
PQL 91314 LED SMD 4'13WT8/40K/SC/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 13WT8/40K/SC/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 64.1000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

Photometric Results

Lumens(lm): 7480.37

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 116.70

Central intensity(cd): 2957.115

Maximum intensity(cd): 2985.516

Angle of maximum intensity: C=90.0 γ =0.0

Beam Angle(50% I_{max}): [C0/180]Total=108.2

[C90/270]Total=90.6

Field angle(10% I_{max}): [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

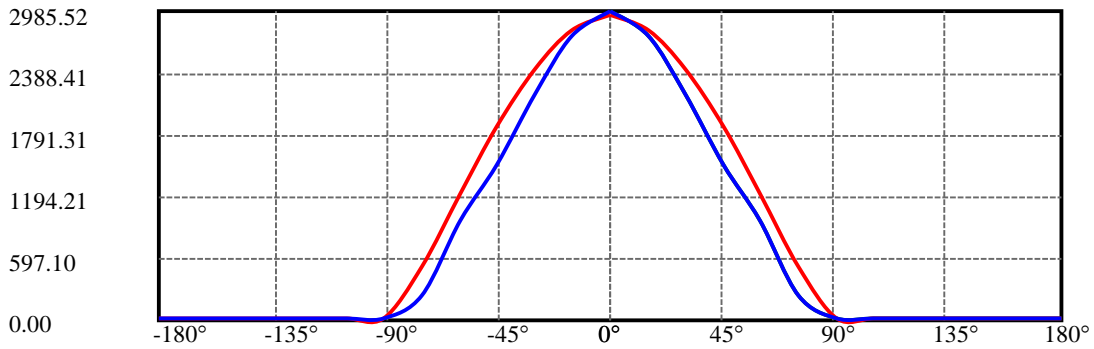
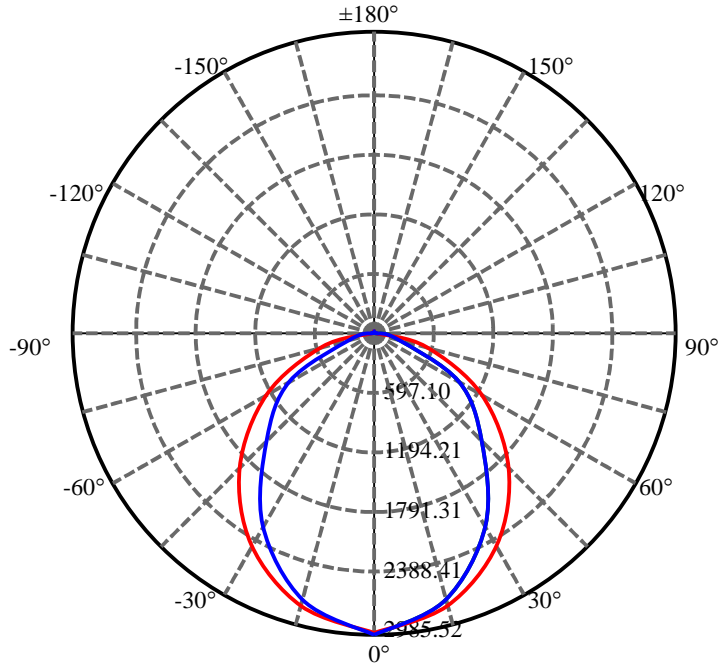
Output flux ratio in π solid angle : 79.926%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2969.233	0.000	0	.000%	.000%
15.0	2750.163	612.245	612.245	.000%	8.185%
30.0	2329.440	1594.215	2206.461	.000%	29.497%
45.0	1681.508	2002.496	4208.957	.000%	56.267%
60.0	1038.612	1769.833	5978.79	.000%	79.926%
75.0	376.364	1072.116	7050.907	.000%	94.259%
90.0	17.857	320.543	7371.449	.000%	98.544%
105.0	14.477	26.291	7397.741	.000%	98.895%
120.0	15.814	22.951	7420.692	.000%	99.202%
135.0	18.061	22.040	7442.732	.000%	99.497%
150.0	20.501	19.253	7461.985	.000%	99.754%
165.0	22.466	13.485	7475.47	.000%	99.935%
180.0	23.289	4.898	7480.368	.000%	100.000%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	2206.46	N.A.	29.50%
0-40	2206.46	N.A.	29.50%
0-60	5978.79	N.A.	79.93%
0-90	7371.45	N.A.	98.54%
0-120	7420.69	N.A.	99.20%
0-180	7480.37	N.A.	100.00%
60-90	3162.49	N.A.	42.28%
90-120	369.79	N.A.	4.94%
90-130	369.79	N.A.	4.94%
90-150	411.08	N.A.	5.50%
90-180	424.56	N.A.	5.68%
0-60.08	5984.29	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	612.25
20-30	1594.22
30-40	0.00
40-50	2002.50
50-60	1769.83
60-70	0.00
70-80	1072.12
80-90	320.54
90-100	0.00
100-110	26.29
110-120	22.95
120-130	0.00
130-140	22.04
140-150	19.25
150-160	0.00
160-170	13.48
170-180	0.00



C90(Max): ——

C0/C180: ——

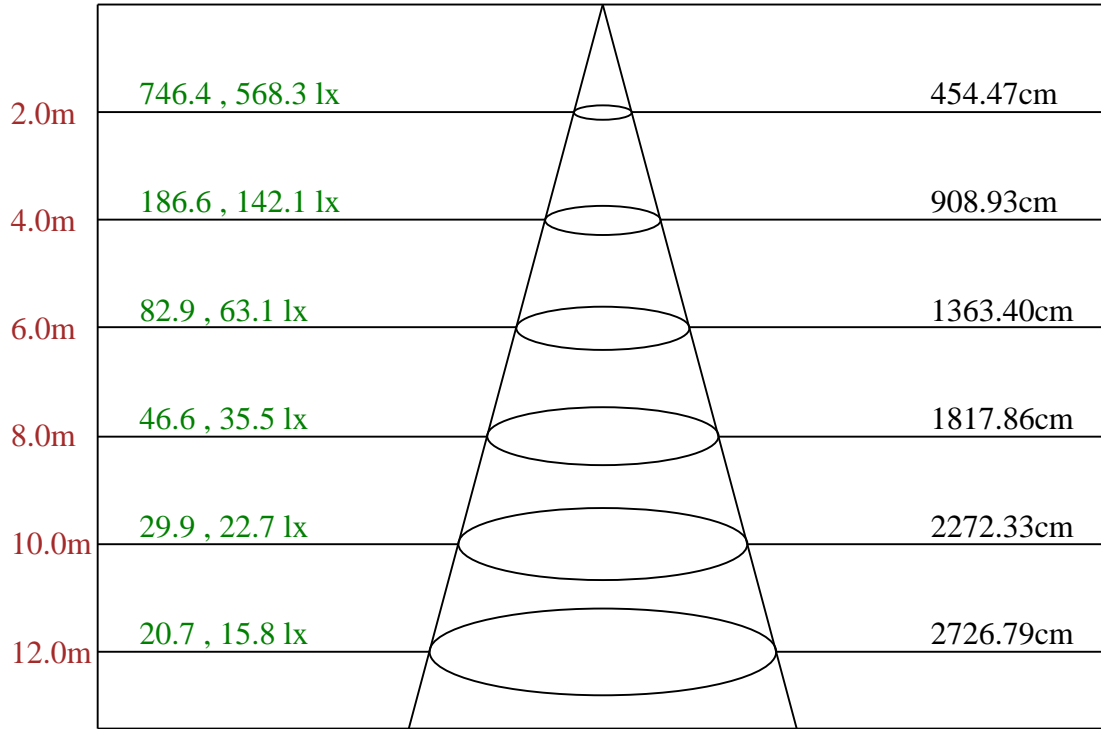
C90/C270: ——

Field angle(10% I_{max}):C0/180Left:81.8 Right:81.8

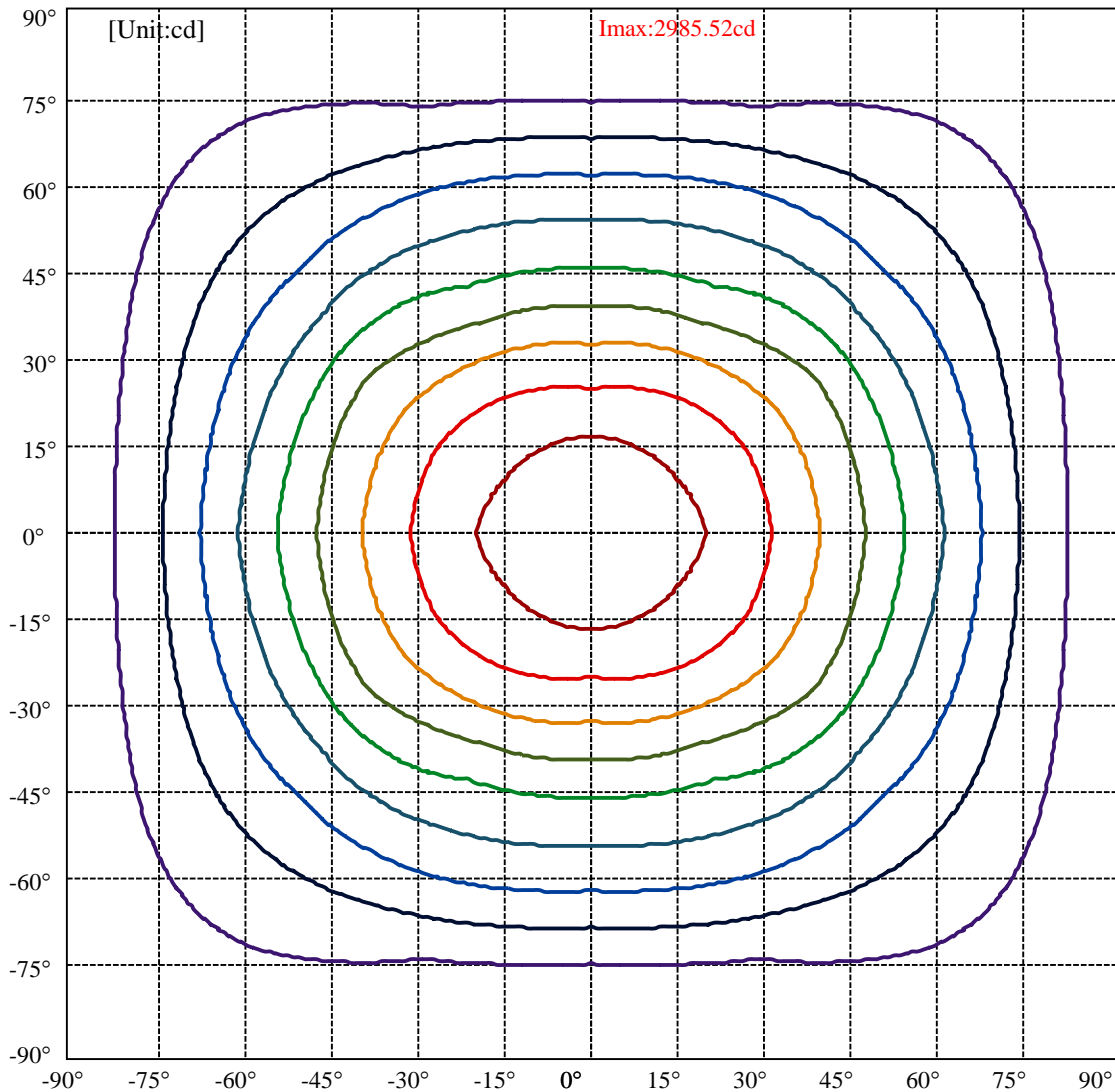
:C90/270Left:73.9 Right:73.9

Beam Angle(50% I_{max}):C0/180Left:54.1 Right:54.1

:C90/270Left:45.3 Right:45.3



Max , Ave Beam angle of C90 plane 97.29

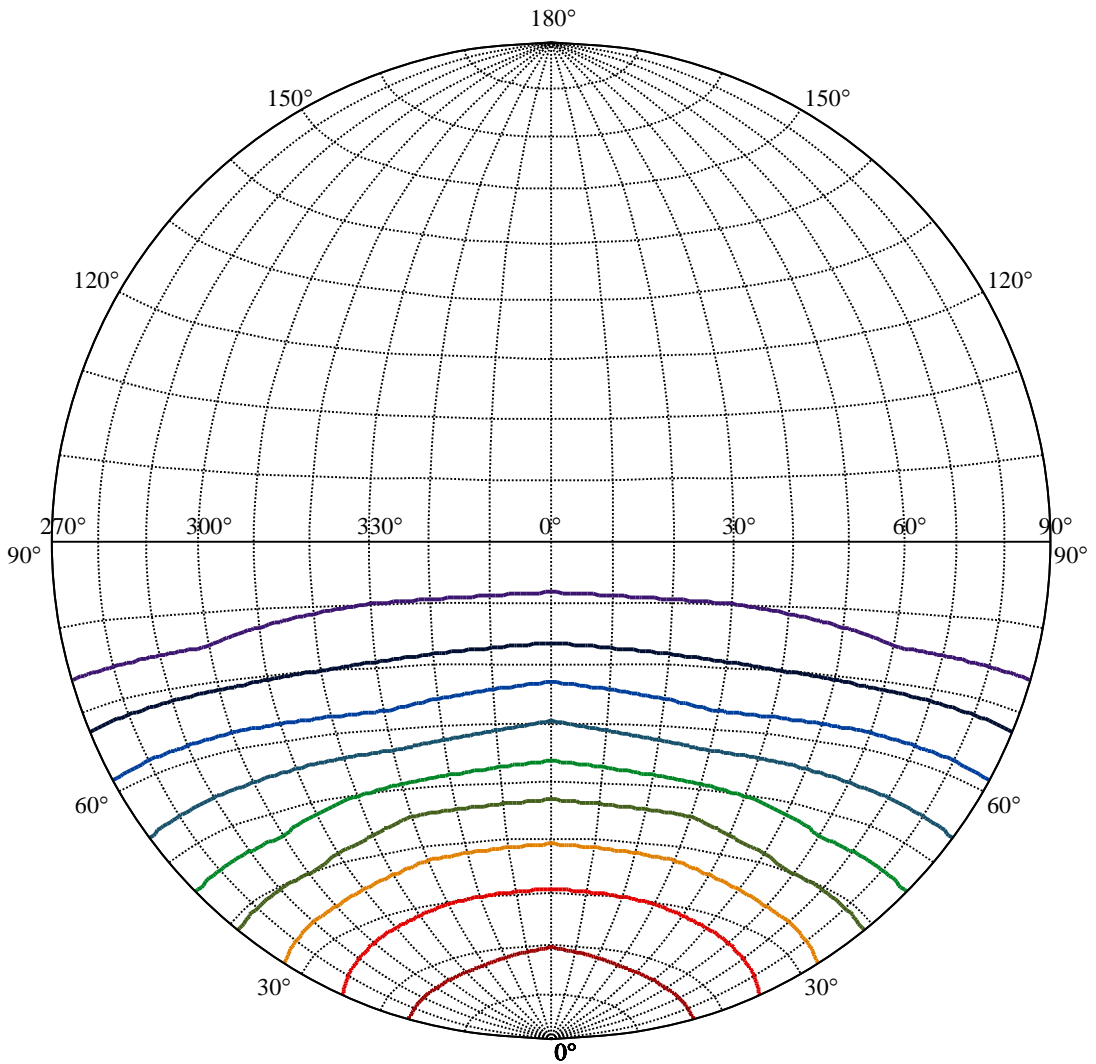


(10% I _{max}) 298.552	—
(20% I _{max}) 597.103	—
(30% I _{max}) 895.655	—
(40% I _{max}) 1194.21	—
(50% I _{max}) 1492.76	—
(60% I _{max}) 1791.31	—
(70% I _{max}) 2089.86	—
(80% I _{max}) 2388.41	—
(90% I _{max}) 2686.96	—

Equipment: 123
Temperature(°C): 345

Date:
Humidity(%): 456%

Operator: 234



House

[Unit:cd]

Road

Imax:2985.52

(10%Imax) 298.552

(20%Imax) 597.103

(30%Imax) 895.655

(40%Imax) 1194.21

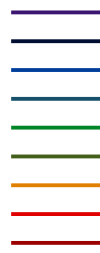
(50%Imax) 1492.76

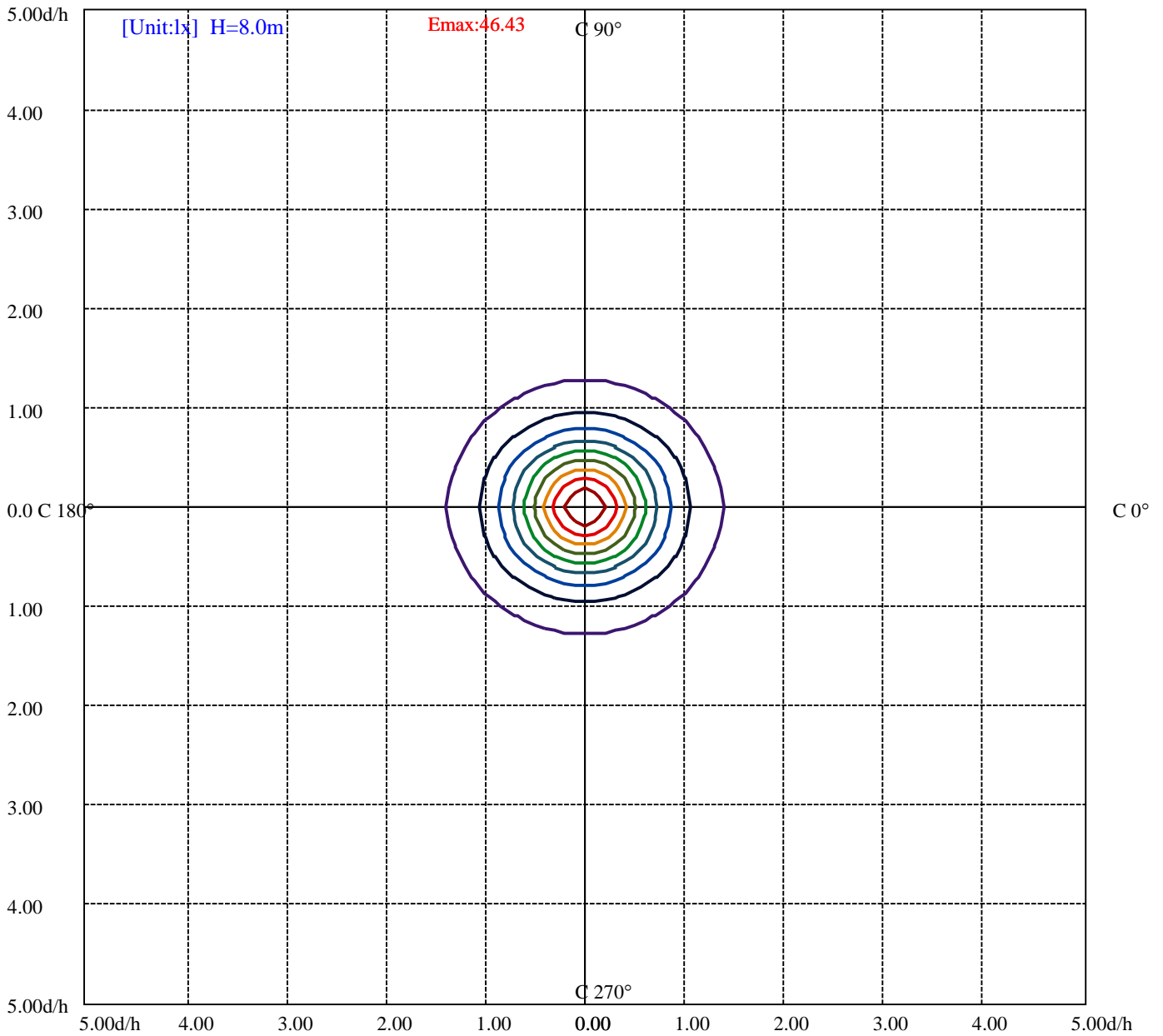
(60%Imax) 1791.31

(70%Imax) 2089.86

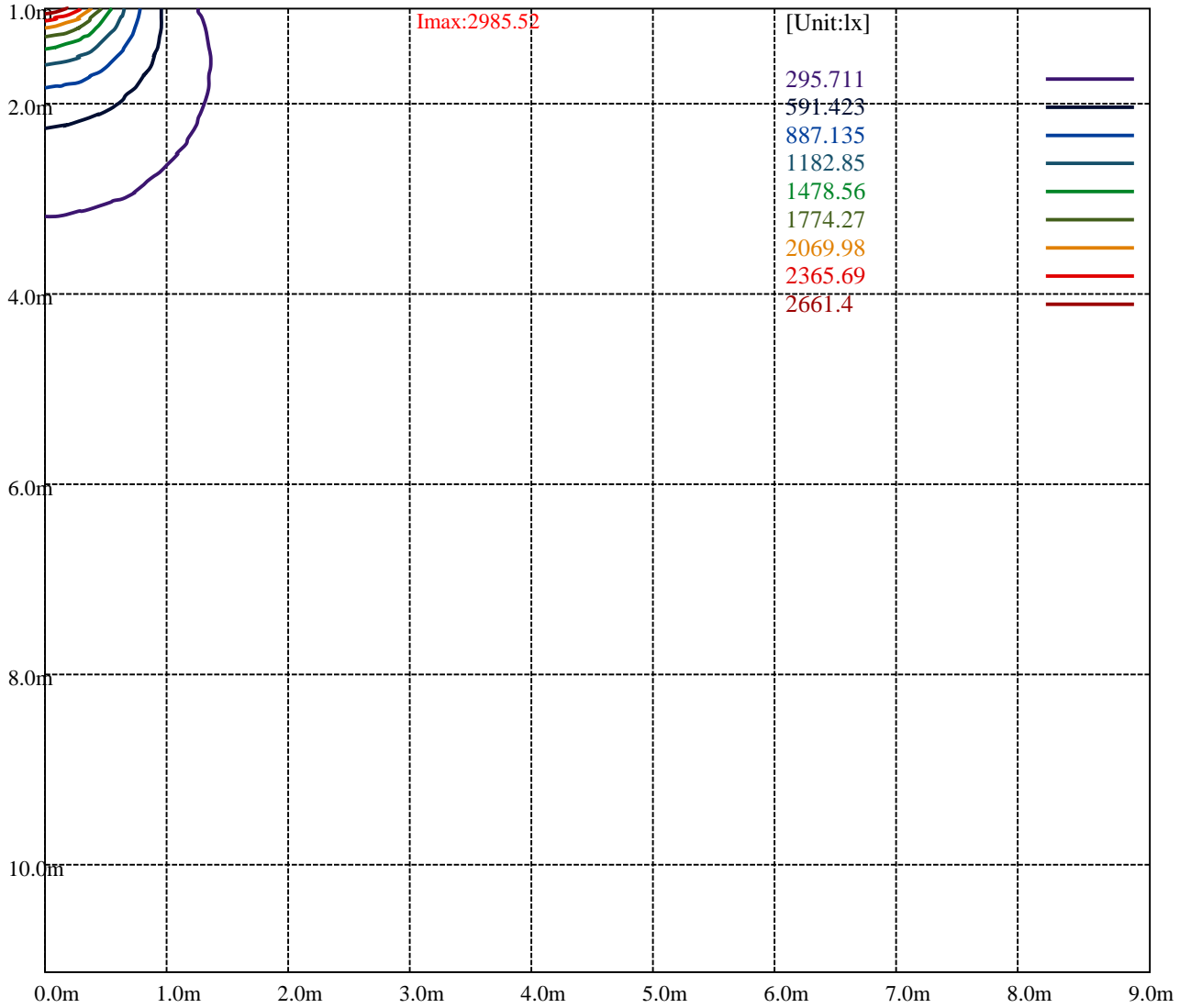
(80%Imax) 2388.41

(90%Imax) 2686.96





- (10% Emax) 4.642672
- (20% Emax) 9.285359
- (30% Emax) 13.92803
- (40% Emax) 18.57078
- (50% Emax) 23.21344
- (60% Emax) 27.85609
- (70% Emax) 32.49875
- (80% Emax) 37.14141
- (90% Emax) 41.78406



Luminance Table

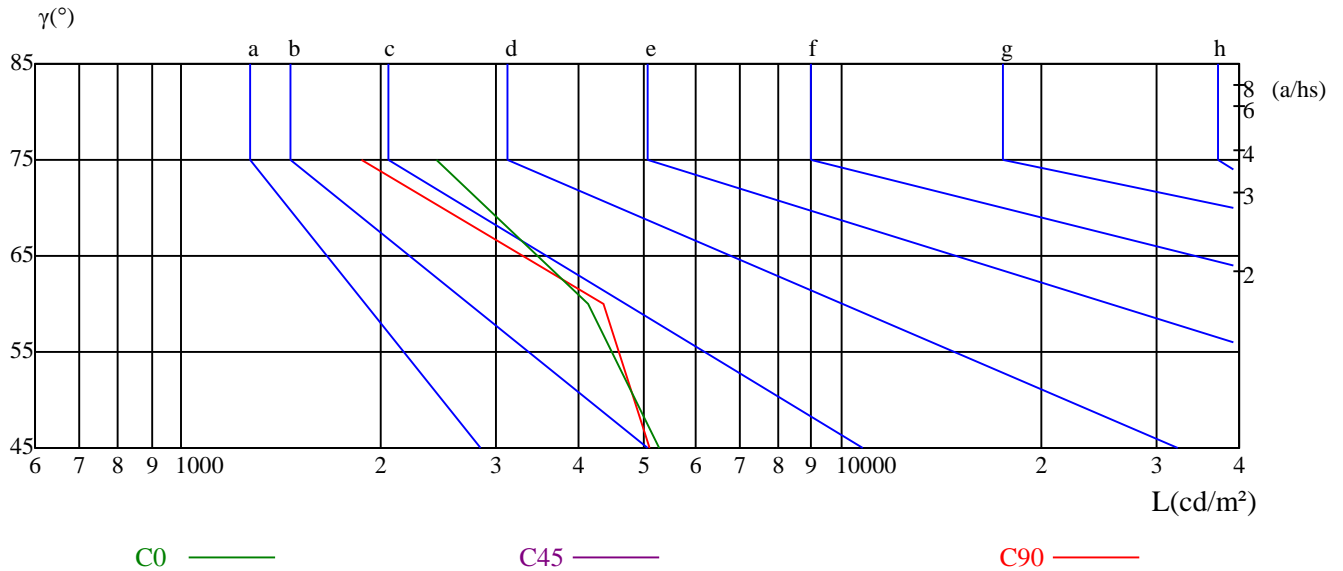
γ	45	50	55	60	65	70	75	80	85
C0	5275	0	0	4121	0	0	2427	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5115	0	0	4362	0	0	1873	0	0

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	5258	2455	0	0	0	0

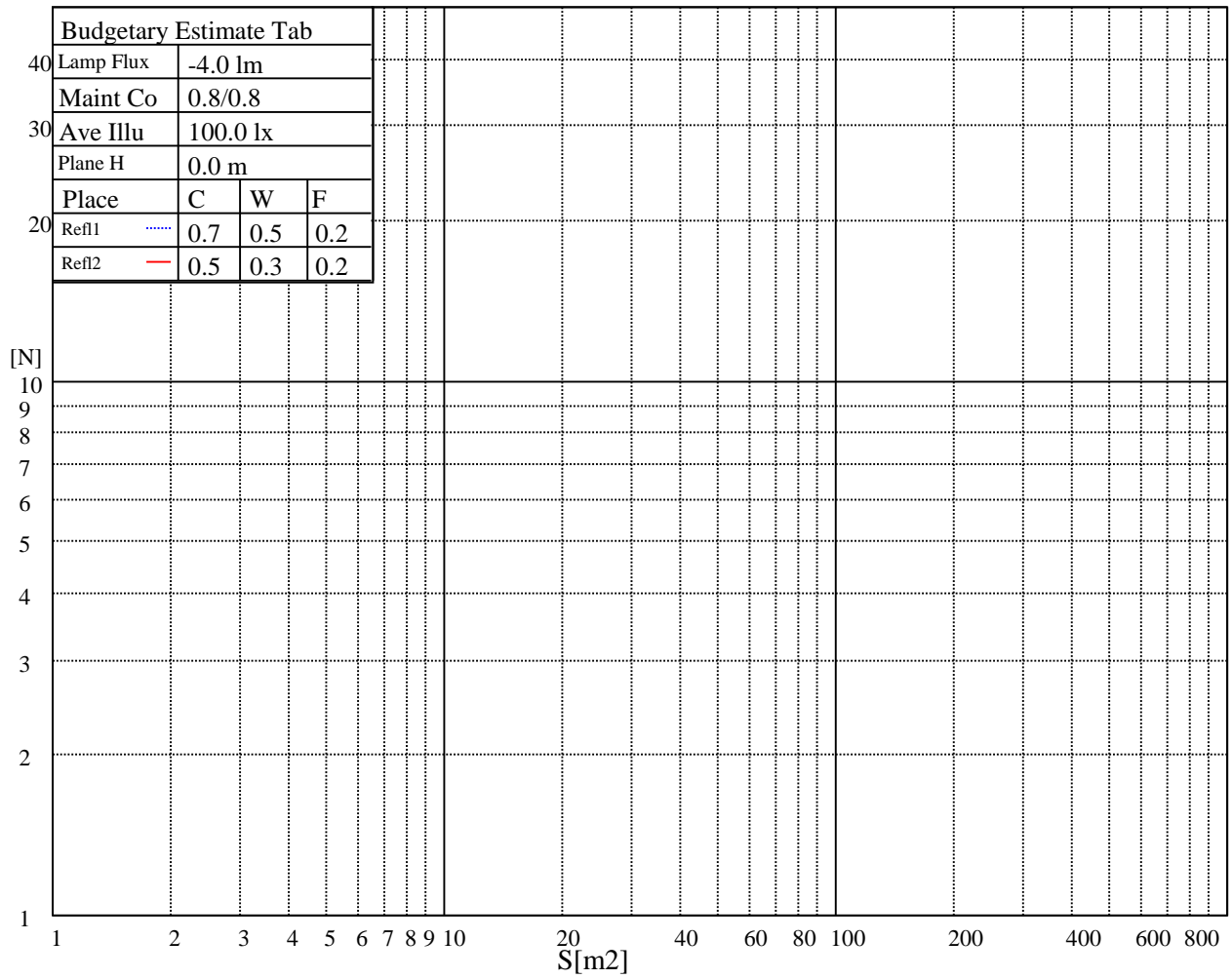
Glare Table

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

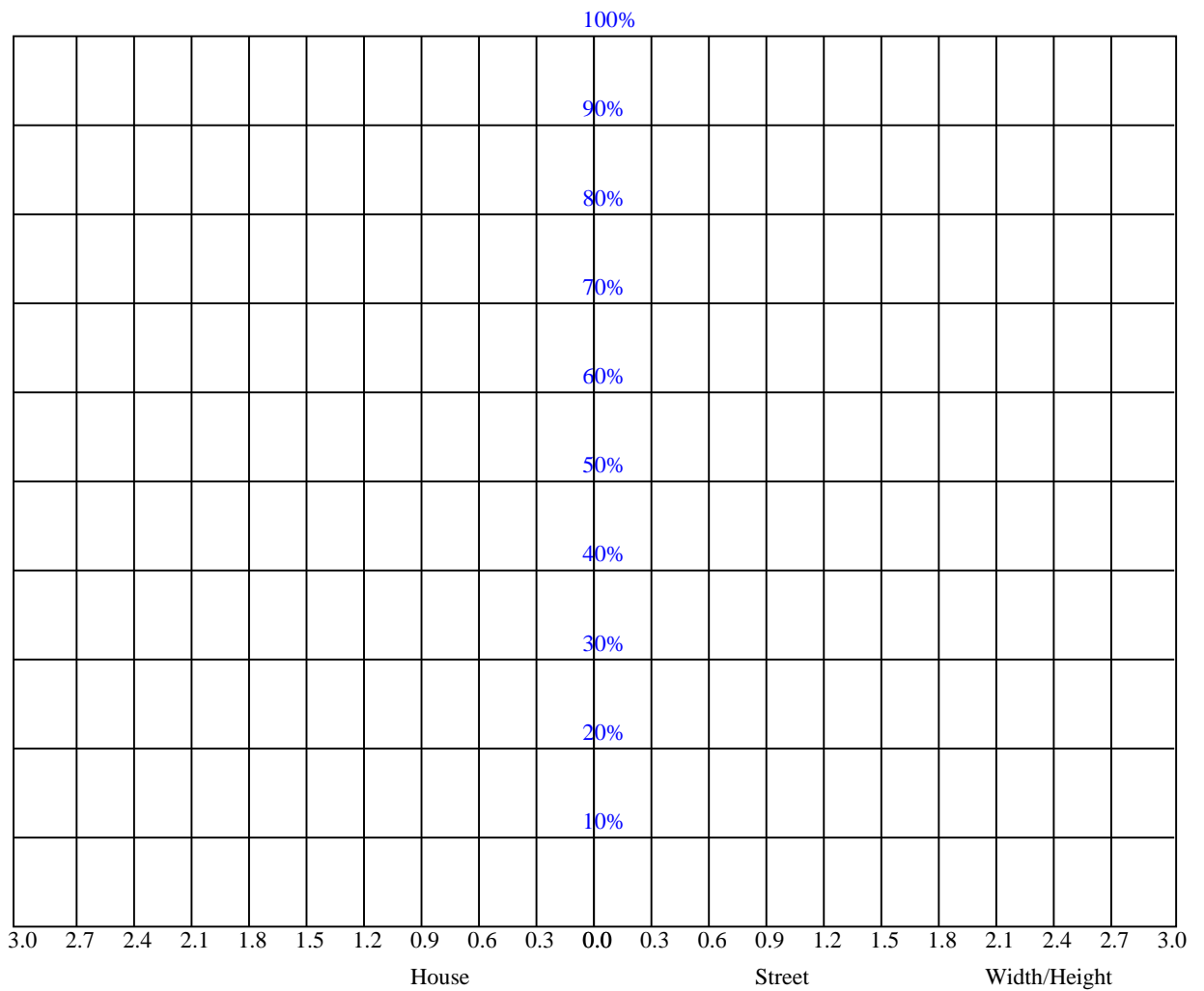
Luminance Limiting Curve



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	9.80	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
4H	12H	11.64	12.78	12.09	13.19	13.64	12.93	14.07	13.37	14.47	14.93
	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	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
	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	12H	13.06	13.62	13.59	14.19	14.71	14.21	14.77	14.74	15.34	15.86
	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		1.7					2.7				



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 RHOFC=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	2957.12	2825.70	2456.15	1923.34	1279.67	583.29	26.96	15.86	17.08
30.0	2969.61	2781.62	2408.68	1876.87	1064.30	501.18	19.37	15.29	16.62
60.0	2973.02	2777.10	2415.46	1634.78	1123.55	383.73	19.59	14.71	16.17
90.0	2985.52	2755.63	2209.63	1525.72	983.62	251.10	18.46	14.60	16.39
120.0	2971.88	2731.89	2256.31	1567.41	1031.94	307.62	15.74	12.78	14.12
150.0	2958.25	2770.32	2383.81	1872.21	1042.65	464.71	16.76	13.57	14.46
180.0	2957.12	2785.01	2388.33	1836.77	1159.22	461.88	15.29	14.26	15.14
210.0	2969.61	2716.07	2361.20	1737.02	953.77	388.03	15.74	14.49	15.60
240.0	2973.02	2699.11	2217.31	1439.49	910.47	215.42	14.38	13.80	15.14
270.0	2985.52	2731.89	2180.35	1483.68	933.26	236.94	14.27	12.89	14.57
300.0	2971.88	2716.07	2314.86	1512.09	1002.77	299.01	19.37	15.40	16.96
330.0	2958.25	2711.55	2361.20	1768.72	978.15	423.48	18.35	16.08	17.53
360.0	2957.12	2825.70	2456.15	1923.34	1279.67	583.29	26.96	15.86	17.08

C/γ(°)	135.0	150.0	165.0	180.0
0.0	19.14	21.54	22.95	23.18
30.0	18.80	21.08	22.72	23.29
60.0	18.46	20.74	22.50	23.06
90.0	18.69	20.97	22.61	23.29
120.0	16.52	19.26	22.04	23.52
150.0	16.75	19.37	21.93	23.40
180.0	17.43	20.06	22.27	23.18
210.0	17.55	19.94	22.04	23.29
240.0	17.55	19.94	22.04	23.06
270.0	16.98	19.60	22.04	23.29
300.0	19.26	21.65	23.18	23.52
330.0	19.60	21.88	23.29	23.40
360.0	19.14	21.54	22.95	23.18