

Input: Colorimetric Offset Reflective System ORS18

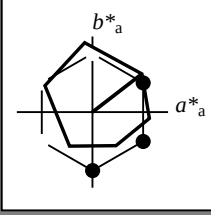
for hue  $h^* = lab^*h = 38/360 = 0.105$

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

D65: hue O

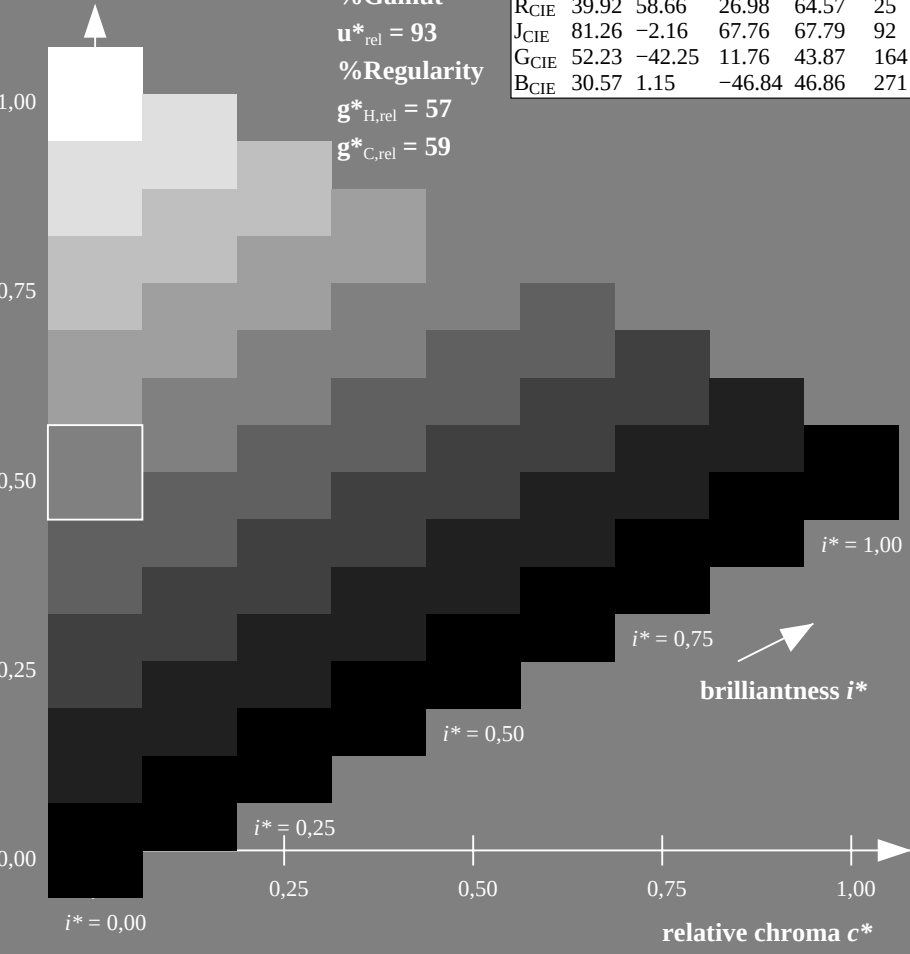
LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0



| ORS18; adapted (a) CIELAB data |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| OMa                            | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| YMa                            | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| LMa                            | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| CMa                            | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| VMa                            | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| MMa                            | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| NMa                            | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa                            | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| JCIE                           | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| GCIE                           | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| BCIE                           | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

triangle lightness  $t^*$



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

ZE660-7N, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)

Output: Colorimetric Offset Reflective System ORS18

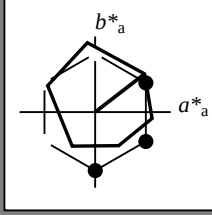
for hue  $h^* = lab^*h = 38/360 = 0.105$

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

D65: hue O

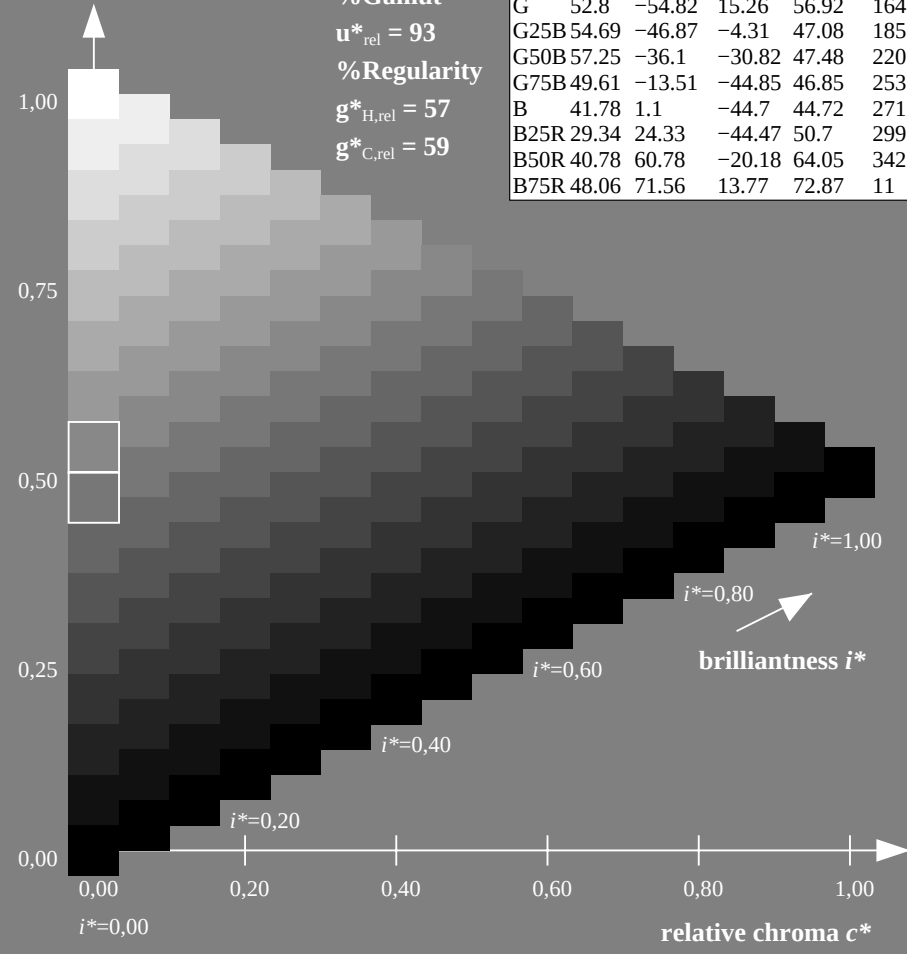
LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0



| 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        | 11           |

triangle lightness  $t^*$



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

ZE660-7N, 16 step scales for constant CIELAB hue 38/360 = 0.105 (right)

Input: Colorimetric Offset Reflective System ORS18

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

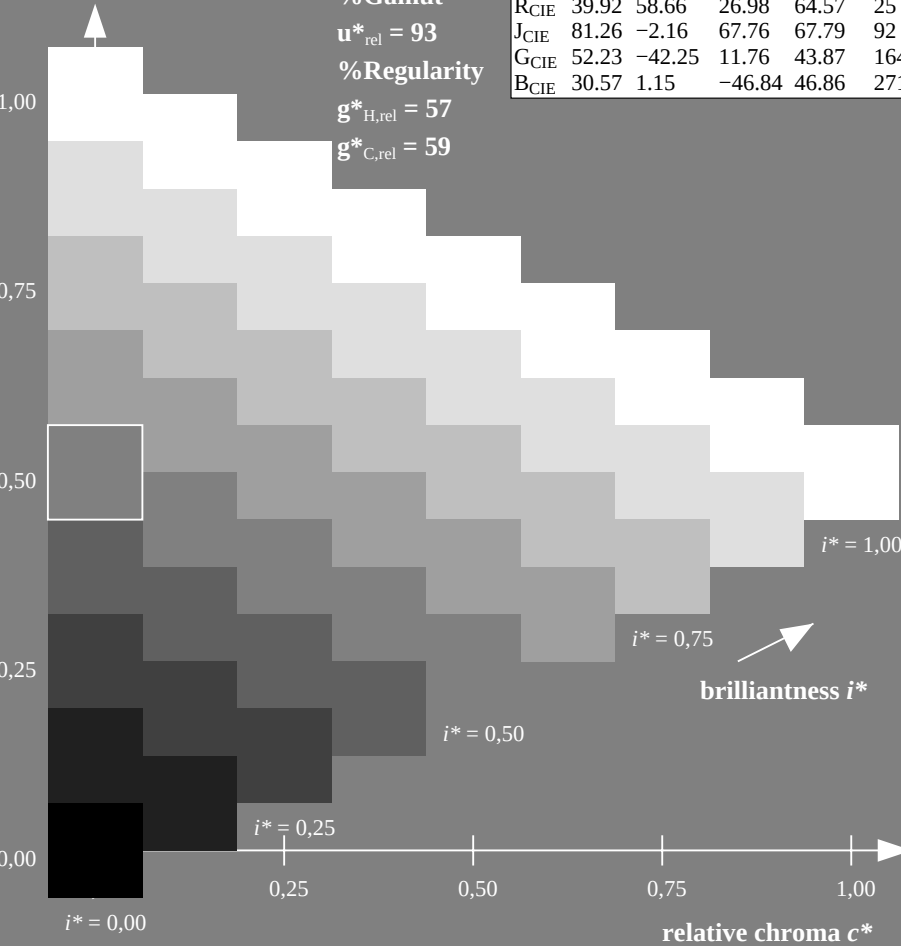
$lab^*tch$  and  $lab^*nch$

D65: hue Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Output: Colorimetric Offset Reflective System ORS18

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

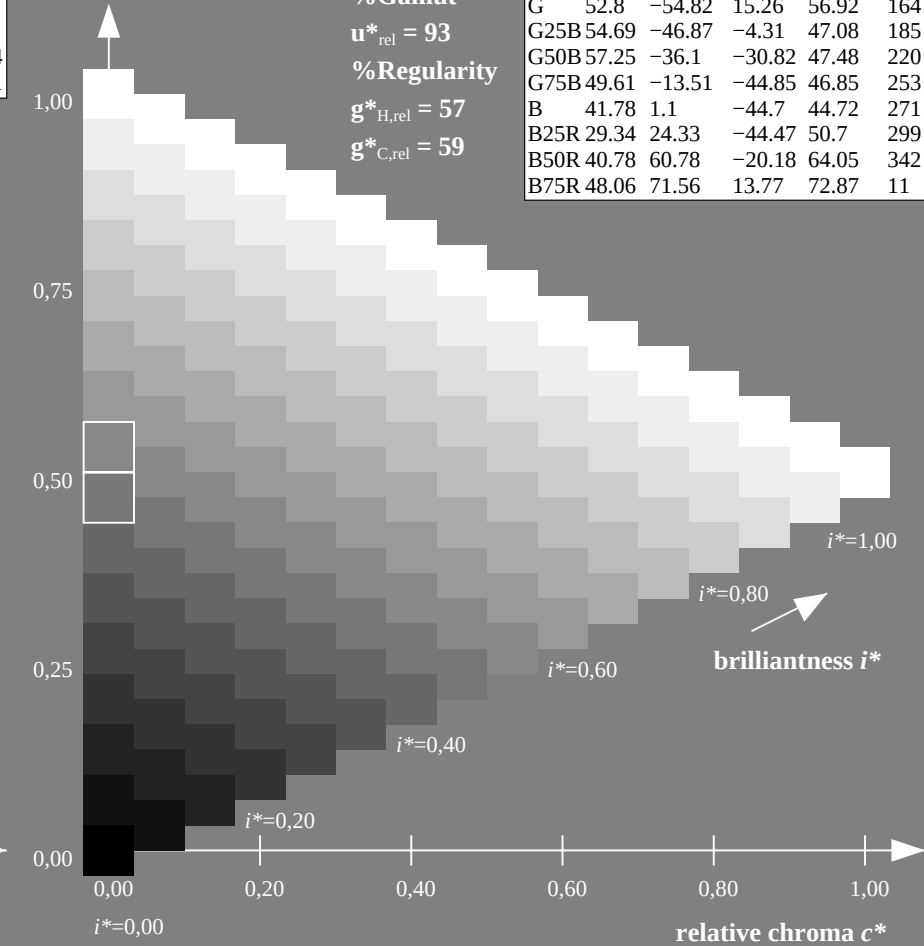
$lab^*tch$  and  $lab^*nch$

D65: hue Y

LCH\*Ma: 90 92 96

olv\*Ma: 1.0 1.0 0.0

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 96/360 = 0.268 (right)

Input: Colorimetric Offset Reflective System ORS18

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

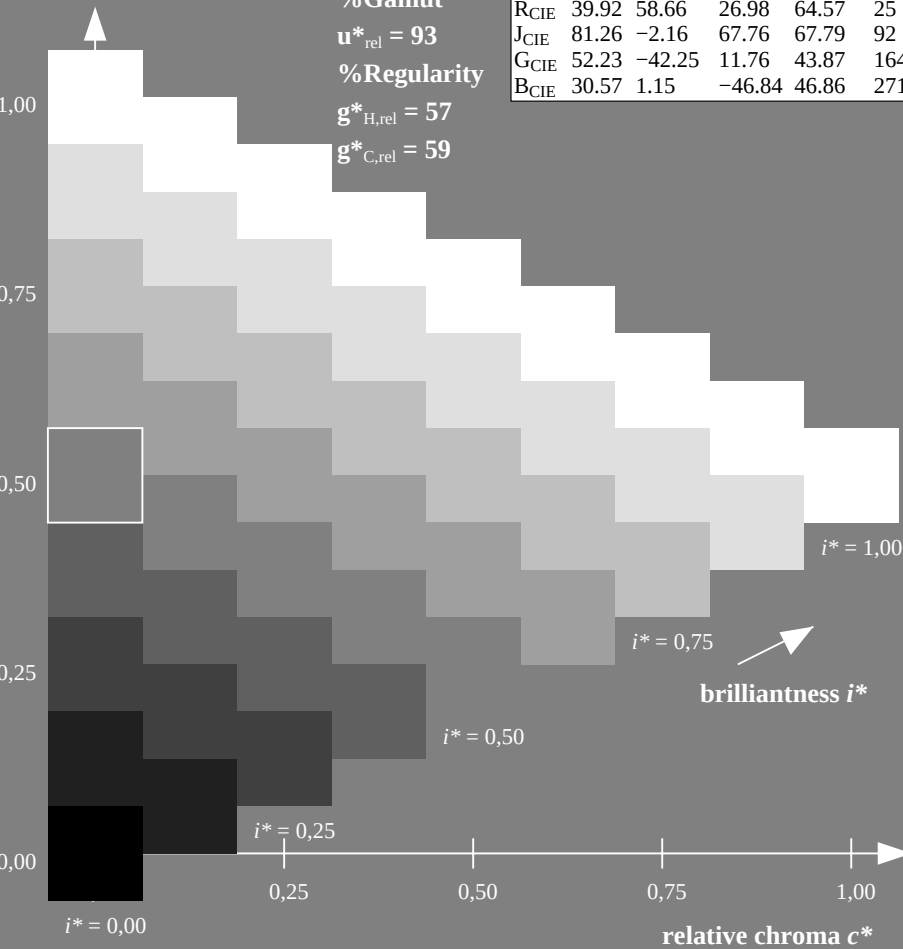
$lab^*tch$  and  $lab^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 151/360 = 0.419 (left)

Output: Colorimetric Offset Reflective System ORS18

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

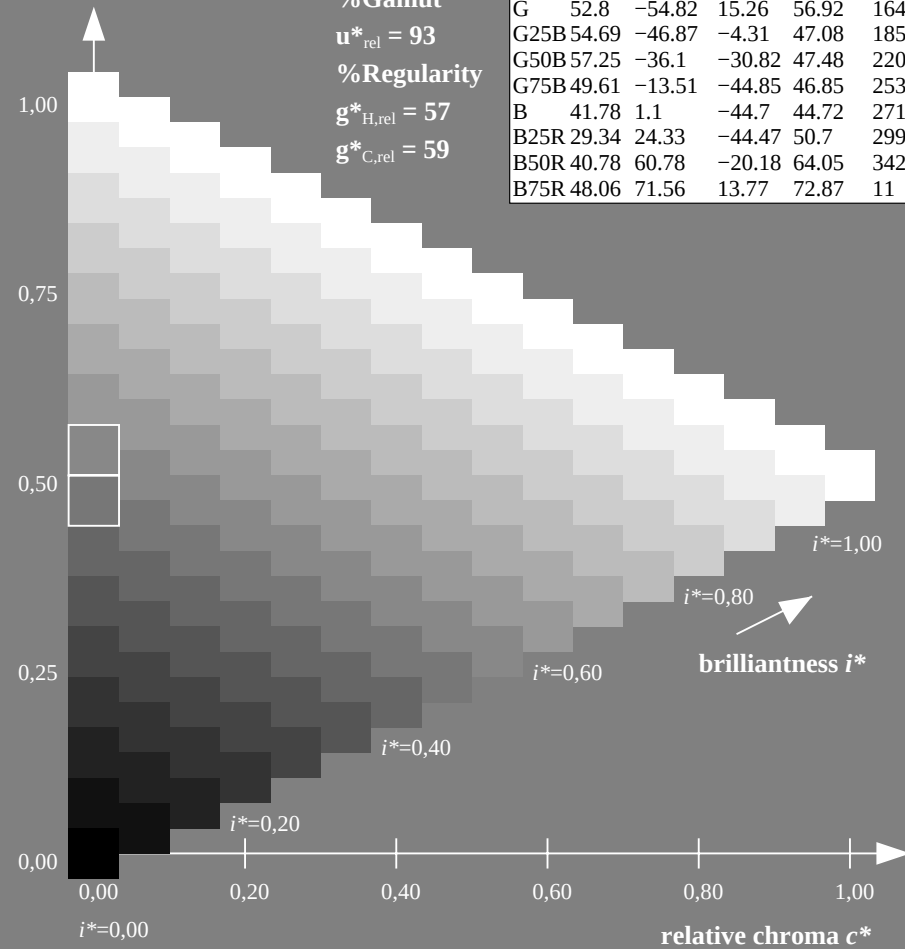
$lab^*tch$  and  $lab^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 151/360 = 0.419 (right)

Input: Colorimetric Offset Reflective System ORS18

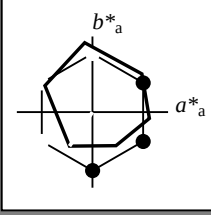
for hue  $h^* = lab^*h = 236/360 = 0.656$

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

D65: hue C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0



%Gamut

$u^*_{rel} = 93$

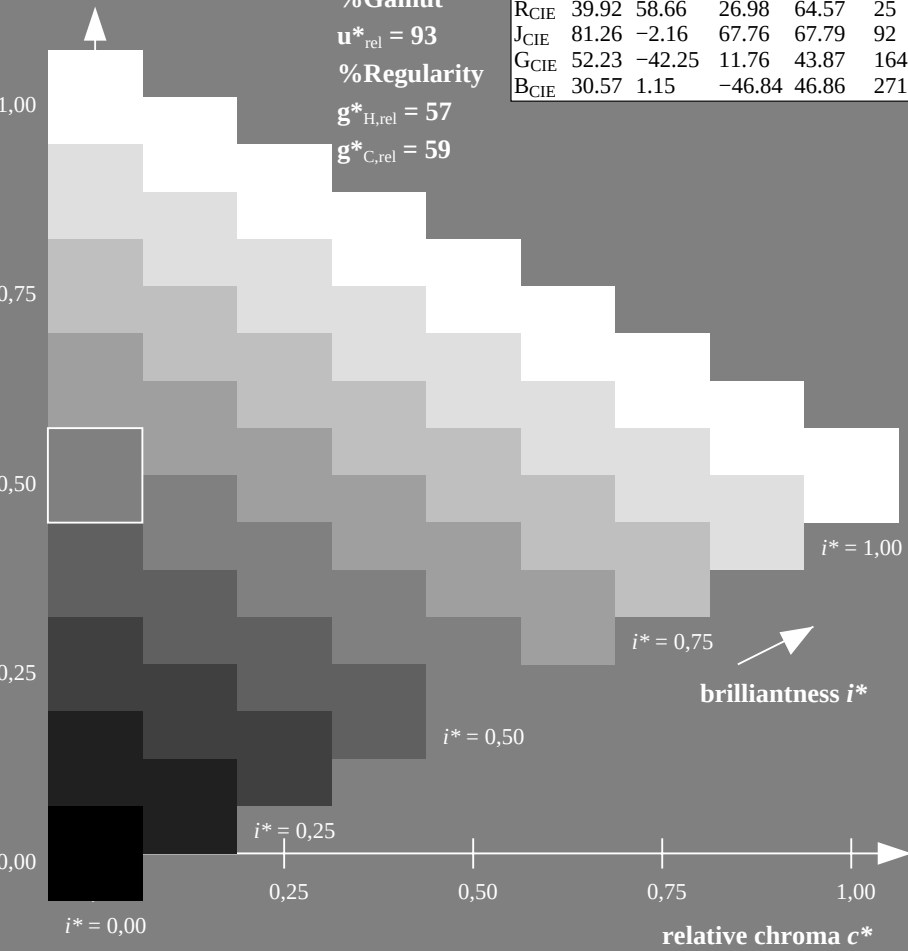
%Regularity

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

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

| ORS18; adapted (a) CIELAB data |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| OMa                            | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| YMa                            | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| LMa                            | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| CMa                            | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| VMa                            | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| MMa                            | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| NMa                            | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa                            | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| JCIE                           | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| GCIE                           | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| BCIE                           | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Offset Reflective System ORS18

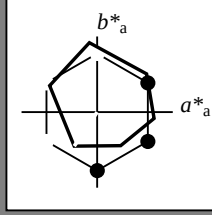
for hue  $h^* = lab^*h = 236/360 = 0.656$

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

D65: hue C

LCH\*Ma: 59 54 236

olv\*Ma: 0.0 1.0 1.0



%Gamut

$u^*_{rel} = 93$

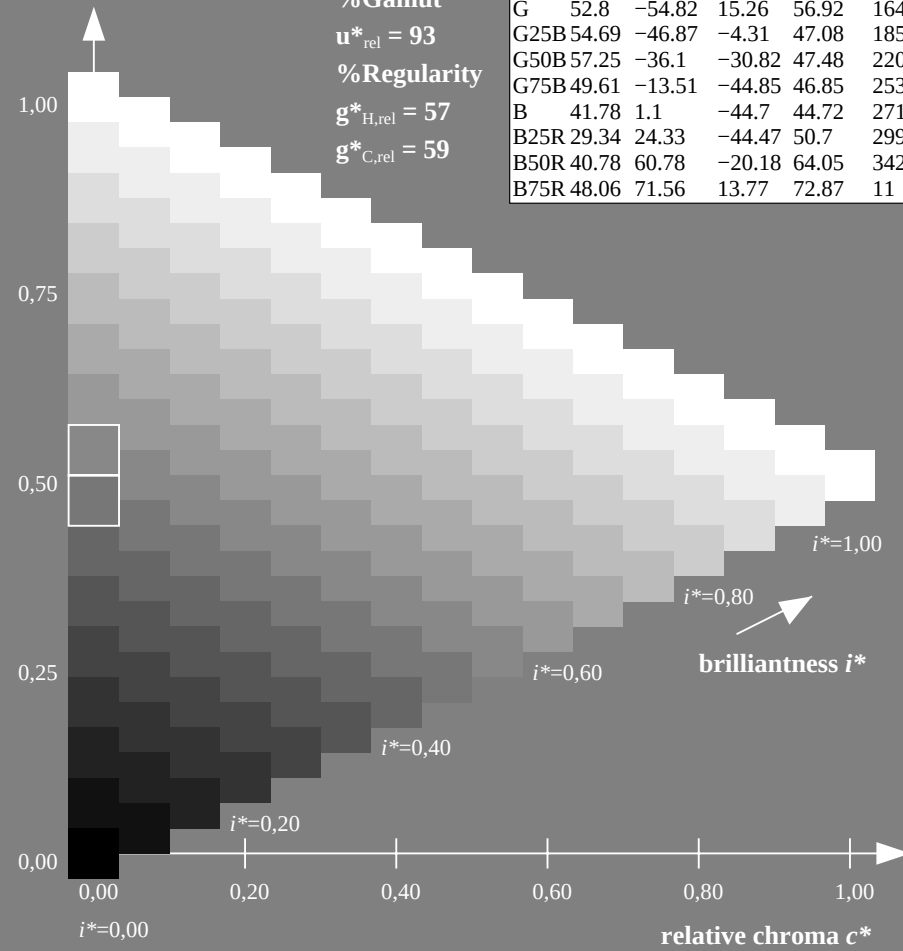
%Regularity

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

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

| 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        | 11           |

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 236/360 = 0.656 (right)

Input: Colorimetric Offset Reflective System ORS18

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

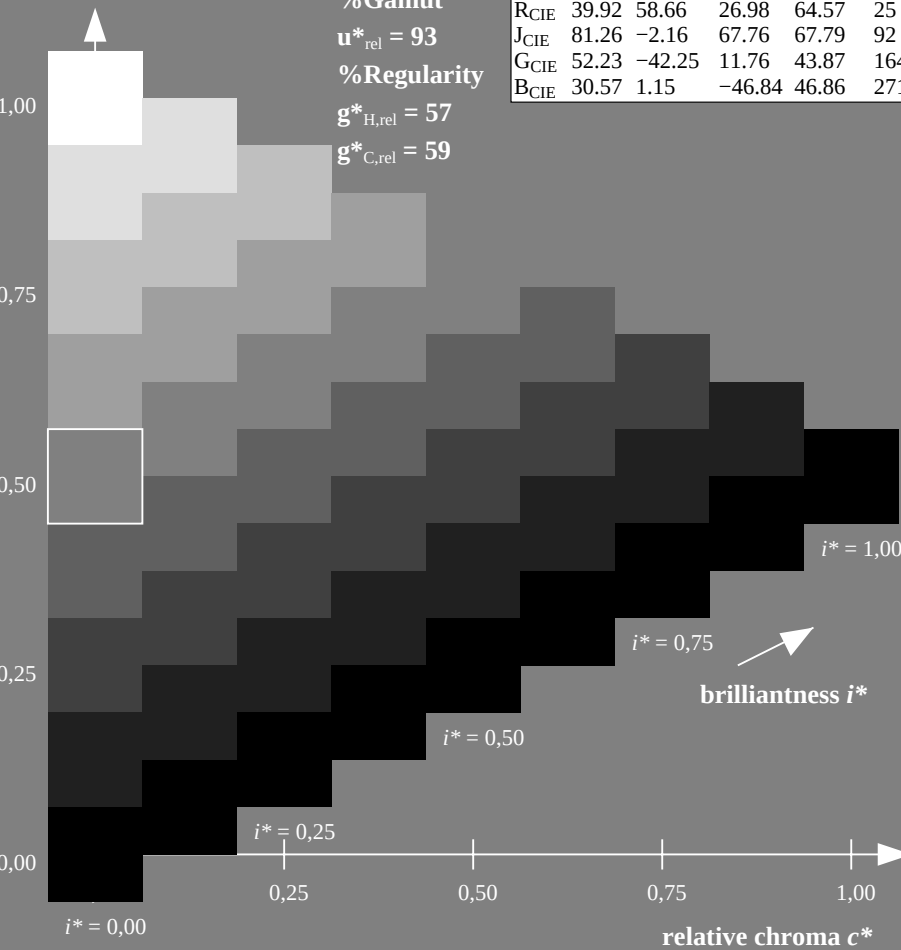
$lab^*tch$  and  $lab^*nch$

D65: hue V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Output: Colorimetric Offset Reflective System ORS18

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

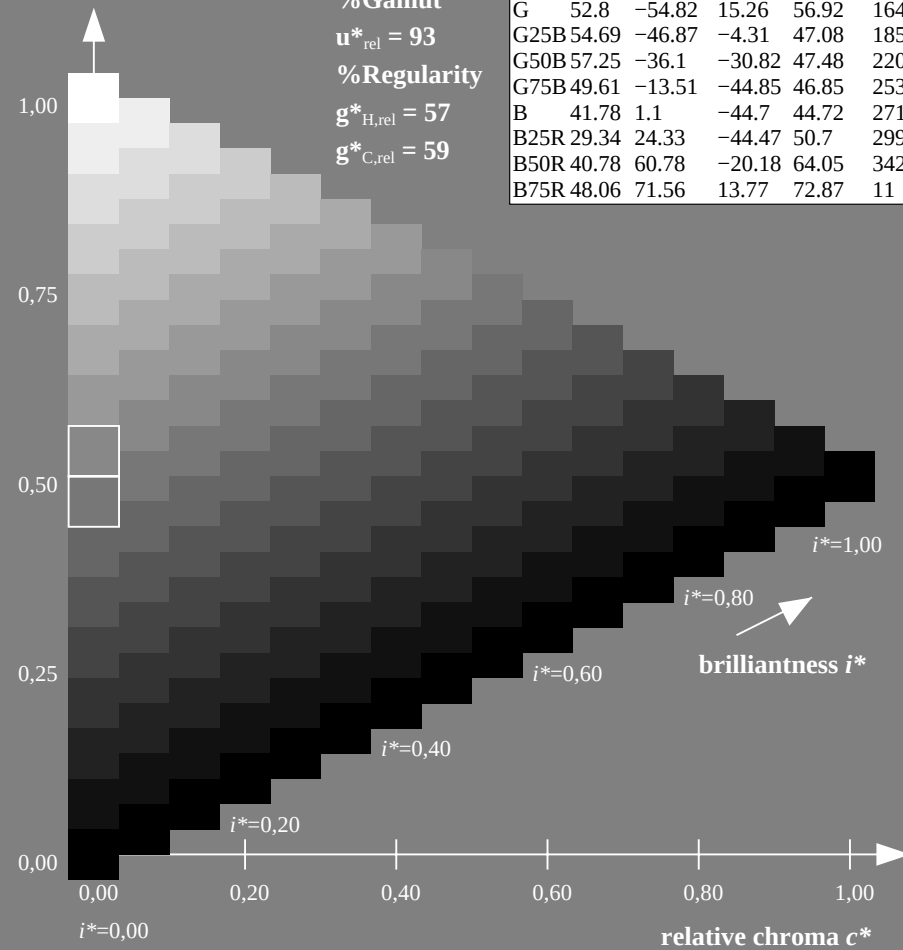
$lab^*tch$  and  $lab^*nch$

D65: hue V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 305/360 = 0.847 (right)

Input: Colorimetric Offset Reflective System ORS18

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

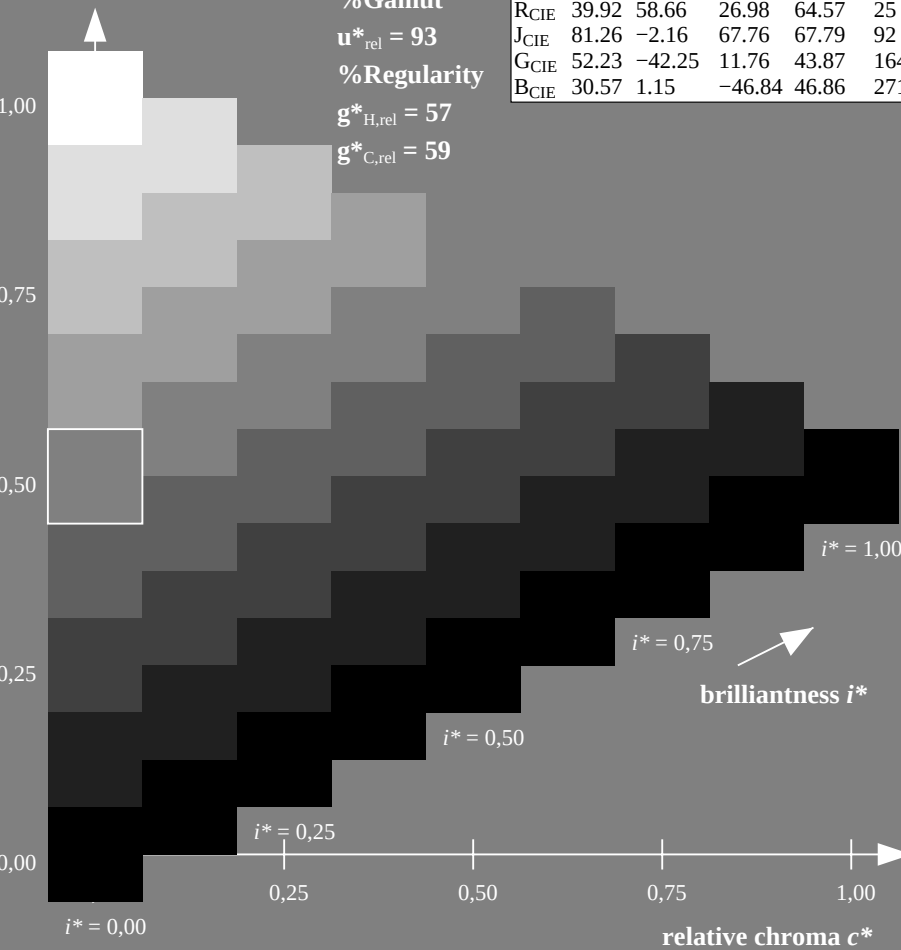
$lab^*tch$  and  $lab^*nch$

D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: Colorimetric Offset Reflective System ORS18

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

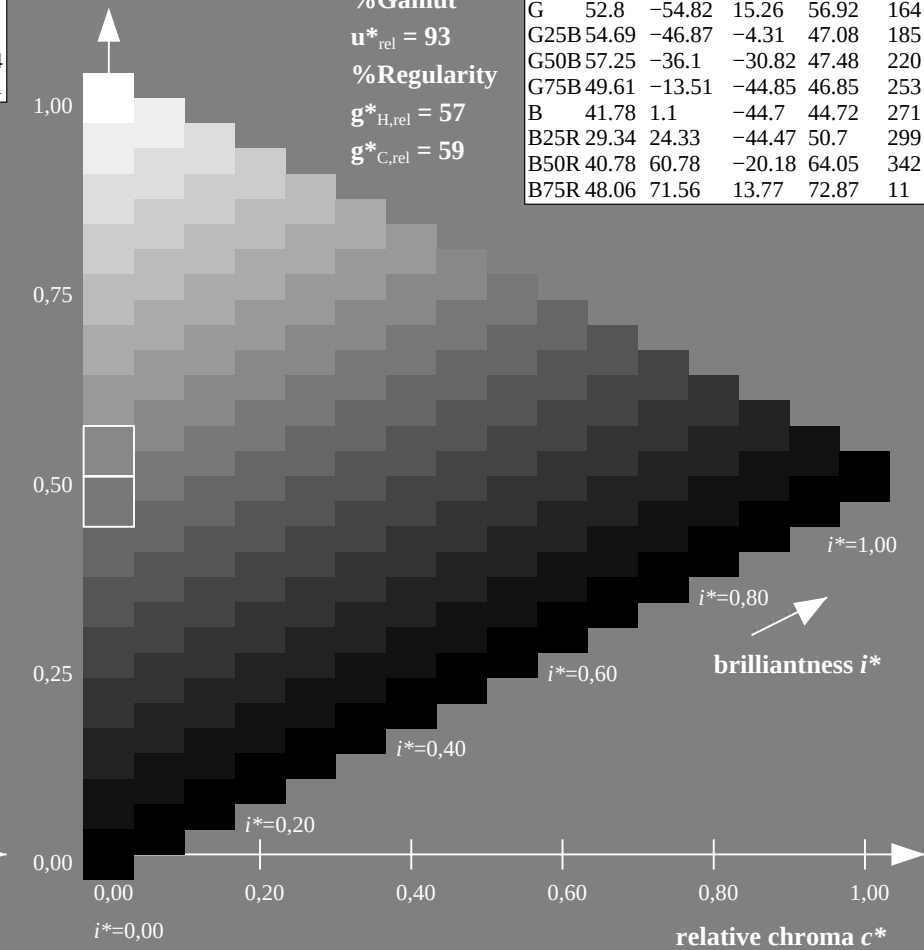
$lab^*tch$  and  $lab^*nch$

D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 354/360 = 0.982 (right)

Input: Colorimetric Offset Reflective System ORS18

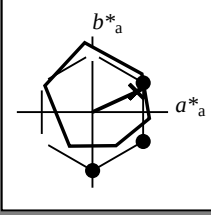
for hue  $h^* = lab^*h = 25/360 = 0.069$

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

D65: hue R

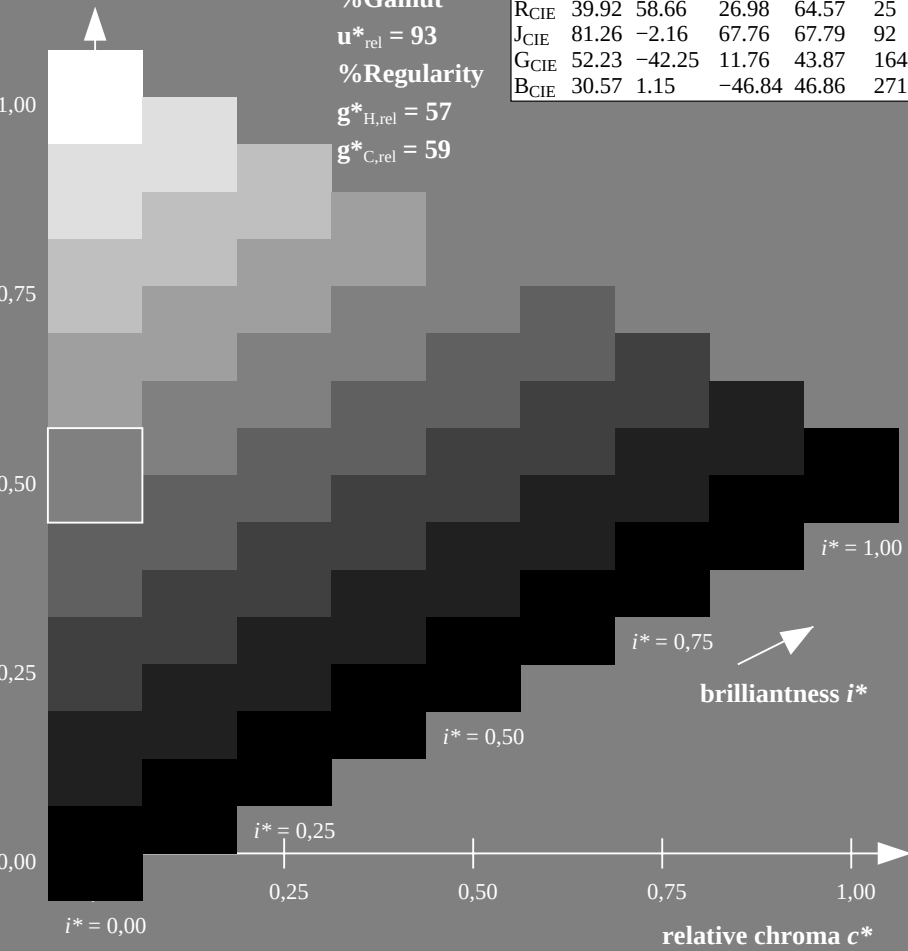
LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32



| ORS18; adapted (a) CIELAB data |             |         |         |              |              |
|--------------------------------|-------------|---------|---------|--------------|--------------|
|                                | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| OMa                            | 47.94       | 65.39   | 50.52   | 82.63        | 38           |
| YMa                            | 90.37       | -10.26  | 91.75   | 92.32        | 96           |
| LMa                            | 50.9        | -62.83  | 34.96   | 71.91        | 151          |
| CMa                            | 58.62       | -30.34  | -45.01  | 54.3         | 236          |
| VMa                            | 25.72       | 31.1    | -44.4   | 54.22        | 305          |
| MMa                            | 48.13       | 75.28   | -8.36   | 75.74        | 354          |
| NMa                            | 18.01       | 0.0     | 0.0     | 0.0          | 0            |
| WMa                            | 95.41       | 0.0     | 0.0     | 0.0          | 0            |
| RCIE                           | 39.92       | 58.66   | 26.98   | 64.57        | 25           |
| JCIE                           | 81.26       | -2.16   | 67.76   | 67.79        | 92           |
| GCIE                           | 52.23       | -42.25  | 11.76   | 43.87        | 164          |
| BCIE                           | 30.57       | 1.15    | -46.84  | 46.86        | 271          |

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 25/360 = 0.069 (left)

Output: Colorimetric Offset Reflective System ORS18

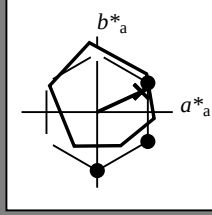
for hue  $h^* = lab^*h = 25/360 = 0.069$

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

D65: hue R

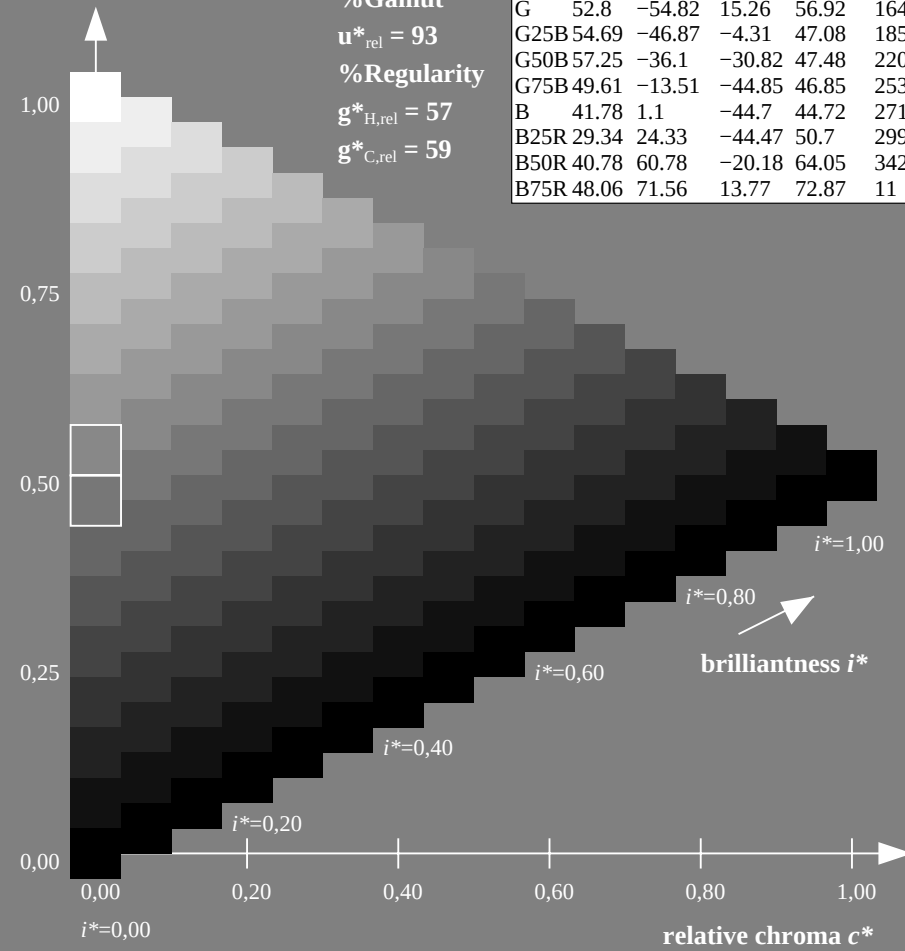
LCH\*Ma: 48 75 25

olv\*Ma: 1.0 0.0 0.32



| 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        | 11           |

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 25/360 = 0.069 (right)

Input: Colorimetric Offset Reflective System ORS18

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

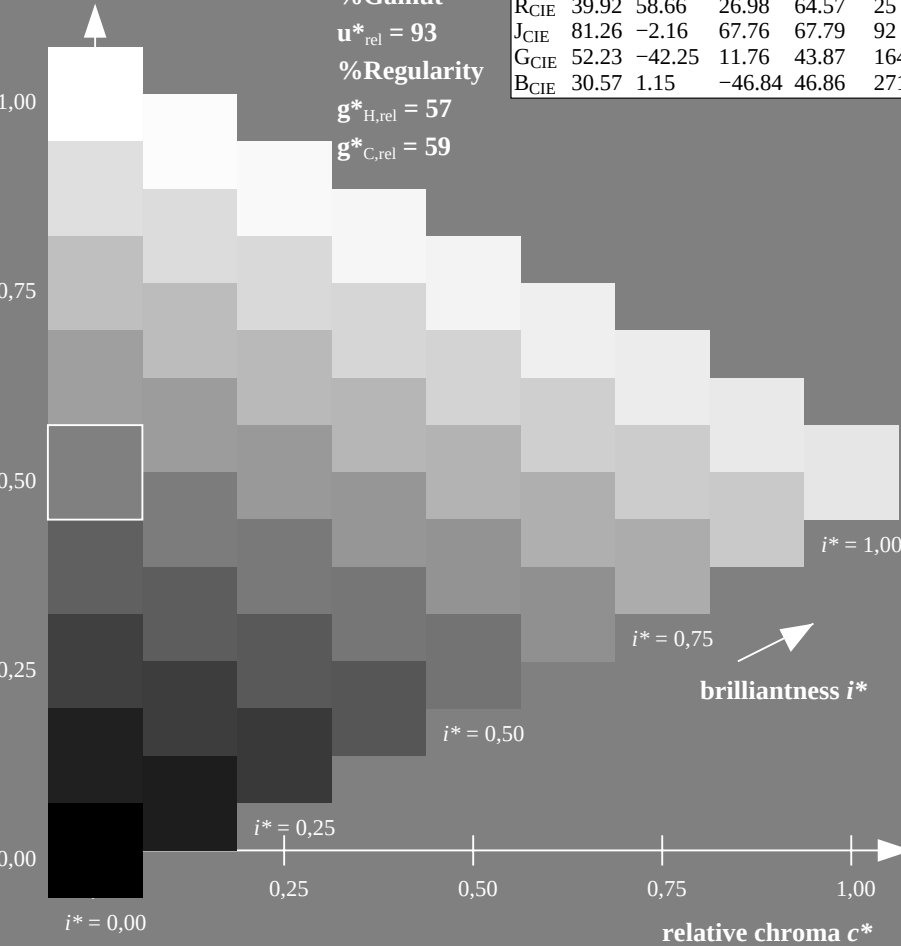
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Output: Colorimetric Offset Reflective System ORS18

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

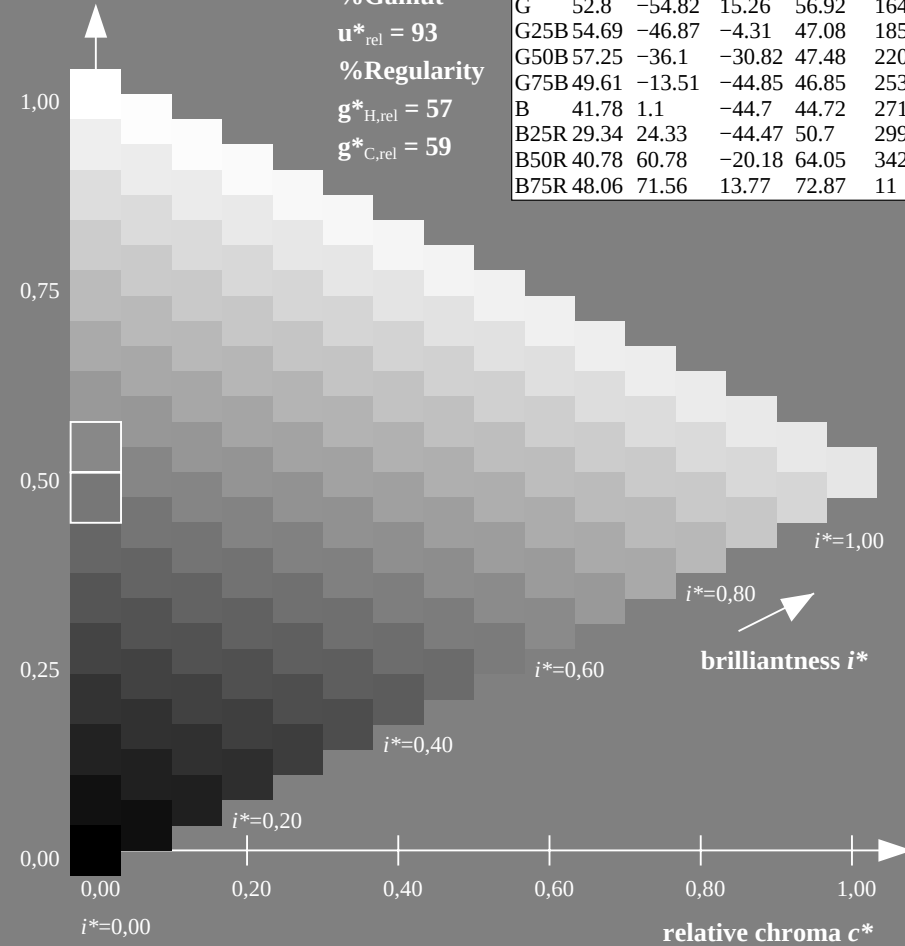
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 92/360 = 0.255 (right)



|     | m   | n   |
|-----|-----|-----|
| 1   | 1   | 1   |
| 2   | 2   | 2   |
| 3   | 3   | 3   |
| 4   | 4   | 4   |
| 5   | 5   | 5   |
| 6   | 6   | 6   |
| 7   | 7   | 7   |
| 8   | 8   | 8   |
| 9   | 9   | 9   |
| 10  | 10  | 10  |
| 11  | 11  | 11  |
| 12  | 12  | 12  |
| 13  | 13  | 13  |
| 14  | 14  | 14  |
| 15  | 15  | 15  |
| 16  | 16  | 16  |
| 17  | 17  | 17  |
| 18  | 18  | 18  |
| 19  | 19  | 19  |
| 20  | 20  | 20  |
| 21  | 21  | 21  |
| 22  | 22  | 22  |
| 23  | 23  | 23  |
| 24  | 24  | 24  |
| 25  | 25  | 25  |
| 26  | 26  | 26  |
| 27  | 27  | 27  |
| 28  | 28  | 28  |
| 29  | 29  | 29  |
| 30  | 30  | 30  |
| 31  | 31  | 31  |
| 32  | 32  | 32  |
| 33  | 33  | 33  |
| 34  | 34  | 34  |
| 35  | 35  | 35  |
| 36  | 36  | 36  |
| 37  | 37  | 37  |
| 38  | 38  | 38  |
| 39  | 39  | 39  |
| 40  | 40  | 40  |
| 41  | 41  | 41  |
| 42  | 42  | 42  |
| 43  | 43  | 43  |
| 44  | 44  | 44  |
| 45  | 45  | 45  |
| 46  | 46  | 46  |
| 47  | 47  | 47  |
| 48  | 48  | 48  |
| 49  | 49  | 49  |
| 50  | 50  | 50  |
| 51  | 51  | 51  |
| 52  | 52  | 52  |
| 53  | 53  | 53  |
| 54  | 54  | 54  |
| 55  | 55  | 55  |
| 56  | 56  | 56  |
| 57  | 57  | 57  |
| 58  | 58  | 58  |
| 59  | 59  | 59  |
| 60  | 60  | 60  |
| 61  | 61  | 61  |
| 62  | 62  | 62  |
| 63  | 63  | 63  |
| 64  | 64  | 64  |
| 65  | 65  | 65  |
| 66  | 66  | 66  |
| 67  | 67  | 67  |
| 68  | 68  | 68  |
| 69  | 69  | 69  |
| 70  | 70  | 70  |
| 71  | 71  | 71  |
| 72  | 72  | 72  |
| 73  | 73  | 73  |
| 74  | 74  | 74  |
| 75  | 75  | 75  |
| 76  | 76  | 76  |
| 77  | 77  | 77  |
| 78  | 78  | 78  |
| 79  | 79  | 79  |
| 80  | 80  | 80  |
| 81  | 81  | 81  |
| 82  | 82  | 82  |
| 83  | 83  | 83  |
| 84  | 84  | 84  |
| 85  | 85  | 85  |
| 86  | 86  | 86  |
| 87  | 87  | 87  |
| 88  | 88  | 88  |
| 89  | 89  | 89  |
| 90  | 90  | 90  |
| 91  | 91  | 91  |
| 92  | 92  | 92  |
| 93  | 93  | 93  |
| 94  | 94  | 94  |
| 95  | 95  | 95  |
| 96  | 96  | 96  |
| 97  | 97  | 97  |
| 98  | 98  | 98  |
| 99  | 99  | 99  |
| 100 | 100 | 100 |

Input: Colorimetric Offset Reflective System ORS18

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

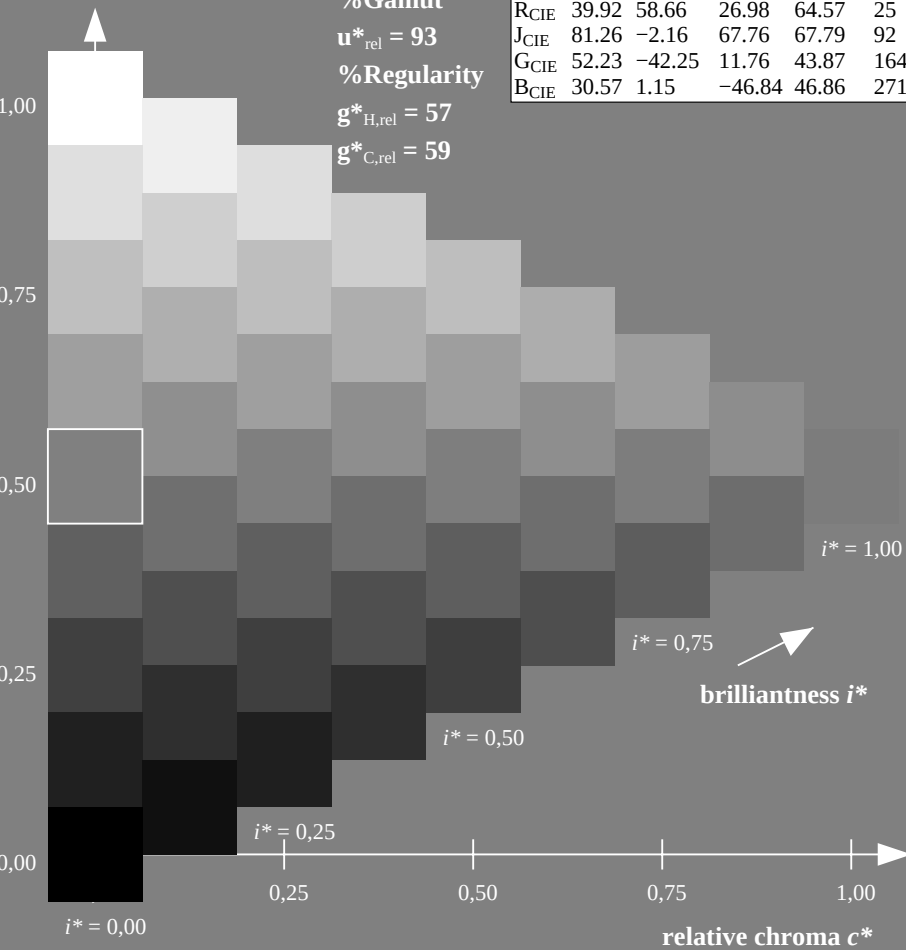
$lab^*tch$  and  $lab^*nch$

D65: hue B

LCH\*Ma: 42 45 271

olv\*Ma: 0.0 0.49 1.0

triangle lightness  $t^*$



ZE660-7N, 9 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Offset Reflective System ORS18

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

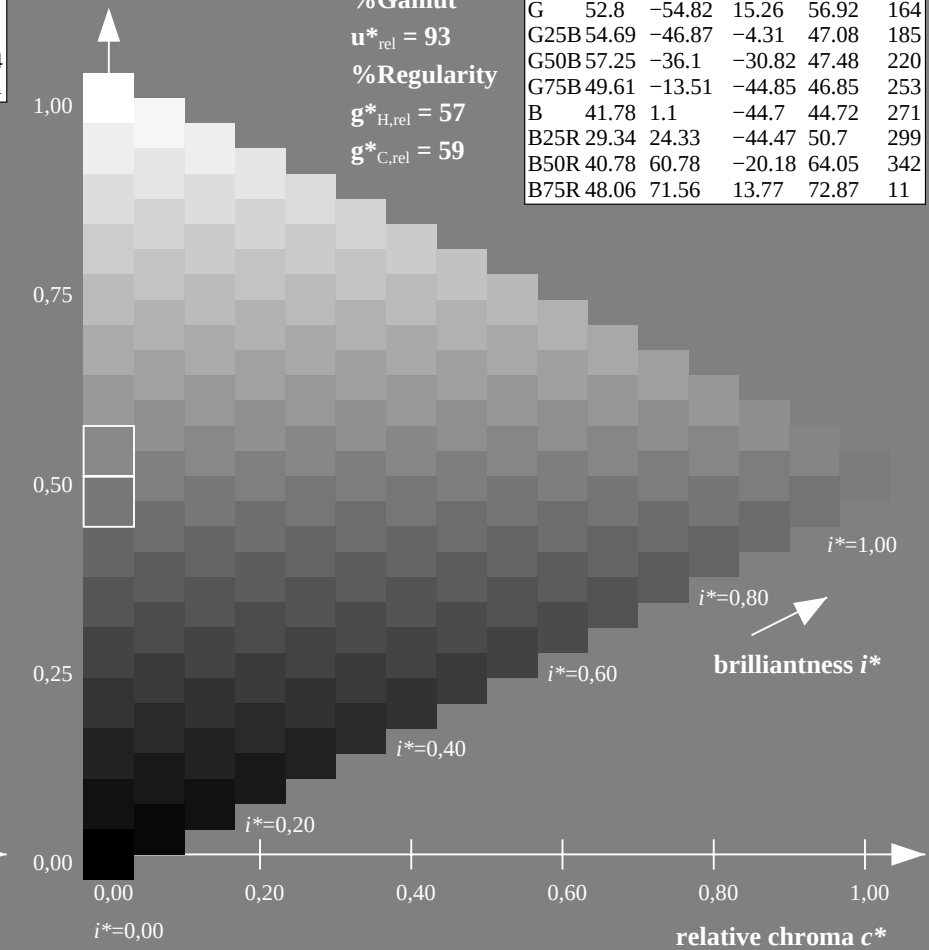
$lab^*tch$  and  $lab^*nch$

D65: hue B

LCH\*Ma: 42 45 271

olv\*Ma: 0.0 0.49 1.0

triangle lightness  $t^*$



ZE660-7N, 16 step scales for constant CIELAB hue 271/360 = 0.754 (right)