

**Input: Colorimetric Reflective System ORS18**

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

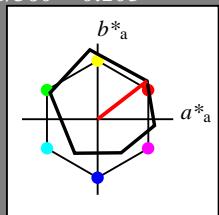
$lab^*tch$  and  $lab^*nch$

D65: hue O

LCH\*Ma: 48 83 38

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



relative Inform. Technology (IT)

olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh$ a 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)

$lab^*lrij$  1.0 0.0 0.0  
 $lab^*ice$  1.0 0.0 -  
 $lab^*ncE$  0.0 0.0 -

relative Inform. Technology (IT)

olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 1.0 1.0 0.5  
cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB  
 $LAB^*LAB$  56.71 -0.23 2.14  
 $LAB^*LABa$  56.71 0.0 0.0  
 $LAB^*TCh$ a 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)

$lab^*lrij$  0.5 0.0 0.0  
 $lab^*ice$  0.5 0.0 -  
 $lab^*ncE$  0.5 0.0 -

relative Inform. Technology (IT)

olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh$ a 0.01 0.01 -

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)

$lab^*lrij$  0.0 0.0 0.0  
 $lab^*ice$  0.0 0.0 -  
 $lab^*ncE$  1.0 0.0 -

$n^* = 1,0$

**ORS18; adapted (a) CIELAB data**

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

	O Ma	Y Ma	L Ma	C Ma	V Ma	M Ma	N Ma	W Ma	R CIE	J CIE	G CIE	B CIE
	47.94	65.37	50.52	82.62	38							
	90.37	-10.27	91.77	92.34	96							
	50.9	-62.79	34.95	71.87	151							
	58.62	-30.35	-45.01	54.3	236							
	25.71	31.11	-44.42	54.24	305							
	48.13	75.27	-8.35	75.73	354							
	18.01	0.0	0.0	0.0	0							
	95.41	0.0	0.0	0.0	0							
	39.92	58.66	26.98	64.56	25							
	81.26	-2.17	67.76	67.79	92							
	52.23	-42.26	11.75	43.87	164							
	30.57	1.15	-46.84	46.87	271							

**Output: Colorimetric Reflective System MRS18**

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

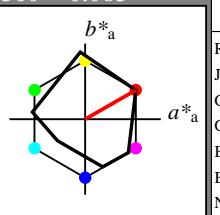
$lab^*tch$  and  $lab^*nch$

D65: hue R

LCH\*Ma: 50 77 30

olv\*Ma: 1.0 0.0 0.0

triangle lightness  $t^*$



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

**MRS18; adapted (a) CIELAB data**

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

	R Ma	J Ma	G Ma	G50B Ma	B Ma	B50R Ma	N Ma	W Ma	R CIE	J CIE	G CIE	B CIE
	49.63	66.96	38.37	77.18	30							
	90.7	-6.36	88.75	88.98	94							
	52.11	-69.73	9.44	70.37	172							
	45.03	-36.57	-28.47	46.36	218							
	36.65	23.19	-63.05	67.18	290							
	34.94	57.17	-44.26	72.31	322							
	18.01	0.0	0.0	0.0	0							
	95.41	0.0	0.0	0.0	0							
	39.92	58.66	26.98	64.56	25							
	81.26	-2.17	67.76	67.79	92							
	52.23	-42.26	11.75	43.87	164							
	30.57	1.15	-46.84	46.87	271							

**relative Inform. Technology (IT)**

olv3\* 1.0 0.5 0.5 (1.0)  
cmyn3\* 0.0 0.5 0.5 (0.0)  
olv4\* 1.0 0.5 0.5 1.0  
cmyn4\* 0.0 0.5 0.5 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh$ a 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)

$lab^*lrij$  1.0 0.0 0.0  
 $lab^*ice$  1.0 0.0 -  
 $lab^*ncE$  0.0 0.0 -

**relative Inform. Technology (IT)**

olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 0.5 0.5 1.0  
cmyn4\* 0.0 0.5 0.5 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  72.52 32.93 22.4  
 $LAB^*LABa$  72.52 33.47 19.18  
 $LAB^*TCh$ a 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)

$lab^*lrij$  0.704 0.496 0.06  
 $lab^*ice$  0.75 0.5 0.019  
 $lab^*ncE$  0.0 0.5 r07j

**relative Inform. Technology (IT)**

olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  56.71 -0.23 2.14  
 $LAB^*LABa$  56.71 0.0 0.0  
 $LAB^*TCh$ a 50.0 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.387 0.791 0.611  
 $lab^*tch$  0.5 1.0 0.105  
 $lab^*nch$  0.0 1.0 0.105

relative Natural Colour (NC)

$lab^*lrij$  0.387 0.954 0.299  
 $lab^*ice$  0.5 1.0 0.048  
 $lab^*ncE$  0.0 1.0 r19j

**relative Inform. Technology (IT)**

olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  33.82 33.67 19.79  
 $LAB^*LABa$  33.82 33.47 19.18  
 $LAB^*TCh$ a 25.01 38.58 29.82

relative CIELAB lab\*

$lab^*lab$  0.204 0.434 0.249  
 $lab^*tch$  0.25 0.5 0.083  
 $lab^*nch$  0.5 0.5 0.083

relative Natural Colour (NC)

$lab^*lrij$  0.204 0.496 0.06  
 $lab^*ice$  0.25 0.5 0.019  
 $lab^*ncE$  0.5 0.5 r07j

$n^* = 0,00$

blackness  $n^*$

$n^* = 0,50$

$n^* = 1,00$

chromaticness  $c^*$

$n^* = 1,0$

$n^* = 1,0$

$n^* = 1,0$

TE100-7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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

BAM-test chart TE10; Colorimetric systems ORS18 & ORS18  
D65: 2 coordinate data of 3 step colour scales for 10 hues

input:  $olv^* setrgbcolor$   
output: Startup (S) data dependend

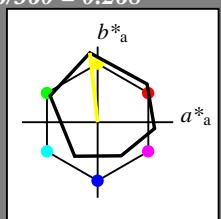
See for similar files: <http://www.ps.bam.de/TE10/>  
Technical information: <http://www.ps.bam.de>

Version 2.1, io=1,1?

**Input: Colorimetric Reflective System ORS18**

for hue  $h^* = lab^*h = 96/360 = 0.268$   
 $lab^*tch$  and  $lab^*nch$

D65: hue Y  
LCH\*Ma: 90 92 96  
olv\*Ma: 1.0 1.0 0.0  
triangle lightness  $t^*$



relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy3^*$  0.0 0.0 0.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 1.0

$cmy4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  95.41 -0.97 4.75

$LAB^*LABa$  95.41 0.0 0.0

$LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*ice$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv_i3^*$  0.5 0.5 0.5 (1.0)

$cmy3^*$  0.5 0.5 0.5 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.5

$cmy4^*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  56.71 -0.23 2.14

$LAB^*LABa$  56.71 0.0 0.0

$LAB^*TCh_a$  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)

$lab^*lrij$  0.5 0.0 0.0

$lab^*ice$  0.5 0.0 -

$lab^*nCE$  0.5 0.0 -

relative Inform. Technology (IT)

$olv_i3^*$  0.0 0.0 0.0 (1.0)

$cmy3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0

$cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB

$LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

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)

$lab^*lrij$  0.0 0.0 0.0

$lab^*ice$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

**ORS18; adapted (a) CIELAB data**

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

	OMa	YMa	LMa	CMa	VMa	MMa	NMa	WMa	RCIE	JCIE	GCIE	BCIE
$L^*=L^*_a$	47.94	65.37	50.52	82.62	38							
$a^*_{a,a}$		-10.27	91.77	92.34	96							
$b^*_{a,a}$			-62.79	34.95	71.87	151						
$C^*_{ab,a}$				-30.35	-45.01	54.3	236					
$h^*_{ab,a}$					-44.42	54.24	305					

relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 0.5 (1.0)  
 $cmy3^*$  0.0 0.0 0.5 (0.0)

$olv_i4^*$  1.0 1.0 0.5 1.0

$cmy4^*$  0.0 0.0 0.5 0.0

standard and adapted CIELAB

$LAB^*LAB$  92.88 -6.06 50.46

$LAB^*LABa$  92.88 -5.13 45.87

$LAB^*TCh_a$  75.0 46.16 96.39

relative CIELAB lab\*

$lab^*lab$  0.967 -0.055 0.497

$lab^*tch$  0.75 0.5 0.268

$lab^*nch$  0.0 0.5 0.268

relative Natural Colour (NC)

$lab^*lrij$  0.967 -0.048 0.497

$lab^*ice$  0.75 0.5 0.266

$lab^*nCE$  0.0 0.5 j06g

relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 0.0 (1.0)

$cmy3^*$  0.0 0.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 0.0 1.0

$cmy4^*$  0.0 0.0 1.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  90.37 -11.15 96.17

$LAB^*LABa$  90.37 -10.26 91.75

$LAB^*TCh_a$  50.0 92.32 96.39

relative CIELAB lab\*

$lab^*lab$  0.935 -0.11 0.994

$lab^*tch$  0.5 1.0 0.268

$lab^*nch$  0.0 1.0 0.268

relative Natural Colour (NC)

$lab^*lrij$  0.935 -0.097 0.995

$lab^*ice$  0.5 1.0 0.266

$lab^*nCE$  0.0 1.0 j06g

relative Inform. Technology (IT)

$olv_i3^*$  0.5 0.5 0.0 (1.0)

$cmy3^*$  0.5 0.5 1.0 (0.0)

$olv_i4^*$  1.0 1.0 0.5 0.5

$cmy4^*$  0.0 0.0 0.5 0.5

standard and adapted CIELAB

$LAB^*LAB$  54.19 -5.32 47.85

$LAB^*LABa$  54.19 -5.13 45.87

$LAB^*TCh_a$  25.01 46.16 96.39

relative CIELAB lab\*

$lab^*lab$  0.467 -0.055 0.497

$lab^*tch$  0.25 0.5 0.268

$lab^*nch$  0.5 0.5 0.268

relative Natural Colour (NC)

$lab^*lrij$  0.467 -0.048 0.497

$lab^*ice$  0.25 0.5 0.266

$lab^*nCE$  0.5 0.5 j06g

relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (1.0)

$cmy3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0

$cmy4^*$  0.0 0.0 1.0 1.0

standard and adapted CIELAB

$LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

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)

$lab^*lrij$  0.0 0.0 0.0

$lab^*ice$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

$n^* = 0,50$

$n^* = 0,00$

blackness  $n^*$

chromaticness  $c^*$

$n^* = 0,50$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

blackness  $n^*$

chromaticness  $c^*$

$n^* = 0,25$

$n^* = 0,75$

$n^* = 1,00$

$n^* = 0,00$

$n^* = 0,25$

$n^* = 0,50$

**Input: Colorimetric Reflective System ORS18**

for hue  $h^* = lab^*h = 151/360 = 0.419$

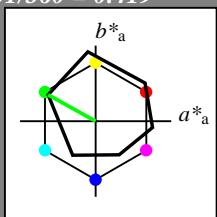
$lab^*tch$  and  $lab^*nch$

D65: hue L

LCH\*Ma: 51 72 151

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



relative Inform. Technology (IT)  
 $olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*tce$  1.0 0.0 -

$lab^*ncE$  0.0 0.0 -

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.5 1.0 0.5 (1.0)  
 $cmy3^*$  0.5 0.0 0.5 (0.0)  
 $olv_i4^*$  0.5 1.0 0.5 1.0  
 $cmy4^*$  0.5 0.0 0.5 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  73.15 -31.94 20.73  
 $LAB^*LABa$  73.15 -31.38 17.47  
 $LAB^*TCh_a$  75.0 35.93 150.91

relative CIELAB lab\*

$lab^*lab$  0.712 -0.436 0.243

$lab^*tch$  0.75 0.5 0.419

$lab^*nch$  0.0 0.5 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.712 -0.478 0.144

$lab^*tce$  0.75 0.5 0.453

$lab^*ncE$  0.0 0.5 j81g

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.5 0.0 (1.0)  
 $cmy3^*$  1.0 0.5 1.0 (0.0)  
 $olv_i4^*$  0.5 1.0 0.5 0.5  
 $cmy4^*$  0.5 0.0 0.5 0.5

standard and adapted CIELAB  
 $LAB^*LAB$  56.71 -0.23 2.14

$LAB^*LABa$  56.71 0.0 0.0

$LAB^*TCh_a$  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)

$lab^*lrij$  0.5 0.0 0.0

$lab^*tce$  0.5 0.0 -

$lab^*ncE$  0.5 0.0 -

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

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)

$lab^*lrij$  0.0 0.0 0.0

$lab^*tce$  0.0 0.0 -

$lab^*ncE$  1.0 0.0 -

$n^* = 1,0$

0,25

0,50  $n^* = 0,50$

0,75

1,00

chromaticness  $c^*$

TE100-7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)

**Output: Colorimetric Reflective System MRS18**

for hue  $h^* = lab^*h = 172/360 = 0.479$

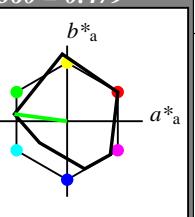
$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 52 70 172

olv\*Ma: 0.0 1.0 0.0

triangle lightness  $t^*$



relative Inform. Technology (IT)  
 $olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy3^*$  0.0 0.0 0.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0

$lab^*tce$  1.0 0.0 -

$lab^*ncE$  0.0 0.0 -

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.5 1.0 0.5 (1.0)  
 $cmy3^*$  0.5 0.0 0.5 (0.0)  
 $olv_i4^*$  0.5 1.0 0.5 1.0  
 $cmy4^*$  0.5 0.0 0.5 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  73.75 -35.42 8.02

$LAB^*LABa$  73.75 -34.85 4.72

$LAB^*TCh_a$  75.0 35.18 172.29

relative CIELAB lab\*

$lab^*lab$  0.72 -0.494 0.067

$lab^*tch$  0.75 0.5 0.479

$lab^*nch$  0.0 0.5 0.479

relative Natural Colour (NC)

$lab^*lrij$  0.72 -0.496 -0.056

$lab^*tce$  0.75 0.5 0.518

$lab^*ncE$  0.0 0.5 g07b

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.5 0.0 (1.0)  
 $cmy3^*$  1.0 0.5 1.0 (0.0)  
 $olv_i4^*$  0.5 1.0 0.5 0.5  
 $cmy4^*$  0.5 0.0 0.5 0.5

standard and adapted CIELAB  
 $LAB^*LAB$  56.71 -0.23 2.14

$LAB^*LABa$  56.71 0.0 0.0

$LAB^*TCh_a$  50.0 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.425 -0.873 0.486

$lab^*tch$  0.5 1.0 0.419

$lab^*nch$  0.0 1.0 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.425 -0.956 0.289

$lab^*tce$  0.5 1.0 0.453

$lab^*ncE$  0.0 1.0 j81g

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.213 -0.436 0.243

$lab^*tch$  0.25 0.5 0.419

$lab^*nch$  0.5 0.5 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.213 -0.478 0.144

$lab^*tce$  0.25 0.5 0.453

$lab^*ncE$  0.5 0.5 j81g

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.213 -0.436 0.243

$lab^*tch$  0.25 0.5 0.419

$lab^*nch$  0.5 0.5 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.213 -0.478 0.144

$lab^*tce$  0.25 0.5 0.453

$lab^*ncE$  0.5 0.5 j81g

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.213 -0.436 0.243

$lab^*tch$  0.25 0.5 0.419

$lab^*nch$  0.5 0.5 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.213 -0.478 0.144

$lab^*tce$  0.25 0.5 0.453

$lab^*ncE$  0.5 0.5 j81g

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.213 -0.436 0.243

$lab^*tch$  0.25 0.5 0.419

$lab^*nch$  0.5 0.5 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.213 -0.478 0.144

$lab^*tce$  0.25 0.5 0.453

$lab^*ncE$  0.5 0.5 j81g

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

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

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy3^*$  1.0 1.0 1.0 (0.0)  
 $olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46

$LAB^*LABa$  18.02 0.0 0.0

$LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

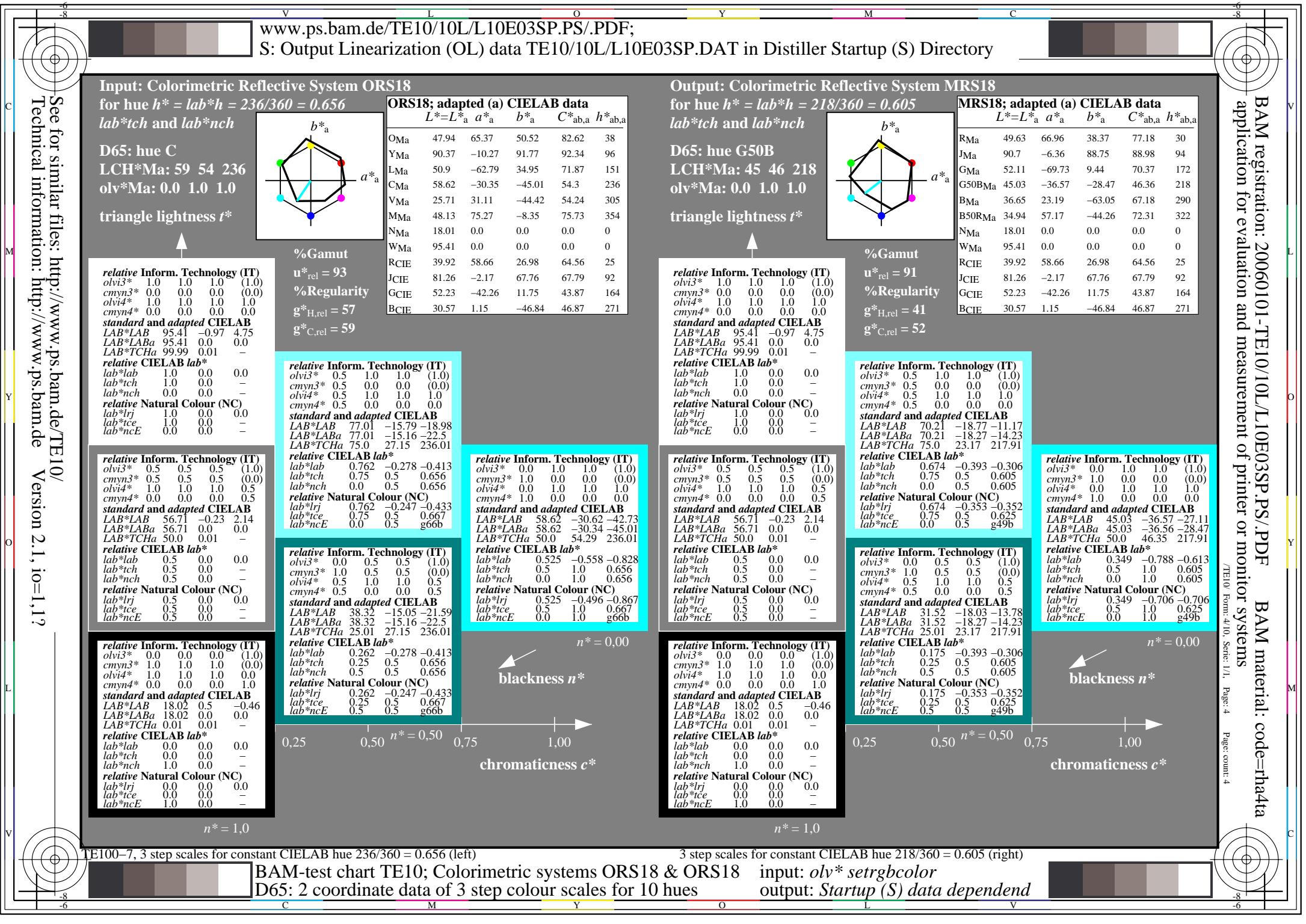
$lab^*lab$  0.213 -0.436 0.243

$lab^*tch$  0.25 0.5 0.419

$lab^*nch$  0.5 0.5 0.419

relative Natural Colour (NC)

$lab^*lrij$  0.213 -0.478 0.



See for similar files: <http://www.ps.bam.de/TE10/>  
 Technical information: <http://www.ps.bam.de>

Version 2.1, io=1,1?

### Input: Colorimetric Reflective System ORS18

for hue  $h^* = lab^*h = 305/360 = 0.847$

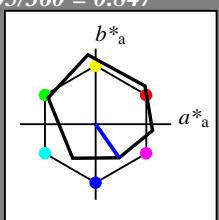
lab\*tch and lab\*nch

D65: hue V

LCH\*Ma: 26 54 305

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$



relative Inform. Technology (IT)

olv3\* 1.0 1.0 1.0 (1.0)  
 cmyn3\* 0.0 0.0 0.0 (0.0)

olv4\* 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 -0.97 4.75  
 LAB\*LABa 95.41 0.0 0.0

LAB\*TChA 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\*tce 1.0 0.0 -

lab\*ncE 0.0 0.0 -

relative Inform. Technology (IT)

olv3\* 0.5 0.5 0.5 (1.0)  
 cmyn3\* 0.5 0.5 0.5 (0.0)

olv4\* 1.0 1.0 1.0 0.5  
 cmyn4\* 0.0 0.0 0.0 0.5

standard and adapted CIELAB

LAB\*LAB 56.71 -0.23 2.14  
 LAB\*LABa 56.71 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\*lrj 0.5 0.0 0.0  
 lab\*tce 0.5 0.0 -

lab\*ncE 0.5 0.0 -

relative Inform. Technology (IT)

olv3\* 0.0 0.0 0.0 (1.0)  
 cmyn3\* 1.0 1.0 1.0 (0.0)

olv4\* 1.0 1.0 1.0 0.0  
 cmyn4\* 0.0 0.0 0.0 1.0

standard and adapted CIELAB

LAB\*LAB 18.02 0.5 -0.46  
 LAB\*LABa 18.02 0.0 0.0

LAB\*TChA 0.01 0.01 -

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\*lrj 0.0 0.0 0.0  
 lab\*tce 0.0 0.0 -

lab\*ncE 1.0 0.0 -

$n^* = 1,0$

### ORS18; adapted (a) CIELAB data

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

	$O Ma$	$Y Ma$	$L Ma$	$C Ma$	$V Ma$	$M Ma$	$N Ma$	$W Ma$	$R CIE$	$J CIE$	$G CIE$	$B CIE$
	47.94	65.37	50.52	82.62	38							
	90.37	-10.27	91.77	92.34	96							
	50.9	-62.79	34.95	71.87	151							
	58.62	-30.35	-45.01	54.3	236							
	25.71	31.11	-44.42	54.24	305							
	48.13	75.27	-8.35	75.73	354							
	18.01	0.0	0.0	0.0	0							
	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						

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

### Output: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 290/360 = 0.806$

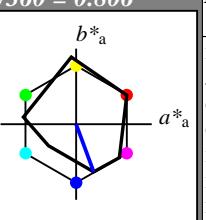
lab\*tch and lab\*nch

D65: hue B

LCH\*Ma: 37 67 290

olv\*Ma: 0.0 0.0 1.0

triangle lightness  $t^*$



%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

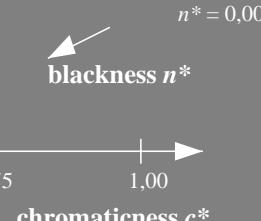
$g^*_{C,rel} = 52$

### MRS18; adapted (a) CIELAB data

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

	$R Ma$	$J Ma$	$G Ma$	$G50B Ma$	$B Ma$	$B50R Ma$	$N Ma$	$W Ma$	$R CIE$	$J CIE$	$G CIE$	$B CIE$
	49.63	66.96	38.37	77.18	30							
	90.7	-6.36	88.75	88.98	94							
	52.11	-69.73	9.44	70.37	172							
	45.03	-36.57	-28.47	46.36	218							
	36.65	23.19	-63.05	67.18	290							
	34.94	57.17	-44.26	72.31	322							
	18.01	0.0	0.0	0.0	0							
	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						

$n^* = 0,00$



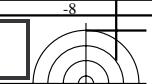
$n^* = 1,0$



TE100-7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)

BAM-test chart TE10; Colorimetric systems ORS18 & ORS18  
 D65: 2 coordinate data of 3 step colour scales for 10 hues

input:  $olv^* setrgbcolor$   
 output: Startup (S) data dependend



C

M

M

Y

O

L

V

-8

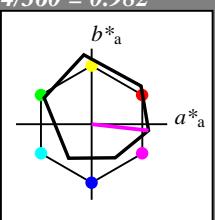
-6

**Input: Colorimetric Reflective System ORS18**for hue  $h^* = lab^*h = 354/360 = 0.982$  $lab^*tch$  and  $lab^*nch$ 

D65: hue M

LCH\*Ma: 48 76 354

olv\*Ma: 1.0 0.0 1.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 93$ 

%Regularity

 $g^*_{H,rel} = 57$  $g^*_{C,rel} = 59$ 

relative Inform. Technology (IT)

 $olv^3* 1.0 1.0 1.0 (1.0)$  $cmy3* 0.0 0.0 0.0 (0.0)$  $olv^4* 1.0 1.0 1.0 1.0$  $cmy4* 0.0 0.0 0.0 0.0$ 

standard and adapted CIELAB

 $LAB^*LAB 95.41 -0.97 4.75$  $LAB^*LABa 95.41 0.0 0.0$  $LAB^*TChA 99.99 0.01 -$ 

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)

 $lab^*lrij 1.0 0.0 0.0$  $lab^*ice 1.0 0.0 -$  $lab^*ncE 0.0 0.0 -$ 

standard and adapted CIELAB

 $LAB^*LAB 71.77 37.1 -1.01$  $LAB^*LABa 71.77 37.63 -4.17$  $LAB^*TChA 75.0 37.86 353.66$ 

relative CIELAB lab\*

 $lab^*lab 0.695 0.497 -0.054$  $lab^*tch 0.75 0.5 0.982$  $lab^*nch 0.0 0.5 0.982$ 

relative Natural Colour (NC)

 $lab^*lrij 0.695 0.454 -0.208$  $lab^*ice 0.75 0.5 0.932$  $lab^*ncE 0.0 0.5 b72r$ 

relative Inform. Technology (IT)

 $olv^3* 0.5 0.5 0.5 (1.0)$  $cmy3* 0.5 0.5 0.5 (0.0)$  $olv^4* 1.0 1.0 1.0 0.5$  $cmy4* 0.0 0.0 0.0 0.5$ 

standard and adapted CIELAB

 $LAB^*LAB 56.71 -0.23 2.14$  $LAB^*LABa 56.71 0.0 0.0$  $LAB^*TChA 50.0 0.01 -$ 

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)

 $lab^*lrij 0.5 0.0 0.0$  $lab^*ice 0.5 0.0 -$  $lab^*ncE 0.5 0.0 -$ 

standard and adapted CIELAB

 $LAB^*LAB 18.02 0.5 -0.46$  $LAB^*LABa 18.02 0.0 0.0$  $LAB^*TChA 0.01 0.01 -$ 

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)

 $lab^*lrij 0.0 0.0 0.0$  $lab^*ice 0.0 0.0 -$  $lab^*ncE 1.0 0.0 -$  $n^* = 1,0$  $n^* = 0,50$  $n^* = 0,00$ 

$n^* = 0,00$   
blackness  $n^*$   
 $\rightarrow$   
 $chromaticness c^*$

C

M

Y

O

L

V

TE100-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

BAM-test chart TE10; Colorimetric systems ORS18 & ORS18  
D65: 2 coordinate data of 3 step colour scales for 10 hues

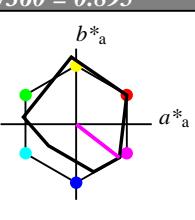
3 step scales for constant CIELAB hue 322/360 = 0.895 (right)

input:  $olv^* setrgbcolor$   
output: Startup (S) data dependend**Output: Colorimetric Reflective System MRS18**for hue  $h^* = lab^*h = 322/360 = 0.895$  $lab^*tch$  and  $lab^*nch$ 

D65: hue B50R

LCH\*Ma: 35 72 322

olv\*Ma: 1.0 0.0 1.0

triangle lightness  $t^*$ 

%Gamut

 $u^*_{rel} = 91$ 

%Regularity

 $g^*_{H,rel} = 41$  $g^*_{C,rel} = 52$ 

relative Inform. Technology (IT)

 $olv^3* 1.0 1.0 1.0 (1.0)$  $cmy3* 0.0 0.0 0.0 (0.0)$  $olv^4* 1.0 1.0 1.0 1.0$  $cmy4* 0.0 0.0 0.0 0.0$ 

standard and adapted CIELAB

 $LAB^*LAB 95.41 -0.97 4.75$  $LAB^*LABa 95.41 0.0 0.0$  $LAB^*TChA 99.99 0.01 -$ 

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)

 $lab^*lrij 1.0 0.0 0.0$  $lab^*ice 1.0 0.0 -$  $lab^*ncE 0.0 0.0 -$ 

relative Inform. Technology (IT)

 $olv^3* 0.5 0.5 0.5 (1.0)$  $cmy3* 0.5 0.5 0.5 (0.0)$  $olv^4* 1.0 1.0 1.0 0.5$  $cmy4* 0.0 0.0 0.0 0.5$ 

standard and adapted CIELAB

 $LAB^*LAB 65.17 28.18 -19.4$  $LAB^*LABa 65.17 28.58 -22.12$  $LAB^*TChA 75.0 36.15 322.25$ 

relative CIELAB lab\*

 $lab^*lab 0.609 0.395 -0.305$  $lab^*tch 0.75 0.5 0.895$  $lab^*nch 0.0 0.5 0.895$ 

relative Natural Colour (NC)

 $lab^*lrij 0.609 0.324 -0.38$  $lab^*ice 0.75 0.5 0.862$  $lab^*ncE 0.0 0.5 b44r$ 

relative Inform. Technology (IT)

 $olv^3* 0.0 0.0 0.0 (1.0)$  $cmy3* 1.0 1.0 1.0 (0.0)$  $olv^4* 1.0 1.0 1.0 0.0$  $cmy4* 0.0 0.0 0.0 1.0$ 

standard and adapted CIELAB

 $LAB^*LAB 18.02 0.5 -0.46$  $LAB^*LABa 18.02 0.0 0.0$  $LAB^*TChA 0.01 0.01 -$ 

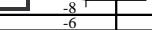
relative CIELAB lab\*

 $lab^*lab 0.0 0.0 0.0$  $lab^*tch 0.0 0.0 -$  $lab^*nch 1.0 0.0 -$ 

relative Natural Colour (NC)

 $lab^*lrij 0.0 0.0 0.0$  $lab^*ice 0.0 0.0 -$  $lab^*ncE 1.0 0.0 -$  $n^* = 0,00$  $\rightarrow$  $blackness n^*$  $\rightarrow$  $chromaticness c^*$ 

/TE10 Form: 6/10, Serie: 1/1, Page: 6 Page: count: 6



BAM registration: 20060101-TE10/10L/L10E05SP.PS/.PDF BAM material: code=rha4ta  
application for evaluation and measurement of printer or monitor systems

TE100-7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)  
BAM-test chart TE10; Colorimetric systems ORS18 & ORS18  
D65: 2 coordinate data of 3 step colour scales for 10 hues

C

M

Y

O

L

V

C

-8

-6



C

M

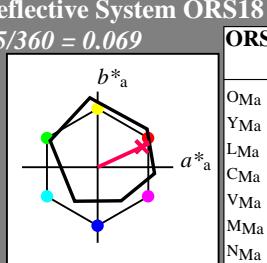
Y

O

L

V

**Input: Colorimetric Reflective System ORS18**  
for hue  $h^* = lab^*h = 25/360 = 0.069$   
 $lab^*tch$  and  $lab^*nch$



D65: hue R  
LCH\*Ma: 48 75 25  
olv\*Ma: 1.0 0.0 0.32  
triangle lightness  $t^*$

relative Inform. Technology (IT)  
olv3\* 1.0 1.0 1.0 (1.0)  
cmyn3\* 0.0 0.0 0.0 (0.0)  
olv4\* 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 -0.97 4.75  
LAB\*LABa 95.41 0.0 0.0  
LAB\*TChA 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\*tce 1.0 0.0 -  
lab\*ncE 0.0 0.0 -

relative Inform. Technology (IT)  
olv3\* 0.5 0.5 0.5 (1.0)  
cmyn3\* 0.5 0.5 0.5 (0.0)  
olv4\* 1.0 1.0 1.0 0.5  
cmyn4\* 0.0 0.0 0.0 0.5  
standard and adapted CIELAB  
LAB\*LAB 56.71 -0.23 2.14  
LAB\*LABa 56.71 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\*lrj 0.5 0.0 0.0  
lab\*tce 0.5 0.0 -  
lab\*ncE 0.5 0.0 -

relative Inform. Technology (IT)  
olv3\* 0.0 0.0 0.0 (1.0)  
cmyn3\* 1.0 1.0 1.0 (0.0)  
olv4\* 1.0 1.0 1.0 0.0  
cmyn4\* 0.0 0.0 0.0 1.0  
standard and adapted CIELAB  
LAB\*LAB 18.02 0.5 -0.46  
LAB\*LABa 18.02 0.0 0.0  
LAB\*TChA 0.01 0.01 -

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\*lrj 0.0 0.0 0.0  
lab\*tce 0.0 0.0 -  
lab\*ncE 1.0 0.0 -

$n^* = 1.0$

### ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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

%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

relative Inform. Technology (IT)

olv3\* 1.0 0.5 0.661 (1.0)

cmyn3\* 0.0 0.5 0.339 (0.0)

olv4\* 1.0 0.5 0.661 1.0

cmyn4\* 0.0 0.5 0.339 0.0

standard and adapted CIELAB

LAB\*LAB 95.41 -0.97 4.75

LAB\*LABa 95.41 0.0 0.0

LAB\*TChA 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\*tce 1.0 0.0 -

lab\*ncE 0.0 0.0 -

standard and adapted CIELAB

LAB\*LAB 71.7 33.75 18.92

LAB\*LABa 71.7 34.27 15.76

LAB\*TChA 75.0 37.72 24.69

relative CIELAB lab\*

lab\*lab 0.694 0.454 0.209

lab\*tch 0.75 0.5 0.069

lab\*nch 0.0 0.5 0.069

relative Natural Colour (NC)

lab\*lrj 0.694 0.5 0.0

lab\*tce 0.75 0.5 1.0

lab\*ncE 0.0 0.5 b99r

relative Inform. Technology (IT)

olv3\* 1.0 0.0 0.322 (1.0)

cmyn3\* 0.0 1.0 0.678 (0.0)

olv4\* 1.0 0.0 0.323 1.0

cmyn4\* 0.0 1.0 0.677 0.0

standard and adapted CIELAB

LAB\*LAB 48.01 68.48 33.09

LAB\*LABa 48.01 68.55 31.53

LAB\*TChA 50.0 75.45 24.7

relative CIELAB lab\*

lab\*lab 0.388 0.908 0.418

lab\*tch 0.5 1.0 0.069

lab\*nch 0.0 1.0 0.069

relative Natural Colour (NC)

lab\*lrj 0.388 1.0 0.0

lab\*tce 0.5 1.0 0.0

lab\*ncE 0.0 1.0 r00j

relative CIELAB lab\*

lab\*lab 0.194 0.454 0.209

lab\*tch 0.25 0.5 0.069

lab\*nch 0.5 0.5 0.069

relative Natural Colour (NC)

lab\*lrj 0.194 0.5 0.0

lab\*tce 0.25 0.5 0.0

lab\*ncE 0.5 0.5 r00j

$n^* = 0,00$

### Output: Colorimetric Reflective System MRS18

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

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

D65: hue R

LCH\*Ma: 48 73 25

olv\*Ma: 1.0 0.0 0.1

triangle lightness  $t^*$

triangle lightness  $t^*$

↑

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

olv3\* 1.0 1.0 1.0 (1.0)

cmyn3\* 0.0 0.0 0.0 (0.0)

olv4\* 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 -0.97 4.75

LAB\*LABa 95.41 0.0 0.0

LAB\*TChA 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\*tce 1.0 0.0 -

lab\*ncE 0.0 0.0 -

standard and adapted CIELAB

LAB\*LAB 71.8 32.47 18.34

LAB\*LABa 71.8 33.0 15.17

LAB\*TChA 75.0 36.32 24.7

relative CIELAB lab\*

lab\*lab 0.695 0.454 0.209

lab\*tch 0.75 0.5 0.069

lab\*nch 0.0 0.5 0.069

relative Natural Colour (NC)

lab\*lrj 0.695 0.5 0.0

lab\*tce 0.75 0.5 1.0

lab\*ncE 0.0 0.5 b99r

$n^* = 0,00$

ORS18; 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

JMa 90.7

-6.36

88.75

88.98

94

GMa 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

0.0

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

relative Inform. Technology (IT)

olv3\* 1.0 0.5 0.458 (1.0)

cmyn3\* 0.0 0.5 0.452 (0.0)

olv4\* 1.0 0.5 0.549 1.0

cmyn4\* 0.0 0.5 0.451 0.0

standard and adapted CIELAB

LAB\*LAB 71.8 32.47 18.34

LAB\*LABa 71.8 33.0 15.17

LAB\*TChA 75.0 36.32 24.7

relative CIELAB lab\*

lab\*lab 0.695 0.454 0.209

lab\*tch 0.75 0.5 0.069

lab\*nch 0.0 0.5 0.069

relative Natural Colour (NC)

lab\*lrj 0.695 0.5 0.0

lab\*tce 0.75 0.5 1.0

lab\*ncE 0.0 0.5 b99r

$n^* = 0,00$

relative Inform. Technology (IT)

olv3\* 1.0 1.0 0.903 (0.0)

See for similar files: <http://www.ps.bam.de/TE10/>

Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1?

### Input: Colorimetric Reflective System ORS18

for hue  $h^* = lab^*h = 92/360 = 0.255$

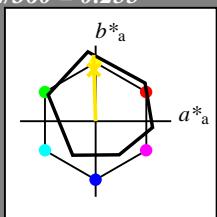
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 86 88 92

olv\*Ma: 1.0 0.9 0.0

triangle lightness  $t^*$



relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0  
 $lab^*tce$  1.0 0.0 -  
 $lab^*ncE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 0.5 0.5 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  56.71 -0.23 2.14  
 $LAB^*LABa$  56.71 0.0 0.0  
 $LAB^*TCh_a$  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)

$lab^*lrij$  0.5 0.0 0.0  
 $lab^*tce$  0.5 0.0 -  
 $lab^*ncE$  0.5 0.0 -

relative Inform. Technology (IT)

$olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB

$LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.0 0.0 0.0  
 $lab^*tch$  0.0 0.0 -  
 $lab^*nch$  1.0 0.0 -

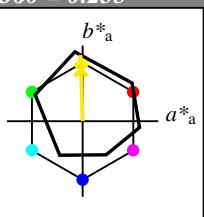
relative Natural Colour (NC)

$lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -  
 $lab^*ncE$  1.0 0.0 -

$n^* = 1,0$

### ORS18; adapted (a) CIELAB data

	$L^*$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
OMa	47.94	65.37	50.52	82.62	38
YMa	90.37	-10.27	91.77	92.34	96
LMa	50.9	-62.79	34.95	71.87	151
CMa	58.62	-30.35	-45.01	54.3	236
VMa	25.71	31.11	-44.42	54.24	305
MMa	48.13	75.27	-8.35	75.73	354
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



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

relative Inform. Technology (IT)

$olv_i3^*$  1.0 0.951 0.5 (1.0)  
 $cmy_n3^*$  0.0 0.049 0.5 (0.0)

$olv_i4^*$  1.0 0.951 0.5 1.0  
 $cmy_n4^*$  0.0 0.049 0.5 0.0

standard and adapted CIELAB

$LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0  
 $lab^*tce$  1.0 0.0 -  
 $lab^*ncE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 0.5 0.5 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB

$LAB^*LAB$  56.71 -0.23 2.14  
 $LAB^*LABa$  56.71 0.0 0.0  
 $LAB^*TCh_a$  50.0 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.5 0.451 0.0 (1.0)  
 $lab^*tch$  0.5 0.549 1.0 (0.0)

$lab^*nch$  1.0 0.951 0.5 0.5  
 $cmy_n4^*$  0.0 0.049 0.5 0.5

relative Natural Colour (NC)

$lab^*lrij$  0.5 0.451 0.0 0.5  
 $lab^*tce$  0.5 0.549 1.0 0.5  
 $lab^*ncE$  0.0 0.0 0.0 0.5

relative Inform. Technology (IT)

$olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB

$LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

relative CIELAB lab\*

$lab^*lab$  0.44 -0.015 0.5  
 $lab^*tch$  0.25 0.5 0.255  
 $lab^*nch$  0.5 0.5 0.255

relative Natural Colour (NC)

$lab^*lrij$  0.44 0.44 0.0 0.5  
 $lab^*tce$  0.25 0.25 0.25  
 $lab^*ncE$  0.5 0.5 r99j

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

chromaticness  $c^*$

blackness  $n^*$

$n^* = 0,00$

$n^* = 0,50$

$n^* = 1,00$

### Output: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 92/360 = 0.255$

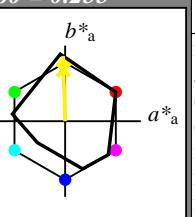
$lab^*tch$  and  $lab^*nch$

D65: hue J

LCH\*Ma: 89 86 92

olv\*Ma: 1.0 0.95 0.0

triangle lightness  $t^*$



%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

$olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB

$LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)

$lab^*lrij$  1.0 0.0 0.0  
 $lab^*tce$  1.0 0.0 -  
 $lab^*ncE$  0.0 0.0 -

relative Inform. Technology (IT)

$olv_i3^*$  0.5 0.951 0.0 (1.0)  
 $cmy_n3^*$  0.0 0.024 0.5 (0.0)

$olv_i4^*$  1.0 0.956 0.5 1.0  
 $cmy_n4^*$  0.0 0.024 0.5 0.0

standard and adapted CIELAB

$LAB^*LAB$  92.04 -0.97 47.67  
 $LAB^*LABa$  92.04 -1.39 43.14  
 $LAB^*TCh_a$  75.0 43.16 91.85

relative CIELAB lab\*

$lab^*lab$  0.957 -0.015 0.5  
 $lab^*tch$  0.75 0.5 0.255  
 $lab^*nch$  0.0 0.5 0.255

relative Natural Colour (NC)

$lab^*lrij$  0.957 0.0 0.5  
 $lab^*tce$  0.75 0.5 0.25  
 $lab^*ncE$  0.0 0.5 0.0

relative Inform. Technology (IT)

$olv_i3^*$  0.476 0.0 0.0 (1.0)  
 $cmy_n3^*$  0.524 1.0 0.0 (0.0)

$olv_i4^*$  1.0 0.976 0.5 0.5  
 $cmy_n4^*$  0.0 0.024 0.5 0.5

standard and adapted CIELAB

$LAB^*LAB$  53.35 -1.55 45.05  
 $LAB^*LABa$  53.35 -1.38 43.13  
 $LAB^*TCh_a$  25.01 43.16 91.84

relative CIELAB lab\*

$lab^*lab$  0.457 -0.015 0.5  
 $lab^*tch$  0.25 0.5 0.255  
 $lab^*nch$  0.5 0.5 0.255

relative Natural Colour (NC)

$lab^*lrij$  0.457 0.0 0.5  
 $lab^*tce$  0.25 0.5 0.25  
 $lab^*ncE$  0.5 0.5 r99j

$n^* = 1,00$

	$L^*$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	49.63	66.96	38.37	77.18	30
JMa	90.7	-6.36	88.75	88.98	94
GMa	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

%Gamut

$u^*_{rel} = 91$

%Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$

relative Inform. Technology (IT)

$olv_i3^*$  1.0 0.976 0.5 (1.0)  
 $cmy_n3^*$  0.0 0.024 0.5 (0.0)

$olv_i4^*$  1.0 0.976 0.5 1.0  
 $cmy_n4^*$  0.0 0.024 0.5 0.0

standard and adapted CIELAB

$LAB^*LAB$  92.04 -0.97 47.67  
 $LAB^*LABa$  92.04 -1.39 43.14  
 $LAB^*TCh_a$  75.0 43.16 91.85

relative CIELAB lab\*

$lab^*lab$  0.957 -0.015 0.5  
 $lab^*tch$  0.75 0.5 0.255  
 $lab^*nch$  0.0 0.5 0.255

relative Natural Colour (NC)

$lab^*lrij$  0.957 0.0 0.5  
 $lab^*tce$  0.75 0.5 0.25  
 $lab^*ncE$  0.0 0.5 0.0

relative Inform. Technology (IT)

### Input: Colorimetric Reflective System ORS18

for hue  $h^* = lab^*h = 164/360 = 0.457$

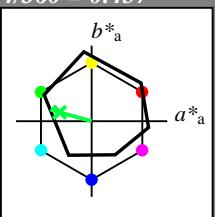
$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 53 57 164

olv\*Ma: 0.0 1.0 0.25

triangle lightness  $t^*$



relative Inform. Technology (IT)  
 $olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)  
 $lab^*lrij$  1.0 0.0 0.0  
 $lab^*tce$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 0.5 0.5 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB  
 $LAB^*LAB$  56.71 -0.23 2.14  
 $LAB^*LABa$  56.71 0.0 0.0  
 $LAB^*TCh_a$  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)  
 $lab^*lrij$  0.5 0.0 0.0  
 $lab^*tce$  0.5 0.0 -

$lab^*nCE$  0.5 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

$lab^*nCE$  1.0 0.0 -

$n^* = 1,0$

TE100-7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)

BAM-test chart TE10; Colorimetric systems ORS18 & ORS18  
 D65: 2 coordinate data of 3 step colour scales for 10 hues

### Output: Colorimetric Reflective System MRS18

for hue  $h^* = lab^*h = 164/360 = 0.457$

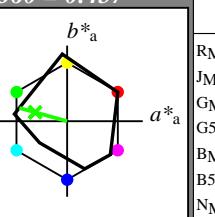
$lab^*tch$  and  $lab^*nch$

D65: hue G

LCH\*Ma: 56 66 164

olv\*Ma: 0.1 1.0 0.0

triangle lightness  $t^*$



relative Inform. Technology (IT)  
 $olv_i3^*$  1.0 1.0 1.0 (1.0)  
 $cmy_n3^*$  0.0 0.0 0.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 1.0  
 $cmy_n4^*$  0.0 0.0 0.0 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  95.41 -0.97 4.75  
 $LAB^*LABa$  95.41 0.0 0.0  
 $LAB^*TCh_a$  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)  
 $lab^*lrij$  1.0 0.0 0.0  
 $lab^*tce$  1.0 0.0 -

$lab^*nCE$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.551 1.0 0.5 (1.0)  
 $cmy_n3^*$  0.449 0.0 0.5 (0.0)

$olv_i4^*$  0.551 1.0 0.5 1.0  
 $cmy_n4^*$  0.449 0.0 0.5 0.0

standard and adapted CIELAB  
 $LAB^*LAB$  75.74 -32.2 12.22  
 $LAB^*LABa$  75.74 -31.6 8.79  
 $LAB^*TCh_a$  75.0 32.81 164.46

relative CIELAB lab\*  
 $lab^*lab$  0.746 -0.481 0.134  
 $lab^*tch$  0.75 0.5 0.457

$lab^*nch$  0.0 0.5 0.457

relative Natural Colour (NC)  
 $lab^*lrij$  0.746 -0.499 0.0  
 $lab^*tce$  0.75 0.5 0.5  
 $lab^*nCE$  0.0 0.5 j99g

relative Inform. Technology (IT)  
 $olv_i3^*$  0.5 0.5 0.5 (1.0)  
 $cmy_n3^*$  0.5 0.5 0.5 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.5  
 $cmy_n4^*$  0.0 0.0 0.0 0.5

standard and adapted CIELAB  
 $LAB^*LAB$  56.71 -0.23 2.14  
 $LAB^*LABa$  56.71 0.0 0.0  
 $LAB^*TCh_a$  50.0 0.01 -

relative CIELAB lab\*  
 $lab^*lab$  0.45 -0.962 0.268  
 $lab^*tch$  0.5 1.0 0.457

$lab^*nch$  0.0 1.0 0.457

relative Natural Colour (NC)  
 $lab^*lrij$  0.45 -0.999 0.0  
 $lab^*tce$  0.5 1.0 0.5  
 $lab^*nCE$  0.0 1.0 j99g

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  35.41 -27.22 8.34  
 $LAB^*LABa$  35.41 -27.39 7.63  
 $LAB^*TCh_a$  25.01 28.44 164.45

relative CIELAB lab\*  
 $lab^*lab$  0.225 -0.481 0.134  
 $lab^*tch$  0.25 0.5 0.457

$lab^*nch$  0.5 0.5 0.457

relative Natural Colour (NC)  
 $lab^*lrij$  0.225 -0.499 0.0  
 $lab^*tce$  0.25 0.5 0.5  
 $lab^*nCE$  0.5 0.5 j99g

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0 0.0 0.0 1.0

standard and adapted CIELAB  
 $LAB^*LAB$  18.02 0.5 -0.46  
 $LAB^*LABa$  18.02 0.0 0.0  
 $LAB^*TCh_a$  0.01 0.01 -

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)  
 $lab^*lrij$  0.0 0.0 0.0  
 $lab^*tce$  0.0 0.0 -

relative Inform. Technology (IT)  
 $olv_i3^*$  0.0 0.0 0.0 (1.0)  
 $cmy_n3^*$  1.0 1.0 1.0 (0.0)

$olv_i4^*$  1.0 1.0 1.0 0.0  
 $cmy_n4^*$  0.0

