

Equal 9 step grey scaling between $L^*_{0aN}=20.0$ and $L^*_{0aW}=103.0$, $Y_{0ref}=108.0$, normalisation white

$L^*_{0aN}=20.0$, $L^*_{0aU}=61.5$, $L^*_{0aW}=103.0$, $Y_{0aN}=3.0$, $Y_{0aU}=29.8$, $Y_{0aW}=108.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=36.0$
 $L^*_{taN}=79.3$, $L^*_{taU}=86.5$, $L^*_{taW}=103.0$, $Y_{taN}=55.5$, $Y_{taU}=68.9$, $Y_{taW}=108.0$, $C_{taY}=Y_{taW}:Y_{taN}=1.9$

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

$g^*_5 = 100$, $g^*_9 = 99$

$g^*_5 = 25$, $g^*_9 = 19$

$g^*_5 = 89$, $g^*_9 = 73$

$L^*_{CIE LAB}$	n0. i	intended output				real output				linearized output		
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.68}$	L^*_{la}	ΔL^*_{la}
100	○ 9	103.0	1.0	108.0	1.0	103.0		1.0	108.0	1.0	103.0	
	● 8	92.6	0.875	82.1	0.754	98.1	4.9	0.791	95.1	0.87	99.9	3.1
	● 7	82.3	0.75	60.8	0.55	93.6	4.4	0.603	84.4	0.741	96.9	3.1
75	● 6	71.9	0.625	43.5	0.386	89.7	3.9	0.44	75.7	0.613	93.9	3.0
	● 5	61.5	0.5	29.8	0.256	86.5	3.3	0.301	68.9	0.49	90.9	2.9
50	● 4	51.2	0.375	19.4	0.156	83.8	2.6	0.189	63.7	0.371	88.1	2.8
	● 3	40.8	0.25	11.7	0.083	81.8	2.0	0.103	59.9	0.258	85.4	2.7
	● 2	30.4	0.125	6.4	0.032	80.3	1.5	0.041	57.2	0.149	82.9	2.6
25	● 1	20.0	0.0	3.0	0.0	79.3	1.0	0.0	55.5	0.0	79.3	3.5
0		$\Delta L^*_{0a}=10.4$ (i=1,2,...,8)				normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$						