



Test Center of Foshan Electrical and Lighting Co.,Ltd.

TEST REPORT

IES LM-79 report		
Testing Laboratory Name	Test Center of Foshan Electrical and Lighting Co.,Ltd.	
Address	64 North Fenjiang Road, Foshan, Guangdong, China	
Tested by (printed name and signature) ..	Liu Min	
Approved by (printed name and signature) ..	Wu Weihua	
Date of receipt of test item.....	2021-10-11	
Date of issue	2021-10-12	
Client's Name	Foshan Electrical And Lighting Co., Ltd.	
Address	64 North Fenjiang Road, Foshan, Guangdong. P.R.China.	
Manufacturer.....	Foshan Electrical And Lighting Co., Ltd.	
Address	64 North Fenjiang Road, Foshan, Guangdong. P.R.China.	
Test specification /Standard(s)..	IES LM-79-08	
Test procedure.....	Commission Testing (according to client's requirements)	
Lamp type.....	LED Lamp	
Model and/or type reference	CL-16-3CCT/B163/*51-G	
Rated voltage(V)	AC 120V	
Rated Frequency(Hz)	60Hz	
Rated power(W)	16.5W	
Nominal CCT.....	3000K	
Rated color temperature (K)	3000K	
Not apply to the test object :	N/A (Not applicable)	
Test item meet the requirement:	P (Pass)	

Test Center of Foshan Electrical and Lighting Co.,Ltd.

TEST REPORT

Test item description		
Burning time.....:		0h
Stabilization time..... :		0.5h
Total operating time.....:		0.5h
Burning position..... :		Base up
Ambient temperature.....:		25±1℃
Test method(Instrument)..... :		Goniophotometer
Type of reference lamp used.....:		Halogen lamp;D908;590W;Omni-directional; NIM traceable
Correction factors applied.....:		---
Photometric distance.....:		1.9M
Measurement conditions.....:		AC120V; 60Hz
Statement of uncertainties..... :		---
Deviation from standard.....:		---
Disclaimers.....:		The test result presented in this report relates only to the submitted test samples.
Equipment used		
No.	Equipment name	Model No.
1	DIGITAL POWER METER	PF210
2	FULL-FIELD SPEED GONIOPHOTOMETER	GO-R5000
3	CALIBRATED LAMPS STANDARD	D908
4	DPS SERIES PWM AC POWER SUPPLY	DPS1060

Test Center of Foshan Electrical and Lighting Co.,Ltd.

TEST REPORT

IES LM-79-08			
Clause	Test items/ requirements	Result-remark	Verdict
1	Luminous intensity distribution	Refer to Annex 1 , 3 and 4	---
2	Input voltage(V)	Refer to Annex 2	---
3	Current (A)	Refer to Annex 2	---
4	Total luminous flux (lm)	Refer to Annex 2	---
5	Power (W)	Refer to Annex 2	---
6	Power factor	Refer to Annex 2	---
7	Luminous efficacy (lm/W)	Refer to Annex 2	---
8	Chromaticity coordinates	Refer to Annex 2	---
9	Correlated color temperature(K)	Refer to Annex 2	---
10	Color rendering index	Refer to Annex 2	---
11	Spatial non-uniformity of chromaticity	Refer to Annex 2	---

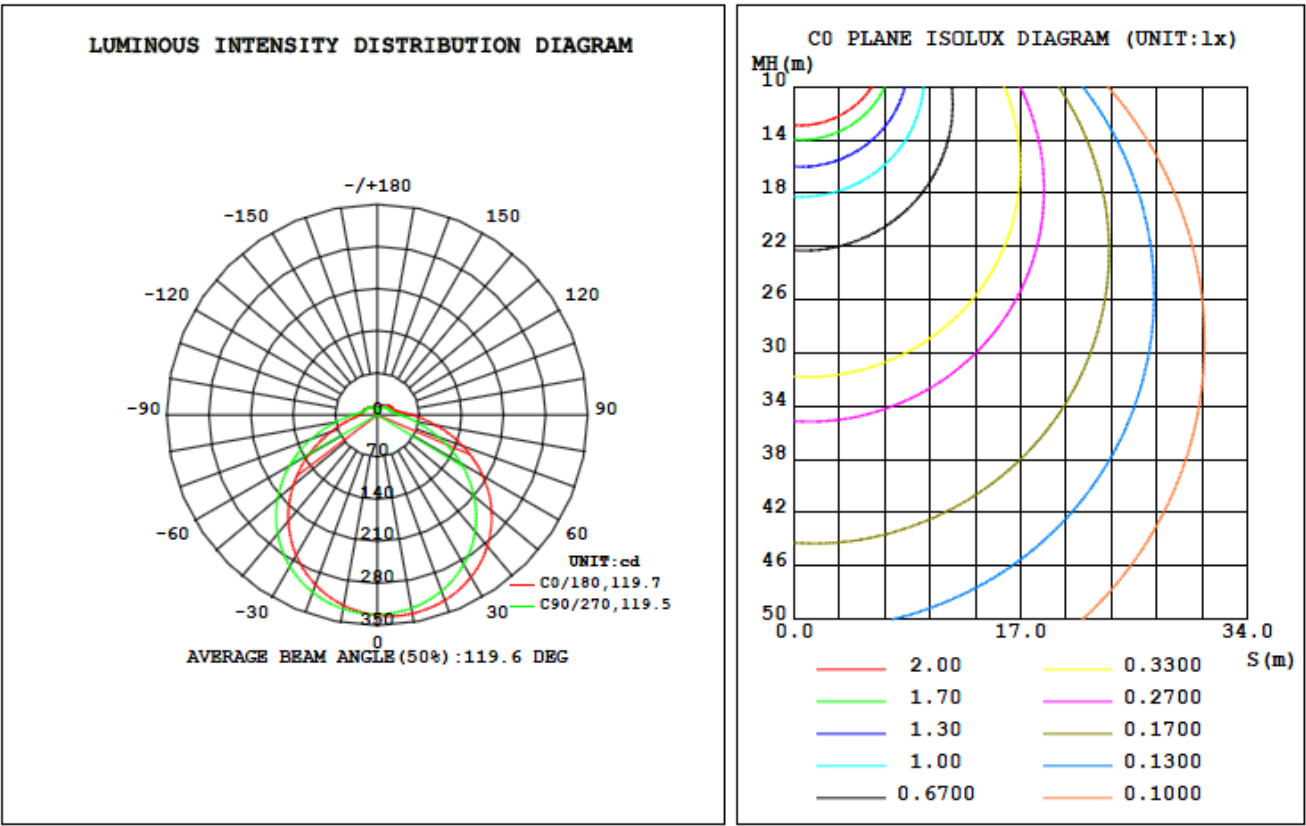
Test Center of Foshan Electrical and Lighting Co.,Ltd.

TEST REPORT

Annex 1 Luminous Intensity Distribution Diagram

Test:U:120.24V I:0.1353A P:15.276W PF:0.9390 Freq:50.00Hz Lamp Flux:1222.65x1 lm		
NAME: 11INCH 3CCT Ceiling light	TYPE:出口研发部	WEIGHT:
SPEC.:120V 16.5W 3000K	DIM.:	SERIAL No.:2021101102
MFR.: FSL	SUR.:	Shielding Angle:

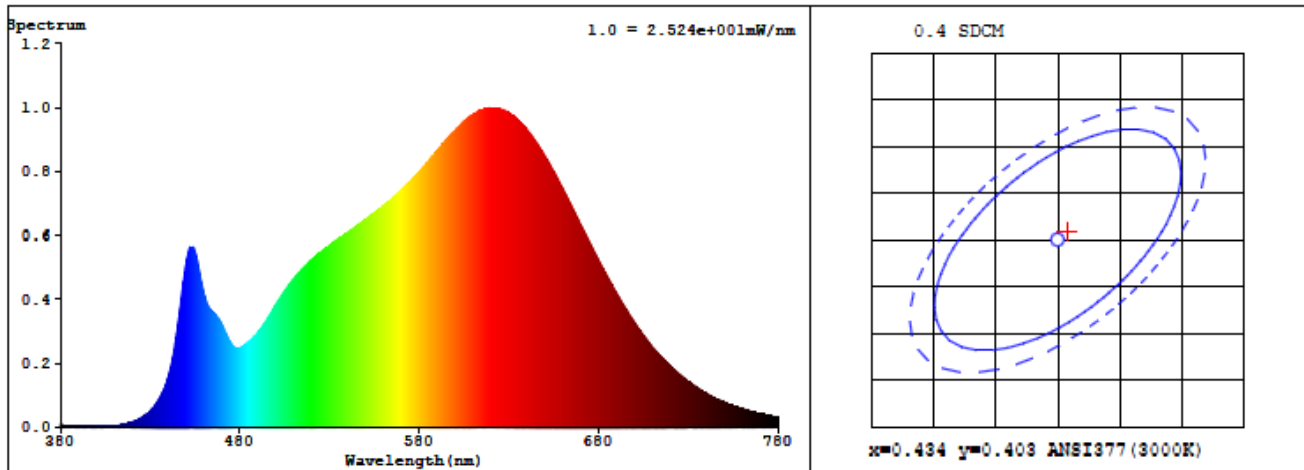
DATA OF LAMP		PHOTOMETRIC DATA				Eff: 80.04 lm/W
MODEL		Imax(cd)	335.7	S/MH(C0/180)	1.21	
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.30	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1222.6	η UP,DN(C0-180)	6.0,44.4	
NOMINAL FLUX(lm)	1222.65	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	5.8,43.9	
LAMPS INSIDE	1	η up(%)	11.7	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	120	η down(%)	88.3	CIBSE SHR MAX	1.50	



Test Center of Foshan Electrical and Lighting Co.,Ltd.

TEST REPORT

Annex 2 Total Luminous Flux And Electrical Power



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4346$ $y = 0.4042$ / $u' = 0.2490$ $v' = 0.5211$ ($duv=3.72e-04$)CCT= 3041K Prcp WL: $L_d=582.5\text{nm}$ Purity=51.8%Peak WL: $L_p=620\text{nm}$ FWHM: $=165.9\text{nm}$ Ratio: R=24.1% G=73.0% B=3.0%Render Index: $R_a = 93.4$

EEL: 0.16226 A+

R1 =93.7 R2 =96.9 R3 =98.6 R4 =93.3 R5 =93.2 R6 =95.9 R7 =92.5

R8 =83.1 R9 =62.0 R10=91.6 R11=94.3 R12=79.3 R13=94.6 R14=98.6 R15=89.7

Photometric & Radiometric Parameters

Flux = 1276.8 lm Eff. : 83.70 lm/W $F_e = 4.4130\text{ W}$

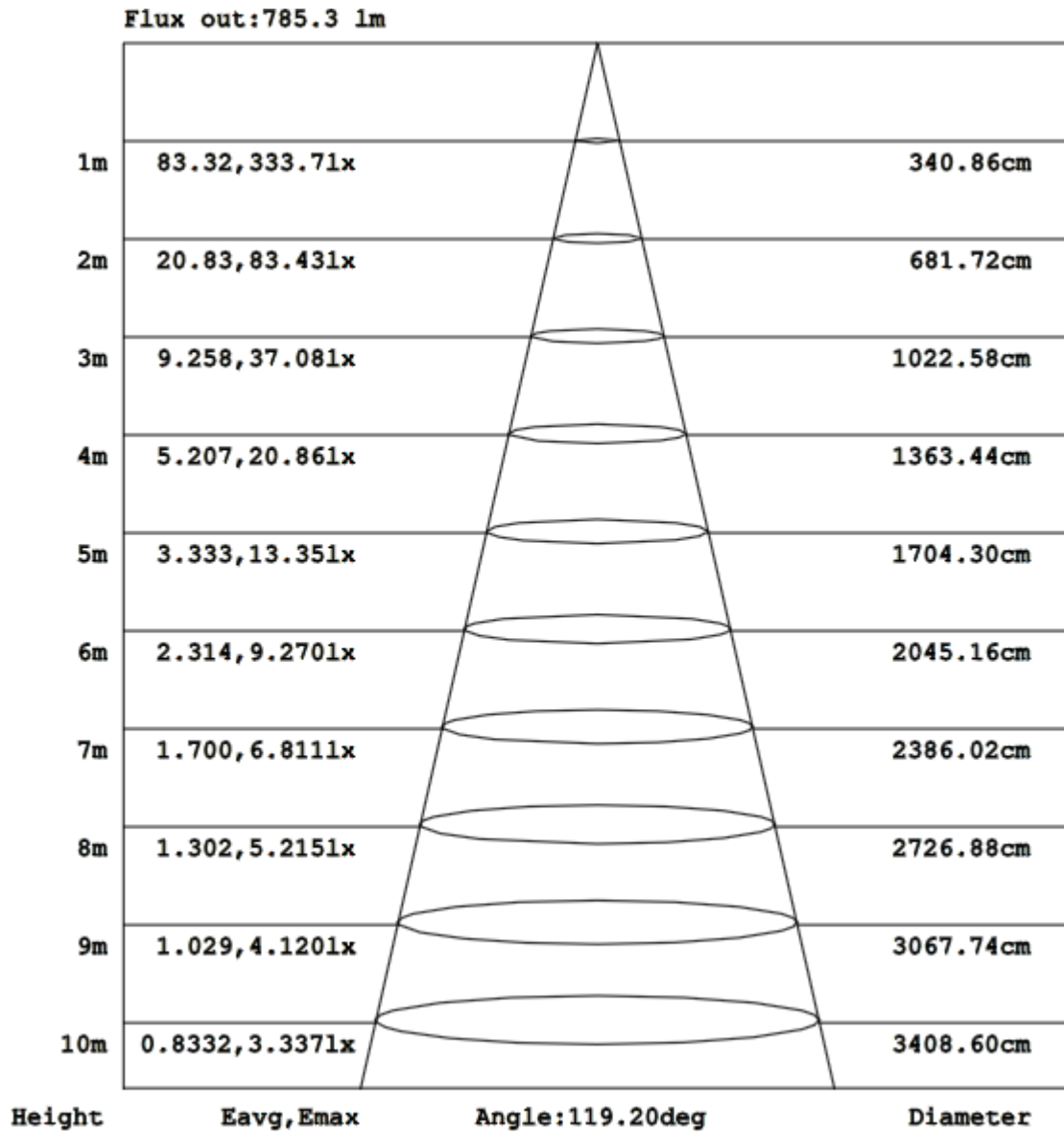
Electrical parameters

 $V = 119.97\text{ V}$ $I = 0.1355\text{ A}$ $P = 15.25\text{ W}$ PF = 0.9383 F=59.98 Hz

Test Center of Foshan Electrical and Lighting Co.,Ltd.

TEST REPORT

Annex 3 Cone Diagram



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TEST REPORT

Annex 4 Candela Distribution Table

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	⊙ zone	⊙ total	⊙lum, lamp
10	335.3	331.2	326.3	321.1	321.7	322.2	327.5	332.3	0- 10	31.45	31.45	2.57,2.57
20	328.0	321.5	311.7	301.7	300.5	303.2	314.0	324.9	10- 20	90.75	122.2	9.99,9.99
30	311.5	301.7	287.1	272.4	269.7	274.8	290.8	307.6	20- 30	139.5	261.7	21.4,21.4
40	284.7	271.9	252.9	233.8	230.0	236.8	258.0	280.3	30- 40	171.4	433.1	35.4,35.4
50	248.0	233.5	210.0	187.2	182.6	191.5	216.6	243.2	40- 50	182.1	615.1	50.3,50.3
60	202.6	186.5	160.5	135.6	130.9	140.9	168.4	197.6	50- 60	170.1	785.3	64.2,64.2
70	151.1	134.9	108.8	85.64	81.26	90.85	117.0	146.2	60- 70	138.4	923.7	75.5,75.5
80	99.07	85.45	64.74	48.79	45.91	51.98	70.42	94.70	70- 80	96.49	1020	83.4,83.4
90	57.85	49.39	37.26	30.15	28.92	31.12	39.74	54.63	80- 90	59.12	1079	88.3,88.3
100	34.88	31.65	26.66	25.35	25.23	25.25	26.67	33.08	90-100	36.85	1116	91.3,91.3
110	28.44	27.40	22.49	22.93	23.60	23.25	21.92	27.22	100-110	27.66	1144	93.6,93.6
120	26.58	25.17	21.15	20.61	21.35	21.01	20.76	24.86	110-120	23.49	1167	95.5,95.5
130	24.06	22.71	19.41	18.40	18.76	18.85	18.91	22.18	120-130	19.36	1187	97.1,97.1
140	21.01	19.96	17.35	16.15	16.33	16.15	16.95	19.44	130-140	14.88	1202	98.3,98.3
150	18.02	17.46	15.11	14.13	14.25	13.43	15.08	16.79	140-150	10.53	1212	99.1,99.1
160	15.33	14.59	12.71	11.52	10.94	11.50	12.72	14.12	150-160	6.671	1219	99.7,99.7
170	10.63	10.43	9.151	8.318	8.043	7.848	8.597	9.496	160-170	3.171	1222	99.9,99.9
180	3.368	3.241	2.588	2.922	5.267	5.131	2.722	4.275	170-180	0.7241	1223	100.100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		