Equal 9 step grey scaling between L^*_{0aN}=−50.0 and L^*_{0aW}=50.0, Y_{0ref}=0.9, normalisation grey *U*

L^*_{0aN}=−49.9, L^*_{0aU}=0.0, L^*_{0aW}=50.0, Y_{0aN}=3.6, Y_{0aU}=18.0, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=25.0

L^*_{taN}=−44.5, L^*_{taU}=0.0, L^*_{taW}=48.8, Y_{taN}=4.3, Y_{taU}=18.0, Y_{taW}=86.6, C_{taY}=Y_{taW}:Y_{taN}=20.2

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

g^* = 100 [ΔL^*_{min}] / [ΔL^*_{max}], $L^*_{TUBLOG,Ua}$ = 50 / log(5) [log (Y/Y_u)] with Y_u=18

$L^*_{TUBLOG,Ua}$													
		g^*_5= 100, g^*_9= 100				g^*_5= 86, g^*_9= 83					g^*_5= 99, g^*_9= 97		
		intended output				real output					linearized output		
	n0. i	L*0a	L*0r	Y0a	Y0r	L*ta	ΔL*ta	L*tr	Yta	$(L^*tr)^{1/1.06}$	L*la	ΔL*la
50	9	50.0	1.0	90.0	1.0	48.8		1.0	86.6	1.0	48.8	
							12.3					11.6
	8	37.5	0.875	60.2	0.655	36.4		0.868	58.2	0.875	37.1	
							12.3					11.7
25	7	25.0	0.75	40.2	0.424	24.2		0.736	39.2	0.75	25.4	
							12.2					11.7
	6	12.5	0.625	26.9	0.27	12.0		0.606	26.5	0.624	13.7	
							12.0					11.7
0	5	0.0	0.5	18.0	0.167	0.0		0.477	18.0	0.499	2.0	
							11.8					11.7
	4	−12.4	0.375	12.0	0.098	−11.7		0.351	12.3	0.374	−9.6	
							11.4					11.6
−25	3	−24.9	0.25	8.0	0.051	−23.1		0.229	8.5	0.25	−21.2	
							11.0					11.5
	2	−37.4	0.125	5.4	0.021	−34.1		0.111	6.0	0.127	−32.7	
							10.4					11.8
−50	1	−49.9	0.0	3.6	0.0	−44.5		0.0	4.3	0.0	−44.5	

ΔL^*_{0a}=12.5 (i=1,2,...,8)

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