

Equal 9 step grey scaling between $L^*_{0aN}=8.1$ and $L^*_{0aW}=95.9$, $Y_{0ref}=1.8$, normalisation grey U

$L^*_{0aN}=8.1$, $L^*_{0aU}=52.1$, $L^*_{0aW}=96.0$, $Y_{0aN}=0.9$, $Y_{0aU}=20.2$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=99.9$

$L^*_{taN}=17.8$, $L^*_{taU}=52.1$, $L^*_{taW}=93.6$, $Y_{taN}=2.5$, $Y_{taU}=20.2$, $Y_{taW}=84.3$, $C_{taY}=Y_{taW}:Y_{taN}=34.0$

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

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

$g^*_5=71$, $g^*_9=61$

$g^*_5=94$, $g^*_9=91$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.15}$	L^*_{la}	ΔL^*_{la}
100	○ 9	96.0	1.0	90.0	1.0	93.6		1.0	84.3	1.0	93.6	
							10.5					9.2
	● 8	85.0	0.875	66.0	0.731	83.1		0.861	62.3	0.878	84.4	
							10.4					9.3
75	● 7	74.0	0.75	46.7	0.515	72.6		0.723	44.6	0.755	75.0	
							10.3					9.5
	● 6	63.0	0.625	31.6	0.345	62.3		0.587	30.7	0.629	65.5	
							10.2					9.6
50	● 5	52.1	0.5	20.2	0.217	52.1		0.452	20.2	0.502	55.9	
							9.9					9.8
	● 4	41.1	0.375	11.9	0.124	42.1		0.321	12.6	0.373	46.1	
							9.4					9.8
	● 3	30.1	0.25	6.3	0.06	32.7		0.197	7.4	0.244	36.3	
25							8.4					9.5
	● 2	19.1	0.125	2.8	0.021	24.3		0.086	4.2	0.119	26.8	
							6.5					9.0
0	● 1	8.1	0.0	0.9	0.0	17.8		0.0	2.5	0.0	17.8	

$\Delta L^*_{0a}=11.0$ (i=1,2,...,8)

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