http://farbe.li.tu-berlin.de/hes1/hes1l0n1.txt /.ps; only vector graphic VG; start output
see separate images of this page: http://farbe.li.tu-berlin.de/hes1/hes1.htm

see similar files of the whole series: http://farbe.li.tu-berlin.de/hes.htm
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=10 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, y) = C_T(y)L_T^{-1} - B_{\frac{1}{2}}(L_a, y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0.31) [2]
$L_T(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3]
$y = (Y_T - C_T(y)\cdot S_0(y))/S_1(y)$ $BT_{\frac{1}{2}} = L_{T1} - L_a/L_T$ [4]
$S_0(y) = C_T(y)$ $d_{L0}(y) = B_{\frac{1}{2}}(L_a, y)$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T
2782	120' 22,969	0,0718	0,2448	49,51 218,98	11,91	83,94	1,00
1736	120' 22,969	0,0718	0,2448	49,51 182,48	11,91	83,94	1,00
1000	120' 22,969	0,0718	0,2448	49,51 145,98	11,91	83,94	1,00
513	120' 22,969	0,0718	0,2448	49,51 109,48	11,91	83,94	1,00
221	120' 22,969	0,0718	0,2448	49,51 72,99	11,91	83,94	1,00
70	120' 22,969	0,0718	0,2448	49,51 36,49	11,91	83,94	70
11,91	120' 22,969	0,0718	0,2448	49,51 0,00	11,91	83,94	11,91
1	120' 22,969	0,0718	0,2448	50,82 72,99	12,95	83,94	1

hes10-1a $y=0$, $L_T=300$, $L_a=1000$, $q=120'$, $B_{\frac{1}{2}}=49,51$, $BT_{\frac{1}{2}}=11,91$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=100 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, y) = s_{\frac{1}{2}}(y)L_T^{-1} - d_{\frac{1}{2}}(L_a, y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31) [2]
$s_{\frac{1}{2}}(y) = C_T(y)$ [3] $d_{\frac{1}{2}}(y) = B_{\frac{1}{2}}(L_a, y)$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T
2782	120' 22,969	0,0718	0,2448	49,51 218,98	22,96	49,51	
1736	120' 22,969	0,0718	0,2448	49,51 182,48	22,96	49,51	
1000	120' 22,969	0,0718	0,2448	49,51 145,98	22,96	49,51	
513	120' 22,969	0,0718	0,2448	49,51 109,48	22,96	49,51	
221	120' 22,969	0,0718	0,2448	49,51 72,99	22,96	49,51	
70	120' 22,969	0,0718	0,2448	49,51 36,49	22,96	49,51	
11,91	120' 22,969	0,0718	0,2448	49,51 0,00	22,96	49,51	
1	120' 22,969	0,0718	0,2448	50,82 72,99	22,96	49,51	

hes10-2a $y=0$, $L_T=300$, $L_a=1000$, $q=120'$, $B_{\frac{1}{2}}=49,51$, $BT_{\frac{1}{2}}=22,96$, $d_{\frac{1}{2}}=49,51$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=1000 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = [C_T(y)L_T^{-1} - B_{\frac{1}{2}}(L_a, y)]B_{\frac{1}{2}}$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3] $s_{T1}(y)=C_T(y)BT_{\frac{1}{2}}$ [4] $d_{T1}(y)=B_{\frac{1}{2}}(L_a, y)BT_{\frac{1}{2}}$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T	$s_{T1}(y)$	$d_{T1}(y)$
1906	120' 22,969	0,0718	0,2448	34,60 149,99	8,15	83,94	1906	120' 22,969	0,0718
1189	120' 22,969	0,0718	0,2448	34,60 124,99	8,15	83,94	1189	120' 22,969	0,0718
684	120' 22,969	0,0718	0,2448	34,60 99,99	8,15	83,94	684	120' 22,969	0,0718
351	120' 22,969	0,0718	0,2448	34,60 74,99	8,15	83,94	351	120' 22,969	0,0718
151	120' 22,969	0,0718	0,2448	34,60 49,99	8,15	83,94	151	120' 22,969	0,0718
48	120' 22,969	0,0718	0,2448	34,60 24,99	8,15	83,94	48	120' 22,969	0,0718
11,91	120' 22,969	0,0718	0,2448	34,60 0,00	8,15	83,94	8,15	120' 22,969	0,0718
1	120' 22,969	0,0718	0,2448	35,53 49,99	8,15	83,94	151	120' 22,969	0,0718

hes10-3a $y=0$, $L_T=300$, $L_a=1000$, $q=120'$, $B_{\frac{1}{2}}=34,60$, $BT_{\frac{1}{2}}=110,21$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=40 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = s_{T1}(y)L_T^{-1} - d_{T1}(y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3] $s_{T1}(y)=C_T(y)BT_{\frac{1}{2}}$ [4] $d_{T1}(y)=B_{\frac{1}{2}}(L_a, y)BT_{\frac{1}{2}}$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T	$s_{T1}(y)$	$d_{T1}(y)$
207	120' 22,969	0,0718	0,2448	34,60 149,99	1,07	70,18	207	120' 22,969	0,0718
130	120' 22,969	0,0718	0,2448	34,60 124,99	1,07	70,18	130	120' 22,969	0,0718
75	120' 22,969	0,0718	0,2448	34,60 99,99	1,07	70,18	75	120' 22,969	0,0718
39	120' 22,969	0,0718	0,2448	34,60 74,99	1,07	70,18	39	120' 22,969	0,0718
17	120' 22,969	0,0718	0,2448	34,60 49,99	1,07	70,18	17	120' 22,969	0,0718
5,1	120' 22,969	0,0718	0,2448	34,60 24,99	1,07	70,18	5,1	120' 22,969	0,0718
0,56	120' 22,969	0,0718	0,2448	34,60 0,00	1,07	70,18	1,07	120' 22,969	0,0718
17	120' 22,969	0,0718	0,2448	35,53 49,99	1,07	70,18	17	120' 22,969	0,0718

hes10-4a $y=2$, $L_T=300$, $L_a=40$, $q=120'$, $B_{\frac{1}{2}}=34,60$, $BT_{\frac{1}{2}}=70,99$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=0 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = [C_T(y)L_T^{-1} - B_{\frac{1}{2}}(L_a, y)]B_{\frac{1}{2}}$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3] $s_{T1}(y)=C_T(y)BT_{\frac{1}{2}}$ [4] $d_{T1}(y)=B_{\frac{1}{2}}(L_a, y)BT_{\frac{1}{2}}$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T	$s_{T1}(y)$	$d_{T1}(y)$
207	120' 22,969	0,0718	0,2448	34,60 149,99	1,07	70,18	207	120' 22,969	0,0718
130	120' 22,969	0,0718	0,2448	34,60 124,99	1,07	70,18	130	120' 22,969	0,0718
75	120' 22,969	0,0718	0,2448	34,60 99,99	1,07	70,18	75	120' 22,969	0,0718
39	120' 22,969	0,0718	0,2448	34,60 74,99	1,07	70,18	39	120' 22,969	0,0718
17	120' 22,969	0,0718	0,2448	34,60 49,99	1,07	70,18	17	120' 22,969	0,0718
5,1	120' 22,969	0,0718	0,2448	34,60 24,99	1,07	70,18	5,1	120' 22,969	0,0718
0,56	120' 22,969	0,0718	0,2448	34,60 0,00	1,07	70,18	1,07	120' 22,969	0,0718
17	120' 22,969	0,0718	0,2448	35,53 49,99	1,07	70,18	17	120' 22,969	0,0718

hes11-1a $y=2$, $L_T=300$, $L_a=0$, $q=120'$, $B_{\frac{1}{2}}=34,60$, $BT_{\frac{1}{2}}=70,99$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=200 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, y) = s_{\frac{1}{2}}(y)L_T^{-1} - d_{\frac{1}{2}}(L_a, y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31) [2]
$s_{\frac{1}{2}}(y) = C_T(y)$ [3] $d_{\frac{1}{2}}(y) = B_{\frac{1}{2}}(L_a, y)$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T
552	120' 22,969	0,0718	0,2448	30,71 131,98	2,55	78,36	552
346	120' 22,969	0,0718	0,2448	30,71 109,99	2,55	78,36	346
200	120' 22,969	0,0718	0,2448	30,71 87,99	2,55	78,36	200
103	120' 22,969	0,0718	0,2448	30,71 65,99	2,55	78,36	103
44	120' 22,969	0,0718	0,2448	30,71 43,99	2,55	78,36	44
14	120' 22,969	0,0718	0,2448	30,71 21,99	2,55	78,36	14
2,55	120' 22,969	0,0718	0,2448	30,71 0,00	2,55	78,36	2,55
44	120' 22,969	0,0718	0,2448	31,54 43,99	2,55	78,36	44

hes10-5a $y=1$, $L_T=300$, $L_a=200$, $q=120'$, $B_{\frac{1}{2}}=30,71$, $BT_{\frac{1}{2}}=2,55$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=200 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = s_{T1}(y)L_T^{-1} - d_{T1}(y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3] $s_{T1}(y)=C_T(y)BT_{\frac{1}{2}}$ [4] $d_{T1}(y)=B_{\frac{1}{2}}(L_a, y)BT_{\frac{1}{2}}$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T	$s_{T1}(y)$	$d_{T1}(y)$
628	120' 22,969	0,0718	0,2448	34,60 149,99	2,90	78,36	628	120' 22,969	0,0718
393	120' 22,969	0,0718	0,2448	34,60 124,99	2,90	78,36	393	120' 22,969	0,0718
227	120' 22,969	0,0718	0,2448	34,60 99,99	2,90	78,36	227	120' 22,969	0,0718
117	120' 22,969	0,0718	0,2448	34,60 74,99	2,90	78,36	117	120' 22,969	0,0718
49	120' 22,969	0,0718	0,2448	34,60 49,99	2,90	78,36	49	120' 22,969	0,0718
16	120' 22,969	0,0718	0,2448	34,60 24,99	2,90	78,36	16	120' 22,969	0,0718
2,55	120' 22,969	0,0718	0,2448	34,60 0,00	2,90	78,36	2,90	120' 22,969	0,0718
49	120' 22,969	0,0718	0,2448	35,53 49,99	2,90	78,36	51	120' 22,969	0,0718

hes10-5b $y=1$, $L_T=300$, $L_a=200$, $q=120'$, $B_{\frac{1}{2}}=34,60$, $BT_{\frac{1}{2}}=95,57$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=8 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = C_T(y)L_T^{-1} - B_{\frac{1}{2}}(L_a, y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3]

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T
21	120' 22,969	0,0718	0,2448	12,36 47,09	0,13	58,98	21
13	120' 22,969	0,0718	0,2448	12,36 39,24	0,13	58,98	13
8	120' 22,969	0,0718	0,2448	12,36 31,39	0,13	58,98	8
4	120' 22,969	0,0718	0,2448	12,36 23,54	0,13	58,98	4
1	120' 22,969	0,0718	0,2448	12,36 15,69	0,13	58,98	1
0,13	120' 22,969	0,0718	0,2448	12,36 0,00	0,13	58,98	0,13
1	120' 22,969	0,0718	0,2448	12,71 15,69	0,13	58,98	1

hes11-5a $y=3$, $L_T=300$, $L_a=8$, $q=120'$, $B_{\frac{1}{2}}=12,36$, $BT_{\frac{1}{2}}=31,39$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=8 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = [C_T(y)L_T^{-1} - B_{\frac{1}{2}}(L_a, y)]B_{\frac{1}{2}}$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3] $s_{T1}(y)=C_T(y)BT_{\frac{1}{2}}$ [4] $d_{T1}(y)=B_{\frac{1}{2}}(L_a, y)BT_{\frac{1}{2}}$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T	$s_{T1}(y)$	$d_{T1}(y)$
68	120' 22,969	0,0718	0,2448	34,60 149,99	0,43	58,98	68	120' 22,969	0,0718
43	120' 22,969	0,0718	0,2448	34,60 124,99	0,43	58,98	43	120' 22,969	0,0718
25	120' 22,969	0,0718	0,2448	34,60 99,99	0,43	58,98	25	120' 22,969	0,0718
13	120' 22,969	0,0718	0,2448	34,60 74,99	0,43	58,98	13	120' 22,969	0,0718
6	120' 22,969	0,0718	0,2448	34,60 49,99	0,43	58,98	6	120' 22,969	0,0718
1	120' 22,969	0,0718	0,2448	34,60 24,99	0,43	58,98	1	120' 22,969	0,0718
0,13	120' 22,969	0,0718	0,2448	34,60 0,00	0,43	58,98	0,43	120' 22,969	0,0718
6	120' 22,969	0,0718	0,2448	35,53 49,99	0,43	58,98	6	120' 22,969	0,0718

hes11-5b $y=3$, $L_T=300$, $L_a=8$, $q=120'$, $B_{\frac{1}{2}}=34,60$, $BT_{\frac{1}{2}}=29,17$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=0 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = s_{\frac{1}{2}}(y)L_T^{-1} - d_{\frac{1}{2}}(y)$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$s_{\frac{1}{2}}(y) = C_T(y)$ [3] $d_{\frac{1}{2}}(y) = B_{\frac{1}{2}}(L_a, y)$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T
21	120' 22,969	0,0718	0,2448	12,36 47,09	0,13	58,98	21
13	120' 22,969	0,0718	0,2448	12,36 39,24	0,13	58,98	13
8	120' 22,969	0,0718	0,2448	12,36 31,39	0,13	58,98	8
4	120' 22,969	0,0718	0,2448	12,36 23,54	0,13	58,98	4
1	120' 22,969	0,0718	0,2448	12,36 15,69	0,13	58,98	1
0,13	120' 22,969	0,0718	0,2448	12,36 0,00	0,13	58,98	0,13
1	120' 22,969	0,0718	0,2448	12,71 15,69	0,13	58,98	1

hes11-6a $y=3$, $L_T=300$, $L_a=0$, $q=120'$, $B_{\frac{1}{2}}=12,36$, $BT_{\frac{1}{2}}=31,39$

Relationship brightness $BT_{\frac{1}{2}}$ and luminance L_T as function of trivistimulus value Y_T for the adaptation luminance L_a=0 cd/m²

$BT_{\frac{1}{2}}(L_T, L_a, L_0, y) = [C_T(y)L_T^{-1} - B_{\frac{1}{2}}(L_a, y)]B_{\frac{1}{2}}$ brightness $BT_{\frac{1}{2}}$ [1]
$B_{\frac{1}{2}}(L_a, y) = C_T(y)[S_0(y) + S_1(y)L_a^{1/3}]$ (n=0,31, $B_{\frac{1}{2}}=BT_{\frac{1}{2}}/BT_{\frac{1}{2}}$) [2]
$L_{T1}(L_a, y) = [S_0(y) + S_1(y)L_a^{1/3}]^3$ (=black threshold) [3] $s_{T1}(y)=C_T(y)BT_{\frac{1}{2}}$ [4] $d_{T1}(y)=B_{\frac{1}{2}}(L_a, y)BT_{\frac{1}{2}}$ [4] (=scaling factor)

Y_T	$C_T(y)$	$S_0(y)$	$S_1(y)$	$B_{\frac{1}{2}}(L_a,y)$	$BT_{\frac{1}{2}}$	L_{T1}	L_a/L_T	$s_{T1}(y)$	$d_{T1}(y)$
68	120' 22,969	0,0718	0,2448	34,60 149,99	0,43	58,98	68	120' 22,969	0,0718
43	120' 22,969	0,0718	0,2448	34,60 124,99	0,43	58,98	43	120' 22,969	0,0718
25	120' 22,969	0,0718	0,2448	34,60 99,99	0,43	58,98	25	120' 22,969	0,0718
13	120' 22,969	0,0718	0,2448	34,60 74,99	0,43	58,98	13	120' 22,969	0,0718
6	120' 22,969	0,0718	0,2448	34,60 49,99	0,43	58,98	6	120' 22,969	0,0718
1	120' 22,969	0,0718	0,2448	34,60 24,99	0,43	58,98	1	120' 22,969	0,0718
0,13	120' 22,969	0,0718	0,2448	34,60 0,00	0,43	58,98	0,43	120' 22,969	0,0718
6	120' 22,969	0,0718	0,2448	35,53 49,99	0,43	58,98	6	120' 22,969	0,0718

hes11-6b $y=3$, $L_T=300$, $L_a=0$, $q=120'$, $B_{\frac{1}{2}}=34,60$, $BT_{\frac{1}{2}}=29,17$

TUB registration: 20241201-hes1/hes1l0n1.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rha4a

TUB-test chart hes1; HAULAB, scaling of achromatic colours in white surround of 180 degree, *Hauber* (1980), Adaptations L_{wa}=1000, 200, 40 & 8cd/m²; 7 test luminances for 120'