



TEST REPORT

Of IES LM-79-08

Kunde: <i>Client:</i>	ARTIKA FOR LIVING INC.
Adresse: <i>Address:</i>	1756 50th avenue, Lachine, Qc, Canada H8T 2V5
Hersteller: <i>Manufacturer:</i>	HIFLY ILLUMINATION CO., LIMITED
Adresse: <i>Address:</i>	No.2-2, Nanfeng Second Street, Guzhen Town, ZHONGSHAN CITY, Guangdong 528421
Name der Marke: <i>Brand Name:</i>	HIFLY ARTIKA
Beschreibung des Produkts: <i>Product Description:</i>	Denali Pendant 3CCT
Modelle: <i>Models:</i>	PDT-DEC-BLJ
Bewertung: <i>Rating:</i>	AC120V, 60Hz, 27W
Verfahren: <i>Method:</i>	IES LM-79-08: Approved Method for Electrical and Photometric Measurements of Solid-State Lighting Products
Prüfergebnis*: <i>Test result*:</i>	Please see the following test data

Datum der Prüfung:*Date of Test:*

2022-03-24-2022-03-25

Datum der Emission:*Date of Issue:*

2022-04-01

Klassifizierung:*Classification:*

Commission Test

Gegenstand der Prüfung:*Test item:*

IES LM-79-08

Prüflabor (Testlabor) / Testing Laboratory:

Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

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Zero Huang/ Project Engineer

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Jesse Liu/ Manager

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

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1. Test Method

Test Item.....	Integrating Sphere Test
Ambient Condition.....	24.9℃
Stabilization time(h):	0.5h
Orientation(burning position) of SSL product during test	down
Test Method	The sample was tested according to the IES LM-79-2008. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.
Test Item.....	Goniophotometer Test
Ambient Condition.....	24.9℃
Total operated time of the product for measurements including stabilization..... (h):	1.0h
Orientation(burning position) of SSL product during test	down
Test Method.....	The sample was tested according to the IES LM-79-2008. Photometric parameters were measured using a type C goniophotometer and software. The sample reference plane was located at the center of the sample goniometer at a test distance of 26m from the detectors. The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, Luminous efficacy, zonal flux were calculated from the software taken at 1°vertical intervals and 22.5°horizontal intervals.





2. Product Information

Product description.....:	Denali Pendant 3CCT
Model Number.....:	PDT-DEC-BLJ
Rated Inputs.....:	AC120V
Rated Power.....:	27W
Declared CCT.....:	3000K
LED Manufacturer.....:	Lumileds Holding B.V.
LED Model.....:	L128-AABBRA3500DDD
LED Package, Array or Module.....:	13S6P *2
Forward current of the LED chip.....:	60mA
Date of Receipt Samples.....:	March 21, 2022
Quantity of Receipt Samples.....:	1 unit
Remark.....:	PDT-DEC-XXXXXX ("XXXXXX" can be A to Z and/or 0 to 9 and/or blank (commercial code))

3. Test equipment list

Manufacturer	Description	Equipment ID	Model	Calibration Date	Calibration Due Date
EVERFINE	Full-field Speed Goniophotometer	SLCS-S-112	GO-R5000	2021/06/21	2022/06/20
EVERFINE	Digital Power Meter	SLCS-S-103	PF2010	2021/06/21	2022/06/20
EVERFINE	AC Testing Power Source	SLCS-S-115	DPS1060	2021/06/21	2022/06/20
EVERFINE	Total Spectral Radiant Flux Standard Lamp	SLCS-S-143	D908S	2021/07/02	2022/07/01
SENSING	2 Meter Integrating Sphere	SLCS-S-038	SPR-3000	2021/06/21	2022/06/20
YOKOGAWA	Digital Power Meter	SLCS-S-058	WT310	2021/06/21	2022/06/20
ALL POWER ELECTRONIC	AC Testing Power Source	SLCS-S-111	APW-105N	2021/06/21	2022/06/20
SENSING	Standard Lamp	SLCS-S-118	S11010017	2021/07/02	2022/07/01



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4. Integrating Sphere Test Results

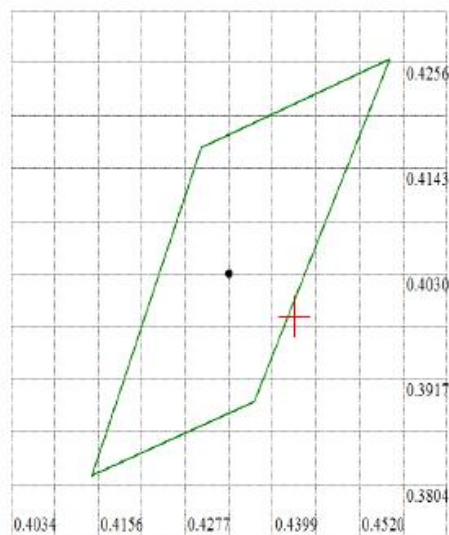
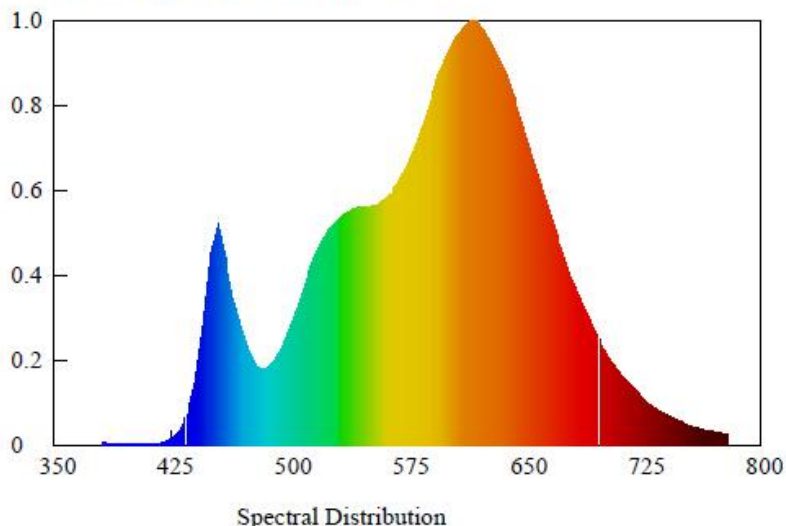
4.1 Test Data

Test type	Voltage (V AC)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
Input	120.21	60.0	0.2339	0.9840	27.66

Test type	CCT (K)	CRI	Duv	Luminous flux (lm)	Luminous efficacy(lm/W)
Output	2855	93.4	-0.00299	1247.47	45.1

4.2 Spectrum

Spectroradiometric Parameters



Chromaticity Coordinates: $x=0.4429$ $y=0.3984$ $u'=0.2569$ $v'=0.52$

Correlated Color Temperature: 2855 K

Colour Fidelity Index: $R_f=89$

Luminous Flux: 1247.47 lm

Chromaticity Difference: $-0.00299D_{uv}$

Color Ratio: $K_r=46.0\%$ $K_g=46.7\%$ $K_b=7.4\%$

Bandwidth: 150.4nm

Rendering Index: $R_a=93.4$

$R_1=96$ $R_2=98$ $R_3=98$ $R_4=95$ $R_5=95$ $R_6=96$ $R_7=90$ $R_8=80$

$R_9=56$ $R_{10}=93$ $R_{11}=96$ $R_{12}=81$ $R_{13}=98$ $R_{14}=98$ $R_{15}=90$ $R_e=91$

Dominant Wavelength: 583.0 nm(E)

Gamut Index: $R_g=100$

Purity: 0.5278

Peak Wavelength: 620.0 nm

Radiant Flux: 2.852 W



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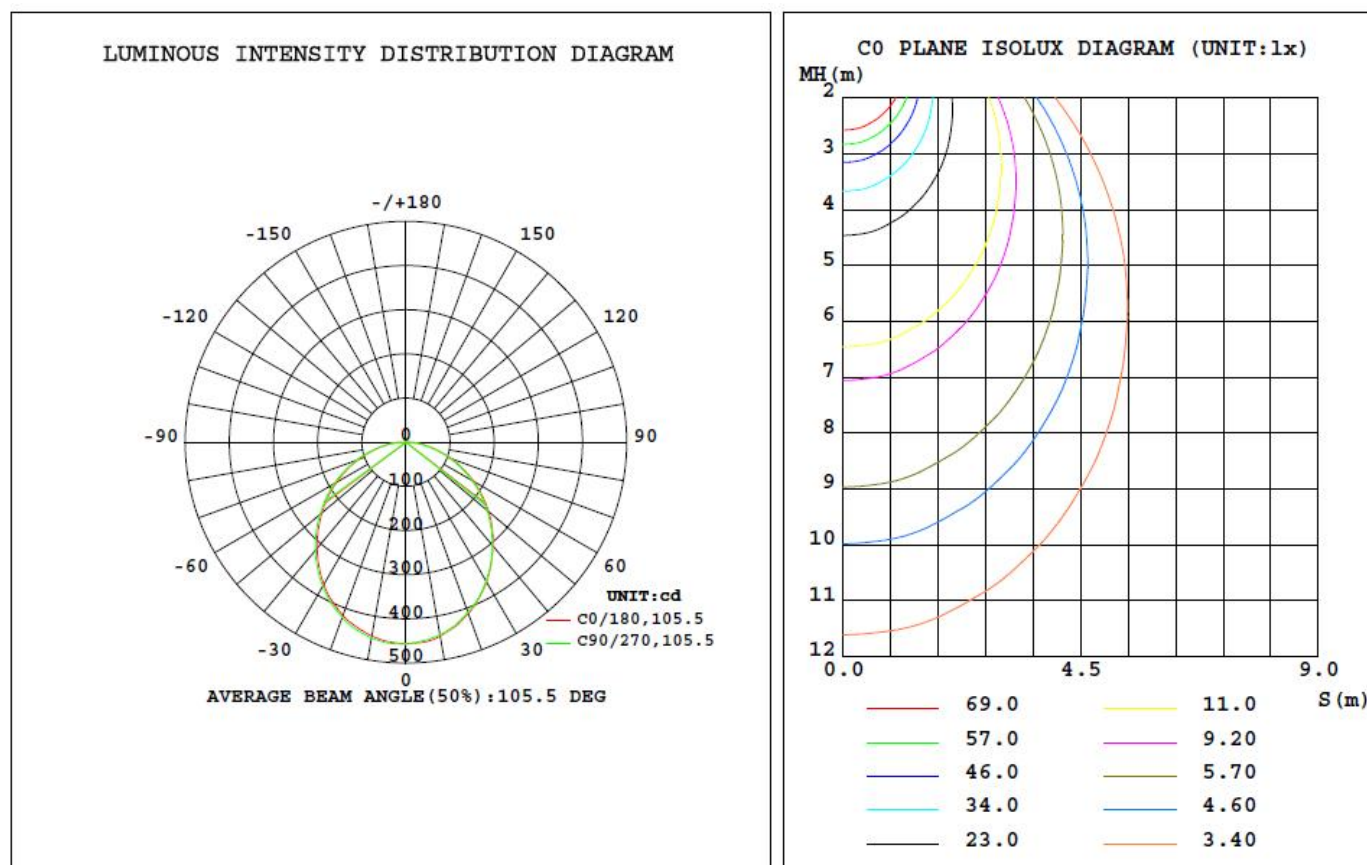
5. Goniophotometer Test results

5.1 Test Data

Test type	Voltage (V AC)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
Input	119.98	60.01	0.2336	0.9837	27.566

Test type	Total Flux (lm)	Luminous efficacy(lm/W)	I _{max} (cd)	Spacing Criteria (0~180°)	Spacing Criteria (90~270°)
Output	1243.78	45.12	458.1	1.22	1.23

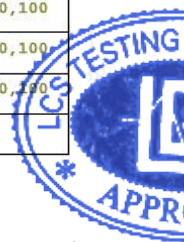
5.2 Luminous Intensity Distribution Diagram and C0 Plane Isolux Diagram (Unit : lx)





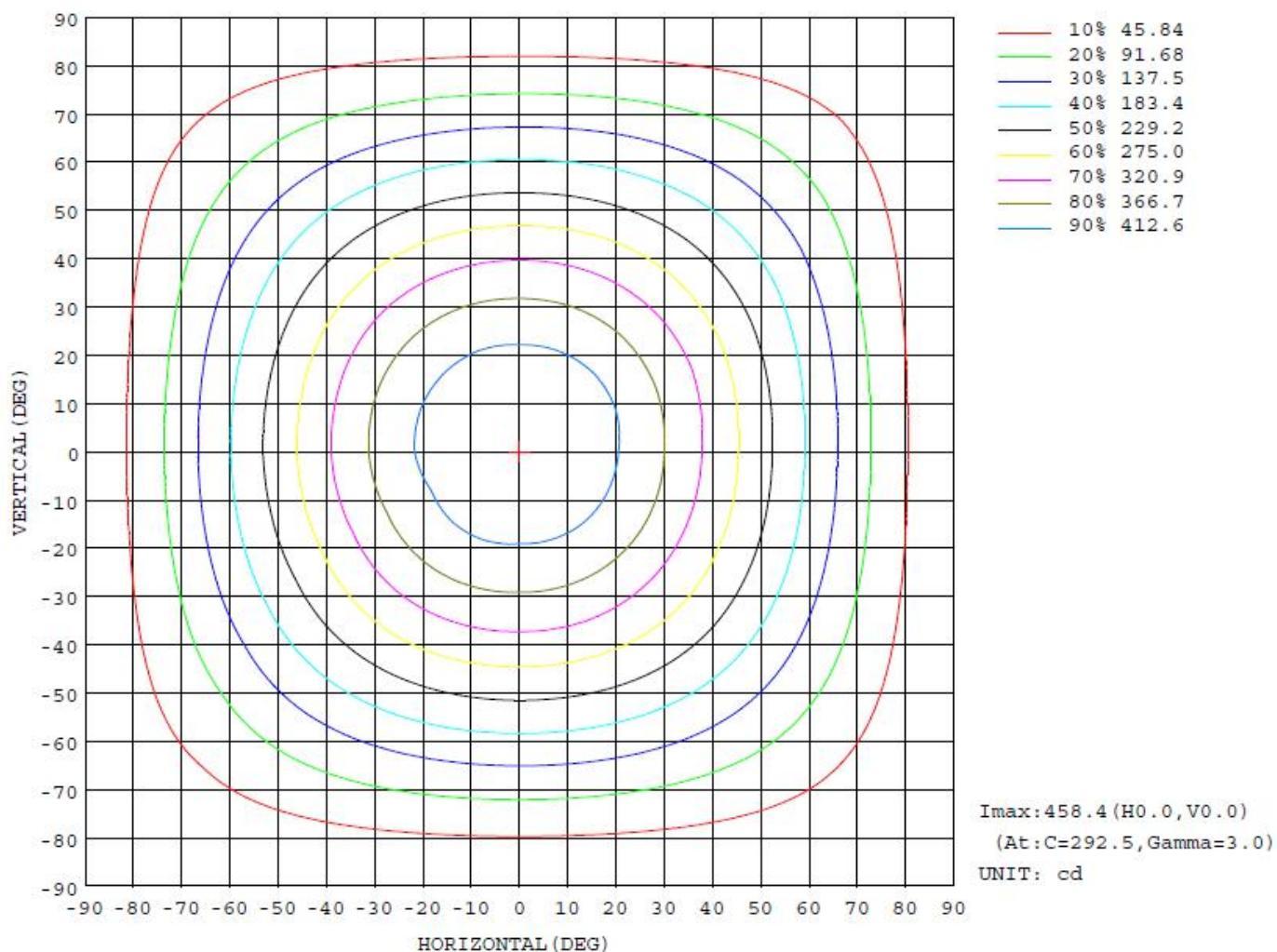
5.3 Zonal Flux Diagram

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	445.4	442.1	443.0	444.9	445.3	448.3	450.0	451.9	0- 10	43.12	43.12	3.47, 3.47
20	412.6	410.6	409.7	413.5	417.6	420.7	422.1	422.6	10- 20	122.2	165.4	13.3, 13.3
30	365.2	363.2	362.9	366.8	372.1	376.6	377.2	375.6	20- 30	181.9	347.3	27.9, 27.9
40	306.0	304.1	304.6	307.7	313.6	318.1	319.7	318.0	30- 40	213.8	561.0	45.1, 45.1
50	244.2	240.4	239.8	240.7	249.0	252.0	254.5	254.3	40- 50	215.9	776.9	62.5, 62.5
60	176.7	173.2	172.3	173.2	181.5	184.9	187.4	187.5	50- 60	190.8	967.8	77.8, 77.8
70	109.3	105.7	105.3	106.5	114.9	117.4	119.4	119.3	60- 70	144.1	1112	89.4, 89.4
80	47.98	45.54	44.38	45.37	53.44	55.42	56.69	56.39	70- 80	84.88	1197	96.2, 96.2
90	6.413	6.349	6.139	6.251	6.550	11.49	13.62	13.25	80- 90	30.22	1227	98.7, 98.7
100	5.089	5.280	5.223	5.171	4.020	3.956	3.897	4.082	90-100	5.845	1233	99.1, 99.1
110	3.940	4.127	4.397	4.336	3.118	2.803	2.568	2.667	100-110	4.360	1237	99.5, 99.5
120	2.792	3.218	0.4145	2.917	2.462	1.726	0.8369	1.498	110-120	2.713	1240	99.7, 99.7
130	2.054	2.230	1.824	1.504	1.231	0.6596	0.5803	0.5000	120-130	1.507	1241	99.8, 99.8
140	1.559	1.403	1.575	1.167	0.4924	0.9069	0.5803	0.5019	130-140	0.9221	1242	99.9, 99.9
150	0.9044	0.9069	0.9119	0.9167	0.9020	0.9069	0.9948	0.9191	140-150	0.5920	1243	99.9, 99.9
160	0.7386	0.9069	0.8290	0.9167	1.149	0.9930	1.161	1.083	150-160	0.4253	1243	100, 100
170	1.394	1.237	1.325	1.168	1.395	1.402	1.326	1.333	160-170	0.2933	1244	100, 100
180	1.313	1.319	1.409	1.417	1.395	1.487	1.326	1.333	170-180	0.1280	1244	100, 100
DEG	LUMINOUS INTENSITY: cd									UNIT: lm		





5.4 Isocandela Diagram





5.5 Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456			
5	454	455	453	451	451	452	454	453	453	455	455	455	457	457	457	456			
10	445	445	442	442	443	444	445	445	445	448	448	449	450	451	452	451			
15	432	431	429	428	429	429	431	432	433	436	436	438	439	439	440	438			
20	413	412	411	409	410	412	414	414	418	420	421	421	422	423	423	421			
25	390	390	388	388	389	390	391	393	396	400	401	402	402	401	401	399			
30	365	365	363	363	363	365	367	368	372	376	377	377	377	377	376	373			
35	336	335	333	334	335	336	338	339	344	348	349	349	349	349	348	345			
40	306	305	304	304	305	306	308	309	314	317	318	319	320	320	318	316			
45	276	275	273	273	273	273	275	276	281	284	286	286	287	287	287	285			
50	244	242	240	240	240	240	241	243	249	251	252	253	254	255	254	253			
55	211	209	207	206	206	206	207	209	216	217	219	220	221	221	220	219			
60	177	175	173	173	172	172	173	175	182	183	185	186	187	188	188	186			
65	142	141	139	139	138	138	139	140	148	149	150	152	153	154	153	152			
70	109	107	106	105	105	106	107	107	115	116	117	118	119	120	119	118			
75	77.0	75.7	74.5	73.7	73.2	73.3	73.8	74.8	82.9	83.6	85.0	85.7	86.5	87.0	86.8	85.7			
80	48.0	46.7	45.5	44.6	44.4	44.6	45.4	46.4	53.4	54.3	55.4	56.1	56.7	56.9	56.4	55.7			
85	25.0	24.5	23.6	22.6	22.1	22.0	22.7	23.5	28.4	29.1	30.0	30.5	30.6	30.7	30.5	30.0			
90	6.41	6.43	6.35	6.28	6.14	6.16	6.25	6.25	6.55	8.36	11.5	13.0	13.6	13.7	13.2	12.3			
95	5.66	5.69	5.69	5.70	5.55	5.57	5.67	5.67	4.68	4.61	4.53	4.54	4.56	4.66	4.50	4.66			
100	5.09	5.19	5.28	5.29	5.22	5.32	5.17	5.17	4.02	4.11	3.96	4.05	3.90	4.07	4.08	4.08			
105	4.52	4.69	4.70	4.79	4.89	4.91	4.84	4.83	3.86	3.79	3.71	3.30	3.31	3.32	3.42	3.83			
110	3.94	3.96	4.13	4.21	4.40	4.33	4.34	4.25	3.12	2.96	2.80	2.64	2.57	2.66	2.67	2.99			
115	3.37	3.54	3.71	3.72	3.66	2.67	3.67	3.67	2.71	2.64	2.39	1.13	1.65	1.74	2.41	2.58			
120	2.79	3.13	3.22	1.57	0.41	1.64	2.92	3.25	2.46	1.97	1.73	1.16	0.84	0.58	1.50	1.91			
125	2.46	2.72	2.64	1.57	1.82	1.75	2.17	2.92	1.72	1.56	1.07	0.91	0.74	0.42	1.08	1.33			
130	2.05	2.31	2.23	1.57	1.82	1.75	1.50	2.33	1.23	1.32	0.66	0.83	0.58	0.42	0.50	1.00			
135	1.81	2.06	2.06	1.57	1.82	1.66	1.17	1.67	0.74	0.58	0.82	0.83	0.58	0.42	0.50	0.67			
140	1.56	1.89	1.40	1.57	1.58	1.25	1.17	0.83	0.49	0.66	0.91	0.83	0.58	0.50	0.50	0.67			
145	1.32	1.48	0.91	1.32	0.91	1.00	1.08	0.83	0.58	0.82	0.91	0.91	0.74	0.58	0.67	0.67			
150	0.90	0.99	0.91	0.99	0.91	0.75	0.92	0.83	0.90	0.91	0.91	0.99	0.99	1.00	0.92	0.83			
155	0.82	0.82	0.91	0.83	0.83	0.67	0.92	0.83	0.99	0.91	0.91	1.07	1.16	1.00	1.00	0.92			
160	0.74	0.82	0.91	0.83	0.83	0.67	0.92	0.83	1.15	1.15	0.99	1.07	1.16	1.08	1.08	0.92			
165	1.14	0.90	0.91	0.83	0.83	0.67	0.92	0.83	1.23	1.24	1.32	1.16	1.16	1.08	1.08	1.00			
170	1.39	1.23	1.24	1.07	1.33	0.83	1.17	1.33	1.40	1.48	1.40	1.40	1.33	1.50	1.33	1.33			
175	1.31	1.32	1.24	1.24	1.41	1.17	1.25	1.50	1.40	1.40	1.40	1.49	1.33	1.58	1.33	1.42			
180	1.31	1.24	1.32	1.57	1.41	1.33	1.42	1.50	1.40	1.32	1.49	1.32	1.33	1.41	1.33	1.33			

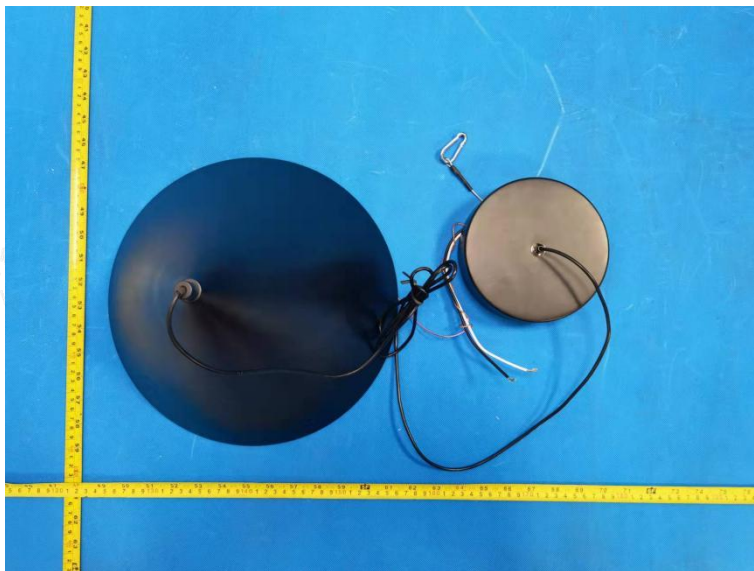
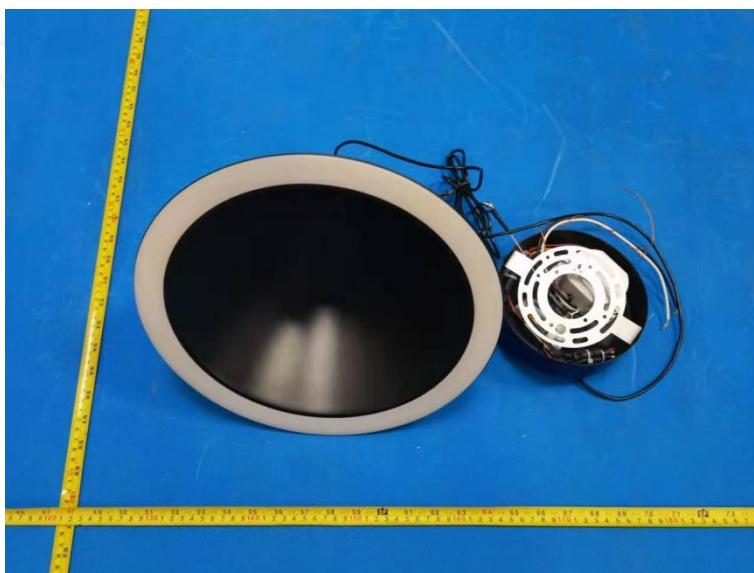




6. Photo of sample

Photo document

Photos of PDT-DEC-BLJ



----- End of test report -----

