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PQL 91298 LED 12.5WT8/35K/FR/V5

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LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 12.5WT8/35K/FR/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 51.3000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

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Photometric Results

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Lumens(lm): 6465.61

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 126.04

Central intensity(cd): 2561.601

Maximum intensity(cd): 2586.204

Angle of maximum intensity: C=90.0  $\gamma$ =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  $\pi$  solid angle : 79.909%

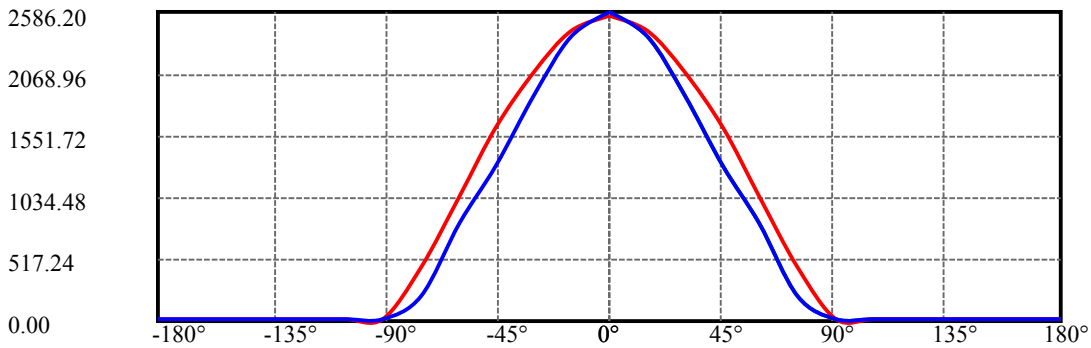
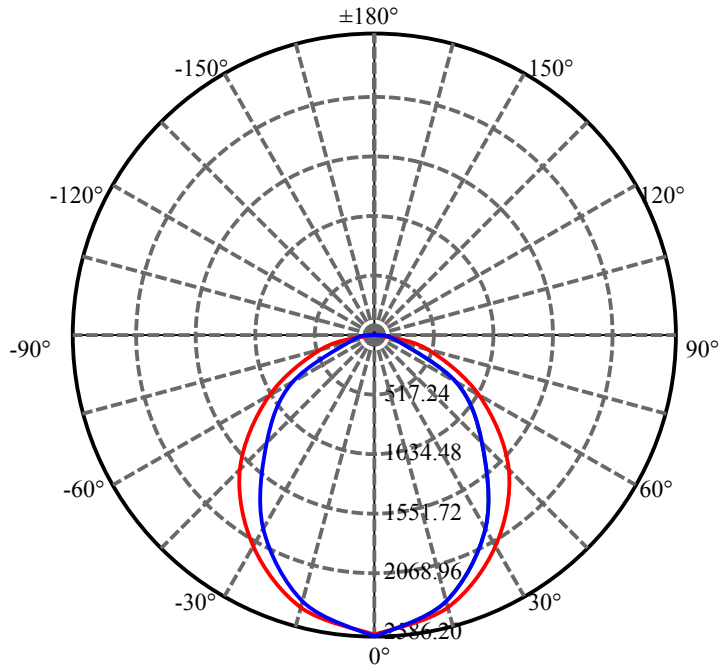
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2572.099	0.000	0	.000%	.000%
15.0	2376.884	529.775	529.775	.000%	8.194%
30.0	2010.959	1377.109	1906.883	.000%	29.493%
45.0	1454.942	1730.377	3637.261	.000%	56.255%
60.0	895.585	1529.359	5166.619	.000%	79.909%
75.0	326.770	926.169	6092.789	.000%	94.234%
90.0	15.522	278.319	6371.108	.000%	98.538%
105.0	12.498	22.784	6393.891	.000%	98.891%
120.0	13.762	19.897	6413.788	.000%	99.198%
135.0	15.681	19.157	6432.945	.000%	99.495%
150.0	17.779	16.705	6449.65	.000%	99.753%
165.0	19.528	11.709	6461.359	.000%	99.934%
180.0	20.220	4.255	6465.614	.000%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1906.88	N.A.	29.49%
0-40	1906.88	N.A.	29.49%
0-60	5166.62	N.A.	79.91%
0-90	6371.11	N.A.	98.54%
0-120	6413.79	N.A.	99.20%
0-180	6465.61	N.A.	100.00%
60-90	2733.85	N.A.	42.28%
90-120	321.00	N.A.	4.96%
90-130	321.00	N.A.	4.96%
90-150	356.86	N.A.	5.52%
90-180	368.57	N.A.	5.70%
0-60.10	5172.49	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	0.00
10-20	529.77
20-30	1377.11
30-40	0.00
40-50	1730.38
50-60	1529.36
60-70	0.00
70-80	926.17
80-90	278.32
90-100	0.00
100-110	22.78
110-120	19.90
120-130	0.00
130-140	19.16
140-150	16.71
150-160	0.00
160-170	11.71
170-180	0.00



C90(Max): ———

C0/C180: ———

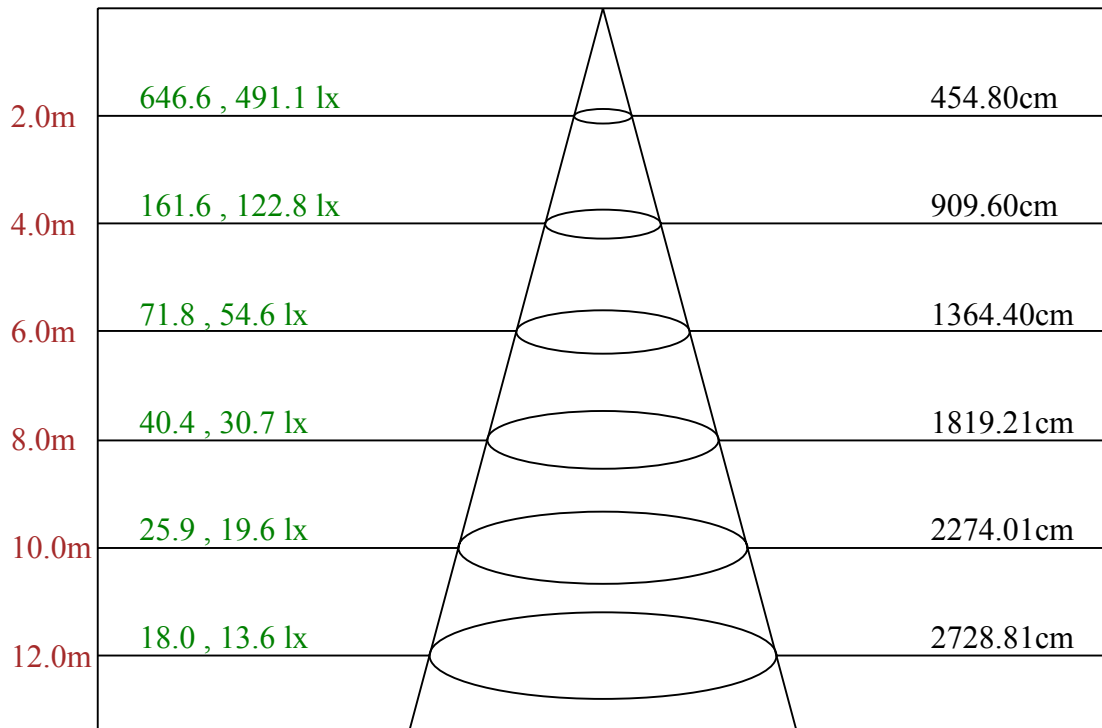
C90/C270: ———

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

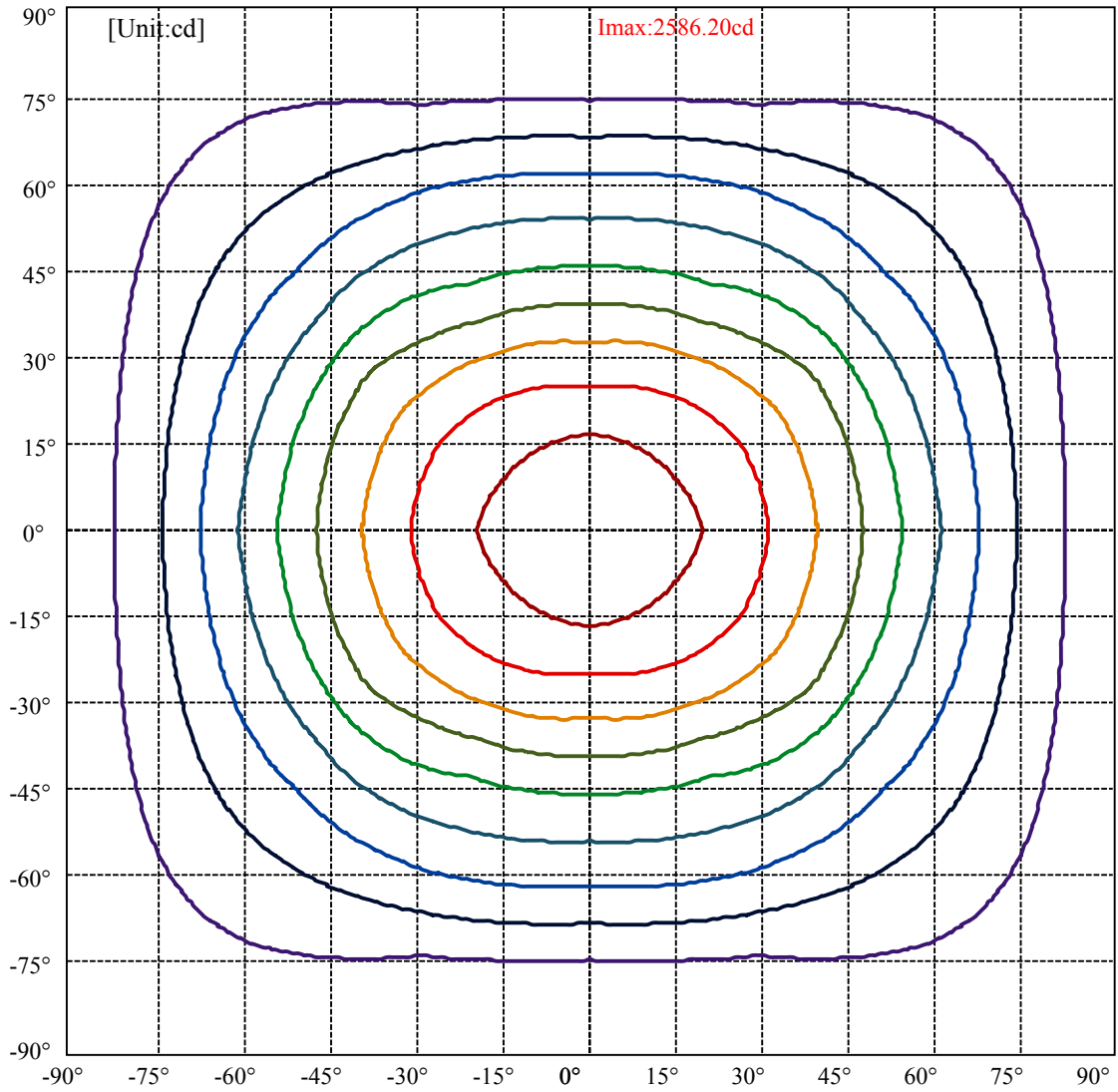
:C90/270Left:73.9 Right:73.9

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

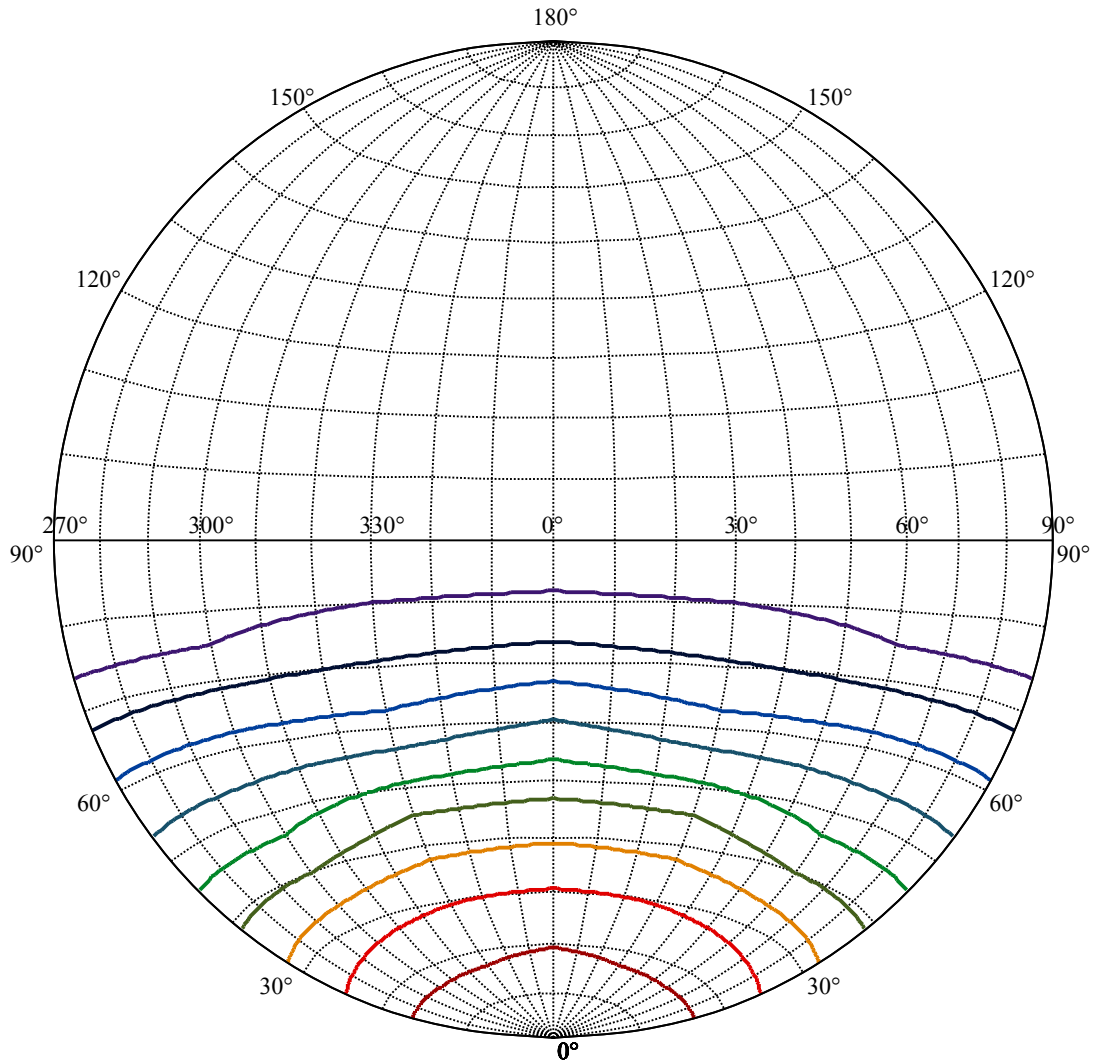
:C90/270Left:45.3 Right:45.3



Max , Ave      Beam angle of C90 plane 97.34



(10%Imax) 258.62	—
(20%Imax) 517.241	—
(30%Imax) 775.861	—
(40%Imax) 1034.48	—
(50%Imax) 1293.1	—
(60%Imax) 1551.72	—
(70%Imax) 1810.34	—
(80%Imax) 2068.96	—
(90%Imax) 2327.58	—












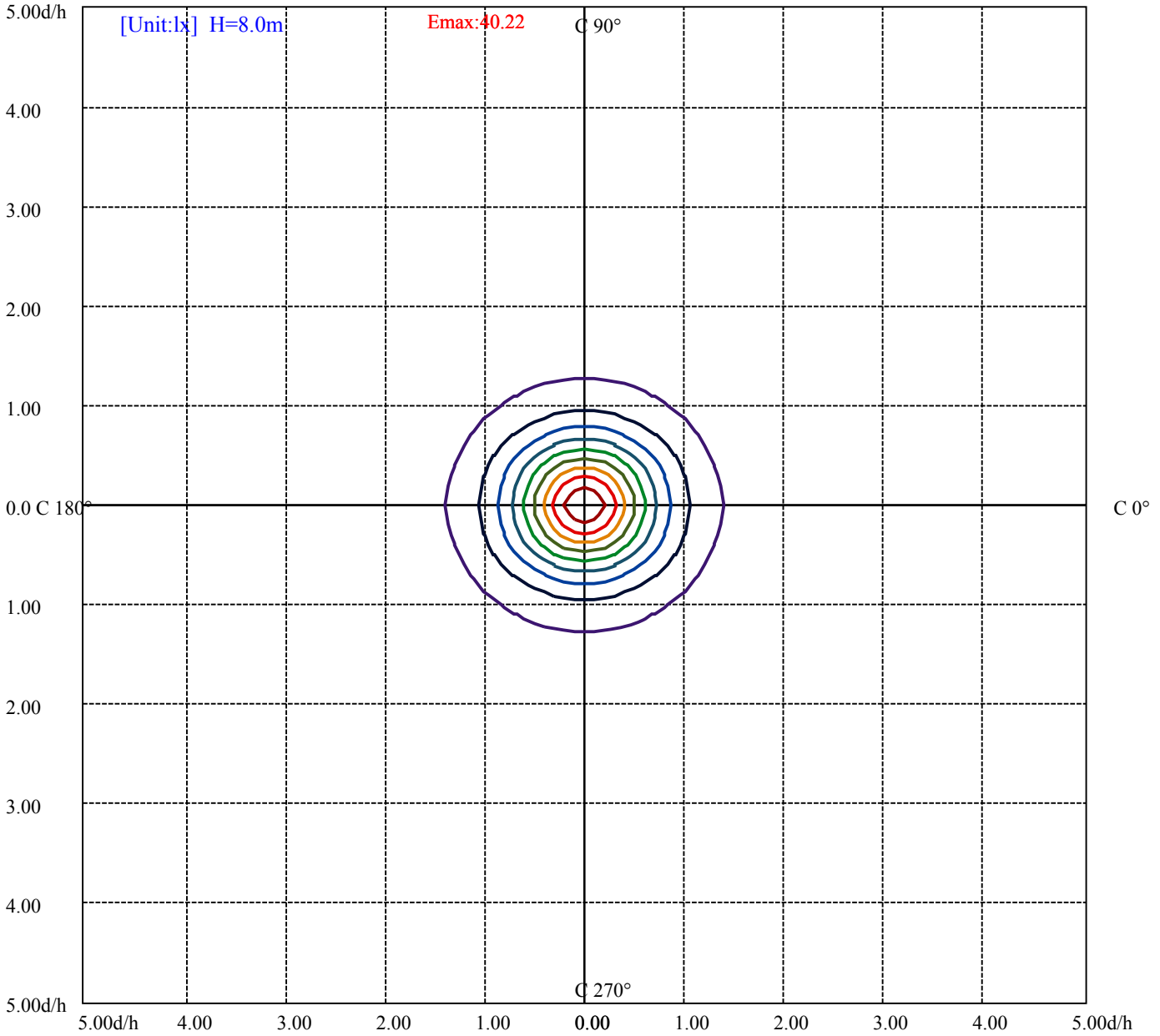
House

[Unit:cd]

Road

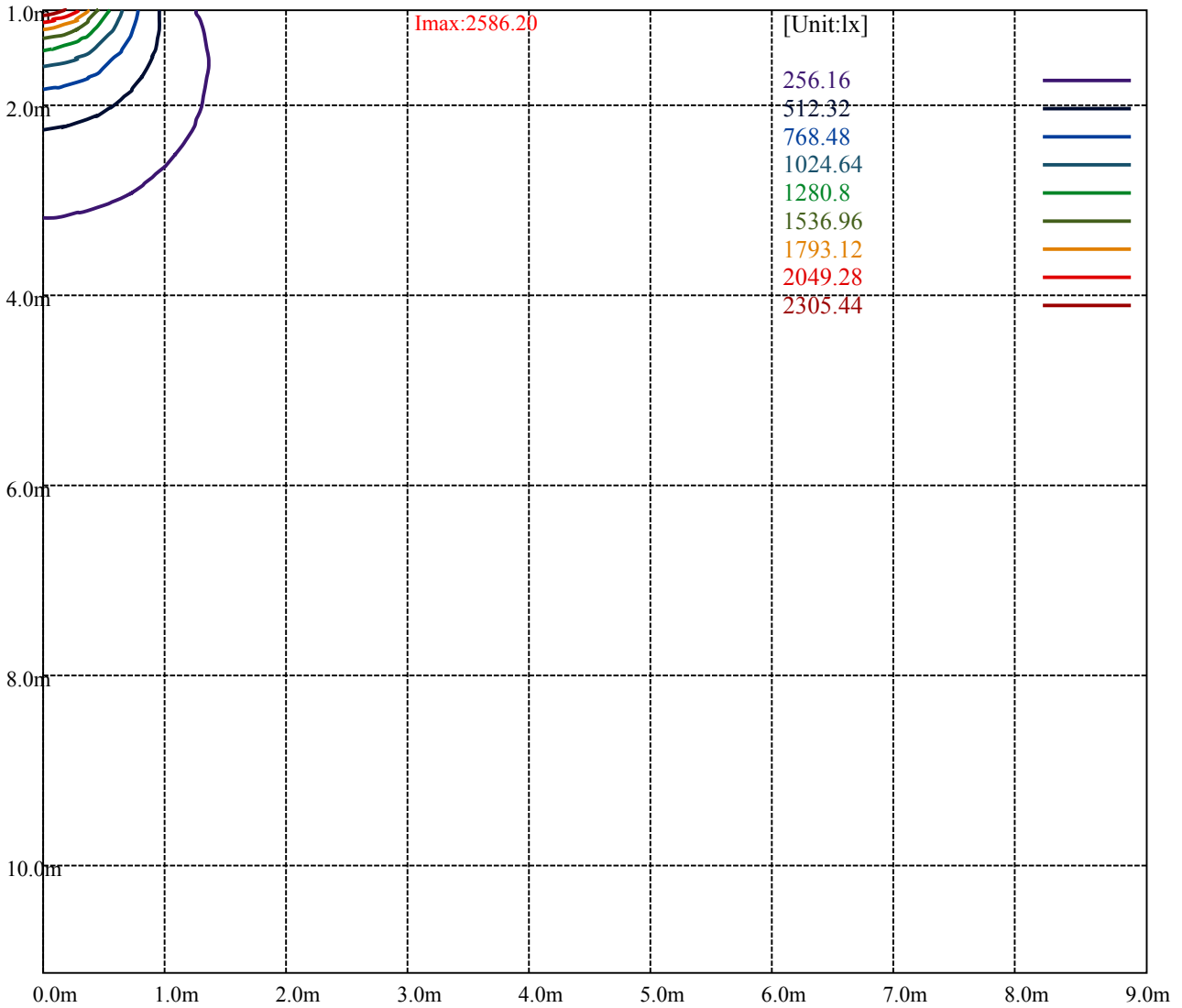
**Imax:2586.20**

(10%Imax) 258.62	
(20%Imax) 517.241	
(30%Imax) 775.861	
(40%Imax) 1034.48	
(50%Imax) 1293.1	
(60%Imax) 1551.72	
(70%Imax) 1810.34	
(80%Imax) 2068.96	
(90%Imax) 2327.58	



- (10%Emax) 4.021719
- (20%Emax) 8.043438
- (30%Emax) 12.06516
- (40%Emax) 16.08688
- (50%Emax) 20.10859
- (60%Emax) 24.13031
- (70%Emax) 28.15203
- (80%Emax) 32.17375
- (90%Emax) 36.19547





Luminance Table

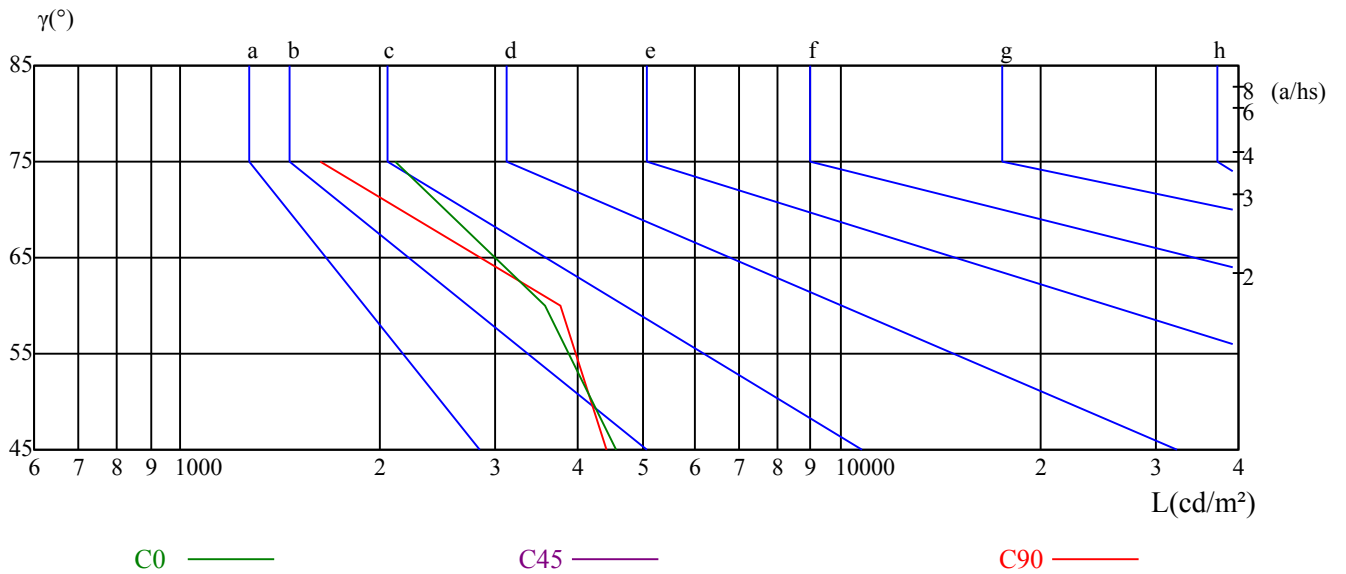
$\gamma$	45	50	55	60	65	70	75	80	85
C0	4565	0	0	3553	0	0	2107	0	0
C45	0	0	0	0	0	0	0	0	0
C90	4426	0	0	3762	0	0	1626	0	0

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	4565	2132	0	0	0	0

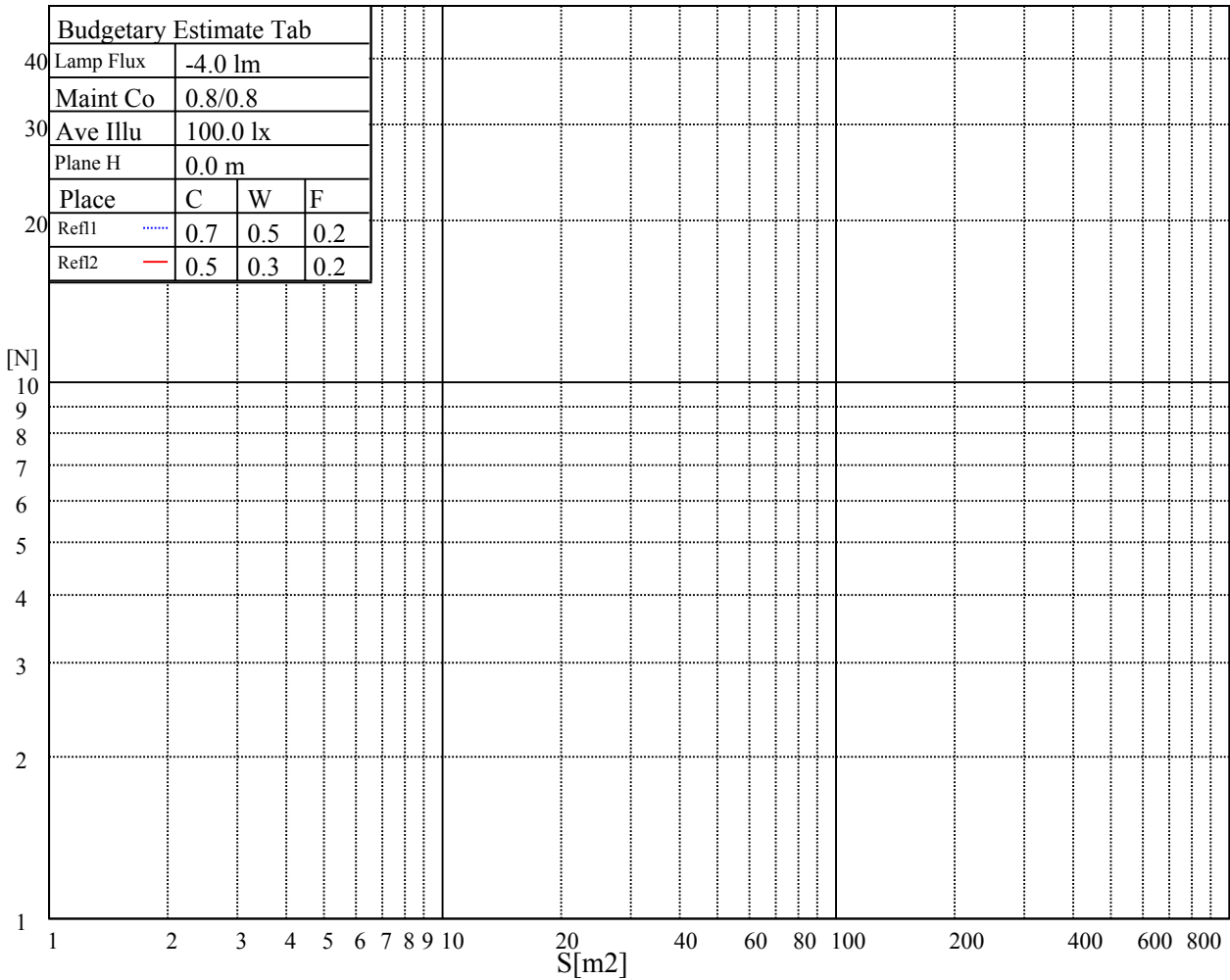
Glare Table

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

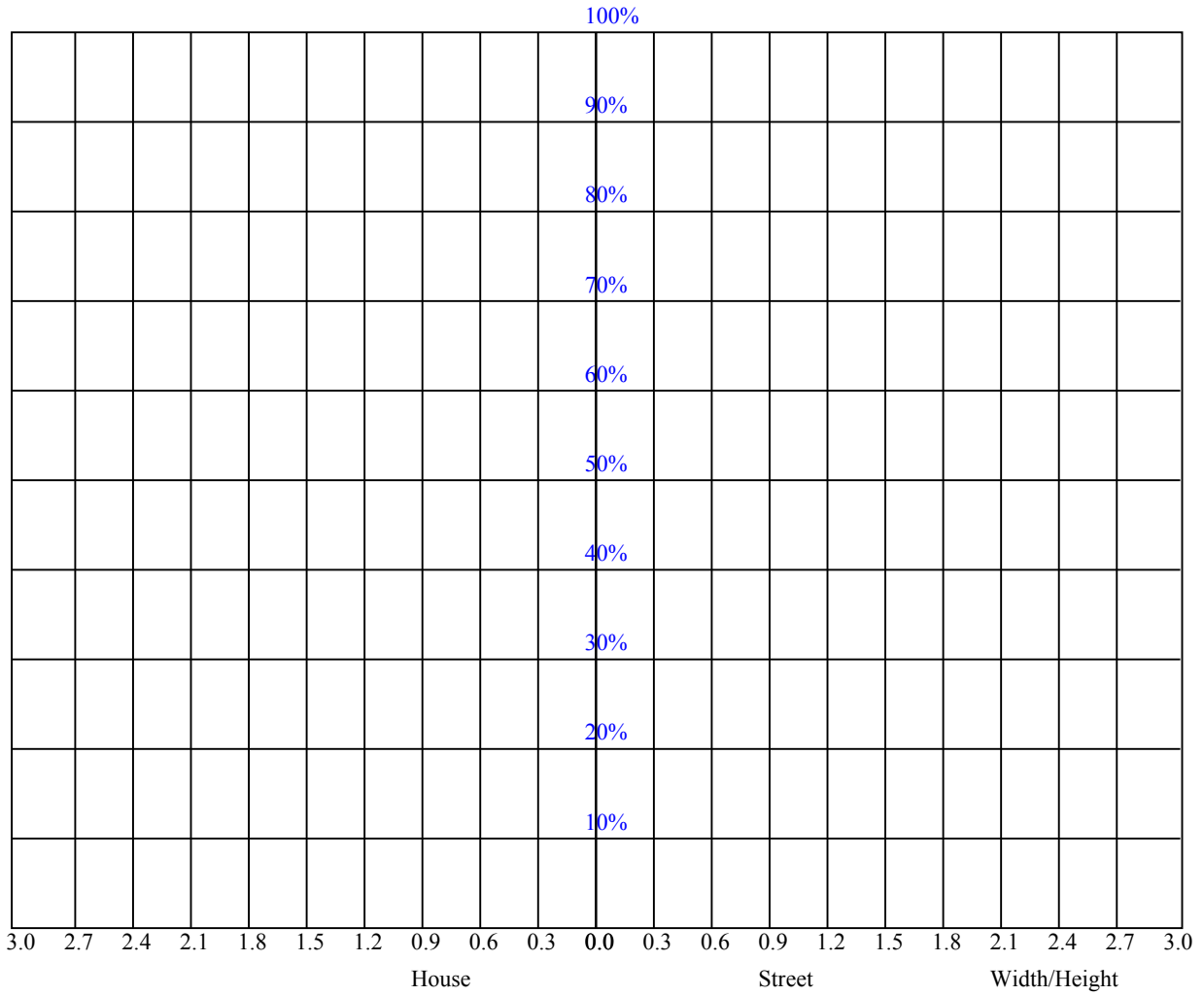
Luminance Limiting Curve



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	1.2					2.2					



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	2561.60	2442.17	2120.34	1664.19	1103.44	506.43	23.43	13.69	14.86
30.0	2572.43	2404.07	2079.36	1623.98	917.73	435.14	16.83	13.20	14.46
60.0	2575.38	2400.17	2085.22	1414.51	968.83	333.16	17.03	12.70	14.07
90.0	2586.20	2381.60	1907.53	1320.14	848.17	218.01	16.05	12.61	14.27
120.0	2574.40	2361.09	1947.83	1356.22	889.83	267.08	13.68	11.03	12.28
150.0	2562.59	2394.30	2057.89	1619.95	899.06	403.47	14.57	11.72	12.58
180.0	2561.60	2407.00	2061.80	1589.28	999.58	401.01	13.29	12.31	13.18
210.0	2572.43	2347.42	2038.38	1502.98	822.42	336.90	13.68	12.51	13.57
240.0	2575.38	2332.76	1914.16	1245.54	785.08	187.04	12.50	11.92	13.18
270.0	2586.20	2361.09	1882.26	1283.77	804.74	205.72	12.41	11.13	12.68
300.0	2574.40	2347.42	1998.37	1308.35	864.67	259.61	16.83	13.29	14.76
330.0	2562.59	2343.51	2038.38	1530.40	843.45	367.68	15.95	13.89	15.26
360.0	2561.60	2442.17	2120.34	1664.19	1103.44	506.43	23.43	13.69	14.86
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	16.62	18.68	19.95	20.12					
30.0	16.32	18.28	19.75	20.22					
60.0	16.03	17.99	19.55	20.02					
90.0	16.22	18.18	19.65	20.22					
120.0	14.35	16.70	19.16	20.42					
150.0	14.54	16.80	19.06	20.32					
180.0	15.14	17.39	19.36	20.12					
210.0	15.24	17.29	19.16	20.22					
240.0	15.24	17.29	19.16	20.02					
270.0	14.74	17.00	19.16	20.22					
300.0	16.72	18.78	20.15	20.42					
330.0	17.02	18.97	20.25	20.32					
360.0	16.62	18.68	19.95	20.12					