Photometric Test Report

Relevant Standards

☑IES LM-79-2008

☑ANSI C82.77:2017

Prepared For

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2021/11/8

Issue Date

2021/11/11

Prepared By	**Approved By**
Wangzun Zhu	Kevin Jia

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		48635
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	130.5
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		372.7
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	120V	2.91%
		20.00%	277V	10.41%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9	120V	0.999
		0.9	277V	0.963
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	4984
		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		14
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%		0.17%
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		3.107
(Goniophotometer - Section 4.2)		Non-Worst Case		1.376
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		372.7
(Goniophotometer - Section 4.2)		Non-Worst Case		366.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/8	ALEDXLAT	K1
2	Goniophotometer Test	2021/11/8	ALEDXLAT	K1
3	THD and PF Test	2021/11/8	ALEDXLAT	K1

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.

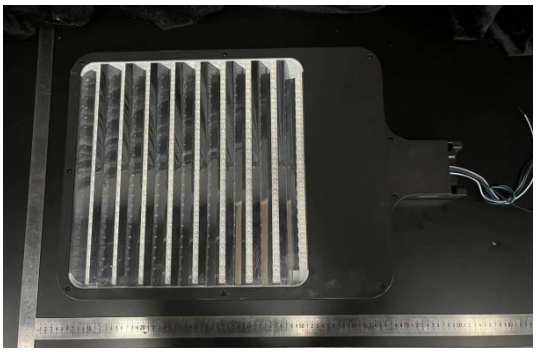
3.0 Production Description

Luminaire Description: ALEDXLAT

Description: 385W/50,000 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.	ALEDXLAT	Sample ID.	K1
Opreate 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 paramters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25º C ± 1º 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
120.02	60	3.094	371.1	0.999
276.97	60	1.371	365.6	0.963

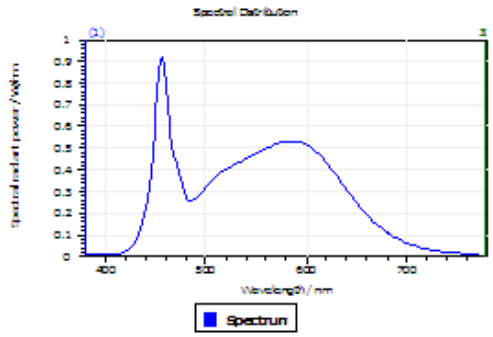
Test Result

CCT (K)	CRI	R9	Duv
4984	85	14	0.00072

Rf	Rg	IES Rcs,h1
83	93	-12%

4.1 Integrating Sphere Test

Results



Spectral Distribution

Spectral values

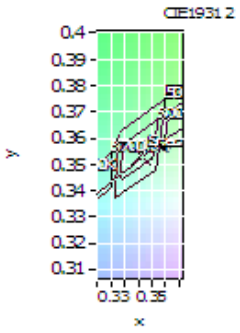
DominantWavelength	572.22 nm
Purity	0.098
PeakWavelength	456.33 nm
Radiant Power	104.3 W
Width50%:	

Color Coordinates

Correlated Color Temperat		4984 K			
x:	0.3457	u:	0.2111	u':	0.2111
y:	0.3535	v:	0.3238	v':	0.4857

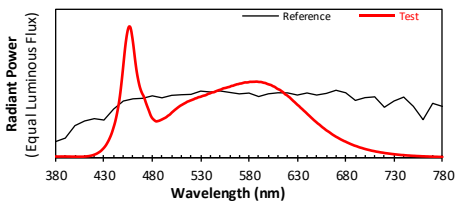
CRI01	83.7	CRI09	13.8
CRI02	93.0	CRI10	81.9
CRI03	94.9	CRI11	80.2
CRI04	81.1	CRI12	62.7
CRI05	83.5	CRI13	86.8
CRI06	88.0	CRI14	98.0
CRI07	85.1	CRI15	78.8
CRI08	66.9	CRI16	74.4

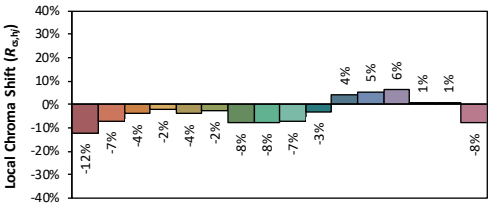
ResultsCRI 84.5

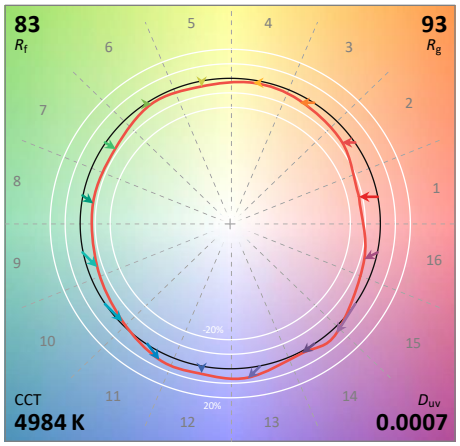


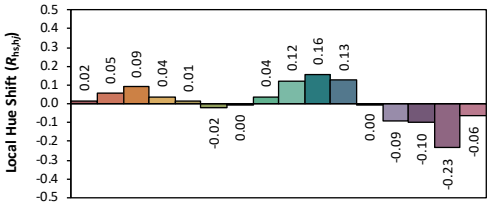
PlanckDistance 7.2E-004

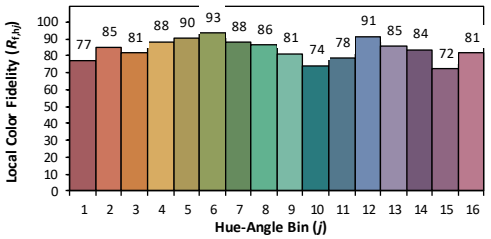
4.1 Integrating Sphere Test

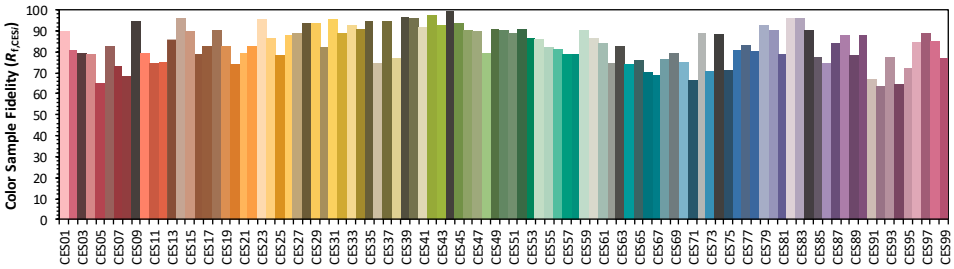












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3457
y	0.3535
u'	0.2111
v'	0.4857

CIE 13.3-1995 (CRI)

R_a	84
R_9	15

lors 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.	ALEDXLAT	Sample ID.	K1
Opreate 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 paramters 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^{o} vertical intervals and 10^{o} horizontal intervals.

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	120.00	60	3.107	372.7	0.999
NON-WROST CASE	277.01	60	1.376	366.6	0.962

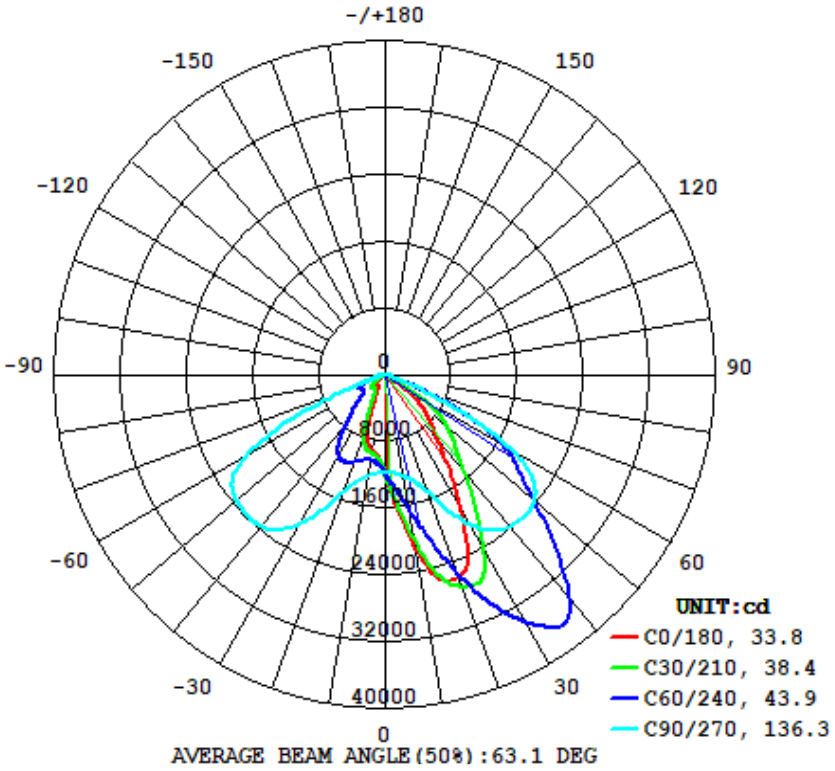
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
48635	82.0	149.9	33.8	136.3	130.5

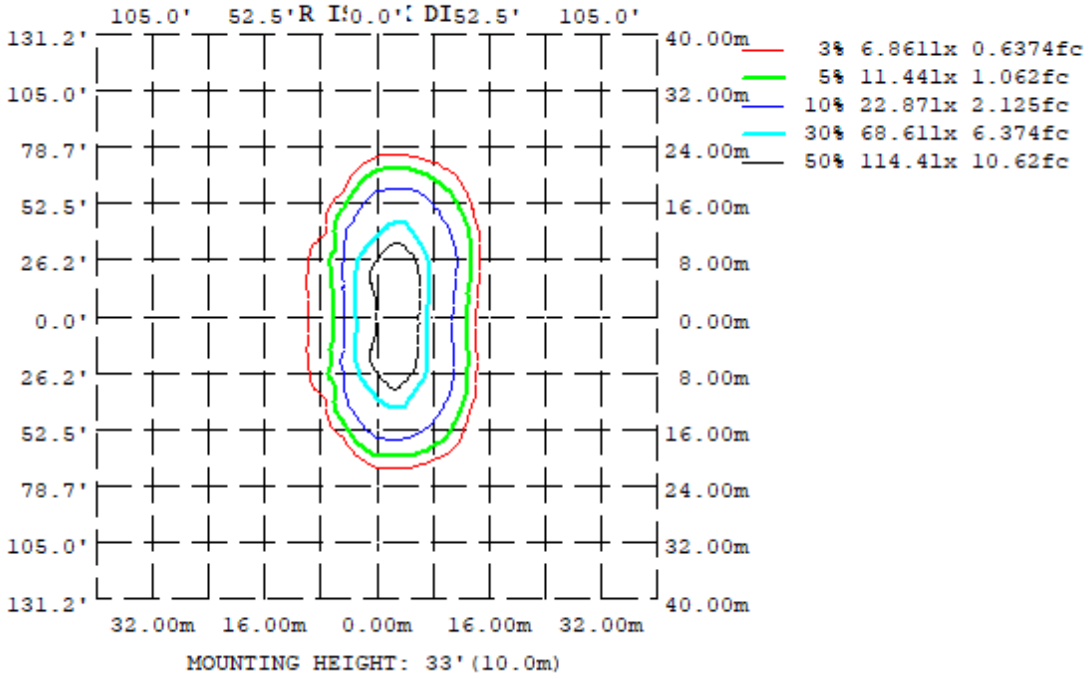
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	0.17%	B4-U0-G3

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

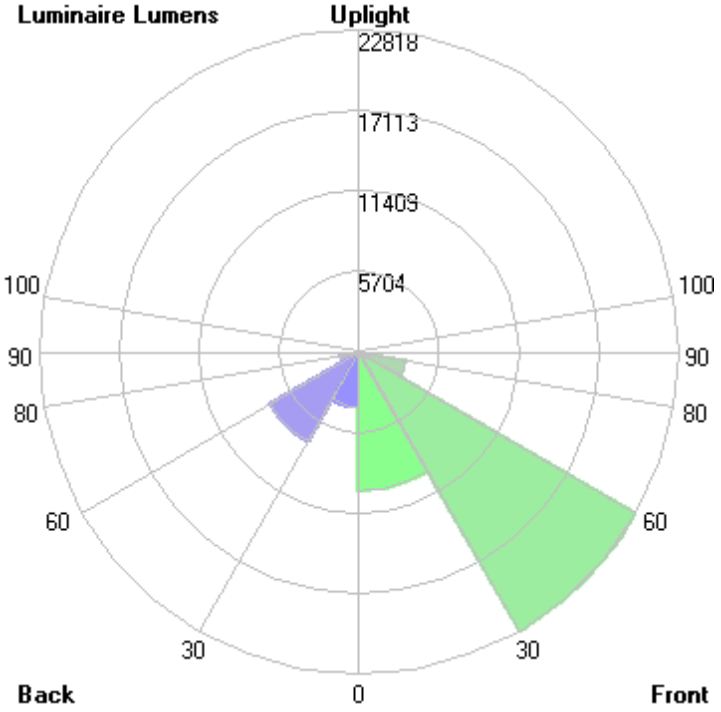
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	2071	1807	1231	985.3	927.7	997.4	1228	1791
20	2583	2736	1484	928.1	560.7	953.1	1486	2767
30	1829	3066	2078	544.8	180.8	555.5	2057	3216
40	992.1	2354	2367	267.4	207.6	261.2	2368	2529
50	601.3	1699	2364	320.0	108.9	312.5	2350	1837
60	122.5	934.9	1746	203.6	12.93	230.1	1953	1149
70	15.21	72.82	271.1	14.01	6.078	18.99	480.3	112.6
80	5.325	12.24	64.11	6.282	3.149	6.755	82.60	16.42
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	1220.31	0 - 10	1220.31	2.51%
10-20	4450.77	0 - 20	5671.08	11.66%
20-30	8049.70	0 - 30	13720.78	28.21%
30-40	10361.03	0 - 40	24081.81	49.52%
40-50	10729.16	0 - 50	34810.97	71.58%
50-60	9022.38	0 - 60	43833.35	90.13%
60-70	4095.23	0 - 70	47928.58	98.55%
70-80	624.71	0 - 80	48553.29	99.83%
80-90	82.00	0 - 90	48635.29	100.00%
90-100	0.00	0 - 100	48635.29	100.00%
100-110	0.00	0 - 110	48635.29	100.00%
110-120	0.00	0 - 120	48635.29	100.00%
120-130	0.00	0 - 130	48635.29	100.00%
130-140	0.00	0 - 140	48635.29	100.00%
140-150	0.00	0 - 150	48635.29	100.00%
150-160	0.00	0 - 160	48635.29	100.00%
160-170	0.00	0 - 170	48635.29	100.00%
170-180	0.00	0 - 180	48635.29	100.00%

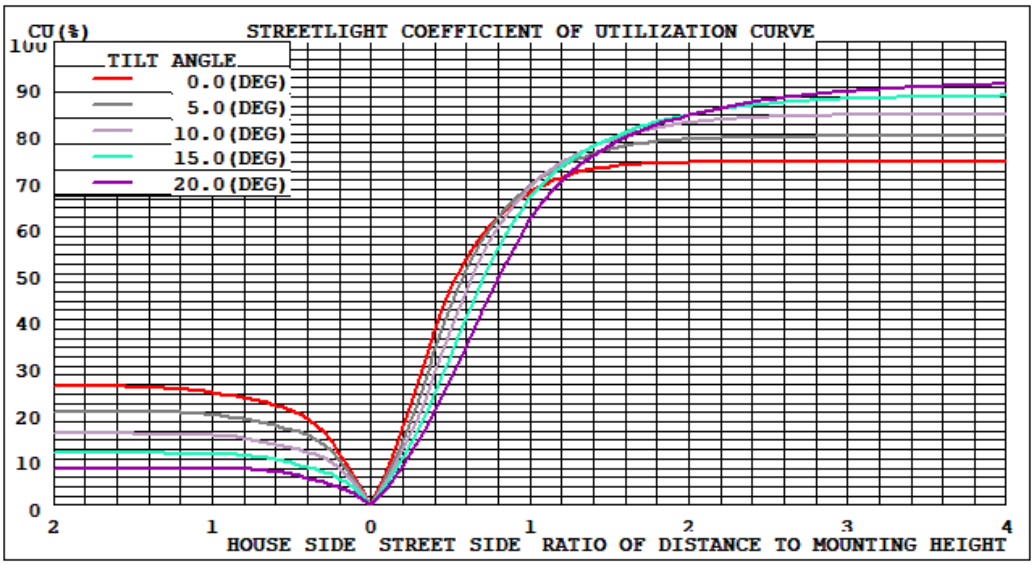
4.2 Goniophotometer Test

LCS/BUG

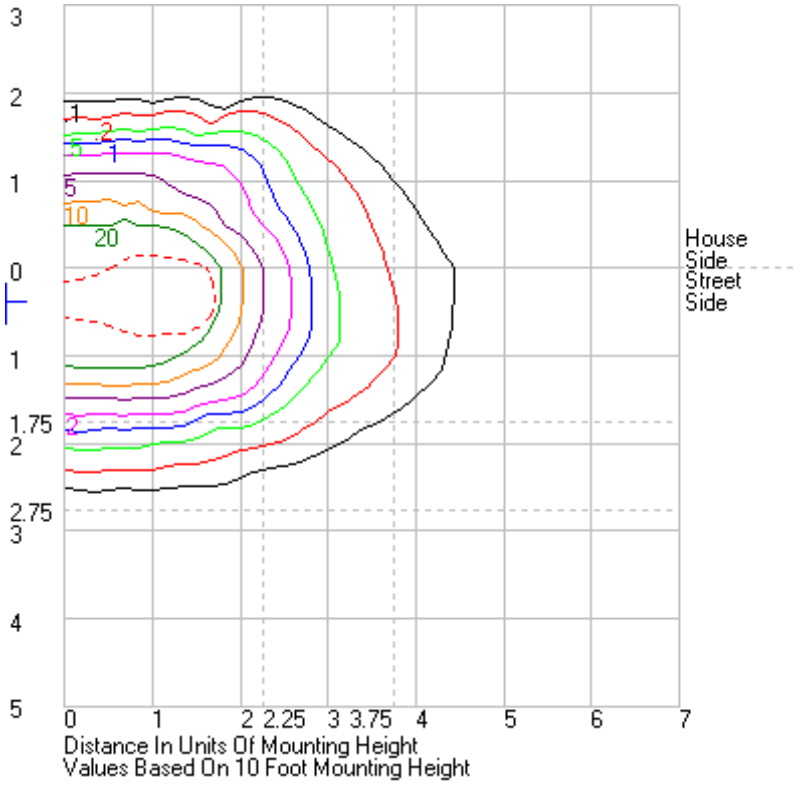


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	9815.5	N.A.	20.2
FM - Front-Medium (30-60)	22817.5	N.A.	46.9
FH - Front-High (60-80)	3399.1	N.A.	7.0
FVH - Front-Very High (80-90)	51.1	N.A.	0.1
BL - Back-Low (0-30)	3905.3	N.A.	8.0
BM - Back-Medium (30-60)	7295.1	N.A.	15.0
BH - Back-High (60-80)	1320.9	N.A.	2.7
BVH - Back-Very High (80-90)	30.9	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	48635.4	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	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756	11756
1	12336.2	12313	12256.1	12159.3	12035.4	11841.4	11695.4	11553	11420.7	11312.3	11230.9	11171.8	11268.3	11289.1	11335.1	11413.2	11508	11569.1	11697.7	11824.9	11947.5	12050.7	12129.3	12174.2	12336.2
2	12978.7	12969.2	12825.6	12624.2	12354.9	12005.6	11715.2	11438.2	11195.7	11003.8	10862.2	10768.7	10860.8	10881.4	10961.8	11097.1	11283.5	11459	11716	11988.2	12258	12504.5	12689.6	12807.1	12978.7
3	13750.8	13691.5	13490.9	13110.4	12701.7	12184.5	11746.8	11349.4	11010.9	10748.3	10566.4	10449.9	10512.1	10547.3	10658.9	10836.5	11090.8	11363.7	11745	12167.9	12599.3	12995.2	13318.2	13521.9	13750.8
4	14524.1	14413.9	14157.1	13674.9	13079.2	12386.2	11789.3	11277.4	10850.9	10536.2	10311.1	10182	10227	10269.4	10399.5	10616.7	10925.7	11284.1	11787.7	12363.7	12969.9	13534.4	13986	14287.3	14524.1
5	15396.7	15260.6	14865.1	14240.1	13501.5	12602.5	11848.6	11215.5	10721.3	10356.5	10102.4	9951.63	9993.1	10038.2	10188.3	10434.4	10790.5	11220.4	11839.4	12573.8	13354.1	14120.3	14729.1	15113.7	15396.7
6	16356.1	16193.5	15691.9	14894.9	13924.9	12843.8	11919.7	11175	10612.9	10200	9922.59	9763.89	9805.18	9858.2	10016.5	10280	10680.1	11175.7	11901.5	12799.5	13792.5	14749.3	15533.2	16033.5	16356.1
7	17380.7	17191.6	16572.8	15591.1	14389.3	13102.2	11999.7	11147.4	10520.4	10076.2	9783.42	9616.9	9659.03	9718.68	9885.99	10166.6	10592.5	11144.2	11981.3	13049.7	14272.9	15444.4	16407.3	17022.4	17380.7
8	18477.3	18233.3	17510	16360.6	14900.1	13378.4	12090.6	11129.5	10448	9977.98	9673.76	9487.75	9530.92	9599.61	9784.82	10078.3	10528.8	11131.3	12070.1	13325.3	14785.9	16207.5	17333.3	18059.6	18477.3
9	19585.5	19350.9	18541.5	17194.2	15464.8	13686	12198.2	11131.4	10392.3	9905.59	9574.19	9364.4	9400.31	9485.19	9704.9	10015.6	10478.8	11131.4	12168.4	13624.6	15355.9	17026.3	18358.9	19166	19585.5
10	20711.1	20462.3	19599.5	18074.6	16058.9	13998.6	12310.9	11144.7	10358.5	9852.75	9484.31	9243.04	9277.13	9374.62	9629.7	9974.31	10447.6	11138.2	12281.4	13942.1	15969.8	17907.8	19413.8	20274.7	20711.1
11	21808.3	21555.7	20697	19053.3	16731.4	14346.8	12435.8	11167	10347.1	9812.56	9389.92	9138.81	9173.51	9276.12	9548.06	9947.56	10443.9	11163.4	12406.7	14294.9	16625.9	18864.9	20514.3	21389.3	21808.3
12	22875.6	22619.4	21776.8	20026.1	17411.6	14716	12574.6	11207.5	10351.4	9781.31	9308.92	9031.04	9046.91	9174.97	9483.19	9929.69	10459.2	11199.9	12543.2	14670.2	17332.7	19868.6	21609.8	22451.6	22875.6
13	23804.1	23602.5	22829.8	21064.7	18184.2	15110.6	12729.8	11267.2	10385	9752.42	9231.76	8873.91	8851.33	9027.54	9415.94	9913.21	10492.7	11258.5	12707.4	15085.5	18121	20903.2	22659.8	23464	23804.1
14	24603.6	24432.7	23801.1	22093.6	19009.4	15563.6	12918.9	11355.1	10436.3	9725.35	9127.26	8644.14	8579.43	8812.11	9317.86	9898	10551.7	11340.4	12904.1	15561	18967.2	21986.6	23654.9	24318.6	24603.6
15	25188.3	25097.1	24661.4	23081.3	19891.2	16052.6	13135.4	11459.3	10500.2	9702.07	8972.39	8333.99	8224.86	8512.39	9171.21	9890.41	10625.8	11443	13118.1	16072.9	19879.1	23038.7	24576.6	25039.8	25188.3
16	25586.7	25596.1	25409	24116.4	20819.2	16604	13400.9	11601.4	10590.8	9672.94	8759.45	7952.97	7781.49	8125.58	8967.3	9886.27	10718	11574.7	13390.1	16665.2	20870.6	24076.5	25376.2	25571.6	25586.7
17	25815.7	25909.9	26003.8	25015.2	21789.5	17203.6	13695.1	11762	10688	9630.61	8473.94	7506.69	7291.36	7690.88	8697.41	9855.44	10818.5	11735.5	13687	17309.4	21894.3	25062	26037.6	25941.3	25815.7
18	25911.6	26086.6	26450.4	25888.7	22838.6	17891.1	14023.8	11961.6	10791.3	9562.24	8118.87	7012.44	6773.25	7202.76	8353.22	9791.85	10928.2	11929.1	14025.4	18018.6	22963.7	26015.6	26569.7	26163.3	25911.6
19	25899.2	26148.3	26781	26675.1	23877.4	18657.8	14428.8	12200.4	10918	9444.4	7731.41	6473.16	6209.44	6691.97	7971.69	9684	11040.8	12159.5	14424.9	18779.6	24052.7	26880.5	26982	26259.7	25899.2
20	25827.9	26146.8	27020.3	27364.4	24910.1	19466.4	14844.8	12462	11033.1	9281.18	7296.58	5915.38	5606.68	6139.91	7536.49	9531.49	11157.7	12428.7	14862.1	19591.4	25159.1	27665.5	27304.2	26276.6	25827.9
21	25707	26098.3	27189.6	27978.9	25993.2	20385.2	15342.1	12768.8	11153.1	9075.4	6810.33	5357.6	4998.52	5528.65	7071.38	9328.85	11277.9	12721.3	15342.4	20473.7	26273	28373.6	27547.3	26250.9	25707
22	25531.5	25997	27310.4	28510.5	27028.4	21314.6	15885.8	13087.5	11279	8818.82	6244.13	4773.1	4397.94	4924.62	6560.18	9073.53	11391.5	13049.6	15877.9	21411	27341.9	29003.1	27722.1	26174.8	25531.5
23	25242.4	25818.9	27380.7	28967.6	28064.7	22293.3	16456	13429.5	11369.3	8529.27	5745.45	4211.1	3823.33	4345.49	5999.91	8781.02	11499.1	13408.6	16457.7	22389.5	28418	29584.9	27859.3	26037.1	25242.4
24	24741.3	25487.3	27404.7	29402.6	29080.7	23322.1	17099.6	13802.2	11445.9	8208.6	5212.92	3677.06	3315.31	3802.93	5427.67	8450.49	11582.3	13779.9	17057	23364.9	29470.3	30111.8	27946.5	25770.8	24741.3
25	24007.5	24924.1	27334.3	29788.6	30026.4	24319	17715.6	14160.8	11491.9	7819.46	4673.47	3197.58	2873.25	3302.72	4864.29	8047.08	11629	14174.4	17676.5	24392.8	30497.5	30594	27960.6	25286.7	24007.5
26	22998.2	24096.8	27087.1	30130.9	30964.2	25363.8	18365	14575.4	11500.2	7379.33	4177.17	2804.32	2526.86	2895.62	4324.98	7596.87	11641.3	14566.2	18285.6	25420.9	31504.9	31038.3	27865.7	24549.8	22998.2
27	21822	23074.5	26623.5	30428.6	31837.5	26399.2	19003.8	14965.7	11471	6903.31	3708.41	2488.64	2257.24	2570.36	3840.65	7111.01	11616.1	14941.2	18883.3	26435.1	32466.1	31439.3	27573.6	23603.8	21822
28	20559.2	21915.5	25952.6	30648.7	32660.4	27420.1	19621	15352.1	11416.3	6418.17	3299.19	2239.85	2039.67	2302.96	3421.19	6576.77	11562.8	15319.8	19468	27447.8	33395.1	31776.6	27047	22468.3	20559.2
29	19375.7	20725.7	25063.3	30741.5	33445.4	28410.8	20212.7	15728.1	11318.5	5933.27	2956.57	2042.42	1886.45	2083.76	3056.74	6057.59	11467.6	15671.8	20028.5	28409.2	34279.5	32034.9	26300.3	21261.5	19375.7
30	18293.1	19606.6	24053.2	30663.7	34202.5	29371.8	20777.1	16070	11178.2	5448.37	2671.48	1905.73	1807.7	1931.33	2751.72	5555.33	11325.7	15998.8	20573.7	29339.9	35116.8	32164.8	25362	20091.6	18293.1
31	17339.3	18631	23008.2	30380.7	34860.2	30301.9	21320	16388.3	11012.4	4999.87	2440.33	1843.79	1787.23	1854.39	2496.83	5075.01	11138.6	16307.3	21068.4	30237.6	35878.7	32110.1	24310.9	19051.9	17339.3
32	16457	17719	21962.1	29891.3	35492	31195.2	21806.2	16684.9	10780.8	4567.9	2256.14	1835.27	1791.04	1834.22	2281.07	4630.18	10877.3	16584.2	21517.4	31113.1	36611.8	31829.1	23225.5	18128.8	16457
33	15579.2	16835.6	21024.9	29234.7	36019.7	32047.7	22229.4	16928.4	10483	4181.2	2131.22	1849.15	1800.3	1840.24	2132.52	4237.55	10542.7	16823.5	21940	31951.1	37248.3	31319.9	22189.3	17269.2	15579.2
34	14643	15919.5	20156.3	28420.8	36435.5	32797.3	22572.8	17111.6	10135.9	3848.15	2076.5	1871.22	1818.88	1853.52	2053.25	3879.54	10154.3	17020	22327.9	32742.1	37815.3	30623.1	21291.1	16412.7	14643
35	13646.6	14917	19314.1	27532	36740.4	33451.3	22863.7	17227.6	9718.99	3542.71	2070.93	1899.92	1847.92	1876.69	2031.54	3565.5	9708.95	17161.2	22701.1	33500	38288.9	29777.4	20435.4	15483.8	13646.6
36	12719	13912.3	18428.4	26654.6	36832.3	34002.5	23099.9	17277.4	9269.27	3273.21	2096.15	1939.25	1891.53	1912	2043.17	3282.65	9227.92	17252.9	23025.3	34217	38623.5	28849.2	19612.7	14536.5	12719
37	11872.3	12979	17546.8	25815.4	36679.5	34494.5	23291.2	17280.5	8815.23	3047.89	2132	1990.41	1947.15	1962.55	2069.39	3036.67	8739.51	17302.7	23266.8	34860.2	38811.8	27894.8	18775.5	13640.1	11872.3
38	11140.1	12167.9	16619.3	25038.3	36273.9	34917.3	23443.2	17226.7	8309.73	2864.65	2174	2052.79	2003.05	2024.52	2104.02	2834.71	8239.06	17279.6	23448.2	35402.3	38826	26978.6	17884.3	12745.3	11140.1
39	10489	11430.3	15702.4	24290.2	35648.9	35264.8	23566.4	17129.4	7836.07	2733.2	2224.01	2116.57	2051.03	2091.7	2153.81	2694.15	7734.43	17198.9	23586.6	35858.9	38608.2	26122.7	16960.3	11981.7	10489
40	9921.03	10791.7	14880.4	23541.9	34795.5	35569.8	23665	16970.3	7343.95	2674.01	2283.03	2172.45	2075.8	2148.77	2216.42	2611.7	7247.25	17062.5	23678.2	36249	38165.1	25288.9	16092.1	11314.6	9921.03
41	9427.47	10237.9	14195.3	22773.1	33804.4	35828	23739.6	16790.8	6850.57	2660.08	2349.67	2203.41	2073.79	2183.41	2296.2	2584.43	6773.86	16866.7	23742.5	36573.1	37500.9	24499.8	15291	10731.7	9427.47
42	9005.34	9753.68	13558.9	21948.9	32680.8	36053.3	23804.4	16571.2	6424.4	2685.69	2424.25	2206.46	2046.67	2190.32	2382.26	2591.08	6300.96	16622.8	23784.9	36850.3	36637.4	23722	14629.1	10208.4	9005.34
43	8623.7	9325.8	13016.6	21163.6	31493.2	36252.4	23853.5	16314.8	5998.57	2734.29	2495.7	2181.73	1996.16	2173.12	2465.29	2620.94	5861.9	16346.2	23806.7	37093.8	35598.5	22914.9	14073.2	9767.48	8623.7
44	8237.48	8926.43	12574.3	20399.3	30309.5	36409.3	23908.9	16045.7	5572.74	2788.33	2555.25	2128.52	1918.46	2133.06	2534.07	2660.04	5436.93	16032.8	23793.2	37285.5	34420.3	22105.8	13643	9361.89	8237.48
45	7872.02	8525.44	12165.1	19674.4	29127.3	36529	23948.1	15735	5169.89	2846.75	2588.56	2046.64	1809.86	2062.18	2578.35	2710.88	5034.57	15684.4	23758.6	37434.1	33140.8	21327.4	13213.3	8967.09	7872.02
46	7506.48	8144.46	11757.2	19054.8	28016.9	36582.6	23964.1	15399.6	4807.97	2909.77	2590.16	1938.93	1674.1	1962.23	2591.5	2774.87	4669.86	15292.2	23707.6	37558	31862.6	20611.2	12829.5	8586.53	7506.48
47	7146.26	7767.72	11355.8	18487	26900.3	36518.2	23941.6	14994.7	4466.28	2980.25	2561.31	1799.36	1522.88	1831.69	2573.83	2852.75	4339.06	14866	23664.2	37630.7	30580.8	19963	12481.8	8201.58	7146.26
48	6789.8	7401.43	10949.2	17966.8	25863.9	36332.2	23889.2	14556.4	4160.46	3057.66	2494.26	1639.48	1373.2	1677.8	2524.71	2941.72	4050.14	14403	23632.6	37655.2	29341.5	19389.6	12110	7819.43	6789.8
49	6405.13	7038.67	10512.3	17474.8	24784.7	35980.5	23789.3	14052	3906.92	3134.21	2396.84	1476.85	1223.54	1519.77	2445.3	3038	3804.41	13921	23584.3	37631.5	28100.9	18868.9	11716.2	7446.56	6405.13
50	6013.04	6666.64	10104.7	16988.9	23784.8	35422.9	23639.8	13489.5	3690.69	3200.1	2271.78	1323.97	1089.27	1370.71	2337.38	3124.61	3622.87	13414.4	23502.3	37490.3	26927.3	18371.1	11300.2	7075.45	6013.04

51	5560.59	6162	9705.73	16461.2	22849.3	34694	23466.7	12912.1	3543.38	3245.1	2120.35	1177.76	956.36	1221.66	2201.33	3196.17	3498.7	12907.3	23398.7	37190.4	25758	17877.8	10859.9	6669.48	5560.59
52	4984.56	5653.86	9289.01	15867.3	21930.5	33687.4	23200.3	12239.7	3443.47	3253.5	1959.89	1040.59	829.14	1079.61	2049.22	3239.17	3429.67	12330.7	23275	36730.5	24635	17365.7	10414.9	6186.53	4984.56
53	4404.51	5100	8859.99	15248.1	21162.6	32559.4	22890.6	11601.4	3382.8	3224.69	1801.23	905.91	699.69	947.99	1883.97	3251.23	3401.05	11722.3	23109.7	36048.9	23613.8	16807.7	9972.68	5617.76	4404.51
54	3799.38	4468.05	8322.48	14571.9	20461.6	31198.6	22515.1	10933.6	3369.5	3149.42	1647.1	761.25	572.95	807.63	1725.33	3223.86	3398.02	11112.4	22908.2	35151.6	22638.2	16167.6	9461.22	4994.76	3799.38
55	3217.29	3811.22	7595.96	13875.1	19805.4	29698.9	22009	10239.3	3384.54	3030.75	1489.52	625.51	450.52	666.21	1564.46	3153.88	3411.44	10479.8	22633.2	34064.7	21766.8	15444.6	8859.46	4344.44	3217.29
56	2696.77	3204.08	6758.09	13165.9	19178.3	28139.6	21421.4	9530.88	3409.39	2883.74	1316.5	498.52	347.92	533.78	1389.99	3050.07	3427.63	9842.47	22274.4	32729.5	20992.1	14684.1	8125.37	3705.98	2696.77
57	2209.76	2663.22	5864.77	12418	18537.9	26380	20677.4	8784.45	3437.64	2707.55	1115.11	371.53	265.5	413.51	1215.52	2904.45	3445.35	9187.59	21806.3	31201.5	20294.3	13929.4	7269.14	3104.08	2209.76
58	1782.82	2156.63	4970.71	11579.5	17865.2	24549.1	19782.4	8032.25	3462.72	2504.06	897.79	278.87	203.52	311.95	1028.47	2731.54	3474.89	8503.34	21196.1	29515.6	19617.4	13174.6	6322.18	2537.7	1782.82
59	1462.83	1733.54	4061.94	10543.7	17062	22637.5	18699.4	7256	3487.61	2276.61	693.44	211.79	166.15	237.15	828.12	2529.61	3513.83	7813.43	20444.8	27660.8	18924.9	12385.5	5363.35	2029.15	1462.83
60	1224.91	1443.47	3220.12	9349.25	16130.3	20634.3	17461	6425.58	3505.58	2036.18	540.51	165.88	129.25	192.06	641.82	2301.05	3557.69	7110.76	19526.7	25734.7	18164.8	11490.4	4424.37	1650.44	1224.91
61	1006.11	1215.5	2458.62	7998.07	15072.5	18519.6	16038.4	5721.69	3510.56	1759.78	388.08	133.69	109.63	157.17	475.36	2039.28	3600.5	6402.97	18381.5	23648	17299.4	10394.3	3474.48	1410.65	1006.11
62	839.47	1009.06	1853.55	6581.32	13927.2	16443.5	14307.9	5020.31	3479.3	1461.02	264.15	113.99	98.44	122.47	347.15	1760.17	3630.53	5711.66	17142	21513.3	16291.5	9144.23	2633.72	1171.41	839.47
63	705.75	854.31	1489.38	5352.16	12640.8	14421.9	12540.2	4362.3	3402.32	1150.91	200.65	102.86	91.3	108.08	254.81	1462.79	3625.14	5034.79	15715.2	19333.9	15108.7	7753.17	1989.59	972.39	705.75
64	582.55	726.8	1248.32	4125.66	11317.3	12428.8	10686.6	3761.35	3280.31	863.2	155.55	95.68	85.48	99.66	201.14	1165.42	3563.65	4381.69	14020.9	17052.1	13820.6	6353.32	1609.61	833.57	582.55
65	466.2	602.59	1004.38	2947.06	9907.13	10534.8	8968.08	3248.04	3088.03	619.86	128.55	89.52	80.21	92.98	162.07	880.49	3426.58	3800.35	12328.1	14858.7	12532.4	4988.27	1317.37	706.4	466.2
66	356.41	478.77	807.66	2042.97	8364.24	8719.91	7372.53	2786.47	2834.4	465.24	115.41	83.9	75.56	87.25	123.65	647.01	3225.56	3305.43	10632.2	12665.2	11161.8	3736.11	1025.98	572.91	356.41
67	265.11	354.95	634.96	1473.27	6745.79	7144.56	6034.47	2406.01	2528.06	312.93	107.28	78.94	71.4	81.98	112.67	455.35	2952.44	2892.61	8923.77	10584.9	9735.93	2649.39	816.19	443.36	265.11
68	202.26	261.59	504.08	1142.45	5274.75	5776.74	4823.55	2074.25	2160.4	231.13	100.05	74.36	67.63	77.36	104.78	317.27	2637.86	2546.59	7394.33	8704.4	8220.24	1995.98	653	325.51	202.26
69	171.61	212.42	373.2	941.52	3807.19	4657.98	3612.64	1793.09	1739.9	174.12	93.51	70.22	64.07	73.26	97.72	233.74	2301.18	2255.52	6035.87	7077.84	6668.23	1558.46	518.48	244.87	171.61
70	152.15	186.41	298.63	728.2	2602.24	3626.87	2710.87	1567.19	1355.93	140.09	87.64	66.21	60.78	69.2	91.52	189.85	1913.37	1980.03	4803.35	5675.41	5051.96	1125.9	401.95	206.9	152.15
71	136.1	166.72	254.68	568.25	1790.33	2827.51	2027.42	1352.99	954.69	123.94	82.27	62.85	57.64	65.4	85.94	145.97	1542.89	1748.45	3728.52	4516.39	3655.82	924.64	321.9	183.32	136.1
72	122.57	149.57	223.41	441.14	1270.05	2280.98	1572.57	1184.49	660.35	113.74	77.49	59.5	54.58	61.94	80.81	118.46	1172.4	1560.78	2784.37	3516.95	2618.69	695.51	272.11	165.43	122.57
73	111.76	135.19	197.88	339.69	974.76	1904.15	1317.07	1028.12	499.49	104.73	73	56.37	51.71	58.59	76.05	108.69	824.97	1388.94	2046.62	2773.84	1968.66	534.98	238.41	149.5	111.76
74	102.02	122.92	175.43	281.76	771.15	1652.69	1170.84	879.38	340.86	96.86	69	53.29	48.95	55.45	71.78	100.43	562.49	1217.13	1664.81	2301.77	1491.21	415.6	209.89	133.66	102.02
75	92.97	111.44	156.34	240.89	614.18	1449.06	1088.22	724.44	224.46	89.87	65.37	50.27	46.26	52.41	67.85	93.21	376.54	1052.63	1406.36	1972.48	1019.54	335.56	186.37	121.78	92.97
76	84.62	100.73	140.08	210.14	480.05	1234.59	1024.54	580.31	166.17	83.89	61.73	47.19	43.53	49.51	64.39	86.53	254.32	897.06	1152.77	1715.26	828.36	281.6	167.42	110.5	84.62
77	76.78	90.66	125.23	183	345.93	1034.38	955.33	451.57	128.07	78.84	58.09	44.01	40.71	46.4	61.04	80.57	198.69	721.41	1057.73	1522.93	651.33	242.18	150.55	99.98	76.78
78	68.94	80.9	111.26	159.52	267.81	824.9	867.02	341.28	109.63	73.91	54.19	40.6	37.77	43.2	57.66	75.59	143.07	561.76	981.94	1333.4	498.64	210.41	133.7	89.96	68.94
79	60.99	71.34	98.36	139.69	215.81	641	755.79	267.31	96.21	68.72	50.13	37.15	34.73	40.02	54.06	71.53	105.97	420.33	910.29	1143.45	378.96	185.02	120.17	80.43	60.99
80	53.25	61.92	85.12	122.39	177.27	487.21	641.12	208.58	85.19	62.82	45.58	33.48	31.49	36.55	50.14	67.55	93.23	315.38	825.96	916.52	290.13	164.17	106.98	70.44	53.25
81	45.4	52.5	71.01	105.23	147.77	333.72	510.44	162.34	75.97	57.18	40.53	29.46	27.98	32.89	46.04	63.4	82.5	235.17	727.27	710.67	230.41	143.32	92.93	60.16	45.4
82	38.29	43.09	57.97	86.14	123.12	229.2	379.3	126.55	65.42	51.04	34.68	25.21	24.26	28.92	41.56	58.87	73.81	188.25	618.43	526.14	191.78	124.76	78.14	50.22	38.29
83	32.89	36.16	46.74	65.84	99.12	156.71	269.69	97.34	54.37	42.92	28.18	20.94	20.54	24.59	36.29	53.35	67.1	151.43	498.08	378.15	164.84	105.75	63.54	41.78	32.89
84	28.61	30.48	36.76	51.46	74.52	113.67	175.55	75.28	43.32	33.03	21.88	16.97	17.19	20.28	30.01	46.91	59.52	114.63	380.31	263.84	137.89	86.18	51.2	35.39	28.61
85	24.03	24.61	28.31	37.12	53.16	78.12	105.21	55.71	32.1	23.82	16.71	13.51	14.17	16.62	23.4	38.27	50.3	91.98	273.47	194.03	112.01	66.89	41.81	29.74	24.03
86	18.3	17.79	19.4	23.7	34.22	50.43	56.67	37.6	22.22	16.6	12.4	10.71	11.19	13.49	18.42	28.98	39.91	72.82	194.88	138.94	85.47	51.27	33.08	23.54	18.3
87	11.43	10.39	10.74	12.72	17.15	27.14	33.41	19.5	13.92	10.91	8.86	8.28	9.04	10.38	14.17	21.31	29.33	53.87	116.28	92.05	60.36	36.96	23.64	16.12	11.43
88	6.31	5.21	5.41	6.76	6.31	8.61	10.17	8.64	7.4	6.26	5.72	5.53	6.88	8.1	9.94	14.99	20.59	33.57	57.38	56.93	37.14	24.28	14.18	8.7	6.31
89	3.29	2.01	2.25	3.91	3.86	6.15	4.42	6.37	5.33	3.84	2.65	2.46	3.7	5.16	6.61	8.71	13.3	21.81	33.07	35.59	22.95	11.59	4.83	2.24	3.29
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	0
91	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
92	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
93	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
94	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
95	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
96	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
97	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
98	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
99	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
100	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
101	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
102	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
103	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
104	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
105	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

106	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
107	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
108	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
109	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
110	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
111	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
112	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
113	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
114	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
115	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
116	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
117	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
118	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
119	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
120	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
121	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
122	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
123	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
124	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
125	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
126	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
127	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
128	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
129	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
130	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
131	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
132	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
133	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
134	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
135	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
136	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
137	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
138	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
139	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
140	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
141	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
142	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
143	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
144	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
145	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
146	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
147	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
148	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
149	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
150	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
151	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
152	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
153	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
154	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
155	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
156	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
157	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
158	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
159	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
160	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

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.	ALEDXLAT	Sample ID.	K1
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 25º C ± 1º 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
120.02	60	3.094	371.1	0.999	2.91%
276.97	60	1.371	365.6	0.963	10.41%

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**********