

Photometric Test Report

Relevant Standards

- IES LM-79-2008
- ANSI C82.77:2014

Prepared For RAB Lighting Inc.

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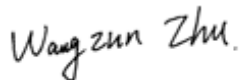
Test Date

2019/6/3

Issue Date

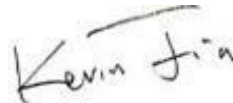
2019/6/3

Prepared By



Wangzun Zhu

Approved By



Kevin Jia

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1.0 Test Summary

DLC Technical Requirements v4.4

Outdoor - Architectural Flood and Spot Luminaires				
Requirement Category (Test Data Source)	Test Method	Requirements		Test value
Luminaire Output (lm) (Goniophotometer - Section 4.2)	IES LM-79-2008	1000		9989
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	standard 92.15	Premium 111.55	127.3
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Wrost Case		78.5
Total Harmonic Distortion (A%) (THD & PF - Section 4.3)	ANSI C82.77:2014	25.00%	120V	6.12%
	ANSI C82.77:2014	25.00%	277V	7.79%
Power Factor (THD & PF - Section 4.3)	ANSI C82.77:2014	0.873	120V	0.998
	ANSI C82.77:2014	0.873	277V	0.949
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	5700		4819
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	63		75
Zonal Lumen Requirement (0°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	≥82%		100.00%
Input Voltage (V)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Wrost Case		120
(THD & PF - section 4.3)		Non-Wrost Case		277
Input Current (A)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Wrost Case		0.655
(THD & PF - section 4.3)		Non-Wrost Case		0.291
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Wrost Case		78.5
(THD & PF - section 4.3)		Non-Wrost Case		76.4

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2019/6/3	FXLED78SF	E1
2	Goniophotometer Test	2019/6/3	FXLED78SF	E1
3	THD and PF Test	2019/6/3	FXLED78SF	E1

Remark(If any)

1、 This report shall not be used by the client to claim product endorsement by NVLAP, NIST or any agency of the US government.

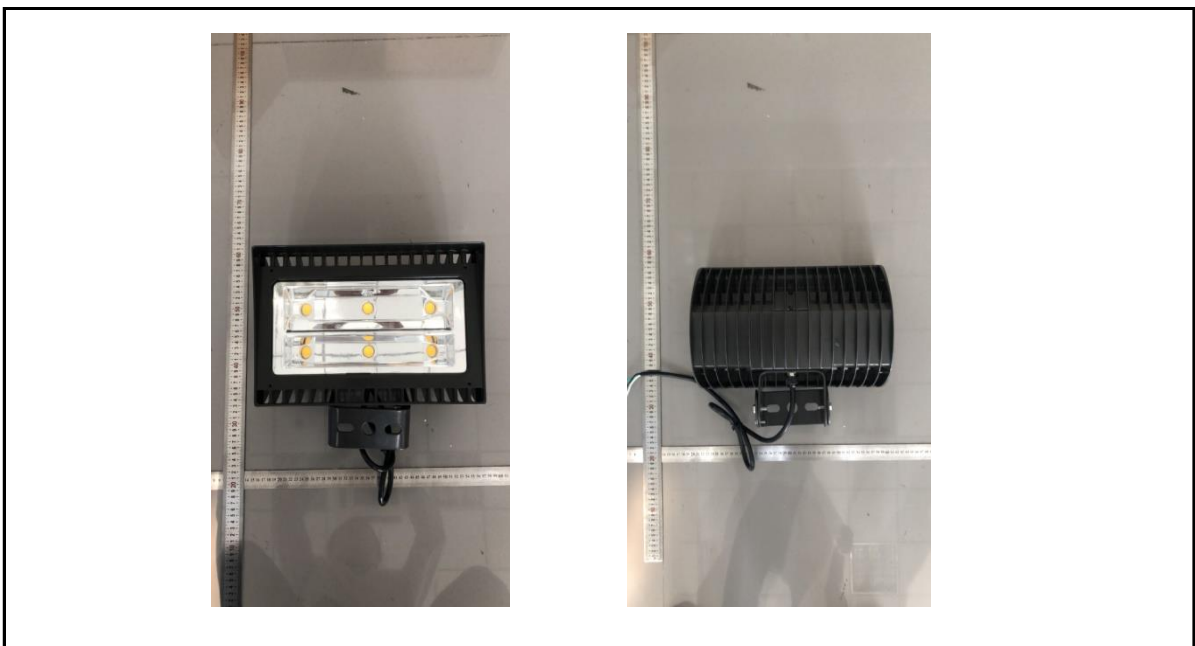
2、 The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification.

3.0 Production Description

Luminaire Description: FXLED78SF

Electrical Specification: 120V-277V,50/60HZ

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	FXLED78SF	Sample ID.	E1
Operate time (Min.)	10	Stabilization time (Min.)	30
Temperature (°C)	25.3	Humidity (%RH)	53.0

Test Method

The samples were tested according to the IES LM-79-2008.

Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

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 voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.

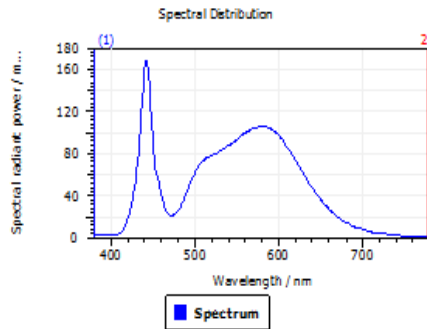
The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.

Test Result

Voltage (V)	CCT (K)	CRI	Duv
120.00	4819	75	3.9E-03

4.1 Integrating Sphere Test

Results



Spectral values

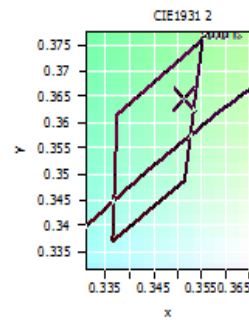
DominantWavelength	571.61 nm
Purity	0.149
PeakWavelength	441.91 nm
Radiant Power	18.64 W
Width50%	17.42 nm

Color Coordinates

Correlated Color Temperatu 4819 K

x: 0.3515 u: 0.2107 u': 0.2107
y: 0.3646 v: 0.3279 v': 0.4918

ResultsCRICRI01	71.0	ResultsCRICRI09	-31.9
ResultsCRICRI02	79.6	ResultsCRICRI10	54.4
ResultsCRICRI03	88.7	ResultsCRICRI11	75.5
ResultsCRICRI04	75.8	ResultsCRICRI12	58.7
ResultsCRICRI05	73.4	ResultsCRICRI13	72.1
ResultsCRICRI06	74.3	ResultsCRICRI14	93.9
ResultsCRICRI07	81.0	ResultsCRICRI15	61.5
ResultsCRICRI08	54.9	ResultsCRICRI16	62.8
ResultsCRI	74.8		



PlankDistance 3.9E-003

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	FXLED78SF	Sample ID.	E1
Operate time (Min.)	90	Stabilization time (Min.)	45
Temperature (°C)	25.3	Humidity (%RH)	55.0

Test Method

The samples were tested according to the IES LM-79-2008.

Photometric parameters were measured using a type C goniophotometer and software.

The ambient temperature shall be maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.

The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.

The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 0.5° vertical intervals and 10° horizontal intervals.

Test Conditions

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Orientation
120.04	60	0.655	78.5	0.998	Light Down

Test Result

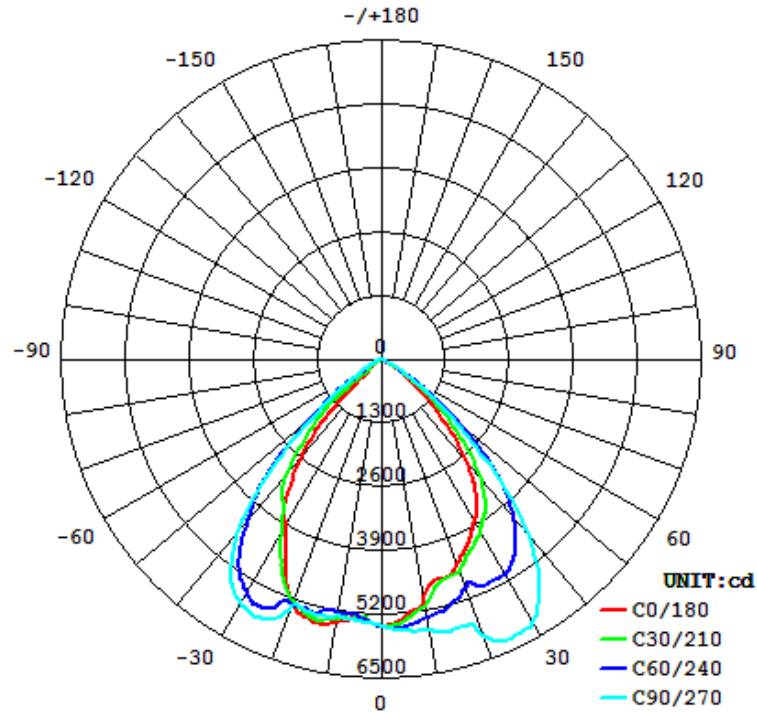
Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	Horizontal Spread	Vertical Spread	Horizontal Spread	Vertical Spread	
9989	118.4	104.1	90.2	69.9	127.3

Zonal Lumen Requirement (0°-90°)

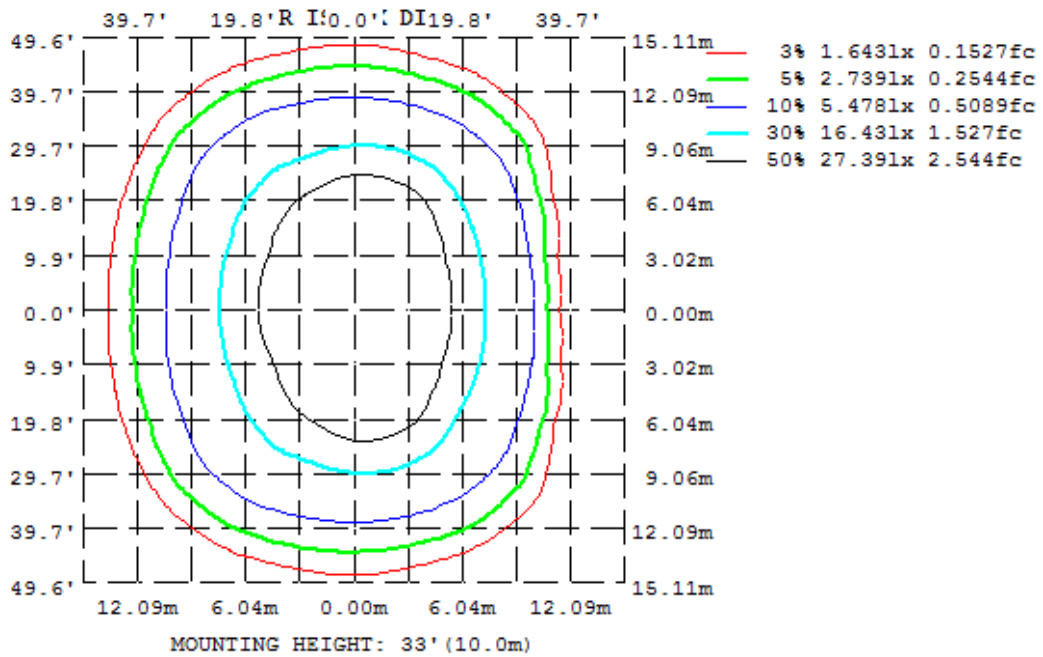
100.00%

4.2 Goniophotometer Test

Light Distribution Curve



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

γ	LUMINOUS INTENSITY:cd										
	C0	C45	C90	C135	C180	C225	C270	C315			
10	5431	5248	5314	5038	4955	5171	5619	5539			
20	5305	5362	5329	4439	4454	4715	5958	5627			
30	3899	4751	5738	4218	3820	4500	6161	5130			
40	2516	3459	4516	3573	2694	3783	4630	3717			
50	473.0	1887	1878	2086	1178	2103	1906	1859			
60	84.20	258.2	483.7	555.3	212.4	529.1	498.2	230.1			
70	30.86	33.66	63.38	34.32	51.82	34.41	52.02	31.50			
80	0.1862	0.1724	14.22	26.15	50.40	28.15	10.51	0.1225			
90	0	0	0	0	0	0	0	0			
100	0	0	0	0	0	0	0	0			
110	0	0	0	0	0	0	0	0			
120	0	0	0	0	0	0	0	0			
130	0	0	0	0	0	0	0	0			
140	0	0	0	0	0	0	0	0			
150	0	0	0	0	0	0	0	0			
160	0	0	0	0	0	0	0	0			
170	0	0	0	0	0	0	0	0			
180	0	0	0	0	0	0	0	0			



4.2 Goniophotometer Test
ZONAL LUMEN SUMMARY

	Zonal (lm)		Total (lm)	Percent
0-10	510.62	0 - 10	510.62	5.11%
10-20	1478.05	0 - 20	1988.67	19.91%
20-30	2303.86	0 - 30	4292.53	42.97%
30-40	2662.35	0 - 40	6954.89	69.63%
40-50	2037.32	0 - 50	8992.20	90.02%
50-60	814.56	0 - 60	9806.76	98.18%
60-70	147.30	0 - 70	9954.06	99.65%
70-80	27.77	0 - 80	9981.84	99.93%
80-90	6.81	0 - 90	9988.65	100.00%
90-100	0.00	0 - 100	9988.65	100.00%
100-110	0.00	0 - 110	9988.65	100.00%
110-120	0.00	0 - 120	9988.65	100.00%
120-130	0.00	0 - 130	9988.65	100.00%
130-140	0.00	0 - 140	9988.65	100.00%
140-150	0.00	0 - 150	9988.65	100.00%
150-160	0.00	0 - 160	9988.65	100.00%
160-170	0.00	0 - 170	9988.65	100.00%
170-180	0.00	0 - 180	9988.65	100.00%

4.3 Goniophotometer Test

Axial Candela

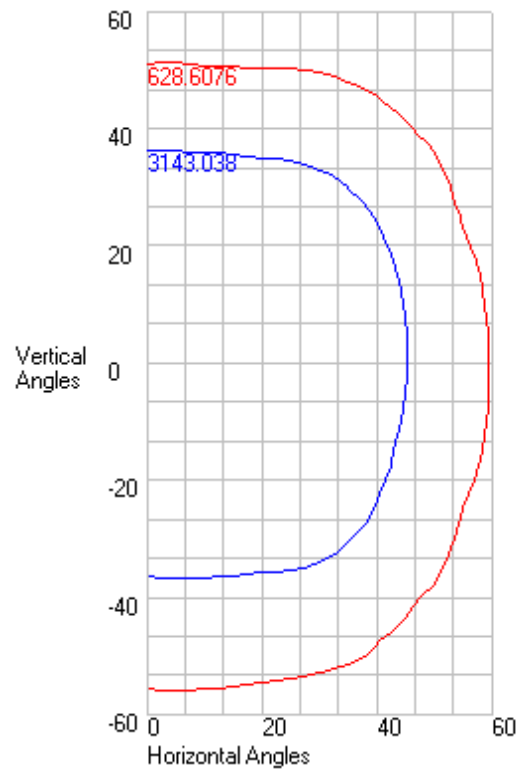
DEG.	HOR.	DEG.	VERT.
90	0.002	90	0
85	1.14	85	0.16
75	25.89	75	0.3
65	163.24	65	51.11
55	1027.85	55	227.21
47.5	2589.605	47.5	1012.325
42.5	3951.28	42.5	2033.65
37.5	5122.635	37.5	2960.76
33	5833.868	33	3602.954
29	6185.182	29	4040.558
25.5	6268.349	25.5	4537.691
22.5	6119.12	22.5	4956.675
19.5	5930.836	19.5	5327.65
17	5794.966	17	5442.7
15	5686.27	15	5534.74
13	5659.49	13	5493.348
11	5632.71	11	5451.956
9	5605.338	9	5406.234
7	5577.374	7	5356.182
5	5549.41	5	5306.13
3	5503.368	3	5357.4
1	5457.327	1	5408.671
0	5434.306	0	5434.306
-1	5417.395	-1	5399.771
-3	5383.572	-3	5330.7
-5	5349.75	-5	5261.63
-7	5335.298	-7	5139.102
-9	5320.846	-9	5016.574
-11	5323.71	-11	4884.916
-13	5343.89	-13	4744.128
-15	5364.07	-15	4603.34
-17	5350.206	-17	4543.76
-19.5	5332.876	-19.5	4469.285
-22.5	5573.175	-22.5	4309.9
-25.5	5809.004	-25.5	4130.826
-29	5753.452	-29	3888.738
-33	5487.53	-33	3552.228
-37.5	4918.225	-37.5	3033.985
-42.5	3876.98	-42.5	2266.135
-47.5	2558.38	-47.5	1508.315
-55	1009.43	-55	671.04
-65	164.28	-65	70.52
-75	33.08	-75	56.61
-85	3.12	-85	9.65
-90	0.006	-90	0.019

4.3 Goniophotometer Test

Characteristics

NEMA Type	6 H x 6 V
Maximum Candela	6286.076
Maximum Candela Angle	25.5 H 7 V
Horizontal Beam Angle (50%)	90.2
Vertical Beam Angle (50%)	69.9
Horizontal Field Angle (10%)	118.4
Vertical Field Angle (10%)	104.1
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	7468
Beam Efficiency	N.A.
Field Lumens	9600
Field Efficiency	N.A.
Spill Lumens	389
Luminaire Lumens	9989
Total Efficiency	N.A.
Total Luminaire Watts	78.484
Ballast Factor	1

ISOCANDELA CURVES





LUMEN TABULATION

	0	1	3	5	7	9	11	13	15	17	20	23	26	29	33	38	43	48	55	65	75	85	90	Total
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0	0	0	0	0
65	0.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.2	1.1	1.2	1.2	1.1	0.9	0.6	0.6	0.3	0.1	0	0	0	0
55	1.4	2.89 *	2.92 *	2.9	2.8	2.7	2.7	2.6	2.6	3.2	3.7	3.6	3.8	3.8	3.5	2.5	1.5	1.2	0.5	0.1	0	0	0	0
47.5	2.33 *	4.70 *	4.72 *	4.70 *	4.62 *	4.51 *	4.42 *	4.36 *	4.27 *	5.17 *	5.92 *	5.60 *	6.06 *	6.15 *	5.54 *	4.04 *	2.2	1.5	0.5	0.1	0	0	0	0
42.5	3.81 *	7.66 *	7.67 *	7.62 *	7.52 *	7.41 *	7.32 *	7.21 *	7.06 *	8.50 *	9.72 *	9.23 *	10.03 *	10.21 *	9.23 *	7.03 *	4.11 *	2.7	0.9	0.1	0	0	0	0
37.5	4.51 *	9.03 *	9.03 *	8.98 *	8.89 *	8.78 *	8.66 *	8.49 *	8.28 *	10.07 *	11.73 *	11.27 *	12.32 *	12.64 *	11.64 *	9.19 *	5.57 *	3.7	1.2	0.2	0	0	0	0
33	4.66 *	9.33 *	9.31 *	9.25 *	9.17 *	9.10 *	8.99 *	8.81 *	8.63 *	10.64 *	12.54 *	12.10 *	13.38 *	13.92 *	13.12 *	10.59 *	6.46 *	4.34 *	1.4	0.2	0	0	0	0
29	4.58 *	9.17 *	9.14 *	9.06 *	8.97 *	8.88 *	8.75 *	8.61 *	8.53 *	10.61 *	12.52 *	12.14 *	13.56 *	14.25 *	13.66 *	11.18 *	6.87 *	4.71 *	1.5	0.2	0	0	0	0
25.5	4.34 *	8.69 *	8.67 *	8.61 *	8.53 *	8.44 *	8.30 *	8.17 *	8.09 *	10.06 *	11.91 *	11.63 *	13.04 *	13.77 *	13.24 *	10.92 *	6.80 *	4.72 *	1.6	0.2	0	0	0	0
22.5	4.70 *	9.39 *	9.34 *	9.27 *	9.19 *	9.09 *	8.97 *	8.84 *	8.73 *	10.83 *	12.92 *	12.72 *	14.34 *	15.15 *	14.48 *	12.04 *	7.57 *	5.28 *	1.8	0.2	0	0	0	0
19.5	4.10 *	8.18 *	8.13 *	8.08 *	8.03 *	7.95 *	7.85 *	7.74 *	7.64 *	9.49 *	11.39 *	11.32 *	12.80 *	13.46 *	12.91 *	10.87 *	6.86 *	4.80 *	1.7	0.2	0	0	0	0
17	3.34 *	6.66 *	6.63 *	6.60 *	6.56 *	6.52 *	6.46 *	6.38 *	6.30 *	7.86 *	9.46 *	9.43 *	10.63 *	11.17 *	10.85 *	9.21 *	5.84 *	4.12 *	1.4	0.2	0	0	0	0
15	3.36 *	6.70 *	6.68 *	6.67 *	6.64 *	6.59 *	6.54 *	6.48 *	6.42 *	8.02 *	9.69 *	9.64 *	10.85 *	11.48 *	11.25 *	9.60 *	6.14 *	4.36 *	1.5	0.2	0	0	0	0
13	3.33 *	6.66 *	6.66 *	6.66 *	6.65 *	6.61 *	6.57 *	6.51 *	6.46 *	8.08 *	9.81 *	9.77 *	11.03 *	11.75 *	11.55 *	9.89 *	6.39 *	4.57 *	1.6	0.2	0	0	0	0
11	3.31 *	6.62 *	6.61 *	6.61 *	6.61 *	6.59 *	6.57 *	6.52 *	6.46 *	8.08 *	9.82 *	9.84 *	11.19 *	11.97 *	11.74 *	10.10 *	6.59 *	4.74 *	1.6	0.2	0	0	0	0
9	3.28 *	6.56 *	6.56 *	6.55 *	6.55 *	6.55 *	6.55 *	6.52 *	6.46 *	8.05 *	9.78 *	9.87 *	11.31 *	12.09 *	11.84 *	10.24 *	6.75 *	4.89 *	1.7	0.2	0	0	0	0
7	3.24 *	6.50 *	6.51 *	6.50 *	6.49 *	6.50 *	6.52 *	6.50 *	6.46 *	8.03 *	9.74 *	9.89 *	11.35 *	12.13 *	11.91 *	10.35 *	6.87 *	5.00 *	1.7	0.2	0	0	0	0
5	3.24 *	6.48 *	6.49 *	6.49 *	6.49 *	6.49 *	6.50 *	6.49 *	6.46 *	8.03 *	9.73 *	9.89 *	11.36 *	12.15 *	11.95 *	10.41 *	6.95 *	5.08 *	1.8	0.2	0	0	0	0
3	3.28 *	6.53 *	6.53 *	6.54 *	6.53 *	6.52 *	6.51 *	6.50 *	6.48 *	8.06 *	9.75 *	9.90 *	11.37 *	12.15 *	11.97 *	10.43 *	6.99 *	5.12 *	1.8	0.2	0	0	0	0
1	1.65 *	3.30 *	3.30 *	3.29 *	3.29 *	3.28 *	3.27 *	3.26 *	3.25 *	4.05 *	4.89 *	4.96 *	5.69 *	6.07 *	5.98 *	5.21 *	3.49 *	2.57 *	0.9	0.1	0	0	0	0
0																								



-1	1.65 *	3.30 *	3.30 *	3.29 *	3.28 *	3.27 *	3.26 *	3.25 *	3.23 *	4.03 *	4.86 *	4.92 *	5.65 *	6.04 *	5.95 *	5.19 *	3.49 *	2.57 *	0.9	0.1	0	0	0
-3	3.27 *	6.55 *	6.55 *	6.53 *	6.50 *	6.48 *	6.45 *	6.42 *	6.37 *	7.89 *	9.51 *	9.64 *	11.07 *	11.85 *	11.69 *	10.24 *	6.91 *	5.12 *	1.8	0.2	0	0	0
-5	3.23 *	6.47 *	6.45 *	6.42 *	6.38 *	6.36 *	6.33 *	6.29 *	6.23 *	7.68 *	9.24 *	9.36 *	10.76 *	11.55 *	11.41 *	10.03 *	6.81 *	5.07 *	1.8	0.2	0	0	0
-7	3.17 *	6.35 *	6.32 *	6.28 *	6.24 *	6.21 *	6.18 *	6.13 *	6.06 *	7.47 *	8.99 *	9.09 *	10.45 *	11.24 *	11.11 *	9.78 *	6.67 *	4.99 *	1.8	0.2	0	0	0
-9	3.10 *	6.20 *	6.18 *	6.13 *	6.08 *	6.04 *	6.01 *	5.95 *	5.86 *	7.26 *	8.78 *	8.85 *	10.15 *	10.92 *	10.78 *	9.51 *	6.51 *	4.88 *	1.7	0.2	0	0	0
-11	3.02 *	6.04 *	6.01 *	5.94 *	5.88 *	5.85 *	5.82 *	5.76 *	5.68 *	7.06 *	8.57 *	8.62 *	9.87 *	10.61 *	10.46 *	9.22 *	6.32 *	4.74 *	1.7	0.2	0	0	0
-13	2.93 *	5.85 *	5.81 *	5.73 *	5.68 *	5.67 *	5.65 *	5.60 *	5.53 *	6.90 *	8.37 *	8.40 *	9.62 *	10.33 *	10.17 *	8.93 *	6.11 *	4.58 *	1.6	0.2	0	0	0
-15	2.85 *	5.67 *	5.63 *	5.57 *	5.54 *	5.54 *	5.51 *	5.45 *	5.41 *	6.77 *	8.17 *	8.20 *	9.38 *	10.06 *	9.91 *	8.68 *	5.88 *	4.40 *	1.6	0.2	0	0	0
-17	2.78 *	5.56 *	5.53 *	5.50 *	5.47 *	5.45 *	5.41 *	5.34 *	5.29 *	6.61 *	7.98 *	8.01 *	9.15 *	9.78 *	9.64 *	8.44 *	5.66 *	4.19 *	1.5	0.2	0	0	0
-20	3.43 *	6.86 *	6.84 *	6.81 *	6.75 *	6.68 *	6.60 *	6.51 *	6.45 *	8.05 *	9.73 *	9.74 *	11.10 *	11.86 *	11.65 *	10.16 *	6.76 *	4.95 *	1.8	0.2	0	0	0
-23	4.01 *	8.02 *	8.00 *	7.95 *	7.86 *	7.75 *	7.63 *	7.56 *	7.51 *	9.39 *	11.30 *	11.22 *	12.74 *	13.65 *	13.39 *	11.55 *	7.61 *	5.52 *	1.9	0.2	0	0	0
-26	3.86 *	7.71 *	7.68 *	7.63 *	7.55 *	7.45 *	7.34 *	7.27 *	7.25 *	9.06 *	10.82 *	10.68 *	12.06 *	12.87 *	12.66 *	10.80 *	7.00 *	5.00 *	1.7	0.2	0	0	0
-29	4.28 *	8.56 *	8.54 *	8.50 *	8.43 *	8.32 *	8.19 *	8.08 *	8.02 *	10.00 *	11.91 *	11.69 *	13.15 *	13.91 *	13.56 *	11.45 *	7.27 *	5.07 *	1.7	0.2	0	0	0
-33	4.54 *	9.09 *	9.09 *	9.05 *	8.99 *	8.89 *	8.76 *	8.61 *	8.47 *	10.48 *	12.43 *	12.15 *	13.60 *	14.24 *	13.57 *	11.24 *	7.03 *	4.76 *	1.5	0.2	0	0	0
-38	4.52 *	9.06 *	9.06 *	9.02 *	8.94 *	8.85 *	8.75 *	8.61 *	8.43 *	10.28 *	12.06 *	11.73 *	13.02 *	13.49 *	12.55 *	10.09 *	6.20 *	4.15 *	1.3	0.2	0	0	0
-43	4.05 *	8.12 *	8.13 *	8.10 *	8.02 *	7.93 *	7.83 *	7.72 *	7.56 *	9.14 *	10.55 *	10.14 *	11.16 *	11.44 *	10.44 *	8.11 *	4.80 *	3.1	0.9	0.1	0	0	0
-48	2.88 *	5.81 *	5.84 *	5.83 *	5.79 *	5.71 *	5.62 *	5.53 *	5.39 *	6.51 *	7.43 *	7.05 *	7.67 *	7.75 *	6.99 *	5.27 *	3	1.8	0.6	0.1	0	0	0
-55	2.50 *	5.06 *	5.09 *	5.09 *	5.05 *	4.97 *	4.87 *	4.78 *	4.65 *	5.58 *	6.31 *	5.86 *	6.19 *	6.08 *	5.42 *	3.9	2.1	1.4	0.5	0.1	0	0	0
-65	1.1	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.5	2.8	2.5	2.5	2.4	2.1	1.4	0.8	0.7	0.4	0.1	0	0	0
-75	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0	0	0
-85	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0	0	0	0
-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	125	249	249	248	246	244	241	239	236	291	347	343	386	407	392	330	212	151	52	6.4	0.7	0	4994

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	FXLED78SF	Sample ID.	E1
Temperature (°C)	25.3	Humidity (%RH)	53.0

Test Method

The samples were tested according to the ANSI C82.77:2002.

The total harmonic distortion shall be measured to the 40th order.

The ambient temperature condition was maintained at 25° C ± 1° C. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion were calculated.

Test Results

Wrost Case			Non-Wrost Case				
Voltage (Vac)	Power Factor	THD	Voltage (Vac)	Current	Wattage	Power Factor	THD
120.00	0.998	6.12%	277.01	0.291	76.4	0.949	7.79%

5.0 Equipment Information

Test Equipment			
Equipment ID	Equipment Name	Last Calibration Date	Calibration Due Date
DLF107	Integrating Sphere System	2018/12/26	2019/12/25
DLF108	Auxiliary Lamp	2018/12/26	2019/12/25
DLF122	Measurement Standard Lamp Standard Lamp Type: 220 V, 0.4720 A, Tungsten, Omni-derectional	2018/12/26	2019/12/25
DLF116	AC Power Source	2018/12/26	2019/12/25
DLF113	Power Meter	2018/12/26	2019/12/25
DLF112	Temperature Recorder	2018/12/26	2019/12/25
DLF114	Temperature & Humidity Datalogger	2018/12/26	2019/12/25
DLF101	Goniophotometer	2018/12/26	2019/12/25
DLF125	Standard Lamp Standard Lamp Type: 76.58 V, 6.7875 A, Tungsten, Omni-derectional	2018/12/26	2019/12/25
DLF104	AC Power Source	2018/12/26	2019/12/25
DLF507	DC Power Source	2018/12/26	2019/12/25
DLF102	Power Meter	2018/12/26	2019/12/25
DLF111	Temperature & Humidity Datalogger	2018/12/26	2019/12/25
DLF119	Power Meter	2018/12/26	2019/12/25
DLF031	Temperature data logger	2018/12/26	2019/12/25
DLF022	Digital power meter	2018/12/26	2019/12/25
DLF003	Temperature & Humidity Datalogger	2018/12/26	2019/12/25

***** End of Test Report*****