

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 24/360 = 0.066$

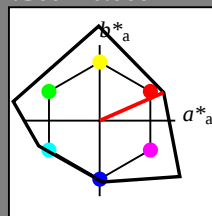
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 24/360 = 0.066$

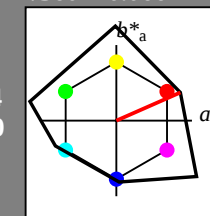
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 47 92 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
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N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
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1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

TE490-7, 5 step scales for constant CIELAB hue 24/360 = 0.066 (left)

5 step scales for constant CIELAB hue 24/360 = 0.066 (right)

BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^* setrgbcolor$

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

output: no change compared to input

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 91/360 = 0.252$

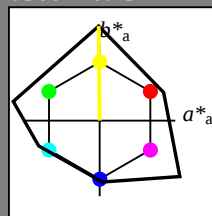
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

TE490-7, 5 step scales for constant CIELAB hue 91/360 = 0.252 (left)



BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^* setrgbcolor$

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

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 91/360 = 0.252$

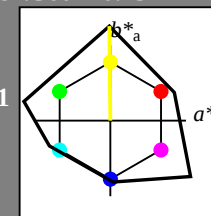
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 91 125 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
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$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

5 step scales for constant CIELAB hue 91/360 = 0.252 (right)

output: no change compared to input

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 167/360 = 0.465$

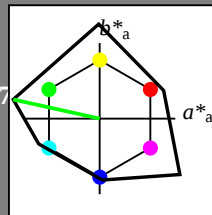
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

TE490-7, 5 step scales for constant CIELAB hue 167/360 = 0.465 (left)



BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^* setrgbcolor$
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 167/360 = 0.465$

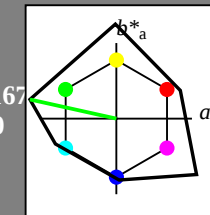
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 63 117 167

rgb*Ma: 0.0 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

blackness n^*

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

5 step scales for constant CIELAB hue 167/360 = 0.465 (right)

output: no change compared to input

Input: Colorimetric Reflective System NCS11

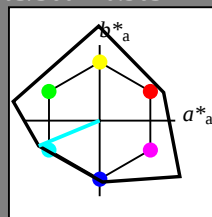
for hue $h^* = lab^*h = 203/360 = 0.563$

lab^*tch and lab^*nch

D65: hue G50B
LCH*Ma: 59 87 203
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 149$

NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

relative Inform. Technology (IT)					
olvi3*	1.0	1.0	1.0	(1.0)	
cmyn3*	0.0	0.0	0.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	95.41	0.0	-0.01		
LAB*LABa	95.41	0.0	0.0		
LAB*TCha	98.99	0.01	0.0		
relative CIELAB lab*					
lab*lab	1.0	0.0	0.0		
lab*tch	1.0	0.0	-		
lab*nch	0.0	0.0	-		
relative Natural Colour (NC)					
lab*trj	1.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*nce	0.0	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.75	0.75	0.75	(1.0)	
cmyn3*	0.25	0.25	0.25	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	74.31	0.02	0.0		
LAB*LABa	74.31	0.0	0.0		
LAB*TCha	75.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.75	0.0	0.0		
lab*tch	0.75	0.0	-		
lab*nch	0.25	0.0	-		
relative Natural Colour (NC)					
lab*trj	0.75	0.0	0.0		
lab*tce	0.25	0.0	-		
lab*nce	0.25	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.5	0.5	0.5	(1.0)	
cmyn3*	0.5	0.5	0.5	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	53.21	0.04	0.0		
LAB*LABa	53.21	0.0	0.0		
LAB*TCha	50.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.5	0.0	0.0		
lab*tch	0.5	0.0	-		
lab*nch	0.5	0.0	-		
relative Natural Colour (NC)					
lab*trj	0.5	0.0	0.0		
lab*tce	0.5	0.0	-		
lab*nce	0.5	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.25	0.25	0.25	(1.0)	
cmyn3*	0.75	0.75	0.75	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	32.11	0.05	0.01		
LAB*LABa	32.11	0.0	0.0		
LAB*TCha	25.0	0.01	-		
relative CIELAB lab*					
lab*lab	0.25	0.0	0.0		
lab*tch	0.25	0.0	-		
lab*nch	0.75	0.0	-		
relative Natural Colour (NC)					
lab*trj	0.25	0.0	0.0		
lab*tce	0.75	0.0	-		
lab*nce	0.75	0.0	-		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(1.0)	
cmyn3*	1.0	1.0	1.0	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	11.01	0.07	0.01		
LAB*LABa	11.01	0.0	0.0		
LAB*TCha	0.01	0.0	-		
relative CIELAB lab*					
lab*lab	0.0	0.0	0.0		
lab*tch	0.0	0.0	-		
lab*nch	1.0	0.0	-		
relative Natural Colour (NC)					
lab*trj	0.0	0.0	0.0		
lab*tce	1.0	0.0	-		
lab*nce	1.0	0.0	-		

$n^* = 1,0$

Output: Colorimetric Reflective System NCS11

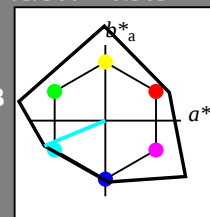
for hue $h^* = lab^*h = 203/360 = 0.563$

lab^*tch and lab^*nch

D65: hue G50B
LCH*Ma: 59 87 203
rgb*Ma: 0.0 1.0 1.0

triangle lightness

1,00



%Gamut

$u^*_{rel} = 149$

NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

relative Inform. Technology (IT)					
olvi3*	0.75	1.0	1.0	(1.0)	
cmyn3*	0.25	0.0	0.0	(0.0)	
olvi4*	0.75	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	86.42	-20.12	-8.35		
LAB*LABa	86.42	-20.13	-8.35		
LAB*TCha	87.5	21.81	202.54		
relative CIELAB lab*					
lab*lab	0.893	-0.23	-0.095		
lab*tch	0.875	0.25	0.563		
lab*nch	0.0	0.25	0.563		
relative Natural Colour (NC)					
lab*trj	0.893	-0.208	-0.136		
lab*tce	0.875	0.25	0.592		
lab*nce	0.0	0.25	0.592		

relative Inform. Technology (IT)					
olvi3*	0.5	0.75	0.75	(1.0)	
cmyn3*	0.5	0.25	0.25	(0.0)	
olvi4*	0.75	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	65.32	-20.11	-8.35		
LAB*LABa	65.32	-20.14	-8.36		
LAB*TCha	62.5	21.82	202.54		
relative CIELAB lab*					
lab*lab	0.644	-0.208	-0.136		
lab*tch	0.625	0.25	0.592		
lab*nch	0.0	0.25	0.592		
relative Natural Colour (NC)					
lab*trj	0.644	-0.208	-0.136		
lab*tce	0.625	0.25	0.592		
lab*nce	0.0	0.25	0.592		

relative Inform. Technology (IT)					
olvi3*	0.25	0.75	0.75	(1.0)	
cmyn3*	0.75	0.25	0.25	(0.0)	
olvi4*	0.5	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	56.33	-40.26	-16.71		
LAB*LABa	56.33	-40.3	-16.72		
LAB*TCha	50.0	43.64	202.54		
relative CIELAB lab*					
lab*lab	0.537	-0.461	-0.191		
lab*tch	0.5	0.5	0.563		
lab*nch	0.5	0.5	0.563		
relative Natural Colour (NC)					
lab*trj	0.537	-0.418	-0.272		
lab*tce	0.537	0.5	0.592		
lab*nce	0.25	0.5	0.592		

relative Inform. Technology (IT)					
olvi3*	0.0	0.5	0.5	(1.0)	
cmyn3*	1.0	0.5	0.5	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	35.23	-40.23	-16.77		
LAB*LABa	35.23	-40.29	-16.72		
LAB*TCha	25.01	43.63	202.54		
relative CIELAB lab*					
lab*lab	0.287	-0.461	-0.191		
lab*tch	0.25	0.5	0.563		
lab*nch	0.5	0.5	0.563		
relative Natural Colour (NC)					
lab*trj	0.287	-0.418	-0.272		
lab*tce	0.25	0.5	0.592		
lab*nce	0.5	0.5	0.592		

relative Inform. Technology (IT)					
olvi3*	0.0	0.0	0.0	(1.0)	
cmyn3*	1.0	0.75	0.75	(0.0)	
olvi4*	1.0	1.0	1.0	(1.0)	
cmyn4*	0.0	0.0	0.0	(0.0)	
standard and adapted CIELAB					
LAB*LAB	23.11	-20.13	-8.35		
LAB*LABa	23.11	-20.13	-8.35		
LAB*TCha	12.5	21.81	202.54		
relative CIELAB lab*					
lab*lab	0.144	-0.23	-0.095		
lab*tch	0.125	0.25	0.563		
lab*nch	0.75	0.25	0.563		
relative Natural Colour (NC)					
lab*trj	0.144	-0.208	-0.136		
lab*tce	0.125	0.25	0.592		
lab*nce	0.75	0.25	0.592		

$n^* = 0,50$

GCIE	52
BCIE	30

Input: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 273/360 = 0.757$

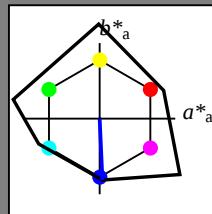
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness



NCS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

Output: Colorimetric Reflective System NCS11

for hue $h^* = lab^*h = 273/360 = 0.757$

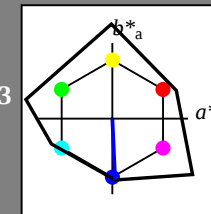
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 81 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness



NCS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

TE490-7, 5 step scales for constant CIELAB hue 273/360 = 0.757 (left)

5 step scales for constant CIELAB hue 273/360 = 0.757 (right)

BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^* setrgbcolor$

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

output: no change compared to input

Input: Colorimetric Reflective System NCS11

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

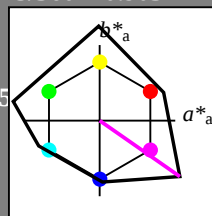
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 44 129 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness

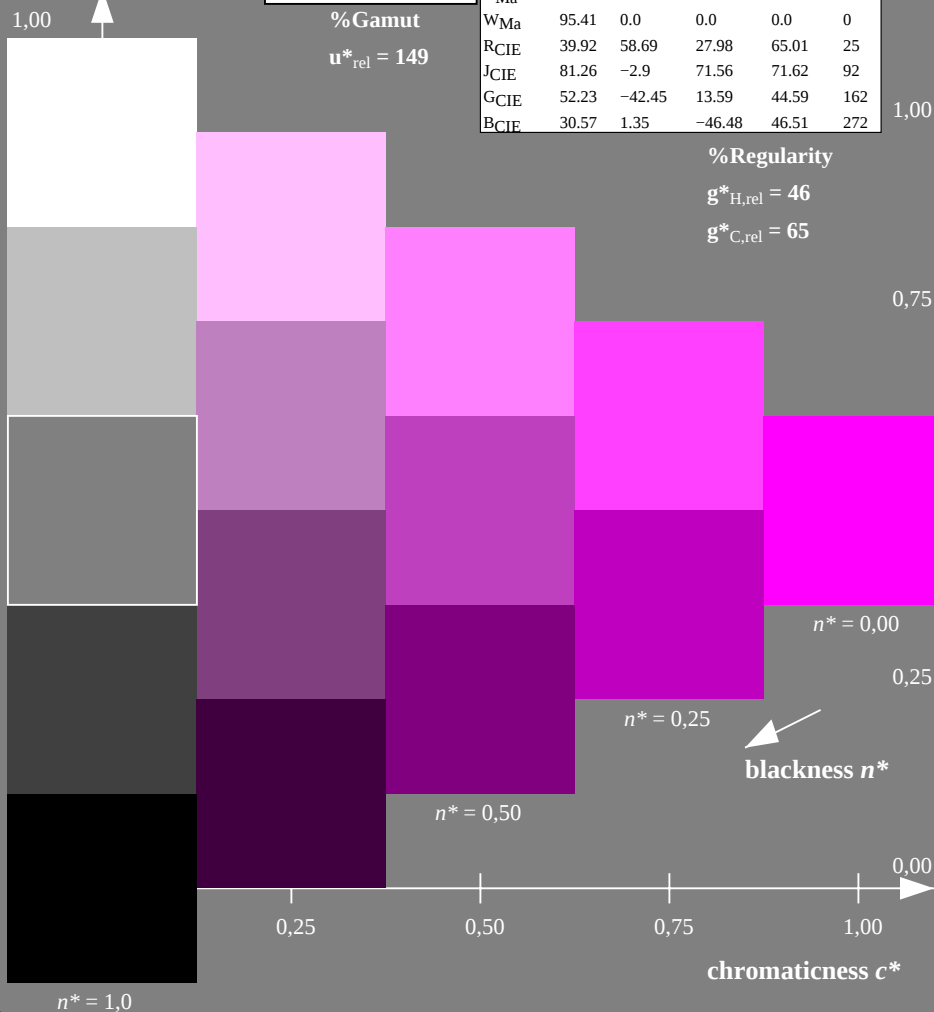


NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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



TE490-7, 5 step scales for constant CIELAB hue 325/360 = 0.903 (left)



BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^* setrgbcolor$

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

Output: Colorimetric Reflective System NCS11

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

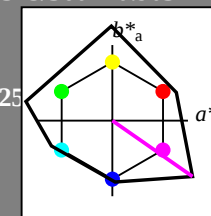
lab^*tch and lab^*nch

D65: hue B50R

LCH*Ma: 44 129 325

rgb*Ma: 1.0 0.0 1.0

triangle lightness

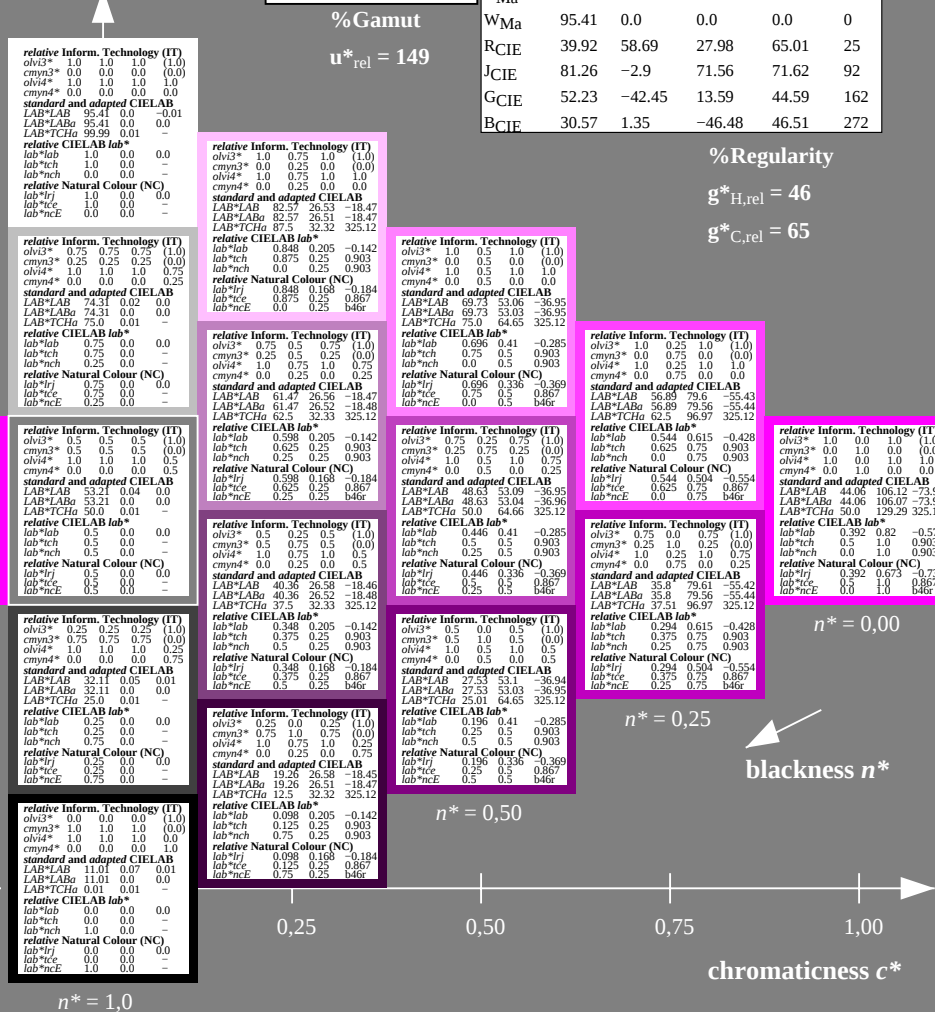


NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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



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

BAM material: code=rhda4a

output: no change compared to input

Input: Colorimetric Reflective System NCS11

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

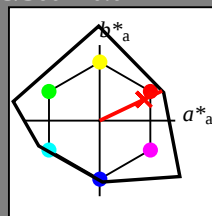
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 91 25

rgb*Ma: 1.0 0.02 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

0,25

0,00

0,00

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

TE490-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)



BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^*setrgbcolor$

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

Output: Colorimetric Reflective System NCS11

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

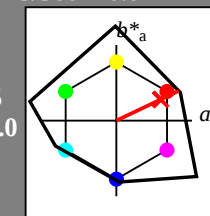
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 91 25

rgb*Ma: 1.0 0.02 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

0,25

0,00

0,00

0,25

0,50

0,75

1,00

chromaticness c^*

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

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

output: no change compared to input

Input: Colorimetric Reflective System NCS11

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

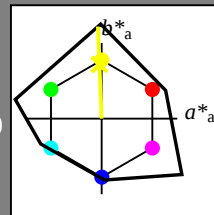
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 90 122 92

rgb*Ma: 0.97 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

Output: Colorimetric Reflective System NCS11

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

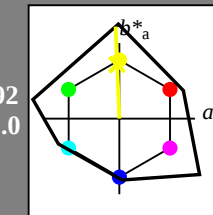
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 90 122 92

rgb*Ma: 0.97 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

TE490-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^*setrgbcolor$

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

output: no change compared to input

Input: Colorimetric Reflective System NCS11

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

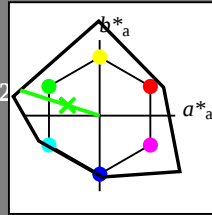
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 65 110 162

rgb*Ma: 0.08 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

Output: Colorimetric Reflective System NCS11

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

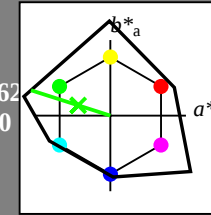
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 65 110 162

rgb*Ma: 0.08 1.0 0.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

TE490-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^*setrgbcolor$

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

output: no change compared to input

Input: Colorimetric Reflective System NCS11

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

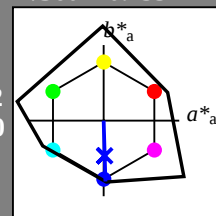
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 80 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

$n^* = 1,0$

chromaticness c^*

$n^* = 1,0$

Output: Colorimetric Reflective System NCS11

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

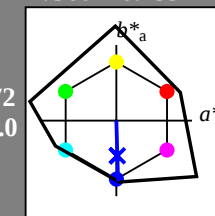
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 49 80 272

rgb*Ma: 0.0 0.02 1.0

triangle lightness



NCS11; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	47.15	84.64	37.25	92.48	24
JMa	91.37	-1.27	125.03	125.03	91
GMa	63.07	-114.28	25.35	117.06	167
G50B _{Ma}	59.47	-80.6	-33.45	87.28	203
B _{Ma}	49.01	3.65	-81.19	81.28	273
B50R _{Ma}	44.06	106.09	-73.93	129.32	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 46$

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

1,00

0,75

$n^* = 0,00$

0,25

$n^* = 0,25$

$n^* = 0,50$

chromaticness c^*

$n^* = 1,0$

TE490-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

BAM-test chart TE49; Colorimetric systems NCS11a & NCS11a input: $olv^* setrgbcolor$

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

output: no change compared to input