

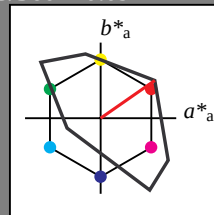
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 35/360 = 0.097$ lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

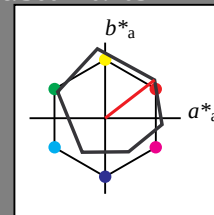
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$ lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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	-0.98	4.75
LAB*LABa	95.41	0.0	0.0
LAB*TCa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	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	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.24	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCa	50.0	0.01	-

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	1.0
cmyn4*	0.0	0.5	0.5	0.0

standard and adapted CIELAB

LAB*LAB	71.67	32.15	28.41
LAB*LABa	71.67	32.69	25.25
LAB*TCa	75.0	41.31	37.69

relative CIELAB lab*

lab*lab	0.693	0.396	0.306
lab*tch	0.75	0.5	0.105
lab*nch	0.0	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.693	0.477	0.15
lab*tce	0.75	0.5	0.048
lab*nce	0.0	0.5	r19j

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.0	(1.0)
cmyn3*	0.5	1.0	1.0	(0.0)
olvi4*	1.0	0.5	0.5	0.5
cmyn4*	0.0	0.5	0.5	0.5

standard and adapted CIELAB

LAB*LAB	32.98	32.9	25.8
LAB*LABa	32.98	32.69	25.25
LAB*TCa	25.01	41.31	37.69

relative CIELAB lab*

lab*lab	0.193	0.396	0.306
lab*tch	0.25	0.5	0.105
lab*nch	0.5	0.5	0.105

relative Natural Colour (NC)

lab*lrj	0.193	0.477	0.15
lab*tce	0.25	0.5	0.048
lab*nce	0.5	0.5	r19j

relative Inform. Technology (IT)

olvi3*	1.0	0.0	0.0	(1.0)
cmyn3*	0.0	1.0	1.0	(0.0)
olvi4*	1.0	0.0	0.0	1.0
cmyn4*	0.0	1.0	1.0	0.0

standard and adapted CIELAB

LAB*LAB	47.94	65.3	52.06
LAB*LABa	47.94	65.37	50.51
LAB*TCa	50.0	82.61	37.69

relative CIELAB lab*

lab*lab	0.387	0.791	0.611
lab*tch	0.5	1.0	0.105
lab*nch	0.0	1.0	0.105

relative Natural Colour (NC)

lab*lrj	0.387	0.954	0.299
lab*tce	0.5	1.0	0.048
lab*nce	0.0	1.0	r19j

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

blackness n^*

chromaticness c^*

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,0$

OE060-7, 3 step scales for constant CIELAB hue 35/360 = 0.097 (left)

3 step scales for constant CIELAB hue 38/360 = 0.105 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

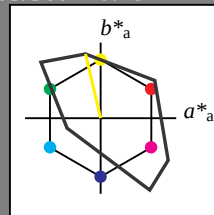
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$ lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	52.76	71.63	49.88	87.29	35
YMa	92.74	-20.02	84.97	87.3	103
LMa	84.0	-78.98	73.94	108.2	137
CMa	87.14	-44.41	-13.11	46.32	196
VMa	35.47	64.92	-95.06	115.12	304
MMa	59.01	89.33	-55.67	105.26	328
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.74	27.99	65.07	25
JCIE	81.26	-2.88	71.56	71.62	92
GCIE	52.23	-42.41	13.6	44.55	162
BCIE	30.57	1.41	-46.46	46.49	272

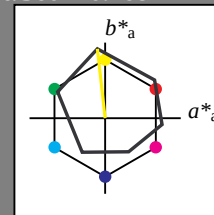
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$ lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 90 92 96

olv*Ma: 1.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.39	50.52	82.63	38
YMa	90.37	-10.26	91.75	92.32	96
LMa	50.9	-62.83	34.96	71.91	151
CMa	58.62	-30.34	-45.01	54.3	236
VMa	25.72	31.1	-44.4	54.22	305
MMa	48.13	75.28	-8.36	75.74	354
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.57	25
JCIE	81.26	-2.16	67.76	67.79	92
GCIE	52.23	-42.25	11.76	43.87	164
BCIE	30.57	1.15	-46.84	46.86	271

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	-0.98	4.75
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.5	(1.0)
cmyn3*	0.0	0.0	0.5	(0.0)
olvi4*	1.0	1.0	0.5	1.0
cmyn4*	0.0	0.0	0.5	0.0

standard and adapted CIELAB

LAB*LAB	92.88	-6.06	50.46
LAB*LABa	92.88	-5.12	45.87
LAB*TCHa	75.0	46.15	96.38

relative CIELAB lab*

lab*lab	0.967	-0.055	0.497
lab*tch	0.75	0.5	0.268
lab*nch	0.0	0.5	0.268

relative Natural Colour (NC)

lab*lrj	0.967	-0.048	0.497
lab*tce	0.75	0.5	0.266
lab*nce	0.0	0.5	j06g

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.5	0.5	1.0	(0.0)
olvi4*	1.0	1.0	0.5	0.5
cmyn4*	0.0	0.0	0.5	0.5

standard and adapted CIELAB

LAB*LAB	54.19	-5.32	47.84
LAB*LABa	54.19	-5.12	45.87
LAB*TCHa	25.01	46.15	96.38

relative CIELAB lab*

lab*lab	0.467	-0.055	0.497
lab*tch	0.25	0.5	0.268
lab*nch	0.5	0.5	0.268

relative Natural Colour (NC)

lab*lrj	0.467	-0.048	0.497
lab*tce	0.25	0.5	0.266
lab*nce	0.5	0.5	j06g

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.0	(1.0)
cmyn3*	0.0	0.0	1.0	(0.0)
olvi4*	1.0	1.0	0.0	1.0
cmyn4*	0.0	0.0	1.0	0.0

standard and adapted CIELAB

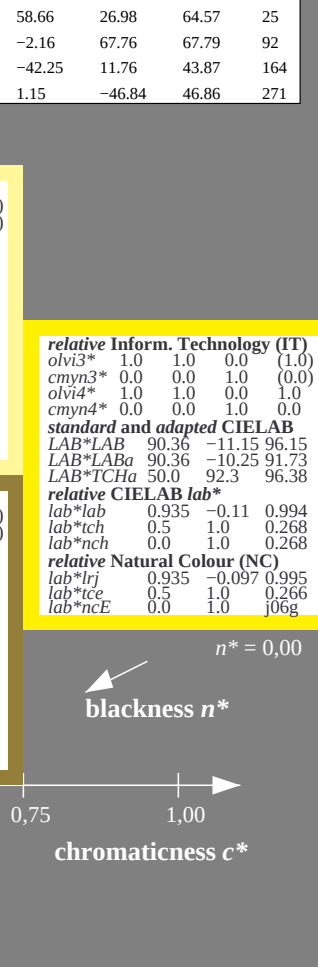
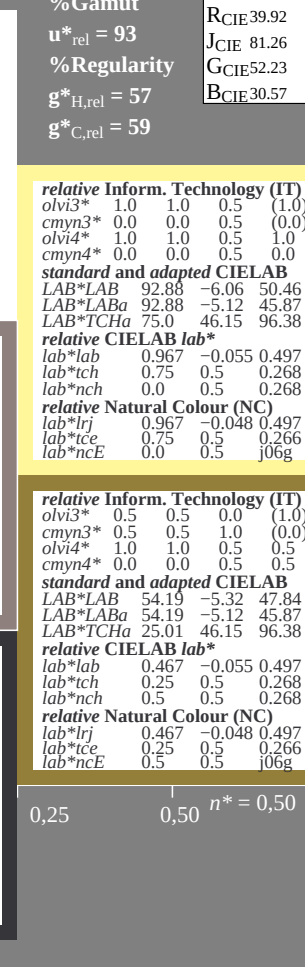
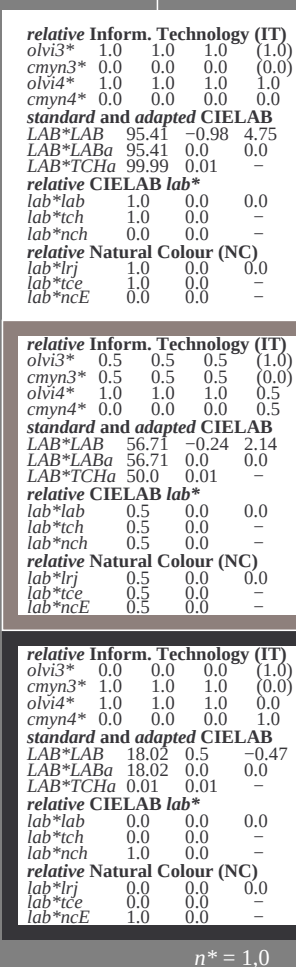
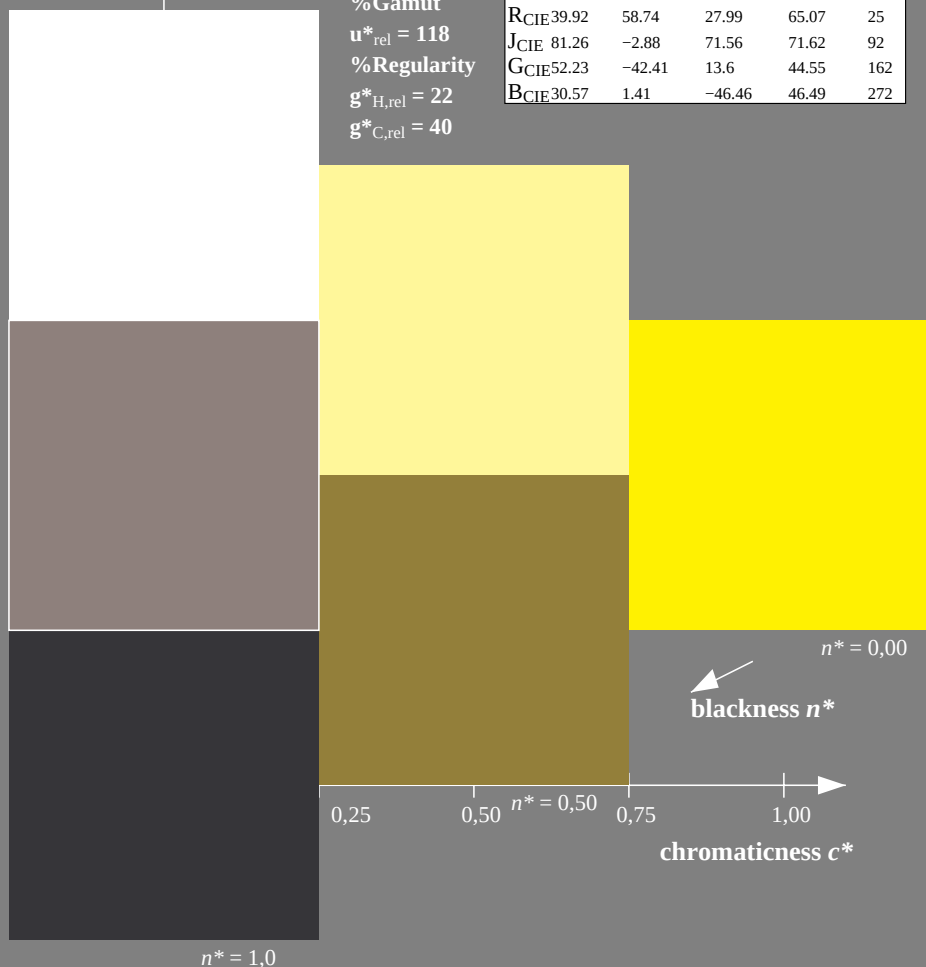
LAB*LAB	90.36	-11.15	96.15
LAB*LABa	90.36	-10.25	91.73
LAB*TCHa	50.0	92.3	96.38

relative CIELAB lab*

lab*lab	0.935	-0.11	0.994
lab*tch	0.5	1.0	0.268
lab*nch	0.0	1.0	0.268

relative Natural Colour (NC)

lab*lrj	0.935	-0.097	0.995
lab*tce	0.5	1.0	0.266
lab*nce	0.0	1.0	j06g



OE060-7, 3 step scales for constant CIELAB hue 103/360 = 0.287 (left)

3 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* setcmykcolor$

output: Startup (S) data depend

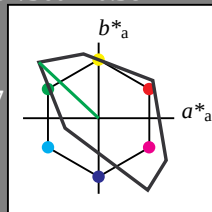
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 137/360 = 0.38$ lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

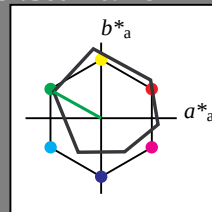
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$ lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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 -0.98 4.75
 LAB^*LABa 95.41 0.0 0.0
 LAB^*TCHa 99.99 0.01 -

relative CIELAB lab*
 lab^*lab 1.0 0.0 0.0
 lab^*tch 1.0 0.0 -
 lab^*nch 0.0 0.0 -

relative Natural Colour (NC)
 lab^*lrj 1.0 0.0 0.0
 lab^*tce 1.0 0.0 -
 lab^*nce 0.0 0.0 -

relative Inform. Technology (IT)
 $olvi3^*$ 0.5 1.0 0.5 (1.0)
 $cmyn3^*$ 0.5 0.0 0.5 (0.0)
 $olvi4^*$ 0.5 1.0 0.5 1.0
 $cmyn4^*$ 0.5 0.0 0.5 0.0

standard and adapted CIELAB
 LAB^*LAB 73.15 -31.96 20.73
 LAB^*LABa 73.15 -31.4 17.48
 LAB^*TCHa 75.0 35.95 150.91

relative CIELAB lab*
 lab^*lab 0.712 -0.436 0.243
 lab^*tch 0.75 0.5 0.419
 lab^*nch 0.0 0.5 0.419

relative Natural Colour (NC)
 lab^*lrj 0.712 -0.478 0.144
 lab^*tce 0.75 0.5 0.453
 lab^*nce 0.0 0.5 j81g

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 0.5 0.0 (1.0)
 $cmyn3^*$ 1.0 0.5 1.0 (0.0)
 $olvi4^*$ 0.5 1.0 0.5 0.5
 $cmyn4^*$ 0.5 0.0 0.5 0.5

standard and adapted CIELAB
 LAB^*LAB 34.46 -31.22 18.12
 LAB^*LABa 34.46 -31.4 17.48
 LAB^*TCHa 25.01 35.95 150.91

relative CIELAB lab*
 lab^*lab 0.213 -0.436 0.243
 lab^*tch 0.25 0.5 0.419
 lab^*nch 0.5 0.5 0.419

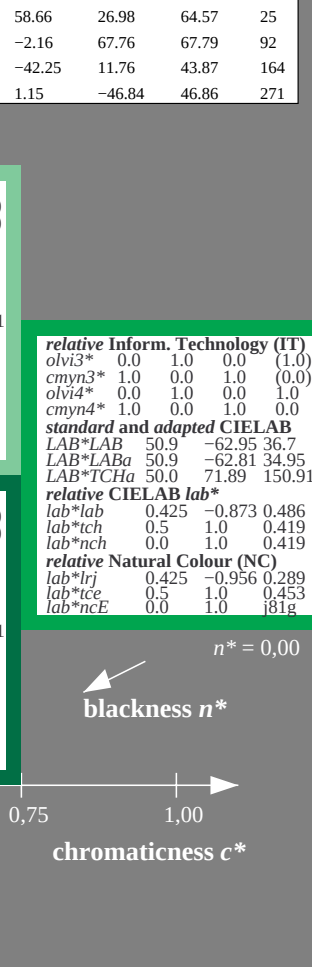
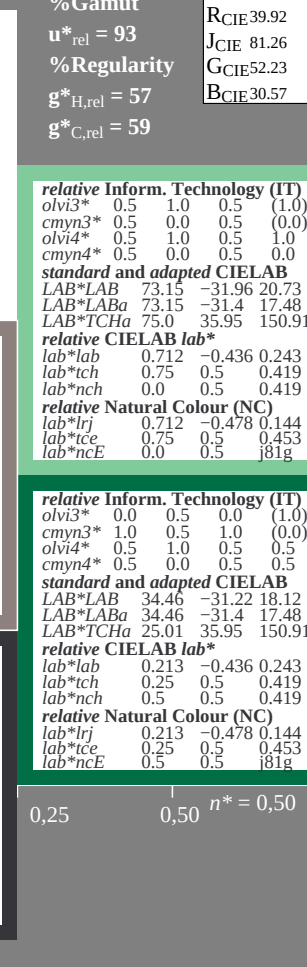
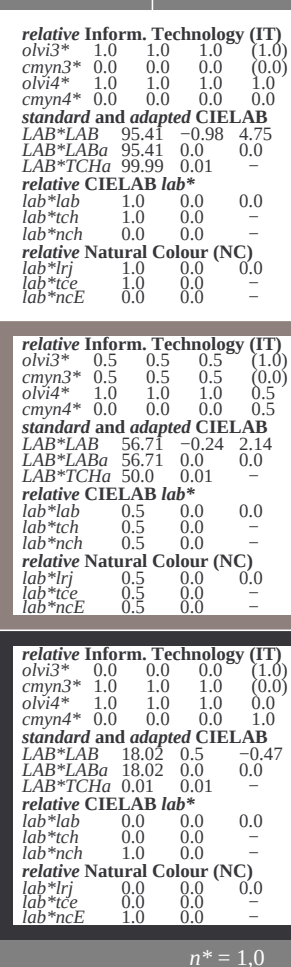
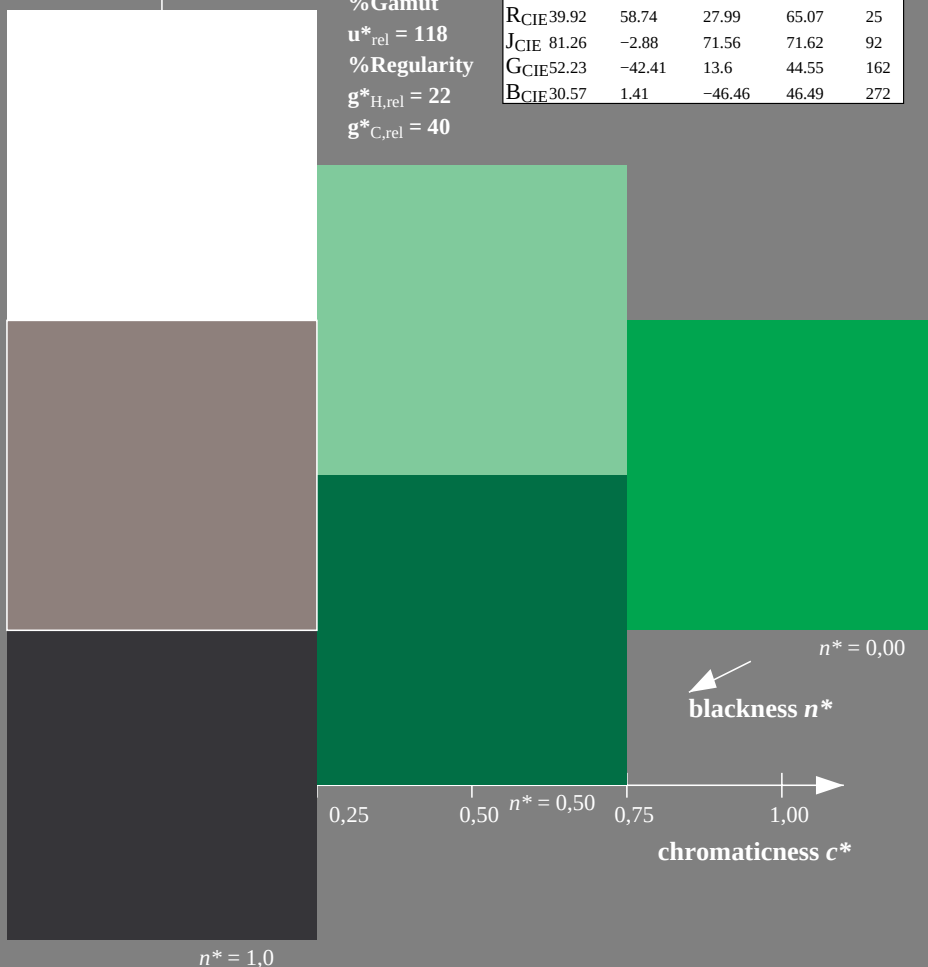
relative Natural Colour (NC)
 lab^*lrj 0.213 -0.478 0.144
 lab^*tce 0.25 0.5 0.453
 lab^*nce 0.5 0.5 j81g

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 1.0 0.0 (1.0)
 $cmyn3^*$ 1.0 0.0 1.0 (0.0)
 $olvi4^*$ 0.0 1.0 0.0 1.0
 $cmyn4^*$ 1.0 0.0 1.0 0.0

standard and adapted CIELAB
 LAB^*LAB 50.9 -62.95 36.7
 LAB^*LABa 50.9 -62.81 34.95
 LAB^*TCHa 50.0 71.89 150.91

relative CIELAB lab*
 lab^*lab 0.425 -0.873 0.486
 lab^*tch 0.5 1.0 0.419
 lab^*nch 0.0 1.0 0.419

relative Natural Colour (NC)
 lab^*lrj 0.425 -0.956 0.289
 lab^*tce 0.5 1.0 0.453
 lab^*nce 0.0 1.0 j81g



OE060-7, 3 step scales for constant CIELAB hue 137/360 = 0.38 (left)

3 step scales for constant CIELAB hue 151/360 = 0.419 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^*$ setcmykcolor

output: Startup (S) data dependend

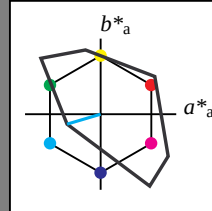
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$ lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

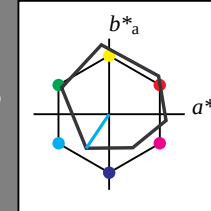
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$ lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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 -0.98 4.75
 LAB^*LABa 95.41 0.0 0.0
 LAB^*TCHa 99.99 0.01 -

relative CIELAB lab*
 lab^*lab 1.0 0.0 0.0
 lab^*tch 1.0 0.0 -
 lab^*nch 0.0 0.0 -

relative Natural Colour (NC)
 lab^*lrj 1.0 0.0 0.0
 lab^*tce 1.0 0.0 -
 lab^*nce 0.0 0.0 -

relative Inform. Technology (IT)
 $olvi3^*$ 0.5 1.0 1.0 (1.0)
 $cmyn3^*$ 0.5 0.0 0.0 (0.0)
 $olvi4^*$ 0.5 1.0 1.0 1.0
 $cmyn4^*$ 0.5 0.0 0.0 0.0

standard and adapted CIELAB
 LAB^*LAB 77.01 -15.8 -18.98
 LAB^*LABa 77.01 -15.16 -22.5
 LAB^*TCHa 75.0 27.14 236.02

relative CIELAB lab*
 lab^*lab 0.762 -0.278 -0.414
 lab^*tch 0.75 0.5 0.656
 lab^*nch 0.0 0.5 0.656

relative Natural Colour (NC)
 lab^*lrj 0.762 -0.247 -0.433
 lab^*tce 0.75 0.5 0.667
 lab^*nce 0.0 0.5 g66b

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 0.5 0.5 (1.0)
 $cmyn3^*$ 1.0 0.5 0.5 (0.0)
 $olvi4^*$ 0.5 1.0 1.0 0.5
 $cmyn4^*$ 0.5 0.0 0.0 0.5

standard and adapted CIELAB
 LAB^*LAB 38.32 -15.05 -21.6
 LAB^*LABa 38.32 -15.16 -22.5
 LAB^*TCHa 25.01 27.14 236.02

relative CIELAB lab*
 lab^*lab 0.262 -0.278 -0.414
 lab^*tch 0.25 0.5 0.656
 lab^*nch 0.5 0.5 0.656

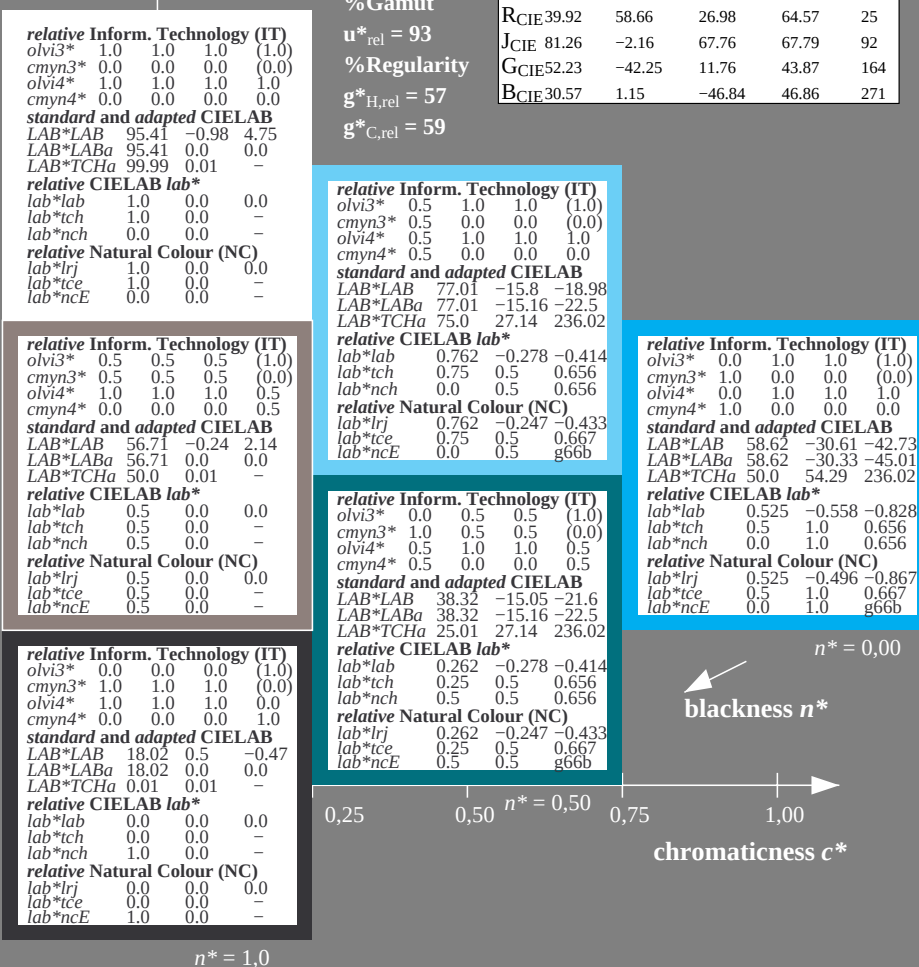
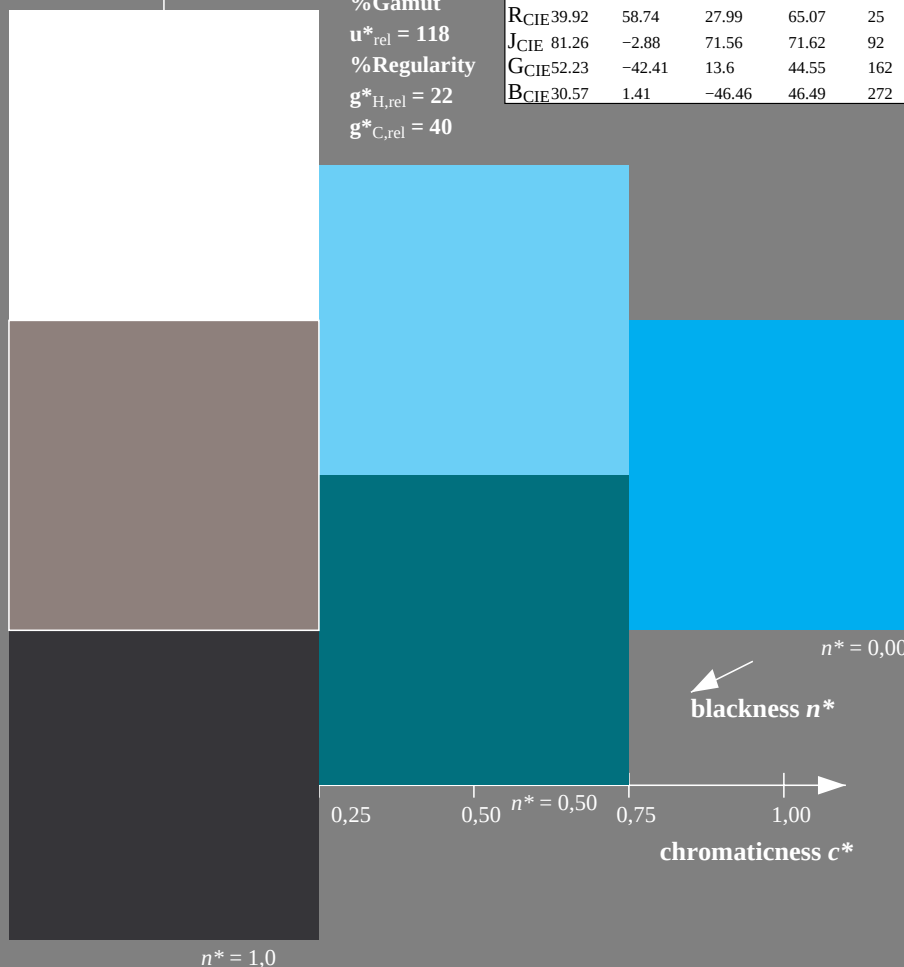
relative Natural Colour (NC)
 lab^*lrj 0.262 -0.247 -0.433
 lab^*tce 0.25 0.5 0.667
 lab^*nce 0.5 0.5 g66b

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 1.0 1.0 (1.0)
 $cmyn3^*$ 1.0 0.0 0.0 (0.0)
 $olvi4^*$ 0.0 1.0 1.0 1.0
 $cmyn4^*$ 1.0 0.0 0.0 0.0

standard and adapted CIELAB
 LAB^*LAB 58.62 -30.61 -42.73
 LAB^*LABa 58.62 -30.33 -45.01
 LAB^*TCHa 50.0 54.29 236.02

relative CIELAB lab*
 lab^*lab 0.525 -0.558 -0.828
 lab^*tch 0.5 1.0 0.656
 lab^*nch 0.0 1.0 0.656

relative Natural Colour (NC)
 lab^*lrj 0.525 -0.496 -0.867
 lab^*tce 0.5 1.0 0.667
 lab^*nce 0.0 1.0 g66b



OE060-7, 3 step scales for constant CIELAB hue 196/360 = 0.546 (left)

3 step scales for constant CIELAB hue 236/360 = 0.656 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^*$ setcmykcolor

output: Startup (S) data depend

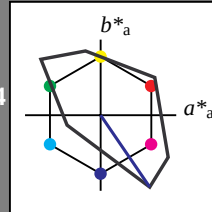
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 304/360 = 0.845$ lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

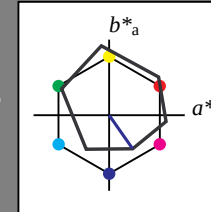
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$ lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

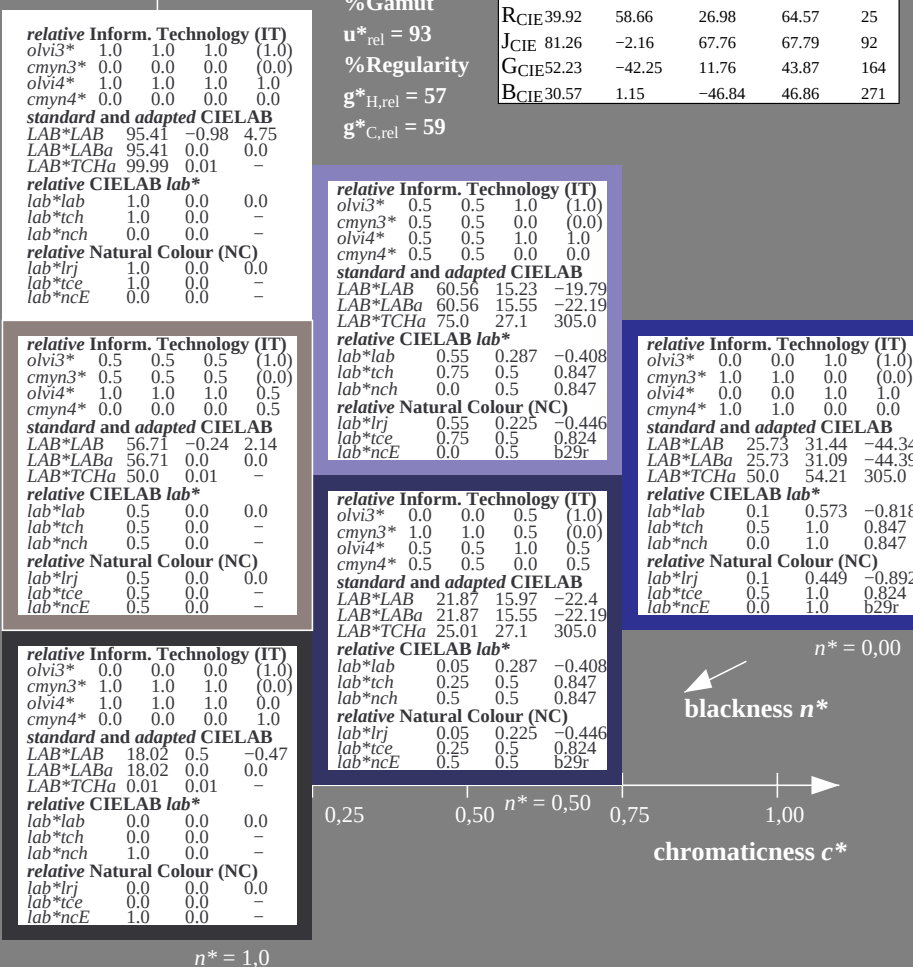
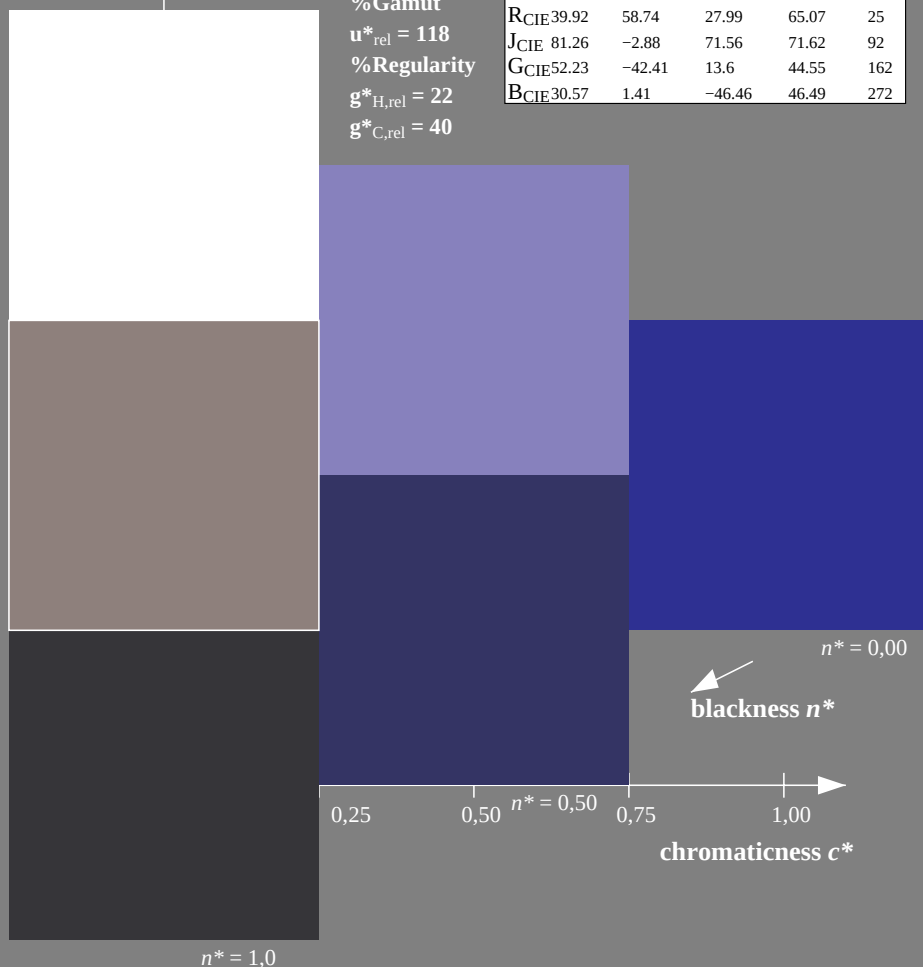
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0	
LAB*TCHa	99.99	0.01	-	
relative CIELAB lab*				
lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	-	
lab*nch	0.0	0.0	-	
relative Natural Colour (NC)				
lab*lrj	1.0	0.0	0.0	
lab*tce	1.0	0.0	-	
lab*nce	0.0	0.0	-	

relative Inform. Technology (IT)				
olvi3*	0.5	0.5	1.0	(1.0)
cmyn3*	0.5	0.5	0.0	(0.0)
olvi4*	0.5	0.5	1.0	1.0
cmyn4*	0.5	0.5	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	60.56	15.23	-19.79	
LAB*LABa	60.56	15.55	-22.19	
LAB*TCHa	75.0	27.1	305.0	
relative CIELAB lab*				
lab*lab	0.55	0.287	-0.408	
lab*tch	0.75	0.5	0.847	
lab*nch	0.0	0.5	0.847	
relative Natural Colour (NC)				
lab*lrj	0.55	0.225	-0.446	
lab*tce	0.75	0.5	0.824	
lab*nce	0.0	0.5	0.824	

relative Inform. Technology (IT)				
olvi3*	0.0	0.0	0.5	(1.0)
cmyn3*	1.0	1.0	0.5	(0.0)
olvi4*	0.5	0.5	1.0	0.5
cmyn4*	0.5	0.5	0.0	0.5
standard and adapted CIELAB				
LAB*LAB	21.87	15.97	-22.4	
LAB*LABa	21.87	15.55	-22.19	
LAB*TCHa	25.01	27.1	305.0	
relative CIELAB lab*				
lab*lab	0.05	0.287	-0.408	
lab*tch	0.25	0.5	0.847	
lab*nch	0.5	0.5	0.847	
relative Natural Colour (NC)				
lab*lrj	0.05	0.225	-0.446	
lab*tce	0.25	0.5	0.824	
lab*nce	0.5	0.5	0.824	

relative Inform. Technology (IT)				
olvi3*	0.0	0.0	1.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	0.0	0.0	1.0	1.0
cmyn4*	1.0	1.0	0.0	0.0
standard and adapted CIELAB				
LAB*LAB	25.73	31.44	-44.34	
LAB*LABa	25.73	31.09	-44.39	
LAB*TCHa	50.0	54.21	305.0	
relative CIELAB lab*				
lab*lab	0.1	0.573	-0.818	
lab*tch	0.5	1.0	0.847	
lab*nch	0.0	1.0	0.847	
relative Natural Colour (NC)				
lab*lrj	0.1	0.449	-0.892	
lab*tce	0.5	1.0	0.824	
lab*nce	0.0	1.0	0.824	



OE060-7, 3 step scales for constant CIELAB hue 304/360 = 0.845 (left)

3 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* setcmykcolor$

output: Startup (S) data depend

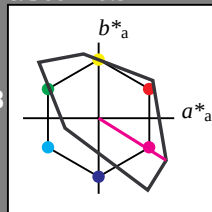
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$ lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

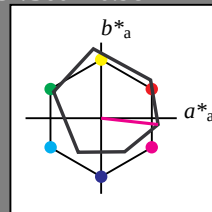
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 354/360 = 0.982$ lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 48 76 354

olv*Ma: 1.0 0.0 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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	-0.98	4.75
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	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	0.5
cmyn4*	0.0	0.0	0.0	0.5

standard and adapted CIELAB

LAB*LAB	56.71	-0.24	2.14
LAB*LABa	56.71	0.0	0.0
LAB*TCHa	50.0	0.01	-

relative CIELAB lab*

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

relative Natural Colour (NC)

lab*lrj	0.5	0.0	0.0
lab*tce	0.5	0.0	-
lab*nce	0.5	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	0.0
cmyn4*	0.0	0.0	0.0	1.0

standard and adapted CIELAB

LAB*LAB	18.02	0.5	-0.47
LAB*LABa	18.02	0.0	0.0
LAB*TCHa	0.01	0.01	-

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	0.0	-
lab*nch	1.0	0.0	-

relative Natural Colour (NC)

lab*lrj	0.0	0.0	0.0
lab*tce	0.0	0.0	-
lab*nce	1.0	0.0	-

relative Inform. Technology (IT)

olvi3*	1.0	0.5	1.0	(1.0)
cmyn3*	0.0	0.5	0.0	(0.0)
olvi4*	1.0	0.5	1.0	1.0
cmyn4*	0.0	0.5	0.0	0.0

standard and adapted CIELAB

LAB*LAB	71.77	37.1	-1.01
LAB*LABa	71.77	37.63	-4.17
LAB*TCHa	75.0	37.86	353.66

relative CIELAB lab*

lab*lab	0.695	0.497	-0.054
lab*tch	0.75	0.5	0.982
lab*nch	0.0	0.5	0.982

relative Natural Colour (NC)

lab*lrj	0.695	0.454	-0.208
lab*tce	0.75	0.5	0.932
lab*nce	0.0	0.5	0.72r

relative Inform. Technology (IT)

olvi3*	0.5	0.0	0.5	(1.0)
cmyn3*	0.5	1.0	0.5	(0.0)
olvi4*	1.0	0.5	1.0	0.5
cmyn4*	0.0	0.5	0.0	0.5

standard and adapted CIELAB

LAB*LAB	33.07	37.84	-3.62
LAB*LABa	33.07	37.63	-4.17
LAB*TCHa	25.01	37.86	353.66

relative CIELAB lab*

lab*lab	0.195	0.497	-0.054
lab*tch	0.25	0.5	0.982
lab*nch	0.5	0.5	0.982

relative Natural Colour (NC)

lab*lrj	0.195	0.454	-0.208
lab*tce	0.25	0.5	0.932
lab*nce	0.5	0.5	0.72r

relative Inform. Technology (IT)

olvi3*	1.0	0.0	1.0	(1.0)
cmyn3*	0.0	1.0	0.0	(0.0)
olvi4*	1.0	0.0	1.0	1.0
cmyn4*	0.0	1.0	0.0	0.0

standard and adapted CIELAB

LAB*LAB	48.13	75.18	-6.79
LAB*LABa	48.13	75.26	-8.35
LAB*TCHa	50.0	75.73	353.66

relative CIELAB lab*

lab*lab	0.389	0.994	-0.109
lab*tch	0.5	1.0	0.982
lab*nch	0.0	1.0	0.982

relative Natural Colour (NC)

lab*lrj	0.389	0.909	-0.416
lab*tce	0.5	1.0	0.932
lab*nce	0.0	1.0	0.72r

0,25 0,50 0,75 1,00
chromaticness c^*

blackness n^* $n^* = 0,00$ $n^* = 1,0$

OE060-7, 3 step scales for constant CIELAB hue 328/360 = 0.911 (left)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

3 step scales for constant CIELAB hue 354/360 = 0.982 (right)

input: $cmv0^* setcmykcolor$

output: Startup (S) data dependend

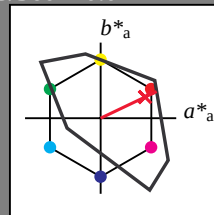
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = \text{lab}^*h = 25/360 = 0.071$ lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness t^* 

%Gamut

 $u^*_{\text{rel}} = 118$

%Regularity

 $g^*_{H,\text{rel}} = 22$ $g^*_{C,\text{rel}} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

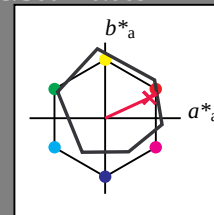
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = \text{lab}^*h = 25/360 = 0.069$ lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

olv*Ma: 1.0 0.0 0.32

triangle lightness t^* 

%Gamut

 $u^*_{\text{rel}} = 93$

%Regularity

 $g^*_{H,\text{rel}} = 57$ $g^*_{C,\text{rel}} = 59$

ORS18; adapted (a) CIELAB data

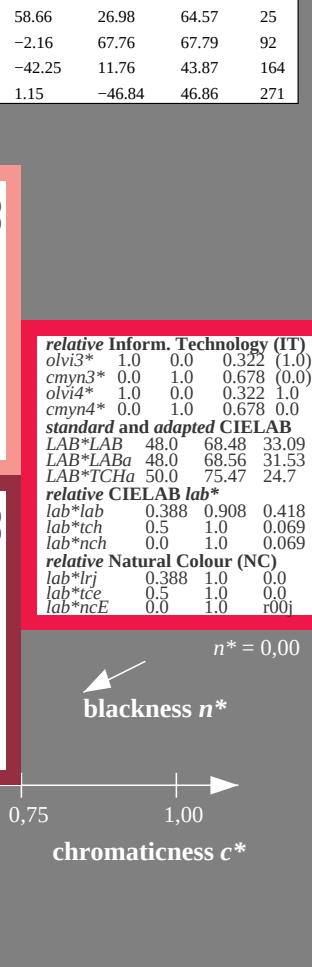
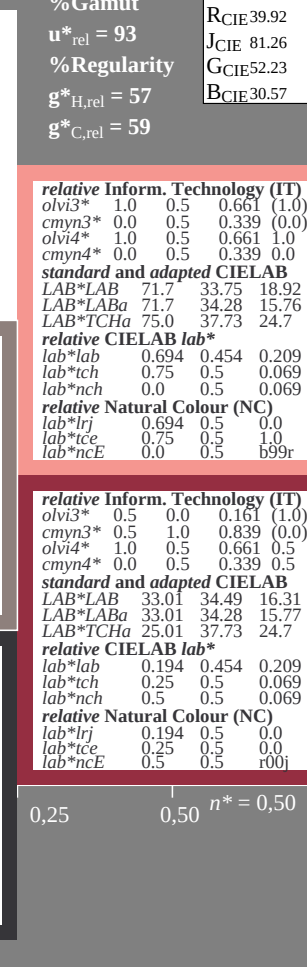
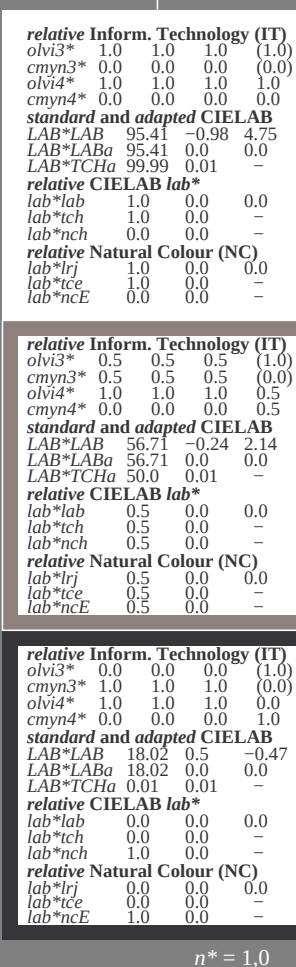
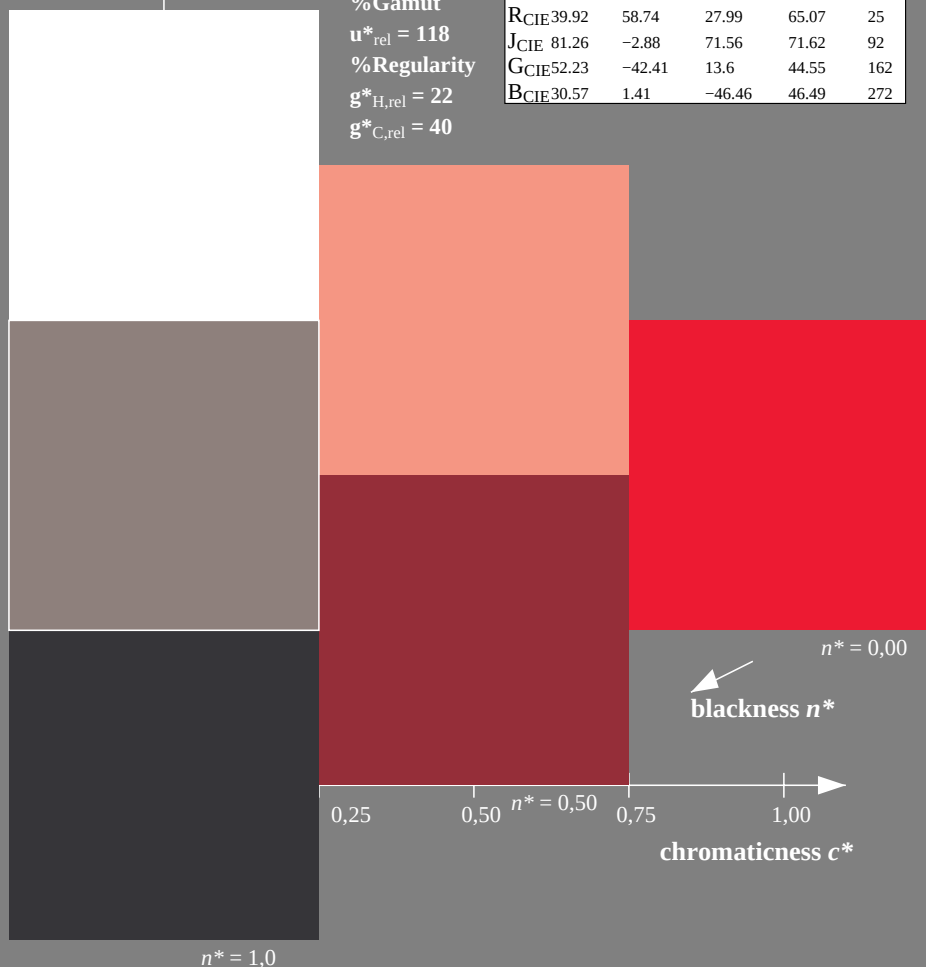
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

relative Inform. Technology (IT)				
olvi3*	1.0	0.5	0.661	(1.0)
cmyn3*	0.0	0.5	0.339	(0.0)
olvi4*	1.0	0.5	0.661	1.0
cmyn4*	0.0	0.5	0.339	0.0
standard and adapted CIELAB				
LAB*LAB	95.41	-0.98	4.75	
LAB*LABa	95.41	0.0	0.0	
LAB*TCa	99.99	0.01	-	
relative CIELAB lab*				
lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	-	
lab*nch	0.0	0.0	-	
relative Natural Colour (NC)				
lab*lrj	1.0	0.0	0.0	
lab*tce	1.0	0.0	-	
lab*nce	0.0	0.0	-	

relative Inform. Technology (IT)				
olvi3*	1.0	0.5	0.661	(1.0)
cmyn3*	0.0	0.5	0.339	(0.0)
olvi4*	1.0	0.5	0.661	1.0
cmyn4*	0.0	0.5	0.339	0.0
standard and adapted CIELAB				
LAB*LAB	71.7	33.75	18.92	
LAB*LABa	71.7	34.28	15.76	
LAB*TCa	75.0	37.73	24.7	
relative CIELAB lab*				
lab*lab	0.694	0.454	0.209	
lab*tch	0.75	0.5	0.069	
lab*nch	0.0	0.5	0.069	
relative Natural Colour (NC)				
lab*lrj	0.694	0.5	0.0	
lab*tce	0.75	0.5	1.0	
lab*nce	0.0	0.5	0.99r	

relative Inform. Technology (IT)				
olvi3*	0.5	0.0	0.161	(1.0)
cmyn3*	0.5	1.0	0.839	(0.0)
olvi4*	1.0	0.5	0.661	0.5
cmyn4*	0.0	0.5	0.339	0.5
standard and adapted CIELAB				
LAB*LAB	33.01	34.49	16.31	
LAB*LABa	33.01	34.28	15.77	
LAB*TCa	25.01	37.73	24.7	
relative CIELAB lab*				
lab*lab	0.194	0.454	0.209	
lab*tch	0.25	0.5	0.069	
lab*nch	0.5	0.5	0.069	
relative Natural Colour (NC)				
lab*lrj	0.194	0.5	0.0	
lab*tce	0.25	0.5	0.0	
lab*nce	0.5	0.5	0.00j	

relative Inform. Technology (IT)				
olvi3*	1.0	0.0	0.322	(1.0)
cmyn3*	0.0	1.0	0.678	(0.0)
olvi4*	1.0	0.0	0.322	1.0
cmyn4*	0.0	1.0	0.678	0.0
standard and adapted CIELAB				
LAB*LAB	48.0	68.48	33.09	
LAB*LABa	48.0	68.56	31.53	
LAB*TCa	50.0	75.47	24.7	
relative CIELAB lab*				
lab*lab	0.388	0.908	0.418	
lab*tch	0.5	1.0	0.069	
lab*nch	0.0	1.0	0.069	
relative Natural Colour (NC)				
lab*lrj	0.388	1.0	0.0	
lab*tce	0.5	1.0	0.0	
lab*nce	0.0	1.0	0.00j	



OE060-7, 3 step scales for constant CIELAB hue 25/360 = 0.071 (left)

3 step scales for constant CIELAB hue 25/360 = 0.069 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $\text{cmy}0^* \text{ setcmykcolor}$

output: Startup (S) data dependend

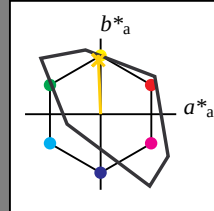
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$ lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

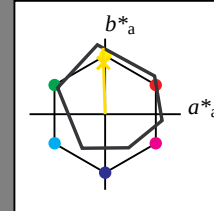
Output: Colorimetric Offset Reflective System ORS18

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

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

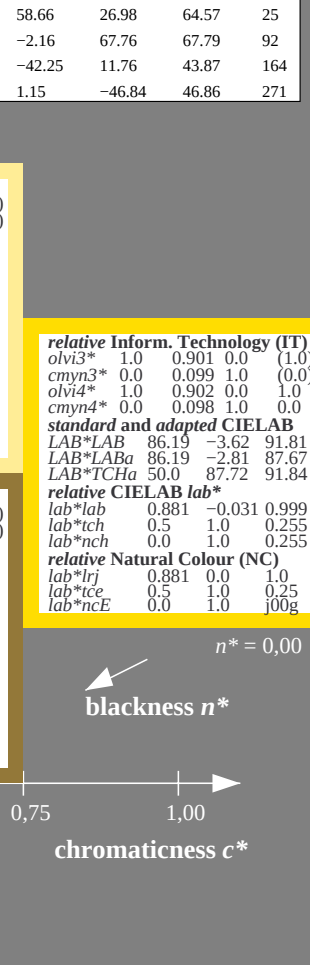
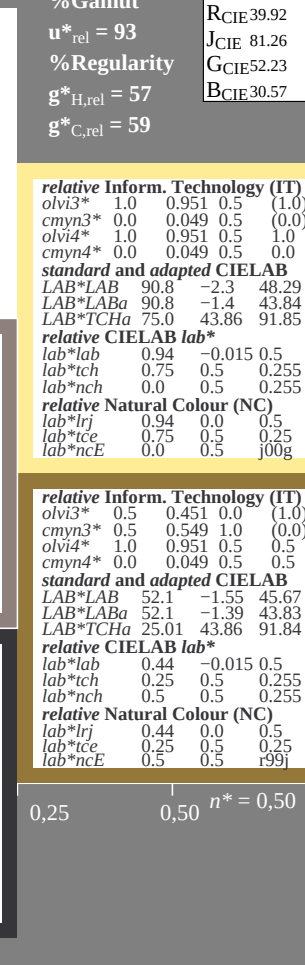
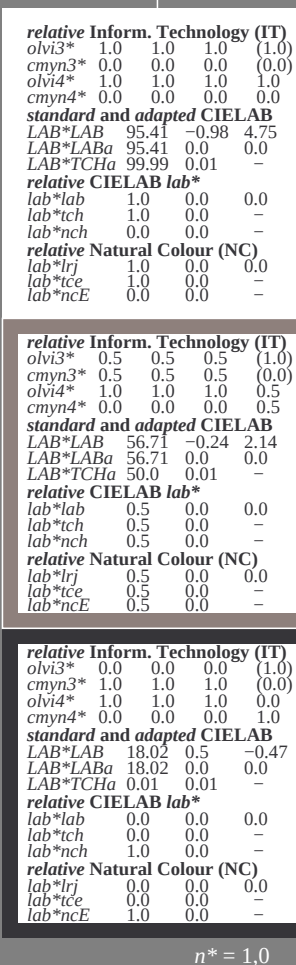
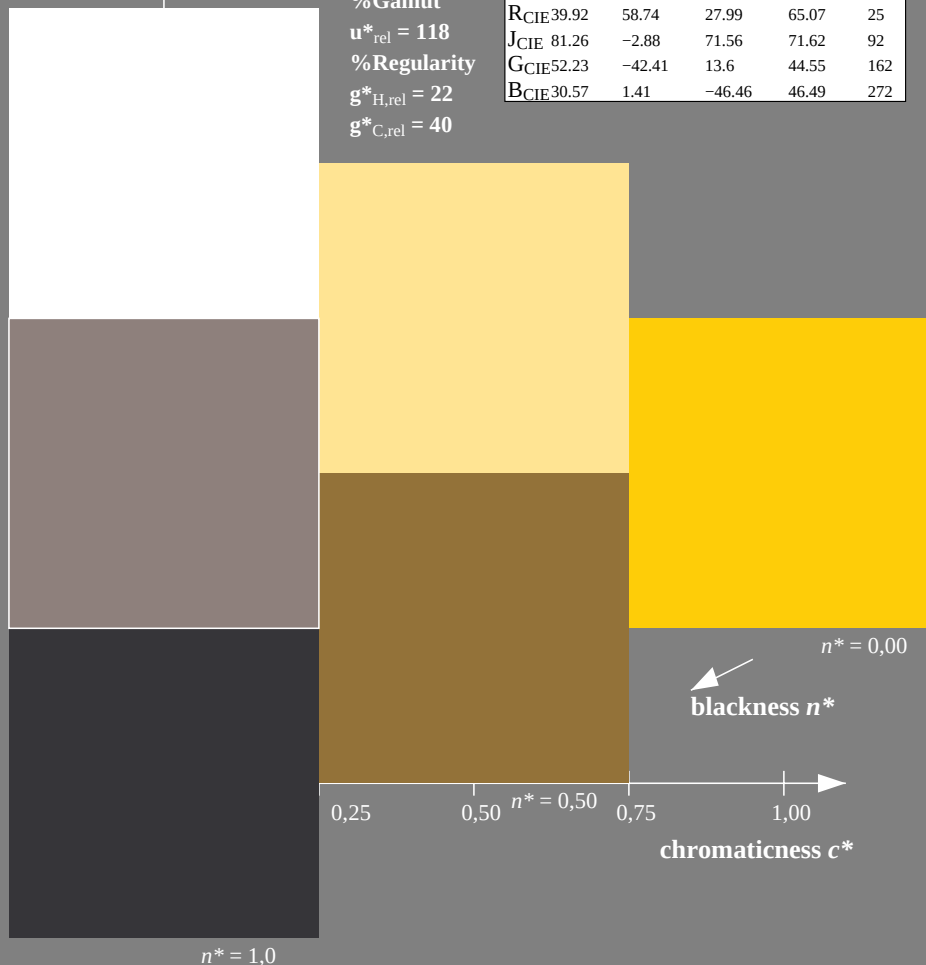
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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	-0.98	4.75		
LAB*LABa	95.41	0.0	0.0		
LAB*TCHa	99.99	0.01	-		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		
relative Natural Colour (NC)					
lab*lrj	1.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*nce	0.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	1.0	0.951	0.5	(1.0)	
cmyn3*	0.0	0.049	0.5	(0.0)	
olvi4*	1.0	0.951	0.5	1.0	
cmyn4*	0.0	0.049	0.5	0.0	
standard and adapted CIELAB					
LAB*LAB	90.8	-2.3	48.29		
LAB*LABa	90.8	-1.4	43.84		
LAB*TCHa	75.0	43.86	91.85		
relative CIELAB lab*					
lab*lab	0.94	-0.015	0.5		
lab*tch	0.75	0.5	0.255		
lab*nch	0.0	0.5	0.255		
relative Natural Colour (NC)					
lab*lrj	0.94	0.0	0.5		
lab*tce	0.75	0.5	0.25		
lab*nce	0.0	0.5	j00g		

relative Inform. Technology (IT)					
olvi3*	0.5	0.451	0.0	(1.0)	
cmyn3*	0.5	0.549	1.0	(0.0)	
olvi4*	1.0	0.951	0.5	0.5	
cmyn4*	0.0	0.049	0.5	0.5	
standard and adapted CIELAB					
LAB*LAB	52.1	-1.55	45.67		
LAB*LABa	52.1	-1.39	43.83		
LAB*TCHa	25.01	43.86	91.84		
relative CIELAB lab*					
lab*lab	0.44	-0.015	0.5		
lab*tch	0.25	0.5	0.255		
lab*nch	0.5	0.5	0.255		
relative Natural Colour (NC)					
lab*lrj	0.44	0.0	0.5		
lab*tce	0.25	0.5	0.25		
lab*nce	0.5	0.5	j99j		

relative Inform. Technology (IT)					
olvi3*	1.0	0.901	0.0	(1.0)	
cmyn3*	0.0	0.099	1.0	(0.0)	
olvi4*	1.0	0.902	0.0	1.0	
cmyn4*	0.0	0.098	1.0	0.0	
standard and adapted CIELAB					
LAB*LAB	86.19	-3.62	91.81		
LAB*LABa	86.19	-2.81	87.67		
LAB*TCHa	50.0	87.72	91.84		
relative CIELAB lab*					
lab*lab	0.881	-0.031	0.999		
lab*tch	0.5	1.0	0.255		
lab*nch	0.0	1.0	0.255		
relative Natural Colour (NC)					
lab*lrj	0.881	0.0	1.0		
lab*tce	0.5	1.0	0.25		
lab*nce	0.0	1.0	j00g		



OE060-7, 3 step scales for constant CIELAB hue 92/360 = 0.256 (left)

3 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmv0^* setcmykcolor$

output: Startup (S) data depend

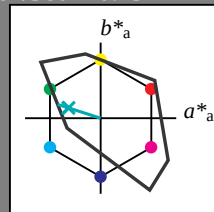
Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$ lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

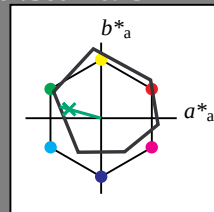
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 164/360 = 0.457$ lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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 -0.98 4.75
 LAB^*LABa 95.41 0.0 0.0
 LAB^*TCHa 99.99 0.01 -

relative CIELAB lab*
 lab^*lab 1.0 0.0 0.0
 lab^*tch 1.0 0.0 -
 lab^*nch 0.0 0.0 -

relative Natural Colour (NC)
 lab^*lrj 1.0 0.0 0.0
 lab^*tce 1.0 0.0 -
 lab^*nce 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 0.5
 $cmyn4^*$ 0.0 0.0 0.0 0.5

standard and adapted CIELAB
 LAB^*LAB 56.71 -0.24 2.14
 LAB^*LABa 56.71 0.0 0.0
 LAB^*TCHa 50.0 0.01 -

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

relative Natural Colour (NC)
 lab^*lrj 0.5 0.0 0.0
 lab^*tce 0.5 0.0 -
 lab^*nce 0.5 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 0.0
 $cmyn4^*$ 0.0 0.0 0.0 1.0

standard and adapted CIELAB
 LAB^*LAB 18.02 0.5 -0.47
 LAB^*LABa 18.02 0.0 0.0
 LAB^*TCHa 0.01 0.01 -

relative CIELAB lab*
 lab^*lab 0.0 0.0 0.0
 lab^*tch 0.0 0.0 -
 lab^*nch 1.0 0.0 -

relative Natural Colour (NC)
 lab^*lrj 0.0 0.0 0.0
 lab^*tce 0.0 0.0 -
 lab^*nce 1.0 0.0 -

relative Inform. Technology (IT)
 $olvi3^*$ 0.5 1.0 0.623 (1.0)
 $cmyn3^*$ 0.5 0.0 0.377 (0.0)
 $olvi4^*$ 0.5 1.0 0.623 1.0
 $cmyn4^*$ 0.5 0.0 0.377 0.0

standard and adapted CIELAB
 LAB^*LAB 74.1 -27.98 10.94
 LAB^*LABa 74.1 -27.4 7.62
 LAB^*TCHa 75.0 28.45 164.46

relative CIELAB lab*
 lab^*lab 0.725 -0.481 0.134
 lab^*tch 0.75 0.5 0.457
 lab^*nch 0.0 0.5 0.457

relative Natural Colour (NC)
 lab^*lrj 0.725 -0.499 0.0
 lab^*tce 0.75 0.5 0.5
 lab^*nce 0.0 0.5 g00b

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 0.5 0.123 (1.0)
 $cmyn3^*$ 1.0 0.5 0.877 (0.0)
 $olvi4^*$ 0.5 1.0 0.623 0.5
 $cmyn4^*$ 0.5 0.0 0.377 0.5

standard and adapted CIELAB
 LAB^*LAB 35.41 -27.24 8.34
 LAB^*LABa 35.41 -27.4 7.63
 LAB^*TCHa 25.01 28.46 164.44

relative CIELAB lab*
 lab^*lab 0.225 -0.481 0.134
 lab^*tch 0.25 0.5 0.457
 lab^*nch 0.5 0.5 0.457

relative Natural Colour (NC)
 lab^*lrj 0.225 -0.499 0.0
 lab^*tce 0.25 0.5 0.5
 lab^*nce 0.5 0.5 g99g

relative Inform. Technology (IT)
 $olvi3^*$ 0.0 1.0 0.246 (1.0)
 $cmyn3^*$ 1.0 0.0 0.754 (0.0)
 $olvi4^*$ 0.0 1.0 0.246 1.0
 $cmyn4^*$ 1.0 0.0 0.754 0.0

standard and adapted CIELAB
 LAB^*LAB 52.8 -54.98 17.14
 LAB^*LABa 52.8 -54.81 15.26
 LAB^*TCHa 50.0 56.91 164.45

relative CIELAB lab*
 lab^*lab 0.45 -0.962 0.268
 lab^*tch 0.5 1.0 0.457
 lab^*nch 0.0 1.0 0.457

relative Natural Colour (NC)
 lab^*lrj 0.45 -0.999 0.0
 lab^*tce 0.5 1.0 0.5
 lab^*nce 0.0 1.0 g99g

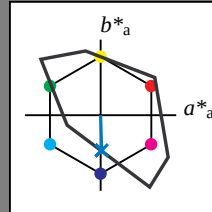
Input: Colorimetric Television Luminous System TLS18

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

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 118$

%Regularity

 $g^*_{H,rel} = 22$ $g^*_{C,rel} = 40$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	328
N _{Ma}	18.01	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

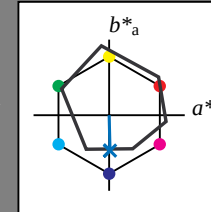
Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 271/360 = 0.754$ lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

olv*Ma: 0.0 0.49 1.0

triangle lightness t^* 

%Gamut

 $u^*_{rel} = 93$

%Regularity

 $g^*_{H,rel} = 57$ $g^*_{C,rel} = 59$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

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	-0.98	4.75
LAB*LABa	95.41	0.0	0.0
LAB*TBa	99.99	0.01	-

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	1.0	0.0	-
lab*nch	0.0	0.0	-

relative Natural Colour (NC)

lab*lrj	1.0	0.0	0.0
lab*tce	1.0	0.0	-
lab*nce	0.0	0.0	-

relative Inform. Technology (IT)

olvi3*	0.5	0.744	1.0	(1.0)
cmyn3*	0.5	0.256	0.0	(0.0)
olvi4*	0.5	0.744	1.0	1.0
cmyn4*	0.5	0.256	0.0	0.0

standard and adapted CIELAB

LAB*LAB	68.6	0.07	-19.39
LAB*LABa	68.6	0.55	-22.34
LAB*TBa	75.0	22.36	271.4

relative CIELAB lab*

lab*lab	0.654	0.012	-0.499
lab*tch	0.75	0.5	0.754
lab*nch	0.0	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.654	0.0	-0.499
lab*tce	0.75	0.5	0.75
lab*nce	0.0	0.5	g99b

relative Inform. Technology (IT)

olvi3*	0.0	0.244	0.5	(1.0)
cmyn3*	1.0	0.756	0.5	(0.0)
olvi4*	0.5	0.744	1.0	0.5
cmyn4*	0.5	0.256	0.0	0.5

standard and adapted CIELAB

LAB*LAB	29.9	0.82	-22.01
LAB*LABa	29.9	0.55	-22.34
LAB*TBa	25.01	22.36	271.42

relative CIELAB lab*

lab*lab	0.154	0.012	-0.499
lab*tch	0.25	0.5	0.754
lab*nch	0.5	0.5	0.754

relative Natural Colour (NC)

lab*lrj	0.154	0.0	-0.499
lab*tce	0.25	0.5	0.75
lab*nce	0.5	0.5	b00r

relative Inform. Technology (IT)

olvi3*	0.0	0.488	1.0	(1.0)
cmyn3*	1.0	0.512	0.0	(0.0)
olvi4*	0.0	0.488	1.0	1.0
cmyn4*	1.0	0.512	0.0	0.0

standard and adapted CIELAB

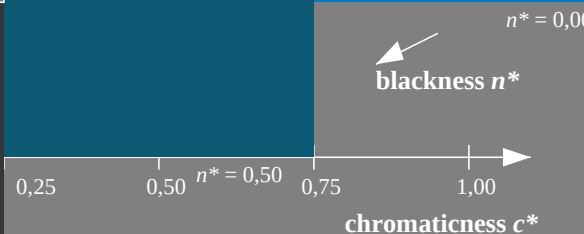
LAB*LAB	41.79	1.14	-43.55
LAB*LABa	41.79	1.1	-44.69
LAB*TBa	50.0	44.71	271.41

relative CIELAB lab*

lab*lab	0.307	0.025	-0.998
lab*tch	0.5	1.0	0.754
lab*nch	0.0	1.0	0.754

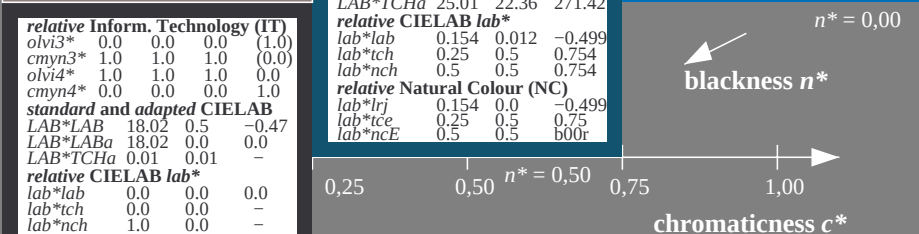
relative Natural Colour (NC)

lab*lrj	0.307	0.0	-0.999
lab*tce	0.5	1.0	0.75
lab*nce	0.0	1.0	b00r

 $n^* = 0,00$ blackness n^*

0,25 0,50 $n^* = 0,50$ 0,75 1,00

chromaticness c^*

 $n^* = 1,0$  $n^* = 0,00$ blackness n^*

0,25 0,50 $n^* = 0,50$ 0,75 1,00

chromaticness c^*

 $n^* = 1,0$

OE060-7, 3 step scales for constant CIELAB hue 272/360 = 0.755 (left)

3 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart OE06; Colorimetric systems ORS18 & ORS18

D65: 3 step colour scales and coordinate data for 10 hues

input: $cmY0^* setcmykcolor$

output: Startup (S) data dependend