
PQL 91310 LED SMD 4'15WT8/40K/PSP/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 15WT8/40K/PSP/V5

Lamp flux(lm): -1.0

Number of Lamps: 4

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 72.6000

PF:

Ballast type:

Width(mm): 320

Height(mm): 100

Photometric Results

Lumens(lm): 8128.31

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 111.96

Central intensity(cd): 2974.156

Maximum intensity(cd): 3012.782

Angle of maximum intensity: C=90.0 γ =0.0

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

[C90/270]Total=101.0

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

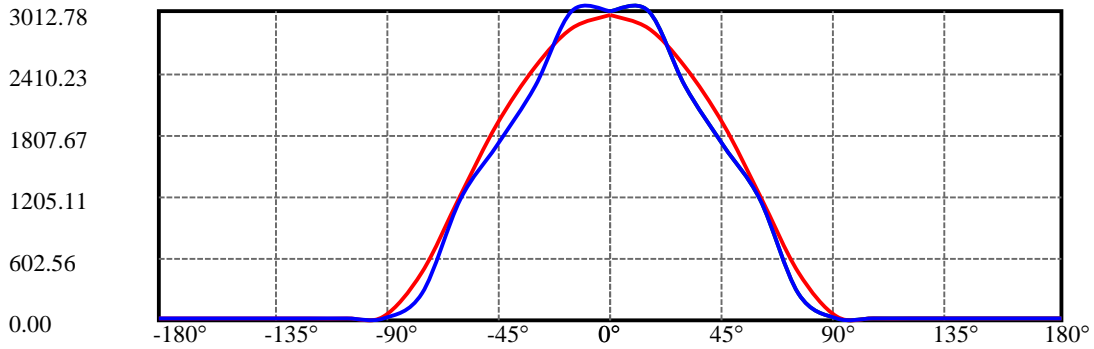
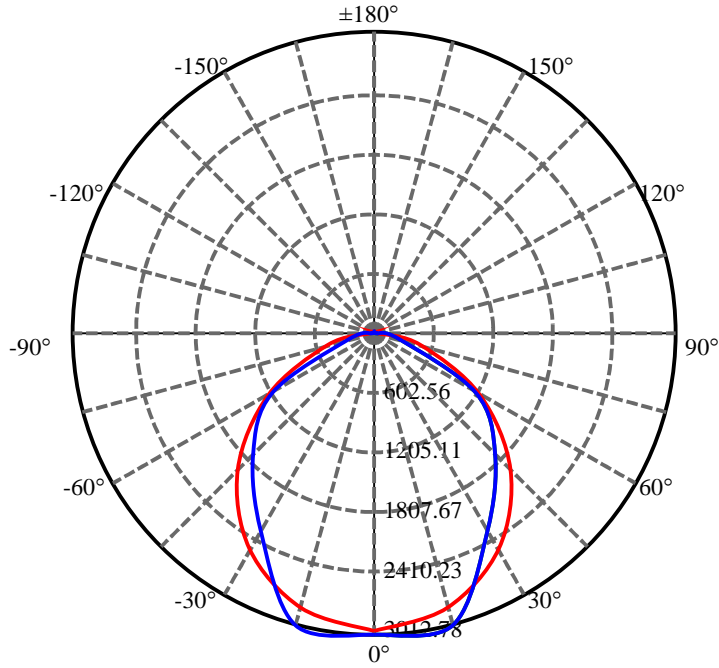
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2992.071	0.000	0	.000%	.000%
15.0	2902.204	630.966	630.966	.000%	7.763%
30.0	2514.840	1700.120	2331.086	.000%	28.679%
45.0	1821.523	2164.962	4496.048	.000%	55.313%
60.0	1177.673	1951.412	6447.46	.000%	79.321%
75.0	415.539	1207.165	7654.625	.000%	94.172%
90.0	21.671	355.497	8010.122	.000%	98.546%
105.0	15.504	30.226	8040.349	.000%	98.918%
120.0	16.848	24.512	8064.861	.000%	99.219%
135.0	19.210	23.461	8088.322	.000%	99.508%
150.0	21.774	20.462	8108.784	.000%	99.760%
165.0	23.838	14.315	8123.099	.000%	99.936%
180.0	24.860	5.213	8128.312	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2331.09	N.A.	28.68%
0-40	2331.09	N.A.	28.68%
0-60	6447.46	N.A.	79.32%
0-90	8010.12	N.A.	98.55%
0-120	8064.86	N.A.	99.22%
0-180	8128.31	N.A.	100.00%
60-90	3514.07	N.A.	43.23%
90-120	410.24	N.A.	5.05%
90-130	410.24	N.A.	5.05%
90-150	454.16	N.A.	5.59%
90-180	468.47	N.A.	5.76%
0-60.69	6502.65	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	630.97
20-30	1700.12
30-40	0.00
40-50	2164.96
50-60	1951.41
60-70	0.00
70-80	1207.16
80-90	355.50
90-100	0.00
100-110	30.23
110-120	24.51
120-130	0.00
130-140	23.46
140-150	20.46
150-160	0.00
160-170	14.32
170-180	0.00



C90(Max): ———

C0/C180: ———

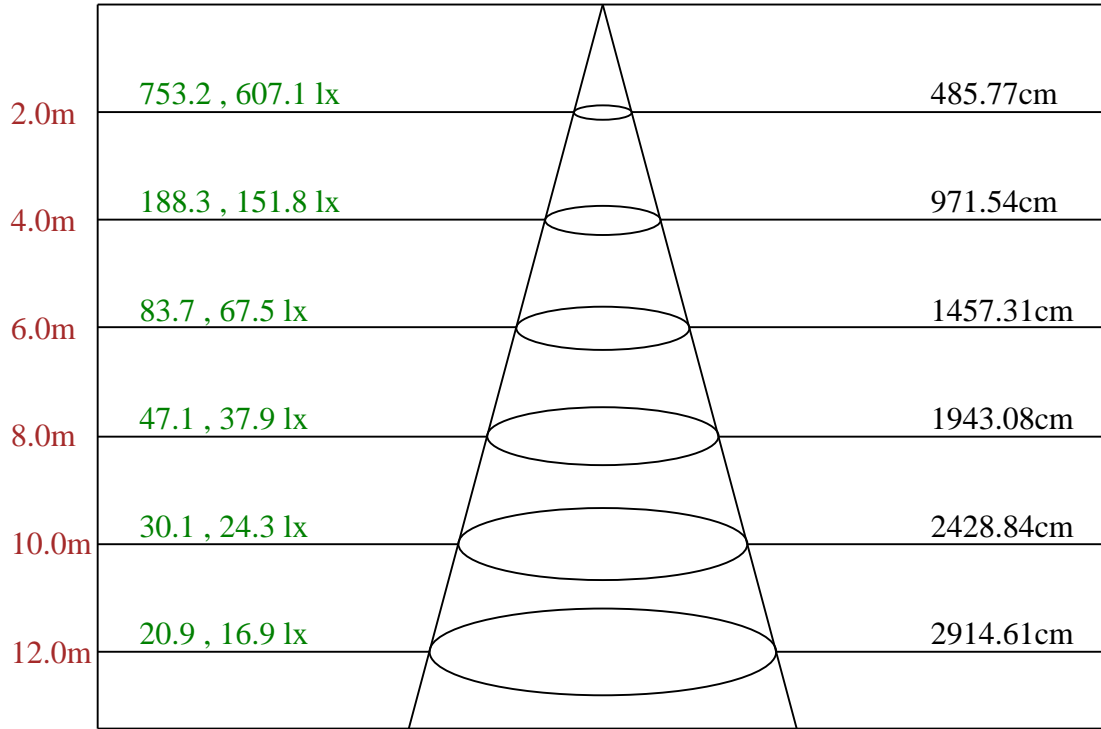
C90/C270: ———

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

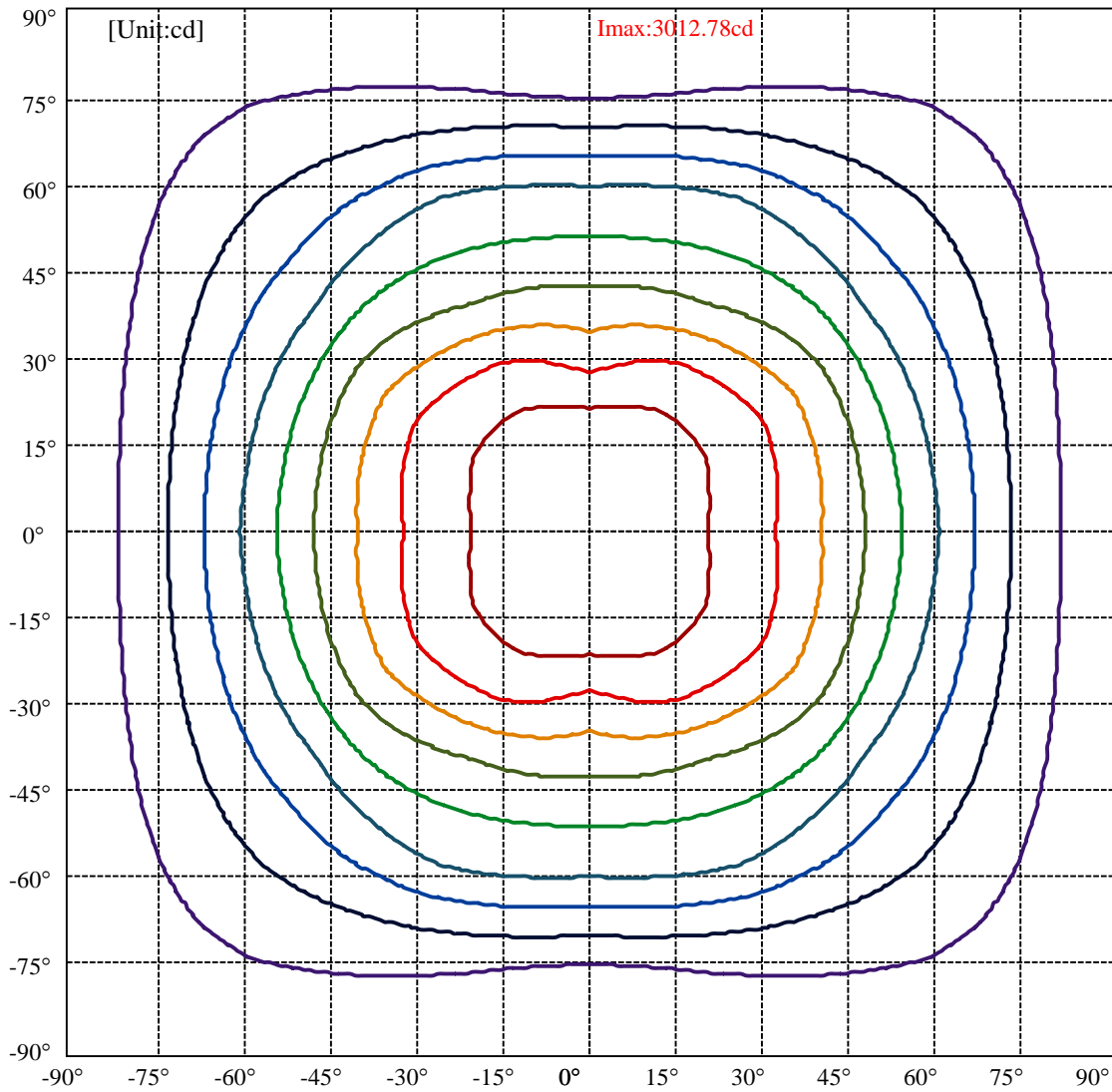
:C90/270Left:74.3 Right:74.3

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

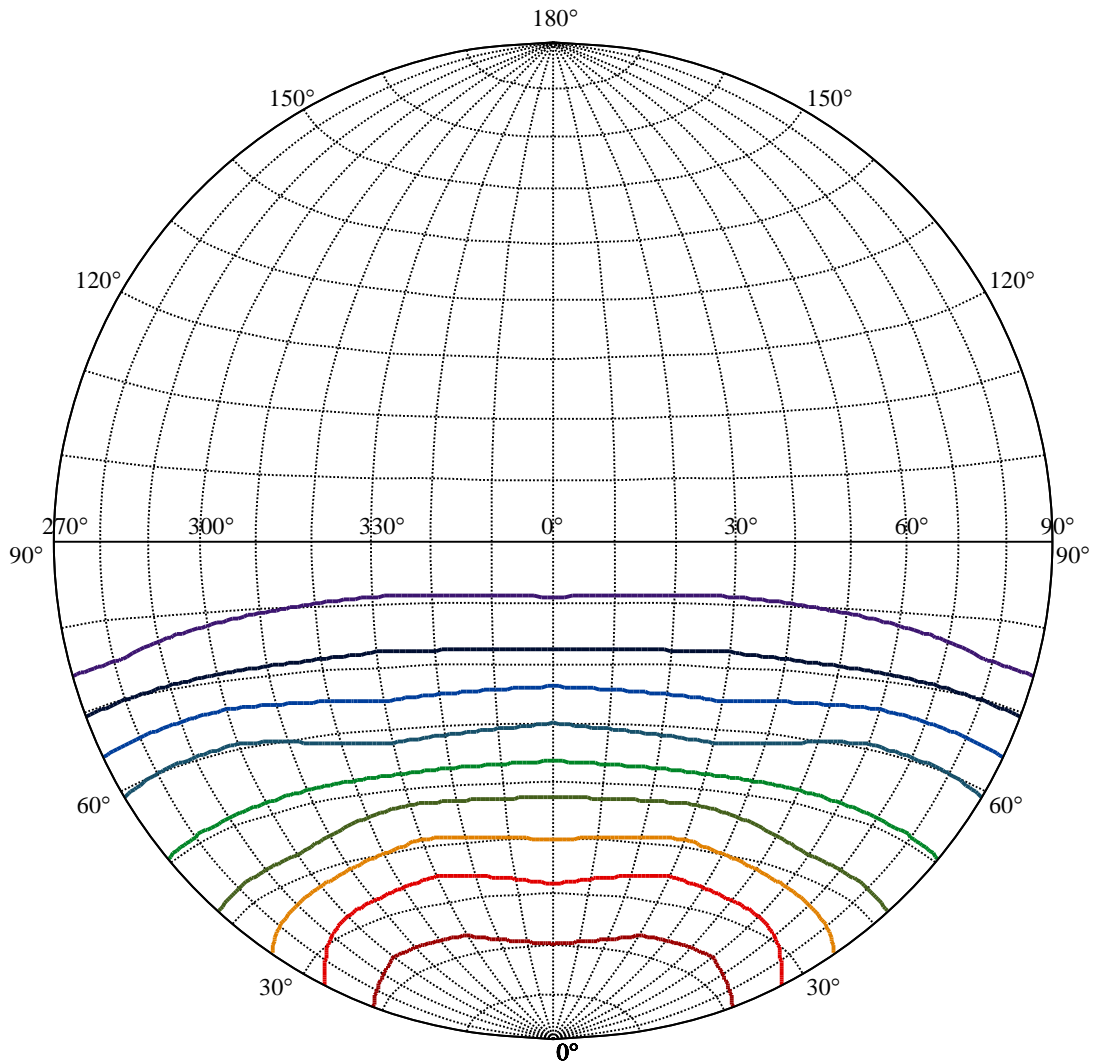


(10% Imax)	301.278	—
(20% Imax)	602.556	—
(30% Imax)	903.835	—
(40% Imax)	1205.11	—
(50% Imax)	1506.39	—
(60% Imax)	1807.67	—
(70% Imax)	2108.95	—
(80% Imax)	2410.23	—
(90% Imax)	2711.5	—

Equipment: 123
Temperature(°C): 345

Date:
Humidity(%): 456%











Operator: 234

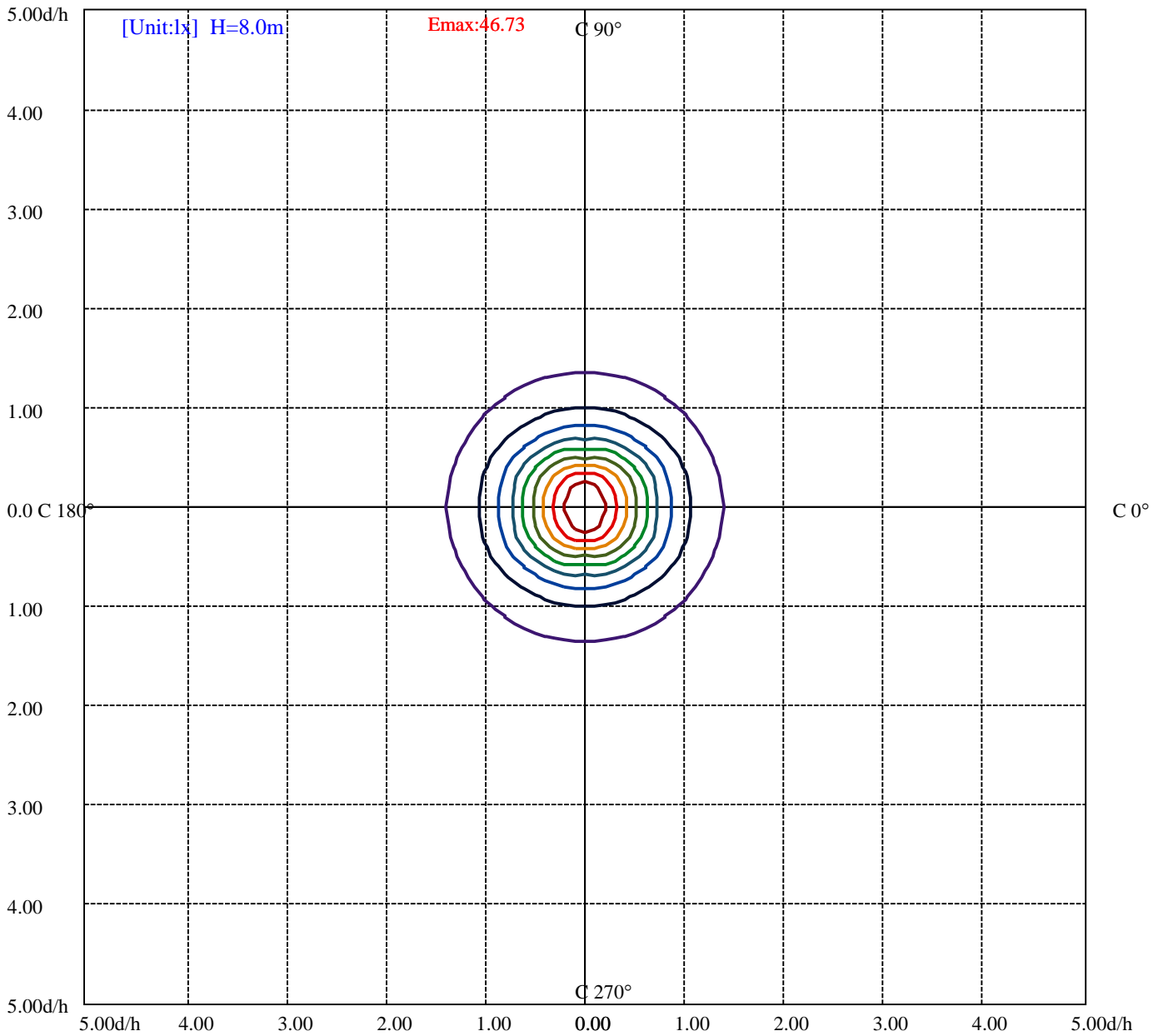


House

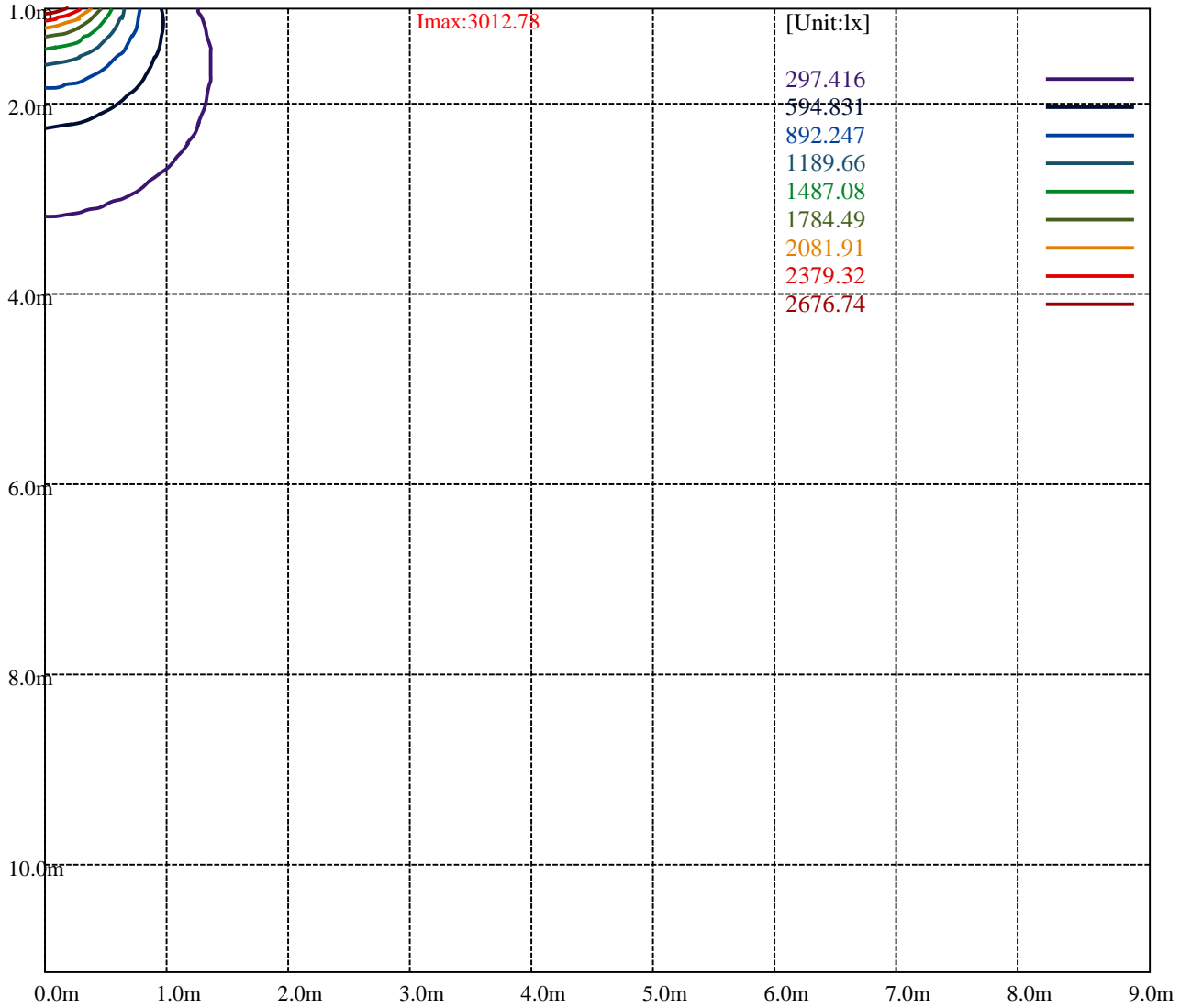
[Unit:cd]

Road

Imax:3012.78	
(10% Imax) 301.278	
(20% Imax) 602.556	
(30% Imax) 903.835	
(40% Imax) 1205.11	
(50% Imax) 1506.39	
(60% Imax) 1807.67	
(70% Imax) 2108.95	
(80% Imax) 2410.23	
(90% Imax) 2711.5	



(10% Emax)	4.673406	—
(20% Emax)	9.346812	—
(30% Emax)	14.02022	—
(40% Emax)	18.69359	—
(50% Emax)	23.36703	—
(60% Emax)	28.04047	—
(70% Emax)	32.71391	—
(80% Emax)	37.38719	—
(90% Emax)	42.06062	—



Luminance Table

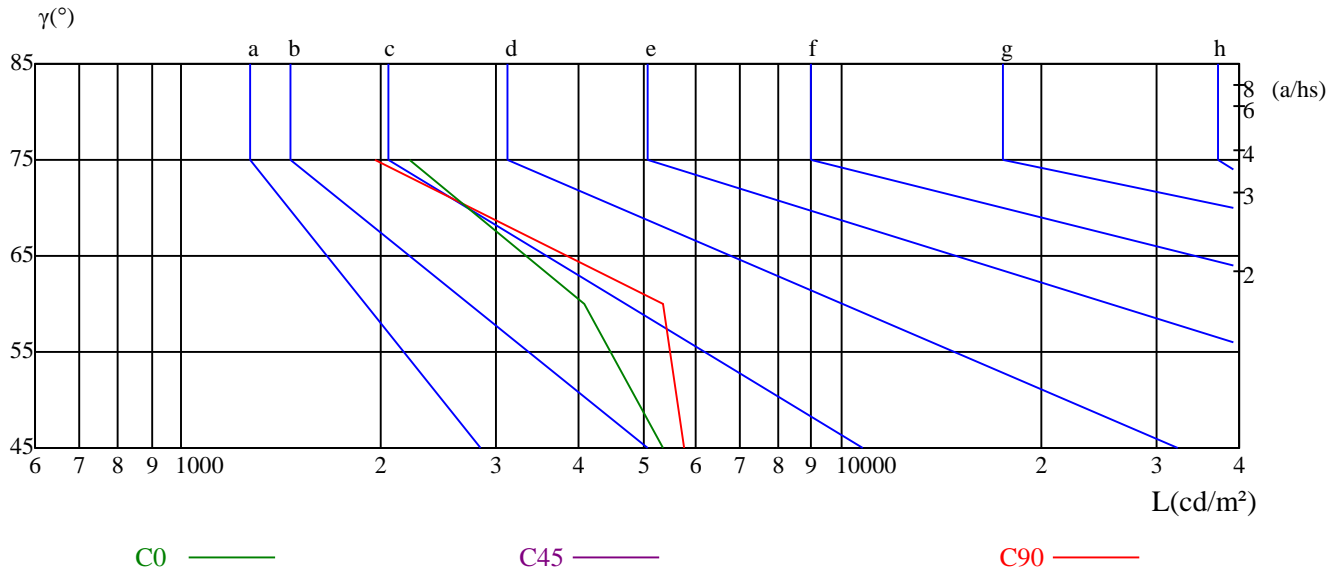
γ	45	50	55	60	65	70	75	80	85
C0	5380	0	0	4088	0	0	2215	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5772	0	0	5360	0	0	1969	0	0

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	4799	2581	0	0	0	0

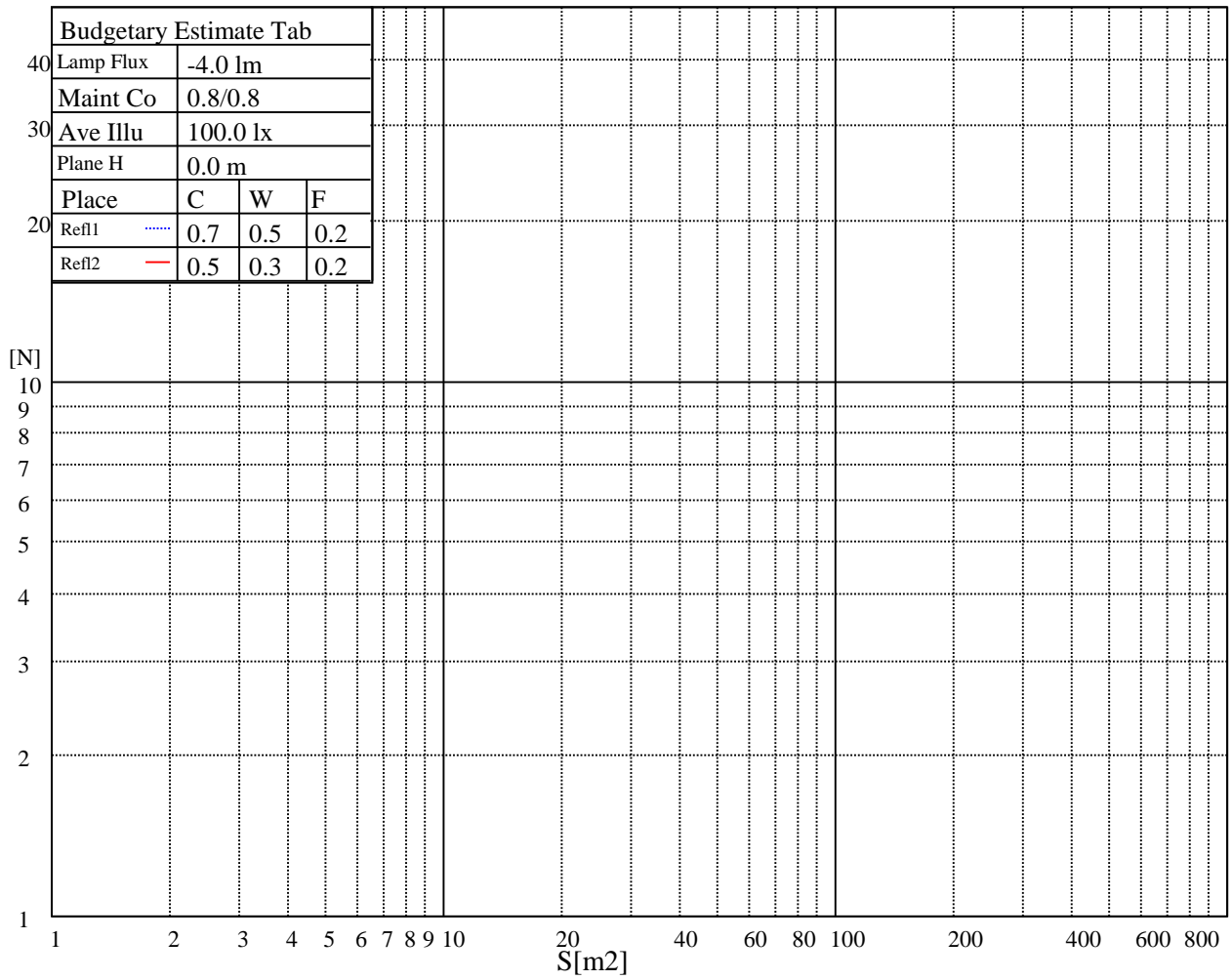
Glare Table

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

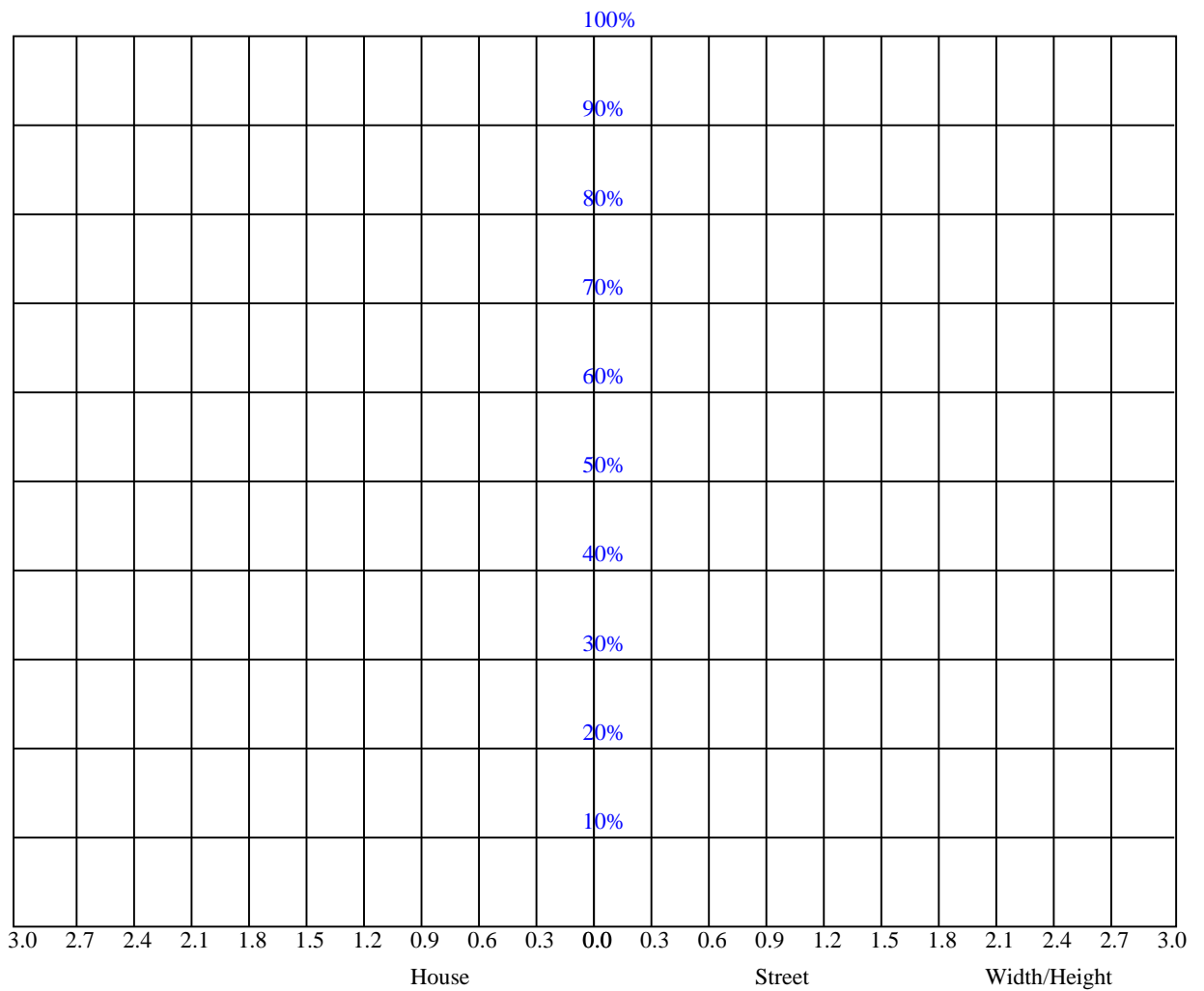
Luminance Limiting Curve



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	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
4H	12H	12.24	13.39	12.69	13.80	14.25	12.42	13.56	12.86	13.97	14.42
	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	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
	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	12H	13.68	14.24	14.20	14.81	15.33	13.93	14.49	14.45	15.06	15.58
	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		2.5					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	2974.16	2844.92	2482.14	1942.65	1234.09	512.16	39.07	16.77	17.99
30.0	2986.65	2826.83	2635.86	2032.85	1122.07	535.61	20.73	16.43	17.87
60.0	2992.33	2961.34	2632.47	1754.06	1300.18	437.52	21.29	15.97	17.30
90.0	3012.78	3026.89	2250.32	1700.78	1176.08	264.12	20.39	15.74	17.53
120.0	3003.69	2981.68	2556.74	1711.46	1229.53	338.19	18.24	14.15	15.37
150.0	2979.84	2820.05	2614.39	2035.81	1107.60	582.16	18.12	14.49	15.60
180.0	2974.16	2833.27	2469.98	1891.77	1185.32	441.82	35.74	14.94	16.05
210.0	2986.65	2808.75	2633.60	1844.95	1039.23	425.97	15.97	15.06	16.17
240.0	2998.28	2955.12	2442.57	1686.98	1254.06	370.79	17.27	14.71	16.05
270.0	3012.78	2997.51	2300.17	1694.99	1179.39	248.95	15.40	14.03	15.48
300.0	3003.69	2957.95	2520.57	1682.49	1243.20	344.31	19.48	16.77	18.10
330.0	2979.84	2812.14	2639.26	1879.48	1061.34	484.87	18.35	17.00	18.67
360.0	2974.16	2844.92	2482.14	1942.65	1234.09	512.16	39.07	16.77	17.99

C/γ(°)	135.0	150.0	165.0	180.0
0.0	20.40	22.79	24.43	24.77
30.0	20.17	22.45	24.31	24.99
60.0	19.83	22.34	23.97	24.65
90.0	19.94	22.45	24.08	24.65
120.0	17.78	20.74	23.63	25.11
150.0	17.78	20.63	23.29	24.99
180.0	18.46	21.20	23.52	24.77
210.0	18.23	20.74	23.29	24.99
240.0	18.46	20.97	23.18	24.65
270.0	17.89	20.74	23.18	24.65
300.0	20.74	23.13	24.43	25.11
330.0	20.85	23.13	24.77	24.99
360.0	20.40	22.79	24.43	24.77