
PQL 91313 LED SMD 4'13WT8/35K/SC/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 13WT8/35K/SC/V5

Lamp flux(lm): -1.0

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 95.9000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

Photometric Results

Lumens(lm): 10760.12

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 112.20

Central intensity(cd): 3825.592

Maximum intensity(cd): 3825.592

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=111.2

[C90/270]Total=93.8

Field angle(10%Imax): [C0/180]Total=169.0

[C90/270]Total=152.6

Maximum s/h(1/2): C0_180=1.24 C90_270=1.17

Maximum s/h(1/4): C0_180=1.36 C90_270=1.27

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 7.78%

Down flux rate of LUM(%): 92.22%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 72.680%

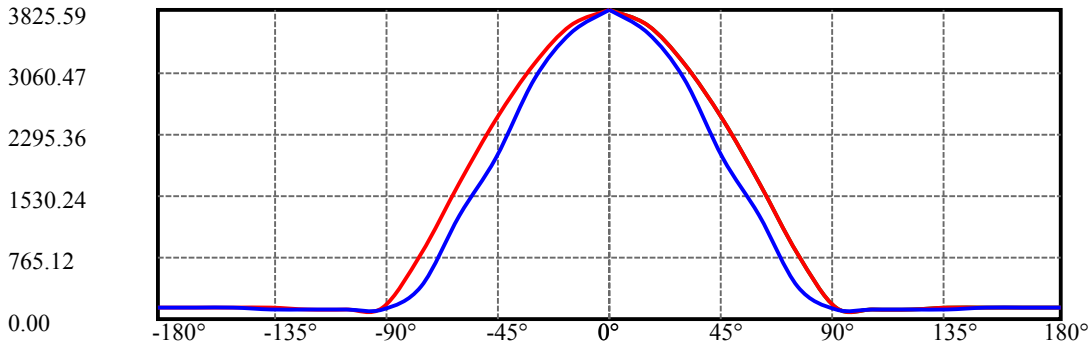
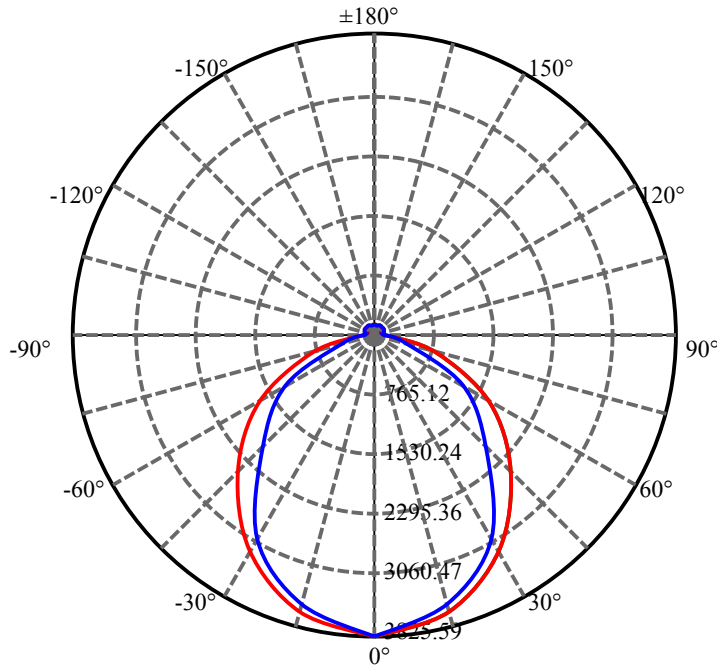
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3821.365	0.000	0	.000%	.000%
15.0	3560.360	790.193	790.193	.000%	7.344%
30.0	3032.307	2069.085	2859.278	.000%	26.573%
45.0	2199.274	2611.906	5471.184	.000%	50.847%
60.0	1411.483	2349.321	7820.505	.000%	72.680%
75.0	588.413	1515.306	9335.811	.000%	86.763%
90.0	134.117	587.492	9923.304	.000%	92.223%
105.0	129.123	214.041	10137.345	.000%	94.212%
120.0	131.175	197.226	10334.571	.000%	96.045%
135.0	133.625	172.291	10506.862	.000%	97.646%
150.0	139.030	136.125	10642.987	.000%	98.911%
165.0	139.380	87.378	10730.365	.000%	99.723%
180.0	138.608	29.758	10760.123	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2859.28	N.A.	26.57%
0-40	2859.28	N.A.	26.57%
0-60	7820.51	N.A.	72.68%
0-90	9923.30	N.A.	92.22%
0-120	10334.57	N.A.	96.05%
0-180	10760.12	N.A.	100.00%
60-90	4452.12	N.A.	41.38%
90-120	998.76	N.A.	9.28%
90-130	998.76	N.A.	9.28%
90-150	1307.18	N.A.	12.15%
90-180	1394.55	N.A.	12.96%
0-67.80	8608.10	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	790.19
20-30	2069.08
30-40	0.00
40-50	2611.91
50-60	2349.32
60-70	0.00
70-80	1515.31
80-90	587.49
90-100	0.00
100-110	214.04
110-120	197.23
120-130	0.00
130-140	172.29
140-150	136.13
150-160	0.00
160-170	87.38
170-180	0.00



C0(Max): ———

C0/C180: ———

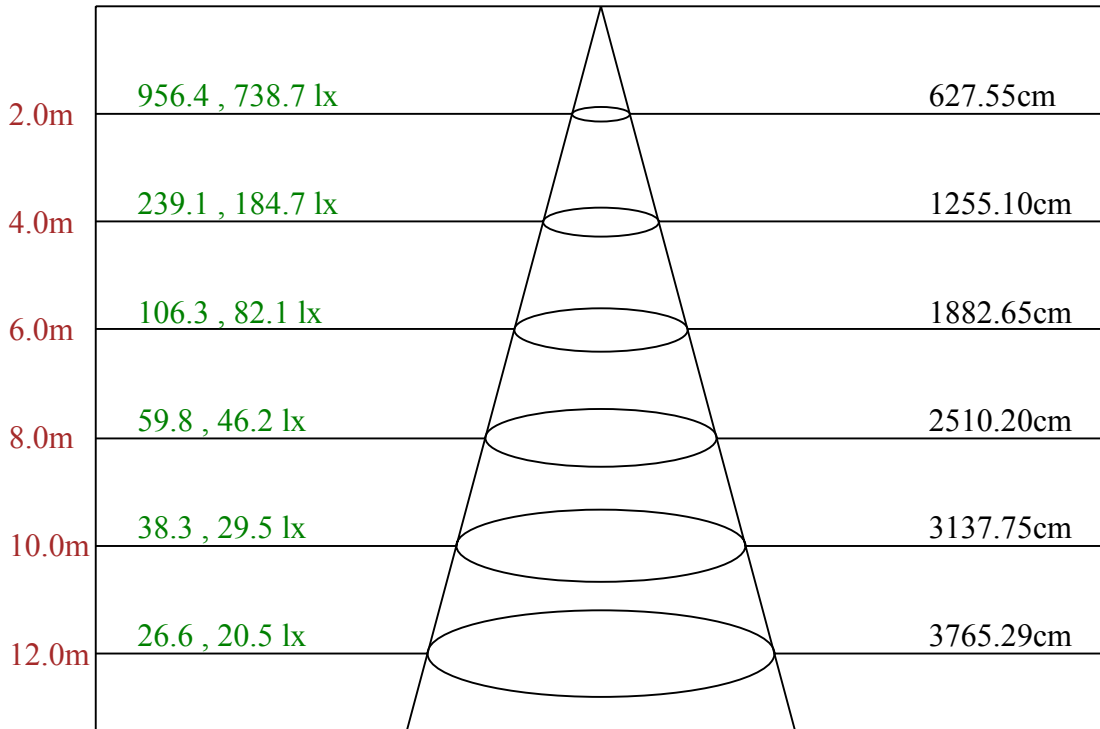
C90/C270: ———

Field angle(10%Imax):C0/180Left:84.5 Right:84.5

:C90/270Left:76.3 Right:76.3

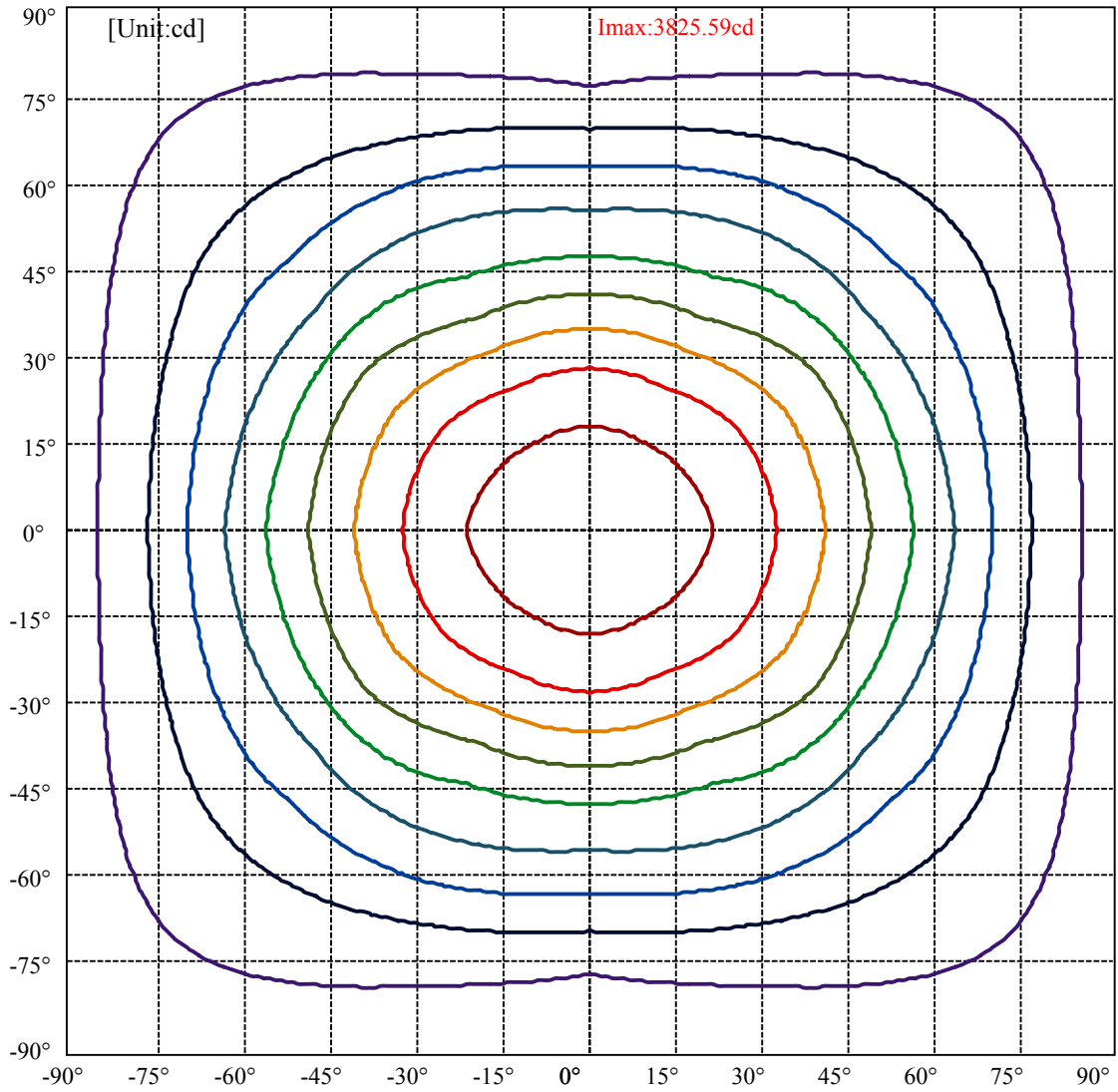
Beam Angle(50%Imax):C0/180Left:55.6 Right:55.6

:C90/270Left:46.9 Right:46.9



Max , Ave Beam angle of C0 plane 114.97

ISO-Intensity(V-H)

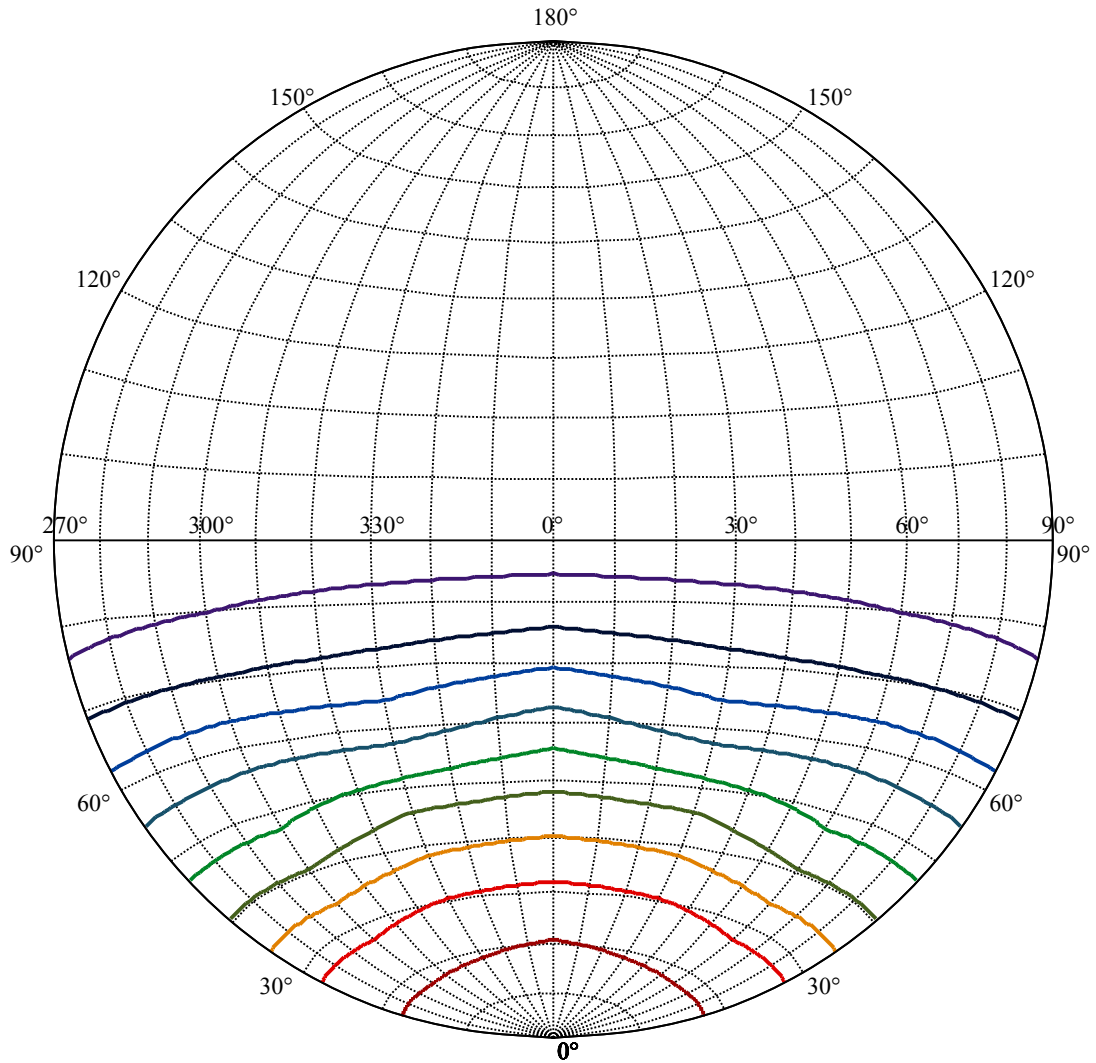


(10%Imax) 381.635	—
(20%Imax) 763.27	—
(30%Imax) 1144.91	—
(40%Imax) 1526.54	—
(50%Imax) 1908.18	—
(60%Imax) 2289.81	—
(70%Imax) 2671.45	—
(80%Imax) 3053.08	—
(90%Imax) 3434.72	—

Equipment: 123
Temperature(°C): 345

Date:
Humidity(%): 456%

Operator: 234



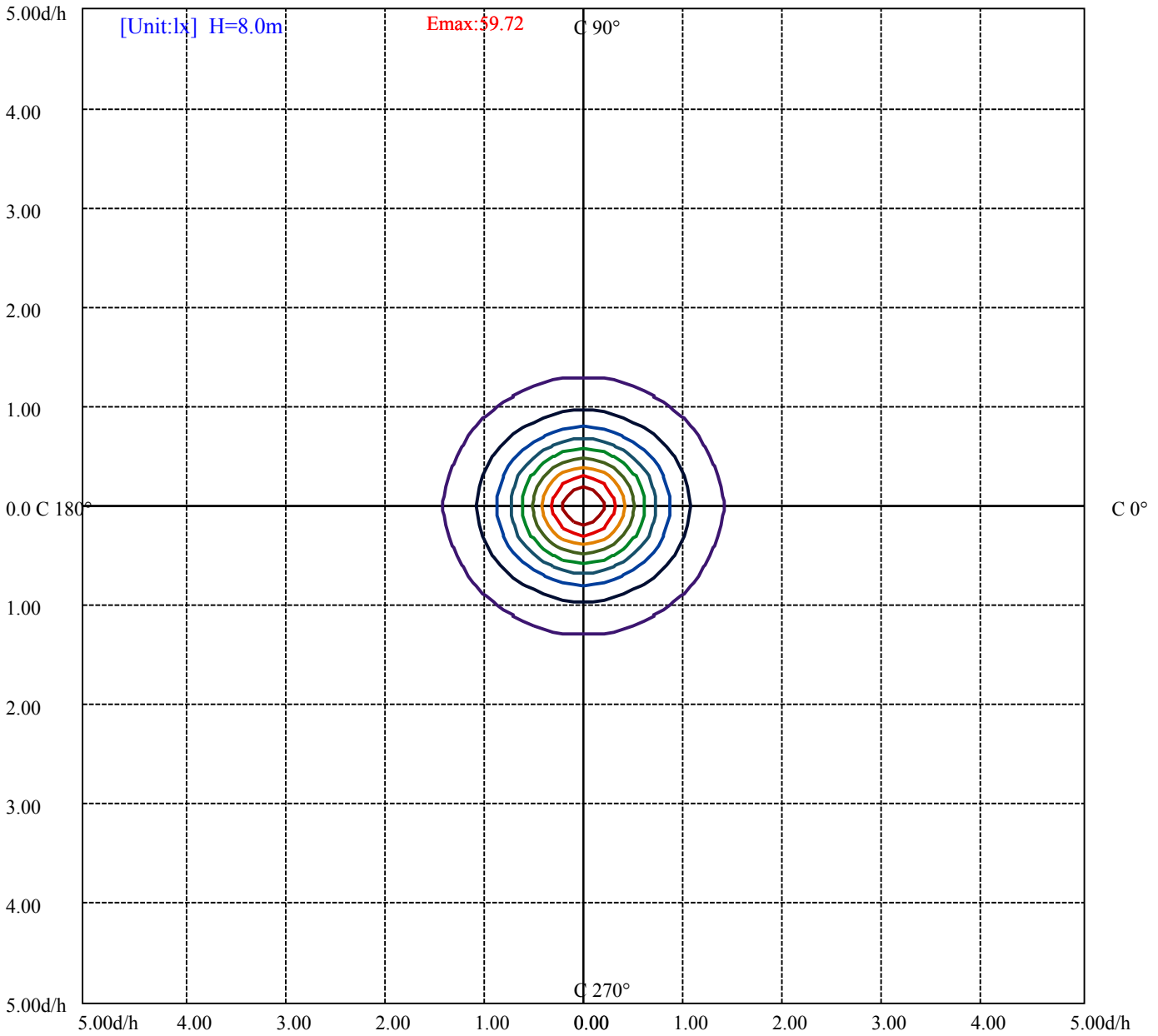
House

[Unit:cd]

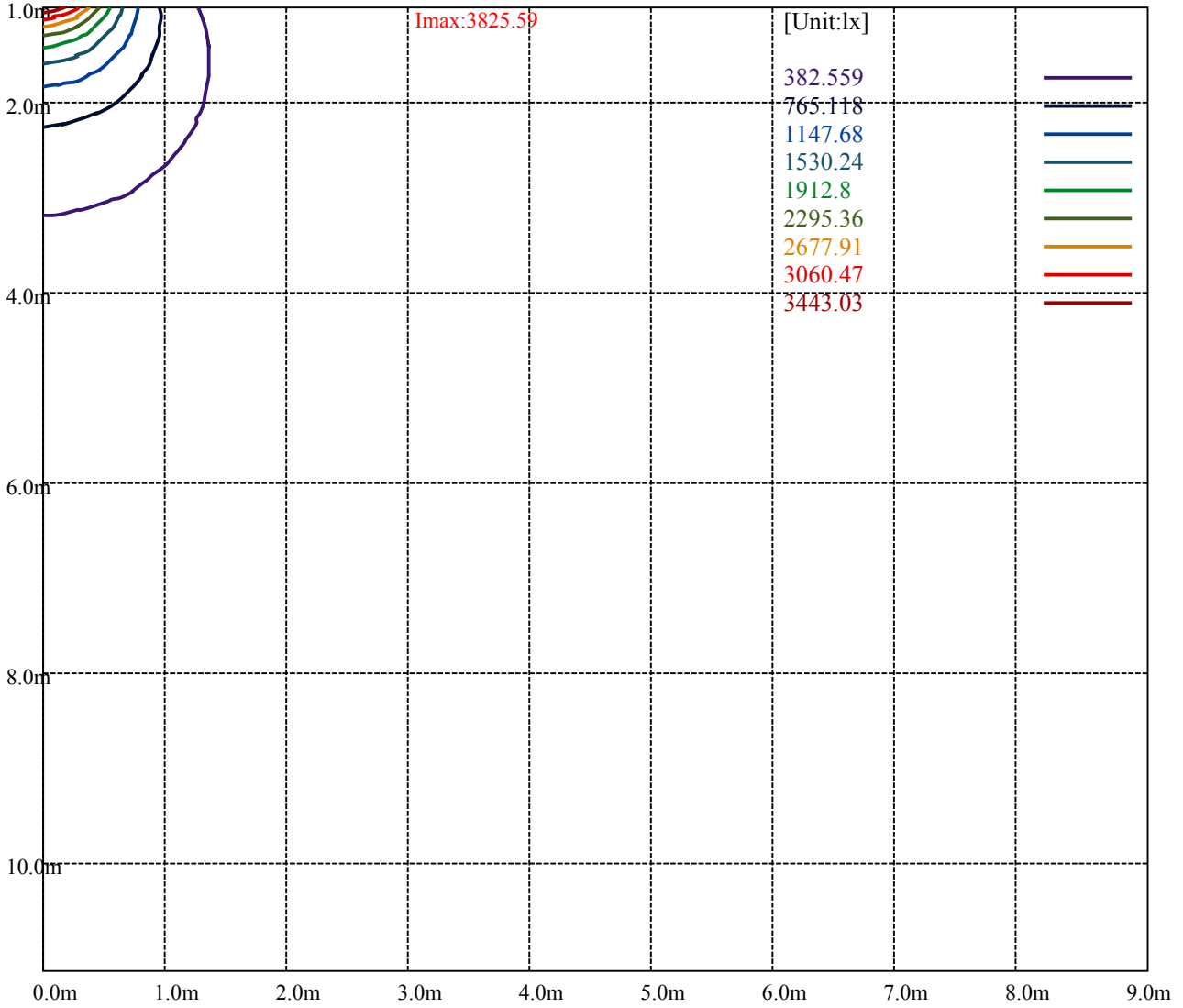
Road

Imax:3825.59

(10%Imax) 382.559	—
(20%Imax) 765.118	—
(30%Imax) 1147.68	—
(40%Imax) 1530.24	—
(50%Imax) 1912.8	—
(60%Imax) 2295.36	—
(70%Imax) 2677.91	—
(80%Imax) 3060.47	—
(90%Imax) 3443.03	—



(10%Emax) 5.972109	—
(20%Emax) 11.94422	—
(30%Emax) 17.91625	—
(40%Emax) 23.88844	—
(50%Emax) 29.86047	—
(60%Emax) 35.83266	—
(70%Emax) 41.80469	—
(80%Emax) 47.77687	—
(90%Emax) 53.74891	—



Luminance Table

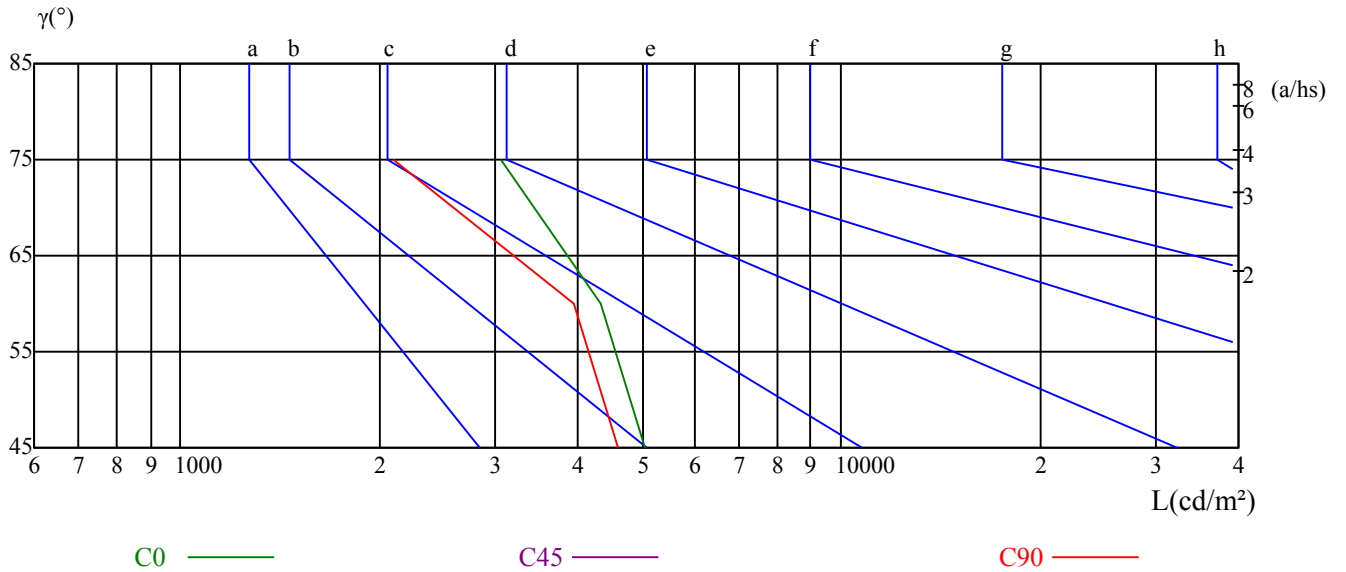
γ	45	50	55	60	65	70	75	80	85
C0	5047	0	0	4334	0	0	3055	0	0
C45	0	0	0	0	0	0	0	0	0
C90	4582	0	0	3950	0	0	2096	0	0

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	5455	2748	0	0	0	0

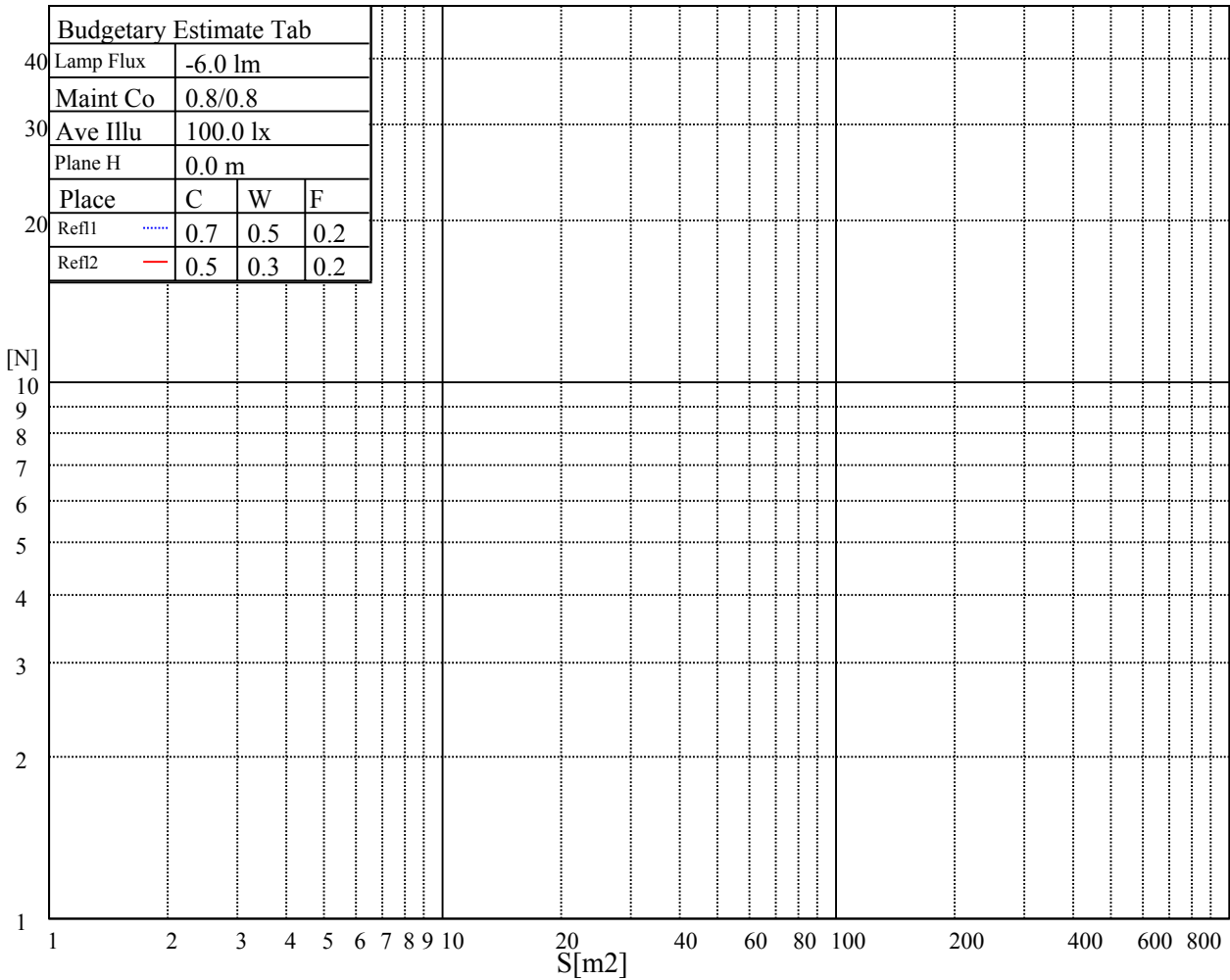
Glare Table

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

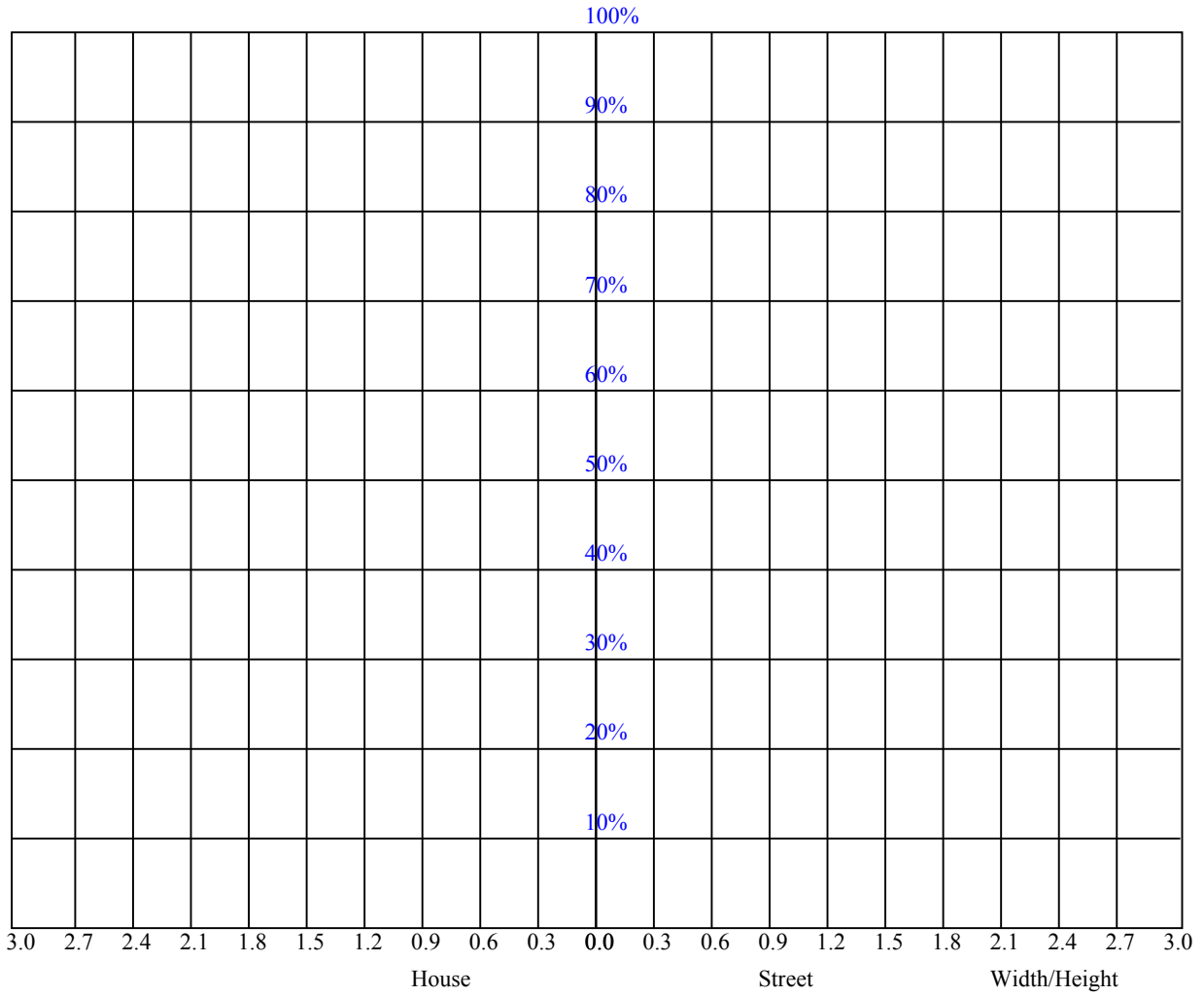
Luminance Limiting Curve



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	7.87	9.31	8.36	9.79	10.30	8.56	10.00	9.05	10.48	10.99
	3H	9.24	10.54	9.74	11.03	11.58	10.20	11.51	10.70	11.99	12.54
	4H	9.59	10.83	10.12	11.33	11.89	10.84	12.07	11.36	12.57	13.14
	6H	9.91	11.06	10.45	11.57	12.15	11.37	12.51	11.91	13.03	13.61
	8H	10.06	11.15	10.61	11.69	12.26	11.57	12.66	12.12	13.20	13.77
	12H	10.32	11.36	10.87	11.89	12.51	11.86	12.90	12.41	13.43	14.05
4H	2H	8.37	9.60	8.89	10.10	10.67	8.94	10.17	9.46	10.67	11.24
	3H	9.93	10.97	10.47	11.51	12.10	10.77	11.80	11.30	12.35	12.93
	4H	10.38	11.32	10.94	11.88	12.50	11.52	12.47	12.08	13.02	13.64
	6H	10.70	11.54	11.30	12.13	12.76	12.06	12.91	12.66	13.49	14.13
	8H	10.94	11.71	11.52	12.29	12.93	12.37	13.14	12.95	13.72	14.37
	12H	11.23	11.92	11.83	12.53	13.18	12.69	13.39	13.30	14.00	14.65
8H	4H	10.65	11.42	11.23	12.00	12.65	11.69	12.46	12.27	13.04	13.68
	6H	11.13	12.40	11.74	12.40	13.05	12.39	13.66	13.01	13.66	14.31
	8H	11.43	12.01	12.06	12.65	13.31	12.77	13.34	13.40	13.98	14.64
	12H	12.07	12.59	12.70	13.71	13.94	13.35	13.86	13.98	14.99	15.22
12H	4H	10.69	11.38	11.29	11.99	12.64	11.69	12.39	12.30	13.00	13.65
	6H	12.11	11.80	11.86	12.40	13.11	13.32	13.01	13.07	13.61	14.32
	8H	11.58	12.09	12.21	12.71	13.44	12.86	13.37	13.48	13.99	14.72
Variation with the observer position at spacings:											
S = 1.0H	0.3/-0.4					0.3/-0.6					
S = 1.5H	0.7/-0.8					0.6/-0.6					
S = 2.0H	0.8/-1.0					0.8/-0.7					
Standard tables:	BK4					BK3					
Uncorrected UGR	2.4					2.9					



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	3825.59	3649.90	3190.28	2513.46	1696.18	819.92	138.19	129.90	129.63
30.0	3825.59	3567.16	3116.73	2282.44	1353.24	700.16	138.19	129.90	129.63
60.0	3818.71	3567.16	2914.46	2032.94	1455.19	543.54	138.19	129.90	129.63
90.0	3816.35	3548.77	2941.39	1977.50	1279.09	396.14	128.98	129.90	129.63
120.0	3816.35	3530.38	2794.94	1959.02	1371.77	469.84	128.98	120.62	129.63
150.0	3825.59	3557.97	3089.14	2282.44	1343.97	681.73	138.19	129.90	129.63
180.0	3825.59	3613.13	3116.73	2411.81	1674.91	789.73	135.41	129.90	129.63
210.0	3825.59	3557.97	3052.37	2421.05	1353.24	626.46	128.98	129.90	129.63
240.0	3818.71	3495.91	2986.98	1986.74	1369.05	485.72	128.98	129.90	129.63
270.0	3816.35	3538.43	2997.21	2023.70	1297.62	414.57	128.98	129.90	129.63
300.0	3816.35	3539.58	3125.92	2060.66	1362.51	488.27	138.19	129.90	138.89
330.0	3825.59	3557.97	3061.56	2439.53	1381.04	644.88	138.19	129.90	138.89
360.0	3825.59	3649.90	3190.28	2513.46	1696.18	819.92	138.19	129.90	129.63
C/γ(°)	135.0	150.0	165.0	180.0					
0.0	139.03	139.03	138.61	138.61					
30.0	129.76	139.03	147.85	138.61					
60.0	139.03	139.03	138.61	138.61					
90.0	129.76	139.03	138.61	138.61					
120.0	129.76	139.03	138.61	138.61					
150.0	129.76	139.03	138.61	138.61					
180.0	129.76	139.03	138.61	138.61					
210.0	129.76	139.03	138.61	138.61					
240.0	139.03	139.03	138.61	138.61					
270.0	129.76	139.03	138.61	138.61					
300.0	139.03	139.03	138.61	138.61					
330.0	139.03	139.03	138.61	138.61					
360.0	139.03	139.03	138.61	138.61					