

Equal 9 step grey scaling between $L^*_{0aN}=20.0$ and $L^*_{0aW}=103.0$, $Y_{0ref}=0.9$, normalisation white W

$L^*_{0aN}=20.0$, $L^*_{0aU}=61.5$, $L^*_{0aW}=103.0$, $Y_{0aN}=3.0$, $Y_{0aU}=29.8$, $Y_{0aW}=108.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=36.0$
 $L^*_{taN}=23.2$, $L^*_{taU}=62.1$, $L^*_{taW}=103.0$, $Y_{taN}=3.9$, $Y_{taU}=30.5$, $Y_{taW}=108.0$, $C_{taY}=Y_{taW}:Y_{taN}=27.9$

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

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

$g^*_5=91$, $g^*_9=88$

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

$L^*_{CIE LAB}$	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}
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	92.7	10.3	0.871	82.4	0.876	93.1	9.9
	7	82.3	0.75	60.8	0.55	82.5	10.2	0.743	61.2	0.751	83.1	9.9
75	6	71.9	0.625	43.5	0.386	72.3	10.2	0.614	44.0	0.626	73.1	10.0
	5	61.5	0.5	29.8	0.256	62.1	10.2	0.487	30.5	0.5	63.1	10.0
	4	51.2	0.375	19.4	0.156	52.0	10.1	0.36	20.1	0.374	53.1	10.0
50	3	40.8	0.25	11.7	0.083	42.0	9.9	0.236	12.5	0.249	43.1	10.0
	2	30.4	0.125	6.4	0.032	32.4	9.7	0.114	7.2	0.124	33.1	9.9
25	1	20.0	0.0	3.0	0.0	23.2	9.1	0.0	3.9	0.0	23.2	9.9
0		$\Delta L^*_{0a}=10.4$ (i=1,2,...,8)				normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$						