
PQL 91329 LED 16.5WT8/50K/SC/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 16.5WT8/50K/SC/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 68.1000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

Photometric Results

Lumens(lm): 7808.37

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 114.66

Central intensity(cd): 3093.586

Maximum intensity(cd): 3123.298

Angle of maximum intensity: C=90.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=108.0

[C90/270]Total=90.6

Field angle(10%Imax): [C0/180]Total=163.6

[C90/270]Total=147.8

Maximum s/h(1/2): C0_180=1.22 C90_270=1.11

Maximum s/h(1/4): C0_180=1.35 C90_270=1.25

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 1.46%

Down flux rate of LUM(%): 98.54%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.909%

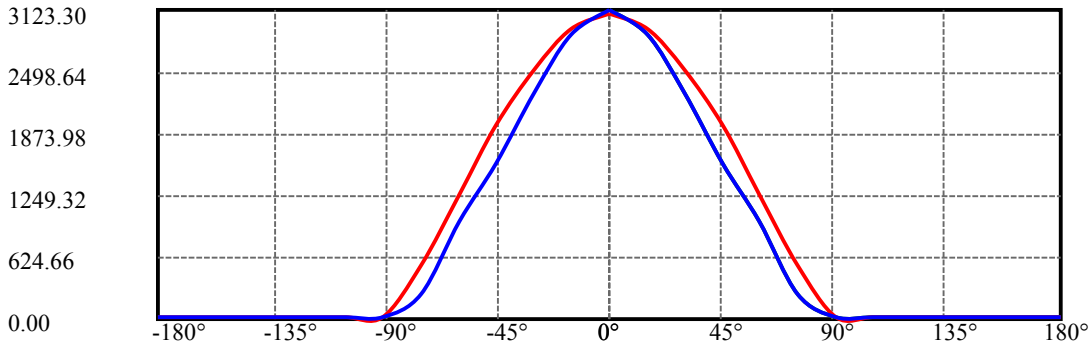
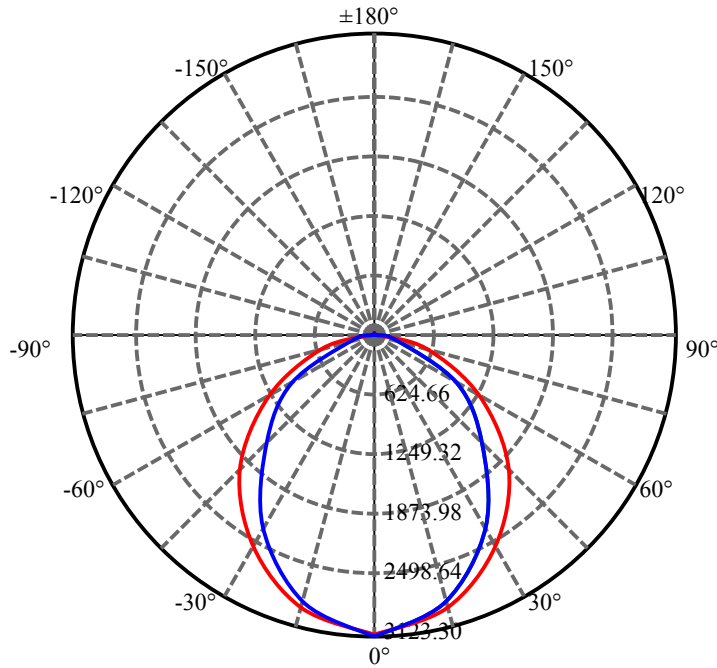
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3106.264	0.000	0	.000%	.000%
15.0	2870.507	639.796	639.796	.000%	8.194%
30.0	2428.589	1663.102	2302.899	.000%	29.493%
45.0	1757.099	2089.737	4392.636	.000%	56.255%
60.0	1081.577	1846.971	6239.607	.000%	79.909%
75.0	394.633	1118.513	7358.119	.000%	94.234%
90.0	18.746	336.119	7694.239	.000%	98.538%
105.0	15.093	27.515	7721.753	.000%	98.891%
120.0	16.620	24.029	7745.782	.000%	99.198%
135.0	18.937	23.135	7768.917	.000%	99.495%
150.0	21.472	20.175	7789.092	.000%	99.753%
165.0	23.583	14.140	7803.232	.000%	99.934%
180.0	24.420	5.139	7808.371	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2302.90	N.A.	29.49%
0-40	2302.90	N.A.	29.49%
0-60	6239.61	N.A.	79.91%
0-90	7694.24	N.A.	98.54%
0-120	7745.78	N.A.	99.20%
0-180	7808.37	N.A.	100.00%
60-90	3301.60	N.A.	42.28%
90-120	387.66	N.A.	4.96%
90-130	387.66	N.A.	4.96%
90-150	430.97	N.A.	5.52%
90-180	445.11	N.A.	5.70%
0-60.10	6246.70	N.A.	80.00%

ZONAL LUMEN SUMMARY

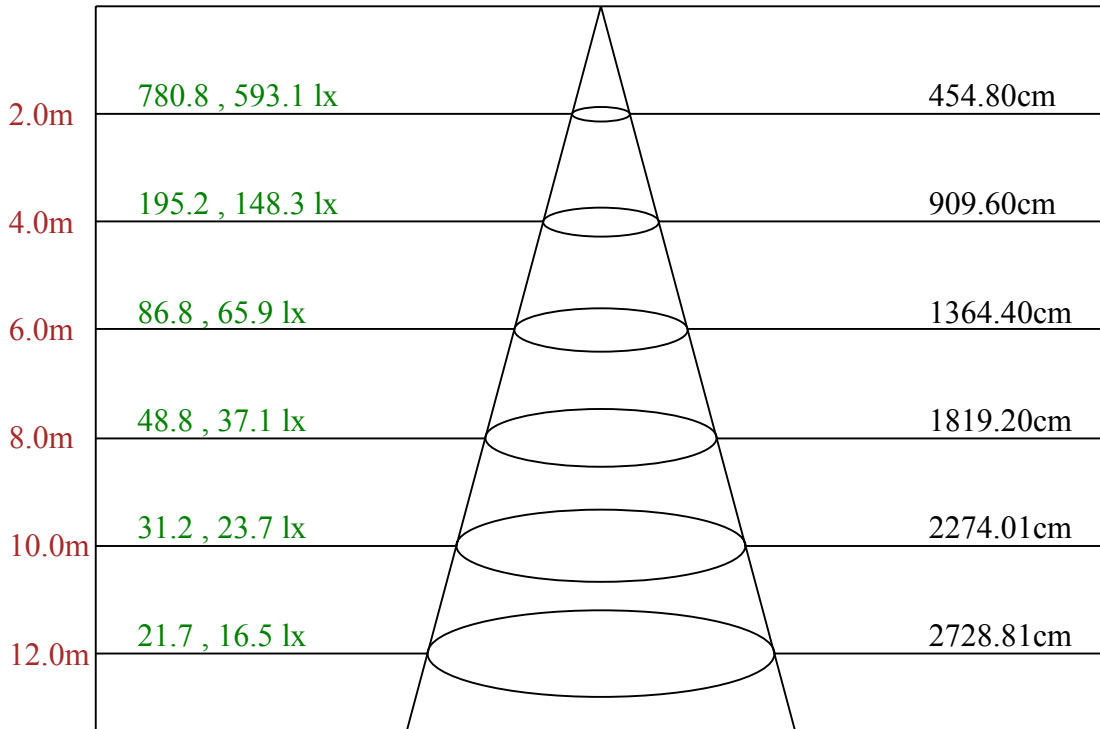
0-10	0.00
10-20	639.80
20-30	1663.10
30-40	0.00
40-50	2089.74
50-60	1846.97
60-70	0.00
70-80	1118.51
80-90	336.12
90-100	0.00
100-110	27.51
110-120	24.03
120-130	0.00
130-140	23.13
140-150	20.17
150-160	0.00
160-170	14.14
170-180	0.00



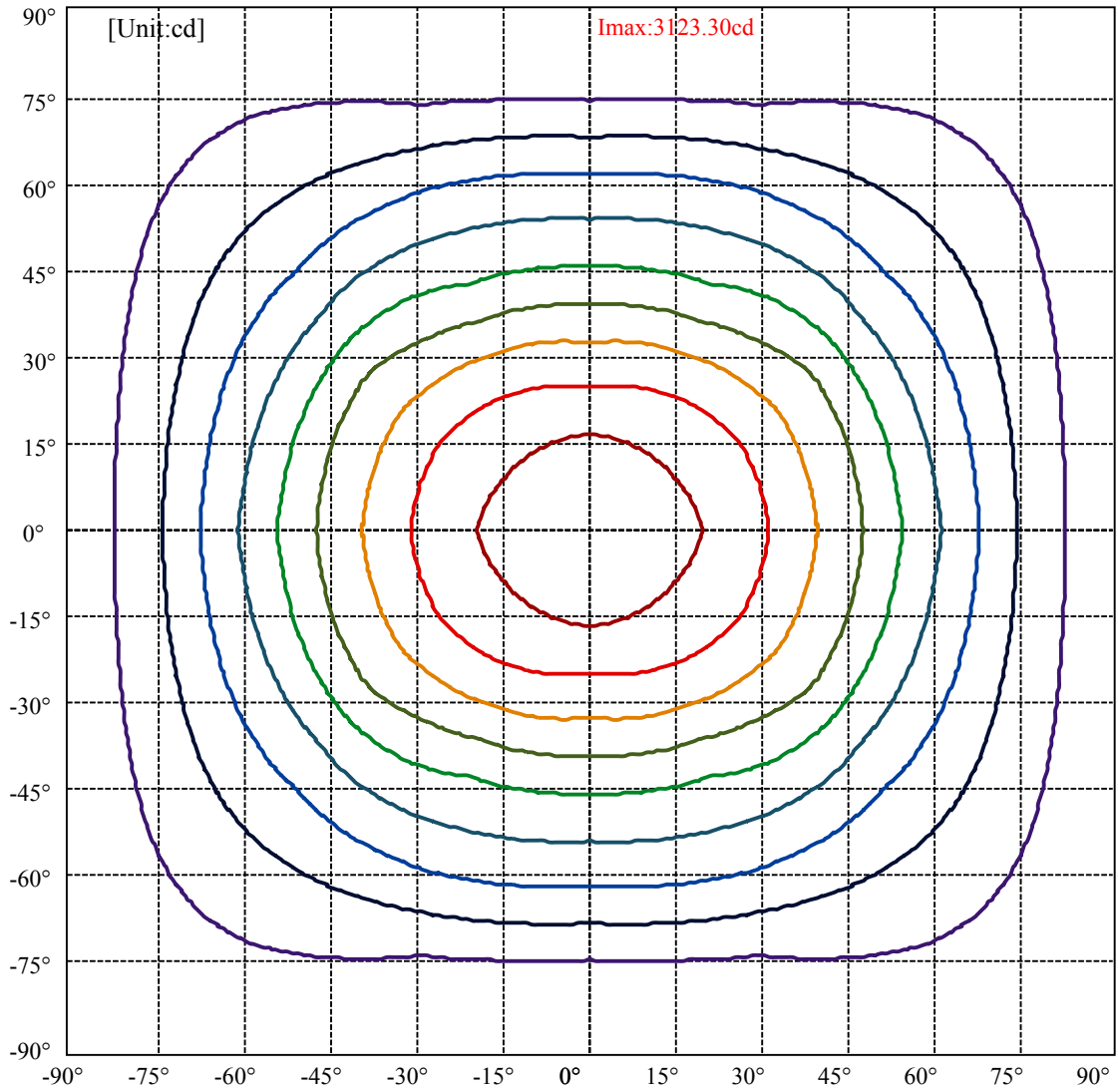
C90(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:81.8 Right:81.8
 :C90/270Left:73.9 Right:73.9

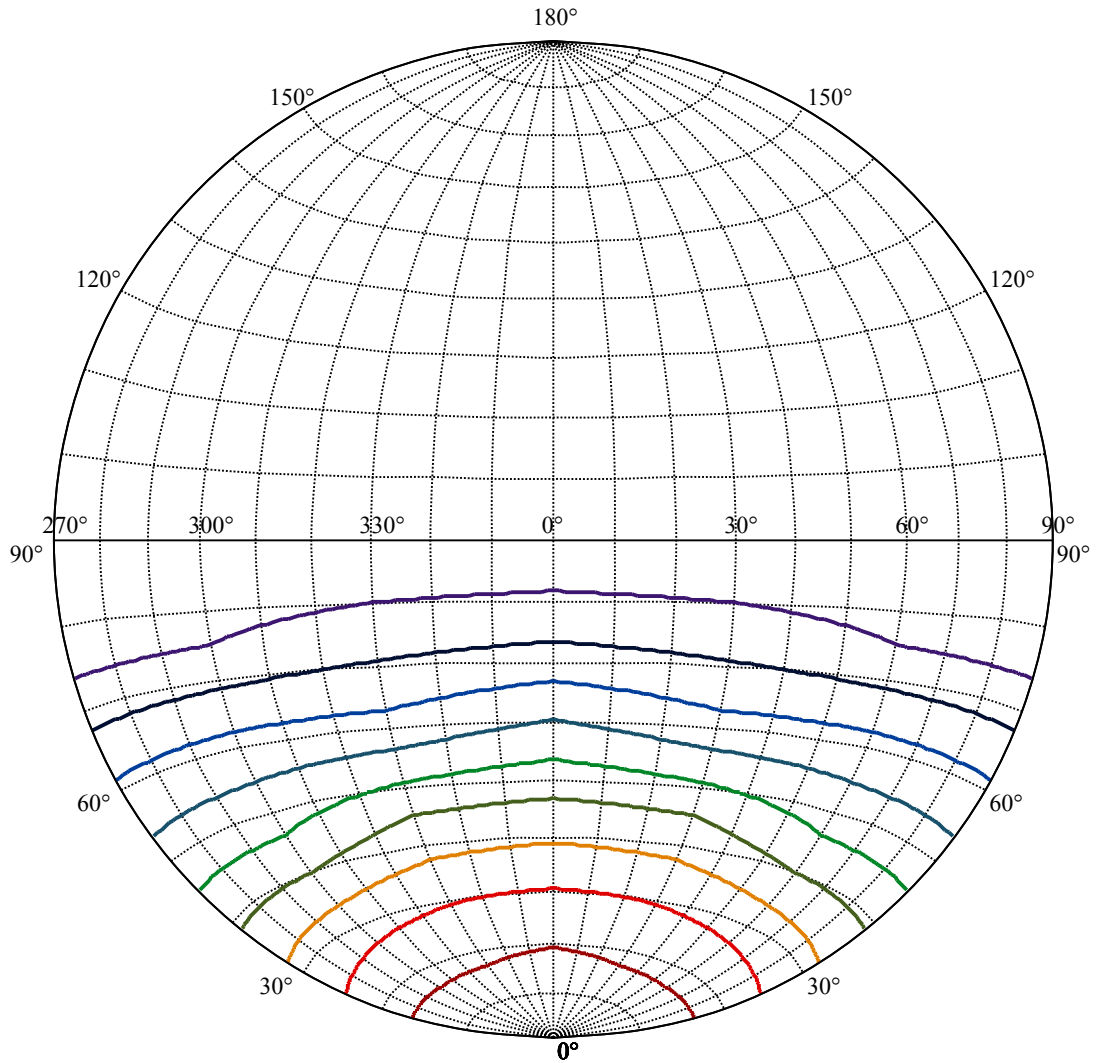
Beam Angle(50%Imax):C0/180Left:54.0 Right:54.0
 :C90/270Left:45.3 Right:45.3



Max , Ave Beam angle of C90 plane 97.34



(10%Imax) 312.33	—
(20%Imax) 624.66	—
(30%Imax) 936.989	—
(40%Imax) 1249.32	—
(50%Imax) 1561.65	—
(60%Imax) 1873.98	—
(70%Imax) 2186.31	—
(80%Imax) 2498.64	—
(90%Imax) 2810.97	—



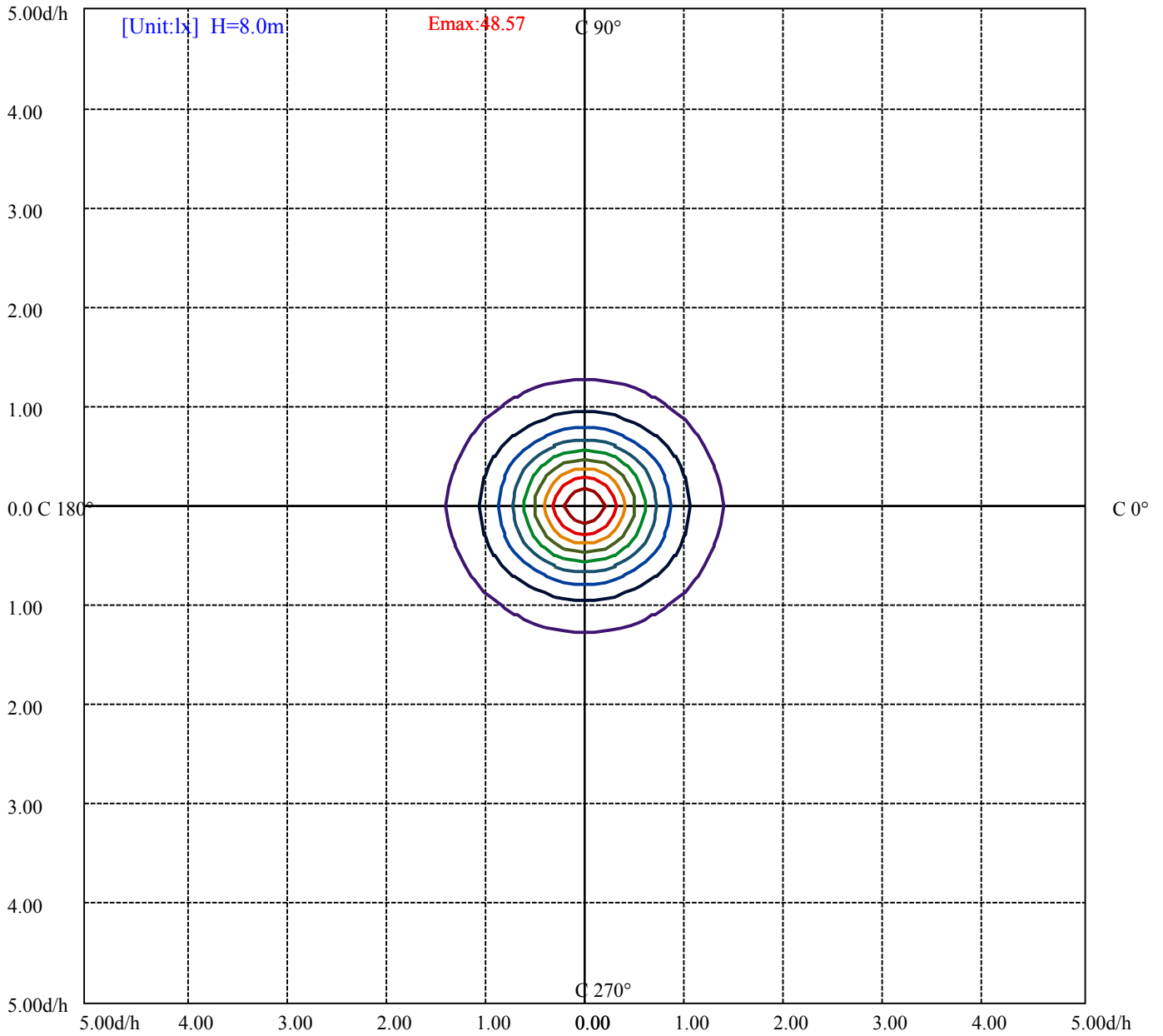
House

[Unit:cd]

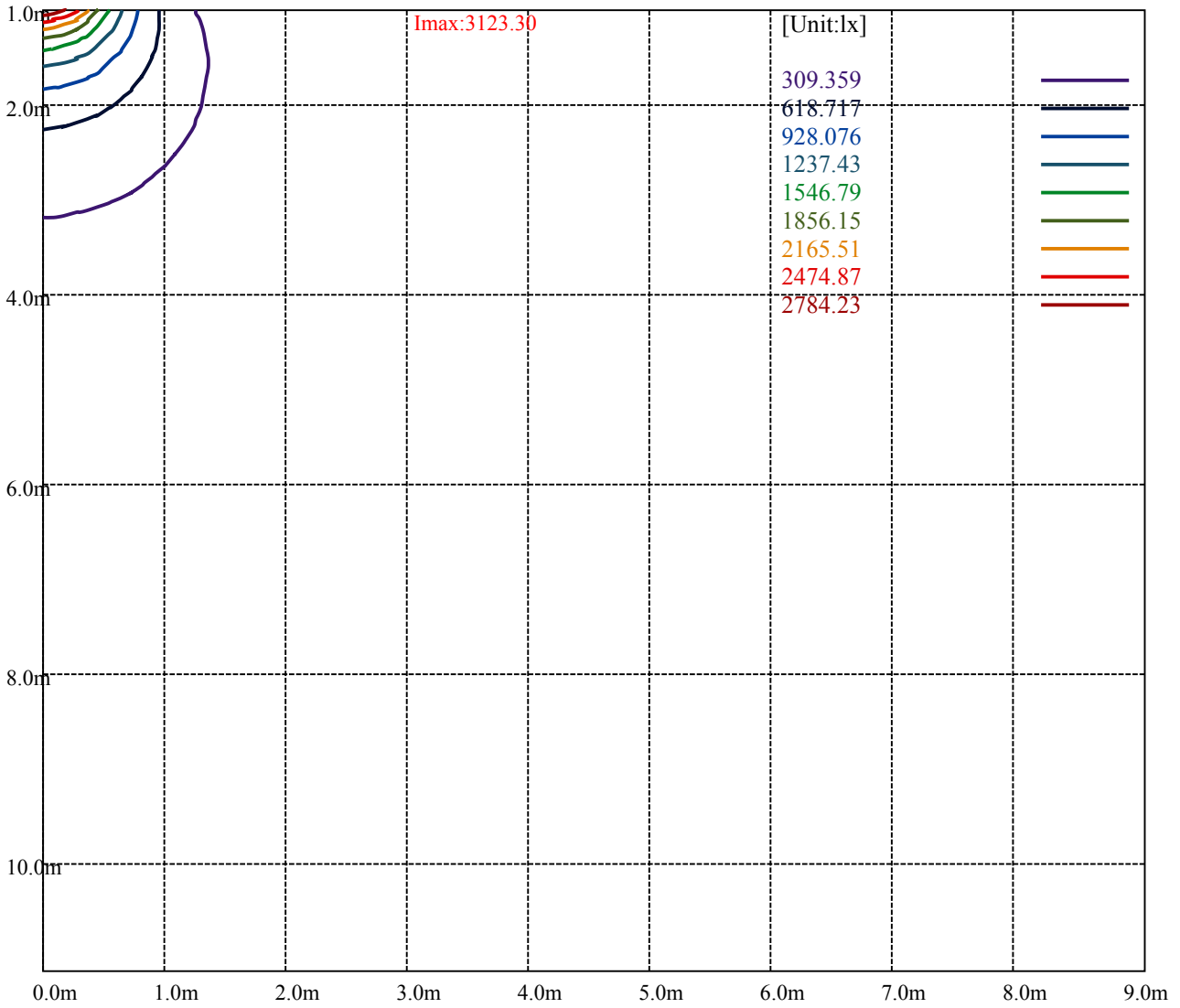
Road

Imax:3123.30

(10%Imax) 312.33	
(20%Imax) 624.66	
(30%Imax) 936.989	
(40%Imax) 1249.32	
(50%Imax) 1561.65	
(60%Imax) 1873.98	
(70%Imax) 2186.31	
(80%Imax) 2498.64	
(90%Imax) 2810.97	



- (10%Emax) 4.856937 —
- (20%Emax) 9.713875 —
- (30%Emax) 14.57081 —
- (40%Emax) 19.42781 —
- (50%Emax) 24.28469 —
- (60%Emax) 29.14156 —
- (70%Emax) 33.99859 —
- (80%Emax) 38.85547 —
- (90%Emax) 43.7125 —



Luminance Table

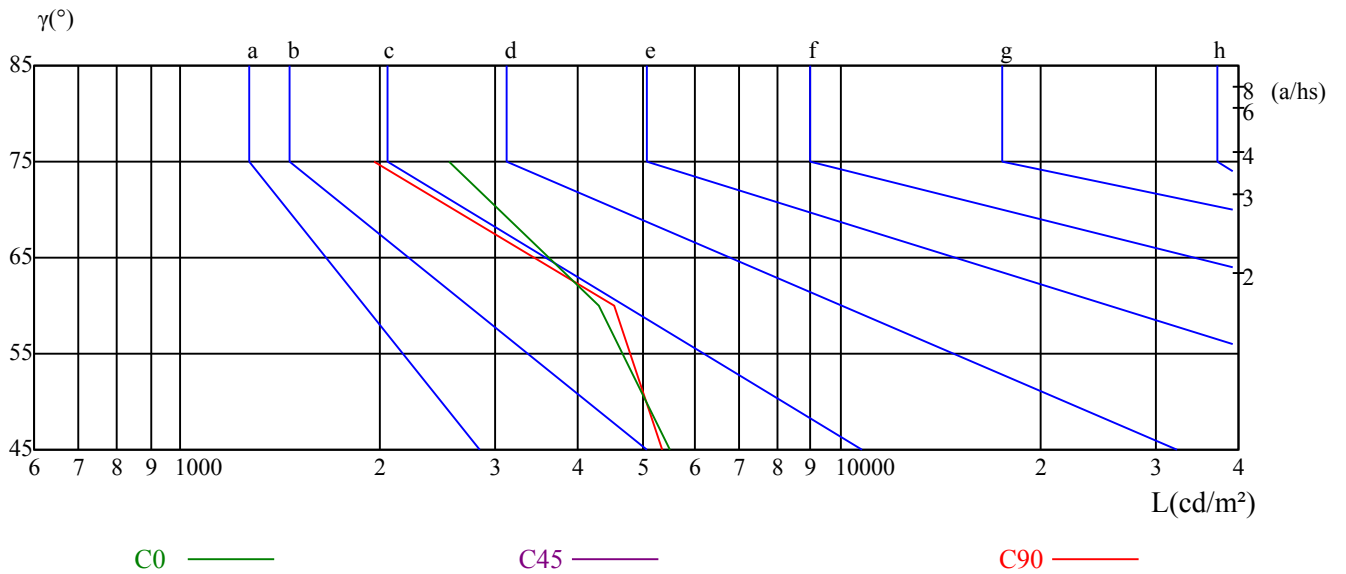
γ	45	50	55	60	65	70	75	80	85
C0	5513	0	0	4291	0	0	2545	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5345	0	0	4543	0	0	1964	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	5513	2574	0	0	0	0

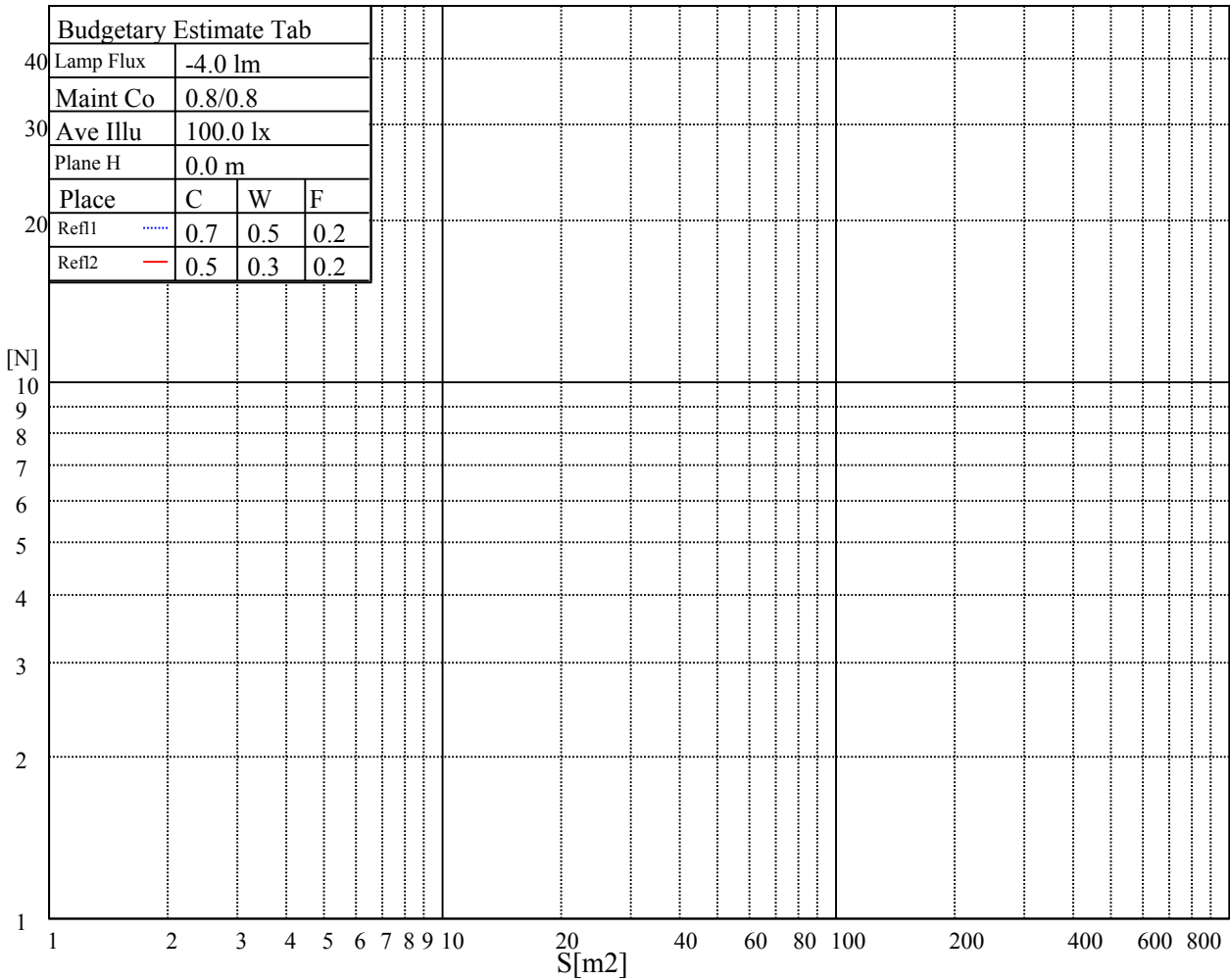
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

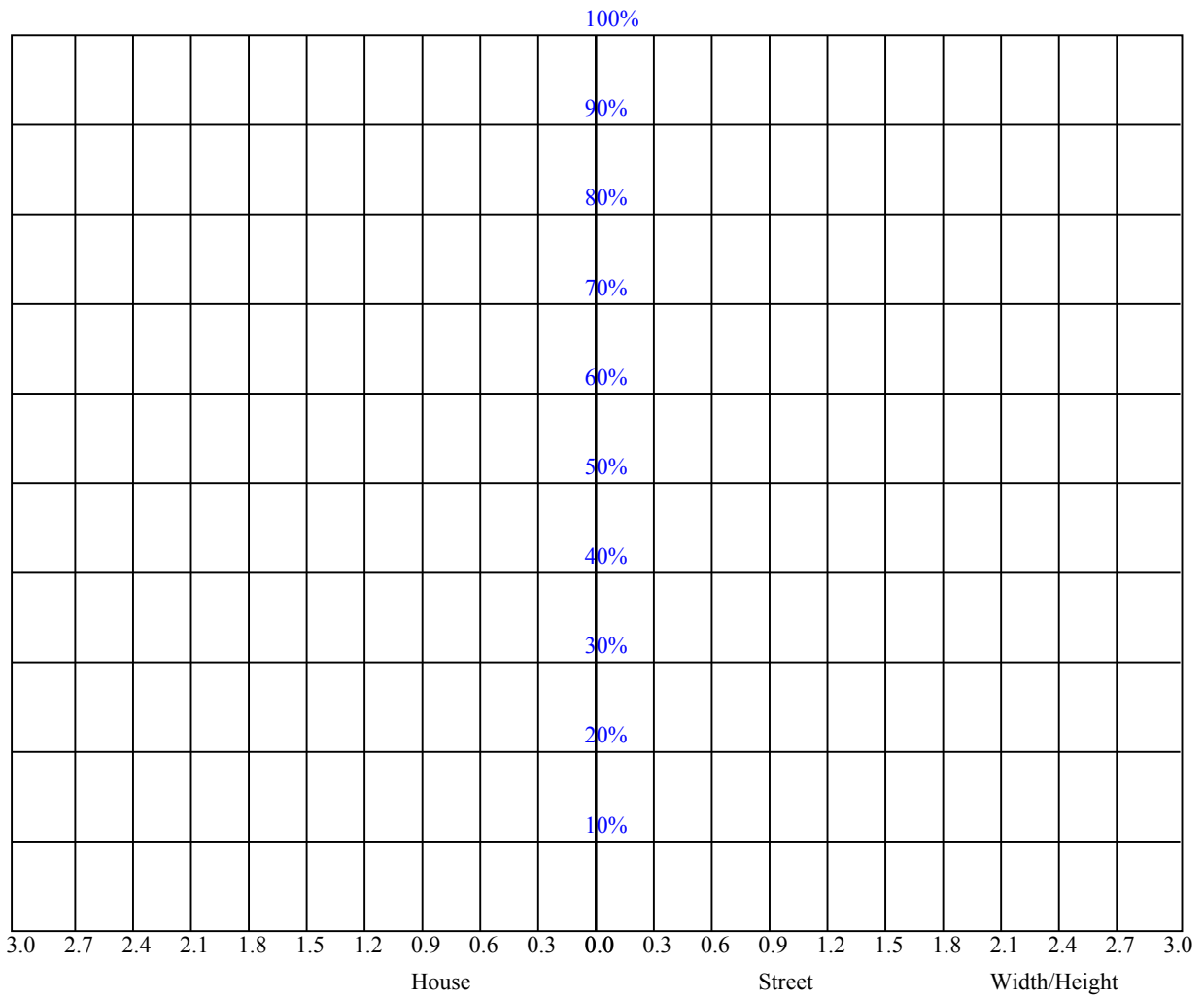
Luminance Limiting Curve



Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	9.79	11.37	10.17	11.71	12.05	10.42	12.00	10.80	12.34	12.68
	3H	11.03	12.46	11.42	12.81	13.19	11.81	13.24	12.20	13.59	13.97
	4H	11.29	12.63	11.70	13.00	13.40	12.30	13.64	12.71	14.01	14.41
	6H	11.48	12.72	11.90	13.11	13.52	12.67	13.91	13.10	14.30	14.72
	8H	11.54	12.73	11.98	13.14	13.56	12.79	13.98	13.23	14.39	14.81
	12H	11.64	12.78	12.09	13.19	13.64	12.93	14.07	13.38	14.48	14.93
4H	2H	10.23	11.58	10.65	11.95	12.35	10.77	12.11	11.18	12.48	12.88
	3H	11.64	12.77	12.07	13.18	13.61	12.34	13.47	12.77	13.89	14.32
	4H	11.96	12.98	12.41	13.42	13.88	12.94	13.96	13.39	14.40	14.86
	6H	12.16	13.05	12.63	13.51	13.99	13.34	14.24	13.81	14.70	15.17
	8H	12.26	13.10	12.74	13.56	14.05	13.51	14.35	13.99	14.81	15.30
	12H	12.39	13.14	12.88	13.63	14.13	13.69	14.44	14.18	14.93	15.43
8H	4H	12.15	12.99	12.63	13.45	13.94	13.06	13.90	13.54	14.36	14.85
	6H	12.43	13.21	12.94	13.64	14.14	13.57	14.34	14.08	14.77	15.27
	8H	12.58	13.21	13.11	13.74	14.24	13.80	14.43	14.32	14.95	15.46
	12H	13.07	13.62	13.59	14.19	14.71	14.22	14.78	14.74	15.35	15.87
12H	4H	12.18	12.93	12.67	13.42	13.92	13.06	13.81	13.55	14.30	14.80
	6H	13.50	13.12	13.02	13.59	14.16	14.59	14.21	14.12	14.69	15.25
	8H	12.67	13.23	13.19	13.73	14.32	13.85	14.41	14.37	14.91	15.50
Variation with the observer position at spacings:											
S = 1.0H	0.4/-0.4					0.3/-0.5					
S = 1.5H	0.7/-0.9					0.7/-0.7					
S = 2.0H	1.2/-1.2					1.0/-0.9					
Standard tables:	BK3					BK3					
Uncorrected UGR	1.9					2.8					



RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Intensity data(cd)

C/γ(°)	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0
0.0	3093.59	2949.35	2560.69	2009.80	1332.60	611.60	28.30	16.53	17.95
30.0	3106.66	2903.34	2511.20	1961.25	1108.33	525.50	20.33	15.94	17.47
60.0	3110.23	2898.63	2518.27	1708.27	1170.03	402.35	20.57	15.34	16.99
90.0	3123.30	2876.21	2303.68	1594.31	1024.31	263.29	19.38	15.22	17.23
120.0	3109.04	2851.43	2352.35	1637.87	1074.63	322.55	16.53	13.32	14.83
150.0	3094.78	2891.55	2485.27	1956.38	1085.78	487.26	17.60	14.15	15.20
180.0	3093.59	2906.88	2489.99	1919.34	1207.17	484.30	16.05	14.87	15.91
210.0	3106.66	2834.92	2461.70	1815.11	993.22	406.86	16.53	15.10	16.39
240.0	3110.23	2817.22	2311.69	1504.20	948.13	225.88	15.10	14.39	15.91
270.0	3123.30	2851.43	2273.16	1550.38	971.86	248.44	14.98	13.44	15.32
300.0	3109.04	2834.92	2413.39	1580.06	1044.25	313.52	20.33	16.05	17.83
330.0	3094.78	2830.20	2461.70	1848.23	1018.62	444.04	19.26	16.77	18.42
360.0	3093.59	2949.35	2560.69	2009.80	1332.60	611.60	28.30	16.53	17.95
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	20.07	22.56	24.09	24.30					
30.0	19.71	22.08	23.85	24.42					
60.0	19.36	21.72	23.61	24.18					
90.0	19.59	21.96	23.73	24.42					
120.0	17.33	20.17	23.14	24.66					
150.0	17.56	20.29	23.02	24.54					
180.0	18.28	21.01	23.37	24.30					
210.0	18.40	20.89	23.14	24.42					
240.0	18.40	20.89	23.14	24.18					
270.0	17.80	20.53	23.14	24.42					
300.0	20.19	22.68	24.33	24.66					
330.0	20.55	22.91	24.45	24.54					
360.0	20.07	22.56	24.09	24.30					