

Equal 9 step grey scaling between $L^*_{0aN}=23.6$ and $L^*_{0aW}=95.5$, $Y_{0ref}=3.6$, normalisation grey U

$L^*_{0aN}=23.6$, $L^*_{0aU}=59.6$, $L^*_{0aW}=95.5$, $Y_{0aN}=3.6$, $Y_{0aU}=30.3$, $Y_{0aW}=90.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=25.0$

$L^*_{taN}=30.4$, $L^*_{taU}=59.6$, $L^*_{taW}=92.5$, $Y_{taN}=6.4$, $Y_{taU}=30.3$, $Y_{taW}=83.7$, $C_{taY}=Y_{taW}:Y_{taN}=13.0$

Regularity index according to ISO/IEC 15775:2022, annex G for 5 and 9 steps

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{TUBsRGB,W} = 100 [Y/Y_n]^{[1/\ln(10)]}$ with $Y \geq 0,3$, $Y_n=100$

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

$g^*_5 = 81$, $g^*_9 = 76$

$g^*_5 = 95$, $g^*_9 = 93$

100 75 50 25 0	n0. i	intended output				real output					linearized output	
		L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.12}$	L^*_{la}	ΔL^*_{la}
	9	95.5	1.0	90.0	1.0	92.5		1.0	83.7	1.0	92.5	
	8	86.5	0.875	71.7	0.788	84.2	8.3	0.866	67.3	0.879	85.0	7.5
	7	77.5	0.75	55.7	0.603	75.9	8.3	0.732	53.0	0.756	77.4	7.6
	6	68.5	0.625	41.9	0.443	67.7	8.2	0.6	40.7	0.633	69.7	7.7
	5	59.6	0.5	30.3	0.309	59.6	8.1	0.469	30.3	0.508	61.9	7.7
	4	50.6	0.375	20.8	0.199	51.6	7.9	0.342	21.8	0.382	54.1	7.8
	3	41.6	0.25	13.3	0.112	44.0	7.7	0.218	15.1	0.256	46.3	7.8
	2	32.6	0.125	7.6	0.046	36.8	7.2	0.103	10.0	0.13	38.5	7.8
	1	23.6	0.0	3.6	0.0	30.4	6.4	0.0	6.4	0.0	30.4	8.1

$\Delta L^*_{0a}=9.0$

(i=1,2,...,8)

normalisation: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$