

$$H^*_d = B25R_d$$

Data for maximum colour (Ma):

LabCh*_{d, Ma}: 38 79 -89 120 311

*HIC**_{d,Ma}: B25R_100_100d

*rgbic**d, Ma:

0.5 0.0 1.0 1.0 1.0

triangle lightness T^*

%

% Gamut

$$u_{rel}^* = 158$$

%Regularity

 $g^*_{H,rel} = 19$
$$g^*_{C,rel} = 37$$

Figure 1

Figure 1. The effect of the number of trials on the number of correct responses.

100

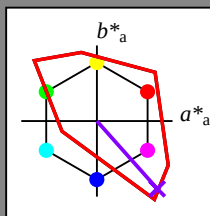
Age Group	Percentage
18-24	85%
25-34	75%
35-44	65%
45-54	55%
55-64	45%
65-74	35%
75-84	25%
85+	15%

100

1. **Introduction**

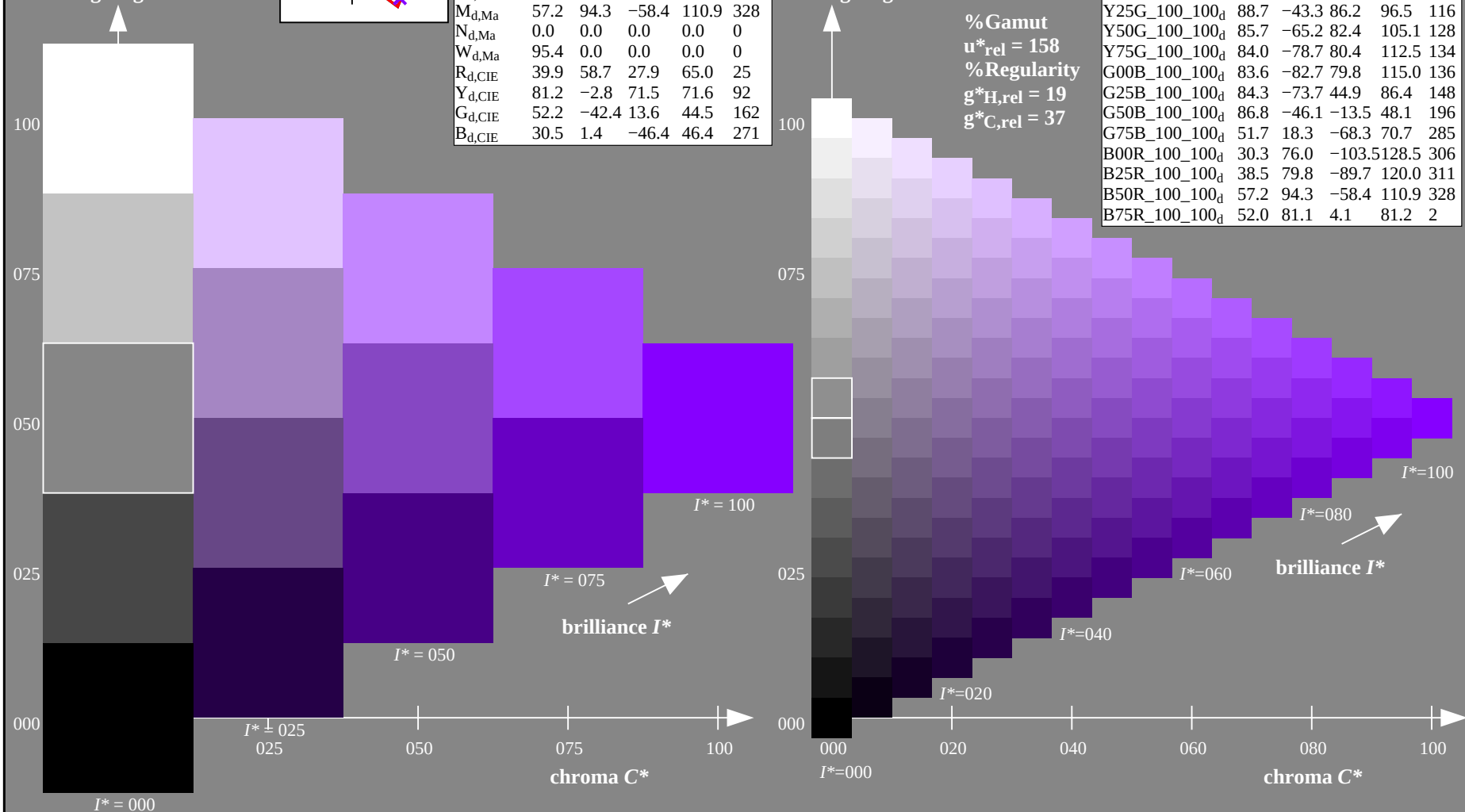
 $\ast=020$

--	--



TLS00a; adapted (a) CIELAB data					
name	L^*_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{d, Ma}	50.4	76.9	64.5	100.4	40
Y _{d, Ma}	92.6	-20.7	90.7	93.0	102
G _{d, Ma}	83.6	-82.7	79.8	115.0	136
C _{d, Ma}	86.8	-46.1	-13.5	48.1	196
B _{d, Ma}	30.3	76.0	-103.5	128.5	306
M _{d, Ma}	57.2	94.3	-58.4	110.9	328
N _{d, Ma}	0.0	0.0	0.0	0.0	0
W _{d, Ma}	95.4	0.0	0.0	0.0	0
R _{d, CIE}	39.9	58.7	27.9	65.0	25
Y _{d, CIE}	81.2	-2.8	71.5	71.6	92
G _{d, CIE}	52.2	-42.4	13.6	44.5	162
B _{d, CIE}	30.5	1.4	-46.4	46.4	271

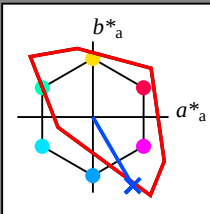
1 TLS00a; adapted (a) CIELAB data					
H^*_d	$L^*=L^*_{a,d}$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100 _d	50.4	76.9	64.5	100.4	40
R25Y_100_100 _d	53.7	67.6	65.8	94.4	44
R50Y_100_100 _d	63.6	41.3	71.0	82.2	59
R75Y_100_100 _d	78.2	7.8	80.6	81.0	84
Y00G_100_100 _d	92.6	-20.7	90.7	93.0	102
Y25G_100_100 _d	88.7	-43.3	86.2	96.5	116
Y50G_100_100 _d	85.7	-65.2	82.4	105.1	128
Y75G_100_100 _d	84.0	-78.7	80.4	112.5	134
G00B_100_100 _d	83.6	-82.7	79.8	115.0	136
G25B_100_100 _d	84.3	-73.7	44.9	86.4	148
G50B_100_100 _d	86.8	-46.1	-13.5	48.1	196
G75B_100_100 _d	51.7	18.3	-68.3	70.7	285
B00R_100_100 _d	30.3	76.0	-103.5	128.5	306
B25R_100_100 _d	38.5	79.8	-89.7	120.0	311
B50R_100_100 _d	57.2	94.3	-58.4	110.9	328
B75R_100_100 _d	52.0	81.1	4.1	81.2	2



Input and Output: Television Luminous System TLS00a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 300/360 = 0.83$

Data for any device (d) or elementary (e) colour:

HIC^*_e
hue text for the colours of this page:
 $H^*_e = B25R_e$
triangle lightness T^*



TLS00a; adapted (a) CIELAB data					
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _e ,Ma	50.9	78.3	37.3	86.7	25
Y _e ,Ma	83.7	-3.4	84.5	84.5	92
G _e ,Ma	85.1	-64.6	20.7	67.9	162
C _e ,Ma	79.0	-34.2	-25.7	42.8	216
B _e ,Ma	59.2	1.7	-56.6	56.6	271
M _e ,Ma	57.1	94.1	-57.4	110.3	328
N _e ,Ma	0.0	0.0	0.0	0.0	0
W _e ,Ma	95.4	0.0	0.0	0.0	0
R _e ,CIE	39.9	58.7	27.9	65.0	25
Y _e ,CIE	81.2	-2.8	71.5	71.6	92
G _e ,CIE	52.2	-42.4	13.6	44.5	162
B _e ,CIE	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_{e,Ma}$: 38 52 -90 104 300

$HIC^*_{e,Ma}$: B25R_100_100_e

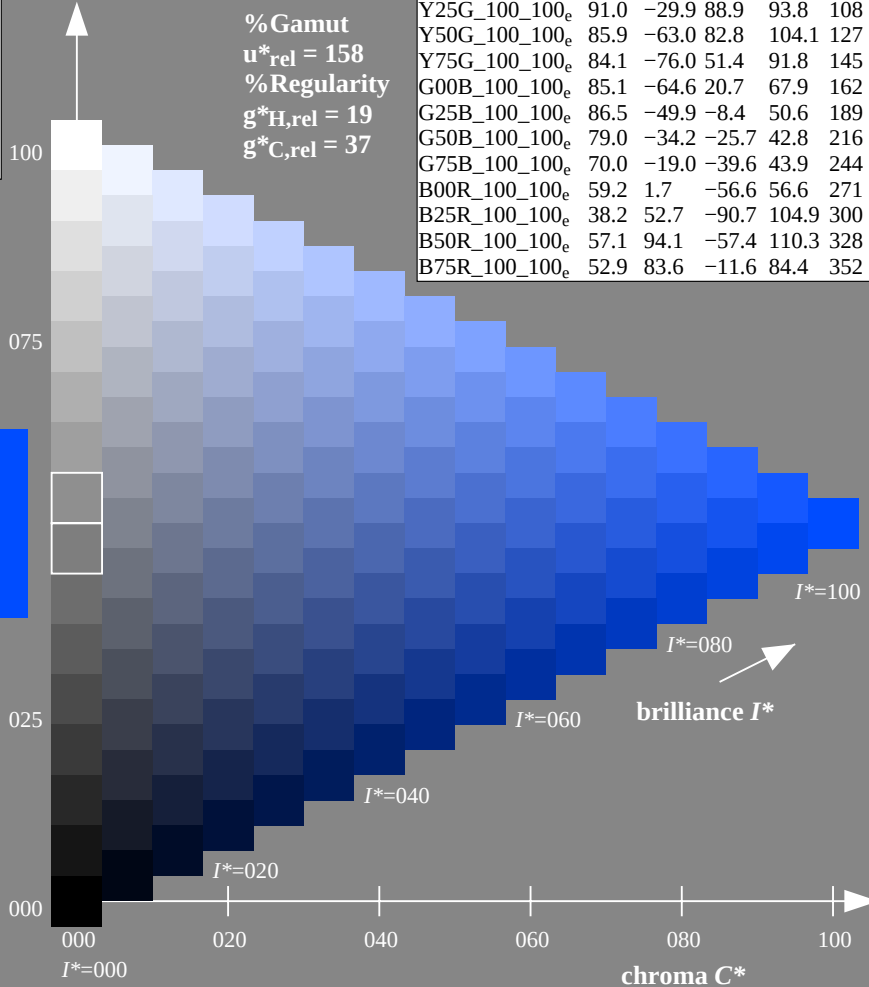
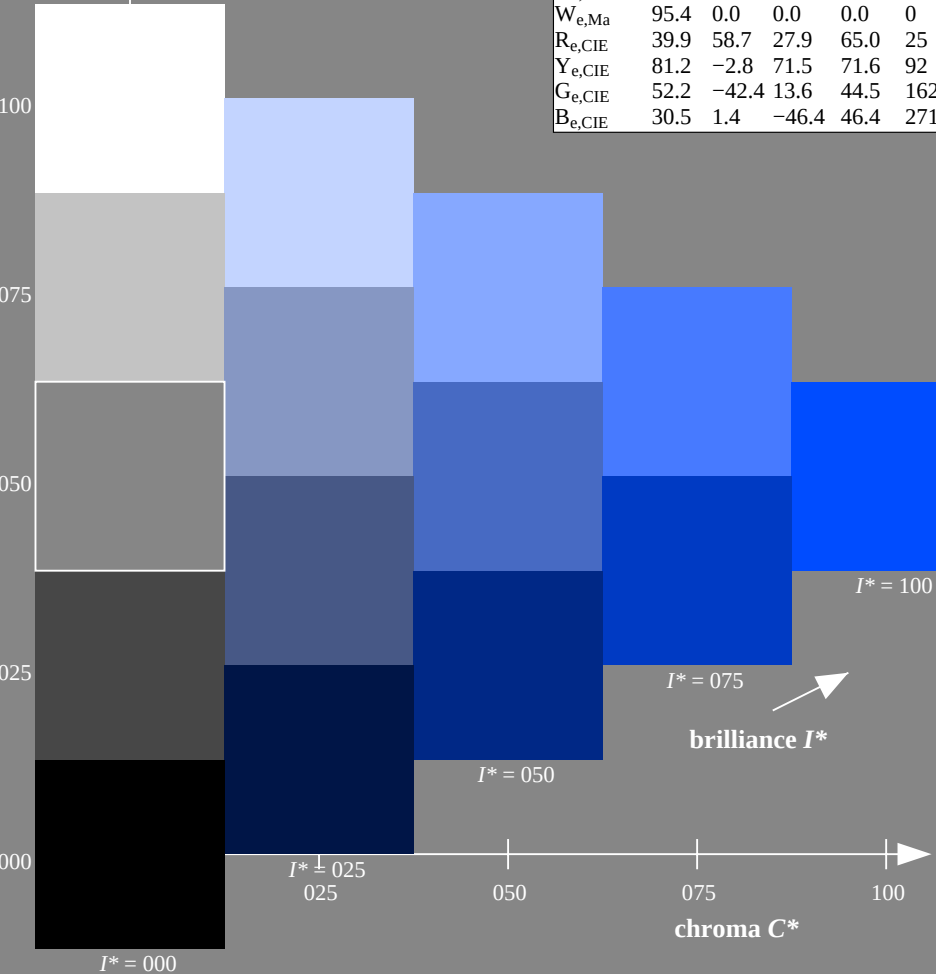
$rgbic^*_{e,Ma}$:

0.0 0.27 1.0 1.0 1.0

triangle lightness T^*

%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 19$
 $g^*_{C,rel} = 37$

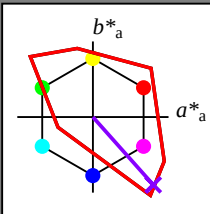
TLS00a; adapted (a) CIELAB data					
H^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100 _e	50.9	78.3	37.3	86.7	25
R25Y_100_100 _e	51.3	74.4	64.8	98.7	41
R50Y_100_100 _e	63.1	42.7	70.8	82.7	58
R75Y_100_100 _e	73.5	18.3	77.7	79.8	76
Y00G_100_100 _e	83.7	-3.4	84.5	84.5	92
Y25G_100_100 _e	91.0	-29.9	88.9	93.8	108
Y50G_100_100 _e	85.9	-63.0	82.8	104.1	127
Y75G_100_100 _e	84.1	-76.0	51.4	91.8	145
G00B_100_100 _e	85.1	-64.6	20.7	67.9	162
G25B_100_100 _e	86.5	-49.9	-8.4	50.6	189
G50B_100_100 _e	79.0	-34.2	-25.7	42.8	216
G75B_100_100 _e	70.0	-19.0	-39.6	43.9	244
B00R_100_100 _e	59.2	1.7	-56.6	56.6	271
B25R_100_100 _e	38.2	52.7	-90.7	104.9	300
B50R_100_100 _e	57.1	94.1	-57.4	110.3	328
B75R_100_100 _e	52.9	83.6	-11.6	84.4	352



Input and Output: Television Luminous System TLS00a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 311/360 = 0.86$ $H^*_d = B25R_d$

Data for any device (d) or elementary (e) colour:

HIC^*_d
hue text for the colours of this page:
 $H^*_d = B25R_d$
triangle lightness T^*



TLS00a; adapted (a) CIELAB data					
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{d,Ma}	50.4	76.9	64.5	100.4	40
Y _{d,Ma}	92.6	-20.7	90.7	93.0	102
G _{d,Ma}	83.6	-82.7	79.8	115.0	136
C _{d,Ma}	86.8	-46.1	-13.5	48.1	196
B _{d,Ma}	30.3	76.0	-103.5	128.5	306
M _{d,Ma}	57.2	94.3	-58.4	110.9	328
N _{d,Ma}	0.0	0.0	0.0	0.0	0
W _{d,Ma}	95.4	0.0	0.0	0.0	0
R _{d,CIE}	39.9	58.7	27.9	65.0	25
Y _{d,CIE}	81.2	-2.8	71.5	71.6	92
G _{d,CIE}	52.2	-42.4	13.6	44.5	162
B _{d,CIE}	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_d, Ma$: 38 79 -89 120 311

HIC^*_d, Ma : B25R_100_100d

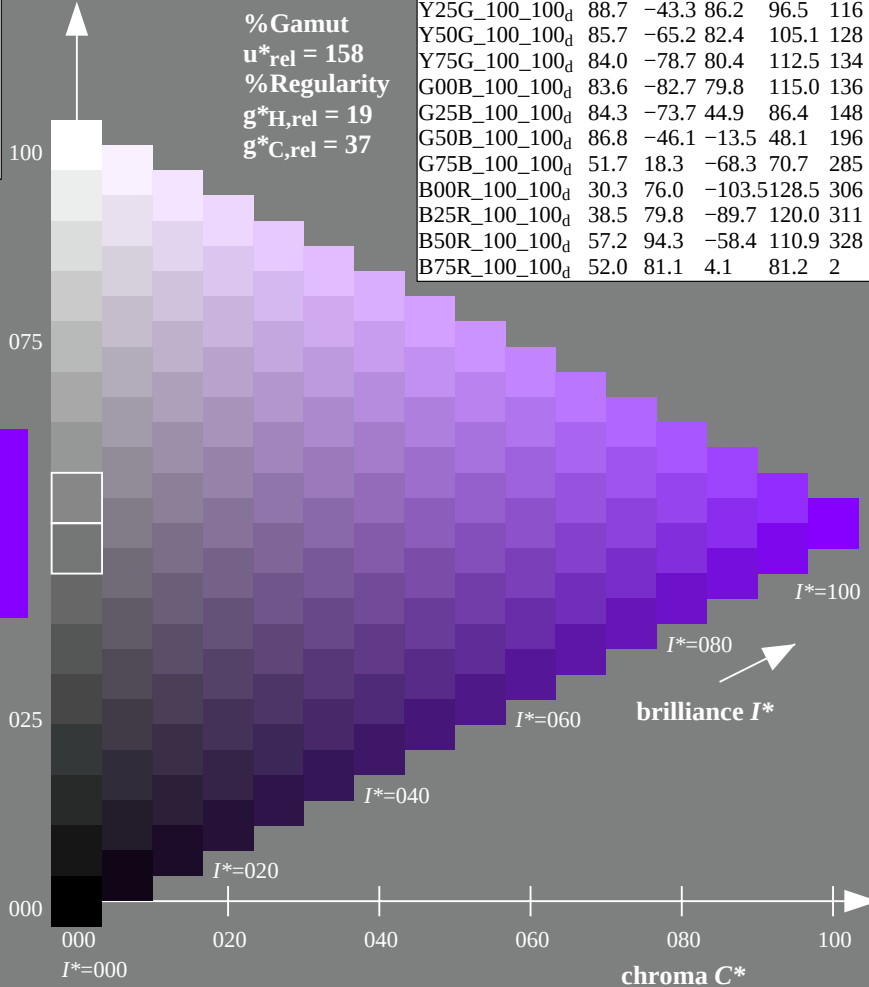
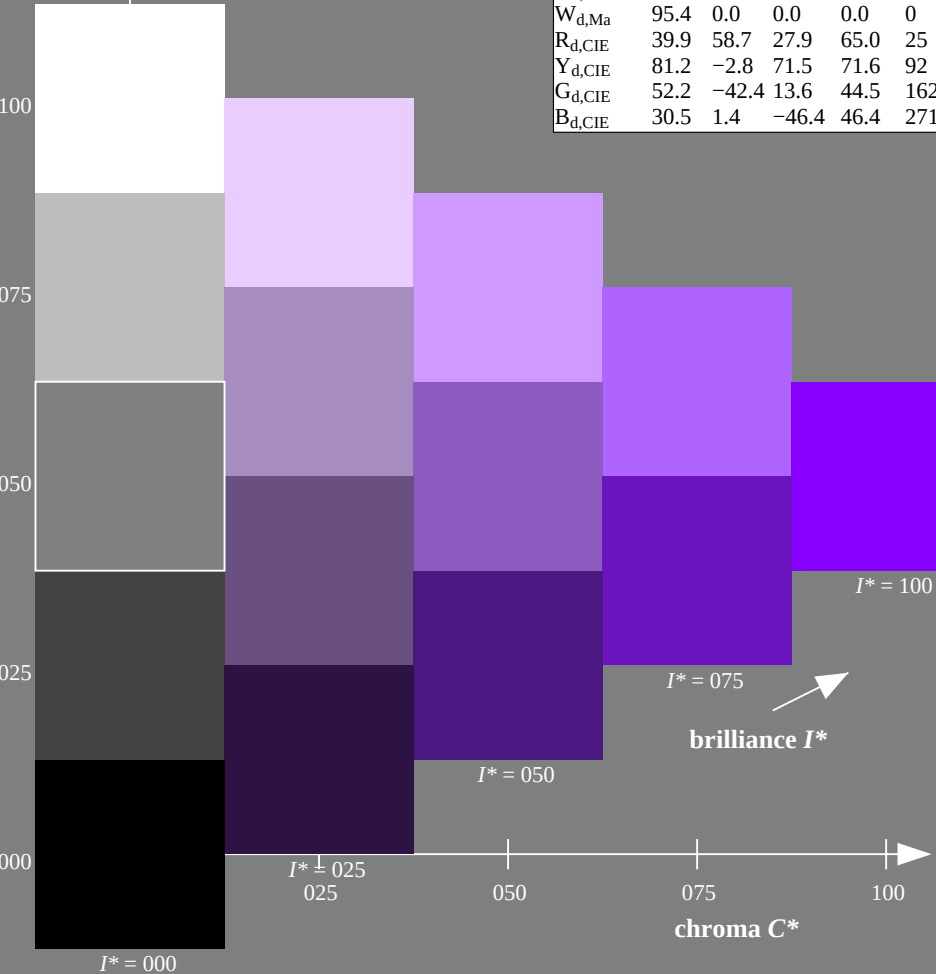
$rgbic^*_d, Ma$:

0.5 0.0 1.0 1.0 1.0

triangle lightness T^*

%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 19$
 $g^*_{C,rel} = 37$

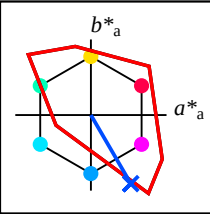
TLS00a; adapted (a) CIELAB data					
H^*_d	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100d	50.4	76.9	64.5	100.4	40
R25Y_100_100d	53.7	67.6	65.8	94.4	44
R50Y_100_100d	63.6	41.3	71.0	82.2	59
R75Y_100_100d	78.2	7.8	80.6	81.0	84
Y00G_100_100d	92.6	-20.7	90.7	93.0	102
Y25G_100_100d	88.7	-43.3	86.2	96.5	116
Y50G_100_100d	85.7	-65.2	82.4	105.1	128
Y75G_100_100d	84.0	-78.7	80.4	112.5	134
G00B_100_100d	83.6	-82.7	79.8	115.0	136
G25B_100_100d	84.3	-73.7	44.9	86.4	148
G50B_100_100d	86.8	-46.1	-13.5	48.1	196
G75B_100_100d	51.7	18.3	-68.3	70.7	285
B00R_100_100d	30.3	76.0	-103.5	128.5	306
B25R_100_100d	38.5	79.8	-89.7	120.0	311
B50R_100_100d	57.2	94.3	-58.4	110.9	328
B75R_100_100d	52.0	81.1	4.1	81.2	2



Input and Output: Television Luminous System TLS00a for relative CIELAB hue $h_{ab,a,rel} = h_{ab}/360 = 300/360 = 0.83$

Data for any device (d) or elementary (e) colour:

HIC^*_e
hue text for the colours of this page:
 $H^*_e = B25R_e$
triangle lightness T^*



TLS00a; adapted (a) CIELAB data					
name	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _e ,Ma	50.9	78.3	37.3	86.7	25
Y _e ,Ma	83.7	-3.4	84.5	84.5	92
G _e ,Ma	85.1	-64.6	20.7	67.9	162
C _e ,Ma	79.0	-34.2	-25.7	42.8	216
B _e ,Ma	59.2	1.7	-56.6	56.6	271
M _e ,Ma	57.1	94.1	-57.4	110.3	328
N _e ,Ma	0.0	0.0	0.0	0.0	0
W _e ,Ma	95.4	0.0	0.0	0.0	0
R _e ,CIE	39.9	58.7	27.9	65.0	25
Y _e ,CIE	81.2	-2.8	71.5	71.6	92
G _e ,CIE	52.2	-42.4	13.6	44.5	162
B _e ,CIE	30.5	1.4	-46.4	46.4	271

Data for maximum colour (Ma):

$LabCh^*_{e,Ma}$: 38 52 -90 104 300

$HIC^*_{e,Ma}$: B25R_100_100_e

$rgbic^*_{e,Ma}$:

0.0 0.27 1.0 1.0 1.0

triangle lightness T^*

%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 19$
 $g^*_{C,rel} = 37$

TLS00a; adapted (a) CIELAB data					
H^*_e	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R00Y_100_100 _e	50.9	78.3	37.3	86.7	25
R25Y_100_100 _e	51.3	74.4	64.8	98.7	41
R50Y_100_100 _e	63.1	42.7	70.8	82.7	58
R75Y_100_100 _e	73.5	18.3	77.7	79.8	76
Y00G_100_100 _e	83.7	-3.4	84.5	84.5	92
Y25G_100_100 _e	91.0	-29.9	88.9	93.8	108
Y50G_100_100 _e	85.9	-63.0	82.8	104.1	127
Y75G_100_100 _e	84.1	-76.0	51.4	91.8	145
G00B_100_100 _e	85.1	-64.6	20.7	67.9	162
G25B_100_100 _e	86.5	-49.9	-8.4	50.6	189
G50B_100_100 _e	79.0	-34.2	-25.7	42.8	216
G75B_100_100 _e	70.0	-19.0	-39.6	43.9	244
B00R_100_100 _e	59.2	1.7	-56.6	56.6	271
B25R_100_100 _e	38.2	52.7	-90.7	104.9	300
B50R_100_100 _e	57.1	94.1	-57.4	110.3	328
B75R_100_100 _e	52.9	83.6	-11.6	84.4	352

