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PQL 91311 LED SMD 4'15WT8/50K/PSP/V5

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LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 15WT8/50K/PSP/V5

Lamp flux(lm): -1.0

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 110.2000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

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Photometric Results

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Lumens(lm): 12479.97

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 113.25

Central intensity(cd): 4330.902

Maximum intensity(cd): 4330.902

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=108.4

[C90/270]Total=102.6

Field angle(10%Imax): [C0/180]Total=164.0

[C90/270]Total=153.4

Maximum s/h(1/2): C0\_180=1.24 C90\_270=1.20

Maximum s/h(1/4): C0\_180=1.36 C90\_270=1.30

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 7.32%

Down flux rate of LUM(%): 92.68%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 73.360%

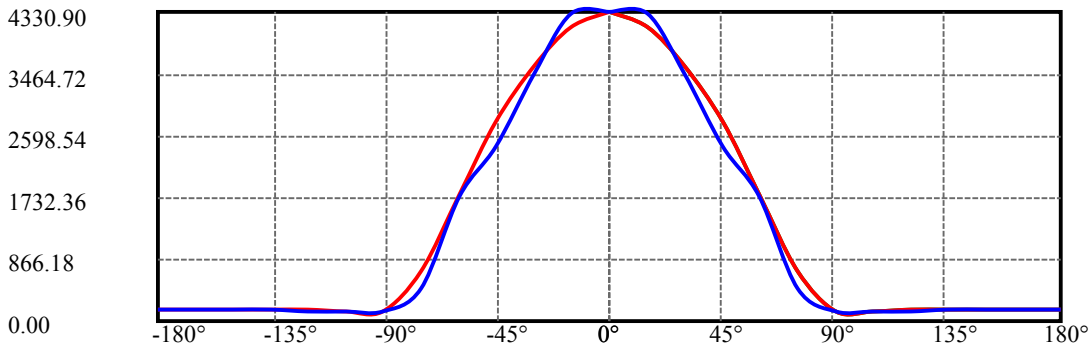
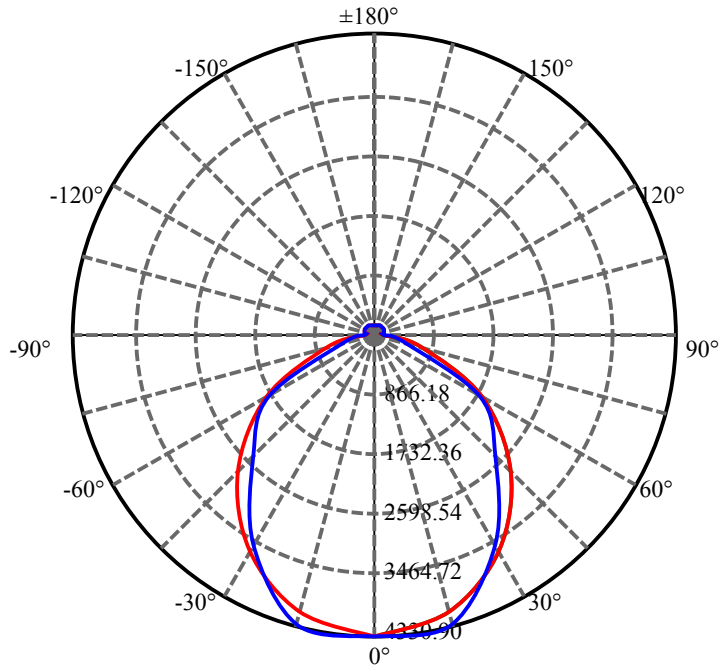
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4328.156	0.000	0	.000%	.000%
15.0	4172.961	910.021	910.021	.000%	7.292%
30.0	3546.085	2422.595	3332.616	.000%	26.704%
45.0	2564.671	3050.841	6383.457	.000%	51.150%
60.0	1695.424	2771.810	9155.267	.000%	73.360%
75.0	641.349	1770.555	10925.821	.000%	87.547%
90.0	145.891	640.108	11565.929	.000%	92.676%
105.0	141.155	233.399	11799.328	.000%	94.546%
120.0	144.988	216.809	12016.137	.000%	96.283%
135.0	148.432	190.912	12207.049	.000%	97.813%
150.0	148.431	148.211	12355.26	.000%	99.001%
165.0	147.983	93.028	12448.289	.000%	99.746%
180.0	147.981	31.682	12479.971	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3332.62	N.A.	26.70%
0-40	3332.62	N.A.	26.70%
0-60	9155.27	N.A.	73.36%
0-90	11565.93	N.A.	92.68%
0-120	12016.14	N.A.	96.28%
0-180	12479.97	N.A.	100.00%
60-90	5182.47	N.A.	41.53%
90-120	1090.32	N.A.	8.74%
90-130	1090.32	N.A.	8.74%
90-150	1429.44	N.A.	11.45%
90-180	1522.47	N.A.	12.20%
0-67.02	9983.98	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	910.02
20-30	2422.60
30-40	0.00
40-50	3050.84
50-60	2771.81
60-70	0.00
70-80	1770.55
80-90	640.11
90-100	0.00
100-110	233.40
110-120	216.81
120-130	0.00
130-140	190.91
140-150	148.21
150-160	0.00
160-170	93.03
170-180	0.00



C0(Max): —————

C0/C180: —————

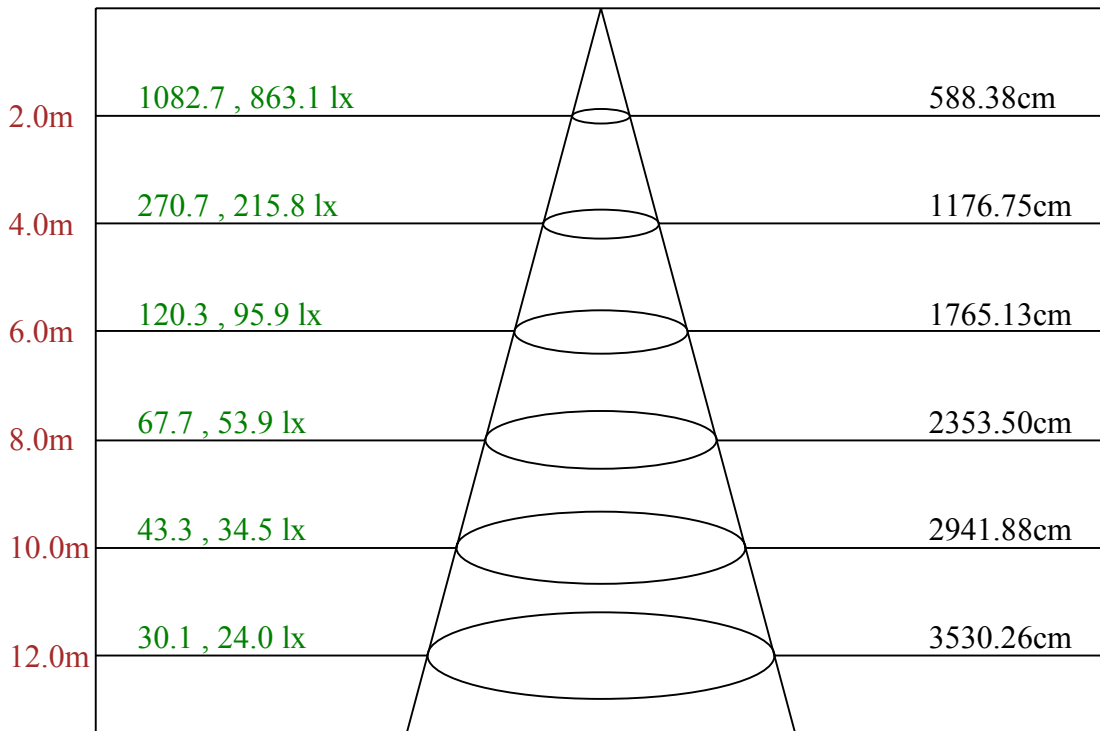
C90/C270: —————

Field angle(10%Imax):C0/180Left:82.0 Right:82.0

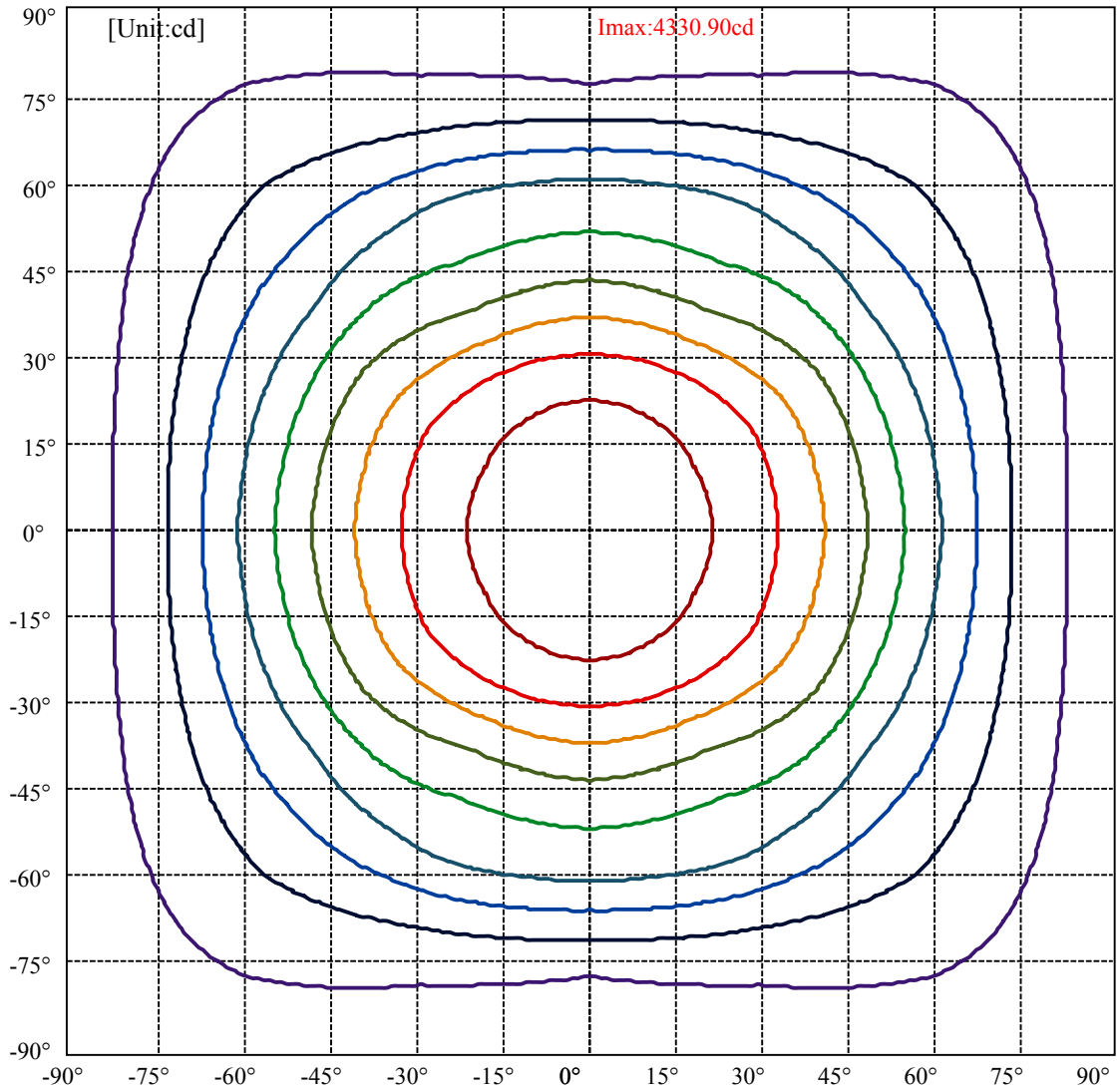
:C90/270Left:76.7 Right:76.7










Beam Angle(50%Imax):C0/180Left:54.2 Right:54.2

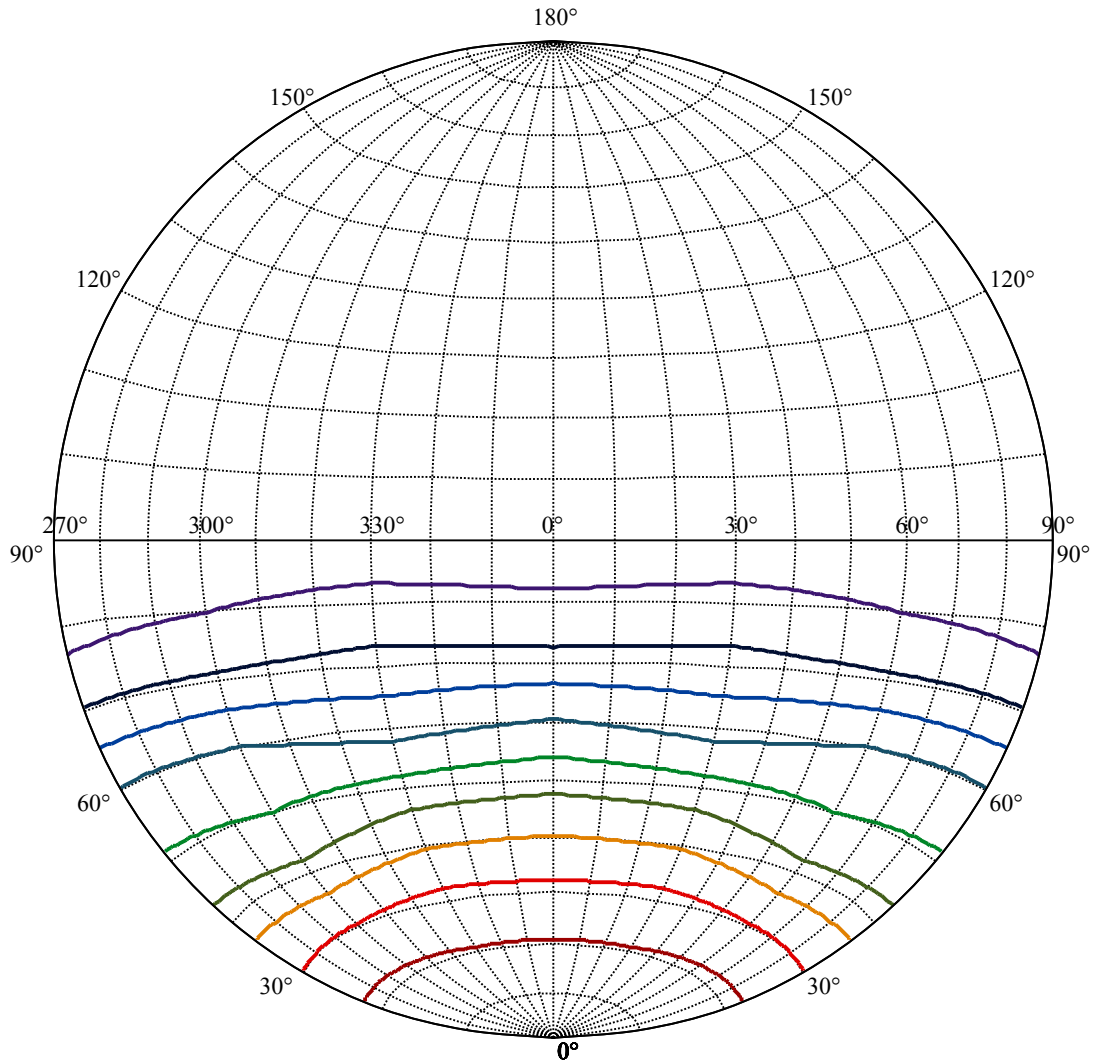
:C90/270Left:51.3 Right:51.3



Max , Ave      Beam angle of C0 plane 111.58



(10%Imax) 433.09	
(20%Imax) 866.18	
(30%Imax) 1299.27	
(40%Imax) 1732.36	
(50%Imax) 2165.45	
(60%Imax) 2598.54	
(70%Imax) 3031.63	
(80%Imax) 3464.72	
(90%Imax) 3897.81	



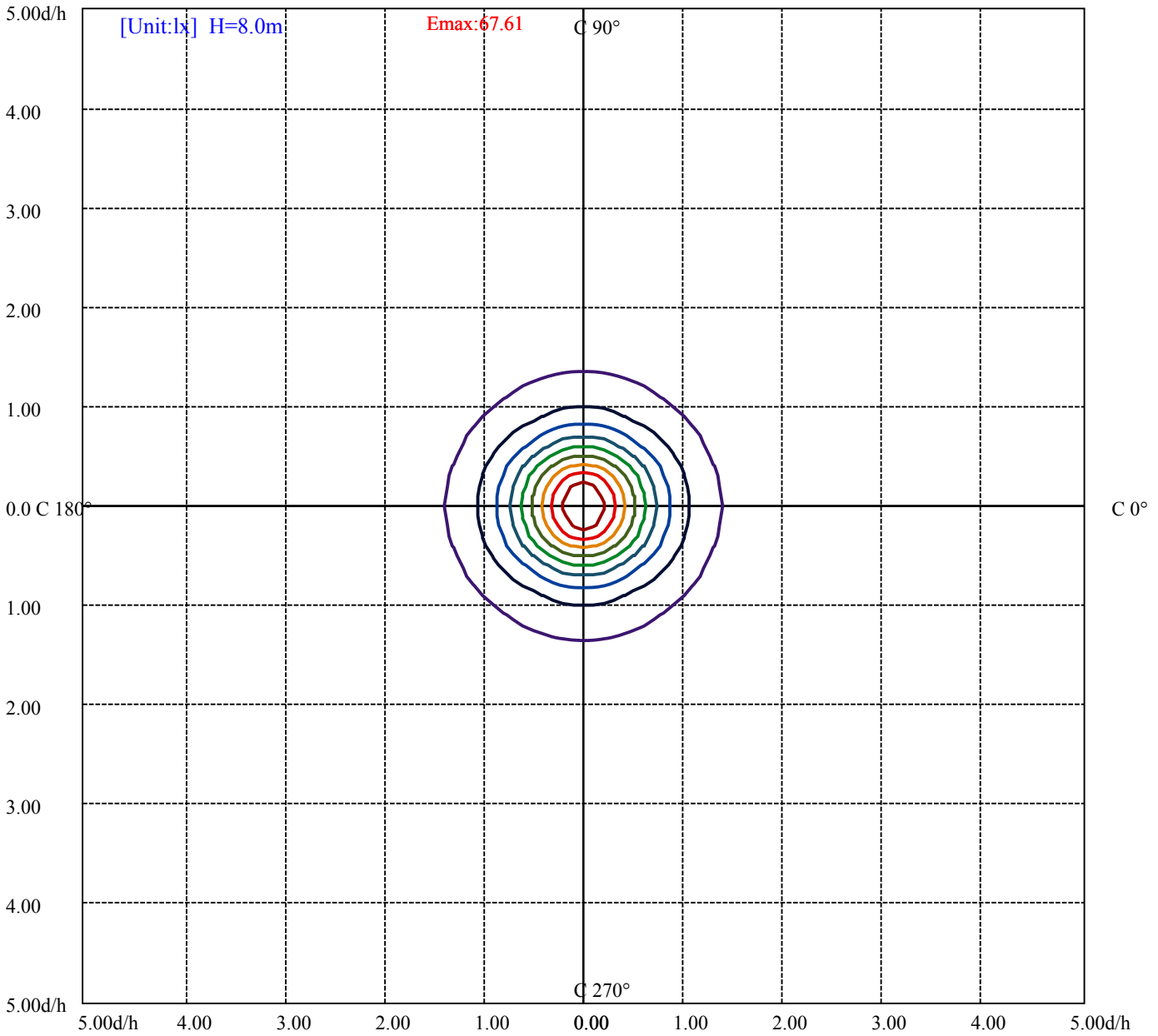
House

[Unit:cd]

Road

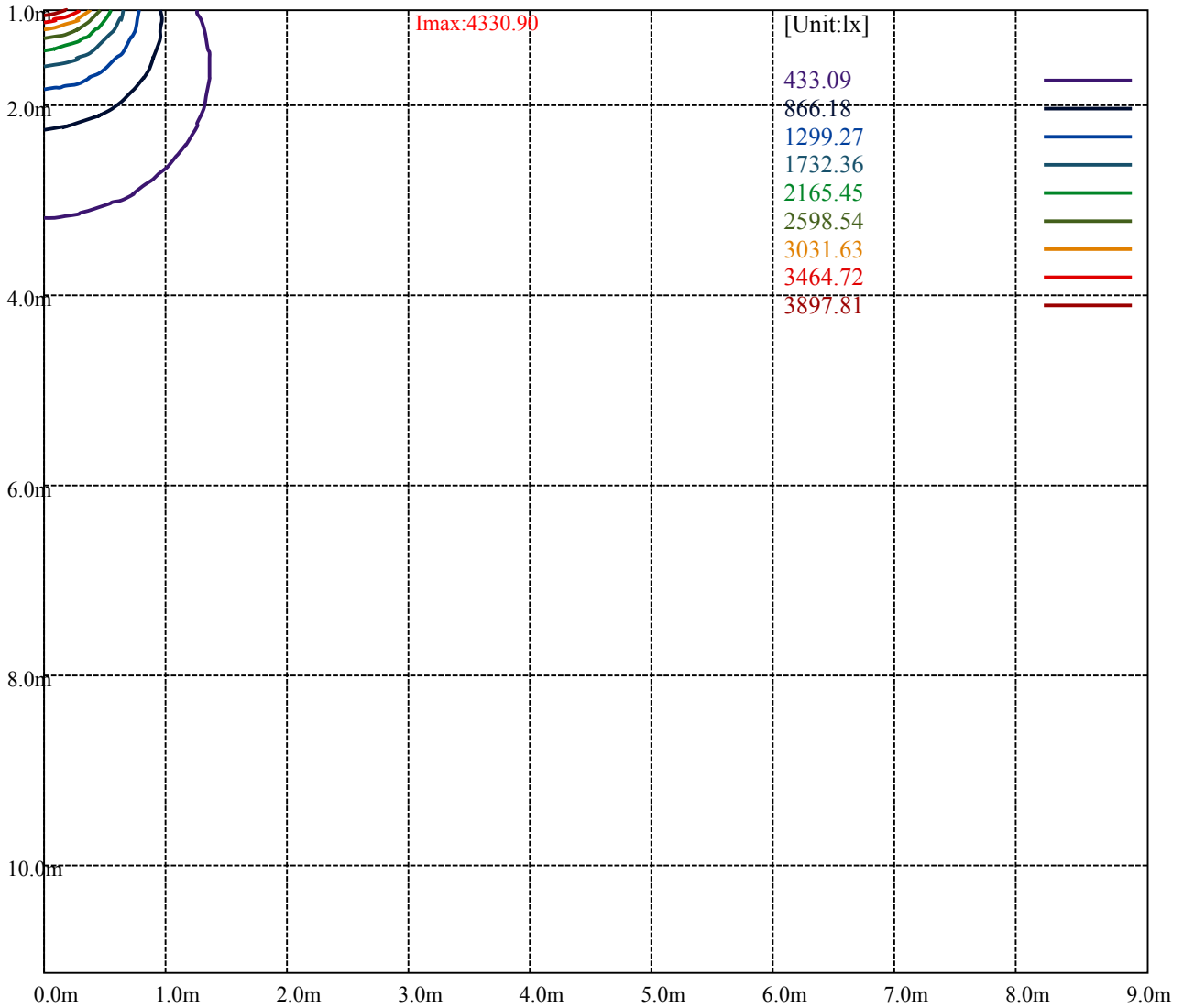
I<sub>max</sub>:4330.90

(10%I <sub>max</sub> ) 433.342	—
(20%I <sub>max</sub> ) 866.684	—
(30%I <sub>max</sub> ) 1300.03	—
(40%I <sub>max</sub> ) 1733.37	—
(50%I <sub>max</sub> ) 2166.71	—
(60%I <sub>max</sub> ) 2600.05	—
(70%I <sub>max</sub> ) 3033.39	—
(80%I <sub>max</sub> ) 3466.74	—
(90%I <sub>max</sub> ) 3900.08	—



- (10%Emax) 6.761297
- (20%Emax) 13.52258
- (30%Emax) 20.28391
- (40%Emax) 27.04516
- (50%Emax) 33.80641
- (60%Emax) 40.56781
- (70%Emax) 47.32906
- (80%Emax) 54.09031
- (90%Emax) 60.85156





Luminance Table

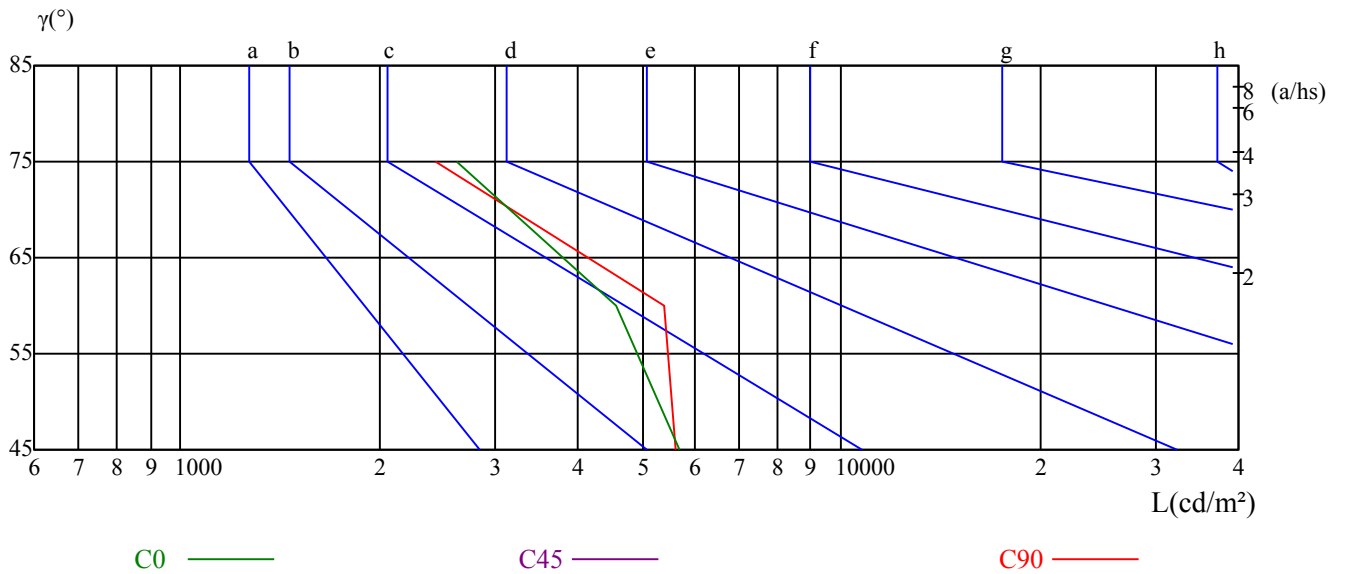
$\gamma$	45	50	55	60	65	70	75	80	85
C0	5712	0	0	4554	0	0	2613	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5634	0	0	5381	0	0	2428	0	0

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	4667	3183	0	0	0	0

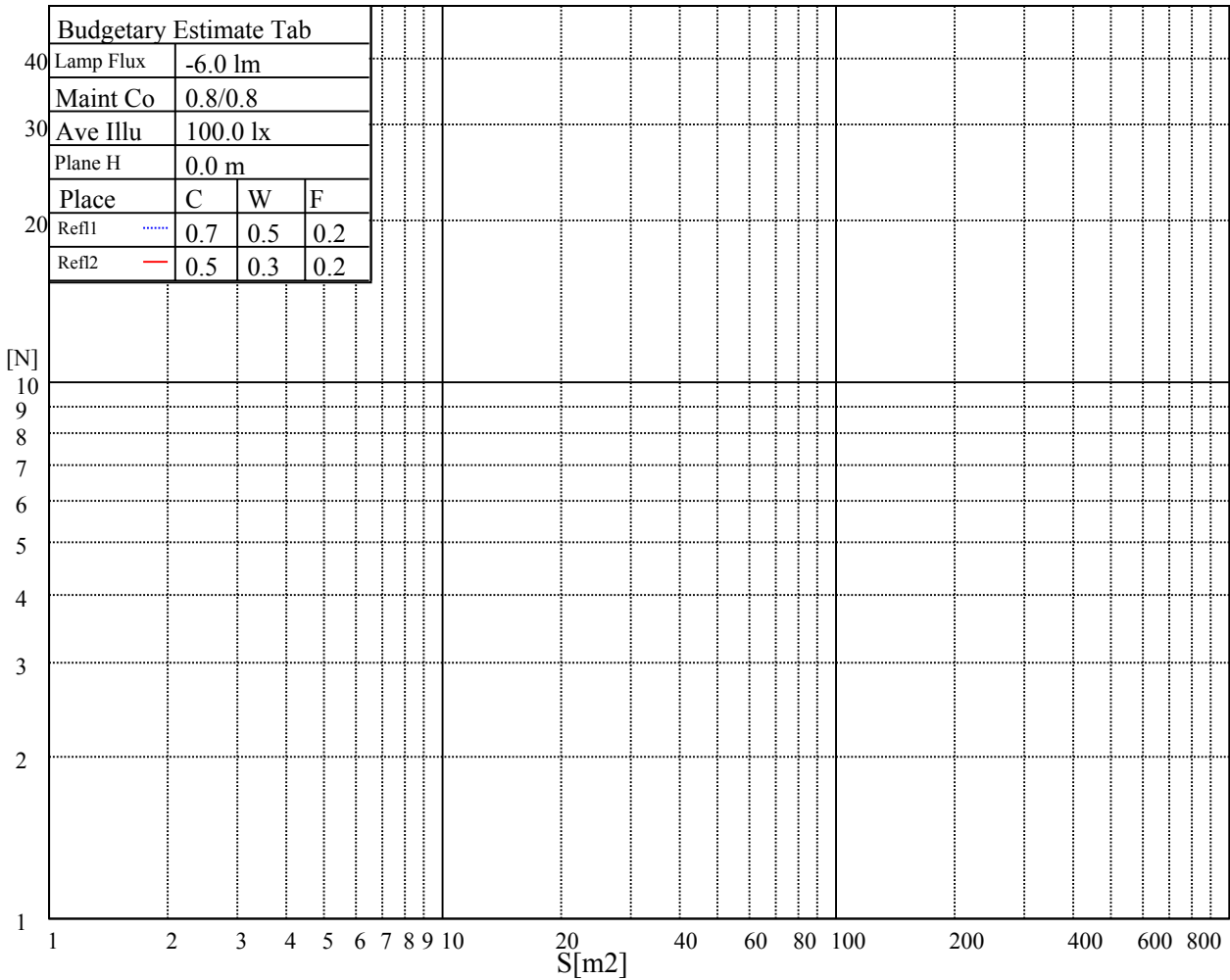
Glare Table

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

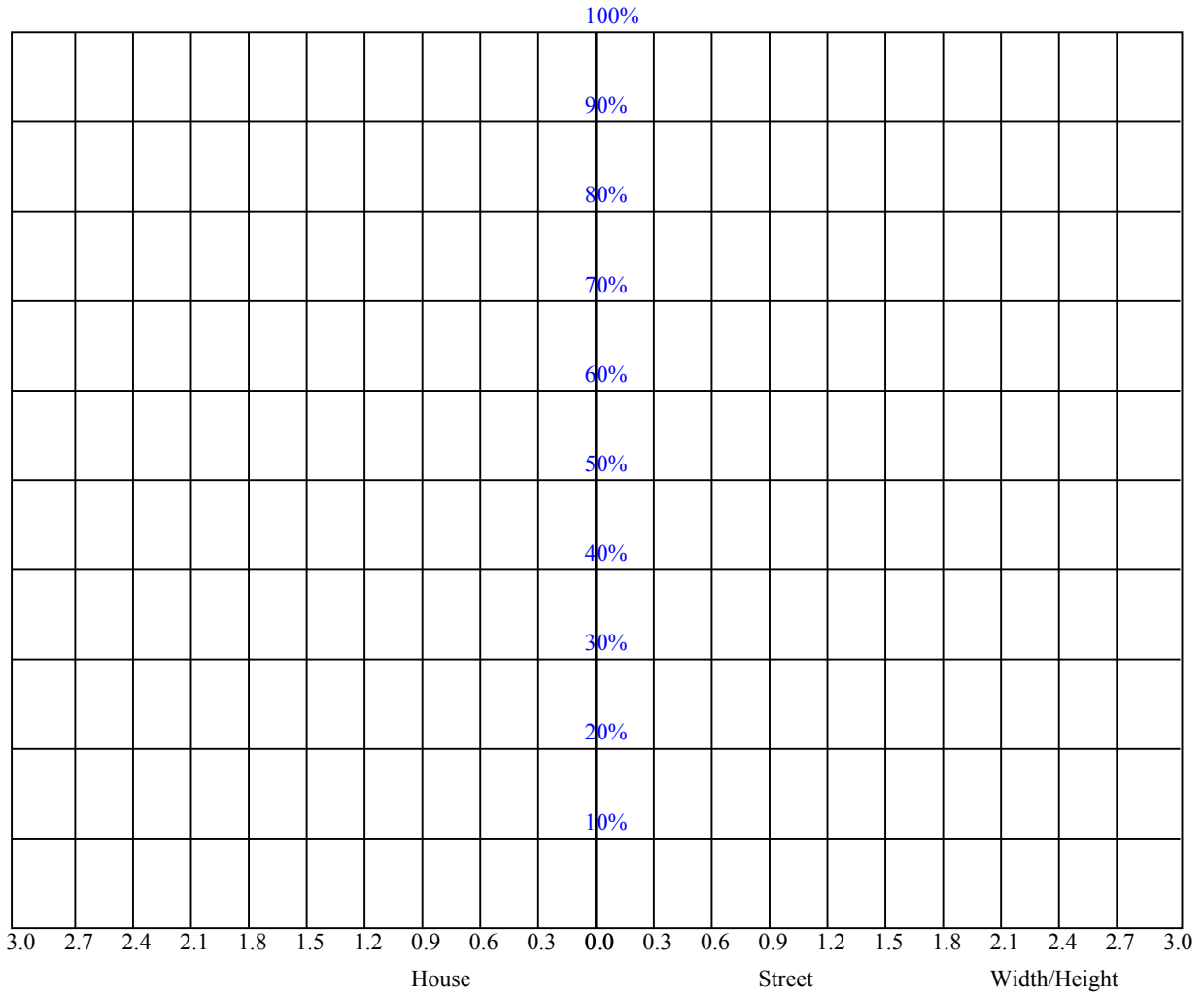
Luminance Limiting Curve



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	8.57	10.03	9.04	10.49	10.98	8.34	9.80	8.81	10.26	10.74
	3H	9.92	11.25	10.41	11.71	12.24	9.78	11.11	10.27	11.58	12.10
	4H	10.22	11.47	10.73	11.95	12.49	10.26	11.51	10.77	11.99	12.54
	6H	10.48	11.63	11.00	12.13	12.69	10.65	11.81	11.17	12.31	12.86
	8H	10.60	11.70	11.13	12.23	12.78	10.80	11.91	11.33	12.43	12.98
	12H	10.81	11.87	11.35	12.39	12.98	11.02	12.08	11.56	12.59	13.18
4H	2H	8.99	10.24	9.50	10.73	11.27	8.80	10.05	9.31	10.54	11.08
	3H	10.53	11.58	11.05	12.10	12.67	10.48	11.53	11.00	12.06	12.62
	4H	10.91	11.86	11.45	12.40	13.00	11.10	12.05	11.64	12.59	13.19
	6H	11.17	12.02	11.75	12.59	13.20	11.50	12.36	12.08	12.92	13.54
	8H	11.37	12.15	11.94	12.72	13.34	11.74	12.52	12.31	13.09	13.71
	12H	11.62	12.33	12.21	12.92	13.55	11.99	12.69	12.58	13.29	13.92
8H	4H	11.12	11.90	11.69	12.47	13.09	11.30	12.08	11.87	12.65	13.27
	6H	11.53	12.73	12.13	12.79	13.42	11.90	13.10	12.50	13.16	13.79
	8H	11.79	12.38	12.40	13.00	13.64	12.21	12.80	12.83	13.42	14.07
	12H	12.42	12.94	13.03	13.99	14.26	12.74	13.26	13.35	14.31	14.58
12H	4H	11.15	11.86	11.74	12.45	13.08	11.31	12.01	11.90	12.61	13.24
	6H	12.52	12.20	12.23	12.78	13.47	12.86	12.54	12.57	13.12	13.81
	8H	11.91	12.44	12.53	13.04	13.75	12.32	12.84	12.94	13.45	14.16
Variation with the observer position at spacings:											
S = 1.0H	0.3/-0.4					0.3/-0.5					
S = 1.5H	0.7/-0.7					0.6/-0.7					
S = 2.0H	0.9/-0.9					0.8/-0.8					
Standard tables:	BK3					BK4					
Uncorrected UGR	2.8					3.5					



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	4330.90	4132.27	3621.94	2831.39	1840.56	757.34	147.53	138.68	148.28
30.0	4330.90	4122.45	3512.04	2584.76	1543.69	806.51	147.53	138.68	148.28
60.0	4323.56	4279.50	3423.00	2347.98	1781.19	639.31	157.37	148.58	148.28
90.0	4330.90	4308.95	3402.67	2414.22	1709.00	457.25	147.53	138.68	148.28
120.0	4324.82	4289.32	3420.37	2288.79	1711.92	531.12	147.53	138.68	138.40
150.0	4323.56	4112.64	3759.35	2634.08	1523.90	786.84	147.53	138.68	138.40
180.0	4330.90	4093.01	3543.41	2742.60	1702.02	619.64	137.70	138.68	148.28
210.0	4330.90	4043.93	3443.33	2649.58	1593.17	747.50	137.70	138.68	148.28
240.0	4323.56	4151.90	3536.23	2417.04	1731.71	481.94	137.70	138.68	138.40
270.0	4330.90	4296.68	3543.41	2505.83	1800.98	481.94	147.53	138.68	138.40
300.0	4333.42	4181.34	3637.01	2439.59	1774.20	599.97	147.53	148.58	148.28
330.0	4323.56	4063.56	3710.28	2920.18	1632.75	786.84	147.53	148.58	148.28
360.0	4330.90	4132.27	3621.94	2831.39	1840.56	757.34	147.53	138.68	148.28
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	148.43	148.43	147.98	147.98					
30.0	148.43	148.43	147.98	147.98					
60.0	148.43	148.43	147.98	147.98					
90.0	148.43	148.43	147.98	147.98					
120.0	148.43	148.43	147.98	147.98					
150.0	148.43	148.43	147.98	147.98					
180.0	148.43	148.43	147.98	147.98					
210.0	148.43	148.43	147.98	147.98					
240.0	148.43	148.43	147.98	147.98					
270.0	148.43	148.43	147.98	147.98					
300.0	148.43	148.43	147.98	147.98					
330.0	148.43	148.43	147.98	147.98					
360.0	148.43	148.43	147.98	147.98					