

Input: Colorimetric Reflective System ORS18

for hue $h^* = \text{lab}^*h = 38/360 = 0.105$

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

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticity c^*

$n^* = 1.0$

UE410-7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

ORS18; adapted (a) CIELAB data

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

	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
M _{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 _{CIIE}	39.92	58.66	26.98	64.56	25
J _{CIIE}	81.26	-2.17	67.76	67.79	92
G _{CIIE}	52.23	-42.26	11.75	43.87	164
B _{CIIE}	30.57	1.15	-46.84	46.87	271

%Regularity

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

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

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticity c^*

$n^* = 1.0$

Output: Colorimetric Reflective System MRS18a

for hue $h^* = \text{lab}^*h = 31/360 = 0.086$

lab^*tch and lab^*nch

D65: hue R
LCH*Ma: 50 78 31
rgb*Ma: 1.0 0.0 0.0

triangle lightness

1.00

%Gamut

$u^*_{rel} = 92$

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticity c^*

$n^* = 1.0$

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)

MRS18a; adapted (a) CIELAB data

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

	L^*_a	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.8	40.02	77.87	31
J _{Ma}	90.7	-7.27	93.19	93.48	94
G _{Ma}	52.11	-69.93	11.26	70.85	171
G50B _{Ma}	45.03	-36.65	-27.13	45.61	217
B _{Ma}	36.65	23.26	-62.27	66.49	290
B50R _{Ma}	34.94	57.27	-43.6	71.99	323
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIIE}	39.92	58.67	27.97	64.99	25
J _{CIIE}	81.26	-2.91	71.56	71.62	92
G _{CIIE}	52.23	-42.47	13.98	44.66	162
B _{CIIE}	30.57	1.33	-46.48	46.51	272

%Regularity

$g^*_{H,rel} = 42$

$g^*_{C,rel} = 49$

0.75

0.50

0.25

0.00

blackness n^*

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.00$

chromaticity c^*

$n^* = 1.0$