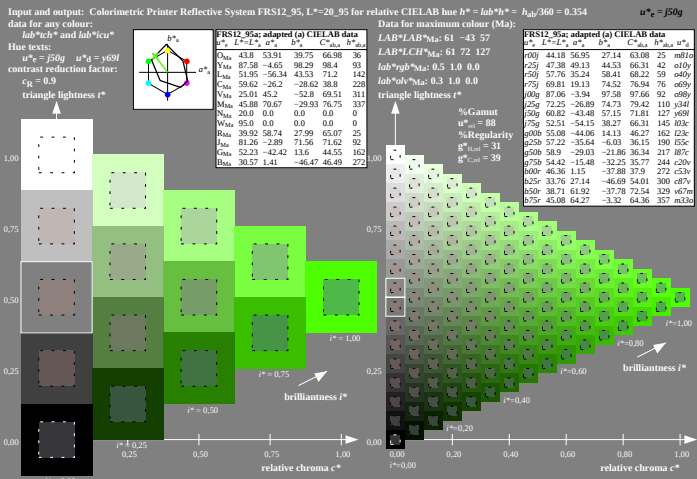
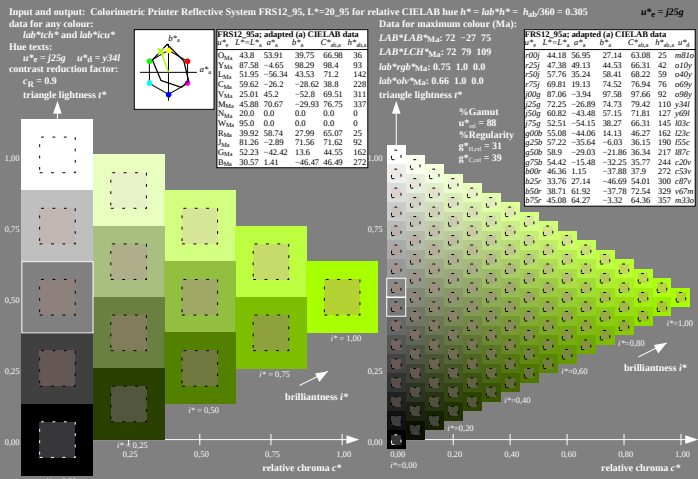
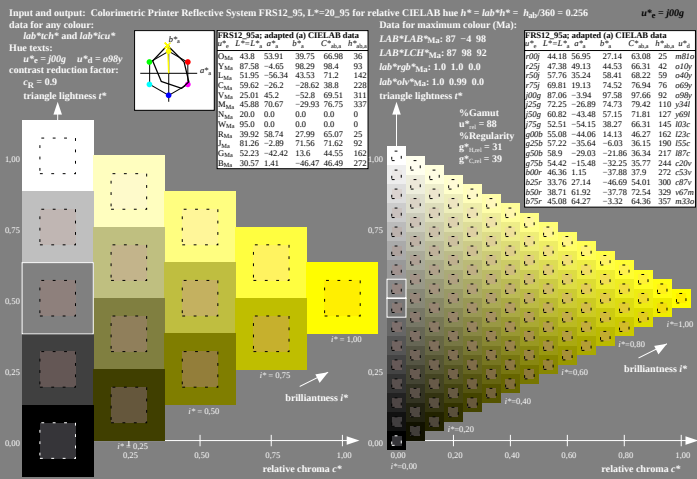
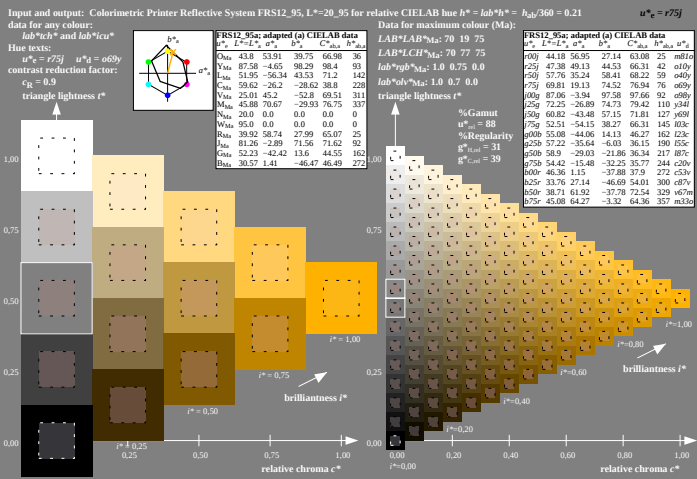
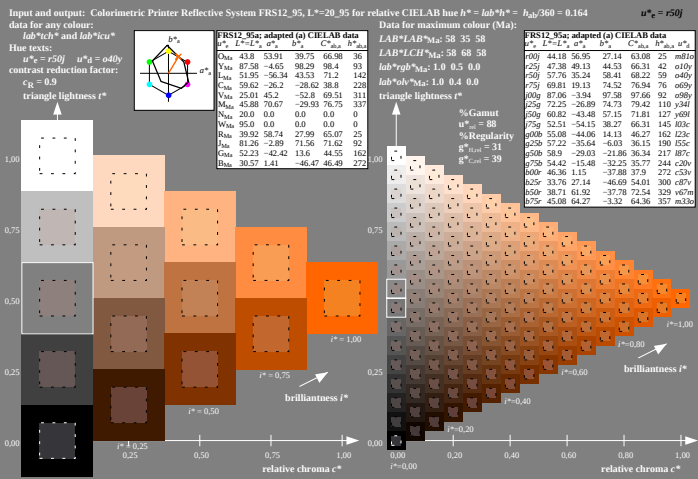
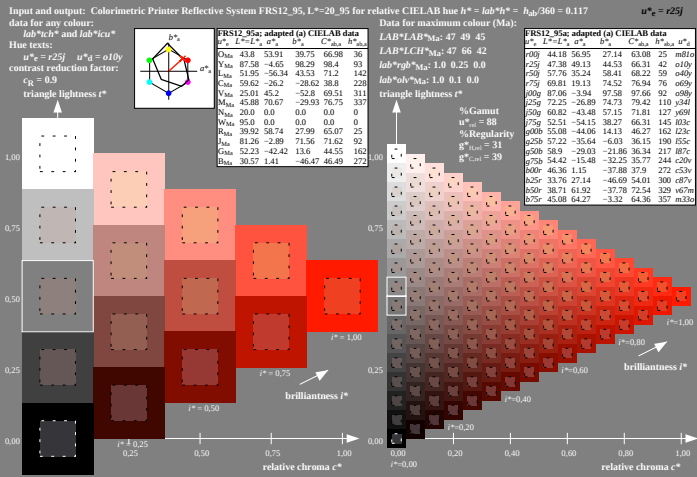
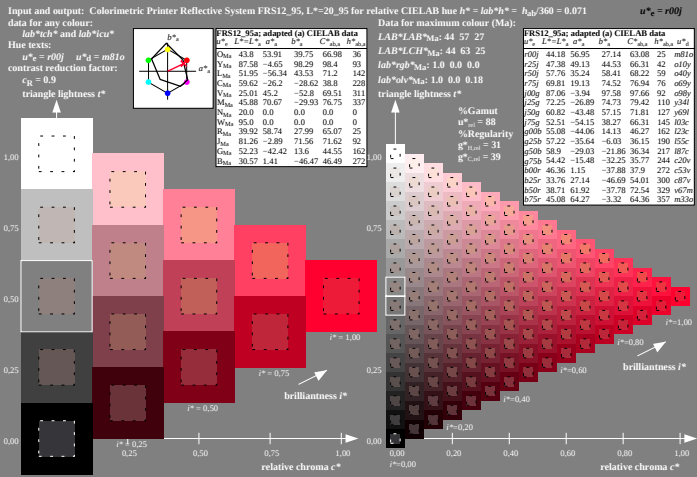
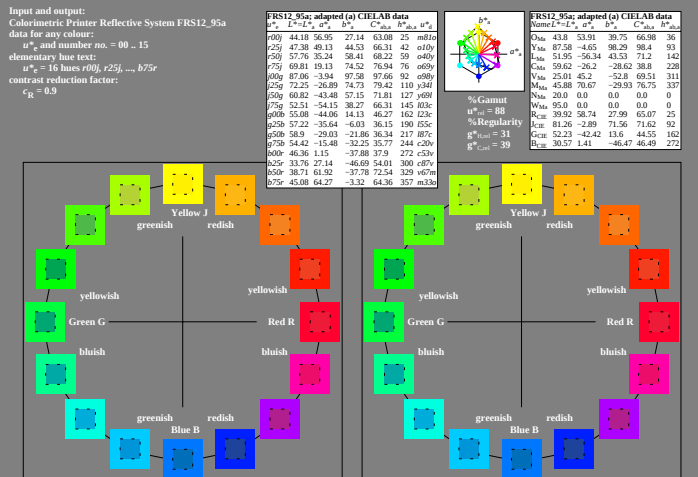




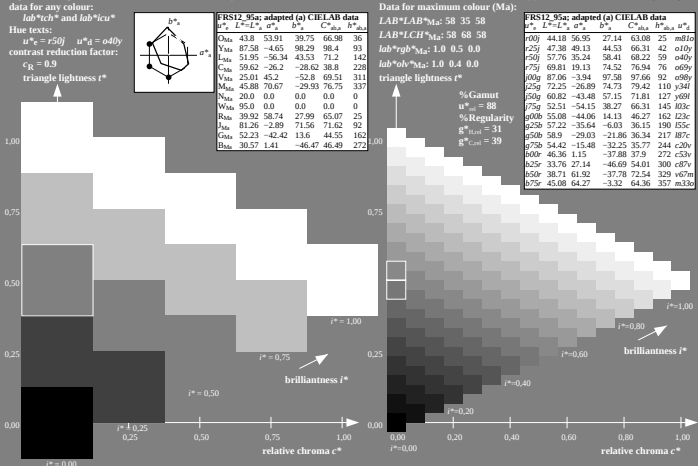


Input and output:  
Colorimetric Printer Reflective System FRS12\_95a  
data for any colour:  
 $u^*_r, L^*$  and number no. = 00...15  
elementary hue text:  
 $u^*_r = 16$  hues  $r00, r25j, r50j, b75r$   
contrast reduction factor:  
 $c_R = 0.9$

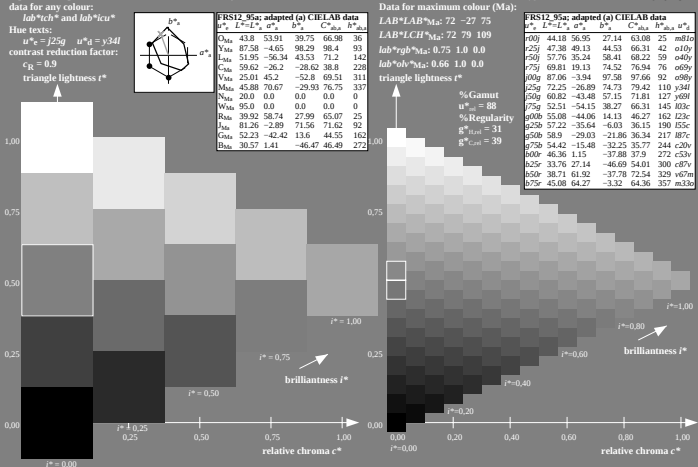
| FRS12_95a adapted (a) CIELAB data         | FRS12_95a adapted (a) CIELAB data         |
|-------------------------------------------|-------------------------------------------|
| $u^*_r, L^*, a^*, b^*$                    | $u^*_r, L^*, a^*, b^*$                    |
| 000 44.18 56.95 27.14 63.08 25 m80        | 000 44.18 56.95 27.14 63.08 25 m80        |
| 010 47.38 49.13 44.53 66.42 42 o10        | 010 47.38 49.13 44.53 66.42 42 o10        |
| 020 57.76 35.24 58.41 68.22 59 o40        | 020 57.76 35.24 58.41 68.22 59 o40        |
| 030 69.81 19.13 74.52 76.94 76 o69        | 030 69.81 19.13 74.52 76.94 76 o69        |
| 040 87.06 3.94 97.98 97.66 92 o90         | 040 87.06 3.94 97.98 97.66 92 o90         |
| 050 72.25 26.89 74.73 79.42 110 y34       | 050 72.25 26.89 74.73 79.42 110 y34       |
| 060 60.82 43.48 57.15 71.81 127 o60       | 060 60.82 43.48 57.15 71.81 127 o60       |
| 070 52.51 54.15 38.27 66.31 145 R03       | 070 52.51 54.15 38.27 66.31 145 R03       |
| 080 55.08 44.06 14.13 46.27 162 G23       | 080 55.08 44.06 14.13 46.27 162 G23       |
| 090 57.22 35.64 4.03 36.15 190 G55        | 090 57.22 35.64 4.03 36.15 190 G55        |
| 100 58.59 29.03 21.86 36.34 217 B76       | 100 58.59 29.03 21.86 36.34 217 B76       |
| 110 57.50 54.42 15.48 32.25 35.77 244 c30 | 110 57.50 54.42 15.48 32.25 35.77 244 c30 |
| 120 46.36 1.15 37.88 37.9 272 c59         | 120 46.36 1.15 37.88 37.9 272 c59         |
| 130 33.76 27.14 46.69 54.01 300 o87       | 130 33.76 27.14 46.69 54.01 300 o87       |
| 140 38.71 61.92 37.78 72.54 329 o76       | 140 38.71 61.92 37.78 72.54 329 o76       |
| 150 45.08 64.27 3.32 64.36 357 m33        | 150 45.08 64.27 3.32 64.36 357 m33        |



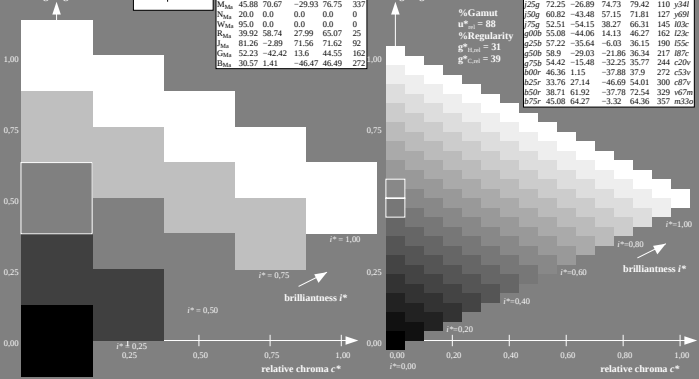
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.164$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = r50j$   $u^*_a = o60y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



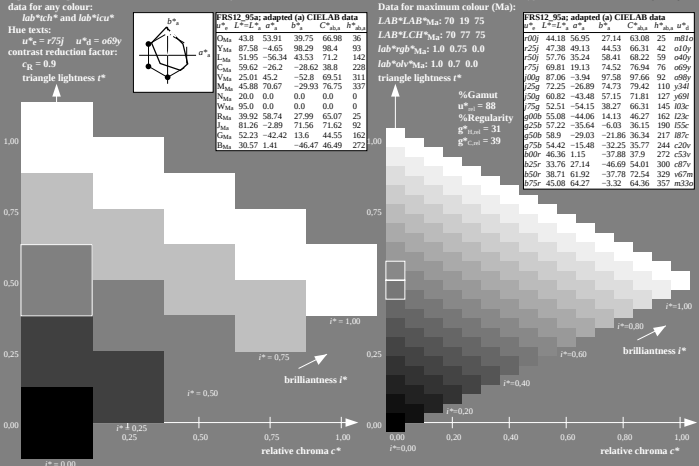
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.305$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = j25g$   $u^*_a = y34l$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



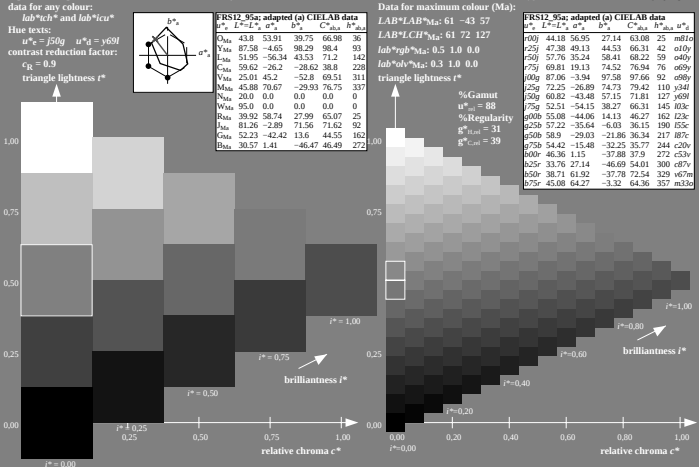
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.071$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = r00j$   $u^*_a = m80l$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



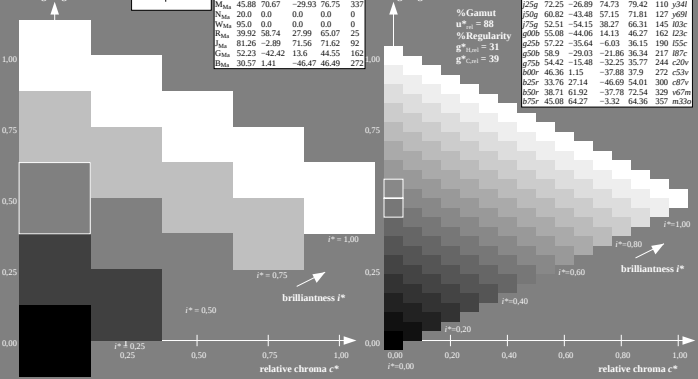
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.21$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = r75j$   $u^*_a = o60y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



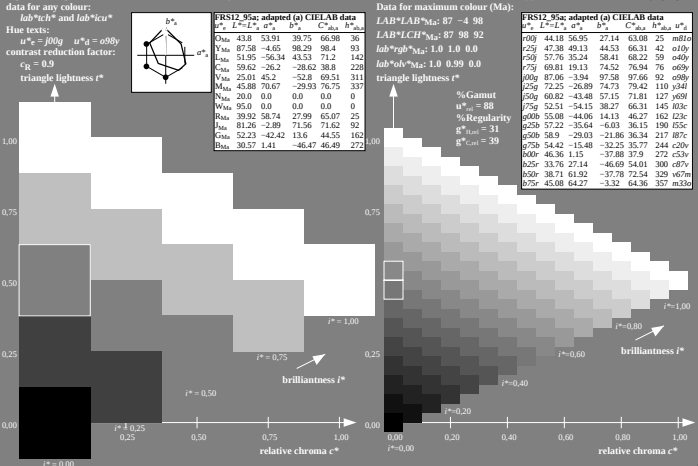
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.354$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = j50j$   $u^*_a = y60l$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



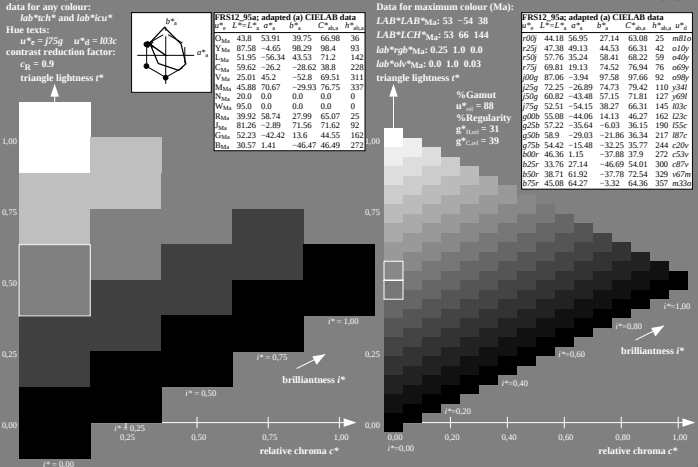
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.117$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = r25j$   $u^*_a = o10y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.256$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = j00g$   $u^*_a = o90y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*20\_95 for relative CIELAB hue  $h^* = lab^*h^* = h_{ab}/360 = 0.402$   
data for any colour:  
 $lab^*ch^*$  and  $lab^*cu^*$   
Hue texts:  
 $u^*_r = j75g$   $u^*_a = R03c$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



Input and output:  
Colorimetric Printer Reflective System FRS12\_95a  
data for any colour:  
 $u^*_e$  and number no. = 00...15  
elementary hue text:  
 $u^*_e = 16$  hues  $r00$ ,  $r25j$ , ...,  $b75r$   
contrast reduction factor:  
 $c_R = 0.9$

| FRS12_95a adapted (a) CIELAB data |       |        |        |        |       |       |       |       |         |
|-----------------------------------|-------|--------|--------|--------|-------|-------|-------|-------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $L^*$  | $a^*$  | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                               | 44.18 | 56.95  | 27.14  | 63.08  | 25    | m80e  |       |       |         |
| 010                               | 47.38 | 49.13  | 44.53  | 66.31  | 42    | o10p  |       |       |         |
| 020                               | 57.76 | 35.24  | 58.41  | 68.22  | 59    | o40p  |       |       |         |
| 030                               | 69.81 | 19.13  | 74.52  | 76.94  | 76    | o69p  |       |       |         |
| 040                               | 87.06 | -3.84  | 97.68  | 97.66  | 92    | o89p  |       |       |         |
| 050                               | 72.25 | -26.89 | 74.73  | 79.42  | 110   | y34l  |       |       |         |
| 060                               | 60.82 | -43.48 | 57.15  | 71.81  | 127   | y69l  |       |       |         |
| 070                               | 52.51 | -54.15 | 38.27  | 66.31  | 145   | 80e   |       |       |         |
| 080                               | 55.08 | -44.06 | 14.13  | 46.27  | 162   | 123e  |       |       |         |
| 090                               | 52.22 | -35.64 | -4.03  | 36.15  | 180   | 155e  |       |       |         |
| 100                               | 59.08 | -29.03 | -21.86 | 36.34  | 217   | 87e   |       |       |         |
| 110                               | 57.50 | -54.42 | -15.48 | -32.25 | 35.77 | 244   | c20v  |       |         |
| 120                               | 46.36 | 1.15   | -37.88 | 37.9   | 272   | c53v  |       |       |         |
| 130                               | 33.76 | 27.14  | -46.69 | 54.01  | 300   | e87v  |       |       |         |
| 140                               | 38.71 | 61.92  | -37.78 | 72.54  | 329   | e67v  |       |       |         |
| 150                               | 45.08 | 64.27  | -3.32  | 64.36  | 357   | m33e  |       |       |         |

| FRS12_95a adapted (a) CIELAB data |       |        |        |       |       |       |       |       |         |
|-----------------------------------|-------|--------|--------|-------|-------|-------|-------|-------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $L^*$  | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                               | 43.8  | 53.91  | 39.75  | 66.98 | 36    |       |       |       |         |
| 010                               | 47.38 | 46.65  | 98.29  | 98.4  | 93    |       |       |       |         |
| 020                               | 51.95 | -56.34 | 43.53  | 71.2  | 142   |       |       |       |         |
| 030                               | 59.62 | -26.2  | -28.62 | 38.8  | 228   |       |       |       |         |
| 040                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 050                               | 45.88 | 70.67  | -29.93 | 76.75 | 337   |       |       |       |         |
| 060                               | 20.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |       |         |
| 070                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 080                               | 39.92 | 58.74  | 27.99  | 65.07 | 25    |       |       |       |         |
| 090                               | 81.26 | -2.89  | 71.56  | 71.62 | 92    |       |       |       |         |
| 100                               | 52.23 | -42.42 | 13.6   | 44.55 | 162   |       |       |       |         |
| 110                               | 30.57 | 1.41   | -46.47 | 46.49 | 272   |       |       |       |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\* = 20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.071$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_e = r00$   $u^*_d = m80e$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a adapted (a) CIELAB data |       |        |        |       |       |       |       |       |         |
|-----------------------------------|-------|--------|--------|-------|-------|-------|-------|-------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $L^*$  | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                               | 43.8  | 53.91  | 39.75  | 66.98 | 36    |       |       |       |         |
| 010                               | 47.38 | 46.65  | 98.29  | 98.4  | 93    |       |       |       |         |
| 020                               | 51.95 | -56.34 | 43.53  | 71.2  | 142   |       |       |       |         |
| 030                               | 59.62 | -26.2  | -28.62 | 38.8  | 228   |       |       |       |         |
| 040                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 050                               | 45.88 | 70.67  | -29.93 | 76.75 | 337   |       |       |       |         |
| 060                               | 20.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |       |         |
| 070                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 080                               | 39.92 | 58.74  | 27.99  | 65.07 | 25    |       |       |       |         |
| 090                               | 81.26 | -2.89  | 71.56  | 71.62 | 92    |       |       |       |         |
| 100                               | 52.23 | -42.42 | 13.6   | 44.55 | 162   |       |       |       |         |
| 110                               | 30.57 | 1.41   | -46.47 | 46.49 | 272   |       |       |       |         |

| Data for maximum colour (Ma): |       |       |       |       |       |       |       |       |         |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| $L^*$                         | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| LAB*/LAB*_Ma: 44 57 27        |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.0 0.0     |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.0 0.0     |       |       |       |       |       |       |       |       |         |
| triangle lightness $l^*$      |       |       |       |       |       |       |       |       |         |
| %Gamut                        |       |       |       |       |       |       |       |       |         |
| $u^*_e = 88$                  |       |       |       |       |       |       |       |       |         |
| %Regularity                   |       |       |       |       |       |       |       |       |         |
| $g^*_{min} = 31$              |       |       |       |       |       |       |       |       |         |
| $g^*_{max} = 39$              |       |       |       |       |       |       |       |       |         |

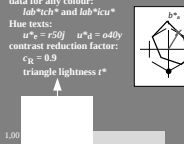
Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\* = 20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.117$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_e = r25j$   $u^*_d = o10p$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a adapted (a) CIELAB data |       |        |        |       |       |       |       |       |         |
|-----------------------------------|-------|--------|--------|-------|-------|-------|-------|-------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $L^*$  | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                               | 43.8  | 53.91  | 39.75  | 66.98 | 36    |       |       |       |         |
| 010                               | 47.38 | 46.65  | 98.29  | 98.4  | 93    |       |       |       |         |
| 020                               | 51.95 | -56.34 | 43.53  | 71.2  | 142   |       |       |       |         |
| 030                               | 59.62 | -26.2  | -28.62 | 38.8  | 228   |       |       |       |         |
| 040                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 050                               | 45.88 | 70.67  | -29.93 | 76.75 | 337   |       |       |       |         |
| 060                               | 20.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |       |         |
| 070                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 080                               | 39.92 | 58.74  | 27.99  | 65.07 | 25    |       |       |       |         |
| 090                               | 81.26 | -2.89  | 71.56  | 71.62 | 92    |       |       |       |         |
| 100                               | 52.23 | -42.42 | 13.6   | 44.55 | 162   |       |       |       |         |
| 110                               | 30.57 | 1.41   | -46.47 | 46.49 | 272   |       |       |       |         |

| Data for maximum colour (Ma): |       |       |       |       |       |       |       |       |         |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| $L^*$                         | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| LAB*/LAB*_Ma: 47 66 42        |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.25 0.0    |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.1 0.0     |       |       |       |       |       |       |       |       |         |
| triangle lightness $l^*$      |       |       |       |       |       |       |       |       |         |
| %Gamut                        |       |       |       |       |       |       |       |       |         |
| $u^*_e = 88$                  |       |       |       |       |       |       |       |       |         |
| %Regularity                   |       |       |       |       |       |       |       |       |         |
| $g^*_{min} = 31$              |       |       |       |       |       |       |       |       |         |
| $g^*_{max} = 39$              |       |       |       |       |       |       |       |       |         |

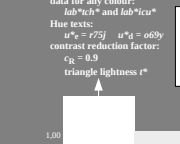
Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\* = 20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.164$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_e = r50j$   $u^*_d = o69p$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a adapted (a) CIELAB data |       |        |        |       |       |       |       |       |         |
|-----------------------------------|-------|--------|--------|-------|-------|-------|-------|-------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $L^*$  | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                               | 43.8  | 53.91  | 39.75  | 66.98 | 36    |       |       |       |         |
| 010                               | 47.38 | 46.65  | 98.29  | 98.4  | 93    |       |       |       |         |
| 020                               | 51.95 | -56.34 | 43.53  | 71.2  | 142   |       |       |       |         |
| 030                               | 59.62 | -26.2  | -28.62 | 38.8  | 228   |       |       |       |         |
| 040                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 050                               | 45.88 | 70.67  | -29.93 | 76.75 | 337   |       |       |       |         |
| 060                               | 20.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |       |         |
| 070                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 080                               | 39.92 | 58.74  | 27.99  | 65.07 | 25    |       |       |       |         |
| 090                               | 81.26 | -2.89  | 71.56  | 71.62 | 92    |       |       |       |         |
| 100                               | 52.23 | -42.42 | 13.6   | 44.55 | 162   |       |       |       |         |
| 110                               | 30.57 | 1.41   | -46.47 | 46.49 | 272   |       |       |       |         |

| Data for maximum colour (Ma): |       |       |       |       |       |       |       |       |         |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| $L^*$                         | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| LAB*/LAB*_Ma: 58 35 58        |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.5 0.0     |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.4 0.0     |       |       |       |       |       |       |       |       |         |
| triangle lightness $l^*$      |       |       |       |       |       |       |       |       |         |
| %Gamut                        |       |       |       |       |       |       |       |       |         |
| $u^*_e = 88$                  |       |       |       |       |       |       |       |       |         |
| %Regularity                   |       |       |       |       |       |       |       |       |         |
| $g^*_{min} = 31$              |       |       |       |       |       |       |       |       |         |
| $g^*_{max} = 39$              |       |       |       |       |       |       |       |       |         |

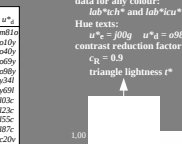
Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\* = 20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.21$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_e = r75j$   $u^*_d = o69p$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a adapted (a) CIELAB data |       |        |        |       |       |       |       |       |         |
|-----------------------------------|-------|--------|--------|-------|-------|-------|-------|-------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $L^*$  | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                               | 43.8  | 53.91  | 39.75  | 66.98 | 36    |       |       |       |         |
| 010                               | 47.38 | 46.65  | 98.29  | 98.4  | 93    |       |       |       |         |
| 020                               | 51.95 | -56.34 | 43.53  | 71.2  | 142   |       |       |       |         |
| 030                               | 59.62 | -26.2  | -28.62 | 38.8  | 228   |       |       |       |         |
| 040                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 050                               | 45.88 | 70.67  | -29.93 | 76.75 | 337   |       |       |       |         |
| 060                               | 20.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |       |         |
| 070                               | 55.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |       |         |
| 080                               | 39.92 | 58.74  | 27.99  | 65.07 | 25    |       |       |       |         |
| 090                               | 81.26 | -2.89  | 71.56  | 71.62 | 92    |       |       |       |         |
| 100                               | 52.23 | -42.42 | 13.6   | 44.55 | 162   |       |       |       |         |
| 110                               | 30.57 | 1.41   | -46.47 | 46.49 | 272   |       |       |       |         |

| Data for maximum colour (Ma): |       |       |       |       |       |       |       |       |         |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| $L^*$                         | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| LAB*/LAB*_Ma: 70 19 75        |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.25 0.0    |       |       |       |       |       |       |       |       |         |
| lab*/lab*_Ma: 1.0 0.2 0.0     |       |       |       |       |       |       |       |       |         |
| triangle lightness $l^*$      |       |       |       |       |       |       |       |       |         |
| %Gamut                        |       |       |       |       |       |       |       |       |         |
| $u^*_e = 88$                  |       |       |       |       |       |       |       |       |         |
| %Regularity                   |       |       |       |       |       |       |       |       |         |
| $g^*_{min} = 31$              |       |       |       |       |       |       |       |       |         |
| $g^*_{max} = 39$              |       |       |       |       |       |       |       |       |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\* = 20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.256$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_e = j00g$   $u^*_d = o89p$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a; adapted |       |        |       |       |       |       |       |       |         |
|--------------------|-------|--------|-------|-------|-------|-------|-------|-------|---------|
| $L^*$              | $a^*$ | $b^*$  | $L^*$ | $a^*$ | $b^*$ | $L^*$ | $a^*$ | $b^*$ | $u^*_e$ |
| 000                | 43.8  | 53.91  |       |       |       |       |       |       |         |
| $Y_{Mn}$           | 87.58 | -4.65  |       |       |       |       |       |       |         |
| $L_{Mn}$           | 51.95 | -56.34 |       |       |       |       |       |       |         |
| $C_{Mn}$           | 59.62 | -26.2  |       |       |       |       |       |       |         |
| $V_{Mn}$           | 25.01 | 45.2   |       |       |       |       |       |       |         |
| $M_{Mn}$           | 45.88 | 70.67  |       |       |       |       |       |       |         |
| $N_{Mn}$           | 20.0  | 0.0    |       |       |       |       |       |       |         |
| $S_{Mn}$           | 95.0  | 0.0    |       |       |       |       |       |       |         |
| $R_{Mn}$           | 39.92 | 58.74  |       |       |       |       |       |       |         |
| $J_{Mn}$           | 81.26 | -2.89  |       |       |       |       |       |       |         |
| $G_{Mn}$           | 52.23 | -42.42 |       |       |       |       |       |       |         |
| $B_{Mn}$           | 30.57 | 1.41   |       |       |       |       |       |       |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95a  
data for any colour:  
 $u^*_c$  and number no. = 00...15  
elementary hue text:  
 $u^*_c = 16$  hues  $r00$ ,  $r25$ , ...,  $b75$   
contrast reduction factor:  
 $c_R = 0.9$

| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 44.18 | 56.95  | 27.14    | 63.08    | 25    | m80      |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |



| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 43.8  | 53.91  | 39.75    | 66.98    | 36    |          |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |



Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{90}/360 = 0.071$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_c = r00$   $u^*_a = m80$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 43.8  | 53.91  | 39.75    | 66.98    | 36    |          |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{90}/360 = 0.117$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_c = r25$   $u^*_a = o10$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 44.18 | 56.95  | 27.14    | 63.08    | 25    | m80      |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{90}/360 = 0.164$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_c = r50$   $u^*_a = o69$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



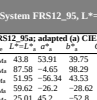
| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 44.18 | 56.95  | 27.14    | 63.08    | 25    | m80      |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{90}/360 = 0.21$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_c = r75$   $u^*_a = o87$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$

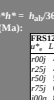


| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 44.18 | 56.95  | 27.14    | 63.08    | 25    | m80      |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |

Input and output:  
Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{90}/360 = 0.256$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*u^*$   
Hue texts:  
 $u^*_c = r00$   $u^*_a = o87$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



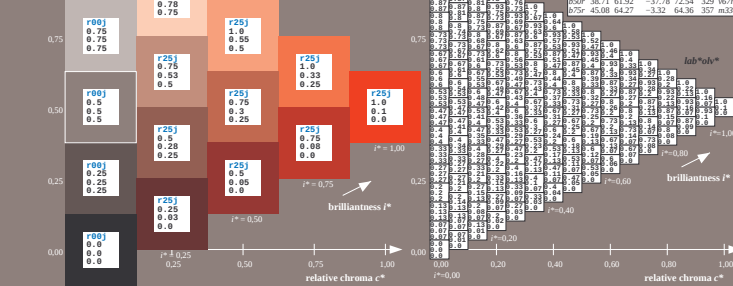
| FRS12_95a adapted (a) CIELAB data |       |        |          |          |       |          |          |         |         |
|-----------------------------------|-------|--------|----------|----------|-------|----------|----------|---------|---------|
| $L^*$                             | $a^*$ | $b^*$  | $C_{90}$ | $C_{50}$ | $h^*$ | $h_{90}$ | $h_{50}$ | $u^*_a$ | $u^*_b$ |
| 000                               | 44.18 | 56.95  | 27.14    | 63.08    | 25    | m80      |          |         |         |
| 010                               | 47.38 | -4.65  | 98.29    | 98.4     | 42    | o10      |          |         |         |
| 020                               | 57.76 | 35.24  | 58.41    | 68.22    | 59    | o40      |          |         |         |
| 030                               | 69.81 | 19.13  | 74.52    | 76.94    | 76    | o69      |          |         |         |
| 040                               | 87.06 | -3.84  | 97.66    | 92       | o89   |          |          |         |         |
| 050                               | 72.25 | -26.89 | 74.73    | 79.42    | 110   | y34      |          |         |         |
| 060                               | 60.02 | -43.48 | 57.15    | 71.81    | 127   | y69      |          |         |         |
| 070                               | 52.51 | -54.15 | 30.27    | 66.31    | 145   | 03c      |          |         |         |
| 080                               | 55.08 | -44.06 | 14.13    | 46.27    | 162   | 23c      |          |         |         |
| 090                               | 52.22 | -35.64 | -4.03    | 36.15    | 180   | 05c      |          |         |         |
| 100                               | 56.98 | -29.03 | -21.86   | 36.34    | 217   | 87c      |          |         |         |
| 110                               | 57.50 | -54.42 | -15.48   | -32.25   | 357   | 24       | c0b      |         |         |
| 120                               | 46.36 | 1.15   | -37.88   | 37.9     | 272   | c59      |          |         |         |
| 130                               | 33.76 | 27.14  | -46.69   | 54.01    | 300   | e87      |          |         |         |
| 140                               | 38.71 | 61.92  | -37.78   | 72.54    | 329   | e67      |          |         |         |
| 150                               | 45.08 | 64.27  | -3.32    | 64.36    | 357   | m36      |          |         |         |



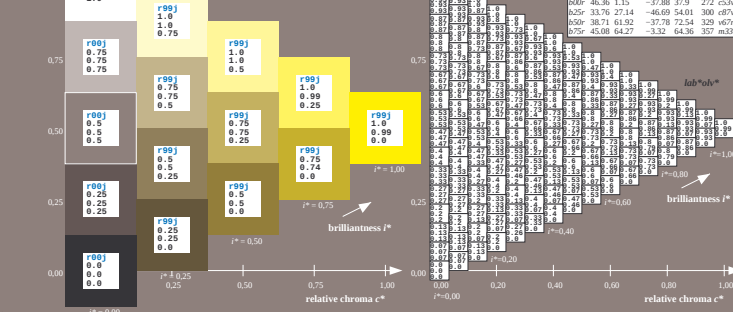
| FRS12_95a adapted (a) CIELAB data |  |  |
|-----------------------------------|--|--|
|-----------------------------------|--|--|

**Black separation empty**

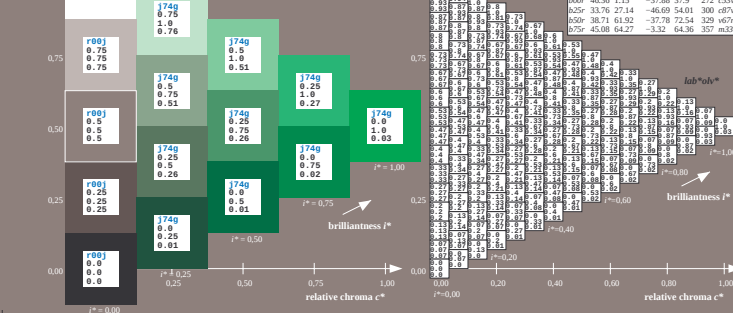
| RS12 95a: adapted (a) CIELAB data |        |        | $u^*_e = r25j$<br>lab*oh* |         |         |
|-----------------------------------|--------|--------|---------------------------|---------|---------|
| $L^*$                             | $a^*$  | $b^*$  | $a^*_e$                   | $b^*_e$ | $u^*_e$ |
| 40.18                             | 56.95  | 27.14  | 63.08                     | 25      | m10     |
| 47.38                             | 49.13  | 44.53  | 68.01                     | 28      | o80     |
| 57.76                             | 35.64  | 58.81  | 68.22                     | 59      | o60     |
| 61.81                             | 19.94  | 74.52  | 74.58                     | 79      | o40     |
| 87.06                             | -3.94  | 97.88  | 97.66                     | 66      | o20     |
| 72.25                             | -26.89 | 74.73  | 79.42                     | 110     | y34f    |
| 60.82                             | -43.48 | 57.15  | 71.81                     | 127     | y61     |
| 52.51                             | -54.51 | 38.27  | 66.31                     | 145     | 03c     |
| 55.08                             | -44.06 | 14.13  | 66.31                     | 162     | 123c    |
| 57.22                             | -35.64 | 6.03   | 36.15                     | 155     | 155c    |
| 51.87                             | -29.03 | 11.86  | 36.15                     | 177     | 218c    |
| 54.42                             | -15.48 | -32.25 | 35.77                     | 244     | 202c    |
| 46.36                             | 1.15   | -37.88 | 37.79                     | 272     | c23c    |
| 33.76                             | 27.14  | -46.69 | 54.01                     | 300     | c87c    |



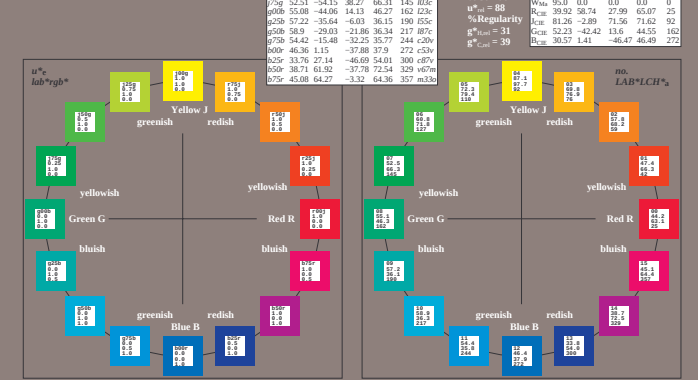
|                                                | $u^*_{\text{e}} = 100g$<br>$\text{lab}^{\text{ab}}\text{u}^*$ |                 |
|------------------------------------------------|---------------------------------------------------------------|-----------------|
| RS12.95c, adapted (a) CIELAB data              |                                                               |                 |
| $u^*_{\text{e}} \quad L^* \quad a^* \quad b^*$ | $C_{30}$                                                      | $h^*_{30}$      |
| 44.18 56.95                                    | 27.14                                                         | 63.08 25 $m10$  |
| 37.48 49.13                                    | 44.53                                                         | 66.31 42 $o10$  |
| 57.76 35.24                                    | 58.61                                                         | 68.22 59 $o0$   |
| 69.81 19.13                                    | 74.52                                                         | 76.94 76 $o69$  |
| 87.06 -3.94                                    | 97.58                                                         | 97.66 92 $o87$  |
| 72.25 26.89                                    | 74.73                                                         | 74.73 24 $m10$  |
| 60.82 -43.48                                   | 57.15                                                         | 71.81 127 $o60$ |
| 52.51 -54.15                                   | 28.27                                                         | 66.31 145 $o52$ |
| 55.08 -44.06                                   | 14.13                                                         | 46.27 162 $o35$ |
| 57.22 -36.64                                   | -6.03                                                         | 36.15 190 $o55$ |
| 58.9 -29.03                                    | -21.86                                                        | 36.34 217 $o87$ |
| 54.42 -15.48                                   | -32.25                                                        | 35.77 244 $o20$ |



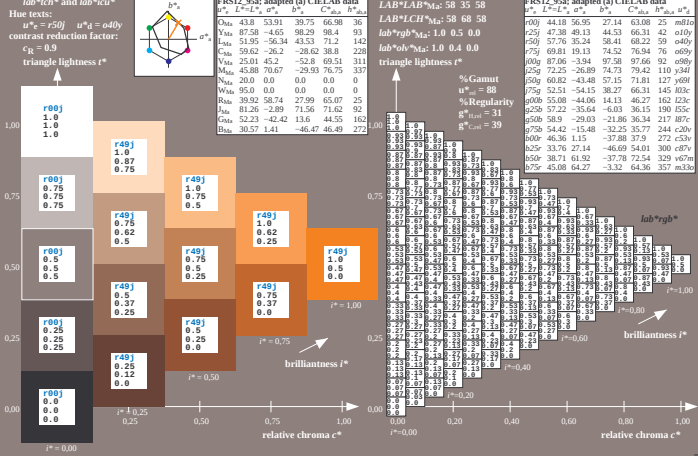
| RS12_95a; adapted (4) CIELAB data |        |        |       |                 |
|-----------------------------------|--------|--------|-------|-----------------|
| $x^*$                             | $y^*$  | $z^*$  | $w^*$ |                 |
| 47.18                             | 56.95  | 27.14  | 63.08 | 25 <i>mfl0</i>  |
| 47.38                             | 49.13  | 44.53  | 66.31 | 42 <i>o10y</i>  |
| 47.36                             | 47.76  | 58.41  | 68.22 | 46 <i>o10y</i>  |
| 46.91                             | 18.13  | 74.52  | 76.94 | 76 <i>o6y</i>   |
| 87.06                             | -3.94  | 97.58  | 97.66 | 92 <i>o89y</i>  |
| 72.25                             | -26.89 | 74.73  | 92.40 | 110 <i>34l</i>  |
| 60.82                             | -43.48 | 57.15  | 71.81 | 127 <i>y63l</i> |
| 52.51                             | -54.15 | 38.27  | 66.31 | 145 <i>po3l</i> |
| 55.08                             | -44.06 | 14.13  | 46.27 | 162 <i>l23c</i> |
| 57.22                             | -36.64 | -6.03  | 36.15 | 190 <i>l55c</i> |
| 58.9                              | -29.03 | -21.86 | 36.34 | 217 <i>l87c</i> |
| 54.42                             | -14.48 | -32.25 | 35.77 | 244 <i>240v</i> |



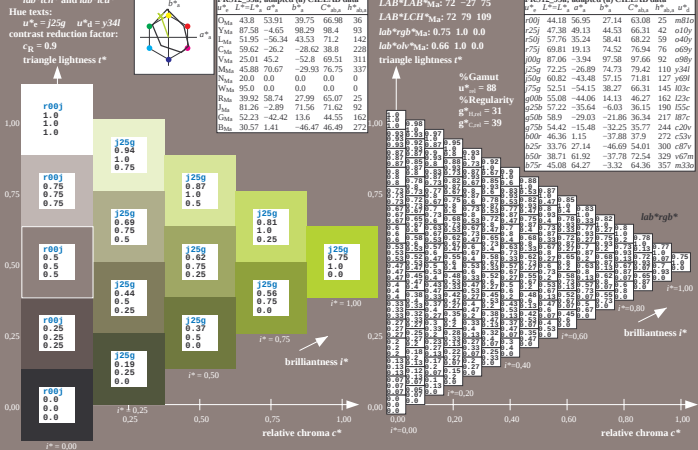
Input and output: Colorimetric Printer Reflective System FRS12\_95a  
data for any colour:  
 $u^*_r = 16$  hue  $r00$ ,  $r25$ , ...,  $b75r$   
contrast reduction factor:  
 $c_{tr} = 0.9$



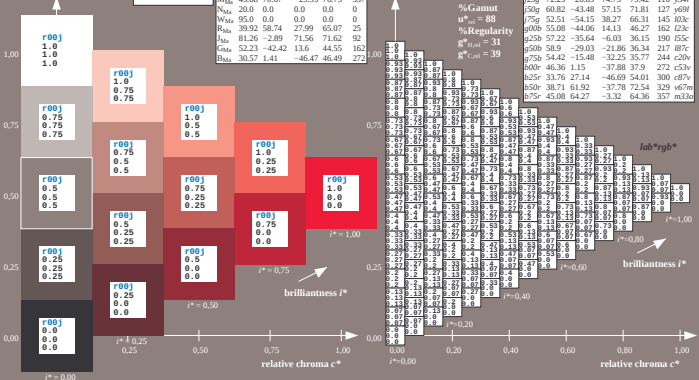
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.164$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = r50$   $u^*_a = 0.01y$   
contrast reduction factor:  
 $c_{tr} = 0.9$   
triangle lightness  $l^*$



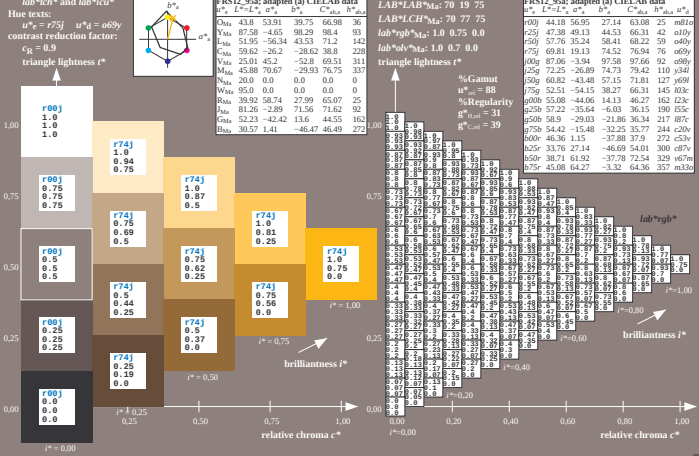
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.305$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = r25g$   $u^*_a = y34l$   
contrast reduction factor:  
 $c_{tr} = 0.9$   
triangle lightness  $l^*$



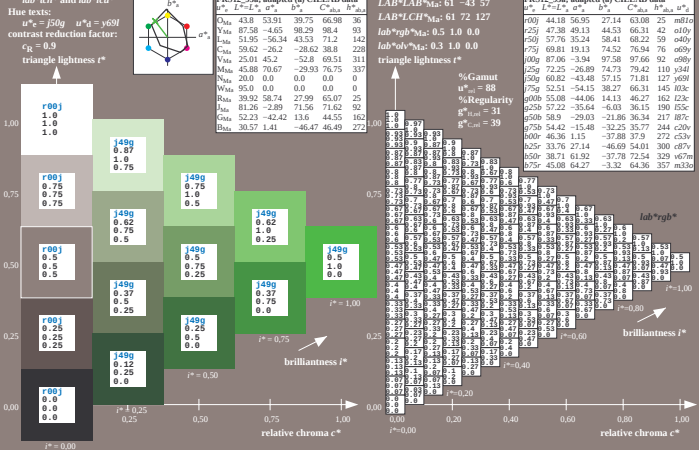
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.071$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = r00$   $u^*_a = m80$   
contrast reduction factor:  
 $c_{tr} = 0.9$   
triangle lightness  $l^*$



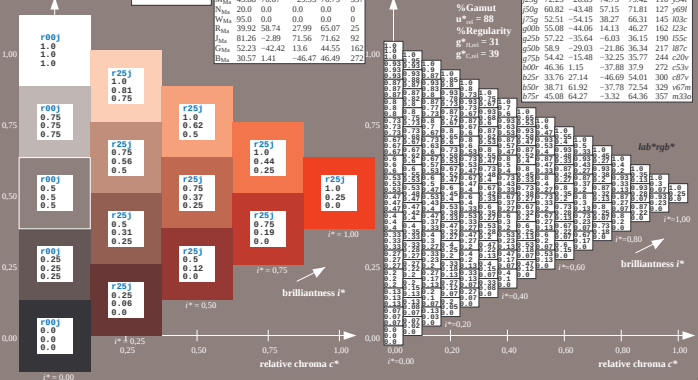
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.21$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = r75j$   $u^*_a = 0.01y$   
contrast reduction factor:  
 $c_{tr} = 0.9$   
triangle lightness  $l^*$



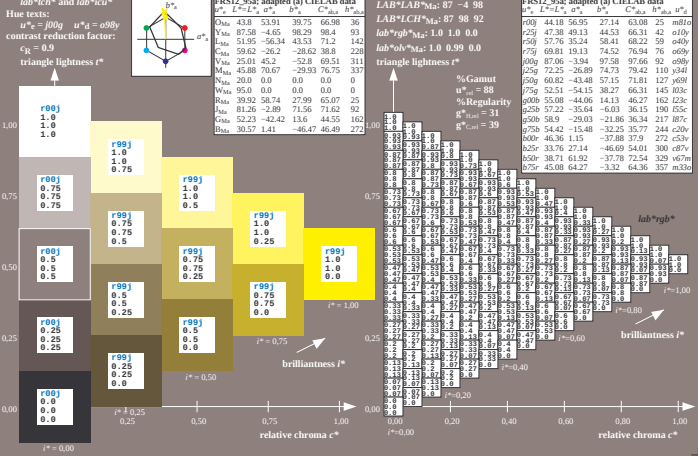
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.354$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = f50g$   $u^*_a = y60l$   
contrast reduction factor:  
 $c_{tr} = 0.9$   
triangle lightness  $l^*$



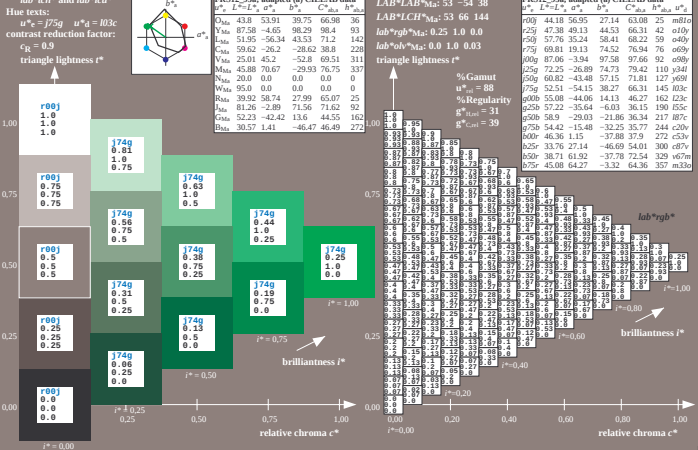
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.117$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = r25j$   $u^*_a = 0.01y$   
contrast reduction factor:  
 $c_{tr} = 0.5$   
triangle lightness  $l^*$



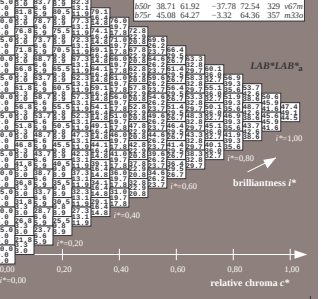
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.256$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = f00g$   $u^*_a = 0.01y$   
contrast reduction factor:  
 $c_{tr} = 0.5$   
triangle lightness  $l^*$



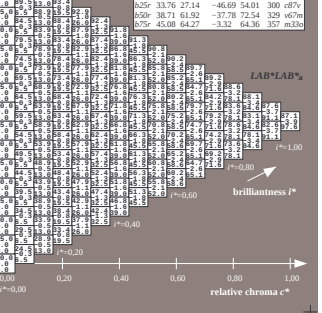
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.402$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*ic^*$   
Hue texts:  
 $u^*_r = f75g$   $u^*_a = 0.03c$   
contrast reduction factor:  
 $c_{tr} = 0.5$   
triangle lightness  $l^*$



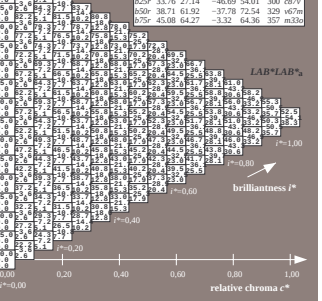
| ELAB data          |                    |                 |
|--------------------|--------------------|-----------------|
| C* <sub>ab,s</sub> | h* <sub>ab,s</sub> | u* <sub>d</sub> |
| 63.08              | 25                 | m81o            |
| 66.31              | 42                 | o10y            |
| 68.22              | 59                 | o40y            |
| 76.94              | 76                 | o69y            |
| 97.66              | 92                 | o98y            |
| 79.42              | 110                | y34l            |
| 71.81              | 127                | y69l            |
| 66.31              | 145                | 103c            |
| 46.27              | 162                | 123c            |
| 36.15              | 190                | 155c            |
| 36.34              | 217                | 187c            |
| 35.77              | 244                | c20v            |
| 37.9               | 272                | c53v            |
| 54.01              | 300                | c87v            |



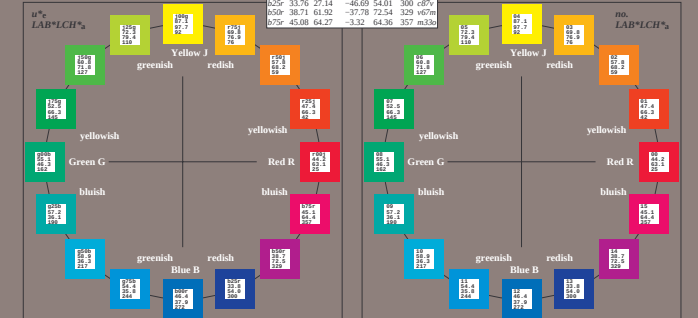
| ELAB data    |              |             |  |
|--------------|--------------|-------------|--|
| $C^*_{ab,s}$ | $h^*_{ab,s}$ | $u^*_d$     |  |
| 63.08        | 25           | <i>m81o</i> |  |
| 66.31        | 42           | <i>o10y</i> |  |
| 68.22        | 59           | <i>o40y</i> |  |
| 76.94        | 76           | <i>o69y</i> |  |
| 97.66        | 92           | <i>o98y</i> |  |
| 79.42        | 110          | <i>y34f</i> |  |
| 71.81        | 127          | <i>y69f</i> |  |
| 66.31        | 145          | <i>i03c</i> |  |
| 46.27        | 162          | <i>i23c</i> |  |
| 36.15        | 190          | <i>i55c</i> |  |
| 36.34        | 217          | <i>i87c</i> |  |
| 35.77        | 244          | <i>c20v</i> |  |
| 37.9         | 272          | <i>c53v</i> |  |



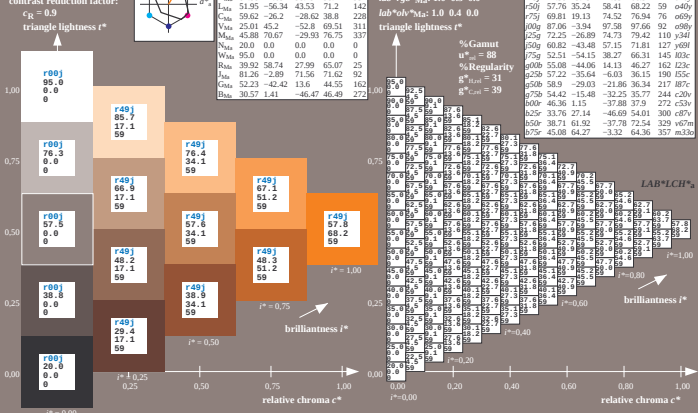
| ELAB data |       |         |
|-----------|-------|---------|
| $C_{ab}$  | $h^*$ | $u^*_d$ |
| 63.08     | 25    | m81o    |
| 66.31     | 42    | o10y    |
| 68.22     | 59    | o40y    |
| 76.94     | 76    | o69y    |
| 97.66     | 92    | o98y    |
| 79.42     | 110   | y34l    |
| 71.81     | 127   | y69l    |
| 66.31     | 145   | i03c    |
| 46.27     | 162   | i23c    |
| 36.15     | 190   | i55c    |
| 5 36.34   | 217   | i87c    |
| 35.77     | 244   | c20v    |
| 37.9      | 272   | c53v    |
| 54.01     | 300   | c83v    |



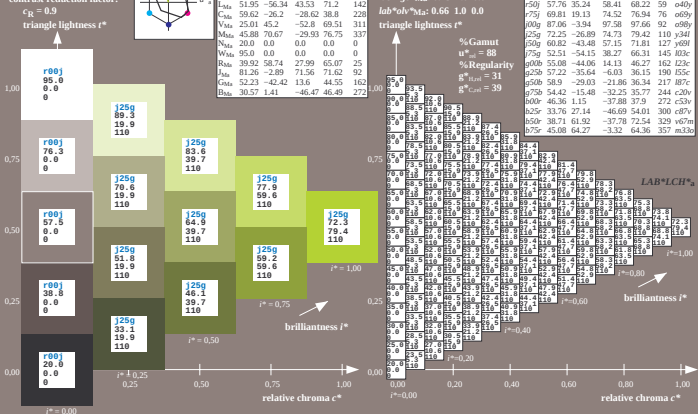
| FRS12_35aa; adapted (a) |                        | CIELAB data            |                        |       |      |
|-------------------------|------------------------|------------------------|------------------------|-------|------|
| $\lambda$               | $\lambda_{\text{max}}$ | $\lambda_{\text{max}}$ | $\lambda_{\text{max}}$ |       |      |
| r00                     | 44.18                  | 49.15                  | 27.14                  | 66.65 | m81b |
| r05                     | 47.30                  | 49.13                  | 44.53                  | 66.31 | 42   |
| r10                     | 56.76                  | 35.24                  | 58.41                  | 68.22 | 59   |
| r50                     | 69.81                  | 38.13                  | 74.52                  | 76.94 | 76   |
| r55                     | 67.06                  | 39.34                  | 97.58                  | 97.66 | 92   |
| g05                     | 82.25                  | -26.89                 | 74.73                  | 79.42 | 110  |
| g10                     | 80.60                  | -43.48                 | 57.15                  | 81.1  | 127  |
| g50                     | 65.58                  | -44.06                 | 12.72                  | 66.37 | 123  |
| g55                     | 60.51                  | -44.06                 | 14.13                  | 66.22 | 122  |
| b25b                    | 57.22                  | -36.64                 | -60.3                  | 36.15 | 190  |
| b50b                    | 58.89                  | -29.03                 | -21.86                 | 36.34 | 217  |
| g50b                    | 54.42                  | -15.48                 | -32.25                 | 35.77 | 244  |
| b55                     | 57.22                  | -36.64                 | -60.3                  | 36.15 | 272  |
| b55b                    | 33.76                  | -74.14                 | -46.69                 | 54.01 | 300  |
| b55b                    | 38.71                  | 61.92                  | -37.78                 | 75.24 | 327  |
| b75r                    | 45.00                  | -64.32                 | -3.23                  | 64.36 | 359  |



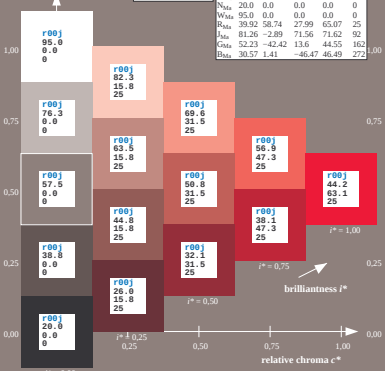
|                                   |              | LAB <sup>+</sup> CH <sup>+</sup> |                             |                             |                             |                             |
|-----------------------------------|--------------|----------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| FRS12_95a; adapted (4) CIEBA data |              | b <sub>1</sub> <sup>a</sup>      | b <sub>2</sub> <sup>a</sup> | b <sub>3</sub> <sup>a</sup> | b <sub>4</sub> <sup>a</sup> | b <sub>5</sub> <sup>a</sup> |
|                                   |              | b <sub>1</sub> <sup>b</sup>      | b <sub>2</sub> <sup>b</sup> | b <sub>3</sub> <sup>b</sup> | b <sub>4</sub> <sup>b</sup> | b <sub>5</sub> <sup>b</sup> |
| m00                               | 44.18 56.95  | 27.14                            | 63.08                       | 25                          | m810                        |                             |
| m25                               | 47.78 49.13  | 44.53                            | 66.31                       | 42                          | m100                        |                             |
| m50                               | 49.91 49.13  | 74.52                            | 76.94                       | 76                          | m120                        |                             |
| m75                               | 87.06 -3.94  | 97.58                            | 97.66                       | 92                          | m89y                        |                             |
| m25g                              | 72.25 -62.89 | 74.73                            | 92.42                       | 110                         | y34                         |                             |
| m50g                              | 60.82 -43.45 | 75.15                            | 71.81                       | 127                         | y69                         |                             |
| y75                               | 52.51 -54.15 | 38.27                            | 66.28                       | 45                          | m33c                        |                             |
| m00g                              | 55.08 -44.06 | 44.13                            | 46.27                       | 162                         | m32c                        |                             |
| m25g                              | 55.08 -44.06 | 44.13                            | 46.27                       | 162                         | m32c                        |                             |
| m50g                              | 59.83 -29.03 | -21.86                           | 36.34                       | 217                         | m77c                        |                             |
| y75g                              | 54.42 -15.48 | -32.25                           | 35.77                       | 244                         | c20v                        |                             |
| m00g                              | 46.36 15.15  | -37.88                           | 57.91                       | 272                         | c33c                        |                             |
| m25g                              | 33.76 27.14  | -46.69                           | 54.01                       | 300                         | m7v                         |                             |
| m50g                              | 38.71 61.92  | -36.78                           | 72.54                       | 329                         | m7v                         |                             |



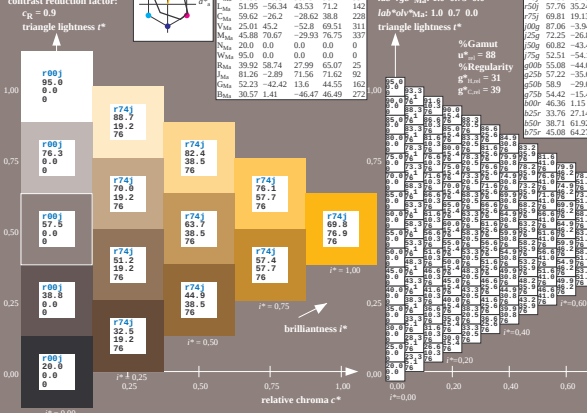
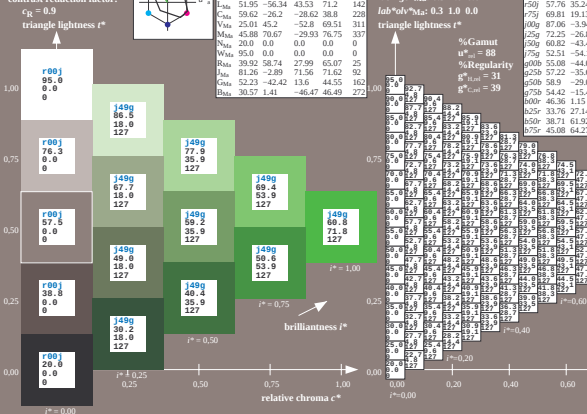
| PSR12_95a; adapted (c) CIEB data |                |                |                |
|----------------------------------|----------------|----------------|----------------|
|                                  | $\alpha^*$     | $\alpha^*$     | $\alpha^*$     |
|                                  | $C_{\alpha}^*$ | $C_{\alpha}^*$ | $C_{\alpha}^*$ |
| $C_{\alpha}^*$                   | 43.8           | 53.91          | 39.75          |
| $\alpha^*$                       | 87.58          | -4.65          | 98.29          |
| $\alpha^*$                       | 51.95          | -35.34         | 63.33          |
| $\alpha^*$                       | 20.02          | -35.2          | -28.62         |
| $\alpha^*$                       | 25.01          | 45.2           | -52.8          |
| $\alpha^*$                       | 45.88          | 70.67          | -29.93         |
| $\alpha^*$                       | 20.0           | 0.0            | 0.0            |
| $\alpha^*$                       | 95.0           | 0.0            | 0.0            |
| $\alpha^*$                       | 39.92          | 58.74          | 27.99          |
| $\alpha^*$                       | 81.26          | -2.89          | 71.52          |
| $\alpha^*$                       | 22.22          | -42.2          | 13.6           |
| $\alpha^*$                       | 30.57          | 14.1           | -46.47         |



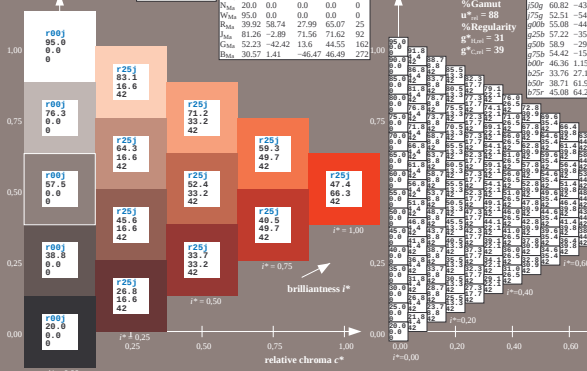
| FRS12_95a; adapted (a) CII |       |        |        |
|----------------------------|-------|--------|--------|
| $g^+$                      | $L^+$ | $b^+$  |        |
| $O_{M2}$                   | 43.8  | 53.91  | 39.75  |
| $Y_{M2}$                   | 87.58 | -4.65  | 98.29  |
| $L_{M2}$                   | 51.95 | -56.34 | 43.53  |
| $C_{M2}$                   | 59.62 | -26.2  | -28.62 |
| $V_{M2}$                   | 25.01 | 45.2   | -52.8  |
| $M_{M2}$                   | 45.88 | 70.67  | -29.93 |
| $N_{M2}$                   | 20.0  | 0.0    | 0.0    |
| $W_{M2}$                   | 95.0  | 0.0    | 0.0    |
| $R_{M2}$                   | 39.92 | 58.74  | 27.99  |
| $J_{M2}$                   | 81.26 | -2.89  | 71.56  |
| $G_{M2}$                   | 52.23 | -42.42 | 13.6   |
| $g^+$                      | 30.27 | -4.4   | 46.47  |



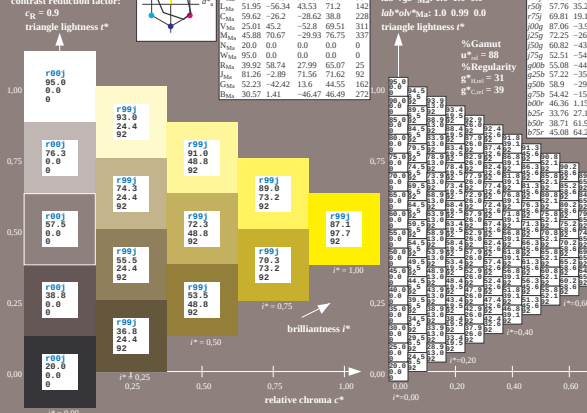
| FRS12_95a; adapted (a) |                | CIELAB data |        |       |       |           |
|------------------------|----------------|-------------|--------|-------|-------|-----------|
| $a^*$                  | $L^*=L_{95}^*$ | $a^*$       | $b^*$  | $C^*$ | $h^*$ | $a_{95a}$ |
| $O_{50a}$              | 43.8           | 53.91       | 39.75  | 66.98 | 36    |           |
| $Y_{50a}$              | 67.58          | -4.65       | 29.29  | 98.4  | 93    |           |
| $B_{50a}$              | 81.26          | -2.89       | 71.56  | 72.1  | 22    |           |
| $M_{50a}$              | 59.62          | -2.62       | 68.82  | 98.4  | 148   |           |
| $Y_{50a}$              | 25.01          | 4.52        | -52.8  | 69.51 | 31    |           |
| $M_{50a}$              | 45.88          | 70.67       | -29.93 | 76.15 | 337   |           |
| $N_{50a}$              | 20.0           | 0.0         | 0.0    | 0     | 0     |           |
| $N_{50a}$              | 95.0           | 0.0         | 0.0    | 0     | 0     |           |
| $N_{50a}$              | 39.92          | 58.74       | 27.39  | 65.07 | 25    |           |
| $N_{50a}$              | 81.26          | -2.89       | 71.56  | 72.1  | 92    |           |
| $N_{50a}$              | 52.23          | -42.42      | 13.6   | 44.55 | 162   |           |
| $N_{50a}$              | 30.57          | 1.41        | -46.47 | 46.49 | 272   |           |

[illegible]

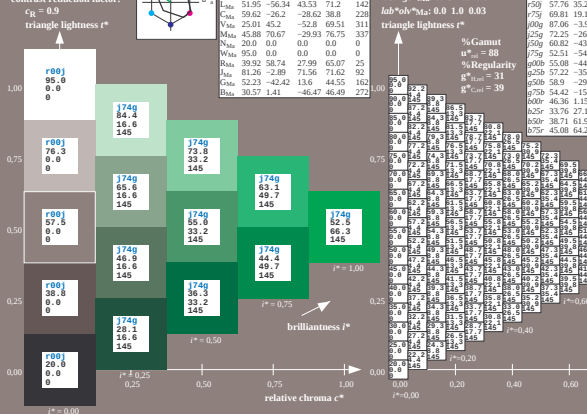
| FRS12_95a; adapted (a) CII |             |        |        |
|----------------------------|-------------|--------|--------|
| $\sigma^a$                 | $L^a = L^a$ | $b^a$  |        |
| O <sub>Mds</sub>           | 43.8        | 53.91  | 39.75  |
| Y <sub>Mds</sub>           | 87.58       | -4.65  | 98.29  |
| L <sub>Mds</sub>           | 51.95       | -56.34 | 43.53  |
| C <sub>Mds</sub>           | 59.62       | -26.2  | -28.62 |
| V <sub>Mds</sub>           | 25.01       | 45.2   | -52.8  |
| M <sub>Mds</sub>           | 45.88       | 70.67  | -29.93 |
| N <sub>Mds</sub>           | 20.0        | 0.0    | 0.0    |
| W <sub>Mds</sub>           | 95.0        | 0.0    | 0.0    |
| R <sub>Mds</sub>           | 39.92       | 58.74  | 27.99  |
| J <sub>Mds</sub>           | 81.26       | -2.89  | 71.56  |
| G <sub>Mds</sub>           | 52.23       | -42.42 | 13.6   |
|                            | 30.23       | 4.4    | -46.42 |



| FRS12.95a; adapted (a) CIELAB data |       |        |        |       |       |       |       |
|------------------------------------|-------|--------|--------|-------|-------|-------|-------|
| $b^*$                              | $L^*$ | $a^*$  | $b^*$  | $C^*$ | $h^*$ | $a^*$ | $b^*$ |
| $O_{Std}$                          | 43.8  | 53.91  | 39.75  | 66.98 | 36    |       |       |
| $Y_{Std}$                          | 87.58 | -4.5   | 98.29  | 99.84 | 93    |       |       |
| $X_{Std}$                          | 59.55 | 26.34  | 98.29  | 99.84 | 142   |       |       |
| $Z_{Std}$                          | 59.52 | -26.2  | 98.29  | 99.84 | 28    |       |       |
| $Y_{M45}$                          | 25.01 | 45.2   | -52.8  | 69.51 | 311   |       |       |
| $M_{M45}$                          | 45.88 | 70.67  | -29.93 | 97.95 | 765   |       |       |
| $N_{M45}$                          | 20.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |
| $Y_{Std}$                          | 95.0  | 0.0    | 0.0    | 0.0   | 0     |       |       |
| $R_{Std}$                          | 39.92 | 58.74  | 27.99  | 65.07 | 25    |       |       |
| $G_{Std}$                          | 81.26 | -2.89  | 71.56  | 71.42 | 92    |       |       |
| $B_{Std}$                          | 52.23 | -42.42 | 13.6   | 44.55 | 162   |       |       |
| $B_{Std}$                          | 30.57 | 41.1   | -46.47 | 46.49 | 272   |       |       |



| FRS12.9% <sub>2</sub> adapted (a) CIELAB data |       |        |        |       |
|-----------------------------------------------|-------|--------|--------|-------|
| $a^*$                                         | $L^*$ | $a^*$  | $b^*$  |       |
| $a^*$                                         | $L^*$ | $a^*$  | $b^*$  |       |
| $Y_{std}$                                     | 43.8  | 53.91  | 39.75  | 66.98 |
| $Y_{std}$                                     | 87.58 | -4.65  | 98.29  | 98.84 |
| $Y_{std}$                                     | 51.95 | -56.34 | 43.53  | 71.2  |
| $Y_{std}$                                     | 59.62 | -5.2   | -29.63 | 38.8  |
| $Y_{std}$                                     | 25.01 | 45.7   | -52.8  | 69.51 |
| $Y_{std}$                                     | 45.88 | 70.67  | -29.93 | 76.75 |
| $Y_{std}$                                     | 20.0  | 0      | 0      | 0     |
| $Y_{std}$                                     | 35.0  | 0      | 0      | 0     |
| $Y_{std}$                                     | 39.92 | 58.74  | 27.99  | 65.07 |
| $Y_{std}$                                     | 81.26 | -2.89  | 71.75  | 71.62 |
| $Y_{std}$                                     | 52.23 | -42.42 | 13.6   | 44.55 |
| $Y_{std}$                                     | 30.57 | 41.1   | -46.47 | 49.49 |



|                     | $u_e^*$ = $r25j$<br>$lab^{*}tch^*$ |       |         |         |
|---------------------|------------------------------------|-------|---------|---------|
| Accepted (a) CIELAB |                                    |       |         |         |
| $L^*$               | $C^*_{ab}$                         | $h^*$ | $u_e^*$ | $u_s^*$ |
| 95                  | 27.14                              | 63.08 | 25      | $m81o$  |
| 123                 | 44.53                              | 66.31 | 42      | $o10y$  |
| 124                 | 58.41                              | 68.22 | 59      | $o40y$  |
| 131                 | 74.52                              | 76.94 | 92      | $o69y$  |
| 194                 | 97.58                              | 97.66 | 92      | $o88y$  |
| 1.89                | 74.73                              | 79.42 | 110     | $y34l$  |
| 1.48                | 57.15                              | 78.11 | 127     | $y61l$  |
| 1.15                | 38.27                              | 66.31 | 145     | $103c$  |
| 1.06                | 14.13                              | 46.27 | 162     | $123c$  |
| 1.64                | -6.03                              | 36.15 | 190     | $155c$  |
| 1.03                | -21.86                             | 36.34 | 217     | $187c$  |
| 0.48                | -31.25                             | 35.77 | 244     | $c20r$  |
| 1.1                 | -37.88                             | 37.9  | 272     | $c53v$  |
| 1.4                 | -46.69                             | 54.01 | 300     | $c87v$  |



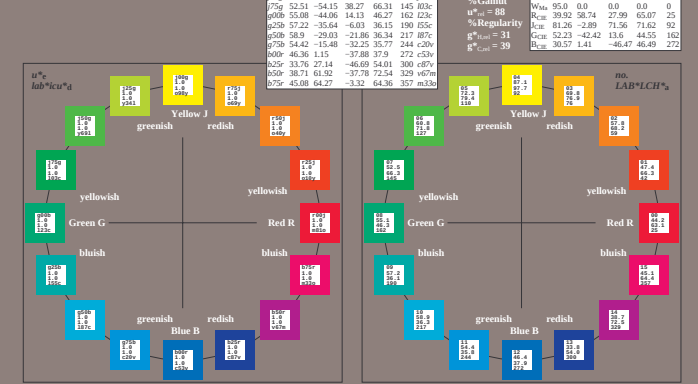
| Accepted (a) | $b_{\text{obs}}^*$ | $C_{\text{obs}}^*$ | $h_{\text{obs}}^*$ | $m_{\text{obs}}^*$   |
|--------------|--------------------|--------------------|--------------------|----------------------|
| 0.95         | 27.14              | 63.08              | 25                 | $m_{810}$            |
| 0.13         | 44.53              | 66.31              | 42                 | $\alpha 10\gamma$    |
| 0.24         | 58.41              | 68.22              | 59                 | $\alpha 40\gamma$    |
| 0.13         | 74.52              | 76.94              | 76                 | $\alpha 69\gamma$    |
| 0.94         | 97.58              | 97.66              | 92                 | $\alpha 98\gamma$    |
| 0.89         | 74.73              | 79.42              | 110                | $\gamma 341$         |
| 0.48         | 57.15              | 78.11              | 127                | $\gamma 96\gamma$    |
| 0.15         | 38.27              | 66.31              | 145                | $\gamma 103\epsilon$ |
| 0.06         | 14.13              | 46.27              | 162                | $123\epsilon$        |
| 0.64         | -6.03              | 36.15              | 190                | $155\epsilon$        |
| 0.03         | -21.86             | 36.34              | 217                | $187\epsilon$        |
| 0.48         | -32.25             | 35.77              | 244                | $\epsilon 20\gamma$  |
| 0.15         | -37.88             | 37.91              | 270                | $\epsilon 53\gamma$  |
| 0.4          | -46.69             | 54.01              | 302                | $\epsilon 87\gamma$  |



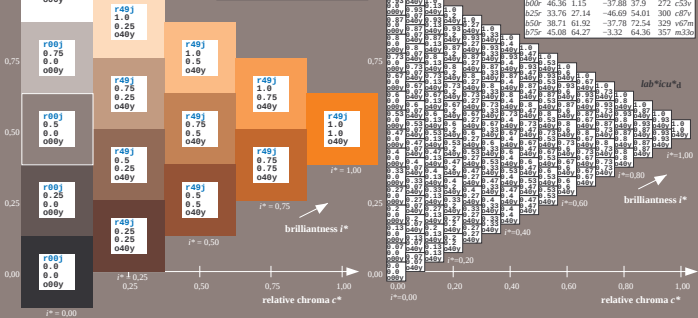
| u <sup>c</sup> = j75g<br>lab <sup>a</sup> tch <sup>a</sup> |                  |                  |                  |                |
|------------------------------------------------------------|------------------|------------------|------------------|----------------|
| Accepted (a)                                               | C <sub>abs</sub> | h <sub>abs</sub> | u <sub>abs</sub> | u <sub>g</sub> |
| 95                                                         | 27.14            | 63.08            | 25               | m810           |
| 113                                                        | 44.53            | 66.31            | 42               | o10y           |
| 124                                                        | 58.41            | 68.22            | 59               | a04y           |
| 113                                                        | 74.52            | 76.94            | 76               | o69y           |
| 94                                                         | 97.58            | 97.66            | 92               | o38y           |
| 139                                                        | 74.73            | 79.42            | 110              | y341           |
| 148                                                        | 57.15            | 71.81            | 127              | y61y           |
| 115                                                        | 38.27            | 66.31            | 145              | i03c           |
| 106                                                        | 14.13            | 46.27            | 162              | 123c           |
| 164                                                        | -6.03            | 36.15            | 190              | i55c           |
| 103                                                        | -21.86           | 36.34            | 217              | 187c           |
| 148                                                        | -32.25           | 35.77            | 244              | 202y           |
| 115                                                        | -37.88           | 37.9             | 272              | c53y           |
| 114                                                        | -46.69           | 54.01            | 308              | c87y           |



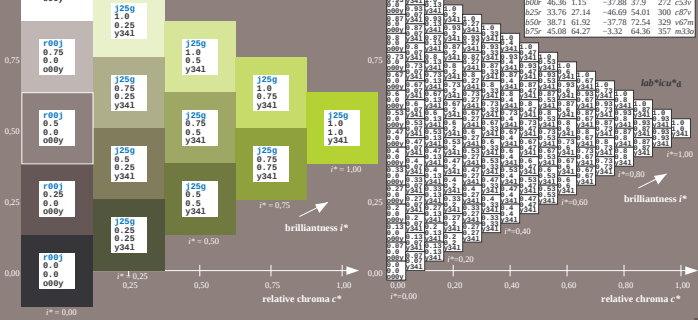
Input and output: Colorimetric Printer Reflective System FRS12\_95a  
data for any colour:  
 $u^*_c =$  and number no. = 00...15  
elementary hue test:  
 $u^*_c = 16$  hues  $r00, r25, \dots, b75r$   
contrast reduction factor:  
 $c_R = 0.9$



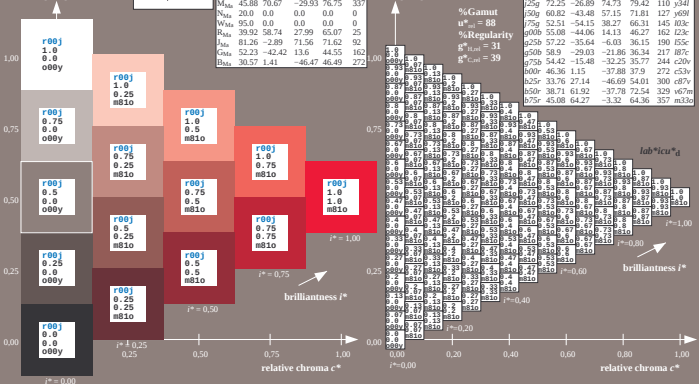
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.164$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = r50$   $u^*_a = o40y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



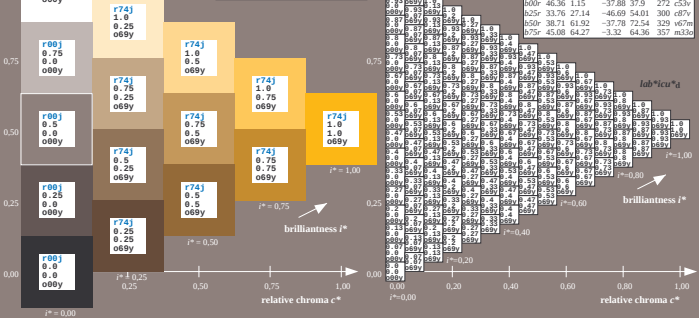
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.305$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = j25g$   $u^*_a = y34l$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



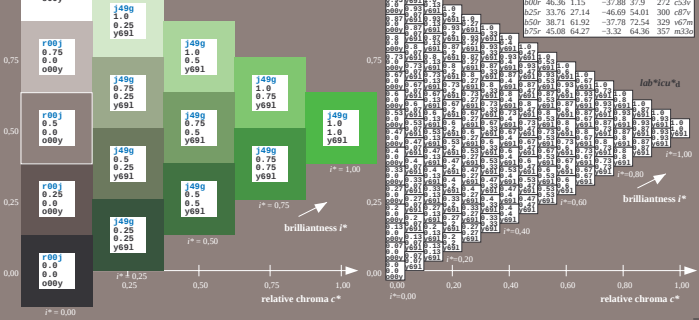
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.071$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = r00$   $u^*_a = m8l0$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



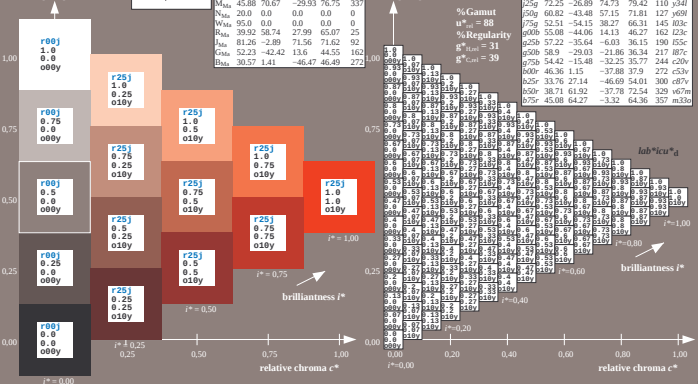
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.21$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = r75j$   $u^*_a = o60y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



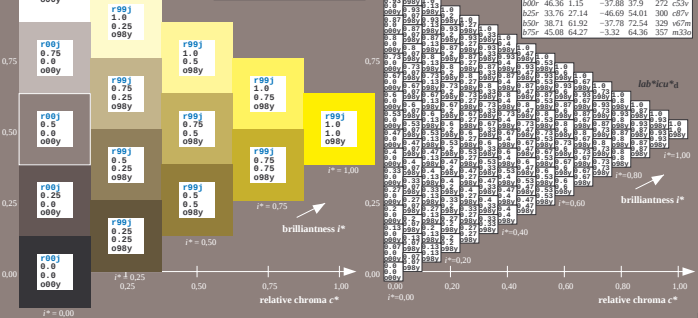
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.354$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = j50g$   $u^*_a = y60l$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



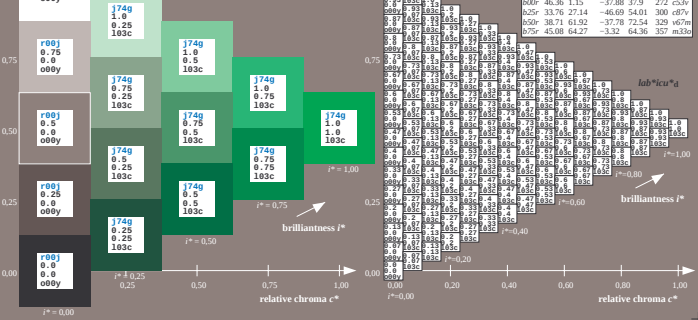
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.117$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = r25j$   $u^*_a = o10y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



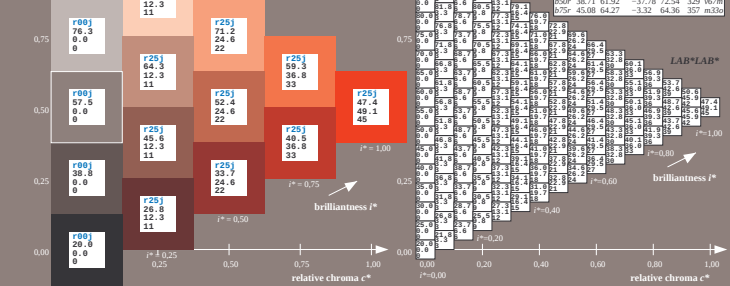
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.256$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = j00g$   $u^*_a = o80y$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



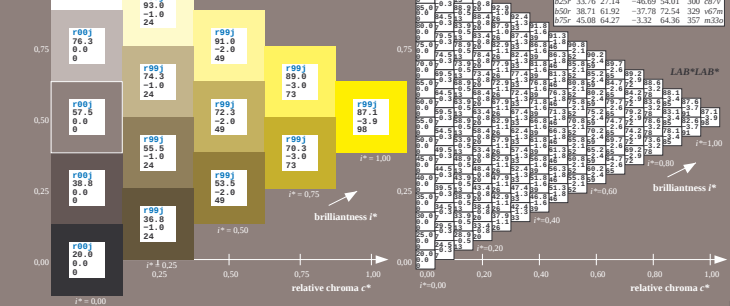
Input and output: Colorimetric Printer Reflective System FRS12\_95, L\*=20\_95 for relative CIELAB hue  $h^* = \text{lab}^*h^* = h_{360}/360 = 0.402$   
data for any colour:  
 $\text{lab}^*h^*$  and  $\text{lab}^*a^*$   
Hue tests:  
 $u^*_c = j75g$   $u^*_a = l03c$   
contrast reduction factor:  
 $c_R = 0.9$   
triangle lightness  $l^*$



| $\approx 0.117$              |        | $u_e^* = r25j$ |          | $LAB^*LAB^*$ |             |
|------------------------------|--------|----------------|----------|--------------|-------------|
| 35a; adapted (a) CIELAB data |        |                |          |              |             |
| $L^*$                        | $a^*$  | $b^*$          | $C_{14}$ | $h^*$        | $u_e^*$     |
| 18                           | 56.95  | 27.14          | 63.08    | 25           | <i>mb10</i> |
| 38                           | 49.13  | 44.53          | 66.31    | 42           | <i>o10y</i> |
| 76                           | 35.24  | 58.41          | 68.22    | 59           | <i>o40y</i> |
| 81                           | 19.13  | 74.52          | 76.94    | 76           | <i>o69y</i> |
| 06                           | -3.94  | 97.58          | 97.66    | 92           | <i>o98y</i> |
| 25                           | -26.89 | 74.73          | 79.42    | 110          | <i>y34l</i> |
| 82                           | -43.48 | 57.15          | 71.81    | 127          | <i>y61l</i> |
| 51                           | -54.15 | 38.27          | 66.31    | 145          | <i>i03c</i> |
| 08                           | -44.06 | 14.13          | 46.27    | 160          | <i>i25c</i> |
| 22                           | -35.64 | -6.03          | 36.15    | 192          | <i>53cs</i> |
| 9                            | -29.03 | -21.86         | 36.34    | 217          | <i>i87c</i> |
| 42                           | -15.48 | -32.25         | 35.77    | 244          | <i>c20v</i> |
| 36                           | 1.15   | -37.88         | 37.91    | 270          | <i>c53v</i> |
| 76                           | 17.14  | -46.69         | 54.09    | 302          | <i>e87v</i> |



| $\alpha = 0.256$        |                |                | $u^*_{\epsilon} = j00g$<br>$LAB^*LAB^*$ |                   |                |
|-------------------------|----------------|----------------|-----------------------------------------|-------------------|----------------|
| 95a; adapted (a) CIELAB |                |                |                                         |                   |                |
| $L^*_{\alpha}$          | $a^*_{\alpha}$ | $b^*_{\alpha}$ | $C^*_{\alpha,ab}$                       | $h^*_{\alpha,ab}$ | $u^*_{\alpha}$ |
| 18                      | 56.95          | 27.14          | 63.08                                   | 25                | <i>mb10</i>    |
| 38                      | 49.13          | 44.53          | 66.31                                   | 42                | <i>o10y</i>    |
| 76                      | 35.24          | 58.41          | 68.22                                   | 59                | <i>o40y</i>    |
| 81                      | 19.13          | 74.52          | 76.94                                   | 76                | <i>o69y</i>    |
| 06                      | -3.94          | 97.58          | 97.66                                   | 92                | <i>o98y</i>    |
| 25                      | -26.89         | 74.73          | 79.42                                   | 110               | <i>y34l</i>    |
| 82                      | -43.48         | 57.15          | 71.81                                   | 127               | <i>y69l</i>    |
| 51                      | -54.15         | 38.27          | 66.31                                   | 145               | <i>103c</i>    |
| 08                      | -44.06         | 14.13          | 46.27                                   | 162               | <i>123c</i>    |
| 22                      | -35.64         | 0.63           | 36.15                                   | 190               | <i>155c</i>    |
| 69                      | -29.03         | -21.86         | 36.34                                   | 217               | <i>87r</i>     |
| 42                      | -15.48         | -32.25         | 35.77                                   | 244               | <i>203r</i>    |
| 36                      | 1.15           | -37.88         | 37.79                                   | 272               | <i>c25v</i>    |



| $\alpha = 0.402$             |                | $u^*_{\alpha} = j75g$ |                  |
|------------------------------|----------------|-----------------------|------------------|
| LAB*LAB*                     |                | LAB*LAB*              |                  |
| 95%: adapted (a) CIELAB data |                |                       |                  |
| $L^*_{\alpha}$               | $a^*_{\alpha}$ | $b^*_{\alpha}$        | $C^*_{\alpha,2}$ |
| 1.18                         | 56.95          | 27.14                 | 63.08            |
| 2.38                         | 49.13          | 44.53                 | 66.31            |
| 3.76                         | 35.24          | 58.41                 | 68.22            |
| 5.81                         | 19.13          | 74.52                 | 76.94            |
| 8.06                         | -3.94          | 97.58                 | 97.66            |
| 10.5                         | -26.89         | 74.73                 | 79.42            |
| 13.1                         | -43.48         | 57.15                 | 71.81            |
| 15.8                         | -54.15         | 28.27                 | 66.31            |
| 18.6                         | -44.06         | 14.13                 | 62.27            |
| 21.4                         | -32.64         | -6.03                 | 36.15            |
| 24.2                         | -19.03         | -21.86                | 36.34            |
| 27.0                         | -14.42         | -38.25                | 35.77            |
| 29.8                         | -6.15          | -37.88                | 37.72            |
| 32.6                         | 1.14           | -46.69                | 54.01            |

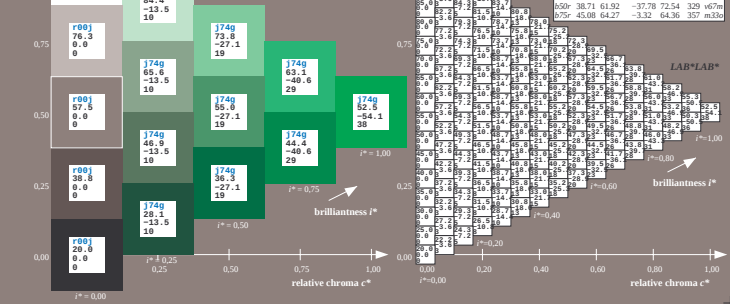


Figure 1 consists of two color wheels, labeled (a) and (b), showing color differences between Yellow J and Yellow J+LAB\*ICH\*α. The wheels are arranged in a circular pattern with labels for Yellow J, Yellow J+LAB\*ICH\*α, and Yellow J+LAB\*ICH\*α+β. The wheels are color-coded by hue and saturation, with labels for Yellow J, Yellow J+LAB\*ICH\*α, and Yellow J+LAB\*ICH\*α+β. The wheels are arranged in a circular pattern with labels for Yellow J, Yellow J+LAB\*ICH\*α, and Yellow J+LAB\*ICH\*α+β. The wheels are color-coded by hue and saturation, with labels for Yellow J, Yellow J+LAB\*ICH\*α, and Yellow J+LAB\*ICH\*α+β.

Figure 1 shows a 3D visualization of the color space defined by relative chroma (x-axis, 0.00 to 1.0), relative luminance (y-axis, 0.00 to 1.0), and brilliance (z-axis, 0.00 to 1.0). The space is filled with a grid of colored blocks, each labeled with a color name and its corresponding RGB values. The blocks are arranged in a way that shows the relationship between these three attributes. The x-axis is labeled 'relative chroma' and the y-axis is labeled 'relative luminance'. The z-axis is labeled 'brilliance'.

Figure 1 consists of 10 color charts (a-j) arranged in a grid. Each chart shows a series of color patches arranged in a grid, with the x-axis representing relative chroma ( $C^*$ ) and the y-axis representing relative brightness ( $Y$ ). The charts are labeled as follows:

- (a)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (b)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (c)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (d)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (e)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (f)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (g)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (h)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (i)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.
- (j)**  $C^*$  and  $Y$  axes, with a color bar on the right showing values from 0.0 to 1.0.

The charts show that as relative chroma ( $C^*$ ) increases, the relative brightness ( $Y$ ) also increases, leading to a shift in color appearance towards higher brightness and saturation. The charts are labeled with  $C^*$  and  $Y$  values, and some charts include specific color names and numerical values.

Figure 1 shows a 3D visualization of the color space defined by the three parameters: hue, saturation, and brightness. The vertical axis represents brightness (0.00 to 1.00), the horizontal axis represents relative chroma (0.00 to 0.75), and the depth axis represents hue (0.00 to 1.00). The color space is a complex, multi-faceted shape with various colored regions and labels. The top surface is a light blue/white plane. The side surfaces are colored in shades of blue, green, yellow, orange, and red. The bottom surface is a dark blue/black plane. The axes are labeled with numerical values and arrows. The top surface is labeled with 'r00', 'r01', and 'r02'. The side surfaces are labeled with 'r74', 'r75', and 'r76'. The bottom surface is labeled with 'r00', 'r01', and 'r02'. The axes are labeled with 'hue', 'saturation', and 'brightness'.

Figure 1 is a 3D bar chart illustrating the relationship between relative chroma ( $c^*$ ) and various colorimetric parameters for 100 color samples. The x-axis represents relative chroma ( $c^*$ ) from 0.00 to 1.00. The y-axis represents  $lab^*$  ( $a^*$ ) from 0.00 to 100.00. The z-axis represents  $lab^*$  ( $b^*$ ) from 0.00 to 100.00. The bars are labeled with values for %Gamut,  $u^*$ ,  $v^*$ , %Regularity, and  $s^*$ . Correlation coefficients ( $r$ ) are shown for various parameters:  $r=0.60$  for %Gamut,  $r=0.80$  for  $u^*$ ,  $r=0.40$  for  $v^*$ ,  $r=0.20$  for %Regularity, and  $r=0.60$  for  $s^*$ . A legend indicates that the color of the bars corresponds to the value of the parameter being measured.

Figure 1 shows a 3D visualization of the color space defined by relative chroma (x-axis, 0.00 to 1.00), relative hue (y-axis, 0.00 to 1.00), and brightness (z-axis, 0.00 to 1.00). The space is filled with a grid of colored blocks, each labeled with a color name and its corresponding L\*a\*b\* values. The blocks are arranged in a way that shows the relationship between these three attributes. The top of the plot is labeled 'brightness' and the bottom right is labeled 'relative chroma'.

Figure 1 is a 3D scatter plot showing the relationship between relative chroma ( $c^*$ ), brightness ( $b^*$ ), and gamut volume ( $V$ ). The plot is a 3D bar chart with axes for  $c^*$  (0.00 to 1.00),  $b^*$  (0.00 to 1.00), and  $V$  (0.00 to 1.00). The bars are labeled with values for %Gamut,  $u^*$ , %Regularity, and  $g^*$ . The plot shows a strong positive correlation between  $c^*$  and  $b^*$ , and a weaker correlation between  $c^*$  and  $V$ . The bars are colored in a gradient from light yellow to dark brown.

[illegible]

Figure 1 is a 3D visualization of the color space defined by relative chroma (x-axis, 0.00 to 1.00) and relative hue (y-axis, 0.00 to 1.00). The vertical axis represents relative luminance, ranging from 0.00 to 1.00. The plot shows a series of nested, colored surfaces representing different levels of color saturation and brightness. The surfaces are labeled with 'r00j' and 'r00i' values, indicating the relative luminance and hue components. The surfaces are colored in a gradient from dark blue/black at the bottom to light green/yellow at the top. The plot is divided into regions by dashed lines, and the axes are labeled 'relative chroma' and 'relative hue'. A legend on the right lists the 'r00j' and 'r00i' values for various color patches, including 'r00j' and 'r00i' values for 'r00j' and 'r00i'.

[illegible]

| LAB <sup>a</sup> cmy <sup>b</sup> n <sup>c</sup> |        |       |          |            |
|--------------------------------------------------|--------|-------|----------|------------|
| $u^*_e = r25j$                                   |        |       |          |            |
| Adapted (a) CIE LAB data <sup>a</sup>            |        |       |          |            |
| $L^*$                                            | $a^*$  | $b^*$ | $C_{ab}$ | $h^*_{ab}$ |
| 5.95                                             | 27.14  | 63.08 | 25       | $m81$      |
| 8.13                                             | 44.53  | 66.31 | 42       | $o101o$    |
| 9.24                                             | 58.41  | 68.22 | 59       | $o40y$     |
| 9.13                                             | 74.52  | 76.94 | 76       | $o69y$     |
| 9.94                                             | 97.58  | 97.66 | 92       | $o98y$     |
| 26.89                                            | 74.73  | 79.42 | 110      | $y34l$     |
| 43.48                                            | 57.15  | 71.81 | 127      | $y69l$     |
| 54.15                                            | 38.27  | 66.31 | 145      | $103c$     |
| 44.06                                            | 14.13  | 46.27 | 162      | $123c$     |
| 35.64                                            | -6.03  | 36.15 | 190      | $155c$     |
| 29.03                                            | -21.86 | 36.34 | 217      | $187c$     |
| 15.48                                            | -32.25 | 35.77 | 244      | $c20v$     |
| 15                                               | -37.68 | 37.9  | 272      | $c53v$     |
| 1.14                                             | -46.69 | 54.01 | 300      | $c87v$     |

