

Equal 9 step grey scaling between $L^*_{0aN}=18$ & $L^*_{0aW}=135.1$, $Y_{0ref}=4$, normalisation white W

$L^*_{0aN}=18.3, L^*_{0aU}=76.7, L^*_{0aW}=135.1, Y_{0aN}=2.0, Y_{0aU}=54.3, Y_{0aW}=200.0, C_{0aY}=Y_{0aW}:Y_{0aN}=100.0$
 $L^*_{taN}=29.2, L^*_{taU}=78.4, L^*_{taW}=135.1, Y_{taN}=5.9, Y_{taU}=57.1, Y_{taW}=200.0, C_{taY}=Y_{taW}:Y_{taN}=34.0$

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 $Y \geq 0.39 = 100/255, Y_n=100$
 $g^*_5=99, g^*_9=99 \quad g^*_5=77, g^*_9=69 \quad g^*_5=67, g^*_9=60$

	n0. i	L*0a			Y0r	real output			linearized output			
		L*TUBsRGB,W intended output	L*0a	L*0r		L*ta	ΔL^*_{ta}	L*tr	Yta	$(L^*_{tr})^{1/1.34}$	L*la	ΔL^*_{la}
140	9	135.1	1.0	200.0	1.0	135.1	14.3	1.0	200.0	1.0	135.1	10.9
105	8	120.5	0.875	153.7	0.766	120.8	14.2	0.865	154.6	0.897	124.2	11.3
105	7	105.9	0.75	114.1	0.566	106.6	14.1	0.73	115.8	0.791	113.0	11.7
70	6	91.3	0.625	81.1	0.399	92.4	14.0	0.597	83.4	0.68	101.2	12.3
70	5	76.7	0.5	54.3	0.264	78.4	13.8	0.465	57.1	0.564	88.9	13.0
35	4	62.1	0.375	33.4	0.158	64.7	13.3	0.335	36.6	0.441	76.0	13.8
35	3	47.5	0.25	18.0	0.081	51.4	12.3	0.209	21.6	0.311	62.1	14.9
35	2	32.9	0.125	7.7	0.029	39.1	9.9	0.093	11.5	0.17	47.2	18.0
0	1	18.3	0.0	2.0	0.0	29.2		0.0	5.9	0.0	29.2	

$\Delta L^*_{0a}=14.6$

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

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