

Input: Colorimetric Reflective System ORS18

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

lab^*tch and lab^*nch

D65: hue O
LCH*Ma: 48 83 38
rgb*Ma: 1.0 0.0 0.0

triangle lightness

1.00

↑

$u^*_{rel} = 93$

%Gamut

$g^*_{H,rel} = 57$

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

0.25

0.50

0.75

1.00

blackness n^*

$n^* = 1.0$

UE420-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

ORS18; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.37	50.52	82.62	38
Y _{Ma}	90.37	-10.27	91.77	92.34	96
L _{Ma}	50.9	-62.79	34.95	71.87	151
C _{Ma}	58.62	-30.35	-45.01	54.3	236
V _{Ma}	25.71	31.11	-44.42	54.24	305
M _{Ma}	48.13	75.27	-8.35	75.73	354
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	58.66	26.98	64.56	25
J _{CIE}	81.26	-2.17	67.76	67.79	92
G _{CIE}	52.23	-42.26	11.75	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.87	271

%Regularity

$g^*_{H,rel} = 57$

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

0.25

0.50

0.75

1.00

blackness n^*

$n^* = 1.0$

BAM-test chart UE42; Colorimetric systems ORS18 & NRS11
D65: 5 step colour scales and coordinate data for 10 hues

Output: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 24/360 = 0.067$

lab^*tch and lab^*nch

D65: hue R
LCH*Ma: 53 84 24
rgb*Ma: 1.0 0.0 0.0

triangle lightness

1.00

↑

$u^*_{rel} = 119$

%Gamut

$g^*_{H,rel} = 47$

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

0.25

0.50

0.75

1.00

blackness n^*

$n^* = 1.0$

5 step scales for constant CIELAB hue 24/360 = 0.067 (right)

input: cmy0* setcmykcolor
output: no change compared to input

NRS11; adapted (a) CIELAB data

	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	53.2	77.06	34.32	84.36	24
J _{Ma}	53.2	-1.51	84.38	84.39	91
G _{Ma}	53.2	-82.27	18.98	84.44	167
G50B _{Ma}	53.2	-77.72	-32.98	84.44	203
B _{Ma}	53.2	4.37	-84.28	84.41	273
B50R _{Ma}	53.2	69.09	-48.41	84.37	325
N _{Ma}	10.99	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.69	27.98	65.01	25
J _{CIE}	81.26	-2.9	71.56	71.62	92
G _{CIE}	52.23	-42.45	13.99	44.59	162
B _{CIE}	30.57	1.35	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 47$

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticness c^*

0.25

0.50

0.75

1.00

blackness n^*

$n^* = 1.0$