

Equal 9 step grey scaling between $L^*_{0aN}=23.6$ and $L^*_{0aW}=95.5$, $Y_{0ref}=1.8$, normalisation white W

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

$L^*_{taN}=27.9$, $L^*_{taU}=60.5$, $L^*_{taW}=95.5$, $Y_{taN}=5.3$, $Y_{taU}=31.5$, $Y_{taW}=90.0$, $C_{taY}=Y_{taW}:Y_{taN}=17.0$

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 $Y \geq 0,3$, $Y_n=100$

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

$g^*_5=89$, $g^*_9=85$

$g^*_5=97$, $g^*_9=96$

n0. i	intended output				real output				$(L^*_{tr})^{1/1.06}$	linearized output	
	L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}		L^*_{la}	ΔL^*_{la}
9	95.5	1.0	90.0	1.0	95.5		1.0	90.0	1.0	95.5	
8	86.5	0.875	71.7	0.788	86.7	8.8	0.87	72.0	0.877	87.2	8.3
7	77.5	0.75	55.7	0.603	77.9	8.8	0.74	56.3	0.754	78.9	8.3
6	68.5	0.625	41.9	0.443	69.2	8.7	0.611	42.9	0.629	70.5	8.4
5	59.6	0.5	30.3	0.309	60.5	8.7	0.483	31.5	0.504	62.0	8.4
4	50.6	0.375	20.8	0.199	52.0	8.6	0.356	22.2	0.379	53.5	8.5
3	41.6	0.25	13.3	0.112	43.6	8.4	0.232	14.8	0.253	45.0	8.5
2	32.6	0.125	7.6	0.046	35.4	8.1	0.111	9.2	0.127	36.5	8.5
1	23.6	0.0	3.6	0.0	27.9	7.5	0.0	5.3	0.0	27.9	8.6

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

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

normalisation: $Y_{taiW}=Y_{0aW} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aW}+Y_{0ref}}$