

Input: Colorimetric Offset Reflective System ORS18

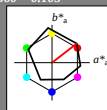
for hue  $h^* = lab^*h = 38/360 = 0.105$

$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

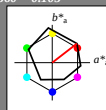
for hue  $h^* = lab^*h = 38/360 = 0.105$

$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0



triangle lightness  $t^*$

%Gamut

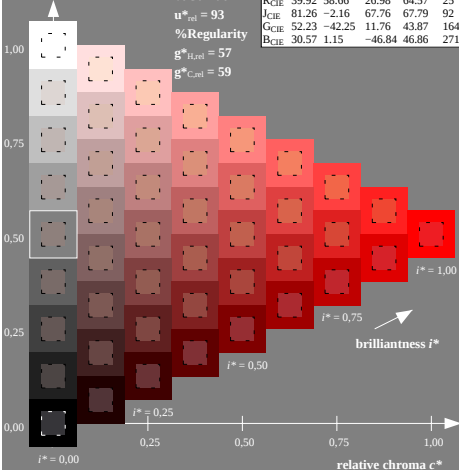
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

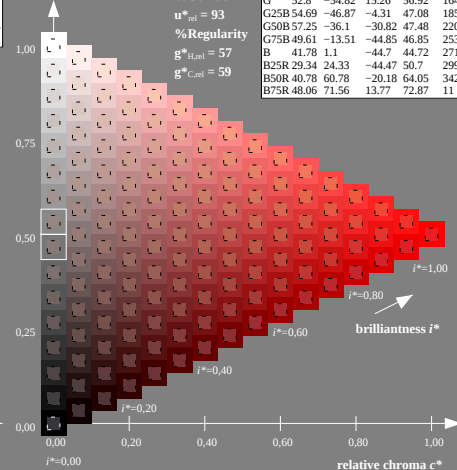
$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart ZE72; Colorimetric systems, Page 1/60  
D65: 9 and 16 step colour scales for 10 hues



ZE720-7N, 16 step scales for constant CIELAB hue 38/360 = 0.105 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

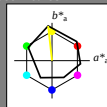
for hue  $h^* = lab^*h = 96/360 = 0.268$

$lab^*tch$  and  $lab^*nch$

D65: hue Y

LCH\*Ma: 90 92 96

ol\*Ma: 1.0 1.0 0.0



triangle lightness  $t^*$

%Gamut

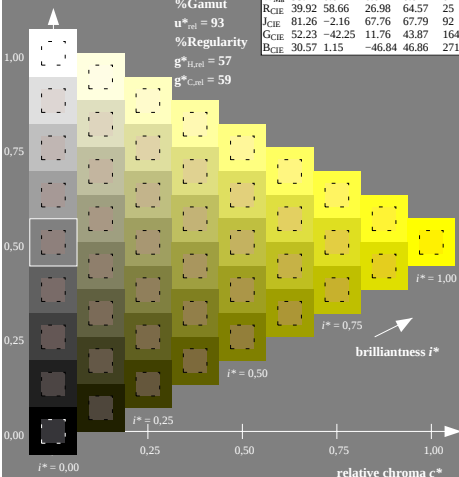
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |



Output: Colorimetric Offset Reflective System ORS18

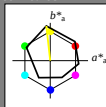
for hue  $h^* = lab^*h = 96/360 = 0.268$

$lab^*tch$  and  $lab^*nch$

D65: hue Y

LCH\*Ma: 90 92 96

ol\*Ma: 1.0 1.0 0.0



triangle lightness  $t^*$

%Gamut

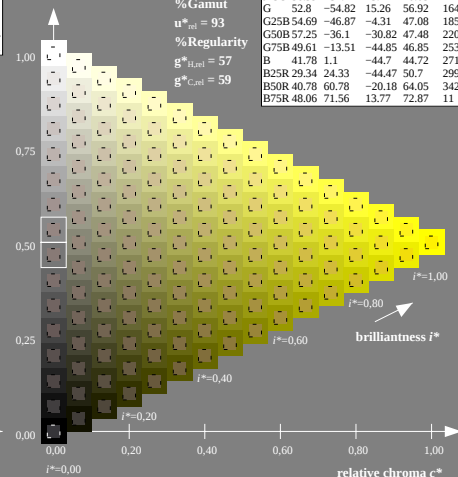
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart ZE72; Colorimetric systems, Page 2/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

BAM registration: 20071001-ZE72/L72E00N1.PS/TXT  
application for evaluation and measurement of printer or monitor systems

BAM material: code=ha4ta

Input: Colorimetric Offset Reflective System ORS18

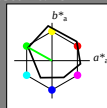
for hue  $h^* = lab^*h = 151/360 = 0.419$

$lab^*tch$  and  $lab^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

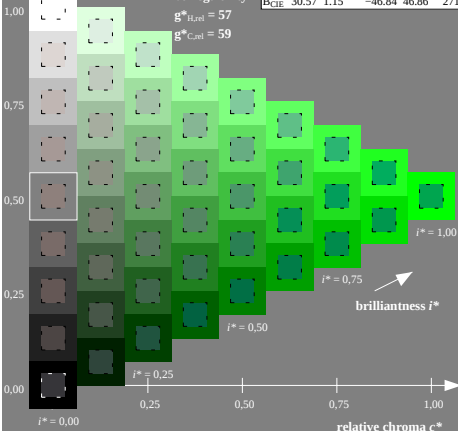


triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 93$

%Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |



ZE720-7N, 9 step scales for constant CIELAB hue 151/360 = 0.419 (left)

BAM-test chart ZE72; Colorimetric systems, Page 3/60  
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

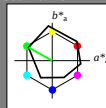
for hue  $h^* = lab^*h = 151/360 = 0.419$

$lab^*tch$  and  $lab^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

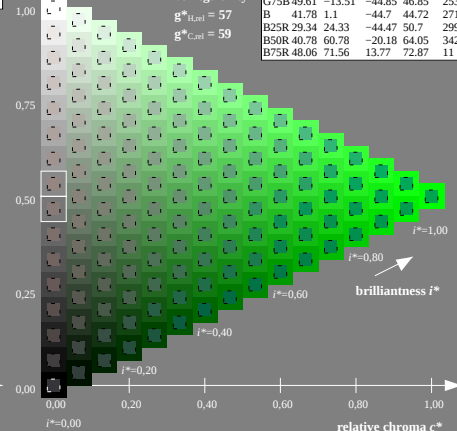


triangle lightness  $t^*$

%Gamut  
 $u^*_{rel} = 93$

%Regularity  
 $g^*_{H,rel} = 57$   
 $g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 16 step scales for constant CIELAB hue 151/360 = 0.419 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

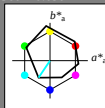
for hue  $h^* = lab^*h = 236/360 = 0.656$

$lab^*tch$  and  $lab^*nch$

D65: hue C

LCH\*Ma: 59 54 236

ol\*Ma: 0.0 1.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

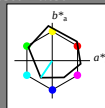
for hue  $h^* = lab^*h = 236/360 = 0.656$

$lab^*tch$  and  $lab^*nch$

D65: hue C

LCH\*Ma: 59 54 236

ol\*Ma: 0.0 1.0 1.0



triangle lightness  $t^*$

%Gamut

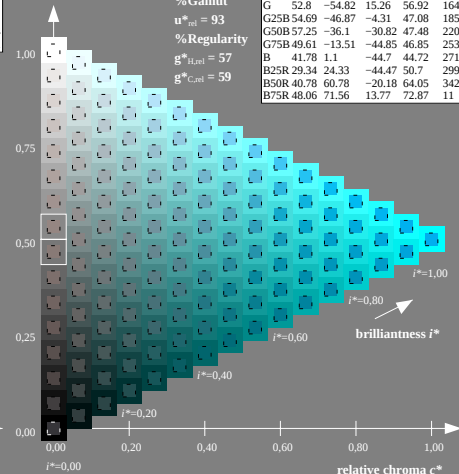
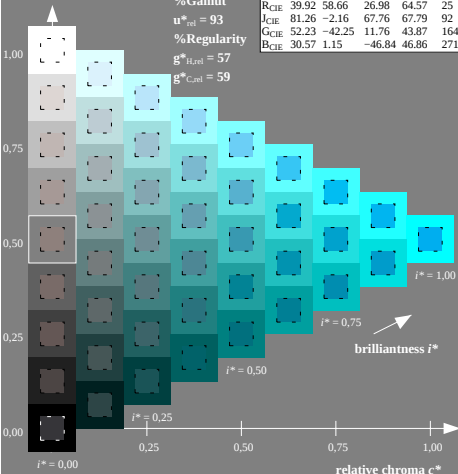
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
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| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 236/360 = 0.656 (right)

BAM-test chart ZE72; Colorimetric systems, Page 4/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

BAM registration: 20071001-ZE72/L72E00N1.PS/TXT  
application for evaluation and measurement of printer or monitor systems

BAM material: code=ha4ta

Input: Colorimetric Offset Reflective System ORS18

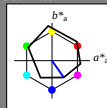
for hue  $h^* = lab^*h = 305/360 = 0.847$

$lab^*tch$  and  $lab^*nch$

D65: hue V

LCH\*Ma: 26 54 305

ol\*Ma: 0.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

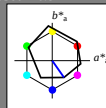
for hue  $h^* = lab^*h = 305/360 = 0.847$

$lab^*tch$  and  $lab^*nch$

D65: hue V

LCH\*Ma: 26 54 305

ol\*Ma: 0.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

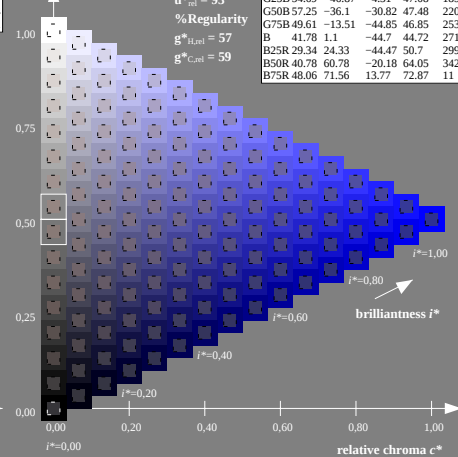
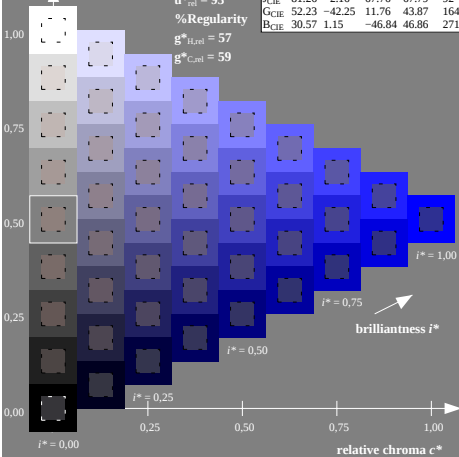
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart ZE72; Colorimetric systems, Page 5/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

BAM registration: 20071001-ZE72/L72E00N1.PS/TXT  
application for evaluation and measurement of printer or monitor systems

BAM material: code=ha4ta

Input: Colorimetric Offset Reflective System ORS18

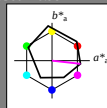
for hue  $h^* = lab^*h = 354/360 = 0.982$

$lab^*tch$  and  $lab^*nch$

D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^*=L^*_a$                    | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

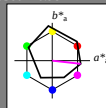
for hue  $h^* = lab^*h = 354/360 = 0.982$

$lab^*tch$  and  $lab^*nch$

D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

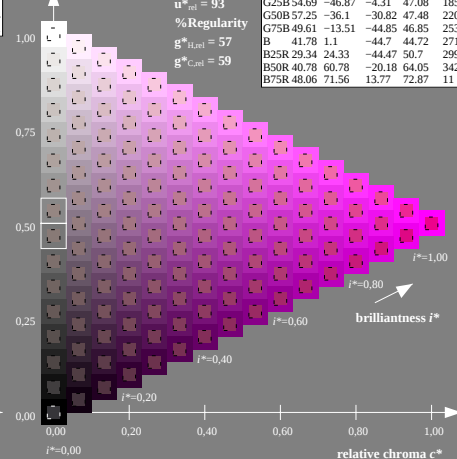
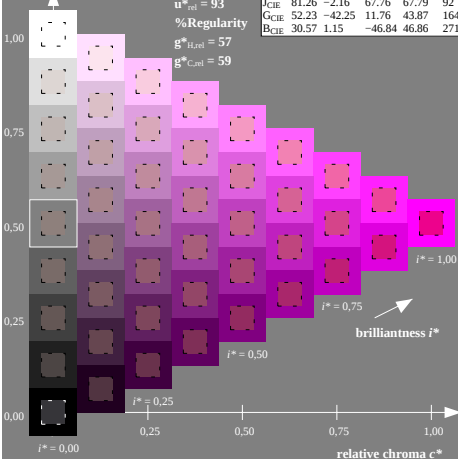
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^*=L^*_a$                    | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 354/360 = 0.982 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 354/360 = 0.982 (right)

BAM-test chart ZE72; Colorimetric systems, Page 6/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

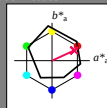
for hue  $h^* = lab^*h = 25/360 = 0.069$

$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 48 75 25

ol\*Ma: 1.0 0.0 0.32



triangle lightness  $t^*$

%Gamut

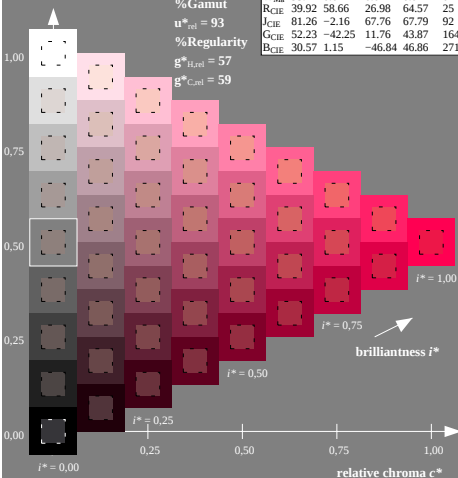
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |



ZE720-7N, 9 step scales for constant CIELAB hue 25/360 = 0.069 (left)

BAM-test chart ZE72; Colorimetric systems, Page 7/60  
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

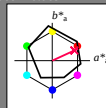
for hue  $h^* = lab^*h = 25/360 = 0.069$

$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 48 75 25

ol\*Ma: 1.0 0.0 0.32



triangle lightness  $t^*$

%Gamut

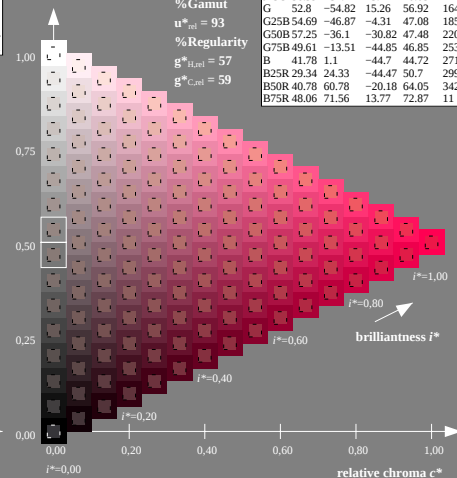
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 16 step scales for constant CIELAB hue 25/360 = 0.069 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

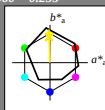
for hue  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0



triangle lightness  $t^*$

%Gamut

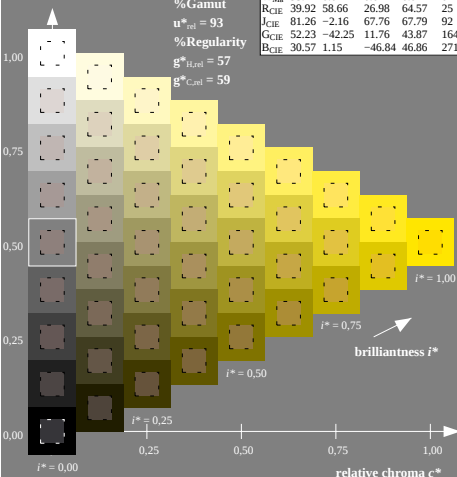
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |



ZE720-7N, 9 step scales for constant CIELAB hue 92/360 = 0.255 (left)

BAM-test chart ZE72; Colorimetric systems, Page 8/60  
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

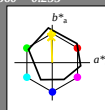
for hue  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0



triangle lightness  $t^*$

%Gamut

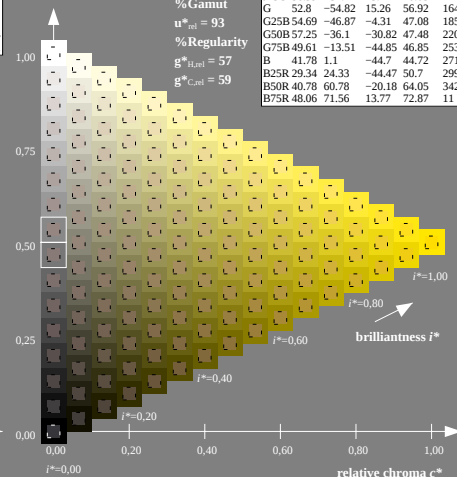
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 16 step scales for constant CIELAB hue 92/360 = 0.255 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

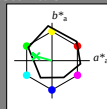
for hue  $h^* = lab^*h = 164/360 = 0.457$

$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

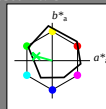
for hue  $h^* = lab^*h = 164/360 = 0.457$

$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25



triangle lightness  $t^*$

%Gamut

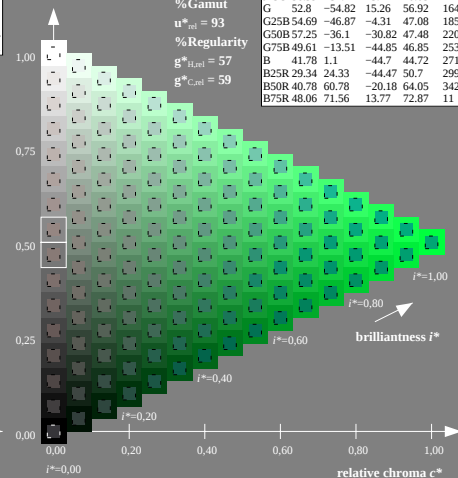
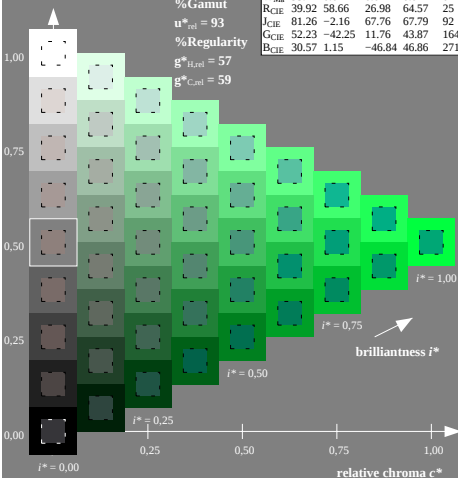
$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart ZE72; Colorimetric systems, Page 9/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

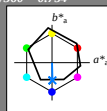
for hue  $h^* = lab^*h = 271/360 = 0.754$

$lab^*tch$  and  $lab^*nch$

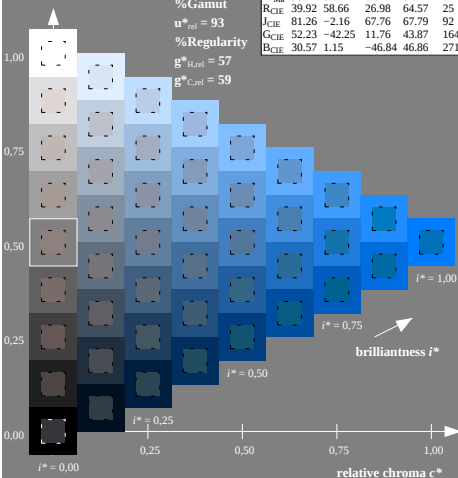
D65: hue B

LCH\*Ma: 42 45 271

ol\*Ma: 0.0 0.49 1.0



triangle lightness  $t^*$



| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

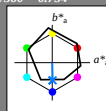
for hue  $h^* = lab^*h = 271/360 = 0.754$

$lab^*tch$  and  $lab^*nch$

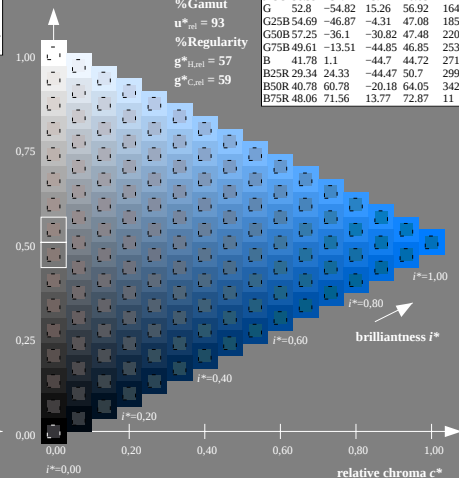
D65: hue B

LCH\*Ma: 42 45 271

ol\*Ma: 0.0 0.49 1.0



triangle lightness  $t^*$



| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |

ZE720-7N, 9 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart ZE72; Colorimetric systems, Page 10/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

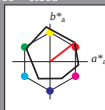
for hue  $h^* = lab^*h = 38/360 = 0.105$

$lab^*tch$  and  $lab^*nch$

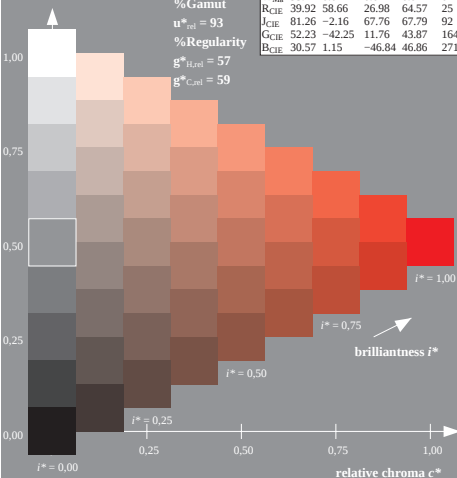
D65: hue O

LCH\*Ma: 48 83 38

ol\*Ma: 1.0 0.0 0.0



triangle lightness  $t^*$



ZE720-7N, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart ZE72; Colorimetric systems, Page 11/60  
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

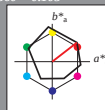
for hue  $h^* = lab^*h = 38/360 = 0.105$

$lab^*tch$  and  $lab^*nch$

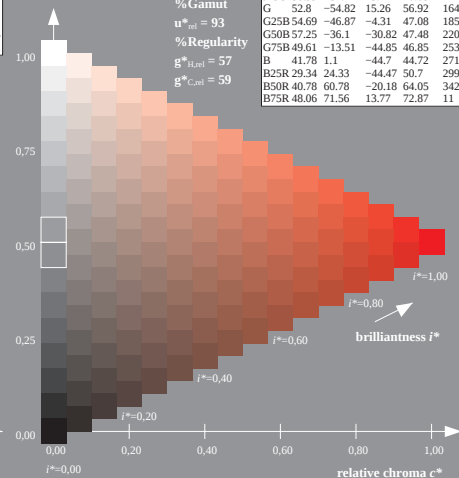
D65: hue O

LCH\*Ma: 48 83 38

ol\*Ma: 1.0 0.0 0.0



triangle lightness  $t^*$



ZE720-7N, 16 step scales for constant CIELAB hue 38/360 = 0.105 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output:  $\rightarrow cmy4^*$  set( $cmyk$ )color

Input: Colorimetric Offset Reflective System ORS18

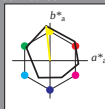
for hue  $h^* = lab^*h = 96/360 = 0.268$

$lab^*tch$  and  $lab^*nch$

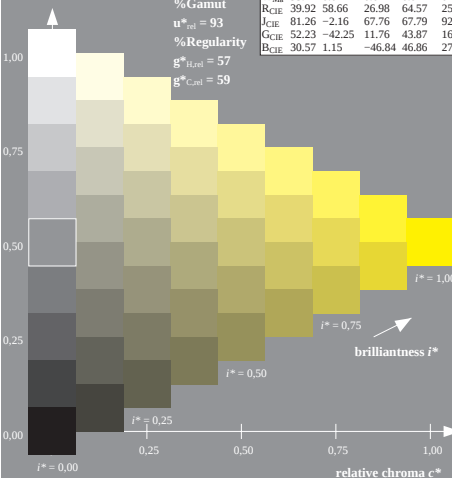
D65: hue Y

LCH\*Ma: 90 92 96

ol\*Ma: 1.0 1.0 0.0



triangle lightness  $t^*$



ORS18; adapted (a) CIELAB data

|                  | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|---------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94         | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37         | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9          | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62         | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72         | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13         | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92         | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26         | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23         | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57         | 1.15    | -46.84  | 46.86        | 271          |

Output: Colorimetric Offset Reflective System ORS18

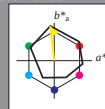
for hue  $h^* = lab^*h = 96/360 = 0.268$

$lab^*tch$  and  $lab^*nch$

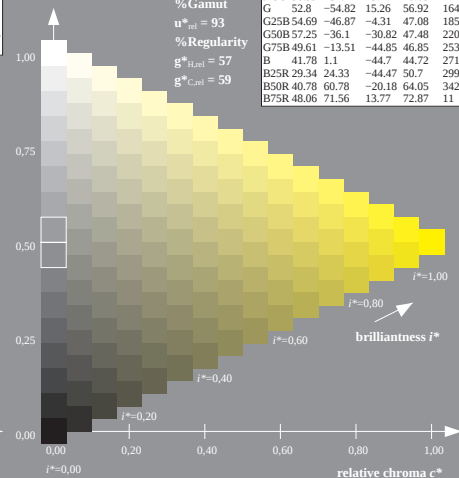
D65: hue Y

LCH\*Ma: 90 92 96

ol\*Ma: 1.0 1.0 0.0



triangle lightness  $t^*$



ORS18; adapted (a) CIELAB data

|      | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|---------------|---------|---------|--------------|--------------|
| R    | 48.0          | 68.58   | 31.54   | 75.48        | 25           |
| R25J | 50.11         | 61.52   | 52.63   | 80.96        | 41           |
| R50J | 62.87         | 38.77   | 65.02   | 75.71        | 59           |
| R75J | 74.87         | 17.37   | 76.69   | 78.63        | 77           |
| J    | 86.19         | -2.8    | 87.69   | 87.73        | 92           |
| J25G | 84.01         | -18.73  | 82.6    | 84.7         | 103          |
| J50G | 71.17         | -35.83  | 64.13   | 73.46        | 119          |
| J75G | 56.99         | -54.71  | 43.72   | 70.05        | 141          |
| G    | 52.8          | -54.82  | 15.26   | 56.92        | 164          |
| G25B | 54.69         | -46.87  | -4.31   | 47.08        | 185          |
| G50B | 57.25         | -36.1   | -30.82  | 47.48        | 220          |
| G75B | 49.61         | -13.51  | -44.85  | 46.85        | 253          |
| B    | 41.78         | 1.1     | -44.7   | 44.72        | 271          |
| B25R | 29.34         | 24.33   | -44.47  | 50.7         | 299          |
| B50R | 40.78         | 60.78   | -20.18  | 64.05        | 342          |
| B75R | 48.06         | 71.56   | 13.77   | 72.87        | 411          |

ZE720-7N, 9 step scales for constant CIELAB hue 96/360 = 0.268 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart ZE72; Colorimetric systems, Page 12/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

Input: Colorimetric Offset Reflective System ORS18

for hue  $h^* = \text{lab}^*h = 151/360 = 0.419$

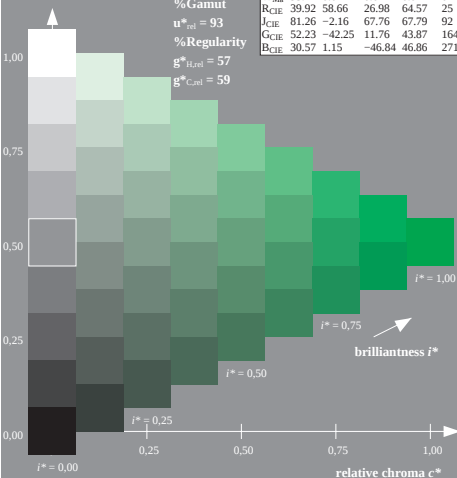
$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



ZE720-7N, 9 step scales for constant CIE LAB hue 151/360 = 0.419 (left)

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Output: Colorimetric Offset Reflective System ORS18

for hue  $h^* = \text{lab}^*h = 151/360 = 0.419$

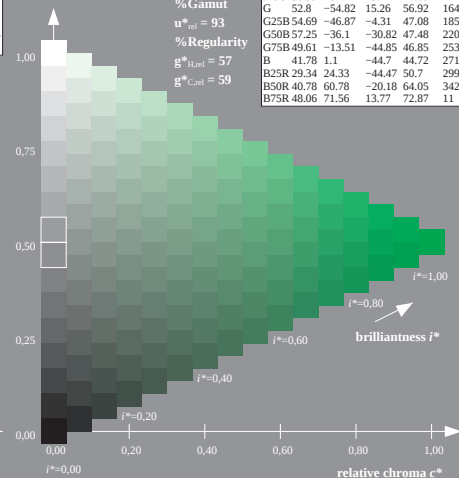
$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



ZE720-7N, 16 step scales for constant CIE LAB hue 151/360 = 0.419 (right)

BAM-test chart ZE72; Colorimetric systems, Page 13/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $\text{rgb} / \text{cmy}0 \text{ set}(\text{rgb}/\text{cmyk})\text{color}$   
output:  $\rightarrow \text{cmy}n4^* \text{ setcmykcolor}$

Input: Colorimetric Offset Reflective System ORS18

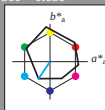
for hue  $h^* = \text{lab}^*h = 236/360 = 0.656$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

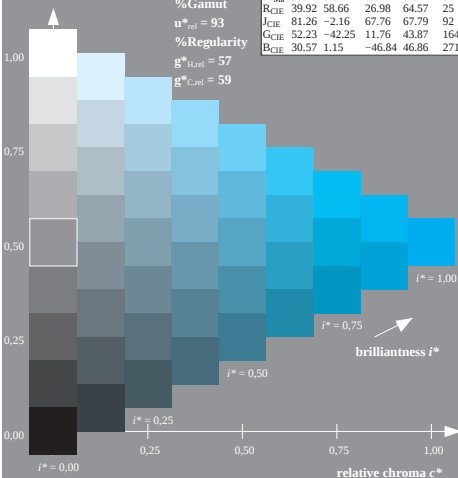
D65: hue C

LCH\*Ma: 59 54 236

olvm\*Ma: 0.0 1.0 1.0



triangle lightness  $t^*$



ZE720-7N, 9 step scales for constant CIELAB hue 236/360 = 0.656 (left)

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Output: Colorimetric Offset Reflective System ORS18

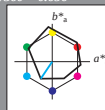
for hue  $h^* = \text{lab}^*h = 236/360 = 0.656$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

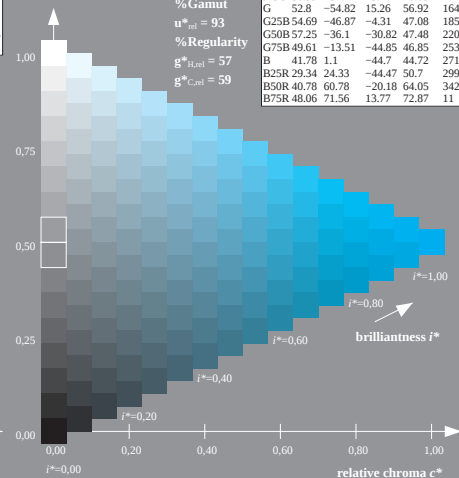
D65: hue C

LCH\*Ma: 59 54 236

olvm\*Ma: 0.0 1.0 1.0



triangle lightness  $t^*$



ZE720-7N, 16 step scales for constant CIELAB hue 236/360 = 0.656 (right)

BAM-test chart ZE72; Colorimetric systems, Page 14/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $\text{rgb} / \text{cmy}0 \text{ set}(\text{rgb}/\text{cmyk})\text{color}$   
output:  $\rightarrow \text{cmy}n4^* \text{ setcmykcolor}$

Input: Colorimetric Offset Reflective System ORS18

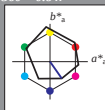
for hue  $h^* = lab^*h = 305/360 = 0.847$

$lab^*tch$  and  $lab^*nch$

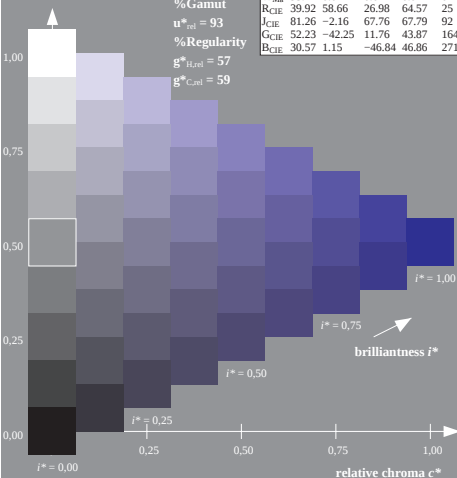
D65: hue V

LCH\*Ma: 26 54 305

ol\*Ma: 0.0 0.0 1.0



triangle lightness  $t^*$



Output: Colorimetric Offset Reflective System ORS18

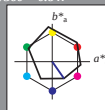
for hue  $h^* = lab^*h = 305/360 = 0.847$

$lab^*tch$  and  $lab^*nch$

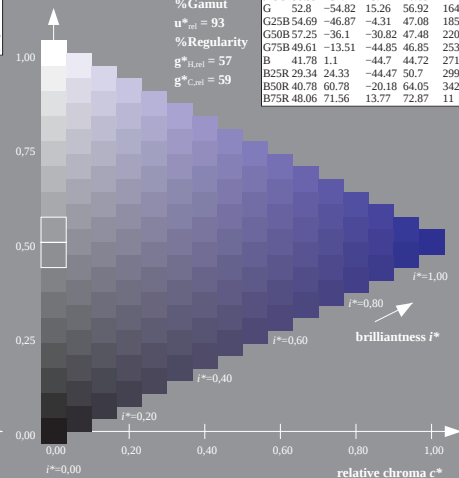
D65: hue V

LCH\*Ma: 26 54 305

ol\*Ma: 0.0 0.0 1.0



triangle lightness  $t^*$



| ORS18; adapted (a) CIELAB data |         |         |              |              |
|--------------------------------|---------|---------|--------------|--------------|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        |
|                                |         |         |              | 271          |

| ORS18; adapted (a) CIELAB data |         |         |              |              |
|--------------------------------|---------|---------|--------------|--------------|
| $L^* = L^*_a$                  | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        |
|                                |         |         |              | 11           |

ZE720-7N, 9 step scales for constant CIELAB hue 305/360 = 0.847 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart ZE72; Colorimetric systems, Page 15/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output:  $\rightarrow cmy4^*$  set( $cmyk$ )color

Input: Colorimetric Offset Reflective System ORS18

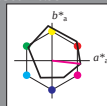
for hue  $h^* = lab^*h = 354/360 = 0.982$

$lab^*tch$  and  $lab^*nch$

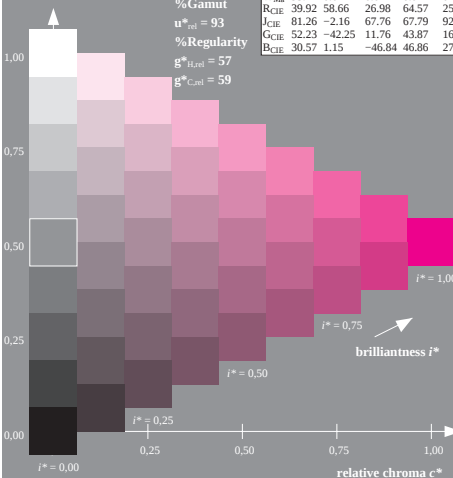
D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0



triangle lightness  $t^*$



ZE720-7N, 9 step scales for constant CIELAB hue 354/360 = 0.982 (left)

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Output: Colorimetric Offset Reflective System ORS18

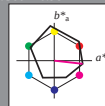
for hue  $h^* = lab^*h = 354/360 = 0.982$

$lab^*tch$  and  $lab^*nch$

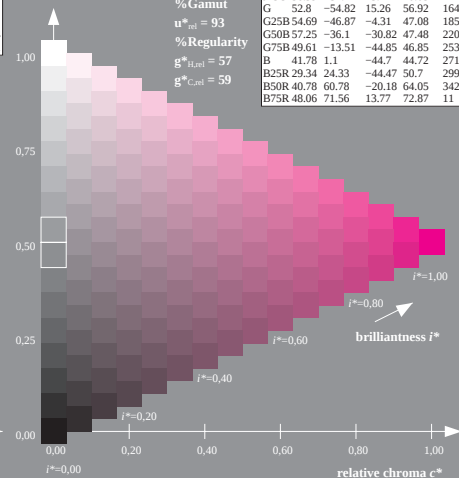
D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0



triangle lightness  $t^*$



ZE720-7N, 16 step scales for constant CIELAB hue 354/360 = 0.982 (right)

BAM-test chart ZE72; Colorimetric systems, Page 16/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output:  $\rightarrow cmy4^*$  set( $cmyk$ )color

Input: Colorimetric Offset Reflective System ORS18

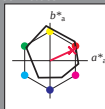
for hue  $h^* = lab^*h = 25/360 = 0.069$

$lab^*tch$  and  $lab^*nch$

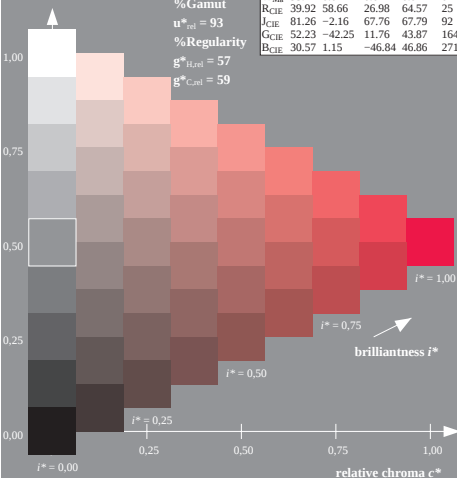
D65: hue R

LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32



triangle lightness  $t^*$



ORS18; adapted (a) CIELAB data

|                  | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|---------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94         | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37         | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9          | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62         | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72         | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13         | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01         | 0.0     | 0.0     | 0            | 0            |
| W <sub>Ma</sub>  | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92         | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26         | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23         | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57         | 1.15    | -46.84  | 46.86        | 271          |

Output: Colorimetric Offset Reflective System ORS18

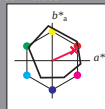
for hue  $h^* = lab^*h = 25/360 = 0.069$

$lab^*tch$  and  $lab^*nch$

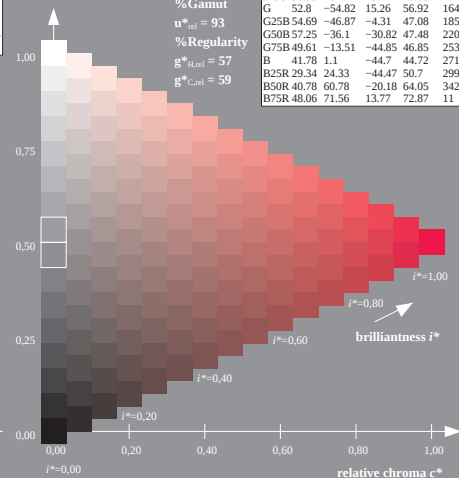
D65: hue R

LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32



triangle lightness  $t^*$



ORS18; adapted (a) CIELAB data

|      | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|---------------|---------|---------|--------------|--------------|
| R    | 48.0          | 68.58   | 31.54   | 75.48        | 25           |
| R25J | 50.11         | 61.52   | 52.63   | 80.96        | 41           |
| R50J | 62.87         | 38.77   | 65.02   | 75.71        | 59           |
| R75J | 74.87         | 17.37   | 76.69   | 78.63        | 77           |
| J    | 86.19         | -2.8    | 87.69   | 87.73        | 92           |
| J25G | 84.01         | -18.73  | 82.6    | 84.7         | 103          |
| J50G | 71.17         | -35.83  | 64.13   | 73.46        | 119          |
| J75G | 56.99         | -54.71  | 43.72   | 70.05        | 141          |
| G    | 52.8          | -54.82  | 15.26   | 56.92        | 164          |
| G25B | 54.69         | -46.87  | -4.31   | 47.08        | 185          |
| G50B | 57.25         | -36.1   | -30.82  | 47.48        | 220          |
| G75B | 49.61         | -13.51  | -44.85  | 46.85        | 253          |
| B    | 41.78         | 1.1     | -44.7   | 44.72        | 271          |
| B25R | 29.34         | 24.33   | -44.47  | 50.7         | 299          |
| B50R | 40.78         | 60.78   | -20.18  | 64.05        | 342          |
| B75R | 48.06         | 71.56   | 13.77   | 72.87        | 411          |

ZE720-7N, 9 step scales for constant CIELAB hue 25/360 = 0.069 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 25/360 = 0.069 (right)

BAM-test chart ZE72; Colorimetric systems, Page 17/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

Input: Colorimetric Offset Reflective System ORS18

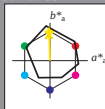
for hue  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  and  $lab^*nch$

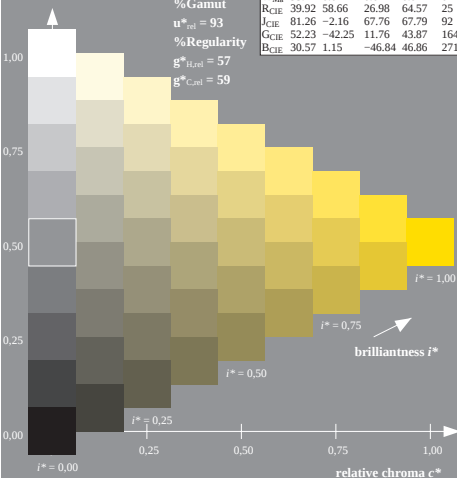
D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0



triangle lightness  $t^*$



Output: Colorimetric Offset Reflective System ORS18

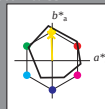
for hue  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  and  $lab^*nch$

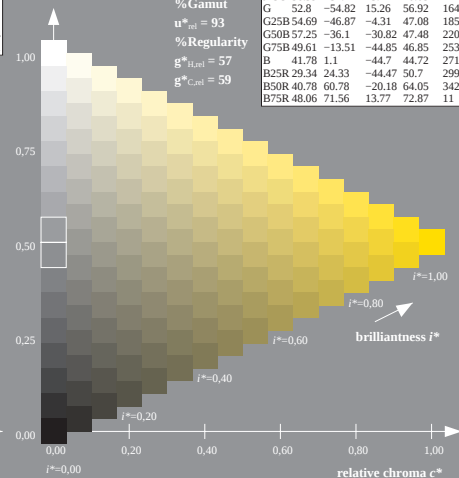
D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0



triangle lightness  $t^*$



|                  | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|---------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94         | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37         | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9          | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62         | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72         | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13         | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01         | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41         | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92         | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26         | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23         | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57         | 1.15    | -46.84  | 46.86        | 271          |

|      | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|---------------|---------|---------|--------------|--------------|
| R    | 48.0          | 68.58   | 31.54   | 75.48        | 25           |
| R25J | 50.11         | 61.52   | 52.63   | 80.96        | 41           |
| R50J | 62.87         | 38.77   | 65.02   | 75.71        | 59           |
| R75J | 74.87         | 17.37   | 76.69   | 78.63        | 77           |
| J    | 86.19         | -2.8    | 87.69   | 87.73        | 92           |
| J25G | 84.01         | -18.73  | 82.6    | 84.7         | 103          |
| J50G | 71.17         | -35.83  | 64.13   | 73.46        | 119          |
| J75G | 56.99         | -54.71  | 43.72   | 70.05        | 141          |
| G    | 52.8          | -54.82  | 15.26   | 56.92        | 164          |
| G25B | 54.69         | -46.87  | -4.31   | 47.08        | 185          |
| G50B | 57.25         | -36.1   | -30.82  | 47.48        | 220          |
| G75B | 49.61         | -13.51  | -44.85  | 46.85        | 253          |
| B    | 41.78         | 1.1     | -44.7   | 44.72        | 271          |
| B25R | 29.34         | 24.33   | -44.47  | 50.7         | 299          |
| B50R | 40.78         | 60.78   | -20.18  | 64.05        | 342          |
| B75R | 48.06         | 71.56   | 13.77   | 72.87        | 411          |

ZE720-7N, 9 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart ZE72; Colorimetric systems, Page 18/60

D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color

output:  $\rightarrow cmy4^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

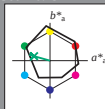
for hue  $h^* = lab^*h = 164/360 = 0.457$

$lab^*tch$  and  $lab^*nch$

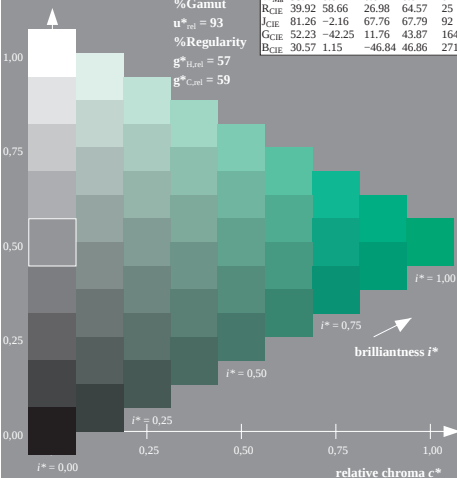
D65: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25



triangle lightness  $t^*$



ZE720-7N, 9 step scales for constant CIELAB hue 164/360 = 0.457 (left)

BAM-test chart ZE72; Colorimetric systems, Page 19/60  
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

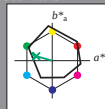
for hue  $h^* = lab^*h = 164/360 = 0.457$

$lab^*tch$  and  $lab^*nch$

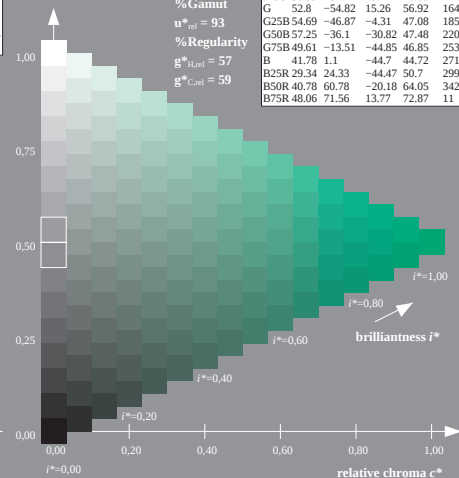
D65: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25



triangle lightness  $t^*$



ZE720-7N, 16 step scales for constant CIELAB hue 164/360 = 0.457 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output:  $\rightarrow cmy4^*$  set( $cmyk$ )color

Input: Colorimetric Offset Reflective System ORS18

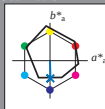
for hue  $h^* = lab^*h = 271/360 = 0.754$

$lab^*tch$  and  $lab^*nch$

D65: hue B

LCH\*Ma: 42 45 271

ol\*Ma: 0.0 0.49 1.0



| ORS18; adapted (a) CIELAB data | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------------------|---------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>                | 47.94         | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>                | 90.37         | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>                | 50.9          | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>                | 58.62         | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>                | 25.72         | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>                | 48.13         | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>                | 18.01         | 0.0     | 0.0     | 0            | 0            |
| W <sub>Ma</sub>                | 95.41         | 0.0     | 0.0     | 0            | 0            |
| R <sub>CIE</sub>               | 39.92         | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub>               | 81.26         | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub>               | 52.23         | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub>               | 30.57         | 1.15    | -46.84  | 46.86        | 271          |

triangle lightness  $t^*$

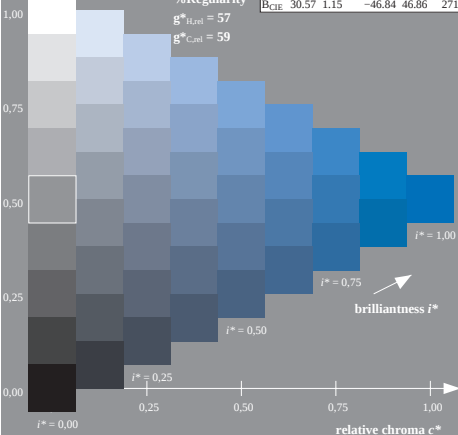
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



Output: Colorimetric Offset Reflective System ORS18

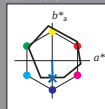
for hue  $h^* = lab^*h = 271/360 = 0.754$

$lab^*tch$  and  $lab^*nch$

D65: hue B

LCH\*Ma: 42 45 271

ol\*Ma: 0.0 0.49 1.0



| ORS18; adapted (a) CIELAB data | $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------------------|---------------|---------|---------|--------------|--------------|
| R                              | 48.0          | 68.58   | 31.54   | 75.48        | 25           |
| R25J                           | 50.11         | 61.52   | 52.63   | 80.96        | 41           |
| R50J                           | 62.87         | 38.77   | 65.02   | 75.71        | 59           |
| R75J                           | 74.87         | 17.37   | 76.69   | 78.63        | 77           |
| J                              | 86.19         | -2.8    | 87.69   | 87.73        | 92           |
| J25G                           | 84.01         | -18.73  | 82.6    | 84.7         | 103          |
| J50G                           | 71.17         | -35.83  | 64.13   | 73.46        | 119          |
| J75G                           | 56.99         | -54.71  | 43.72   | 70.05        | 141          |
| G                              | 52.8          | -54.82  | 15.26   | 56.92        | 164          |
| G25B                           | 54.69         | -46.87  | -4.31   | 47.08        | 185          |
| G50B                           | 57.25         | -36.1   | -30.82  | 47.48        | 220          |
| G75B                           | 49.61         | -13.51  | -44.85  | 46.85        | 253          |
| B                              | 41.78         | 1.1     | -44.7   | 44.72        | 271          |
| B25R                           | 29.34         | 24.33   | -44.47  | 50.7         | 299          |
| B50R                           | 40.78         | 60.78   | -20.18  | 64.05        | 342          |
| B75R                           | 48.06         | 71.56   | 13.77   | 72.87        | 411          |

triangle lightness  $t^*$

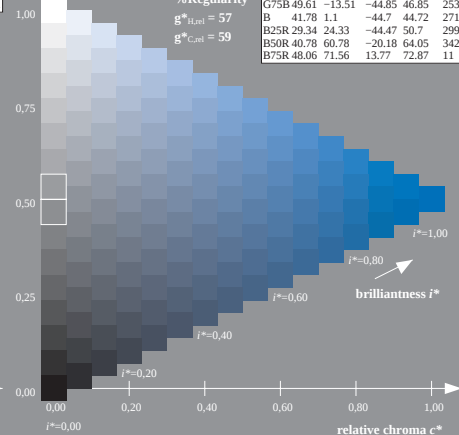
%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$



ZE720-7N, 9 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart ZE72; Colorimetric systems, Page 20/60  
D65: 9 and 16 step colour scales for 10 hues

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output:  $\rightarrow cmy4^*$  set( $cmyk$ )color



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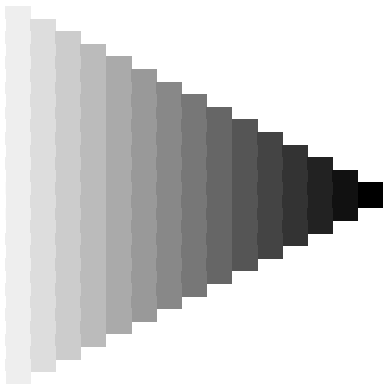
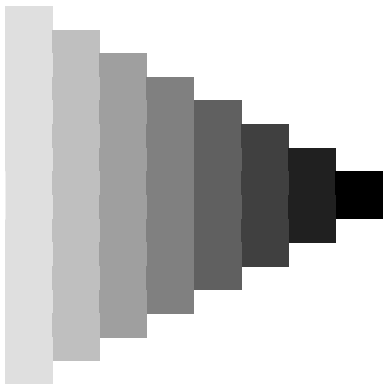
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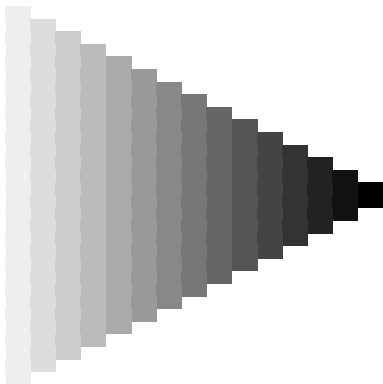
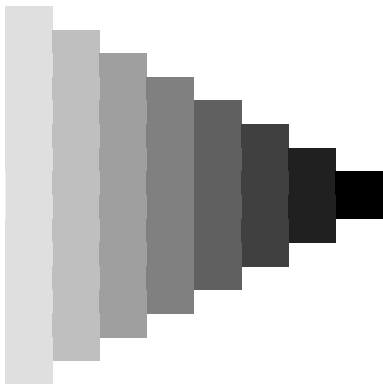


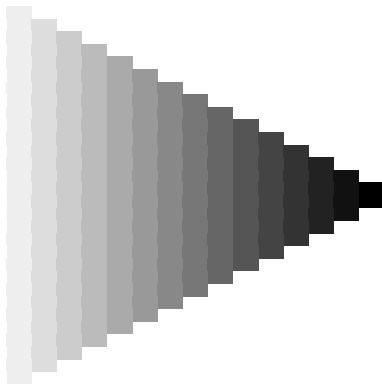
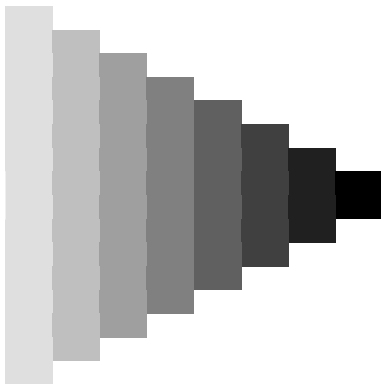
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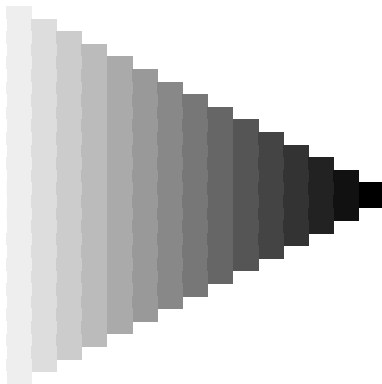
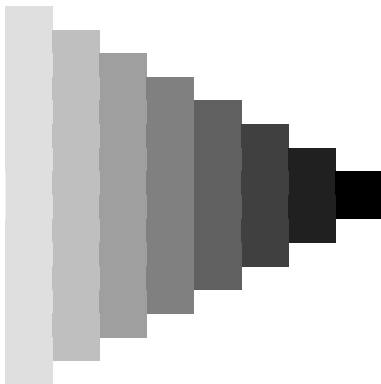
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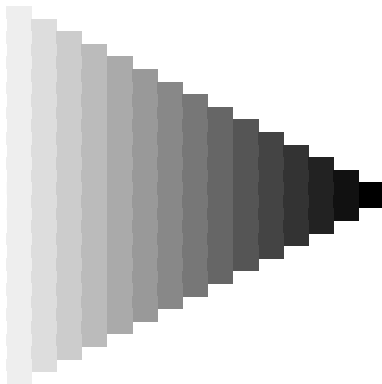
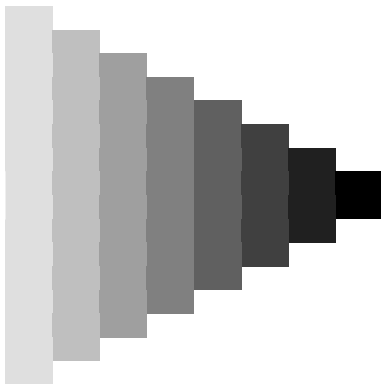


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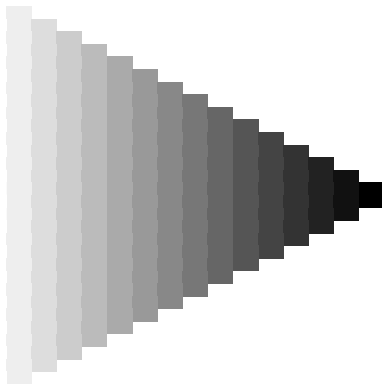
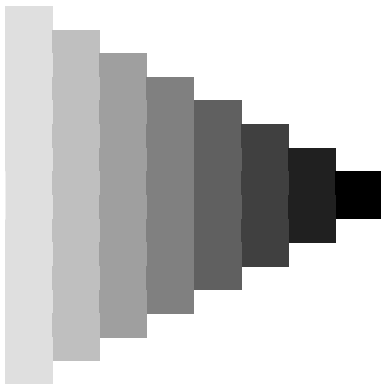
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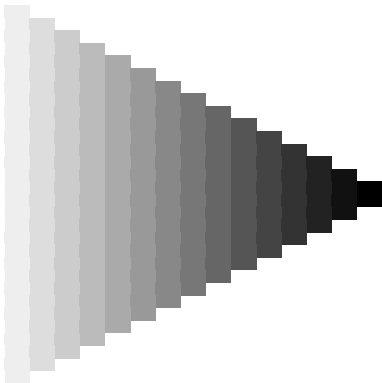
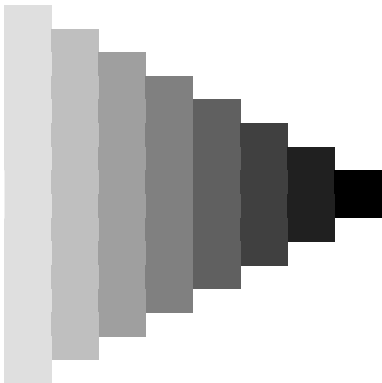
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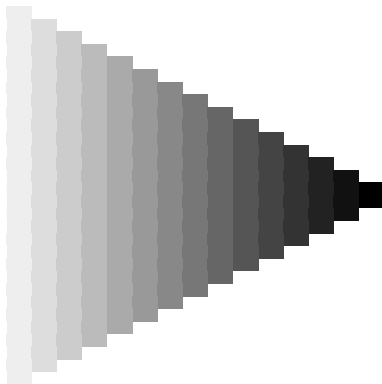
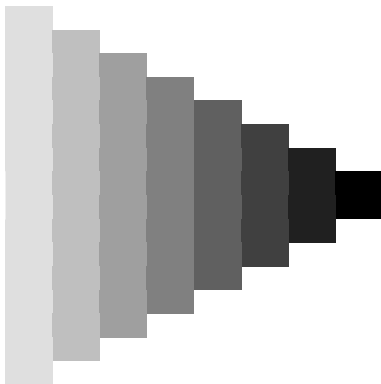
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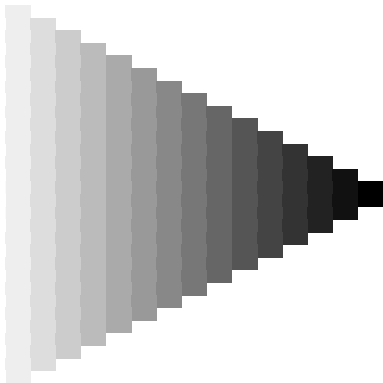
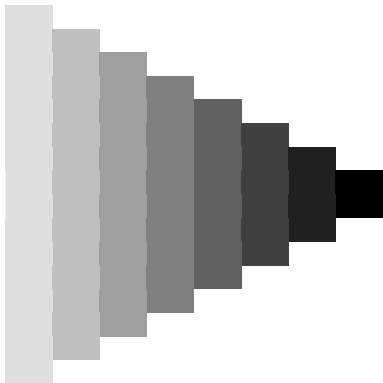


m

m

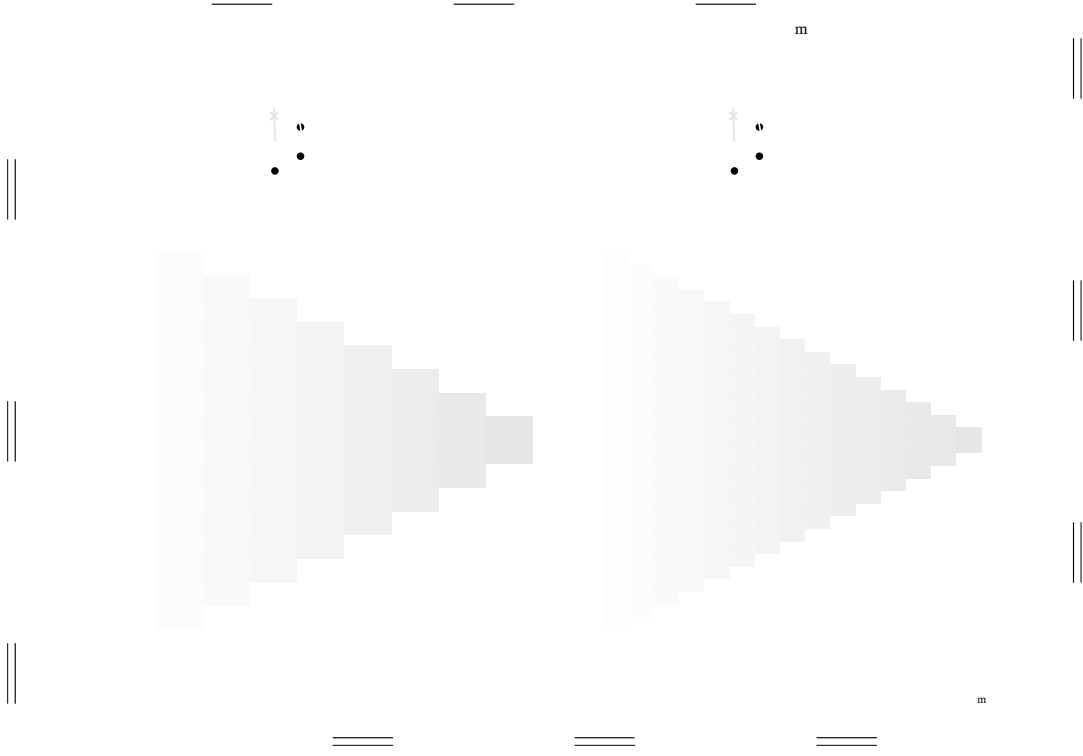


m



m





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m

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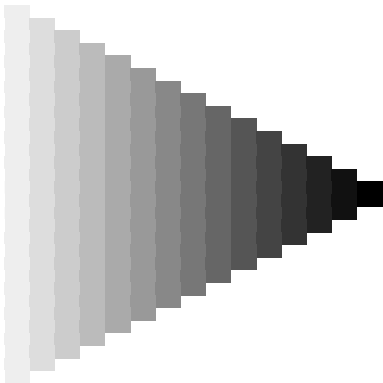
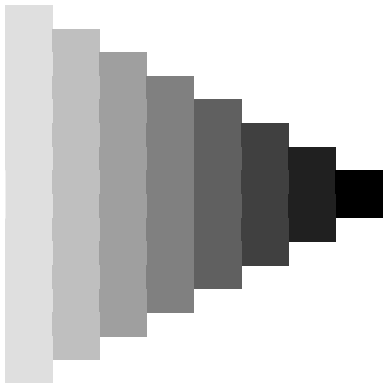
=====



m

m

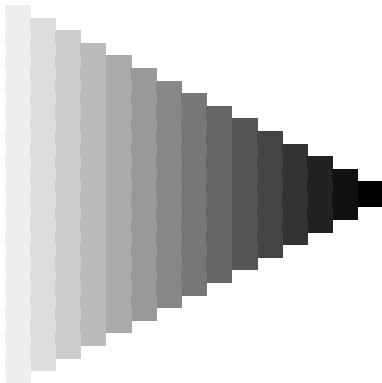
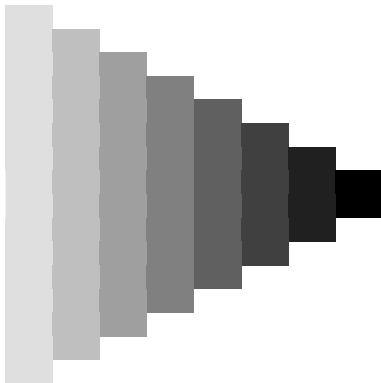




y

y

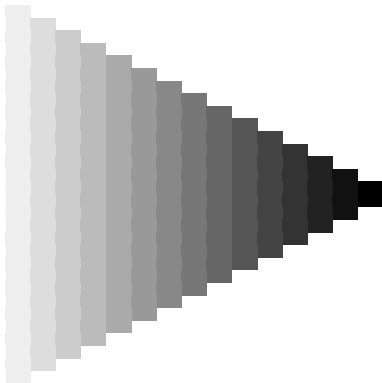
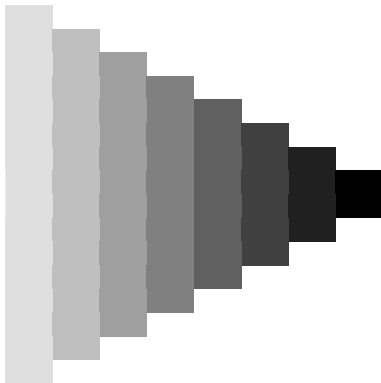




y

y





y

y



y



y

y



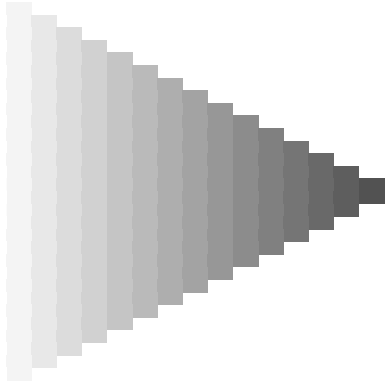
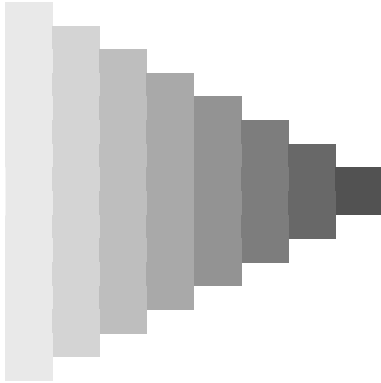
y

y

e o

e o

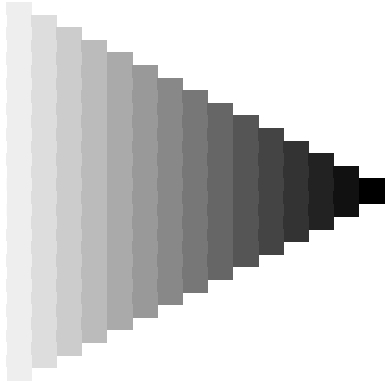
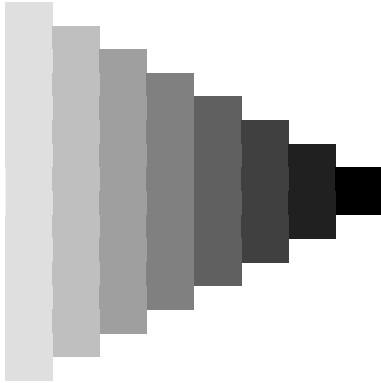
y



y

y

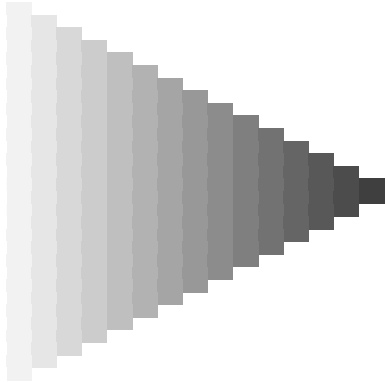
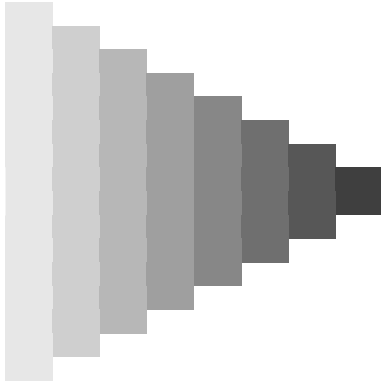




y

y





y

y



y

e o

e o

y

Input: Colorimetric Offset Reflective System ORS18

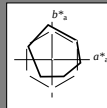
for hue  $h^* = \text{lab}^*h = 38/360 = 0.105$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue O

LCH\*Ma: 48 83 38

ol\*Ma: 1.0 0.0 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{\text{rel}} = 93$

%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 18.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

Output: Colorimetric Offset Reflective System ORS18

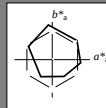
for hue  $h^* = \text{lab}^*h = 38/360 = 0.105$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue O

LCH\*Ma: 48 83 38

ol\*Ma: 1.0 0.0 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{\text{rel}} = 93$

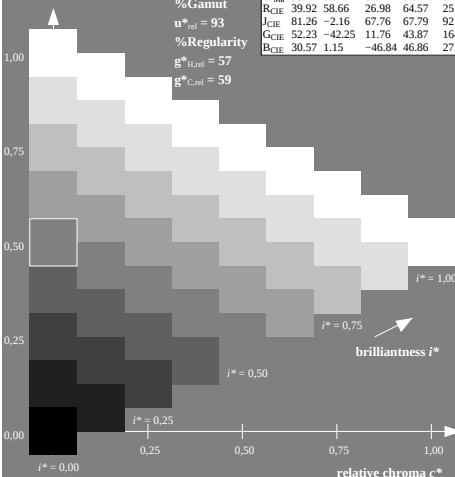
%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

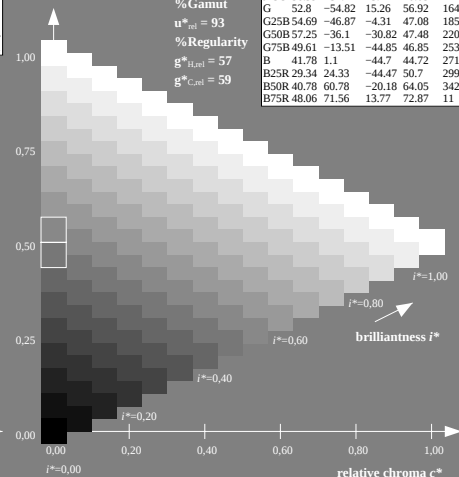
ORS18; adapted (a) CIELAB data

|      | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| R    | 48.0        | 68.58   | 31.54   | 75.48        | 25           |
| R25J | 50.11       | 61.52   | 52.63   | 80.96        | 41           |
| R50J | 62.87       | 38.77   | 65.02   | 75.71        | 59           |
| R75J | 74.87       | 17.37   | 76.69   | 78.63        | 77           |
| J    | 86.19       | -2.8    | 87.69   | 87.73        | 92           |
| J25G | 84.01       | -18.73  | 82.6    | 84.7         | 103          |
| J50G | 71.17       | -35.83  | 64.13   | 73.46        | 119          |
| J75G | 56.99       | -54.71  | 43.72   | 70.05        | 141          |
| G    | 52.8        | -54.82  | 15.26   | 56.92        | 164          |
| G25B | 54.69       | -46.87  | -4.31   | 47.08        | 185          |
| G50B | 57.25       | -36.1   | -30.82  | 47.48        | 220          |
| G75B | 49.61       | -13.51  | -44.85  | 46.85        | 253          |
| B    | 41.78       | 1.1     | -44.7   | 44.72        | 271          |
| B25R | 29.34       | 24.33   | -44.47  | 50.7         | 299          |
| B50R | 40.78       | 60.78   | -20.18  | 64.05        | 342          |
| B75R | 48.06       | 71.56   | 13.77   | 72.87        | 411          |



ZE720-7N, 9 step scales for constant CIE LAB hue 38/360 = 0.105 (left)

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ZE720-7N, 16 step scales for constant CIE LAB hue 38/360 = 0.105 (right)

BAM-test chart ZE72; Colorimetric systems, Page 51/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

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ORS18; adapted (a) CIELAB data

|   | $L^* = L_a$ | $d_a^*$ | $b_a^*$ | $C_{ab,a}^*$ | $n_{ab,a}^*$ |
|---|-------------|---------|---------|--------------|--------------|
| R | 48.0        | 68.58   | 31.54   | 75.48        | 25           |

|      |       |       |       |       |    |
|------|-------|-------|-------|-------|----|
| R    | 48.9  | 68.58 | 31.54 | 75.48 | 25 |
| R25J | 50.11 | 61.52 | 52.63 | 80.96 | 41 |
| R50J | 62.87 | 38.77 | 65.02 | 75.71 | 59 |

|      |       |       |       |       |    |
|------|-------|-------|-------|-------|----|
| R50J | 62.87 | 38.77 | 65.02 | 75.71 | 59 |
| R75J | 74.87 | 17.37 | 76.69 | 78.63 | 77 |

|      |       |        |       |       |     |
|------|-------|--------|-------|-------|-----|
| R75J | 74.37 | 17.37  | 76.69 | 78.63 | 77  |
| J    | 86.19 | -2.8   | 87.69 | 87.73 | 92  |
| I25G | 84.01 | -18.73 | 93.6  | 94.7  | 100 |

|      |       |        |       |       |     |
|------|-------|--------|-------|-------|-----|
| J50G | 71.17 | -35.83 | 64.13 | 73.46 | 119 |
| J75G | 56.99 | -54.71 | 43.72 | 70.05 | 141 |
| G    | 52.8  | -54.82 | 15.26 | 56.92 | 164 |

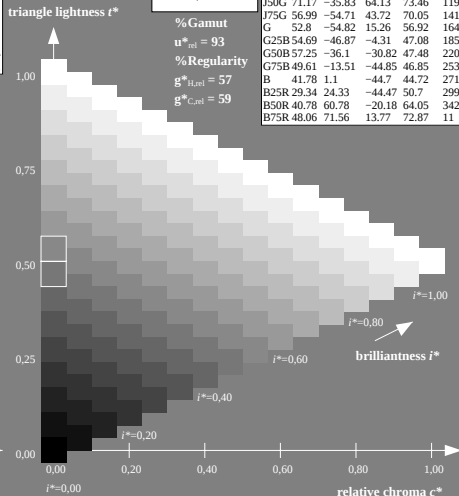
|      |       |        |       |       |     |
|------|-------|--------|-------|-------|-----|
| J75G | 56.99 | -54.71 | 43.72 | 70.05 | 141 |
| G    | 52.8  | -54.82 | 15.26 | 56.92 | 164 |
| G25D | 54.69 | -46.87 | 4.21  | 47.08 | 182 |

|      |       |        |        |       |     |
|------|-------|--------|--------|-------|-----|
| G25B | 54.69 | -46.87 | -4.31  | 47.08 | 185 |
| G50B | 57.25 | -36.1  | -30.82 | 47.48 | 220 |

|      |       |        |        |       |     |
|------|-------|--------|--------|-------|-----|
| G50B | 57.25 | -36.1  | -30.82 | 47.48 | 220 |
| G75B | 49.61 | -13.51 | -44.85 | 46.85 | 253 |

|      |       |       |        |       |     |
|------|-------|-------|--------|-------|-----|
| B    | 41.78 | 1.1   | -44.7  | 44.72 | 271 |
| B25B | 29.34 | 24.33 | -44.47 | 50.7  | 299 |

|      |       |       |        |       |     |
|------|-------|-------|--------|-------|-----|
| B25R | 29.34 | 24.33 | -44.47 | 50.7  | 299 |
| B50R | 40.78 | 60.78 | -20.18 | 64.05 | 342 |



ZE720-7N, 16 step scales for constant CIELAB hue 96/360 = 0.268 (right)

```
input: rgb / cmv0 set(rgb/cmvk)color
```

```
output: ->cmvyn4* setcmvycolor
```

```
output: ->cmvyn4* setcmvycolor
```

\_\_\_\_\_ L \_\_\_\_\_

BAM registration: 20071001-ZE72/L72E00N1.PS/TXT BAM manual application for evaluation and measurement of printer or monitor systems

BAM material: code=rha4ta

Input: Colorimetric Offset Reflective System ORS18

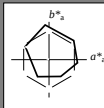
for hue  $h^* = \text{lab}^*h = 151/360 = 0.419$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{\text{rel}} = 93$

%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{\text{ab},a}$ | $h^*_{\text{ab},a}$ |
|------------------|-------------|---------|---------|---------------------|---------------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63               | 38                  |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32               | 96                  |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91               | 151                 |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3                | 236                 |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22               | 305                 |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74               | 354                 |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57               | 25                  |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79               | 92                  |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87               | 164                 |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86               | 271                 |

Output: Colorimetric Offset Reflective System ORS18

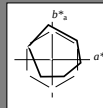
for hue  $h^* = \text{lab}^*h = 151/360 = 0.419$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{\text{rel}} = 93$

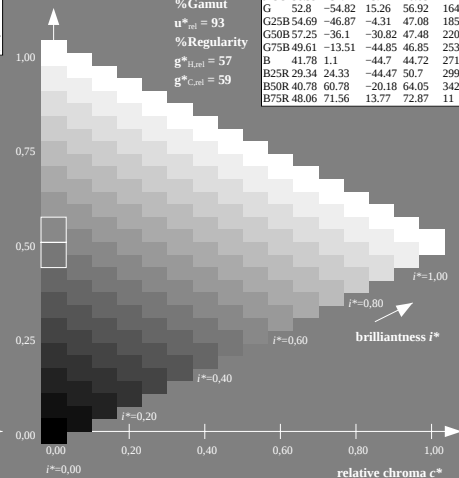
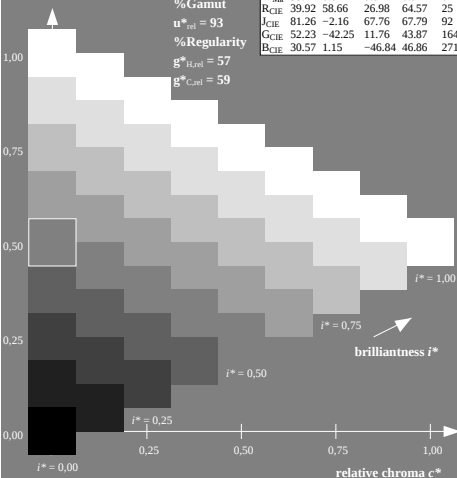
%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

ORS18; adapted (a) CIELAB data

|      | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{\text{ab},a}$ | $h^*_{\text{ab},a}$ |
|------|-------------|---------|---------|---------------------|---------------------|
| R    | 48.0        | 68.58   | 31.54   | 75.48               | 25                  |
| R25J | 50.11       | 61.52   | 52.63   | 80.96               | 41                  |
| R50J | 62.87       | 38.77   | 65.02   | 75.71               | 59                  |
| R75J | 74.87       | 17.37   | 76.69   | 78.63               | 77                  |
| J    | 86.19       | -2.8    | 87.69   | 87.73               | 92                  |
| J25G | 84.01       | -18.73  | 82.6    | 84.7                | 103                 |
| J50G | 71.17       | -35.83  | 64.13   | 73.46               | 119                 |
| J75G | 56.99       | -54.71  | 43.72   | 70.05               | 141                 |
| G    | 52.8        | -54.82  | 15.26   | 56.92               | 164                 |
| G25B | 54.69       | -46.87  | -4.31   | 47.08               | 185                 |
| G50B | 57.25       | -36.1   | -30.82  | 47.48               | 220                 |
| G75B | 49.61       | -13.51  | -44.85  | 46.85               | 253                 |
| B    | 41.78       | 1.1     | -44.7   | 44.72               | 271                 |
| B25R | 29.34       | 24.33   | -44.47  | 50.7                | 299                 |
| B50R | 40.78       | 60.78   | -20.18  | 64.05               | 342                 |
| B75R | 48.06       | 71.56   | 13.77   | 72.87               | 411                 |



ZE720-7N, 9 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 151/360 = 0.419 (right)

BAM-test chart ZE72; Colorimetric systems, Page 53/60

D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`

output: `->cmy4* setcmykcolor`

Input: Colorimetric Offset Reflective System ORS18

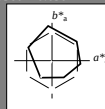
for hue  $h^* = \text{lab}^*h = 236/360 = 0.656$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0



triangle lightness  $t^*$

%Gamut

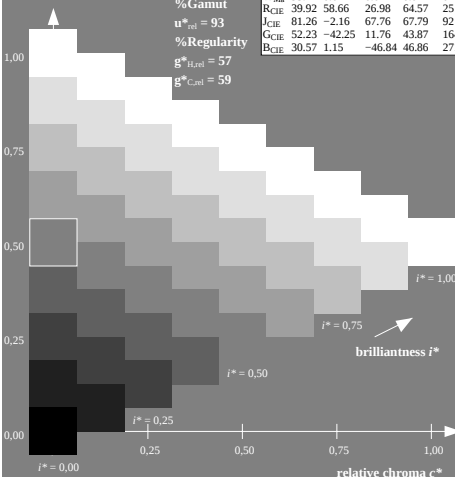
$u^*_{\text{rel}} = 93$

%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^*=L^*_a$                    | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0.0          | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0.0          | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |



ZE720-7N, 9 step scales for constant CIE LAB hue 236/360 = 0.656 (left)

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Output: Colorimetric Offset Reflective System ORS18

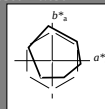
for hue  $h^* = \text{lab}^*h = 236/360 = 0.656$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0



triangle lightness  $t^*$

%Gamut

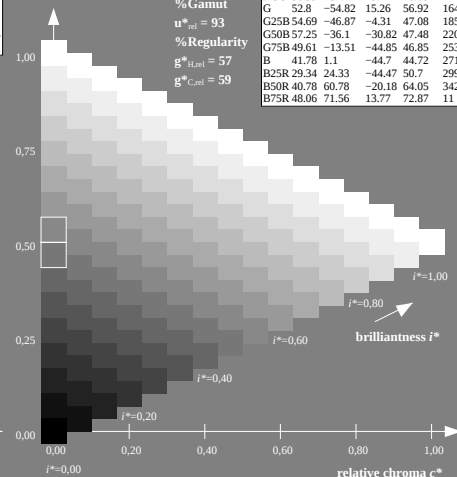
$u^*_{\text{rel}} = 93$

%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^*=L^*_a$                    | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 16 step scales for constant CIE LAB hue 236/360 = 0.656 (right)

BAM-test chart ZE72; Colorimetric systems, Page 54/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

Input: Colorimetric Offset Reflective System ORS18

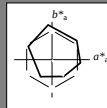
for hue  $h^* = \text{lab}^*h = 305/360 = 0.847$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue V

LCH\*Ma: 26 54 305

ol\*Ma: 0.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{\text{rel}} = 93$

%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

ORS18; adapted (a) CIELAB data

| $L^* = L^*_a$    | $a^*_a$ | $b^*_a$ | $C^*_{\text{ab},a}$ | $h^*_{\text{ab},a}$ | $n^*_{\text{ab},a}$ |
|------------------|---------|---------|---------------------|---------------------|---------------------|
| O <sub>Ma</sub>  | 47.94   | 65.39   | 50.52               | 82.63               | 38                  |
| Y <sub>Ma</sub>  | 90.37   | -10.26  | 91.75               | 92.32               | 96                  |
| L <sub>Ma</sub>  | 50.9    | -62.83  | 34.96               | 71.91               | 151                 |
| C <sub>Ma</sub>  | 58.62   | -30.34  | -45.01              | 54.3                | 236                 |
| V <sub>Ma</sub>  | 25.72   | 31.1    | -44.4               | 54.22               | 305                 |
| M <sub>Ma</sub>  | 48.13   | 75.28   | -8.36               | 75.74               | 354                 |
| N <sub>Ma</sub>  | 18.01   | 0.0     | 0.0                 | 0.0                 | 0                   |
| W <sub>Ma</sub>  | 95.41   | 0.0     | 0.0                 | 0.0                 | 0                   |
| R <sub>CIE</sub> | 39.92   | 58.66   | 26.98               | 64.57               | 25                  |
| J <sub>CIE</sub> | 81.26   | -2.16   | 67.76               | 67.79               | 92                  |
| G <sub>CIE</sub> | 52.23   | -42.25  | 11.76               | 43.87               | 164                 |
| B <sub>CIE</sub> | 30.57   | 1.15    | -46.84              | 46.86               | 271                 |

Output: Colorimetric Offset Reflective System ORS18

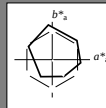
for hue  $h^* = \text{lab}^*h = 305/360 = 0.847$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

D65: hue V

LCH\*Ma: 26 54 305

ol\*Ma: 0.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{\text{rel}} = 93$

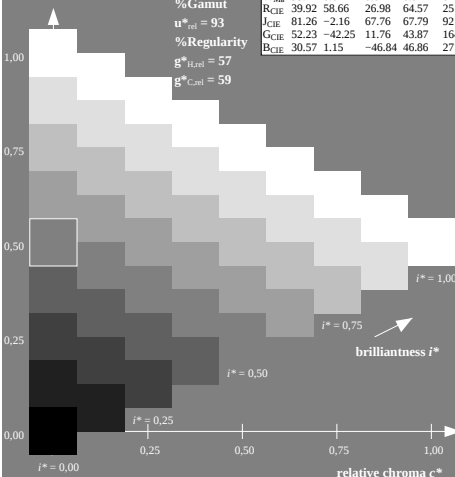
%Regularity

$g^*_{H,\text{rel}} = 57$

$g^*_{C,\text{rel}} = 59$

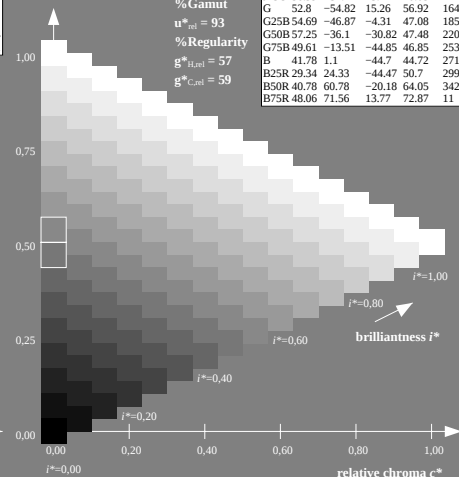
ORS18; adapted (a) CIELAB data

| $L^* = L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{\text{ab},a}$ | $h^*_{\text{ab},a}$ | $n^*_a$ |
|---------------|---------|---------|---------------------|---------------------|---------|
| R             | 48.0    | 68.58   | 31.54               | 75.48               | 25      |
| R25J          | 50.11   | 61.52   | 52.63               | 80.96               | 41      |
| R50J          | 62.87   | 38.77   | 65.02               | 75.71               | 59      |
| R75J          | 74.87   | 17.37   | 76.69               | 78.63               | 77      |
| J             | 86.19   | -2.8    | 87.69               | 87.73               | 92      |
| J25G          | 84.01   | -18.73  | 82.6                | 84.7                | 103     |
| J50G          | 71.17   | -35.83  | 64.13               | 73.46               | 119     |
| J75G          | 56.99   | -54.71  | 43.72               | 70.05               | 141     |
| G             | 52.8    | -54.82  | 15.26               | 56.92               | 164     |
| G25B          | 54.69   | -46.87  | -4.31               | 47.08               | 185     |
| G50B          | 57.25   | -36.1   | -30.82              | 47.48               | 220     |
| G75B          | 49.61   | -13.51  | -44.85              | 46.85               | 253     |
| B             | 41.78   | 1.1     | -44.7               | 44.72               | 271     |
| B25R          | 29.34   | 24.33   | -44.47              | 50.7                | 299     |
| B50R          | 40.78   | 60.78   | -20.18              | 64.05               | 342     |
| B75R          | 48.06   | 71.56   | 13.77               | 72.87               | 411     |



ZE720-7N, 9 step scales for constant CIE LAB hue 305/360 = 0.847 (left)

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ZE720-7N, 16 step scales for constant CIE LAB hue 305/360 = 0.847 (right)

BAM-test chart ZE72; Colorimetric systems, Page 55/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

# Input: Colorimetric Offset Reflective System ORS18

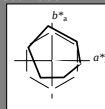
for hue  $h^* = lab^*h = 354/360 = 0.982$

$lab^*tch$  and  $lab^*nch$

D65: hue M

LCH\*Ma: 48 76 354

olvm\*Ma: 1.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

## ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 18.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

# Output: Colorimetric Offset Reflective System ORS18

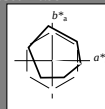
for hue  $h^* = lab^*h = 354/360 = 0.982$

$lab^*tch$  and  $lab^*nch$

D65: hue M

LCH\*Ma: 48 76 354

olvm\*Ma: 1.0 0.0 1.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

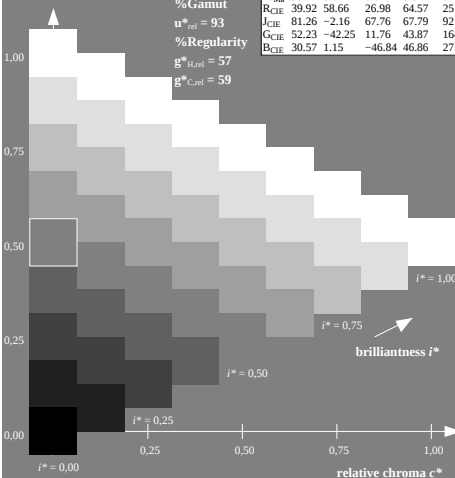
%Regularity

$g^*_{H,rel} = 57$

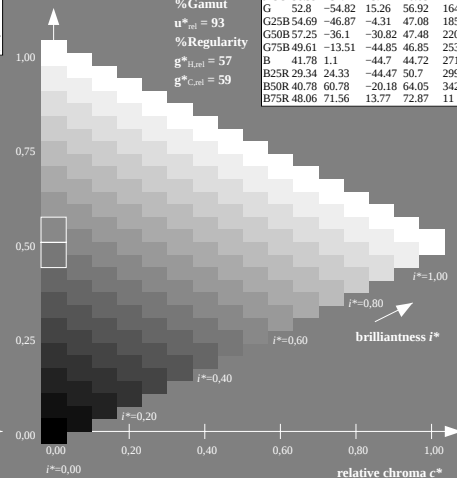
$g^*_{C,rel} = 59$

## ORS18; adapted (a) CIELAB data

|      | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| R    | 48.0        | 68.58   | 31.54   | 75.48        | 25           |
| R25J | 50.11       | 61.52   | 52.63   | 80.96        | 41           |
| R50J | 62.87       | 38.77   | 65.02   | 75.71        | 59           |
| R75J | 74.87       | 17.37   | 76.69   | 78.63        | 77           |
| J    | 86.19       | -2.8    | 87.69   | 87.73        | 92           |
| J25G | 84.01       | -18.73  | 82.6    | 84.7         | 103          |
| J50G | 71.17       | -35.83  | 64.13   | 73.46        | 119          |
| J75G | 56.99       | -54.71  | 43.72   | 70.05        | 141          |
| G    | 52.8        | -54.82  | 15.26   | 56.92        | 164          |
| G25B | 54.69       | -46.87  | -4.31   | 47.08        | 185          |
| G50B | 57.25       | -36.1   | -30.82  | 47.48        | 220          |
| G75B | 49.61       | -13.51  | -44.85  | 46.85        | 253          |
| B    | 41.78       | 1.1     | -44.7   | 44.72        | 271          |
| B25R | 29.34       | 24.33   | -44.47  | 50.7         | 299          |
| B50R | 40.78       | 60.78   | -20.18  | 64.05        | 342          |
| B75R | 48.06       | 71.56   | 13.77   | 72.87        | 411          |



ZE720-7N, 9 step scales for constant CIE LAB hue 354/360 = 0.982 (left)



ZE720-7N, 16 step scales for constant CIE LAB hue 354/360 = 0.982 (right)

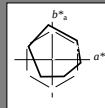
BAM-test chart ZE72; Colorimetric systems, Page 56/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

BAM registration: 20071001-ZE7/L72E00N1.PS.TXT BAM number: 11

ORIS18; adapted (a) CIELAB data

|      |       |       |       |       |    |
|------|-------|-------|-------|-------|----|
| R253 | 30.11 | 01.32 | 32.03 | 60.30 | 41 |
|------|-------|-------|-------|-------|----|



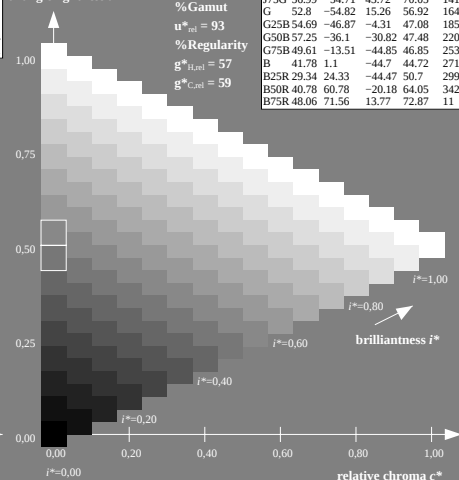
**%Gamut**  
 **$u^*_{rel} = 93$**   
**%Regularity**  
 **$g^*_{H,rel} = 57$**   
 **$g^*_{C,rel} = 59$**

%Gamut

11\* = 93

0.6 Days/yr

%Regula

$$g^*_{H,rel} = 5$$


ZE720-7N, 16 step scales for constant CIELAB hue 25/360 = 0.069 (right)

```
input: rab / cmv0 set(rab/cmvk)color
```

```
output: ->cmvn4* setcmvcolor
```

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Input: Colorimetric Offset Reflective System ORS18

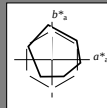
for hue  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

ol\*Ma: 1.0 0.9 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

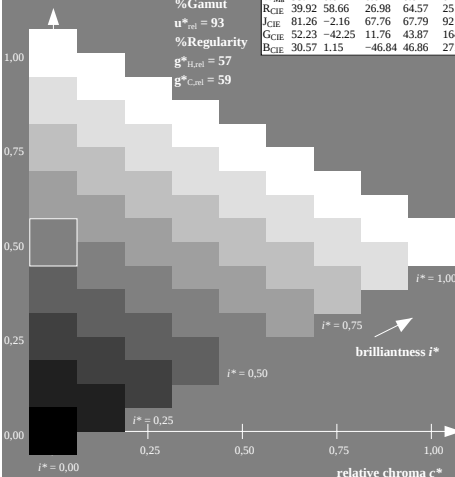
%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |



ZE720-7N, 9 step scales for constant CIELAB hue 92/360 = 0.255 (left)

BAM-test chart ZE72; Colorimetric systems, Page 58/60  
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

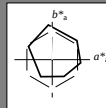
for hue  $h^* = lab^*h = 92/360 = 0.255$

$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

ol\*Ma: 1.0 0.9 0.0



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

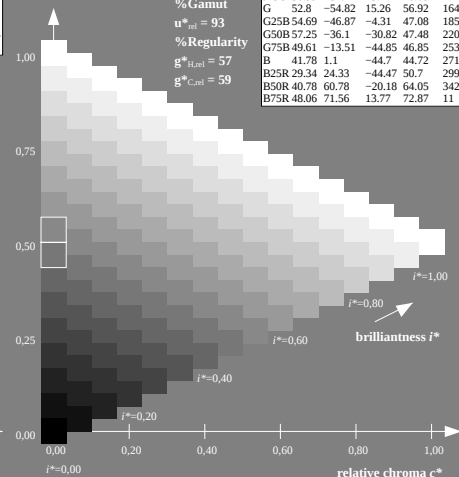
%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

|      | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------|-------------|---------|---------|--------------|--------------|
| R    | 48.0        | 68.58   | 31.54   | 75.48        | 25           |
| R25J | 50.11       | 61.52   | 52.63   | 80.96        | 41           |
| R50J | 62.87       | 38.77   | 65.02   | 75.71        | 59           |
| R75J | 74.87       | 17.37   | 76.69   | 78.63        | 77           |
| J    | 86.19       | -2.8    | 87.69   | 87.73        | 92           |
| J25G | 84.01       | -18.73  | 82.6    | 84.7         | 103          |
| J50G | 71.17       | -35.83  | 64.13   | 73.46        | 119          |
| J75G | 56.99       | -54.71  | 43.72   | 70.05        | 141          |
| G    | 52.8        | -54.82  | 15.26   | 56.92        | 164          |
| G25B | 54.69       | -46.87  | -4.31   | 47.08        | 185          |
| G50B | 57.25       | -36.1   | -30.82  | 47.48        | 220          |
| G75B | 49.61       | -13.51  | -44.85  | 46.85        | 253          |
| B    | 41.78       | 1.1     | -44.7   | 44.72        | 271          |
| B25R | 29.34       | 24.33   | -44.47  | 50.7         | 299          |
| B50R | 40.78       | 60.78   | -20.18  | 64.05        | 342          |
| B75R | 48.06       | 71.56   | 13.77   | 72.87        | 411          |



ZE720-7N, 16 step scales for constant CIELAB hue 92/360 = 0.255 (right)

input:  $rgb / cmy0$  set( $rgb/cmyk$ )color  
output:  $\rightarrow cmy4^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

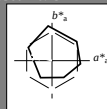
for hue  $h^* = lab^*h = 164/360 = 0.457$

$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 53 57 164

ol\*Ma: 0.0 1.0 0.25



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

|                  | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|------------------|-------------|---------|---------|--------------|--------------|
| O <sub>Ma</sub>  | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| Y <sub>Ma</sub>  | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| L <sub>Ma</sub>  | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| C <sub>Ma</sub>  | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| V <sub>Ma</sub>  | 25.72       | 31.1    | -44.4   | 54.22        | 309          |
| M <sub>Ma</sub>  | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| N <sub>Ma</sub>  | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>Ma</sub>  | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>CIE</sub> | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| J <sub>CIE</sub> | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| G <sub>CIE</sub> | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| B <sub>CIE</sub> | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

Output: Colorimetric Offset Reflective System ORS18

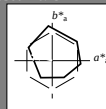
for hue  $h^* = lab^*h = 164/360 = 0.457$

$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 53 57 164

ol\*Ma: 0.0 1.0 0.25



triangle lightness  $t^*$

%Gamut

$u^*_{rel} = 93$

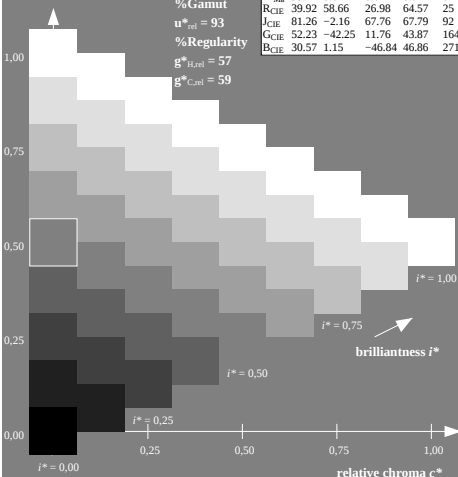
%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

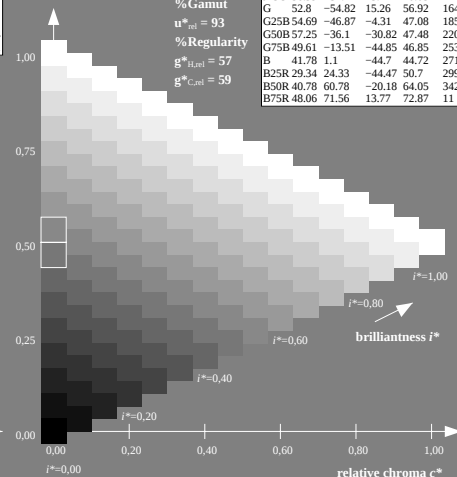
ORS18; adapted (a) CIELAB data

| $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
|-------------|---------|---------|--------------|--------------|-----|
| R           | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J        | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J        | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J        | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J           | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G        | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G        | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G        | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G           | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B        | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B        | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B        | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B           | 41.8    | 1.1     | -44.7        | 44.72        | 271 |
| B25R        | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R        | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R        | 48.06   | 71.56   | 13.77        | 72.87        | 411 |



ZE720-7N, 9 step scales for constant CIELAB hue 164/360 = 0.457 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart ZE72; Colorimetric systems, Page 59/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`

Input: Colorimetric Offset Reflective System ORS18

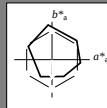
for hue  $h^* = \text{lab}^*h = 271/360 = 0.754$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

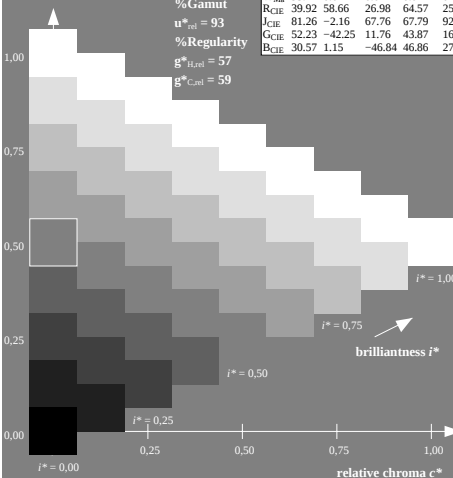
D65: hue B

LCH\*Ma: 42 45 271

ol\*Ma: 0.0 0.49 1.0



triangle lightness  $t^*$



| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^*=L^*_a$                    | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| O <sub>Ma</sub>                | 47.94   | 65.39   | 50.52        | 82.63        | 38  |
| Y <sub>Ma</sub>                | 90.37   | -10.26  | 91.75        | 92.32        | 96  |
| L <sub>Ma</sub>                | 50.9    | -62.83  | 34.96        | 71.91        | 151 |
| C <sub>Ma</sub>                | 58.62   | -30.34  | -45.01       | 54.3         | 236 |
| V <sub>Ma</sub>                | 25.72   | 31.1    | -44.4        | 54.22        | 305 |
| M <sub>Ma</sub>                | 48.13   | 75.28   | -8.36        | 75.74        | 354 |
| N <sub>Ma</sub>                | 18.01   | 0.0     | 0.0          | 0.0          | 0   |
| W <sub>Ma</sub>                | 95.41   | 0.0     | 0.0          | 0.0          | 0   |
| R <sub>CIE</sub>               | 39.92   | 58.66   | 26.98        | 64.57        | 25  |
| J <sub>CIE</sub>               | 81.26   | -2.16   | 67.76        | 67.79        | 92  |
| G <sub>CIE</sub>               | 52.23   | -42.25  | 11.76        | 43.87        | 164 |
| B <sub>CIE</sub>               | 30.57   | 1.15    | -46.84       | 46.86        | 271 |

Output: Colorimetric Offset Reflective System ORS18

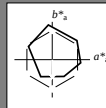
for hue  $h^* = \text{lab}^*h = 271/360 = 0.754$

$\text{lab}^*tch$  and  $\text{lab}^*nch$

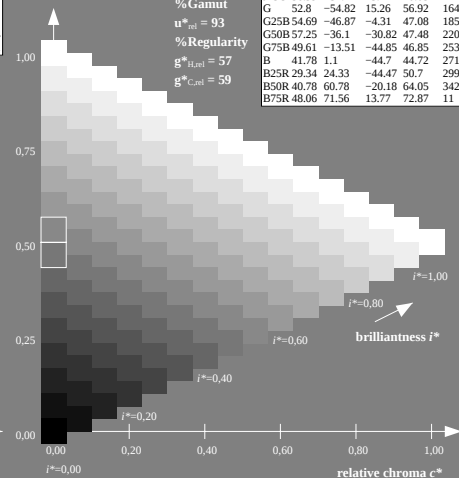
D65: hue B

LCH\*Ma: 42 45 271

ol\*Ma: 0.0 0.49 1.0



triangle lightness  $t^*$



| ORS18; adapted (a) CIELAB data |         |         |              |              |     |
|--------------------------------|---------|---------|--------------|--------------|-----|
| $L^*=L^*_a$                    | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |     |
| R                              | 48.0    | 68.58   | 31.54        | 75.48        | 25  |
| R25J                           | 50.11   | 61.52   | 52.63        | 80.96        | 41  |
| R50J                           | 62.87   | 38.77   | 65.02        | 75.71        | 59  |
| R75J                           | 74.87   | 17.37   | 76.69        | 78.63        | 77  |
| J                              | 86.19   | -2.8    | 87.69        | 87.73        | 92  |
| J25G                           | 84.01   | -18.73  | 82.6         | 84.7         | 103 |
| J50G                           | 71.17   | -35.83  | 64.13        | 73.46        | 119 |
| J75G                           | 56.99   | -54.71  | 43.72        | 70.05        | 141 |
| G                              | 52.8    | -54.82  | 15.26        | 56.92        | 164 |
| G25B                           | 54.69   | -46.87  | -4.31        | 47.08        | 185 |
| G50B                           | 57.25   | -36.1   | -30.82       | 47.48        | 220 |
| G75B                           | 49.61   | -13.51  | -44.85       | 46.85        | 253 |
| B                              | 41.78   | 1.1     | -44.7        | 44.72        | 271 |
| B25R                           | 29.34   | 24.33   | -44.47       | 50.7         | 299 |
| B50R                           | 40.78   | 60.78   | -20.18       | 64.05        | 342 |
| B75R                           | 48.06   | 71.56   | 13.77        | 72.87        | 411 |

ZE720-7N, 9 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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ZE720-7N, 16 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart ZE72; Colorimetric systems, Page 60/60  
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`  
output: `->cmy4* setcmykcolor`