Photometric Test Report

Relevant Standards

☑IES LM-79-2008

☑ANSI C82.77:2017

Prepared For

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Project Number

DLF2111113

Report Number

DLF2111113-3a

Test Date

2021/11/24

Issue Date

2021/12/1

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		37726
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	140.3
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		269.0
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	120V	1.53%
		20.00%	277V	4.08%
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	3985±275	3935
		4 step	3985±154	
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	⩾70		83
Minimum R9 (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	⩾-40		6
Minimum Rf (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	⩾70		84
Minimum Rg (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	⩾89		95
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%		1.10%
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		2.244
(Goniophotometer - Section 4.2)		Non-Worst Case		0.970
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		269.0
(Goniophotometer - Section 4.2)		Non-Worst Case		259.1

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/24	ALEDL4TN	C1
2	Goniophotometer Test	2021/11/24	ALEDL4TN	C1
3	THD and PF Test	2021/11/24	ALEDL4TN	C1

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.

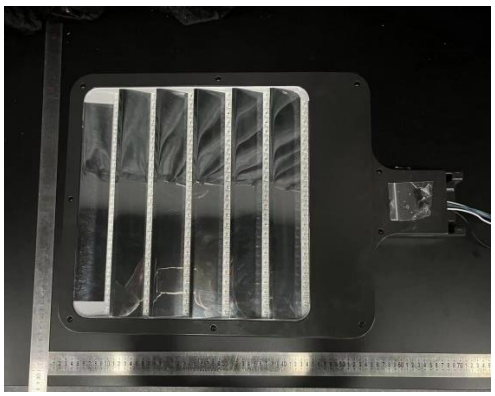
3.0 Production Description

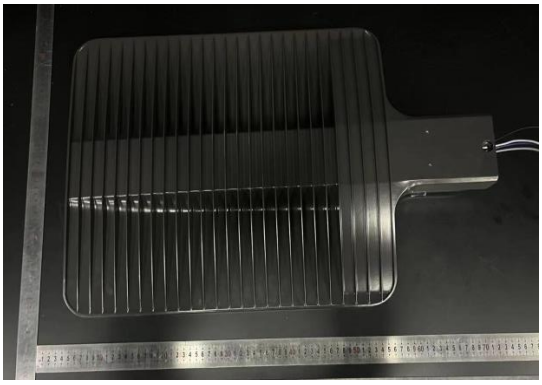
Luminaire Description: ALEDL4TN

Description: 260W/36,000 lm @ 4000K

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.	ALEDL4TN	Sample ID.	C1
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
119.99	60	2.243	268.9	0.999
277.02	60	0.967	258.8	0.966

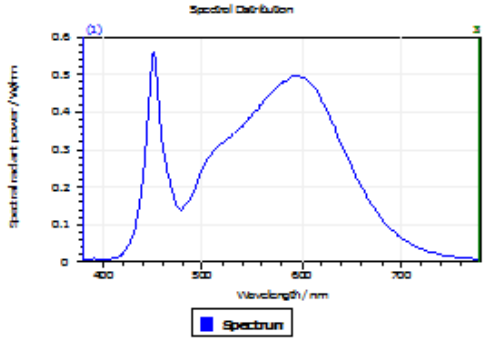
Test Result

CCT (K)	CRI	R9	Duv
3935	83	6	0.00053

Rf	Rg	IES Rcs,h1
84	95	-12%

4.1 Integrating Sphere Test

Results



Spectral values

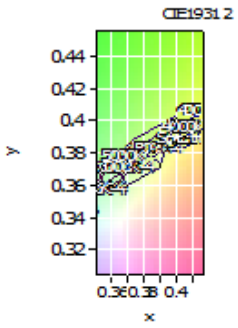
DominantWavelength	579.04 nm
Purity	0.292
PeakWavelength	451.07 nm
Radiant Power	86.12 W
Width50%:	19.45 nm

Color Coordinates

Correlated Color Temperat 3935 K

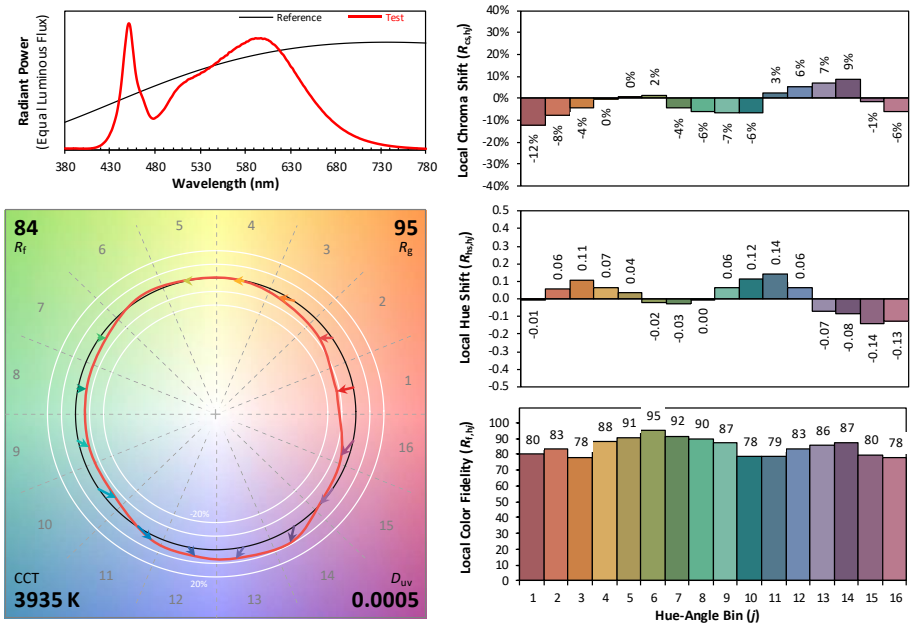
x:	0.3837	u:	0.2260	u':	0.2260
y:	0.3799	v:	0.3356	v':	0.5035

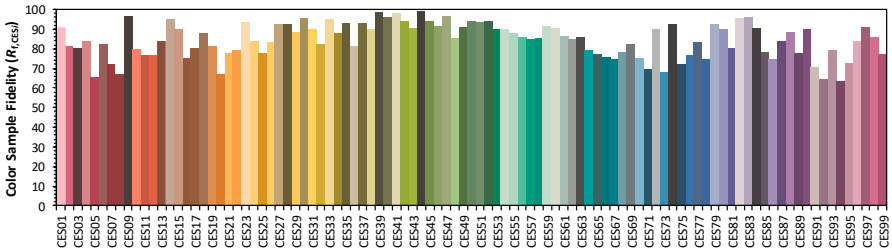
ResultsCRICRI01	80.7	ResultsCRICRI09	5.9
ResultsCRICRI02	89.6	ResultsCRICRI10	75.7
ResultsCRICRI03	95.4	ResultsCRICRI11	80.1
ResultsCRICRI04	81.1	ResultsCRICRI12	64.0
ResultsCRICRI05	81.3	ResultsCRICRI13	82.8
ResultsCRICRI06	86.1	ResultsCRICRI14	97.8
ResultsCRICRI07	85.0	ResultsCRICRI15	73.9
ResultsCRICRI08	62.7	ResultsCRICRI16	71.6
ResultsCRI	82.7		



PlanckDistance 5.3E-004

4.1 Integrating Sphere Test





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

x	0.3837
y	0.3799
u'	0.2260
v'	0.5035

CIE 13.3-1995 (CRI)

R_a	83
R_9	8

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.	ALEDL4TN	Sample ID.	C1
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	119.98	60	2.244	269.0	0.999
NON-WROST CASE	277.04	60	0.970	259.1	0.964

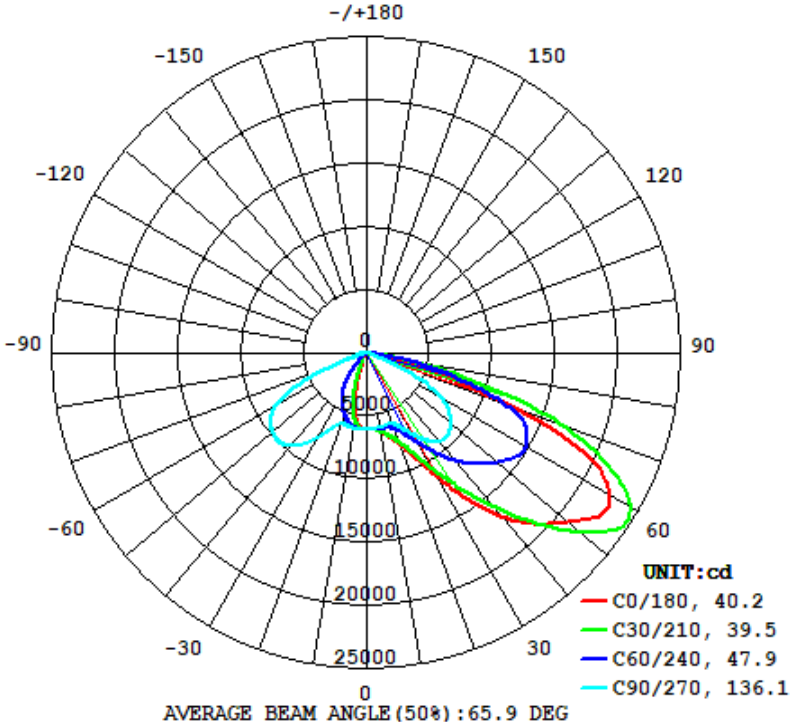
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
37726	96.9	148.8	40.2	136.1	140.3

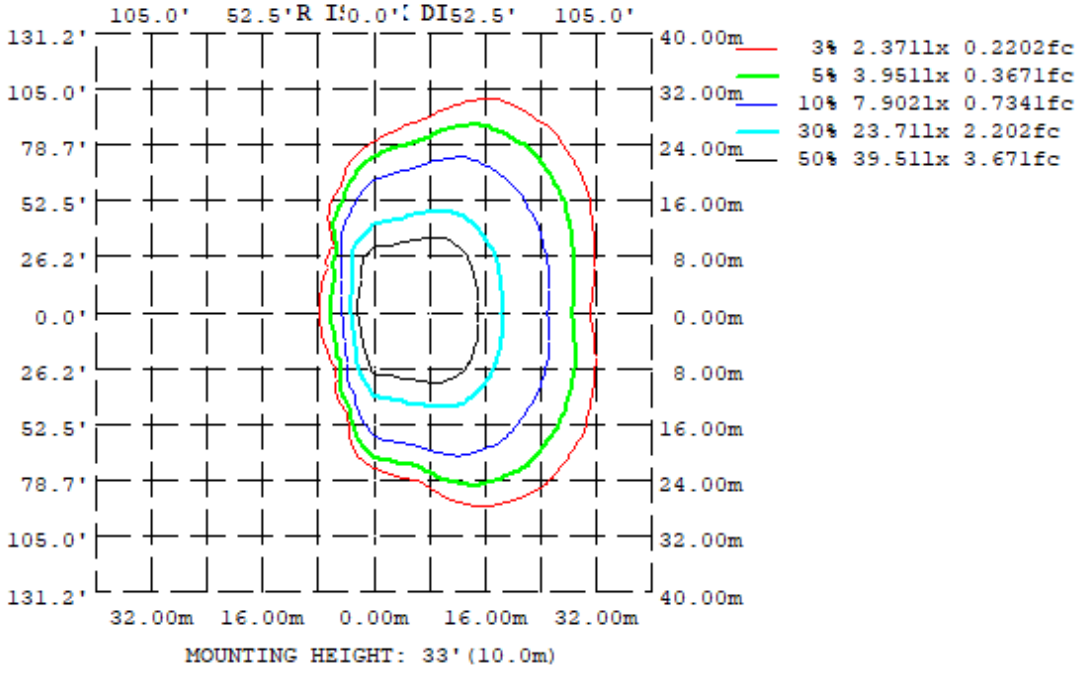
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	1.10%	B3-U0-G4

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

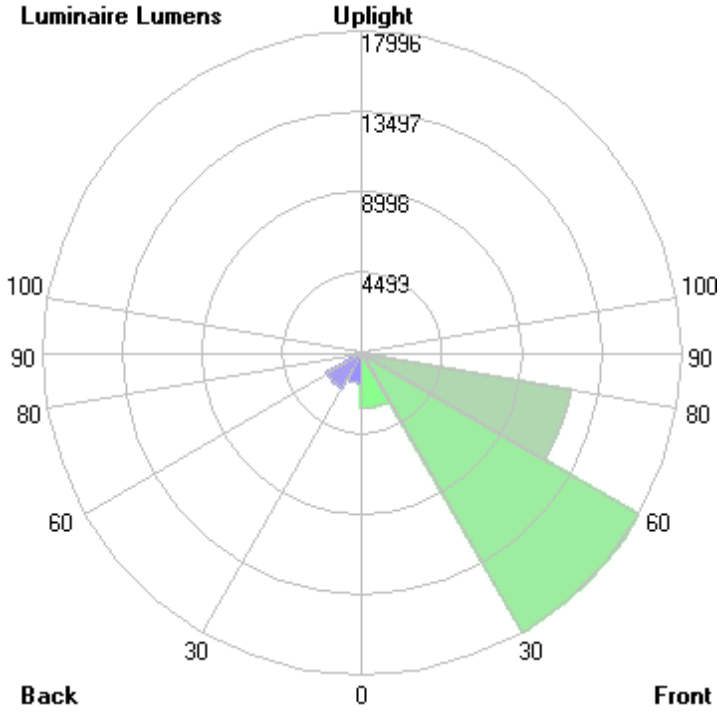
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	629.8	623.7	602.7	568.6	519.9	582.4	611.3	625.3
20	764.4	694.0	600.5	344.5	190.2	393.1	603.6	716.3
30	1133	920.5	750.4	118.4	69.01	164.1	760.5	966.1
40	1700	1350	914.4	61.28	43.04	68.60	966.4	1438
50	2087	1818	880.5	36.62	16.79	44.28	977.9	1976
60	2235	2172	666.2	13.72	7.626	19.31	842.0	2392
70	1195	1601	114.2	8.710	5.084	9.741	266.5	1856
80	145.8	356.9	23.08	4.518	2.930	5.246	40.45	543.7
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	573.82	0 - 10	573.82	1.52%
10-20	1599.38	0 - 20	2173.20	5.76%
20-30	2609.68	0 - 30	4782.88	12.68%
30-40	4493.81	0 - 40	9276.69	24.59%
40-50	6863.59	0 - 50	16140.28	42.78%
50-60	8872.63	0 - 60	25012.91	66.30%
60-70	8454.58	0 - 70	33467.49	88.71%
70-80	3844.74	0 - 80	37312.23	98.90%
80-90	413.76	0 - 90	37725.99	100.00%
90-100	0.00	0 - 100	37725.99	100.00%
100-110	0.00	0 - 110	37725.99	100.00%
110-120	0.00	0 - 120	37725.99	100.00%
120-130	0.00	0 - 130	37725.99	100.00%
130-140	0.00	0 - 140	37725.99	100.00%
140-150	0.00	0 - 150	37725.99	100.00%
150-160	0.00	0 - 160	37725.99	100.00%
160-170	0.00	0 - 170	37725.99	100.00%
170-180	0.00	0 - 180	37725.99	100.00%

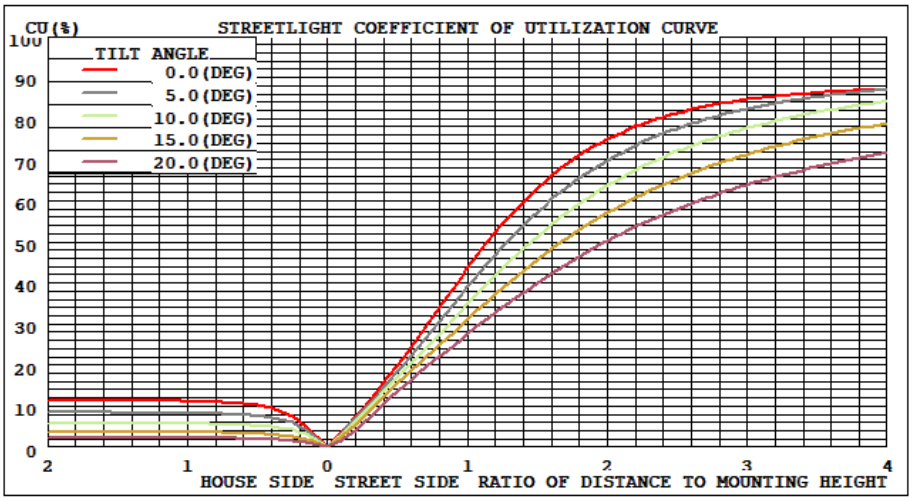
4.2 Goniophotometer Test

LCS/BUG

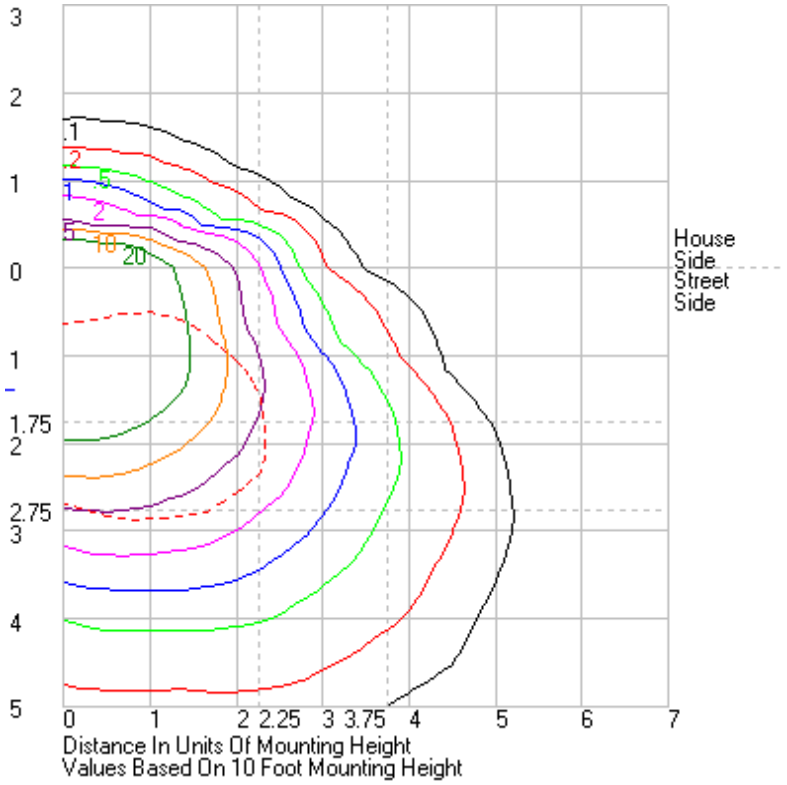


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	3094.2	N.A.	8.2
FM - Front-Medium (30-60)	17996.3	N.A.	47.7
FH - Front-High (60-80)	11896.2	N.A.	31.5
FVH - Front-Very High (80-90)	391.8	N.A.	1.0
BL - Back-Low (0-30)	1688.7	N.A.	4.5
BM - Back-Medium (30-60)	2233.7	N.A.	5.9
BH - Back-High (60-80)	403.1	N.A.	1.1
BVH - Back-Very High (80-90)	21.9	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	37725.9	N.A.	100.0
BUG Rating	B3-U0-G4		

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	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44	6013.44
1	6011.98	6008.78	6008.6	6009.1	6008.85	6010.18	6012.61	6014.56	6016.03	6018.06	6018.93	6020.66	6042.75	6039.67	6036.2	6032.91	6027.11	6021.71	6015.61	6009.31	6003.14	5997.93	5993.7	5990.68	6011.98
2	6005.85	6003.66	6004.27	6006.75	6008.77	6012.35	6017.28	6022.31	6026.34	6030.29	6031.27	6031.74	6054.87	6053.37	6052.36	6049.86	6041.59	6032.97	6022.87	6013.9	6003.88	5995.25	5988.02	5983.73	6005.85
3	6008.6	6006.69	6008.27	6011.51	6013.4	6017.99	6024.65	6032.51	6036.04	6037.18	6034.09	6031.4	6053.26	6054.76	6058.66	6061.05	6056.22	6044.99	6032.37	6021.03	6008.83	5998.36	5990.29	5986.68	6008.6
4	6022.81	6021.38	6021.84	6021.78	6023.21	6025.92	6033.36	6042.85	6043.29	6035.32	6023.33	6012.35	6032.15	6040.31	6055.44	6065.66	6067.61	6059.36	6044.88	6032.3	6017.15	6007.96	6001.38	5998.9	6022.81
5	6046.32	6048.24	6047.7	6042.29	6038.05	6036.82	6042.1	6050.68	6042.25	6023.97	5994.65	5969.87	5983.89	6000.79	6033.73	6062.64	6077.33	6073.84	6058.9	6046.32	6033.14	6025.97	6022.79	6019.96	6046.32
6	6080.04	6083.09	6083.22	6070.51	6054.8	6046.29	6047.8	6054.29	6036.19	5996.98	5940.95	5891.97	5901.96	5932.98	5990.63	6048.64	6082.59	6088.41	6075.47	6065.61	6055.86	6054.84	6051.08	6050.38	6080.04
7	6121.47	6126.77	6126.78	6105.07	6072.27	6053.09	6049.84	6052	6020.52	5951.25	5858.95	5784.32	5788.21	5832.84	5921.69	6019.52	6082.04	6100.03	6089.74	6085.68	6086.55	6091.99	6091.77	6090.77	6121.47
8	6171.45	6179.07	6178.74	6144.64	6090.74	6054.14	6046.93	6045.23	5995.03	5883.34	5749.06	5645.1	5640.29	5700.58	5827.54	5974.03	6074.84	6108.62	6103.63	6107.14	6122.38	6138.33	6139.43	6137.57	6171.45
9	6231.95	6243.8	6238.62	6190.78	6110.47	6053.26	6040.18	6034.11	5957.11	5796.52	5606.18	5460.4	5443.75	5536.59	5706.54	5909.96	6058.34	6111.9	6111.74	6126.9	6161.69	6193.03	6197.77	6195.97	6231.95
10	6298.35	6314.28	6305.77	6237.32	6128.83	6046.41	6026.6	6012.3	5907.52	5685.57	5433.24	5230.53	5198.56	5312.3	5558.53	5824.36	6028.68	6107.25	6112.66	6140.27	6203.44	6252.94	6265.81	6260.92	6298.35
11	6377.38	6395.43	6378.81	6285.75	6145.03	6037.7	6007.4	5988.44	5841.13	5554.45	5209.32	4965.64	4920.6	5054.36	5370.37	5721.59	5987.39	6094.18	6104.24	6149.32	6241.69	6320.31	6343.73	6339.1	6377.38
12	6469.51	6489.07	6461.1	6337.89	6159.71	6024.25	5990.01	5957.94	5763.19	5395.81	4968.03	4669.72	4608.77	4772.32	5147.17	5602.67	5936.39	6073.33	6091.45	6154.21	6281.15	6393.03	6430.71	6429.57	6469.51
13	6578.76	6599.13	6553.64	6389.13	6172.34	6008.76	5967.53	5923.13	5667.58	5202.88	4693.4	4348.83	4274.24	4454.91	4897.42	5455.24	5870.51	6050.15	6074.69	6155.78	6318.9	6469.05	6526.89	6527.54	6578.76
14	6695.6	6720.59	6656.97	6445.71	6187.5	5997.27	5948.67	5890.58	5564.73	4991.56	4395.9	4014.06	3933.87	4132.89	4625.63	5277.94	5796.8	6021.34	6053.69	6156.29	6356.22	6538.35	6623.07	6625.51	6695.6
15	6817.04	6846.97	6769.6	6506.22	6200.97	5983.22	5933.24	5854.41	5455.28	4760.52	4094.95	3680.48	3588.63	3802.53	4342.86	5087.21	5715.51	5992.15	6034.76	6156.81	6395.24	6596.49	6736.37	6738.94	6817.04
16	6953.86	6987.03	6891.57	6572.64	6219.51	5979.22	5923.49	5822.64	5324.74	4508.72	3778.06	3329.85	3237.79	3470.22	4044.49	4873.16	5624.2	5967.75	6018.25	6155.5	6437.11	6693.67	6875.58	6874.52	6953.86
17	7096.81	7132.02	7020	6648.21	6248.1	5986.11	5928.8	5797.88	5186.06	4246.83	3461.81	2987.46	2883.93	3128.36	3745.17	4650.02	5530.52	5947.14	6007.69	6158.8	6479.34	6801.96	7023.76	7026.71	7096.81
18	7259.05	7294.5	7157.72	6730.3	6284.92	6002.67	5941.49	5775.81	5036.15	3981.45	3136.99	2638.77	2530.41	2787.69	3438.91	4415.91	5431.39	5933.91	6003.43	6171.24	6529.04	6912.88	7184.35	7188.69	7259.05
19	7443.14	7476.27	7306.61	6829.18	6337.52	6030.23	5966.21	5758.93	4878.96	3715.22	2813.58	2297.67	2199.24	2451.45	3134.83	4174.66	5323.69	5929.74	6010.02	6192.75	6566.25	7032.67	7358.05	7373.49	7443.14
20	7644.33	7681.66	7469.06	6939.59	6402.61	6073.9	6005.1	5750.01	4719.99	3445	2493.57	1990.05	1902.49	2139.54	2827.02	3931.02	5207.2	5940.26	6035.86	6229.37	6589.54	7163.19	7545.4	7577.09	7644.33
21	7870.03	7905.37	7660.38	7071.18	6486.12	6140.54	6075.69	5753.41	4543.94	3179.13	2188.17	1709.76	1633.41	1856.85	2524.88	3682.41	5088.42	5964.48	6087.1	6286.34	6700.25	7311.61	7753.54	7809.63	7870.03
22	8123.88	8166.19	7870.54	7216.71	6589.32	6225.86	6153.49	5764.52	4372.12	2913.22	1916.31	1464.35	1423.53	1610.77	2238.58	3434.73	4971.41	6005.34	6158.54	6365.5	6809.98	7471.87	7983.4	8056.18	8123.88
23	8405.78	8450.53	8114.36	7388.72	6719.76	6344.32	6265.51	5796.24	4198.31	2647.08	1661.1	1258.44	1214.6	1410.14	1969.34	3187.3	4853.82	6058.51	6251.32	6471.81	6943.06	7659.43	8244.15	8334.68	8405.78
24	8724.61	8770.29	8381.06	7579.22	6871.03	6473.26	6398.77	5826.11	4025.25	2386.43	1440.72	1082.11	1046.38	1210.27	1732.48	2943.25	4733.14	6130.06	6381.72	6607.57	7100.63	7866.18	8524.77	8646.16	8724.61
25	9087.55	9130.4	8674.21	7789.83	7047.58	6632.77	6534.45	5865.72	3850.42	2135.3	1252.38	938.93	913.47	1049.41	1531.68	2704.63	4607.46	6229.43	6532.35	6768.36	7287.92	8097.95	8837.09	9001.85	9087.55
26	9463.31	9526.21	8996.24	8030.4	7253.51	6818.47	6726.96	5908.58	3671.07	1906.79	1093.59	838.84	826.69	920.75	1351.23	2461.31	4481.22	6337.65	6709.73	6952.98	7498.83	8360.68	9181.88	9387.67	9463.31
27	9881.58	9949.42	9354.96	8290.76	7468.52	7006.18	6894.91	5931.72	3488.63	1700.51	960.4	776.75	777.64	834.14	1171.7	2235.35	4352.32	6466.38	6915	7158.3	7729.1	8651.89	9572.18	9799.28	9881.58
28	10328.4	10393.2	9749.09	8580.06	7707.59	7240.03	7096.54	5964.97	3304.73	1509.45	856.33	741.02	746.21	783.39	1030.31	2023.92	4224.94	6602.29	7124.66	7381.12	7983.75	8963.16	9990.1	10239.2	10328.4
29	10815	10877.5	10162.5	8881.45	7955.47	7460.51	7318.68	5979.21	3119.78	1338.06	788.95	713.87	720.04	748.99	914.57	1824.24	4091.39	6737.02	7362.63	7619.97	8236.71	9296.81	10444.6	10715.8	10815
30	11332.3	11392.4	10612.7	9205.17	8210.89	7690.38	7504.19	5982.94	2917.25	1183.85	744.54	687.69	690.09	723.41	833	1640.55	3952.17	6881.95	7604.9	7872.78	8531	9660.84	10905.3	11236.5	11332.3
31	11878.2	11947.2	11059.2	9552.75	8494.48	7940.9	7742.48	5986.46	2712.99	1047.64	716.41	661.94	661.62	694.41	777.67	1474.35	3806.25	7005.58	7848.34	8133.12	8827.06	10044.5	11395	11784.4	11878.2
32	12465.3	12539.4	11546.4	9916.24	8769.66	8165.71	7941.36	5961.25	2510.12	926.91	691.27	636.57	634.56	667.27	743.06	1319.25	3655.8	7127.52	8098.55	8398.32	9143.19	10457.5	11905.7	12366	12465.3
33	13065.3	13138.3	12047.1	10315.4	9071.01	8413.19	8142.89	5934.07	2306.4	836.54	662.55	613.36	608.56	640.57	717.98	1174.46	3504.51	7240.15	8336.06	8663.64	9474.5	10888.4	12457.6	12973.1	13065.3
34	13633.3	13738.9	12567.2	10723.4	9366.48	8646.18	8358.23	5887.82	2121.35	773.34	641.9	590.14	584.2	615.25	694.07	1041.78	3334.65	7330.26	8578.81	8926.96	9801.23	11335.3	13028.4	13586.7	13633.3
35	14200.6	14339.6	13121.6	11164.5	9672.31	8868.51	8519.08	5813.46	1936.22	730.16	621.54	566.01	559.5	591.1	669.59	925.7	3153	7413.81	8807.72	9192.27	10146.6	11802.6	13628.9	14198.7	14200.6
36	14763.5	14936.7	13676.6	11607.9	9994.04	9097.41	8695.03	5730.54	1754.74	703.9	598.38	541.52	534.44	567.01	644.97	839.84	2963.11	7470.54	9016.99	9451.89	10488.7	12284.8	14235.7	14804.6	14763.5
37	15348.4	15552	14231.6	12067.6	10302.9	9293.27	8836.11	5619.26	1575.69	680.41	574.55	516.66	508.7	542.89	620.59	776.28	2763.73	7507.55	9216.8	9704.76	10834.5	12783	14852.9	15423.8	15348.4
38	15918.5	16171.5	14810.4	12536.1	10615.1	9480.74	8954.8	5486.27	1399.38	658.05	551.24	491.32	482.88	518.41	597.31	735.14	2563.96	7518.8	9383.72	9939.13	11196.9	13299.9	15458.3	16033.1	15918.5
39	16465.4	16797.3	15398.6	13020	10921.6	9659.72	9069.33	5333.95	1234.41	636.05	527.41	465	456.23	492.87	574.01	709.45	2366.92	7497.4	9537.2	10162.4	11545.5	13835	16075	16645.1	16465.4
40	17000	17406.2	16009.4	13498.9	11201	9804.04	9143.94	5158.23	1080.04	612.84	503.02	439.15	430.45	467.42	550.68	686.02	2169.1	7455.37	9664.31	10364.4	11920.8	14382.7	16698.1	17234.7	17000
41	17502.3	17989.9	16602.9	13977.8	11476.5	9934.85	9200.22	4965.5	943.77	588.92	478.03	414.14	404.67	442.06	527.33	662.62	1971.49	7379.12	9764.7	10540.4	12271.6	14923	17315.5	17815	17502.3
42	17987.5	18554.2	17229.6	14460.9	11746.9	10047.2	9233.66	4740.77	831.54	564.75	452.5	388.35	379.34	416.26	503.09	638.45	1769.17	7269.67	9842.3	10699.8	12618.2	15468.5	17930.7	18370.3	17987.5
43	18425.8	19108	17833.4	14950.9	12007.4	10145.4	9253.31	4508.59	755.29	540.87	427.6	363.94	354.66	391.7	478.46	613.01	1572.21	7132.28	9896.76	10834.3	12957	16016.7	18524.8	18891	18425.8
44	18839.2	19633.4	18452.7	15437.9	12266.5	10229.7	9237.02	4249.22	699.43	516.61	402.33	339.87	330.66	367.17	453.44	588.56	1391.95	6963.76	9929.96	10955.6	13273.9	16551.9	19116.3	19391.1	18839.2
45	19206.4	20139.6	19073.9	15919.5	12511.9	10300.1	9207.22	3991.47	670.58	491.95	377.8	314.9	305.82	343.16	428.56	564.39	1211.8	6768.28	9945.28	11067.2	13568.5	17090.5	19702.4	19867.6	19206.4
46	19540.4	20606.8	19679.2	16376.4	12746.7	10346.3	9154.75	3713.6	645.18	467.34	353.7	289.93	280.18	318.76	403.85	540.45	1041.59	6556.54	9941.37	11168.5	13843.9	17616.3	20275.7	20289.7	19540.4
47	19856.1	21031.9	20311.9	16839.1	12976.7	10379	9075.04	3428.38	619.77	442.36	328.86	263.29	252.28	293.4	379.35	516.29	899.72	6320.13	9916.49	11257.8	14110	18140.7	20854.7	20695.1	19856.1
48	20164.5	21433.8	20927.7	17277.3	13188.8	10403.7	9014.72	3168.58	593.34	417.48	304.02	234.49	222.81	266.48	355.03	492.27	789.36	6068.14	9883.27	11338.6	14381.2	18667.7	21432.6	21074.1	20164.5
49	20518.9	21843.1	21553.8	17727.6	13375.8	10395.8	8907.04	2894.59	563.74	391.07	277.01	205.61	193.58	237.5	331.26	467.39	708.92	5804.11	9836.33	11408.3	14660.1	19209.1	21997.4	21456.8	20518.9
50	20871.2	22245.4	22107.5	18177	13549.9	10397.5	8804.7	2652.73	537.14	366.22	250.32	178.58	167.88	208.9	306.58	442.83	665.26	5530.23	9778.79	11462.7	14939.2	19756.2	22530.2	21844.8	20871.2

51	21198.9	22641.8	22639	18633.8	13723.7	10380.4	8699.94	2403.35	510.65	340.65	222.14	154.07	143.98	181.49	280.56	417.88	636	5242.55	9716.33	11508.3	15243.2	20323.4	23038.9	22217.7	21198.9
52	21514.4	23007.7	23120.1	19123.5	13906.2	10355.3	8534.93	2145.06	482.83	314.98	194.78	131.83	122.3	157.79	253.28	392.75	608.74	4958.8	9632.69	11543.3	15549.2	20880.9	23508.1	22547.2	21514.4
53	21864	23350.6	23552.4	19605.9	14091.6	10347.6	8419.79	1933.63	459.33	289.92	170.03	114.83	106.91	134.12	226.06	368.24	580.78	4660.63	9549.86	11573.8	15854.8	21429.9	23953.7	22868.5	21864
54	22229.4	23667.7	23968.3	20070.8	14252.9	10298.3	8248.14	1688.5	432.47	263.66	148.36	102.86	95.74	116.49	199.4	343.91	552.69	4374.76	9457.83	11600.9	16133.1	21939.7	24377	23220.3	22229.4
55	22524.3	23927.5	24315.5	20506.1	14427.3	10256.3	8058.27	1472.65	408.25	238.55	130.44	96.17	90.36	104.62	175.45	318.85	524.74	4081.32	9340.16	11614.3	16389.6	22404.6	24751.9	23524.4	22524.3
56	22720.4	24105.7	24547.2	20875.5	14574.1	10192.3	7888.17	1273.29	383.98	214.29	118.6	92.97	87.35	97.69	153.37	292.9	496.7	3784.11	9213	11623.5	16615.7	22828.7	25030.6	23753.1	22720.4
57	22800.9	24202.6	24647.4	21193.1	14675	10055	7605.39	1070	357.27	191	111.65	90.05	84.46	94.42	131.45	266.88	470.22	3501.49	9061.11	11615.9	16815.6	23204.8	25186.9	23886.7	22800.9
58	22761.5	24191.5	24623.3	21453	14769.8	9926.05	7371.37	916.31	334.38	170.77	107.65	87.2	81.74	91.62	118.81	240.63	443.91	3217.25	8883.78	11587.9	16982.4	23532.4	25254.1	23921	22761.5
59	22610.3	24079.7	24478.6	21628.2	14768.1	9663.5	7052.01	761.83	307.67	152.23	104.36	84.42	78.93	88.84	111.49	216.05	419.06	2938.64	8682.64	11532.6	17154.9	23789.7	25239.8	23861	22610.3
60	22348.2	23848.9	24258.9	21715.9	14743.7	9391.16	6661.97	653.97	283.8	137.24	101.3	81.64	76.26	86.08	107.35	193.14	394.46	2668.9	8419.84	11425.2	17289.8	23916.9	25116.8	23675.4	22348.2
61	22021.3	23519.4	23905.1	21632.9	14650.4	9090.06	6323.4	601.58	260.63	127.92	98.08	78.96	73.57	83.33	104.12	171.77	369.44	2392.27	8115.62	11264.5	17422.7	23886.6	24855.7	23382.9	22021.3
62	21620.7	23138.4	23392.2	21422.3	14485.6	8595.04	5793.5	550.2	235.17	122.04	94.92	76.25	70.96	80.65	100.97	155.01	345.01	2124.15	7751.54	11039.1	17544.6	23670.5	24455.3	23037.4	21620.7
63	21107.5	22715	22733.2	21087	14405	8140.48	5315.5	518.97	215.22	117.5	91.78	73.6	68.36	77.95	97.77	138.29	320.31	1849.97	7341.42	10744.7	17602.1	23304.9	23951.3	22636	21107.5
64	20405.8	22160.9	21982.3	20589.5	14219.4	7432.75	4721.96	482.08	193.16	112.89	88.65	70.93	65.82	75.34	94.63	127.25	296.13	1596.92	6872.17	10414.8	17630.8	22848.5	23333.6	22106.2	20405.8
65	19482.5	21451.3	21219.8	20068.2	14041.8	6632.06	3963.26	441.93	174.91	108.6	85.5	68.27	63.25	72.66	91.5	120.33	272.07	1357.77	6254.54	9998.8	17582.2	22298.7	22691.3	21407.5	19482.5
66	18340.1	20501.4	20422.4	19401.9	13813.4	5967.59	3402.1	405	160.28	104.32	82.3	65.65	60.7	70	88.36	115.16	248.01	1119.3	5597.23	9495.05	17443.5	21707.7	21962.9	20450	18340.1
67	17015.1	19393.3	19572	18702.2	13384.5	5164.36	2705.35	362.07	145.6	99.98	79.2	63.07	58.21	67.35	85.25	110.55	225.94	910.79	4840.79	8882.42	17238.2	21005.4	21147.8	19317.4	17015.1
68	15443.8	18090.4	18609.2	17922.6	12973.1	4538.9	2115.08	330.7	135.5	95.81	75.92	60.49	55.74	64.68	82.03	106.21	203.9	719.81	4055.4	8220.82	16896.5	20236.9	20159	17979.3	15443.8
69	13755.5	16643.3	17555.2	16971.9	12279.7	3928.37	1646.37	299.84	126.43	91.37	72.72	57.9	53.24	62.05	78.86	101.8	182.74	583.57	3359.34	7590.15	16368.2	19447.9	19046	16464.5	13755.5
70	11953.4	14971.6	16415.2	16011.3	11491.1	3324.99	1142.14	269.83	118.67	87.1	69.47	55.33	50.84	59.43	75.63	97.41	165.45	490.56	2664.95	6986.41	15613.8	18564.3	17801.8	14776.4	11953.4
71	10112.4	13284.5	15114.1	14926.4	10645.8	2868.85	847.94	245.98	111.84	82.75	65.88	52.78	48.38	56.79	72.24	92.99	150.16	425.13	2079.3	6361.94	14662.9	17591.1	16450.7	13004.3	10112.4
72	8339.17	11550	13779.1	13774	9616.04	2411.16	619.72	217.93	104.45	78.35	62.84	50.25	46.03	54.16	68.94	88.71	134.91	373.61	1655.76	5725.06	13729.8	16483.5	14981.3	11222.1	8339.17
73	6660.43	9697.1	12409.2	12580.4	8743.1	2118.19	535.68	194.39	98.21	74.09	59.83	47.77	43.71	51.57	65.71	84.02	124.5	330.03	1232.22	5077.56	12794.5	15261.2	13513.6	9401.03	6660.43
74	5552.21	7961.48	10972.7	11222.4	7845.67	1883.68	452.99	173.65	91.75	69.7	56.64	45.39	41.42	49.02	62.53	79.41	115.74	291.38	908.34	4517.77	11811.4	13903.3	12044.9	7656.49	5552.21
75	4449.68	6386.16	9411.3	9839.02	7044.32	1632.82	406.31	152.6	84.96	65.35	53.5	42.99	39.22	46.57	59.17	74.69	107.47	258.23	733.45	3986.96	10829.7	12547.5	10466.7	6096.9	4449.68
76	3532.04	5173.55	7909.2	8431.59	6265.15	1456.21	370.65	137.62	79.32	61.24	50.39	40.73	37.19	44.08	55.68	70.2	99.66	226.18	642.25	3568.92	9629.82	11252.9	8954.25	4846.37	3532.04
77	2903.42	3970.79	6484.66	6989.02	5385.04	1202.77	333.98	121.34	72.61	57.13	47.3	38.47	35.04	41.47	52.38	65.61	91.89	199.26	576.42	3164.15	8442.04	9862.55	7452.62	3851.07	2903.42
78	2348.71	3018.31	5228.18	5726.37	4504.92	925.8	296.68	107.08	66.71	53.12	44.26	36.26	33.06	39.02	49.01	61.15	84.74	175.63	512.54	2751.68	7236.02	8323.55	5961.24	3058.01	2348.71
79	1875.68	2346.82	3974.01	4607.65	3603.7	708.6	269.24	95.6	61.14	49.14	41.36	34.23	31.1	36.61	45.75	56.74	77.62	155.27	455.79	2305.11	6139.65	6861.87	4635.3	2436.2	1875.68
80	1457.62	1798.9	3042.86	3568.99	2660.34	519.17	230.75	82.73	55.55	45.18	38.49	32.24	29.3	34.34	42.58	52.46	70.85	134.97	404.51	1852.02	5167.25	5436.77	3531.64	1910.2	1457.62
81	1064.86	1305.18	2230.7	2702.38	1932.22	422.51	195.83	73.28	50.4	41.51	35.79	30.39	27.59	32.12	39.45	48.21	63.94	117.43	358.9	1489.67	4178.5	4227.13	2710.5	1464.54	1064.86
82	706.03	827.06	1476.07	1919.54	1260.03	327.58	160.77	64.38	45	37.8	33.18	28.66	26	30.04	36.44	44.06	57.57	101.81	314.13	1127.32	3286.25	3218.67	2041.85	1019.27	706.03
83	506.69	552.85	844.13	1257.68	773.63	242.25	120.36	55.7	39.84	34.43	30.72	27.03	24.53	27.97	33.53	40.05	51.6	87.7	266.15	807.8	2411.45	2340.69	1412.37	637.4	506.69
84	310.91	358.45	506.66	680.65	508.15	177.67	94.5	47.03	35.47	31.13	28.32	25.39	22.97	26.03	30.71	36.1	45.5	74.26	220.29	583.33	1776.52	1670.53	785.81	390.64	310.91
85	161.74	164.05	271.26	440.28	288	108.91	65.46	37.4	30.07	27.59	25.75	23.67	21.43	24.11	28.03	32.26	39.83	62.46	174.11	419.25	1141.59	1000.38	444.71	244.82	161.74
86	90.45	85.74	104.64	205.51	123.67	66.05	47.05	29.71	25.71	24.4	22.9	21.61	19.74	22.11	25.28	28.71	34.33	51.07	127.93	285.54	608.71	485.65	294.66	141.84	90.45
87	44.55	40.24	46.97	49.45	48.24	41.09	28.64	22.04	20.5	20.54	19.36	18.88	17.8	19.99	22.44	25.18	28.93	40.4	87.15	189.06	358.37	312.23	144.6	62.86	44.55
88	9.02	4.36	5.51	16.73	16.82	16.27	12.57	13.67	15.15	16.8	16.27	15.66	13.89	16.4	19.53	21.59	23.89	30.83	54.46	93.11	200.88	138.8	58.2	37.49	9.02
89	4.51	2.34	2.73	0.57	1.2	3.1	5.51	6.59	10.04	11.37	11.58	10.85	9.97	11.79	14.63	16.87	18.17	21.72	33.85	52.77	47.05	40.14	28.96	12.13	4.51
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.	ALEDL4TN	Sample ID.	C1
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
119.99	60	2.243	268.9	0.999	1.53%
277.02	60	0.967	258.8	0.966	4.08%

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**********