

Equal 9 step grey scaling between $L^*_{0aN}=-55$ & $L^*_{0aW}=55.6$, $Y_{0ref}=2$, normalisation white W

$L^*_{0aN}=-55.6$, $L^*_{0aU}=0.0$, $L^*_{0aW}=55.7$, $Y_{0aN}=3.3$, $Y_{0aU}=20.0$, $Y_{0aW}=120.0$, $C_{0aY}=Y_{0aW}:Y_{0aN}=36.0$
 $L^*_{taN}=-41.5$, $L^*_{taU}=2.4$, $L^*_{taW}=55.7$, $Y_{taN}=5.2$, $Y_{taU}=21.6$, $Y_{taW}=120.0$, $C_{taY}=Y_{taW}:Y_{taN}=22.9$

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

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$, $L^*_{TUBLOG,Ua} = 50 / \log(5) [\log (Y/Y_u)]$ with $Y_u=20$

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

$g^*_5=73$, $g^*_9=68$

$g^*_5=98$, $g^*_9=94$

n0. i	intended output				real output					linearized output	
	L^*_{0a}	L^*_{0r}	Y_{0a}	Y_{0r}	L^*_{ta}	ΔL^*_{ta}	L^*_{tr}	Y_{ta}	$(L^*_{tr})^{1/1.14}$	L^*_{la}	ΔL^*_{la}
9	55.7	1.0	120.0	1.0	55.7		1.0	120.0	1.0	55.7	
8	41.7	0.875	76.7	0.628	42.0	13.6	0.86	77.4	0.876	43.6	12.1
7	27.8	0.75	49.0	0.391	28.5	13.5	0.721	50.1	0.75	31.4	12.2
6	13.9	0.625	31.3	0.24	15.3	13.2	0.585	32.7	0.624	19.1	12.2
5	0.0	0.5	20.0	0.143	2.4	12.9	0.453	21.6	0.498	6.9	12.3
4	-13.8	0.375	12.8	0.081	-9.8	12.4	0.325	14.5	0.373	-5.2	12.2
3	-27.8	0.25	8.1	0.041	-21.5	11.6	0.206	10.0	0.249	-17.2	12.0
2	-41.7	0.125	5.2	0.016	-32.1	10.6	0.097	7.1	0.128	-29.0	11.8
1	-55.6	0.0	3.3	0.0	-41.5	9.4	0.0	5.2	0.0	-41.5	12.5

$\Delta L^*_{0a}=13.9$ (i=1,2,...,8)

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