

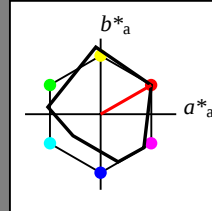
Input: Colorimetric Reflective System MRS18

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

D65: hue R

LCH*Ma: 50 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	1.0
cmyn4*	0.0	0.5	0.5	0.0

standard and adapted CIELAB

LAB*LAB	72.52	32.93	22.4
LAB*LABa	72.52	33.47	19.18
LAB*TCHa	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*lrj	0.704	0.496	0.06
lab*tce	0.75	0.5	0.019
lab*nce	0.0	0.5	0.07

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.0	(1.0)
cmyn3*	0.5	1.0	1.0	(0.0)
olvi4*	1.0	0.5	0.5	0.5
cmyn4*	0.0	0.5	0.5	0.5

standard and adapted CIELAB

LAB*LAB	33.82	33.67	19.79
LAB*LABa	33.82	33.47	19.18
LAB*TCHa	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	0.5	0.5	0.083

relative Natural Colour (NC)

lab*lrj	0.204	0.496	0.06
lab*tce	0.25	0.5	0.019
lab*nce	0.5	0.5	0.07

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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 0.00$ blackness n^* chromaticness c^* $n^* = 0.50$ $n^* = 1.0$

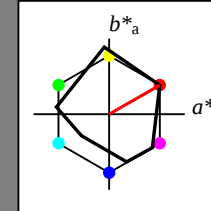
Output: Colorimetric Reflective System MRS18

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

D65: hue R

LCH*Ma: 50 77 30

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
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standard and adapted CIELAB

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LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$

3 step scales for constant CIELAB hue 30/360 = 0.083 (right)

input: olv* setrgbcolor

output: Startup (S) data dependend

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

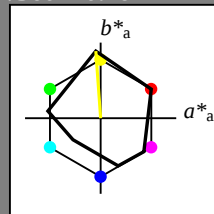
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 94/360 = 0.261$ lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.5	(1.0)
cmyn3*	0.0	0.0	0.5	(0.0)
olvi4*	1.0	1.0	0.5	1.0
cmyn4*	0.0	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB	93.05	-4.11	48.97
LAB*LABa	93.05	-3.17	44.37
LAB*TCHa	75.0	44.48	94.1

relative CIELAB lab*

lab*lab	0.969	-0.035	0.499
lab*tch	0.75	0.5	0.261
lab*nch	0.0	0.5	0.261

relative Natural Colour (NC)

lab*lrj	0.969	-0.023	0.499
lab*tce	0.75	0.5	0.258
lab*nce	0.0	0.5	j03g

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	1.0	(0.0)
olvi4*	1.0	1.0	0.5	0.5
cmyn4*	0.0	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB	54.35	-3.37	46.36
LAB*LABa	54.35	-3.17	44.37
LAB*TCHa	25.01	44.48	94.1

relative CIELAB lab*

lab*lab	0.47	-0.035	0.499
lab*tch	0.25	0.5	0.261
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relative Natural Colour (NC)

lab*lrj	0.47	-0.023	0.499
lab*tce	0.25	0.5	0.258
lab*nce	0.5	0.5	j03g

blackness n^*

chromaticness c^*

$n^* = 0.50$

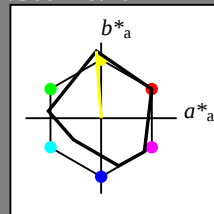
Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 94/360 = 0.261$ lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 89 94

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	0.5
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standard and adapted CIELAB

LAB*LAB	56.71	-0.23	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCHa	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
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LAB*LAB	18.02	0.5	-0.46
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lab*lab	0.0	0.0	0.0
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relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.5	(1.0)
cmyn3*	0.0	0.0	0.5	(0.0)
olvi4*	1.0	1.0	0.5	1.0
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standard and adapted CIELAB

LAB*LAB	93.05	-4.11	48.97
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lab*nce	0.0	0.5	j03g

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cmyn3*	0.5	0.5	1.0	(0.0)
olvi4*	1.0	1.0	0.5	0.5
cmyn4*	0.0	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB	54.35	-3.37	46.36
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lab*tch	0.25	0.5	0.261
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relative Natural Colour (NC)

lab*lrj	0.47	-0.023	0.499
lab*tce	0.25	0.5	0.258
lab*nce	0.5	0.5	j03g

blackness n^*

chromaticness c^*

$n^* = 0.50$

TE140-7, 3 step scales for constant CIELAB hue 94/360 = 0.261 (left)

3 step scales for constant CIELAB hue 94/360 = 0.261 (right)

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

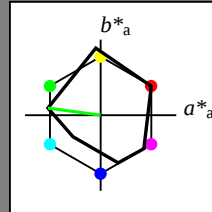
Input: Colorimetric Reflective System MRS18

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

D65: hue G

LCH*Ma: 52 70 172

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
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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
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LAB*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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 Natural Colour (NC)

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cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	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	0.5	-0.46
LAB*LABa	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	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	0.5	1.0	0.5	(1.0)
cmyn3*	0.5	0.0	0.5	(0.0)
olvi4*	0.5	1.0	0.5	1.0
cmyn4*	0.5	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB	73.75	-35.42	8.02
LAB*LABa	73.75	-34.85	4.72
LAB*TCHa	75.0	35.18	172.29

relative CIELAB lab*

lab*lab	0.72	-0.494	0.067
lab*tch	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*tce	0.75	0.5	0.518
lab*nce	0.0	0.5	g07b

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.0	(1.0)
cmyn3*	1.0	0.5	1.0	(0.0)
olvi4*	0.5	1.0	0.5	0.5
cmyn4*	0.5	0.0	0.5	0.5

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*tch	0.25	0.5	0.479
lab*nch	0.5	0.5	0.479

relative Natural Colour (NC)

lab*lrj	0.22	-0.496	-0.056
lab*tce	0.25	0.5	0.518
lab*nce	0.5	0.5	g07b

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	0.0	1.0	(0.0)
olvi4*	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	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

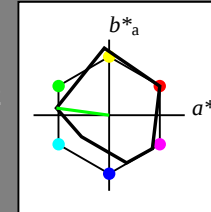
Output: Colorimetric Reflective System MRS18

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

D65: hue G

LCH*Ma: 52 70 172

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	0.0	1.0	(0.0)
olvi4*	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	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$ $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

TE140-7, 3 step scales for constant CIELAB hue 172/360 = 0.479 (left)

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

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

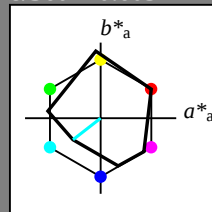
Input: Colorimetric Reflective System MRS18

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

D65: hue G50B

LCH*Ma: 45 46 218

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	0.5	1.0	1.0	(1.0)
cmyn3*	0.5	0.0	0.0	(0.0)
olvi4*	0.5	1.0	1.0	1.0
cmyn4*	0.5	0.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB	70.21	-18.77	-11.17
LAB*LABa	70.21	-18.27	-14.23
LAB*TCHa	75.0	23.17	217.91

relative CIELAB lab*

lab*lab	0.674	-0.393	-0.306
lab*tch	0.75	0.5	0.605
lab*nch	0.0	0.5	0.605

relative Natural Colour (NC)

lab*lrj	0.674	-0.353	-0.352
lab*tce	0.75	0.5	0.625
lab*nce	0.0	0.5	0.605

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.5	(1.0)
cmyn3*	1.0	0.5	0.5	(0.0)
olvi4*	0.5	1.0	1.0	0.5
cmyn4*	0.5	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	31.52	-18.03	-13.78
LAB*LABa	31.52	-18.27	-14.23
LAB*TCHa	25.01	23.17	217.91

relative CIELAB lab*

lab*lab	0.175	-0.393	-0.306
lab*tch	0.25	0.5	0.605
lab*nch	0.5	0.5	0.605

relative Natural Colour (NC)

lab*lrj	0.175	-0.353	-0.352
lab*tce	0.25	0.5	0.625
lab*nce	0.5	0.5	0.605

 $n^* = 0.50$ blackness n^* chromaticness c^*

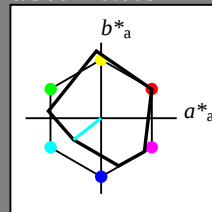
Output: Colorimetric Reflective System MRS18

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

D65: hue G50B

LCH*Ma: 45 46 218

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$ blackness n^* chromaticness c^*

3 step scales for constant CIELAB hue 218/360 = 0.605 (right)

input: olv* setrgbcolor

output: Startup (S) data dependend

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

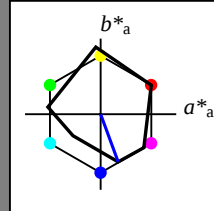
Input: Colorimetric Reflective System MRS18

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

D65: hue B

LCH*Ma: 37 67 290

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	0.5	0.5	1.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	0.5	0.5	1.0	1.0
cmyn4*	0.5	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	66.03	11.17	-28.74
LAB*LABa	66.03	11.59	-31.51
LAB*TCHa	75.0	33.59	290.19

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*lrj	0.62	0.129	-0.482
lab*tce	0.75	0.5	0.791
lab*nce	0.0	0.5	0.806

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.5	(1.0)
cmyn3*	1.0	1.0	0.5	(0.0)
olvi4*	0.5	0.5	1.0	0.5
cmyn4*	0.5	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	27.34	11.92	-31.35
LAB*LABa	27.34	11.59	-31.51
LAB*TCHa	25.01	33.59	290.19

relative CIELAB lab*

lab*lab	0.12	0.173	-0.468
lab*tch	0.25	0.5	0.806
lab*nch	0.5	0.5	0.806

relative Natural Colour (NC)

lab*lrj	0.12	0.129	-0.482
lab*tce	0.25	0.5	0.791
lab*nce	0.5	0.5	0.806

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	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	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 0.00$ blackness n^* chromaticness c^* $n^* = 0.50$ $n^* = 1.0$

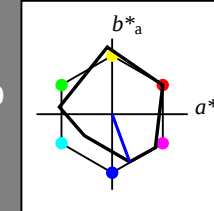
Output: Colorimetric Reflective System MRS18

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

D65: hue B

LCH*Ma: 37 67 290

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	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	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$

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

input: olv* setrgbcolor

output: Startup (S) data dependend

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

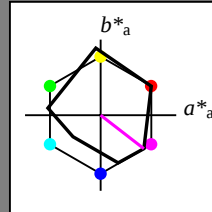
Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 322/360 = 0.895$ lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olvi4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	65.17	28.18	-19.4
LAB*LABa	65.17	28.58	-22.12
LAB*TCHa	75.0	36.15	322.25

relative CIELAB lab*

lab*lab	0.609	0.395	-0.305
lab*tch	0.75	0.5	0.895
lab*nch	0.0	0.5	0.895

relative Natural Colour (NC)

lab*lrj	0.609	0.324	-0.38
lab*tce	0.75	0.5	0.862
lab*nce	0.0	0.5	0.862

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	26.48	28.92	-22.01
LAB*LABa	26.48	28.58	-22.12
LAB*TCHa	25.01	36.15	322.25

relative CIELAB lab*

lab*lab	0.109	0.395	-0.305
lab*tch	0.25	0.5	0.895
lab*nch	0.5	0.5	0.895

relative Natural Colour (NC)

lab*lrj	0.109	0.324	-0.38
lab*tce	0.25	0.5	0.862
lab*nce	0.5	0.5	0.862

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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.0	1.0	(1.0)
cmyn3*	0.0	1.0	0.0	(0.0)
olvi4*	1.0	0.0	1.0	1.0
cmyn4*	0.0	1.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB	34.95	57.34	-43.57
LAB*LABa	34.95	57.16	-44.25
LAB*TCHa	50.0	72.29	322.25

relative CIELAB lab*

lab*lab	0.219	0.791	-0.611
lab*tch	0.5	1.0	0.895
lab*nch	0.0	1.0	0.895

relative Natural Colour (NC)

lab*lrj	0.219	0.648	-0.76
lab*tce	0.5	1.0	0.862
lab*nce	0.0	1.0	0.862

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	26.48	28.92	-22.01
LAB*LABa	26.48	28.58	-22.12
LAB*TCHa	25.01	36.15	322.25

relative CIELAB lab*

lab*lab	0.109	0.395	-0.305
lab*tch	0.25	0.5	0.895
lab*nch	0.5	0.5	0.895

relative Natural Colour (NC)

lab*lrj	0.109	0.324	-0.38
lab*tce	0.25	0.5	0.862
lab*nce	0.5	0.5	0.862

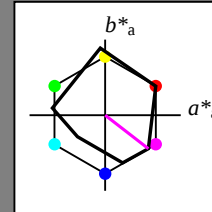
Output: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 322/360 = 0.895$ lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 35 72 322

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	26.48	28.92	-22.01
LAB*LABa	26.48	28.58	-22.12
LAB*TCHa	25.01	36.15	322.25

relative CIELAB lab*

lab*lab	0.109	0.395	-0.305
lab*tch	0.25	0.5	0.895
lab*nch	0.5	0.5	0.895

relative Natural Colour (NC)

lab*lrj	0.109	0.324	-0.38
lab*tce	0.25	0.5	0.862
lab*nce	0.5	0.5	0.862

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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

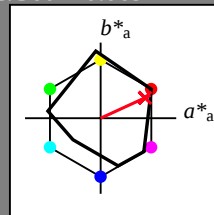
Input: Colorimetric Reflective System MRS18

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

D65: hue R

LCH*Ma: 48 73 25

olv*Ma: 1.0 0.0 0.1

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa 99.99 0.01 -

relative CIELAB lab*

lab*lab 1.0 0.0 0.0

lab*tch 1.0 0.0 -

lab*nch 0.0 0.0 -

relative Natural Colour (NC)

lab*lrj 1.0 0.0 0.0

lab*tce 1.0 0.0 -

lab*nce 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*TCHa 50.0 0.01 -

relative CIELAB lab*

lab*lab 0.5 0.0 0.0

lab*tch 0.5 0.0 -

lab*nch 0.5 0.0 -

relative Natural Colour (NC)

lab*lrj 0.5 0.0 0.0

lab*tce 0.5 0.0 -

lab*nce 0.5 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 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

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.548	(1.0)
cmyn3*	0.0	0.5	0.452	(0.0)
olvi4*	1.0	0.5	0.549	1.0
cmyn4*	0.0	0.5	0.451	0.0

standard and adapted CIELAB

LAB*LAB 71.8 32.47 18.34

LAB*LABa 71.8 33.0 15.17

LAB*TCHa 75.0 36.32 24.7

relative CIELAB lab*

lab*lab 0.695 0.454 0.209

lab*tch 0.75 0.5 0.069

lab*nch 0.0 0.5 0.069

relative Natural Colour (NC)

lab*lrj 0.695 0.5 0.0

lab*tce 0.75 0.5 1.0

lab*nce 0.0 0.5 0.999

standard and adapted CIELAB

LAB*LAB 48.21 65.92 31.93

LAB*LABa 48.21 66.0 30.36

LAB*TCHa 50.0 72.65 24.7

relative CIELAB lab*

lab*lab 0.39 0.908 0.418

lab*tch 0.5 1.0 0.069

lab*nch 0.0 1.0 0.069

relative Natural Colour (NC)

lab*lrj 0.39 1.0 0.0

lab*tce 0.5 1.0 0.0

lab*nce 0.0 1.0 0.00j

standard and adapted CIELAB

LAB*LAB 33.11 33.21 15.74

LAB*LABa 33.11 33.0 15.18

LAB*TCHa 25.01 36.33 24.71

relative CIELAB lab*

lab*lab 0.195 0.454 0.209

lab*tch 0.25 0.5 0.069

lab*nch 0.5 0.5 0.069

relative Natural Colour (NC)

lab*lrj 0.195 0.5 0.0

lab*tce 0.25 0.5 0.0

lab*nce 0.5 0.5 0.00j

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*tch 0.0 0.0 -

lab*nch 1.0 0.0 -

relative Natural Colour (NC)

lab*lrj 0.0 0.0 0.0

lab*tce 0.0 0.0 -

lab*nce 1.0 0.0 -

standard and adapted CIELAB

LAB*LAB 18.02 0.5 -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*t

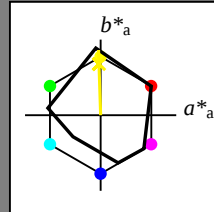
Input: Colorimetric Reflective System MRS18

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

D65: hue J

LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	1.0	0.976	0.5	(1.0)
cmyn3*	0.0	0.024	0.5	(0.0)
olvi4*	1.0	0.976	0.5	1.0
cmyn4*	0.0	0.024	0.5	0.0

standard and adapted CIELAB

LAB*LAB	92.04	-2.3	47.67
LAB*LABa	92.04	-1.39	43.14
LAB*TCHa	75.0	43.16	91.85

relative CIELAB lab*

lab*lab	0.957	-0.015	0.5
lab*tch	0.75	0.5	0.255
lab*nch	0.0	0.5	0.255

relative Natural Colour (NC)

lab*lrj	0.957	0.0	0.5
lab*tce	0.75	0.5	0.25
lab*nce	0.0	0.5	j00g

relative Inform. Technology (IT)

olvi3*	0.5	0.476	0.0	(1.0)
cmyn3*	0.5	0.524	1.0	(0.0)
olvi4*	1.0	0.976	0.5	0.5
cmyn4*	0.0	0.024	0.5	0.5

standard and adapted CIELAB

LAB*LAB	53.35	-1.55	45.05
LAB*LABa	53.35	-1.38	43.13
LAB*TCHa	25.01	43.16	91.84

relative CIELAB lab*

lab*lab	0.457	-0.015	0.5
lab*tch	0.25	0.5	0.255
lab*nch	0.5	0.5	0.255

relative Natural Colour (NC)

lab*lrj	0.457	0.0	0.5
lab*tce	0.25	0.5	0.25
lab*nce	0.5	0.5	r99j

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 0.50$ $n^* = 0.00$ blackness n^* chromaticness c^* $n^* = 1.0$

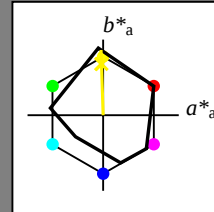
Output: Colorimetric Reflective System MRS18

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

D65: hue J

LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$

3 step scales for constant CIELAB hue 92/360 = 0.255 (right)

input: olv* setrgbcolor

output: Startup (S) data dependend

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

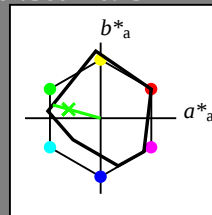
Input: Colorimetric Reflective System MRS18

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

D65: hue G

LCH*Ma: 56 66 164

olv*Ma: 0.1 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	0.551	1.0	0.5	(1.0)
cmyn3*	0.449	0.0	0.5	(0.0)
olvi4*	0.551	1.0	0.5	1.0
cmyn4*	0.449	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB	75.74	-32.2	12.22
LAB*LABa	75.74	-31.6	8.79
LAB*TCHa	75.0	32.81	164.46

relative CIELAB lab*

lab*lab	0.746	-0.481	0.134
lab*tch	0.75	0.5	0.457
lab*nch	0.0	0.5	0.457

relative Natural Colour (NC)

lab*lrj	0.746	-0.499	0.0
lab*tce	0.75	0.5	0.5
lab*nce	0.0	0.5	0.99g

relative Inform. Technology (IT)

olvi3*	0.051	0.5	0.0	(1.0)
cmyn3*	0.949	0.5	1.0	(0.0)
olvi4*	0.551	1.0	0.5	0.5
cmyn4*	0.449	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB	37.04	-31.47	9.6
LAB*LABa	37.04	-31.6	8.78
LAB*TCHa	25.01	32.81	164.47

relative CIELAB lab*

lab*lab	0.246	-0.481	0.134
lab*tch	0.25	0.5	0.457
lab*nch	0.5	0.5	0.457

relative Natural Colour (NC)

lab*lrj	0.246	-0.499	0.0
lab*tce	0.25	0.5	0.5
lab*nce	0.5	0.5	g00b

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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

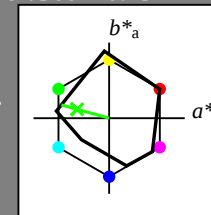
Output: Colorimetric Reflective System MRS18

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

D65: hue G

LCH*Ma: 56 66 164

olv*Ma: 0.1 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$ $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

TE140-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

3 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues

input: olv* setrgbcolor

output: Startup (S) data dependend

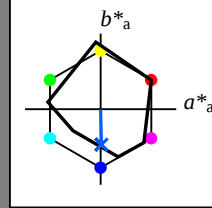
Input: Colorimetric Reflective System MRS18

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

D65: hue B

LCH*Ma: 40 50 271

olv*Ma: 0.0 0.37 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	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

relative Inform. Technology (IT)

olvi3*	0.5	0.684	1.0	(1.0)
cmyn3*	0.5	0.316	0.0	(0.0)
olvi4*	0.5	0.684	1.0	1.0
cmyn4*	0.5	0.316	0.0	0.0

standard and adapted CIELAB

LAB*LAB	67.57	0.17	-22.28
LAB*LABa	67.57	0.61	-25.16
LAB*TCHa	75.0	25.18	271.4

relative CIELAB lab*

lab*lab	0.64	0.012	-0.499
lab*tch	0.75	0.5	0.754
lab*nch	0.0	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.64	0.0	-0.499
lab*tce	0.75	0.5	0.75
lab*nce	0.0	0.5	g99b

relative Inform. Technology (IT)

olvi3*	0.0	0.184	0.5	(1.0)
cmyn3*	1.0	0.816	0.5	(0.0)
olvi4*	0.5	0.684	1.0	0.5
cmyn4*	0.5	0.316	0.0	0.5

standard and adapted CIELAB

LAB*LAB	28.87	0.92	-24.9
LAB*LABa	28.87	0.62	-25.16
LAB*TCHa	25.01	25.18	271.41

relative CIELAB lab*

lab*lab	0.14	0.012	-0.499
lab*tch	0.25	0.5	0.754
lab*nch	0.5	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.14	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	b00r

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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 0.00$ blackness n^*

chromaticness c^*

0.25 0.50 0.75 1.00

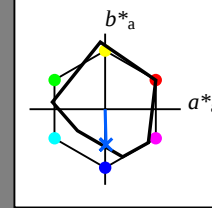
Output: Colorimetric Reflective System MRS18

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

D65: hue B

LCH*Ma: 40 50 271

olv*Ma: 0.0 0.37 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 91$

%Regularity

 $g^*_{H,rel} = 41$ $g^*_{C,rel} = 52$

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
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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	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	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	50.0	0.01	-

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	-
lab*nch	0.5	0.0	-

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-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*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

 $n^* = 1.0$

3 step scales for constant CIELAB hue 271/360 = 0.754 (right)

input: olv* setrgbcolor

output: Startup (S) data dependend

BAM-test chart TE14; Colorimetric systems ORS18 & ORS18

D65: 2 coordinate data of 3 step colour scales for 10 hues