

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

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{CIE LAB} = 116 [Y/Y_n]^{1/3} - 16$ with $Y \geq 0.882$, $Y_n=100$

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

$g^*_5 = 51$, $g^*_9 = 40$

$g^*_5 = 91$, $g^*_9 = 89$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.3}$	L^*_{la}	ΔL^*_{la}
100	○ 9	96.0	1.0	90.0	1.0	96.0		1.0	90.0	1.0	96.0	
							11.0					8.6
	● 8	84.4	0.875	64.9	0.72	84.9		0.848	65.9	0.881	87.3	
							10.9					8.9
75	● 7	72.9	0.75	45.0	0.498	74.0		0.698	46.7	0.759	78.5	
							10.7					9.2
	● 6	61.3	0.625	29.6	0.326	63.3		0.551	32.0	0.633	69.3	
							10.3					9.4
50	● 5	49.8	0.5	18.2	0.199	53.0		0.409	21.0	0.504	59.9	
							9.7					9.6
	● 4	38.2	0.375	10.2	0.11	43.2		0.275	13.3	0.372	50.2	
							8.7					9.6
25	● 3	26.7	0.25	5.0	0.051	34.5		0.156	8.3	0.24	40.7	
							6.9					8.9
	● 2	15.2	0.125	1.9	0.017	27.6		0.061	5.3	0.118	31.7	
							4.5					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: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$