

Photometric Test Report

Relevant Standards

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

Prepared For RAB Lighting Inc.

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Report Number

DLF2111105-1a

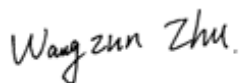
Test Date

2021/11/8

Issue Date

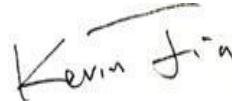
2021/11/11

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		36458
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	136.3
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		267.4
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	120V	1.57%
		20.00%	277V	4.10%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9	120V	0.999
		0.9	277V	0.966
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	4924
		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		12
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
Minimum 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%		0.21%
Input Voltage (V)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		120
(Goniophotometer - Section 4.2)		Non-Worst Case		277
Input Current (A)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		2.231
(Goniophotometer - Section 4.2)		Non-Worst Case		0.966
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		267.4
(Goniophotometer - Section 4.2)		Non-Worst Case		258.2

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/8	ALEDL2T	A1
2	Goniophotometer Test	2021/11/8	ALEDL2T	A1
3	THD and PF Test	2021/11/8	ALEDL2T	A1

Remark(If any)

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- 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.

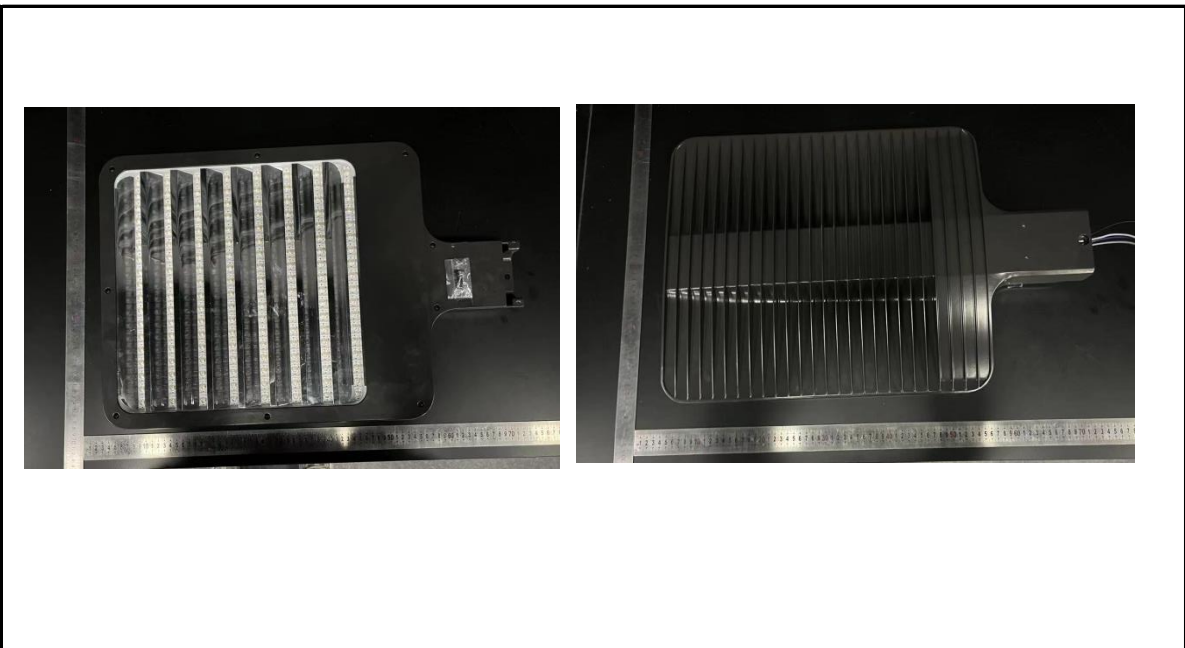
3.0 Production Description

Luminaire Description: ALEDL2T

Description: 260W/36,000 lm @ 5000K

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.	ALEDL2T	Sample ID.	A1
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
120.00	60	2.238	268.3	0.999
277.04	60	0.965	258.1	0.966

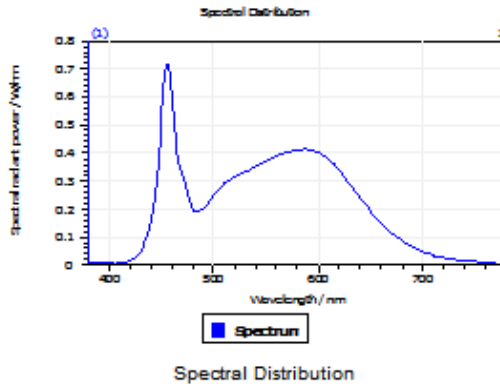
Test Result

CCT (K)	CRI	R9	Duv
4924	84	12	0.0014

Rf	Rg	IES Rcs,h1
83	93	-12%

4.1 Integrating Sphere Test

Results



Spectral values

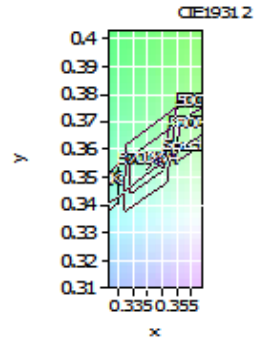
DominantWavelength 572.37 nm
Purity 0.112
PeakWavelength 455.76 nm
Radiant Power 80.38 W
Width50%:

Color Coordinates

Correlated Color Temperat 4924 K
x: 0.3476 u: 0.2113 u': 0.2113
y: 0.3584 v: 0.3249 v': 0.4873

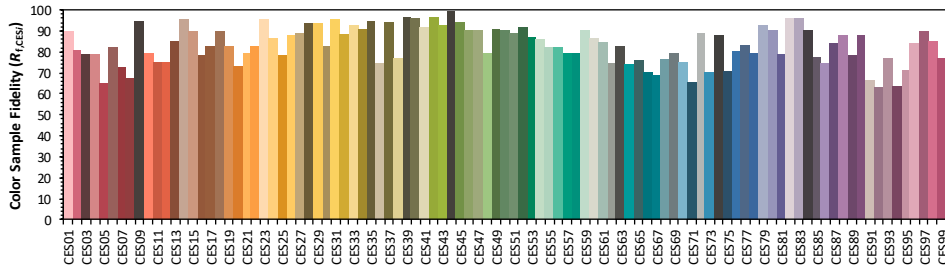
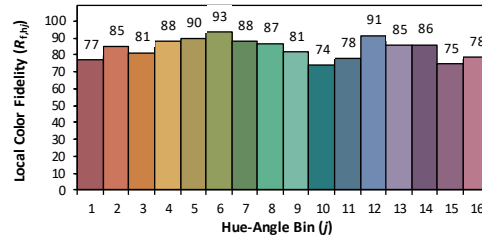
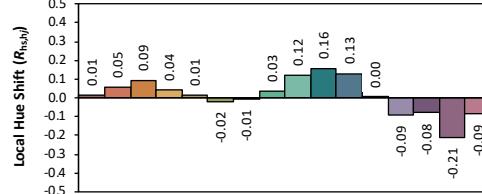
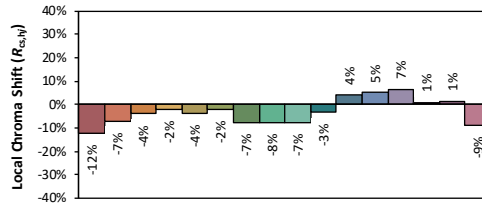
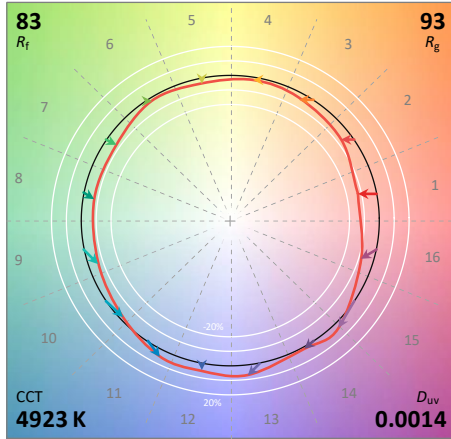
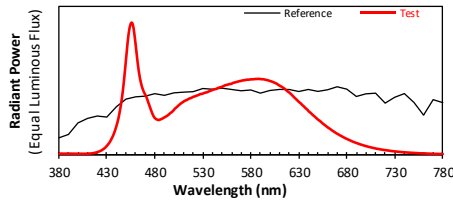
CRI01	82.7	CRI09	12.4
CRI02	92.6	CRI10	80.9
CRI03	95.0	CRI11	78.3
CRI04	79.3	CRI12	56.6
CRI05	82.0	CRI13	86.0
CRI06	87.6	CRI14	97.9
CRI07	85.3	CRI15	77.0
CRI08	66.3	CRI16	71.4

ResultsCRI 83.8



PlankDistance 1.4E-003

4.1 Integrating Sphere Test



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

x 0.3476
 y 0.3564
 u' 0.2113
 v' 0.4873

CIE 13.3-1995 (CRI)	
R_a	84
R_g	13

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.	ALEDL2T	Sample ID.	A1
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	120.02	60	2.231	267.4	0.999
NON-WROST CASE	277.02	60	0.966	258.2	0.965

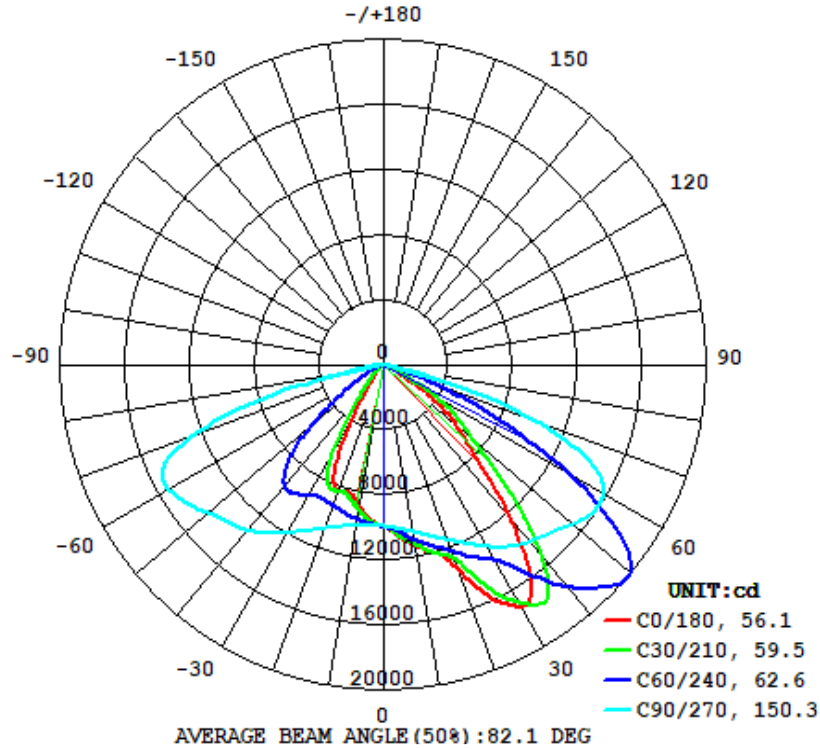
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
36458	95.6	158.8	56.1	150.3	136.3

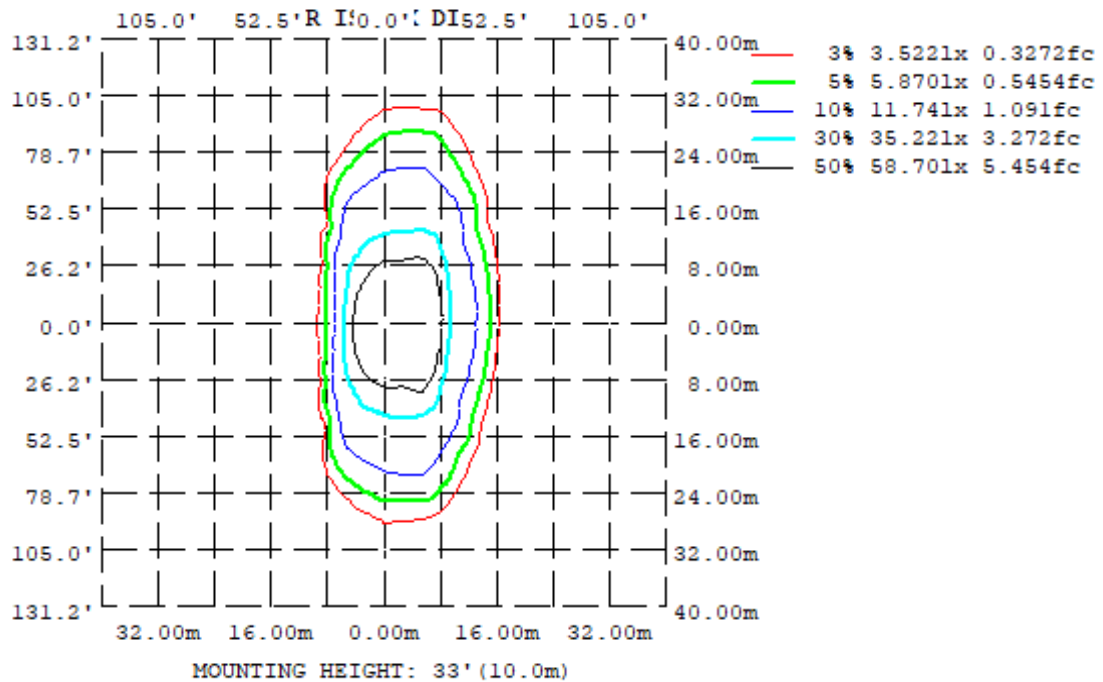
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	0.21%	B4-U0-G3

4.2 Goniophotometer Test

Light Distribution Curve



Isolux Plot



4.2 Goniophotometer Test

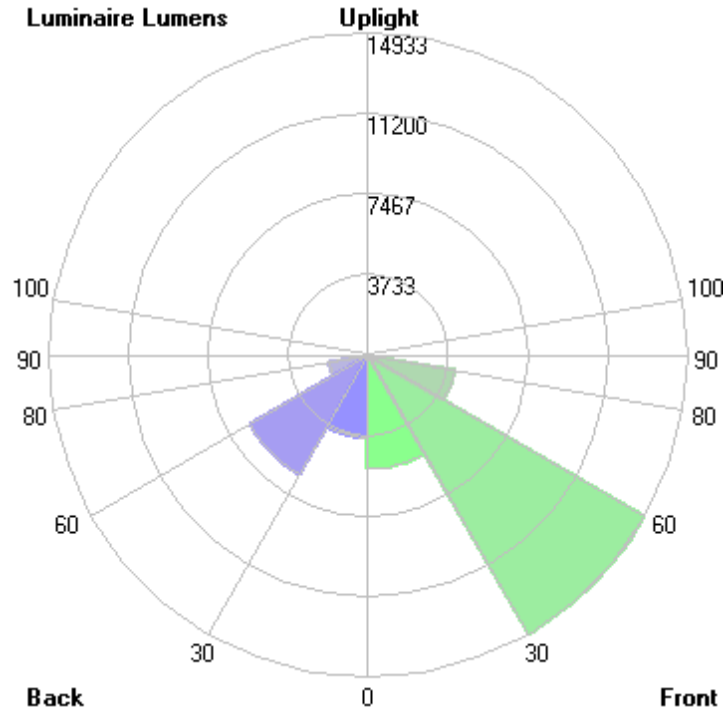
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	1121	1109	1042	953.1	886.3	935.3	1004	1072
20	1324	1249	1144	883.9	828.2	845.9	1070	1195
30	1714	1586	1291	919.3	451.2	850.1	1193	1461
40	1214	1883	1416	584.9	108.0	492.9	1329	1806
50	609.4	1283	1525	155.3	33.90	137.8	1421	1432
60	146.1	540.2	1575	40.81	8.862	38.91	1535	627.6
70	13.52	50.74	980.2	13.57	7.585	12.58	1248	103.2
80	3.643	8.824	56.08	3.516	1.170	5.195	154.0	13.23
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	961.61	0 - 10	961.61	2.64%
10-20	2937.77	0 - 20	3899.38	10.70%
20-30	5230.63	0 - 30	9130.01	25.04%
30-40	7138.80	0 - 40	16268.81	44.62%
40-50	7469.32	0 - 50	23738.13	65.11%
50-60	6690.45	0 - 60	30428.58	83.46%
60-70	4589.79	0 - 70	35018.37	96.05%
70-80	1362.41	0 - 80	36380.78	99.79%
80-90	77.44	0 - 90	36458.22	100.00%
90-100	0.00	0 - 100	36458.22	100.00%
100-110	0.00	0 - 110	36458.22	100.00%
110-120	0.00	0 - 120	36458.22	100.00%
120-130	0.00	0 - 130	36458.22	100.00%
130-140	0.00	0 - 140	36458.22	100.00%
140-150	0.00	0 - 150	36458.22	100.00%
150-160	0.00	0 - 160	36458.22	100.00%
160-170	0.00	0 - 170	36458.22	100.00%
170-180	0.00	0 - 180	36458.22	100.00%

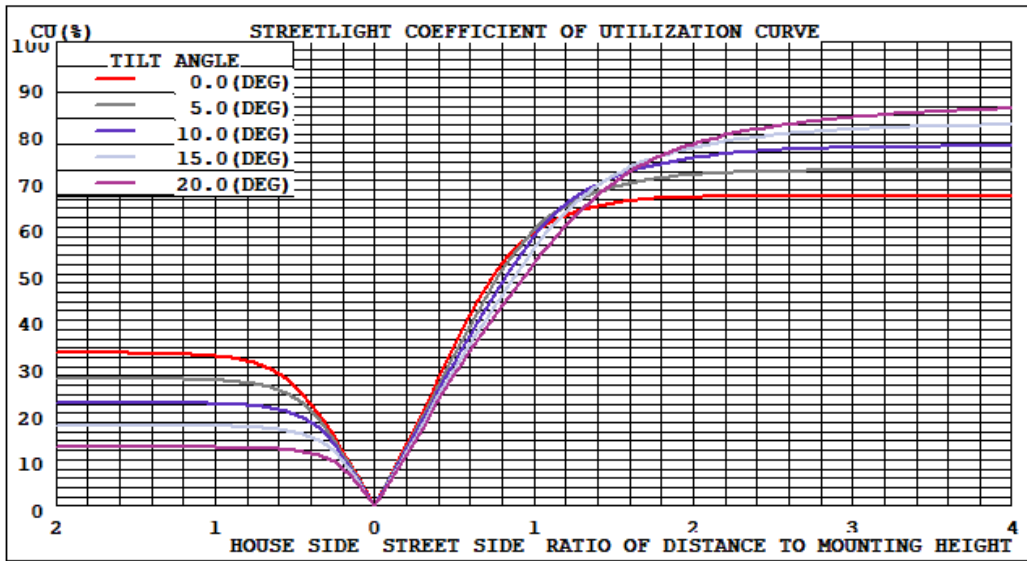
4.2 Goniophotometer Test

LCS/BUG

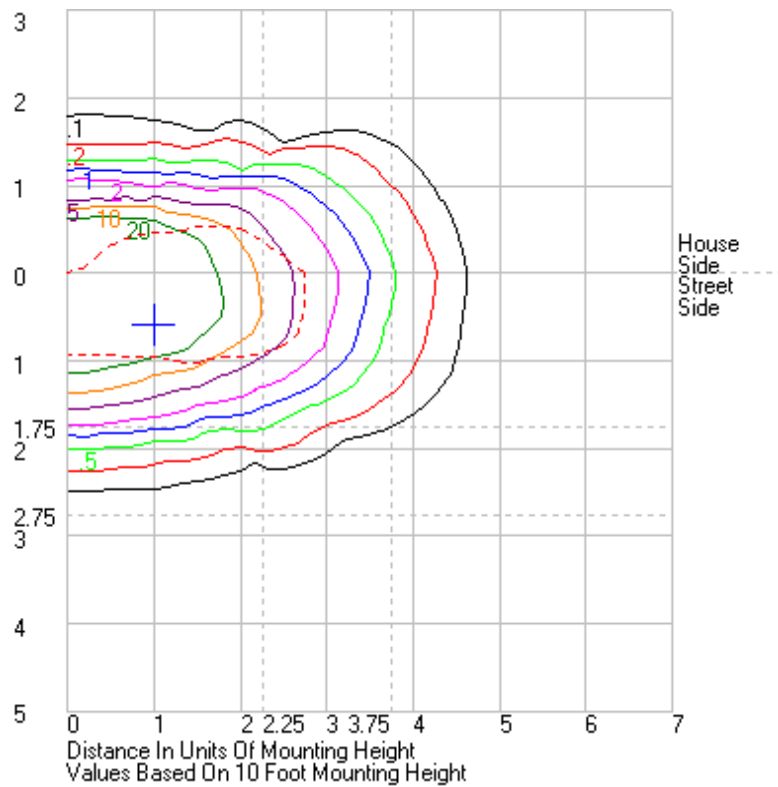


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	5291.0	N.A.	14.5
FM - Front-Medium (30-60)	14933.3	N.A.	41.0
FH - Front-High (60-80)	4099.3	N.A.	11.2
FVH - Front-Very High (80-90)	48.3	N.A.	0.1
BL - Back-Low (0-30)	3839.0	N.A.	10.5
BM - Back-Medium (30-60)	6365.3	N.A.	17.5
BH - Back-High (60-80)	1852.9	N.A.	5.1
BVH - Back-Very High (80-90)	29.1	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	36458.2	N.A.	100.0
BUG Rating	B4-U0-G3		

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	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18	9997.18
1	10038.5	10039	10037.6	10032.2	10023.7	10012.8	9951.2	9935.69	9924.53	9906.98	9886.02	9883	9957.63	9952.4	9948.83	9950.14	9953.52	9957.44	9915.46	9922.28	9931.49	9938.31	9949.33	9951.85	10038.5
2	10088.9	10090.7	10086.5	10079.5	10066.6	10048.7	9977.83	9951.41	9924.53	9890.89	9862.55	9835.77	9903.33	9898.04	9899.7	9910.51	9924.33	9940.52	9906.55	9924.56	9942.87	9958.48	9979.44	9994.91	10088.9
3	10199.7	10198.2	10174.9	10140.4	10114.8	10091.9	10011.7	9975.61	9929.01	9866.53	9810.69	9765.12	9826.42	9821.28	9834.36	9862.9	9895.71	9926.3	9902.06	9929.06	9958.26	9989.88	10036.8	10078.7	10199.7
4	10371.5	10368.8	10322.9	10244.1	10175	10135.5	10050	9999.9	9929.02	9830.64	9745.75	9679.46	9733.34	9732.62	9760.3	9806.7	9865.15	9915.09	9904.33	9940.35	9983.17	10051	10159.9	10234.4	10371.5
5	10557.2	10555.6	10501.5	10387.2	10260.8	10192.6	10098.5	10034.5	9928.62	9795.08	9674.27	9581.93	9624.07	9625.97	9671.08	9746.94	9831.18	9908.43	9913.47	9954.42	10022.2	10157.6	10256.6	10403.2	10557.2
6	10701.6	10710.9	10669.8	10548.6	10371.3	10252.5	10150	10068.3	9928.21	9750.36	9590.92	9473.56	9504.16	9511.28	9571.69	9677.8	9803.02	9906.7	9922.49	9976.5	10087.5	10279.8	10457	10560	10701.6
7	10823.8	10828.7	10795.3	10708.1	10503.2	10322.7	10209.9	10112.2	9927.8	9702.34	9498.61	9345.21	9363.68	9379.58	9468.07	9606.07	9770.1	9908.28	9938.42	10001.9	10173.4	10411.3	10581.7	10670.3	10823.8
8	10997.8	11001.2	10923.8	10843.1	10646.3	10406.7	10276.8	10162	9927.39	9653.74	9395.81	9193.97	9197.82	9224.43	9346.5	9530.54	9733.76	9912.59	9965.49	10040.1	10274.4	10533.8	10677.7	10818	10997.8
9	11110.8	11133.5	11089.8	10947.1	10791	10496.4	10342.3	10207.1	9926.2	9595.74	9267.61	9033.69	9025.54	9058.96	9210.36	9447.57	9701.43	9923.85	9996.73	10082.9	10376.3	10625.9	10823.5	10965.3	11110.8
10	11206.4	11221.3	11213.3	11089.7	10925.3	10597.8	10416.2	10258.4	9924.24	9531.43	9140.03	8874.06	8662.57	8897.8	9066.52	9353.25	9664.62	9934.73	10035.4	10136.3	10487.2	10718.5	10955.7	11048.7	11206.4
11	11379.9	11374	11300.5	11242.2	11046.6	10713.3	10499.2	10307.7	9922.28	9448.33	9006.38	8735.71	8712.93	8755.21	8927.73	9247.35	9626.58	9950.46	10075.6	10202.4	10590	10850.7	11037.7	11168.3	11379.9
12	11560.5	11567.1	11445.6	11354.8	11145.7	10831.3	10580.9	10361.9	9915.72	9364.33	8897.11	8591.38	8558.86	8605.66	8806.19	9145.38	9589.92	9967.33	10121	10274.1	10680.3	10972.4	11130.6	11353.9	11560.5
13	11747.9	11734.1	11633.9	11445.1	11265.7	10967.2	10674.8	10426.7	9911.26	9279.75	8775.37	8437.51	8389.41	8448.69	8672.85	9040.34	9543.87	9985.48	10173.3	10353.7	10766	11055.2	11291	11505.8	11747.9
14	11876.4	11904.4	11781.6	11561.6	11412	11097.4	10772	10490.6	9906.79	9197.84	8663.11	8294.41	8266.37	8298.36	8545.16	8948.61	9499.03	10009.4	10231.2	10447.6	10854.3	11125.9	11451.3	11699.6	11876.4
15	11985.7	11992.6	11970.8	11725.4	11550.3	11226	10871.6	10553.7	9997.59	9140.62	8534	8223.65	8216.46	8226.33	8402.48	8860.38	9448.57	10031.1	10289.9	10547.2	10965	11236.3	11609.8	11787.3	11985.7
16	12063.3	12106.4	12077.2	11897.3	11673.2	11370.3	10981.5	10627.5	9884.26	9068.59	8442.38	8207.58	8201.74	8204.44	8310.96	8767.91	9395.92	10052.9	10359.5	10649.3	11085.8	11389.9	11765.7	11912.5	12063.3
17	12194.7	12201.8	12201.7	12042.9	11769.3	11499.1	11084	10686.3	9866.59	9010.28	8403.49	8213.76	8215.69	8203.93	8269.49	8672.85	9348.21	10080.8	10434.4	10758	11194.1	11537.4	11843.6	11982.4	12194.7
18	12430.4	12376.5	12290.5	12232.8	11872.1	11636.8	11205.1	10769.2	9863.88	8932.18	8407.37	8244.92	8250.88	8226.45	8259.15	8567.41	9303.61	10108.1	10513.9	10866.4	11275.1	11673.3	11966.3	12125.8	12430.4
19	12758.9	12663	12418.8	12359	12003.2	11764.2	11323.6	10842.5	9852.74	8860.65	8426.87	8289.79	8284.41	8261.98	8268.34	8495.97	9267.4	10141.2	10605.7	10979.1	11358.9	11840.7	12040.8	12371.3	12758.9
20	13243.8	13089.4	12631.5	12485	12171	11882.5	11440.7	10915.3	9854.58	8839.15	8469.56	8317.33	8281.9	8281.61	8295.76	8459.4	9238.71	10173.6	10697.9	11094.1	11445.3	11954.2	12182.7	12707.7	13243.8
21	13753.9	13587.6	12939.4	12619.6	12357.7	12013.3	11573.5	11000.8	9875.04	8849.77	8527.47	8306.77	8237.76	8261.56	8332.05	8457.75	9199.47	10211.3	10797.1	11208.4	11559.4	12059.1	12412.3	13179.5	13753.9
22	14263.9	14086.3	13372.2	12740.4	12515.6	12132.9	11696.3	11067.9	9868.47	8883.86	8570.64	8242.6	8119.7	8191.27	8352.04	8469.67	9178.42	10253	10905	11322.7	11712	12184.5	12703.1	13699	14263.9
23	14785.1	14593	13858	12924.8	12683.7	12285.8	11842.2	11162.5	9894.61	8939.05	8587.25	8095.06	7906.01	8035.23	8340.61	8502.22	9152.04	10296.8	11010.5	11436	11865	12278	13128	14220.8	14785.1
24	15315.5	15128.2	14328.4	13189.9	12886.4	12444.7	11987.5	11250.5	9906.55	9003.84	8558.98	7873.49	7626.5	7805.88	8287.31	8549.61	9115.48	10343.2	11122.8	11549.7	12010.1	12432.4	13591.7	14727.9	15315.5
25	15766.4	15614	14824.2	13568.9	13050.5	12589.4	12125.6	11333.5	9897.61	9050.58	8468.72	7572.55	7244.98	7498.11	8163.13	8604.43	9085.32	10393.5	11242.9	11667	12165.6	12631.2	14097.6	15243.1	15766.4
26	16154.6	16037.9	15339.8	13949	13189.4	12758.4	12293.4	11441.3	9911.03	9173.75	8303.81	7181.24	6778.41	7100.59	7964.23	8646.98	9082.61	10443.4	11363.7	11797.8	12355	12913.9	14570.3	15685	16154.6
27	16448.4	16387.2	15823.9	14378.1	13358.7	12891.2	12439.1	11523.5	9926.55	9226.99	8074.38	6708.99	6272.38	6638.89	7715.98	8671.83	9097.99	10497.6	11493.7	11942.5	12509.6	13247.9	15060	16062.7	16448.4
28	16721.8	16653	16235.9	14871.3	13518.1	13023.5	12595.5	11629.5	9971.52	9265.82	7778.08	6182.97	5694.22	6120.8	7385.26	8661.45	9137.73	10552.5	11630.4	12097.7	12636.7	13678.6	15514.4	16345.5	16721.8
29	16970	16933	16593	15343.6	13677.5	13164.8	12758.9	11729.1	10027.6	9255.02	7407.49	5656.08	5109.49	5556.37	6984.51	8612.44	9197.9	10613.9	11774.4	12249.7	12803	14145	15910.6	16605.3	16970
30	17143.5	17156.5	16868	15856.9	13864.2	13287.8	12906.7	11809.8	10096.9	9192.55	6986.63	5109.8	4512.18	4992.73	6554.43	8501.01	9273.07	10678.3	11926.2	12404.8	12983.3	14609.1	16240.2	16847.4	17143.5
31	17192.1	17277.2	17138.2	16341.5	14120.2	13431.1	13073.8	11920.8	10194.4	9080.3	6555.96	4536.69	3917.08	4413.56	6061.45	8342.13	9359.95	10748.7	12074.2	12538.5	13152.6	15061.6	16496.5	17024.3	17192.1
32	17128.8	17298.4	17384.7	16757.6	14438.5	13570.3	13216.2	11999.4	10284.4	8905.03	6043.1	3937.41	3337.82	3823.08	5550.37	8125.75	9455.81	10831.5	12225.4	12662.6	13333.7	15545.2	16747.6	17089.3	17128.8
33	16857.8	17152.2	17575.4	17150	14814	13709.4	13356.5	12088.5	10391.2	8668.28	5530.19	3355.38	2826.62	3271.52	5025.48	7856.98	9551.61	10912.7	12373.1	12789	13564.9	15988.9	16977.9	17062.3	16857.8
34	16434.7	16828.9	17665.2	17469.4	15224.8	13876.8	13503.5	12190.8	10495.1	8386.09	4981.87	2862.82	2398.49	2776.62	4478.72	7544.14	9633.09	10999	12514.3	12908.4	13832.7	16383.1	17157.1	16851.8	16434.7
35	15883.9	16343.8	17631.5	17760.5	15648.6	14027	13629.5	12262.1	10575	8054.79	4403.4	2434.9	2052.98	2364.74	3921.62	7200.57	9706.41	11084.4	12654.7	13037.6	14156.1	16736.7	17230.9	16477	15883.9
36	15198.7	15762.4	17418.3	18073.4	16108.5	14171.8	13756.8	12367.2	10661.3	7709.24	3859.31	2096.98	1761.11	2034.11	3403.08	6804.85	9758.65	11166	12789.5	13161.2	14510.8	17036.5	17232.8	15978.5	15198.7
37	14433.5	15024.5	17046.2	18356.4	16558.7	14297.8	13786	12456.8	10702.1	7286	3337.07	1806.07	1530.15	1751.22	2932.63	6383.74	9782.28	11267.7	12920.1	13294.3	14891.7	17314.2	17088.7	15360.3	14433.5
38	13663.2	14260	16543.4	18607.3	17020.1	14433.7	13992.1	12548.9	10711.1	6849.79	2901.96	1550.34	1331.68	1522.65	2535.6	5921.4	9762.06	11356.6	13040.6	13437.8	15314.4	17588.4	17098.1	1	



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.	ALEDL2T	Sample ID.	A1
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
120.00	60	2.238	268.3	0.999	1.57%
277.04	60	0.965	258.1	0.966	4.10%

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*****