
PQL 91315 LED SMD 4'13WT8/50K/SC/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 13WT8/50K/SC/V5

Lamp flux(lm): -1.0

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 96.4000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

Photometric Results

Lumens(lm): 11199.31

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 116.18

Central intensity(cd): 3981.738

Maximum intensity(cd): 3981.738

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=111.2

[C90/270]Total=93.8

Field angle(10%Imax): [C0/180]Total=169.0

[C90/270]Total=152.6

Maximum s/h(1/2): C0_180=1.24 C90_270=1.17

Maximum s/h(1/4): C0_180=1.36 C90_270=1.27

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 7.78%

Down flux rate of LUM(%): 92.22%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 72.680%

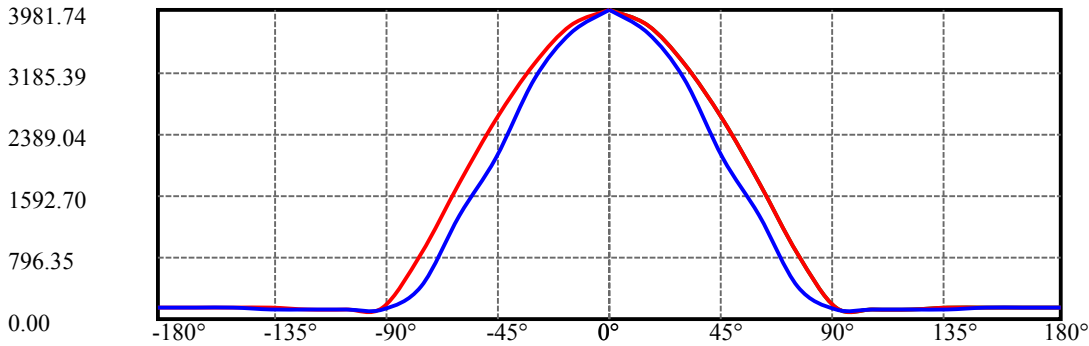
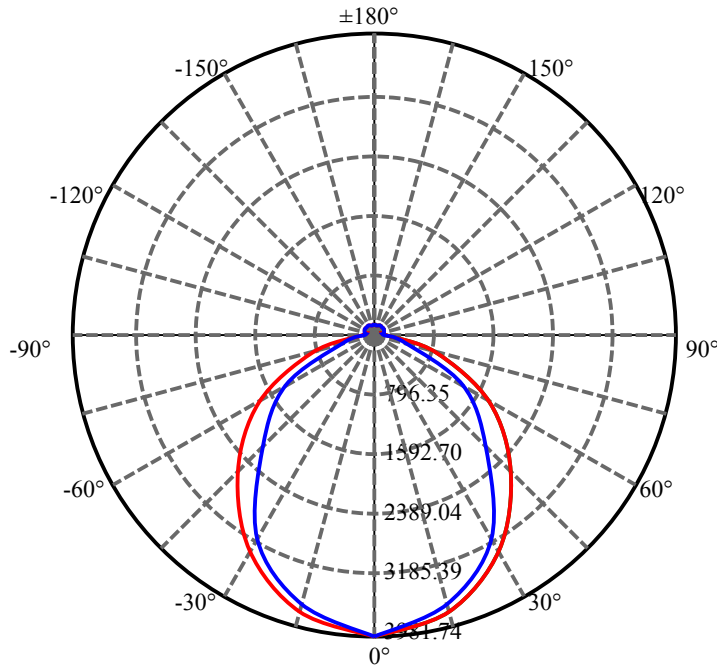
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3977.339	0.000	0	.000%	.000%
15.0	3705.681	822.446	822.446	.000%	7.344%
30.0	3156.075	2153.538	2975.983	.000%	26.573%
45.0	2289.040	2718.515	5694.498	.000%	50.847%
60.0	1469.095	2445.212	8139.71	.000%	72.680%
75.0	612.430	1577.155	9716.865	.000%	86.763%
90.0	139.591	611.471	10328.336	.000%	92.223%
105.0	134.393	222.778	10551.114	.000%	94.212%
120.0	136.530	205.277	10756.391	.000%	96.045%
135.0	139.079	179.323	10935.714	.000%	97.646%
150.0	144.704	141.681	11077.395	.000%	98.911%
165.0	145.069	90.944	11168.339	.000%	99.723%
180.0	144.266	30.973	11199.312	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2975.98	N.A.	26.57%
0-40	2975.98	N.A.	26.57%
0-60	8139.71	N.A.	72.68%
0-90	10328.34	N.A.	92.22%
0-120	10756.39	N.A.	96.05%
0-180	11199.31	N.A.	100.00%
60-90	4633.84	N.A.	41.38%
90-120	1039.53	N.A.	9.28%
90-130	1039.53	N.A.	9.28%
90-150	1360.53	N.A.	12.15%
90-180	1451.47	N.A.	12.96%
0-67.80	8959.45	N.A.	80.00%

ZONAL LUMEN SUMMARY

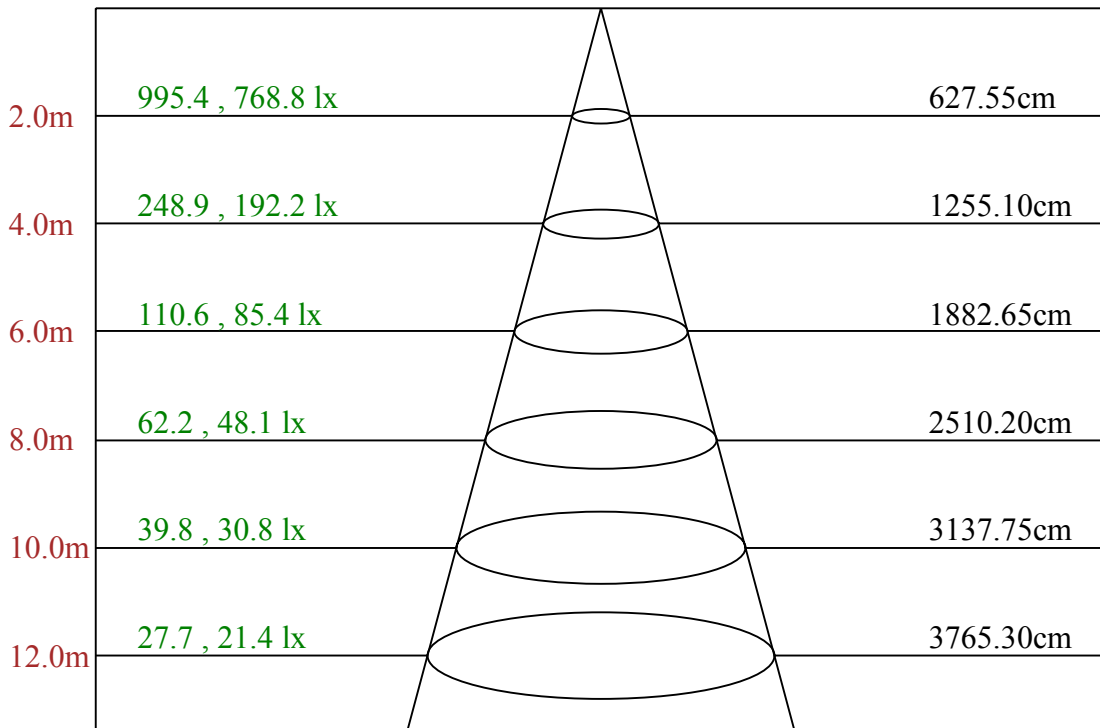
0-10	0.00
10-20	822.45
20-30	2153.54
30-40	0.00
40-50	2718.51
50-60	2445.21
60-70	0.00
70-80	1577.16
80-90	611.47
90-100	0.00
100-110	222.78
110-120	205.28
120-130	0.00
130-140	179.32
140-150	141.68
150-160	0.00
160-170	90.94
170-180	0.00



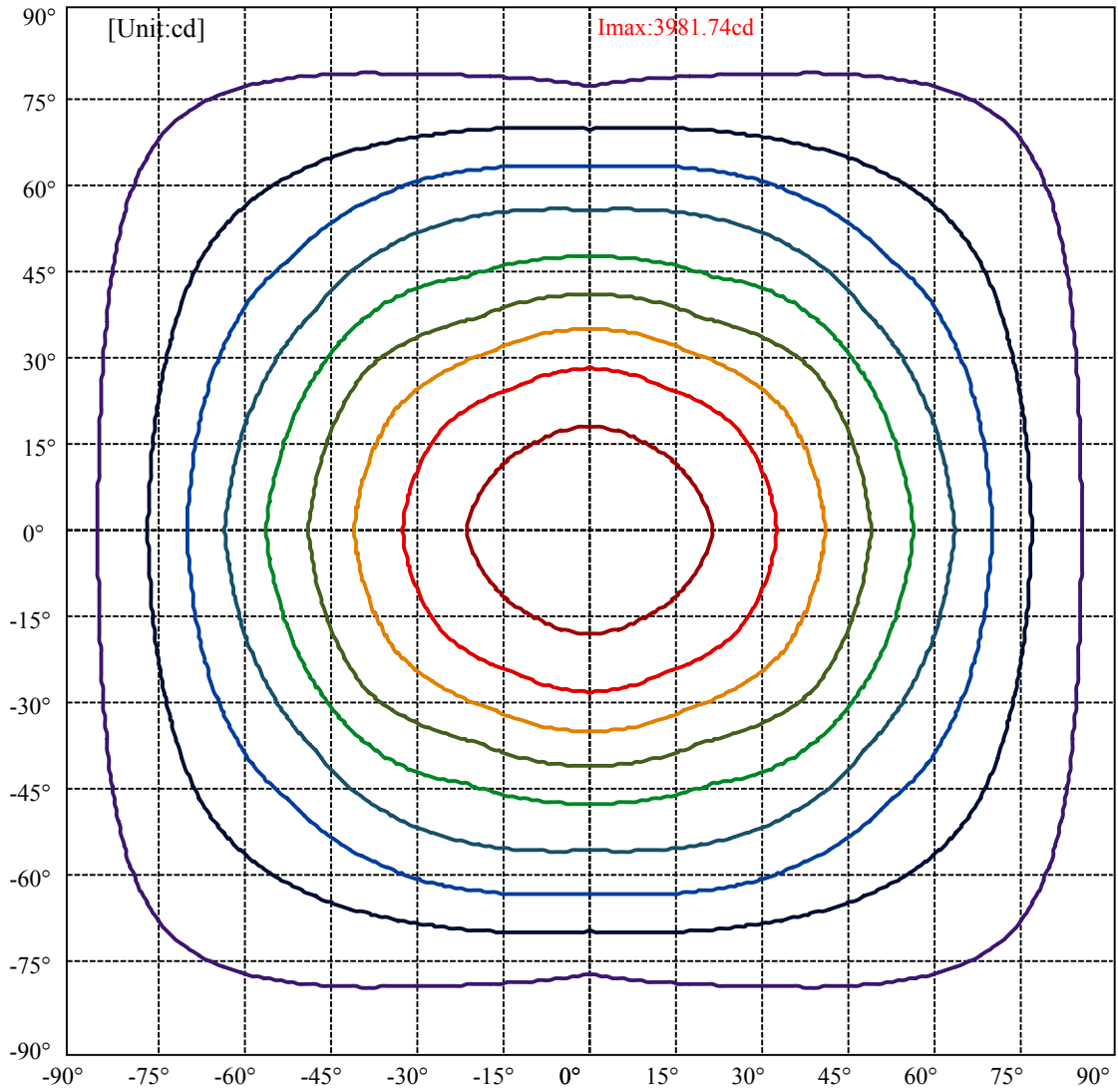
C0(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:84.5 Right:84.5
 :C90/270Left:76.3 Right:76.3

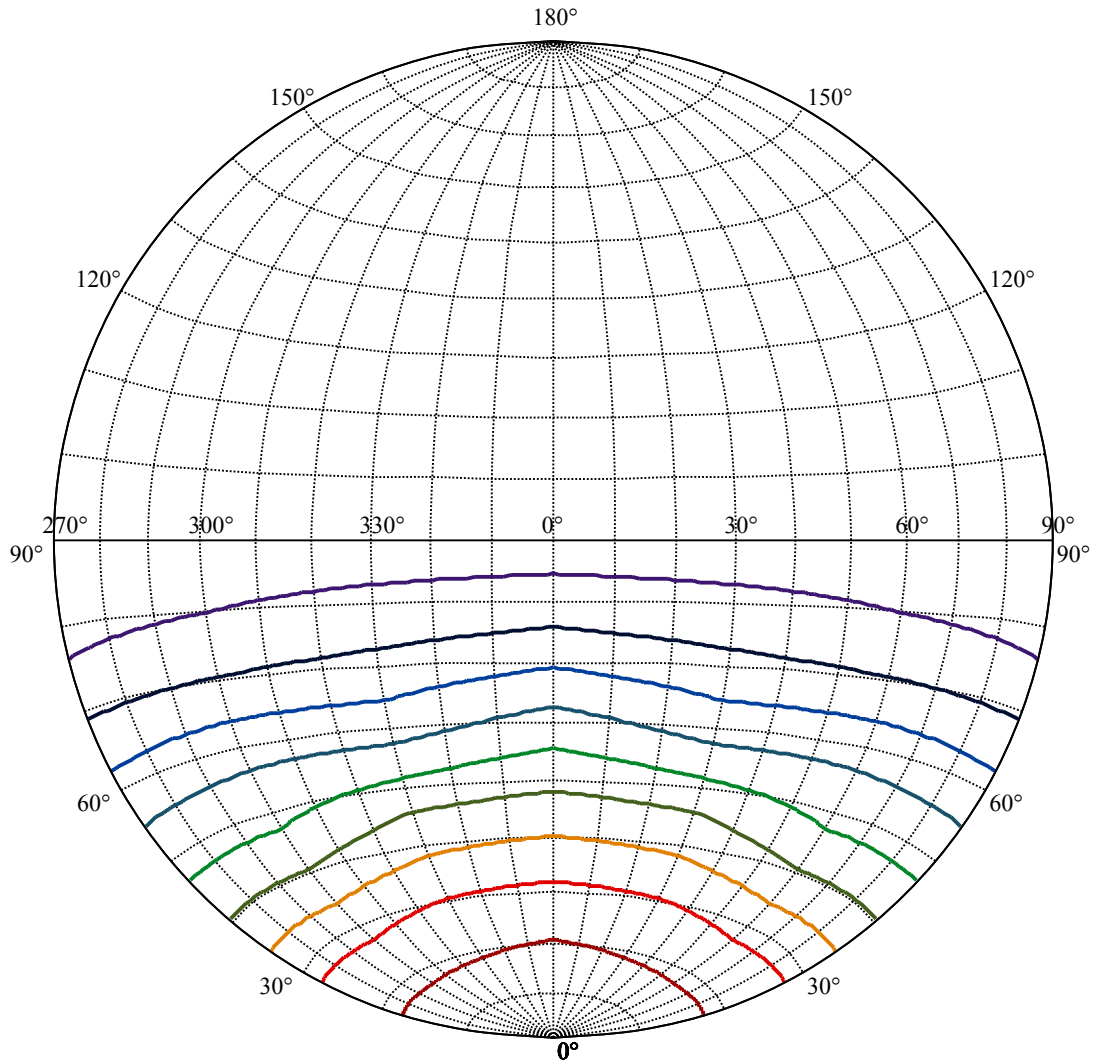
Beam Angle(50%Imax):C0/180Left:55.6 Right:55.6
 :C90/270Left:46.9 Right:46.9



Max , Ave Beam angle of C0 plane 114.97



(10%Imax) 397.212	—
(20%Imax) 794.424	—
(30%Imax) 1191.64	—
(40%Imax) 1588.85	—
(50%Imax) 1986.06	—
(60%Imax) 2383.27	—
(70%Imax) 2780.48	—
(80%Imax) 3177.7	—
(90%Imax) 3574.91	—



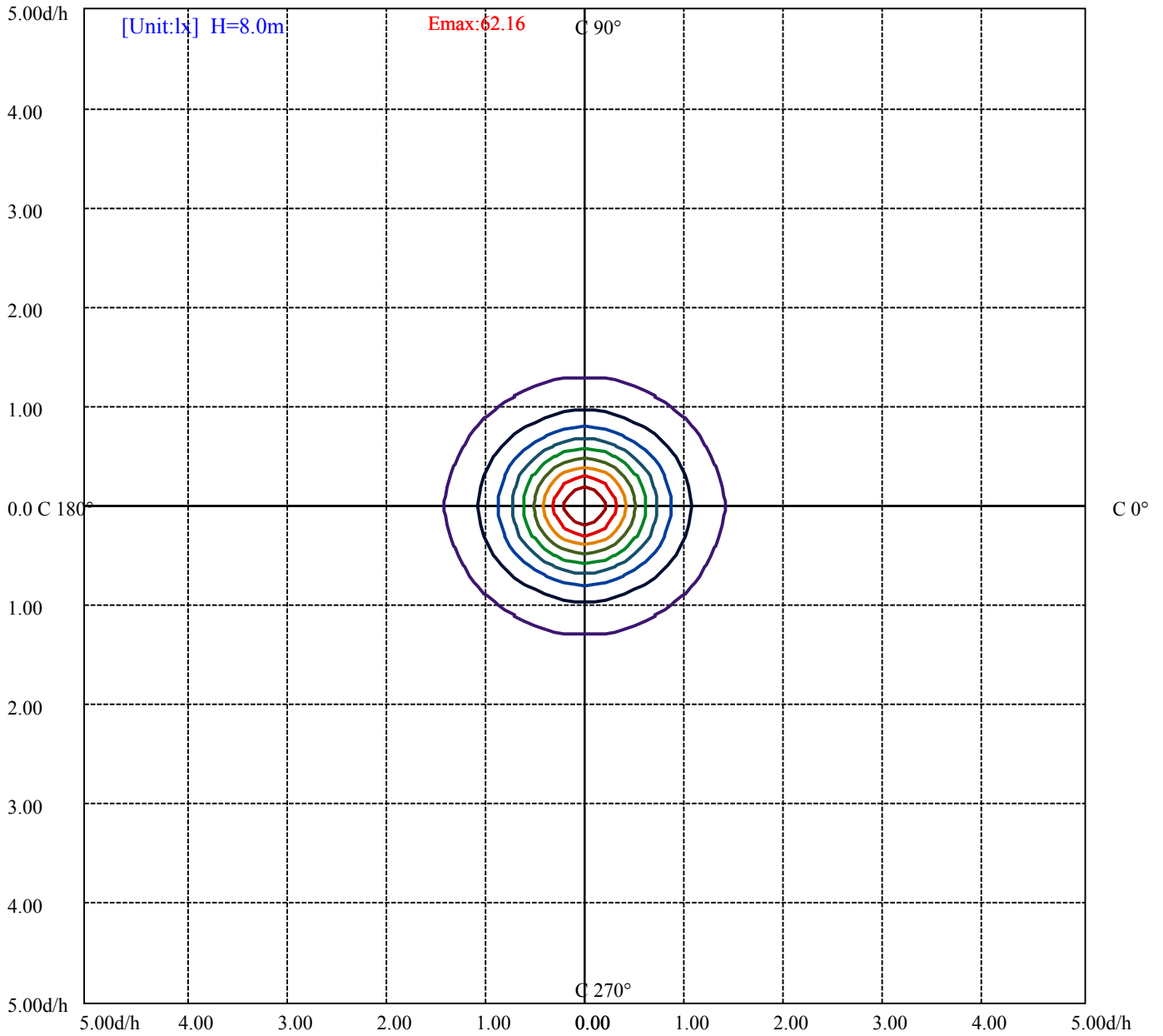
House

[Unit:cd]

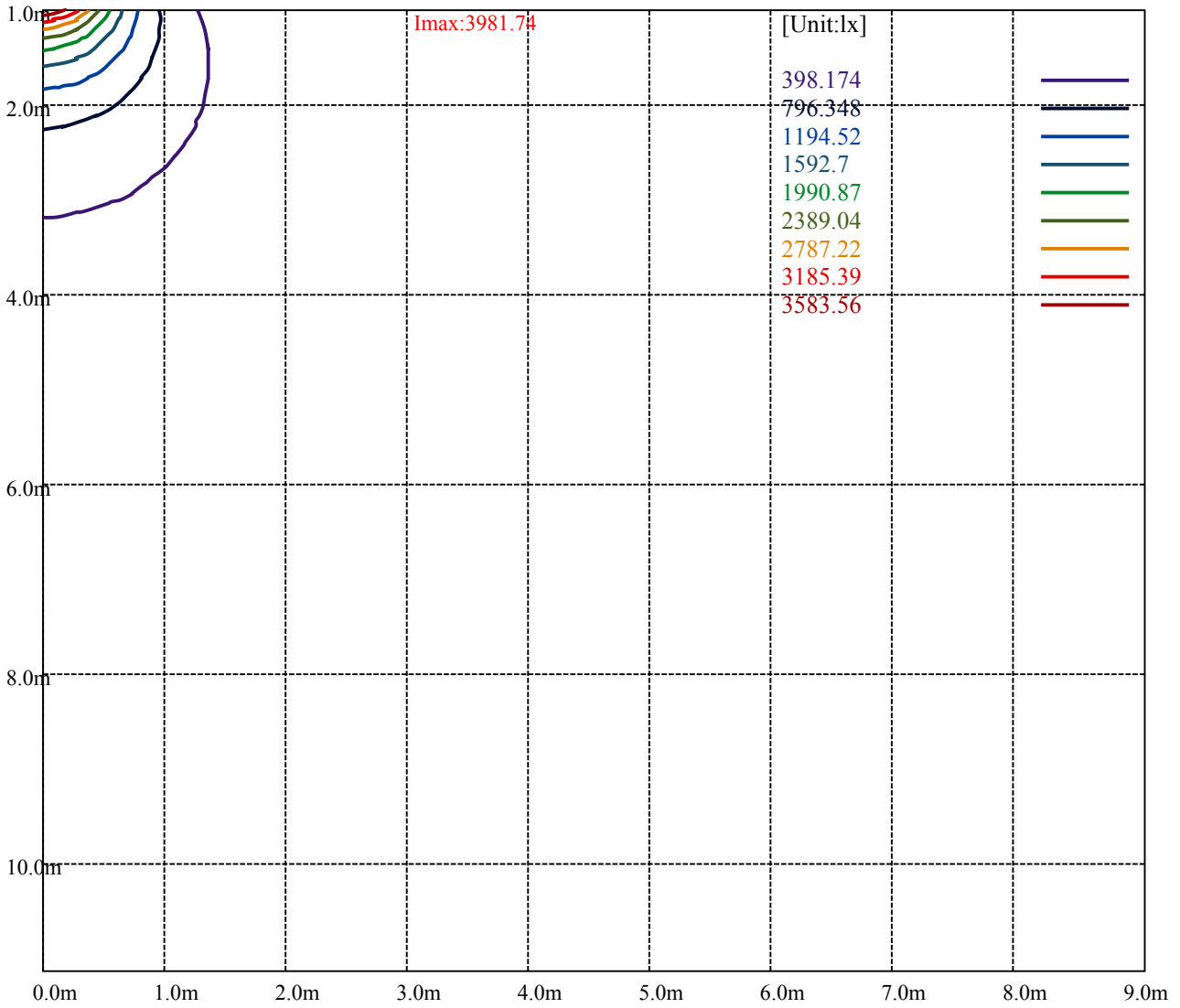
Road

Imax:3981.74

(10%Imax) 398.174	
(20%Imax) 796.348	
(30%Imax) 1194.52	
(40%Imax) 1592.7	
(50%Imax) 1990.87	
(60%Imax) 2389.04	
(70%Imax) 2787.22	
(80%Imax) 3185.39	
(90%Imax) 3583.56	



(10%Emax) 6.215859	—
(20%Emax) 12.43173	—
(30%Emax) 18.64766	—
(40%Emax) 24.86344	—
(50%Emax) 31.07937	—
(60%Emax) 37.29515	—
(70%Emax) 43.51109	—
(80%Emax) 49.72688	—
(90%Emax) 55.94281	—



Luminance Table

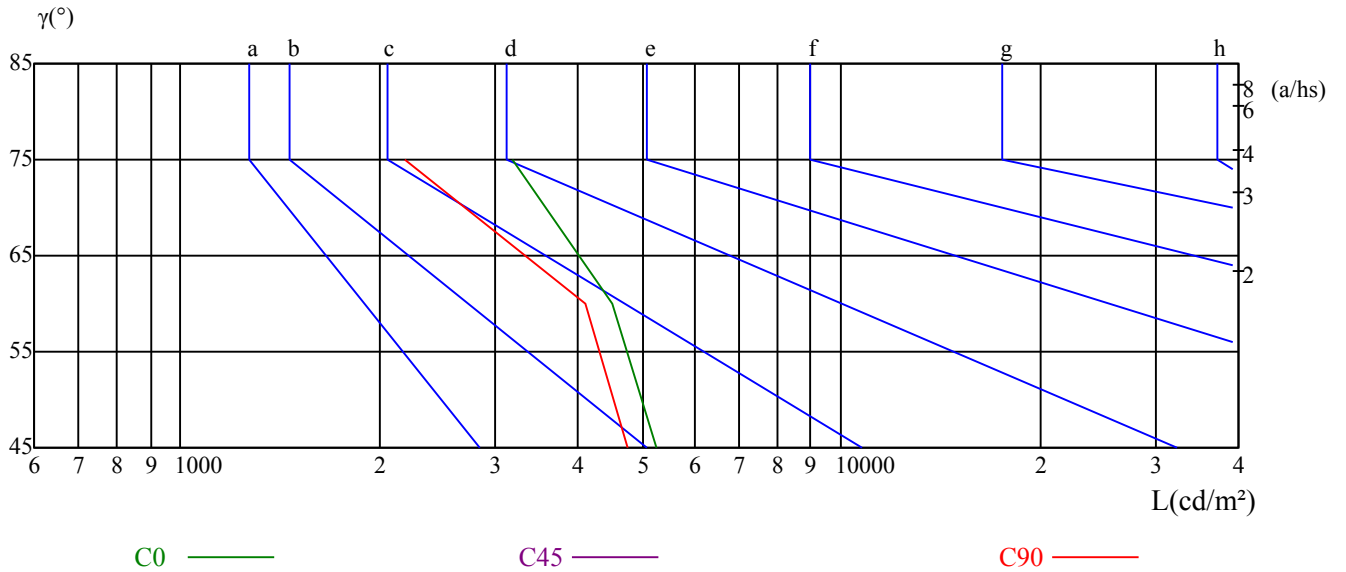
γ	45	50	55	60	65	70	75	80	85
C0	5253	0	0	4511	0	0	3180	0	0
C45	0	0	0	0	0	0	0	0	0
C90	4769	0	0	4112	0	0	2181	0	0

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	5678	2860	0	0	0	0

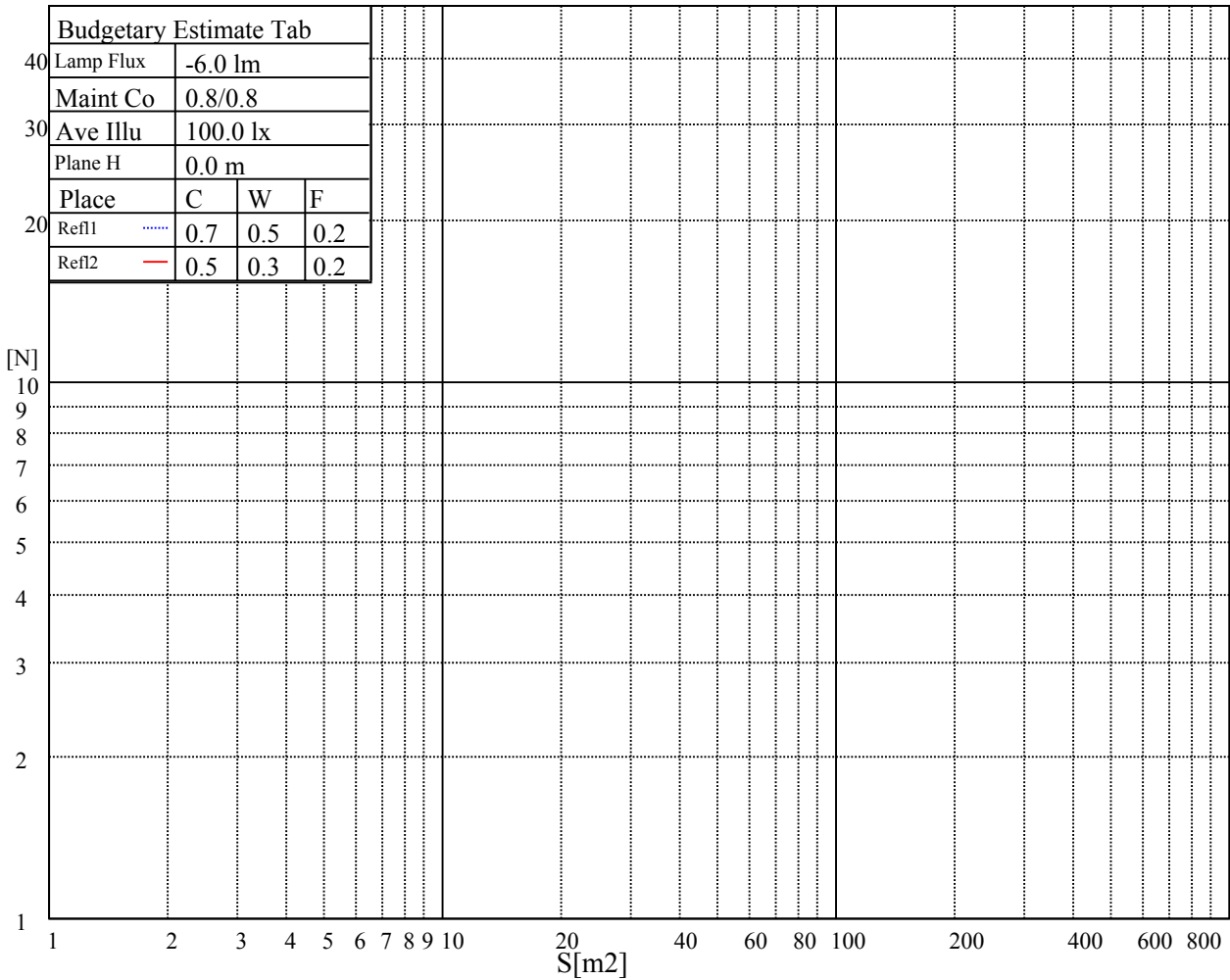
Glare Table

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

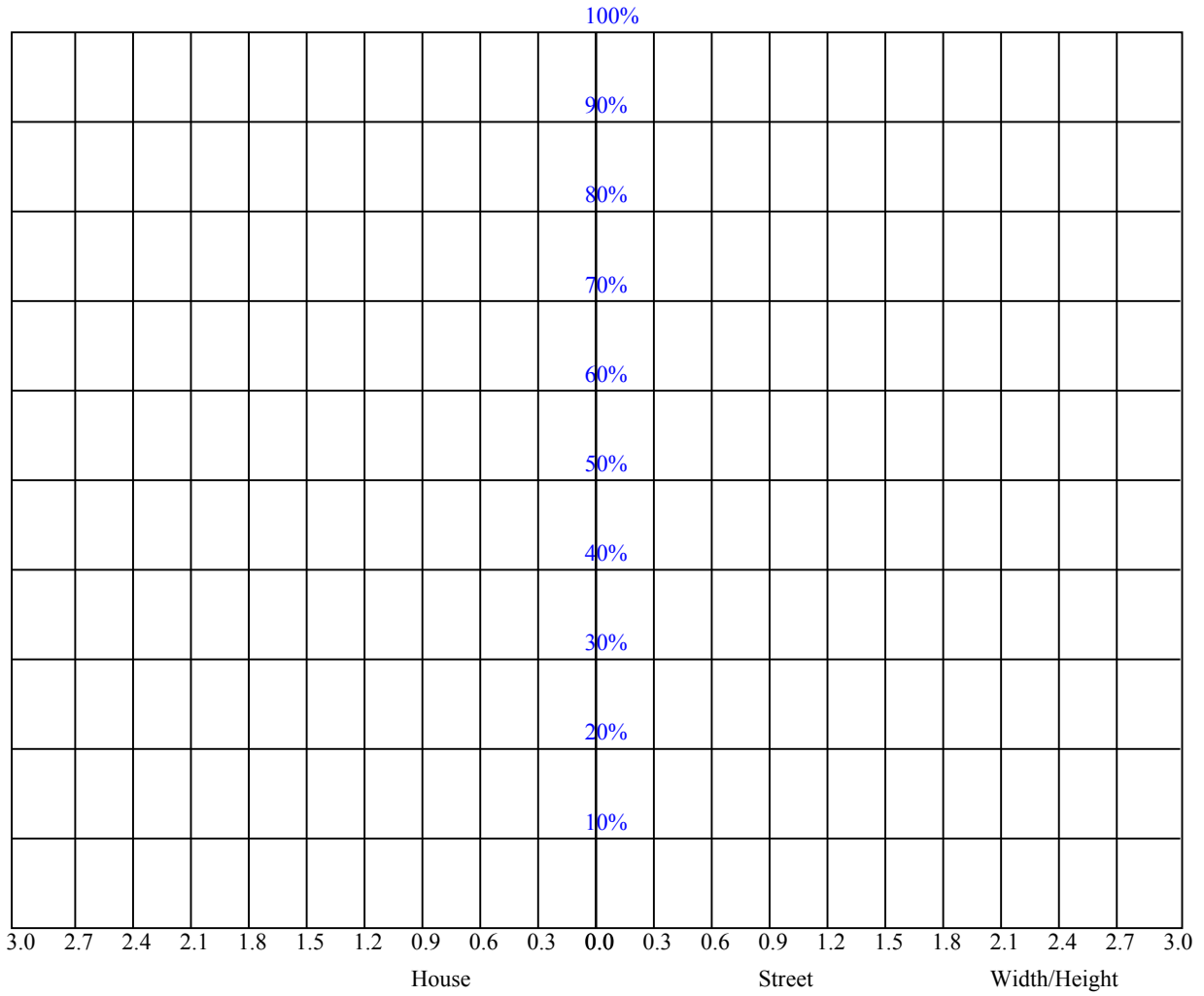
Luminance Limiting Curve



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	7.87	9.31	8.36	9.79	10.30	8.56	10.00	9.05	10.48	10.99
	3H	9.24	10.54	9.74	11.03	11.58	10.20	11.51	10.70	11.99	12.54
	4H	9.59	10.83	10.12	11.33	11.89	10.84	12.07	11.36	12.57	13.14
	6H	9.91	11.06	10.45	11.57	12.15	11.37	12.51	11.91	13.03	13.61
	8H	10.06	11.15	10.61	11.69	12.26	11.57	12.66	12.12	13.20	13.77
	12H	10.32	11.36	10.87	11.89	12.51	11.86	12.90	12.41	13.43	14.05
4H	2H	8.37	9.60	8.89	10.10	10.67	8.94	10.17	9.46	10.67	11.24
	3H	9.93	10.97	10.47	11.51	12.10	10.77	11.80	11.30	12.35	12.93
	4H	10.38	11.32	10.94	11.88	12.50	11.52	12.47	12.08	13.02	13.64
	6H	10.70	11.54	11.30	12.13	12.76	12.06	12.91	12.66	13.49	14.13
	8H	10.94	11.71	11.52	12.29	12.93	12.37	13.14	12.95	13.72	14.37
	12H	11.23	11.92	11.83	12.53	13.18	12.69	13.39	13.30	14.00	14.65
8H	4H	10.65	11.42	11.23	12.00	12.65	11.69	12.46	12.27	13.04	13.68
	6H	11.13	12.40	11.74	12.40	13.05	12.39	13.66	13.01	13.66	14.31
	8H	11.43	12.01	12.06	12.65	13.31	12.77	13.34	13.40	13.98	14.64
	12H	12.07	12.59	12.70	13.71	13.94	13.35	13.86	13.98	14.99	15.22
12H	4H	10.69	11.38	11.29	11.99	12.64	11.69	12.39	12.30	13.00	13.65
	6H	12.11	11.80	11.86	12.40	13.11	13.32	13.01	13.07	13.61	14.32
	8H	11.58	12.09	12.21	12.71	13.44	12.86	13.37	13.48	13.99	14.72
Variation with the observer position at spacings:											
S = 1.0H	0.3/-0.4					0.3/-0.6					
S = 1.5H	0.7/-0.8					0.6/-0.6					
S = 2.0H	0.8/-1.0					0.8/-0.7					
Standard tables:	BK4					BK3					
Uncorrected UGR	2.5					3.0					



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 RHOF=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	3981.74	3798.88	3320.49	2616.05	1765.41	853.39	143.83	135.20	134.92
30.0	3981.74	3712.76	3243.94	2375.60	1408.47	728.73	143.83	135.20	134.92
60.0	3974.58	3712.76	3033.42	2115.92	1514.59	565.73	143.83	135.20	134.92
90.0	3972.12	3693.62	3061.44	2058.21	1331.29	412.31	134.24	135.20	134.92
120.0	3972.12	3674.48	2909.02	2038.98	1427.76	489.02	134.24	125.54	134.92
150.0	3981.74	3703.19	3215.23	2375.60	1398.82	709.56	143.83	135.20	134.92
180.0	3981.74	3760.60	3243.94	2510.25	1743.28	821.97	140.94	135.20	134.92
210.0	3981.74	3703.19	3176.96	2519.87	1408.47	652.03	134.24	135.20	134.92
240.0	3974.58	3638.60	3108.89	2067.83	1424.93	505.54	134.24	135.20	134.92
270.0	3972.12	3682.86	3119.54	2106.30	1350.59	431.49	134.24	135.20	134.92
300.0	3972.12	3684.05	3253.51	2144.77	1418.12	508.20	143.83	135.20	144.56
330.0	3981.74	3703.19	3186.52	2539.10	1437.41	671.20	143.83	135.20	144.56
360.0	3981.74	3798.88	3320.49	2616.05	1765.41	853.39	143.83	135.20	134.92
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	144.71	144.70	144.27	144.27					
30.0	135.06	144.70	153.89	144.27					
60.0	144.71	144.70	144.27	144.27					
90.0	135.06	144.70	144.27	144.27					
120.0	135.06	144.70	144.27	144.27					
150.0	135.06	144.70	144.27	144.27					
180.0	135.06	144.70	144.27	144.27					
210.0	135.06	144.70	144.27	144.27					
240.0	144.71	144.70	144.27	144.27					
270.0	135.06	144.70	144.27	144.27					
300.0	144.71	144.70	144.27	144.27					
330.0	144.71	144.70	144.27	144.27					
360.0	144.71	144.70	144.27	144.27					