

<http://farbe.li.tu-berlin.de/eep2/eep210na.txt> /.ps; only vector graphic VG; start output
 see similar files: <http://farbe.li.tu-berlin.de/eep2/eep2.htm>

Equal 9 step grey scaling between $L^*_{0aN}=3.6$ and $L^*_{0aW}=95.9$, $Y_{0ref}=3.6$, normalisation white W

$L^*_{0aN}=3.6, L^*_{0aU}=49.8, L^*_{0aW}=96.0, Y_{0aN}=0.4, Y_{0aU}=18.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$
 $L^*_{taN}=23.2, L^*_{taU}=53.0, L^*_{taW}=96.0, Y_{taN}=3.8, Y_{taU}=21.0, Y_{taW}=90.0, C_{taY}=Y_{taW}:Y_{taN}=23.4$

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}	$(L^*_{tr})^{1/1.3}$	L* _{la}	ΔL^*_{la}	
100	9	96.0	1.0	90.0	1.0	96.0	1.0	90.0	1.0	96.0	8.6	
	8	84.4	0.875	64.9	0.72	84.9	0.848	65.9	0.881	87.3	8.9	
75	7	72.9	0.75	45.0	0.498	74.0	0.698	46.7	0.759	78.5	9.2	
	6	61.3	0.625	29.6	0.326	63.3	0.551	32.0	0.633	69.3	9.4	
50	5	49.8	0.5	18.2	0.199	53.0	0.409	21.0	0.504	59.9	9.6	
	4	38.2	0.375	10.2	0.11	43.2	0.275	13.3	0.372	50.2	9.6	
25	3	26.7	0.25	5.0	0.051	34.5	0.156	8.3	0.24	40.7	8.9	
	2	15.2	0.125	1.9	0.017	27.6	0.061	5.3	0.118	31.7	8.6	
0	1	3.6	0.0	0.4	0.0	23.2	0.0	3.8	0.0	23.2		

$\Delta L^*_{0a}=11.5$ (i=1,2,...,8) normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$

eep20-3n

Equal 9 step grey scaling between $L^*_{0aN}=3.6$ and $L^*_{0aW}=95.9$, $Y_{0ref}=0.4$, normalisation white W

$L^*_{0aN}=3.6, L^*_{0aU}=49.8, L^*_{0aW}=96.0, Y_{0aN}=0.4, Y_{0aU}=18.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$
 $L^*_{taN}=7.2, L^*_{taU}=50.2, L^*_{taW}=96.0, Y_{taN}=0.8, Y_{taU}=18.6, Y_{taW}=90.0, C_{taY}=Y_{taW}:Y_{taN}=113.0$

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}	$(L^*_{tr})^{1/1.05}$	L* _{la}	ΔL^*_{la}	
100	9	96.0	1.0	90.0	1.0	96.0	1.0	90.0	1.0	96.0	11.0	
	8	84.4	0.875	64.9	0.72	84.5	0.871	65.0	0.876	85.0	11.0	
75	7	72.9	0.75	45.0	0.498	73.0	0.741	45.2	0.752	73.9	11.1	
	6	61.3	0.625	29.6	0.326	61.6	0.612	29.9	0.626	62.8	11.2	
50	5	49.8	0.5	18.2	0.199	50.2	0.484	18.6	0.501	51.6	11.2	
	4	38.2	0.375	10.2	0.11	38.9	0.357	10.6	0.374	40.4	11.2	
25	3	26.7	0.25	5.0	0.051	27.8	0.231	5.4	0.248	29.2	11.0	
	2	15.2	0.125	1.9	0.017	17.1	0.112	2.3	0.124	18.2	11.0	
0	1	3.6	0.0	0.4	0.0	7.2	0.0	0.8	0.0	7.2		

$\Delta L^*_{0a}=11.5$ (i=1,2,...,8) normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$

eep20-7n

Equal 9 step grey scaling between $L^*_{0aN}=3.6$ and $L^*_{0aW}=95.9$, $Y_{0ref}=0.9$, normalisation white W

$L^*_{0aN}=3.6, L^*_{0aU}=49.8, L^*_{0aW}=96.0, Y_{0aN}=0.4, Y_{0aU}=18.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$
 $L^*_{taN}=11.2, L^*_{taU}=50.6, L^*_{taW}=96.0, Y_{taN}=1.3, Y_{taU}=19.0, Y_{taW}=90.0, C_{taY}=Y_{taW}:Y_{taN}=69.9$

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}	$(L^*_{tr})^{1/1.11}$	L* _{la}	ΔL^*_{la}	
100	9	96.0	1.0	90.0	1.0	96.0	1.0	90.0	1.0	96.0	10.4	
	8	84.4	0.875	64.9	0.72	84.6	0.865	65.2	0.878	85.6	10.5	
75	7	72.9	0.75	45.0	0.498	73.2	0.731	45.4	0.754	75.1	10.6	
	6	61.3	0.625	29.6	0.326	61.9	0.598	30.2	0.629	64.5	10.8	
50	5	49.8	0.5	18.2	0.199	50.6	0.465	19.0	0.502	53.7	10.9	
	4	38.2	0.375	10.2	0.11	39.6	0.335	11.0	0.373	42.9	10.9	
25	3	26.7	0.25	5.0	0.051	29.0	0.21	5.8	0.245	32.0	10.6	
	2	15.2	0.125	1.9	0.017	19.3	0.095	2.8	0.12	21.4	10.2	
0	1	3.6	0.0	0.4	0.0	11.2	0.0	1.3	0.0	11.2		

$\Delta L^*_{0a}=11.5$ (i=1,2,...,8) normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$

eep21-3n

Equal 9 step grey scaling between $L^*_{0aN}=3.6$ and $L^*_{0aW}=95.9$, $Y_{0ref}=1.8$, normalisation white W

$L^*_{0aN}=3.6, L^*_{0aU}=49.8, L^*_{0aW}=96.0, Y_{0aN}=0.4, Y_{0aU}=18.2, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$
 $L^*_{taN}=16.3, L^*_{taU}=51.4, L^*_{taW}=96.0, Y_{taN}=2.1, Y_{taU}=19.7, Y_{taW}=90.0, C_{taY}=Y_{taW}:Y_{taN}=41.7$

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}	
100	9	96.0	1.0	90.0	1.0	96.0	1.0	90.0	1.0	96.0	9.6	
	8	84.4	0.875	64.9	0.72	84.7	0.858	65.4	0.879	86.4	9.8	
75	7	72.9	0.75	45.0	0.498	73.5	0.717	45.9	0.757	76.6	10.0	
	6	61.3	0.625	29.6	0.326	62.4	0.578	30.8	0.631	66.6	10.2	
50	5	49.8	0.5	18.2	0.199	51.4	0.441	19.7	0.503	56.4	10.4	
	4	38.2	0.375	10.2	0.11	40.9	0.309	11.8	0.373	46.0	10.4	
25	3	26.7	0.25	5.0	0.051	31.0	0.185	6.6	0.242	35.6	9.9	
	2	15.2	0.125	1.9	0.017	22.5	0.078	3.7	0.118	25.7	9.4	
0	1	3.6	0.0	0.4	0.0	16.3	0.0	2.1	0.0	16.3		

$\Delta L^*_{0a}=11.5$ (i=1,2,...,8) normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$

eep21-7n

Test chart eep2; Equal 9 step grey scaling for four display reflections $Y_{ref}=3.6, 0.4, 0.9, 1.8$, and black $L^*_{N,CIELAB}=3.61, Y_N=0.4$ and white $L^*_{W,CIELAB}=95.99, Y_W=90$, normalisation: white W

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

TUB registration: 20230701-eep2/eep210na.txt /.ps
 application for evaluation and measurement of display or print output
 TUB material: code=rh4ta