



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingtest.com

Tel:0755-29351191 Fax:0755-29351120

Address:1 F,No.1 building,Meibaoh industrial park,Dalang street,Longhua district,Shenzhen,China

LumCAT: LRG2-27K

Luminaire:

Report No:

Voltage(V): 120.04

Test No:

Current(A): 0.0418

LampCAT:

Power (W): 4.7430

Lamp flux(lm): 380.4

PF: 0.9461

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 380.37

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 80.20

Central intensity(cd): 1319.858

Maximum intensity(cd): 1336.052

Angle of maximum intensity: C=225.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=23.3

[C90/270]Total=23.3

Field angle(10%Imax): [C0/180]Total=52.9

[C90/270]Total=52.7

Maximum s/h(1/2): C0_180=0.48 C90_270=0.32

Maximum s/h(1/4): C0_180=0.69 C90_270=0.37

Up flux rate of lamp(%): 1.20%

Down flux rate of lamp(%): 98.80%

Up flux rate of LUM(%): 1.20%

Down flux rate of LUM(%): 98.80%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.874%

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

Date:
Humidity(%): 58%

Operator: Zac

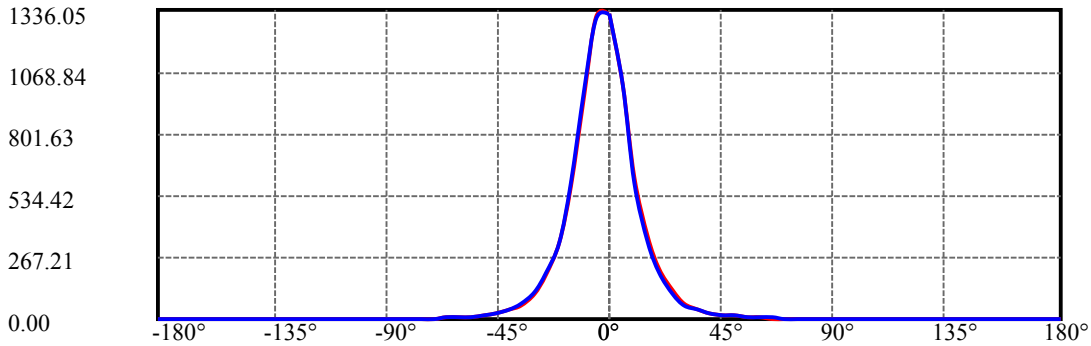
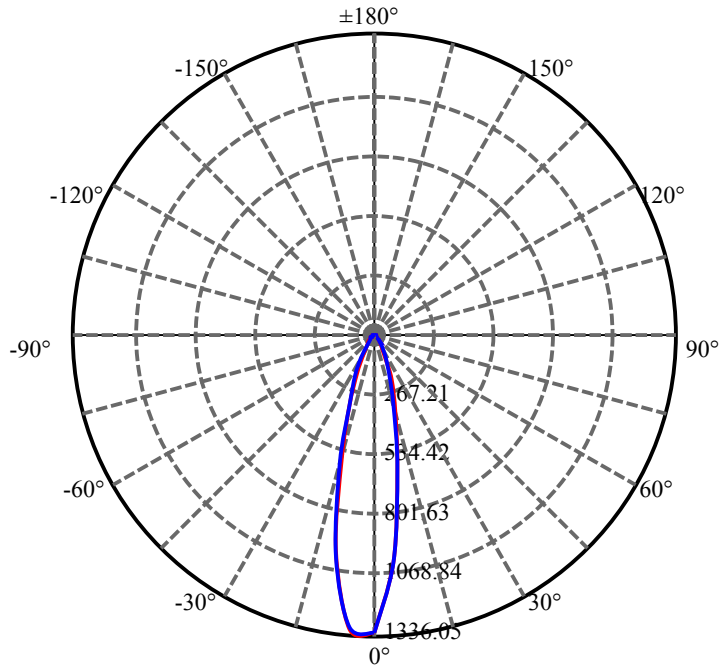
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1319.858	.000	.000	.000%	.000%
5.0	1152.697	29.559	29.559	7.771%	7.771%
10.0	787.135	69.394	98.953	18.244%	26.015%
15.0	458.311	73.879	172.832	19.423%	45.438%
20.0	265.542	59.656	232.487	15.684%	61.122%
25.0	153.719	43.973	276.460	11.561%	72.682%
30.0	86.504	30.400	306.861	7.992%	80.675%
35.0	50.577	20.186	327.047	5.307%	85.982%
40.0	32.498	13.860	340.907	3.644%	89.626%
45.0	22.808	10.240	351.147	2.692%	92.318%
50.0	15.415	7.724	358.871	2.031%	94.348%
55.0	10.302	5.592	364.463	1.470%	95.818%
60.0	7.072	4.016	368.479	1.056%	96.874%
65.0	4.225	2.746	371.225	.722%	97.596%
70.0	2.556	1.717	372.942	.451%	98.048%
75.0	1.577	1.080	374.023	.284%	98.332%
80.0	1.332	.778	374.801	.205%	98.536%
85.0	.888	.603	375.404	.159%	98.695%
90.0	.567	.398	375.803	.105%	98.800%
95.0	.613	.323	376.125	.085%	98.885%
100.0	.597	.329	376.454	.086%	98.971%
105.0	.658	.336	376.790	.088%	99.059%
110.0	.643	.340	377.130	.089%	99.149%
115.0	.704	.341	377.472	.090%	99.239%
120.0	.658	.331	377.803	.087%	99.326%
125.0	.704	.315	378.118	.083%	99.408%
130.0	.643	.293	378.411	.077%	99.485%
135.0	.750	.282	378.692	.074%	99.559%
140.0	.812	.289	378.982	.076%	99.635%
145.0	.796	.268	379.250	.071%	99.706%
150.0	.903	.250	379.500	.066%	99.772%
155.0	.965	.236	379.737	.062%	99.834%
160.0	1.041	.210	379.947	.055%	99.889%
165.0	1.133	.179	380.126	.047%	99.936%
170.0	1.133	.134	380.261	.035%	99.972%
175.0	1.118	.081	380.341	.021%	99.993%
180.0	1.110	.027	380.368	.007%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	306.86	80.67%	80.67%
0-40	340.91	89.63%	89.63%
0-60	368.48	96.87%	96.87%
0-90	375.80	98.80%	98.80%
0-120	377.80	99.33%	99.33%
0-180	380.37	100.00%	100.00%
60-90	11.34	2.98%	2.98%
90-120	2.40	0.63%	0.63%
90-130	3.01	0.79%	0.79%
90-150	4.10	1.08%	1.08%
90-180	4.94	1.30%	1.30%
0-29.58	304.29	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	98.95
10-20	133.53
20-30	74.37
30-40	34.05
40-50	17.96
50-60	9.61
60-70	4.46
70-80	1.86
80-90	1.00
90-100	0.65
100-110	0.68
110-120	0.67
120-130	0.61
130-140	0.57
140-150	0.52
150-160	0.45
160-170	0.31
170-180	0.08



C0/C180: —

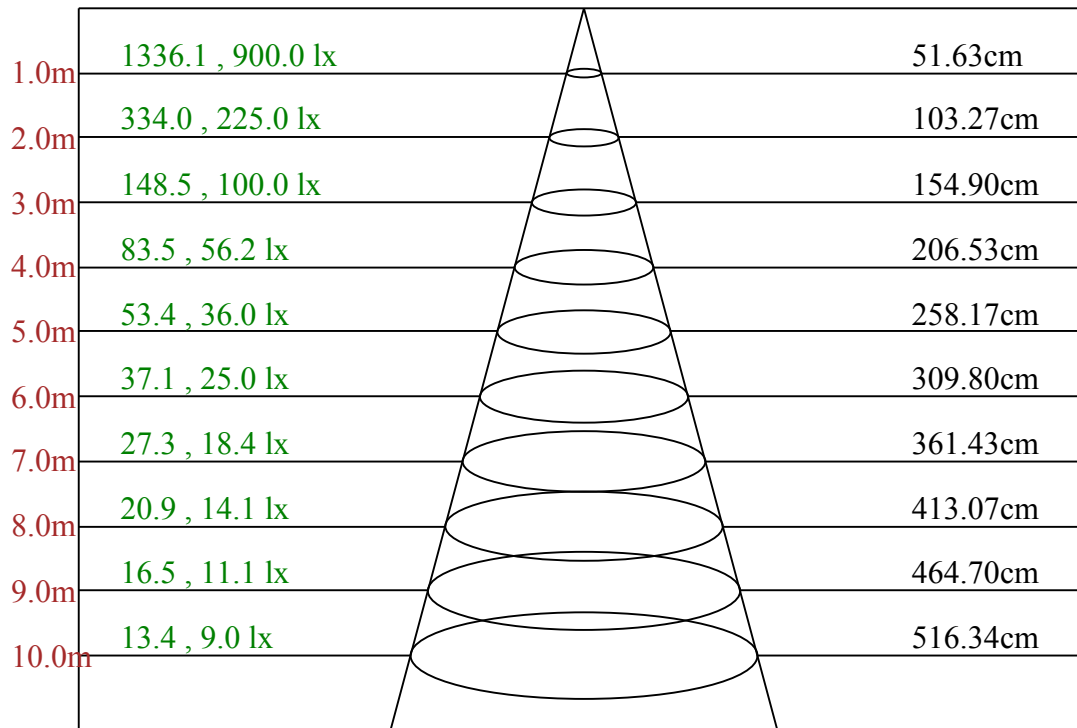
C90/C270: —

Field angle(10%Imax):C0/180Left:28.4 Right:24.5

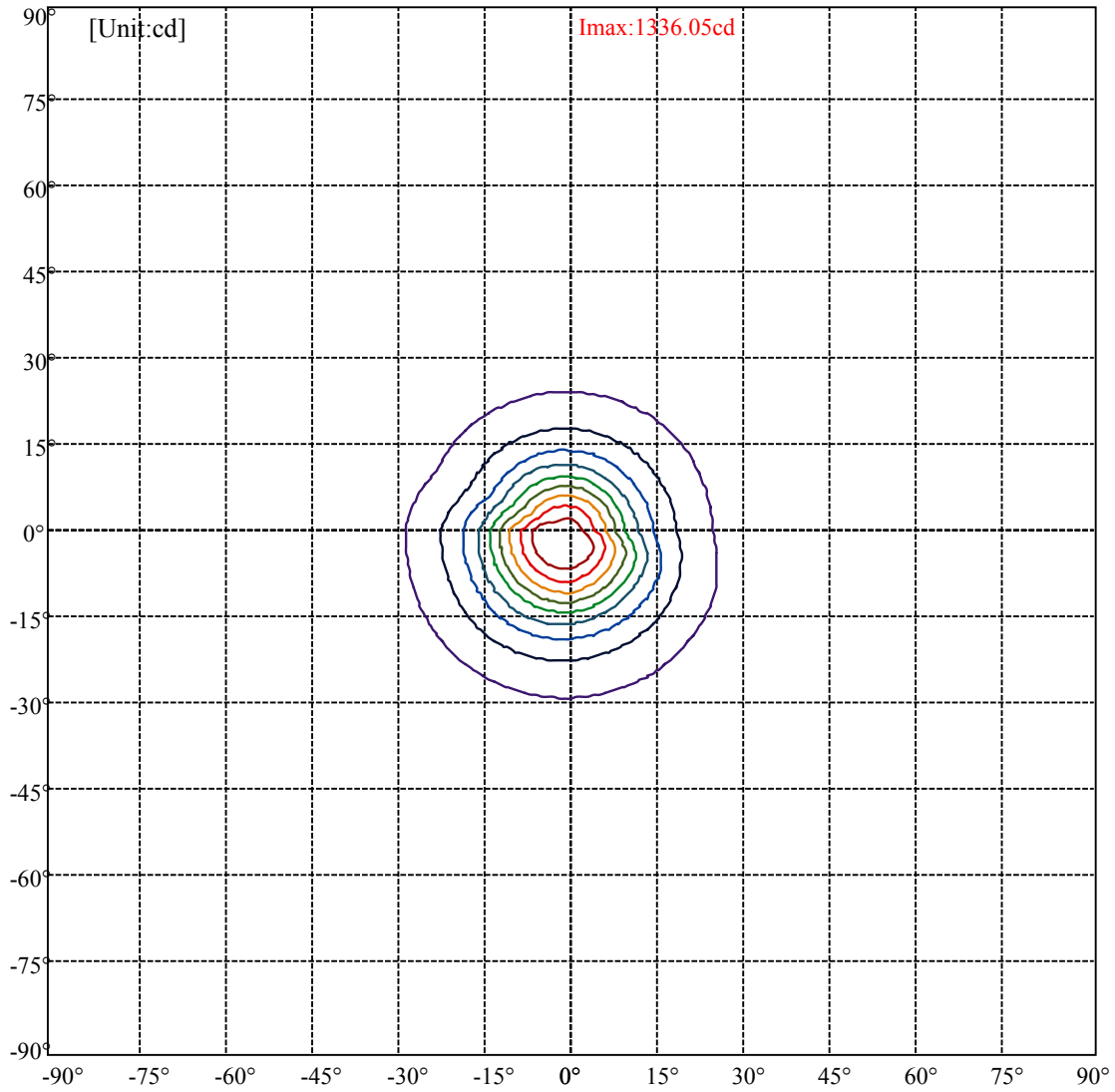
:C90/270Left:28.9 Right:23.8

Beam Angle(50%Imax):C0/180Left:13.9 Right:9.4

:C90/270Left:14.1 Right:9.2



Max , Ave Beam angle of C225plane28.87



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	1319.86	1012.02	610.10	359.30	212.35	122.95	68.09	40.17	27.19
22.5	1319.86	988.26	585.86	334.07	203.29	117.81	63.68	37.96	25.72
45.0	1319.86	988.51	565.28	323.30	195.20	112.42	62.46	37.23	25.72
67.5	1319.86	989.49	580.71	324.03	193.98	110.46	63.44	37.96	25.47
90.0	1319.86	1012.02	592.96	328.93	198.39	111.20	61.97	38.21	26.21
112.5	1319.86	1038.23	631.66	349.26	205.00	116.09	64.66	38.94	26.21
135.0	1319.86	1071.78	682.60	375.96	216.02	125.40	69.80	41.39	27.19
157.5	1319.86	1125.42	724.73	396.29	228.51	133.97	75.68	45.07	28.90
180.0	1319.86	1303.97	967.69	570.91	331.14	189.33	106.05	60.01	37.96
202.5	1319.86	1318.17	1001.49	606.18	342.16	198.63	110.22	63.93	38.94
225.0	1319.86	1336.05	1019.12	624.06	354.16	204.51	114.62	65.64	41.39
247.5	1319.86	1322.83	1011.78	621.86	357.59	201.82	116.58	67.60	41.39
270.0	1319.86	1294.42	991.94	589.77	332.61	196.43	114.62	65.88	40.41
292.5	1319.86	1264.05	933.89	545.93	311.05	187.61	106.54	61.23	38.70
315.0	1319.86	1215.06	878.29	509.44	293.91	170.71	96.74	56.33	35.27
337.5	1319.86	1162.89	816.08	473.68	273.33	160.18	88.91	51.68	33.31
360.0	1319.86	1012.02	610.10	359.30	212.35	122.95	68.09	40.17	27.19
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	20.08	14.21	9.80	6.37	3.18	1.71	0.98	0.49	0.00
22.5	19.59	14.45	10.04	6.86	3.92	2.20	1.47	1.23	0.74
45.0	18.61	13.96	9.55	6.86	4.16	2.45	1.47	1.23	0.74
67.5	18.61	13.96	9.80	6.86	4.16	2.69	1.47	1.47	0.98
90.0	18.86	13.96	9.80	6.61	4.41	2.45	1.71	0.98	0.74
112.5	19.35	13.72	9.06	6.37	3.92	2.45	1.47	1.23	0.49
135.0	19.35	13.23	9.06	6.12	3.67	2.20	1.47	1.23	0.98
157.5	20.08	13.23	9.06	5.88	3.67	2.69	1.47	1.47	0.74
180.0	25.96	16.90	11.02	7.59	4.41	2.69	1.47	1.23	1.23
202.5	26.70	16.90	10.78	7.35	4.41	2.20	1.47	1.47	0.98
225.0	27.43	16.66	10.78	7.35	4.41	2.94	1.71	1.47	1.23
247.5	27.92	17.39	11.27	7.84	4.41	2.94	1.71	1.47	0.98
270.0	27.68	17.39	11.27	7.84	4.65	2.69	1.71	1.47	0.74
292.5	25.96	16.90	11.02	7.59	4.41	2.69	1.71	1.47	0.98
315.0	24.98	16.90	11.27	7.84	4.65	2.94	1.96	1.71	1.23
337.5	23.76	16.90	11.27	7.84	5.14	2.94	1.96	1.71	1.47
360.0	20.08	14.21	9.80	6.37	3.18	1.71	0.98	0.49	0.00
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.25	0.49	0.25	0.49	0.74	0.49	0.25	0.49	0.49
45.0	0.49	0.25	0.49	0.49	0.49	0.74	0.49	0.49	0.49
67.5	0.49	0.74	0.49	0.74	0.49	0.74	0.49	0.74	0.49
90.0	0.49	0.49	0.49	0.49	0.25	0.74	0.49	0.25	0.49
112.5	0.49	0.49	0.25	0.49	0.49	0.74	0.49	0.49	0.74
135.0	0.49	0.49	0.74	0.49	0.74	0.74	0.74	0.74	0.49
157.5	0.49	0.49	0.74	0.49	0.49	0.74	0.49	0.98	0.74
180.0	0.25	0.49	0.74	0.74	0.49	0.49	0.98	0.74	0.74
202.5	0.74	0.98	0.74	0.98	0.98	0.74	0.74	0.98	0.74
225.0	0.98	0.74	0.74	0.98	0.98	0.74	0.74	0.98	0.74
247.5	0.98	0.98	0.74	0.74	0.98	0.98	0.74	0.74	0.98
270.0	0.98	0.74	0.98	0.98	0.49	0.98	0.98	0.98	0.74
292.5	0.49	0.74	0.74	0.74	0.98	0.74	0.98	0.74	0.74
315.0	0.74	0.98	0.74	0.74	0.98	0.74	0.98	1.23	0.98
337.5	0.74	0.74	0.74	0.98	0.74	0.98	0.98	0.74	0.74
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Intensity data(cd)

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C/\u03b3(\u00b0)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.25	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.25
22.5	0.25	0.74	0.49	1.23	0.98	1.23	1.23	0.98	1.23
45.0	0.49	0.74	0.74	0.74	0.98	1.23	1.23	0.98	1.23
67.5	0.74	0.98	0.98	0.98	0.98	0.98	1.23	1.23	0.98
90.0	0.74	0.98	0.49	0.98	1.23	0.98	1.23	1.23	1.23
112.5	0.98	0.74	0.74	0.98	0.98	0.98	1.23	1.23	1.23
135.0	0.98	0.98	0.98	0.98	0.98	1.47	1.23	1.23	1.23
157.5	0.74	0.74	0.74	0.74	0.74	0.98	1.23	1.23	1.23
180.0	0.49	0.74	0.74	0.74	0.98	0.74	0.98	1.23	0.74
202.5	0.74	0.74	0.74	0.98	0.98	0.98	1.23	1.47	1.23
225.0	1.23	0.98	1.23	1.23	0.98	1.23	1.47	1.23	1.23
247.5	0.98	0.98	0.74	0.98	1.23	0.98	0.98	1.23	1.23
270.0	0.74	0.74	0.98	0.74	0.98	1.23	1.23	1.23	1.23
292.5	0.98	0.98	0.98	1.23	0.98	1.23	1.47	0.98	1.23
315.0	0.74	0.98	1.23	0.98	1.23	1.23	0.98	1.23	1.23
337.5	0.98	0.98	0.98	0.98	1.23	0.98	0.98	1.23	1.23
360.0	0.25	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.25
C/\u03b3(\u00b0)	180.0								
0.0	1.11								
22.5	1.11								
45.0	1.11								
67.5	1.11								
90.0	1.11								
112.5	1.11								
135.0	1.11								
157.5	1.11								
180.0	1.11								
202.5	1.11								
225.0	1.11								
247.5	1.11								
270.0	1.11								
292.5	1.11								
315.0	1.11								
337.5	1.11								
360.0	1.11								