

Test Report Number:	LCZP21030011	Total Page:10 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:	OW0644-2-12-943-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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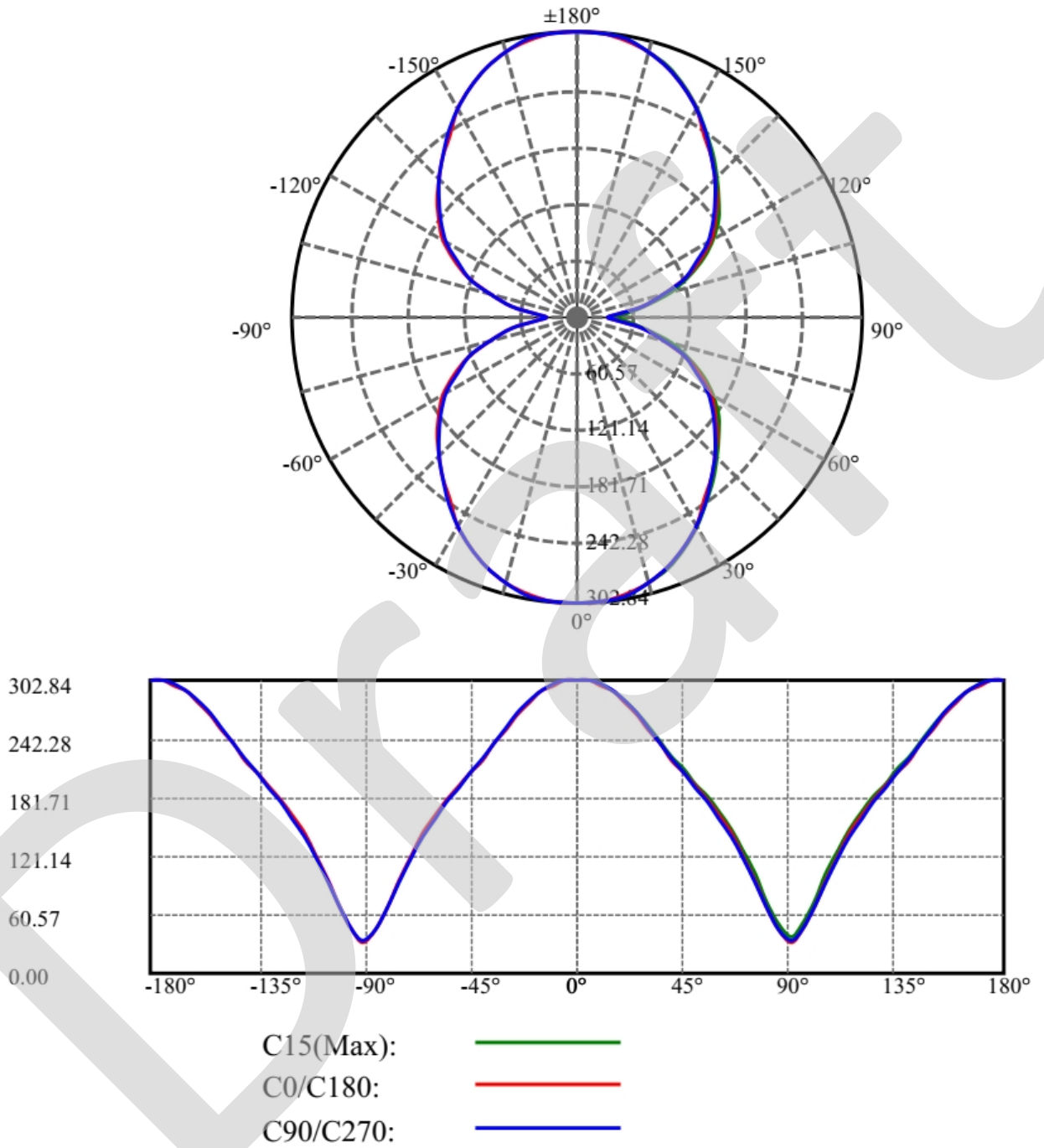
Sample Description			
Luminaire Type	LED outdoor fixture	Model/Type	OW0644-2-12-943-BK
Input Type	<input checked="" type="checkbox"/> AC <input type="checkbox"/> DC	Rated Voltage	120-277VAC, 50/60Hz
Rated Wattage	24 W	Lamp Rated Flux	Not Provided
Lamp Type	LED	Lamp Model	Not Provided
Power Supply Type	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.	210302102003		

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	120.01 V	Input Current	0.207 A
Wattage	24.41 W	Power Factor	0.984
Total lumens	2043.09 lm	Luminous Efficacy	83.70 lm/W
Luminaire Efficiency	N.A	Central Intensity	302.833 cd
Max intensity	302.845 cd	Angle of max intensity	C=15,Gamma=180
Maximum S/H	C0_180= 1.24,C90_270= 1.25	CIE Type	Direct lighting

Luminance Data (cd/m ²)									
Gamma	45	50	55	60	65	70	75	80	85
C0	25036	24258	23604	22880	21706	19934	17331	14064	10468
C45	22819	21356	20311	19186	18021	16503	14736	12321	9690
C90	24917	24051	23299	22334	21078	19642	17020	14092	10519

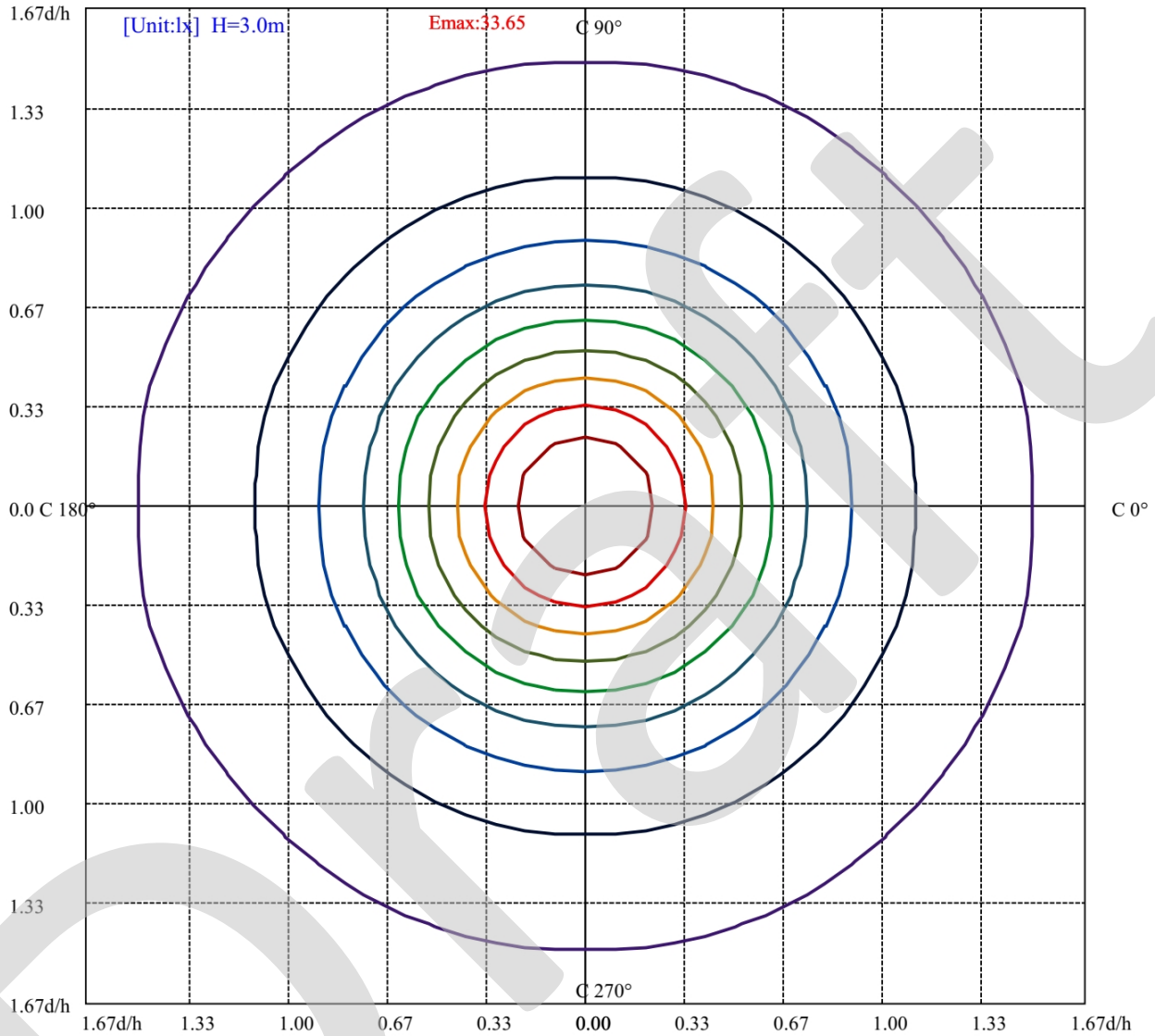
Light Distribution Curve(cd)



Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	302.833	0.000	0	0.00%	0.00%
5.0	302.077	7.232	7.232	0.35%	0.35%
10.0	298.787	21.495	28.726	1.05%	1.41%
15.0	292.432	35.071	63.797	1.72%	3.12%
20.0	282.748	47.403	111.2	2.32%	5.44%
25.0	270.303	58.005	169.205	2.84%	8.28%
30.0	256.195	66.629	235.834	3.26%	11.54%
35.0	240.157	73.091	308.925	3.58%	15.12%
40.0	224.573	77.537	386.461	3.80%	18.92%
45.0	210.084	80.480	466.942	3.94%	22.85%
50.0	194.688	81.790	548.732	4.00%	26.86%
55.0	179.935	81.456	630.187	3.99%	30.84%
60.0	164.427	79.598	709.786	3.90%	34.74%
65.0	146.005	75.467	785.252	3.69%	38.43%
70.0	125.354	68.710	853.963	3.36%	41.80%
75.0	102.283	59.501	913.463	2.91%	44.71%
80.0	76.485	47.834	961.297	2.34%	47.05%
85.0	52.656	35.091	996.388	1.72%	48.77%
90.0	39.191	25.148	1021.536	1.23%	50.00%
95.0	52.658	25.149	1046.685	1.23%	51.23%
100.0	76.487	35.092	1081.777	1.72%	52.95%
105.0	102.285	47.834	1129.611	2.34%	55.29%
110.0	125.357	59.502	1189.113	2.91%	58.20%
115.0	146.008	68.711	1257.824	3.36%	61.56%
120.0	164.431	75.468	1333.293	3.69%	65.26%
125.0	179.940	79.600	1412.893	3.90%	69.15%
130.0	194.692	81.457	1494.35	3.99%	73.14%
135.0	210.087	81.791	1576.142	4.00%	77.15%
140.0	224.576	80.481	1656.623	3.94%	81.08%
145.0	240.160	77.538	1734.161	3.80%	84.88%
150.0	256.196	73.092	1807.253	3.58%	88.46%
155.0	270.307	66.629	1873.882	3.26%	91.72%
160.0	282.752	58.006	1931.888	2.84%	94.56%
165.0	292.435	47.404	1979.292	2.32%	96.88%
170.0	298.791	35.071	2014.363	1.72%	98.59%
175.0	302.081	21.495	2035.858	1.05%	99.65%
180.0	302.837	7.232	2043.089	0.35%	100.00%

ISO illuminance diagram(Lux)



(10%Emax)	3.364811	—
(20%Emax)	6.729611	—
(30%Emax)	10.09442	—
(40%Emax)	13.45922	—
(50%Emax)	16.824	—
(60%Emax)	20.18889	—
(70%Emax)	23.55367	—
(80%Emax)	26.91845	—
(90%Emax)	30.28322	—

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	1.07	1.07	1.07	0.99	0.99	0.99	0.83	0.83	0.83	0.69	0.69	0.69	0.56	0.56	0.56	0.50
1	0.92	0.87	0.83	0.84	0.81	0.77	0.71	0.68	0.66	0.59	0.57	0.55	0.48	0.46	0.45	0.39
2	0.79	0.72	0.67	0.73	0.67	0.62	0.61	0.57	0.53	0.51	0.48	0.45	0.41	0.39	0.37	0.32
3	0.69	0.61	0.55	0.64	0.57	0.51	0.54	0.48	0.44	0.44	0.40	0.37	0.36	0.33	0.30	0.26
4	0.61	0.52	0.46	0.56	0.49	0.43	0.47	0.42	0.37	0.39	0.35	0.31	0.32	0.28	0.26	0.22
5	0.54	0.45	0.39	0.50	0.42	0.37	0.42	0.36	0.32	0.35	0.30	0.27	0.28	0.25	0.22	0.19
6	0.48	0.40	0.34	0.45	0.37	0.32	0.38	0.32	0.27	0.31	0.27	0.23	0.26	0.22	0.19	0.16
7	0.43	0.35	0.29	0.40	0.33	0.27	0.34	0.28	0.24	0.29	0.24	0.20	0.23	0.20	0.17	0.14
8	0.39	0.31	0.26	0.36	0.29	0.24	0.31	0.25	0.21	0.26	0.21	0.18	0.21	0.18	0.15	0.13
9	0.36	0.28	0.23	0.33	0.26	0.22	0.28	0.23	0.19	0.24	0.19	0.16	0.20	0.16	0.14	0.11
10	0.33	0.25	0.20	0.31	0.24	0.19	0.26	0.21	0.17	0.22	0.18	0.15	0.18	0.15	0.12	0.10

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	302.83	302.83	299.24	293.85	284.86	271.38	257.00	240.83	225.55
15.0	302.83	302.83	300.12	294.70	285.66	273.00	258.54	243.17	227.80
30.0	302.83	302.83	299.22	293.79	285.66	273.00	260.35	244.98	230.51
45.0	302.83	301.02	299.22	293.79	285.66	274.81	260.35	244.98	229.61
60.0	302.83	302.83	301.01	295.56	285.55	274.64	261.00	245.54	230.99
75.0	302.83	302.83	300.10	294.65	284.64	272.82	257.36	242.81	227.35
90.0	302.83	302.83	301.01	294.62	284.59	271.82	256.31	240.81	226.21
105.0	302.83	302.83	300.10	294.62	285.50	272.73	258.14	243.54	228.04
120.0	302.83	301.92	299.19	293.74	284.64	273.73	260.09	244.63	229.17
135.0	302.83	301.92	299.19	294.65	284.64	274.64	261.00	245.54	230.99
150.0	302.83	301.92	297.38	293.74	284.64	272.82	260.09	245.54	229.17
165.0	302.83	301.92	300.10	292.80	284.59	271.82	258.14	243.54	228.04
180.0	302.83	301.04	296.54	288.45	276.77	264.19	248.92	231.84	215.67
195.0	302.83	301.02	297.41	289.27	280.23	266.67	253.11	235.94	220.57
210.0	302.83	301.02	298.31	290.18	281.14	269.39	254.02	238.65	222.38
225.0	302.83	301.02	297.41	290.18	281.14	269.39	254.02	238.65	222.38
240.0	302.83	301.92	299.19	291.92	281.92	268.28	254.63	239.17	222.80
255.0	302.83	301.92	297.38	290.10	279.19	267.37	251.00	236.45	220.08
270.0	302.83	302.83	298.27	290.06	279.12	264.52	249.93	233.51	217.09
285.0	302.83	302.83	298.27	290.97	280.03	266.35	252.66	235.33	218.92
300.0	302.83	301.92	299.19	291.92	281.92	268.28	253.72	237.36	221.90
315.0	302.83	301.92	297.38	291.92	281.92	269.18	255.54	238.26	221.90
330.0	302.83	301.92	297.38	291.92	281.92	269.18	261.00	237.36	221.90
345.0	302.83	301.92	298.27	290.97	280.03	267.26	251.75	235.33	220.74
360.0	302.83	302.83	299.24	293.85	284.86	271.38	257.00	240.83	225.55
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	211.17	196.80	183.32	168.94	151.87	129.40	105.14	78.18	51.22
15.0	214.24	199.78	186.22	171.76	156.39	135.60	112.09	84.97	57.85
30.0	214.24	199.78	185.32	169.95	153.68	134.69	113.00	89.49	63.28
45.0	214.24	198.88	184.41	168.14	150.96	131.98	112.09	88.59	62.37
60.0	214.62	200.07	185.52	170.06	152.78	134.59	112.77	87.30	62.75
75.0	213.71	198.25	185.52	170.06	153.69	132.77	110.04	84.57	58.20
90.0	210.71	196.11	182.43	166.01	148.68	129.52	103.98	78.44	51.08
105.0	214.35	198.85	184.25	170.57	153.24	132.26	109.46	83.92	57.47
120.0	214.62	199.16	183.70	169.15	151.87	131.86	109.13	84.57	60.93
135.0	213.71	197.34	182.79	166.42	149.14	130.05	109.13	85.48	60.93
150.0	214.62	197.34	182.79	168.24	151.87	131.86	109.13	84.57	59.11
165.0	212.53	198.85	186.08	170.57	154.15	132.26	108.55	81.18	56.55
180.0	203.09	189.61	175.23	159.05	138.39	115.92	88.06	61.11	38.64
195.0	207.01	192.55	179.89	163.62	142.83	120.23	94.92	66.89	45.20
210.0	207.91	192.55	177.18	160.00	141.92	120.23	96.73	71.41	48.81
225.0	207.91	190.74	174.47	157.29	139.21	117.52	94.92	69.61	49.72
240.0	208.25	191.88	175.52	158.24	138.23	118.22	95.49	70.02	50.02
255.0	205.53	190.98	175.52	159.15	138.23	117.31	91.85	67.30	46.38
270.0	201.58	186.99	171.48	154.15	133.17	112.19	85.74	61.11	39.22
285.0	204.32	188.81	172.40	157.80	137.73	117.67	103.98	68.41	46.52
300.0	205.53	190.98	174.61	165.51	140.05	119.13	96.40	72.75	50.02
315.0	215.53	190.98	174.61	157.33	140.05	119.13	97.31	72.75	50.93
330.0	206.44	191.88	176.42	160.06	141.87	120.95	98.22	72.75	50.02
345.0	206.15	193.38	178.78	164.19	144.12	123.14	96.69	70.24	46.52
360.0	211.17	196.80	183.32	168.94	151.87	129.40	105.14	78.18	51.22

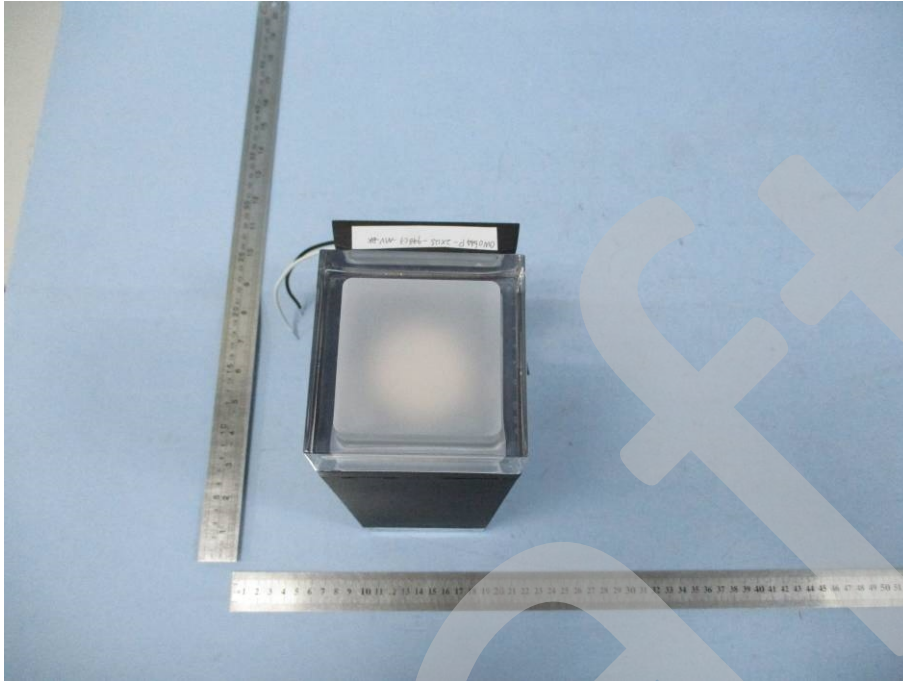
Intensity data(cd)									
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	34.15	51.22	78.18	105.14	129.40	151.87	168.94	183.32	196.80
15.0	35.26	46.10	69.61	95.82	122.04	142.83	162.72	177.18	191.64
30.0	39.78	49.72	72.32	97.63	120.23	141.02	159.10	175.37	190.74
45.0	40.68	50.62	72.32	96.73	118.42	139.21	156.39	173.56	189.84
60.0	40.01	50.02	72.75	96.40	119.13	140.05	165.51	174.61	190.98
75.0	35.47	46.38	68.21	103.67	117.31	137.32	157.33	171.88	188.25
90.0	32.84	39.22	61.11	85.74	112.19	133.17	154.15	171.48	186.99
105.0	35.57	46.52	67.50	92.13	117.67	138.65	159.63	176.04	191.55
120.0	40.01	50.02	70.02	95.49	118.22	138.23	158.24	175.52	191.88
135.0	40.92	50.02	70.02	95.49	118.22	140.05	158.24	175.52	191.88
150.0	40.01	49.11	71.84	97.31	120.95	142.78	160.97	178.24	193.70
165.0	35.57	45.61	67.50	95.78	121.32	144.12	165.10	181.52	194.29
180.0	29.65	38.64	61.11	88.06	115.92	138.39	159.05	175.23	189.61
195.0	38.87	56.05	80.45	107.57	131.08	152.77	169.04	184.41	197.07
210.0	43.39	58.76	84.07	108.48	131.08	150.96	167.24	181.70	196.16
225.0	44.29	60.57	84.97	108.48	129.27	148.25	165.43	181.70	196.16
240.0	43.65	60.93	84.57	109.13	131.86	151.87	169.15	183.70	199.16
255.0	40.01	57.29	83.67	109.13	131.86	152.78	170.06	183.70	198.25
270.0	34.66	51.08	78.44	103.98	129.52	148.68	166.01	182.43	196.11
285.0	41.05	58.38	84.83	110.37	133.17	154.15	170.57	186.08	198.85
300.0	44.56	62.75	87.30	112.77	134.59	152.78	170.06	185.52	200.07
315.0	45.47	62.75	89.12	112.77	132.77	151.87	169.15	185.52	200.07
330.0	44.56	63.66	90.03	113.68	135.50	154.60	170.97	186.43	200.98
345.0	40.13	58.38	85.74	113.11	136.82	157.80	173.31	187.90	201.58
360.0	34.15	51.22	78.18	105.14	129.40	151.87	168.94	183.32	196.80
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	211.17	225.55	240.83	257.00	271.38	284.86	293.85	299.24	302.83
15.0	204.30	218.76	233.23	249.50	264.87	277.52	288.37	295.60	299.22
30.0	205.20	220.57	235.94	259.44	267.58	280.23	290.18	295.60	300.12
45.0	214.24	220.57	236.84	254.02	267.58	280.23	290.18	295.60	300.12
60.0	205.53	221.90	237.36	253.72	268.28	281.92	291.92	299.19	301.92
75.0	203.71	218.26	234.63	251.91	265.55	279.19	290.10	297.38	301.92
90.0	201.58	217.09	233.51	249.93	264.52	279.12	290.06	298.27	302.83
105.0	206.15	220.74	237.16	251.75	268.17	280.03	290.97	298.27	302.83
120.0	208.25	222.80	239.17	254.63	268.28	281.92	291.92	299.19	301.92
135.0	209.16	223.71	240.08	255.54	271.00	282.83	291.92	299.19	302.83
150.0	209.16	223.71	240.08	255.54	271.00	282.83	291.92	300.10	302.83
165.0	208.88	222.56	238.07	255.40	269.08	282.77	291.89	300.10	303.74
180.0	203.09	215.67	231.84	248.92	264.19	276.77	288.45	296.54	301.04
195.0	210.63	225.99	241.36	255.83	269.39	282.04	290.18	297.41	299.22
210.0	213.34	227.80	244.07	258.54	271.19	282.95	291.98	295.60	300.12
225.0	212.43	229.61	244.07	259.44	273.00	282.95	292.89	297.41	300.12
240.0	214.62	229.17	244.63	260.09	273.73	284.64	293.74	299.19	301.92
255.0	213.71	227.35	242.81	257.36	271.91	284.64	293.74	299.19	301.92
270.0	210.71	226.21	240.81	256.31	271.82	284.59	294.62	301.01	302.83
285.0	214.35	228.04	243.54	258.14	273.64	285.50	295.54	301.01	303.74
300.0	214.62	230.99	245.54	261.00	274.64	285.55	295.56	301.01	302.83
315.0	215.53	230.99	246.45	261.91	276.46	287.37	295.56	301.01	302.83
330.0	215.53	231.90	246.45	261.91	274.64	287.37	295.56	301.01	304.65
345.0	216.18	229.86	245.37	260.87	275.47	288.24	297.36	302.83	305.57
360.0	211.17	225.55	240.83	257.00	271.38	284.86	293.85	299.24	302.83



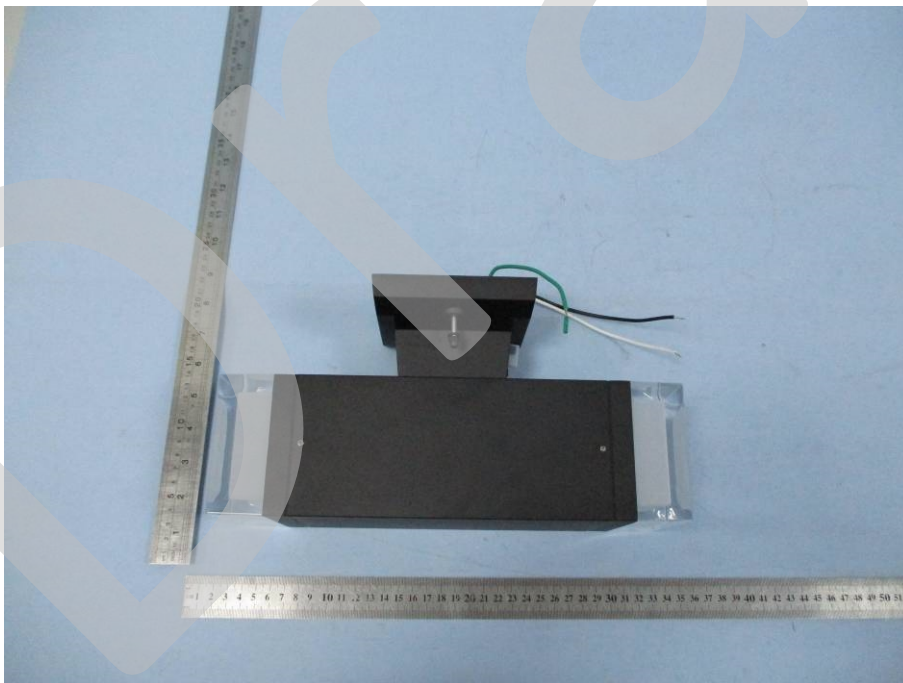
Intensity data(cd)

<i>C_γ</i> (°)	180.0
0.0	302.83
15.0	300.12
30.0	301.02
45.0	301.02
60.0	302.83
75.0	301.92
90.0	302.83
105.0	303.74
120.0	302.83
135.0	304.65
150.0	304.65
165.0	305.57
180.0	302.83
195.0	300.12
210.0	301.02
225.0	301.02
240.0	302.83
255.0	301.92
270.0	302.83
285.0	303.74
300.0	302.83
315.0	304.65
330.0	304.65
345.0	305.57
360.0	302.83

Appendix A Product Photo



Picture 1



Picture 2

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