Relationship brightness B^*_{LT} and luminance L_T as function of viewing angle φ for test equal adaptation luminance L_a = 300 cd/m^2

$B^*_{LT}(L_T, L_a, \varphi) = C_T(\varphi) L_T^n - B_0(L_a, \varphi)$ 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
300	120’	22,969	0,0718	0,2448	34,60	99,99	3,75	79,99
300	100’	23,128	0,0747	0,2494	34,60	99,99	3,75	79,99
300	90’	23,415	0,1086	0,2526	35,53	99,99	3,99	75,07
300	60’	23,973	0,1313	0,2657	37,21	100,00	4,45	67,31
300	30’	26,235	0,1797	0,3188	40,48	99,99	5,42	55,33
300	20’	27,971	0,2013	0,3555	53,74	100,00	10,10	29,68
300	10’	30,747	0,2730	0,3984	63,91	99,99	14,37	20,86
67,0U	120’	22,969	0,0718	0,2448	34,60	49,99U	3,75	79,99

hep40−1a L_{aj}=300, L_r=300, Lajdr=1,00, Lajdren=1,00, 0’ <= φ <= 120’

Relationship brightness B^*_{LT} and luminance L_T as function of viewing angle φ for test equal adaptation luminance L_a = 300 cd/m^2

$B^*_{LT}(L_T, L_a, \varphi) = s_x(\varphi) L_T^n - d_x(L_a, \varphi)$ 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}	$s_x(\varphi)$	$d_x(L_a,\varphi)$
300	120’	22,969	0,0718	0,2448	34,60	99,99	22,96	34,60
300	100’	23,128	0,0747	0,2494	34,60	99,99	22,96	34,60
300	90’	23,415	0,1086	0,2526	35,53	99,99	23,12	35,53
300	60’	23,973	0,1313	0,2657	37,21	100,00	23,41	37,21
300	30’	26,235	0,1797	0,3188	40,48	99,99	23,97	40,48
300	20’	27,971	0,2013	0,3555	53,74	100,00	26,23	53,74
300	10’	30,747	0,2730	0,3984	63,91	99,99	27,97	63,91
67,0U	120’	22,969	0,0718	0,2448	34,60	49,99U	22,96	34,60

hep40−2a L_{aj}=300, L_r=300, Lajdr=1,00, Lajdren=1,00, 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 = 300 cd/m^2

$B^*_{YT}(L_T, L_a, \varphi) = [C_T(\varphi) L_T^n - B_0(L_a, \varphi)] L_{ra}^n$ 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
300	120’	22,969	0,0718	0,2448	34,60	99,99	3,75	79,99
300	100’	23,128	0,0747	0,2494	34,60	99,99	3,75	79,99
300	90’	23,415	0,1086	0,2526	35,53	99,99	3,99	75,07
300	60’	23,973	0,1313	0,2657	37,21	100,00	4,45	67,31
300	30’	26,235	0,1797	0,3188	40,48	99,99	5,42	55,33
300	20’	27,971	0,2013	0,3555	53,74	100,00	10,10	29,68
300	10’	30,747	0,2730	0,3984	63,91	99,99	14,37	20,86
53,1U	120’	22,969	0,0718	0,2448	34,60	50,00U	3,75	79,99

hep40−3a L_{aj}=300, L_r=300, Lajdr=1,00, Lajdren=1,00, 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 = 300 cd/m^2

$B^*_{YT}(L_T, L_a, \varphi) = s_y(L_a,\varphi) L_T^n - d_y(L_a, \varphi)$ 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}	$s_y(L_a,\varphi)$	$d_y(L_a,\varphi)$
300	120’	22,969	0,0718	0,2448	34,60	99,99	22,96	34,60
300	100’	23,128	0,0747	0,2494	34,60	99,99	22,96	34,60
300	90’	23,415	0,1086	0,2526	35,53	99,99	23,12	35,53
300	60’	23,973	0,1313	0,2657	37,21	100,00	23,41	37,21
300	30’	26,235	0,1797	0,3188	40,48	99,99	23,97	40,48
300	20’	27,971	0,2013	0,3555	53,74	100,00	26,23	53,74
300	10’	30,747	0,2730	0,3984	63,91	99,99	27,97	63,91
23,8U	120’	22,969	0,0718	0,2448	34,60	50,00U	22,96	34,60

hep40−4a L_{aj}=300, L_r=300, Lajdr=1,00, Lajdren=1,00, 0’ <= φ <= 120’

hep40−3R_R