



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

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

Client:

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.04

LampCAT:

Current(A): 0.3250

Lamp flux(lm): -1.0

Power (W): 38.89

Number of Lamps: 1

PF: 0.9967

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 4373.44, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 112.46

Central intensity(cd): 1512.072, Maximum intensity(cd): 1541.215

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=112.7

[C90/270]Total=108.9

Field angle(10%Imax): [C0/180]Total=167.5

[C90/270]Total=159.2

Maximum s/h(1/2): C0_180=1.26 C90_270=1.26

Maximum s/h(1/4): C0_180=1.39 C90_270=1.37

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.12%

Down flux rate of LUM(%): 99.88%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 77.199%

Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1512.072	0.000	0	0.00%	0.00%
5.0	1509.399	36.121	36.121	0.00%	0.83%
10.0	1489.456	107.278	143.399	0.00%	3.28%
15.0	1453.006	174.545	317.944	0.00%	7.27%
20.0	1402.939	235.370	553.314	0.00%	12.65%
25.0	1341.299	287.820	841.134	0.00%	19.23%
30.0	1267.317	330.123	1171.257	0.00%	26.78%
35.0	1183.406	360.886	1532.143	0.00%	35.03%
40.0	1092.915	379.787	1911.93	0.00%	43.72%
45.0	994.031	386.415	2298.344	0.00%	52.55%
50.0	888.461	380.385	2678.73	0.00%	61.25%
55.0	780.549	362.898	3041.628	0.00%	69.55%
60.0	667.114	334.623	3376.251	0.00%	77.20%
65.0	550.522	296.009	3672.26	0.00%	83.97%
70.0	433.112	249.062	3921.323	0.00%	89.66%
75.0	317.589	196.221	4117.544	0.00%	94.15%
80.0	206.735	140.295	4257.838	0.00%	97.36%
85.0	94.681	81.902	4339.74	0.00%	99.23%
90.0	9.269	28.462	4368.203	0.00%	99.88%
95.0	0.180	2.587	4370.79	0.00%	99.94%
100.0	0.132	0.085	4370.875	0.00%	99.94%
105.0	0.168	0.080	4370.955	0.00%	99.94%
110.0	0.240	0.107	4371.062	0.00%	99.95%
115.0	0.276	0.131	4371.192	0.00%	99.95%
120.0	0.396	0.163	4371.356	0.00%	99.95%
125.0	0.456	0.197	4371.553	0.00%	99.96%
130.0	0.552	0.219	4371.772	0.00%	99.96%
135.0	0.636	0.240	4372.012	0.00%	99.97%
140.0	0.708	0.249	4372.261	0.00%	99.97%
145.0	0.696	0.234	4372.495	0.00%	99.98%
150.0	0.792	0.219	4372.714	0.00%	99.98%
155.0	0.948	0.220	4372.934	0.00%	99.99%
160.0	0.804	0.184	4373.118	0.00%	99.99%
165.0	0.852	0.136	4373.255	0.00%	100.00%
170.0	0.840	0.100	4373.355	0.00%	100.00%
175.0	0.900	0.062	4373.417	0.00%	100.00%
180.0	0.926	0.022	4373.439	0.00%	100.00%

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

Date:
Humidity(%): 59%

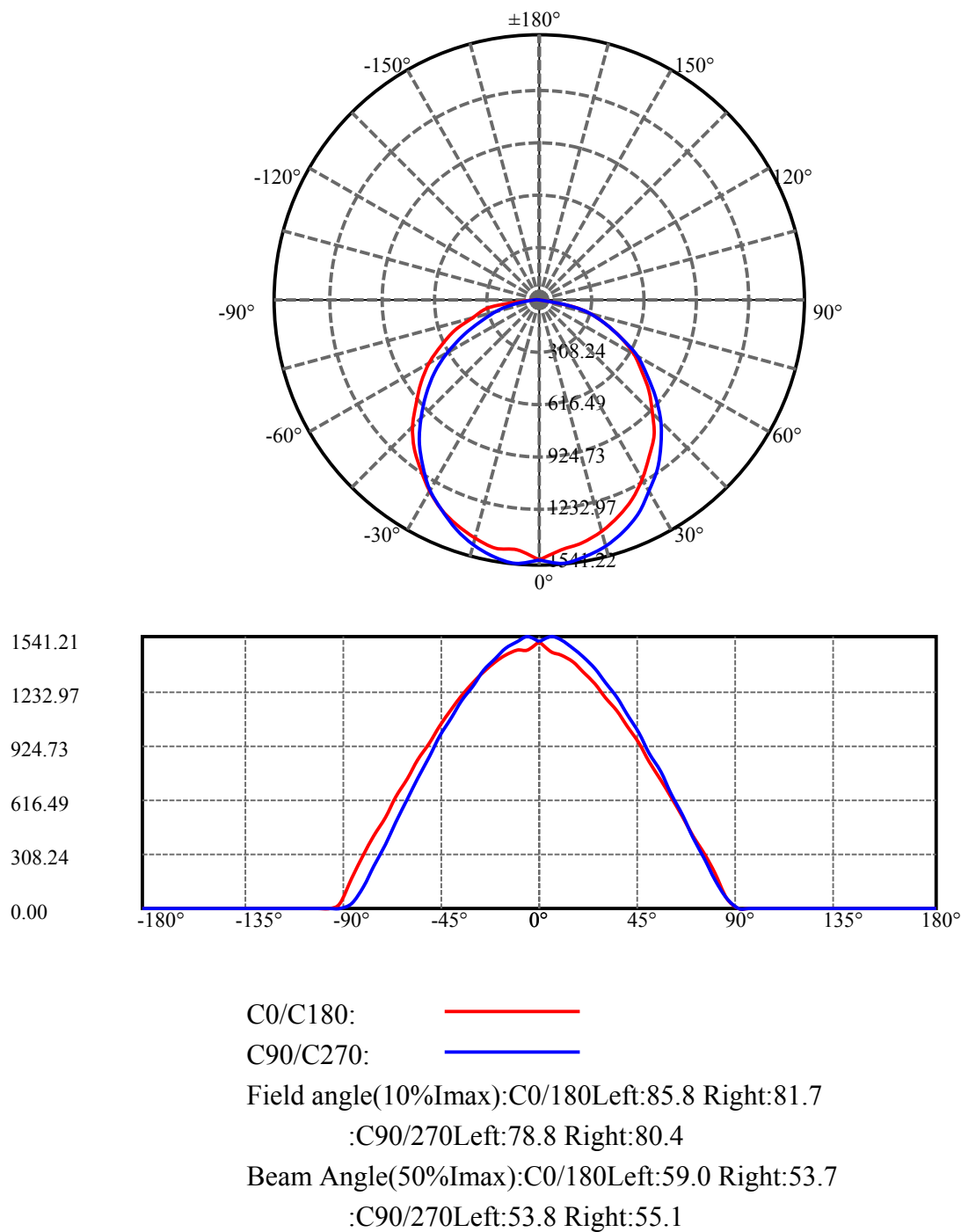
Operator: jarvis

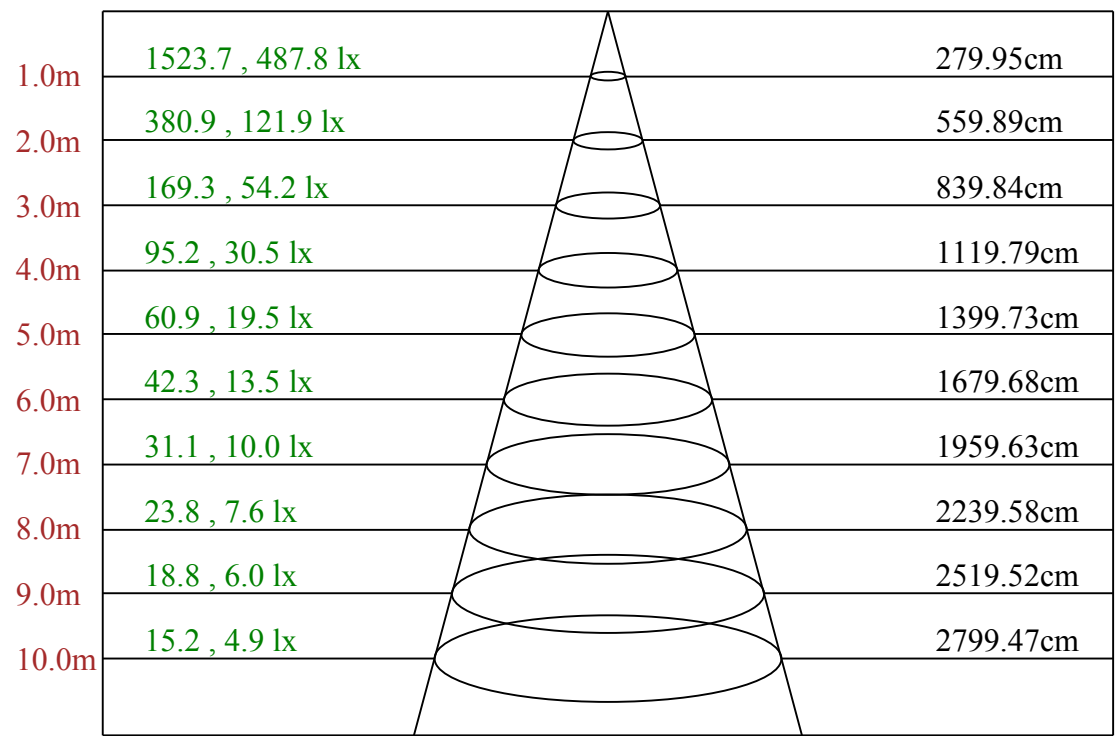
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1171.26	N.A.	26.78%
0-40	1911.93	N.A.	43.72%
0-60	3376.25	N.A.	77.20%
0-90	4368.20	N.A.	99.88%
0-120	4371.36	N.A.	99.95%
0-180	4373.44	N.A.	100.00%
60-90	991.95	N.A.	22.68%
90-120	3.15	N.A.	0.07%
90-130	3.57	N.A.	0.08%
90-150	4.51	N.A.	0.10%
90-180	5.21	N.A.	0.12%
0-62.07	3498.75	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	143.40
10-20	409.91
20-30	617.94
30-40	740.67
40-50	766.80
50-60	697.52
60-70	545.07
70-80	336.52
80-90	110.36
90-100	2.67
100-110	0.19
110-120	0.29
120-130	0.42
130-140	0.49
140-150	0.45
150-160	0.40
160-170	0.24
170-180	0.06





Max , Ave Beam angle of C90 plane 108.91

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	1512.07	1453.62	1432.49	1393.68	1339.51	1277.85	1200.05	1120.33	1031.00
22.5	1512.07	1500.49	1475.52	1432.30	1377.16	1313.96	1237.31	1151.83	1059.43
45.0	1512.07	1507.02	1478.59	1436.71	1380.81	1312.42	1233.86	1148.76	1053.47
67.5	1512.07	1503.56	1474.56	1430.57	1372.94	1305.13	1224.25	1131.08	1039.26
90.0	1512.07	1541.22	1518.74	1478.78	1426.72	1360.45	1281.88	1193.32	1099.77
112.5	1512.07	1535.45	1515.67	1478.98	1428.26	1363.91	1290.72	1204.66	1113.41
135.0	1512.07	1530.65	1513.17	1480.32	1433.83	1376.01	1304.93	1223.29	1136.27
157.5	1512.07	1505.87	1491.08	1463.42	1424.80	1372.36	1302.82	1229.82	1145.11
180.0	1512.07	1462.84	1460.34	1432.68	1393.49	1343.93	1282.27	1205.04	1125.13
202.5	1512.07	1502.22	1498.95	1474.94	1432.30	1381.20	1317.42	1237.51	1153.75
225.0	1512.07	1519.51	1504.33	1473.98	1429.61	1374.09	1306.28	1226.75	1138.38
247.5	1512.07	1514.71	1496.46	1462.84	1416.54	1355.84	1282.65	1201.78	1109.95
270.0	1512.07	1538.72	1512.59	1470.91	1416.54	1348.16	1267.28	1176.23	1080.56
292.5	1512.07	1528.73	1502.41	1459.77	1402.71	1333.17	1255.56	1165.85	1067.69
315.0	1512.07	1520.85	1493.77	1451.89	1398.87	1331.83	1253.26	1168.93	1072.88
337.5	1512.07	1484.93	1462.65	1426.34	1372.94	1310.50	1236.55	1149.33	1060.58
360.0	1512.07	1453.62	1432.49	1393.68	1339.51	1277.85	1200.05	1120.33	1031.00

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	934.95	829.87	729.59	630.28	520.78	411.48	308.13	200.17	60.13
22.5	960.69	854.65	749.96	638.54	527.89	413.40	304.48	198.25	65.31
45.0	952.24	845.81	737.66	622.98	500.80	384.78	273.55	171.93	58.98
67.5	935.72	827.37	713.65	595.32	479.10	358.84	240.32	134.85	51.29
90.0	995.84	884.43	772.05	651.79	528.08	403.99	282.39	161.94	61.66
112.5	1008.14	903.64	791.07	674.46	558.63	436.83	314.47	197.09	98.93
135.0	1038.88	935.14	830.45	717.49	600.89	481.59	365.95	252.04	144.27
157.5	1054.05	953.20	852.54	745.54	630.09	520.01	405.71	294.30	172.51
180.0	1037.72	940.14	840.82	734.21	628.74	521.36	409.94	305.25	175.58
202.5	1060.20	961.27	857.34	747.27	632.58	519.63	408.21	295.83	170.39
225.0	1042.33	943.02	838.32	721.91	608.38	487.74	367.87	253.00	150.03
247.5	1011.21	905.75	798.17	681.57	562.28	439.14	320.23	202.09	102.39
270.0	974.14	859.65	740.93	620.87	490.62	367.29	241.09	125.63	32.85
292.5	965.49	854.84	738.43	617.41	494.66	374.79	252.42	140.23	53.79
315.0	970.30	861.57	752.07	636.23	516.94	396.30	282.77	178.27	57.82
337.5	962.61	855.04	745.73	637.96	527.89	412.63	303.90	196.90	58.98
360.0	934.95	829.87	729.59	630.28	520.78	411.48	308.13	200.17	60.13

C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.58	0.38	0.19	0.19	0.19	0.38	0.58	0.58	0.38
22.5	0.38	0.38	0.19	0.38	0.38	0.58	0.38	0.38	0.58
45.0	0.38	0.38	0.38	0.38	0.58	0.38	0.38	0.77	0.77
67.5	0.19	0.19	0.19	0.19	0.38	0.58	0.77	0.77	0.96
90.0	3.65	0.00	0.19	0.19	0.38	0.19	0.38	0.58	0.77
112.5	9.80	0.00	0.00	0.19	0.00	0.19	0.38	0.58	0.38
135.0	16.71	0.00	0.00	0.00	0.00	0.19	0.19	0.19	0.38
157.5	26.51	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.19
180.0	28.24	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.19
202.5	25.93	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
225.0	22.67	0.00	0.00	0.00	0.00	0.00	0.19	0.19	0.38
247.5	11.53	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.77
270.0	0.58	0.58	0.38	0.38	0.58	0.77	0.77	0.96	0.96
292.5	0.19	0.19	0.19	0.19	0.58	0.38	0.58	0.58	0.77
315.0	0.58	0.38	0.38	0.38	0.58	0.38	0.58	0.77	0.58
337.5	0.38	0.38	0.00	0.19	0.19	0.38	0.38	0.38	0.58
360.0	0.58	0.38	0.19	0.19	0.19	0.38	0.58	0.58	0.38

C/ $\gamma(^{\circ})$	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.58	0.58	0.58	0.77	0.77	0.58	0.58	0.77	0.77
22.5	0.77	0.77	0.58	0.77	0.58	0.96	0.96	0.96	0.96
45.0	0.77	0.96	0.96	0.77	1.35	0.77	0.96	0.96	0.77
67.5	0.77	0.96	0.77	0.96	1.35	0.96	1.15	0.77	1.15
90.0	0.96	0.77	0.96	0.96	1.15	0.77	0.96	0.96	0.96
112.5	0.77	0.58	0.77	0.96	1.15	0.96	0.96	0.77	0.96
135.0	0.58	0.77	0.58	0.77	0.96	0.77	0.77	0.77	0.96
157.5	0.38	0.58	0.58	0.58	0.77	0.58	0.77	0.96	0.77
180.0	0.19	0.19	0.38	0.38	0.38	0.38	0.58	0.58	0.77
202.5	0.19	0.38	0.38	0.38	0.58	0.58	0.58	0.77	0.58
225.0	0.38	0.58	0.58	0.58	0.77	0.77	0.58	0.96	0.58
247.5	0.38	0.58	0.58	0.96	0.96	0.77	0.77	0.96	0.96
270.0	0.96	1.15	1.15	1.35	1.35	1.35	1.54	0.96	1.54
292.5	0.96	0.96	0.77	0.77	1.15	0.96	0.96	0.96	0.96
315.0	0.77	0.96	0.96	0.96	1.15	0.96	0.96	0.77	0.77
337.5	0.77	0.58	0.58	0.77	0.77	0.77	0.58	0.58	0.96
360.0	0.58	0.58	0.58	0.77	0.77	0.58	0.58	0.77	0.77

C/ $\gamma(^{\circ})$	180.0
0.0	0.93
22.5	0.93
45.0	0.93
67.5	0.93
90.0	0.93
112.5	0.93
135.0	0.93
157.5	0.93
180.0	0.93
202.5	0.93
225.0	0.93
247.5	0.93
270.0	0.93
292.5	0.93
315.0	0.93
337.5	0.93
360.0	0.93