

<http://farbe.li.tu-berlin.de/eeq5/eeq510na.txt> /.ps; only vector graphic VG; start output
 see similar files: <http://farbe.li.tu-berlin.de/eeq5/eeq5.htm>

Equal 9 step grey scaling between $L^*_{0aN}=8.1$ and $L^*_{0aW}=95.9$, $Y_{0ref}=2.5$, normalisation grey U

$L^*_{0aN}=8.1, L^*_{0aU}=52.1, L^*_{0aW}=96.0, Y_{0aN}=0.9, Y_{0aU}=20.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$
 $L^*_{taN}=20.1, L^*_{taU}=52.1, L^*_{taW}=92.7, Y_{taN}=3.0, Y_{taU}=20.2, Y_{taW}=82.3, C_{taY}=Y_{taW}:Y_{taN}=27.2$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882, Y_n=100$

L* _{CIELAB} n0.i	intended output		real output		linearized output						
	L* _{0a}	L* _{0r}	Y _{0a}	Y _{0r}	L* _{ta}	ΔL^*_{ta}	L* _{tr}	Y _{ta}	$(L^*_{tr})^{1/1.19}$	L* _{la}	ΔL^*_{la}
9	96.0	1.0	90.0	1.0	92.7	10.3	1.0	82.3	1.0	92.7	8.8
8	85.0	0.875	66.0	0.731	82.4	10.2	0.857	61.0	0.879	83.9	8.9
7	74.0	0.75	46.7	0.515	72.1	10.1	0.716	43.8	0.756	75.0	9.1
6	63.0	0.625	31.6	0.345	62.0	9.9	0.576	30.4	0.63	65.9	9.3
5	52.1	0.5	20.2	0.217	52.1	9.6	0.44	20.2	0.503	56.6	9.4
4	41.1	0.375	11.9	0.124	42.5	8.9	0.308	12.8	0.373	47.2	9.4
3	30.1	0.25	6.3	0.06	33.6	7.7	0.185	7.8	0.243	37.8	9.0
2	19.1	0.125	2.8	0.021	25.8	5.7	0.078	4.7	0.119	28.8	8.6
1	8.1	0.0	0.9	0.0	20.1		0.0	3.0	0.0	20.1	

$\Delta L^*_{0a}=11.0$ (i=1,2,...,8) normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eeq50-3n

Equal 9 step grey scaling between $L^*_{0aN}=8.1$ and $L^*_{0aW}=95.9$, $Y_{0ref}=20.0$, normalisation grey U

$L^*_{0aN}=8.1, L^*_{0aU}=52.1, L^*_{0aW}=96.0, Y_{0aN}=0.9, Y_{0aU}=20.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$
 $L^*_{taN}=38.7, L^*_{taU}=52.1, L^*_{taW}=79.2, Y_{taN}=10.5, Y_{taU}=20.2, Y_{taW}=55.3, C_{taY}=Y_{taW}:Y_{taN}=5.3$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882, Y_n=100$

L* _{CIELAB} n0.i	intended output		real output		linearized output						
	L* _{0a}	L* _{0r}	Y _{0a}	Y _{0r}	L* _{ta}	ΔL^*_{ta}	L* _{tr}	Y _{ta}	$(L^*_{tr})^{1/1.59}$	L* _{la}	ΔL^*_{la}
9	96.0	1.0	90.0	1.0	79.2	7.5	1.0	55.3	1.0	79.2	4.9
8	85.0	0.875	66.0	0.731	71.7	7.1	0.815	43.2	0.879	74.3	5.0
7	74.0	0.75	46.7	0.515	64.6	6.6	0.639	33.5	0.755	69.3	5.2
6	63.0	0.625	31.6	0.345	58.0	5.9	0.476	25.9	0.627	64.1	5.2
5	52.1	0.5	20.2	0.217	52.1	5.0	0.329	20.2	0.498	58.9	5.2
4	41.1	0.375	11.9	0.124	47.0	5.0	0.205	16.0	0.369	53.7	5.0
3	30.1	0.25	6.3	0.06	43.1	3.9	0.107	13.2	0.246	48.7	4.6
2	19.1	0.125	2.8	0.021	40.3	2.7	0.039	11.4	0.131	44.0	5.3
1	8.1	0.0	0.9	0.0	38.7	1.6	0.0	10.5	0.0	38.7	

$\Delta L^*_{0a}=11.0$ (i=1,2,...,8) normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eeq51-3n

Equal 9 step grey scaling between $L^*_{0aN}=8.1$ and $L^*_{0aW}=95.9$, $Y_{0ref}=10.0$, normalisation grey U

$L^*_{0aN}=8.1, L^*_{0aU}=52.1, L^*_{0aW}=96.0, Y_{0aN}=0.9, Y_{0aU}=20.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$
 $L^*_{taN}=32.5, L^*_{taU}=52.1, L^*_{taW}=85.4, Y_{taN}=7.3, Y_{taU}=20.2, Y_{taW}=66.9, C_{taY}=Y_{taW}:Y_{taN}=9.2$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882, Y_n=100$

L* _{CIELAB} n0.i	intended output		real output		linearized output						
	L* _{0a}	L* _{0r}	Y _{0a}	Y _{0r}	L* _{ta}	ΔL^*_{ta}	L* _{tr}	Y _{ta}	$(L^*_{tr})^{1/1.44}$	L* _{la}	ΔL^*_{la}
9	96.0	1.0	90.0	1.0	85.4	8.8	1.0	66.9	1.0	85.4	6.3
8	85.0	0.875	66.0	0.731	76.6	8.6	0.833	50.8	0.88	79.1	6.5
7	74.0	0.75	46.7	0.515	68.0	8.2	0.67	38.0	0.757	72.6	6.7
6	63.0	0.625	31.6	0.345	59.8	7.7	0.515	27.8	0.63	65.8	6.9
5	52.1	0.5	20.2	0.217	52.1	6.9	0.37	20.2	0.5	59.0	6.9
4	41.1	0.375	11.9	0.124	45.2	6.9	0.24	14.6	0.37	52.1	6.7
3	30.1	0.25	6.3	0.06	39.4	5.8	0.131	10.9	0.242	45.3	6.7
2	19.1	0.125	2.8	0.021	35.1	4.3	0.05	8.5	0.123	39.0	6.3
1	8.1	0.0	0.9	0.0	32.5	2.6	0.0	7.3	0.0	32.5	6.5

$\Delta L^*_{0a}=11.0$ (i=1,2,...,8) normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eeq50-7n

Equal 9 step grey scaling between $L^*_{0aN}=8.1$ and $L^*_{0aW}=95.9$, $Y_{0ref}=90.0$, normalisation grey U

$L^*_{0aN}=8.1, L^*_{0aU}=52.1, L^*_{0aW}=96.0, Y_{0aN}=0.9, Y_{0aU}=20.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$
 $L^*_{taN}=47.8, L^*_{taU}=52.1, L^*_{taW}=64.2, Y_{taN}=16.7, Y_{taU}=20.2, Y_{taW}=33.0, C_{taY}=Y_{taW}:Y_{taN}=2.0$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882, Y_n=100$

L* _{CIELAB} n0.i	intended output		real output		linearized output						
	L* _{0a}	L* _{0r}	Y _{0a}	Y _{0r}	L* _{ta}	ΔL^*_{ta}	L* _{tr}	Y _{ta}	$(L^*_{tr})^{1/1.89}$	L* _{la}	ΔL^*_{la}
9	96.0	1.0	90.0	1.0	64.2	3.7	1.0	33.0	1.0	64.2	2.1
8	85.0	0.875	66.0	0.731	60.4	3.3	0.772	28.6	0.872	62.1	2.1
7	74.0	0.75	46.7	0.515	57.1	3.3	0.57	25.1	0.743	60.0	2.1
6	63.0	0.625	31.6	0.345	54.3	2.8	0.399	22.3	0.615	57.9	2.1
5	52.1	0.5	20.2	0.217	52.1	2.3	0.259	20.2	0.49	55.8	2.0
4	41.1	0.375	11.9	0.124	50.3	1.7	0.152	18.7	0.369	53.9	2.0
3	30.1	0.25	6.3	0.06	49.1	1.2	0.076	17.6	0.255	52.0	1.9
2	19.1	0.125	2.8	0.021	48.3	0.8	0.027	17.0	0.147	50.2	1.8
1	8.1	0.0	0.9	0.0	47.8	0.4	0.0	16.7	0.0	47.8	2.4

$\Delta L^*_{0a}=11.0$ (i=1,2,...,8) normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eeq51-7n

Test chart eqq5; Equal 9 step grey scaling for four display reflections $Y_{ref}=2,5,10,20,90$, and black $L^*_{N,CIELAB}=8.13, Y_N=0.9$ and white $L^*_{W,CIELAB}=95.99, Y_W=90$, normalisation: grey U

see similar files of the whole serie: <http://farbe.li.tu-berlin.de/eeq5.htm>
 technical information: <http://farbe.li.tu-berlin.de> or <http://color.li.tu-berlin.de>

TUB registration: 20230701-eeq5/eeq510na.txt /.ps
 application for evaluation and measurement of display or print output
 TUB material: code=rha4ta