

Input: Colorimetric Reflective System NCS11

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

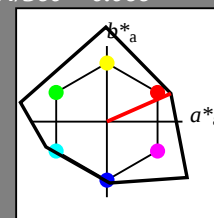
lab^*tch and lab^*nch

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)
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 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)
LAB*LAB	83.34	21.17	9.31	
LAB*LABa	83.34	21.15	9.31	
LAB*TCHa	97.5	23.11	23.75	

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)
LAB*LAB	74.31	0.02	0.0	
LAB*LABa	74.31	0.0	0.0	
LAB*TCHa	75.0	0.01	-	

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)
LAB*LAB	53.21	0.04	0.0	
LAB*LABa	53.21	0.0	0.0	
LAB*TCHa	50.0	0.01	-	

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)
LAB*LAB	53.21	0.04	0.0	
LAB*LABa	53.21	0.0	0.0	
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LAB*LABa	53.21	0.0	0.0	
LAB*TCHa	50.0	0.01	-	

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LAB*LAB	53.21	0.04	0.0	
LAB*LABa	53.21	0.0	0.0	
LAB*TCHa	50.0	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

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

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

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)
LAB*LAB	71.27	42.34	18.63	
LAB*LABa	71.27	42.31	18.63	
LAB*TCHa	75.0	46.23	23.75	

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)
LAB*LAB	59.21	63.51	27.94	
LAB*LABa	59.21	63.48	27.93	
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cmyn4*	0.0	0.5	0.5	(0.0)
LAB*LAB	59.21	63.51	27.94	
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cmyn4*	0.0	0.5	0.5	(0.0)
LAB*LAB	59.21	63.51	27.94	
LAB*LABa	59.21	63.48	27.93	
LAB*TCHa	62.5	69.35	23.75	

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cmyn4*	0.0	0.5	0.5	(0.0)
LAB*LAB	59.21	63.51	27.94	
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cmyn4*	0.0	0.5	0.5	(0.0)
LAB*LAB	59.21	63.51	27.94	
LAB*LABa	59.21	63.48	27.93	
LAB*TCHa	62.5	69.35	23.75	

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.5	(1.0)

Input: Colorimetric Reflective System NCS11

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

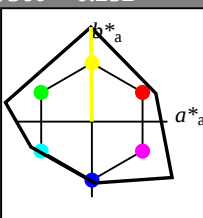
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 149$

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*TCRa	99.99	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.75	(1.0)
cmyn3*	0.0	0.0	0.25	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	94.39	-0.3	31.24	
LAB*Lab	94.39	-0.31	31.26	
LAB*TCRa	97.31	-0.25	30.59	

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	93.38	-0.62	62.5	
LAB*Lab	93.38	-0.63	62.5	
LAB*TCRa	97.0	-0.5	59.59	

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.25	(1.0)
cmyn3*	0.0	0.0	0.25	(0.0)
olvi4*	1.0	1.0	0.25	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	93.38	-0.62	62.5	
LAB*Lab	93.38	-0.63	62.5	
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standard and adapted CIELAB				
LAB*LAB	93.38	-0.62	62.5	
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standard and adapted CIELAB				
LAB*LAB	93.38	-0.62	62.5	
LAB*Lab	93.38	-0.63	62.5	
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cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.0	0.0	
LAB*TCRa	75.0	0.01	-	

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cmyn3*	0.25	0.25	0.5	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.5	(0.0)
standard and adapted CIELAB				
LAB*LAB	73.3	-0.28	31.26	
LAB*Lab	73.3	-0.31	31.26	
LAB*TCRa	75.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.25	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	72.29	-0.62	62.52	
LAB*Lab	72.29	-0.63	62.51	
LAB*TCRa	75.0	-0.5	59.59	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.25	0.25	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	72.29	-0.62	62.52	
LAB*Lab	72.29	-0.63	62.51	
LAB*TCRa	75.0	-0.5	59.59	

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olvi3*	0.75	0.75	0.0	(1.0)
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olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	72.29	-0.62	62.52	
LAB*Lab	72.29	-0.63	62.51	
LAB*TCRa	75.0	-0.5	59.59	

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olvi3*	0.75	0.75	0.0	(1.0)
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cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	72.29	-0.62	62.52	
LAB*Lab	72.29	-0.63	62.51	
LAB*TCRa	75.0	-0.5	59.59	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
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LAB*LAB	53.21	0.04	0.0	
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olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	52.1	-0.02	31.27	
LAB*Lab	52.1	-0.05	31.27	
LAB*TCRa	50.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	52.1	-0.02	31.27	
LAB*Lab	52.1	-0.05	31.27	
LAB*TCRa	50.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	52.1	-0.02	31.27	
LAB*Lab	52.1	-0.05	31.27	
LAB*TCRa	50.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	52.1	-0.02	31.27	
LAB*Lab	52.1	-0.05	31.27	
LAB*TCRa	50.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	52.1	-0.02	31.27	
LAB*Lab	52.1	-0.05	31.27	
LAB*TCRa	50.0	-0.25	30.59	

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	0.25	(1.0)
cmyn4*	0.0	0.0	0.75	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	0.0	0.0	
LAB*Lab	32.11	0.0	0.0	
LAB*TCRa	25.0	0.01	-	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.75	0.75	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	-0.59	62.51	
LAB*Lab	32.11	-0.59	62.51	
LAB*TCRa	25.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.75	0.75	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	-0.59	62.51	
LAB*Lab	32.11	-0.59	62.51	
LAB*TCRa	25.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.75	0.75	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	-0.59	62.51	
LAB*Lab	32.11	-0.59	62.51	
LAB*TCRa	25.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.75	0.75	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	-0.59	62.51	
LAB*Lab	32.11	-0.59	62.51	
LAB*TCRa	25.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.75	0.75	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	-0.59	62.51	
LAB*Lab	32.11	-0.59	62.51	
LAB*TCRa	25.0	-0.25	30.59	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.0	0.0	
LAB*TCRa	0.01	0.01	-	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.75	(1.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.0	0.0	
LAB*TCRa	0.01	0.01	-	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.75	(1.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.0	0.0	
LAB*TCRa	0.01	0.01	-	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.75	(1.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.0	0.0	
LAB*TCRa	0.01	0.01	-	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.75	(1.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.0	0.0	
LAB*TCRa	0.01	0.01	-	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.75	(1.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.0	0.0	
LAB*TCRa	0.01	0.01	-	

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	0.05	0.01	
LBYLAB	32.11	0.0	0.0	

Input: Colorimetric Reflective System NCS11

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

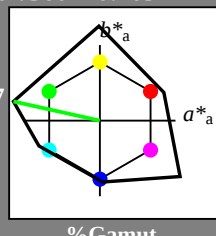
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness t^*



$u^*_{rel} = 149$

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 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*LABb	87.5	-29.25	16.75	

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*LABb	75.0	-58.52	16.75	

relative Inform. Technology (IT)

olvi3*	0.25	1.0	0.25	(1.0)
cmyn3*	0.25	0.0	0.25	(0.0)
olvi4*	0.25	1.0	0.25	(1.0)
cmyn4*	0.25	0.0	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	71.15	-85.66	19.01	
LAB*LABa	71.15	-85.66	19.01	
LAB*LABb	62.5	-87.78	16.75	

relative Inform. Technology (IT)

olvi3*	0.0	1.0	0.0	(1.0)
cmyn3*	1.0	0.0	1.0	(0.0)
olvi4*	0.0	1.0	0.0	(1.0)
cmyn4*	1.0	0.0	1.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	63.07	-114.225	35	
LAB*LABa	63.07	-114.225	35	
LAB*LABb	50.0	-117.04	16.75	

relative Inform. Technology (IT)

olvi3*	0.0	0.75	0.0	(1.0)
cmyn3*	0.75	0.25	0.75	(0.0)
olvi4*	0.0	0.75	0.0	(1.0)
cmyn4*	0.75	0.25	0.75	(0.0)
standard and adapted CIELAB				
LAB*LAB	58.14	-57.09	12.68	
LAB*LABa	58.14	-57.09	12.68	
LAB*LABb	50.0	-58.53	16.75	

relative Inform. Technology (IT)

olvi3*	0.0	0.5	0.0	(1.0)
cmyn3*	0.5	0.25	0.5	(0.0)
olvi4*	0.0	0.5	0.0	(1.0)
cmyn4*	0.5	0.25	0.5	(0.0)
standard and adapted CIELAB				
LAB*LAB	50.06	-85.65	19.02	
LAB*LABa	50.06	-85.65	19.01	
LAB*LABb	37.51	-87.78	16.75	

relative Inform. Technology (IT)

olvi3*	0.0	0.25	0.0	(1.0)
cmyn3*	0.25	0.125	0.25	(0.0)
olvi4*	0.0	0.25	0.0	(1.0)
cmyn4*	0.25	0.125	0.25	(0.0)
standard and adapted CIELAB				
LAB*LAB	45.06	-85.65	19.02	
LAB*LABa	45.06	-85.65	19.01	
LAB*LABb	33.75	-87.78	16.75	

relative Inform. Technology (IT)

olvi3*	0.0	0.125	0.0	(1.0)
cmyn3*	0.125	0.0625	0.125	(0.0)
olvi4*	0.0	0.125	0.0	(1.0)
cmyn4*	0.125	0.0625	0.125	(0.0)
standard and adapted CIELAB				
LAB*LAB	40.06	-85.65	19.02	
LAB*LABa	40.06	-85.65	19.01	
LAB*LABb	30.06	-87.78	16.75	

relative Inform. Technology (IT)

olvi3*	0.0	0.0625	0.0	(1.0)
cmyn3*	0.0625	0.03125	0.0625	(0.0)
olvi4*	0.0	0.0625	0.0	(1.0)
cmyn4*	0.0625	0.03125	0.0625	(0.0)
standard and adapted CIELAB				
LAB*LAB	35.06	-85.65	19.02	
LAB*LABa	35.06	-85.65	19.01	
LAB*LABb	25.06	-87.78	16.75	

TE580-7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)

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

BAM-test chart TE58; Colorimetric systems NCS11a & MRS18

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

input: `olv* setrgbcolor`

output: *no change compared to input*

chromaticness c^*

Input: Colorimetric Reflective System NCS11

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

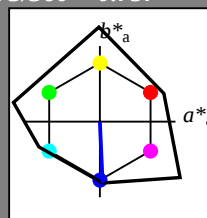
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% 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	1.0	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	0.0	0.0	
LAB*LABb	75.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.75	0.75	0.75	(1.0)
lab*tch	0.25	0.25	0.25	(0.0)
lab*nch	0.0	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.75	0.75	0.75	(1.0)
lab*tce	0.25	0.25	0.25	(0.0)
lab*nce	0.0	0.0	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	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	53.21	0.04	0.0	
LAB*LABa	53.21	0.0	0.0	
LAB*LABb	50.00	0.01	0.0	

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	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.5	0.5	0.5	(1.0)
lab*tce	0.5	0.5	0.5	(0.0)
lab*nce	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	0.07	0.01	
LAB*LABa	32.11	0.0	0.0	
LAB*LABb	25.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.25	0.25	(1.0)
lab*tch	0.75	0.75	0.75	(0.0)
lab*nch	0.0	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.25	0.25	0.25	(1.0)
lab*tce	0.75	0.75	0.75	(0.0)
lab*nce	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*LABa	11.01	0.0	0.0	
LAB*LABb	0.01	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	0.0	0.0	0.0	
LAB*LABa	0.0	0.0	0.0	
LAB*LABb	0.0	0.0	0.0	

relative CIELAB lab*

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

TE580-7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

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*	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	72.21	1.85	-40.58	
LAB*LABa	72.21	1.82	-40.58	
LAB*LABb	75.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.75	0.75	0.75	(1.0)
lab*tch	0.25	0.25	0.25	(0.0)
lab*nch	0.0	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.75	0.75	0.75	(1.0)
lab*tce	0.25	0.25	0.25	(0.0)
lab*nce	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	51.11	1.87	-40.58	
LAB*LABa	51.11	1.82	-40.58	
LAB*LABb	50.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.25	0.25	(1.0)
lab*tch	0.75	0.75	0.75	(0.0)
lab*nch	0.0	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.25	0.25	0.25	(1.0)
lab*tce	0.75	0.75	0.75	(0.0)
lab*nce	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	30.01	1.82	-40.58	
LAB*LABa	30.01	1.82	-40.58	
LAB*LABb	25.00	0.01	0.0	

relative CIELAB lab*

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

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	0.0	0.0	0.0	
LAB*LABa	0.0	0.0	0.0	
LAB*LABb	0.0	0.0	0.0	

relative CIELAB lab*

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

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

Output: Colorimetric Reflective System MRS18

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

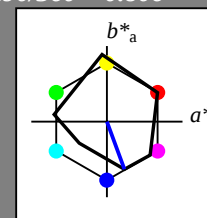
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 37 67 290

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 91$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	95.41	-0.97	4.75	
LAB*LABa	95.41	0.0	0.0	
LAB*LABb	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	1.0	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	76.06	-0.6	3.44	
LAB*LABa	76.06	0.0	0.0	
LAB*LABb	75.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.75	0.75	0.75	(1.0)
lab*tch	0.25	0.25	0.25	(0.0)
lab*nch	0.0	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.75	0.75	0.75	(1.0)
lab*tce	0.25	0.25	0.25	(0.0)
lab*nce	0.0	0.0	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	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	56.71	0.23	2.14	
LAB*LABa	56.71	0.0	0.0	
LAB*LABb	50.00	0.01	0.0	

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	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.5	0.5	0.5	(1.0)
lab*tce	0.5	0.5	0.5	(0.0)
lab*nce	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	37.36	0.13	0.8	
LAB*LABa	37.36	0.0	0.0	
LAB*LABb	25.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.25	0.25	(1.0)
lab*tch	0.75	0.75	0.75	(0.0)
lab*nch	0.0	0.0	0.0	(0.0)
relative Natural Colour (NC)				
lab*trj	0.25	0.25	0.25	(1.0)
lab*tce	0.75	0.75	0.75	(0.0)
lab*nce	0.0	0.0	0.0	(0.0)

relative Inform. Technology (IT)

olvi3*
