

Input: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 37/360 = 0.102$

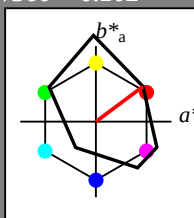
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 33 78 37

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	91.97	-0.17	-5.11
LAB*Lab	91.97	0.0	0.0
LAB*TCh	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	0.0	1.0	0.0
lab*nce	0.0	0.0	1.0

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.75	(1.0)
cmv3*	0.0	0.25	0.25	(0.0)
olv3*	0.998	0.756	0.686	(1.0)
cmv3*	0.002	0.244	0.314	(0.0)

standard and adapted CIELAB

LAB*Lab	77.12	15.14	7.09
LAB*Lab	77.12	15.57	11.62
LAB*TCh	87.5	19.43	36.72

relative CIELAB lab*

lab*lab	0.827	0.2	0.149
lab*tch	0.875	0.25	0.102
lab*nch	0.0	0.25	0.102

relative Natural Colour (NC)

lab*trj	0.827	0.244	0.056
lab*tce	0.875	0.25	0.036
lab*nce	0.0	0.25	0.14

relative Inform. Technology (IT)

olv3*	1.0	0.5	0.5	(1.0)
cmv3*	0.0	0.5	0.5	(0.0)
olv3*	0.991	0.522	0.433	(1.0)
cmv3*	0.009	0.478	0.567	(0.0)

standard and adapted CIELAB

LAB*Lab	62.27	30.47	19.3
LAB*Lab	62.27	31.16	23.24
LAB*TCh	75.0	38.87	36.72

relative CIELAB lab*

lab*lab	0.653	0.401	0.299
lab*tch	0.75	0.5	0.102
lab*nch	0.0	0.5	0.102

relative Natural Colour (NC)

lab*trj	0.653	0.487	0.112
lab*tce	0.75	0.5	0.036
lab*nce	0.0	0.5	0.14

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	0.75	0.75	(0.0)
olv3*	0.966	0.295	0.22	(1.0)
cmv3*	0.034	0.705	0.78	(0.0)

standard and adapted CIELAB

LAB*Lab	47.42	45.8	31.51
LAB*Lab	47.42	46.74	34.86
LAB*TCh	62.5	58.31	36.72

relative CIELAB lab*

lab*lab	0.48	0.601	0.448
lab*tch	0.625	0.75	0.102
lab*nch	0.0	0.75	0.102

relative Natural Colour (NC)

lab*trj	0.48	0.731	0.168
lab*tce	0.625	0.75	0.036
lab*nce	0.0	0.75	0.14

relative Inform. Technology (IT)

olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	1.0	1.0	(0.0)
olv3*	1.0	0.0	0.0	(1.0)
cmv3*	0.0	1.0	1.0	(0.0)

standard and adapted CIELAB

LAB*Lab	32.57	62.31	43.71
LAB*Lab	32.57	62.31	46.48
LAB*TCh	50.0	77.74	36.72

relative CIELAB lab*

lab*lab	0.307	0.801	0.598
lab*tch	0.5	1.0	0.102
lab*nch	0.0	1.0	0.102

relative Natural Colour (NC)

lab*trj	0.307	0.974	0.224
lab*tce	0.5	1.0	0.036
lab*nce	0.0	1.0	0.14

relative Inform. Technology (IT)

olv3*	0.75	0.0	0.0	(1.0)
cmv3*	0.25	0.0	0.0	(0.0)
olv3*	0.734	0.037	0.0	(1.0)
cmv3*	0.266	0.963	1.0	(0.0)

standard and adapted CIELAB

LAB*Lab	26.0	45.44	32.35
LAB*Lab	26.0	46.74	34.86
LAB*TCh	51.3	58.31	36.72

relative CIELAB lab*

lab*lab	0.23	0.601	0.448
lab*tch	0.375	0.75	0.102
lab*nch	0.0	0.75	0.102

relative Natural Colour (NC)

lab*trj	0.23	0.731	0.168
lab*tce	0.375	0.75	0.036
lab*nce	0.0	0.75	0.14

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)
olv3*	0.546	0.52	0.498	(1.0)
cmv3*	0.454	0.48	0.502	(0.0)

standard and adapted CIELAB

LAB*Lab	49.11	0.89	-3.42
LAB*Lab	49.11	0.0	0.0
LAB*TCh	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)

olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)
olv3*	0.548	0.303	0.25	(1.0)
cmv3*	0.452	0.697	0.75	(0.0)

standard and adapted CIELAB

LAB*Lab	34.26	14.42	8.79
LAB*Lab	34.26	15.58	11.62
LAB*TCh	37.5	19.44	36.72

relative CIELAB lab*

lab*lab	0.327	0.2	0.149
lab*tch	0.375	0.25	0.102
lab*nch	0.0	0.25	0.102

relative Natural Colour (NC)

lab*trj	0.327	0.244	0.056
lab*tce	0.375	0.25	0.036
lab*nce	0.0	0.25	0.14

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)
olv3*	0.541	0.062	0.0	(1.0)
cmv3*	0.459	0.938	1.0	(0.0)

standard and adapted CIELAB

LAB*Lab	19.42	29.75	20.99
LAB*Lab	19.42	31.16	23.24
LAB*TCh	25.01	38.87	36.72

relative CIELAB lab*

lab*lab	0.154	0.401	0.299
lab*tch	0.25	0.5	0.102
lab*nch	0.0	0.5	0.102

relative Natural Colour (NC)

lab*trj	0.154	0.487	0.112
lab*tce	0.25	0.5	0.036
lab*nce	0.0	0.5	0.14

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)
olv3*	1.0	1.0	1.0	(0.0)
cmv3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	6.26	6.26	1.73
LAB*Lab	6.26	6.26	1.73
LAB*TCh	0.0	0.0	0.01

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)

olv3*	0.75	0.75	0.75	(1.0)
cmv3*	0.25	0.25	0.25	(0.0)
olv3*	0.762	0.759	0.722	(1.0)
cmv3*	0.238	0.241	0.278	(0.0)

standard and adapted CIELAB

LAB*Lab	70.54	-0.53	-4.26
LAB*Lab	70.54	0.0	0.0
LAB*TCh	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)

olv3*	0.75	0.5	0.5	(1.0)
cmv3*	0.25	0.5	0.5	(0.0)
olv3*	0.765	0.522	0.47	(1.0)
cmv3*	0.235	0.478	0.52	(0.0)

standard and adapted CIELAB

LAB*Lab	55.69	14.79	7.94
LAB*Lab	55.69	15.58	11.62
LAB*TCh	62.5	19.44	36.72

relative CIELAB lab*

lab*lab	0.577	0.244	0.056
lab*tch	0.625	0.25	0.036
lab*nch	0.0	0.25	0.14

relative Natural Colour (NC)

lab*trj	0.577	0.244	0.056
lab*tce	0.625	0.25	0.036
lab*nce	0.0	0.25	0.14

relative Inform. Technology (IT)

olv3*	0.75	0.25	0.25	(1.0)
cmv3*	0.25	0.75	0.75	(0.0)
olv3*	0.75	0.308	0.242	(1.0)
cmv3*	0.25	0.692	0.758	(0.0)

standard and adapted CIELAB

LAB*Lab	40.84	30.12	20.15
LAB*Lab	40.84	31.16	23.24
LAB*TCh	50.0	38.87	36.72

relative CIELAB lab*

lab*lab	0.401	0.401	0.299
lab*tch	0.5	0.5	0.102
lab*nch	0.0	0.5	0.102

relative Natural Colour (NC)

lab*trj	0.404	0.487	0.112
lab*tce	0.5	0.5	0.036
lab*nce	0.0	0.5	0.14

relative Inform. Technology (IT)

olv3*	0.75	0.0	0.0	(1.0)
cmv3*	0.25	0.0	0.0	(0.0)
olv3*	0.734	0.037	0.0	(1.0)
cmv3*	0.266	0.963	1.0	(0.0)

standard and adapted CIELAB

LAB*Lab	26.0	45.44	32.35
LAB*Lab	26.0	46.74	34.86
LAB*TCh	51.3	58.31	36.72

relative CIELAB lab*

lab*lab	0.23	0.601	0.448
lab*tch	0.375	0.75	0.102
lab*nch	0.0	0.75	0.102

relative Natural Colour (NC)

lab*trj	0.23	0.731	0.168
lab*tce	0.375	0.75	0.036
lab*nce	0.0	0.75	0.14

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)
olv3*	0.546	0.52	0.498	(1.0)
cmv3*	0.454	0.48	0.502	(0.0)

standard and adapted CIELAB

LAB*Lab	49.11	0.89	-3.42
LAB*Lab	49.11	0.0	0.0
LAB*TCh	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)

olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)
olv3*	0.548	0.303	0.25	(1.0)
cmv3*	0.452	0.697	0.75	(0.0)

standard and adapted CIELAB

LAB*Lab	34.26	14.42	8.79
LAB*Lab	34.26	15.58	11.62
LAB*TCh	37.5	19.44	36.72

relative CIELAB lab*

lab*lab	0.327	0.2	0.149
lab*tch	0.375	0.25	0.102
lab*nch	0.0	0.25	0.102

relative Natural Colour (NC)

lab*trj	0.327	0.244	0.056
lab*tce	0.375	0.25	0.036
lab*nce	0.0	0.25	0.14

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)
olv3*	1.0	1.0	1.0	(0.0)
cmv3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	6.26	6.26	1.73
LAB*Lab	6.26	6.26	1.73
LAB*TCh	0.0	0.0	0.01

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)

olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)
olv3*	0.546	0.52	0.498	(1.0)
cmv3*	0.454	0.48	0.502	(0.0)

standard and adapted CIELAB

LAB*Lab	49.11	0.89	-3.42
LAB*Lab	49.11	0.0	0.0
LAB*TCh	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)

olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)
olv3*	0.548	0.303	0.25	(1.0)
cmv3*	0.452	0.697	0.75	(0.0)

standard and adapted CIELAB

LAB*Lab	34.26	14.42	8.79
LAB*Lab	34.26	15.58	11.62
LAB*TCh	37.5	19.44	36.72

relative CIELAB lab*

lab*lab	0.327	0.2	0.149

Input: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 232/360 = 0.644$

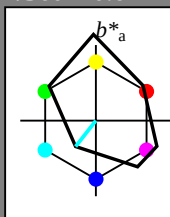
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 48 43 232

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



FRS06; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	32.57	62.32	46.49	77.75	37
Y _{Ma}	82.73	-3.16	113.99	114.03	92
L _{Ma}	39.43	-61.79	45.84	76.95	143
C _{Ma}	47.86	-26.79	-34.24	43.49	232
V _{Ma}	10.16	55.12	-61.03	82.24	312
M _{Ma}	34.5	80.68	-33.92	87.52	337
N _{Ma}	6.25	0.0	0.0	0.0	0
W _{Ma}	91.97	0.0	0.0	0.0	0
R _{CIE}	39.92	59.8	31.05	67.38	27
J _{CIE}	81.26	-2.52	76.25	76.29	92
G _{CIE}	52.23	-41.56	17.14	44.96	158
B _{CIE}	30.57	2.63	-43.77	43.86	273

%Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

relative Inform. Technology (IT)	
olv3* 1.0 1.0 1.0 (1.0)	
cmv3* 0.0 0.0 0.0 (0.0)	
olv3* 1.0 1.0 1.0 (1.0)	
cmv3* 0.0 0.0 0.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 91.97 -0.17 -5.11	
LAB*LAB 91.97 0.0 0.0	
LAB*LAB 91.97 0.0 0.0	
relative CIELAB lab*	
lab*lab 1.0 0.0 0.0	
lab*lab 1.0 0.0 0.0	
lab*lab 1.0 0.0 0.0	
relative Natural Colour (NC)	
lab*lab 1.0 0.0 0.0	
lab*lab 1.0 0.0 0.0	
lab*lab 1.0 0.0 0.0	

relative Inform. Technology (IT)	
olv3* 0.75 0.75 0.75 (1.0)	
cmv3* 0.25 0.25 0.25 (0.0)	
olv3* 0.75 0.75 0.75 (1.0)	
cmv3* 0.25 0.25 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 70.54 -0.53 -4.26	
LAB*LAB 70.54 0.0 0.0	
LAB*LAB 70.54 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.75 0.75 0.75 (1.0)	
lab*lab 0.75 0.75 0.75 (1.0)	
lab*lab 0.75 0.75 0.75 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.75 0.75 0.75 (1.0)	
lab*lab 0.75 0.75 0.75 (1.0)	
lab*lab 0.75 0.75 0.75 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 59.51 -1.39 -12.38	
LAB*LAB 59.51 0.0 0.0	
LAB*LAB 59.51 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.5 0.5 0.5 (1.0)	
lab*lab 0.5 0.5 0.5 (1.0)	
lab*lab 0.5 0.5 0.5 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.5 0.5 0.5 (1.0)	
lab*lab 0.5 0.5 0.5 (1.0)	
lab*lab 0.5 0.5 0.5 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 48.49 -1.39 -17.11	
LAB*LAB 48.49 0.0 0.0	
LAB*LAB 48.49 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 47.86 -26.79 -34.23	
LAB*LAB 47.86 0.0 0.0	
LAB*LAB 47.86 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 49.11 -0.89 -3.42	
LAB*LAB 49.11 0.0 0.0	
LAB*LAB 49.11 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	
lab*lab 0.25 0.25 0.25 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 38.08 -7.78 11.54	
LAB*LAB 38.08 0.0 0.0	
LAB*LAB 38.08 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 27.06 -14.67 -19.66	
LAB*LAB 27.06 0.0 0.0	
LAB*LAB 27.06 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 27.06 -14.67 -19.66	
LAB*LAB 27.06 0.0 0.0	
LAB*LAB 27.06 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 27.06 -14.67 -19.66	
LAB*LAB 27.06 0.0 0.0	
LAB*LAB 27.06 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 6.26 0.0 0.0	
LAB*LAB 6.26 0.0 0.0	
LAB*LAB 6.26 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 16.66 -6.69 -8.55	
LAB*LAB 16.66 0.0 0.0	
LAB*LAB 16.66 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 16.66 -6.69 -8.55	
LAB*LAB 16.66 0.0 0.0	
LAB*LAB 16.66 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 16.66 -6.69 -8.55	
LAB*LAB 16.66 0.0 0.0	
LAB*LAB 16.66 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 6.26 0.0 0.0	
LAB*LAB 6.26 0.0 0.0	
LAB*LAB 6.26 0.0 0.0	
relative CIELAB lab*	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
relative Natural Colour (NC)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	
lab*lab 0.0 0.0 0.0 (1.0)	

VE25-7, 5 step scales for constant CIELAB hue 232/360 = 0.644 (left)

5 step scales for constant CIELAB hue 232/360 = 0.644 (right)

BAM-test chart VE25; Colorimetric systems FRS06 & FRS06

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

input: $olv^* setrgbcolor$

output: $olv^* (TRI9) setrgbcolor$

Input: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 312/360 = 0.867$

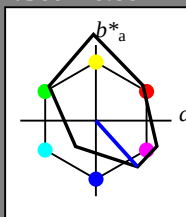
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 10 82 312

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



FRS06; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	32.57	62.32	46.49	77.75	37
Y _{Ma}	82.73	-3.16	113.99	114.03	92
L _{Ma}	39.43	-61.79	45.84	76.95	143
C _{Ma}	47.86	-26.79	-34.24	43.49	232
V _{Ma}	10.16	55.12	-61.03	82.24	312
M _{Ma}	34.5	80.68	-33.92	87.52	337
N _{Ma}	6.25	0.0	0.0	0.0	0
W _{Ma}	91.97	0.0	0.0	0.0	0
R _{CIE}	39.92	59.8	31.05	67.38	27
J _{CIE}	81.26	-2.52	76.25	76.29	92
G _{CIE}	52.23	-41.56	17.14	44.96	158
B _{CIE}	30.57	2.63	-43.77	43.86	273

%Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

relative Inform. Technology (IT)	
olv3* 1.0 1.0 1.0 (1.0)	
cmv3* 0.0 0.0 0.0 (0.0)	
olv3* 1.0 1.0 1.0 (1.0)	
cmv3* 0.0 0.0 0.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 91.97 -0.17 -5.11	
LAB*LAB 91.97 0.0 0.0	
LAB*LAB 91.97 0.0 0.0	

relative CIELAB lab*	
lab*lab 1.0 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 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)	
cmv3* 0.25 0.25 0.25 (0.0)	
olv3* 0.75 0.75 0.75 (1.0)	
cmv3* 0.25 0.25 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 70.54 -0.53 -4.26	
LAB*LAB 70.54 0.0 0.0	
LAB*LAB 70.54 0.0 0.0	

relative CIELAB lab*	
lab*lab 0.75 0.0 0.0	
lab*tch 0.75 0.0 0.0	
lab*nch 0.75 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 0.75 0.0 0.0	

relative Inform. Technology (IT)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 49.11 -0.89 -3.42	
LAB*LAB 49.11 0.0 0.0	
LAB*LAB 49.11 0.0 0.0	

relative CIELAB lab*	
lab*lab 0.5 0.0 0.0	
lab*tch 0.5 0.0 0.0	
lab*nch 0.5 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 0.5 0.0 0.0	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 27.68 1.25 3.57	
LAB*LAB 27.68 0.0 0.0	
LAB*LAB 27.68 0.0 0.0	

relative CIELAB lab*	
lab*lab 0.25 0.0 0.0	
lab*tch 0.25 0.0 0.0	
lab*nch 0.25 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 0.25 0.0 0.0	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 6.26 0.25 1.73	
LAB*LAB 6.26 0.0 0.0	
LAB*LAB 6.26 0.0 0.0	

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

$n^* = 1.0$

relative Inform. Technology (IT)	
olv3* 0.75 0.75 0.75 (1.0)	
cmv3* 0.25 0.25 0.25 (0.0)	
olv3* 0.75 0.75 0.75 (1.0)	
cmv3* 0.25 0.25 0.25 (0.0)	
standard and adapted CIELAB	
LAB*LAB 71.52 13.25 -19.55	
LAB*LAB 71.52 13.25 -19.55	
LAB*LAB 71.52 13.25 -19.55	

relative CIELAB lab*	
lab*lab 0.75 0.167 -0.184	
lab*tch 0.875 0.25 0.867	
lab*nch 0.0 0.25 0.867	
relative Natural Colour (NC)	
lab*trj 0.75 0.127 -0.214	
lab*tce 0.875 0.25 0.835	
lab*nce 0.0 0.25 0.835	

relative Inform. Technology (IT)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 50.09 12.89 -18.71	
LAB*LAB 50.09 12.89 -18.71	
LAB*LAB 50.09 12.89 -18.71	

relative CIELAB lab*	
lab*lab 0.5 0.167 -0.185	
lab*tch 0.625 0.25 0.867	
lab*nch 0.25 0.25 0.867	
relative Natural Colour (NC)	
lab*trj 0.5 0.127 -0.214	
lab*tce 0.625 0.25 0.835	
lab*nce 0.25 0.25 0.835	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 28.66 12.53 -17.86	
LAB*LAB 28.66 12.53 -17.86	
LAB*LAB 28.66 12.53 -17.86	

relative CIELAB lab*	
lab*lab 0.25 0.167 -0.185	
lab*tch 0.375 0.25 0.867	
lab*nch 0.75 0.25 0.867	
relative Natural Colour (NC)	
lab*trj 0.25 0.127 -0.214	
lab*tce 0.375 0.25 0.835	
lab*nce 0.75 0.25 0.835	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 2.16 17.01 -4.43	
LAB*LAB 2.16 17.01 -4.43	
LAB*LAB 2.16 17.01 -4.43	

relative CIELAB lab*	
lab*lab 0.0 0.23 0.335	
lab*tch 0.25 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.0 0.23 0.335	
lab*tce 0.25 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 6.26 0.25 1.73	
LAB*LAB 6.26 0.25 1.73	
LAB*LAB 6.26 0.25 1.73	

$n^* = 0.50$

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 30.61 40.12 -48.45	
LAB*LAB 30.61 40.12 -48.45	
LAB*LAB 30.61 40.12 -48.45	

relative CIELAB lab*	
lab*lab 0.25 0.335 -0.37	
lab*tch 0.75 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.25 0.335 -0.43	
lab*tce 0.75 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 10.17 55.11 -61.01	
LAB*LAB 10.17 55.11 -61.01	
LAB*LAB 10.17 55.11 -61.01	

relative CIELAB lab*	
lab*lab 0.0 0.335 -0.37	
lab*tch 0.0 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.0 0.335 -0.43	
lab*tce 0.0 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 29.64 26.33 -33.16	
LAB*LAB 29.64 26.33 -33.16	
LAB*LAB 29.64 26.33 -33.16	

relative CIELAB lab*	
lab*lab 0.25 0.335 -0.37	
lab*tch 0.75 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.25 0.335 -0.43	
lab*tce 0.75 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 8.21 27.56 -30.5	
LAB*LAB 8.21 27.56 -30.5	
LAB*LAB 8.21 27.56 -30.5	

relative CIELAB lab*	
lab*lab 0.0 0.23 0.335	
lab*tch 0.25 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.0 0.23 0.335	
lab*tce 0.25 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 6.26 0.25 1.73	
LAB*LAB 6.26 0.25 1.73	
LAB*LAB 6.26 0.25 1.73	

$n^* = 0.00$

relative Inform. Technology (IT)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 51.06 26.68 -34.0	
LAB*LAB 51.06 26.68 -34.0	
LAB*LAB 51.06 26.68 -34.0	

relative CIELAB lab*	
lab*lab 0.5 0.335 -0.37	
lab*tch 0.75 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.5 0.335 -0.43	
lab*tce 0.75 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 30.61 40.12 -48.45	
LAB*LAB 30.61 40.12 -48.45	
LAB*LAB 30.61 40.12 -48.45	

relative CIELAB lab*	
lab*lab 0.25 0.335 -0.37	
lab*tch 0.75 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.25 0.335 -0.43	
lab*tce 0.75 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 10.17 55.11 -61.01	
LAB*LAB 10.17 55.11 -61.01	
LAB*LAB 10.17 55.11 -61.01	

relative CIELAB lab*	
lab*lab 0.0 0.335 -0.37	
lab*tch 0.0 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.0 0.335 -0.43	
lab*tce 0.0 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
olv3* 0.25 0.25 0.25 (1.0)	
cmv3* 0.75 0.75 0.75 (0.0)	
standard and adapted CIELAB	
LAB*LAB 29.64 26.33 -33.16	
LAB*LAB 29.64 26.33 -33.16	
LAB*LAB 29.64 26.33 -33.16	

relative CIELAB lab*	
lab*lab 0.25 0.335 -0.37	
lab*tch 0.75 0.5 0.867	
lab*nch 0.0 0.867	
relative Natural Colour (NC)	
lab*trj 0.25 0.335 -0.43	
lab*tce 0.75 0.5 0.835	
lab*nce 0.0 0.867	

relative Inform. Technology (IT)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
olv3* 0.0 0.0 0.0 (1.0)	
cmv3* 1.0 1.0 1.0 (0.0)	
standard and adapted CIELAB	
LAB*LAB 8.21 27.56 -30.5	
LAB*LAB 8.21 27.56 -30.5	
LAB*LAB 8.21 27.56 -30.5	

$n^* = 0.25$

relative Inform. Technology (IT)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
olv3* 0.5 0.5 0.5 (1.0)	
cmv3* 0.5 0.5 0.5 (0.0)	
standard and adapted CIELAB	
LAB*LAB 51.06 26.68 -34.0	
LAB*LAB 51.06 26.68 -34.0	
LAB*LAB 51.06 26.68 -34.0	

Input: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 337/360 = 0.937$

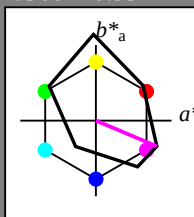
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 35 88 337

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	91.97	-17	-5.11
LAB*LAB	91.97	0.0	0.0
LAB*LAB	91.97	0.0	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	0.0	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)
cmv3*	0.25	0.25	0.25	(0.0)
olv3*	0.75	0.75	0.75	(1.0)
cmv3*	0.25	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	70.54	-0.53	-4.26
LAB*LAB	70.54	0.0	0.0
LAB*LAB	70.54	0.0	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	0.25	0.25	0.25	(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	0.25	0.25	0.25	(0.0)

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	49.11	-0.89	-3.42
LAB*LAB	49.11	0.0	0.0
LAB*LAB	49.11	0.0	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	0.5	0.5	0.5	(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	0.5	0.5	0.5	(0.0)

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)
olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)

standard and adapted CIELAB

LAB*LAB	27.68	-1.62	-5.57
LAB*LAB	27.68	0.0	0.0
LAB*LAB	27.68	0.0	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	0.75	0.75	0.75	(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	0.75	0.75	0.75	(0.0)

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)

standard and adapted CIELAB

LAB*LAB	6.26	0.6	-1.73
LAB*LAB	6.26	0.0	0.0
LAB*LAB	6.26	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	1.0	1.0	1.0	(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	1.0	1.0	1.0	(0.0)

VE25-7, 5 step scales for constant CIELAB hue 337/360 = 0.937 (left)

BAM-test chart VE25; Colorimetric systems FRS06 & FRS06

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

Output: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 337/360 = 0.937$

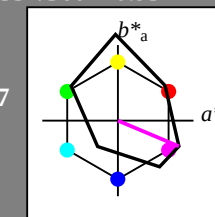
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 35 88 337

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	91.97	-17	-5.11
LAB*LAB	91.97	0.0	0.0
LAB*LAB	91.97	0.0	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	0.0	1.0	0.0
lab*nce	0.0	0.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
cmv3*	0.25	0.25	0.25	(0.0)
olv3*	0.75	0.75	0.75	(1.0)
cmv3*	0.25	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	70.54	-0.53	-4.26
LAB*LAB	70.54	0.0	0.0
LAB*LAB	70.54	0.0	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	0.25	0.25	0.25	(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	0.25	0.25	0.25	(0.0)

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(1.0)
cmv3*	0.5	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	49.11	-0.89	-3.42
LAB*LAB	49.11	0.0	0.0
LAB*LAB	49.11	0.0	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	0.5	0.5	0.5	(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	0.5	0.5	0.5	(0.0)

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)
olv3*	0.25	0.25	0.25	(1.0)
cmv3*	0.75	0.75	0.75	(0.0)

standard and adapted CIELAB

LAB*LAB	27.68	-1.62	-5.57
LAB*LAB	27.68	0.0	0.0
LAB*LAB	27.68	0.0	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	0.75	0.75	0.75	(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	0.75	0.75	0.75	(0.0)

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmv3*	1.0	1.0	1.0	(0.0)

standard and adapted CIELAB

LAB*LAB	6.26	0.6	-1.73
LAB*LAB	6.26	0.0	0.0
LAB*LAB	6.26	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	1.0	1.0	1.0	(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	1.0	1.0	1.0	(0.0)

5 step scales for constant CIELAB hue 337/360 = 0.937 (right)

input: $olv^*setrgbcolor$

output: $olv^*setrgbcolor$

%Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

0.25

0.50

0.75

1.00

chromaticness c^*

%Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

0.25

0.50

0.75

1.00

chromaticness c^*

Input: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 27/360 = 0.076$

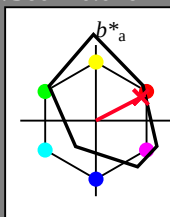
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 33 73 27

ol v^* Ma: 1.0 0.0 0.16

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

relative Inform. Technology (IT)

ol v^*	1.0	1.0	1.0	(1.0)
ol v^*	0.0	0.0	0.0	(0.0)
ol v^*	0.0	0.0	0.0	(0.0)
ol v^*	0.0	0.0	0.0	(0.0)
ol v^*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	91.97	-0.17	-5.11
LAB*LAB	91.97	0.0	0.0
LAB*LAB	91.97	0.0	0.0

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*lab	0.0	1.0	0.0
lab*lab	0.0	0.0	1.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

relative Natural Colour (NC)

lab*lab	1.0	0.0	0.0
lab*lab	0.0	1.0	0.0
lab*lab	0.0	0.0	1.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

relative Inform. Technology (IT)

ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)

standard and adapted CIELAB

LAB*LAB	70.54	-0.53	-4.26
LAB*LAB	70.54	0.0	0.0
LAB*LAB	70.54	0.0	0.0

relative CIELAB lab*

lab*lab	0.828	0.222	0.115
lab*lab	0.875	0.25	0.076
lab*lab	0.875	0.25	0.076
lab*lab	0.875	0.25	0.076
lab*lab	0.875	0.25	0.076

relative Natural Colour (NC)

lab*lab	0.828	0.222	0.115
lab*lab	0.875	0.25	0.076
lab*lab	0.875	0.25	0.076
lab*lab	0.875	0.25	0.076
lab*lab	0.875	0.25	0.076

relative Inform. Technology (IT)

ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)

standard and adapted CIELAB

LAB*LAB	49.11	-0.89	-3.42
LAB*LAB	49.11	0.0	0.0
LAB*LAB	49.11	0.0	0.0

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0

relative Natural Colour (NC)

lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0
lab*lab	0.5	0.0	0.0

relative Inform. Technology (IT)

ol v^*	0.25	0.25	0.25	(1.0)
ol v^*	0.75	0.75	0.75	(0.0)
ol v^*	0.25	0.25	0.25	(1.0)
ol v^*	0.75	0.75	0.75	(0.0)
ol v^*	0.25	0.25	0.25	(1.0)

standard and adapted CIELAB

LAB*LAB	27.68	0.0	0.0
LAB*LAB	27.68	0.0	0.0
LAB*LAB	27.68	0.0	0.0

relative CIELAB lab*

lab*lab	0.328	0.222	0.115
lab*lab	0.375	0.25	0.076
lab*lab	0.375	0.25	0.076
lab*lab	0.375	0.25	0.076
lab*lab	0.375	0.25	0.076

relative Natural Colour (NC)

lab*lab	0.328	0.222	0.115
lab*lab	0.375	0.25	0.076
lab*lab	0.375	0.25	0.076
lab*lab	0.375	0.25	0.076
lab*lab	0.375	0.25	0.076

relative Inform. Technology (IT)

ol v^*	0.25	0.25	0.25	(1.0)
ol v^*	0.75	0.75	0.75	(0.0)
ol v^*	0.25	0.25	0.25	(1.0)
ol v^*	0.75	0.75	0.75	(0.0)
ol v^*	0.25	0.25	0.25	(1.0)

standard and adapted CIELAB

LAB*LAB	6.26	0.0	0.0
LAB*LAB	6.26	0.0	0.0
LAB*LAB	6.26	0.0	0.0

relative CIELAB lab*

lab*lab	0.078	0.222	0.115
lab*lab	0.125	0.25	0.076
lab*lab	0.125	0.25	0.076
lab*lab	0.125	0.25	0.076
lab*lab	0.125	0.25	0.076

relative Natural Colour (NC)

lab*lab	0.078	0.222	0.115
lab*lab	0.125	0.25	0.076
lab*lab	0.125	0.25	0.076
lab*lab	0.125	0.25	0.076
lab*lab	0.125	0.25	0.076

relative Inform. Technology (IT)

ol v^*	0.0	0.0	0.0	(1.0)
ol v^*	1.0	1.0	1.0	(0.0)
ol v^*	0.0	0.0	0.0	(1.0)
ol v^*	1.0	1.0	1.0	(0.0)
ol v^*	0.0	0.0	0.0	(1.0)

standard and adapted CIELAB

LAB*LAB	0.0	0.0	0.0
LAB*LAB	0.0	0.0	0.0
LAB*LAB	0.0	0.0	0.0

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

relative Natural Colour (NC)

lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

relative Inform. Technology (IT)

ol v^*	0.0	0.0	0.0	(1.0)
ol v^*	1.0	1.0	1.0	(0.0)
ol v^*	0.0	0.0	0.0	(1.0)
ol v^*	1.0	1.0	1.0	(0.0)
ol v^*	0.0	0.0	0.0	(1.0)

standard and adapted CIELAB

LAB*LAB	0.0	0.0	0.0
LAB*LAB	0.0	0.0	0.0
LAB*LAB	0.0	0.0	0.0

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

relative Natural Colour (NC)

lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

FRS06; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O M_a	32.57	62.32	46.49	77.75	37
Y M_a	82.73	-3.16	113.99	114.03	92
L M_a	39.43	-61.79	45.84	76.95	143
C M_a	47.86	-26.79	-34.24	43.49	232
V M_a	10.16	55.12	-61.03	82.24	312
M M_a	34.5	80.68	-33.92	87.52	337
N M_a	6.25	0.0	0.0	0.0	0
W M_a	91.97	0.0	0.0	0.0	0
R C_{IE}	39.92	59.8	31.05	67.38	27
J C_{IE}	81.26	-2.52	76.25	76.29	92
G C_{IE}	52.23	-41.56	17.14	44.96	158
B C_{IE}	30.57	2.63	-43.77	43.86	273

%Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

relative Inform. Technology (IT)

ol v^*	1.0	0.5	0.75	(1.0)
ol v^*	0.5	1.0	0.75	(1.0)
ol v^*	0.75	0.75	1.0	(1.0)
ol v^*	0.5	0.75	0.75	(1.0)
ol v^*	0.75	0.75	0.75	(1.0)

standard and adapted CIELAB

LAB*LAB	62.42	31.92	12.98
LAB*LAB	62.42	31.92	12.98
LAB*LAB	62.42	31.92	12.98

relative CIELAB lab*

lab*lab	0.655	0.444	0.23
lab*lab	0.75	0.5	0.076
lab*lab	0.75	0.5	0.076
lab*lab	0.75	0.5	0.076
lab*lab	0.75	0.5	0.076

relative Natural Colour (NC)

lab*lab	0.655	0.444	0.23
lab*lab	0.75	0.5	0.076
lab*lab	0.75	0.5	0.076
lab*lab	0.75	0.5	0.076
lab*lab	0.75	0.5	0.076

relative Inform. Technology (IT)

ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)

standard and adapted CIELAB

LAB*LAB	40.99	31.56	13.83
LAB*LAB	40.99	31.56	13.83
LAB*LAB	40.99	31.56	13.83

relative CIELAB lab*

lab*lab	0.483	0.666	0.346
lab*lab	0.625	0.75	0.076
lab*lab	0.625	0.75	0.076
lab*lab	0.625	0.75	0.076
lab*lab	0.625	0.75	0.076

relative Natural Colour (NC)

lab*lab	0.483	0.666	0.346
lab*lab	0.625	0.75	0.076
lab*lab	0.625	0.75	0.076
lab*lab	0.625	0.75	0.076
lab*lab	0.625	0.75	0.076

relative Inform. Technology (IT)

ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)
ol v^*	0.25	0.25	0.25	(0.0)
ol v^*	0.75	0.75	0.75	(1.0)

standard and adapted CIELAB

LAB*LAB	26.22	48.9	25.39
LAB*LAB	26.22	48.9	25.39
LAB*LAB	26.22	48.9	25.39

relative CIELAB lab*

lab*lab	0.233	0.666	0.346
lab*lab	0.375	0.75	0.076
lab*lab	0.375	0.75	0.076
lab*lab	0.375	0.75	0.076
lab*lab	0.375	0.75	0.076

relative Natural Colour (NC)

lab*lab	0.233	0.666	0.346
lab*lab	0.375	0.75	0.076
lab*lab	0.375	0.75	0.076
lab*lab	0.375	0.75	0.076
lab*lab	0.375	0.75	0.076

relative Inform. Technology (IT)

ol v^*	0.25	0.25	0.25	(1.0)
ol v^*	0.75	0.75	0.75	(0.0)
ol v^*	0.25	0.25	0.25	(1.0)
ol v^*	0.75	0.75	0.75	(0.0)
ol v^*	0.25	0.25	0.25	(1.0)

standard and adapted CIELAB

LAB*LAB	19.57	31.19	14.68
LAB*LAB	19.57	31.19	14.68
LAB*LAB	19.57	31.19	14.68

relative CIELAB lab*

lab*lab	0.155	0.444	0.23
lab*lab	0.25	0.5	0.076
lab*lab	0.25	0.5	0.076
lab*lab	0.25	0.5	0.076
lab*lab	0.25	0.5	0.076

relative Natural Colour (NC)

lab*lab	0.155	0.444	0.23
lab*lab	0.25	0.5	0.076
lab*lab	0.25	0.5	0.076
lab*lab	0.25	0.5	0.076
lab*lab	0.25	0.5	0.076

relative Inform. Technology (IT)

ol v^*	0.0	0.0	0.0	(1.0)
ol v^*	1.0	1.0	1.0	(0.0)
ol v^*	0.0	0.0	0.0	(1.0)
ol v^*	1.0	1.0	1.0	(0.0)
ol v^*	0.0	0.0	0.0	(1.0)

standard and adapted CIELAB

LAB*LAB	6.26	0.0	0.0
LAB*LAB	6.26	0.0	0.0
LAB*LAB	6.26	0.0	0.0

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

relative Natural Colour (NC)

lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0
lab*lab	0.0	0.0	0.0

Output: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 27/360 = 0.076$

lab^*tch and lab^*nch

D65: hue R

Input: Colorimetric Printer Reflective System FRS06

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

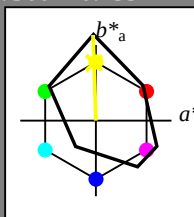
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 82 113 92

olv*Ma: 0.99 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	91.97	-0.17	-5.11
LAB*LABa	91.97	0.0	0.0
LAB*LABb	91.97	0.0	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*tr	1.0	0.0	0.0
lab*tc	0.0	1.0	0.0
lab*nc	0.0	0.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olv3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	70.54	-0.53	-4.26
LAB*LABa	70.54	0.0	0.0
LAB*LABb	70.54	0.0	0.0

relative CIELAB lab*

lab*lab	0.75	0.0	0.0
lab*tch	0.0	0.75	0.0
lab*nch	0.0	0.0	0.75

relative Natural Colour (NC)

lab*tr	0.75	0.0	0.0
lab*tc	0.0	0.75	0.0
lab*nc	0.0	0.0	0.75

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	49.11	-0.89	-3.42
LAB*LABa	49.11	0.0	0.0
LAB*LABb	49.11	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*tr	0.5	0.0	0.0
lab*tc	0.0	0.5	0.0
lab*nc	0.0	0.0	0.5

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(0.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olv3*	0.25	0.25	0.25	(0.0)
cmyn3*	0.75	0.75	0.75	(0.0)

standard and adapted CIELAB

LAB*LAB	27.68	-1.25	-2.57
LAB*LABa	27.68	0.0	0.0
LAB*LABb	27.68	0.0	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*tch	0.0	0.25	0.0
lab*nch	0.0	0.0	0.25

relative Natural Colour (NC)

lab*tr	0.25	0.0	0.0
lab*tc	0.0	0.25	0.0
lab*nc	0.0	0.0	0.25

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)

standard and adapted CIELAB

LAB*LAB	6.26	1.62	1.73
LAB*LABa	6.26	0.0	0.0
LAB*LABb	6.26	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*tr	0.0	0.0	0.0
lab*tc	0.0	0.0	0.0
lab*nc	0.0	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(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

FRS06; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	32.57	62.32	46.49	77.75	37
YMa	82.73	-3.16	113.99	114.03	92
LMa	39.43	-61.79	45.84	76.95	143
CMa	47.86	-26.79	-34.24	43.49	232
VMa	10.16	55.12	-61.03	82.24	312
MMa	34.5	80.68	-33.92	87.52	337
NMa	6.25	0.0	0.0	0.0	0
WMa	91.97	0.0	0.0	0.0	0
RCIE	39.92	59.8	31.05	67.38	27
JCIE	81.26	-2.52	76.25	76.29	92
GCIE	52.23	-41.56	17.14	44.96	158
BCIE	30.57	2.63	-43.77	43.86	273

% Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

relative Inform. Technology (IT)

olv3*	0.99	1.0	0.5	(1.0)
cmyn3*	0.002	0.0	0.5	(0.0)
olv3*	0.99	1.0	0.5	(1.0)
cmyn3*	0.002	0.0	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	87.13	-1.86	56.65
LAB*LABa	87.13	0.0	0.0
LAB*LABb	87.13	0.0	0.0

relative CIELAB lab*

lab*lab	0.944	-0.016	0.5
lab*tch	0.0	0.944	0.0
lab*nch	0.0	0.0	0.944

relative Natural Colour (NC)

lab*tr	0.944	0.0	0.5
lab*tc	0.0	0.944	0.0
lab*nc	0.0	0.0	0.944

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olv3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	87.13	-1.86	56.65
LAB*LABa	87.13	0.0	0.0
LAB*LABb	87.13	0.0	0.0

relative CIELAB lab*

lab*lab	0.75	0.0	0.0
lab*tch	0.0	0.75	0.0
lab*nch	0.0	0.0	0.75

relative Natural Colour (NC)

lab*tr	0.75	0.0	0.0
lab*tc	0.0	0.75	0.0
lab*nc	0.0	0.0	0.75

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	65.7	-2.49	52.58
LAB*LABa	65.7	0.0	0.0
LAB*LABb	65.7	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*tr	0.5	0.0	0.0
lab*tc	0.0	0.5	0.0
lab*nc	0.0	0.0	0.5

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(0.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olv3*	0.25	0.25	0.25	(0.0)
cmyn3*	0.75	0.75	0.75	(0.0)

standard and adapted CIELAB

LAB*LAB	44.28	-2.86	56.64
LAB*LABa	44.28	0.0	0.0
LAB*LABb	44.28	0.0	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*tch	0.0	0.25	0.0
lab*nch	0.0	0.0	0.25

relative Natural Colour (NC)

lab*tr	0.25	0.0	0.0
lab*tc	0.0	0.25	0.0
lab*nc	0.0	0.0	0.25

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)

standard and adapted CIELAB

LAB*LAB	6.26	1.62	1.73
LAB*LABa	6.26	0.0	0.0
LAB*LABb	6.26	0.0	0.0

Output: Colorimetric Printer Reflective System FRS06

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

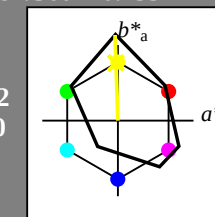
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 82 113 92

olv*Ma: 0.99 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 115$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	91.97	-0.17	-5.11
LAB*LABa	91.97	0.0	0.0
LAB*LABb	91.97	0.0	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*tr	1.0	0.0	0.0
lab*tc	0.0	1.0	0.0
lab*nc	0.0	0.0	1.0

relative Inform. Technology (IT)

olv3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olv3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	70.54	-0.53	-4.26
LAB*LABa	70.54	0.0	0.0
LAB*LABb	70.54	0.0	0.0

relative CIELAB lab*

lab*lab	0.75	0.0	0.0
lab*tch	0.0	0.75	0.0
lab*nch	0.0	0.0	0.75

relative Natural Colour (NC)

lab*tr	0.75	0.0	0.0
lab*tc	0.0	0.75	0.0
lab*nc	0.0	0.0	0.75

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	49.11	-0.89	-3.42
LAB*LABa	49.11	0.0	0.0
LAB*LABb	49.11	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*tr	0.5	0.0	0.0
lab*tc	0.0	0.5	0.0
lab*nc	0.0	0.0	0.5

relative Inform. Technology (IT)

olv3*	0.25	0.25	0.25	(0.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olv3*	0.25	0.25	0.25	(0.0)
cmyn3*	0.75	0.75	0.75	(0.0)

standard and adapted CIELAB

LAB*LAB	27.68	-1.25	-2.57
LAB*LABa	27.68	0.0	0.0
LAB*LABb	27.68	0.0	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*tch	0.0	0.25	0.0
lab*nch	0.0	0.0	0.25

relative Natural Colour (NC)

lab*tr	0.25	0.0	0.0
lab*tc	0.0	0.25	0.0
lab*nc	0.0	0.0	0.25

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(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
lab*tch	0.0	0.0	0.0
lab*nch	0.0	0.0	0.0

relative Natural Colour (NC)

lab*tr	0.0	0.0	0.0
lab*tc	0.0	0.0	0.0
lab*nc	0.0	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olv3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(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

FRS06; adapted (a) CIELAB data

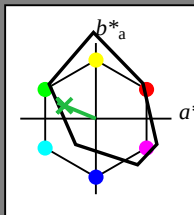
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	h^*_{ab}
O _{Ma}	32.57	62.32	46.49	77.75	37
Y _{Ma}	82.73	-3.16	113.99	114.03	92
L _{Ma}	39.43	-61.79	45.84	76.95	143
C _{Ma}	47.86	-26.79	-34.24	43.49	232
V _{Ma}	10.16	55.12	-61.03	82.24	312
M _{Ma}	34.5	80.68	-33.92	87.52	337
N _{Ma}	6.25	0.0	0.0	0.0	0
W _{Ma}	91.97	0.0	0.0	0.0	0
R _{CIE}	39.92	59.8	31.05	67.38	27
J _{CIE}	81.26	-2.52	76.25	76.29	92
G _{CIE}	52.23	-41.56	17.14	44.96	158
B _{CIE}	30.57	2.63	-43.77	43.86	273

Input: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 158/360 = 0.438$
 lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 42 55 158
olv*Ma: 0.0 1.0 0.31

triangle lightness t^*



relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 91.97 -0.17 -5.11
LAB*LABa 91.97 0.0 0.0
LAB*LABb 91.97 0.0 0.0

relative CIELAB lab*
lab*lab 1.0 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 1.0 0.0 0.0
lab*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 70.54 -0.53 -4.26
LAB*LABa 70.54 0.0 0.0
LAB*LABb 70.54 0.0 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.75 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*trc 0.75 0.0 0.0
lab*ncc 0.75 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 49.11 -0.89 -3.42
LAB*LABa 49.11 0.0 0.0
LAB*LABb 49.11 0.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*trc 0.5 0.0 0.0
lab*ncc 0.5 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 27.68 0.24 -2.57
LAB*LABa 27.68 0.0 0.0
LAB*LABb 27.68 0.0 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.25 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*trc 0.25 0.0 0.0
lab*ncc 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 6.26 0.26 1.73
LAB*LABa 6.26 0.0 0.0
LAB*LABb 6.26 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 6.26 0.26 1.73
LAB*LABa 6.26 0.0 0.0
LAB*LABb 6.26 0.0 0.0

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

FRS06; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	32.57	62.32	46.49	77.75	37
Y _{Ma}	82.73	-3.16	113.99	114.03	92
L _{Ma}	39.43	-61.79	45.84	76.95	143
C _{Ma}	47.86	-26.79	-34.24	43.49	232
V _{Ma}	10.16	55.12	-61.03	82.24	312
M _{Ma}	34.5	80.68	-33.92	87.52	337
N _{Ma}	6.25	0.0	0.0	0.0	0
W _{Ma}	91.97	0.0	0.0	0.0	0
R _{CIE}	39.92	59.8	31.05	67.38	27
J _{CIE}	81.26	-2.52	76.25	76.29	92
G _{CIE}	52.23	-41.56	17.14	44.96	158
B _{CIE}	30.57	2.63	-43.77	43.86	273

%Regularity

$g^*_{H,rel} = 28$

$g^*_{C,rel} = 38$

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.25$

blackness n^*

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

$n^* = 0.50$

chromaticness c^*

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

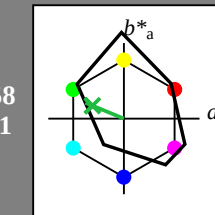
$n^* = 1.0$

Output: Colorimetric Printer Reflective System FRS06

for hue $h^* = lab^*h = 158/360 = 0.438$
 lab^*tch and lab^*nch

D65: hue G
LCH*Ma: 42 55 158
olv*Ma: 0.0 1.0 0.31

triangle lightness t^*



relative Inform. Technology (IT)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
olv3* 1.0 1.0 1.0 (1.0)
cmyn3* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 91.97 -0.17 -5.11
LAB*LABa 91.97 0.0 0.0
LAB*LABb 91.97 0.0 0.0

relative CIELAB lab*
lab*lab 1.0 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 1.0 0.0 0.0
lab*trc 1.0 0.0 0.0
lab*ncc 0.0 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olv3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
standard and adapted CIELAB
LAB*LAB 70.54 -0.53 -4.26
LAB*LABa 70.54 0.0 0.0
LAB*LABb 70.54 0.0 0.0

relative CIELAB lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 0.0
lab*nch 0.75 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.75 0.0 0.0
lab*trc 0.75 0.0 0.0
lab*ncc 0.75 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
olv3* 0.5 0.5 0.5 (0.0)
cmyn3* 0.5 0.5 0.5 (0.0)
standard and adapted CIELAB
LAB*LAB 49.11 -0.89 -3.42
LAB*LABa 49.11 0.0 0.0
LAB*LABb 49.11 0.0 0.0

relative CIELAB lab*
lab*lab 0.5 0.0 0.0
lab*tch 0.5 0.0 0.0
lab*nch 0.5 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.5 0.0 0.0
lab*trc 0.5 0.0 0.0
lab*ncc 0.5 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olv3* 0.25 0.25 0.25 (0.0)
cmyn3* 0.75 0.75 0.75 (0.0)
standard and adapted CIELAB
LAB*LAB 27.68 0.24 -2.57
LAB*LABa 27.68 0.0 0.0
LAB*LABb 27.68 0.0 0.0

relative CIELAB lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 0.0
lab*nch 0.25 0.0 0.0
relative Natural Colour (NC)
lab*trj 0.25 0.0 0.0
lab*trc 0.25 0.0 0.0
lab*ncc 0.25 0.0 0.0

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 6.26 0.26 1.73
LAB*LABa 6.26 0.0 0.0
LAB*LABb 6.26 0.0 0.0

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

relative Inform. Technology (IT)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olv3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
standard and adapted CIELAB
LAB*LAB 6.26 0.26 1.73
LAB*LABa 6.26 0.0 0.0
LAB*LABb 6.26 0.0 0.0

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

$n^* = 1.0$

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%Regularity

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$n^* = 0.50$

chromaticness c^*

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

VE25-7, 5 step scales for constant CIELAB hue 158/360 = 0.438 (left)

5 step scales for constant CIELAB hue 158/360 = 0.438 (right)

BAM-test chart VE25; Colorimetric systems FRS06 & FRS06

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

input: $olv^*setrgbcolor$

output: $olv^* (TRI9) setrgbcolor$

