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

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 15WT8/50K/PSP/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 73.0000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

Photometric Results

Lumens(lm): 8453.44

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 115.80

Central intensity(cd): 3093.122

Maximum intensity(cd): 3133.293

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%

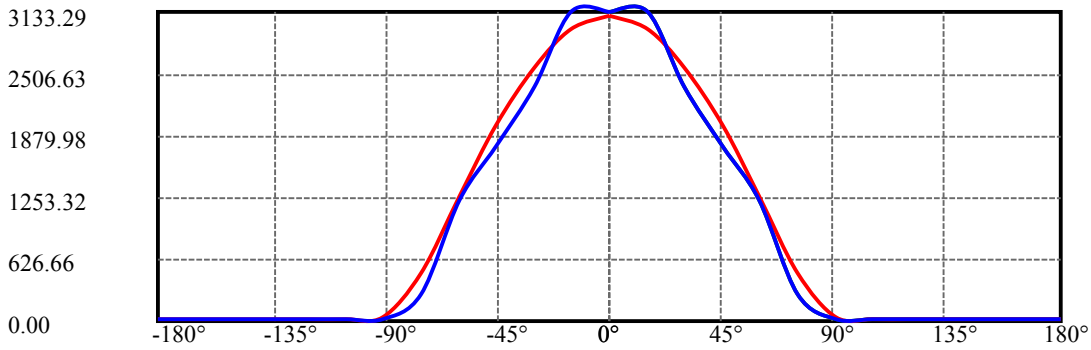
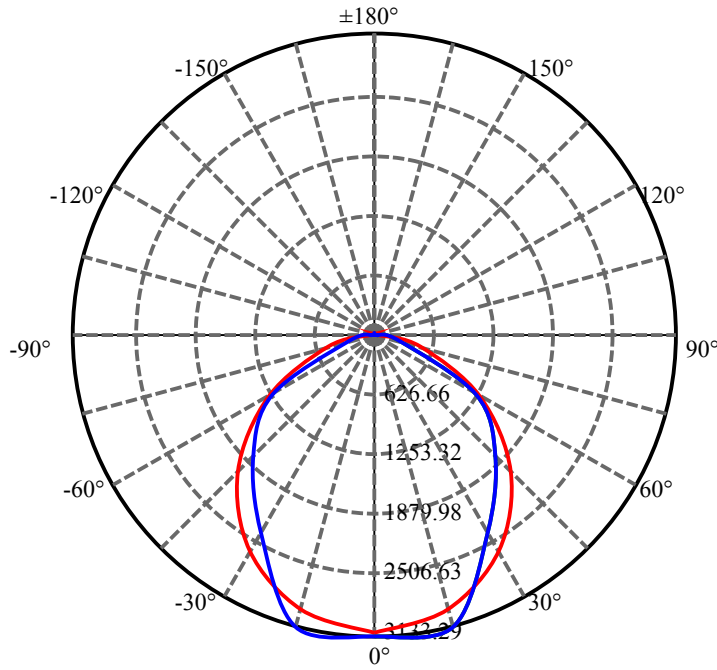
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3111.753	0.000	0	.000%	.000%
15.0	3018.292	656.204	656.204	.000%	7.763%
30.0	2615.434	1768.125	2424.329	.000%	28.679%
45.0	1894.384	2251.561	4675.89	.000%	55.313%
60.0	1224.780	2029.469	6705.359	.000%	79.321%
75.0	432.161	1255.451	7960.81	.000%	94.172%
90.0	22.537	369.717	8330.527	.000%	98.546%
105.0	16.124	31.436	8361.963	.000%	98.918%
120.0	17.522	25.493	8387.456	.000%	99.219%
135.0	19.979	24.399	8411.855	.000%	99.508%
150.0	22.645	21.280	8433.135	.000%	99.760%
165.0	24.792	14.888	8448.023	.000%	99.936%
180.0	25.855	5.422	8453.445	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2424.33	N.A.	28.68%
0-40	2424.33	N.A.	28.68%
0-60	6705.36	N.A.	79.32%
0-90	8330.53	N.A.	98.55%
0-120	8387.46	N.A.	99.22%
0-180	8453.44	N.A.	100.00%
60-90	3654.64	N.A.	43.23%
90-120	426.65	N.A.	5.05%
90-130	426.65	N.A.	5.05%
90-150	472.33	N.A.	5.59%
90-180	487.21	N.A.	5.76%
0-60.69	6762.76	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	656.20
20-30	1768.12
30-40	0.00
40-50	2251.56
50-60	2029.47
60-70	0.00
70-80	1255.45
80-90	369.72
90-100	0.00
100-110	31.44
110-120	25.49
120-130	0.00
130-140	24.40
140-150	21.28
150-160	0.00
160-170	14.89
170-180	0.00



C90(Max): ———

C0/C180: ———

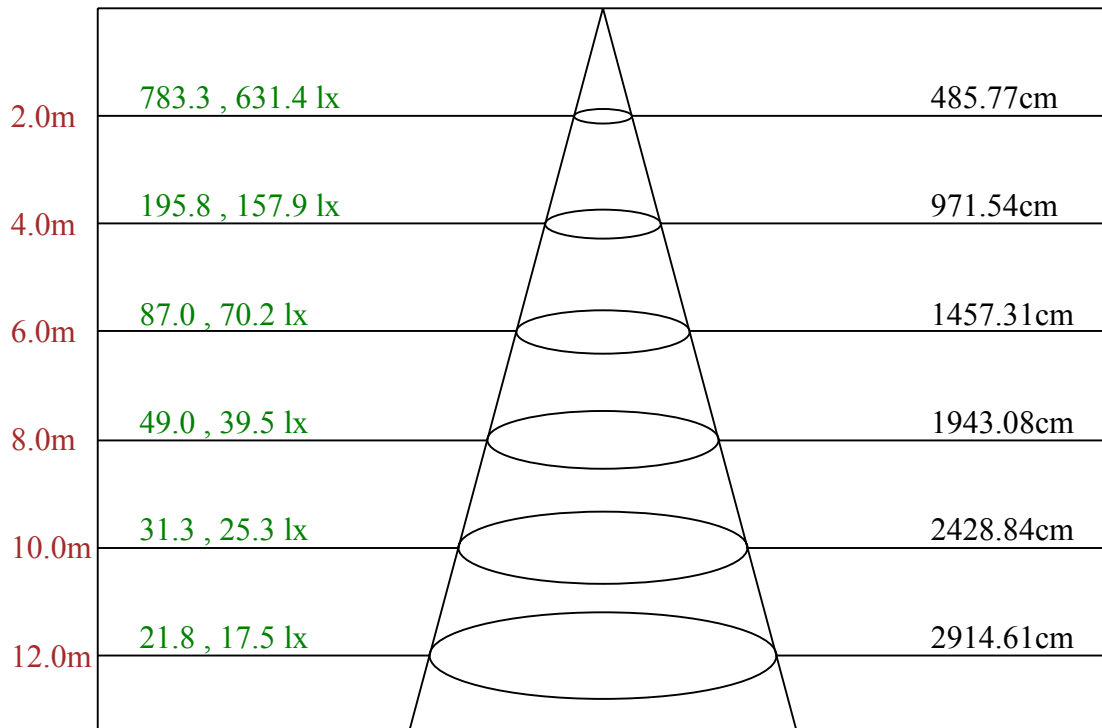
C90/C270: ———

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

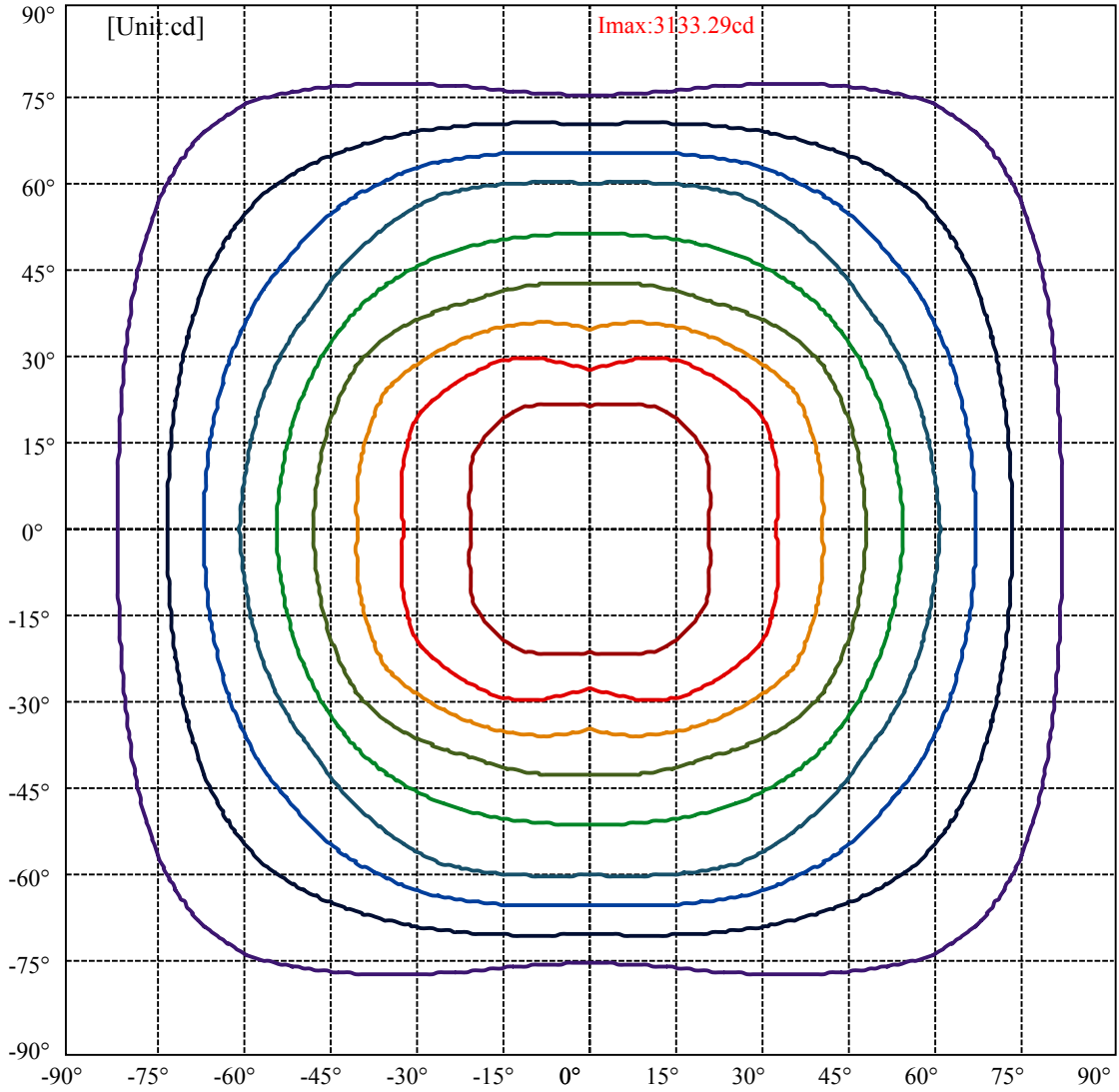
:C90/270Left:74.3 Right:74.3

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

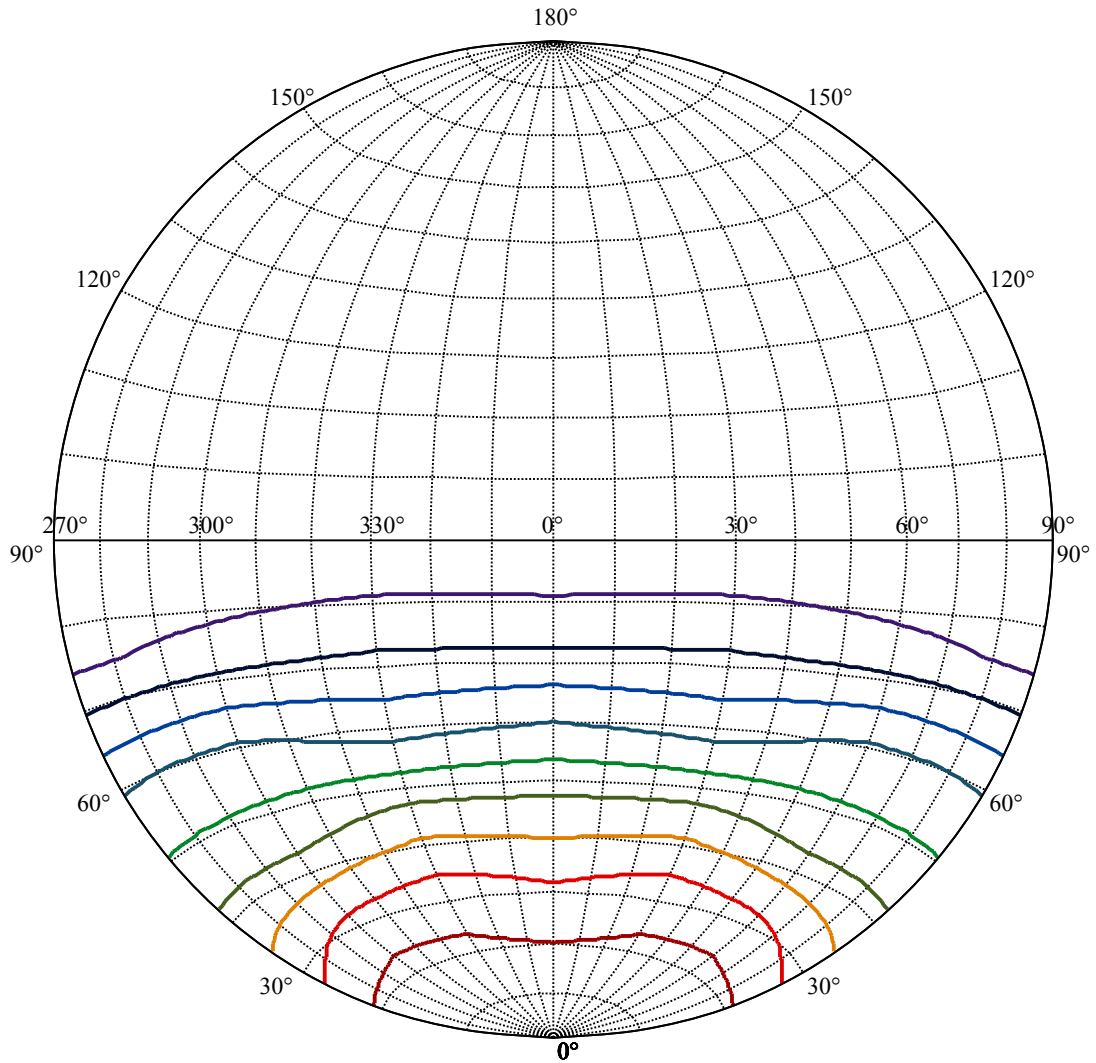
:C90/270Left:50.5 Right:50.5



Max , Ave Beam angle of C90 plane 101.06



(10%Imax) 313.329	—
(20%Imax) 626.659	—
(30%Imax) 939.988	—
(40%Imax) 1253.32	—
(50%Imax) 1566.65	—
(60%Imax) 1879.98	—
(70%Imax) 2193.31	—
(80%Imax) 2506.63	—
(90%Imax) 2819.96	—



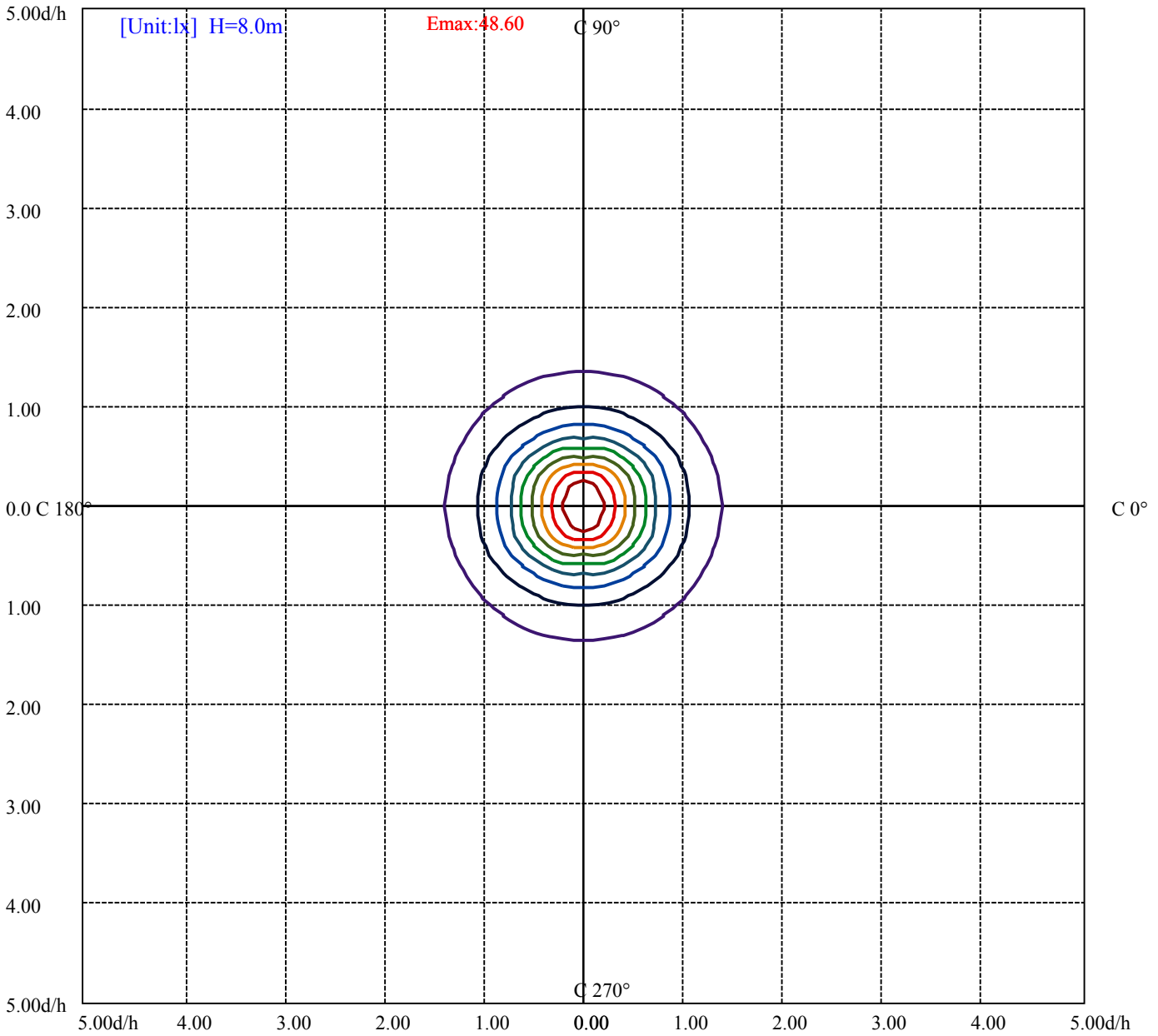
House

[Unit:cd]

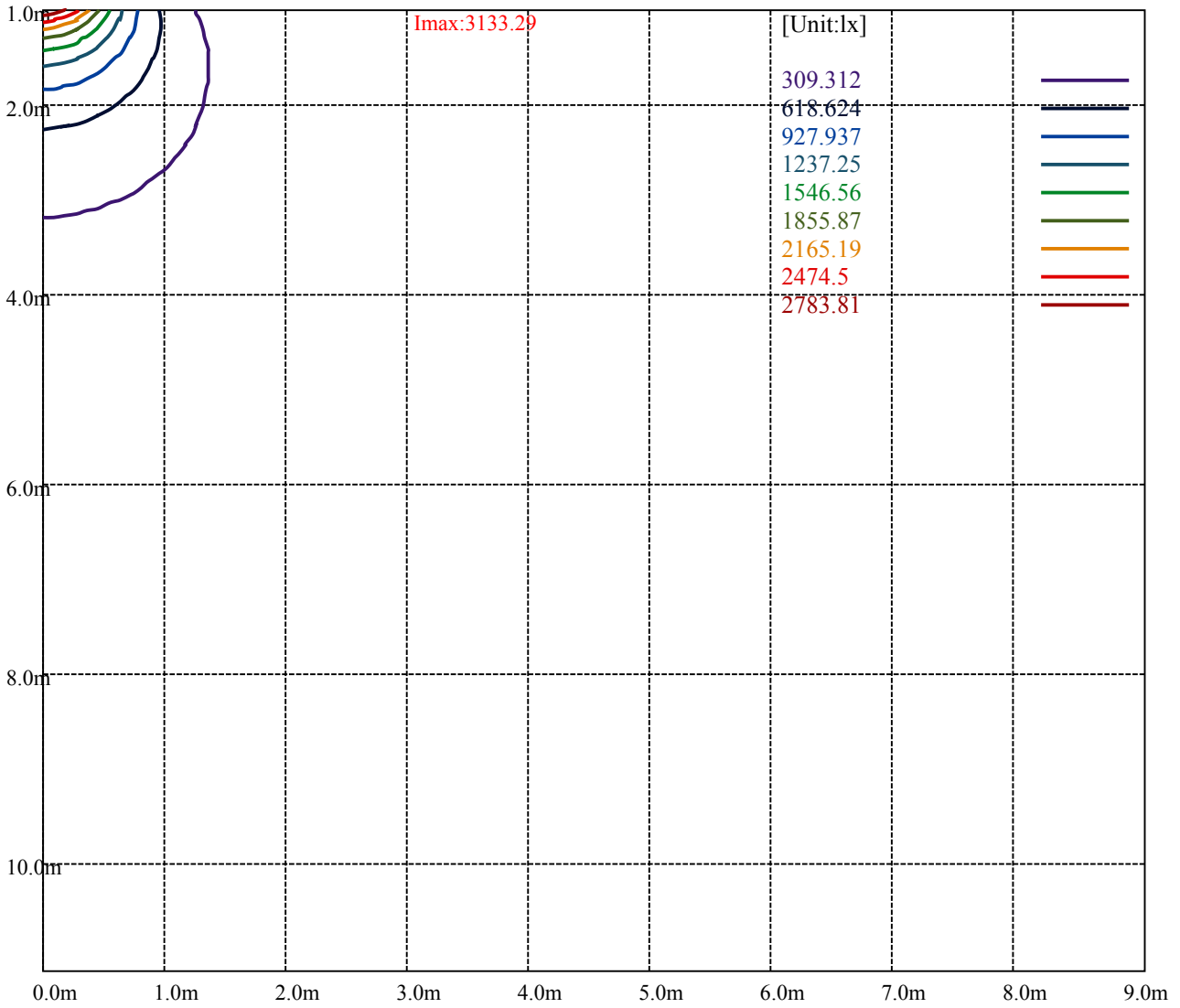
Road

Imax:3133.29

(10%Imax) 313.329	
(20%Imax) 626.659	
(30%Imax) 939.988	
(40%Imax) 1253.32	
(50%Imax) 1566.65	
(60%Imax) 1879.98	
(70%Imax) 2193.31	
(80%Imax) 2506.63	
(90%Imax) 2819.96	



- (10%Emax) 4.860344
- (20%Emax) 9.720672
- (30%Emax) 14.58102
- (40%Emax) 19.44141
- (50%Emax) 24.30172
- (60%Emax) 29.16203
- (70%Emax) 34.02234
- (80%Emax) 38.88266
- (90%Emax) 43.74313



Luminance Table

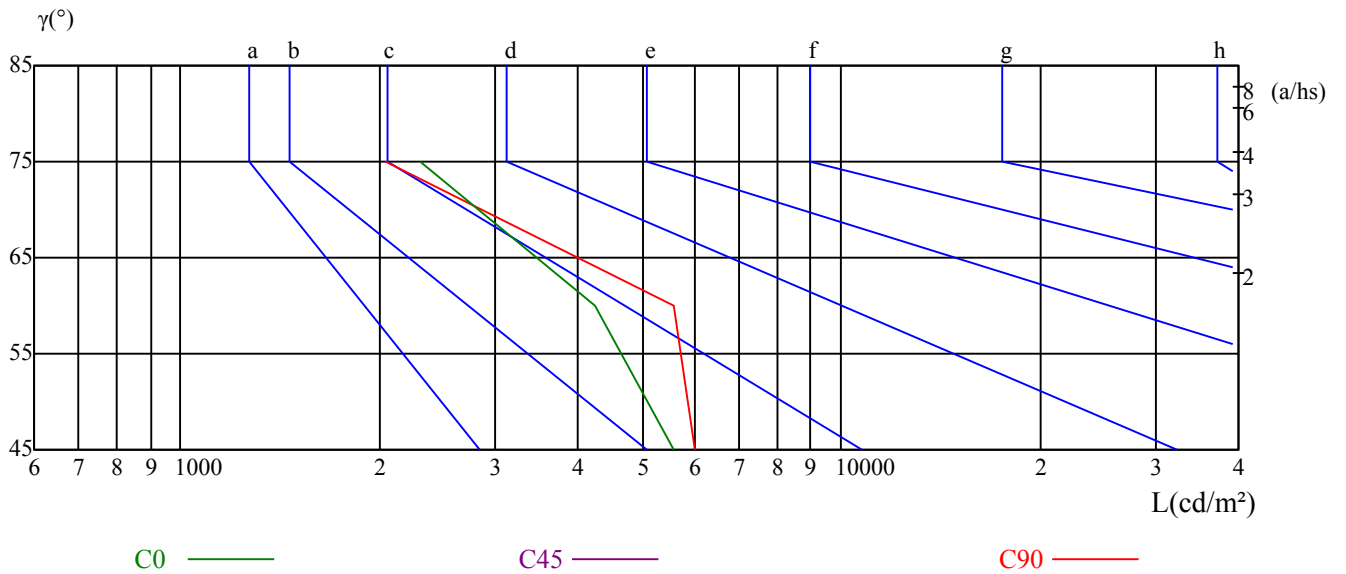
γ	45	50	55	60	65	70	75	80	85
C0	5595	0	0	4251	0	0	2304	0	0
C45	0	0	0	0	0	0	0	0	0
C90	6003	0	0	5575	0	0	2048	0	0

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	4991	2684	0	0	0	0

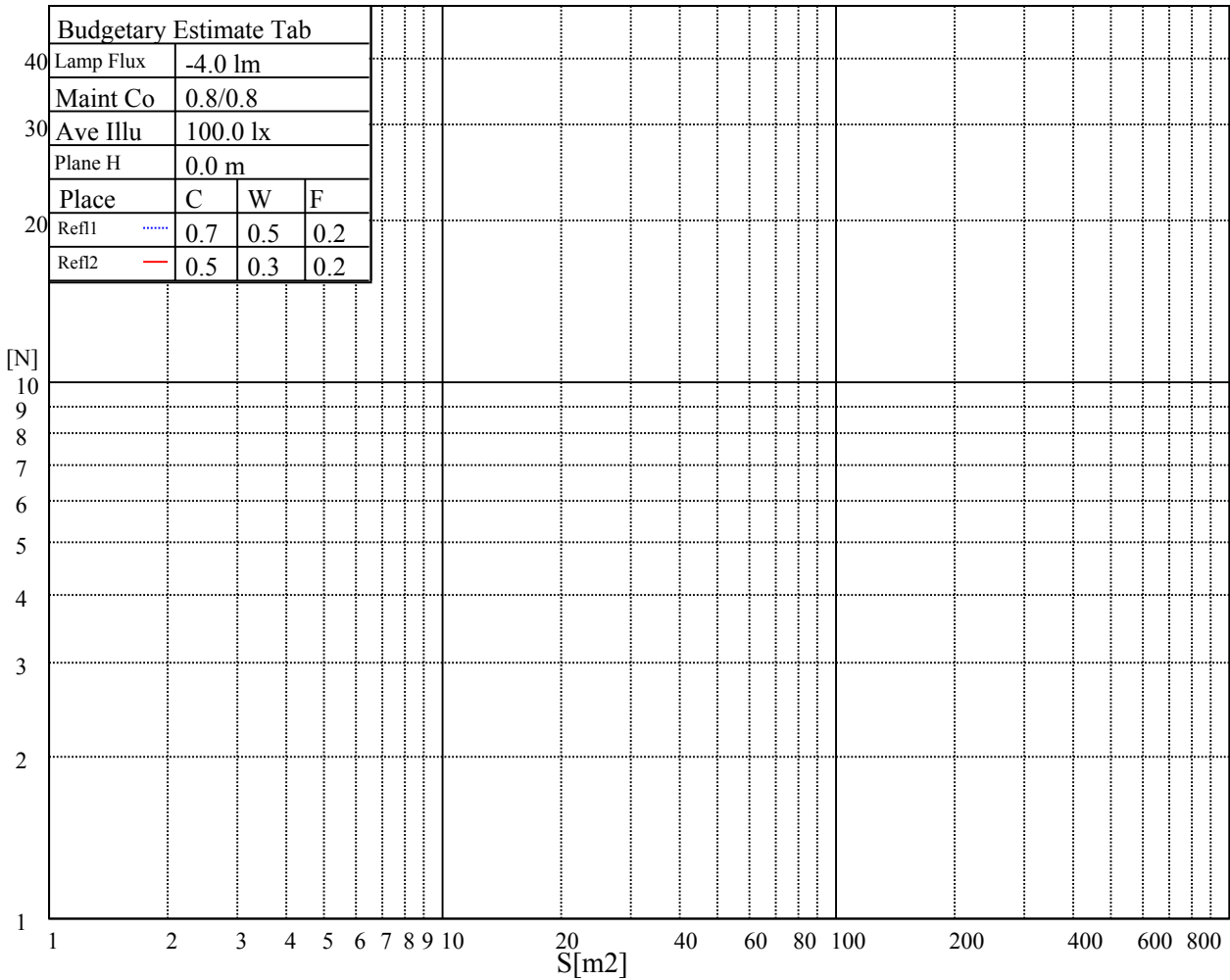
Glare Table

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

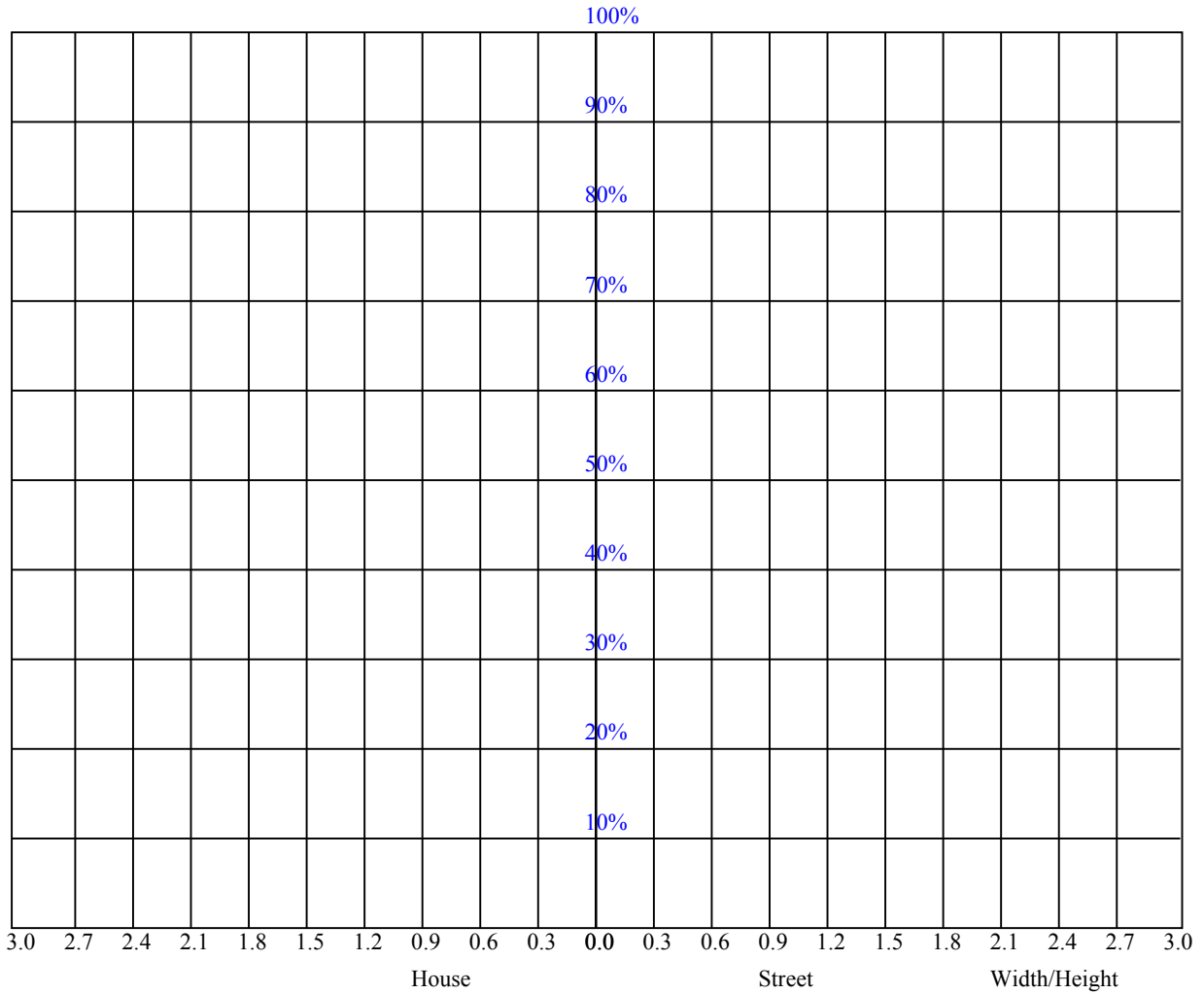
Luminance Limiting Curve



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	2.7					2.8					



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	3093.12	2958.72	2581.43	2020.36	1283.45	532.65	40.64	17.44	18.71
30.0	3106.12	2939.91	2741.30	2114.17	1166.95	557.03	21.56	17.08	18.59
60.0	3112.03	3079.79	2737.77	1824.23	1352.18	455.03	22.15	16.61	18.00
90.0	3133.29	3147.97	2340.33	1768.81	1223.13	274.69	21.20	16.37	18.23
120.0	3123.84	3100.95	2659.01	1779.92	1278.71	351.72	18.96	14.71	15.98
150.0	3099.03	2932.85	2718.97	2117.24	1151.90	605.44	18.85	15.07	16.22
180.0	3093.12	2946.60	2568.78	1967.44	1232.73	459.49	37.17	15.54	16.69
210.0	3106.12	2921.10	2738.95	1918.75	1080.80	443.01	16.61	15.66	16.81
240.0	3118.21	3073.33	2540.28	1754.46	1304.22	385.62	17.96	15.30	16.69
270.0	3133.29	3117.41	2392.17	1762.79	1226.57	258.90	16.02	14.59	16.10
300.0	3123.84	3076.27	2621.40	1749.79	1292.93	358.08	20.26	17.44	18.82
330.0	3099.03	2924.63	2744.83	1954.66	1103.79	504.26	19.08	17.68	19.42
360.0	3093.12	2958.72	2581.43	2020.36	1283.45	532.65	40.64	17.44	18.71
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	21.21	23.70	25.40	25.76					
30.0	20.98	23.35	25.28	25.99					
60.0	20.62	23.23	24.93	25.64					
90.0	20.74	23.35	25.05	25.64					
120.0	18.49	21.57	24.57	26.11					
150.0	18.49	21.45	24.22	25.99					
180.0	19.20	22.04	24.46	25.76					
210.0	18.96	21.57	24.22	25.99					
240.0	19.20	21.81	24.10	25.64					
270.0	18.61	21.57	24.10	25.64					
300.0	21.57	24.06	25.40	26.11					
330.0	21.69	24.06	25.76	25.99					
360.0	21.21	23.70	25.40	25.76					