



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.16

LampCAT:

Current(A): 0.2270

Lamp flux(lm): -1.0

Power (W): 27.10

Number of Lamps: 1

PF: 0.9939

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 3421.70, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 126.28

Central intensity(cd): 1198.496, Maximum intensity(cd): 1199.543

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=113.1

[C90/270]Total=108.4

Field angle(10%Imax): [C0/180]Total=168.4

[C90/270]Total=158.8

Maximum s/h(1/2): C0_180=1.27 C90_270=1.23

Maximum s/h(1/4): C0_180=1.39 C90_270=1.35

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.11%

Down flux rate of LUM(%): 99.89%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 77.259%

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	1198.496	0.000	0	0.00%	0.00%
5.0	1192.647	28.585	28.585	0.00%	0.84%
10.0	1174.718	84.688	113.274	0.00%	3.31%
15.0	1144.738	137.589	250.862	0.00%	7.33%
20.0	1104.406	185.361	436.223	0.00%	12.75%
25.0	1053.526	226.327	662.55	0.00%	19.36%
30.0	996.143	259.387	921.938	0.00%	26.94%
35.0	928.081	283.355	1205.293	0.00%	35.22%
40.0	854.300	297.377	1502.67	0.00%	43.92%
45.0	776.306	301.920	1804.59	0.00%	52.74%
50.0	692.266	296.746	2101.336	0.00%	61.41%
55.0	606.590	282.414	2383.751	0.00%	69.67%
60.0	517.406	259.808	2643.559	0.00%	77.26%
65.0	426.757	229.528	2873.087	0.00%	83.97%
70.0	336.030	193.143	3066.23	0.00%	89.61%
75.0	249.072	152.936	3219.166	0.00%	94.08%
80.0	164.914	110.771	3329.937	0.00%	97.32%
85.0	77.249	65.801	3395.738	0.00%	99.24%
90.0	3.586	22.133	3417.871	0.00%	99.89%
95.0	0.144	1.021	3418.892	0.00%	99.92%
100.0	0.105	0.068	3418.96	0.00%	99.92%
105.0	0.131	0.063	3419.023	0.00%	99.92%
110.0	0.196	0.085	3419.108	0.00%	99.92%
115.0	0.222	0.106	3419.214	0.00%	99.93%
120.0	0.393	0.149	3419.364	0.00%	99.93%
125.0	0.484	0.203	3419.566	0.00%	99.94%
130.0	0.615	0.239	3419.805	0.00%	99.94%
135.0	0.654	0.257	3420.062	0.00%	99.95%
140.0	0.825	0.274	3420.336	0.00%	99.96%
145.0	0.877	0.284	3420.62	0.00%	99.97%
150.0	0.943	0.268	3420.888	0.00%	99.98%
155.0	0.982	0.244	3421.131	0.00%	99.98%
160.0	0.943	0.202	3421.333	0.00%	99.99%
165.0	0.982	0.159	3421.491	0.00%	99.99%
170.0	0.969	0.116	3421.607	0.00%	100.00%
175.0	0.956	0.069	3421.676	0.00%	100.00%
180.0	1.047	0.024	3421.7	0.00%	100.00%

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

Date:
Humidity(%): 59%

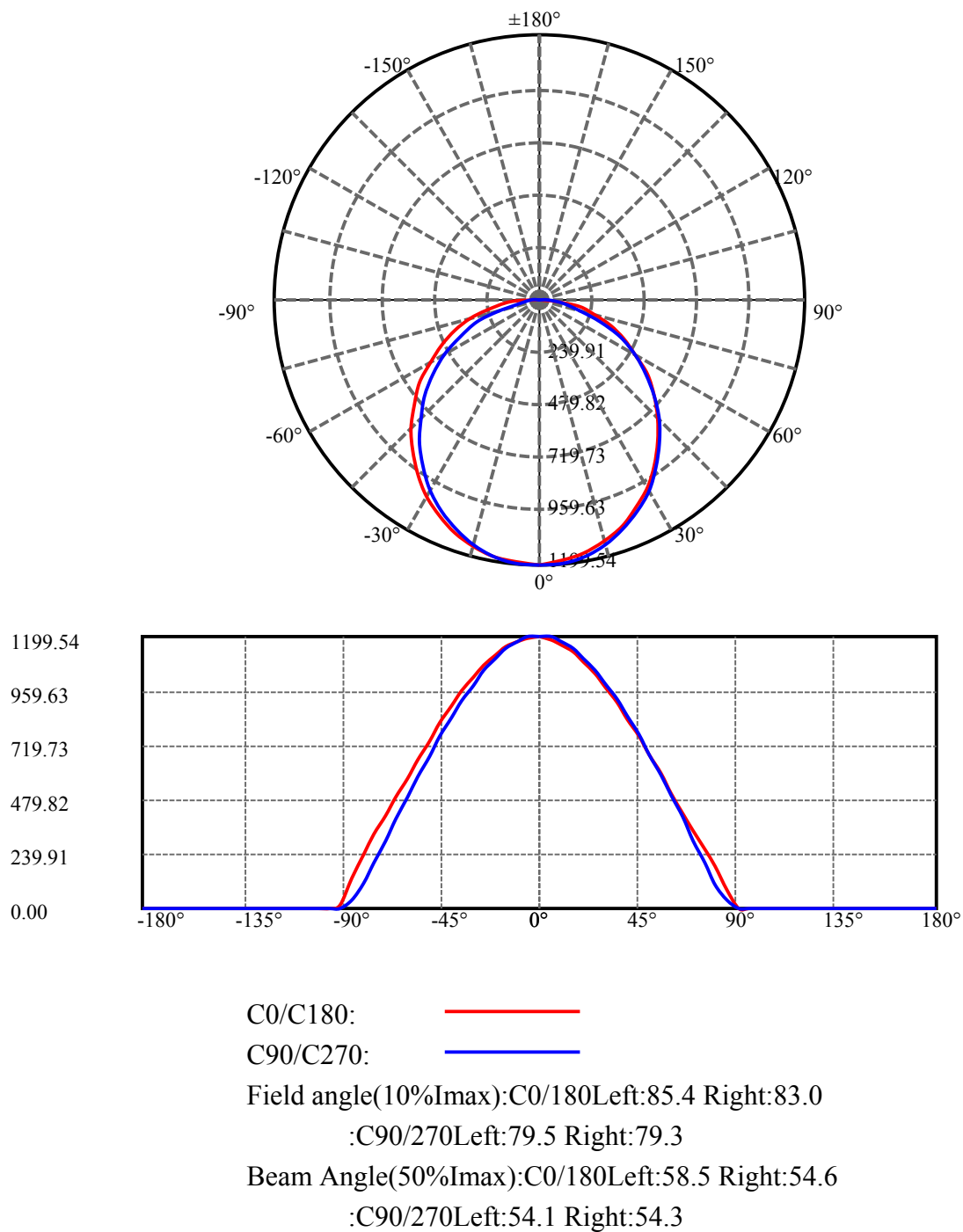
Operator: jarvis

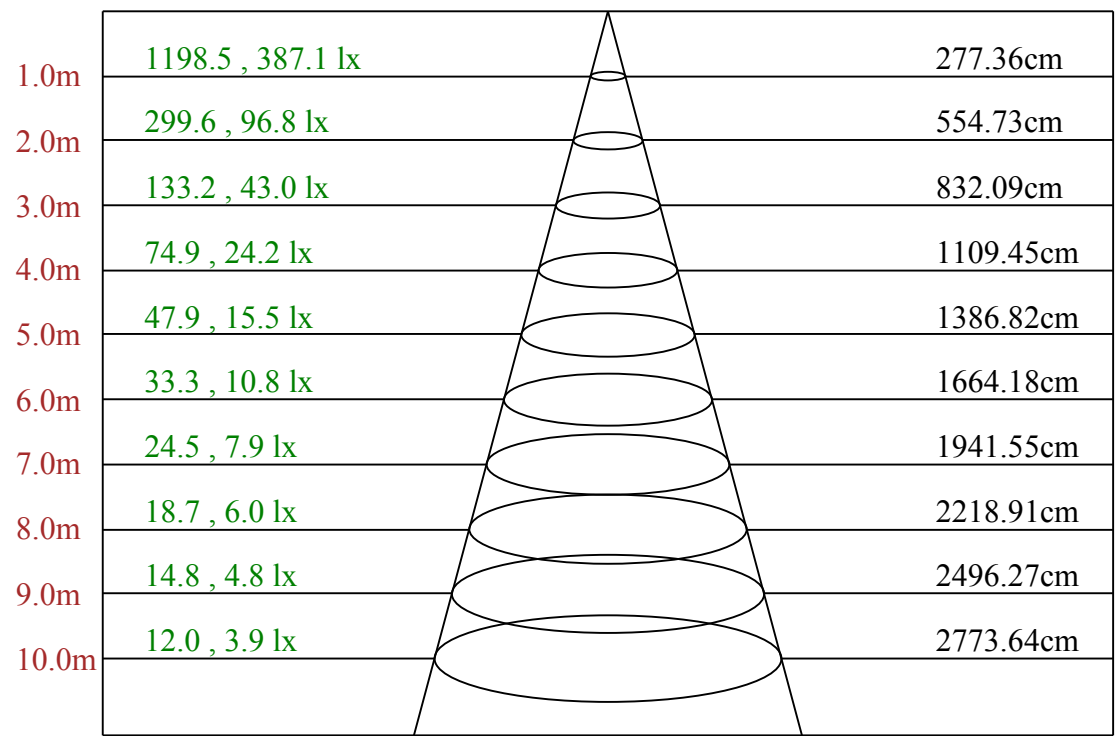
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	921.94	N.A.	26.94%
0-40	1502.67	N.A.	43.92%
0-60	2643.56	N.A.	77.26%
0-90	3417.87	N.A.	99.89%
0-120	3419.36	N.A.	99.93%
0-180	3421.70	N.A.	100.00%
60-90	774.31	N.A.	22.63%
90-120	1.49	N.A.	0.04%
90-130	1.93	N.A.	0.06%
90-150	3.02	N.A.	0.09%
90-180	3.80	N.A.	0.11%
0-62.04	2737.36	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	113.27
10-20	322.95
20-30	485.71
30-40	580.73
40-50	598.67
50-60	542.22
60-70	422.67
70-80	263.71
80-90	87.93
90-100	1.09
100-110	0.15
110-120	0.26
120-130	0.44
130-140	0.53
140-150	0.55
150-160	0.45
160-170	0.27
170-180	0.07





Max , Ave Beam angle of C90 plane 108.41

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	1198.50	1183.63	1163.32	1130.87	1088.57	1038.74	978.23	911.23	837.31
22.5	1198.50	1184.05	1163.53	1130.45	1088.99	1036.44	975.51	909.55	835.01
45.0	1198.50	1184.68	1162.06	1129.19	1085.22	1033.30	971.11	907.88	826.01
67.5	1198.50	1186.98	1166.04	1131.91	1086.90	1029.32	979.07	898.87	821.19
90.0	1198.50	1199.54	1179.86	1147.83	1105.74	1052.14	992.68	920.23	845.69
112.5	1198.50	1197.45	1179.65	1150.76	1110.35	1058.42	1012.36	933.21	858.25
135.0	1198.50	1199.54	1184.89	1157.67	1119.35	1069.94	1014.03	948.50	875.84
157.5	1198.50	1199.12	1185.93	1160.18	1126.05	1078.52	1023.04	959.38	890.92
180.0	1198.50	1192.01	1179.44	1154.95	1120.40	1075.59	1020.73	961.06	892.59
202.5	1198.50	1192.84	1179.86	1154.95	1119.14	1073.08	1019.69	956.45	886.73
225.0	1198.50	1191.59	1177.35	1151.60	1114.95	1067.63	1013.82	946.40	875.21
247.5	1198.50	1193.68	1178.40	1149.71	1110.56	1060.31	1002.73	936.35	862.65
270.0	1198.50	1198.92	1178.61	1145.94	1103.02	1049.63	986.18	916.67	842.13
292.5	1198.50	1193.89	1173.37	1140.71	1097.16	1045.02	982.63	912.69	836.27
315.0	1198.50	1193.26	1172.74	1140.50	1097.37	1044.18	982.42	915.20	840.04
337.5	1198.50	1191.17	1170.44	1138.61	1096.74	1044.18	984.09	915.62	842.97
360.0	1198.50	1183.63	1163.32	1130.87	1088.57	1038.74	978.23	911.23	837.31

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	758.59	678.19	592.76	506.07	420.65	341.50	263.82	183.63	78.94
22.5	755.66	671.90	591.92	498.54	410.39	325.17	247.49	169.39	71.61
45.0	746.86	662.48	573.70	486.39	392.38	301.30	213.78	137.14	58.63
67.5	744.98	654.53	566.59	476.55	384.42	282.87	190.96	101.55	37.69
90.0	764.45	676.09	587.31	500.21	402.43	294.81	201.01	107.20	35.60
112.5	788.32	692.21	610.76	511.94	416.88	325.59	231.16	138.40	65.75
135.0	796.49	716.08	629.61	539.99	451.43	359.72	271.78	191.79	99.67
157.5	815.12	734.51	653.90	566.59	479.69	394.68	314.07	229.69	119.35
180.0	817.63	738.49	658.71	574.75	489.95	409.34	327.47	242.04	130.44
202.5	811.35	734.09	650.97	564.70	481.16	394.89	310.51	229.27	122.49
225.0	800.25	718.39	632.96	547.11	456.87	366.21	279.31	194.10	103.85
247.5	783.29	701.85	614.11	522.41	429.02	333.33	241.63	151.38	71.19
270.0	760.05	673.37	583.13	492.05	392.17	297.74	199.54	110.76	36.43
292.5	757.54	670.65	578.10	487.44	396.36	300.67	207.50	122.28	54.23
315.0	756.70	674.00	588.36	497.07	405.57	314.70	231.37	154.10	70.35
337.5	763.61	679.44	592.55	506.70	418.76	333.96	253.77	175.88	79.77
360.0	758.59	678.19	592.76	506.07	420.65	341.50	263.82	183.63	78.94

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.21	0.21	0.21	0.21	0.21	0.42	0.42	0.84	0.84
22.5	0.42	0.00	0.00	0.21	0.21	0.21	0.21	0.42	0.63
45.0	0.84	0.21	0.21	0.21	0.21	0.21	0.63	0.42	0.84
67.5	1.26	0.42	0.00	0.21	0.21	0.21	0.63	0.63	0.84
90.0	1.26	0.00	0.00	0.00	0.21	0.21	0.63	0.42	0.63
112.5	2.09	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.42
135.0	5.03	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.42
157.5	7.33	0.00	0.00	0.00	0.21	0.21	0.42	0.42	0.21
180.0	11.31	0.00	0.00	0.00	0.00	0.00	0.42	0.42	0.42
202.5	11.52	0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.42
225.0	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.42
247.5	5.44	0.00	0.00	0.00	0.00	0.21	0.21	0.21	0.63
270.0	0.63	0.63	0.63	0.63	0.63	0.63	0.84	1.26	1.05
292.5	0.21	0.21	0.21	0.21	0.63	0.63	0.42	0.63	0.63
315.0	0.42	0.42	0.21	0.21	0.21	0.21	0.42	0.42	0.63
337.5	0.42	0.21	0.21	0.21	0.21	0.21	0.42	0.63	0.84
360.0	0.21	0.21	0.21	0.21	0.21	0.42	0.42	0.84	0.84

C/ $\gamma(^{\circ})$	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.84	0.84	0.84	0.84	0.84	1.05	0.84	0.84	0.84
22.5	0.63	0.84	0.84	0.84	0.84	0.84	0.84	0.84	1.05
45.0	0.84	0.84	0.63	1.05	0.84	0.84	1.05	0.84	1.05
67.5	0.84	0.84	1.05	0.84	0.84	0.84	1.05	0.84	0.84
90.0	0.84	0.84	1.05	1.26	1.05	1.05	1.26	1.05	1.05
112.5	0.63	0.63	0.63	0.84	1.05	0.63	1.05	1.05	0.84
135.0	0.63	0.42	0.84	0.84	0.84	0.84	0.84	1.05	0.84
157.5	0.42	0.63	0.63	0.84	0.84	0.84	1.05	1.05	0.84
180.0	0.21	0.84	0.84	0.63	1.05	0.84	0.84	0.63	0.63
202.5	0.42	0.84	0.42	0.84	0.84	0.84	0.84	0.84	1.05
225.0	0.42	0.63	0.84	1.05	1.05	0.84	0.84	0.84	0.84
247.5	0.42	0.84	0.63	0.84	0.84	1.05	0.84	0.84	1.05
270.0	1.26	1.47	1.68	1.47	1.68	1.68	1.47	1.68	1.47
292.5	0.63	1.05	1.05	0.84	1.05	0.84	1.05	1.26	0.84
315.0	0.84	0.84	1.05	1.05	1.05	1.05	1.05	0.84	1.05
337.5	0.63	0.84	1.05	1.05	1.05	1.05	0.84	1.05	1.05
360.0	0.84	0.84	0.84	0.84	0.84	1.05	0.84	0.84	0.84

C/ $\gamma(^{\circ})$	180.0
0.0	1.05
22.5	1.05
45.0	1.05
67.5	1.05
90.0	1.05
112.5	1.05
135.0	1.05
157.5	1.05
180.0	1.05
202.5	1.05
225.0	1.05
247.5	1.05
270.0	1.05
292.5	1.05
315.0	1.05
337.5	1.05
360.0	1.05