



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:

LumCAT: LL10R-50K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.05

LampCAT:

Current(A): 0.4330

Lamp flux(lm): -1.0

Power (W): 49.70

Number of Lamps: 1

PF: 0.9564

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 6828.67, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 137.40

Central intensity(cd): 6181.307, Maximum intensity(cd): 6212.071

Angle of maximum intensity: C=270.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=67.5

[C90/270]Total=67.0

Field angle(10%Imax): [C0/180]Total=87.2

[C90/270]Total=87.9

Maximum s/h(1/2): C0_180=1.11 C90_270=1.07

Maximum s/h(1/4): C0_180=1.05 C90_270=0.99

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.24%

Down flux rate of LUM(%): 99.76%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.758%

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

Date:
Humidity(%): 58%

Operator: Tester

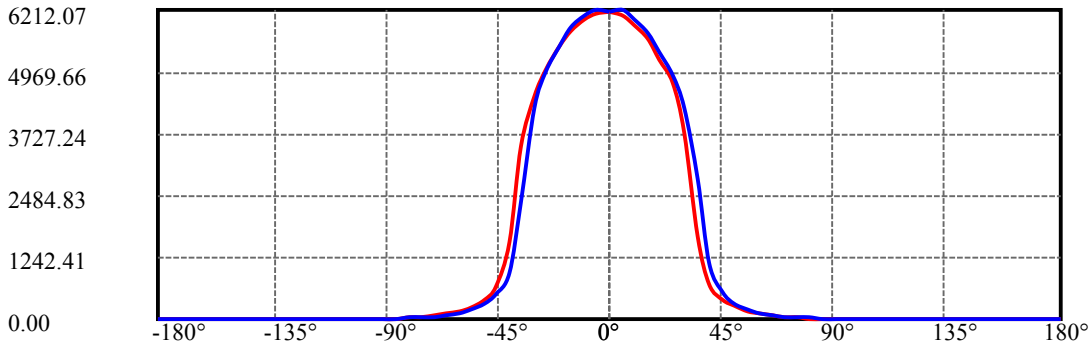
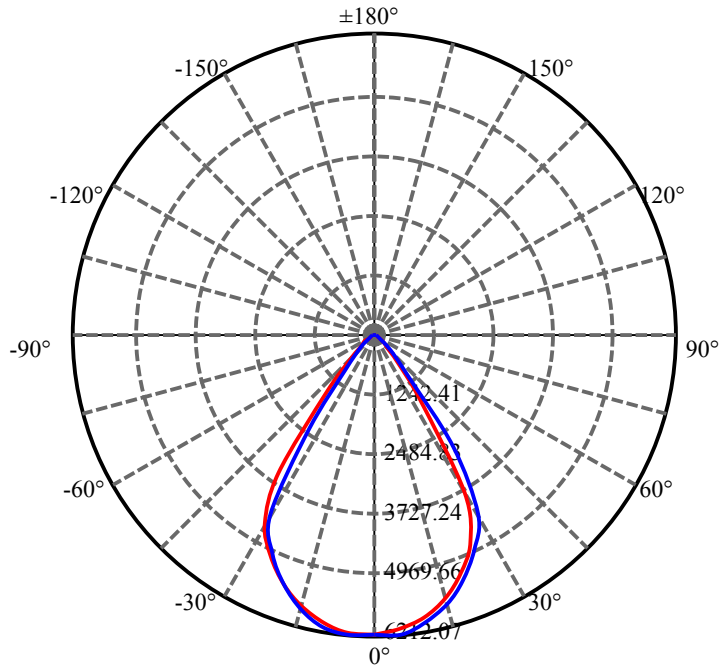
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6181.307	0.000	0	0.00%	0.00%
5.0	6138.698	147.282	147.282	0.00%	2.16%
10.0	5996.659	434.120	581.402	0.00%	8.51%
15.0	5732.239	695.750	1277.152	0.00%	18.70%
20.0	5365.373	914.599	2191.751	0.00%	32.10%
25.0	4873.386	1073.857	3265.608	0.00%	47.82%
30.0	4149.014	1141.792	4407.4	0.00%	64.54%
35.0	2582.484	991.260	5398.661	0.00%	79.06%
40.0	1102.119	614.748	6013.409	0.00%	88.06%
45.0	527.677	301.770	6315.179	0.00%	92.48%
50.0	316.224	170.523	6485.701	0.00%	94.98%
55.0	203.008	112.898	6598.6	0.00%	96.63%
60.0	129.967	76.966	6675.566	0.00%	97.76%
65.0	82.233	51.586	6727.152	0.00%	98.51%
70.0	53.299	34.318	6761.47	0.00%	99.02%
75.0	35.275	23.152	6784.622	0.00%	99.35%
80.0	21.818	15.276	6799.898	0.00%	99.58%
85.0	10.245	8.712	6808.61	0.00%	99.71%
90.0	2.298	3.434	6812.045	0.00%	99.76%
95.0	0.858	0.864	6812.909	0.00%	99.77%
100.0	0.859	0.467	6813.375	0.00%	99.78%
105.0	0.914	0.474	6813.85	0.00%	99.78%
110.0	0.997	0.499	6814.349	0.00%	99.79%
115.0	1.025	0.512	6814.861	0.00%	99.80%
120.0	1.274	0.559	6815.42	0.00%	99.81%
125.0	1.689	0.685	6816.105	0.00%	99.82%
130.0	2.298	0.867	6816.972	0.00%	99.83%
135.0	3.046	1.080	6818.052	0.00%	99.84%
140.0	3.904	1.287	6819.339	0.00%	99.86%
145.0	4.790	1.451	6820.789	0.00%	99.88%
150.0	5.842	1.566	6822.355	0.00%	99.91%
155.0	6.895	1.612	6823.967	0.00%	99.93%
160.0	7.725	1.533	6825.5	0.00%	99.95%
165.0	8.251	1.317	6826.817	0.00%	99.97%
170.0	8.611	1.000	6827.817	0.00%	99.99%
175.0	8.999	0.630	6828.447	0.00%	100.00%
180.0	9.500	0.221	6828.668	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	4407.40	N.A.	64.54%
0-40	6013.41	N.A.	88.06%
0-60	6675.57	N.A.	97.76%
0-90	6812.04	N.A.	99.76%
0-120	6815.42	N.A.	99.81%
0-180	6828.67	N.A.	100.00%
60-90	136.48	N.A.	2.00%
90-120	3.38	N.A.	0.05%
90-130	4.93	N.A.	0.07%
90-150	10.31	N.A.	0.15%
90-180	16.40	N.A.	0.24%
0-35.52	5462.94	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	581.40
10-20	1610.35
20-30	2215.65
30-40	1606.01
40-50	472.29
50-60	189.86
60-70	85.90
70-80	38.43
80-90	12.15
90-100	1.33
100-110	0.97
110-120	1.07
120-130	1.55
130-140	2.37
140-150	3.02
150-160	3.15
160-170	2.32
170-180	0.63



C0/C180: —

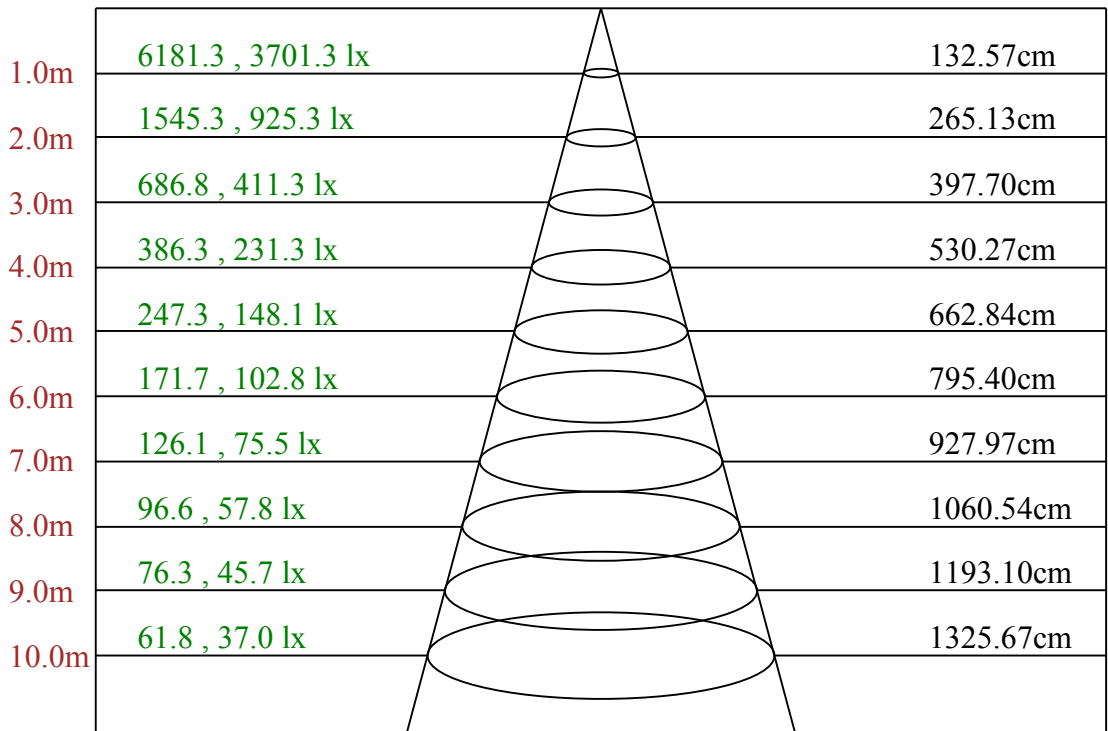
C90/C270: —

Field angle(10%Imax):C0/180Left:45.7 Right:41.5

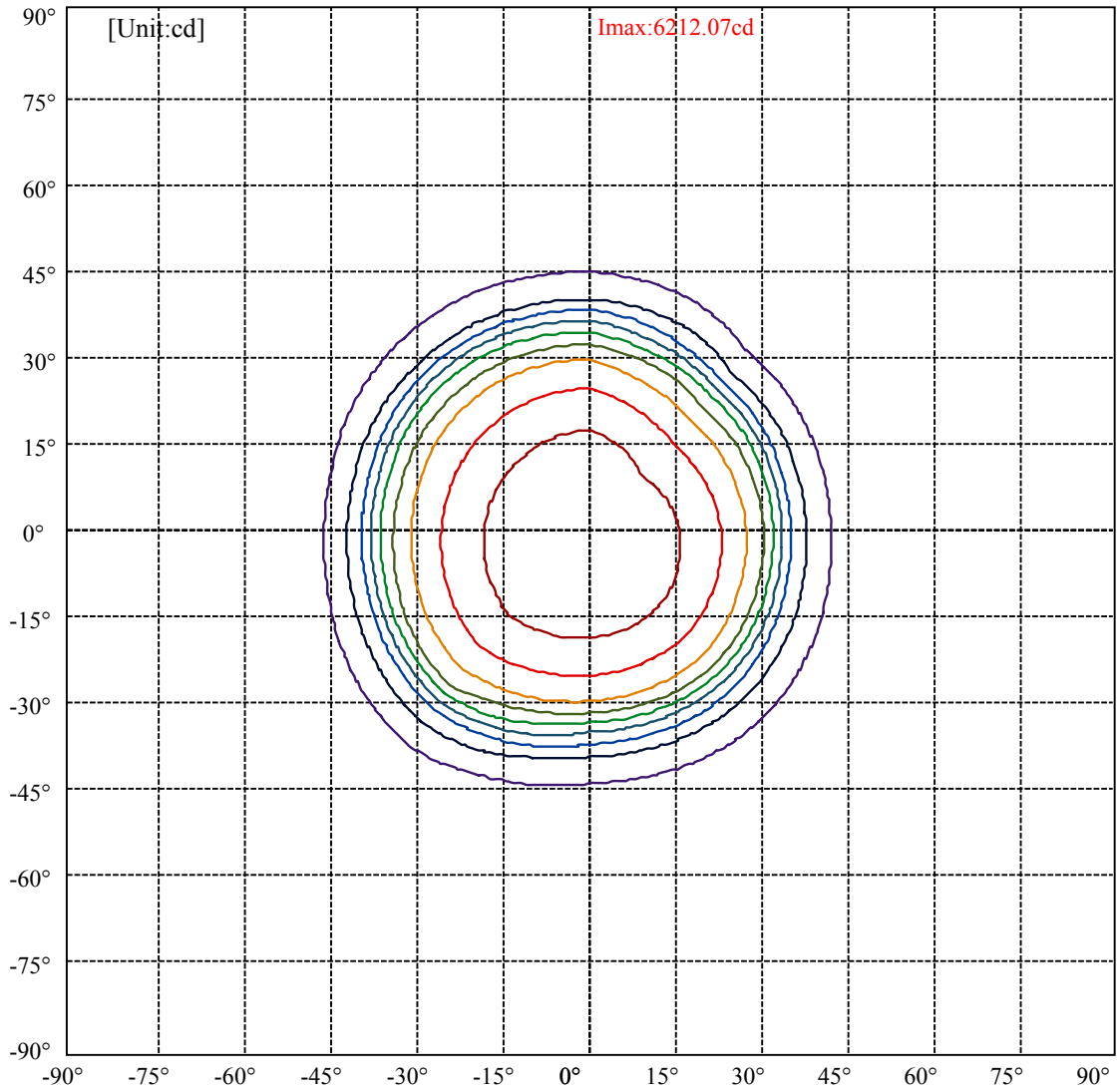
:C90/270Left:43.5 Right:44.4

Beam Angle(50%Imax):C0/180Left:36.0 Right:31.5

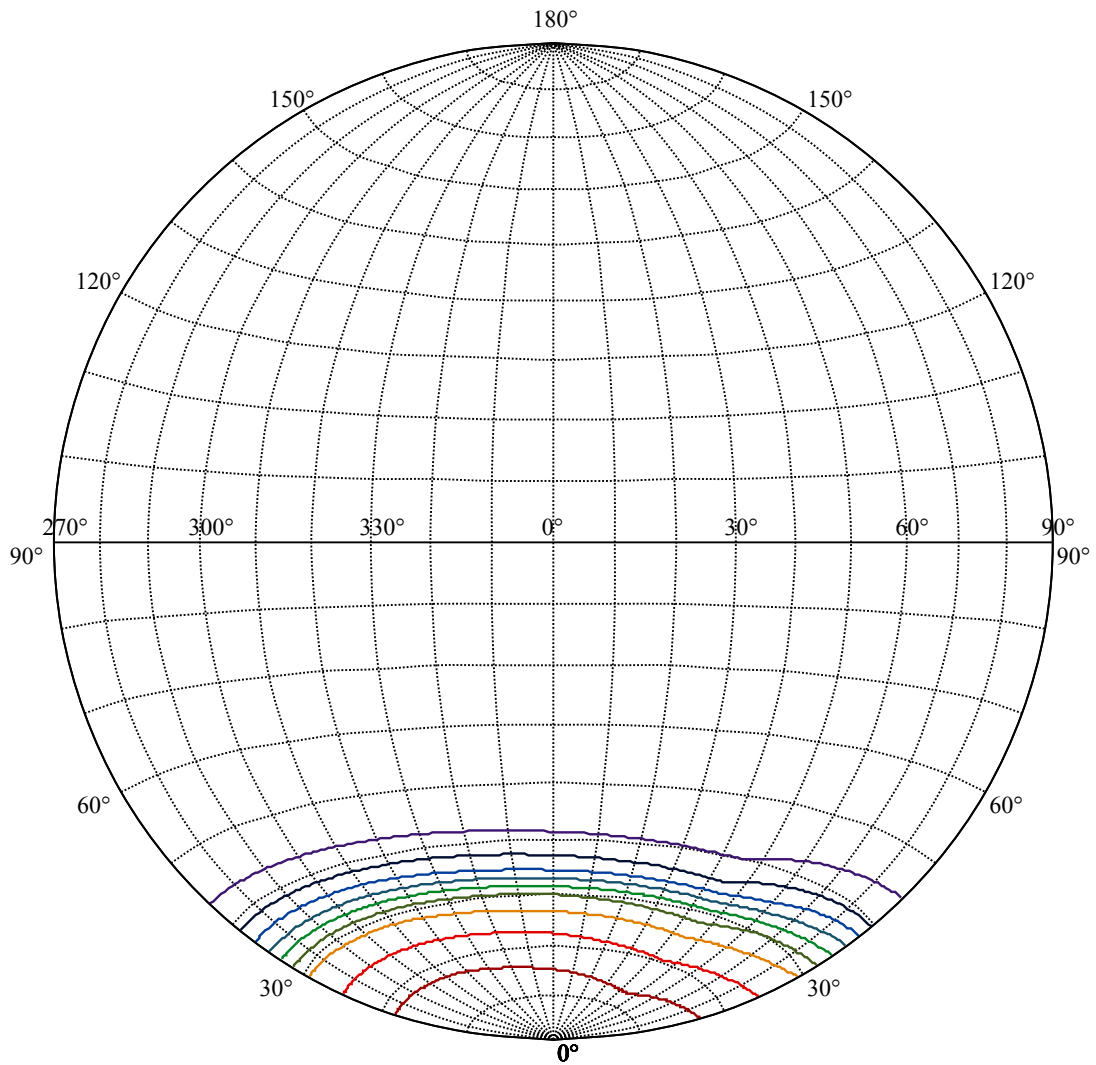
:C90/270Left:33.0 Right:34.0



Max , Ave Beam angle of C270 plane 67.08



(10%Imax) 621.207	—
(20%Imax) 1242.41	—
(30%Imax) 1863.62	—
(40%Imax) 2484.83	—
(50%Imax) 3106.04	—
(60%Imax) 3727.24	—
(70%Imax) 4348.45	—
(80%Imax) 4969.66	—
(90%Imax) 5590.86	—



House

[Unit:cd]

Road

Imax:6212.07

(10%Imax) 621.207	—
(20%Imax) 1242.41	—
(30%Imax) 1863.62	—
(40%Imax) 2484.83	—
(50%Imax) 3106.04	—
(60%Imax) 3727.24	—
(70%Imax) 4348.45	—
(80%Imax) 4969.66	—
(90%Imax) 5590.86	—

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	6181.31	6088.03	5915.26	5620.66	5221.95	4728.00	3723.70	1662.61	713.02
45.0	6181.31	6003.86	5791.21	5447.88	5022.60	4400.39	3349.14	1332.57	610.24
90.0	6181.31	6194.35	6032.65	5746.91	5377.00	4900.77	4258.41	2814.20	1115.27
135.0	6181.31	6161.13	6008.29	5733.62	5361.50	4902.98	4316.00	3071.15	1228.24
180.0	6181.31	6152.27	6037.08	5795.64	5463.39	5022.60	4486.56	3461.00	1538.34
225.0	6181.31	6127.90	6054.80	5882.03	5591.86	5188.72	4681.48	3830.91	1841.80
270.0	6181.31	6212.07	6090.24	5846.59	5478.89	4960.58	4249.99	2363.44	933.64
315.0	6181.31	6169.99	6043.73	5784.57	5405.80	4883.05	4126.84	2124.00	836.40
360.0	6181.31	6088.03	5915.26	5620.66	5221.95	4728.00	3723.70	1662.61	713.02
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	401.14	253.84	165.69	104.33	65.79	42.97	27.47	15.73	4.43
45.0	359.94	227.48	149.52	95.91	61.80	39.65	26.36	14.18	3.54
90.0	548.67	324.28	209.99	132.68	83.95	56.04	39.43	25.47	12.63
135.0	569.71	342.45	219.95	141.10	91.04	58.92	39.21	25.69	13.96
180.0	658.75	376.56	239.00	156.60	98.79	63.35	42.53	27.47	15.95
225.0	745.58	420.41	264.92	171.44	108.98	69.55	44.30	28.35	17.28
270.0	485.98	298.14	190.27	120.72	75.31	49.62	33.45	20.38	8.42
315.0	451.65	286.63	184.73	116.95	72.21	46.29	29.46	17.28	5.76
360.0	401.14	253.84	165.69	104.33	65.79	42.97	27.47	15.73	4.43
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.89	0.89	0.89	0.89	1.11	0.89	1.55	2.22	2.88
45.0	0.89	0.89	1.11	1.11	0.89	1.55	1.55	2.22	2.66
90.0	1.77	0.67	0.67	0.67	1.11	0.89	1.11	1.55	1.99
135.0	3.10	0.89	0.89	0.89	0.89	0.89	1.11	1.33	2.22
180.0	4.43	0.89	0.67	0.89	0.89	0.67	1.11	1.33	1.77
225.0	5.54	0.89	0.67	0.89	1.11	0.89	1.11	1.11	1.77
270.0	0.89	0.89	1.11	1.11	1.11	1.11	1.33	1.99	2.66
315.0	0.89	0.89	0.89	0.89	0.89	1.33	1.33	1.77	2.44
360.0	0.89	0.89	0.89	0.89	1.11	0.89	1.55	2.22	2.88
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	3.54	4.43	5.10	6.20	7.53	8.20	8.86	8.86	9.53
45.0	3.54	4.43	5.54	6.42	7.75	8.20	8.64	8.86	9.30
90.0	3.10	3.77	4.65	5.76	6.42	7.53	7.97	8.64	8.86
135.0	2.88	3.77	4.43	5.54	6.87	7.53	7.97	8.64	8.64
180.0	2.44	3.10	4.43	5.32	6.42	7.31	7.97	8.42	8.42
225.0	2.22	3.10	3.99	5.10	5.98	7.09	7.75	8.20	8.42
270.0	3.32	4.43	5.10	6.20	6.87	7.97	8.20	8.64	9.53
315.0	3.32	4.21	5.10	6.20	7.31	7.97	8.64	8.64	9.30
360.0	3.54	4.43	5.10	6.20	7.53	8.20	8.86	8.86	9.53
C/ γ (°)	180.0								
0.0	9.50								
45.0	9.50								
90.0	9.50								
135.0	9.50								
180.0	9.50								
225.0	9.50								
270.0	9.50								
315.0	9.50								
360.0	9.50								