Photometric Test Report

Relevant Standards

☑IES LM-79-2008
☑ANSI C82.77:2017

Prepared For

RAB Lighting Inc.

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2021/11/25

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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		48439
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	130.3
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		371.7
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	120V	3.06%
		20.00%	277V	9.47%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9	120V	0.999
		0.9	277V	0.967
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	3985±275	3904
		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		8
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%		0.26%
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		3.100
(Goniophotometer - Section 4.2)		Non-Worst Case		1.368
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		371.7
(Goniophotometer - Section 4.2)		Non-Worst Case		365.7

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/25	ALEDXL2TN	H1
2	Goniophotometer Test	2021/11/25	ALEDXL2TN	H1
3	THD and PF Test	2021/11/25	ALEDXL2TN	H1

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.

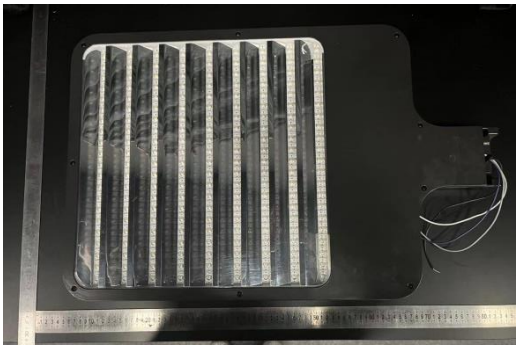
3.0 Production Description

Luminaire Description: ALEDXL2TN

Description: 385W/50,000 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.	ALEDXL2TN	Sample ID.	H1
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
120.00	60	3.090	370.6	0.999
277.04	60	1.364	365.5	0.967

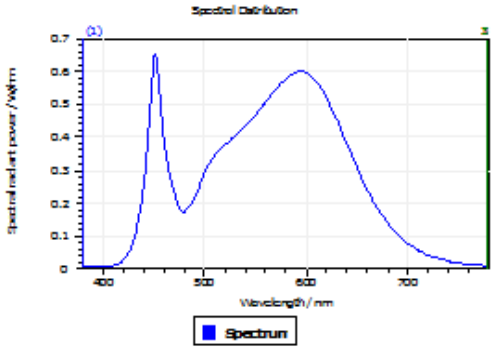
Test Result

CCT (K)	CRI	R9	Duv
3904	83	8	0.00021

Rf	Rg	IES Rcs,h1
84	95	-12%

4.1 Integrating Sphere Test

Results



Spectral values

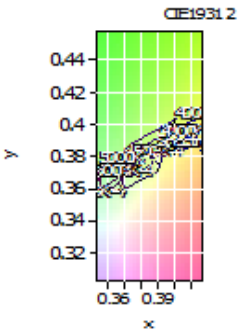
DominantWavelength	579.32 nm
Purity	0.296
PeakWavelength	451.44 nm
Radiant Power	103.6 W
Width50%:	20.47 nm

Color Coordinates

Correlated Color Temperat 3904 K

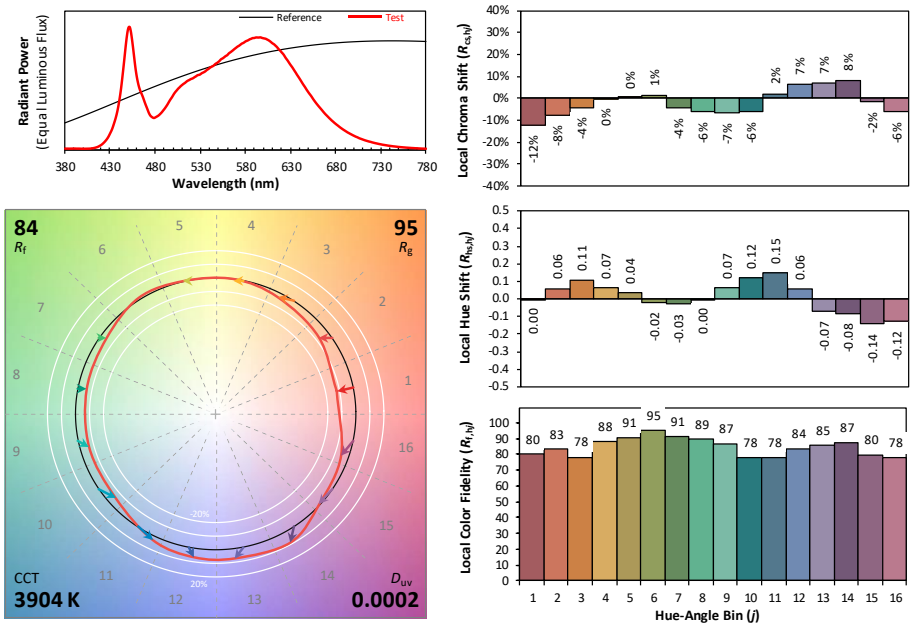
x:	0.3849	u:	0.2268	u':	0.2268
y:	0.3799	v:	0.3358	v':	0.5036

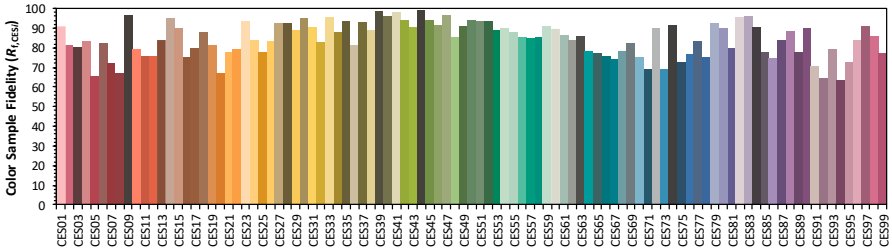
ResultsCRICRI01	81.0	ResultsCRICRI09	7.6
ResultsCRICRI02	89.7	ResultsCRICRI10	75.8
ResultsCRICRI03	95.5	ResultsCRICRI11	80.4
ResultsCRICRI04	81.5	ResultsCRICRI12	63.7
ResultsCRICRI05	81.6	ResultsCRICRI13	83.1
ResultsCRICRI06	86.1	ResultsCRICRI14	97.8
ResultsCRICRI07	85.3	ResultsCRICRI15	74.6
ResultsCRICRI08	63.4	ResultsCRICRI16	72.2
ResultsCRI	83.0		



PlanckDistance	2.1E-004

4.1 Integrating Sphere Test





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

x	0.3849
y	0.3799
u'	0.2268
v'	0.5036

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.	ALEDXL2TN	Sample ID.	H1
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	3.100	371.7	0.999
NON-WROST CASE	277.01	60	1.368	365.7	0.965

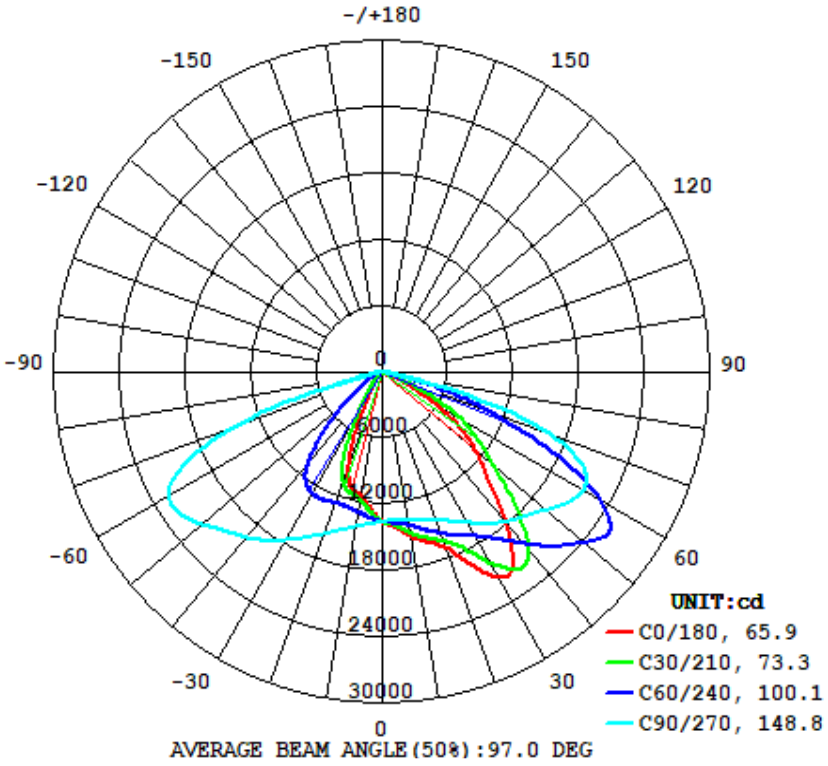
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
48439	95.7	157.6	65.9	148.8	130.3

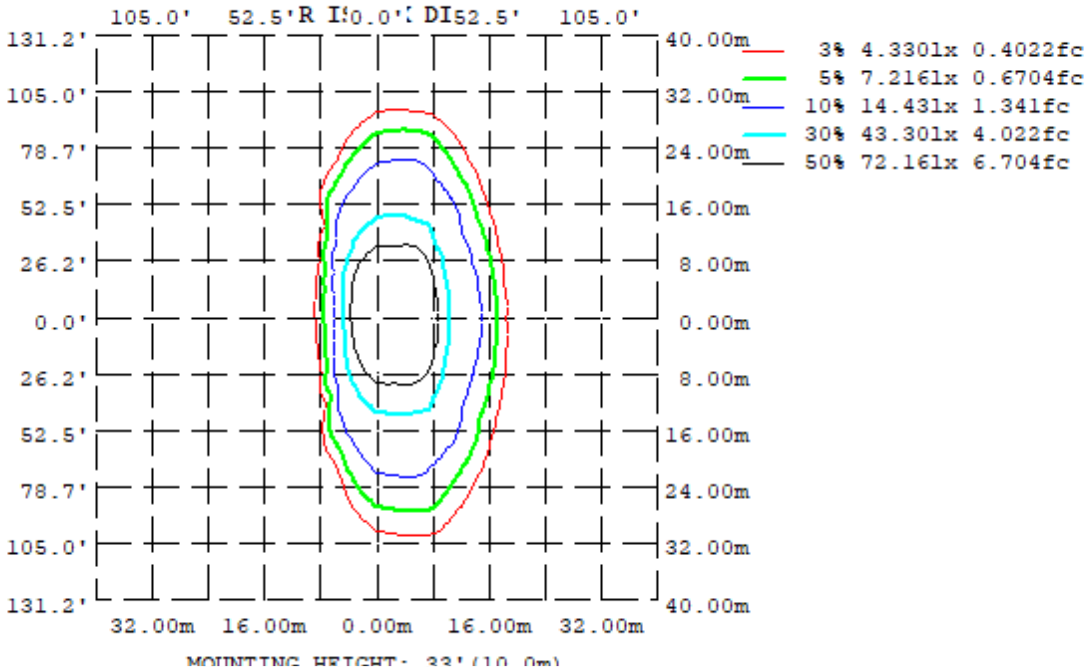
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	0.26%	B4-U0-G3

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

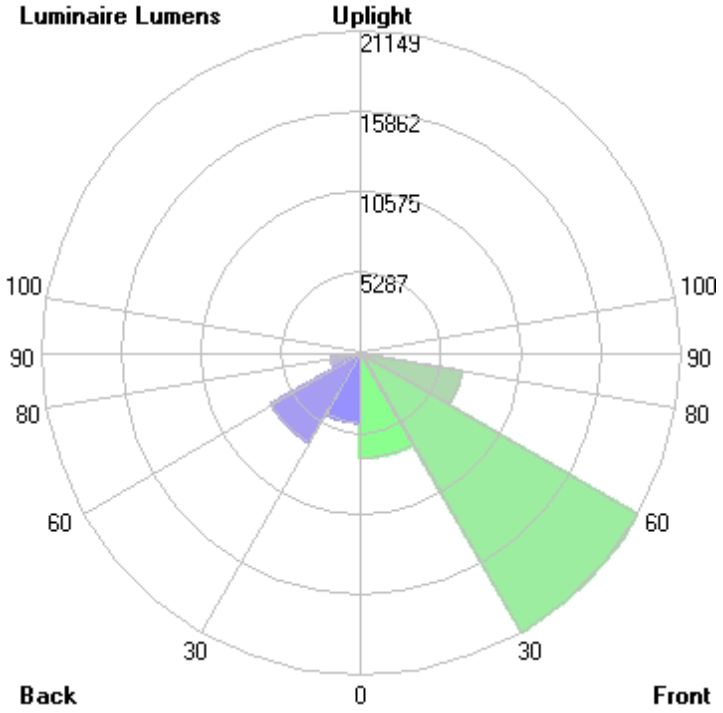
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	1512	1446	1361	1181	1143	1231	1421	1479
20	1696	1595	1431	1093	905.1	1170	1559	1663
30	2153	1821	1582	790.7	270.1	906.3	1759	1956
40	1764	2265	1773	299.7	112.3	360.4	1961	2410
50	1135	2051	1948	123.1	29.58	138.5	2157	2028
60	524.5	1120	2131	35.23	14.44	39.38	2249	1064
70	53.54	347.6	1625	17.27	10.87	18.08	1422	228.8
80	13.39	26.96	120.4	5.308	2.809	4.806	72.93	23.96
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	1281.49	0 - 10	1281.49	2.65%
10-20	3875.13	0 - 20	5156.62	10.65%
20-30	6415.37	0 - 30	11571.99	23.89%
30-40	8739.13	0 - 40	20311.12	41.93%
40-50	9771.84	0 - 50	30082.96	62.11%
50-60	9458.77	0 - 60	39541.73	81.63%
60-70	6780.74	0 - 70	46322.47	95.63%
70-80	1991.48	0 - 80	48313.95	99.74%
80-90	124.85	0 - 90	48438.80	100.00%
90-100	0.00	0 - 100	48438.80	100.00%
100-110	0.00	0 - 110	48438.80	100.00%
110-120	0.00	0 - 120	48438.80	100.00%
120-130	0.00	0 - 130	48438.80	100.00%
130-140	0.00	0 - 140	48438.80	100.00%
140-150	0.00	0 - 150	48438.80	100.00%
150-160	0.00	0 - 160	48438.80	100.00%
160-170	0.00	0 - 170	48438.80	100.00%
170-180	0.00	0 - 180	48438.80	100.00%

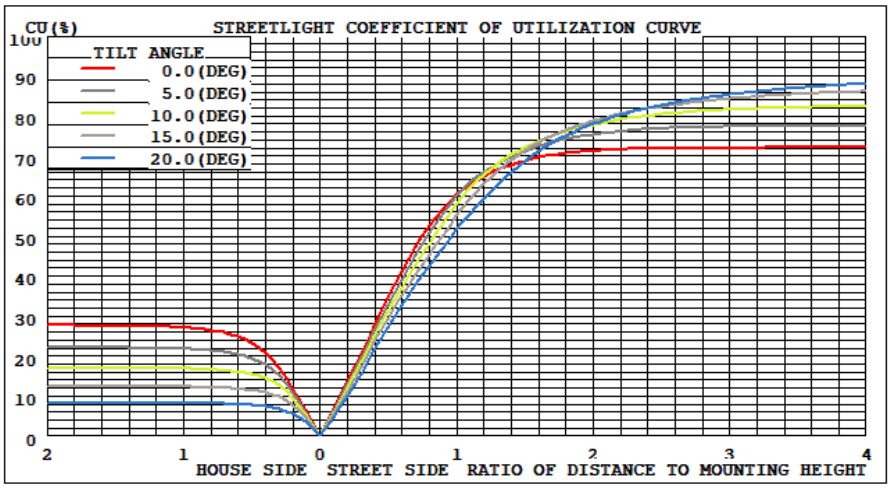
4.2 Goniophotometer Test

LCS/BUG

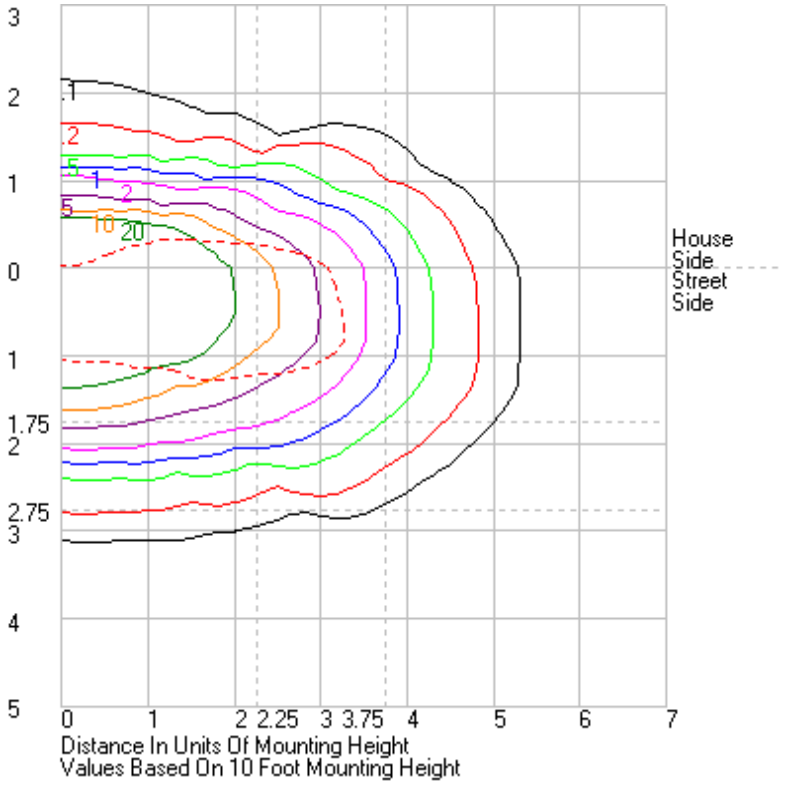


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	6950.6	N.A.	14.3
FM - Front-Medium (30-60)	21149.3	N.A.	43.7
FH - Front-High (60-80)	6781.2	N.A.	14.0
FVH - Front-Very High (80-90)	92.5	N.A.	0.2
BL - Back-Low (0-30)	4621.4	N.A.	9.5
BM - Back-Medium (30-60)	6820.5	N.A.	14.1
BH - Back-High (60-80)	1991.0	N.A.	4.1
BVH - Back-Very High (80-90)	32.4	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	48438.9	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	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7	13593.7
1	13738.2	13721.8	13697.7	13672.3	13639.4	13601.2	13563.6	13515.3	13467.7	13418	13383.7	13353.2	13451.8	13457.6	13511.4	13526.1	13573.6	13590	13619.9	13637.3	13645.5	13648.5	13648	13637.7	13738.2
2	13815.4	13783.9	13744.7	13702.1	13655	13605.7	13545.2	13451.2	13343.4	13236.4	13158.5	13109.6	13280.1	13299.9	13367.4	13424.2	13523.9	13583	13655.9	13696.2	13714.5	13722	13729.7	13723.1	13815.4
3	13903.3	13868.3	13814.3	13754.6	13676.9	13612.4	13529.4	13382.9	13203.1	13049	12931	12858.5	13025.1	13068.8	13167.7	13301.1	13473.3	13574.2	13699	13755.4	13781.6	13815.9	13834.8	13829.2	13903.3
4	13975.7	13932.4	13878.6	13817.6	13715.8	13628.2	13522.7	13316.5	13065.2	12850.4	12688.6	12593.4	12750	12815	12951	13147.7	13383.5	13569.5	13748.2	13820.6	13875.1	13915.8	13917.7	13907.3	13975.7
5	14105.6	14040.2	13946.6	13866	13766.7	13645.6	13520.4	13246.3	12929.2	12648.1	12459.2	12357.2	12503.3	12578.8	12738.2	12991.6	13303.8	13563.5	13801.6	13892.7	13972.5	13998.7	14016.9	14028.9	14105.6
6	14293.7	14212.4	14074.5	13926.3	13823.4	13672.6	13529.3	13178.2	12791.6	12465.3	12249.1	12129.8	12261.7	12357.4	12552.7	12837.7	13221.2	13564.4	13866.4	13975	14066.7	14100	14179.1	14219.4	14293.7
7	14478.4	14387.7	14235	14032.4	13872.2	13712.5	13542.4	13115.9	12658.6	12293.5	12042.4	11897.4	12024.9	12130.6	12363.9	12700	13139.5	13565.4	13945.3	14068.6	14162.2	14250.5	14364.7	14406.2	14478.4
8	14690	14587.3	14400.3	14171.2	13924.2	13755.5	13558	13060.8	12534.2	12128.5	11834.9	11687.8	11803.3	11924.2	12182.2	12576	13060.5	13570.1	14024.7	14179.9	14272.6	14427.4	14548	14619.7	14690
9	14909.2	14802.9	14589.1	14312.9	14006.5	13819.4	13582.6	13010.8	12413.5	11961.2	11644.9	11476.5	11598.3	11729.1	12011.5	12441.4	12988	13588.4	14117	14298.9	14409.4	14604.5	14761.4	14842.9	14909.2
10	15115.6	14993.1	14783	14459.3	14110.2	13879.6	13614.1	12965.5	12317.1	11805	11463.1	11312.7	11434.4	11552.6	11844.1	12314	12937	13610.6	14211.8	14419.2	14579.6	14792.9	14971.9	15042.1	15115.6
11	15327.3	15203.1	14963.2	14628.3	14233.6	13953.7	13656.6	12919.2	12206.3	11650.3	11309.3	11203.4	11328.2	11440.4	11697.1	12201	12888.9	13631.3	14321.5	14550.4	14759.2	14995.3	15171.7	15260.3	15327.3
12	15485.5	15387.9	15149.4	14807.6	14365.1	14028.6	13699.7	12880.6	12107.1	11507.5	11207.8	11119.5	11250.6	11358.3	11598	12090.6	12834.3	13660	14429.7	14679.7	14931.6	15205.2	15384.6	15443.6	15485.5
13	15611	15510.5	15330.4	14972.3	14497	14109	13751.5	12846.6	12007.5	11386.2	11129.7	11050.2	11173.4	11292.3	11526.3	11984.4	12790.4	13689.3	14551.5	14821	15116.4	15411.1	15574.2	15567.8	15611
14	15796	15652.8	15462.3	15131	14633.6	14190.6	13807.8	12821.5	11917.2	11296.4	11066.5	10949.4	11058.8	11200.8	11471.5	11906	12743.5	13722.9	14682.9	14959.8	15316.2	15611.2	15707	15722.8	15796
15	15945.7	15826.1	15572.1	15297.6	14782.4	14275.1	13870.3	12796.9	11832.3	11237.1	10990.4	10820.3	10912.8	11079.8	11418.5	11864.1	12709.5	13761.3	14810.2	15126.1	15529.3	15813.4	15840.7	15891.9	15945.7
16	16117.2	15977.4	15732.4	15457	14940.3	14372.9	13944.7	12793.9	11754.1	11181.6	10886.9	10640	10701.9	10914.7	11332.3	11832.6	12683.5	13810.5	14950.4	15305.9	15744.1	15985.8	16025	16055.6	16117.2
17	16271.9	16127.2	15879.4	15571.2	15099.6	14479.9	14024.2	12796.7	11685.8	11137.1	10756.4	10387.2	10397.7	10674.7	11222.7	11814.7	12655.6	13863.9	15097.8	15500.6	15953.9	16117.8	16179.3	16210.3	16271.9
18	16432	16280.1	16017.2	15675.8	15254.3	14599.6	14115.2	12799.5	11630.5	11085.9	10581	10046.4	10012.7	10349.1	11068	11796.4	12638.4	13929	15256	15704.1	16155.2	16265.2	16352.2	16381.7	16432
19	16696.4	16458.6	16156.4	15802.2	15405.6	14742.6	14207.8	12809.9	11601.7	11017	10324.8	9635.64	9554.57	9948.7	10846.9	11756.3	12634.8	14008.9	15419.8	15920	16359.9	16455	16512.6	16591.6	16696.4
20	16962.3	16718.3	16307.3	15954.6	15556.2	14885.5	14312	12827.7	11592.8	10929.2	10013.8	9171.43	9051.39	9485.6	10551	11698.4	12652	14089.5	15591.6	16135.4	16572.2	16626.9	16705.3	16870.1	16962.3
21	17259.8	16978.9	16474.1	16084.6	15725.3	15045.3	14427.9	12855.1	11593.6	10809.6	9632.44	8655.86	8484.41	8980.05	10198	11623.4	12686.5	14173.6	15767.4	16360	16771.6	16812.1	16942.8	17153.7	17259.8
22	17628.6	17267.6	16720.1	16230.1	15886.4	15209	14546.1	12890.7	11594.4	10656	9218.9	8087.82	7841.33	8424.13	9800.05	11510.2	12723	14256.4	15944.6	16577.7	16940.9	16999.8	17218.9	17459.3	17628.6
23	18106.4	17653.2	16969.7	16387.9	16029.5	15386.2	14682.9	12925.7	11605.4	10438.8	8746.95	7430.04	7106.27	7760.71	9360.65	11347.4	12764.4	14345	16130	16806.8	17107.2	17211.7	17520.6	17874.5	18106.4
24	18653.5	18124.2	17255.4	16558.6	16155.4	15568.8	14815.7	12973.9	11614.6	10184.4	8243.6	6717.38	6333.21	7040.57	8873.54	11141.3	12805.2	14436.7	16325.2	17043.9	17276.7	17436.5	17841.7	18369.7	18653.5
25	19222.9	18653.3	17571.3	16733.6	16286.3	15753.2	14958	13022.9	11610.2	9899.25	7667.91	6000.36	5553.74	6284.87	8321.8	10888.3	12841.2	14531.8	16528.1	17283.5	17492.3	17716.8	18241.1	18927.3	19222.9
26	19794.8	19216.1	17984.9	16980.9	16458.6	15954.5	15117.4	13083	11603.3	9571.03	7035.21	5283.19	4831.31	5539.03	7677.06	10595.6	12864.7	14632.1	16741.6	17536.6	17709.7	18042	18722.6	19502.3	19794.8
27	20317.9	19771	18452	17249.9	16639.7	16158.9	15278.1	13149.4	11588	9221.53	6367.59	4584.01	4177.43	4833.2	7003.52	10285.5	12871.9	14734.1	16949.6	17791.9	17928.1	18356.5	19256.4	20037.1	20317.9
28	20772.1	20263.6	18969.8	17531.6	16821.2	16379.7	15443.9	13215.8	11550.5	8826.13	5727.3	3974.27	3587.54	4199.11	6312.39	9932.85	12871.4	14839.7	17165.4	18043.5	18163.8	18716.4	19814.1	20524	20772.1
29	21192.6	20704.8	19490.1	17856.1	17014.3	16605.3	15624.3	13291.9	11497.2	8407.02	5087.01	3438.62	3100	3637.54	5642.08	9534.16	12859.6	14946.7	17372	18290.8	18391.1	19095.6	20361.5	20943.1	21192.6
30	21529.8	21110.9	20009.5	18207.3	17212.4	16835.2	15819.5	13376.9	11412.2	7906.52	4450.31	2988.86	2701.27	3154.76	5003.28	9062.61	12815.5	15060.5	17592.3	18523.8	18649.5	19557.9	20847.7	21331.3	21529.8
31	21749.2	21439.2	20458.4	18599.2	17430.7	17069.8	16009.3	13472.2	11294.3	7352.85	3921.51	2629.5	2365.12	2762.26	4410	8527.48	12745.3	15178.7	17808.6	18755.7	18936.4	20055.2	21295.4	21617.2	21749.2
32	21804.3	21660.6	20877	19065.7	17666.1	17293.4	16202.7	13575.4	11154.2	6785.85	3429.1	2299.36	2063.11	2420.76	3883.9	7934.45	12652.5	15298.2	18021	18981.7	19228.9	20600.2	21708.3	21793.3	21804.3
33	21701.4	21725	21266.5	19552.2	17931.2	17518.4	16397.1	13684.4	10991	6195.11	3034.8	2012.4	1812.12	2112.05	3422.08	7328.02	12517.7	15419.9	18236.1	19208.1	19562.3	21150.7	22052.4	21805.9	21701.4
34	21429	21622.6	21581.7	20053.9	18202.2	17732.5	16596	13794.3	10812.7	5664.48	2695.98	1770.78	1630.32	1853.13	3027.31	6713.16	12358.9	15544.1	18442.3	19421.5	19919	21668	22318.2	21674.7	21429
35	21038.3	21387	21798.5	20574.4	18514	17942.7	16799.3	13914.3	10607.2	5136.25	2381.34	1600.24	1517.23	1664.13	2671.92	6104.99	12183.7	15667	18658.6	19624.8	20260.5	22167.5	22465.5	21411.1	21038.3
36	20490.4	21020.9	21887.3	21039.2	18847.7	18150	16993.8	14024	10370.4	4610.67	2103.82	1492.39	1437.49	1540.48	2350.33	5529.18	11969	15792.1	18868.2	19821.6	20632.9	22639.9	22468.7	20998.1	20490.4
37	19823.1	20507.8	21832.5	21494	19190	18344.9	17185.3	14126.6	10092.7	4140.96	1852.96	1407.67	1362.37	1455.29	2066.11	4976.48	11697.3	15910.8	19077.2	20014.2	21027	23093.5	22343.3	20426.5	19823.1
38	19105.2	19876	21672.2	21917.7	19548.6	18534	17374.4	14219.9	9753.78	3716.14	1671.35	1330.63	1287.08	1380.41	1841.2	4479.03	11381.7	16025.9	19274.9	20194.5	21433.1	23495.1	22085.2	19734	19105.2
39	18351.2	19171.7	21380.8	22312.8	19935.1	18709.7	17560.2	14311.3	9349.89	3345.94	1541.08	1251.25	1203.06	1305.53	1676.35	4023.73	10981.9	16113.4	19460.3	20383.3	21868.1	23847	21659	19003.1	18351.2
40	17642.6	18422.6	20944	22652.2	20340.6	18881.5	17731.3	14391	8881.01	2996.61	1448.45	1168.86	1122.94	1226.42	1559.14	3604.43	10506.6	16175.6	19607.6	20561.9	22329.3	24101.8	21085.3	18255.1	17642.6
41	16871.4	17726.8	20394.5	22913.6	20735.3	19006.5	17859.8	14428	8397.13	2683.71	1368.31	1089.76	1043.96	1147.18	1470.92	3205.05	9990.65	16213.1	19753.5	20706.3	22793	24244	20398.4	17532.9	16871.4
42	15999.9	16950.5	19728.2	23085.2	21149.9	19103.4	17993.8	14428.5	7879.23	2378.39	1288.65	1012.51	966.21	1068.81	1391.2	2834.89	9422.16	16228.5	19906.4	20839.6	23258.5	24289.5	19669.1	16736.9	15999.9
43	15154.6	16130.8	19030.2	23150	21580.8	19215.2	18136.4	14405.9	7345.62	2104.47	1210.66	940.72	895.11	995.35	1311.48	2494.69	8820.47	16230.7	20073.4	21000.6	23726.6	24222.1	18921.8	15897.9	15154.6
44	14385.3	15269.3	18323.2	23129.3	21968.6	19345.9	18278.8	14365.8	6816.95	1878.46	1133.05	870.65	816.1	925.94	1231.57	2195.15	8207.36	16223.9	20249.7	21185.6	24160.6	23994.6	18182.1	15067	14385.3
45	13743.4	14473	17594.5	22990.4	22344.2	19497.7	18434.5	14312.6	6272.02	1698.22	1058.55	794	727.04	845.68	1152.36	1953.78	7590.32	16192.2	20431.1	21398.6	24577.5	23591.9	17349.5	14295.7	13743.4
46	13231.7	13792.7	16796.7	22708.5	22677.3	19667.9	18596.4	14235.7	5782.91	1567.69	988.44	707.4	630.11	755.22	1079.05	1763.76	6969.2	16143.1	20631.2	21640.3	24970.7	23053.8	16459.6	13721.2	13231.7
47	12785.3	13233.1	15918.2	22285	23016.7	19872.1	18790.1	14157.5	5290.57	1468.77	916.54	615.31	529	653.8	1007.39	1632.78	6377.36	16092.8	20852.7	21915.4	25331.7	22446.7	15547.1	13149.6	12785.3
48	12330.3	12756.1	15079.8	21754	23360.6	20125	19009.9	14086.5	4814.96	1385.82	836.47	521.05	436.86	553.26	926.22	1539.73	5819.78	16050.5	21092.1	22237.6	25677.1	21806	14678.5	12704.1	12330.3
49	11852.4	12295.4	14245	21153.5	23716.5	20423.9	19242.3	14004	4370.15	1305.2	746.41	426.78	359.27	456.57	830.38	1457.09	5273.37	16001.4	21335.5	22591.9	25977.2	21075.5	13982.6	12219.2	11852.4
50	11354.4	11814.4	13546.4	20506.5	24062.4	20735.7	19482.2	13892.7	3938.97	1231.5	645.69	353.35	295.75	377.95	727.25	1384.81	4763.47	15934.3	21567.2	22972	26227.7	20279	13355.3	11740.7	11354.4

51	10836.1	11314.3	12927.2	19781.3	24394.9	21071.2	19717.2	13753	3546.75	1160.72	553.81	291.26	242.8	312.8	619.11	1312.53	4292.33	15834.7	21793.4	23370.5	26392.6	19271.6	12760.8	11229.3	10836.1
52	10295.1	10786.4	12383.5	18864.9	24755.3	21437.9	19966.3	13545.5	3137.68	1088.32	462.09	238.82	206.34	258.4	516.68	1238.12	3835.48	15681	21996.2	23787.1	26456.3	18163.8	12212.9	10685.7	10295.1
53	9767.64	10267	11862.8	17857.1	25044.8	21816.1	20202.7	13293.6	2774.31	1004.07	387.31	203.93	181.01	218.96	432.88	1147.22	3404.36	15465.4	22188	24165.9	26394	17048.3	11677.1	10149.9	9767.64
54	9227.98	9741.07	11325.2	16787.9	25249.9	22222.1	20436.7	12963.7	2425.8	906.25	324.62	179.82	167.07	192.68	360.15	1037.8	3013.73	15174.3	22365.8	24524.5	26163.3	15861.4	11114.5	9625.26	9227.98
55	8697.73	9210.92	10776.9	15674.3	25327.7	22657.6	20658.1	12560.2	2134.45	800.33	269.35	167.45	160.43	177.15	297.55	915.92	2639.51	14805.3	22504.8	24840.1	25709.3	14679.7	10548.3	9091.65	8697.73
56	8164.73	8683.72	10229.8	14569.8	25233.6	23071.9	20859.6	12078.9	1913.33	690.08	230.04	161.15	155.66	170.2	250.8	789.14	2327.81	14342.2	22610.2	25105.1	25085.1	13730.5	9995.44	8563.89	8164.73
57	7556.89	8161	9689.36	13527.4	24888.6	23471	21030.3	11515.8	1749.74	601.13	203.69	156.61	152.37	165.28	220.68	667.52	2096.92	13716	22665.1	25369	24337	12781.2	9450.78	8017.8	7556.89
58	6858.18	7585.46	9163.82	12589.9	24408.5	23828.9	21173	10919.3	1637.92	505.78	186.52	153.42	149.4	161.57	199.75	560.95	1929.26	13089.8	22671	25586.8	23493.6	11998.4	8902.68	7376.99	6858.18
59	6034.37	6894.26	8630.15	11811.3	23769.7	24126.8	21276	10274.2	1549.51	418.73	178.84	150.63	146.47	158.47	189.83	473.15	1807.09	12401.4	22620.3	25742.9	22551.8	11296.8	8338.6	6641.89	6034.37
60	5244.51	6077.75	8104.78	11195.9	22990.2	24358.2	21314	9614.2	1464.87	352.29	173.67	148.14	144.35	155.55	183.96	393.76	1704.85	11659.2	22490.3	25869.6	21536.3	10641.4	7714.14	5830.54	5244.51
61	4426.82	5286.29	7504.58	10577.9	22098.9	24523.5	21297.1	8940.77	1356.97	291.8	169.7	145.52	141.83	152.63	179.11	322.71	1586.42	10897.2	22271.1	25937.6	20311.2	9992.43	6939.86	4941.11	4426.82
62	3601.57	4489.89	6773.24	10004.1	21079.6	24637.7	21200.2	8231.89	1231.89	253.6	165.91	142.73	139.43	149.51	174.75	273.92	1434.23	10115.7	21940.8	25915.6	18923.8	9338.7	6084.93	4101.06	3601.57
63	2891.94	3661.01	5921.21	9450.06	19874.2	24667.5	21012.8	7554.22	1094.78	226.8	162.16	140.13	137.25	146.4	170.49	240.8	1282.03	9320.05	21485.4	25703.8	17416.2	8656.89	5155.64	3283	2891.94
64	2267.98	2914.24	5066.91	8850.15	18574.3	24606.4	20729.7	6860.11	961.02	208.47	158.41	137.82	135.42	143.71	166.11	217.84	1124.82	8486.91	20869.1	25249.1	15794.3	7882.66	4257.47	2600.05	2267.98
65	1614.23	2275.66	4221.85	8194.43	17178	24444.9	20281.1	6197.57	824.49	200.69	154.43	135.83	133.75	141.24	161.67	207.76	961.69	7590.66	20073.4	24451.5	14360.9	6972.78	3382.37	2035.79	1614.23
66	1146.45	1623.81	3369.12	7425.64	15700.4	24121.5	19697.6	5608.88	698.6	194.58	150.93	133.91	131.79	138.85	157.73	201.26	807.47	6712.29	19186	23375.4	12927.4	5945.06	2650.54	1531.99	1146.45
67	906.36	1146.67	2642.15	6457.65	14266.7	23545.3	19012.5	5005.07	600.31	188.93	147.85	131.46	128.76	136.03	154.16	195.52	678.96	5899.15	18178.7	22059.9	11622	4918.81	2035.75	1037.76	906.36
68	756.38	892.03	1995.34	5445.23	12909.2	22709.9	18206.1	4447.02	506.16	183.21	144.87	127.68	124.04	131.98	150.1	190.09	555.02	5154.29	17028.8	20554.5	10446.9	3954.82	1548.82	841.47	756.38
69	644.35	741.97	1421.7	4433.8	11723.3	21645.9	17283.8	3946.86	415.49	177.63	141.35	122.37	117.57	126.4	146.03	184.87	449.01	4459.92	15792.3	18855.5	9199.6	3054.25	1067.52	707.22	644.35
70	535.44	628.65	1023.12	3475.86	10581.6	20320.9	16253.9	3509.09	351.09	172.68	136.56	115.18	108.73	118.57	141.05	180.77	372.9	3811.99	14216.3	16853.1	7886.96	2287.71	845.78	595.53	535.44
71	426.35	528.41	809.53	2612.58	9407.03	18691.5	14919.5	3034.37	311.73	168.32	129.96	105.26	97.2	107.93	133.4	177.19	327.87	3226.8	12640.3	14550.8	6605.2	1733.04	700.03	491.59	426.35
72	345.2	428.17	664.22	1925.2	8170.34	16829	13404.1	2569.89	288.89	164.3	121.31	92.52	83.27	94.07	122.65	173.06	301.29	2694.63	10792.1	12248.4	5328.26	1266.64	579.32	407.54	345.2
73	281.52	348.23	563.31	1381.62	6932.63	14661.5	11567.7	2143.03	280.19	158.64	109.58	77.69	68.86	78.61	108.55	166.58	291.16	2186.94	8309.43	9832.19	4168.69	896.15	482.38	330.03	281.52
74	239.63	289.61	463.01	976.26	5666.84	12095.6	9404.7	1774.74	275.38	149.84	94.38	63.53	56.49	64.22	91.39	152.35	287.07	1753.34	5851.2	7256.92	3110.66	706.6	397.55	276.72	239.63
75	212.11	249.76	372.86	732.98	4317.46	9443.62	7175.13	1445.52	271.81	138.45	77.31	54.22	47.49	52.98	74.09	138.12	287.33	1373.77	3879.94	4976.69	2184.09	567.06	328.47	238.75	212.11
76	193.08	223.81	313.74	591.07	3038.7	6824.5	5291.83	1168.98	270.14	121.23	63.31	44.95	41.42	45.53	60.18	118.24	290.18	994.32	2588.63	3209.28	1573.14	467.05	281.5	215.27	193.08
77	177.81	204.33	271.33	478.33	2024.63	5065.1	3683.18	906.7	267.38	101.37	54.07	39.65	37.12	40.38	50.53	91.37	284.57	692.93	1859.68	2098.13	972.63	379.22	248.42	196.12	177.81
78	163.53	187.07	240.9	378	1312.5	3329.91	2381.8	688.02	251.2	78.45	44.83	35.66	33.69	36.39	44.12	69.33	260.88	472.87	1334.26	1649.27	698.23	315.87	222.42	179.72	163.53
79	149.69	171.31	217.24	316.25	896.19	2042.2	1661.32	541.87	225.58	62.75	39.61	32.32	30.76	32.98	39.32	56.12	210.43	339.92	939.73	1200.4	538.96	271.64	200.71	163.25	149.69
80	133.94	154.26	195.15	269.58	658.48	1457.78	1203.52	395.73	180.53	53.08	35.33	29.35	28.09	30.03	35.31	48.06	147.82	252.34	729.33	840.72	424.69	239.63	179.19	145.82	133.94
81	117.27	136.04	173.03	237.45	527.42	1076.32	884.19	290.14	120.56	43.42	31.55	26.61	25.68	27.34	31.9	42.26	86.24	204.21	567.29	669.16	341.78	211.81	156.48	128.37	117.27
82	101.2	117.47	150.12	210.63	397.91	799.12	657.83	245.98	79.41	37.67	28.2	23.92	23.14	24.64	28.81	37.44	63.4	162.48	429.57	469.09	289.23	184.18	133.78	110.57	101.2
83	86.4	99.43	127.06	181.27	302.71	606.85	514.96	193.07	61.71	32.88	25.19	21.57	20.69	22.19	25.31	32.79	51.39	120.75	310.08	340.63	247.19	154.86	112.06	94.04	86.4
84	74.26	84.3	105.76	150.06	257.05	444.93	372.41	141.09	50.49	28.7	22.24	19.32	18.52	19.53	22.01	27.73	41.63	83.27	225.49	252.07	202.63	125.67	93.87	79.96	74.26
85	64.73	71.97	87.8	119.81	211.15	283	249.12	92.72	39.27	24.43	19.03	16.28	13.4	13.93	16.7	22.13	32.46	59.79	155.07	190.46	156.83	102.24	79.08	68.75	64.73
86	56.15	61.34	72.96	94.98	152.91	196.86	163.45	64.59	31.19	19.73	14.73	11.51	8.27	8.33	9.9	14.05	22.34	39.59	85.11	128.86	111.27	82.04	65.97	58.96	56.15
87	47.58	50.77	59.05	74.18	106.44	133.02	103.09	46.47	23.02	13.52	6.83	5.1	1.17	1.61	3.11	5.97	12	24.47	46.14	74.21	75.27	62.19	53.53	49.38	47.58
88	37.42	40.21	45.1	55.16	71.67	81.64	57.82	28.4	12.53	4.84	3.7	2.09	0.27	0.31	0.45	0.83	1.76	9.35	28.32	43.93	43.53	41.13	39.01	38.36	37.42
89	25.49	27.76	31.16	36.84	46.59	46.95	31.14	11.62	6.19	3.02	0.72	0.56	0.31	0.36	0.52	0.96	1.59	2.03	10.5	22.52	22.87	25.04	24.26	25.89	25.49
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.	ALEDXL2TN	Sample ID.	H1
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
120.00	60	3.090	370.6	0.999	3.06%
277.04	60	1.364	365.5	0.967	9.47%

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**********