



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

Luminaire:

Report No:

Test No:

LampCAT:

Lamp flux(lm): 1665.9

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.03

Current(A): 0.1028

Power (W): 12.1080

PF: 0.9816

Ballast type:

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 1665.92

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 137.59

Central intensity(cd): 583.936

Maximum intensity(cd): 583.936

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=112.3

[C90/270]Total=112.4

Field angle(10%Imax): [C0/180]Total=160.7

[C90/270]Total=158.8

Maximum s/h(1/2): C0_180=1.32 C90_270=1.28

Maximum s/h(1/4): C0_180=1.88 C90_270=1.39

Up flux rate of lamp(%): 0.56%

Down flux rate of lamp(%): 99.44%

Up flux rate of LUM(%): 0.56%

Down flux rate of LUM(%): 99.44%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.897%

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

Date:
Humidity(%): 58%

Operator: Zac

Zonal flux distribution table

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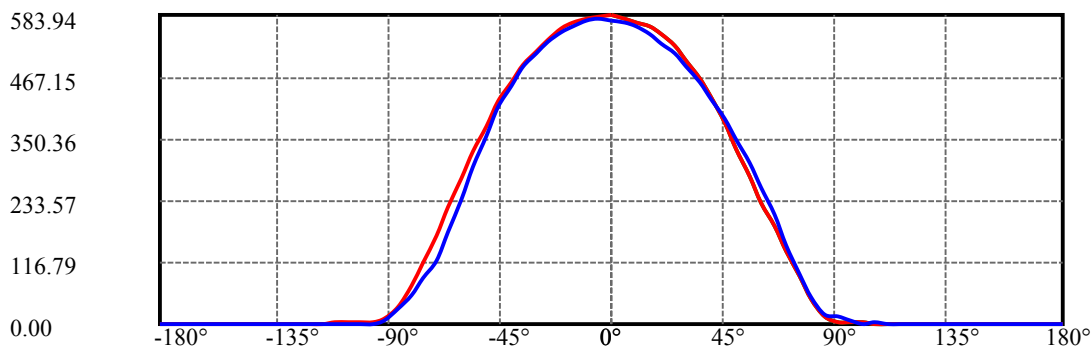
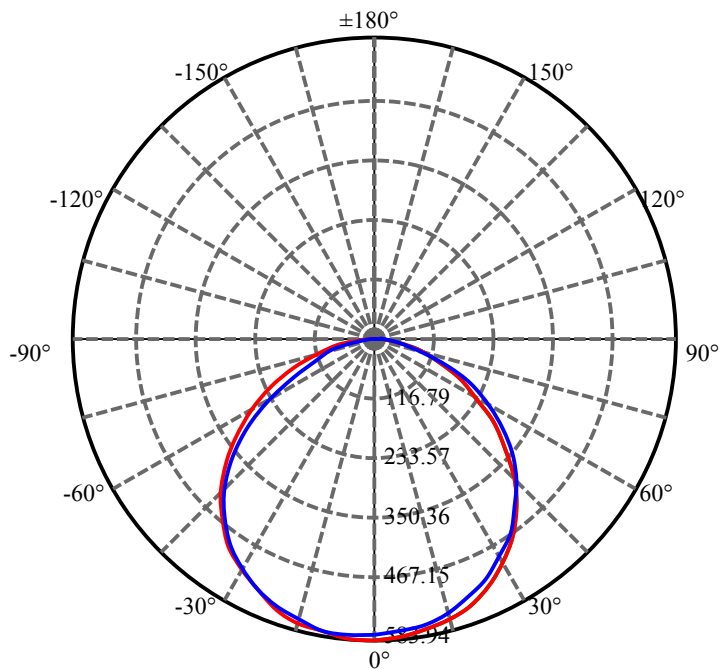
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	576.133	.000	.000	.000%	.000%
5.0	574.146	13.751	13.751	.825%	.825%
10.0	568.884	40.890	54.641	2.454%	3.280%
15.0	558.999	66.905	121.546	4.016%	7.296%
20.0	545.116	90.995	212.541	5.462%	12.758%
25.0	525.561	112.294	324.835	6.741%	19.499%
30.0	502.635	130.119	454.954	7.811%	27.309%
35.0	474.207	143.847	598.801	8.635%	35.944%
40.0	440.059	152.538	751.339	9.156%	45.101%
45.0	400.974	155.724	907.063	9.348%	54.448%
50.0	354.749	152.705	1059.768	9.166%	63.615%
55.0	303.937	143.220	1202.989	8.597%	72.212%
60.0	249.993	128.039	1331.028	7.686%	79.897%
65.0	195.075	108.197	1439.225	6.495%	86.392%
70.0	141.962	85.340	1524.565	5.123%	91.515%
75.0	94.991	61.936	1586.500	3.718%	95.233%
80.0	53.739	39.796	1626.296	2.389%	97.621%
85.0	23.660	21.031	1647.327	1.262%	98.884%
90.0	9.970	9.208	1656.535	.553%	99.437%
95.0	3.239	3.617	1660.152	.217%	99.654%
100.0	1.626	1.322	1661.474	.079%	99.733%
105.0	1.975	.963	1662.437	.058%	99.791%
110.0	1.048	.790	1663.227	.047%	99.838%
115.0	.518	.396	1663.624	.024%	99.862%
120.0	.482	.243	1663.866	.015%	99.877%
125.0	.446	.214	1664.081	.013%	99.890%
130.0	.482	.202	1664.282	.012%	99.902%
135.0	.638	.226	1664.509	.014%	99.915%
140.0	.674	.243	1664.752	.015%	99.930%
145.0	.735	.235	1664.987	.014%	99.944%
150.0	.783	.223	1665.210	.013%	99.957%
155.0	.819	.203	1665.413	.012%	99.970%
160.0	.891	.179	1665.592	.011%	99.980%
165.0	.867	.145	1665.737	.009%	99.989%
170.0	.819	.100	1665.837	.006%	99.995%
175.0	.903	.062	1665.899	.004%	99.999%
180.0	.843	.021	1665.920	.001%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	454.95	27.31%	27.31%
0-40	751.34	45.10%	45.10%
0-60	1331.03	79.90%	79.90%
0-90	1656.54	99.44%	99.44%
0-120	1663.87	99.88%	99.88%
0-180	1665.92	100.00%	100.00%
60-90	453.55	27.23%	27.23%
90-120	16.54	0.99%	0.99%
90-130	16.96	1.02%	1.02%
90-150	17.88	1.07%	1.07%
90-180	18.57	1.11%	1.11%
0-60.08	1332.74	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	54.64
10-20	157.90
20-30	242.41
30-40	296.39
40-50	308.43
50-60	271.26
60-70	193.54
70-80	101.73
80-90	30.24
90-100	4.94
100-110	1.75
110-120	0.64
120-130	0.42
130-140	0.47
140-150	0.46
150-160	0.38
160-170	0.24
170-180	0.06



C0(Max):

C0/C180:

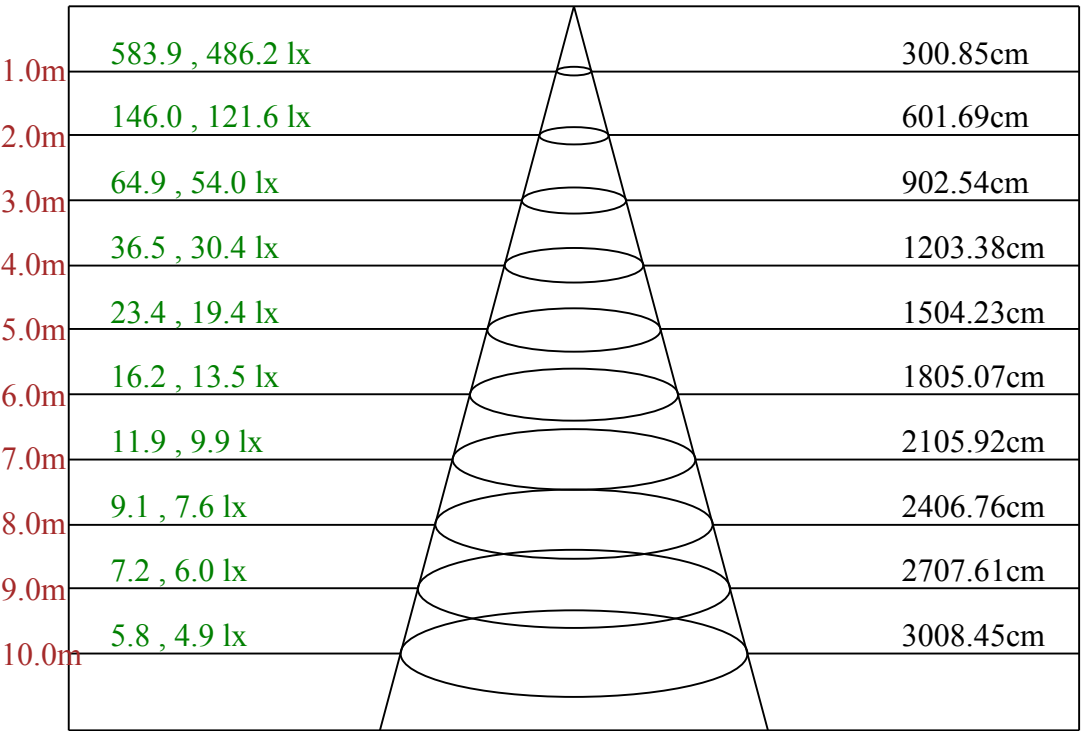
C90/C270:

Field angle(10%Imax):C0/180Left:81.9 Right:78.8

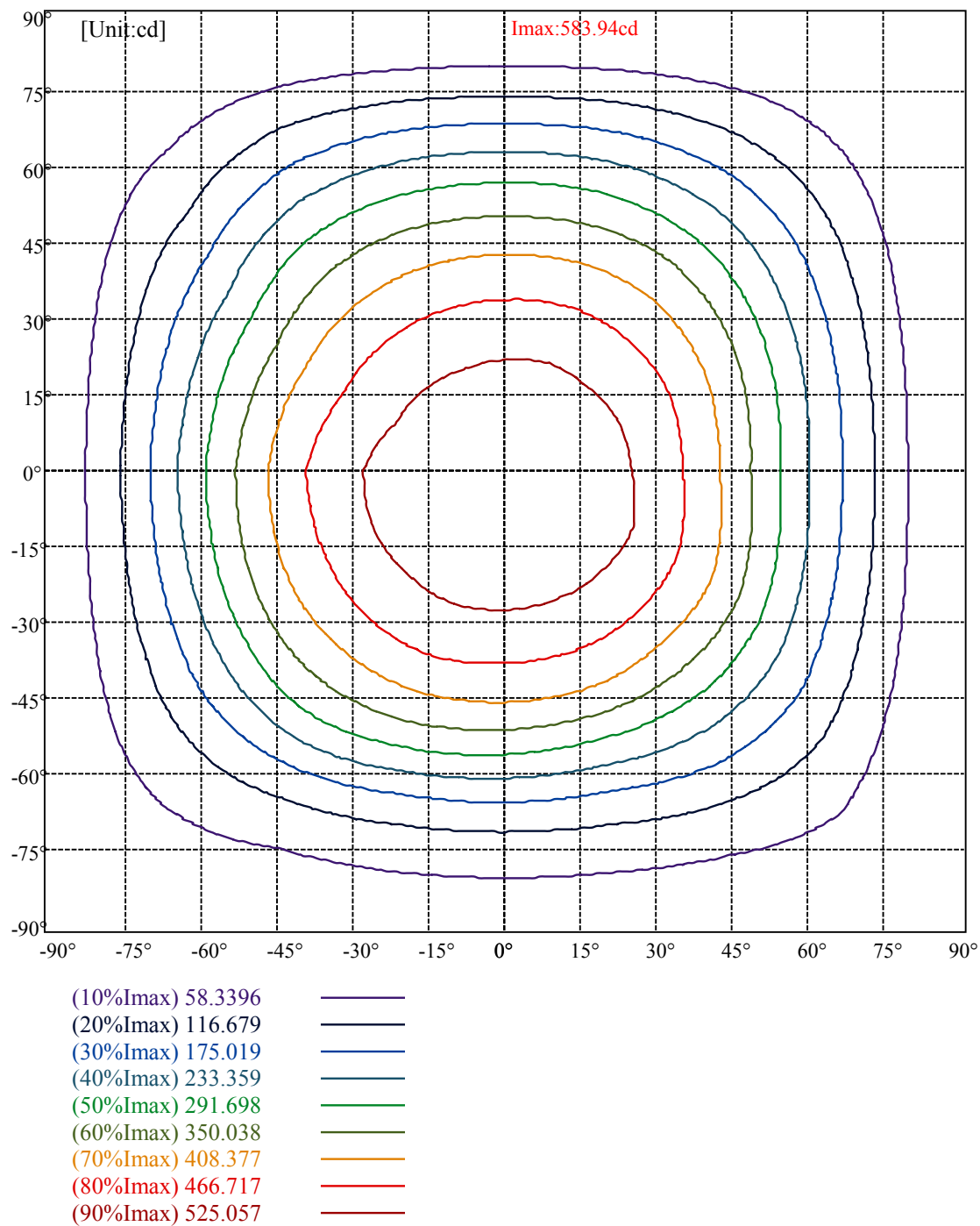
:C90/270Left:74.7 Right:84.1

Beam Angle(50%Imax):C0/180Left:58.3 Right:53.9

:C90/270Left:50.8 Right:61.6



Max , Ave Beam angle of C0plane112.51



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	583.94	577.96	570.06	562.94	548.29	524.60	497.63	465.45	427.31
22.5	579.89	574.50	564.48	558.51	545.79	520.75	497.63	468.15	430.58
45.0	577.58	572.95	565.25	556.39	538.47	513.81	494.16	463.53	431.35
67.5	575.46	572.95	566.60	551.18	534.42	516.89	488.57	461.99	427.31
90.0	573.92	568.52	561.59	548.87	531.15	511.69	485.68	457.36	424.03
112.5	571.41	567.56	560.43	544.25	530.19	510.73	485.30	456.40	423.45
135.0	571.99	570.06	563.13	549.84	533.08	512.65	488.57	458.13	426.34
157.5	574.88	572.18	566.79	553.88	537.31	517.28	493.97	464.30	432.32
180.0	583.94	581.24	575.27	568.52	556.77	535.19	514.77	490.50	458.52
202.5	579.89	578.35	573.53	567.37	555.23	536.35	516.51	490.50	453.89
225.0	577.58	576.81	573.15	565.83	556.77	535.58	512.65	486.45	457.17
247.5	575.46	577.00	575.07	565.63	552.53	536.35	515.54	490.31	456.40
270.0	573.92	576.23	573.53	562.36	550.80	534.81	512.65	485.30	449.08
292.5	571.41	570.64	570.26	564.67	550.22	533.46	512.65	482.79	450.04
315.0	571.99	573.92	571.03	563.51	551.57	535.00	510.15	484.91	444.45
337.5	574.88	575.46	571.99	560.24	549.26	533.85	515.74	481.25	448.69
360.0	583.94	577.96	570.06	562.94	548.29	524.60	497.63	465.45	427.31
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	381.65	331.37	280.89	229.07	184.18	138.33	91.70	48.36	15.99
22.5	391.86	345.43	294.95	242.55	194.97	145.26	97.10	50.67	17.72
45.0	394.56	353.71	302.28	252.96	202.67	149.69	97.87	50.09	20.04
67.5	391.86	350.82	306.32	257.77	207.30	152.97	98.06	49.90	20.42
90.0	387.04	347.16	303.05	257.00	205.18	150.27	94.79	49.32	19.65
112.5	388.78	348.51	304.01	256.81	206.91	152.78	97.87	49.13	21.39
135.0	389.16	349.48	305.74	257.00	205.18	153.35	101.14	50.86	21.00
157.5	392.05	345.43	299.19	244.48	193.81	139.68	93.63	50.09	19.27
180.0	419.22	372.40	327.71	274.34	221.75	166.84	116.94	73.02	34.10
202.5	419.79	374.33	327.32	266.83	209.22	151.62	99.41	60.69	28.90
225.0	415.17	372.21	322.31	268.75	192.46	129.46	79.37	48.16	24.47
247.5	414.59	367.39	309.21	242.94	174.16	120.79	83.81	53.17	24.66
270.0	411.32	357.18	297.84	234.85	172.43	120.41	88.81	55.87	27.74
292.5	408.43	351.59	287.25	228.49	169.15	120.41	85.92	53.75	25.43
315.0	403.03	350.82	293.80	240.05	186.10	131.78	90.74	53.94	26.59
337.5	407.08	358.15	301.12	246.02	195.74	147.77	102.69	62.81	31.21
360.0	381.65	331.37	280.89	229.07	184.18	138.33	91.70	48.36	15.99
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	4.43	2.12	2.70	1.35	0.39	0.39	0.39	0.39	0.39
22.5	7.13	3.66	0.39	0.39	0.39	0.39	0.58	0.58	0.58
45.0	11.75	0.39	5.78	2.12	0.39	0.58	0.77	0.77	0.77
67.5	13.68	4.82	0.77	3.47	0.96	0.39	0.58	0.77	0.77
90.0	13.29	6.74	0.19	3.47	1.73	0.58	0.39	0.58	0.77
112.5	14.45	6.55	0.39	5.78	2.70	0.96	0.58	0.58	0.58
135.0	14.06	1.93	5.97	4.82	1.35	0.58	0.58	0.58	0.77
157.5	11.17	4.05	2.31	0.58	1.35	1.16	0.77	0.58	0.58
180.0	11.37	5.01	4.43	5.01	3.08	1.35	0.39	0.39	0.00
202.5	10.60	4.62	1.54	0.19	0.96	0.58	0.58	0.77	0.39
225.0	8.48	4.43	0.19	2.51	1.16	0.39	0.39	0.39	0.58
247.5	7.51	2.51	0.39	0.58	1.16	0.58	0.39	0.00	0.39
270.0	6.36	0.77	0.19	0.00	0.39	0.19	0.39	0.19	0.39
292.5	6.94	1.16	0.00	0.39	0.19	0.00	0.39	0.19	0.19
315.0	8.48	2.51	0.00	0.96	0.39	0.19	0.19	0.19	0.39
337.5	9.83	0.58	0.77	0.00	0.19	0.00	0.39	0.19	0.19
360.0	4.43	2.12	2.70	1.35	0.39	0.39	0.39	0.39	0.39

Intensity data(cd)									Page: 8 Total:8
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.39	0.58	0.77	0.77	0.58	0.58	0.58	0.58	0.58
22.5	0.77	0.96	0.77	0.96	0.96	0.96	0.96	0.77	0.96
45.0	0.77	0.77	0.77	0.96	0.96	0.96	0.96	0.77	0.96
67.5	0.77	0.96	0.96	0.96	0.96	0.77	0.96	0.77	0.96
90.0	0.77	0.77	0.96	0.77	0.58	1.16	0.96	0.96	0.96
112.5	0.77	0.77	0.77	0.96	0.77	1.16	0.96	0.77	0.96
135.0	0.77	0.77	0.96	0.96	0.96	1.35	0.96	0.77	0.96
157.5	0.96	0.96	0.96	0.77	1.16	0.96	1.16	0.96	1.16
180.0	0.39	0.39	0.77	0.58	0.77	0.77	0.77	0.77	0.77
202.5	0.58	0.58	0.77	0.77	0.96	0.77	0.77	0.96	0.96
225.0	0.39	0.58	0.39	0.77	0.77	0.77	0.77	0.58	0.96
247.5	0.58	0.58	0.58	0.77	0.77	0.77	0.96	0.96	0.96
270.0	0.58	0.39	0.58	0.58	0.77	0.77	0.58	0.96	0.77
292.5	0.58	0.58	0.58	0.58	0.58	0.77	0.96	0.96	0.77
315.0	0.58	0.58	0.58	0.77	0.77	0.77	0.77	0.77	0.96
337.5	0.58	0.58	0.58	0.58	0.77	0.96	0.77	0.77	0.77
360.0	0.39	0.58	0.77	0.77	0.58	0.58	0.58	0.58	0.58
C/γ(°)	180.0								
0.0	0.58								
22.5	0.77								
45.0	0.58								
67.5	0.77								
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135.0	0.96								
157.5	1.16								
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