



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.07

LampCAT:

Current(A): 2.4740

Lamp flux(lm): -1.0

Power (W): 296.66

Number of Lamps: 1

PF: 0.9986

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 53797.47, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 181.34

Central intensity(cd): 18939.730, Maximum intensity(cd): 19083.920

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=112.8

[C90/270]Total=113.0

Field angle(10%Imax): [C0/180]Total=158.5

[C90/270]Total=158.8

Maximum s/h(1/2): C0_180=1.26 C90_270=1.29

Maximum s/h(1/4): C0_180=1.39 C90_270=1.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.21%

Down flux rate of LUM(%): 99.79%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.755%

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

Date:
Humidity(%): 58%

Operator: Sam

Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	18939.730	0.000	0	0.00%	0.00%
5.0	18859.516	451.879	451.879	0.00%	0.84%
10.0	18599.652	1340.032	1791.912	0.00%	3.33%
15.0	18198.742	2182.856	3974.767	0.00%	7.39%
20.0	17639.580	2953.581	6928.349	0.00%	12.88%
25.0	16970.602	3629.969	10558.318	0.00%	19.63%
30.0	16102.358	4185.410	14743.728	0.00%	27.41%
35.0	15127.466	4598.810	19342.539	0.00%	35.95%
40.0	14023.174	4863.564	24206.102	0.00%	44.99%
45.0	12762.220	4959.533	29165.636	0.00%	54.21%
50.0	11407.855	4883.917	34049.553	0.00%	63.29%
55.0	9919.321	4637.238	38686.791	0.00%	71.91%
60.0	8334.463	4219.311	42906.101	0.00%	79.75%
65.0	6655.926	3644.192	46550.293	0.00%	86.53%
70.0	4955.135	2939.996	49490.289	0.00%	91.99%
75.0	3282.738	2153.248	51643.537	0.00%	96.00%
80.0	1669.486	1325.077	52968.614	0.00%	98.46%
85.0	471.409	581.732	53550.346	0.00%	99.54%
90.0	9.738	131.742	53682.088	0.00%	99.79%
95.0	7.436	4.702	53686.791	0.00%	99.79%
100.0	7.092	3.948	53690.738	0.00%	99.80%
105.0	8.415	4.149	53694.887	0.00%	99.81%
110.0	10.585	4.966	53699.854	0.00%	99.82%
115.0	13.470	6.091	53705.945	0.00%	99.83%
120.0	16.381	7.257	53713.201	0.00%	99.84%
125.0	19.635	8.325	53721.526	0.00%	99.86%
130.0	22.546	9.172	53730.698	0.00%	99.88%
135.0	25.219	9.652	53740.349	0.00%	99.89%
140.0	27.680	9.795	53750.144	0.00%	99.91%
145.0	30.009	9.625	53759.769	0.00%	99.93%
150.0	32.311	9.177	53768.946	0.00%	99.95%
155.0	33.793	8.366	53777.312	0.00%	99.96%
160.0	34.322	7.144	53784.456	0.00%	99.98%
165.0	34.137	5.642	53790.098	0.00%	99.99%
170.0	34.005	4.042	53794.14	0.00%	99.99%
175.0	35.090	2.472	53796.612	0.00%	100.00%
180.0	36.860	0.860	53797.472	0.00%	100.00%

Equipment: GMS-3000
Temperature($^{\circ}\text{C}$): 25

Date:
Humidity(%): 58%

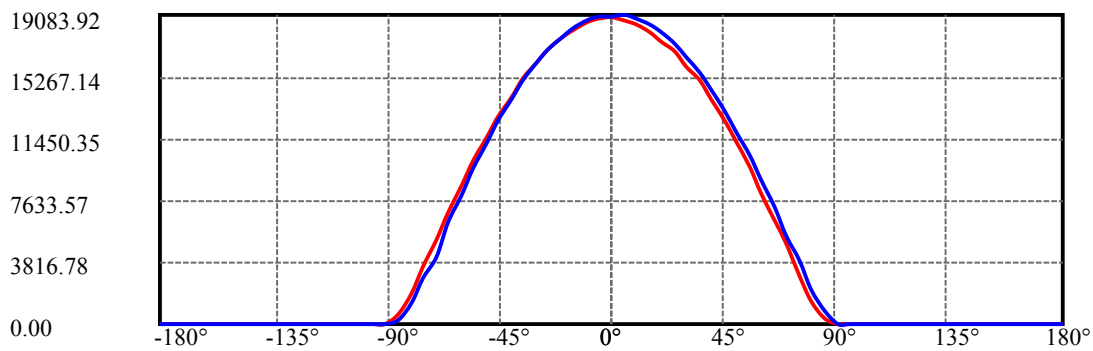
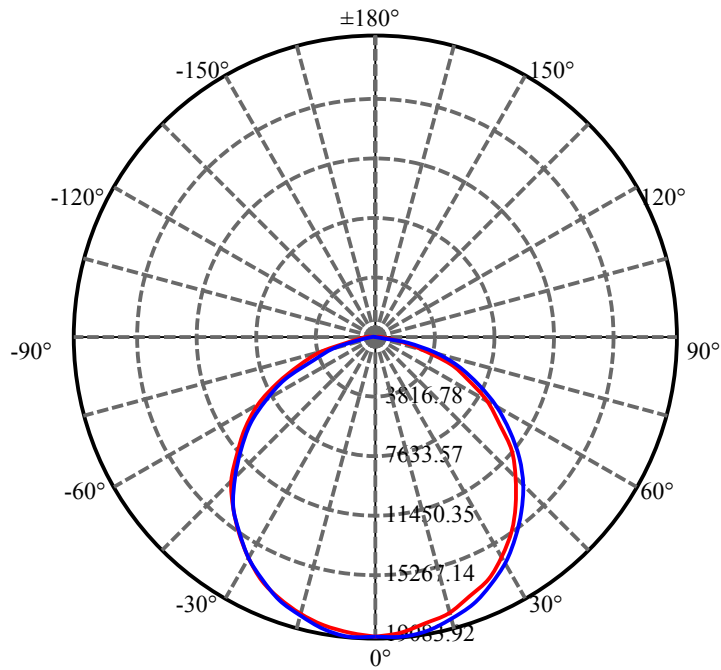
Operator: Sam

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	14743.73	N.A.	27.41%
0-40	24206.10	N.A.	44.99%
0-60	42906.10	N.A.	79.75%
0-90	53682.09	N.A.	99.79%
0-120	53713.20	N.A.	99.84%
0-180	53797.47	N.A.	100.00%
60-90	10775.99	N.A.	20.03%
90-120	31.11	N.A.	0.06%
90-130	48.61	N.A.	0.09%
90-150	86.86	N.A.	0.16%
90-180	114.52	N.A.	0.21%
0-60.18	43037.98	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	1791.91
10-20	5136.44
20-30	7815.38
30-40	9462.37
40-50	9843.45
50-60	8856.55
60-70	6584.19
70-80	3478.33
80-90	713.47
90-100	8.65
100-110	9.12
110-120	13.35
120-130	17.50
130-140	19.45
140-150	18.80
150-160	15.51
160-170	9.68
170-180	2.47

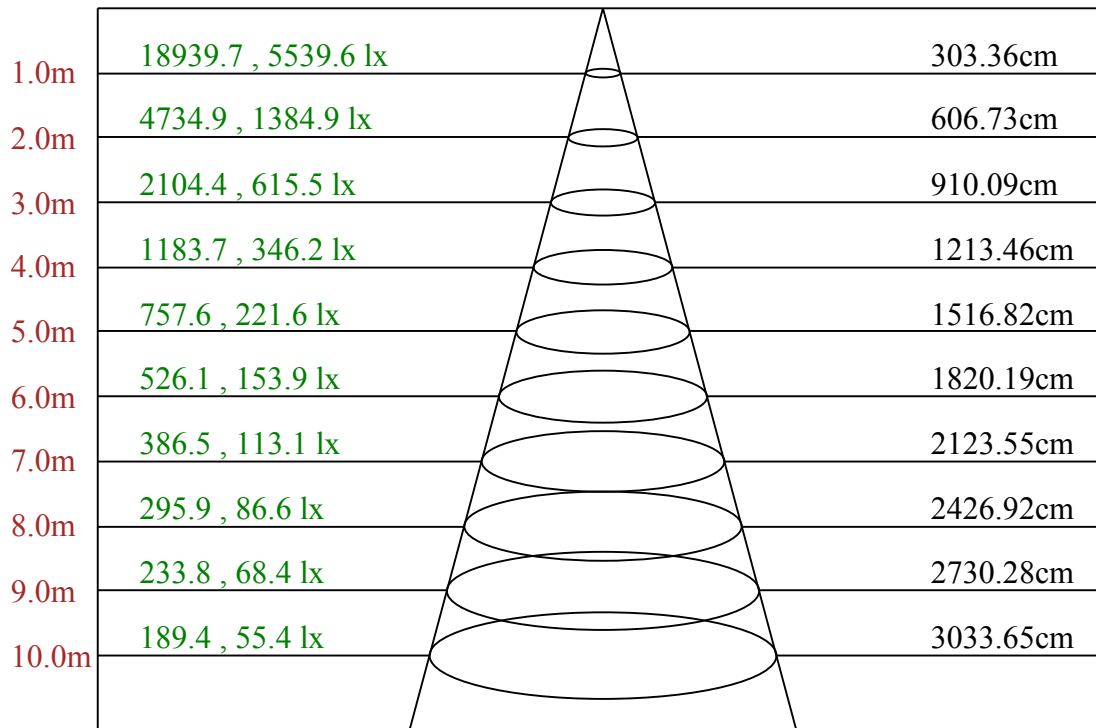


C0/C180: —

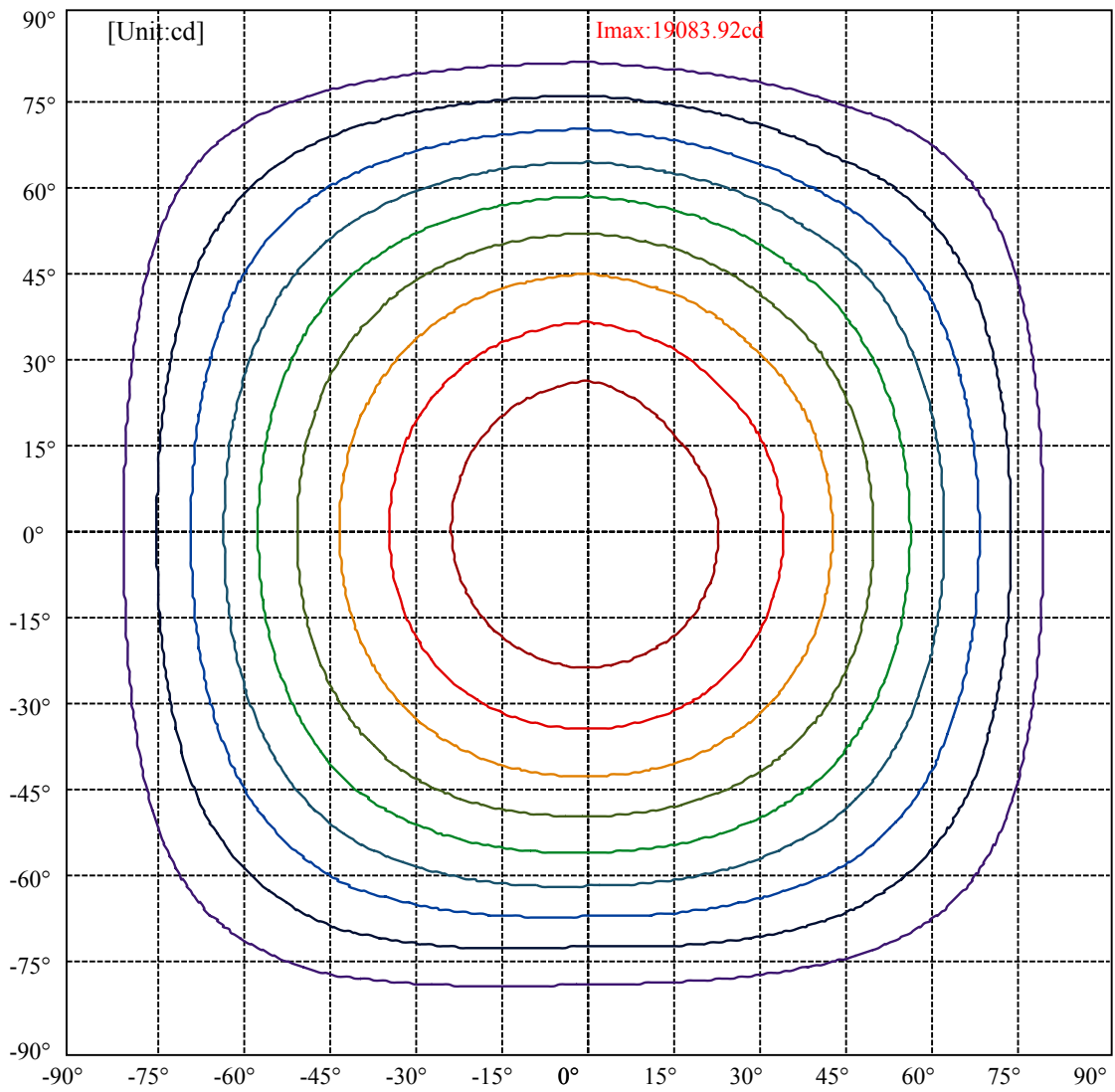
C90/C270: —

Field angle(10%Imax):C0/180Left:80.0 Right:78.5
 :C90/270Left:77.9 Right:80.9

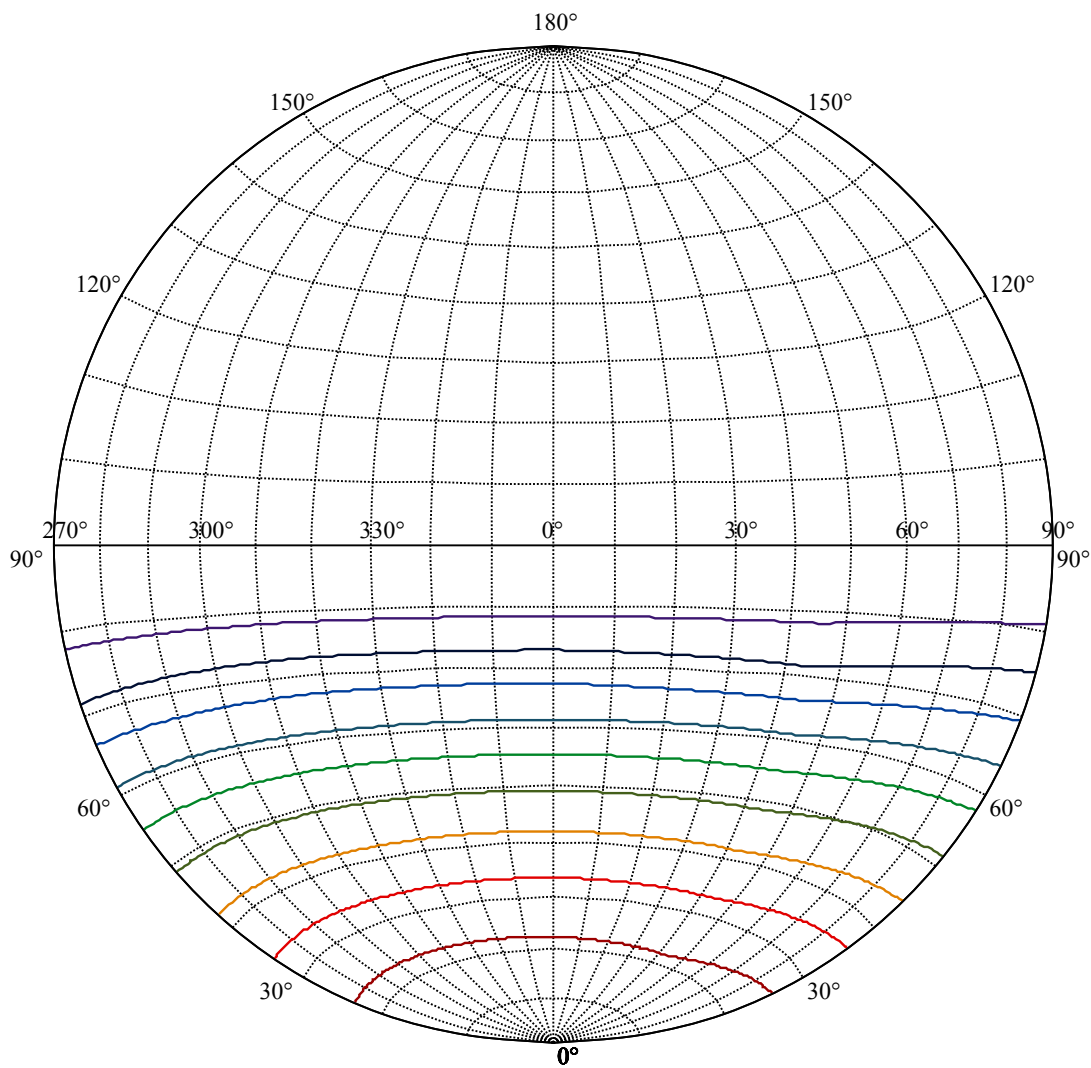
Beam Angle(50%Imax):C0/180Left:57.1 Right:55.7
 :C90/270Left:55.2 Right:57.8



Max , Ave Beam angle of C90 plane 113.21



(10%Imax) 1908.39	—
(20%Imax) 3816.78	—
(30%Imax) 5725.18	—
(40%Imax) 7633.57	—
(50%Imax) 9541.96	—
(60%Imax) 11450.4	—
(70%Imax) 13358.7	—
(80%Imax) 15267.1	—
(90%Imax) 17175.5	—



House

[Unit:cd]

Road

I_{max}:19083.92

(10%I _{max}) 1908.39	—
(20%I _{max}) 3816.78	—
(30%I _{max}) 5725.18	—
(40%I _{max}) 7633.57	—
(50%I _{max}) 9541.96	—
(60%I _{max}) 11450.4	—
(70%I _{max}) 13358.7	—
(80%I _{max}) 15267.1	—
(90%I _{max}) 17175.5	—

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	18939.73	18770.60	18440.35	18065.63	17481.33	16850.46	15933.79	15025.58	13895.09
45.0	18939.73	18683.80	18438.23	17983.07	17455.93	16702.27	15908.38	14902.80	13768.07
90.0	18939.73	19083.92	18846.81	18510.21	17993.65	17345.84	16433.41	15497.68	14464.57
135.0	18939.73	18910.32	18671.10	18309.09	17741.73	17079.10	16253.46	15256.34	14176.66
180.0	18939.73	18808.71	18561.02	18165.13	17642.23	16981.71	16105.27	15116.62	14045.40
225.0	18939.73	18745.20	18501.74	18146.08	17574.48	16943.61	16069.28	15144.14	14020.00
270.0	18939.73	19011.94	18736.73	18262.52	17661.28	16952.08	16094.68	15055.22	13914.15
315.0	18939.73	18861.63	18601.24	18148.20	17566.02	16909.74	16020.59	15021.35	13901.45
360.0	18939.73	18770.60	18440.35	18065.63	17481.33	16850.46	15933.79	15025.58	13895.09

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	12618.53	11223.41	9692.80	8102.91	6386.01	5003.59	2945.63	1423.28	311.84
45.0	12480.92	11085.80	9584.83	7984.36	6290.74	4223.04	2871.11	1358.28	279.45
90.0	13209.18	11890.27	10380.83	8869.28	7192.59	5501.09	3870.98	2141.37	789.23
135.0	12948.78	11636.23	10177.60	8608.88	6985.12	5319.03	3650.81	1933.90	650.56
180.0	12836.58	11479.57	10128.91	8541.14	6875.04	5192.00	3591.53	1897.91	596.79
225.0	12798.47	11557.90	10073.86	8536.90	6932.20	5255.52	3597.88	1969.89	648.02
270.0	12597.36	11153.55	9608.12	7984.36	6246.28	4181.34	2803.58	1261.32	197.10
315.0	12607.94	11236.11	9707.62	8047.87	6339.43	4965.48	2930.39	1369.93	298.29
360.0	12618.53	11223.41	9692.80	8102.91	6386.01	5003.59	2945.63	1423.28	311.84

C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	9.32	7.83	7.62	8.89	10.80	13.34	16.51	19.69	22.44
45.0	9.10	7.83	7.41	9.10	11.22	13.97	16.72	20.32	23.08
90.0	13.55	7.20	6.77	8.05	9.95	12.91	15.88	19.05	22.02
135.0	9.10	6.99	6.56	7.62	9.74	12.91	15.67	18.63	22.02
180.0	9.32	6.99	6.35	7.83	9.95	12.49	15.24	18.63	21.38
225.0	9.10	6.77	6.56	7.62	9.74	12.70	15.45	18.84	21.81
270.0	9.32	7.83	7.83	9.32	12.07	15.24	18.42	21.59	24.56
315.0	9.10	8.05	7.62	8.89	11.22	14.18	17.15	20.32	23.08
360.0	9.32	7.83	7.62	8.89	10.80	13.34	16.51	19.69	22.44

C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	25.19	27.73	29.64	31.97	33.24	33.87	33.66	33.66	36.20
45.0	26.04	28.16	30.49	32.60	34.08	34.30	34.30	34.30	35.99
90.0	24.77	27.31	30.06	32.39	34.30	34.93	34.51	34.30	34.08
135.0	24.77	27.10	29.43	31.76	33.45	34.51	34.30	33.87	34.08
180.0	23.92	26.68	29.00	31.33	32.81	33.45	33.45	33.03	33.45
225.0	24.35	26.89	29.43	31.76	33.24	33.66	33.45	33.45	33.45
270.0	27.10	29.64	31.97	34.30	35.57	35.78	35.57	35.35	37.47
315.0	25.62	27.95	30.06	32.39	33.66	34.08	33.87	34.08	35.99
360.0	25.19	27.73	29.64	31.97	33.24	33.87	33.66	33.66	36.20

C/ γ (°)	180.0
0.0	36.86
45.0	36.86
90.0	36.86
135.0	36.86
180.0	36.86
225.0	36.86
270.0	36.86
315.0	36.86
360.0	36.86