



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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ASD Lighting Corp.

Report No	:	Voltage	:	120.010 V
Test No	:	Current	:	0.400 A
LumCAT	:	Power	:	47.690 W
Luminaire	:	PF	:	0.995
LampCAT	:	Ballast type	:	
Lamp flux	:	Width	:	0 mm
Number of Lamps	:	Length	:	0 mm
Phm Type	:	Height	:	0 mm

Photometric Results

Lumens(lm)	:	5272.73	Central intensity(cd)	:	2240.561
Efficiency(%)	:	0.00%	Maximum intensity(cd)	:	2243.440
Luminous Efficacy(lm/W)	:	110.56	Angle of maximum intensity	:	C=22.5 γ =0.0
Beam Angle(50%Imax)	:	[C0/180]Total=99.7 [C90/270]Total=95.1			
Field angle(10%Imax)	:	[C0/180]Total=155.9 [C90/270]Total=160.3			
Maximum s/h(1/2)	:	C0_180=1.19 C90_270=1.13			
Maximum s/h(1/4)	:	C0_180=1.30 C90_270=1.24			
Up flux rate of lamp(%)	:	0.00%			
Down flux rate of lamp(%)	:	0.00%			
Up flux rate of LUM(%)	:	0.85%			
Down flux rate of LUM(%)	:	99.15%			
CIE Type	:	Direct lighting			
Output flux ratio in π solid angle	:	79.960%			

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 59.0%

Operator:
Distance(m): 15.49

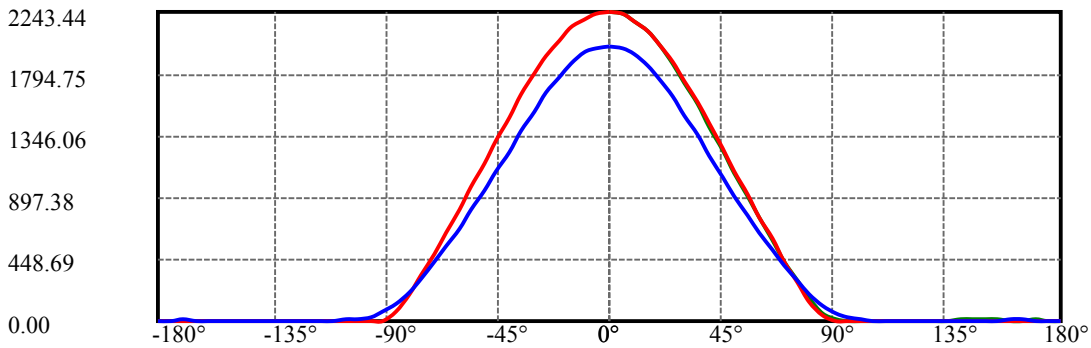
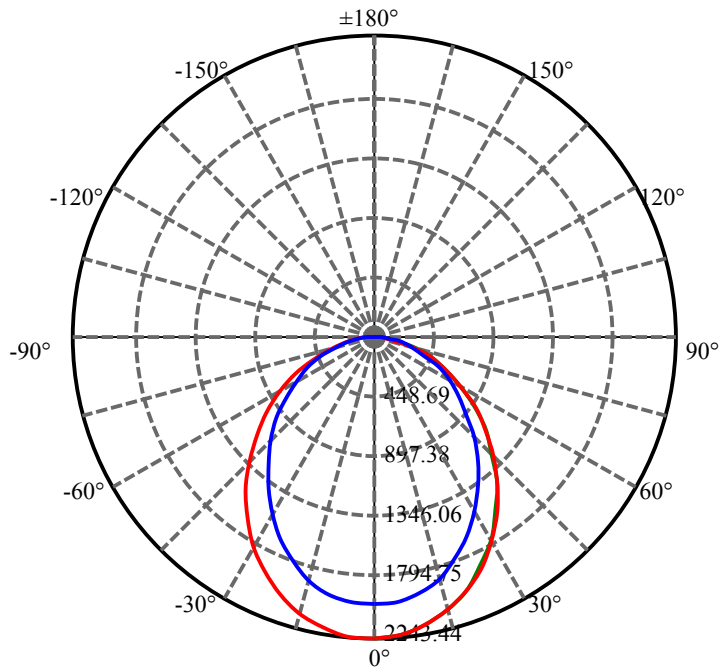
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2133.008	0.000	0	0.00%	0.00%
5.0	2120.006	50.847	50.847	0.00%	0.96%
10.0	2076.892	150.165	201.012	0.00%	3.81%
15.0	2003.320	242.112	443.124	0.00%	8.40%
20.0	1903.685	322.142	765.266	0.00%	14.51%
25.0	1783.340	386.934	1152.2	0.00%	21.85%
30.0	1645.539	434.261	1586.46	0.00%	30.09%
35.0	1494.452	462.832	2049.292	0.00%	38.87%
40.0	1339.466	473.327	2522.619	0.00%	47.84%
45.0	1179.800	467.033	2989.652	0.00%	56.70%
50.0	1022.385	445.641	3435.293	0.00%	65.15%
55.0	870.338	412.296	3847.589	0.00%	72.97%
60.0	720.180	368.464	4216.053	0.00%	79.96%
65.0	577.311	316.212	4532.264	0.00%	85.96%
70.0	437.396	257.709	4789.973	0.00%	90.84%
75.0	305.609	195.011	4984.984	0.00%	94.54%
80.0	186.059	132.349	5117.333	0.00%	97.05%
85.0	91.327	75.998	5193.331	0.00%	98.49%
90.0	34.956	34.842	5228.173	0.00%	99.15%
95.0	13.212	13.222	5241.395	0.00%	99.41%
100.0	6.268	5.283	5246.678	0.00%	99.51%
105.0	3.374	2.566	5249.244	0.00%	99.55%
110.0	3.659	1.825	5251.069	0.00%	99.59%
115.0	3.929	1.912	5252.98	0.00%	99.63%
120.0	4.169	1.961	5254.942	0.00%	99.66%
125.0	4.439	1.984	5256.926	0.00%	99.70%
130.0	4.904	2.031	5258.958	0.00%	99.74%
135.0	5.489	2.100	5261.058	0.00%	99.78%
140.0	6.028	2.131	5263.189	0.00%	99.82%
145.0	6.358	2.065	5265.254	0.00%	99.86%
150.0	6.493	1.891	5267.146	0.00%	99.89%
155.0	6.793	1.680	5268.826	0.00%	99.93%
160.0	6.703	1.414	5270.24	0.00%	99.95%
165.0	6.793	1.112	5271.352	0.00%	99.97%
170.0	6.358	0.781	5272.134	0.00%	99.99%
175.0	6.148	0.448	5272.582	0.00%	100.00%
180.0	6.358	0.150	5272.731	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1586.46	N.A.	30.09%
0-40	2522.62	N.A.	47.84%
0-60	4216.05	N.A.	79.96%
0-90	5228.17	N.A.	99.15%
0-120	5254.94	N.A.	99.66%
0-180	5272.73	N.A.	100.00%
60-90	1012.12	N.A.	19.20%
90-120	26.77	N.A.	0.51%
90-130	30.78	N.A.	0.58%
90-150	38.97	N.A.	0.74%
90-180	44.41	N.A.	0.84%
0-60.03	4218.19	N.A.	80.00%

ZONAL LUMEN SUMMARY

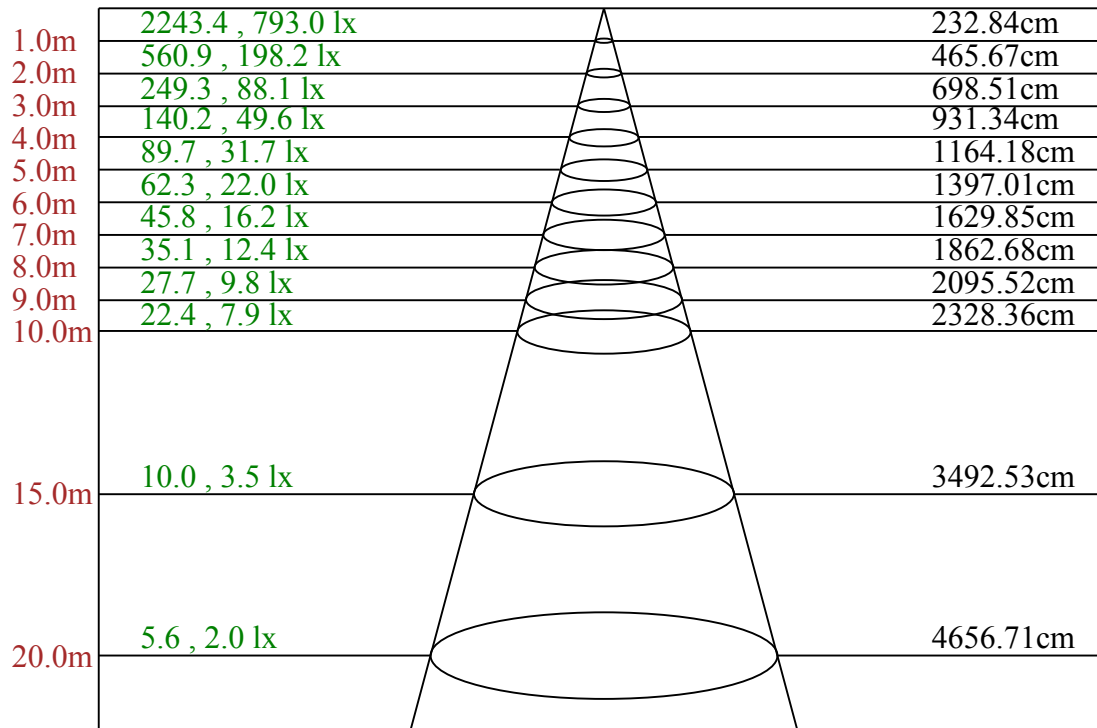
0-10	201.01
10-20	564.25
20-30	821.19
30-40	936.16
40-50	912.67
50-60	780.76
60-70	573.92
70-80	327.36
80-90	110.84
90-100	18.50
100-110	4.39
110-120	3.87
120-130	4.02
130-140	4.23
140-150	3.96
150-160	3.09
160-170	1.89
170-180	0.45



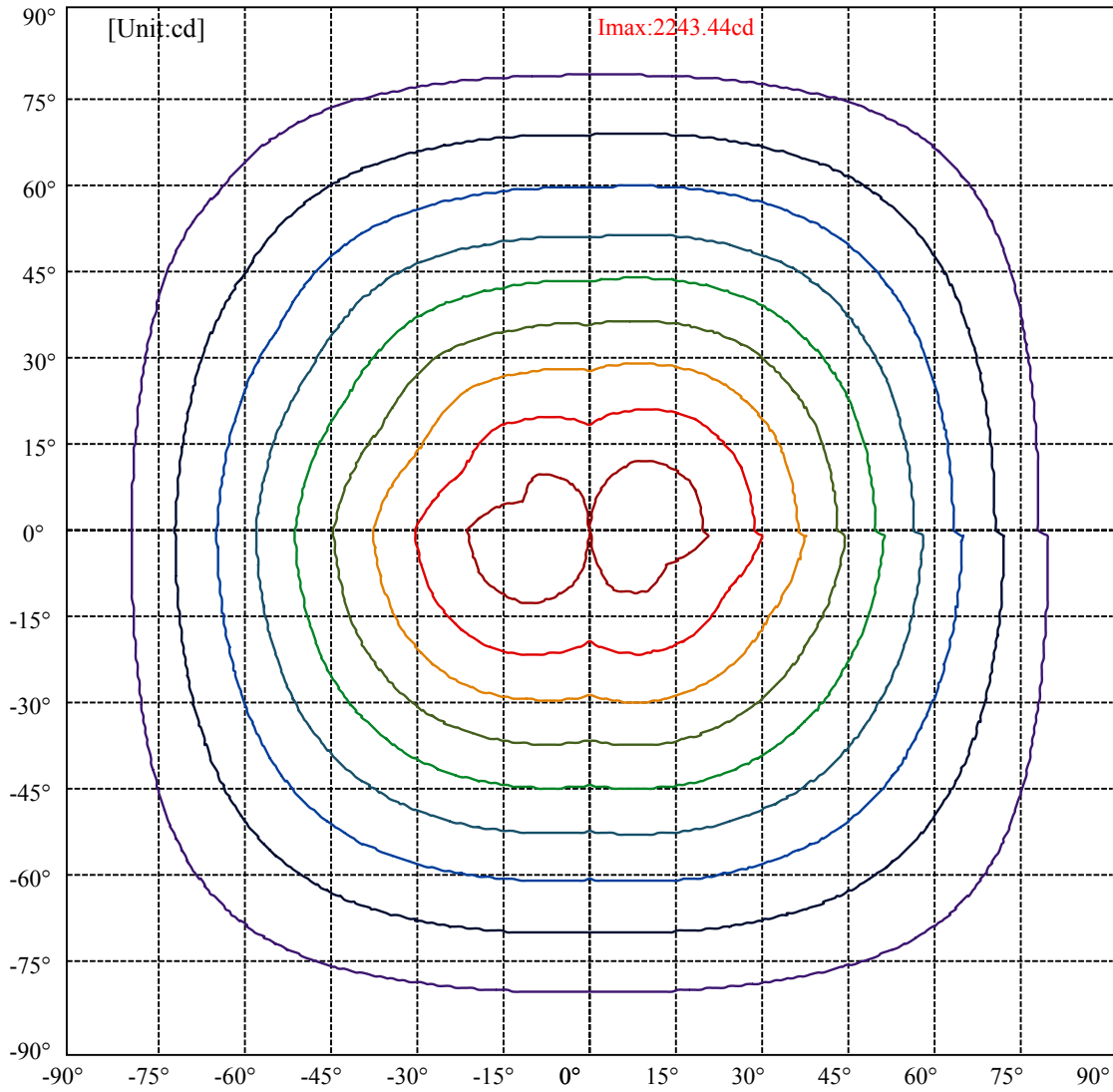
C22.5(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:78.8 Right:77.1
 :C90/270Left:80.8 Right:79.5

Beam Angle(50%Imax):C0/180Left:50.6 Right:49.1
 :C90/270Left:48.2 Right:46.9



Max , Ave Beam angle of C22.5 plane 98.68



(10%Imax) 223.869	—
(20%Imax) 447.738	—
(30%Imax) 671.607	—
(40%Imax) 895.476	—
(50%Imax) 1119.34	—
(60%Imax) 1343.21	—
(70%Imax) 1567.08	—
(80%Imax) 1790.95	—
(90%Imax) 2014.82	—

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 59.0%

Operator:
Distance(m): 15.49

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	2240.56	2222.57	2175.78	2102.12	2002.54	1884.73	1744.84	1591.04	1431.00
22.5	2243.44	2225.92	2178.66	2102.84	1999.90	1872.97	1734.53	1577.61	1412.29
45.0	2192.09	2173.62	2124.43	2045.25	1944.23	1818.75	1676.70	1523.14	1365.74
67.5	2070.92	2064.20	2018.86	1951.67	1843.22	1721.09	1581.21	1426.20	1276.00
90.0	1987.90	1979.27	1934.16	1858.34	1752.52	1633.27	1495.31	1351.10	1203.30
112.5	2076.68	2059.17	1999.42	1915.20	1810.59	1681.74	1538.98	1388.29	1234.49
135.0	2134.27	2115.07	2065.16	1989.34	1886.17	1760.68	1618.88	1465.55	1309.35
157.5	2118.19	2098.76	2052.69	1979.75	1885.45	1766.44	1629.43	1479.23	1325.91
180.0	2240.56	2231.20	2192.81	2126.59	2036.37	1921.92	1791.87	1640.95	1478.75
202.5	2243.44	2230.72	2188.73	2118.43	2020.54	1898.41	1762.60	1605.44	1445.16
225.0	2192.09	2177.22	2133.55	2062.05	1956.47	1835.78	1693.98	1539.70	1377.98
247.5	2070.92	2080.76	2033.73	1955.03	1860.26	1738.37	1592.24	1451.40	1296.64
270.0	1987.90	1983.10	1951.43	1871.53	1773.64	1656.31	1524.10	1375.58	1231.13
292.5	2076.68	2048.37	2027.97	1959.59	1858.10	1742.68	1608.08	1454.04	1303.83
315.0	2134.27	2121.07	2080.52	2007.82	1908.48	1790.67	1656.79	1506.34	1350.14
337.5	2118.19	2109.07	2072.36	2007.58	1920.48	1809.63	1679.10	1535.62	1389.73
360.0	2240.56	2222.57	2175.78	2102.12	2002.54	1884.73	1744.84	1591.04	1431.00
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1260.41	1087.89	917.29	749.33	592.65	435.73	284.81	141.80	41.27
22.5	1242.17	1076.85	908.65	745.73	589.53	437.41	294.89	162.44	60.70
45.0	1199.46	1036.54	882.74	723.18	578.26	434.05	304.00	184.27	90.70
67.5	1121.24	964.32	817.24	681.67	551.38	419.42	298.25	190.51	106.77
90.0	1049.98	901.93	768.05	640.40	518.03	397.58	286.01	188.83	109.17
112.5	1081.17	931.69	795.40	659.60	531.47	405.50	289.37	185.95	103.17
135.0	1147.63	989.75	841.95	693.43	548.74	410.78	284.33	170.12	82.78
157.5	1164.67	1005.59	848.43	694.87	548.98	401.66	261.29	134.61	49.91
180.0	1311.27	1141.16	975.12	805.00	640.88	485.88	332.80	188.59	68.14
202.5	1272.64	1110.20	944.88	782.20	627.44	471.96	324.16	188.59	80.38
225.0	1219.62	1057.66	900.02	751.01	604.65	462.60	329.68	205.15	105.09
247.5	1144.03	992.15	850.11	706.14	572.26	445.09	321.04	211.39	121.65
270.0	1085.49	943.44	807.64	671.83	546.58	425.17	309.04	213.07	124.29
292.5	1150.51	1001.75	857.79	715.98	576.34	445.09	322.96	212.83	121.89
315.0	1193.22	1042.78	889.94	740.46	599.61	459.25	325.12	203.47	110.61
337.5	1233.29	1074.45	920.17	762.05	610.17	461.16	322.00	195.31	84.70
360.0	1260.41	1087.89	917.29	749.33	592.65	435.73	284.81	141.80	41.27
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	1.92	1.92	3.12	3.36	4.08	3.84	4.80	4.08	4.32
22.5	13.44	3.12	3.36	3.60	4.08	4.80	5.52	5.76	6.00
45.0	34.55	12.00	3.36	4.08	4.56	4.32	4.80	5.28	5.52
67.5	51.59	20.87	10.32	3.36	5.52	5.04	4.32	4.56	5.28
90.0	53.75	23.27	11.52	2.64	3.36	5.28	4.08	4.56	4.80
112.5	48.95	19.44	9.60	2.64	5.28	4.56	4.56	4.56	4.80
135.0	29.03	10.80	3.36	4.80	4.32	4.08	4.80	5.28	5.76
157.5	10.08	3.12	3.12	3.60	3.84	4.08	5.04	5.52	6.00
180.0	6.00	1.68	2.16	2.64	3.12	3.60	4.08	4.08	4.32
202.5	18.24	4.32	2.16	2.40	3.12	3.36	3.60	4.32	5.04
225.0	42.71	14.16	6.48	2.40	3.12	2.88	3.60	4.08	4.80
247.5	60.22	24.71	10.32	2.64	2.40	2.88	3.12	3.36	4.08
270.0	63.58	28.07	11.76	7.68	2.64	4.08	3.36	3.12	4.08
292.5	61.18	24.95	10.56	2.88	2.88	3.60	3.12	3.60	4.08
315.0	43.67	14.40	6.96	2.64	2.88	2.64	3.60	4.08	4.56
337.5	20.39	4.56	2.16	2.64	3.36	3.84	4.32	4.80	5.04
360.0	1.92	1.92	3.12	3.36	4.08	3.84	4.80	4.08	4.32

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 59.0%

Operator:
Distance(m): 15.49

Intensity data(cd)

C/\u03b3(\u00b0)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	5.04	5.52	5.04	5.04	5.28	6.00	5.76	6.24	6.48
22.5	6.48	7.20	7.92	7.68	8.88	6.96	6.96	7.20	6.72
45.0	6.00	6.72	7.20	8.16	7.92	7.68	9.12	6.24	6.48
67.5	5.76	6.48	6.72	7.44	7.44	7.92	7.20	6.72	6.00
90.0	5.28	5.76	6.00	6.72	6.96	7.20	7.20	6.96	5.28
112.5	5.52	5.76	6.24	6.72	6.96	6.48	5.52	5.04	6.00
135.0	6.48	6.72	7.44	6.96	6.48	6.48	7.68	6.48	6.48
157.5	6.72	7.68	6.96	5.52	6.00	6.48	6.00	6.48	6.48
180.0	5.04	5.28	5.04	4.80	5.28	5.52	6.24	6.48	6.72
202.5	5.76	6.72	6.72	6.24	5.76	5.76	6.24	6.48	6.48
225.0	5.04	5.76	6.24	6.48	6.48	5.52	6.48	5.76	6.24
247.5	4.32	4.80	5.28	6.24	6.72	7.20	5.76	5.28	5.28
270.0	4.56	4.80	5.52	6.00	6.48	6.72	6.96	7.44	5.52
292.5	4.80	5.04	5.76	6.48	6.72	7.44	6.48	6.72	5.76
315.0	5.28	5.76	6.24	6.48	7.68	7.44	8.64	6.24	6.24
337.5	5.76	6.48	7.44	6.96	7.68	6.48	6.48	6.00	6.24
360.0	5.04	5.52	5.04	5.04	5.28	6.00	5.76	6.24	6.48
C/\u03b3(\u00b0)	180.0								
0.0	6.72								
22.5	6.96								
45.0	6.48								
67.5	6.48								
90.0	5.04								
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