

Photometric Test Report

Relevant Standards

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

Prepared For

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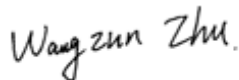
Test Date

2021/11/8

Issue Date

2021/11/11

Prepared By



Wangzun Zhu

Approved By



Kevin Jia

The results contained in this report pertain only to the tested sample.

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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		44042
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	151.7
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		290.3
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	120V	2.84%
		20.00%	277V	12.59%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9	120V	0.999
		0.9	277V	0.950
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	5095
		4 step	5029±220	
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥70		85
Minimum R9 (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥-40		17
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%		0.61%
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		2.423
(Goniophotometer - Section 4.2)		Non-Worst Case		1.073
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		290.3
(Goniophotometer - Section 4.2)		Non-Worst Case		286.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/8	ALEDXL5T	L1
2	Goniophotometer Test	2021/11/8	ALEDXL5T	L1
3	THD and PF Test	2021/11/8	ALEDXL5T	L1

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: ALEDXL5T

Description: 300W/40,000 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.	ALEDXL5T	Sample ID.	L1
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
119.98	60	2.410	288.9	0.999
276.96	60	1.090	286.8	0.950

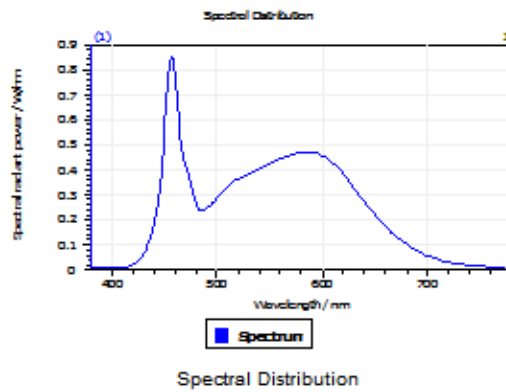
Test Result

CCT (K)	CRI	R9	Duv
5095	85	17	0.00076

Rf	Rg	IES Rcs,h1
83	93	-12%

4.1 Integrating Sphere Test

Results



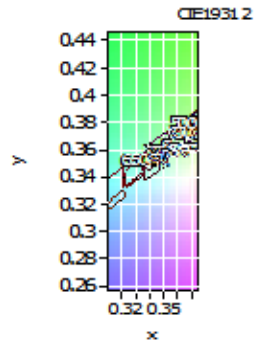
Spectral values

DominantWavelength 570.49 nm
Purity 0.082
PeakWavelength 456.95 nm
Radiant Power 93.61 W
Width50%:

Color Coordinates

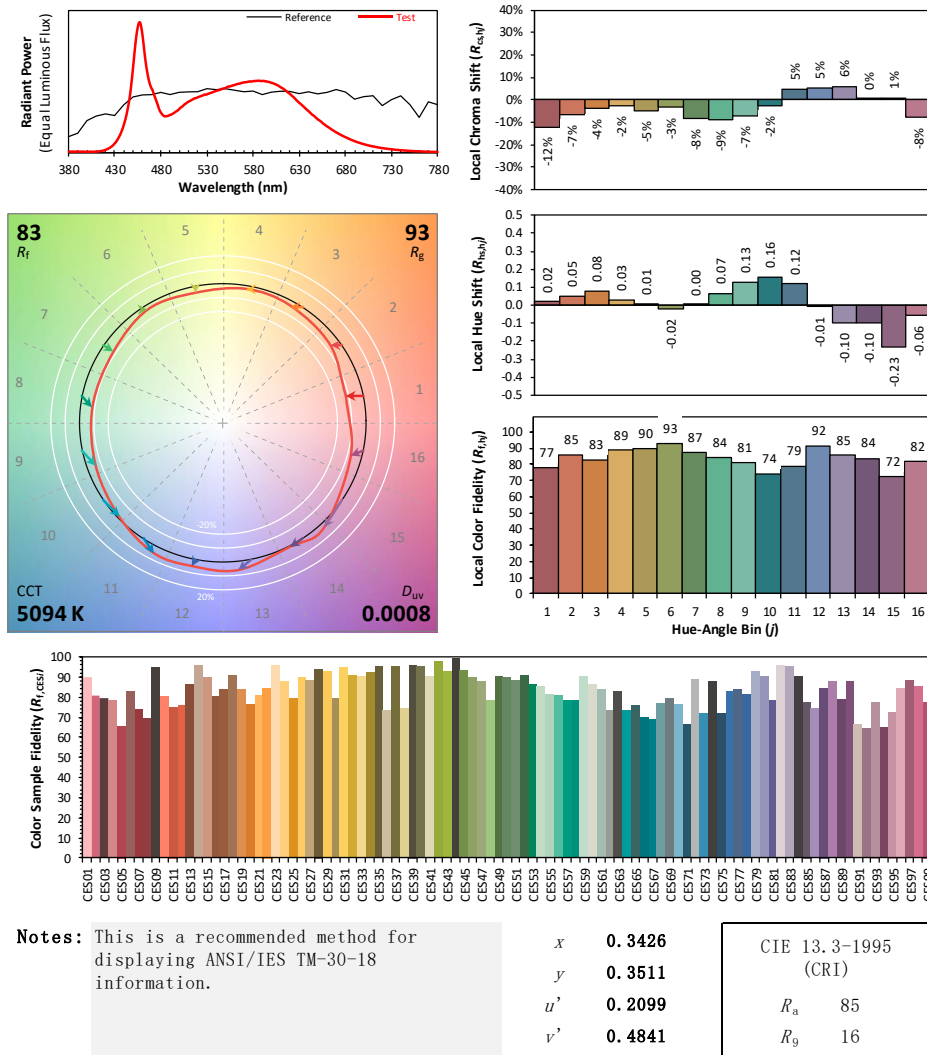
Correlated Color Temporal 5095 K
x: 0.3426 u: 0.2099 u': 0.2099
y: 0.3511 v: 0.3227 v': 0.4841

CRI01	84.8	CRI09	16.6
CRI02	94.2	CRI10	84.2
CRI03	94.7	CRI11	80.3
CRI04	80.9	CRI12	63.0
CRI05	83.9	CRI13	88.2
CRI06	88.7	CRI14	97.9
CRI07	85.2	CRI15	80.0
CRI08	67.8	CRI16	74.9
ResultsCRI	85.0		



PlanckDistance 7.6E-004

4.1 Integrating Sphere Test



Results 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.	ALEDXL5T	Sample ID.	L1
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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, 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

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	119.93	60	2.423	290.3	0.999
NON-WROST CASE	277.02	60	1.073	286.8	0.965

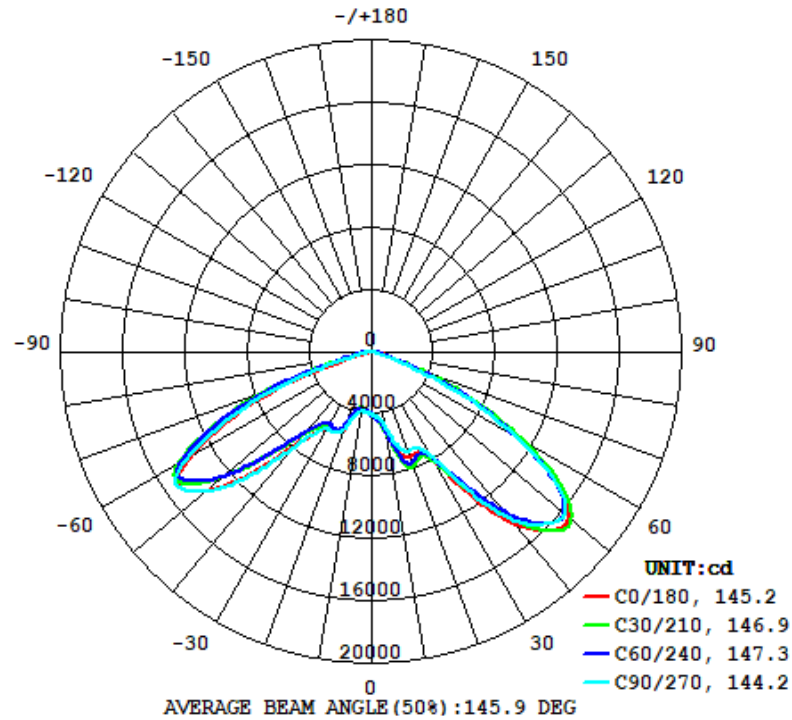
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
44042	163.9	153.8	145.2	144.2	151.7

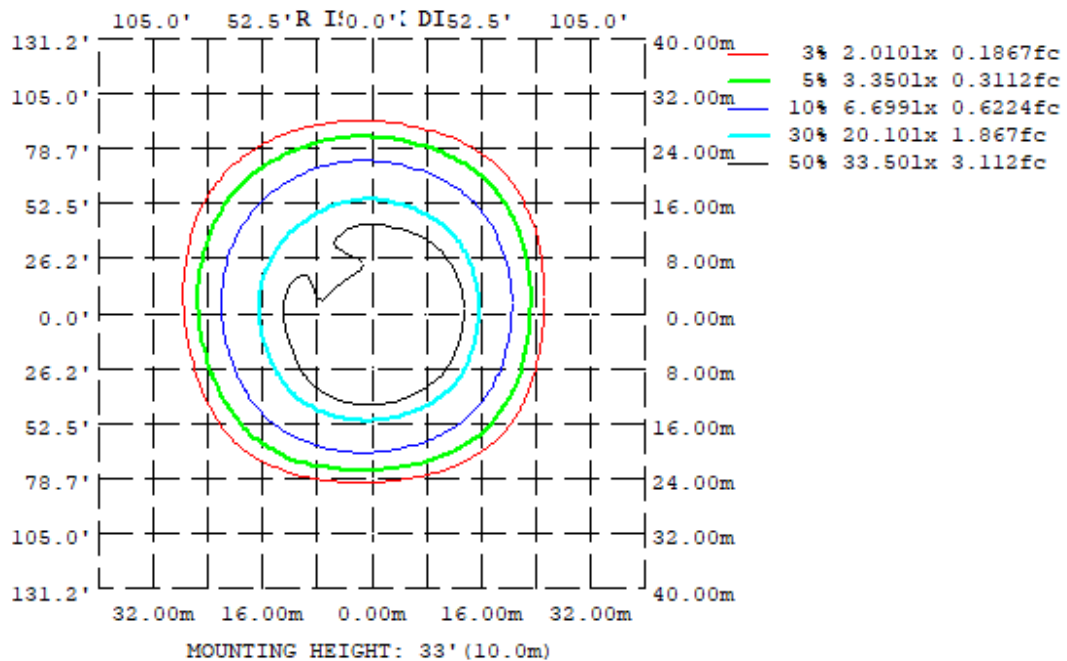
Zonal Lumen Requirement (0° - 90°)	Zonal Lumen Requirement (80° - 90°)	BUG rating
100.00%	0.61%	B5-U0-G3

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

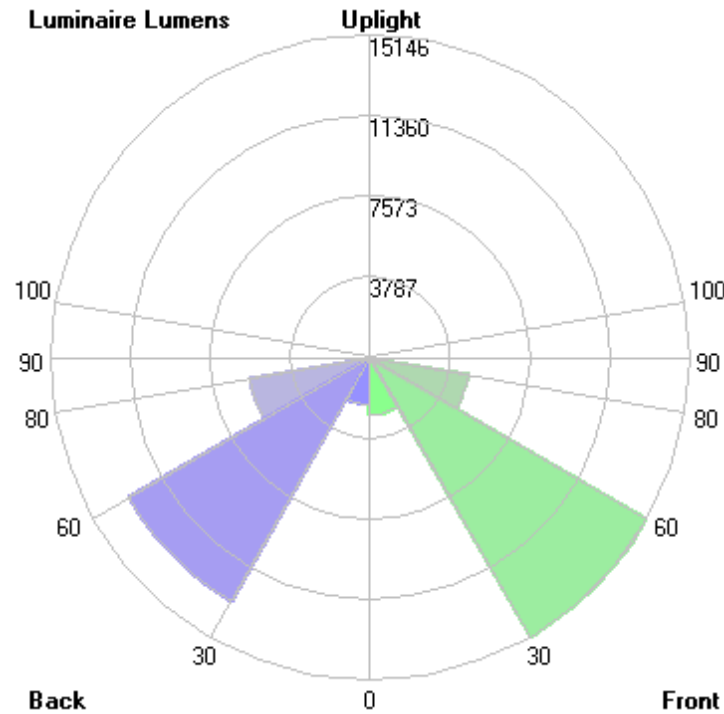
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	497.7	507.5	471.8	418.4	376.8	368.7	391.5	436.8
20	722.0	789.1	683.3	647.3	528.1	486.9	523.0	660.5
30	804.1	799.0	773.1	641.8	567.7	552.7	575.7	666.0
40	1438	1342	1401	948.8	798.3	658.9	815.6	979.6
50	1661	1695	1623	1513	1383	1168	1394	1538
60	1081	1137	1051	1329	1344	1464	1376	1369
70	274.0	359.0	217.2	495.1	493.3	742.6	550.7	568.1
80	53.95	58.31	21.73	64.34	66.45	89.13	31.60	77.58
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	397.74	0 - 10	397.74	0.90%
10-20	1516.08	0 - 20	1913.82	4.35%
20-30	3007.85	0 - 30	4921.67	11.17%
30-40	5265.91	0 - 40	10187.58	23.13%
40-50	10056.97	0 - 50	20244.55	45.97%
50-60	12999.58	0 - 60	33244.13	75.48%
60-70	8591.25	0 - 70	41835.38	94.99%
70-80	1939.30	0 - 80	43774.68	99.39%
80-90	267.60	0 - 90	44042.28	100.00%
90-100	0.00	0 - 100	44042.28	100.00%
100-110	0.00	0 - 110	44042.28	100.00%
110-120	0.00	0 - 120	44042.28	100.00%
120-130	0.00	0 - 130	44042.28	100.00%
130-140	0.00	0 - 140	44042.28	100.00%
140-150	0.00	0 - 150	44042.28	100.00%
150-160	0.00	0 - 160	44042.28	100.00%
160-170	0.00	0 - 170	44042.28	100.00%
170-180	0.00	0 - 180	44042.28	100.00%

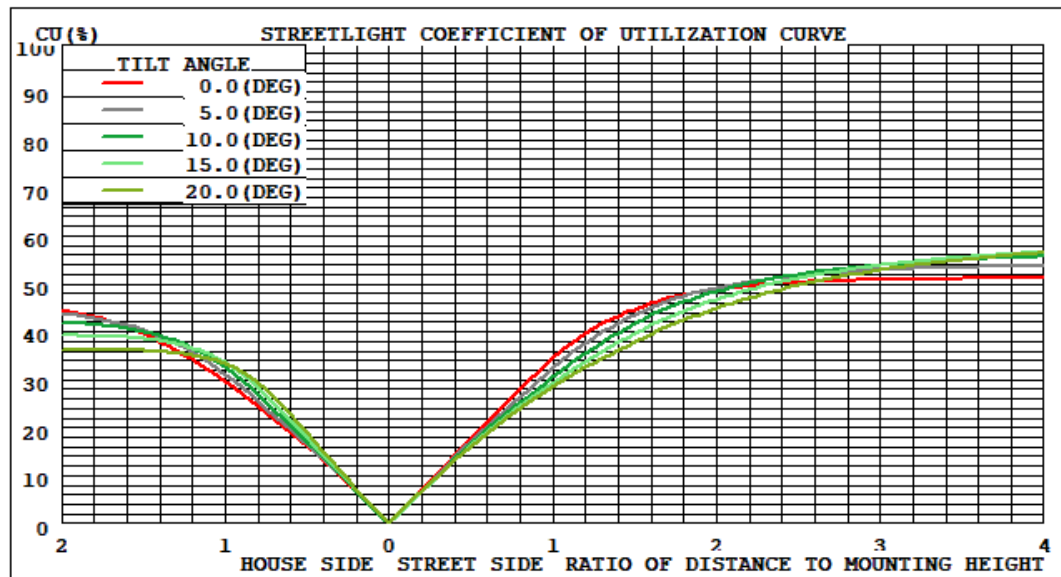
4.2 Goniophotometer Test

LCS/BUG

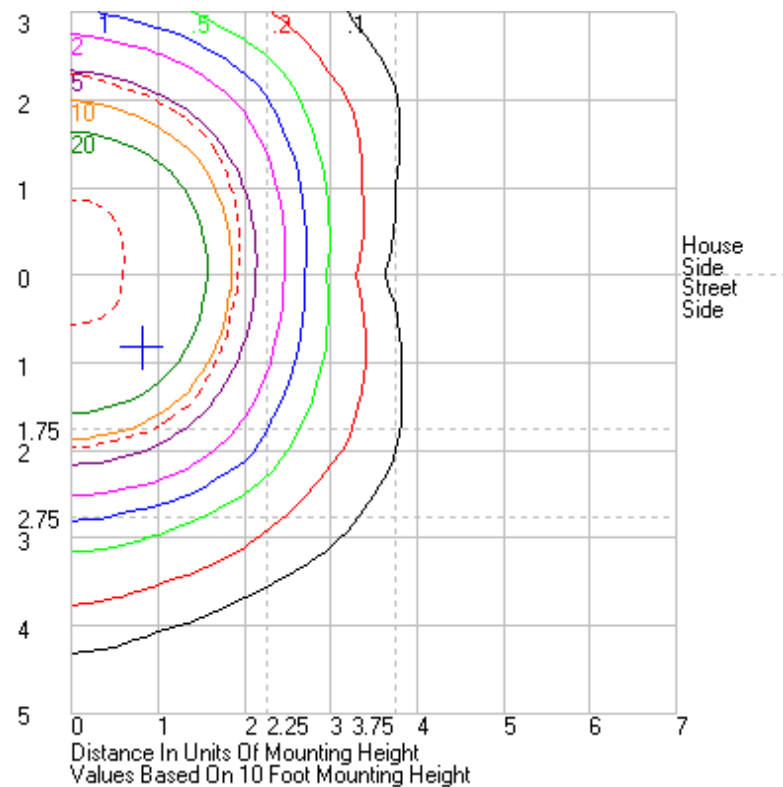


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2695.2	N.A.	6.1
FM - Front-Medium (30-60)	15146.4	N.A.	34.4
FH - Front-High (60-80)	4730.8	N.A.	10.7
FVH - Front-Very High (80-90)	116.8	N.A.	0.3
BL - Back-Low (0-30)	2226.4	N.A.	5.1
BM - Back-Medium (30-60)	13176.1	N.A.	29.9
BH - Back-High (60-80)	5799.7	N.A.	13.2
BVH - Back-Very High (80-90)	150.8	N.A.	0.3
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	44042.2	N.A.	100.0
BUG Rating	B5-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	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26	4044.26
1	4087.91	4094.2	4098.47	4097.78	4094.63	4088.45	4080.02	4069.12	4057.29	4044.88	4032.72	4021.74	4003.96	4000.28	4000.51	4004.39	4011.47	4020.33	4032.85	4044.77	4058.17	4069.7	4080.87	4090.23	4087.91
2	4140.2	4151.2	4155.81	4153.06	4145.91	4132.15	4113.82	4092.56	4066.83	4038.34	4012.33	3990.46	3964.03	3955.09	3953.94	3959.53	3971.96	3990.19	4011.58	4036.36	4061.93	4088.86	4113.2	4133.63	4140.2
3	4198.33	4214.51	4220.63	4215.2	4202.36	4180.28	4152.86	4120	4079.68	4037.57	3999.03	3964.37	3928.06	3913.91	3908.57	3914.96	3934.01	3961.89	3994.93	4032.84	4072.06	4111.29	4149.63	4180.88	4198.33
4	4258.66	4281.01	4289.2	4283.6	4263.78	4232.95	4195.73	4151.31	4098.57	4045.09	3989.67	3940.85	3895.15	3873.99	3865.21	3873.26	3895.65	3931.21	3976.94	4030.43	4086.4	4139.7	4188.65	4231.87	4258.66
5	4322.63	4351.06	4360.99	4353.69	4330.48	4288.88	4242.16	4187.42	4123.57	4052.47	3982.76	3920.47	3866.19	3839.13	3824.9	3833.28	3859.57	3901.69	3957.62	4024.95	4098	4169.37	4230.3	4283.38	4322.63
6	4394.4	4430.71	4441.29	4433.42	4405.42	4355.8	4296.93	4230.52	4151.24	4067.06	3982.32	3904	3840.45	3808.14	3790.41	3794.47	3824.77	3876.28	3941.54	4022.26	4111.78	4200.95	4273.5	4339.27	4394.4
7	4479.33	4527.91	4543.53	4528.55	4493.05	4436.25	4366.85	4281.9	4186.44	4087.68	3980.09	3887.74	3814.4	3775.77	3754.06	3761.11	3794.06	3853.08	3930.56	4022.52	4128.58	4231.33	4321.26	4397.46	4479.33
8	4599.86	4669.01	4686.64	4662.81	4611.5	4534.93	4446.51	4344.94	4232.02	4108.86	3985.97	3877.09	3793.93	3747.05	3723.74	3731.58	3766.02	3833.29	3919.59	4024.8	4144.47	4265.63	4373.38	4471.25	4599.86
9	4766.83	4850.95	4870.02	4845.03	4778.5	4677.62	4558.15	4422.84	4285.33	4141.19	4000.65	3870.82	3775.97	3719.22	3698.24	3706.45	3743.87	3818.25	3914.35	4033.5	4169.74	4309.35	4445.7	4577.12	4766.83
10	4977.14	5080.16	5108.05	5074.95	4993.29	4867.9	4717.59	4536.37	4360.55	4184.49	4011.31	3873.89	3768.19	3698.5	3677.19	3686.78	3729.04	3805.83	3915.14	4049.77	4203.05	4368.48	4546.07	4724.71	4977.14
11	5227.2	5359.5	5405.38	5372.38	5282.24	5118.06	4930.89	4712.32	4472.35	4246.77	4040.24	3893.95	3776.43	3694.88	3659.29	3675.41	3719.33	3799.27	3921.55	4073.62	4248.59	4451.05	4682.75	4910.28	5227.2
12	5503.23	5669.08	5751.33	5728.88	5605.94	5409.32	5189.57	4930.83	4628.1	4342.19	4094.83	3931.73	3800.15	3704.29	3659.5	3669.67	3714.89	3803.29	3936.72	4109.24	4314.17	4569.74	4864.87	5141.6	5503.23
13	5793.52	6007.5	6137.1	6128.41	5971.69	5725.38	5478.13	5189.88	4847.3	4485.63	4185.8	3995.1	3847.13	3731.93	3674.91	3670.62	3723.57	3824.12	3975.32	4167.37	4410.78	4732.58	5086.21	5391	5793.52
14	6088	6349.42	6528.45	6547.7	6358.13	6054.46	5770.01	5473.09	5105.06	4688.43	4331.36	4093.62	3932.32	3788.51	3709.64	3689.36	3754.4	3874.89	4047.27	4265.76	4548.67	4934.49	5332.15	5652.97	6088
15	6387.11	6698.41	6920.1	6940.05	6717.45	6363.67	6038.06	5742.81	5383.71	4951.63	4535.93	4243.78	4066.64	3891.43	3777.91	3741	3817.35	3961.61	4155.73	4408.91	4736.15	5176.21	5588.62	5929.15	6387.11
16	6684.7	7049.22	7298.81	7326.77	7078.52	6670.17	6298.2	6000.09	5685.47	5269.92	4802	4458.53	4253.5	4053.82	3901.82	3843.66	3931.43	4088.06	4309.65	4600.36	4987.62	5456.35	5875.67	6191.29	6684.7
17	6940.03	7336.51	7604.43	7635.14	7358.97	6922.24	6511.64	6235.15	5970.12	5604.7	5121.49	4724.99	4486.47	4259.3	4089.49	4002.86	4082.54	4256.68	4508.25	4837.74	5277.21	5755.9	6158.04	6429.77	6940.03
18	7116.76	7533.76	7810.4	7829	7547.81	7106.71	6676.29	6419.83	6227.83	5951.89	5480.99	5030.82	4756.2	4505.1	4338.88	4234.32	4285.33	4467.91	4741.86	5108.16	5590.19	6065.62	6372.1	6665.01	7116.76
19	7202.02	7624.33	7886.84	7906.47	7642.73	7222.13	6785.36	6537.44	6428.23	6247.57	5828.77	5340.35	5042.53	4801.77	4632.62	4527.01	4535.33	4700.39	4989.26	5415.94	5921.22	6362.37	6526.92	6782.93	7202.02
20	7220.44	7643.07	7870.1	7890.98	7645.09	7264.88	6833.1	6596.39	6532.58	6472.77	6118.69	5615.63	5280.78	5088.62	4960.91	4868.73	4798.24	4924.41	5230.1	5702.72	6229.66	6604.73	6702.35	6834.71	7220.44
21	7208.61	7612.14	7804.06	7817.72	7581.6	7240.3	6830.58	6618.64	6584.02	6600.52	6311.09	5815.48	5447.5	5312.83	5271.64	5205.02	5065.86	5119.45	5427.26	5952.38	6483.8	6764.06	6764.87	6852.39	7208.61
22	7182.62	7553.4	7709.55	7705.05	7491.46	7186.24	6805.77	6607.26	6598.9	6625.77	6408.91	5942.56	5554.29	5463.94	5504.96	5491.4	5287.42	5257.45	5570.52	6134.84	6653.69	6857.3	6791.97	6852.25	7182.62
23	7154.08	7487.04	7603.31	7583.89	7392.22	7136.21	6789.4	6588.31	6583.74	6585.79	6429.7	6012.31	5610.92	5545.16	5666.04	5687.56	5436.44	5356.85	5675.23	6256.23	6735.58	6887.69	6798.31	6850.13	7154.08
24	7146.84	7444.51	7527.55	7481.93	7313.62	7106.79	6800.19	6584.33	6539.53	6521.92	6389.24	6027.06	5629.83	5574.79	5745.88	5789.67	5520.82	5423.87	5739.51	6317.73	6746.36	6864.91	6791.57	6857.13	7146.84
25	7175.06	7427.1	7485.71	7413.24	7266.55	7107.08	6847.37	6610.82	6494.37	6453.1	6305.85	5999.39	5631.44	5582.11	5768.02	5809.45	5550.41	5458.75	5771.05	6335.84	6699.66	6803.26	6786.04	6879.32	7175.06
26	7235.24	7447.82	7479.07	7391.99	7260.59	7143.85	6929.12	6679.25	6479.33	6392.73	6218.86	5953.04	5615.27	5569.31	5742.76	5764.75	5545.47	5464.57	5781.22	6317.86	6615.44	6731.88	6784.7	6926.15	7235.24
27	7329.14	7516.08	7526.69	7422.65	7302.55	7224.71	7046.79	6779.81	6506.64	6348.16	6146.79	5897.41	5592.93	5541.63	5688.95	5691.12	5516.88	5460.51	5786.83	6271.13	6523.95	6678.89	6783.36	7005.13	7329.14
28	7476.83	7655.36	7654.63	7526.52	7414.53	7360.72	7214.01	6921.58	6575.44	6331.86	6097.89	5851.12	5590.33	5523.03	5634.29	5619.71	5473.63	5460.05	5775.41	6207.91	6445.53	6646.85	6823.69	7110.59	7476.83
29	7691.95	7900.03	7874.04	7720.77	7611.24	7588.12	7435.02	7106.14	6677.13	6356.52	6079.55	5834.11	5619.29	5528.58	5597.85	5561.9	5430.46	5459.98	5755.92	6143.6	6396.96	6653.55	6893.38	7259.1	7691.95
30	8041.33	8253.56	8174.68	7990.25	7890.96	7902.89	7730.63	7336.68	6819.7	6417.52	6090.15	5849.16	5677.06	5570.5	5583.84	5526.92	5400.36	5473.29	5756.71	6110.11	6382.58	6660.25	7002.48	7472.96	8041.33
31	8547.54	8712.53	8550.29	8319.62	8243.46	8299.67	8156	7631.45	7001.8	6504.05	6132.28	5894.76	5760.39	5640.38	5597.18	5516.4	5394.88	5511.52	5792.4	6122.73	6402.78	6704.24	7165.97	7774.6	8547.54
32	9152.84	9295.88	9004.85	8717.35	8657.57	8803.21	8681.06	8035.43	7232.61	6635.49	6213.85	5975.1	5864.72	5736.52	5647.79	5530.38	5423.29	5580.87	5870.27	6178.52	6474.53	6808.07	7406.08	8218.14	9152.84
33	9829.72	9937.8	9514.2	9164.54	9134.91	9378.77	9302.64	8547.74	7547.1	6801.37	6322.31	6084.39	5996.69	5857.22	5718.44	5570.03	5479.3	5680.59	5987.18	6277.34	6571.36	6962.95	7719.55	8779.87	9829.72
34	10550	10604.3	10094.8	9669.19	9675.46	9994.56	9977.08	9143.73	7920.48	7015.79	6466.26	6231.74	6157.41	6001.57	5816.84	5638.15	5561.06	5814.1	6144.19	6439.58	6669.7	7186.38	8105.65	9412.58	10550
35	11298.7	11315.5	10718.8	10219.4	10268.9	10691.3	10690.4	9817.1	8368.7	7298.75	6652.75	6413.6	6361.26	6173.07	5941.62	5728.12	5677.18	5981.48	6361.03	6601.81	6847.95	7470.1	8586.71	10121.9	11298.7
36	12018	12001	11365.4	10799.7	10892	11385.2	11457.3	10526.9	8917.14	7616.54	6893.51	6631.42	6565.11	6374.95	6088.67	5851.08	5822.83	6193.12	6577.88	6815.22	7107.94	7825.67	9144.32	10843.1	12018
37	12683.6	12666	12039.8	11425.9	11560.1	12080	12176.5	11273.7	9526.62	8006.28	7185.5	6905.37	6792.22	6576.83	6271.81	5997.31	5990.21	6429.28	6841.96	7117.98	7426.94	8237.14	9760.49	11561.6	12683.6
38	13283.4	13256.3	12691.9	12078.5	12206.4	12774.7	12892.9	12004.3	10164.4	8446.94	7522.64	7230.17	7109.85	6813.23	6468.53	6165.88	620								

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	ALEDXL5T	Sample ID.	L1
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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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
119.98	60	2.410	288.9	0.999	2.84%
276.96	60	1.090	286.8	0.950	12.59%

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*****