



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
www.bellingtest.com

Tel:0755-29351191 Fax:0755-29351120

Address:1 F,No.1 building,Meibaohu industrial park,Dalang street,Longhua district,Shenzhen,China

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LumCAT: LL4G-30K

Luminaire:

Report No:

Voltage(V): 120.09

Test No:

Current(A): 0.0944

LampCAT:

Power (W): 11.1700

Lamp flux(lm): 1030.8

PF: 0.9852

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 1030.75

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 92.28

Central intensity(cd): 1662.879

Maximum intensity(cd): 1745.621

Angle of maximum intensity: C=90.0  $\gamma=5.0$

Beam Angle(50%Imax): [C0/180]Total=40.3

[C90/270]Total=41.4

Field angle(10%Imax): [C0/180]Total=73.3

[C90/270]Total=74.8

Maximum s/h(1/2): C0\_180=0.68 C90\_270=0.83

Maximum s/h(1/4): C0\_180=0.71 C90\_270=0.82

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 100.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 96.879%

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Equipment: GMS-3000  
Temperature(°C): 25

Date:  
Humidity(%): 58%

Operator: Sam

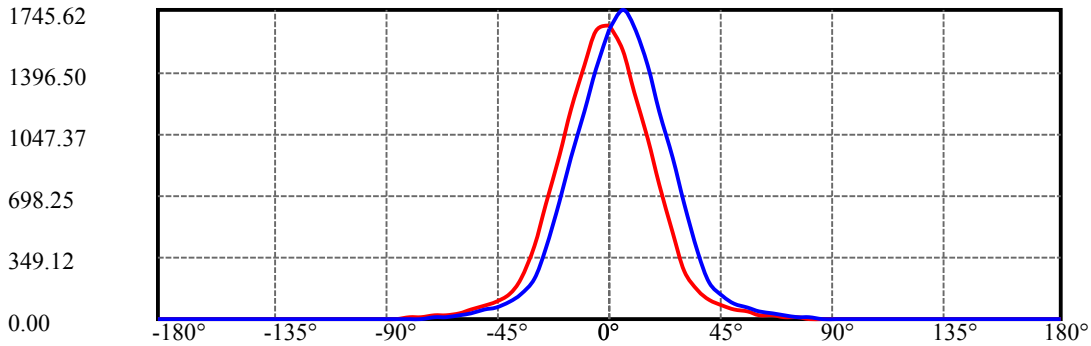
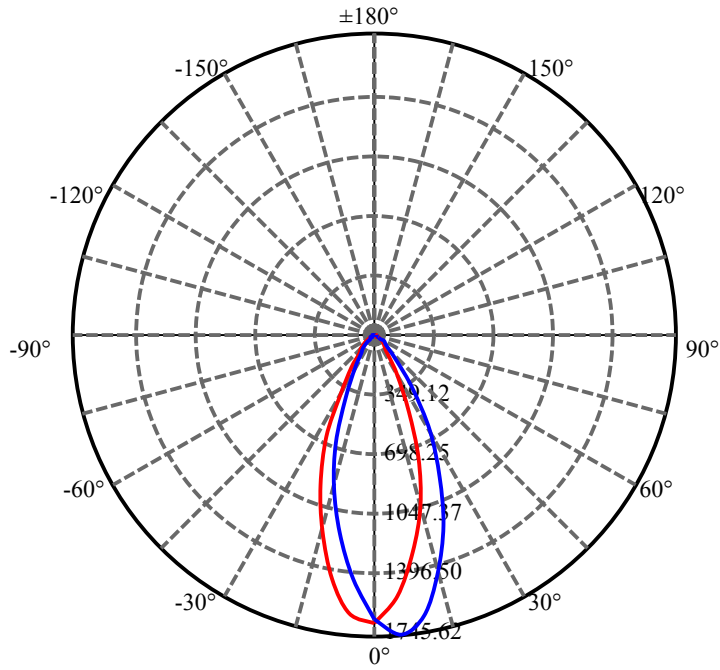
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1659.229	0.000	0	.000%	.000%
5.0	1574.965	38.664	38.664	3.751%	3.751%
10.0	1373.737	105.484	144.148	10.234%	13.985%
15.0	1127.183	148.353	292.501	14.393%	28.377%
20.0	872.872	164.833	457.334	15.992%	44.369%
25.0	610.347	155.562	612.896	15.092%	59.461%
30.0	374.136	124.587	737.483	12.087%	71.548%
35.0	214.431	86.671	824.154	8.408%	79.956%
40.0	133.057	57.976	882.129	5.625%	85.581%
45.0	93.055	41.866	923.996	4.062%	89.643%
50.0	65.981	32.135	956.131	3.118%	92.760%
55.0	46.360	24.427	980.558	2.370%	95.130%
60.0	31.606	18.022	998.58	1.748%	96.879%
65.0	21.264	12.853	1011.432	1.247%	98.126%
70.0	15.027	9.189	1020.621	.891%	99.017%
75.0	8.487	6.146	1026.768	.596%	99.613%
80.0	3.088	3.097	1029.865	.300%	99.914%
85.0	0.091	0.864	1030.729	.084%	99.998%
90.0	0.000	0.025	1030.754	.002%	100.000%
95.0	0.000	0.000	1030.754	.000%	100.000%
100.0	0.000	0.000	1030.754	.000%	100.000%
105.0	0.000	0.000	1030.754	.000%	100.000%
110.0	0.000	0.000	1030.754	.000%	100.000%
115.0	0.000	0.000	1030.754	.000%	100.000%
120.0	0.000	0.000	1030.754	.000%	100.000%
125.0	0.000	0.000	1030.754	.000%	100.000%
130.0	0.000	0.000	1030.754	.000%	100.000%
135.0	0.000	0.000	1030.754	.000%	100.000%
140.0	0.000	0.000	1030.754	.000%	100.000%
145.0	0.000	0.000	1030.754	.000%	100.000%
150.0	0.000	0.000	1030.754	.000%	100.000%
155.0	0.000	0.000	1030.754	.000%	100.000%
160.0	0.000	0.000	1030.754	.000%	100.000%
165.0	0.000	0.000	1030.754	.000%	100.000%
170.0	0.000	0.000	1030.754	.000%	100.000%
175.0	0.000	0.000	1030.754	.000%	100.000%
180.0	0.000	0.000	1030.754	.000%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	737.48	71.55%	71.55%
0-40	882.13	85.58%	85.58%
0-60	998.58	96.88%	96.88%
0-90	1030.75	100.00%	100.00%
0-120	1030.75	100.00%	100.00%
0-180	1030.75	100.00%	100.00%
60-90	50.20	4.87%	4.87%
90-120	0.02	0.00%	0.00%
90-130	0.02	0.00%	0.00%
90-150	0.02	0.00%	0.00%
90-180	0.02	0.00%	0.00%
0-35.04	824.60	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	144.15
10-20	313.19
20-30	280.15
30-40	144.65
40-50	74.00
50-60	42.45
60-70	22.04
70-80	9.24
80-90	0.89
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



C0/C180: —

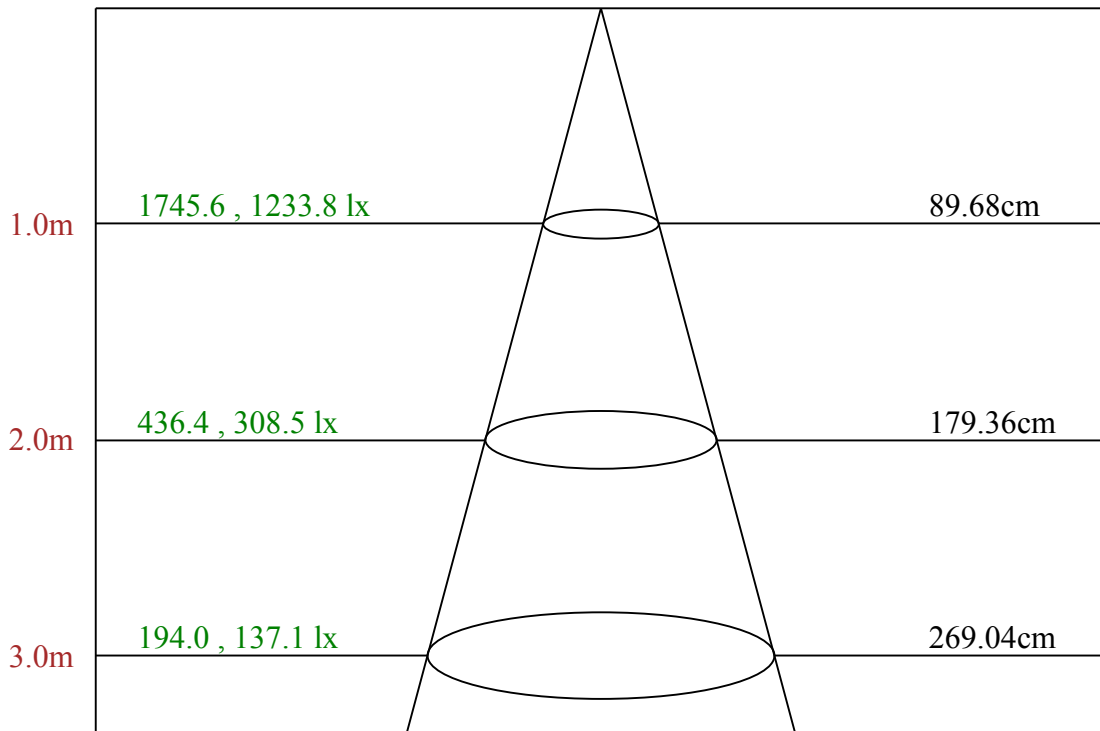
C90/C270: —

Field angle(10%Imax):C0/180Left:38.6 Right:34.7

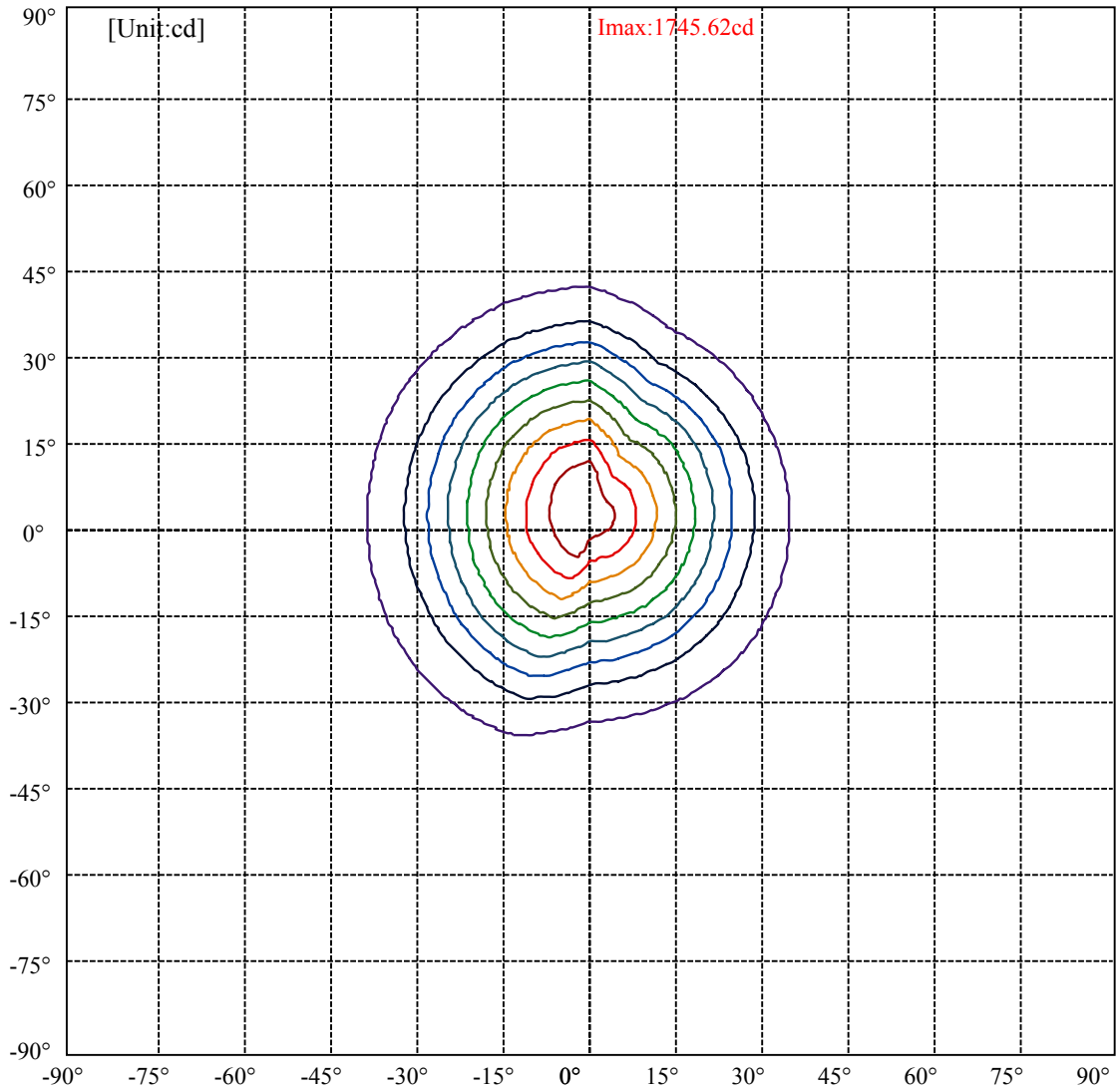
:C90/270Left:37.9 Right:36.9

Beam Angle(50%Imax):C0/180Left:21.7 Right:18.6

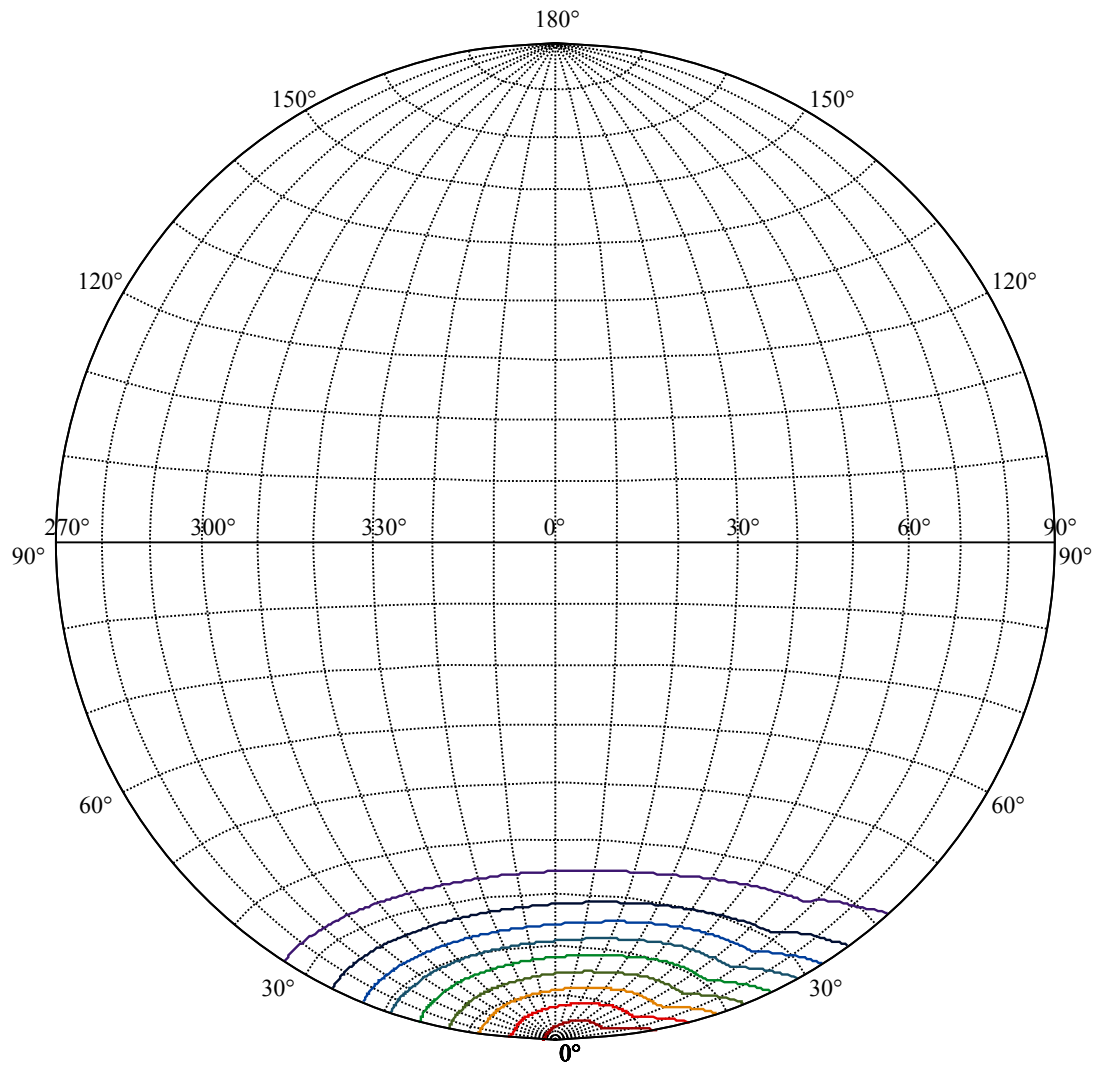
:C90/270Left:20.8 Right:20.6



Max , Ave      Beam angle of C90 plane 47.93



(10%Imax) 174.562	—
(20%Imax) 349.124	—
(30%Imax) 523.686	—
(40%Imax) 698.248	—
(50%Imax) 872.81	—
(60%Imax) 1047.37	—
(70%Imax) 1221.93	—
(80%Imax) 1396.5	—
(90%Imax) 1571.06	—



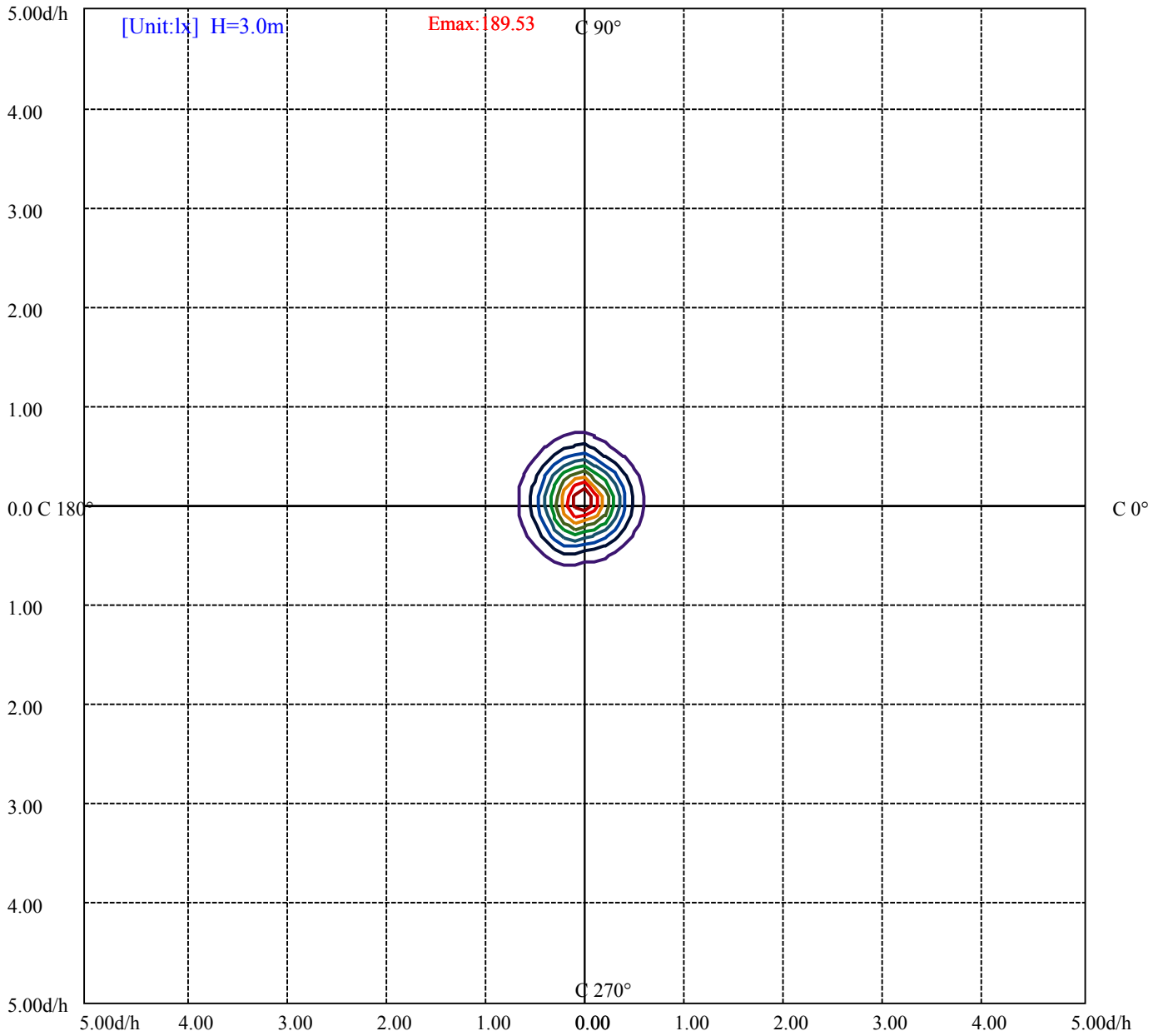
House

[Unit:cd]

Road

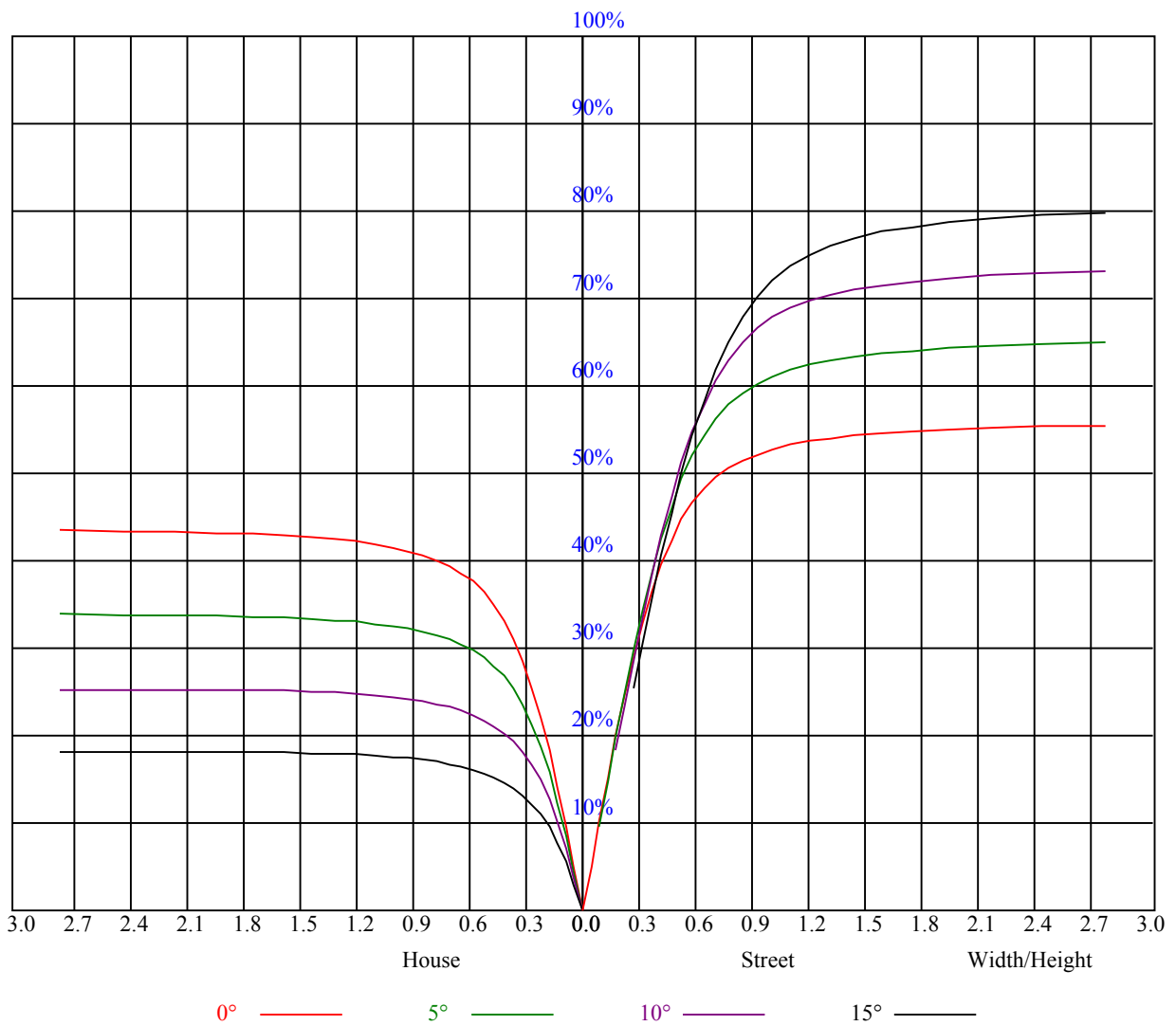
I<sub>max</sub>:1745.62

(10%I <sub>max</sub> ) 174.562	—
(20%I <sub>max</sub> ) 349.124	—
(30%I <sub>max</sub> ) 523.686	—
(40%I <sub>max</sub> ) 698.248	—
(50%I <sub>max</sub> ) 872.81	—
(60%I <sub>max</sub> ) 1047.37	—
(70%I <sub>max</sub> ) 1221.93	—
(80%I <sub>max</sub> ) 1396.5	—
(90%I <sub>max</sub> ) 1571.06	—



- (10%Emax) 18.953
- (20%Emax) 37.906
- (30%Emax) 56.85889
- (40%Emax) 75.81189
- (50%Emax) 94.76488
- (60%Emax) 113.7178
- (70%Emax) 132.6711
- (80%Emax) 151.6233
- (90%Emax) 170.5767





## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1662.88	1516.86	1275.94	1022.84	757.58	485.02	270.86	158.91	110.24
22.5	1679.91	1560.67	1339.21	1076.38	815.99	555.59	312.23	171.08	117.54
45.0	1692.08	1599.61	1387.88	1134.79	886.56	616.43	353.60	185.68	119.98
67.5	1696.95	1614.21	1402.48	1149.39	903.60	640.77	385.24	205.15	124.84
90.0	1640.98	1745.62	1645.84	1426.82	1166.43	906.03	645.63	382.81	202.72
112.5	1626.38	1716.42	1614.21	1390.32	1142.09	876.83	601.83	353.60	190.55
135.0	1631.24	1684.78	1546.07	1314.87	1066.65	803.82	528.82	295.20	168.65
157.5	1643.41	1650.71	1482.79	1239.43	981.47	721.08	460.68	256.26	151.61
180.0	1662.88	1621.51	1431.69	1178.59	918.20	655.37	409.58	231.92	141.88
202.5	1679.91	1602.04	1387.88	1142.09	888.99	623.73	373.07	214.89	134.58
225.0	1692.08	1589.87	1365.98	1120.19	879.26	618.87	368.20	210.02	129.71
247.5	1696.95	1577.70	1356.25	1108.02	864.66	618.87	375.51	210.02	132.15
270.0	1640.98	1412.22	1166.43	913.33	660.24	402.27	224.62	137.01	98.07
292.5	1626.38	1400.05	1159.12	908.46	648.07	397.41	214.89	134.58	98.07
315.0	1631.24	1434.12	1190.76	940.10	674.84	404.71	222.19	137.01	102.94
337.5	1643.41	1473.06	1227.27	969.30	711.34	438.78	239.22	146.75	105.38
360.0	1662.88	1516.86	1275.94	1022.84	757.58	485.02	270.86	158.91	110.24
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	78.61	56.70	39.67	25.07	17.77	12.90	5.60	0.00	0.00
22.5	81.04	56.70	39.67	27.50	17.77	15.33	5.60	0.73	0.00
45.0	85.91	59.14	42.10	27.50	20.20	15.33	8.03	0.73	0.00
67.5	88.34	61.57	44.54	32.37	20.20	15.33	8.03	0.73	0.00
90.0	127.28	88.34	64.00	44.54	27.50	20.20	15.33	8.03	0.00
112.5	122.41	88.34	64.00	44.54	29.93	20.20	15.33	8.03	0.73
135.0	115.11	83.47	59.14	42.10	25.07	17.77	15.33	5.60	0.73
157.5	107.81	78.61	54.27	37.23	25.07	17.77	15.33	8.03	0.00
180.0	102.94	73.74	51.84	37.23	25.07	17.77	10.46	8.03	0.00
202.5	98.07	68.87	49.40	32.37	22.63	17.77	10.46	3.16	0.00
225.0	95.64	68.87	46.97	32.37	20.20	15.33	10.46	3.16	0.00
247.5	95.64	66.44	46.97	29.93	22.63	15.33	8.03	3.16	0.00
270.0	68.87	49.40	32.37	22.63	15.33	8.03	0.73	0.00	0.00
292.5	71.30	49.40	34.80	22.63	15.33	10.46	0.73	0.00	0.00
315.0	73.74	51.84	34.80	22.63	17.77	10.46	3.16	0.00	0.00
337.5	76.17	54.27	37.23	25.07	17.77	10.46	3.16	0.00	0.00
360.0	78.61	56.70	39.67	25.07	17.77	12.90	5.60	0.00	0.00
C/ $\gamma$ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

LL4G-30K

Intensity data(cd)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C/γ(°)	180.0								
0.0	0.00								
22.5	0.00								
45.0	0.00								
67.5	0.00								
90.0	0.00								
112.5	0.00								
135.0	0.00								
157.5	0.00								
180.0	0.00								
202.5	0.00								
225.0	0.00								
247.5	0.00								
270.0	0.00								
292.5	0.00								
315.0	0.00								
337.5	0.00								
360.0	0.00								