

Input: Colorimetric Reflective System NRS11

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

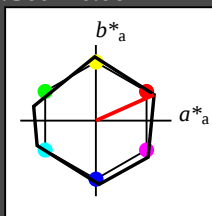
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 53 84 24

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	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	-0.01
LAB*LABa	95.41	0.0	0.0
LAB*TCHa	99.99	0.01	0.0

relative CIELAB lab*

lab*lab	1.0	0.0	0.0
lab*tch	0.0	1.0	0.0
lab*nch	0.0	0.0	1.0

relative Natural Colour (NC)

lab*trj	1.0	0.0	0.0
lab*tce	1.0	0.0	0.0
lab*nce	0.0	1.0	0.0

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	74.31	0.02	0.0
LAB*LABa	74.31	0.02	0.0
LAB*TCHa	75.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.75	0.0	0.0
lab*tch	0.75	0.0	0.0
lab*nch	0.75	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.75	0.0	0.0
lab*tce	0.75	0.0	0.0
lab*nce	0.75	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	53.21	0.04	0.0
LAB*LABa	53.21	0.04	0.0
LAB*TCHa	50.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.5	0.0	0.0
lab*tch	0.5	0.0	0.0
lab*nch	0.5	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.5	0.0	0.0
lab*tce	0.5	0.0	0.0
lab*nce	0.5	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	32.11	0.07	0.01
LAB*LABa	32.11	0.07	0.01
LAB*TCHa	25.00	0.01	0.0

relative CIELAB lab*

lab*lab	0.25	0.0	0.0
lab*tch	0.25	0.0	0.0
lab*nch	0.25	0.0	0.0

relative Natural Colour (NC)

lab*trj	0.25	0.0	0.0
lab*tce	0.25	0.0	0.0
lab*nce	0.25	0.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	11.01	0.07	0.01
LAB*LABa	11.01	0.07	0.01
LAB*TCHa	0.01	0.01	0.0

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	1.0	0.0
lab*nch	0.0	0.0	1.0

relative Natural Colour (NC)

lab*trj	0.0	1.0	0.0
lab*tce	0.0	1.0	0.0
lab*nce	0.0	1.0	0.0

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	11.01	0.07	0.01
LAB*LABa	11.01	0.07	0.01
LAB*TCHa	0.01	0.01	0.0

relative Inform. Technology (IT)

olvi3*	1.0	0.75	0.75	(1.0)
cmyn3*	0.0	0.25	0.25	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	84.85	19.28	8.58
LAB*LABa	84.85	19.28	8.58
LAB*TCHa	97.5	21.08	24.01

relative CIELAB lab*

lab*lab	0.75	0.25	0.0
lab*tch	0.75	0.25	0.0
lab*nch	0.75	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.75	0.25	-0.004
lab*tce	0.75	0.25	0.997
lab*nce	0.75	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.75	0.5	0.5	(1.0)
cmyn3*	0.25	0.5	0.5	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	63.75	19.3	8.59
LAB*LABa	63.75	19.3	8.59
LAB*TCHa	62.5	21.09	24.01

relative CIELAB lab*

lab*lab	0.625	0.25	0.0
lab*tch	0.625	0.25	0.0
lab*nch	0.625	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.625	0.25	-0.004
lab*tce	0.625	0.25	0.997
lab*nce	0.625	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	42.65	19.32	8.59
LAB*LABa	42.65	19.32	8.59
LAB*TCHa	37.5	21.09	24.01

relative CIELAB lab*

lab*lab	0.375	0.25	0.0
lab*tch	0.375	0.25	0.0
lab*nch	0.375	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.375	0.25	-0.004
lab*tce	0.375	0.25	0.997
lab*nce	0.375	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.25	0.5	0.5	(1.0)
cmyn3*	0.75	0.5	0.5	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	21.25	19.33	8.6
LAB*LABa	21.25	19.33	8.6
LAB*TCHa	12.5	21.08	24.01

relative CIELAB lab*

lab*lab	0.125	0.25	0.0
lab*tch	0.125	0.25	0.0
lab*nch	0.125	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.125	0.25	-0.004
lab*tce	0.125	0.25	0.997
lab*nce	0.125	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	11.01	0.07	0.01
LAB*LABa	11.01	0.07	0.01
LAB*TCHa	0.01	0.01	0.0

relative CIELAB lab*

lab*lab	0.0	0.0	0.0
lab*tch	0.0	1.0	0.0
lab*nch	0.0	0.0	1.0

relative Natural Colour (NC)

lab*trj	0.0	1.0	0.0
lab*tce	0.0	1.0	0.0
lab*nce	0.0	1.0	0.0

NRS11; adapted (a) CIELAB data

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

RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

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

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

relative Inform. Technology (IT)

olvi3*	1.0	0.5	0.5	(1.0)
cmyn3*	0.0	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	74.3	38.55	17.16
LAB*LABa	74.3	38.55	17.16
LAB*TCHa	75.0	42.17	24.01

relative CIELAB lab*

lab*lab	0.75	0.25	0.0
lab*tch	0.75	0.25	0.0
lab*nch	0.75	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.75	0.25	-0.009
lab*tce	0.75	0.25	0.997
lab*nce	0.75	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.75	0.25	0.25	(1.0)
cmyn3*	0.25	0.75	0.75	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	53.2	38.57	17.17
LAB*LABa	53.2	38.57	17.17
LAB*TCHa	50.0	42.18	24.01

relative CIELAB lab*

lab*lab	0.625	0.25	0.0
lab*tch	0.625	0.25	0.0
lab*nch	0.625	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.625	0.25	-0.014
lab*tce	0.625	0.25	0.997
lab*nce	0.625	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	0.5	0.5	(1.0)
cmyn4*	0.0	0.5	0.5	(0.0)

standard and adapted CIELAB

LAB*LAB	42.65	37.64	25.75
LAB*LABa	42.65	37.64	25.75
LAB*TCHa	37.5	42.18	24.01

relative CIELAB lab*

lab*lab	0.375	0.25	0.0
lab*tch	0.375	0.25	0.0
lab*nch	0.375	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.375	0.25	-0.014
lab*tce	0.375	0.25	0.997
lab*nce	0.375	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.25	0.5	0.5	(1.0)
cmyn3*	0.75	0.5	0.5	(0.0)
olvi4*	1.0	0.75	0.75	(1.0)
cmyn4*	0.0	0.25	0.25	(0.0)

standard and adapted CIELAB

LAB*LAB	21.25	38.52	17.16
LAB*LABa	21.25	38.52	17.16
LAB*TCHa	25.01	42.17	24.01

relative CIELAB lab*

lab*lab	0.25	0.25	0.0
lab*tch	0.25	0.25	0.0
lab*nch	0.25	0.25	0.0

relative Natural Colour (NC)

lab*trj	0.25	0.25	-0.009
lab*tce	0.25	0.25	0.997
lab*nce	0.25	0.25	0.998

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)

standard and adapted CIELAB

LAB*LAB	11.01	0.07	0.01
LAB*LABa	11.01	0.07	0.01
LAB*TCHa	0.01	0.01	0.0

1.00

0.75

$n^* = 0.00$

$n^* = 0.25$

$n^* = 1.0$

chromaticness c^*

Output: Colorimetric Reflective System ORS18

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

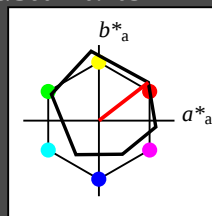
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 48 83 38

rgb*Ma: 1.0 0.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)				
olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	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	

Input: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 91/360 = 0.253$

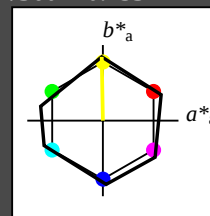
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 53 84 91

rgb*Ma: 1.0 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	95.41	0.0	-0.01	
LAB*Lab	95.41	0.0	0.0	
LAB*TCRa	99.99	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.75	(1.0)
cmyn3*	0.0	0.0	0.25	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
LAB*LAB	84.85	-0.35	21.09	
LAB*Lab	84.85	-0.37	21.09	
LAB*TCRa	87.5	21.09	91.03	

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.5	(1.0)
cmyn3*	0.0	0.0	0.5	(0.0)
olvi4*	1.0	1.0	0.5	(1.0)
cmyn4*	0.0	0.0	0.5	(0.0)
LAB*LAB	74.3	-0.72	42.18	
LAB*Lab	74.3	-0.75	42.18	
LAB*TCRa	75.0	42.19	91.03	

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.25	(1.0)
cmyn3*	0.0	0.0	0.25	(0.0)
olvi4*	1.0	1.0	0.25	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
LAB*LAB	63.75	-1.09	63.28	
LAB*Lab	63.75	-1.13	63.27	
LAB*TCRa	62.5	63.28	91.03	

relative Inform. Technology (IT)

olvi3*	1.0	1.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.2	-1.46	84.37	
LAB*Lab	53.2	-1.51	84.36	
LAB*TCRa	50.0	84.37	91.03	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.5	(1.0)
cmyn4*	0.0	0.0	0.5	(0.0)
LAB*LAB	56.71	0.23	21.4	
LAB*Lab	56.71	0.21	21.4	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.25	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
LAB*LAB	55.45	-2.77	25.0	
LAB*Lab	55.45	-2.76	25.0	
LAB*TCRa	37.5	23.09	96.39	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	54.19	-5.13	45.88	
LAB*Lab	54.19	-5.13	45.87	
LAB*TCRa	25.01	46.16	96.39	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	52.23	-42.26	11.75	
LAB*Lab	52.23	-42.26	11.75	
LAB*TCRa	1.15	-46.84	46.87	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	50.0	0.0	0.0	
LAB*Lab	50.0	0.0	0.0	
LAB*TCRa	0.01	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.75	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.25	(1.0)
cmyn3*	0.0	0.0	0.25	(0.0)
olvi4*	1.0	1.0	0.25	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.25	(1.0)
cmyn4*	0.0	0.0	0.25	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.0	0.01	0.0	

UE570-7, 5 step scales for constant CIELAB hue 91/360 = 0.253 (left)

5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart UE57; Colorimetric systems NRS11 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: $cmv0^* setcmykcolor$
output: $olv^* setrgbcolor / w^* setgray$

Input: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 273/360 = 0.758$

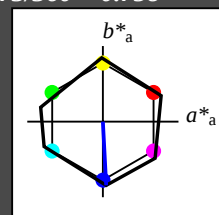
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 53 84 273

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

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

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

1.00

0.75

$n^* = 0.00$

0.25

$n^* = 0.25$

blackness n^*

$n^* = 0.50$

0.75

1.00

chromaticness c^*

Output: Colorimetric Reflective System ORS18

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

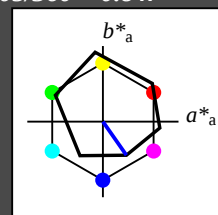
lab^*tch and lab^*nch

D65: hue V

LCH*Ma: 26 54 305

rgb*Ma: 0.0 0.0 1.0

triangle lightness t^*



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

%Regularity

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

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

1.00

0.75

$n^* = 0.00$

0.25

$n^* = 0.25$

blackness n^*

$n^* = 0.50$

0.75

1.00

chromaticness c^*

UE570-7, 5 step scales for constant CIELAB hue 273/360 = 0.758 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart UE57; Colorimetric systems NRS11 & ORS18

output: $cmy0^* setcmycolor$

output: $olv^* setrgbcolor / w^* setgray$

input: $cmy0^* setcmycolor$

output: $olv^* setrgbcolor / w^* setgray$

output: `olv* setrgbcolor / w* setgray`

Input: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 25/360 = 0.071$

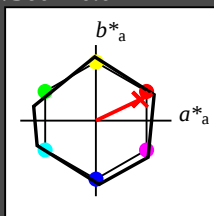
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 53 83 25

rgb*Ma: 1.0 0.03 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	95.41	0.0	-0.01	
LAB*Lab	95.41	0.0	0.0	
LAB*TCRa	99.99	0.01	0.0	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	0.0	
lab*nch	0.0	0.0	0.0	
lab*trj	1.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Natural Colour (NC)

lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	0.0	
lab*nch	0.0	0.0	0.0	
lab*trj	1.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	0.0	

standard and adapted CIELAB

LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.00	0.01	-	

relative CIELAB lab*

lab*lab	0.75	0.75	0.75	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.00	0.01	-	

relative CIELAB lab*

lab*lab	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	32.11	0.07	0.01	
LAB*Lab	32.11	0.07	0.01	
LAB*TCRa	25.00	0.01	-	

relative CIELAB lab*

lab*lab	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	17.46	0.13	0.01	
LAB*Lab	17.46	0.13	0.01	
LAB*TCRa	12.50	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

UE570-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

NRS11; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

% Regularity

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

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

relative Inform. Technology (IT)

olvi3*	1.0	0.514	0.5	(1.0)
cmyn3*	0.0	0.486	0.5	(0.0)
olvi4*	1.0	0.514	0.5	(1.0)
cmyn4*	0.0	0.486	0.5	(0.0)
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.00	0.01	-	

relative CIELAB lab*

lab*lab	0.75	0.451	0.215	
lab*tch	0.75	0.5	0.071	
lab*nch	0.0	0.5	0.071	
lab*trj	0.75	0.5	0.0	
lab*tce	0.75	0.5	0.0	
lab*nce	0.0	0.5	0.0	

relative Natural Colour (NC)

lab*lab	0.75	0.451	0.215	
lab*tch	0.75	0.5	0.071	
lab*nch	0.0	0.5	0.071	
lab*trj	0.75	0.5	0.0	
lab*tce	0.75	0.5	0.0	
lab*nce	0.0	0.5	0.0	

standard and adapted CIELAB

LAB*LAB	53.2	37.45	17.86	
LAB*Lab	53.2	37.45	17.86	
LAB*TCRa	50.0	41.48	25.49	

relative CIELAB lab*

lab*lab	0.5	0.014	0.0	(1.0)
cmyn3*	0.5	0.743	0.75	(0.0)
olvi4*	1.0	0.757	0.75	(1.0)
cmyn4*	0.0	0.243	0.25	(0.0)
LAB*LAB	42.65	56.17	26.78	
LAB*Lab	42.65	56.17	26.78	
LAB*TCRa	37.5	20.74	25.49	

relative CIELAB lab*

lab*lab	0.25	0.014	0.0	(1.0)
cmyn3*	0.75	0.743	0.75	(0.0)
olvi4*	1.0	0.757	0.75	(1.0)
cmyn4*	0.0	0.243	0.25	(0.0)
LAB*LAB	21.35	18.72	8.92	
LAB*Lab	21.35	18.72	8.92	
LAB*TCRa	12.5	20.74	25.49	

relative CIELAB lab*

lab*lab	0.0	0.014	0.0	(1.0)
cmyn3*	0.75	0.743	0.75	(0.0)
olvi4*	1.0	0.757	0.75	(1.0)
cmyn4*	0.0	0.243	0.25	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.014	0.0	(1.0)
cmyn3*	0.75	0.743	0.75	(0.0)
olvi4*	1.0	0.757	0.75	(1.0)
cmyn4*	0.0	0.243	0.25	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.014	0.0	(1.0)
cmyn3*	0.75	0.743	0.75	(0.0)
olvi4*	1.0	0.757	0.75	(1.0)
cmyn4*	0.0	0.243	0.25	(0.0)
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

BAM-test chart UE57; Colorimetric systems NRS11 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

Output: Colorimetric Reflective System ORS18

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

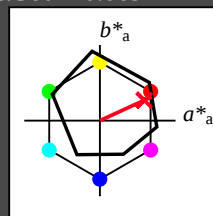
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 48 75 25

rgb*Ma: 1.0 0.0 0.32

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	95.41	-0.97	4.75	
LAB*Lab	95.41	0.0	0.0	
LAB*TCRa	99.99	0.01	0.0	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	0.0	
lab*nch	0.0	0.0	0.0	
lab*trj	1.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Natural Colour (NC)

lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	0.0	
lab*nch	0.0	0.0	0.0	
lab*trj	1.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	0.0	

standard and adapted CIELAB

LAB*LAB	76.06	-0.6	3.44	
LAB*Lab	76.06	-0.6	3.44	
LAB*TCRa	75.00	0.01	-	

relative CIELAB lab*

lab*lab	0.5	0.5	0.5	(1.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	56.71	0.23	2.14	
LAB*Lab	56.71	0.23	2.14	
LAB*TCRa	50.00	0.01	-	

relative CIELAB lab*

lab*lab	0.25	0.5	0.0	(1.0)
cmyn3*	0.75	0.5	0.0	(0.0)
olvi4*	1.0	1.0	0.5	(1.0)
cmyn4*	0.0	0.5	0.0	(0.0)
LAB*LAB	32.11	0.07	0.01	
LAB*Lab	32.11	0.07	0.01	
LAB*TCRa	25.00	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.5	0.0	(1.0)
cmyn3*	0.75	0.5	0.0	(0.0)
olvi4*	1.0	1.0	0.5	(1.0)
cmyn4*	0.0	0.5	0.0	(0.0)
LAB*LAB	17.46	0.13	0.01	
LAB*Lab	17.46	0.13	0.01	
LAB*TCRa	12.50	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.25	0.0	(1.0)
cmyn3*	0.75	0.25	0.0	(0.0)
olvi4*	1.0	1.0	0.25	(1.0)
cmyn4*	0.0	0.25	0.0	(0.0)
LAB*LAB	9.00	0.07	0.01	
LAB*Lab	9.00	0.07	0.01	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	18.02	0.0	0.46	
LAB*Lab	18.02	0.0	0.46	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	18.02	0.0	0.46	
LAB*Lab	18.02	0.0	0.46	
LAB*TCRa	0.01	0.01	-	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	0.0	(0.0)
olvi4*	1.0	1.0	0.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
LAB*LAB	18.02	0.0	0.46	
LAB*Lab	18.02	0.0	0.46	
LAB*TCRa	0.01	0.01	-	

Input: Colorimetric Reflective System NRS11

for hue $h^* = lab^*h = 92/360 = 0.256$

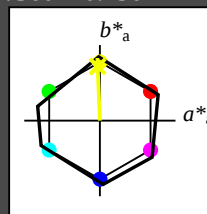
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 53 83 92

rgb*Ma: 0.98 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	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	-0.01	
LAB*Lab	95.41	0.0	0.0	
LAB*TCRa	99.99	0.01	0.0	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	74.31	0.02	0.0	
LAB*Lab	74.31	0.02	0.0	
LAB*TCRa	75.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.75	0.0	0.0	
lab*tch	0.75	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.75	0.0	0.0	
lab*tce	0.75	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	53.21	0.04	0.0	
LAB*Lab	53.21	0.04	0.0	
LAB*TCRa	50.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.5	0.0	0.0	
lab*tch	0.5	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.5	0.0	0.0	
lab*tce	0.5	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.11	0.07	0.01	
LAB*Lab	32.11	0.07	0.01	
LAB*TCRa	25.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0	
lab*tch	0.25	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.25	0.0	0.0	
lab*tce	0.25	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	11.01	0.07	0.01	
LAB*Lab	11.01	0.07	0.01	
LAB*TCRa	0.01	0.01	0.0	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	
lab*tch	0.0	0.0	0.0	
lab*nch	1.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.0	0.0	0.0	
lab*tce	0.0	0.0	0.0	
lab*nce	1.0	0.0	0.0	

$n^* = 1.0$

NRS11; adapted (a) CIELAB data

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

RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

%Regularity

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

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

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

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$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

Output: Colorimetric Reflective System ORS18

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

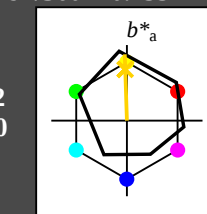
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

rgb*Ma: 1.0 0.9 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)

olvi3*	1.0	1.0	1.0	(1.0)
cmyn3*	0.0	0.0	0.0	(0.0)
olvi4*	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*Lab	95.41	0.0	0.0	
LAB*TCRa	99.99	0.01	0.0	

relative CIELAB lab*

lab*lab	1.0	0.0	0.0	
lab*tch	1.0	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	1.0	0.0	0.0	
lab*tce	1.0	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.75	0.75	0.75	(1.0)
cmyn3*	0.25	0.25	0.25	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	76.06	-0.6	3.44	
LAB*Lab	76.06	0.0	0.0	
LAB*TCRa	75.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.75	0.0	0.0	
lab*tch	0.75	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.75	0.0	0.0	
lab*tce	0.75	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.5	0.5	0.5	(0.0)
cmyn3*	0.5	0.5	0.5	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	56.71	0.23	2.14	
LAB*Lab	56.71	0.23	2.14	
LAB*TCRa	50.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.5	0.0	0.0	
lab*tch	0.5	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.5	0.0	0.0	
lab*tce	0.5	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.25	0.25	0.25	(1.0)
cmyn3*	0.75	0.75	0.75	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	32.13	0.23	2.14	
LAB*Lab	32.13	0.23	2.14	
LAB*TCRa	25.00	0.01	0.0	

relative CIELAB lab*

lab*lab	0.25	0.0	0.0	
lab*tch	0.25	0.0	0.0	
lab*nch	0.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.25	0.0	0.0	
lab*tce	0.25	0.0	0.0	
lab*nce	0.0	0.0	0.0	

relative Inform. Technology (IT)

olvi3*	0.0	0.0	0.0	(1.0)
cmyn3*	1.0	1.0	1.0	(0.0)
olvi4*	1.0	1.0	1.0	(1.0)
cmyn4*	0.0	0.0	0.0	(0.0)
standard and adapted CIELAB				
LAB*LAB	18.02	0.5	0.46	
LAB*Lab	18.02	0.5	0.46	
LAB*TCRa	0.01	0.01	0.0	

relative CIELAB lab*

lab*lab	0.0	0.0	0.0	
lab*tch	0.0	0.0	0.0	
lab*nch	1.0	0.0	0.0	
relative Natural Colour (NC)				
lab*trj	0.0	0.0	0.0	
lab*tce	0.0	0.0	0.0	
lab*nce	1.0	0.0	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

%Regularity

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

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

$n^* = 0.00$

$n^* = 0.25$

$n^* = 0.50$

$n^* = 0.75$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

$n^* = 1.0$

Input: Colorimetric Reflective System NRS11

for hue $h^* = lab \cdot h = 162/360 = 0.451$

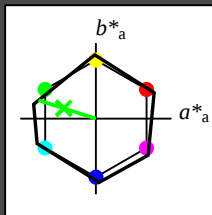
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 80 162

rgb*Ma: 0.08 1.0 0.0

triangle lightness t^*



% Gamut

$u^*_{rel} = 119$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi6* 1.0 1.0 1.0 (1.0)
olvi7* 1.0 1.0 1.0 (1.0)
olvi8* 1.0 1.0 1.0 (1.0)
olvi9* 1.0 1.0 1.0 (1.0)
olvi10* 1.0 1.0 1.0 (1.0)
olvi11* 1.0 1.0 1.0 (1.0)
olvi12* 1.0 1.0 1.0 (1.0)
olvi13* 1.0 1.0 1.0 (1.0)
olvi14* 1.0 1.0 1.0 (1.0)
olvi15* 1.0 1.0 1.0 (1.0)
olvi16* 1.0 1.0 1.0 (1.0)
olvi17* 1.0 1.0 1.0 (1.0)
olvi18* 1.0 1.0 1.0 (1.0)
olvi19* 1.0 1.0 1.0 (1.0)
olvi20* 1.0 1.0 1.0 (1.0)
olvi21* 1.0 1.0 1.0 (1.0)
olvi22* 1.0 1.0 1.0 (1.0)
olvi23* 1.0 1.0 1.0 (1.0)
olvi24* 1.0 1.0 1.0 (1.0)
olvi25* 1.0 1.0 1.0 (1.0)
olvi26* 1.0 1.0 1.0 (1.0)
olvi27* 1.0 1.0 1.0 (1.0)
olvi28* 1.0 1.0 1.0 (1.0)
olvi29* 1.0 1.0 1.0 (1.0)
olvi30* 1.0 1.0 1.0 (1.0)
olvi31* 1.0 1.0 1.0 (1.0)
olvi32* 1.0 1.0 1.0 (1.0)
olvi33* 1.0 1.0 1.0 (1.0)
olvi34* 1.0 1.0 1.0 (1.0)
olvi35* 1.0 1.0 1.0 (1.0)
olvi36* 1.0 1.0 1.0 (1.0)
olvi37* 1.0 1.0 1.0 (1.0)
olvi38* 1.0 1.0 1.0 (1.0)
olvi39* 1.0 1.0 1.0 (1.0)
olvi40* 1.0 1.0 1.0 (1.0)
olvi41* 1.0 1.0 1.0 (1.0)
olvi42* 1.0 1.0 1.0 (1.0)
olvi43* 1.0 1.0 1.0 (1.0)
olvi44* 1.0 1.0 1.0 (1.0)
olvi45* 1.0 1.0 1.0 (1.0)
olvi46* 1.0 1.0 1.0 (1.0)
olvi47* 1.0 1.0 1.0 (1.0)
olvi48* 1.0 1.0 1.0 (1.0)
olvi49* 1.0 1.0 1.0 (1.0)
olvi50* 1.0 1.0 1.0 (1.0)
olvi51* 1.0 1.0 1.0 (1.0)
olvi52* 1.0 1.0 1.0 (1.0)
olvi53* 1.0 1.0 1.0 (1.0)
olvi54* 1.0 1.0 1.0 (1.0)
olvi55* 1.0 1.0 1.0 (1.0)
olvi56* 1.0 1.0 1.0 (1.0)
olvi57* 1.0 1.0 1.0 (1.0)
olvi58* 1.0 1.0 1.0 (1.0)
olvi59* 1.0 1.0 1.0 (1.0)
olvi60* 1.0 1.0 1.0 (1.0)
olvi61* 1.0 1.0 1.0 (1.0)
olvi62* 1.0 1.0 1.0 (1.0)
olvi63* 1.0 1.0 1.0 (1.0)
olvi64* 1.0 1.0 1.0 (1.0)
olvi65* 1.0 1.0 1.0 (1.0)
olvi66* 1.0 1.0 1.0 (1.0)
olvi67* 1.0 1.0 1.0 (1.0)
olvi68* 1.0 1.0 1.0 (1.0)
olvi69* 1.0 1.0 1.0 (1.0)
olvi70* 1.0 1.0 1.0 (1.0)
olvi71* 1.0 1.0 1.0 (1.0)
olvi72* 1.0 1.0 1.0 (1.0)
olvi73* 1.0 1.0 1.0 (1.0)
olvi74* 1.0 1.0 1.0 (1.0)
olvi75* 1.0 1.0 1.0 (1.0)
olvi76* 1.0 1.0 1.0 (1.0)
olvi77* 1.0 1.0 1.0 (1.0)
olvi78* 1.0 1.0 1.0 (1.0)
olvi79* 1.0 1.0 1.0 (1.0)
olvi80* 1.0 1.0 1.0 (1.0)
olvi81* 1.0 1.0 1.0 (1.0)
olvi82* 1.0 1.0 1.0 (1.0)
olvi83* 1.0 1.0 1.0 (1.0)
olvi84* 1.0 1.0 1.0 (1.0)
olvi85* 1.0 1.0 1.0 (1.0)
olvi86* 1.0 1.0 1.0 (1.0)
olvi87* 1.0 1.0 1.0 (1.0)
olvi88* 1.0 1.0 1.0 (1.0)
olvi89* 1.0 1.0 1.0 (1.0)
olvi90* 1.0 1.0 1.0 (1.0)
olvi91* 1.0 1.0 1.0 (1.0)
olvi92* 1.0 1.0 1.0 (1.0)
olvi93* 1.0 1.0 1.0 (1.0)
olvi94* 1.0 1.0 1.0 (1.0)
olvi95* 1.0 1.0 1.0 (1.0)
olvi96* 1.0 1.0 1.0 (1.0)
olvi97* 1.0 1.0 1.0 (1.0)
olvi98* 1.0 1.0 1.0 (1.0)
olvi99* 1.0 1.0 1.0 (1.0)
olvi100* 1.0 1.0 1.0 (1.0)

relative Inform. Technology (IT)

olvi3* 0.75 0.75 0.75 (1.0)

olvi4* 0.75 0.75 0.75 (1.0)

olvi5* 0.75 0.75 0.75 (1.0)

olvi6* 0.75 0.75 0.75 (1.0)

olvi7* 0.75 0.75 0.75 (1.0)

olvi8* 0.75 0.75 0.75 (1.0)

olvi9* 0.75 0.75 0.75 (1.0)

olvi10* 0.75 0.75 0.75 (1.0)

olvi11* 0.75 0.75 0.75 (1.0)

olvi12* 0.75 0.75 0.75 (1.0)

olvi13* 0.75 0.75 0.75 (1.0)

olvi14* 0.75 0.75 0.75 (1.0)

olvi15* 0.75 0.75 0.75 (1.0)

olvi16* 0.75 0.75 0.75 (1.0)

olvi17* 0.75 0.75 0.75 (1.0)

olvi18* 0.75 0.75 0.75 (1.0)

olvi19* 0.75 0.75 0.75 (1.0)

olvi20* 0.75 0.75 0.75 (1.0)

olvi21* 0.75 0.75 0.75 (1.0)

olvi22* 0.75 0.75 0.75 (1.0)

olvi23* 0.75 0.75 0.75 (1.0)

olvi24* 0.75 0.75 0.75 (1.0)

olvi25* 0.75 0.75 0.75 (1.0)

olvi26* 0.75 0.75 0.75 (1.0)

olvi27* 0.75 0.75 0.75 (1.0)

olvi28* 0.75 0.75 0.75 (1.0)

olvi29* 0.75 0.75 0.75 (1.0)

olvi30* 0.75 0.75 0.75 (1.0)

olvi31* 0.75 0.75 0.75 (1.0)

olvi32* 0.75 0.75 0.75 (1.0)

olvi33* 0.75 0.75 0.75 (1.0)

olvi34* 0.75 0.75 0.75 (1.0)

olvi35* 0.75 0.75 0.75 (1.0)

olvi36* 0.75 0.75 0.75 (1.0)

olvi37* 0.75 0.75 0.75 (1.0)

olvi38* 0.75 0.75 0.75 (1.0)

NRS11; adapted (a) CIELAB data

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

RMa	53.2	77.06	34.32	84.36	24
JMa	53.2	-1.51	84.38	84.39	91
GMa	53.2	-82.27	18.98	84.44	167
G50BMa	53.2	-77.72	-32.98	84.44	203
BMa	53.2	4.37	-84.28	84.41	273
B50RMa	53.2	69.09	-48.41	84.37	325
NMa	10.99	0.0	0.0	0.0	0
WMa	95.41	0.0	0.0	0.0	0
RCIE	39.92	58.69	27.98	65.01	25
JCIE	81.26	-2.9	71.56	71.62	92
GCIE	52.23	-42.45	13.59	44.59	162
BCIE	30.57	1.35	-46.48	46.51	272

% Regularity

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

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

relative Inform. Technology (IT)

olvi3* 0.54 1.0 0.5 (1.0)

olvi4* 0.54 1.0 0.5 (1.0)

olvi5* 0.54 1.0 0.5 (1.0)

olvi6* 0.54 1.0 0.5 (1.0)

olvi7* 0.54 1.0 0.5 (1.0)

olvi8* 0.54 1.0 0.5 (1.0)

olvi9* 0.54 1.0 0.5 (1.0)

olvi10* 0.54 1.0 0.5 (1.0)

olvi11* 0.54 1.0 0.5 (1.0)

olvi12* 0.54 1.0 0.5 (1.0)

olvi13* 0.54 1.0 0.5 (1.0)

olvi14* 0.54 1.0 0.5 (1.0)

olvi15* 0.54 1.0 0.5 (1.0)

olvi16* 0.54 1.0 0.5 (1.0)

olvi17* 0.54 1.0 0.5 (1.0)

olvi18* 0.54 1.0 0.5 (1.0)

olvi19* 0.54 1.0 0.5 (1.0)

olvi20* 0.54 1.0 0.5 (1.0)

olvi21* 0.54 1.0 0.5 (1.0)

olvi22* 0.54 1.0 0.5 (1.0)

olvi23* 0.54 1.0 0.5 (1.0)

olvi24* 0.54 1.0 0.5 (1.0)

olvi25* 0.54 1.0 0.5 (1.0)

olvi26* 0.54 1.0 0.5 (1.0)

olvi27* 0.54 1.0 0.5 (1.0)

olvi28* 0.54 1.0 0.5 (1.0)

olvi29* 0.54 1.0 0.5 (1.0)

olvi30* 0.54 1.0 0.5 (1.0)

olvi31* 0.54 1.0 0.5 (1.0)

olvi32* 0.54 1.0 0.5 (1.0)

olvi33* 0.54 1.0 0.5 (1.0)

olvi34* 0.54 1.0 0.5 (1.0)

olvi35* 0.54 1.0 0.5 (1.0)

Output: Colorimetric Reflective System ORS18

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

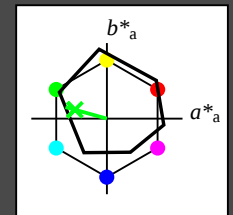
$lab \cdot tch$ and $lab \cdot nch$

D65: hue G

LCH*Ma: 53 57 164

rgb*Ma: 0.0 1.0 0.25

triangle lightness t^*



% Gamut

$u^*_{rel} = 93$

relative Inform. Technology (IT)
olvi3* 1.0 1.0 1.0 (1.0)
olvi4* 1.0 1.0 1.0 (1.0)
olvi5* 1.0 1.0 1.0 (1.0)
olvi6* 1.0 1.0 1.0 (1.0)
olvi7* 1.0 1.0 1.0 (1.0)
olvi8* 1.0 1.0 1.0 (1.0)
olvi9* 1.0 1.0 1.0 (1.0)
olvi10* 1.0 1.0 1.0 (1.0)
olvi11* 1.0 1.0 1.0 (1.0)
olvi12* 1.0 1.0 1.0 (1.0)
olvi13* 1.0 1.0 1.0 (1.0)
olvi14* 1.0 1.0 1.0 (1.0)
olvi15* 1.0 1.0 1.0 (1.0)
olvi16* 1.0 1.0 1.0 (1.0)
olvi17* 1.0 1.0 1.0 (1.0)
olvi18* 1.0 1.0 1.0 (1.0)
olvi19* 1.0 1.0 1.0 (1.0)
olvi20* 1.0 1.0 1.0 (1.0)
olvi21* 1.0 1.0 1.0 (1.0)
olvi22* 1.0 1.0 1.0 (1.0)
olvi23* 1.0 1.0 1.0 (1.0)
olvi24* 1.0 1.0 1.0 (1.0)
olvi25* 1.0 1.0 1.0 (1.0)
olvi26* 1.0 1.0 1.0 (1.0)
olvi27* 1.0 1.0 1.0 (1.0)
olvi28* 1.0 1.0 1.0 (1.0)
olvi29* 1.0 1.0 1.0 (1.0)
olvi30* 1.0 1.0 1.0 (1.0)
olvi31* 1.0 1.0 1.0 (1.0)
olvi32* 1.0 1.0 1.0 (1.0)
olvi33* 1.0 1.0 1.0 (1.0)
olvi34* 1.0 1.0 1.0 (1.0)
olvi35* 1.0 1.0 1.0 (1.0)
olvi36* 1.0 1.0 1.0 (1.0)
olvi37* 1.0 1.0 1.0 (1.0)
olvi38* 1.0 1.0 1.0 (1.0)
olvi39* 1.0 1.0 1.0 (1.0)
olvi40* 1.0 1.0 1.0 (1.0)
olvi41* 1.0 1.0 1.0 (1.0)
olvi42* 1.0 1.0 1.0 (1.0)
olvi43* 1.0 1.0 1.0 (1.0)
olvi44* 1.0 1.0 1.0 (1.0)
olvi45* 1.0 1.0 1.0 (1.0)
olvi46* 1.0 1.0 1.0 (1.0)
olvi47* 1.0 1.0 1.0 (1.0)
olvi48* 1.0 1.0 1.0 (1.0)
olvi49* 1.0 1.0 1.0 (1.0)
olvi50* 1.0 1.0 1.0 (1.0)
olvi51* 1.0 1.0 1.0 (1.0)
olvi52* 1.0 1.0 1.0 (1.0)
olvi53* 1.0 1.0 1.0 (1.0)
olvi54* 1.0 1.0 1.0 (1.0)
olvi55* 1.0 1.0 1.0 (1.0)
olvi56* 1.0 1.0 1.0 (1.0)
olvi57* 1.0 1.0 1.0 (1.0)
olvi58* 1.0 1.0 1.0 (1.0)
olvi59* 1.0 1.0 1.0 (1.0)
olvi60* 1.0 1.0 1.0 (1.0)
olvi61* 1.0 1.0 1.0 (1.0)
olvi62* 1.0 1.0 1.0 (1.0)
olvi63* 1.0 1.0 1.0 (1.0)
olvi64* 1.0 1.0 1.0 (1.0)
olvi65* 1.0 1.0 1.0 (1.0)
olvi66* 1.0 1.0 1.0 (1.0)
olvi67* 1.0 1.0 1.0 (1.0)
olvi68* 1.0 1.0 1.0 (1.0)
olvi69* 1.0 1.0 1.0 (1.0)
olvi70* 1.0 1.0 1.0 (1.0)
olvi71* 1.0 1.0 1.0 (1.0)
olvi72* 1.0 1.0 1.0 (1.0)
olvi73* 1.0 1.0 1.0 (1.0)
olvi74* 1.0 1.0 1.0 (1.0)
olvi75* 1.0 1.0 1.0 (1.0)
olvi76* 1.0 1.0 1.0 (1.0)
olvi77* 1.0 1.0 1.0 (1.0)
olvi78* 1.0 1.0 1.0 (1.0)
olvi79* 1.0 1.0 1.0 (1.0)
olvi80* 1.0 1.0 1.0 (1.0)
olvi81* 1.0 1.0 1.0 (1.0)
olvi82* 1.0 1.0 1.0 (1.0)
olvi83* 1.0 1.0 1.0 (1.0)
olvi84* 1.0 1.0 1.0 (1.0)
olvi85* 1.0 1.0 1.0 (1.0)
olvi86* 1.0 1.0 1.0 (1.0)
olvi87* 1.0 1.0 1.0 (1.0)
olvi88* 1.0 1.0 1.0 (1.0)
olvi89* 1.0 1.0 1.0 (1.0)
olvi90* 1.0 1.0 1.0 (1.0)
olvi91* 1.0 1.0 1.0 (1.0)
olvi92* 1.0 1.0 1.0 (1.0)
olvi93* 1.0 1.0 1.0 (1.0)
olvi94* 1.0 1.0 1.0 (1.0)
olvi95* 1.0 1.0 1.0 (1.0)
olvi96* 1.0 1.0 1.0 (1.0)
olvi97* 1.0 1.0 1.0 (1.0)
olvi98* 1.0 1.0 1.0 (1.0)
olvi99* 1.0 1.0 1.0 (1.0)
olvi100* 1.0 1.0 1.0 (1.0)

relative Inform. Technology (IT)

olvi3* 0.75 0.75 0.75 (1.0)

olvi4* 0.75 0.75 0.75 (1.0)

olvi5* 0.75 0.75 0.75 (1.0)

olvi6* 0.75 0.75 0.75 (1.0)

olvi7* 0.75 0.75 0.75 (1.0)

olvi8* 0.75 0.75 0.75 (1.0)

olvi9* 0.75 0.75 0.75 (1.0)

olvi10* 0.75 0.75 0.75 (1.0)

olvi11* 0.75 0.75 0.75 (1.0)

olvi12* 0.75 0.75 0.75 (1.0)

olvi13* 0.75 0.75 0.75 (1.0)

olvi14* 0.75 0.75 0.75 (1.0)

olvi15* 0.75 0.75 0.75 (1.0)

olvi16* 0.75 0.75 0.75 (1.0)

olvi17* 0.75 0.75 0.75 (1.0)

olvi18* 0.75 0.75 0.75 (1.0)

olvi19* 0.75 0.75 0.75 (1.0)

olvi20* 0.75 0.75 0.75 (1.0)

olvi21* 0.75 0.75 0.75 (1.0)

olvi22* 0.75 0.75 0.75 (1.0)

olvi23* 0.75 0.75 0.75 (1.0)

olvi24* 0.75 0.75 0.75 (1.0)

olvi25* 0.75 0.75 0.75 (1.0)

