Shenzhen Belling Efficiency Testing Lab Co.,Ltd
www.bellingeel.com

Tel:0755-21038430
Address:1Floor, No.1 Building,Meibaohe Industrial Park,Dalang Street,Longhua District,Shenzhen,Guangdong Prov.518101 China

Report No	:	Voltage	: 120.03 V
Test No	:	Current	: 0.1507 A
LumCAT	:	Power	: 17.882 W
Luminaire	: LD8R-27K	PF	: 0.9889
LampCAT	:	Ballast type	:
Lamp flux	: 1535.9 lm	Width	: 0 mm
Number of Lamps	: 1	Length	: 0 mm
Phm Type	: C	Height	: 0 mm

Photometric Results

Lumens(lm)	: 1535.88	Central intensity(cd)	: 2754.615
Efficiency(%)	: 100.00%	Maximum intensity(cd)	: 2754.615
Luminous Efficacy(lm/W)	: 85.89	Angle of maximum intensity	: C=0.0 γ=0.0

Beam Angle(50%Imax)	: [C0/180]Total=42.4 [C90/270]Total=42.2
Field angle(10%Imax)	: [C0/180]Total=72.1 [C90/270]Total=70.9
Maximum s/h(1/2)	: C0_180=0.67 C90_270=0.68
Maximum s/h(1/4)	: C0_180=0.71 C90_270=0.70
Up flux rate of lamp(%)	: 0.03%
Down flux rate of lamp(%)	: 99.97%
Up flux rate of LUM(%)	: 0.03%
Down flux rate of LUM(%)	: 99.97%
CIE Type	: Direct lighting
Output flux ratio in π solid angle :	: 98.693%

Zonal flux distribution table

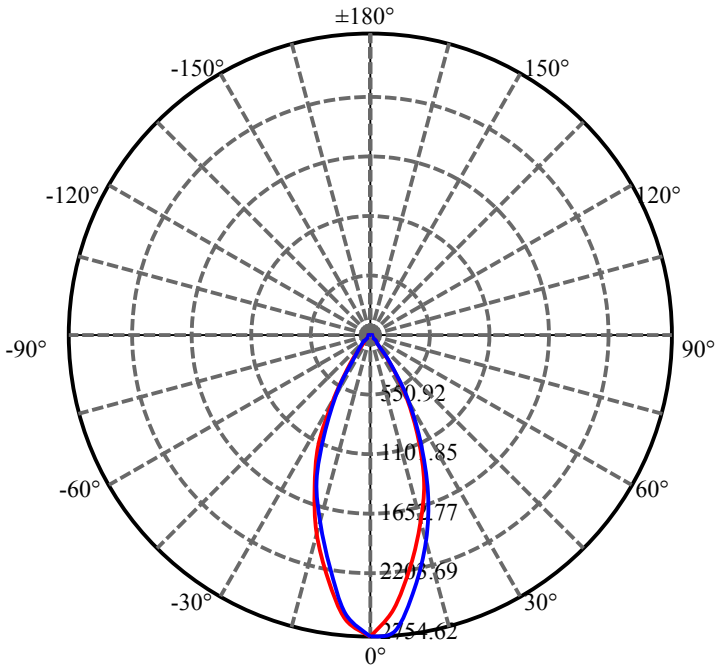
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2754.615	0.000	0	0.00%	0.00%
5.0	2582.539	63.804	63.804	4.15%	4.15%
10.0	2211.604	171.502	235.306	11.17%	15.32%
15.0	1824.703	239.431	474.737	15.59%	30.91%
20.0	1462.891	270.944	745.681	17.64%	48.55%
25.0	1052.998	263.870	1009.551	17.18%	65.73%
30.0	643.718	214.721	1224.272	13.98%	79.71%
35.0	302.265	139.303	1363.575	9.07%	88.78%
40.0	105.638	68.056	1431.63	4.43%	93.21%
45.0	67.981	32.147	1463.777	2.09%	95.31%
50.0	49.444	23.727	1487.505	1.54%	96.85%
55.0	29.268	17.115	1504.619	1.11%	97.96%
60.0	19.135	11.188	1515.807	0.73%	98.69%
65.0	13.058	7.826	1523.633	0.51%	99.20%
70.0	8.450	5.446	1529.079	0.35%	99.56%
75.0	5.051	3.529	1532.608	0.23%	99.79%
80.0	2.388	1.991	1534.599	0.13%	99.92%
85.0	0.322	0.736	1535.335	0.05%	99.96%
90.0	0.000	0.088	1535.423	0.01%	99.97%
95.0	0.000	0.000	1535.423	0.00%	99.97%
100.0	0.000	0.000	1535.423	0.00%	99.97%
105.0	0.000	0.000	1535.423	0.00%	99.97%
110.0	0.000	0.000	1535.423	0.00%	99.97%
115.0	0.000	0.000	1535.423	0.00%	99.97%
120.0	0.000	0.000	1535.423	0.00%	99.97%
125.0	0.000	0.000	1535.423	0.00%	99.97%
130.0	0.000	0.000	1535.423	0.00%	99.97%
135.0	0.015	0.003	1535.426	0.00%	99.97%
140.0	0.000	0.003	1535.429	0.00%	99.97%
145.0	0.015	0.003	1535.431	0.00%	99.97%
150.0	0.092	0.016	1535.447	0.00%	99.97%
155.0	0.306	0.050	1535.497	0.00%	99.98%
160.0	0.536	0.088	1535.586	0.01%	99.98%
165.0	0.781	0.109	1535.694	0.01%	99.99%
170.0	0.842	0.096	1535.791	0.01%	99.99%
175.0	0.919	0.063	1535.854	0.00%	100.00%
180.0	0.966	0.023	1535.876	0.00%	100.00%

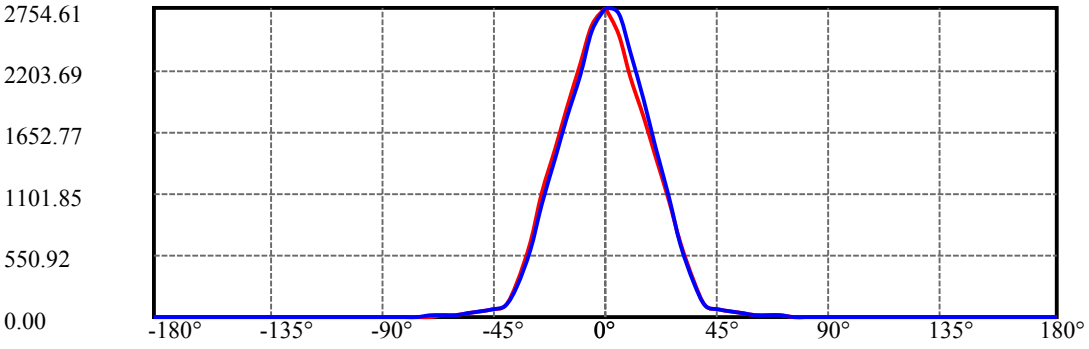
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1224.27	79.71%	79.71%
0-40	1431.63	93.21%	93.21%
0-60	1515.81	98.69%	98.69%
0-90	1535.42	99.97%	99.97%
0-120	1535.42	99.97%	99.97%
0-180	1535.88	100.00%	100.00%
60-90	19.62	1.28%	1.28%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.02	0.00%	0.00%
90-180	0.43	0.03%	0.03%
0-30.16	1228.70	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	235.31
10-20	510.37
20-30	478.59
30-40	207.36
40-50	55.87
50-60	28.30
60-70	13.27
70-80	5.52
80-90	0.82
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.01
140-150	0.02
150-160	0.14
160-170	0.20
170-180	0.06



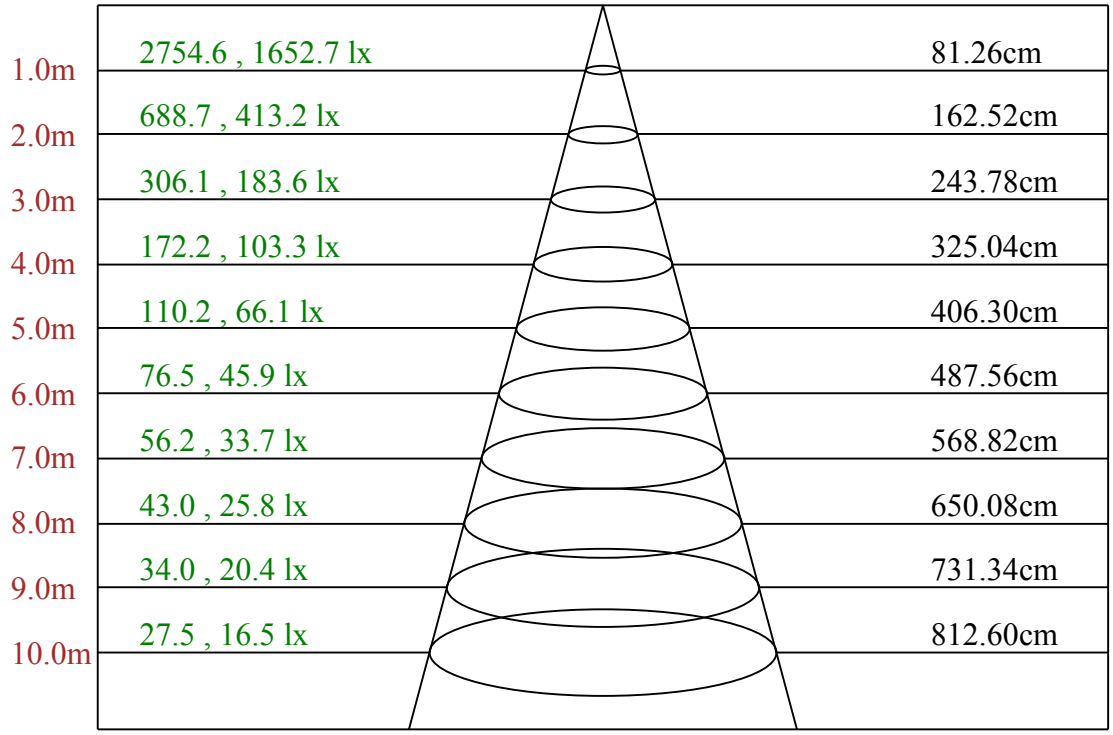


C0/C180:

C90/C270:

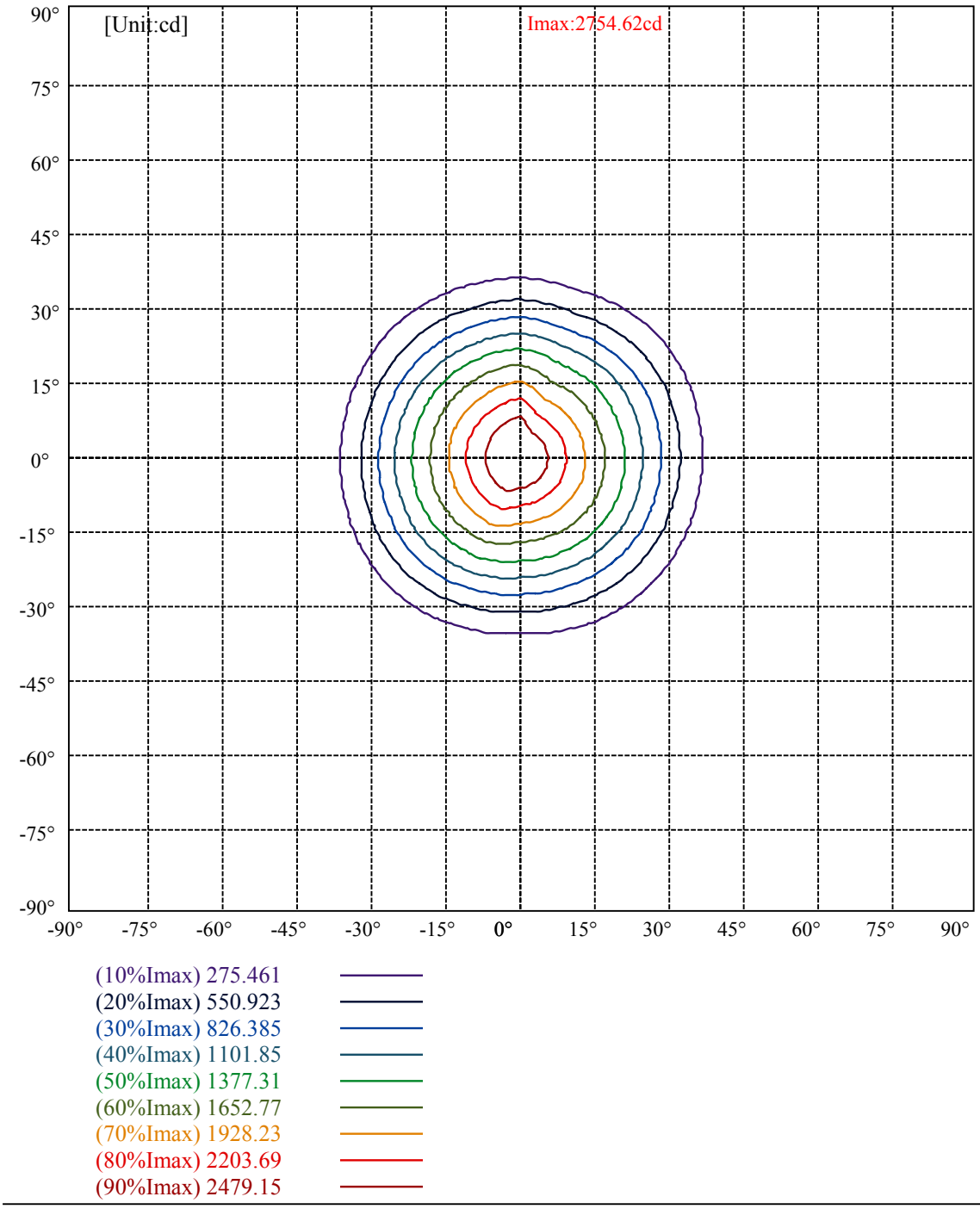
Field angle(10%Imax):C0/180Left:35.8 Right:36.3
:C90/270Left:35.0 Right:35.9

Beam Angle(50%Imax):C0/180Left:21.6 Right:20.8
:C90/270Left:20.5 Right:21.7



Max , Ave

Beam angle of C0 plane 44.22


[Unit:cd]
Imax:2754.62cd
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) 275.461
(20%Imax) 550.923
(30%Imax) 826.385
(40%Imax) 1101.85
(50%Imax) 1377.31
(60%Imax) 1652.77
(70%Imax) 1928.23
(80%Imax) 2203.69
(90%Imax) 2479.15

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	2754.62	2513.40	2132.05	1774.46	1437.21	1049.00	672.80	333.10	107.03
22.5	2754.62	2515.11	2130.58	1762.46	1421.04	1053.66	679.91	330.40	105.56
45.0	2754.62	2517.80	2123.72	1760.99	1407.33	1033.33	635.33	309.34	101.89
67.5	2754.62	2524.42	2124.95	1736.99	1399.49	987.04	585.61	273.09	99.19
90.0	2754.62	2707.37	2358.60	1940.77	1530.52	1073.74	653.70	310.56	110.22
112.5	2754.62	2671.37	2304.72	1886.39	1499.17	1050.47	628.96	297.09	107.52
135.0	2754.62	2636.84	2278.76	1866.31	1490.35	1051.70	638.51	297.58	107.52
157.5	2754.62	2618.71	2270.43	1871.45	1501.13	1081.82	651.49	294.89	108.99
180.0	2754.62	2607.45	2262.84	1869.25	1502.84	1105.34	673.29	309.09	107.52
202.5	2754.62	2615.28	2261.12	1865.09	1519.99	1107.30	681.37	312.03	109.97
225.0	2754.62	2615.77	2269.21	1874.39	1496.48	1102.15	688.72	310.07	107.28
247.5	2754.62	2633.41	2278.27	1877.33	1504.56	1074.72	639.25	293.91	107.28
270.0	2754.62	2556.01	2162.91	1772.75	1416.63	1002.96	594.43	275.29	101.40
292.5	2754.62	2534.95	2138.17	1768.10	1414.92	1000.26	596.39	290.48	102.87
315.0	2754.62	2532.74	2142.58	1781.32	1422.51	1024.27	622.10	291.70	102.87
337.5	2754.62	2520.01	2146.75	1787.20	1442.10	1050.23	657.62	307.62	103.11
360.0	2754.62	2513.40	2132.05	1774.46	1437.21	1049.00	672.80	333.10	107.03

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	67.60	48.50	28.41	19.10	13.47	8.82	5.14	2.69	0.49
22.5	66.13	48.74	28.90	19.10	12.98	8.57	5.14	2.20	0.49
45.0	66.13	48.25	28.66	19.10	12.98	8.82	4.90	2.45	0.49
67.5	66.13	48.25	27.68	18.61	12.98	8.33	5.14	2.20	0.49
90.0	71.27	52.41	31.11	19.59	13.47	8.57	5.14	2.69	0.49
112.5	70.29	50.70	29.88	19.10	12.74	8.33	5.14	2.20	0.00
135.0	68.82	49.96	29.39	19.10	12.74	7.84	4.65	2.45	0.00
157.5	68.09	48.98	28.90	18.37	12.25	8.08	4.65	1.96	0.00
180.0	68.82	49.47	28.90	18.12	12.74	8.08	4.65	1.96	0.00
202.5	68.58	49.47	29.39	18.61	12.49	8.08	4.65	2.20	0.00
225.0	68.33	49.23	29.39	19.10	12.74	8.08	4.65	2.45	0.25
247.5	68.33	49.72	29.88	19.35	12.98	7.84	4.90	2.20	0.00
270.0	67.11	50.21	29.64	20.08	13.72	9.06	5.63	2.94	0.73
292.5	67.84	49.23	29.64	19.84	13.47	8.82	5.63	2.69	0.73
315.0	67.35	48.98	29.15	19.59	13.72	8.82	5.39	2.45	0.49
337.5	66.86	48.98	29.39	19.35	13.47	9.06	5.39	2.45	0.49
360.0	67.60	48.50	28.41	19.10	13.47	8.82	5.14	2.69	0.49

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	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.49	0.49	0.98	0.73	0.98
22.5	0.00	0.00	0.00	0.00	0.49	0.74	0.74	0.74	0.74
45.0	0.00	0.00	0.00	0.00	0.49	0.49	0.74	0.98	0.73
67.5	0.00	0.00	0.00	0.25	0.00	0.73	0.98	0.98	0.98
90.0	0.00	0.00	0.00	0.00	0.49	0.49	1.23	1.23	0.98
112.5	0.00	0.00	0.00	0.00	0.25	0.49	0.73	0.49	0.98
135.0	0.00	0.00	0.00	0.00	0.00	0.24	0.74	0.49	0.98
157.5	0.00	0.00	0.00	0.00	0.25	0.25	0.74	0.98	0.98
180.0	0.00	0.00	0.00	0.00	0.25	0.49	0.73	0.74	0.74
202.5	0.00	0.00	0.00	0.00	0.00	0.49	0.49	0.49	0.74
225.0	0.00	0.00	0.00	0.00	0.00	0.49	0.49	0.73	0.74
247.5	0.00	0.00	0.00	0.00	0.25	0.49	0.49	0.73	0.98
270.0	0.25	0.00	0.25	0.49	0.73	0.98	1.23	1.23	1.47
292.5	0.00	0.00	0.00	0.25	0.25	0.73	0.74	0.98	0.73
315.0	0.00	0.00	0.00	0.25	0.49	0.49	0.74	0.98	1.23
337.5	0.00	0.00	0.00	0.25	0.49	0.49	0.74	0.98	0.73
360.0	0.00	0.00	0.00	0.00	0.49	0.49	0.98	0.73	0.98

C/γ(°)	180.0
0.0	0.97
22.5	0.97
45.0	0.97
67.5	0.97
90.0	0.97
112.5	0.97
135.0	0.97
157.5	0.97
180.0	0.97
202.5	0.97
225.0	0.97
247.5	0.97
270.0	0.97
292.5	0.97
315.0	0.97
337.5	0.97
360.0	0.97