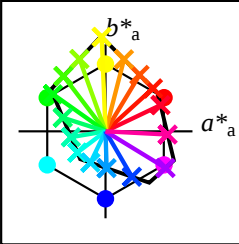


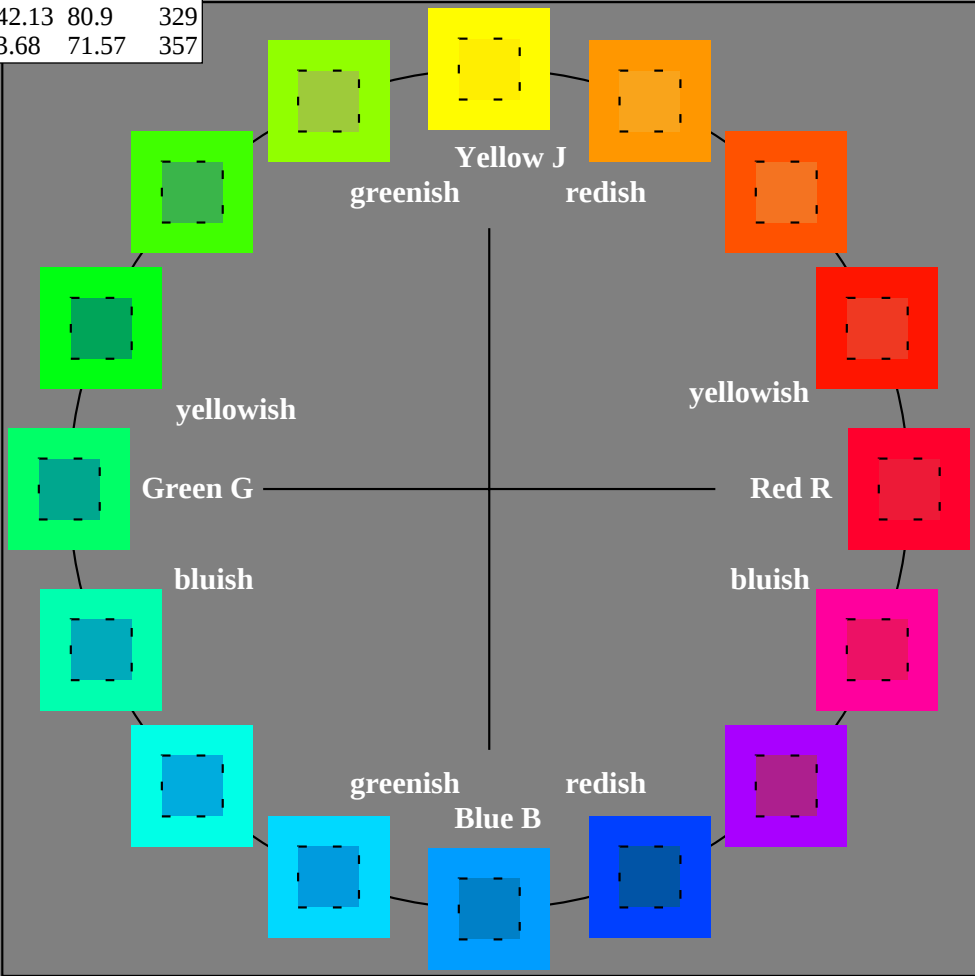
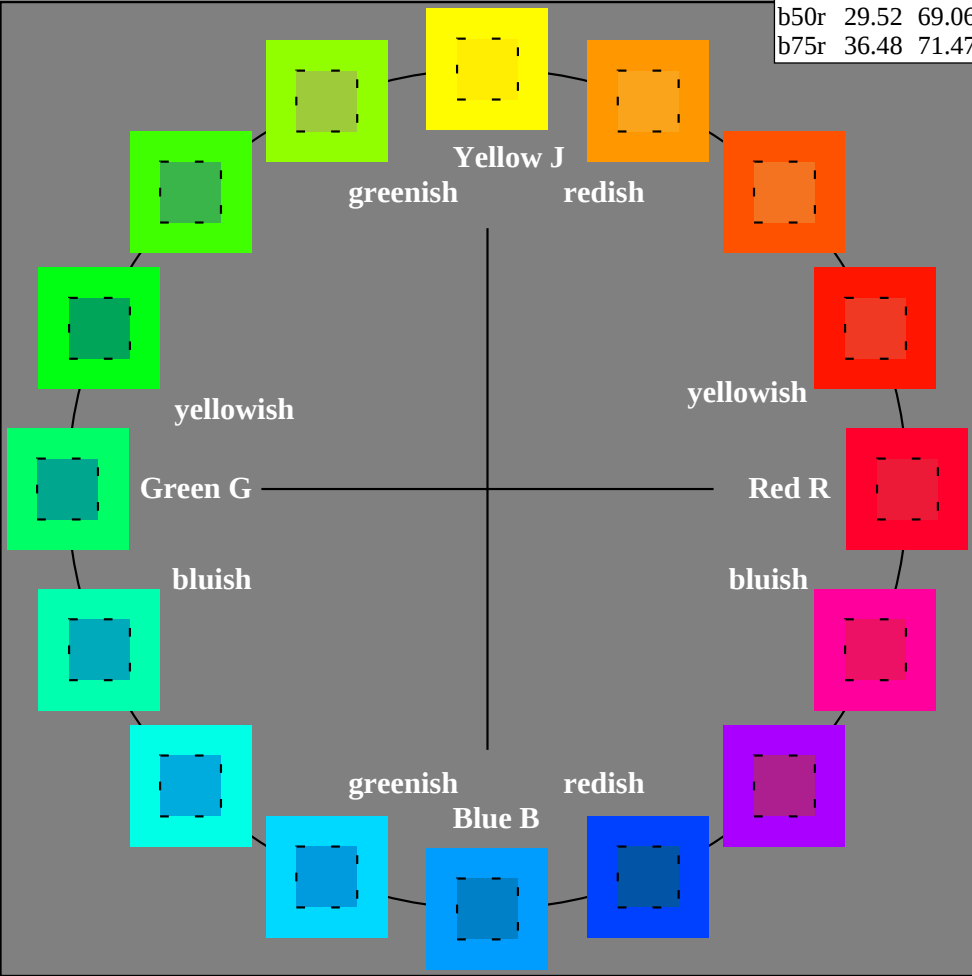
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\*tch\* and lab\*icu\*  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



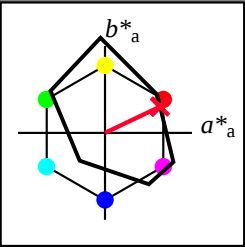
%Gamut  
u\*<sub>rel</sub> = 109  
%Regularity  
g\*<sub>H,rel</sub> = 31  
g\*<sub>C,rel</sub> = 40

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



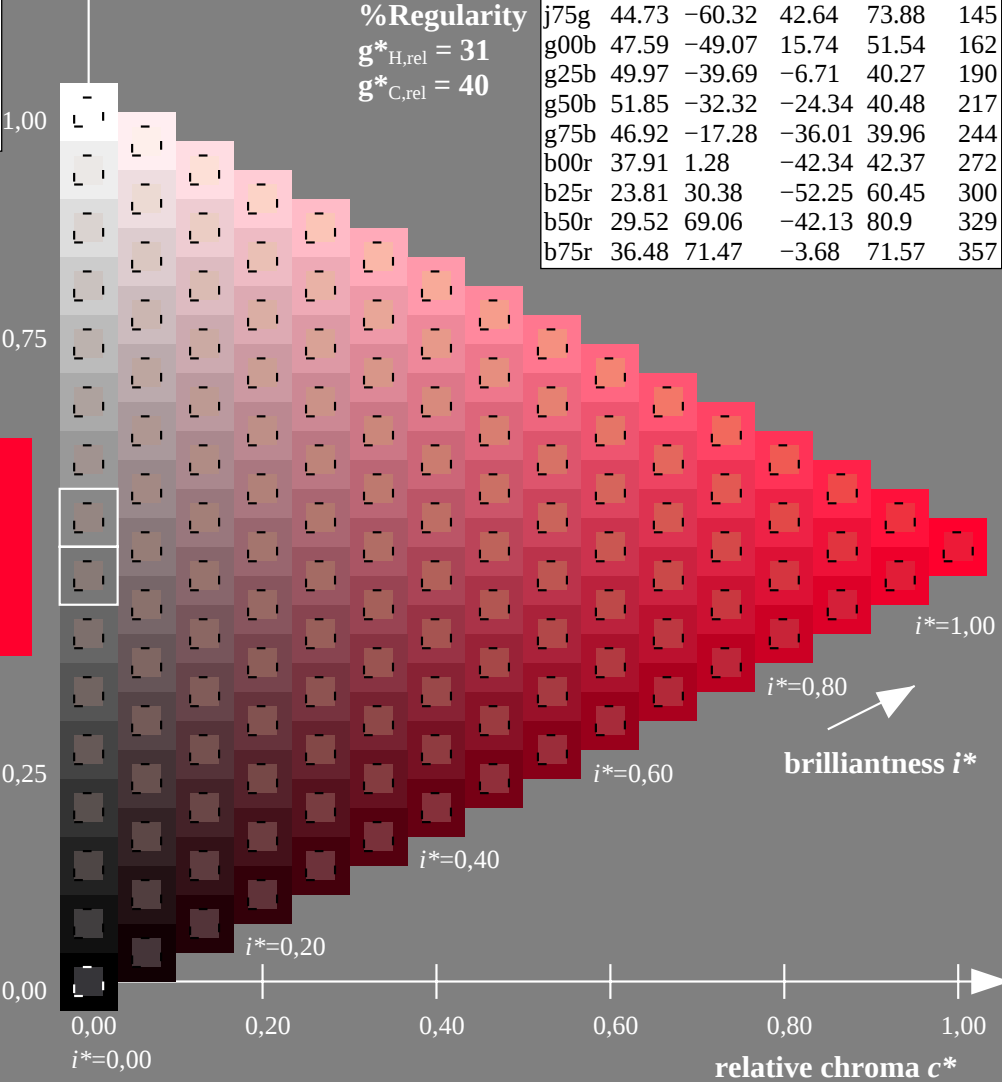
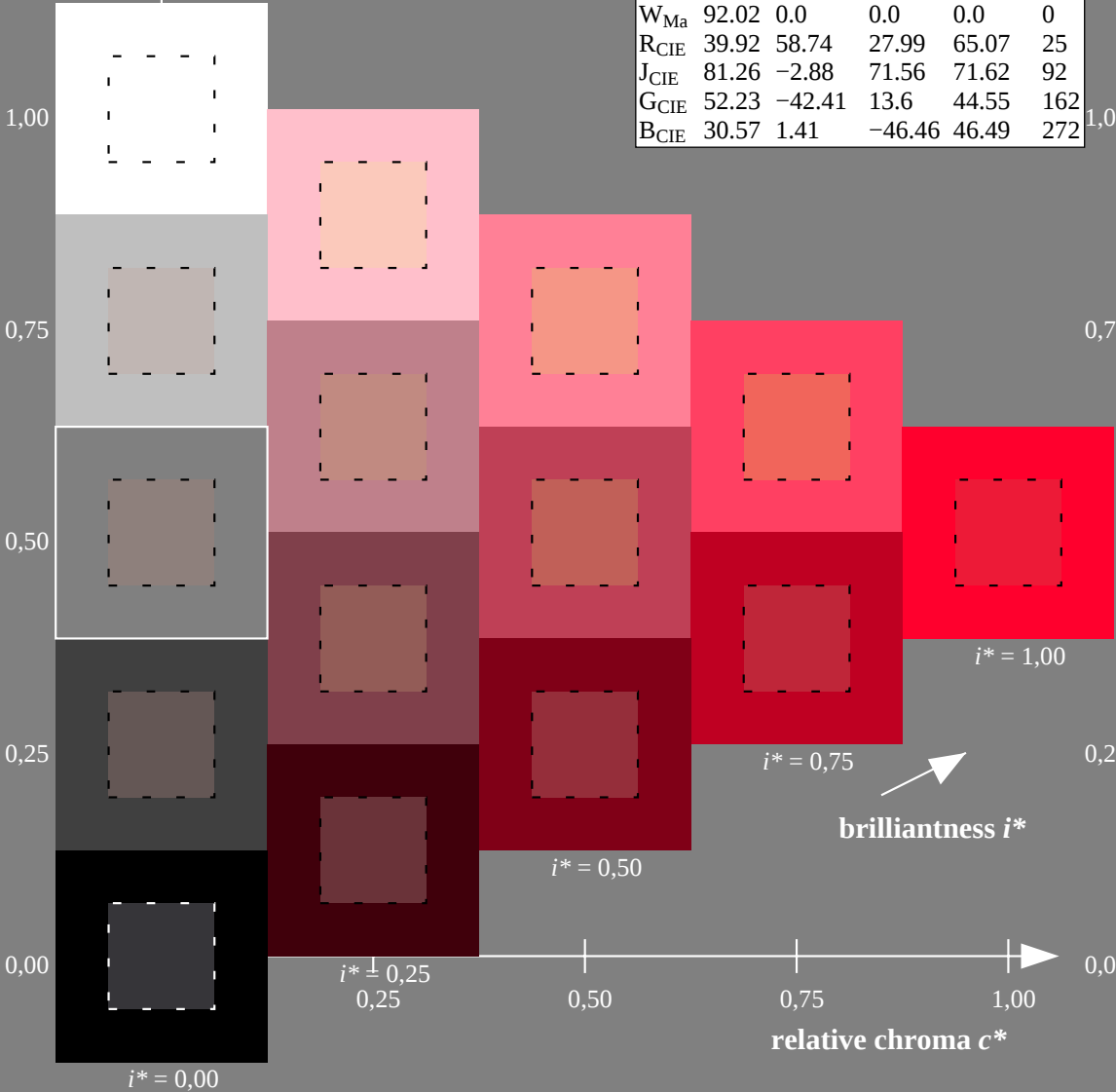
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18

triangle lightness  $t^*$

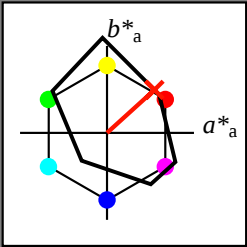
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

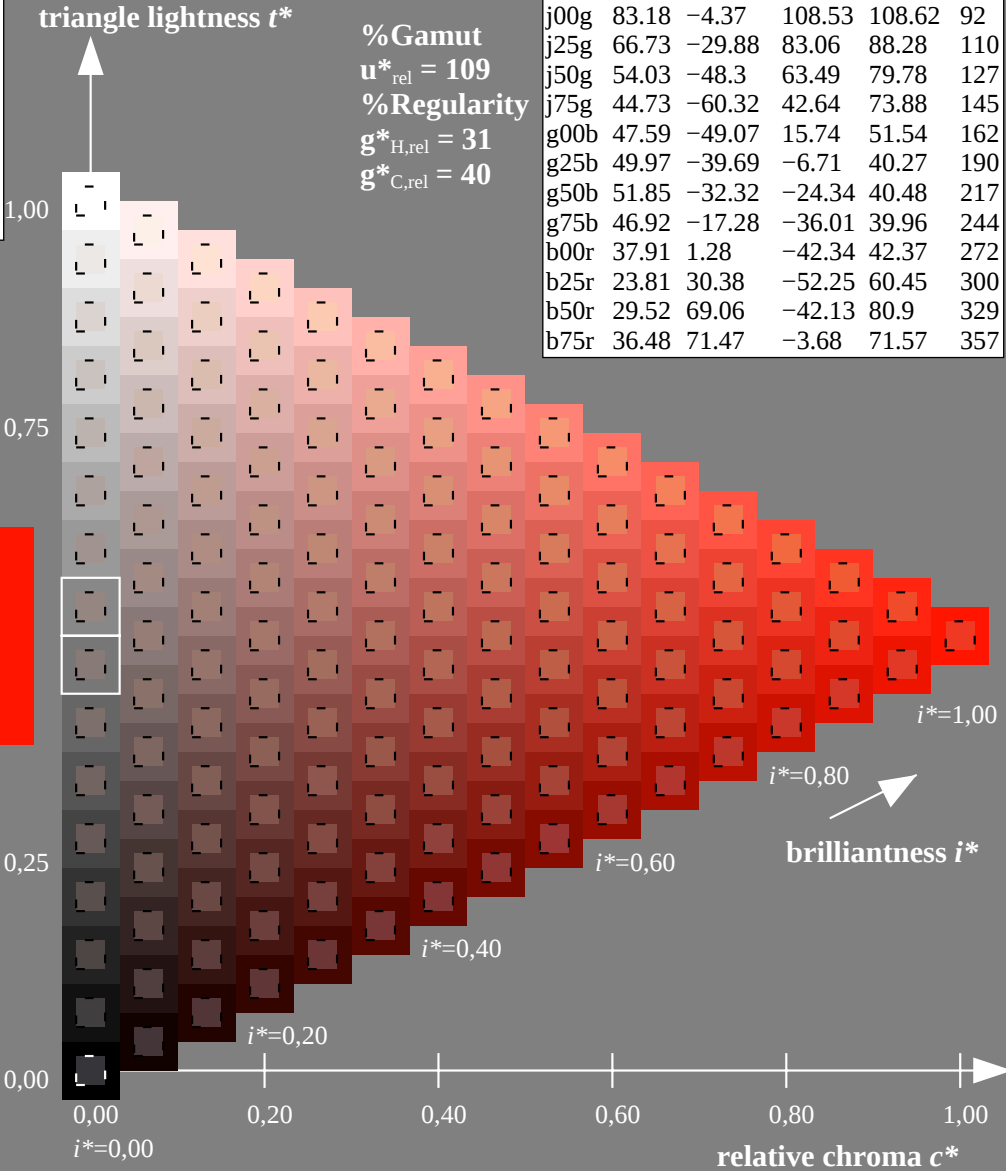
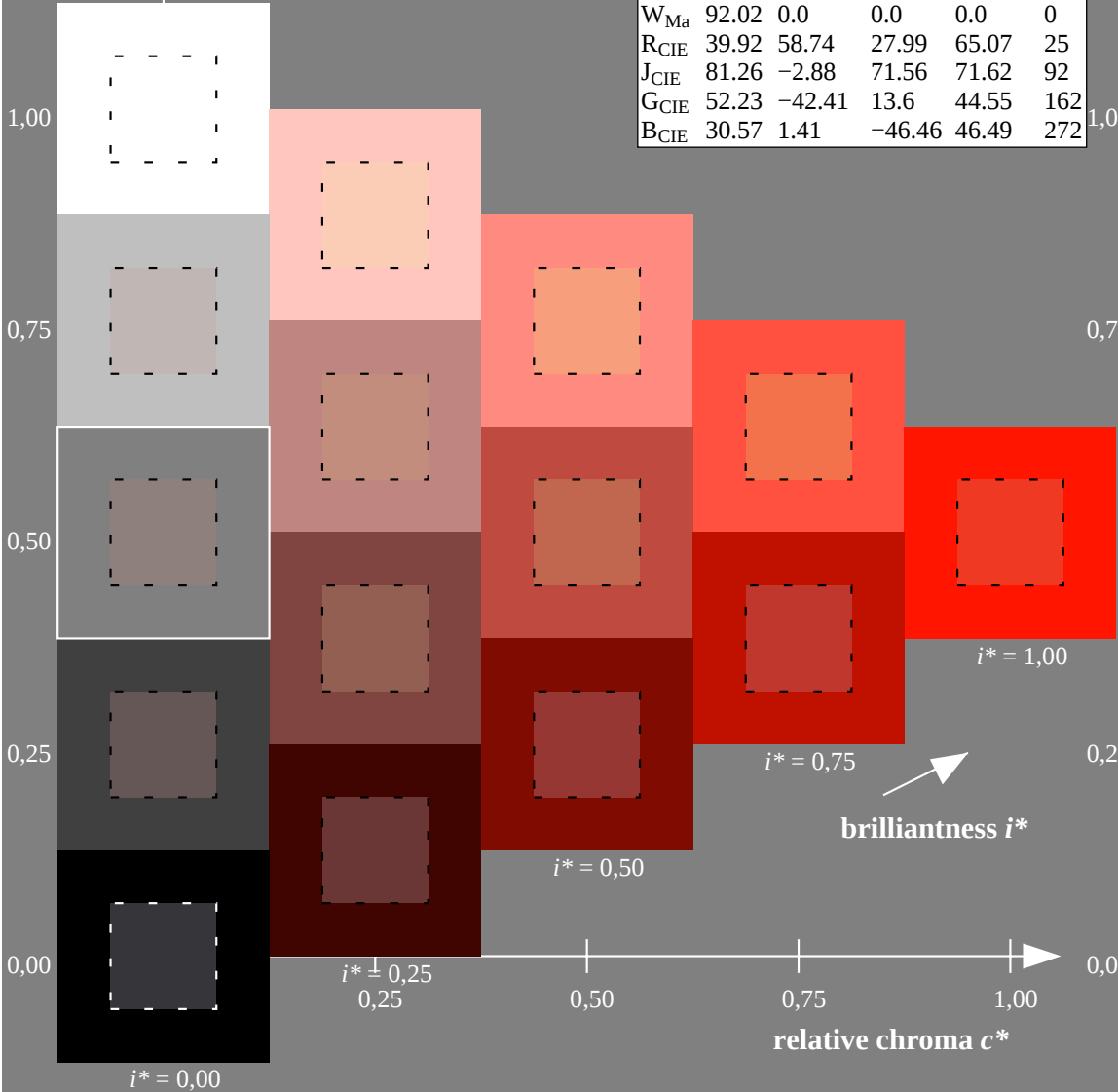


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 39 55 49  
 $LAB^*LCH^*_{Ma}$ : 39 74 42  
 $lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.08 0.0

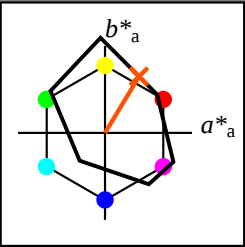
$u^* = r25j$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

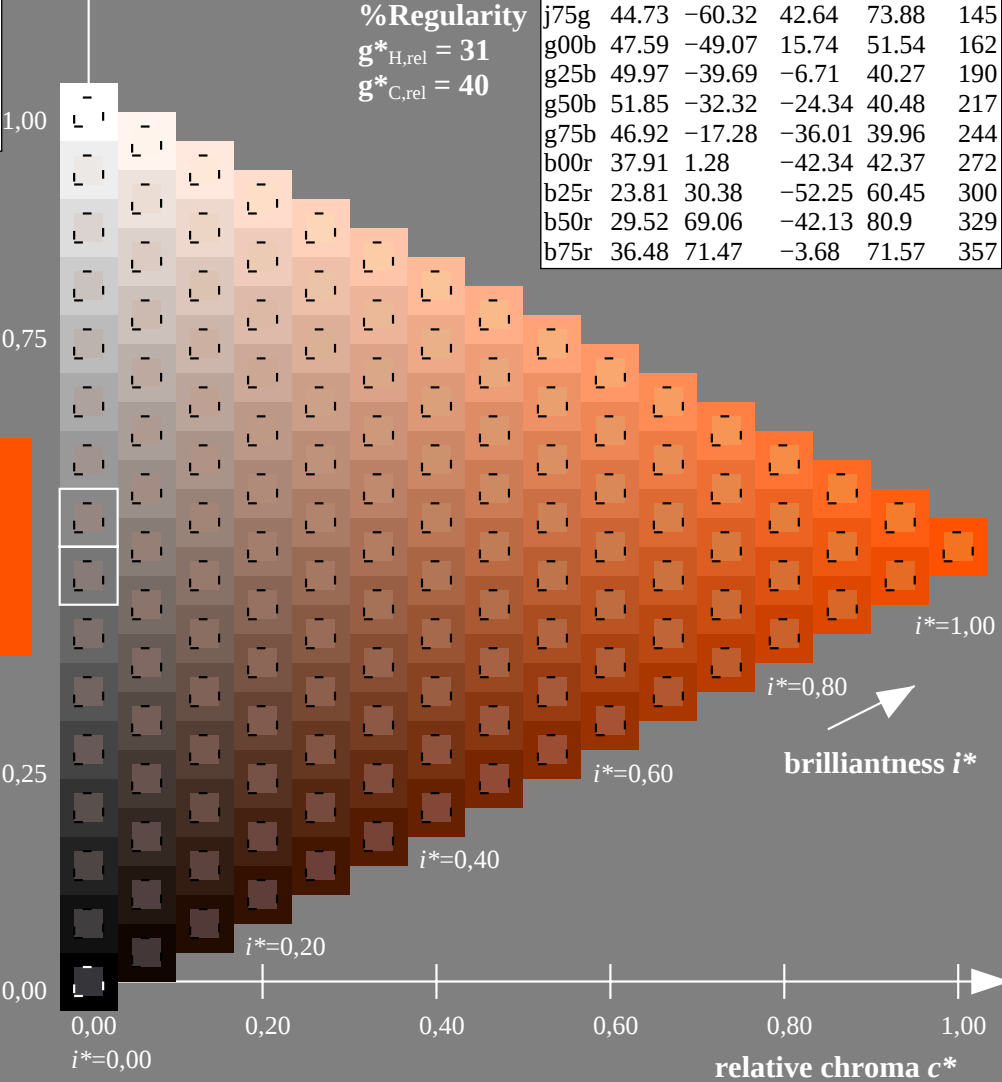
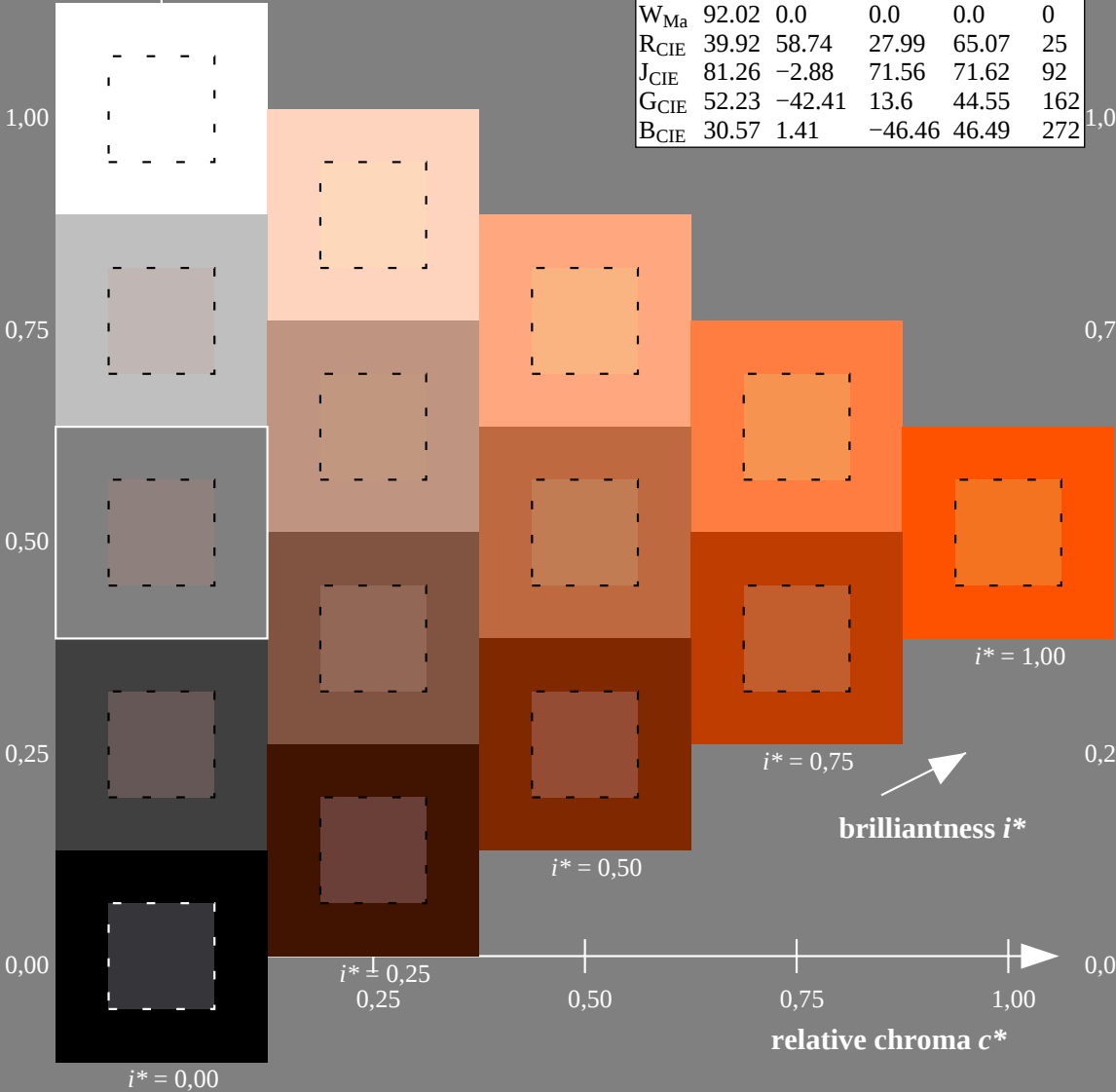
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 51 39 65  
 $LAB^*LCH^*_{Ma}$ : 51 76 59  
 $lab^*rgb^*_{Ma}$ : 1.0 0.5 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.32 0.0

triangle lightness  $t^*$

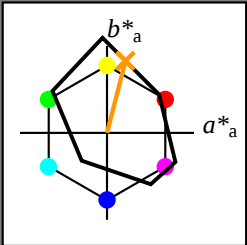
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

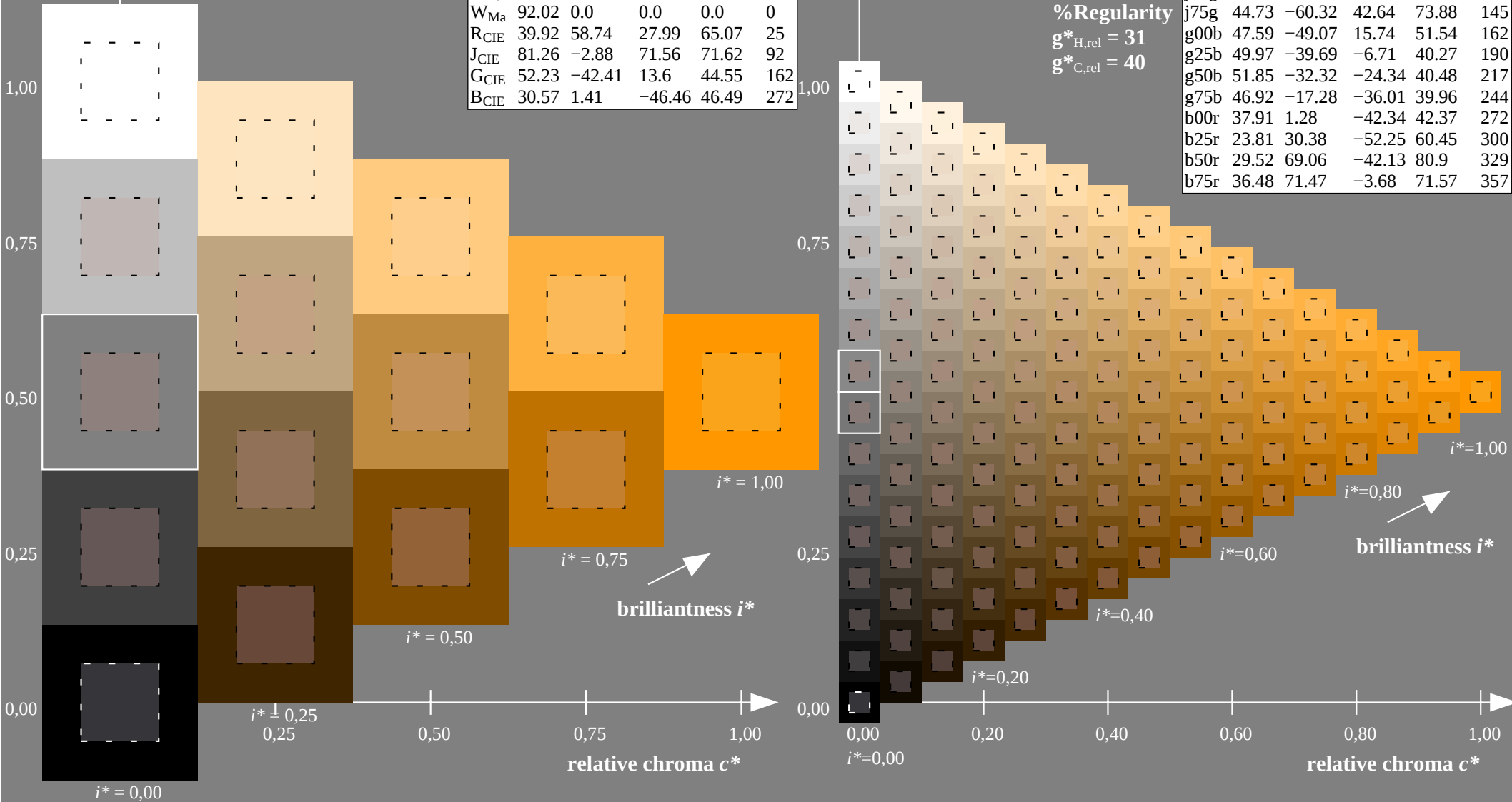
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 64 21 83  
 $LAB^*LCH^*_{Ma}$ : 64 86 76  
 $lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.59 0.0

triangle lightness  $t^*$

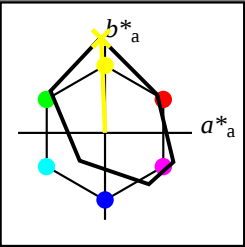
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 83 -3 109

$LAB^*LCH^*_{Ma}$ : 83 109 92

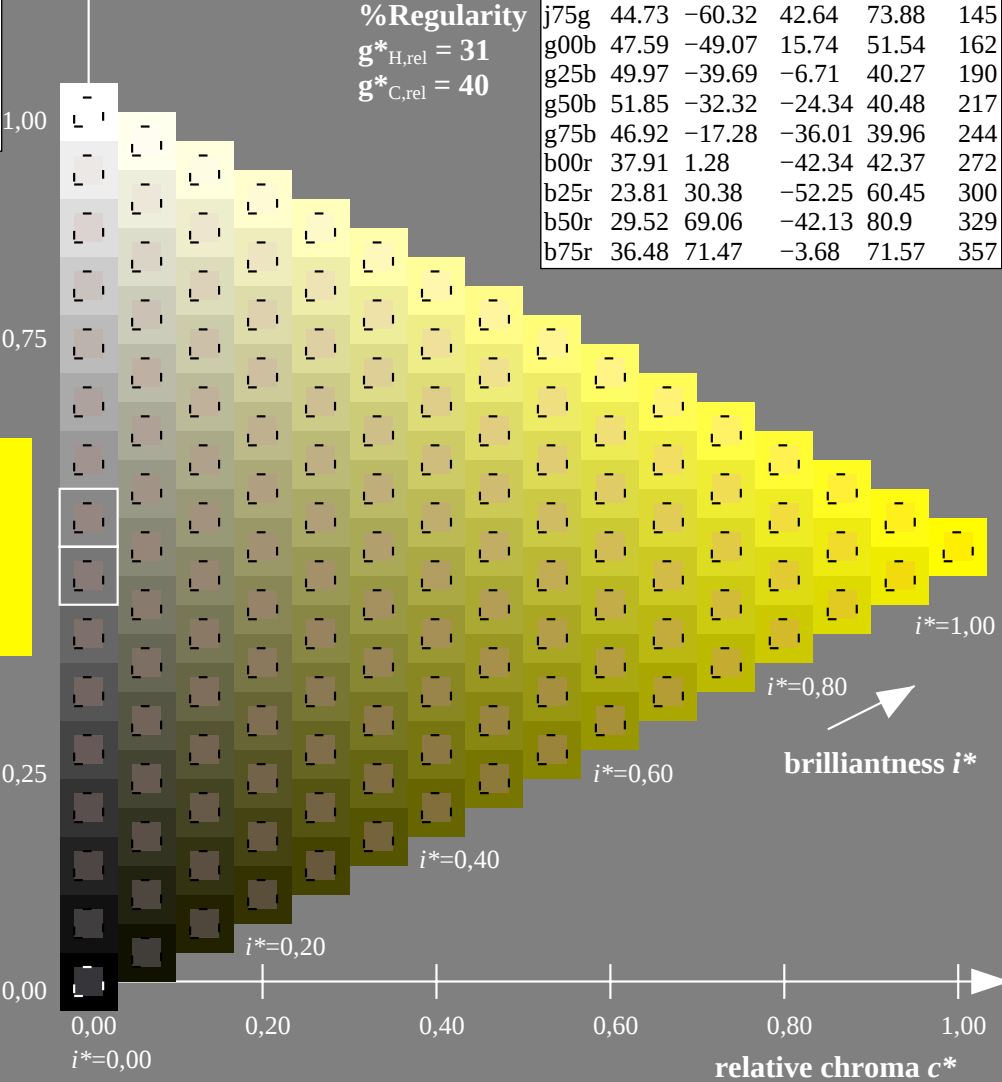
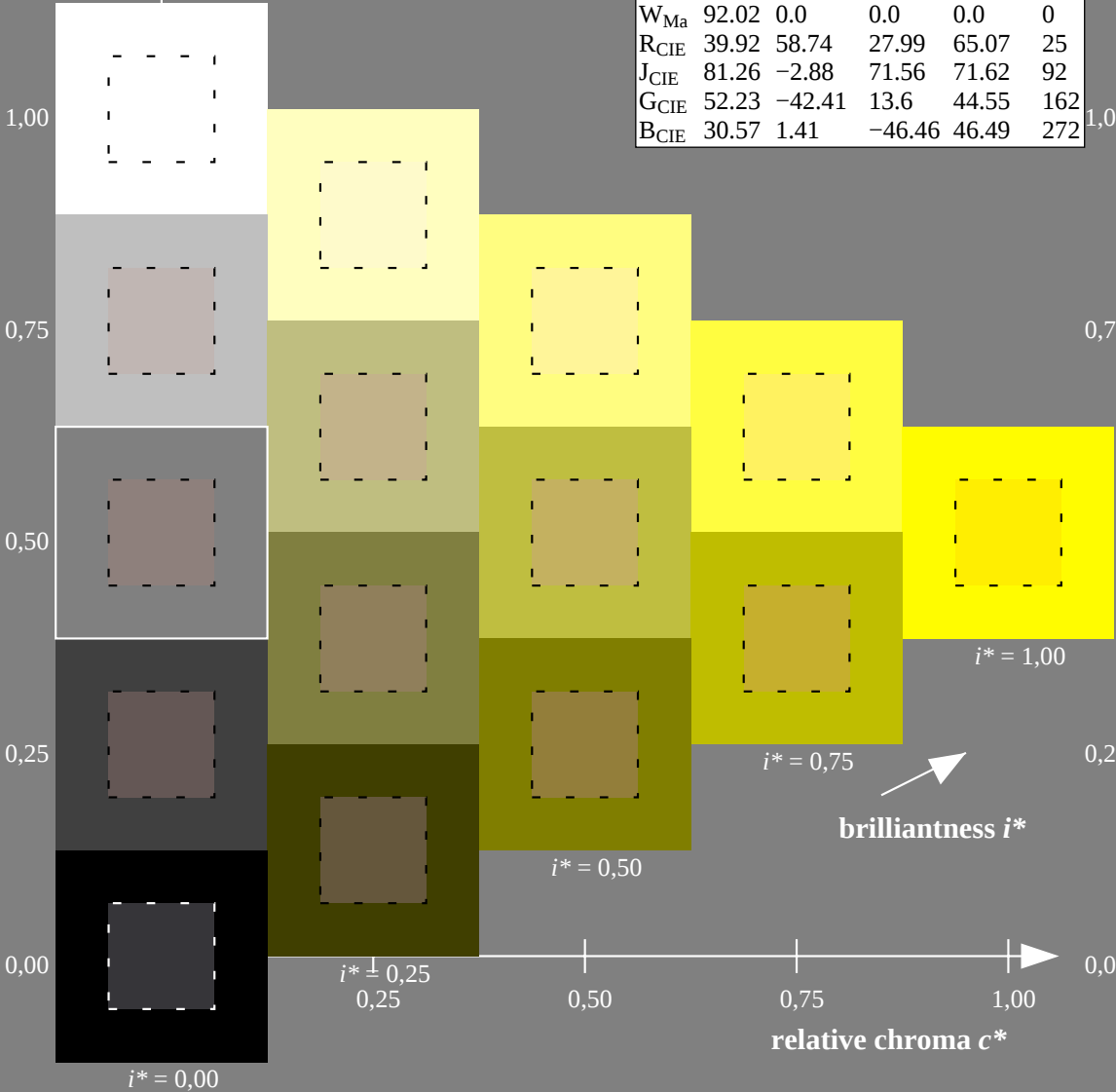
$lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0

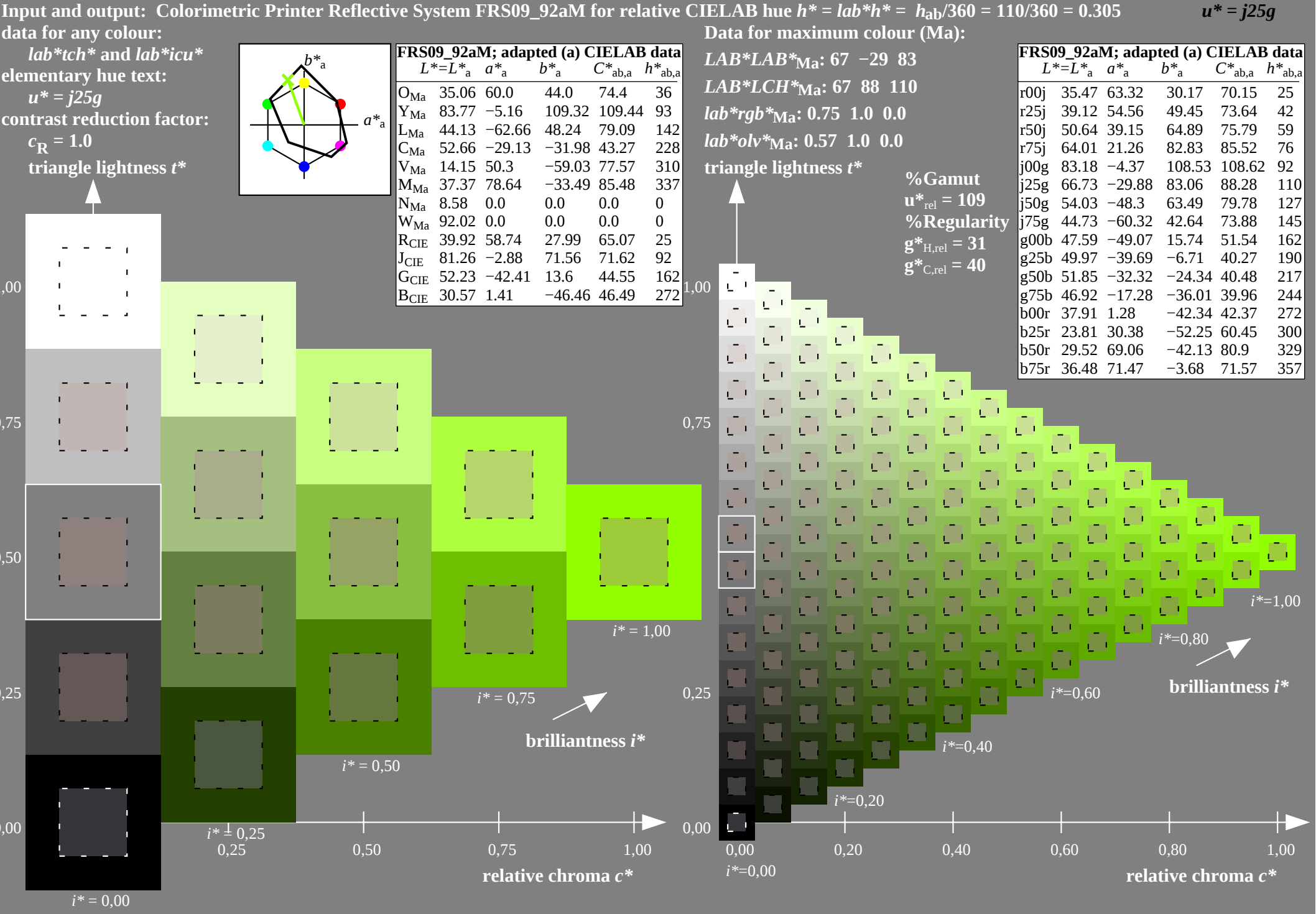
$lab^*olv^*_{Ma}$ : 1.0 0.99 0.0

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

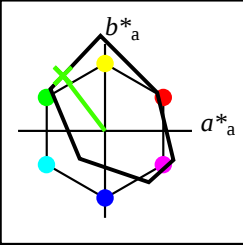
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |





Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 127/360 = 0.354$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j50g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 54 -47 63

$LAB^*LCH^*_{Ma}$ : 54 80 127

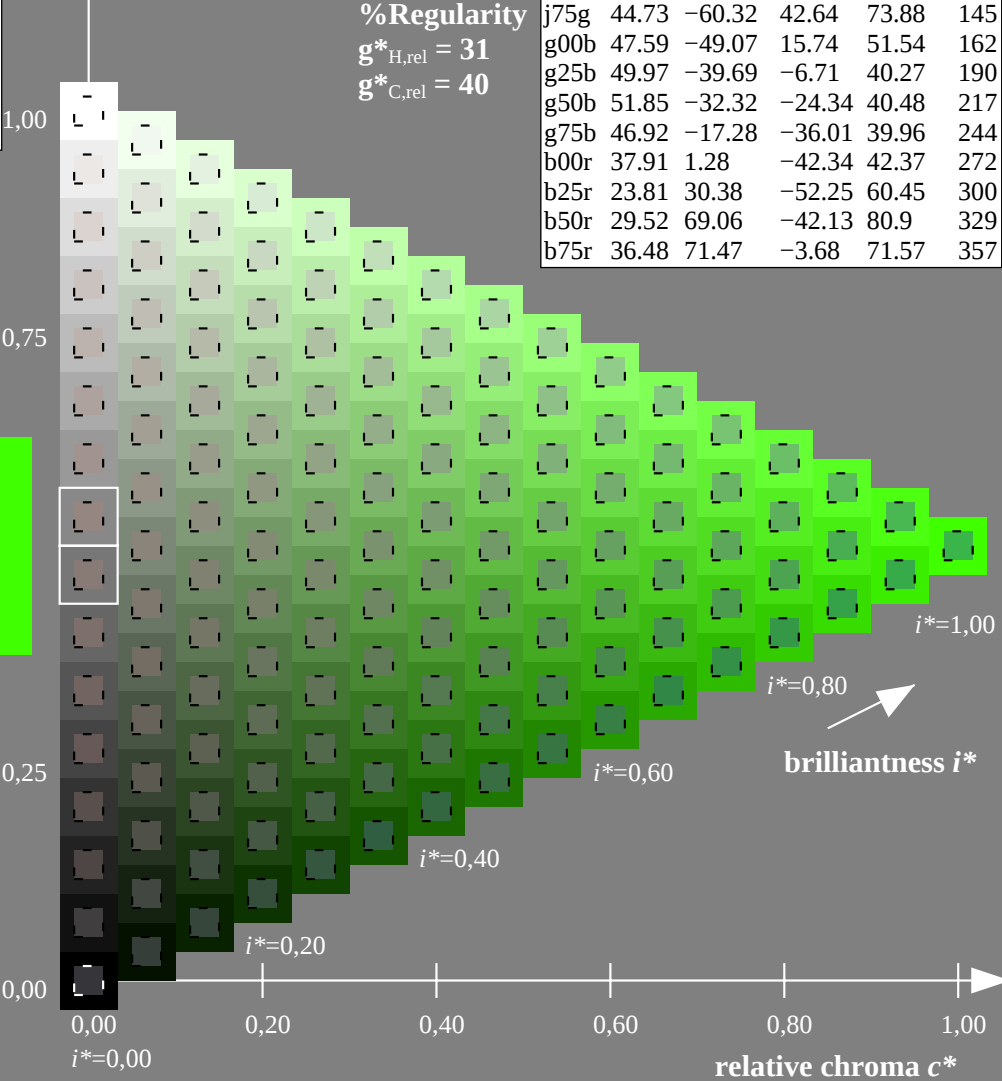
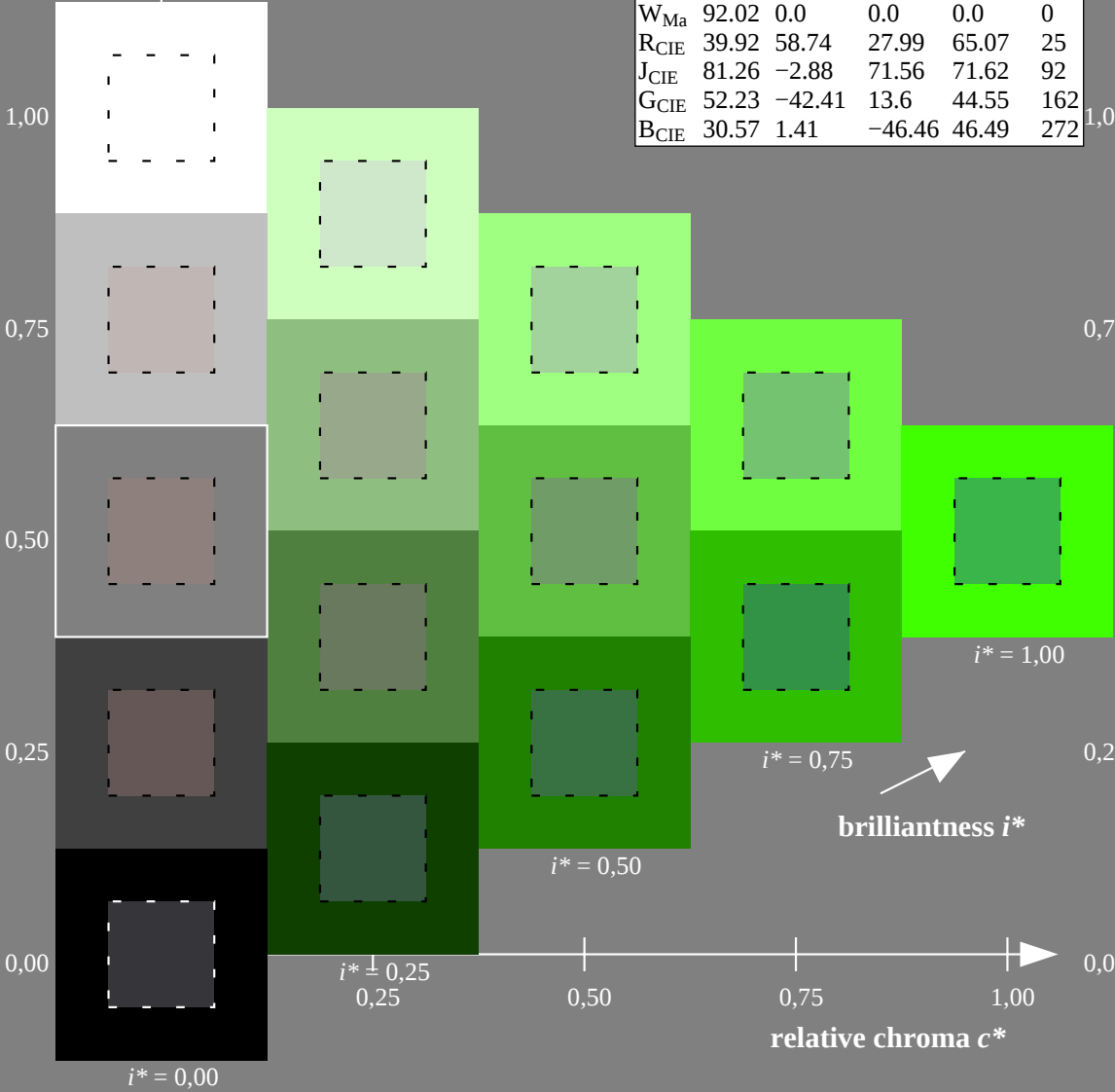
$lab^*rgb^*_{Ma}$ : 0.5 1.0 0.0

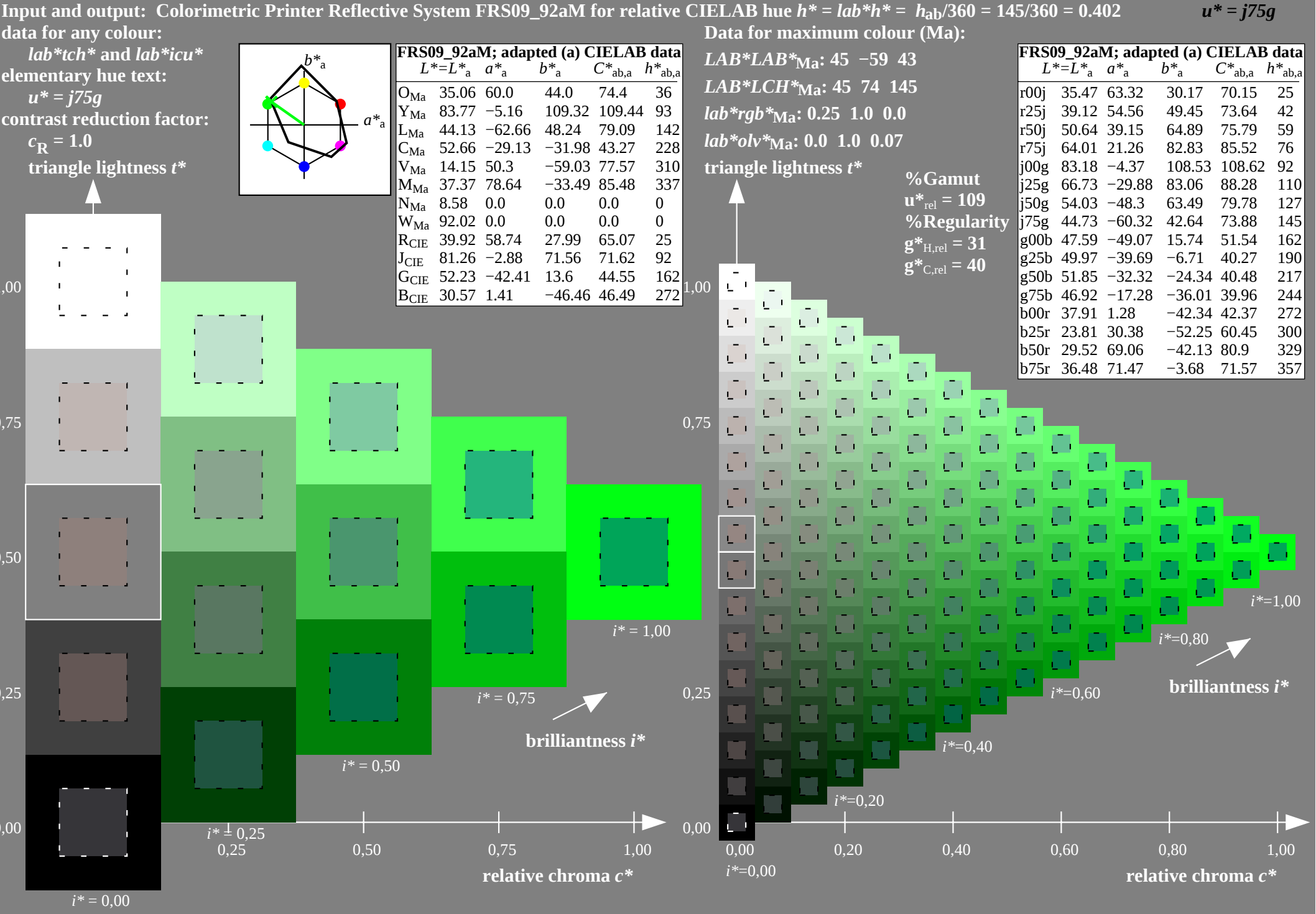
$lab^*olv^*_{Ma}$ : 0.25 1.0 0.0

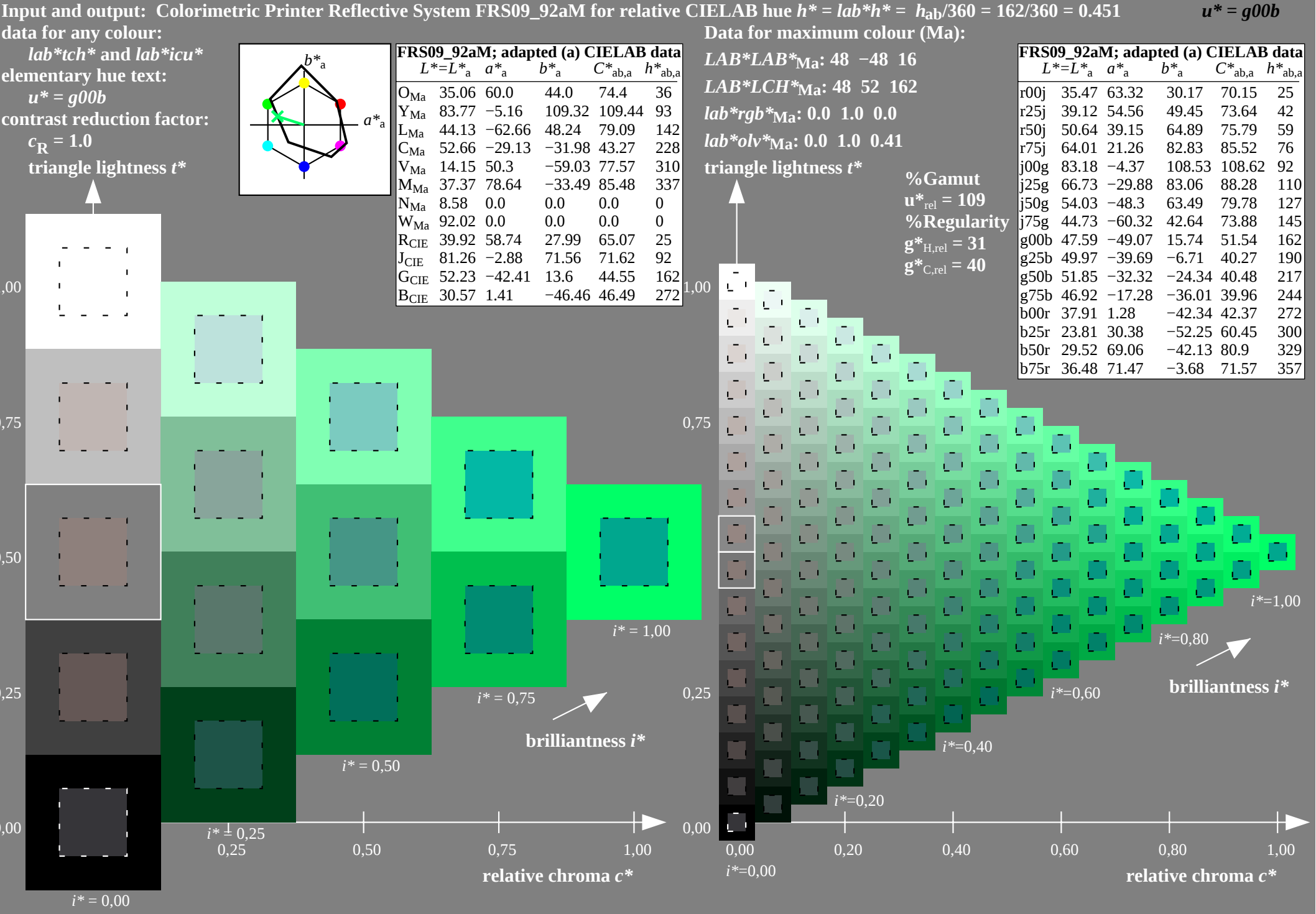
triangle lightness  $t^*$

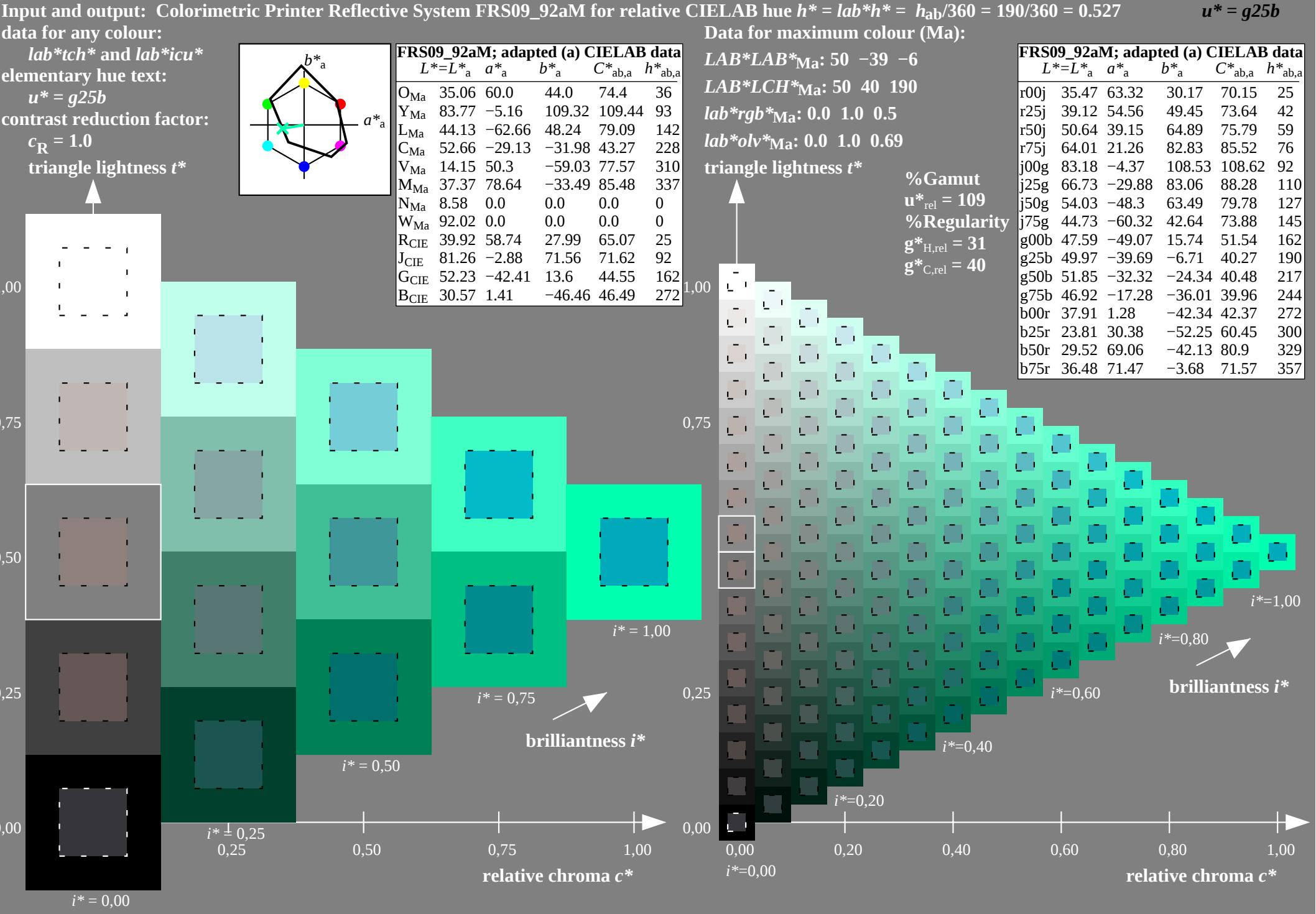
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

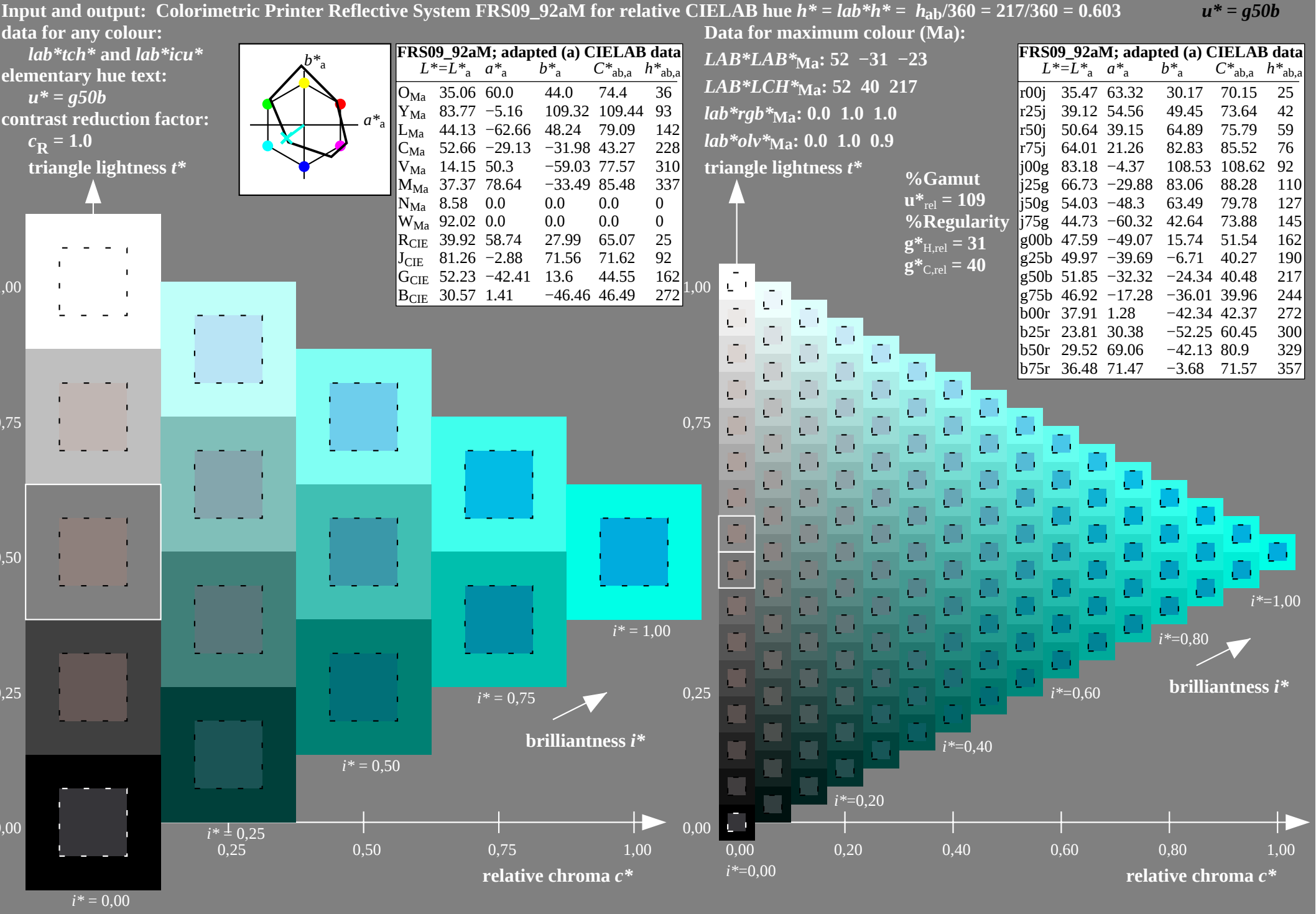
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

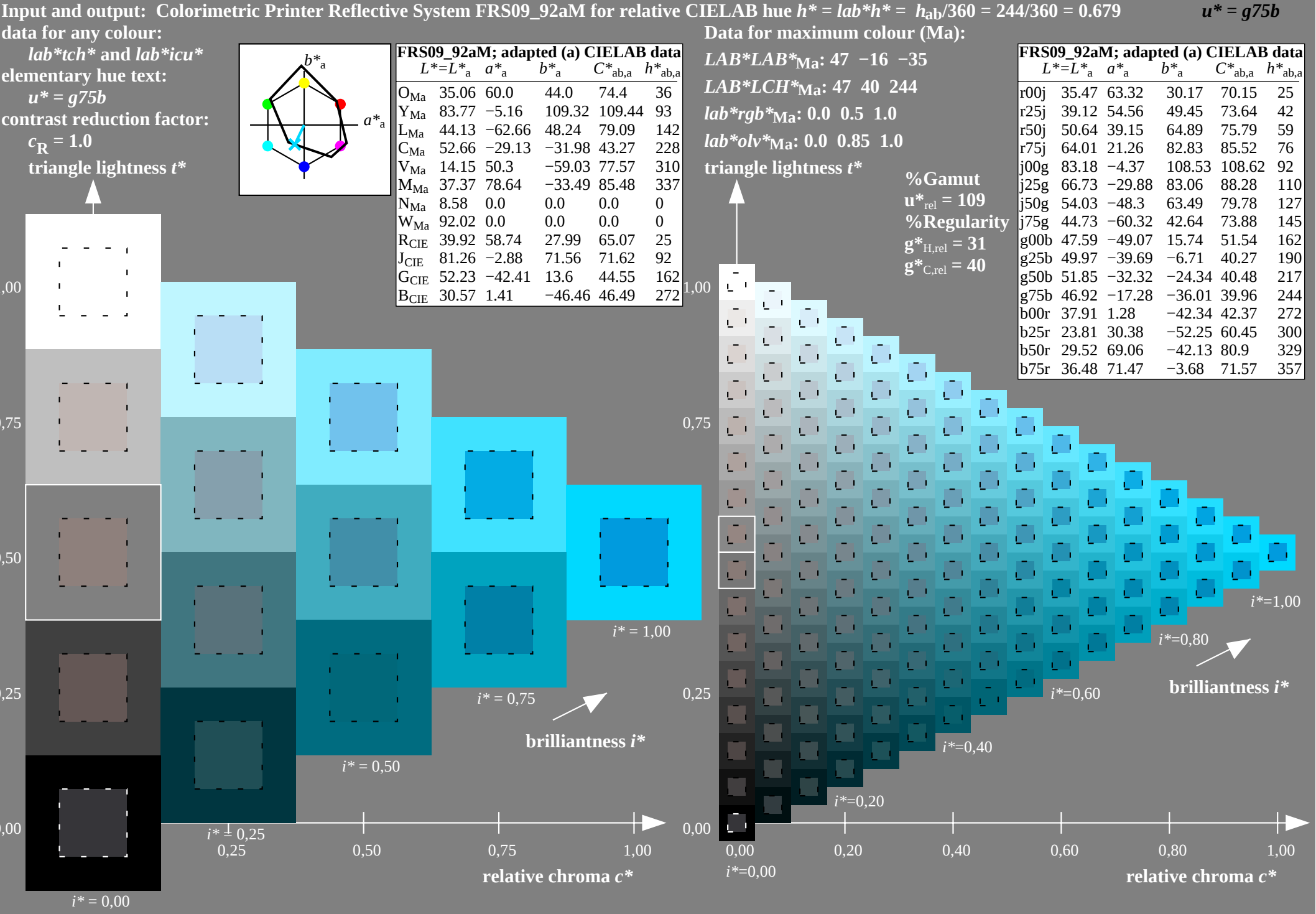


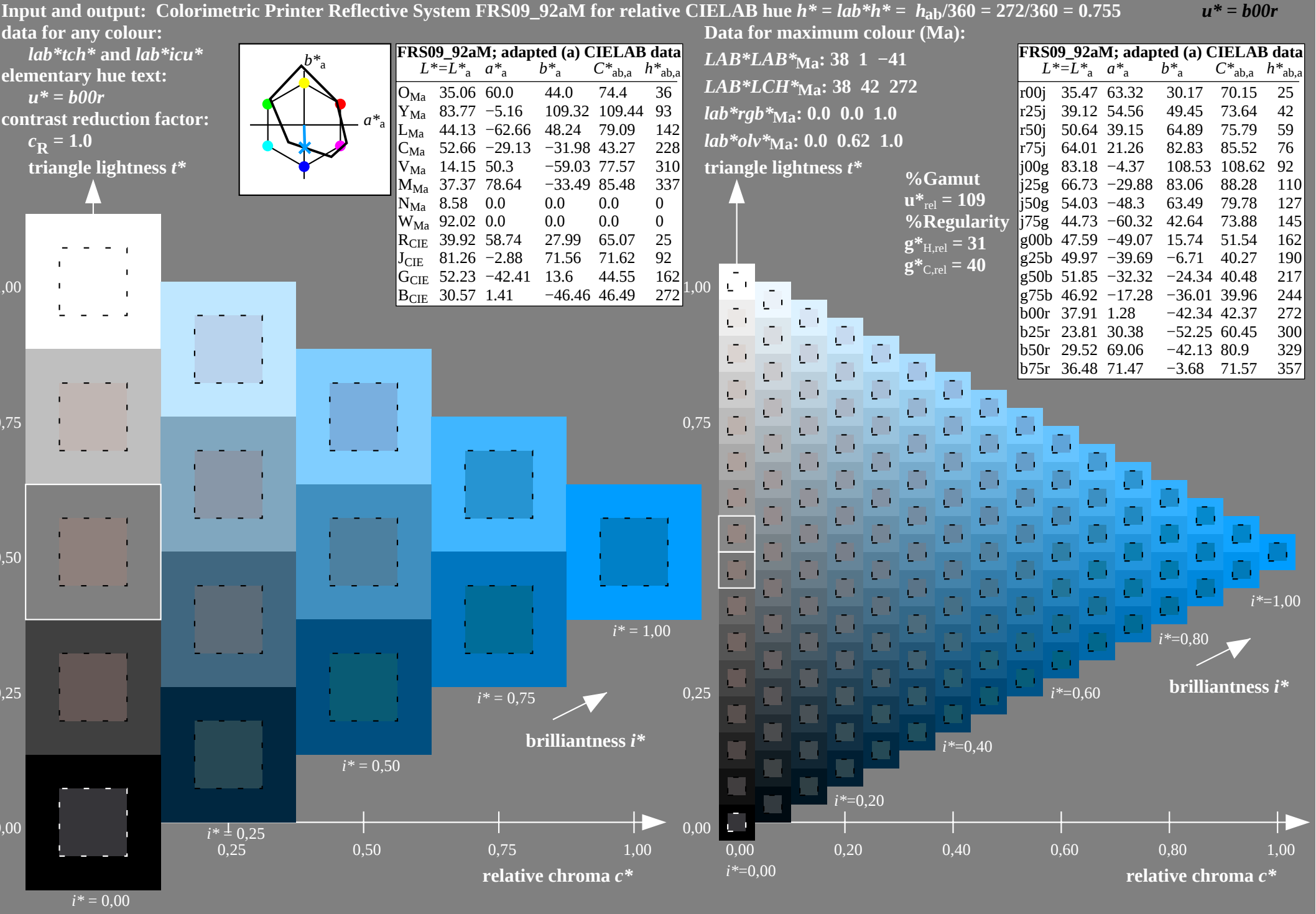


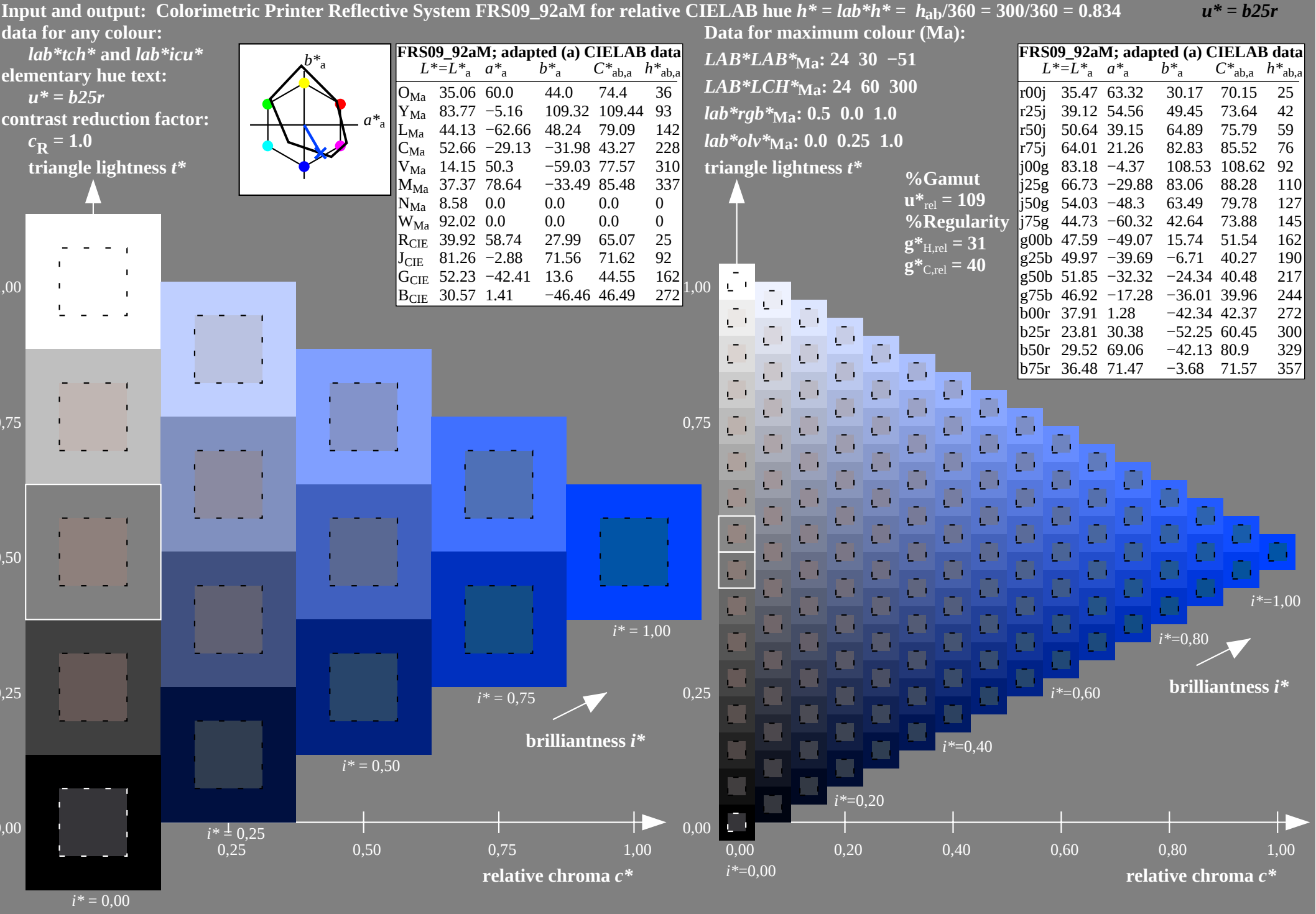


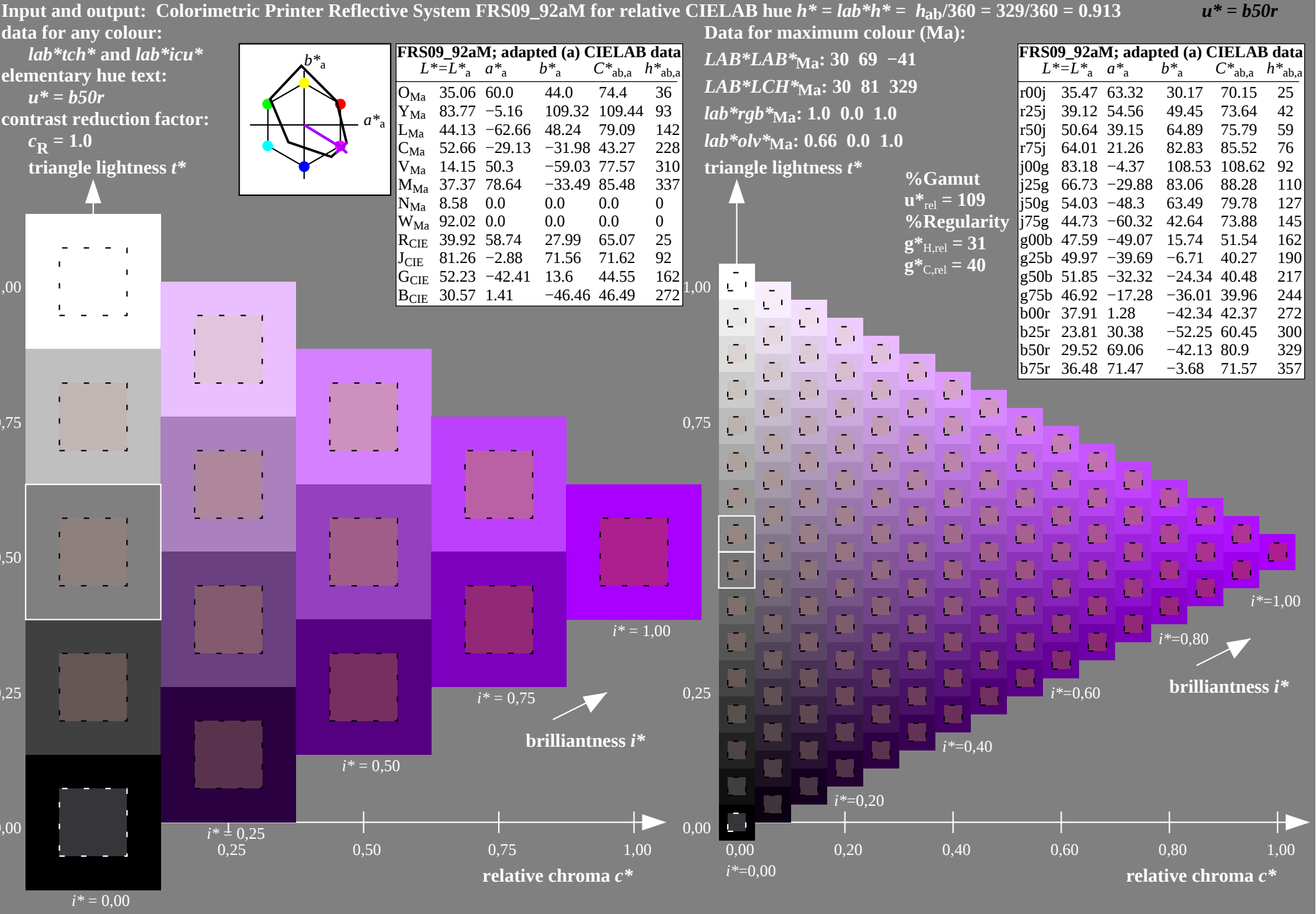












$$u^* = b75r$$

**Data for maximum colour (Ma):**

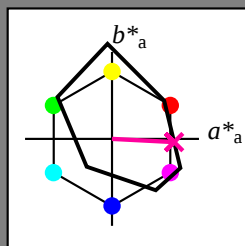
**LAB\*LAB\*<sub>Ma</sub>: 36 71 -3**

**LAB\*LCH\*Ma: 36 72 357**

**lab\*rqb\*\_Ma: 1.0 0.0 0.5**

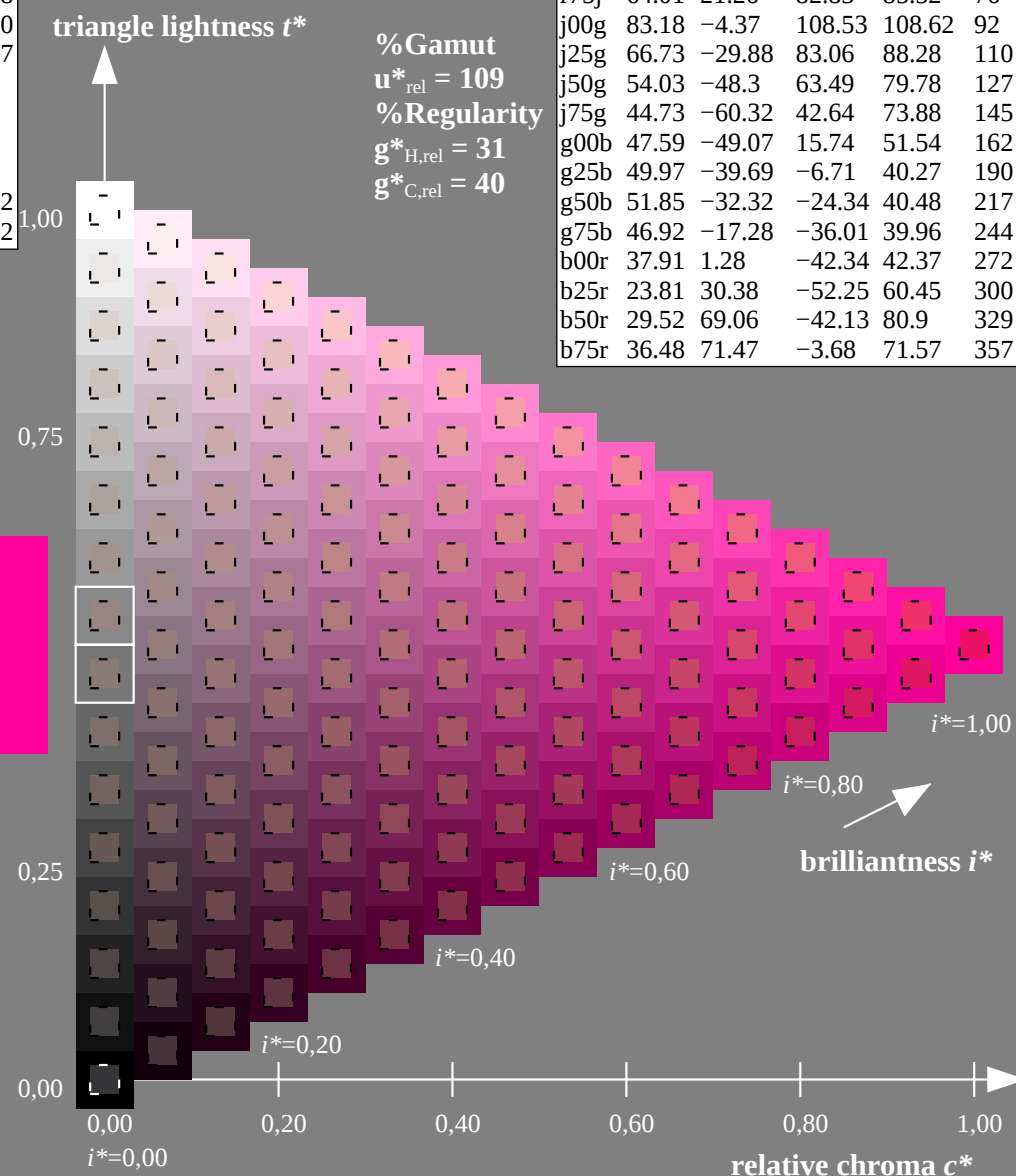
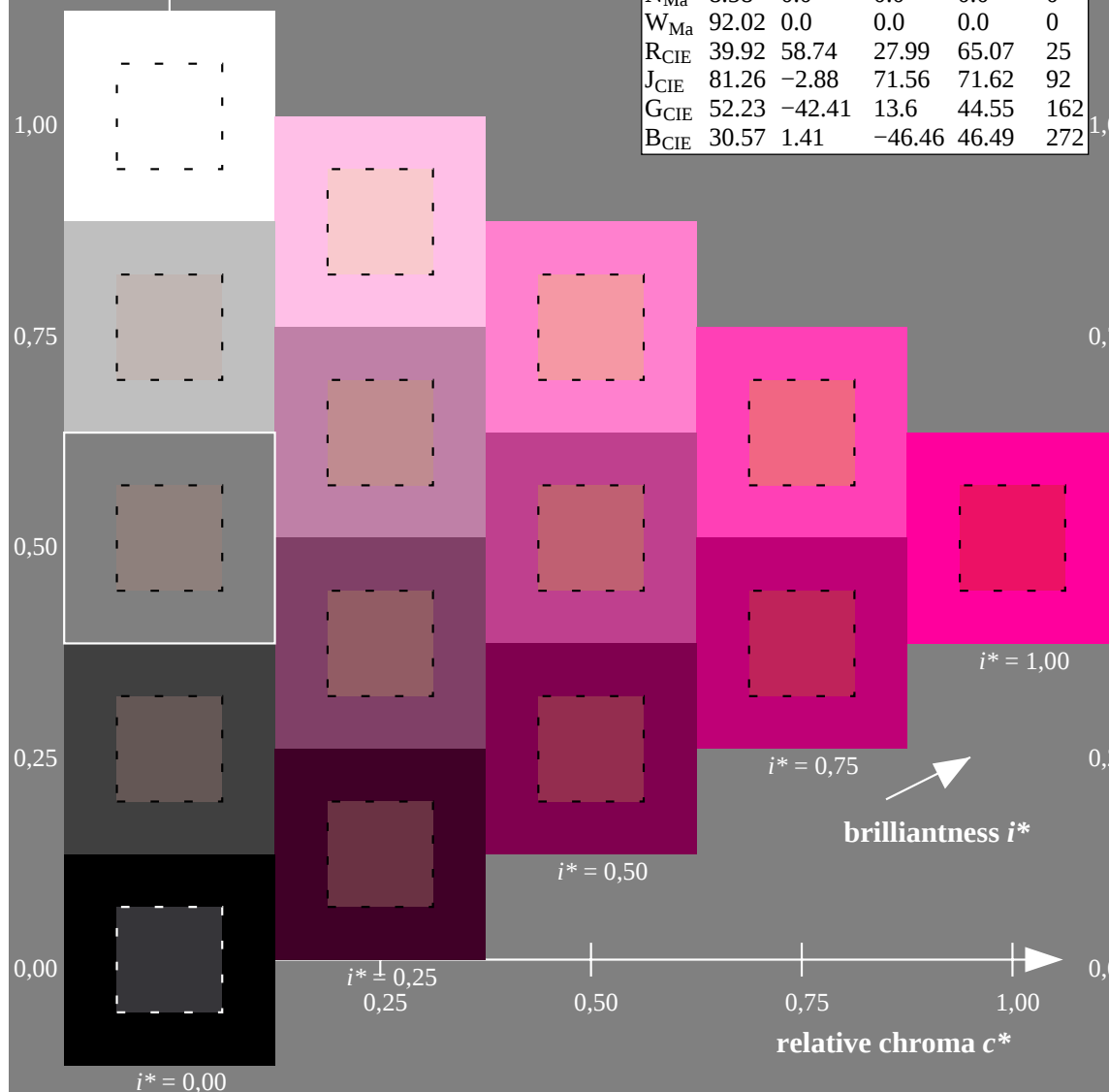
**lab\*olv\*Ma: 1.0 0.0 0.62**

triangle lightness  $t^*$

triangle lightness  $t^*$ 

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| G <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| J <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

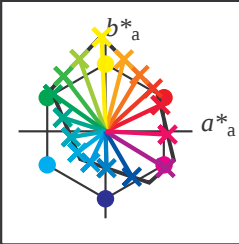
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |     |
|-------------------------------------|-------------|---------|---------|--------------|--------------|-----|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
|                                     | r00j        | 35.47   | 63.32   | 30.17        | 70.15        | 25  |
|                                     | r25j        | 39.12   | 54.56   | 49.45        | 73.64        | 42  |
|                                     | r50j        | 50.64   | 39.15   | 64.89        | 75.79        | 59  |
|                                     | r75j        | 64.01   | 21.26   | 82.83        | 85.52        | 76  |
|                                     | j00g        | 83.18   | -4.37   | 108.53       | 108.62       | 92  |
|                                     | j25g        | 66.73   | -29.88  | 83.06        | 88.28        | 110 |
|                                     | j50g        | 54.03   | -48.3   | 63.49        | 79.78        | 127 |
| y                                   | j75g        | 44.73   | -60.32  | 42.64        | 73.88        | 145 |
|                                     | g00b        | 47.59   | -49.07  | 15.74        | 51.54        | 162 |
|                                     | g25b        | 49.97   | -39.69  | -6.71        | 40.27        | 190 |
|                                     | g50b        | 51.85   | -32.32  | -24.34       | 40.48        | 217 |
|                                     | g75b        | 46.92   | -17.28  | -36.01       | 39.96        | 244 |
|                                     | b00r        | 37.91   | 1.28    | -42.34       | 42.37        | 272 |
|                                     | b25r        | 23.81   | 30.38   | -52.25       | 60.45        | 300 |
|                                     | b50r        | 29.52   | 69.06   | -42.13       | 80.9         | 329 |
|                                     | b75r        | 36.48   | 71.47   | -3.68        | 71.57        | 357 |





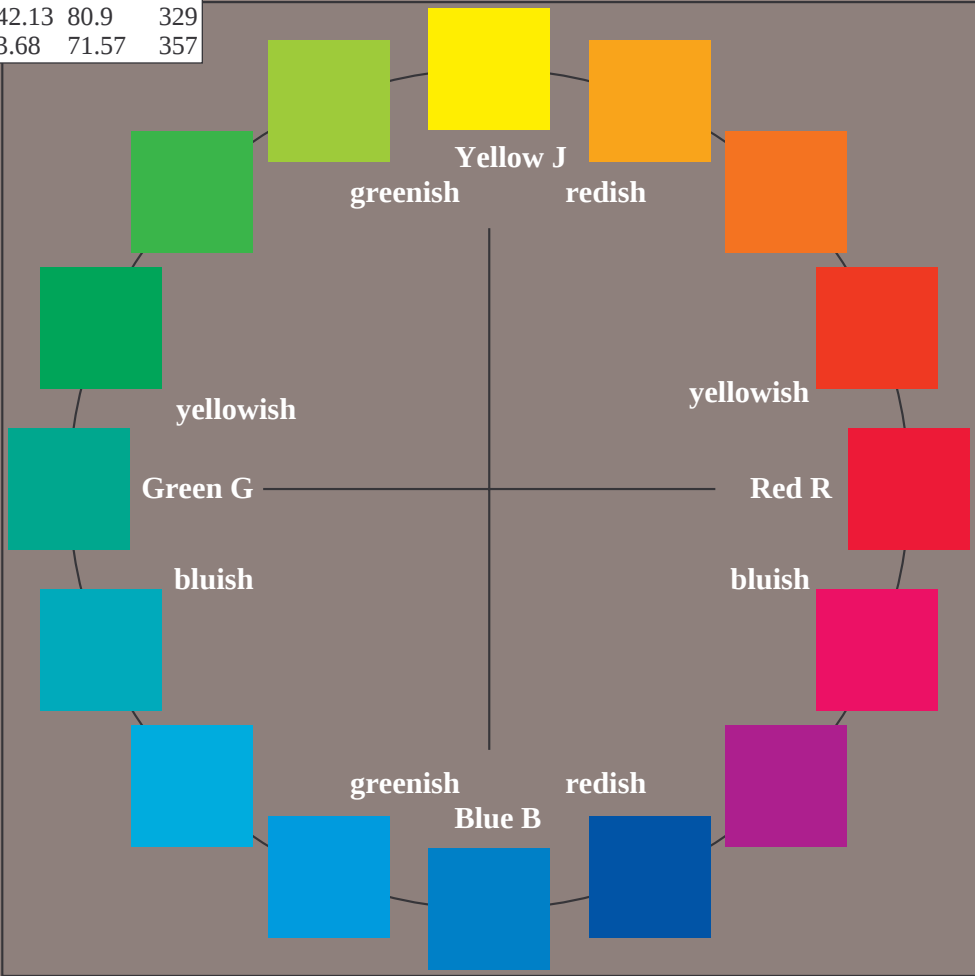
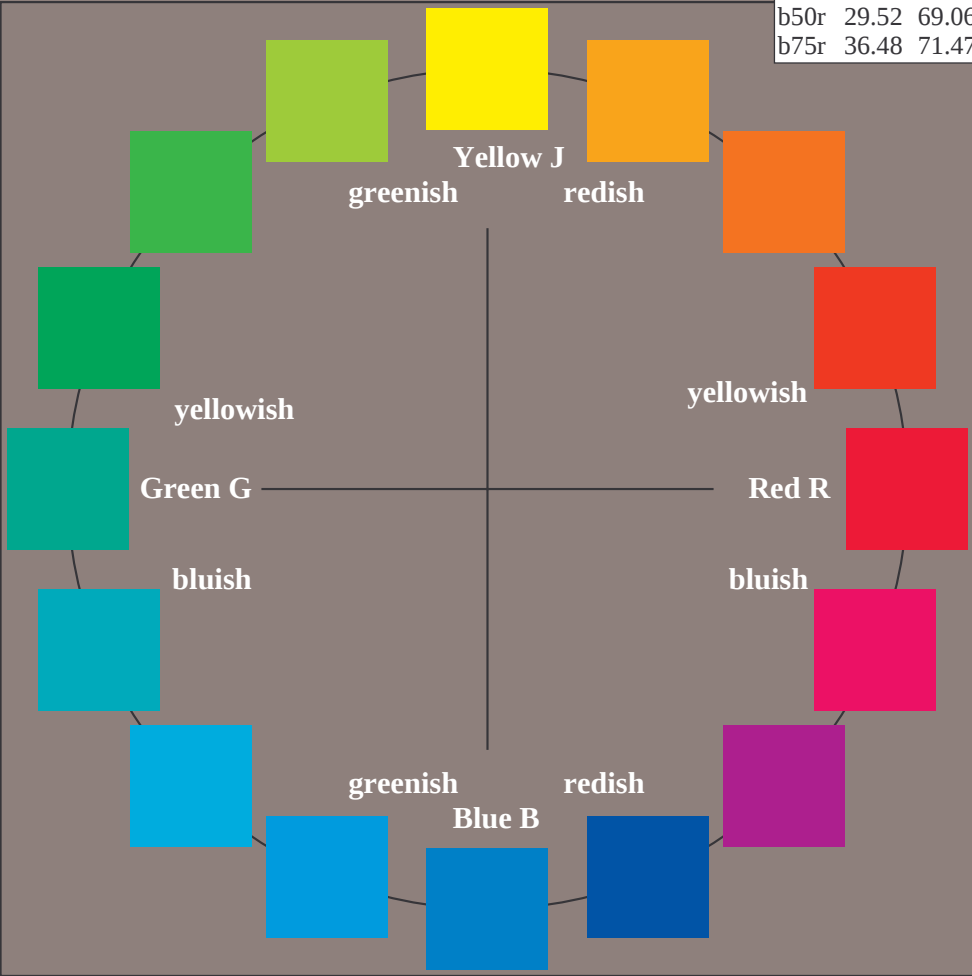
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\**tch\** and lab\**icu\**  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



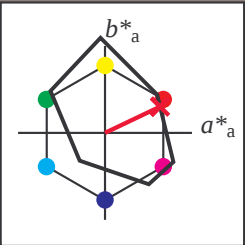
% Gamut  
u\*<sub>rel</sub> = 109  
% Regularity  
g\*<sub>H,rel</sub> = 31  
g\*<sub>C,rel</sub> = 40

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

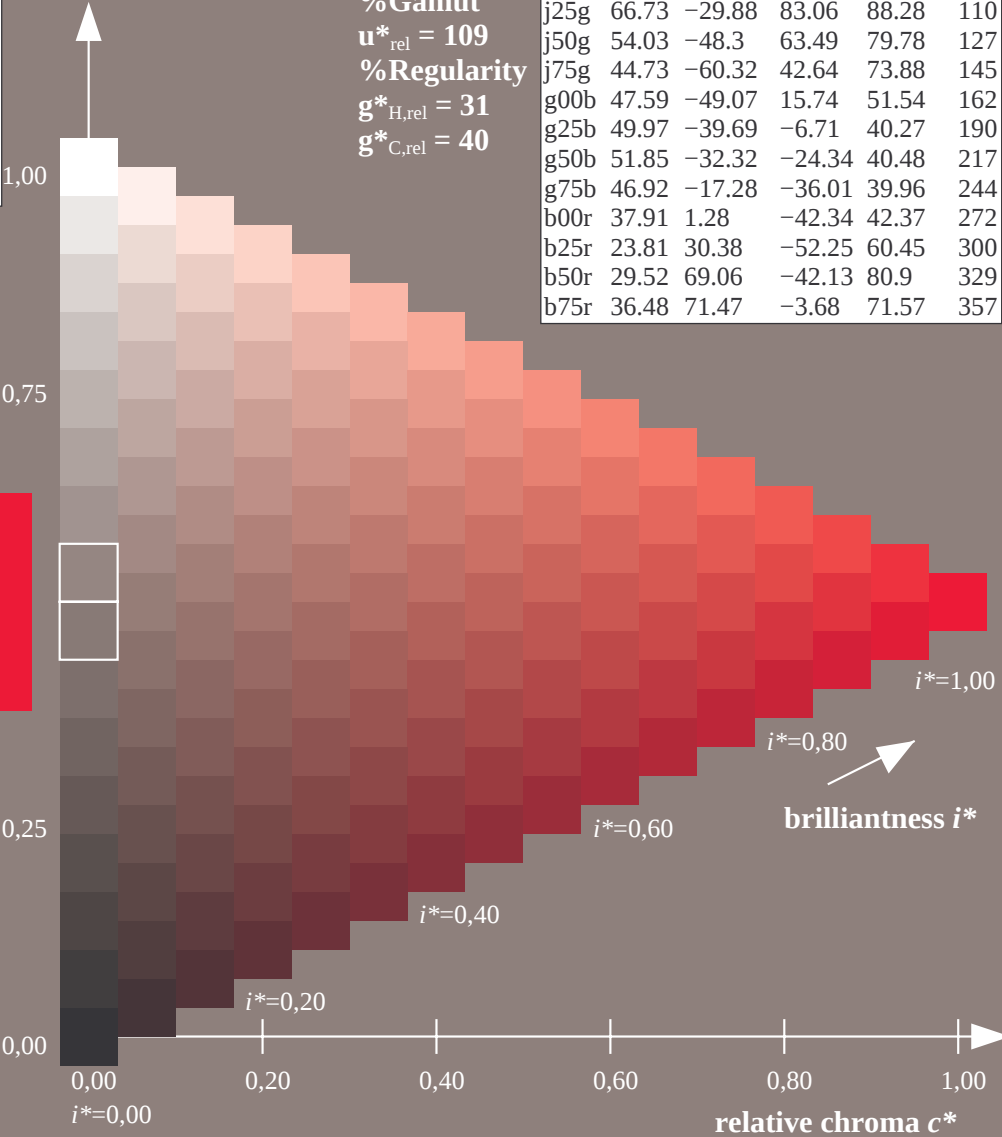
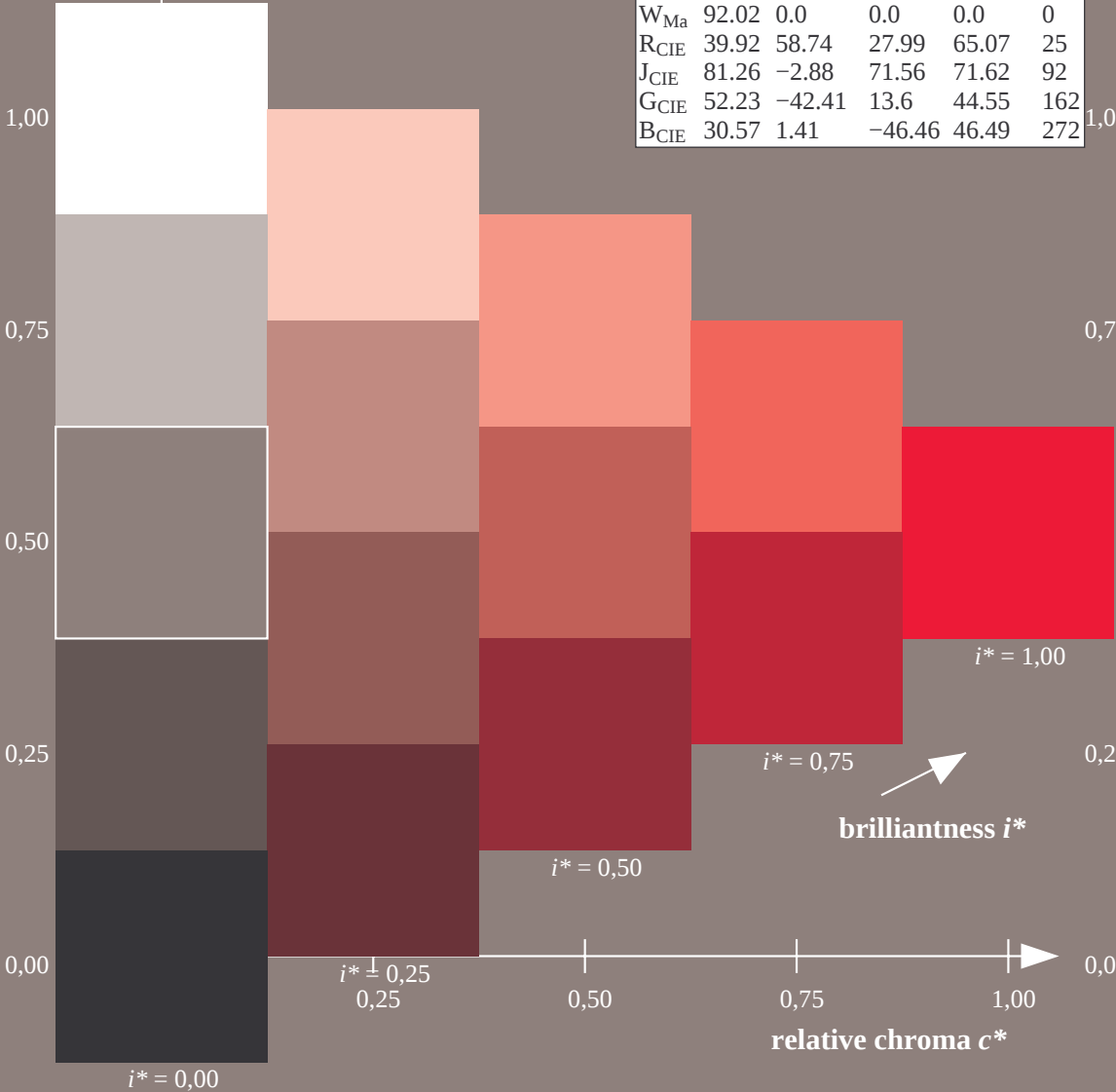
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18

triangle lightness  $t^*$

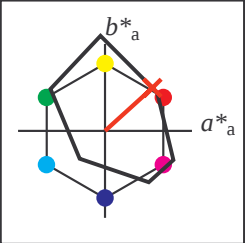
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

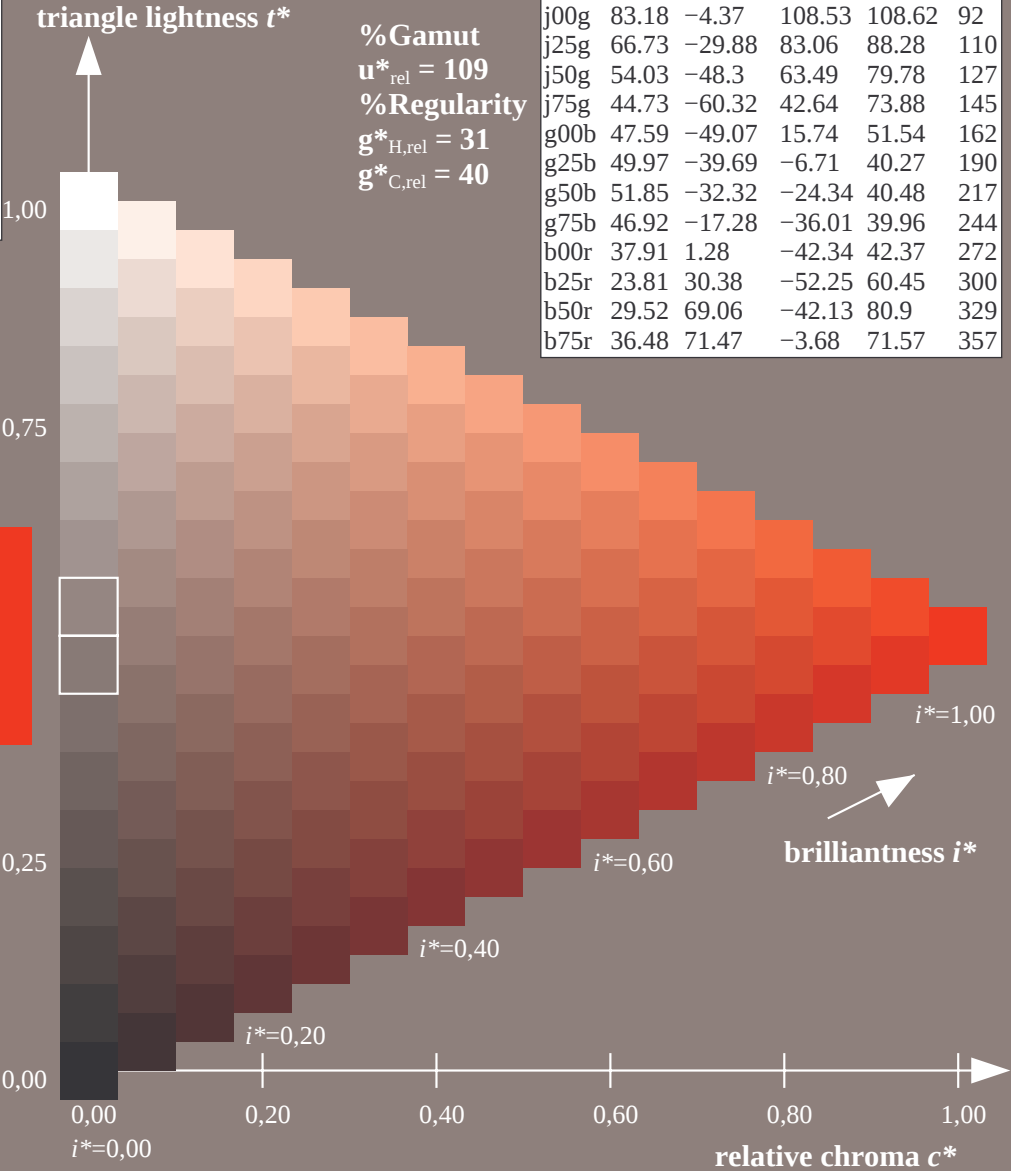
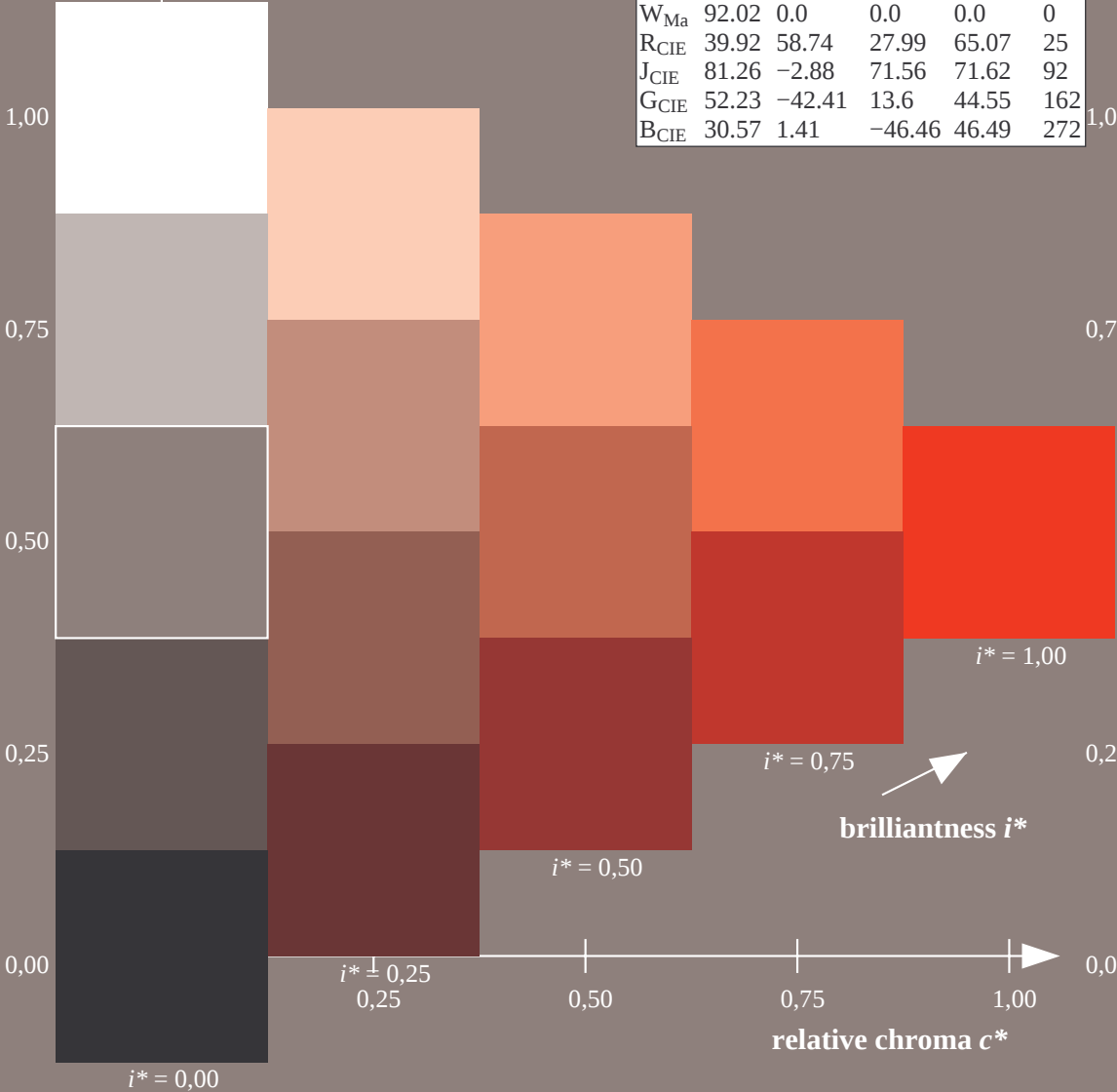


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 39\ 55\ 49$   
 $LAB^*LCH^*_{Ma}: 39\ 74\ 42$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.25\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.08\ 0.0$

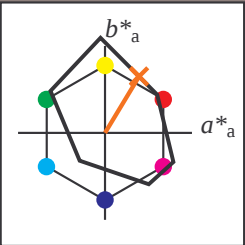
$u^* = r25j$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

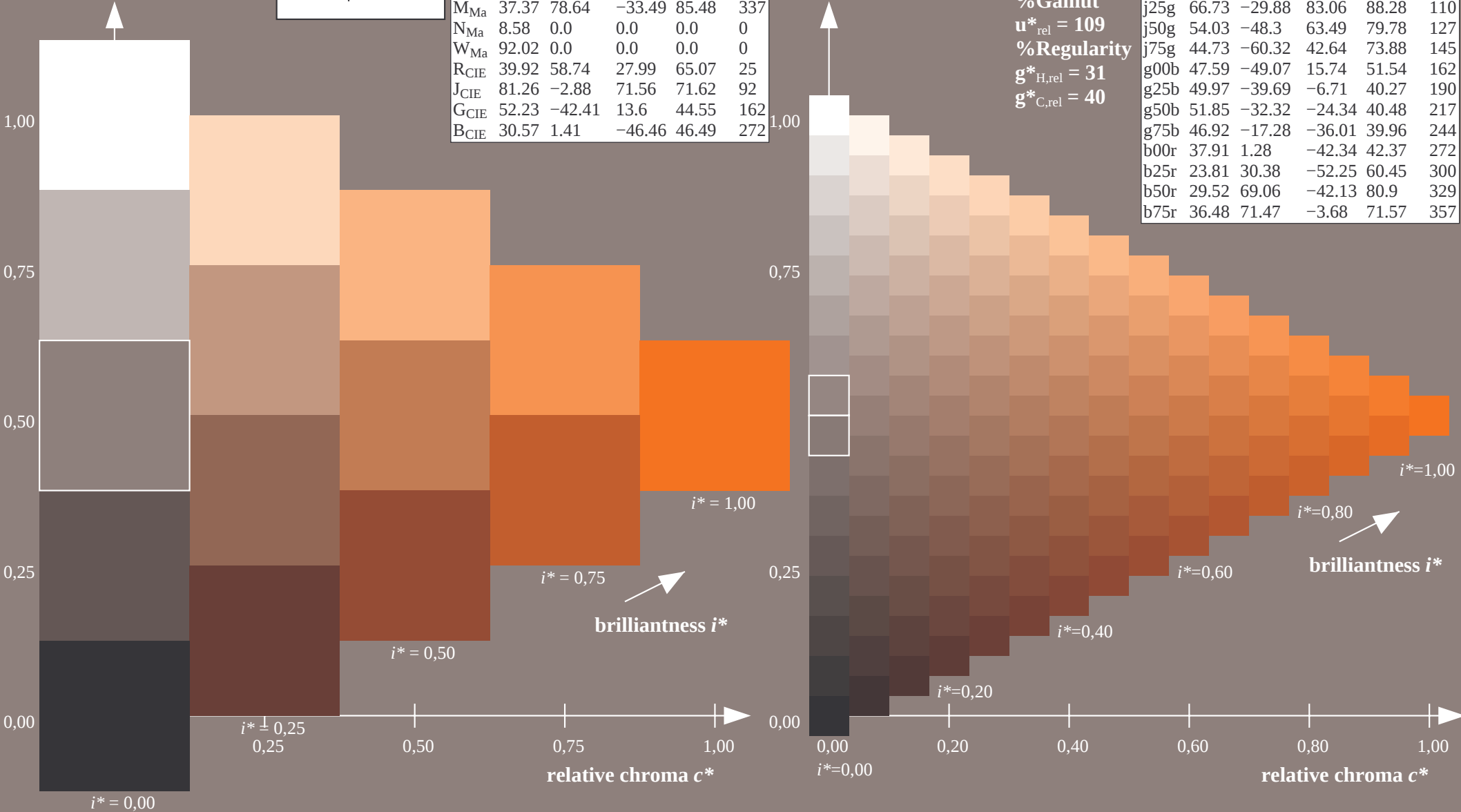


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 51\ 39\ 65$   
 $LAB^*LCH^*_{Ma}: 51\ 76\ 59$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.5\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.32\ 0.0$

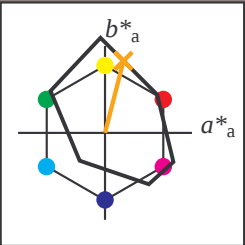
$u^* = r50j$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

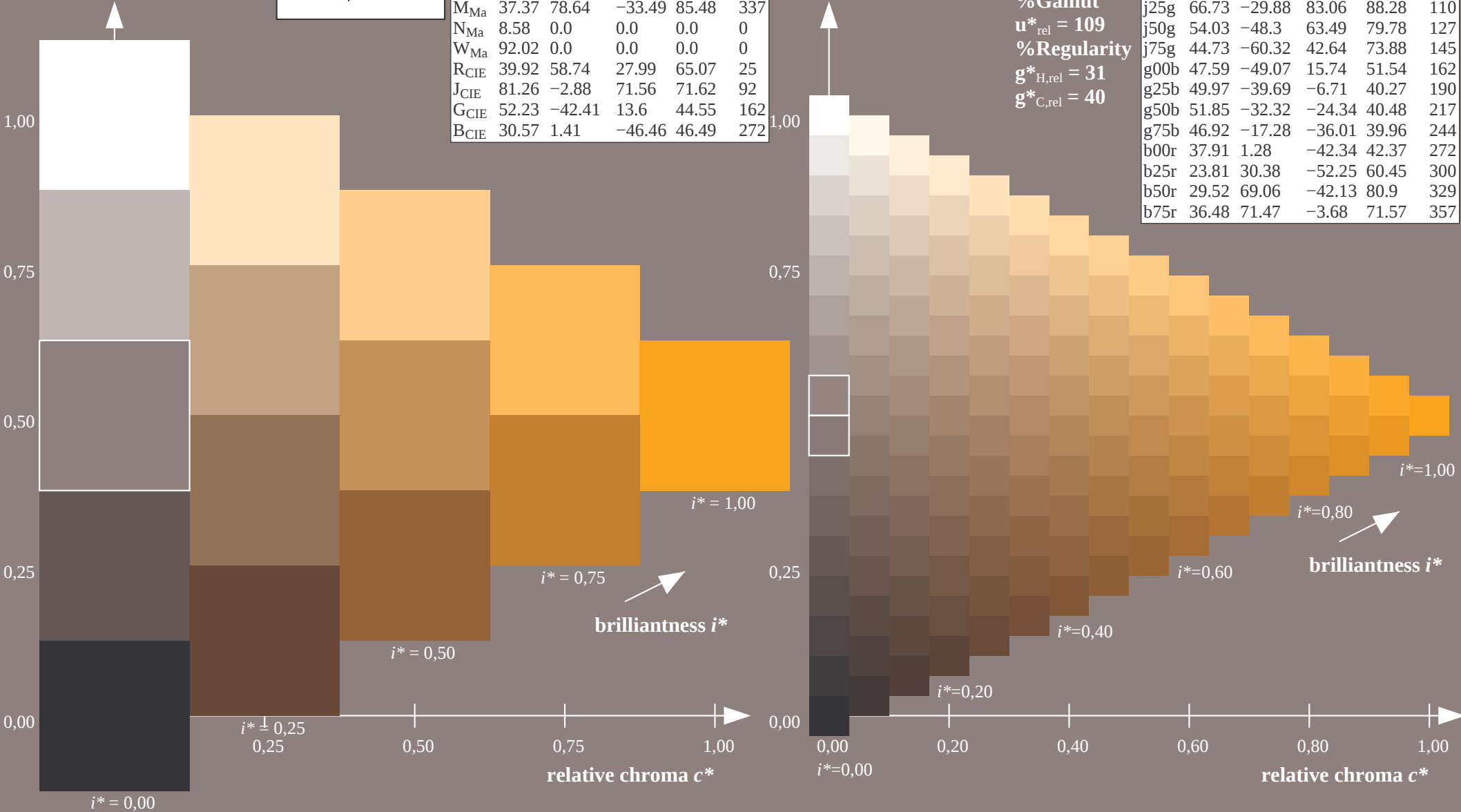


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 64 21 83  
 $LAB^*LCH^*_{Ma}$ : 64 86 76  
 $lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.59 0.0

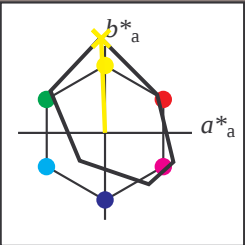
$u^* = r75j$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

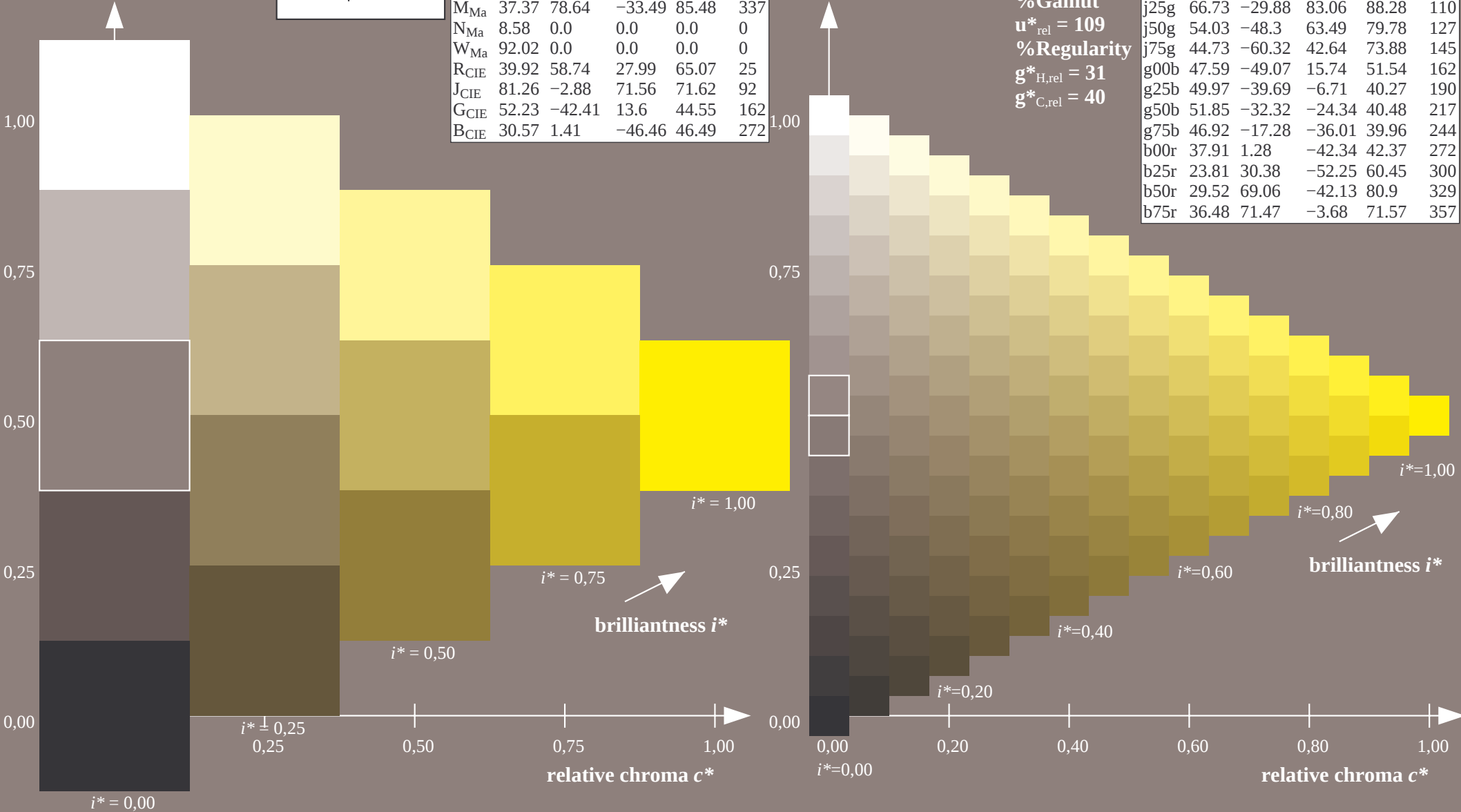


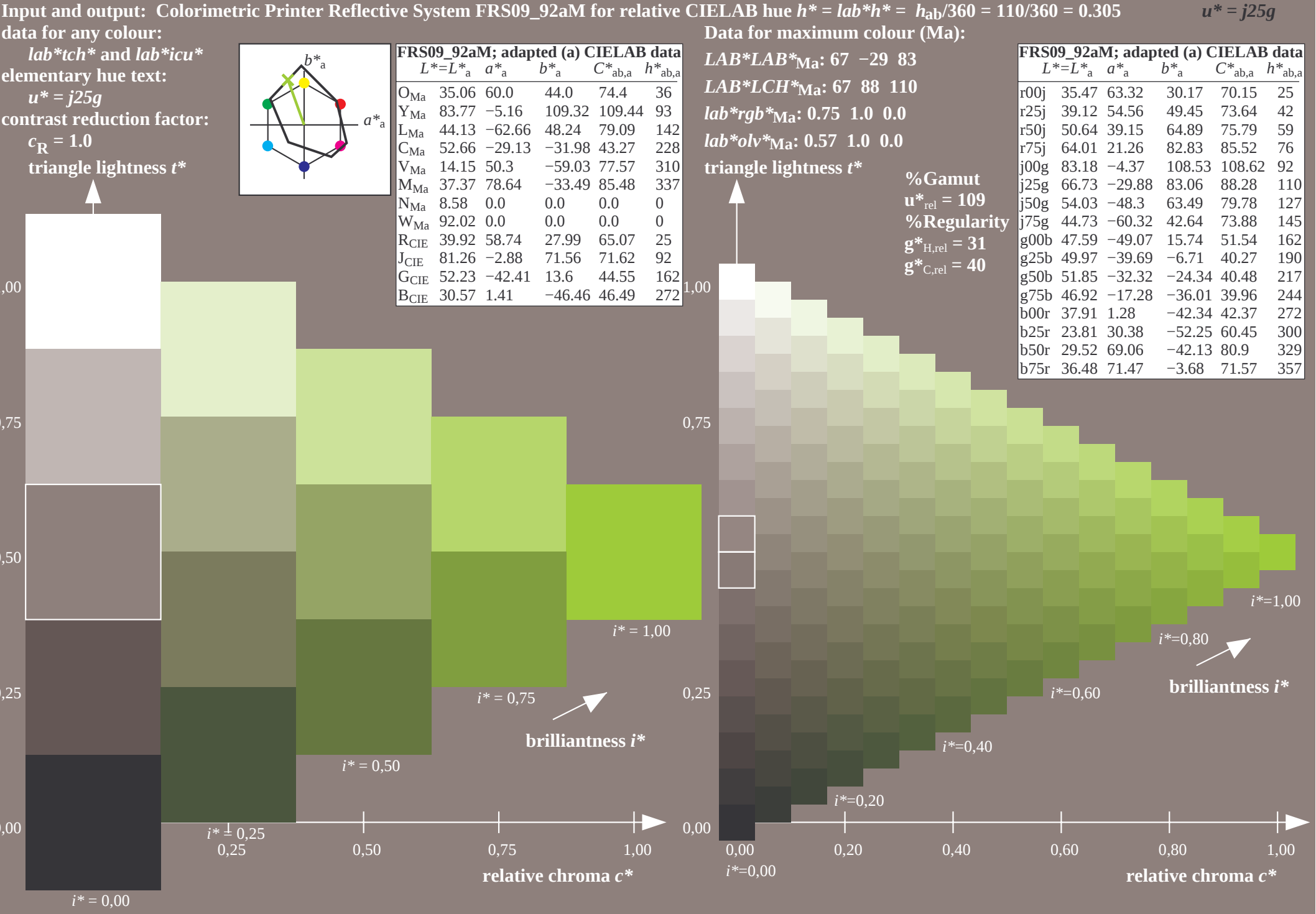
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

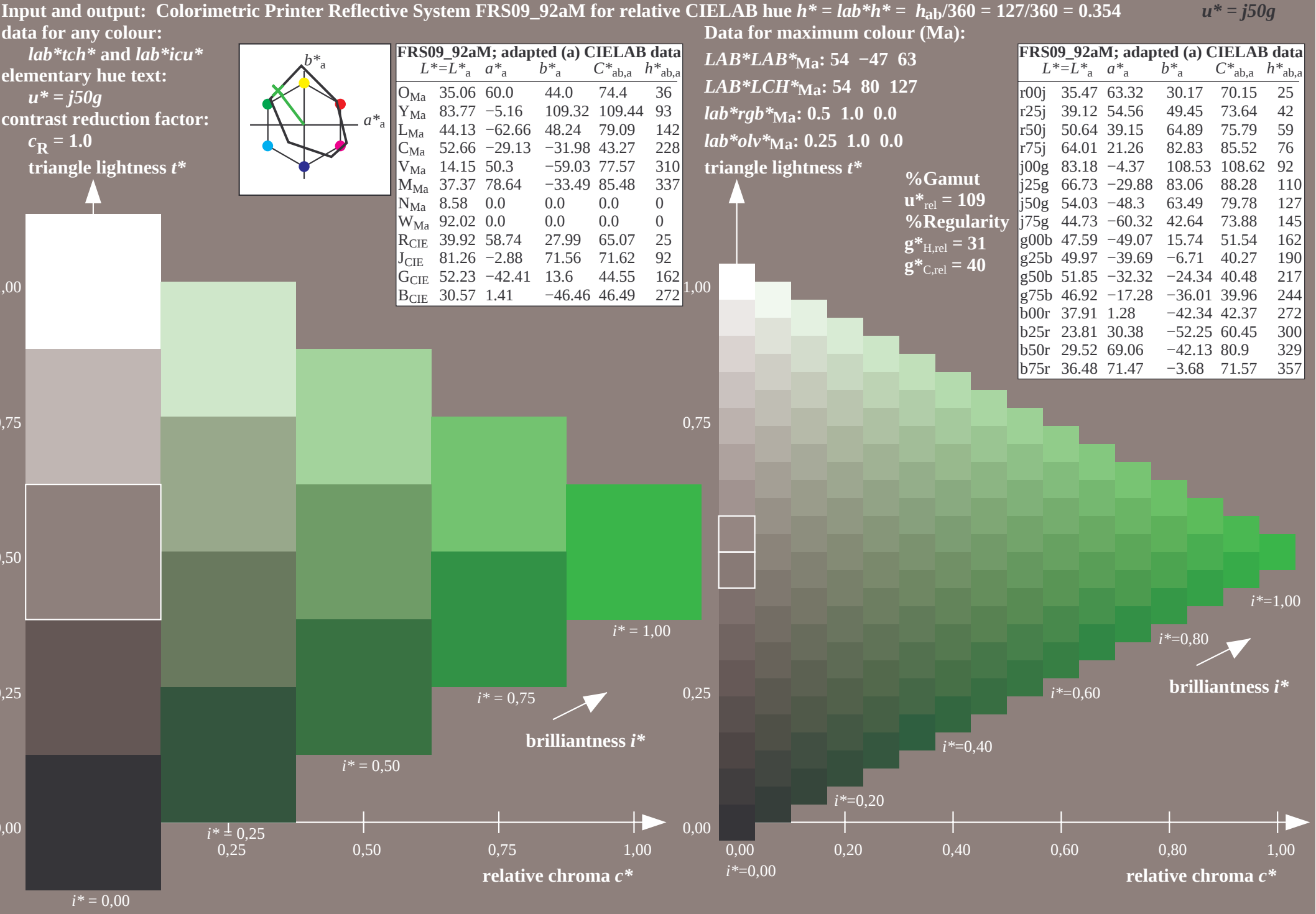
Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 83 \ -3 \ 109$   
 $LAB^*LCH^*_{Ma}: 83 \ 109 \ 92$   
 $lab^*rgb^*_{Ma}: 1.0 \ 1.0 \ 0.0$   
 $lab^*olv^*_{Ma}: 1.0 \ 0.99 \ 0.0$

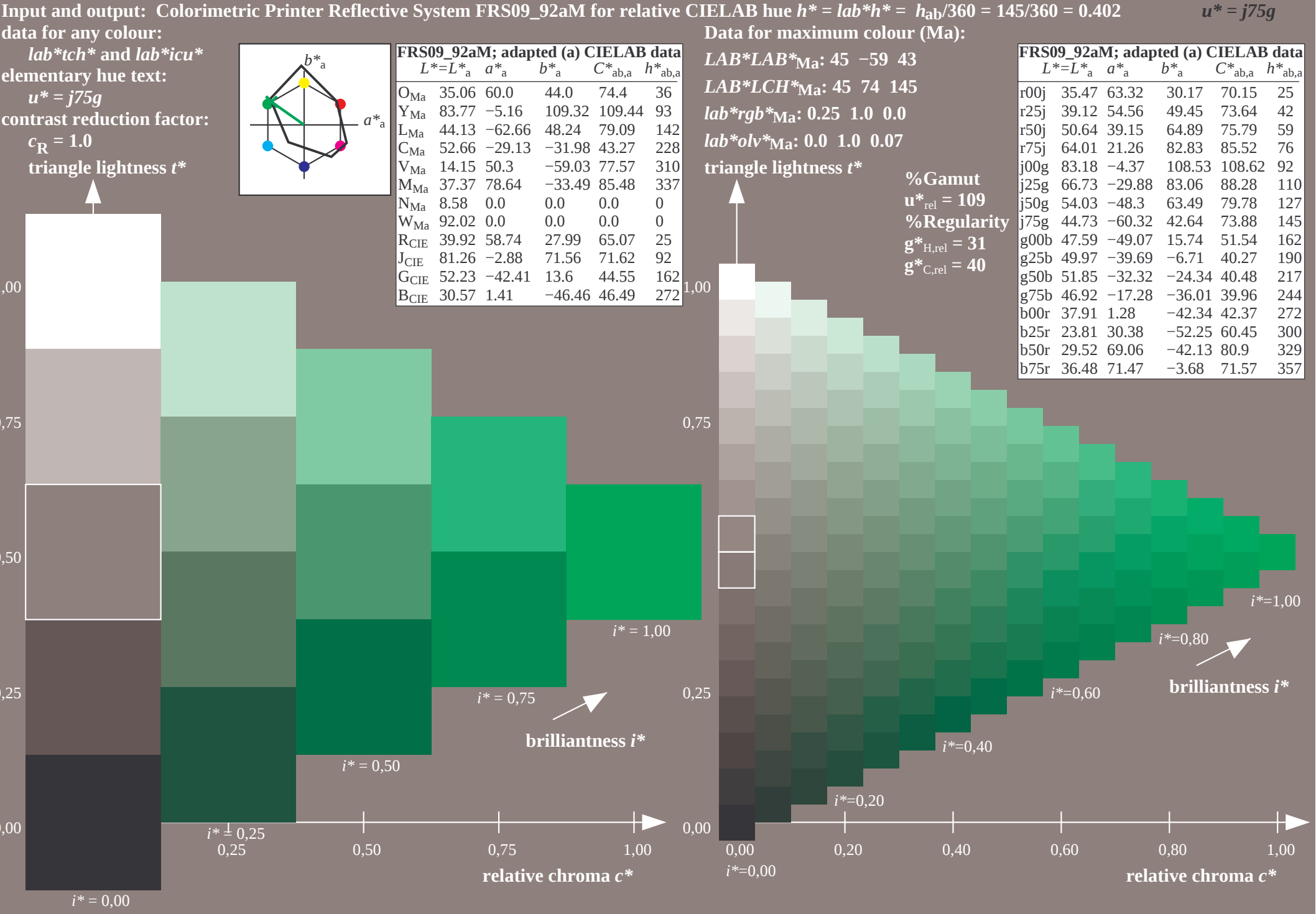
$u^* = j00g$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |













$$u^* = g50b$$

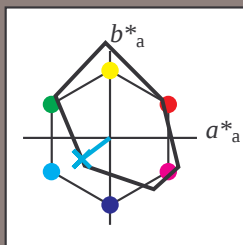
**data for any colour:**

*lab\*tch\** and *lab\*icu\**

elementary hue text:

$$u^* = q50b$$

**contrast reduction factor:**

$$c_p = 1.0$$
triangle lightness  $t^*$ 

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

**Data for maximum colour (Ma):**

*LAB\*LAB\**<sub>Ma</sub>: 52 -31 -23

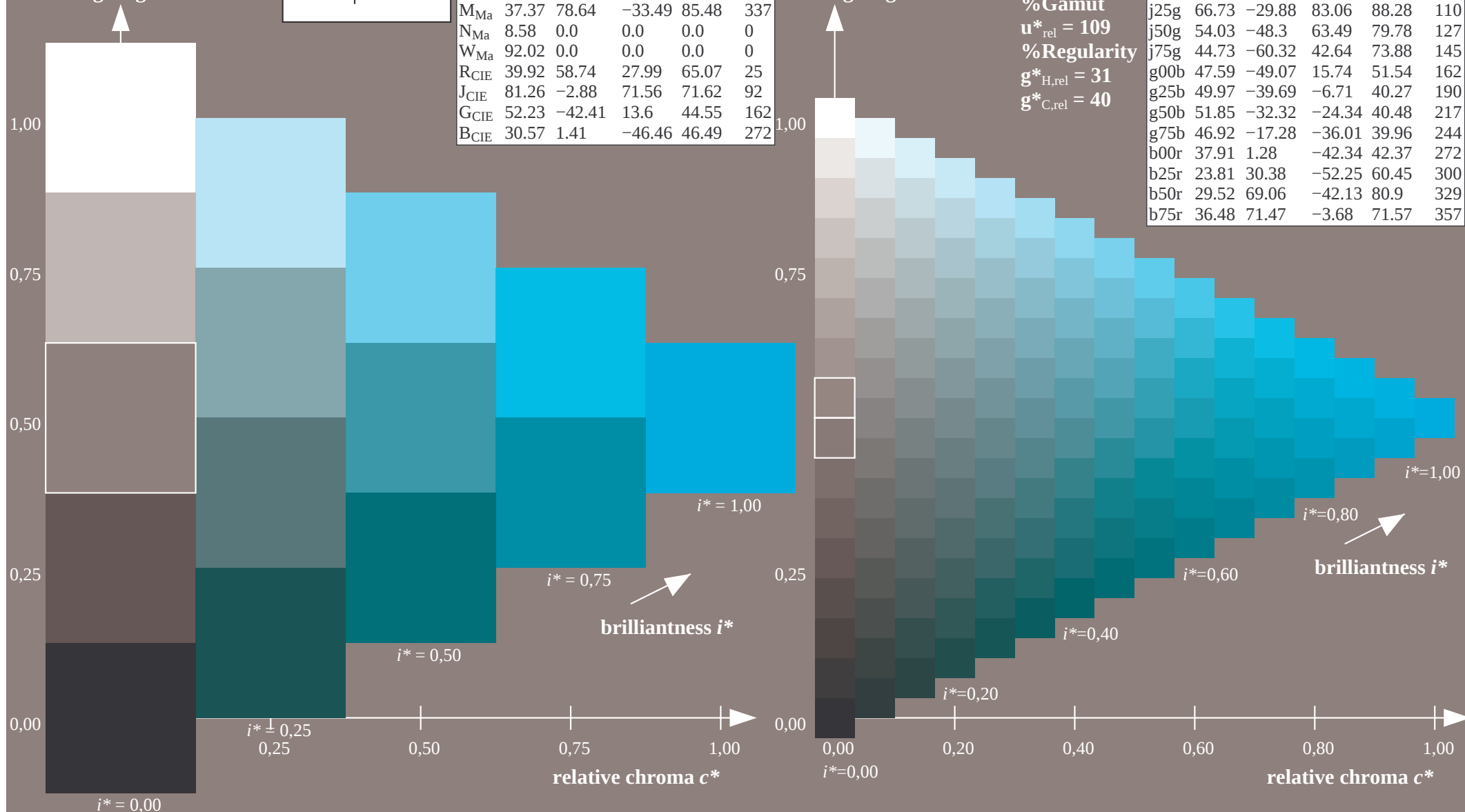
**LAB\*LCH\*Ma: 52 40 217**

**lab\*rgb\*\_Ma: 0.0 1.0 1.0**

**lab\*olv\*Ma: 0.0 1.0 0.9**

triangle lightness  $t^*$

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = g75b$$

**Data for maximum colour (Ma):**

**LAB\*LAB\*<sub>Ma</sub>: 47 -16 -35**

**LAB\*LCH\*\_Ma: 47 40 244**

*lab\*rqb\**<sub>Ma</sub>: 0.0 0.5 1.0

**lab\*olv\*Ma: 0.0 0.85 1.0**

triangle lightness  $t^*$

## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$
 $i^*=0,40$ 

100

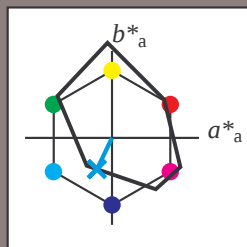
0,40

\_\_\_\_\_

$$j^* = 0$$

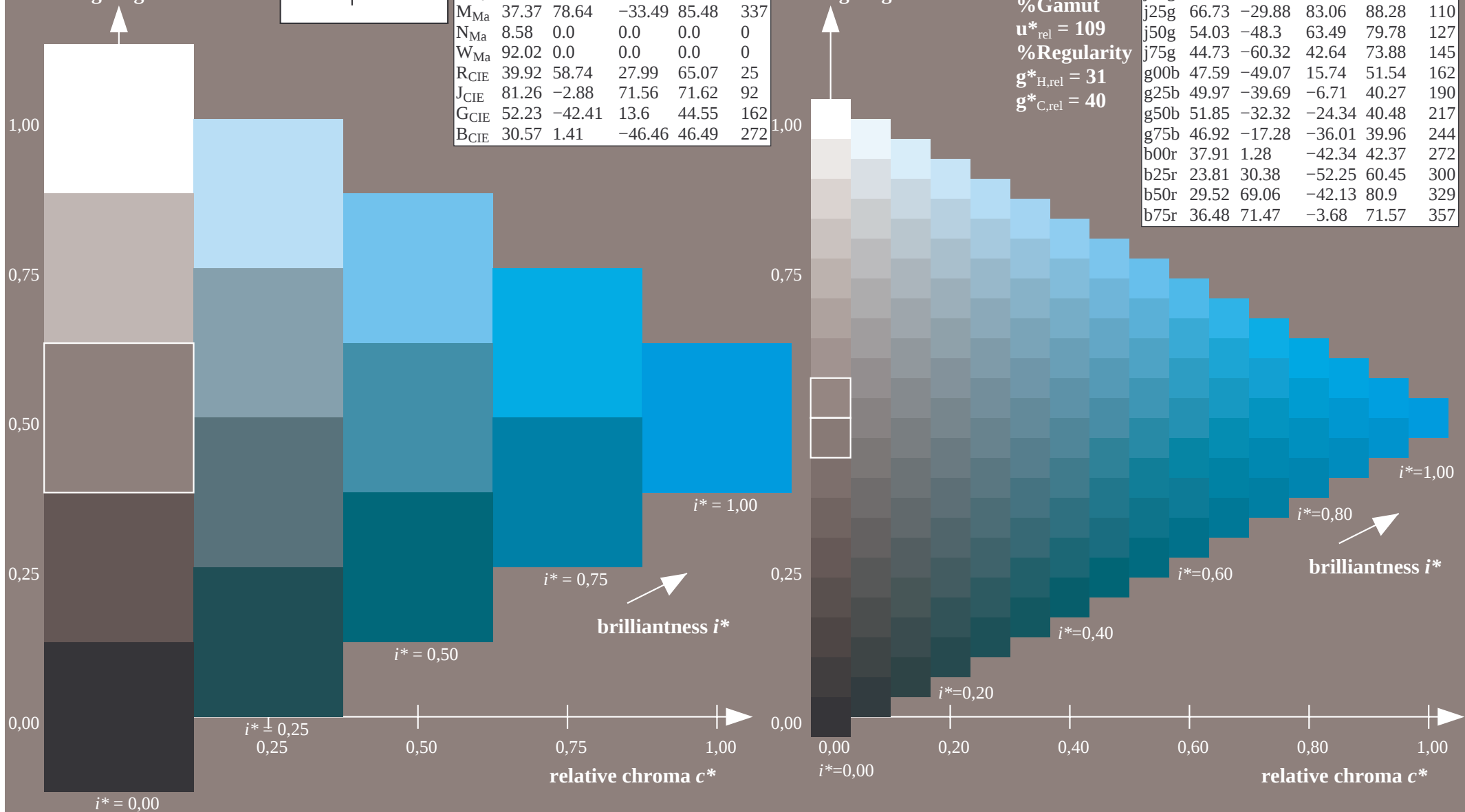
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| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = b00r$$

**Data for maximum colour (Ma):**

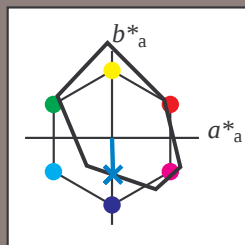
$LAB*LAB*_{Ma}: 38 \ 1 \ -41$

**LAB\*LCH\*Ma: 38 42 272**

**lab\*rgb\*Ma: 0.0 0.0 1.0**

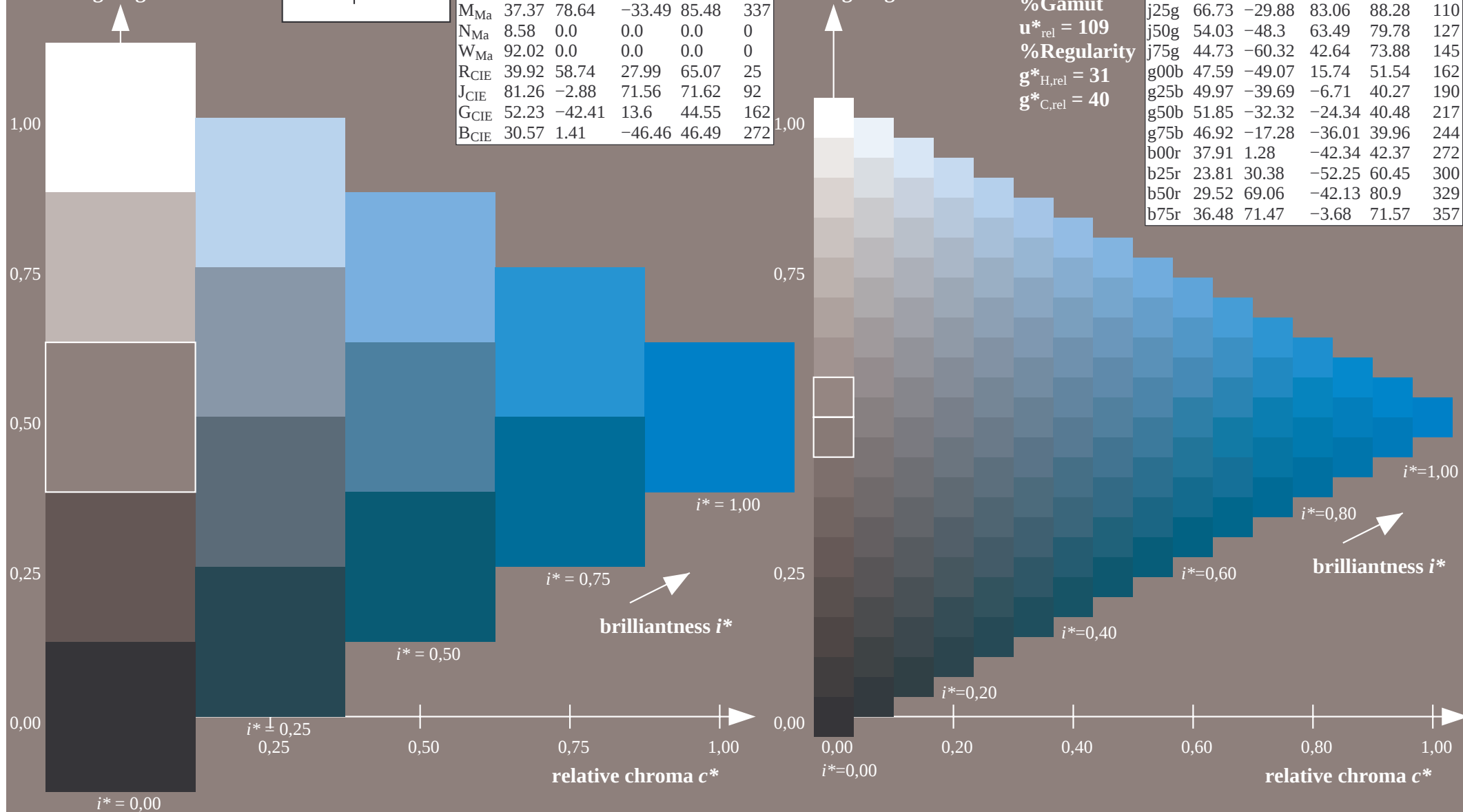
*lab\*olv\**Ma: 0.0 0.62 1.0

triangle lightness  $t^*$

triangle lightness  $t^*$ 

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = b25r$$

**Data for maximum colour (Ma):**

**LAB\*LAB\*Ma: 24 30 -51**

**LAB\*LCH\*Ma: 24 60 300**

***lab\*rgb\*\_Ma: 0.5 0.0 1.0***

*lab\*olv\**Ma: 0.0 0.25 1.0

triangle lightness  $t^*$

triangle lightness  $t^*$ 

## %Gamut

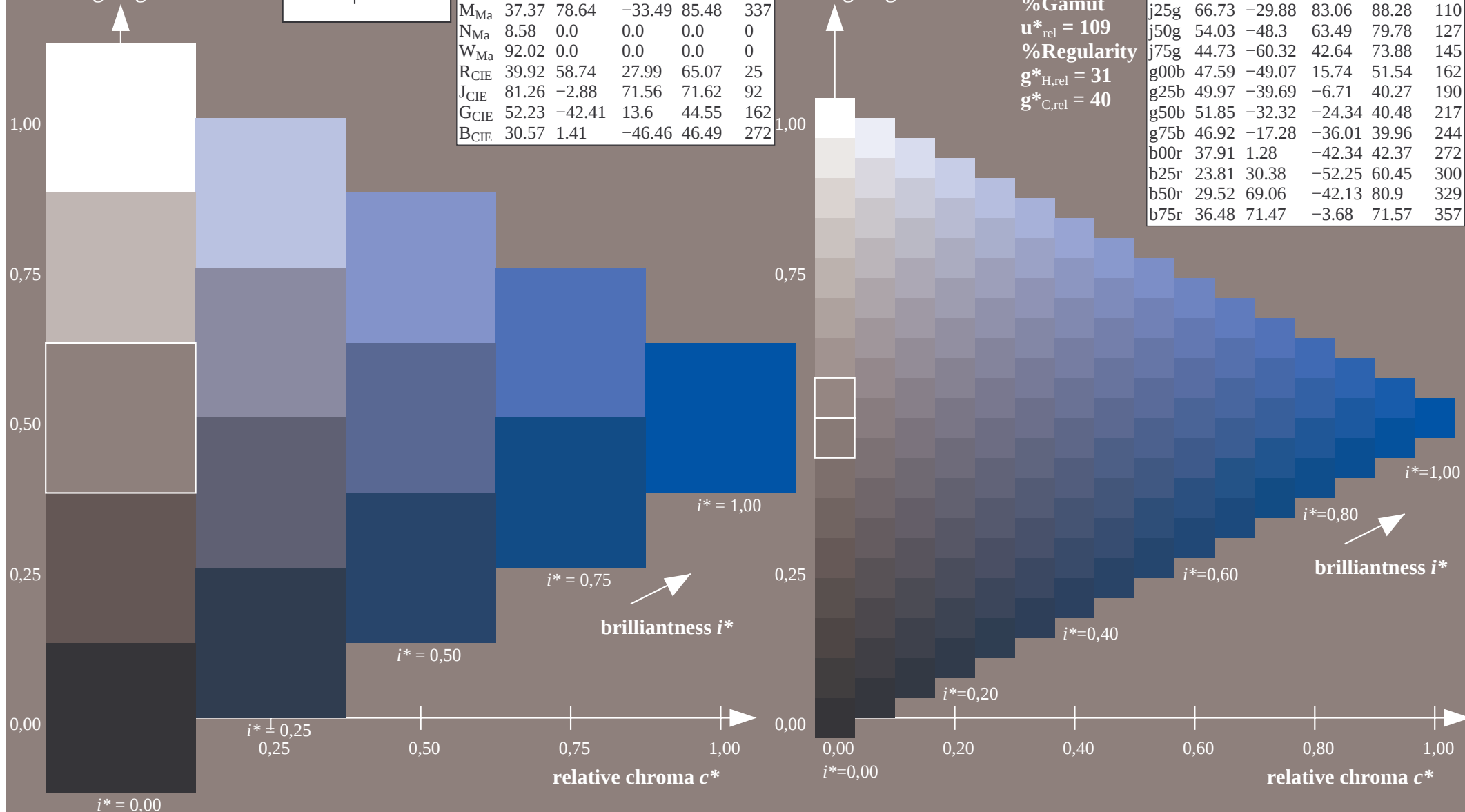
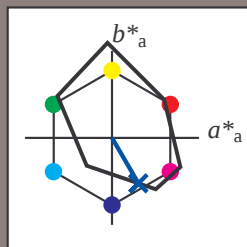
$$\mathbf{u}_{\text{rel}}^* = 109$$

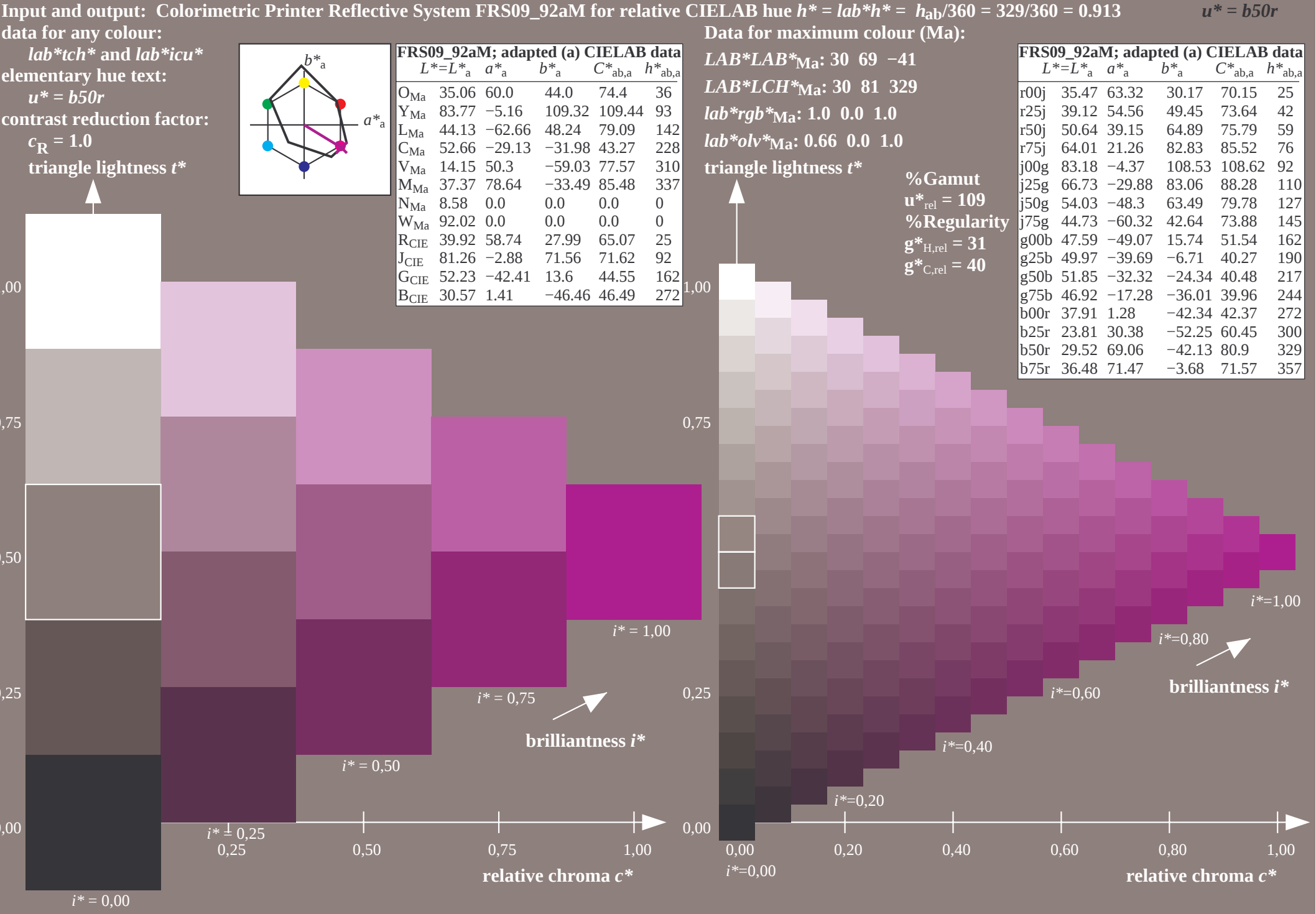
### %Regularity

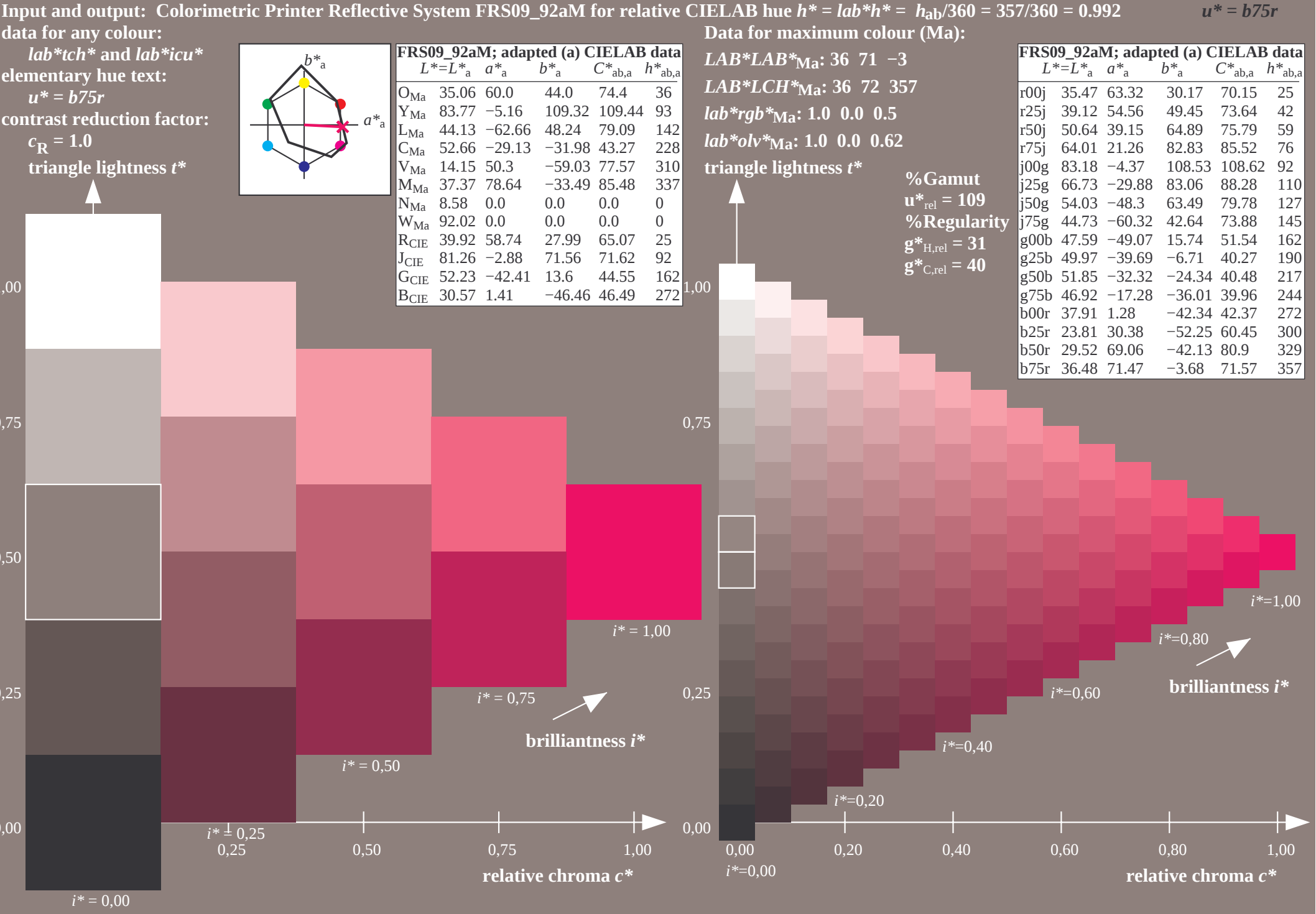
$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

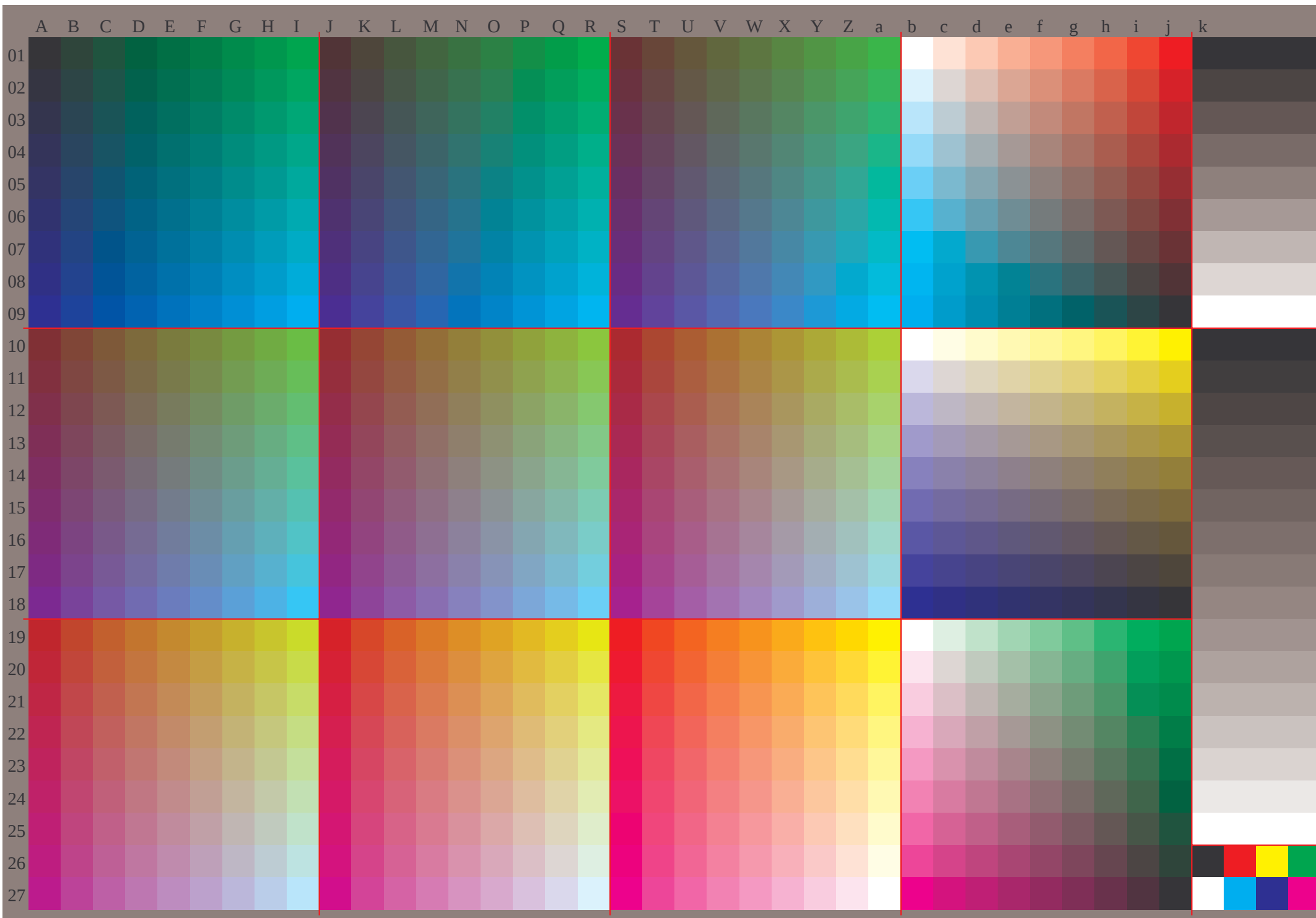
| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



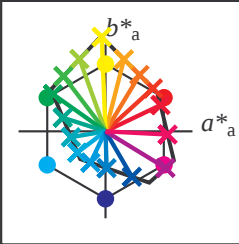






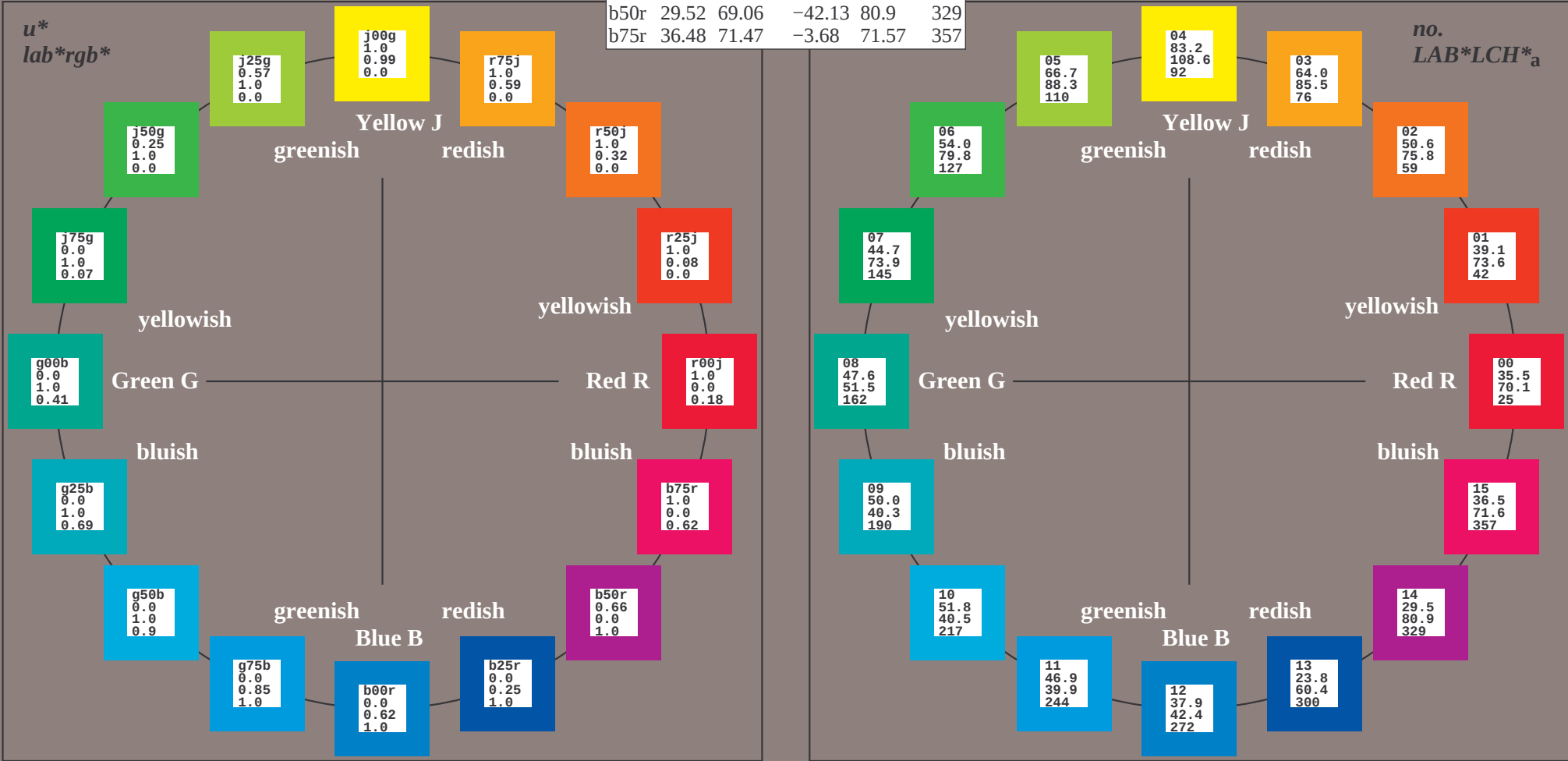
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\**tch\** and lab\**icu\**  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



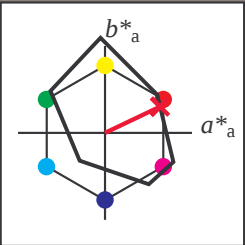
% Gamut  
u\*<sub>rel</sub> = 109  
% Regularity  
g\*<sub>H,rel</sub> = 31  
g\*<sub>C,rel</sub> = 40

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



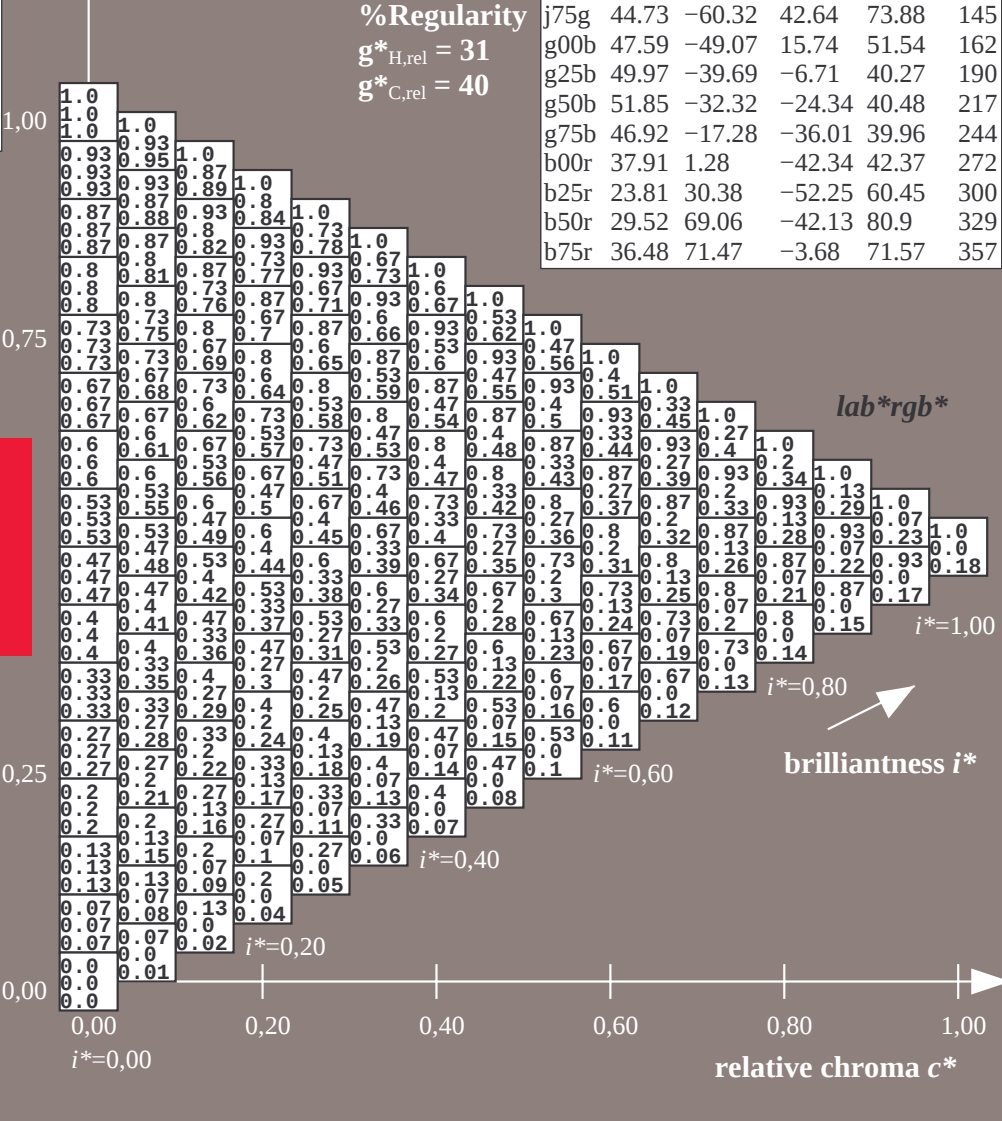
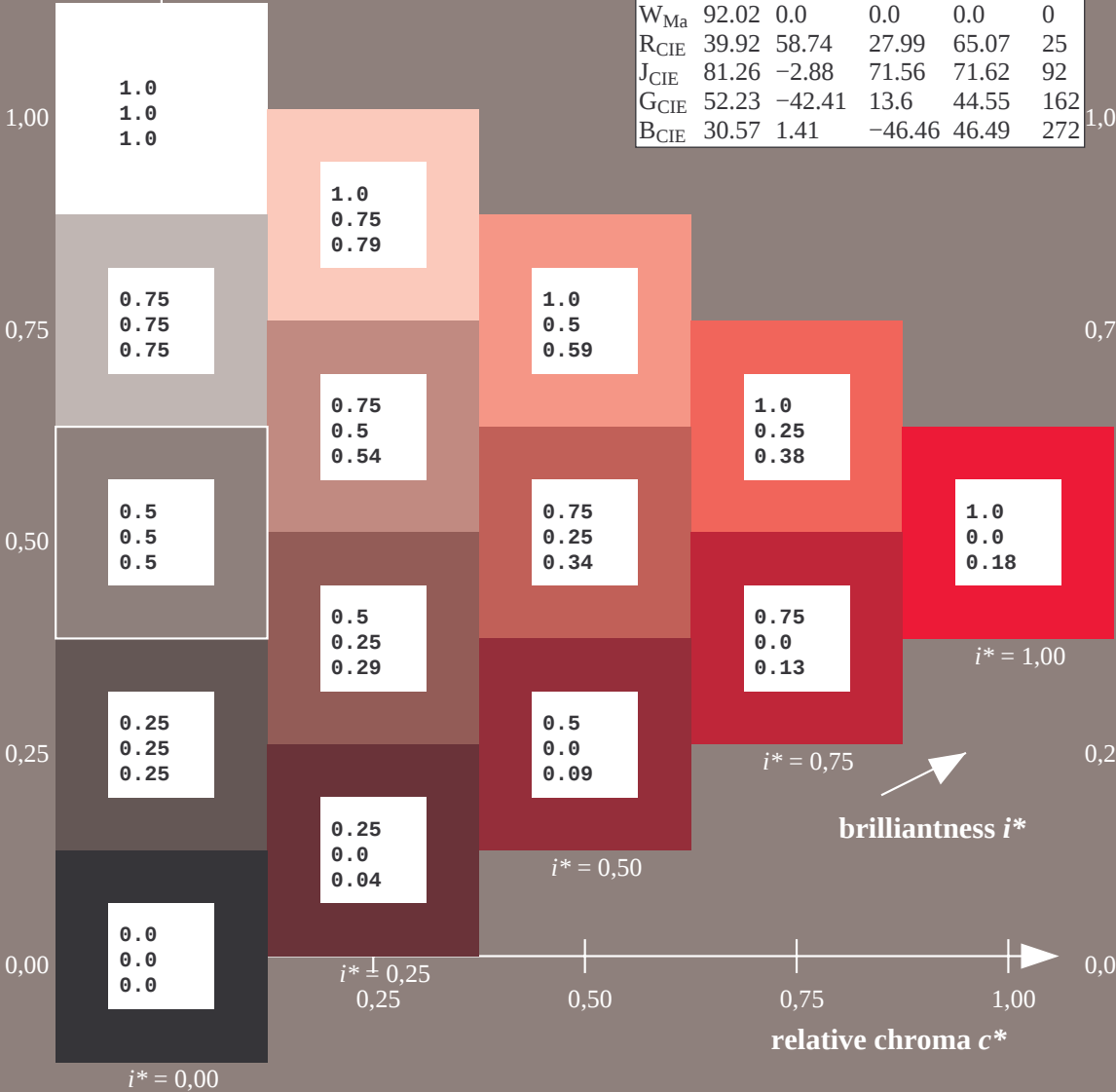
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18

triangle lightness  $t^*$

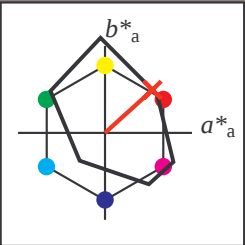
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 39 55 49

$LAB^*LCH^*_{Ma}$ : 39 74 42

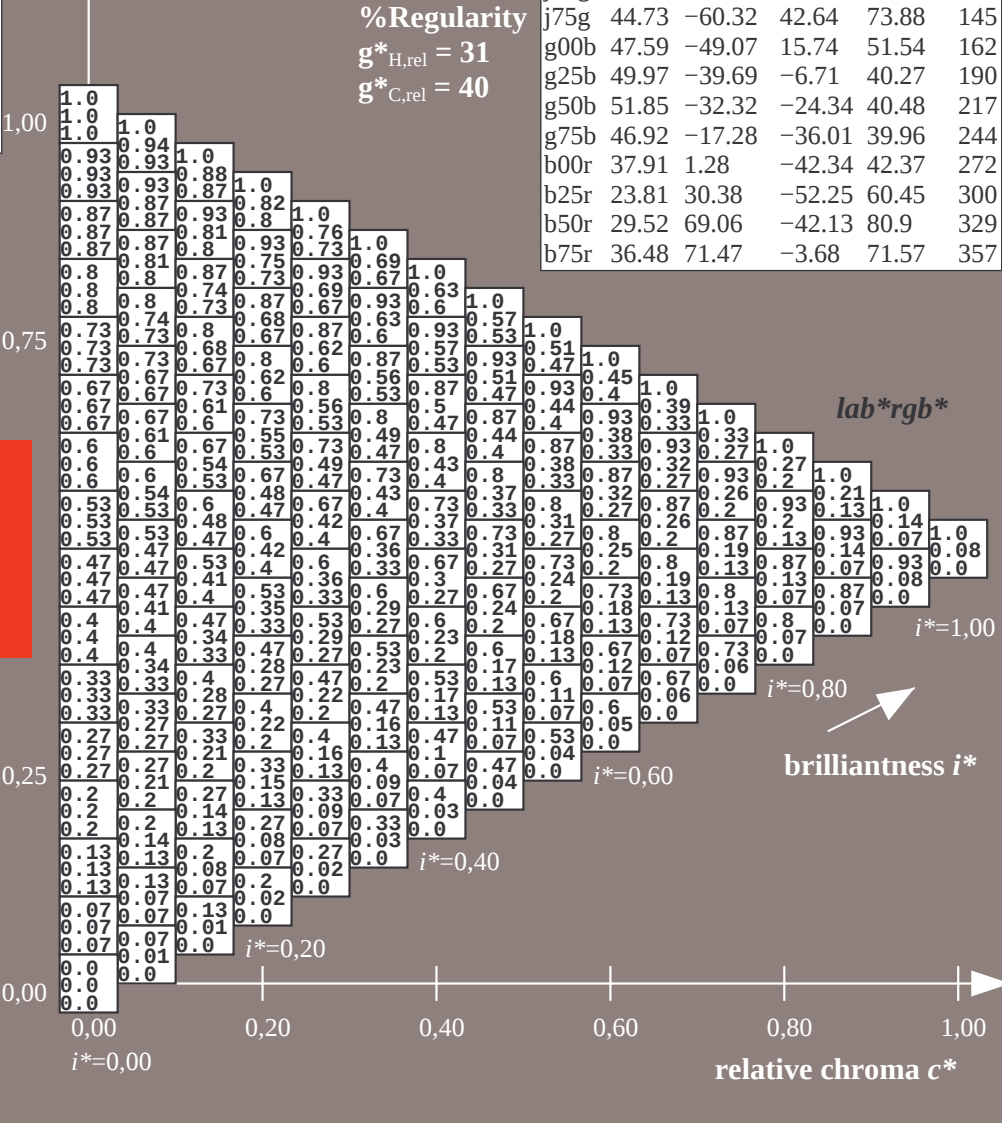
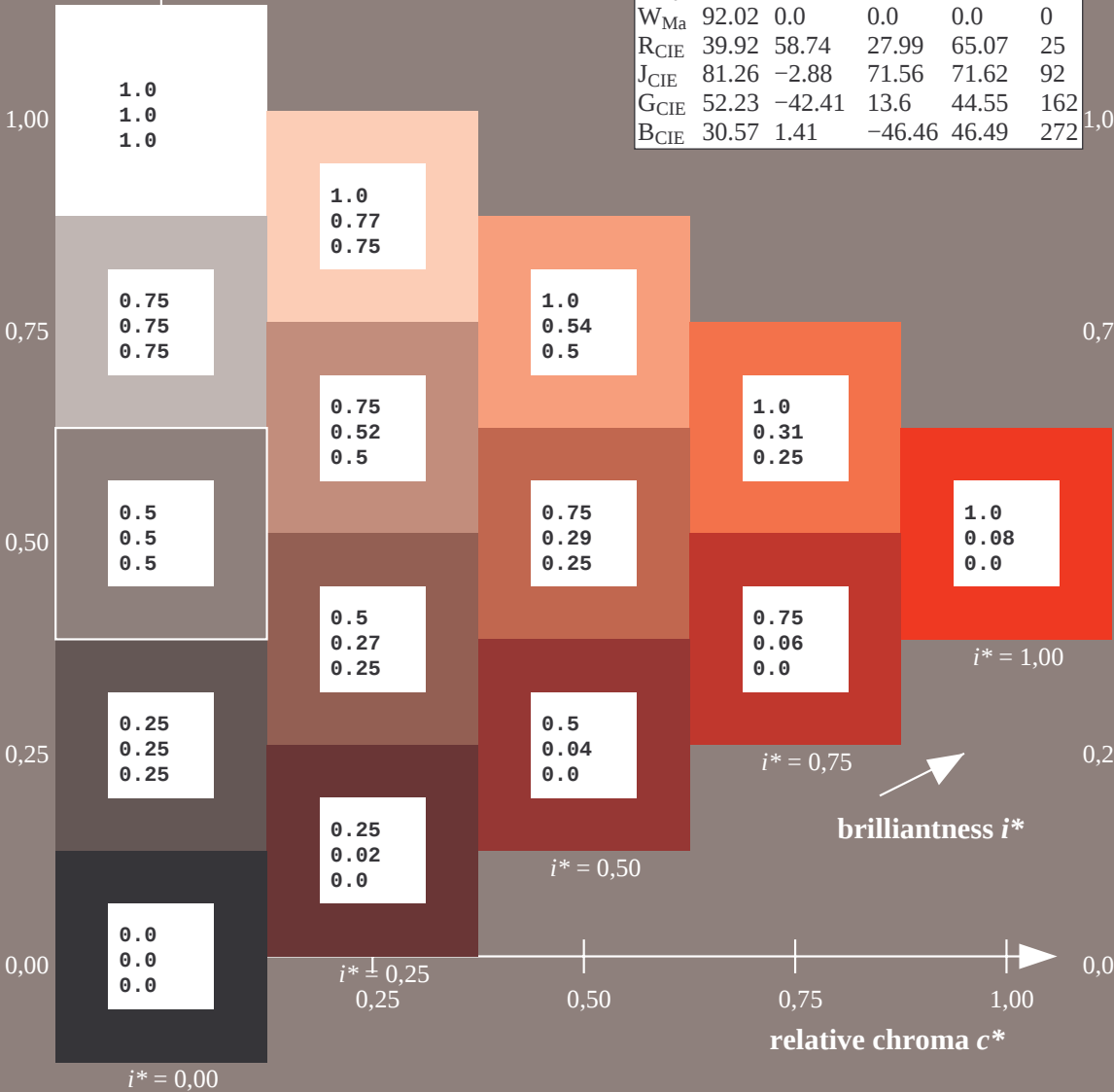
$lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.08 0.0

triangle lightness  $t^*$

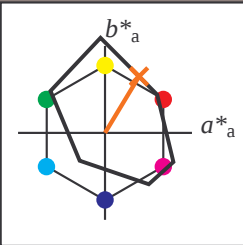
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

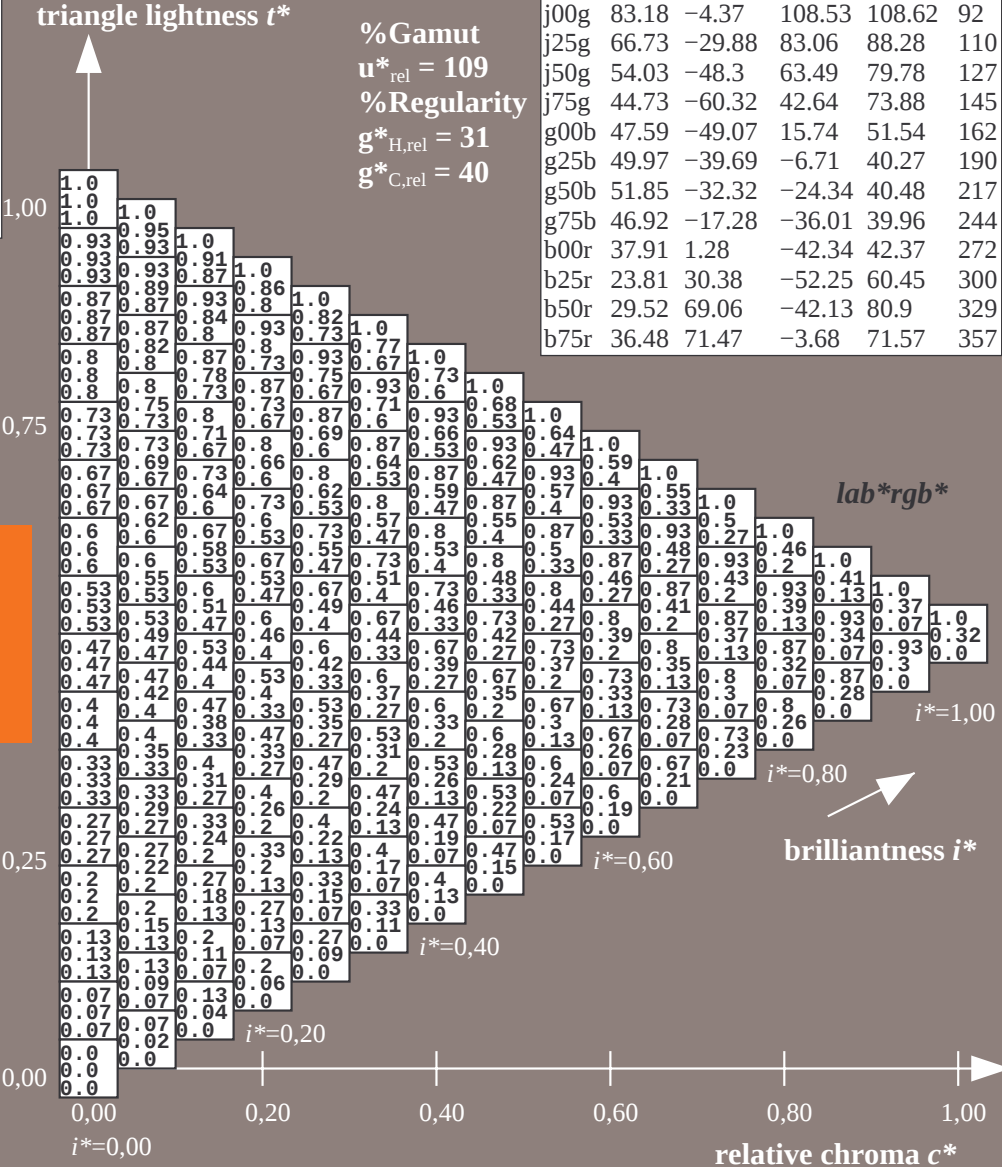
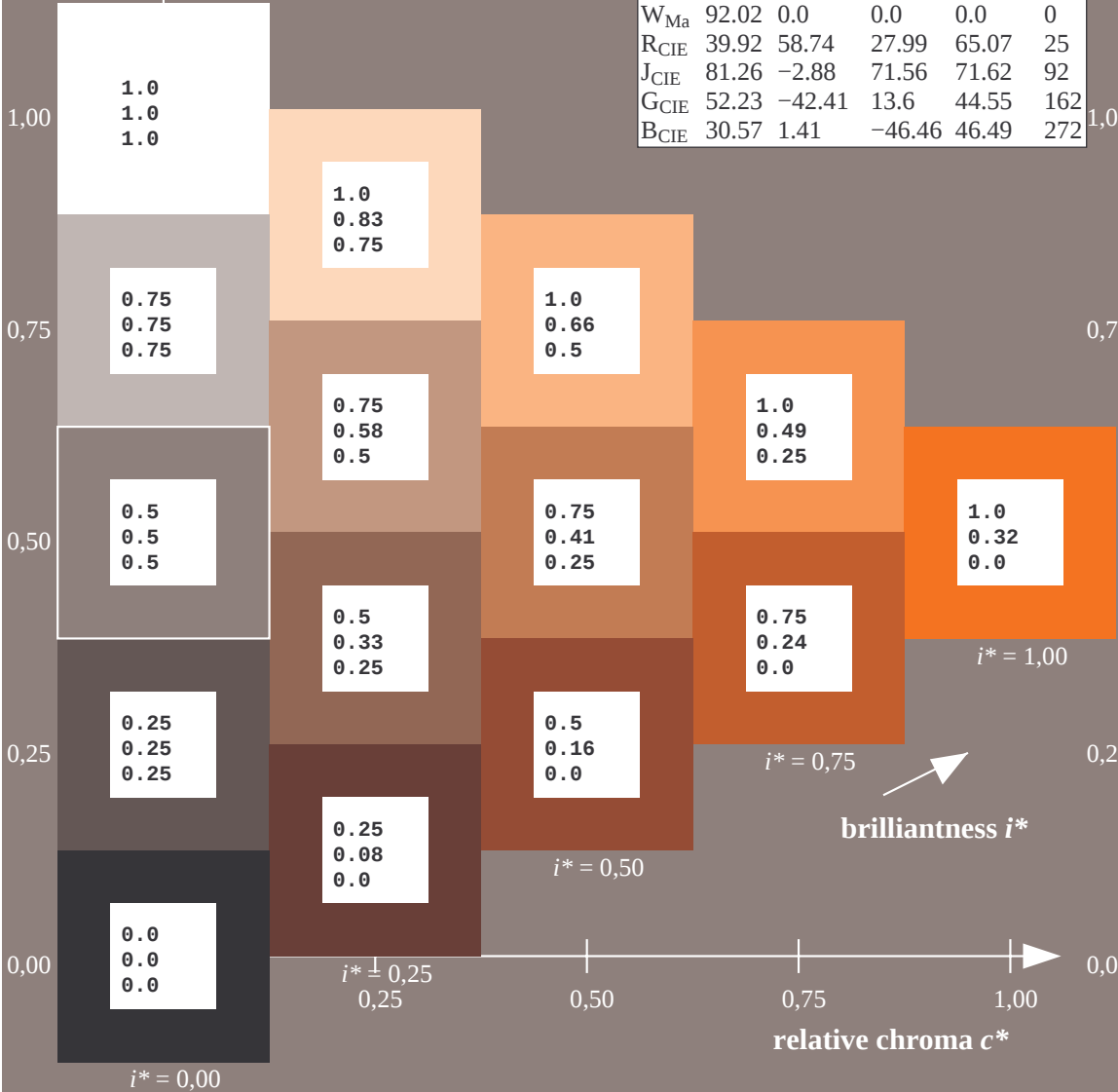


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 51\ 39\ 65$   
 $LAB^*LCH^*_{Ma}: 51\ 76\ 59$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.5\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.32\ 0.0$

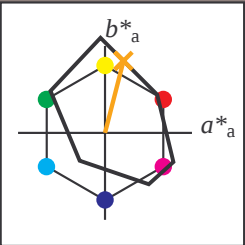
$u^* = r50j$   
 $lab^*rgb^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

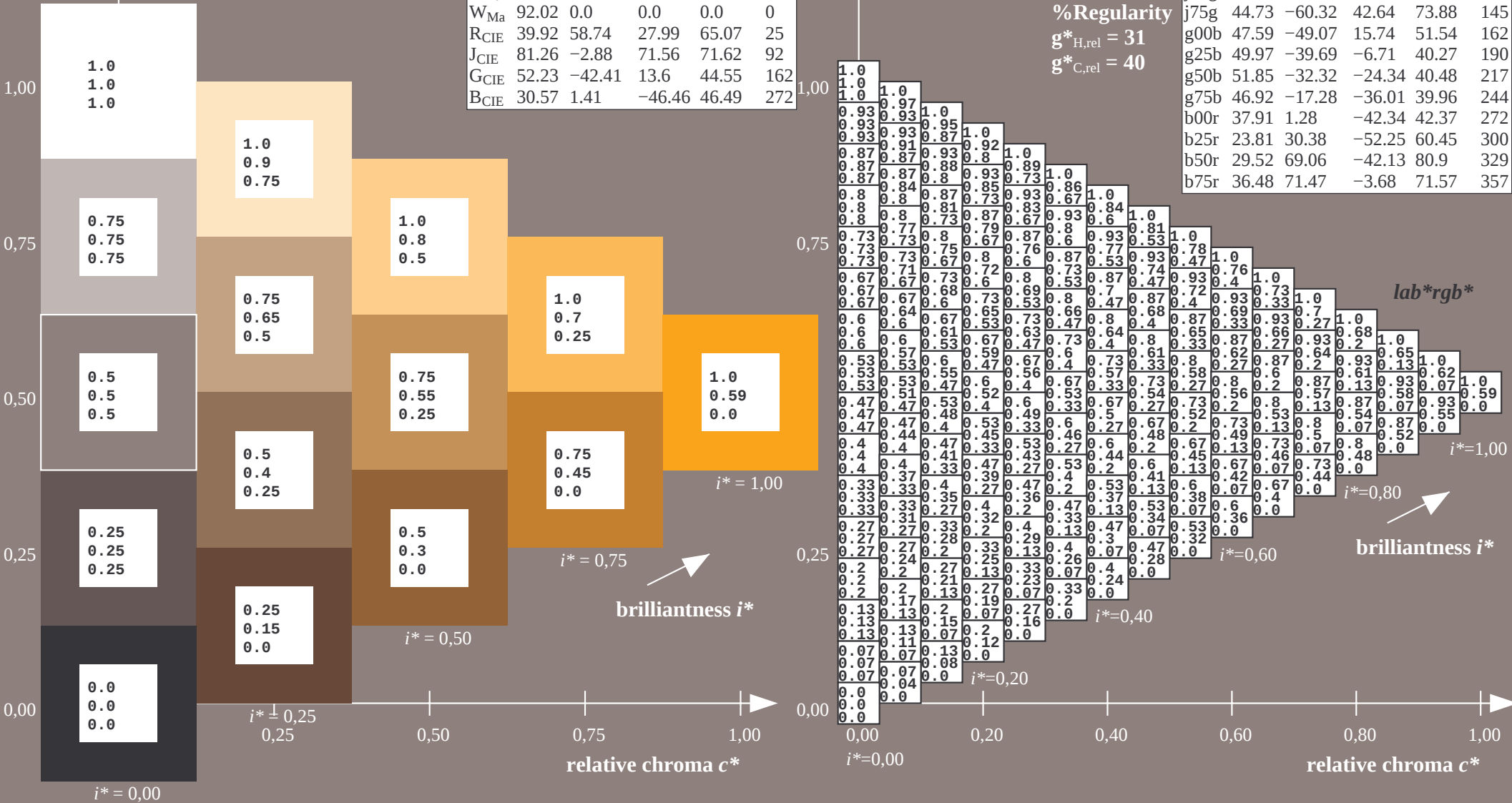
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 64 21 83  
 $LAB^*LCH^*_{Ma}$ : 64 86 76  
 $lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.59 0.0

triangle lightness  $t^*$

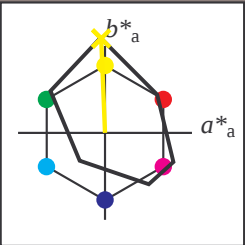
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



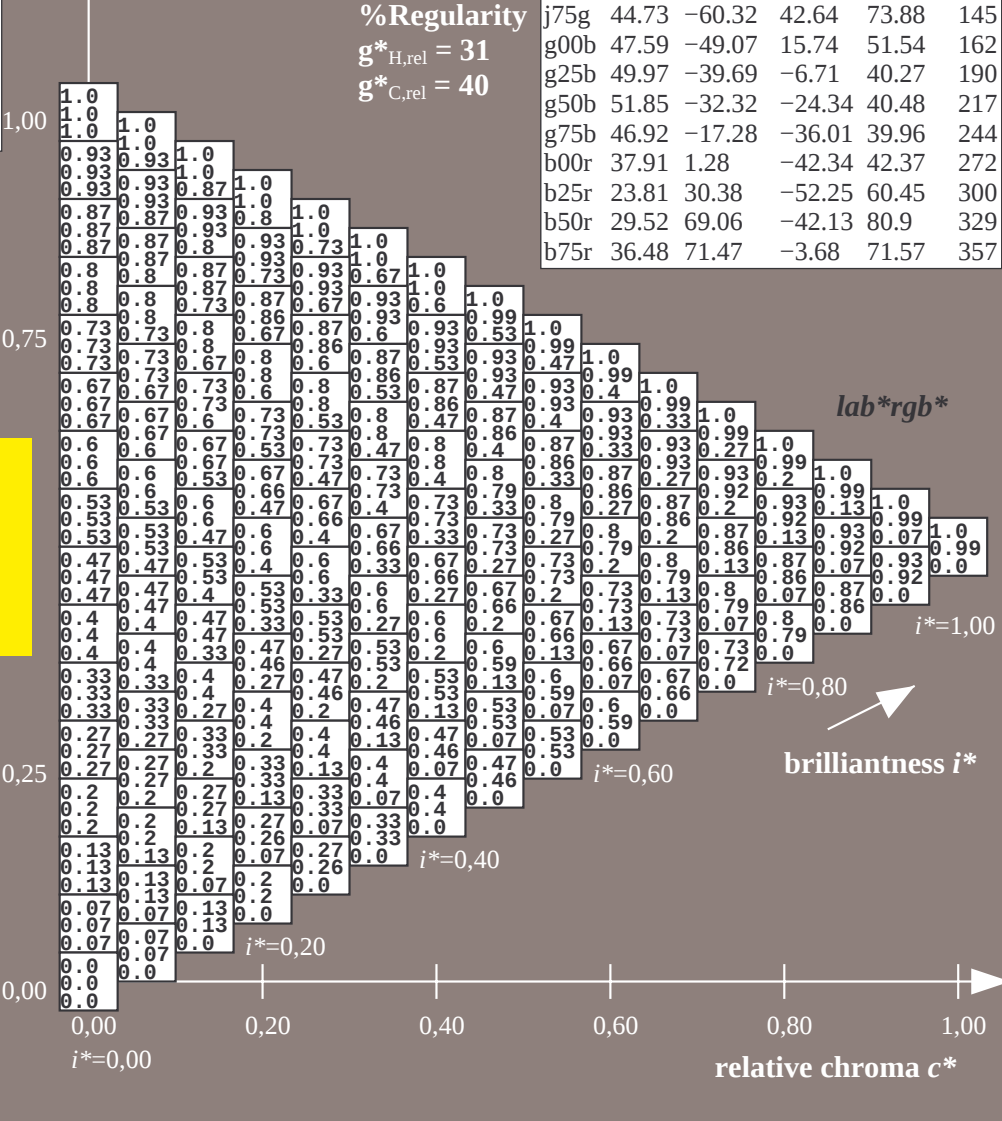
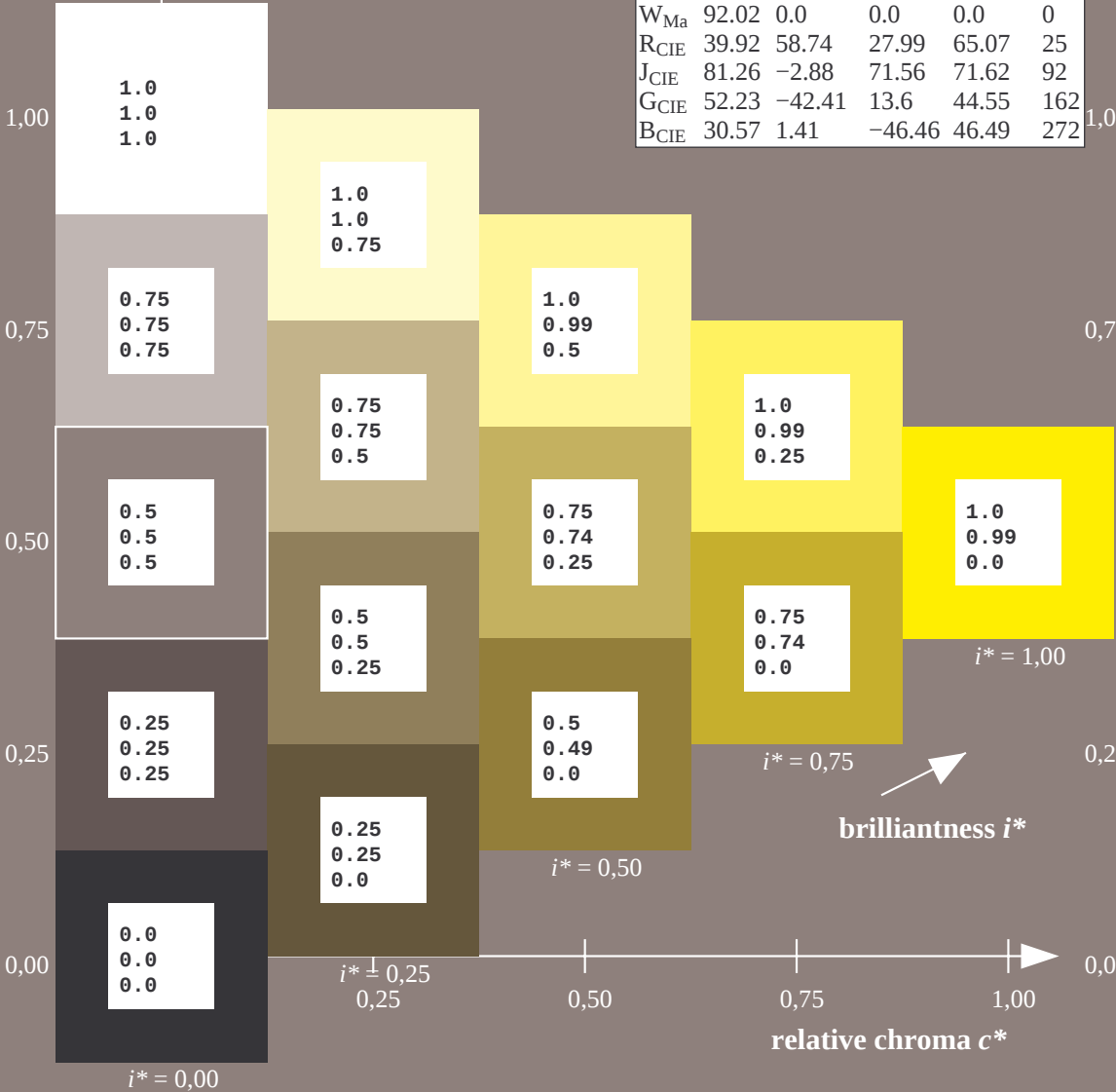
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 83 -3 109  
 $LAB^*LCH^*_{Ma}$ : 83 109 92  
 $lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.99 0.0

triangle lightness  $t^*$

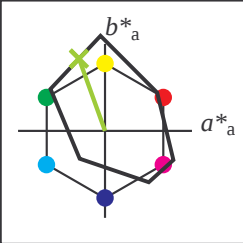
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 110/360 = 0.305$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j25g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



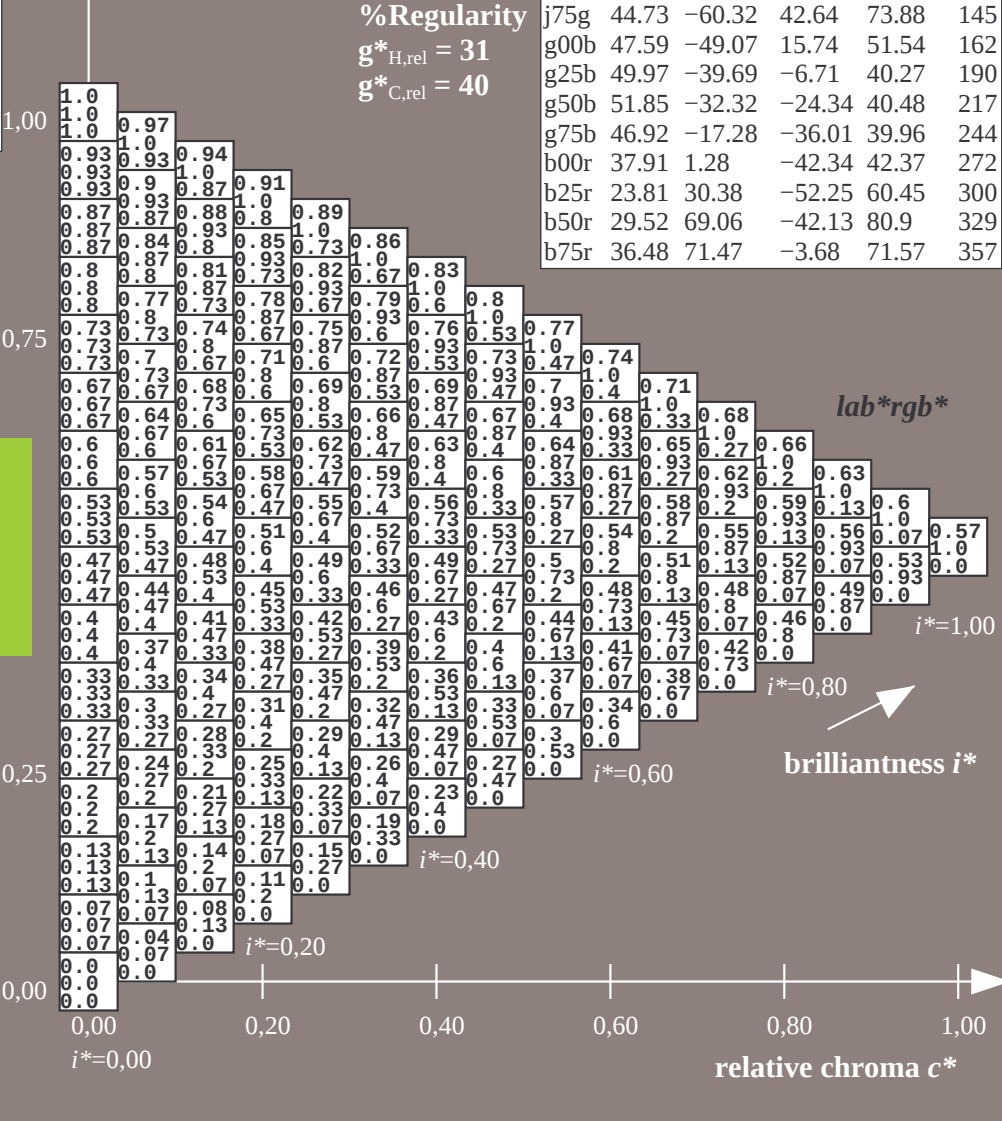
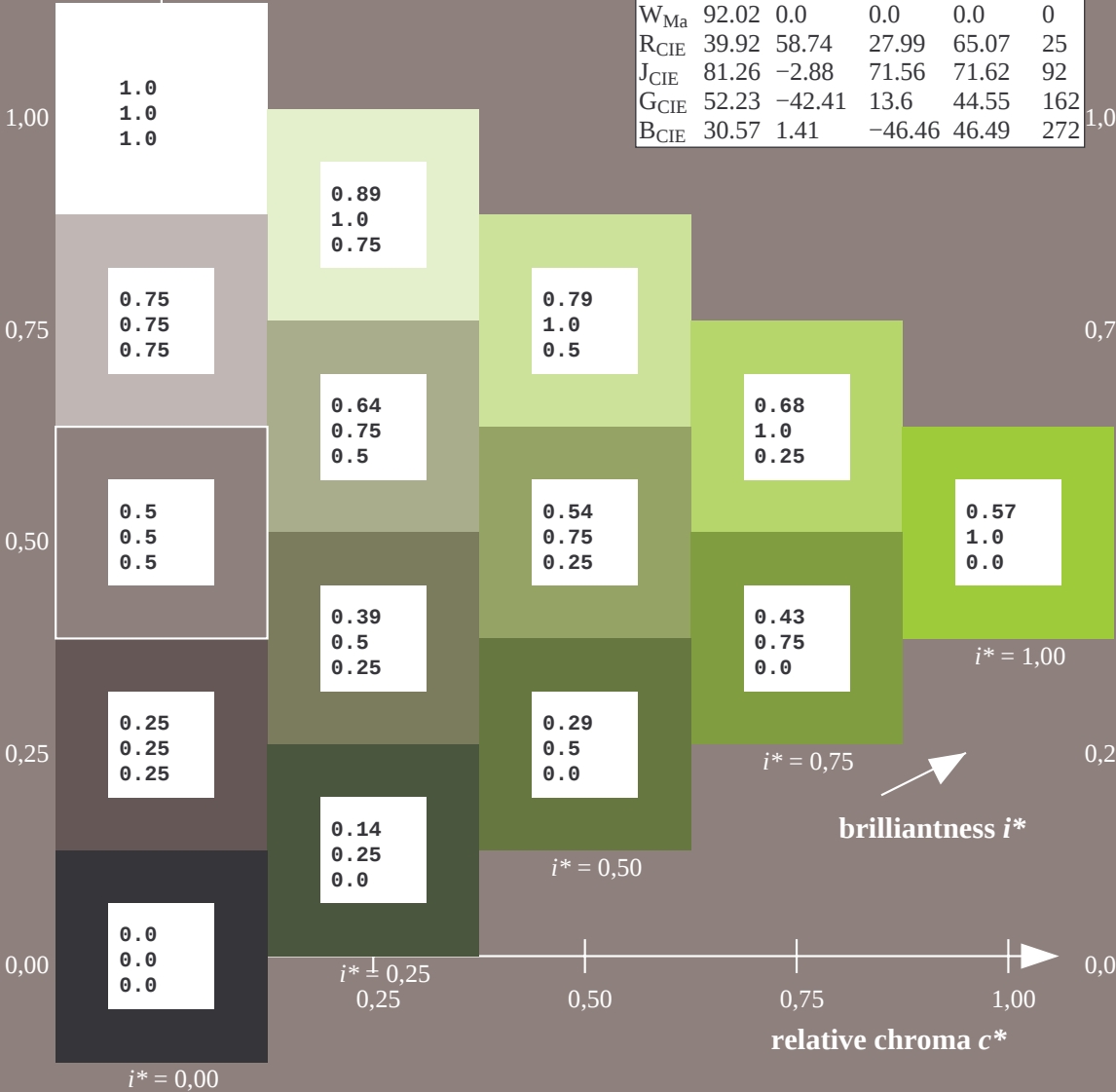
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 67 -29 83  
 $LAB^*LCH^*_{Ma}$ : 67 88 110  
 $lab^*rgb^*_{Ma}$ : 0.75 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.57 1.0 0.0

triangle lightness  $t^*$

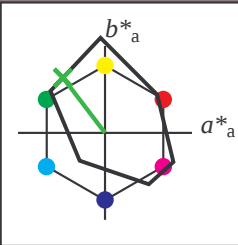
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 127/360 = 0.354$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j50g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

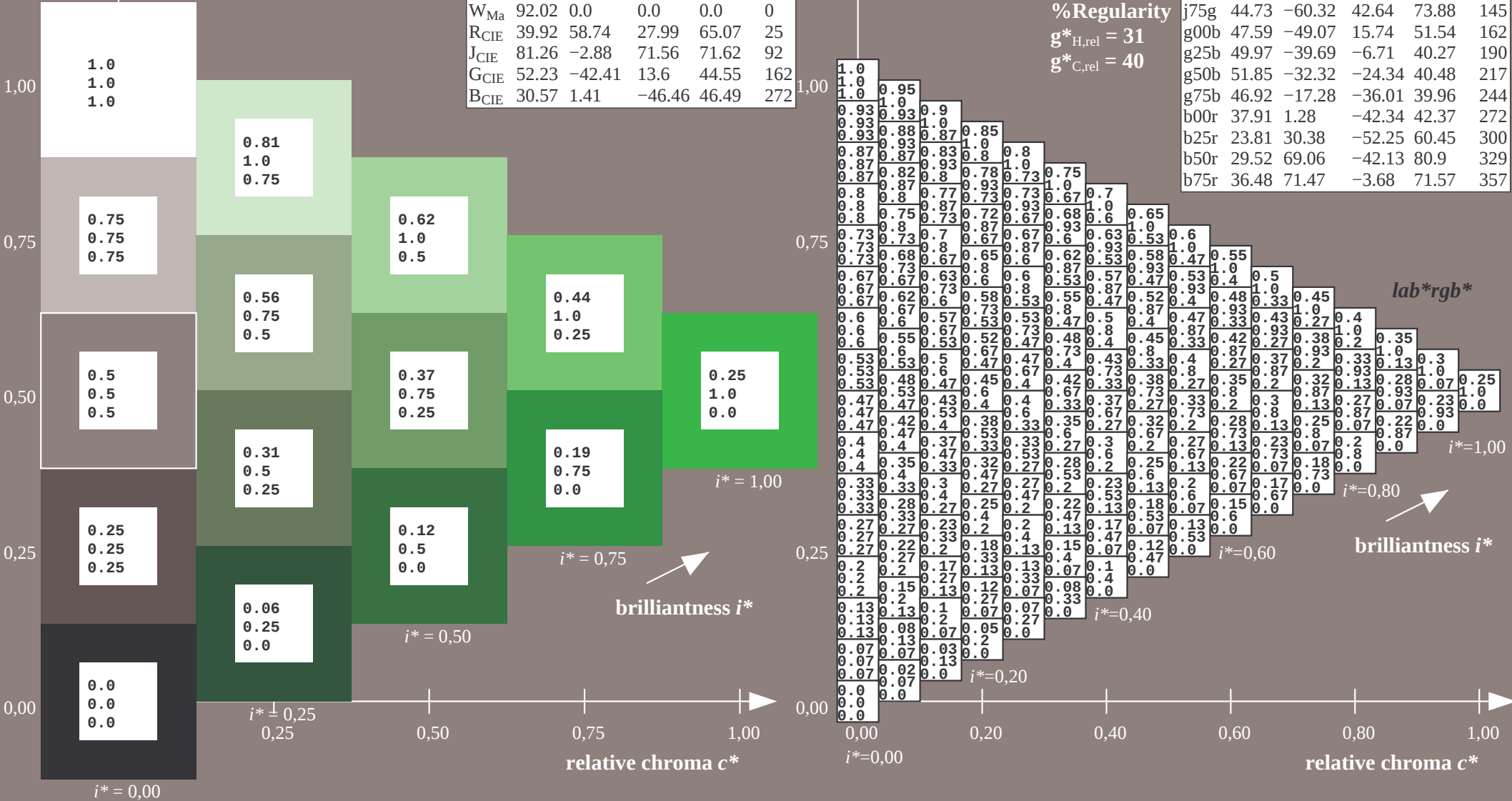


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 54 -47 63  
 $LAB^*LCH^*_{Ma}$ : 54 80 127  
 $lab^*rgb^*_{Ma}$ : 0.5 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.25 1.0 0.0

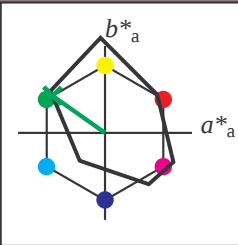
$u^* = j50g$   
 $lab^*rgb^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 145/360 = 0.402$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j75g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

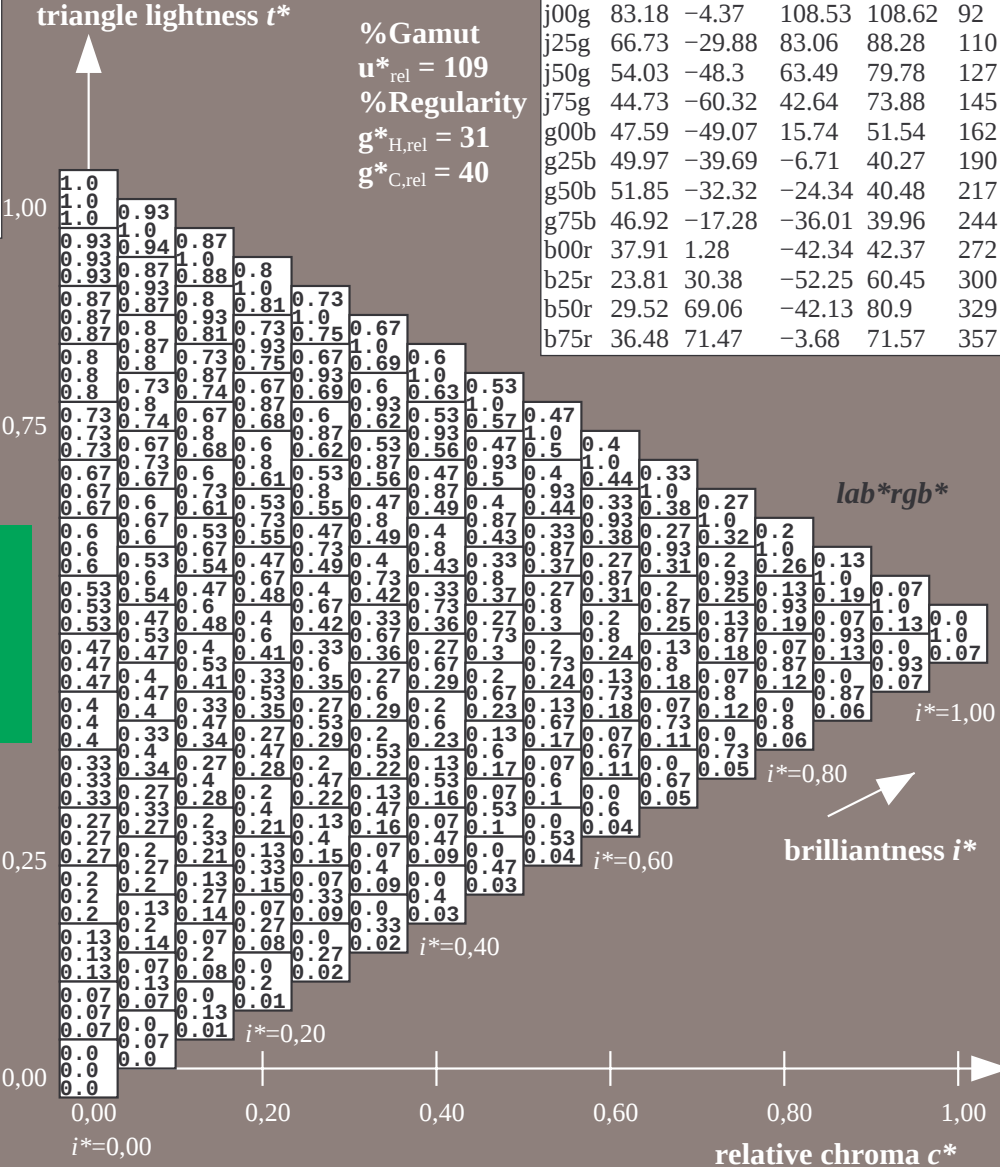
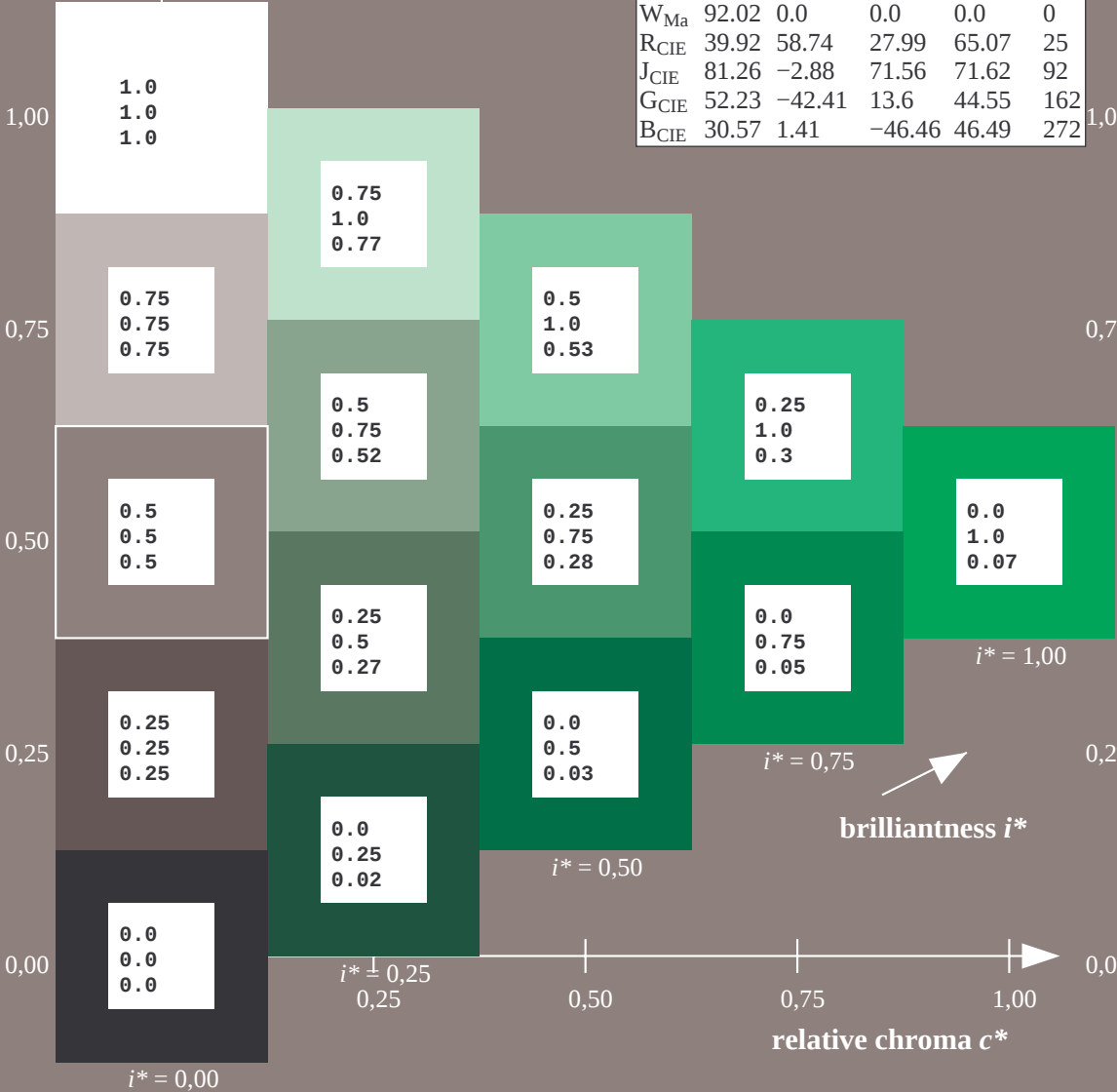


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 45 -59 43  
 $LAB^*LCH^*_{Ma}$ : 45 74 145  
 $lab^*rgb^*_{Ma}$ : 0.25 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.0 1.0 0.07

$u^* = j75g$   
 $lab^*rgb^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



*lab\*rgb\**

Diagram illustrating the hexagonal lattice structure with axes  $a^*$  and  $b^*$ . A green arrow points from the origin to a green dot in the second quadrant. Other dots are colored red, yellow, cyan, magenta, and blue.

|                  | $L^*=L_a^*$ | $a_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>  | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>  | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>  | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>  | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>  | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>  | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub> | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

**LAB\*LAB\*Ma: 48 -48 16**

**LAB\*LCH\*Ma: 48 52 162**

*lab\*rgb\*\_Ma: 0.0 1.0 0.0*

*lab\*olv\**Ma: 0.0 1.0 0.41

triangle lightness  $t^*$

## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

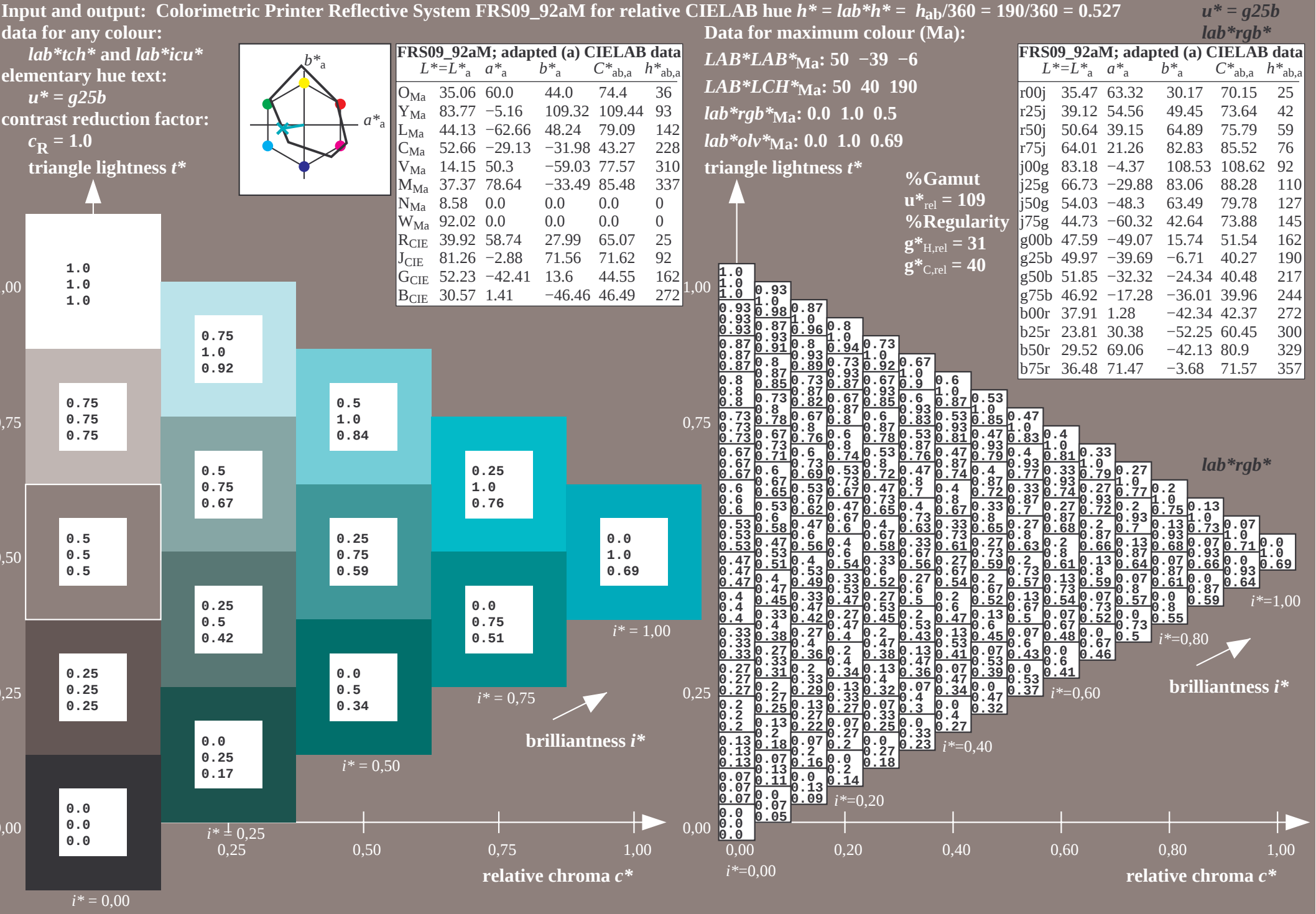
|      | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| r00j | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

*lab\*rgb\**

$$i^*=1,00$$

brilliantness  $i^*$

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$$u^* = g50b$$

**Data for maximum colour (Ma):**

*lab\*rgb\**

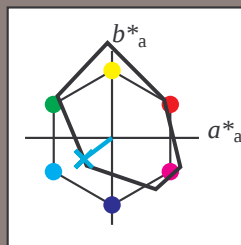
**LAB\*LAB\*<sub>Ma</sub>: 52 -31 -23**

*LAB\*LCH*\*<sub>Ma</sub>: 52 40 217

*lab\*rgb\*\_Ma: 0.0 1.0 1.0*

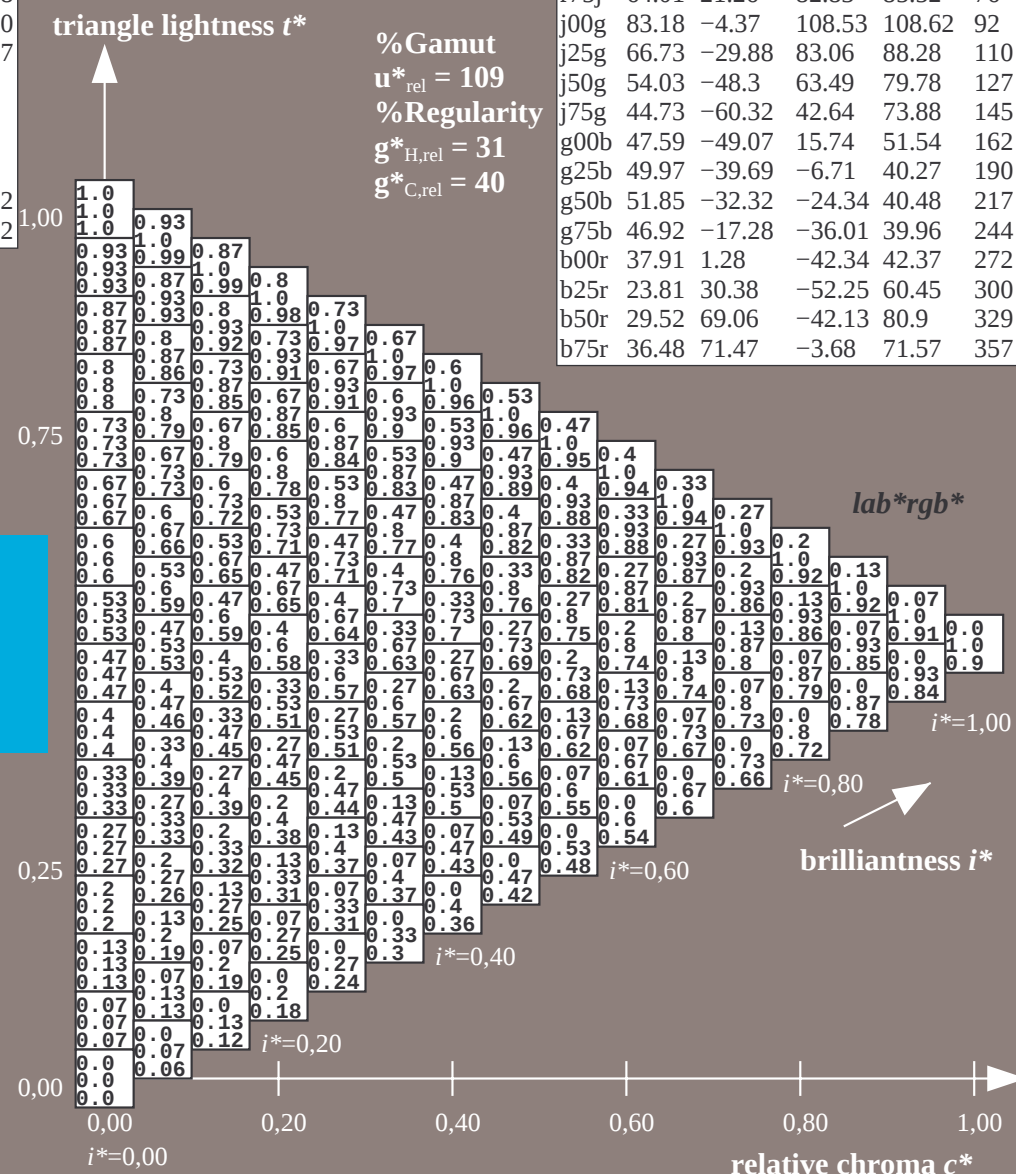
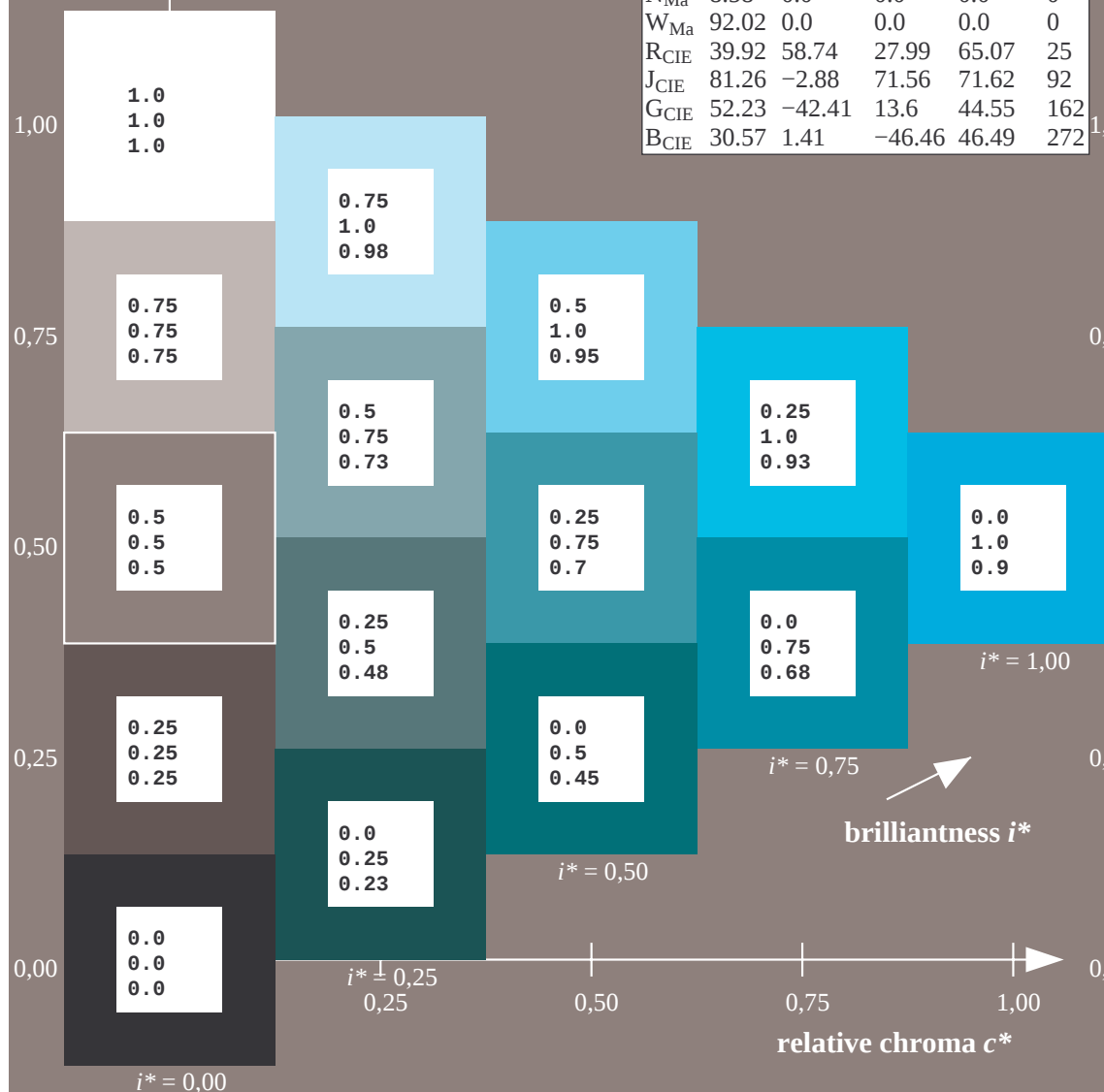
**lab\*olv\*\_Ma: 0.0 1.0 0.9**

triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = g75b$$

**Data for maximum colour (Ma):**

*lab\*rgb\**

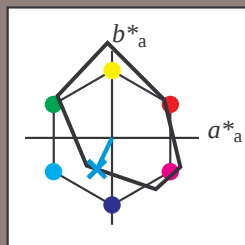
**LAB\*LAB\*<sub>Ma</sub>: 47 -16 -35**

**LAB\*LCH\*Ma: 47 40 244**

*lab\*rgb\*\_Ma: 0.0 0.5 1.0*

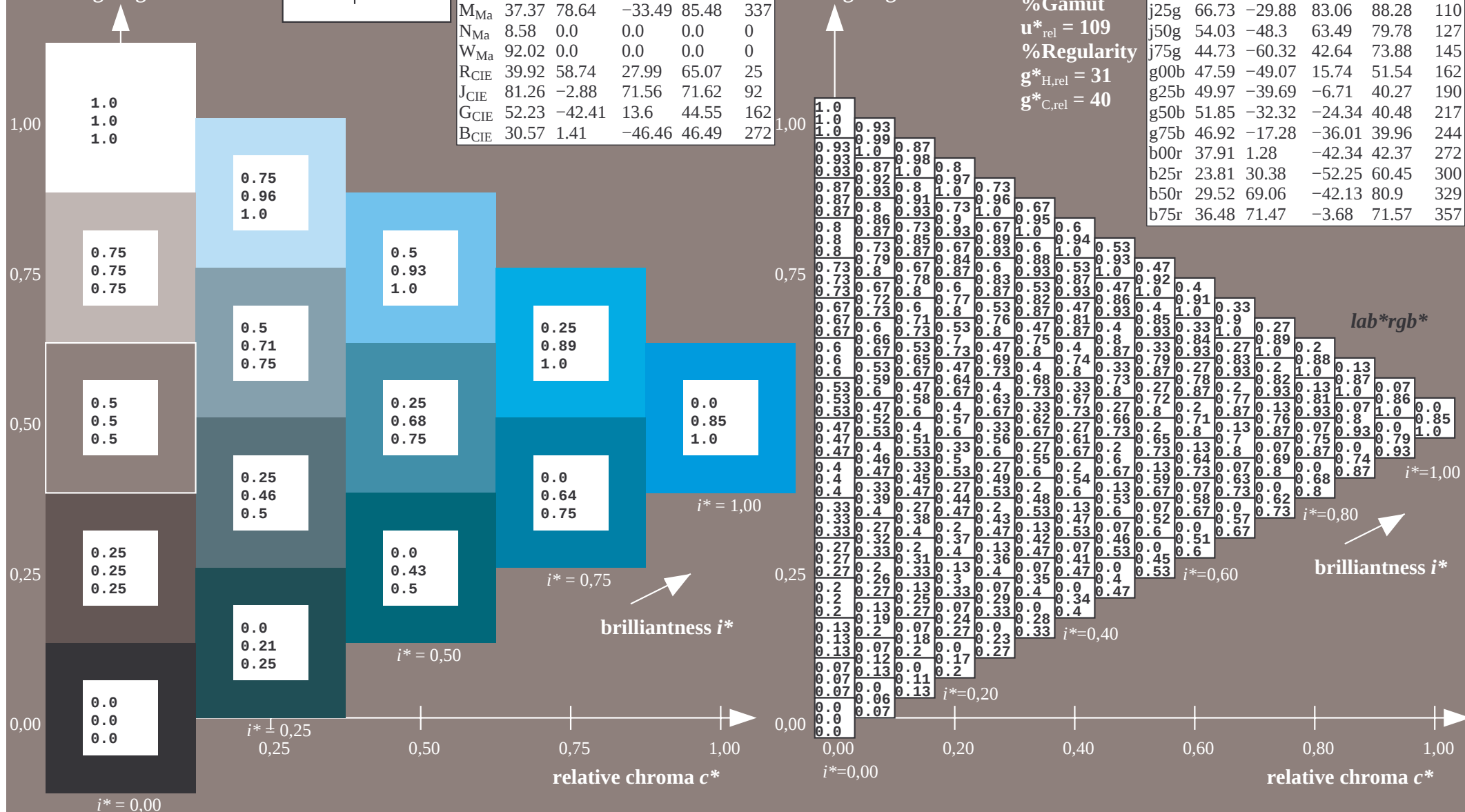
*lab\*olv\**Ma: 0.0 0.85 1.0

triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = b00r$$

**Data for maximum colour (Ma):**

*lab\*rgb\**

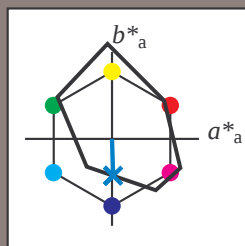
$LAB*LAB*_{Ma}: 38 \quad 1 \quad -41$

**LAB\*LCH\*Ma: 38 42 272**

**lab\*rgb\*\_Ma: 0.0 0.0 1.0**

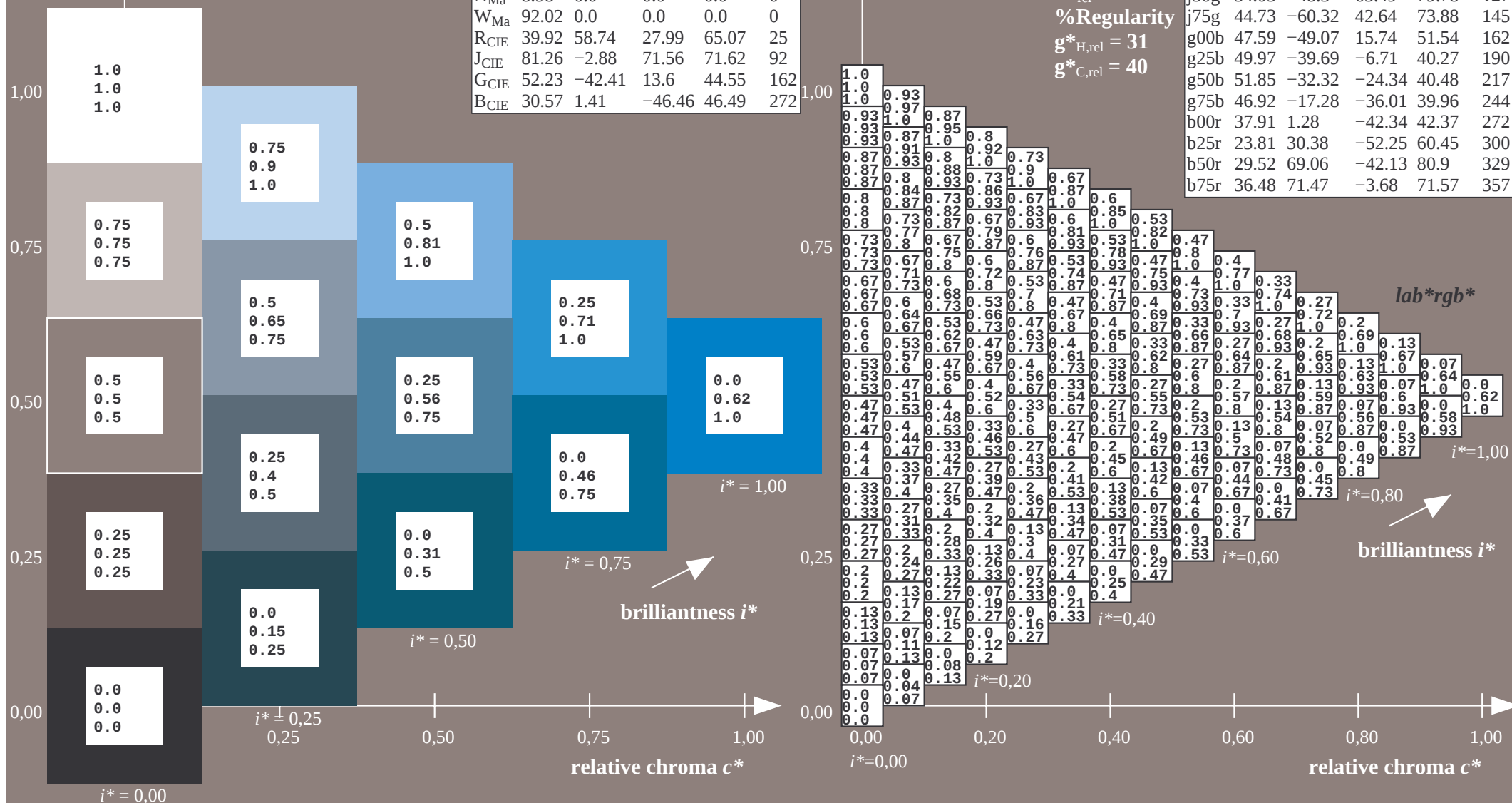
*lab\*olv\**Ma: 0.0 0.62 1.0

triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |     |
|-------------------------------------|-------------|---------|---------|--------------|--------------|-----|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        |              | 25  |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        |              | 42  |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        |              | 59  |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        |              | 76  |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       |              | 92  |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        |              | 110 |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        |              | 127 |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        |              | 145 |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        |              | 162 |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        |              | 190 |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        |              | 217 |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        |              | 244 |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        |              | 272 |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        |              | 300 |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         |              | 329 |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        |              | 357 |



$$u^* = b25r$$

**Data for maximum colour (Ma):**

*lab\*rgb\**

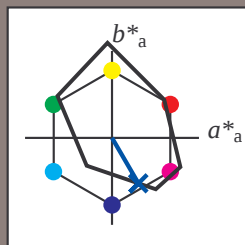
**LAB\*LAB\*Ma: 24 30 -51**

**LAB\*LCH\*Ma: 24 60 300**

***lab\*rgb\*\_Ma: 0.5 0.0 1.0***

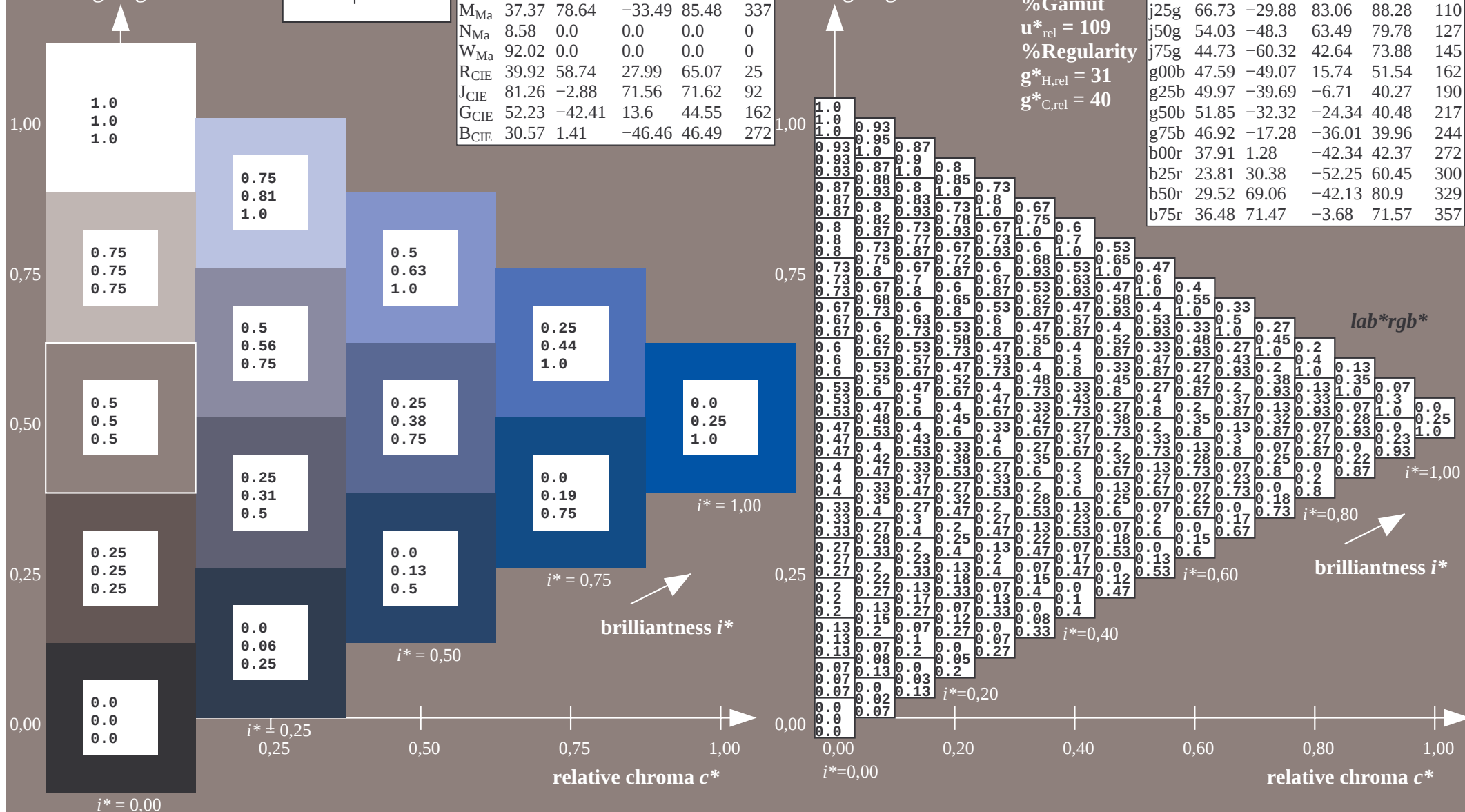
*lab\*olv\**Ma: 0.0 0.25 1.0

triangle lightness  $t^*$

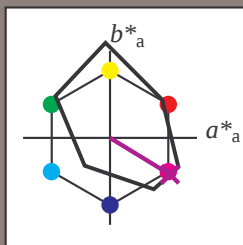


| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



triangle lightness  $t^*$

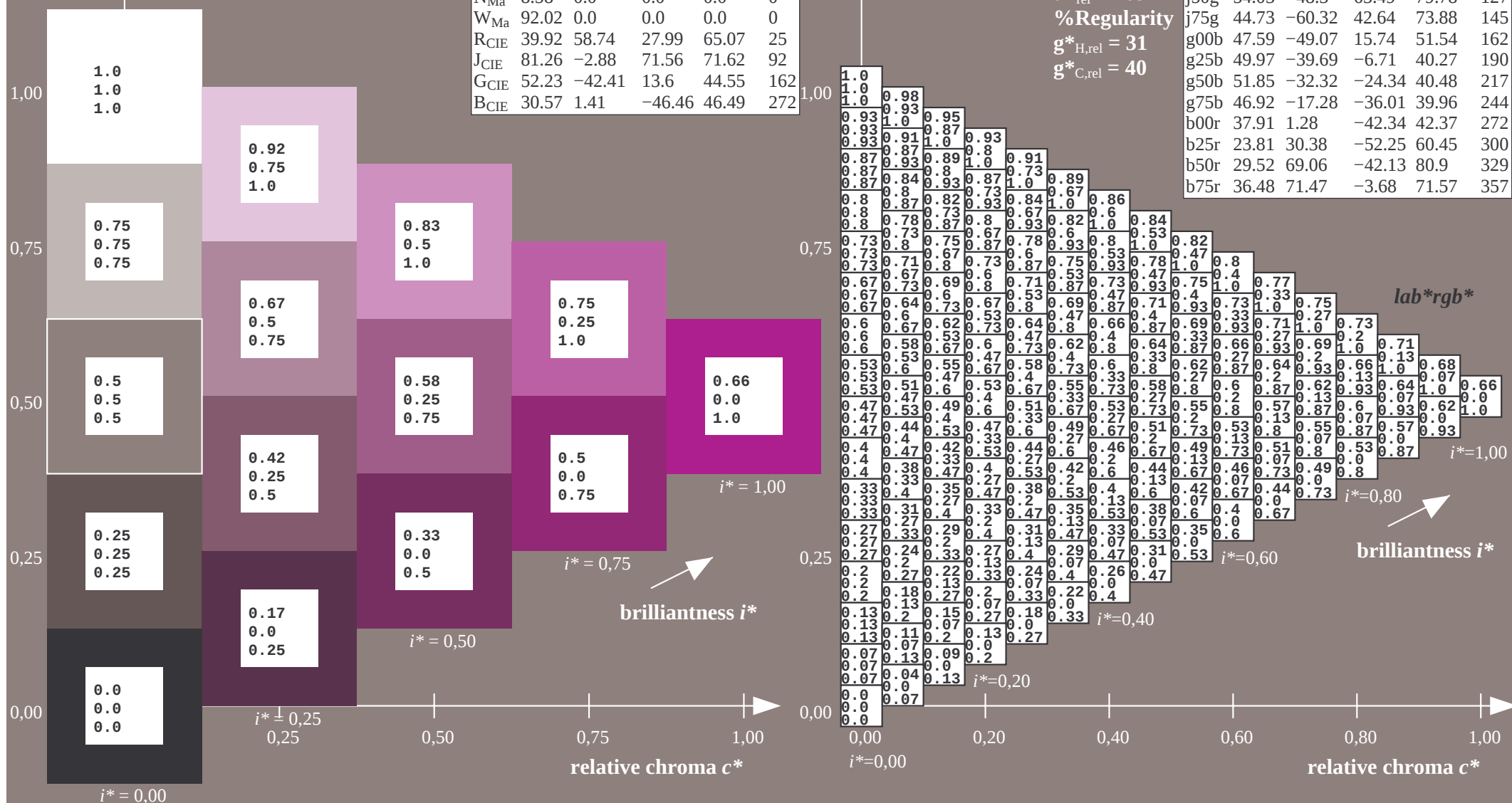


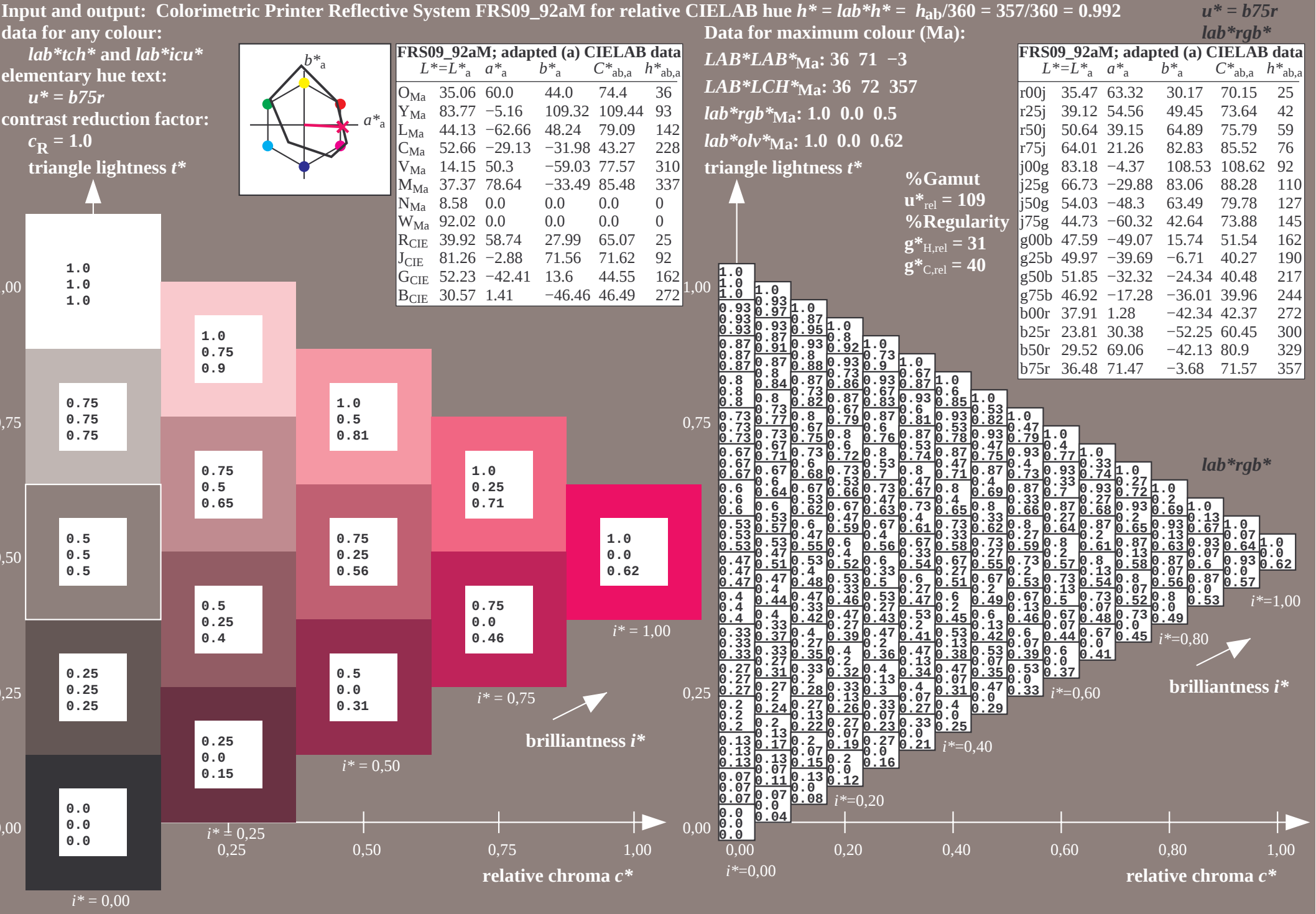
| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

triangle lightness  $t^*$

$$g^*_{C,rel} = 40$$

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |

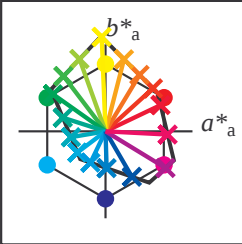




[illegible]

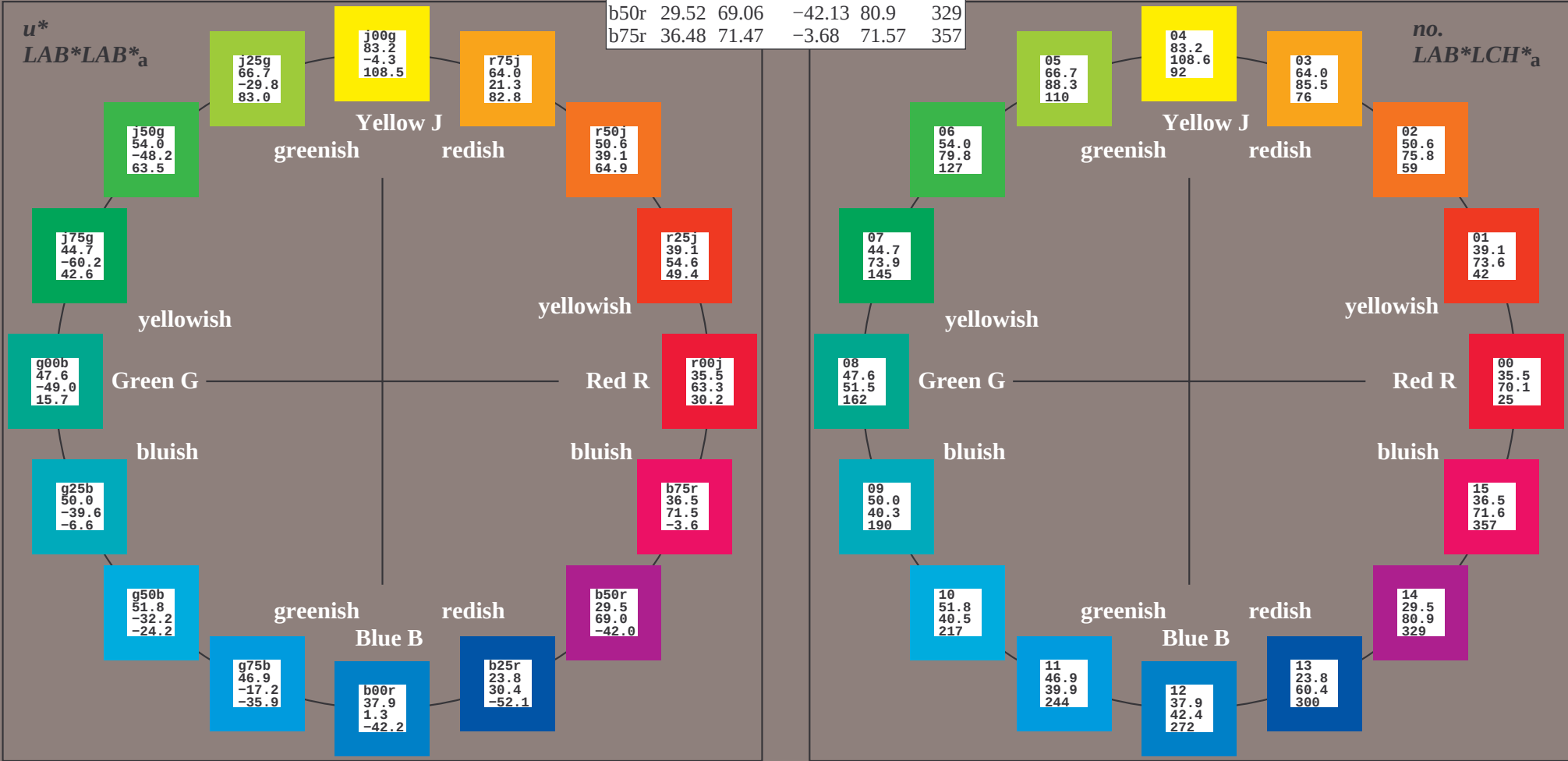
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\*tch\* and lab\*icu\*  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



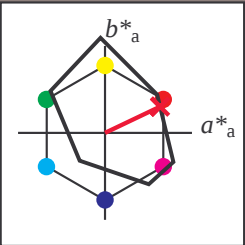
%Gamut  
u<sub>rel</sub><sup>\*</sup> = 109  
%Regularity  
g<sub>H,rel</sub><sup>\*</sup> = 31  
g<sub>C,rel</sub><sup>\*</sup> = 40

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



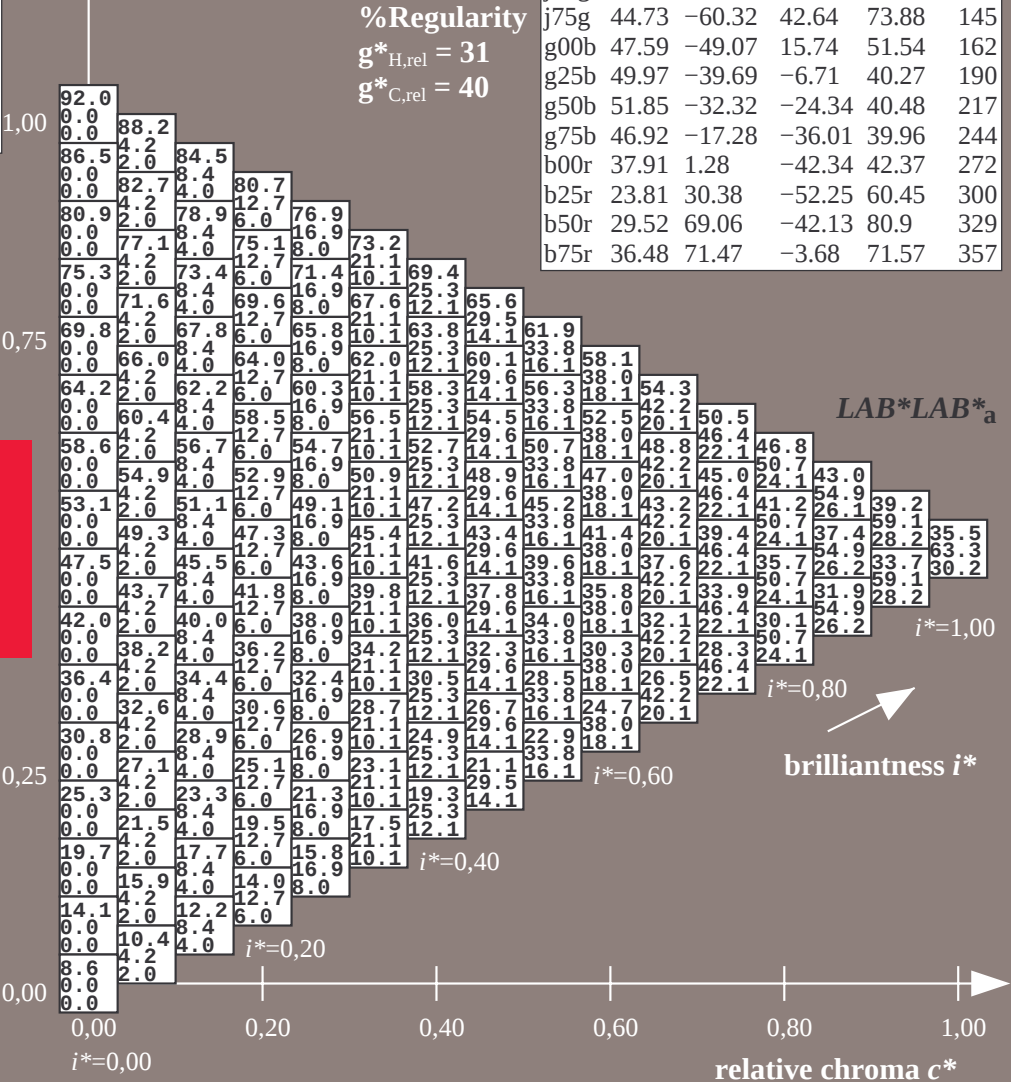
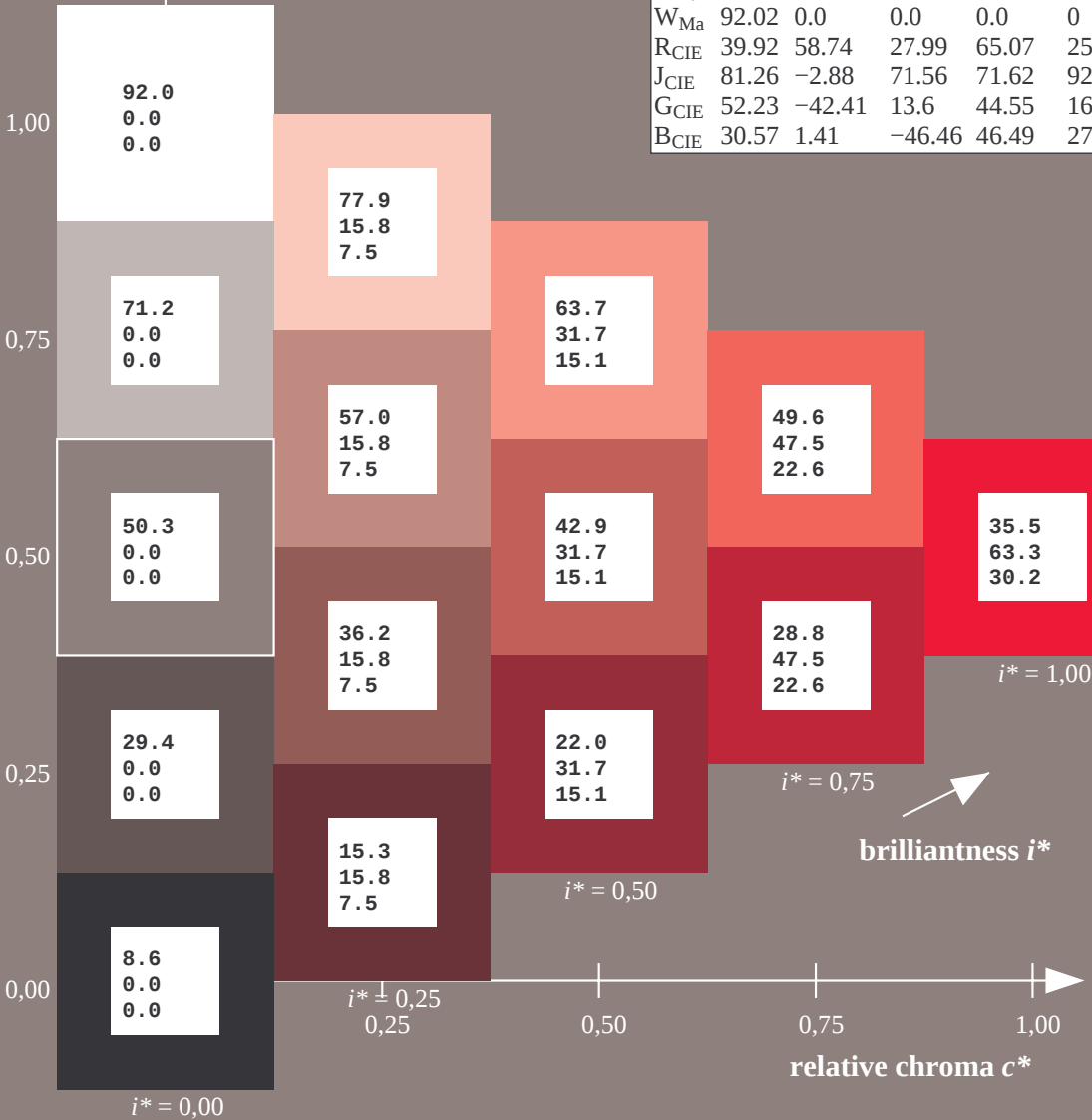
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18

triangle lightness  $t^*$

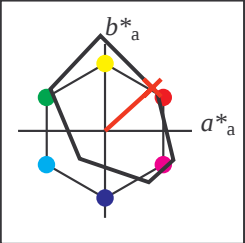
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

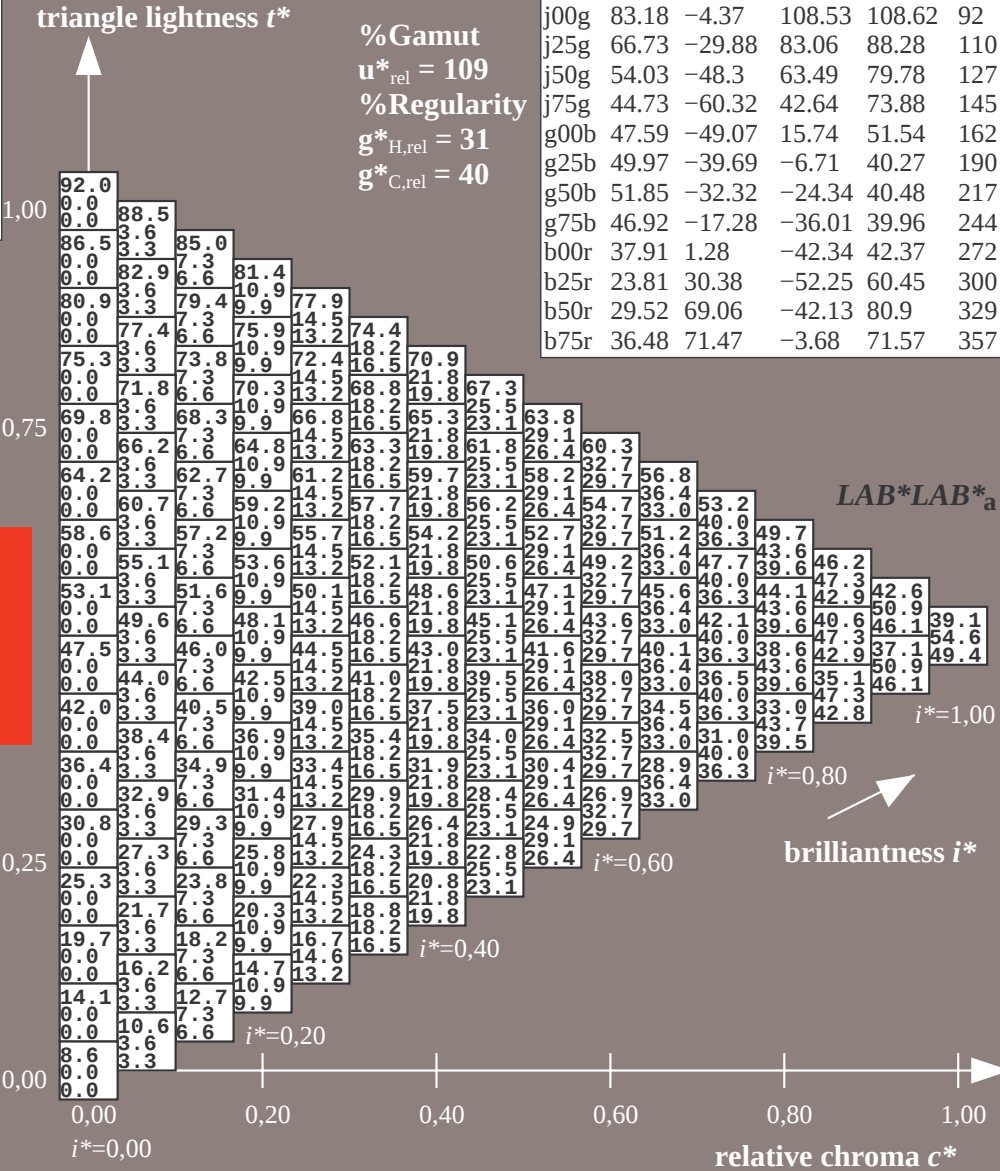
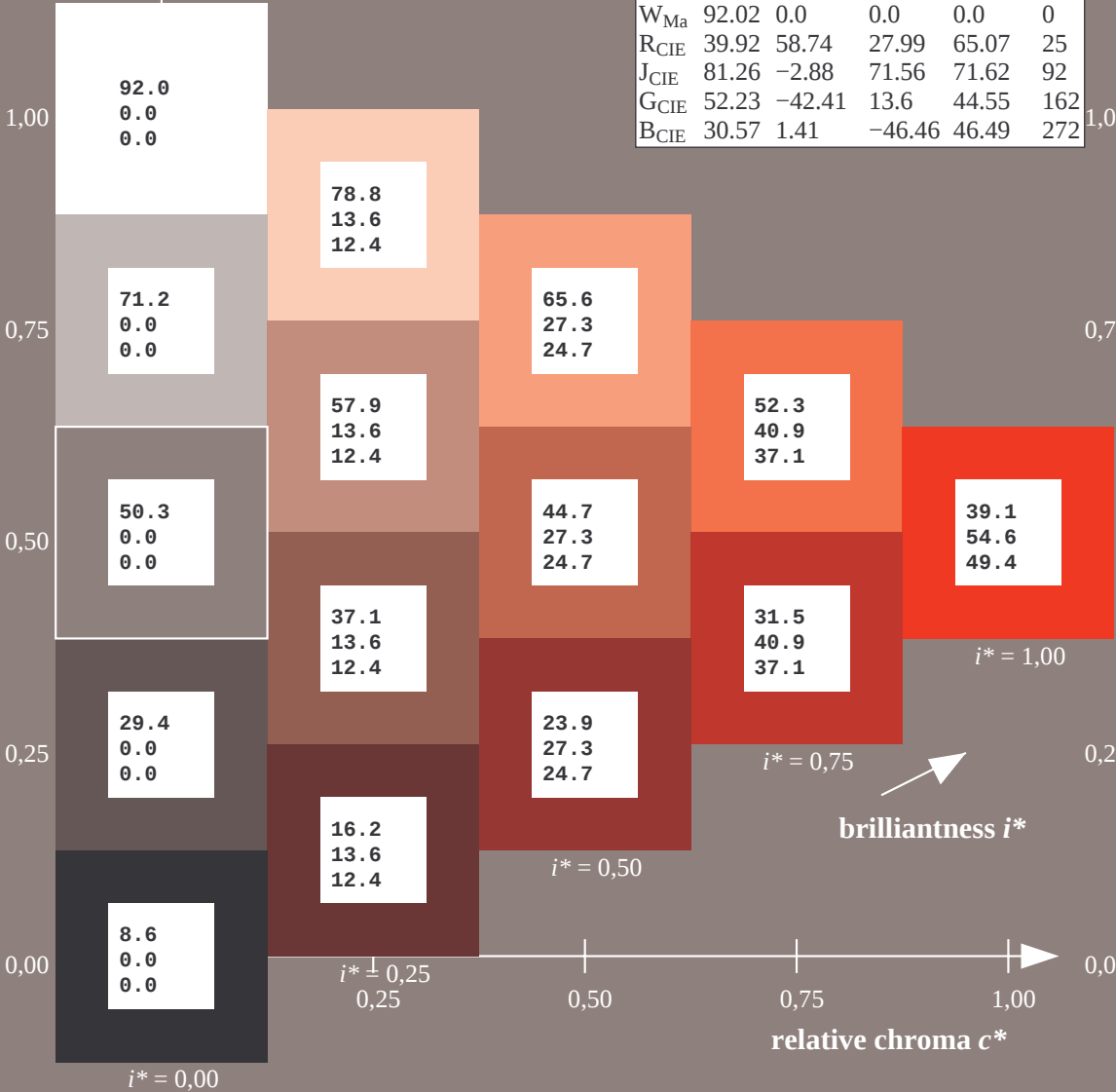


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 39 55 49  
 $LAB^*LCH^*_{Ma}$ : 39 74 42  
 $lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.08 0.0

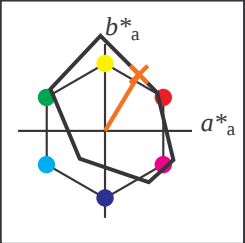
$u^* = r25j$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

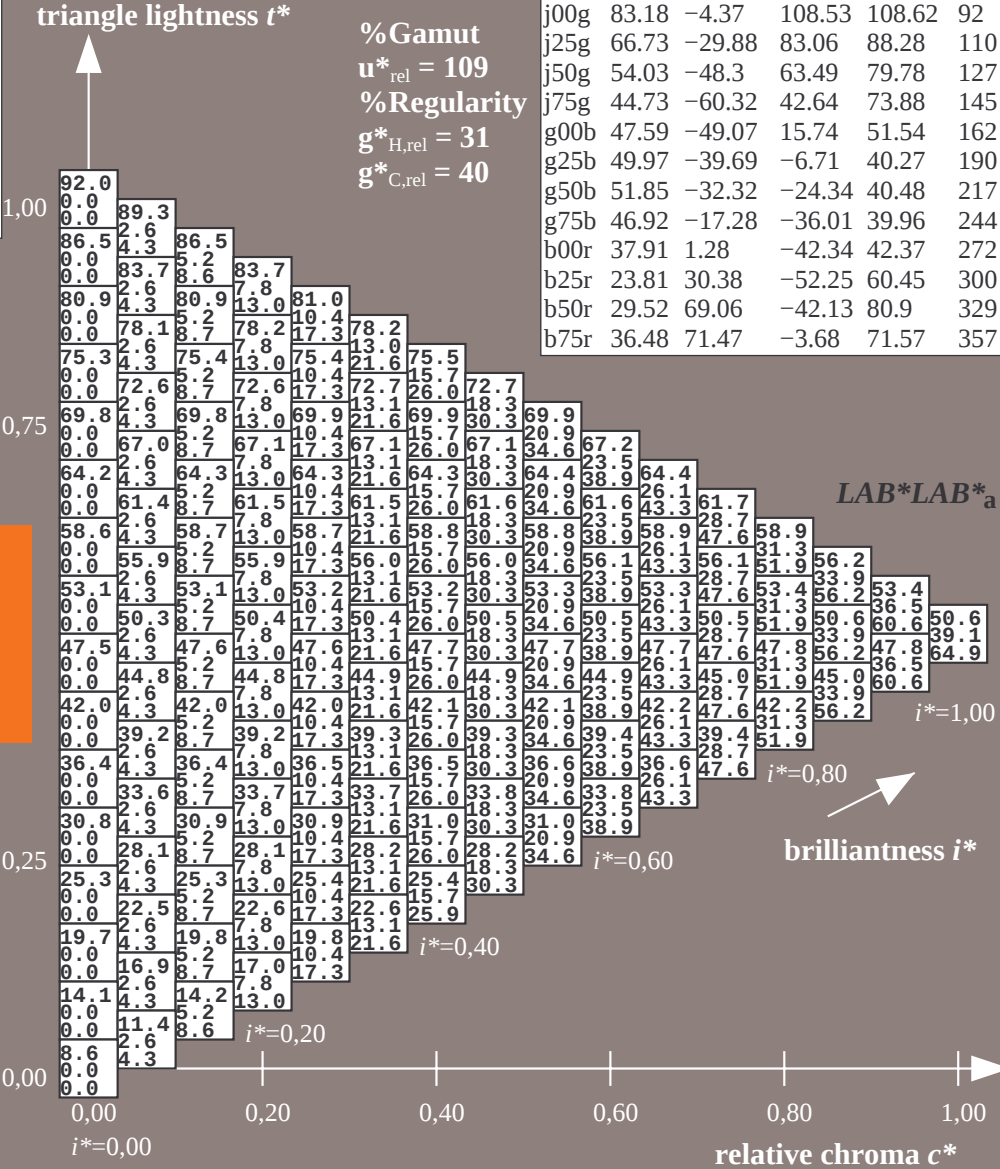
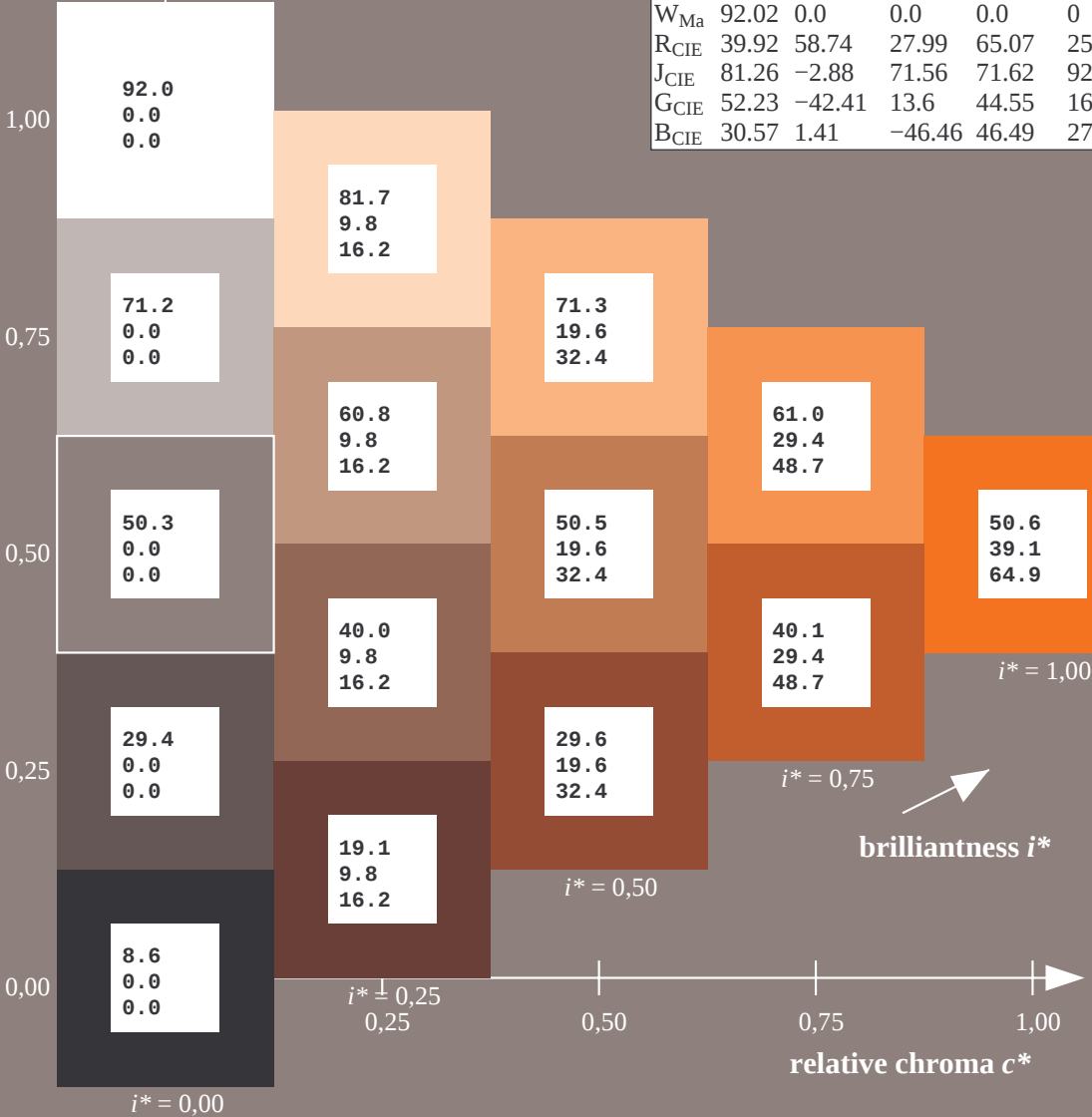


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 51\ 39\ 65$   
 $LAB^*LCH^*_{Ma}: 51\ 76\ 59$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.5\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.32\ 0.0$

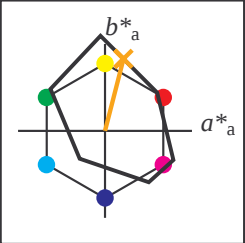
$u^* = r50j$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

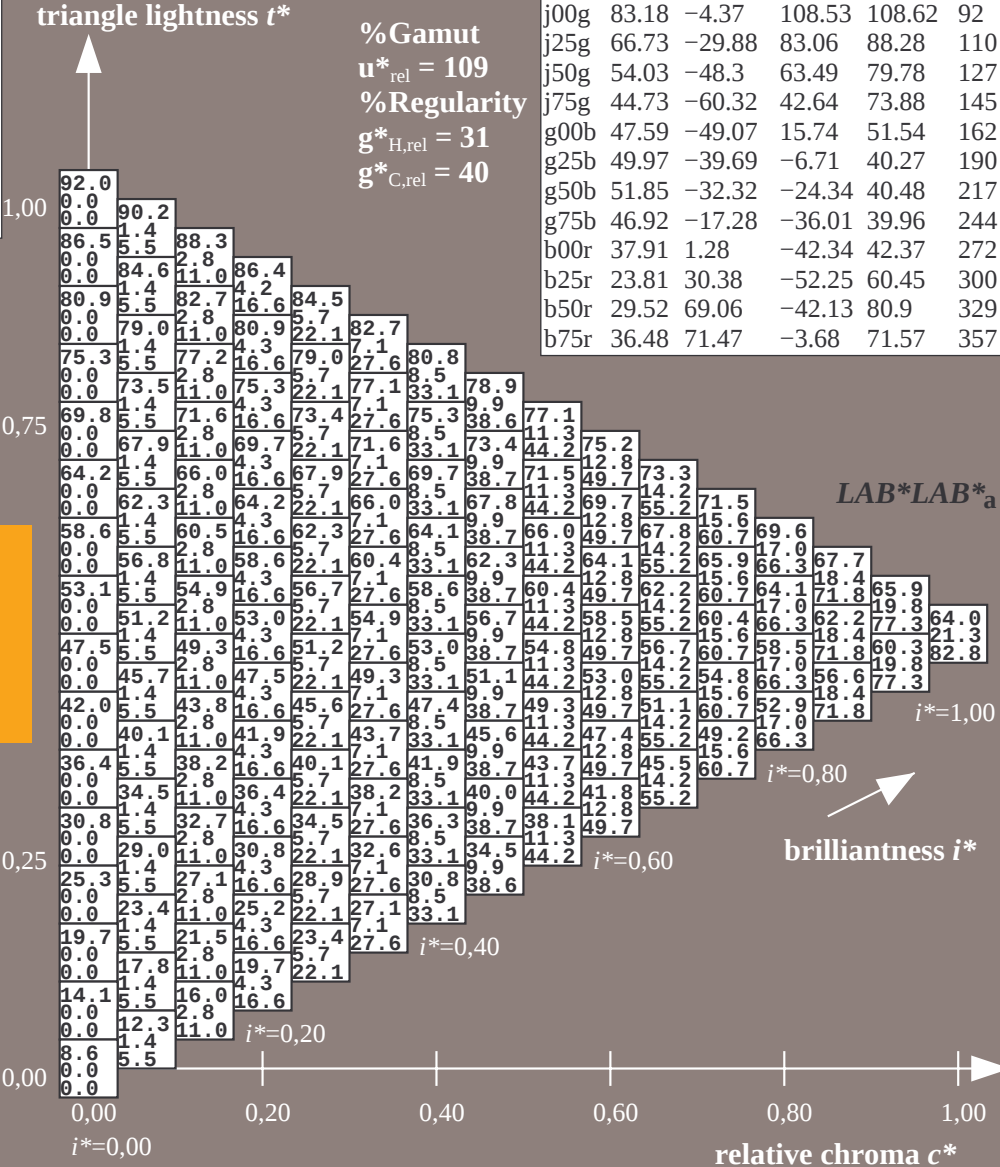
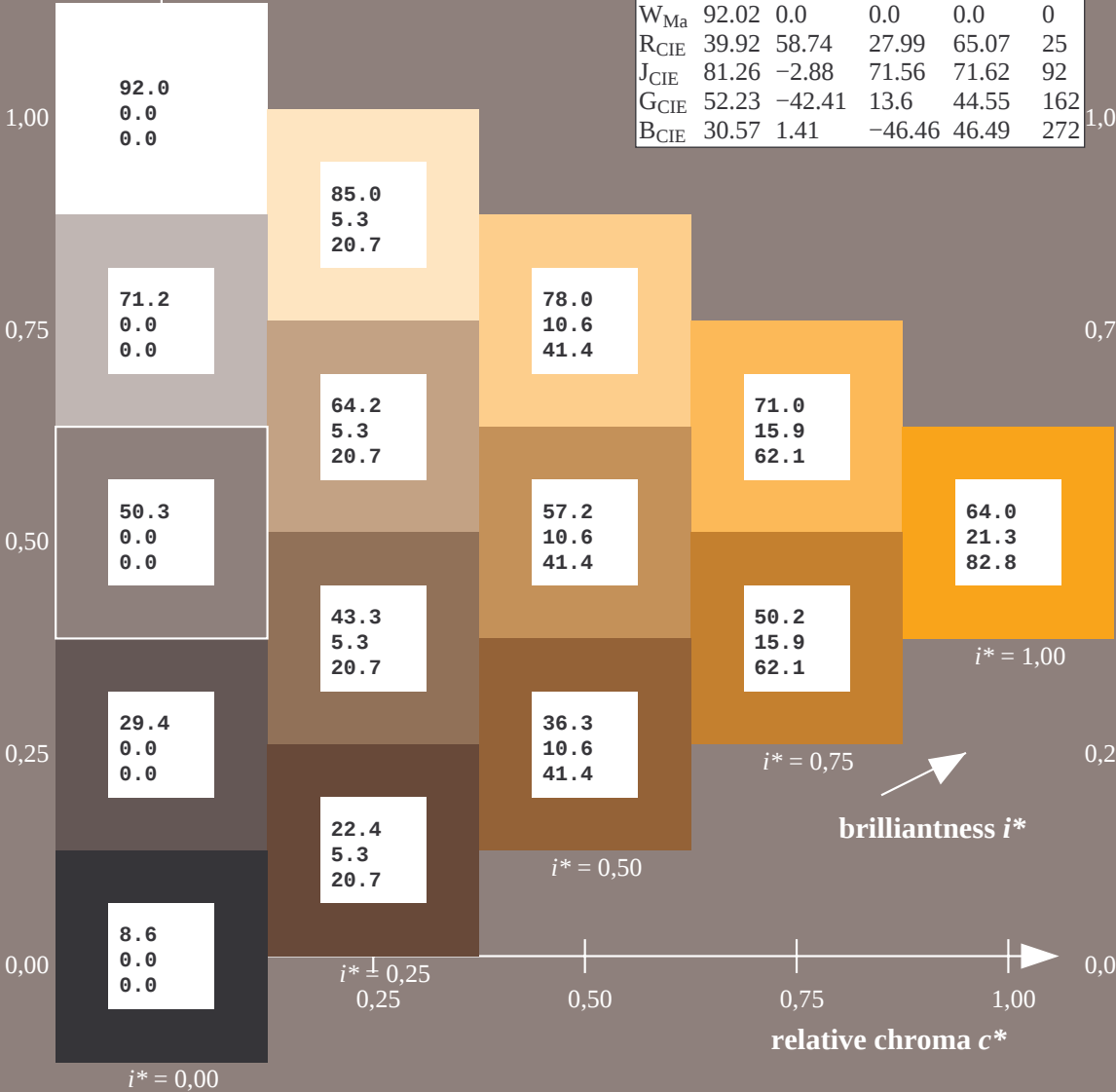


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 64 21 83  
 $LAB^*LCH^*_{Ma}$ : 64 86 76  
 $lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.59 0.0

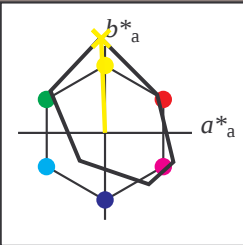
$u^* = r75j$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$  data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

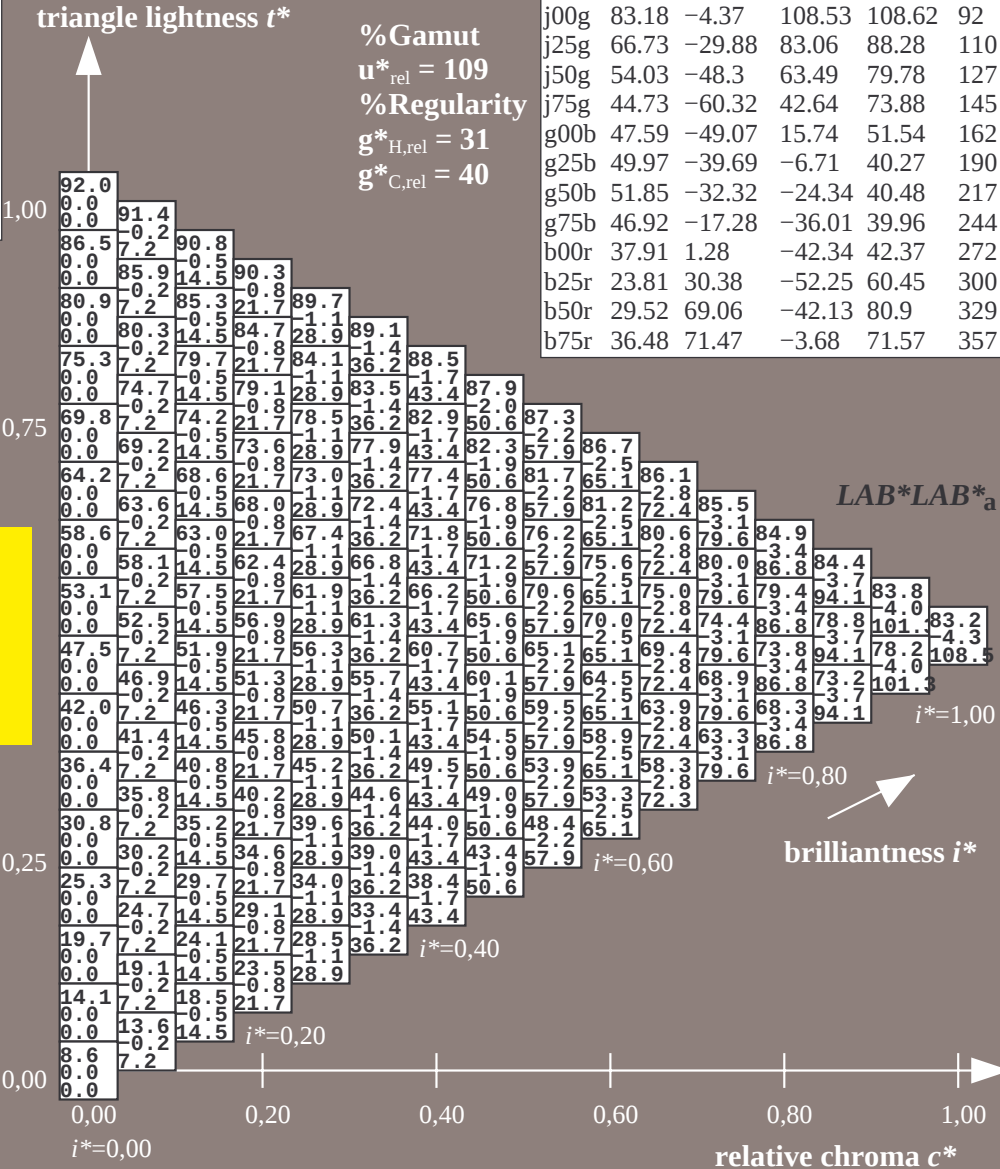
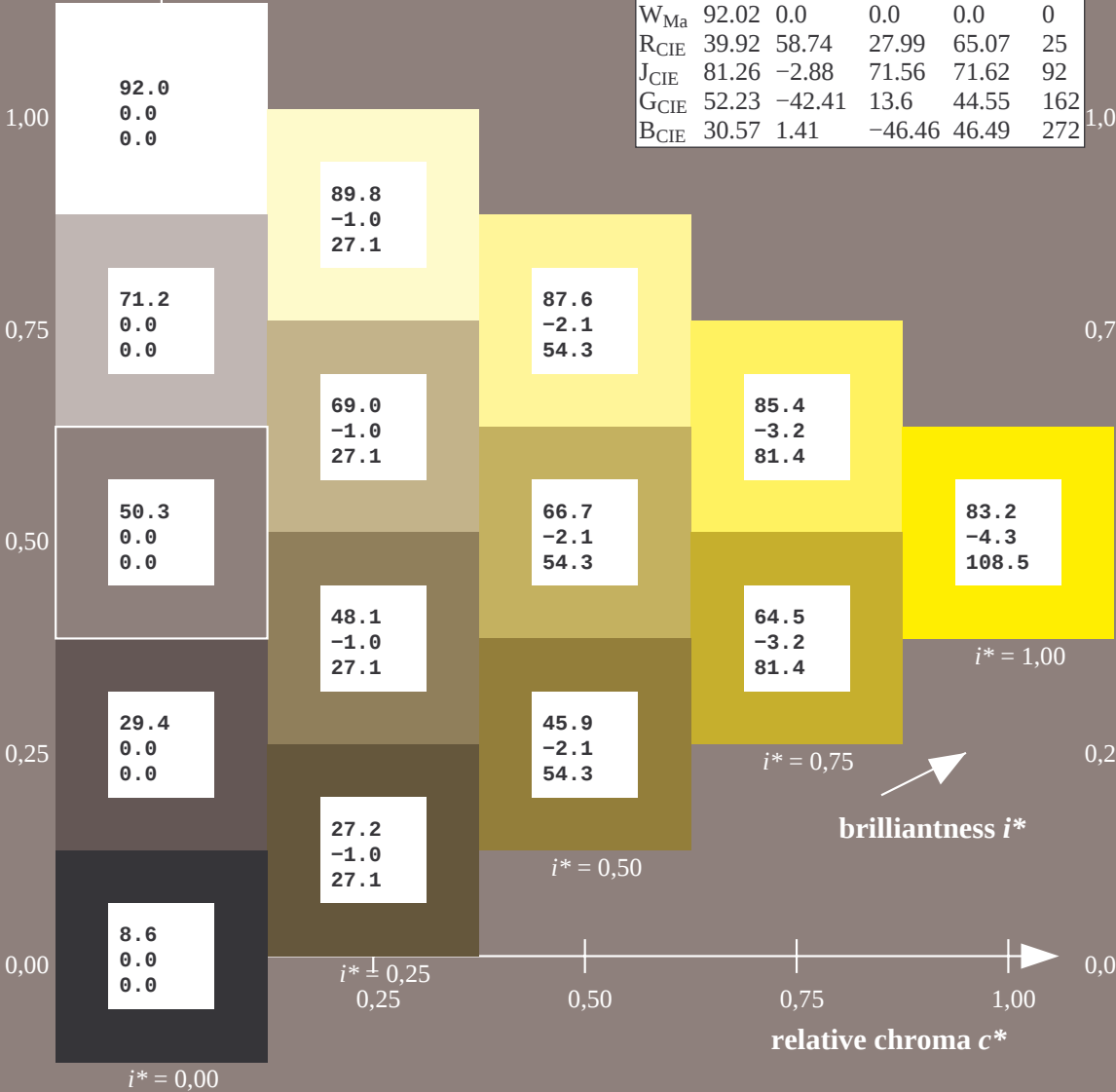


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 83 -3 109  
 $LAB^*LCH^*_{Ma}$ : 83 109 92  
 $lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.99 0.0

$u^* = j00g$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



*LAB\*LAB\**<sub>a</sub>

**Data for maximum colour (Ma):**

**LAB\*LAB\*Ma: 67 -29 83**

**LAB\*LCH\*Ma: 67 88 110**

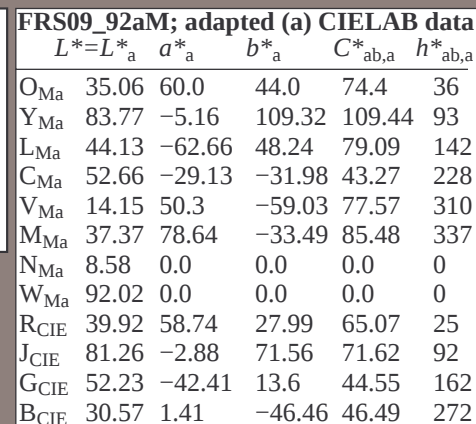
***lab\*rqb\*\_Ma: 0.75 1.0 0.0***

**lab\*olv\*\_Ma: 0.57 1.0 0.0**

triangle lightness  $t^*$

triangle lightness  $t^*$ 

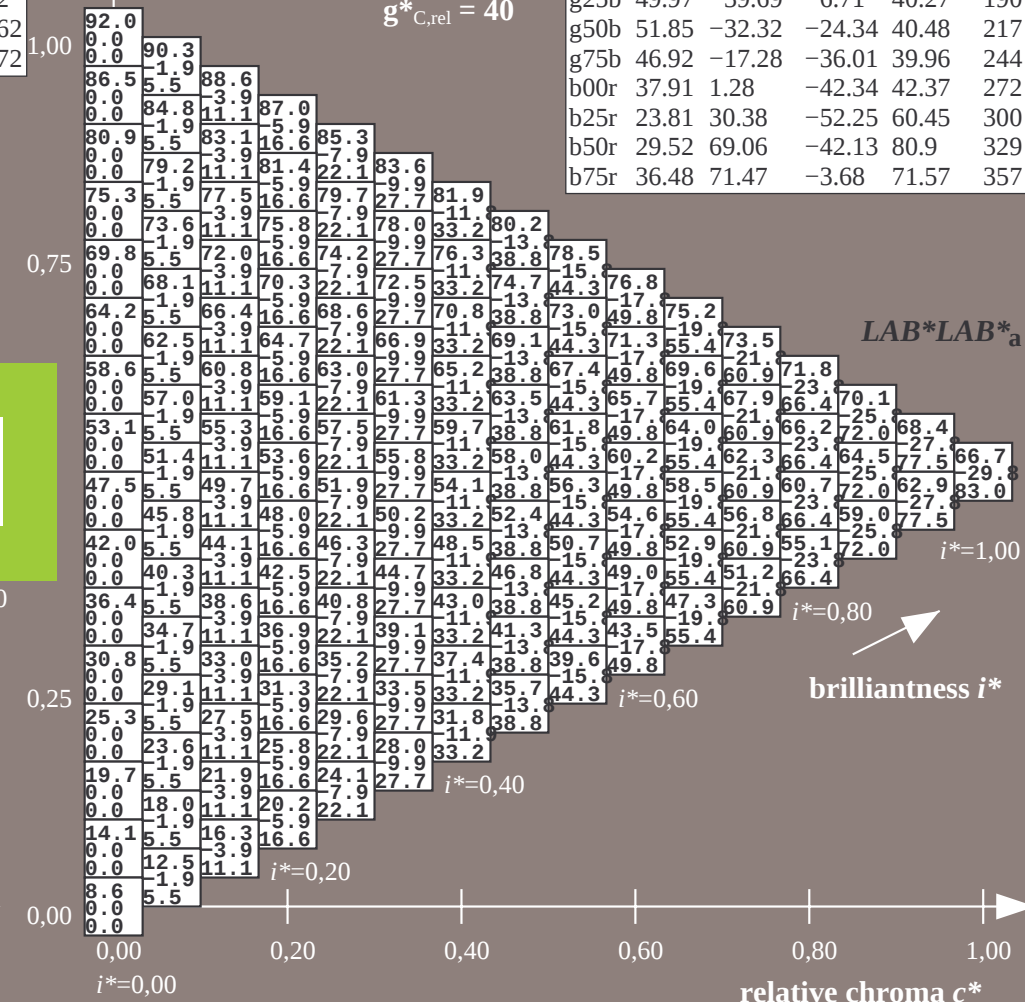

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## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C_{rel}} = 40$$


$$u^* = j50g$$

*LAB\*LAB\**<sub>a</sub>

(a) CIELAB data

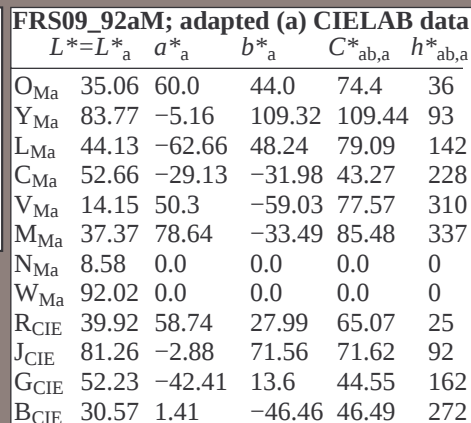
---

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 20 | 75.50 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |



*LAB\*LAB\**<sub>a</sub>

(a) CIELAB data

|    | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|----|--------------|--------------|
| 17 | 70 15        | 25           |

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 23 |
| 45 | 73.64 | 42 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |

|    |       |     |
|----|-------|-----|
| 06 | 88.28 | 110 |
| 40 | 79.78 | 127 |

|    |       |     |
|----|-------|-----|
| 49 | 79.78 | 127 |
| 64 | 73.88 | 145 |

|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 162 |
| 71 | 40.37 | 190 |

|      |       |     |
|------|-------|-----|
| 4.34 | 40.48 | 217 |
|------|-------|-----|

|      |       |     |
|------|-------|-----|
| 6.01 | 39.96 | 244 |
| 2.34 | 42.37 | 272 |

|      |       |     |
|------|-------|-----|
| 2.34 | 42.37 | 272 |
| 2.25 | 60.45 | 300 |

|      |       |     |
|------|-------|-----|
| 2.13 | 80.9  | 329 |
| 68   | 71.57 | 357 |

|      |       |     |
|------|-------|-----|
| 0.00 | 71.57 | 337 |
|------|-------|-----|

$$LAB^*LAB^*_a$$

59 1

55.0 56.6

|       |       |      |
|-------|-------|------|
| 53.5  | 59.3  | 54.0 |
| -41.8 | -48.2 |      |
| 55.0  | 51.0  | 62.5 |

|      |      |      |
|------|------|------|
| 55.0 | 51.0 | 63.5 |
| 48.0 | 45.0 |      |
| 41.0 | 59.2 |      |

55.0  $i^*=1,00$

0,80 

**illiantness *i*\***

1,00

**chroma  $c^*$**

\_\_\_\_\_



$$u^* = j75g$$

*LAB\*LAB\**<sub>a</sub>

(a) CIELAB data

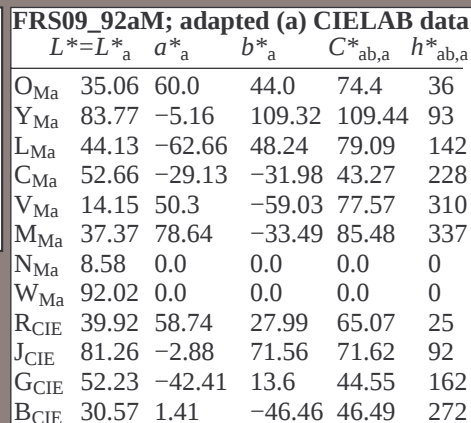
---

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 20 | 75.50 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.53 | 76 |

|      |        |    |
|------|--------|----|
| 83   | 85.52  | 76 |
| 3.53 | 108.62 | 92 |



*LAB\*LAB\**<sub>a</sub>

(a) CIELAB data

|    | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|----|--------------|--------------|
| 17 | 70 15        | 25           |

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 23 |
| 45 | 73.64 | 42 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 92 | 85.52 | 76 |

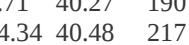
|      |        |    |
|------|--------|----|
| 83   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |

|    |       |     |
|----|-------|-----|
| 06 | 88.28 | 110 |
| 49 | 79.78 | 127 |

|    |       |     |
|----|-------|-----|
| 49 | 79.78 | 127 |
| 64 | 73.88 | 145 |

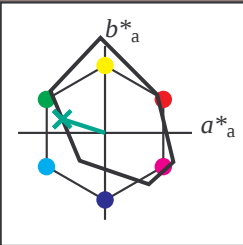
|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 162 |
| 71 | 40.37 | 100 |

|      |       |     |
|------|-------|-----|
| 4.71 | 40.27 | 190 |
| 4.34 | 40.48 | 217 |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g00b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



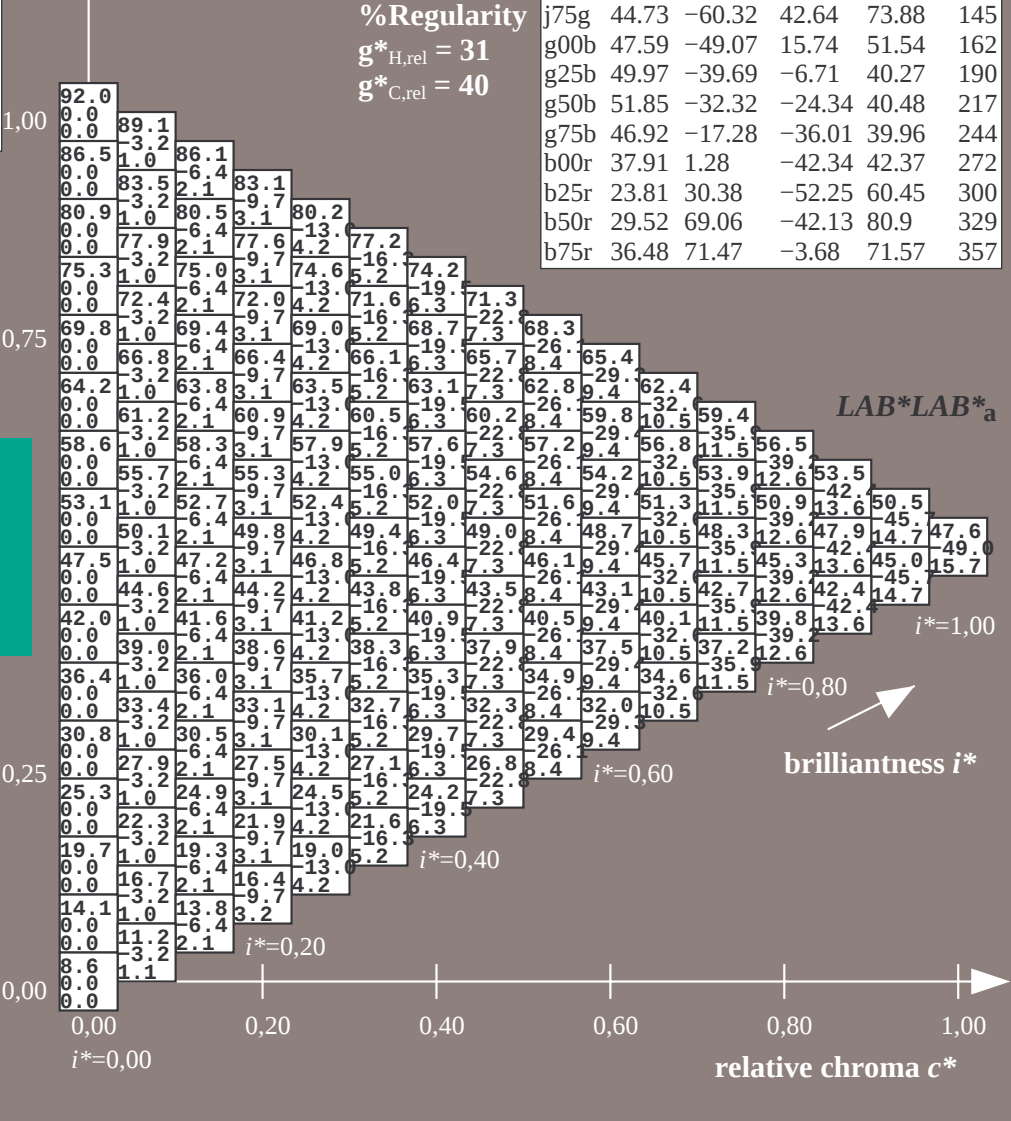
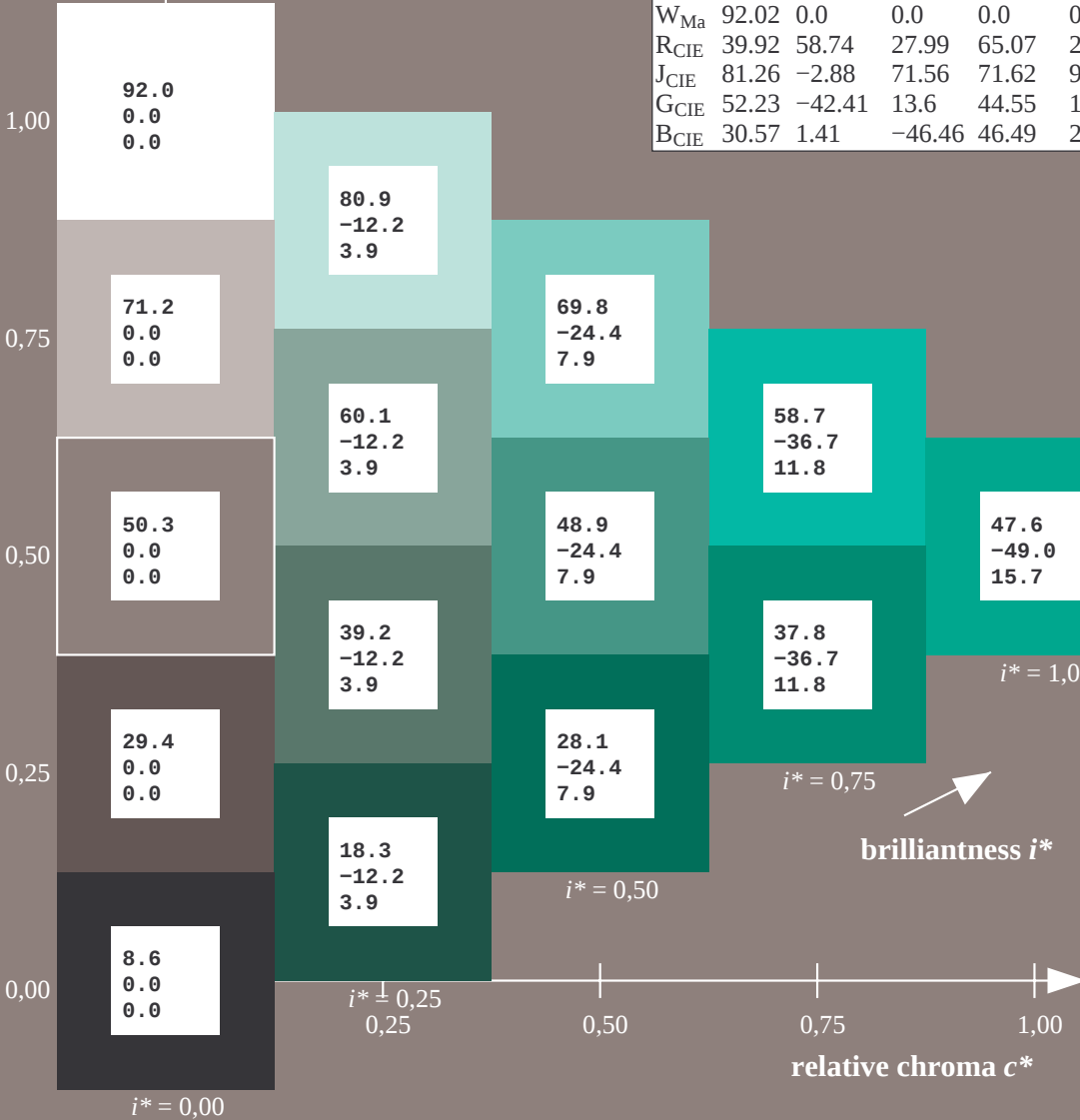
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 48 -48 16  
 $LAB^*LCH^*_{Ma}$ : 48 52 162  
 $lab^*rgb^*_{Ma}$ : 0.0 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.0 1.0 0.41

triangle lightness  $t^*$

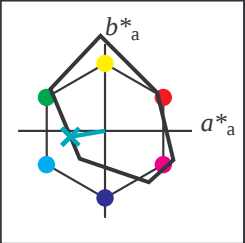
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g25b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

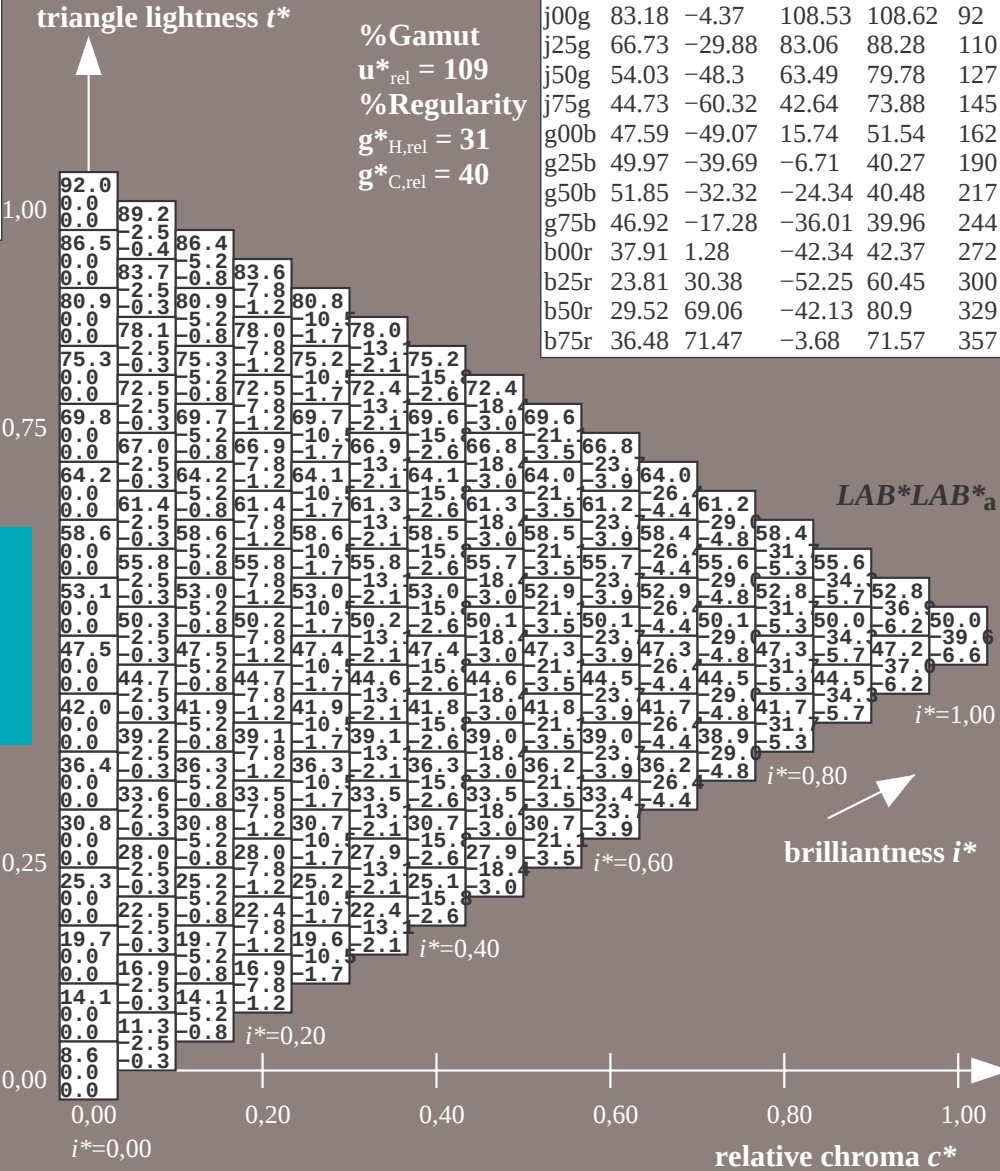
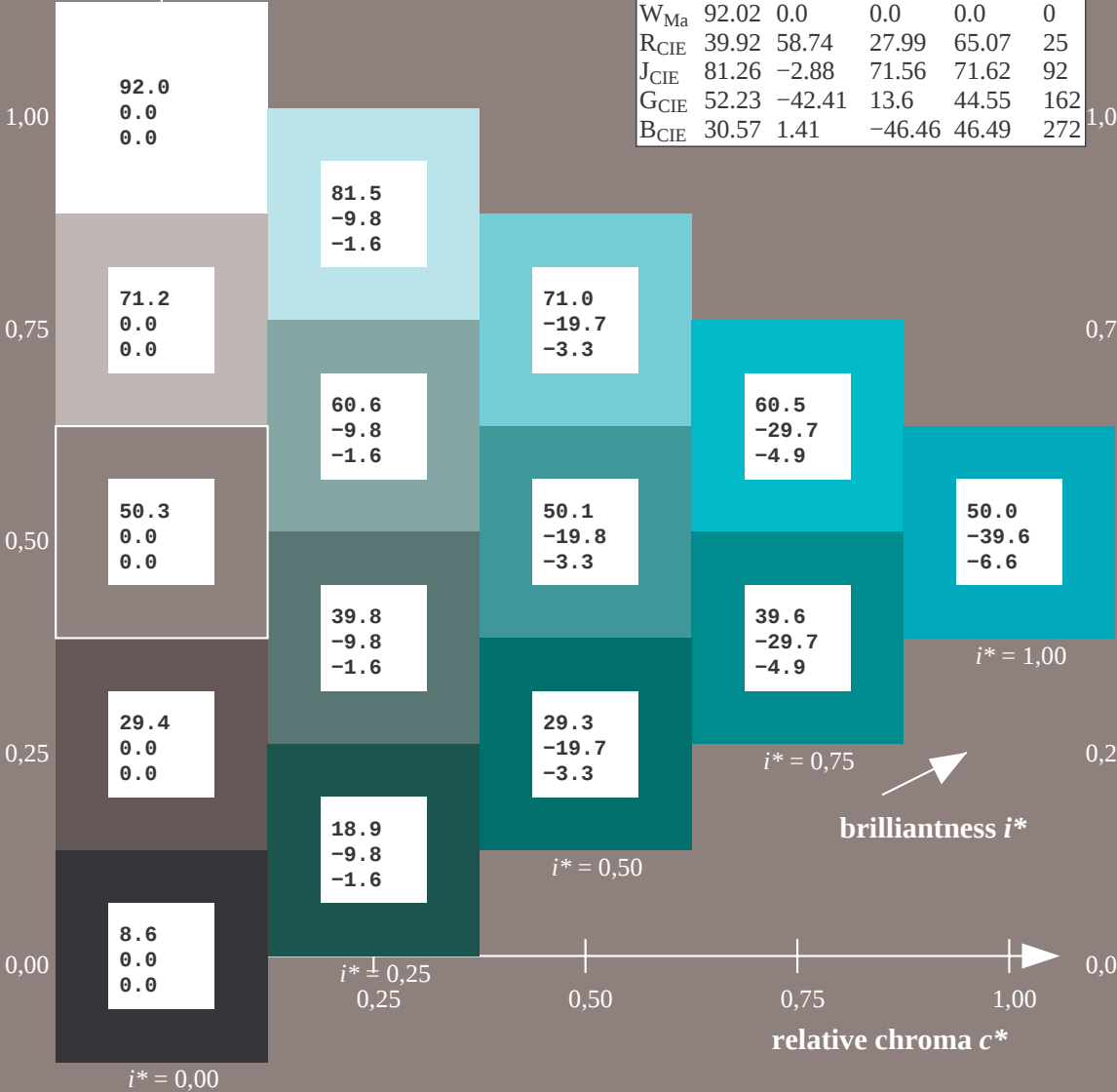


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 50 -39 -6  
 $LAB^*LCH^*_{Ma}$ : 50 40 190  
 $lab^*rgb^*_{Ma}$ : 0.0 1.0 0.5  
 $lab^*olv^*_{Ma}$ : 0.0 1.0 0.69

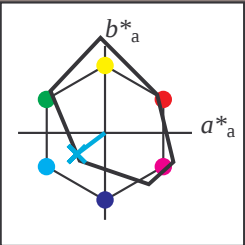
$u^* = g25b$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 217/360 = 0.603$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g50b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

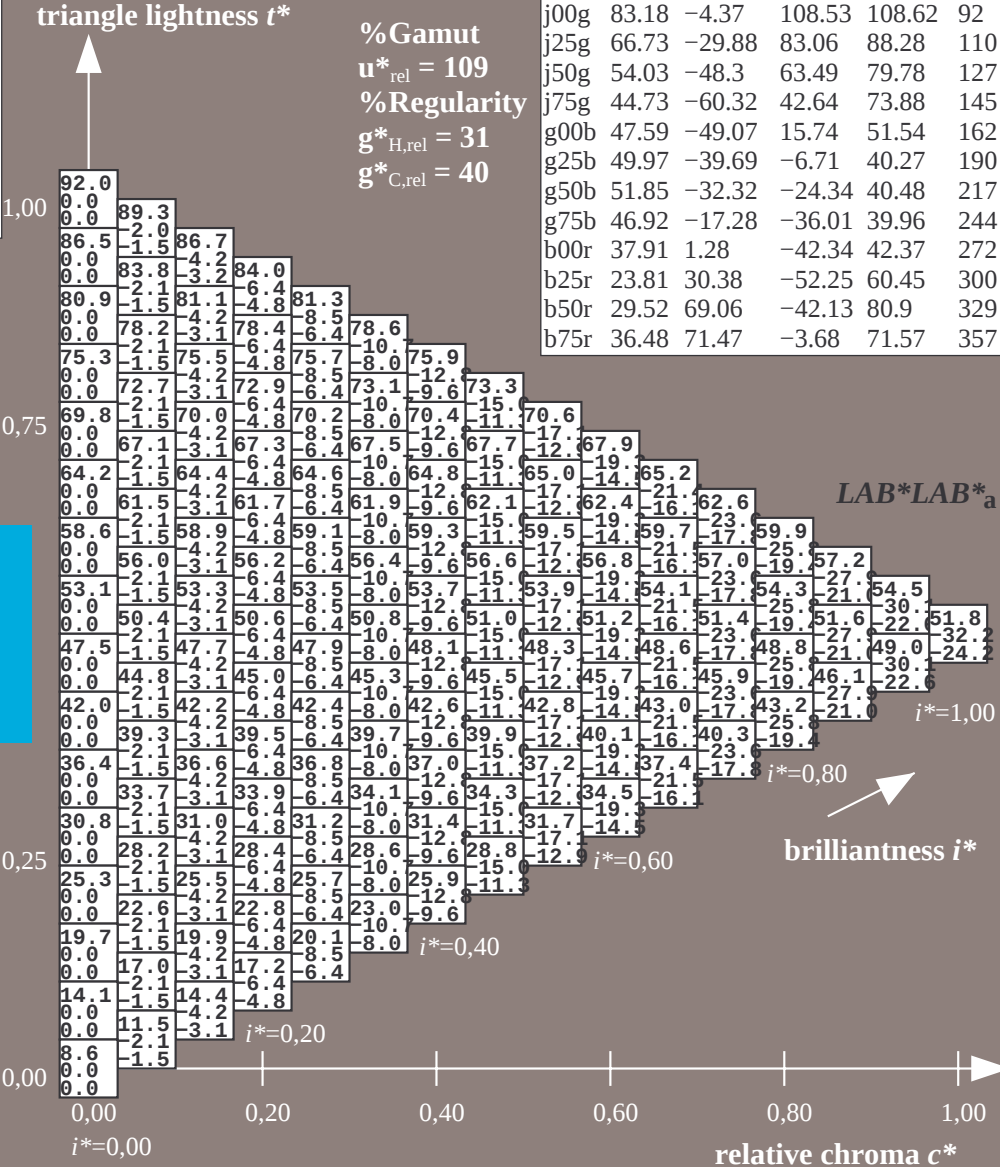
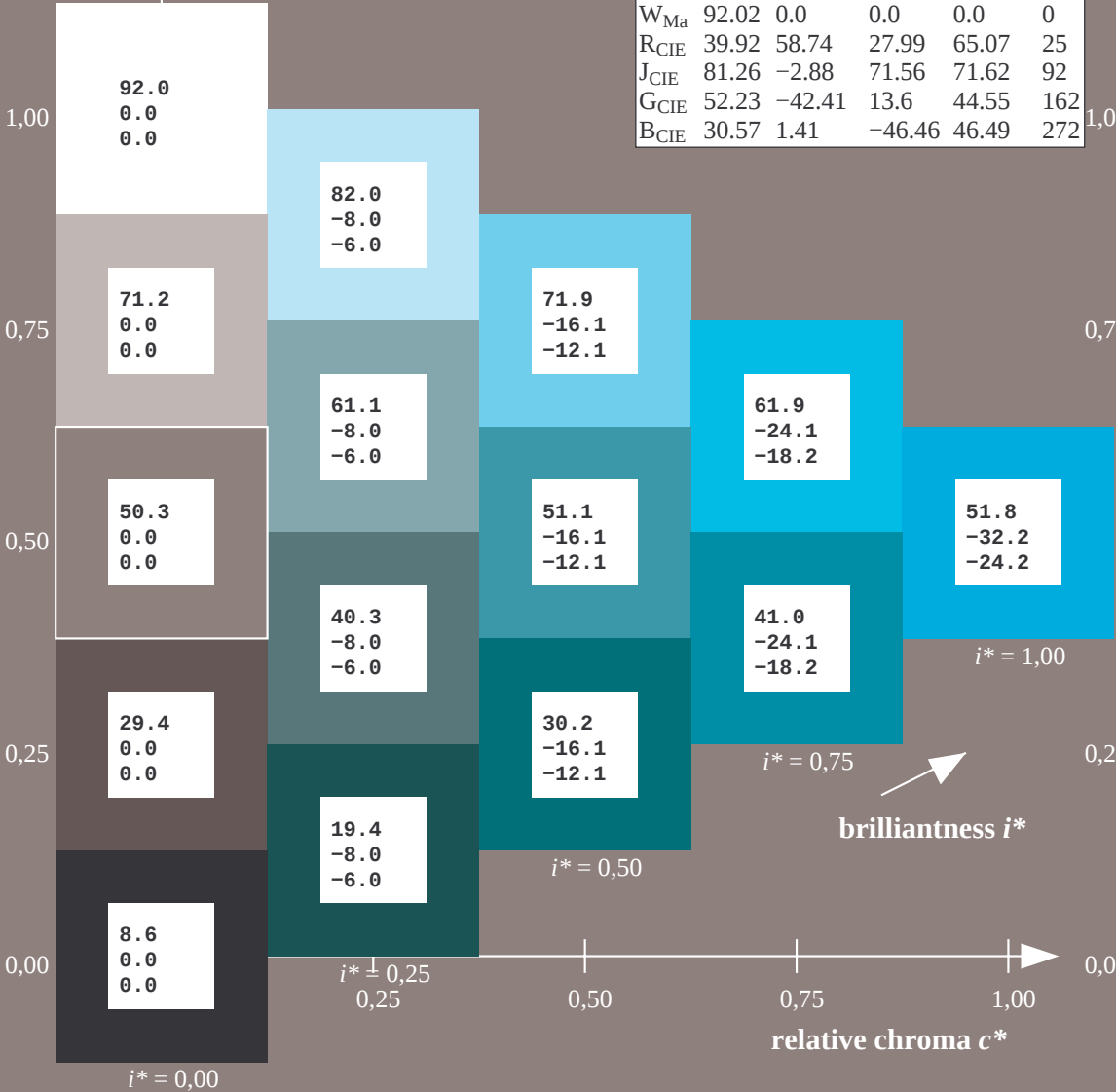


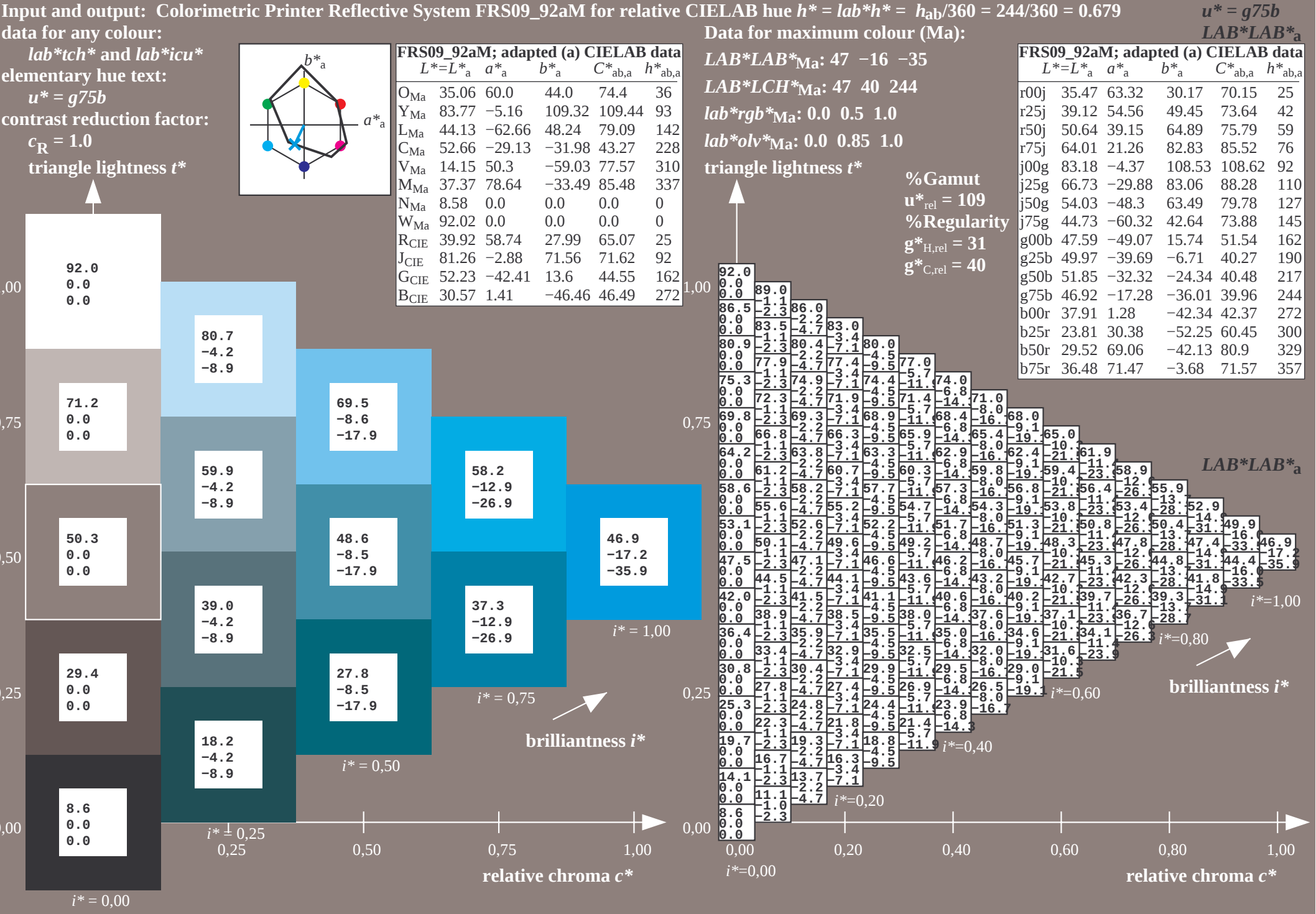
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 52 -31 -23  
 $LAB^*LCH^*_{Ma}$ : 52 40 217  
 $lab^*rgb^*_{Ma}$ : 0.0 1.0 1.0  
 $lab^*olv^*_{Ma}$ : 0.0 1.0 0.9

$u^* = g50b$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |





$$u^* = b00r$$

*LAB\*LAB\**<sub>a</sub>

(a) CIELAB data

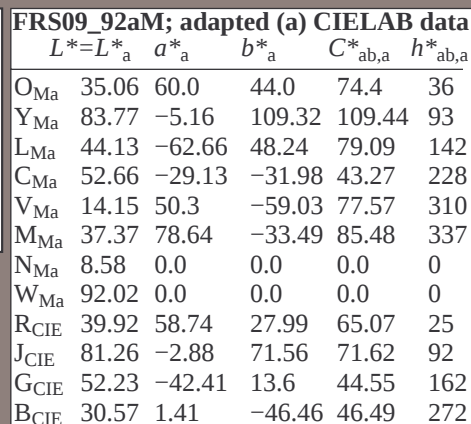
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|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
| 45 | 72.34 | 45 |

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 89 | 75.70 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 73.79 | 39 |
| 83 | 85.52 | 76 |

3.53 108.62 92



(a) CIELAB data

---

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
| 45 | 72.34 | 45 |

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 80 | 75.70 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 73.79 | 39 |
| 83 | 85.52 | 76 |

3.53 108.62 92

|    |       |     |
|----|-------|-----|
| 06 | 88.28 | 110 |
|----|-------|-----|

|    |       |     |
|----|-------|-----|
| 49 | 79.78 | 127 |
| 64 | 73.88 | 145 |

|    |       |     |
|----|-------|-----|
| 64 | 73.88 | 145 |
| 74 | 51.54 | 162 |

|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 192 |
| 71 | 40.27 | 190 |

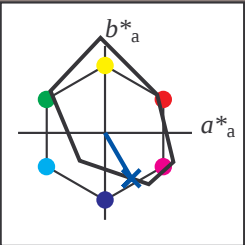
4.34 40.48 217



|       |            |
|-------|------------|
| 1.1   |            |
| -36.6 | $i^*=1,00$ |

Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 300/360 = 0.834$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = b25r$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

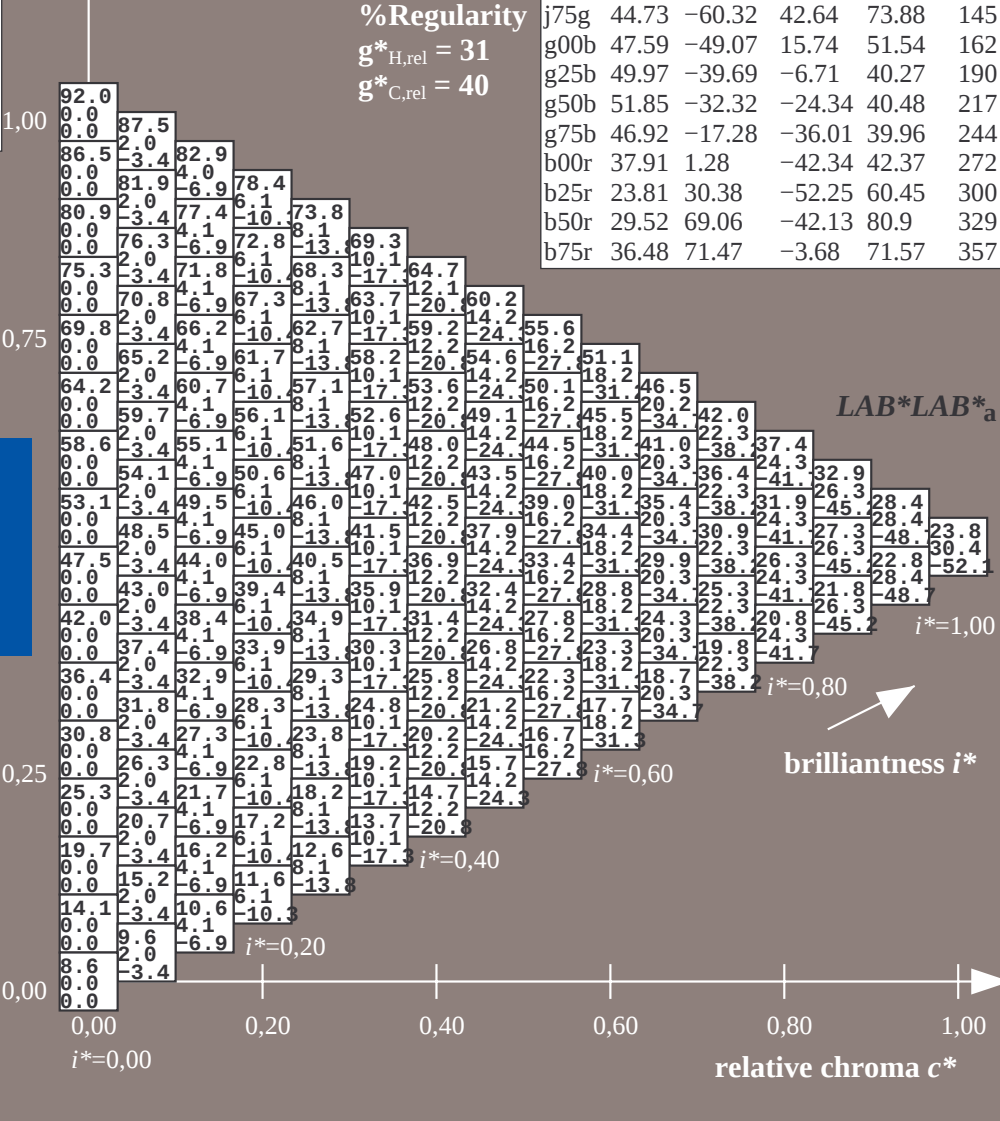
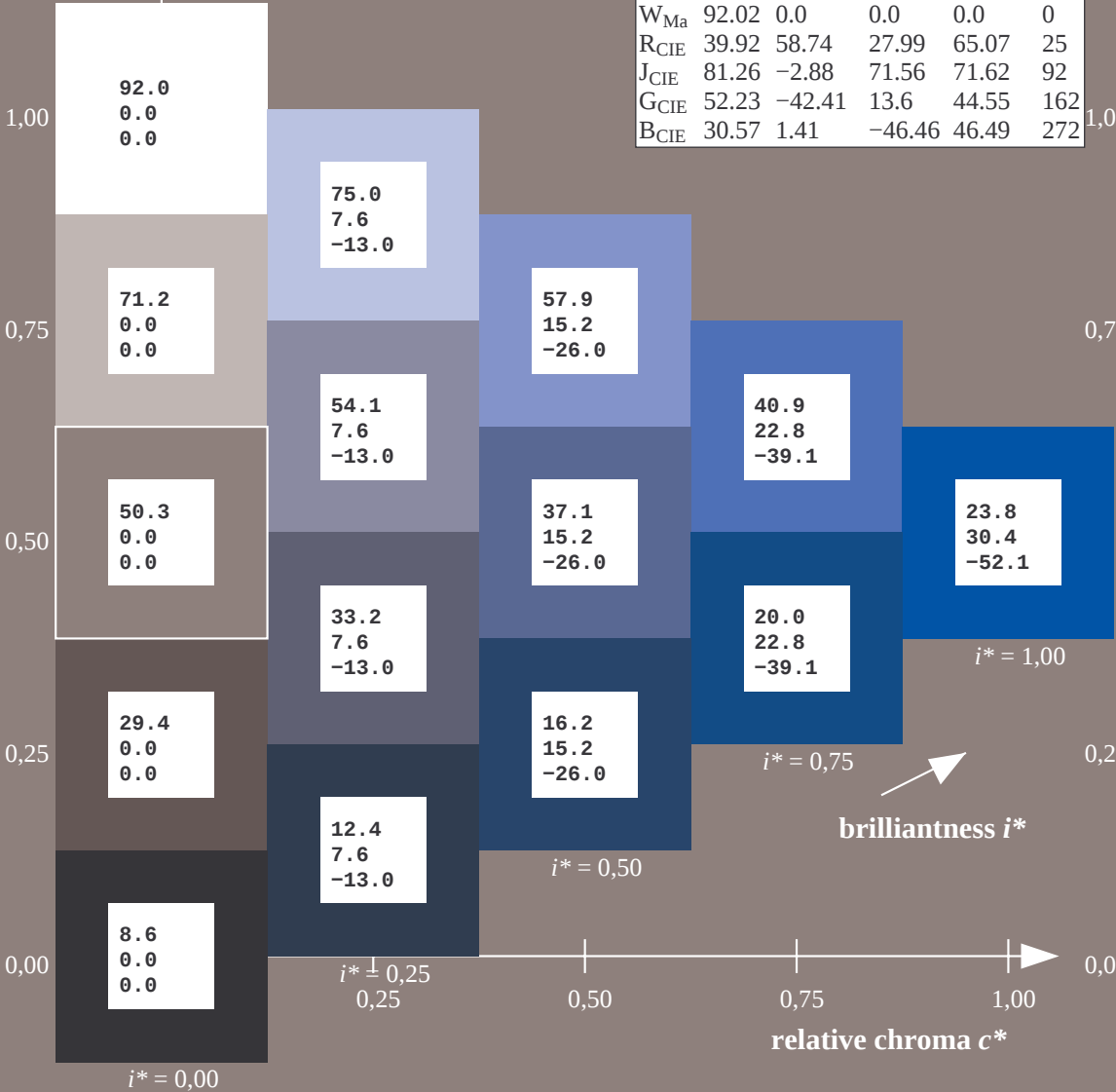
Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 24 30 -51  
 $LAB^*LCH^*_{Ma}$ : 24 60 300  
 $lab^*rgb^*_{Ma}$ : 0.5 0.0 1.0  
 $lab^*olv^*_{Ma}$ : 0.0 0.25 1.0

$u^* = b25r$   
 $LAB^*LAB^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$



$$u^* = b50r$$

*LAB\*LAB\**<sub>a</sub>

*lab\*tch\** and *lab\*icu\**

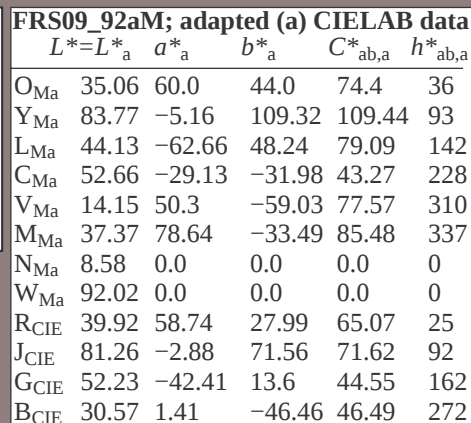
**Complementary hue text:**

$$u^* = b50r$$

**contrast reduction factor:**

$$c_D = 1.0$$

**K**  
triangle lightness  $t^*$



LAB\*LAB\*<sub>M</sub>: 30 69 -41

**LAB\*LAB\*Ma: 30 69 -41**

**LAB\*LCH\*Ma: 30 81 329**

***lab\*rqb\*\_Ma: 1.0 0.0 1.0***

**lab\*olv\*Ma: 0.66 0.0 1.0**

triangle lightness  $t^*$

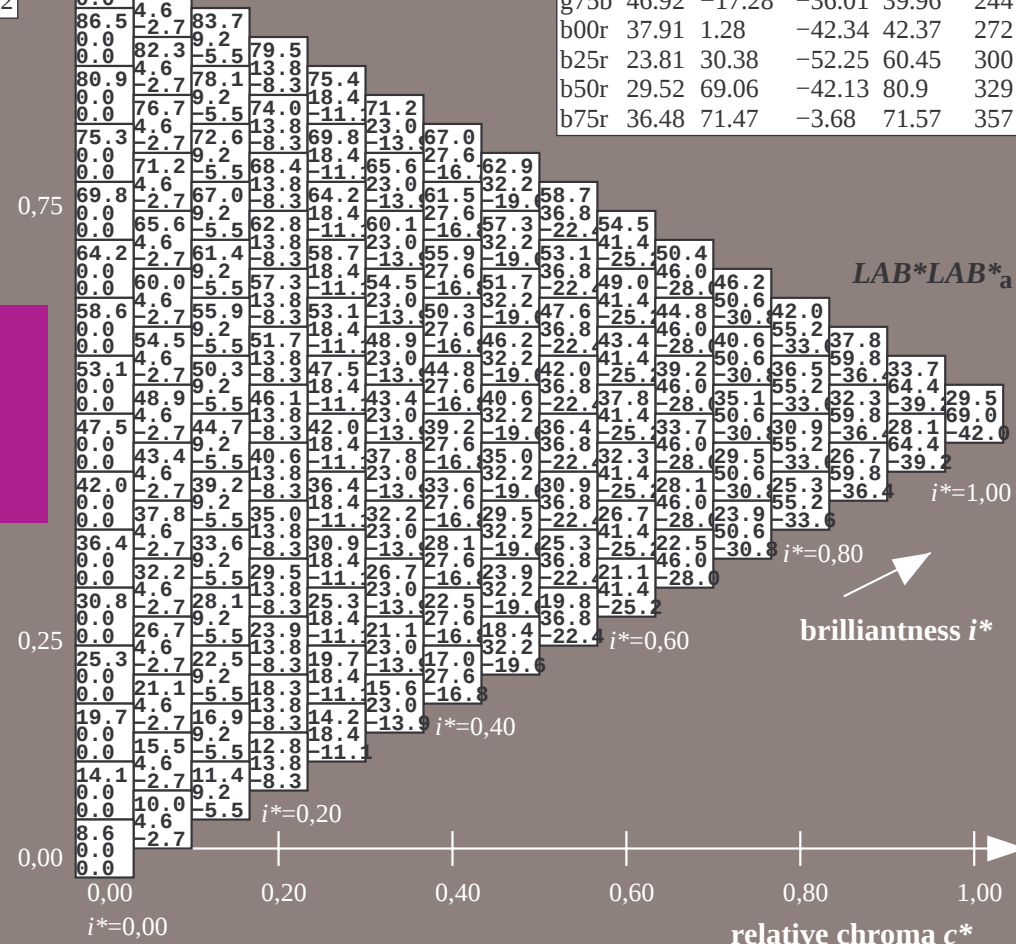
## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

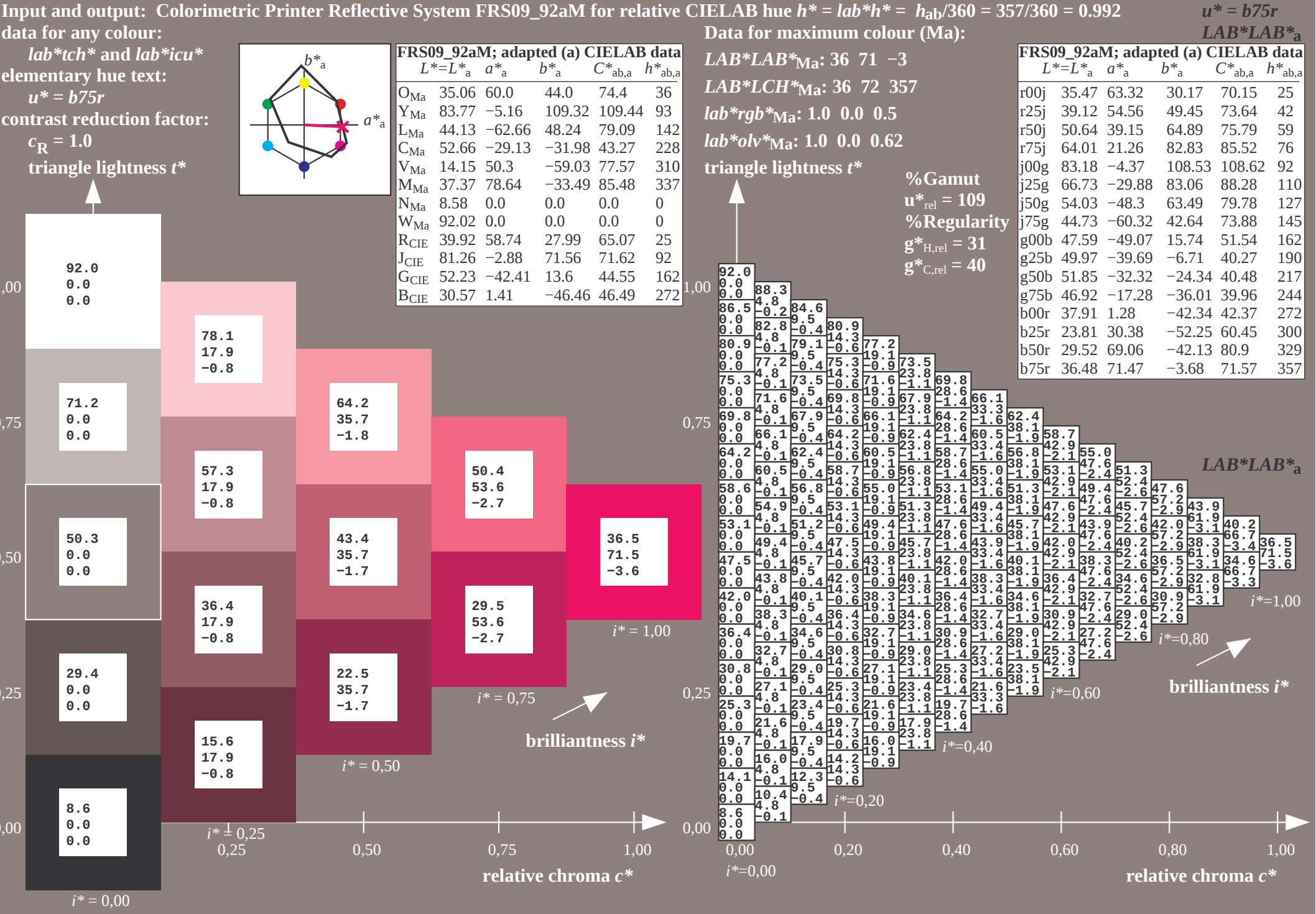
$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

|   |      |
|---|------|
| 2 | 1,00 |
|---|------|



brilliantness  $i^*$

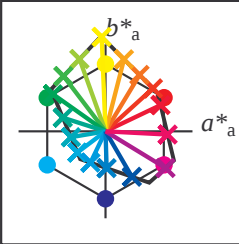
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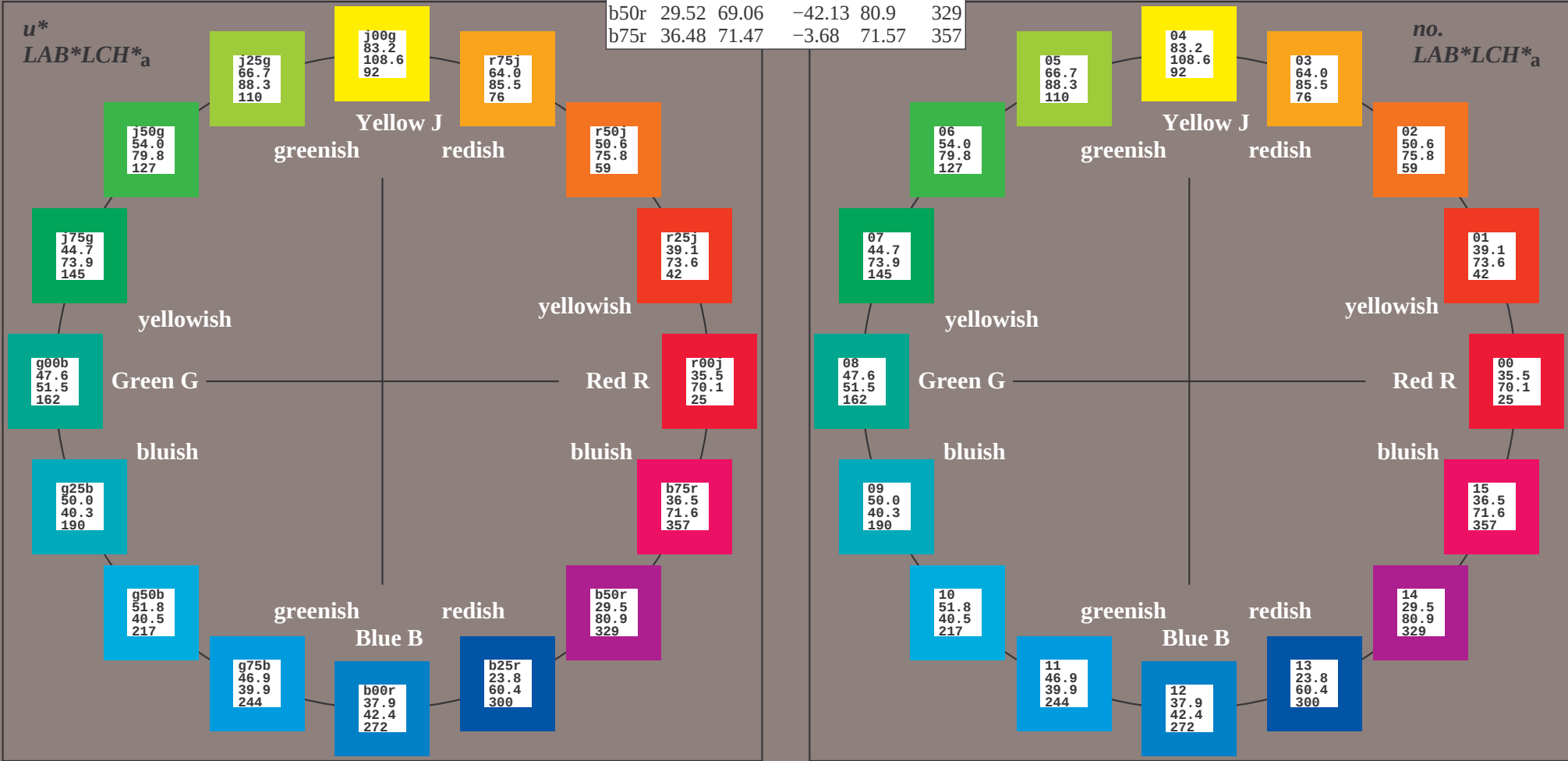
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
 $lab*_{tch*}$  and  $lab*_{icu*}$   
elementary hue text:  
 $u^* = 16$  hues  $r00j$ ,  $r25j$ , ...,  $b75r$   
contrast reduction factor:  
 $c_R = 1.0$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



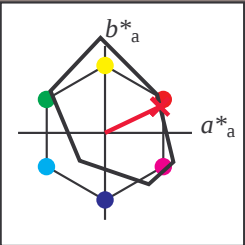
% Gamut  
 $u^*_{rel} = 109$   
% Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

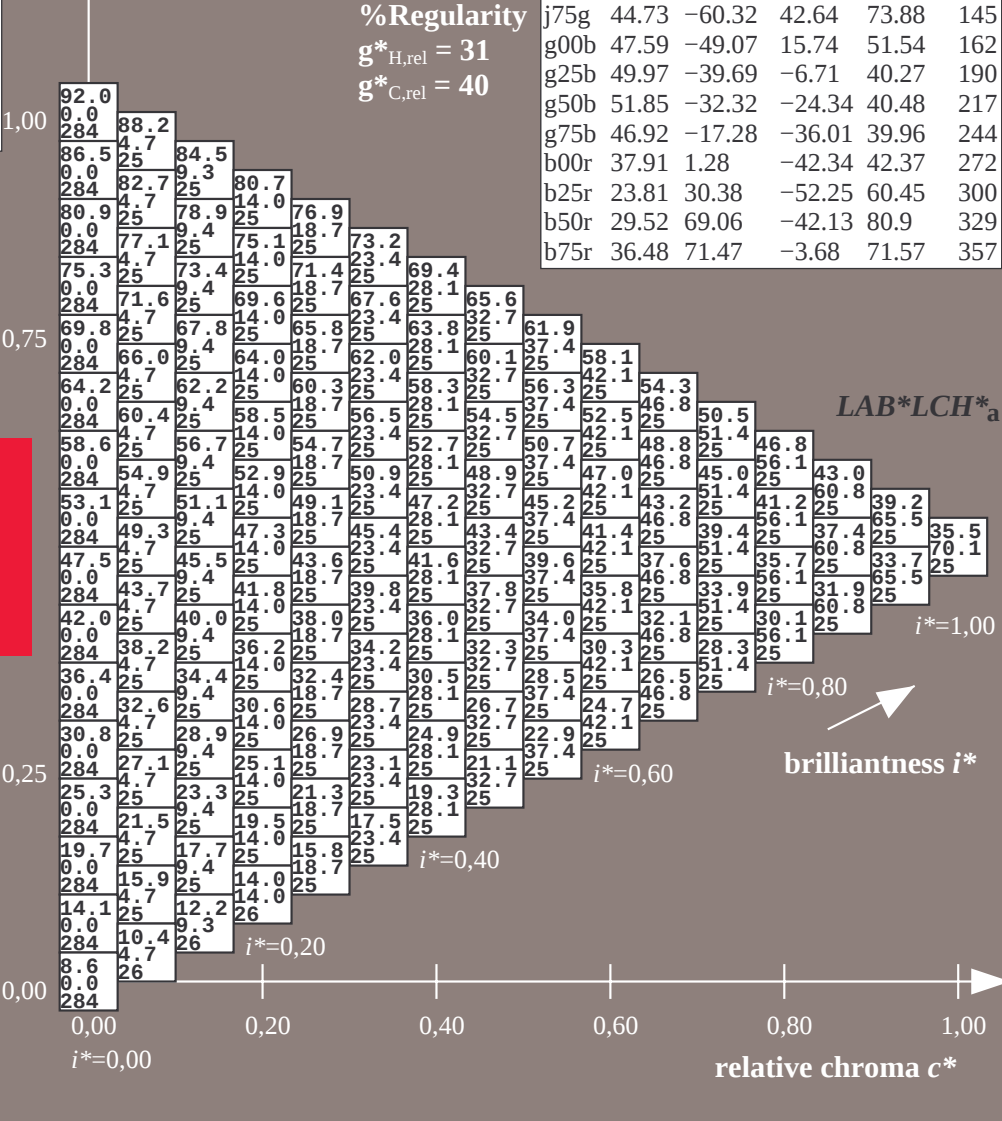
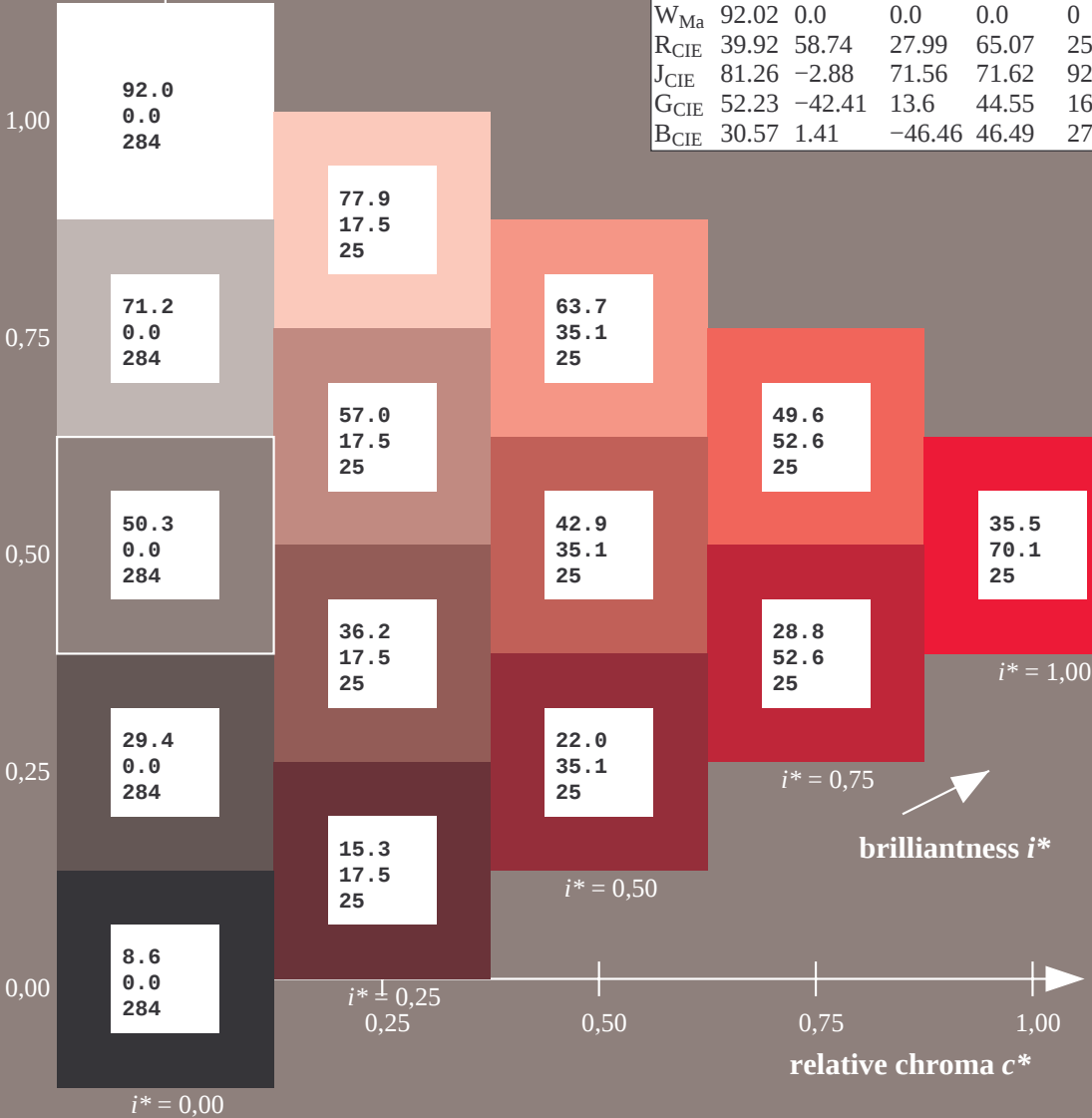


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18  
triangle lightness  $t^*$

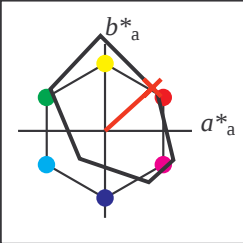
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



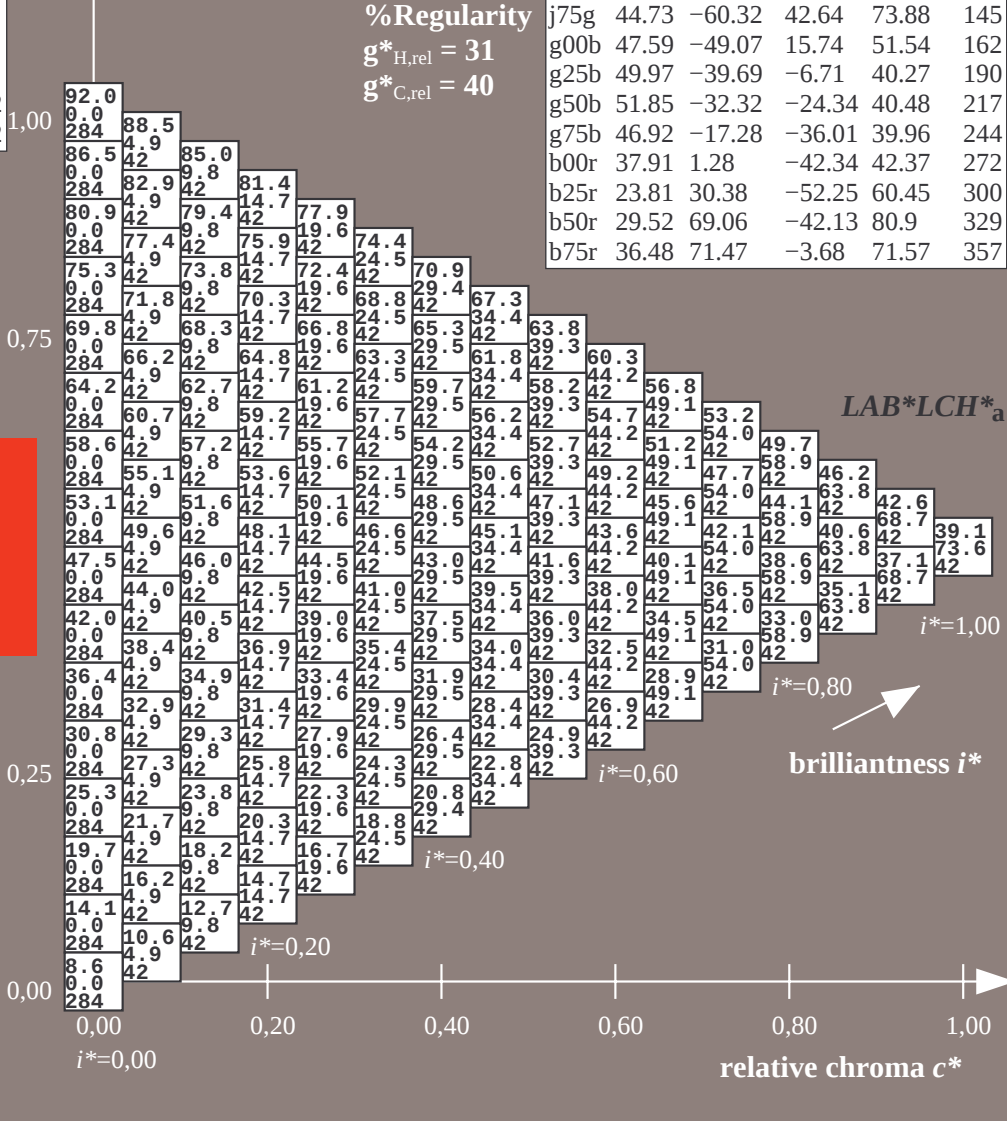
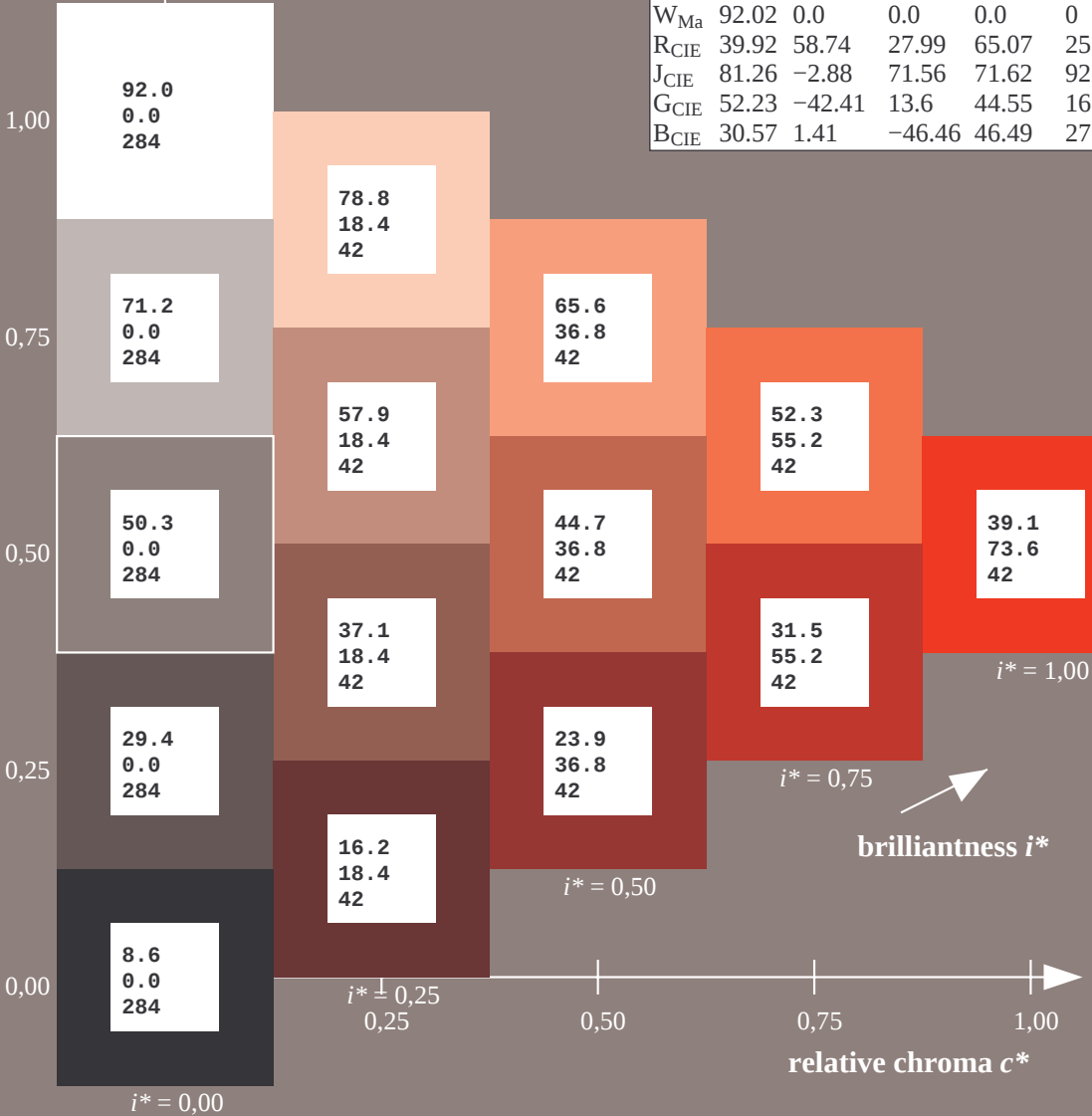
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 39 55 49  
 $LAB^*LCH^*_{Ma}$ : 39 74 42  
 $lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.08 0.0

triangle lightness  $t^*$

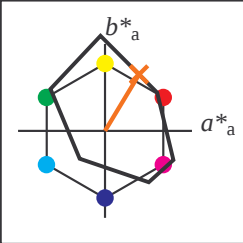
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

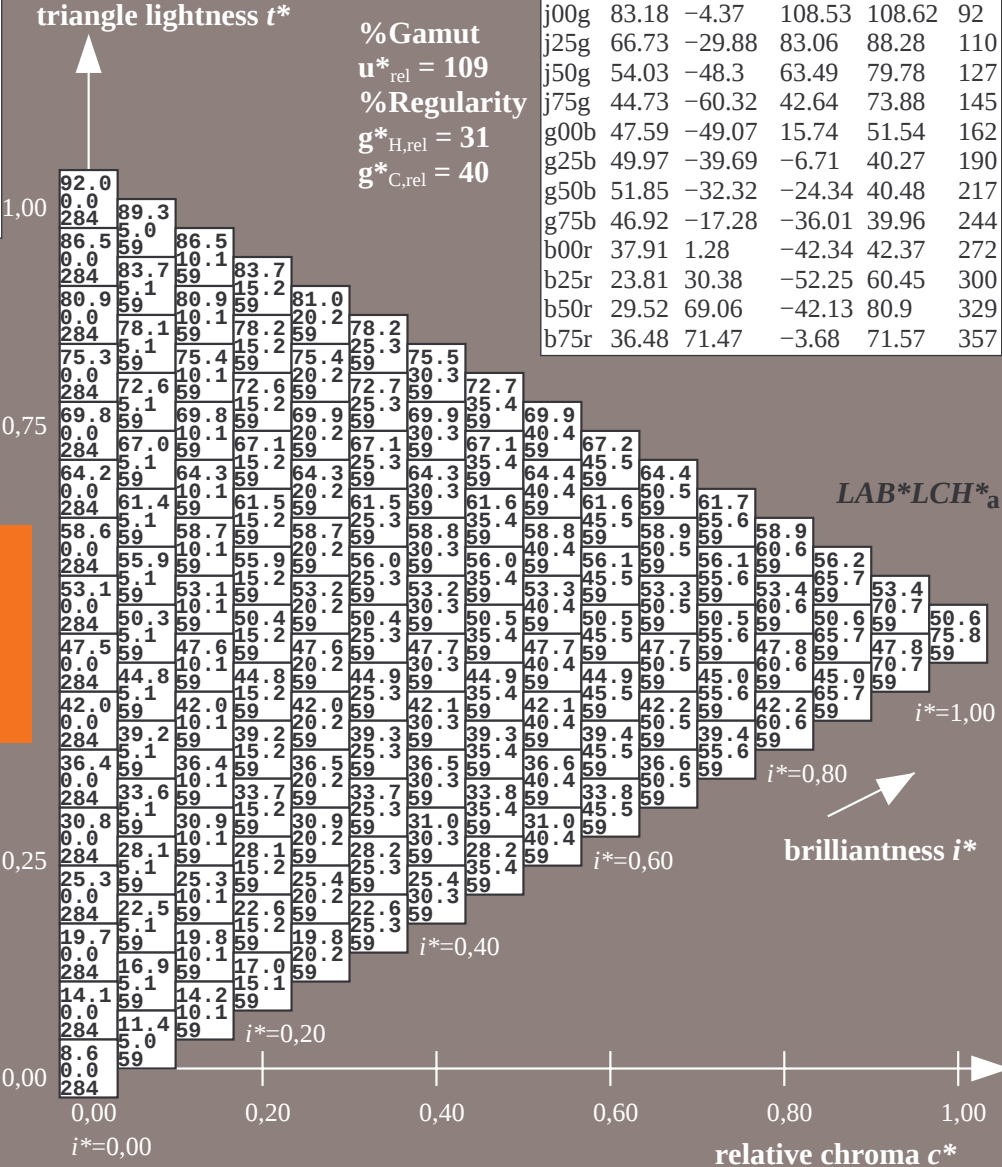
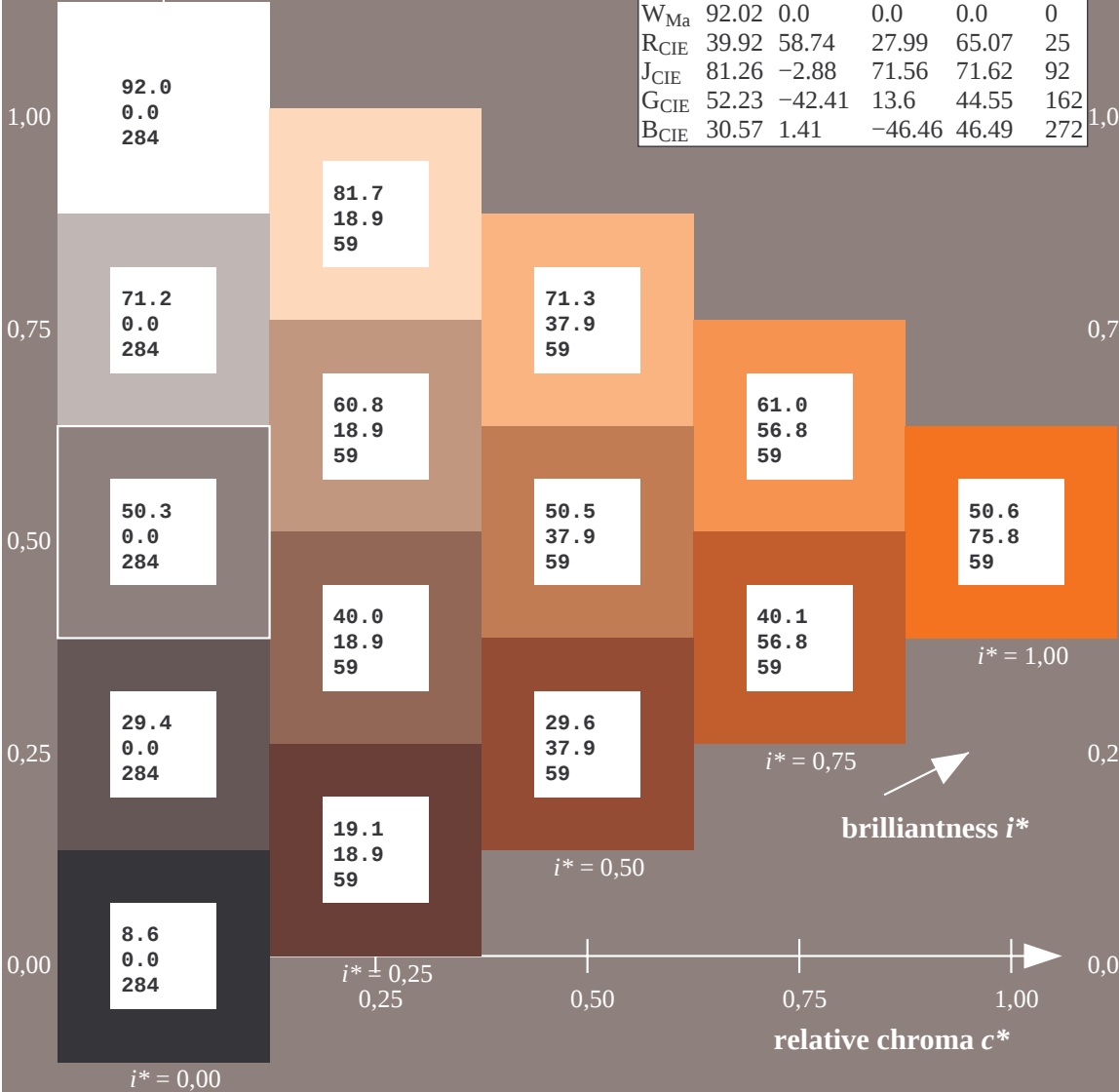


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 51\ 39\ 65$   
 $LAB^*LCH^*_{Ma}: 51\ 76\ 59$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.5\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.32\ 0.0$

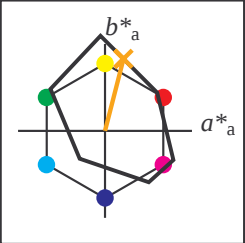
$u^* = r50j$   
 $LAB^*LCH^*_a$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

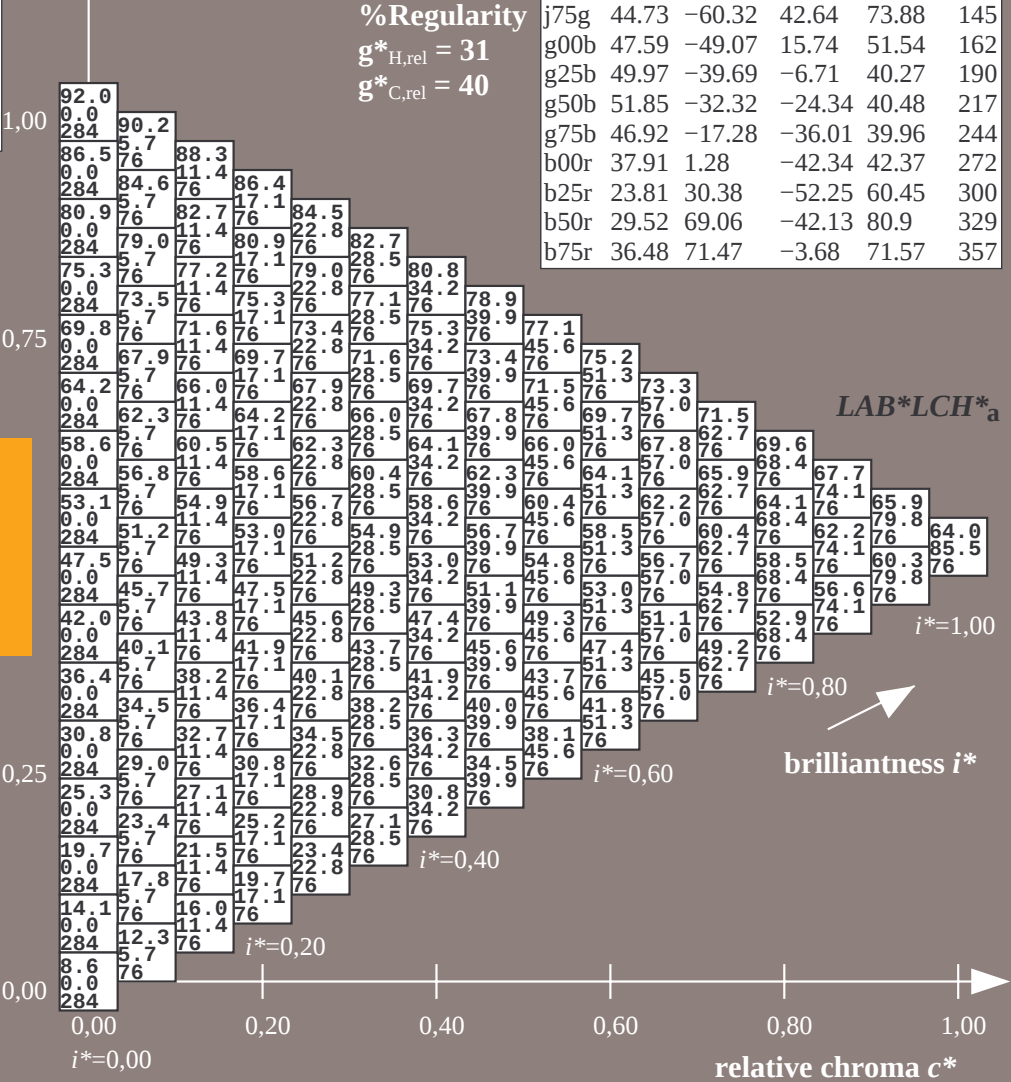
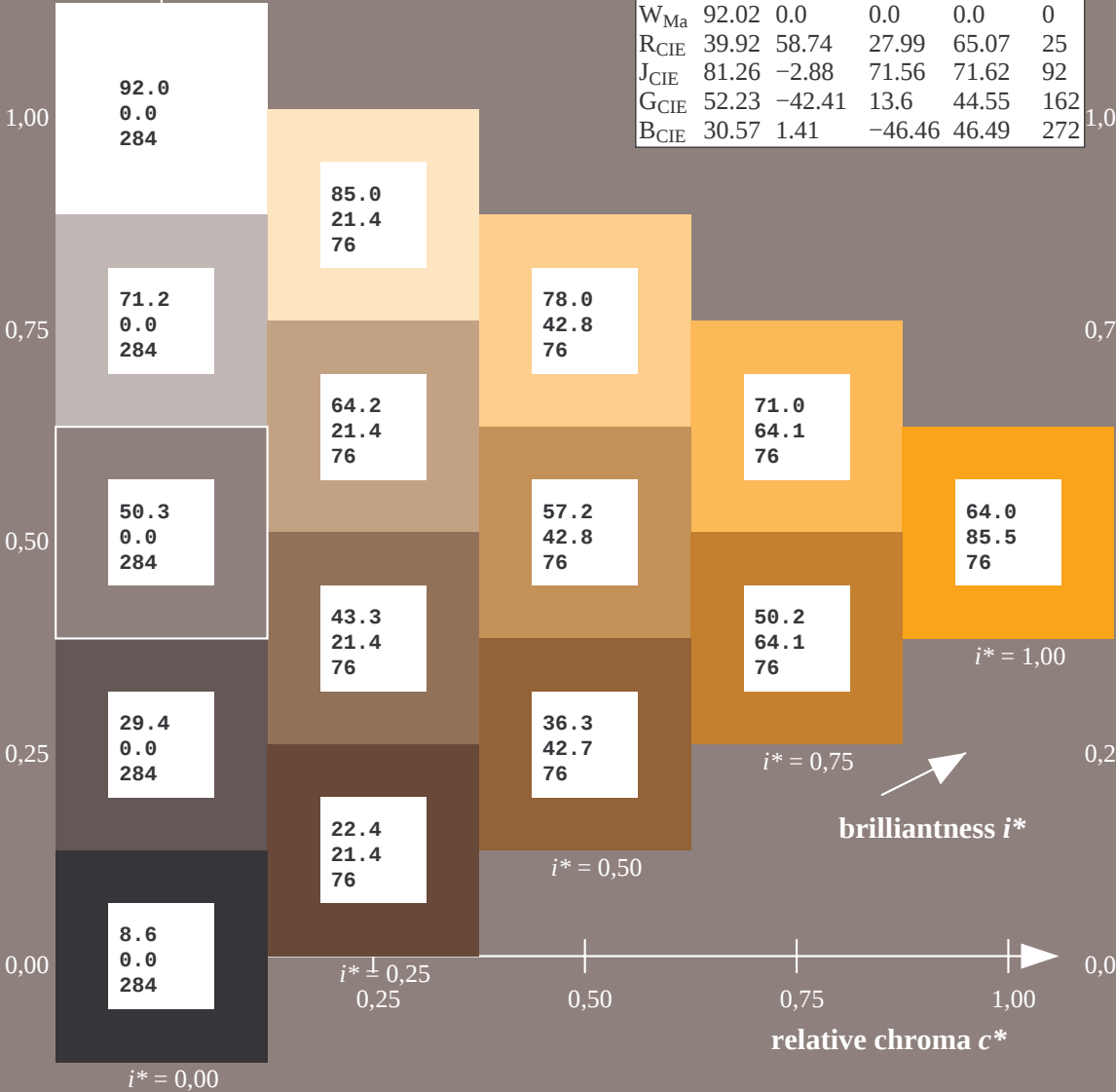


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 64\ 21\ 83$   
 $LAB^*LCH^*_{Ma}: 64\ 86\ 76$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.75\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.59\ 0.0$   
triangle lightness  $t^*$

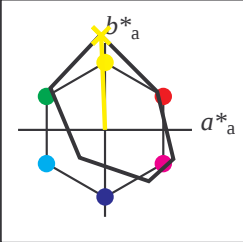
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 83 -3 109

$LAB^*LCH^*_{Ma}$ : 83 109 92

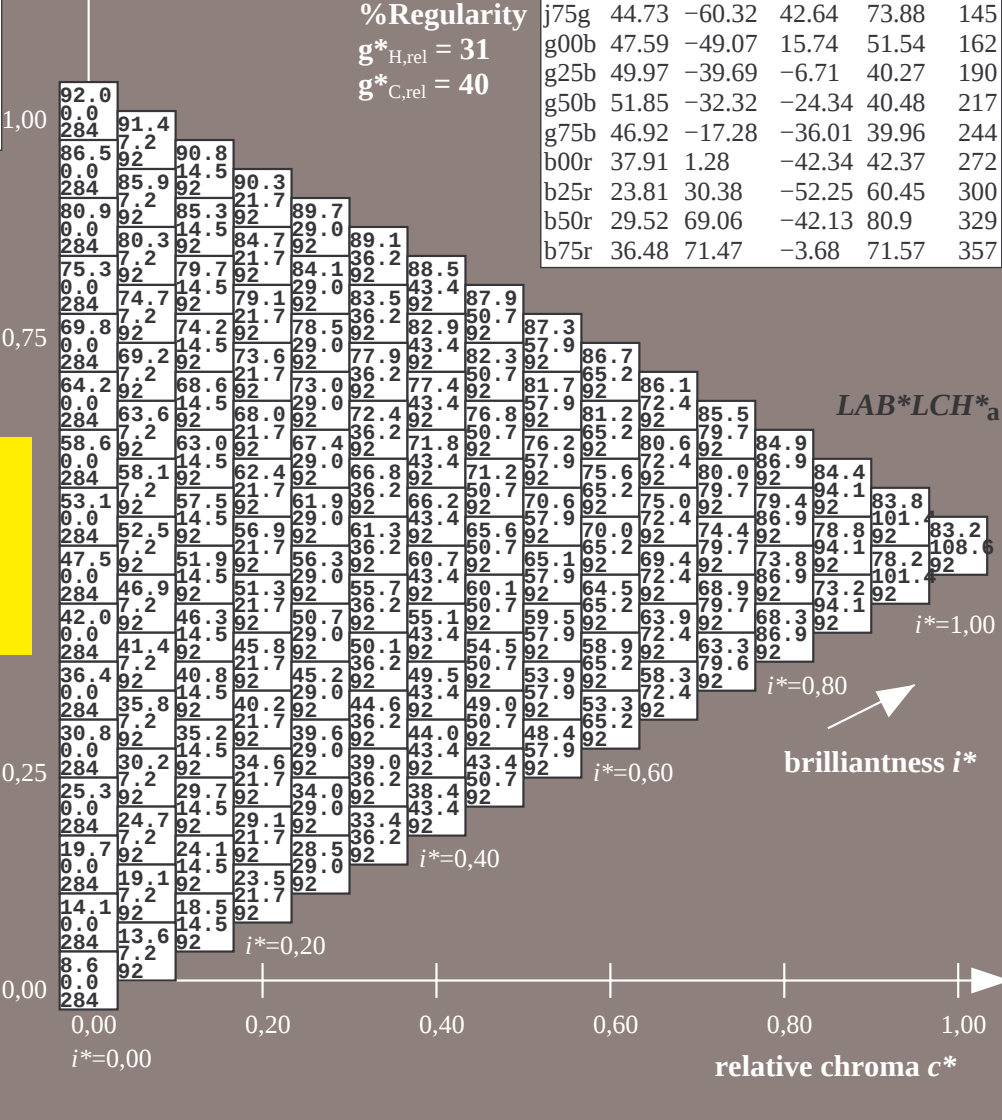
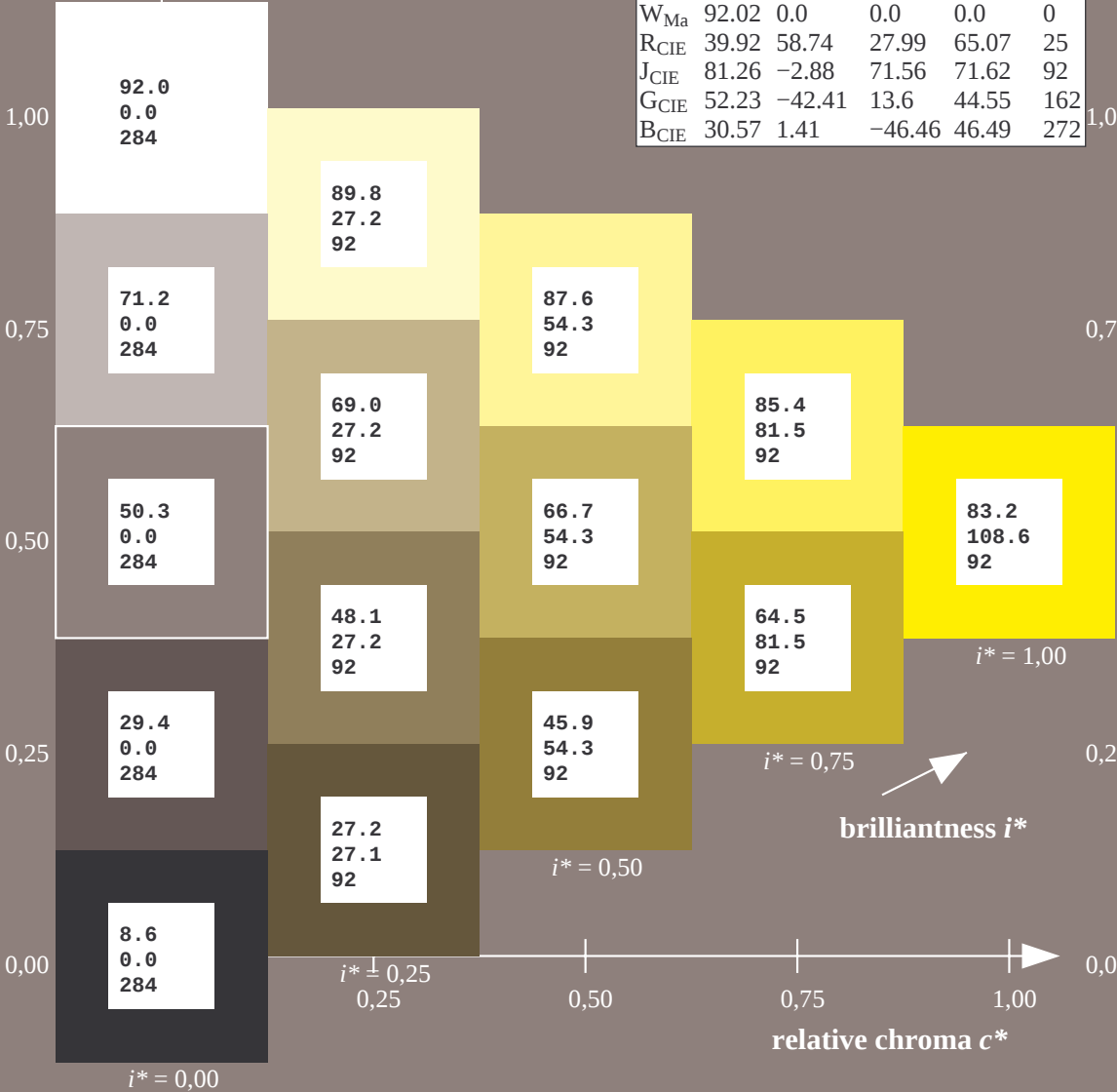
$lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0

$lab^*olv^*_{Ma}$ : 1.0 0.99 0.0

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



$$u^* = j25g$$

**Data for maximum colour (Ma):**

**LAB\*LCH\*a**

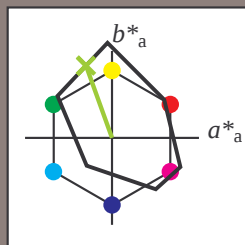
**LAB\*LAB\*Ma: 67 -29 83**

**LAB\*LCH\*Ma: 67 88 110**

*lab\*rqb\**Ma: 0.75 1.0 0.0

**lab\*olv\*Ma: 0.57 1.0 0.0**

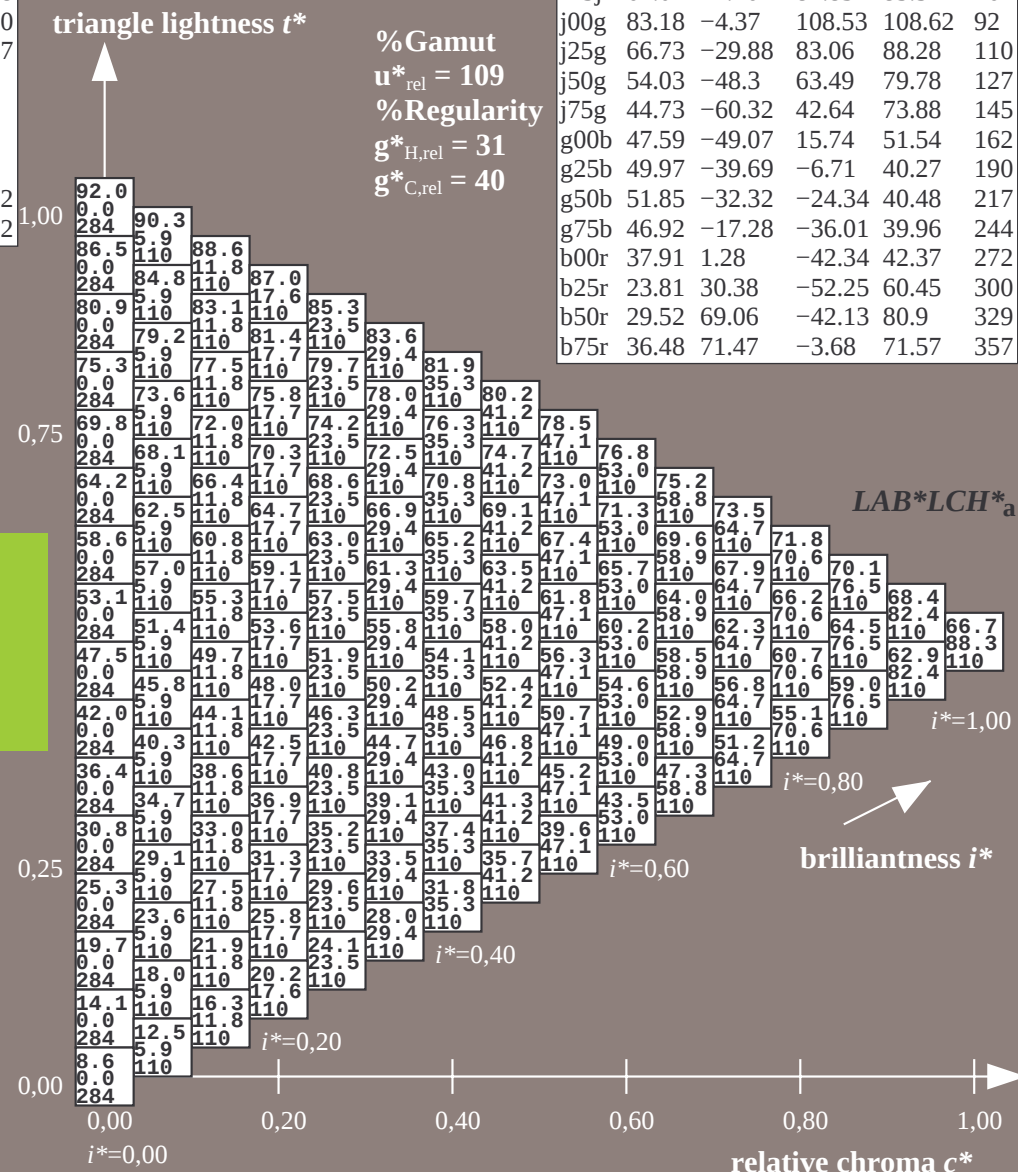
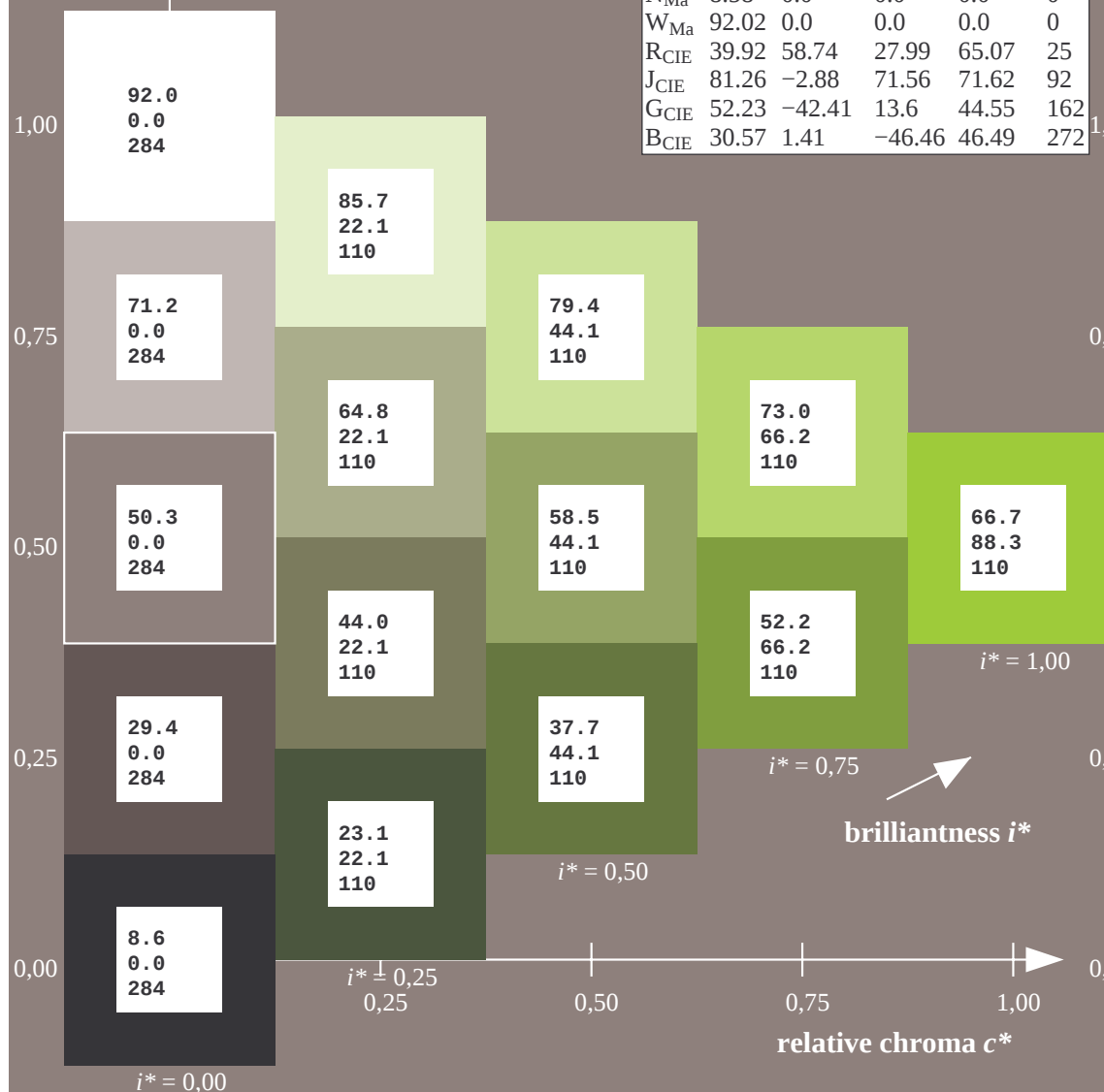
triangle lightness  $t^*$

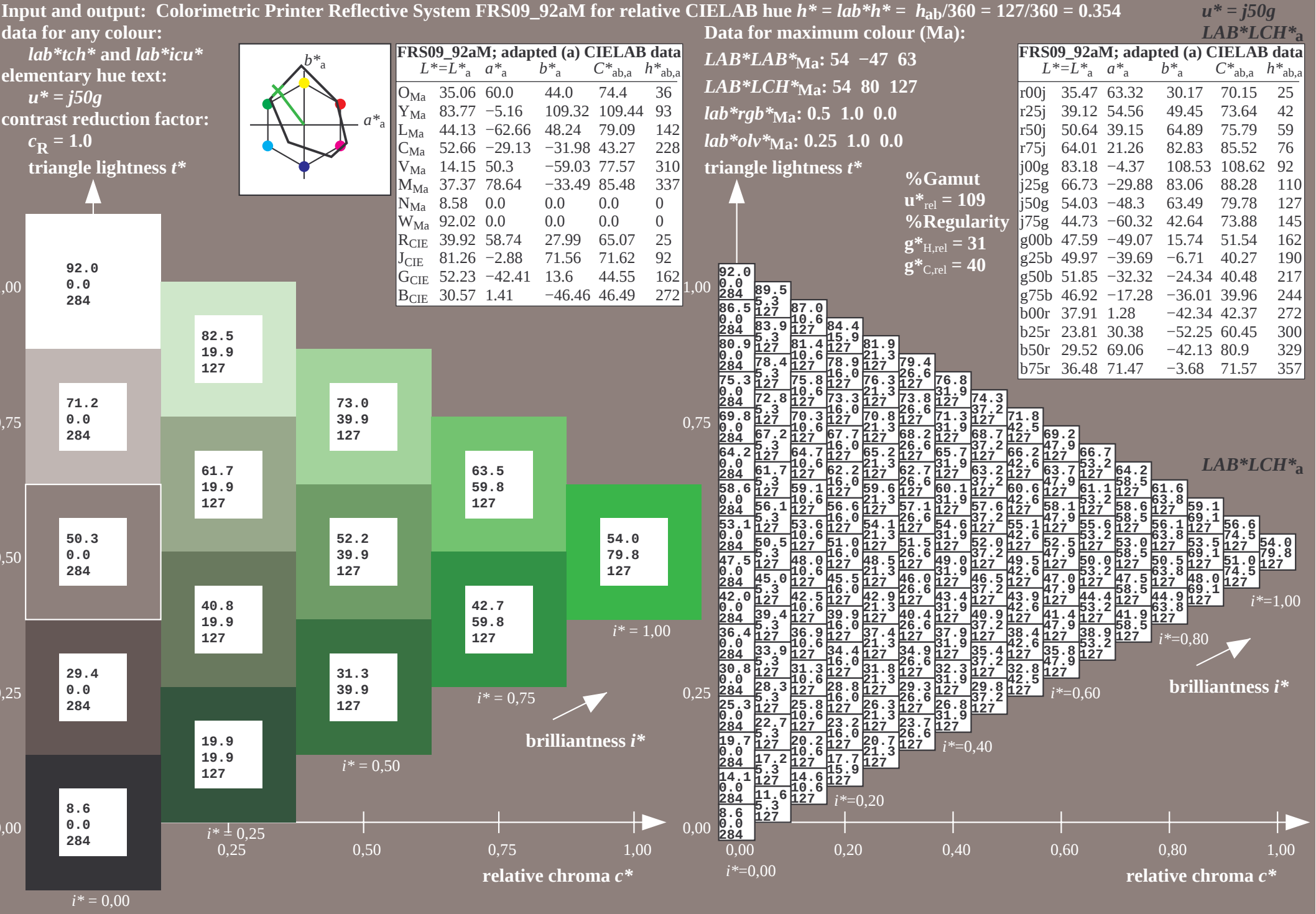


FRS09\_92aM; adapted (a) CIELAB data

|                  | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------------------|------------------------|------------------|------------------|---------------------|---------------------|
| O <sub>Ma</sub>  | 35.06                  | 60.0             | 44.0             | 74.4                | 36                  |
| Y <sub>Ma</sub>  | 83.77                  | -5.16            | 109.32           | 109.44              | 93                  |
| L <sub>Ma</sub>  | 44.13                  | -62.66           | 48.24            | 79.09               | 142                 |
| C <sub>Ma</sub>  | 52.66                  | -29.13           | -31.98           | 43.27               | 228                 |
| V <sub>Ma</sub>  | 14.15                  | 50.3             | -59.03           | 77.57               | 310                 |
| M <sub>Ma</sub>  | 37.37                  | 78.64            | -33.49           | 85.48               | 337                 |
| N <sub>Ma</sub>  | 8.58                   | 0.0              | 0.0              | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 92.02                  | 0.0              | 0.0              | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92                  | 58.74            | 27.99            | 65.07               | 25                  |
| J <sub>CIE</sub> | 81.26                  | -2.88            | 71.56            | 71.62               | 92                  |
| G <sub>CIE</sub> | 52.23                  | -42.41           | 13.6             | 44.55               | 162                 |
| B <sub>CIE</sub> | 30.57                  | 1.41             | -46.46           | 46.49               | 272                 |

|      | $L^*=L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------|----------------------|------------------|------------------|---------------------|---------------------|
| r00j | 35.47                | 63.32            | 30.17            | 70.15               | 25                  |
| r25j | 39.12                | 54.56            | 49.45            | 73.64               | 42                  |
| r50j | 50.64                | 39.15            | 64.89            | 75.79               | 59                  |
| r75j | 64.01                | 21.26            | 82.83            | 85.52               | 76                  |
| j00g | 83.18                | -4.37            | 108.53           | 108.62              | 92                  |
| j25g | 66.73                | -29.88           | 83.06            | 88.28               | 110                 |
| j50g | 54.03                | -48.3            | 63.49            | 79.78               | 127                 |
| j75g | 44.73                | -60.32           | 42.64            | 73.88               | 145                 |
| g00b | 47.59                | -49.07           | 15.74            | 51.54               | 162                 |
| g25b | 49.97                | -39.69           | -6.71            | 40.27               | 190                 |
| g50b | 51.85                | -32.32           | -24.34           | 40.48               | 217                 |
| g75b | 46.92                | -17.28           | -36.01           | 39.96               | 244                 |
| b00r | 37.91                | 1.28             | -42.34           | 42.37               | 272                 |
| b25r | 23.81                | 30.38            | -52.25           | 60.45               | 300                 |
| b50r | 29.52                | 69.06            | -42.13           | 80.9                | 329                 |
| b75r | 36.48                | 71.47            | -3.68            | 71.57               | 357                 |





$$u^* = j75g$$

*LAB\*LCH\**<sub>a</sub>

(a) CIELAB data

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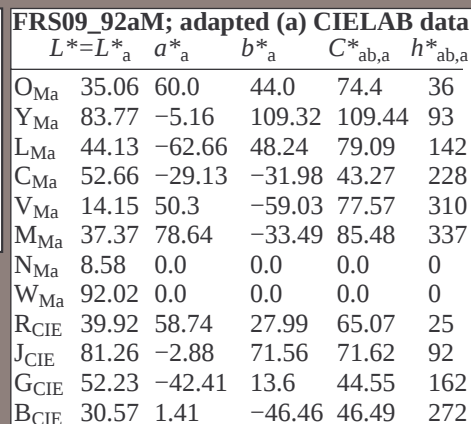
 $C_{ab,a}^* \quad h_{ab,a}^*$ 

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 20 | 75.70 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |



*LAB\*LCH\**<sub>a</sub>

(a) CIELAB data

|    | $C_{ab,a}^*$ | $h_{ab,a}^*$ |
|----|--------------|--------------|
| 17 | 70           | 15           |
| 25 |              |              |

|    |       |    |
|----|-------|----|
| 17 | 70.13 | 23 |
| 45 | 73.64 | 42 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |

|    |       |     |
|----|-------|-----|
| 06 | 88.28 | 110 |
| 40 | 79.78 | 127 |

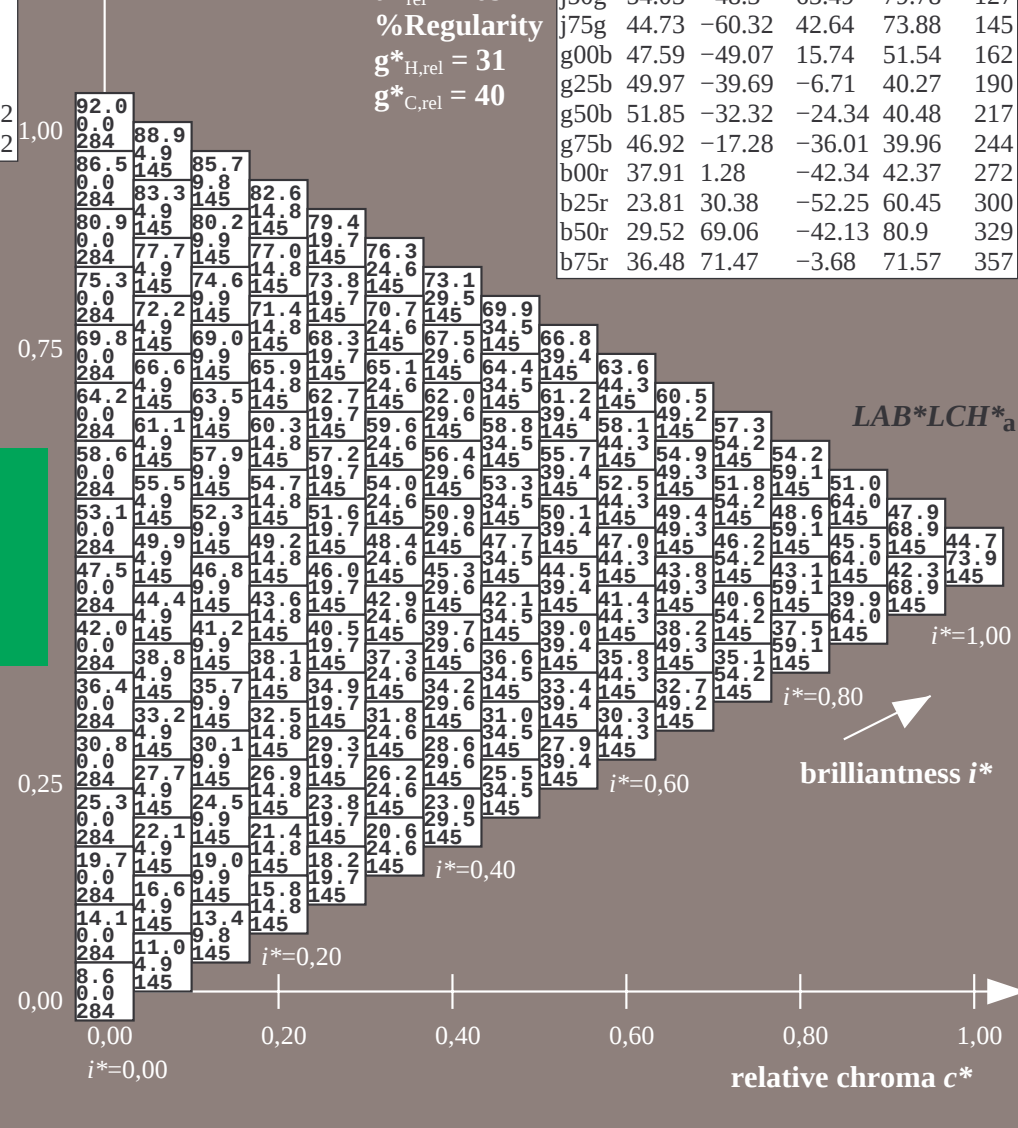
|      |        |     |
|------|--------|-----|
| 5.53 | 108.62 | 92  |
| 06   | 88.28  | 110 |

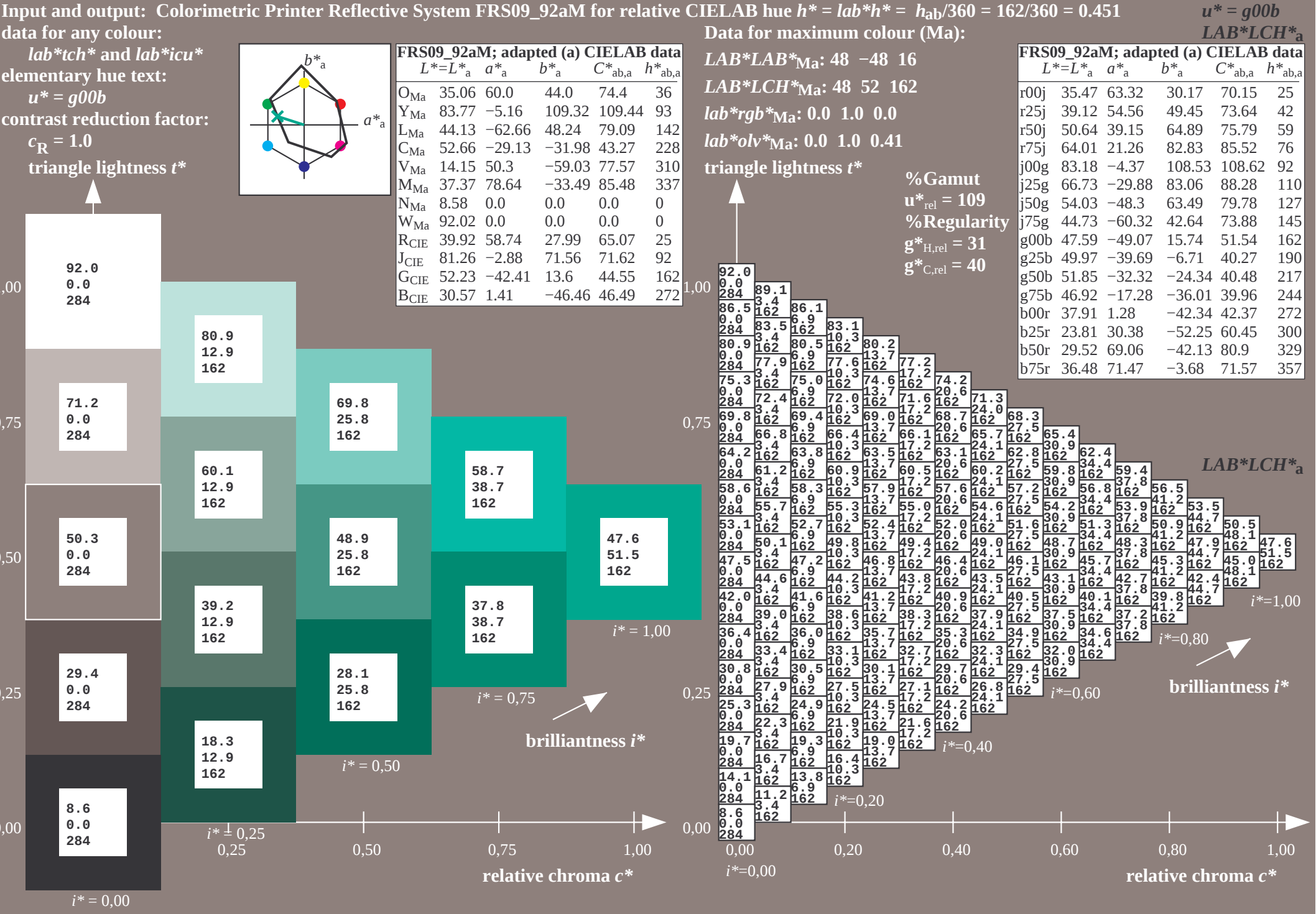
|    |       |     |
|----|-------|-----|
| 00 | 88.28 | 110 |
| 49 | 79.78 | 127 |

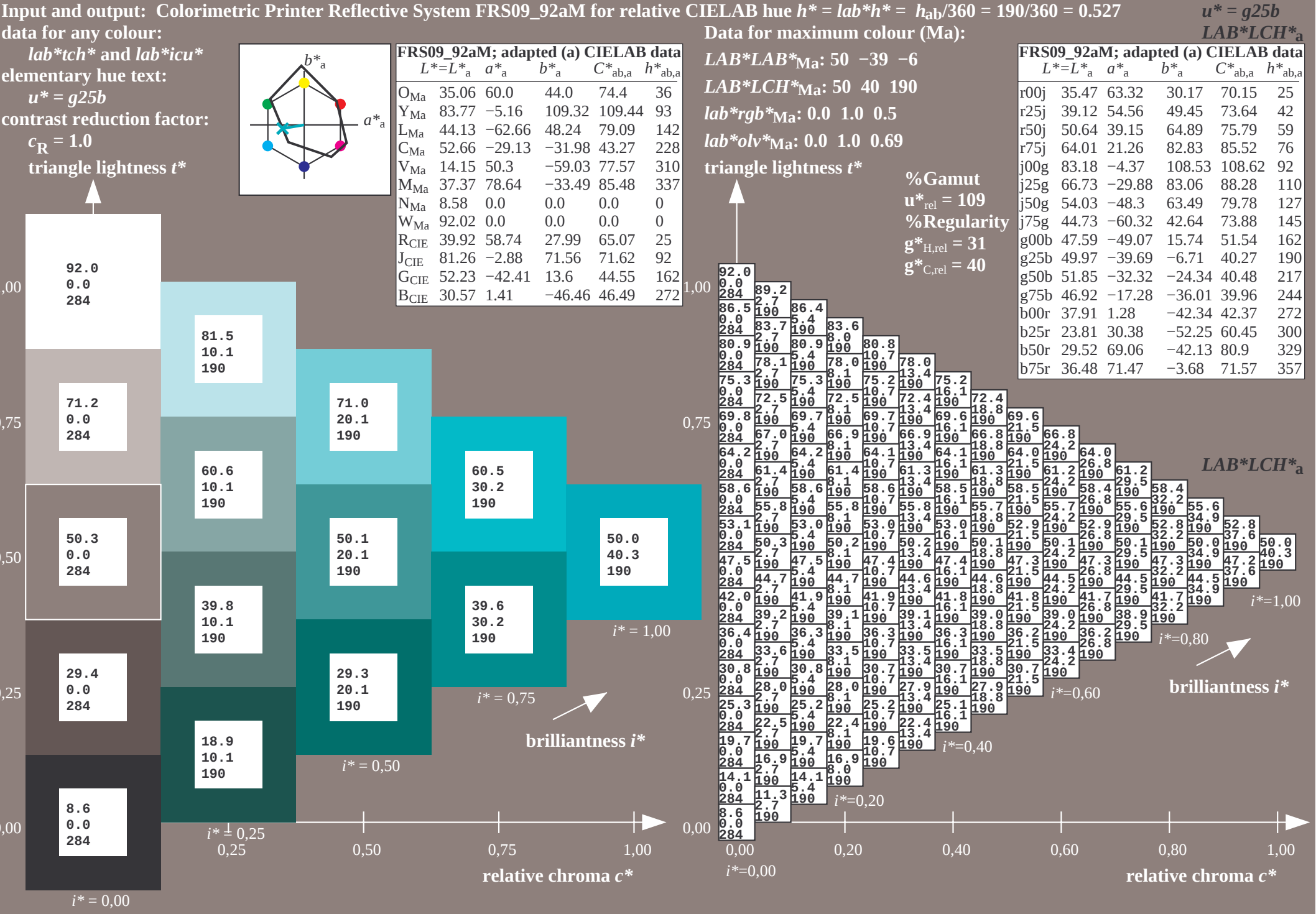
|    |       |     |
|----|-------|-----|
| 45 | 75.78 | 127 |
| 64 | 73.88 | 145 |

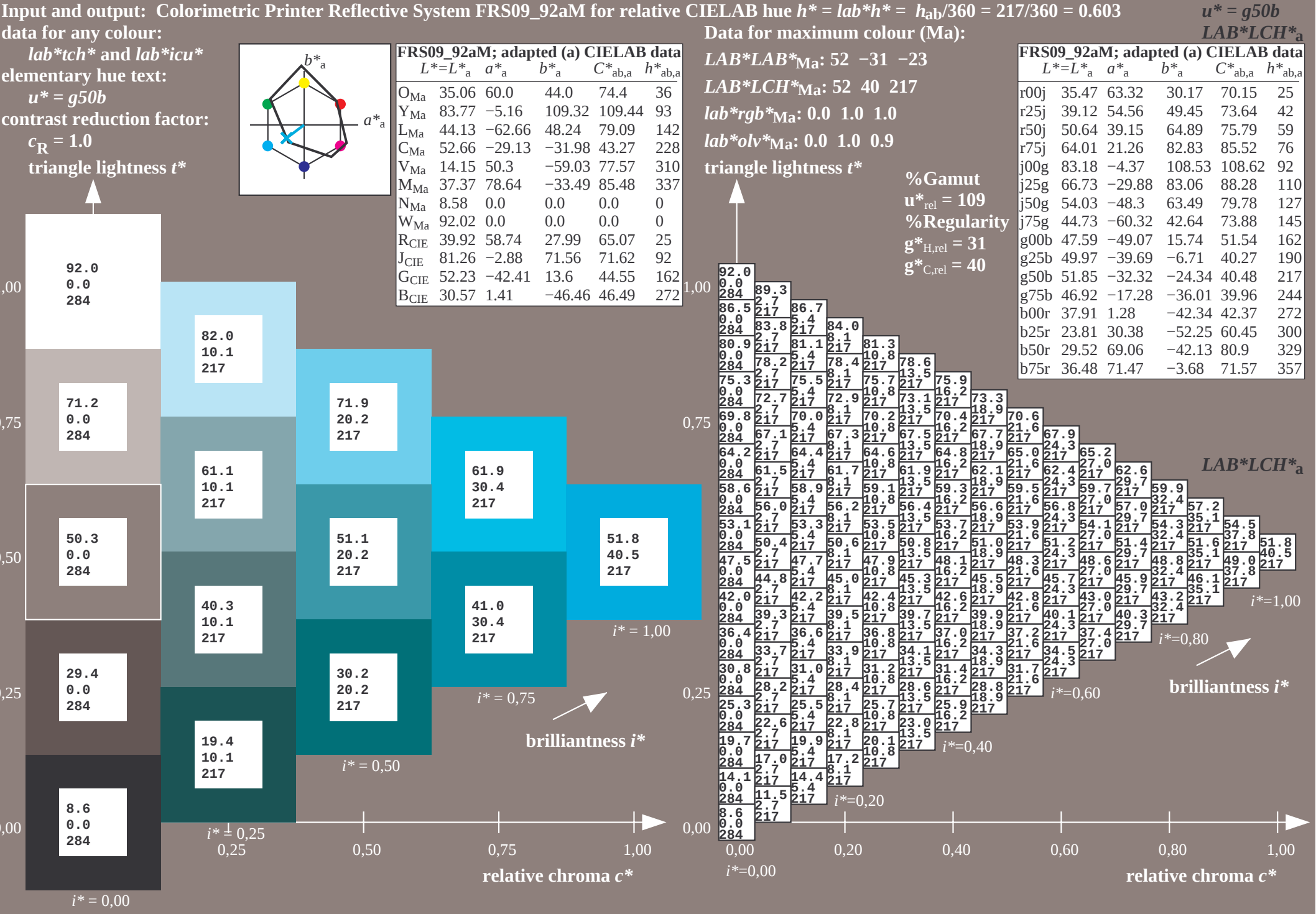
|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 162 |
|----|-------|-----|

|    |       |     |
|----|-------|-----|
| 71 | 40.27 | 190 |
|----|-------|-----|









$$u^* = g75b$$

*LAB\*LCH\**<sub>a</sub>

(a) CIELAB data

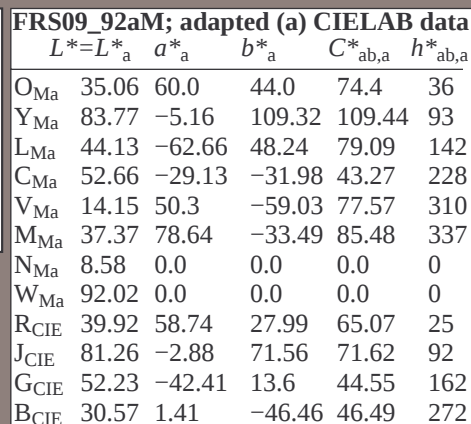
---

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 20 | 75.70 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |



*LAB\*LCH\**<sub>a</sub>

(a) CIELAB data

|    | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|----|--------------|--------------|
| 17 | 70           | 15           |
| 25 |              |              |

|    |       |    |
|----|-------|----|
| 17 | 70.13 | 23 |
| 45 | 73.64 | 42 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |

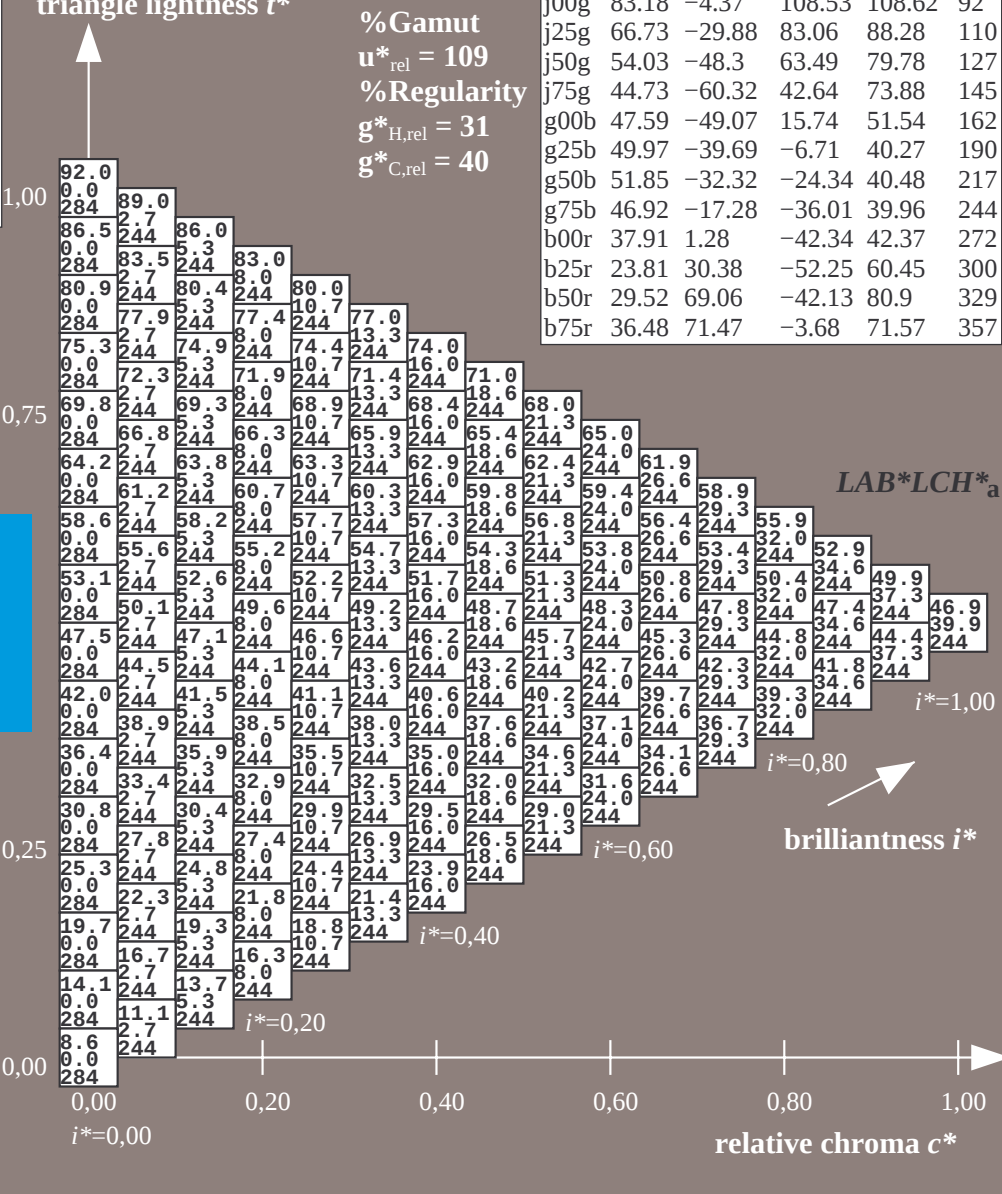
|      |        |     |
|------|--------|-----|
| 5.53 | 108.62 | 92  |
| 06   | 88.28  | 110 |

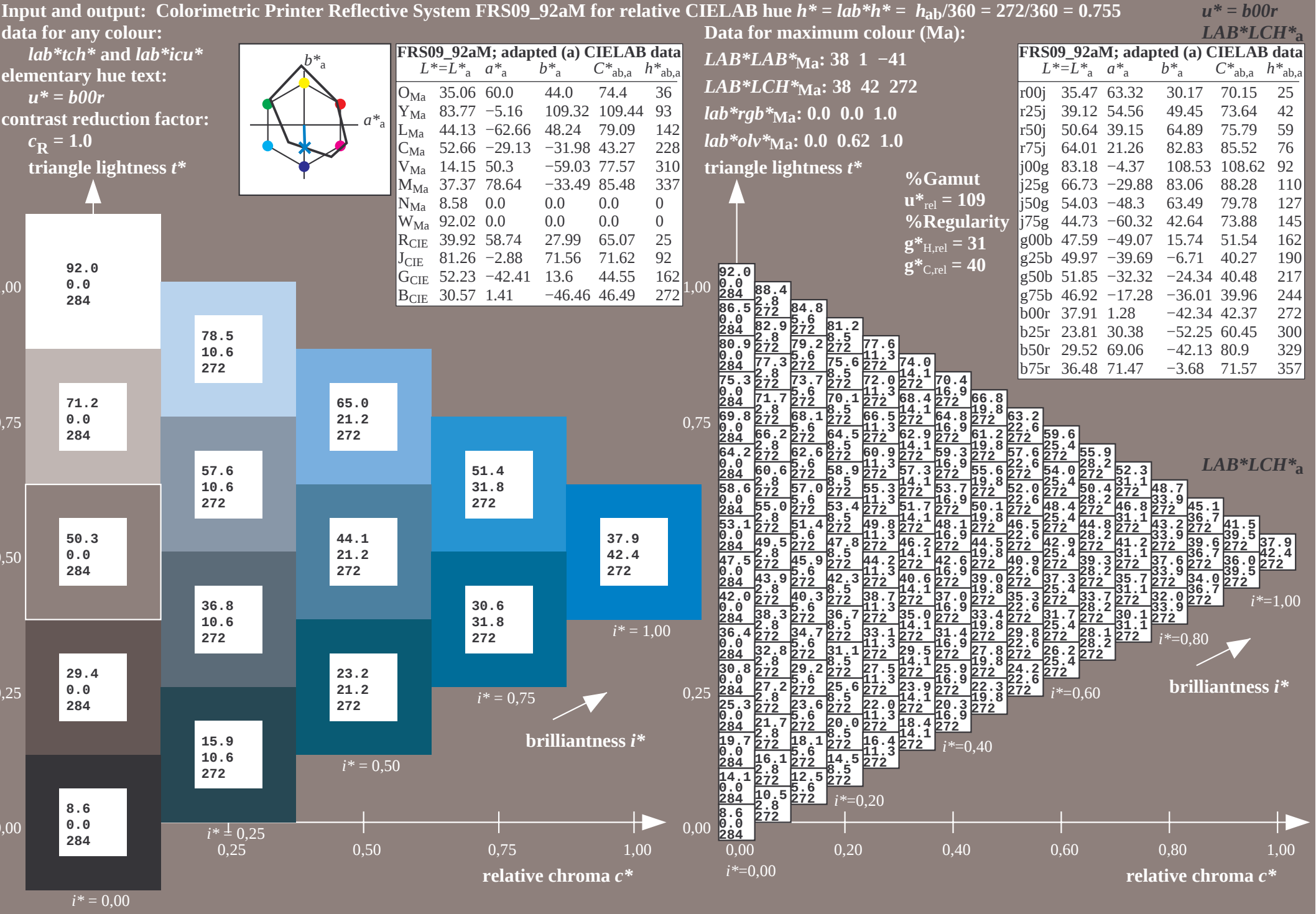
|    |       |     |
|----|-------|-----|
| 00 | 88.28 | 110 |
| 49 | 79.78 | 127 |

|    |       |     |
|----|-------|-----|
| 64 | 73.88 | 145 |
|----|-------|-----|

|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 162 |
|----|-------|-----|

|     |       |     |
|-----|-------|-----|
| 71  | 40.27 | 190 |
| 134 | 40.48 | 217 |





$$u^* = b25r$$

*LAB\*LCH\*\_a*

*lab\*tch\** and *lab\*icu\**

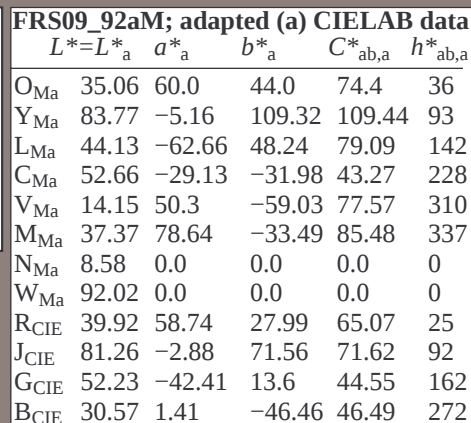
**Complementary hue text:**

$$u^* = b25r$$

**Contrast reduction factor:**

 $C_D = 1.0$ 

triangle lightness  $t^*$



**Data for maximum colour (Ma):**

**LAB\*LAB\*Ma: 24 30 -51**

**LAB\*LCH\*Ma: 24 60 300**

***lab\*rgb*<sub>Ma</sub>: 0.5 0.0 1.0**

*lab\*olv\**Ma: 0.0 0.25 1.0

triangle lightness  $t^*$

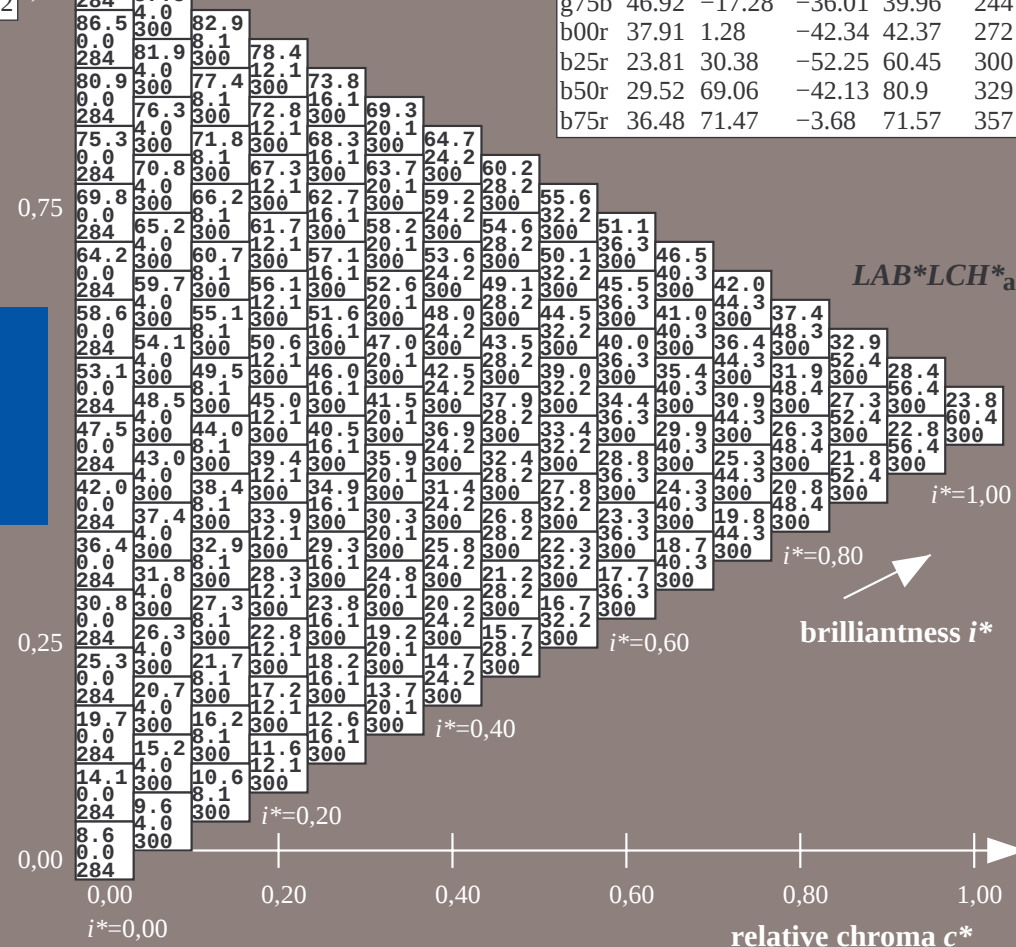
## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

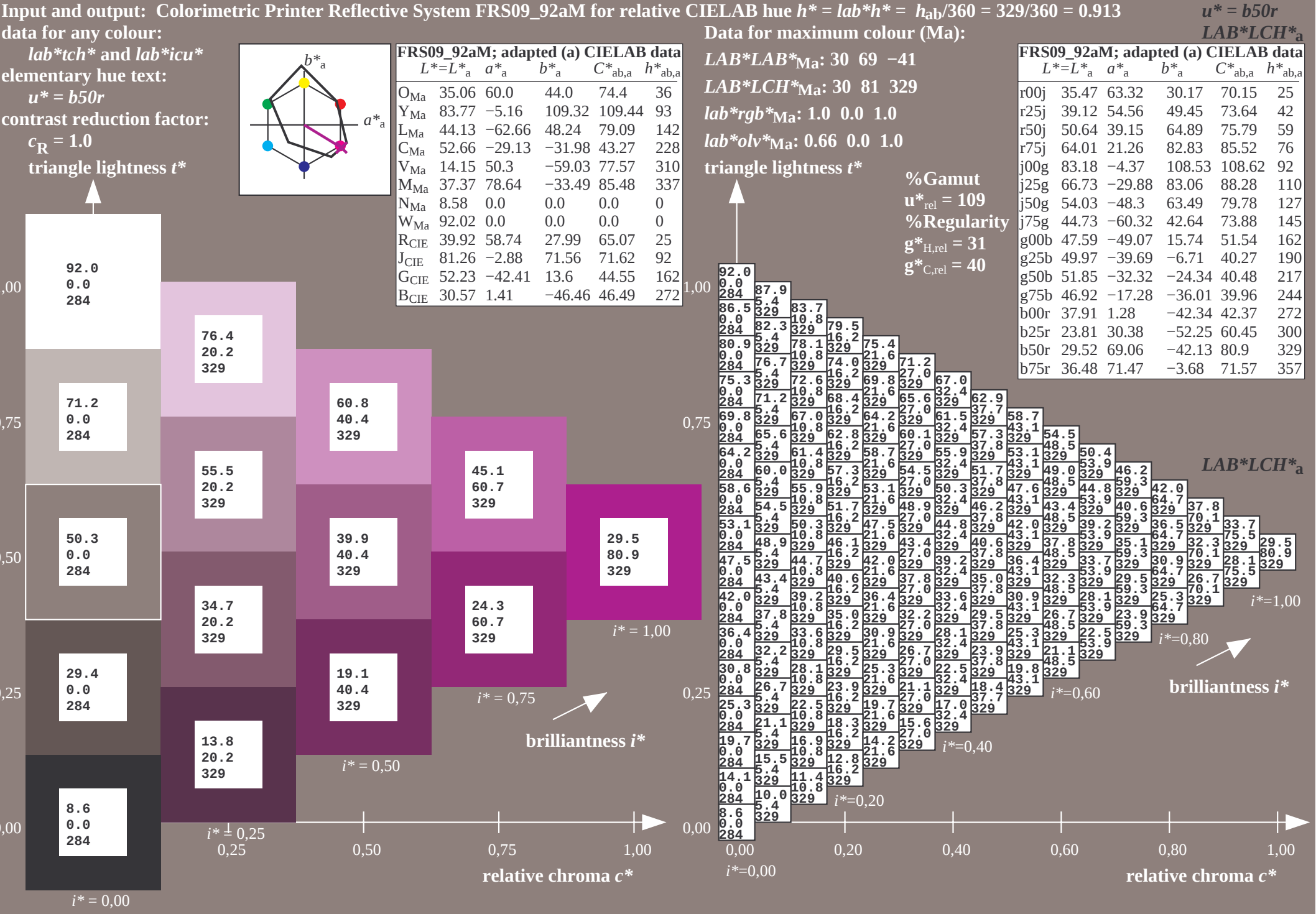
$$g^*_{H,rel} = 31$$
$$g^*_{C_{rel}} = 40$$

21,000



*LAB\*LCH\*\_a*

$$i^* = 1,00$$
brilliantness *i*\*relative chroma  $c^*$ relative chroma  $c^*$



$$u^* = b75r$$

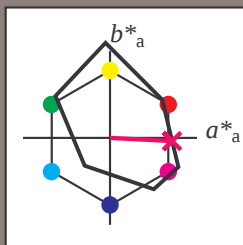
*LAB\*LCH\*a*

*lab\*tch\** and *lab\*icu\**

**Complementary hue text:**

$$u^* = b75r$$

**contrast reduction factor:**

$$c_D = 1.0$$
triangle lightness  $t^*$ 

FRS09\_92aM; adapted (a) CIELAB data

|                  | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------------------|------------------------|------------------|------------------|---------------------|---------------------|
| O <sub>Ma</sub>  | 35.06                  | 60.0             | 44.0             | 74.4                | 36                  |
| Y <sub>Ma</sub>  | 83.77                  | -5.16            | 109.32           | 109.44              | 93                  |
| L <sub>Ma</sub>  | 44.13                  | -62.66           | 48.24            | 79.09               | 142                 |
| C <sub>Ma</sub>  | 52.66                  | -29.13           | -31.98           | 43.27               | 228                 |
| V <sub>Ma</sub>  | 14.15                  | 50.3             | -59.03           | 77.57               | 310                 |
| M <sub>Ma</sub>  | 37.37                  | 78.64            | -33.49           | 85.48               | 337                 |
| N <sub>Ma</sub>  | 8.58                   | 0.0              | 0.0              | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 92.02                  | 0.0              | 0.0              | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92                  | 58.74            | 27.99            | 65.07               | 25                  |
| J <sub>CIE</sub> | 81.26                  | -2.88            | 71.56            | 71.62               | 92                  |
| G <sub>CIE</sub> | 52.23                  | -42.41           | 13.6             | 44.55               | 162                 |
| B <sub>CIE</sub> | 30.57                  | 1.41             | -46.46           | 46.49               | 272                 |

**Data for maximum colour (Ma):**

$LAB*LAB*_{Ma}: 36 \ 71 \ -3$

**LAB\*LCH\*Ma: 36 72 357**

*lab\*rgb\*\_Ma: 1.0 0.0 0.5*

**lab\*olv\*Ma: 1.0 0.0 0.62**

triangle lightness  $t^*$

## %Gamut

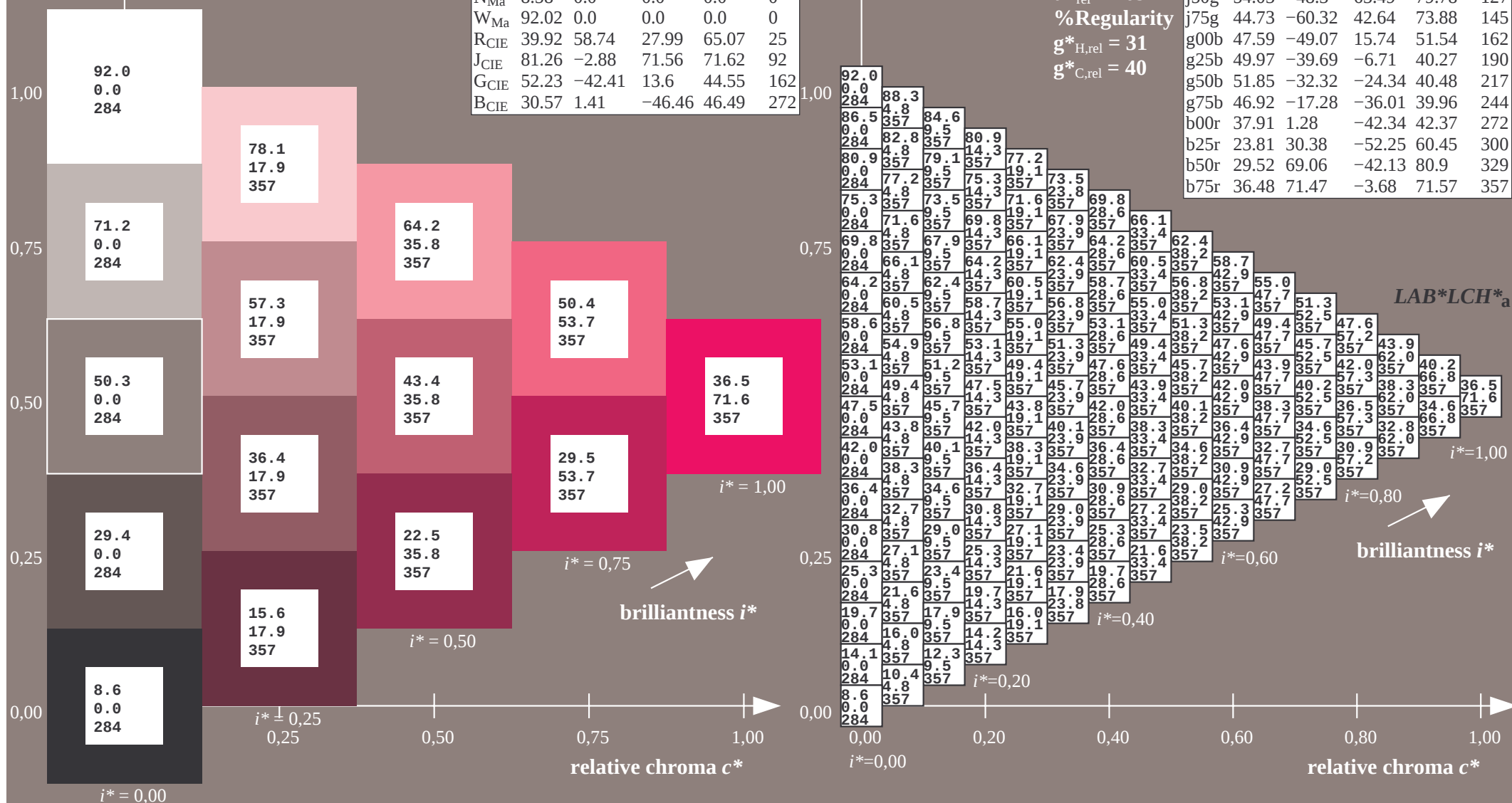
$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

FRS09\_92aM; adapted (a) CIELAB data

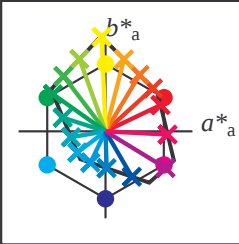
|      | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|---------------|---------|---------|--------------|--------------|
| r00j | 35.47         | 63.32   | 30.17   | 70.15        | 25           |
| r25j | 39.12         | 54.56   | 49.45   | 73.64        | 42           |
| r50j | 50.64         | 39.15   | 64.89   | 75.79        | 59           |
| r75j | 64.01         | 21.26   | 82.83   | 85.52        | 76           |
| j00g | 83.18         | -4.37   | 108.53  | 108.62       | 92           |
| j25g | 66.73         | -29.88  | 83.06   | 88.28        | 110          |
| j50g | 54.03         | -48.3   | 63.49   | 79.78        | 127          |
| j75g | 44.73         | -60.32  | 42.64   | 73.88        | 145          |
| g00b | 47.59         | -49.07  | 15.74   | 51.54        | 162          |
| g25b | 49.97         | -39.69  | -6.71   | 40.27        | 190          |
| g50b | 51.85         | -32.32  | -24.34  | 40.48        | 217          |
| g75b | 46.92         | -17.28  | -36.01  | 39.96        | 244          |
| b00r | 37.91         | 1.28    | -42.34  | 42.37        | 272          |
| b25r | 23.81         | 30.38   | -52.25  | 60.45        | 300          |
| b50r | 29.52         | 69.06   | -42.13  | 80.9         | 329          |
| b75r | 36.48         | 71.47   | -3.68   | 71.57        | 357          |



|    | A    | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    | N    | O    | P    | Q    | R    | S    | T    | U    | V    | W    | X    | Y    | Z    | a    | b    | c    | d    | e     | f     | g     | h     | i     | j     | k     | LAB*LCH*a |       |       |       |     |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-----|
| 01 | 8.6  | 13.0 | 17.5 | 21.9 | 26.4 | 30.8 | 35.2 | 39.7 | 44.1 | 11.9 | 18.0 | 22.4 | 26.9 | 31.3 | 35.8 | 40.2 | 44.6 | 49.1 | 15.2 | 21.3 | 27.4 | 31.8 | 36.3 | 40.7 | 45.2 | 49.6 | 54.0 | 58.4 | 62.8 | 67.2 | 71.6  | 76.0  | 80.4  | 84.8  | 89.2  | 93.6  | 98.0  | 8.6       | 8.6   | 8.6   | 8.6   |     |
|    | 0.0  | 9.9  | 19.8 | 29.6 | 39.5 | 49.4 | 59.3 | 69.2 | 79.1 | 9.3  | 13.7 | 21.4 | 30.5 | 39.9 | 49.5 | 59.2 | 68.9 | 78.7 | 18.6 | 20.3 | 27.3 | 34.6 | 42.9 | 51.7 | 60.9 | 70.3 | 79.8 | 89.0 | 9.3  | 18.6 | 27.9  | 37.2  | 46.5  | 55.8  | 65.1  | 74.4  | 83.7  | 93.0      | 0.0   | 0.0   | 0.0   | 0.0 |
|    | 284  | 142  | 142  | 142  | 142  | 142  | 142  | 142  | 142  | 36   | 93   | 113  | 122  | 127  | 130  | 132  | 134  | 135  | 36   | 70   | 93   | 105  | 113  | 119  | 122  | 125  | 127  | 284  | 36   | 36   | 36    | 36    | 36    | 36    | 36    | 284   | 284   | 284       | 284   |       |       |     |
| 02 | 9.3  | 14.1 | 18.5 | 23.0 | 27.4 | 31.9 | 36.3 | 40.8 | 45.2 | 12.2 | 19.0 | 23.5 | 27.9 | 32.3 | 36.8 | 41.2 | 45.7 | 50.1 | 15.5 | 22.6 | 28.4 | 32.9 | 37.3 | 41.7 | 46.2 | 50.6 | 55.1 | 59.5 | 63.9 | 68.3 | 72.7  | 77.1  | 81.5  | 85.9  | 90.3  | 94.7  | 99.1  | 103.5     | 107.9 | 112.3 | 116.7 |     |
|    | 9.7  | 5.4  | 11.7 | 20.9 | 30.6 | 40.4 | 50.2 | 60.0 | 69.8 | 10.7 | 0.0  | 9.9  | 19.8 | 29.7 | 39.5 | 49.4 | 59.3 | 69.2 | 17.4 | 9.3  | 13.7 | 21.4 | 30.5 | 39.9 | 49.5 | 59.2 | 68.9 | 78.7 | 88.5 | 98.3 | 108.1 | 117.9 | 127.7 | 137.5 | 147.3 | 157.1 | 166.9 | 176.7     | 186.5 | 196.3 |       |     |
|    | 310  | 228  | 170  | 157  | 153  | 150  | 149  | 148  | 147  | 337  | 284  | 142  | 142  | 142  | 142  | 142  | 142  | 142  | 4    | 36   | 93   | 113  | 122  | 127  | 130  | 132  | 134  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 03 | 10.0 | 14.8 | 19.6 | 24.0 | 28.5 | 32.9 | 37.4 | 41.8 | 46.3 | 12.9 | 19.7 | 24.5 | 29.0 | 33.4 | 37.9 | 42.3 | 46.7 | 51.2 | 15.8 | 22.6 | 29.4 | 33.9 | 38.3 | 42.8 | 47.2 | 51.7 | 56.1 | 60.5 | 64.9 | 69.3 | 73.7  | 78.1  | 82.5  | 86.9  | 91.3  | 95.7  | 100.1 | 104.5     | 108.9 | 113.3 | 117.7 |     |
|    | 19.4 | 11.7 | 10.8 | 15.2 | 23.3 | 32.4 | 41.8 | 51.5 | 61.2 | 19.8 | 9.7  | 5.4  | 11.7 | 20.9 | 30.6 | 40.4 | 50.2 | 60.0 | 21.4 | 10.7 | 0.9  | 9.9  | 19.8 | 29.7 | 39.5 | 49.4 | 59.3 | 69.2 | 79.1 | 89.0 | 98.9  | 108.8 | 118.7 | 128.6 | 138.5 | 148.4 | 158.3 | 168.2     | 178.1 | 188.0 |       |     |
|    | 310  | 283  | 228  | 187  | 170  | 162  | 157  | 154  | 153  | 324  | 310  | 228  | 170  | 157  | 153  | 150  | 149  | 148  | 337  | 337  | 284  | 142  | 142  | 142  | 142  | 142  | 142  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 04 | 10.7 | 15.5 | 20.3 | 25.1 | 29.6 | 34.0 | 38.4 | 42.9 | 47.3 | 13.6 | 20.4 | 25.2 | 30.0 | 34.5 | 38.9 | 43.4 | 47.8 | 52.2 | 16.5 | 23.3 | 30.1 | 34.9 | 39.4 | 43.8 | 48.3 | 52.7 | 57.2 | 61.6 | 66.0 | 70.4 | 74.8  | 79.2  | 83.6  | 88.0  | 92.4  | 96.8  | 101.2 | 105.6     | 110.0 | 114.4 |       |     |
|    | 29.1 | 20.8 | 15.4 | 16.2 | 19.7 | 26.6 | 35.0 | 44.0 | 53.3 | 29.3 | 19.4 | 11.7 | 10.8 | 15.2 | 23.3 | 32.4 | 41.9 | 51.5 | 60.9 | 39.3 | 19.8 | 9.7  | 5.4  | 11.7 | 20.9 | 30.6 | 40.4 | 50.2 | 60.0 | 69.8 | 79.6  | 89.4  | 99.2  | 109.0 | 118.8 | 128.6 | 138.4 | 148.2     | 158.0 | 167.8 |       |     |
|    | 310  | 295  | 266  | 228  | 198  | 180  | 170  | 164  | 160  | 320  | 310  | 283  | 228  | 187  | 170  | 162  | 157  | 155  | 329  | 324  | 310  | 228  | 170  | 157  | 153  | 150  | 149  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 05 | 11.4 | 16.2 | 21.0 | 25.8 | 30.6 | 35.1 | 39.5 | 44.0 | 48.4 | 14.3 | 21.1 | 25.9 | 30.7 | 35.5 | 40.0 | 44.4 | 48.9 | 53.3 | 17.2 | 24.0 | 30.8 | 35.6 | 40.5 | 44.9 | 49.3 | 53.8 | 58.2 | 62.6 | 67.0 | 71.4 | 75.8  | 80.2  | 84.6  | 89.0  | 93.4  | 97.8  | 102.2 | 106.6     | 111.0 | 115.4 |       |     |
|    | 38.8 | 30.2 | 23.4 | 19.9 | 21.6 | 24.5 | 30.5 | 38.1 | 46.6 | 38.9 | 29.1 | 20.8 | 15.4 | 16.2 | 19.7 | 26.6 | 35.0 | 44.0 | 4    | 29.3 | 19.4 | 11.7 | 10.8 | 15.2 | 23.3 | 32.4 | 41.8 | 51.2 | 60.6 | 70.0 | 79.4  | 88.8  | 98.2  | 107.6 | 117.0 | 126.4 | 135.8 | 145.2     | 154.6 | 164.0 |       |     |
|    | 310  | 300  | 283  | 257  | 228  | 204  | 187  | 177  | 170  | 317  | 310  | 295  | 266  | 228  | 198  | 180  | 170  | 164  | 324  | 320  | 310  | 283  | 228  | 187  | 170  | 162  | 157  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 06 | 12.1 | 16.9 | 21.7 | 26.5 | 31.3 | 36.1 | 40.6 | 45.0 | 49.5 | 15.0 | 21.8 | 26.6 | 31.4 | 36.2 | 41.1 | 45.5 | 49.9 | 54.4 | 17.9 | 24.7 | 31.5 | 36.3 | 41.2 | 46.0 | 50.4 | 54.9 | 59.3 | 63.7 | 68.1 | 72.5 | 76.9  | 81.3  | 85.7  | 90.1  | 94.5  | 98.9  | 103.3 | 107.7     | 112.1 | 116.5 |       |     |
|    | 48.5 | 39.8 | 32.3 | 26.8 | 24.8 | 27.0 | 29.5 | 34.8 | 41.9 | 48.6 | 38.8 | 30.2 | 23.4 | 19.9 | 21.6 | 24.5 | 30.0 | 38.1 | 49.1 | 38.9 | 29.1 | 20.8 | 15.4 | 16.2 | 19.7 | 26.6 | 35.0 | 44.0 | 53.0 | 62.0 | 71.0  | 80.0  | 89.0  | 98.0  | 107.0 | 116.0 | 125.0 | 134.0     | 143.0 | 152.0 |       |     |
|    | 310  | 303  | 291  | 274  | 250  | 228  | 208  | 193  | 183  | 316  | 310  | 300  | 283  | 257  | 228  | 204  | 187  | 177  | 322  | 317  | 310  | 295  | 266  | 228  | 198  | 180  | 170  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 07 | 12.8 | 17.6 | 22.4 | 27.2 | 32.0 | 36.8 | 41.6 | 46.4 | 51.0 | 15.7 | 22.5 | 27.3 | 32.1 | 36.9 | 41.7 | 46.4 | 51.0 | 55.4 | 18.6 | 25.4 | 32.2 | 37.0 | 41.9 | 46.7 | 51.5 | 56.3 | 61.1 | 65.9 | 70.7 | 75.5 | 80.3  | 85.1  | 89.9  | 94.7  | 99.5  | 104.3 | 109.1 | 113.9     | 118.7 | 123.5 |       |     |
|    | 58.2 | 49.5 | 41.6 | 35.0 | 33.0 | 36.8 | 29.9 | 32.4 | 34.7 | 39.4 | 58.2 | 48.5 | 39.8 | 32.3 | 26.8 | 24.8 | 27.0 | 29.6 | 34.8 | 58.7 | 48.6 | 38.8 | 30.2 | 23.4 | 19.9 | 21.6 | 24.5 | 30.0 | 38.1 | 47.0 | 55.9  | 64.8  | 73.7  | 82.6  | 91.5  | 100.4 | 109.3 | 118.2     | 127.1 | 136.0 | 144.9 |     |
|    | 310  | 304  | 295  | 283  | 266  | 246  | 228  | 211  | 198  | 315  | 310  | 303  | 291  | 274  | 250  | 228  | 208  | 193  | 320  | 316  | 310  | 300  | 283  | 257  | 228  | 208  | 187  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 08 | 13.5 | 18.3 | 23.1 | 27.9 | 32.7 | 37.5 | 42.3 | 47.2 | 51.6 | 16.4 | 23.2 | 28.0 | 32.8 | 37.6 | 42.4 | 47.3 | 52.1 | 56.5 | 19.3 | 26.1 | 32.9 | 37.7 | 42.5 | 47.4 | 52.2 | 57.0 | 61.4 | 65.8 | 70.2 | 74.6 | 79.0  | 83.4  | 87.8  | 92.2  | 96.6  | 101.0 | 105.4 | 109.8     | 114.2 | 118.6 |       |     |
|    | 67.9 | 59.1 | 51.0 | 43.9 | 38.4 | 35.2 | 35.0 | 37.9 | 39.9 | 67.9 | 58.2 | 49.5 | 41.6 | 35.0 | 30.8 | 29.9 | 32.5 | 34.7 | 68.3 | 58.2 | 48.5 | 39.8 | 32.3 | 26.8 | 24.8 | 27.0 | 29.5 | 37.9 | 47.2 | 56.5 | 65.8  | 75.1  | 84.4  | 93.7  | 103.0 | 112.3 | 121.6 | 130.9     | 140.2 | 149.5 |       |     |
|    | 310  | 305  | 298  | 289  | 276  | 261  | 244  | 228  | 213  | 314  | 310  | 304  | 295  | 283  | 266  | 246  | 228  | 211  | 318  | 315  | 310  | 303  | 291  | 274  | 250  | 228  | 208  | 228  | 284  | 36   | 36    | 36    | 36    | 36    | 36    | 36    | 284   | 284       | 284   | 284   |       |     |
| 09 | 14.2 | 19.0 | 23.8 | 28.6 | 33.4 | 38.2 | 43.0 | 47.8 | 52.7 | 17.1 | 23.9 | 28.7 | 33.5 | 38.3 | 43.1 | 48.0 | 52.8 | 57.6 | 20.0 | 26.8 | 33.6 | 38.4 | 43.2 | 48.1 | 52.9 | 57.7 | 62.5 | 67.3 | 72.1 | 76.9 | 81.7  | 86.5  | 91.3  | 96.1  | 100.9 | 105.7 | 110.5 | 115.3     | 120.1 | 124.9 |       |     |
|    | 77.5 | 68.8 | 60.5 | 53.0 | 46.7 | 42.1 | 39.8 | 40.2 | 43.3 | 77.6 | 67.9 | 59.1 | 51.0 | 43.9 | 38.4 | 35.0 | 35.2 | 35.0 | 37.9 | 77.9 | 67.9 | 58.2 | 49.4 | 41.5 | 35.0 | 30.8 | 29.9 | 32.4 | 43.3 | 52.6 | 61.9  | 71.2  | 80.5  | 89.8  | 99.1  | 108.4 | 117.7 | 127.0     | 136.3 | 145.6 |       |     |
|    | 310  | 306  | 300  | 293  | 283  | 2717 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |           |       |       |       |     |

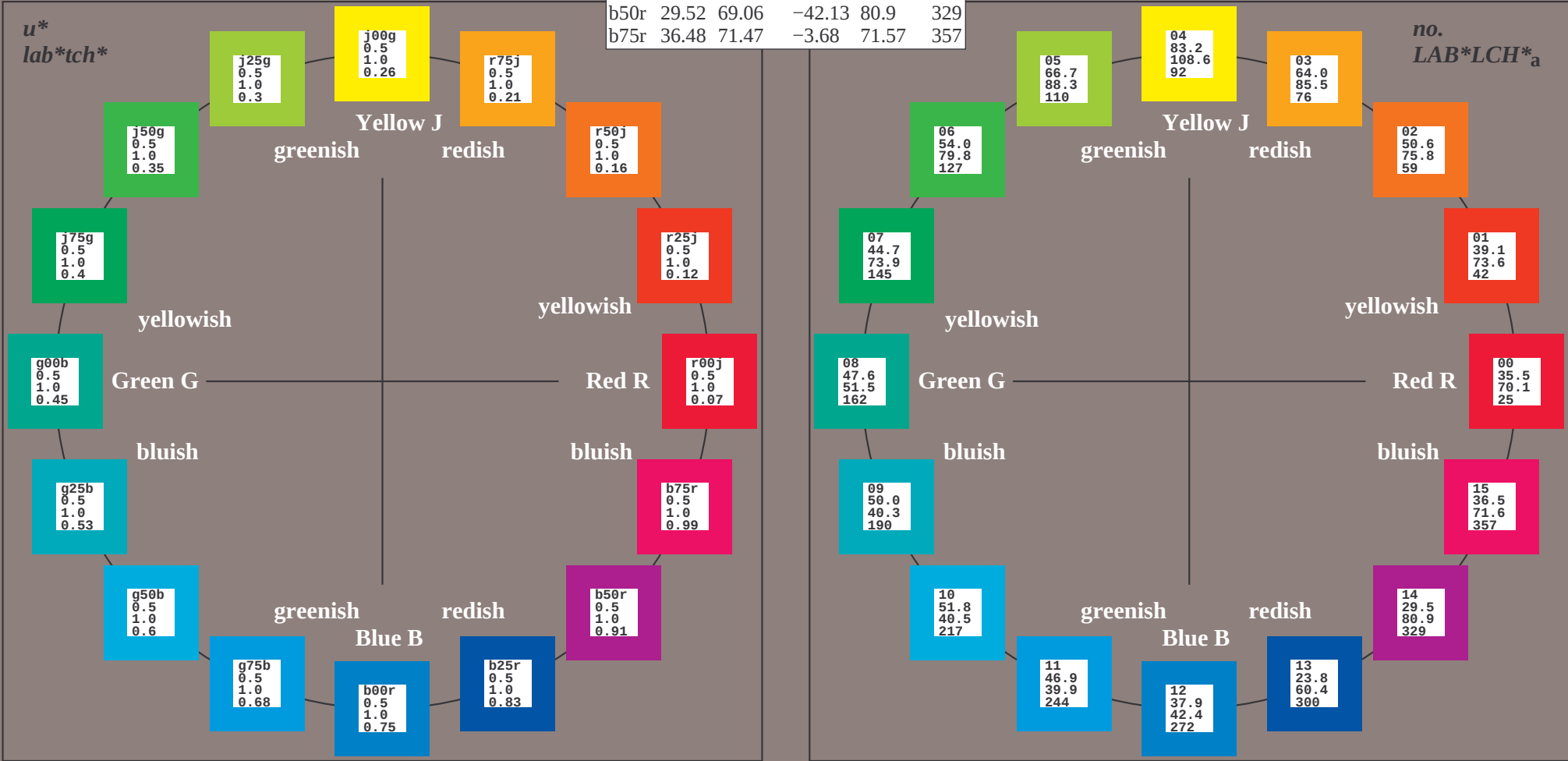
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\*tch\* and lab\*icu\*  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



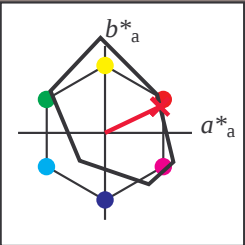
% Gamut  
u\*<sub>rel</sub> = 109  
% Regularity  
g\*<sub>H,rel</sub> = 31  
g\*<sub>C,rel</sub> = 40

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



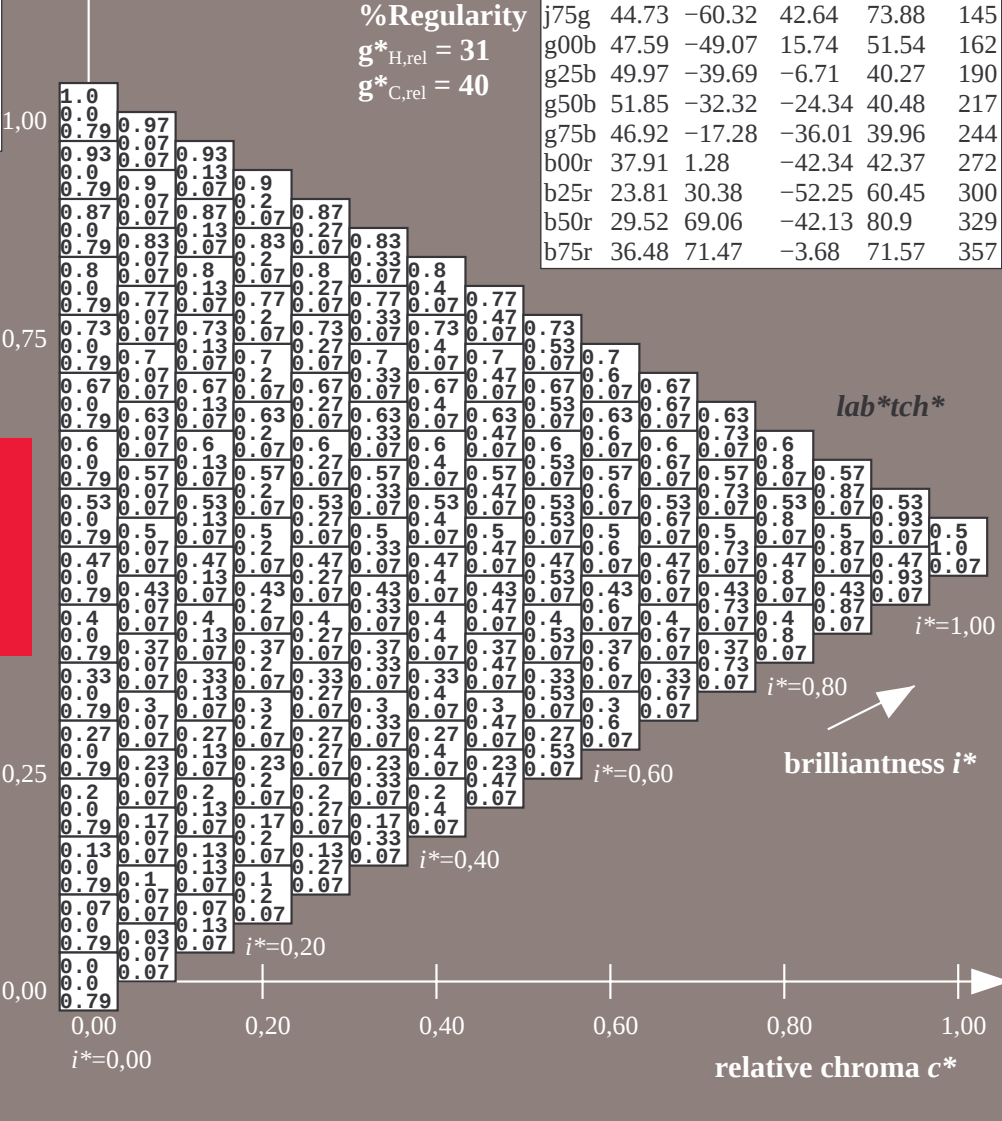
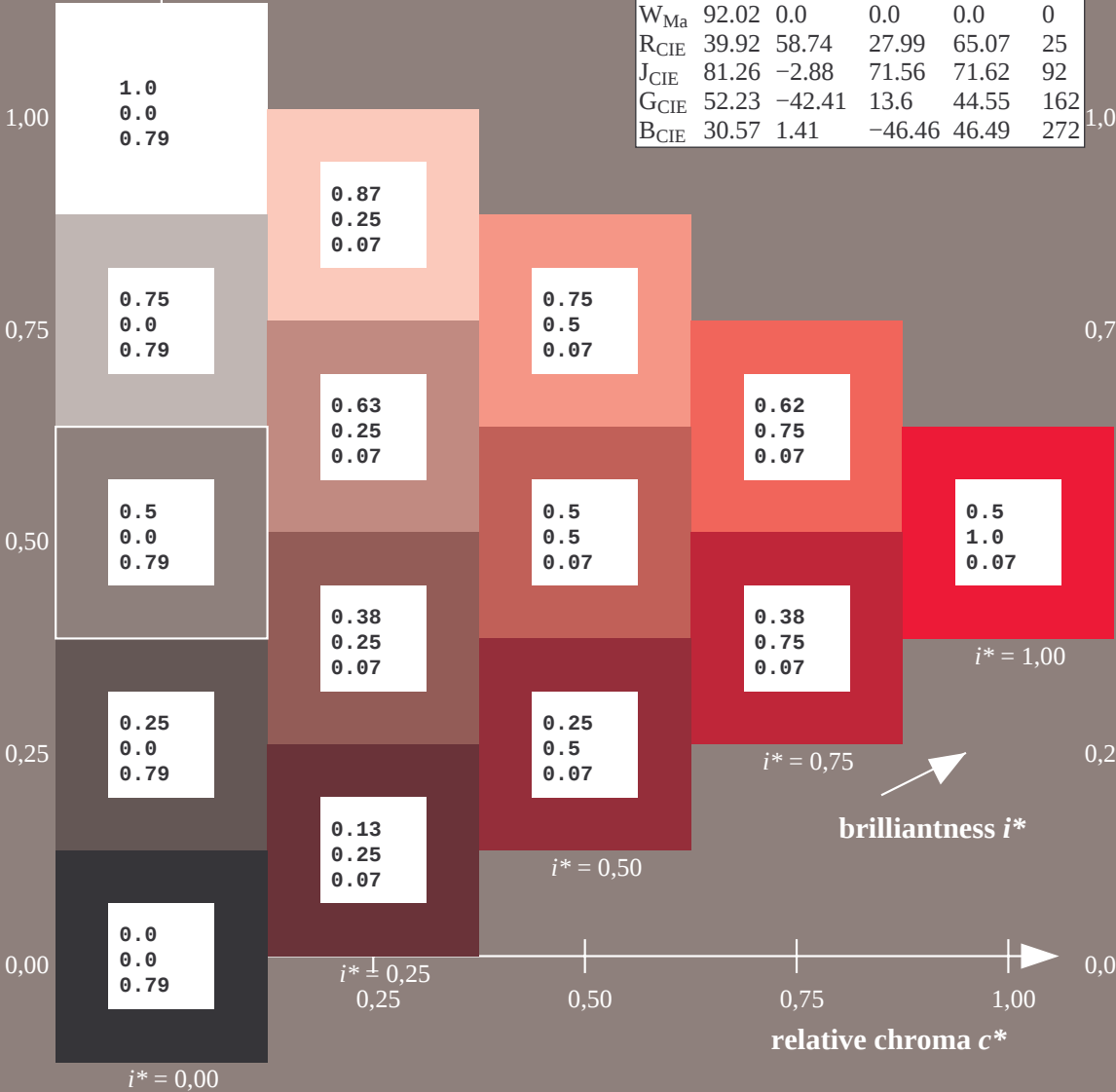
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18

triangle lightness  $t^*$

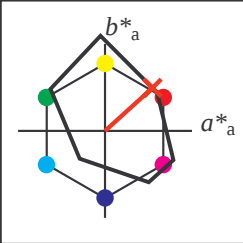
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

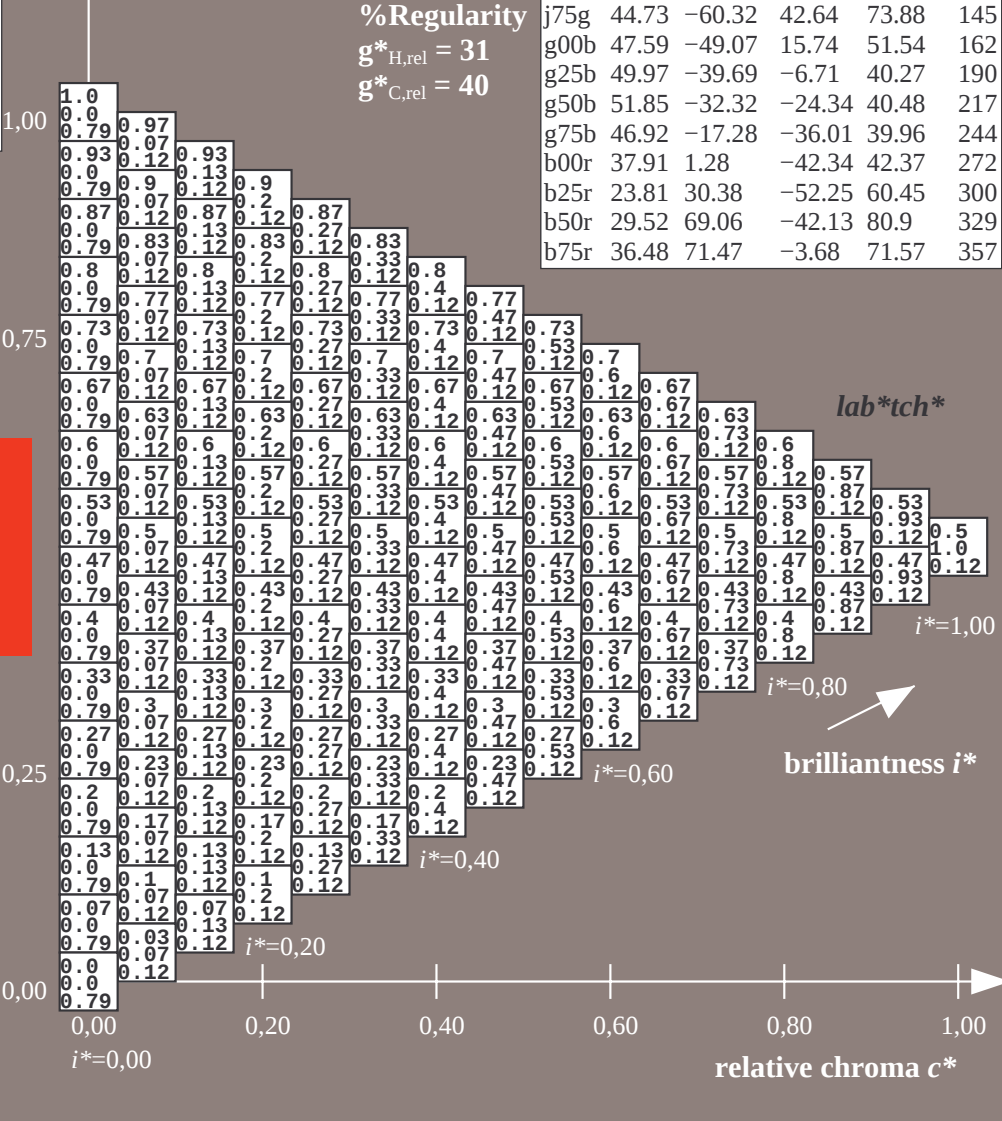
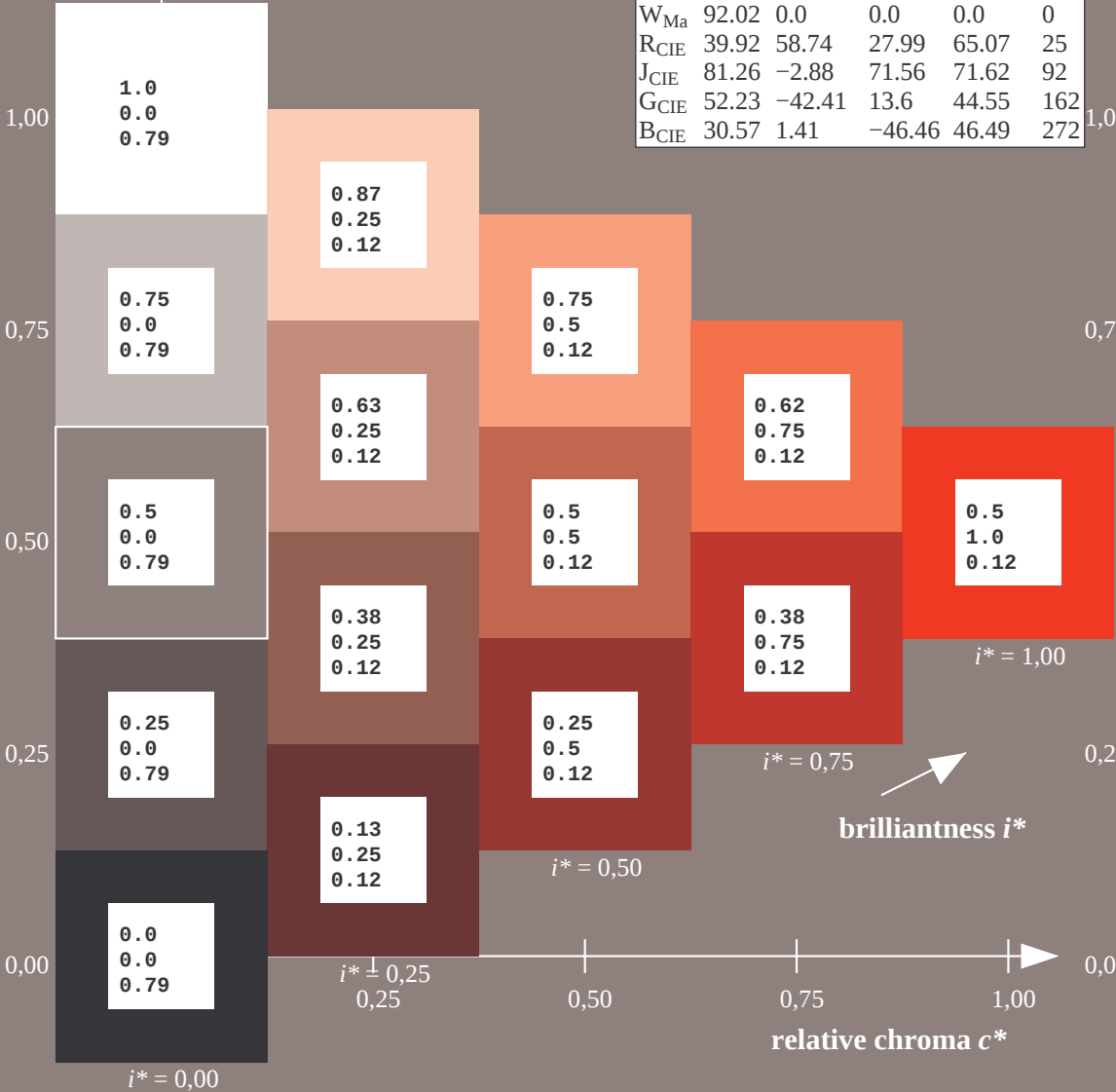
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 39 55 49  
 $LAB^*LCH^*_{Ma}$ : 39 74 42  
 $lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.08 0.0

triangle lightness  $t^*$

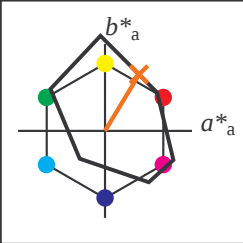
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

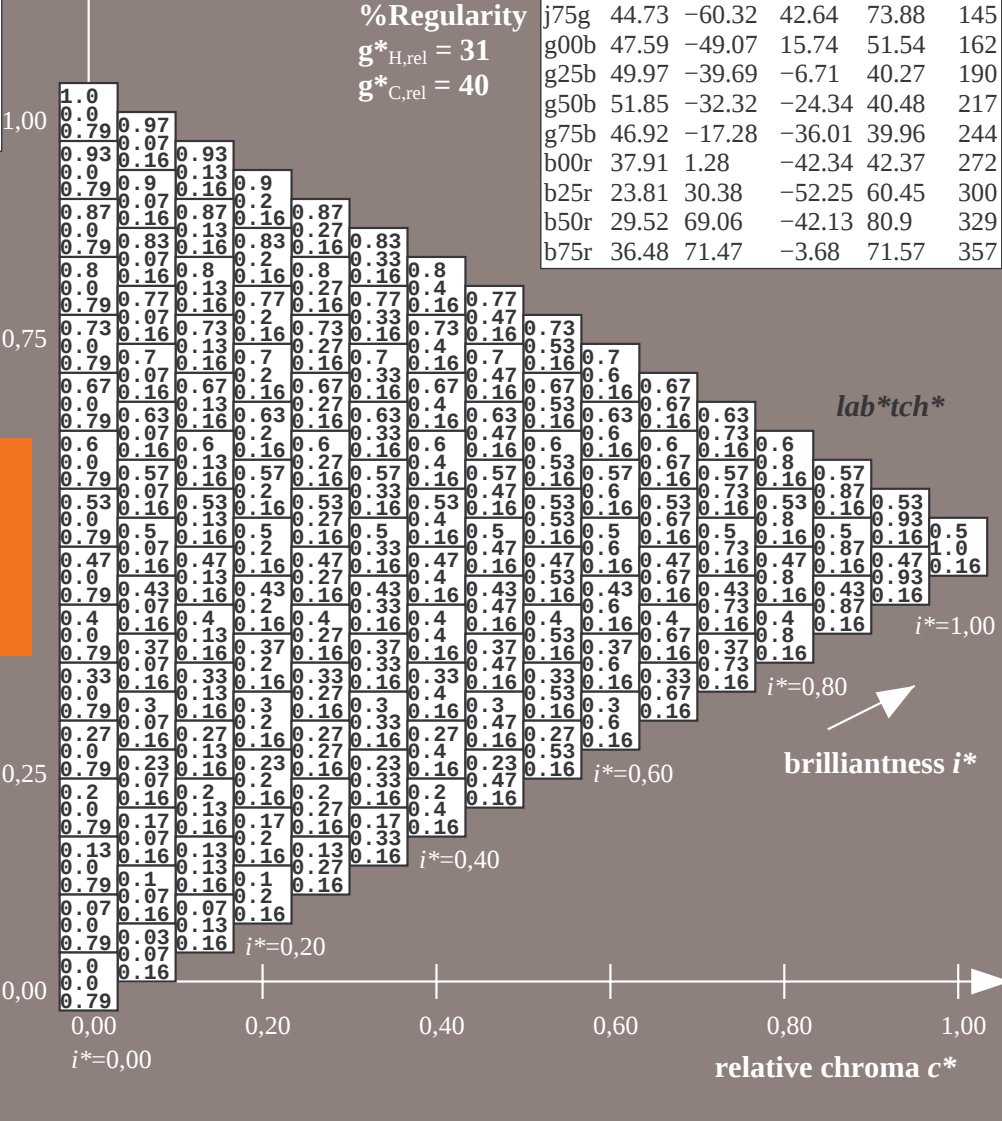
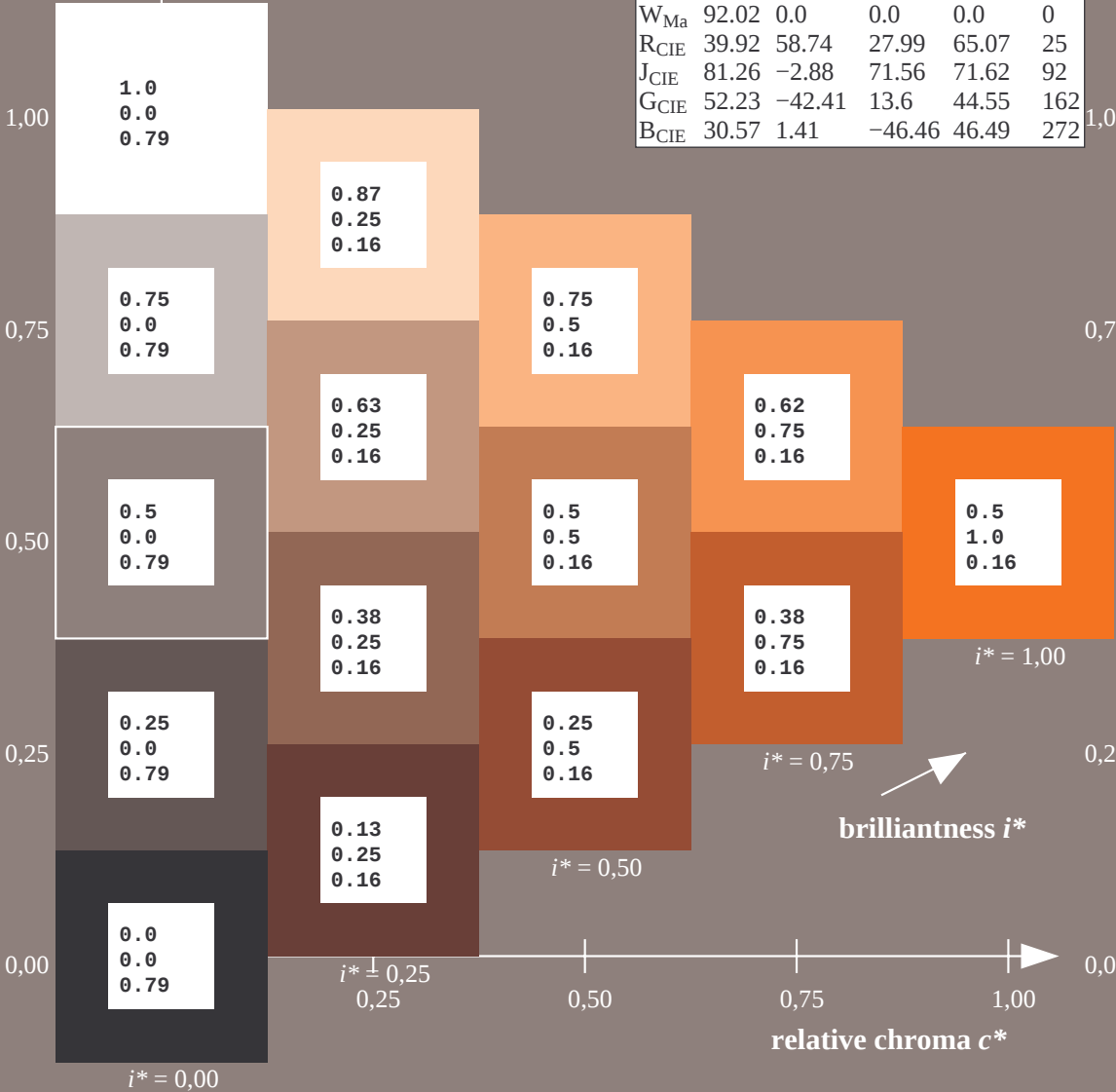
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 51 39 65  
 $LAB^*LCH^*_{Ma}$ : 51 76 59  
 $lab^*rgb^*_{Ma}$ : 1.0 0.5 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.32 0.0

triangle lightness  $t^*$

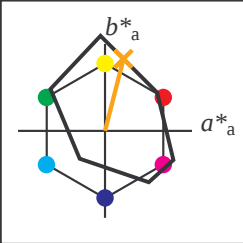
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

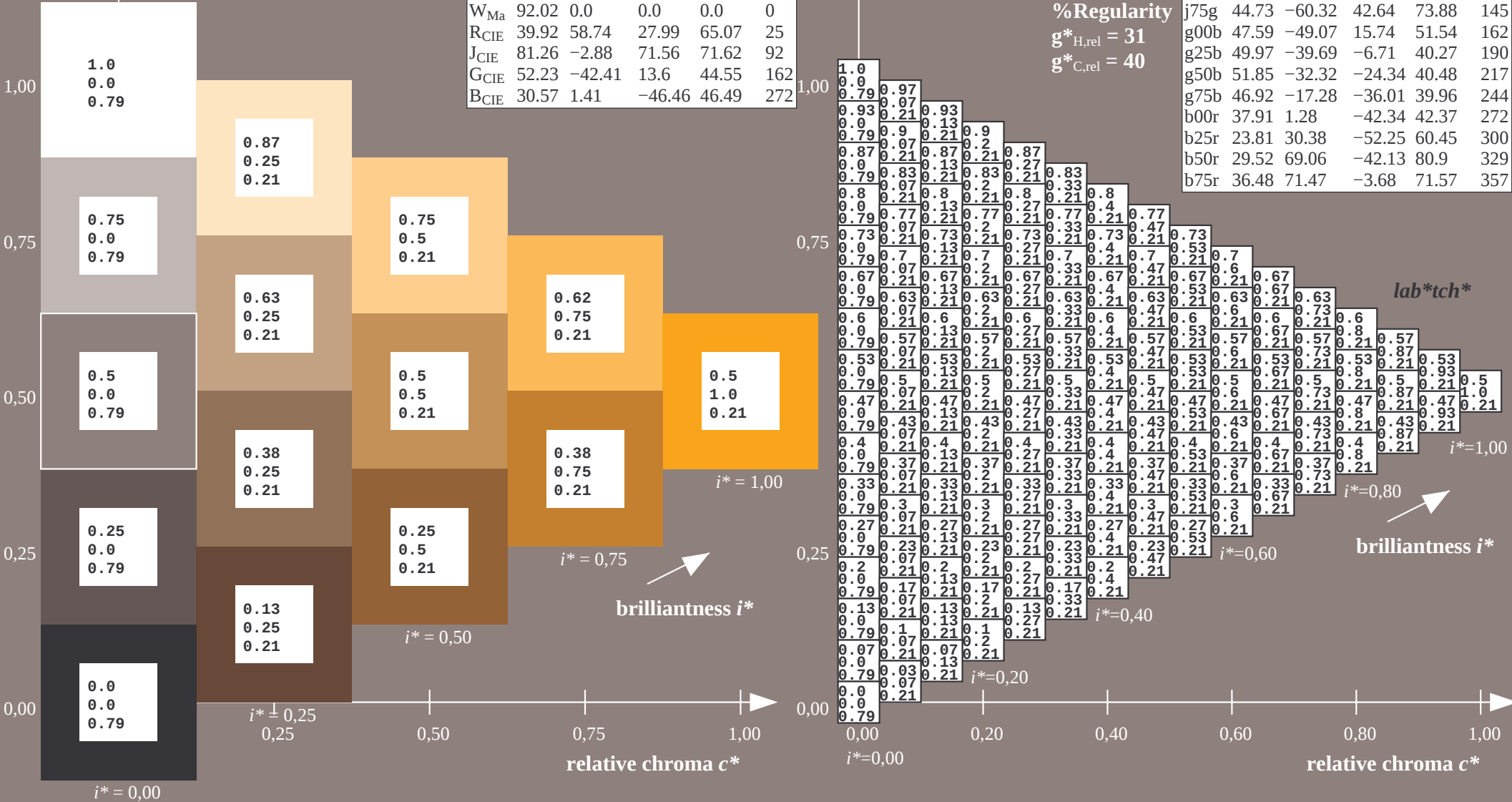
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 64 21 83  
 $LAB^*LCH^*_{Ma}$ : 64 86 76  
 $lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.59 0.0

triangle lightness  $t^*$

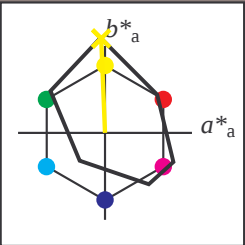
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

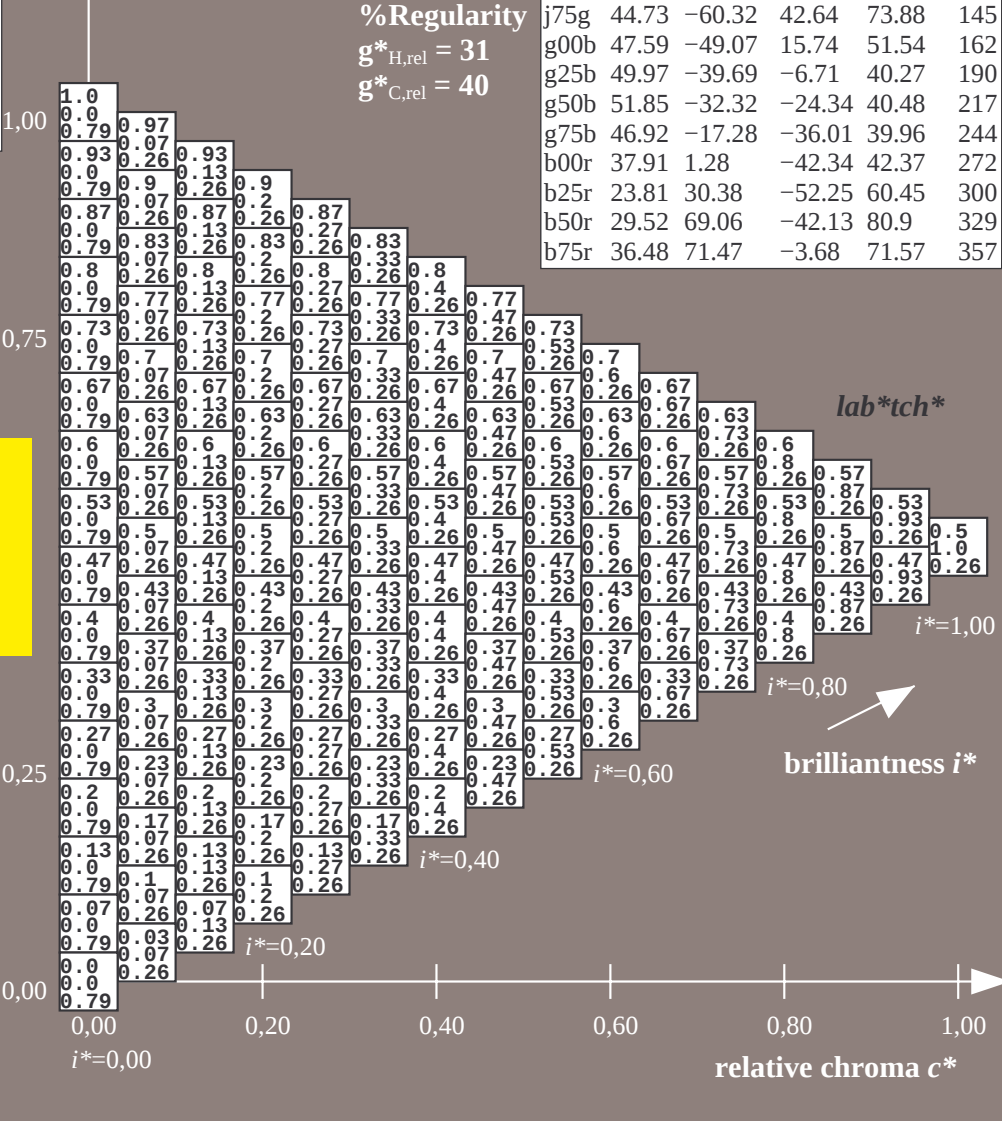
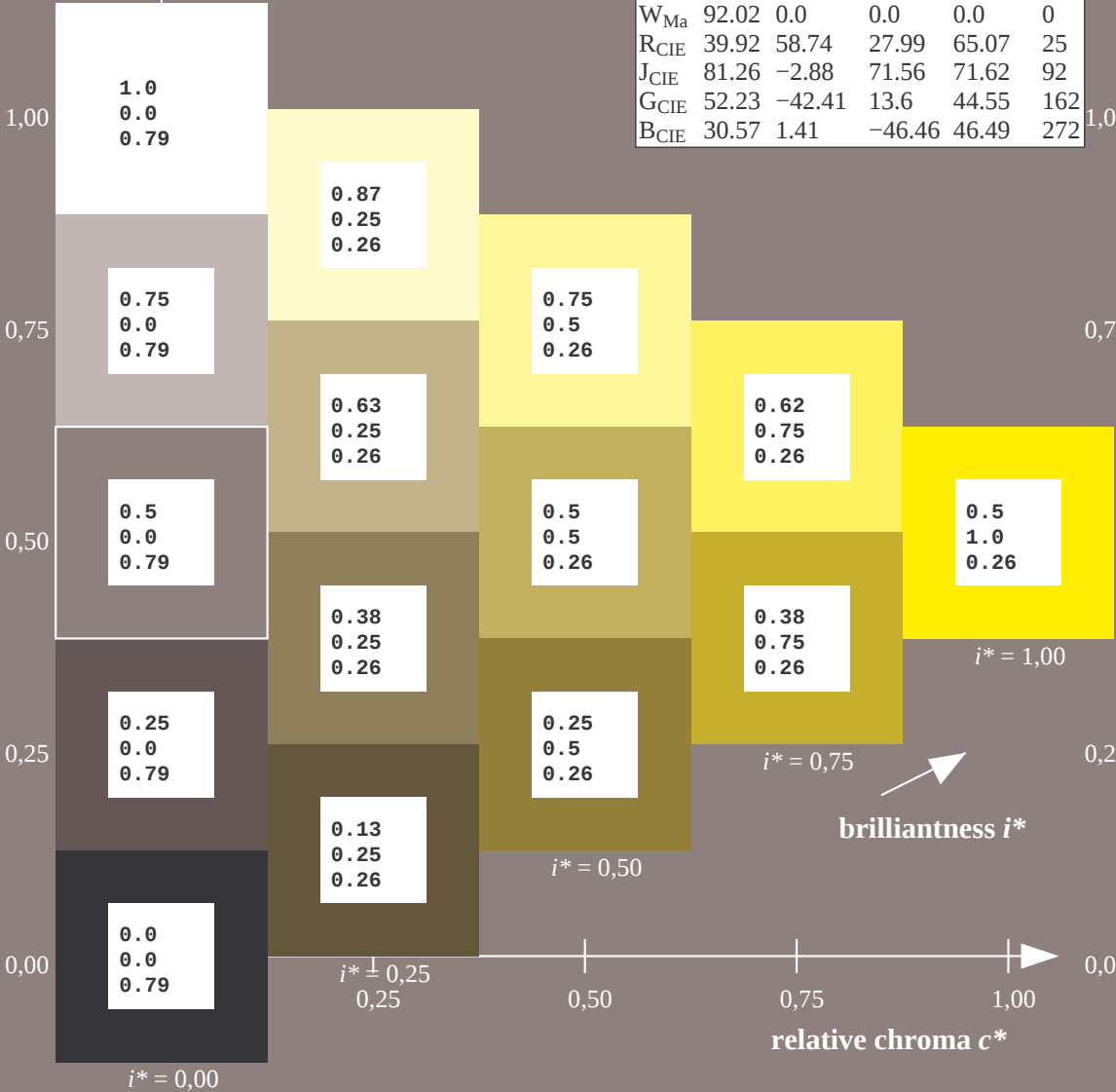
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 83 -3 109  
 $LAB^*LCH^*_{Ma}$ : 83 109 92  
 $lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.99 0.0

triangle lightness  $t^*$

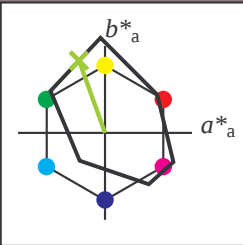
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 110/360 = 0.305$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j25g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



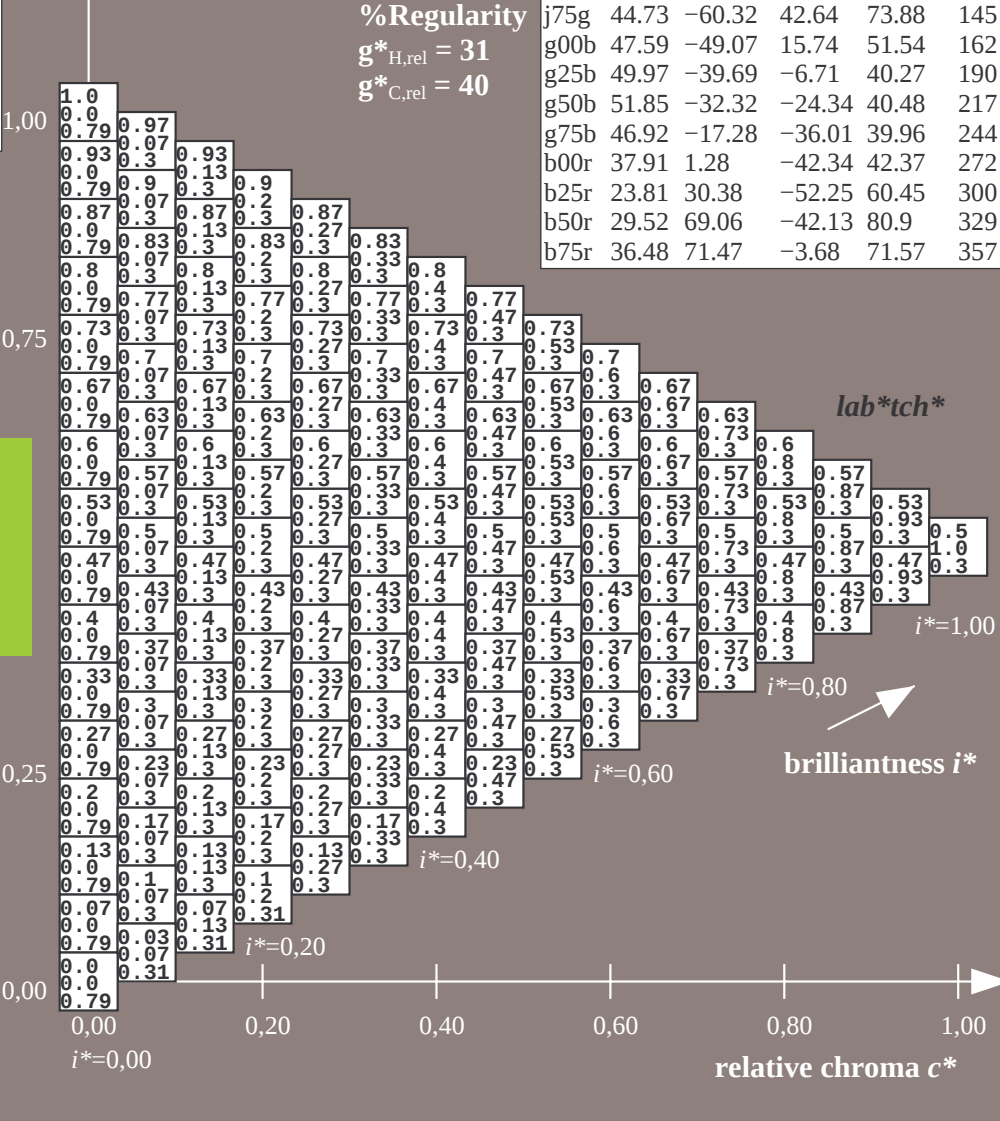
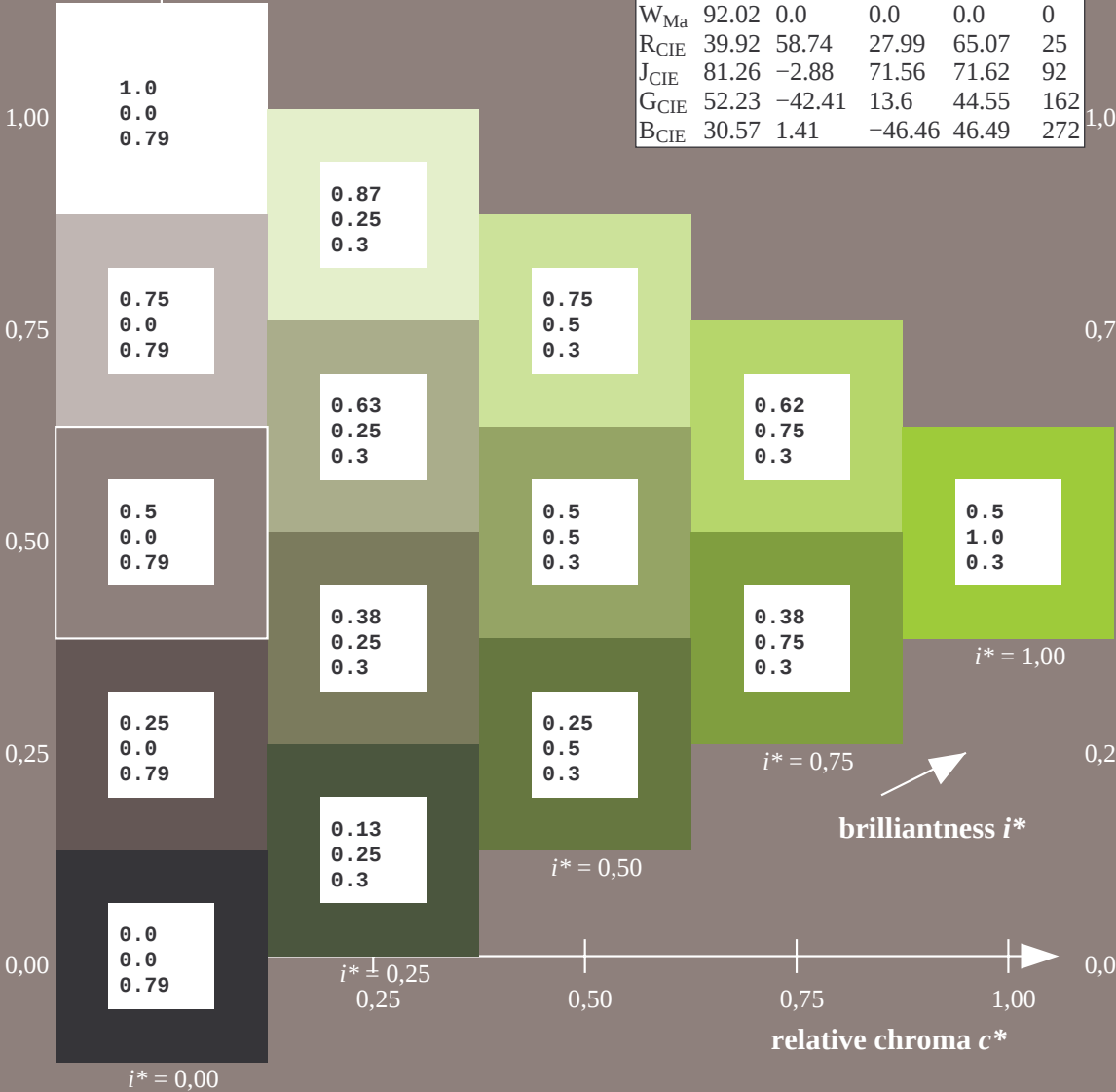
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 67 -29 83  
 $LAB^*LCH^*_{Ma}$ : 67 88 110  
 $lab^*rgb^*_{Ma}$ : 0.75 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.57 1.0 0.0

$u^* = j25g$   
 $lab^*tch^*$

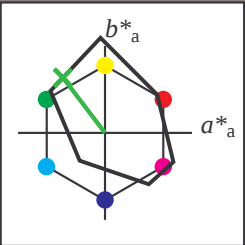
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

triangle lightness  $t^*$   
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 127/360 = 0.354$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j50g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

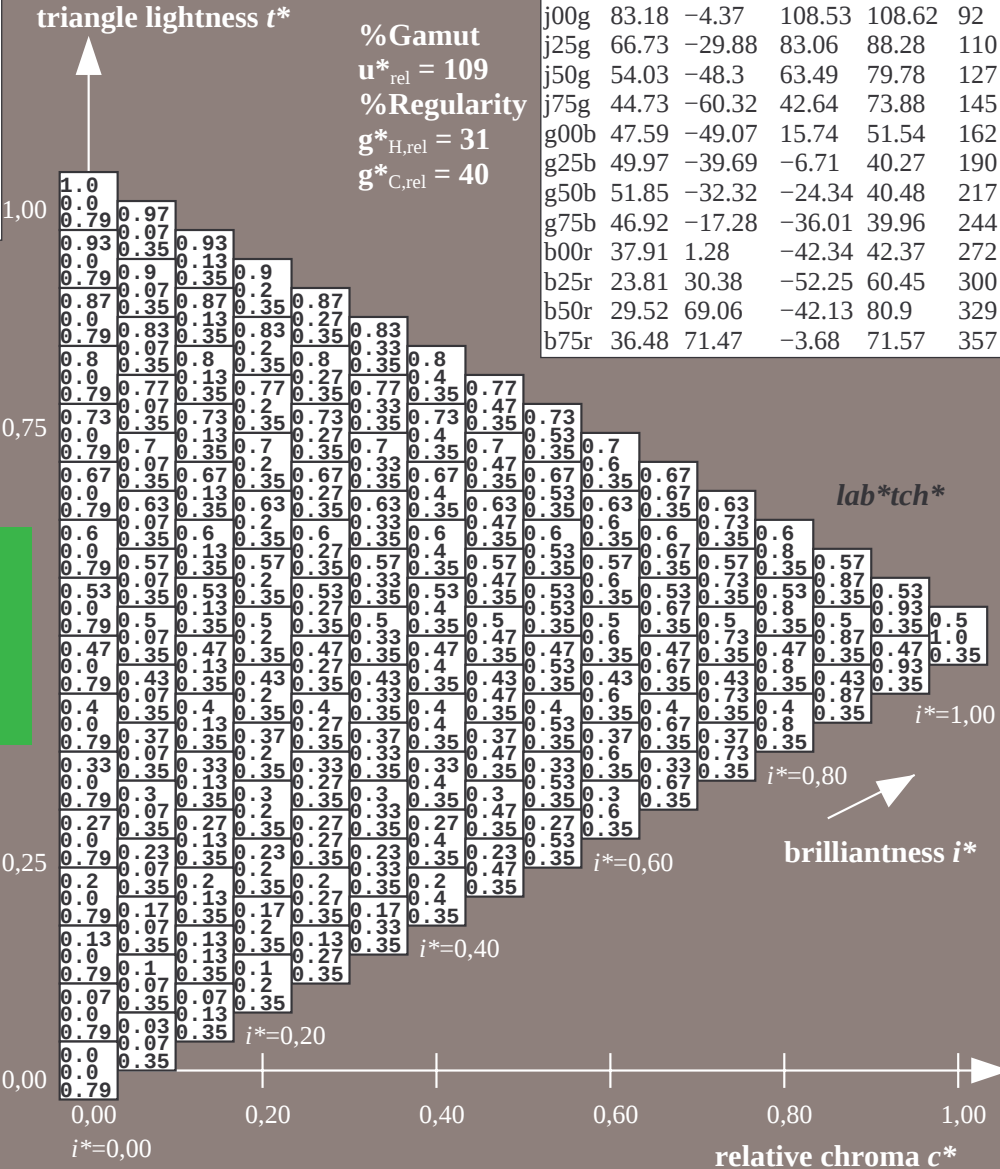
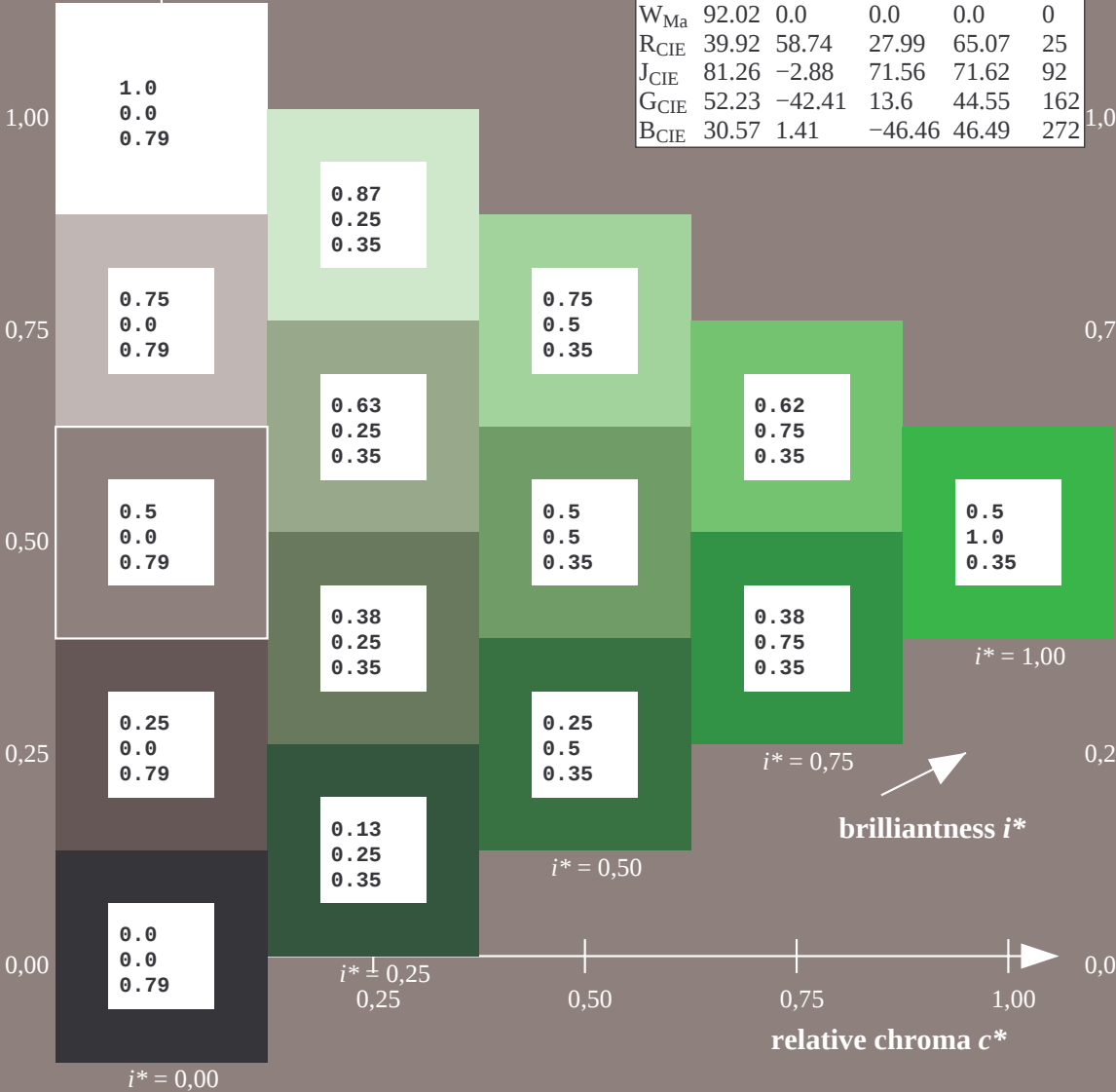


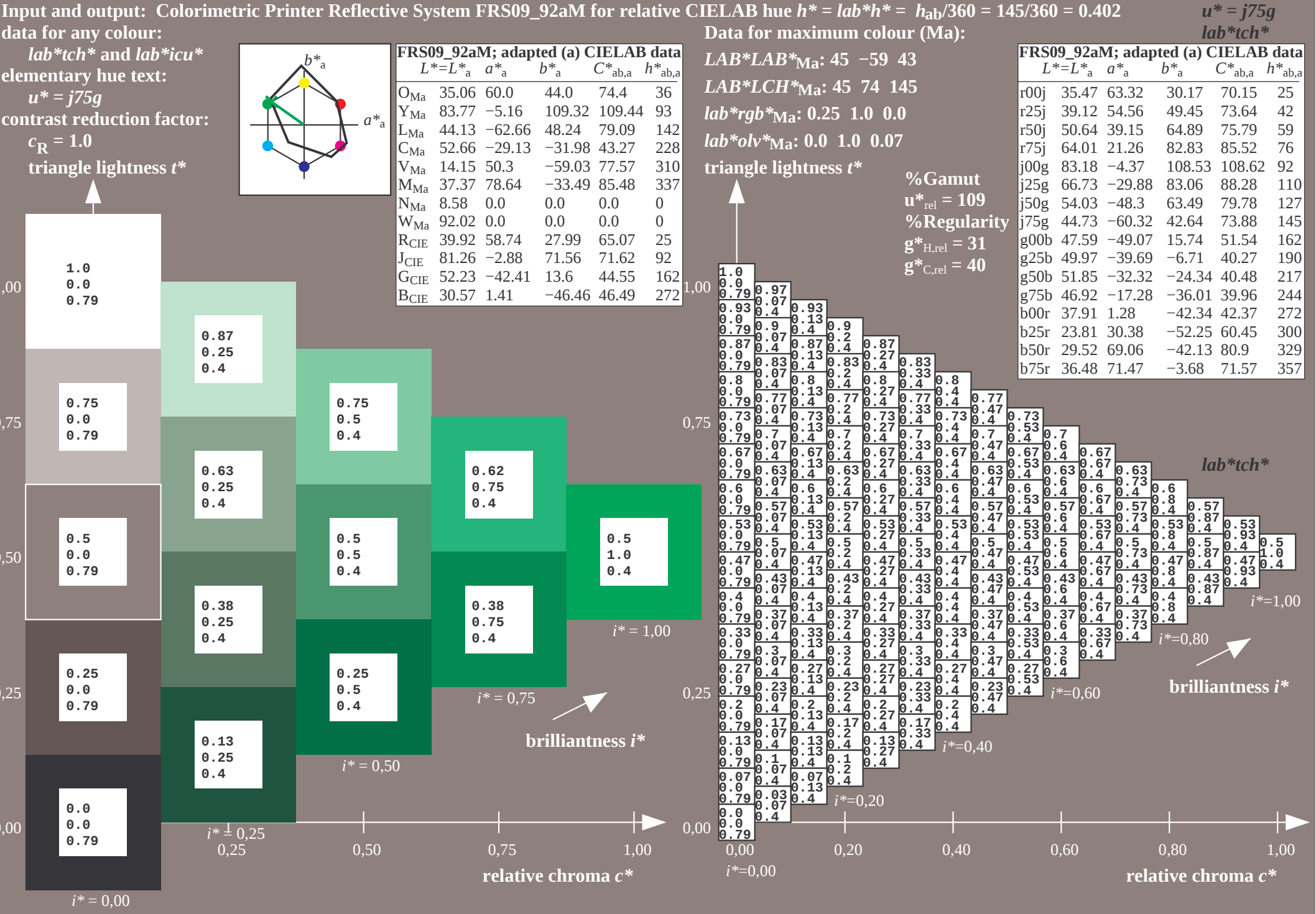
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 54 -47 63  
 $LAB^*LCH^*_{Ma}$ : 54 80 127  
 $lab^*rgb^*_{Ma}$ : 0.5 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.25 1.0 0.0

$u^* = j50g$   
 $lab^*tch^*$

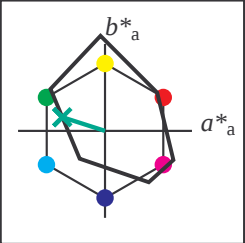
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |





Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g00b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



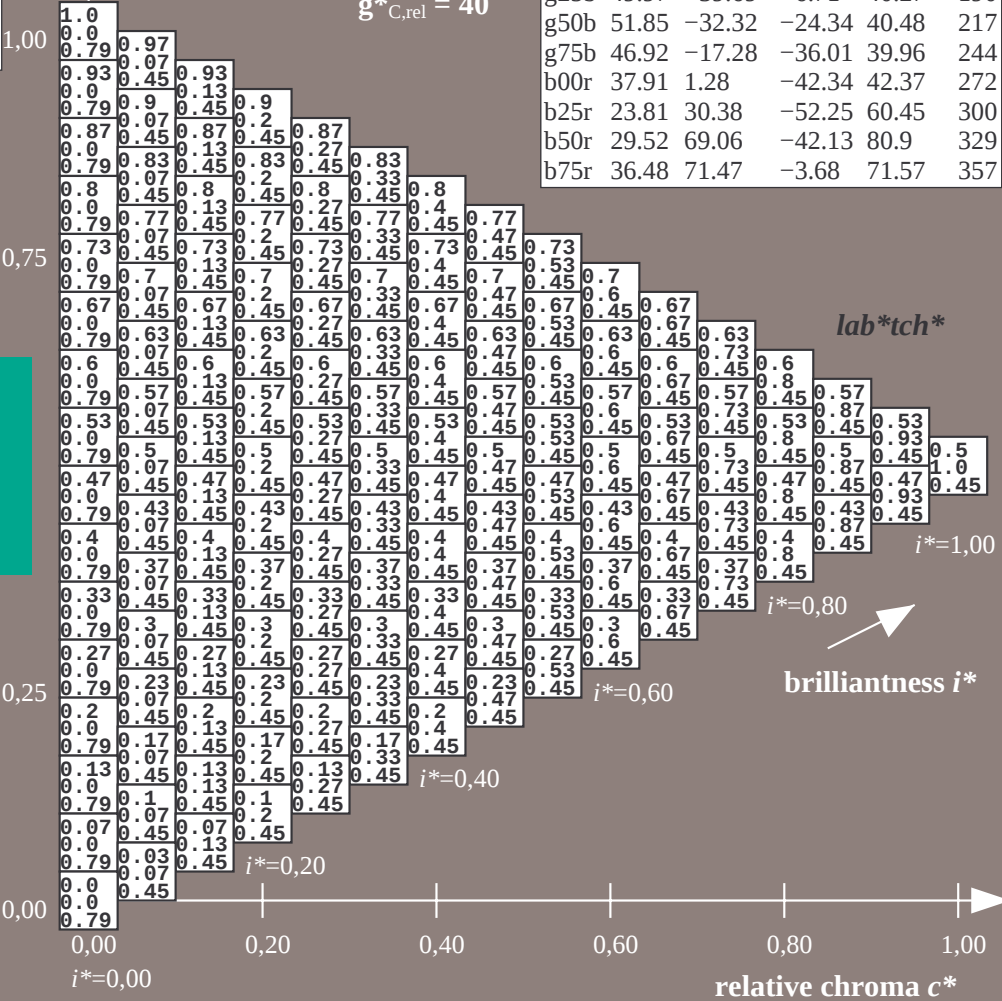
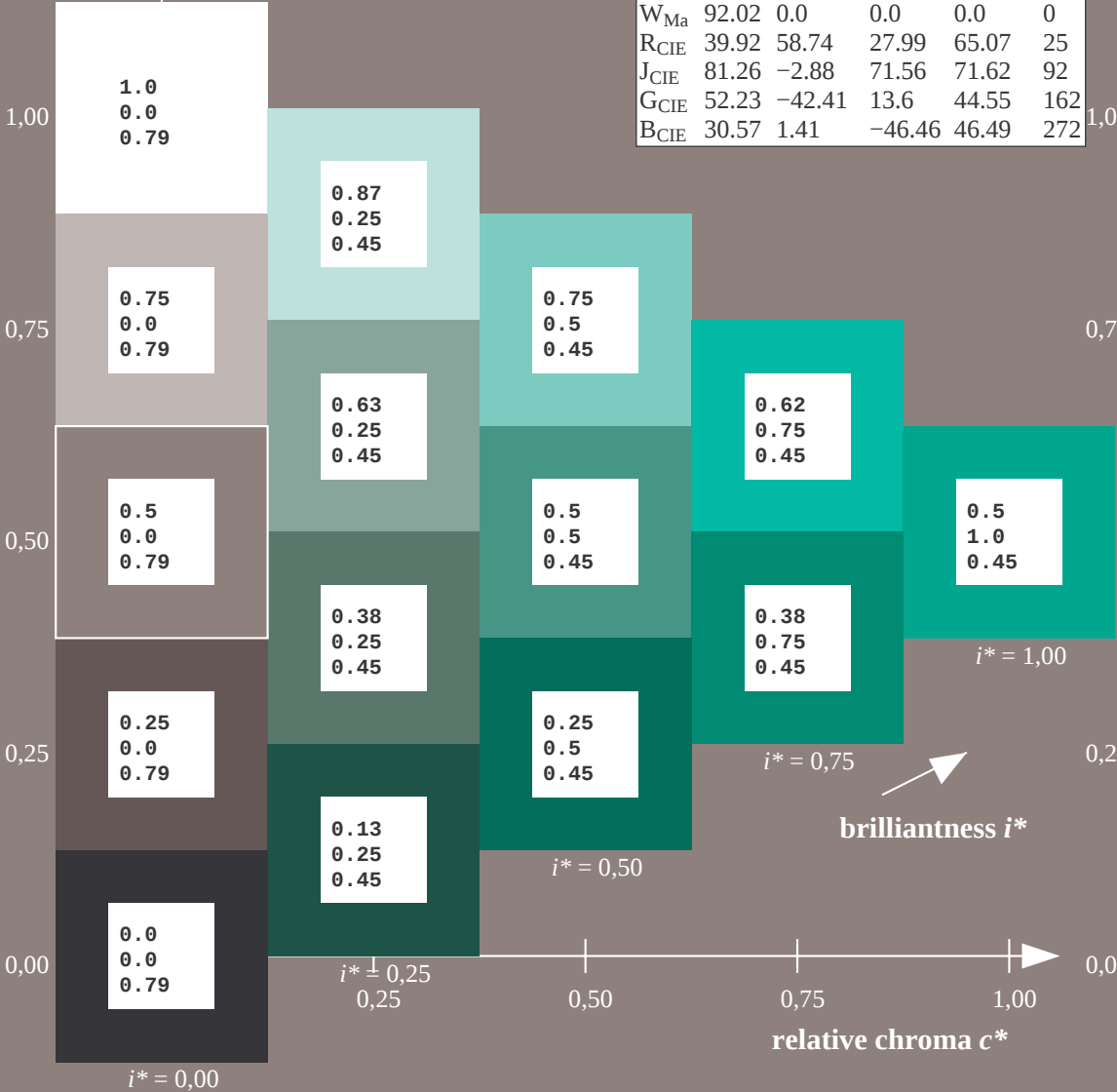
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 48 -48 16  
 $LAB^*LCH^*_{Ma}$ : 48 52 162  
 $lab^*rgb^*_{Ma}$ : 0.0 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.0 1.0 0.41

$u^* = g00b$   
 $lab^*tch^*$

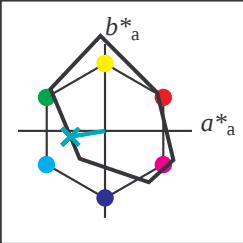
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

triangle lightness  $t^*$   
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 190/360 = 0.527$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g25b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

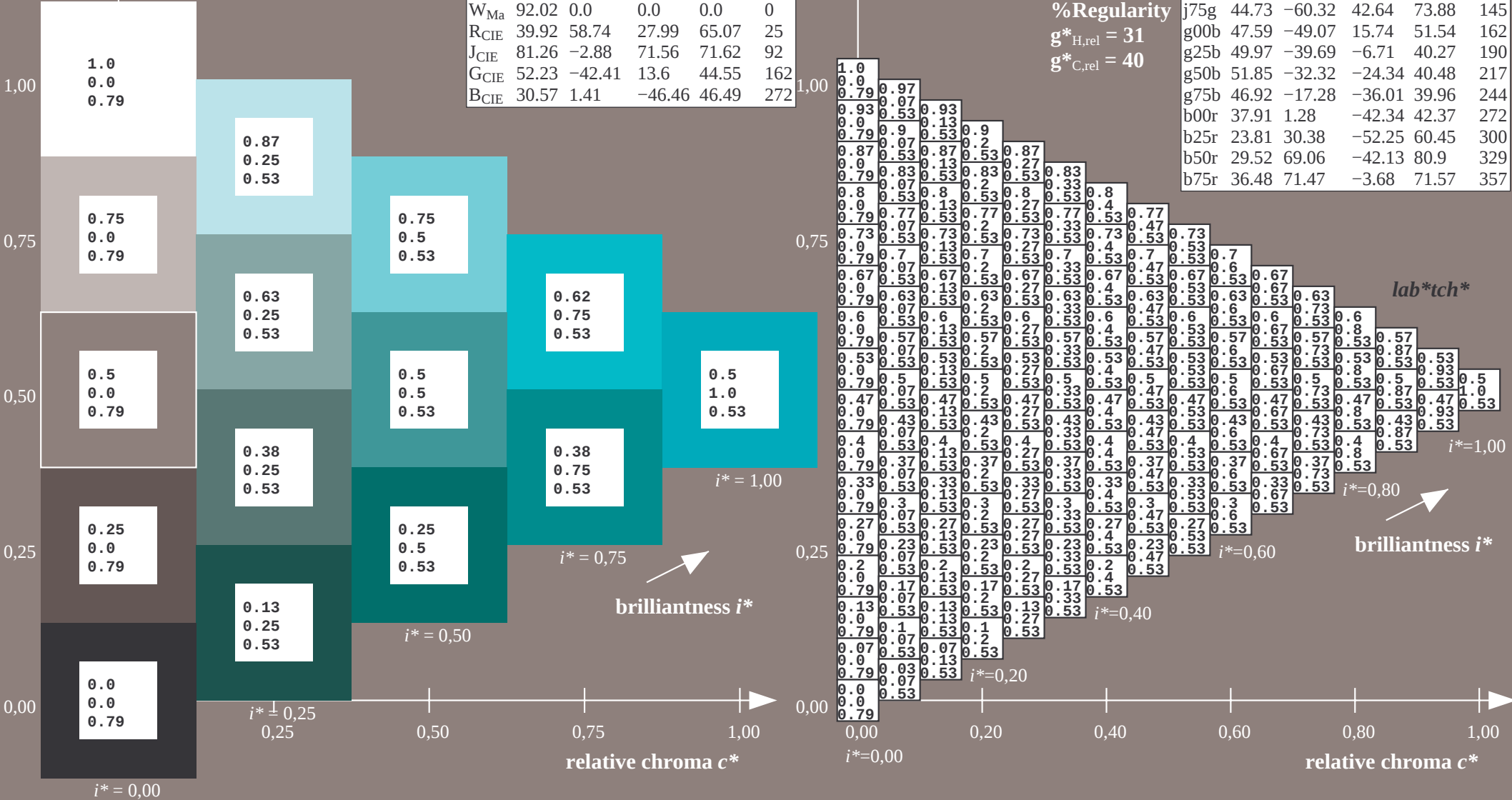


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 50 -39 -6  
 $LAB^*LCH^*_{Ma}$ : 50 40 190  
 $lab^*rgb^*_{Ma}$ : 0.0 1.0 0.5  
 $lab^*olv^*_{Ma}$ : 0.0 1.0 0.69

$u^* = g25b$   
 $lab^*tch^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



$$u^* = g50b$$

**Data for maximum colour (Ma):**

*lab\*tch\**

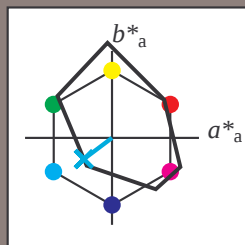
*LAB\*LAB*\*<sub>Ma</sub>: 52 -31 -23

**LAB\*LCH\*Ma: 52 40 217**

*lab\*rgb\*\_Ma: 0.0 1.0 1.0*

**lab\*olv\*Ma: 0.0 1.0 0.9**

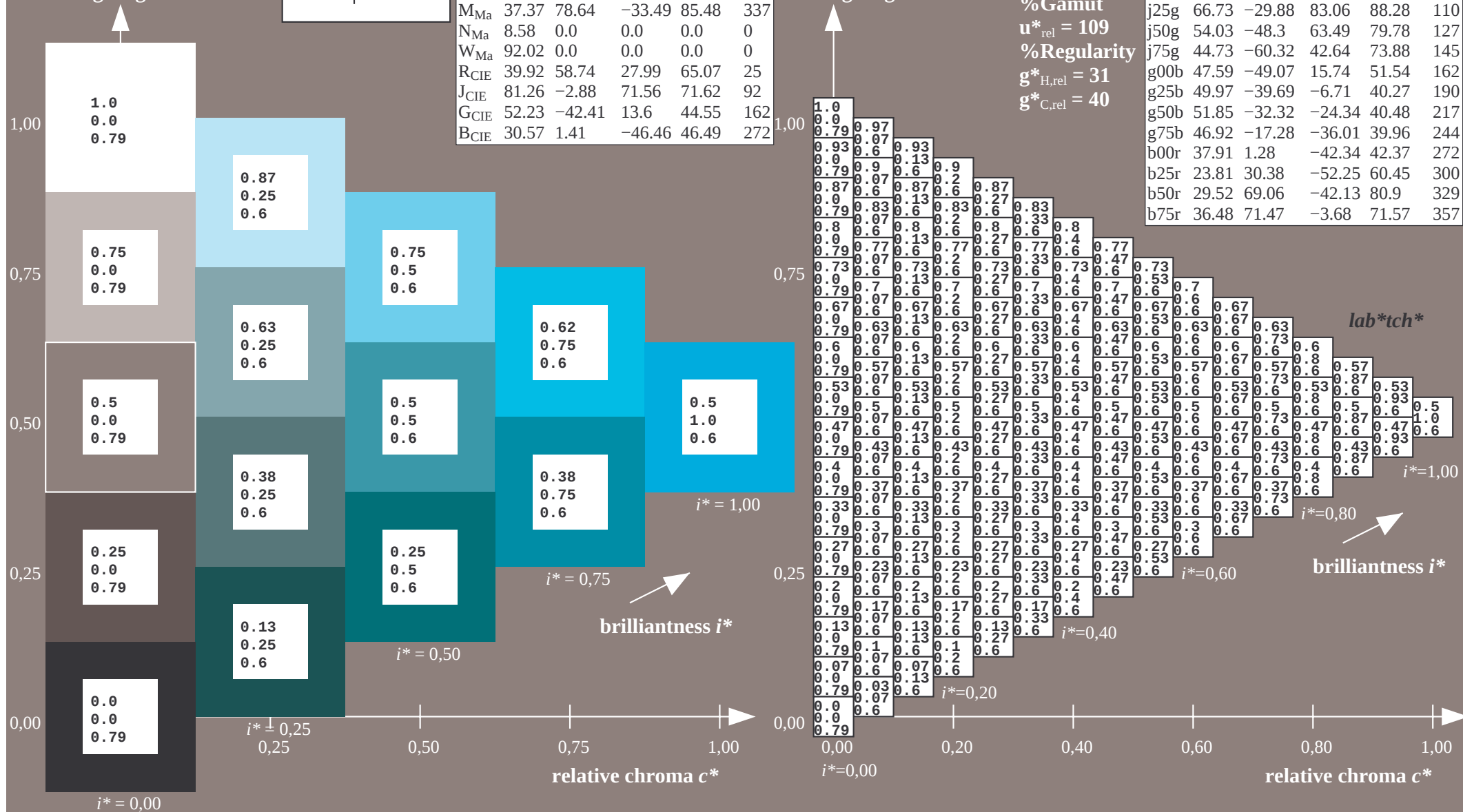
triangle lightness  $t^*$



FRS09\_92aM; adapted (a) CIELAB data

|                  | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------------------|------------------------|------------------|------------------|---------------------|---------------------|
| O <sub>Ma</sub>  | 35.06                  | 60.0             | 44.0             | 74.4                | 36                  |
| Y <sub>Ma</sub>  | 83.77                  | -5.16            | 109.32           | 109.44              | 93                  |
| L <sub>Ma</sub>  | 44.13                  | -62.66           | 48.24            | 79.09               | 142                 |
| C <sub>Ma</sub>  | 52.66                  | -29.13           | -31.98           | 43.27               | 228                 |
| V <sub>Ma</sub>  | 14.15                  | 50.3             | -59.03           | 77.57               | 310                 |
| M <sub>Ma</sub>  | 37.37                  | 78.64            | -33.49           | 85.48               | 337                 |
| N <sub>Ma</sub>  | 8.58                   | 0.0              | 0.0              | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 92.02                  | 0.0              | 0.0              | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92                  | 58.74            | 27.99            | 65.07               | 25                  |
| J <sub>CIE</sub> | 81.26                  | -2.88            | 71.56            | 71.62               | 92                  |
| G <sub>CIE</sub> | 52.23                  | -42.41           | 13.6             | 44.55               | 162                 |
| B <sub>CIE</sub> | 30.57                  | 1.41             | -46.46           | 46.49               | 272                 |

|      | $L^*=L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------|----------------------|------------------|------------------|---------------------|---------------------|
| r00j | 35.47                | 63.32            | 30.17            | 70.15               | 25                  |
| r25j | 39.12                | 54.56            | 49.45            | 73.64               | 42                  |
| r50j | 50.64                | 39.15            | 64.89            | 75.79               | 59                  |
| r75j | 64.01                | 21.26            | 82.83            | 85.52               | 76                  |
| j00g | 83.18                | -4.37            | 108.53           | 108.62              | 92                  |
| j25g | 66.73                | -29.88           | 83.06            | 88.28               | 110                 |
| j50g | 54.03                | -48.3            | 63.49            | 79.78               | 127                 |
| j75g | 44.73                | -60.32           | 42.64            | 73.88               | 145                 |
| g00b | 47.59                | -49.07           | 15.74            | 51.54               | 162                 |
| g25b | 49.97                | -39.69           | -6.71            | 40.27               | 190                 |
| g50b | 51.85                | -32.32           | -24.34           | 40.48               | 217                 |
| g75b | 46.92                | -17.28           | -36.01           | 39.96               | 244                 |
| b00r | 37.91                | 1.28             | -42.34           | 42.37               | 272                 |
| b25r | 23.81                | 30.38            | -52.25           | 60.45               | 300                 |
| b50r | 29.52                | 69.06            | -42.13           | 80.9                | 329                 |
| b75r | 36.48                | 71.47            | -3.68            | 71.57               | 357                 |



$u^* = g75b$   
 $lab^*tch^*$

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

*LAB\*LAB\**<sub>Ma</sub>: 47 -16 -35

**LAB\*LCH\*Ma: 47 40 244**

**lab\*rgb\*Ma: 0.0 0.5 1.0**

**lab\*olv\*Ma: 0.0 0.85 1.0**

triangle lightness  $t^*$

**%Gamut**  
 **$u^*_{\text{rel}} = 109$**   
**%Regularity**  
 **$g^*_{\text{H,rel}} = 31$**   
 **$g^*_{\text{C,rel}} = 40$**

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = b00r$$

**Data for maximum colour (Ma):**

*lab\*tch\**

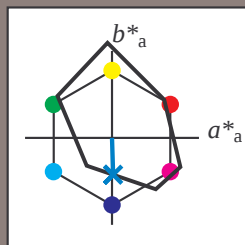
$LAB*LAB*_{Ma}: 38 \quad 1 \quad -41$

**LAB\*LCH\*Ma: 38 42 272**

**lab\*rgb\*\_Ma: 0.0 0.0 1.0**

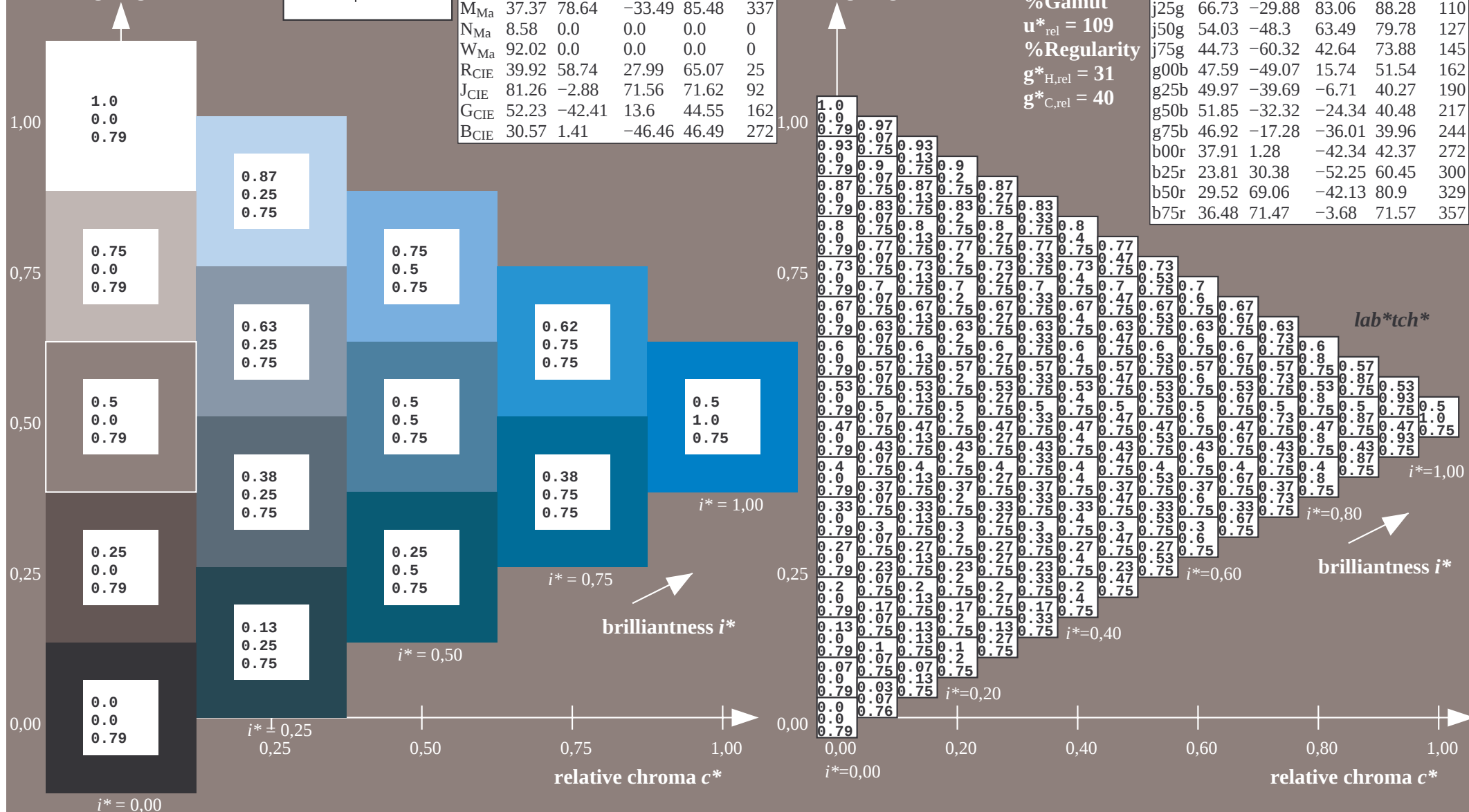
*lab\*olv\**Ma: 0.0 0.62 1.0

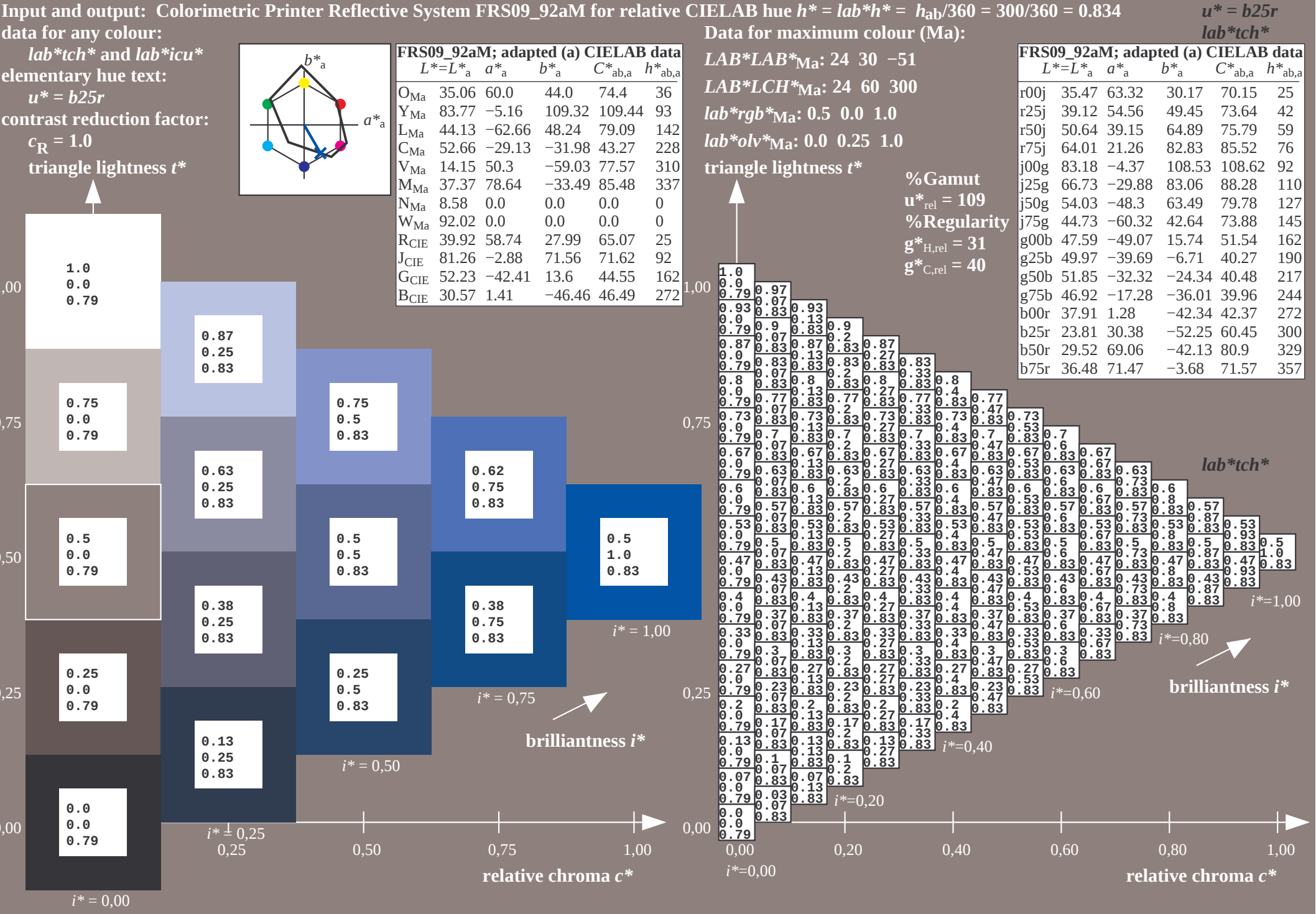
triangle lightness  $t^*$

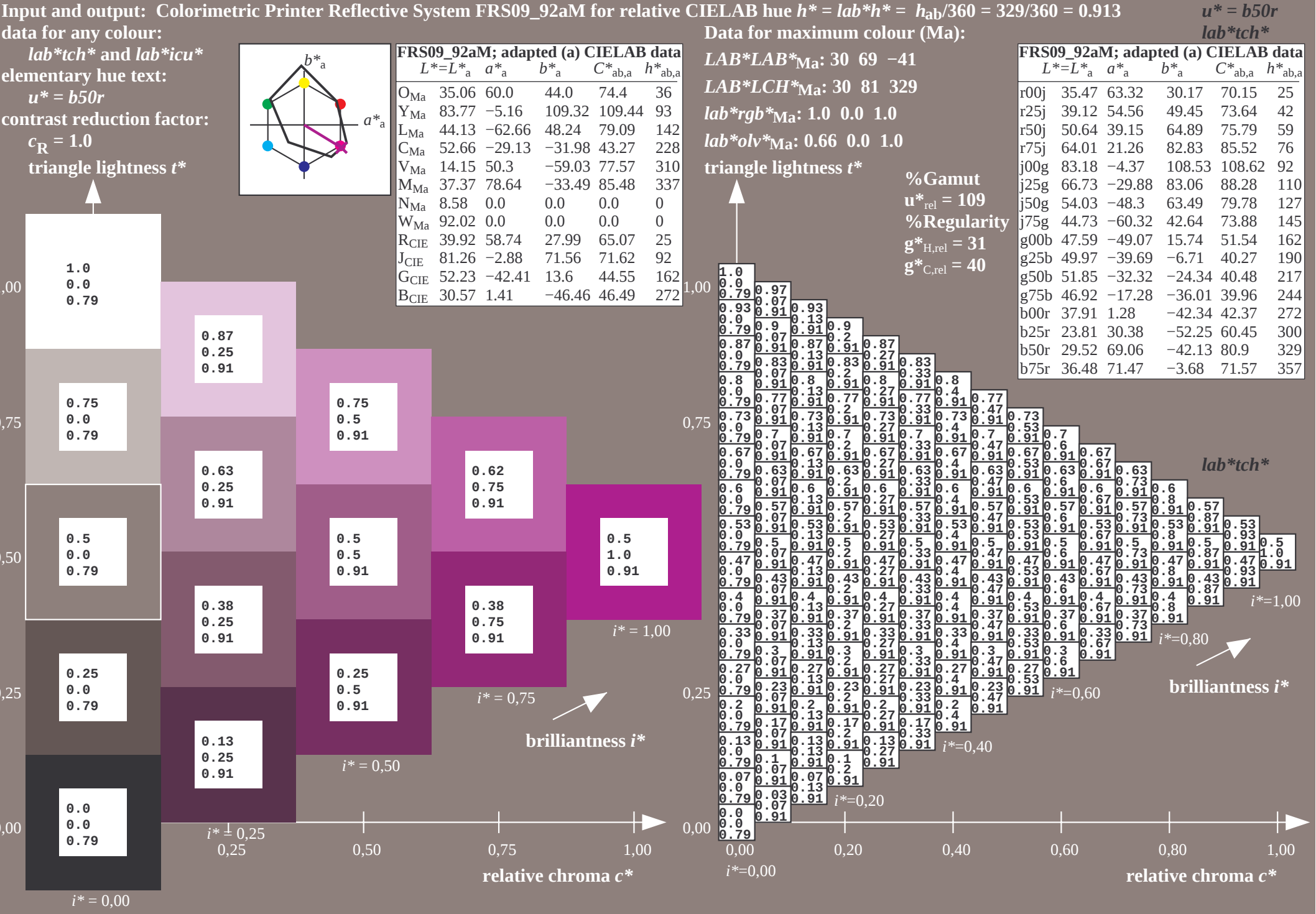
triangle lightness  $l^*$ 

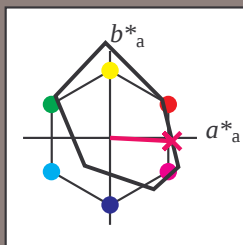
| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |







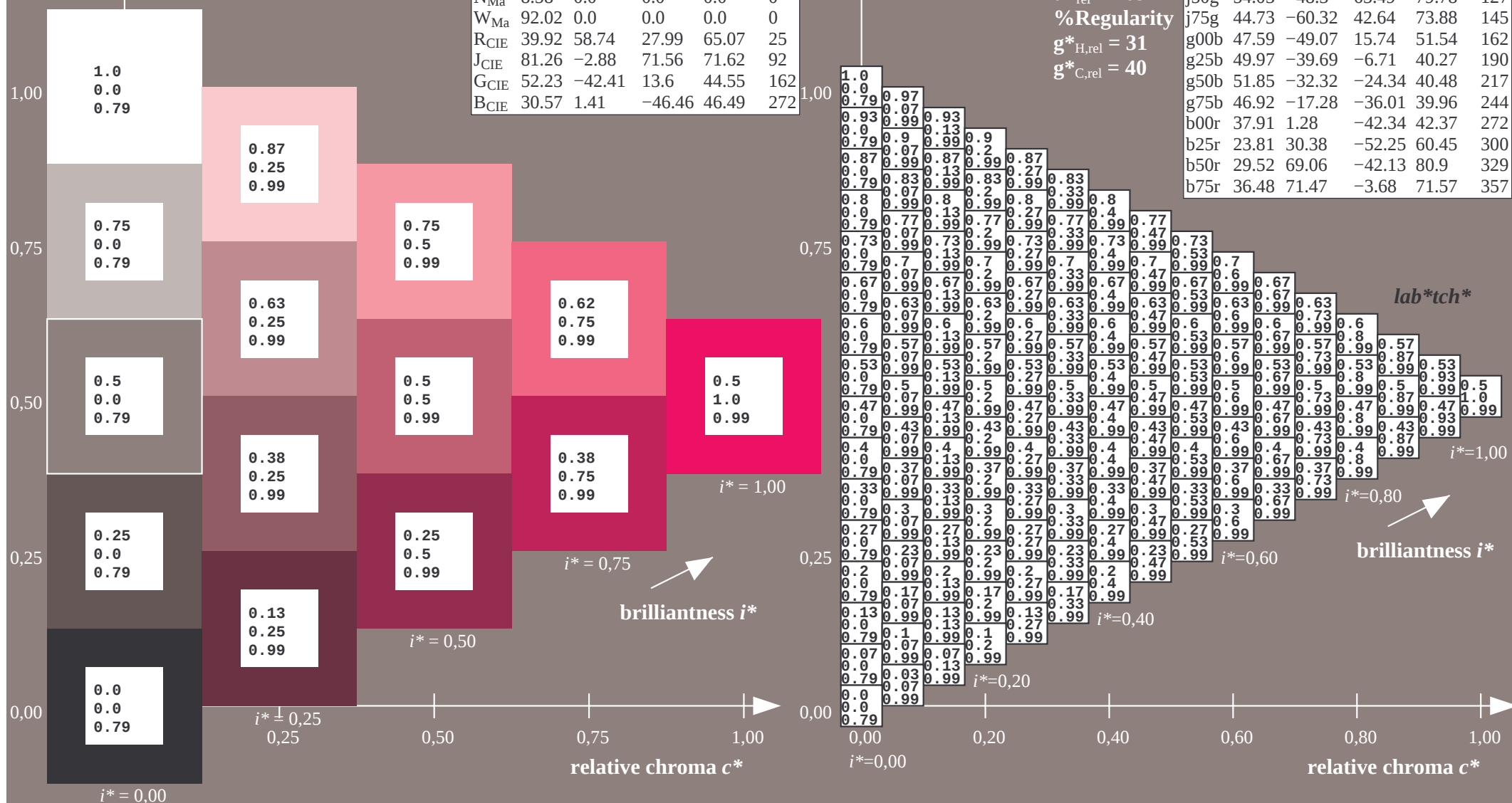
triangle lightness  $t^*$ 

|                  | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------------------|------------------------|------------------|------------------|---------------------|---------------------|
| O <sub>Ma</sub>  | 35.06                  | 60.0             | 44.0             | 74.4                | 36                  |
| Y <sub>Ma</sub>  | 83.77                  | -5.16            | 109.32           | 109.44              | 93                  |
| L <sub>Ma</sub>  | 44.13                  | -62.66           | 48.24            | 79.09               | 142                 |
| C <sub>Ma</sub>  | 52.66                  | -29.13           | -31.98           | 43.27               | 228                 |
| V <sub>Ma</sub>  | 14.15                  | 50.3             | -59.03           | 77.57               | 310                 |
| M <sub>Ma</sub>  | 37.37                  | 78.64            | -33.49           | 85.48               | 337                 |
| N <sub>Ma</sub>  | 8.58                   | 0.0              | 0.0              | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 92.02                  | 0.0              | 0.0              | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92                  | 58.74            | 27.99            | 65.07               | 25                  |
| J <sub>CIE</sub> | 81.26                  | -2.88            | 71.56            | 71.62               | 92                  |
| G <sub>CIE</sub> | 52.23                  | -42.41           | 13.6             | 44.55               | 162                 |
| B <sub>CIE</sub> | 30.57                  | 1.41             | -46.46           | 46.49               | 272                 |

triangle lightness  $t^*$

$$g^*_{C,rel} = 40$$

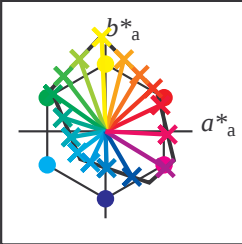
|      | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------|------------------------|------------------|------------------|---------------------|---------------------|
| r00j | 35.47                  | 63.32            | 30.17            | 70.15               | 25                  |
| r25j | 39.12                  | 54.56            | 49.45            | 73.64               | 42                  |
| r50j | 50.64                  | 39.15            | 64.89            | 75.79               | 59                  |
| r75j | 64.01                  | 21.26            | 82.83            | 85.52               | 76                  |
| j00g | 83.18                  | -4.37            | 108.53           | 108.62              | 92                  |
| j25g | 66.73                  | -29.88           | 83.06            | 88.28               | 110                 |
| j50g | 54.03                  | -48.3            | 63.49            | 79.78               | 127                 |
| j75g | 44.73                  | -60.32           | 42.64            | 73.88               | 145                 |
| g00b | 47.59                  | -49.07           | 15.74            | 51.54               | 162                 |
| g25b | 49.97                  | -39.69           | -6.71            | 40.27               | 190                 |
| g50b | 51.85                  | -32.32           | -24.34           | 40.48               | 217                 |
| g75b | 46.92                  | -17.28           | -36.01           | 39.96               | 244                 |
| b00r | 37.91                  | 1.28             | -42.34           | 42.37               | 272                 |
| b25r | 23.81                  | 30.38            | -52.25           | 60.45               | 300                 |
| b50r | 29.52                  | 69.06            | -42.13           | 80.9                | 329                 |
| b75r | 36.48                  | 71.47            | -3.68            | 71.57               | 357                 |



|    | A    | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    | N    | O    | P    | Q    | R    | S    | T    | U      | V    | W    | X    | Y    | Z    | a    | b    | c    | d    | e    | f    | g    | h    | i    | j    | k    | lab*tch* |      |      |     |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|-----|
| 01 | 0.0  | 0.06 | 0.13 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.06 | 0.06 | 0.13 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.13 | 0.13 | 0.13   | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 1.0  | 0.94 | 0.87 | 0.81 | 0.75 | 0.69 | 0.62 | 0.56 | 0.5  | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.0  | 0.12 | 0.25 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.12 | 0.12 | 0.25 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.25 | 0.25 | 0.25   | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.0  | 0.12 | 0.25 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.79 | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.1  | 0.26 | 0.31 | 0.34 | 0.35 | 0.36 | 0.37 | 0.37 | 0.37 | 0.1  | 0.2  | 0.26   | 0.29 | 0.31 | 0.33 | 0.34 | 0.35 | 0.35 | 0.79 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.79 | 0.79     | 0.79 |      |     |
| 02 | 0.06 | 0.06 | 0.13 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.06 | 0.13 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.13 | 0.19 | 0.19   | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.94 | 0.88 | 0.81 | 0.75 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.13 | 0.13     | 0.13 |      |     |
|    | 0.12 | 0.12 | 0.25 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.12 | 0.0  | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.25 | 0.13 | 0.13   | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.12 | 0.0  | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.86 | 0.63 | 0.47 | 0.44 | 0.42 | 0.42 | 0.41 | 0.41 | 0.41 | 0.94 | 0.79 | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.01 | 0.1  | 0.26   | 0.31 | 0.34 | 0.35 | 0.36 | 0.37 | 0.37 | 0.63 | 0.79 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.79 | 0.79     | 0.79 |      |     |
| 03 | 0.13 | 0.13 | 0.13 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.13 | 0.19 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.13 | 0.19 | 0.25   | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.62 | 0.87 | 0.81 | 0.75 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.38 | 0.25 | 0.25     | 0.25 |      |     |
|    | 0.25 | 0.25 | 0.25 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.25 | 0.13 | 0.19 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.25 | 0.13 | 0.0    | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.25 | 0.13 | 0.0  | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.86 | 0.79 | 0.63 | 0.52 | 0.47 | 0.45 | 0.44 | 0.43 | 0.42 | 0.9  | 0.86 | 0.63 | 0.47 | 0.44 | 0.42 | 0.42 | 0.41 | 0.41 | 0.94 | 0.94 | 0.79   | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.63 | 0.63 | 0.79 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.79 | 0.79     | 0.79 |      |     |
| 04 | 0.19 | 0.19 | 0.19 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.19 | 0.25 | 0.25 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.19 | 0.25 | 0.31   | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.62 | 0.81 | 0.75 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.38 | 0.31 | 0.38 | 0.38     | 0.38 |      |     |
|    | 0.37 | 0.37 | 0.37 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.37 | 0.25 | 0.25 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.37 | 0.25 | 0.13   | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.37 | 0.25 | 0.13 | 0.0  | 0.13 | 0.25 | 0.38 | 0.5  | 0.62 | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.86 | 0.82 | 0.74 | 0.63 | 0.55 | 0.5  | 0.47 | 0.46 | 0.44 | 0.89 | 0.86 | 0.79 | 0.63 | 0.52 | 0.47 | 0.45 | 0.44 | 0.43 | 0.91 | 0.9  | 0.86   | 0.63 | 0.47 | 0.44 | 0.42 | 0.41 | 0.63 | 0.63 | 0.63 | 0.79 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.79 | 0.79 | 0.79     |      |      |     |
| 05 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.25 | 0.31 | 0.31 | 0.31 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.25 | 0.31 | 0.38   | 0.38 | 0.38 | 0.44 | 0.5  | 0.56 | 0.62 | 0.75 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.38 | 0.31 | 0.25 | 0.5  | 0.5      | 0.5  |      |     |
|    | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.5  | 0.38 | 0.38 | 0.38 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.5  | 0.38 | 0.25   | 0.25 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.5  | 0.38 | 0.25 | 0.13 | 0.0  | 0.13 | 0.25 | 0.38 | 0.5  | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.86 | 0.83 | 0.79 | 0.71 | 0.63 | 0.57 | 0.52 | 0.49 | 0.47 | 0.88 | 0.86 | 0.82 | 0.74 | 0.63 | 0.55 | 0.5  | 0.47 | 0.46 | 0.9  | 0.89 | 0.86   | 0.79 | 0.63 | 0.52 | 0.47 | 0.45 | 0.44 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.79 | 0.1  | 0.1  | 0.1  | 0.79 | 0.79     | 0.79 |      |     |
| 06 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.38 | 0.44 | 0.5  | 0.31 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.44 | 0.5  | 0.56 | 0.31 | 0.38 | 0.44   | 0.44 | 0.44 | 0.44 | 0.5  | 0.56 | 0.62 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.38 | 0.31 | 0.25 | 0.19 | 0.63 | 0.63     | 0.63 |      |     |
|    | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.75 | 0.87 | 1.0  | 0.62 | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.63 | 0.75 | 0.87 | 0.62 | 0.5  | 0.38   | 0.38 | 0.38 | 0.38 | 0.5  | 0.63 | 0.75 | 0.62 | 0.5  | 0.38 | 0.25 | 0.13 | 0.0  | 0.13 | 0.25 | 0.37 | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.86 | 0.84 | 0.81 | 0.76 | 0.7  | 0.63 | 0.58 | 0.54 | 0.51 | 0.88 | 0.86 | 0.83 | 0.79 | 0.71 | 0.63 | 0.57 | 0.52 | 0.49 | 0.89 | 0.88 | 0.86   | 0.82 | 0.74 | 0.63 | 0.55 | 0.5  | 0.47 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.79 | 0.1  | 0.1  | 0.1  | 0.79 | 0.79     | 0.79 |      |     |
| 07 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.44 | 0.5  | 0.38 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.5  | 0.56 | 0.38 | 0.44 | 0.5    | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.56 | 0.62 | 0.62 | 0.56 | 0.5  | 0.44 | 0.38 | 0.31 | 0.25 | 0.19 | 0.13 | 0.75     | 0.75 | 0.75 |     |
|    | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.87 | 1.0  | 0.75 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.75 | 0.87 | 0.75 | 0.63 | 0.5    | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.63 | 0.75 | 0.75 | 0.63 | 0.5  | 0.38 | 0.25 | 0.13 | 0.0  | 0.13 | 0.25 | 0.0      | 0.0  | 0.0  |     |
|    | 0.86 | 0.85 | 0.82 | 0.79 | 0.74 | 0.68 | 0.63 | 0.59 | 0.55 | 0.88 | 0.86 | 0.84 | 0.81 | 0.76 | 0.7  | 0.63 | 0.58 | 0.54 | 0.89 | 0.88 | 0.86   | 0.83 | 0.79 | 0.71 | 0.63 | 0.57 | 0.52 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.79 | 0.1  | 0.1  | 0.1  | 0.79 | 0.79     | 0.79 |      |     |
| 08 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.5  | 0.44 | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.56 | 0.44 | 0.5  | 0.56   | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.5  | 0.44 | 0.38 | 0.31 | 0.25 | 0.19 | 0.13 | 0.06 | 0.88     | 0.88 | 0.88 |     |
|    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 1.0  | 0.87 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.87 | 0.87 | 0.75 | 0.63   | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.75 | 0.87 | 0.75 | 0.63 | 0.5  | 0.38 | 0.25 | 0.13 | 0.0      | 0.12 | 0.0  | 0.0 |
|    | 0.86 | 0.85 | 0.83 | 0.8  | 0.77 | 0.72 | 0.68 | 0.63 | 0.59 | 0.87 | 0.86 | 0.85 | 0.82 | 0.79 | 0.74 | 0.68 | 0.63 | 0.59 | 0.88 | 0.88 | 0.86   | 0.84 | 0.81 | 0.76 | 0.7  | 0.63 | 0.58 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.79 | 0.1  | 0.1  | 0.79     | 0.79 | 0.79 |     |
| 09 | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.5  | 0.56 | 0.62   | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.5  | 0.44 | 0.38 | 0.31 | 0.25 | 0.19 | 0.13 | 0.06 | 0.0  | 1.0  | 1.0      | 1.0  |      |     |
|    | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 1.0  | 0.87 | 0.75   | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 1.0  | 0.87 | 0.75 | 0.62 | 0.5  | 0.37 | 0.25 | 0.12 | 0.0  | 0.0  | 0.0      |      |      |     |
|    | 0.86 | 0.85 | 0.83 | 0.81 | 0.79 | 0.75 | 0.71 | 0.67 | 0.63 | 0.87 | 0.86 | 0.85 | 0.83 | 0.8  | 0.77 | 0.72 | 0.68 | 0.63 | 0.88 | 0.87 | 0.86   | 0.85 | 0.82 | 0.79 | 0.74 | 0.68 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.79 | 0.79 | 0.79 | 0.79     |      |      |     |
| 10 | 0.19 | 0.19 | 0.19 | 0.19 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.19 | 0.25 | 0.25 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.19 | 0.25 | 0.31   | 0.31 | 0.31 | 0.31 | 0.38 | 0.44 | 0.5  | 1.0  | 0.94 | 0.87 | 0.81 | 0.75 | 0.69 | 0.62 | 0.56 | 0.5  | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.37 | 0.37 | 0.37 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.62 | 0.75 | 0.87 | 1.0  | 0.62 | 0.62   | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.75 | 0.87 | 1.0  | 0.0  | 0.12 | 0.25 | 0.37 | 0.5  | 0.62 | 0.75 | 0.87     |      |      |     |
|    | 0.1  | 0.17 | 0.22 | 0.26 | 0.28 | 0.3  | 0.31 | 0.33 | 0.33 | 0.1  | 0.15 | 0.2  | 0.23 | 0.26 | 0.28 | 0.29 | 0.3  | 0.31 | 0.1  | 0.14 | 0.18   | 0.21 | 0.24 | 0.26 | 0.27 | 0.29 | 0.3  | 0.79 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.79 | 0.79     | 0.79 |      |     |
| 11 | 0.19 | 0.25 | 0.25 | 0.25 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.25 | 0.31 | 0.31 | 0.31 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.31 | 0.38 | 0.38   | 0.38 | 0.38 | 0.38 | 0.44 | 0.5  | 0.56 | 0.94 | 0.88 | 0.81 | 0.75 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.07 | 0.07     | 0.07 |      |     |
|    | 0.37 | 0.25 | 0.25 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.5  | 0.38 | 0.38 | 0.38 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.62 | 0.5  | 0.5    | 0.5  | 0.5  | 0.5  | 0.63 | 0.75 | 0.87 | 0.12 | 0.0  | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.87 | 0.0  | 0.0      | 0.0  |      |     |
|    | 0.04 | 0.2  | 0.26 | 0.29 | 0.31 | 0.33 | 0.34 | 0.35 | 0.06 | 0.1  | 0.17 | 0.22 | 0.26 | 0.28 | 0.3  | 0.31 | 0.33 | 0.07 | 0.1  | 0.15 | 0.2    | 0.23 | 0.26 | 0.28 | 0.29 | 0.3  | 0.86 | 0.79 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.79 | 0.79     | 0.79 |      |     |
| 12 | 0.19 | 0.25 | 0.31 | 0.31 | 0.38 | 0.44 | 0.5  | 0.56 | 0.62 | 0.25 | 0.31 | 0.38 | 0.38 | 0.38 | 0.44 | 0.5  | 0.56 | 0.62 | 0.31 | 0.38 | 0.44   | 0.44 | 0.44 | 0.44 | 0.5  | 0.56 | 0.62 | 0.87 | 0.81 | 0.75 | 0.69 | 0.63 | 0.56 | 0.5  | 0.44 | 0.38 | 0.13 | 0.13     | 0.13 |      |     |
|    | 0.37 | 0.25 | 0.13 | 0.13 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.5  | 0.38 | 0.25 | 0.25 | 0.38 | 0.5  | 0.63 | 0.75 | 0.62 | 0.5  | 0.38 | 0.38</ |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |     |

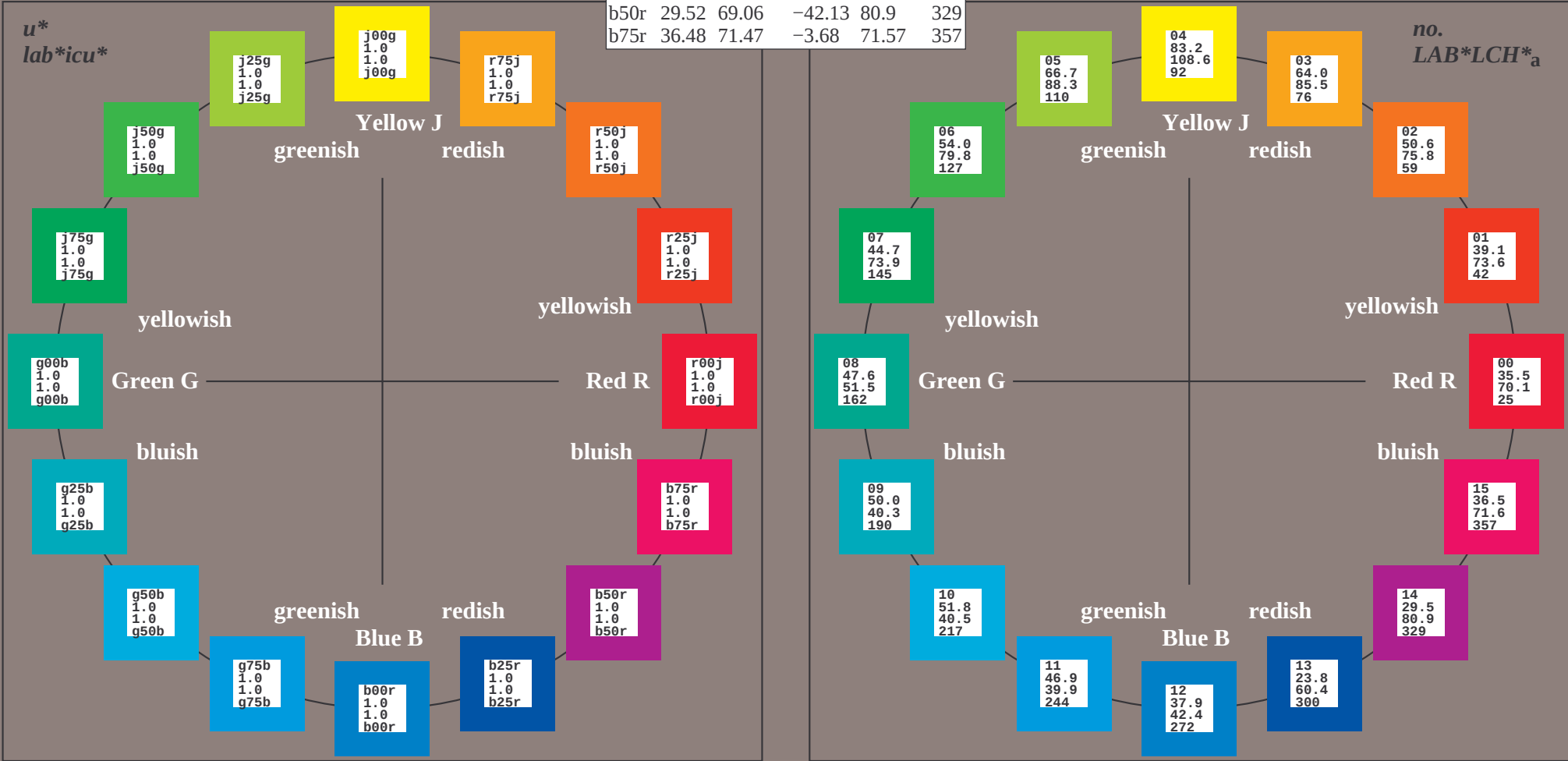
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
 $lab*_{tch*}$  and  $lab*_{icu*}$   
elementary hue text:  
 $u^* = 16$  hues  $r00j$ ,  $r25j$ , ...,  $b75r$   
contrast reduction factor:  
 $c_R = 1.0$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



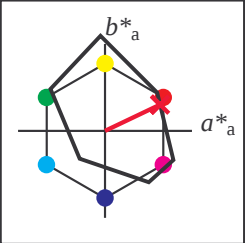
% Gamut  
 $u^*_{rel} = 109$   
% Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



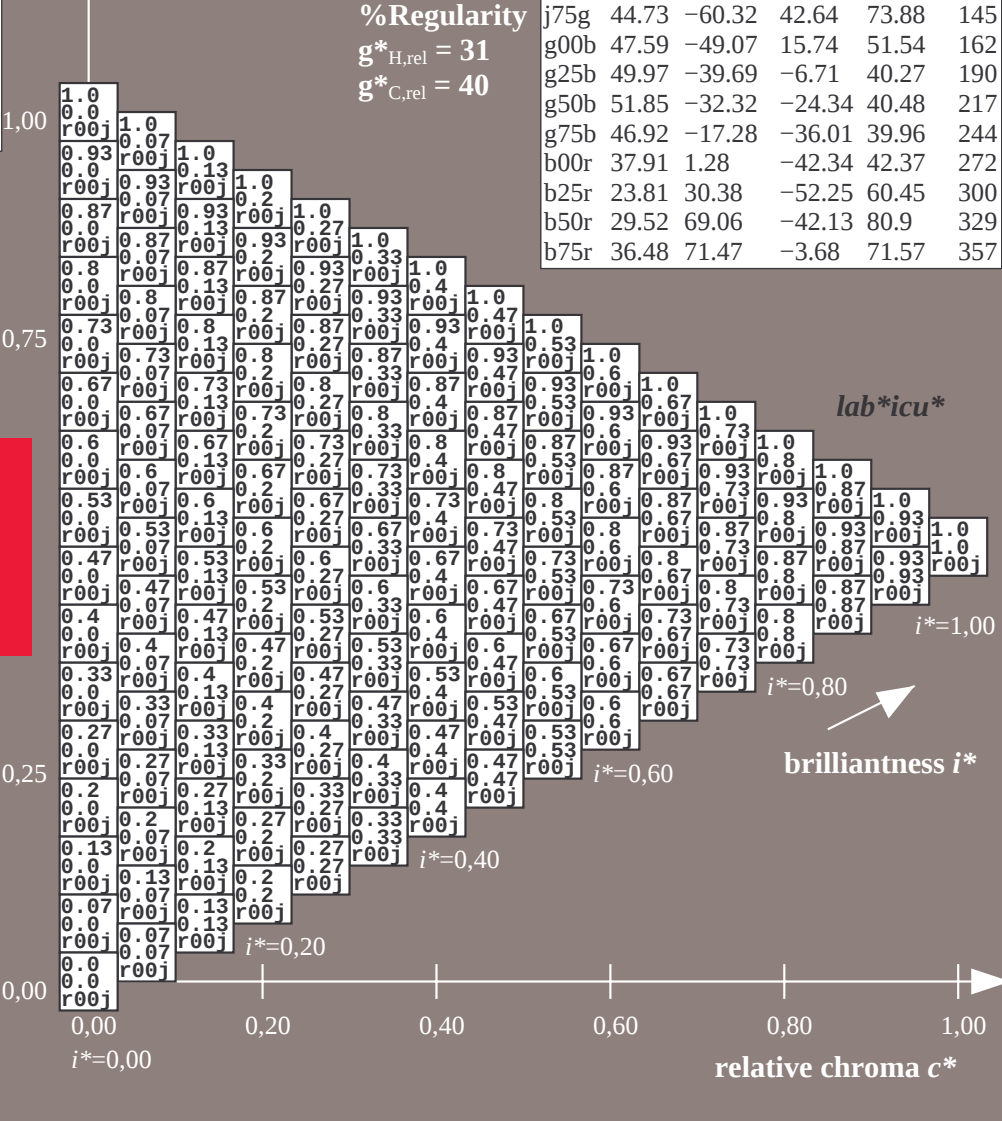
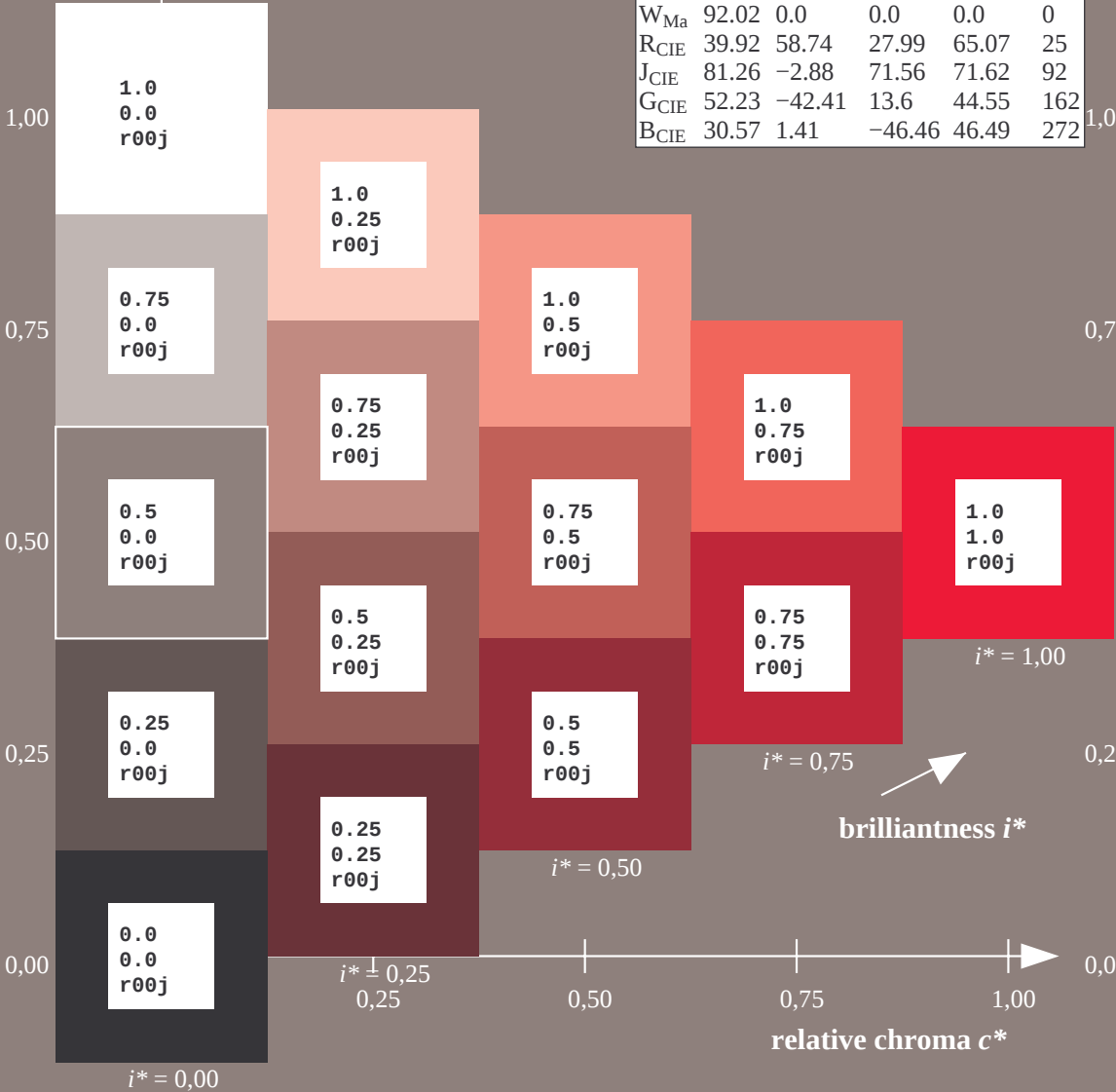
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 35 63 30  
 $LAB^*LCH^*_{Ma}$ : 35 70 25  
 $lab^*rgb^*_{Ma}$ : 1.0 0.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.0 0.18

triangle lightness  $t^*$

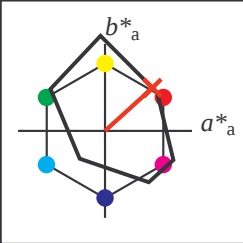
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

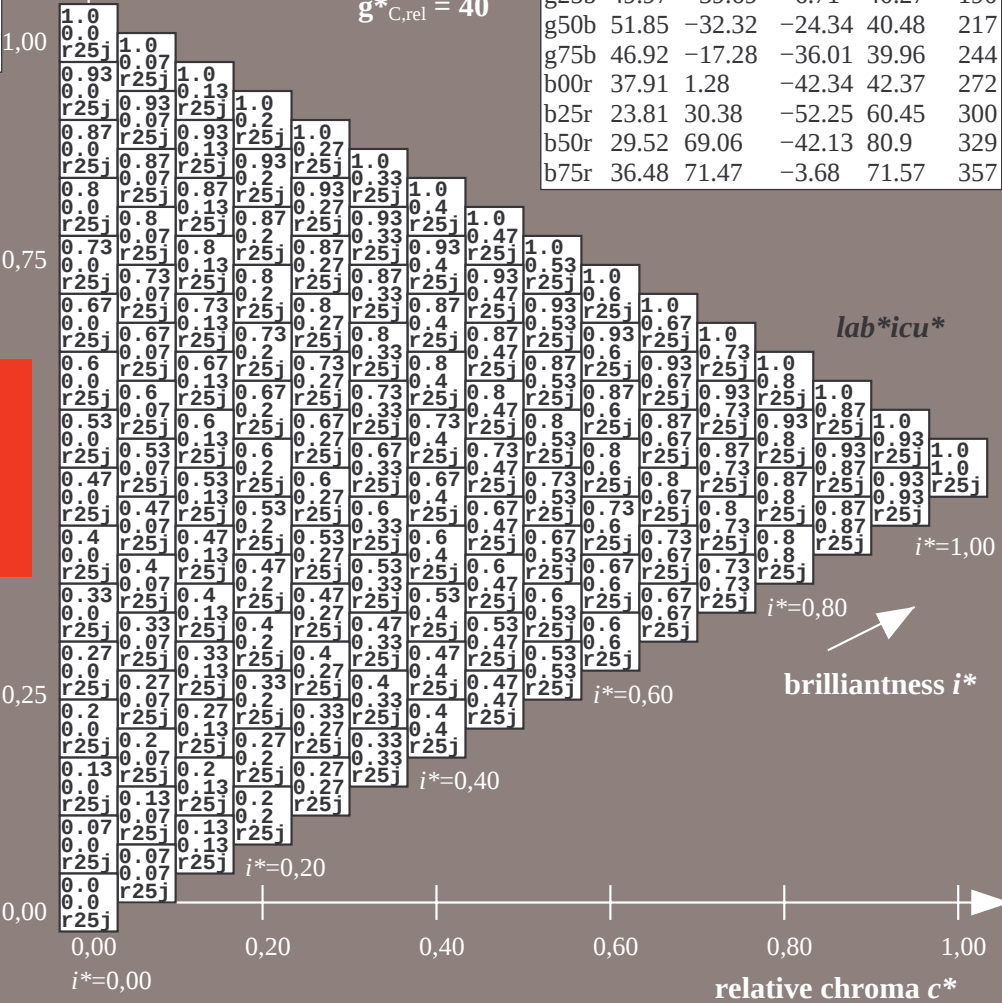
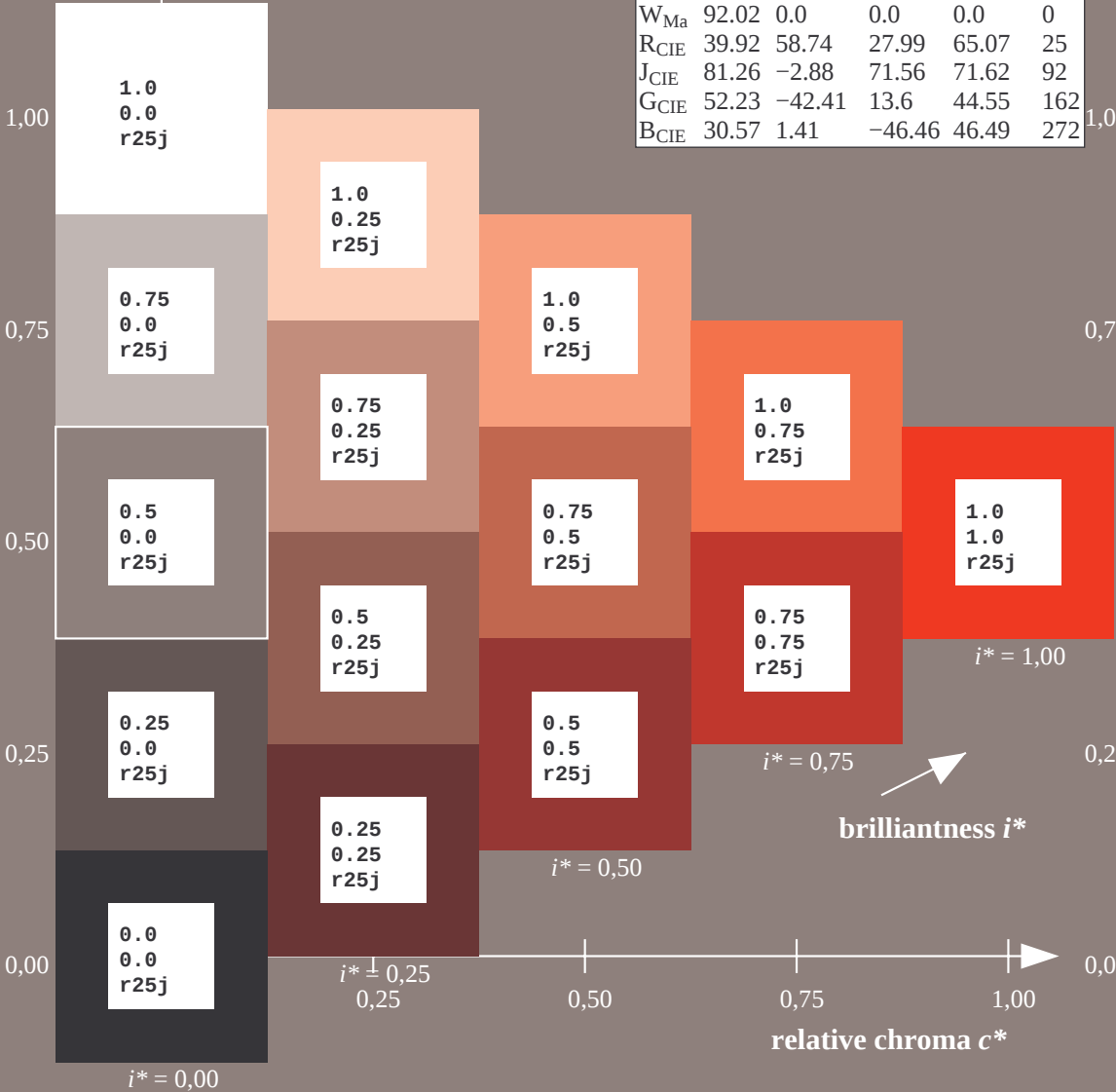
Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 39 55 49  
 $LAB^*LCH^*_{Ma}$ : 39 74 42  
 $lab^*rgb^*_{Ma}$ : 1.0 0.25 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.08 0.0

$u^* = r25j$   
 $lab^*icu^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

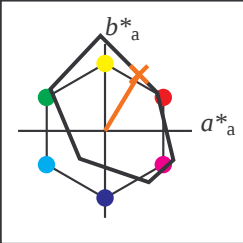
triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

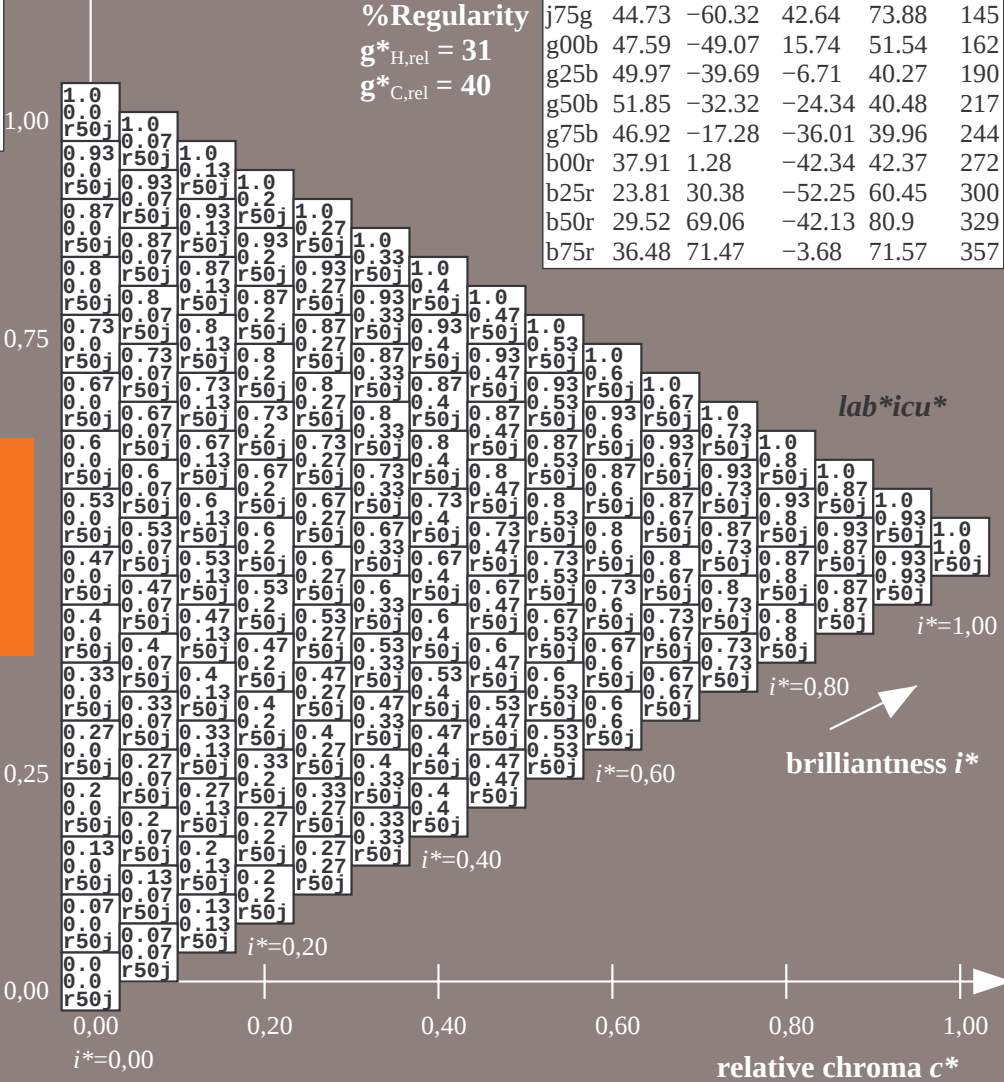
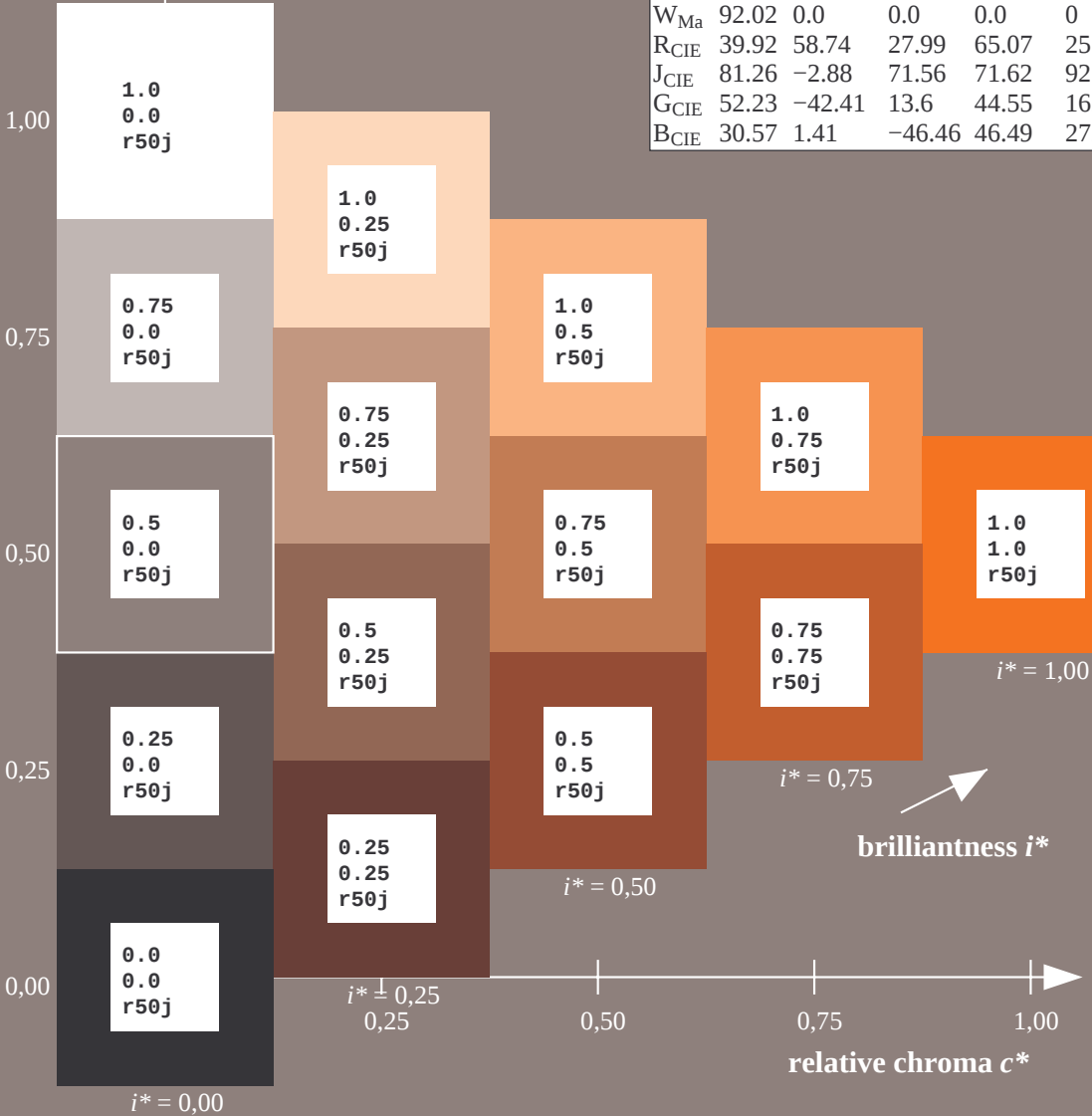
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 51 39 65  
 $LAB^*LCH^*_{Ma}$ : 51 76 59  
 $lab^*rgb^*_{Ma}$ : 1.0 0.5 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.32 0.0

triangle lightness  $t^*$

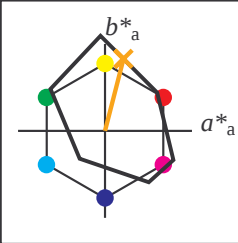
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$  data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

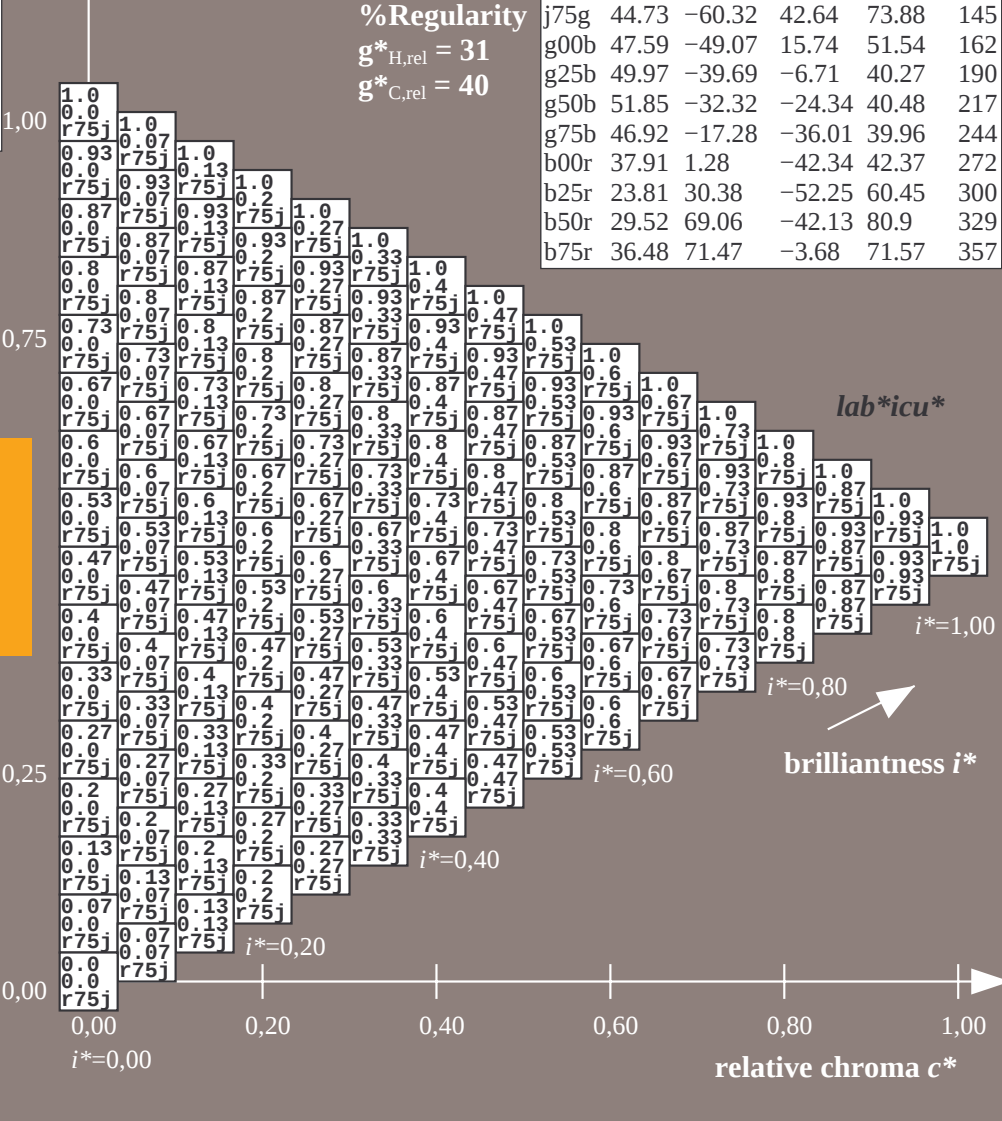
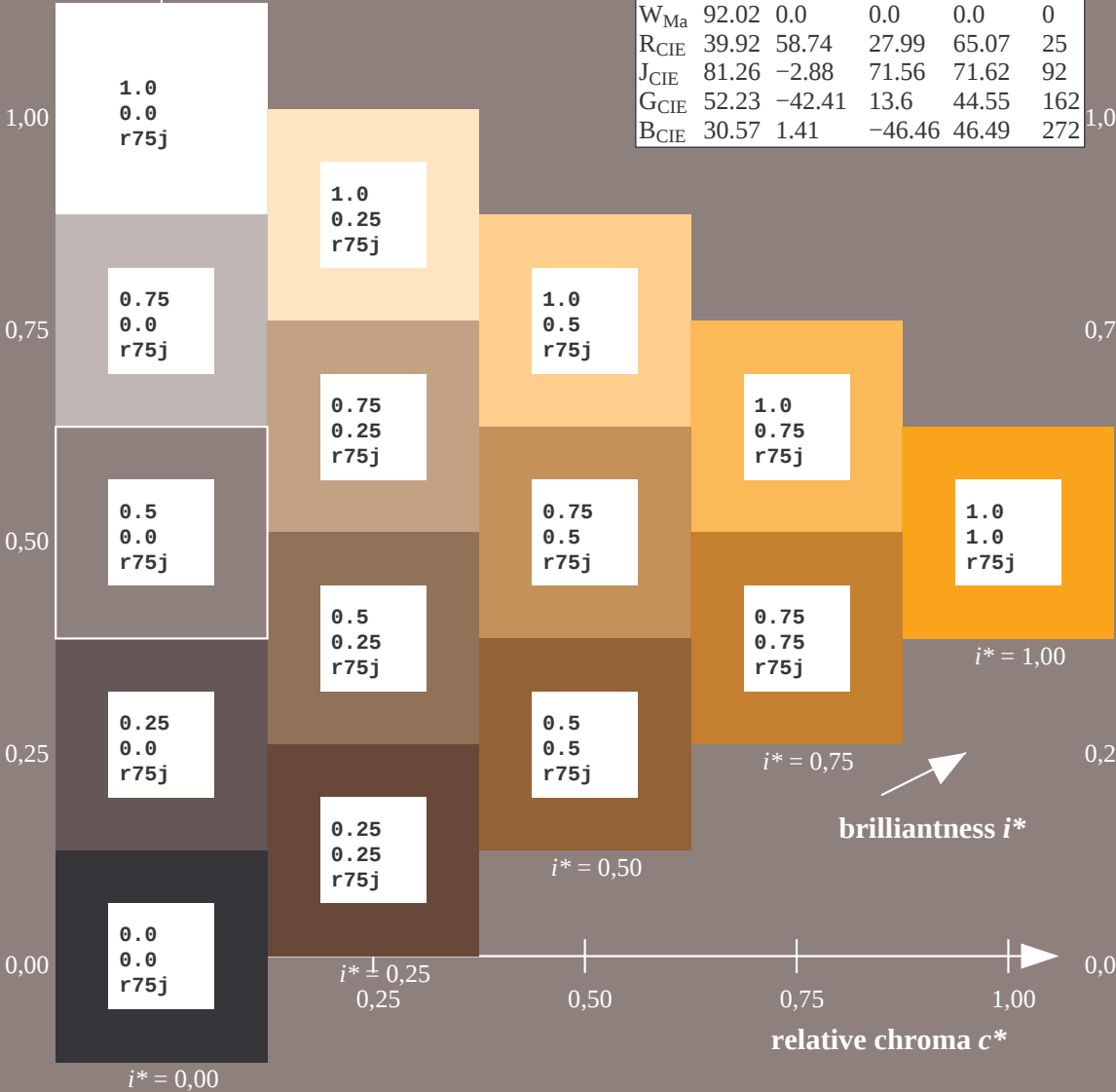
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 64 21 83  
 $LAB^*LCH^*_{Ma}$ : 64 86 76  
 $lab^*rgb^*_{Ma}$ : 1.0 0.75 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.59 0.0

triangle lightness  $t^*$

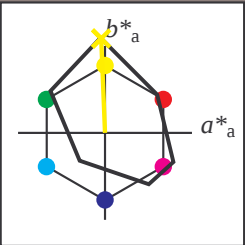
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

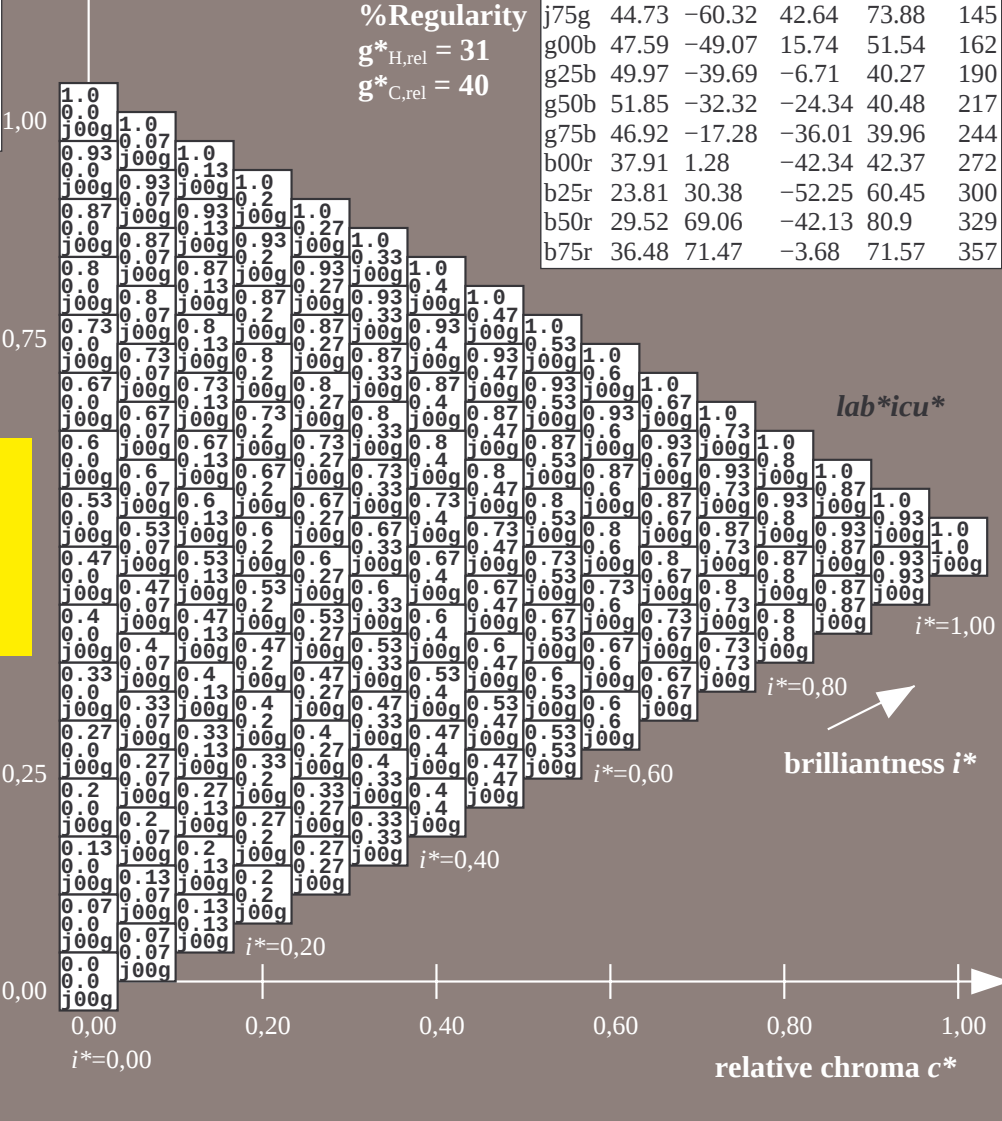
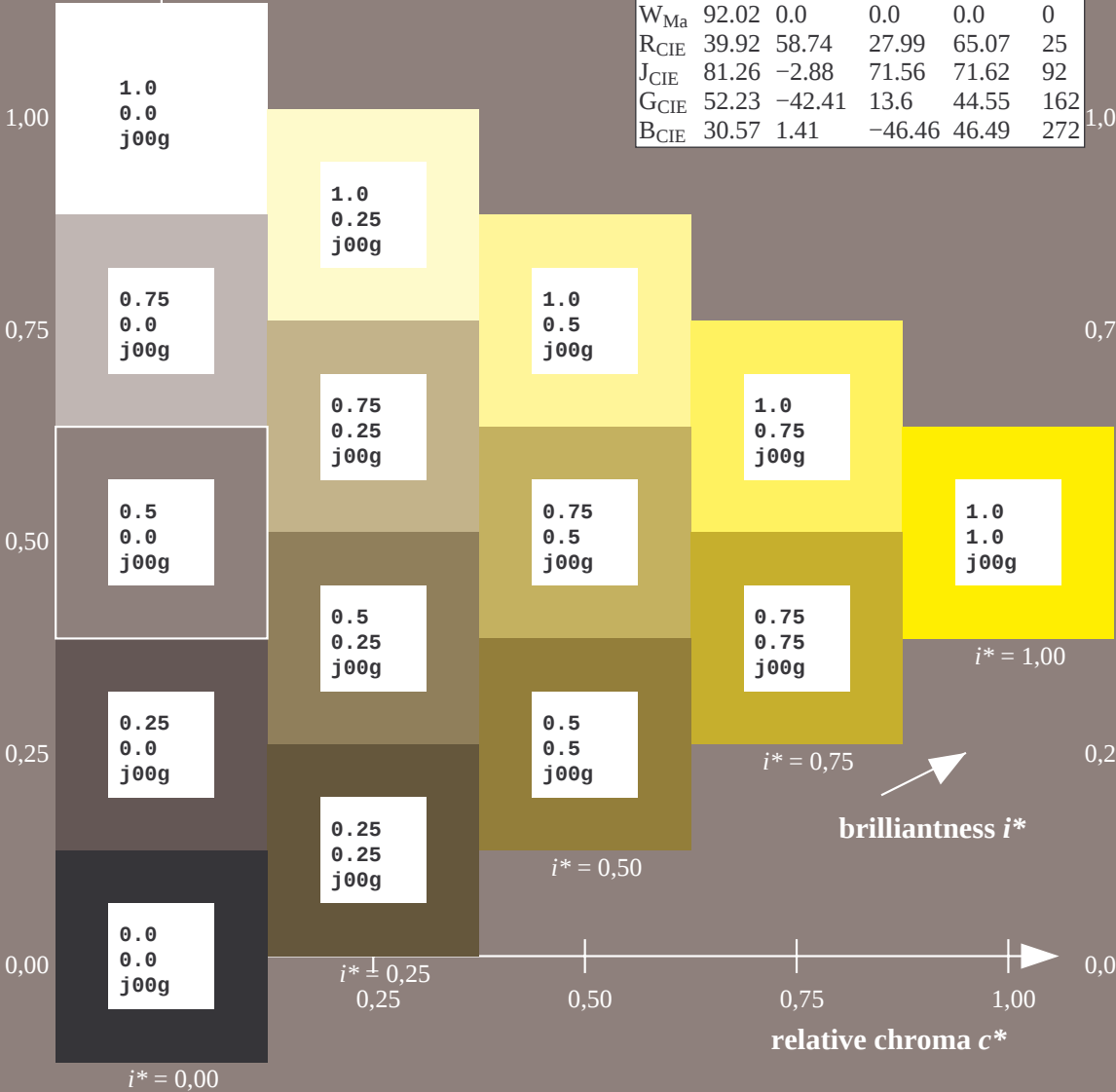
Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$ : 83 -3 109  
 $LAB^*LCH^*_{Ma}$ : 83 109 92  
 $lab^*rgb^*_{Ma}$ : 1.0 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 1.0 0.99 0.0

triangle lightness  $t^*$

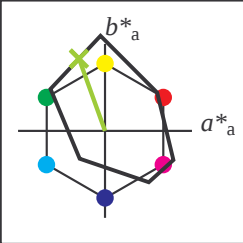
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 110/360 = 0.305$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j25g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



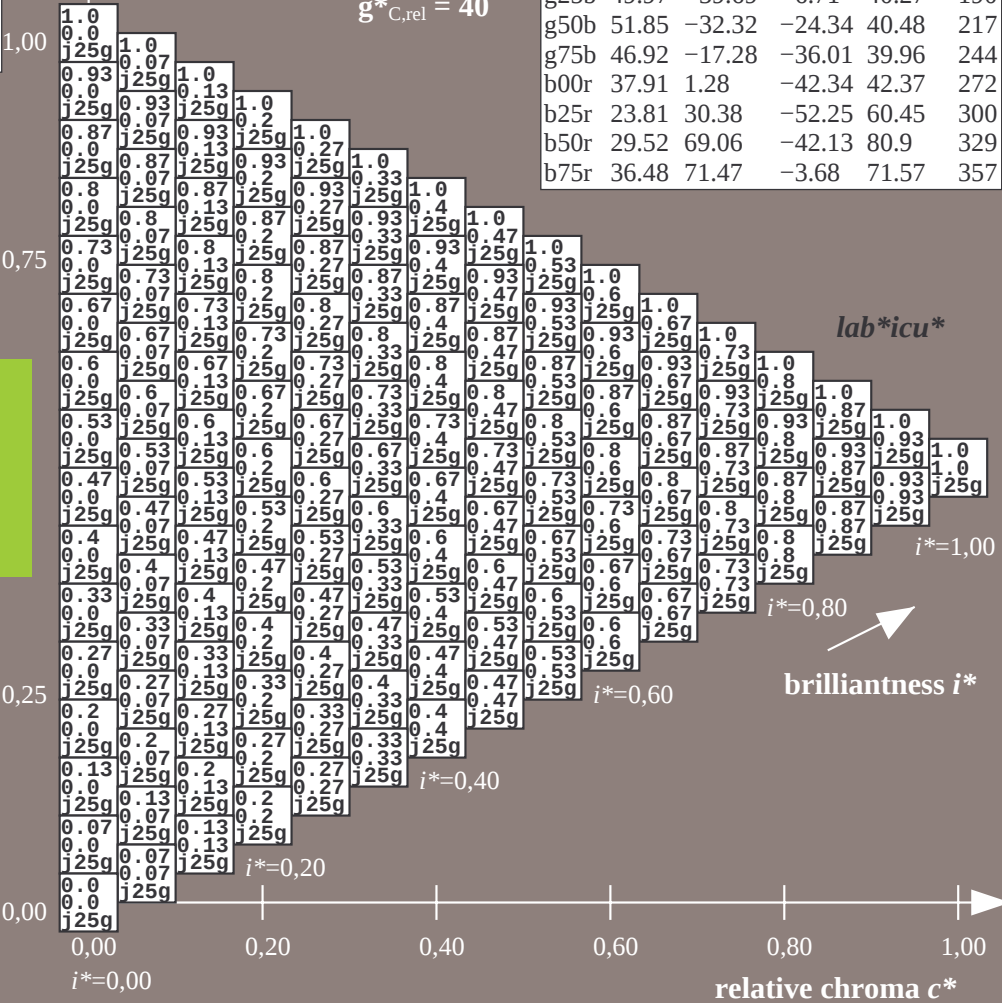
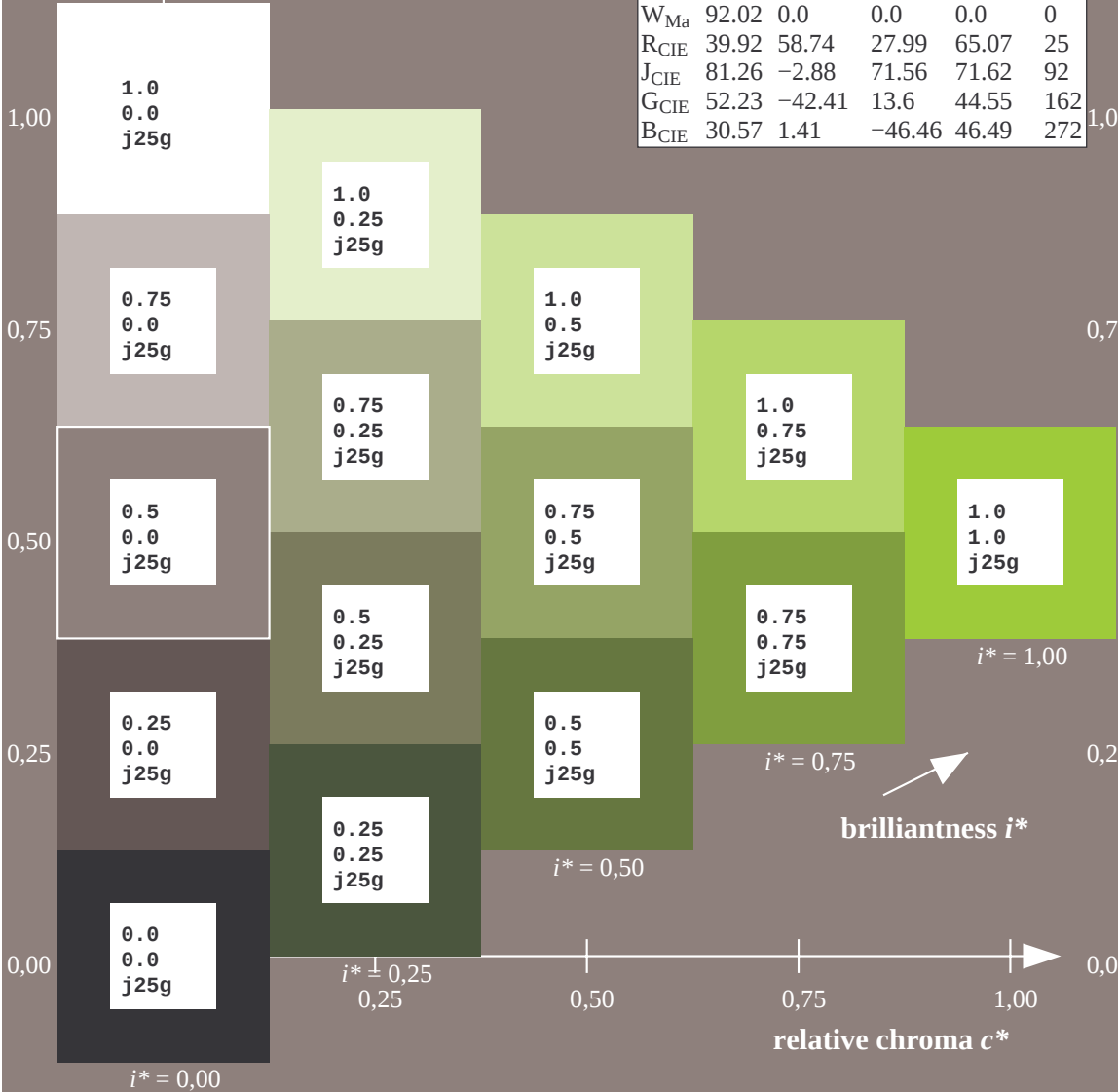
| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06       | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77       | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13       | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66       | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15       | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37       | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92       | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26       | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23       | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57       | 1.41    | -46.46  | 46.49        | 272          |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}$ : 67 -29 83  
 $LAB^*LCH^*_{Ma}$ : 67 88 110  
 $lab^*rgb^*_{Ma}$ : 0.75 1.0 0.0  
 $lab^*olv^*_{Ma}$ : 0.57 1.0 0.0

$u^* = j25g$   
 $lab^*icu^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |

triangle lightness  $t^*$   
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$



$u^* = j50g$   
 $lab^*icu^*$

A diagram of a hexagonal lattice. A green line segment is labeled  $b^*_a$  and a red line segment is labeled  $a^*_a$ .

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

*LAB\*LAB\**Ma: 54 -47 63

**LAB\*LCH\*Ma: 54 80 127**

***lab\*rgb\*\_Ma: 0.5 1.0 0.0***

**lab\*olv\*Ma: 0.25 1.0 0.0**

triangle lightness  $t^*$

**%Gamut**  
 **$u^*_{\text{rel}} = 109$**   
**%Regularity**  
 **$g^*_{\text{H,rel}} = 31$**   
 **$g^*_{\text{C,rel}} = 40$**

| FRS09_92aM; adapted (a) CIELAB data |         |         |         |              |              |  |
|-------------------------------------|---------|---------|---------|--------------|--------------|--|
|                                     | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47   | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12   | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64   | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01   | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18   | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73   | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03   | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73   | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59   | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97   | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85   | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92   | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91   | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81   | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52   | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48   | 71.47   | -3.68   | 71.57        | 357          |  |



$$u^* = j75g$$

**Data for maximum colour (Ma):**

*lab\*icu\**

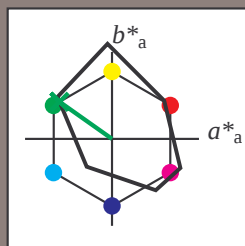
**LAB\*LAB\*Ma: 45 -59 43**

**LAB\*LCH\*Ma: 45 74 145**

***lab\*rgb\*\_Ma: 0.25 1.0 0.0***

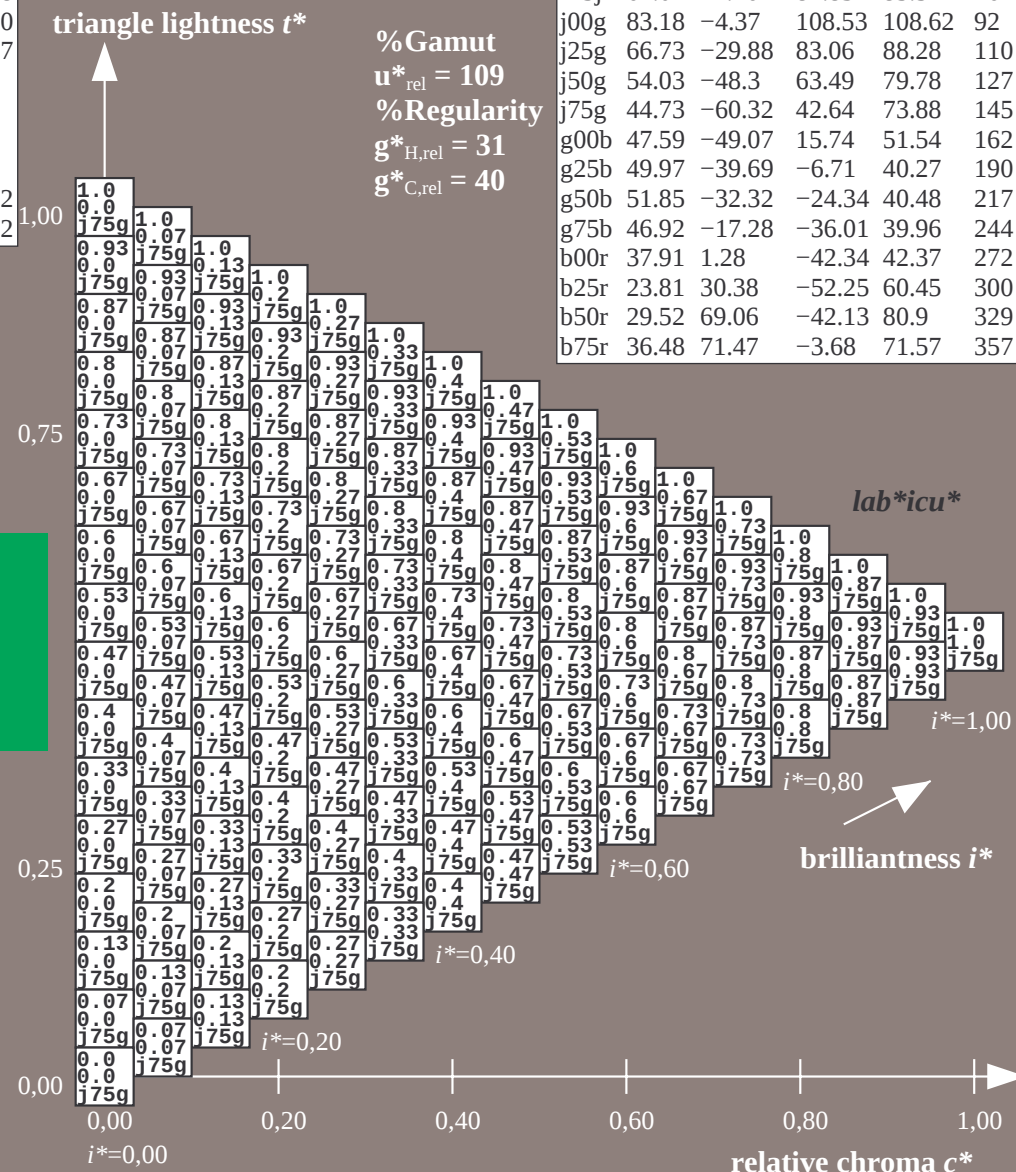
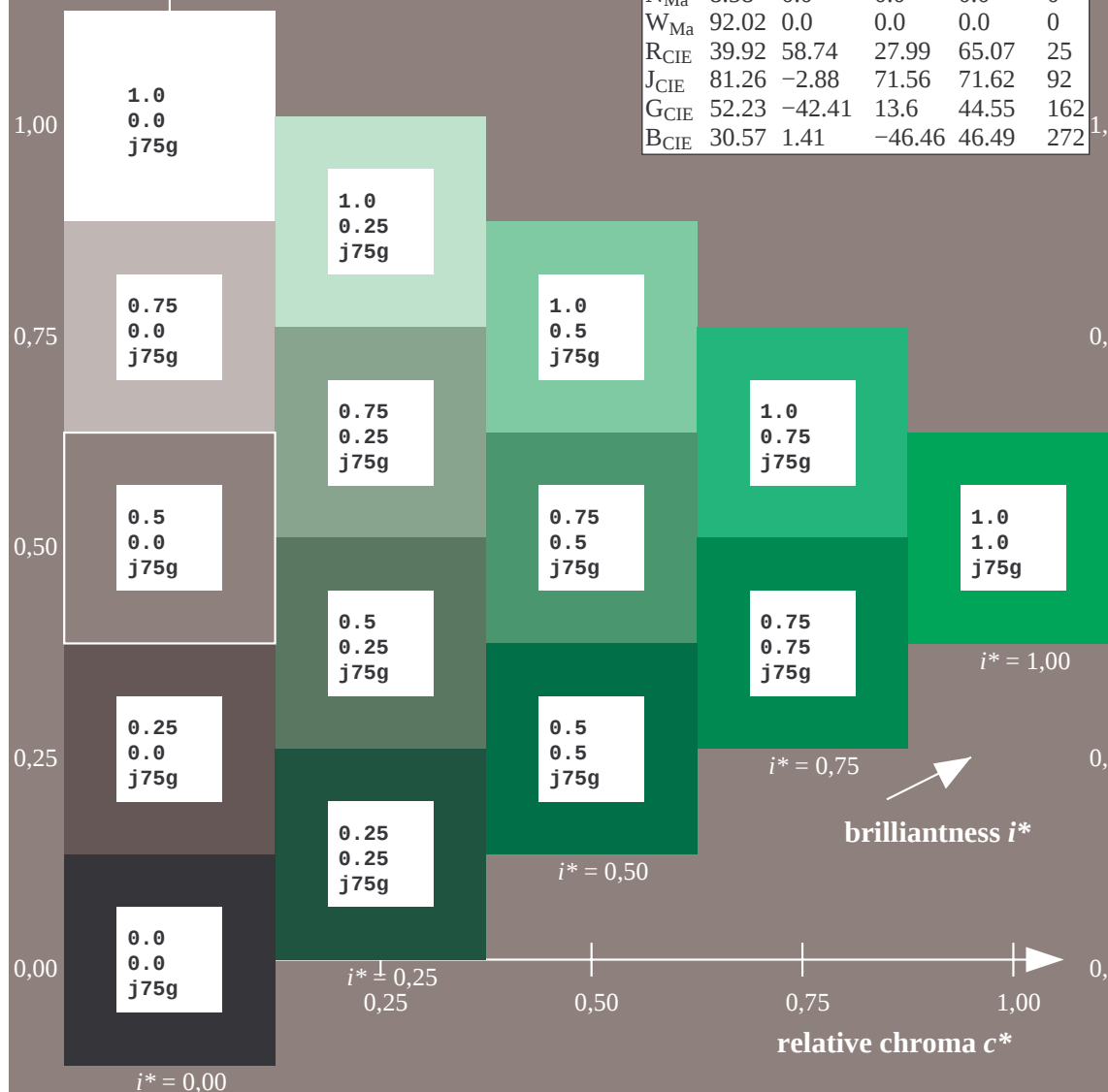
**lab\*oly\*Ma: 0.0 1.0 0.07**

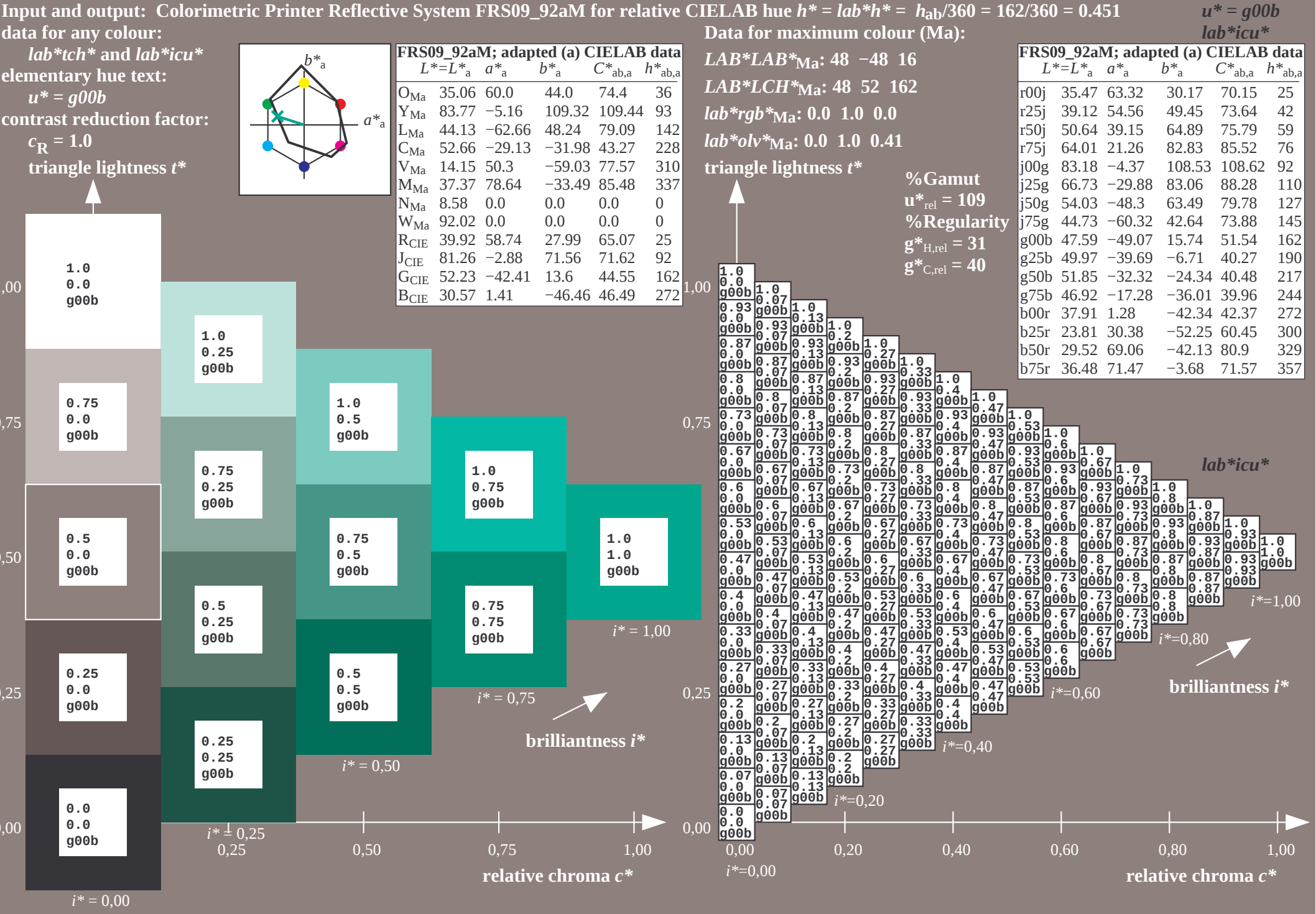
triangle lightness  $t^*$



| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |  |
|-------------------------------------|-------------|---------|---------|--------------|--------------|--|
|                                     | $L^*=L_a^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |  |





$$u^* = g25b$$

**Data for maximum colour (Ma):**

*lab\*icu\**

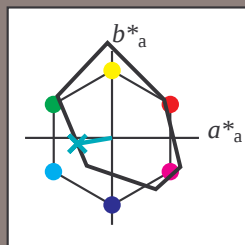
**LAB\*LAB\*Ma: 50 -39 -6**

*LAB\*LCH*\*<sub>Ma</sub>: 50 40 190

*lab\*rgb\*\_Ma: 0.0 1.0 0.5*

**lab\*olv\*Ma: 0.0 1.0 0.69**

triangle lightness  $t^*$



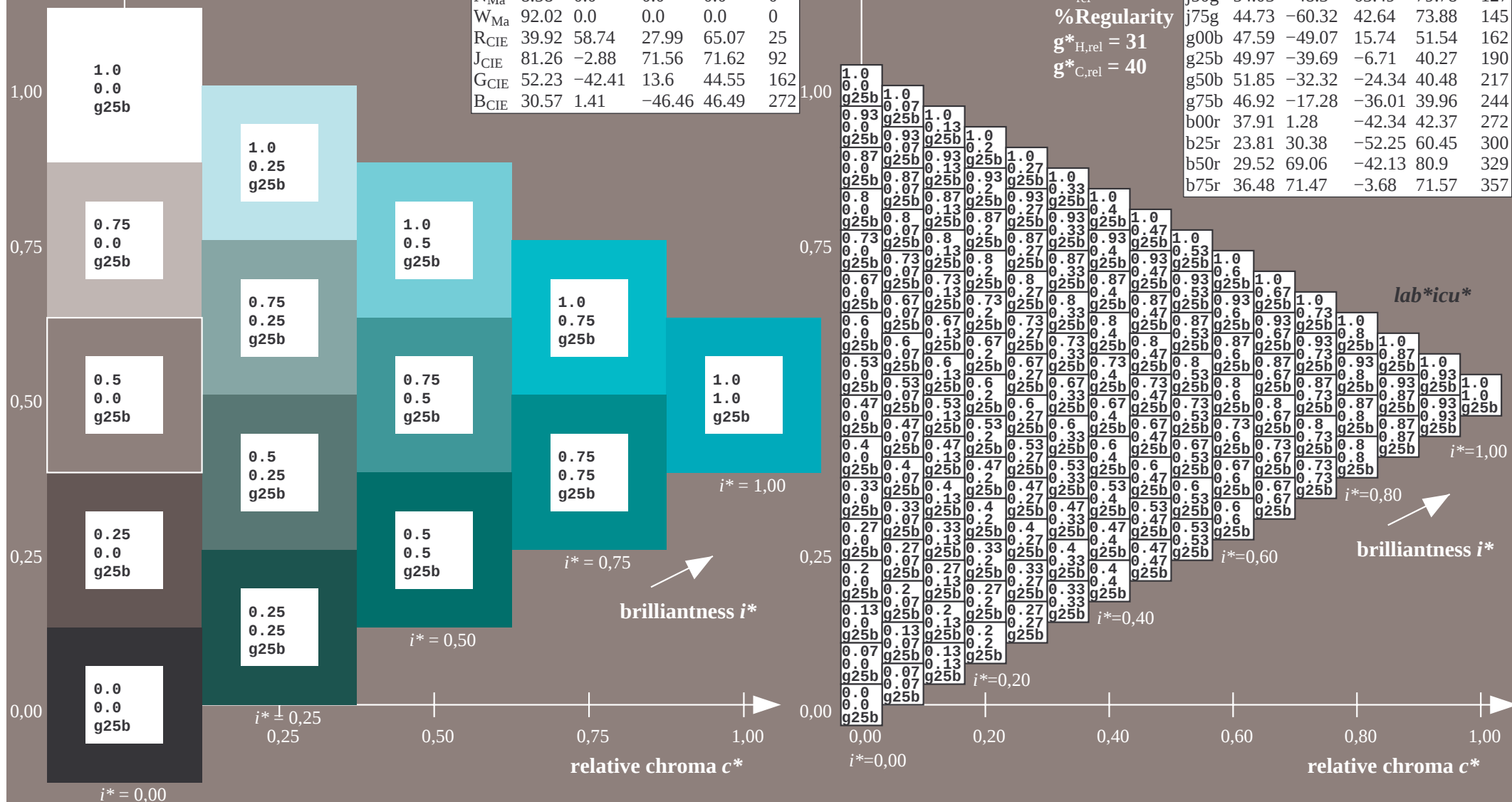
| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |
|-------------------------------------|---------------|---------|---------|--------------|--------------|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                     | 35.06         | 60.0    | 44.0    | 74.4         | 36           |
| Y <sub>Ma</sub>                     | 83.77         | -5.16   | 109.32  | 109.44       | 93           |
| L <sub>Ma</sub>                     | 44.13         | -62.66  | 48.24   | 79.09        | 142          |
| C <sub>Ma</sub>                     | 52.66         | -29.13  | -31.98  | 43.27        | 228          |
| V <sub>Ma</sub>                     | 14.15         | 50.3    | -59.03  | 77.57        | 310          |
| M <sub>Ma</sub>                     | 37.37         | 78.64   | -33.49  | 85.48        | 337          |
| N <sub>Ma</sub>                     | 8.58          | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                     | 92.02         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>                    | 39.92         | 58.74   | 27.99   | 65.07        | 25           |
| J <sub>CIE</sub>                    | 81.26         | -2.88   | 71.56   | 71.62        | 92           |
| G <sub>CIE</sub>                    | 52.23         | -42.41  | 13.6    | 44.55        | 162          |
| B <sub>CIE</sub>                    | 30.57         | 1.41    | -46.46  | 46.49        | 272          |

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |

## %Gamut

$$\mathbf{u}_{rel}^* = 109$$

### %Regularity

$$g^*_{\text{H,rel}} = 31$$
$$g^*_{C_{rel}} = 40$$


$$u^* = g50b$$

**Data for maximum colour (Ma):**

*lab\*icu\**

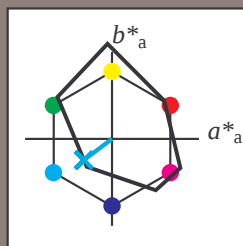
*LAB\*LAB*\*<sub>Ma</sub>: 52 -31 -23

**LAB\*LCH\*Ma: 52 40 217**

*lab\*rgb\*\_Ma: 0.0 1.0 1.0*

**lab\*olv\*Ma: 0.0 1.0 0.9**

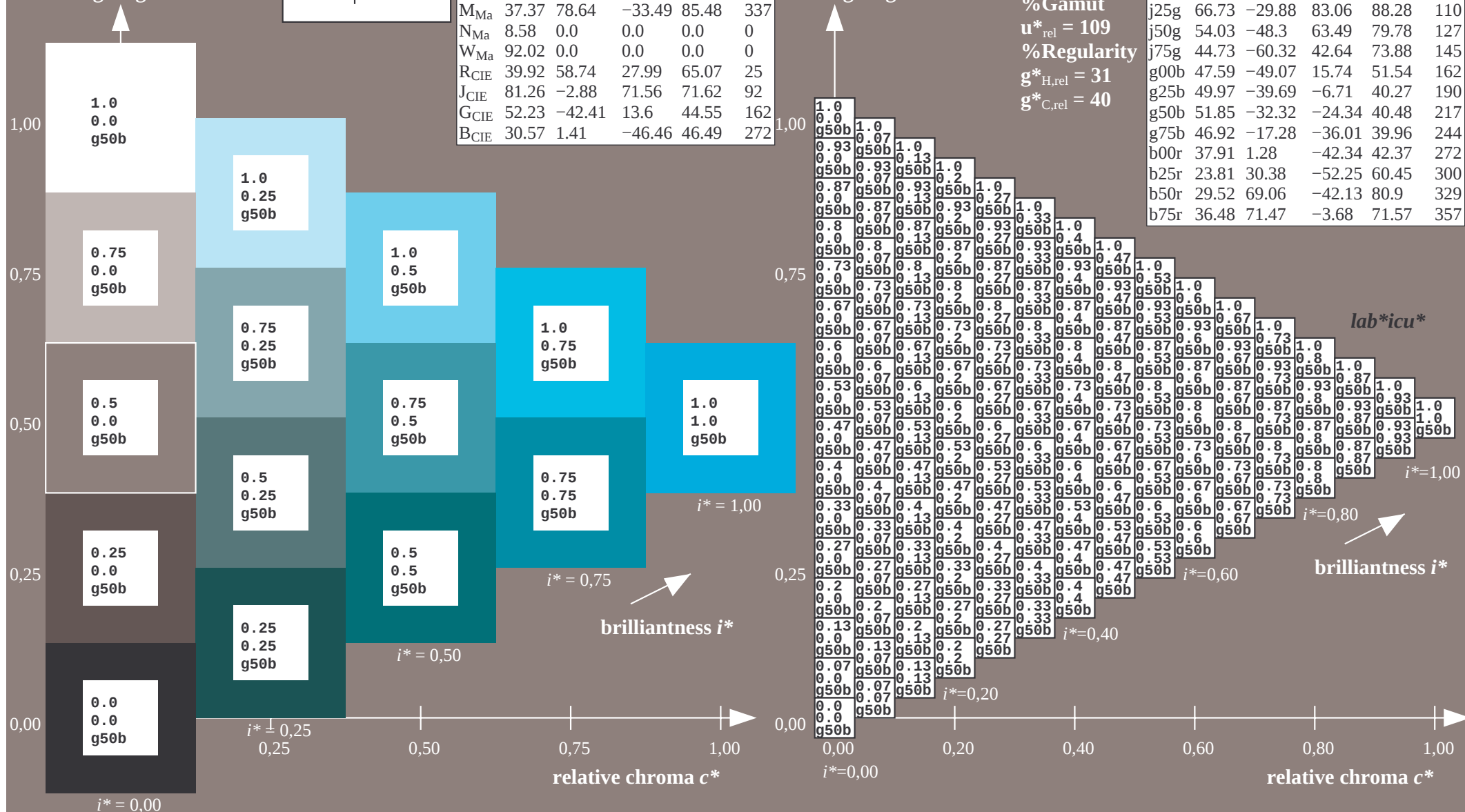
triangle lightness  $t^*$

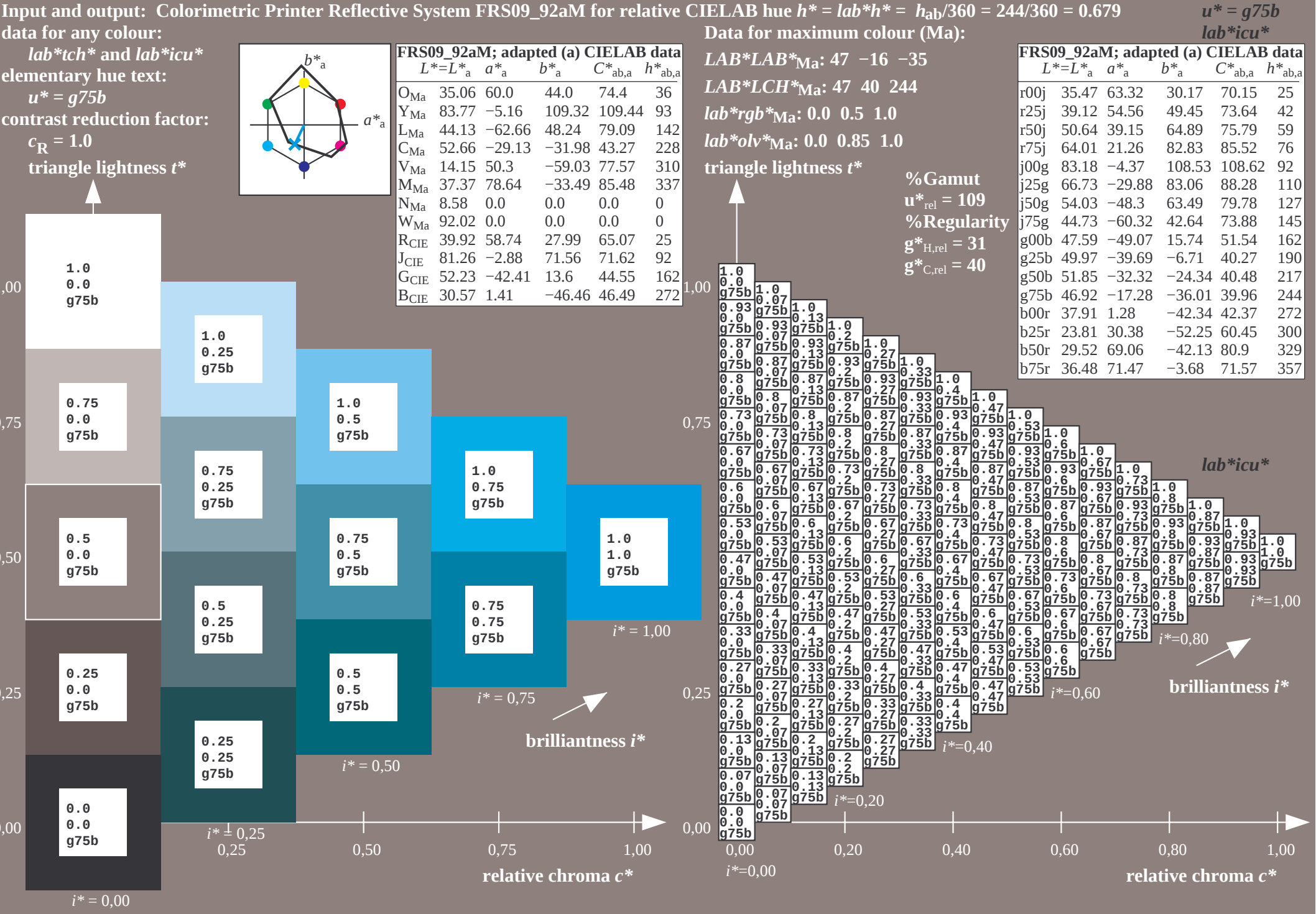


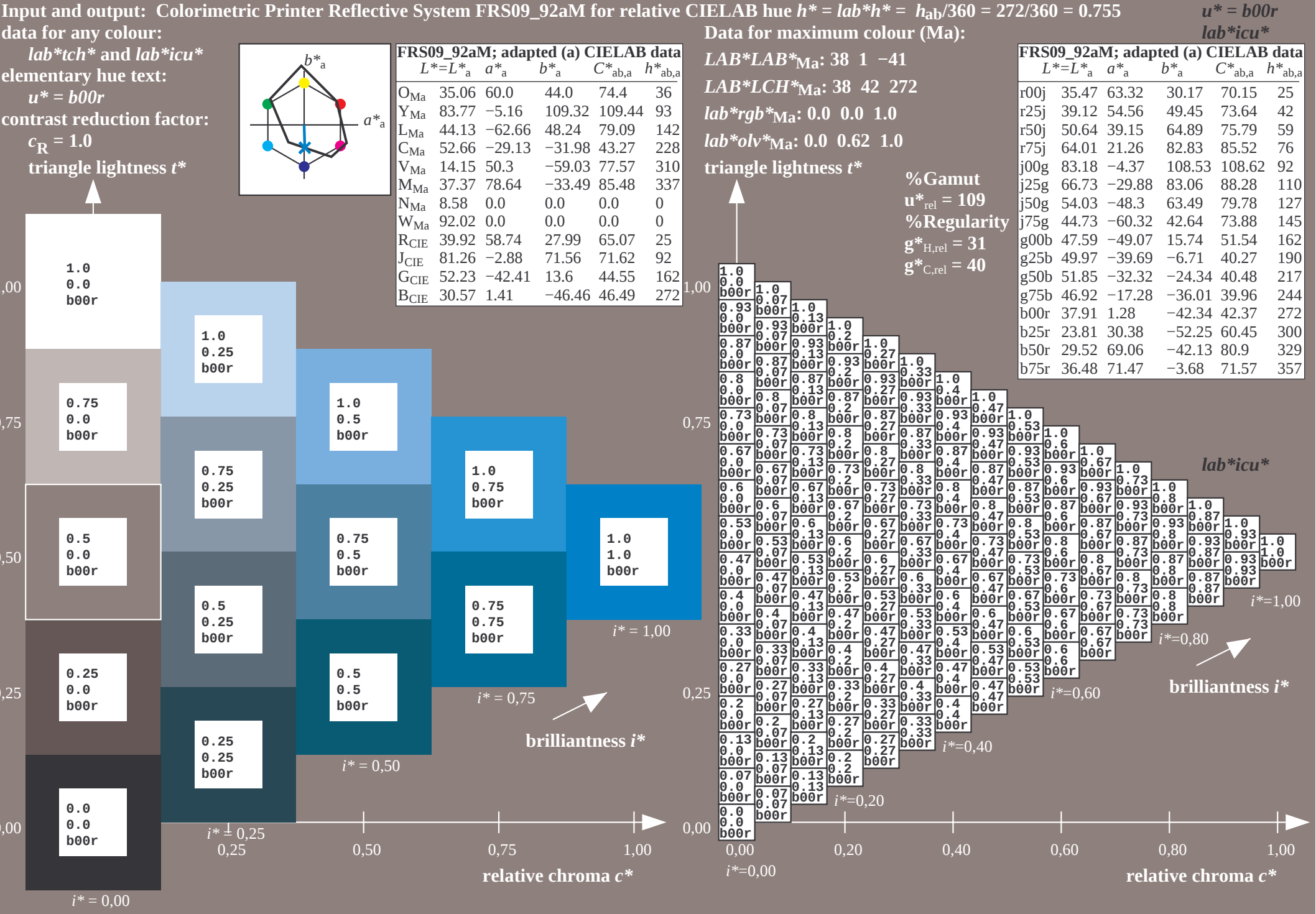
FRS09\_92aM; adapted (a) CIELAB data

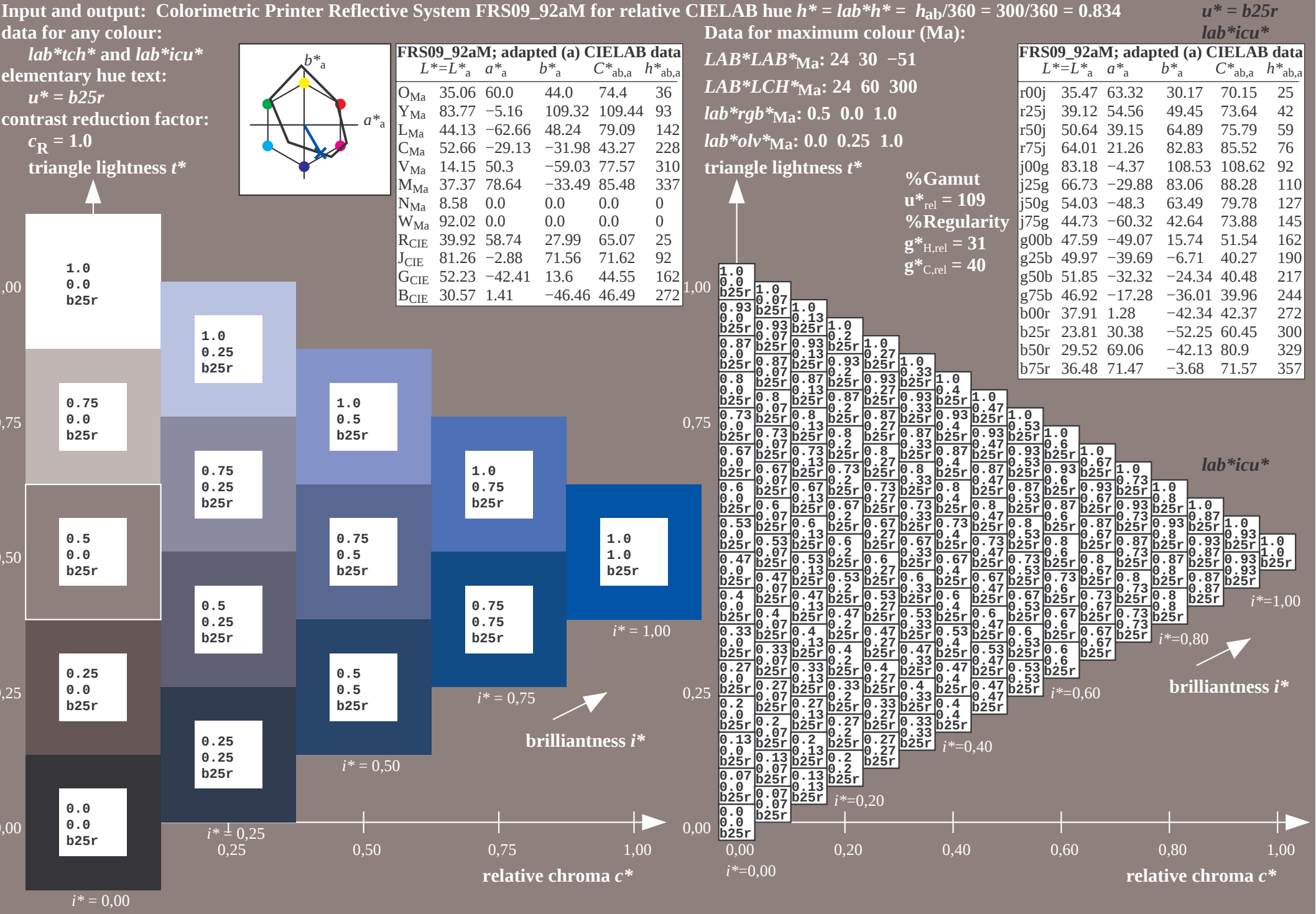
|                  | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------------------|------------------------|------------------|------------------|---------------------|---------------------|
| O <sub>Ma</sub>  | 35.06                  | 60.0             | 44.0             | 74.4                | 36                  |
| Y <sub>Ma</sub>  | 83.77                  | -5.16            | 109.32           | 109.44              | 93                  |
| L <sub>Ma</sub>  | 44.13                  | -62.66           | 48.24            | 79.09               | 142                 |
| C <sub>Ma</sub>  | 52.66                  | -29.13           | -31.98           | 43.27               | 228                 |
| V <sub>Ma</sub>  | 14.15                  | 50.3             | -59.03           | 77.57               | 310                 |
| M <sub>Ma</sub>  | 37.37                  | 78.64            | -33.49           | 85.48               | 337                 |
| N <sub>Ma</sub>  | 8.58                   | 0.0              | 0.0              | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 92.02                  | 0.0              | 0.0              | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92                  | 58.74            | 27.99            | 65.07               | 25                  |
| J <sub>CIE</sub> | 81.26                  | -2.88            | 71.56            | 71.62               | 92                  |
| G <sub>CIE</sub> | 52.23                  | -42.41           | 13.6             | 44.55               | 162                 |
| B <sub>CIE</sub> | 30.57                  | 1.41             | -46.46           | 46.49               | 272                 |

|      | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------|------------------------|------------------|------------------|---------------------|---------------------|
| r00j | 35.47                  | 63.32            | 30.17            | 70.15               | 25                  |
| r25j | 39.12                  | 54.56            | 49.45            | 73.64               | 42                  |
| r50j | 50.64                  | 39.15            | 64.89            | 75.79               | 59                  |
| r75j | 64.01                  | 21.26            | 82.83            | 85.52               | 76                  |
| j00g | 83.18                  | -4.37            | 108.53           | 108.62              | 92                  |
| j25g | 66.73                  | -29.88           | 83.06            | 88.28               | 110                 |
| j50g | 54.03                  | -48.3            | 63.49            | 79.78               | 127                 |
| j75g | 44.73                  | -60.32           | 42.64            | 73.88               | 145                 |
| g00b | 47.59                  | -49.07           | 15.74            | 51.54               | 162                 |
| g25b | 49.97                  | -39.69           | -6.71            | 40.27               | 190                 |
| g50b | 51.85                  | -32.32           | -24.34           | 40.48               | 217                 |
| g75b | 46.92                  | -17.28           | -36.01           | 39.96               | 244                 |
| b00r | 37.91                  | 1.28             | -42.34           | 42.37               | 272                 |
| b25r | 23.81                  | 30.38            | -52.25           | 60.45               | 300                 |
| b50r | 29.52                  | 69.06            | -42.13           | 80.9                | 329                 |
| b75r | 36.48                  | 71.47            | -3.68            | 71.57               | 357                 |









$$u^* = b50r$$

**Data for maximum colour (Ma):**

*lab\*icu\**

**LAB\*LAB\*Ma: 30 69 -41**

**LAB\*LCH\*Ma: 30 81 329**

***lab\*rqb\*\_Ma: 1.0 0.0 1.0***

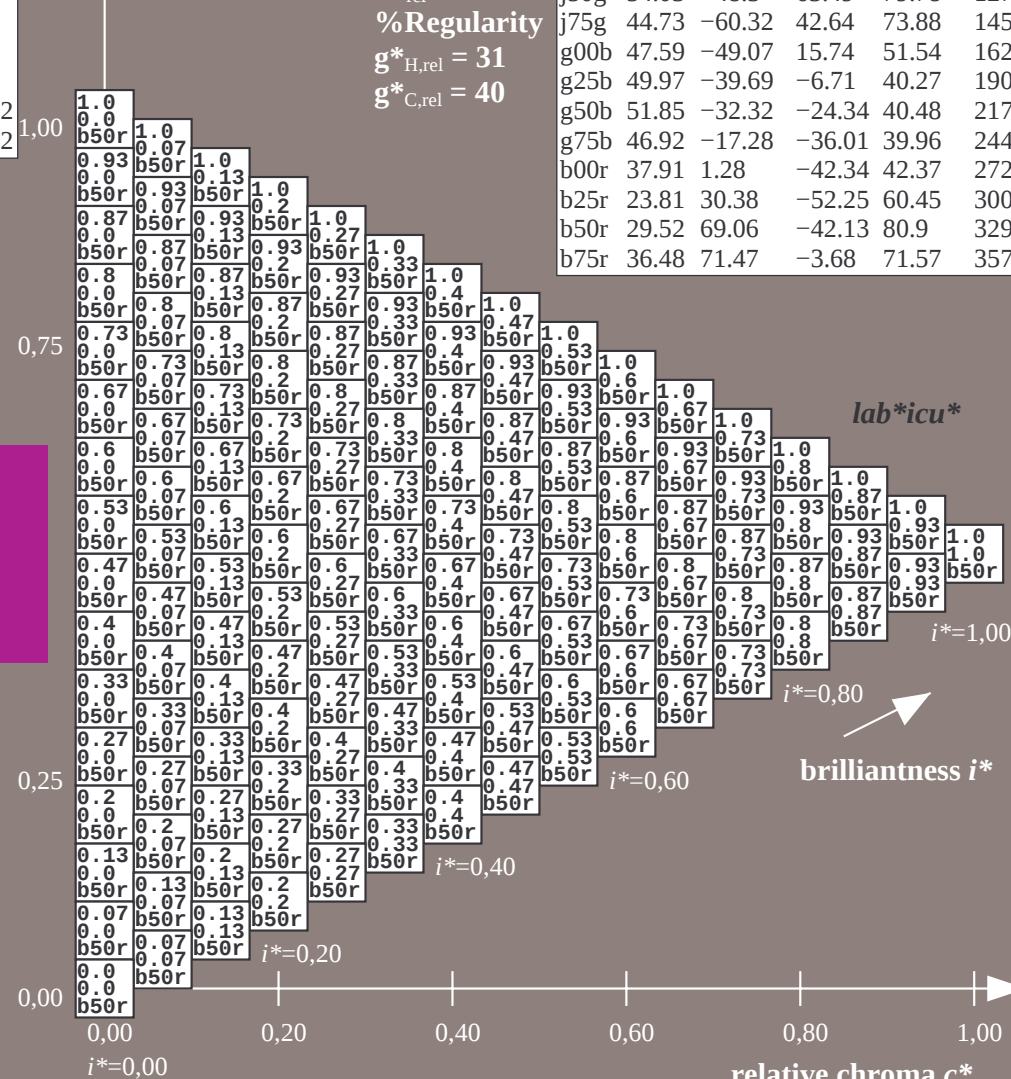
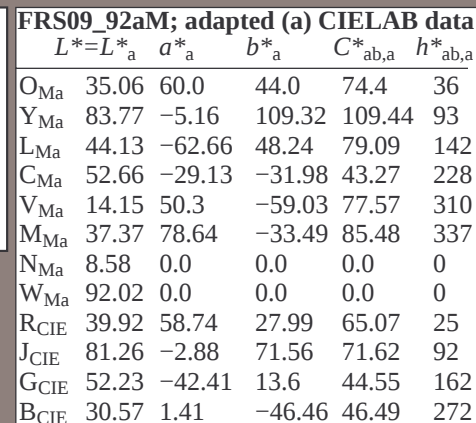
**lab\*olv\*Ma: 0.66 0.0 1.0**

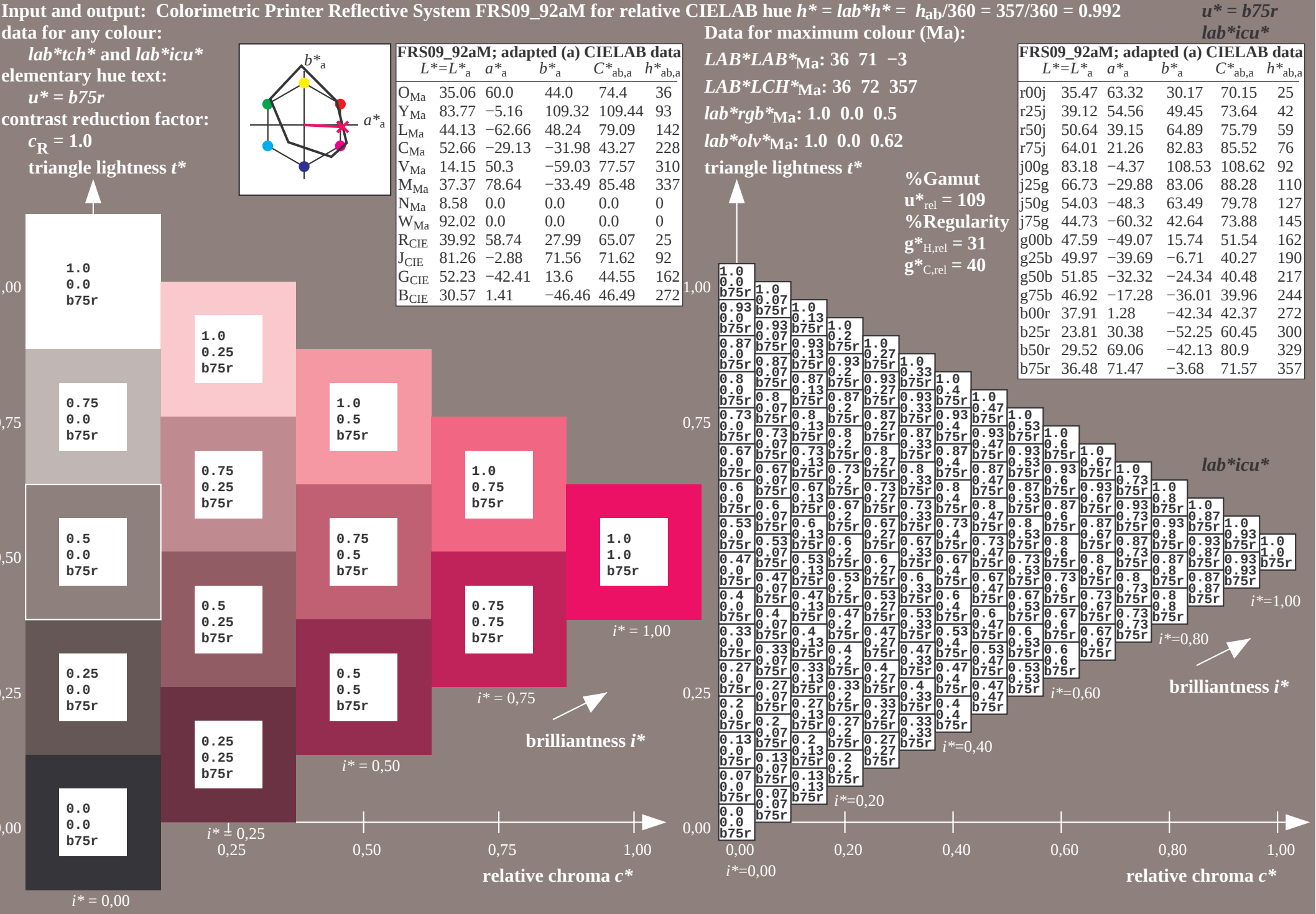
triangle lightness  $t^*$

## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

## %Regularity

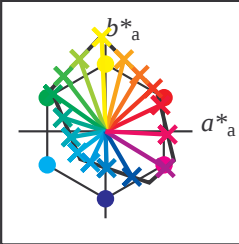
$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$




|    | A            | B            | C              | D            | E            | F            | G            | H            | I           | J            | K            | L            | M            | N            | O            | P            | Q            | R            | S            | T            | U            | V            | W            | X            | Y            | Z            | a            | b           | c           | d           | e           | f           | g           | h           | i           | j           | k           | lab*icu*    |
|----|--------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 01 | 0.0<br>b10r  | 0.13<br>j70g | 0.25<br>j70g   | 0.38<br>j70g | 0.5<br>j70g  | 0.63<br>j70g | 0.75<br>j70g | 0.88<br>j70g | 1.0<br>j70g | 0.13<br>r15j | 0.13<br>j00g | 0.25<br>j29g | 0.38<br>j42g | 0.5<br>j49g  | 0.63<br>j53g | 0.75<br>j56g | 0.88<br>j58g | 1.0<br>j60g  | 0.25<br>r15j | 0.25<br>r66j | 0.25<br>j00g | 0.38<br>j18g | 0.5<br>j29g  | 0.63<br>j37g | 0.75<br>j42g | 0.88<br>j46g | 1.0<br>j49g  | 1.0<br>b10r | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |
| 02 | 0.13<br>b33r | 0.12<br>g59b | 0.25<br>g06b   | 0.38<br>j92g | 0.5<br>j85g  | 0.63<br>j61g | 0.75<br>j79g | 0.88<br>j78g | 1.0<br>j77g | 0.13<br>b56r | 0.13<br>b10r | 0.25<br>j70g | 0.38<br>j70g | 0.5<br>j70g  | 0.63<br>j70g | 0.75<br>j70g | 0.88<br>j70g | 1.0<br>j70g  | 0.25<br>b20r | 0.25<br>r15j | 0.25<br>j00g | 0.38<br>j13g | 0.5<br>j29g  | 0.63<br>j42g | 0.75<br>j49g | 0.88<br>j58g | 1.0<br>j57g  | 1.0<br>b10r | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |             |
| 03 | 0.25<br>b33r | 0.25<br>b09r | 0.25<br>g59b   | 0.38<br>g22b | 0.5<br>g06b  | 0.63<br>j98g | 0.75<br>j92g | 0.88<br>j88g | 1.0<br>j85g | 0.13<br>b45r | 0.13<br>b33r | 0.25<br>g59b | 0.38<br>g06b | 0.5<br>j92g  | 0.63<br>j85g | 0.75<br>j81g | 0.88<br>j78g | 1.0<br>j78g  | 0.25<br>b56r | 0.25<br>b56r | 0.25<br>b10r | 0.38<br>j70g | 0.5<br>j70g  | 0.63<br>j70g | 0.75<br>j70g | 0.88<br>j70g | 1.0<br>j70g  | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |             |
| 04 | 0.38<br>b37r | 0.38<br>b20r | 0.38<br>g44b   | 0.5<br>g59b  | 0.63<br>g32b | 0.75<br>g15b | 0.88<br>g06b | 1.0<br>g01b  | 1.0<br>j95g | 0.13<br>b41r | 0.13<br>b33r | 0.25<br>b09r | 0.38<br>g59b | 0.5<br>g22b  | 0.63<br>g06b | 0.75<br>j98g | 0.88<br>j88g | 1.0<br>j88g  | 0.25<br>b47r | 0.25<br>b45r | 0.25<br>b33r | 0.38<br>g59b | 0.5<br>g59b  | 0.63<br>j92g | 0.75<br>j85g | 0.88<br>j81g | 1.0<br>j79g  | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |             |
| 05 | 0.5<br>b33r  | 0.5<br>b24r  | 0.5<br>b09r    | 0.5<br>g85b  | 0.5<br>g59b  | 0.63<br>g37b | 0.75<br>g22b | 0.88<br>q13b | 1.0<br>g06b | 0.5<br>b39r  | 0.5<br>b38r  | 0.38<br>b30r | 0.38<br>g38b | 0.5<br>g38b  | 0.63<br>g59b | 0.75<br>g32b | 0.88<br>q15b | 1.0<br>g06b  | 0.5<br>b45r  | 0.5<br>b41r  | 0.25<br>b33r | 0.25<br>b09r | 0.38<br>g59b | 0.5<br>g22b  | 0.63<br>g06b | 0.75<br>j98g | 1.0<br>j92g  | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |             |
| 06 | 0.63<br>b33r | 0.63<br>b26r | 0.63<br>b16r   | 0.63<br>b01r | 0.63<br>g79b | 0.63<br>g59b | 0.75<br>g41b | 0.88<br>g27b | 1.0<br>g18b | 0.63<br>b38r | 0.63<br>b33r | 0.63<br>b24r | 0.63<br>b09r | 0.63<br>g85b | 0.63<br>g59b | 0.75<br>g37b | 0.88<br>g22b | 1.0<br>g13b  | 0.63<br>b43r | 0.63<br>b39r | 0.63<br>b33r | 0.63<br>b20r | 0.63<br>g94b | 0.63<br>g59b | 0.75<br>g32b | 0.88<br>q15b | 1.0<br>g06b  | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |             |
| 07 | 0.75<br>b37r | 0.75<br>b28r | 0.75<br>b20r   | 0.75<br>b09r | 0.75<br>g94b | 0.75<br>g76b | 0.75<br>g59b | 0.88<br>g44b | 1.0<br>g32b | 0.75<br>b37r | 0.75<br>b33r | 0.75<br>b26r | 0.75<br>b16r | 0.75<br>b01r | 0.75<br>g79b | 0.75<br>g59b | 0.88<br>g41b | 1.0<br>g27b  | 0.63<br>b41r | 0.63<br>b38r | 0.63<br>b33r | 0.63<br>b24r | 0.63<br>b09r | 0.63<br>g85b | 0.63<br>g59b | 0.75<br>g37b | 0.88<br>g22b | 1.0<br>g13b | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |
| 08 | 0.88<br>b33r | 0.88<br>b29r | 0.88<br>b23r   | 0.88<br>b14r | 0.88<br>b04r | 0.88<br>g89b | 0.88<br>g73b | 0.88<br>g59b | 1.0<br>g46b | 0.88<br>b37r | 0.88<br>b33r | 0.88<br>b28r | 0.88<br>b20r | 0.88<br>b09r | 0.88<br>g94b | 0.88<br>g76b | 0.88<br>g59b | 1.0<br>g44b  | 0.88<br>b40r | 0.88<br>b37r | 0.88<br>b33r | 0.88<br>b26r | 0.88<br>b16r | 0.88<br>b01r | 0.88<br>g79b | 0.88<br>g59b | 1.0<br>g41b  | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 1.0<br>r15j | 0.0<br>b10r | 0.0<br>b10r | 0.0<br>b10r |             |
| 09 | 1.0<br>b33r  | 1.0<br>b29r  | 1.0<br>b24r    | 1.0<br>b18r  | 1.0<br>b09r  | 1.0<br>g63b  | 1.0<br>g85b  | 1.0<br>g71b  | 1.0<br>g59b | 1.0<br>b36r  | 1.0<br>b33r  | 1.0<br>b29r  | 1.0<br>b23r  | 1.0<br>b14r  | 1.0<br>b04r  | 1.0<br>g89g  | 1.0<br>g73b  | 1.0<br>g59b  | 1.0<br>b39r  | 1.0<br>b37r  | 1.0<br>b33r  | 1.0<br>b28r  | 1.0<br>b20r  | 1.0<br>b09r  | 1.0<br>g94b  | 1.0<br>g76b  | 1.0<br>g59b  | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>g59b | 1.0<br>b10r | 1.0<br>b10r | 1.0<br>b10r |             |
| 10 | 0.38<br>r15j | 0.38<br>r37j | 0.38<br>r79j   | 0.38<br>j00g | 0.5<br>j32g  | 0.63<br>j29g | 0.75<br>j35g | 0.88<br>j39g | 1.0<br>r15j | 0.63<br>r45j | 0.5<br>r02j  | 0.5<br>r05j  | 0.5<br>r05j  | 0.5<br>r05j  | 0.5<br>r05j  | 0.63<br>j10g | 0.75<br>j18g | 0.88<br>j24g | 1.0<br>j29g  | 0.62<br>r15j | 0.62<br>r37j | 0.62<br>r57j | 0.62<br>r74j | 0.62<br>r88j | 0.62<br>j00g | 0.75<br>j15g | 0.88<br>j21g | 1.0<br>b10r | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>b10r | 1.0<br>b10r |
| 11 | 0.38<br>b90r | 0.38<br>r15j | 0.38<br>r66j   | 0.38<br>j00g | 0.5<br>j18g  | 0.63<br>j29g | 0.75<br>j37g | 0.88<br>j42g | 1.0<br>j46g | 0.5<br>b94r  | 0.5<br>r15j  | 0.5<br>r50j  | 0.5<br>r79j  | 0.5<br>j00g  | 0.5<br>j13g  | 0.63<br>j22g | 0.75<br>j35g | 0.88<br>j39g | 1.0<br>b97r  | 0.63<br>r15j | 0.63<br>r42j | 0.63<br>r66j | 0.63<br>r85j | 0.63<br>j00g | 0.63<br>j18g | 0.75<br>j24g | 1.0<br>b33r  | 1.0<br>b10r | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>b10r | 1.0<br>b10r |             |
| 12 | 0.38<br>b71r | 0.38<br>b80r | 0.38<br>r15j   | 0.38<br>j00g | 0.5<br>j29g  | 0.63<br>j42g | 0.75<br>j49g | 0.88<br>j53g | 1.0<br>j56g | 0.5<br>b80r  | 0.5<br>b90r  | 0.5<br>r15j  | 0.5<br>r66j  | 0.5<br>j00g  | 0.5<br>j18g  | 0.63<br>j29g | 0.75<br>j37g | 0.88<br>j42g | 1.0<br>b66r  | 0.63<br>b94r | 0.63<br>r15j | 0.63<br>r50j | 0.63<br>r79j | 0.63<br>j00g | 0.63<br>j13g | 0.75<br>j22g | 1.0<br>b33r  | 1.0<br>b33r | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>b10r | 1.0<br>b10r |             |
| 13 | 0.5<br>b56r  | 0.5<br>b56r  | 0.5<br>b56r    | 0.5<br>b10r  | 0.5<br>j70g  | 0.63<br>j70g | 0.75<br>j70g | 0.88<br>j70g | 1.0<br>j70g | 0.5<br>b67r  | 0.5<br>b71r  | 0.5<br>b80r  | 0.5<br>r15j  | 0.5<br>j00g  | 0.5<br>j13g  | 0.63<br>j29g | 0.75<br>j42g | 0.88<br>j49g | 1.0<br>j53g  | 0.63<br>b75r | 0.63<br>b80r | 0.63<br>b90r | 0.63<br>r15j | 0.63<br>r66j | 0.63<br>j00g | 0.63<br>j18g | 0.75<br>j29g | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>b10r | 1.0<br>b10r |             |
| 14 | 0.5<br>b51r  | 0.5<br>b49r  | 0.5<br>b45r    | 0.5<br>b33r  | 0.5<br>g59b  | 0.63<br>g06b | 0.75<br>j92g | 0.88<br>j85g | 1.0<br>j81g | 0.5<br>b56r  | 0.5<br>b56r  | 0.5<br>b56r  | 0.5<br>b56r  | 0.5<br>b10r  | 0.5<br>j70g  | 0.63<br>j70g | 0.75<br>j70g | 0.88<br>j70g | 1.0<br>j70g  | 0.63<br>b65r | 0.63<br>b67r | 0.63<br>b71r | 0.63<br>b80r | 0.63<br>r15j | 0.63<br>j00g | 0.63<br>j29g | 0.75<br>j42g | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>j00g | 1.0<br>b10r | 1.0<br>b10r |             |
| 15 | 0.63<br>b48r | 0.63<br>b45r | 0.63<br>b41r   | 0.63<br>b33r | 0.63<br>b09r | 0.63<br>g59b | 0.75<br>g22b | 0.88<br>g06b | 1.0<br>j98g | 0.63<br>b52r | 0.63<br>b51r | 0.63<br>b49r | 0.63<br>b45r | 0.63<br>b33r | 0.63<br>g59b | 0.75<br>g06b | 0.88<br>j92g | 1.0<br>j85g  | 0.63<br>b65r | 0.63<br>b56r | 0.63<br>b56r | 0.63<br>b56r | 0.63<br>b56r | 0.63<br>b10r | 0.63<br>j70g | 0.75<br>j70g | 1.0<br>b33r  | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b10r | 1.0<br>b10r |             |
| 16 | 0.75<br>b45r | 0.75<br>b63r | 0.75<br>b39r   | 0.75<br>b33r | 0.75<br>b20r | 0.75<br>g94b | 0.75<br>g59b | 0.88<br>g32b | 1.0<br>g15b | 0.75<br>b49r | 0.75<br>b63r | 0.75<br>b05r | 0.75<br>b45r | 0.75<br>b33r | 0.75<br>b09r | 0.75<br>g59b | 0.88<br>g22b | 1.0<br>g07b  | 0.75<br>b53r | 0.75<br>b52r | 0.75<br>b51r | 0.75<br>b49r | 0.75<br>b45r | 0.75<br>b33r | 0.75<br>g59b | 0.88<br>j92g | 1.0<br>b33r  | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b10r | 1.0<br>b10r |             |
| 17 | 0.88<br>b44r | 0.88<br>b75r | 0.88<br>b63r   | 0.88<br>b56r | 0.88<br>b56r | 0.88<br>b56r | 0.88<br>b56r | 0.88<br>b56r | 1.0<br>g37b | 0.88<br>b47r | 0.88<br>b63r | 0.88<br>b75r | 0.88<br>b88r | 0.88<br>b88r | 0.88<br>b88r | 0.88<br>b88r | 0.88<br>b88r | 1.0<br>b88r  | 0.88<br>b50r | 0.88<br>b49r | 0.88<br>b45r | 0.88<br>b41r | 0.88<br>b33r | 0.88<br>b09r | 0.88<br>g59b | 0.88<br>g32b | 1.0<br>b59r  | 1.0<br>b48r | 1.0<br>b45r | 1.0<br>b41r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b10r | 1.0<br>b10r |
| 18 | 1.0<br>b42r  | 1.0<br>b40r  | 1.0<br>b37r    | 1.0<br>b33r  | 1.0<br>b26r  | 1.0<br>b16r  | 1.0<br>b01r  | 1.0<br>g79b  | 1.0<br>g62b | 1.0<br>b45r  | 1.0<br>b44r  | 1.0<br>b41r  | 1.0<br>b38r  | 1.0<br>b33r  | 1.0<br>b24r  | 1.0<br>b09r  | 1.0<br>g85b  | 1.0<br>g59b  | 1.0<br>b48r  | 1.0<br>b47r  | 1.0<br>b45r  | 1.0<br>b43r  | 1.0<br>b39r  | 1.0<br>b33r  | 1.0<br>b20r  | 1.0<br>g94b  | 1.0<br>g59b  | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b33r | 1.0<br>b10r | 1.0<br>b10r |
| 19 | 0.75<br>r15j | 0.75<br>r33j | 0.75<br>r50j   | 0.75<br>r66j | 0.75<br>r79j | 0.75<br>r90j | 0.75<br>j00g | 0.75<br>j07g | 1.0<br>j13g | 0.88<br>r15j | 0.88<br>r31j | 0.88<br>r46j | 0.88<br>r60j | 0.88<br>r72j | 0.88<br>r83j | 0.88<br>r92j | 0.88<br>j00g | 1.0<br>j06g  | 1.0<br>r15j  | 1.0<br>r29j  | 1.0<br>r42j  | 1.0<br>r54j  | 1.0<br>r66j  | 1.0<br>r76j  | 1.0<br>r85j  | 1.0<br>r93j  | 1.0<br>j00g  | 1.0<br>b10r | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>b10r | 1.0<br>b10r |             |
| 20 | 0.75<br>r01j | 0.75<br>r15j | 0.75<br>r37j   | 0.75<br>r57j | 0.75<br>r74j | 0.75<br>r88j | 0.75<br>j00g | 0.75<br>j08g | 1.0<br>j15g | 0.88<br>r03j | 0.88<br>r15j | 0.88<br>r33j | 0.88<br>r50j | 0.88<br>r66j | 0.88<br>r79j | 0.88<br>j00g | 1.0<br>j07g  | 0.88<br>r04j | 1.0<br>r01j  | 1.0<br>r15j  | 1.0<br>r31j  | 1.0<br>r46j  | 1.0<br>r60j  | 1.0<br>r72j  | 1.0<br>r83j  | 1.0<br>r92j  | 1.0<br>j00g  | 1.0<br>b56r | 1.0<br>b10r | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>b10r | 1.0<br>b10r |             |
| 21 | 0.75<br>b90r | 0.75<br>b63r | 0.75<br>b56r   | 0.75<br>b56r | 0.75<br>b56r | 0.75<br>b56r | 0.75<br>b56r | 0.75<br>b56r | 1.0<br>j70g | 0.88<br>b92r | 0.88<br>r01j | 0.88<br>r15j | 0.88<br>r37j | 0.88<br>r57j | 0.88<br>r74j | 0.88<br>j00g | 1.0<br>j08g  | 0.88<br>b94r | 0.88<br>r03j | 0.88<br>r15j | 0.88<br>r33j | 0.88<br>r50j | 0.88<br>r66j | 0.88<br>r79j | 0.88<br>j00g | 0.88<br>j05g | 1.0<br>b56r  | 1.0<br>b56r | 1.0<br>b10r | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>b10r | 1.0<br>b10r |             |
| 22 | 0.75<br>b80r | 0.75<br>b63r | 0.75<br>b56r   | 0.75<br>b56r | 0.75<br>b56r | 0.75<br>b56r | 0.75<br>b56r | 0.75<br>b56r | 1.0<br>j70g | 0.88<br>b87r | 0.88<br>b75r | 0.88<br>b63r | 0.88<br>b56r | 0.88<br>b56r | 0.88<br>b56r | 0.88<br>b56r | 0.88<br>b56r | 1.0<br>b87r  | 0.88<br>b92r | 0.88<br>r01j | 0.88<br>r15j | 0.88<br>r37j | 0.88<br>r57j | 0.88<br>r74j | 0.88<br>j00g | 0.88<br>j05g | 1.0<br>b56r  | 1.0<br>b56r | 1.0<br>b56r | 1.0<br>b10r | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>j70g | 1.0<br>b10r | 1.0<br>b10r |
| 23 | 0.75<br>b71r | 0.75<br>b75r | 0.75<br>b80r</ |              |              |              |              |              |             |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |             |             |             |             |             |             |             |             |             |             |

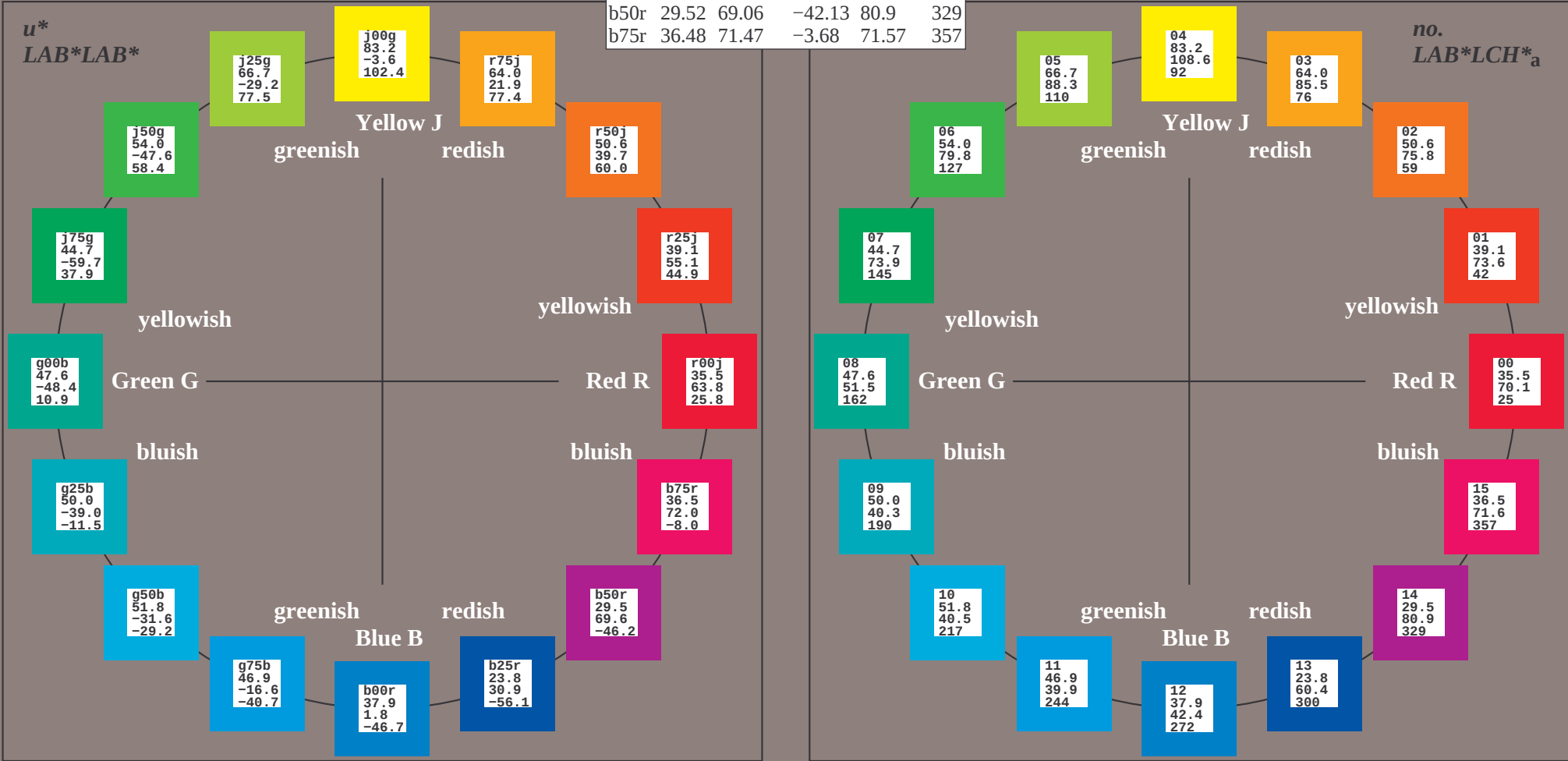
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\*tch\* and lab\*icu\*  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



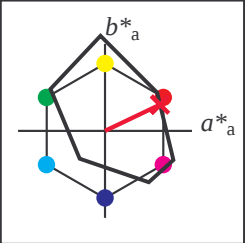
% Gamut  
 $u^*_{rel} = 109$   
% Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>         | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>         | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>         | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>         | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>         | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>         | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>         | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>         | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>       | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>       | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>       | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>       | 30.57     | 1.41   | -46.46 | 46.49      | 272        |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

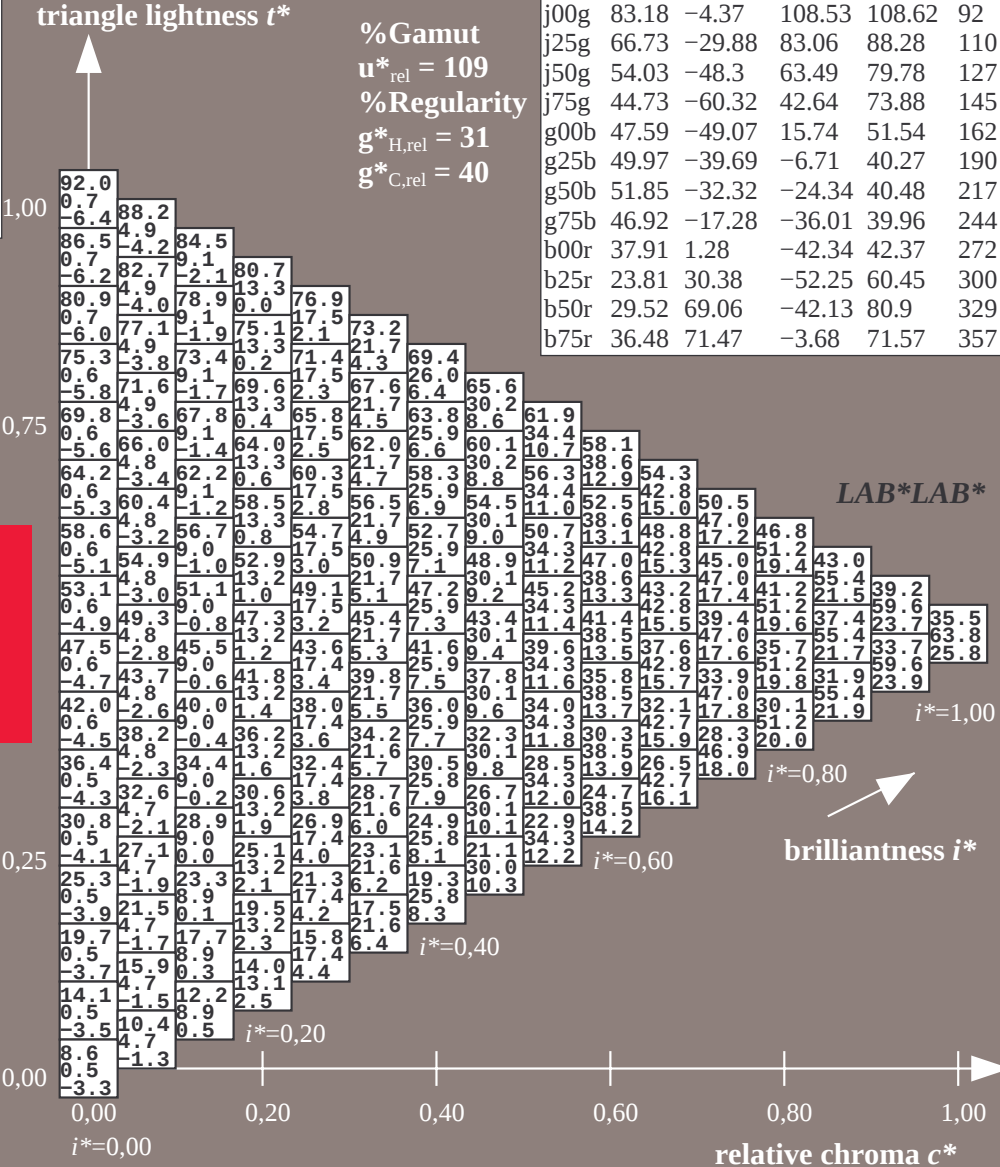
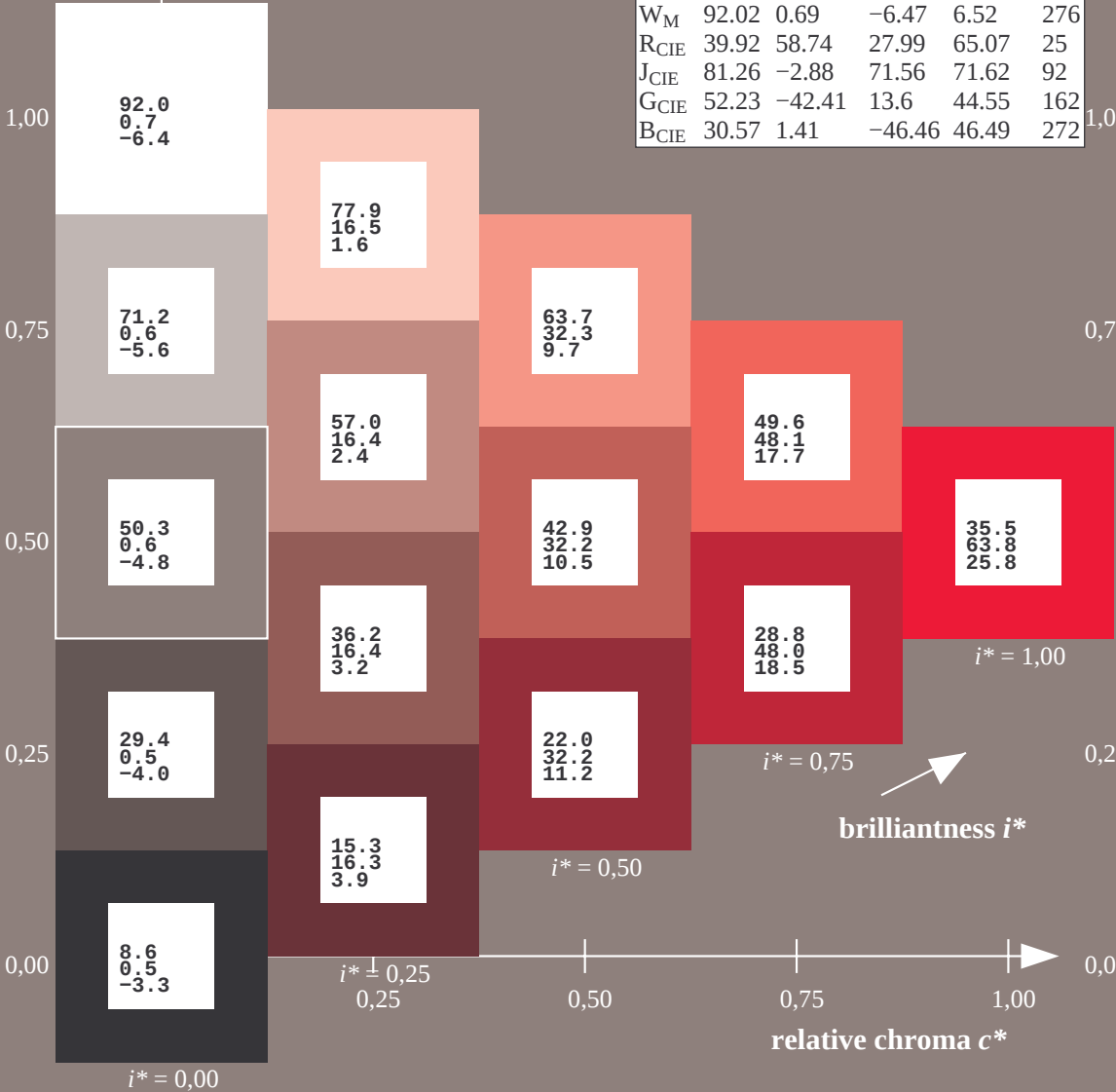


| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 35\ 63\ 30$   
 $LAB^*LCH^*_{Ma}: 35\ 70\ 25$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.0\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.0\ 0.18$

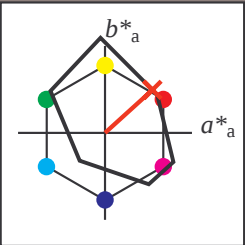
$u^* = r00j$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

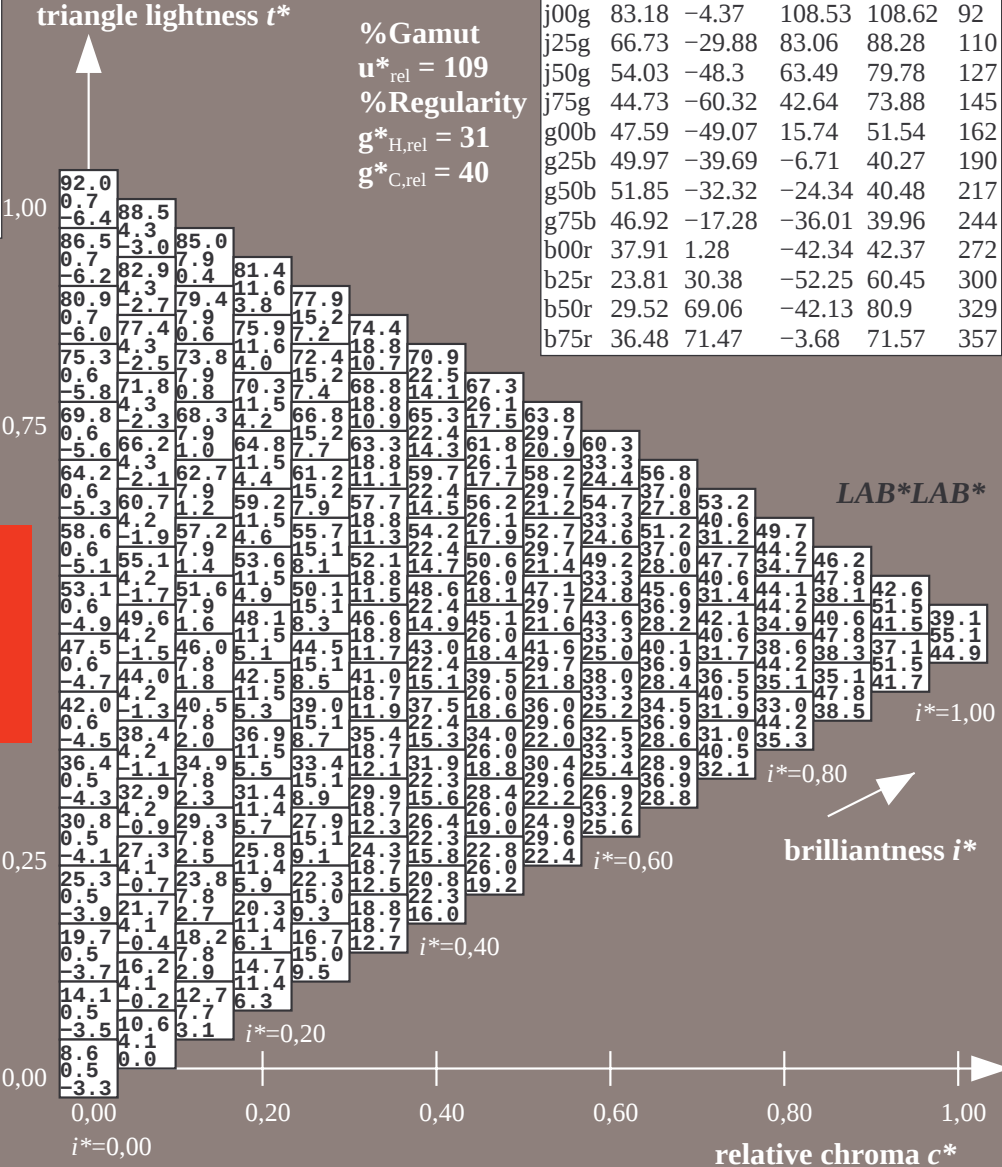
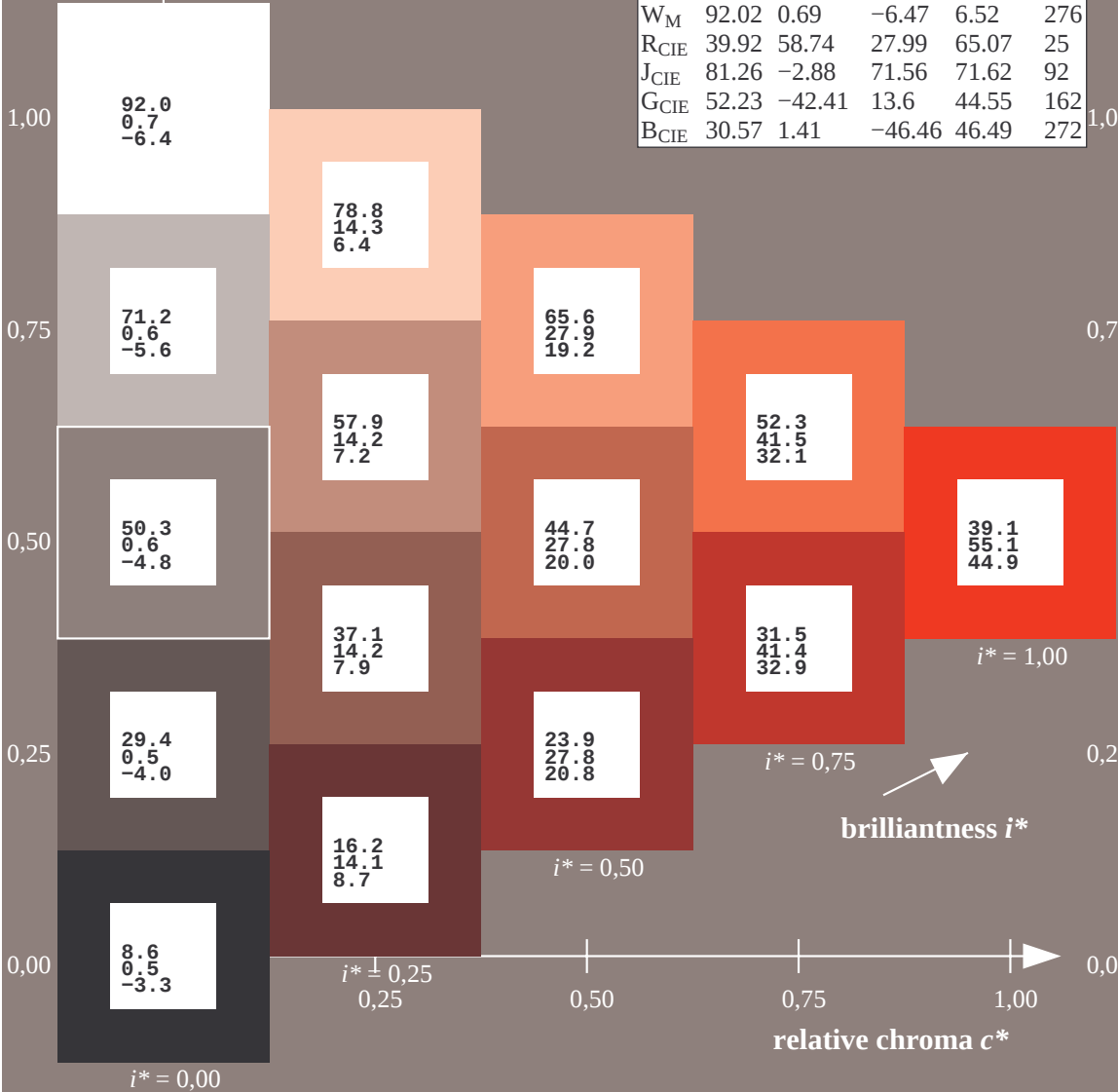


| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 39\ 55\ 49$   
 $LAB^*LCH^*_{Ma}: 39\ 74\ 42$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.25\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.08\ 0.0$

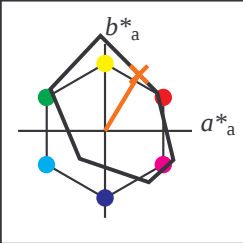
$u^* = r25j$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |           |         |         |              |              |
|-------------------------------------|-----------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47     | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12     | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64     | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01     | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18     | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73     | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03     | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73     | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59     | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97     | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85     | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92     | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91     | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81     | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52     | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48     | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

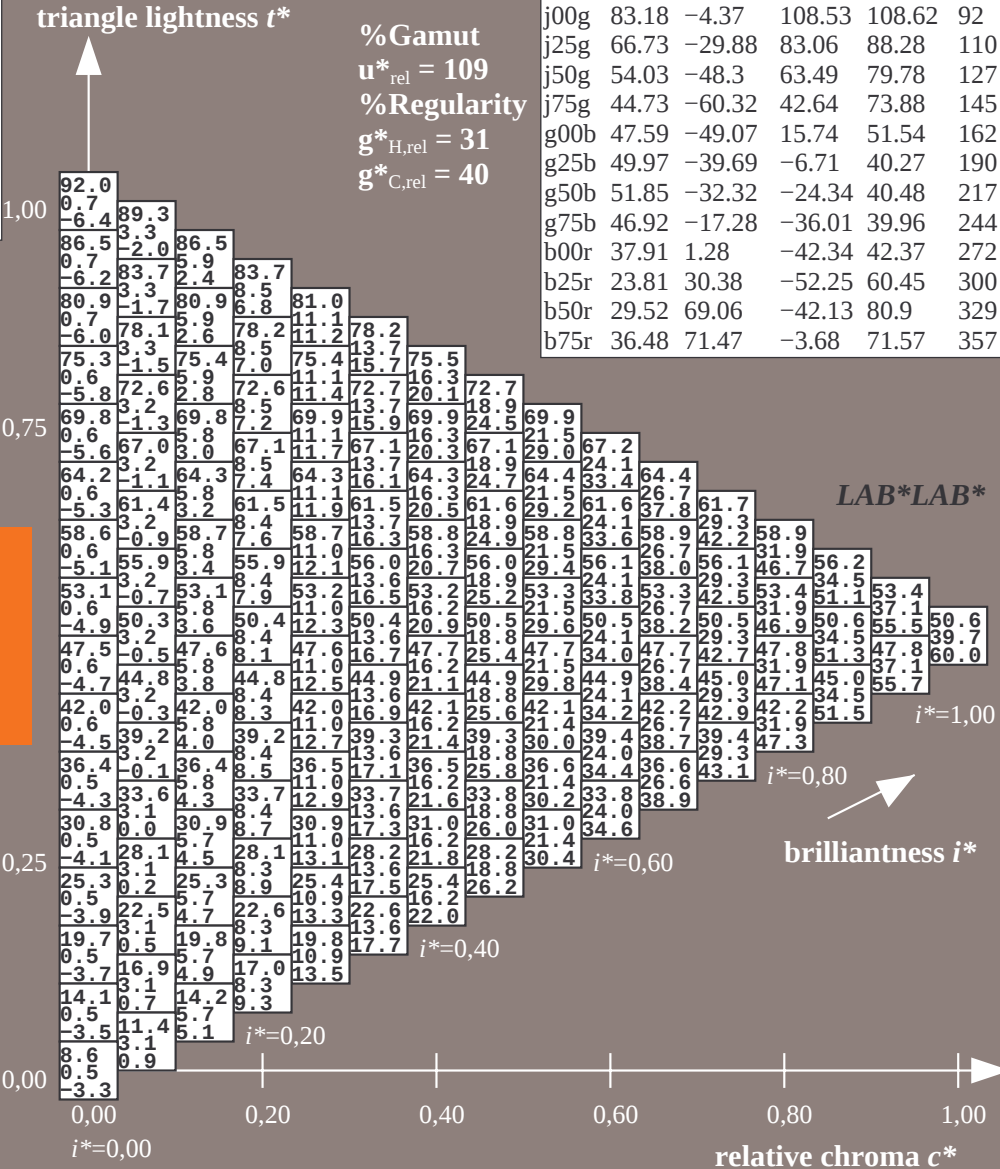
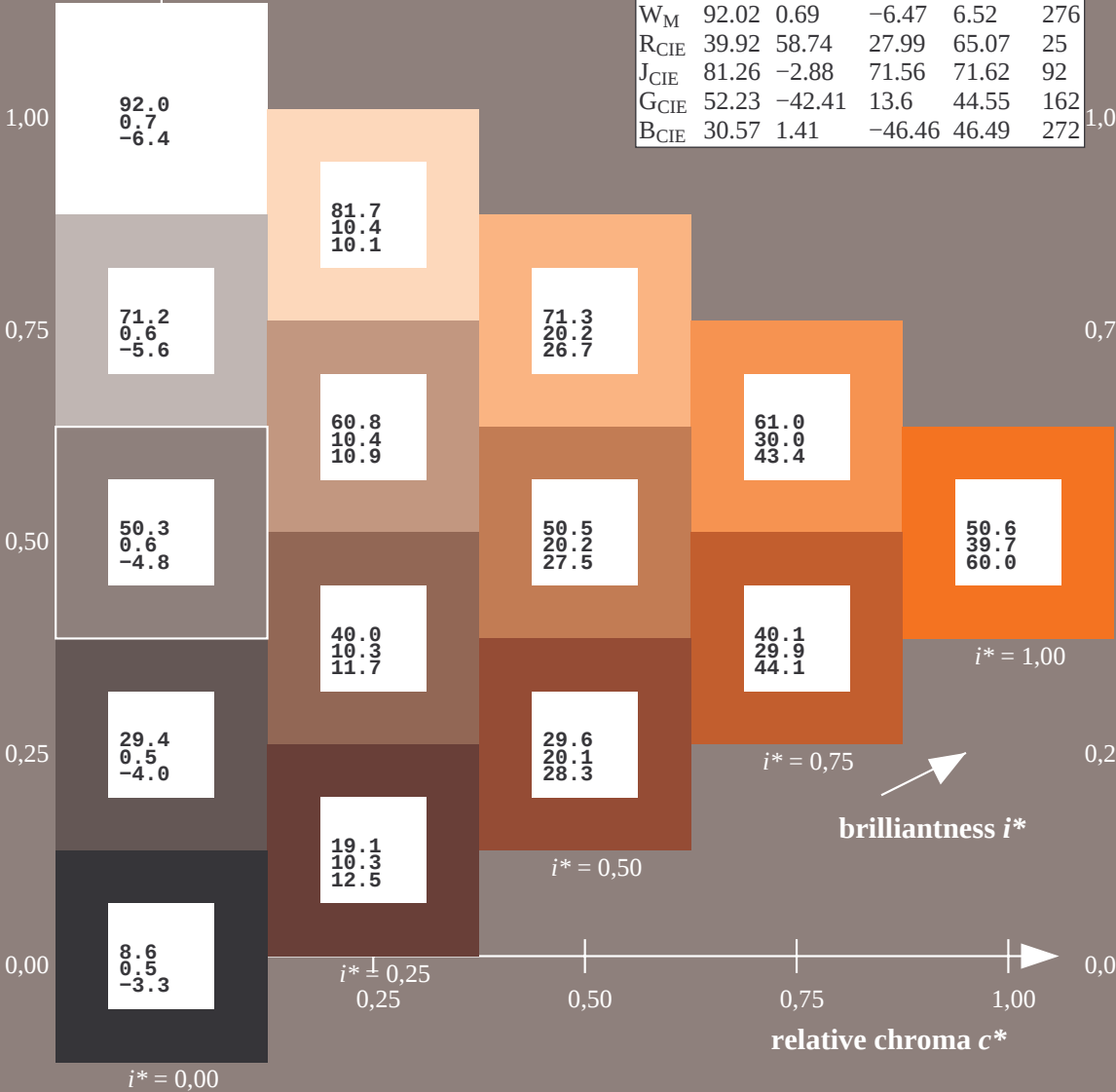


| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 51\ 39\ 65$   
 $LAB^*LCH^*_{Ma}: 51\ 76\ 59$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.5\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.32\ 0.0$

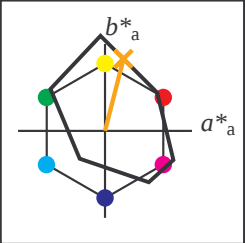
$u^* = r50j$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

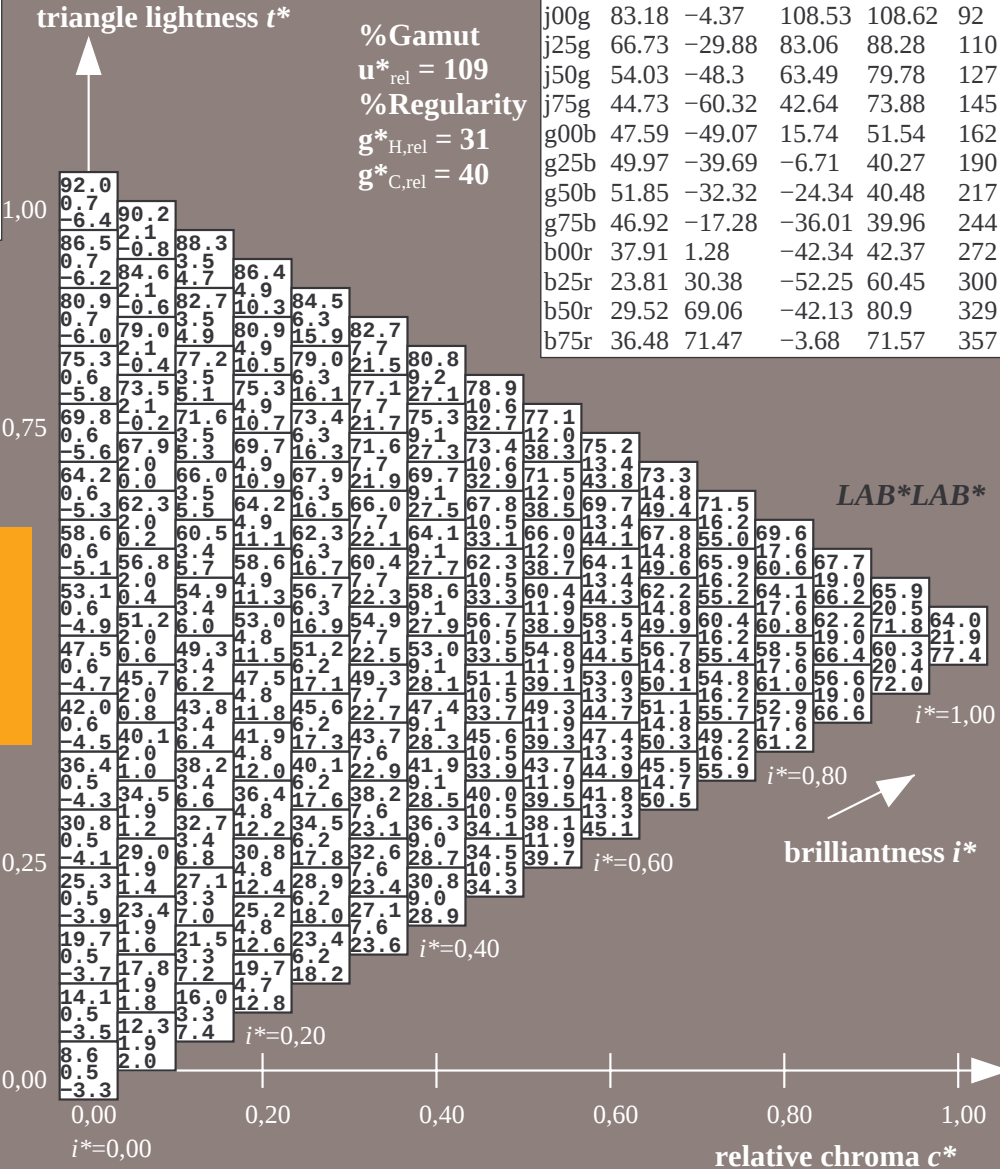
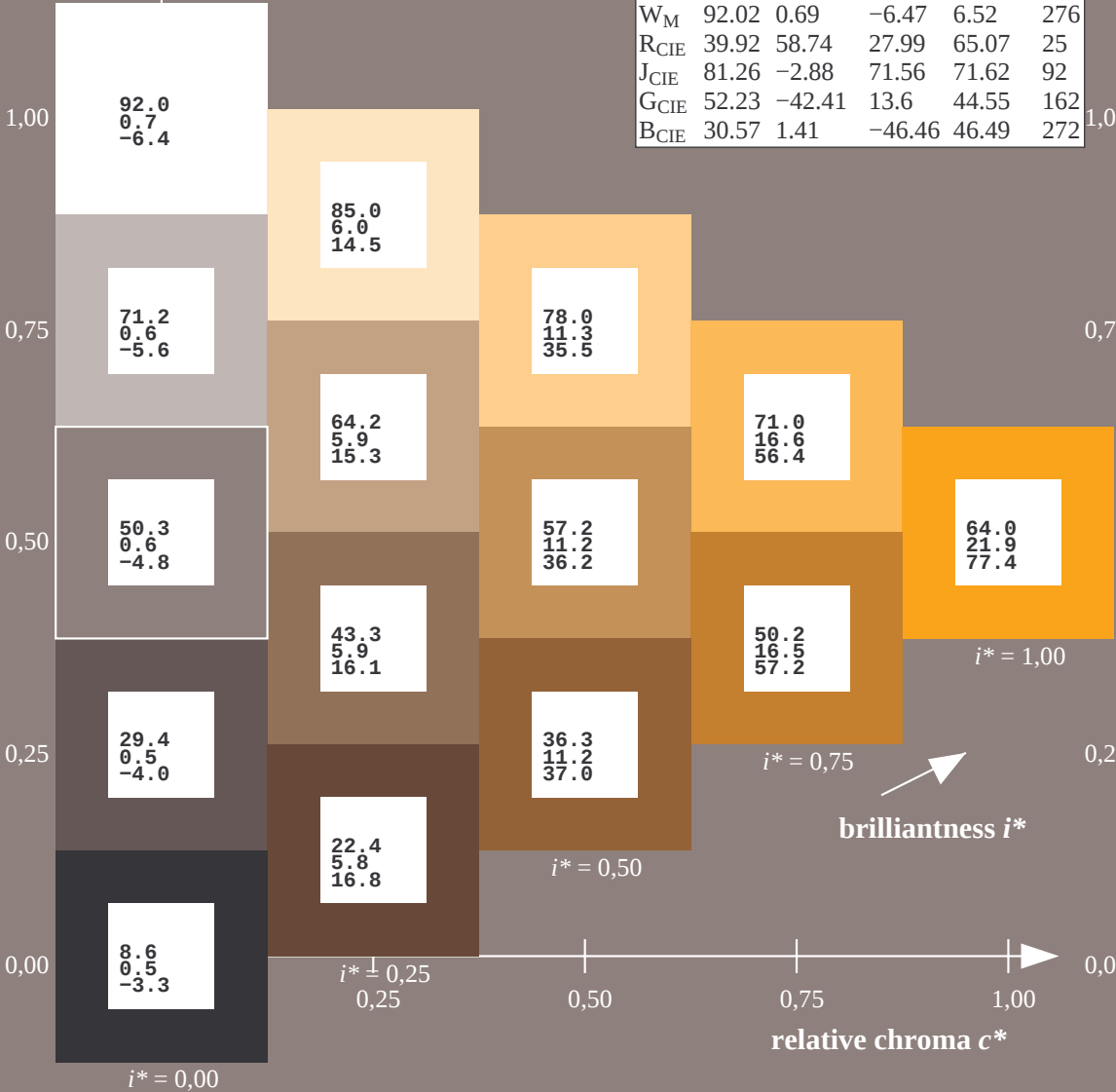


| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 64\ 21\ 83$   
 $LAB^*LCH^*_{Ma}: 64\ 86\ 76$   
 $lab^*rgb^*_{Ma}: 1.0\ 0.75\ 0.0$   
 $lab^*olv^*_{Ma}: 1.0\ 0.59\ 0.0$

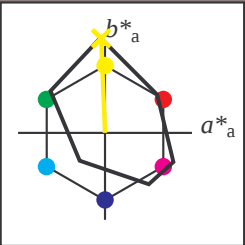
$u^* = r75j$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

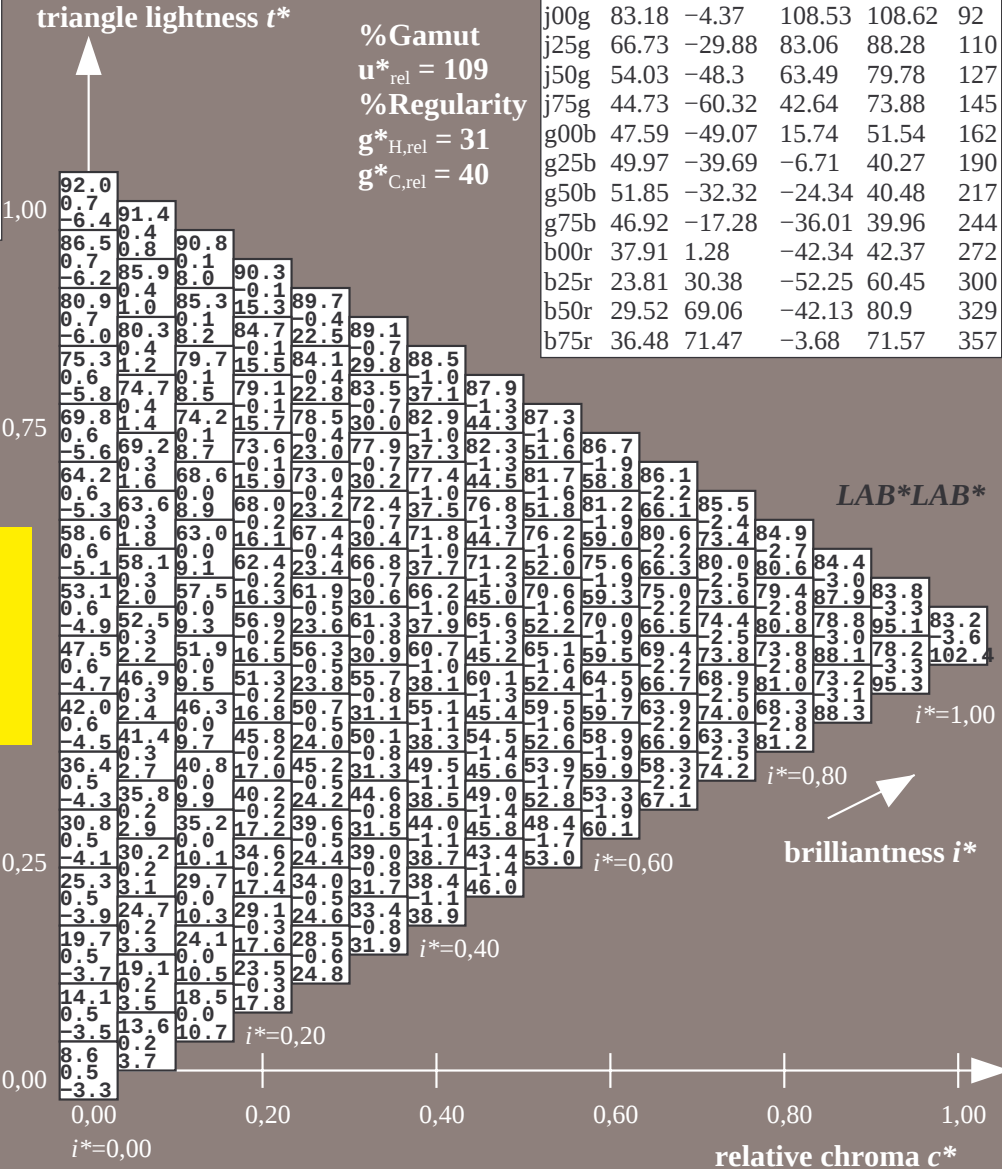
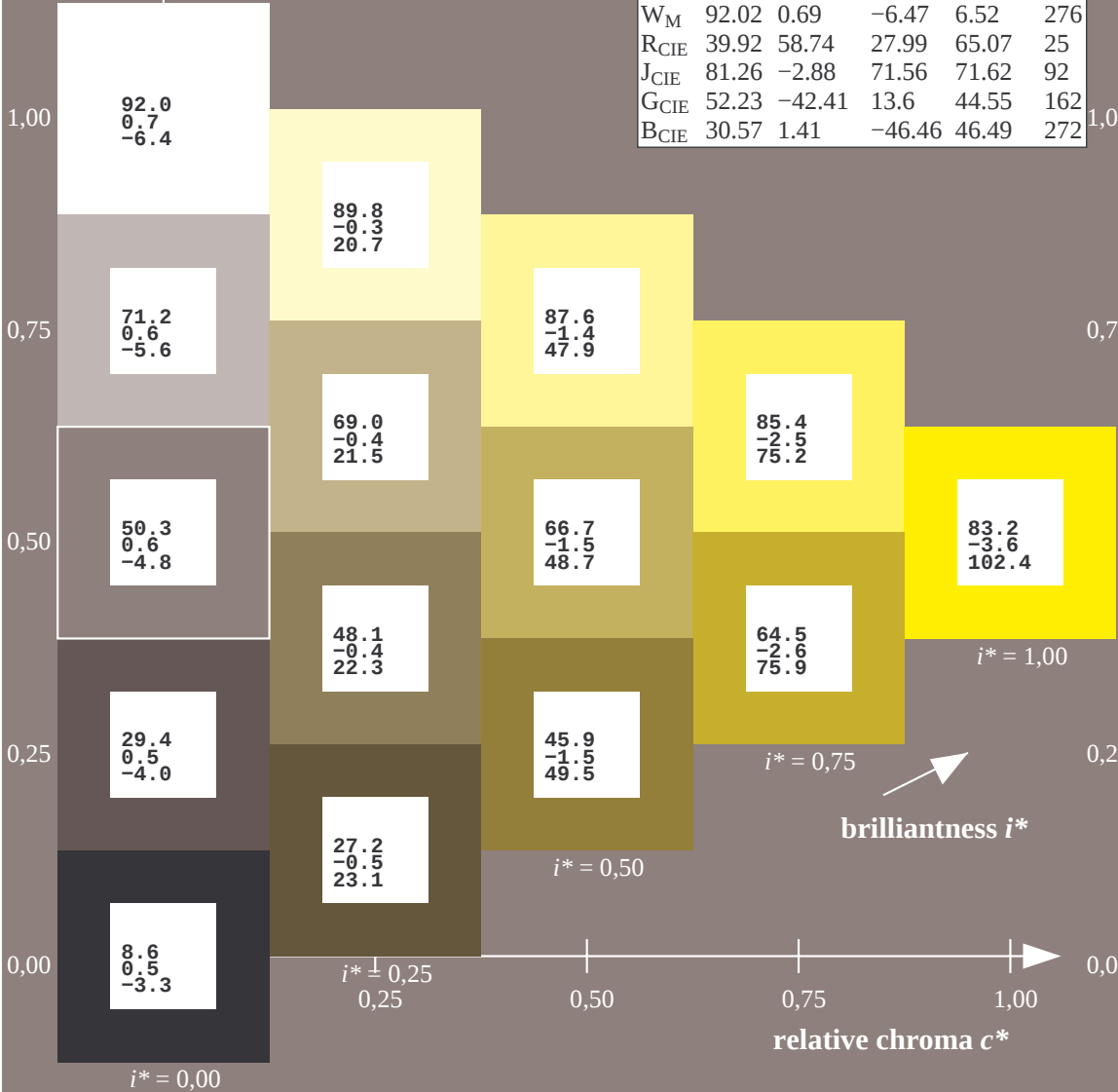


| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 83 -3 109$   
 $LAB^*LCH^*_{Ma}: 83 109 92$   
 $lab^*rgb^*_{Ma}: 1.0 1.0 0.0$   
 $lab^*olv^*_{Ma}: 1.0 0.99 0.0$

$u^* = j00g$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



$$u^* = j25g$$

**LAB\*LAB\***

(a) CIELAB data

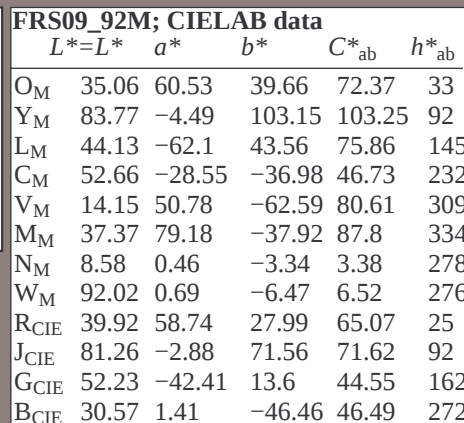
$$C_{ab,a}^* \quad h_{ab}^*,$$

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 28 | 75.50 | 50 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 83   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |



**LAB\*LAB\***

(a) CIELAB data

|    |              |            |
|----|--------------|------------|
|    | $C_{ab,a}^*$ | $h_{ab}^*$ |
| 17 | 70           | 15         |
|    |              | 25         |

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
| 45 | 73.64 | 42 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 83   | 85.52  | 76 |
| 8.53 | 108.62 | 92 |

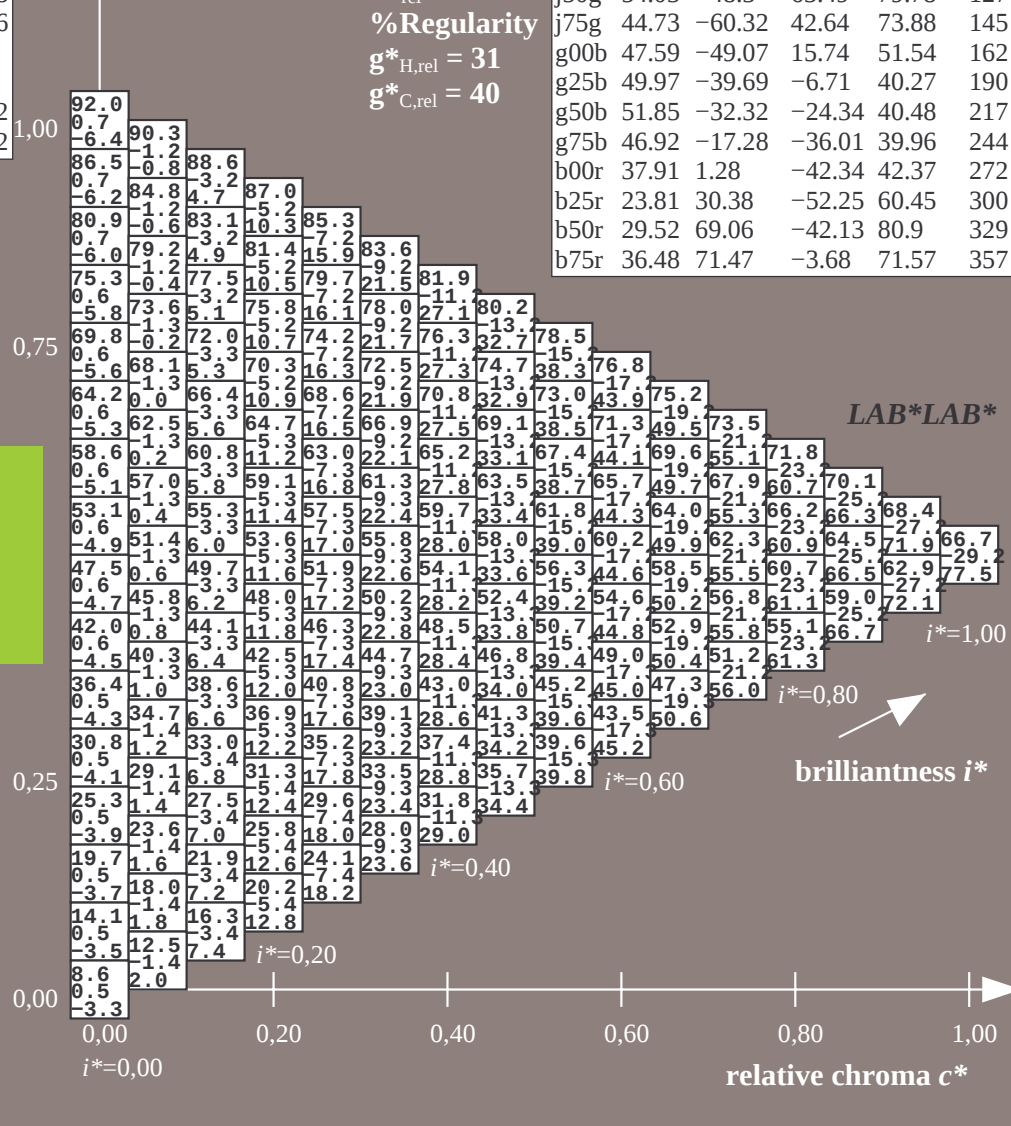
|      |        |     |
|------|--------|-----|
| 5.53 | 108.62 | 92  |
| 06   | 88.28  | 110 |

|    |       |     |
|----|-------|-----|
| 00 | 88.28 | 110 |
| 49 | 79.78 | 127 |

|    |       |     |
|----|-------|-----|
| 64 | 73.88 | 145 |
|----|-------|-----|

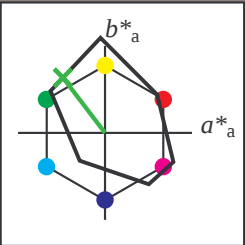
|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 162 |
|----|-------|-----|

|    |       |     |
|----|-------|-----|
| 71 | 40.27 | 190 |
|----|-------|-----|



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 127/360 = 0.354$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j50g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

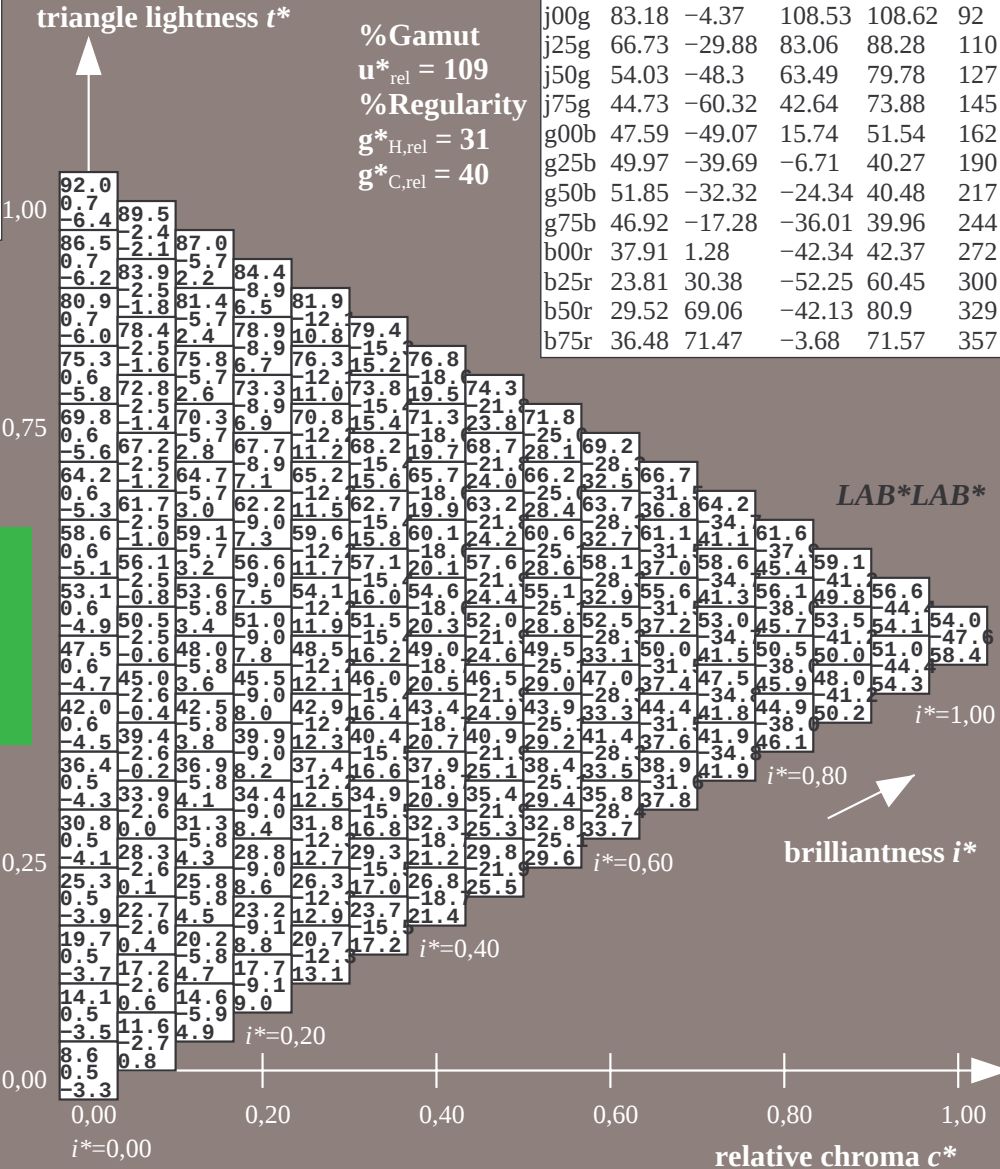
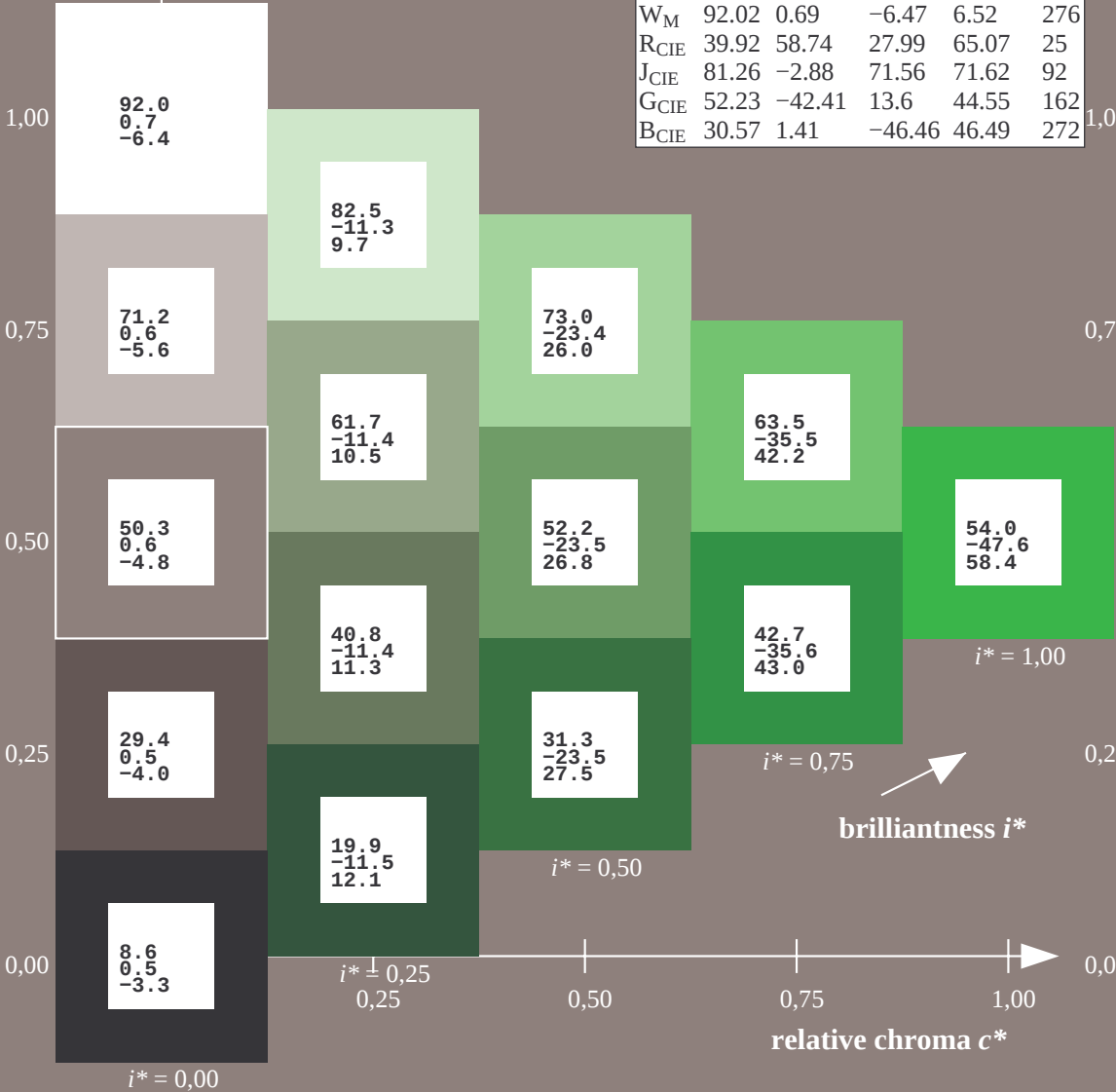


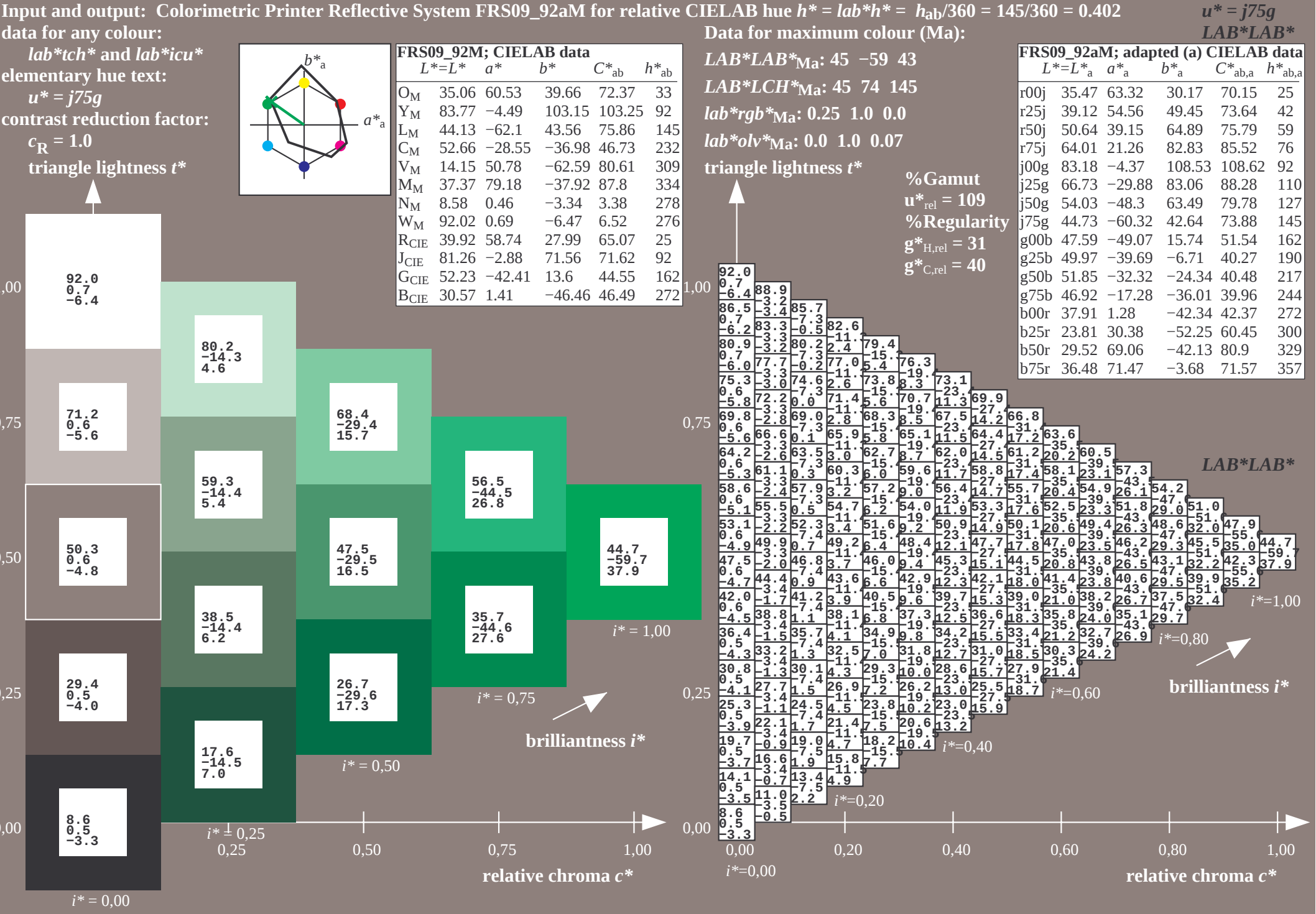
| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_{Ma}: 54 -47 63$   
 $LAB^*LCH^*_{Ma}: 54 80 127$   
 $lab^*rgb^*_{Ma}: 0.5 1.0 0.0$   
 $lab^*olv^*_{Ma}: 0.25 1.0 0.0$

$u^* = j50g$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |





$i^* = 0,00$

$i^* = 0,25$

$i^* = 0,50$

$i^* = 0,75$

$i^* = 1,00$

brilliantness  $i^*$

relative chroma  $c^*$

$i^* = 0,00$

$i^* = 0,20$

$i^* = 0,40$

$i^* = 0,60$

$i^* = 0,80$

$i^* = 1,00$

brilliantness  $i^*$

relative chroma  $c^*$

$i^* = 0,00$

$i^* = 0,25$

$i^* = 0,50$

$i^* = 0,75$

$i^* = 1,00$

brilliantness  $i^*$

relative chroma  $c^*$

$i^* = 0,00$

$i^* = 0,20$

$i^* = 0,40$

$i^* = 0,60$

$i^* = 0,80$

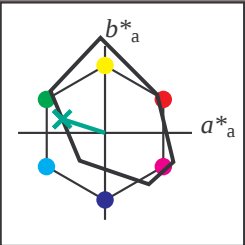
$i^* = 1,00$

brilliantness  $i^*$

relative chroma  $c^*$

Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g00b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                  | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                  | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                  | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                  | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                  | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                  | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                  | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                  | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$              | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$              | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$              | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$              | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 48 -48 16$

$LAB^*LCH^*_Ma: 48 52 162$

$lab^*rgb^*_Ma: 0.0 1.0 0.0$

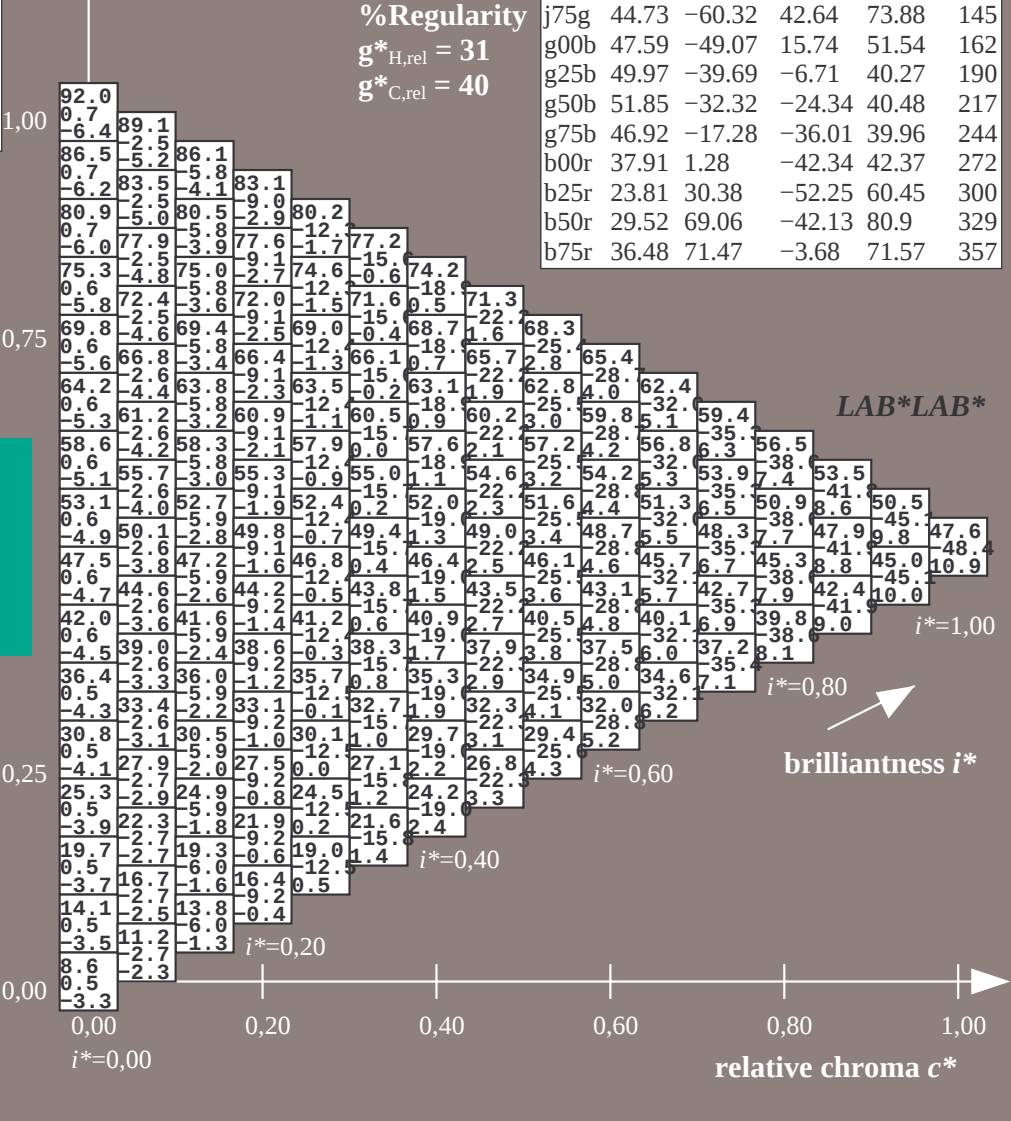
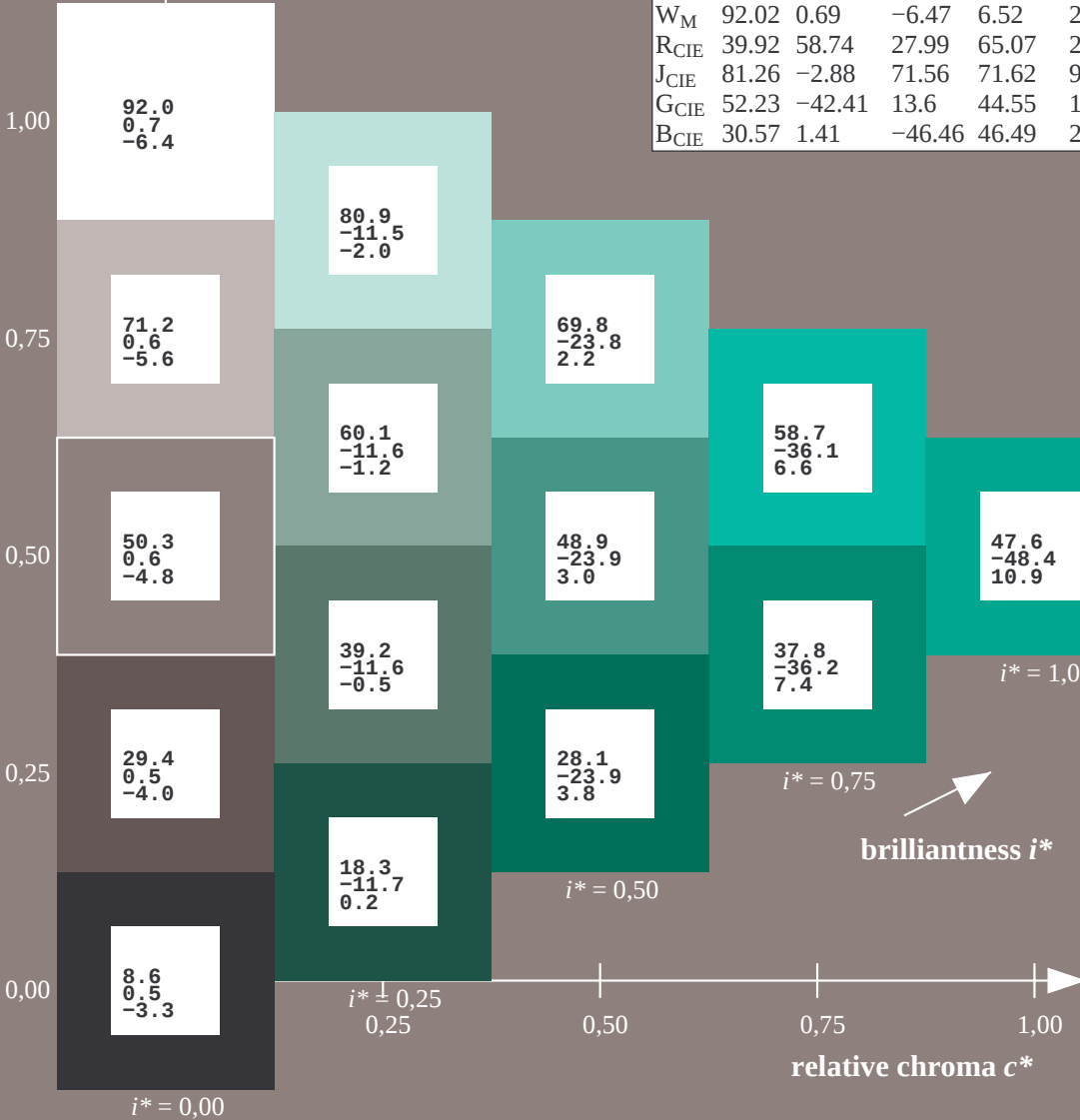
$lab^*olv^*_Ma: 0.0 1.0 0.41$

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

$u^* = g00b$   
 $LAB^*LAB^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



$$u^* = g25b$$

**LAB\*LAB\***

(a) CIELAB data

---

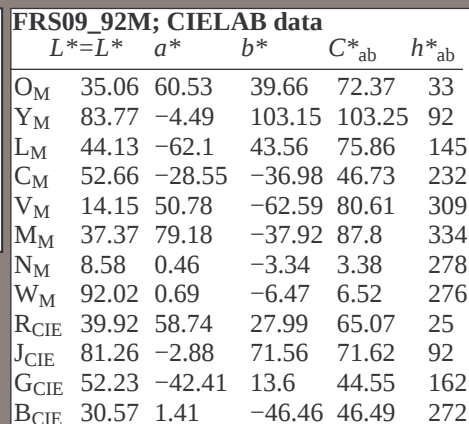
 $C_{ab,a}^* \quad h_{ab}^*,$ 

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 99 | 75.79 | 59 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 70 |
| 8.53 | 108.62 | 92 |



**LAB\*LAB\***

(a) CIELAB data

---

 $C_{ab,a}^* \quad h_{ab}^*,$ 

|    |       |    |
|----|-------|----|
| 17 | 70.15 | 25 |
|----|-------|----|

|    |       |    |
|----|-------|----|
| 45 | 73.64 | 42 |
| 99 | 75.79 | 59 |

|    |       |    |
|----|-------|----|
| 89 | 75.79 | 59 |
| 83 | 85.52 | 76 |

|      |        |    |
|------|--------|----|
| 85   | 85.52  | 70 |
| 8.53 | 108.62 | 92 |

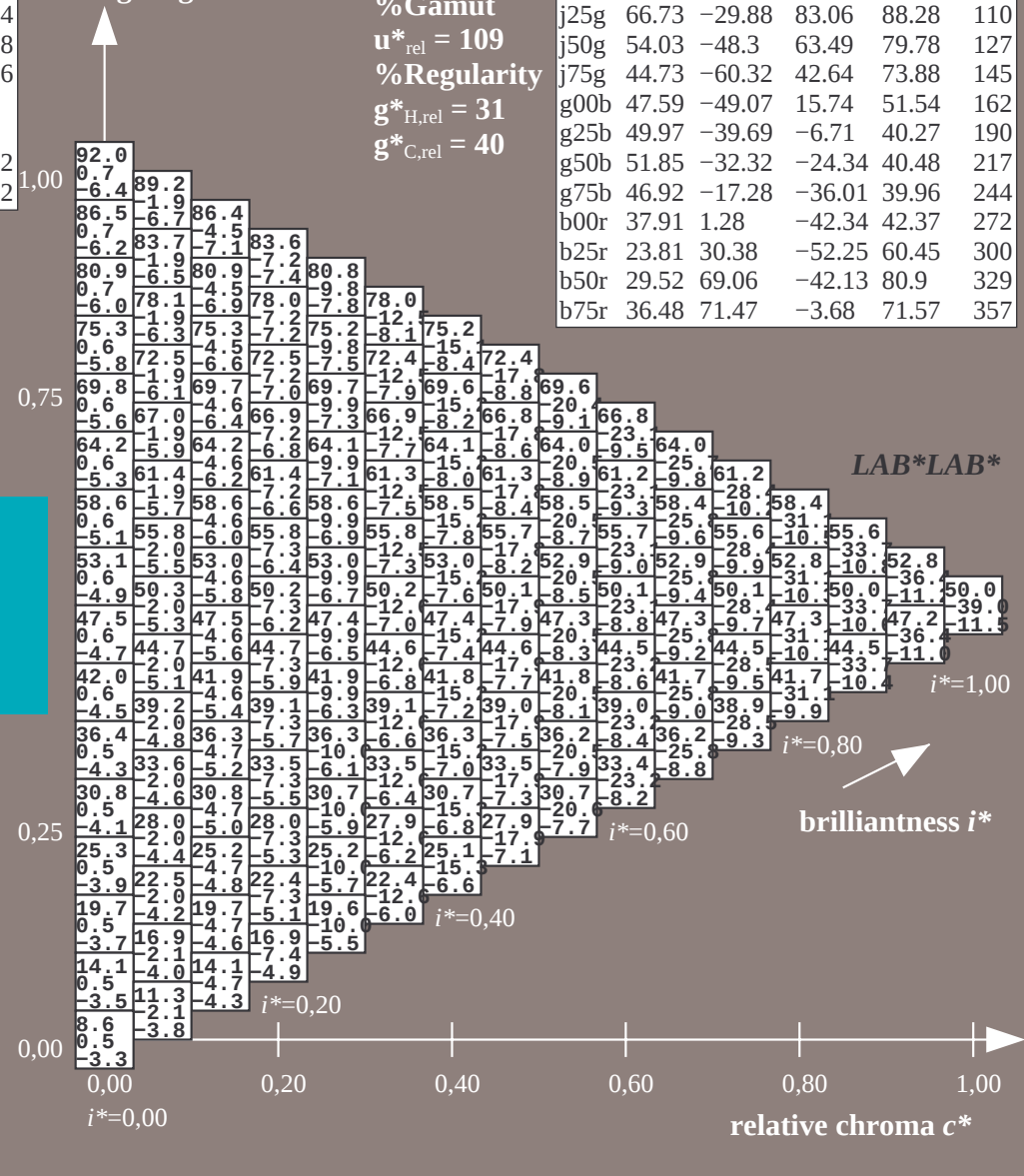
|      |        |     |
|------|--------|-----|
| 5.53 | 108.62 | 92  |
| 06   | 88.28  | 110 |

|    |       |     |
|----|-------|-----|
| 00 | 00.20 | 110 |
| 49 | 79.78 | 127 |

|    |       |     |
|----|-------|-----|
| 64 | 73.88 | 145 |
|----|-------|-----|

|    |       |     |
|----|-------|-----|
| 74 | 51.54 | 162 |
|----|-------|-----|

71 40.27 190



$$u^* = g50b$$

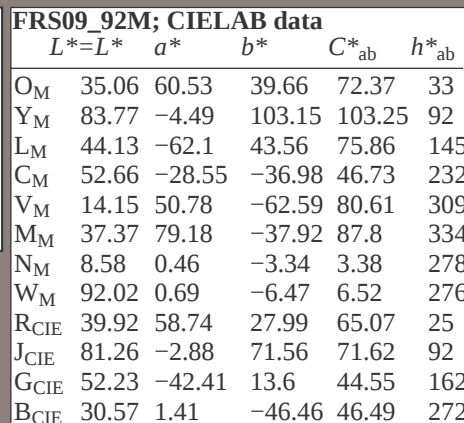
**LAB\*LAB\***

*lab\*tch\** and *lab\*icu\**

plementary hue text:

$$u^* = q50b$$

**Contrast reduction factor:**

$$c_p = 1.0$$
triangle lightness  $t^*$ 

**Data for maximum colour (Ma):**

**LAB\*LAB\*<sub>Ma</sub>: 52 -31 -23**

**LAB\*LCH\*Ma: 52 40 217**

**lab\*rqb\*\_Ma: 0.0 1.0 1.0**

**lab\*olv\*Ma: 0.0 1.0 0.9**

triangle lightness  $t^*$

## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

Figure 1 shows a 3D visualization of the color space defined by LAB\* and relative chroma  $c^*$ . The vertical axis represents LAB\* (0.00 to 2.00), the horizontal axis represents relative chroma  $c^*$  (0.00 to 1.00), and the depth axis represents brilliantness  $i^*$  (0.00 to 1.00). The color space is filled with a grid of color patches, each labeled with its LAB\* and  $c^*$  values. The patches are arranged in a 3D grid, showing the relationship between these three color attributes. The color patches are labeled with LAB\* values on the vertical axis and  $c^*$  values on the horizontal axis. The brilliantness  $i^*$  is indicated by a color gradient from blue (low  $i^*$ ) to red (high  $i^*$ ).

$u^* = g75b$   
 $LAB^*LAB^*$

| FRS09_92M; CIELAB data |           |        |        |            |            |
|------------------------|-----------|--------|--------|------------|------------|
|                        | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>         | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>         | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>         | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>         | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>         | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>         | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>         | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>         | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>       | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>       | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>       | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>       | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

**LAB\*LAB\*<sub>Ma</sub>: 47 -16 -35**

*LAB\*LCH*\*Ma: 47 40 244

*lab\*rqb\**Ma: 0.0 0.5 1.0

*lab\*olv\**Ma: 0.0 0.85 1.0

triangle lightness  $t^*$

## %Gamut

$$u_{rel}^* = 109$$

### %Regularity

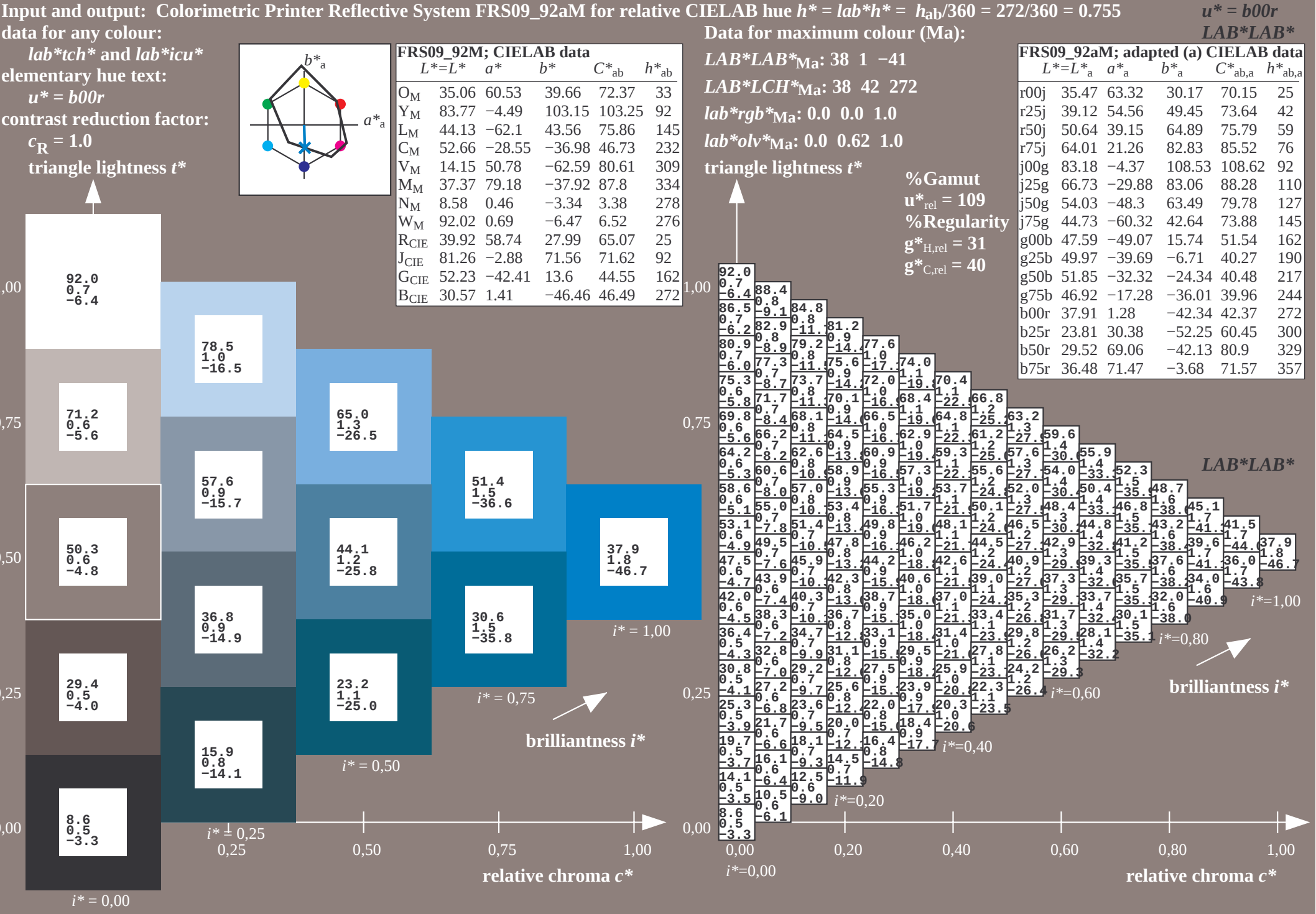
$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

| FRS09_92aM; adapted (a) CIELAB data |         |         |         |              |              |  |
|-------------------------------------|---------|---------|---------|--------------|--------------|--|
|                                     | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47   | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12   | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64   | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01   | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18   | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73   | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03   | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73   | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59   | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97   | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85   | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92   | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91   | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81   | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52   | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48   | 71.47   | -3.68   | 71.57        | 357          |  |

**LAB\*LAB\***

brilliantness  $i^*$  $i^*=1,00$  $i^* = 0,80$ 
$$j^* = 0.40$$
 $i^* = 0.2$  $i^* = 0,00$ relative chroma  $c^*$ 

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$$u^* = b25r$$

LAB\*LAB\*

*lab\*tch\** and *lab\*icu\**

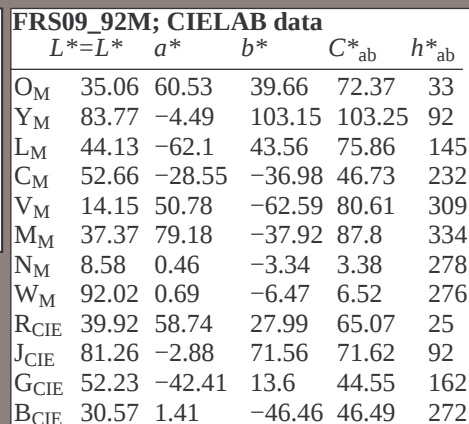
plementary hue text:

$$u^* = b25r$$

**contrast reduction factor:**

$$c_D = 1.0$$

triangle lightness  $t^*$



**Data for maximum colour (Ma):**

*LAB\*LAB\**<sub>Ma</sub>: 24 30 -51

**LAB\*LCH\*<sub>Ma</sub>: 24 60 300**

***lab\*rgb\*\_Ma: 0.5 0.0 1.0***

*lab\*olv\**Ma: 0.0 0.25 1.0

triangle lightness  $t^*$

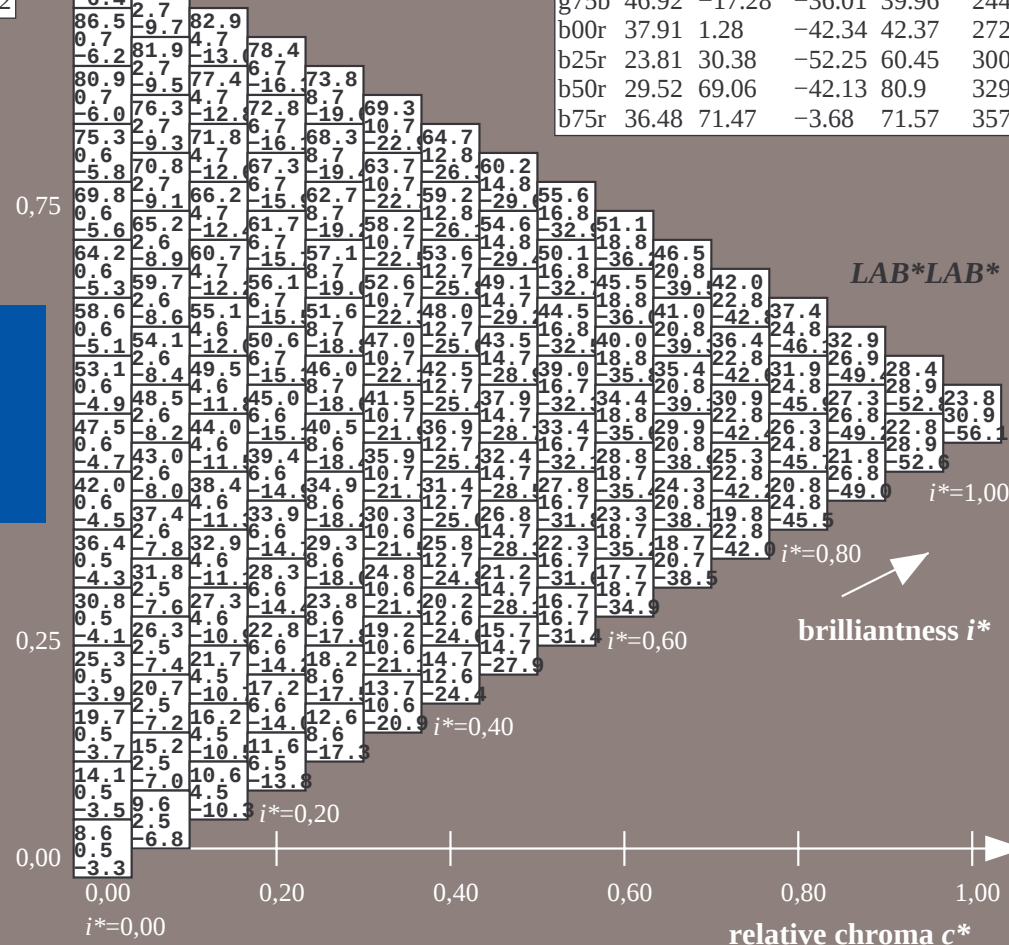
## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

|   |      |
|---|------|
| 2 | 1,00 |
|---|------|



$$u^* = b50r$$

*LAB\*LAB\**

*lab\*tch\** and *lab\*icu\**

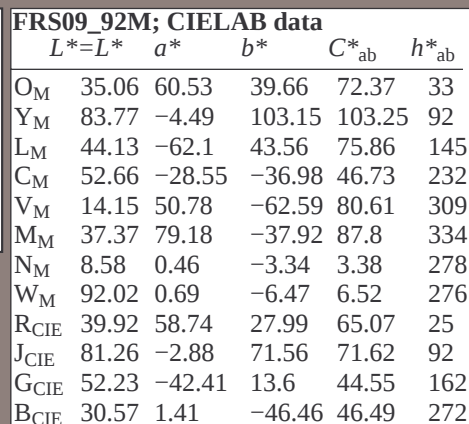
plementary hue text:

$$u^* = b50r$$

### Contrast reduction factor:

$$c_D = 1.0$$

triangle lightness  $t^*$



**Data for maximum colour (Ma):**

**LAB\*LAB\*Ma: 30 69 -41**

**LAB\*LCH\*Ma: 30 81 329**

***lab\*rqb\*\_Ma: 1.0 0.0 1.0***

**lab\*olv\*Ma: 0.66 0.0 1.0**

triangle lightness  $t^*$

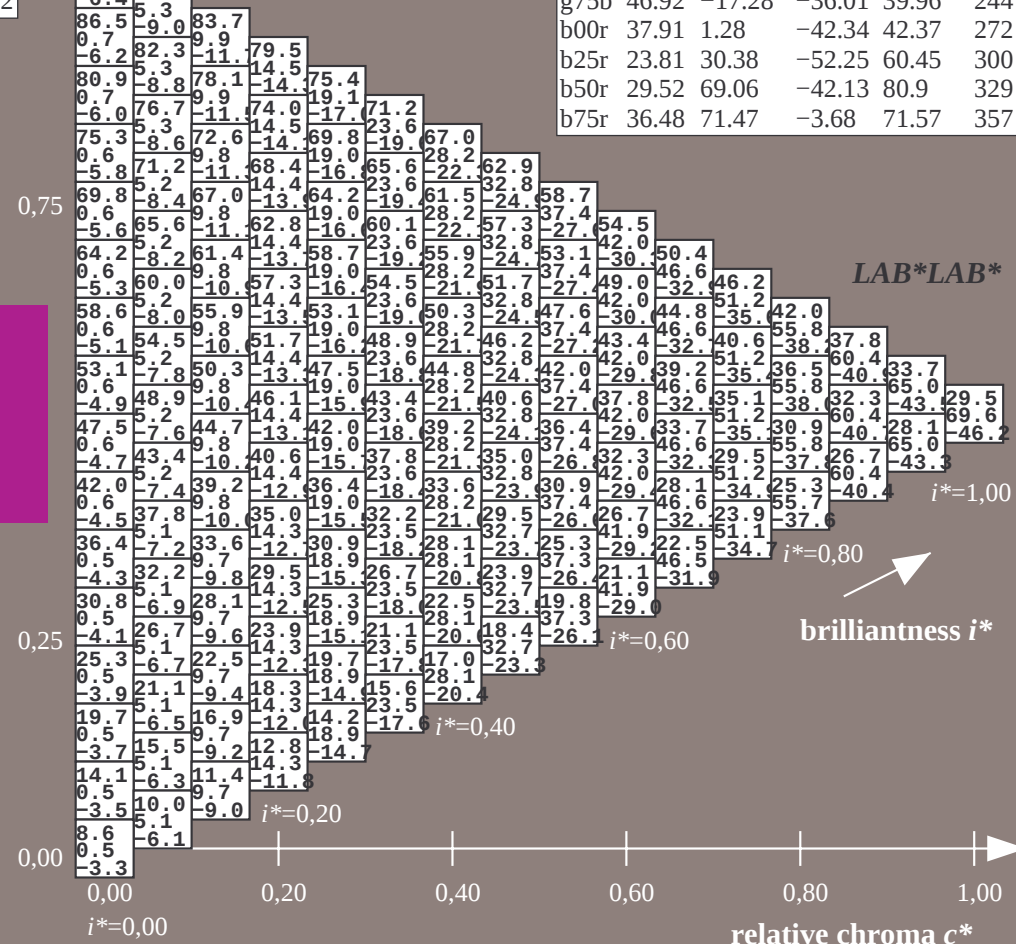
## %Gamut

$$\mathbf{u}_{\text{rel}}^* = 109$$

### %Regularity

$$g^*_{H,rel} = 31$$
$$g^*_{C,rel} = 40$$

|   |      |
|---|------|
| 2 | 1,00 |
|---|------|



LAB\*LAB\*

brilliantness *i*\*

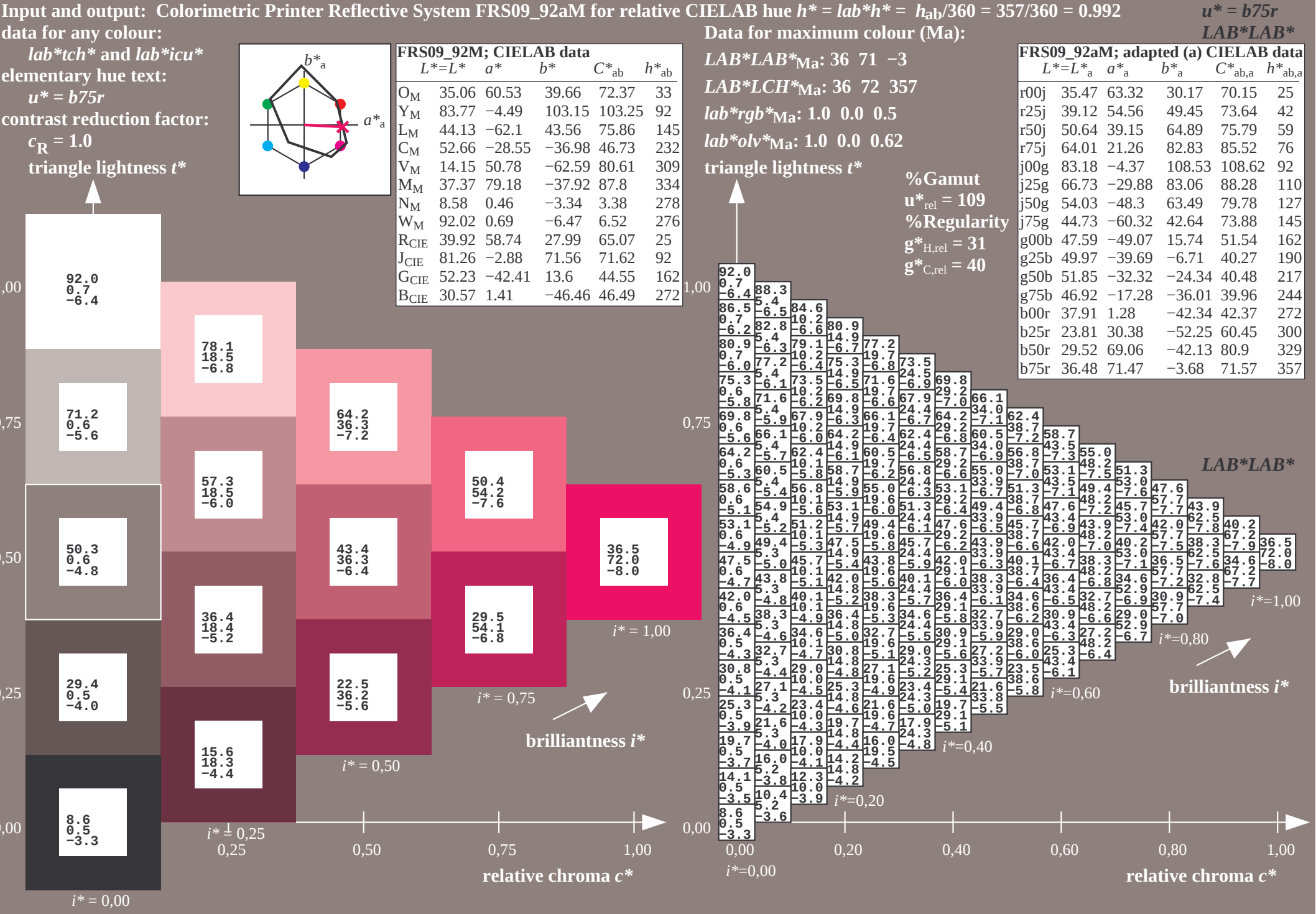
$$i^* = 1,00$$

$i^* = 0,80$

1  $i^* = 0,60$

6  $i^*=0,40$

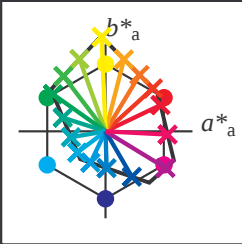
 $i^* = 0.20$  $i^* = 0,00$ relative chroma  $c^*$



|    |  | A   | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    | N    | O    | P    | Q    | R    | S    | T    | U    | V    | W    | X    | Y    | Z    | a    | b    | c    | d    | e    | f    | g    | h    | i    | j    | k     | LAB*LAB* |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        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       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |   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|----|--|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|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| 01 |  | 8.6 | 13.0 | 17.5 | 21.9 | 26.4 | 30.8 | 35.2 | 39.7 | 44.1 | 11.9 | 18.0 | 22.4 | 26.9 | 31.3 | 35.8 | 40.2 | 44.6 | 49.1 | 15.2 | 21.3 | 27.4 | 31.8 | 36.3 | 40.7 | 45.2 | 49.6 | 54.0 | 58.4 | 62.8 | 67.3 | 71.8 | 76.7 | 81.7 | 86.9 | 92.0 | 97.1 | 102.2 | 107.3    | 112.4 | 117.5 | 122.6 | 127.7 | 132.8 | 137.9 | 143.0 | 148.1 | 153.2 | 158.3 | 163.4 | 168.5 | 173.6 | 178.7 | 183.8 | 188.9 | 194.0 | 199.1 | 204.2 | 209.3 | 214.4 | 219.5 | 224.6 | 229.7 | 234.8 | 239.9 | 245.0 | 250.1 | 255.2 | 260.3 | 265.4 | 270.5 | 275.6 | 280.7 | 285.8 | 290.9 | 296.0 | 301.1 | 306.2 | 311.3 | 316.4 | 321.5 | 326.6 | 331.7 | 336.8 | 341.9 | 347.0 | 352.1 | 357.2 | 362.3 | 367.4 | 372.5 | 377.6 | 382.7 | 387.8 | 392.9 | 398.0 | 403.1 | 408.2 | 413.3 | 418.4 | 423.5 | 428.6 | 433.7 | 438.8 | 443.9 | 449.0 | 454.1 | 459.2 | 464.3 | 469.4 | 474.5 | 479.6 | 484.7 | 489.8 | 494.9 | 500.0 | 505.1 | 510.2 | 515.3 | 520.4 | 525.5 | 530.6 | 535.7 | 540.8 | 545.9 | 551.0 | 556.1 | 561.2 | 566.3 | 571.4 | 576.5 | 581.6 | 586.7 | 591.8 | 596.9 | 602.0 | 607.1 | 612.2 | 617.3 | 622.4 | 627.5 | 632.6 | 637.7 | 642.8 | 647.9 | 653.0 | 658.1 | 663.2 | 668.3 | 673.4 | 678.5 | 683.6 | 688.7 | 693.8 | 698.9 | 704.0 | 709.1 | 714.2 | 719.3 | 724.4 | 729.5 | 734.6 | 739.7 | 744.8 | 749.9 | 755.0 | 760.1 | 765.2 | 770.3 | 775.4 | 780.5 | 785.6 | 790.7 | 795.8 | 800.9 | 806.0 | 811.1 | 816.2 | 821.3 | 826.4 | 831.5 | 836.6 | 841.7 | 846.8 | 851.9 | 857.0 | 862.1 | 867.2 | 872.3 | 877.4 | 882.5 | 887.6 | 892.7 | 897.8 | 902.9 | 908.0 | 913.1 | 918.2 | 923.3 | 928.4 | 933.5 | 938.6 | 943.7 | 948.8 | 953.9 | 959.0 | 964.1 | 969.2 | 974.3 | 979.4 | 984.5 | 989.6 | 994.7 | 999.8 | 1004.9 | 1010.0 | 1015.1 | 1020.2 | 1025.3 | 1030.4 | 1035.5 | 1040.6 | 1045.7 | 1050.8 | 1055.9 | 1061.0 | 1066.1 | 1071.2 | 1076.3 | 1081.4 | 1086.5 | 1091.6 | 1096.7 | 1101.8 | 1106.9 | 1112.0 | 1117.1 | 1122.2 | 1127.3 | 1132.4 | 1137.5 | 1142.6 | 1147.7 | 1152.8 | 1157.9 | 1163.0 | 1168.1 | 1173.2 | 1178.3 | 1183.4 | 1188.5 | 1193.6 | 1198.7 | 1203.8 | 1208.9 | 1214.0 | 1219.1 | 1224.2 | 1229.3 | 1234.4 | 1239.5 | 1244.6 | 1249.7 | 1254.8 | 1259.9 | 1265.0 | 1270.1 | 1275.2 | 1280.3 | 1285.4 | 1290.5 | 1295.6 | 1300.7 | 1305.8 | 1310.9 | 1316.0 | 1321.1 | 1326.2 | 1331.3 | 1336.4 | 1341.5 | 1346.6 | 1351.7 | 1356.8 | 1361.9 | 1367.0 | 1372.1 | 1377.2 | 1382.3 | 1387.4 | 1392.5 | 1397.6 | 1402.7 | 1407.8 | 1412.9 | 1418.0 | 1423.1 | 1428.2 | 1433.3 | 1438.4 | 1443.5 | 1448.6 | 1453.7 | 1458.8 | 1463.9 | 1469.0 | 1474.1 | 1479.2 | 1484.3 | 1489.4 | 1494.5 | 1499.6 | 1504.7 | 1509.8 | 1514.9 | 1520.0 | 1525.1 | 1530.2 | 1535.3 | 1540.4 | 1545.5 | 1550.6 | 1555.7 | 1560.8 | 1565.9 | 1571.0 | 1576.1 | 1581.2 | 1586.3 | 1591.4 | 1596.5 | 1601.6 | 1606.7 | 1611.8 | 1616.9 | 1622.0 | 1627.1 | 1632.2 | 1637.3 | 1642.4 | 1647.5 | 1652.6 | 1657.7 | 1662.8 | 1667.9 | 1673.0 | 1678.1 | 1683.2 | 1688.3 | 1693.4 | 1698.5 | 1703.6 | 1708.7 | 1713.8 | 1718.9 | 1724.0 | 1729.1 | 1734.2 | 1739.3 | 1744.4 | 1749.5 | 1754.6 | 1759.7 | 1764.8 | 1769.9 | 1775.0 | 1780.1 | 1785.2 | 1790.3 | 1795.4 | 1800.5 | 1805.6 | 1810.7 | 1815.8 | 1820.9 | 1826.0 | 1831.1 | 1836.2 | 1841.3 | 1846.4 | 1851.5 | 1856.6 | 1861.7 | 1866.8 | 1871.9 | 1877.0 | 1882.1 | 1887.2 | 1892.3 | 1897.4 | 1902.5 | 1907.6 | 1912.7 | 1917.8 | 1922.9 | 1928.0 | 1933.1 | 1938.2 | 1943.3 | 1948.4 | 1953.5 | 1958.6 | 1963.7 | 1968.8 | 1973.9 | 1979.0 | 1984.1 | 1989.2 | 1994.3 | 1999.4 | 2004.5 | 2009.6 | 2014.7 | 2019.8 | 2024.9 | 2030.0 | 2035.1 | 2040.2 | 2045.3 | 2050.4 | 2055.5 | 2060.6 | 2065.7 | 2070.8 | 2075.9 | 2081.0 | 2086.1 | 2091.2 | 2096.3 | 2101.4 | 2106.5 | 2111.6 | 2116.7 | 2121.8 | 2126.9 | 2132.0 | 2137.1 | 2142.2 | 2147.3 | 2152.4 | 2157.5 | 2162.6 | 2167.7 | 2172.8 | 2177.9 | 2183.0 | 2188.1 | 2193.2 | 2198.3 | 2203.4 | 2208.5 | 2213.6 | 2218.7 | 2223.8 | 2228.9 | 2234.0 | 2239.1 | 2244.2 | 2249.3 | 2254.4 | 2259.5 | 2264.6 | 2269.7 | 2274.8 | 2279.9 | 2285.0 | 2290.1 | 2295.2 | 2300.3 | 2305.4 | 2310.5 | 2315.6 | 2320.7 | 2325.8 | 2330.9 | 2336.0 | 2341.1 | 2346.2 | 2351.3 | 2356.4 | 2361.5 | 2366.6 | 2371.7 | 2376.8 | 2381.9 | 2387.0 | 2392.1 | 2397.2 | 2402.3 | 2407.4 | 2412.5 | 2417.6 | 2422.7 | 2427.8 | 2432.9 | 2438.0 | 2443.1 | 2448.2 | 2453.3 | 2458.4 | 2463.5 | 2468.6 | 2473.7 | 2478.8 | 2483.9 | 2489.0 | 2494.1 | 2499.2 | 2504.3 | 2509.4 | 2514.5 | 2519.6 | 2524.7 | 2529.8 | 2534.9 | 2540.0 | 2545.1 | 2550.2 | 2555.3 | 2560.4 | 2565.5 | 2570.6 | 2575.7 | 2580.8 | 2585.9 | 2591.0 | 2596.1 | 2601.2 | 2606.3 | 2611.4 | 2616.5 | 2621.6 | 2626.7 | 2631.8 | 2636.9 | 2642.0 | 2647.1 | 2652.2 | 2657.3 | 2662.4 | 2667.5 | 2672.6 | 2677.7 | 2682.8 | 2687.9 | 2693.0 | 2698.1 | 2703.2 | 2708.3 | 2713.4 | 2718.5 | 2723.6 | 2728.7 | 2733.8 | 2738.9 | 2744.0 | 2749.1 | 2754.2 | 2759.3 | 2764.4 | 2769.5 | 2774.6 | 2779.7 | 2784.8 | 2789.9 | 2795.0 | 2800.1 | 2805.2 | 2810.3 | 2815.4 | 2820.5 | 2825.6 | 2830.7 | 2835.8 | 2840.9 | 2846.0 | 2851.1 | 2856.2 | 2861.3 | 2866.4 | 2871.5 | 2876.6 | 2881.7 | 2886.8 | 2891.9 | 2897.0 | 2902.1 | 2907.2 | 2912.3 | 2917.4 | 2922.5 | 2927.6 | 2932.7 | 2937.8 | 2942.9 | 2948.0 | 2953.1 | 2958.2 | 2963.3 | 2968.4 | 2973.5 | 2978.6 | 2983.7 | 2988.8 | 2993.9 | 2999.0 | 3004.1 | 3009.2 | 3014.3 | 3019.4 | 3024.5 | 3029.6 | 3034.7 | 3039.8 | 3044.9 | 3050.0 | 3055.1 | 3060.2 | 3065.3 | 3070.4 | 3075.5 | 3080.6 | 3085.7 | 3090.8 | 3095.9 | 3101.0 | 3106.1 | 3111.2 | 3116.3 | 3121.4 | 3126.5 | 3131.6 | 3136.7 | 3141.8 | 3146.9 | 3152.0 | 3157.1 | 3162.2 | 3167.3 | 3172.4 | 3177.5 | 3182.6 | 3187.7 | 3192.8 | 3197.9 | 3203.0 | 3208.1 | 3213.2 | 3218.3 | 3223.4 | 3228.5 | 3233.6 | 3238.7 | 3243.8 | 3248.9 | 3254.0 | 3259.1 | 3264.2 | 3269.3 | 3274.4 | 3279.5 | 3284.6 | 3289.7 | 3294.8 | 3299.9 | 3305.0 | 3310.1 | 3315.2 | 3320.3 | 3325.4 | 3330.5 | 3335.6 | 3340.7 | 3345.8 | 3350.9 | 3356.0 | 3361.1 | 3366.2 | 3371.3 | 3376.4 | 3381.5 | 3386.6 | 3391.7 | 3396.8 | 3401.9 | 3407.0 | 3412.1 | 3417.2 | 3422.3 | 3427.4 | 3432.5 | 3437.6 | 3442.7 | 3447.8 | 3452.9 | 3458.0 | 3463.1 | 3468.2 | 3473.3 | 3478.4 | 3483.5 | 3488.6 | 3493.7 | 3498.8 | 3503.9 | 3509.0 | 3514.1 | 3519.2 | 3524.3 | 3529.4 | 3534.5 | 3539.6 | 3544.7 | 3549.8 | 3554.9 | 3560.0 | 3565.1 | 3570.2 | 3575.3 | 3580.4 | 3585.5 | 3590.6 | 3595.7 | 3600.8 | 3605.9 | 3611.0 | 3616.1 | 3621.2 | 3626.3 | 3631.4 | 3636.5 | 3641.6 | 3646.7 | 3651.8 | 3656.9 | 3662.0 | 3667.1 | 3672.2 | 3677.3 | 3682.4 | 3687.5 | 3692.6 | 3697.7 | 3702.8 | 3707.9 | 3713.0 | 3718.1 | 3723.2 | 3728.3 | 3733.4 | 3738.5 | 3743.6 | 3748.7 | 3753.8 | 3758.9 | 3764.0 | 3769.1 | 3774.2 | 3779.3 | 3784.4 | 3789.5 | 3794.6 | 3799.7 | 3804.8 | 3809.9 | 3815.0 | 3820.1 | 3825.2 | 3830.3 | 3835.4 | 3840.5 | 3845.6 | 3850.7 | 3855.8 | 3860.9 | 3866.0 | 3871.1 | 3876.2 | 3881.3 | 3886.4 | 3891.5 | 3896.6 | 3901.7 | 3906.8 | 3911.9 | 3917.0 | 3922.1 | 3927.2 | 3932.3 | 3937.4 | 3942.5 | 3947.6 | 3952.7 | 3957.8 | 3962.9 | 3968.0 | 3973.1 | 3978.2 | 3983.3 | 3988.4 | 3993.5 | 3998.6 | 4003.7 | 4008.8 | 4013.9 | 4019.0 | 4024.1 | 4029.2 | 4034.3 | 4039.4 | 4044.5 | 4049.6 | 4054.7 | 4059.8 | 4064.9 | 4070.0 | 4075.1 | 4080.2 | 4085.3 | 4090.4 | 4095.5 | 4100.6 | 4105.7 | 4110.8 | 4115.9 | 4121.0 | 4126.1 | 4131.2 | 4136.3 | 4141.4 | 4146.5 | 4151.6 | 4156.7 | 4161.8 | 4166.9 | 4172.0 | 4177.1 | 4182.2 | 4187.3 | 4192.4 | 4197.5 | 4202.6 | 4207.7 | 4212.8 | 4217.9 | 4223.0 | 4228.1 | 4233.2 | 4238.3 | 4243.4 | 4248.5 | 4253.6 | 4258.7 | 4263.8 | 4268.9 | 4274.0 | 4279.1 | 4284.2 | 4289.3 | 4294.4 | 4299.5 | 4304.6 | 4309.7 | 4314.8 | 4319.9 | 4325.0 | 4330.1 | 4335.2 | 4340.3 | 4345.4 | 4350.5 | 4355.6 | 4360.7 | 4365.8 | 4370.9 | 4376.0 | 4381.1 | 4386.2 | 4391.3 | 4396.4 | 4401.5 | 4406.6 | 4411.7 | 4416.8 | 4421.9 | 4427.0 | 4432.1 | 4437.2 | 4442.3 | 4447.4 | 4452.5 | 4457.6 | 4462.7 | 4467.8 | 4472.9 | 4478.0 | 4483.1 | 4488.2 | 4493.3 | 4498.4 | 4503.5 | 4508.6 | 4513.7 | 4518.8 | 4523.9 | 4529.0 | 4534.1 | 4539.2 | 4544.3 | 4549.4 | 4554.5 | 4559.6 | 4564.7 | 4569.8 | 4574.9 | 4580.0 | 4585.1 | 4590.2 | 4595.3 | 4600.4 | 4605.5 | 4610.6 | 4615.7 | 4620.8 | 4625.9 | 4631.0 | 4636.1 | 4641.2 | 4646.3 | 4651.4 | 4656.5 | 4661.6 | 4666.7 | 4671.8 | 4676.9 | 4682.0 | 4687.1 | 4692.2 | 4697.3 | 4702.4 | 4707.5 | 4712.6 | 4717.7 | 4722.8 | 4727.9 | 4733.0 | 4738.1 | 4743.2 | 4748.3 | 4753.4 | 4758.5 | 4763.6 | 4768.7 | 4773.8 | 4778.9 | 4784.0 | 4789.1 | 4794.2 | 4799.3 | 4804.4 | 4809.5 | 4814.6 | 4819.7 | 4824.8 | 4829.9 | 4835.0 | 4840.1 | 4845.2 | 4850.3 | 4855.4 | 4860.5 | 4865.6 | 4870.7 | 4875.8 | 4880.9 | 4886.0 | 4891.1 | 4896.2 | 4901.3 | 4906.4 | 4911.5 | 4916.6 | 4921.7 | 4926.8 | 4931.9 | 4937.0 | 4942.1 | 4947.2 | 4952.3 | 4957.4 | 4962.5 | 4967.6 | 4972.7 | 4977.8 | 4982.9 | 4988.0 | 4993.1 | 4998.2 | 5003.3 | 5008.4 | 5013.5 | 5018.6 | 5023.7 | 5028.8 | 5033.9 | 5039.0 | 5044.1 | 5049.2 | 5054.3 | 5059.4 | 5064.5 | 5069.6 | 5074.7 | 5079.8 | 5084.9 | 5090.0 | 5095.1 | 5100.2 | 5105.3 | 5110.4 | 5115.5 | 5120.6 | 5125.7 | 5130.8 | 5135.9 | 5141.0 | 5146.1 | 5151.2 | 5156.3 | 5161.4 | 5166.5 | 5171.6 | 5176.7 | 5181.8 | 5186.9 | 5192.0 | 5197.1 | 5202.2 | 5207.3 | 5212.4 | 5217.5 | 5222.6 | 5227.7 | 5232.8 | 5237.9 | 5243.0 | 5248.1 | 5253.2 | 5258.3 | 5263.4 | 5268.5 | 5273.6 | 5278.7 | 5283.8 | 5288.9 | 5294.0 | 5299.1 | 5304.2 | 5309.3 | 5314.4 | 5319.5 | 5324.6 | 5329.7 | 5334.8 | 5339.9 | 5345.0 | 5350.1 | 5355.2 | 5360.3 | 5365.4 | 5370.5 | 5375.6 | 5380.7 | 5385.8 | 5390.9 | 5396.0 | 5401.1 | 5406.2 | 5411.3 | 5416.4 | 5421.5 | 5426.6 | 5431.7 | 5436.8 | 5441.9 | 5447.0 | 5452.1 | 5457.2 | 5462.3 | 5467.4 | 5472.5 | 5477.6 | 5482.7 | 5487.8 | 5492.9 | 5498.0 | 5503.1 | 5508.2 | 5513.3 | 5518.4 | 5523.5 | 5528.6 | 5533.7 | 5538.8 | 5543.9 | 5549.0 | 5554.1 | 5559.2 | 5564.3 | 5569.4 | 5574.5 | 5579.6 | 5584.7 | 5589.8 | 5594.9 | 5600.0 | 5605.1 | 5610.2 | 5615.3 | 5620.4 | 5625.5 | 5630.6 | 5635.7 | 5640.8 |

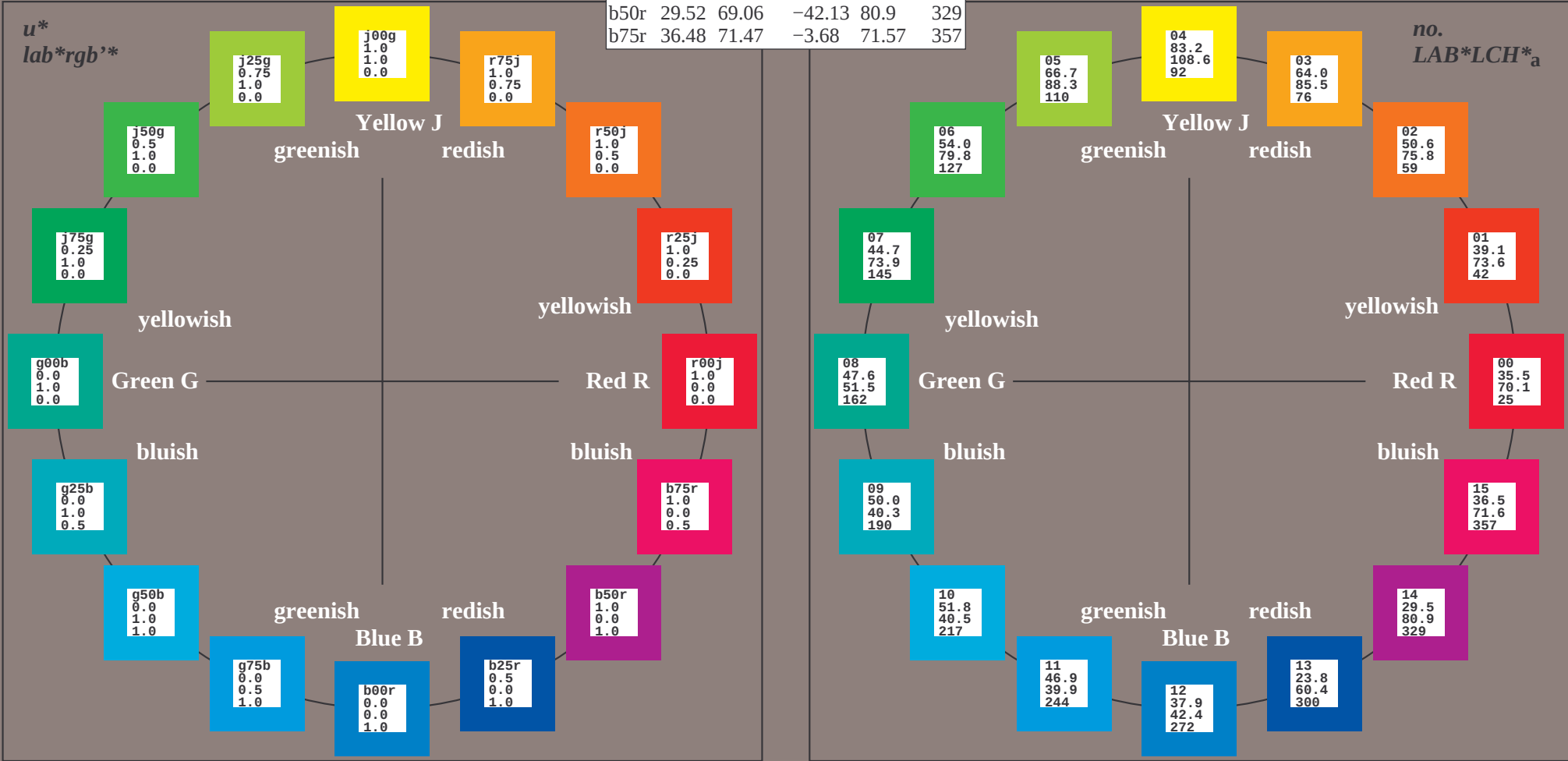
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\*tch\* and lab\*icu\*  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
cR = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



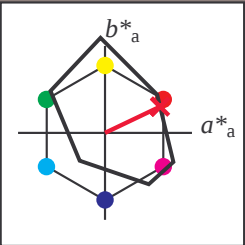
% Gamut  
u\*<sub>rel</sub> = 109  
% Regularity  
g\*<sub>H,rel</sub> = 31  
g\*<sub>C,rel</sub> = 40

| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



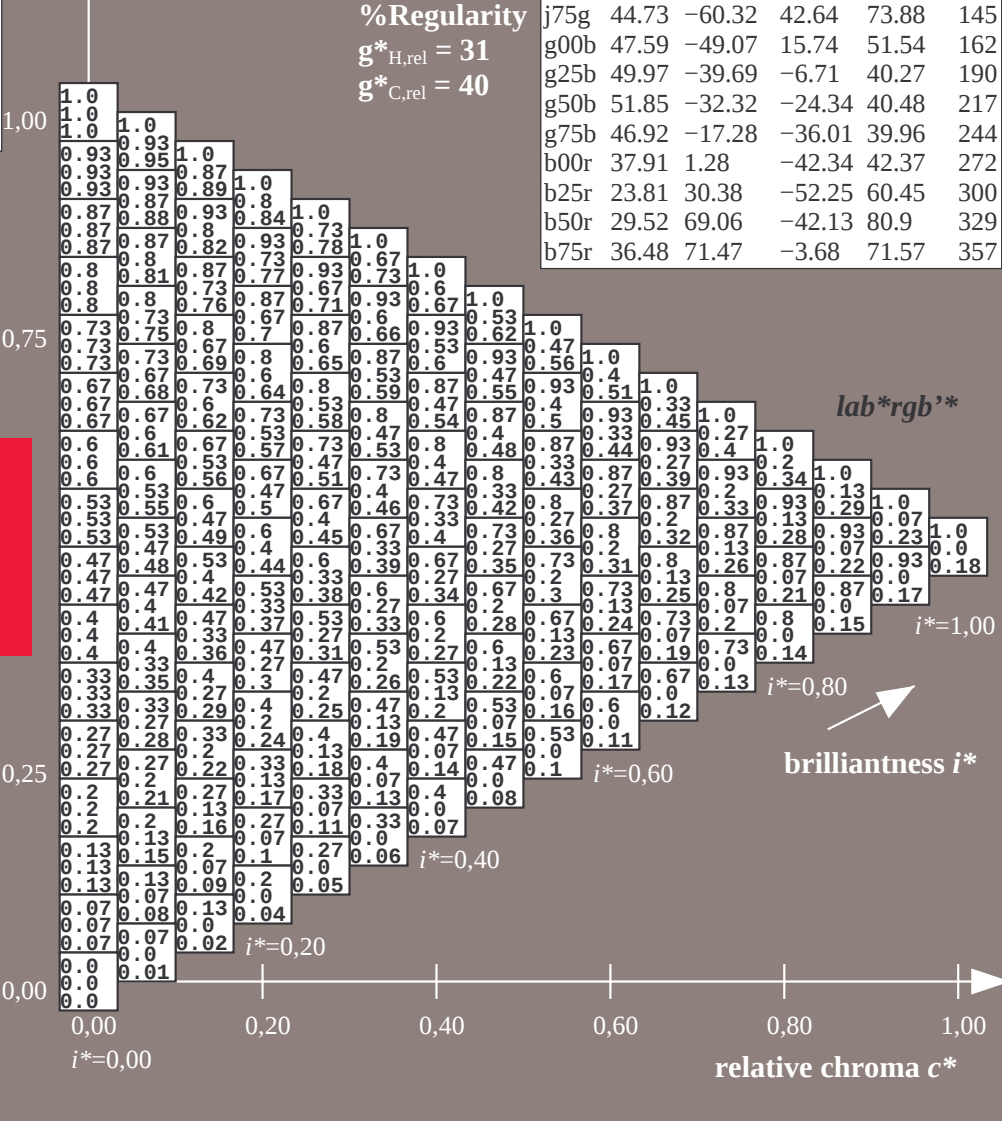
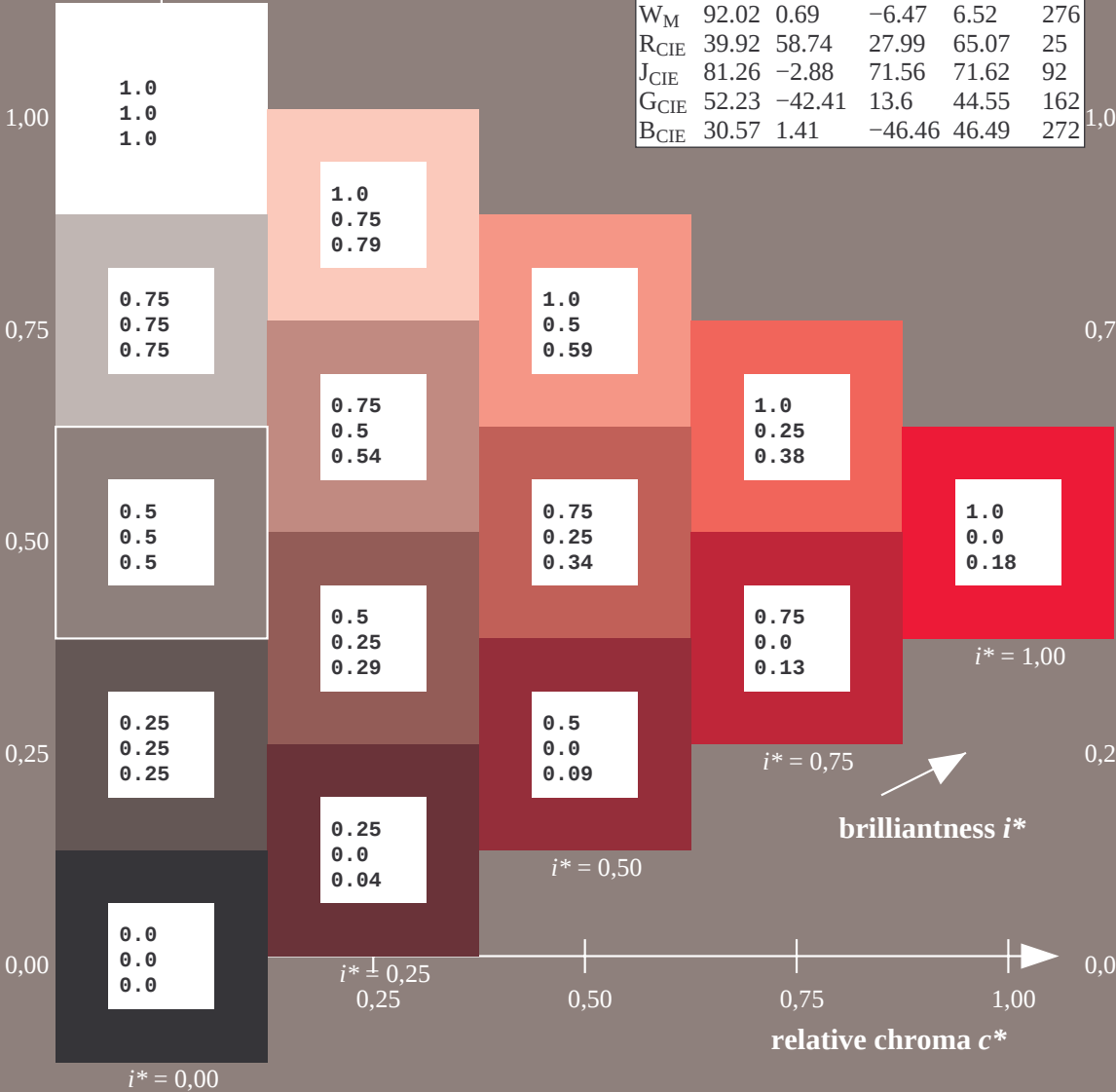
| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 35\ 63\ 30$   
 $LAB^*LCH^*_Ma: 35\ 70\ 25$   
 $lab^*rgb^*_Ma: 1.0\ 0.0\ 0.0$   
 $lab^*olv^*_Ma: 1.0\ 0.0\ 0.18$

triangle lightness  $t^*$

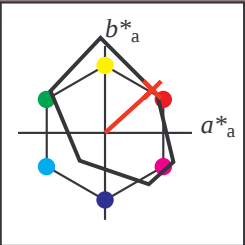
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |           |         |         |              |              |
|-------------------------------------|-----------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47     | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12     | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64     | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01     | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18     | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73     | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03     | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73     | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59     | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97     | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85     | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92     | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91     | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81     | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52     | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48     | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 39\ 55\ 49$

$LAB^*LCH^*_Ma: 39\ 74\ 42$

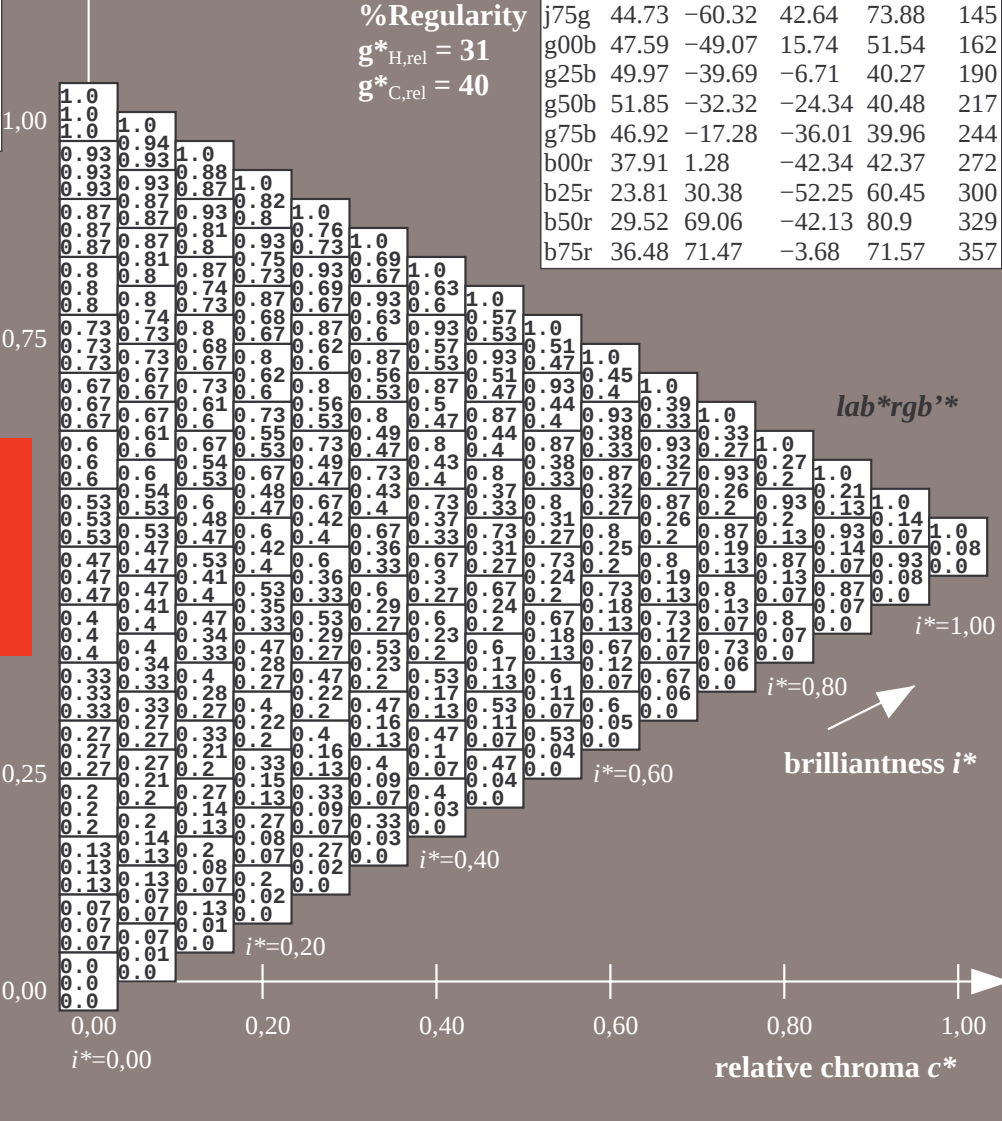
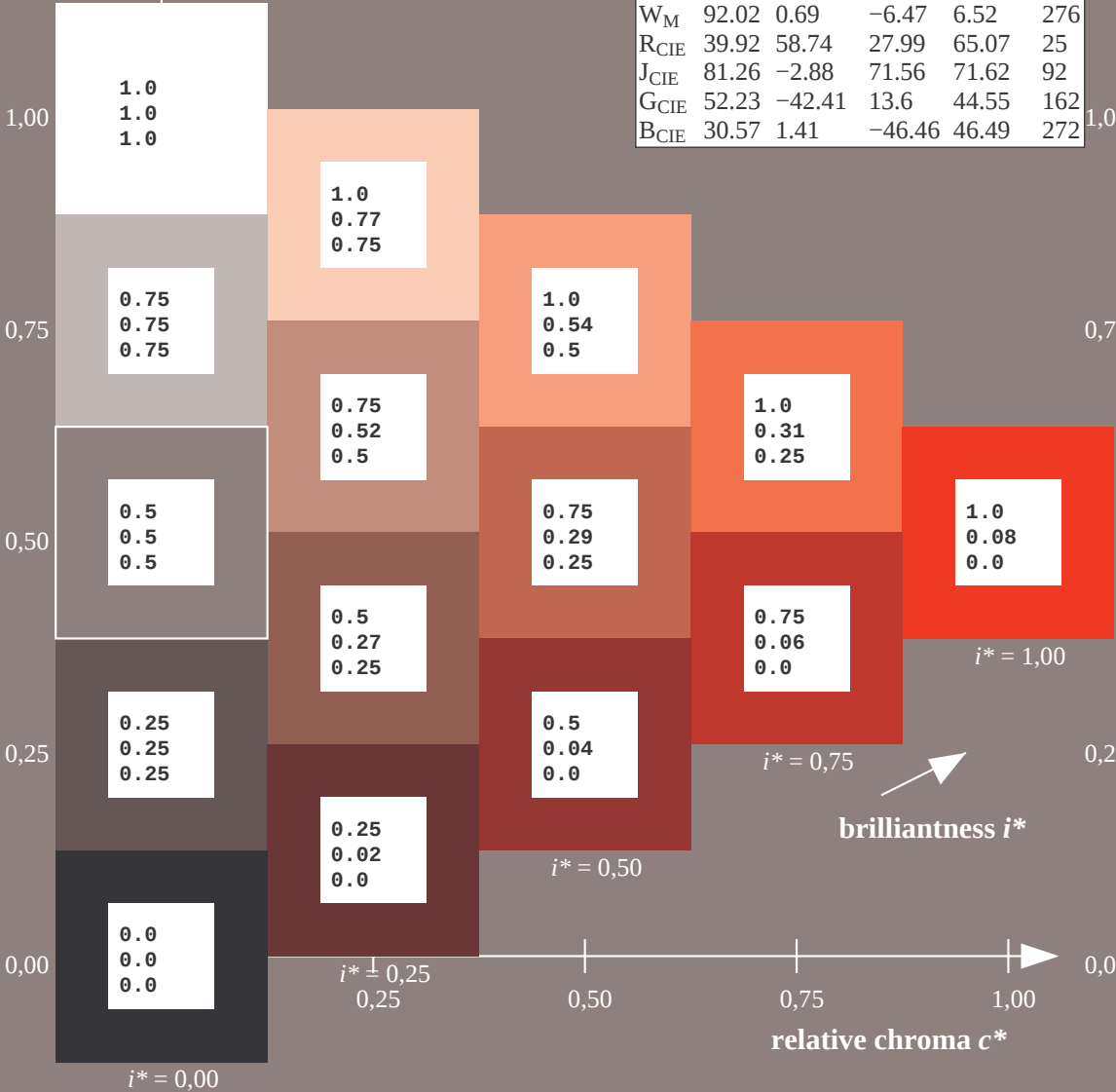
$lab^*rgb^*_Ma: 1.0\ 0.25\ 0.0$

$lab^*olv^*_Ma: 1.0\ 0.08\ 0.0$

triangle lightness  $t^*$

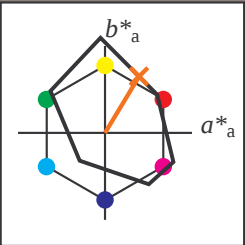
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 51\ 39\ 65$

$LAB^*LCH^*_Ma: 51\ 76\ 59$

$lab^*rgb^*_Ma: 1.0\ 0.5\ 0.0$

$lab^*olv^*_Ma: 1.0\ 0.32\ 0.0$

triangle lightness  $t^*$

%Gamut

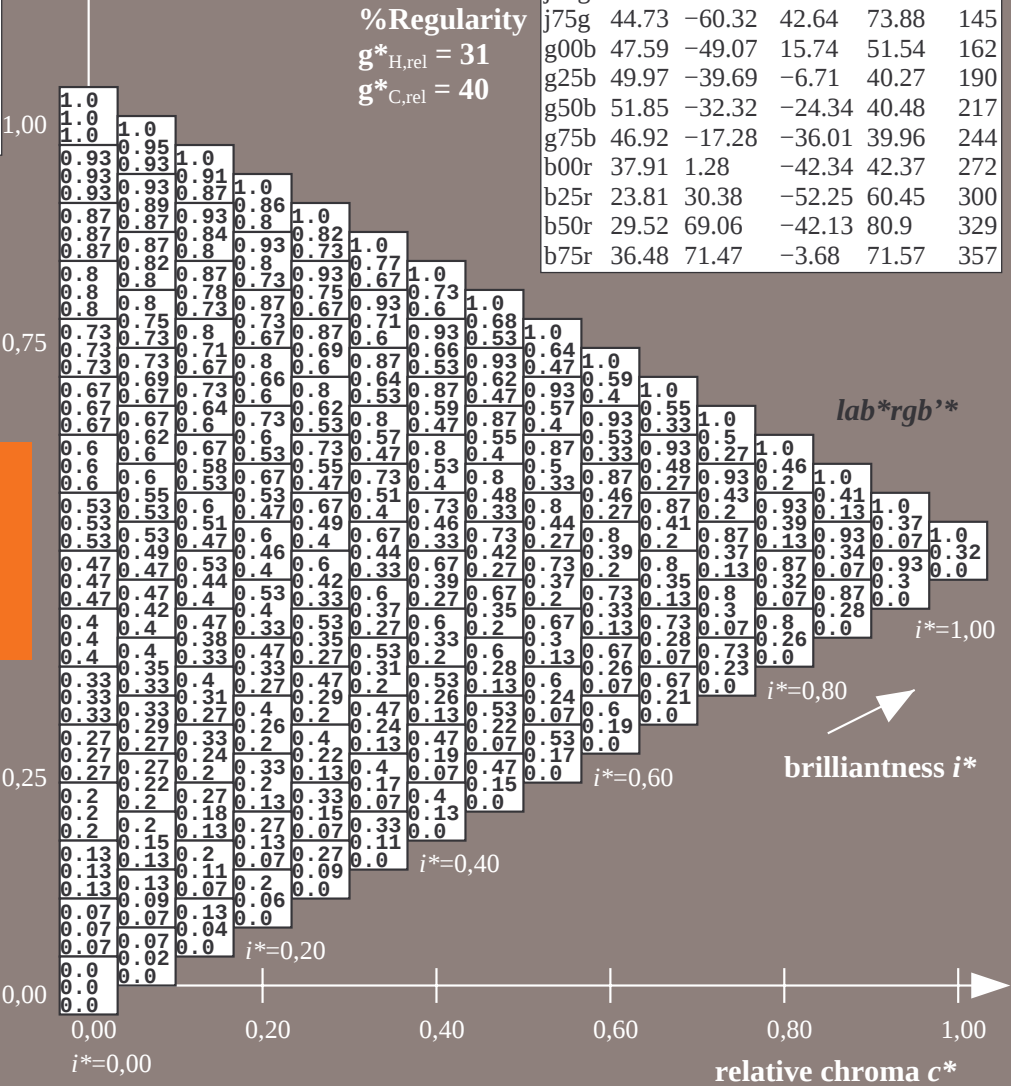
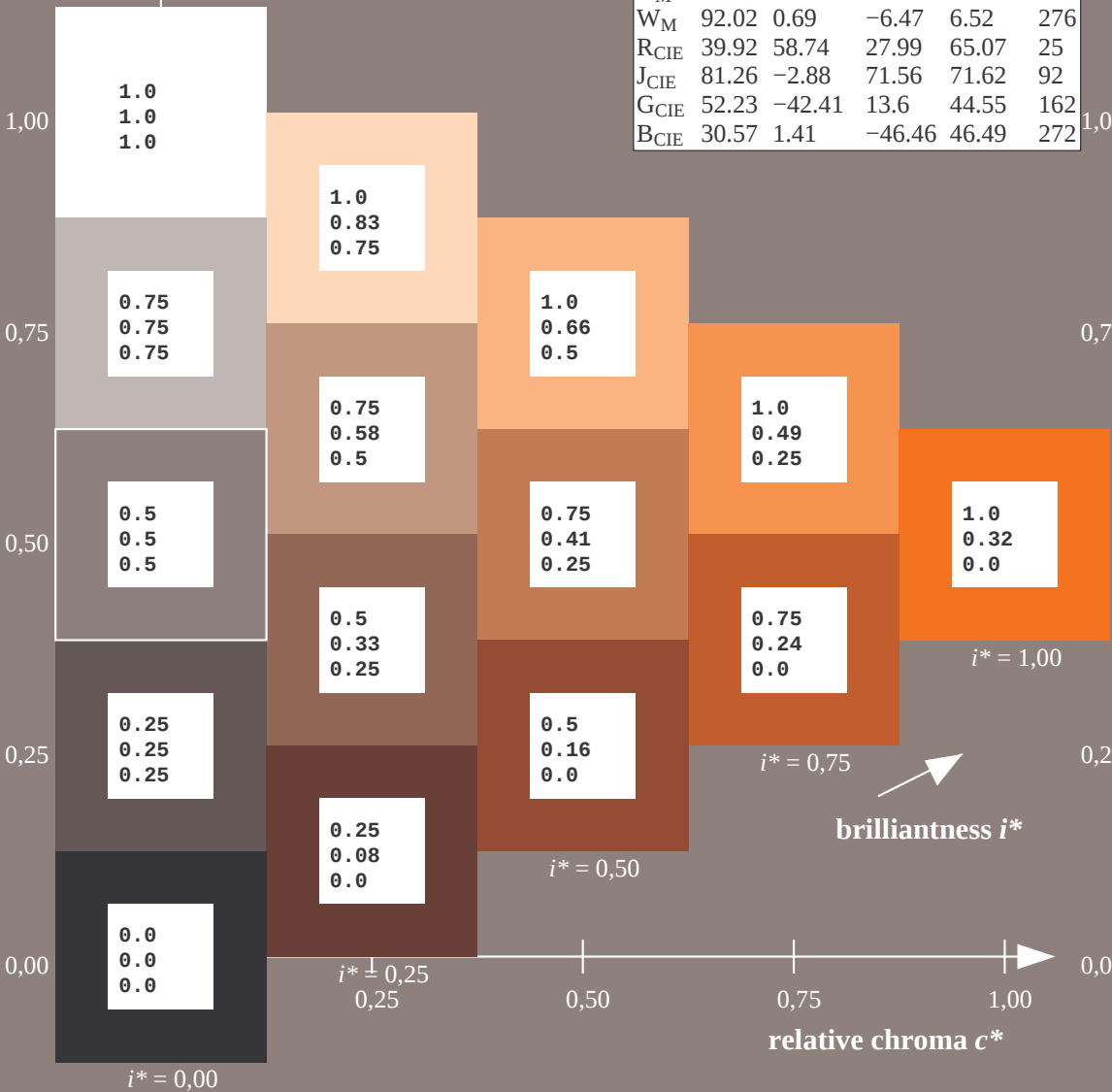
$u^*_{rel} = 109$

%Regularity

$g^*_{H,rel} = 31$

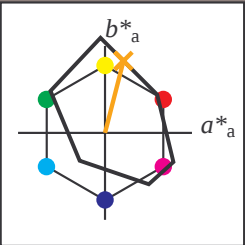
$g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

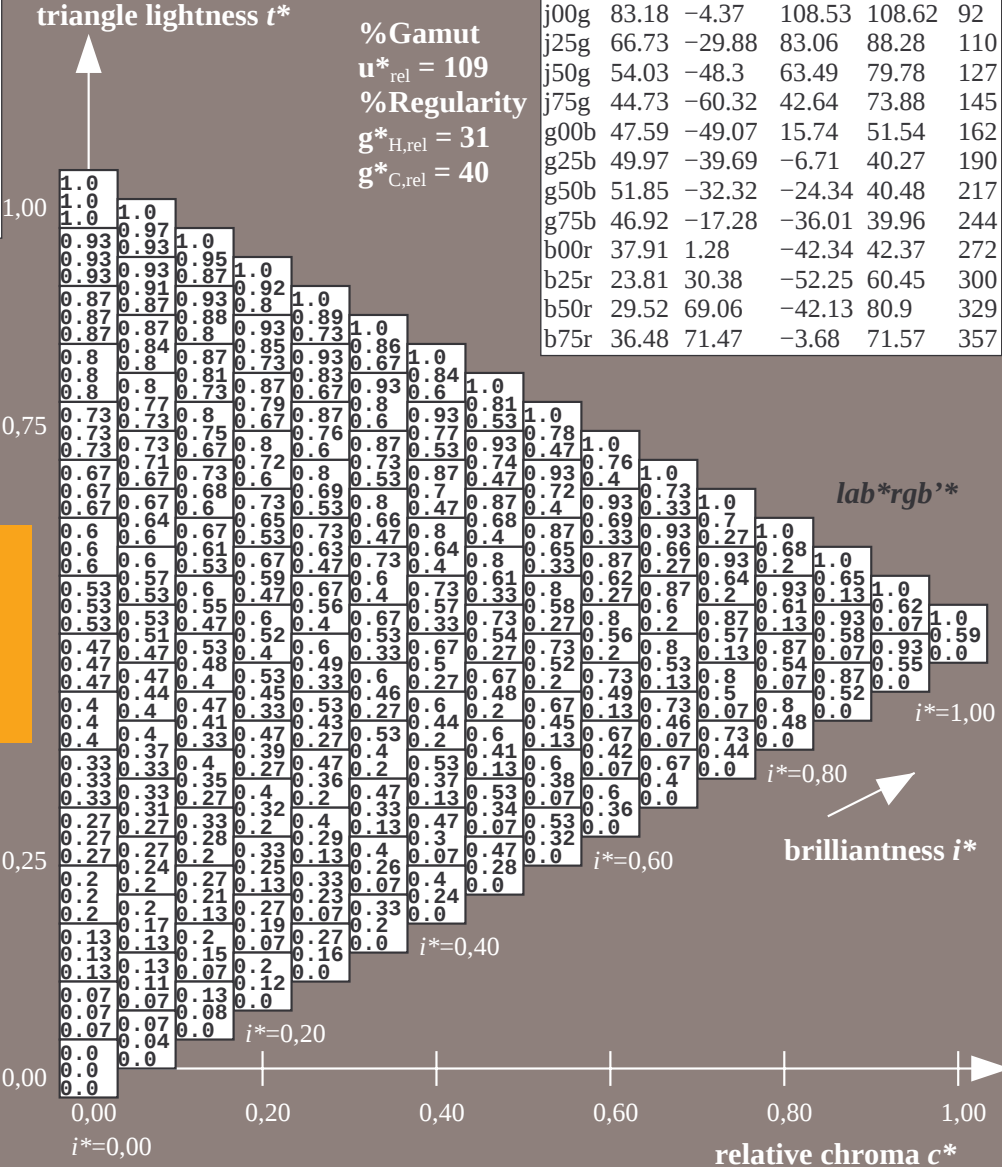
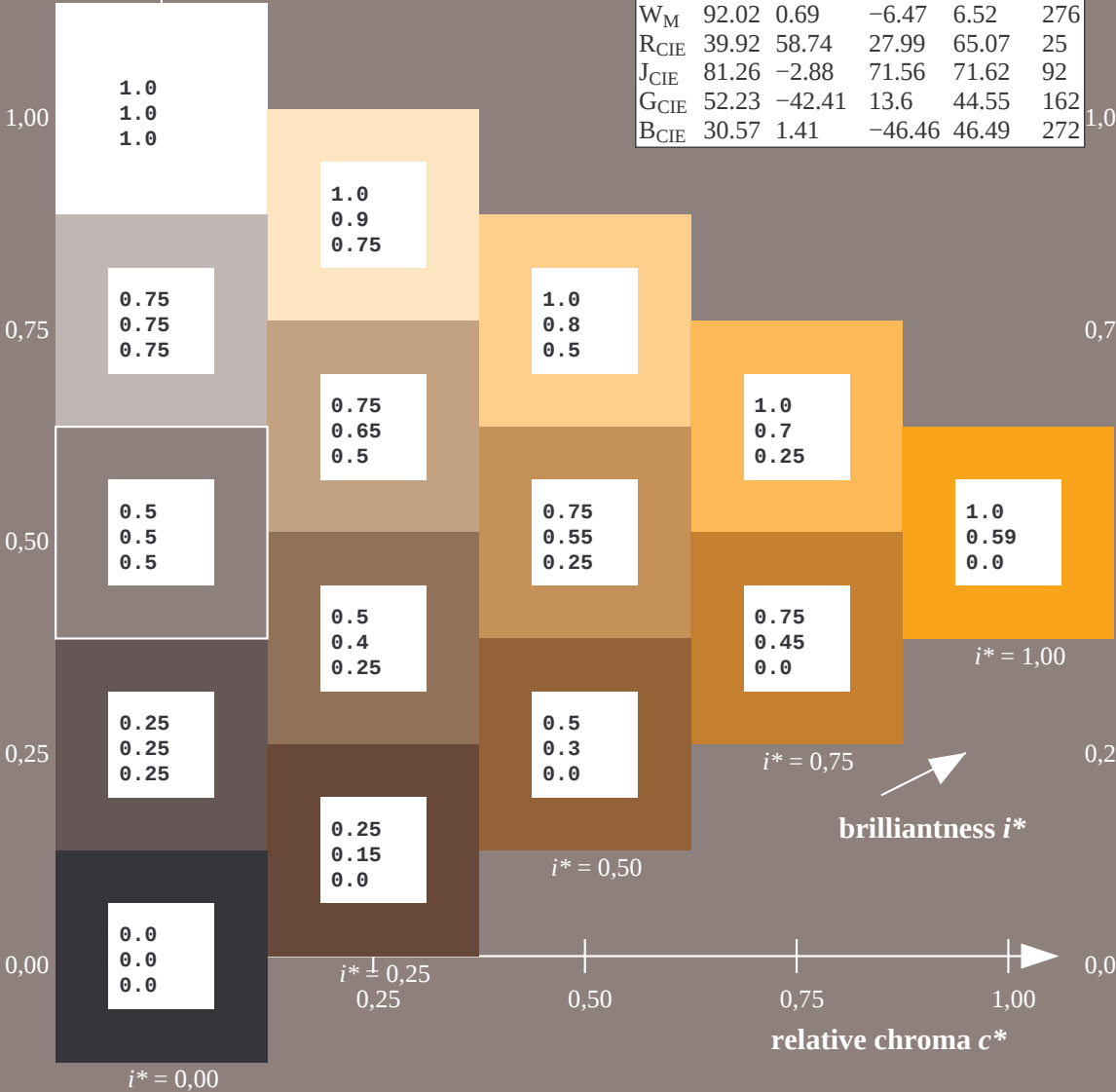


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 64\ 21\ 83$   
 $LAB^*LCH^*_Ma: 64\ 86\ 76$   
 $lab^*rgb^*_Ma: 1.0\ 0.75\ 0.0$   
 $lab^*olv^*_Ma: 1.0\ 0.59\ 0.0$

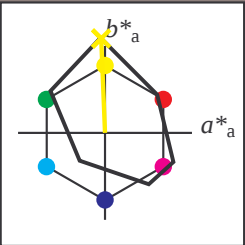
$u^* = r75j$   
 $lab^*rgb^*$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 83 -3 109$

$LAB^*LCH^*_Ma: 83 109 92$

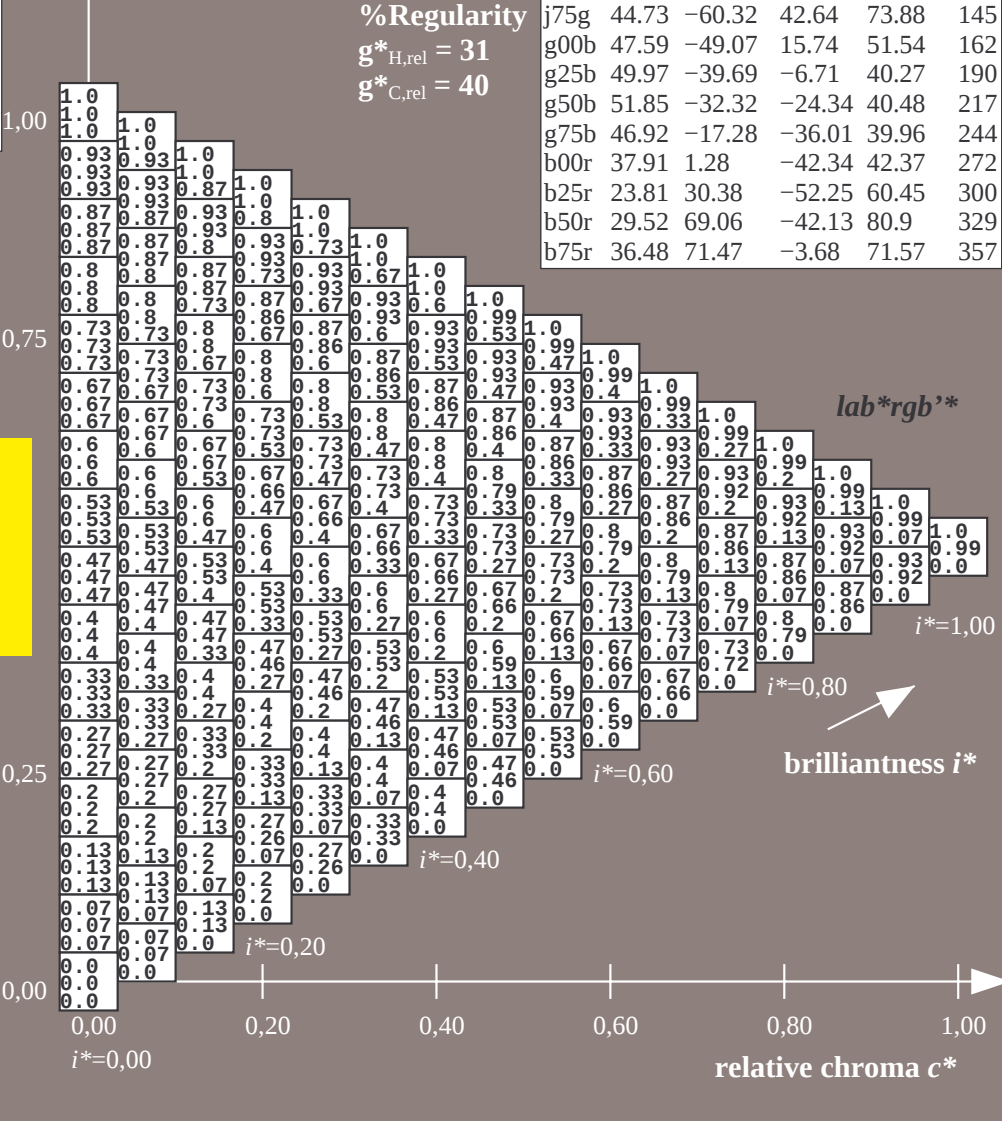
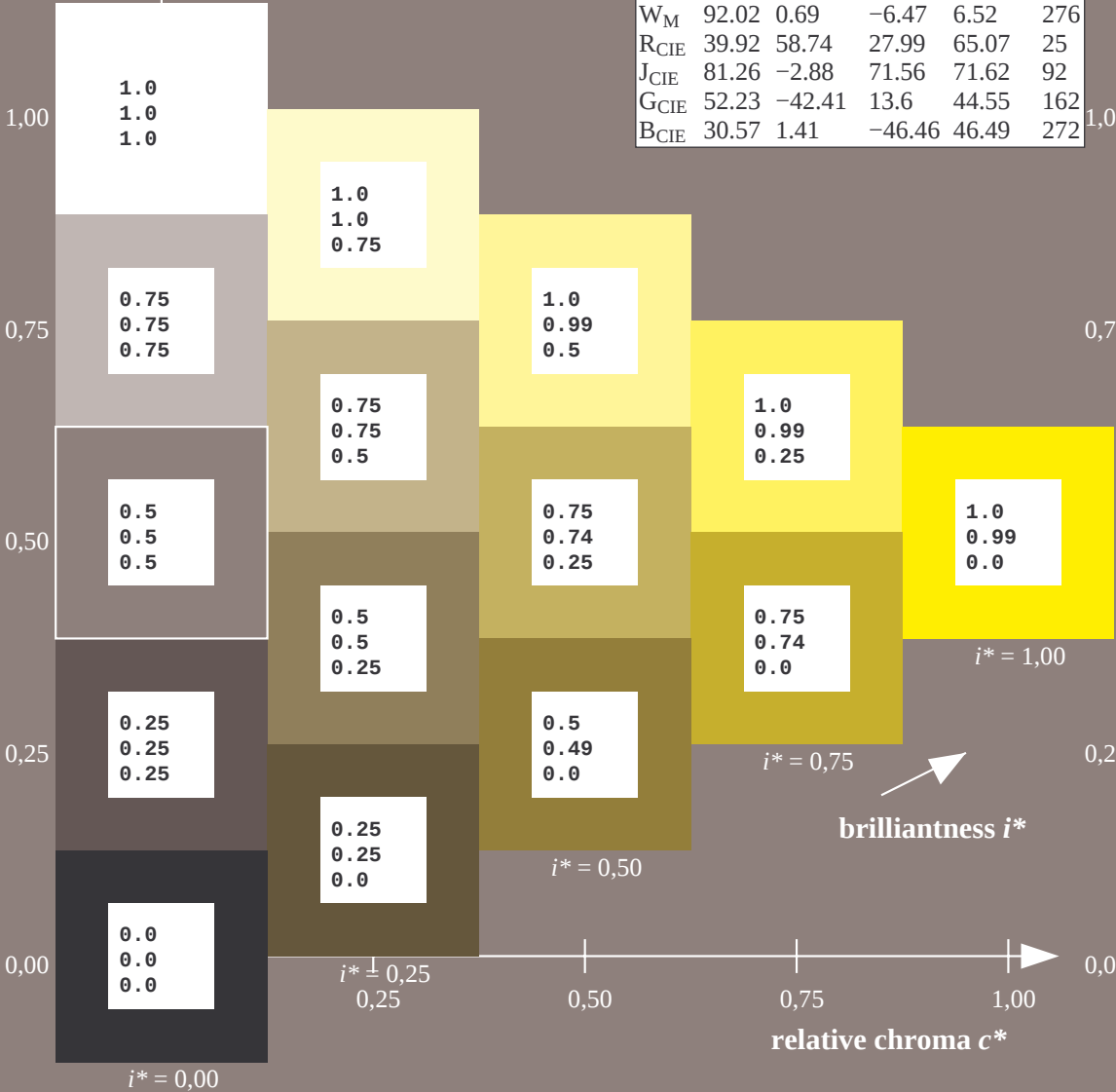
$lab^*rgb^*_Ma: 1.0 1.0 0.0$

$lab^*olv^*_Ma: 1.0 0.99 0.0$

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



**lab\*rqb'**

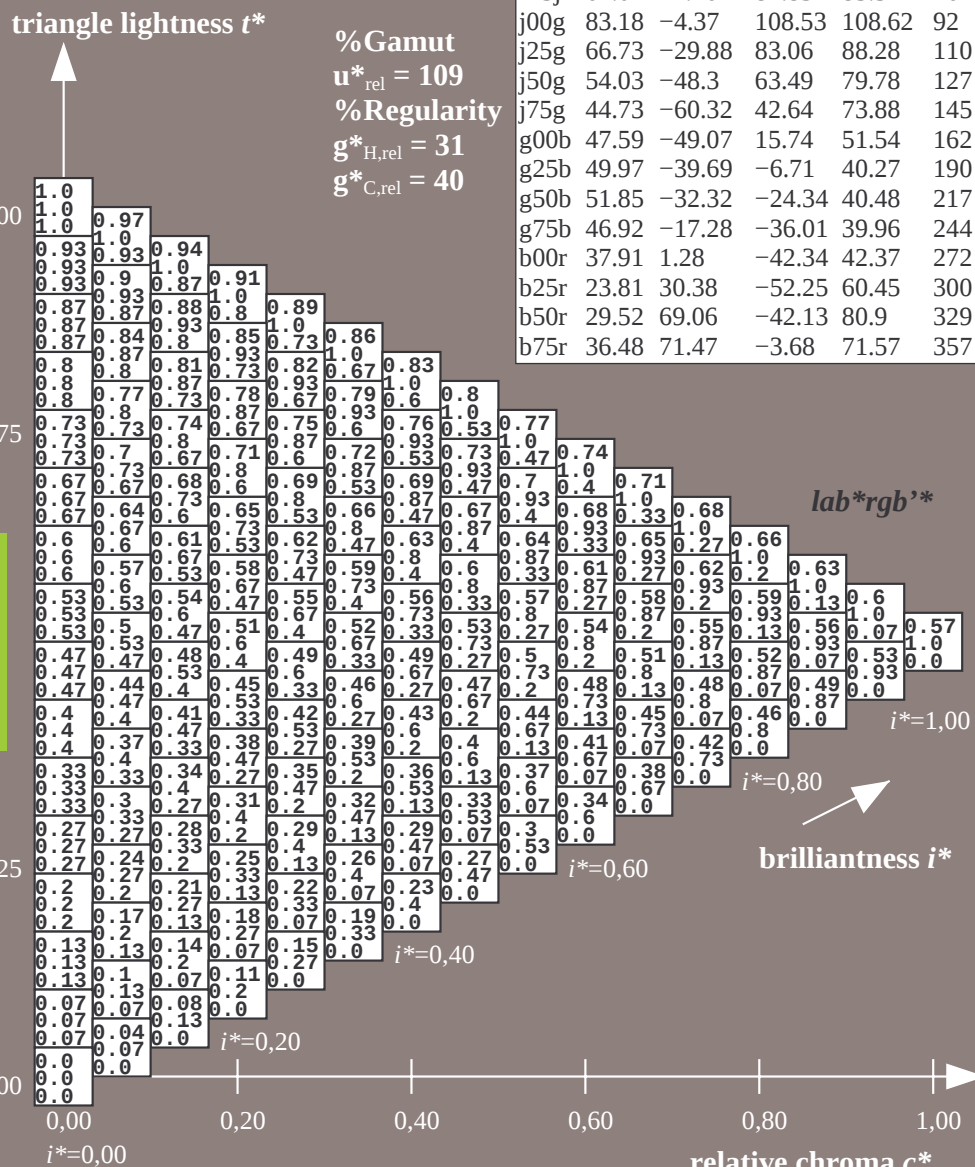
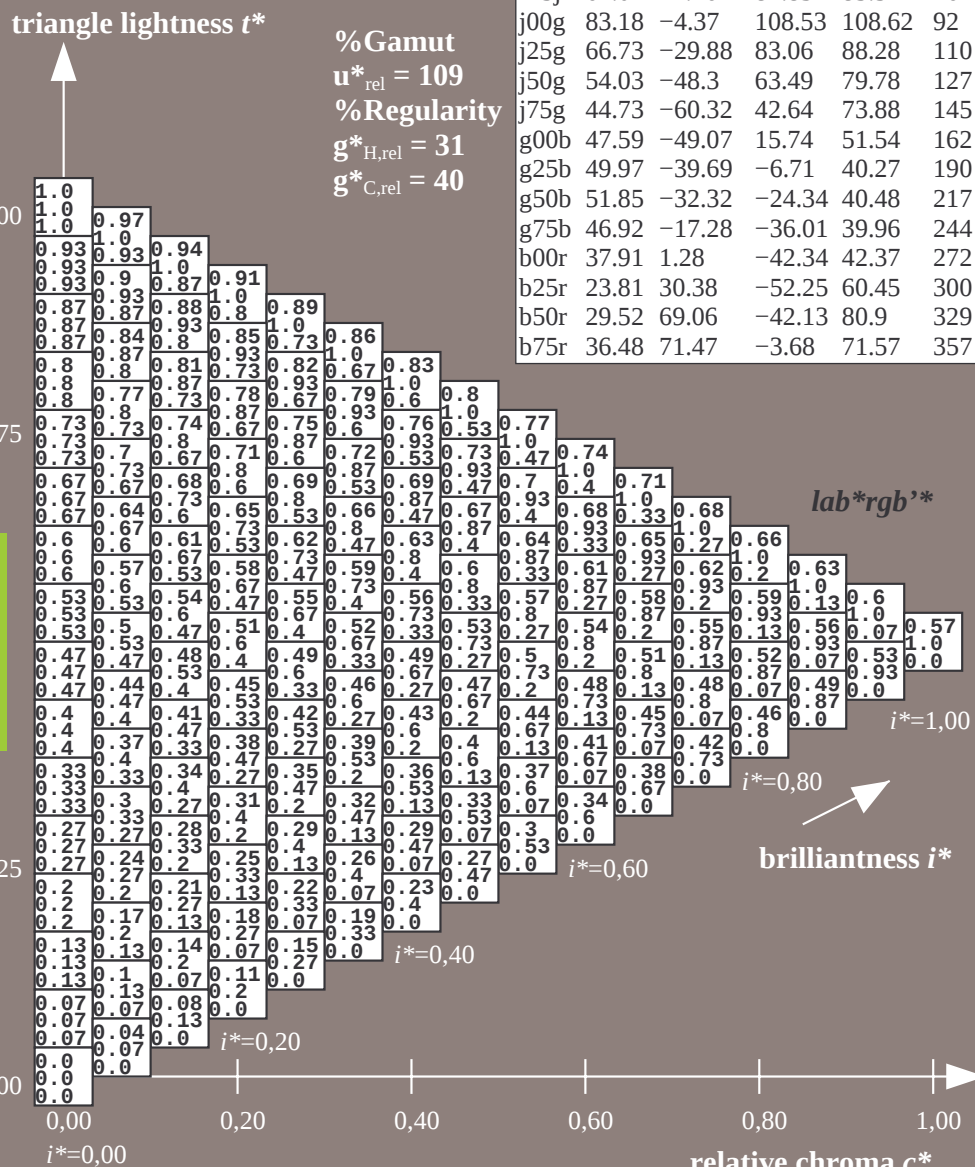
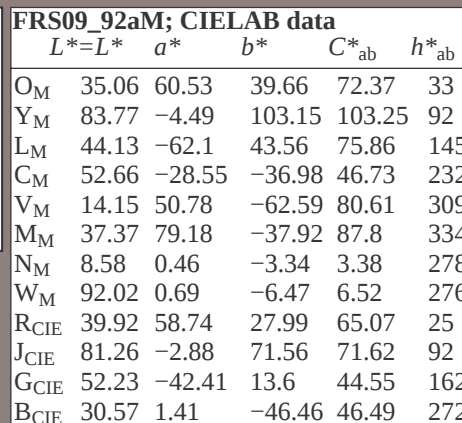
**Data for maximum colour (Ma):**

*lab\*tch\** and *lab\*icu\**

**Complementary hue text:**

$$u^* = j25q$$

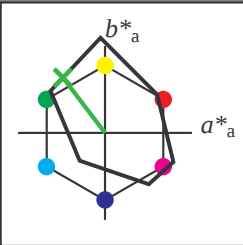
**Contrast reduction factor:**

$$C_D = 1.0$$
triangle lightness  $t^*$ 

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Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 127/360 = 0.354$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j50g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 54 -47 63$

$LAB^*LCH^*_Ma: 54 80 127$

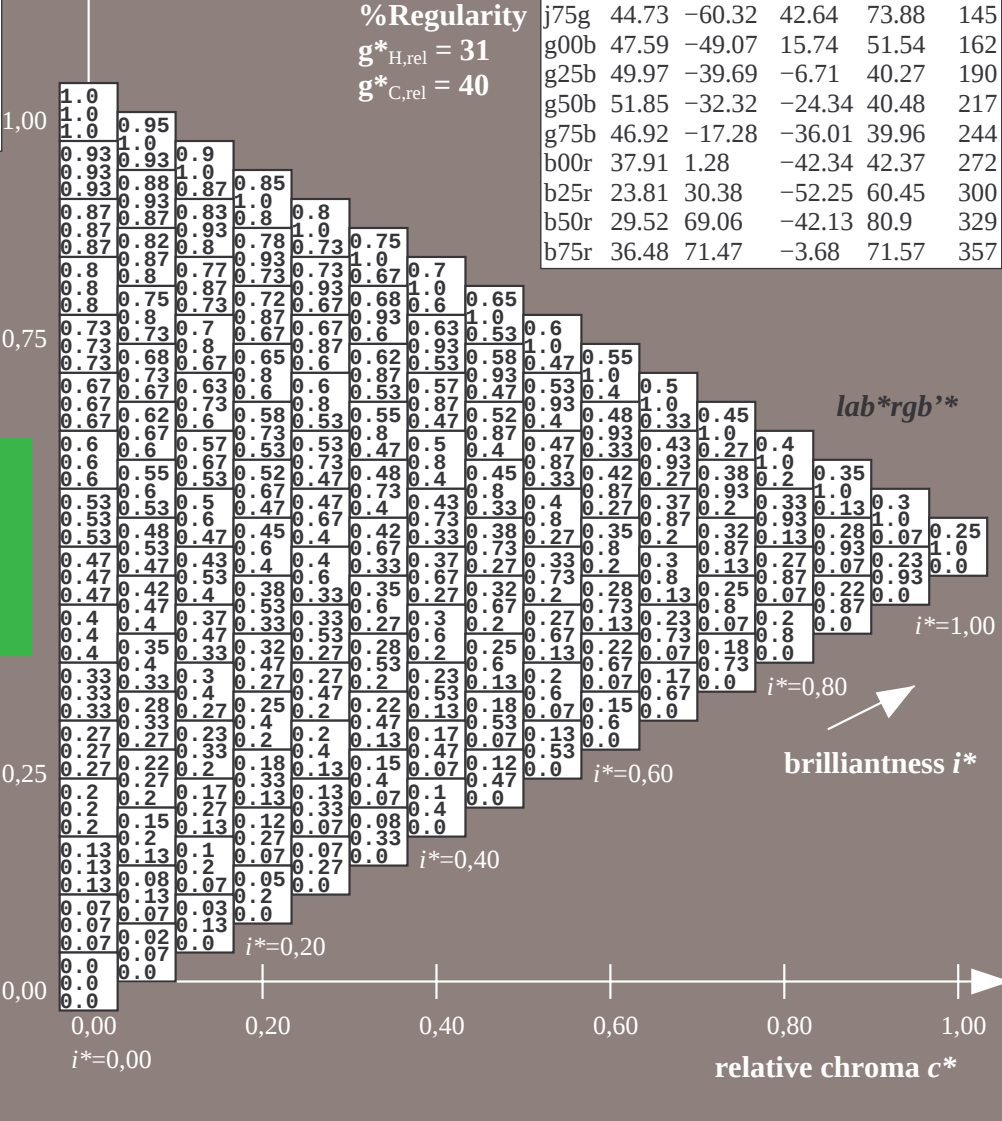
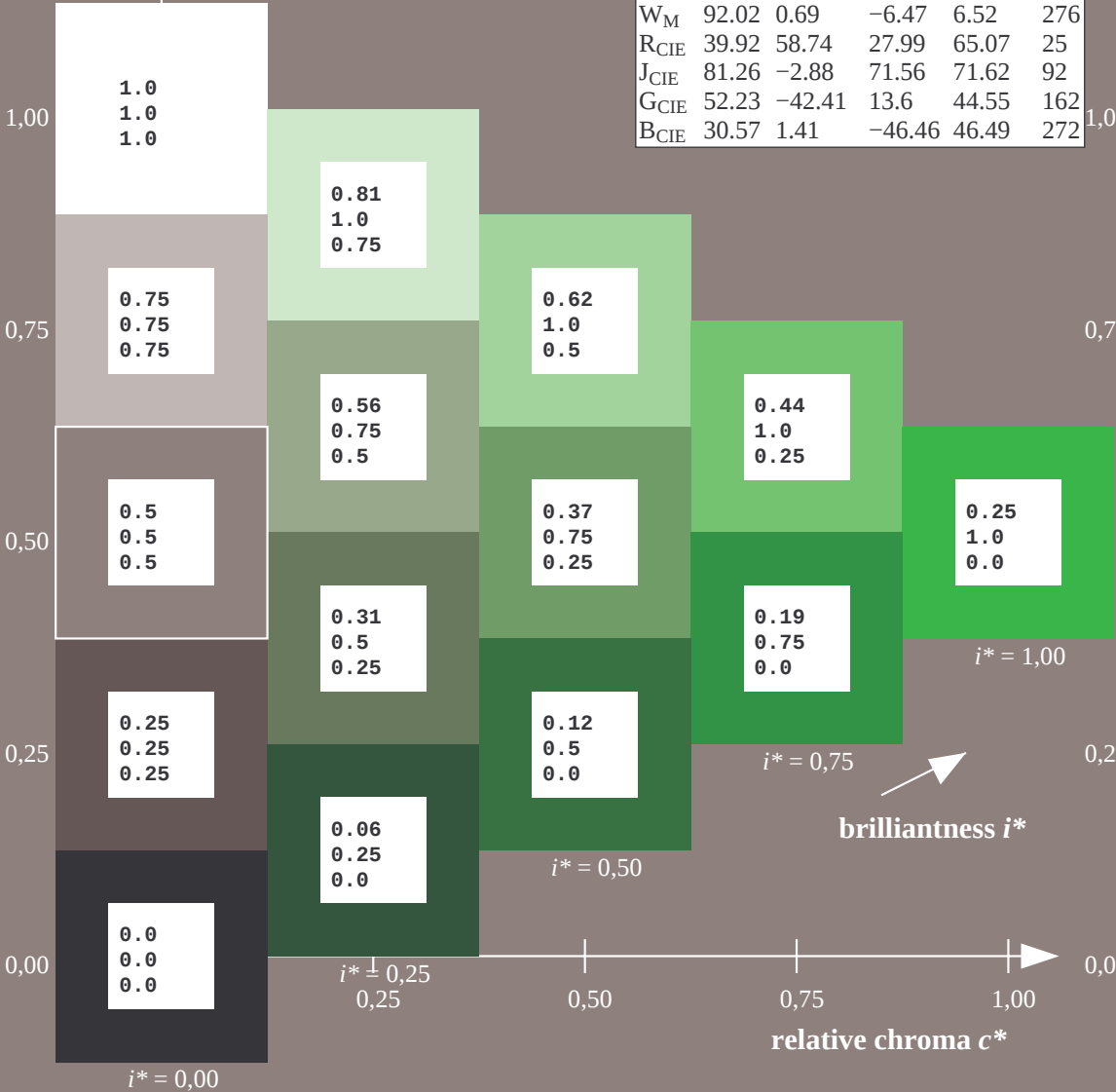
$lab^*rgb^*_Ma: 0.5 1.0 0.0$

$lab^*olv^*_Ma: 0.25 1.0 0.0$

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



$u^* = j75g$   
 $lab^*rgb^{**}$

| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

*LAB\*LAB\**Ma: 45 -59 43

**LAB\*LCH\*Ma: 45 74 145**

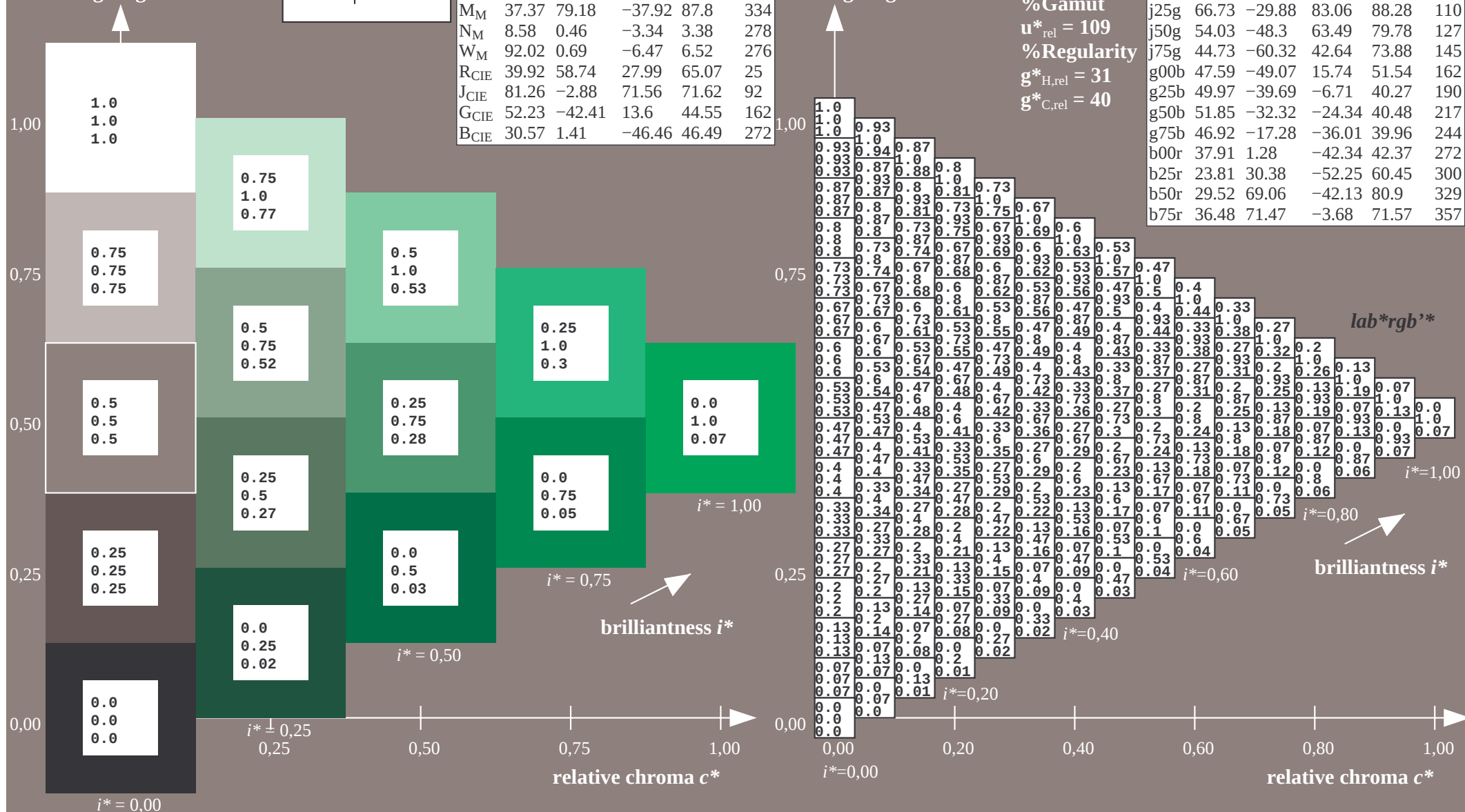
**lab\*rgb\*\_Ma: 0.25 1.0 0.0**

**lab\*olv\*Ma: 0.0 1.0 0.07**

triangle lightness  $t^*$

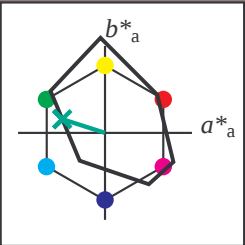
**%Gamut**  
 **$u^*_{\text{rel}} = 109$**   
**%Regularity**  
 **$g^*_{\text{H,rel}} = 31$**   
 **$g^*_{\text{C,rel}} = 40$**

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g00b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



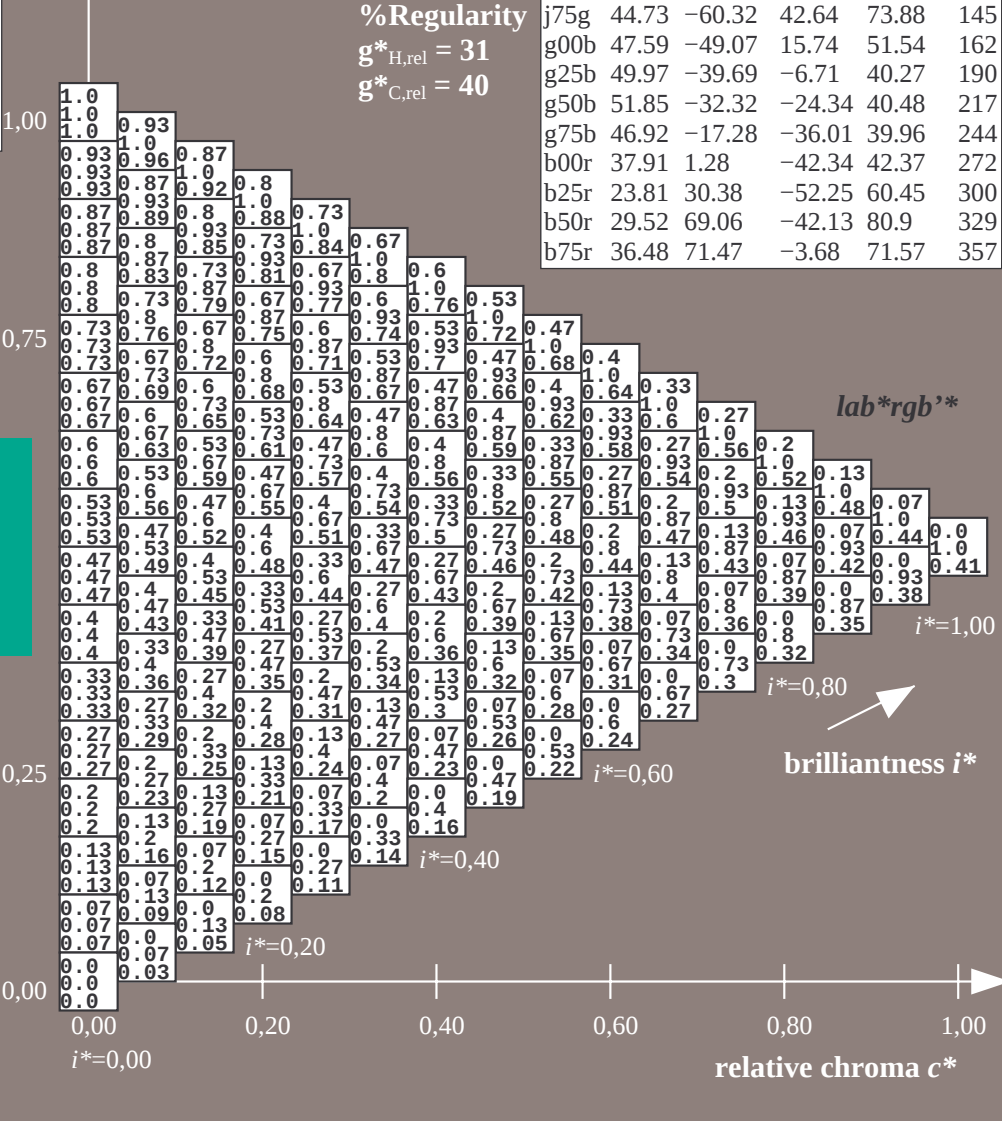
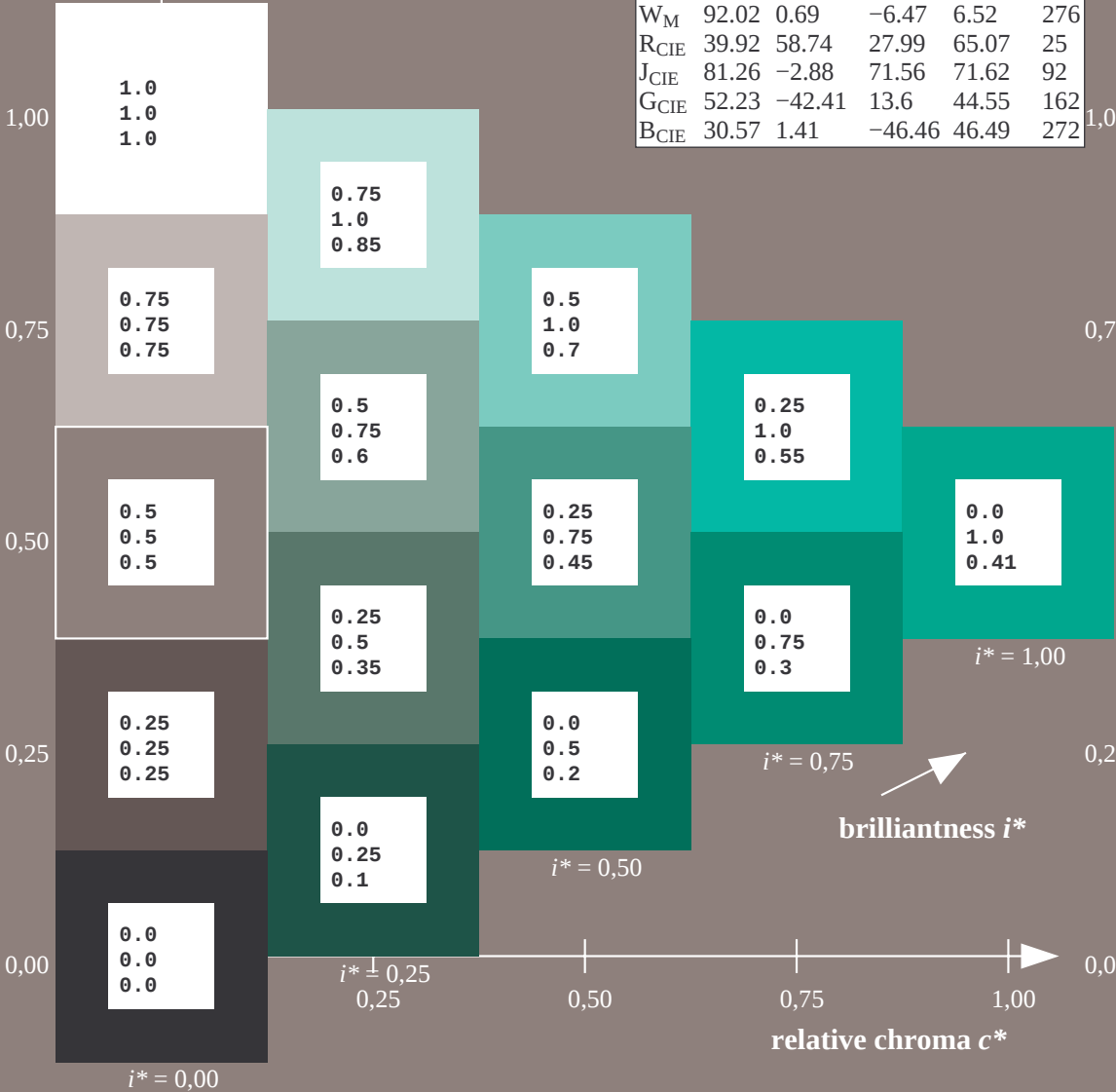
| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 48 -48 16$   
 $LAB^*LCH^*_Ma: 48 52 162$   
 $lab^*rgb^*_Ma: 0.0 1.0 0.0$   
 $lab^*olv^*_Ma: 0.0 1.0 0.41$

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



$$u^* = g25b$$

**Data for maximum colour (Ma):**

*lab\*rgb\*\**

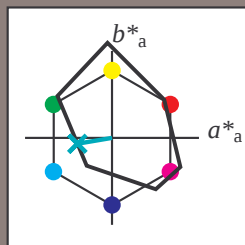
**LAB\*LAB\*Ma: 50 -39 -6**

**LAB\*LCH\*Ma: 50 40 190**

*lab\*rgb\*\_Ma: 0.0 1.0 0.5*

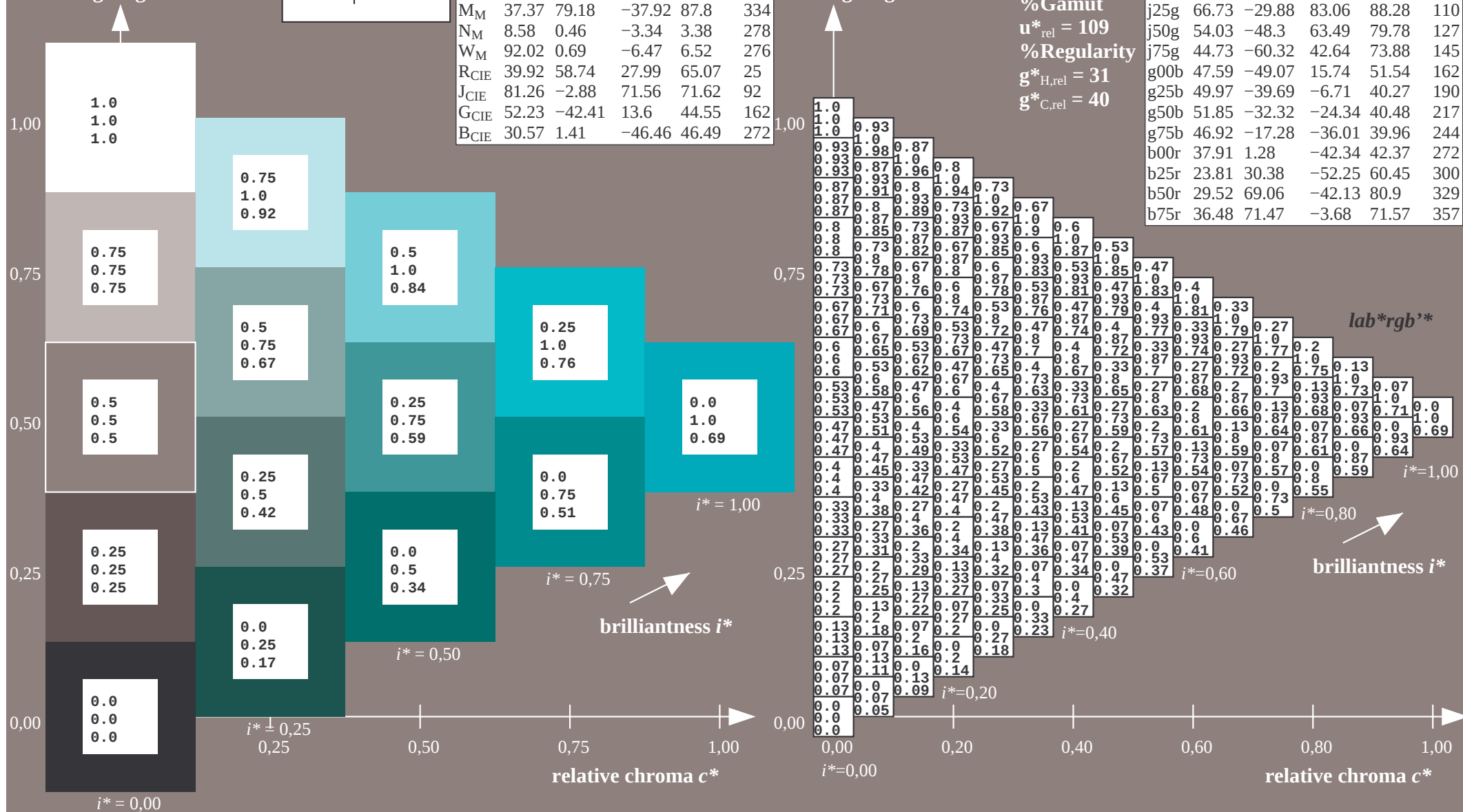
**lab\*olv\*Ma: 0.0 1.0 0.69**

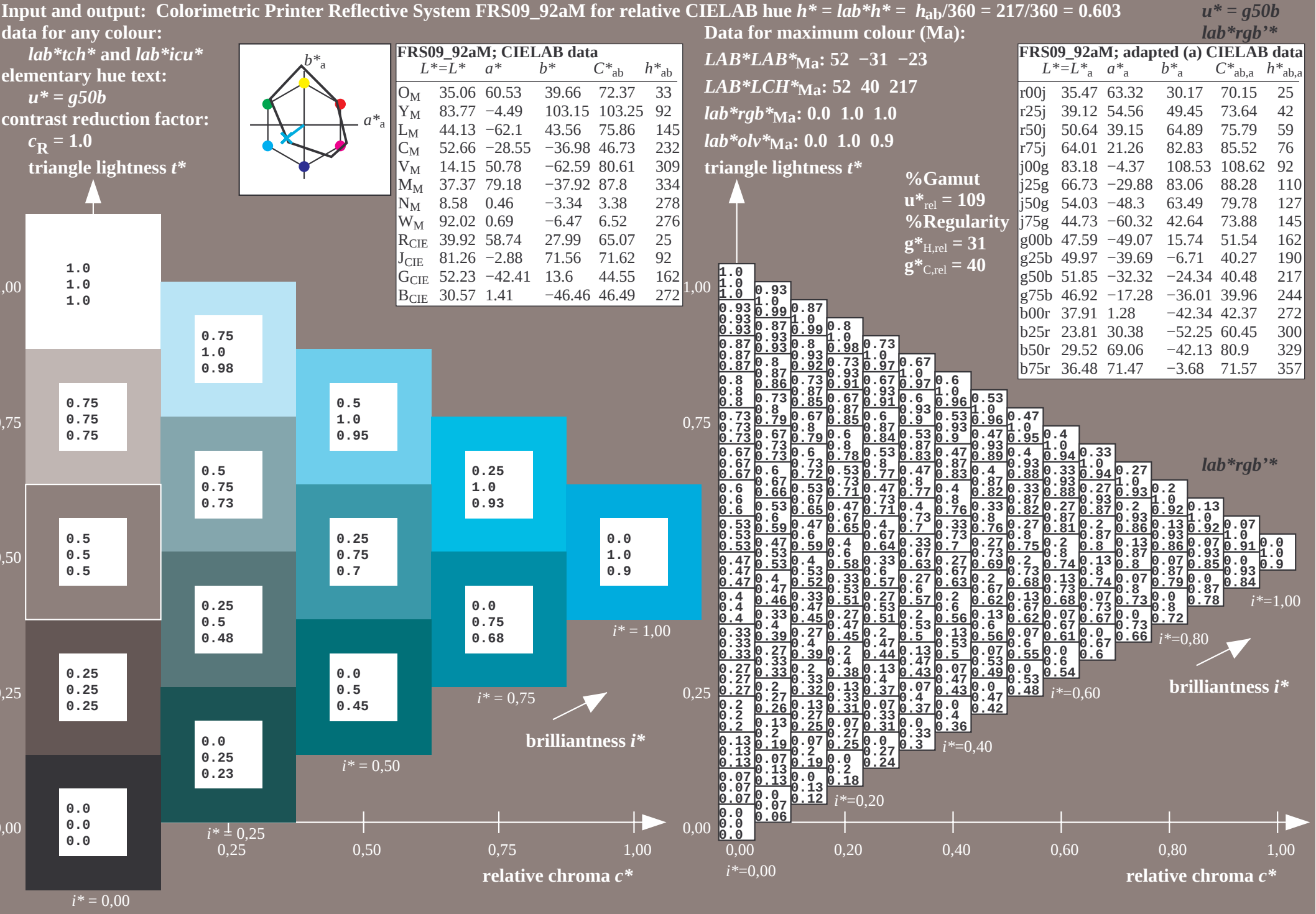
triangle lightness  $t^*$

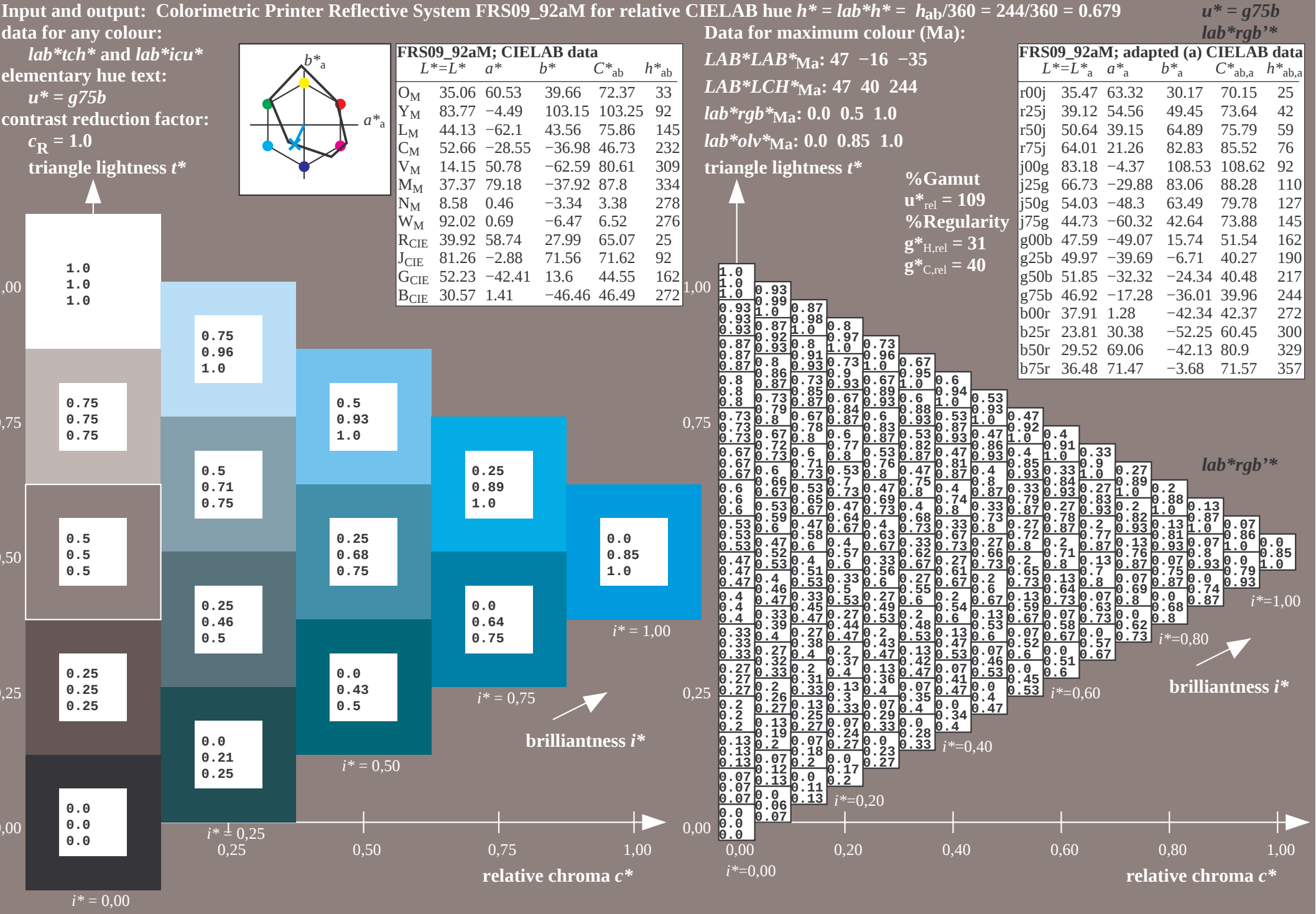


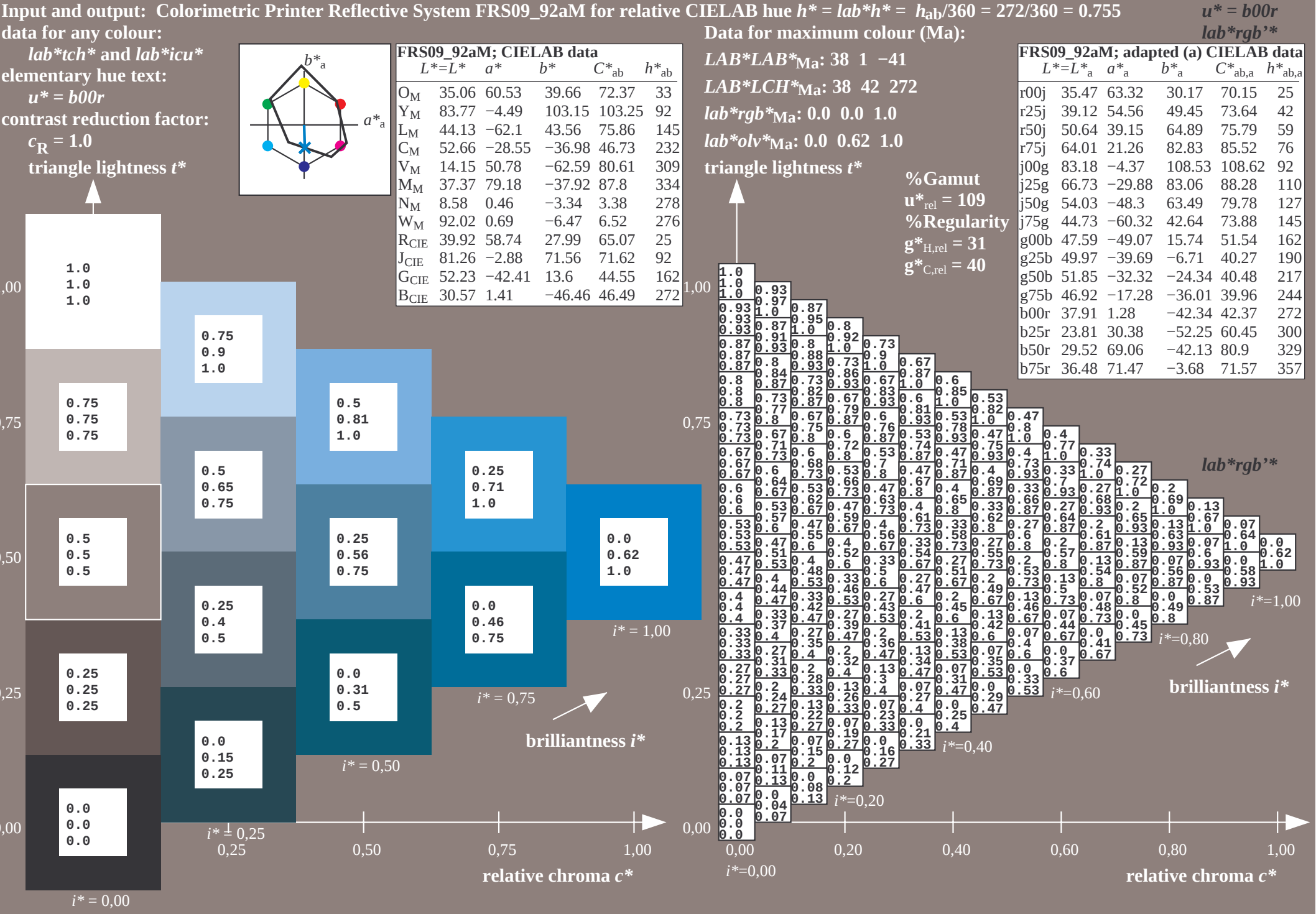
| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIF</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

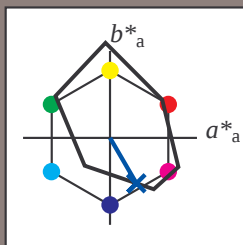
| FRS09_92aM; adapted (a) CIELAB data |         |         |         |              |              |  |
|-------------------------------------|---------|---------|---------|--------------|--------------|--|
|                                     | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47   | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12   | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64   | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01   | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18   | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73   | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03   | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73   | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59   | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97   | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85   | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92   | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91   | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81   | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52   | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48   | 71.47   | -3.68   | 71.57        | 357          |  |





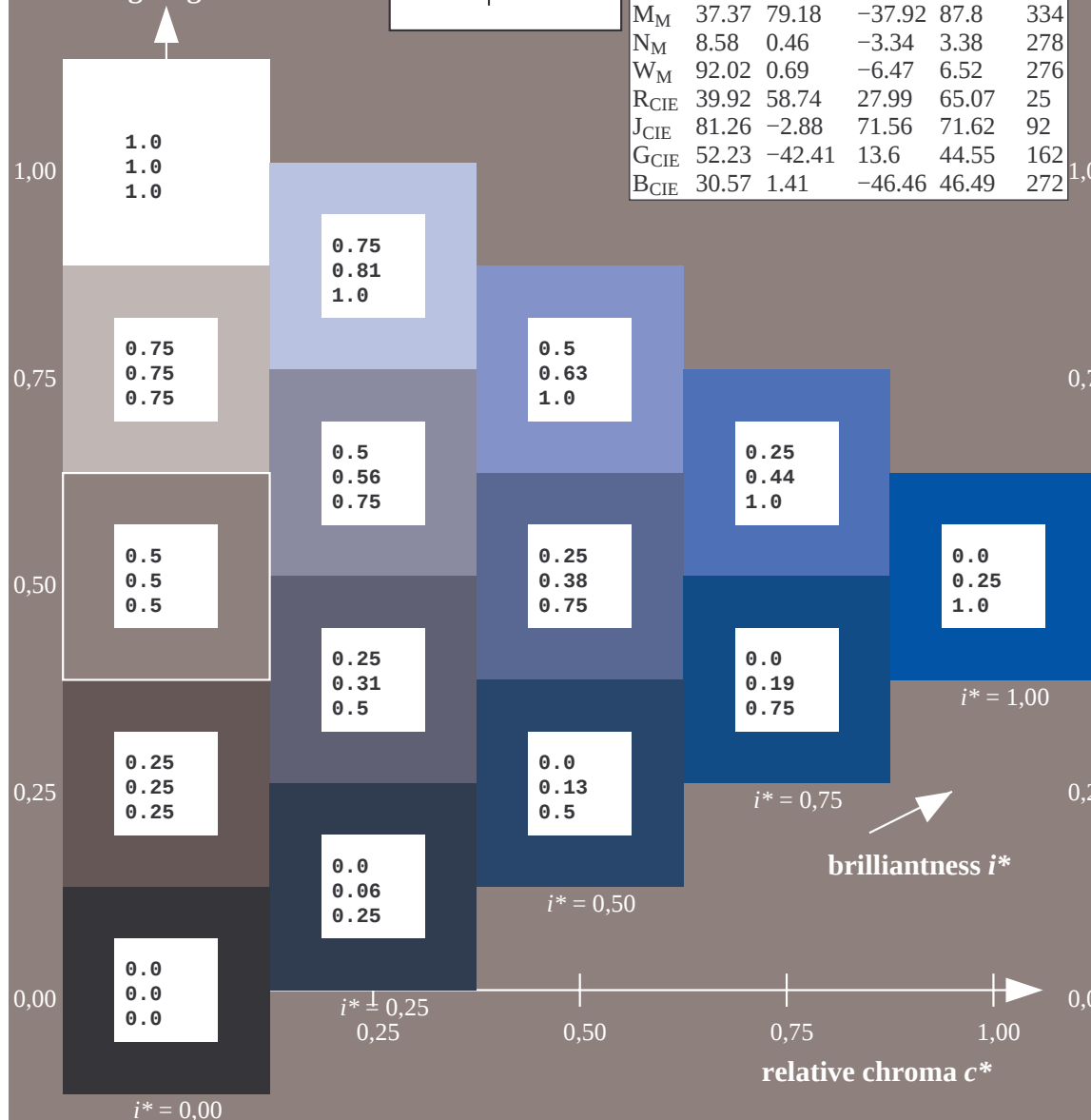
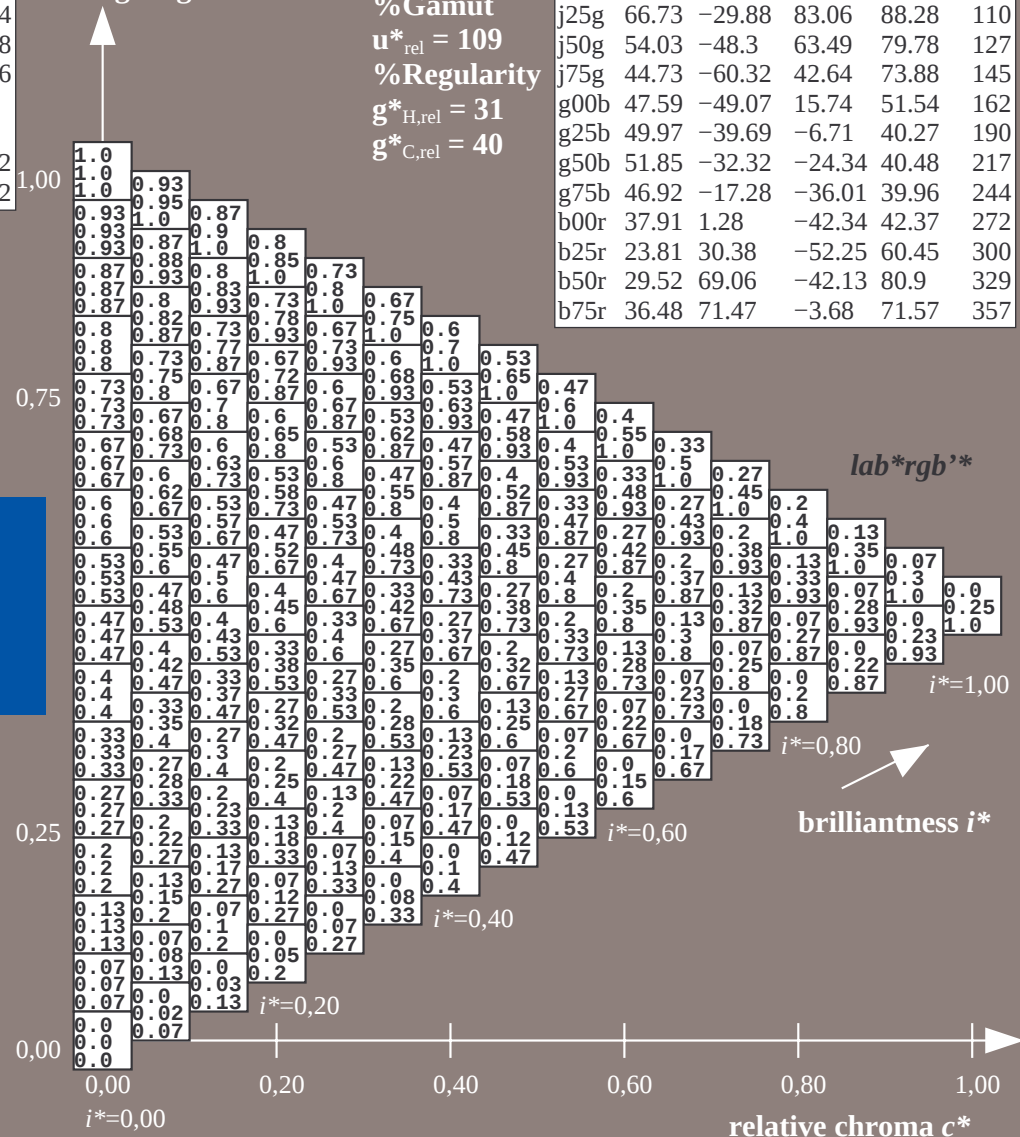




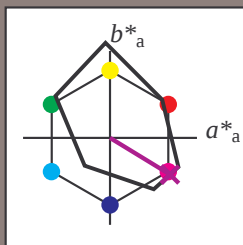
triangle lightness  $t^*$ 

| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

triangle lightness  $t^*$


$$g^*_{C,rel} = 40$$


triangle lightness  $t^*$

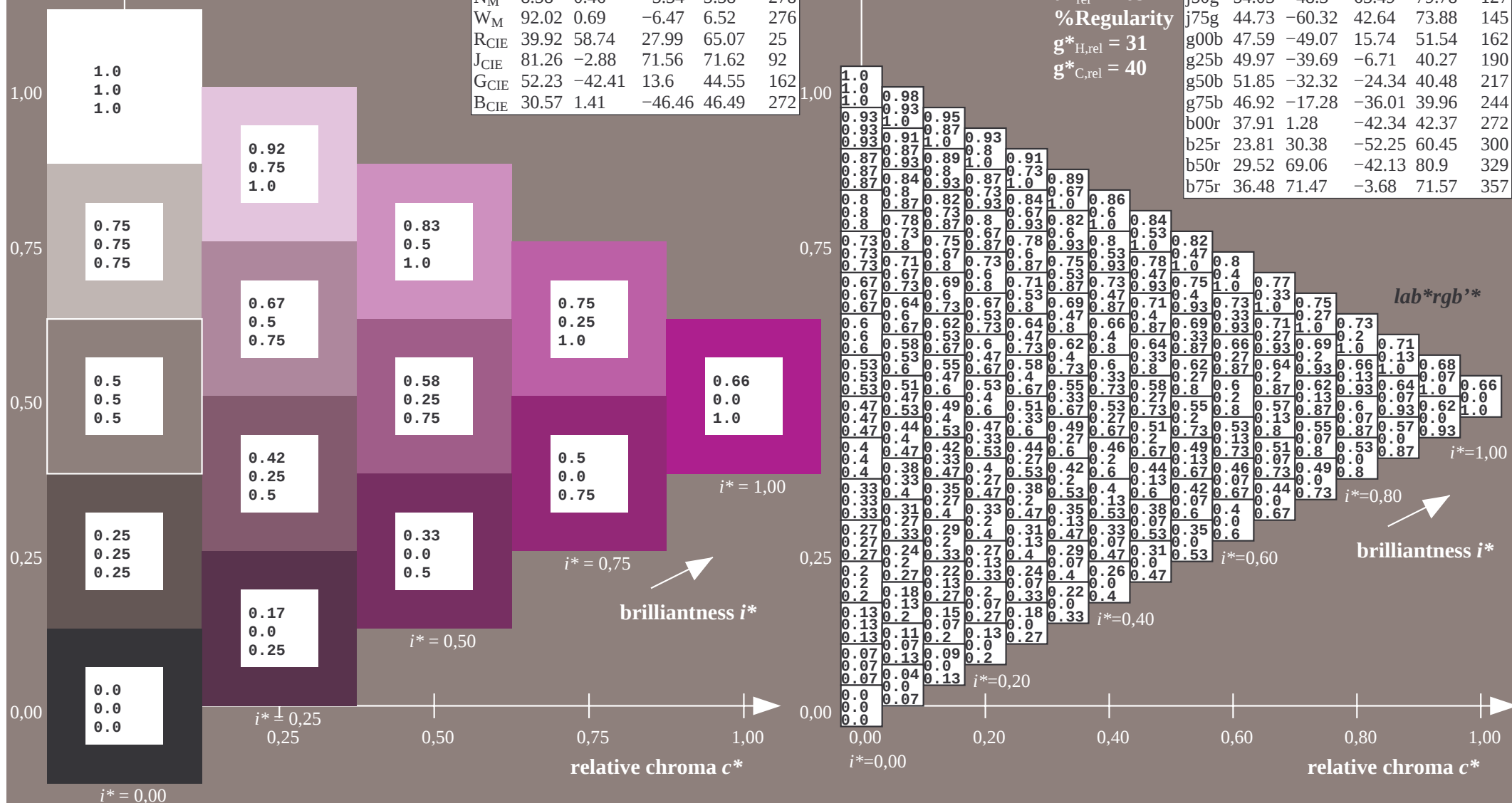


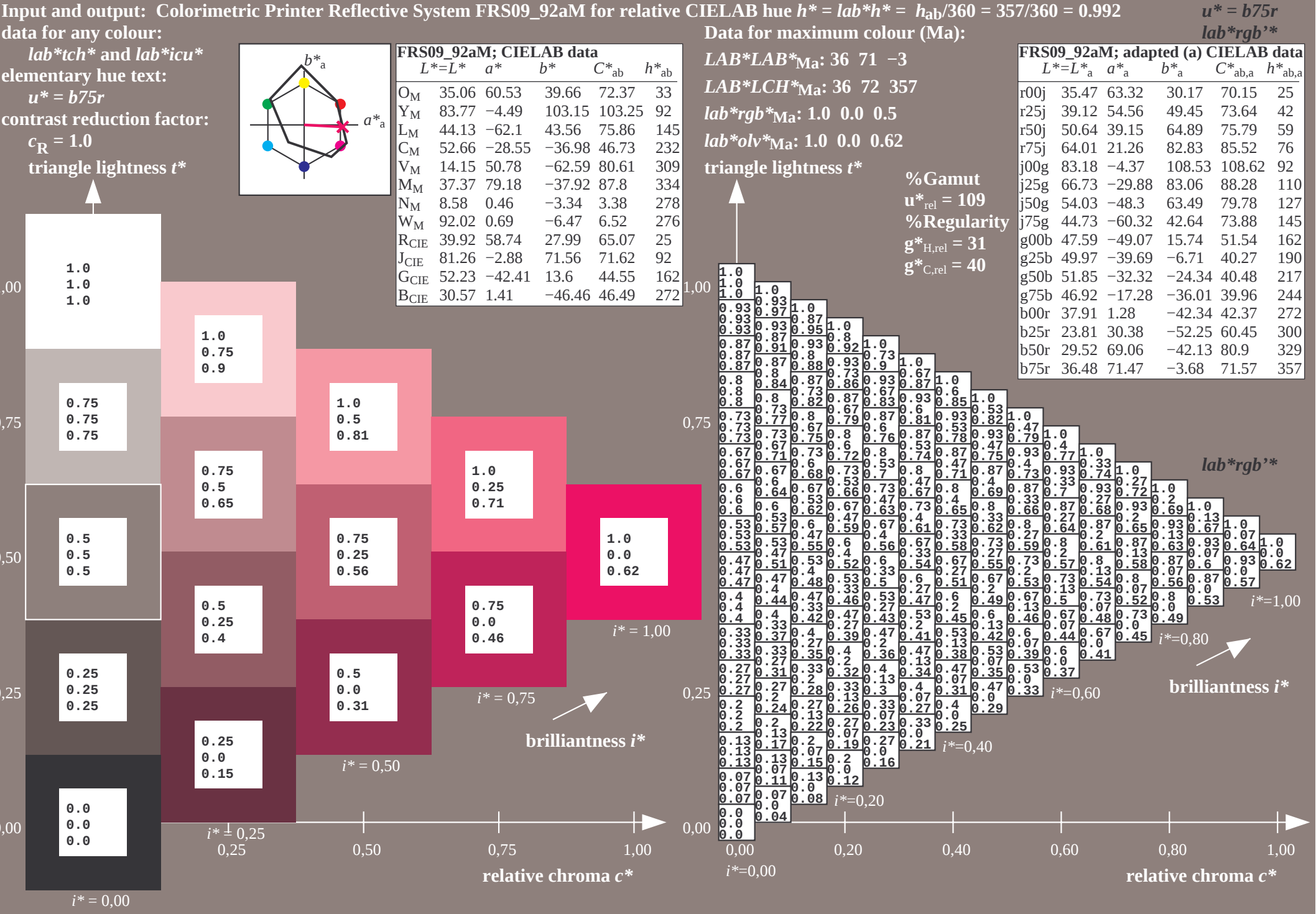
| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

triangle lightness  $t^*$

$$g^*_{C,rel} = 40$$

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |

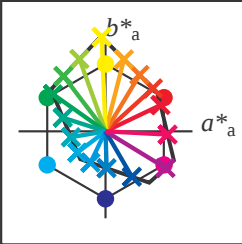






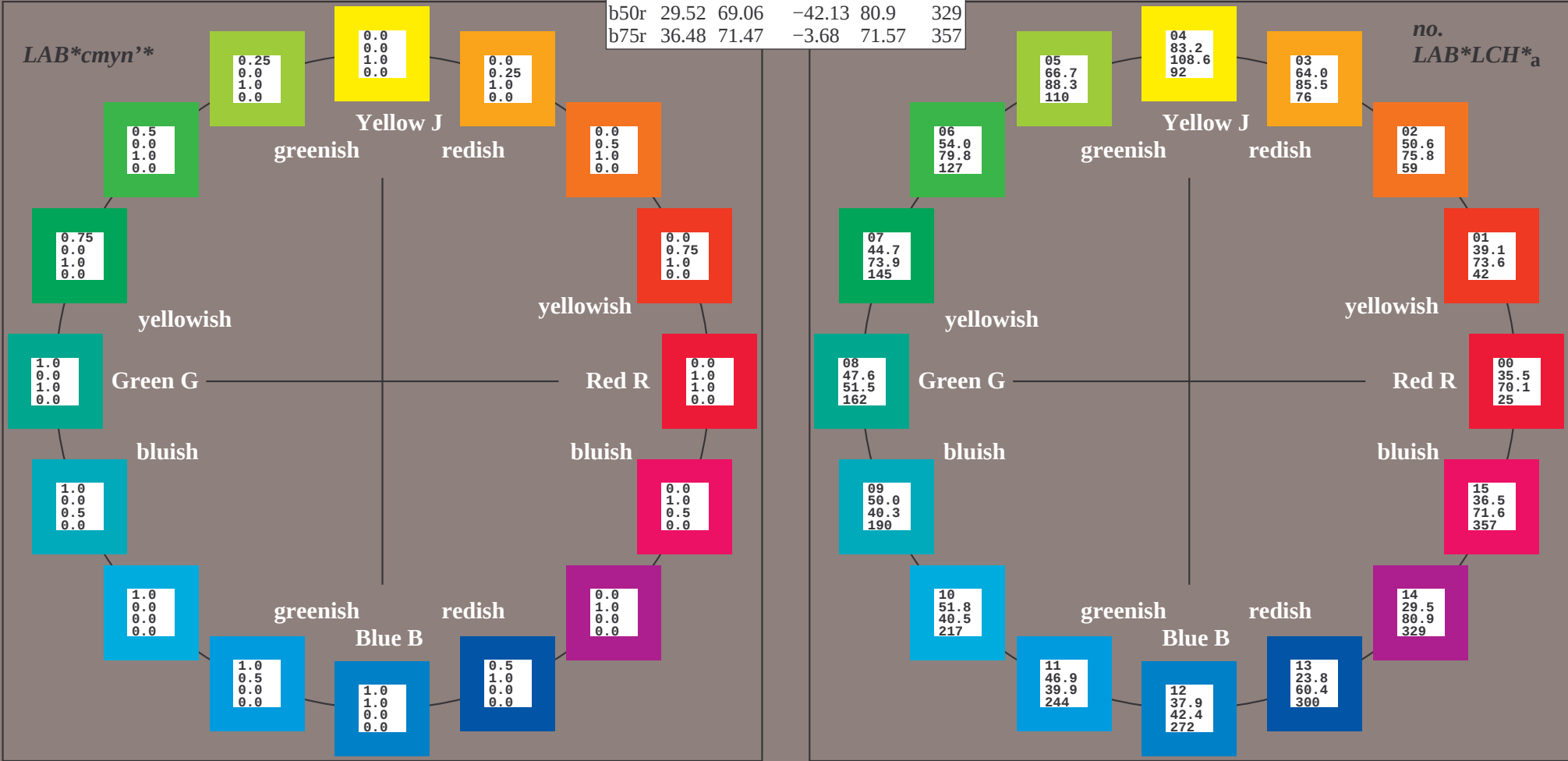
Input and output:  
Colorimetric Printer Reflective System FRS09\_92aM  
data for any colour:  
lab\*tch\* and lab\*icu\*  
elementary hue text:  
u\* = 16 hues r00j, r25j, ..., b75r  
contrast reduction factor:  
c<sub>R</sub> = 1.0

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



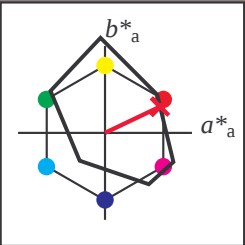
% Gamut  
u\*<sub>rel</sub> = 109  
% Regularity  
g\*<sub>H,rel</sub> = 31  
g\*<sub>C,rel</sub> = 40

| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 25/360 = 0.071$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r00j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

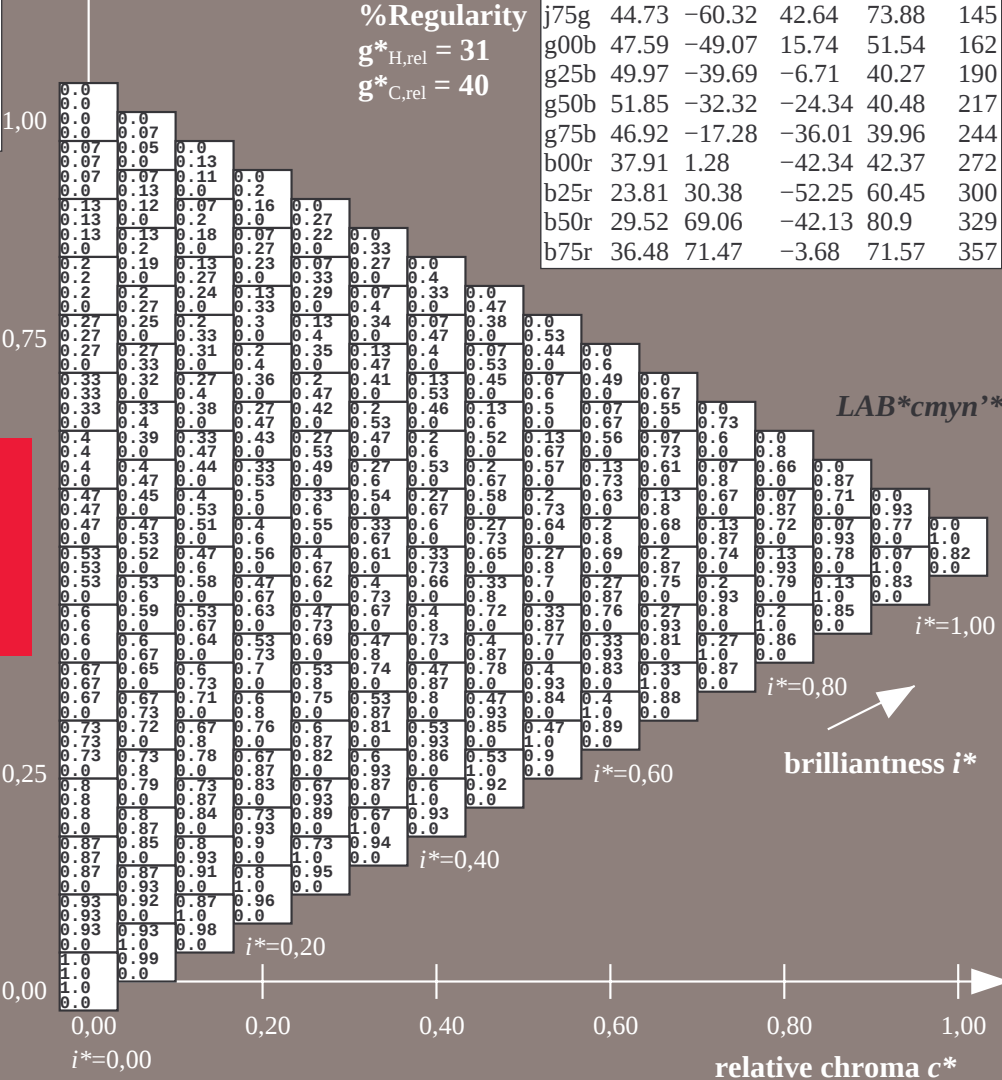
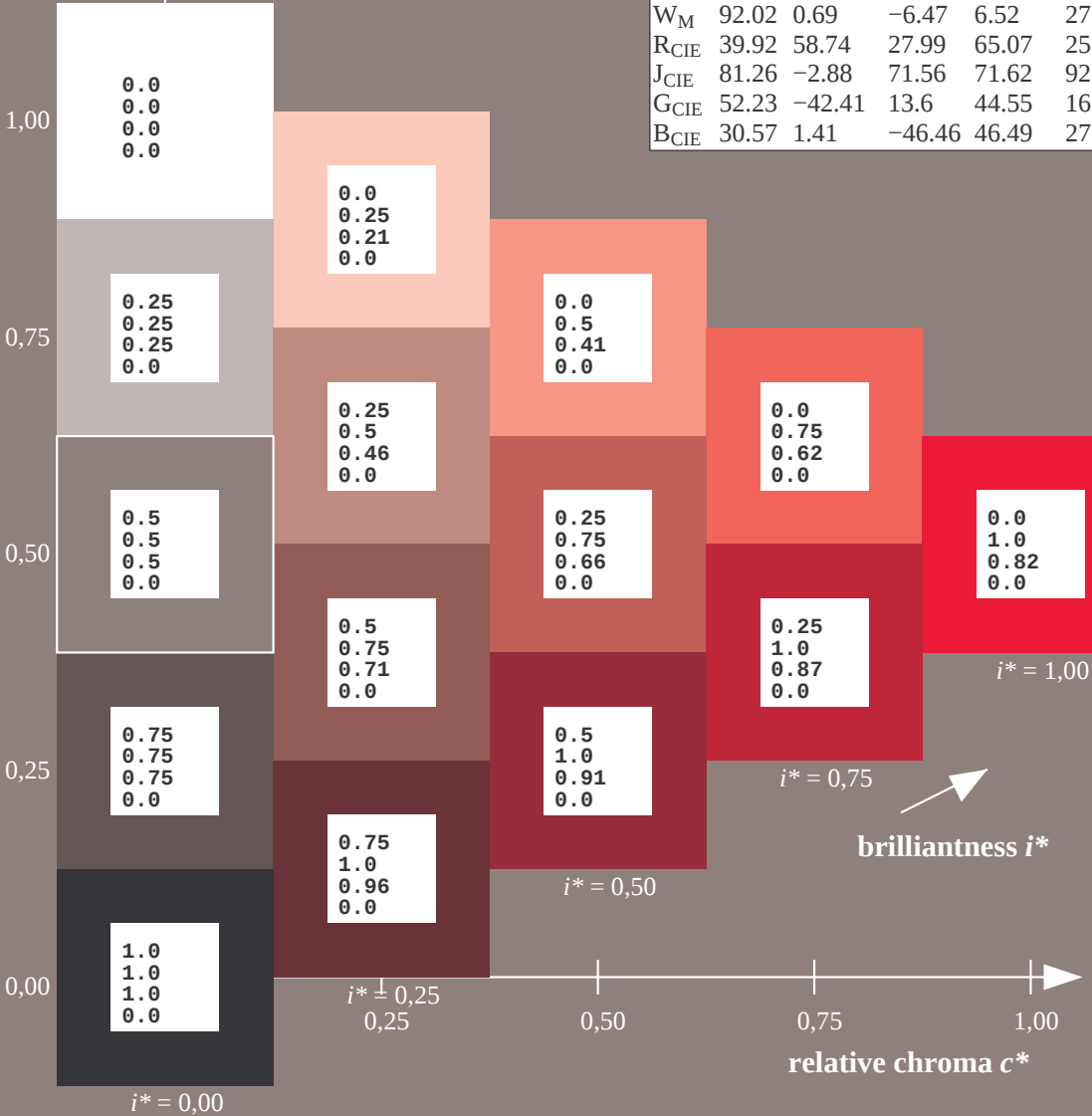


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 35\ 63\ 30$   
 $LAB^*LCH^*_Ma: 35\ 70\ 25$   
 $lab^*rgb^*_Ma: 1.0\ 0.0\ 0.0$   
 $lab^*olv^*_Ma: 1.0\ 0.0\ 0.18$   
triangle lightness  $t^*$

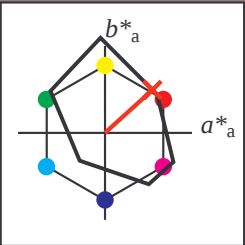
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 42/360 = 0.117$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r25j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

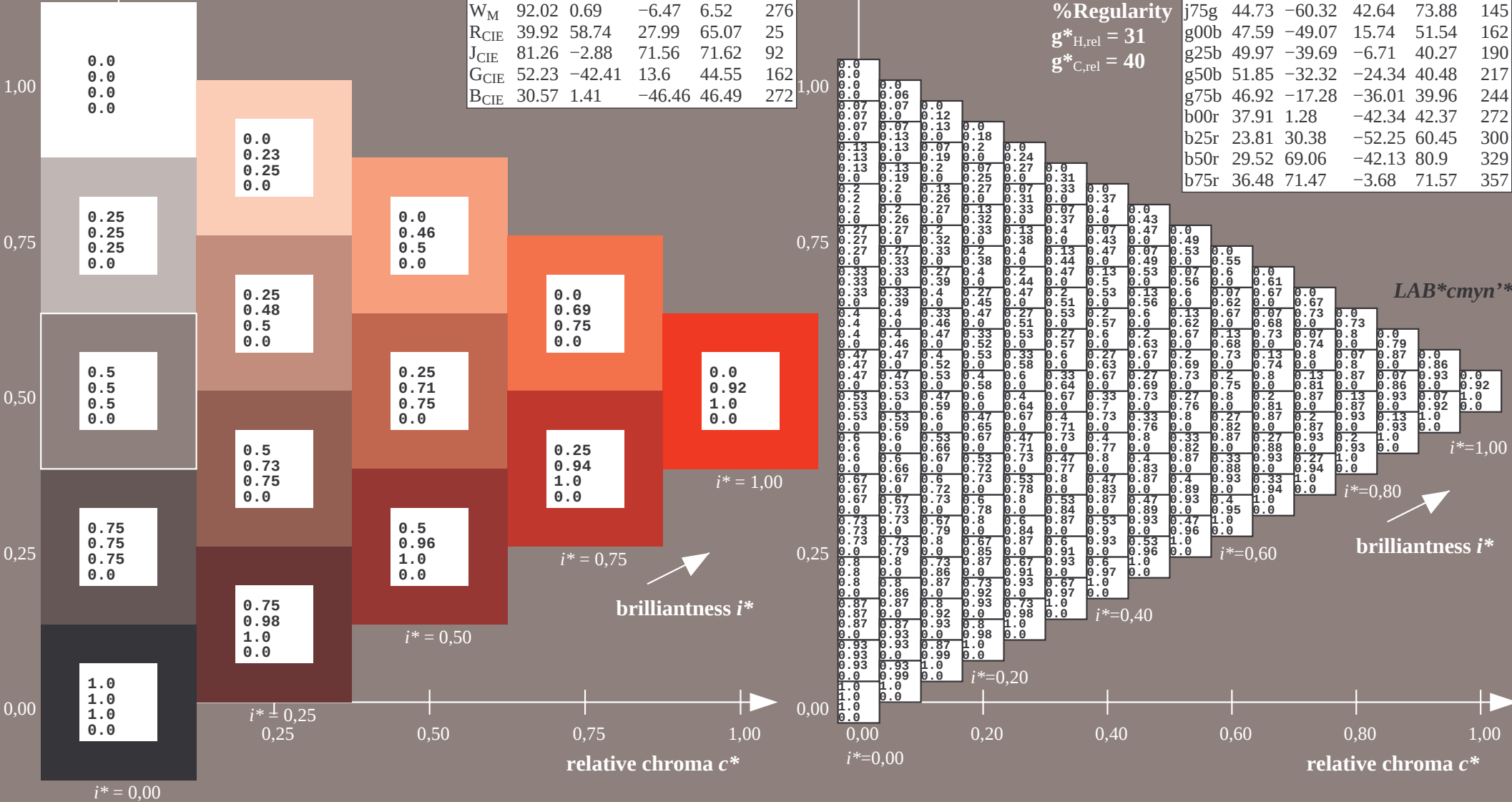


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 39\ 55\ 49$   
 $LAB^*LCH^*_Ma: 39\ 74\ 42$   
 $lab^*rgb^*_Ma: 1.0\ 0.25\ 0.0$   
 $lab^*olv^*_Ma: 1.0\ 0.08\ 0.0$   
triangle lightness  $t^*$

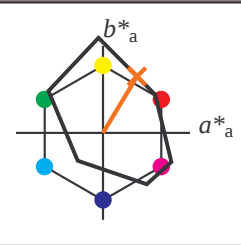
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |           |         |         |              |              |
|-------------------------------------|-----------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47     | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12     | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64     | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01     | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18     | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73     | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03     | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73     | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59     | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97     | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85     | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92     | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91     | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81     | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52     | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48     | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 59/360 = 0.164$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r50j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 51\ 39\ 65$

$LAB^*LCH^*_Ma: 51\ 76\ 59$

$lab^*rgb^*_Ma: 1.0\ 0.5\ 0.0$

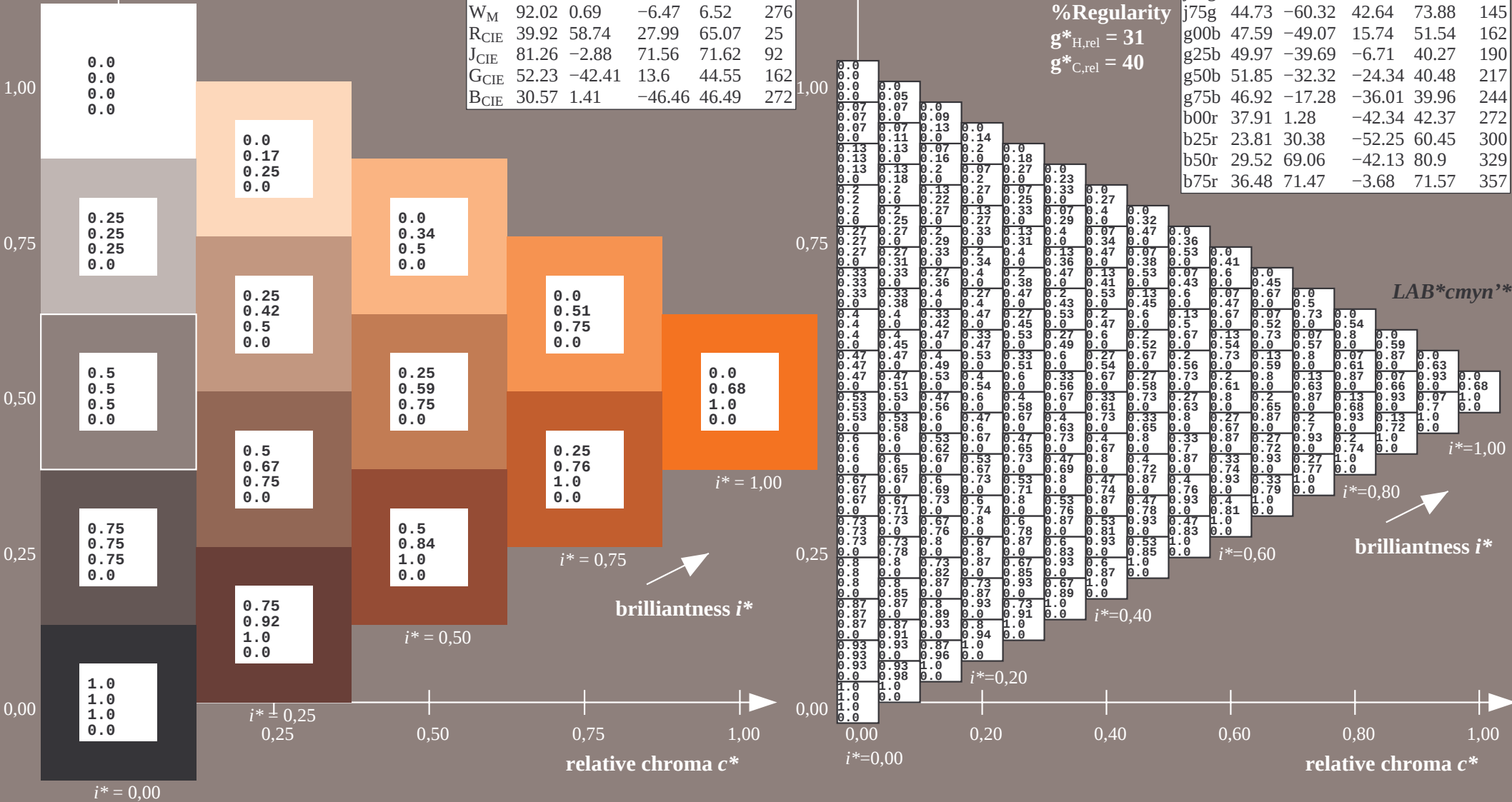
$lab^*olv^*_Ma: 1.0\ 0.32\ 0.0$

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

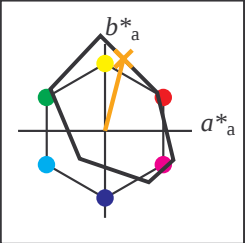
$u^* = r50j$   
 $LAB^*cmyn^*$

| FRS09_92aM; adapted (a) CIELAB data |           |         |         |              |              |
|-------------------------------------|-----------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47     | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12     | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64     | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01     | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18     | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73     | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03     | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73     | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59     | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97     | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85     | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92     | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91     | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81     | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52     | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48     | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 76/360 = 0.21$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = r75j$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

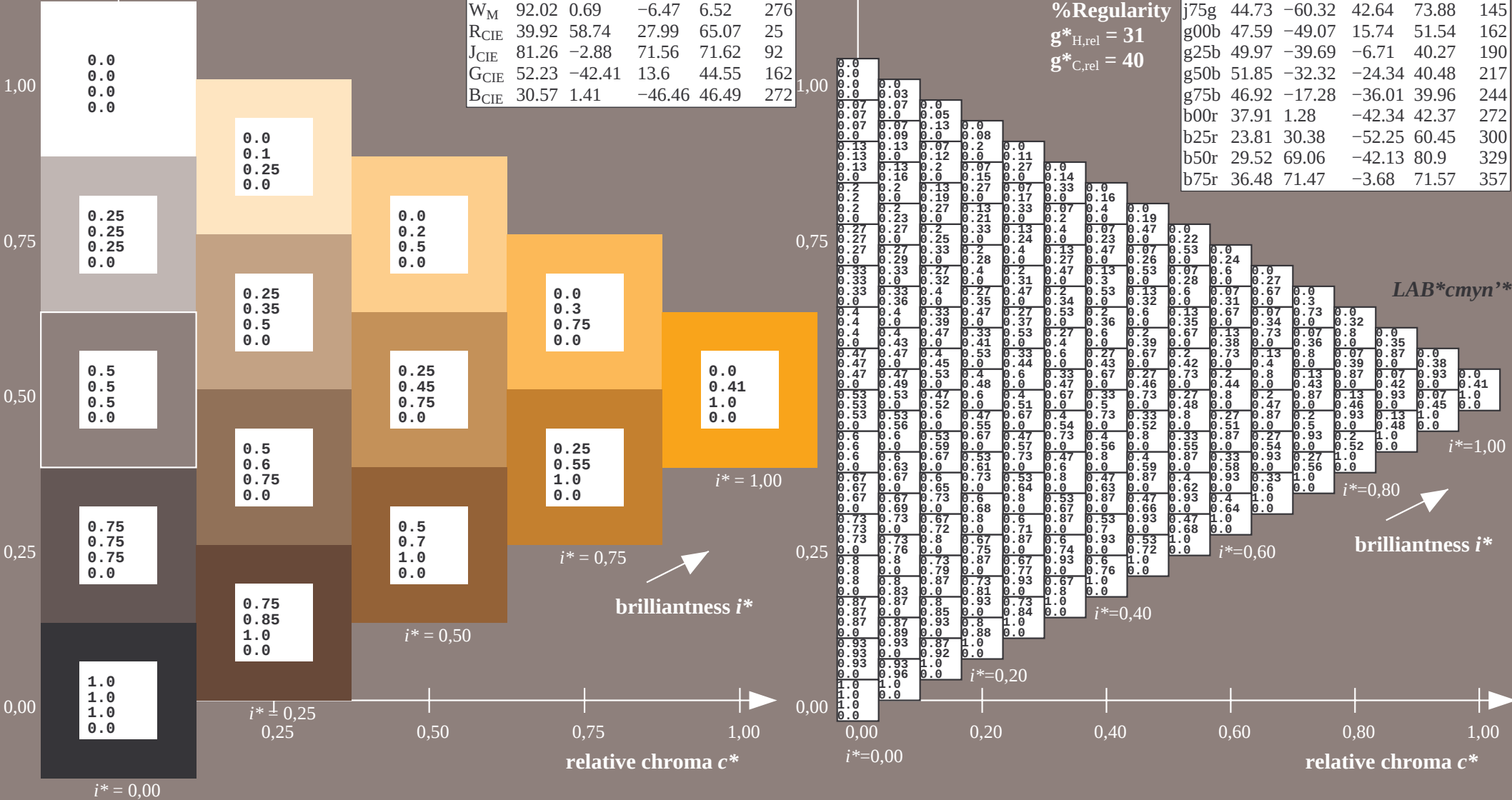


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 64\ 21\ 83$   
 $LAB^*LCH^*_Ma: 64\ 86\ 76$   
 $lab^*rgb^*_Ma: 1.0\ 0.75\ 0.0$   
 $lab^*olv^*_Ma: 1.0\ 0.59\ 0.0$   
triangle lightness  $t^*$

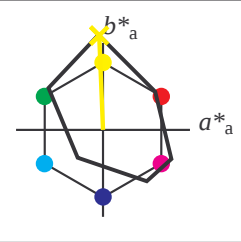
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 92/360 = 0.256$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j00g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$



| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):

$LAB^*LAB^*_Ma: 83 -3 109$

$LAB^*LCH^*_Ma: 83 109 92$

$lab^*rgb^*_Ma: 1.0 1.0 0.0$

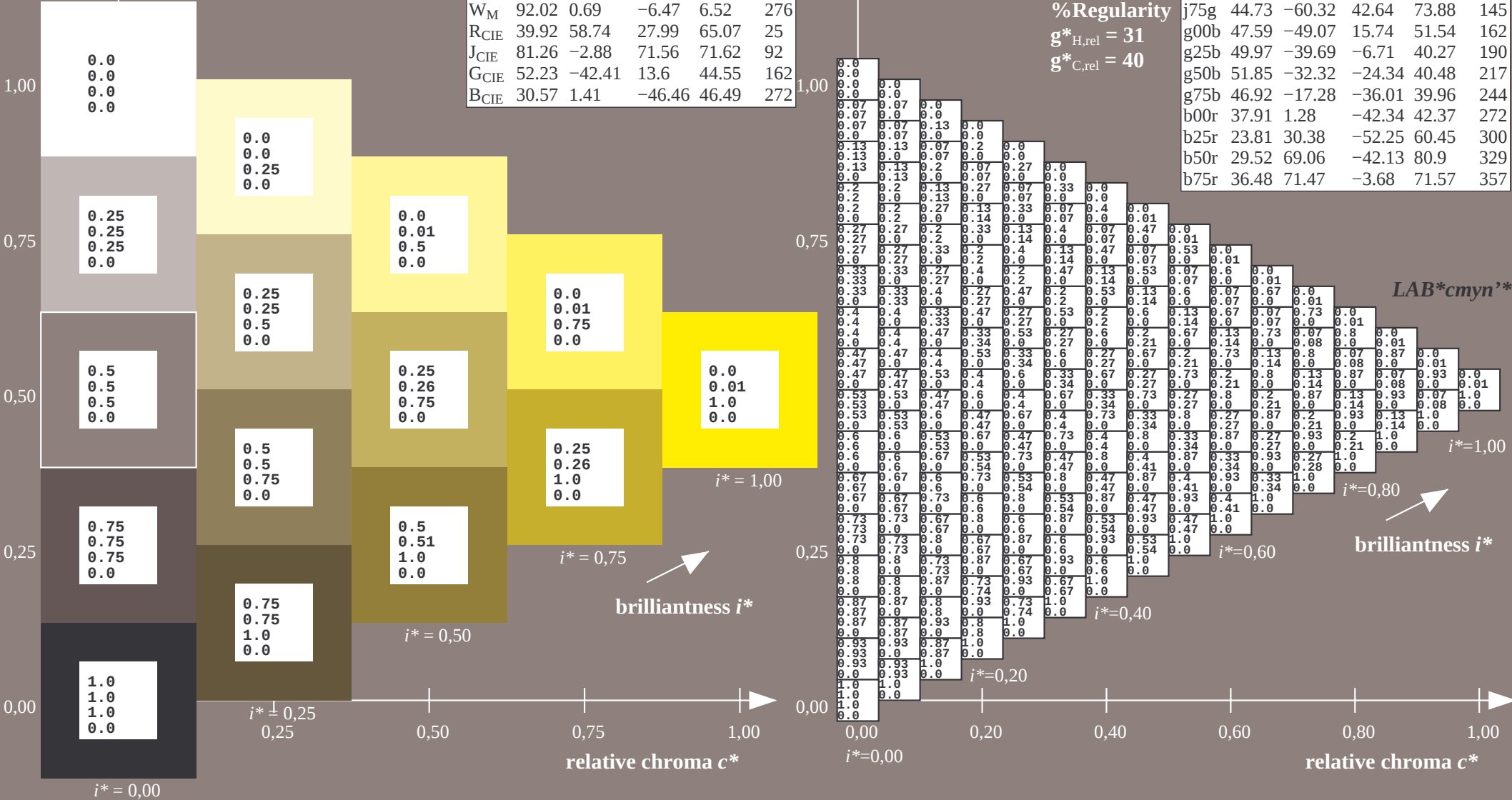
$lab^*olv^*_Ma: 1.0 0.99 0.0$

triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

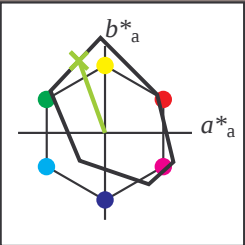
$u^* = j00g$   
 $LAB^*cmyn^*$

| FRS09_92aM; adapted (a) CIELAB data |           |         |         |              |              |
|-------------------------------------|-----------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47     | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12     | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64     | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01     | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18     | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73     | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03     | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73     | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59     | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97     | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85     | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92     | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91     | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81     | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52     | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48     | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 110/360 = 0.305$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j25g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

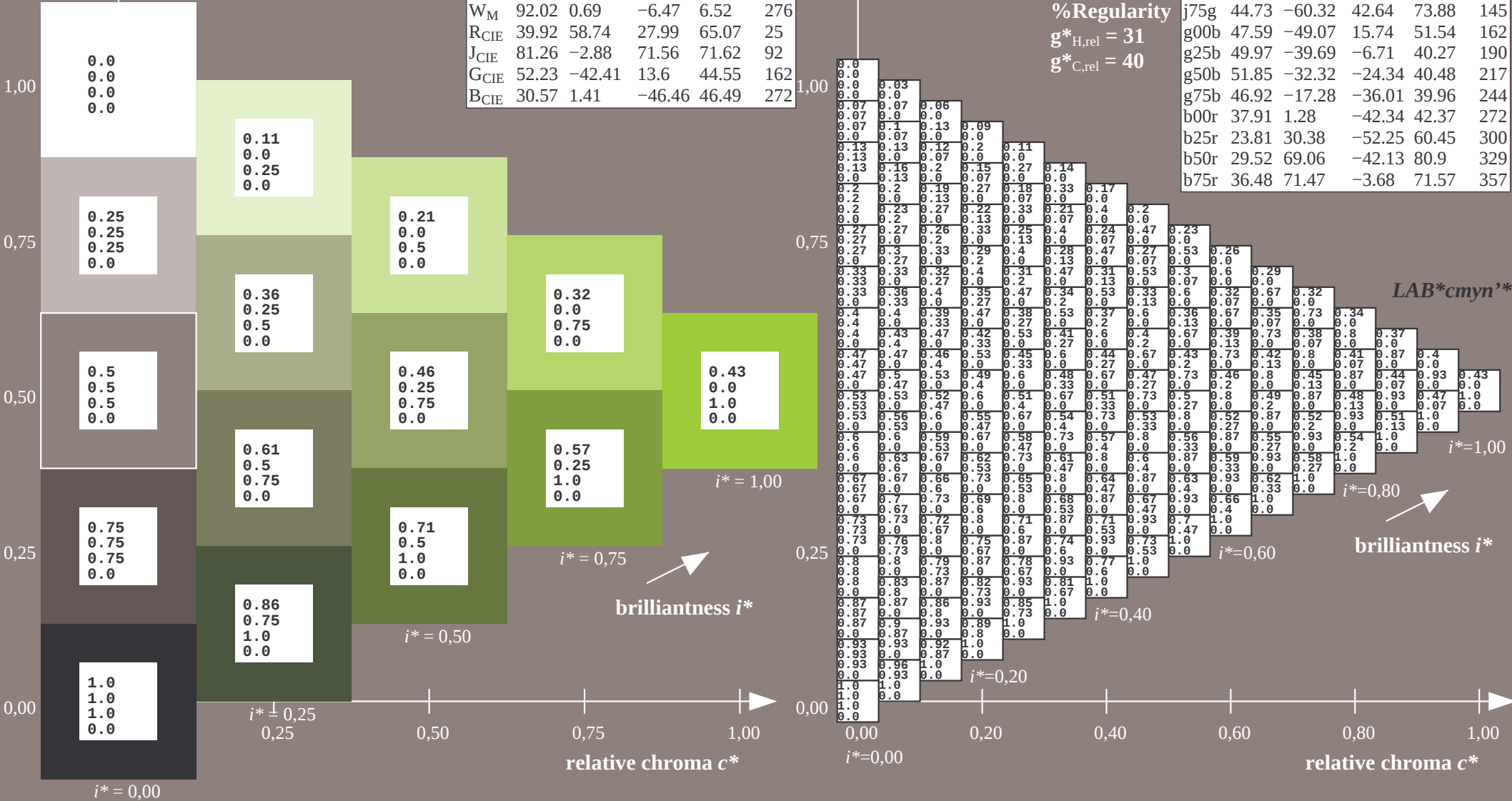


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 67 -29 83$   
 $LAB^*LCH^*_Ma: 67 88 110$   
 $lab^*rgb^*_Ma: 0.75 1.0 0.0$   
 $lab^*olv^*_Ma: 0.57 1.0 0.0$   
triangle lightness  $t^*$

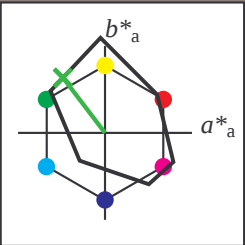
%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 127/360 = 0.354$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = j50g$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

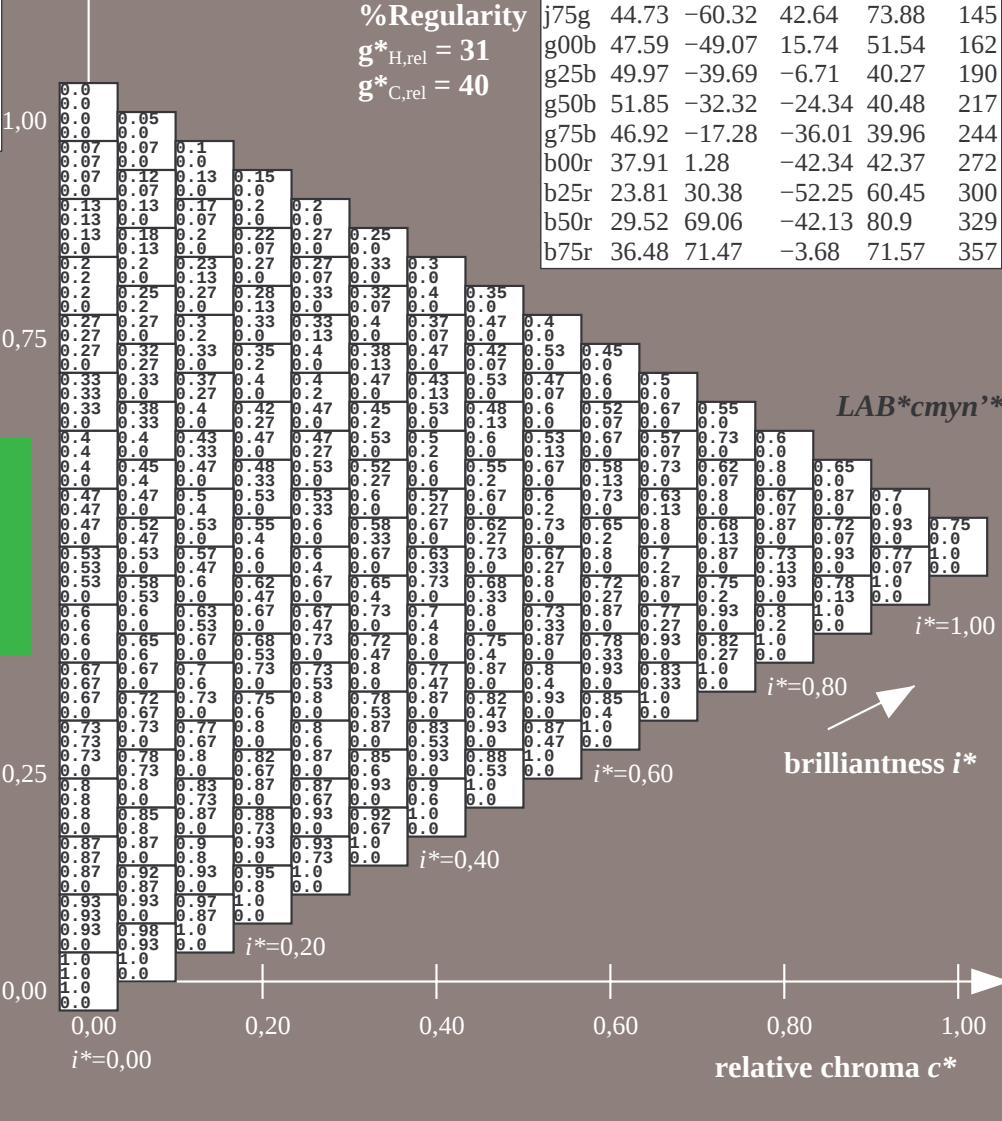
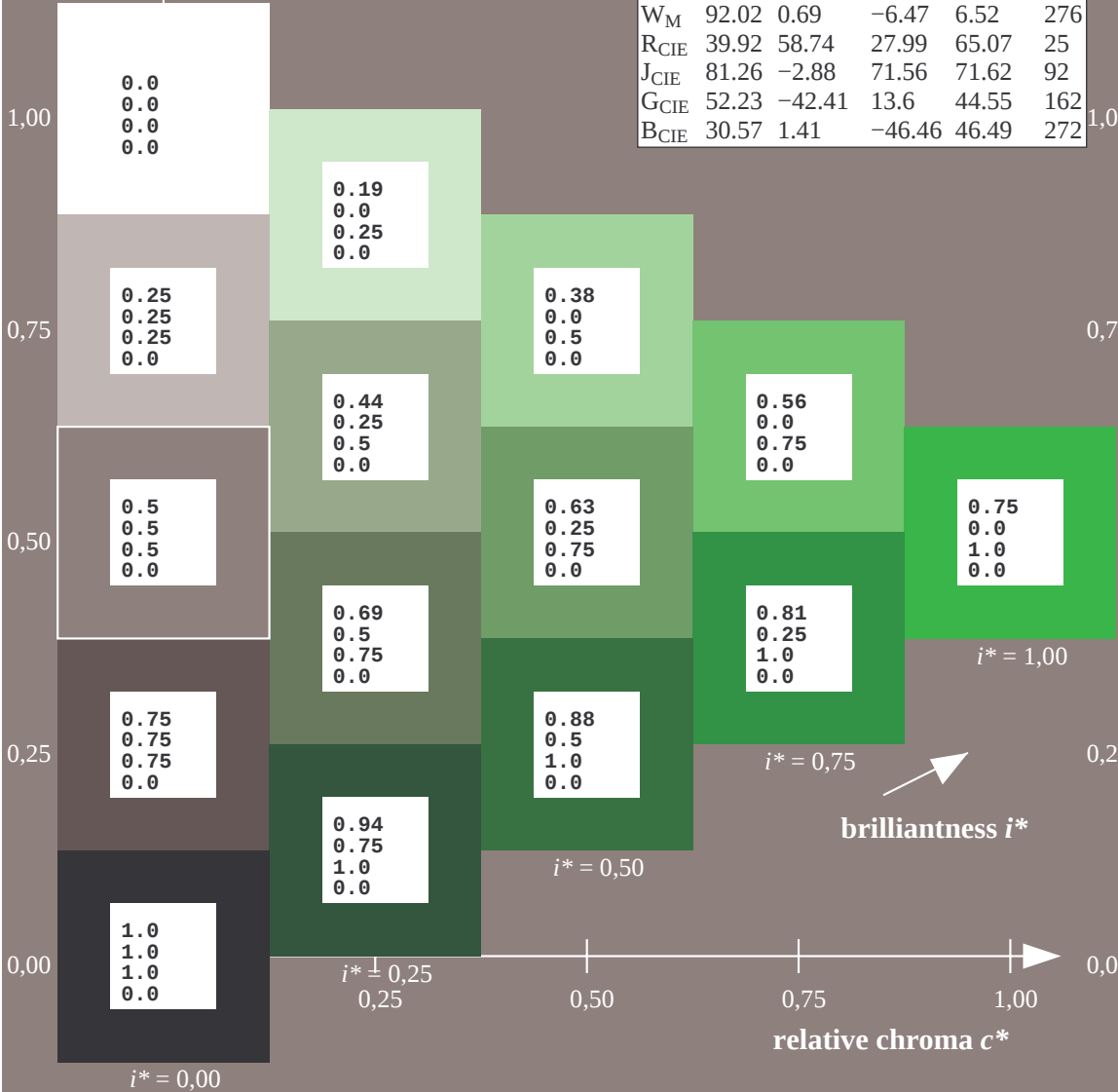


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

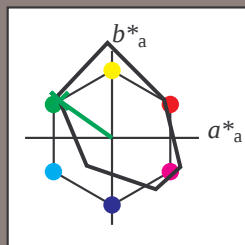
Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 54 -47 63$   
 $LAB^*LCH^*_Ma: 54 80 127$   
 $lab^*rgb^*_Ma: 0.5 1.0 0.0$   
 $lab^*olv^*_Ma: 0.25 1.0 0.0$   
triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |           |         |         |              |              |
|-------------------------------------|-----------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47     | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12     | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64     | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01     | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18     | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73     | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03     | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73     | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59     | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97     | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85     | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92     | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91     | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81     | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52     | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48     | 71.47   | -3.68   | 71.57        | 357          |



**triangle lightness  $t^*$**

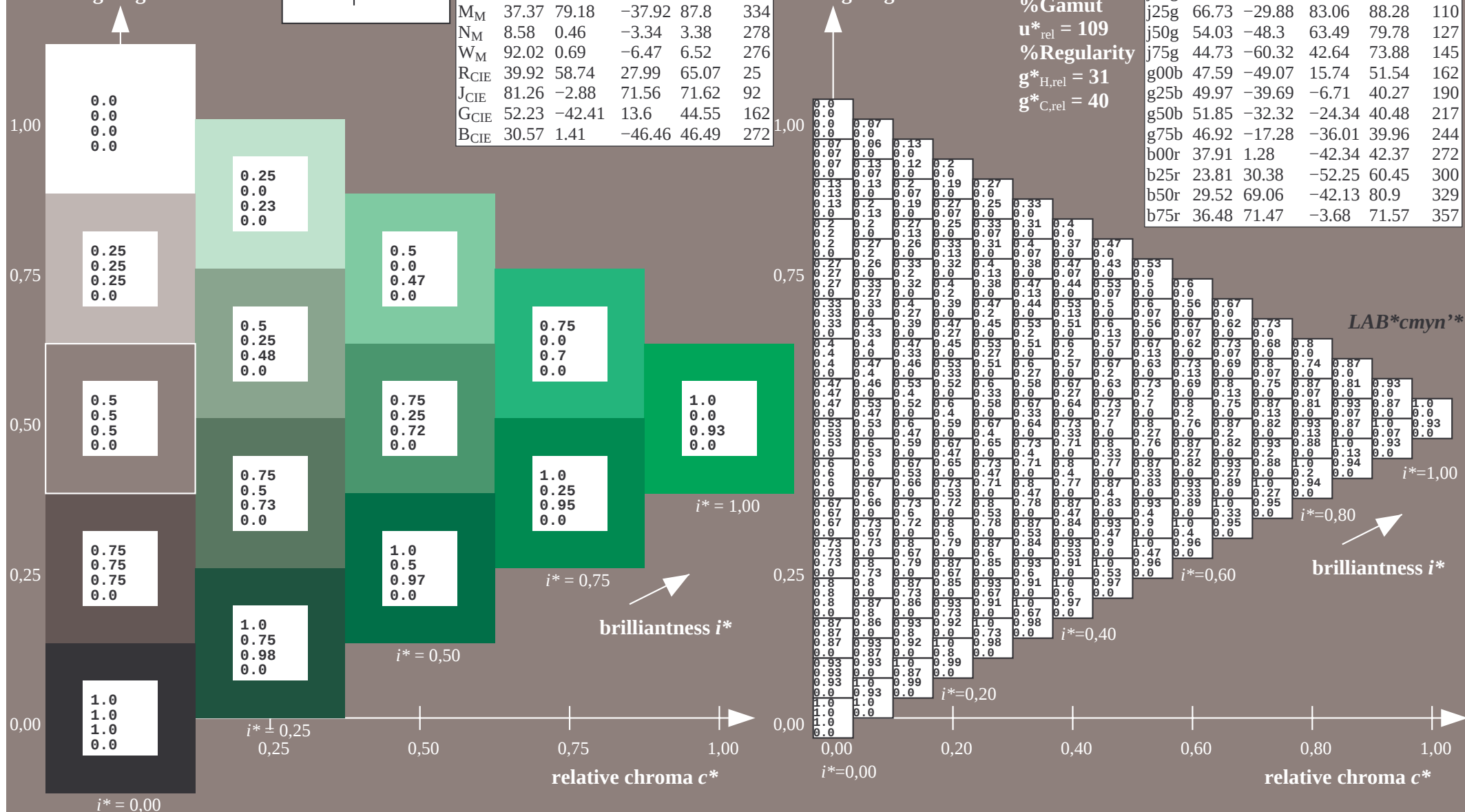


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

triangle lightness  $t^*$

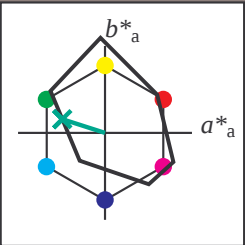
$$g^*_{C,rel} = 40$$

| FRS09_92aM; adapted (a) CIELAB data |               |         |         |              |              |  |
|-------------------------------------|---------------|---------|---------|--------------|--------------|--|
|                                     | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47         | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12         | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64         | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01         | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18         | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73         | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03         | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73         | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59         | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97         | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85         | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92         | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91         | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81         | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52         | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48         | 71.47   | -3.68   | 71.57        | 357          |  |



Input and output: Colorimetric Printer Reflective System FRS09\_92aM for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 162/360 = 0.451$   
data for any colour:

$lab^*tch^*$  and  $lab^*icu^*$   
elementary hue text:  
 $u^* = g00b$   
contrast reduction factor:  
 $c_R = 1.0$   
triangle lightness  $t^*$

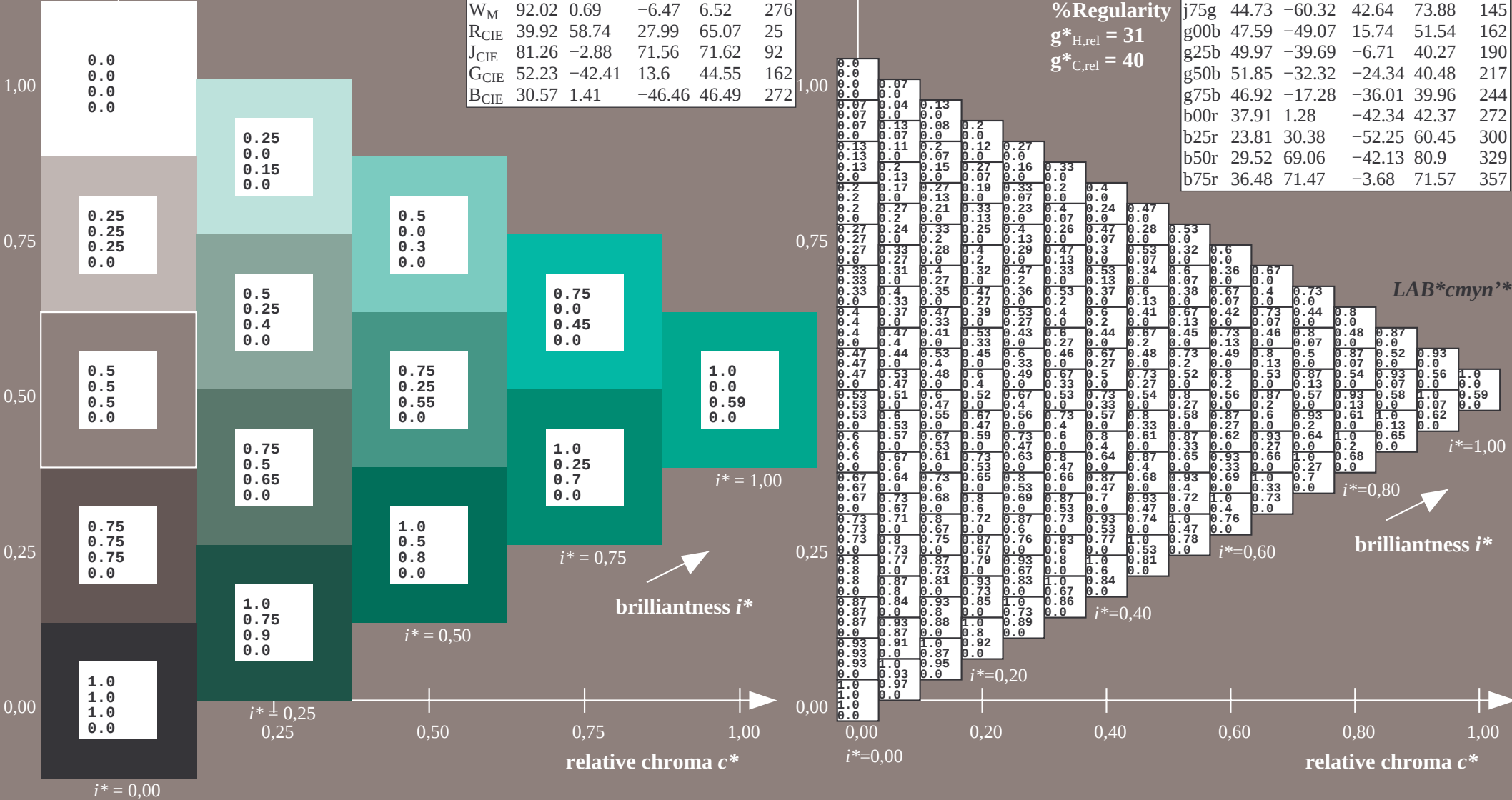


| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| $O_M$                   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| $Y_M$                   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| $L_M$                   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| $C_M$                   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| $V_M$                   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| $M_M$                   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| $N_M$                   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| $W_M$                   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| $R_{CIE}$               | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| $J_{CIE}$               | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| $G_{CIE}$               | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| $B_{CIE}$               | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

Data for maximum colour (Ma):  
 $LAB^*LAB^*_Ma: 48 -48 16$   
 $LAB^*LCH^*_Ma: 48 52 162$   
 $lab^*rgb^*_Ma: 0.0 1.0 0.0$   
 $lab^*olv^*_Ma: 0.0 1.0 0.41$   
triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 109$   
%Regularity  
 $g^*_{H,rel} = 31$   
 $g^*_{C,rel} = 40$

| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |
|-------------------------------------|-------------|---------|---------|--------------|--------------|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| r00j                                | 35.47       | 63.32   | 30.17   | 70.15        | 25           |
| r25j                                | 39.12       | 54.56   | 49.45   | 73.64        | 42           |
| r50j                                | 50.64       | 39.15   | 64.89   | 75.79        | 59           |
| r75j                                | 64.01       | 21.26   | 82.83   | 85.52        | 76           |
| j00g                                | 83.18       | -4.37   | 108.53  | 108.62       | 92           |
| j25g                                | 66.73       | -29.88  | 83.06   | 88.28        | 110          |
| j50g                                | 54.03       | -48.3   | 63.49   | 79.78        | 127          |
| j75g                                | 44.73       | -60.32  | 42.64   | 73.88        | 145          |
| g00b                                | 47.59       | -49.07  | 15.74   | 51.54        | 162          |
| g25b                                | 49.97       | -39.69  | -6.71   | 40.27        | 190          |
| g50b                                | 51.85       | -32.32  | -24.34  | 40.48        | 217          |
| g75b                                | 46.92       | -17.28  | -36.01  | 39.96        | 244          |
| b00r                                | 37.91       | 1.28    | -42.34  | 42.37        | 272          |
| b25r                                | 23.81       | 30.38   | -52.25  | 60.45        | 300          |
| b50r                                | 29.52       | 69.06   | -42.13  | 80.9         | 329          |
| b75r                                | 36.48       | 71.47   | -3.68   | 71.57        | 357          |



LAB\*cmyn'\*

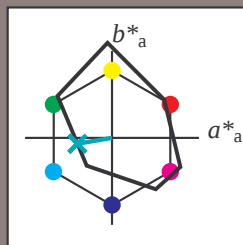
**Data for maximum colour (Ma):**

**LAB\*LAB\*Ma: 50 -39 -6**

*LAB\*LCH*\*<sub>Ma</sub>: 50 40 190

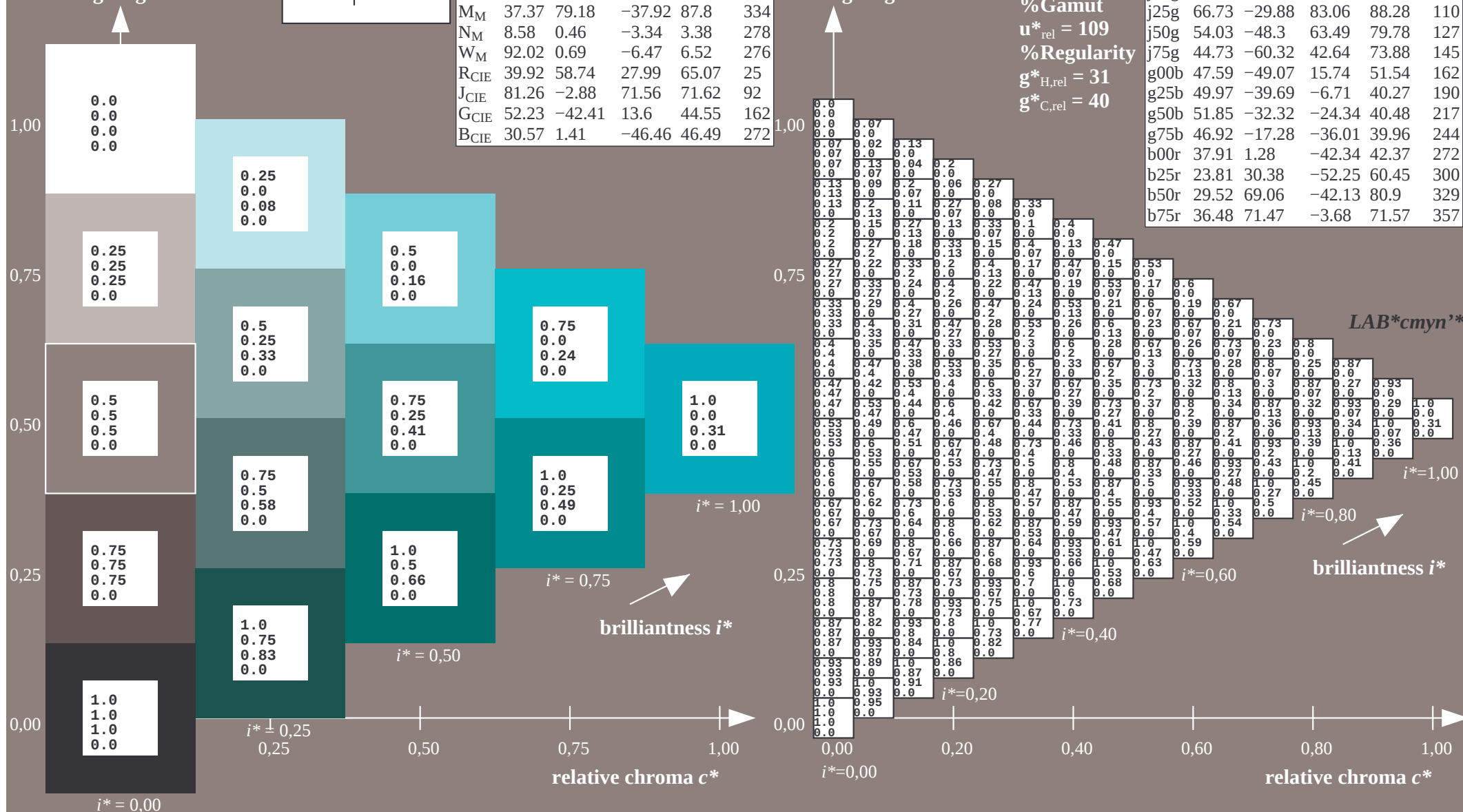
*lab\*rag\**<sub>M2</sub>: 0.0 1.0 0.5

**lab\*oly\*Ma: 0.0 1.0 0.69**

triangle lightness  $t^*$ triangle lightness  $t^*$ 

| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIF</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

| FRS09_92aM; adapted (a) CIELAB data |         |         |         |              |              |  |
|-------------------------------------|---------|---------|---------|--------------|--------------|--|
|                                     | $L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |  |
| r00j                                | 35.47   | 63.32   | 30.17   | 70.15        | 25           |  |
| r25j                                | 39.12   | 54.56   | 49.45   | 73.64        | 42           |  |
| r50j                                | 50.64   | 39.15   | 64.89   | 75.79        | 59           |  |
| r75j                                | 64.01   | 21.26   | 82.83   | 85.52        | 76           |  |
| j00g                                | 83.18   | -4.37   | 108.53  | 108.62       | 92           |  |
| j25g                                | 66.73   | -29.88  | 83.06   | 88.28        | 110          |  |
| j50g                                | 54.03   | -48.3   | 63.49   | 79.78        | 127          |  |
| j75g                                | 44.73   | -60.32  | 42.64   | 73.88        | 145          |  |
| g00b                                | 47.59   | -49.07  | 15.74   | 51.54        | 162          |  |
| g25b                                | 49.97   | -39.69  | -6.71   | 40.27        | 190          |  |
| g50b                                | 51.85   | -32.32  | -24.34  | 40.48        | 217          |  |
| g75b                                | 46.92   | -17.28  | -36.01  | 39.96        | 244          |  |
| b00r                                | 37.91   | 1.28    | -42.34  | 42.37        | 272          |  |
| b25r                                | 23.81   | 30.38   | -52.25  | 60.45        | 300          |  |
| b50r                                | 29.52   | 69.06   | -42.13  | 80.9         | 329          |  |
| b75r                                | 36.48   | 71.47   | -3.68   | 71.57        | 357          |  |



LAB\*cmyn'\*

**Data for maximum colour (Ma):**

**LAB\*LAB\*<sub>Ma</sub>: 52 -31 -23**

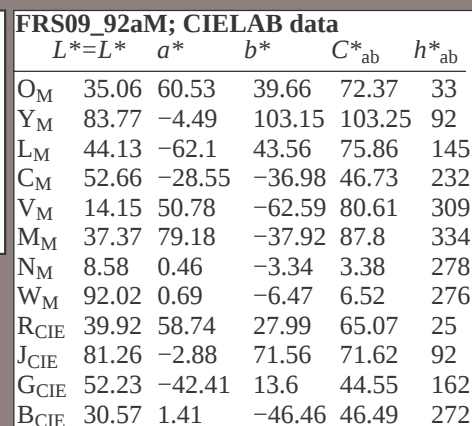
*LAB\*LCH*\*<sub>Ma</sub>: 52 40 217

*lab\*rgb\*\_M<sub>a</sub>*: 0.0 1.0 1.0

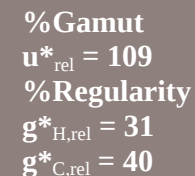
*lab\*oly\**M<sub>2</sub>: 0.0 1.0 0.9

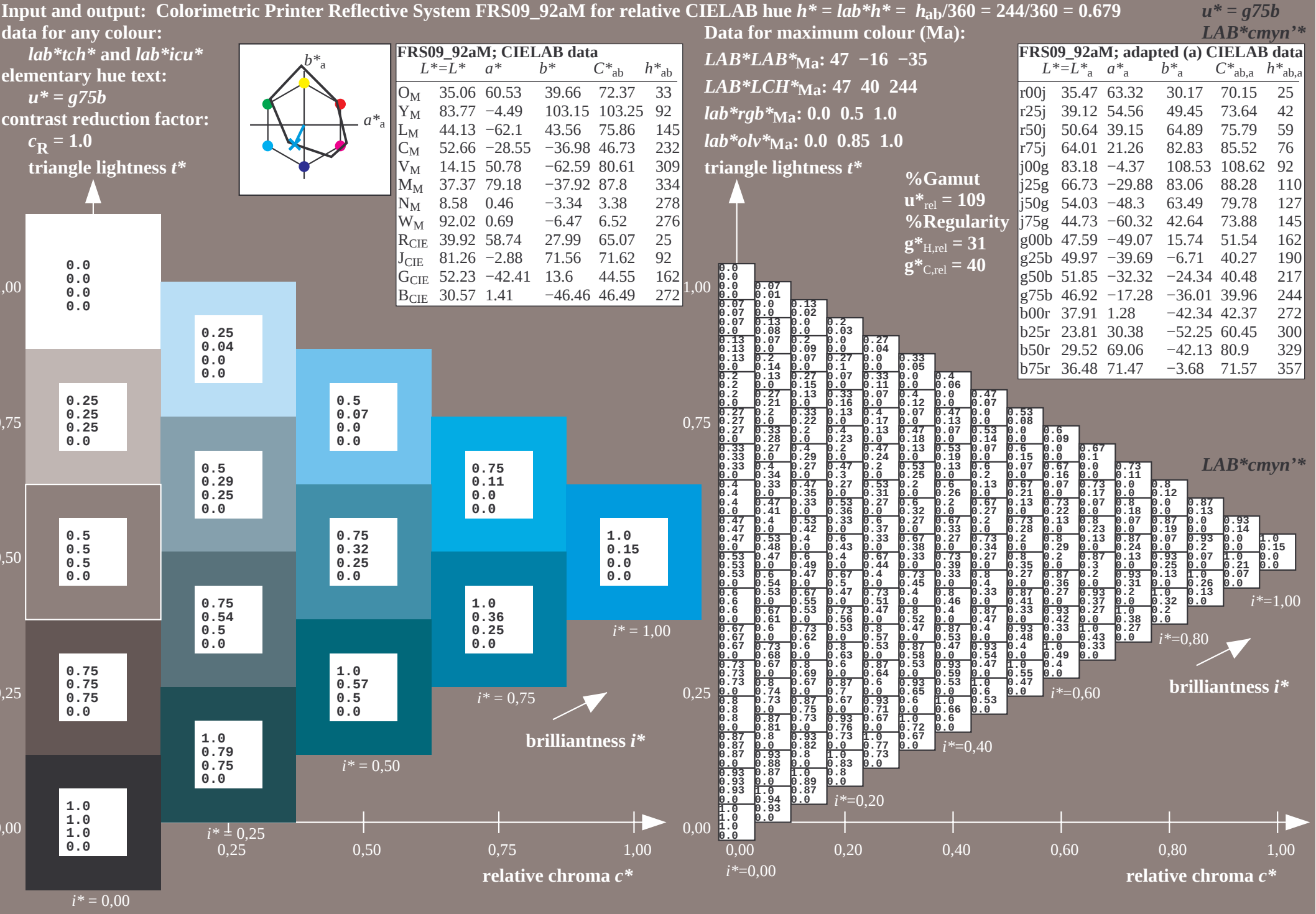
triangle lightness  $t^*$ 

**0**

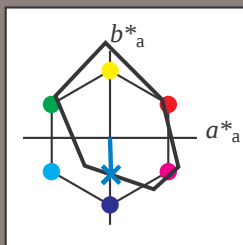


| FRS09_92aM; adapted (a) CIELAB data |             |         |         |              |              |     |
|-------------------------------------|-------------|---------|---------|--------------|--------------|-----|
|                                     | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
|                                     | r00j        | 35.47   | 63.32   | 30.17        | 70.15        | 25  |
|                                     | r25j        | 39.12   | 54.56   | 49.45        | 73.64        | 42  |
|                                     | r50j        | 50.64   | 39.15   | 64.89        | 75.79        | 59  |
|                                     | r75j        | 64.01   | 21.26   | 82.83        | 85.52        | 76  |
|                                     | j00g        | 83.18   | -4.37   | 108.53       | 108.62       | 92  |
|                                     | j25g        | 66.73   | -29.88  | 83.06        | 88.28        | 110 |
|                                     | j50g        | 54.03   | -48.3   | 63.49        | 79.78        | 127 |
| y                                   | j75g        | 44.73   | -60.32  | 42.64        | 73.88        | 145 |
|                                     | g00b        | 47.59   | -49.07  | 15.74        | 51.54        | 162 |
|                                     | g25b        | 49.97   | -39.69  | -6.71        | 40.27        | 190 |
|                                     | g50b        | 51.85   | -32.32  | -24.34       | 40.48        | 217 |
|                                     | g75b        | 46.92   | -17.28  | -36.01       | 39.96        | 244 |
|                                     | b00r        | 37.91   | 1.28    | -42.34       | 42.37        | 272 |
|                                     | b25r        | 23.81   | 30.38   | -52.25       | 60.45        | 300 |
|                                     | b50r        | 29.52   | 69.06   | -42.13       | 80.9         | 329 |
|                                     | b75r        | 36.48   | 71.47   | -3.68        | 71.57        | 357 |





triangle lightness  $t^*$



|                  | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
|------------------|-----------|--------|--------|------------|------------|
| O <sub>M</sub>   | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>   | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>   | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>   | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>   | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>   | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>   | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>   | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub> | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub> | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub> | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub> | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

triangle lightness  $t^*$

$$g^*_{C_{rel}} = 40$$

|      | $L^* = L^*_{\text{a}}$ | $a^*_{\text{a}}$ | $b^*_{\text{a}}$ | $C^*_{\text{ab,a}}$ | $h^*_{\text{ab,a}}$ |
|------|------------------------|------------------|------------------|---------------------|---------------------|
| r00j | 35.47                  | 63.32            | 30.17            | 70.15               | 25                  |
| r25j | 39.12                  | 54.56            | 49.45            | 73.64               | 42                  |
| r50j | 50.64                  | 39.15            | 64.89            | 75.79               | 59                  |
| r75j | 64.01                  | 21.26            | 82.83            | 85.52               | 76                  |
| j00g | 83.18                  | -4.37            | 108.53           | 108.62              | 92                  |
| j25g | 66.73                  | -29.88           | 83.06            | 88.28               | 110                 |
| j50g | 54.03                  | -48.3            | 63.49            | 79.78               | 127                 |
| j75g | 44.73                  | -60.32           | 42.64            | 73.88               | 145                 |
| g00b | 47.59                  | -49.07           | 15.74            | 51.54               | 162                 |
| g25b | 49.97                  | -39.69           | -6.71            | 40.27               | 190                 |
| g50b | 51.85                  | -32.32           | -24.34           | 40.48               | 217                 |
| g75b | 46.92                  | -17.28           | -36.01           | 39.96               | 244                 |
| b00r | 37.91                  | 1.28             | -42.34           | 42.37               | 272                 |
| b25r | 23.81                  | 30.38            | -52.25           | 60.45               | 300                 |
| b50r | 29.52                  | 69.06            | -42.13           | 80.9                | 329                 |
| b75r | 36.48                  | 71.47            | -3.68            | 71.57               | 357                 |

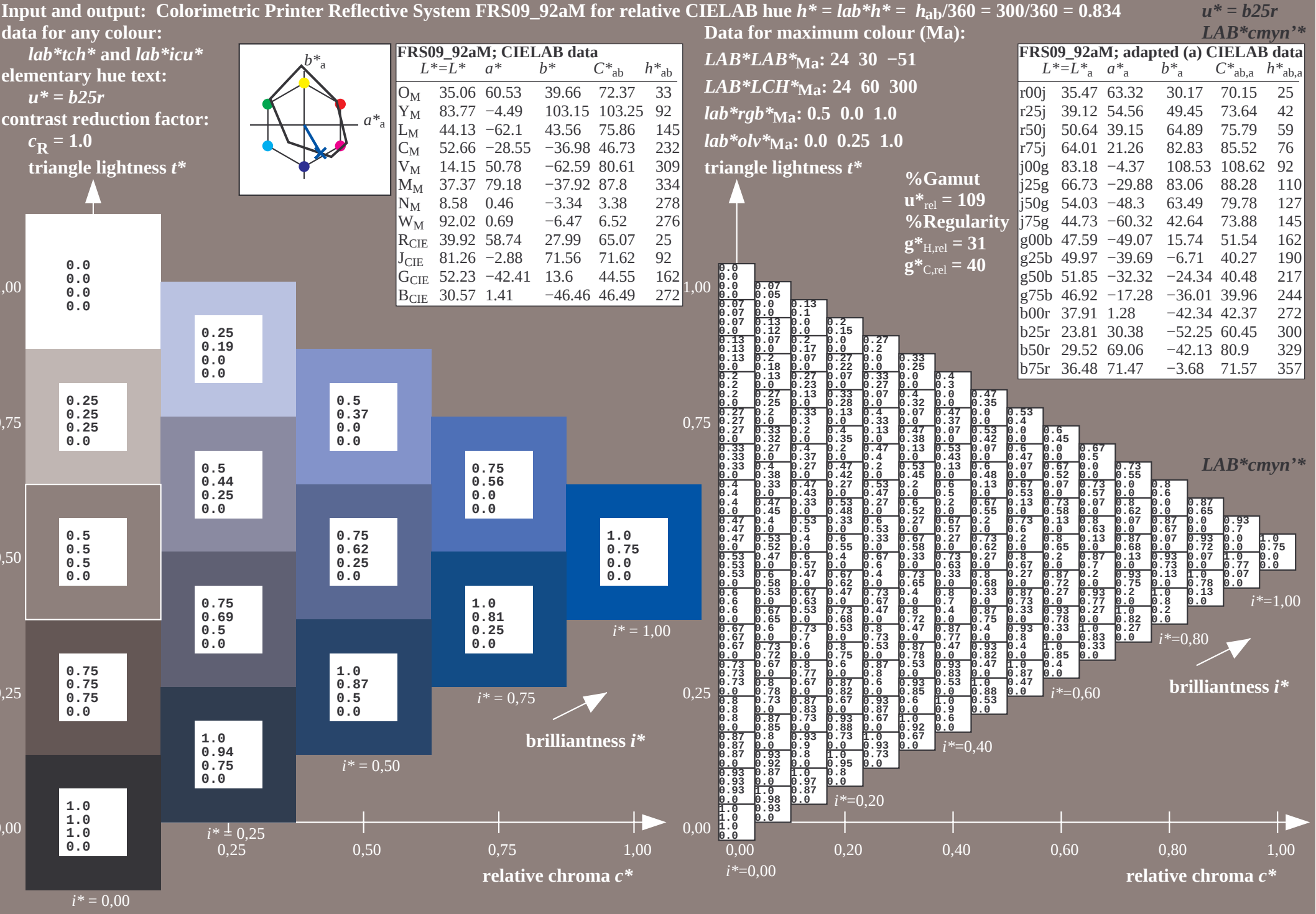


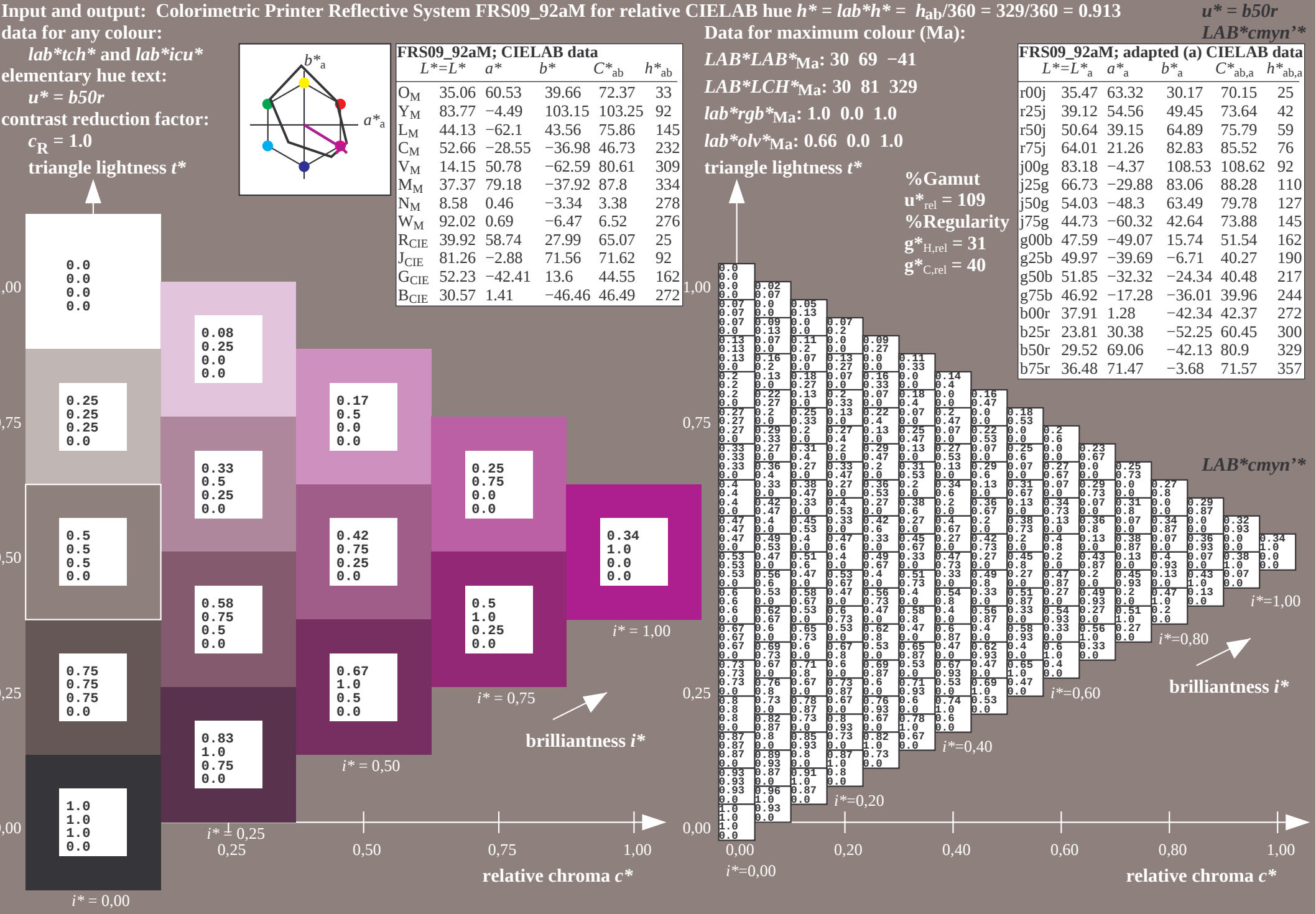
brilliantness *i*\*

$$i^* = 1,00$$
 $i^*=0,80$  $i^* = 0,60$ 

```
i*=0 40
```

 $i^*=0.20$





$u^* = b75r$   
 $LAB^*cmyn'^*$

A diagram of a hexagonal lattice. A central pink star is surrounded by six colored dots (yellow, red, magenta, blue, cyan, green) at the vertices of a hexagon. The axes are labeled  $a^*a$  and  $b^*a$ .

| FRS09_92aM; CIELAB data |           |        |        |            |            |
|-------------------------|-----------|--------|--------|------------|------------|
|                         | $L^*=L^*$ | $a^*$  | $b^*$  | $C^*_{ab}$ | $h^*_{ab}$ |
| O <sub>M</sub>          | 35.06     | 60.53  | 39.66  | 72.37      | 33         |
| Y <sub>M</sub>          | 83.77     | -4.49  | 103.15 | 103.25     | 92         |
| L <sub>M</sub>          | 44.13     | -62.1  | 43.56  | 75.86      | 145        |
| C <sub>M</sub>          | 52.66     | -28.55 | -36.98 | 46.73      | 232        |
| V <sub>M</sub>          | 14.15     | 50.78  | -62.59 | 80.61      | 309        |
| M <sub>M</sub>          | 37.37     | 79.18  | -37.92 | 87.8       | 334        |
| N <sub>M</sub>          | 8.58      | 0.46   | -3.34  | 3.38       | 278        |
| W <sub>M</sub>          | 92.02     | 0.69   | -6.47  | 6.52       | 276        |
| R <sub>CIE</sub>        | 39.92     | 58.74  | 27.99  | 65.07      | 25         |
| J <sub>CIE</sub>        | 81.26     | -2.88  | 71.56  | 71.62      | 92         |
| G <sub>CIE</sub>        | 52.23     | -42.41 | 13.6   | 44.55      | 162        |
| B <sub>CIE</sub>        | 30.57     | 1.41   | -46.46 | 46.49      | 272        |

$LAB*LAB*_{Ma}: 36 \ 71 \ -3$

**LAB\*LCH\*Ma: 36 72 357**

***lab\*rqb\*\_Ma: 1.0 0.0 0.5***

**lab\*olv\*Ma: 1.0 0.0 0.62**

triangle lightness  $t^*$

**%Gamut**  
 **$u^*_{\text{rel}} = 109$**   
**%Regularity**  
 **$g^*_{\text{H,rel}} = 31$**   
 **$g^*_{\text{C,rel}} = 40$**

**FRS09\_92aM; adapted (a) CIELAB data**

|      |       |        |        |        |     |
|------|-------|--------|--------|--------|-----|
| r00j | 35.47 | 63.32  | 30.17  | 70.15  | 25  |
| r25j | 39.12 | 54.56  | 49.45  | 73.64  | 42  |
| r50j | 50.64 | 39.15  | 64.89  | 75.79  | 59  |
| r75j | 64.01 | 21.26  | 82.83  | 85.52  | 76  |
| j00g | 83.18 | -4.37  | 108.53 | 108.62 | 92  |
| j25g | 66.73 | -29.88 | 83.06  | 88.28  | 110 |
| j50g | 54.03 | -48.3  | 63.49  | 79.78  | 127 |
| j75g | 44.73 | -60.32 | 42.64  | 73.88  | 145 |
| g00b | 47.59 | -49.07 | 15.74  | 51.54  | 162 |
| g25b | 49.97 | -39.69 | -6.71  | 40.27  | 190 |
| g50b | 51.85 | -32.32 | -24.34 | 40.48  | 217 |
| g75b | 46.92 | -17.28 | -36.01 | 39.96  | 244 |
| b00r | 37.91 | 1.28   | -42.34 | 42.37  | 272 |
| b25r | 23.81 | 30.38  | -52.25 | 60.45  | 300 |
| b50r | 29.52 | 69.06  | -42.13 | 80.9   | 329 |
| b75r | 36.48 | 71.47  | -3.68  | 71.57  | 357 |

*LAB\*cmyn'\**

brilliantness  $i^*$

$$i^*=1.00$$
 $i^* = 0,80$  $i^* = 0.60$  $i^* = 0,40$  $i^* = 0,20$ 
$$i^*=0,00$$
relative chroma  $c^*$ 

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|    | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | a | b | c | d | e | f | g | h | i | j | k | LAB*cmyn' |  |
|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--|
| 01 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 02 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 03 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 04 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 05 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 06 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 07 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 08 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 09 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 10 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 11 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 12 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 13 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 14 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 15 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 16 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 17 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 18 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 19 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 20 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 21 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 22 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 23 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 24 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 25 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 26 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
| 27 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |