

Equal 9 step grey scaling between $L^*_{0aN}=3.6$ and $L^*_{0aW}=95.9$, $Y_{0ref}=10.0$, normalisation white W

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

$L^*_{taN}=36.7$, $L^*_{taU}=57.5$, $L^*_{taW}=96.0$, $Y_{taN}=9.4$, $Y_{taU}=25.4$, $Y_{taW}=90.0$, $C_{taY}=Y_{taW}:Y_{taN}=9.6$

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 $Y \geq 0.882$, $Y_n=100$

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

$g^*_5 = 33$, $g^*_9 = 24$

$g^*_5 = 92$, $g^*_9 = 88$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.52}$	L^*_{la}	ΔL^*_{la}
100	○ 9	96.0	1.0	90.0	1.0	96.0		1.0	90.0	1.0	96.0	
							10.3					7.0
	● 8	84.4	0.875	64.9	0.72	85.7		0.827	67.4	0.882	89.0	
							9.9					7.3
75	● 7	72.9	0.75	45.0	0.498	75.8		0.659	49.5	0.759	81.7	
							9.5					7.5
	● 6	61.3	0.625	29.6	0.326	66.3		0.499	35.7	0.632	74.2	
							8.8					7.8
50	● 5	49.8	0.5	18.2	0.199	57.5		0.351	25.4	0.501	66.4	
							7.7					7.8
	● 4	38.2	0.375	10.2	0.11	49.7		0.22	18.2	0.369	58.5	
							6.2					7.6
25	● 3	26.7	0.25	5.0	0.051	43.5		0.115	13.5	0.24	50.9	
							4.3					6.9
	● 2	15.2	0.125	1.9	0.017	39.1		0.042	10.7	0.123	44.0	
							2.5					7.3
0	● 1	3.6	0.0	0.4	0.0	36.7		0.0	9.4	0.0	36.7	

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

normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$