

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 38/360 = 0.105$

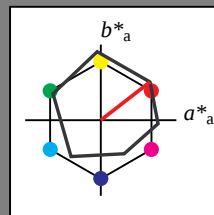
$lab \cdot tch$ and $lab \cdot nch$

D50: hue O

LCH*Ma: 48 82 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

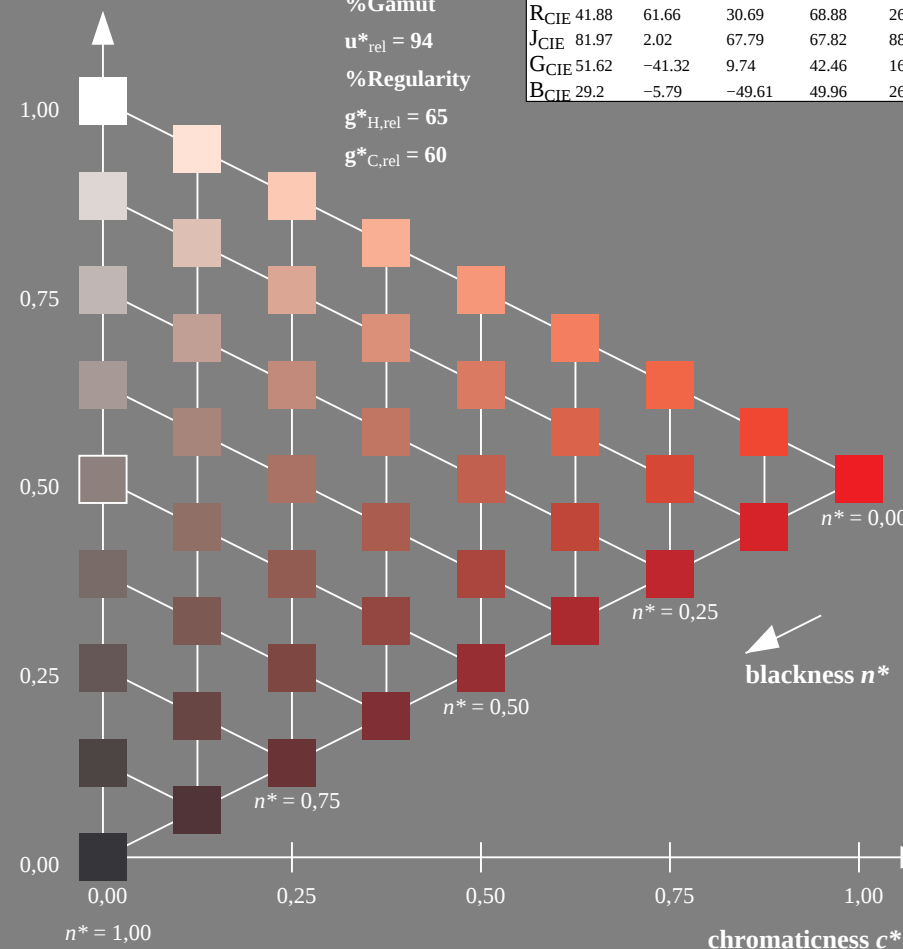
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 38/360 = 0.107$

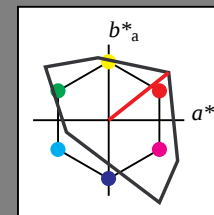
$lab \cdot tch$ and $lab \cdot nch$

D50: hue O

LCH*Ma: 54 101 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

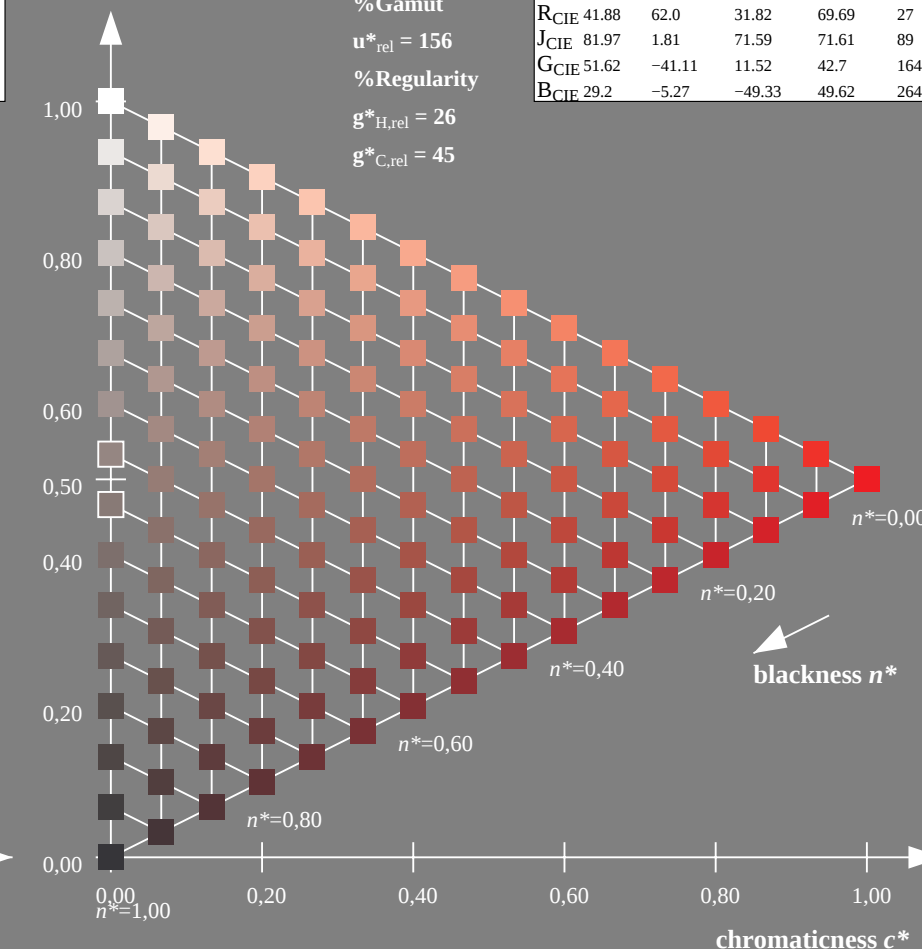
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 38/360 = 0.107 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 93/360 = 0.258$

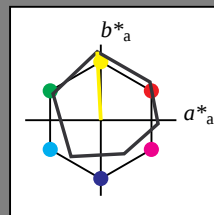
$lab \cdot tch$ and $lab \cdot nch$

D50: hue Y

LCH*Ma: 91 91 93

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

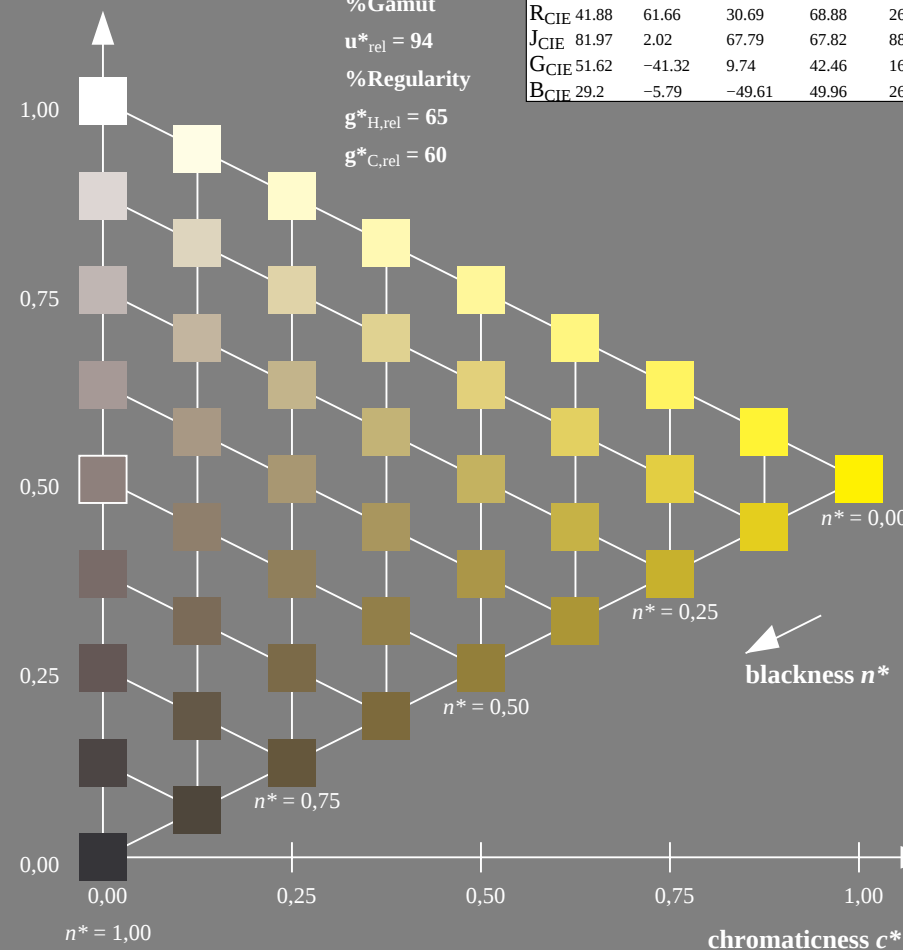
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 93/360 = 0.258 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 100/360 = 0.277$

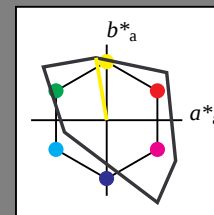
$lab \cdot tch$ and $lab \cdot nch$

D50: hue Y

LCH*Ma: 93 84 100

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

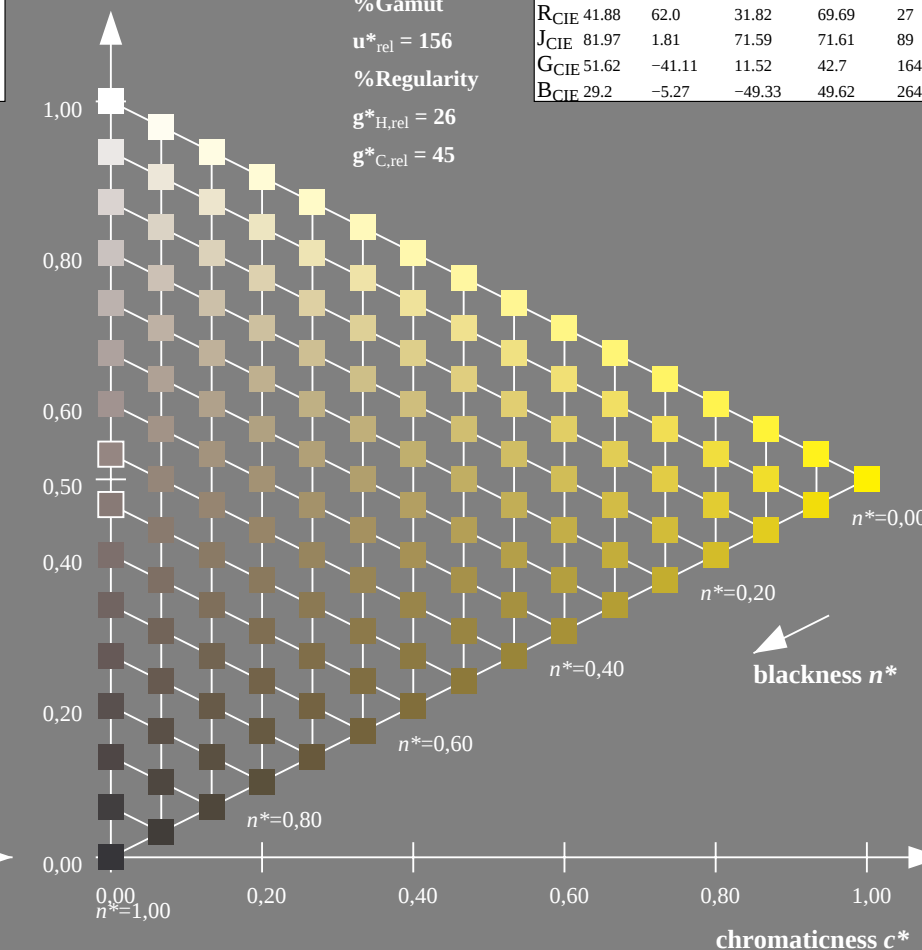
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 100/360 = 0.277 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 151/360 = 0.42$

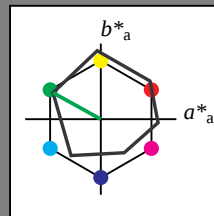
$lab \cdot tch$ and $lab \cdot nch$

D50: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

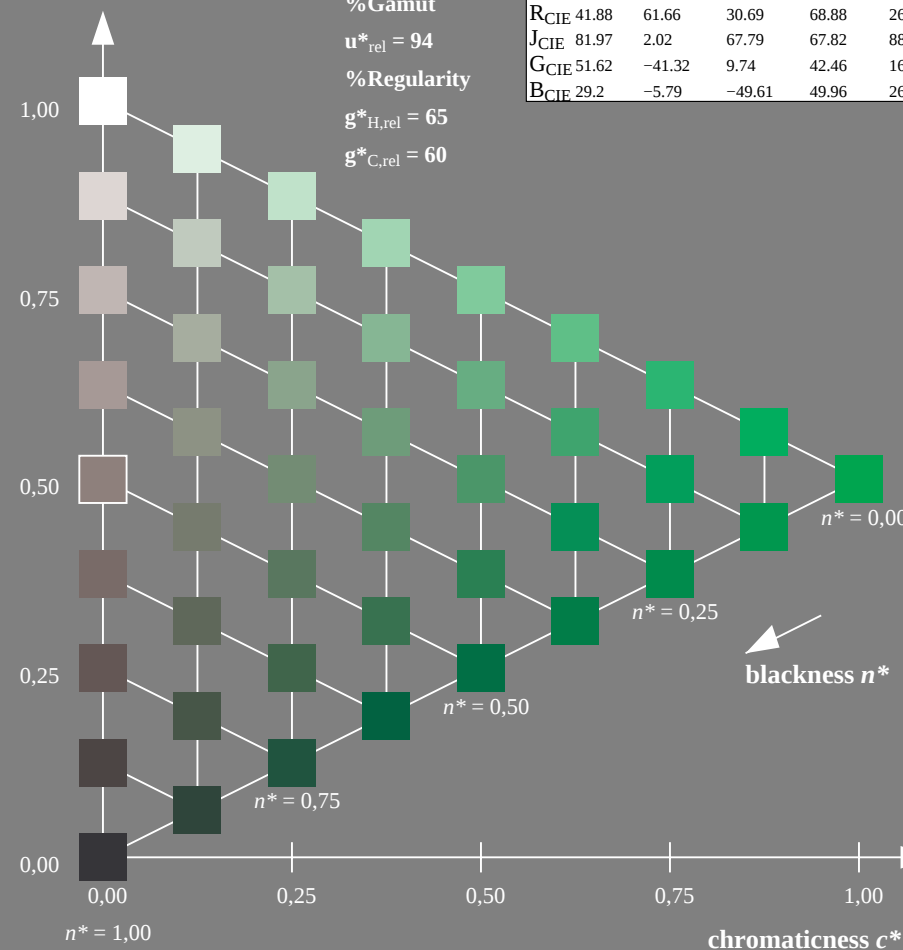
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 151/360 = 0.42 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 140/360 = 0.389$

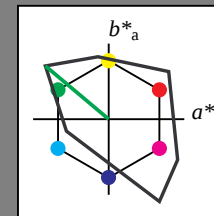
$lab \cdot tch$ and $lab \cdot nch$

D50: hue L

LCH*Ma: 83 109 140

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

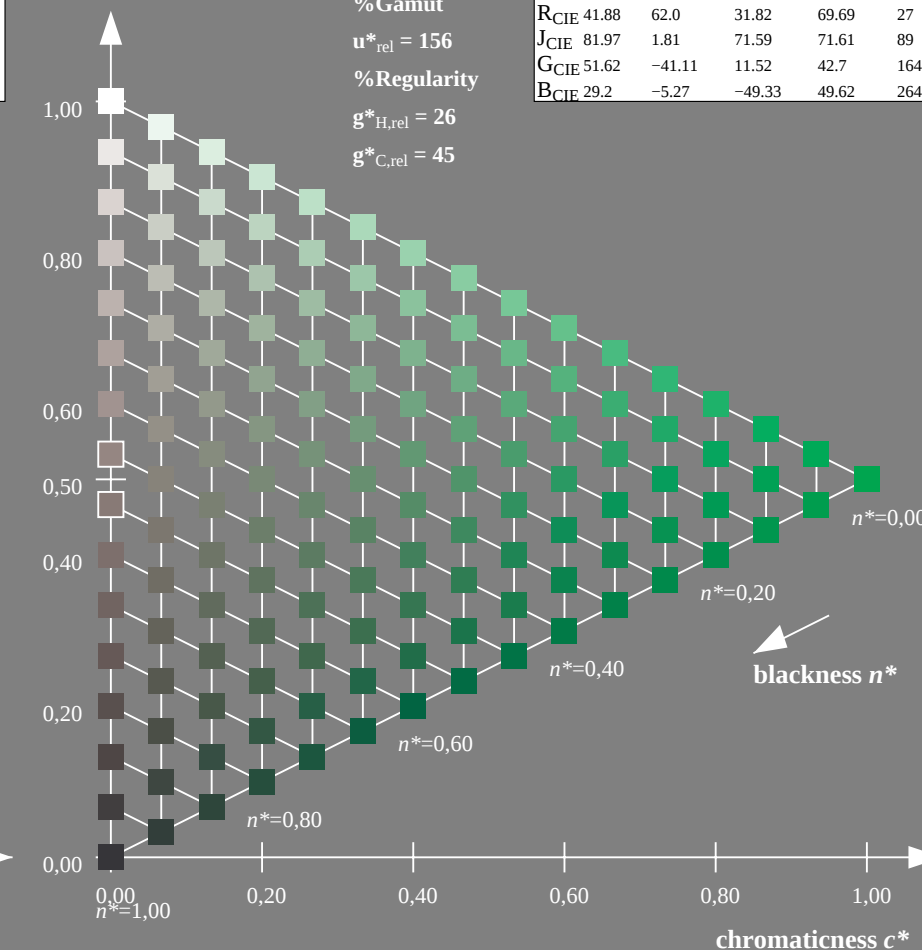
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 140/360 = 0.389 (right)

input: $cmy0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 231/360 = 0.641$

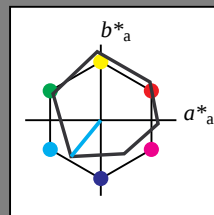
$lab \cdot tch$ and $lab \cdot nch$

D50: hue C

LCH*Ma: 57 62 231

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

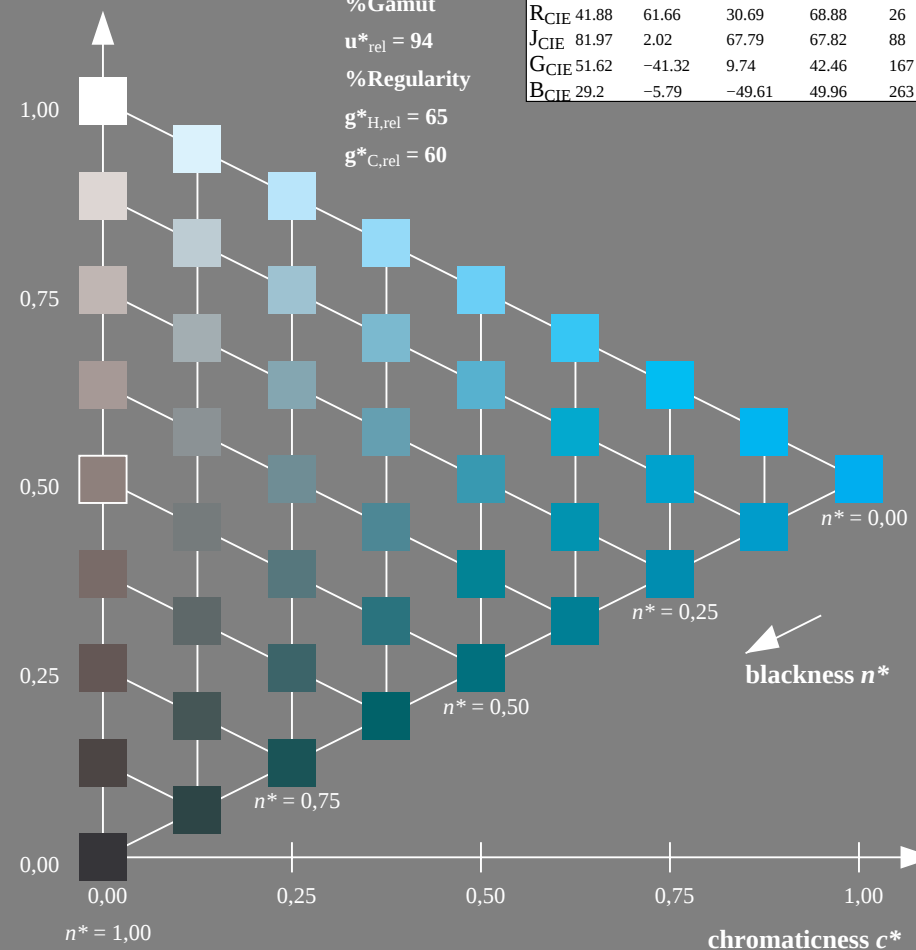
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 231/360 = 0.641 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 196/360 = 0.544$

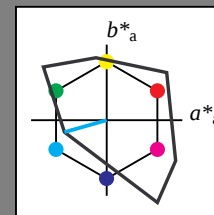
$lab \cdot tch$ and $lab \cdot nch$

D50: hue C

LCH*Ma: 85 58 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

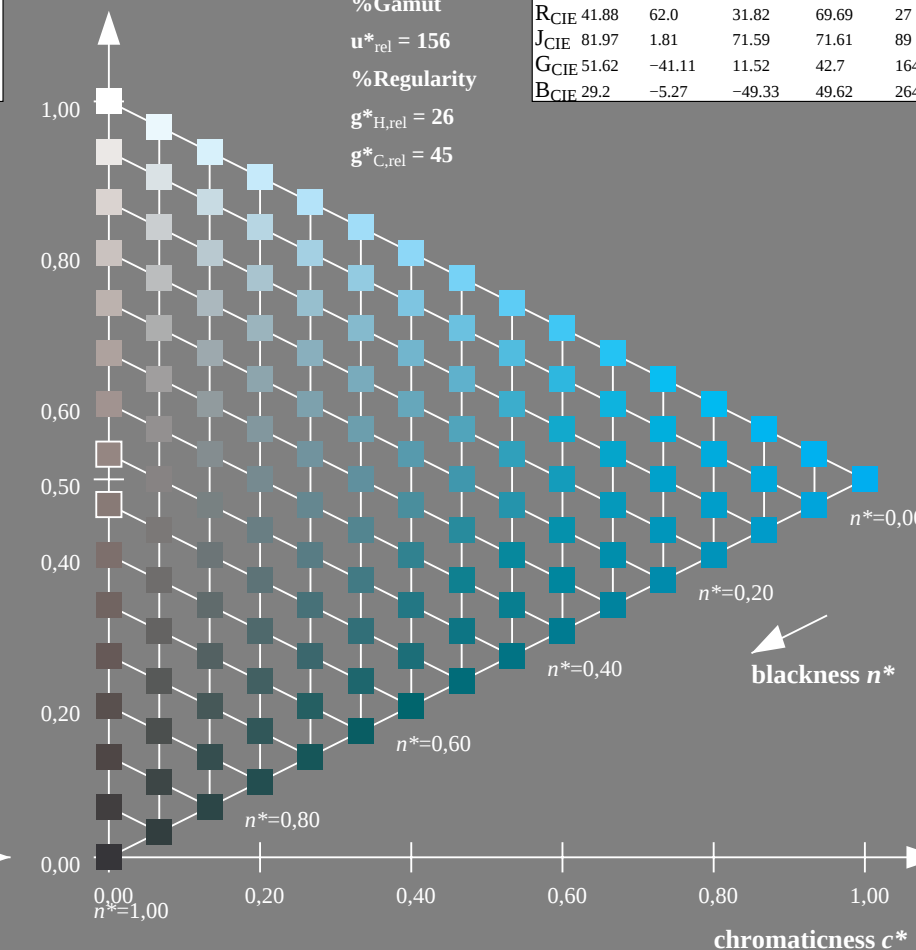
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 196/360 = 0.544 (right)

input: $cmY0^*$ setcmykcolor

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 305/360 = 0.847$

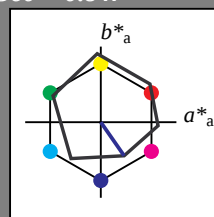
$lab \cdot tch$ and $lab \cdot nch$

D50: hue V

LCH*Ma: 26 54 305

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

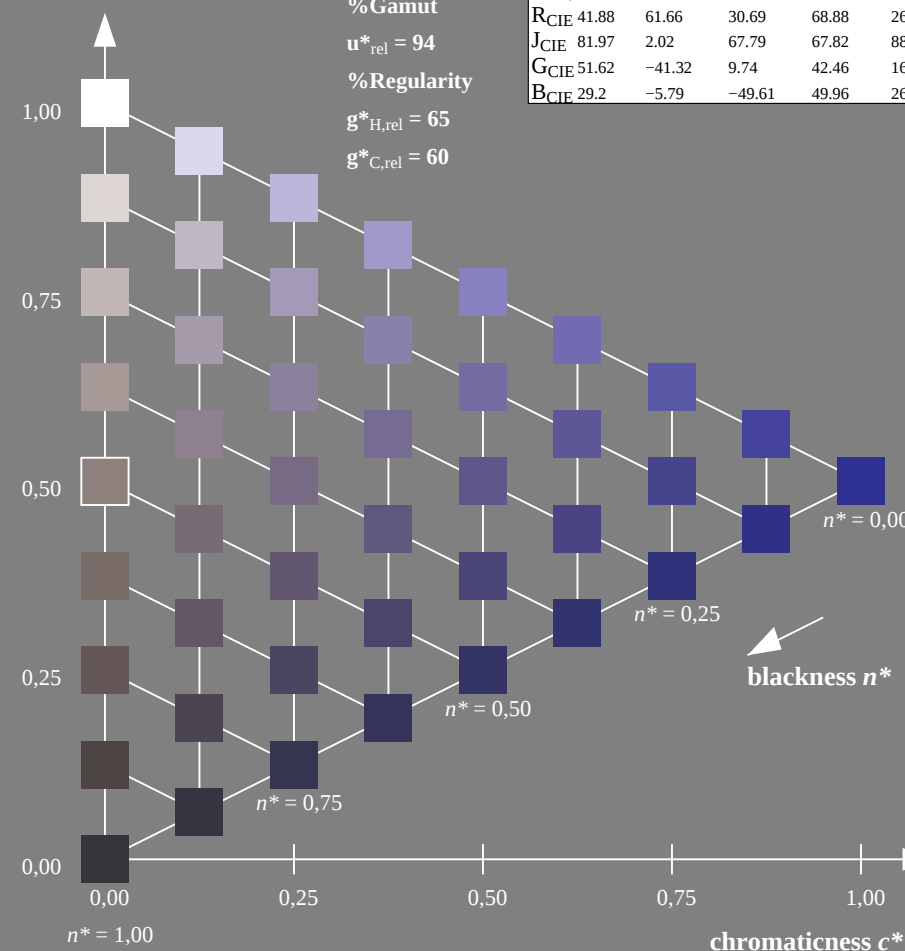
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 305/360 = 0.847 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 302/360 = 0.838$

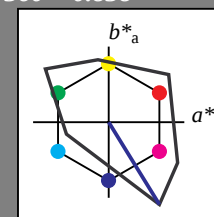
$lab \cdot tch$ and $lab \cdot nch$

D50: hue V

LCH*Ma: 26 128 302

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

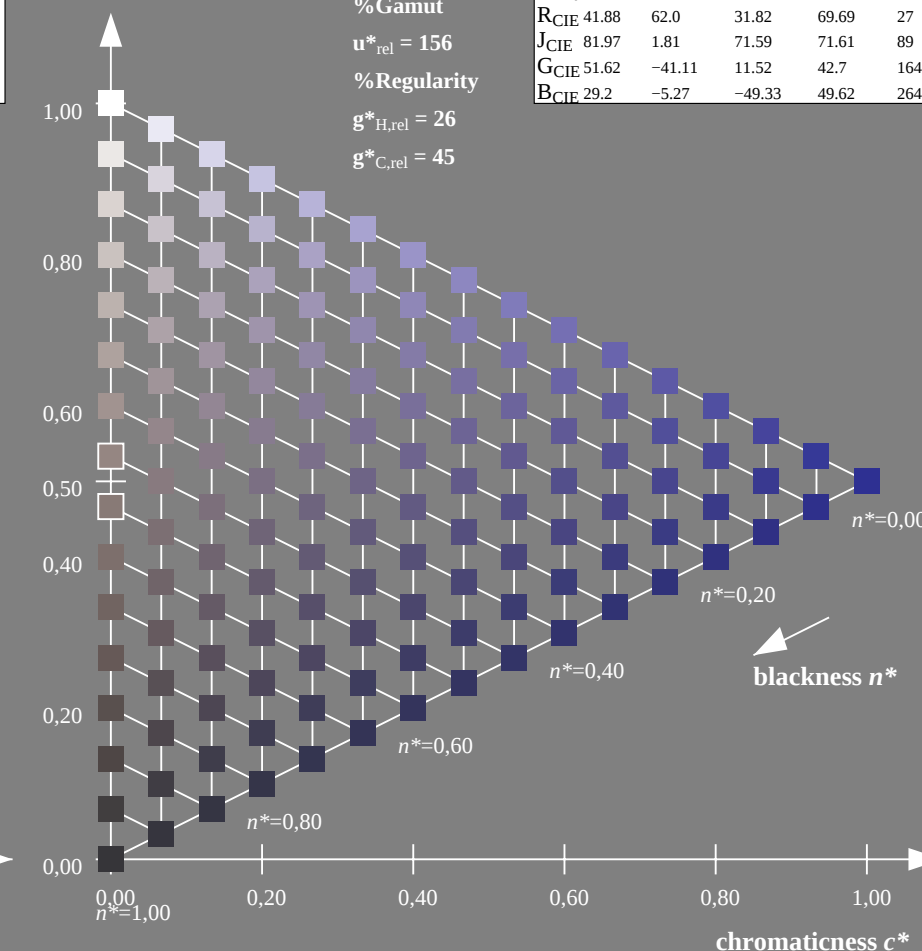
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 302/360 = 0.838 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 356/360 = 0.99$

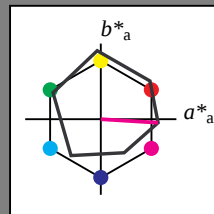
$lab \cdot tch$ and $lab \cdot nch$

D50: hue M

LCH*Ma: 50 76 356

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

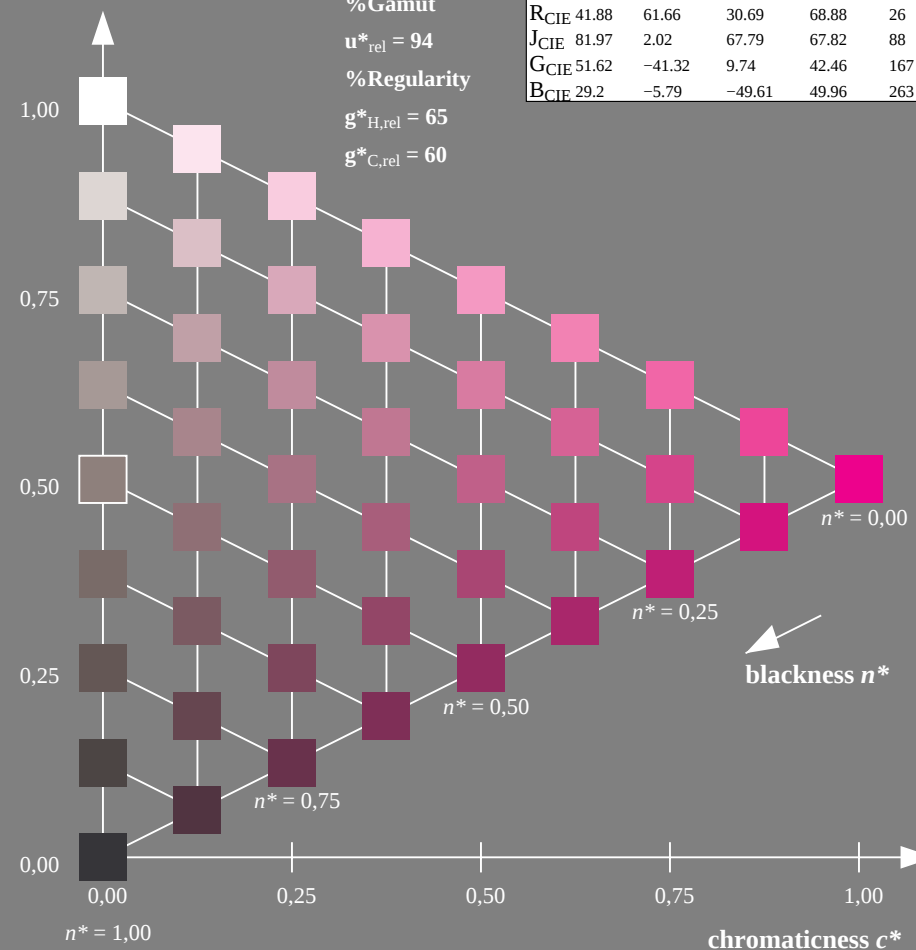
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 356/360 = 0.99 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 330/360 = 0.915$

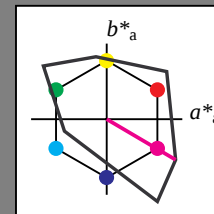
$lab \cdot tch$ and $lab \cdot nch$

D50: hue M

LCH*Ma: 59 106 330

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

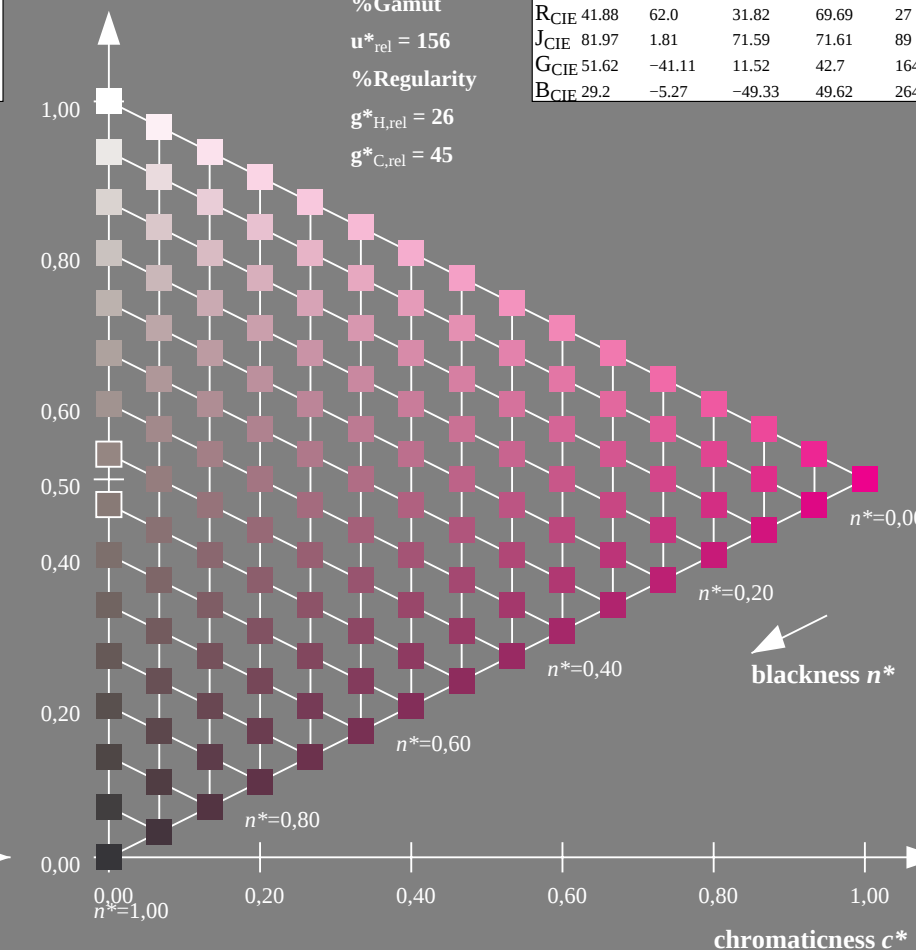
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 330/360 = 0.915 (right)

input: $cmY0^*$ setcmykcolor

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 26/360 = 0.074$

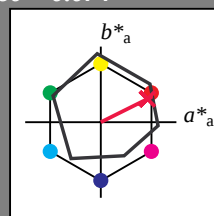
$lab \cdot tch$ and $lab \cdot nch$

D50: hue R

LCH*Ma: 49 76 26

olv*Ma: 1.0 0.0 0.3

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263

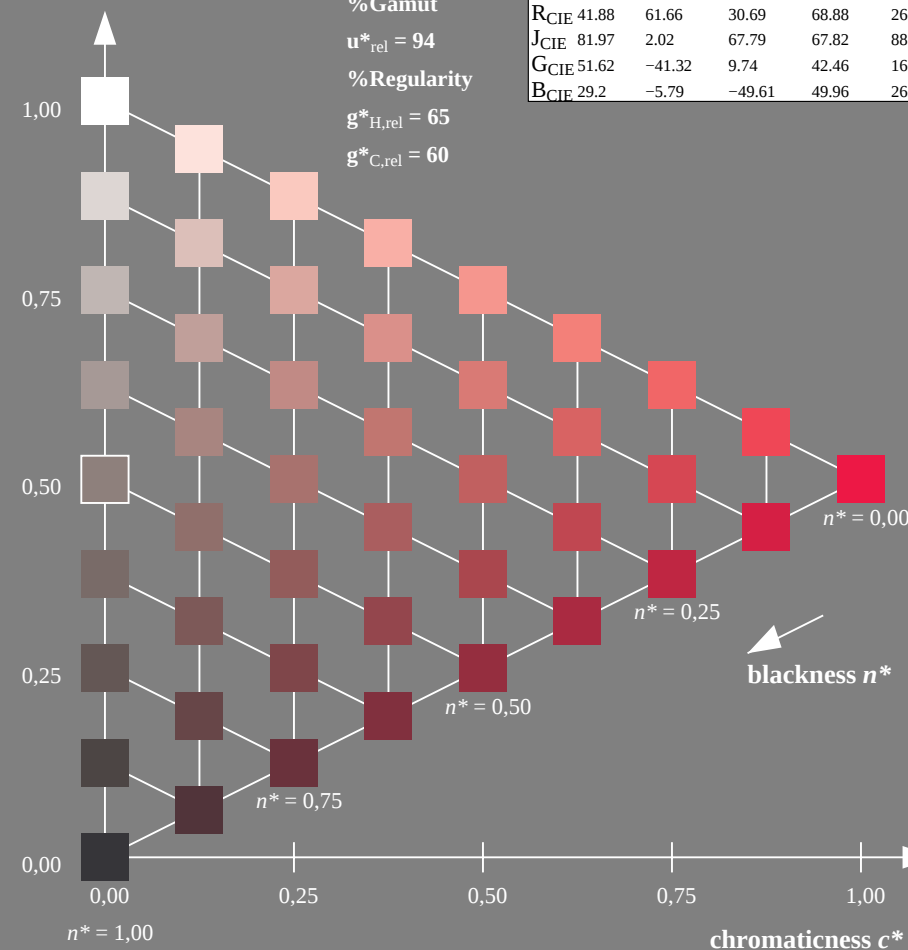
%Gamut

$u^*_{rel} = 94$

%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$



QE700-7, 9 step scales for constant CIELAB hue 26/360 = 0.074 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 27/360 = 0.075$

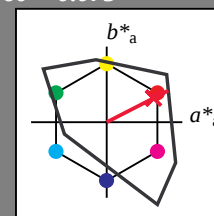
$lab \cdot tch$ and $lab \cdot nch$

D50: hue R

LCH*Ma: 55 92 27

olv*Ma: 1.0 0.0 0.18

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264

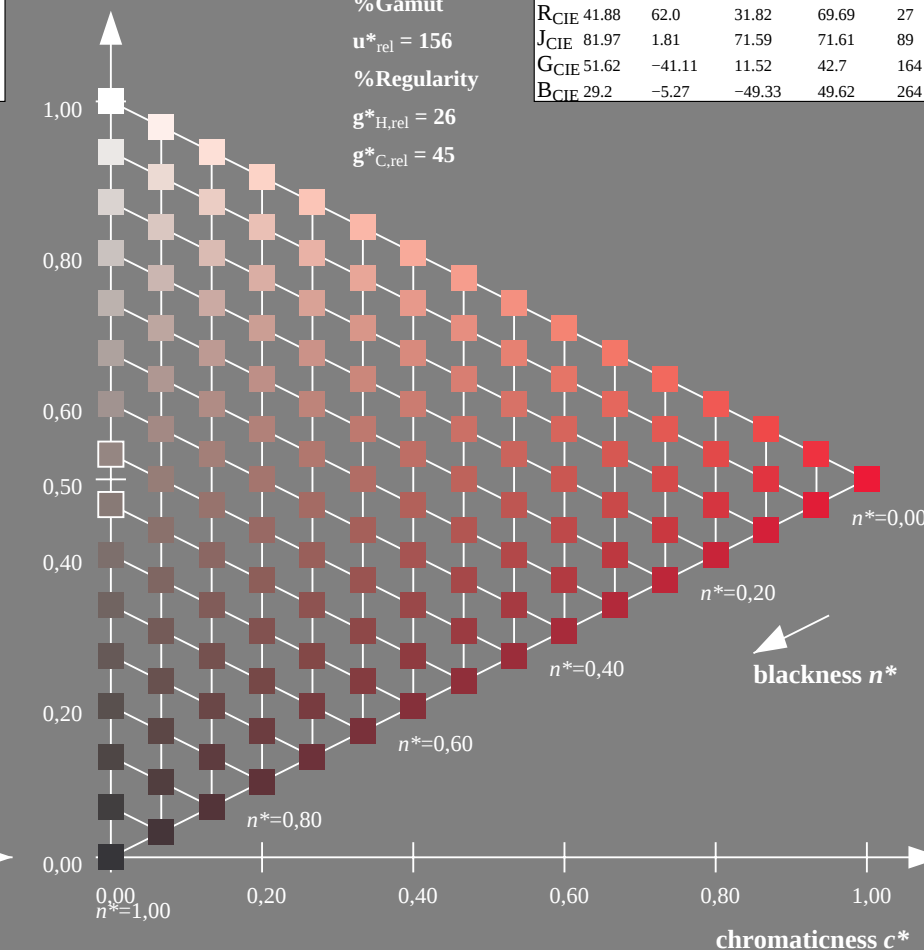
%Gamut

$u^*_{rel} = 156$

%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$



16 step scales for constant CIELAB hue 27/360 = 0.075 (right)

input: $cmY0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 88/360 = 0.245$

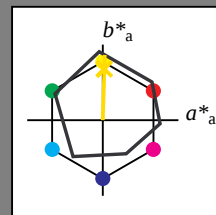
$lab \cdot tch$ and $lab \cdot nch$

D50: hue J

LCH*Ma: 86 86 88

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

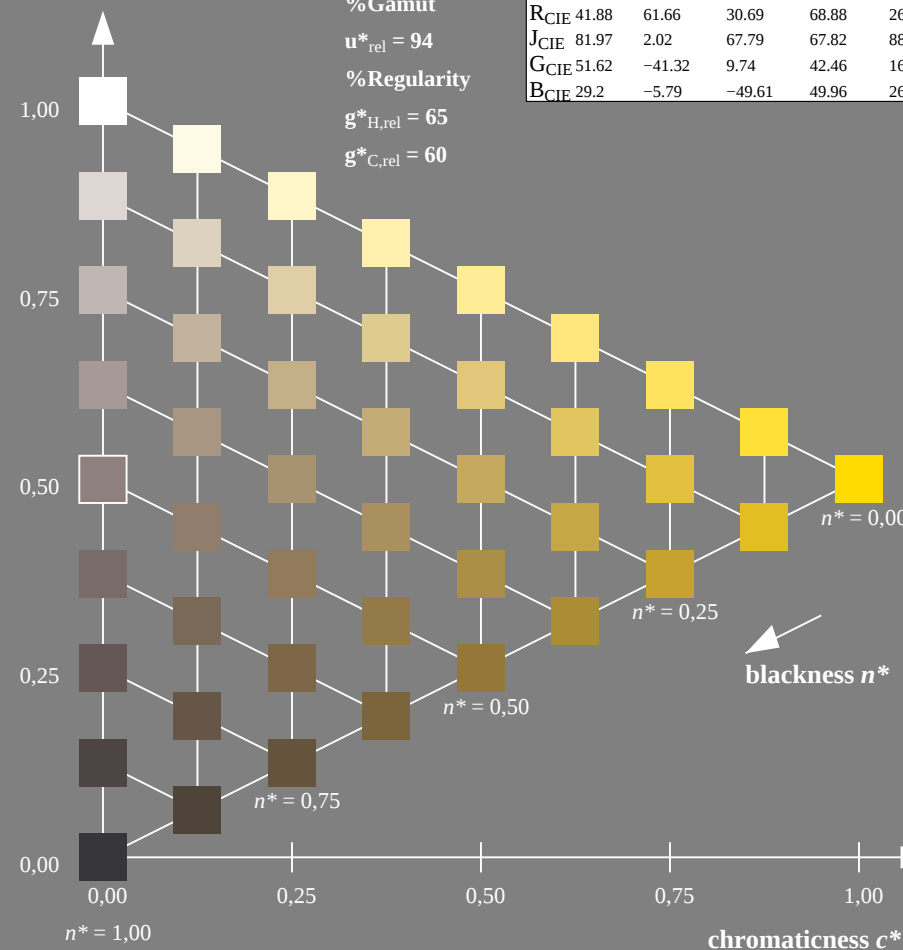
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 88/360 = 0.245 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 89/360 = 0.246$

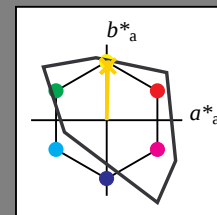
$lab \cdot tch$ and $lab \cdot nch$

D50: hue J

LCH*Ma: 87 79 89

olv*Ma: 1.0 0.83 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

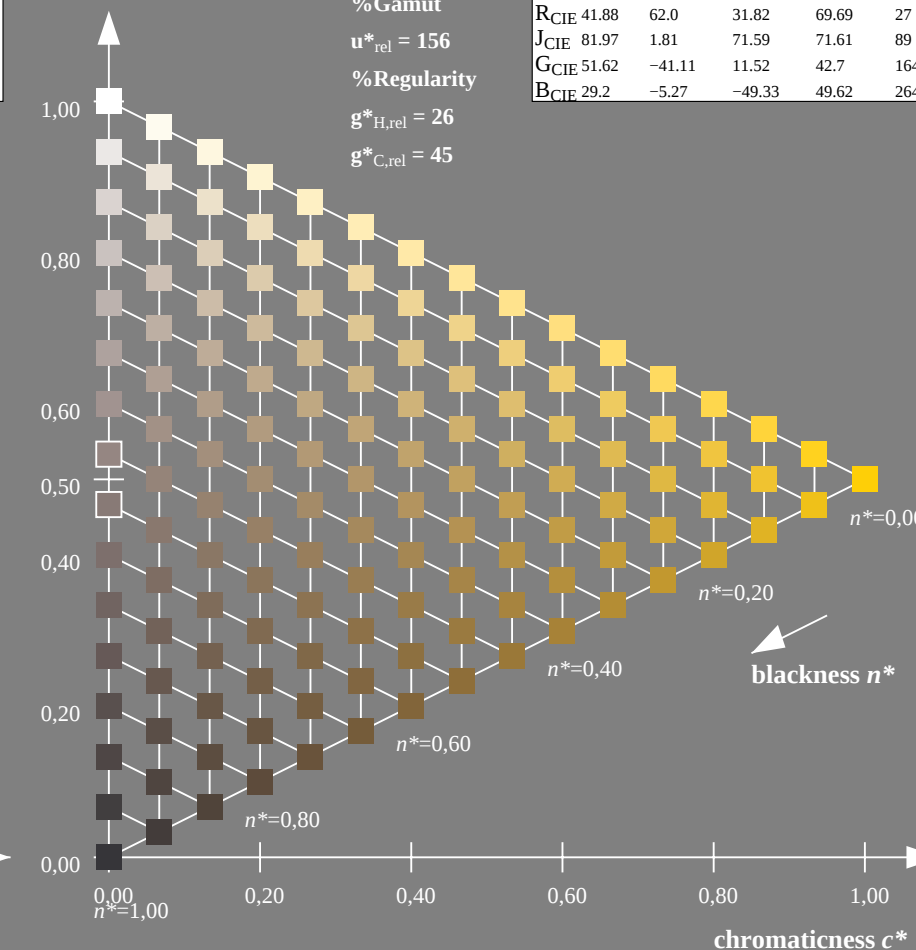
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 89/360 = 0.246 (right)

input: $cmy0^* setcmykcolor$

output: no change compared to input



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 167/360 = 0.463$

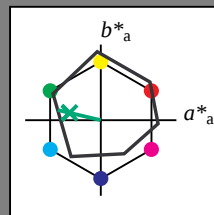
$lab \cdot tch$ and $lab \cdot nch$

D50: hue G

LCH*Ma: 52 59 167

olv*Ma: 0.0 1.0 0.26

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

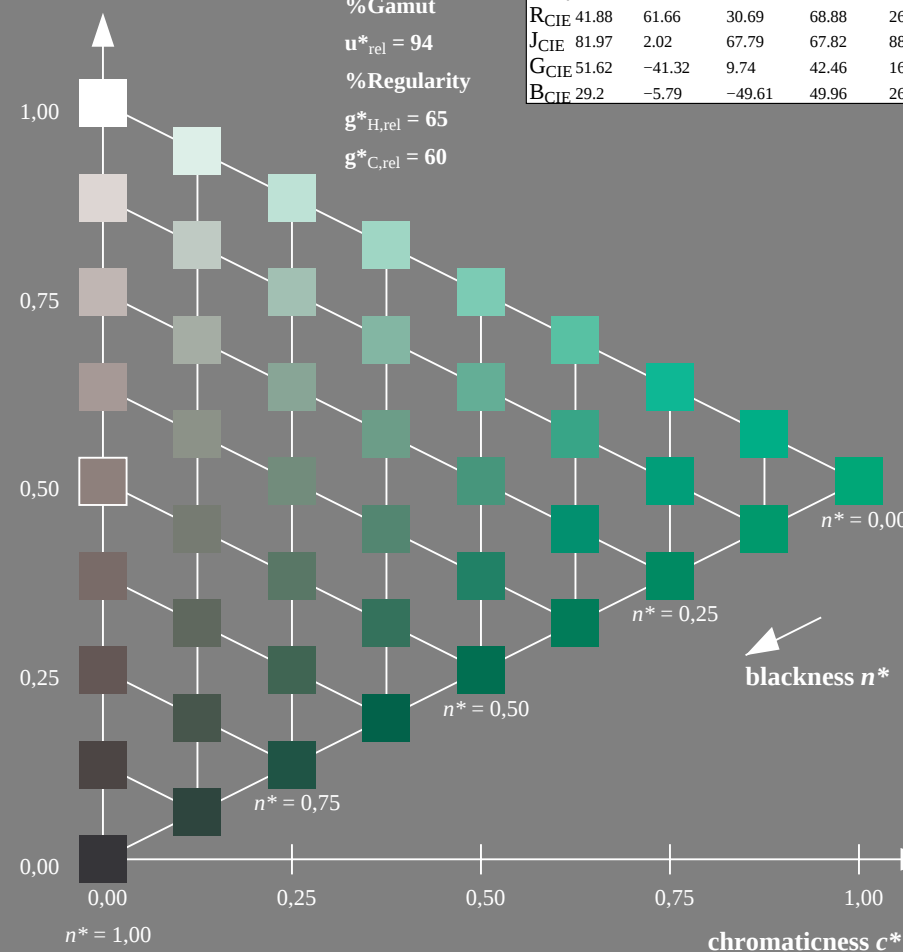
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



QE700-7, 9 step scales for constant CIELAB hue 167/360 = 0.463 (left)



BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

D50: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 164/360 = 0.457$

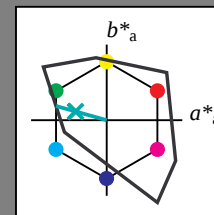
$lab \cdot tch$ and $lab \cdot nch$

D50: hue G

LCH*Ma: 84 70 164

olv*Ma: 0.0 1.0 0.6

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

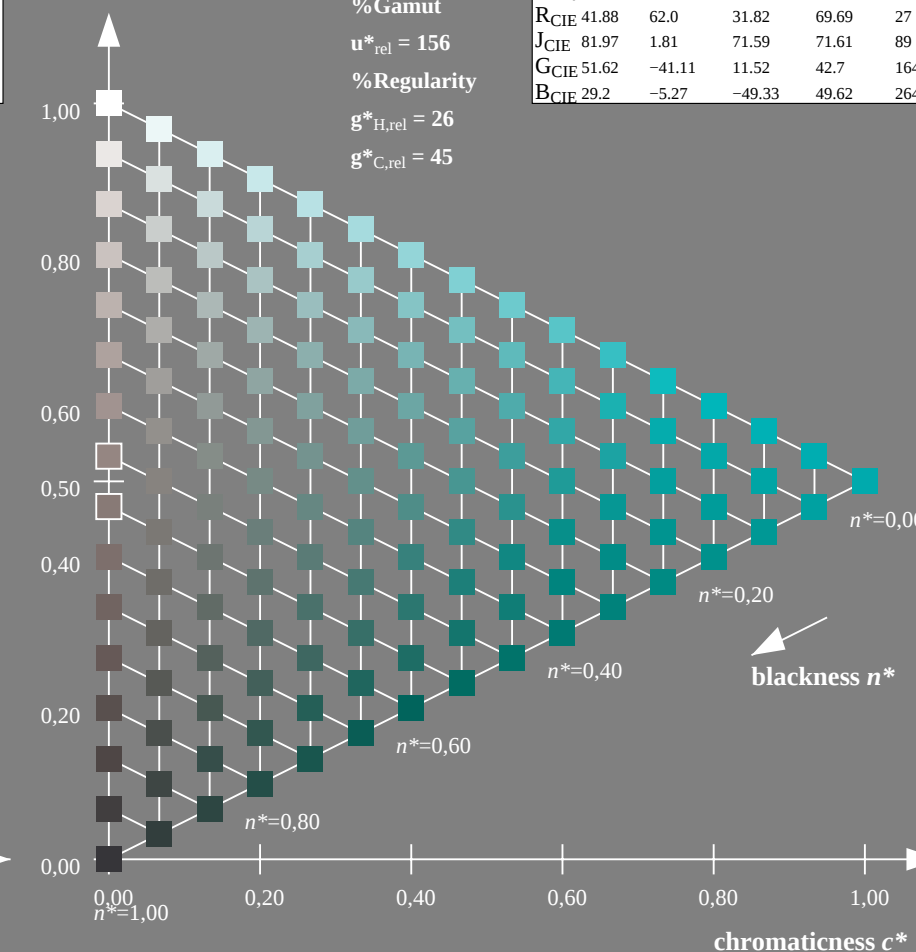
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



16 step scales for constant CIELAB hue 164/360 = 0.457 (right)

input: *cmY0* setcmykcolor*

output: *no change compared to input*



Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab \cdot h = 263/360 = 0.731$

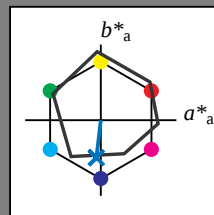
$lab \cdot tch$ and $lab \cdot nch$

D50: hue B

LCH*Ma: 42 47 263

olv*Ma: 0.0 0.52 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 94$

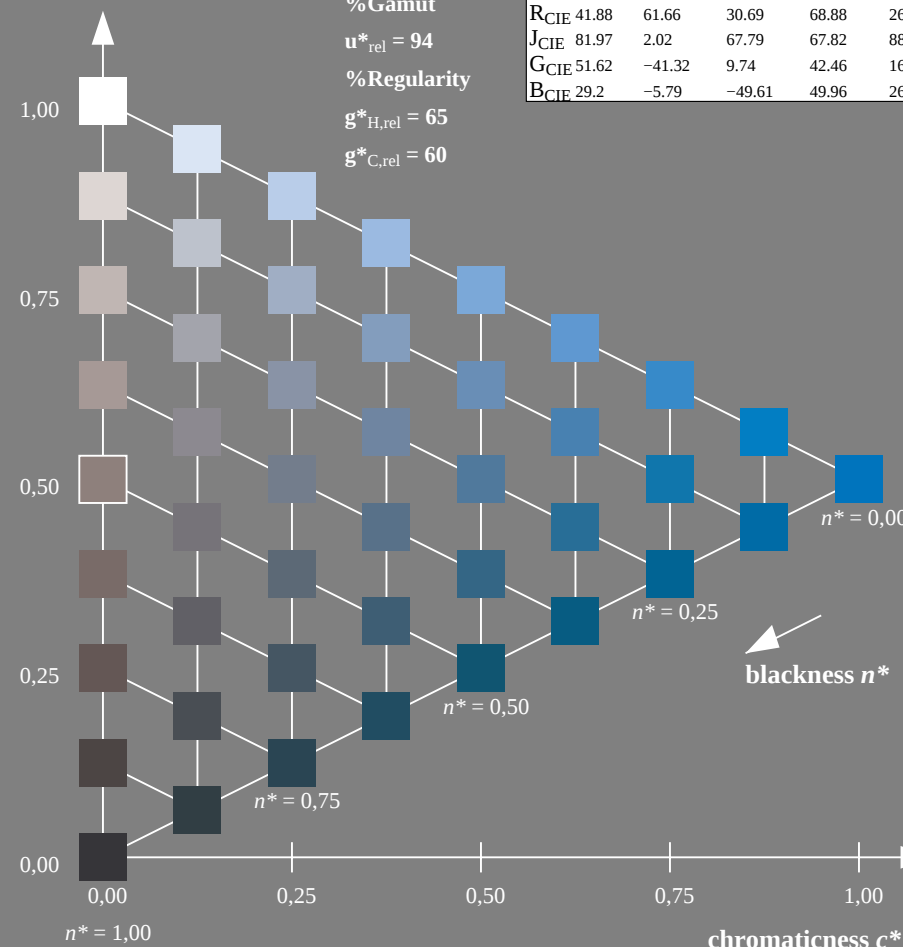
%Regularity

$g^*_{H,rel} = 65$

$g^*_{C,rel} = 60$

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.05	50.54	82.38	38
Y _{Ma}	91.0	-4.72	90.58	90.7	93
L _{Ma}	50.9	-63.18	34.98	72.22	151
C _{Ma}	56.99	-39.34	-48.1	62.16	231
V _{Ma}	25.72	30.89	-44.4	54.09	305
M _{Ma}	49.99	75.76	-4.64	75.9	356
N _{Ma}	18.09	0.0	0.0	0.0	0
W _{Ma}	95.46	0.0	0.0	0.0	0
R _{CIE}	41.88	61.66	30.69	68.88	26
J _{CIE}	81.97	2.02	67.79	67.82	88
G _{CIE}	51.62	-41.32	9.74	42.46	167
B _{CIE}	29.2	-5.79	-49.61	49.96	263



Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab \cdot h = 264/360 = 0.733$

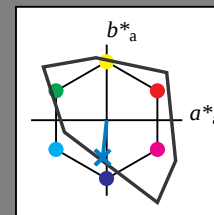
$lab \cdot tch$ and $lab \cdot nch$

D50: hue B

LCH*Ma: 61 54 264

olv*Ma: 0.0 0.59 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 156$

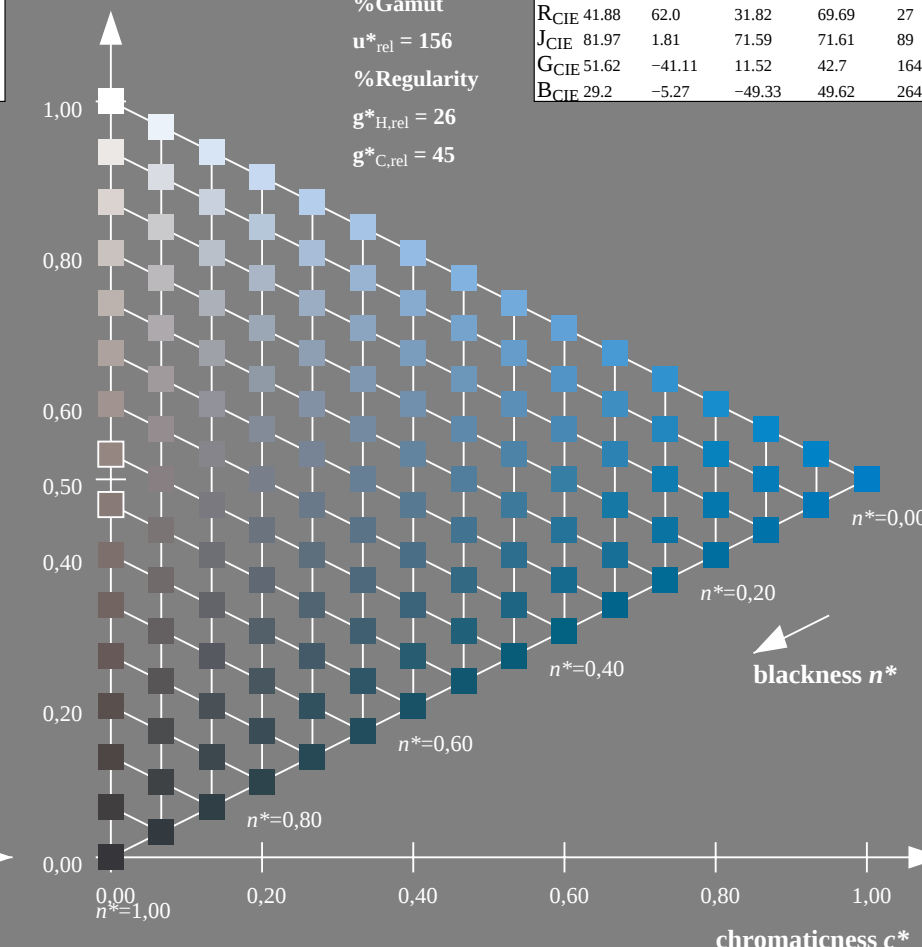
%Regularity

$g^*_{H,rel} = 26$

$g^*_{C,rel} = 45$

TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	54.19	79.36	63.0	101.33	38
Y _{Ma}	93.44	-14.18	82.59	83.8	100
L _{Ma}	82.82	-83.73	70.41	109.41	140
C _{Ma}	85.22	-55.9	-15.78	58.1	196
V _{Ma}	25.61	67.05	-108.87	127.87	302
M _{Ma}	58.76	91.18	-53.69	105.82	330
N _{Ma}	0.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	41.88	62.0	31.82	69.69	27
J _{CIE}	81.97	1.81	71.59	71.61	89
G _{CIE}	51.62	-41.11	11.52	42.7	164
B _{CIE}	29.2	-5.27	-49.33	49.62	264



QE700-7, 9 step scales for constant CIELAB hue 263/360 = 0.731 (left)

16 step scales for constant CIELAB hue 264/360 = 0.733 (right)

BAM-test chart QE70; Colorimetric systems ORS18 & TLS00

input: *cmY0* setcmykcolor*

D50: 9 and 16 step colour scales for 10 hues

output: *no change compared to input*