Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Client:
LumCAT:LRG6-HO-5CCT(3500K)
Luminaire:
Report No:
Ballast type:

Test No:	Voltage(V): 120.04
LampCAT:	Current(A): 0.1420
Lamp flux(lm): -1.0	Power (W): 16.87
Number of Lamps: 1	PF: 0.9893
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1528.38, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 90.59
Central intensity(cd): 2453.831, Maximum intensity(cd): 2577.036
Angle of maximum intensity: C=112.5 γ=5.0
Beam Angle(50%Imax): [C0/180]Total=40.3
[C90/270]Total=38.7
Field angle(10%Imax): [C0/180]Total=76.5
[C90/270]Total=75.4
Maximum s/h(1/2): C0_180=0.70 C90_270=0.67
Maximum s/h(1/4): C0_180=0.77 C90_270=0.74
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 0.00%
Up flux rate of LUM(%): 0.09%
Down flux rate of LUM(%): 99.91%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.890%

Zonal flux distribution table

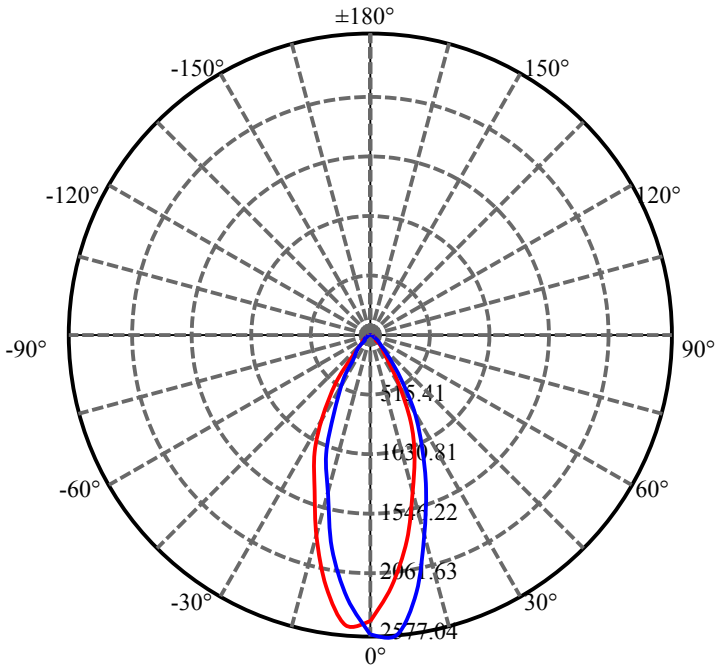
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2488.264	0.000	0	0.00%	0.00%
5.0	2338.217	57.699	57.699	0.00%	3.78%
10.0	1994.966	155.012	212.711	0.00%	13.92%
15.0	1602.155	213.379	426.09	0.00%	27.88%
20.0	1253.716	235.364	661.454	0.00%	43.28%
25.0	938.140	229.885	891.339	0.00%	58.32%
30.0	621.336	197.353	1088.692	0.00%	71.23%
35.0	366.529	145.470	1234.162	0.00%	80.75%
40.0	212.004	96.524	1330.686	0.00%	87.07%
45.0	115.682	60.674	1391.359	0.00%	91.04%
50.0	74.668	38.463	1429.823	0.00%	93.55%
55.0	56.169	28.448	1458.271	0.00%	95.41%
60.0	41.464	22.568	1480.838	0.00%	96.89%
65.0	30.433	17.478	1498.317	0.00%	98.03%
70.0	18.035	12.272	1510.589	0.00%	98.84%
75.0	11.742	7.783	1518.372	0.00%	99.35%
80.0	7.441	5.133	1523.505	0.00%	99.68%
85.0	2.840	2.794	1526.299	0.00%	99.86%
90.0	0.000	0.778	1527.076	0.00%	99.91%
95.0	0.014	0.004	1527.08	0.00%	99.92%
100.0	0.014	0.007	1527.087	0.00%	99.92%
105.0	0.014	0.007	1527.095	0.00%	99.92%
110.0	0.014	0.007	1527.102	0.00%	99.92%
115.0	0.027	0.010	1527.112	0.00%	99.92%
120.0	0.027	0.013	1527.125	0.00%	99.92%
125.0	0.041	0.016	1527.141	0.00%	99.92%
130.0	0.055	0.021	1527.162	0.00%	99.92%
135.0	0.136	0.039	1527.2	0.00%	99.92%
140.0	0.218	0.066	1527.266	0.00%	99.93%
145.0	0.369	0.098	1527.364	0.00%	99.93%
150.0	0.614	0.145	1527.509	0.00%	99.94%
155.0	0.846	0.185	1527.694	0.00%	99.96%
160.0	1.079	0.202	1527.895	0.00%	99.97%
165.0	1.202	0.188	1528.083	0.00%	99.98%
170.0	1.393	0.154	1528.237	0.00%	99.99%
175.0	1.502	0.104	1528.341	0.00%	100.00%
180.0	1.557	0.037	1528.377	0.00%	100.00%

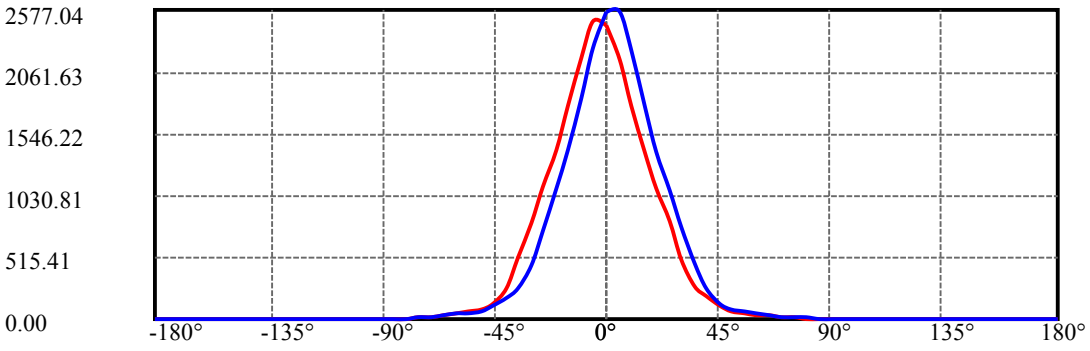
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1088.69	N.A.	71.23%
0-40	1330.69	N.A.	87.07%
0-60	1480.84	N.A.	96.89%
0-90	1527.08	N.A.	99.91%
0-120	1527.13	N.A.	99.92%
0-180	1528.38	N.A.	100.00%
60-90	46.24	N.A.	3.03%
90-120	0.05	N.A.	0.00%
90-130	0.09	N.A.	0.01%
90-150	0.43	N.A.	0.03%
90-180	1.26	N.A.	0.08%
0-34.61	1222.70	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	212.71
10-20	448.74
20-30	427.24
30-40	241.99
40-50	99.14
50-60	51.02
60-70	29.75
70-80	12.92
80-90	3.57
90-100	0.01
100-110	0.01
110-120	0.02
120-130	0.04
130-140	0.10
140-150	0.24
150-160	0.39
160-170	0.34
170-180	0.10



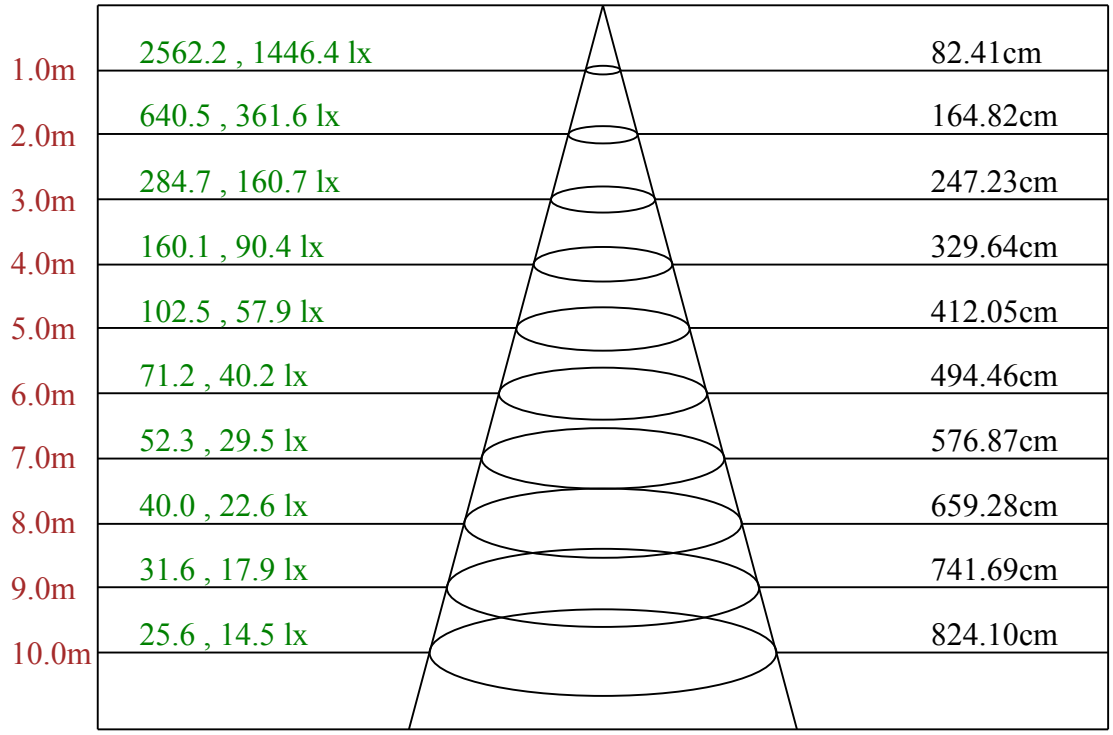


C0/C180:

C90/C270:

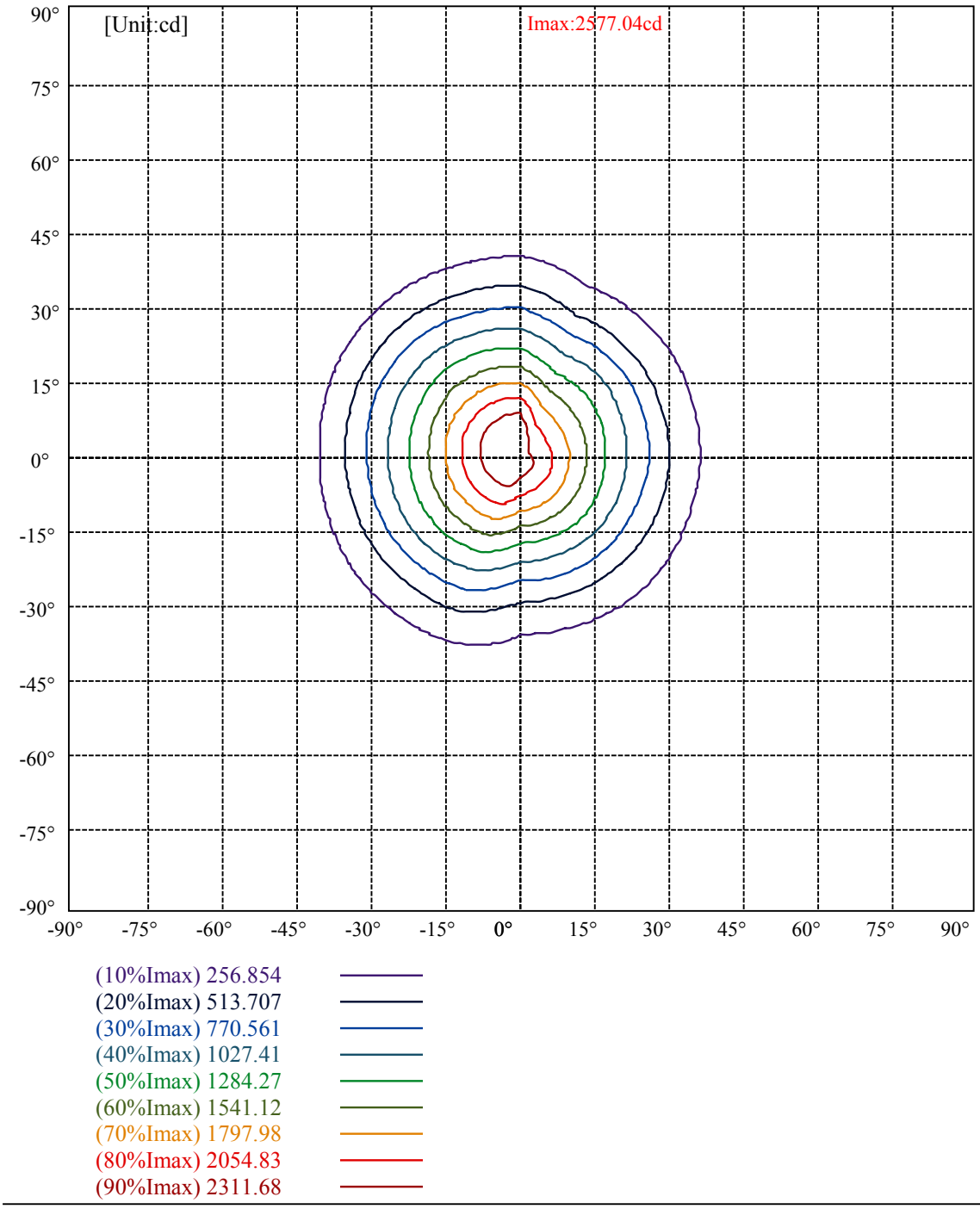
Field angle(10%Imax):C0/180Left:40.2 Right:36.3
:C90/270Left:35.2 Right:40.2

Beam Angle(50%Imax):C0/180Left:22.8 Right:17.5
:C90/270Left:17.0 Right:21.7



Max , Ave

Beam angle of C112.5 plane 44.79


[Unit:cd]
Imax:2577.04cd
90°
75°
60°
45°
30°
15°
0°
-15°
-30°
-45°
-60°
-75°
-90°
-90° -75° -60° -45° -30° -15° 0° 15° 30° 45° 60° 75° 90°
(10%Imax) 256.854
(20%Imax) 513.707
(30%Imax) 770.561
(40%Imax) 1027.41
(50%Imax) 1284.27
(60%Imax) 1541.12
(70%Imax) 1797.98
(80%Imax) 2054.83
(90%Imax) 2311.68

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	2453.83	2156.96	1779.48	1395.45	1088.97	811.10	491.51	270.44	184.81
22.5	2435.26	2132.93	1784.29	1433.46	1125.01	835.78	491.73	273.06	179.13
45.0	2429.15	2146.04	1806.13	1467.32	1169.35	865.71	510.08	278.52	170.83
67.5	2473.71	2226.86	1873.85	1508.61	1165.20	863.75	525.59	293.16	161.43
90.0	2562.18	2568.52	2233.64	1780.57	1394.36	1067.99	761.29	469.45	261.70
112.5	2532.47	2577.04	2241.94	1823.17	1443.51	1116.49	778.77	491.29	253.62
135.0	2528.54	2546.45	2243.03	1842.61	1473.22	1134.40	839.28	506.15	258.86
157.5	2490.97	2510.41	2219.00	1831.47	1434.33	1134.18	846.27	520.34	266.07
180.0	2453.83	2482.88	2182.52	1782.76	1411.18	1111.25	806.95	506.80	254.27
202.5	2435.26	2452.96	2160.24	1751.52	1395.89	1085.91	764.79	449.79	235.49
225.0	2429.15	2414.73	2100.60	1701.93	1350.23	1036.76	703.62	394.08	220.41
247.5	2473.71	2396.38	2064.99	1664.14	1296.05	969.04	657.97	382.72	221.94
270.0	2562.18	2252.64	1844.36	1416.20	1080.88	735.73	444.76	259.74	181.31
292.5	2532.47	2198.90	1815.31	1408.99	1067.78	744.91	425.54	255.59	179.78
315.0	2528.54	2170.07	1799.58	1425.81	1075.86	740.76	429.25	256.24	181.31
337.5	2490.97	2177.71	1770.52	1400.47	1087.66	756.49	463.98	257.11	181.09
360.0	2453.83	2156.96	1779.48	1395.45	1088.97	811.10	491.51	270.44	184.81

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	105.73	69.47	53.96	39.98	29.27	16.60	12.02	7.21	2.18
22.5	103.76	68.37	52.87	38.88	28.62	15.73	11.58	6.77	2.18
45.0	102.23	66.41	50.90	37.36	27.09	14.85	10.70	6.12	2.18
67.5	98.74	64.44	49.15	36.26	25.78	13.76	10.05	5.46	1.53
90.0	128.67	81.04	59.86	44.56	32.99	21.19	12.23	8.30	3.71
112.5	124.30	76.46	58.33	43.03	31.89	20.10	11.58	7.86	3.28
135.0	121.68	76.02	57.67	41.94	31.46	19.22	11.14	7.65	3.50
157.5	122.33	76.24	57.89	42.16	31.02	19.66	11.36	7.65	2.84
180.0	122.33	76.89	58.76	42.38	30.80	19.66	11.36	7.65	2.84
202.5	124.52	81.70	59.20	43.03	32.11	20.10	11.58	7.65	3.28
225.0	131.29	86.94	60.51	44.78	33.20	20.97	12.45	8.30	3.71
247.5	138.72	90.00	62.04	45.87	34.30	21.85	13.11	8.96	4.15
270.0	105.29	70.12	53.74	40.63	29.05	15.95	11.80	7.43	2.62
292.5	106.60	69.69	54.18	40.85	29.71	16.17	12.23	7.21	2.40
315.0	107.04	70.56	55.05	41.07	29.93	16.17	12.23	7.43	2.18
337.5	107.70	70.34	54.61	40.63	29.71	16.60	12.45	7.43	2.84
360.0	105.73	69.47	53.96	39.98	29.27	16.60	12.02	7.21	2.18

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.44
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	0.22	0.22	0.44	0.66	0.87	1.09	1.31	1.53	1.53
22.5	0.22	0.22	0.66	0.87	0.87	1.09	1.53	1.31	1.53
45.0	0.22	0.22	0.66	0.87	0.87	1.09	1.09	1.31	1.53
67.5	0.22	0.66	0.44	0.66	0.87	1.09	1.09	1.31	1.75
90.0	0.00	0.00	0.22	0.66	0.66	1.09	1.31	1.53	1.53
112.5	0.00	0.00	0.22	0.44	0.66	1.09	0.87	1.53	1.31
135.0	0.00	0.00	0.44	0.22	0.44	0.87	0.87	1.09	1.53
157.5	0.00	0.00	0.00	0.22	0.66	0.87	1.09	1.31	1.31
180.0	0.00	0.00	0.00	0.44	0.66	0.87	1.09	1.09	1.31
202.5	0.00	0.00	0.22	0.44	0.66	0.66	0.87	1.09	1.31
225.0	0.00	0.00	0.22	0.44	0.44	1.09	1.09	1.31	1.31
247.5	0.00	0.00	0.00	0.22	0.66	0.87	1.09	1.31	1.31
270.0	0.66	0.87	1.09	1.31	1.75	1.75	1.97	1.97	2.18
292.5	0.22	0.44	0.44	0.66	1.09	1.31	1.31	1.53	1.53
315.0	0.22	0.44	0.44	0.87	1.31	1.31	1.31	1.53	1.53
337.5	0.22	0.44	0.44	0.87	1.09	1.09	1.31	1.53	1.53
360.0	0.22	0.22	0.44	0.66	0.87	1.09	1.31	1.53	1.53

C/γ(°)	180.0
0.0	1.53
22.5	1.75
45.0	1.53
67.5	1.31
90.0	2.18
112.5	1.31
135.0	1.31
157.5	1.53
180.0	1.53
202.5	1.75
225.0	1.53
247.5	1.31
270.0	2.18
292.5	1.31
315.0	1.31
337.5	1.53
360.0	1.53