



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.03

LampCAT:

Current(A): 0.2690

Lamp flux(lm): 2190.0

Power (W): 31.88

Number of Lamps: 1

PF: 0.9875

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2189.87, Efficiency(%): 99.99% , Luminous Efficacy(lm/W): 68.69

Central intensity(cd): 658.312, Maximum intensity(cd): 662.247

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=110.4

[C90/270]Total=112.0

Field angle(10%Imax): [C0/180]Total=194.6

[C90/270]Total=195.2

Maximum s/h(1/2): C0_180=1.16 C90_270=1.20

Maximum s/h(1/4): C0_180=1.31 C90_270=1.35

Up flux rate of lamp(%): 7.56%

Down flux rate of lamp(%): 92.43%

Up flux rate of LUM(%): 7.56%

Down flux rate of LUM(%): 92.44%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 65.253%

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

Date:
Humidity(%): 59%

Operator: jarvis

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	658.312	0.000	0	0.00%	0.00%
5.0	654.061	15.689	15.689	0.72%	0.72%
10.0	635.580	46.135	61.824	2.11%	2.82%
15.0	609.428	73.853	135.677	3.37%	6.20%
20.0	582.297	98.215	233.891	4.48%	10.68%
25.0	558.127	119.609	353.501	5.46%	16.14%
30.0	530.662	137.787	491.288	6.29%	22.43%
35.0	498.281	151.519	642.807	6.92%	29.35%
40.0	461.421	160.119	802.926	7.31%	36.67%
45.0	420.545	163.303	966.229	7.46%	44.12%
50.0	374.831	160.717	1126.947	7.34%	51.46%
55.0	338.949	155.199	1282.146	7.09%	58.55%
60.0	296.220	146.817	1428.963	6.70%	65.25%
65.0	260.235	135.275	1564.239	6.18%	71.43%
70.0	223.297	122.433	1686.672	5.59%	77.02%
75.0	188.625	107.670	1794.342	4.92%	81.94%
80.0	154.571	91.830	1886.171	4.19%	86.13%
85.0	125.227	76.028	1962.199	3.47%	89.60%
90.0	101.391	62.050	2024.249	2.83%	92.44%
95.0	77.298	48.927	2073.175	2.23%	94.67%
100.0	54.647	35.853	2109.028	1.64%	96.31%
105.0	36.397	24.361	2133.388	1.11%	97.42%
110.0	23.141	15.562	2148.951	0.71%	98.13%
115.0	17.066	10.180	2159.131	0.46%	98.60%
120.0	11.789	7.015	2166.146	0.32%	98.92%
125.0	11.557	5.396	2171.542	0.25%	99.16%
130.0	9.781	4.640	2176.182	0.21%	99.37%
135.0	8.623	3.719	2179.901	0.17%	99.54%
140.0	7.491	2.984	2182.884	0.14%	99.68%
145.0	6.487	2.332	2185.216	0.11%	99.79%
150.0	5.483	1.763	2186.979	0.08%	99.87%
155.0	4.376	1.248	2188.226	0.06%	99.92%
160.0	3.346	0.810	2189.036	0.04%	99.96%
165.0	2.420	0.475	2189.511	0.02%	99.98%
170.0	1.596	0.238	2189.749	0.01%	99.99%
175.0	1.056	0.095	2189.844	0.00%	100.00%
180.0	1.121	0.026	2189.87	0.00%	100.00%

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

Date:
Humidity(%): 59%

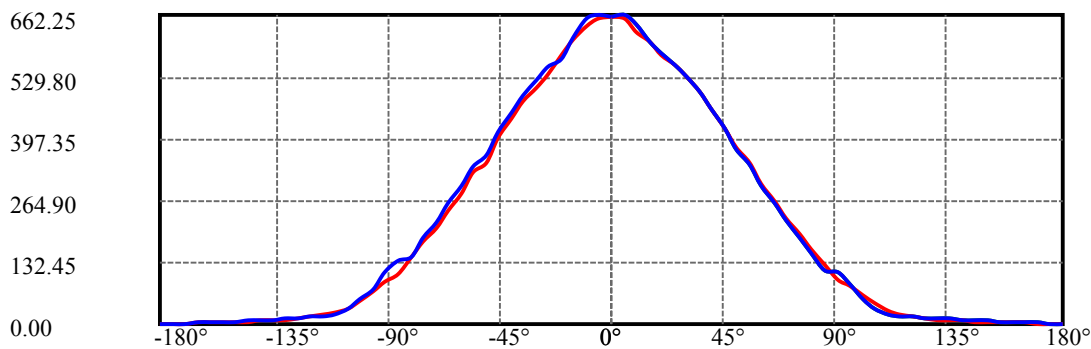
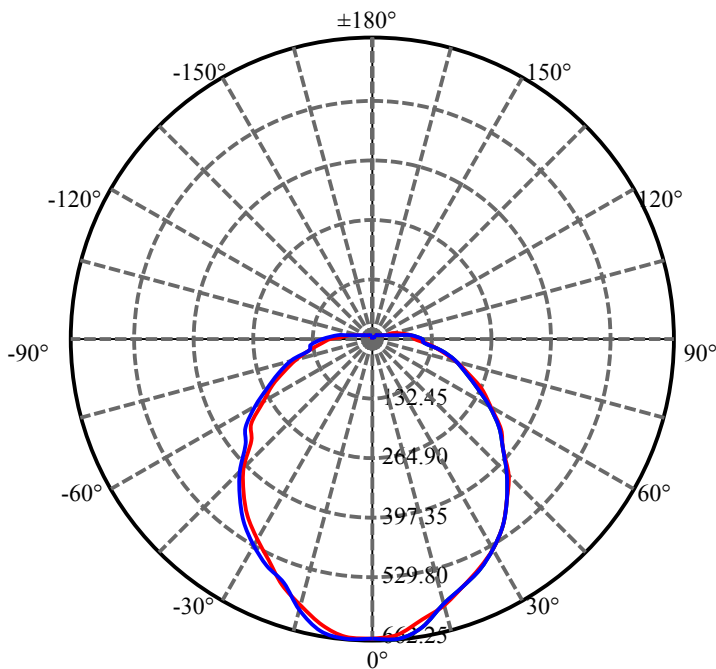
Operator: jarvis

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	491.29	22.43%	22.43%
0-40	802.93	36.66%	36.67%
0-60	1428.96	65.25%	65.25%
0-90	2024.25	92.43%	92.44%
0-120	2166.15	98.91%	98.92%
0-180	2189.87	99.99%	100.00%
60-90	595.29	27.18%	27.18%
90-120	141.90	6.48%	6.48%
90-130	151.93	6.94%	6.94%
90-150	162.73	7.43%	7.43%
90-180	165.60	7.56%	7.56%
0-73.03	1751.90	80.00%	80.00%

ZONAL LUMEN SUMMARY

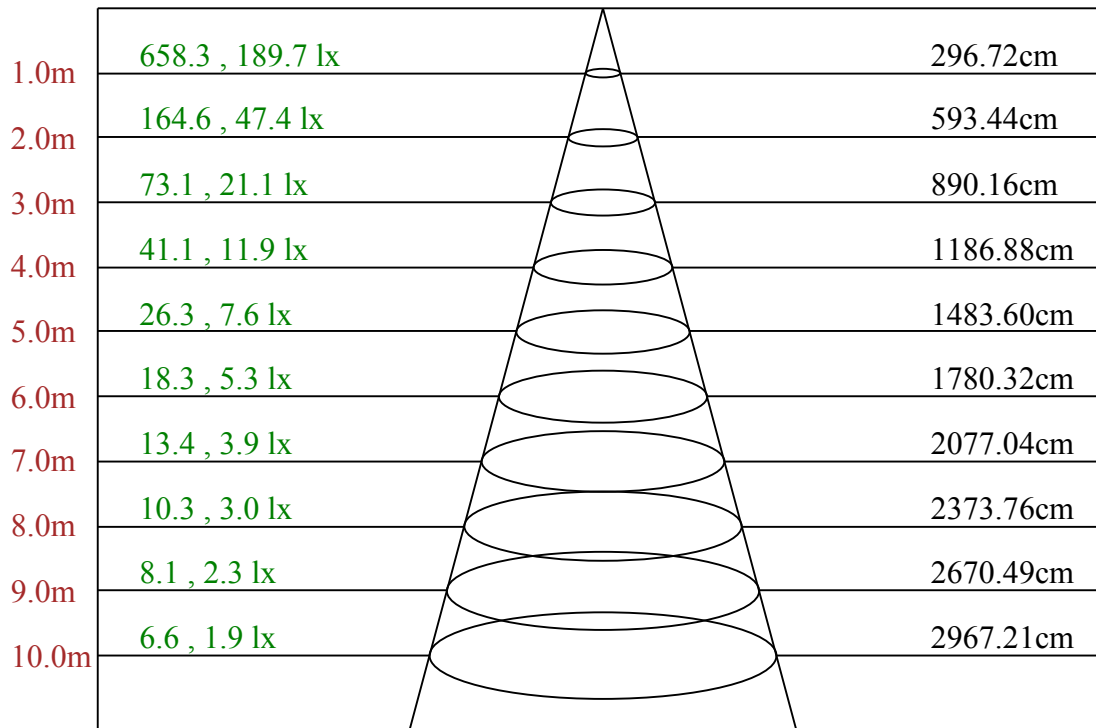
0-10	61.82
10-20	172.07
20-30	257.40
30-40	311.64
40-50	324.02
50-60	302.02
60-70	257.71
70-80	199.50
80-90	138.08
90-100	84.78
100-110	39.92
110-120	17.20
120-130	10.04
130-140	6.70
140-150	4.09
150-160	2.06
160-170	0.71
170-180	0.09



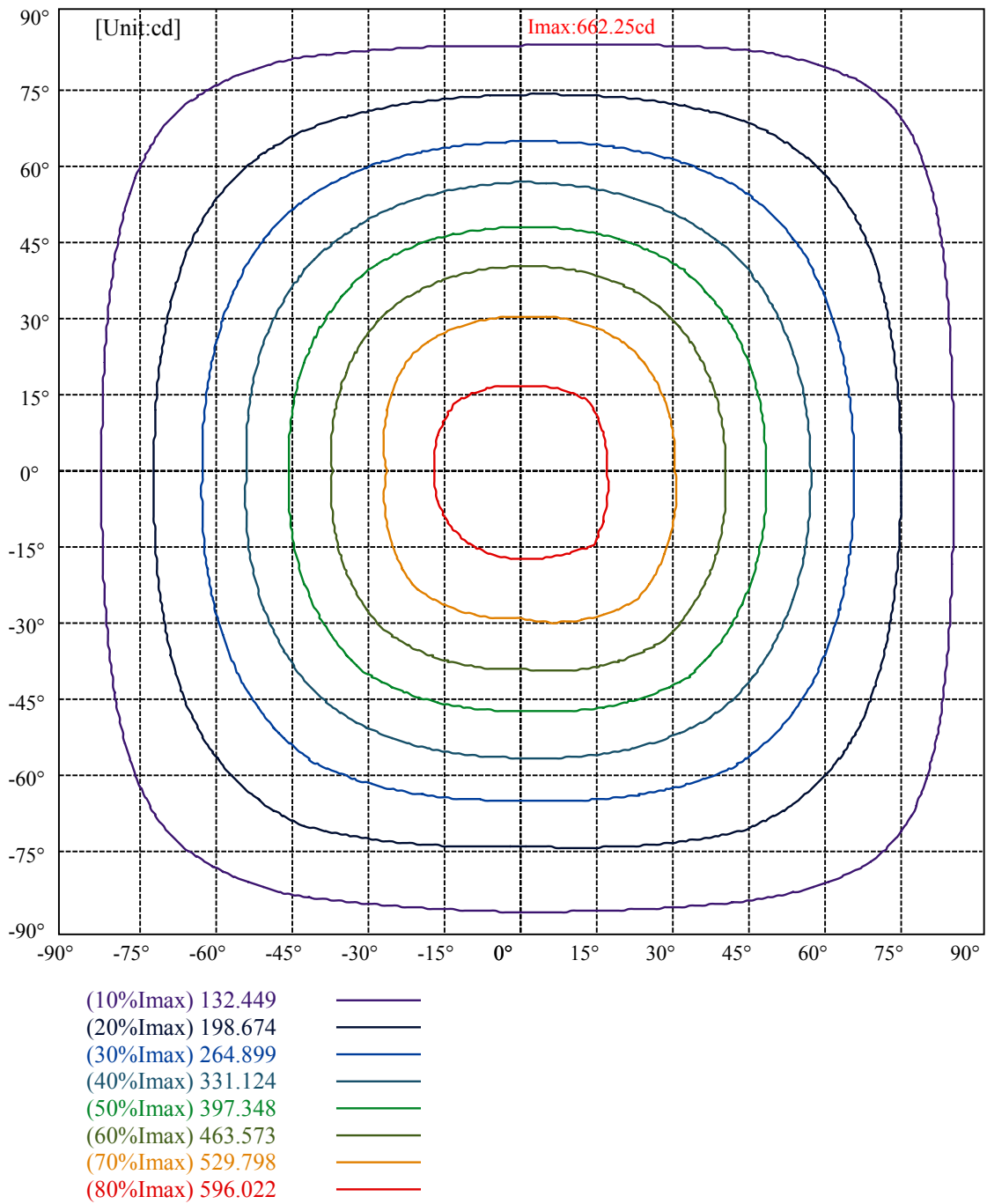
C90(Max): ———
 C0/C180: ———
 C90/C270: ———

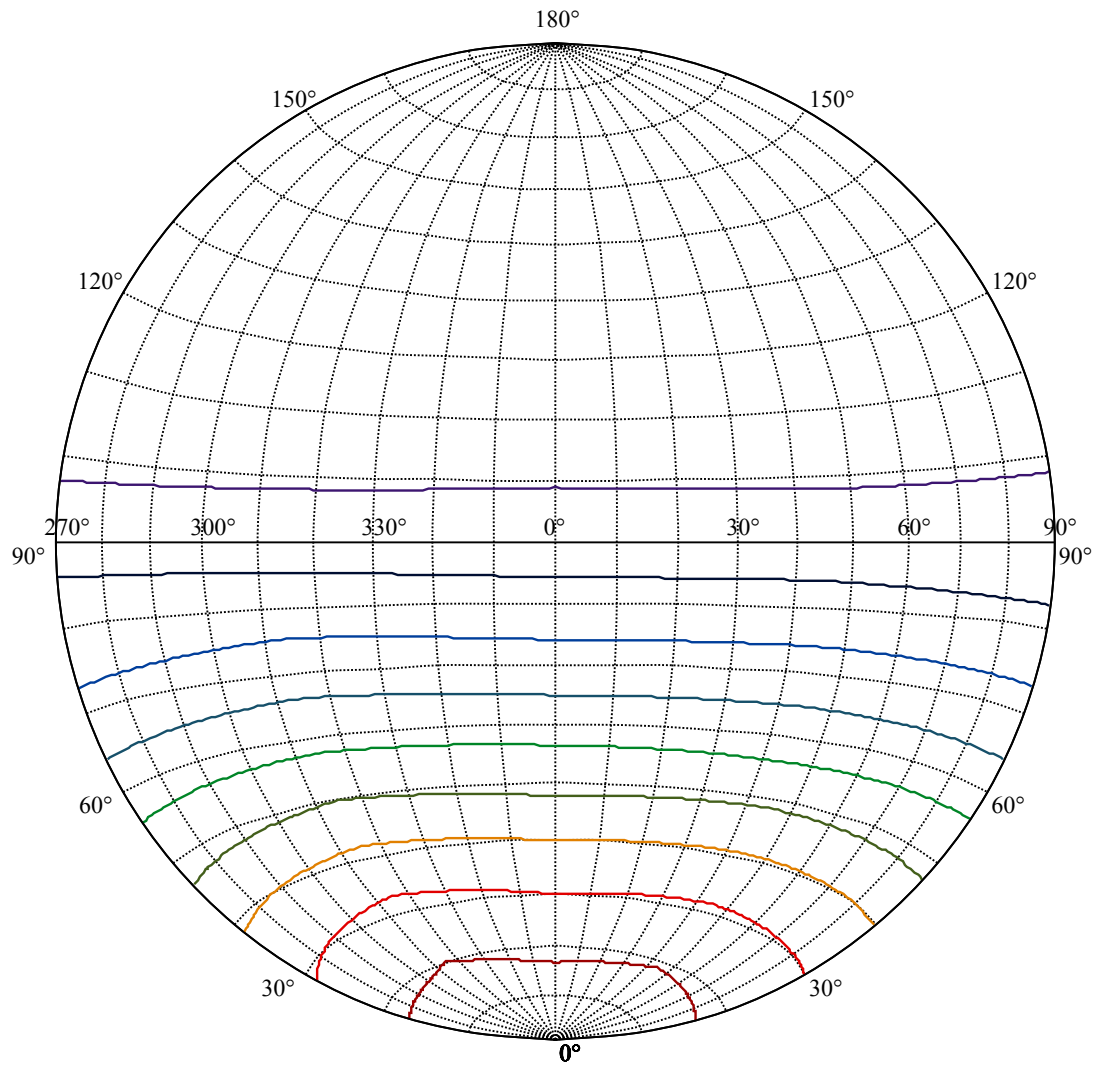
Field angle(10%Imax):C0/180Left:95.7 Right:98.9
 :C90/270Left:97.1 Right:98.1

Beam Angle(50%Imax):C0/180Left:53.7 Right:56.7
 :C90/270Left:55.8 Right:56.2



Max , Ave Beam angle of C90 plane 112.04





House

[Unit:cd]

Road

Imax:662.25

(10%Imax) 66.2247	—
(20%Imax) 132.449	—
(30%Imax) 198.674	—
(40%Imax) 264.899	—
(50%Imax) 331.124	—
(60%Imax) 397.348	—
(70%Imax) 463.573	—
(80%Imax) 529.798	—
(90%Imax) 596.022	—

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	658.31	653.19	627.03	606.44	577.41	555.79	529.84	497.72	462.30
45.0	658.31	636.71	620.24	609.74	591.82	569.38	541.37	506.57	470.95
90.0	658.31	662.25	643.30	602.94	578.02	556.81	529.63	498.74	461.88
135.0	658.31	655.66	624.56	609.12	589.35	562.37	533.34	499.98	460.03
180.0	658.31	654.22	639.18	607.88	576.17	536.43	506.98	475.27	439.03
225.0	658.31	654.42	642.07	610.97	579.26	558.26	530.87	499.57	463.33
270.0	658.31	661.42	652.57	614.68	569.38	549.20	522.63	489.89	452.62
315.0	658.31	654.63	635.68	613.65	596.97	576.79	550.64	518.51	481.24
360.0	658.31	653.19	627.03	606.44	577.41	555.79	529.84	497.72	462.30
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	421.52	376.84	343.89	299.62	263.99	226.10	191.92	160.62	127.47
45.0	429.55	385.49	340.39	298.18	264.41	228.57	192.95	158.97	127.26
90.0	419.67	372.51	341.83	295.50	258.02	220.96	185.95	152.59	115.93
135.0	418.64	376.02	330.51	288.29	253.49	216.22	181.21	150.12	120.05
180.0	397.84	346.77	323.09	278.82	243.19	206.95	175.03	142.70	108.73
225.0	423.38	380.75	339.98	303.12	266.46	230.43	195.83	161.44	130.35
270.0	412.88	363.45	337.92	294.88	257.82	219.72	183.89	142.91	136.94
315.0	440.88	396.81	353.98	311.36	274.50	237.43	202.22	167.21	135.09
360.0	421.52	376.84	343.89	299.62	263.99	226.10	191.92	160.62	127.47
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	93.90	82.58	61.37	44.27	30.48	22.03	17.30	12.77	7.21
45.0	101.93	78.46	57.66	40.57	25.95	14.62	8.44	11.12	9.88
90.0	109.76	85.46	54.16	34.18	20.80	15.65	14.83	12.15	11.12
135.0	93.28	69.19	47.77	30.68	17.71	12.56	7.00	9.88	9.68
180.0	92.05	68.57	49.83	34.18	24.30	19.36	15.86	11.53	7.62
225.0	102.96	78.46	56.22	37.89	23.68	16.47	8.03	11.74	10.71
270.0	111.20	75.16	54.16	32.54	18.53	18.33	15.24	13.39	11.12
315.0	106.05	80.52	56.01	36.86	23.68	17.50	7.62	9.88	10.91
360.0	93.90	82.58	61.37	44.27	30.48	22.03	17.30	12.77	7.21
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	7.21	6.38	5.97	5.56	4.94	4.12	3.30	1.85	0.82
45.0	8.24	7.62	6.80	5.77	4.53	3.09	2.27	1.44	1.24
90.0	10.30	9.06	8.03	6.80	4.94	3.91	2.68	2.06	1.24
135.0	8.24	7.00	5.56	5.15	4.12	3.30	2.68	1.65	1.03
180.0	8.03	6.59	5.77	5.15	4.94	3.50	2.47	1.44	1.03
225.0	8.24	7.41	7.00	5.56	4.12	2.68	1.44	1.03	0.82
270.0	9.47	8.44	6.80	4.94	3.30	3.09	2.47	1.85	1.44
315.0	9.27	7.41	5.97	4.94	4.12	3.09	2.06	1.44	0.82
360.0	7.21	6.38	5.97	5.56	4.94	4.12	3.30	1.85	0.82
C/ γ (°)	180.0								
0.0	1.12								
45.0	1.12								
90.0	1.12								
135.0	1.12								
180.0	1.12								
225.0	1.12								
270.0	1.12								
315.0	1.12								
360.0	1.12								