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PQL 91309 LED SMD 4'15WT8/35K/PSP/V5

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LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 15WT8/35K/PSP/V5

Lamp flux(lm): -1.0

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 109.2000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

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Photometric Results

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Lumens(lm): 11519.97

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 105.49

Central intensity(cd): 3997.756

Maximum intensity(cd): 3997.756

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%

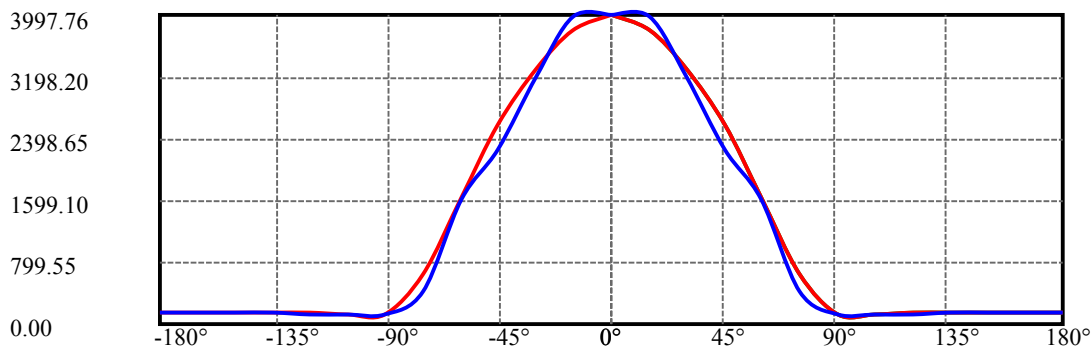
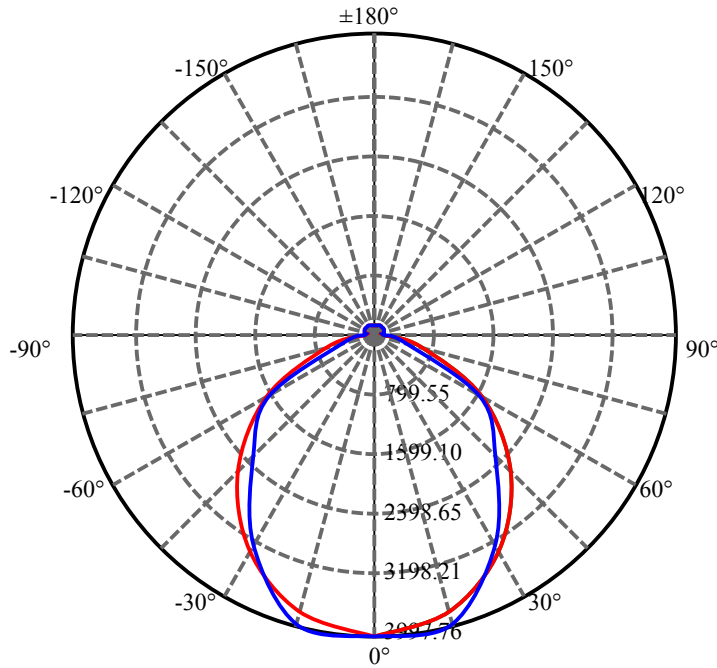
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3995.221	0.000	0	.000%	.000%
15.0	3851.964	840.019	840.019	.000%	7.292%
30.0	3273.309	2236.242	3076.261	.000%	26.704%
45.0	2367.388	2816.161	5892.421	.000%	51.150%
60.0	1565.007	2558.593	8451.015	.000%	73.360%
75.0	592.014	1634.358	10085.373	.000%	87.547%
90.0	134.669	590.869	10676.242	.000%	92.676%
105.0	130.297	215.445	10891.687	.000%	94.546%
120.0	133.835	200.131	11091.818	.000%	96.283%
135.0	137.014	176.227	11268.045	.000%	97.813%
150.0	137.013	136.810	11404.855	.000%	99.001%
165.0	136.599	85.872	11490.727	.000%	99.746%
180.0	136.597	29.245	11519.972	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3076.26	N.A.	26.70%
0-40	3076.26	N.A.	26.70%
0-60	8451.01	N.A.	73.36%
0-90	10676.24	N.A.	92.68%
0-120	11091.82	N.A.	96.28%
0-180	11519.97	N.A.	100.00%
60-90	4783.82	N.A.	41.53%
90-120	1006.45	N.A.	8.74%
90-130	1006.45	N.A.	8.74%
90-150	1319.48	N.A.	11.45%
90-180	1405.35	N.A.	12.20%
0-67.02	9215.98	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	840.02
20-30	2236.24
30-40	0.00
40-50	2816.16
50-60	2558.59
60-70	0.00
70-80	1634.36
80-90	590.87
90-100	0.00
100-110	215.44
110-120	200.13
120-130	0.00
130-140	176.23
140-150	136.81
150-160	0.00
160-170	85.87
170-180	0.00



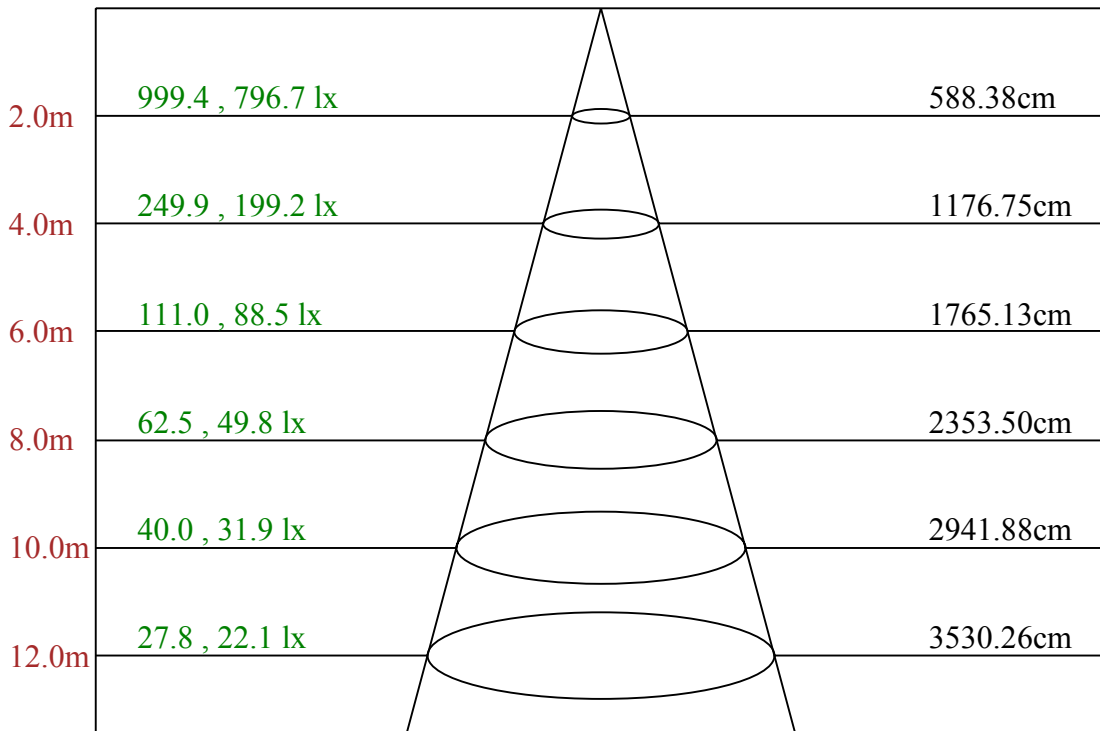
C0(Max): ———

C0/C180: ———

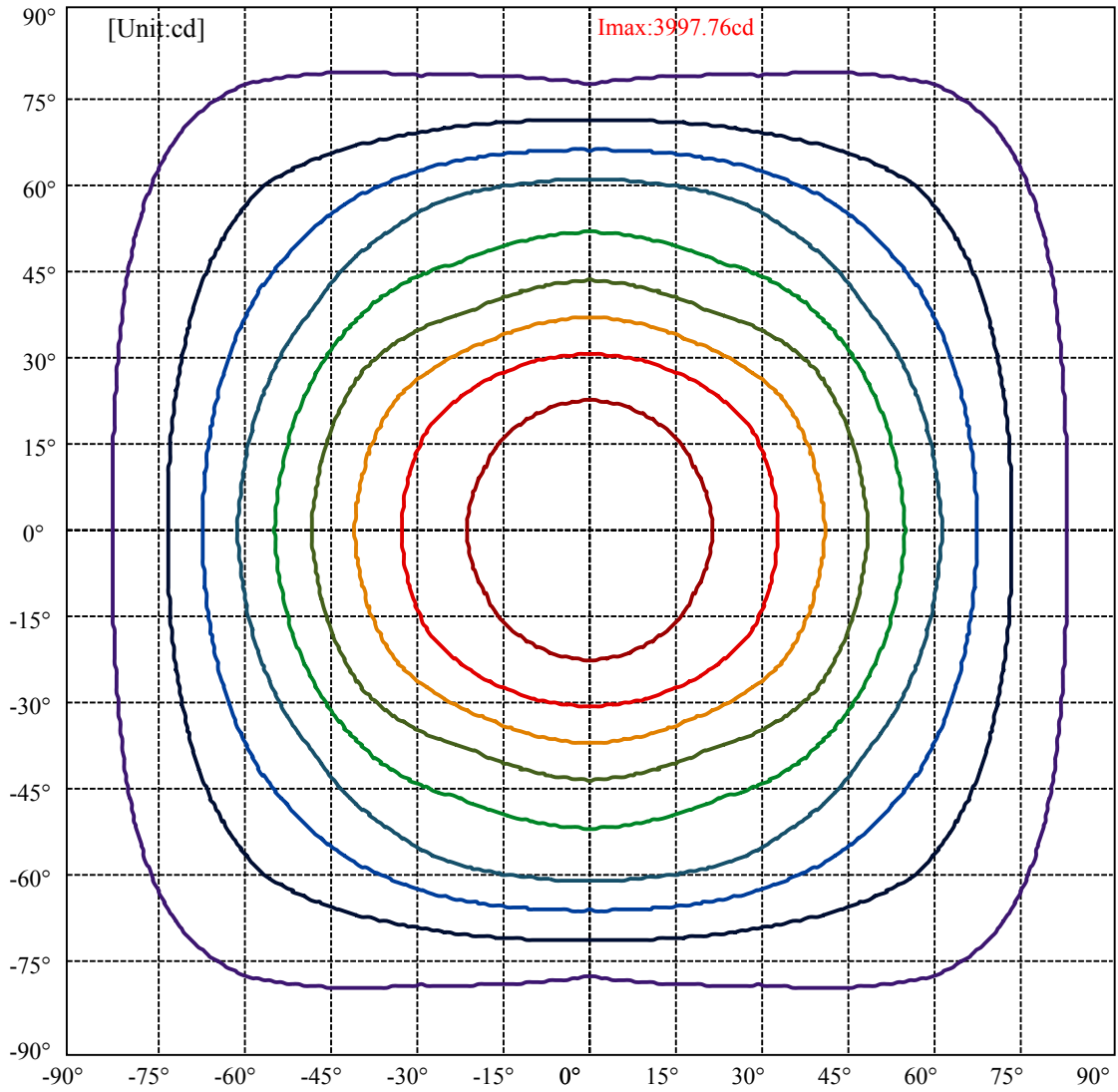
C90/C270: ———

Field angle(10%Imax):C0/180Left:82.0 Right:82.0  
:C90/270Left:76.7 Right:76.7

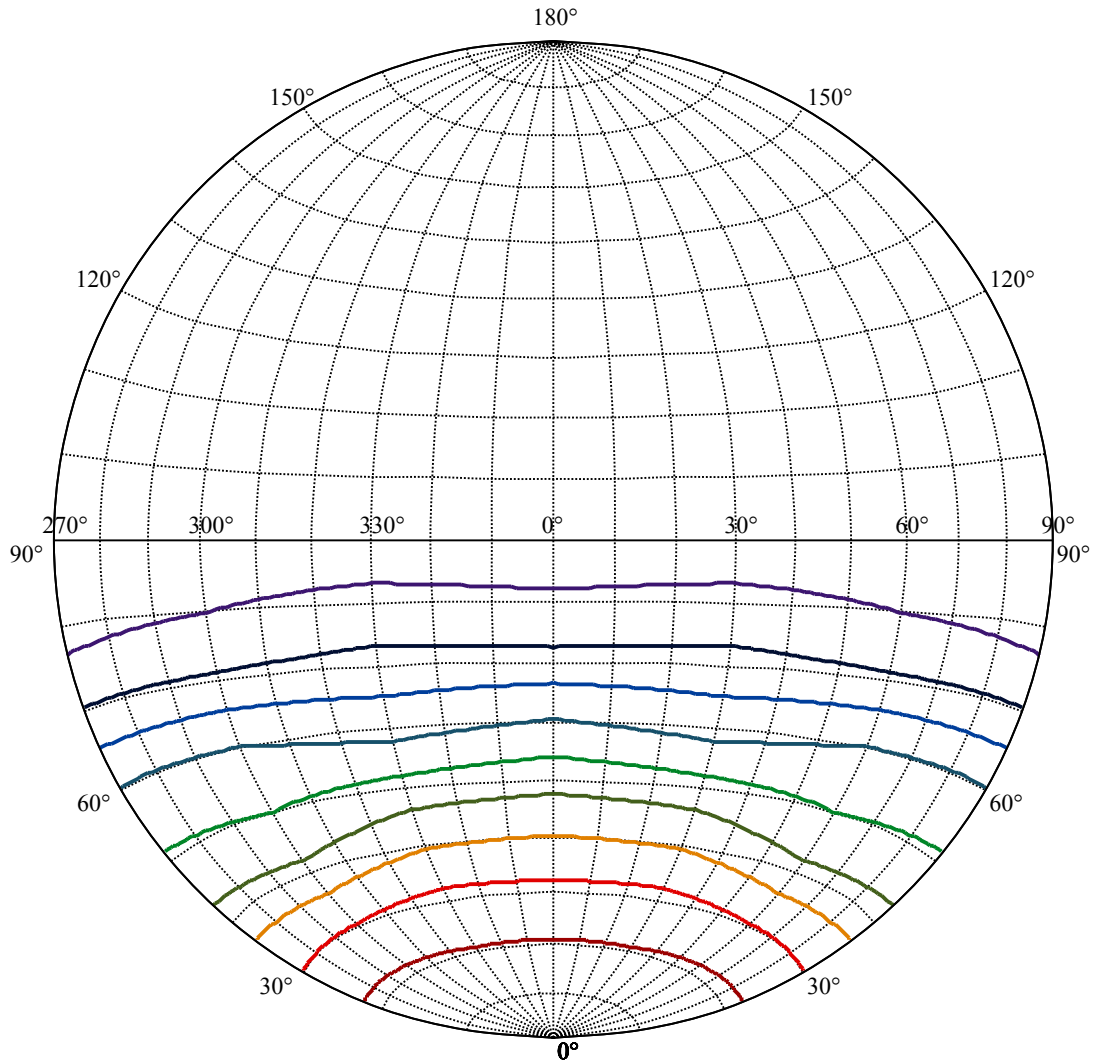
Beam Angle(50%Imax):C0/180Left:54.2 Right:54.2  
:C90/270Left:51.3 Right:51.3



Max , Ave      Beam angle of C0 plane 111.58



(10%Imax) 399.776	—
(20%Imax) 799.551	—
(30%Imax) 1199.33	—
(40%Imax) 1599.1	—
(50%Imax) 1998.88	—
(60%Imax) 2398.65	—
(70%Imax) 2798.43	—
(80%Imax) 3198.2	—
(90%Imax) 3597.98	—



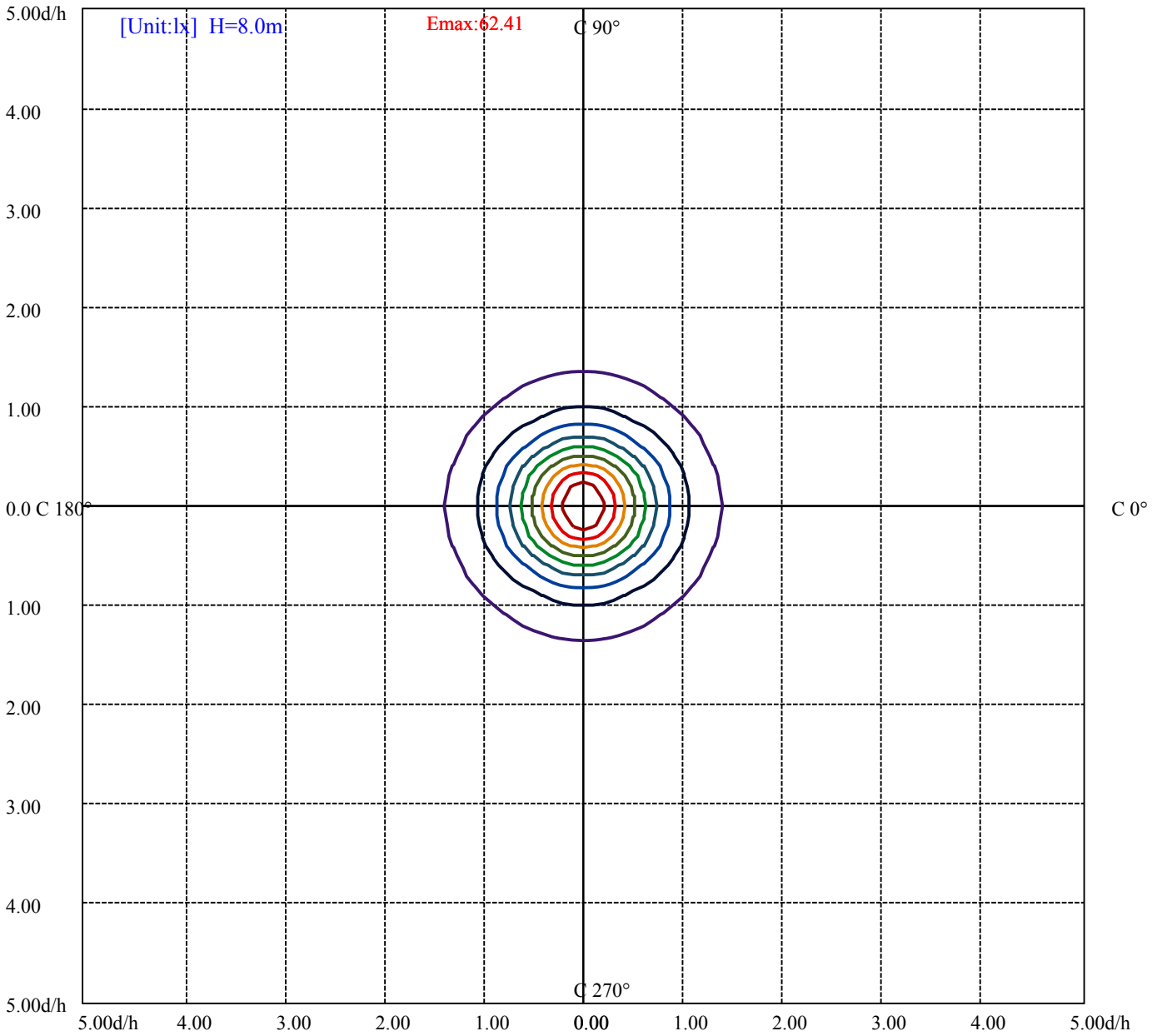
House

[Unit:cd]

Road

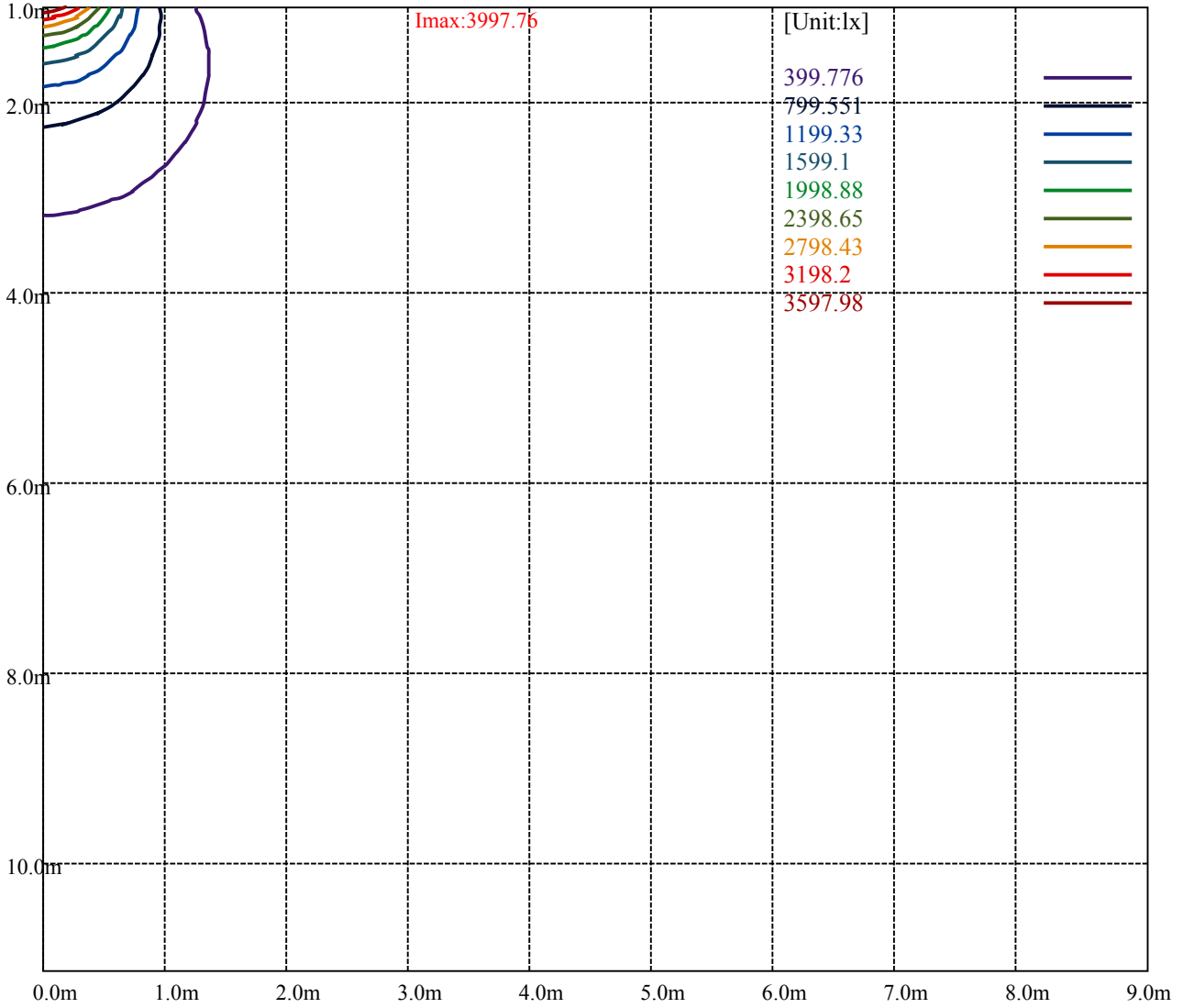
**I<sub>max</sub>:3997.76**

(10%I <sub>max</sub> ) 400.008	—
(20%I <sub>max</sub> ) 800.016	—
(30%I <sub>max</sub> ) 1200.02	—
(40%I <sub>max</sub> ) 1600.03	—
(50%I <sub>max</sub> ) 2000.04	—
(60%I <sub>max</sub> ) 2400.05	—
(70%I <sub>max</sub> ) 2800.06	—
(80%I <sub>max</sub> ) 3200.06	—
(90%I <sub>max</sub> ) 3600.07	—



(10%Emax) 6.241188	—
(20%Emax) 12.48239	—
(30%Emax) 18.72359	—
(40%Emax) 24.96484	—
(50%Emax) 31.20594	—
(60%Emax) 37.44719	—
(70%Emax) 43.68828	—
(80%Emax) 49.92953	—
(90%Emax) 56.17078	—





Luminance Table

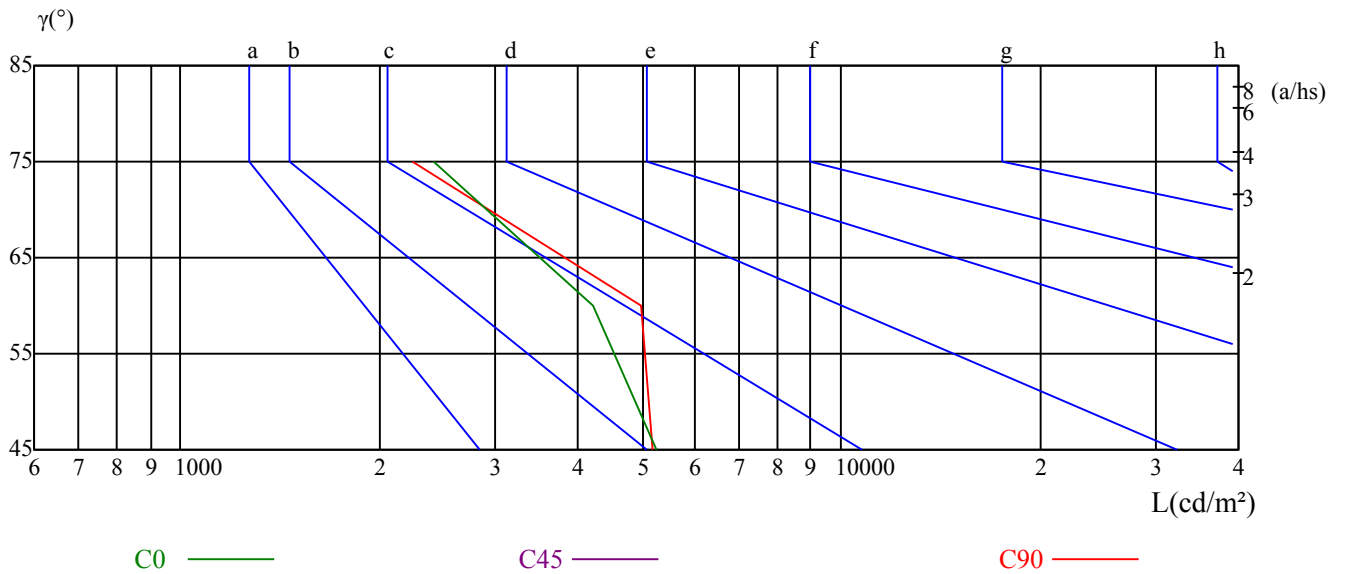
$\gamma$	45	50	55	60	65	70	75	80	85
C0	5273	0	0	4204	0	0	2412	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5201	0	0	4967	0	0	2241	0	0

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	4308	2938	0	0	0	0

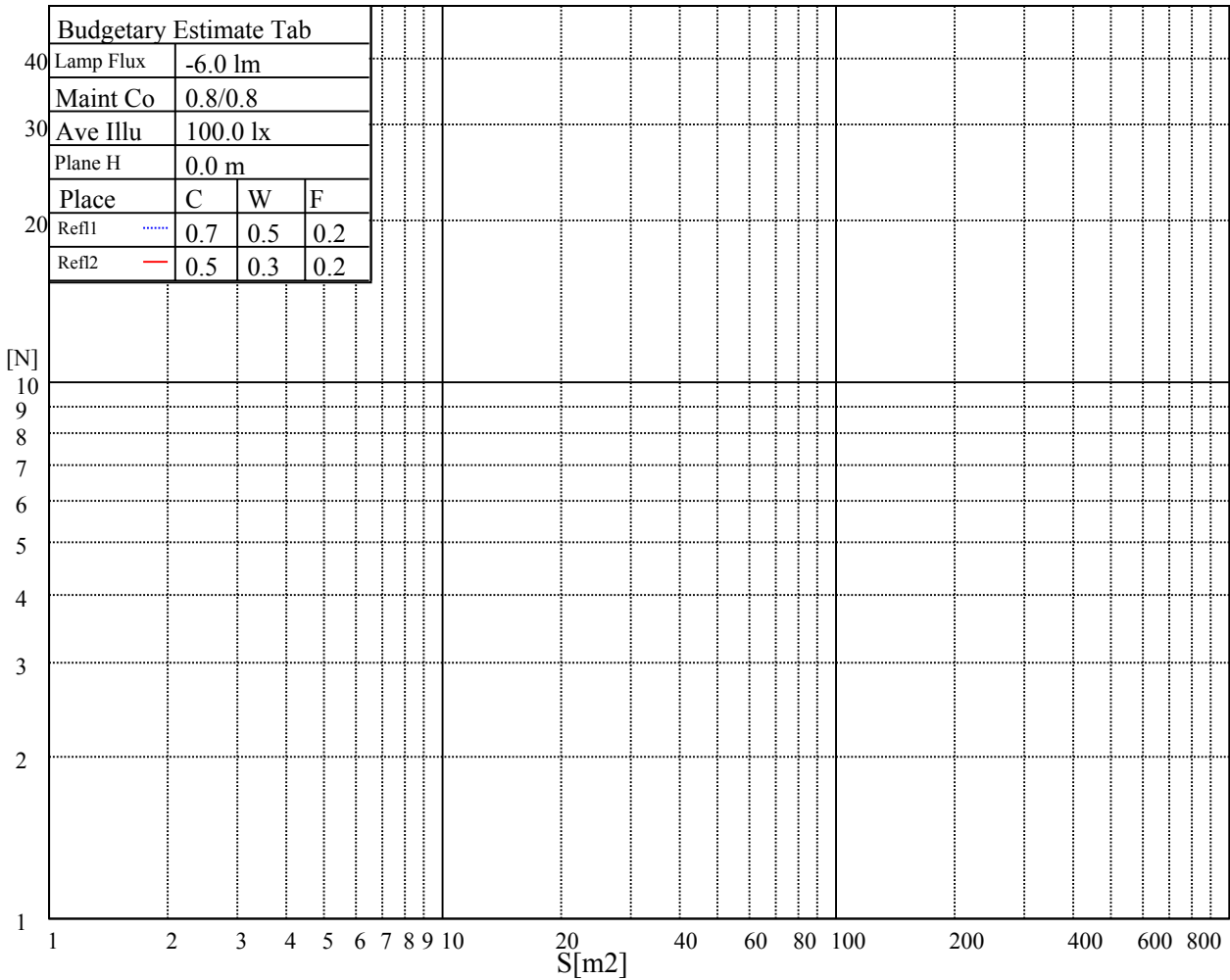
Glare Table

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

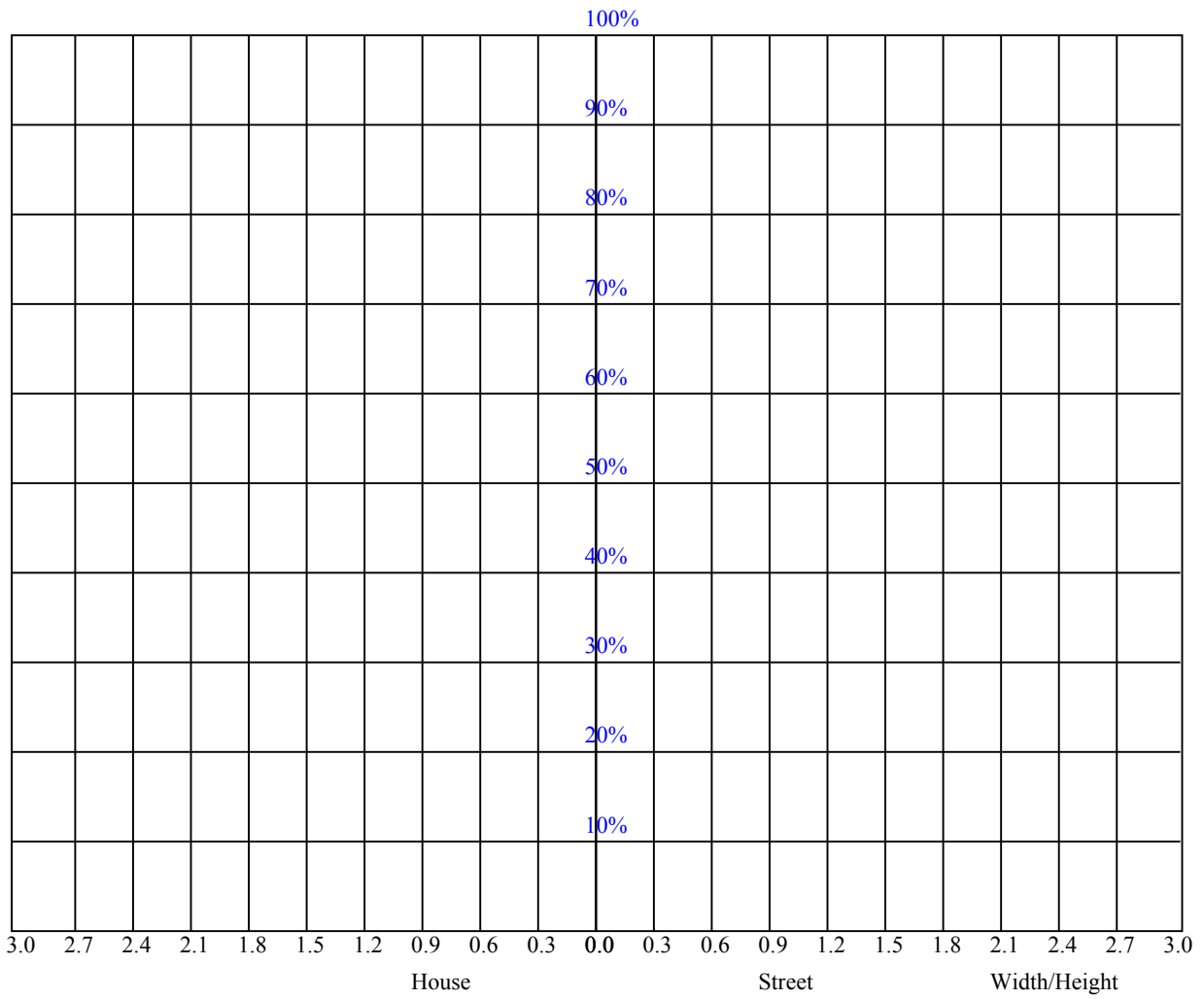
Luminance Limiting Curve



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	2.5					3.2					



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	3997.76	3814.40	3343.33	2613.59	1698.98	699.08	136.18	128.01	136.88
30.0	3997.76	3805.34	3241.88	2385.93	1424.95	744.47	136.18	128.01	136.88
60.0	3990.97	3950.31	3159.69	2167.37	1644.17	590.13	145.26	137.15	136.88
90.0	3997.76	3977.49	3140.92	2228.51	1577.54	422.07	136.18	128.01	136.88
120.0	3992.14	3959.37	3157.26	2112.73	1580.23	490.26	136.18	128.01	127.75
150.0	3990.97	3796.28	3470.17	2431.46	1406.68	726.32	136.18	128.01	127.75
180.0	3997.76	3778.16	3270.84	2531.63	1571.10	571.97	127.10	128.01	136.88
210.0	3997.76	3732.86	3178.46	2445.77	1470.62	690.00	127.10	128.01	136.88
240.0	3990.97	3832.52	3264.21	2231.12	1598.50	444.87	127.10	128.01	127.75
270.0	3997.76	3966.16	3270.84	2313.07	1662.44	444.87	136.18	128.01	127.75
300.0	4000.08	3859.70	3357.24	2251.93	1637.73	553.82	136.18	137.15	136.88
330.0	3990.97	3750.98	3424.87	2695.55	1507.16	726.32	136.18	137.15	136.88
360.0	3997.76	3814.40	3343.33	2613.59	1698.98	699.08	136.18	128.01	136.88
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	137.01	137.01	136.60	136.60					
30.0	137.01	137.01	136.60	136.60					
60.0	137.01	137.01	136.60	136.60					
90.0	137.01	137.01	136.60	136.60					
120.0	137.01	137.01	136.60	136.60					
150.0	137.01	137.01	136.60	136.60					
180.0	137.01	137.01	136.60	136.60					
210.0	137.01	137.01	136.60	136.60					
240.0	137.01	137.01	136.60	136.60					
270.0	137.01	137.01	136.60	136.60					
300.0	137.01	137.01	136.60	136.60					
330.0	137.01	137.01	136.60	136.60					
360.0	137.01	137.01	136.60	136.60					