

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

$L^*_{0aN}=3.6$, $L^*_{0aU}=49.8$, $L^*_{0aW}=96.0$, $Y_{0aN}=0.4$, $Y_{0aU}=18.2$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=225.0$
 $L^*_{taN}=7.1$, $L^*_{taU}=49.8$, $L^*_{taW}=95.3$, $Y_{taN}=0.8$, $Y_{taU}=18.2$, $Y_{taW}=88.5$, $C_{taY}=Y_{taW}:Y_{taN}=113.0$

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

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

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

$g^*_5 = 89$, $g^*_9 = 86$

$g^*_5 = 97$, $g^*_9 = 97$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.05}$	L^*_{la}	ΔL^*_{la}
100	○ 9	96.0	1.0	90.0	1.0	95.3		1.0	88.5	1.0	95.3	
							11.4					10.9
	● 8	84.4	0.875	64.9	0.72	83.9		0.871	63.9	0.876	84.4	
							11.4					11.0
75	● 7	72.9	0.75	45.0	0.498	72.5		0.741	44.4	0.752	73.4	
							11.4					11.0
	● 6	61.3	0.625	29.6	0.326	61.1		0.612	29.4	0.626	62.4	
							11.3					11.1
50	● 5	49.8	0.5	18.2	0.199	49.8		0.484	18.2	0.5	51.3	
							11.2					11.2
	● 4	38.2	0.375	10.2	0.11	38.6		0.357	10.4	0.374	40.1	
							11.0					11.2
25	● 3	26.7	0.25	5.0	0.051	27.5		0.231	5.3	0.248	28.9	
							10.6					10.9
	● 2	15.2	0.125	1.9	0.017	16.9		0.112	2.3	0.124	18.0	
							9.9					10.9
0	● 1	3.6	0.0	0.4	0.0	7.1		0.0	0.8	0.0	7.1	

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

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