

Input: Colorimetric Television Luminous System TLS18

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

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

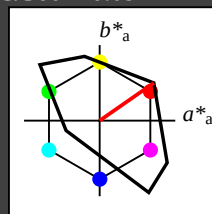
D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 118$

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

%Regularity

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

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

Output: Colorimetric Television Luminous System TLS18

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

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

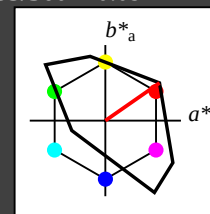
D65: hue O

LCH*Ma: 53 87 35

olv*Ma: 1.0 0.0 0.0

triangle lightness

1,00



%Gamut

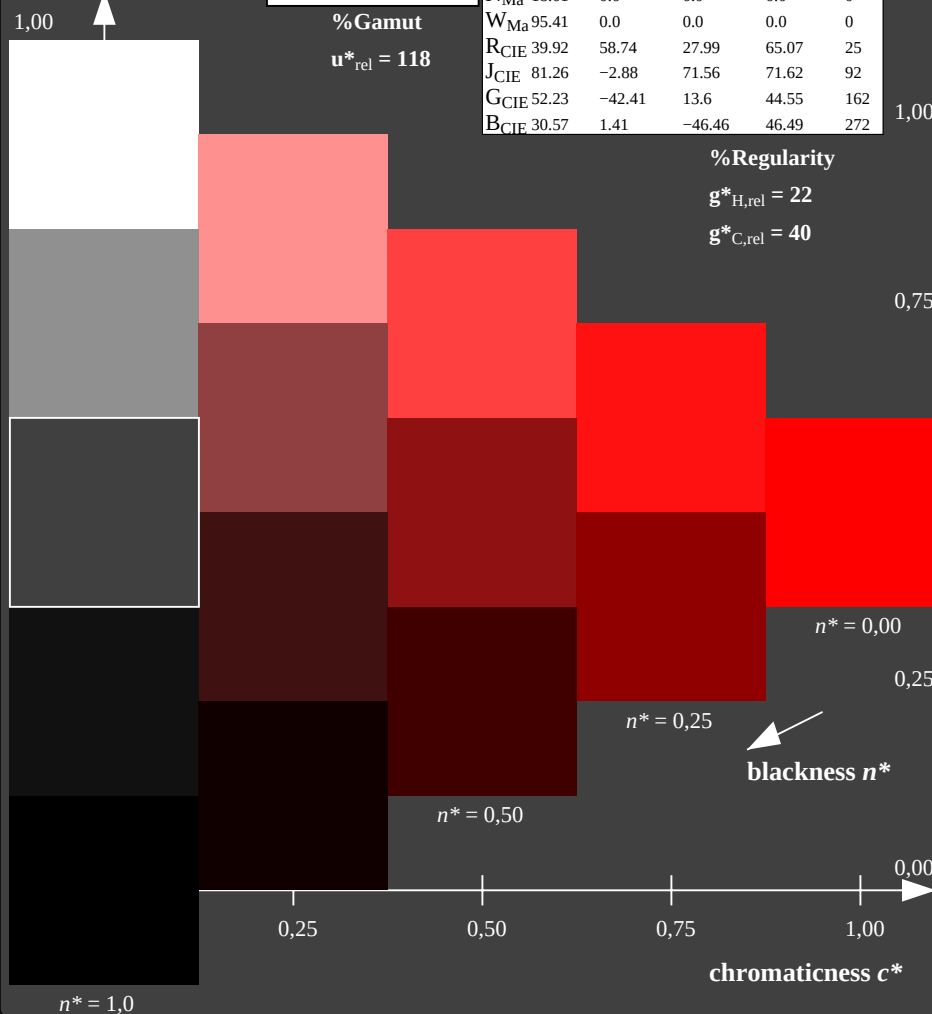
$u^*_{rel} = 118$

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

%Regularity

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

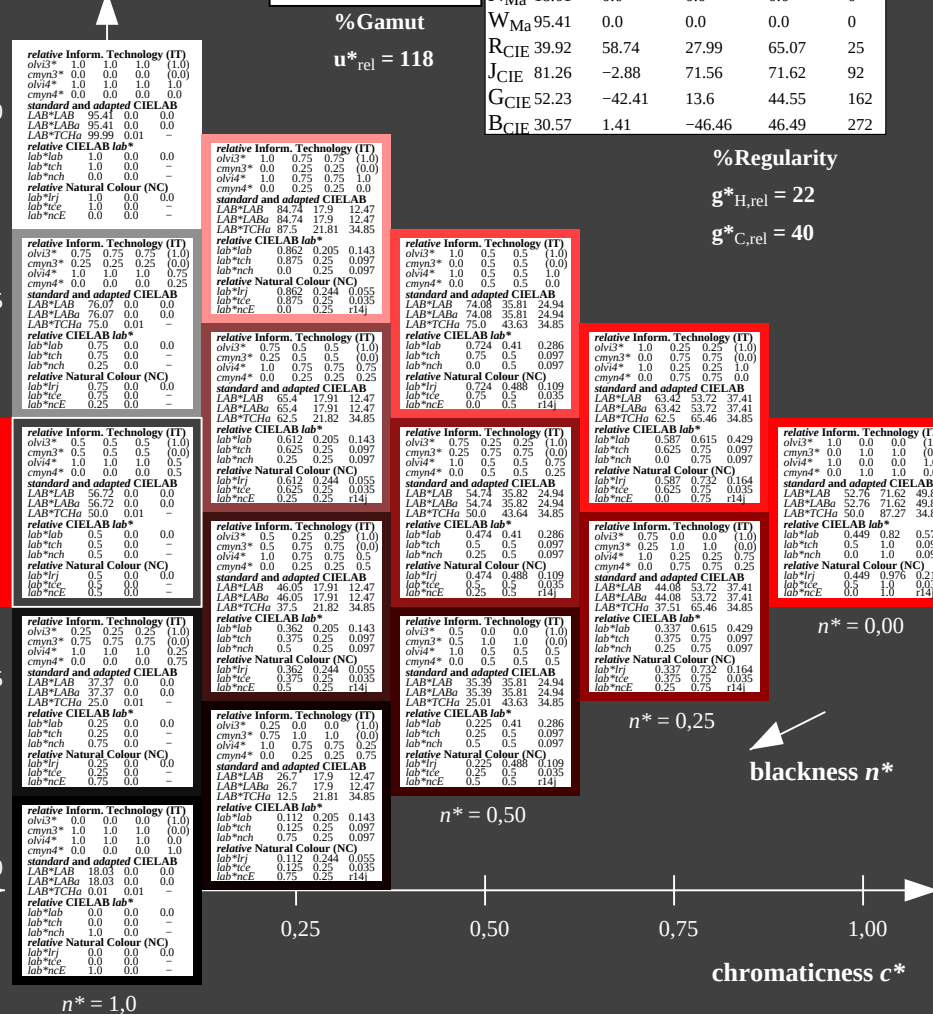
$g^*_{C,rel} = 40$



NE490-7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues



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

input: $olv \cdot setrgbcolor$

output: $olv \cdot setrgbcolor / w^* \cdot setgray$

Input: Colorimetric Television Luminous System TLS18

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

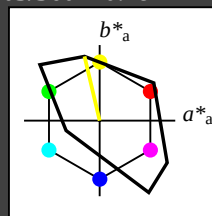
$lab \cdot tch$ and $lab \cdot nch$

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness



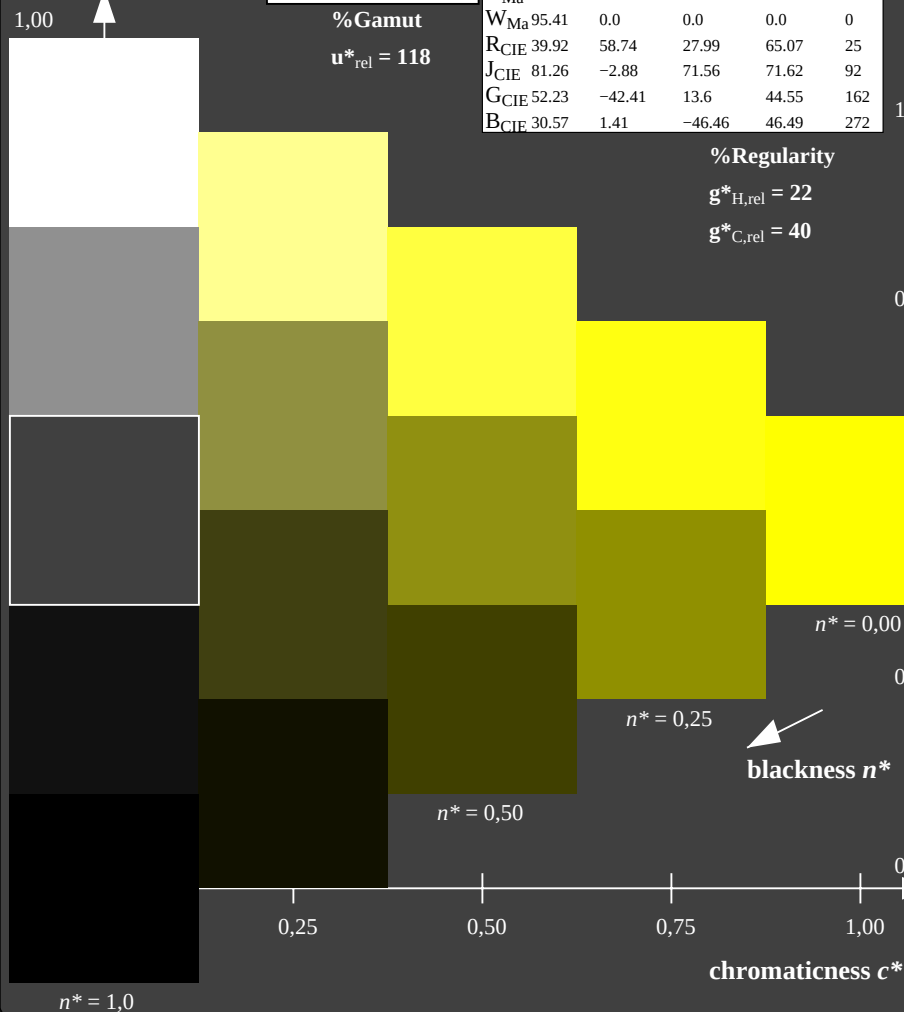
TLS18; adapted (a) CIELAB data

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

%Regularity

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

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



NE490-7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)

BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS18

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

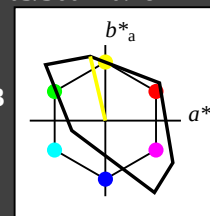
$lab \cdot tch$ and $lab \cdot nch$

D65: hue Y

LCH*Ma: 93 87 103

olv*Ma: 1.0 1.0 0.0

triangle lightness



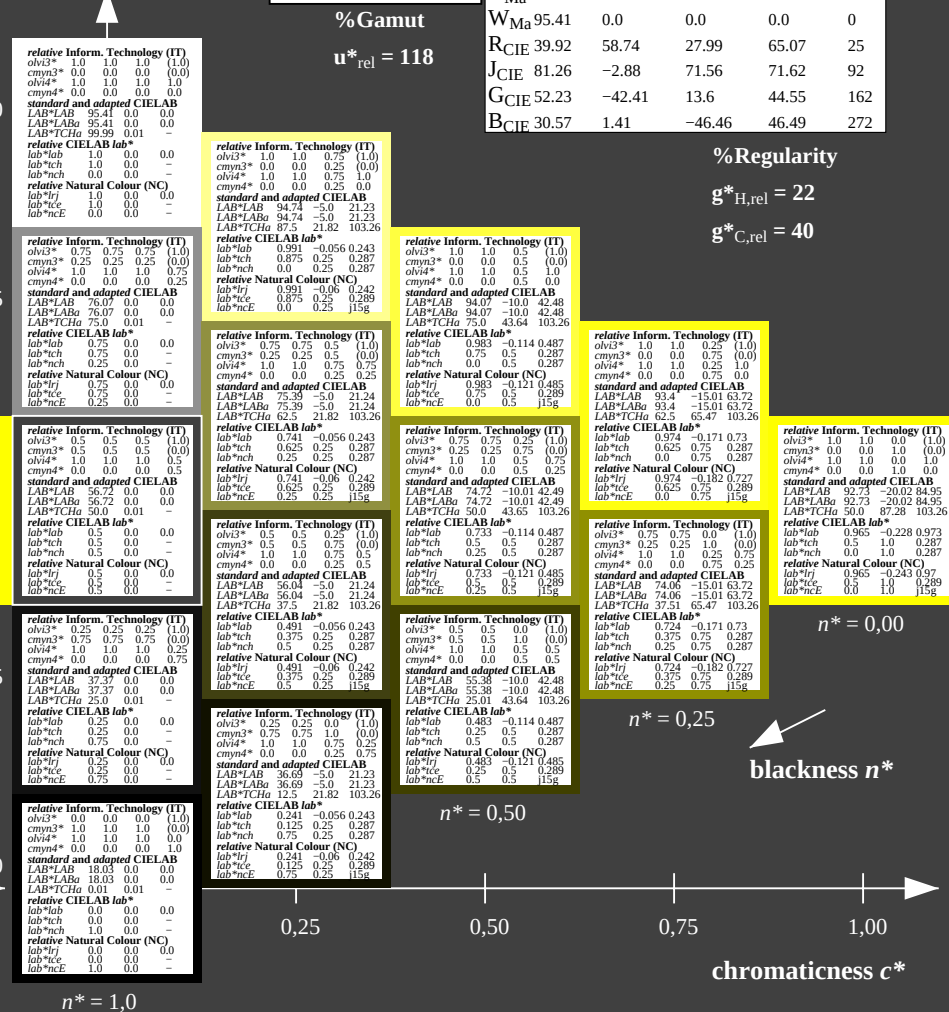
TLS18; adapted (a) CIELAB data

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

%Regularity

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

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



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

input: $olv \cdot setrgbcolor$

output: $olv \cdot setrgbcolor / w \cdot setgray$

Input: Colorimetric Television Luminous System TLS18

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

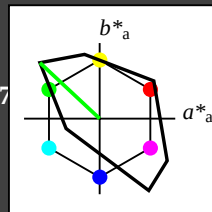
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness



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

%Regularity

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

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

Output: Colorimetric Television Luminous System TLS18

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

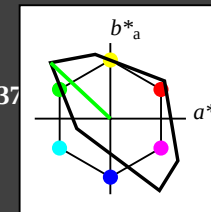
$lab \cdot tch$ and $lab \cdot nch$

D65: hue L

LCH*Ma: 84 108 137

olv*Ma: 0.0 1.0 0.0

triangle lightness

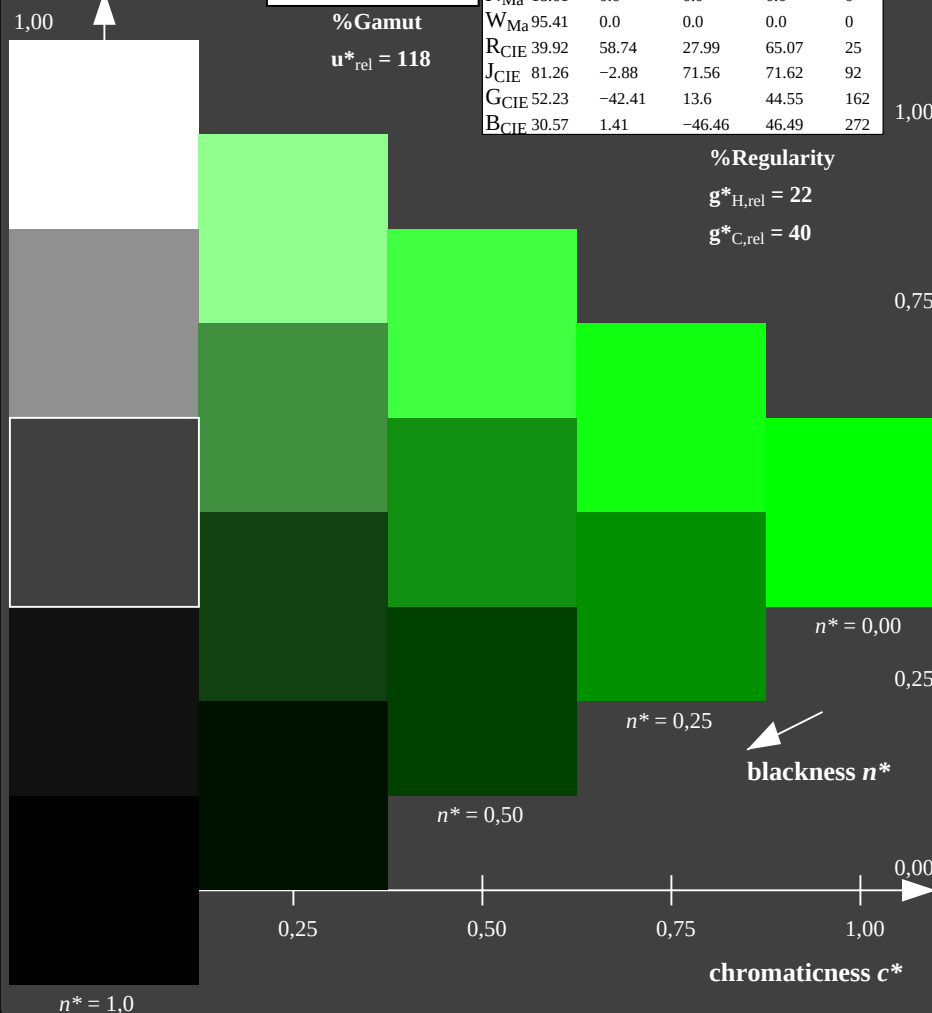


TLS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	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

%Regularity

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

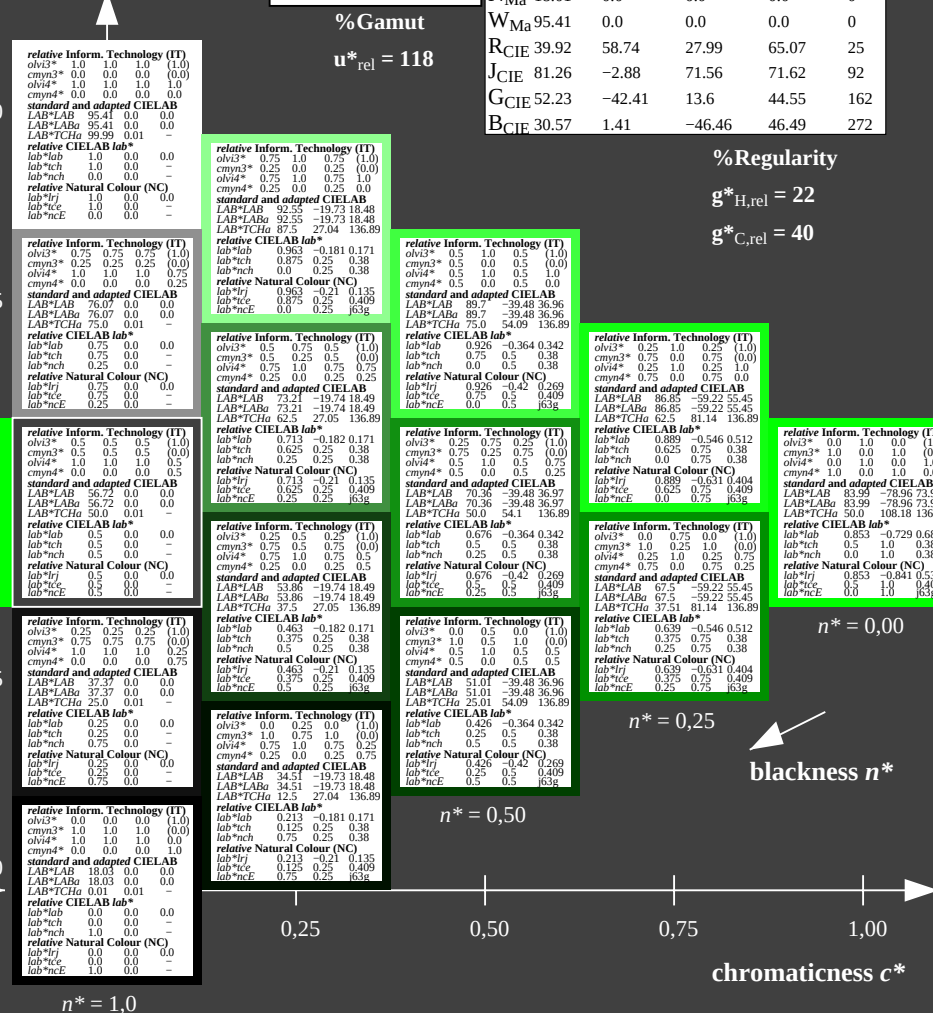
$g^*_{C,rel} = 40$



NE490-7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues



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

input: $olv^* \cdot setrgbcolor$

output: $olv^* \cdot setrgbcolor / w^* \cdot setgray$

Input: Colorimetric Television Luminous System TLS18

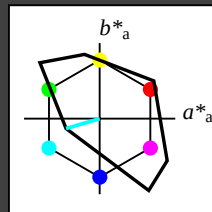
for hue $h^* = lab \cdot h = 196/360 = 0.546$

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

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 118$

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

%Regularity

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

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

1,00

relative Inform. Technology (IT)					
olvi3*	1.0	1.0	1.0	(1.0)	
olvi3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
olvi4*	0.0	0.0	0.0	(0.0)	
olvi4*	0.0	0.0	0.0	(0.0)	

standard and adapted CIELAB					
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		

relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

relative Natural Colour (NC)					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

standard and adapted CIELAB					
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		

relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

relative Natural Colour (NC)					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

standard and adapted CIELAB					
LAB*LAB	95.41	0.0	0.0		
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LAB*LAB	95.41	0.0	0.0		

relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

relative Natural Colour (NC)					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
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standard and adapted CIELAB					
LAB*LAB	95.41	0.0	0.0		
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LAB*LAB	95.41	0.0	0.0		
LAB*LAB	95.41	0.0	0.0		

relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

relative Natural Colour (NC)					
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		
lab*lab	1.0	0.0	0.0		

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

BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $olv^* \cdot setrgbcolor$

output: $olv^* \cdot setrgbcolor / w^* \cdot setgray$

Input: Colorimetric Television Luminous System TLS18

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

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

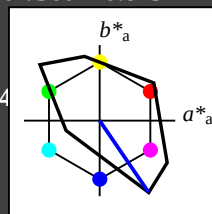
D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00



% Gamut

$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data

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

% Regularity

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

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

1,00

Output: Colorimetric Television Luminous System TLS18

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

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

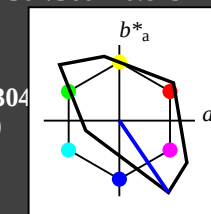
D65: hue V

LCH*Ma: 35 115 304

olv*Ma: 0.0 0.0 1.0

triangle lightness

1,00



% Gamut

$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data

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

% Regularity

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

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

1,00

NE490-7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)



BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

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

input: $olv \cdot setrgbcolor$

output: $olv \cdot setrgbcolor / w \cdot setgray$



Input: Colorimetric Television Luminous System TLS18

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

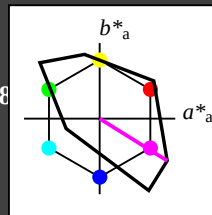
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness



%Gamut

$u^*_{rel} = 118$

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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

Output: Colorimetric Television Luminous System TLS18

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

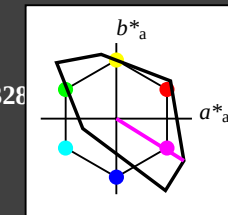
$lab \cdot tch$ and $lab \cdot nch$

D65: hue M

LCH*Ma: 59 105 328

olv*Ma: 1.0 0.0 1.0

triangle lightness



%Gamut

$u^*_{rel} = 118$

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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

0,25

0,50

$n^* = 0,50$

chromaticness c^*

1,00

$n^* = 0,25$

blackness n^*

0,75

1,00

NE490-7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)



BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

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

input: $olv \cdot setrgbcolor$

output: $olv \cdot setrgbcolor / w^* \cdot setgray$



Input: Colorimetric Television Luminous System TLS18

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

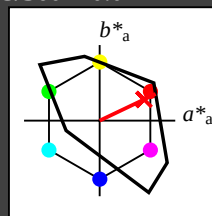
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness



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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

Output: Colorimetric Television Luminous System TLS18

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

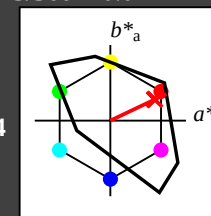
$lab \cdot tch$ and $lab \cdot nch$

D65: hue R

LCH*Ma: 54 82 25

olv*Ma: 1.0 0.0 0.14

triangle lightness



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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

1,00

NE490-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)



BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

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

input: $olv^* \cdot setrgbcolor$

output: $olv^* \cdot setrgbcolor / w^* \cdot setgray$

Input: Colorimetric Television Luminous System TLS18

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

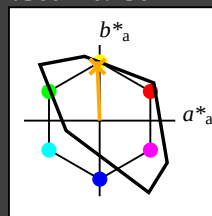
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness



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

%Regularity

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

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

Output: Colorimetric Television Luminous System TLS18

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

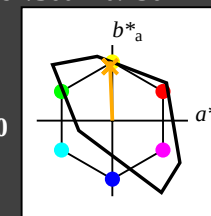
$lab \cdot tch$ and $lab \cdot nch$

D65: hue J

LCH*Ma: 85 79 92

olv*Ma: 1.0 0.82 0.0

triangle lightness

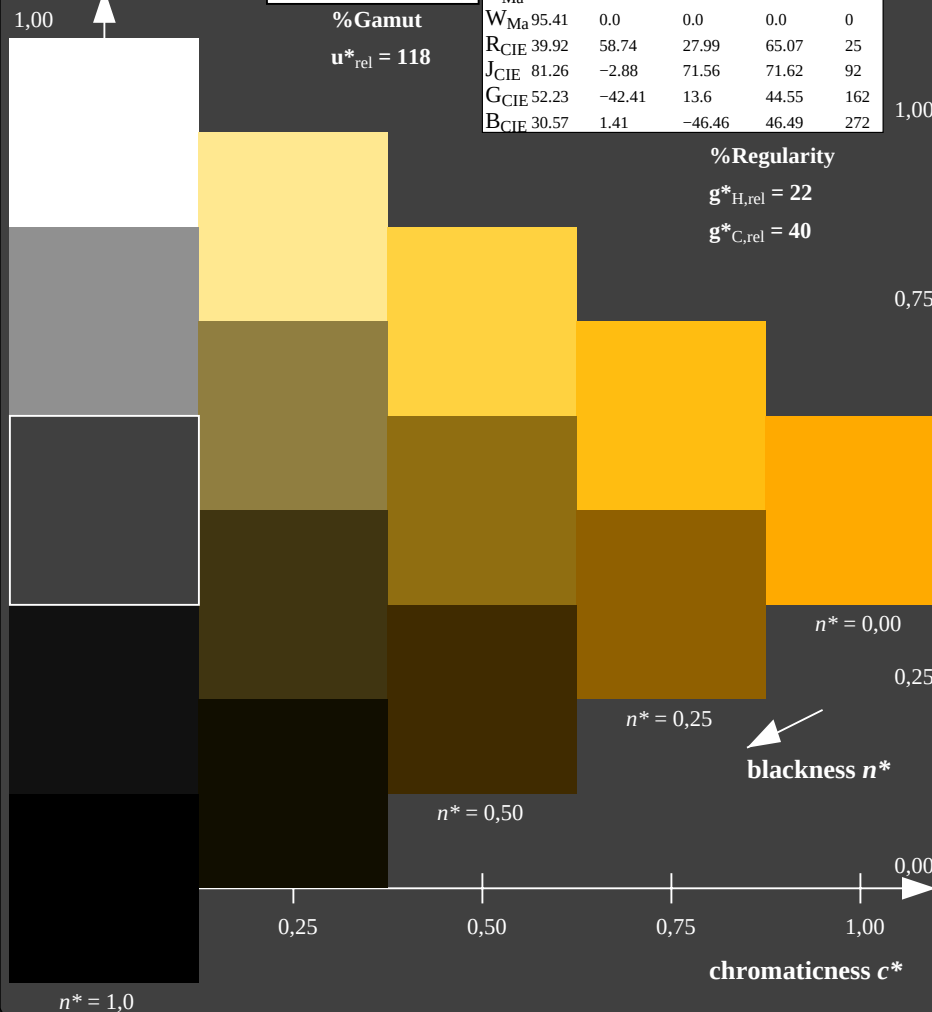


TLS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	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

%Regularity

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

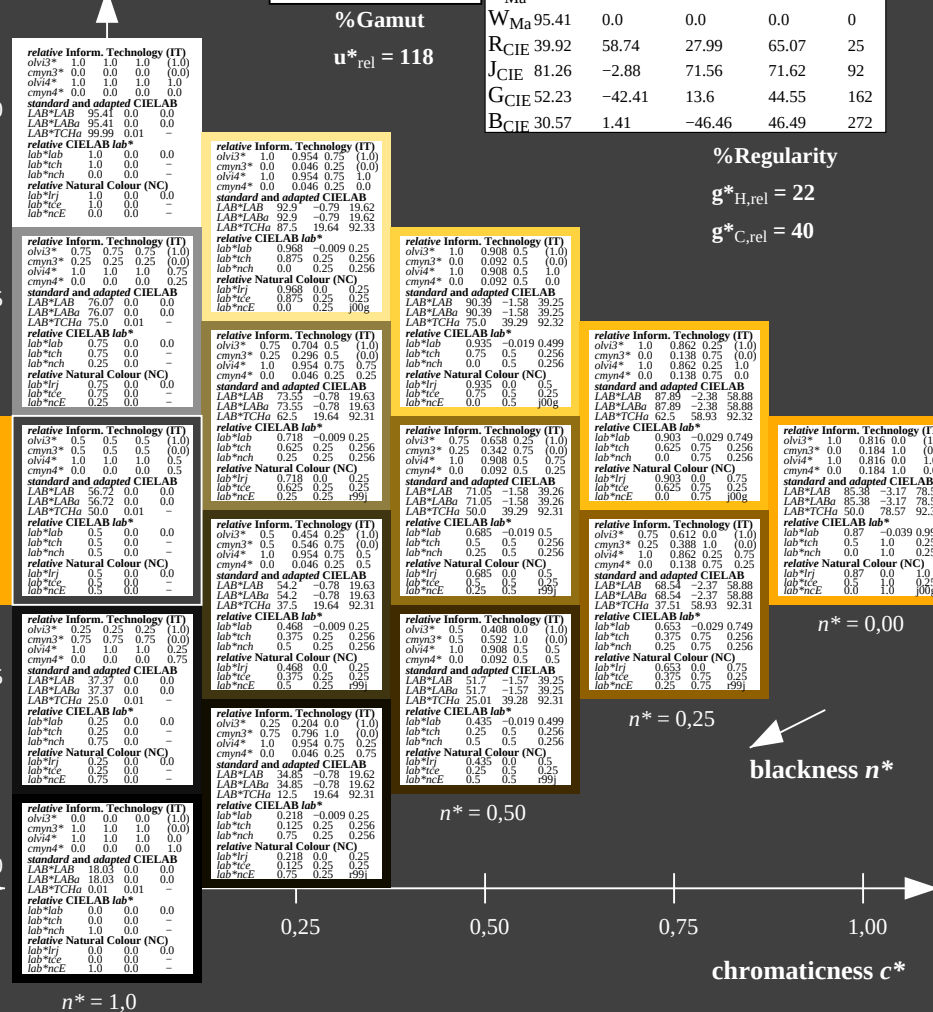
$g^*_{C,rel} = 40$



NE490-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues



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

input: $olv \cdot setrgbcolor$

output: $olv \cdot setrgbcolor / w \cdot setgray$

Input: Colorimetric Television Luminous System TLS18

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

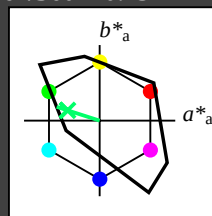
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness



%Gamut

$u^*_{rel} = 118$

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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

Output: Colorimetric Television Luminous System TLS18

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

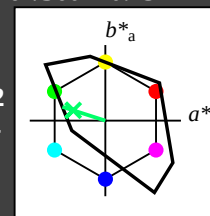
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 86 60 162

olv*Ma: 0.0 1.0 0.64

triangle lightness



%Gamut

$u^*_{rel} = 118$

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

%Regularity

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

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

NE490-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)



BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

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

input: $olv^* \cdot setrgbcolor$

output: $olv^* \cdot setrgbcolor / w^* \cdot setgray$



Input: Colorimetric Television Luminous System TLS18

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

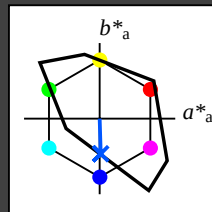
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness

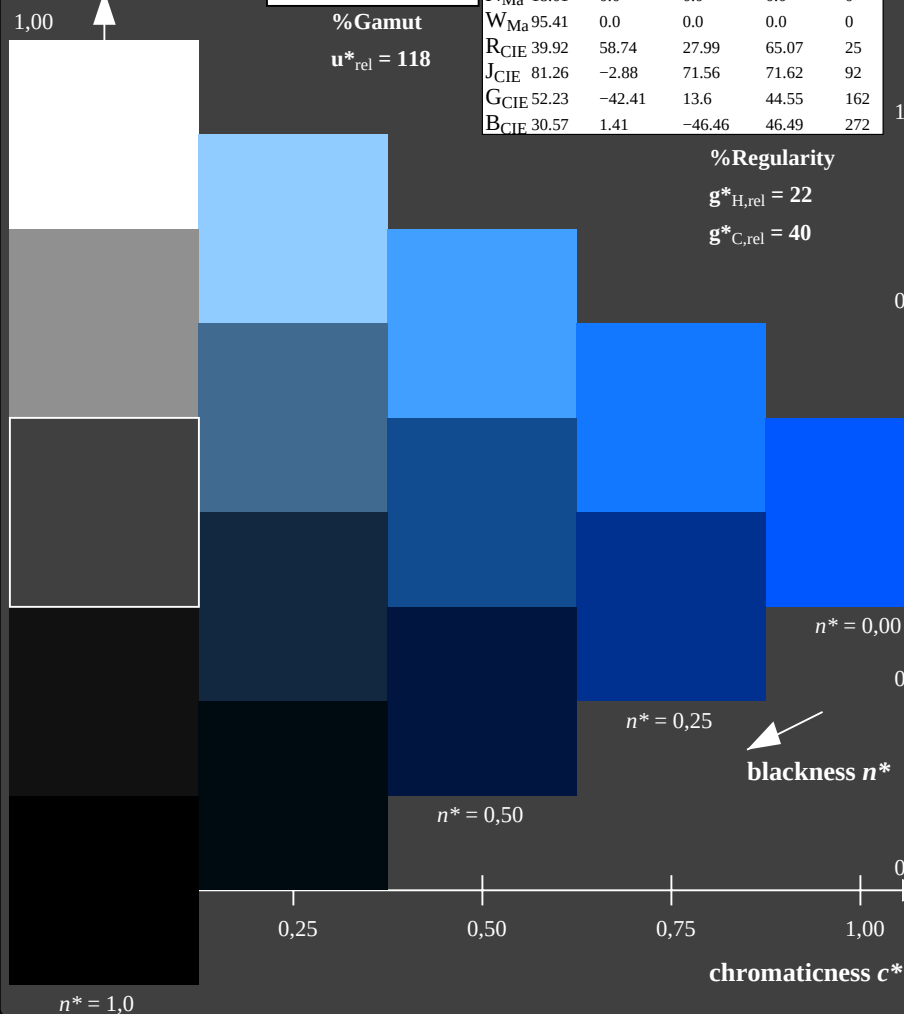


TLS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	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

%Regularity

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

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



NE490-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)



BAM-test chart NE49; Colorimetric systems TLS18 & TLS18

D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Television Luminous System TLS18

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

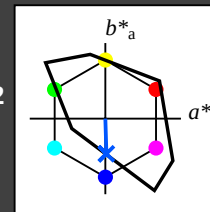
$lab \cdot tch$ and $lab \cdot nch$

D65: hue B

LCH*Ma: 65 48 272

olv*Ma: 0.0 0.58 1.0

triangle lightness

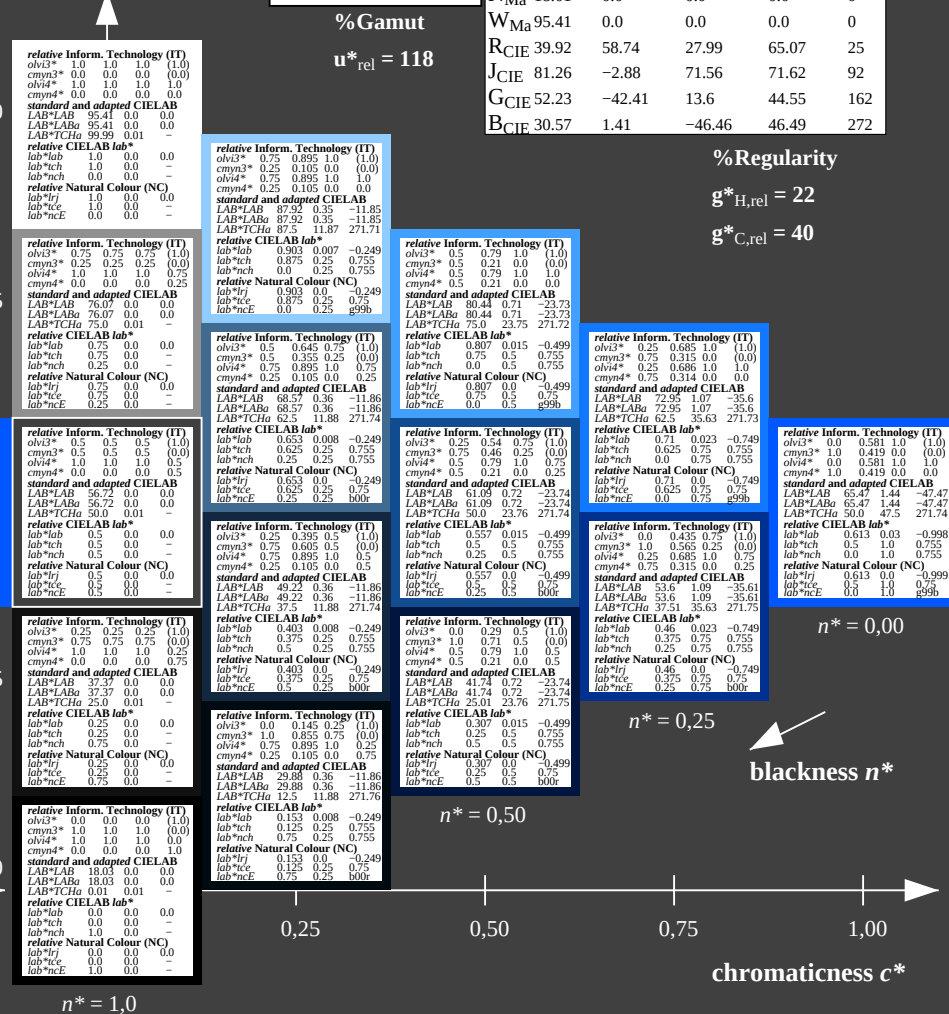


TLS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	52.76	71.63	49.88	87.29	35
Y _{Ma}	92.74	-20.02	84.97	87.3	103
L _{Ma}	84.0	-78.98	73.94	108.2	137
C _{Ma}	87.14	-44.41	-13.11	46.32	196
V _{Ma}	35.47	64.92	-95.06	115.12	304
M _{Ma}	59.01	89.33	-55.67	105.26	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

%Regularity

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

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



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

input: $olv \cdot setrgbcolor$

output: $olv \cdot setrgbcolor / w \cdot setgray$