

# 9stufige Grauskalierung zwischen $L^*_{0aN}=20.0$ und $L^*_{0aW}=103.0$ , $Y_{0ref}=3.6$ , Normierung Grau U

$L^*_{0aN}=20.0$ ,  $L^*_{0aU}=61.5$ ,  $L^*_{0aW}=103.0$ ,  $Y_{0aN}=3.0$ ,  $Y_{0aU}=29.8$ ,  $Y_{0aW}=108.0$ ,  $C_{0aY}=Y_{0aW}:Y_{0aN}=36.0$   
 $L^*_{taN}=29.1$ ,  $L^*_{taU}=61.5$ ,  $L^*_{taW}=99.8$ ,  $Y_{taN}=5.9$ ,  $Y_{taU}=29.8$ ,  $Y_{taW}=99.6$ ,  $C_{taY}=Y_{taW}:Y_{taN}=16.9$

## Regularitätsindex nach ISO/IEC 15775:2022, Anhang G für 5 und 9 Stufen

$g^* = 100 [\Delta L^*_{min}] / [\Delta L^*_{max}]$ ,  $L^*_{CIELAB} = 116 [Y/Y_n]^{1/3} - 16$  mit  $Y \geq 0,882$ ,  $Y_n=100$

$g^*_5=100$ ,  $g^*_9=99$

$g^*_5=75$ ,  $g^*_9=68$

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

$L^*_{CIELAB}$	n0. i	angestrebte Ausgabe				reale Ausgabe					linearisierte Ausgabe	
		$L^*_{0a}$	$L^*_{0r}$	$Y_{0a}$	$Y_{0r}$	$L^*_{ta}$	$\Delta L^*_{ta}$	$L^*_{tr}$	$Y_{ta}$	$(L^*_{tr})^{1/1.13}$	$L^*_{la}$	$\Delta L^*_{la}$
100	○ 9	103.0	1.0	108.0	1.0	99.8		1.0	99.6	1.0	99.8	
	● 8	92.6	0.875	82.1	0.754	90.1	9.7	0.862	76.5	0.877	91.1	8.7
	● 7	82.3	0.75	60.8	0.55	80.4	9.6	0.726	57.5	0.752	82.3	8.8
75	● 6	71.9	0.625	43.5	0.386	70.9	9.5	0.591	42.0	0.627	73.4	8.9
	● 5	61.5	0.5	29.8	0.256	61.5	9.4	0.458	29.8	0.5	64.5	8.9
50	● 4	51.2	0.375	19.4	0.156	52.4	9.1	0.329	20.5	0.373	55.5	9.0
	● 3	40.8	0.25	11.7	0.083	43.8	8.6	0.207	13.7	0.247	46.6	8.9
	● 2	30.4	0.125	6.4	0.032	35.8	7.9	0.095	8.9	0.124	37.9	8.7
25	● 1	20.0	0.0	3.0	0.0	29.1	6.7	0.0	5.9	0.0	29.1	8.7
0		$\Delta L^*_{0a}=10.4$ (i=1,2,...,8)				Normierung: $Y_{taiU}=Y_{0aU} \frac{Y_{0ai}+Y_{0ref}}{Y_{0aU}+Y_{0ref}}$						