Relationship brightness B^*_{LT} and luminance L_T as function of viewing angle φ for test equal adaptation luminance L_a = 3000 cd/m²

$B^*_{LT}(L_T, L_a, \varphi) = C_T(\varphi) L_T^n - B_0(L_a, \varphi)$ brightness B^*_{LT} [1]

$B_0(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31) [2]

$L_{Lt}(L_a, \varphi) = [S_0(\varphi) + S_1(\varphi) L_a^n]^{1/n}$ (t=black threshold) [3]

L_T	φ	$C_T(\varphi)$	$S_0(\varphi)$	$S_1(\varphi)$	$B_0(L_a,\varphi)$	B^*_{LT}	L_{Lt}	L_a/L_t
3000	120’	22,969	0,0718	0,2448	68,92	205,89	34,63	86,60
3000	100’	23,128	0,0747	0,2494	68,92	205,89	34,63	86,60
3000	90’	23,415	0,1086	0,2526	70,75	205,97	36,85	81,41
3000	60’	23,973	0,1313	0,2657	73,32	206,83	39,74	75,48
3000	30’	26,235	0,1797	0,3188	79,38	207,45	47,58	63,05
3000	20’	27,971	0,2013	0,3555	104,81	209,08	87,17	34,41
3000	10’	30,747	0,2730	0,3984	124,62	210,03	123,95	24,20
660,0U	120’	22,969	0,0718	0,2448	68,92	102,94U	34,63	86,60

hep60−1a L_{aj}=3000, L_r=300, Lajdr=10,00, Lajdren=2,04, 0’ <= φ <= 120’

Relationship brightness B^*_{LT} and luminance L_T as function of viewing angle φ for test equal adaptation luminance L_a = 3000 cd/m²

$B^*_{LT}(L_T, L_a, \varphi) = s_x(\varphi) L_T^n - d_x(L_a, \varphi)$ brightness B^*_{LT} [1]

$B_0(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31) [2]

$s_x(\varphi) = C_T(\varphi)$ [3] $d_x(L_a,\varphi) = B_0(L_a, \varphi)$ [4] (s=scaling factor)

L_T	φ	$C_T(\varphi)$	$S_0(\varphi)$	$S_1(\varphi)$	$B_0(L_a,\varphi)$	B^*_{LT}	$s_x(\varphi)$	$d_x(L_a,\varphi)$
3000	120’	22,969	0,0718	0,2448	68,92	205,89	22,96	68,92
3000	100’	23,128	0,0747	0,2494	68,92	205,89	22,96	68,92
3000	90’	23,415	0,1086	0,2526	70,75	205,97	23,12	70,75
3000	60’	23,973	0,1313	0,2657	73,32	206,83	23,41	73,32
3000	30’	26,235	0,1797	0,3188	79,38	207,45	23,97	79,38
3000	20’	27,971	0,2013	0,3555	104,81	209,08	26,23	104,81
3000	10’	30,747	0,2730	0,3984	124,62	210,03	27,97	124,62
660,0U	120’	22,969	0,0718	0,2448	68,92	102,94U	22,96	68,92

hep60−2a L_{aj}=3000, L_r=300, Lajdr=10,00, Lajdren=2,04, 0’ <= φ <= 120’

Relationship brightness B^*_{YT} and tristimulus value Y_T as function of viewing angle φ for test equal adaptation luminance L_a = 3000 cd/m²

$B^*_{YT}(L_T, L_a, \varphi) = [C_T(\varphi) L_T^n - B_0(L_a, \varphi)] L_{ra}^n$ brightness B^*_{YT} [1]

$B_0(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31, $L_{ra}^n = (L_{300}/L_a)^n$) [2]

$L_{Yt}(L_a, \varphi) = [S_0(\varphi) + S_1(\varphi) L_a^n]^{1/n} L_{ra}^n$ (t=black threshold)

Y_T	φ	$C_T(\varphi)$	$S_0(\varphi)$	$S_1(\varphi)$	$B_0(L_a,\varphi)$	B^*_{YT}	L_{Yt}	L_a/L_t
3000	120’	22,969	0,0718	0,2448	68,92	100,84	16,96	86,60
3000	100’	23,128	0,0747	0,2494	68,92	100,84	16,96	86,60
3000	90’	23,415	0,1086	0,2526	70,75	100,88	18,04	81,41
3000	60’	23,973	0,1313	0,2657	73,32	101,30	19,46	75,48
3000	30’	26,235	0,1797	0,3188	79,38	101,60	23,30	63,05
3000	20’	27,971	0,2013	0,3555	104,81	102,40	42,69	34,41
3000	10’	30,747	0,2730	0,3984	124,62	102,87	60,71	24,20
92,3U	120’	22,969	0,0718	0,2448	68,92	50,00U	16,96	86,60

hep60−3a L_{aj}=3000, L_r=300, Lajdr=10,00, Lajdren=2,04, 0’ <= φ <= 120’

Relationship brightness B^*_{YT} and tristimulus value Y_T as function of viewing angle φ for test equal adaptation luminance L_a = 3000 cd/m²

$B^*_{YT}(L_T, L_a, \varphi) = s_y(L_a,\varphi) L_T^n - d_y(L_a, \varphi)$ brightness B^*_{YT} [1]

$B_0(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31, $L_{ra}^n = (L_{300}/L_a)^n$) [2]

$s_y(\varphi) = C_T(\varphi) L_{ra}^n$ [3] $d_y(L_a,\varphi) = B_0(L_a, \varphi) L_{ra}^n$ [4] (s=scaling factor)

Y_T	φ	$C_T(\varphi)$	$S_0(\varphi)$	$S_1(\varphi)$	$B_0(L_a,\varphi)$	B^*_{YT}	$s_y(L_a,\varphi)$	$d_y(L_a,\varphi)$
3000	120’	22,969	0,0718	0,2448	68,92	100,84	11,24	33,76
3000	100’	23,128	0,0747	0,2494	68,92	100,84	11,24	33,76
3000	90’	23,415	0,1086	0,2526	70,75	100,88	11,32	34,65
3000	60’	23,973	0,1313	0,2657	73,32	101,30	11,46	35,91
3000	30’	26,235	0,1797	0,3188	79,38	101,60	11,74	38,88
3000	20’	27,971	0,2013	0,3555	104,81	102,40	12,84	51,33
3000	10’	30,747	0,2730	0,3984	124,62	102,87	13,69	61,04
58,1U	120’	22,969	0,0718	0,2448	68,92	50,00U	11,24	33,76

hep60−4a L_{aj}=3000, L_r=300, Lajdr=10,00, Lajdren=2,04, 0’ <= φ <= 120’

hep60−3R_R