



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
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LumCAT: LL6RRG-27K

Luminaire:

Report No:

Voltage(V): 120.14

Test No: Sam

Current(A): 0.1405

LampCAT:

Power (W): 16.6220

Lamp flux(lm): 1006.9

PF: 0.9845

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): 1006.92

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 60.15

Central intensity(cd): 433.540

Maximum intensity(cd): 449.043

Angle of maximum intensity: C=180.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=93.9

[C90/270]Total=93.8

Field angle(10%Imax): [C0/180]Total=149.5

[C90/270]Total=149.4

Maximum s/h(1/2): C0\_180=1.24 C90\_270=1.02

Maximum s/h(1/4): C0\_180=1.32 C90\_270=1.13

Up flux rate of lamp(%): 0.31%

Down flux rate of lamp(%): 98.99%

Up flux rate of LUM(%): -0.39%

Down flux rate of LUM(%): 99.69%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 83.784%

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

Date:  
Humidity(%): 58%

Operator: Sam

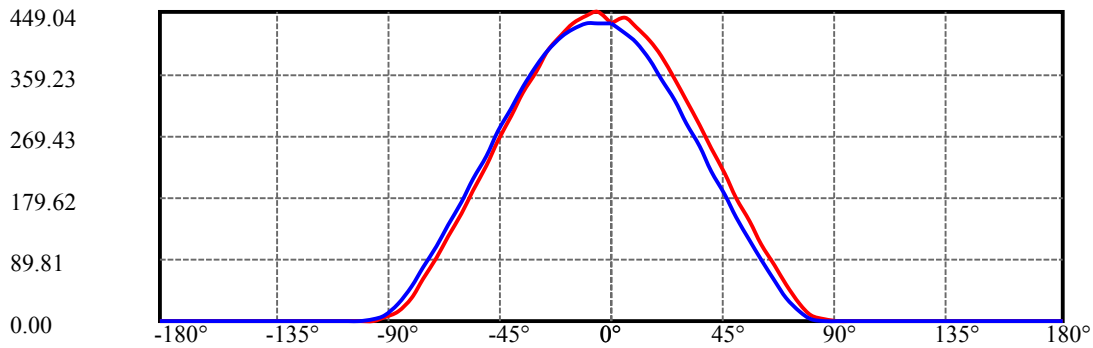
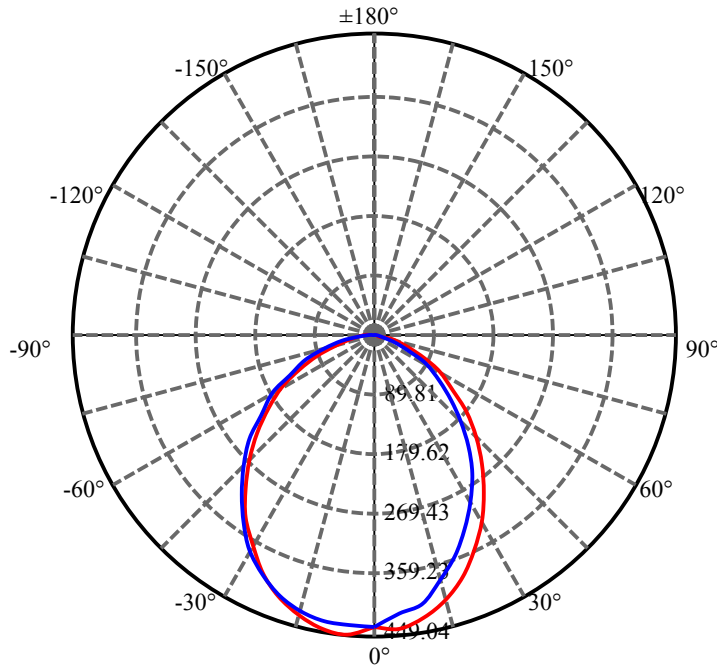
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	433.540	0.000	0	.000%	.000%
5.0	429.479	10.320	10.32	1.025%	1.025%
10.0	420.189	30.422	40.743	3.021%	4.046%
15.0	405.356	49.044	89.786	4.871%	8.917%
20.0	385.348	65.306	155.092	6.486%	15.403%
25.0	360.117	78.419	233.512	7.788%	23.191%
30.0	331.164	87.811	321.323	8.721%	31.912%
35.0	299.157	93.233	414.556	9.259%	41.171%
40.0	265.831	94.753	509.309	9.410%	50.581%
45.0	232.061	92.737	602.046	9.210%	59.791%
50.0	197.688	87.433	689.48	8.683%	68.474%
55.0	163.993	79.274	768.754	7.873%	76.347%
60.0	131.455	68.956	837.709	6.848%	83.195%
65.0	100.397	57.032	894.741	5.664%	88.859%
70.0	71.395	44.141	938.882	4.384%	93.243%
75.0	45.190	31.079	969.961	3.087%	96.330%
80.0	25.318	19.380	989.341	1.925%	98.254%
85.0	11.150	10.232	999.573	1.016%	99.271%
90.0	3.671	4.195	1003.768	.417%	99.687%
95.0	0.591	1.203	1004.97	.119%	99.807%
100.0	0.197	0.214	1005.185	.021%	99.828%
105.0	0.197	0.105	1005.29	.010%	99.838%
110.0	0.197	0.103	1005.393	.010%	99.849%
115.0	0.197	0.100	1005.493	.010%	99.858%
120.0	0.283	0.117	1005.609	.012%	99.870%
125.0	0.296	0.132	1005.742	.013%	99.883%
130.0	0.332	0.135	1005.877	.013%	99.897%
135.0	0.394	0.147	1006.024	.015%	99.911%
140.0	0.394	0.146	1006.17	.014%	99.926%
145.0	0.456	0.142	1006.311	.014%	99.940%
150.0	0.493	0.139	1006.45	.014%	99.954%
155.0	0.529	0.129	1006.579	.013%	99.966%
160.0	0.579	0.116	1006.695	.012%	99.978%
165.0	0.591	0.096	1006.791	.010%	99.987%
170.0	0.591	0.070	1006.861	.007%	99.994%
175.0	0.591	0.042	1006.904	.004%	99.999%
180.0	0.591	0.014	1006.918	.001%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	321.32	31.91%	31.91%
0-40	509.31	50.58%	50.58%
0-60	837.71	83.20%	83.20%
0-90	1003.77	99.69%	99.69%
0-120	1005.61	99.87%	99.87%
0-180	1006.92	100.00%	100.00%
60-90	235.01	23.34%	23.34%
90-120	6.04	0.60%	0.60%
90-130	6.30	0.63%	0.63%
90-150	6.88	0.68%	0.68%
90-180	7.33	0.73%	0.73%
0-57.67	805.53	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	40.74
10-20	114.35
20-30	166.23
30-40	187.99
40-50	180.17
50-60	148.23
60-70	101.17
70-80	50.46
80-90	14.43
90-100	1.42
100-110	0.21
110-120	0.22
120-130	0.27
130-140	0.29
140-150	0.28
150-160	0.24
160-170	0.17
170-180	0.04

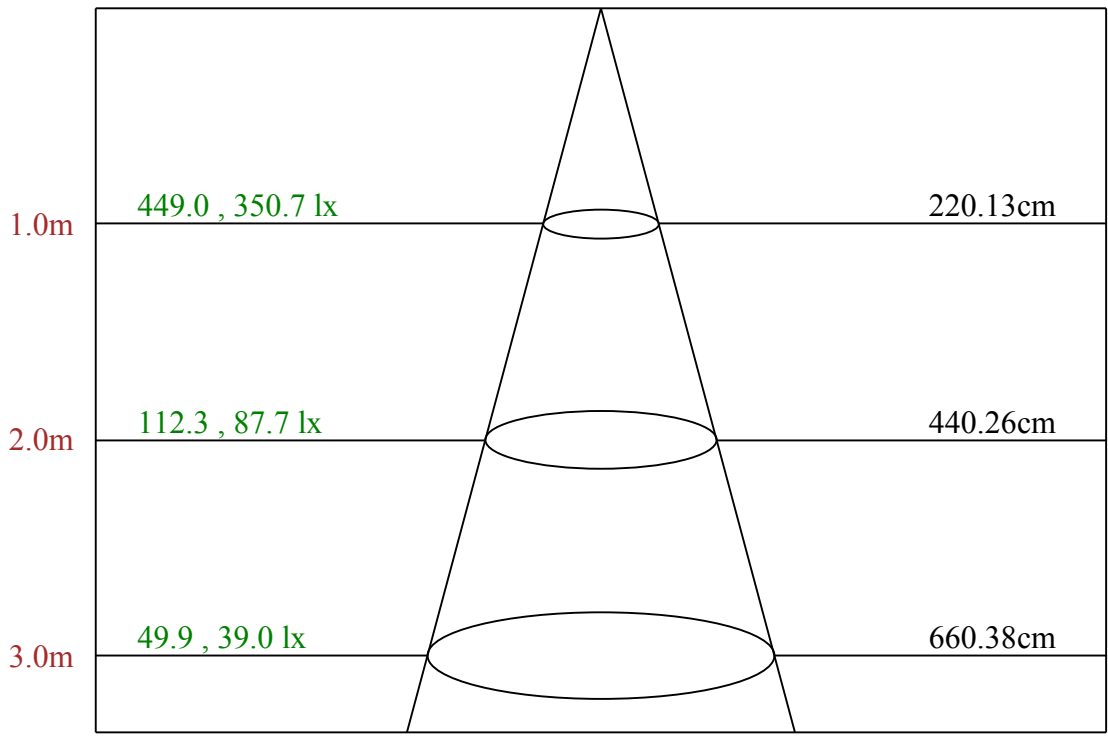


C0/C180: —

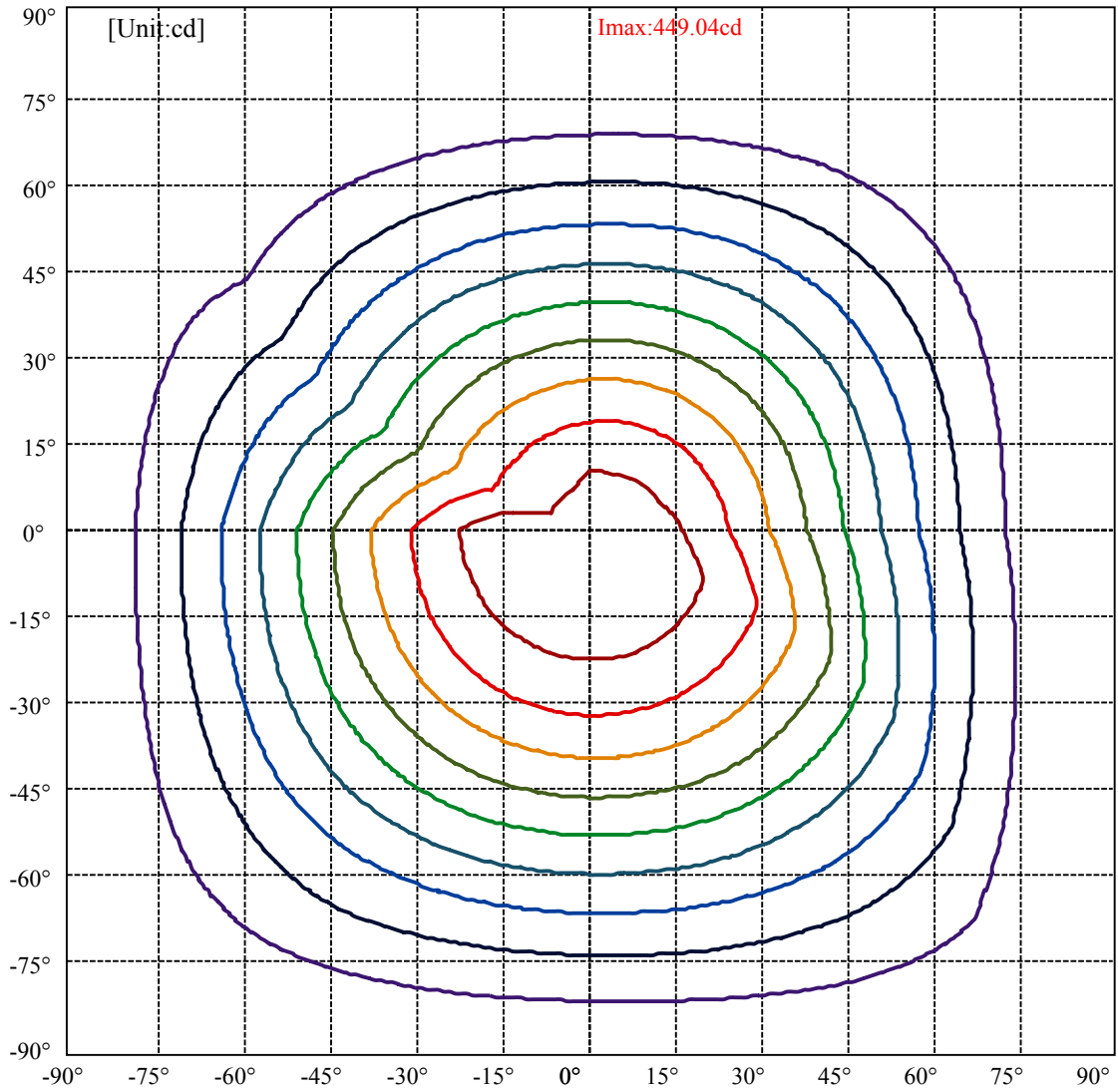
C90/C270: —

Field angle(10%Imax):C0/180Left:73.1 Right:76.4  
:C90/270Left:81.2 Right:68.2

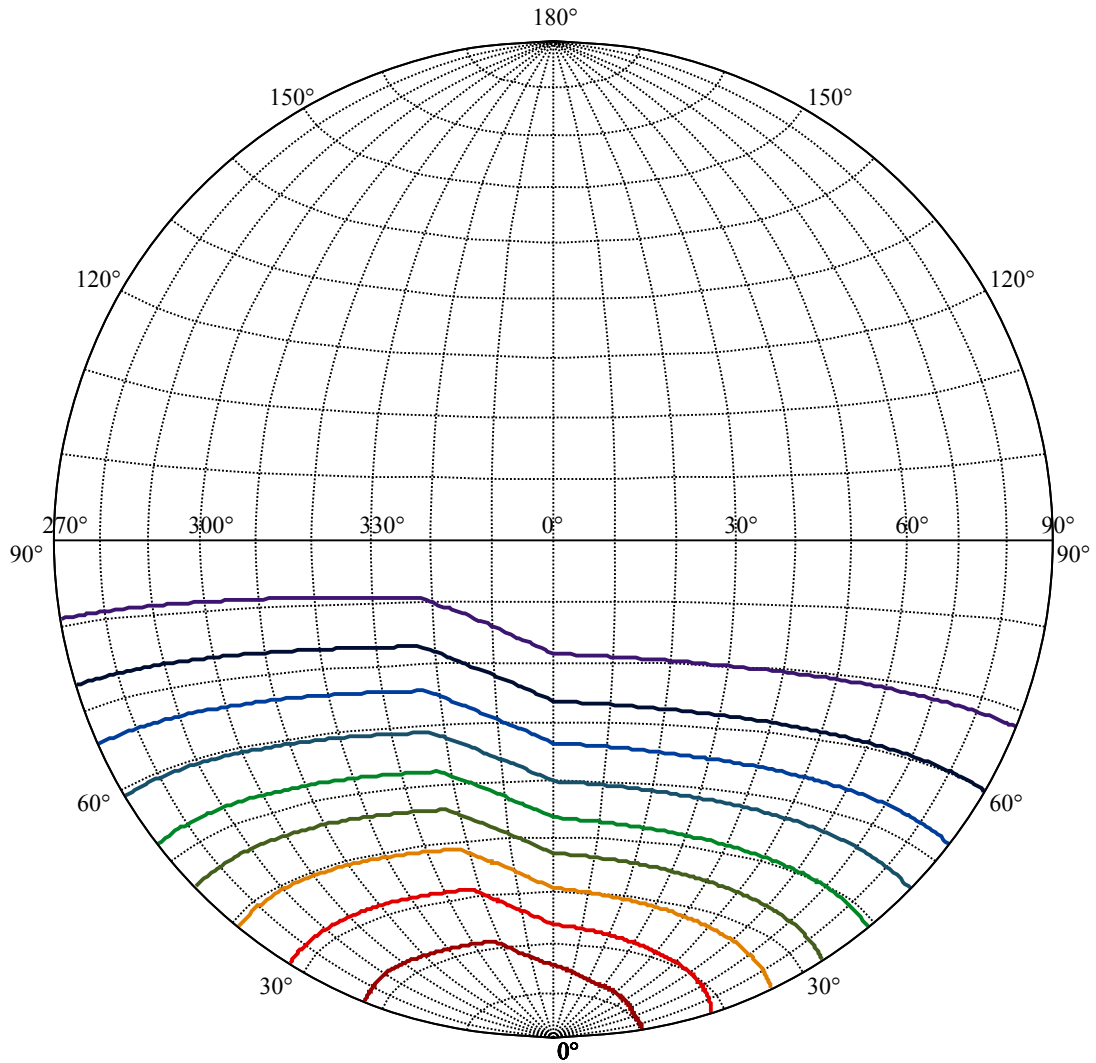
Beam Angle(50%Imax):C0/180Left:45.3 Right:48.6  
:C90/270Left:53.6 Right:40.2



Max , Ave      Beam angle of C180 plane 95.06



(10%I <sub>max</sub> ) 44.9043	—
(20%I <sub>max</sub> ) 89.8086	—
(30%I <sub>max</sub> ) 134.713	—
(40%I <sub>max</sub> ) 179.617	—
(50%I <sub>max</sub> ) 224.521	—
(60%I <sub>max</sub> ) 269.426	—
(70%I <sub>max</sub> ) 314.33	—
(80%I <sub>max</sub> ) 359.234	—
(90%I <sub>max</sub> ) 404.139	—



House

[Unit:cd]

Road

I<sub>max</sub>:449.04

(10%I<sub>max</sub>) 44.9043

(20%I<sub>max</sub>) 89.8086

(30%I<sub>max</sub>) 134.713

(40%I<sub>max</sub>) 179.617

(50%I<sub>max</sub>) 224.521

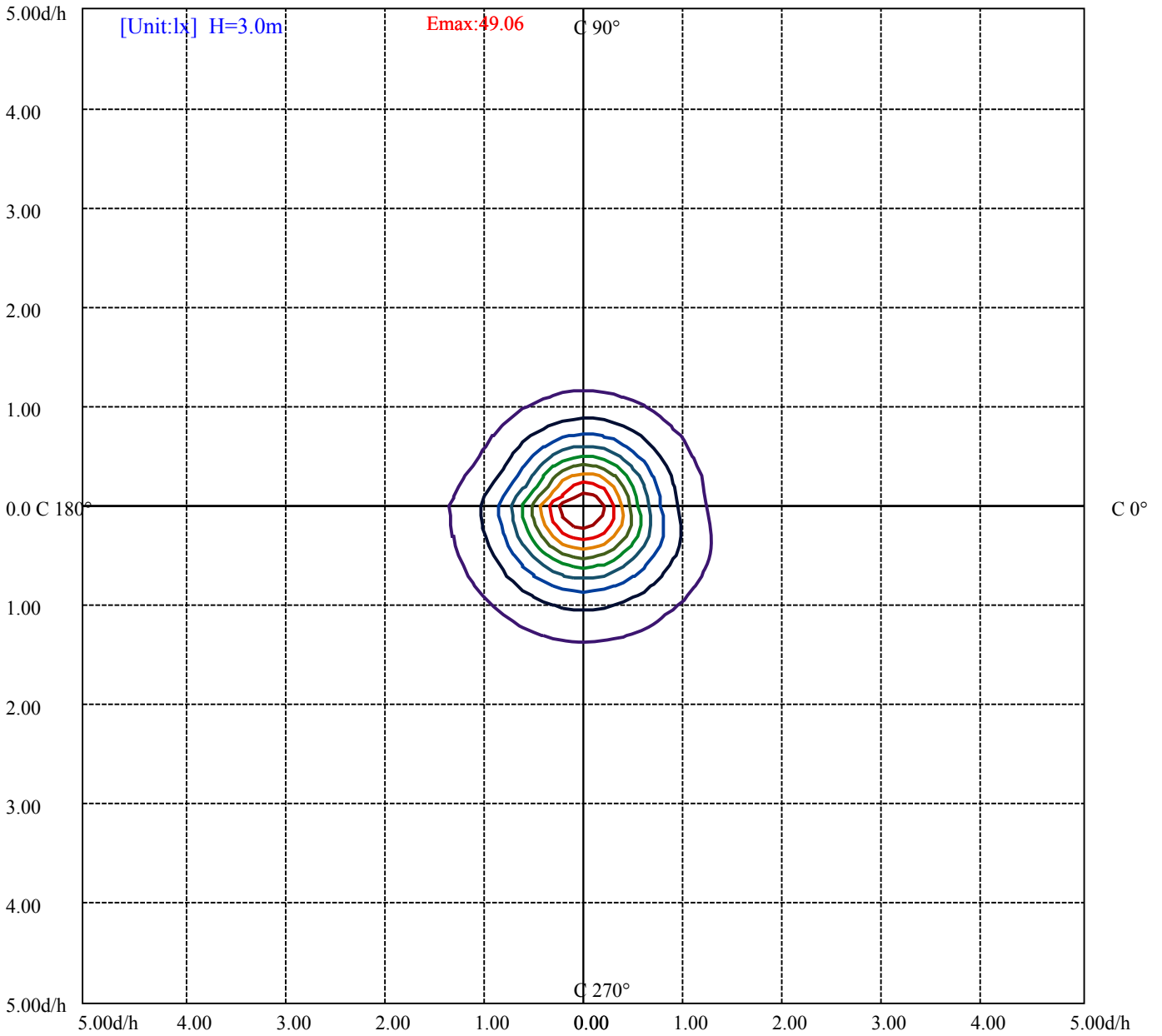
(60%I<sub>max</sub>) 269.426

(70%I<sub>max</sub>) 314.33

(80%I<sub>max</sub>) 359.234

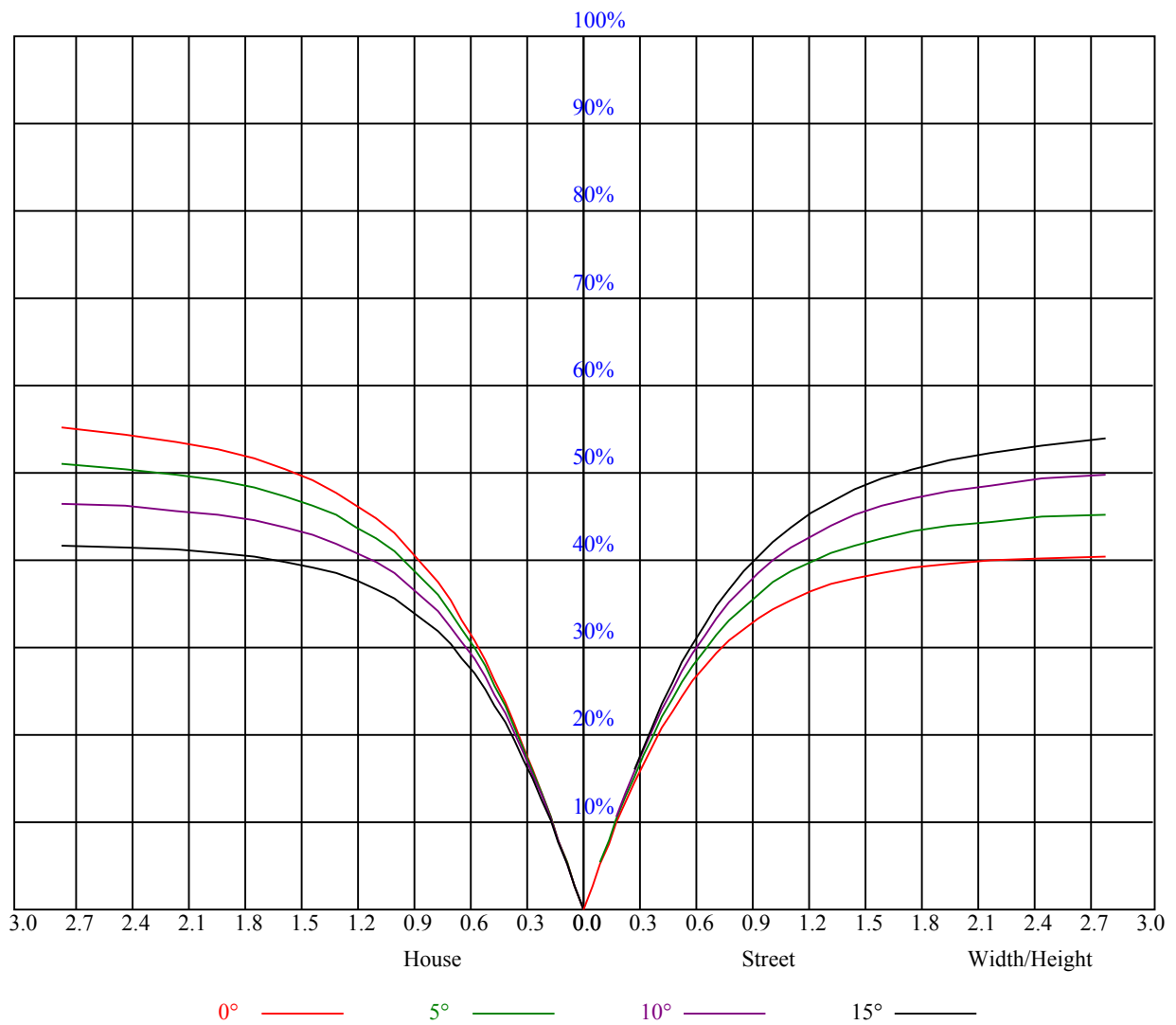
(90%I<sub>max</sub>) 404.139





- (10%Emax) 4.906222 ———
- (20%Emax) 9.812444 ———
- (30%Emax) 14.71867 ———
- (40%Emax) 19.62489 ———
- (50%Emax) 24.53111 ———
- (60%Emax) 29.43733 ———
- (70%Emax) 34.34356 ———
- (80%Emax) 39.24977 ———
- (90%Emax) 44.156 ———





LL6RRG-27K

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	433.54	440.57	427.36	408.44	383.60	352.45	319.93	285.04	250.34
22.5	433.54	433.08	418.49	393.85	373.15	342.99	309.88	276.17	240.69
45.0	433.54	426.37	411.59	390.50	364.28	333.33	301.20	266.51	231.42
67.5	433.54	421.25	405.87	383.40	357.18	326.04	293.91	259.61	224.32
90.0	433.54	417.50	405.48	378.87	351.07	319.93	287.60	253.10	218.21
112.5	433.54	414.94	393.65	374.93	346.93	315.59	283.66	249.16	214.86
135.0	433.54	413.17	393.85	373.74	345.75	315.79	282.48	248.18	215.26
157.5	433.54	413.36	393.46	374.14	347.53	316.77	283.46	249.56	216.64
180.0	433.54	449.04	443.13	431.89	414.94	392.47	363.10	331.76	297.46
202.5	433.54	442.74	438.79	427.95	412.18	390.50	363.49	331.95	298.64
225.0	433.54	438.99	435.84	426.97	411.98	391.68	365.46	335.30	302.78
247.5	433.54	435.84	433.87	425.78	411.98	392.86	367.63	338.06	305.93
270.0	433.54	433.27	432.49	425.19	412.58	393.46	370.00	340.63	308.89
292.5	433.54	431.89	430.91	424.99	412.58	395.03	370.19	341.61	311.06
315.0	433.54	429.92	429.53	423.22	410.41	392.67	369.41	341.42	310.07
337.5	433.54	429.73	428.74	421.84	409.42	390.30	367.24	338.46	306.72
360.0	433.54	440.57	427.36	408.44	383.60	352.45	319.93	285.04	250.34
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	214.67	179.58	144.69	111.37	81.02	52.24	26.41	8.48	1.77
22.5	205.60	170.90	136.80	105.26	74.91	46.92	23.06	7.29	0.59
45.0	197.71	163.41	130.10	98.17	69.39	42.18	19.52	6.11	0.20
67.5	190.03	156.32	124.19	92.84	63.67	37.45	15.97	4.73	0.20
90.0	183.91	150.60	118.27	88.31	59.93	34.30	13.01	3.94	0.20
112.5	181.16	148.63	116.30	85.75	57.76	32.33	12.42	3.55	0.20
135.0	181.35	147.84	115.51	86.14	58.15	32.53	12.22	3.75	0.20
157.5	182.73	150.21	118.08	86.54	59.33	33.71	13.40	4.14	0.20
180.0	262.37	226.30	191.01	156.91	123.40	91.07	61.70	34.69	13.60
202.5	264.93	229.65	194.36	161.05	127.34	94.62	66.04	38.64	16.56
225.0	268.48	233.39	199.49	164.79	131.68	103.69	70.18	42.38	19.52
247.5	273.01	238.12	203.63	170.12	136.61	104.87	74.91	46.72	22.87
270.0	275.77	241.08	207.57	173.47	139.76	108.81	77.86	49.28	25.43
292.5	277.74	243.25	208.95	175.64	141.93	110.19	79.83	51.05	26.41
315.0	278.73	243.25	208.95	174.85	142.13	109.99	79.05	51.25	25.82
337.5	274.79	240.49	205.99	172.09	139.37	107.43	77.47	49.08	24.64
360.0	214.67	179.58	144.69	111.37	81.02	52.24	26.41	8.48	1.77
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39
22.5	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
45.0	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
67.5	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
90.0	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
112.5	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
135.0	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
157.5	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39	0.39
180.0	4.34	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.39
202.5	5.13	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.39
225.0	6.51	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.39
247.5	7.29	0.59	0.20	0.20	0.20	0.20	0.20	0.20	0.20
270.0	8.08	1.58	0.20	0.20	0.20	0.20	0.20	0.20	0.20
292.5	8.67	1.77	0.20	0.20	0.20	0.20	0.20	0.20	0.20
315.0	8.87	1.77	0.20	0.20	0.20	0.20	0.20	0.20	0.20
337.5	8.28	1.58	0.20	0.20	0.20	0.20	0.20	0.20	0.20
360.0	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.39	0.39

LL6RRG-27K

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	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59
22.5	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59	0.59
45.0	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59
67.5	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59
90.0	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59	0.59
112.5	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59	0.59
135.0	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59	0.59
157.5	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59	0.59
180.0	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59
202.5	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59
225.0	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59
247.5	0.39	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59
270.0	0.39	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59
292.5	0.39	0.39	0.39	0.39	0.39	0.39	0.59	0.59	0.59
315.0	0.39	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59
337.5	0.39	0.39	0.39	0.39	0.39	0.59	0.59	0.59	0.59
360.0	0.39	0.39	0.39	0.59	0.59	0.59	0.59	0.59	0.59

C/γ(°)	180.0
0.0	0.59
22.5	0.59
45.0	0.59
67.5	0.59
90.0	0.59
112.5	0.59
135.0	0.59
157.5	0.59
180.0	0.59
202.5	0.59
225.0	0.59
247.5	0.59
270.0	0.59
292.5	0.59
315.0	0.59
337.5	0.59
360.0	0.59