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PQL 90421 LED SMD 4'15WT8/35K/FR/V5

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LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No: SL/BG6-172568-03

LampCAT: 15WT8/35K/FR/V5

Lamp flux(lm)

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 107.8000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

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Photometric Results

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Lumens(lm): 11404.77

Lumens(lm)/Power(W): 105.80

Central intensity(cd): 3957.778

Maximum intensity(cd): 3957.778

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 LUM(%): 7.32%

Down flux rate of LUM(%): 92.68%

CIE Type : Direct lighting

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

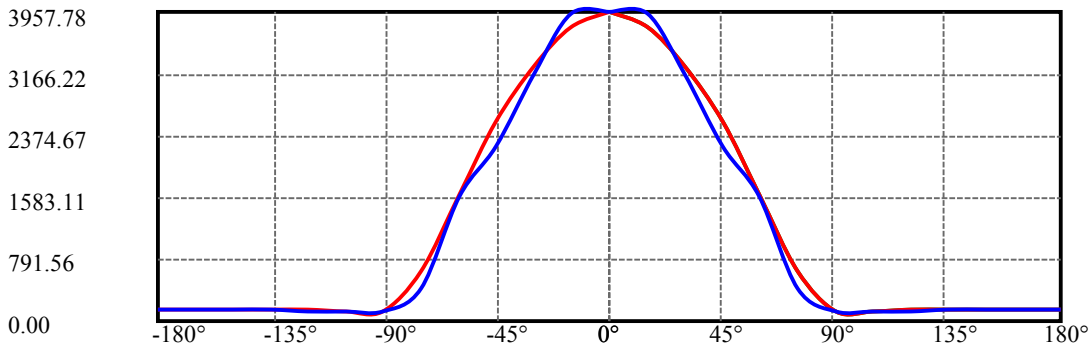
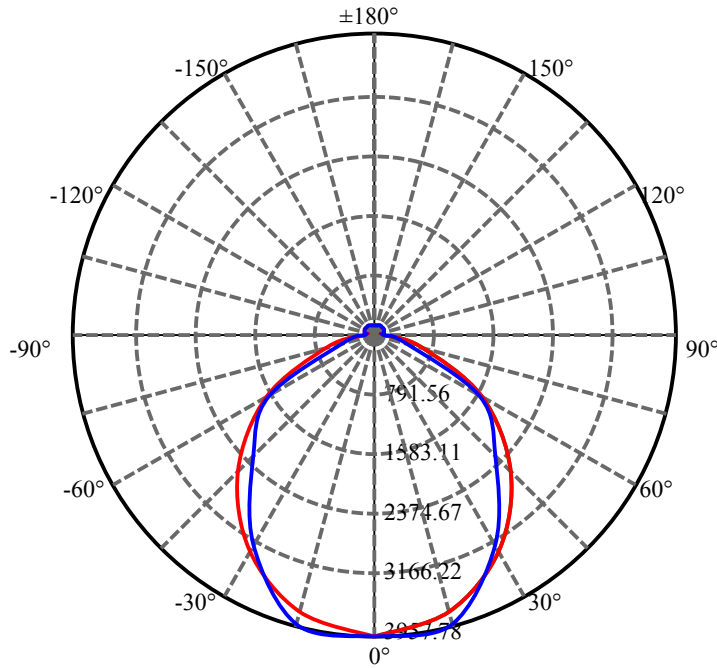
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3955.268	0.000	0	.000%	.000%
15.0	3813.444	831.619	831.619	7.292%	7.292%
30.0	3240.576	2213.879	3045.498	19.412%	26.704%
45.0	2343.714	2787.999	5833.497	24.446%	51.150%
60.0	1549.357	2533.008	8366.505	22.210%	73.360%
75.0	586.094	1618.015	9984.519	14.187%	87.547%
90.0	133.322	584.960	10569.48	5.129%	92.676%
105.0	128.994	213.290	10782.77	1.870%	94.546%
120.0	132.497	198.129	10980.899	1.737%	96.283%
135.0	135.644	174.464	11155.364	1.530%	97.813%
150.0	135.643	135.442	11290.806	1.188%	99.001%
165.0	135.233	85.013	11375.819	.745%	99.746%
180.0	135.231	28.952	11404.772	.254%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	3045.50	26.70%
0-40	3045.50	26.70%
0-60	8366.50	73.36%
0-90	10569.48	92.68%
0-120	10980.90	96.28%
0-180	11404.77	100.00%
60-90	4735.98	41.53%
90-120	996.38	8.74%
90-130	996.38	8.74%
90-150	1306.29	11.45%
90-180	1391.30	12.20%
0-67.02	9123.82	80.00%

## ZONAL LUMEN SUMMARY

0-10	0.00
10-20	831.62
20-30	2213.88
30-40	0.00
40-50	2788.00
50-60	2533.01
60-70	0.00
70-80	1618.01
80-90	584.96
90-100	0.00
100-110	213.29
110-120	198.13
120-130	0.00
130-140	174.46
140-150	135.44
150-160	0.00
160-170	85.01
170-180	0.00



C0(Max): ———

C0/C180: ———

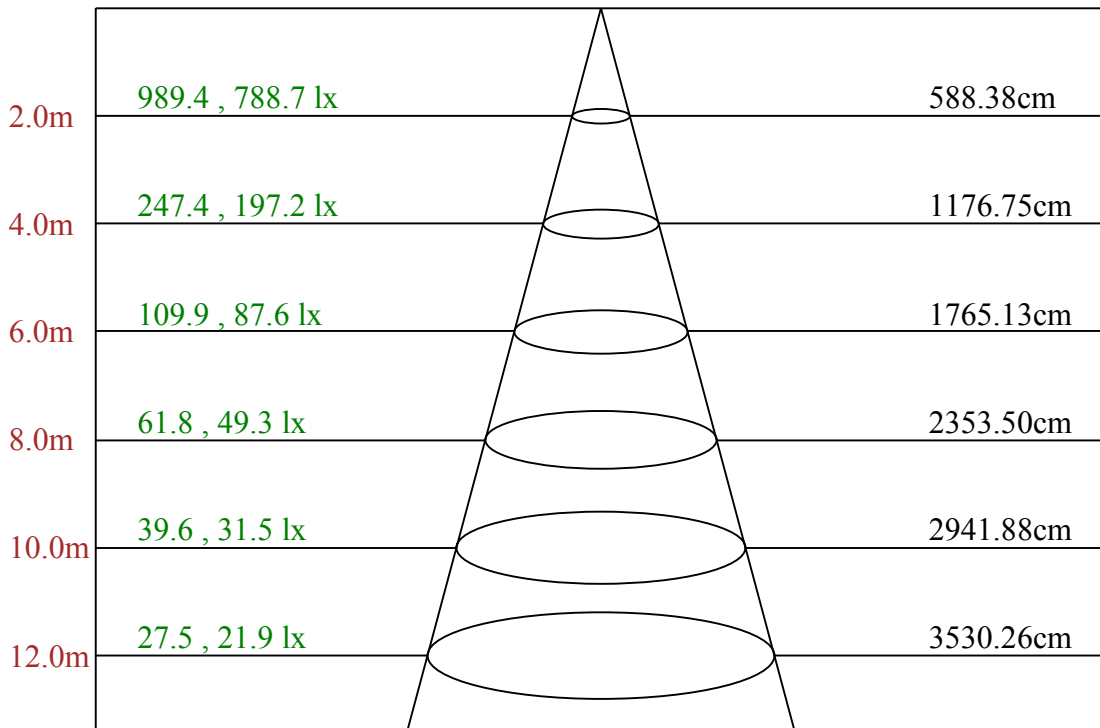
C90/C270: ———

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

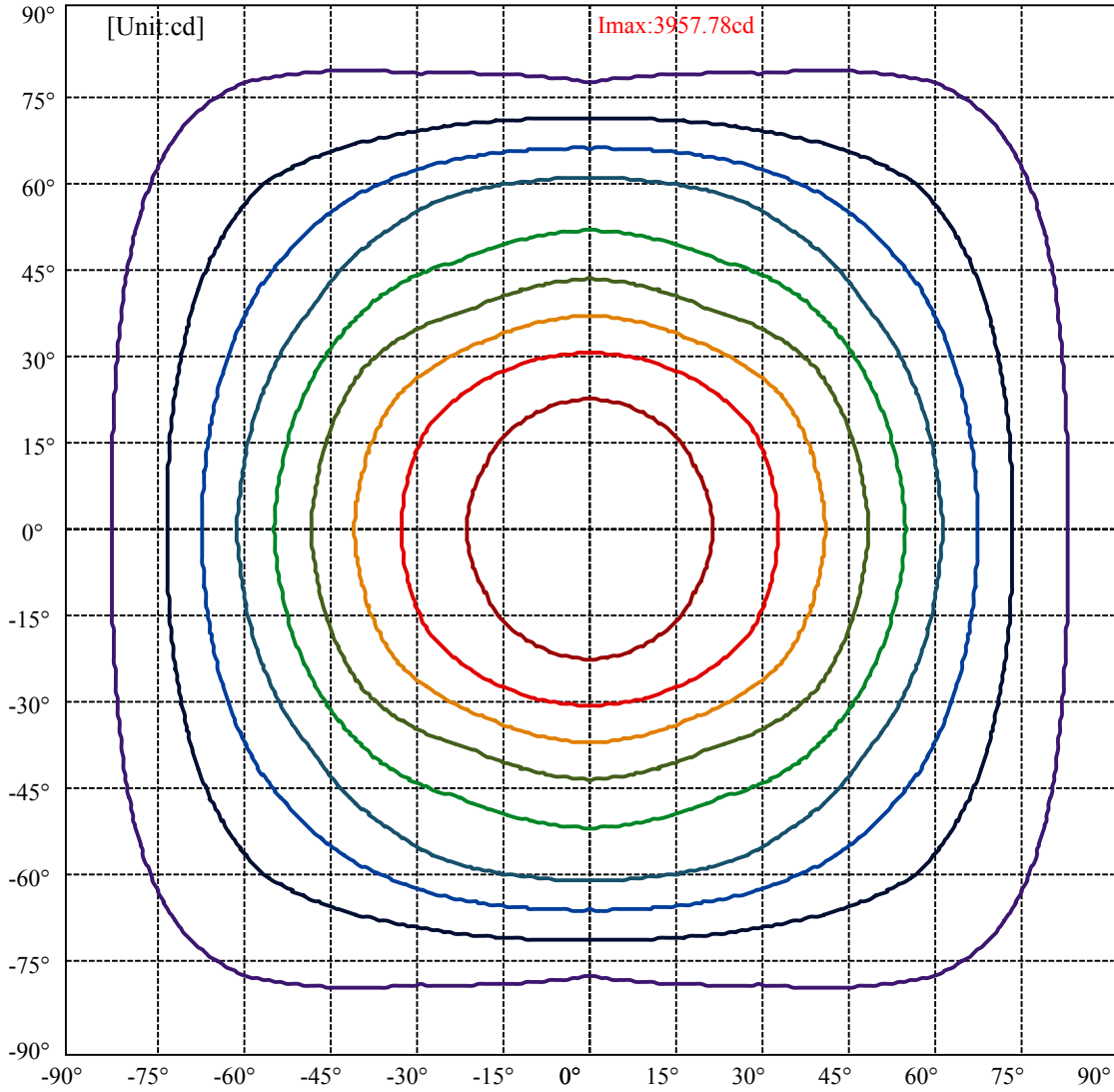
:C90/270Left:76.7 Right:76.7










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

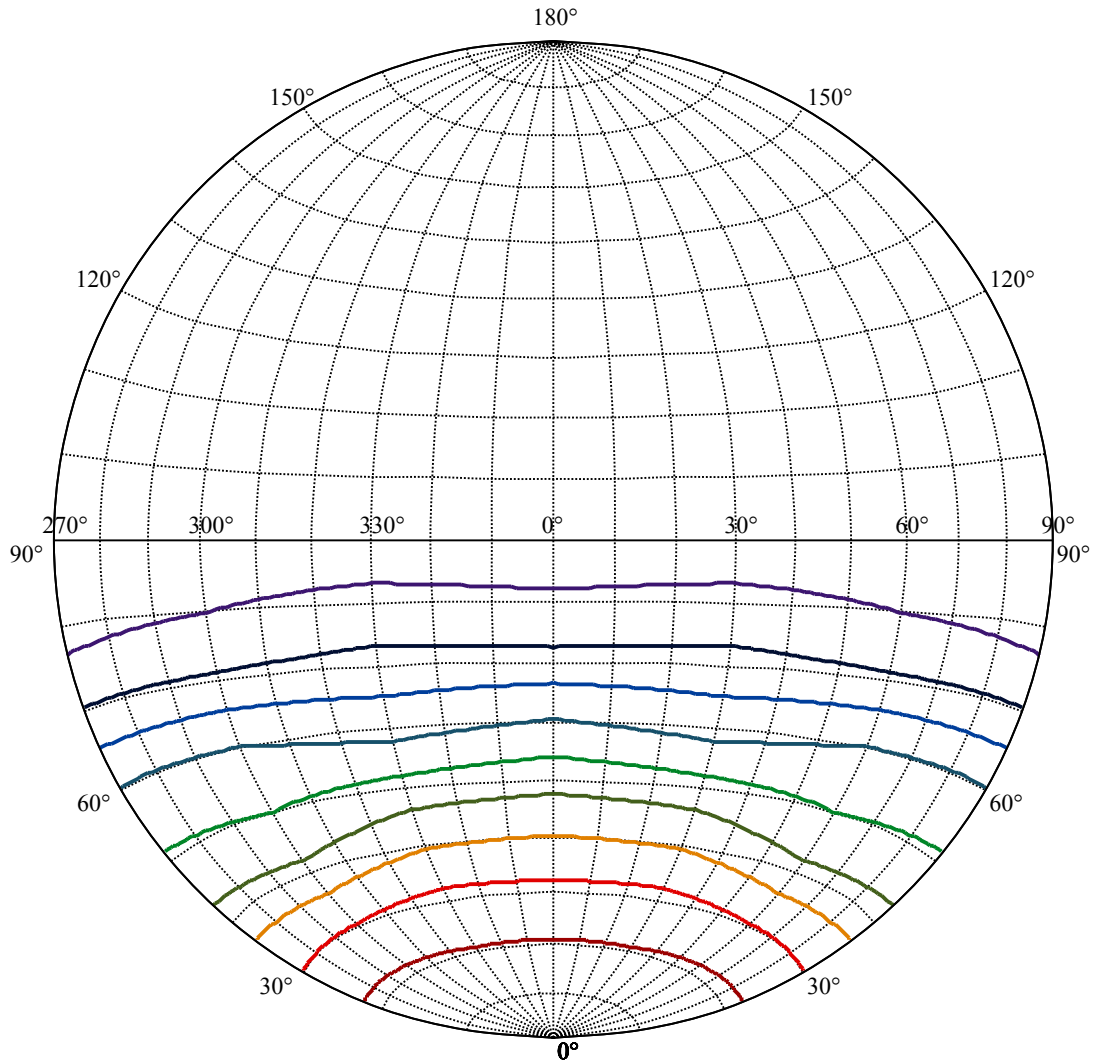
:C90/270Left:51.3 Right:51.3



Max , Ave      Beam angle of C0 plane 111.58



(10%Imax)	395.778	
(20%Imax)	791.556	
(30%Imax)	1187.33	
(40%Imax)	1583.11	
(50%Imax)	1978.89	
(60%Imax)	2374.67	
(70%Imax)	2770.44	
(80%Imax)	3166.22	
(90%Imax)	3562	












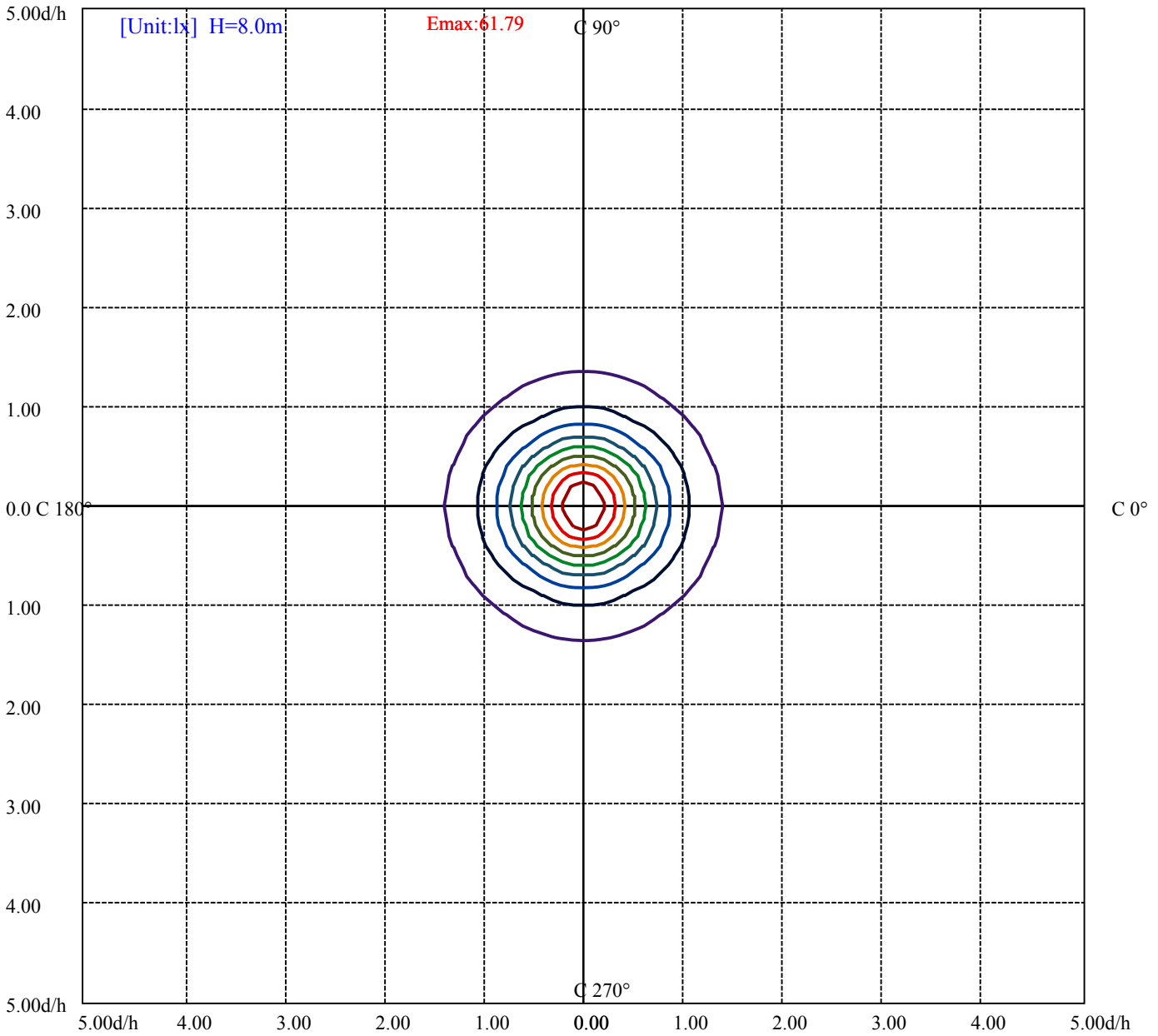
House

[Unit:cd]

Road

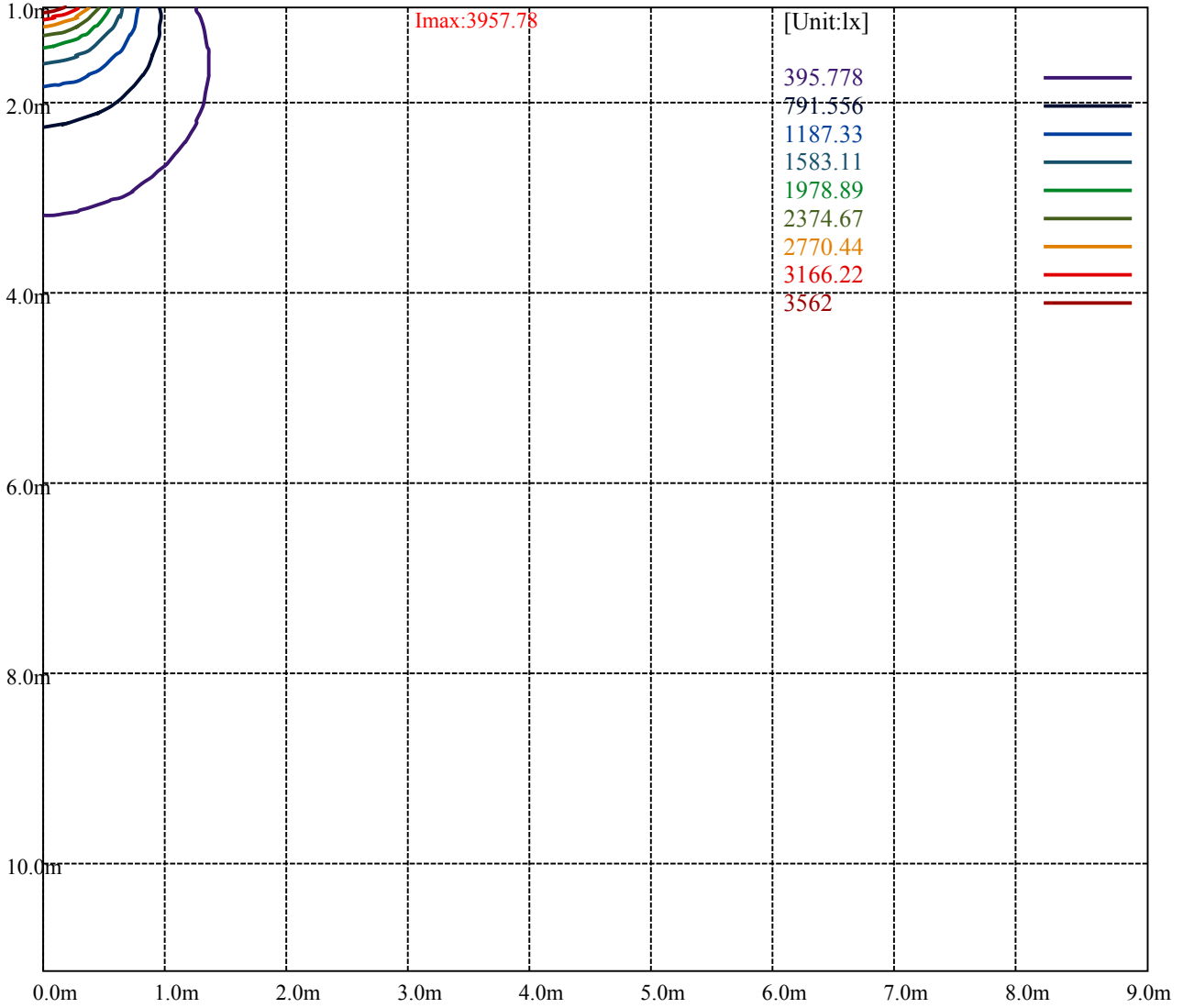
**Imax:3957.78**

(10%Imax)	396.008	
(20%Imax)	792.016	
(30%Imax)	1188.02	
(40%Imax)	1584.03	
(50%Imax)	1980.04	
(60%Imax)	2376.05	
(70%Imax)	2772.06	
(80%Imax)	3168.06	
(90%Imax)	3564.07	



(10%Emax) 6.178781	—
(20%Emax) 12.35756	—
(30%Emax) 18.53641	—
(40%Emax) 24.71516	—
(50%Emax) 30.89391	—
(60%Emax) 37.07265	—
(70%Emax) 43.25141	—
(80%Emax) 49.43016	—
(90%Emax) 55.60906	—





Luminance Table

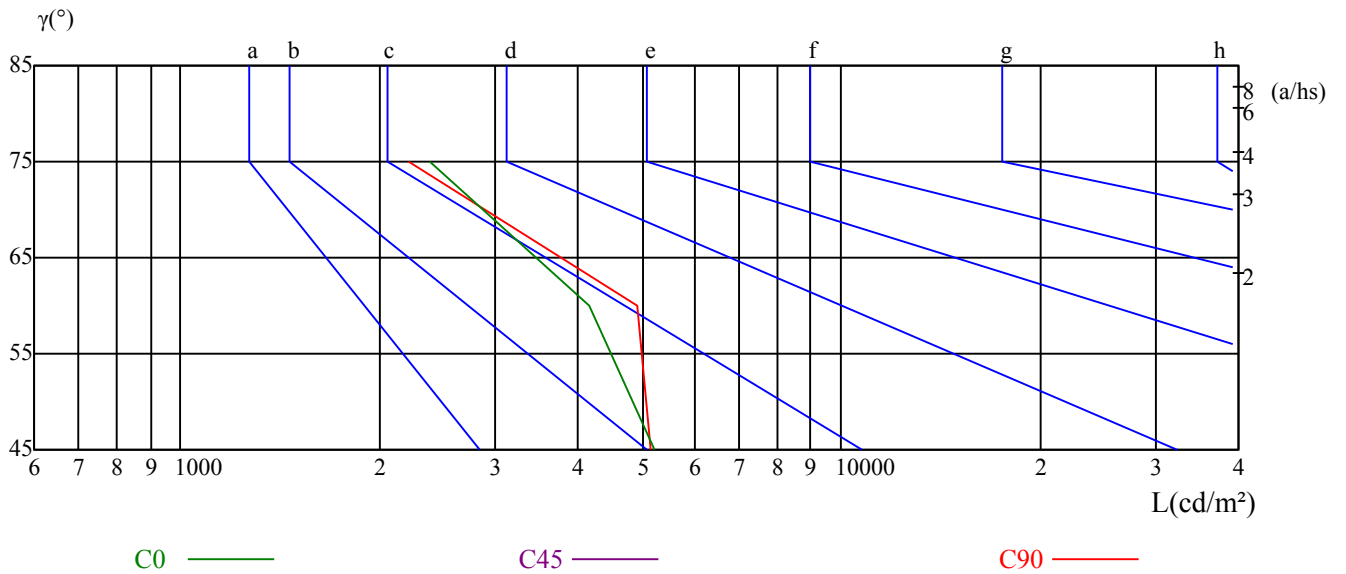
$\gamma$	45	50	55	60	65	70	75	80	85
C0	5220	0	0	4162	0	0	2388	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5149	0	0	4918	0	0	2219	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
17	17	0	4265	2909	0	17	17	0

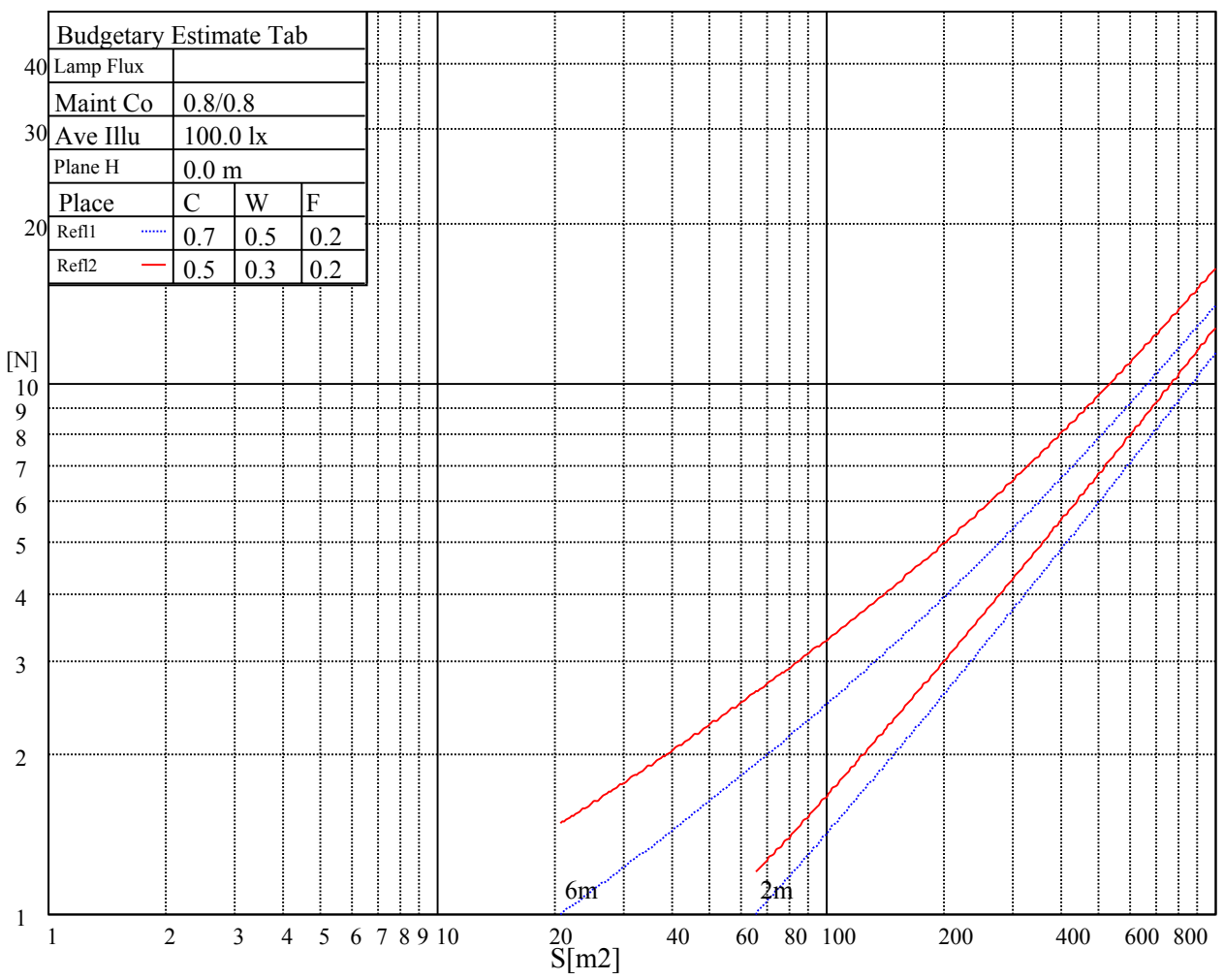
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
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

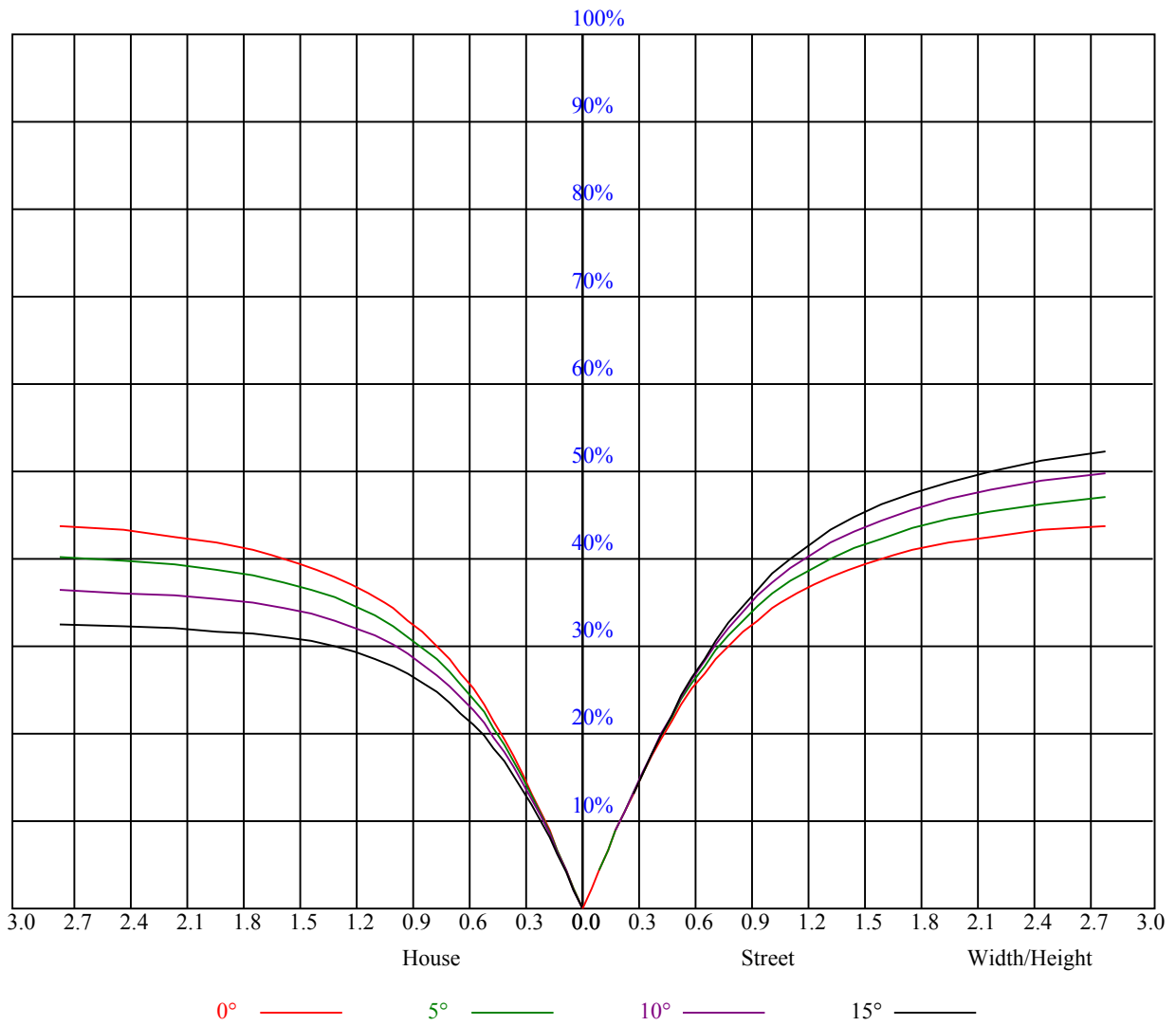
Luminance Limiting Curve



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	2.4					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	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	0.95	0.95	0.95	0.93
1	0.94	0.88	0.82	0.91	0.85	0.80	0.85	0.80	0.76	0.80	0.76	0.72	0.75	0.72	0.69	0.66
2	0.81	0.72	0.65	0.78	0.71	0.64	0.74	0.67	0.61	0.69	0.63	0.59	0.65	0.60	0.56	0.53
3	0.70	0.61	0.53	0.68	0.59	0.52	0.64	0.56	0.50	0.60	0.54	0.48	0.56	0.51	0.46	0.44
4	0.61	0.51	0.43	0.59	0.50	0.43	0.56	0.48	0.41	0.52	0.45	0.40	0.49	0.43	0.38	0.36
5	0.54	0.43	0.36	0.52	0.42	0.35	0.49	0.41	0.34	0.46	0.39	0.33	0.43	0.37	0.32	0.30
6	0.47	0.37	0.30	0.46	0.37	0.30	0.43	0.35	0.29	0.41	0.34	0.28	0.39	0.32	0.27	0.25
7	0.42	0.33	0.26	0.41	0.32	0.25	0.39	0.31	0.25	0.37	0.29	0.24	0.35	0.28	0.23	0.21
8	0.38	0.29	0.22	0.37	0.28	0.22	0.35	0.27	0.21	0.33	0.26	0.21	0.31	0.25	0.20	0.18
9	0.34	0.26	0.19	0.34	0.25	0.19	0.32	0.24	0.19	0.30	0.23	0.18	0.29	0.22	0.18	0.16
10	0.31	0.23	0.17	0.31	0.22	0.17	0.29	0.22	0.17	0.28	0.21	0.16	0.26	0.20	0.16	0.14



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	3957.78	3776.26	3309.89	2587.46	1681.99	692.09	134.82	126.73	135.51
30.0	3957.78	3767.29	3209.46	2362.07	1410.70	737.03	134.82	126.73	135.51
60.0	3951.06	3910.80	3128.09	2145.70	1627.73	584.23	143.81	135.78	135.51
90.0	3957.78	3937.71	3109.51	2206.23	1561.77	417.85	134.82	126.73	135.51
120.0	3952.22	3919.77	3125.69	2091.60	1564.43	485.36	134.82	126.73	126.47
150.0	3951.06	3758.32	3435.47	2407.14	1392.61	719.05	134.82	126.73	126.47
180.0	3957.78	3740.38	3238.13	2506.32	1555.39	566.25	125.83	126.73	135.51
210.0	3957.78	3695.53	3146.67	2421.31	1455.91	683.10	125.83	126.73	135.51
240.0	3951.06	3794.20	3231.57	2208.80	1582.51	440.42	125.83	126.73	126.47
270.0	3957.78	3926.50	3238.13	2289.94	1645.82	440.42	134.82	126.73	126.47
300.0	3960.08	3821.11	3323.67	2229.41	1621.35	548.28	134.82	135.78	135.51
330.0	3951.06	3713.47	3390.62	2668.60	1492.08	719.05	134.82	135.78	135.51
360.0	3957.78	3776.26	3309.89	2587.46	1681.99	692.09	134.82	126.73	135.51

C/γ(°)	135.0	150.0	165.0	180.0
0.0	135.64	135.64	135.23	135.23
30.0	135.64	135.64	135.23	135.23
60.0	135.64	135.64	135.23	135.23
90.0	135.64	135.64	135.23	135.23
120.0	135.64	135.64	135.23	135.23
150.0	135.64	135.64	135.23	135.23
180.0	135.64	135.64	135.23	135.23
210.0	135.64	135.64	135.23	135.23
240.0	135.64	135.64	135.23	135.23
270.0	135.64	135.64	135.23	135.23
300.0	135.64	135.64	135.23	135.23
330.0	135.64	135.64	135.23	135.23
360.0	135.64	135.64	135.23	135.23