

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab^*h = 30/360 = 0.083$
 lab^*tch and lab^*nch

D65: hue R
LCH*Ma: 50 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut
 $u^*_{rel} = 91$
%Regularity
 $g^*_{H,rel} = 41$
 $g^*_{C,rel} = 52$

relative Inform. Technology (IT)
 $olv^*3^* = 1.0 \ 1.0 \ 1.0 \ (1.0)$
 $cmyn^*3^* = 0.0 \ 0.5 \ 0.5 \ (0.0)$
 $olv^*4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn^*4^* = 0.0 \ 0.0 \ 0.0 \ 0.0$
standard and adapted CIELAB
LAB*LAB 95.41 -0.97 4.75
LAB*LABo 95.41 0.0 0.0
LAB*TCHo 99.99 0.01 -

relative CIELAB lab*
 $lab^*lab = 1.0 \ 0.5 \ 0.0 \ 0.0$
 $lab^*tch = 1.0 \ 0.0 \ -$
 $lab^*nch = 0.0 \ 0.0 \ -$
relative Natural Colour (NC)
 $lab^*lrj = 1.0 \ 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 1.0 \ 0.0 \ 0.0 \ -$
 $lab^*nce = 0.0 \ 0.0 \ -$

relative Inform. Technology (IT)
 $olv^*3^* = 0.5 \ 0.5 \ 0.5 \ (1.0)$
 $cmyn^*3^* = 0.5 \ 0.5 \ 0.5 \ (0.0)$
 $olv^*4^* = 1.0 \ 1.0 \ 1.0 \ 0.5$
 $cmyn^*4^* = 0.0 \ 0.0 \ 0.0 \ 0.5$
standard and adapted CIELAB
LAB*LAB 56.71 -0.23 2.14
LAB*LABo 56.71 0.0 0.0
LAB*TCHo 50.0 0.01 -

relative CIELAB lab*
 $lab^*lab = 0.5 \ 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.5 \ 0.0 \ 0.0 \ -$
 $lab^*nch = 0.5 \ 0.0 \ -$
relative Natural Colour (NC)
 $lab^*lrj = 0.5 \ 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.5 \ 0.0 \ 0.0 \ -$
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 $olv^*4^* = 1.0 \ 1.0 \ 1.0 \ 1.0$
 $cmyn^*4^* = 0.0 \ 0.0 \ 0.0 \ 1.0$
standard and adapted CIELAB
LAB*LAB 18.02 0.5 -0.46
LAB*LABo 18.02 0.0 0.0
LAB*TCHo 0.01 0.01 -

relative CIELAB lab*
 $lab^*lab = 0.0 \ 0.0 \ 0.0 \ 0.0$
 $lab^*tch = 0.0 \ 0.0 \ 0.0 \ -$
 $lab^*nch = 1.0 \ 0.0 \ -$
relative Natural Colour (NC)
 $lab^*lrj = 0.0 \ 0.0 \ 0.0 \ 0.0$
 $lab^*tce = 0.0 \ 0.0 \ 0.0 \ -$
 $lab^*nce = 1.0 \ 0.0 \ -$

$n^* = 1.0$

MRS18; adapted (a) CIELAB data
 $L^* = L^*_a \ a^*_a \ b^*_a \ C^*_{ab,a} \ h^*_{ab,a}$

RMa	49.63	66.96	38.37	77.18	30
GMa	90.7	-6.36	88.75	88.98	94
JMa	52.11	-69.73	9.44	70.37	172
G50BMa	45.03	-36.57	-28.47	46.36	218
BMa	36.65	23.19	-63.05	67.18	290
B50RMa	34.94	57.17	-44.26	72.31	322
NMa	18.01	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.66	26.98	64.56	25
JCIE	81.26	-2.17	67.76	67.79	92
GCIE	52.23	-42.26	11.75	43.87	164
BCIE	30.57	1.15	-46.84	46.87	271

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standard and adapted CIELAB
LAB*LAB 72.52 32.93 22.4
LAB*LABo 72.52 33.47 19.18
LAB*TCHo 75.0 38.58 29.82

relative CIELAB lab*
 $lab^*lab = 0.704 \ 0.434 \ 0.249$
 $lab^*tch = 0.75 \ 0.5 \ 0.083$
 $lab^*nch = 0.0 \ 0.5 \ 0.083$
relative Natural Colour (NC)
 $lab^*lrj = 0.704 \ 0.496 \ 0.06$
 $lab^*tce = 0.75 \ 0.5 \ 0.019$
 $lab^*nce = 0.0 \ 0.5 \ 0.071$

relative Inform. Technology (IT)
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standard and adapted CIELAB
LAB*LAB 49.63 66.84 40.03
LAB*LABo 49.63 66.95 38.36
LAB*TCHo 50.0 77.16 29.82

relative CIELAB lab*
 $lab^*lab = 0.409 \ 0.867 \ 0.497$
 $lab^*tch = 0.409 \ 0.993 \ 0.119$
 $lab^*nch = 0.0 \ 1.0 \ 0.083$
relative Natural Colour (NC)
 $lab^*lrj = 0.409 \ 0.993 \ 0.119$
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$n^* = 0.00$

blackness n^*

0.25 0.50 $n^* = 0.50$ 0.75 1.00
chromaticness c^*

Output: Colorimetric Reflective System MRS18

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TE140-7, 3 step scales for constant CIELAB hue 30/360 = 0.083 (left)

3 step scales for constant CIELAB hue 30/360 = 0.083 (right)

BAM-test chart TE14; Colorimetric systems MRS18 & MRS18

input: $olv^* \text{setrgcolor}$

D65: 2 coordinate data of 3 step colour scales for 10 hues

output: no change compared to input