

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 24/360 = 0.066$

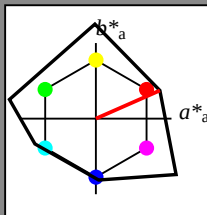
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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	0.0	-0.01
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.75	0.75	(1.0)
cmyn3*	0.0	0.25	0.25	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	83.34	21.17	9.31
LAB*Lab	83.34	21.17	9.31
LAB*Lab	83.34	21.17	9.31

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	71.27	42.31	18.63
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LAB*Lab	71.27	42.31	18.63

relative Inform. Technology (IT)

olvi3*	1.0	0.25	0.25	(1.0)
cmyn3*	0.0	0.75	0.75	(0.0)
olvi4*	1.0	0.25	0.25	(1.0)
cmyn4*	0.0	0.75	0.75	(0.0)

standard and adapted CIELAB

LAB*Lab	59.21	63.51	27.94
LAB*Lab	59.21	63.51	27.94
LAB*Lab	59.21	63.51	27.94

relative Inform. Technology (IT)

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

standard and adapted CIELAB

LAB*Lab	47.15	84.64	37.25
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relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	0.75	0.75	0.75	(1.0)
cmyn4*	0.25	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*Lab	50.17	42.32	18.63
LAB*Lab	50.17	42.32	18.63
LAB*Lab	50.17	42.32	18.63

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	62.25	23.12	23.75
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relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
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cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	11.01	11.01	0.01
LAB*Lab	11.01	11.01	0.01
LAB*Lab	11.01	11.01	0.01

NCS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

% Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

1.00

0.75

0.50

0.25

0.00

chromaticness c^*

UE59-7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

BAM-test chart UE59; Colorimetric systems NCS11a & NCS11ainput: `cmY0* setcmYcolor`

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

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 24/360 = 0.066$

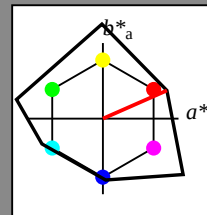
lab^*tch and lab^*nch

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LAB*Lab	11.01	11.01	0.01
LAB*Lab	11.01	11.01	0.01
LAB*Lab	11.01	11.01	0.01

chromaticness c^*

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)

output: `cmY0* setrgbcolor / w* setgray`

www.ps.bam.de/UE59/10L/L59E01FP.PS/.PDF; linearized output
 F: Output Linearization (OL) data UE59/10L/L59E01FP.DAT in File (F)

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 91/360 = 0.252$

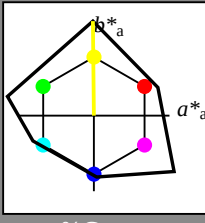
lab^*ch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



NCS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
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%Regularity

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5 step scales for constant CIELAB hue 91/360 = 0.252 (right)

BAM-test chart UE59; Colorimetric systems NCS11a & NCS11ainput: $cmv^*0 \text{ setcmvcolor}$

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

output: $olv^* \text{ setrgbcolor} / w^* \text{ setgray}$

See for similar files: <http://www.ps.bam.de/UE59/>
Technical information: <http://www.ps.bam.de> Version 2.1, io=0,1, CIEXYZ

www.ps.bam.de/UE59/10L/L59E02FP.PS/.PDF; linearized output
F: Output Linearization (OL) data UE59/10L/L59E02FP.DAT in File (F)

BAM registration: 20060101-UE59/10L/L59E02FP.PS/.PDF
application for evaluation and measurement of printer or monitor systems, Yr=2.5, XYZ
/UE59/ Form 3/10, Serie: 1/1, Page: 3 Page count: 3

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 167/360 = 0.465$

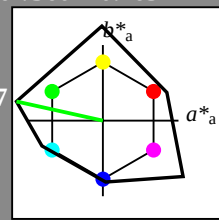
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



NCS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

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 0.0 -0.01
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*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 1.0 0.75 (1.0)
cmyn3* 0.25 0.0 0.25 (0.0)
olvi4* 0.75 1.0 0.75 (1.0)
cmyn4* 0.25 0.0 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 87.32 -28.53 6.33
LAB*LABa 87.32 -28.53 6.33
LAB*TCHa 87.5 29.25 167.5

relative CIELAB lab*
lab*lab 0.904 -0.243 0.054
lab*tch 0.875 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.904 -0.248 -0.018
lab*tce 0.875 0.25 0.512
lab*nce 0.0 0.25 0.465

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 79.24 -57.12 12.67
LAB*LABa 79.24 -57.12 12.67
LAB*TCHa 75.0 58.52 167.5

relative CIELAB lab*
lab*lab 0.808 -0.487 0.108
lab*tch 0.775 0.5 0.465
lab*nch 0.0 0.5 0.465
lab*trj 0.808 -0.497 -0.037
lab*tce 0.775 0.5 0.512
lab*nce 0.0 0.5 0.465

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 0.75
cmyn4* 0.0 0.0 0.0 0.25
standard and adapted CIELAB
LAB*LAB 74.31 0.02 0.0
LAB*LABa 74.31 0.02 0.0
LAB*TCHa 75.0 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 (1.0)
cmyn3* 0.5 0.0 0.5 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 66.22 -28.53 6.34
LAB*LABa 66.22 -28.53 6.34
LAB*TCHa 62.5 29.27 167.5

relative CIELAB lab*
lab*lab 0.625 0.25 0.512
lab*tch 0.625 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.625 0.25 0.512
lab*tce 0.625 0.25 0.465
lab*nce 0.0 0.25 0.465

relative Inform. Technology (IT)
olvi3* 0.25 0.75 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 58.14 -57.09 12.68
LAB*LABa 58.14 -57.09 12.68
LAB*TCHa 50.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.512 -0.731 0.162
lab*tch 0.625 0.75 0.465
lab*nch 0.0 0.75 0.465
lab*trj 0.512 -0.747 -0.055
lab*tce 0.625 0.75 0.512
lab*nce 0.0 0.75 0.465

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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 53.21 0.04 0.0
LAB*LABa 53.21 0.04 0.0
LAB*TCHa 50.0 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 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 45.12 -28.51 6.35
LAB*LABa 45.12 -28.51 6.35
LAB*TCHa 37.5 29.27 167.5

relative CIELAB lab*
lab*lab 0.404 -0.243 0.054
lab*tch 0.375 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.404 -0.248 -0.018
lab*tce 0.375 0.25 0.512
lab*nce 0.0 0.25 0.465

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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.07 0.01
LAB*LABa 32.11 0.07 0.01
LAB*TCHa 25.0 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 32.11 0.07 0.01
LAB*LABa 32.11 0.07 0.01
LAB*TCHa 25.0 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* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 24.02 -28.46 6.35
LAB*LABa 24.02 -28.46 6.35
LAB*TCHa 12.5 29.25 167.5

relative CIELAB lab*
lab*lab 0.154 -0.243 0.054
lab*tch 0.125 0.25 0.465
lab*nch 0.0 0.25 0.465
lab*trj 0.154 -0.248 -0.018
lab*tce 0.125 0.25 0.512
lab*nce 0.0 0.25 0.465

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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 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 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 11.01 0.07 0.01
LAB*LABa 11.01 0.07 0.01
LAB*TCHa 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 0.0 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 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 7.04 -28.07 12.69
LAB*LABa 7.04 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.463 -0.731 0.162
lab*tch 0.375 0.75 0.465
lab*nch 0.0 0.75 0.465
lab*trj 0.463 -0.747 -0.055
lab*tce 0.375 0.75 0.512
lab*nce 0.0 0.75 0.465

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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 2.02 -28.46 6.35
LAB*LABa 2.02 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 2.02 -28.46 6.35
LAB*LABa 2.02 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 0.01 -28.07 12.69
LAB*LABa 0.01 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.463 -0.731 0.162
lab*tch 0.375 0.75 0.465
lab*nch 0.0 0.75 0.465
lab*trj 0.463 -0.747 -0.055
lab*tce 0.375 0.75 0.512
lab*nce 0.0 0.75 0.465

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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.46 6.35
LAB*LABa 0.01 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.07 12.69
LAB*LABa 0.01 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 0.01 -28.46 6.35
LAB*LABa 0.01 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.07 12.69
LAB*LABa 0.01 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.46 6.35
LAB*LABa 0.01 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 0.01 -28.07 12.69
LAB*LABa 0.01 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.46 6.35
LAB*LABa 0.01 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.07 12.69
LAB*LABa 0.01 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.5 0.25 (1.0)
cmyn3* 0.75 0.25 0.75 (0.0)
olvi4* 0.5 1.0 0.5 0.75
cmyn4* 0.5 0.0 0.5 0.25
standard and adapted CIELAB
LAB*LAB 0.01 -28.46 6.35
LAB*LABa 0.01 -28.46 6.35
LAB*TCHa 0.0 29.25 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 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 0.25
cmyn4* 0.0 0.0 0.0 0.75
standard and adapted CIELAB
LAB*LAB 0.01 -28.07 12.69
LAB*LABa 0.01 -28.07 12.69
LAB*TCHa 0.0 58.53 167.5

relative CIELAB lab*
lab*lab 0.0 0.0 0.0
lab*tch 0.0 0.0 0.0
lab*nch 0.0 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 0.0 0.0 0.0

UE59-7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

BAM-test chart UE59; Colorimetric systems NCS11a & NCS11ainput: $cmY0^* \text{ set } cmYkcolor$

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

output: $olvi3^* \text{ set } rgbcolor / w^* \text{ set } gray$

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 203/360 = 0.563$

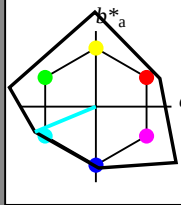
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 59 87 203

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi6* 0.0 0.0 0.0 (0.0)
olvi7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
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 Inform. Technology (IT)
olvi3* 0.75 1.0 1.0 (1.0)
olvi4* 0.25 0.0 0.0 (0.0)
olvi5* 0.75 1.0 1.0 (1.0)
olvi6* 0.25 0.0 0.0 (0.0)
olvi7* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.42 -20.12 -8.35
LAB*LABa 86.42 -20.12 -8.35
LAB*LABb 86.42 -20.12 -8.35
LAB*LABc 86.42 -20.12 -8.35

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.5)
olvi4* 0.5 0.5 0.5 (0.5)
olvi5* 0.5 0.5 0.5 (0.5)
olvi6* 0.5 0.5 0.5 (0.5)
olvi7* 0.5 0.5 0.5 (0.5)
standard and adapted CIELAB
LAB*LAB 77.43 -40.26 -16.71
LAB*LABa 77.43 -40.26 -16.71
LAB*LABb 77.43 -40.26 -16.71
LAB*LABc 77.43 -40.26 -16.71

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.25)
olvi4* 0.25 0.25 0.25 (0.25)
olvi5* 0.25 0.25 0.25 (0.25)
olvi6* 0.25 0.25 0.25 (0.25)
olvi7* 0.25 0.25 0.25 (0.25)
standard and adapted CIELAB
LAB*LAB 65.32 -20.11 -8.35
LAB*LABa 65.32 -20.11 -8.35
LAB*LABb 65.32 -20.11 -8.35
LAB*LABc 65.32 -20.11 -8.35

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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)
standard and adapted CIELAB
LAB*LAB 50.00 0.00 0.00
LAB*LABa 50.00 0.00 0.00
LAB*LABb 50.00 0.00 0.00
LAB*LABc 50.00 0.00 0.00

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 203/360 = 0.563$

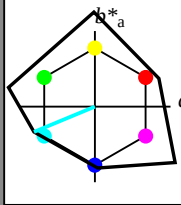
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 59 87 203

rgb*Ma: 0.0 1.0 1.0

triangle lightness t^*



relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi4* 0.0 0.0 0.0 (0.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi6* 0.0 0.0 0.0 (0.0)
olvi7* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 95.41 0.0 -0.01
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 Inform. Technology (IT)
olvi3* 0.75 1.0 1.0 (1.0)
olvi4* 0.25 0.0 0.0 (0.0)
olvi5* 0.75 1.0 1.0 (1.0)
olvi6* 0.25 0.0 0.0 (0.0)
olvi7* 0.25 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 86.42 -20.12 -8.35
LAB*LABa 86.42 -20.12 -8.35
LAB*LABb 86.42 -20.12 -8.35
LAB*LABc 86.42 -20.12 -8.35

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (0.5)
olvi4* 0.5 0.5 0.5 (0.5)
olvi5* 0.5 0.5 0.5 (0.5)
olvi6* 0.5 0.5 0.5 (0.5)
olvi7* 0.5 0.5 0.5 (0.5)
standard and adapted CIELAB
LAB*LAB 77.43 -40.26 -16.71
LAB*LABa 77.43 -40.26 -16.71
LAB*LABb 77.43 -40.26 -16.71
LAB*LABc 77.43 -40.26 -16.71

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (0.25)
olvi4* 0.25 0.25 0.25 (0.25)
olvi5* 0.25 0.25 0.25 (0.25)
olvi6* 0.25 0.25 0.25 (0.25)
olvi7* 0.25 0.25 0.25 (0.25)
standard and adapted CIELAB
LAB*LAB 65.32 -20.11 -8.35
LAB*LABa 65.32 -20.11 -8.35
LAB*LABb 65.32 -20.11 -8.35
LAB*LABc 65.32 -20.11 -8.35

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (0.0)
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)
standard and adapted CIELAB
LAB*LAB 50.00 0.00 0.00
LAB*LABa 50.00 0.00 0.00
LAB*LABb 50.00 0.00 0.00
LAB*LABc 50.00 0.00 0.00

UE59-7, 5 step scales for constant CIELAB hue 203/360 = 0.563 (left)

5 step scales for constant CIELAB hue 203/360 = 0.563 (right)

BAM-test chart UE59; Colorimetric systems NCS11a & NCS11ainput: `cmv0* setcmvcolor`

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

output: `olvi* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 273/360 = 0.757$

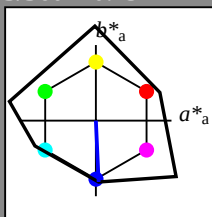
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



$u^*_{rel} = 149$

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 0.0 -0.01
 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 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*Lab 74.31 0.02 0.0
 LAB*TCMa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.863 0.011 -0.249
 lab*tch 0.875 0.25 0.757
 lab*nch 0.0 0.25 0.757
 relative Natural Colour (NC)
 lab*trj 0.863 0.003 -0.249
 lab*tce 0.875 0.25 0.752
 lab*nce 0.0 0.25 0.752

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 53.21 0.04 0.0
 LAB*Lab 53.21 0.04 0.0
 LAB*TCMa 50.0 0.01 -

relative CIELAB lab*
 lab*lab 0.5 0.5 0.5 (1.0)
 lab*tch 0.5 0.5 0.5 (0.0)
 lab*nch 0.0 0.5 0.5 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.5 0.5 0.5 (0.0)
 lab*tce 0.5 0.5 0.5 (0.0)
 lab*nce 0.0 0.5 0.5 (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 0.25
 cmy4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.01
 LAB*Lab 32.11 0.07 0.01
 LAB*TCMa 32.11 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.25 0.25 (1.0)
 lab*tch 0.25 0.25 0.25 (0.0)
 lab*nch 0.0 0.25 0.25 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.25 0.25 0.25 (0.0)
 lab*tce 0.25 0.25 0.25 (0.0)
 lab*nce 0.0 0.25 0.25 (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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.25
 cmy4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.01
 LAB*Lab 32.11 0.07 0.01
 LAB*TCMa 32.11 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.25 0.25 (1.0)
 lab*tch 0.25 0.25 0.25 (0.0)
 lab*nch 0.0 0.25 0.25 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.25 0.25 0.25 (0.0)
 lab*tce 0.25 0.25 0.25 (0.0)
 lab*nce 0.0 0.25 0.25 (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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

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

UE59-7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

BAM-test chart UE59; Colorimetric systems NCS11a & NCS11ainput: $cmy0^* setcmykcolor$

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

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 273/360 = 0.757$

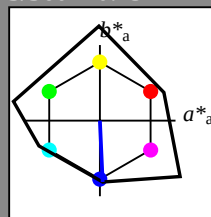
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



$u^*_{rel} = 149$

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 0.0 -0.01
 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 0.75
 cmy4* 0.0 0.0 0.0 0.25
 standard and adapted CIELAB
 LAB*LAB 74.31 0.02 0.0
 LAB*Lab 74.31 0.02 0.0
 LAB*TCMa 75.0 0.01 -

relative CIELAB lab*
 lab*lab 0.863 0.011 -0.249
 lab*tch 0.875 0.25 0.757
 lab*nch 0.0 0.25 0.757
 relative Natural Colour (NC)
 lab*trj 0.863 0.003 -0.249
 lab*tce 0.875 0.25 0.752
 lab*nce 0.0 0.25 0.752

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 cmy3* 0.5 0.5 0.5 (0.0)
 olv4* 1.0 1.0 1.0 0.5
 cmy4* 0.0 0.0 0.0 0.5
 standard and adapted CIELAB
 LAB*LAB 53.21 0.04 0.0
 LAB*Lab 53.21 0.04 0.0
 LAB*TCMa 50.0 0.01 -

relative CIELAB lab*
 lab*lab 0.5 0.5 0.5 (1.0)
 lab*tch 0.5 0.5 0.5 (0.0)
 lab*nch 0.0 0.5 0.5 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.5 0.5 0.5 (0.0)
 lab*tce 0.5 0.5 0.5 (0.0)
 lab*nce 0.0 0.5 0.5 (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 0.25
 cmy4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.01
 LAB*Lab 32.11 0.07 0.01
 LAB*TCMa 32.11 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.25 0.25 (1.0)
 lab*tch 0.25 0.25 0.25 (0.0)
 lab*nch 0.0 0.25 0.25 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.25 0.25 0.25 (0.0)
 lab*tce 0.25 0.25 0.25 (0.0)
 lab*nce 0.0 0.25 0.25 (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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.25
 cmy4* 0.0 0.0 0.0 0.75
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.01
 LAB*Lab 32.11 0.07 0.01
 LAB*TCMa 32.11 0.01 -

relative CIELAB lab*
 lab*lab 0.25 0.25 0.25 (1.0)
 lab*tch 0.25 0.25 0.25 (0.0)
 lab*nch 0.0 0.25 0.25 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.25 0.25 0.25 (0.0)
 lab*tce 0.25 0.25 0.25 (0.0)
 lab*nce 0.0 0.25 0.25 (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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

relative CIELAB lab*
 lab*lab 0.0 0.0 0.0 (1.0)
 lab*tch 0.0 0.0 0.0 (0.0)
 lab*nch 0.0 0.0 0.0 (0.0)
 relative Natural Colour (NC)
 lab*trj 0.0 0.0 0.0 (0.0)
 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 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 0.0
 cmy4* 0.0 0.0 0.0 1.0
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.01
 LAB*Lab 11.01 0.07 0.01
 LAB*TCMa 0.01 0.01 -

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

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)

output: $olv^* setrgbcolor$ / $w^* setgray$

chromaticness c^*

chromaticness c^*

$n^* = 0.25$

$n^* = 0.25$

blackness n^*

blackness n^*

$n^* = 0.50$

$n^* = 0.50$

$n^* = 1.0$

$n^* = 1.0$

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 325/360 = 0.903$

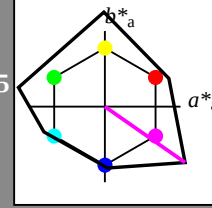
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 44 129 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*trj	0.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	0.0	1.0

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

UE59-7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)

BAM-test chart UE59; Colorimetric systems NCS11a & NCS11ainput: $cmv0^* \text{ setcmvcolor}$

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

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 325/360 = 0.903$

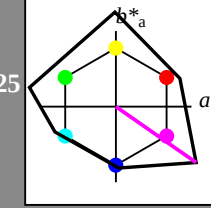
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 44 129 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*trj	0.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	0.0	1.0

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.903
lab*nch	0.0	0.25	0.903

relative Natural Colour (NC)

lab*trj	0.848	0.168	-0.184
lab*tce	0.875	0.25	0.903
lab*nce	0.0	0.25	0.903

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	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*LABb	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.848	0.205	-0.142
lab*tch	0.875	0.25	0.90

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 25/360 = 0.071$

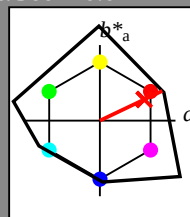
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 91 25

rgb*Ma: 1.0 0.02 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 149$

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

standard and adapted CIELAB		
LAB*Lab	95.41	0.0
LAB*a	95.41	0.0
LAB*b	95.41	0.0
LAB*c	95.41	0.0
LAB*d	95.41	0.0
LAB*e	95.41	0.0
LAB*f	95.41	0.0
LAB*g	95.41	0.0
LAB*h	95.41	0.0
LAB*i	95.41	0.0
LAB*j	95.41	0.0
LAB*k	95.41	0.0
LAB*l	95.41	0.0
LAB*m	95.41	0.0
LAB*n	95.41	0.0
LAB*O	95.41	0.0
LAB*P	95.41	0.0
LAB*Q	95.41	0.0
LAB*R	95.41	0.0
LAB*S	95.41	0.0
LAB*T	95.41	0.0
LAB*U	95.41	0.0
LAB*V	95.41	0.0
LAB*W	95.41	0.0
LAB*X	95.41	0.0
LAB*Y	95.41	0.0
LAB*Z	95.41	0.0

relative Inform. Technology (IT)		
olvi3*	1.0	0.756 0.75 (1.0)
olvi4*	1.0	0.244 0.25 (0.0)
olvi5*	1.0	0.756 0.75 (1.0)
olvi6*	1.0	0.244 0.25 (0.0)
olvi7*	1.0	0.756 0.75 (1.0)
olvi8*	1.0	0.244 0.25 (0.0)
olvi9*	1.0	0.756 0.75 (1.0)
olvi10*	1.0	0.244 0.25 (0.0)
olvi11*	1.0	0.756 0.75 (1.0)
olvi12*	1.0	0.244 0.25 (0.0)
olvi13*	1.0	0.756 0.75 (1.0)
olvi14*	1.0	0.244 0.25 (0.0)
olvi15*	1.0	0.756 0.75 (1.0)
olvi16*	1.0	0.244 0.25 (0.0)
olvi17*	1.0	0.756 0.75 (1.0)
olvi18*	1.0	0.244 0.25 (0.0)
olvi19*	1.0	0.756 0.75 (1.0)
olvi20*	1.0	0.244 0.25 (0.0)
olvi21*	1.0	0.756 0.75 (1.0)
olvi22*	1.0	0.244 0.25 (0.0)
olvi23*	1.0	0.756 0.75 (1.0)
olvi24*	1.0	0.244 0.25 (0.0)
olvi25*	1.0	0.756 0.75 (1.0)
olvi26*	1.0	0.244 0.25 (0.0)
olvi27*	1.0	0.756 0.75 (1.0)
olvi28*	1.0	0.244 0.25 (0.0)
olvi29*	1.0	0.756 0.75 (1.0)
olvi30*	1.0	0.244 0.25 (0.0)
olvi31*	1.0	0.756 0.75 (1.0)
olvi32*	1.0	0.244 0.25 (0.0)
olvi33*	1.0	0.756 0.75 (1.0)
olvi34*	1.0	0.244 0.25 (0.0)
olvi35*	1.0	0.756 0.75 (1.0)
olvi36*	1.0	0.244 0.25 (0.0)
olvi37*	1.0	0.756 0.75 (1.0)
olvi38*	1.0	0.244 0.25 (0.0)
olvi39*	1.0	0.756 0.75 (1.0)
olvi40*	1.0	0.244 0.25 (0.0)
olvi41*	1.0	0.756 0.75 (1.0)
olvi42*	1.0	0.244 0.25 (0.0)
olvi43*	1.0	0.756 0.75 (1.0)
olvi44*	1.0	0.244 0.25 (0.0)
olvi45*	1.0	0.756 0.75 (1.0)
olvi46*	1.0	0.244 0.25 (0.0)
olvi47*	1.0	0.756 0.75 (1.0)
olvi48*	1.0	0.244 0.25 (0.0)
olvi49*	1.0	0.756 0.75 (1.0)
olvi50*	1.0	0.244 0.25 (0.0)
olvi51*	1.0	0.756 0.75 (1.0)
olvi52*	1.0	0.244 0.25 (0.0)
olvi53*	1.0	0.756 0.75 (1.0)
olvi54*	1.0	0.244 0.25 (0.0)
olvi55*	1.0	0.756 0.75 (1.0)
olvi56*	1.0	0.244 0.25 (0.0)
olvi57*	1.0	0.756 0.75 (1.0)
olvi58*	1.0	0.244 0.25 (0.0)
olvi59*	1.0	0.756 0.75 (1.0)
olvi60*	1.0	0.244 0.25 (0.0)
olvi61*	1.0	0.756 0.75 (1.0)
olvi62*	1.0	0.244 0.25 (0.0)
olvi63*	1.0	0.756 0.75 (1.0)
olvi64*	1.0	0.244 0.25 (0.0)
olvi65*	1.0	0.756 0.75 (1.0)
olvi66*	1.0	0.244 0.25 (0.0)
olvi67*	1.0	0.756 0.75 (1.0)
olvi68*	1.0	0.244 0.25 (0.0)
olvi69*	1.0	0.756 0.75 (1.0)
olvi70*	1.0	0.244 0.25 (0.0)
olvi71*	1.0	0.756 0.75 (1.0)
olvi72*	1.0	0.244 0.25 (0.0)
olvi73*	1.0	0.756 0.75 (1.0)
olvi74*	1.0	0.244 0.25 (0.0)
olvi75*	1.0	0.756 0.75 (1.0)
olvi76*	1.0	0.244 0.25 (0.0)
olvi77*	1.0	0.756 0.75 (1.0)
olvi78*	1.0	0.244 0.25 (0.0)
olvi79*	1.0	0.756 0.75 (1.0)
olvi80*	1.0	0.244 0.25 (0.0)
olvi81*	1.0	0.756 0.75 (1.0)
olvi82*	1.0	0.244 0.25 (0.0)
olvi83*	1.0	0.756 0.75 (1.0)
olvi84*	1.0	0.244 0.25 (0.0)
olvi85*	1.0	0.756 0.75 (1.0)
olvi86*	1.0	0.244 0.25 (0.0)
olvi87*	1.0	0.756 0.75 (1.0)
olvi88*	1.0	0.244 0.25 (0.0)
olvi89*	1.0	0.756 0.75 (1.0)
olvi90*	1.0	0.244 0.25 (0.0)
olvi91*	1.0	0.756 0.75 (1.0)
olvi92*	1.0	0.244 0.25 (0.0)
olvi93*	1.0	0.756 0.75 (1.0)
olvi94*	1.0	0.244 0.25 (0.0)
olvi95*	1.0	0.756 0.75 (1.0)
olvi96*	1.0	0.244 0.25 (0.0)
olvi97*	1.0	0.756 0.75 (1.0)
olvi98*	1.0	0.244 0.25 (0.0)
olvi99*	1.0	0.756 0.75 (1.0)
olvi100*	1.0	0.244 0.25 (0.0)

standard and adapted CIELAB		
LAB*Lab	83.61	20.65 9.84
LAB*a	83.61	20.64 9.84
LAB*b	83.61	20.64 9.84
LAB*c	83.61	20.64 9.84
LAB*d	83.61	20.64 9.84
LAB*e	83.61	20.64 9.84
LAB*f	83.61	20.64 9.84
LAB*g	83.61	20.64 9.84
LAB*h	83.61	20.64 9.84
LAB*i	83.61	20.64 9.84
LAB*j	83.61	20.64 9.84
LAB*k	83.61	20.64 9.84
LAB*l	83.61	20.64 9.84
LAB*m	83.61	20.64 9.84
LAB*n	83.61	20.64 9.84
LAB*O	83.61	20.64 9.84
LAB*P	83.61	20.64 9.84
LAB*Q	83.61	20.64 9.84
LAB*R	83.61	20.64 9.84
LAB*S	83.61	20.64 9.84
LAB*T	83.61	20.64 9.84
LAB*U	83.61	20.64 9.84
LAB*V	83.61	20.64 9.84
LAB*W	83.61	20.64 9.84
LAB*X	83.61	20.64 9.84
LAB*Y	83.61	20.64 9.84
LAB*Z	83.61	20.64 9.84

relative Inform. Technology (IT)		
olvi3*	1.0	0.512 0.5 (1.0)
olvi4*	1.0	0.268 0.25 (0.0)
olvi5*	1.0	0.512 0.5 (1.0)
olvi6*	1.0	0.268 0.25 (0.0)
olvi7*	1.0	0.512 0.5 (1.0)
olvi8*	1.0	0.268 0.25 (0.0)
olvi9*	1.0	0.512 0.5 (1.0)
olvi10*	1.0	0.268 0.25 (0.0)
olvi11*	1.0	0.512 0.5 (1.0)
olvi12*	1.0	0.268 0.25 (0.0)
olvi13*	1.0	0.512 0.5 (1.0)
olvi14*	1.0	0.268 0.25 (0.0)
olvi15*	1.0	0.512 0.5 (1.0)
olvi16*	1.0	0.268 0.25 (0.0)
olvi17*	1.0	0.512 0.5 (1.0)
olvi18*	1.0	0.268 0.25 (0.0)
olvi19*	1.0	0.512 0.5 (1.0)
olvi20*	1.0	0.268 0.25 (0.0)
olvi21*	1.0	0.512 0.5 (1.0)
olvi22*	1.0	0.268 0.25 (0.0)
olvi23*	1.0	0.512 0.5 (1.0)
olvi24*	1.0	0.268 0.25 (0.0)
olvi25*	1.0	0.512 0.5 (1.0)
olvi26*	1.0	0.268 0.25 (0.0)
olvi27*	1.0	0.512 0.5 (1.0)
olvi28*	1.0	0.268 0.25 (0.0)
olvi29*	1.0	0.512 0.5 (1.0)
olvi30*	1.0	0.268 0.25 (0.0)
olvi31*	1.0	0.512 0.5 (1.0)
olvi32*	1.0	0.268 0.25 (0.0)
olvi33*	1.0	0.512 0.5 (1.0)
olvi34*	1.0	0.268 0.25 (0.0)
olvi35*	1.0	0.512 0.5 (1.0)
olvi36*	1.0	0.268 0.25 (0.0)
olvi37*	1.0	0.512 0.5 (1.0)
olvi38*	1.0	0.268 0.25 (0.0)
olvi39*	1.0	0.512 0.5 (1.0)
olvi40*	1.0	0.268 0.25 (0.0)
olvi41*	1.0	0.512 0.5 (1.0)
olvi42*	1.0	0.268 0.25 (0.0)
olvi43*	1.0	0.512 0.5 (1.0)
olvi44*	1.0	0.268 0.25 (0.0)
olvi45*	1.0	0.512 0.5 (1.0)
olvi46*	1.0	0.268 0.25 (0.0)
olvi47*	1.0	0.512 0.5 (1.0)
olvi48*	1.0	0.268 0.25 (0.0)
olvi49*	1.0	0.512 0.5 (1.0)
olvi50*	1.0	0.268 0.25 (0.0)
olvi51*	1.0	0.512 0.5 (1.0)
olvi52*	1.0	0.268 0.25 (0.0)
olvi53*	1.0	0.512 0.5 (1.0)
olvi54*	1.0	0.268 0.25 (0.0)
olvi55*	1.0	0.512 0.5 (1.0)
olvi56*	1.0	0.268 0.25 (0.0)
olvi57*	1.0	0.512 0.5 (1.0)
olvi58*	1.0	0.268 0.25 (0.0)
olvi59*	1.0	0.512 0.5 (1.0)
olvi60*	1.0	0.268 0.25 (0.0)
olvi61*	1.0	0.512 0.5 (1.0)
olvi62*	1.0	0.268 0.25 (0.0)
olvi63*	1.0	0.512 0.5 (1.0)
olvi64*	1.0	0.268 0.25 (0.0)
olvi65*	1.0	0.512 0.5 (1.0)
olvi66*	1.0	0.268 0.25 (0.0)
olvi67*	1.0	0.512 0.5 (1.0)
olvi68*	1.0	0.268 0.25 (0.0)
olvi69*	1.0	0.512 0.5 (1.0)
olvi70*	1.0	0.268

www.ps.bam.de/UE59/10L/L59E09FP.PS/.PDF; linearized output
 F: Output Linearization (OL) data UE59/10L/L59E09FP.DAT in File (F)

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 272/360 = 0.755$

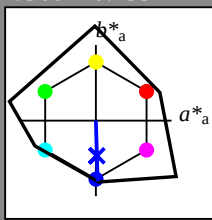
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 80 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness t^*



$u^*_{rel} = 149$

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 0.0 -0.01
 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 74.31 0.02 0.0
 LAB*Lab 74.31 0.02 0.0
 LAB*TCMa 75.0 0.01 0.0

relative CIELAB lab*
 lab*lab 0.863 0.007 -0.249
 lab*tch 0.875 0.25 0.755
 lab*nch 0.0 0.25 0.755
 relative Natural Colour (NC)
 lab*trj 0.863 0.0 -0.249
 lab*tce 0.875 0.25 0.755
 lab*nce 0.0 0.25 0.755

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 53.21 0.04 0.0
 LAB*Lab 53.21 0.04 0.0
 LAB*TCMa 50.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (0.0)
 cmy3* 0.75 0.75 0.75 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 32.11 0.07 0.0
 LAB*Lab 32.11 0.07 0.0
 LAB*TCMa 30.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (0.0)
 cmy3* 0.75 0.75 0.75 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 30.09 1.24 0.02
 LAB*Lab 30.09 1.24 0.02
 LAB*TCMa 32.11 0.01 0.0

relative CIELAB lab*
 lab*lab 0.363 0.007 -0.249
 lab*tch 0.375 0.25 0.755
 lab*nch 0.0 0.25 0.755
 relative Natural Colour (NC)
 lab*trj 0.363 0.0 -0.249
 lab*tce 0.375 0.25 0.755
 lab*nce 0.0 0.25 0.755

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

NCS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50BMa	59.47	-80.6	-33.45	87.28	203
BMa	49.01	3.65	-81.19	81.28	273
B50RMa	44.06	106.09	-73.93	129.32	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

$g^*_{C,rel} = 65$

relative Inform. Technology (IT)
 olv3* 0.5 0.5 0.5 (1.0)
 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 72.29 1.2 -40.21
 LAB*Lab 72.29 1.2 -40.21
 LAB*TCMa 75.0 0.01 0.0

relative CIELAB lab*
 lab*lab 0.726 0.014 -0.499
 lab*tch 0.75 0.5 0.755
 lab*nch 0.0 0.5 0.755
 relative Natural Colour (NC)
 lab*trj 0.726 0.0 -0.499
 lab*tce 0.75 0.5 0.755
 lab*nce 0.0 0.5 0.755

relative Inform. Technology (IT)
 olv3* 0.25 0.25 0.25 (0.0)
 cmy3* 0.75 0.75 0.75 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 51.19 1.17 -40.22
 LAB*Lab 51.19 1.17 -40.22
 LAB*TCMa 50.0 0.01 0.0

relative CIELAB lab*
 lab*lab 0.476 0.015 -0.499
 lab*tch 0.5 0.5 0.755
 lab*nch 0.0 0.5 0.755
 relative Natural Colour (NC)
 lab*trj 0.476 0.0 -0.499
 lab*tce 0.5 0.5 0.755
 lab*nce 0.0 0.5 0.755

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 30.09 1.24 0.02
 LAB*Lab 30.09 1.24 0.02
 LAB*TCMa 32.11 0.01 0.0

relative CIELAB lab*
 lab*lab 0.339 0.022 -0.749
 lab*tch 0.375 0.75 0.755
 lab*nch 0.0 0.75 0.755
 relative Natural Colour (NC)
 lab*trj 0.339 0.0 -0.749
 lab*tce 0.375 0.75 0.755
 lab*nce 0.0 0.75 0.755

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
 LAB*Lab 11.01 0.07 0.0
 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
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 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
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relative CIELAB lab*
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 relative Natural Colour (NC)
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 lab*tce 0.0 0.0 0.0 (0.0)
 lab*nce 0.0 0.0 0.0 (0.0)

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
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 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
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 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy3* 1.0 1.0 1.0 (1.0)
 olv4* 1.0 1.0 1.0 (1.0)
 cmy4* 0.0 0.0 0.0 (0.0)
 standard and adapted CIELAB
 LAB*LAB 11.01 0.07 0.0
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 LAB*TCMa 10.0 0.01 0.0

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

relative Inform. Technology (IT)
 olv3* 0.0 0.0 0.0 (0.0)
 cmy