

Input: Colorimetric Offset Reflective System ORS18

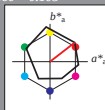
for hue $h^* = lab^*h = 38/360 = 0.105$

lab^*tch and lab^*nch

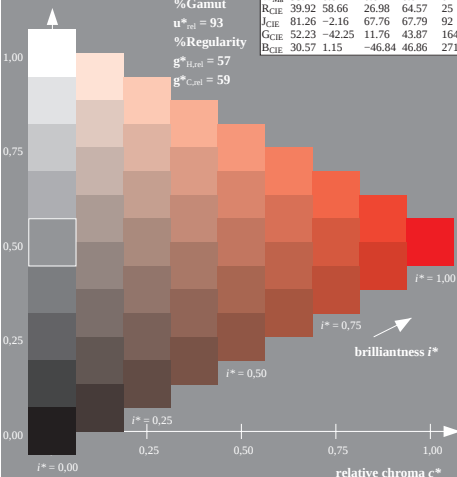
D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0



triangle lightness t^*



ZE740-7N, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)

BAM-test chart ZE74; Colorimetric systems, Page 1/10
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

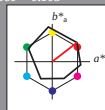
for hue $h^* = lab^*h = 38/360 = 0.105$

lab^*tch and lab^*nch

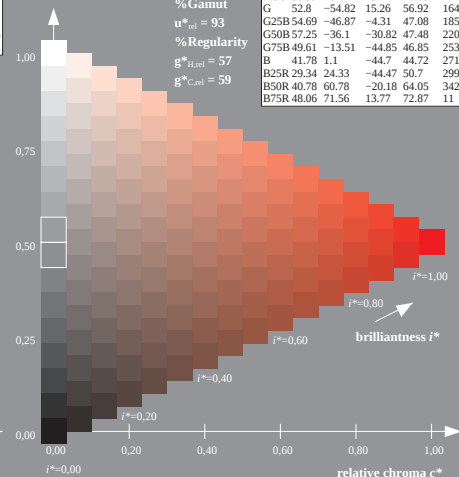
D65: hue O

LCH*Ma: 48 83 38

olv*Ma: 1.0 0.0 0.0



triangle lightness t^*



ZE740-7N, 16 step scales for constant CIELAB hue 38/360 = 0.105 (right)

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^*$ set($cmyk$)color

Input: Colorimetric Offset Reflective System ORS18

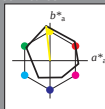
for hue $h^* = lab^*h = 96/360 = 0.268$

lab^*tch and lab^*nch

D65: hue Y

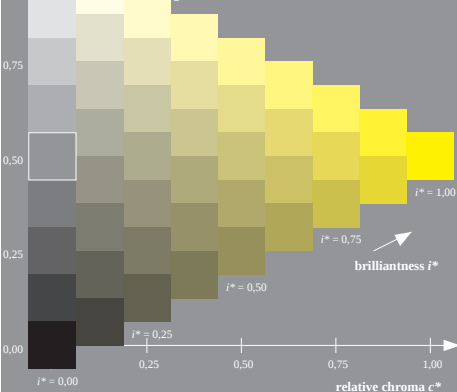
LCH*Ma: 90 92 96

ol*Ma: 1.0 1.0 0.0



triangle lightness t^*

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



ORS18; adapted (a) CIELAB data						
$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$		
O _{Ma}	47.94	65.39	50.52	82.63	38	
Y _{Ma}	90.37	-10.26	91.75	92.32	96	
L _{Ma}	50.9	-62.83	34.96	71.91	151	
C _{Ma}	58.62	-30.34	-45.01	54.3	236	
V _{Ma}	25.72	31.1	-44.4	54.22	305	
M _{Ma}	48.13	75.28	-8.36	75.74	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	64.57	25	
J _{CIE}	81.26	-2.16	67.76	67.79	92	
G _{CIE}	52.23	-42.25	11.76	43.87	164	
B _{CIE}	30.57	1.15	-46.84	46.86	271	

Output: Colorimetric Offset Reflective System ORS18

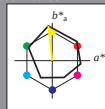
for hue $h^* = lab^*h = 96/360 = 0.268$

lab^*tch and lab^*nch

D65: hue Y

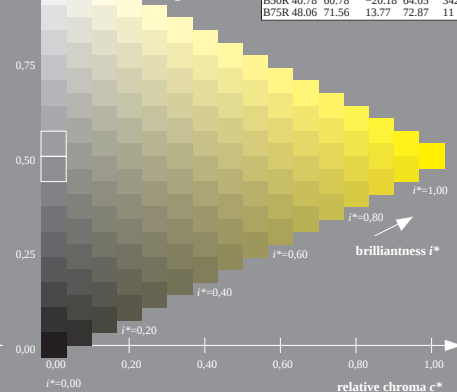
LCH*Ma: 90 92 96

ol*Ma: 1.0 1.0 0.0



triangle lightness t^*

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



ORS18; adapted (a) CIELAB data						
$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$		
R	48.0	68.58	31.54	75.48	25	
R25J	50.11	61.52	52.63	80.96	41	
R50J	62.87	38.77	65.02	75.71	59	
R75J	74.87	17.37	76.69	78.63	77	
J	86.19	-2.8	87.69	87.73	92	
J25G	84.01	-18.73	82.6	84.7	103	
J50G	71.17	-35.83	64.13	73.46	119	
J75G	56.99	-54.71	43.72	70.05	141	
G	52.8	-54.82	15.26	56.92	164	
G25B	54.69	-46.87	-4.31	47.08	185	
G50B	57.25	-36.1	-30.82	47.48	220	
G75B	49.61	-13.51	-44.85	46.85	253	
B	41.78	1.1	-44.7	44.72	271	
B25R	29.34	24.33	-44.47	50.7	299	
B50R	40.78	60.78	-20.18	64.05	342	
B75R	48.06	71.56	13.77	72.87	411	

ZE740-7N, 9 step scales for constant CIELAB hue 96/360 = 0.268 (left)

Page 2/10

ZE740-7N, 16 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart ZE74; Colorimetric systems, Page 2/10
D65: 9 and 16 step colour scales for 10 hues

input: `rgb / cmy0 set(rgb/cmyk)color`
output: `->cmy4* setcmykcolor`

Input: Colorimetric Offset Reflective System ORS18

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

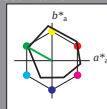
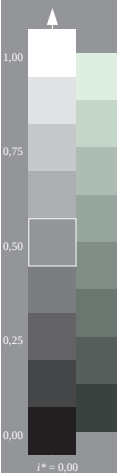
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



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

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$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	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	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Offset Reflective System ORS18

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

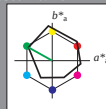
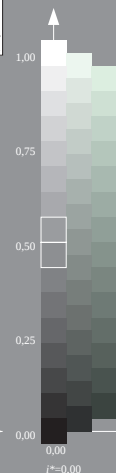
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 51 72 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



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R25J	50.11	61.52	52.63	80.96	41
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J	86.19	-2.8	87.69	87.73	92
J25G	84.01	-18.73	82.6	84.7	103
J50G	71.17	-35.83	64.13	73.46	119
J75G	56.99	-54.71	43.72	70.05	141
G	52.8	-54.82	15.26	56.92	164
G25B	54.69	-46.87	-4.31	47.08	185
G50B	57.25	-36.1	-30.82	47.48	220
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B	41.78	1.1	-44.7	44.72	271
B25R	29.34	24.33	-44.47	50.7	299
B50R	40.78	60.78	-20.18	64.05	342
B75R	48.06	71.56	13.77	72.87	411

ZE740-7N, 9 step scales for constant CIE LAB hue 151/360 = 0.419 (left)

Page 3/10

ZE740-7N, 16 step scales for constant CIE LAB hue 151/360 = 0.419 (right)

BAM-test chart ZE74; Colorimetric systems, Page 3/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

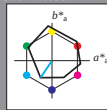
for hue $h^* = lab^*h = 236/360 = 0.656$

lab^*tch and lab^*nch

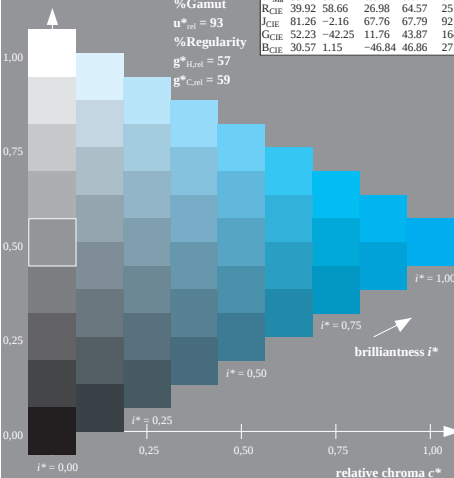
D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*



ZE740-7N, 9 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Page 4/10

Output: Colorimetric Offset Reflective System ORS18

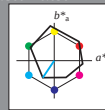
for hue $h^* = lab^*h = 236/360 = 0.656$

lab^*tch and lab^*nch

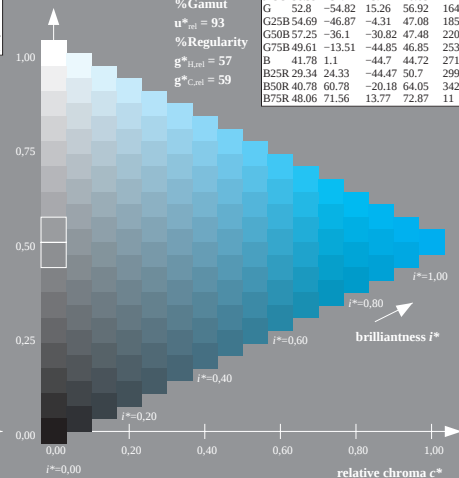
D65: hue C

LCH*Ma: 59 54 236

olv*Ma: 0.0 1.0 1.0



triangle lightness t^*



ZE740-7N, 16 step scales for constant CIELAB hue 236/360 = 0.656 (right)

BAM-test chart ZE74; Colorimetric systems, Page 4/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

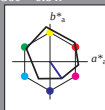
for hue $h^* = lab^*h = 305/360 = 0.847$

lab^*tch and lab^*nch

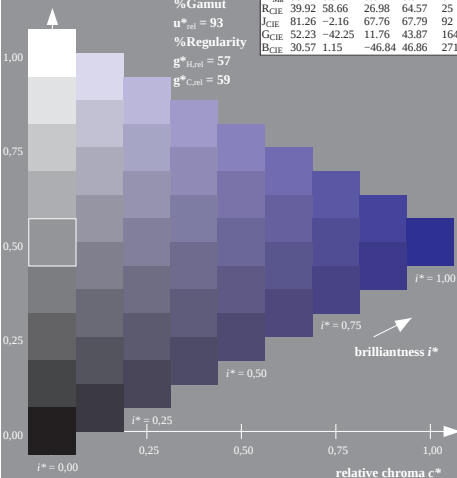
D65: hue V

LCH*Ma: 26 54 305

ol*Ma: 0.0 0.0 1.0



triangle lightness t^*



ZE740-7N, 9 step scales for constant CIELAB hue 305/360 = 0.847 (left)

Page 5/10

Output: Colorimetric Offset Reflective System ORS18

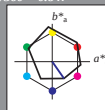
for hue $h^* = lab^*h = 305/360 = 0.847$

lab^*tch and lab^*nch

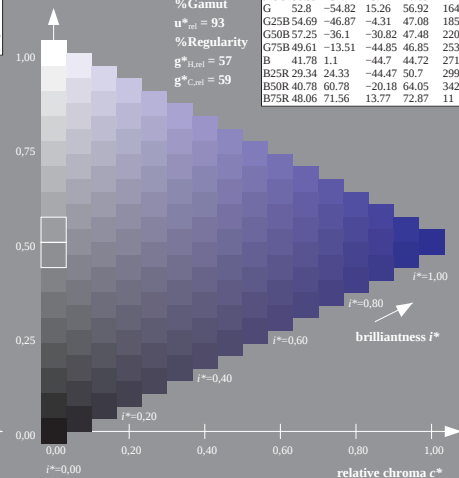
D65: hue V

LCH*Ma: 26 54 305

ol*Ma: 0.0 0.0 1.0



triangle lightness t^*



ZE740-7N, 16 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart ZE74; Colorimetric systems, Page 5/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^* setcmykcolor$

```
input: rgb / cmy0 set(rgb/cmyk)color
output: ->cmy4* setcmykcolor
```

Input: Colorimetric Offset Reflective System ORS18

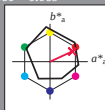
for hue $h^* = lab^*h = 25/360 = 0.069$

lab^*tch and lab^*nch

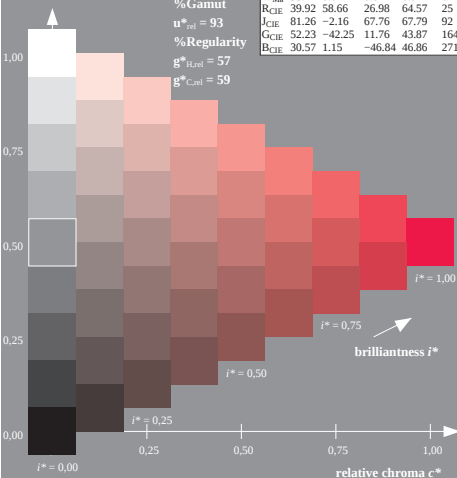
D65: hue R

LCH*Ma: 48 75 25

ol*Ma: 1.0 0.0 0.32



triangle lightness t^*



ZE740-7N, 9 step scales for constant CIELAB hue 25/360 = 0.069 (left)

BAM-test chart ZE74; Colorimetric systems, Page 7/10
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

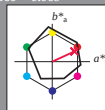
for hue $h^* = lab^*h = 25/360 = 0.069$

lab^*tch and lab^*nch

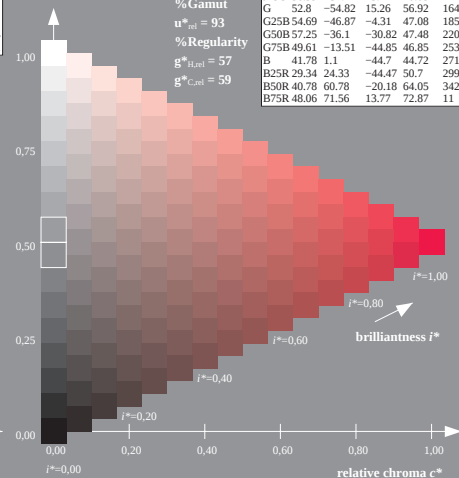
D65: hue R

LCH*Ma: 48 75 25

ol*Ma: 1.0 0.0 0.32



triangle lightness t^*



ZE740-7N, 16 step scales for constant CIELAB hue 25/360 = 0.069 (right)

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^*$ set($cmyk$)color

Input: Colorimetric Offset Reflective System ORS18

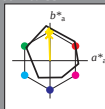
for hue $h^* = lab^*h = 92/360 = 0.255$

lab^*tch and lab^*nch

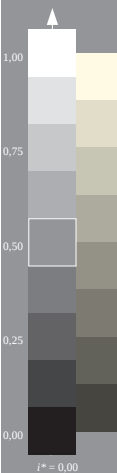
D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0



triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data					
$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	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	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

Output: Colorimetric Offset Reflective System ORS18

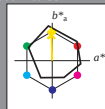
for hue $h^* = lab^*h = 92/360 = 0.255$

lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 86 88 92

olv*Ma: 1.0 0.9 0.0



triangle lightness t^*



%Gamut

$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data					
$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$	
R	48.0	68.58	31.54	75.48	25
R25J	50.11	61.52	52.63	80.96	41
R50J	62.87	38.77	65.02	75.71	59
R75J	74.87	17.37	76.69	78.63	77
J	86.19	-2.8	87.69	87.73	92
J25G	84.01	-18.73	82.6	84.7	103
J50G	71.17	-35.83	64.13	73.46	119
J75G	56.99	-54.71	43.72	70.05	141
G	52.8	-54.82	15.26	56.92	164
G25B	54.69	-46.87	-4.31	47.08	185
G50B	57.25	-36.1	-30.82	47.48	220
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B25R	29.34	24.33	-44.47	50.7	299
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B75R	48.06	71.56	13.77	72.87	411

ZE740-7N, 9 step scales for constant CIELAB hue 92/360 = 0.255 (left)

Page 8/10

ZE740-7N, 16 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart ZE74; Colorimetric systems, Page 8/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^*$ set($cmyk$)color

Input: Colorimetric Offset Reflective System ORS18

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

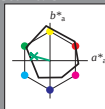
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



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C _{Ma}	58.62	-30.34	-45.01	54.3	236	
V _{Ma}	25.72	31.1	-44.4	54.22	305	
M _{Ma}	48.13	75.28	-8.36	75.74	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	64.57	25	
J _{CIE}	81.26	-2.16	67.76	67.79	92	
G _{CIE}	52.23	-42.25	11.76	43.87	164	
B _{CIE}	30.57	1.15	-46.84	46.86	271	

Output: Colorimetric Offset Reflective System ORS18

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

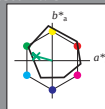
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 53 57 164

olv*Ma: 0.0 1.0 0.25

triangle lightness t^*



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J50G	71.17	-35.83	64.13	73.46	119	
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G25B	54.69	-46.87	-4.31	47.08	185	
G50B	57.25	-36.1	-30.82	47.48	220	
G75B	49.61	-13.51	-44.85	46.85	253	
B	41.78	1.1	-44.7	44.72	271	
B25R	29.34	24.33	-44.47	50.7	299	
B50R	40.78	60.78	-20.18	64.05	342	
B75R	48.06	71.56	13.77	72.87	411	

ZE740-7N, 9 step scales for constant CIELAB hue 164/360 = 0.457 (left)

Page 9/10

ZE740-7N, 16 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart ZE74; Colorimetric systems, Page 9/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: $\rightarrow cmy4^* setcmykcolor$

Input: Colorimetric Offset Reflective System ORS18

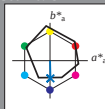
for hue $h^* = \text{lab}^*h = 271/360 = 0.754$

lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

ol*Ma: 0.0 0.49 1.0



triangle lightness t^*

%Gamut

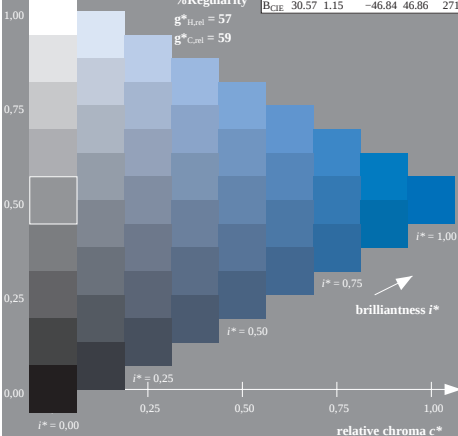
$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0	0
W _{Ma}	95.41	0.0	0.0	0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271



ZE740-7N, 9 step scales for constant CIELAB hue 271/360 = 0.754 (left)

BAM-test chart ZE74; Colorimetric systems, Page 10/10
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

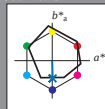
for hue $h^* = \text{lab}^*h = 271/360 = 0.754$

lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 42 45 271

ol*Ma: 0.0 0.49 1.0



triangle lightness t^*

%Gamut

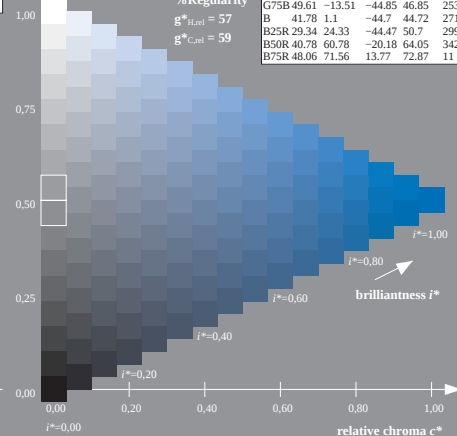
$u^*_{rel} = 93$

%Regularity

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

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

ORS18; adapted (a) CIELAB data	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R	48.0	68.58	31.54	75.48	25
R25J	50.11	61.52	52.63	80.96	41
R50J	62.87	38.77	65.02	75.71	59
R75J	74.87	17.37	76.69	78.63	77
J	86.19	-2.8	87.69	87.73	92
J25G	84.01	-18.73	82.6	84.7	103
J50G	71.17	-35.83	64.13	73.46	119
J75G	56.99	-54.71	43.72	70.05	141
G	52.8	-54.82	15.26	56.92	164
G25B	54.69	-46.87	-4.31	47.08	185
G50B	57.25	-36.1	-30.82	47.48	220
G75B	49.61	-13.51	-44.85	46.85	253
B	41.78	1.1	-44.7	44.72	271
B25R	29.34	24.33	-44.47	50.7	299
B50R	40.78	60.78	-20.18	64.05	342
B75R	48.06	71.56	13.77	72.87	411



ZE740-7N, 16 step scales for constant CIELAB hue 271/360 = 0.754 (right)

input: $\text{rgb} / \text{cmy}0 \text{ set}(\text{rgb}/\text{cmyk})\text{color}$
output: $\rightarrow \text{cmy}n4^* \text{ set}(\text{cmyk})\text{color}$