

Test Report Number:	LCZP21030010	Total Page:11 Version:1.0
Applicant Name:	FOSHAN LEDKEY LIGHTING CO.,LTD.	
Applicant Address:	Building 1, No.5 Nanda Road Danzao, Nanhai, Foshan, China	
Test item:	LED outdoor fixture	
Model / Type Reference:	OW0643-12-943-BK	
Date of Issue:	2021-03-05	
Testing Laboratory:	LCTECH Guangdong Testing Services Co., Ltd. 2/F., Technology and Enterprise Development Center, Guangyuan Road, Xiaolan, Zhongshan, Guangdong, China Tel:+86-760-22833366 Fax:+86-760-22833399 E-mail:Service@lccert.com http://www.lccert.com	
Test Sites:	1/F., Building I, Technology and Enterprise Development Center, Guangyuan Road, Xiaolan, Zhongshan, Guangdong, China	
Test Specification:	Photometric test (According to IES LM-79-08)	
Report Template No.:	LC-RT-PL-006 Rev.1.4	
Test Result:	See the following pages	
Compiled by:	Reviewed by:	
2021-03-05 PengkangLiang	2021-03-05 Lin Qiu	
_____	_____	
<i>Date Name Signature</i>	<i>Date Name Signature</i>	
Remark:		
N/A		
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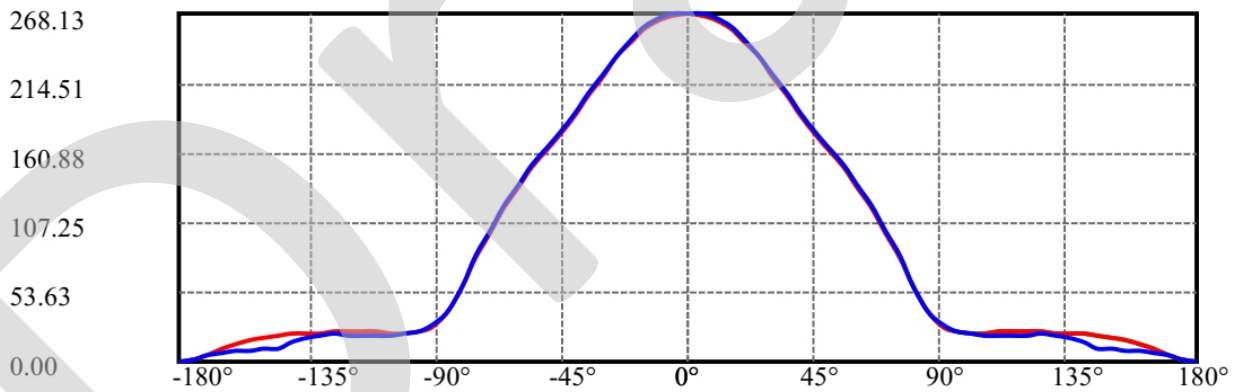
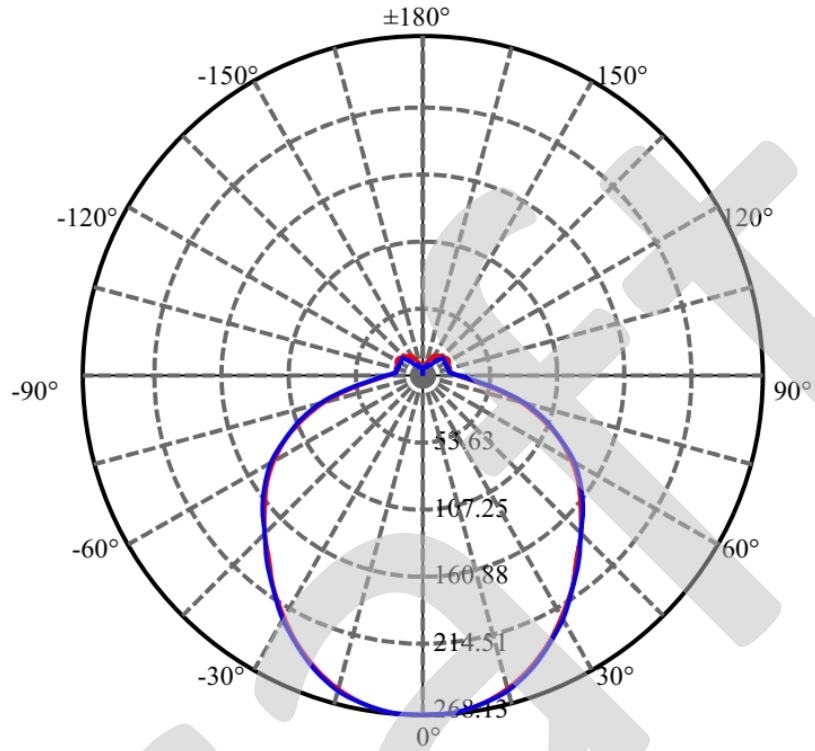
Sample Description			
Luminaire Type	LED outdoor fixture	Model/Type	OW0643-12-943-BK
Input Type	<input checked="" type="checkbox"/> AC <input type="checkbox"/> DC	Rated Voltage	120-277VAC, 50/60Hz
Rated Wattage	12 W	Lamp Rated Flux	Not Provided
Lamp Type	LED	Lamp Model	Not Provided
Power Supply Type	LED driver	Power Supply Model	Not Provided
Luminous Length	90mm	Luminous Width	90 mm
Luminous Diameter	N A	Luminous Height	40 mm
Sample Code of lab.	210302102002		

Test Condition			
Temperature	25.0°C	Humidity	65%
Test Equipment	LC-I-902 GMS-2000	Test Mode	C-Gamma
Test Date	2021-03-04	Test Method	Absolutely photometric
Azimuth (C)	15	Elevation (Gamma)	5
Test distance	30.13 m	Uncertainty	Considered
Stabilization	2 hours		

Characteristics			
Input Voltage	119.98 V	Input Current	0.108 A
Wattage	12.67 W	Power Factor	0.979
Total lumens	1036.15 lm	Luminous Efficacy	81.78 lm/W
Luminaire Efficiency	N.A	Central Intensity	268.131 cd
Max intensity	268.131 cd	Angle of max intensity	C=0,Gamma=0
Maximum S/H	C0_180= 1.22,C90_270= 1.23	CIE Type	Direct lighting

Luminance Data (cd/m ²)									
Gamma	45	50	55	60	65	70	75	80	85
C0	21237	20409	19682	18866	17739	16218	14225	11611	8805
C45	19569	18259	17268	16247	15208	13906	12392	10384	8172
C90	21419	20641	19940	19124	17985	16467	14497	11833	9030

Light Distribution Curve(cd)



C0(Max): —

C0/C180: —

C90/C270: —

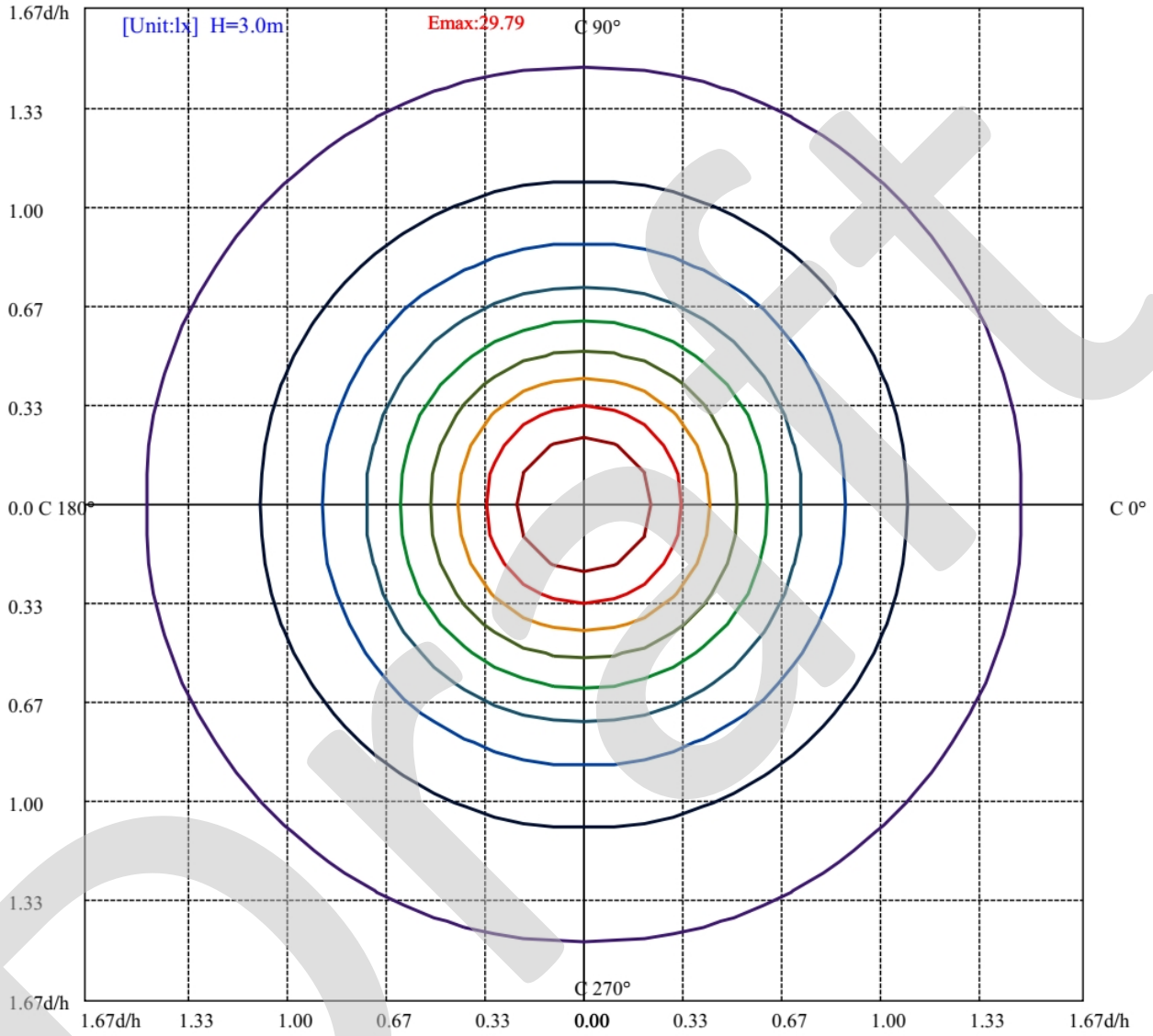
Field angle(10%Imax):C0/180Left:90.2 Right:90.2
:C90/270Left:91.7 Right:91.7










Beam Angle(50%Imax):C0/180Left:60.3 Right:60.3
:C90/270Left:60.9 Right:60.9

Zonal flux distribution table

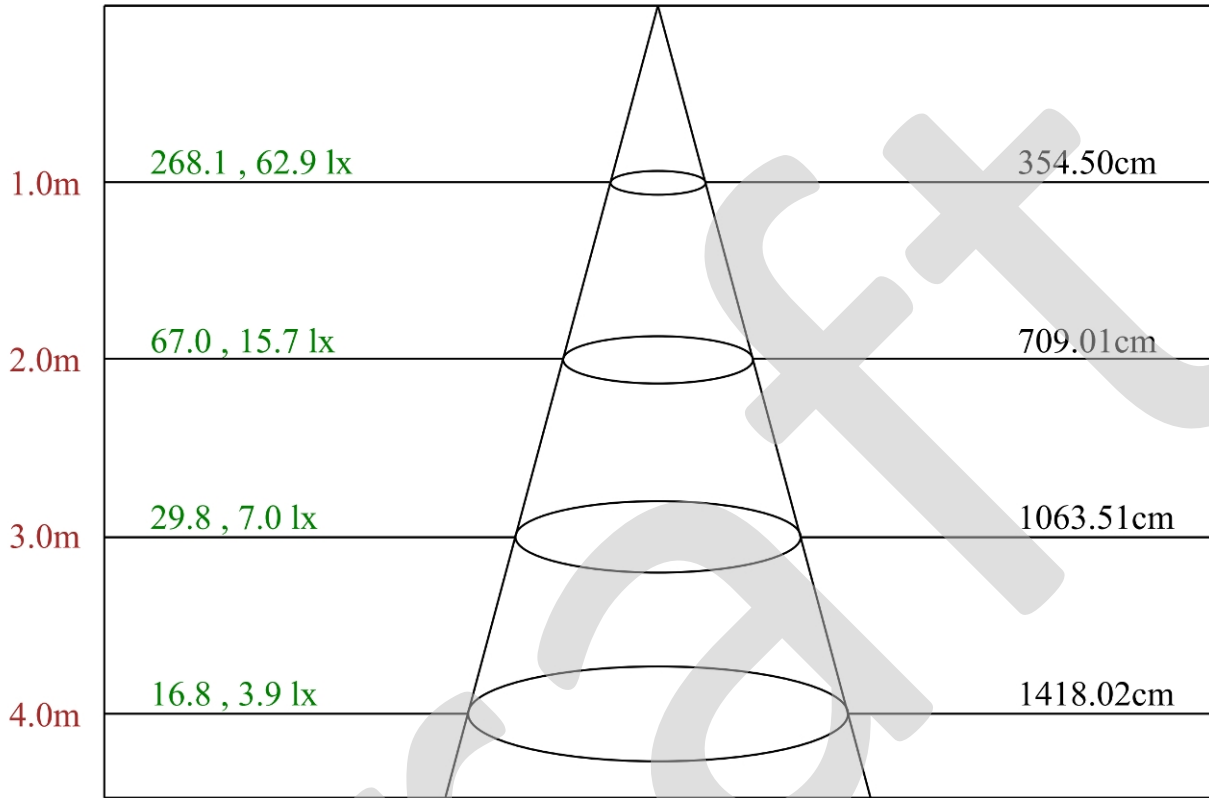
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	268.131	0.000	0	0.00%	0.00%
5.0	267.289	6.401	6.401	0.62%	0.62%
10.0	263.930	19.003	25.404	1.83%	2.45%
15.0	257.682	30.942	56.346	2.99%	5.44%
20.0	248.468	41.714	98.06	4.03%	9.46%
25.0	236.648	50.880	148.939	4.91%	14.37%
30.0	223.328	58.210	207.15	5.62%	19.99%
35.0	208.508	63.591	270.741	6.14%	26.13%
40.0	193.725	67.109	337.85	6.48%	32.61%
45.0	179.708	69.144	406.994	6.67%	39.28%
50.0	165.726	69.800	476.794	6.74%	46.02%
55.0	152.365	69.164	545.958	6.68%	52.69%
60.0	138.594	67.255	613.212	6.49%	59.18%
65.0	122.434	63.457	676.669	6.12%	65.31%
70.0	104.696	57.511	734.18	5.55%	70.86%
75.0	85.590	49.738	783.917	4.80%	75.66%
80.0	64.112	40.056	823.973	3.87%	79.52%
85.0	44.326	29.465	853.439	2.84%	82.37%
90.0	33.118	21.205	874.643	2.05%	84.41%
95.0	29.047	17.021	891.665	1.64%	86.06%
100.0	27.663	15.409	907.074	1.49%	87.54%
105.0	28.133	14.929	922.004	1.44%	88.98%
110.0	29.176	14.980	936.983	1.45%	90.43%
115.0	29.747	14.920	951.903	1.44%	91.87%
120.0	29.876	14.495	966.397	1.40%	93.27%
125.0	29.632	13.755	980.152	1.33%	94.60%
130.0	28.401	12.618	992.771	1.22%	95.81%
135.0	26.241	11.041	1003.812	1.07%	96.88%
140.0	23.256	9.165	1012.976	0.88%	97.76%
145.0	20.688	7.332	1020.308	0.71%	98.47%
150.0	18.501	5.771	1026.079	0.56%	99.03%
155.0	15.698	4.328	1030.407	0.42%	99.45%
160.0	12.422	2.949	1033.356	0.28%	99.73%
165.0	8.949	1.761	1035.117	0.17%	99.90%
170.0	4.558	0.801	1035.918	0.08%	99.98%
175.0	1.218	0.207	1036.125	0.02%	100.00%
180.0	0.567	0.021	1036.146	0.00%	100.00%

ISO illuminance diagram(Lux)



(10%Emax)	2.979234	
(20%Emax)	5.958467	
(30%Emax)	8.937711	
(40%Emax)	11.91689	
(50%Emax)	14.89622	
(60%Emax)	17.87544	
(70%Emax)	20.85467	
(80%Emax)	23.83389	
(90%Emax)	26.81311	

Lux distance Curve



Max , Ave

Beam angle of C0 plane 121.14

Utilization factor table

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.15	1.15	1.15	1.11	1.11	1.11	1.02	1.02	1.02	0.95	0.95	0.95	0.88	0.88	0.88	0.84
1	0.98	0.93	0.89	0.94	0.90	0.86	0.87	0.83	0.80	0.80	0.77	0.75	0.74	0.72	0.70	0.67
2	0.84	0.77	0.71	0.81	0.74	0.68	0.75	0.69	0.64	0.69	0.65	0.61	0.64	0.60	0.57	0.54
3	0.73	0.65	0.58	0.71	0.63	0.56	0.65	0.59	0.53	0.60	0.55	0.50	0.56	0.51	0.48	0.45
4	0.65	0.55	0.48	0.62	0.54	0.47	0.58	0.50	0.45	0.53	0.47	0.43	0.50	0.45	0.40	0.38
5	0.57	0.48	0.41	0.55	0.47	0.40	0.51	0.44	0.38	0.48	0.42	0.37	0.44	0.39	0.35	0.32
6	0.51	0.42	0.36	0.50	0.41	0.35	0.46	0.39	0.33	0.43	0.37	0.32	0.40	0.35	0.30	0.28
7	0.47	0.38	0.31	0.45	0.37	0.31	0.42	0.35	0.29	0.39	0.33	0.28	0.37	0.31	0.27	0.25
8	0.42	0.34	0.28	0.41	0.33	0.27	0.38	0.31	0.26	0.36	0.30	0.25	0.34	0.28	0.24	0.22
9	0.39	0.30	0.25	0.38	0.30	0.24	0.35	0.28	0.23	0.33	0.27	0.23	0.31	0.26	0.22	0.20
10	0.36	0.28	0.22	0.35	0.27	0.22	0.33	0.26	0.21	0.31	0.25	0.20	0.29	0.23	0.20	0.18

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	268.13	267.06	263.85	257.52	248.43	236.67	222.58	207.96	192.90
15.0	268.13	267.77	264.44	258.77	249.51	237.99	224.76	210.28	195.88
30.0	268.13	267.59	264.88	259.01	250.79	239.58	226.30	212.39	197.67
45.0	268.13	268.04	264.96	260.15	251.53	240.55	227.66	213.14	198.35
60.0	268.13	268.22	265.13	259.60	250.61	239.17	226.18	211.93	197.22
75.0	268.13	267.22	265.13	258.87	249.33	237.43	223.26	209.27	194.83
90.0	268.13	268.50	265.49	259.38	249.53	236.85	223.17	207.39	192.62
105.0	268.13	268.04	264.49	259.02	249.91	238.16	224.22	209.64	194.61
120.0	268.13	268.13	265.94	260.55	251.87	240.63	226.38	212.59	196.96
135.0	268.13	268.22	264.94	260.37	252.52	240.56	227.87	212.72	198.11
150.0	268.13	267.40	265.21	260.29	251.25	239.48	226.71	212.75	197.34
165.0	268.13	267.31	265.02	260.00	251.40	239.43	225.44	211.36	196.28
180.0	268.13	266.26	262.60	254.94	244.51	231.67	217.41	201.63	186.84
195.0	268.13	266.60	263.09	256.25	246.27	234.03	220.26	205.33	191.11
210.0	268.13	266.69	263.34	256.93	247.99	235.97	222.42	208.15	193.06
225.0	268.13	267.22	263.96	257.88	249.08	237.37	224.30	209.42	194.63
240.0	268.13	267.50	263.59	257.51	248.25	236.99	223.37	209.29	194.58
255.0	268.13	266.31	262.86	256.05	246.97	234.98	221.26	206.82	192.38
270.0	268.13	267.58	263.21	256.55	246.24	234.20	220.07	205.29	190.43
285.0	268.13	267.31	262.94	255.65	246.27	234.06	220.66	206.63	191.78
300.0	268.13	267.49	262.74	256.35	247.58	235.24	222.27	207.56	193.13
315.0	268.13	266.85	262.93	255.44	246.13	234.90	220.84	206.51	191.54
330.0	268.13	266.03	261.93	254.08	244.78	233.19	225.80	204.27	190.22
345.0	268.13	265.57	261.64	253.23	242.53	230.47	216.66	201.85	186.95
360.0	268.13	267.06	263.85	257.52	248.43	236.67	222.58	207.96	192.90
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	178.81	165.80	152.87	139.50	124.26	105.90	85.48	63.20	42.07
15.0	181.66	168.62	156.11	142.88	128.67	110.67	90.97	69.28	47.87
30.0	183.03	168.76	155.48	142.20	127.65	110.49	92.06	71.73	50.68
45.0	183.38	169.14	155.07	140.83	126.40	109.79	92.28	71.86	50.99
60.0	182.87	168.61	155.45	141.38	127.30	110.78	92.80	71.82	50.67
75.0	180.66	166.95	154.77	142.24	127.25	110.63	90.65	69.76	47.41
90.0	177.84	165.17	152.67	138.72	122.85	105.34	85.73	63.48	42.23
105.0	180.67	166.82	154.61	141.76	126.64	108.69	89.65	68.24	47.10
120.0	182.62	169.01	155.49	140.51	125.89	109.99	91.36	71.53	50.70
135.0	183.50	168.16	154.38	139.50	124.80	108.09	90.38	71.21	50.49
150.0	183.01	168.14	154.64	140.41	125.81	109.11	91.05	70.89	50.00
165.0	181.92	168.76	155.05	141.33	126.52	108.61	89.13	68.29	47.45
180.0	172.57	159.29	146.10	130.95	112.94	93.69	73.09	51.79	33.52
195.0	176.62	163.40	149.36	135.60	118.32	99.96	79.09	58.22	39.50
210.0	178.87	164.06	150.33	135.96	118.89	102.45	82.57	62.24	43.27
225.0	179.93	165.14	150.72	135.47	119.77	101.81	83.39	62.97	44.19
240.0	180.06	166.16	151.91	137.47	121.13	103.51	83.08	62.20	43.13
255.0	178.85	165.49	152.60	138.06	120.17	101.37	80.48	58.31	39.69
270.0	176.57	163.61	150.21	135.43	117.65	97.31	75.88	53.72	35.29
285.0	178.48	165.45	152.33	138.21	120.81	101.59	91.56	58.76	40.18
300.0	178.51	164.72	150.83	144.16	119.86	102.05	82.22	61.21	43.03
315.0	183.32	162.69	148.81	133.93	117.95	100.51	81.62	60.62	43.18
330.0	175.44	162.21	148.34	134.48	118.60	100.99	81.11	60.21	42.24
345.0	173.79	161.26	148.65	135.30	118.30	99.37	78.53	57.14	38.94
360.0	178.81	165.80	152.87	139.50	124.26	105.90	85.48	63.20	42.07

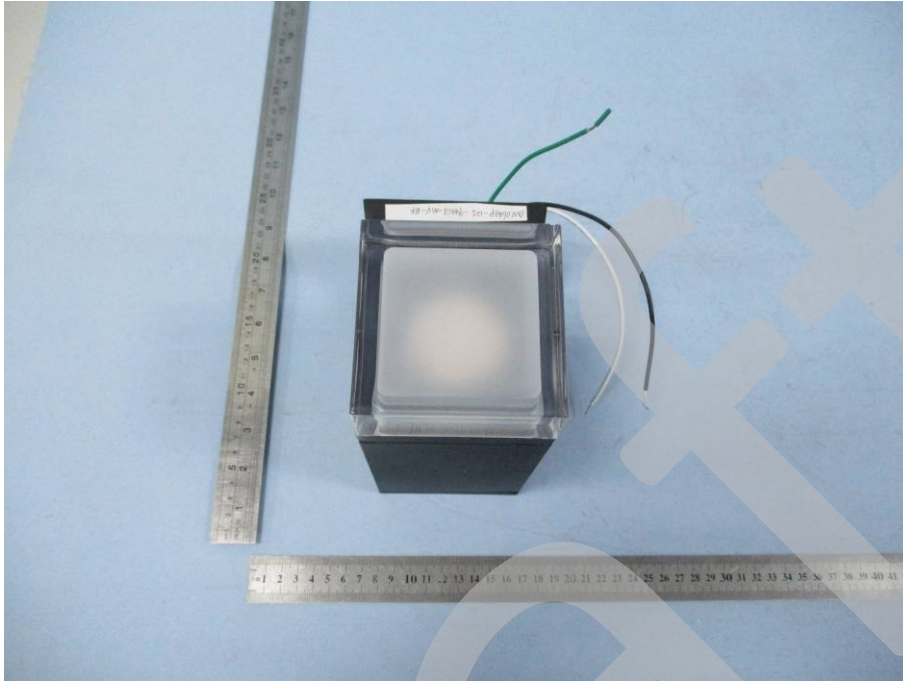
Intensity data(cd)									
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	28.61	23.71	21.57	21.30	22.20	22.64	22.82	22.37	22.02
15.0	33.65	28.43	26.54	26.27	26.72	27.17	27.26	26.45	25.10
30.0	36.68	32.25	30.35	30.90	32.43	33.61	33.70	33.06	32.43
45.0	37.20	32.94	31.30	32.21	34.12	35.75	36.20	36.02	35.30
60.0	36.68	31.87	30.33	30.60	32.42	33.78	34.14	34.05	33.41
75.0	32.88	27.61	26.07	25.89	27.16	28.07	28.25	27.98	27.52
90.0	27.63	22.71	21.43	21.07	22.16	22.98	23.17	23.07	22.89
105.0	32.71	27.51	26.15	26.06	27.33	28.43	28.61	28.33	27.88
120.0	35.90	31.34	30.15	30.70	32.80	34.08	34.53	34.44	33.71
135.0	36.34	32.23	31.04	31.95	34.05	36.06	36.52	36.43	35.70
150.0	35.76	31.20	29.92	30.47	32.48	33.76	34.30	34.03	33.12
165.0	32.64	27.61	26.05	25.96	27.24	28.07	27.97	27.52	26.79
180.0	25.32	22.64	21.75	22.02	23.09	23.80	23.53	23.18	22.64
195.0	30.68	27.80	26.81	27.44	28.70	29.33	29.33	28.79	27.89
210.0	34.78	32.16	31.35	32.70	34.33	35.14	35.14	34.24	32.61
225.0	35.75	33.21	32.58	34.21	36.20	37.20	37.20	35.66	32.12
240.0	34.69	31.78	31.05	32.32	33.78	34.14	33.96	33.51	30.51
255.0	29.97	27.16	26.07	26.07	26.98	25.89	25.34	25.34	24.07
270.0	30.01	23.26	21.61	20.52	18.88	16.69	16.78	18.88	18.06
285.0	31.61	26.42	21.23	21.96	20.68	18.13	17.49	20.68	20.04
300.0	34.90	31.52	30.70	31.43	29.78	30.42	32.25	31.88	28.41
315.0	35.60	32.77	32.32	33.87	35.51	36.43	36.34	34.42	31.04
330.0	34.39	31.66	31.02	32.11	33.48	34.12	34.03	33.21	31.66
345.0	30.44	27.33	26.51	27.15	27.70	28.25	28.16	27.61	26.69
360.0	28.61	23.71	21.57	21.30	22.20	22.64	22.82	22.37	22.02
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	21.66	20.86	19.79	18.36	16.13	13.55	10.25	4.72	1.34
15.0	23.93	22.67	21.23	19.61	17.19	14.31	10.71	5.49	1.26
30.0	30.90	28.73	26.38	23.22	19.87	15.90	11.47	5.87	1.45
45.0	33.48	31.76	29.31	25.86	21.78	17.24	12.34	6.44	1.36
60.0	32.14	30.24	27.78	24.97	21.25	16.98	12.17	6.17	1.27
75.0	26.70	25.25	23.53	21.44	18.89	15.53	11.35	6.36	1.36
90.0	22.44	21.71	20.70	19.24	17.24	14.59	11.22	6.66	1.28
105.0	26.97	25.60	23.78	21.59	19.04	15.76	11.66	6.56	1.46
120.0	32.61	30.79	28.32	25.49	21.83	17.63	12.79	6.67	1.37
135.0	34.24	32.32	29.94	26.75	23.01	18.26	13.15	7.49	1.37
150.0	32.02	30.11	27.92	25.00	21.35	17.33	12.50	6.66	1.55
165.0	25.96	24.59	23.04	21.12	18.65	15.45	10.51	6.40	1.37
180.0	22.11	21.04	19.70	17.92	15.60	12.39	8.20	4.37	1.07
195.0	26.63	24.92	22.76	20.06	17.10	13.41	11.16	4.23	1.08
210.0	31.08	29.00	26.29	24.30	18.34	14.09	9.21	3.52	1.08
225.0	29.67	25.68	23.32	20.51	17.06	12.98	8.53	2.99	1.18
240.0	24.79	15.89	13.53	11.53	9.44	7.17	5.90	2.81	1.09
255.0	18.35	9.99	3.81	3.36	2.82	2.27	3.72	2.63	1.00
270.0	13.50	7.57	0.36	0.36	0.64	0.73	2.01	2.46	1.00
285.0	15.03	8.56	3.83	3.37	2.73	1.46	2.19	2.10	1.09
300.0	23.39	15.53	13.16	10.96	8.50	5.57	4.48	2.10	1.00
315.0	27.30	25.01	22.28	19.26	15.52	11.14	6.85	2.01	1.00
330.0	29.74	27.10	24.27	20.80	16.88	12.77	6.84	2.28	1.09
345.0	25.14	23.22	21.48	18.92	15.91	11.61	5.58	2.38	1.10
360.0	21.66	20.86	19.79	18.36	16.13	13.55	10.25	4.72	1.34



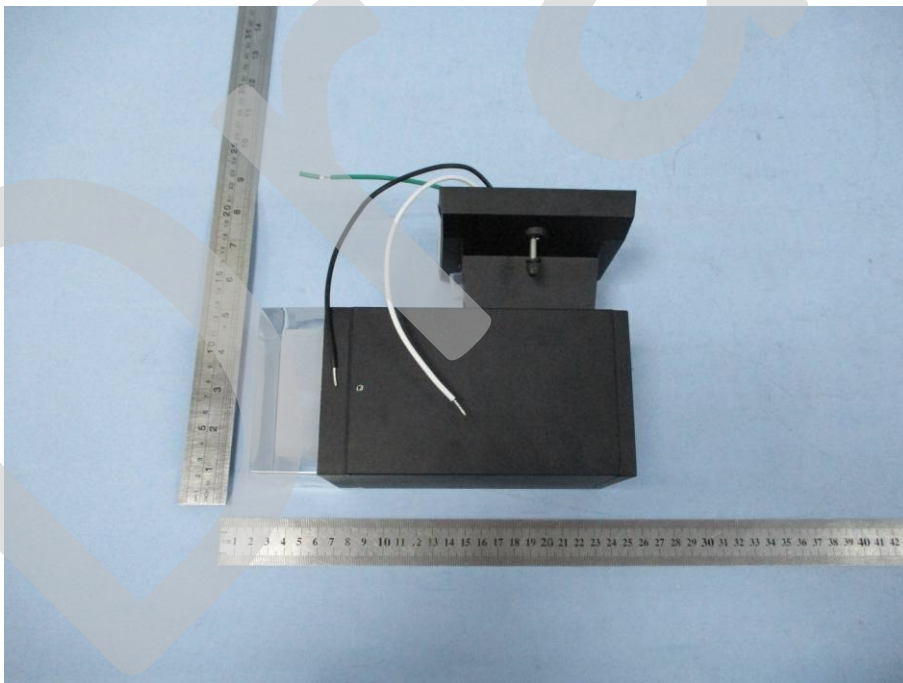
Intensity data(cd)

C/γ(°)	180.0
0.0	1.07
15.0	1.17
30.0	1.17
45.0	1.18
60.0	1.18
75.0	1.09
90.0	1.09
105.0	1.18
120.0	1.10
135.0	1.10
150.0	1.09
165.0	1.19
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	1.07

Appendix A Product Photo



Picture 1



Picture 2

****End of test report****