

Equal 9 step grey scaling between $L^*_{0aN}=18.2$ and $L^*_{0aW}=109.2$, $Y_{0ref}=0.9$, normalisation white W

$L^*_{0aN}=18.2$, $L^*_{0aU}=63.8$, $L^*_{0aW}=109.3$, $Y_{0aN}=2.6$, $Y_{0aU}=32.5$, $Y_{0aW}=126.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=49.0$

$L^*_{taN}=21.7$, $L^*_{taU}=64.3$, $L^*_{taW}=109.3$, $Y_{taN}=3.4$, $Y_{taU}=33.2$, $Y_{taW}=126.0$, $C_{taY}=Y_{taW}:Y_{taN}=36.5$

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

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

$g^*_5=90$, $g^*_9=87$

$g^*_5=98$, $g^*_9=98$

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.04}$	L^*_{la}	ΔL^*_{la}
	9	109.3	1.0	126.0	1.0	109.3		1.0	126.0	1.0	109.3	
100	8	97.9	0.875	94.7	0.746	98.0	11.3	0.871	94.9	0.876	98.4	10.9
	7	86.5	0.75	69.0	0.538	86.7	11.3	0.742	69.4	0.751	87.5	10.9
75	6	75.1	0.625	48.5	0.372	75.5	11.2	0.614	49.0	0.626	76.5	10.9
	5	63.8	0.5	32.5	0.242	64.3	11.2	0.486	33.2	0.5	65.5	11.0
50	4	52.4	0.375	20.5	0.145	53.2	11.1	0.359	21.2	0.374	54.5	11.0
	3	41.0	0.25	11.9	0.075	42.3	10.9	0.234	12.7	0.248	43.5	11.0
25	2	29.6	0.125	6.1	0.028	31.6	10.6	0.113	6.9	0.123	32.6	10.9
	1	18.2	0.0	2.6	0.0	21.7	9.9	0.0	3.4	0.0	21.7	10.8
0		$\Delta L^*_{0a}=11.4$ (i=1,2,...,8)				normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$						