

Equal 9 step grey scaling between $L^*_{0aN}=3.6$ and $L^*_{0aW}=95.9$, $Y_{0ref}=20.0$, normalisation grey U

$L^*_{0aN}=3.6$, $L^*_{0aU}=49.8$, $L^*_{0aW}=96.0$, $Y_{0aN}=0.4$, $Y_{0aU}=18.2$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$

$L^*_{taN}=37.4$, $L^*_{taU}=49.8$, $L^*_{taW}=77.6$, $Y_{taN}=9.7$, $Y_{taU}=18.2$, $Y_{taW}=52.5$, $C_{taY}=Y_{taW}:Y_{taN}=5.4$

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

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{CIE LAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0,882$, $Y_n=100$

$g^*_5 = 99$, $g^*_9 = 99$

$g^*_5 = 24$, $g^*_9 = 16$

$g^*_5 = 93$, $g^*_9 = 86$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.68}$	L^*_{la}	ΔL^*_{la}
100	○ 9	96.0	1.0	90.0	1.0	77.6		1.0	52.5	1.0	77.6	
							7.7					4.8
	● 8	84.4	0.875	64.9	0.72	69.8		0.808	40.5	0.881	72.8	
							7.3					5.0
75	● 7	72.9	0.75	45.0	0.498	62.5		0.626	31.0	0.757	67.8	
							6.7					5.1
	● 6	61.3	0.625	29.6	0.326	55.8		0.458	23.7	0.629	62.6	
							6.0					5.2
50	● 5	49.8	0.5	18.2	0.199	49.8		0.309	18.2	0.498	57.4	
							5.0					5.2
	● 4	38.2	0.375	10.2	0.11	44.8		0.186	14.4	0.368	52.2	
							3.7					5.0
25	● 3	26.7	0.25	5.0	0.051	41.1		0.093	11.9	0.244	47.2	
							2.4					4.5
	● 2	15.2	0.125	1.9	0.017	38.7		0.032	10.5	0.131	42.6	
							1.3					5.2
0	● 1	3.6	0.0	0.4	0.0	37.4		0.0	9.7	0.0	37.4	

$\Delta L^*_{0a}=11.5$ (i=1,2,...,8)

normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$