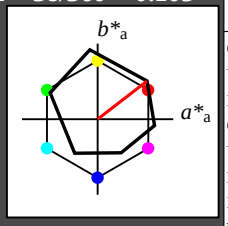
Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 38/360 = 0.105*
*lab*tch* und *lab*nch*

D65: Buntton O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***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
*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)**

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

*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	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	–

***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*	71.67	32.15	28.41
*LAB*LABa*	71.67	32.68	25.25
*LAB*TCHa*	75.0	41.3	37.7

relative* CIELAB *lab*

*lab*lab*	0.693	0.396	0.306
*lab*tch*	0.75	0.5	0.105
*lab*nch*	0.0	0.5	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.693	0.477	0.15
*lab*tce*	0.75	0.5	0.048
*lab*ncE*	0.0	0.5	r19j

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.98	32.9	25.8
*LAB*LABa*	32.98	32.68	25.25
*LAB*TCHa*	25.01	41.3	37.7

relative* CIELAB *lab*

*lab*lab*	0.193	0.396	0.306
*lab*tch*	0.25	0.5	0.105
*lab*nch*	0.5	0.5	0.105

***relative* Natural Colour (NC)**

*lab*lrj*	0.193	0.477	0.15
*lab*tce*	0.25	0.5	0.048
*lab*ncE*	0.5	0.5	r19j

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	47.95	65.29	52.06
*LAB*LABa*	47.95	65.36	50.51
*LAB*TCHa*	50.0	82.6	37.7

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*lrj*	0.387	0.954	0.299
*lab*tce*	0.5	1.0	0.048
*lab*ncE*	0.0	1.0	r19j

$n^* = 0{,}00$

Schwarzheit *n**

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

relative Buntheit *c**

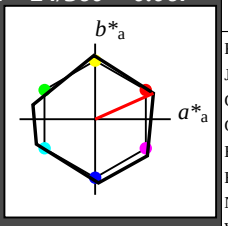
$n^* = 1{,}0$

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 24/360 = 0.067*
*lab*tch* und *lab*nch*

D65: Buntton R
LCH*Ma: 53 84 24
olv*Ma: 1.0 0.0 0.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	53.2	77.06	34.32	84.36	24
J_{Ma}	53.2	−1.51	84.38	84.39	91
G_{Ma}	53.2	−82.27	18.98	84.44	167
$G50B_{Ma}$	53.2	−77.72	−32.98	84.44	203
B_{Ma}	53.2	4.37	−84.28	84.41	273
$B50R_{Ma}$	53.2	69.09	−48.41	84.37	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 119
%Regularität
$g^*_{H,rel}$ = 47
$g^*_{C,rel}$ = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***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	38.52	17.16
*LAB*TCHa*	75.0	42.17	24.01

relative* CIELAB *lab*

*lab*lab*	0.75	0.457	0.203
*lab*tch*	0.75	0.5	0.067
*lab*nch*	0.0	0.5	0.067

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.5	−0.009
*lab*tce*	0.75	0.5	0.997
*lab*ncE*	0.0	0.5	b98r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	38.58	17.17
*LAB*LABa*	32.1	38.52	17.16
*LAB*TCHa*	25.01	42.17	24.01

relative* CIELAB *lab*

*lab*lab*	0.25	0.457	0.203
*lab*tch*	0.25	0.5	0.067
*lab*nch*	0.5	0.5	0.067

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.5	−0.009
*lab*tce*	0.25	0.5	0.997
*lab*ncE*	0.5	0.5	b98r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	77.09	34.32
*LAB*LABa*	53.2	77.04	34.31
*LAB*TCHa*	50.0	84.34	24.01

relative* CIELAB *lab*

*lab*lab*	0.5	0.913	0.407
*lab*tch*	0.5	1.0	0.067
*lab*nch*	0.0	1.0	0.067

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	1.0	−0.019
*lab*tce*	0.5	1.0	0.997
*lab*ncE*	0.0	1.0	b98r

$n^* = 0{,}00$

Schwarzheit *n**

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

relative Buntheit *c**

$n^* = 1{,}0$

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 38/360 = 0.105 (links)

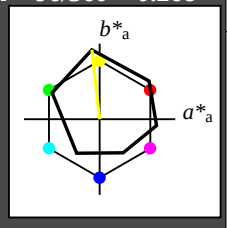
3 stufige Reihen für konstanten CIELAB Buntton 24/360 = 0.067 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 96/360 = 0.268*
lab*tch* und *lab*nch

D65: Buntton Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

***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
*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)**

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

*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	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	–

***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

***standard* and *adapted* CIELAB**

*LAB*LAB*	92.88	−6.06	50.46
*LAB*LABa*	92.88	−5.13	45.87
*LAB*TCHa*	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*lrj*	0.967	−0.048	0.497
*lab*tce*	0.75	0.5	0.266
*lab*ncE*	0.0	0.5	j06g

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.0	(1.0)
*cmyn3**	0.5	0.5	1.0	(0.0)
*olvi4**	1.0	1.0	0.5	0.5
*cmyn4**	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*TCHa*	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*lrj*	0.467	−0.048	0.497
*lab*tce*	0.25	0.5	0.266
*lab*ncE*	0.5	0.5	j06g

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.0	(1.0)
*cmyn3**	0.0	0.0	1.0	(0.0)
*olvi4**	1.0	1.0	0.0	1.0
*cmyn4**	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*TCHa*	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*lrj*	0.935	−0.097	0.995
*lab*tce*	0.5	1.0	0.266
*lab*ncE*	0.0	1.0	j06g

n = 0,00*

Schwarzheit *n**

0,25 0,50 *n* = 0,50* 0,75 1,00

relative Buntheit *c**

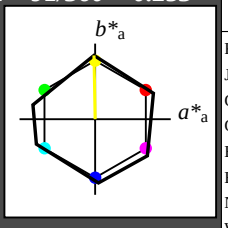
n = 1,0*

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 91/360 = 0.253*
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 53 84 91
olv*Ma: 1.0 1.0 0.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 119
%Regularität
g*H,rel = 47
g*C,rel = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***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

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	−0.72	42.18
*LAB*LABa*	74.3	−0.75	42.18
*LAB*TCHa*	75.0	42.19	91.03

relative* CIELAB *lab*

*lab*lab*	0.75	−0.008	0.5
*lab*tch*	0.75	0.5	0.253
*lab*nch*	0.0	0.5	0.253

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.015	0.5
*lab*tce*	0.75	0.5	0.245
*lab*ncE*	0.0	0.5	r98j

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	−0.69	42.2
*LAB*LABa*	32.1	−0.75	42.18
*LAB*TCHa*	25.01	42.19	91.03

relative* CIELAB *lab*

*lab*lab*	0.25	−0.008	0.5
*lab*tch*	0.25	0.5	0.253
*lab*nch*	0.5	0.5	0.253

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.015	0.5
*lab*tce*	0.25	0.5	0.245
*lab*ncE*	0.5	0.5	r98j

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	−1.46	84.37
*LAB*LABa*	53.2	−1.51	84.36
*LAB*TCHa*	50.0	84.37	91.03

relative* CIELAB *lab*

*lab*lab*	0.5	−0.017	1.0
*lab*tch*	0.5	1.0	0.253
*lab*nch*	0.0	1.0	0.253

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.031	0.999
*lab*tce*	0.5	1.0	0.245
*lab*ncE*	0.0	1.0	r98j

n = 0,00*

Schwarzheit *n**

0,25 0,50 *n* = 0,50* 0,75 1,00

relative Buntheit *c**

n = 1,0*

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 96/360 = 0.268 (links)

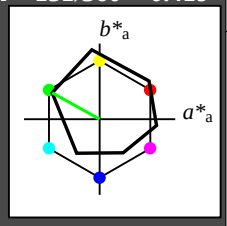
3 stufige Reihen für konstanten CIELAB Buntton 91/360 = 0.253 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 151/360 = 0.419*
lab*tch* und *lab*nch

D65: Buntton L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***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
*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)**

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

*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	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	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	1.0	0.5	(1.0)
*cmyn3**	0.5	0.0	0.5	(0.0)
*olvi4**	0.5	1.0	0.5	1.0
*cmyn4**	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*TCHa*	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*lrj*	0.712	−0.478	0.144
*lab*tce*	0.75	0.5	0.453
*lab*ncE*	0.0	0.5	j81g

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	34.46	−31.2	18.11
*LAB*LABa*	34.46	−31.38	17.47
*LAB*TCHa*	25.01	35.93	150.91

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*lrj*	0.213	−0.478	0.144
*lab*tce*	0.25	0.5	0.453
*lab*ncE*	0.5	0.5	j81g

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	50.9	−62.91	36.69
*LAB*LABa*	50.9	−62.78	34.94
*LAB*TCHa*	50.0	71.86	150.91

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*lrj*	0.425	−0.956	0.289
*lab*tce*	0.5	1.0	0.453
*lab*ncE*	0.0	1.0	j81g

*n** = 0,00

Schwarzheit *n**

*n** = 1,0

0,25 0,50 *n** = 0,50 0,75 1,00

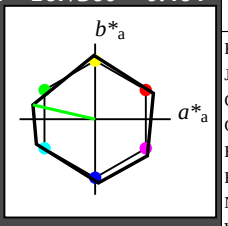
relative Buntheit *c**

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 167/360 = 0.464*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 53 84 167
olv*Ma: 0.0 1.0 0.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	53.2	77.06	34.32	84.36	24
J_{Ma}	53.2	−1.51	84.38	84.39	91
G_{Ma}	53.2	−82.27	18.98	84.44	167
$G50B_{Ma}$	53.2	−77.72	−32.98	84.44	203
B_{Ma}	53.2	4.37	−84.28	84.41	273
$B50R_{Ma}$	53.2	69.09	−48.41	84.37	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 119
%Regularität
$g^*_{H,rel}$ = 47
$g^*_{C,rel}$ = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	−41.1	9.49
*LAB*LABa*	74.3	−41.12	9.49
*LAB*TCHa*	75.0	42.21	167.01

relative* CIELAB *lab*

*lab*lab*	0.75	−0.486	0.112
*lab*tch*	0.75	0.5	0.464
*lab*nch*	0.0	0.5	0.464

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	−0.498	−0.033
*lab*tce*	0.75	0.5	0.511
*lab*ncE*	0.0	0.5	g04b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	−41.06	9.5
*LAB*LABa*	32.1	−41.12	9.49
*LAB*TCHa*	25.01	42.21	167.01

relative* CIELAB *lab*

*lab*lab*	0.25	−0.486	0.112
*lab*tch*	0.25	0.5	0.464
*lab*nch*	0.5	0.5	0.464

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	−0.498	−0.033
*lab*tce*	0.25	0.5	0.511
*lab*ncE*	0.5	0.5	g04b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	−82.21	18.98
*LAB*LABa*	53.2	−82.25	18.97
*LAB*TCHa*	50.0	84.42	167.01

relative* CIELAB *lab*

*lab*lab*	0.5	−0.973	0.225
*lab*tch*	0.5	1.0	0.464
*lab*nch*	0.0	1.0	0.464

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	−0.996	−0.067
*lab*tce*	0.5	1.0	0.511
*lab*ncE*	0.0	1.0	g04b

*n** = 0,00

Schwarzheit *n**

*n** = 1,0

0,25 0,50 *n** = 0,50 0,75 1,00

relative Buntheit *c**

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 151/360 = 0.419 (links)

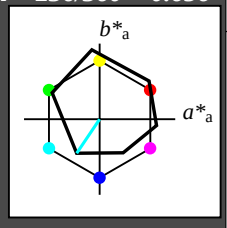
3 stufige Reihen für konstanten CIELAB Buntton 167/360 = 0.464 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 236/360 = 0.656*
lab*tch* und *lab*nch

D65: Buntton C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit *t**



%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

ORS18; adaptierte CIELAB-Daten

	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

***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
*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)**

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

*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	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**

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	77.01	−15.79	−18.98
*LAB*LABa*	77.01	−15.16	−22.5
*LAB*TCHa*	75.0	27.15	236.01

relative* CIELAB *lab*

*lab*lab*	0.762	−0.278	−0.413
*lab*tch*	0.75	0.5	0.656
*lab*nch*	0.0	0.5	0.656

***relative* Natural Colour (NC)**

*lab*lrj*	0.762	−0.247	−0.433
*lab*tce*	0.75	0.5	0.667
*lab*ncE*	0.0	0.5	g66b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	38.32	−15.05	−21.59
*LAB*LABa*	38.32	−15.16	−22.5
*LAB*TCHa*	25.01	27.15	236.01

relative* CIELAB *lab*

*lab*lab*	0.262	−0.278	−0.413
*lab*tch*	0.25	0.5	0.656
*lab*nch*	0.5	0.5	0.656

***relative* Natural Colour (NC)**

*lab*lrj*	0.262	−0.247	−0.433
*lab*tce*	0.25	0.5	0.667
*lab*ncE*	0.5	0.5	g66b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	58.62	−30.62	−42.73
*LAB*LABa*	58.62	−30.34	−45.01
*LAB*TCHa*	50.0	54.29	236.01

relative* CIELAB *lab*

*lab*lab*	0.525	−0.558	−0.828
*lab*tch*	0.5	1.0	0.656
*lab*nch*	0.0	1.0	0.656

***relative* Natural Colour (NC)**

*lab*lrj*	0.525	−0.496	−0.867
*lab*tce*	0.5	1.0	0.667
*lab*ncE*	0.0	1.0	g66b

***n** = 0,00**

Schwarzheit *n**

0,25 0,50 ***n** = 0,50* 0,75 1,00

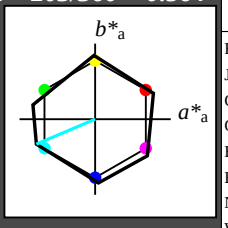
relative Buntheit *c**

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 203/360 = 0.564*
lab*tch* und *lab*nch

D65: Buntton G50B
LCH*Ma: 53 84 203
olv*Ma: 0.0 1.0 1.0

Dreiecks-Helligkeit *t**



%Umfang
u*rel = 119
%Regularität
g*H,rel = 47
g*C,rel = 100

NRS11; adaptierte CIELAB-Daten

	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

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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**

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	−38.82	−16.48
*LAB*LABa*	74.3	−38.85	−16.48
*LAB*TCHa*	75.0	42.21	203.0

relative* CIELAB *lab*

*lab*lab*	0.75	−0.459	−0.194
*lab*tch*	0.75	0.5	0.564
*lab*nch*	0.0	0.5	0.564

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	−0.416	−0.275
*lab*tce*	0.75	0.5	0.593
*lab*ncE*	0.0	0.5	g37b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	−38.79	−16.46
*LAB*LABa*	32.1	−38.85	−16.48
*LAB*TCHa*	25.01	42.21	203.0

relative* CIELAB *lab*

*lab*lab*	0.25	−0.459	−0.194
*lab*tch*	0.25	0.5	0.564
*lab*nch*	0.5	0.5	0.564

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	−0.416	−0.275
*lab*tce*	0.25	0.5	0.593
*lab*ncE*	0.5	0.5	g37b

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	−77.67	−32.96
*LAB*LABa*	53.2	−77.71	−32.97
*LAB*TCHa*	50.0	84.43	202.99

relative* CIELAB *lab*

*lab*lab*	0.5	−0.919	−0.39
*lab*tch*	0.5	1.0	0.564
*lab*nch*	0.0	1.0	0.564

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	−0.833	−0.551
*lab*tce*	0.5	1.0	0.593
*lab*ncE*	0.0	1.0	g37b

***n** = 0,00**

Schwarzheit *n**

0,25 0,50 ***n** = 0,50* 0,75 1,00

relative Buntheit *c**

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 236/360 = 0.656 (links)

3 stufige Reihen für konstanten CIELAB Buntton 203/360 = 0.564 (rechts)

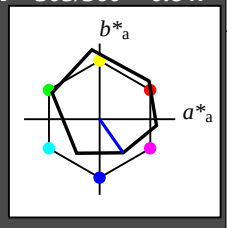
BAM-Prüfvorlage TG12; Farbmetrik-Systeme ORS18 & NRS11 input: *olv* setrgbcolor*
D65: 2 Koordinaten-Daten von 3stufigen Farbreihen für 10 Buntt**one**input: *olv* setrgbcolor / w* setgray*

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 305/360 = 0.847*
lab*tch* und *lab*nch

D65: Buntton V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

***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
*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)**

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

*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	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	–

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	60.56	15.24	−19.79
*LAB*LABa*	60.56	15.55	−22.2
*LAB*TCHa*	75.0	27.11	305.0

relative* CIELAB *lab*

*lab*lab*	0.55	0.287	−0.408
*lab*tch*	0.75	0.5	0.847
*lab*nch*	0.0	0.5	0.847

***relative* Natural Colour (NC)**

*lab*lrj*	0.55	0.225	−0.446
*lab*tce*	0.75	0.5	0.824
*lab*ncE*	0.0	0.5	b29r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	21.87	15.98	−22.4
*LAB*LABa*	21.87	15.55	−22.2
*LAB*TCHa*	25.01	27.11	305.0

relative* CIELAB *lab*

*lab*lab*	0.05	0.287	−0.408
*lab*tch*	0.25	0.5	0.847
*lab*nch*	0.5	0.5	0.847

***relative* Natural Colour (NC)**

*lab*lrj*	0.05	0.225	−0.446
*lab*tce*	0.25	0.5	0.824
*lab*ncE*	0.5	0.5	b29r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	25.72	31.46	−44.36
*LAB*LABa*	25.72	31.1	−44.41
*LAB*TCHa*	50.0	54.23	305.0

relative* CIELAB *lab*

*lab*lab*	0.1	0.573	−0.818
*lab*tch*	0.5	1.0	0.847
*lab*nch*	0.0	1.0	0.847

***relative* Natural Colour (NC)**

*lab*lrj*	0.1	0.449	−0.892
*lab*tce*	0.5	1.0	0.824
*lab*ncE*	0.0	1.0	b29r

*n** = 0,00

Schwarzheit *n**

0,25 0,50 *n** = 0,50 0,75 1,00

relative Buntheit *c**

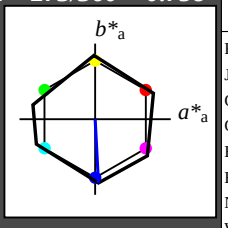
*n** = 1,0

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 273/360 = 0.758*
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 53 84 273
olv*Ma: 0.0 0.0 1.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 119
%Regularität
g*H,rel = 47
g*C,rel = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	2.21	−42.13
*LAB*LABa*	74.3	2.19	−42.13
*LAB*TCHa*	75.0	42.2	272.97

relative* CIELAB *lab*

*lab*lab*	0.75	0.026	−0.498
*lab*tch*	0.75	0.5	0.758
*lab*nch*	0.0	0.5	0.758

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.009	−0.499
*lab*tce*	0.75	0.5	0.753
*lab*ncE*	0.0	0.5	b01r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	2.25	−42.11
*LAB*LABa*	32.1	2.19	−42.13
*LAB*TCHa*	25.01	42.2	272.97

relative* CIELAB *lab*

*lab*lab*	0.25	0.026	−0.498
*lab*tch*	0.25	0.5	0.758
*lab*nch*	0.5	0.5	0.758

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.009	−0.499
*lab*tce*	0.25	0.5	0.753
*lab*ncE*	0.5	0.5	b01r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	4.42	−84.26
*LAB*LABa*	53.2	4.37	−84.27
*LAB*TCHa*	50.0	84.39	272.97

relative* CIELAB *lab*

*lab*lab*	0.5	0.052	−0.997
*lab*tch*	0.5	1.0	0.758
*lab*nch*	0.0	1.0	0.758

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.018	−0.999
*lab*tce*	0.5	1.0	0.753
*lab*ncE*	0.0	1.0	b01r

*n** = 0,00

Schwarzheit *n**

0,25 0,50 *n** = 0,50 0,75 1,00

relative Buntheit *c**

*n** = 1,0

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 305/360 = 0.847 (links)

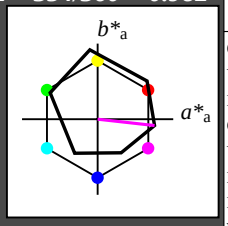
3 stufige Reihen für konstanten CIELAB Buntton 273/360 = 0.758 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 354/360 = 0.982*
lab*tch* und *lab*nch

D65: Buntton M
LCH*Ma: 48 76 354
olv*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***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
*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)**

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

*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	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	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.5	1.0	(1.0)
*cmyn3**	0.0	0.5	0.0	(0.0)
*olvi4**	1.0	0.5	1.0	1.0
*cmyn4**	0.0	0.5	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*lrj*	0.695	0.454	−0.208
*lab*tce*	0.75	0.5	0.932
*lab*ncE*	0.0	0.5	b72r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	33.08	37.84	−3.62
*LAB*LABa*	33.08	37.63	−4.17
*LAB*TCHa*	25.01	37.86	353.66

relative* CIELAB *lab*

*lab*lab*	0.195	0.497	−0.054
*lab*tch*	0.25	0.5	0.982
*lab*nch*	0.5	0.5	0.982

***relative* Natural Colour (NC)**

*lab*lrj*	0.195	0.454	−0.208
*lab*tce*	0.25	0.5	0.932
*lab*ncE*	0.5	0.5	b72r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	48.14	75.18	−6.78
*LAB*LABa*	48.14	75.25	−8.35
*LAB*TCHa*	50.0	75.71	353.66

relative* CIELAB *lab*

*lab*lab*	0.389	0.994	−0.109
*lab*tch*	0.5	1.0	0.982
*lab*nch*	0.0	1.0	0.982

***relative* Natural Colour (NC)**

*lab*lrj*	0.389	0.909	−0.416
*lab*tce*	0.5	1.0	0.932
*lab*ncE*	0.0	1.0	b72r

***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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

$n^* = 0{,}00$

Schwarzheit *n**

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

relative Buntheit *c**

$n^* = 1{,}0$

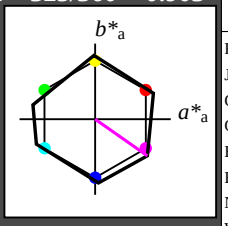
TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 354/360 = 0.982 (links)

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 325/360 = 0.903*
lab*tch* und *lab*nch

D65: Buntton B50R
LCH*Ma: 53 84 325
olv*Ma: 1.0 0.0 1.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	53.2	77.06	34.32	84.36	24
J_{Ma}	53.2	−1.51	84.38	84.39	91
G_{Ma}	53.2	−82.27	18.98	84.44	167
$G50B_{Ma}$	53.2	−77.72	−32.98	84.44	203
B_{Ma}	53.2	4.37	−84.28	84.41	273
$B50R_{Ma}$	53.2	69.09	−48.41	84.37	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 119
%Regularität
$g^*_{H,rel}$ = 47
$g^*_{C,rel}$ = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	34.57	−24.19
*LAB*LABa*	74.3	34.54	−24.2
*LAB*TCHa*	75.0	42.18	324.98

relative* CIELAB *lab*

*lab*lab*	0.75	0.409	−0.286
*lab*tch*	0.75	0.5	0.903
*lab*nch*	0.0	0.5	0.903

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.336	−0.37
*lab*tce*	0.75	0.5	0.867
*lab*ncE*	0.0	0.5	b46r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	34.6	−24.18
*LAB*LABa*	32.1	34.54	−24.2
*LAB*TCHa*	25.01	42.18	324.98

relative* CIELAB *lab*

*lab*lab*	0.25	0.409	−0.286
*lab*tch*	0.25	0.5	0.903
*lab*nch*	0.5	0.5	0.903

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.336	−0.37
*lab*tce*	0.25	0.5	0.867
*lab*ncE*	0.5	0.5	b46r

***relative* Inform. Technology (IT)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	69.12	−48.39
*LAB*LABa*	53.2	69.08	−48.4
*LAB*TCHa*	50.0	84.35	324.98

relative* CIELAB *lab*

*lab*lab*	0.5	0.819	−0.573
*lab*tch*	0.5	1.0	0.903
*lab*nch*	0.0	1.0	0.903

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.671	−0.74
*lab*tce*	0.5	1.0	0.867
*lab*ncE*	0.0	1.0	b46r

$n^* = 0{,}00$

Schwarzheit *n**

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

relative Buntheit *c**

$n^* = 1{,}0$

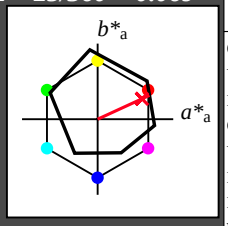
3 stufige Reihen für konstanten CIELAB Buntton 325/360 = 0.903 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 25/360 = 0.069*
*lab*tch* und *lab*nch*

D65: Buntton R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

Dreiecks-Helligkeit *t**



%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

ORS18; adaptierte CIELAB-Daten

	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

***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
*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)**

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

*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	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	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.5	0.661	(1.0)
*cmyn3**	0.0	0.5	0.339	(0.0)
*olvi4**	1.0	0.5	0.661	1.0
*cmyn4**	0.0	0.5	0.339	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)**

*olvi3**	0.5	0.0	0.161	(1.0)
*cmyn3**	0.5	1.0	0.839	(0.0)
*olvi4**	1.0	0.5	0.661	0.5
*cmyn4**	0.0	0.5	0.339	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	33.01	34.49	16.31
*LAB*LABa*	33.01	34.27	15.77
*LAB*TCHa*	25.01	37.73	24.7

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

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.0	0.322	(1.0)
*cmyn3**	0.0	1.0	0.678	(0.0)
*olvi4**	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

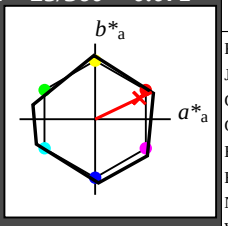
n = 0,00*
Schwarzheit *n**
n = 0,50*
0,25 0,50 0,75 1,00
relative Buntheit *c**
n = 1,0*

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 25/360 = 0.071*
*lab*tch* und *lab*nch*

D65: Buntton R
LCH*Ma: 53 83 25
olv*Ma: 1.0 0.03 0.0

Dreiecks-Helligkeit *t**



%Umfang
u*rel = 119
%Regularität
g*H,rel = 47
g*C,rel = 100

NRS11; adaptierte CIELAB-Daten

	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

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***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

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	37.46	17.85
*LAB*LABa*	74.3	37.44	17.85
*LAB*TCHa*	75.0	41.47	25.49

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

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.5	0.0
*lab*tce*	0.75	0.5	0.0
*lab*ncE*	0.0	0.5	r00j

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.014	0.0	(1.0)
*cmyn3**	0.5	0.986	1.0	(0.0)
*olvi4**	1.0	0.514	0.5	0.5
*cmyn4**	0.0	0.486	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	37.51	17.86
*LAB*LABa*	32.1	37.45	17.84
*LAB*TCHa*	25.01	41.48	25.48

relative* CIELAB *lab*

*lab*lab*	0.25	0.451	0.215
*lab*tch*	0.25	0.5	0.071
*lab*nch*	0.5	0.5	0.071

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.5	0.0
*lab*tce*	0.25	0.5	1.0
*lab*ncE*	0.5	0.5	b99r

***relative* Inform. Technology (IT)**

*olvi3**	1.0	0.028	0.0	(1.0)
*cmyn3**	0.0	0.972	1.0	(0.0)
*olvi4**	1.0	0.028	0.0	1.0
*cmyn4**	0.0	0.972	1.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	74.93	35.7
*LAB*LABa*	53.2	74.88	35.69
*LAB*TCHa*	50.0	82.95	25.48

relative* CIELAB *lab*

*lab*lab*	0.5	0.903	0.43
*lab*tch*	0.5	1.0	0.071
*lab*nch*	0.0	1.0	0.071

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	1.0	0.0
*lab*tce*	0.5	1.0	1.0
*lab*ncE*	0.0	1.0	b99r

n = 0,00*
Schwarzheit *n**
n = 0,50*
0,25 0,50 0,75 1,00
relative Buntheit *c**
n = 1,0*

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.069 (links)
3 stufige Reihen für konstanten CIELAB Buntton 25/360 = 0.071 (rechts)

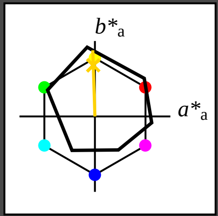
BAM-Prüfvorlage TG12; Farbmetrik-Systeme ORS18 & NRS11 input: *olv* setrgbcolor*
D65: 2 Koordinaten-Daten von 3stufigen Farbreihen für 10 Buntt**one**input: *olv* setrgbcolor / w* setgray*

Siehe ähnliche Dateien: http://www.ps.bam.de/TG12/
Technische Information: http://www.ps.bam.de Version 2.1, io=1,1, CIEXYZ

Eingabe: Farbmetrisches Reflexions-System ORS18
für Buntton *h = *lab*h* = 92/360 = 0.255**
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Umfang
u^*_{rel} = 93
%Regularität
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

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
*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)
*olvi3** 1.0 0.951 0.5 (1.0)
*cmyn3** 0.0 0.049 0.5 (0.0)
*olvi4** 1.0 0.951 0.5 1.0
*cmyn4** 0.0 0.049 0.5 0.0
standard and adapted CIELAB
*LAB*LAB* 90.8 −2.3 48.29
*LAB*LABa* 90.8 −1.41 43.85
*LAB*TCHa* 75.0 43.87 91.85
relative CIELAB *lab**
*lab*lab* 0.94 −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*lrj* 0.94 0.0 0.5
*lab*tce* 0.75 0.5 0.25
*lab*ncE* 0.0 0.5 j00g

relative Inform. Technology (IT)
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 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)
*olvi3** 1.0 0.901 0.0 (1.0)
*cmyn3** 0.0 0.099 1.0 (0.0)
*olvi4** 1.0 0.902 0.0 1.0
*cmyn4** 0.0 0.098 1.0 0.0
standard and adapted CIELAB
*LAB*LAB* 86.19 −3.62 91.83
*LAB*LABa* 86.19 −2.82 87.69
*LAB*TCHa* 50.0 87.73 91.85
relative CIELAB *lab**
*lab*lab* 0.881 −0.031 0.999
*lab*tch* 0.5 1.0 0.255
*lab*nch* 0.0 1.0 0.255
relative Natural Colour (NC)
*lab*lrj* 0.881 0.0 1.0
*lab*tce* 0.5 1.0 0.25
*lab*ncE* 0.0 1.0 j00g

relative Inform. Technology (IT)
*olvi3** 0.5 0.451 0.0 (1.0)
*cmyn3** 0.5 0.549 1.0 (0.0)
*olvi4** 1.0 0.951 0.5 0.5
*cmyn4** 0.0 0.049 0.5 0.5
standard and adapted CIELAB
*LAB*LAB* 52.1 −1.55 45.68
*LAB*LABa* 52.1 −1.4 43.84
*LAB*TCHa* 25.01 43.87 91.84
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*lrj* 0.44 0.0 0.5
*lab*tce* 0.25 0.5 0.25
*lab*ncE* 0.5 0.5 r99j

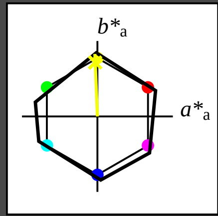
relative Inform. Technology (IT)
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
standard and adapted CIELAB
*LAB*LAB* 18.02 0.5 −0.46
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative CIELAB *lab**
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*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** = 0,00
Schwarzheit *n**
0,25 0,50 *n** = 0,50 0,75 1,00
relative Buntheit *c**
*n** = 1,0

Ausgabe: Farbmetrisches Reflexions-System NRS11
für Buntton *h = *lab*h* = 92/360 = 0.256**
lab*tch* und *lab*nch

D65: Buntton J
LCH*Ma: 53 83 92
olv*Ma: 0.98 1.0 0.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	53.2	77.06	34.32	84.36	24
J_{Ma}	53.2	−1.51	84.38	84.39	91
G_{Ma}	53.2	−82.27	18.98	84.44	167
$G50B_{Ma}$	53.2	−77.72	−32.98	84.44	203
B_{Ma}	53.2	4.37	−84.28	84.41	273
$B50R_{Ma}$	53.2	69.09	−48.41	84.37	325
N_{Ma}	10.99	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.69	27.98	65.01	25
J_{CIE}	81.26	−2.9	71.56	71.62	92
G_{CIE}	52.23	−42.45	13.59	44.59	162
B_{CIE}	30.57	1.35	−46.48	46.51	272

%Umfang
u^*_{rel} = 119
%Regularität
$g^*_{H,rel}$ = 47
$g^*_{C,rel}$ = 100

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 –
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)
*olvi3** 0.989 1.0 0.5 (1.0)
*cmyn3** 0.011 0.0 0.5 (0.0)
*olvi4** 0.989 1.0 0.5 1.0
*cmyn4** 0.011 0.0 0.5 0.0
standard and adapted CIELAB
*LAB*LAB* 74.3 −1.64 41.44
*LAB*LABa* 74.3 −1.67 41.44
*LAB*TCHa* 75.0 41.47 92.32
relative CIELAB *lab**
*lab*lab* 0.75 −0.019 0.499
*lab*tch* 0.75 0.5 0.256
*lab*nch* 0.0 0.5 0.256
relative Natural Colour (NC)
*lab*lrj* 0.75 0.0 0.5
*lab*tce* 0.75 0.5 0.25
*lab*ncE* 0.0 0.5 r99j

relative Inform. Technology (IT)
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
standard and adapted CIELAB
*LAB*LAB* 53.21 0.04 0.0
*LAB*LABa* 53.21 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)
*olvi3** 0.977 1.0 0.0 (1.0)
*cmyn3** 0.023 0.0 1.0 (0.0)
*olvi4** 0.977 1.0 0.0 1.0
*cmyn4** 0.023 0.0 1.0 0.0
standard and adapted CIELAB
*LAB*LAB* 53.2 −3.31 82.87
*LAB*LABa* 53.2 −3.35 82.86
*LAB*TCHa* 50.0 82.93 92.32
relative CIELAB *lab**
*lab*lab* 0.5 −0.04 0.999
*lab*tch* 0.5 1.0 0.256
*lab*nch* 0.0 1.0 0.256
relative Natural Colour (NC)
*lab*lrj* 0.5 0.0 1.0
*lab*tce* 0.5 1.0 0.25
*lab*ncE* 0.0 1.0 r99j

relative Inform. Technology (IT)
*olvi3** 0.489 0.5 0.0 (1.0)
*cmyn3** 0.511 0.5 1.0 (0.0)
*olvi4** 0.989 1.0 0.5 0.5
*cmyn4** 0.011 0.0 0.5 0.5
standard and adapted CIELAB
*LAB*LAB* 32.1 −1.62 41.45
*LAB*LABa* 32.1 −1.68 41.43
*LAB*TCHa* 25.01 41.46 92.33
relative CIELAB *lab**
*lab*lab* 0.25 −0.019 0.499
*lab*tch* 0.25 0.5 0.256
*lab*nch* 0.5 0.5 0.256
relative Natural Colour (NC)
*lab*lrj* 0.25 0.0 0.5
*lab*tce* 0.25 0.5 0.25
*lab*ncE* 0.5 0.5 j00g

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 0.0
*cmyn4** 0.0 0.0 0.0 1.0
standard and adapted CIELAB
*LAB*LAB* 11.01 0.07 0.01
*LAB*LABa* 11.01 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** = 0,00
Schwarzheit *n**
0,25 0,50 *n** = 0,50 0,75 1,00
relative Buntheit *c**
*n** = 1,0

BAM-Registrierung: 20060101-TG12/10S/S12G07FP.PS/.PDF BAM-Material: Code=rha4ta
Anwendung für Beurteilung und Messung von Drucker− oder Monitorsystemen, Yr=2,5, XYZ

/TG12/ Form: 8/10, Serie: 1/1, Seite: 8 Seitenz hlung 8

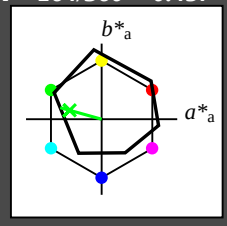
TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.255 (links) 3 stufige Reihen für konstanten CIELAB Buntton 92/360 = 0.256 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 164/360 = 0.457*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

***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
*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)**

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

*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	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	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	1.0	0.623	(1.0)
*cmyn3**	0.5	0.0	0.377	(0.0)
*olvi4**	0.5	1.0	0.623	1.0
*cmyn4**	0.5	0.0	0.377	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.1	−27.96	10.94
*LAB*LABa*	74.1	−27.39	7.62
*LAB*TCHa*	75.0	28.44	164.46

relative* CIELAB *lab*

*lab*lab*	0.725	−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*lrj*	0.725	−0.499	0.0
*lab*tce*	0.75	0.5	0.5
*lab*ncE*	0.0	0.5	g00b

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.5	0.123	(1.0)
*cmyn3**	1.0	0.5	0.877	(0.0)
*olvi4**	0.5	1.0	0.623	0.5
*cmyn4**	0.5	0.0	0.377	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	35.41	−27.22	8.34
*LAB*LABa*	35.41	−27.39	7.63
*LAB*TCHa*	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*lrj*	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)**

*olvi3**	0.0	1.0	0.246	(1.0)
*cmyn3**	1.0	0.0	0.754	(0.0)
*olvi4**	0.0	1.0	0.246	1.0
*cmyn4**	1.0	0.0	0.754	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	52.8	−54.95	17.13
*LAB*LABa*	52.8	−54.79	15.24
*LAB*TCHa*	50.0	56.88	164.45

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*lrj*	0.45	−0.999	0.0
*lab*tce*	0.5	1.0	0.5
*lab*ncE*	0.0	1.0	j99g

*n** = 0,00

Schwarzheit *n**

*n** = 1,0

*n** = 0,50

0,25 0,50 0,75 1,00

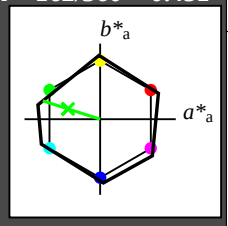
relative Buntheit *c**

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 162/360 = 0.451*
lab*tch* und *lab*nch

D65: Buntton G
LCH*Ma: 53 80 162
olv*Ma: 0.08 1.0 0.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 119
%Regularität
g*H,rel = 47
g*C,rel = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***relative* Inform. Technology (IT)**

*olvi3**	0.54	1.0	0.5	(1.0)
*cmyn3**	0.46	0.0	0.5	(0.0)
*olvi4**	0.54	1.0	0.5	1.0
*cmyn4**	0.46	0.0	0.5	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	−37.84	12.13
*LAB*LABa*	74.3	−37.87	12.12
*LAB*TCHa*	75.0	39.77	162.25

relative* CIELAB *lab*

*lab*lab*	0.75	−0.475	0.152
*lab*tch*	0.75	0.5	0.451
*lab*nch*	0.0	0.5	0.451

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	−0.499	0.0
*lab*tce*	0.75	0.5	0.5
*lab*ncE*	0.0	0.5	j99g

***relative* Inform. Technology (IT)**

*olvi3**	0.04	0.5	0.0	(1.0)
*cmyn3**	0.96	0.5	1.0	(0.0)
*olvi4**	0.54	1.0	0.5	0.5
*cmyn4**	0.46	0.0	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	−37.81	12.13
*LAB*LABa*	32.1	−37.87	12.12
*LAB*TCHa*	25.01	39.77	162.27

relative* CIELAB *lab*

*lab*lab*	0.25	−0.475	0.152
*lab*tch*	0.25	0.5	0.451
*lab*nch*	0.5	0.5	0.451

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	−0.499	0.0
*lab*tce*	0.25	0.5	0.5
*lab*ncE*	0.5	0.5	g00b

***relative* Inform. Technology (IT)**

*olvi3**	0.081	1.0	0.0	(1.0)
*cmyn3**	0.919	0.0	1.0	(0.0)
*olvi4**	0.081	1.0	0.0	1.0
*cmyn4**	0.919	0.0	1.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	−75.71	24.25
*LAB*LABa*	53.2	−75.75	24.24
*LAB*TCHa*	50.0	79.54	162.26

relative* CIELAB *lab*

*lab*lab*	0.5	−0.951	0.305
*lab*tch*	0.5	1.0	0.451
*lab*nch*	0.0	1.0	0.451

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	−0.999	0.0
*lab*tce*	0.5	1.0	0.5
*lab*ncE*	0.0	1.0	g00b

*n** = 0,00

Schwarzheit *n**

*n** = 1,0

*n** = 0,50

0,25 0,50 0,75 1,00

relative Buntheit *c**

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 164/360 = 0.457 (links)

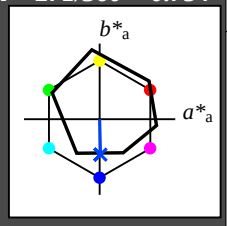
3 stufige Reihen für konstanten CIELAB Buntton 162/360 = 0.451 (rechts)

Eingabe: Farbmetrisches Reflexions-System ORS18

für Buntton *h* = lab*h = 271/360 = 0.754*
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

Dreiecks-Helligkeit *t**



ORS18; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 93
%Regularität
g*H,rel = 57
g*C,rel = 59

***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
*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)**

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

*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	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	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.744	1.0	(1.0)
*cmyn3**	0.5	0.256	0.0	(0.0)
*olvi4**	0.5	0.744	1.0	1.0
*cmyn4**	0.5	0.256	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	68.59	0.08	−19.4
*LAB*LABa*	68.59	0.54	−22.35
*LAB*TCHa*	75.0	22.36	271.4

relative* CIELAB *lab*

*lab*lab*	0.654	0.012	−0.499
*lab*tch*	0.75	0.5	0.754
*lab*nch*	0.0	0.5	0.754

***relative* Natural Colour (NC)**

*lab*lrj*	0.654	0.0	−0.499
*lab*tce*	0.75	0.5	0.75
*lab*ncE*	0.0	0.5	g99b

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.244	0.5	(1.0)
*cmyn3**	1.0	0.756	0.5	(0.0)
*olvi4**	0.5	0.744	1.0	0.5
*cmyn4**	0.5	0.256	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	29.9	0.83	−22.01
*LAB*LABa*	29.9	0.55	−22.35
*LAB*TCHa*	25.01	22.36	271.41

relative* CIELAB *lab*

*lab*lab*	0.154	0.012	−0.499
*lab*tch*	0.25	0.5	0.754
*lab*nch*	0.5	0.5	0.754

***relative* Natural Colour (NC)**

*lab*lrj*	0.154	0.0	−0.499
*lab*tce*	0.25	0.5	0.75
*lab*ncE*	0.5	0.5	b00r

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.488	1.0	(1.0)
*cmyn3**	1.0	0.512	0.0	(0.0)
*olvi4**	0.0	0.488	1.0	1.0
*cmyn4**	1.0	0.512	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	41.79	1.14	−43.56
*LAB*LABa*	41.79	1.1	−44.7
*LAB*TCHa*	50.0	44.73	271.4

relative* CIELAB *lab*

*lab*lab*	0.307	0.024	−0.998
*lab*tch*	0.5	1.0	0.754
*lab*nch*	0.0	1.0	0.754

***relative* Natural Colour (NC)**

*lab*lrj*	0.307	0.0	−0.999
*lab*tce*	0.5	1.0	0.75
*lab*ncE*	0.0	1.0	b00r

n = 0,00*

Schwarzheit *n**

n = 1,0*

0,25 0,50 *n* = 0,50* 0,75 1,00

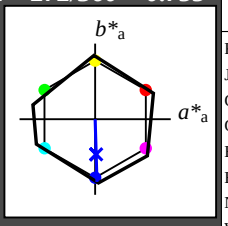
relative Buntheit *c**

Ausgabe: Farbmetrisches Reflexions-System NRS11

für Buntton *h* = lab*h = 272/360 = 0.755*
lab*tch* und *lab*nch

D65: Buntton B
LCH*Ma: 53 83 272
olv*Ma: 0.0 0.02 1.0

Dreiecks-Helligkeit *t**



NRS11; adaptierte CIELAB-Daten

	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

%Umfang
u*rel = 119
%Regularität
g*H,rel = 47
g*C,rel = 100

***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	–

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)**

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

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.21	0.04	0.0
*LAB*LABa*	53.21	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)**

*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	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	11.01	0.07	0.01
*LAB*LABa*	11.01	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	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.512	1.0	(1.0)
*cmyn3**	0.5	0.488	0.0	(0.0)
*olvi4**	0.5	0.512	1.0	1.0
*cmyn4**	0.5	0.488	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	74.3	1.23	−41.51
*LAB*LABa*	74.3	1.2	−41.52
*LAB*TCHa*	75.0	41.54	271.66

relative* CIELAB *lab*

*lab*lab*	0.75	0.014	−0.499
*lab*tch*	0.75	0.5	0.755
*lab*nch*	0.0	0.5	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.0	−0.499
*lab*tce*	0.75	0.5	0.75
*lab*ncE*	0.0	0.5	g99b

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.012	0.5	(1.0)
*cmyn3**	1.0	0.988	0.5	(0.0)
*olvi4**	0.5	0.512	1.0	0.5
*cmyn4**	0.5	0.488	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	32.1	1.27	−41.5
*LAB*LABa*	32.1	1.21	−41.52
*LAB*TCHa*	25.01	41.55	271.67

relative* CIELAB *lab*

*lab*lab*	0.25	0.015	−0.499
*lab*tch*	0.25	0.5	0.755
*lab*nch*	0.5	0.5	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.0	−0.499
*lab*tce*	0.25	0.5	0.75
*lab*ncE*	0.5	0.5	b00r

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.024	1.0	(1.0)
*cmyn3**	1.0	0.976	0.0	(0.0)
*olvi4**	0.0	0.024	1.0	1.0
*cmyn4**	1.0	0.976	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	53.2	2.46	−83.04
*LAB*LABa*	53.2	2.42	−83.05
*LAB*TCHa*	50.0	83.09	271.67

relative* CIELAB *lab*

*lab*lab*	0.5	0.029	−0.998
*lab*tch*	0.5	1.0	0.755
*lab*nch*	0.0	1.0	0.755

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.0	−0.999
*lab*tce*	0.5	1.0	0.75
*lab*ncE*	0.0	1.0	b00r

n = 0,00*

Schwarzheit *n**

n = 1,0*

0,25 0,50 *n* = 0,50* 0,75 1,00

relative Buntheit *c**

TG120−7, 3 stufige Reihen für konstanten CIELAB Buntton 271/360 = 0.754 (links)

3 stufige Reihen für konstanten CIELAB Buntton 272/360 = 0.755 (rechts)