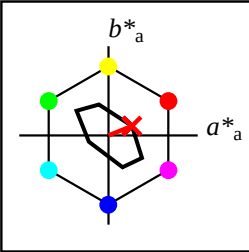


Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.061$
data for any colour:

lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = o00y$ $u^* = b96r$

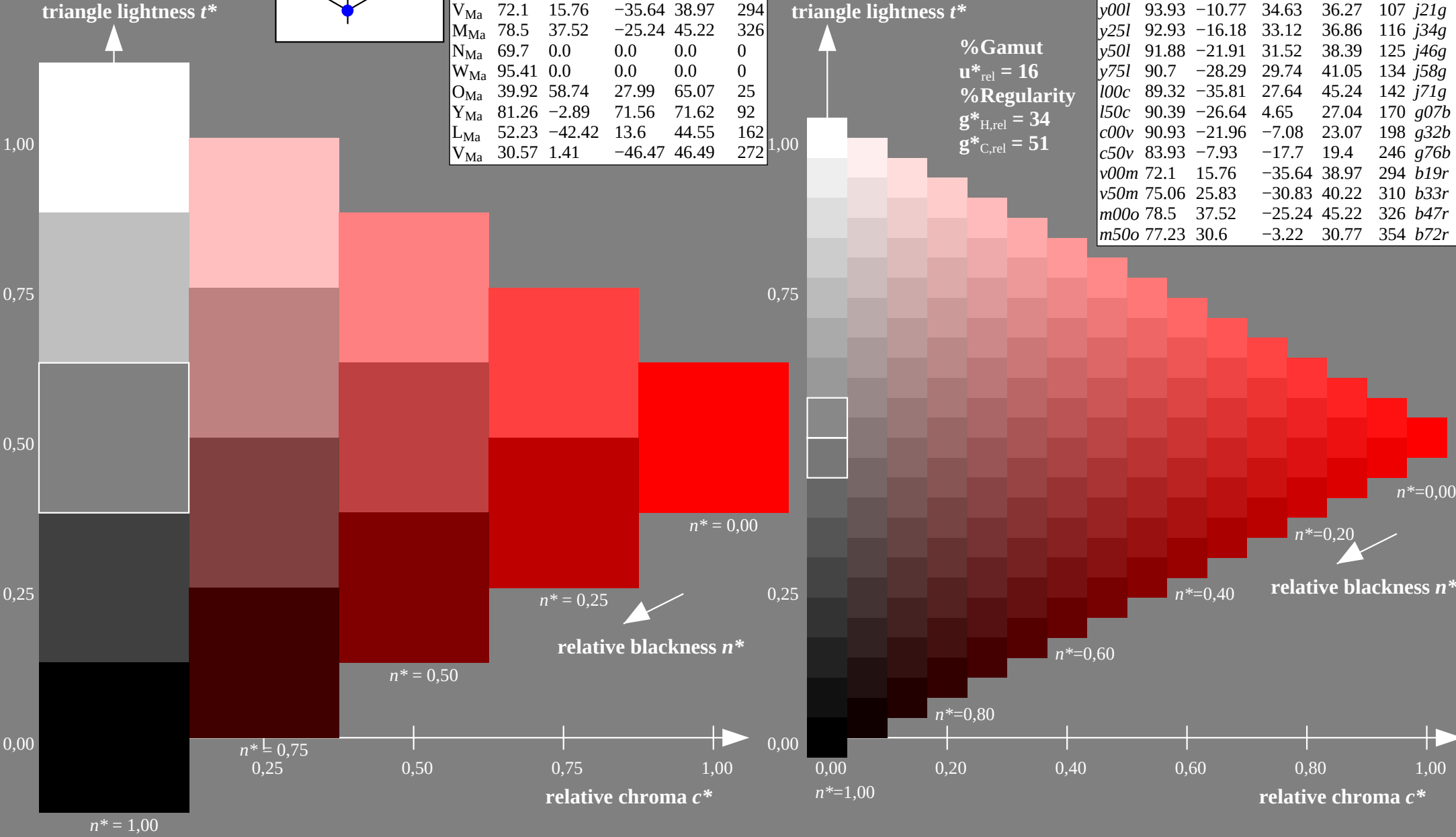


TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	76.43	26.27	10.57	28.32	22	
Y _{Ma}	93.93	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 76 26 11
 $LAB^*LCH^*_{Ma}$: 76 28 21
 $lab^*olv^*_{Ma}$: 1.0 0.0 0.0
 $lab^*rgb^*_{Ma}$: 1.0 0.0 0.06

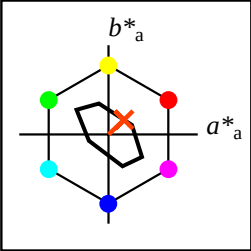
TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
<i>o00y</i>	76.43	26.27	10.57	28.32	22	<i>b96r</i>	
<i>o25y</i>	80.63	17.37	16.35	23.86	43	<i>r26j</i>	
<i>o50y</i>	84.1	10.03	21.12	23.38	65	<i>r58j</i>	
<i>o75y</i>	87.95	1.88	26.42	26.48	86	<i>r90j</i>	
<i>y00l</i>	93.93	-10.77	34.63	36.27	107	<i>j21g</i>	
<i>y25l</i>	92.93	-16.18	33.12	36.86	116	<i>j34g</i>	
<i>y50l</i>	91.88	-21.91	31.52	38.39	125	<i>j46g</i>	
<i>y75l</i>	90.7	-28.29	29.74	41.05	134	<i>j58g</i>	
<i>l00c</i>	89.32	-35.81	27.64	45.24	142	<i>j71g</i>	
<i>l50c</i>	90.39	-26.64	4.65	27.04	170	<i>g07b</i>	
<i>c00v</i>	90.93	-21.96	-7.08	23.07	198	<i>g32b</i>	
<i>c50v</i>	83.93	-7.93	-17.7	19.4	246	<i>g76b</i>	
<i>v00m</i>	72.1	15.76	-35.64	38.97	294	<i>b19r</i>	
<i>v50m</i>	75.06	25.83	-30.83	40.22	310	<i>b33r</i>	
<i>m00o</i>	78.5	37.52	-25.24	45.22	326	<i>b47r</i>	
<i>m50o</i>	77.23	30.6	-3.22	30.77	354	<i>b72r</i>	



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.12$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = o25y$ $u^* = r26j$

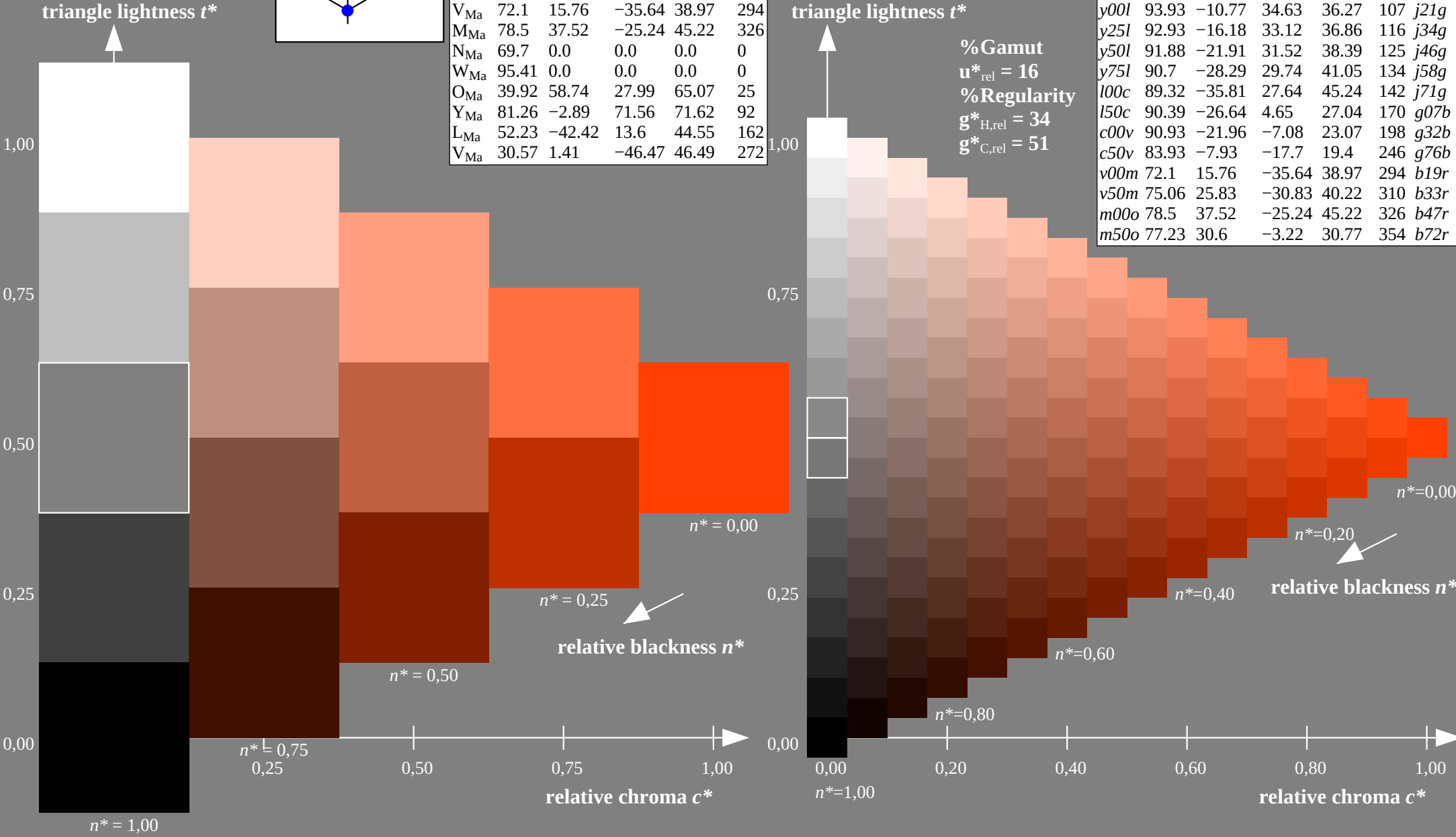
$d^* = o25y$

Data for maximum colour (Ma):
 $LAB^*LAB^*Ma: 81\ 17\ 16$
 $LAB^*LCH^*Ma: 81\ 24\ 43$
 $lab^*olv^*Ma: 1.0\ 0.25\ 0.0$
 $lab^*rgb^*Ma: 1.0\ 0.27\ 0.0$



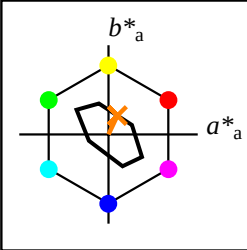
TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	76.43	26.27	10.57	28.32	22	
Y _{Ma}	93.93	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
<i>o00y</i>	76.43	26.27	10.57	28.32	22	<i>b96r</i>	
<i>o25y</i>	80.63	17.37	16.35	23.86	43	<i>r26j</i>	
<i>o50y</i>	84.1	10.03	21.12	23.38	65	<i>r58j</i>	
<i>o75y</i>	87.95	1.88	26.42	26.48	86	<i>r90j</i>	
<i>y00l</i>	93.93	-10.77	34.63	36.27	107	<i>j21g</i>	
<i>y25l</i>	92.93	-16.18	33.12	36.86	116	<i>j34g</i>	
<i>y50l</i>	91.88	-21.91	31.52	38.39	125	<i>j46g</i>	
<i>y75l</i>	90.7	-28.29	29.74	41.05	134	<i>j58g</i>	
<i>l00c</i>	89.32	-35.81	27.64	45.24	142	<i>j71g</i>	
<i>l50c</i>	90.39	-26.64	4.65	27.04	170	<i>g07b</i>	
<i>c00v</i>	90.93	-21.96	-7.08	23.07	198	<i>g32b</i>	
<i>c50v</i>	83.93	-7.93	-17.7	19.4	246	<i>g76b</i>	
<i>v00m</i>	72.1	15.76	-35.64	38.97	294	<i>b19r</i>	
<i>v50m</i>	75.06	25.83	-30.83	40.22	310	<i>b33r</i>	
<i>m00o</i>	78.5	37.52	-25.24	45.22	326	<i>b47r</i>	
<i>m50o</i>	77.23	30.6	-3.22	30.77	354	<i>b72r</i>	



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.179$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = o50y$ $u^* = r58j$

$d^* = o50y$

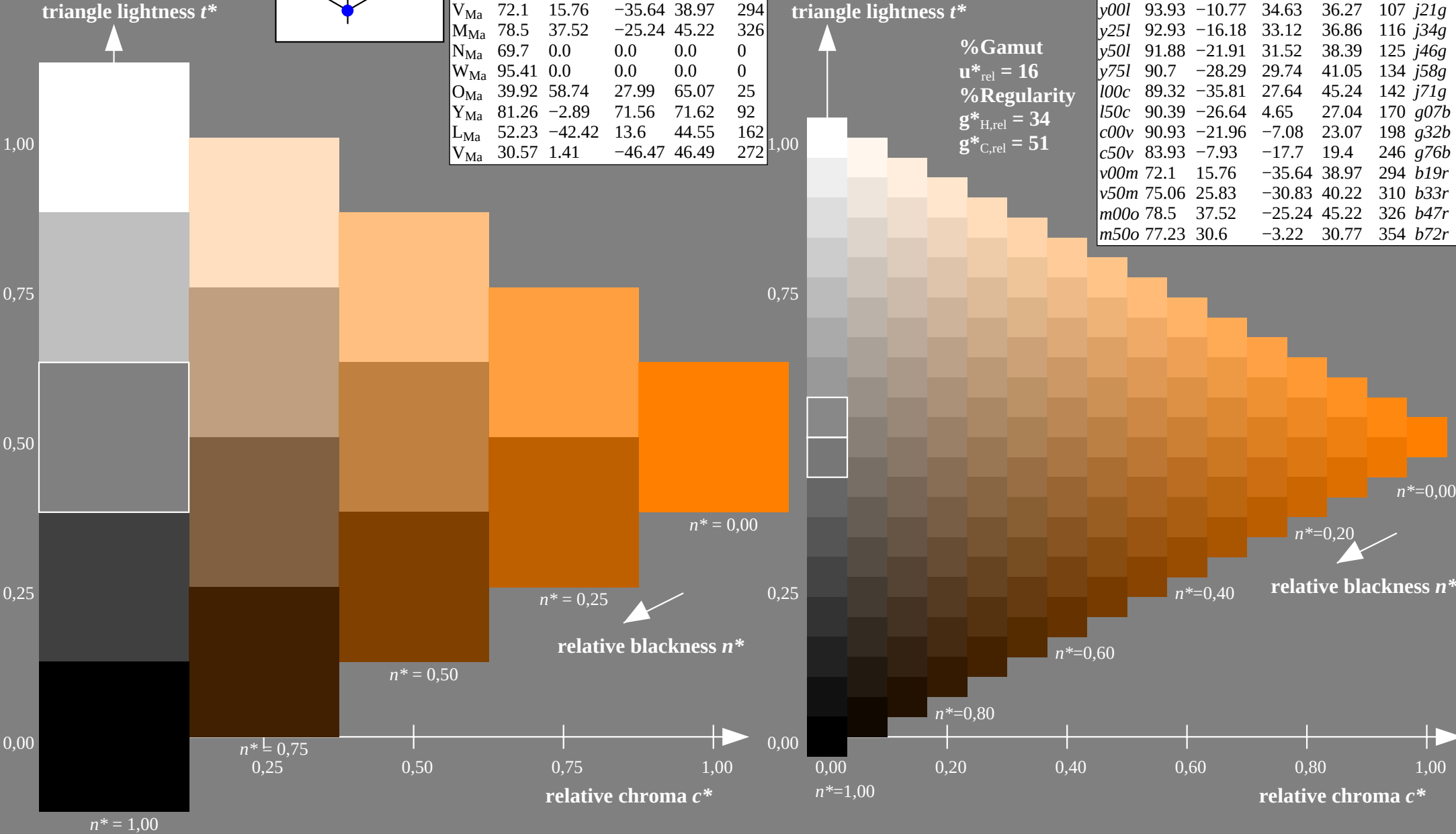


TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 84 10 21
 $LAB^*LCH^*_{Ma}$: 84 23 64
 $lab^*olv^*_{Ma}$: 1.0 0.5 0.0
 $lab^*rgb^*_{Ma}$: 1.0 0.59 0.0

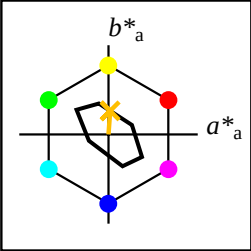
TLS70a; adapted (a) CIELAB data						
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*
$o00y$	76.43	26.27	10.57	28.32	22	$b96r$
$o25y$	80.63	17.37	16.35	23.86	43	$r26j$
$o50y$	84.1	10.03	21.12	23.38	65	$r58j$
$o75y$	87.95	1.88	26.42	26.48	86	$r90j$
$y00l$	93.93	-10.77	34.63	36.27	107	$j21g$
$y25l$	92.93	-16.18	33.12	36.86	116	$j34g$
$y50l$	91.88	-21.91	31.52	38.39	125	$j46g$
$y75l$	90.7	-28.29	29.74	41.05	134	$j58g$
$l00c$	89.32	-35.81	27.64	45.24	142	$j71g$
$l50c$	90.39	-26.64	4.65	27.04	170	$g07b$
$c00v$	90.93	-21.96	-7.08	23.07	198	$g32b$
$c50v$	83.93	-7.93	-17.7	19.4	246	$g76b$
$v00m$	72.1	15.76	-35.64	38.97	294	$b19r$
$v50m$	75.06	25.83	-30.83	40.22	310	$b33r$
$m00o$	78.5	37.52	-25.24	45.22	326	$b47r$
$m50o$	77.23	30.6	-3.22	30.77	354	$b72r$



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.239$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = o75y$ $u^* = r90j$

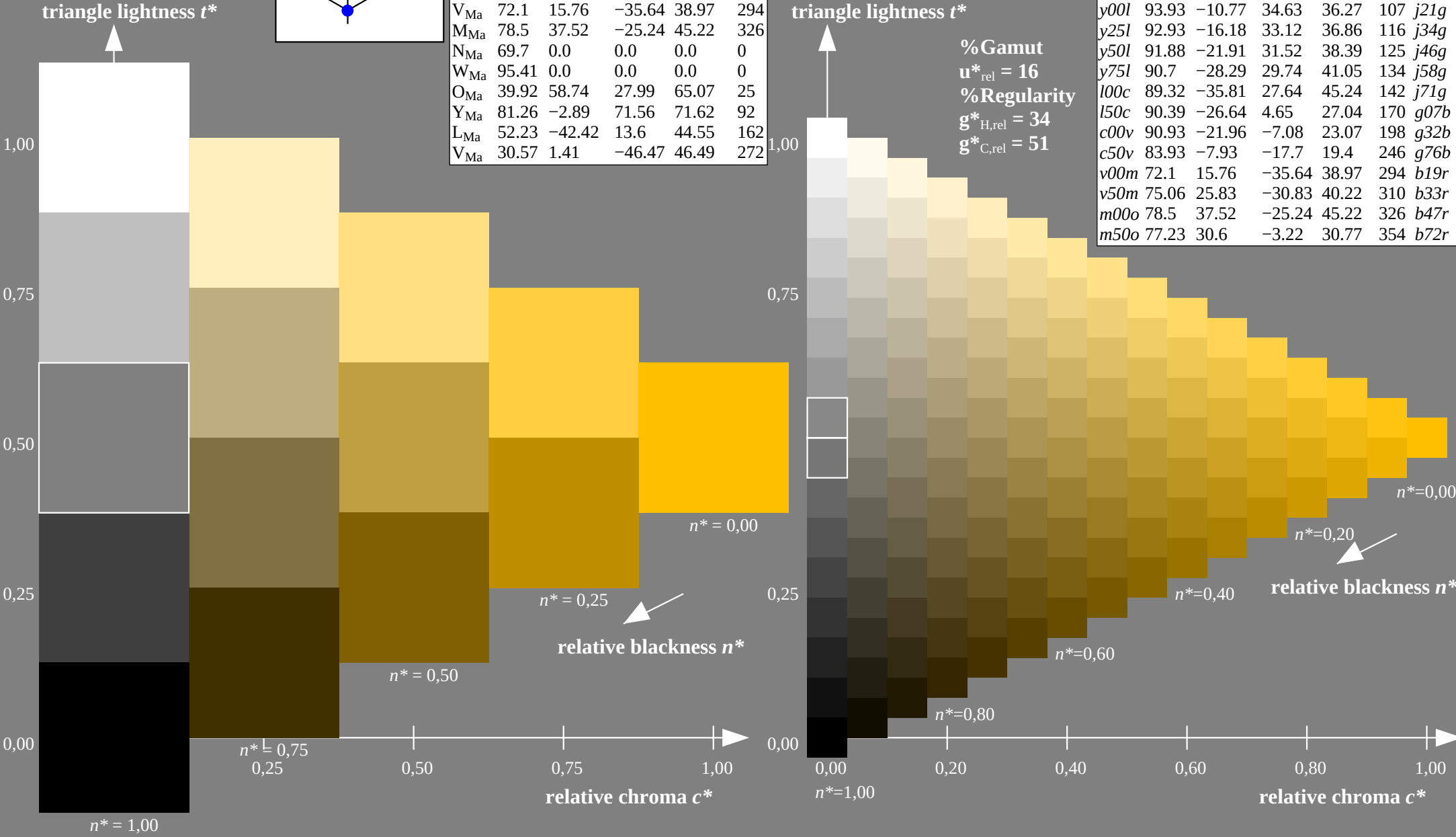
$d^* = o75y$

Data for maximum colour (Ma):
 $LAB^*LAB^*_{Ma}: 88\ 2\ 26$
 $LAB^*LCH^*_{Ma}: 88\ 26\ 85$
 $lab^*olv^*_{Ma}: 1.0\ 0.75\ 0.0$
 $lab^*rgb^*_{Ma}: 1.0\ 0.9\ 0.0$



TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	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	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	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
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

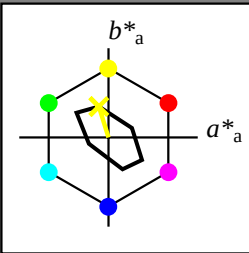
TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
<i>o00y</i>	76.43	26.27	10.57	28.32	22	<i>b96r</i>	
<i>o25y</i>	80.63	17.37	16.35	23.86	43	<i>r26j</i>	
<i>o50y</i>	84.1	10.03	21.12	23.38	65	<i>r58j</i>	
<i>o75y</i>	87.95	1.88	26.42	26.48	86	<i>r90j</i>	
<i>y00l</i>	93.93	-10.77	34.63	36.27	107	<i>j21g</i>	
<i>y25l</i>	92.93	-16.18	33.12	36.86	116	<i>j34g</i>	
<i>y50l</i>	91.88	-21.91	31.52	38.39	125	<i>j46g</i>	
<i>y75l</i>	90.7	-28.29	29.74	41.05	134	<i>j58g</i>	
<i>l00c</i>	89.32	-35.81	27.64	45.24	142	<i>j71g</i>	
<i>l50c</i>	90.39	-26.64	4.65	27.04	170	<i>g07b</i>	
<i>c00v</i>	90.93	-21.96	-7.08	23.07	198	<i>g32b</i>	
<i>c50v</i>	83.93	-7.93	-17.7	19.4	246	<i>g76b</i>	
<i>v00m</i>	72.1	15.76	-35.64	38.97	294	<i>b19r</i>	
<i>v50m</i>	75.06	25.83	-30.83	40.22	310	<i>b33r</i>	
<i>m00o</i>	78.5	37.52	-25.24	45.22	326	<i>b47r</i>	
<i>m50o</i>	77.23	30.6	-3.22	30.77	354	<i>b72r</i>	



data for any colour:

lab^*tch^* and lab^*ncu^*
device and elementary
hue text:

$d^* = y00l$ $u^* = j21g$

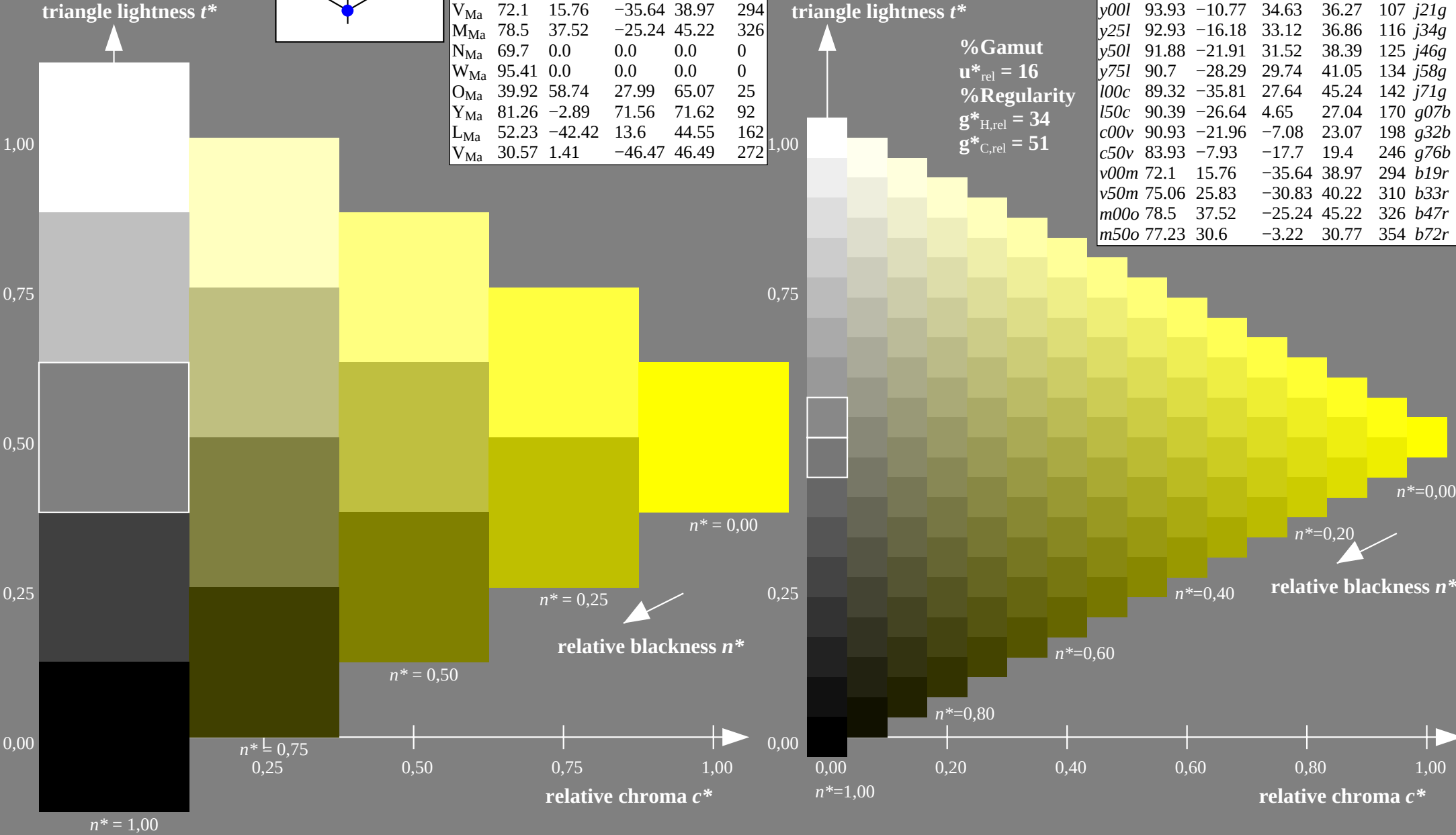


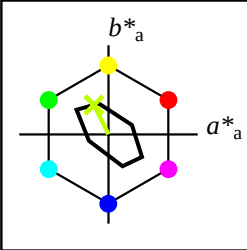
TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 94 -11 35
 $LAB^*LCH^*_{Ma}$: 94 36 107
 $lab^*olv^*_{Ma}$: 1.0 1.0 0.0
 $lab^*rgb^*_{Ma}$: 0.79 1.0 0.0

TLS70a; adapted (a) CIELAB data						
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*
o00y	76.43	26.27	10.57	28.32	22	b96r
o25y	80.63	17.37	16.35	23.86	43	r26j
o50y	84.1	10.03	21.12	23.38	65	r58j
o75y	87.95	1.88	26.42	26.48	86	r90j
y00l	93.93	-10.77	34.63	36.27	107	j21g
y25l	92.93	-16.18	33.12	36.86	116	j34g
y50l	91.88	-21.91	31.52	38.39	125	j46g
y75l	90.7	-28.29	29.74	41.05	134	j58g
l00c	89.32	-35.81	27.64	45.24	142	j71g
l50c	90.39	-26.64	4.65	27.04	170	g07b
c00v	90.93	-21.96	-7.08	23.07	198	g32b
c50v	83.93	-7.93	-17.7	19.4	246	g76b
v00m	72.1	15.76	-35.64	38.97	294	b19r
v50m	75.06	25.83	-30.83	40.22	310	b33r
m00o	78.5	37.52	-25.24	45.22	326	b47r
m50o	77.23	30.6	-3.22	30.77	354	b72r



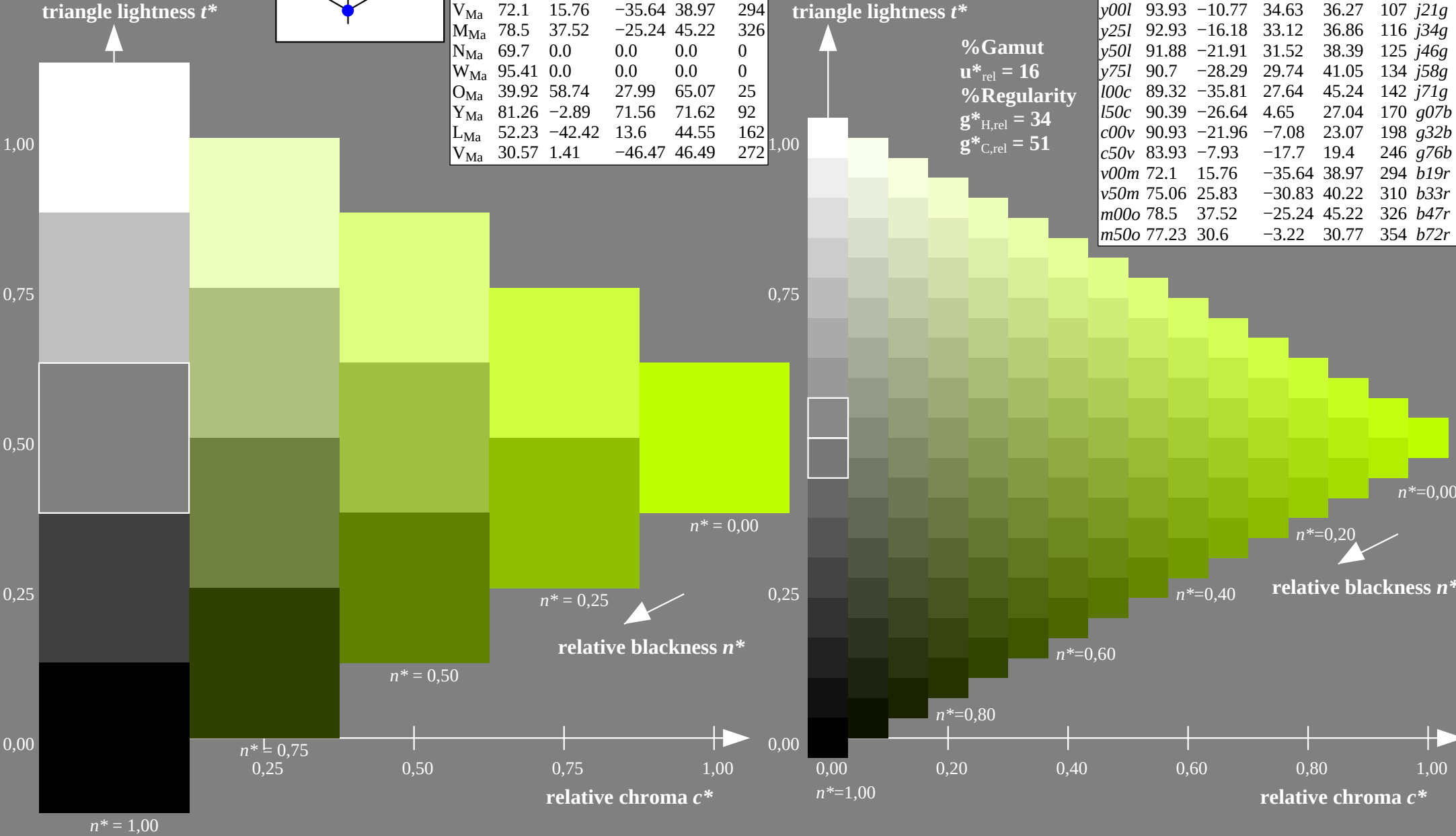


TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	76.43	26.27	10.57	28.32	22	
Y _{Ma}	93.93	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 93 -16 33
 $LAB^*LCH^*_{Ma}$: 93 37 116
 $lab^*olv^*_{Ma}$: 0.75 1.0 0.0
 $lab^*rgb^*_{Ma}$: 0.66 1.0 0.0

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22	b96r	
o25y	80.63	17.37	16.35	23.86	43	r26j	
o50y	84.1	10.03	21.12	23.38	65	r58j	
o75y	87.95	1.88	26.42	26.48	86	r90j	
y00l	93.93	-10.77	34.63	36.27	107	j21g	
y25l	92.93	-16.18	33.12	36.86	116	j34g	
y50l	91.88	-21.91	31.52	38.39	125	j46g	
y75l	90.7	-28.29	29.74	41.05	134	j58g	
l00c	89.32	-35.81	27.64	45.24	142	j71g	
l50c	90.39	-26.64	4.65	27.04	170	g07b	
c00v	90.93	-21.96	-7.08	23.07	198	g32b	
c50v	83.93	-7.93	-17.7	19.4	246	g76b	
v00m	72.1	15.76	-35.64	38.97	294	b19r	
v50m	75.06	25.83	-30.83	40.22	310	b33r	
m00o	78.5	37.52	-25.24	45.22	326	b47r	
m50o	77.23	30.6	-3.22	30.77	354	b72r	



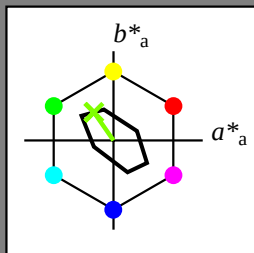
$$d^* = y50l$$

Data for maximum colour (Ma):

$$d^* = y50l \quad u^* = j46g$$

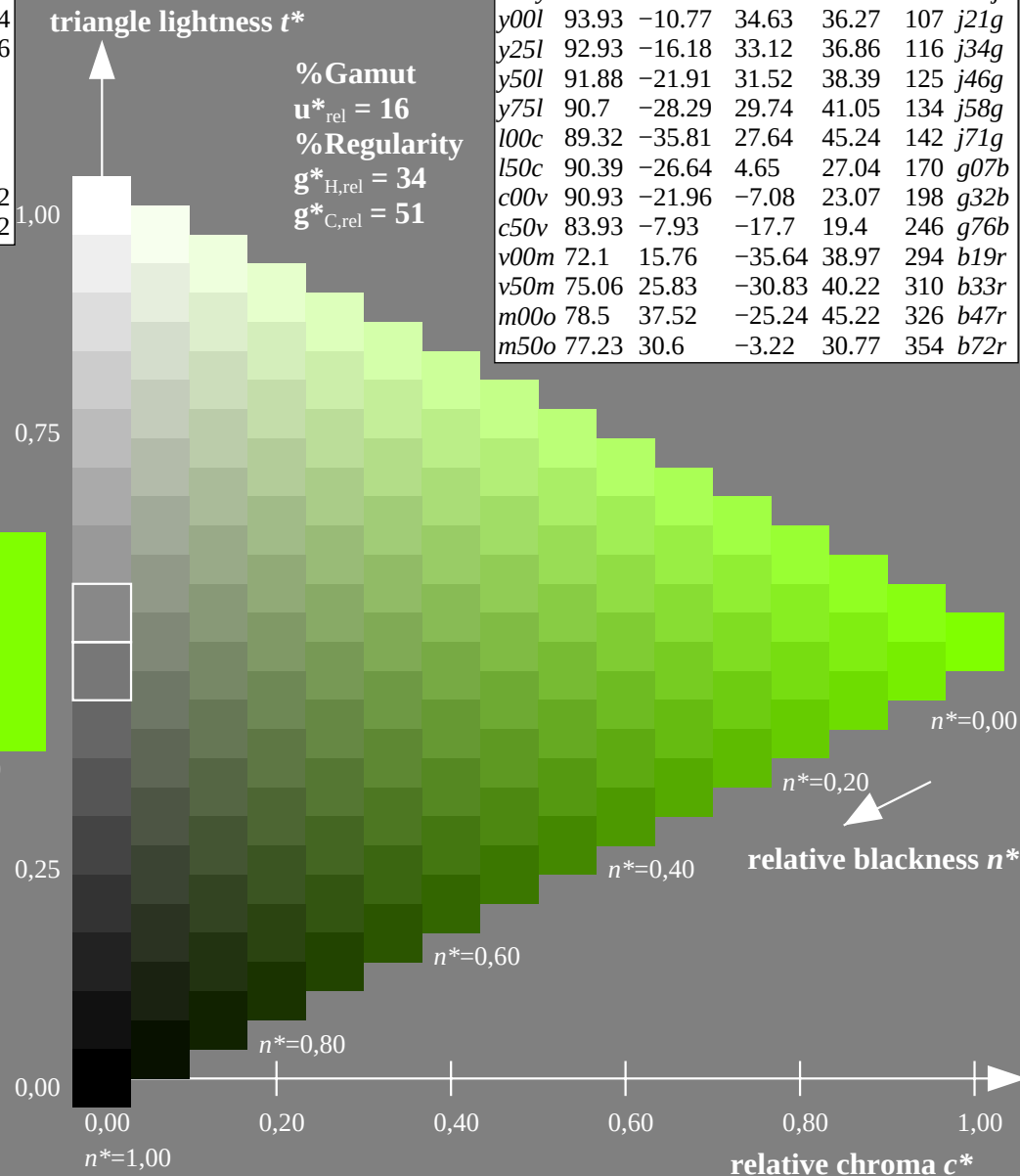
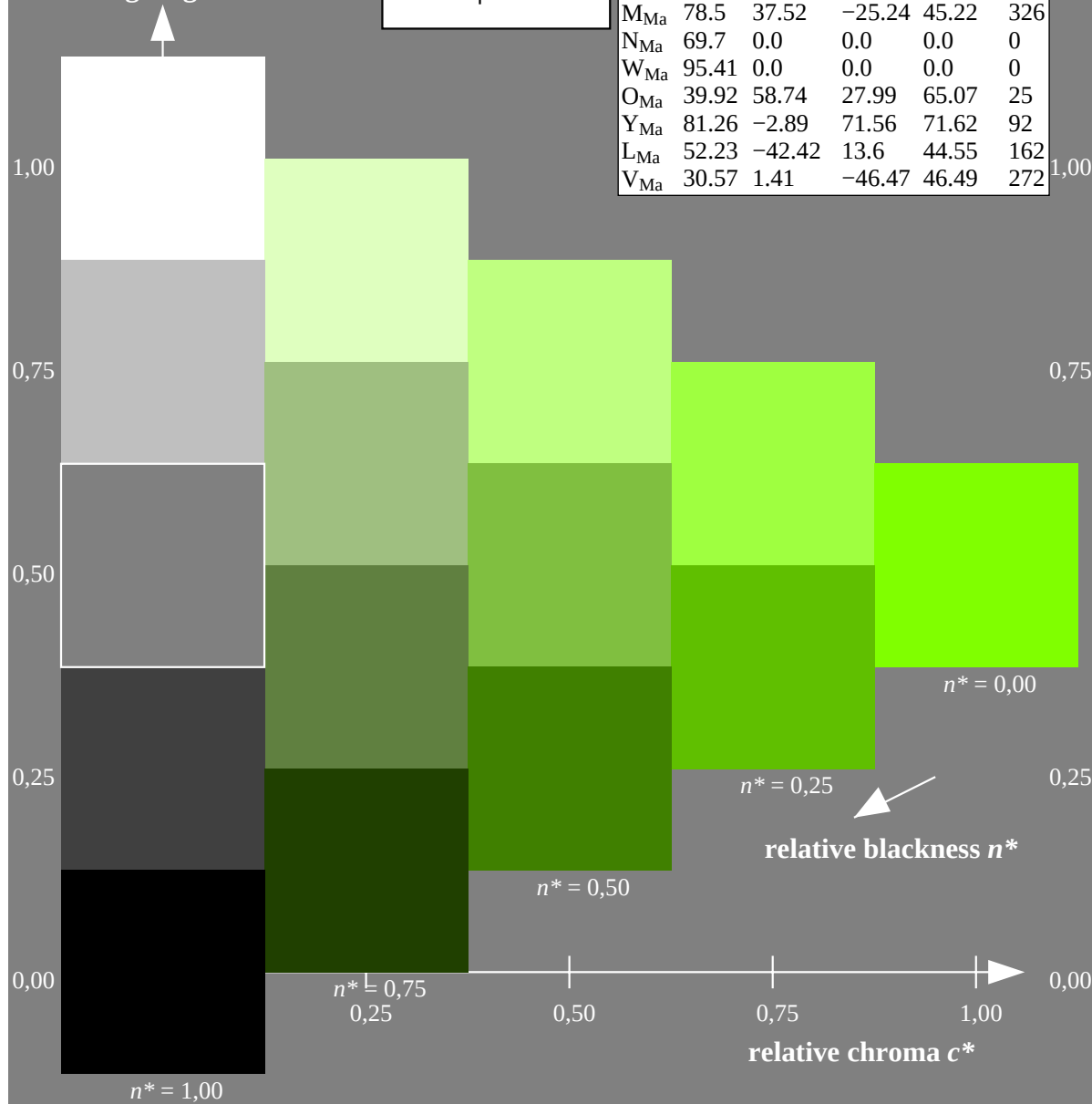
$LAB*LAB^*_{Ma}: 92 \quad -22 \quad 32$

triangle lightness t^*



<i>Name</i>	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	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	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
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

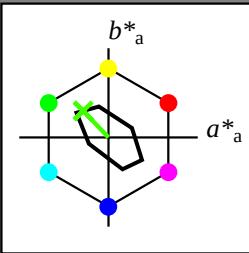
TL S70a; adapted (a) CIELAB data						
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*
<i>o00y</i>	76.43	26.27	10.57	28.32	22	<i>b96r</i>
<i>o25y</i>	80.63	17.37	16.35	23.86	43	<i>r26j</i>
<i>o50y</i>	84.1	10.03	21.12	23.38	65	<i>r58j</i>
<i>o75y</i>	87.95	1.88	26.42	26.48	86	<i>r90j</i>
<i>y00l</i>	93.93	-10.77	34.63	36.27	107	<i>j21g</i>
<i>y25l</i>	92.93	-16.18	33.12	36.86	116	<i>j34g</i>
<i>y50l</i>	91.88	-21.91	31.52	38.39	125	<i>j46g</i>
<i>y75l</i>	90.7	-28.29	29.74	41.05	134	<i>j58g</i>
<i>l00c</i>	89.32	-35.81	27.64	45.24	142	<i>j71g</i>
<i>l50c</i>	90.39	-26.64	4.65	27.04	170	<i>g07b</i>
<i>c00v</i>	90.93	-21.96	-7.08	23.07	198	<i>g32b</i>
<i>c50v</i>	83.93	-7.93	-17.7	19.4	246	<i>g76b</i>
<i>v00m</i>	72.1	15.76	-35.64	38.97	294	<i>b19r</i>
<i>v50m</i>	75.06	25.83	-30.83	40.22	310	<i>b33r</i>
<i>m00o</i>	78.5	37.52	-25.24	45.22	326	<i>b47r</i>
<i>m50o</i>	77.23	30.6	-3.22	30.77	354	<i>b72r</i>



data for any colour:

lab^*tch^* and lab^*ncu^*
device and elementary
hue text:

$d^* = y75l$ $u^* = j58g$

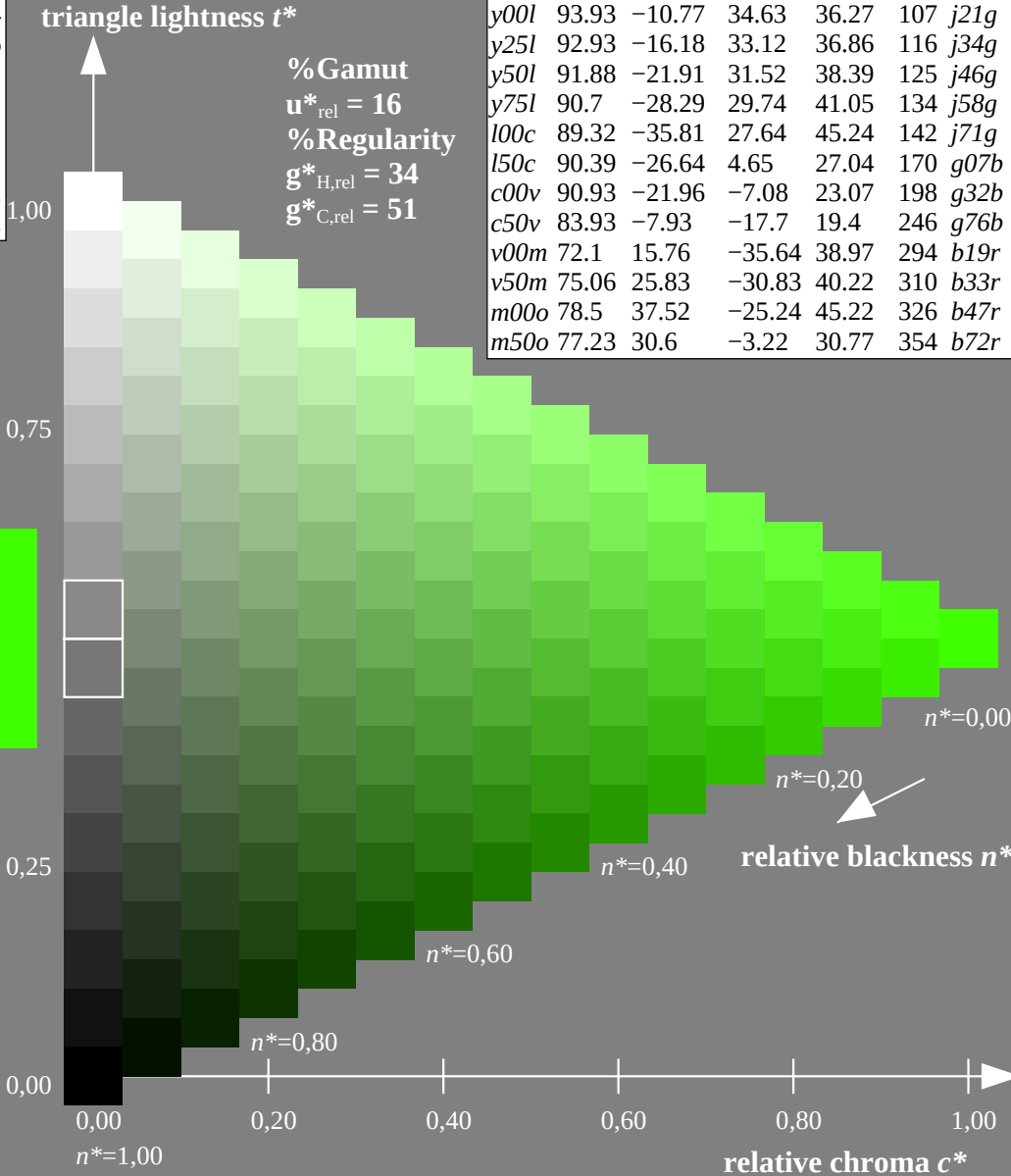
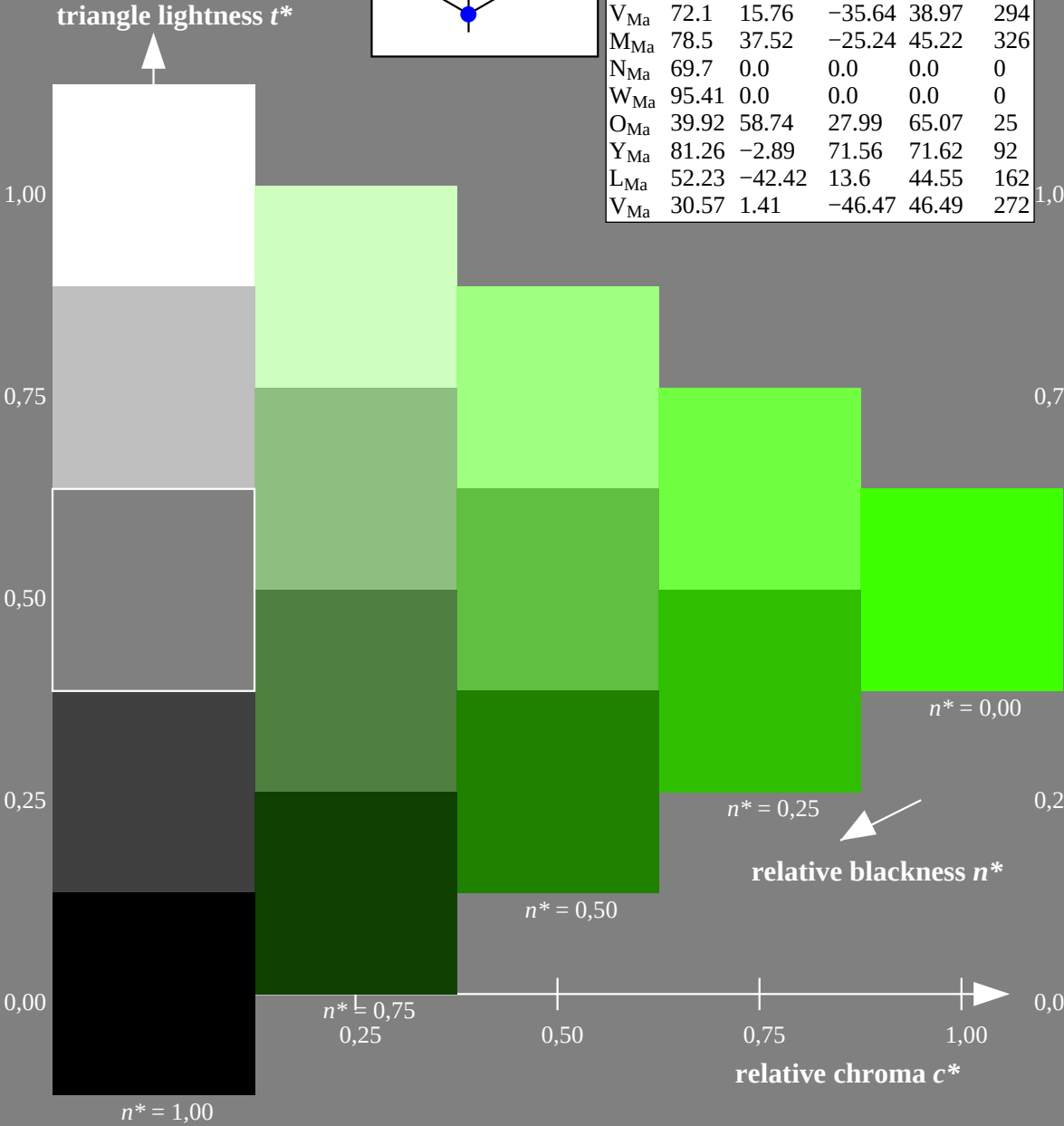


TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	76.43	26.27	10.57	28.32	22
Y _{Ma}	93.93	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	45.22	326
N _{Ma}	69.7	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

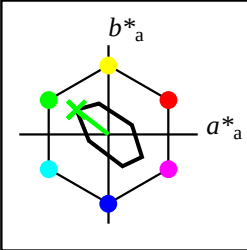
$LAB^*LAB^*_{Ma}$: 91 -28 30
 $LAB^*LCH^*_{Ma}$: 91 41 133
 $lab^*olv^*_{Ma}$: 0.25 1.0 0.0
 $lab^*rgb^*_{Ma}$: 0.41 1.0 0.0

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22	b96r	
o25y	80.63	17.37	16.35	23.86	43	r26j	
o50y	84.1	10.03	21.12	23.38	65	r58j	
o75y	87.95	1.88	26.42	26.48	86	r90j	
y00l	93.93	-10.77	34.63	36.27	107	j21g	
y25l	92.93	-16.18	33.12	36.86	116	j34g	
y50l	91.88	-21.91	31.52	38.39	125	j46g	
y75l	90.7	-28.29	29.74	41.05	134	j58g	
l00c	89.32	-35.81	27.64	45.24	142	j71g	
l50c	90.39	-26.64	4.65	27.04	170	g07b	
c00v	90.93	-21.96	-7.08	23.07	198	g32b	
c50v	83.93	-7.93	-17.7	19.4	246	g76b	
v00m	72.1	15.76	-35.64	38.97	294	b19r	
v50m	75.06	25.83	-30.83	40.22	310	b33r	
m00o	78.5	37.52	-25.24	45.22	326	b47r	
m50o	77.23	30.6	-3.22	30.77	354	b72r	



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.395$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = l00c$ $u^* = j71g$

$d^* = l00c$

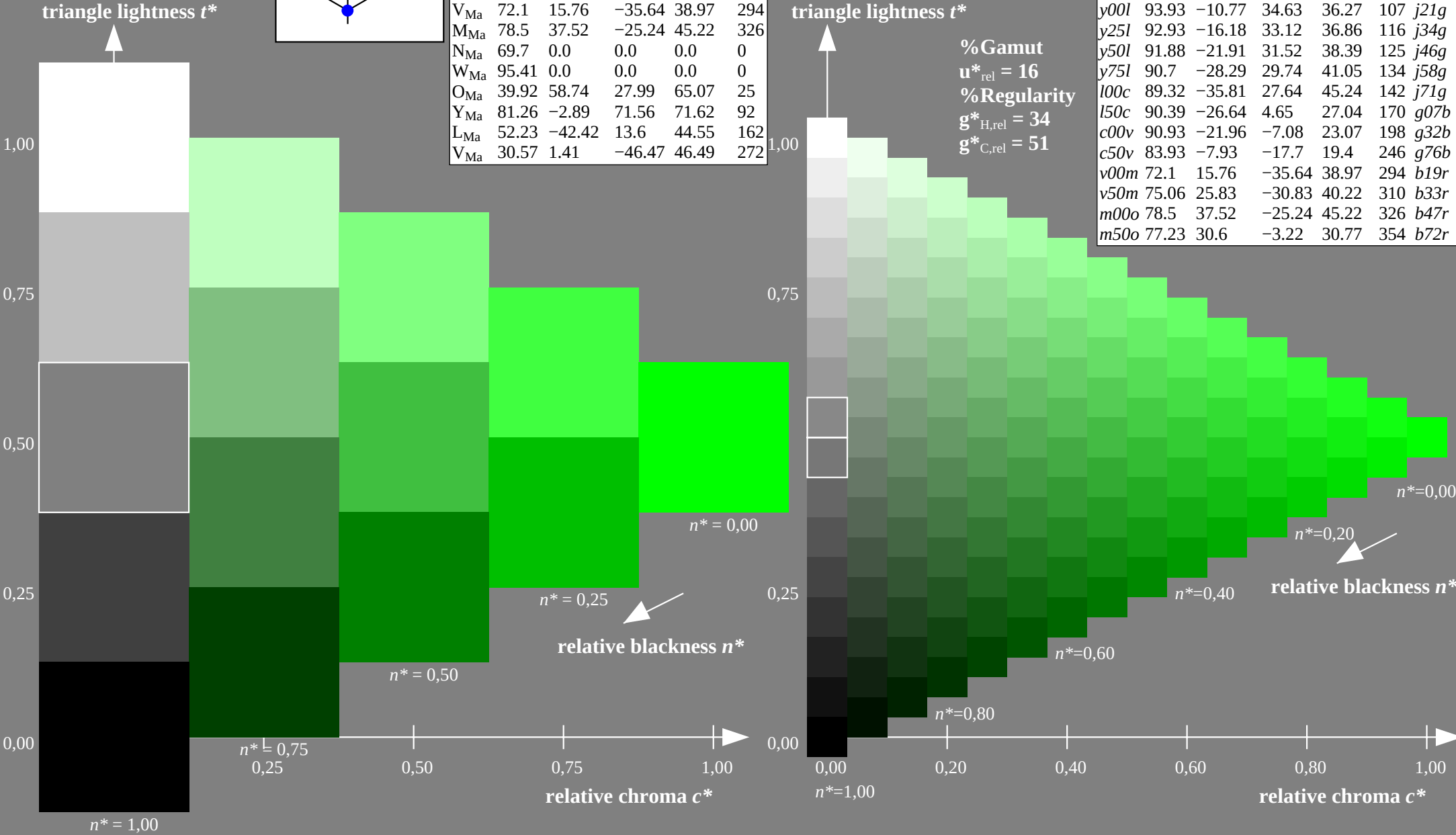


TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	76.43	26.27	10.57	28.32	22	
Y _{Ma}	93.93	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

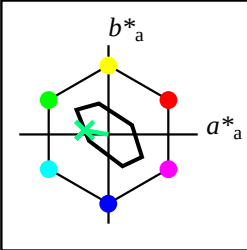
$LAB^*LAB^*_{Ma}$: 89 -36 28
 $LAB^*LCH^*_{Ma}$: 89 45 142
 $lab^*olv^*_{Ma}$: 0.0 1.0 0.0
 $lab^*rgb^*_{Ma}$: 0.28 1.0 0.0

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22		b96r
o25y	80.63	17.37	16.35	23.86	43		r26j
o50y	84.1	10.03	21.12	23.38	65		r58j
o75y	87.95	1.88	26.42	26.48	86		r90j
y00l	93.93	-10.77	34.63	36.27	107		j21g
y25l	92.93	-16.18	33.12	36.86	116		j34g
y50l	91.88	-21.91	31.52	38.39	125		j46g
y75l	90.7	-28.29	29.74	41.05	134		j58g
l00c	89.32	-35.81	27.64	45.24	142		j71g
l50c	90.39	-26.64	4.65	27.04	170		g07b
c00v	90.93	-21.96	-7.08	23.07	198		g32b
c50v	83.93	-7.93	-17.7	19.4	246		g76b
v00m	72.1	15.76	-35.64	38.97	294		b19r
v50m	75.06	25.83	-30.83	40.22	310		b33r
m00o	78.5	37.52	-25.24	45.22	326		b47r
m50o	77.23	30.6	-3.22	30.77	354		b72r



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.473$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = l50c$ $u^* = g07b$

$d^* = l50c$

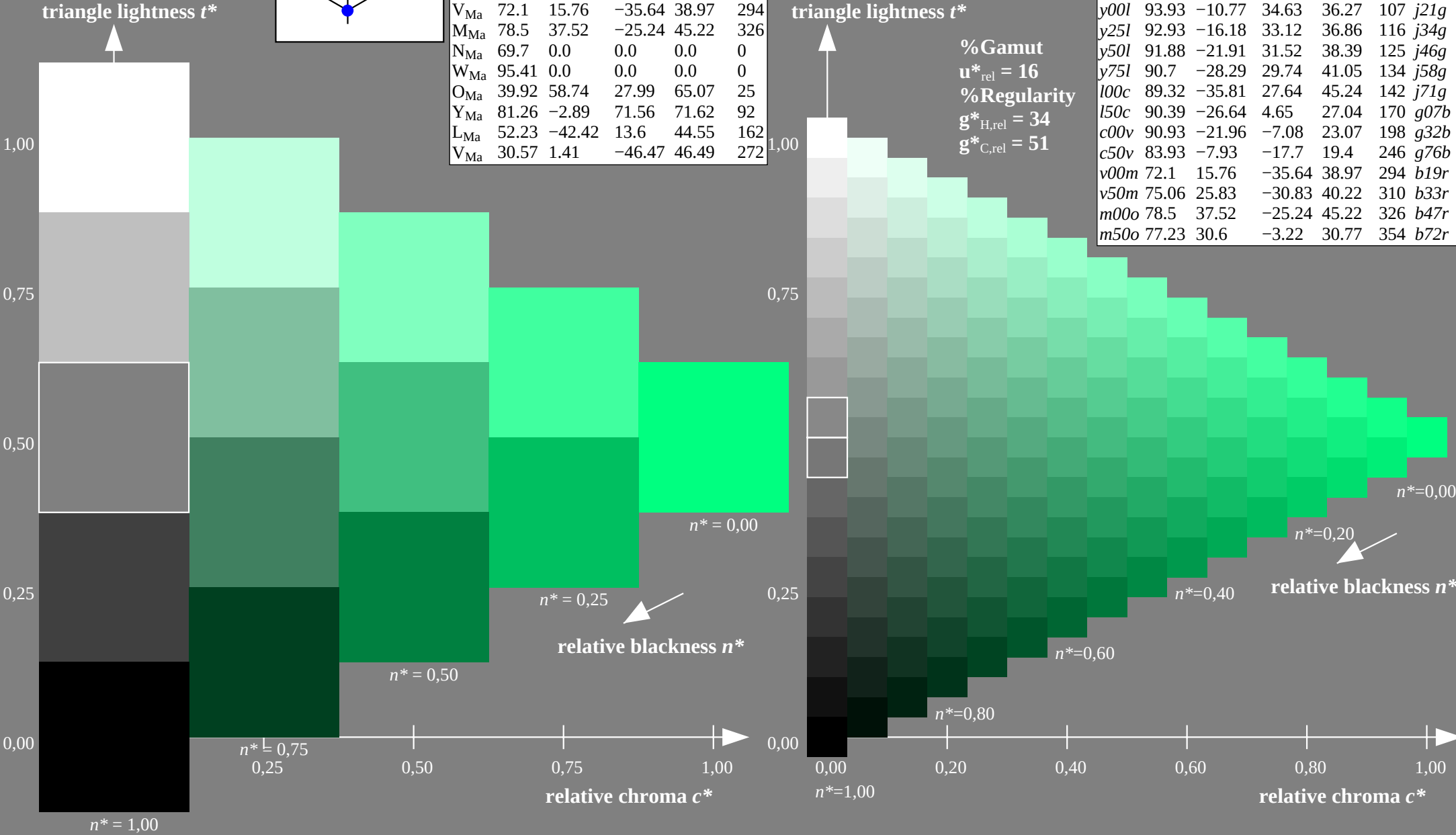


TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	76.43	26.27	10.57	28.32	22	
Y _{Ma}	93.93	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

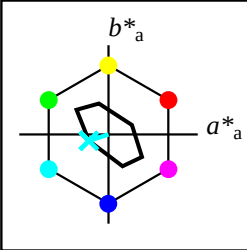
$LAB^*LAB^*_{Ma}$: 90 -27 5
 $LAB^*LCH^*_{Ma}$: 90 27 170
 $lab^*olv^*_{Ma}$: 0.0 1.0 0.5
 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.14

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22		b96r
o25y	80.63	17.37	16.35	23.86	43		r26j
o50y	84.1	10.03	21.12	23.38	65		r58j
o75y	87.95	1.88	26.42	26.48	86		r90j
y00l	93.93	-10.77	34.63	36.27	107		j21g
y25l	92.93	-16.18	33.12	36.86	116		j34g
y50l	91.88	-21.91	31.52	38.39	125		j46g
y75l	90.7	-28.29	29.74	41.05	134		j58g
l00c	89.32	-35.81	27.64	45.24	142		j71g
l50c	90.39	-26.64	4.65	27.04	170		g07b
c00v	90.93	-21.96	-7.08	23.07	198		g32b
c50v	83.93	-7.93	-17.7	19.4	246		g76b
v00m	72.1	15.76	-35.64	38.97	294		b19r
v50m	75.06	25.83	-30.83	40.22	310		b33r
m00o	78.5	37.52	-25.24	45.22	326		b47r
m50o	77.23	30.6	-3.22	30.77	354		b72r



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.55$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = c00v$ $u^* = g32b$

$d^* = c00v$

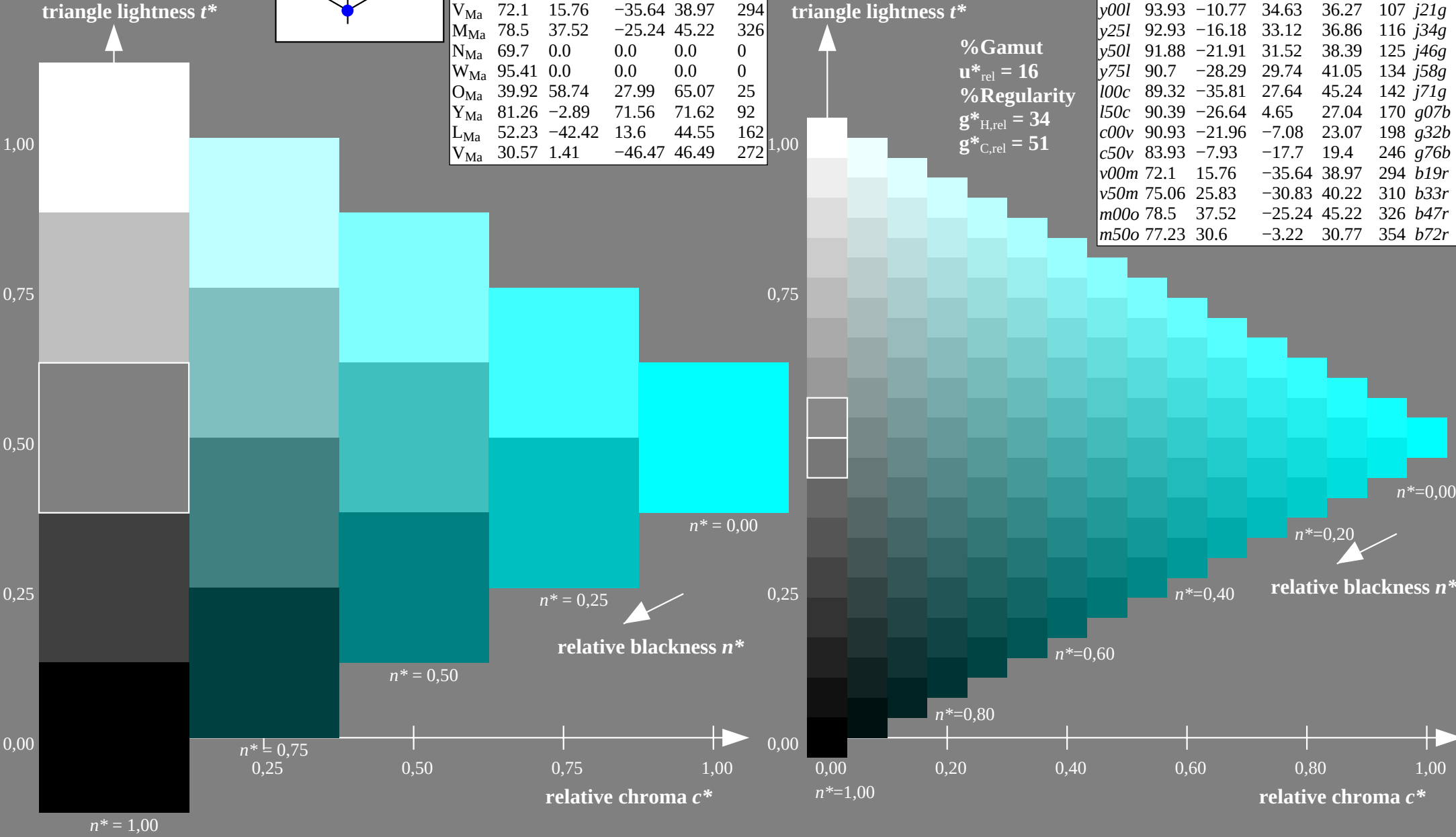


TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	76.43	26.27	10.57	28.32	22	
Y _{Ma}	93.93	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 91 -22 -7
 $LAB^*LCH^*_{Ma}$: 91 23 197
 $lab^*olv^*_{Ma}$: 0.0 1.0 1.0
 $lab^*rgb^*_{Ma}$: 0.0 1.0 0.65

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22	b96r	
o25y	80.63	17.37	16.35	23.86	43	r26j	
o50y	84.1	10.03	21.12	23.38	65	r58j	
o75y	87.95	1.88	26.42	26.48	86	r90j	
y00l	93.93	-10.77	34.63	36.27	107	j21g	
y25l	92.93	-16.18	33.12	36.86	116	j34g	
y50l	91.88	-21.91	31.52	38.39	125	j46g	
y75l	90.7	-28.29	29.74	41.05	134	j58g	
l00c	89.32	-35.81	27.64	45.24	142	j71g	
l50c	90.39	-26.64	4.65	27.04	170	g07b	
c00v	90.93	-21.96	-7.08	23.07	198	g32b	
c50v	83.93	-7.93	-17.7	19.4	246	g76b	
v00m	72.1	15.76	-35.64	38.97	294	b19r	
v50m	75.06	25.83	-30.83	40.22	310	b33r	
m00o	78.5	37.52	-25.24	45.22	326	b47r	
m50o	77.23	30.6	-3.22	30.77	354	b72r	



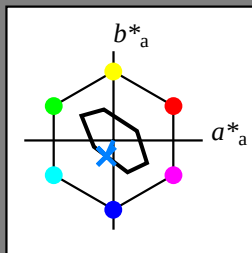
$$d^* = c50v$$

Data for maximum colour (Ma):

LAB*LAB*_{Ma}: 84 -8 -18

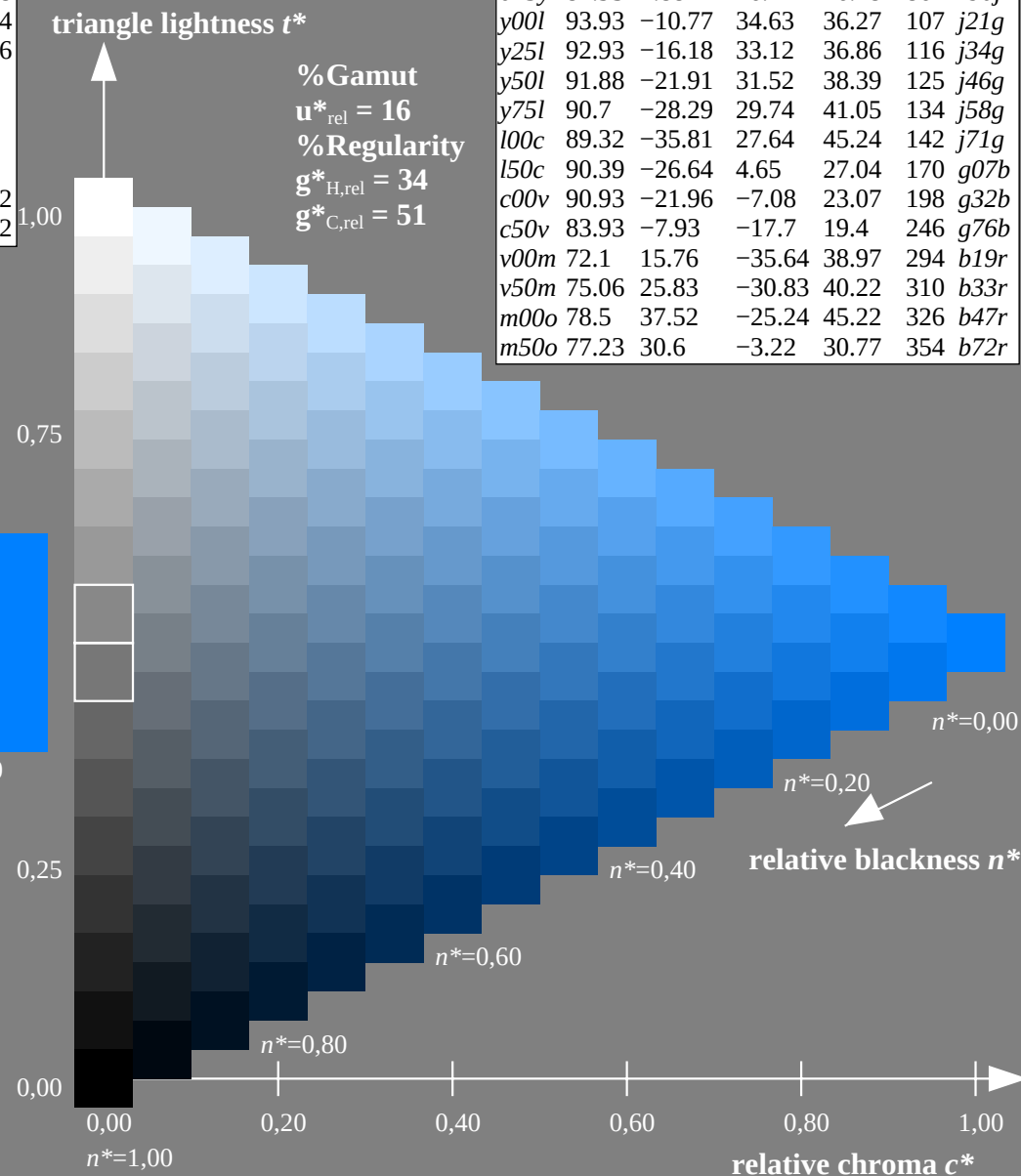
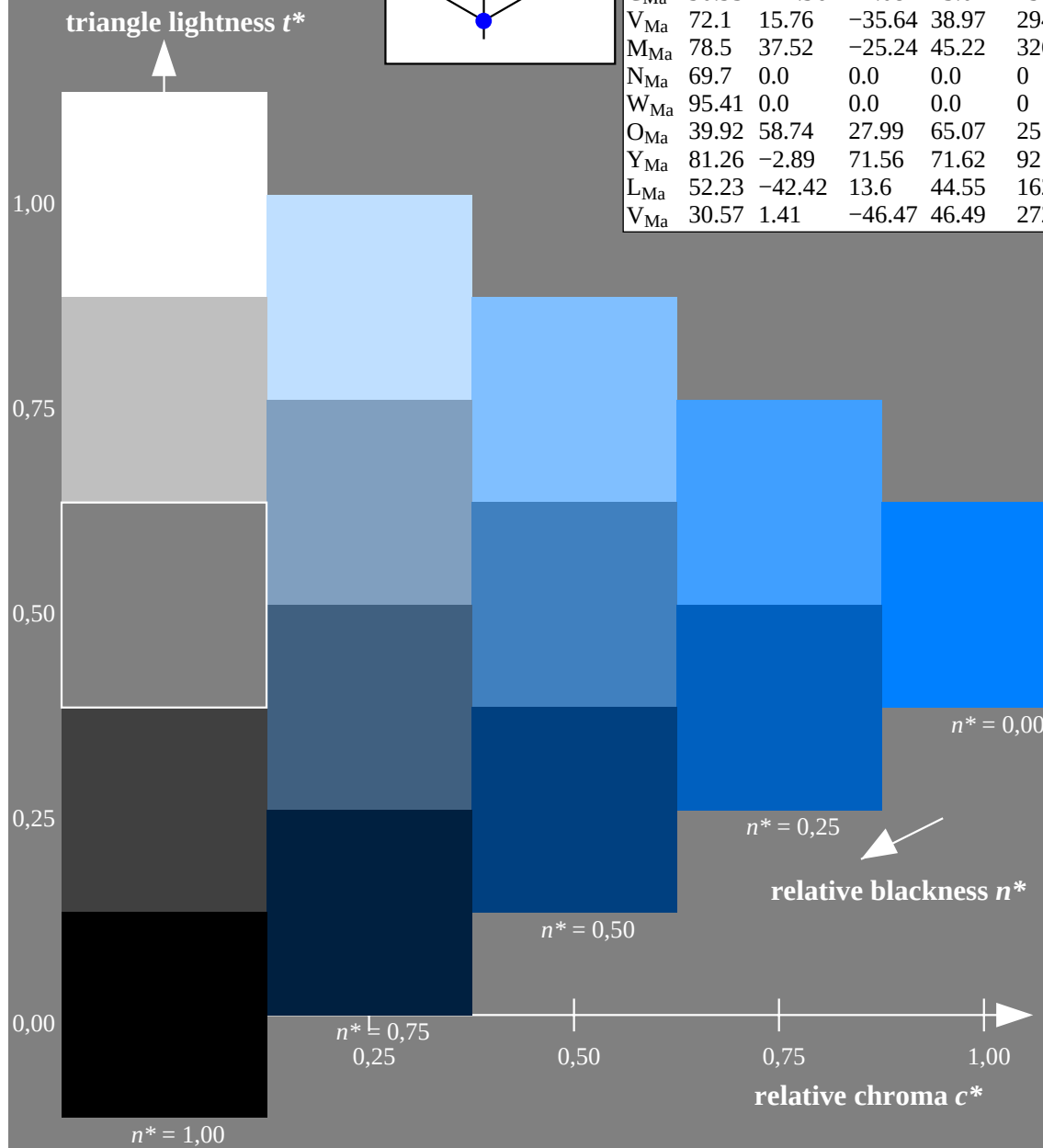
LAB*LCH*Ma: 84 19 245

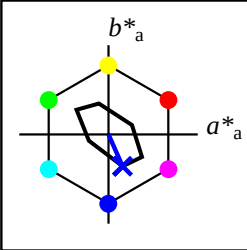
*lab*oly**_{Ma}: 0.0 0.5 1.0



TLS70a; adapted (a) CIELAB data					
Name	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	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	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
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

TLS70a; adapted (a) CIELAB data						
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*
<i>o00y</i>	76.43	26.27	10.57	28.32	22	<i>b96r</i>
<i>o25y</i>	80.63	17.37	16.35	23.86	43	<i>r26j</i>
<i>o50y</i>	84.1	10.03	21.12	23.38	65	<i>r58j</i>
<i>o75y</i>	87.95	1.88	26.42	26.48	86	<i>r90j</i>
<i>y00l</i>	93.93	-10.77	34.63	36.27	107	<i>j21g</i>
<i>y25l</i>	92.93	-16.18	33.12	36.86	116	<i>j34g</i>
<i>y50l</i>	91.88	-21.91	31.52	38.39	125	<i>j46g</i>
<i>y75l</i>	90.7	-28.29	29.74	41.05	134	<i>j58g</i>
<i>l00c</i>	89.32	-35.81	27.64	45.24	142	<i>j71g</i>
<i>l50c</i>	90.39	-26.64	4.65	27.04	170	<i>g07b</i>
<i>c00v</i>	90.93	-21.96	-7.08	23.07	198	<i>g32b</i>
<i>c50v</i>	83.93	-7.93	-17.7	19.4	246	<i>g76b</i>
<i>v00m</i>	72.1	15.76	-35.64	38.97	294	<i>b19r</i>
<i>v50m</i>	75.06	25.83	-30.83	40.22	310	<i>b33r</i>
<i>m00o</i>	78.5	37.52	-25.24	45.22	326	<i>b47r</i>
<i>m50o</i>	77.23	30.6	-3.22	30.77	354	<i>b72r</i>





TLS70a; adapted (a) CIELAB data						
Name	$L^*=L^*_a$	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	-10.77	34.63	36.27	107	
L _{Ma}	89.32	-35.81	27.64	45.24	142	
C _{Ma}	90.93	-21.96	-7.08	23.07	198	
V _{Ma}	72.1	15.76	-35.64	38.97	294	
M _{Ma}	78.5	37.52	-25.24	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	
O _{Ma}	39.92	58.74	27.99	65.07	25	
Y _{Ma}	81.26	-2.89	71.56	71.62	92	
L _{Ma}	52.23	-42.42	13.6	44.55	162	
V _{Ma}	30.57	1.41	-46.47	46.49	272	

Data for maximum colour (Ma):

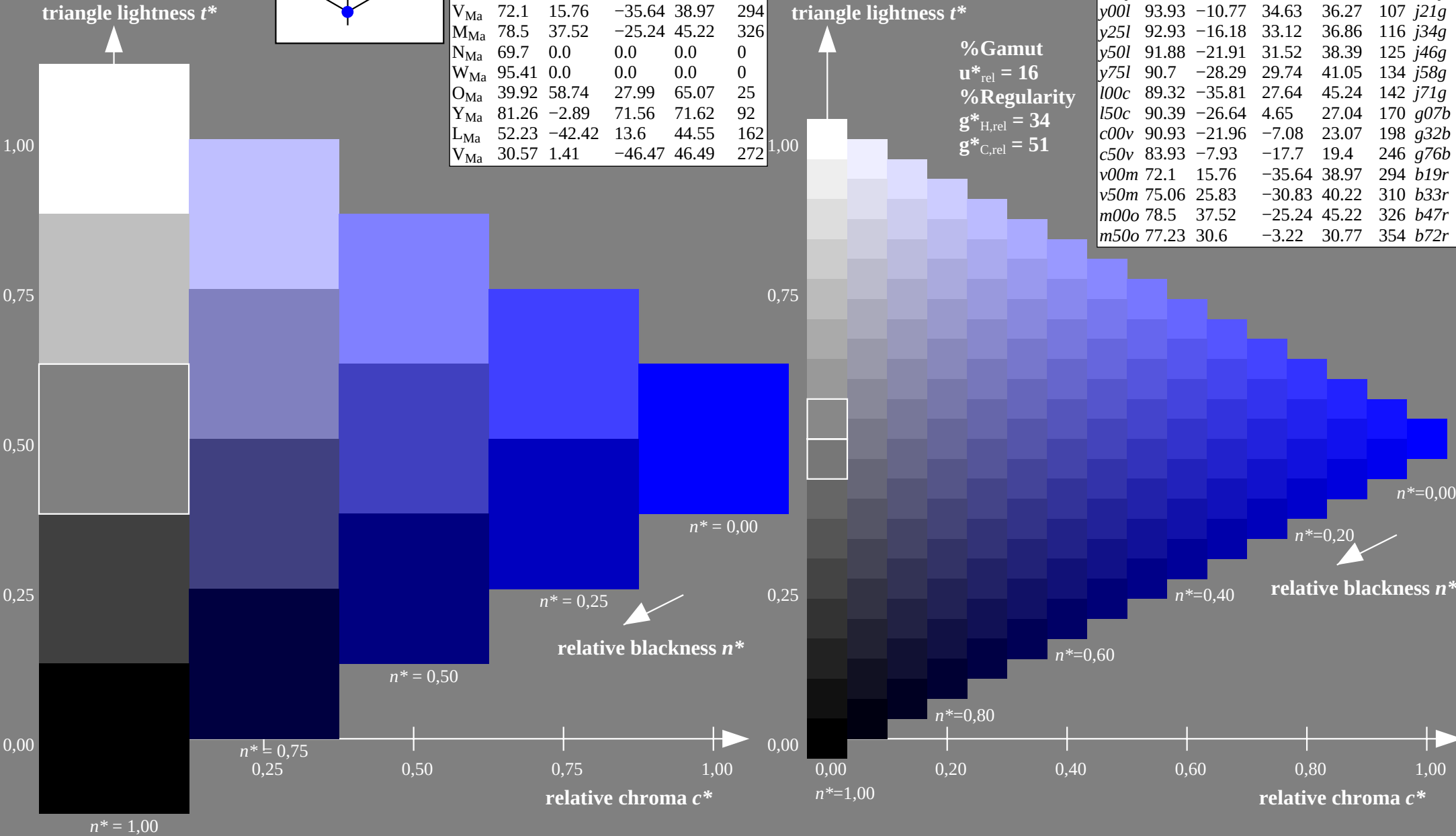
$LAB^*LAB^*_{Ma}$: 72 16 -36

$LAB^*LCH^*_{Ma}$: 72 39 293

$lab^*olv^*_{Ma}$: 0.0 0.0 1.0

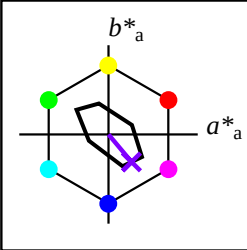
$lab^*rgb^*_{Ma}$: 0.39 0.0 1.0

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22	b96r	
o25y	80.63	17.37	16.35	23.86	43	r26j	
o50y	84.1	10.03	21.12	23.38	65	r58j	
o75y	87.95	1.88	26.42	26.48	86	r90j	
y00l	93.93	-10.77	34.63	36.27	107	j21g	
y25l	92.93	-16.18	33.12	36.86	116	j34g	
y50l	91.88	-21.91	31.52	38.39	125	j46g	
y75l	90.7	-28.29	29.74	41.05	134	j58g	
l00c	89.32	-35.81	27.64	45.24	142	j71g	
l50c	90.39	-26.64	4.65	27.04	170	g07b	
c00v	90.93	-21.96	-7.08	23.07	198	g32b	
c50v	83.93	-7.93	-17.7	19.4	246	g76b	
v00m	72.1	15.76	-35.64	38.97	294	b19r	
v50m	75.06	25.83	-30.83	40.22	310	b33r	
m00o	78.5	37.52	-25.24	45.22	326	b47r	
m50o	77.23	30.6	-3.22	30.77	354	b72r	



Input and output: Colorimetric Television Luminous System TLS70a for relative CIELAB hue $h^* = lab^*h^* = h_{ab}/360 = 0.861$
data for any colour:
 lab^*tch^* and lab^*ncu^*
device and elementary
hue text:
 $d^* = v50m$ $u^* = b33r$

$d^* = v50m$



TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	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	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	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
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

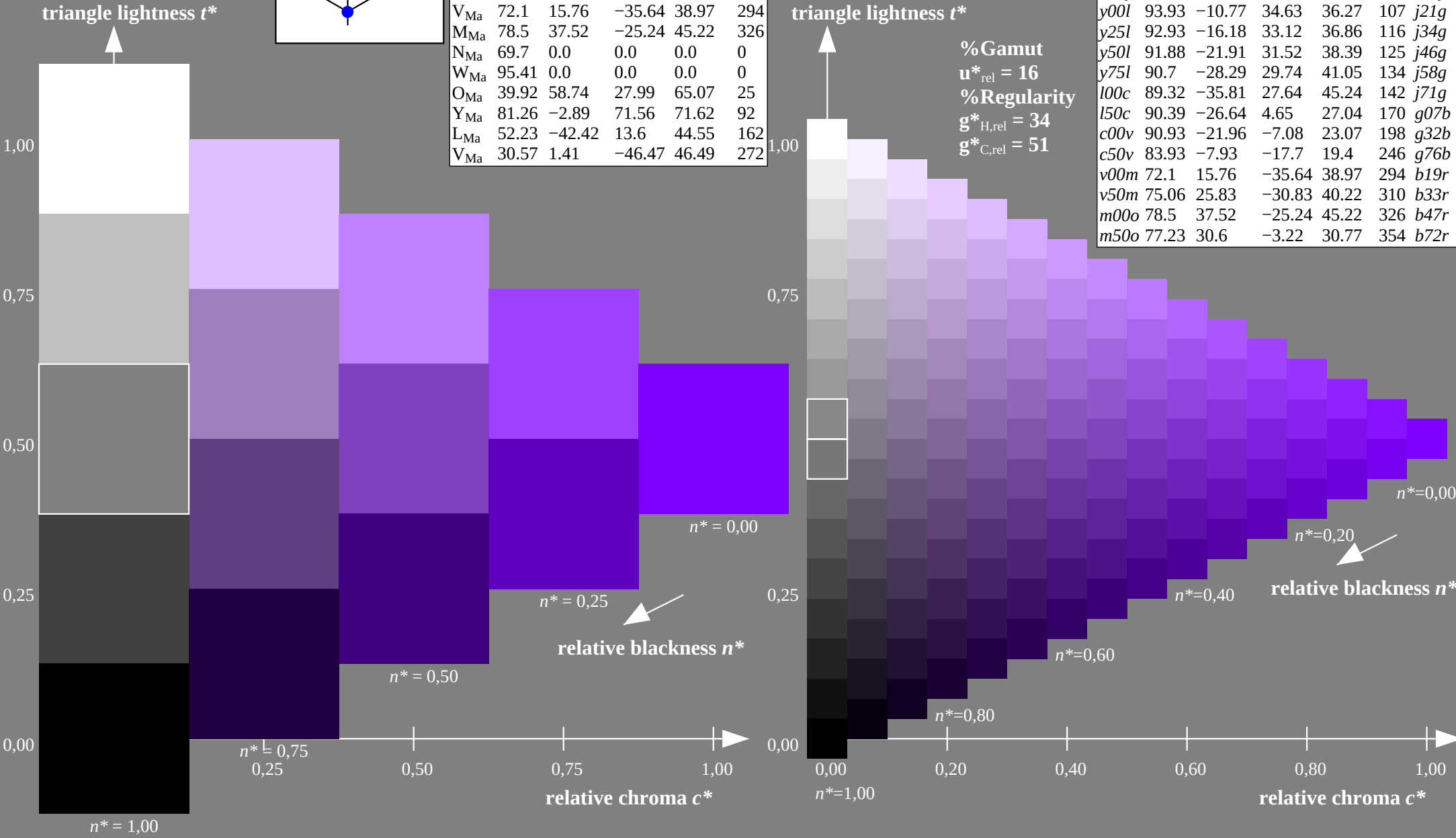
$LAB^*LAB^*_{Ma}$: 75 26 -31

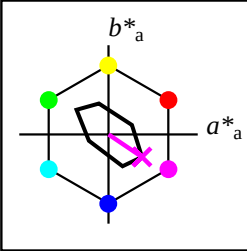
$LAB^*LCH^*_{Ma}$: 75 40 309

$lab^*olv^*_{Ma}$: 0.5 0.0 1.0

$lab^*rgb^*_{Ma}$: 0.67 0.0 1.0

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22	b96r	
o25y	80.63	17.37	16.35	23.86	43	r26j	
o50y	84.1	10.03	21.12	23.38	65	r58j	
o75y	87.95	1.88	26.42	26.48	86	r90j	
y00l	93.93	-10.77	34.63	36.27	107	j21g	
y25l	92.93	-16.18	33.12	36.86	116	j34g	
y50l	91.88	-21.91	31.52	38.39	125	j46g	
y75l	90.7	-28.29	29.74	41.05	134	j58g	
l00c	89.32	-35.81	27.64	45.24	142	j71g	
l50c	90.39	-26.64	4.65	27.04	170	g07b	
c00v	90.93	-21.96	-7.08	23.07	198	g32b	
c50v	83.93	-7.93	-17.7	19.4	246	g76b	
v00m	72.1	15.76	-35.64	38.97	294	b19r	
v50m	75.06	25.83	-30.83	40.22	310	b33r	
m00o	78.5	37.52	-25.24	45.22	326	b47r	
m50o	77.23	30.6	-3.22	30.77	354	b72r	





TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	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	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	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
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

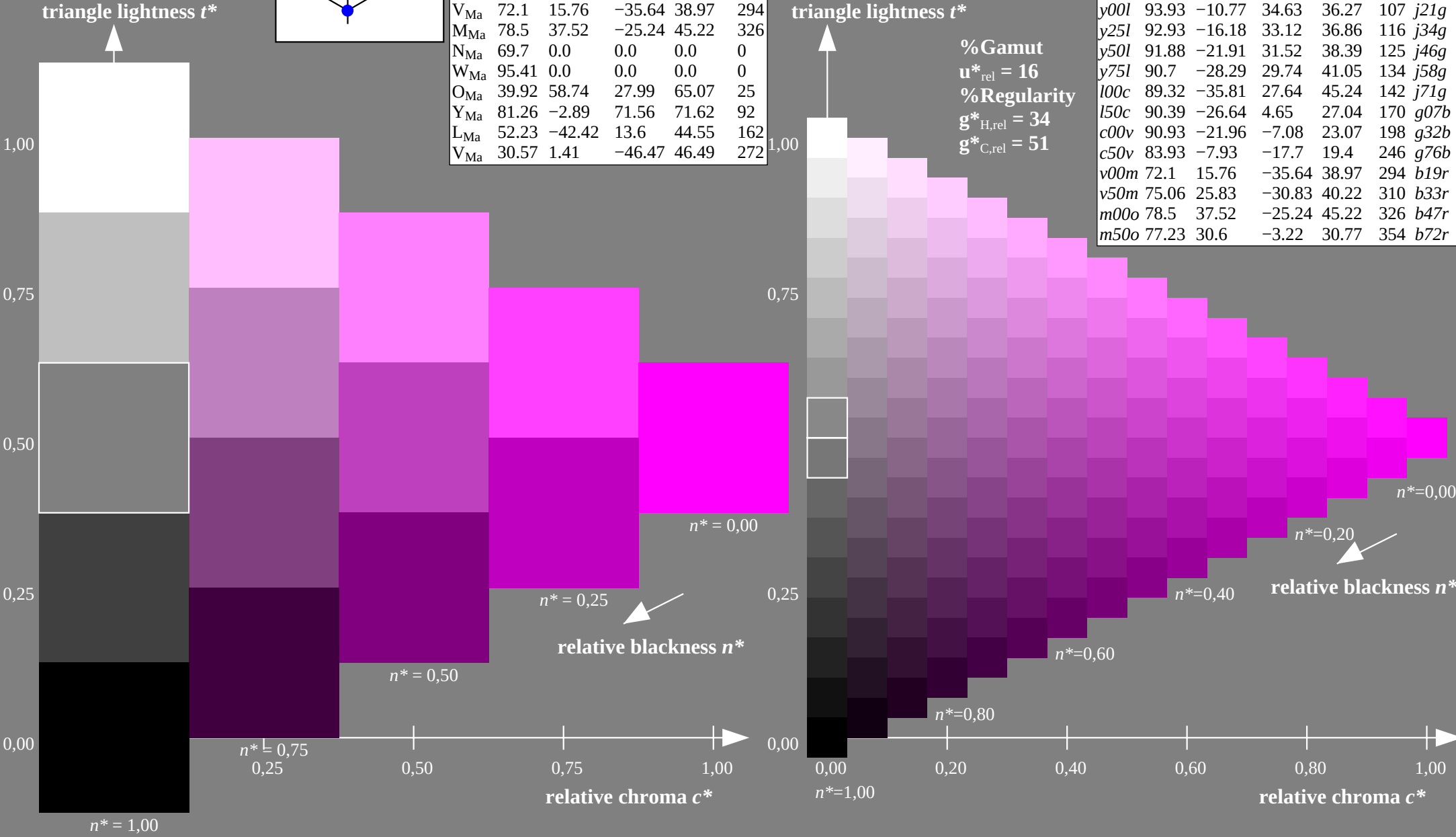
$LAB^*LAB^*_{Ma}$: 78 38 -25

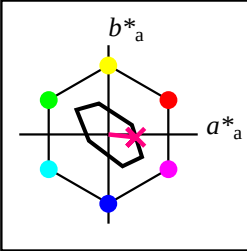
$LAB^*LCH^*_{Ma}$: 78 45 326

$lab^*olv^*_{Ma}$: 1.0 0.0 1.0

$lab^*rgb^*_{Ma}$: 0.96 0.0 1.0

TLS70a; adapted (a) CIELAB data						
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*
<i>o00y</i>	76.43	26.27	10.57	28.32	22	<i>b96r</i>
<i>o25y</i>	80.63	17.37	16.35	23.86	43	<i>r26j</i>
<i>o50y</i>	84.1	10.03	21.12	23.38	65	<i>r58j</i>
<i>o75y</i>	87.95	1.88	26.42	26.48	86	<i>r90j</i>
<i>y00l</i>	93.93	-10.77	34.63	36.27	107	<i>j21g</i>
<i>y25l</i>	92.93	-16.18	33.12	36.86	116	<i>j34g</i>
<i>y50l</i>	91.88	-21.91	31.52	38.39	125	<i>j46g</i>
<i>y75l</i>	90.7	-28.29	29.74	41.05	134	<i>j58g</i>
<i>l00c</i>	89.32	-35.81	27.64	45.24	142	<i>j71g</i>
<i>l50c</i>	90.39	-26.64	4.65	27.04	170	<i>g07b</i>
<i>c00v</i>	90.93	-21.96	-7.08	23.07	198	<i>g32b</i>
<i>c50v</i>	83.93	-7.93	-17.7	19.4	246	<i>g76b</i>
<i>v00m</i>	72.1	15.76	-35.64	38.97	294	<i>b19r</i>
<i>v50m</i>	75.06	25.83	-30.83	40.22	310	<i>b33r</i>
<i>m00o</i>	78.5	37.52	-25.24	45.22	326	<i>b47r</i>
<i>m50o</i>	77.23	30.6	-3.22	30.77	354	<i>b72r</i>





TLS70a; adapted (a) CIELAB data					
Name	$L^*=L^*_a$	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	-10.77	34.63	36.27	107
L _{Ma}	89.32	-35.81	27.64	45.24	142
C _{Ma}	90.93	-21.96	-7.08	23.07	198
V _{Ma}	72.1	15.76	-35.64	38.97	294
M _{Ma}	78.5	37.52	-25.24	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
O _{Ma}	39.92	58.74	27.99	65.07	25
Y _{Ma}	81.26	-2.89	71.56	71.62	92
L _{Ma}	52.23	-42.42	13.6	44.55	162
V _{Ma}	30.57	1.41	-46.47	46.49	272

Data for maximum colour (Ma):

$LAB^*LAB^*_{Ma}$: 77 31 -3

$LAB^*LCH^*_{Ma}$: 77 31 353

$lab^*olv^*_{Ma}$: 1.0 0.0 0.5

$lab^*rgb^*_{Ma}$: 1.0 0.0 0.55

TLS70a; adapted (a) CIELAB data							
d^*	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	u^*	
o00y	76.43	26.27	10.57	28.32	22	b96r	
o25y	80.63	17.37	16.35	23.86	43	r26j	
o50y	84.1	10.03	21.12	23.38	65	r58j	
o75y	87.95	1.88	26.42	26.48	86	r90j	
y00l	93.93	-10.77	34.63	36.27	107	j21g	
y25l	92.93	-16.18	33.12	36.86	116	j34g	
y50l	91.88	-21.91	31.52	38.39	125	j46g	
y75l	90.7	-28.29	29.74	41.05	134	j58g	
l00c	89.32	-35.81	27.64	45.24	142	j71g	
l50c	90.39	-26.64	4.65	27.04	170	g07b	
c00v	90.93	-21.96	-7.08	23.07	198	g32b	
c50v	83.93	-7.93	-17.7	19.4	246	g76b	
v00m	72.1	15.76	-35.64	38.97	294	b19r	
v50m	75.06	25.83	-30.83	40.22	310	b33r	
m00o	78.5	37.52	-25.24	45.22	326	b47r	
m50o	77.23	30.6	-3.22	30.77	354	b72r	

