

Photometric Test Report

Relevant Standards

- IES LM-79-2008
- ANSI C82.77:2017

Prepared For RAB Lighting Inc.

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Report Number

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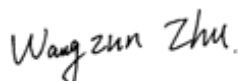
Test Date

2021/11/9

Issue Date

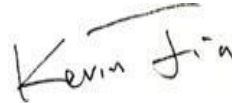
2021/11/12

Prepared By



Wangzun Zhu

Approved By



Kevin Jia

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1.0 Test Summary

DLC Technical Requirements v5.1

Outdoor - Pole/Arm-Mounted Area and Roadway Luminaires				
Requirement Category	Test Method	Requirements	Test value	
Luminaire Output (lm) (Goniophotometer - Section 4.2)	IES LM-79-2008	1000	47596	
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	133.2
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case	357.4	
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	4.77%	
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9	0.934	
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	5045
		4 step	5029±220	
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥70	84	
Minimum R9 (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥-40	13	
Minimum Rf (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	≥70	83	
Minimum Rg (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	≥89	93	
IES Rcs,h1 (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	-18% ≤ IES Rcs,h1 ≤ +23%	-12%	
Zonal Lumen Requirement (0°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	100%	100.00%	
Zonal Lumen Requirement (80°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	≤10%	0.69%	
Input Voltage (V) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case	480	
Input Current (A) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case	0.799	

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/9	ALEDXL3T/480	W1
2	Goniophotometer Test	2021/11/9	ALEDXL3T/480	W1
3	THD and PF Test	2021/11/9	ALEDXL3T/480	W1

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.

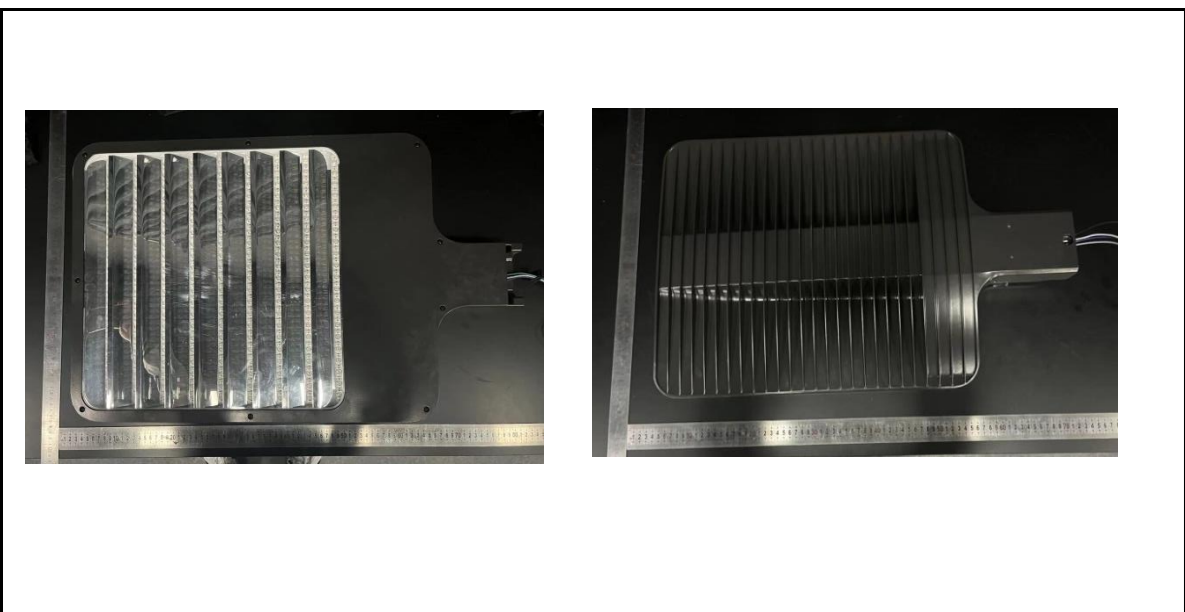
3.0 Production Description

Luminaire Description: ALEDXL3T/480

Description: 385W/50,000 lm @ 5000K

Electrical Specification: 480V,50/60HZ

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	ALEDXL3T/480	Sample ID.	W1
Operate time (Min.)	90	Stabilization time (Min.)	45
Temperature (°C)	25.3	Humidity (%RH)	56.0

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 (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
480.00	60	0.800	358.7	0.934

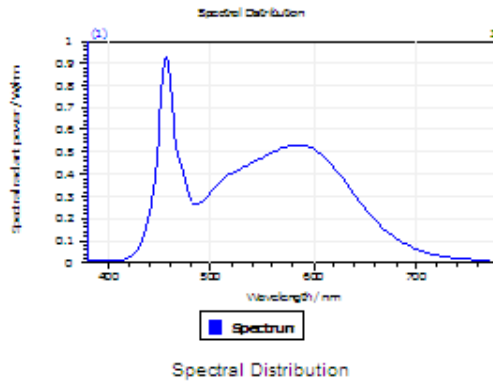
Test Result

CCT (K)	CRI	R9	Duv
5045	84	13	0.00069

Rf	Rg	IES Rcs,h1
83	93	-12%

4.1 Integrating Sphere Test

Results



Spectral values

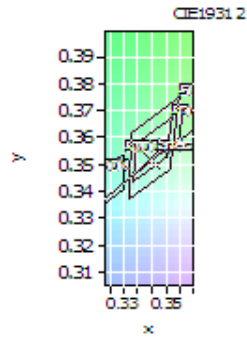
DominantWavelength 571.40 nm
Purity 0.089
PeakWavelength 456.61 nm
Radiant Power 104.6 W
Width50%:

Color Coordinates

Correlated Color Temperat 5045 K
x: 0.3440 u: 0.2105 u': 0.2105
y: 0.3521 v: 0.3232 v': 0.4847

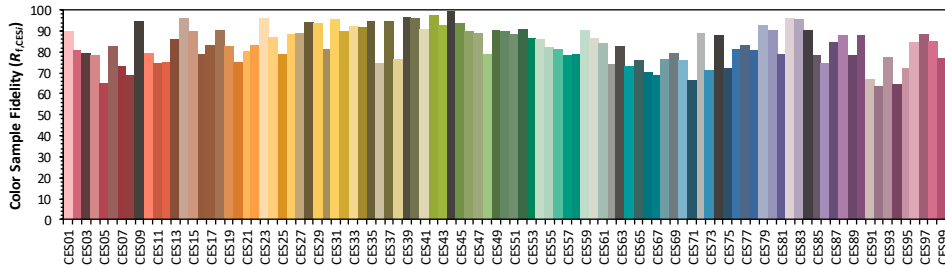
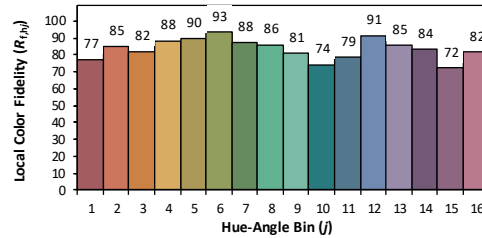
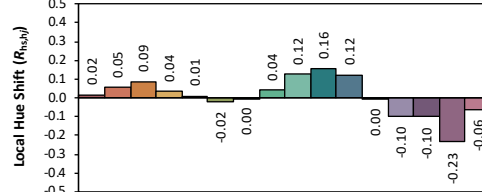
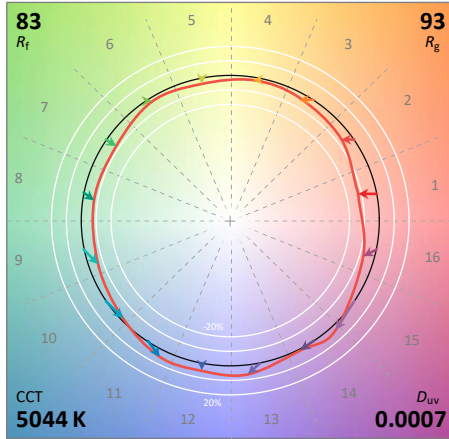
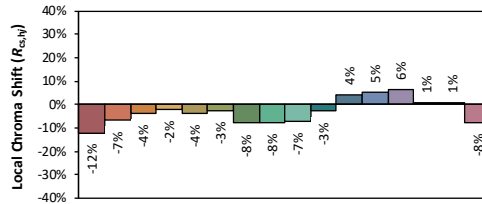
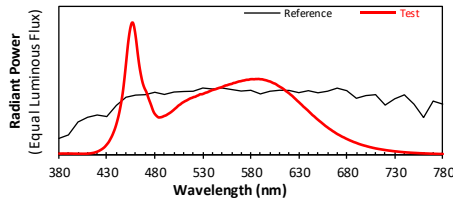
CRI01	83.5	CRI09	12.5
CRI02	93.5	CRI10	83.1
CRI03	94.3	CRI11	79.3
CRI04	80.3	CRI12	63.7
CRI05	83.4	CRI13	86.9
CRI06	88.8	CRI14	97.7
CRI07	84.3	CRI15	78.4
CRI08	65.9	CRI16	73.8

ResultsCRI 84.2



PlanckDistance 6.9E-004

4.1 Integrating Sphere Test



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3440
 y 0.3521
 u' 0.2105
 v' 0.4847

CIE 13.3-1995 (CRI)	
R_a	85
R_g	14

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.0

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	ALEDXL3T/480	Sample ID.	W1
Operate time (Min.)	90	Stabilization time (Min.)	45
Temperature (°C)	25.3	Humidity (%RH)	54.0

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° C ± 1° 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

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	479.98	60	0.799	357.4	0.931

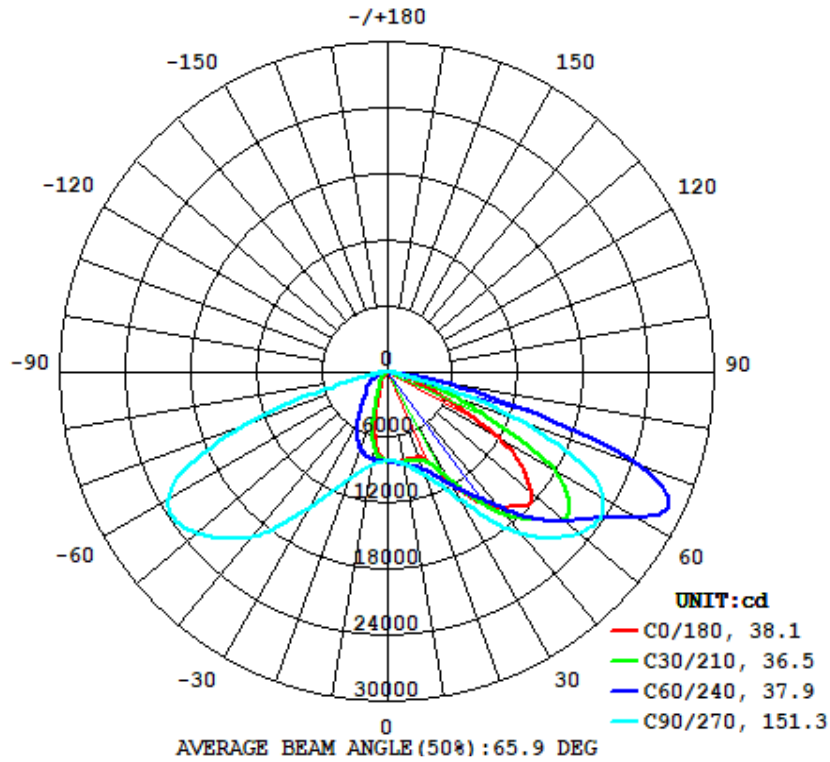
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
47596	97.1	160.6	38.1	151.3	133.2

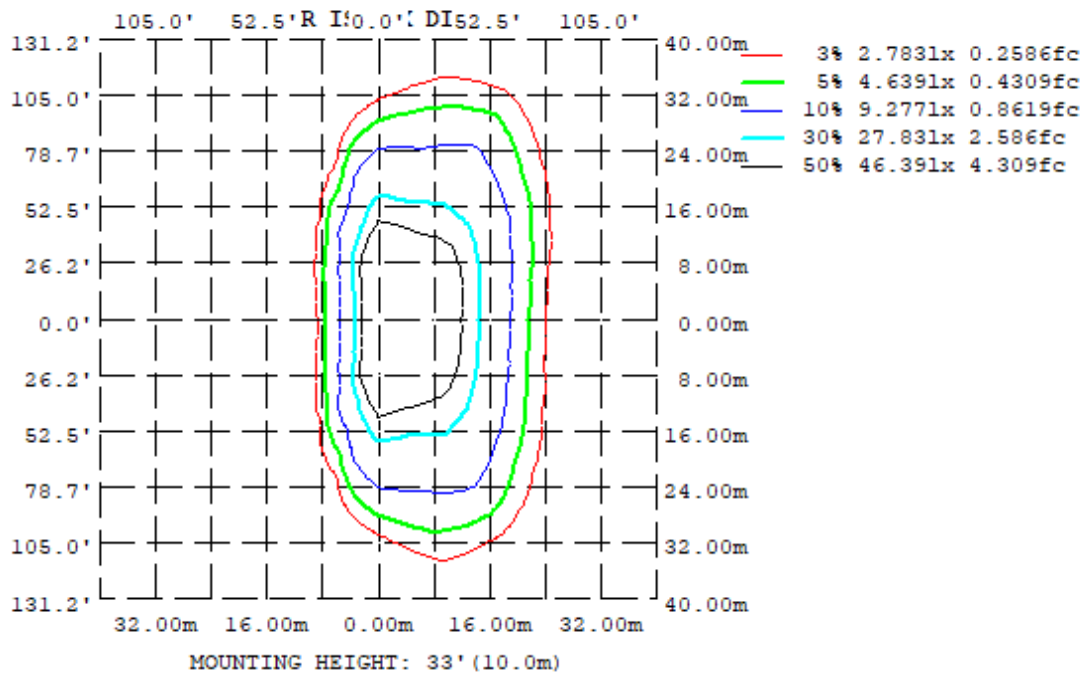
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	0.69%	B4-U0-G5

4.2 Goniophotometer Test

Light Distribution Curve



Isolux Plot



4.2 Goniophotometer Test

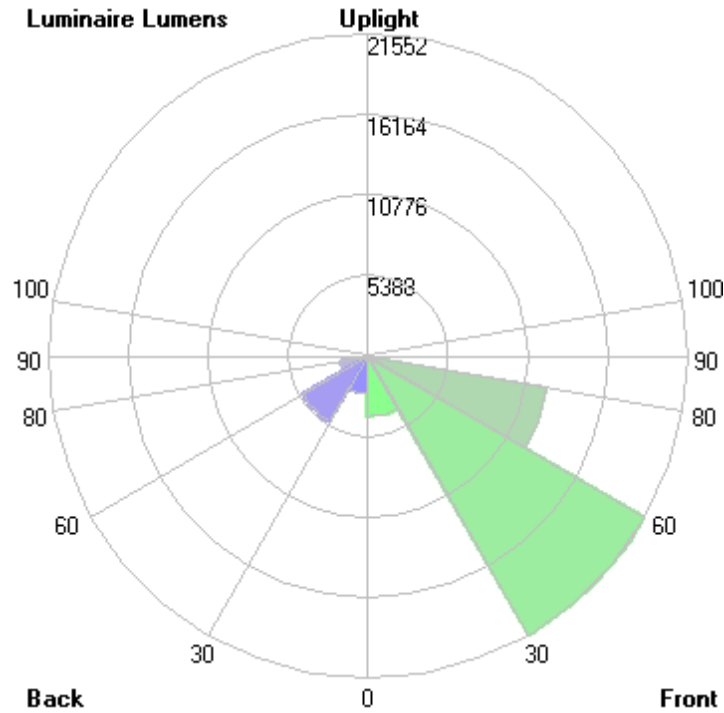
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	822.8	847.3	854.1	755.0	659.1	762.9	862.2	844.4
20	831.6	901.4	1002	513.5	270.1	520.9	1038	910.6
30	1145	1106	1347	263.8	128.0	269.5	1408	1131
40	1615	1681	1933	170.5	71.62	174.8	1965	1719
50	1731	2235	2288	122.5	32.75	129.2	2292	2309
60	1126	2478	2284	63.21	21.58	63.73	2317	2695
70	315.9	1242	1283	30.54	7.556	32.35	1344	1524
80	29.64	105.3	77.94	5.937	2.851	6.994	101.8	253.3
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
DEG	LUMINOUS INTENSITY: *10cd							

	Zonal (lm)	Total (lm)	Percent	
0-10	774.56	0 - 10	774.56	1.63%
10-20	2182.23	0 - 20	2956.79	6.21%
20-30	3606.98	0 - 30	6563.77	13.79%
30-40	6156.51	0 - 40	12720.28	26.73%
40-50	9261.79	0 - 50	21982.07	46.18%
50-60	11220.40	0 - 60	33202.47	69.76%
60-70	9772.69	0 - 70	42975.16	90.29%
70-80	4290.11	0 - 80	47265.27	99.31%
80-90	330.76	0 - 90	47596.03	100.00%
90-100	0.00	0 - 100	47596.03	100.00%
100-110	0.00	0 - 110	47596.03	100.00%
110-120	0.00	0 - 120	47596.03	100.00%
120-130	0.00	0 - 130	47596.03	100.00%
130-140	0.00	0 - 140	47596.03	100.00%
140-150	0.00	0 - 150	47596.03	100.00%
150-160	0.00	0 - 160	47596.03	100.00%
160-170	0.00	0 - 170	47596.03	100.00%
170-180	0.00	0 - 180	47596.03	100.00%

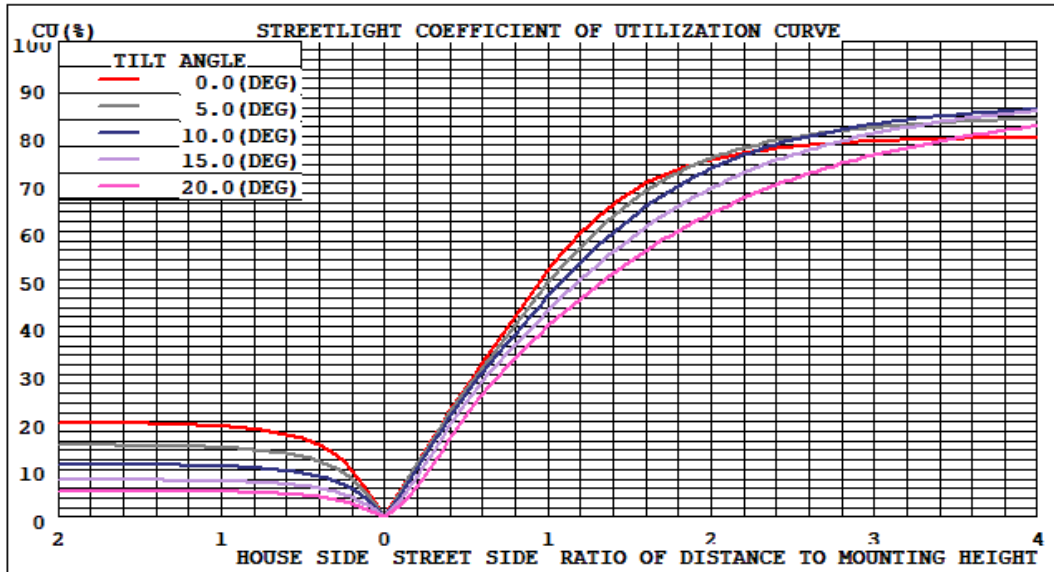
4.2 Goniophotometer Test

LCS/BUG

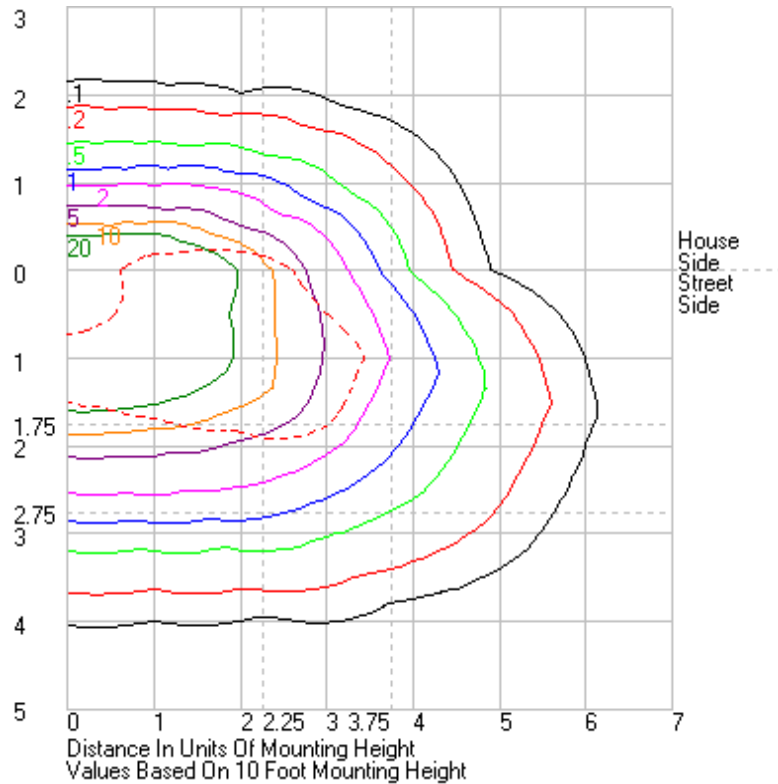


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	4037.9	N.A.	8.5
FM - Front-Medium (30-60)	21551.6	N.A.	45.3
FH - Front-High (60-80)	12186.6	N.A.	25.6
FVH - Front-Very High (80-90)	288.5	N.A.	0.6
BL - Back-Low (0-30)	2525.9	N.A.	5.3
BM - Back-Medium (30-60)	5087.1	N.A.	10.7
BH - Back-High (60-80)	1876.2	N.A.	3.9
BVH - Back-Very High (80-90)	42.2	N.A.	0.1
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	47596.0	N.A.	100.0
BUG Rating	B4-U0-G5		

Coefficients of Utilization



Isolines





4.2 Goniophotometer Test

	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
0	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83	8213.83
1	8249.96	8244.27	8236.5	8228.63	8218.41	8208	8149.01	8133.45	8119.96	8106.6	8098.14	8088.84	8174.41	8174.07	8176.47	8181.08	8188.53	8196.2	8153.58	8158.2	8162.88	8165.6	8167.5	8165.03	8249.96
2	8281.97	8274.81	8268.24	8257.55	8244	8227.12	8155.68	8133.35	8104.27	8079.93	8052.56	8035.42	8117.38	8121.16	8132.87	8155.96	8180.12	8199.65	8169.51	8183.67	8191.91	8198.95	8201.45	8198.77	8281.97
3	8306.63	8300.67	8296.73	8288.75	8275.27	8252.43	8173.7	8135.6	8090.98	8043.53	8001.82	7977.37	8047.19	8056	8082.54	8122.78	8172.94	8212.57	8194.23	8217.34	8230.99	8232.43	8230.32	8225.5	8306.63
4	8317.84	8315.02	8318.77	8318.69	8309.62	8284.57	8198.1	8148.94	8079.58	8007.86	7944.21	7895.75	7959.04	7974.18	8023.17	8090.64	8165.57	8232.16	8226.2	8257.76	8269.19	8266.8	8252.9	8239.11	8317.84
5	8320.56	8320.73	8333.21	8345.88	8348.22	8324.98	8231.78	8166.9	8070.48	7972.54	7869.19	7789.98	7839.28	7868.74	7948.04	8053.95	8161.15	8254.47	8266.87	8304.67	8315.55	8297.95	8272.93	8245.72	8320.56
6	8310.82	8316.54	8343.31	8371.81	8390.59	8374.44	8276.87	8191.75	8065.98	7923.33	7764.58	7641.77	7679.05	7724.97	7846.95	8005.5	8158.95	8285.41	8318.67	8361.77	8363.71	8329.74	8284.16	8243.2	8310.82
7	8292.76	8305.41	8348.76	8400.34	8434.39	8431.32	8331.59	8226.73	8059.29	7857.56	7629.03	7462.19	7481.01	7540.82	7714.52	7943.11	8157.81	8324.4	8376.38	8423.96	8413.07	8359.02	8288.89	8229.63	8292.76
8	8268.99	8290.2	8350.35	8426.35	8484.27	8496.61	8392.55	8265.03	8054.8	7776.08	7471.8	7244.65	7241.35	7324.87	7552.54	7859.42	8155.72	8370.29	8450.49	8497.7	8469.59	8390.12	8289.6	8214.09	8268.99
9	8245.54	8271.42	8346.87	8449.83	8538.8	8570.74	8462.67	8308.5	8045.71	7668.95	7277.2	6965.9	6940.7	7054.65	7359.64	7751.63	8148.75	8425.49	8534.04	8582.05	8531.8	8414.48	8290.31	8193.88	8245.54
10	8228.47	8255.51	8343.18	8472.69	8594.41	8647.41	8540.75	8359.86	8025.85	7549.74	7038.94	6658.98	6591.45	6732.51	7117.81	7628.85	8136.34	8488.49	8622.45	8673.76	8595.89	8443.94	8290.74	8182.74	8228.47
11	8214.52	8245.03	8345.37	8495.48	8654.66	8734.19	8633.26	8418.12	7998.65	7405.42	6764.8	6302.04	6212.4	6373.76	6836.28	7484.53	8119.94	8559.2	8729.2	8771.87	8665.19	8473.06	8295.19	8178.26	8214.52
12	8205.41	8239.39	8354.1	8520.04	8715.48	8833.13	8735.1	8485.81	7968.26	7220.14	6419.52	5944.5	5820.37	6004.47	6535.1	7311.03	8093.28	8637.96	8842.66	8876.95	8737.56	8506.97	8306.88	8173.88	8205.41
13	8208.71	8242.93	8365.98	8552.07	8779.97	8931.27	8849.99	8562.23	7919.95	7007.7	6136.53	5568.18	5415.02	5625.84	6198.23	7103.92	8055.96	8726.78	8973.71	8998.09	8810.85	8545.33	8320.49	8178.73	8208.71
14	8215.3	8253.81	8384.23	8589.66	8851.49	9048.79	8978.11	8643.87	7869	6773.34	5816.87	5181.67	4997.07	5221.68	5857.46	6871.08	8008.21	8824.05	9120.71	9126.32	8892.76	8589.91	8347.57	8194.59	8215.3
15	8226.57	8268.79	8409.47	8631.78	8919.12	9167.95	9116.36	8730.74	7803.51	6522.65	5464.79	4790.09	4591.54	4836.25	5517.84	6617.98	7949.95	8926.6	9284.27	9268.19	8984.23	8643.74	8381.58	8214.34	8226.57
16	8236.16	8285.41	8443.81	8683.06	8999.13	9302.16	9275.29	8829.37	7717.7	6264.71	5104.86	4386.49	4166.14	4432.21	5157.4	6345.86	7870.35	9042.05	9472.27	9428.54	9083.83	8710.13	8428.1	8234.76	8236.16
17	8243.46	8297.7	8484.04	8746.92	9092.03	9449.65	9448.99	8930.75	7621.38	6006.77	4752.01	3978.47	3743.57	4009.02	4798.15	6075.41	7779.56	9162.48	9674.92	9600.45	9191.59	8787.71	8478.39	8252.59	8243.46
18	8254.92	8309.78	8525.58	8822.88	9193.68	9608.22	9626.9	9034.44	7506.79	5714.33	4384.5	3577.97	3347.37	3607.75	4432.08	5793.87	7673.24	9294.58	9896.34	9791.59	9319.45	8897.16	8533.47	8270.72	8254.92
19	8274.01	8328.44	8568.11	8912.47	9317.83	9774.4	9820.45	9144.13	7375.95	5426.06	4008.58	3213.68	3004.11	3239.2	4048.84	5504.4	7548.71	9430.61	10133.6	9995.84	9460.49	8988.53	8586.62	8296.49	8274.01
20	8315.89	8364.44	8616.86	9014.01	9452.29	9943.97	10020.1	9244.11	7228.75	5134.57	3646	2896.75	2701.49	2914.96	3679.9	5209.49	7413.69	9567.62	10378.3	10213.9	9624.07	9105.95	8651.25	8341.17	8315.89
21	8391.63	8429.92	8678.22	9130.66	9604.89	10132	10248.6	9360.39	7073.96	4842.67	3319.66	2621.01	2443.9	2637.37	3346.64	4908.1	7270.17	9703.35	10648.9	10448	9812.67	9240.82	8727.85	8415.09	8391.63
22	8515.18	8533.04	8763.18	9251.73	9767.59	10337.7	10501.7	9478.41	6906.29	4543.32	3025.59	2385.81	2215.1	2401.47	3054.24	4602.91	7115.68	9843.48	10933.6	10708.8	10020.5	9392.96	8825.3	8531.34	8515.18
23	8679.17	8695.49	8875.18	9384.46	9953.84	10587.7	10777.8	9607.32	6741.75	4235.7	2766.63	2168.93	2000.89	2180.08	2792.75	4291.66	6963.2	9980.91	11236.7	10988.1	10250.9	9553.14	8956.5	8696.58	8679.17
24	8884.59	8893.64	9033.36	9533.58	10170.4	10848.7	11080.9	9747.94	6587.64	3935.71	2554.36	1971.78	1819.76	1983.95	2575.94	3994.36	6805.57	10127.6	11555.6	11286	10509.7	9732.81	9134.7	8902.03	8884.59
25	9154.44	9140.77	9247.36	9706.91	10417.3	11139.9	11407.1	9878.3	6427.9	3651.4	2356.69	1800.87	1669.28	1815.34	2374.27	3708.5	6631.38	10273.9	11911.8	11607.5	10783.2	9924.69	9357.44	9147.92	9154.44
26	9509.64	9461.48	9501.95	9902.64	10690.9	11475	11757.7	10024.6	6268.15	3397.75	2169.99	1661.33	1552.2	1673.76	2187.61	3455.17	6455.04	10431.8	12282.3	11973.1	11090.7	10137.3	9632.44	9466.25	9509.64
27	9938.2	9874.41	9804.14	10124.2	10977.8	11811.6	12132	10173.1	6091.04	3171.15	2002.36	1552.52	1463.98	1565.91	2024.4	3235.85	6275.41	10588.2	12683.8	12358.9	11408.1	10372.7	9944.52	9873.76	9938.2
28	10407.1	10345.3	10180.4	10384.4	11288.2	12189.7	12549.4	10323.9	5907.09	2971.99	1857.88	1467.94	1395.69	1484.01	1877.86	3035.8	6085.18	10745.4	13114.2	12758.1	11741.8	10647.2	10312	10343.7	10407.1
29	10904.1	10852.3	10629.1	10700.2	11606.5	12595.4	12984.5	10486.5	5728.42	2800.18	1738.26	1398.16	1335.04	1416.18	1758.62	2863.46	5883.34	10904.6	13583	13184.6	12098.3	10958.5	10749	10864.9	10904.1
30	11447.8	11384.8	11143.1	11055.2	11945.2	13014.3	13469.7	10649.6	5533.15	2638	1645.86	1339.04	1279.94	1362.76	1668.72	2694.88	5670.45	11061.8	14082.3	13630	12468.2	11311.6	11255.2	11406	11447.8
31	12025.1	11962.9	11696.8	11446.3	12292	13470.4	13994.7	10809	5335.79	2478.79	1571.97	1284.2	1227.83	1309.36	1598.68	2534.68	5437.58	11208	14604	14086.3	12827.5	11721.1	11804.6	11993.7	12025.1
32	12598.5	12542.1	12284.1	11910.8	12639.5	13927.1	14552.5	10980.7	5121.15	2324.84	1509.92	1232.44	1174.05	1259.33	1538.59	2379.17	5198.88	11341.3	15145.2	14566.2	13211.5	12176.3	12401.7	12575.4	12598.5
33	13171.6	13104.8	12892.9	12414.9	12997.3	14393.4	15135.9	11144.9	4899.19	2186.64	1455.76	1180.03	1122.58	1206.55	1486.14	2241.45	4968.36	11463	15715.2	15061.2	13590.8	12682.6	13005.8	13154.5	13171.6
34	13735.8	13695.4	13506.5	12957.7	13363.3	14910.4	15739.7	11294.5	4690.54	2066.64	1406.47	1129.53	1070.07	1155.58	1438.24	2119.01	4737.36	11574	16307.2	15577.5	13989.4	13223.4	13652.8	13747.7	13735.8
35	14299.9	14287.6	14120.1	13556.8	13744.3	15455	16362.4	11442.4	4481.39	1969.23	1358.13	1078.51	1016.08	1105.47	1393.64	2019.23	4515.62	11663.6	16902.9	16101.2	14389.1	13824.1	14290.5	14352.9	14299.9
36	14793.7	14851.2	14741.3	14156.5	14125.3	15985.9	16996.5	11561	4291.67	1894.36	1308.71	1027.77	957.63	1054.18	1348.72	1939.45	4316.67	11735	17509.3	16639.9	14795.7	14468.5	14932.1	14946.2	14793.7
37	15214.1	15334.4	15360.4	14778.7	14559.7	16542.9	17634.7	11675.3	4129.38	1833.37	1261.35	971.41	898.48	999.02	1303.81	1876.79	4132.07	11778.8	18115.3	17176.2	15210	15132.5	15588.7	15469.6	15214.1
38	15583.8	15752.7	15973.5	15433.3	15021.4	17079.3	18244.1	11758.6	3972.15	1781.59	1213.96	912.6	840.21	939.23	1258.43	1826.3	3966.31	11788.9	18669.7	17695.7	15644.6	15			



161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	ALEDXL3T/480	Sample ID.	W1
Temperature (°C)	25.3	Humidity (%RH)	56.0

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

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD
480.00	60	0.800	358.7	0.934	4.77%

5.0 Equipment Information

Test Equipment			
Equipment ID	Equipment Name	Last Calibration Date	Calibration Due Date
DLF107	Integrating Sphere System	2020/12/26	2021/12/25
DLF108	Auxiliary Lamp	2020/12/26	2021/12/25
DLF122	Measurement Standard Lamp Standard Lamp Type: 220 V, 0.4720 A, Tungsten, Omni-derectional	2020/12/26	2021/12/25
DLF116	AC Power Source	2020/12/26	2021/12/25
DLF113	Power Meter	2020/12/26	2021/12/25
DLF112	Temperature Recorder	2020/12/26	2021/12/25
DLF114	Temperature & Humidity Datalogger	2020/12/26	2021/12/25
DLF101	Goniophotometer	2020/12/26	2021/12/25
DLF125	Standard Lamp Standard Lamp Type: 76.58 V, 6.7875 A, Tungsten, Omni-derectional	2020/12/26	2021/12/25
DLF104	AC Power Source	2020/12/26	2021/12/25
DLF507	DC Power Source	2020/12/26	2021/12/25
DLF102	Power Meter	2020/12/26	2021/12/25
DLF111	Temperature & Humidity Datalogger	2020/12/26	2021/12/25
DLF119	Power Meter	2020/12/26	2021/12/25
DLF031	Temperature data logger	2020/12/26	2021/12/25
DLF022	Digital power meter	2020/12/26	2021/12/25
DLF003	Temperature & Humidity Datalogger	2020/12/26	2021/12/25

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