Photometric Test Report

Relevant Standards

☑IES LM-79-2008

☑ANSI C82.77:2017

Prepared For

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Report Number

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Test Date

2021/11/26

Issue Date

2021/12/2

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		50022
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	138.8
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		360.3
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%		5.06%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9		0.934
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	3985±275	3928
		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
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		480
Input Current (A) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		0.805

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/26	ALEDXLATN/480	Y1
2	Goniophotometer Test	2021/11/26	ALEDXLATN/480	Y1
3	THD and PF Test	2021/11/26	ALEDXLATN/480	Y1

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.

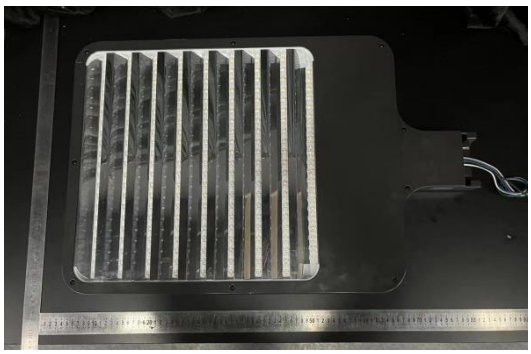
3.0 Production Description

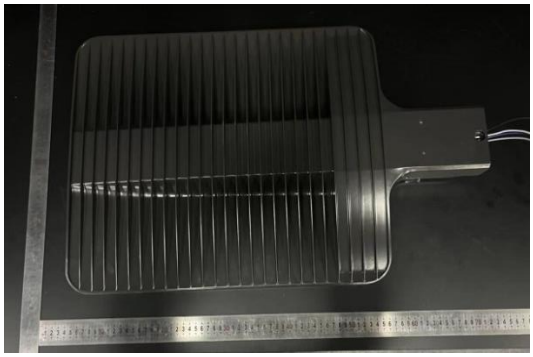
Luminaire Description: ALEDXLATN/480

Description: 385W/50,000 lm @ 4000K

Electrical Specification: 480V,50/60HZ

Photos of Luminaire Characteristics





4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	ALEDXLATN/480	Sample ID.	Y1
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
480.02	60	0.807	361.7	0.934

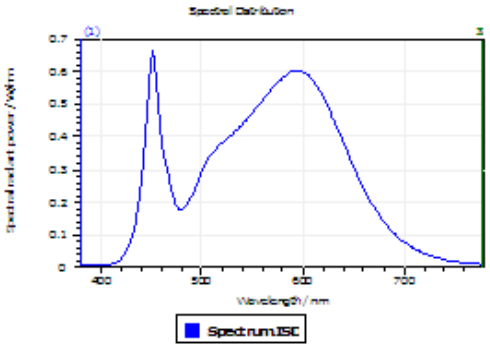
Test Result

CCT (K)	CRI	R9	Duv
3928	83	6	0.00027

Rf	Rg	IES Rcs,h1
84	95	-12%

4.1 Integrating Sphere Test

Results



Spectral values

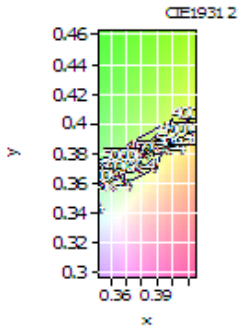
DominantWavelength	579.20 nm
Purity	0.291
PeakWavelength	451.38 nm
Radiant Power	104.4 W
Width50%:	20.63 nm

Color Coordinates

Correlated Color Temperat 3928 K

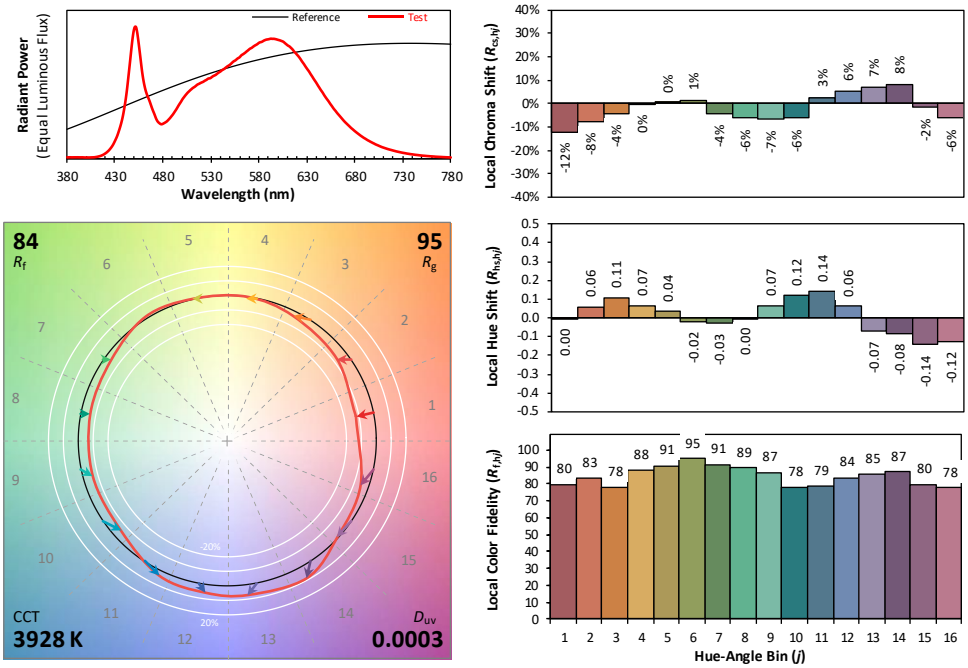
x:	0.3839	u:	0.2263	u':	0.2263
y:	0.3794	v:	0.3355	v':	0.5033

ResultsCRICRI01	80.7	ResultsCRICRI09	6.2
ResultsCRICRI02	89.7	ResultsCRICRI10	76.1
ResultsCRICRI03	95.5	ResultsCRICRI11	79.9
ResultsCRICRI04	81.0	ResultsCRICRI12	64.1
ResultsCRICRI05	81.3	ResultsCRICRI13	82.9
ResultsCRICRI06	86.2	ResultsCRICRI14	97.9
ResultsCRICRI07	84.9	ResultsCRICRI15	74.0
ResultsCRICRI08	62.7	ResultsCRICRI16	71.7
ResultsCRI	82.7		



PlanckDistance 2.7E-004

4.1 Integrating Sphere Test



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

x	0.3839
y	0.3794
u'	0.2263
v'	0.5033

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.	ALEDXLATN/480	Sample ID.	Y1
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	479.99	60	0.805	360.3	0.932

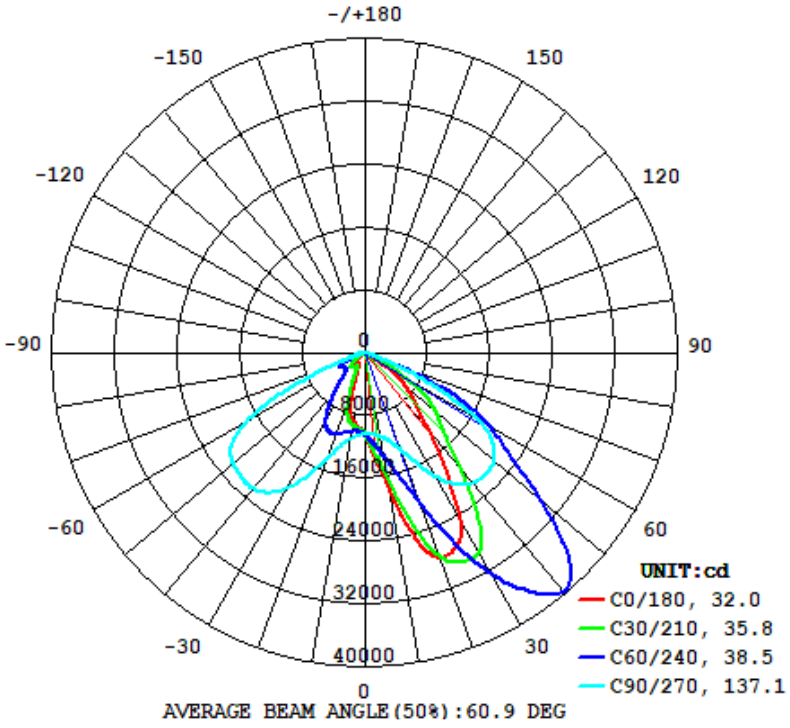
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
50022	80.3	152.6	32.0	137.1	138.8

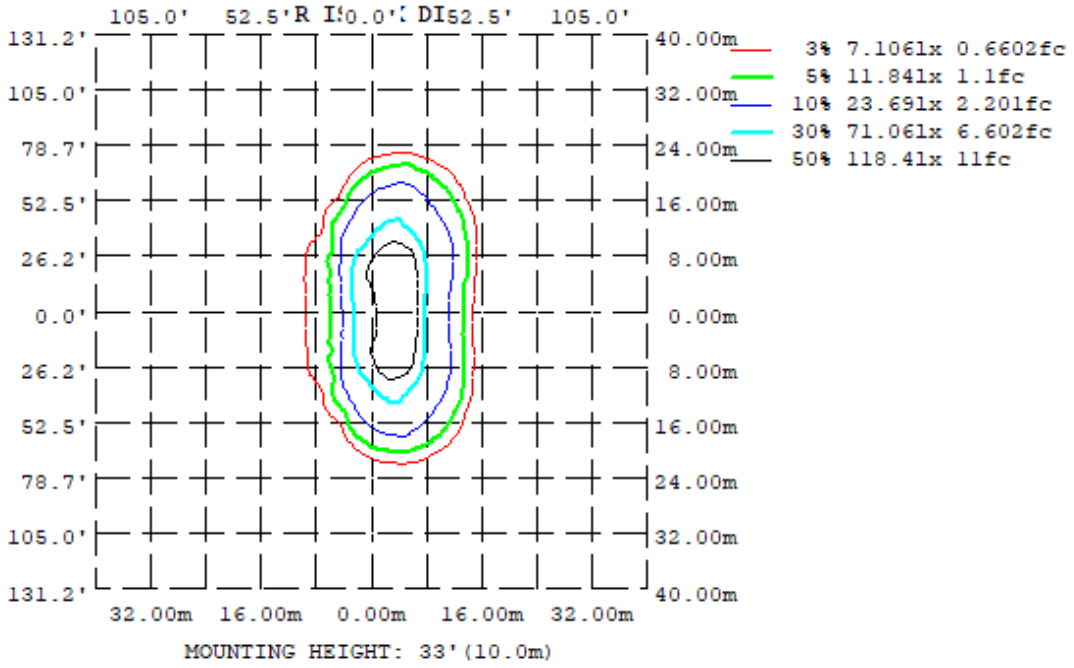
Zonal Lumen Requirement (0°-90°)	Zonal Lumen Requirement (80°-90°)	BUG rating
100.00%	0.17%	B4-U0-G3

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

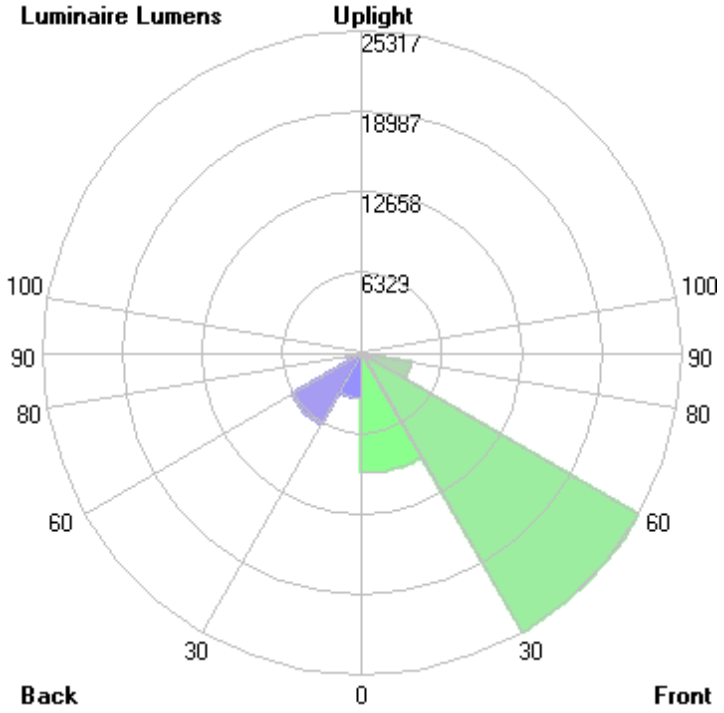
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	1729	1445	1084	940.4	902.9	980.4	1111	1468
20	2775	2504	1295	801.8	439.9	879.9	1425	2636
30	2452	3280	1827	382.8	183.4	428.7	1977	3549
40	1247	2952	2161	251.3	212.1	254.1	2253	3250
50	719.5	1946	2156	315.2	89.27	328.1	2201	2125
60	153.2	1192	1615	146.7	11.89	188.2	1762	1338
70	20.80	102.1	302.6	13.09	6.473	15.17	433.5	153.3
80	6.853	15.04	58.53	6.210	3.351	7.133	72.98	19.12
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	1073.14	0 - 10	1073.14	2.15%
10-20	4029.37	0 - 20	5102.51	10.20%
20-30	7893.95	0 - 30	12996.46	25.98%
30-40	10920.45	0 - 40	23916.91	47.81%
40-50	11346.35	0 - 50	35263.26	70.50%
50-60	9536.98	0 - 60	44800.24	89.56%
60-70	4449.36	0 - 70	49249.60	98.46%
70-80	685.28	0 - 80	49934.88	99.83%
80-90	86.63	0 - 90	50021.51	100.00%
90-100	0.00	0 - 100	50021.51	100.00%
100-110	0.00	0 - 110	50021.51	100.00%
110-120	0.00	0 - 120	50021.51	100.00%
120-130	0.00	0 - 130	50021.51	100.00%
130-140	0.00	0 - 140	50021.51	100.00%
140-150	0.00	0 - 150	50021.51	100.00%
150-160	0.00	0 - 160	50021.51	100.00%
160-170	0.00	0 - 170	50021.51	100.00%
170-180	0.00	0 - 180	50021.51	100.00%

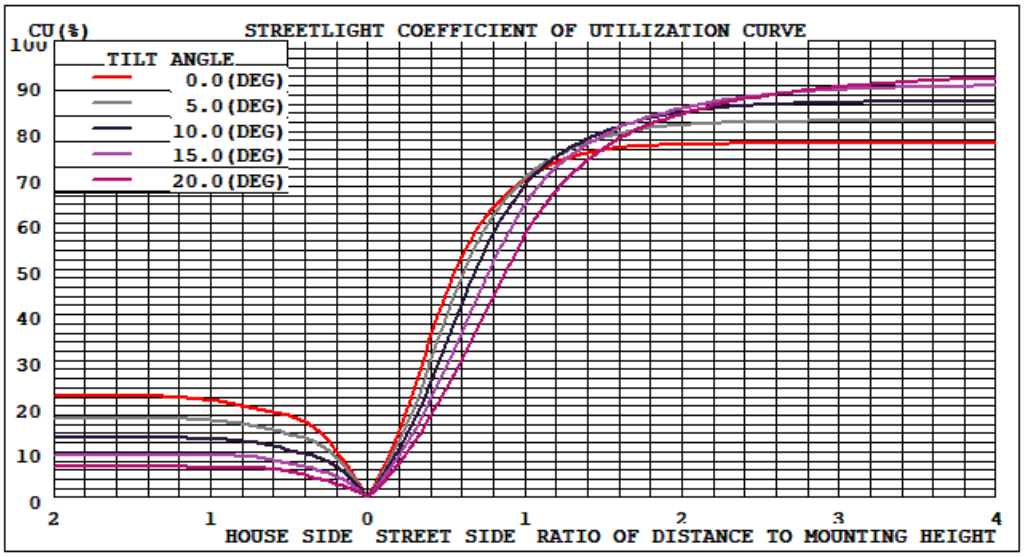
4.2 Goniophotometer Test

LCS/BUG

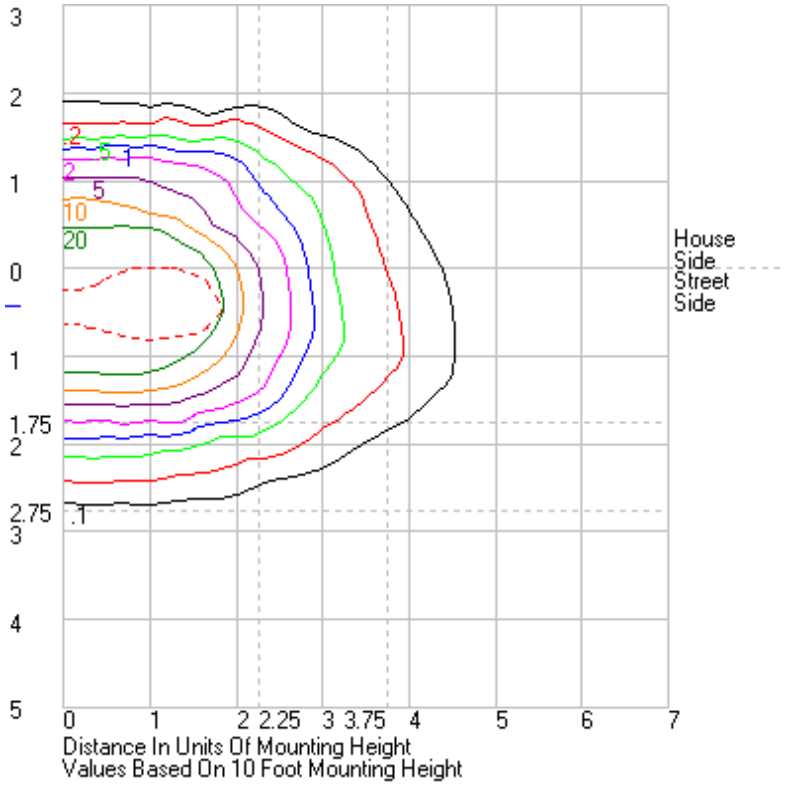


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	9445.0	N.A.	18.9
FM - Front-Medium (30-60)	25316.6	N.A.	50.6
FH - Front-High (60-80)	3964.7	N.A.	7.9
FVH - Front-Very High (80-90)	57.2	N.A.	0.1
BL - Back-Low (0-30)	3551.5	N.A.	7.1
BM - Back-Medium (30-60)	6487.2	N.A.	13.0
BH - Back-High (60-80)	1169.9	N.A.	2.3
BVH - Back-Very High (80-90)	29.4	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	50021.5	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	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4	10387.4
1	10742.4	10725.9	10687.9	10631.5	10562.3	10434	10360.4	10289.7	10225.5	10171.7	10133.4	10109.2	10228	10231.8	10248.7	10282.2	10325.1	10319.6	10381.1	10435.3	10488	10539.4	10571.1	10594	10742.4
2	11110.2	11072.1	10992.8	10865.8	10720.4	10516	10367.1	10239.3	10122.5	10032.7	9969.71	9936.12	10042.5	10055.6	10096	10161.1	10244.4	10293	10412.7	10540	10666.7	10782.8	10878.2	10934.7	11110.2
3	11550.6	11487.4	11345.3	11139.1	10906	10610.9	10389.3	10196.9	10041.8	9919.54	9837.45	9789.38	9889.8	9914.91	9974.26	10063.7	10186.8	10279.6	10457.6	10656.1	10869.4	11077.2	11245.8	11354.9	11550.6
4	12097.3	12009.9	11781.5	11474	11123.5	10727.3	10422.7	10172	9972.19	9821.05	9719.3	9661.23	9764.85	9799.06	9875.01	9988.97	10141.8	10279.8	10512.6	10790.3	11103.1	11414.6	11689.9	11863.3	12097.3
5	12724.2	12599.8	12295.8	11846.8	11362	10853.7	10463.5	10156.4	9919.14	9740.56	9617.31	9549.81	9659.74	9703.6	9799.26	9935.72	10116.1	10291.1	10581.3	10943.3	11367.1	11810.3	12192	12445.7	12724.2
6	13505.3	13306.9	12856.2	12272	11636.7	11000	10519.9	10153.7	9876.21	9669.52	9521.44	9438.87	9544.31	9609.09	9731.56	9896.88	10108.1	10315.7	10660	11111.9	11660.9	12261	12769.8	13108.7	13505.3
7	14288.3	14087.8	13534.2	12750.1	11951	11159.5	10583	10160.2	9843.73	9604.77	9418.97	9307.04	9414.87	9500.31	9664.92	9873.13	10110.5	10352.7	10747.3	11294.1	12004	12752.7	13433.4	13879.2	14288.3
8	15154.6	14868.7	14214.4	13292.5	12274	11324.5	10653.6	10178.2	9823.76	9541.15	9309.99	9174.7	9281.41	9381.25	9588.36	9854.03	10131	10410.1	10856.2	11498.9	12370.1	13320.4	14176.3	14757.6	15154.6
9	16161	15821.1	14962.8	13870.7	12639.7	11516.4	10742.5	10207.1	9814.67	9475.08	9201.54	9047.24	9154.88	9268.68	9503.08	9830.16	10163.8	10475	10977.5	11727.9	12772.3	13956.2	15036.9	15758	16161
10	17285.2	16885.8	15875.6	14448.9	13031.6	11719.9	10836.4	10244.9	9809.95	9403.93	9096.44	8925.81	9029.46	9161.58	9428.88	9803.71	10207	10556.8	11113	11982.4	13235.1	14683.7	16007.4	16864.9	17285.2
11	18560.8	18084.8	16892.3	15181.3	13475.1	11944.1	10947.9	10292.2	9814.34	9337.2	8989.3	8770.36	8861.02	9033.63	9357.33	9784.26	10261.2	10656.7	11269.4	12267.2	13754.9	15498.9	17078	18056.4	18560.8
12	19872.4	19335.4	17976.4	15974.8	13919.1	12184.4	11067.7	10352.9	9818.89	9274.34	8873.07	8550.04	8601.08	8825.18	9265.7	9759.81	10322.8	10772.6	11447.1	12587	14327.2	16411.8	18257.8	19333.6	19872.4
13	21226.5	20655.1	19158.6	16874.4	14392.4	12447.1	11209.3	10432.9	9830.04	9218.16	8692.72	8242.44	8258.81	8538.32	9124.51	9746.24	10392.8	10910.7	11661.5	12957.8	14986.3	17400.5	19501.3	20682	21226.5
14	22596.1	22009.8	20460.3	17887.4	14971.6	12739.9	11365.2	10539.5	9852.47	9160.88	8453.59	7865.28	7839.97	8171.99	8919.41	9733.8	10469.4	11071	11903.9	13384.8	15718.6	18507.4	20825.1	22073.3	22596.1
15	23892.9	23309.9	21743.1	18924.7	15620.5	13050.5	11540.3	10658.9	9879.38	9070.92	8159.46	7438.88	7376.71	7745.36	8644.61	9688.94	10553	11257	12188.7	13855.6	16522.9	19682.1	22162.9	23400.9	23892.9
16	25092.6	24546.2	23029.5	20085.6	16369.3	13429	11753.8	10812	9914.79	8949.37	7801.32	6976.69	6868.56	7277.86	8300.8	9605.95	10646.1	11471.3	12520.7	14403.6	17430.2	20934.5	23556.7	24679.3	25092.6
17	26079.1	25657.1	24308.5	21304.9	17169.1	13844.5	12001.2	10970.7	9952.84	8775.61	7411.3	6451.14	6333.74	6782.89	7924.67	9478.29	10737.9	11706.8	12883.3	14990.2	18406.1	22262	24849.3	25779.7	26079.1
18	26848.3	26556.7	25492.9	22536.8	18042.2	14316.9	12271.2	11147.9	9997.47	8563.14	6984.63	5901.69	5710.35	6209.25	7493.03	9298.46	10845.4	11973.7	13285.4	15658.6	19468	23643.4	26079.8	26693.5	26848.3
19	27414	27252.9	26531.9	23799.4	19034.6	14878	12593.1	11354.8	10047.8	8315.47	6506.37	5352.24	5054.42	5597.26	7014.04	9069.35	10949.4	12260.1	13743.8	16366.1	20610.5	25025.4	27168.2	27424.7	27414
20	27747.4	27741.7	27404.1	25037.8	20058.4	15482.9	12951.3	11569.1	10087.5	8018.04	5996.63	4710.4	4399.19	4952.37	6494.59	8799.12	11034.4	12588.2	14247.6	17147.1	21827.1	26357.4	28100.4	27941.9	27747.4
21	27855.6	27984	28115.3	26254	21217.9	16164.1	13366.7	11817.9	10114.9	7702.35	5486.89	4082.81	3775.15	4312.47	5919.4	8482.3	11110.3	12943.5	14774.7	17974.9	23115.1	27674.1	28840.8	28237.7	27855.6
22	27839.9	28072.3	28634.6	27345.3	22382.8	16883.5	13805.6	12079.2	10117.9	7351.79	4912.76	3531.67	3242.55	3726.17	5309.75	8119.19	11161.5	13309.2	15310.2	18827	24427.3	28890.9	29434.3	28373.8	27839.9
23	27748.7	28065.7	28984.5	28402.1	23627.1	17645.1	14294.4	12357.4	10091.6	6943.64	4335.12	3055.65	2821.55	3235.85	4721.76	7703.72	11185.4	13693.9	15875.1	19722.2	25834.8	30029.8	29880.5	28406.5	27748.7
24	27592.7	27994.8	29202.3	29309.3	24931.1	18484.3	14837.3	12658.6	10041.7	6492.25	3823.75	2676.7	2467.41	2834.47	4159.39	7249.9	11181	14066.7	16447.7	20645.4	27212.9	31065	30207.1	28366.7	27592.7
25	27408.5	27874.3	29345.7	30104	26199.7	19325.7	15374.7	12961.7	9948.65	6030.7	3369.29	2357.89	2171.45	2489.43	3673.14	6738.84	11138.1	14420.7	17037.9	21579	28605.8	31991.9	30453.9	28287.4	27408.5
26	27177.1	27725.2	29448.5	30804.2	27497.7	20230.4	15966.1	13283.5	9832.11	5569.15	3002.86	2104.65	1963.68	2207.99	3266.53	6208.45	11040.8	14775.9	17619.7	22539.9	29979.3	32843.9	30670.3	28167.8	27177.1
27	26841	27518.2	29501.6	31389	28788.1	21152.1	16566.7	13599.9	9682.84	5078.71	2678.76	1931.79	1850.52	2004.11	2913.51	5680.36	10899.6	15093.2	18191.1	23473.4	31303.8	33604.4	30829.1	27997.3	26841
28	26347.3	27214.9	29526.1	31909.8	30058.5	22084.3	17148.6	13897	9477.08	4610.28	2405.98	1849.52	1813.81	1891.73	2592.67	5167.08	10712.1	15409.3	18742.8	24407.8	32578	34298.8	30933.2	27699.7	26347.3
29	25590.8	26695.4	29474	32363.6	31272.3	23066.6	17724.6	14210.1	9244.22	4200.17	2191.54	1833.61	1817.95	1855.51	2332.64	4697.75	10461.6	15691.4	19265.7	25339	33828.5	34927	30975.5	27210	25590.8
30	24518	25879.7	29308.7	32798.3	32433.9	24036.1	18268.7	14496.4	8947.77	3827.51	2056.18	1845.37	1834.31	1857.59	2149.72	4287.23	10153.2	15928.1	19766.8	26252	34990.5	35487.4	30867.6	26456.9	24518
31	23243.5	24799.8	28970.2	33167.4	33552.7	25018.7	18794.1	14760.9	8607.67	3502.75	2002.35	1868.25	1856.7	1876.49	2046.43	3919.16	9801.85	16139.8	20250	27140.3	36080.1	35982.9	30575.1	25456.4	23243.5
32	21879.9	23521.7	28381.8	33463.3	34562.7	26011	19309.5	15000.9	8249.12	3201.73	1999.11	1898.54	1888.9	1903.79	2017.47	3568.55	9393.11	16316.4	20688.3	28039.4	37126.5	36363.5	30026.4	24218.9	21879.9
33	20514.8	22148.2	27479.8	33659.3	35516.5	26984	19769.2	15195.4	7839.04	2923.72	2020.02	1940.49	1933.71	1943.37	2024.56	3245.18	8944.91	16461.2	21090	28910.8	38083	36636	29233.6	22882.4	20514.8
34	19212.8	20829.2	26356.4	33739.8	36379.9	27930	20201.8	15355.4	7424.36	2698.39	2053.97	1992.99	1988.19	1998.14	2053.79	2960.3	8472.08	16576.6	21456.8	29746.5	38986.2	36740	28224.1	21537.6	19212.8
35	18008.6	19552.9	25108.8	33619.8	37190.8	28836.6	20560.7	15464.2	6988.75	2538.91	2095.43	2054.31	2042.74	2063.33	2093.92	2742.37	7981.15	16637.6	21773.7	30539.3	39811.2	36618.3	27003.1	20213.8	18008.6
36	16834.4	18319	23822	33275.8	37907.8	29659.5	20861	15502.4	6506.74	2440.12	2148.23	2114.59	2092.1	2128.98	2147.06	2595.75	7484.56	16652.9	22033.7	31292.3	40547.6	36257.5	25725.1	18955.7	16834.4
37	15697.2	17133.7	22524.6	32654.3	38541.3	30403.9	21117.1	15480.7	6153.77	2417.27	2213.28	2169.21	2130.79	2191.52	2217.94	2515.05	7004.51	16620.3	22231.2	31964.1	41200.1	35628.1	24420	17767.1	15697.2
38	14593.2	15991.3	21341.3	31785.1	39023	31080.6	21316	15402.1	5801.81	2423.81	2285.5	2209.46	2152.46	2241.56	2300.65	2497.59	6548.11	16509	22376.1	32565.9	41740.7	34782.1	23154.3	16615.2	14593.2
39	13463.1	14837.4	20182.1	30708.2	39349.1	31707.2	21481.1	15272.5	5437.78	2458.74	2359.35	2233.43	2151.94	2274.84	2387.95	2506.99	6094.45	16337.3	22470.8	33117.7	42162.8	33710.5	21930.1	15478.7	13463.1
40	12473.7	13765.8	19066.9	29524.3	39499.1	32274.4	21609.9	15090.3	5061.03	2513.12	2425.06	2230.85	2121.26	2285.02	2474.16	2540.9	5663.89	16124	22533.1	33603.2	42424.7	32504	20795.4	14443.6	12473.7
41	11637.5	12831.2	18011.3	28304	39457.8	32780.9	21698.7	14870	4705	2572.05	2479.02	2199.74	2065.66	2264.29	2550.35	2589.15	5234	15841.4	22570.7	34041.3	42476.6	31229.4	19675.7	13496.1	11637.5
42	10878	11986	16961.8	27054.5	39188.2	33253.9	21755.6	14591.2	4347.78	2647.07	2516.25	2140.66	1981.03	2216.25	2615.5	2650.31	4806.53	15517.9	22579.5	34454.9	42329.6	29895.4	18618	12553.9	10878
43	10259.2	11253.7	16015.5	25934.1	38686.2	33686	21799.2	14253.6	4033.84	2732.15	2526.4	2051.48	1873.77	2134.95	2655.49	2724.44	4410.79	15147.6	22556.8	34816.6	41946.5	28612.1	17657	11803.8	10259.2
44	9751.9	10657.6	15203.9	24857.6	37934.3	34107.3	21831.1	13875.6	3764.29	2824.58	2503.28	1942.21	1742.17	2028.1	2664.82	2814.01	4055.42	14730.2	22510.3	35139.2	41332.2	27386.2	16795.1	11163.7	9751.9
45	9316.2	10154.6	14494.4	23812.7	36911.9	34501.6	21857.3	13430.7	3565.1	2922.8	2449.34	1805.52	1591.34	1901.96	2646.24	2911.39	3763.54	14251.8	22434.4	35429.5	40444.4	26221.6	16039.8	10621.6	9316.2
46	8900.83	9695.23	13873.4	22839.6	35685.2	34881.6	21878.3	12969.1	3413.74	3013.72	2363.83	1648.75	1442.83	1750.87	2589.85	3012.65	3543.85	13736	22351.7	35684.3	39298	25104.4	15406.3	10153.1	8900.83
47	8468.62	9252.92	13366.9	21875.2	34191.6	35216.3	21867.6	12460	3337.91	3093.29	2253.2	1490.29	1294.32	1595.11	2501.65	3107.27	3390.11	13220.2	22276.5	35897.6	37910.6	24028.4	14877.6	9715.31	8468.62
48	8043.32	8789.57	12891.8	20996.9	32665.4	35468	21813.6	11903.6	3301.04	3151.5	2118.46	1337.81	1153.46	1444.74	2391.74	3189	3306.4	12679.6	22203	36088.4	36321.2	23038	14415.4	9265.31	8043.32
49	7614.28	8331.78	12437.7	20167	31066.2	35630.6	21717.5	11333.8	3284.86	3172.89	1964.97	1192.48	1018.25	1301.43	2252.54	3250.19	3270.97	12112.6	22117.5	36254.9	34650.5	22103.7	13972.9	8807.77	7614.28
50	7194.61	7893	11965.2	19457	29436.7	35704.4	21558	10716.1	3299.16	3151.64	1805.68	1057.45	892.7	1156	2104.16	3280.81	3263.33	11524.3	22009	36342.8	32911.1	21249	13526.9	8354.61	7194.61

51	6750.83	7460.04	11476.3	18767.2	27943.1	35692.3	21371.3	10120.7	3324.4	3089.29	1653.19	931.1	772.73	1023.16	1945.26	3272.09	3281.77	10926.7	21873.2	36347.3	31148.3	20483.3	13080.8	7904.55	6750.83
52	6158.57	6964.43	10992.3	18131.5	26453.1	35536.1	21117.5	9478.61	3353.65	2983.45	1505.91	804.14	666.41	897.49	1788.17	3225.86	3321.12	10304.2	21719.3	36261	29526.3	19766.5	12549.5	7440.75	6158.57
53	5565.81	6339	10491.3	17512.3	25080.4	35222.2	20826.3	8855.27	3388.91	2857.49	1361.89	687.5	555.81	777.11	1633.65	3146.11	3366.86	9684.4	21519.8	36046.3	27967.3	19092.3	12022.7	6890.17	5565.81
54	4927.61	5676.91	9992.6	16870.2	23857.2	34758.6	20470.1	8231.98	3440.23	2702.23	1217.63	574.07	453.19	657.94	1474.3	3037.48	3418	9062.45	21267.9	35711.3	26497.5	18429.4	11452.2	6242.71	4927.61
55	4259.48	5014.82	9401.28	16190.2	22730.4	34063.6	20016.8	7621.46	3503.94	2531.91	1071.28	460.68	358.57	541.76	1318.18	2896.91	3473.55	8446.1	20932.5	35243.4	25128.6	17727.6	10859.3	5549.44	4259.48
56	3614.8	4311.48	8662.38	15462.3	21696.9	33183.4	19482.7	7033.71	3568.81	2360.77	917.16	356.37	275.45	428.17	1161.84	2733.33	3533.19	7842.38	20508	34574.3	23877	16966	10119.9	4834.99	3614.8
57	2954.77	3612.62	7874.75	14706.6	20759.3	32003.4	18864.2	6465.79	3624.84	2169.43	752.33	271.08	212.33	331.13	992.73	2560.32	3597.4	7243.22	19965.4	33689.1	22720	16156.2	9245.01	4131.4	2954.77
58	2331.62	2881.19	6917.9	13861.9	19943.1	30500.8	18129.4	5907.92	3648.55	1951.22	599.91	206.5	177.75	253.18	814.56	2362.47	3658.9	6653.68	19291.4	32503.5	21674.2	15301.4	8270.79	3383.04	2331.62
59	1830.99	2256.52	5839.68	12940.5	19078	28706.5	17241.7	5350.05	3629.03	1709.42	462.2	162.75	143.18	194.83	638.5	2135.06	3695.76	6069.23	18506.4	31065.2	20686.3	14368.9	7224.03	2662.33	1830.99
60	1531.99	1795.2	4771.33	11920.6	18171.2	26537.1	16148.2	4789.95	3572.15	1466.88	324.49	135.16	118.92	163.26	481.87	1881.52	3698.84	5467.5	17621.3	29384.5	19724.8	13375.3	6119.88	2076.27	1531.99
61	1284.6	1524.63	3689.92	10704.4	17178.9	24152.2	14855	4284.54	3461.67	1209.12	238.93	119.27	108.47	132.09	350.96	1626.92	3665.97	4865.64	16574	27358.1	18754.7	12376.9	4903.32	1698.58	1284.6
62	1069.26	1290.37	2684.22	9369.75	16062.8	21427.4	13346.6	3823.32	3290.05	945.89	182.22	109.79	100.34	118.72	256.49	1367.13	3583.86	4310.69	15414.6	25089	17730.9	11111.6	3693.88	1471.03	1069.26
63	910.96	1084.88	1975.75	7842.51	14858.5	18591.9	11833.1	3459.14	3069.37	714.17	148.04	102.29	93.71	109.84	191.2	1107.22	3444.96	3819.32	13939.4	22600.7	16606.3	9796.8	2669.21	1243.49	910.96
64	771.47	934.36	1602.36	6318.59	13449.7	15808.2	10273.3	3142.04	2815.47	542.29	130.93	95.99	88.29	102.7	162.7	849.79	3251.99	3391.15	12464.2	19884.7	15325.3	8353.29	1987.92	1043.39	771.47
65	641.14	800.07	1334.61	4887.37	11885.1	13138.1	8747.82	2878.73	2517.32	386.36	121.04	90.25	83.26	96.47	134.3	629.34	3016.34	3041.56	10918.6	17134.2	13829.3	6861.62	1632.73	904.61	641.14
66	511.31	664.47	1073.13	3458.39	10177.6	10781.6	7386.77	2640.54	2179.64	264.61	112.92	85.23	79.01	90.89	123.97	439.35	2723.81	2773.16	9352.04	14400	12332.4	5319.34	1355.29	768	511.31
67	381.41	532.54	863.81	2324.16	8475.83	8725.14	6185.01	2426.29	1833.22	200.34	105.87	80.79	75.21	86.23	115.63	308.11	2392.72	2546.21	7906.19	11667.6	10643.1	3824.34	1078.5	620.62	381.41
68	294.49	400.61	676.65	1599.12	6882.73	6950.85	5064.1	2232.08	1459.71	160.14	99.44	76.56	71.57	81.88	108.4	224.37	2052.78	2345.61	6573.95	9381.81	8936.69	2572.79	857.46	456.3	294.49
69	240.81	300.82	554.52	1254.57	5322.61	5483.53	3943.2	2060.51	1106.77	141.99	93.77	72.67	68.06	77.75	101.98	179.86	1718.59	2160.27	5415.85	7475.78	7177.65	1926.32	684.41	348.64	240.81
70	208.01	253.53	434.26	1021.37	4127.27	4427.44	3026.4	1886.25	800.94	130.86	88.5	68.86	64.73	73.9	96.35	151.7	1391.9	1977.85	4335.08	5937.76	5631.96	1532.59	534.18	283.48	208.01
71	184.72	223.88	341.65	786.51	2940.77	3459.2	2323.47	1700.32	593.56	121.22	83.43	65.4	61.54	70.11	91.09	132.36	1066.24	1820.21	3367.18	4701.72	4329.82	1143.38	428.32	245.51	184.72
72	165.78	199.93	296.58	630.44	1951.07	2659.76	1815.97	1492.11	435.27	112.84	78.81	62.05	58.37	66.51	86.26	122.54	777.92	1673.64	2531.7	3536.73	3264.38	906.49	357.9	219.06	165.78
73	148.33	178.15	262.19	509.75	1381.35	2243.32	1487.48	1251.97	276.98	105.11	74.29	58.7	55.28	63.01	81.7	113.89	530.1	1503.83	1897.13	2741.99	2418.92	689.64	310.28	196.19	148.33
74	132.79	158.91	231.22	389.06	1064.91	1961.07	1283.39	1019.51	206.28	98.38	70.16	55.43	52.33	59.62	77.48	106.22	347.78	1323.57	1605.1	2268.43	1848.09	539.54	275.36	175.04	132.79
75	119.92	142.37	201.5	329.3	855.64	1724.01	1141.42	762.64	158.5	91.87	65.89	52.13	49.26	56.2	73.3	99.32	243.71	1143.07	1313.07	1964.82	1429.57	430.08	242.52	157.87	119.92
76	108.88	128.03	176.62	281.29	669.32	1500.74	1037.61	565.78	138.46	85.89	61.9	48.78	46.24	52.82	69.35	93.08	188.81	938.47	1104.6	1743.49	1016.42	362.95	211.58	140.69	108.88
77	98.31	114.78	156.41	238.37	535.35	1294.93	931.28	409.46	124.44	80.49	57.92	45.33	43.24	49.39	65.33	87.44	150.25	736.12	1002.55	1549.22	792.63	310.3	184.54	125.51	98.31
78	88.33	101.94	137.66	202.74	401.85	1068.81	820.75	285.38	111.88	74.76	53.46	41.84	40.1	45.9	61.07	81.96	123.66	533.07	919.59	1372.33	612.48	264.96	164.27	112.45	88.33
79	78.7	90.06	121.13	174.26	297.17	864.6	697.28	222.2	101.47	68.82	49.02	38.25	36.85	42.41	56.87	76.74	111.24	374.79	829.52	1195.35	469.03	223.63	145.63	100.39	78.7
80	68.53	77.61	104.33	150.36	235.89	662.79	585.28	177.27	91.54	62.1	44.25	34.4	33.51	38.74	52.5	71.33	100.1	269.54	729.83	988.38	359.1	191.23	128.29	87.94	68.53
81	58.42	65.52	87.48	128.76	188.8	501.74	464.48	141.6	80.5	55.53	38.99	30.39	29.95	34.8	47.89	65.65	91.16	204.36	630.8	795.03	285.85	166.99	111.7	75.36	58.42
82	50.82	56.04	70.89	106.49	153.83	341.36	347.21	115.42	69.21	48.63	33.5	26.43	26.24	30.78	42.81	59.88	82.75	170.12	523.38	598.92	229.92	144.69	94.07	63.45	50.82
83	43.28	46.6	57.13	81.65	121.3	211.48	246.1	93.07	57.87	40.26	27.94	22.5	22.71	26.7	37.28	53.61	74.02	135.89	421.13	429.35	187.91	122.82	77.5	53.04	43.28
84	36.31	37.76	44.91	61.39	91.56	140.98	161.28	72.9	45.79	31.83	22.81	18.79	19.27	22.6	31.41	46.71	64.33	109.13	322.94	297.62	156.93	100.23	63.15	44.77	36.31
85	29.1	29.08	32.78	43.43	61.57	92.92	97.75	53.46	33.81	24.04	17.98	15.43	16.24	18.78	25.68	38.79	54.12	90.1	240.24	218.1	125.96	78.62	50.85	36.55	29.1
86	19.69	18.41	19.85	25.49	38.72	58.39	58.7	34.77	23.05	17.33	13.85	12.25	13.43	15.55	20.52	30.73	43.54	72.18	166.91	157.66	95.16	59.35	38.22	26.96	19.69
87	9.36	7.76	8.21	10.6	15.97	31.92	32.9	18.44	14.47	11.8	10.22	9.44	10.63	12.32	16.16	22.59	32.76	53.59	94.17	97.36	65.25	39.58	25.53	16.25	9.36
88	3.75	3.96	5.04	3.8	6.15	5.45	7.09	7.35	7.31	6.96	6.75	6.86	7.91	9.31	11.79	16.64	23.28	34.15	53.22	57.52	41	24.9	13.92	5.59	3.75
89	1.39	0.36	2.06	1.72	2.84	3.2	4.25	4.6	4.4	3.99	3.73	3.74	4.85	6.16	7.79	10.68	15.07	22.1	33.06	35.02	21.72	10.21	2.48	0.34	1.39
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.	ALEDXLATN/480	Sample ID.	Y1
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
480.02	60	0.807	361.7	0.934	5.06%

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**********