

# 16stufige Grauskalierung zwischen $L^*_N$ und $L^*_W$ für 3 Reflexionen des Umgebungslichts

$L^*$	keine Umgebungsreflexion $Y_N=0, L^*_N=0$						Umgebungsreflexion $Y_N=2,5, L^*_N=18$						Umgebungsreflexion $Y_N=40, L^*_N=70$								
	Helligkeitsdifferenz $\Delta L^*=6,3$						Helligkeitsdifferenz $\Delta L^*=5,1$						Helligkeitsdifferenz $\Delta L^*=1,7$								
	n0.	$w^*$	$w^*_T$	$L^*_{re}$	$Y_{re}$	$Y_N$	n0.	$w^*$	$w^*_T$	$L^*_{re}$	$Y_{re}$	$Y_N$	n0.	$w^*$	$w^*_T$	$L^*_{re}$	$Y_{re}$	$Y_N$			
100	○	16	1.0	1.0	95.4	88.59	0.0	○	16	1.0	1.0	95.4	88.59	2.52	○	16	1.0	1.0	95.4	88.59	40.32
	●	15	0.933	0.933	89.0	74.27	0.0	●	15	0.945	0.933	89.2	74.67	2.52	●	15	0.928	0.733	83.1	62.49	40.32
	●	14	0.866	0.866	82.6	61.58	0.0	●	14	0.891	0.866	83.0	62.34	2.52	●	14	0.91	0.666	80.7	57.93	40.32
	●	13	0.8	0.8	76.3	50.42	0.0	●	13	0.837	0.799	76.9	51.51	2.52	●	13	0.892	0.6	78.4	54.03	40.32
	●	12	0.733	0.733	69.9	40.7	0.0	●	12	0.837	0.799	76.9	51.51	2.52	●	12	0.874	0.533	76.5	50.76	40.32
	●	11	0.666	0.666	63.6	32.32	0.0	●	11	0.729	0.666	64.9	33.92	2.52	●	11	0.856	0.466	74.8	48.06	40.32
	●	10	0.6	0.6	57.2	25.17	0.0	●	10	0.675	0.599	58.9	26.98	2.52	●	10	0.838	0.399	73.4	45.86	40.32
	●	9	0.533	0.533	50.8	19.17	0.0	●	9	0.621	0.533	53.1	21.14	2.52	●	9	0.802	0.266	71.4	42.8	40.32
	●	8	0.466	0.466	44.5	14.2	0.0	●	8	0.567	0.466	47.3	16.32	2.52	●	8	0.784	0.199	70.7	41.82	40.32
	●	7	0.4	0.4	38.1	10.18	0.0	●	7	0.513	0.4	41.8	12.41	2.52	●	7	0.766	0.133	70.2	41.14	40.32
	●	6	0.333	0.333	31.8	7.0	0.0	●	6	0.459	0.333	36.5	9.32	2.52	●	6	0.748	0.066	69.9	40.7	40.32
	●	5	0.266	0.266	25.4	4.56	0.0	●	5	0.405	0.266	31.6	6.95	2.52	●	5	0.73	0.0	69.6	40.32	40.32
	●	4	0.2	0.2	19.0	2.76	0.0	●	4	0.351	0.199	27.3	5.2	2.52	●	4	0.714	0.0	69.6	40.32	40.32
	●	3	0.133	0.133	12.7	1.51	0.0	●	3	0.296	0.133	23.6	3.99	2.52	●	3	0.696	0.0	69.6	40.32	40.32
	●	2	0.066	0.066	6.3	0.7	0.0	●	2	0.242	0.066	20.8	3.2	2.52	●	2	0.675	0.0	69.6	40.32	40.32
	●	1	0.0	0.0	0.0	0.0	0.0	●	1	0.188	0.0	18.0	2.52	2.52	●	1	0.652	0.0	69.6	40.32	40.32

ISO/CIE 11664-4:  $L^*_{it}$  = angestrebte CIELAB-Helligkeit der Ausgabe

IEC 61966-2-1:  $w^*_{sRGB}$  ist ungefähr proportional zu  $L^*$

$$w^*_{sRGB} = L^*/95,4; w^*_T = [L^*-L^*_N] / [L^*_W-L^*_N]$$

$Y_{re}$  = realer Normfarbwert ohne Ausgabe-Linearisierung