

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 25/360 = 0.069$

lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.0 0.0

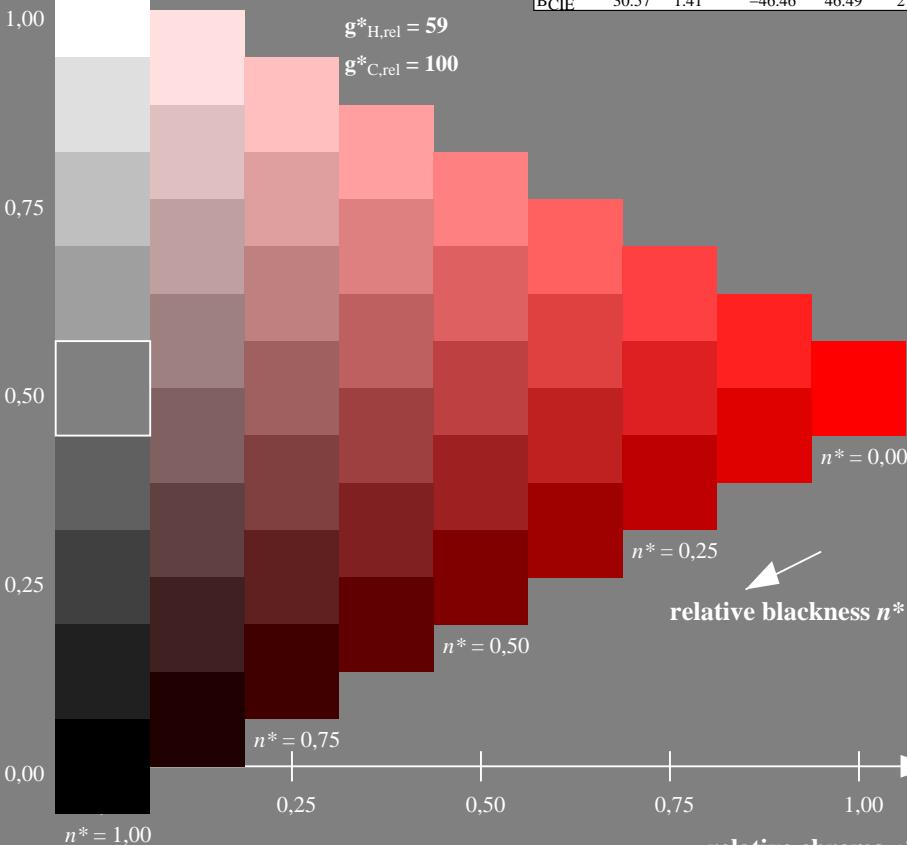
triangle lightness t^*



%Gamut
 $u^*_{rel} = 100$
 %Regularity

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

$g^*_{C,rel} = 100$



CNS18; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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 TLS00

for hue $h^* = lab^*h = 25/360 = 0.069$

lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 52 89 25

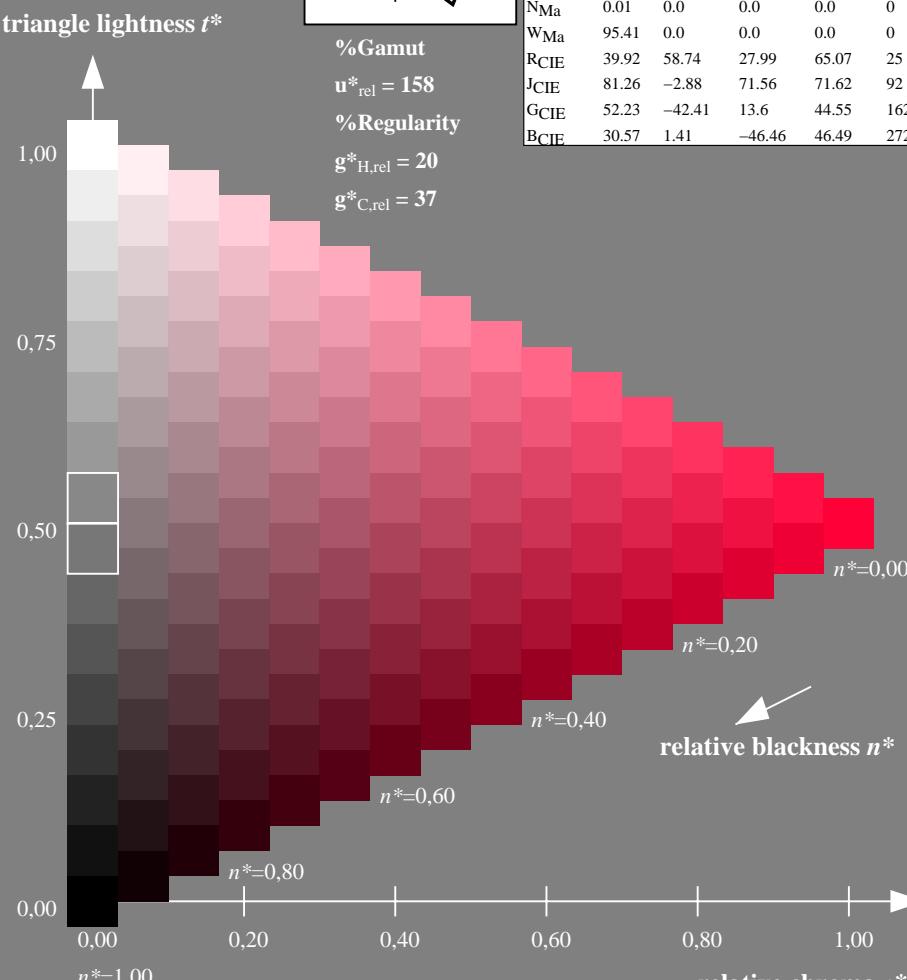
olv*Ma: 1.0 0.0 0.22



%Gamut
 $u^*_{rel} = 158$
 %Regularity

$g^*_{H,rel} = 20$

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



TLS00; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	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

BAM registration: 20080101-VE59/10L/L59E00NP.PS/.PDF BAM material: code=rha4ta
 application for evaluation and measurement of printer or monitor systems

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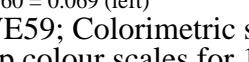
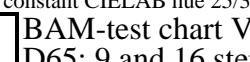
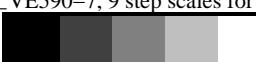
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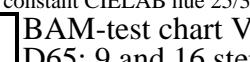
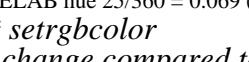
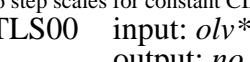
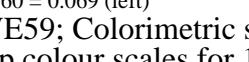
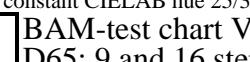
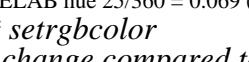
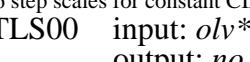
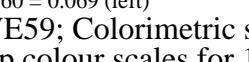
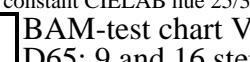
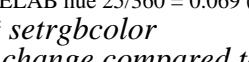
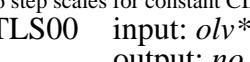
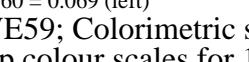
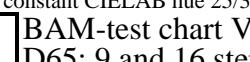
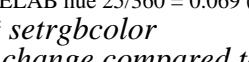
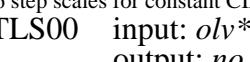
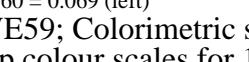
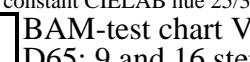
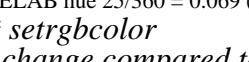
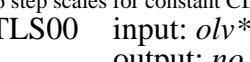
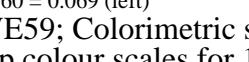
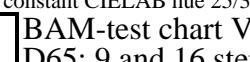
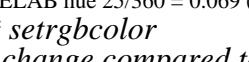
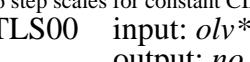
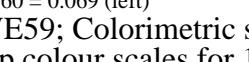
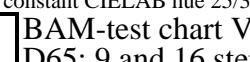
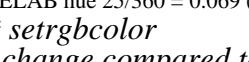
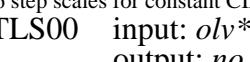
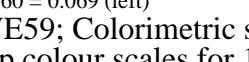
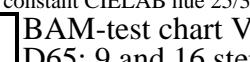
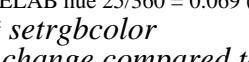
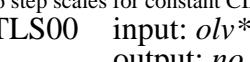
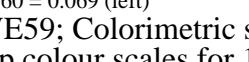
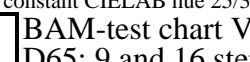
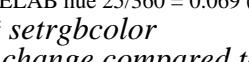
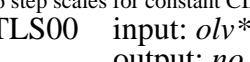
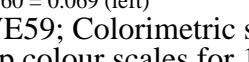
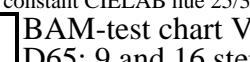
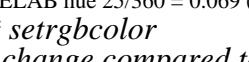
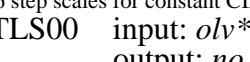
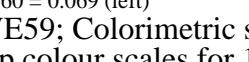
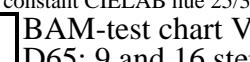
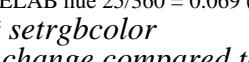
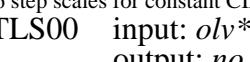
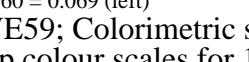
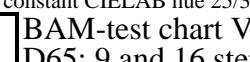
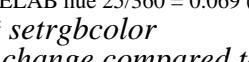
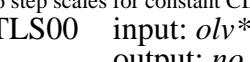
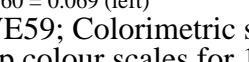
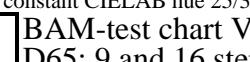
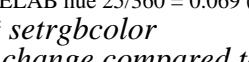
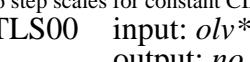
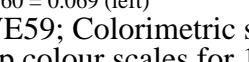
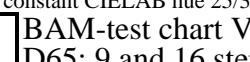
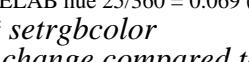
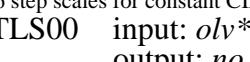
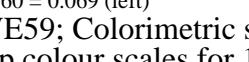
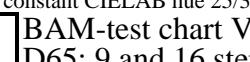
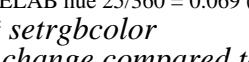
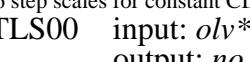
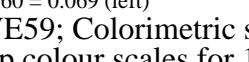
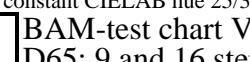
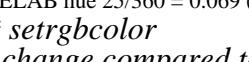
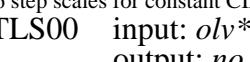
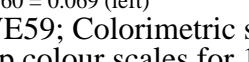
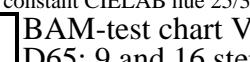
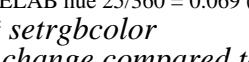
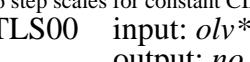
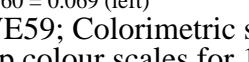
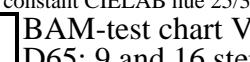
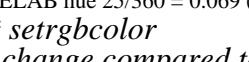
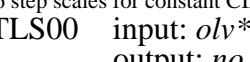
See for similar files: <http://www.ps.bam.de/VE59/> Version 2.1, io=1,1

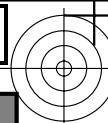
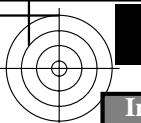
Technical information: <http://www.ps.bam.de>

VE59-7, 9 step scales for constant CIELAB hue 25/360 = 0.069 (left)



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





Input: Colorimetric Natural Reflective System CNS18

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

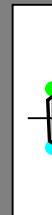
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 57 77 92

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



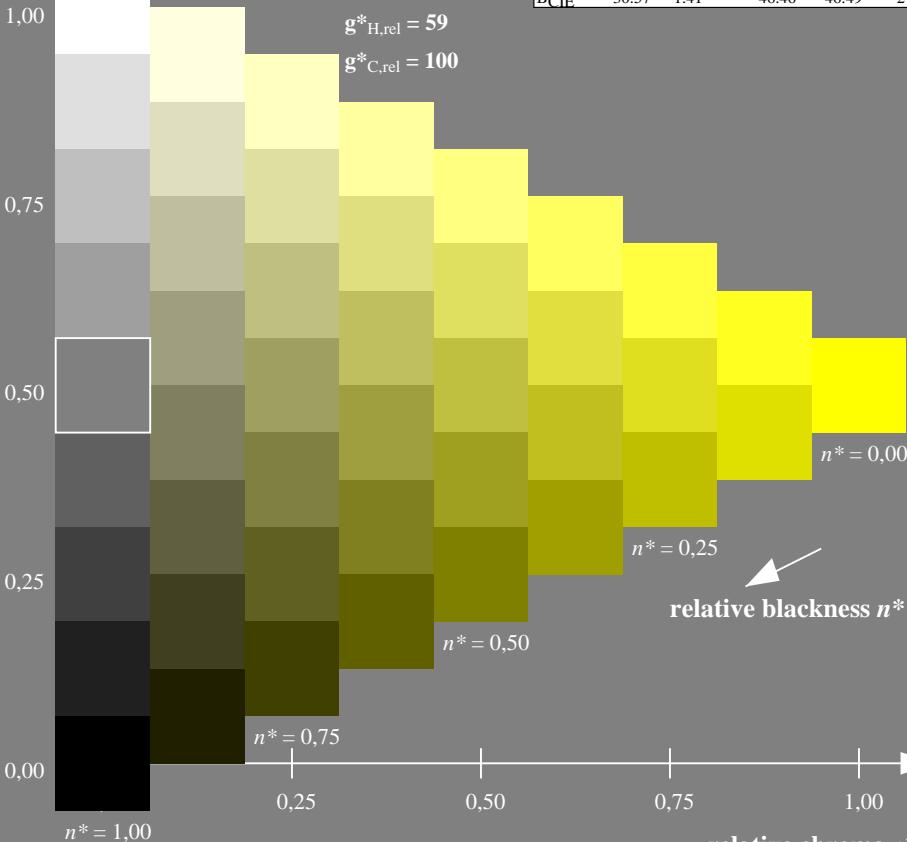
%Gamut

$u^*_{rel} = 100$

%Regularity

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

$g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

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

lab^*tch and lab^*nch

D65: hue Y

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



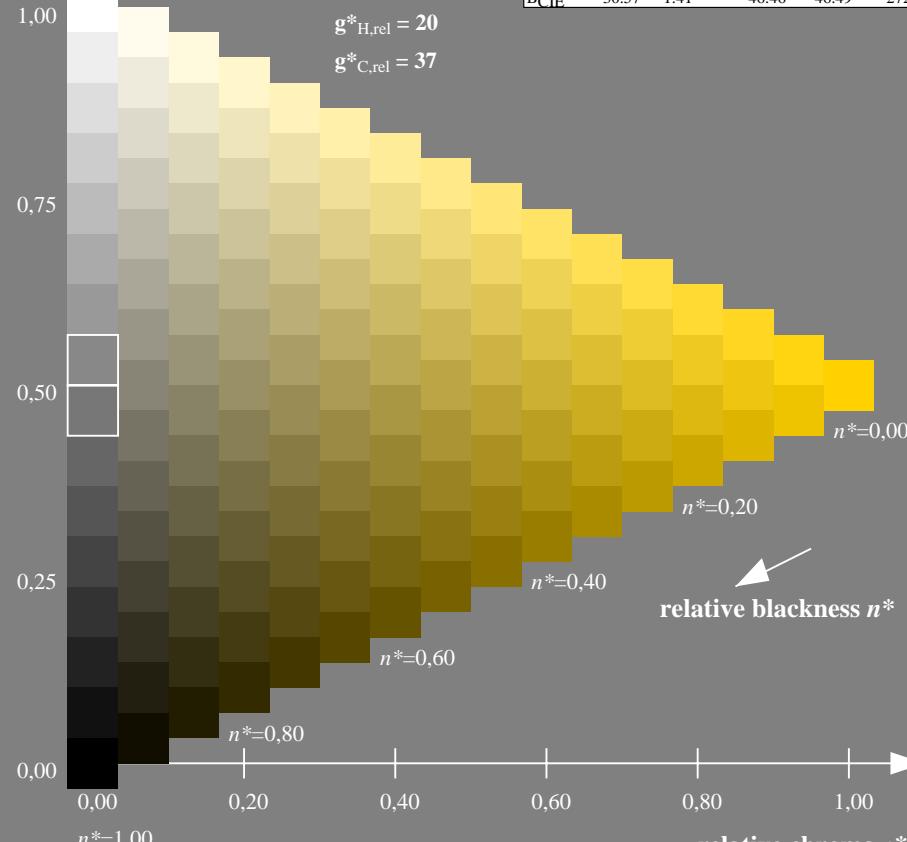
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

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



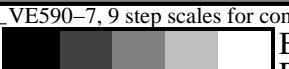
BAM registration: 20080101-VE59/10L/L59E01NP.PDF BAM material: code=rha4ta
 application for evaluation and measurement of printer or monitor systems

/VE59 / Form 2/10, Serie: 1/1, Page: 2
 Page: count: 1

Technical information: http://www.ps.bam.de
 Version 2.1, io=1,1

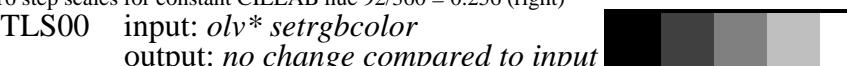


VE590-7, 9 step scales for constant CIELAB hue 92/360 = 0.256 (left)



BAM-test chart VE59; Colorimetric systems CNS18 & TLS00
 D65: 9 and 16 step colour scales for 10 hues

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



input: olv* setrgbcolor
 output: no change compared to input

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 162/360 = 0.45$

lab*tch and lab*nch

D65: hue G

LCH*Ma: 57 77 162

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*

b^*_a

a^*_a

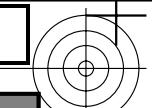
L^*

a^*_a

b^*_a

L^*

a^*_a



Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 203/360 = 0.564$

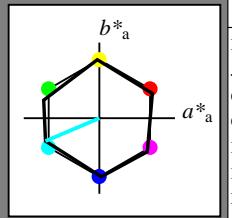
lab^*tch and lab^*nch

D65: hue G50B

LCH*Ma: 57 77 203

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



1,00
0,75
0,50
0,25
0,00

%Gamut
 $u^*_{rel} = 100$
%Regularity
 $g^*_{H,rel} = 59$
 $g^*_{C,rel} = 100$

CNS18; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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 TLS00

for hue $h^* = lab^*h = 203/360 = 0.564$

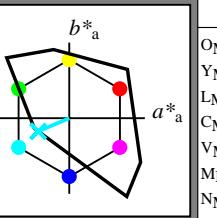
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 84 45 203

olv*Ma: 0.0 0.96 1.0

triangle lightness t^*



1,00
0,75
0,50
0,25
0,00

%Gamut
 $u^*_{rel} = 158$
%Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

TLS00; adapted (a) CIELAB data

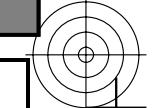
	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	95.41	0.0	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

See for similar files: <http://www.ps.bam.de/VE59/>
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

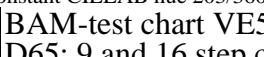
BAM registration: 20080101-VE59/10L/L59E03NP.PS/.PDF BAM material: code=rha4ta
 application for evaluation and measurement of printer or monitor systems

/VE59 / Form 4/10, Serie: 1/1, Page: 4

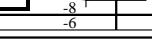
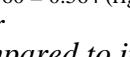
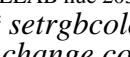
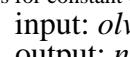
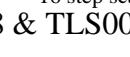
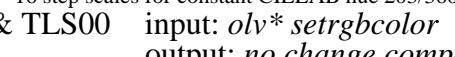
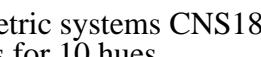
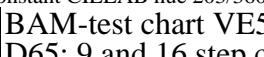
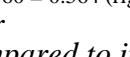
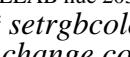
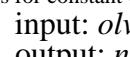
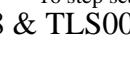
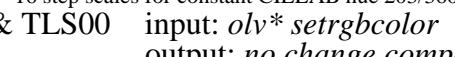
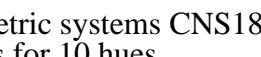
Page: count: 1
 BAM-test chart VE59; Colorimetric systems CNS18 & TLS00
 D65: 9 and 16 step colour scales for 10 hues



VE59-7, 9 step scales for constant CIELAB hue 203/360 = 0.564 (left)



16 step scales for constant CIELAB hue 203/360 = 0.564 (right)



Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 272/360 = 0.756$

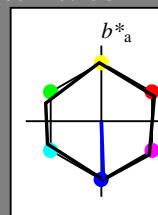
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 57 77 272

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^* = L_{a,a}^*$	$a_{a,a}^*$	$b_{a,a}^*$	$C_{ab,a}^*$	$h_{ab,a}^*$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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

$u_{rel}^* = 100$

%Regularity

$g_{H,rel}^* = 59$

$g_{C,rel}^* = 100$

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

triangle lightness t^*

relative chroma c^*

relative blackness n^*

relative luminance L^*

relative saturation s^*

relative hue h^*

Input: Colorimetric Natural Reflective System CNS18

for hue $h^* = lab^*h = 325/360 = 0.903$

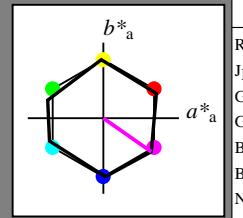
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 57 77 325

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C_{ab,a}^*$	$h_{ab,a}^*$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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

$u^*_{rel} = 100$

%Regularity

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

$g^*_{C,rel} = 100$

triangle lightness t^*

1,00

0,75

0,50

0,25

0,00

n* = 1,00

n* = 0,75

n* = 0,50

n* = 0,25

n* = 0,00

relative chroma c^*

relative blackness n^*

n* = 0,25

n* = 0,50

n* = 0,75

n* = 1,00

Output: Colorimetric Television Luminous System TLS00

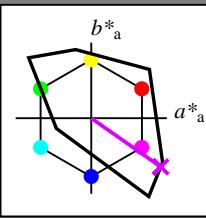
for hue $h^* = lab^*h = 325/360 = 0.903$

lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 54 112 325

olv*Ma: 0.87 0.0 1.0



TLS00; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C_{ab,a}^*$	$h_{ab,a}^*$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	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

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

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

triangle lightness t^*

1,00

0,75

0,50

0,25

0,00

n* = 0,00

n* = 0,20

n* = 0,40

n* = 0,60

n* = 0,80

n* = 1,00

relative chroma c^*

relative blackness n^*

n* = 0,25

n* = 0,50

n* = 0,75

n* = 1,00

relative chroma c^*

relative blackness n^*

n* = 0,00

n* = 0,20

n* = 0,40

n* = 0,60

n* = 0,80

n* = 1,00

VE59-7, 9 step scales for constant CIELAB hue 325/360 = 0.903 (left)

BAM-test chart VE59; Colorimetric systems CNS18 & TLS00

D65: 9 and 16 step colour scales for 10 hues

16 step scales for constant CIELAB hue 325/360 = 0.903 (right)

input: olv* setrgbcolor

output: no change compared to input

Input: Colorimetric Natural Reflective System CNS18

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

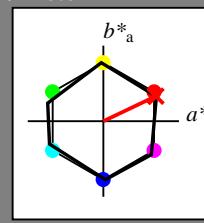
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 57 77 25

olv*Ma: 1.0 0.01 0.0

triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C_{ab,a}^*$	$h_{ab,a}^*$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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
 $u^*_{rel} = 100$
 %Regularity

$g^*_{H,rel} = 59$
 $g^*_{C,rel} = 100$

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

Output: Colorimetric Television Luminous System TLS00

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

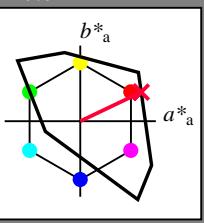
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 52 89 25

olv*Ma: 1.0 0.0 0.21

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L_a^*$	a^*_a	b^*_a	$C_{ab,a}^*$	$h_{ab,a}^*$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	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
 $u^*_{rel} = 158$
 %Regularity

$g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

$n^* = 0,00$
 $n^* = 0,20$
 $n^* = 0,40$
 $n^* = 0,60$
 $n^* = 0,80$
 $n^* = 1,00$

VE59-7, 9 step scales for constant CIELAB hue 25/360 = 0.071 (left)

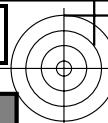
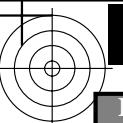
BAM-test chart VE59; Colorimetric systems CNS18 & TLS00

D65: 9 and 16 step colour scales for 10 hues

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

input: `olv* setrgbcolor`

output: no change compared to input



Input: Colorimetric Natural Reflective System CNS18

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

lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 57 77 92

olv*Ma: 0.99 1.0 0.0

triangle lightness t^*

b^*_a

a^*_a

$L^*=L^*_a$

$a^*_{a,a}$

$b^*_{a,a}$

$C^*_{ab,a}$

$h^*_{ab,a}$

RMa

JMa

GMa

G50BMa

BMa

B50RMa

NMa

WMa

R_{CIE}

J_{CIE}

G_{CIE}

B_{CIE}

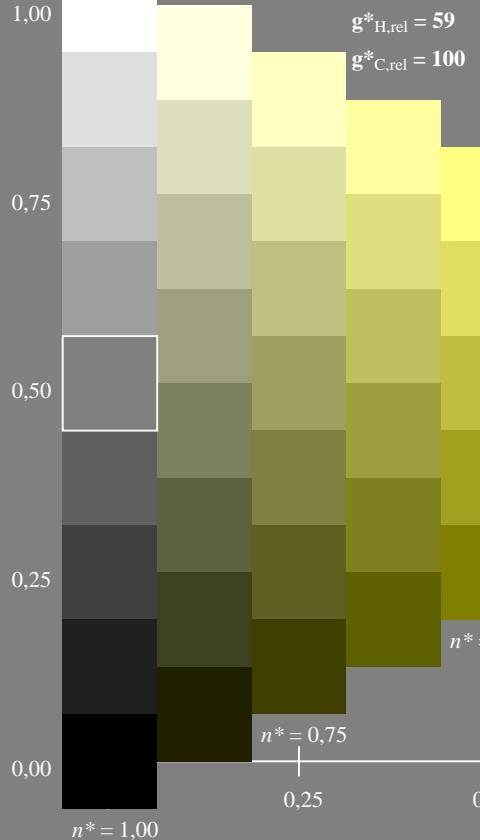
%Gamut

$u^*_{rel} = 100$

%Regularity

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

$g^*_{C,rel} = 100$



CNS18; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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 TLS00

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

lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 85 86 92

olv*Ma: 1.0 0.82 0.0

triangle lightness t^*

b^*_a

a^*_a

$L^*=L^*_a$

$a^*_{a,a}$

$b^*_{a,a}$

$C^*_{ab,a}$

$h^*_{ab,a}$

OMa

YMa

LMa

CMa

VMa

MMa

NMa

WMa

R_{CIE}

J_{CIE}

G_{CIE}

B_{CIE}

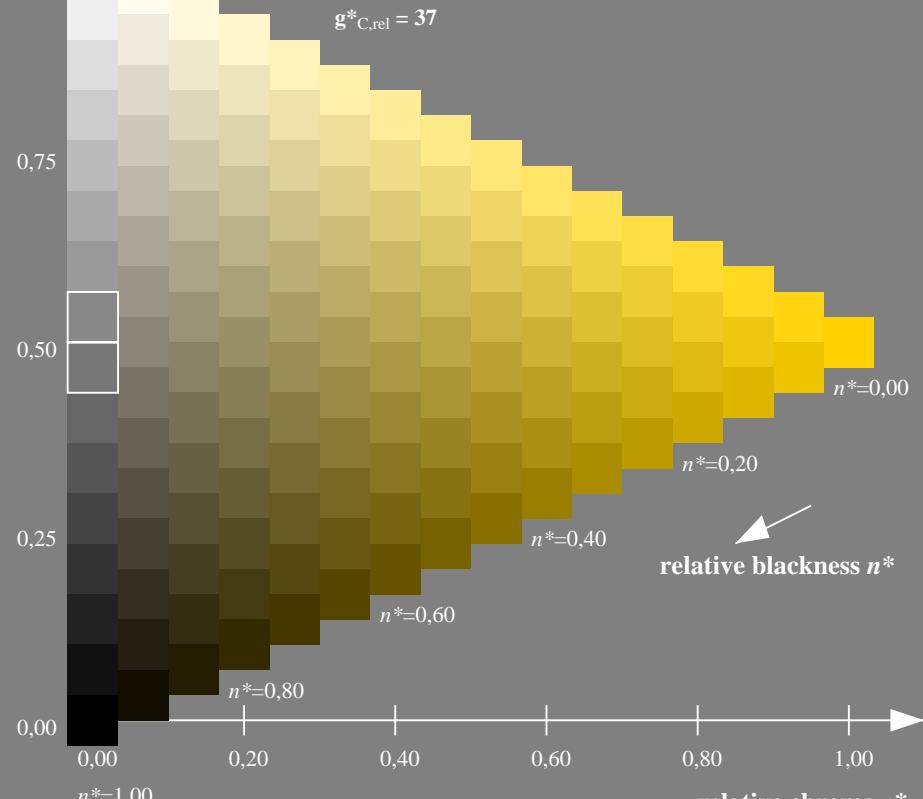
%Gamut

$u^*_{rel} = 158$

%Regularity

$g^*_{H,rel} = 20$

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



BAM registration: 20080101-VE59/10L/L59E07NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

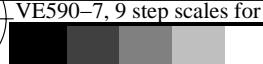
/VE59/ Form 8/10, Serie: 1/1, Page: 8

Page: count: 1

See for similar files: <http://www.ps.bam.de/VE59/> Version 2.1, io=1,1

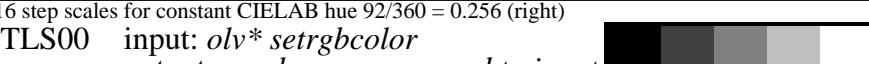
Technical information: <http://www.ps.bam.de>

VE590-7, 9 step scales for constant CIELAB hue 92/360 = 0.256 (left)



BAM-test chart VE59; Colorimetric systems CNS18 & TLS00
D65: 9 and 16 step colour scales for 10 hues

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



input: olv* setrgbcolor
output: no change compared to input

Input: Colorimetric Natural Reflective System CNS18

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

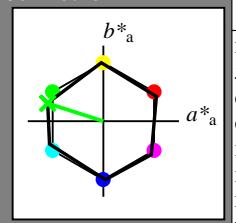
lab*tch and lab*nch

D65: hue G

LCH*Ma: 57 77 162

olv*Ma: 0.0 1.0 0.01

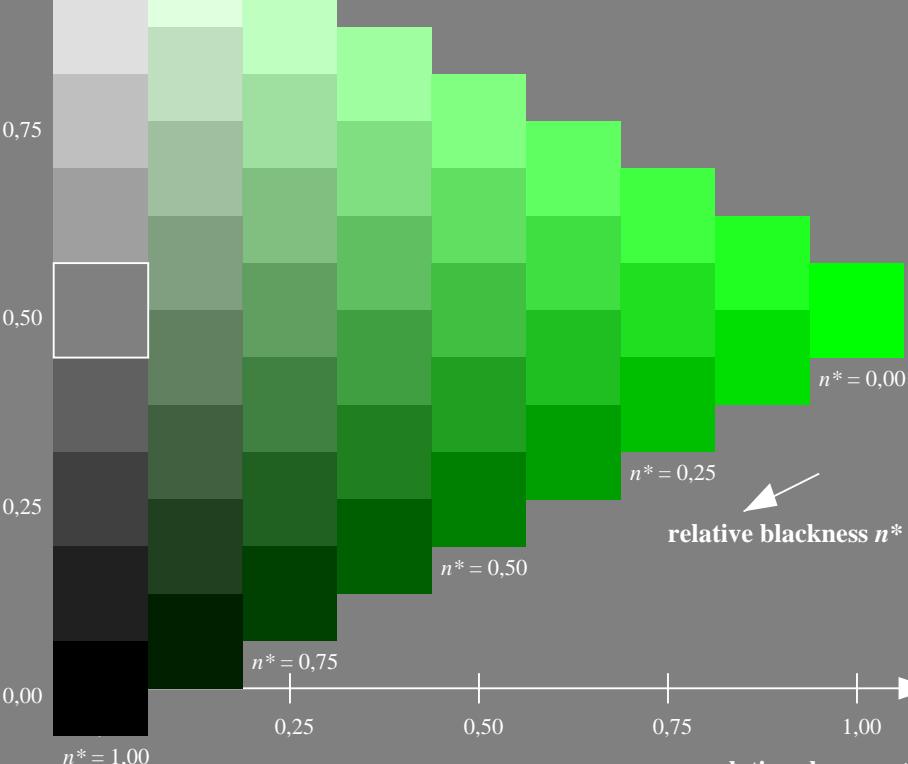
triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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
 $u^*_{rel} = 100$
 %Regularity
 $g^*_{H,rel} = 59$
 $g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

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

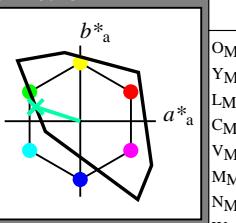
lab*tch and lab*nch

D65: hue G

LCH*Ma: 86 62 162

olv*Ma: 0.0 1.0 0.65

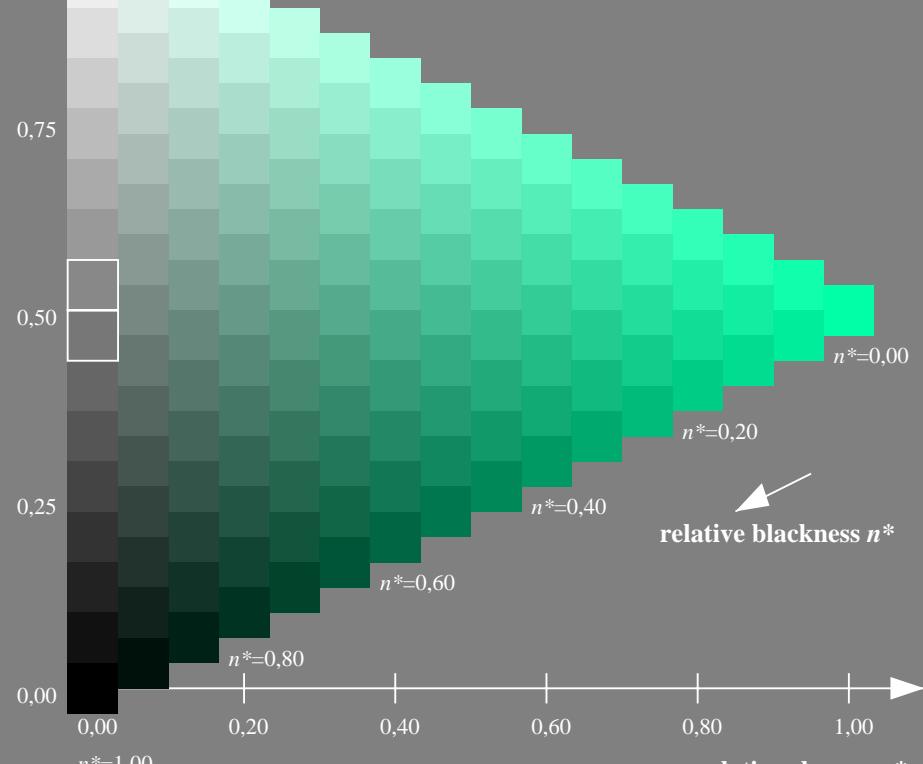
triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	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
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$





Input: Colorimetric Natural Reflective System CNS18

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

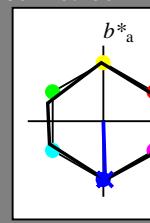
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 57 77 272

olv*Ma: 0.0 0.0 1.0

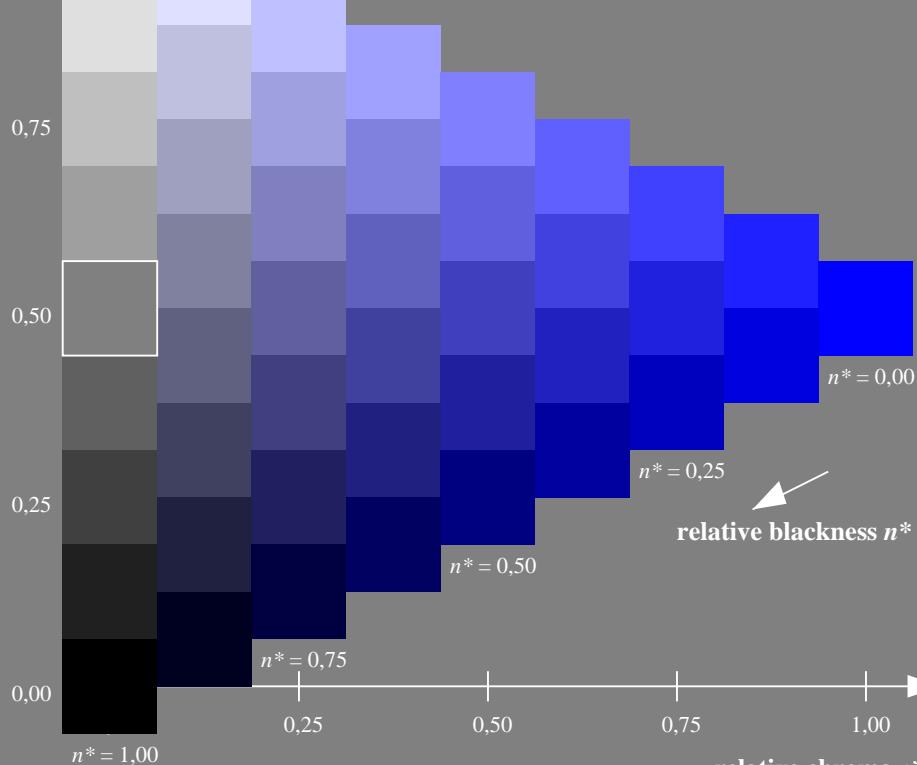
triangle lightness t^*



CNS18; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	56.7	70.15	32.71	77.4	25
JMa	56.7	-2.69	77.35	77.4	92
GMa	56.7	-73.6	23.92	77.4	162
G50BMa	56.7	-71.24	-30.23	77.4	203
BMa	56.7	2.7	-77.34	77.4	272
B50RMa	56.7	63.4	-44.38	77.4	325
NMa	18.01	0.0	0.0	0.0	0
WMa	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
 $u^*_{rel} = 100$
 %Regularity
 $g^*_{H,rel} = 59$
 $g^*_{C,rel} = 100$



Output: Colorimetric Television Luminous System TLS00

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

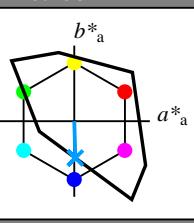
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 65 49 272

olv*Ma: 0.0 0.61 1.0

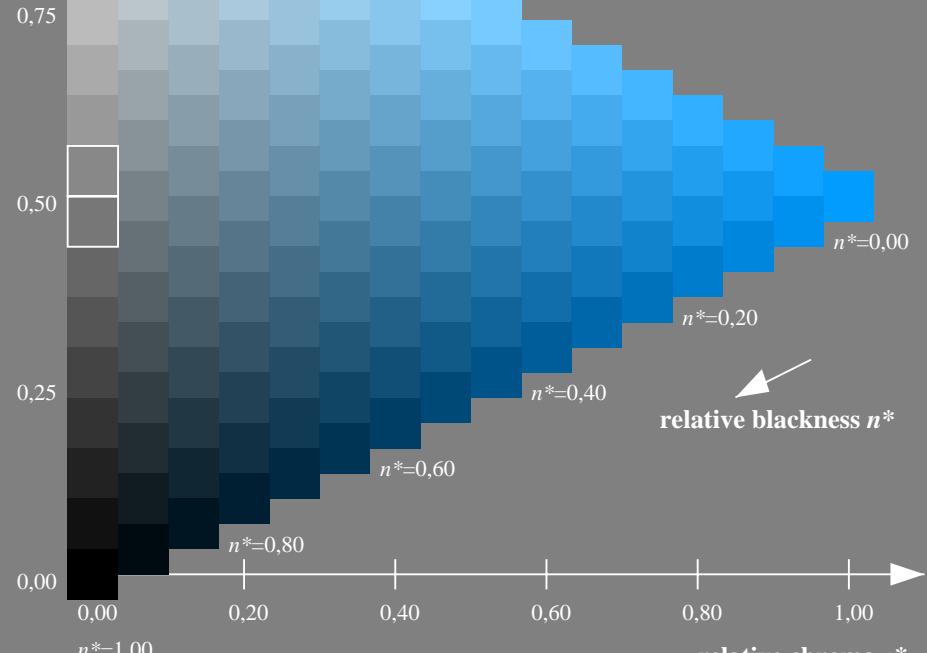
triangle lightness t^*



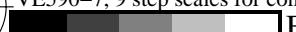
TLS00; adapted (a) CIELAB data

	$L^* = L^*_{a,a}$	$a^*_{a,a}$	$b^*_{a,a}$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	50.5	76.92	64.55	100.42	40
YMa	92.66	-20.69	90.75	93.08	103
LMa	83.63	-82.75	79.9	115.04	136
CMa	86.88	-46.16	-13.55	48.12	196
VMa	30.39	76.06	-103.59	128.52	306
MMa	57.3	94.35	-58.41	110.97	328
NMa	0.01	0.0	0.0	0.0	0
WMa	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
 $u^*_{rel} = 158$
 %Regularity
 $g^*_{H,rel} = 20$
 $g^*_{C,rel} = 37$

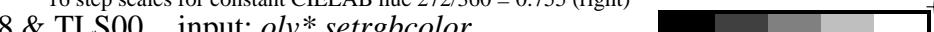


VE59-7, 9 step scales for constant CIELAB hue 272/360 = 0.755 (left)



BAM-test chart VE59; Colorimetric systems CNS18 & TLS00
 D65: 9 and 16 step colour scales for 10 hues

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



input: olv* setrgbcolor
 output: no change compared to input