Equal 9 step grey scaling between L^*_{0aN}=14.4 and L^*_{0aW}=95.9, Y_{0ref}=3.6, normalisation grey *U*

L^*_{0aN}=14.4, L^*_{0aU}=55.2, L^*_{0aW}=96.0, Y_{0aN}=1.8, Y_{0aU}=23.1, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=50.0
L^*_{taN}=25.8, L^*_{taU}=55.2, L^*_{taW}=92.1, Y_{taN}=4.7, Y_{taU}=23.1, Y_{taW}=81.0, C_{taY}=Y_{taW}:Y_{taN}=17.3

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

g^* = 100 [ΔL^*_{min}] / [ΔL^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]$^{1/3}$ − 16 with Y>= 0,882, Y_n=100
g^*_5= 99, g^*_9= 99 | g^*_5= 67, g^*_9= 59 | g^*_5= 96, g^*_9= 95

L^*_{CIELAB} n0. i	intended output L^*0a	L^*0r	Y0a	Y0r	real output L^*ta	ΔL^*ta	L^*tr	Yta	$(L^*tr)^{1.18}$	linearized output L^*la	ΔL^*la
9	96.0	1.0	90.0	1.0	92.1		1.0	81.0	1.0	92.1	
						9.4					8.1
8	85.8	0.875	67.6	0.746	82.7		0.858	61.6	0.878	84.0	
						9.3					8.2
7	75.6	0.75	49.2	0.538	73.4		0.717	45.7	0.754	75.8	
						9.2					8.3
6	65.4	0.625	34.5	0.371	64.2		0.579	33.0	0.628	67.4	
						9.0					8.4
5	55.2	0.5	23.1	0.242	55.2		0.443	23.1	0.501	59.0	
						8.6					8.5
4	45.0	0.375	14.5	0.144	46.6		0.313	15.7	0.373	50.5	
						8.0					8.4
3	34.8	0.25	8.4	0.075	38.5		0.192	10.4	0.246	42.1	
						7.1					8.2
2	24.6	0.125	4.3	0.028	31.4		0.085	6.8	0.123	33.9	
						5.6					8.1
1	14.4	0.0	1.8	0.0	25.8		0.0	4.7	0.0	25.8	

ΔL^*_{0a}=10.2 (i=1,2,...,8) | normalisation: Y_{taU}=Y_{0aU} $\frac{Y_{0at}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eep70−3a

Equal 9 step grey scaling between L^*_{0aN}=14.4 and L^*_{0aW}=95.9, Y_{0ref}=0.9, normalisation grey *U*

L^*_{0aN}=14.4, L^*_{0aU}=55.2, L^*_{0aW}=96.0, Y_{0aN}=1.8, Y_{0aU}=23.1, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=50.0
L^*_{taN}=18.4, L^*_{taU}=55.2, L^*_{taW}=94.9, Y_{taN}=2.6, Y_{taU}=23.1, Y_{taW}=87.5, C_{taY}=Y_{taW}:Y_{taN}=33.6

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

g^* = 100 [ΔL^*_{min}] / [ΔL^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]$^{1/3}$ − 16 with Y>= 0,882, Y_n=100
g^*_5= 99, g^*_9= 99 | g^*_5= 87, g^*_9= 83 | g^*_5= 98, g^*_9= 97

L^*_{CIELAB} n0. i	intended output L^*0a	L^*0r	Y0a	Y0r	real output L^*ta	ΔL^*ta	L^*tr	Yta	$(L^*tr)^{1.06}$	linearized output L^*la	ΔL^*la
9	96.0	1.0	90.0	1.0	94.9		1.0	87.5	1.0	94.9	
						10.0					9.5
8	85.8	0.875	67.6	0.746	84.9		0.869	65.9	0.876	85.5	
						10.0					9.5
7	75.6	0.75	49.2	0.538	74.9		0.739	48.2	0.751	75.9	
						9.9					9.6
6	65.4	0.625	34.5	0.371	65.1		0.61	34.1	0.626	66.3	
						9.9					9.6
5	55.2	0.5	23.1	0.242	55.2		0.481	23.1	0.5	56.7	
						9.7					9.6
4	45.0	0.375	14.5	0.144	45.4		0.354	14.9	0.374	47.0	
						9.5					9.7
3	34.8	0.25	8.4	0.075	35.9		0.229	8.9	0.248	37.3	
						9.2					9.6
2	24.6	0.125	4.3	0.028	26.7		0.109	5.0	0.123	27.8	
						8.3					9.4
1	14.4	0.0	1.8	0.0	18.4		0.0	2.6	0.0	18.4	

ΔL^*_{0a}=10.2 (i=1,2,...,8) | normalisation: Y_{taU}=Y_{0aU} $\frac{Y_{0at}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eep71−3a

Equal 9 step grey scaling between L^*_{0aN}=14.4 and L^*_{0aW}=95.9, Y_{0ref}=0.4, normalisation grey *U*

L^*_{0aN}=14.4, L^*_{0aU}=55.2, L^*_{0aW}=96.0, Y_{0aN}=1.8, Y_{0aU}=23.1, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=50.0
L^*_{taN}=16.3, L^*_{taU}=55.2, L^*_{taW}=95.5, Y_{taN}=2.2, Y_{taU}=23.1, Y_{taW}=88.9, C_{taY}=Y_{taW}:Y_{taN}=41.1

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

g^* = 100 [ΔL^*_{min}] / [ΔL^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]$^{1/3}$ − 16 with Y>= 0,882, Y_n=100
g^*_5= 99, g^*_9= 99 | g^*_5= 93, g^*_9= 91 | g^*_5= 98, g^*_9= 98

L^*_{CIELAB} n0. i	intended output L^*0a	L^*0r	Y0a	Y0r	real output L^*ta	ΔL^*ta	L^*tr	Yta	$(L^*tr)^{1.03}$	linearized output L^*la	ΔL^*la
9	96.0	1.0	90.0	1.0	95.5		1.0	88.9	1.0	95.5	
						10.1					9.9
8	85.8	0.875	67.6	0.746	85.4		0.872	66.8	0.875	85.6	
						10.1					9.9
7	75.6	0.75	49.2	0.538	75.3		0.745	48.8	0.75	75.8	
						10.1					9.9
6	65.4	0.625	34.5	0.371	65.2		0.618	34.3	0.625	65.8	
						10.0					9.9
5	55.2	0.5	23.1	0.242	55.2		0.491	23.1	0.5	55.9	
						10.0					9.9
4	45.0	0.375	14.5	0.144	45.2		0.365	14.7	0.374	46.0	
						9.9					9.9
3	34.8	0.25	8.4	0.075	35.3		0.24	8.6	0.248	36.0	
						9.7					9.9
2	24.6	0.125	4.3	0.028	25.6		0.117	4.6	0.124	26.1	
						9.3					9.8
1	14.4	0.0	1.8	0.0	16.3		0.0	2.2	0.0	16.3	

ΔL^*_{0a}=10.2 (i=1,2,...,8) | normalisation: Y_{taU}=Y_{0aU} $\frac{Y_{0at}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eep70−7a

Equal 9 step grey scaling between L^*_{0aN}=14.4 and L^*_{0aW}=95.9, Y_{0ref}=1.8, normalisation grey *U*

L^*_{0aN}=14.4, L^*_{0aU}=55.2, L^*_{0aW}=96.0, Y_{0aN}=1.8, Y_{0aU}=23.1, Y_{0aW}=90.0, C_{0aY}=Y_{0aW}:Y_{0aN}=50.0
L^*_{taN}=21.4, L^*_{taU}=55.2, L^*_{taW}=93.9, Y_{taN}=3.3, Y_{taU}=23.1, Y_{taW}=85.2, C_{taY}=Y_{taW}:Y_{taN}=25.5

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

g^* = 100 [ΔL^*_{min}] / [ΔL^*_{max}], L^*_{CIELAB} = 116 [Y/Y_n]$^{1/3}$ − 16 with Y>= 0,882, Y_n=100
g^*_5= 99, g^*_9= 99 | g^*_5= 79, g^*_9= 72 | g^*_5= 97, g^*_9= 96

L^*_{CIELAB} n0. i	intended output L^*0a	L^*0r	Y0a	Y0r	real output L^*ta	ΔL^*ta	L^*tr	Yta	$(L^*tr)^{1.1}$	linearized output L^*la	ΔL^*la
9	96.0	1.0	90.0	1.0	93.9		1.0	85.2	1.0	93.9	
						9.8					8.9
8	85.8	0.875	67.6	0.746	84.2		0.865	64.4	0.877	85.0	
						9.7					9.0
7	75.6	0.75	49.2	0.538	74.4		0.731	47.3	0.753	76.0	
						9.7					9.1
6	65.4	0.625	34.5	0.371	64.7		0.598	33.7	0.627	66.9	
						9.5					9.2
5	55.2	0.5	23.1	0.242	55.2		0.466	23.1	0.501	57.7	
						9.3					9.2
4	45.0	0.375	14.5	0.144	45.9		0.337	15.2	0.374	48.5	
						9.0					9.2
3	34.8	0.25	8.4	0.075	36.9		0.213	9.5	0.247	39.3	
						8.3					9.0
2	24.6	0.125	4.3	0.028	28.5		0.098	5.6	0.122	30.3	
						7.1					8.9
1	14.4	0.0	1.8	0.0	21.4		0.0	3.3	0.0	21.4	

ΔL^*_{0a}=10.2 (i=1,2,...,8) | normalisation: Y_{taU}=Y_{0aU} $\frac{Y_{0at}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$

eep71−7a

Test chart eep7; Equal 9 step grey scaling for four display reflections Y_{ref}= 3,6, 0,4, 0,9, 1,8, and black $L^*_{N,CIELAB}$=14.4, Y_N=1.8 and white $L^*_{W,CIELAB}$=95.99, Y_W=90, normalisation: grey *U*

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TUB registration: 20230701-eep7/eep710n1.txt /.ps
application for evaluation and measurement of display or print output

TUB materiali: code=tha4a