

# Input: Colorimetric Natural Reflective System CNS18

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

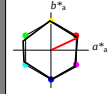
$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 57 77 25

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



% Gamut

$u^*_{rel} = 100$

% Regularity

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

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

relative Inform. Technology (IT)  
olv13\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv14\* 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 0.0  
LAB\*LABo 95.41 0.0 0.0  
LAB\*TCHo 99.99 0.01  
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\*lrj 1.0 0.0 0.0  
lab\*nce 1.0 0.0 -  
lab\*nce 0.0 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

$n^* = 1.0$

relative Inform. Technology (IT)  
olv13\* 1.0 0.5 0.5 (1.0)  
cmyn3\* 0.0 0.5 0.5 (0.0)  
olv14\* 1.0 0.5 0.5 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 76.05 35.07 16.35  
LAB\*LABo 76.05 35.07 16.35  
LAB\*TCHo 75.0 38.69 25.0  
relative CIELAB lab\*  
lab\*lab 0.75 0.453 0.211  
lab\*tch 0.75 0.5 0.069  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*lrj 0.75 0.5 -0.002  
lab\*nce 0.75 0.5 0.999  
lab\*nce 0.0 0.5 0.999

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.7 32.7 32.7  
LAB\*LABo 56.7 32.7 32.7  
LAB\*TCHo 50.0 38.25 50.0  
relative CIELAB lab\*  
lab\*lab 0.5 0.906 0.423  
lab\*tch 0.5 1.0 0.006  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*lrj 0.5 1.0 -0.006  
lab\*nce 0.5 1.0 0.999  
lab\*nce 0.0 0.5 0.999

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.7 32.7 32.7  
LAB\*LABo 56.7 32.7 32.7  
LAB\*TCHo 50.0 38.25 50.0  
relative CIELAB lab\*  
lab\*lab 0.5 0.906 0.423  
lab\*tch 0.5 1.0 0.006  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*lrj 0.5 1.0 -0.006  
lab\*nce 0.5 1.0 0.999  
lab\*nce 0.0 0.5 0.999

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.7 32.7 32.7  
LAB\*LABo 56.7 32.7 32.7  
LAB\*TCHo 50.0 38.25 50.0  
relative CIELAB lab\*  
lab\*lab 0.5 0.906 0.423  
lab\*tch 0.5 1.0 0.006  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*lrj 0.5 1.0 -0.006  
lab\*nce 0.5 1.0 0.999  
lab\*nce 0.0 0.5 0.999

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.7 32.7 32.7  
LAB\*LABo 56.7 32.7 32.7  
LAB\*TCHo 50.0 38.25 50.0  
relative CIELAB lab\*  
lab\*lab 0.5 0.906 0.423  
lab\*tch 0.5 1.0 0.006  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*lrj 0.5 1.0 -0.006  
lab\*nce 0.5 1.0 0.999  
lab\*nce 0.0 0.5 0.999

$n^* = 0.00$

blackness  $n^*$

chromaticness  $c^*$

# Output: Colorimetric Television Luminous System TLS18

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

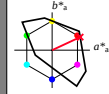
$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 54 82 25

olv\*Ma: 1.0 0.0 0.14

triangle lightness  $t^*$



% Gamut

$u^*_{rel} = 118$

% Regularity

$g^*_{H,rel} = 22$

$g^*_{C,rel} = 40$

relative Inform. Technology (IT)  
olv13\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv14\* 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 0.0  
LAB\*LABo 95.41 0.0 0.0  
LAB\*TCHo 99.99 0.01  
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\*lrj 1.0 0.0 0.0  
lab\*nce 1.0 0.0 -  
lab\*nce 0.0 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv14\* 1.0 1.0 1.0 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

$n^* = 1.0$

relative Inform. Technology (IT)  
olv13\* 1.0 0.5 0.5 (1.0)  
cmyn3\* 0.0 0.5 0.5 (0.0)  
olv14\* 1.0 0.5 0.5 (1.0)  
cmyn4\* 0.0 0.5 0.5 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 74.53 37.09 17.29  
LAB\*LABo 74.53 37.09 17.29  
LAB\*TCHo 75.0 40.92 25.0  
relative CIELAB lab\*  
lab\*lab 0.73 0.453 0.211  
lab\*tch 0.73 0.5 0.069  
lab\*nch 0.0 0.5 0.069  
relative Natural Colour (NC)  
lab\*lrj 0.73 0.5 -0.002  
lab\*nce 0.73 0.5 0.999  
lab\*nce 0.0 0.5 0.999

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

relative Inform. Technology (IT)  
olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
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LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

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olv13\* 0.5 0.0 0.0 (1.0)  
cmyn3\* 0.5 0.0 0.0 (0.0)  
olv14\* 1.0 0.0 0.0 (1.0)  
cmyn4\* 0.0 0.0 0.0 (0.0)  
standard and adapted CIELAB  
LAB\*LAB 56.72 0.0 0.0  
LAB\*LABo 56.72 0.0 0.0  
LAB\*TCHo 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\*lrj 0.5 0.0 0.0  
lab\*nce 0.5 0.0 -  
lab\*nce 0.5 0.0 -

$n^* = 0.00$

blackness  $n^*$

chromaticness  $c^*$

BAM-test chart VE61; Colorimetric systems CNS18 & TLS18

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

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

input: olv\* setrgbcolor

output: no change compared to input