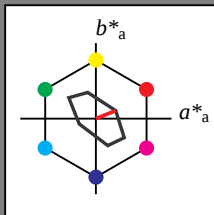


Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 22/360 = 0.061$
 lab^*tch and lab^*nch

D65: hue O
LCH*Ma: 76 28 22
olv*Ma: 1.0 0.0 0.0
triangle lightness t^*



TLS70; adapted (a) CIELAB data					
	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RC _{IE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)					
olv3*	1.0	1.0	1.0	(1.0)	
olv3*	0.0	0.0	0.0	(0.0)	
olv4*	1.0	1.0	1.0	(1.0)	
olv4*	0.0	0.0	0.0	(0.0)	
cmyn3*	0.0	0.0	0.0	0.0	
cmyn3*	0.0	0.0	0.0	0.0	
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		

relative Inform. Technology (IT)					
olv3*	1.0	0.75	0.75	(1.0)	
olv3*	0.0	0.25	0.25	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	90.66	6.56	2.64		
LAB*LAB	90.66	6.56	2.64		
LAB*LAB	90.66	6.56	2.64		
LAB*LAB	90.66	6.56	2.64		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	0.75	0.75	0.75	(1.0)	
olv3*	0.25	0.25	0.25	(0.0)	
olv4*	1.0	1.0	1.0	(1.0)	
olv4*	0.0	0.0	0.0	(0.0)	
cmyn3*	0.0	0.0	0.0	0.25	
cmyn3*	0.0	0.0	0.0	0.25	
LAB*LAB	88.98	0.0	0.0		
LAB*LAB	88.98	0.0	0.0		
LAB*LAB	88.98	0.0	0.0		
LAB*LAB	88.98	0.0	0.0		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	1.0	1.0	(1.0)	
olv4*	0.0	0.0	0.0	(0.0)	
cmyn3*	0.0	0.0	0.0	0.5	
cmyn3*	0.0	0.0	0.0	0.5	
LAB*LAB	82.56	0.0	0.0		
LAB*LAB	82.56	0.0	0.0		
LAB*LAB	82.56	0.0	0.0		
LAB*LAB	82.56	0.0	0.0		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	1.0	0.5	0.5	(1.0)	
olv3*	0.0	0.5	0.5	(0.0)	
olv4*	1.0	0.5	0.5	(1.0)	
olv4*	0.0	0.5	0.5	(0.0)	
cmyn3*	0.0	0.5	0.5	0.0	
cmyn3*	0.0	0.5	0.5	0.0	
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		
LAB*LAB	85.92	13.13	5.28		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	1.0	1.0	(1.0)	
olv4*	0.0	0.0	0.0	(0.0)	
cmyn3*	0.0	0.0	0.0	0.5	
cmyn3*	0.0	0.0	0.0	0.5	
LAB*LAB	82.56	0.0	0.0		
LAB*LAB	82.56	0.0	0.0		
LAB*LAB	82.56	0.0	0.0		
LAB*LAB	82.56	0.0	0.0		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		

relative Inform. Technology (IT)					
olv3*	0.75	0.5	0.5	(1.0)	
olv3*	0.25	0.5	0.5	(0.0)	
olv4*	1.0	0.75	0.75	(1.0)	
olv4*	0.0	0.25	0.25	(0.0)	
cmyn3*	0.0	0.25	0.25	0.0	
cmyn3*	0.0	0.25	0.25	0.0	
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		
LAB*LAB	84.24	6.57	2.64		

LAB*1ChA 62.5				21.23	21.92
relative CIELab lab*					
lab*lab	0.446	0.696	0.28		
lab*tch	0.625	0.75	0.061		
lab*nch	0.0	0.75	0.061		
relative Natural Colour (NC)					
lab*lrj	0.446	0.749	-0.036		
lab*tce	0.625	0.75	0.992		
lab*nce	0.0	0.75	b96r		

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 107/360 = 0.298$

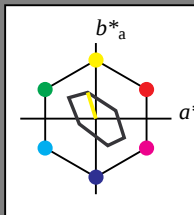
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 94 36 107

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



TLS70; adapted (a) CIELAB data

	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RC _{IE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmv4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0
LAB*Lab	95.41	0.0	0.0

OE580-7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

BAM-test chart OE58; Colorimetric systems TLS70 & TLS00

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

5 step scales for constant CIELAB hue 103/360 = 0.286 (right)

input: $cmv0^* setcmykcolor$

output: no change compared to input

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 198/360 = 0.55$

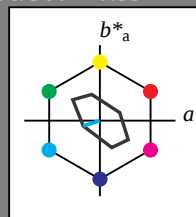
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 91 23 198

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



TLS70; adapted (a) CIELAB data					
	$L^*=L_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

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

relative Inform. Technology (IT)					
olvi3*	0.75	1.0	1.0	(1.0)	
cmyn3*	0.25	0.0	0.0	(0.0)	
olvi4*	0.75	1.0	1.0	1.0	
cmyn4*	0.25	0.0	0.0	0.0	
standard and adapted CIELAB					
LAB*LAB	94.29	-5.48	-1.76		
LAB*LAB _a	94.29	-5.48	-1.76		

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab^*h = 294/360 = 0.816$

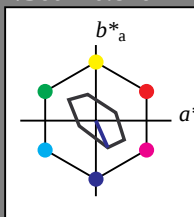
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 72 39 294

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 16$

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 0.0
LAB*LAB 95.41 0.0 0.0
LAB*TCRa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 88.98 0.0 0.0
LAB*LAB 88.98 0.0 0.0
LAB*TCRa 75.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 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 88.98 0.0 0.0
LAB*LAB 88.98 0.0 0.0
LAB*TCRa 75.00 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 (1.0)
lab*nch 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 (1.0)
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 82.56 0.0 0.0
LAB*LAB 82.56 0.0 0.0
LAB*TCRa 50.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.13 0.0 0.0
LAB*LAB 76.13 0.0 0.0
LAB*TCRa 25.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 76.13 0.0 0.0
LAB*LAB 76.13 0.0 0.0
LAB*TCRa 25.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

OE580-7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

BAM-test chart OE58; Colorimetric systems TLS70 & TLS00

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

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 306/360 = 0.851$

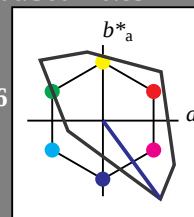
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 30 129 306

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 158$

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 0.0
LAB*LAB 95.41 0.0 0.0
LAB*TCRa 99.99 0.01 0.0

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

relative Inform. Technology (IT)
olvi3* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 88.98 0.0 0.0
LAB*LAB 88.98 0.0 0.0
LAB*TCRa 75.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.5 0.5 0.5 (1.0)
cmyn3* 0.5 0.5 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 88.98 0.0 0.0
LAB*LAB 88.98 0.0 0.0
LAB*TCRa 75.00 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 (1.0)
lab*nch 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 (1.0)
lab*nce 0.0 0.0 0.0

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 82.56 0.0 0.0
LAB*LAB 82.56 0.0 0.0
LAB*TCRa 50.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 82.56 0.0 0.0
LAB*LAB 82.56 0.0 0.0
LAB*TCRa 50.00 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

relative Inform. Technology (IT)
olvi3* 0.0 0.0 0.0 (1.0)
cmyn3* 1.0 1.0 1.0 (0.0)
olvi4* 1.0 1.0 1.0 (1.0)
cmyn4* 0.0 0.0 0.0 (0.0)
standard and adapted CIELAB
LAB*LAB 69.17 0.0 0.0
LAB*LAB 69.17 0.0 0.0
LAB*TCRa 0.01 0.0 0.0

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

5 step scales for constant CIELAB hue 306/360 = 0.851 (right)

input: $cmv0^* setcmvcolor$

output: no change compared to input

BAM-test chart OE58; Colorimetric systems TLS70 & TLS00

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

Input: Colorimetric Television Luminous System TLS70

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

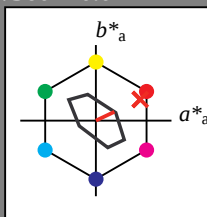
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 77 27 25

olv*Ma: 1.0 0.05 0.0

triangle lightness t^*



TLS70; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv5*	1.0	1.0	1.0	(1.0)
olv5*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	0.762	0.75	(1.0)
olv3*	0.0	0.238	0.25	(0.0)
olv4*	1.0	0.762	0.75	(1.0)
olv4*	0.0	0.238	0.25	(0.0)
olv5*	1.0	0.762	0.75	(1.0)
olv5*	0.0	0.238	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	90.87	6.13	2.92
LAB*LAB	90.87	6.13	2.92
LAB*LAB	90.87	6.13	2.92
LAB*LAB	90.87	6.13	2.92

relative Inform. Technology (IT)

olv3*	1.0	0.523	0.5	(1.0)
olv3*	0.0	0.477	0.5	(0.0)
olv4*	1.0	0.523	0.5	(1.0)
olv4*	0.0	0.477	0.5	(0.0)
olv5*	1.0	0.523	0.5	(1.0)
olv5*	0.0	0.477	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	86.33	12.27	5.85
LAB*LAB	86.33	12.27	5.85
LAB*LAB	86.33	12.27	5.85
LAB*LAB	86.33	12.27	5.85

relative Inform. Technology (IT)

olv3*	1.0	0.285	0.25	(1.0)
olv3*	0.0	0.715	0.25	(0.0)
olv4*	1.0	0.285	0.25	(1.0)
olv4*	0.0	0.715	0.25	(0.0)
olv5*	1.0	0.285	0.25	(1.0)
olv5*	0.0	0.715	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	81.79	18.4	8.77
LAB*LAB	81.79	18.4	8.77
LAB*LAB	81.79	18.4	8.77
LAB*LAB	81.79	18.4	8.77

relative Inform. Technology (IT)

olv3*	1.0	0.047	0.0	(1.0)
olv3*	0.0	0.953	0.0	(0.0)
olv4*	1.0	0.047	0.0	(1.0)
olv4*	0.0	0.953	0.0	(0.0)
olv5*	1.0	0.047	0.0	(1.0)
olv5*	0.0	0.953	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	77.25	24.54	11.69
LAB*LAB	77.25	24.54	11.69
LAB*LAB	77.25	24.54	11.69
LAB*LAB	77.25	24.54	11.69

Output: Colorimetric Television Luminous System TLS00

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

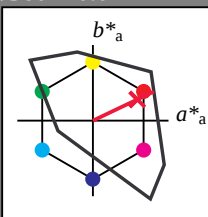
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	50.5	76.92	64.55	100.42	40
Y _{Ma}	92.66	-20.69	90.75	93.08	103
L _{Ma}	83.63	-82.75	79.9	115.04	136
C _{Ma}	86.88	-46.16	-13.55	48.12	196
V _{Ma}	30.39	76.06	-103.59	128.52	306
M _{Ma}	57.3	94.35	-58.41	110.97	328
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 20$

$g^*_{C,rel} = 37$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
olv3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
olv4*	0.0	0.0	0.0	(0.0)
olv5*	1.0	1.0	1.0	(1.0)
olv5*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0
LAB*LAB	95.41	0.0	0.0

relative Inform. Technology (IT)

olv3*	1.0	0.75	0.803	(1.0)
olv3*	0.0	0.25	0.197	(0.0)
olv4*	1.0	0.75	0.803	(1.0)
olv4*	0.0	0.25	0.197	(0.0)
olv5*	1.0	0.75	0.803	(1.0)
olv5*	0.0	0.25	0.197	(0.0)

standard and adapted CIELAB

LAB*LAB	84.54	20.15	9.6
LAB*LAB	84.54	20.15	9.6
LAB*LAB	84.54	20.15	9.6
LAB*LAB	84.54	20.15	9.6

relative Inform. Technology (IT)

olv3*	1.0	0.523	0.5	(1.0)
olv3*	0.0	0.477	0.5	(0.0)
olv4*	1.0	0.523	0.5	(1.0)
olv4*	0.0	0.477	0.5	(0.0)
olv5*	1.0	0.523	0.5	(1.0)
olv5*	0.0	0.477	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	86.33	12.27	5.85
LAB*LAB	86.33	12.27	5.85
LAB*LAB	86.33	12.27	5.85
LAB*LAB	86.33	12.27	5.85

relative Inform. Technology (IT)

olv3*	1.0	0.285	0.25	(1.0)
olv3*	0.0	0.715	0.25	(0.0)
olv4*	1.0	0.285	0.25	(1.0)
olv4*	0.0	0.715	0.25	(0.0)
olv5*	1.0	0.285	0.25	(1.0)
olv5*	0.0	0.715	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	81.79	18.4	8.77
LAB*LAB	81.79	18.4	8.77
LAB*LAB	81.79	18.4	8.77
LAB*LAB	81.79	18.4	8.77

relative Inform. Technology (IT)

olv3*	1.0	0.047	0.0	(1.0)
olv3*	0.0	0.953	0.0	(0.0)
olv4*	1.0	0.047	0.0	(1.0)
olv4*	0.0	0.953	0.0	(0.0)
olv5*	1.0	0.047	0.0	(1.0)
olv5*	0.0	0.953	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	77.25	24.54	11.69
LAB*LAB	77.25	24.54	11.69
LAB*LAB	77.25	24.54	11.69
LAB*LAB	77.25	24.54	11.69

OE580-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart OE58; Colorimetric systems TLS70 & TLS00

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

input: $cmv0^* setcmykcolor$

output: no change compared to input

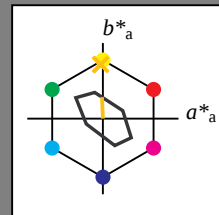
Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab \cdot h = 92/360 = 0.256$

$lab \cdot tch$ and $lab \cdot nch$

D65: hue J
LCH*Ma: 89 28 92
olv*Ma: 1.0 0.74 0.0

triangle lightness t^*



TLS70; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)

olv3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	95.41	0.0	0.0
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	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*	1.0	0.935	0.75	(1.0)
cmyn3*	0.0	0.065	0.25	(0.0)
olv4*	1.0	0.935	0.75	(1.0)
cmyn4*	0.0	0.065	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	93.9	-28	7.09
LAB*LABa	93.9	-28	7.09
LAB*LABb	97.5	7.1	92.33

relative CIELAB lab*

lab*lab	0.941	0.0	0.25
lab*tch	0.875	0.25	0.256
lab*nch	0.0	0.25	0.256

relative Natural Colour (NC)

lab*trj	0.941	0.0	0.25
lab*tce	0.875	0.25	0.256
lab*nce	0.0	0.25	0.256

relative Inform. Technology (IT)

olv3*	1.0	0.875	0.5	(1.0)
cmyn3*	0.0	0.125	0.5	(0.0)
olv4*	1.0	0.875	0.5	(1.0)
cmyn4*	0.0	0.125	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	92.4	-0.57	14.19
LAB*LABa	92.4	-0.57	14.19
LAB*LABb	75.0	14.2	92.32

relative CIELAB lab*

lab*lab	0.883	-0.019	0.499
lab*tch	0.75	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*trj	0.883	0.0	0.5
lab*tce	0.75	0.5	0.256
lab*nce	0.0	0.5	0.256

relative Inform. Technology (IT)

olv3*	1.0	0.805	0.25	(1.0)
cmyn3*	0.0	0.195	0.0	(0.0)
olv4*	1.0	0.805	0.25	(1.0)
cmyn4*	0.0	0.195	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	90.89	-0.85	21.28
LAB*LABa	90.89	-0.85	21.28
LAB*LABb	62.5	21.3	92.32

relative CIELAB lab*

lab*lab	0.824	-0.029	0.749
lab*tch	0.625	0.75	0.256
lab*nch	0.0	0.75	0.256

relative Natural Colour (NC)

lab*trj	0.824	0.0	0.75
lab*tce	0.625	0.75	0.256
lab*nce	0.0	0.75	0.256

relative Inform. Technology (IT)

olv3*	1.0	0.74	0.0	(1.0)
cmyn3*	0.0	0.26	1.0	(0.0)
olv4*	1.0	0.74	0.0	(1.0)
cmyn4*	0.0	0.26	1.0	(0.0)

standard and adapted CIELAB

LAB*LAB	89.38	-1.14	28.37
LAB*LABa	89.38	-1.14	28.37
LAB*LABb	50.0	28.4	92.32

relative CIELAB lab*

lab*lab	0.768	-0.039	0.999
lab*tch	0.5	1.0	0.256
lab*nch	0.0	1.0	0.256

relative Natural Colour (NC)

lab*trj	0.768	0.0	1.0
lab*tce	0.5	1.0	0.256
lab*nce	0.0	1.0	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	47.72	0.0	0.0
LAB*LABa	47.72	0.0	0.0
LAB*LABb	50.0	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.0
lab*tce	0.5	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	82.56	0.0	0.0
LAB*LABa	82.56	0.0	0.0
LAB*LABb	50.0	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.0
lab*tce	0.5	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.435	0.25	(1.0)
cmyn3*	0.5	0.565	0.75	(0.0)
olv4*	1.0	0.935	0.75	(1.0)
cmyn4*	0.0	0.065	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	81.05	-0.28	7.09
LAB*LABa	81.05	-0.28	7.09
LAB*LABb	37.5	7.1	92.33

relative CIELAB lab*

lab*lab	0.441	-0.009	0.25
lab*tch	0.375	0.25	0.256
lab*nch	0.0	0.25	0.256

relative Natural Colour (NC)

lab*trj	0.441	0.0	0.25
lab*tce	0.375	0.25	0.256
lab*nce	0.0	0.25	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.37	0.0	(1.0)
cmyn3*	0.5	0.63	1.0	(0.0)
olv4*	1.0	0.875	0.5	(1.0)
cmyn4*	0.0	0.13	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	85.97	-0.56	14.19
LAB*LABa	85.97	-0.56	14.19
LAB*LABb	50.0	14.2	92.32

relative CIELAB lab*

lab*lab	0.633	-0.019	0.5
lab*tch	0.5	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*trj	0.633	0.0	0.5
lab*tce	0.5	0.5	0.256
lab*nce	0.0	0.5	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.555	0.0	(1.0)
cmyn3*	0.5	0.445	1.0	(0.0)
olv4*	1.0	0.805	0.25	(1.0)
cmyn4*	0.0	0.195	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	84.46	-0.85	21.28
LAB*LABa	84.46	-0.85	21.28
LAB*LABb	37.51	21.3	92.32

relative CIELAB lab*

lab*lab	0.574	-0.029	0.749
lab*tch	0.375	0.75	0.256
lab*nch	0.0	0.75	0.256

relative Natural Colour (NC)

lab*trj	0.574	0.0	0.75
lab*tce	0.375	0.75	0.256
lab*nce	0.0	0.75	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.456	0.25	(1.0)
cmyn3*	0.5	0.544	0.75	(0.0)
olv4*	1.0	0.935	0.75	(1.0)
cmyn4*	0.0	0.065	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	45.16	-0.86	21.53
LAB*LABa	45.16	-0.86	21.53
LAB*LABb	37.5	21.55	92.31

relative CIELAB lab*

lab*lab	0.473	-0.009	0.25
lab*tch	0.375	0.25	0.256
lab*nch	0.0	0.25	0.256

relative Natural Colour (NC)

lab*trj	0.473	0.0	0.25
lab*tce	0.375	0.25	0.256
lab*nce	0.0	0.25	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.456	0.25	(1.0)
cmyn3*	0.5	0.544	0.75	(0.0)
olv4*	1.0	0.935	0.75	(1.0)
cmyn4*	0.0	0.065	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	45.16	-0.86	21.53
LAB*LABa	45.16	-0.86	21.53
LAB*LABb	37.5	21.55	92.31

relative CIELAB lab*

lab*lab	0.473	-0.009	0.25
lab*tch	0.375	0.25	0.256
lab*nch	0.0	0.25	0.256

relative Natural Colour (NC)

lab*trj	0.473	0.0	0.25
lab*tce	0.375	0.25	0.256
lab*nce	0.0	0.25	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olv4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	76.13	0.0	0.0
LAB*LABa	76.13	0.0	0.0
LAB*LABb	25.0	0.0	0.0

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.0
lab*tce	0.5	0.0	0.0
lab*nce	0.0	0.0	0.0

relative Inform. Technology (IT)

olv3*	0.5	0.441	0.0	(1.0)
cmyn3*	0.5	0.559	1.0	(0.0)
olv4*	1.0	0.875	0.5	(1.0)
cmyn4*	0.0	0.125	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	79.54	-0.56	14.19
LAB*LABa	79.54	-0.56	14.19
LAB*LABb	25.01	14.2	92.31

relative CIELAB lab*

lab*lab	0.438	-0.019	0.499
lab*tch	0.25	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*trj	0.438	0.0	0.5
lab*tce	0.25	0.5	0.256
lab*nce	0.0	0.5	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.441	0.0	(1.0)
cmyn3*	0.5	0.559	1.0	(0.0)
olv4*	1.0	0.875	0.5	(1.0)
cmyn4*	0.0	0.125	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	79.54	-0.56	14.19
LAB*LABa	79.54	-0.56	14.19
LAB*LABb	25.01	14.2	92.31

relative CIELAB lab*

lab*lab	0.438	-0.019	0.499
lab*tch	0.25	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*trj	0.438	0.0	0.5
lab*tce	0.25	0.5	0.256
lab*nce	0.0	0.5	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.441	0.0	(1.0)
cmyn3*	0.5	0.559	1.0	(0.0)
olv4*	1.0	0.875	0.5	(1.0)
cmyn4*	0.0	0.125	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	79.54	-0.56	14.19
LAB*LABa	79.54	-0.56	14.19
LAB*LABb	25.01	14.2	92.31

relative CIELAB lab*

lab*lab	0.438	-0.019	0.499
lab*tch	0.25	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*trj	0.438	0.0	0.5
lab*tce	0.25	0.5	0.256
lab*nce	0.0	0.5	0.256

relative Inform. Technology (IT)

olv3*	0.5	0.441	0.0	(1.0)
cmyn3*	0.5	0.559	1.0	(0.0)
olv4*	1.0	0.875	0.5	(1.0)
cmyn4*	0.0	0.125	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	79.54	-0.56	14.19
LAB*LABa	79.54	-0.56	14.19
LAB*LABb	25.01	14.2	92.31

relative CIELAB lab*

lab*lab	0.438	-0.019	0.499
lab*tch	0.25	0.5	0.256
lab*nch	0.0	0.5	0.256

relative Natural Colour (NC)

lab*trj	0.438	0.0	0.5
lab*tce	0.25	0.5	0.256
lab*nce	0.0	0.5	0.256

relative Inform. Technology (IT)				
olv3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olv4*	1.0	1.0	1.0	(0.25)
cmyn4*	0.0	0.0	0.0	0.75
standard and adapted CIELAB				
LAB*LAB	23.87	0.0	0.0	
LAB*LABa	23.87	0.0	0.0	
LAB*LABb	25.0	0.01	-	
relative CIELAB lab*				
lab*lab	0.25	0.0	0.0	
lab*ch	0.25	0.0	-	
lab*nc	0.75	0.0	-	
relative Natural Colour (NC)				
lab*lrj	0.25	0.0	0.0	
lab*ice	0.25	0.0	-	
lab*nce	0.75	0.0	-	

See for similar files: <http://www.ps.bam.de/OE58/>
Technical information: <http://www.ps.bam.de> Version 2.1, io=0.0

Page count: 10

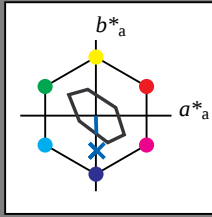
www.ps.bam.de/OE58/10L/L58E09NP.PS/.PDF; start output
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

BAM registration: 20060101-OE58/10L/L58E09NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
/OE58/ Form 10/10/Scene: 1/1, Page: 10

Input: Colorimetric Television Luminous System TLS70

for hue $h^* = lab \cdot h = 272/360 = 0.755$
 $lab \cdot tch$ and $lab \cdot nch$

D65: hue B
LCH*Ma: 80 24 272
olv*Ma: 0.0 0.4 1.0
triangle lightness t^*



TLS70; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.76	34.63	36.27	107
L _{Ma}	89.32	-35.8	27.64	45.24	142
C _{Ma}	90.93	-21.95	-7.07	23.07	198
V _{Ma}	72.1	15.76	-35.63	38.97	294
M _{Ma}	78.5	37.52	-25.23	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$

relative Inform. Technology (IT)					
olv3*	1.0	1.0	1.0	1.0	1.0
olv4*	0.0	0.0	0.0	0.0	0.0
olv5*	0.0	0.0	0.0	0.0	0.0
olv6*	0.0	0.0	0.0	0.0	0.0
olv7*	0.0	0.0	0.0	0.0	0.0
olv8*	0.0	0.0	0.0	0.0	0.0
olv9*	0.0	0.0	0.0	0.0	0.0
olv10*	0.0	0.0	0.0	0.0	0.0
olv11*	0.0	0.0	0.0	0.0	0.0
olv12*	0.0	0.0	0.0	0.0	0.0
olv13*	0.0	0.0	0.0	0.0	0.0
olv14*	0.0	0.0	0.0	0.0	0.0
olv15*	0.0	0.0	0.0	0.0	0.0
olv16*	0.0	0.0	0.0	0.0	0.0
olv17*	0.0	0.0	0.0	0.0	0.0
olv18*	0.0	0.0	0.0	0.0	0.0
olv19*	0.0	0.0	0.0	0.0	0.0
olv20*	0.0	0.0	0.0	0.0	0.0
olv21*	0.0	0.0	0.0	0.0	0.0
olv22*	0.0	0.0	0.0	0.0	0.0
olv23*	0.0	0.0	0.0	0.0	0.0
olv24*	0.0	0.0	0.0	0.0	0.0
olv25*	0.0	0.0	0.0	0.0	0.0
olv26*	0.0	0.0	0.0	0.0	0.0
olv27*	0.0	0.0	0.0	0.0	0.0
olv28*	0.0	0.0	0.0	0.0	0.0
olv29*	0.0	0.0	0.0	0.0	0.0
olv30*	0.0	0.0	0.0	0.0	0.0
olv31*	0.0	0.0	0.0	0.0	0.0
olv32*	0.0	0.0	0.0	0.0	0.0
olv33*	0.0	0.0	0.0	0.0	0.0
olv34*	0.0	0.0	0.0	0.0	0.0
olv35*	0.0	0.0	0.0	0.0	0.0
olv36*	0.0	0.0	0.0	0.0	0.0
olv37*	0.0	0.0	0.0	0.0	0.0
olv38*	0.0	0.0	0.0	0.0	0.0
olv39*	0.0	0.0	0.0	0.0	0.0
olv40*	0.0	0.0	0.0	0.0	0.0
olv41*	0.0	0.0	0.0	0.0	0.0
olv42*	0.0	0.0	0.0	0.0	0.0
olv43*	0.0	0.0	0.0	0.0	0.0
olv44*	0.0	0.0	0.0	0.0	0.0
olv45*	0.0	0.0	0.0	0.0	0.0
olv46*	0.0	0.0	0.0	0.0	0.0
olv47*	0.0	0.0	0.0	0.0	0.0
olv48*	0.0	0.0	0.0	0.0	0.0
olv49*	0.0	0.0	0.0	0.0	0.0
olv50*	0.0	0.0	0.0	0.0	0.0
olv51*	0.0	0.0	0.0	0.0	0.0
olv52*	0.0	0.0	0.0	0.0	0.0
olv53*	0.0	0.0	0.0	0.0	0.0
olv54*	0.0	0.0	0.0	0.0	0.0
olv55*	0.0	0.0	0.0	0.0	0.0
olv56*	0.0	0.0	0.0	0.0	0.0
olv57*	0.0	0.0	0.0	0.0	0.0
olv58*	0.0	0.0	0.0	0.0	0.0
olv59*	0.0	0.0	0.0	0.0	0.0
olv60*	0.0	0.0	0.0	0.0	0.0
olv61*	0.0	0.0	0.0	0.0	0.0
olv62*	0.0	0.0	0.0	0.0	0.0
olv63*	0.0	0.0	0.0	0.0	0.0
olv64*	0.0	0.0	0.0	0.0	0.0
olv65*	0.0	0.0	0.0	0.0	0.0
olv66*	0.0	0.0	0.0	0.0	0.0
olv67*	0.0	0.0	0.0	0.0	0.0
olv68*	0.0	0.0	0.0	0.0	0.0
olv69*	0.0	0.0	0.0	0.0	0.0
olv70*	0.0	0.0	0.0	0.0	0.0
olv71*	0.0	0.0	0.0	0.0	0.0
olv72*	0.0	0.0	0.0	0.0	0.0
olv73*	0.0	0.0	0.0	0.0	0.0
olv74*	0.0	0.0	0.0	0.0	0.0
olv75*	0.0	0.0	0.0	0.0	0.0
olv76*	0.0	0.0	0.0	0.0	0.0
olv77*	0.0	0.0	0.0	0.0	0.0
olv78*	0.0	0.0	0.0	0.0	0.0
olv79*	0.0	0.0	0.0	0.0	0.0
olv80*	0.0	0.0	0.0	0.0	0.0
olv81*	0.0	0.0	0.0	0.0	0.0
olv82*	0.0	0.0	0.0	0.0	0.0
olv83*	0.0	0.0	0.0	0.0	0.0
olv84*	0.0	0.0	0.0	0.0	0.0
olv85*	0.0	0.0	0.0	0.0	0.0
olv86*	0.0	0.0	0.0	0.0	0.0
olv87*	0.0	0.0	0.0	0.0	0.0
olv88*	0.0	0.0	0.0	0.0	0.0
olv89*	0.0	0.0	0.0	0.0	0.0
olv90*	0.0	0.0	0.0	0.0	0.0
olv91*	0.0	0.0	0.0	0.0	0.0
olv92*	0.0	0.0	0.0	0.0	0.0
olv93*	0.0	0.0	0.0	0.0	0.0
olv94*	0.0	0.0	0.0	0.0	0.0
olv95*	0.0	0.0	0.0	0.0	0.0
olv96*	0.0	0.0	0.0	0.0	0.0
olv97*	0.0	0.0	0.0	0.0	0.0
olv98*	0.0	0.0	0.0	0.0	0.0
olv99*	0.0	0.0	0.0	0.0	0.0
olv100*	0.0	0.0	0.0	0.0	0.0

relative Inform. Technology (IT)					
olv3*	0.75	0.85	1.0	1.0	1.0
olv4*	0.25	0.15	0.0	0.0	0.0
olv5*	0.75	0.85	1.0	1.0	1.0
olv6*	0.25	0.15	0.0	0.0	0.0
olv7*	0.75	0.85	1.0	1.0	1.0
olv8*	0.25	0.15	0.0	0.0	0.0
olv9*	0.75	0.85	1.0	1.0	1.0
olv10*	0.25	0.15	0.0	0.0	0.0
olv11*	0.75	0.85	1.0	1.0	1.0
olv12*	0.25	0.15	0.0	0.0	0.0
olv13*	0.75	0.85	1.0	1.0	1.0
olv14*	0.25	0.15	0.0	0.0	0.0
olv15*	0.75	0.85	1.0	1.0	1.0
olv16*	0.25	0.15	0.0	0.0	0.0
olv17*	0.75	0.85	1.0	1.0	1.0
olv18*	0.25	0.15	0.0	0.0	0.0
olv19*	0.75	0.85	1.0	1.0	1.0
olv20*	0.25	0.15	0.0	0.0	0.0
olv21*	0.75	0.85	1.0	1.0	1.0
olv22*	0.25	0.15	0.0	0.0	0.0
olv23*	0.75	0.85	1.0	1.0	1.0
olv24*	0.25	0.15	0.0	0.0	0.0
olv25*	0.75	0.85	1.0	1.0	1.0
olv26*	0.25	0.15	0.0	0.0	0.0
olv27*	0.75	0.85	1.0	1.0	1.0
olv28*	0.25	0.15	0.0	0.0	0.0
olv29*	0.75	0.85	1.0	1.0	1.0
olv30*	0.25	0.15	0.0	0.0	0.0
olv31*	0.75	0.85	1.0	1.0	1.0
olv32*	0.25	0.15	0.0	0.0	0.0
olv33*	0.75	0.85	1.0	1.0	1.0
olv34*	0.25	0.15	0.0	0.0	0.0
olv35*	0.75	0.85	1.0	1.0	1.0
olv36*	0.25	0.15	0.0	0.0	0.0
olv37*	0.75	0.85	1.0	1.0	1.0
olv38*	0.25	0.15	0.0	0.0	0.0
olv39*	0.75	0.85	1.0	1.0	1.0
olv40*	0.25	0.15	0.0	0.0	0.0
olv41*	0.75	0.85	1.0	1.0	1.0
olv42*	0.25	0.15	0.0	0.0	0.0
olv43*	0.75	0.85	1.0	1.0	1.0
olv44*	0.25	0.15	0.0	0.0	0.0
olv45*	0.75	0.85	1.0	1.0	1.0
olv46*	0.25	0.15	0.0	0.0	0.0
olv47*	0.75	0.85	1.0	1.0	1.0
olv48*	0.25	0.15	0.0	0.0	0.0
olv49*	0.75	0.85	1.0	1.0	1.0
olv50*	0.25	0.15	0.0	0.0	0.0
olv51*	0.75	0.85	1.0	1.0	1.0
olv52*	0.25	0.15	0.0	0.0	0.0
olv53*	0.75	0.85	1.0	1.0	1.0
olv54*	0.25	0.15	0.0	0.0	0.0
olv55*	0.75	0.85	1.0	1.0	1.0
olv56*	0.25	0.15	0.0	0.0	0.0
olv57*	0.75	0.85	1.0	1.0	1.0
olv58*	0.25	0.15	0.0	0.0	0.0
olv59*	0.75	0.85	1.0	1.0	1.0
olv60*	0.25	0.15	0.0	0.0	0.0
olv61*	0.75	0.85	1.0	1.0	1.0
olv62*	0.25	0.15	0.0	0.0	0.0
olv63*	0.75	0.85	1.0	1.0	1.0
olv64*	0.25	0.15	0.0	0.0	0.0
olv65*	0.75	0.85	1.0	1.0	1.0
olv66*	0.25	0.15	0.0	0.0	0.0
olv67*	0.75	0.85	1.0	1.0	1.0
olv68*	0.25	0.15	0.0	0.0	0.0
olv69*	0.75	0.85	1.0	1.0	1.0
olv70*	0.25	0.15	0.0	0.0	0.0
olv71*	0.75	0.85	1.0	1.0	1.0
olv72*	0.25	0.15	0.0	0.0	0.0
olv73*	0.75	0.85	1.0	1.0	1.0
olv74*	0.25	0.15	0.0	0.0	0.0
olv75*	0.75	0.85	1.0	1.0	1.0
olv76*	0.25	0.15	0.0	0.0	0.0
olv77*	0.75	0.85	1.0	1.0	1.0
olv78*	0.25	0.15	0.0	0.0	0.0
olv79*	0.75	0.85	1.0	1.0	1.0
olv80*	0.25	0.15	0.0	0.0	0.0
olv81*	0.75	0.85	1.0	1.0	1.0
olv82*	0.25	0.15	0.0	0.0	0.0
olv83*	0.75	0.85	1.0	1.0	1.0
olv84*	0.25	0.15	0.0	0.0	0.0
olv85*	0.75	0.85	1.0	1.0	1.0
olv86*	0.25	0.15	0.0	0.0	0.0
olv87*	0.75	0.85	1.0	1.0	1.0
olv88*	0.25	0.15	0.0	0.0	0.0
olv89*	0.75	0.85	1.0	1.0	1.0
olv90*	0.25	0.15	0.0	0.0	0.0
olv91*	0.75	0.85	1.0	1.0	1.0
olv92*	0.25	0.15	0.0	0.0	0.0
olv93*	0.75	0.85	1.0	1.0	1.0
olv94*	0.25	0.15	0.0	0.0	0.0
olv95*	0.75	0.85	1.0	1.0	1.0
olv96*	0.25	0.15	0.0	0.0	0.0
olv97*	0.75	0.85	1.0	1.0	1.0
olv98*	0.25	0.15	0.0	0.0	0.0
olv99*	0.75	0.85	1.0	1.0	1.0
olv100*	0.25	0.15	0.0	0.0	0.0

relative Inform. Technology (IT)			
----------------------------------	--	--	--