

Equal 9 step grey scaling between $L^*_{0aN}=20.0$ and $L^*_{0aW}=103.0$, $Y_{0ref}=3.6$, normalisation grey U

$L^*_{0aN}=20.0$, $L^*_{0aU}=61.5$, $L^*_{0aW}=103.0$, $Y_{0aN}=3.0$, $Y_{0aU}=29.8$, $Y_{0aW}=108.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=36.0$
 $L^*_{taN}=29.1$, $L^*_{taU}=61.5$, $L^*_{taW}=99.8$, $Y_{taN}=5.9$, $Y_{taU}=29.8$, $Y_{taW}=99.6$, $C_{taY}=Y_{taW}:Y_{taN}=16.9$

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 $Y \geq 0,882$, $Y_n=100$

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

$g^*_5 = 75$, $g^*_9 = 68$

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

$L^*_{CIE LAB}$	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.13}$	L^*_{la}	ΔL^*_{la}
100	9	103.0	1.0	108.0	1.0	99.8		1.0	99.6	1.0	99.8	
	8	92.6	0.875	82.1	0.754	90.1	9.7	0.862	76.5	0.877	91.1	8.7
	7	82.3	0.75	60.8	0.55	80.4	9.6	0.726	57.5	0.752	82.3	8.8
75	6	71.9	0.625	43.5	0.386	70.9	9.5	0.591	42.0	0.627	73.4	8.9
	5	61.5	0.5	29.8	0.256	61.5	9.4	0.458	29.8	0.5	64.5	8.9
	4	51.2	0.375	19.4	0.156	52.4	9.1	0.329	20.5	0.373	55.5	9.0
50	3	40.8	0.25	11.7	0.083	43.8	8.6	0.207	13.7	0.247	46.6	8.9
	2	30.4	0.125	6.4	0.032	35.8	7.9	0.095	8.9	0.124	37.9	8.7
25	1	20.0	0.0	3.0	0.0	29.1	6.7	0.0	5.9	0.0	29.1	8.7
0		$\Delta L^*_{0a}=10.4$ (i=1,2,...,8)				normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$						