
PQL 91315 LED SMD 4'13WT8/50K/SC/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 13WT8/50K/SC/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 64.0000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

Photometric Results

Lumens(lm): 7629.98

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 119.22

Central intensity(cd): 3016.257

Maximum intensity(cd): 3045.226

Angle of maximum intensity: C=90.0 γ =0.0

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

[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=1.23 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 π solid angle : 79.926%

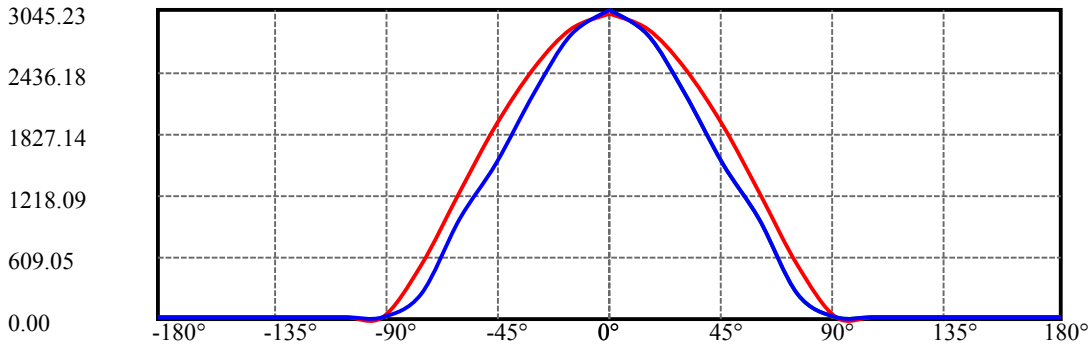
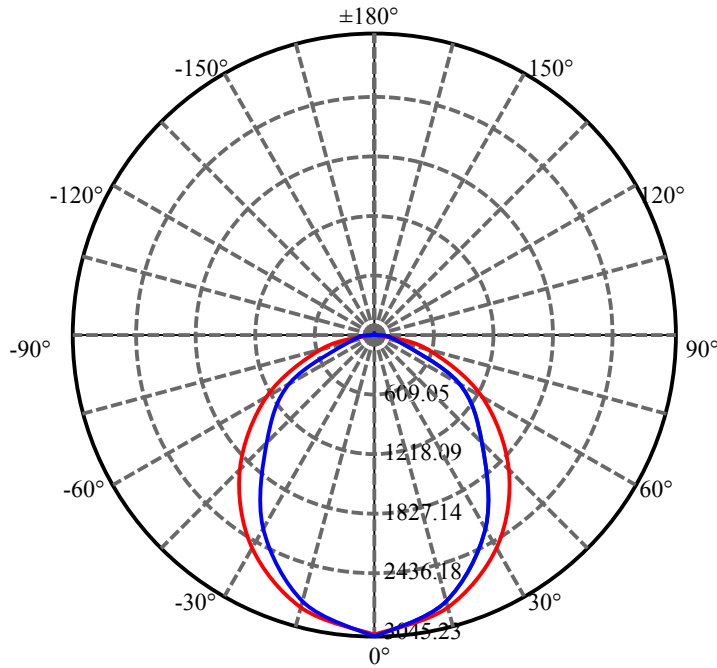
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3028.618	0.000	0	.000%	.000%
15.0	2805.166	624.490	624.49	.000%	8.185%
30.0	2376.029	1626.100	2250.59	.000%	29.497%
45.0	1715.138	2042.546	4293.136	.000%	56.267%
60.0	1059.385	1805.230	6098.366	.000%	79.926%
75.0	383.891	1093.559	7191.925	.000%	94.259%
90.0	18.214	326.954	7518.878	.000%	98.544%
105.0	14.767	26.817	7545.696	.000%	98.895%
120.0	16.130	23.410	7569.106	.000%	99.202%
135.0	18.422	22.481	7591.587	.000%	99.497%
150.0	20.911	19.638	7611.225	.000%	99.754%
165.0	22.915	13.755	7624.979	.000%	99.935%
180.0	23.755	4.996	7629.975	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2250.59	N.A.	29.50%
0-40	2250.59	N.A.	29.50%
0-60	6098.37	N.A.	79.93%
0-90	7518.88	N.A.	98.54%
0-120	7569.11	N.A.	99.20%
0-180	7629.98	N.A.	100.00%
60-90	3225.74	N.A.	42.28%
90-120	377.18	N.A.	4.94%
90-130	377.18	N.A.	4.94%
90-150	419.30	N.A.	5.50%
90-180	433.05	N.A.	5.68%
0-60.08	6103.98	N.A.	80.00%

ZONAL LUMEN SUMMARY

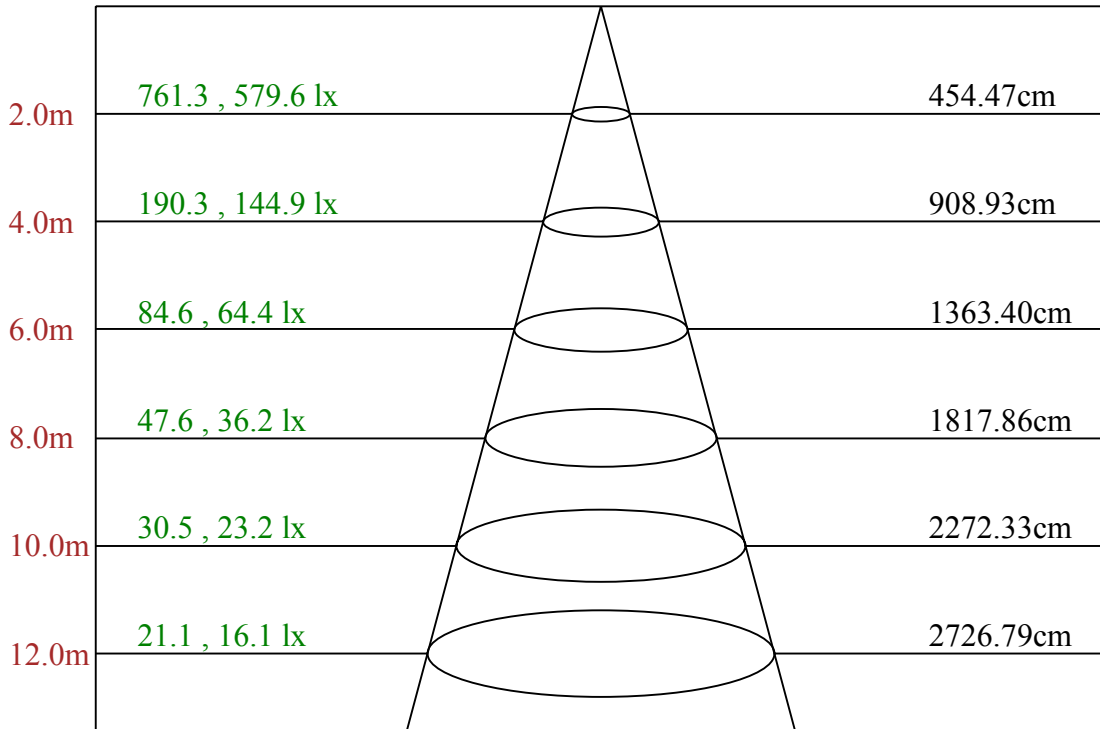
0-10	0.00
10-20	624.49
20-30	1626.10
30-40	0.00
40-50	2042.55
50-60	1805.23
60-70	0.00
70-80	1093.56
80-90	326.95
90-100	0.00
100-110	26.82
110-120	23.41
120-130	0.00
130-140	22.48
140-150	19.64
150-160	0.00
160-170	13.75
170-180	0.00



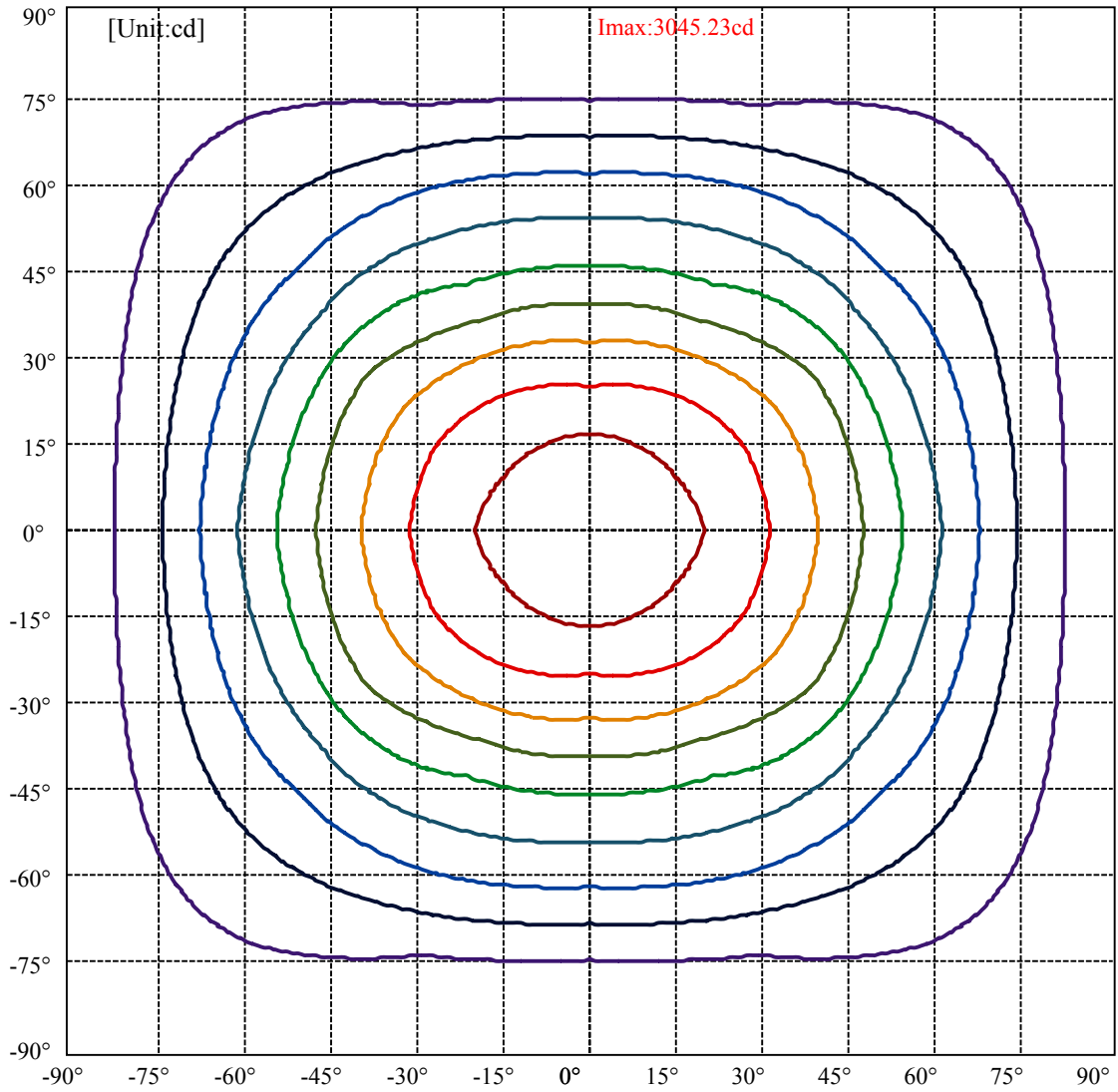
C90(Max): ———
C0/C180: ———
C90/C270: ———

Field angle(10%Imax):C0/180Left:81.8 Right:81.8
:C90/270Left:73.9 Right:73.9

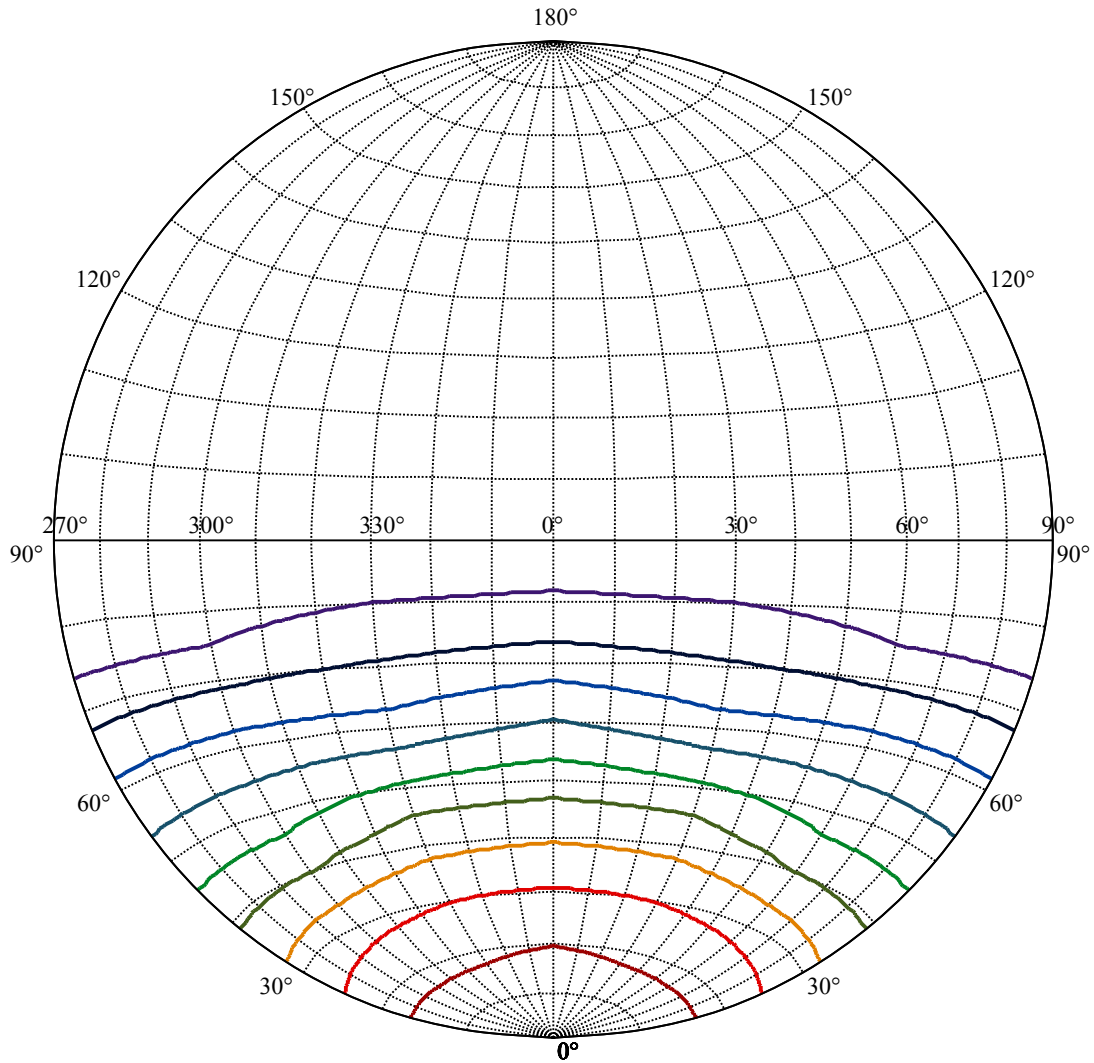
Beam Angle(50%Imax):C0/180Left:54.1 Right:54.1
:C90/270Left:45.3 Right:45.3



Max , Ave Beam angle of C90 plane 97.29



(10%Imax) 304.523	—
(20%Imax) 609.045	—
(30%Imax) 913.568	—
(40%Imax) 1218.09	—
(50%Imax) 1522.61	—
(60%Imax) 1827.14	—
(70%Imax) 2131.66	—
(80%Imax) 2436.18	—
(90%Imax) 2740.7	—



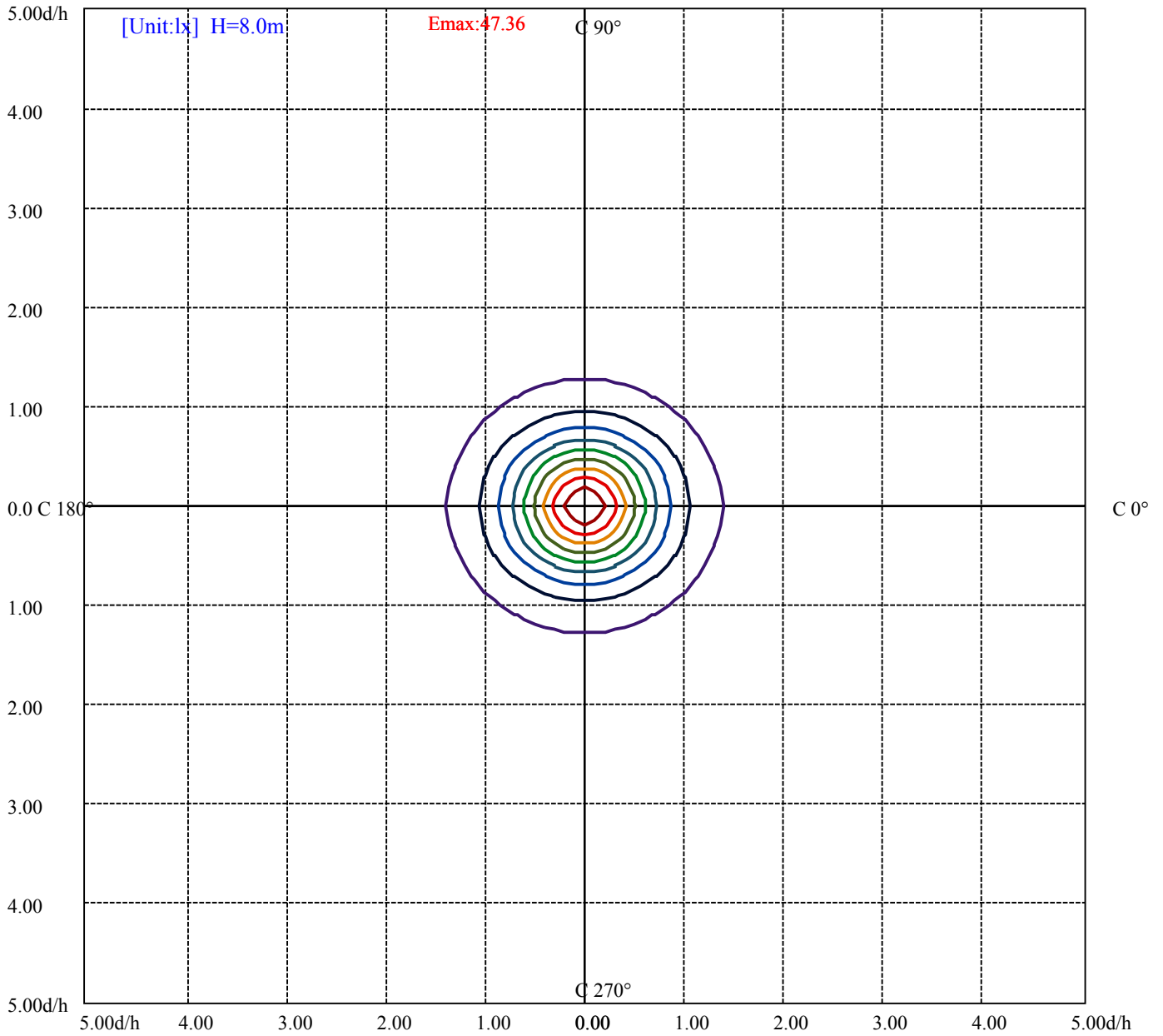
House

[Unit:cd]

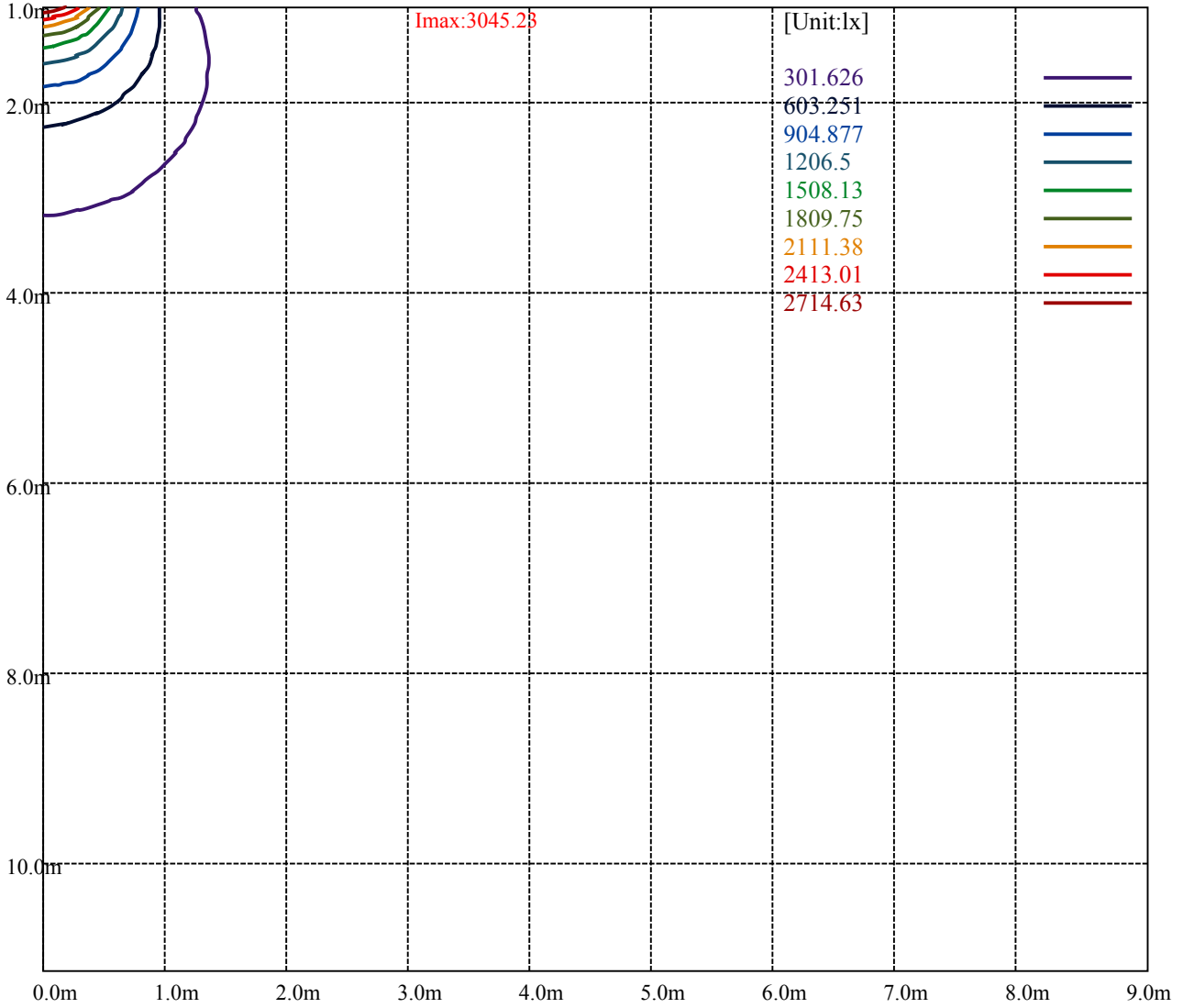
Road

I_{max}:3045.23

(10%I _{max}) 304.523	—
(20%I _{max}) 609.045	—
(30%I _{max}) 913.568	—
(40%I _{max}) 1218.09	—
(50%I _{max}) 1522.61	—
(60%I _{max}) 1827.14	—
(70%I _{max}) 2131.66	—
(80%I _{max}) 2436.18	—
(90%I _{max}) 2740.7	—



(10%Emax) 4.735531	—
(20%Emax) 9.471063	—
(30%Emax) 14.20659	—
(40%Emax) 18.94219	—
(50%Emax) 23.67766	—
(60%Emax) 28.41312	—
(70%Emax) 33.14875	—
(80%Emax) 37.88422	—
(90%Emax) 42.61984	—



Luminance Table

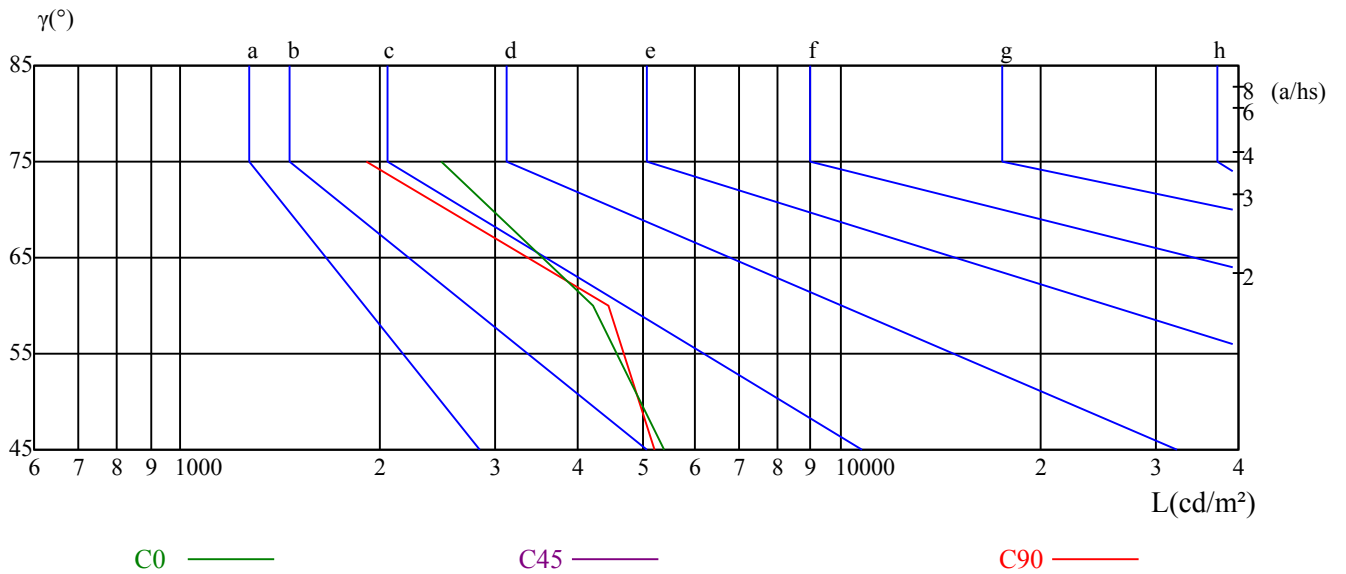
γ	45	50	55	60	65	70	75	80	85
C0	5381	0	0	4203	0	0	2476	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5218	0	0	4449	0	0	1910	0	0

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	5363	2504	0	0	0	0

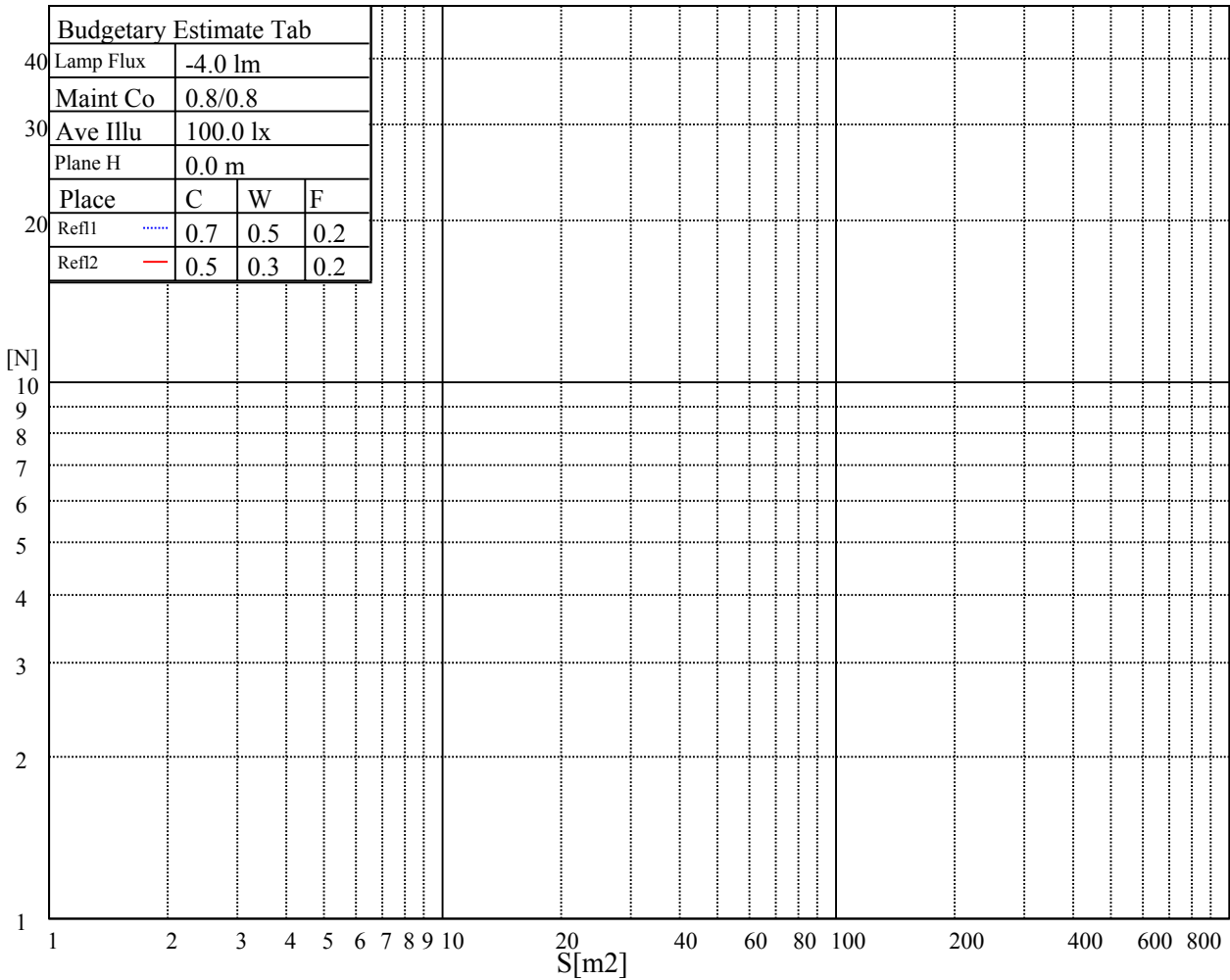
Glare Table

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

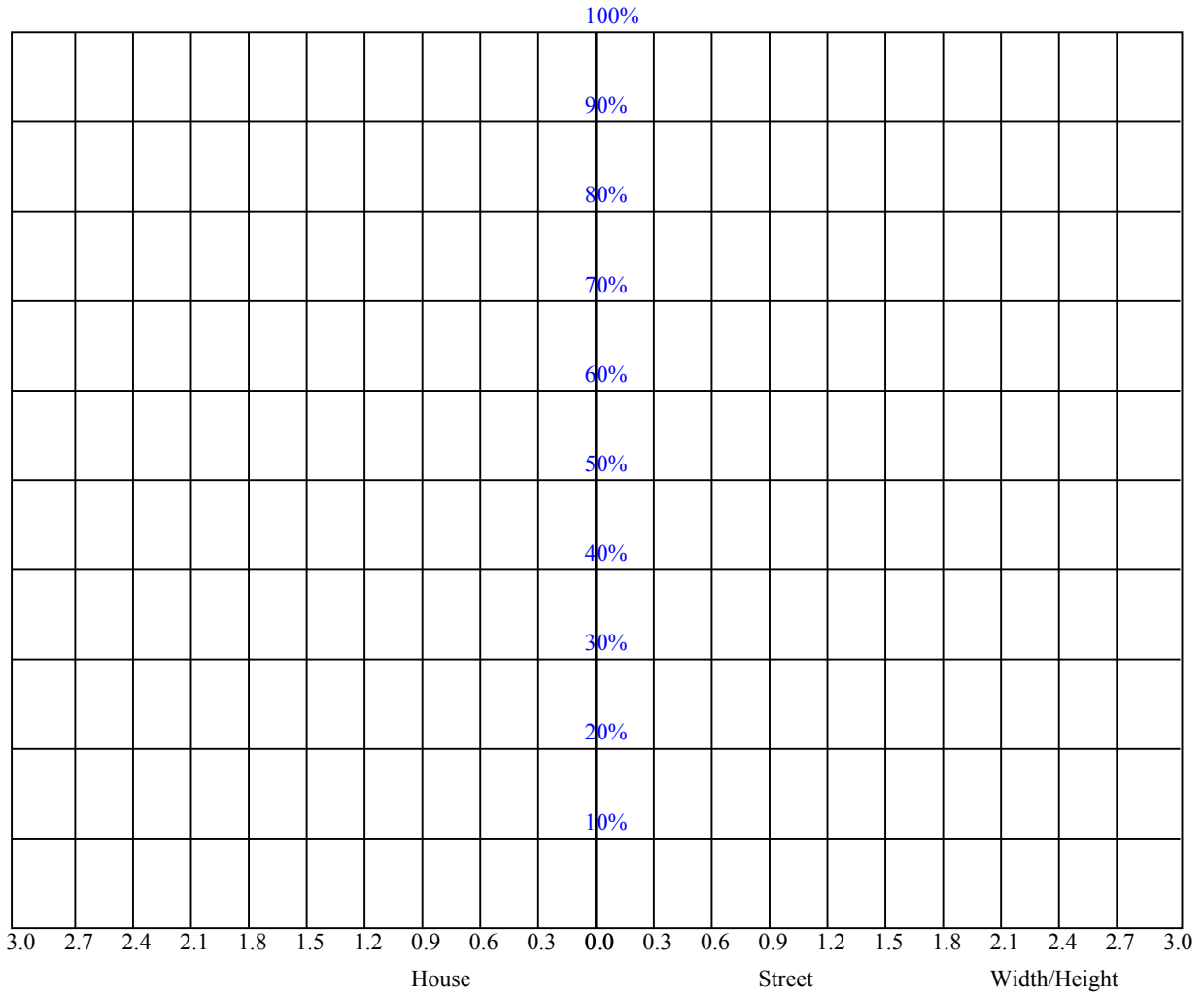
Luminance Limiting Curve



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	9.80	11.38	10.18	11.72	12.06	10.43	12.01	10.81	12.35	12.69
	3H	11.04	12.47	11.43	12.82	13.20	11.82	13.25	12.21	13.60	13.98
	4H	11.29	12.64	11.71	13.01	13.41	12.30	13.65	12.72	14.02	14.42
	6H	11.48	12.73	11.91	13.11	13.53	12.67	13.91	13.09	14.30	14.71
	8H	11.54	12.73	11.99	13.14	13.57	12.78	13.97	13.22	14.38	14.81
	12H	11.64	12.78	12.09	13.19	13.64	12.93	14.07	13.37	14.47	14.93
4H	2H	10.25	11.59	10.66	11.96	12.36	10.78	12.12	11.19	12.49	12.89
	3H	11.65	12.77	12.07	13.19	13.62	12.35	13.48	12.78	13.90	14.32
	4H	11.97	12.99	12.42	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	14.23	13.81	14.69	15.17
	8H	12.26	13.10	12.74	13.56	14.05	13.51	14.34	13.98	14.80	15.29
	12H	12.39	13.14	12.88	13.63	14.12	13.68	14.43	14.18	14.93	15.42
8H	4H	12.16	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	14.13	13.56	14.34	14.07	14.76	15.26
	8H	12.58	13.21	13.11	13.73	14.24	13.79	14.42	14.32	14.94	15.45
	12H	13.06	13.62	13.59	14.19	14.71	14.21	14.77	14.74	15.34	15.86
12H	4H	12.18	12.93	12.68	13.42	13.92	13.06	13.81	13.55	14.30	14.79
	6H	13.49	13.11	13.02	13.59	14.15	14.59	14.21	14.11	14.69	15.25
	8H	12.67	13.22	13.19	13.73	14.31	13.84	14.40	14.36	14.91	15.49
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	1.8					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	3016.26	2882.22	2505.27	1961.80	1305.26	594.96	27.50	16.17	17.42
30.0	3029.00	2837.26	2456.85	1914.41	1085.59	511.20	19.75	15.59	16.95
60.0	3032.48	2832.64	2463.77	1667.47	1146.02	391.40	19.99	15.01	16.49
90.0	3045.23	2810.74	2253.82	1556.23	1003.29	256.12	18.83	14.89	16.72
120.0	3031.32	2786.53	2301.44	1598.76	1052.58	313.77	16.06	13.03	14.40
150.0	3017.42	2825.73	2431.48	1909.66	1063.50	474.00	17.10	13.85	14.75
180.0	3016.26	2840.71	2436.10	1873.50	1182.40	471.11	15.60	14.54	15.44
210.0	3029.00	2770.39	2408.43	1771.76	972.84	395.79	16.06	14.78	15.91
240.0	3032.48	2753.09	2261.66	1468.28	928.67	219.73	14.67	14.08	15.44
270.0	3045.23	2786.53	2223.96	1513.36	951.92	241.68	14.56	13.15	14.86
300.0	3031.32	2770.39	2361.16	1542.33	1022.82	304.99	19.75	15.71	17.30
330.0	3017.42	2765.78	2408.43	1804.09	997.72	431.95	18.71	16.41	17.88
360.0	3016.26	2882.22	2505.27	1961.80	1305.26	594.96	27.50	16.17	17.42
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	19.53	21.97	23.41	23.64					
30.0	19.18	21.50	23.18	23.75					
60.0	18.83	21.15	22.94	23.52					
90.0	19.06	21.39	23.06	23.75					
120.0	16.85	19.64	22.48	23.99					
150.0	17.09	19.76	22.36	23.87					
180.0	17.78	20.46	22.71	23.64					
210.0	17.90	20.34	22.48	23.75					
240.0	17.90	20.34	22.48	23.52					
270.0	17.32	19.99	22.48	23.75					
300.0	19.64	22.08	23.64	23.99					
330.0	19.99	22.32	23.76	23.87					
360.0	19.53	21.97	23.41	23.64					