

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

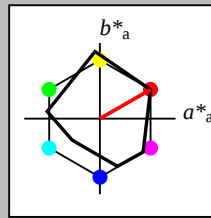
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 95.41 -0.97 4.75
 LAB*LAB 95.41 0.0 0.0
 LAB*TCMa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 1.0 0.0 0.0
 lab*tce 1.0 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LAB 76.06 0.0 0.0
 LAB*TCMa 75.00 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.75 0.0 0.0
 lab*tce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 56.71 -0.23 2.14
 LAB*LAB 56.71 0.0 0.0
 LAB*TCMa 50.00 0.01 -

relative CIELAB lab*
 lab*lab 0.5 0.0 0.0
 lab*tch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.5 0.0 0.0
 lab*tce 0.5 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 37.36 0.3 0.83
 LAB*LAB 37.36 0.0 0.0
 LAB*TCMa 25.00 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.0 0.0
 lab*tch 0.25 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.25 0.0 0.0
 lab*tce 0.25 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 18.02 0.5 0.46
 LAB*LAB 18.02 0.0 0.0
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
 olv3* 1.0 0.5 0.5 (1.0)
 cmy3* 0.0 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 72.52 32.93 22.4
 LAB*LAB 72.52 33.47 19.18
 LAB*TCMa 75.0 38.58 29.82

relative CIELAB lab*
 lab*lab 0.704 0.434 0.249
 lab*tch 0.75 0.5 0.083
 lab*nch 0.0 0.5 0.083
 relative Natural Colour (NC)
 lab*trj 0.704 0.496 0.06
 lab*tce 0.75 0.5 0.019
 lab*nce 0.0 0.5 0.071

relative Inform. Technology (IT)
 olv3* 0.75 0.25 0.25 (1.0)
 cmy3* 0.25 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (0.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 61.07 49.89 31.22
 LAB*LAB 61.07 50.21 28.78
 LAB*TCMa 62.5 57.87 29.82

relative CIELAB lab*
 lab*lab 0.556 0.651 0.373
 lab*tch 0.625 0.75 0.083
 lab*nch 0.0 0.75 0.083
 relative Natural Colour (NC)
 lab*trj 0.556 0.745 0.09
 lab*tce 0.625 0.75 0.019
 lab*nce 0.0 0.75 0.071

relative Inform. Technology (IT)
 olv3* 0.5 0.0 1.0 (0.0)
 cmy3* 0.5 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (0.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 41.73 50.26 29.91
 LAB*LAB 41.73 50.21 28.78
 LAB*TCMa 37.51 57.87 29.82

relative CIELAB lab*
 lab*lab 0.306 0.651 0.373
 lab*tch 0.375 0.75 0.083
 lab*nch 0.0 0.75 0.083
 relative Natural Colour (NC)
 lab*trj 0.306 0.745 0.09
 lab*tce 0.375 0.75 0.019
 lab*nce 0.0 0.75 0.071

relative Inform. Technology (IT)
 olv3* 0.25 0.0 1.0 (0.0)
 cmy3* 0.25 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (0.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 33.82 33.47 19.18
 LAB*LAB 33.82 33.47 19.18
 LAB*TCMa 25.01 38.58 29.82

relative CIELAB lab*
 lab*lab 0.204 0.434 0.249
 lab*tch 0.25 0.5 0.083
 lab*nch 0.0 0.5 0.083
 relative Natural Colour (NC)
 lab*trj 0.204 0.496 0.06
 lab*tce 0.25 0.5 0.019
 lab*nce 0.0 0.5 0.071

$n^* = 0.50$

relative Inform. Technology (IT)
 olv3* 0.25 0.0 1.0 (0.0)
 cmy3* 0.25 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (0.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 33.82 33.47 19.18
 LAB*LAB 33.82 33.47 19.18
 LAB*TCMa 25.01 38.58 29.82

relative CIELAB lab*
 lab*lab 0.204 0.434 0.249
 lab*tch 0.25 0.5 0.083
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 relative Natural Colour (NC)
 lab*trj 0.204 0.496 0.06
 lab*tce 0.25 0.5 0.019
 lab*nce 0.0 0.5 0.071

relative Inform. Technology (IT)
 olv3* 0.25 0.0 1.0 (0.0)
 cmy3* 0.25 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (0.0)
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 standard and adapted CIELAB
 LAB*LAB 33.82 33.47 19.18
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 lab*tch 0.25 0.5 0.083
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 olv3* 0.25 0.0 1.0 (0.0)
 cmy3* 0.25 0.75 0.75 (0.0)
 olv4* 1.0 0.5 0.5 (0.0)
 cmy4* 0.0 0.5 0.5 (0.0)
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 lab*tch 0.25 0.5 0.083
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 relative Natural Colour (NC)
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 lab*tce 0.25 0.5 0.019
 lab*nce 0.0 0.5 0.071

$n^* = 0.25$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

blackness n^*

chromaticness c^*

$n^* = 1.0$

$n^* = 0.75$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.00$

Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 30/360 = 0.083$

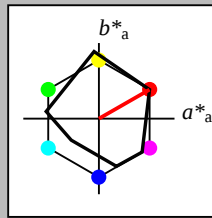
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 50 77 30

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

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 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
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 standard and adapted CIELAB
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 LAB*LAB 95.41 0.0 0.0
 LAB*TCMa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*tch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 1.0 0.0 0.0
 lab*tce 1.0 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LAB 76.06 0.0 0.0
 LAB*TCMa 75.00 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*tch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.75 0.0 0.0
 lab*tce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
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 LAB*LAB 56.71 0.0 0.0
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 lab*lab 0.5 0.0 0.0
 lab*tch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.5 0.0 0.0
 lab*tce 0.5 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 37.36 0.3 0.83
 LAB*LAB 37.36 0.0 0.0
 LAB*TCMa 25.00 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.0 0.0
 lab*tch 0.25 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.25 0.0 0.0
 lab*tce 0.25 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 18.02 0.5 0.46
 LAB*LAB 18.02 0.0 0.0
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relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*tch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0
 lab*tce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 1.0$

$n^* = 0.75$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.00$

blackness n^*

chromaticness c^*

$n^* = 1.0$

$n^* = 0.75$

$n^* = 0.50$

$n^* = 0.25$

$n^* = 0.00$

MRS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
 olv3* 1.0 0.5 0.5 (1.0)
 cmy3* 0.0 0.5 0.5 (0.0)
 olv4* 1.0 0.5 0.5 (1.0)
 cmy4* 0.0 0.5 0.5 (0.0)
 standard and adapted CIELAB
 LAB*LAB 72.52 32.93 22.4
 LAB*LAB 72.52 33.47 19.18
 LAB*TCMa 75.0 38.58 29.82

relative CIELAB lab*
 lab*lab 0.704 0.434 0.249
 lab*tch 0.75 0.5 0.083
 lab*nch 0.0 0.5 0.083
 relative Natural Colour (

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 172/360 = 0.479$

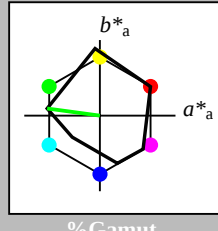
lab^*ch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmyn3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmyn4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 95.41 -0.97 4.75
 LAB*LABa 95.41 0.0 0.0
 LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*ch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 1.0 0.0 0.0
 lab*lce 1.0 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmyn3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmyn4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.00 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*ch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 0.75 0.0 0.0
 lab*lce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmyn4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 56.71 -0.23 2.14
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relative CIELAB lab*
 lab*lab 0.5 0.0 0.0
 lab*ch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
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 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 0.25
 cmyn4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
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 LAB*LABa 37.36 0.0 0.0
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 standard and adapted CIELAB
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relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*ch 0.0 0.0 0.0
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 relative Natural Colour (NC)
 lab*lrj 0.0 0.0 0.0
 lab*lce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

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%Regularity

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relative Inform. Technology (IT)
 olv3* 0.5 1.0 0.5 (1.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 0.5 1.0 0.5 0.5
 cmyn4* 0.5 0.5 0.5 0.5
 standard and adapted CIELAB
 LAB*LAB 73.75 -35.42 8.02
 LAB*LABa 73.75 -34.85 4.72
 LAB*TCHa 75.00 35.18 172.29

relative CIELAB lab*
 lab*lab 0.72 -0.494 0.067
 lab*ch 0.75 0.5 0.479
 lab*nch 0.0 0.5 0.479
 relative Natural Colour (NC)
 lab*lrj 0.72 -0.496 -0.056
 lab*lce 0.75 0.5 0.518
 lab*nce 0.0 0.5 0.676

relative Inform. Technology (IT)
 olv3* 0.25 0.75 0.25 (1.0)
 cmyn3* 0.75 0.25 0.75 (0.0)
 olv4* 0.5 1.0 0.5 0.75
 cmyn4* 0.5 0.0 0.5 0.25
 standard and adapted CIELAB
 LAB*LAB 54.41 -35.05 6.71
 LAB*LABa 54.41 -34.86 4.72
 LAB*TCHa 50.00 35.19 172.29

relative CIELAB lab*
 lab*lab 0.58 -0.742 0.101
 lab*ch 0.625 0.75 0.479
 lab*nch 0.0 0.75 0.479
 relative Natural Colour (NC)
 lab*lrj 0.58 -0.744 -0.085
 lab*lce 0.625 0.75 0.518
 lab*nce 0.0 0.75 0.676

relative Inform. Technology (IT)
 olv3* 0.0 0.75 0.0 (1.0)
 cmyn3* 0.75 0.0 0.75 (0.0)
 olv4* 0.25 1.0 0.25 0.75
 cmyn4* 0.5 0.0 0.5 0.25
 standard and adapted CIELAB
 LAB*LAB 45.88 -17.46 3.78
 LAB*LABa 45.88 -17.42 2.36
 LAB*TCHa 37.5 17.59 172.29

relative CIELAB lab*
 lab*lab 0.33 -0.742 0.101
 lab*ch 0.375 0.75 0.479
 lab*nch 0.0 0.75 0.479
 relative Natural Colour (NC)
 lab*lrj 0.33 -0.744 -0.085
 lab*lce 0.375 0.75 0.518
 lab*nce 0.0 0.75 0.676

relative Inform. Technology (IT)
 olv3* 0.0 0.5 0.0 (1.0)
 cmyn3* 0.5 0.0 0.5 (0.0)
 olv4* 0.25 1.0 0.25 0.5
 cmyn4* 0.5 0.0 0.5 0.25
 standard and adapted CIELAB
 LAB*LAB 35.06 -34.67 5.41
 LAB*LABa 35.06 -34.85 4.72
 LAB*TCHa 25.01 35.18 172.29

relative CIELAB lab*
 lab*lab 0.22 -0.494 0.067
 lab*ch 0.25 0.5 0.479
 lab*nch 0.0 0.5 0.479
 relative Natural Colour (NC)
 lab*lrj 0.22 -0.496 -0.056
 lab*lce 0.25 0.5 0.518
 lab*nce 0.0 0.5 0.676

$n^* = 0.50$

Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 172/360 = 0.479$

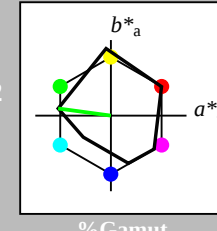
lab^*ch and lab^*nch

D65: hue G

LCH*Ma: 52 70 172

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmyn3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 1.0
 cmyn4* 0.0 0.0 0.0 0.0
 standard and adapted CIELAB
 LAB*LAB 95.41 -0.97 4.75
 LAB*LABa 95.41 0.0 0.0
 LAB*TCHa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*ch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 1.0 0.0 0.0
 lab*lce 1.0 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmyn3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 0.75
 cmyn4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 76.06 -0.6 3.44
 LAB*LABa 76.06 0.0 0.0
 LAB*TCHa 75.00 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*ch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 0.75 0.0 0.0
 lab*lce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmyn4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 56.71 -0.23 2.14
 LAB*LABa 56.71 0.0 0.0
 LAB*TCHa 50.00 0.01 -

relative CIELAB lab*
 lab*lab 0.5 0.0 0.0
 lab*ch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 0.5 0.0 0.0
 lab*lce 0.5 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmyn3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 0.25
 cmyn4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 37.36 0.3 0.83
 LAB*LABa 37.36 0.0 0.0
 LAB*TCHa 25.00 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.0 0.0
 lab*ch 0.25 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 0.25 0.0 0.0
 lab*lce 0.25 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmyn3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 0.0
 cmyn4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 18.02 0.0 0.46
 LAB*LABa 18.02 0.0 0.0
 LAB*TCHa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*ch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*lrj 0.0 0.0 0.0
 lab*lce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmyn3* 0.5 0.5 0.5 (0.0)
 olv4* 0.5 1.0 0.5 0.5
 cmyn4* 0.5 0.5 0.5 0.5
 standard and adapted CIELAB
 LAB*LAB 73.75 -35.42 8.02
 LAB*LABa 73.75 -34.85 4.72
 LAB*TCHa 75.00 35.18 172.29

relative CIELAB lab*
 lab*lab 0.72 -0.494 0.067
 lab*ch 0.75 0.5 0.479
 lab*nch 0.0 0.5 0.479
 relative Natural Colour (NC)
 lab*lrj 0.72 -0.496 -0.056
 lab*lce 0.75 0.5 0.518
 lab*nce 0.0 0.5 0.676

relative Inform. Technology (IT)
 olv3* 0.25 0.75 0.25 (1.0)
 cmyn3* 0.75 0.25 0.75 (0.0)
 olv4* 0.5 1.0 0.5 0.75
 cmyn4* 0.5 0.0 0.5 0.25
 standard and adapted CIELAB
 LAB*LAB 54.41 -35.05 6.71
 LAB*LABa 54.41 -34.86 4.72
 LAB*TCHa 50.00 35.19 172.29

relative CIELAB lab*
 lab*lab 0.58 -0.742 0.101
 lab*ch 0.625 0.75 0.479
 lab*nch 0.0 0.75 0.479
 relative Natural Colour (NC)
 lab*lrj 0.58 -0.744 -0.085
 lab*lce 0.625 0.75 0.518
 lab*nce 0.0 0.75 0.676

relative Inform. Technology (IT)
 olv3* 0.0 0.75 0.0 (1.0)
 cmyn3* 0.75 0.0 0.75 (0.0)
 olv4* 0.25 1.0 0.25 0.75
 cmyn4* 0.5 0.0 0.5 0.25
 standard and adapted CIELAB
 LAB*LAB 45.88 -17.46 3.78
 LAB*LABa 45.88 -17.42 2.36
 LAB*TCHa 37.5 17.59 172.29

relative CIELAB lab*
 lab*lab 0.33 -0.742 0.101
 lab*ch 0.375 0.75 0.479
 lab*nch 0.0 0.75 0.479
 relative Natural Colour (NC)
 lab*lrj 0.33 -0.744 -0.085
 lab*lce 0.375 0.75 0.518
 lab*nce 0.0 0.75 0.676

relative Inform. Technology (IT)
 olv3* 0.0 0.5 0.0 (1.0)
 cmyn3* 0.5 0.0 0.5 (0.0)
 olv4* 0.25 1.0 0.25 0.5
 cmyn4* 0.5 0.0 0.5 0.25
 standard and adapted CIELAB
 LAB*LAB 35.06 -34.67 5.41
 LAB*LABa 35.06 -34.85 4.72
 LAB*TCHa 25.01 35.18 172.29

relative CIELAB lab*
 lab*lab 0.22 -0.494 0.067
 lab*ch 0.25 0.5 0.479
 lab*nch 0.0 0.5 0.479
 relative Natural Colour (NC)
 lab*lrj 0.22 -0.496 -0.056
 lab*lce 0.25 0.5 0.518
 lab*nce 0.0 0.5 0.676

$n^* = 0.50$

UE540-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

BAM-test chart UE54; Colorimetric systems MRS18 & MRS18

input: `cmv0* setcmvcolor`

D65: 2 coordinate data of 5 step colour scales for 10 hues

output: `olv2* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 218/360 = 0.605$

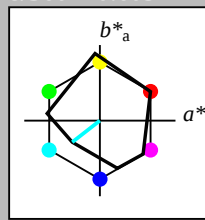
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 45 46 218

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)	
olvi3*	1.0 1.0 1.0 (1.0)
olvi4*	0.0 0.0 0.0 (0.0)
olvi5*	0.0 0.0 0.0 (0.0)
olvi6*	0.0 0.0 0.0 (0.0)
olvi7*	0.0 0.0 0.0 (0.0)
olvi8*	0.0 0.0 0.0 (0.0)
olvi9*	0.0 0.0 0.0 (0.0)
olvi10*	0.0 0.0 0.0 (0.0)
olvi11*	0.0 0.0 0.0 (0.0)
olvi12*	0.0 0.0 0.0 (0.0)
olvi13*	0.0 0.0 0.0 (0.0)
olvi14*	0.0 0.0 0.0 (0.0)
olvi15*	0.0 0.0 0.0 (0.0)
olvi16*	0.0 0.0 0.0 (0.0)
olvi17*	0.0 0.0 0.0 (0.0)
olvi18*	0.0 0.0 0.0 (0.0)
olvi19*	0.0 0.0 0.0 (0.0)
olvi20*	0.0 0.0 0.0 (0.0)
olvi21*	0.0 0.0 0.0 (0.0)
olvi22*	0.0 0.0 0.0 (0.0)
olvi23*	0.0 0.0 0.0 (0.0)
olvi24*	0.0 0.0 0.0 (0.0)
olvi25*	0.0 0.0 0.0 (0.0)
olvi26*	0.0 0.0 0.0 (0.0)
olvi27*	0.0 0.0 0.0 (0.0)
olvi28*	0.0 0.0 0.0 (0.0)
olvi29*	0.0 0.0 0.0 (0.0)
olvi30*	0.0 0.0 0.0 (0.0)
olvi31*	0.0 0.0 0.0 (0.0)
olvi32*	0.0 0.0 0.0 (0.0)
olvi33*	0.0 0.0 0.0 (0.0)
olvi34*	0.0 0.0 0.0 (0.0)
olvi35*	0.0 0.0 0.0 (0.0)
olvi36*	0.0 0.0 0.0 (0.0)
olvi37*	0.0 0.0 0.0 (0.0)
olvi38*	0.0 0.0 0.0 (0.0)
olvi39*	0.0 0.0 0.0 (0.0)
olvi40*	0.0 0.0 0.0 (0.0)
olvi41*	0.0 0.0 0.0 (0.0)
olvi42*	0.0 0.0 0.0 (0.0)
olvi43*	0.0 0.0 0.0 (0.0)
olvi44*	0.0 0.0 0.0 (0.0)
olvi45*	0.0 0.0 0.0 (0.0)
olvi46*	0.0 0.0 0.0 (0.0)
olvi47*	0.0 0.0 0.0 (0.0)
olvi48*	0.0 0.0 0.0 (0.0)
olvi49*	0.0 0.0 0.0 (0.0)
olvi50*	0.0 0.0 0.0 (0.0)
olvi51*	0.0 0.0 0.0 (0.0)
olvi52*	0.0 0.0 0.0 (0.0)
olvi53*	0.0 0.0 0.0 (0.0)
olvi54*	0.0 0.0 0.0 (0.0)
olvi55*	0.0 0.0 0.0 (0.0)
olvi56*	0.0 0.0 0.0 (0.0)
olvi57*	0.0 0.0 0.0 (0.0)
olvi58*	0.0 0.0 0.0 (0.0)
olvi59*	0.0 0.0 0.0 (0.0)
olvi60*	0.0 0.0 0.0 (0.0)
olvi61*	0.0 0.0 0.0 (0.0)
olvi62*	0.0 0.0 0.0 (0.0)
olvi63*	0.0 0.0 0.0 (0.0)
olvi64*	0.0 0.0 0.0 (0.0)
olvi65*	0.0 0.0 0.0 (0.0)
olvi66*	0.0 0.0 0.0 (0.0)
olvi67*	0.0 0.0 0.0 (0.0)
olvi68*	0.0 0.0 0.0 (0.0)
olvi69*	0.0 0.0 0.0 (0.0)
olvi70*	0.0 0.0 0.0 (0.0)
olvi71*	0.0 0.0 0.0 (0.0)
olvi72*	0.0 0.0 0.0 (0.0)
olvi73*	0.0 0.0 0.0 (0.0)
olvi74*	0.0 0.0 0.0 (0.0)
olvi75*	0.0 0.0 0.0 (0.0)
olvi76*	0.0 0.0 0.0 (0.0)
olvi77*	0.0 0.0 0.0 (0.0)
olvi78*	0.0 0.0 0.0 (0.0)
olvi79*	0.0 0.0 0.0 (0.0)
olvi80*	0.0 0.0 0.0 (0.0)
olvi81*	0.0 0.0 0.0 (0.0)
olvi82*	0.0 0.0 0.0 (0.0)
olvi83*	0.0 0.0 0.0 (0.0)
olvi84*	0.0 0.0 0.0 (0.0)
olvi85*	0.0 0.0 0.0 (0.0)
olvi86*	0.0 0.0 0.0 (0.0)
olvi87*	0.0 0.0 0.0 (0.0)
olvi88*	0.0 0.0 0.0 (0.0)
olvi89*	0.0 0.0 0.0 (0.0)
olvi90*	0.0 0.0 0.0 (0.0)
olvi91*	0.0 0.0 0.0 (0.0)
olvi92*	0.0 0.0 0.0 (0.0)
olvi93*	0.0 0.0 0.0 (0.0)
olvi94*	0.0 0.0 0.0 (0.0)
olvi95*	0.0 0.0 0.0 (0.0)
olvi96*	0.0 0.0 0.0 (0.0)
olvi97*	0.0 0.0 0.0 (0.0)
olvi98*	0.0 0.0 0.0 (0.0)
olvi99*	0.0 0.0 0.0 (0.0)
olvi100*	0.0 0.0 0.0 (0.0)

relative Inform. Technology (IT)	
olvi3*	0.75 0.75 0.75 (1.0)
olvi4*	0.25 0.25 0.25 (0.0)
olvi5*	0.5 0.5 0.5 (0.5)
olvi6*	0.25 0.25 0.25 (0.0)
olvi7*	0.5 0.5 0.5 (0.5)
olvi8*	0.25 0.25 0.25 (0.0)
olvi9*	0.5 0.5 0.5 (0.5)
olvi10*	0.25 0.25 0.25 (0.0)
olvi11*	0.5 0.5 0.5 (0.5)
olvi12*	0.25 0.25 0.25 (0.0)
olvi13*	0.5 0.5 0.5 (0.5)
olvi14*	0.25 0.25 0.25 (0.0)
olvi15*	0.5 0.5 0.5 (0.5)
olvi16*	0.25 0.25 0.25 (0.0)
olvi17*	0.5 0.5 0.5 (0.5)
olvi18*	0.25 0.25 0.25 (0.0)
olvi19*	0.5 0.5 0.5 (0.5)
olvi20*	0.25 0.25 0.25 (0.0)
olvi21*	0.5 0.5 0.5 (0.5)
olvi22*	0.25 0.25 0.25 (0.0)
olvi23*	0.5 0.5 0.5 (0.5)
olvi24*	0.25 0.25 0.25 (0.0)
olvi25*	0.5 0.5 0.5 (0.5)
olvi26*	0.25 0.25 0.25 (0.0)
olvi27*	0.5 0.5 0.5 (0.5)
olvi28*	0.25 0.25 0.25 (0.0)
olvi29*	0.5 0.5 0.5 (0.5)
olvi30*	0.25 0.25 0.25 (0.0)
olvi31*	0.5 0.5 0.5 (0.5)
olvi32*	0.25 0.25 0.25 (0.0)
olvi33*	0.5 0.5 0.5 (0.5)
olvi34*	0.25 0.25 0.25 (0.0)
olvi35*	0.5 0.5 0.5 (0.5)
olvi36*	0.25 0.25 0.25 (0.0)
olvi37*	0.5 0.5 0.5 (0.5)
olvi38*	0.25 0.25 0.25 (0.0)
olvi39*	0.5 0.5 0.5 (0.5)
olvi40*	0.25 0.25 0.25 (0.0)
olvi41*	0.5 0.5 0.5 (0.5)
olvi42*	0.25 0.25 0.25 (0.0)
olvi43*	0.5 0.5 0.5 (0.5)
olvi44*	0.25 0.25 0.25 (0.0)
olvi45*	0.5 0.5 0.5 (0.5)
olvi46*	0.25 0.25 0.25 (0.0)
olvi47*	0.5 0.5 0.5 (0.5)
olvi48*	0.25 0.25 0.25 (0.0)
olvi49*	0.5 0.5 0.5 (0.5)
olvi50*	0.25 0.25 0.25 (0.0)
olvi51*	0.5 0.5 0.5 (0.5)
olvi52*	0.25 0.25 0.25 (0.0)
olvi53*	0.5 0.5 0.5 (0.5)
olvi54*	0.25 0.25 0.25 (0.0)
olvi55*	0.5 0.5 0.5 (0.5)
olvi56*	0.25 0.25 0.25 (0.0)
olvi57*	0.5 0.5 0.5 (0.5)
olvi58*	0.25 0.25 0.25 (0.0)
olvi59*	0.5 0.5 0.5 (0.5)
olvi60*	0.25 0.25 0.25 (0.0)
olvi61*	0.5 0.5 0.5 (0.5)
olvi62*	0.25 0.25 0.25 (0.0)
olvi63*	0.5 0.5 0.5 (0.5)
olvi64*	0.25 0.25 0.25 (0.0)
olvi65*	0.5 0.5 0.5 (0.5)
olvi66*	0.25 0.25 0.25 (0.0)
olvi67*	0.5 0.5 0.5 (0.5)
olvi68*	0.25 0.25 0.25 (0.0)
olvi69*	0.5 0.5 0.5 (0.5)
olvi70*	0.25 0.25 0.25 (0.0)
olvi71*	0.5 0.5 0.5 (0.5)
olvi72*	0.25 0.25 0.25 (0.0)
olvi73*	0.5 0.5 0.5 (0.5)
olvi74*	0.25 0.25 0.25 (0.0)
olvi75*	0.5 0.5 0.5 (0.5)
olvi76*	0.25 0.25 0.25 (0.0)
olvi77*	0.5 0.5 0.5 (0.5)
olvi78*	0.25 0.25 0.25 (0.0)
olvi79*	0.5 0.5 0.5 (0.5)
olvi80*	0.25 0.25 0.25 (0.0)
olvi81*	0.5 0.5 0.5 (0.5)
olvi82*	0.25 0.25 0.25 (0.0)
olvi83*	0.5 0.5 0.5 (0.5)
olvi84*	0.25 0.25 0.25 (0.0)
olvi85*	0.5 0.5 0.5 (0.5)
olvi86*	0.25 0.25 0.25 (0.0)
olvi87*	0.5 0.5 0.5 (0.5)
olvi88*	0.25 0.25 0.25 (0.0)
olvi89*	0.5 0.5 0.5 (0.5)
olvi90*	0.25 0.25 0.25 (0.0)
olvi91*	0.5 0.5 0.5 (0.5)
olvi92*	0.25 0.25 0.25 (0.0)
olvi93*	0.5 0.5 0.5 (0.5)
olvi94*	0.25 0.25 0.25 (0.0)
olvi95*	0.5 0.5 0.5 (0.5)
olvi96*	0.25 0.25 0.25 (0.0)
olvi97*	0.5 0.5 0.5 (0.5)
olvi98*	0.25 0.25 0.25 (0.0)
olvi99*	0.5 0.5 0.5 (0.5)
olvi100*	0.25 0.25 0.25 (0.0)

relative Inform. Technology (IT)	
olvi3*	0.75 0.75 0.75 (1.0)
olvi4*	0.25 0.25 0.25 (0.0)
olvi5*	0.5 0.5 0.5 (0.5)
olvi6*	0.25 0.25 0.25 (0.0)
olvi7*	0.5 0.5 0.5 (0.5)
olvi8*	0.25 0.25 0.25 (0.0)
olvi9*	0.5 0.5 0.5 (0.5)
olvi10*	0.25 0.25 0.25 (0.0)
olvi11*	0.5 0.5 0.5 (0.5)
olvi12*	0.25 0.25 0.25 (0.0)
olvi13*	0.5 0.5 0.5 (0.5)
olvi14*	0.25 0.25 0.25 (0.0)
olvi15*	0.5 0.5 0.5 (0.5)
olvi16*	0.25 0.25 0.25 (0.0)
olvi17*	0.5 0.5 0.5 (0.5)
olvi18*	0.25 0.25 0.25 (0.0)
olvi19*	0.5 0.5 0.5 (0.5)
olvi20*	0.25 0.25 0.25 (0.0)
olvi21*	0.5 0.5 0.5 (0.5)
olvi22*	0.25 0.25 0.25 (0.0)
olvi23*	0.5 0.5 0.5 (0.5)
olvi24*	0.25 0.25 0.25 (0.0)
olvi25*	0.5 0.5 0.5 (0.5)
olvi26*	0.25 0.25 0.25 (0.0)
olvi27*	0.5 0.5 0.5 (0.5)
olvi28*	0.25 0.25 0.25 (0.0)
olvi29*	0.5 0.5 0.5 (0.5)
olvi30*	0.25 0.25 0.25 (0.0)
olvi31*	0.5 0.5 0.5 (0.5)
olvi32*	0.25 0.25 0.25 (0.0)
olvi33*	0.5 0.5 0.5 (0.5)
olvi34*	0.25 0.25 0.25 (0.0)
olvi35*	0.5 0.5 0.5 (0.5)
olvi36*	0.25 0.25 0.25 (0.0)
olvi37*	0.5 0.5 0.5 (0.5)
olvi38*	0.25 0.25 0.25 (0.0)
olvi39*	0.5 0.5 0.5 (0.5)
olvi40*	0.25 0.25 0.25 (0.0)
olvi41*	0.5 0.5 0.5 (0.5)
olvi42*	0.25 0.25 0.25 (0.0)
olvi43*	0.5 0.5 0.5 (0.5)
olvi44*	0.25 0.25 0.25 (0.0)
olvi45*	0.5 0.5 0.5 (0.5)
olvi46*	0.25 0.25 0.25 (0.0)
olvi47*	0.5 0.5 0.5 (0.5)
olvi48*	0.25 0.25 0.25 (0.0)
olvi49*	0.5 0.5 0.5 (0.5)
olvi50*	0.25 0.25 0.25 (0.0)
olvi51*	0.5 0.5 0.5 (0.5)
olvi52*	0.25 0.25 0.25 (0.0)
olvi53*	0.5 0.5 0.5 (0.5)
olvi54*	0.25 0.25 0.25 (0.0)
olvi55*	0.5 0.5 0.5 (0.5)
olvi56*	0.25 0.25 0.25 (0.0)
olvi57*	0.5 0.5 0.5 (0.5)
olvi58*	0.25 0.25 0.25 (0.0)
olvi59*	0.5 0.5 0.5 (0.5)
olvi60*	0.25 0.25 0.25 (0.0)
olvi61*	0.5 0.5 0.5 (0.5)
olvi62*	0.25 0.25 0.25 (0.0)
olvi63*	0.5 0.5 0.5 (0.5)
olvi64*	0.25 0.25 0.25 (0.0)
olvi65*	0.5 0.5 0.5 (0.5)
olvi66*	0.25 0.25 0.25 (0.0)
olvi67*	0.5 0.5 0.5 (0.5)
olvi68*	0.25 0.25 0.25 (0.0)
olvi69*	0.5 0.5 0.5 (0.5)
olvi70*	0.25 0.25 0.25 (0.0)
olvi71*	0.5 0.5 0.5 (0.5)
olvi72*	0.25 0.25 0.25 (0.0)
olvi73*	0.5 0.5 0.5 (0.5)
olvi74*	0.25 0.25 0.25 (0.0)
olvi75*	0.5 0.5 0.5 (0.5)
olvi76*	0.25 0.25 0.25 (0.0)
olvi77*	0.5 0.5 0.5 (0.5)
olvi78*	0.25 0.25 0.25 (0.0)
olvi79*	0.5 0.5 0.5 (0.5)
olvi80*	0.25 0.25 0.25 (0.0)
olvi81*	0.5 0.5 0.5 (0.5)
olvi82*	0.25 0.25 0.25 (0.0)
olvi83*	0.5 0.5 0.5 (0.5)
olvi84*	0.25 0.25 0.25 (0.0)
olvi85*	0.5 0.5 0.5 (0.5)
olvi86*	0.25 0.25 0.25 (0.0)
olvi87*	0.5 0.5 0.5 (0.5)
olvi88*	0.25 0.25 0.25 (0.0)
olvi89*	0.5 0.5 0.5 (0.5)
olvi90*	0.25 0.25 0.25 (0.0)
olvi91*	0.5 0.5 0.5 (0.5)
olvi92*	0.25 0.25 0.25 (0.0)
olvi93*	0.5 0.5 0.5 (0.5)
olvi94*	0.25 0.25 0.25 (0.0)
olvi95*	0.5 0.5 0.5 (0.5)
olvi96*	0.25 0.25 0.25 (0.0)
olvi97*	0.5 0.5 0.5 (0.5)
olvi98*	0.25 0.25 0.25 (0.0)
olvi99*	0.5 0.5 0.5 (0.5)
olvi100*	0.25 0.25 0.25 (0.0)

relative Inform. Technology (IT)	
olvi3*	0.75 0.75 0.75 (1.0)
olvi4*	0.25 0.25 0.25 (0.0)
olvi5*	0.5 0.5 0.5 (0.5)
olvi6*	0.25 0.25 0.25 (0.0)
olvi7*	0.5 0.5 0.5 (0.5)
olvi8*	0.25 0.25 0.25 (0.0)
olvi9*	0.5 0.5 0.5 (0.5)
olvi10*	0.25 0.25 0.25 (0.0)
olvi11*	0.5 0.5 0.5 (0.5)
olvi12*	0.25 0.25 0.25 (0.0)
olvi13*	0.5 0.5 0.5 (0.5)
olvi14*	0.25 0.25 0.25 (0.0)
olvi15*	0.5 0.5 0.5 (0.5)
olvi16*	0.25 0.25 0.25 (0.0)
olvi17*	0.5 0

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 290/360 = 0.806$

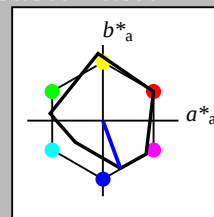
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 76.06 0.0 0.0
LAB*LABc 76.06 0.0 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 0.01 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 66.03 11.29 -31.51
LAB*LABa 66.03 11.29 -31.51
LAB*LABb 66.03 11.29 -31.51
LAB*LABc 66.03 11.29 -31.51

relative CIELAB lab*
lab*lab 0.62 0.173 -0.468
lab*tch 0.75 0.5 0.806
lab*nch 0.0 0.5 0.806
relative Natural Colour (NC)
lab*trj 0.62 0.129 -0.482
lab*tce 0.75 0.5 0.791
lab*nce 0.0 0.5 0.791

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 46.68 11.59 -30.05
LAB*LABa 46.68 11.59 -30.05
LAB*LABb 46.68 11.59 -30.05
LAB*LABc 46.68 11.59 -30.05

relative CIELAB lab*
lab*lab 0.31 0.173 -0.468
lab*tch 0.5 0.5 0.806
lab*nch 0.0 0.5 0.806
relative Natural Colour (NC)
lab*trj 0.31 0.129 -0.482
lab*tce 0.5 0.5 0.791
lab*nce 0.0 0.5 0.791

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 27.34 11.59 -31.51
LAB*LABa 27.34 11.59 -31.51
LAB*LABb 27.34 11.59 -31.51
LAB*LABc 27.34 11.59 -31.51

relative CIELAB lab*
lab*lab 0.181 0.259 -0.703
lab*tch 0.375 0.75 0.806
lab*nch 0.0 0.75 0.806
relative Natural Colour (NC)
lab*trj 0.181 0.193 -0.724
lab*tce 0.375 0.75 0.791
lab*nce 0.0 0.75 0.791

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 0.5 0.5 0.5 (1.0)
cmyn4* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 0.01 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 290/360 = 0.806$

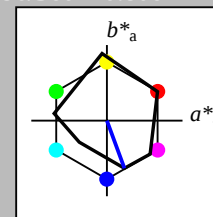
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABa 95.41 0.0 0.0
LAB*LABb 95.41 0.0 0.0
LAB*LABc 95.41 0.0 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LABa 76.06 0.0 0.0
LAB*LABb 76.06 0.0 0.0
LAB*LABc 76.06 0.0 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABa 56.71 0.0 0.0
LAB*LABb 56.71 0.0 0.0
LAB*LABc 56.71 0.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*LABb 37.36 0.0 0.0
LAB*LABc 37.36 0.0 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LABa 18.02 0.0 0.0
LAB*LABb 18.02 0.0 0.0
LAB*LABc 18.02 0.0 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 0.01 0.01
LAB*LABa 0.01 0.01
LAB*LABb 0.01 0.01
LAB*LABc 0.01 0.01

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 0.0 0.0 0.0
lab*nce 1.0 0.0 0.0

UE540-7, 5 step scales for constant CIELAB hue 290/360 = 0.806 (left)

5 step scales for constant CIELAB hue 290/360 = 0.806 (right)

BAM-test chart UE54; Colorimetric systems MRS18 & MRS18

D65: 2 coordinate data of 5 step colour scales for 10 hues

input: `cmv0* setcmymcolor`

output: `olv* setrgbcolor / w* setgray`

www.ps.bam.de/UE54/10Q/Q54E07FP.PS/.PDF; linearized output
 F: Output Linearization (OL) data UE54/10Q/Q54E07FP.DAT in File (F)

Input: Colorimetric Reflective System MRS18

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

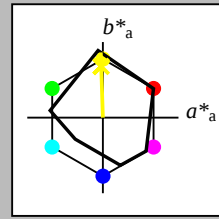
lab^*ch and lab^*nch

D65: hue J

LCH*Ma: 89 86 92

rgb*Ma: 1.0 0.95 0.0

triangle lightness t^*



relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 95.41 -0.97 4.75
 LAB*Lab 95.41 0.0 0.0
 LAB*TCa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*ch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 1.0 0.0 0.0
 lab*ce 1.0 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 76.06 -0.6 3.44
 LAB*Lab 76.06 0.0 0.0
 LAB*TCa 75.00 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*ch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.75 0.0 0.0
 lab*ce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 56.71 -0.23 2.14
 LAB*Lab 56.71 0.0 0.0
 LAB*TCa 50.00 0.01 -

relative CIELAB lab*
 lab*lab 0.5 0.0 0.0
 lab*ch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.5 0.0 0.0
 lab*ce 0.5 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 37.36 -0.3 0.83
 LAB*Lab 37.36 0.0 0.0
 LAB*TCa 25.00 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.0 0.0
 lab*ch 0.25 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.25 0.0 0.0
 lab*ce 0.25 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*ch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.0 0.0 0.0
 lab*ce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
 olv3* 1.0 0.988 0.75 (1.0)
 cmy3* 0.0 0.012 0.25 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 93.72 -1.64 26.21
 LAB*Lab 93.72 -0.69 21.57
 LAB*TCa 97.5 21.58 91.86

relative CIELAB lab*
 lab*lab 0.978 -0.007 0.25
 lab*ch 0.875 0.25 0.255
 lab*nch 0.0 0.25 0.255
 relative Natural Colour (NC)
 lab*tr 0.978 0.0 0.25
 lab*ce 0.875 0.25 0.255
 lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
 olv3* 0.75 0.738 0.5 (1.0)
 cmy3* 0.25 0.262 0.5 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 74.38 -1.26 24.91
 LAB*Lab 74.38 -0.68 21.57
 LAB*TCa 62.5 21.58 91.84

relative CIELAB lab*
 lab*lab 0.728 -0.007 0.25
 lab*ch 0.625 0.25 0.255
 lab*nch 0.0 0.25 0.255
 relative Natural Colour (NC)
 lab*tr 0.728 0.0 0.25
 lab*ce 0.625 0.25 0.255
 lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 55.03 -0.89 23.6
 LAB*Lab 55.03 -0.68 21.57
 LAB*TCa 37.5 21.58 91.84

relative CIELAB lab*
 lab*lab 0.478 -0.007 0.25
 lab*ch 0.375 0.25 0.255
 lab*nch 0.0 0.25 0.255
 relative Natural Colour (NC)
 lab*tr 0.478 0.0 0.25
 lab*ce 0.375 0.25 0.255
 lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
 olv3* 0.25 0.258 0.0 (1.0)
 cmy3* 0.75 0.762 0.0 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 33.58 -0.52 22.29
 LAB*Lab 33.58 -0.68 21.56
 LAB*TCa 12.5 21.57 91.84

relative CIELAB lab*
 lab*lab 0.228 -0.007 0.25
 lab*ch 0.125 0.25 0.255
 lab*nch 0.0 0.25 0.255
 relative Natural Colour (NC)
 lab*tr 0.228 0.0 0.25
 lab*ce 0.125 0.25 0.255
 lab*nce 0.0 0.25 0.255

$n^* = 0.50$

relative Inform. Technology (IT)
 olv3* 1.0 0.963 0.25 (1.0)
 cmy3* 0.0 0.037 0.75 (0.0)
 olv4* 1.0 0.963 0.25 (1.0)
 cmy4* 0.0 0.037 0.75 (0.0)
 standard and adapted CIELAB
 LAB*Lab 90.36 -2.96 69.13
 LAB*Lab 90.36 -2.08 64.71
 LAB*TCa 62.5 64.74 91.85

relative CIELAB lab*
 lab*lab 0.935 -0.023 0.75
 lab*ch 0.625 0.75 0.255
 lab*nch 0.0 0.75 0.255
 relative Natural Colour (NC)
 lab*tr 0.935 0.0 0.75
 lab*ce 0.625 0.75 0.255
 lab*nce 0.0 0.75 0.255

relative Inform. Technology (IT)
 olv3* 0.75 0.713 0.0 (1.0)
 cmy3* 0.25 0.274 0.75 (0.0)
 olv4* 1.0 0.963 0.25 (1.0)
 cmy4* 0.0 0.037 0.75 (0.0)
 standard and adapted CIELAB
 LAB*Lab 72.7 -1.92 46.37
 LAB*Lab 72.7 -1.38 43.14
 LAB*TCa 50.0 43.16 91.84

relative CIELAB lab*
 lab*lab 0.707 -0.015 0.5
 lab*ch 0.5 0.75 0.255
 lab*nch 0.0 0.75 0.255
 relative Natural Colour (NC)
 lab*tr 0.707 0.0 0.5
 lab*ce 0.5 0.75 0.255
 lab*nce 0.0 0.75 0.255

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 0.963 0.25 (1.0)
 cmy4* 0.0 0.037 0.75 (0.0)
 standard and adapted CIELAB
 LAB*Lab 55.03 -0.89 23.6
 LAB*Lab 55.03 -0.68 21.57
 LAB*TCa 37.5 21.58 91.84

relative CIELAB lab*
 lab*lab 0.478 -0.007 0.25
 lab*ch 0.375 0.75 0.255
 lab*nch 0.0 0.75 0.255
 relative Natural Colour (NC)
 lab*tr 0.478 0.0 0.75
 lab*ce 0.375 0.75 0.255
 lab*nce 0.0 0.75 0.255

relative Inform. Technology (IT)
 olv3* 0.25 0.258 0.0 (1.0)
 cmy3* 0.75 0.762 0.0 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 33.58 -0.52 22.29
 LAB*Lab 33.58 -0.68 21.56
 LAB*TCa 12.5 21.57 91.84

$n^* = 0.25$

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*ch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.0 0.0 0.0
 lab*ce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*ch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.0 0.0 0.0
 lab*ce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 0.00$

Output: Colorimetric Reflective System MRS18

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

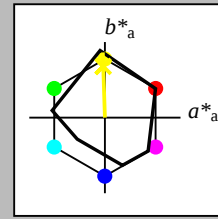
lab^*ch and lab^*nch

D65: hue J

LCH*Ma: 89 86 92

rgb*Ma: 1.0 0.95 0.0

triangle lightness t^*



relative Inform. Technology (IT)
 olv3* 1.0 1.0 1.0 (1.0)
 cmy3* 0.0 0.0 0.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 95.41 -0.97 4.75
 LAB*Lab 95.41 0.0 0.0
 LAB*TCa 99.99 0.01 0.0

relative CIELAB lab*
 lab*lab 1.0 0.0 0.0
 lab*ch 1.0 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 1.0 0.0 0.0
 lab*ce 1.0 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.75 0.75 0.75 (1.0)
 cmy3* 0.25 0.25 0.25 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 76.06 -0.6 3.44
 LAB*Lab 76.06 0.0 0.0
 LAB*TCa 75.00 0.01 -

relative CIELAB lab*
 lab*lab 0.75 0.0 0.0
 lab*ch 0.75 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.75 0.0 0.0
 lab*ce 0.75 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 56.71 -0.23 2.14
 LAB*Lab 56.71 0.0 0.0
 LAB*TCa 50.00 0.01 -

relative CIELAB lab*
 lab*lab 0.5 0.0 0.0
 lab*ch 0.5 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.5 0.0 0.0
 lab*ce 0.5 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (1.0)
 cmy3* 0.75 0.75 0.75 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 37.36 -0.3 0.83
 LAB*Lab 37.36 0.0 0.0
 LAB*TCa 25.00 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.0 0.0
 lab*ch 0.25 0.0 0.0
 lab*nch 0.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.25 0.0 0.0
 lab*ce 0.25 0.0 0.0
 lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (1.0)
 cmy3* 1.0 1.0 1.0 (0.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*Lab 18.02 0.0 0.46
 LAB*Lab 18.02 0.0 0.0
 LAB*TCa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0
 lab*ch 0.0 0.0 0.0
 lab*nch 1.0 0.0 0.0
 relative Natural Colour (NC)
 lab*tr 0.0 0.0 0.0
 lab*ce 0.0 0.0 0.0
 lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
 olv3* 1.0 0.988 0.75 (1.0)
 cmy3* 0.0 0.012 0.25 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 93.72 -1.64 26.21
 LAB*Lab 93.72 -0.69 21.57
 LAB*TCa 97.5 21.58 91.86

relative CIELAB lab*
 lab*lab 0.978 -0.007 0.25
 lab*ch 0.875 0.25 0.255
 lab*nch 0.0 0.25 0.255
 relative Natural Colour (NC)
 lab*tr 0.978 0.0 0.25
 lab*ce 0.875 0.25 0.255
 lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
 olv3* 0.75 0.738 0.5 (1.0)
 cmy3* 0.25 0.262 0.5 (0.0)
 olv4* 1.0 0.988 0.75 (1.0)
 cmy4* 0.0 0.012 0.25 (0.0)
 standard and adapted CIELAB
 LAB*Lab 74.38 -1.26 24.91
 LAB*Lab 74.38 -0.68 21.57
 LAB*TCa 62.5 21.58 91.84

relative CIELAB lab*
 lab*lab 0.728 -0.007 0.25
 lab*ch 0.625 0.25 0.255
 lab*nch 0.0 0.25 0.255
 relative Natural Colour (NC)
 lab*tr 0.728 0.0 0.25
 lab*ce 0.625 0.25 0.255
 lab*nce 0.0 0.25 0.255

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (0.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 0.988 0.75

Input: Colorimetric Reflective System MRS18

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

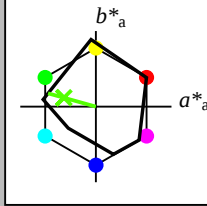
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LAB 95.41 0.0 0.0
LAB*TCBa 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCBa 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCBa 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.63
LAB*LAB 37.36 0.0 0.0
LAB*TCBa 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

$L^* = L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$

RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
olvi3* 0.301 0.75 0.25 (1.0)
cmyn3* 0.699 0.25 0.75 (0.0)
olvi4* 0.551 1.0 0.5 (0.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 66.22 -16.22 7.19
LAB*LAB 66.22 -15.8 4.4
LAB*TCBa 62.5 16.41 164.46

relative CIELAB lab*
lab*lab 0.746 -0.481 0.134
lab*tch 0.75 0.5 0.0
lab*nch 0.0 0.5 0.457
relative Natural Colour (NC)
lab*trj 0.746 -0.481 0.134
lab*tce 0.75 0.5 0.5
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olvi3* 0.077 0.75 0.0 (1.0)
cmyn3* 0.923 0.25 0.75 (0.0)
olvi4* 0.551 1.0 0.5 (0.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.39 -31.61 8.79
LAB*LAB 56.39 -31.61 8.79
LAB*TCBa 50.0 32.81 164.46

relative CIELAB lab*
lab*lab 0.619 -0.722 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.619 -0.722 0.201
lab*tce 0.625 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.031 0.5 0.0 (1.0)
cmyn3* 0.969 0.25 0.75 (0.0)
olvi4* 0.551 1.0 0.5 (0.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 46.87 -15.85 5.88
LAB*LAB 46.87 -15.8 4.4
LAB*TCBa 37.5 16.41 164.46

relative CIELAB lab*
lab*lab 0.373 -0.24 0.067
lab*tch 0.375 0.25 0.457
lab*nch 0.75 0.25 0.457
relative Natural Colour (NC)
lab*trj 0.373 -0.24 0.067
lab*tce 0.375 0.25 0.457
lab*nce 0.5 0.25 0.998

relative Inform. Technology (IT)
olvi3* 0.028 0.5 0.0 (1.0)
cmyn3* 0.974 0.75 1.0 (0.0)
olvi4* 0.75 1.0 0.5 (0.0)
cmyn4* 0.224 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 27.52 -15.8 4.39
LAB*LAB 27.52 -15.8 4.39
LAB*TCBa 12.5 16.4 164.49

relative CIELAB lab*
lab*lab 0.123 -0.24 0.067
lab*tch 0.125 0.25 0.457
lab*nch 0.75 0.25 0.457
relative Natural Colour (NC)
lab*trj 0.123 -0.24 0.067
lab*tce 0.125 0.25 0.457
lab*nce 0.75 0.25 0.908

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.327 1.0 0.5 (1.0)
cmyn3* 0.673 0.0 0.75 (0.0)
olvi4* 0.327 1.0 0.5 (1.0)
cmyn4* 0.673 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 65.9 -47.82 15.96
LAB*LAB 65.9 -47.81 15.19
LAB*TCBa 62.5 49.22 164.46

relative CIELAB lab*
lab*lab 0.619 -0.722 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.619 -0.722 0.201
lab*tce 0.625 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.103 1.0 0.0 (1.0)
cmyn3* 0.897 0.0 1.0 (0.0)
olvi4* 0.103 1.0 0.0 (1.0)
cmyn4* 0.897 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.07 -63.44 19.68
LAB*LAB 56.07 -63.21 17.38
LAB*TCBa 50.0 65.62 164.46

relative CIELAB lab*
lab*lab 0.482 -0.962 0.268
lab*tch 0.5 1.0 0.457
lab*nch 0.0 1.0 0.457
relative Natural Colour (NC)
lab*trj 0.492 -0.999 0.0
lab*tce 0.5 1.0 0.5
lab*nce 0.0 1.0 0.908

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.63
LAB*LAB 37.36 0.0 0.0
LAB*TCBa 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

Output: Colorimetric Reflective System MRS18

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

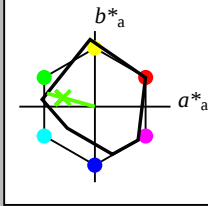
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 56 66 164

rgb*Ma: 0.1 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LAB 95.41 0.0 0.0
LAB*TCBa 99.99 0.01 0.0

relative CIELAB lab*
lab*lab 1.0 0.0 0.0
lab*tch 1.0 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 1.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.06 -0.6 3.44
LAB*LAB 76.06 0.0 0.0
LAB*TCBa 75.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*tce 0.75 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LAB 56.71 0.0 0.0
LAB*TCBa 50.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*tce 0.5 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.63
LAB*LAB 37.36 0.0 0.0
LAB*TCBa 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0
lab*tce 1.0 0.0 0.0
lab*nce 1.0 0.0 0.0

$n^* = 1.0$

MRS18; adapted (a) CIELAB data

$L^* = L^*_a$ a^*_a b^*_a $C^*_{ab,a}$ $h^*_{ab,a}$

RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)
olvi3* 0.301 0.75 0.25 (1.0)
cmyn3* 0.699 0.25 0.75 (0.0)
olvi4* 0.551 1.0 0.5 (0.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 66.22 -16.22 7.19
LAB*LAB 66.22 -15.8 4.4
LAB*TCBa 62.5 16.41 164.46

relative CIELAB lab*
lab*lab 0.746 -0.481 0.134
lab*tch 0.75 0.5 0.0
lab*nch 0.0 0.5 0.457
relative Natural Colour (NC)
lab*trj 0.746 -0.481 0.134
lab*tce 0.75 0.5 0.5
lab*nce 0.0 0.5 0.998

relative Inform. Technology (IT)
olvi3* 0.077 0.75 0.0 (1.0)
cmyn3* 0.923 0.25 0.75 (0.0)
olvi4* 0.551 1.0 0.5 (0.0)
cmyn4* 0.449 0.0 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 56.39 -31.61 8.79
LAB*LAB 56.39 -31.61 8.79
LAB*TCBa 50.0 32.81 164.46

relative CIELAB lab*
lab*lab 0.619 -0.722 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.619 -0.722 0.201
lab*tce 0.625 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.327 1.0 0.5 (1.0)
cmyn3* 0.673 0.0 0.75 (0.0)
olvi4* 0.327 1.0 0.5 (1.0)
cmyn4* 0.673 0.0 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 65.9 -47.82 15.96
LAB*LAB 65.9 -47.81 15.19
LAB*TCBa 62.5 49.22 164.46

relative CIELAB lab*
lab*lab 0.619 -0.722 0.201
lab*tch 0.625 0.75 0.457
lab*nch 0.0 0.75 0.457
relative Natural Colour (NC)
lab*trj 0.619 -0.722 0.201
lab*tce 0.625 0.75 0.5
lab*nce 0.0 0.75 0.998

relative Inform. Technology (IT)
olvi3* 0.103 1.0 0.0 (1.0)
cmyn3* 0.897 0.25 0.75 (0.0)
olvi4* 0.103 1.0 0.0 (1.0)
cmyn4* 0.897 0.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 56.07 -63.44 19.68
LAB*LAB 56.07 -63.21 17.38
LAB*TCBa 50.0 65.62 164.46

relative CIELAB lab*
lab*lab 0.482 -0.962 0.268
lab*tch 0.5 1.0 0.457
lab*nch 0.0 1.0 0.457
relative Natural Colour (NC)
lab*trj 0.492 -0.999 0.0
lab*tce 0.5 1.0 0.5
lab*nce 0.0 1.0 0.908

$n^* = 0.50$

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 37.36 0.13 0.63
LAB*LAB 37.36 0.0 0.0
LAB*TCBa 25.00 0.01 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*tce 0.25 0.0 0.0
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 18.02 0.0 0.46
LAB*LAB 18.02 0.0 0.0
LAB*TCBa 0.01 0.01 0.0

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 1.0 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.0 0.0 0.0

