



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.10

LampCAT:

Current(A): 0.3190

Lamp flux(lm): 1942.0

Power (W): 37.91

Number of Lamps: 1

PF: 0.9909

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1941.90, Efficiency(%): 99.99% , Luminous Efficacy(lm/W): 51.22

Central intensity(cd): 622.389, Maximum intensity(cd): 628.270

Angle of maximum intensity: C=270.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=107.0

[C90/270]Total=107.6

Field angle(10%Imax): [C0/180]Total=187.1

[C90/270]Total=189.3

Maximum s/h(1/2): C0_180=1.18 C90_270=1.18

Maximum s/h(1/4): C0_180=1.33 C90_270=1.32

Up flux rate of lamp(%): 5.58%

Down flux rate of lamp(%): 94.41%

Up flux rate of LUM(%): 5.58%

Down flux rate of LUM(%): 94.42%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 67.809%

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

Date:
Humidity(%): 59%

Operator: jarvis

Zonal flux distribution table

Appendix Page: 2 Total:8

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	622.389	0.000	0	0.00%	0.00%
5.0	617.742	14.825	14.825	0.76%	0.76%
10.0	594.370	43.361	58.186	2.23%	3.00%
15.0	571.821	69.178	127.364	3.56%	6.56%
20.0	550.174	92.468	219.832	4.76%	11.32%
25.0	522.374	112.490	332.323	5.79%	17.11%
30.0	490.997	128.243	460.565	6.60%	23.72%
35.0	459.130	139.913	600.478	7.20%	30.92%
40.0	424.278	147.390	747.868	7.59%	38.51%
45.0	386.079	150.044	897.912	7.73%	46.24%
50.0	344.560	147.636	1045.549	7.60%	53.84%
55.0	300.081	140.166	1185.715	7.22%	61.06%
60.0	266.927	131.062	1316.777	6.75%	67.81%
65.0	230.402	120.901	1437.679	6.23%	74.03%
70.0	193.387	107.306	1544.985	5.53%	79.56%
75.0	164.429	93.527	1638.512	4.82%	84.38%
80.0	132.563	79.467	1717.979	4.09%	88.47%
85.0	105.664	64.732	1782.711	3.33%	91.80%
90.0	79.872	50.801	1833.512	2.62%	94.42%
95.0	56.320	37.290	1870.802	1.92%	96.34%
100.0	35.367	24.914	1895.716	1.28%	97.62%
105.0	24.016	15.889	1911.605	0.82%	98.44%
110.0	12.742	9.608	1921.213	0.49%	98.93%
115.0	8.237	5.312	1926.525	0.27%	99.21%
120.0	6.255	3.523	1930.048	0.18%	99.39%
125.0	5.534	2.725	1932.773	0.14%	99.53%
130.0	4.479	2.177	1934.95	0.11%	99.64%
135.0	4.402	1.794	1936.744	0.09%	99.73%
140.0	3.732	1.506	1938.25	0.08%	99.81%
145.0	3.424	1.194	1939.444	0.06%	99.87%
150.0	2.832	0.921	1940.365	0.05%	99.92%
155.0	2.420	0.665	1941.03	0.03%	99.96%
160.0	1.750	0.437	1941.467	0.02%	99.98%
165.0	1.210	0.244	1941.711	0.01%	99.99%
170.0	0.876	0.124	1941.835	0.01%	100.00%
175.0	0.618	0.053	1941.888	0.00%	100.00%
180.0	0.549	0.014	1941.902	0.00%	100.00%

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

Date:
Humidity(%): 59%

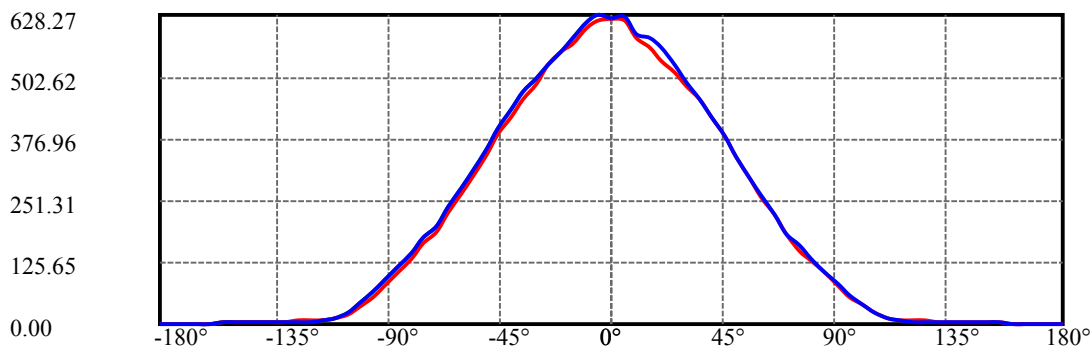
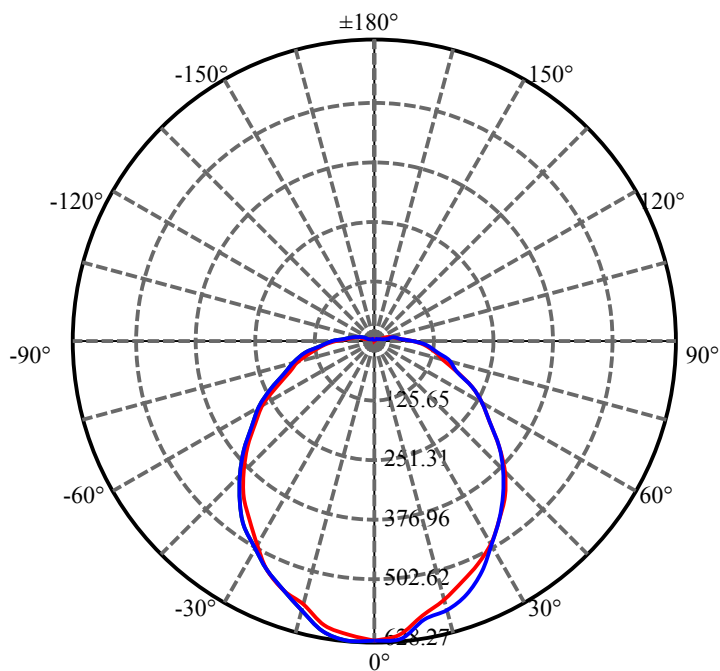
Operator: jarvis

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	460.57	23.72%	23.72%
0-40	747.87	38.51%	38.51%
0-60	1316.78	67.81%	67.81%
0-90	1833.51	94.41%	94.42%
0-120	1930.05	99.38%	99.39%
0-180	1941.90	99.99%	100.00%
60-90	516.73	26.61%	26.61%
90-120	96.54	4.97%	4.97%
90-130	101.44	5.22%	5.22%
90-150	106.85	5.50%	5.50%
90-180	108.38	5.58%	5.58%
0-70.46	1553.52	80.00%	80.00%

ZONAL LUMEN SUMMARY

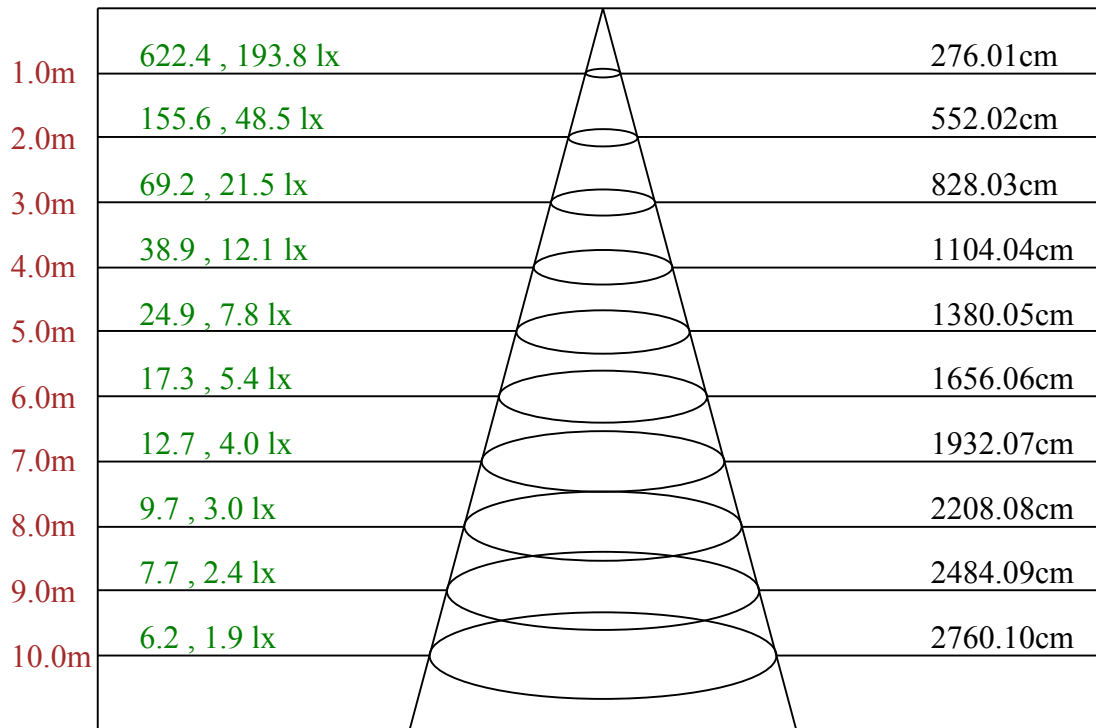
0-10	58.19
10-20	161.65
20-30	240.73
30-40	287.30
40-50	297.68
50-60	271.23
60-70	228.21
70-80	172.99
80-90	115.53
90-100	62.20
100-110	25.50
110-120	8.83
120-130	4.90
130-140	3.30
140-150	2.12
150-160	1.10
160-170	0.37
170-180	0.05



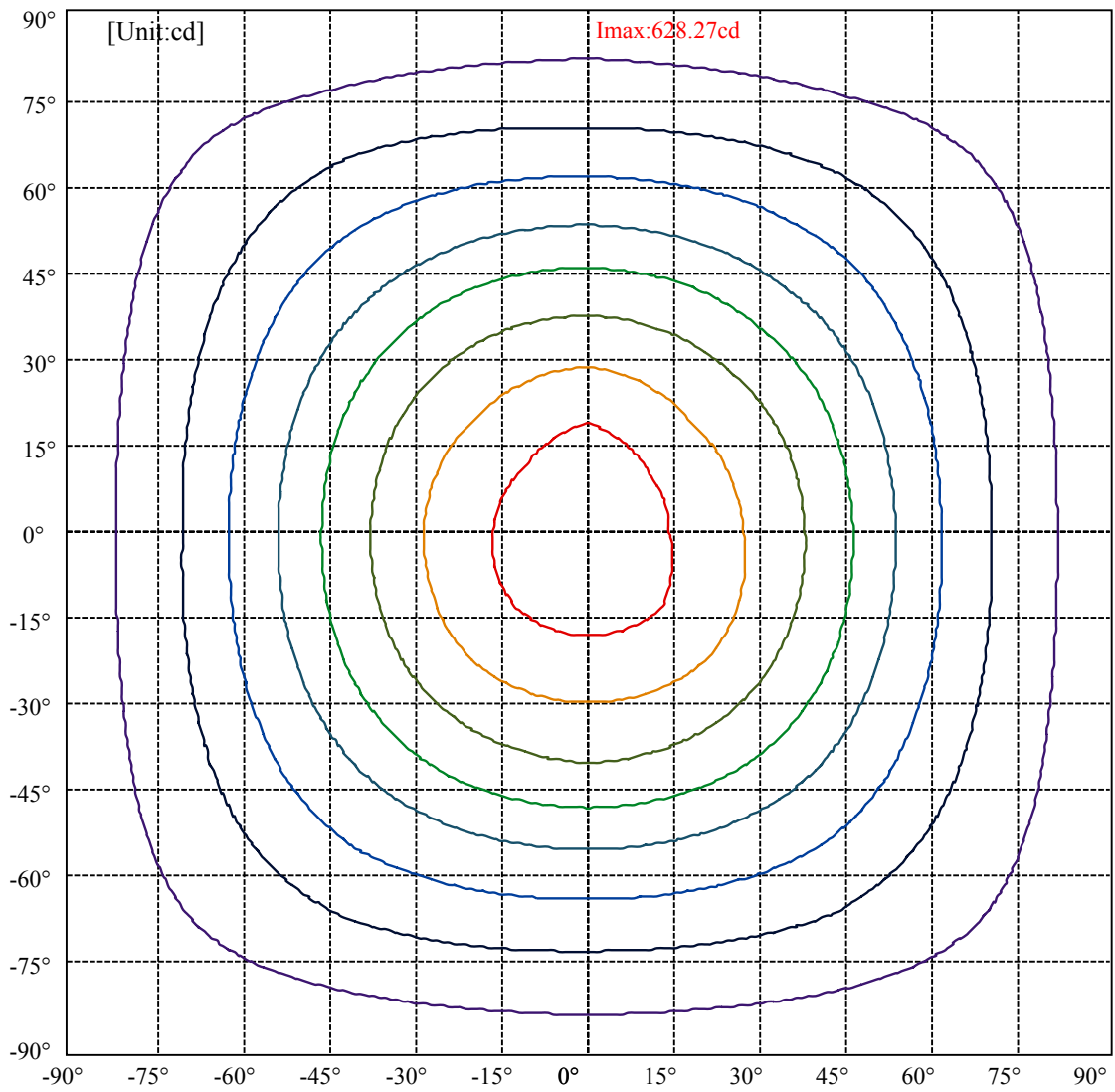
C270(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:93.5 Right:93.6
 :C90/270Left:95.4 Right:93.9

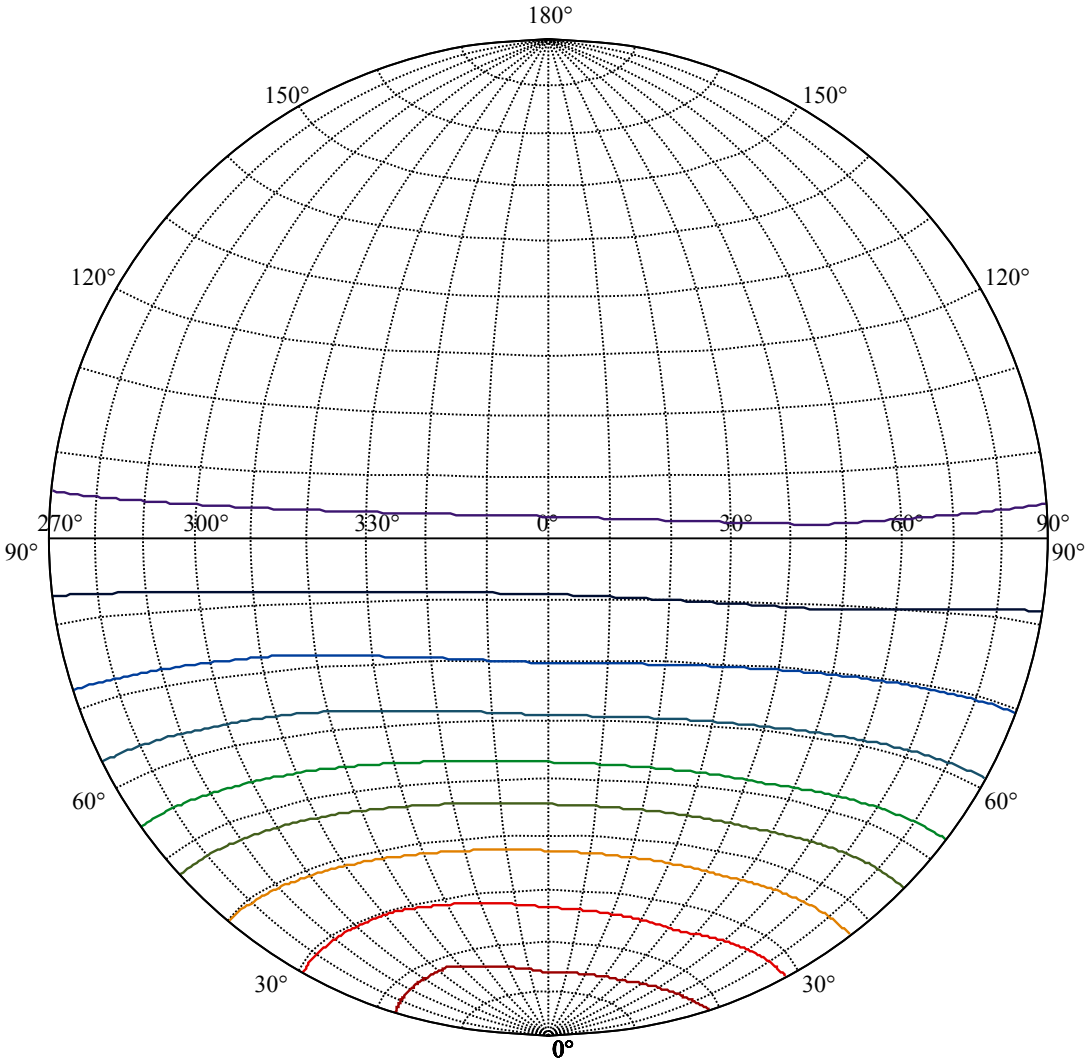
Beam Angle(50%Imax):C0/180Left:53.7 Right:53.3
 :C90/270Left:54.7 Right:52.9



Max , Ave Beam angle of C270 plane 108.15



(10%I _{max}) 125.654	—
(20%I _{max}) 188.481	—
(30%I _{max}) 251.308	—
(40%I _{max}) 314.135	—
(50%I _{max}) 376.962	—
(60%I _{max}) 439.789	—
(70%I _{max}) 502.616	—
(80%I _{max}) 565.443	—



House

[Unit:cd]

Road

I_{max}:628.27

- (10%I_{max}) 62.827
- (20%I_{max}) 125.654
- (30%I_{max}) 188.481
- (40%I_{max}) 251.308
- (50%I_{max}) 314.135
- (60%I_{max}) 376.962
- (70%I_{max}) 439.789
- (80%I_{max}) 502.616
- (90%I_{max}) 565.443

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	622.39	614.68	580.70	560.93	534.37	511.92	485.77	455.30	422.14
45.0	622.39	602.53	576.79	564.43	536.22	505.33	477.33	448.29	412.46
90.0	622.39	623.33	590.59	580.08	560.93	528.19	490.30	455.50	420.08
135.0	622.39	621.89	603.56	568.35	542.61	514.39	486.18	455.30	417.82
180.0	622.39	615.50	600.26	568.96	555.37	527.37	489.68	455.91	422.76
225.0	622.39	617.56	604.79	574.52	558.87	531.69	498.95	465.80	429.55
270.0	622.39	628.27	611.59	580.70	554.14	526.13	499.57	471.15	438.62
315.0	622.39	618.18	586.67	576.58	558.87	533.96	500.19	465.80	430.79
360.0	622.39	614.68	580.70	560.93	534.37	511.92	485.77	455.30	422.14
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	382.19	340.80	295.29	256.58	223.43	184.71	150.12	130.14	103.79
45.0	374.16	331.33	287.06	256.58	221.78	186.57	156.71	120.67	95.96
90.0	380.96	339.77	294.88	259.87	223.22	184.51	161.44	134.26	106.87
135.0	381.16	338.54	293.85	265.23	229.19	195.01	163.50	125.61	99.46
180.0	384.46	343.07	300.44	265.85	226.93	187.60	164.33	133.64	104.82
225.0	393.72	353.98	308.88	278.82	240.93	206.13	172.77	135.09	109.14
270.0	398.25	356.66	311.77	275.52	239.28	198.92	175.65	145.38	115.73
315.0	393.72	352.33	308.47	276.97	238.46	203.66	170.92	135.70	109.55
360.0	382.19	340.80	295.29	256.58	223.43	184.71	150.12	130.14	103.79
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	78.05	56.22	37.68	23.48	12.77	9.47	8.03	6.59	5.56
45.0	71.87	49.01	28.21	21.21	11.94	8.86	6.38	5.77	3.91
90.0	81.13	57.86	38.71	23.06	11.94	7.21	4.53	5.35	4.74
135.0	74.54	50.04	28.01	21.62	10.91	7.00	5.35	4.94	3.09
180.0	78.66	55.39	36.04	21.00	11.74	9.27	7.62	6.18	5.56
225.0	82.58	57.86	34.18	27.80	14.83	8.65	6.18	5.56	4.74
270.0	88.34	64.45	43.04	25.12	11.94	6.38	5.77	5.56	4.94
315.0	83.81	59.72	37.07	28.83	15.86	9.06	6.18	4.32	3.30
360.0	78.05	56.22	37.68	23.48	12.77	9.47	8.03	6.59	5.56
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	5.15	2.47	3.09	2.47	2.27	1.44	0.62	0.62	0.62
45.0	4.32	4.32	3.71	2.88	2.47	1.65	1.03	0.82	0.41
90.0	4.32	3.91	3.50	2.88	2.47	1.85	1.24	0.62	0.21
135.0	4.32	3.91	3.50	2.47	1.85	1.85	1.44	0.82	0.62
180.0	5.15	3.09	3.50	3.09	2.88	1.65	1.24	1.24	0.82
225.0	3.91	4.32	3.91	3.71	3.09	2.06	1.65	1.03	0.82
270.0	4.53	4.12	3.30	2.88	2.47	1.85	1.44	1.24	1.03
315.0	3.50	3.71	2.88	2.27	1.85	1.65	1.03	0.62	0.41
360.0	5.15	2.47	3.09	2.47	2.27	1.44	0.62	0.62	0.62
C/γ(°)	180.0								
0.0	0.55								
45.0	0.55								
90.0	0.55								
135.0	0.55								
180.0	0.55								
225.0	0.55								
270.0	0.55								
315.0	0.55								
360.0	0.55								