

Input: Colorimetric Television Luminous System TLS18a

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

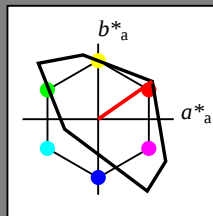
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

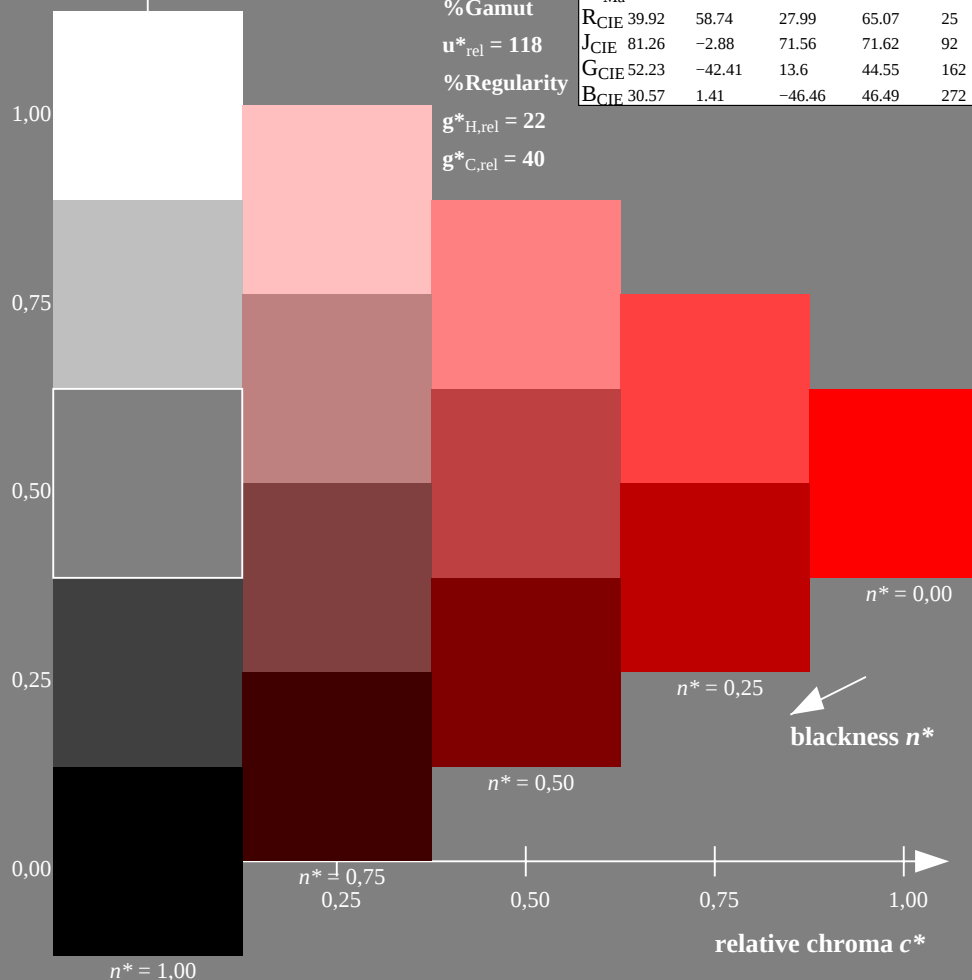
% Regularity

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

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

TLS18a; 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



IE420-7N, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

TUB-test chart IE42 for visual displays, Hue O, Page 1/11
Discrimination of 5 and 16 step colour scales, TLS18a

Output: Colorimetric Television Luminous System TLS18a

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

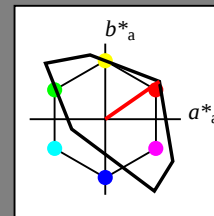
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

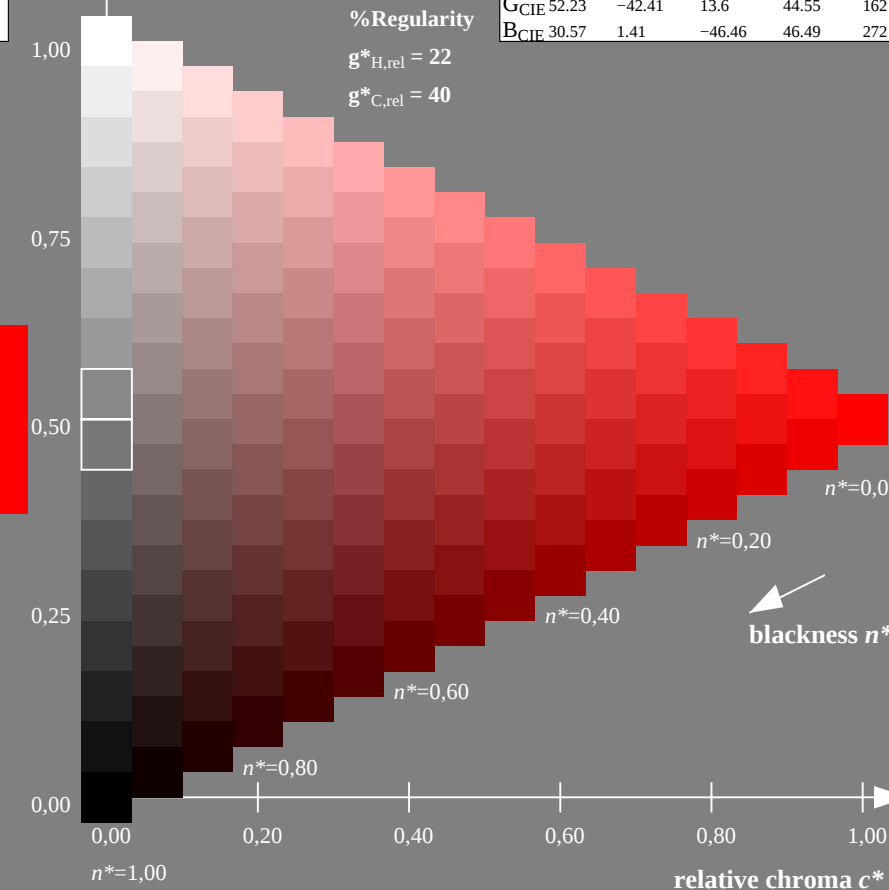
% Regularity

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

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

TLS18a; adapted (a) CIELAB data

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B _{CIE}	30.57	1.41	-46.46	46.49	272



16 step scales for constant CIELAB hue 35/360 = 0.097 (right)

input: rgb ($\rightarrow olv^*$) $setrgbcolor$
output: no change compared to input

Input: Colorimetric Television Luminous System TLS18a

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

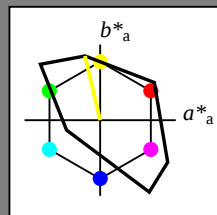
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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

TLS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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W _{Ma}	95.41	0.0	0.0	0.0	0
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Output: Colorimetric Television Luminous System TLS18a

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

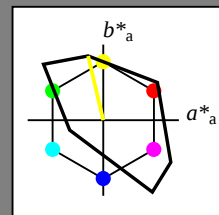
lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

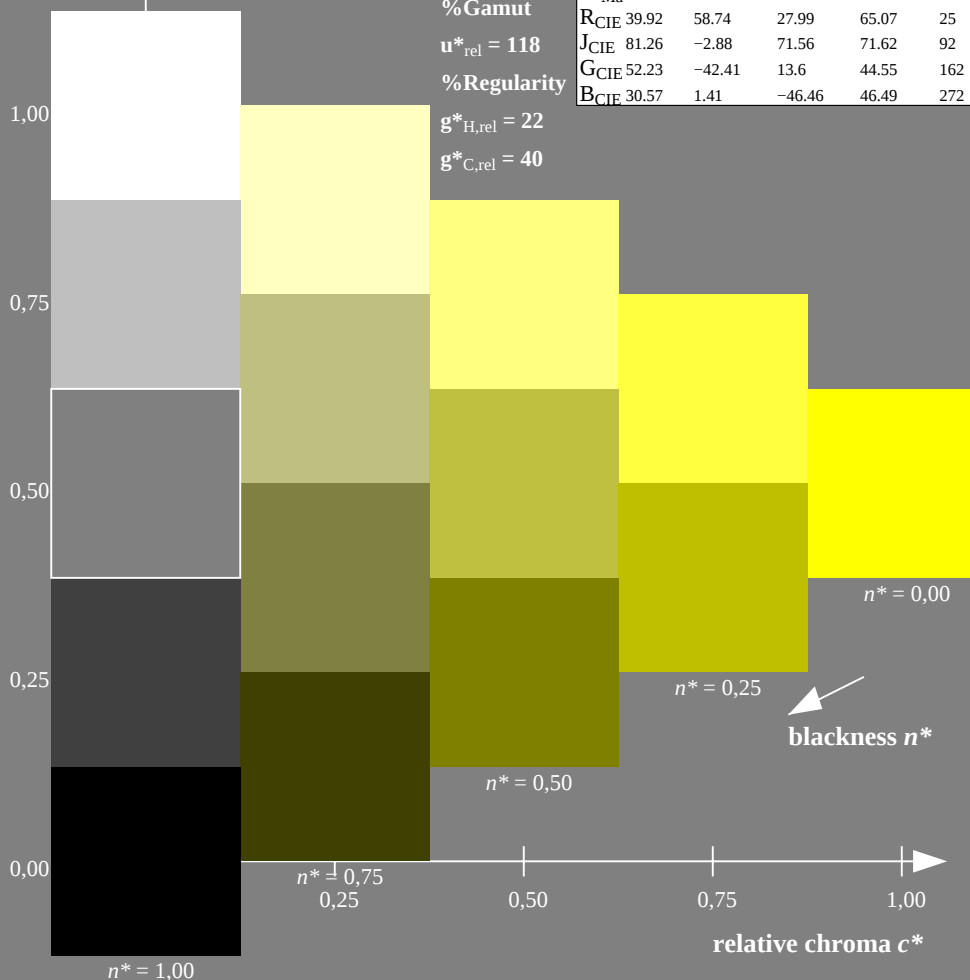
% Regularity

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

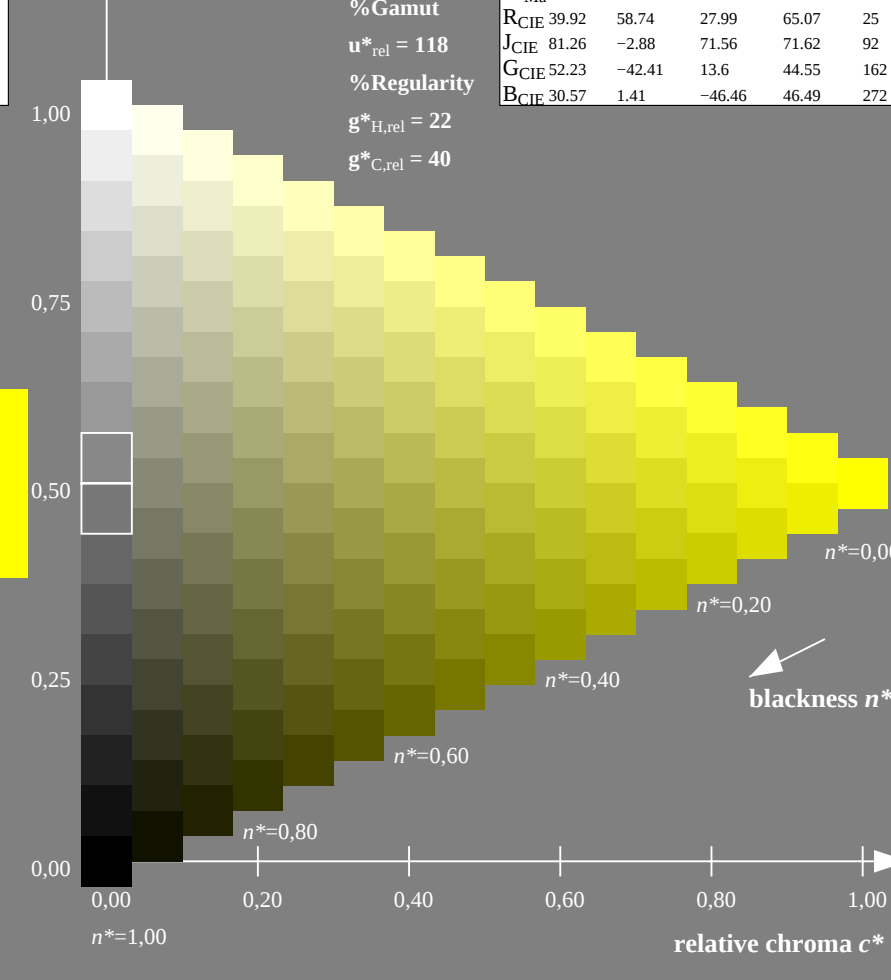
$g^*_{C,rel} = 40$

TLS18a; adapted (a) CIELAB data

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W _{Ma}	95.41	0.0	0.0	0.0	0
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G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



IE420-7N, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)



16 step scales for constant CIELAB hue 103/360 = 0.287 (right)

Input: Colorimetric Television Luminous System TLS18a

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

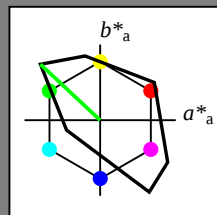
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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

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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
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B _{CIE}	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Television Luminous System TLS18a

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

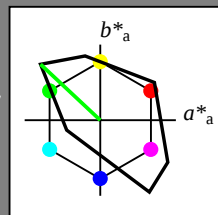
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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B _{CIE}	30.57	1.41	-46.46	46.49	272

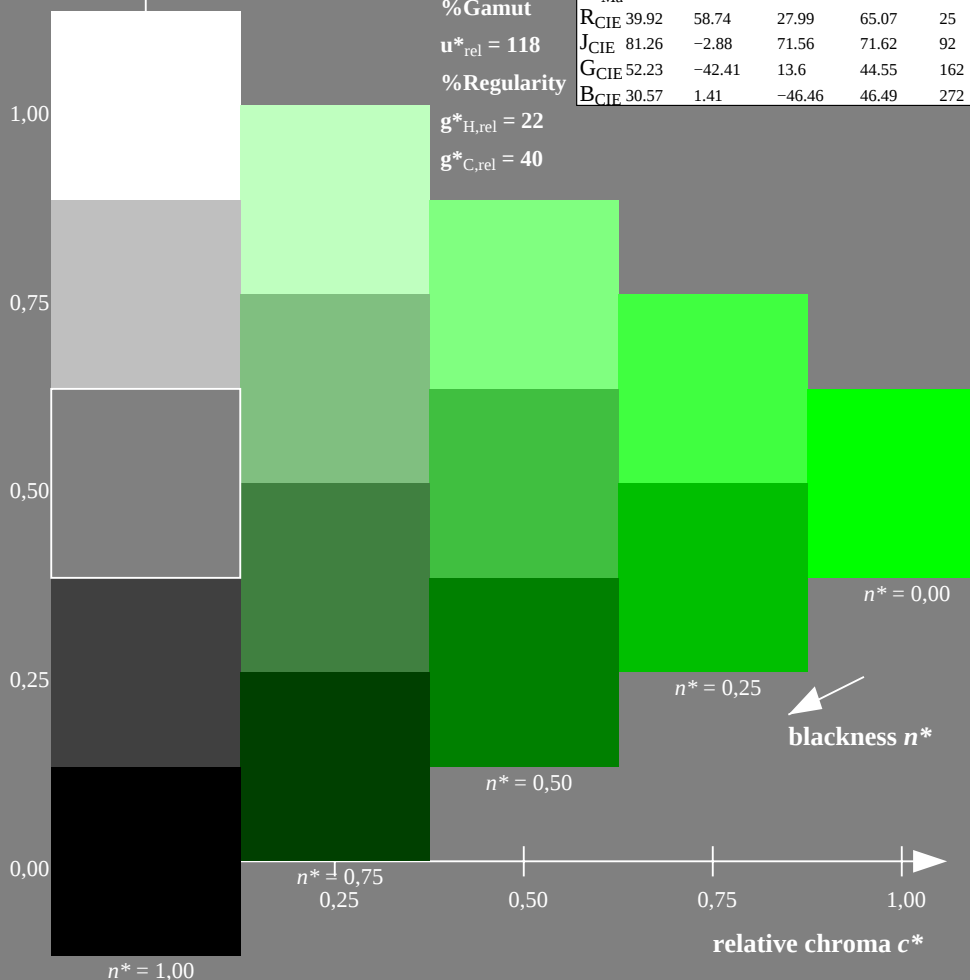
% Gamut

$u^*_{rel} = 118$

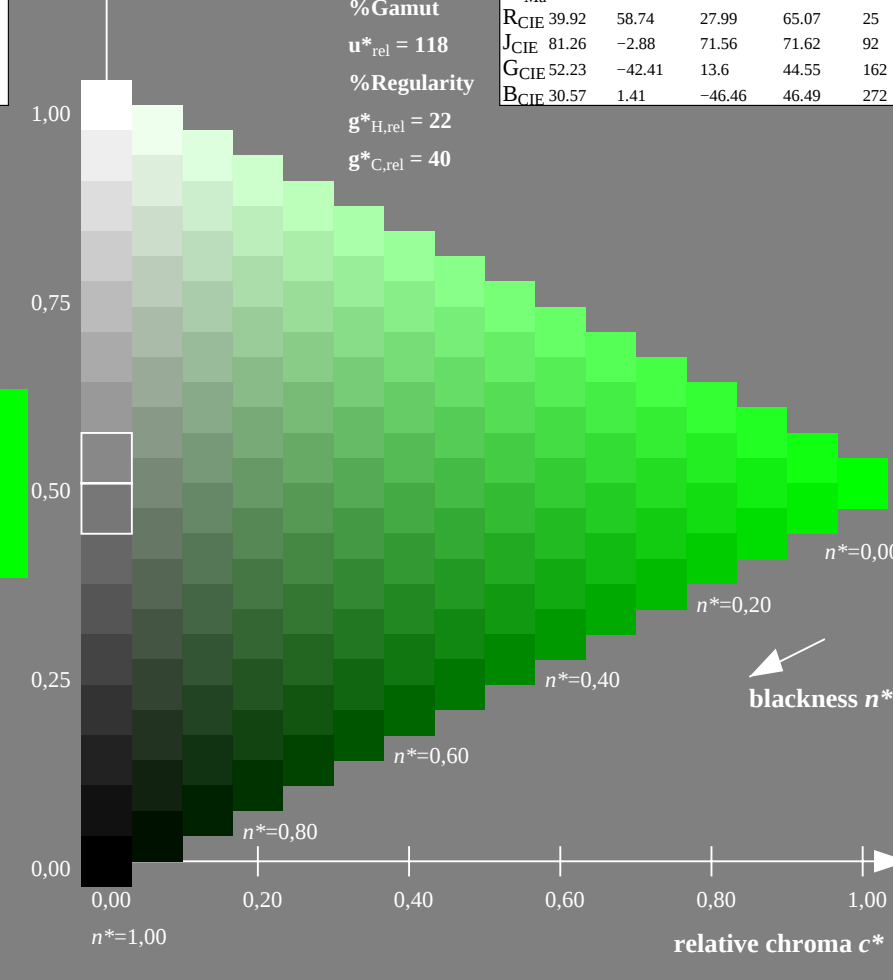
% Regularity

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

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



IE420-7N, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)



16 step scales for constant CIELAB hue 137/360 = 0.38 (right)

Input: Colorimetric Television Luminous System TLS18a

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

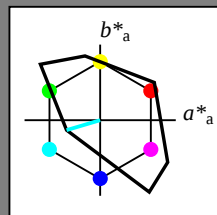
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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

TLS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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L _{Ma}	84.0	-78.98	73.94	108.2	137
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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 Television Luminous System TLS18a

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

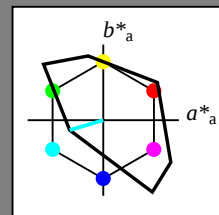
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 87 46 196

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

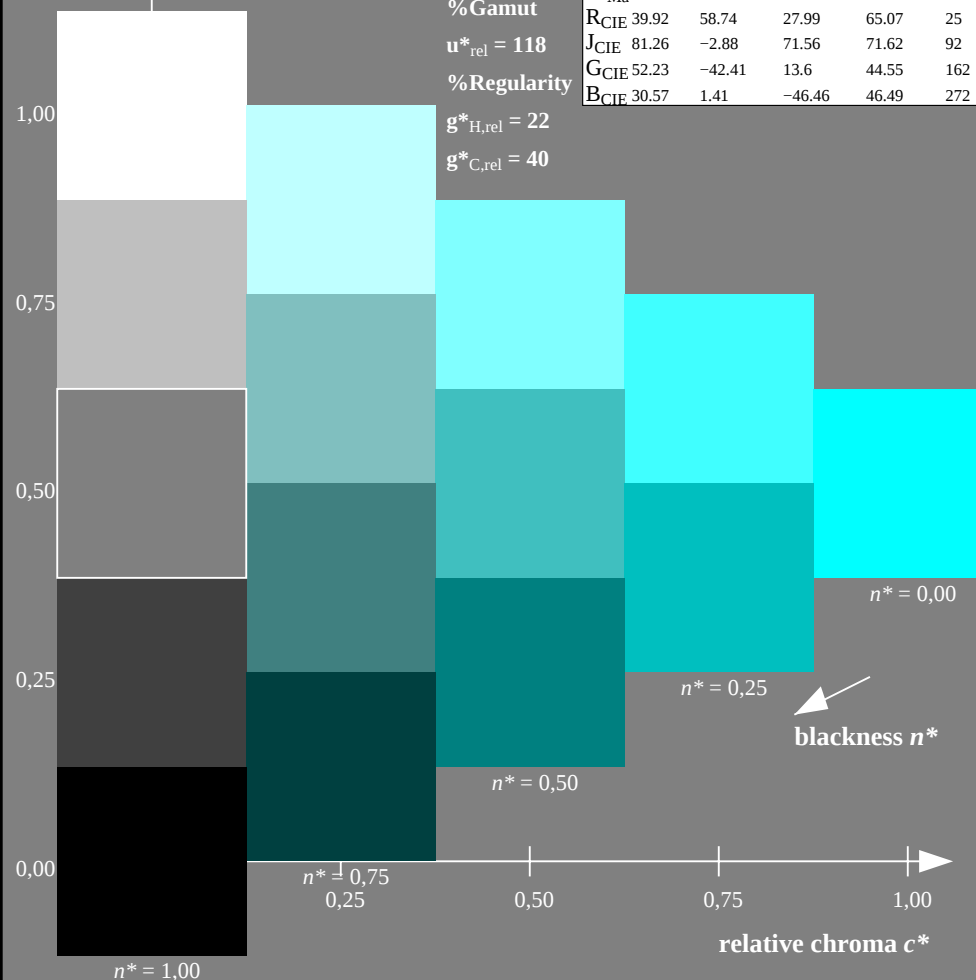
% Regularity

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

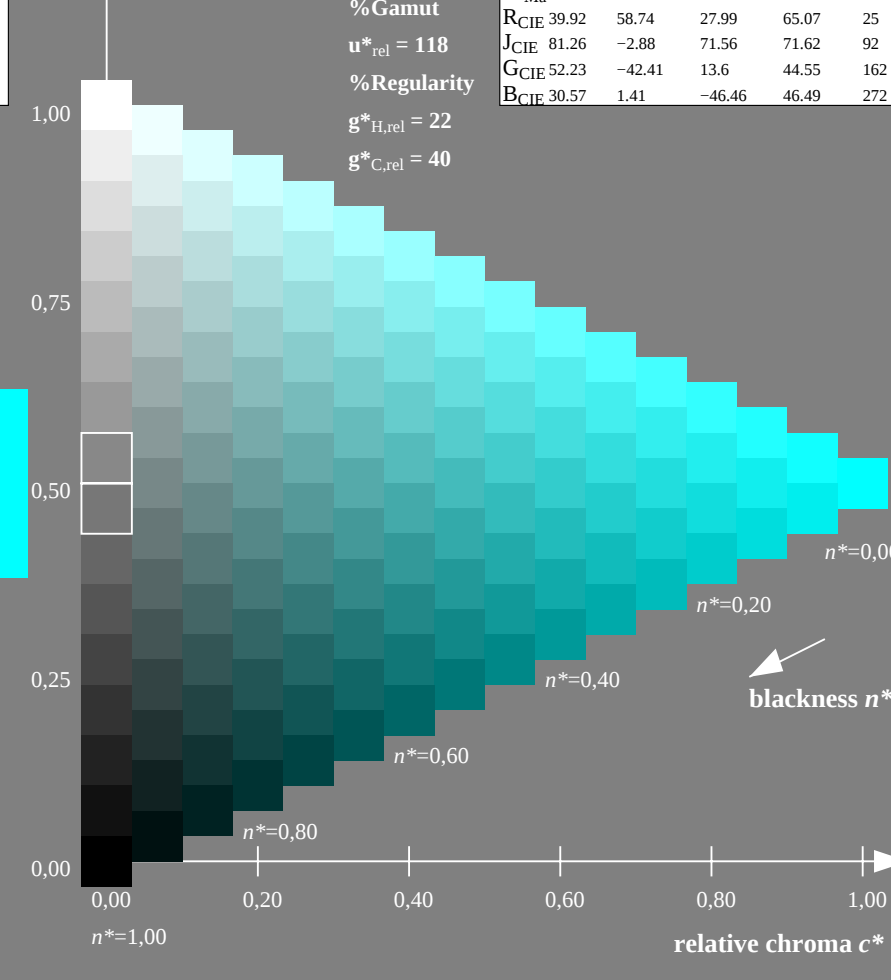
$g^*_{C,rel} = 40$

TLS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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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



IE420-7N, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)



16 step scales for constant CIELAB hue 196/360 = 0.546 (right)

Input: Colorimetric Television Luminous System TLS18a

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

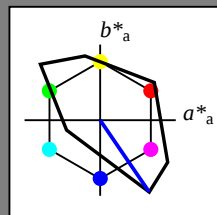
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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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
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Output: Colorimetric Television Luminous System TLS18a

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

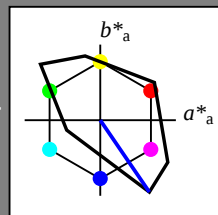
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

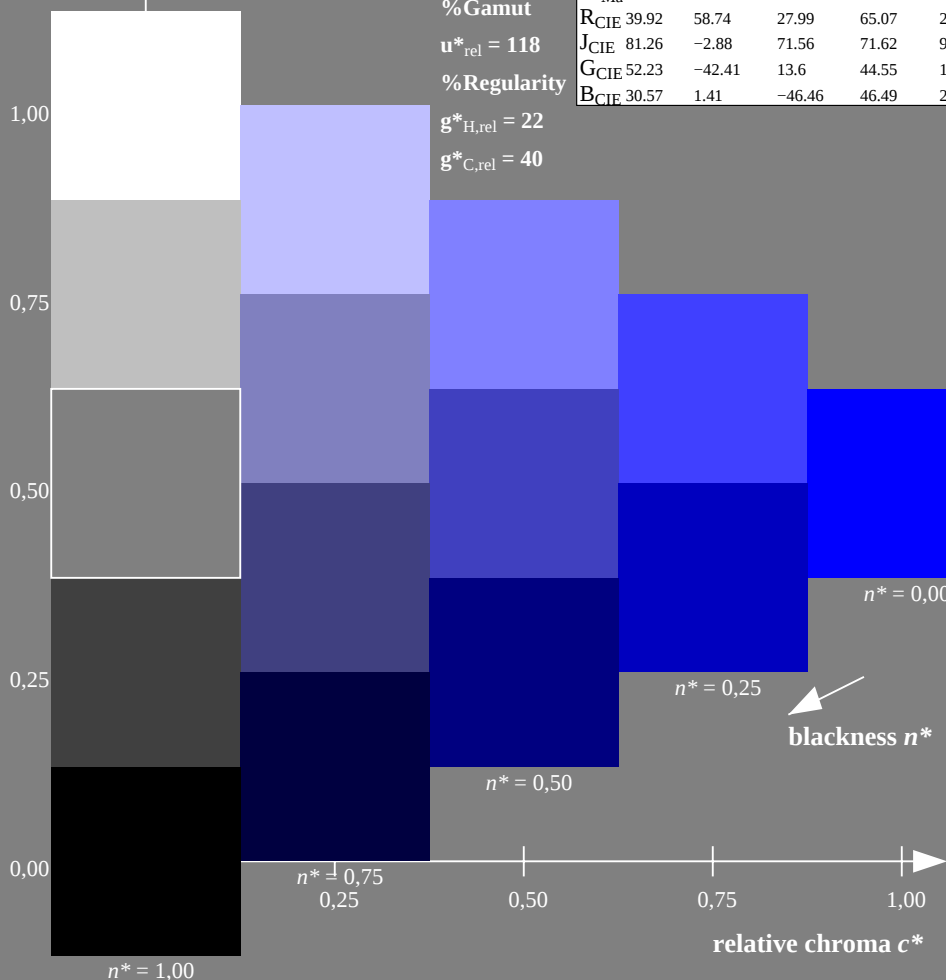
% Regularity

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

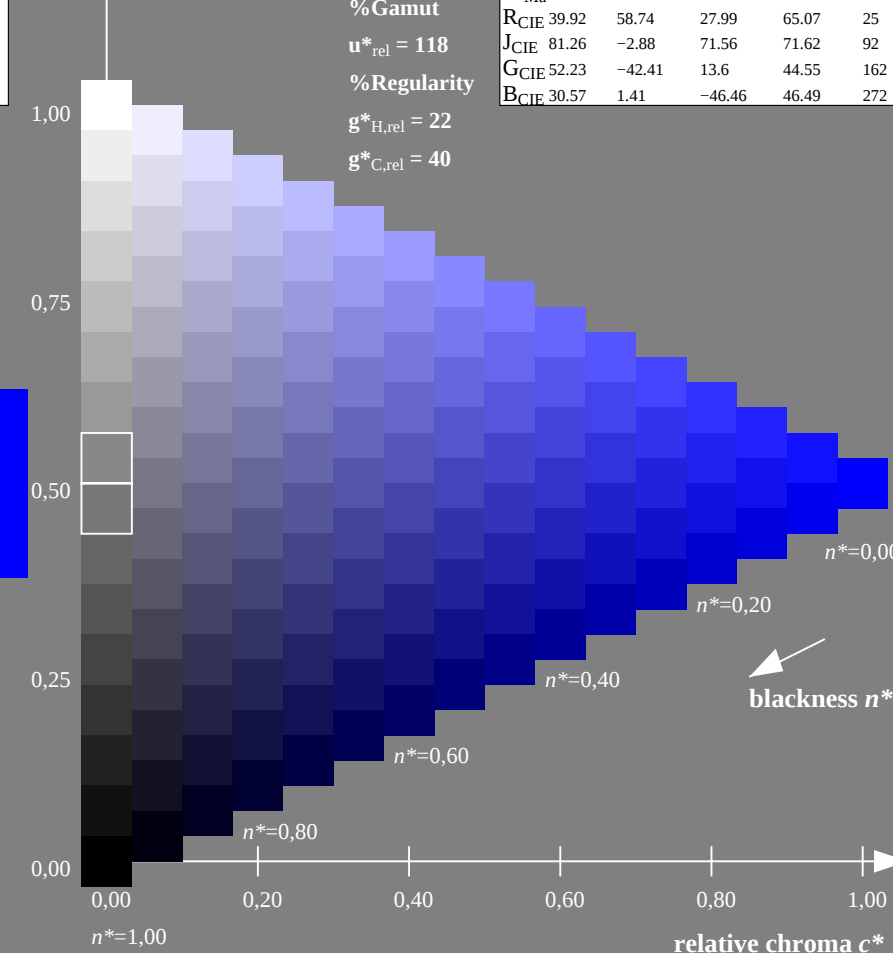
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TLS18a; adapted (a) CIELAB data

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N _{Ma}	18.01	0.0	0.0	0.0	0
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IE420-7N, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)



16 step scales for constant CIELAB hue 304/360 = 0.845 (right)

Input: Colorimetric Television Luminous System TLS18a

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

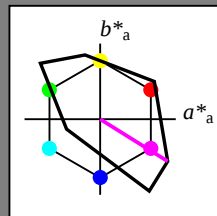
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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

TLS18a; adapted (a) CIELAB data

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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
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Output: Colorimetric Television Luminous System TLS18a

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

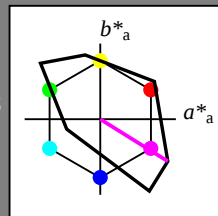
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

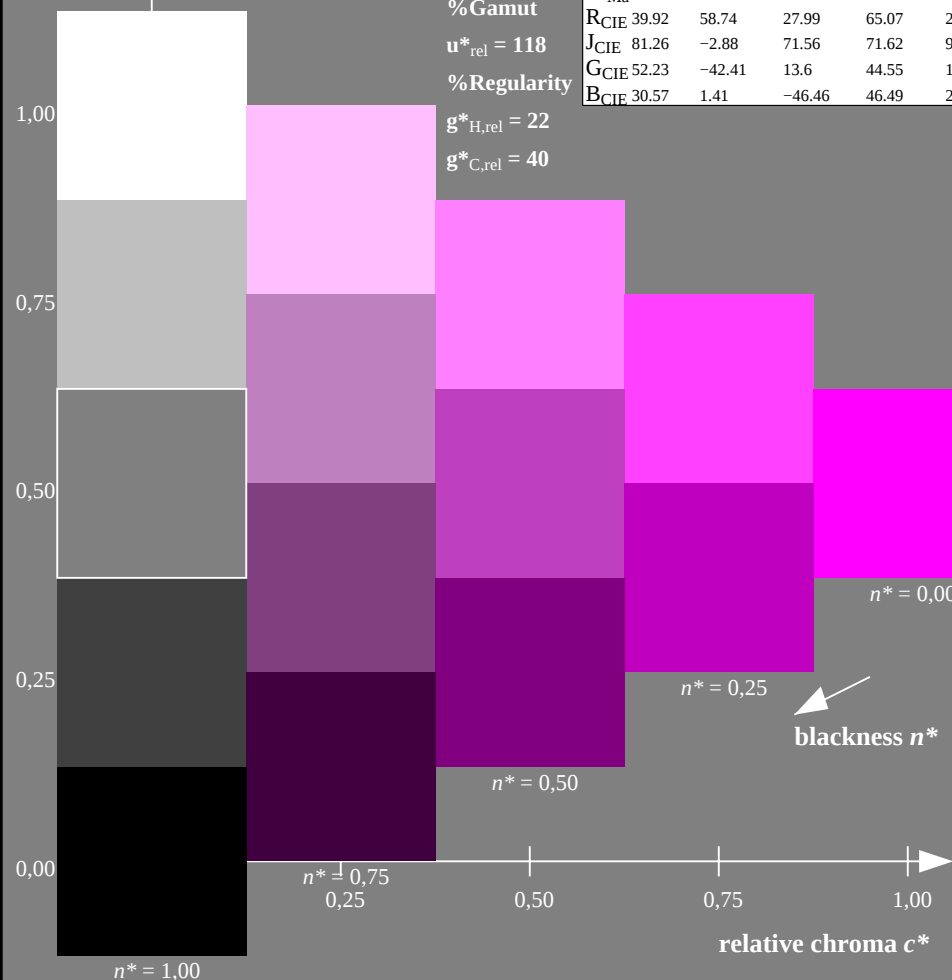
% Regularity

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

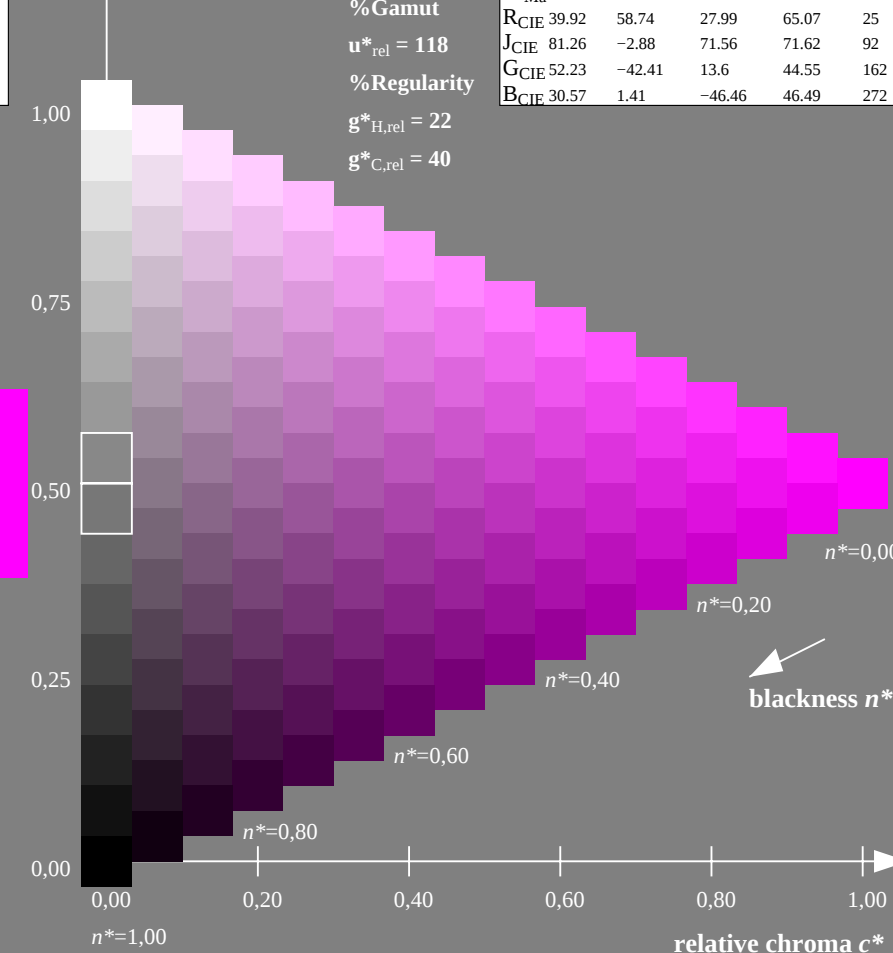
$g^*_{C,rel} = 40$

TLS18a; adapted (a) CIELAB data

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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



IE420-7N, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)



16 step scales for constant CIELAB hue 328/360 = 0.911 (right)

Input: Colorimetric Television Luminous System TLS18a

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

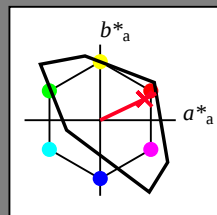
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 54 82 25

ol v^* Ma: 1.0 0.0 0.14

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

% Regularity

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

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

TLS18a; 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 Television Luminous System TLS18a

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

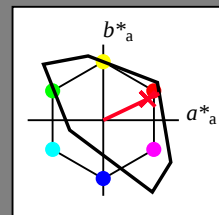
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 54 82 25

ol v^* Ma: 1.0 0.0 0.14

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

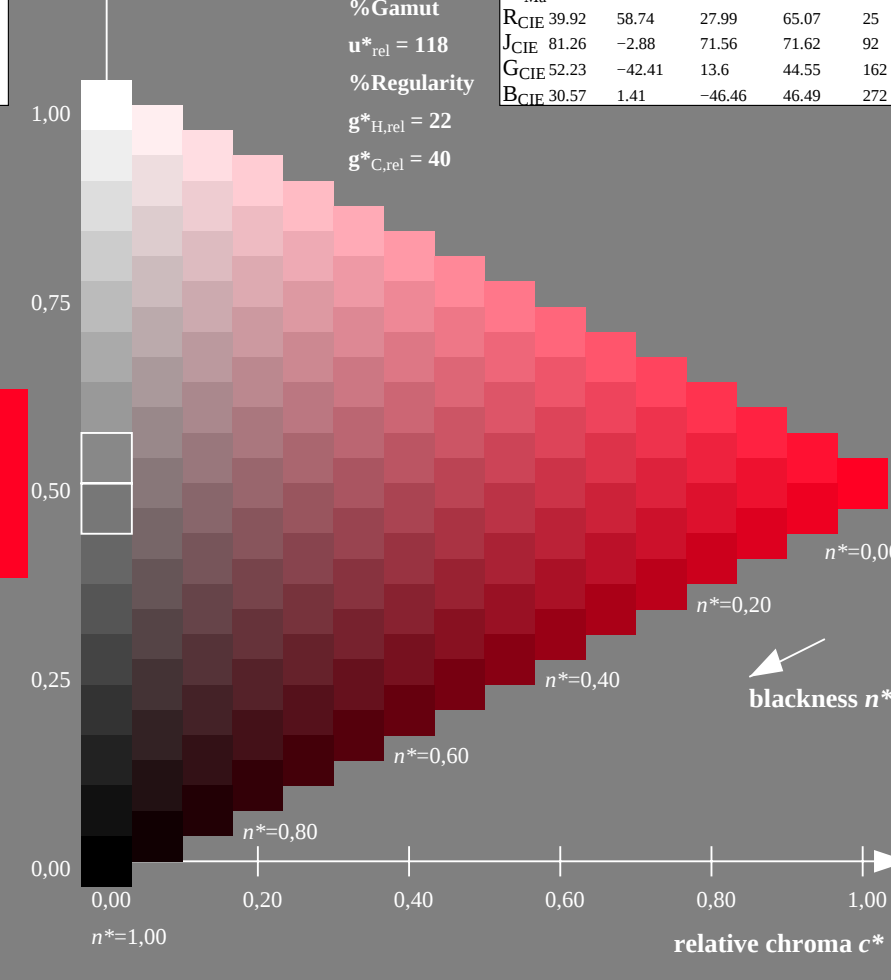
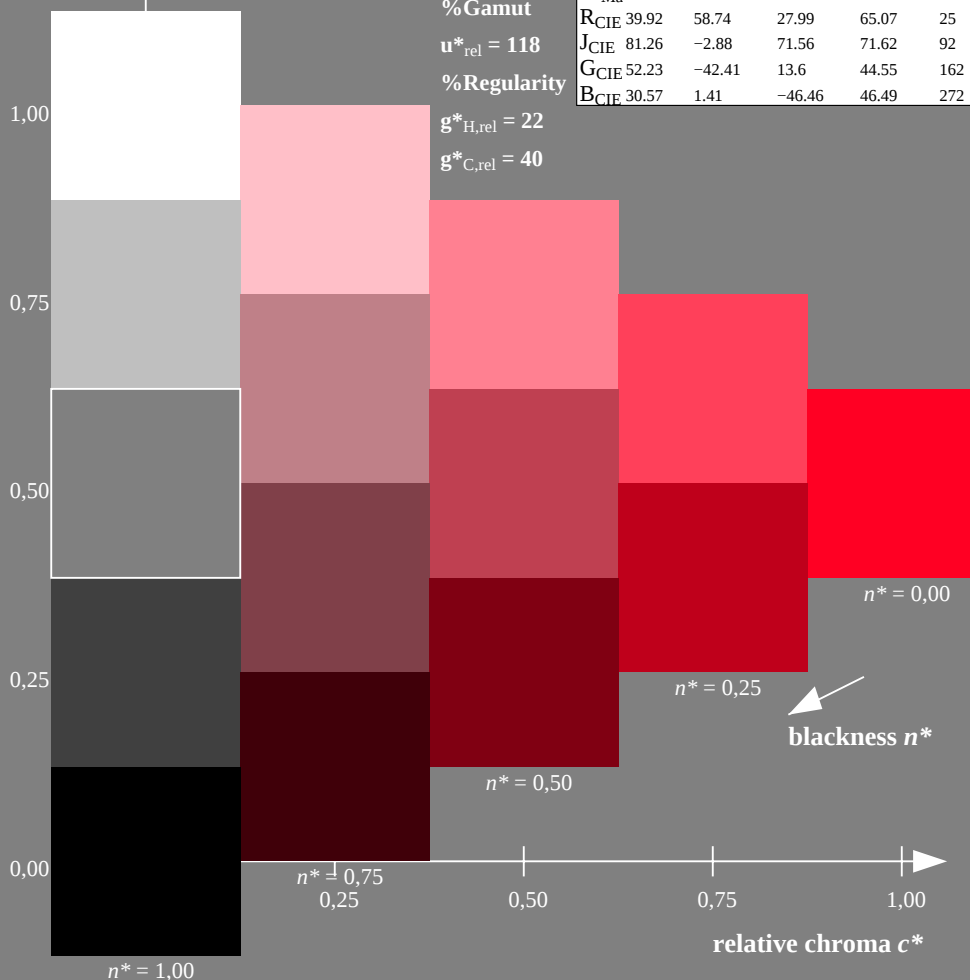
% Regularity

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

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

TLS18a; 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



IE420-7N, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

TUB-test chart IE42 for visual displays, Hue R, Page 7/11
Discrimination of 5 and 16 step colour scales, TLS18a

input: rgb ($\rightarrow rgb^*$) $setrgbcolor$
output: no change compared to input

Input: Colorimetric Television Luminous System TLS18a

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

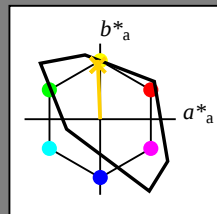
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 79 92

ol v^* Ma: 1.0 0.82 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

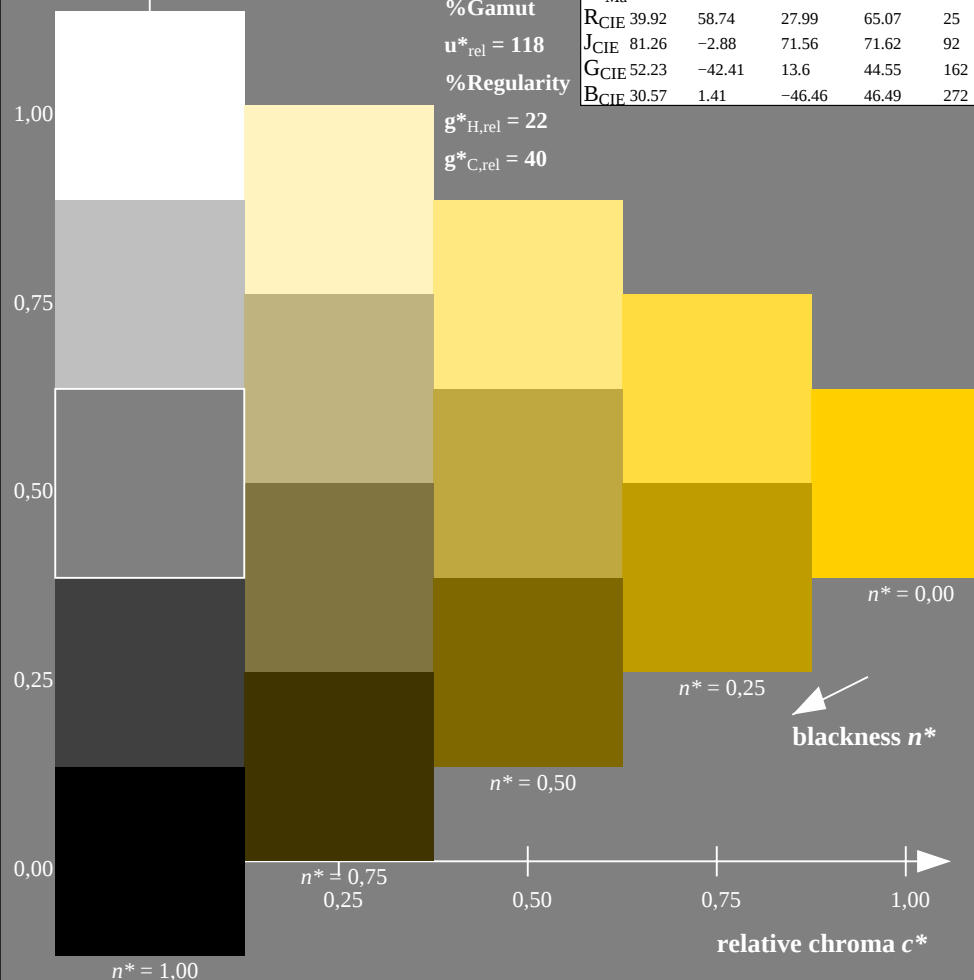
% Regularity

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

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

TLS18a; 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



IE420-7N, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

TUB-test chart IE42 for visual displays, Hue J, Page 8/11
Discrimination of 5 and 16 step colour scales, TLS18a

Output: Colorimetric Television Luminous System TLS18a

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

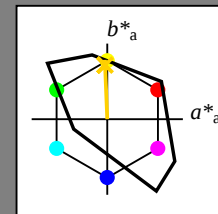
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 79 92

ol v^* Ma: 1.0 0.82 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 118$

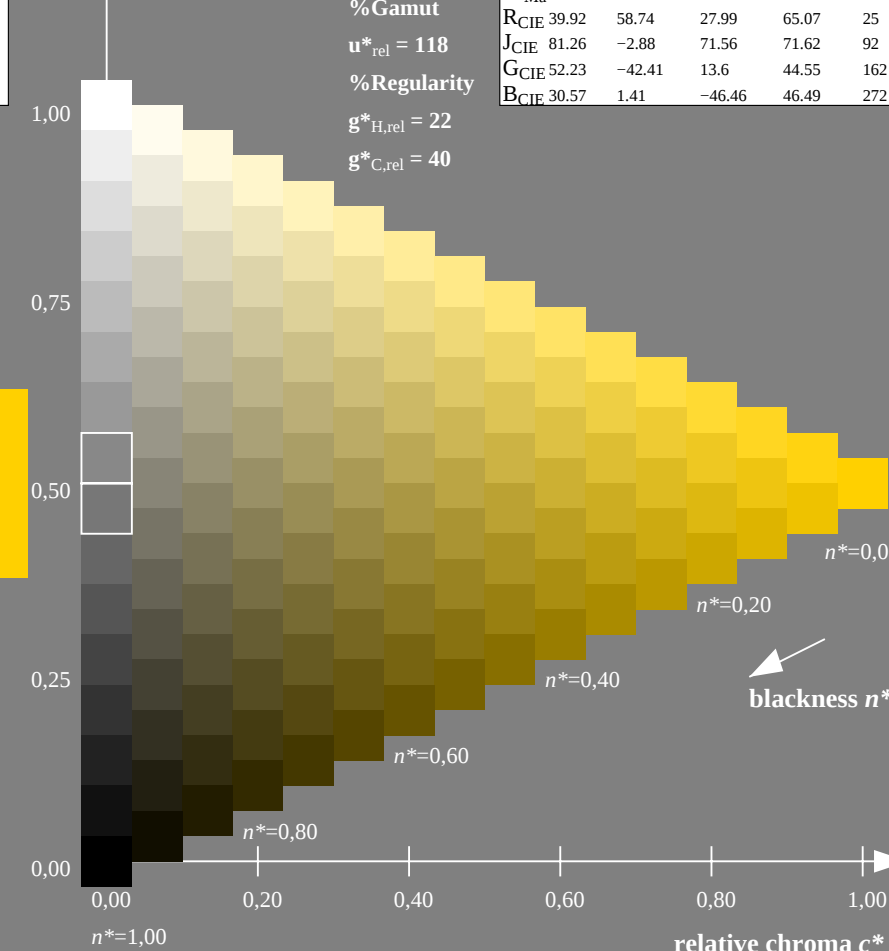
% Regularity

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

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

TLS18a; 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



16 step scales for constant CIELAB hue 92/360 = 0.256 (right)

input: rgb ($\rightarrow rgb^*$) $setrgbcolor$
output: no change compared to input

Input: Colorimetric Television Luminous System TLS18a

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

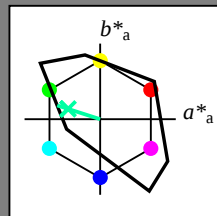
lab*tch and lab*nch

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

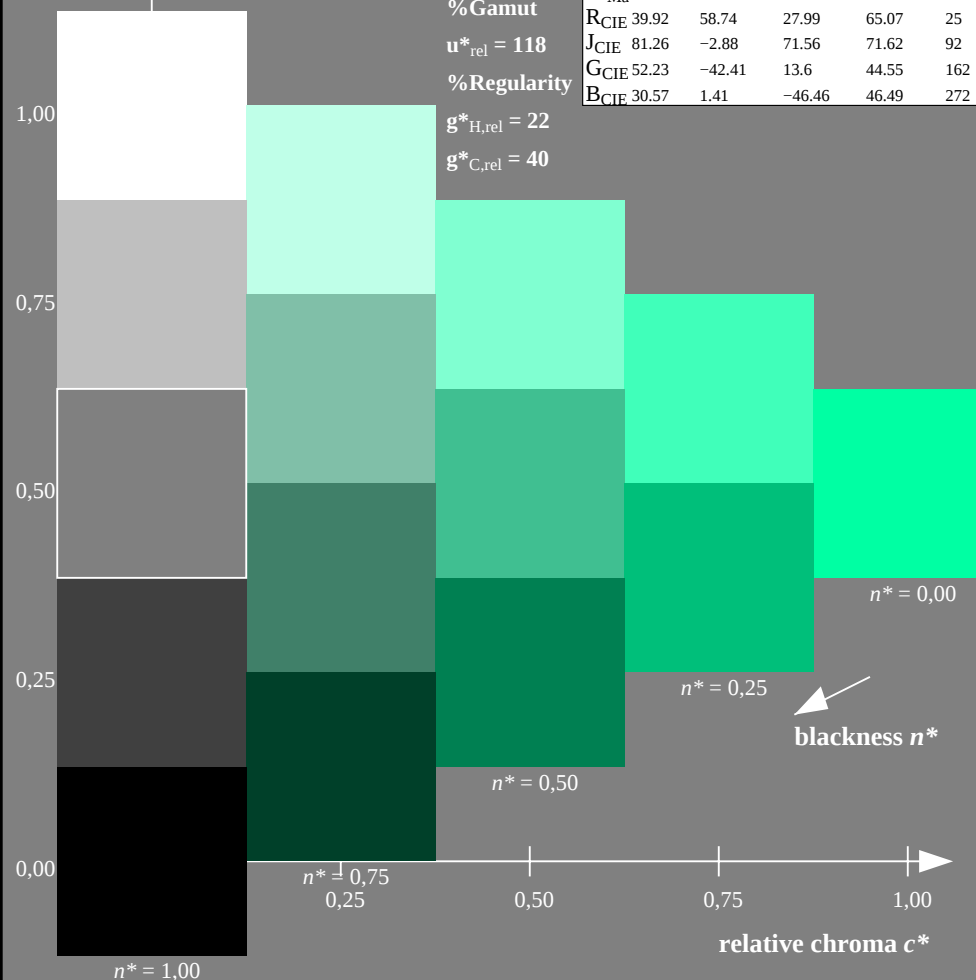
triangle lightness t^*



%Gamut

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

%Regularity

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


IE420-7N, 5 step scales for constant CIELAB hue $162/360 = 0.451$ (left)

TUB-test chart IE42 for visual displays, Hue G, Page 9/11
Discrimination of 5 and 16 step colour scales, TLS18a

Output: Colorimetric Television Luminous System TLS18a

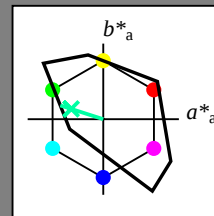
for hue $h^* = lab^*h = 162/360 = 0.451$

lab*tch and lab*nch

D65: hue G

LCH*Ma: 86 60 162

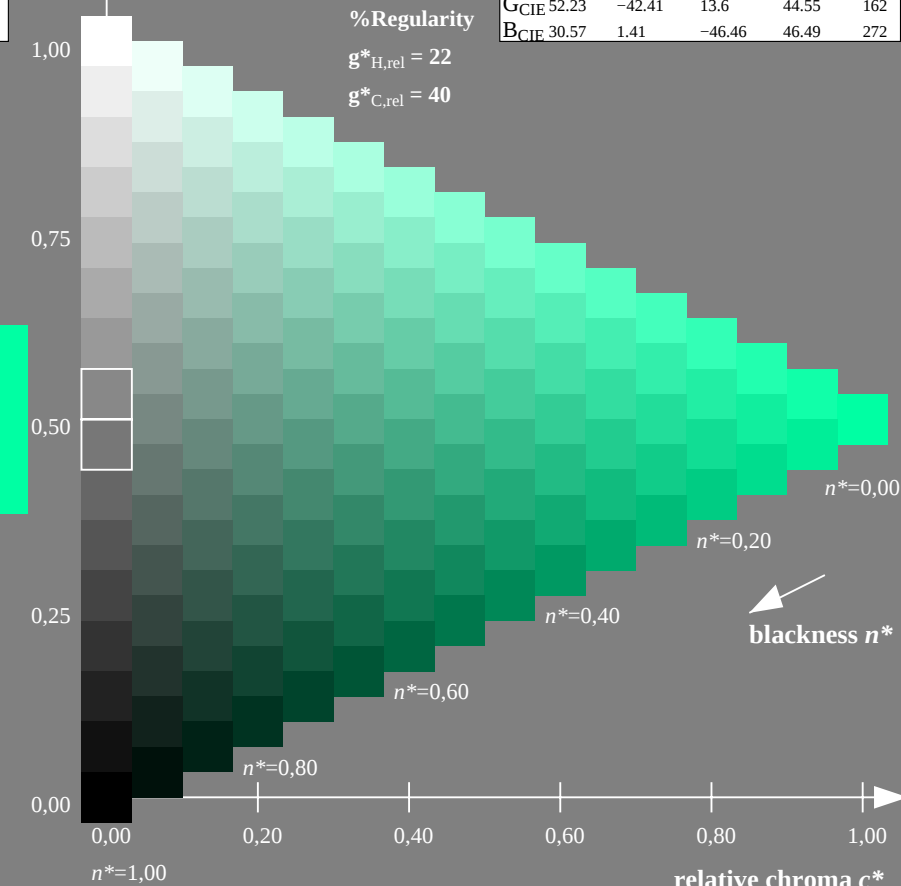
olv*Ma: 0.0 1.0 0.64

triangle lightness t^* 

%Gamut

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

%Regularity

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


16 step scales for constant CIELAB hue 162/360 = 0.451 (right)

input: *rgb* ($\rightarrow$ *rgb**) *setrgbcolor*
output: no change compared to input

Input: Colorimetric Television Luminous System TLS18a

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

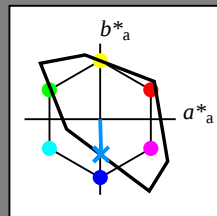
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 65 48 272

ol v^* Ma: 0.0 0.58 1.0

triangle lightness t^*



TLS18a; 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

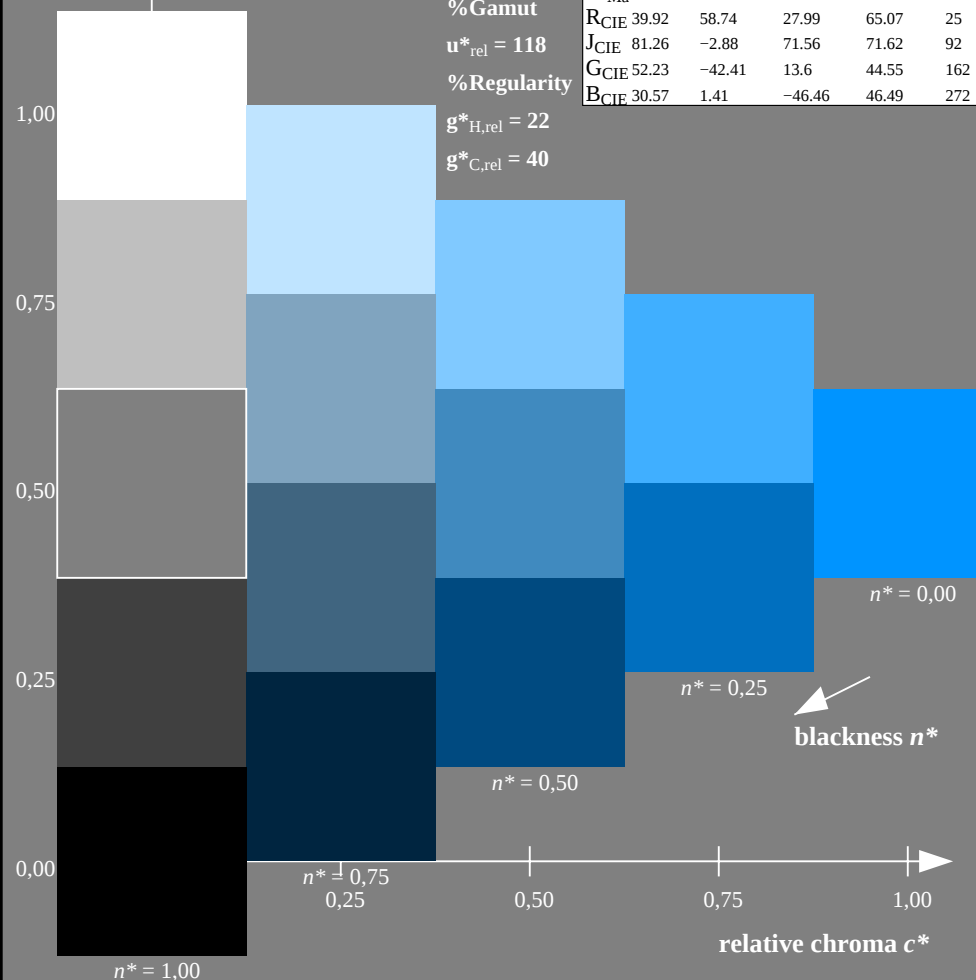
% Gamut

$u^*_{rel} = 118$

% Regularity

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

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



IE420-7N, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

TUB-test chart IE42 for visual displays, Hue B, Page 10/11
Discrimination of 5 and 16 step colour scales, TLS18a

Output: Colorimetric Television Luminous System TLS18a

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

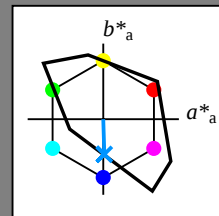
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 65 48 272

ol v^* Ma: 0.0 0.58 1.0

triangle lightness t^*



TLS18a; 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

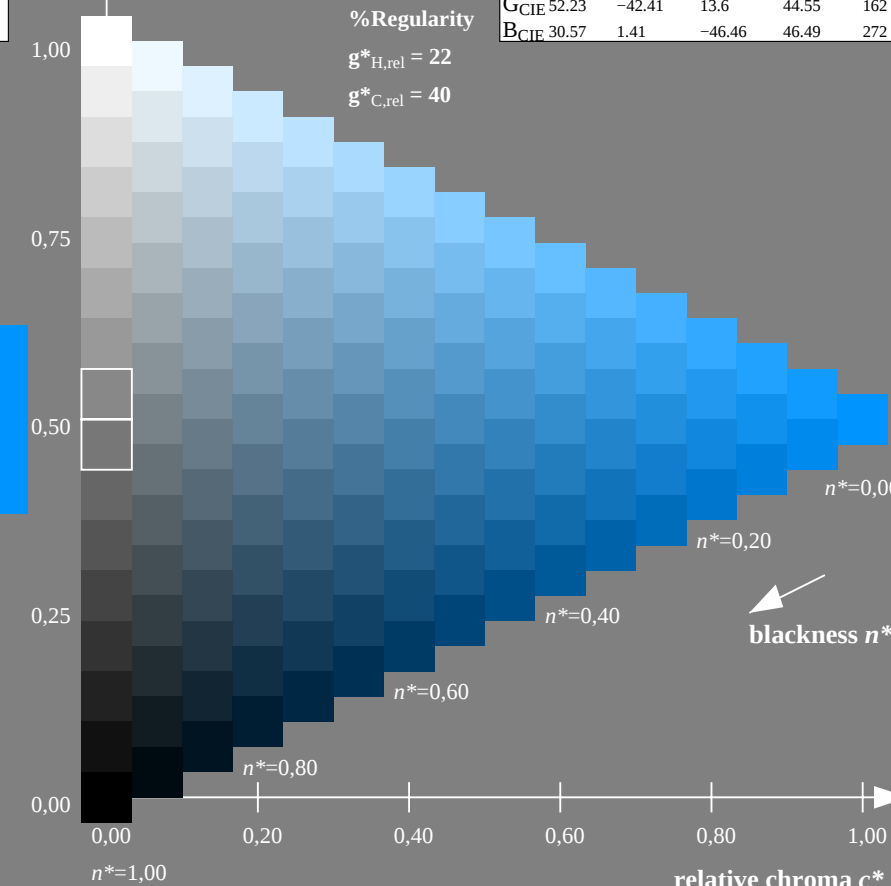
% Gamut

$u^*_{rel} = 118$

% Regularity

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

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

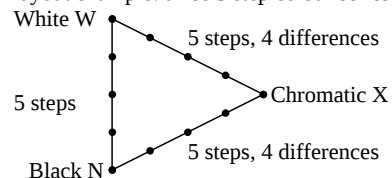


16 step scales for constant CIELAB hue 272/360 = 0.755 (right)

input: rgb ($\rightarrow rgb^*$) $setrgbcolor$
output: no change compared to input

Discriminability of 5 step colour series (Yes/No decision)

Layout example: three 5 step colour series



There are three basic colours on each page:
Black N, White W and Chromatic X.
Ten pages include 10 hue planes
X = OYLCVM and RJGB.
There are at maximum 12 distinguishable steps.

All steps of the three series N-W, W-X and X-N should be distinguishable on **all** pages.

Are the three 5step series distinguishable on all pages? underline: Yes/No

only in case of No: Are the three 5 step series on Page x of 10 pages distinguishable?

Underline Yes/No and give in case of No the number of distinguishable steps?

- Page 1: Yes/No, if No ../12 step differences are distinguishable of O = Orange Red
Page 2: Yes/No, if No ../12 step differences are distinguishable of Y = Yellow
Page 3: Yes/No, if No ../12 step differences are distinguishable of L = Leaf green
Page 4: Yes/No, if No ../12 step differences are distinguishable of C = Cyan blue
Page 5: Yes/No, if No ../12 step differences are distinguishable of V = Violet blue
Page 6: Yes/No, if No ../12 step differences are distinguishable of M = Magenta Red
Page 7: Yes/No, if No ../12 step differences are distinguishable of R = Elementary Red
Page 8: Yes/No, if No ../12 step differences are distinguishable of J = Elementary Yellow
Page 9: Yes/No, if No ../12 step differences are distinguishable of G = Elementary Green
Page 10: Yes/No, if No ../12 step differences are distinguishable of B = Elementary blue

Sum: ../10 Yes-Pages and ../120 step differences are distinguishable

Part 1

IE420-3

Documentation of file format, hardware and software for this test:

PDF-File: either xxx/IE42/IE42L00NP.PDF underline Yes/No
or xxx/IE42/IE42P00NP.PDF underline Yes/No
PS-File: either xxx/IE42/IE42L00NA.PS underline Yes/No
or xxx/IE42/IE42P00NA.PS underline Yes/No

Used computer operating system:

either one of Windows/Mac/Unix/other and version:.....

This evaluation is for the device output: underline monitor/data projector/printer

Device model, driver and version:.....

Device output with PDF/PS-file: underline PDF/PS-file

For device output with PDF-file IE42(L/P)00NP.PDF:

- either PDF-file transfer "download, copy" to PDF device.....
or with computer system interpretation by "Display-PDF":.....
or with software. e. g. Adobe-Reader/-Acrobat and version:.....
or with software e. g. Ghostscript and version:.....

For device output with PS-file IE42(L/P)00NA.PS:

- either PS-file transfer "download, copy" to PS device.....
or with computer system interpretation by "Display-PS":.....
or with software e. g. Ghostscript and version:.....
or with software e. g. Mac-Yap and version:.....

Special remarks, e. g. output of Landscape (L) file IE42L00NA.PS was cutted,
Portrait (P) file IE42P0NA.PS was used:.....

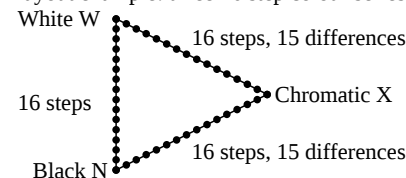
Part 3

IE420-5

Form A for TUB-test chart IE42 for visual displays, Page 11/11
Discriminability of colour scales (Yes/No decision)

Discriminability of 16 step colour series (Yes/No decision)

Layout example: three 16 step colour series



There are three basic colours on each page:
Black N, White W and Chromatic X.
Ten pages include 10 hue planes
X = OYLCVM and RJGB.
There are at maximum 45 distinguishable steps.

All steps of the three series N-W, W-X and X-N should be distinguishable on **all** pages.

Are the three 16step series distinguishable on all pages? underline: Yes/No

only in case of No: Are the three 16 step series on Page x of 10 pages distinguishable?

Underline Yes/No and give in case of No the number of distinguishable steps?

- Page 1: Yes/No, if No ../45 step differences are distinguishable of O = Orange Red
Page 2: Yes/No, if No ../45 step differences are distinguishable of Y = Yellow
Page 3: Yes/No, if No ../45 step differences are distinguishable of L = Leaf green
Page 4: Yes/No, if No ../45 step differences are distinguishable of C = Cyan blue
Page 5: Yes/No, if No ../45 step differences are distinguishable of V = Violet blue
Page 6: Yes/No, if No ../45 step differences are distinguishable of M = Magenta Red
Page 7: Yes/No, if No ../45 step differences are distinguishable of R = Elementary Red
Page 8: Yes/No, if No ../45 step differences are distinguishable of J = Elementary Yellow
Page 9: Yes/No, if No ../45 step differences are distinguishable of G = Elementary Green
Page 10: Yes/No, if No ../45 step differences are distinguishable of B = Elementary blue

Sum: ../10 Yes-Pages and ../450 step differences are distinguishable

Part 2

IE421-3

Documentation of assessor colour vision properties for visual assessment

The assessor has **normal** colour vision according to one test:

- either according to DIN 6160:1996 with Anomaloskop of Nagel underline Yes/No
or with test charts using colour points according to Ishihara underline Yes/unknown
or tested with, please specify: underline Yes/unknown

Only for display (monitor, data projector) output:

- Office workplace illumination is daylight (clouded/north sky) underline Yes/No
PDF-file output with xxx/IE43/IE43L0NP.PDF underline Yes/No
Comparison of contrast range of 16 steps F to 0 with test chart Annex B of ISO 9241-306:2008
give contrast range: (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)
Remark: In daylighted offices the contrast range is in many cases:
on paper between: >F:0 (highly glossy), F:0 (silk glossy) and E:0 (matte)
on display between: >F:0 and E:0 (monitor), D:0 and 3:0 (data projector)

Only for optional colorimetric specification with PDF/PS file output

PDF-File: either xxx/IE41/IE41L0NP.PDF underline Yes/No
or xxx/IE41/IE41P0NP.PDF underline Yes/No
PS-File: either xxx/IE41/IE41L0NA.PS underline Yes/No
or xxx/IE41/IE41P0NA.PS underline Yes/No

colour measurement and specification for:

CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: underline Yes/No
If No, please give other parameters:

Colorimetric specification with PS file for colours in the columns A to T

Exchange of CIELAB data in file xxx/IE47/IE47L0NP.PS and transfer
of the PS-file IE47L0NP.PS in PDF-file IE47L0NP.PDF underline Yes/No
If No, please describe other method:

Part 4

IE421-5

input: *rgb (->olv*) setrgbcOLOR*
output: no change compared to input