



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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LumCAT: LRG3-27K

Luminaire:

Report No:

Voltage(V): 120.02

Test No:

Current(A): 0.06

LampCAT:

Power (W): 7.1470

Lamp flux(lm): 584.4

PF: 0.9925

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 584.45

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 81.77

Central intensity(cd): 941.257

Maximum intensity(cd): 995.814

Angle of maximum intensity: C=315.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=45.4

[C90/270]Total=44.4

Field angle(10%Imax): [C0/180]Total=69.4

[C90/270]Total=68.4

Maximum s/h(1/2): C0_180=0.80 C90_270=0.66

Maximum s/h(1/4): C0_180=1.15 C90_270=0.64

Up flux rate of lamp(%): 0.80%

Down flux rate of lamp(%): 99.20%

Up flux rate of LUM(%): 0.80%

Down flux rate of LUM(%): 99.20%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.309%

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

Date:
Humidity(%): 58%

Operator: Zac

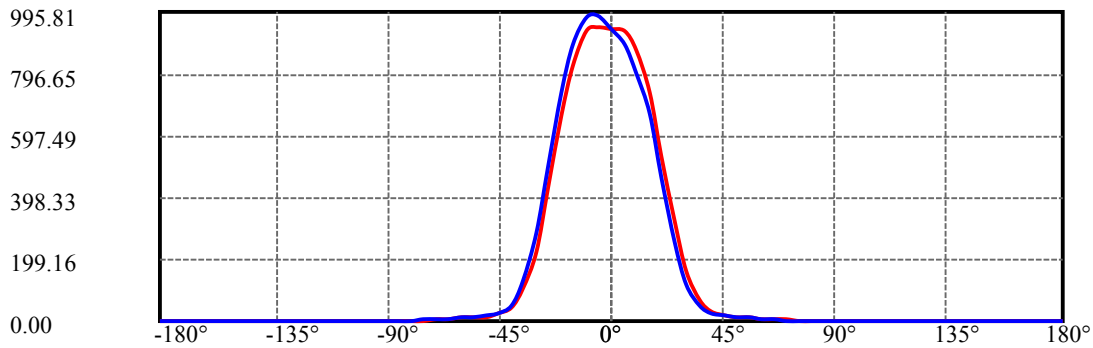
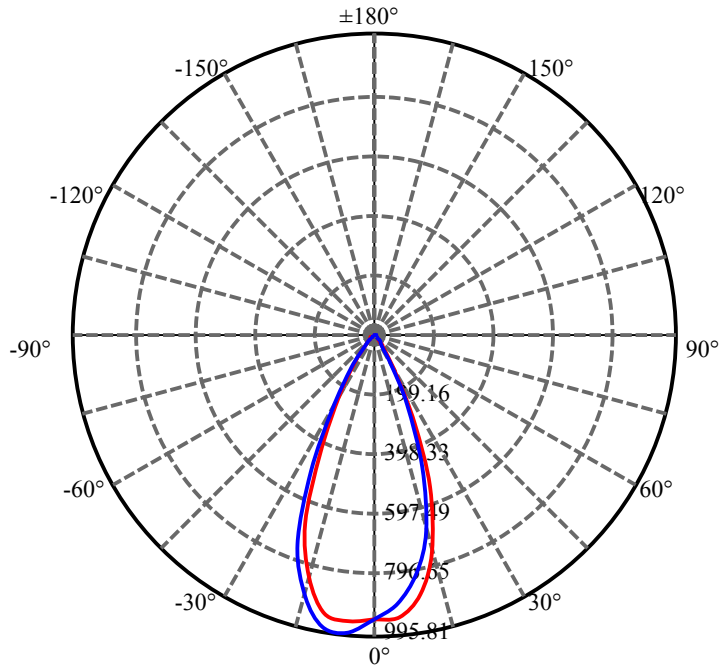
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	941.257	.000	.000	.000%	.000%
5.0	939.624	22.485	22.485	3.847%	3.847%
10.0	891.567	65.507	87.993	11.208%	15.056%
15.0	778.310	99.056	187.049	16.949%	32.005%
20.0	598.259	113.449	300.497	19.411%	51.416%
25.0	375.253	102.103	402.601	17.470%	68.886%
30.0	197.126	72.435	475.036	12.394%	81.280%
35.0	89.622	42.226	517.262	7.225%	88.505%
40.0	39.845	21.600	538.862	3.696%	92.201%
45.0	22.428	11.530	550.392	1.973%	94.174%
50.0	15.024	7.568	557.960	1.295%	95.468%
55.0	11.972	5.870	563.830	1.004%	96.473%
60.0	9.169	4.887	568.717	.836%	97.309%
65.0	6.493	3.808	572.524	.651%	97.960%
70.0	4.522	2.789	575.313	.477%	98.438%
75.0	2.552	1.849	577.162	.316%	98.754%
80.0	1.982	1.213	578.376	.208%	98.962%
85.0	1.242	.876	579.252	.150%	99.111%
90.0	.672	.524	579.776	.090%	99.201%
95.0	.547	.334	580.109	.057%	99.258%
100.0	.627	.319	580.428	.055%	99.313%
105.0	.615	.332	580.760	.057%	99.370%
110.0	.638	.328	581.088	.056%	99.426%
115.0	.638	.323	581.411	.055%	99.481%
120.0	.649	.313	581.724	.054%	99.534%
125.0	.695	.311	582.035	.053%	99.588%
130.0	.661	.295	582.329	.050%	99.638%
135.0	.752	.285	582.615	.049%	99.687%
140.0	.797	.287	582.902	.049%	99.736%
145.0	.888	.281	583.183	.048%	99.784%
150.0	.957	.272	583.455	.046%	99.831%
155.0	1.060	.255	583.710	.044%	99.874%
160.0	1.230	.240	583.950	.041%	99.915%
165.0	1.310	.209	584.159	.036%	99.951%
170.0	1.321	.156	584.315	.027%	99.978%
175.0	1.378	.097	584.412	.017%	99.994%
180.0	1.415	.033	584.445	.006%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	475.04	81.28%	81.28%
0-40	538.86	92.20%	92.20%
0-60	568.72	97.31%	97.31%
0-90	579.78	99.20%	99.20%
0-120	581.72	99.53%	99.53%
0-180	584.45	100.00%	100.00%
60-90	15.95	2.73%	2.73%
90-120	2.47	0.42%	0.42%
90-130	3.08	0.53%	0.53%
90-150	4.20	0.72%	0.72%
90-180	5.16	0.88%	0.88%
0-29.48	467.56	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	87.99
10-20	212.50
20-30	174.54
30-40	63.83
40-50	19.10
50-60	10.76
60-70	6.60
70-80	3.06
80-90	1.40
90-100	0.65
100-110	0.66
110-120	0.64
120-130	0.61
130-140	0.57
140-150	0.55
150-160	0.50
160-170	0.37
170-180	0.10



C0/C180: —

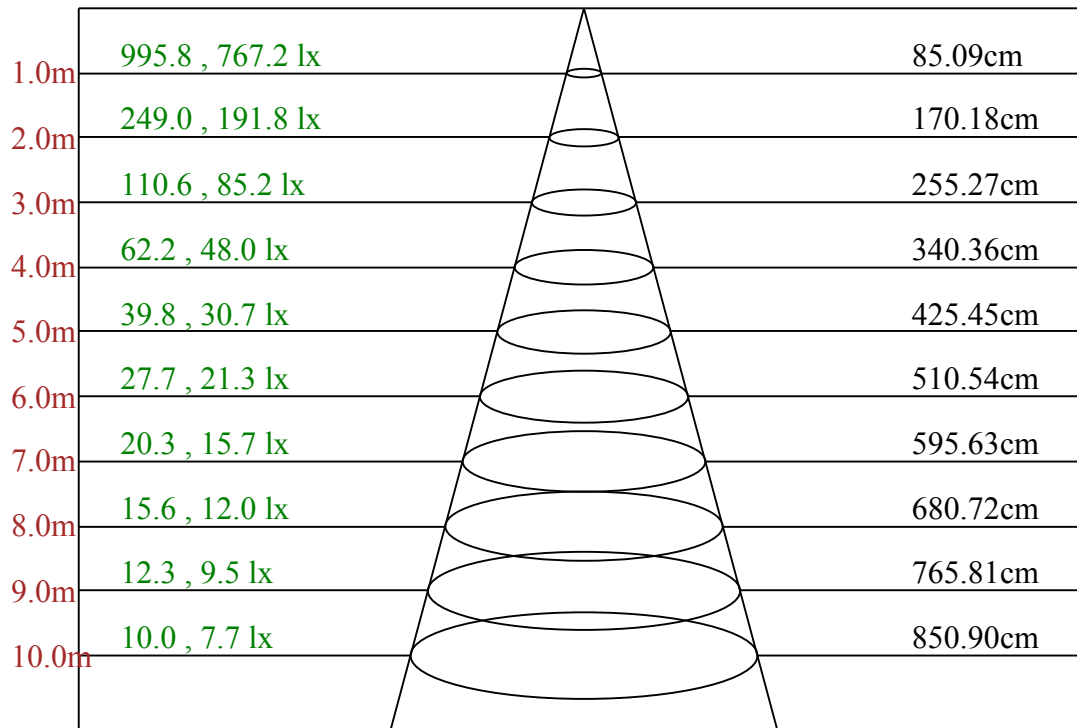
C90/C270: —

Field angle(10%Imax):C0/180Left:30.9 Right:38.5

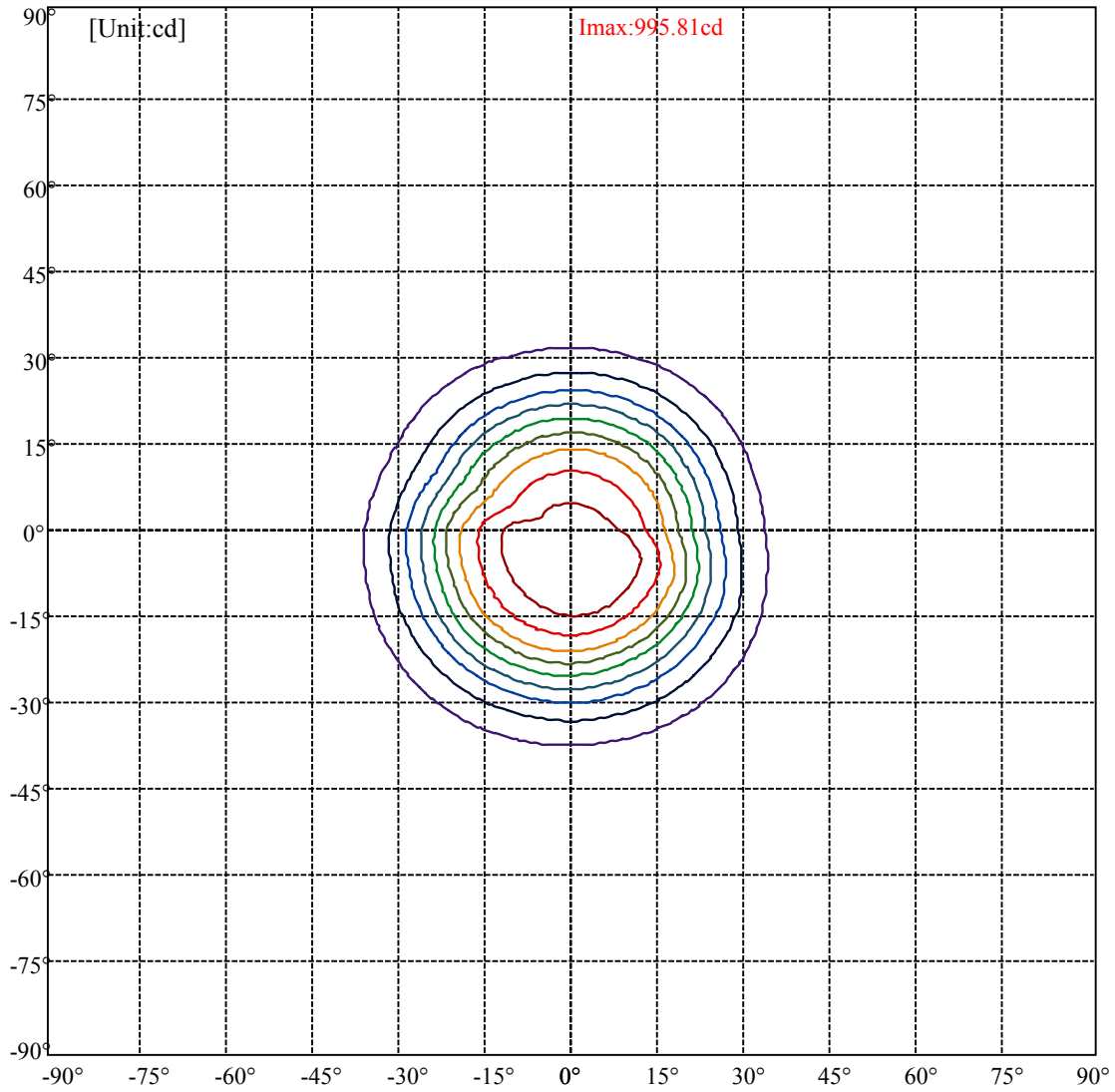
:C90/270Left:32.1 Right:36.3

Beam Angle(50%Imax):C0/180Left:19.0 Right:26.4

:C90/270Left:20.1 Right:24.3



Max , Ave Beam angle of C315plane46.02



- (10%Imax) 99.5536
- (20%Imax) 199.107
- (30%Imax) 298.661
- (40%Imax) 398.215
- (50%Imax) 497.768
- (60%Imax) 597.322
- (70%Imax) 696.875
- (80%Imax) 796.429
- (90%Imax) 895.983

Intensity data(cd)

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C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	941.26	935.49	872.61	739.02	534.54	319.48	158.38	67.80	32.62
22.5	941.26	911.43	840.90	714.79	512.49	299.44	140.52	60.87	30.25
45.0	941.26	898.86	816.85	689.82	491.71	281.21	128.85	55.04	28.80
67.5	941.26	892.11	803.91	675.60	469.29	266.81	120.10	51.40	26.61
90.0	941.26	891.75	800.81	667.58	463.64	255.15	116.09	49.57	25.88
112.5	941.26	894.12	802.45	664.67	470.02	260.44	120.29	54.31	27.52
135.0	941.26	900.50	811.01	674.69	482.23	279.75	134.68	60.69	29.71
157.5	941.26	905.24	819.58	690.73	510.85	299.26	151.09	63.24	31.71
180.0	941.26	948.79	931.66	824.32	661.57	425.37	223.80	105.52	45.75
202.5	941.26	952.99	943.87	848.74	692.19	461.46	254.42	120.10	50.48
225.0	941.26	960.28	956.45	866.42	719.71	492.26	273.56	126.30	53.40
247.5	941.26	973.40	964.29	879.36	736.66	501.01	278.84	129.40	54.49
270.0	941.26	985.24	976.50	891.57	737.20	496.45	284.13	131.22	52.31
292.5	941.26	995.09	984.70	890.11	720.43	477.68	274.47	127.58	52.67
315.0	941.26	995.81	974.67	875.17	700.02	459.64	256.97	123.02	50.85
337.5	941.26	992.90	964.83	860.40	669.59	428.65	237.84	107.89	44.47
360.0	941.26	935.49	872.61	739.02	534.54	319.48	158.38	67.80	32.62
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	20.05	14.95	11.48	8.20	5.83	3.83	2.01	1.28	0.55
22.5	19.68	14.03	11.30	8.02	5.83	3.46	2.19	1.64	0.91
45.0	18.59	13.30	10.94	7.66	5.65	3.65	1.82	1.64	0.91
67.5	17.13	12.76	10.39	7.29	5.29	3.46	2.01	1.46	0.91
90.0	15.67	12.21	9.48	6.74	5.10	2.92	2.01	1.28	0.73
112.5	16.77	12.21	10.21	7.47	5.29	3.83	2.01	1.64	0.91
135.0	17.31	12.03	10.39	7.66	5.47	3.83	1.82	1.64	0.91
157.5	17.50	12.21	10.57	7.66	5.47	4.01	2.01	1.28	0.91
180.0	23.69	15.31	12.03	9.66	6.38	4.74	2.55	2.01	1.28
202.5	26.79	15.86	12.39	9.84	7.11	5.29	2.92	2.19	1.64
225.0	28.98	17.31	13.12	10.75	7.47	5.47	3.10	2.19	1.82
247.5	28.98	17.50	13.67	10.75	7.66	5.65	3.28	2.73	1.82
270.0	27.70	17.68	13.85	11.12	7.66	5.65	3.46	2.73	1.64
292.5	28.07	17.86	14.03	11.12	7.84	5.47	3.46	2.73	1.82
315.0	26.61	17.68	14.22	11.85	8.20	5.83	3.28	2.73	1.64
337.5	25.33	17.50	13.49	10.94	7.66	5.29	2.92	2.55	1.46
360.0	20.05	14.95	11.48	8.20	5.83	3.83	2.01	1.28	0.55
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.18	0.00	0.18	0.18	0.18	0.00	0.00	0.00	0.18
22.5	0.73	0.18	0.55	0.55	0.37	0.55	0.55	0.37	0.37
45.0	0.37	0.55	0.55	0.55	0.55	0.55	0.55	0.73	0.55
67.5	0.55	0.37	0.55	0.37	0.37	0.55	0.73	0.55	0.55
90.0	0.55	0.37	0.55	0.73	0.73	0.55	0.55	0.73	0.73
112.5	0.55	0.55	0.55	0.37	0.55	0.55	0.55	0.55	0.73
135.0	0.37	0.55	0.55	0.73	0.55	0.55	0.55	0.73	0.73
157.5	0.37	0.55	0.55	0.37	0.73	0.55	0.73	0.55	0.55
180.0	0.55	0.55	0.55	0.73	0.73	0.73	0.73	0.91	0.73
202.5	0.73	0.73	0.91	0.73	0.73	0.73	0.73	0.73	0.73
225.0	1.09	0.73	0.55	0.91	0.73	0.73	0.91	1.09	0.91
247.5	0.91	0.73	0.73	0.91	0.73	0.91	0.91	0.91	0.73
270.0	0.91	0.73	0.73	0.73	0.73	0.91	0.73	0.73	0.91
292.5	1.09	0.73	0.91	0.73	0.91	0.73	0.55	0.73	0.73
315.0	0.91	0.73	0.91	0.55	0.73	0.91	0.73	0.91	0.73
337.5	0.91	0.73	0.73	0.73	0.91	0.73	0.91	0.91	0.73
360.0	0.18	0.00	0.18	0.18	0.18	0.00	0.00	0.00	0.18

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	0.18	0.37	0.37	0.37	0.37	0.73	0.91	0.73	0.91
22.5	0.55	0.73	0.73	0.91	1.09	1.28	1.46	1.28	1.28
45.0	0.91	0.73	0.91	1.09	1.09	1.28	1.46	1.46	1.46
67.5	0.73	0.73	0.91	0.91	0.91	1.28	1.46	1.46	1.46
90.0	0.91	0.73	0.91	0.91	0.91	1.46	1.28	1.28	1.28
112.5	0.91	0.91	0.91	1.09	1.09	1.46	1.28	1.46	1.46
135.0	0.55	0.91	0.91	1.09	1.09	1.28	1.28	1.28	1.46
157.5	0.73	0.73	0.91	0.91	1.28	1.28	1.28	1.28	1.46
180.0	0.73	0.91	0.73	0.91	1.09	1.09	1.28	1.28	1.46
202.5	0.73	0.73	1.09	0.73	1.09	1.28	1.28	1.28	1.46
225.0	1.09	0.91	1.09	1.09	1.28	1.28	1.28	1.46	1.46
247.5	0.91	0.73	0.91	1.09	1.28	1.09	1.46	1.46	1.46
270.0	0.73	0.91	0.91	1.09	1.28	1.46	1.09	1.28	1.46
292.5	0.73	0.91	0.91	0.91	0.91	1.09	1.28	1.46	1.46
315.0	0.73	0.91	0.91	1.09	1.09	1.09	1.46	1.46	1.28
337.5	0.91	0.91	1.09	1.09	1.09	1.28	1.46	1.28	1.28
360.0	0.18	0.37	0.37	0.37	0.37	0.73	0.91	0.73	0.91

C/γ(°)	180.0
0.0	1.42
22.5	1.42
45.0	1.42
67.5	1.42
90.0	1.42
112.5	1.42
135.0	1.42
157.5	1.42
180.0	1.42
202.5	1.42
225.0	1.42
247.5	1.42
270.0	1.42
292.5	1.42
315.0	1.42
337.5	1.42
360.0	1.42