



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Report No	:	Voltage	:	120 V
Test No	:	Current	:	0.1139 A
LumCAT	:	Power	:	13.253 W
Luminaire	:	PF	:	0.9696
LampCAT	:	Ballast type	:	
Lamp flux	:	Width	:	0 mm
Number of Lamps	:	Length	:	0 mm
Phm Type	:	Height	:	0 mm

Photometric Results

Lumens(lm)	:	767.43	Central intensity(cd)	:	189.660
Efficiency(%)	:	100.00%	Maximum intensity(cd)	:	191.285
Luminous Efficacy(lm/W)	:	57.91	Angle of maximum intensity	:	C=90.0 γ =0.0
Beam Angle(50%Imax)	:	[C0/180]Total=125.8 [C90/270]Total=126.0			
Field angle(10%Imax)	:	[C0/180]Total=198.4 [C90/270]Total=221.3			
Maximum s/h(1/2)	:	C0_180=1.30 C90_270=1.30			
Maximum s/h(1/4)	:	C0_180=1.44 C90_270=1.44			
Up flux rate of lamp(%)	:	12.61%			
Down flux rate of lamp(%)	:	87.39%			
Up flux rate of LUM(%)	:	12.61%			
Down flux rate of LUM(%)	:	87.39%			
CIE Type	:	Semidirect lighting			
Output flux ratio in π solid angle	:	59.643%			

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

Date:
Humidity(%): 59%

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	190.168	0.000	0	0.00%	0.00%
5.0	189.432	4.538	4.538	0.59%	0.59%
10.0	187.249	13.475	18.013	1.76%	2.35%
15.0	183.670	22.003	40.016	2.87%	5.21%
20.0	178.873	29.879	69.894	3.89%	9.11%
25.0	172.730	36.877	106.771	4.81%	13.91%
30.0	165.623	42.819	149.59	5.58%	19.49%
35.0	157.551	47.590	197.179	6.20%	25.69%
40.0	148.261	51.022	248.202	6.65%	32.34%
45.0	138.209	53.042	301.244	6.91%	39.25%
50.0	126.914	53.572	354.816	6.98%	46.23%
55.0	115.086	52.619	407.435	6.86%	53.09%
60.0	102.470	50.287	457.723	6.55%	59.64%
65.0	89.804	46.742	504.465	6.09%	65.73%
70.0	77.773	42.432	546.896	5.53%	71.26%
75.0	66.782	37.784	584.681	4.92%	76.19%
80.0	56.756	33.055	617.736	4.31%	80.49%
85.0	48.329	28.554	646.29	3.72%	84.21%
90.0	40.587	24.346	670.636	3.17%	87.39%
95.0	33.607	20.315	690.951	2.65%	90.03%
100.0	23.784	15.594	706.545	2.03%	92.07%
105.0	17.946	11.166	717.711	1.45%	93.52%
110.0	15.534	8.751	726.462	1.14%	94.66%
115.0	12.767	7.166	733.628	0.93%	95.60%
120.0	11.524	5.905	739.533	0.77%	96.36%
125.0	11.600	5.345	744.878	0.70%	97.06%
130.0	12.057	5.144	750.022	0.67%	97.73%
135.0	11.778	4.816	754.838	0.63%	98.36%
140.0	10.432	4.112	758.951	0.54%	98.89%
145.0	8.529	3.163	762.114	0.41%	99.31%
150.0	6.600	2.228	764.342	0.29%	99.60%
155.0	4.797	1.442	765.784	0.19%	99.79%
160.0	3.376	0.857	766.641	0.11%	99.90%
165.0	2.234	0.462	767.104	0.06%	99.96%
170.0	1.421	0.217	767.321	0.03%	99.99%
175.0	1.015	0.087	767.408	0.01%	100.00%
180.0	1.117	0.025	767.433	0.00%	100.00%

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

Date:
Humidity(%): 59%

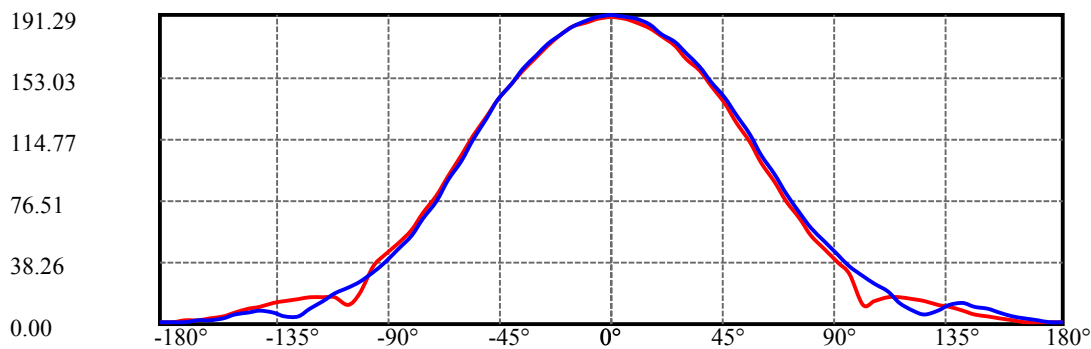
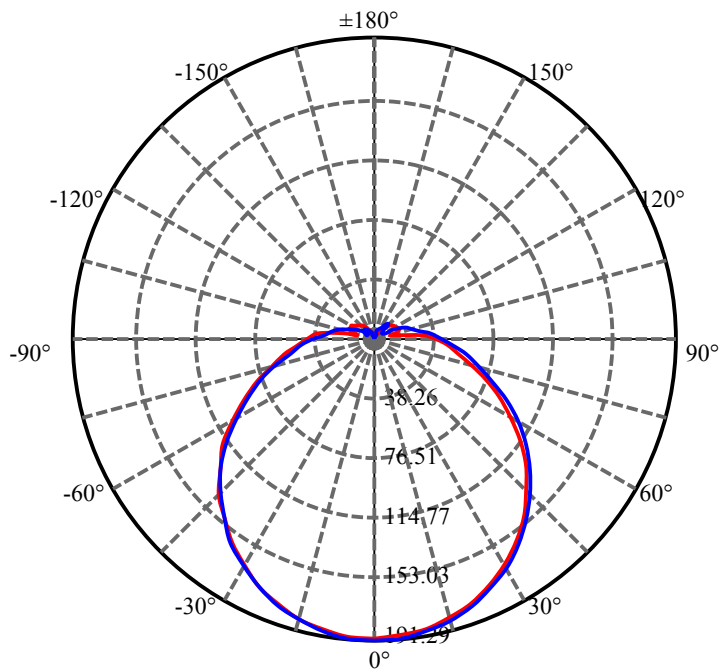
Operator: Zac

ZONAL LUMEN SUMMARY

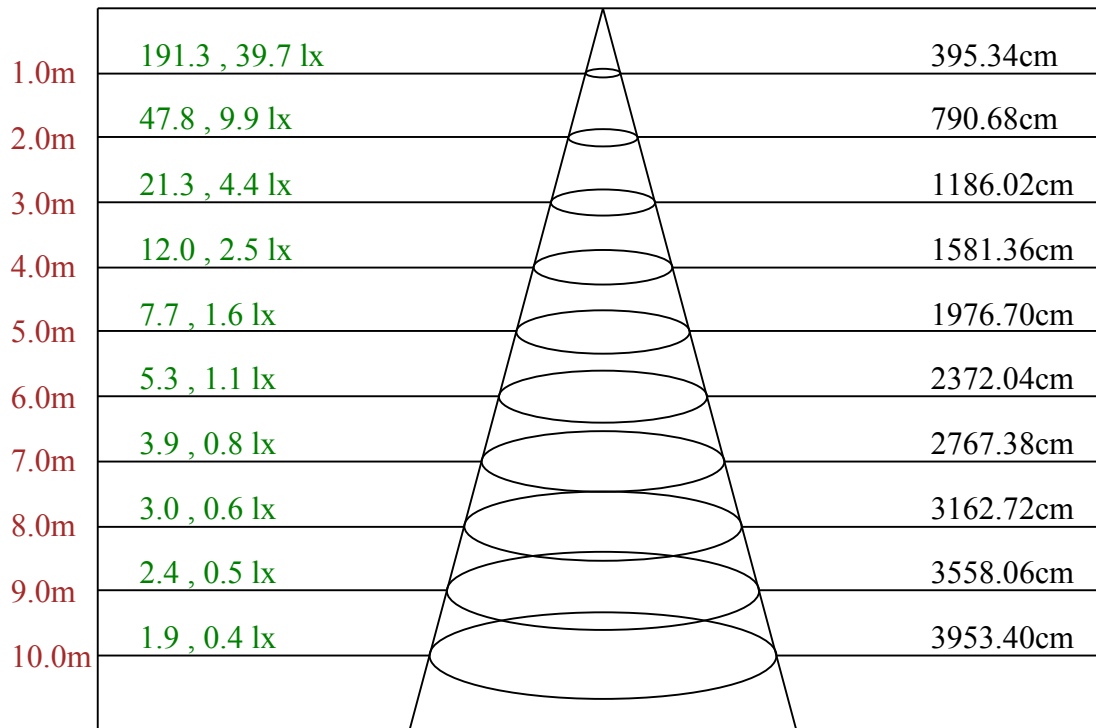
Zone	Lumens	%Lamp	%Fixt
0-30	149.59	19.49%	19.49%
0-40	248.20	32.34%	32.34%
0-60	457.72	59.64%	59.64%
0-90	670.64	87.39%	87.39%
0-120	739.53	96.36%	96.36%
0-180	767.43	100.00%	100.00%
60-90	212.91	27.74%	27.74%
90-120	68.90	8.98%	8.98%
90-130	79.39	10.34%	10.34%
90-150	93.71	12.21%	12.21%
90-180	96.77	12.61%	12.61%
0-79.43	613.95	80.00%	80.00%

ZONAL LUMEN SUMMARY

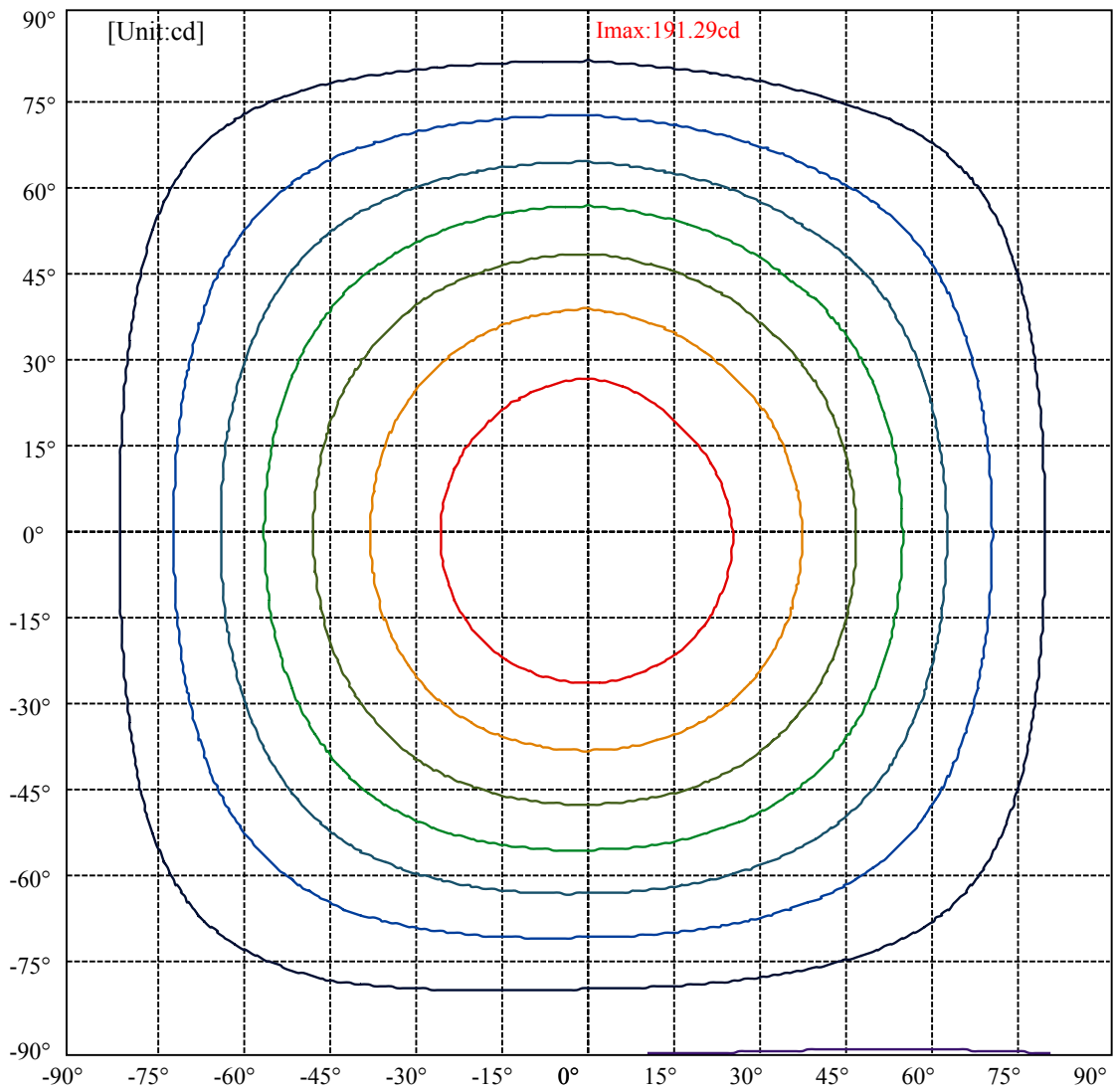
0-10	18.01
10-20	51.88
20-30	79.70
30-40	98.61
40-50	106.61
50-60	102.91
60-70	89.17
70-80	70.84
80-90	52.90
90-100	35.91
100-110	19.92
110-120	13.07
120-130	10.49
130-140	8.93
140-150	5.39
150-160	2.30
160-170	0.68
170-180	0.09



C0/C180: —
 C90/C270: —
 Field angle(10%Imax):C0/180Left:100.3 Right:98.1
 :C90/270Left:110.2 Right:111.1
 Beam Angle(50%Imax):C0/180Left:63.7 Right:62.1
 :C90/270Left:62.3 Right:63.7



Max , Ave Beam angle of C90 plane 126.33



(10%Imax)	38.257	—
(20%Imax)	57.3855	—
(30%Imax)	76.514	—
(40%Imax)	95.6425	—
(50%Imax)	114.771	—
(60%Imax)	133.9	—
(70%Imax)	153.028	—
(80%Imax)	172.157	—

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	189.66	188.85	186.61	183.16	178.29	171.99	164.48	156.56	147.02
45.0	189.46	188.04	185.60	181.74	176.66	170.37	163.06	154.73	144.78
90.0	191.29	190.68	188.44	184.99	179.91	174.23	167.12	159.20	150.06
135.0	190.27	189.66	187.43	183.57	178.90	172.40	165.70	157.98	149.05
180.0	189.66	189.25	187.02	183.57	178.90	172.81	165.29	157.37	148.64
225.0	189.46	188.85	187.22	183.77	179.51	173.42	166.31	158.39	149.66
270.0	191.29	190.47	188.24	184.58	179.71	173.82	166.51	158.39	148.44
315.0	190.27	189.66	187.43	183.98	179.10	172.81	166.51	157.78	148.44
360.0	189.66	188.85	186.61	183.16	178.29	171.99	164.48	156.56	147.02

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	136.66	124.88	112.70	99.91	87.93	75.54	64.78	54.83	46.30
45.0	134.63	122.65	110.87	98.28	85.49	73.71	63.76	54.22	45.89
90.0	140.32	129.15	117.57	104.98	92.39	80.41	69.24	59.29	50.77
135.0	139.10	128.54	116.96	104.58	92.39	80.62	69.04	58.89	50.77
180.0	139.10	127.93	116.76	104.17	91.38	79.60	68.64	58.69	50.16
225.0	139.71	128.74	117.57	104.98	92.19	80.41	69.24	59.09	50.56
270.0	138.49	126.91	114.32	101.53	88.74	76.15	64.98	54.83	46.50
315.0	137.68	126.51	113.92	101.33	87.93	75.74	64.57	54.22	45.69
360.0	136.66	124.88	112.70	99.91	87.93	75.54	64.78	54.83	46.30

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	38.58	30.87	11.37	14.21	17.06	16.45	15.43	14.21	12.39
45.0	38.38	32.08	22.74	14.62	10.76	9.95	11.98	14.01	13.81
90.0	43.05	35.94	30.26	25.38	20.71	13.40	8.12	5.69	8.73
135.0	43.25	36.15	28.63	19.09	13.40	10.97	12.39	15.64	16.65
180.0	42.85	35.74	19.49	11.37	16.85	16.45	16.45	15.64	14.21
225.0	42.85	35.74	28.23	19.70	13.81	10.36	9.34	11.58	13.61
270.0	38.58	31.88	26.60	23.15	19.29	14.21	8.94	5.28	5.28
315.0	37.16	30.46	22.95	16.04	12.39	10.36	9.54	10.76	11.78
360.0	38.58	30.87	11.37	14.21	17.06	16.45	15.43	14.21	12.39

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	10.56	8.53	6.30	4.87	3.45	2.44	1.63	1.02	0.81
45.0	11.78	9.54	7.72	5.48	4.26	3.05	2.03	1.42	1.22
90.0	11.98	12.59	10.97	8.94	6.70	4.87	3.05	1.83	1.42
135.0	15.43	13.40	11.37	9.14	6.90	5.28	3.25	1.83	1.22
180.0	12.59	10.76	8.94	7.51	5.28	3.66	2.44	1.83	1.22
225.0	13.20	11.17	8.73	6.30	4.67	3.25	2.44	1.42	1.02
270.0	7.51	8.73	7.72	5.69	3.86	2.44	1.83	1.02	0.61
315.0	11.17	8.73	6.50	4.87	3.25	2.03	1.22	1.02	0.61
360.0	10.56	8.53	6.30	4.87	3.45	2.44	1.63	1.02	0.81

C/γ(°)	180.0
0.0	1.22
45.0	0.81
90.0	1.22
135.0	1.22
180.0	1.22
225.0	0.81
270.0	1.22
315.0	1.22
360.0	1.22