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

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 15WT8/35K/PSP/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 72.4000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

Photometric Results

Lumens(lm): 7803.18

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 107.78

Central intensity(cd): 2855.190

Maximum intensity(cd): 2892.271

Angle of maximum intensity: C=90.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=108.2

[C90/270]Total=101.0

Field angle(10%Imax): [C0/180]Total=162.2

[C90/270]Total=148.6

Maximum s/h(1/2): C0_180=1.25 C90_270=1.14

Maximum s/h(1/4): C0_180=1.36 C90_270=1.29

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 1.45%

Down flux rate of LUM(%): 98.55%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.321%

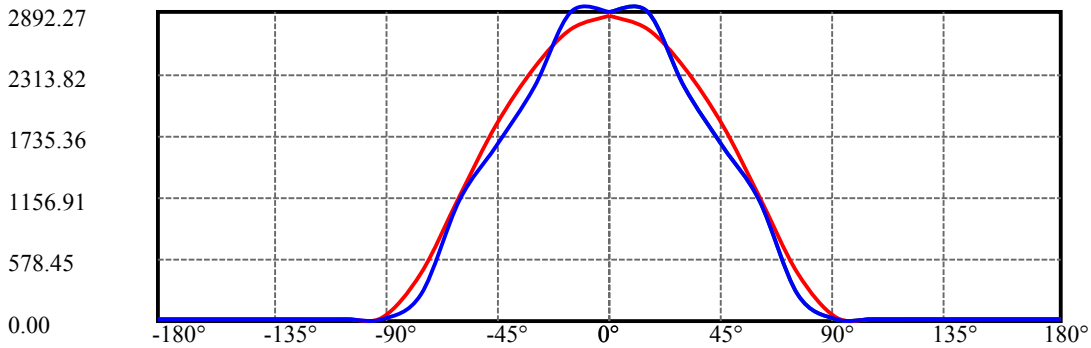
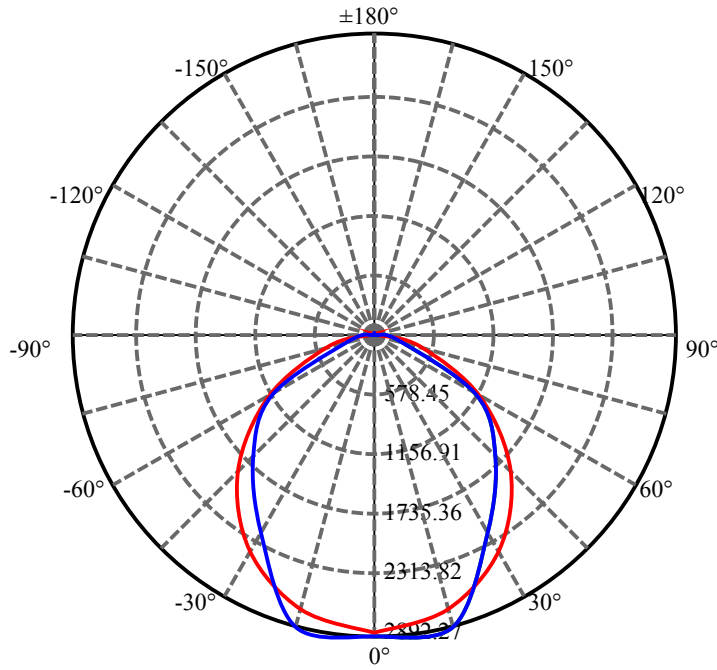
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2872.388	0.000	0	.000%	.000%
15.0	2786.116	605.727	605.727	.000%	7.763%
30.0	2414.247	1632.115	2237.842	.000%	28.679%
45.0	1748.662	2078.364	4316.206	.000%	55.313%
60.0	1130.566	1873.356	6189.562	.000%	79.321%
75.0	398.918	1158.878	7348.44	.000%	94.172%
90.0	20.804	341.277	7689.717	.000%	98.546%
105.0	14.883	29.017	7718.735	.000%	98.918%
120.0	16.174	23.532	7742.267	.000%	99.219%
135.0	18.442	22.522	7764.789	.000%	99.508%
150.0	20.903	19.643	7784.432	.000%	99.760%
165.0	22.885	13.743	7798.175	.000%	99.936%
180.0	23.866	5.005	7803.179	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2237.84	N.A.	28.68%
0-40	2237.84	N.A.	28.68%
0-60	6189.56	N.A.	79.32%
0-90	7689.72	N.A.	98.55%
0-120	7742.27	N.A.	99.22%
0-180	7803.18	N.A.	100.00%
60-90	3373.51	N.A.	43.23%
90-120	393.83	N.A.	5.05%
90-130	393.83	N.A.	5.05%
90-150	435.99	N.A.	5.59%
90-180	449.73	N.A.	5.76%
0-60.69	6242.54	N.A.	80.00%

ZONAL LUMEN SUMMARY

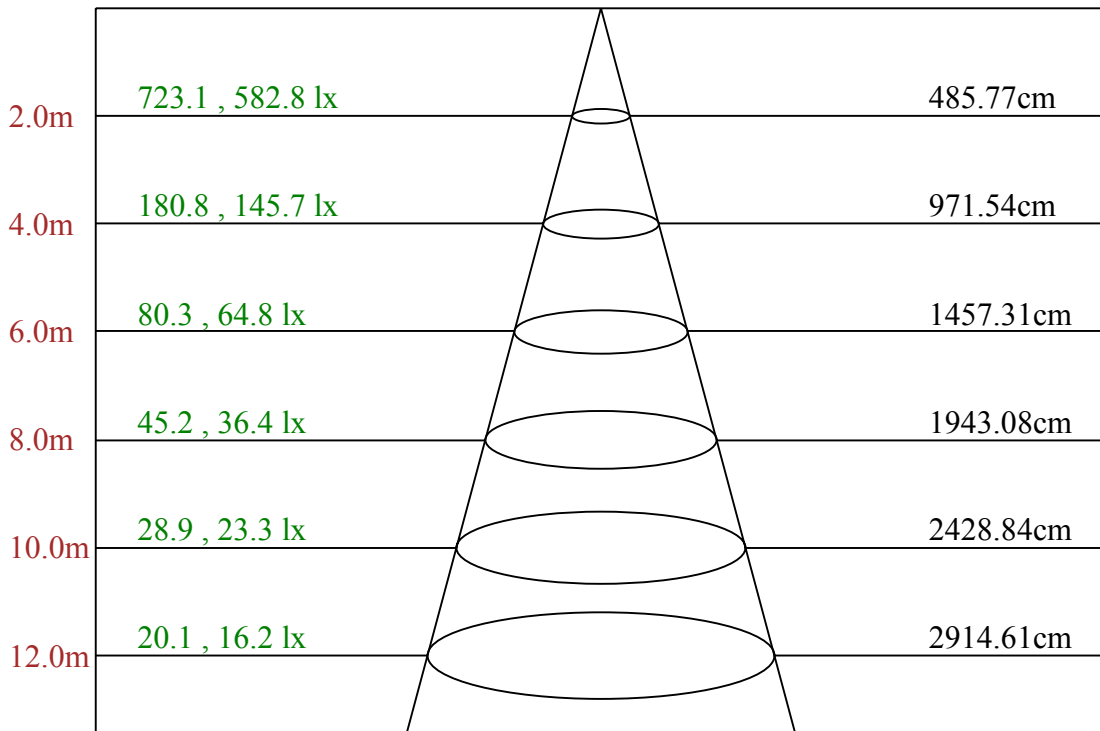
0-10	0.00
10-20	605.73
20-30	1632.12
30-40	0.00
40-50	2078.36
50-60	1873.36
60-70	0.00
70-80	1158.88
80-90	341.28
90-100	0.00
100-110	29.02
110-120	23.53
120-130	0.00
130-140	22.52
140-150	19.64
150-160	0.00
160-170	13.74
170-180	0.00



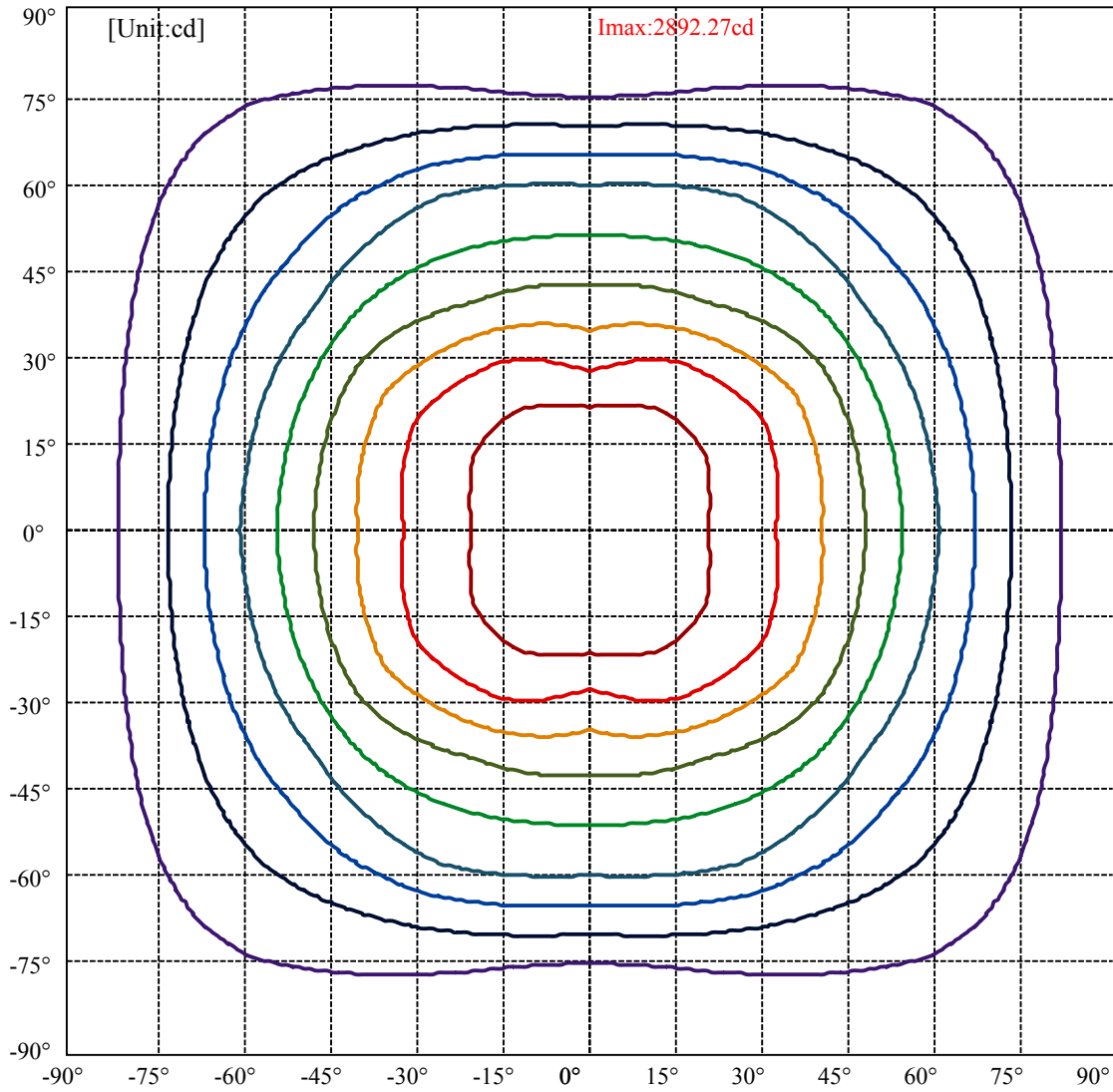
C90(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:81.1 Right:81.1
 :C90/270Left:74.3 Right:74.3

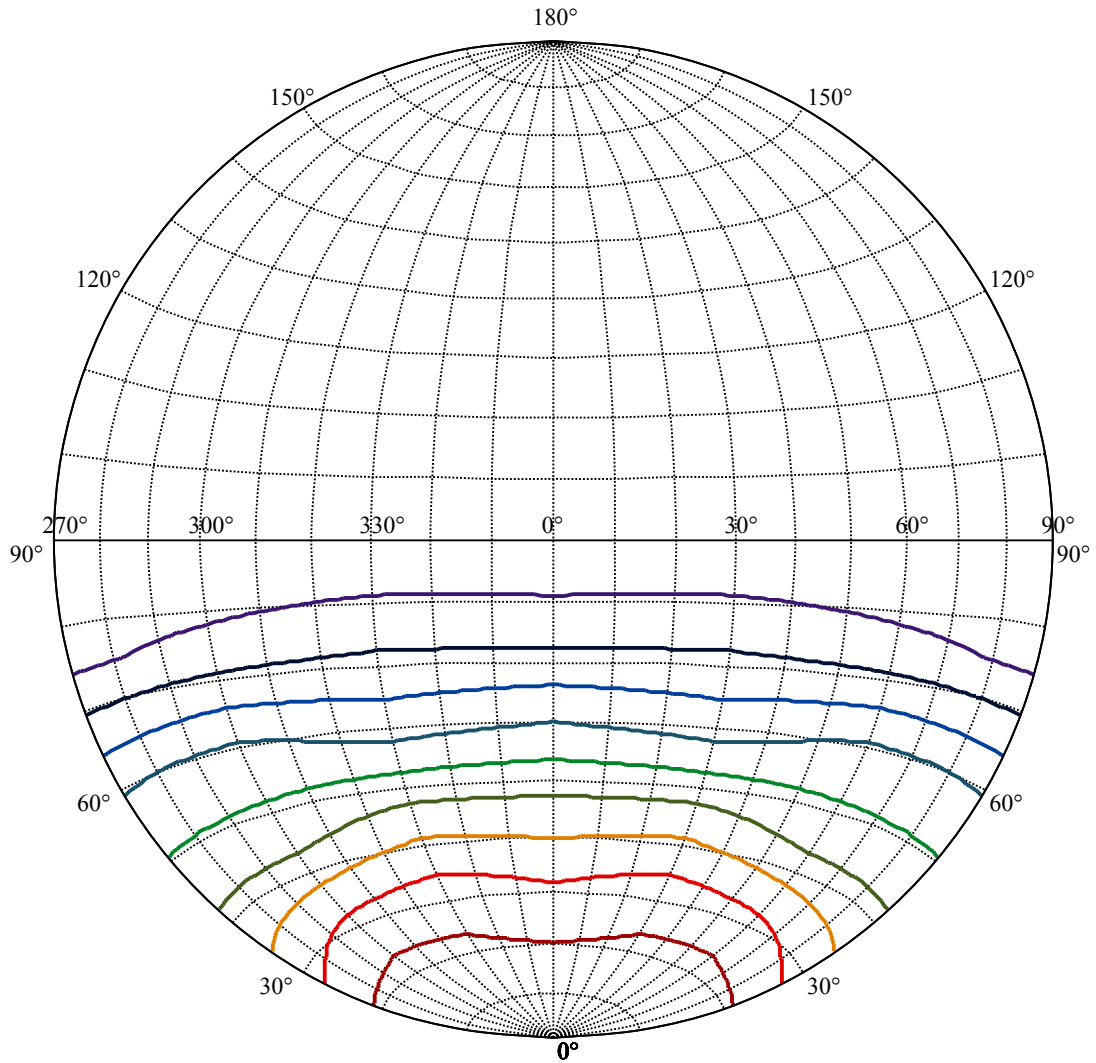
Beam Angle(50%Imax):C0/180Left:54.1 Right:54.1
 :C90/270Left:50.5 Right:50.5



Max , Ave Beam angle of C90 plane 101.06



(10%Imax) 289.227	—
(20%Imax) 578.454	—
(30%Imax) 867.681	—
(40%Imax) 1156.91	—
(50%Imax) 1446.14	—
(60%Imax) 1735.36	—
(70%Imax) 2024.59	—
(80%Imax) 2313.82	—
(90%Imax) 2603.04	—



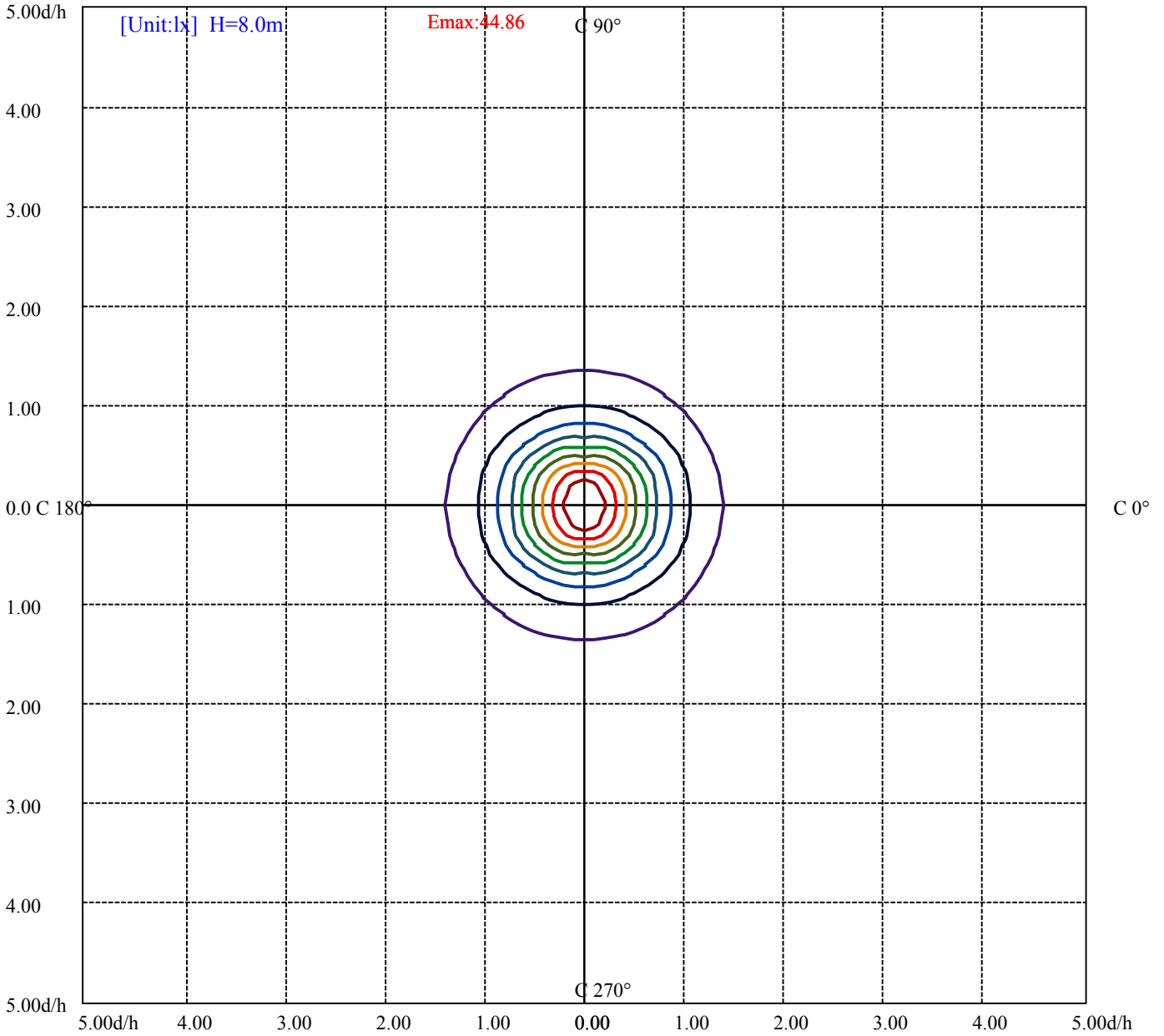
House

[Unit:cd]

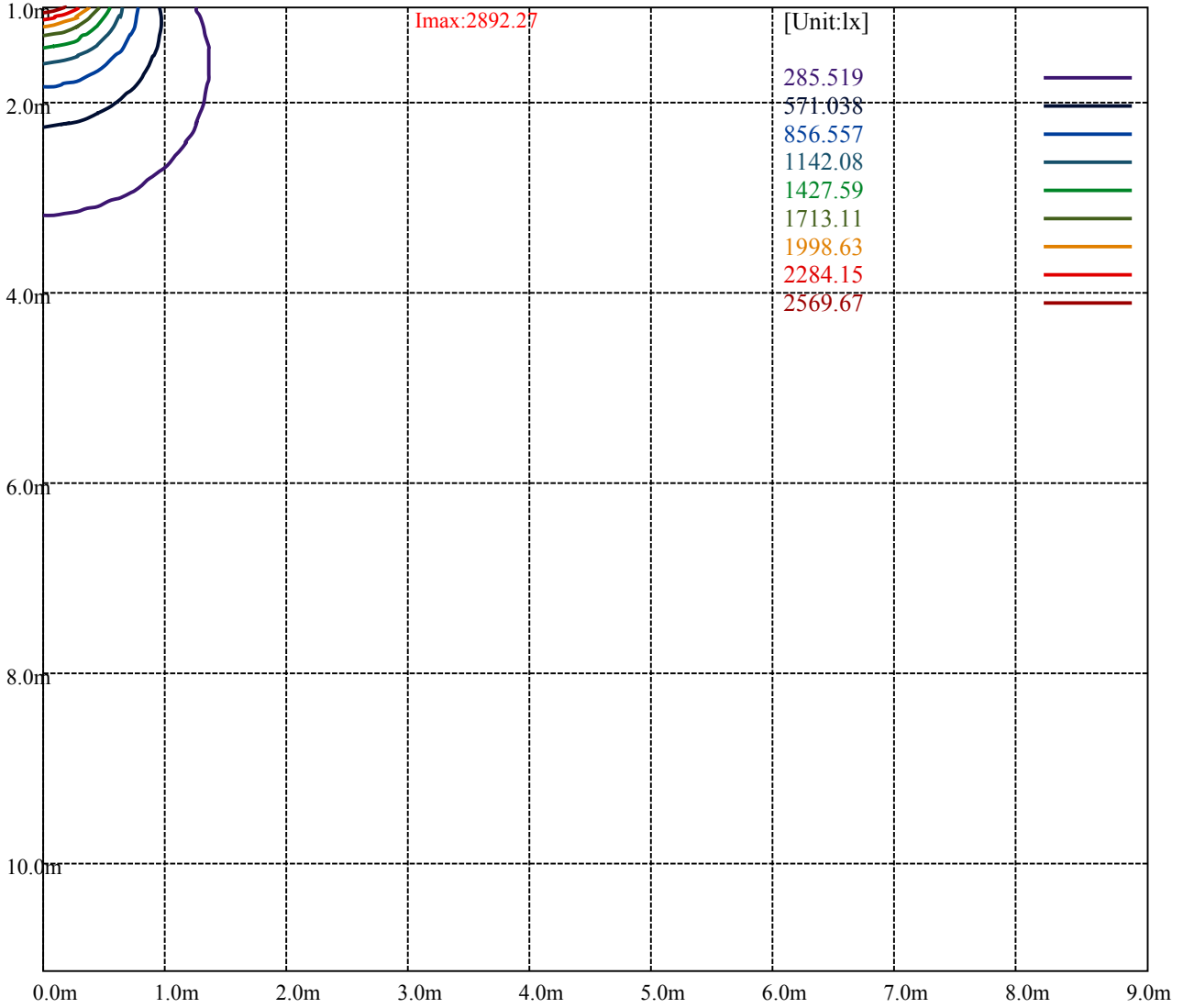
Road

I_{max}:2892.27

(10%I _{max}) 289.227	—
(20%I _{max}) 578.454	—
(30%I _{max}) 867.681	—
(40%I _{max}) 1156.91	—
(50%I _{max}) 1446.14	—
(60%I _{max}) 1735.36	—
(70%I _{max}) 2024.59	—
(80%I _{max}) 2313.82	—
(90%I _{max}) 2603.04	—



- (10%Emax) 4.486469
- (20%Emax) 8.972938
- (30%Emax) 13.45941
- (40%Emax) 17.94594
- (50%Emax) 22.43234
- (60%Emax) 26.91875
- (70%Emax) 31.40531
- (80%Emax) 35.89172
- (90%Emax) 40.37828



Luminance Table

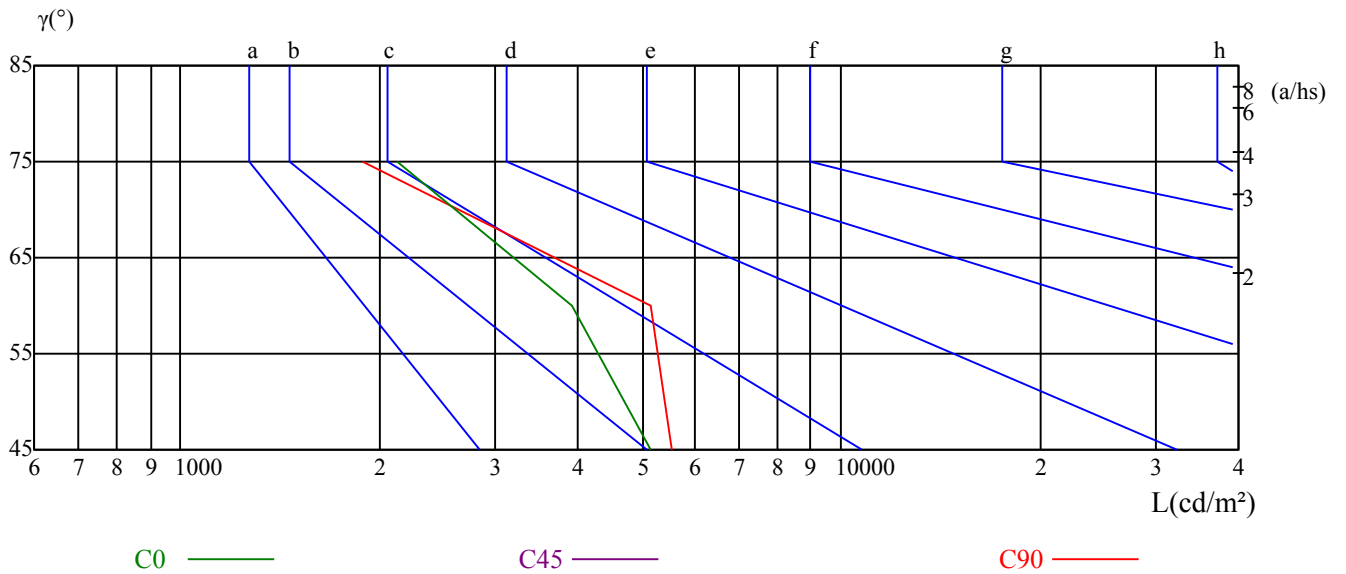
γ	45	50	55	60	65	70	75	80	85
C0	5164	0	0	3924	0	0	2127	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5541	0	0	5146	0	0	1890	0	0

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	4607	2478	0	0	0	0

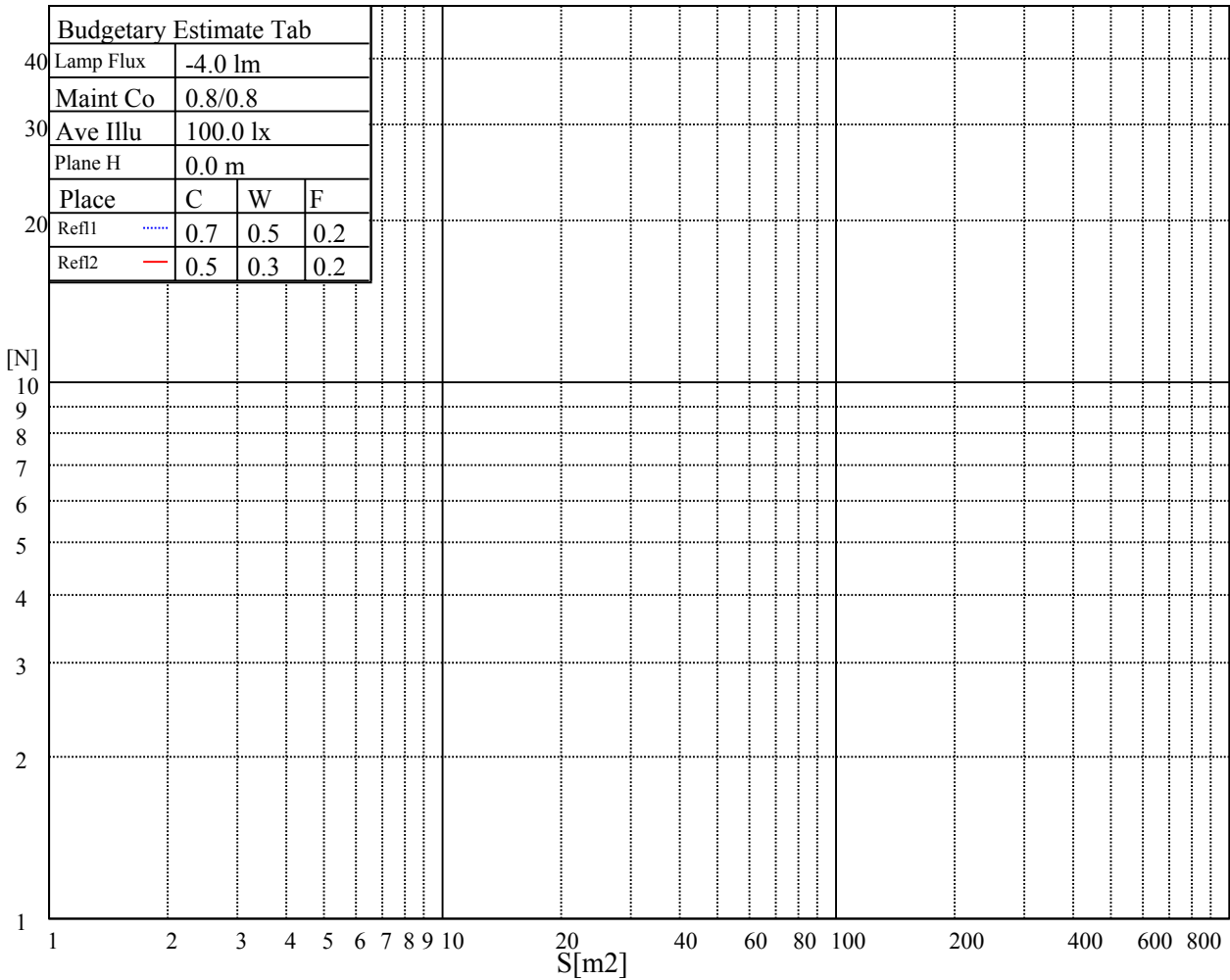
Glare Table

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

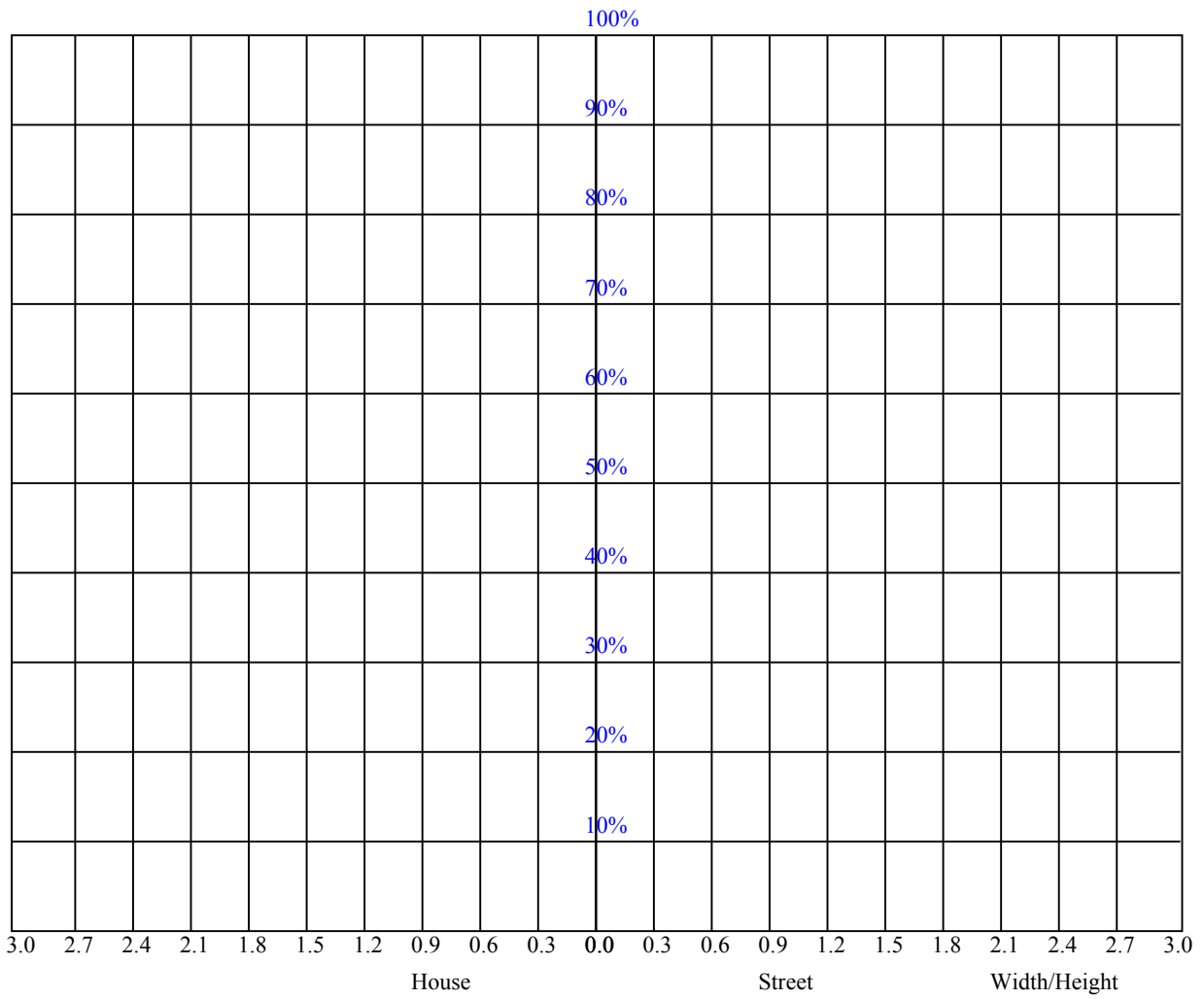
Luminance Limiting Curve



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	10.52	12.11	10.90	12.45	12.79	10.12	11.71	10.50	12.05	12.39
	3H	11.76	13.20	12.15	13.54	13.93	11.43	12.87	11.83	13.22	13.60
	4H	11.98	13.33	12.39	13.70	14.10	11.86	13.21	12.28	13.58	13.98
	6H	12.12	13.37	12.55	13.76	14.18	12.18	13.43	12.61	13.82	14.24
	8H	12.17	13.37	12.61	13.78	14.20	12.28	13.48	12.72	13.89	14.31
	12H	12.24	13.39	12.69	13.80	14.25	12.42	13.56	12.86	13.97	14.42
4H	2H	10.92	12.28	11.34	12.64	13.05	10.59	11.94	11.00	12.31	12.71
	3H	12.35	13.49	12.78	13.90	14.33	12.10	13.24	12.53	13.66	14.08
	4H	12.64	13.67	13.09	14.10	14.56	12.65	13.68	13.10	14.11	14.57
	6H	12.80	13.70	13.27	14.16	14.64	13.00	13.90	13.47	14.36	14.84
	8H	12.89	13.73	13.36	14.19	14.68	13.15	13.99	13.63	14.46	14.94
	12H	12.99	13.74	13.48	14.24	14.73	13.31	14.07	13.81	14.56	15.05
8H	4H	12.82	13.66	13.29	14.12	14.61	12.83	13.67	13.31	14.13	14.62
	6H	13.07	13.85	13.58	14.28	14.77	13.30	14.09	13.81	14.51	15.01
	8H	13.20	13.83	13.73	14.36	14.86	13.52	14.15	14.05	14.68	15.19
	12H	13.68	14.24	14.20	14.81	15.33	13.93	14.49	14.45	15.06	15.58
12H	4H	12.83	13.59	13.33	14.09	14.58	12.83	13.59	13.33	14.09	14.58
	6H	14.14	13.75	13.65	14.23	14.79	14.36	13.97	13.87	14.45	15.01
	8H	13.28	13.84	13.80	14.35	14.93	13.59	14.15	14.11	14.66	15.24
Variation with the observer position at spacings:											
S = 1.0H	0.4/-0.4					0.4/-0.5					
S = 1.5H	0.8/-0.8					0.6/-0.7					
S = 2.0H	1.1/-1.2					1.1/-0.9					
Standard tables:	BK3					BK3					
Uncorrected UGR	2.4					2.6					



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	2855.19	2731.12	2382.86	1864.94	1184.72	491.68	37.51	16.10	17.27
30.0	2867.19	2713.76	2530.43	1951.54	1077.19	514.18	19.90	15.77	17.16
60.0	2872.64	2842.88	2527.18	1683.90	1248.17	420.02	20.44	15.33	16.61
90.0	2892.27	2905.82	2160.31	1632.75	1129.04	253.56	19.57	15.11	16.83
120.0	2883.55	2862.42	2454.47	1643.00	1180.35	324.67	17.51	13.58	14.75
150.0	2860.64	2707.25	2509.81	1954.37	1063.30	558.87	17.40	13.91	14.97
180.0	2855.19	2719.94	2371.18	1816.10	1137.91	424.15	34.31	14.34	15.41
210.0	2867.19	2696.40	2528.26	1771.15	997.66	408.93	15.33	14.46	15.52
240.0	2878.35	2836.92	2344.87	1619.51	1203.90	355.96	16.58	14.13	15.41
270.0	2892.27	2877.61	2208.16	1627.19	1132.21	238.99	14.79	13.47	14.86
300.0	2883.55	2839.63	2419.75	1615.19	1193.47	330.54	18.70	16.10	17.38
330.0	2860.64	2699.65	2533.69	1804.31	1018.88	465.47	17.61	16.32	17.92
360.0	2855.19	2731.12	2382.86	1864.94	1184.72	491.68	37.51	16.10	17.27
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	19.58	21.88	23.45	23.78					
30.0	19.36	21.55	23.34	23.99					
60.0	19.03	21.44	23.01	23.67					
90.0	19.14	21.55	23.12	23.67					
120.0	17.07	19.91	22.68	24.10					
150.0	17.07	19.80	22.36	23.99					
180.0	17.72	20.35	22.58	23.78					
210.0	17.50	19.91	22.36	23.99					
240.0	17.72	20.13	22.25	23.67					
270.0	17.17	19.91	22.25	23.67					
300.0	19.91	22.21	23.45	24.10					
330.0	20.02	22.21	23.78	23.99					
360.0	19.58	21.88	23.45	23.78					