

Photometric Test Report

Relevant Standards

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

Prepared For

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Test Date

2021/11/1

Issue Date

2021/11/4

Prepared By



Wangzun Zhu

Approved By



Kevin Jia

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1.0 Test Summary

DLC Technical Requirements v5.1

Outdoor - Pole/Arm-Mounted Area and Roadway Luminaires				
Requirement Category	Test Method	Requirements		Test value
Luminaire Output (lm) (Goniophotometer - Section 4.2)	IES LM-79-2008	1000		7826
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	147.7
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		53.0
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%	120V	4.03%
		20.00%	277V	7.79%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9	120V	0.997
		0.9	277V	0.919
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step	5029±355	4990
		4 step	5029±220	
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥70		85
Minimum R9 (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥-40		15
Minimum Rf (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	≥70		83
Minimum Rg (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	≥89		93
Minimum IES Rcs,h1 (Integrating Sphere - Section 4.1)	ANSI/IES TM-30-18	-18%≤IES Rcs,h1≤+23%		-12%
Zonal Lumen Requirement (0°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	100%		100.00%
Zonal Lumen Requirement (80°-90°) (Goniophotometer - Section 4.2)	IES LM-79-2008	≤10%		0.45%
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		0.443
(Goniophotometer - Section 4.2)		Non-Worst Case		0.207
Power (Input Wattage - W)				
(Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		53.0
(Goniophotometer - Section 4.2)		Non-Worst Case		52.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2021/11/1	ALEDS5T	F1
2	Goniophotometer Test	2021/11/1	ALEDS5T	F1
3	THD and PF Test	2021/11/1	ALEDS5T	F1

Remark(If any)

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- 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.

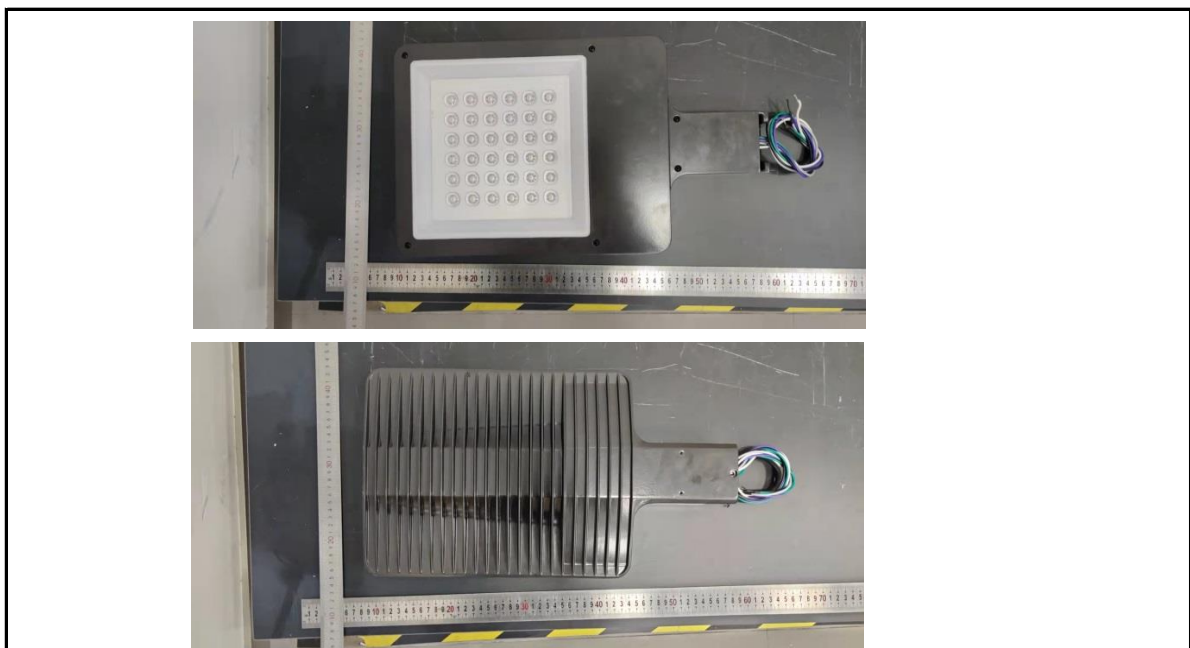
3.0 Production Description

Luminaire Description: ALEDS5T

Description: 50W/6,500 lm @ 5000K

Electrical Specification: 120V-277V,50/60HZ

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	ALEDS5T	Sample ID.	F1
Operate time (Min.)	90	Stabilization time (Min.)	45
Temperature (°C)	25.3	Humidity (%RH)	56.0

Test Method

The samples were tested according to the IES LM-79-2008.

Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.

The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.

The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.01	60	0.448	53.6	0.997
277.05	60	0.207	52.6	0.919

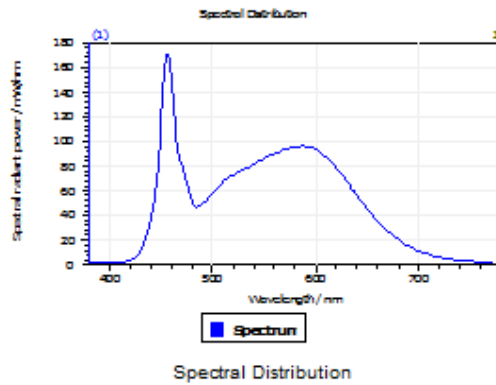
Test Result

CCT (K)	CRI	R9	Duv
4990	85	15	0.00064

Rf	Rg	IES Rcs,h1
83	93	-12%

4.1 Integrating Sphere Test

Results



Spectral values

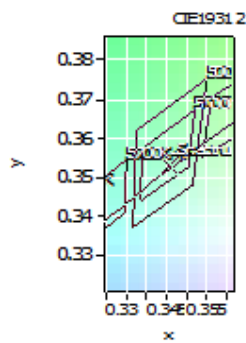
DominantWavelength 572.24 nm
Purity 0.097
PeakWavelength 456.47 nm
Radiant Power 18.9 W
Width50%:

Date: 2021/11/1 15:26:29

Color Coordinates

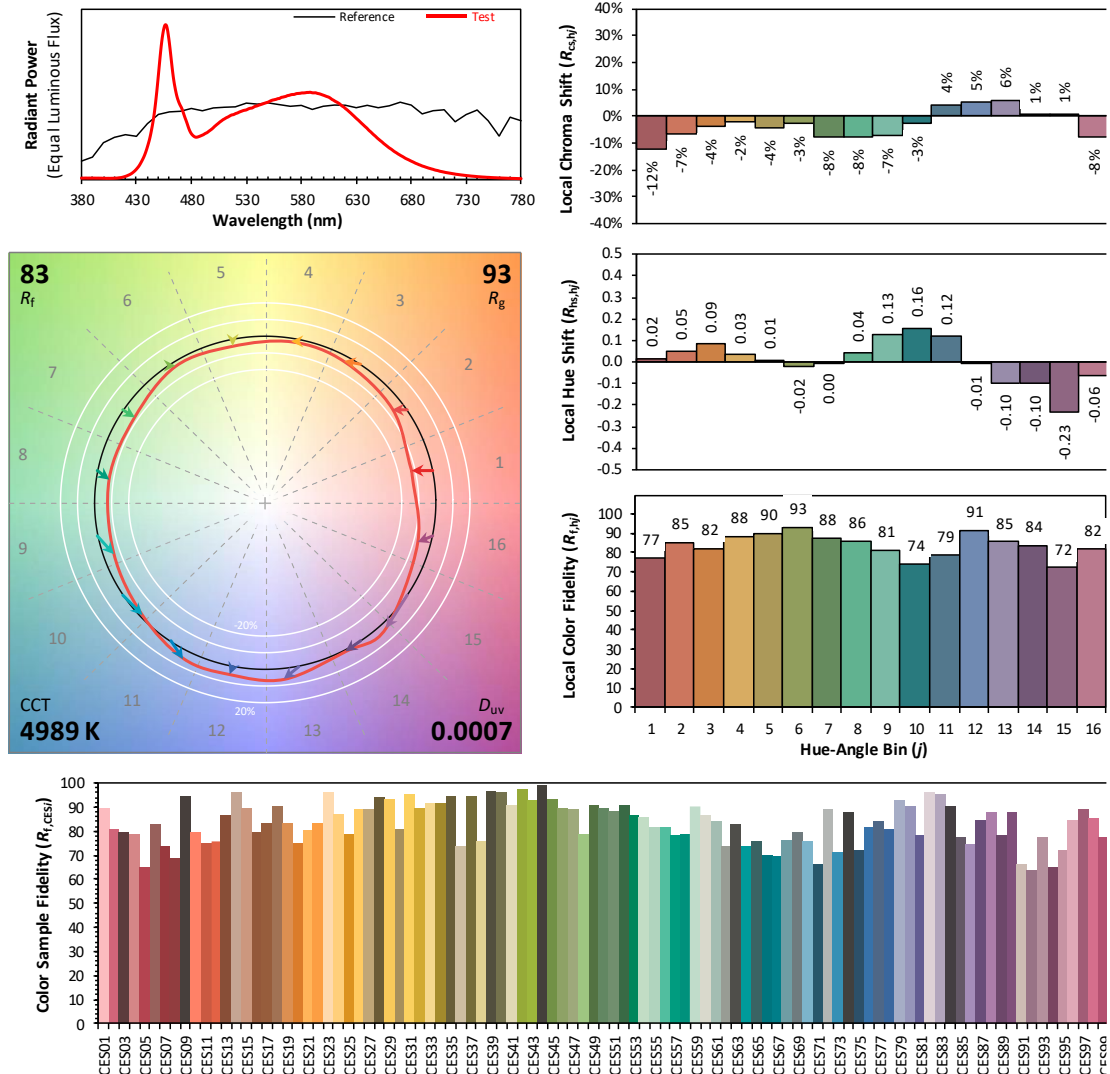
Correlated Color Temperat 4990 K
x: 0.3455 u: 0.2111 u': 0.2111
y: 0.3533 v: 0.3237 v': 0.4855

CRI01	84.1	CRI09	15.4
CRI02	93.5	CRI10	83.1
CRI03	94.9	CRI11	80.4
CRI04	81.2	CRI12	62.8
CRI05	83.9	CRI13	87.4
CRI06	88.5	CRI14	98.0
CRI07	85.0	CRI15	79.4
CRI08	67.2	CRI16	74.6
ResultsCRI	84.8		



PlanckDistance 6.4E-004

4.1 Integrating Sphere Test



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

x 0.3455
 y 0.3533
 u' 0.2111
 v' 0.4855

CIE 13.3-1995
(CRI)

R_a 84

R_g 16

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	ALEDS5T	Sample ID.	F1
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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.

The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.

The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 0.5° vertical intervals and 10° horizontal intervals.

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	120.05	60	0.443	53.0	0.997
NON-WROST CASE	277.00	60	0.207	52.6	0.919

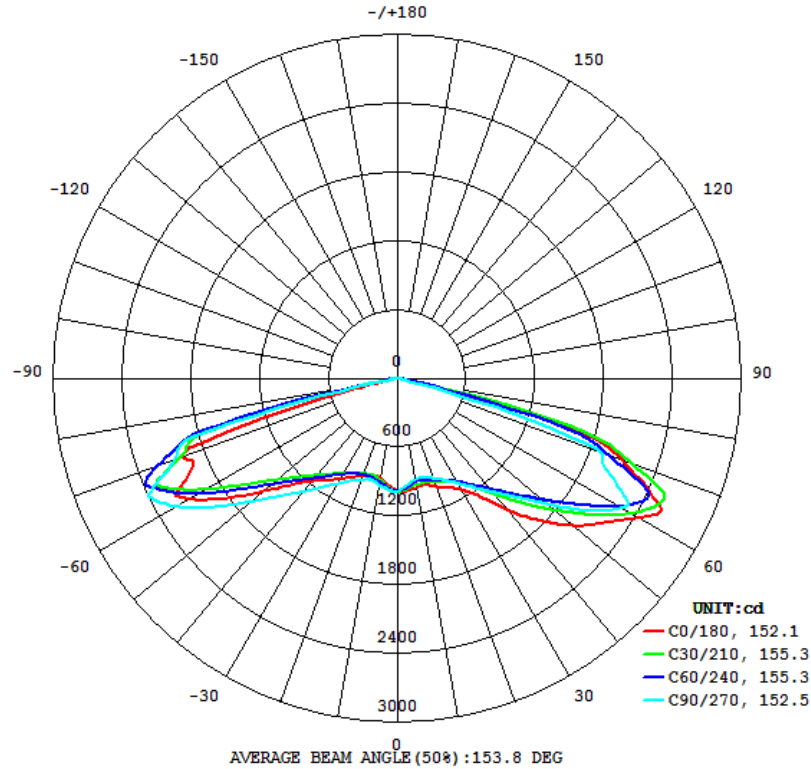
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
7826	156.8	156.4	152.1	152.5	147.7

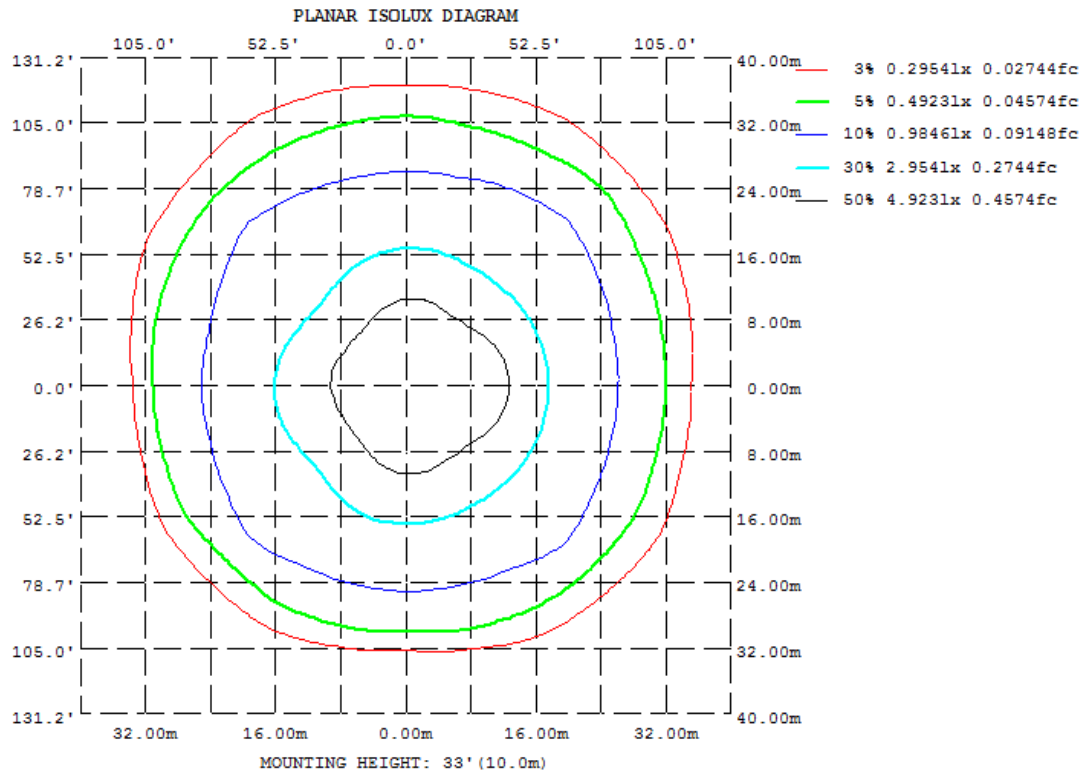
Zonal Lumen Requirement (0° - 90°)	Zonal Lumen Requirement (80° - 90°)	BUG rating
100.00%	0.45%	B3-U0-G3

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

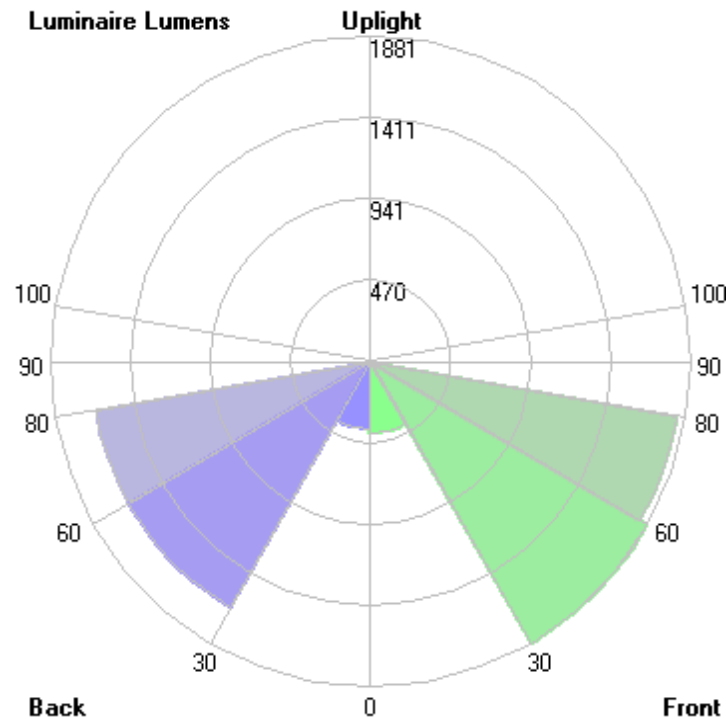
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	971.0	930.7	899.1	884.4	892.1	912.9	947.0	964.5
20	1010	949.3	931.8	874.0	906.7	888.7	948.4	966.8
30	1129	1038	1060	954.2	1015	946.4	1066	1048
40	1492	1262	1297	1117	1176	1100	1290	1277
50	2001	1661	1710	1387	1536	1360	1673	1641
60	2433	2302	2257	1991	2110	1894	2240	2244
70	2083	2462	1887	2134	1996	2539	2065	2683
80	69.47	81.98	39.01	66.95	58.95	252.8	84.14	386.5
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:cd							

	Zonal (lm)		Total (lm)	Percent
0-10	90.65	0 - 10	90.65	1.16%
10-20	260.20	0 - 20	350.85	4.48%
20-30	452.26	0 - 30	803.11	10.26%
30-40	712.21	0 - 40	1515.32	19.36%
40-50	1104.47	0 - 50	2619.79	33.48%
50-60	1704.30	0 - 60	4324.09	55.26%
60-70	2247.66	0 - 70	6571.75	83.98%
70-80	1218.79	0 - 80	7790.54	99.55%
80-90	35.00	0 - 90	7825.54	100.00%
90-100	0.00	0 - 100	7825.54	100.00%
100-110	0.00	0 - 110	7825.54	100.00%
110-120	0.00	0 - 120	7825.54	100.00%
120-130	0.00	0 - 130	7825.54	100.00%
130-140	0.00	0 - 140	7825.54	100.00%
140-150	0.00	0 - 150	7825.54	100.00%
150-160	0.00	0 - 160	7825.54	100.00%
160-170	0.00	0 - 170	7825.54	100.00%
170-180	0.00	0 - 180	7825.54	100.00%

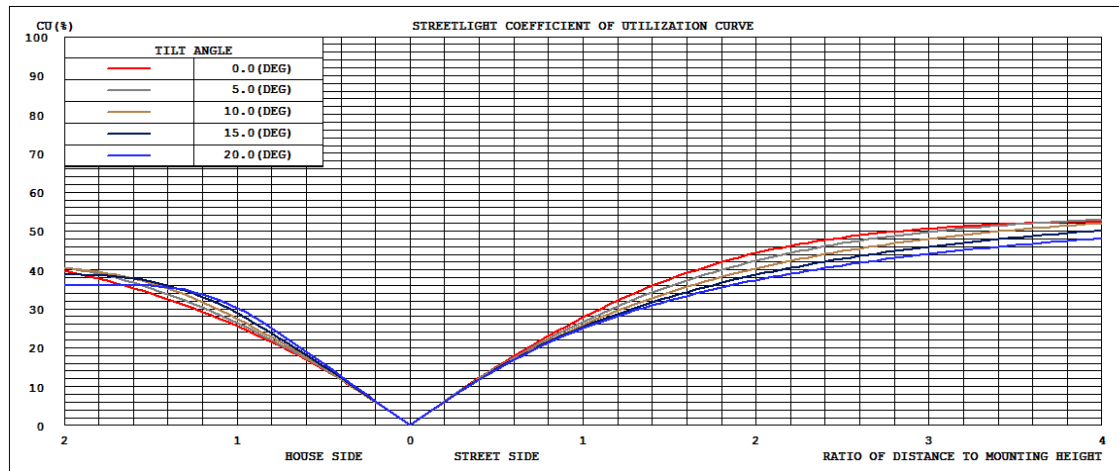
4.2 Goniophotometer Test

LCS/BUG

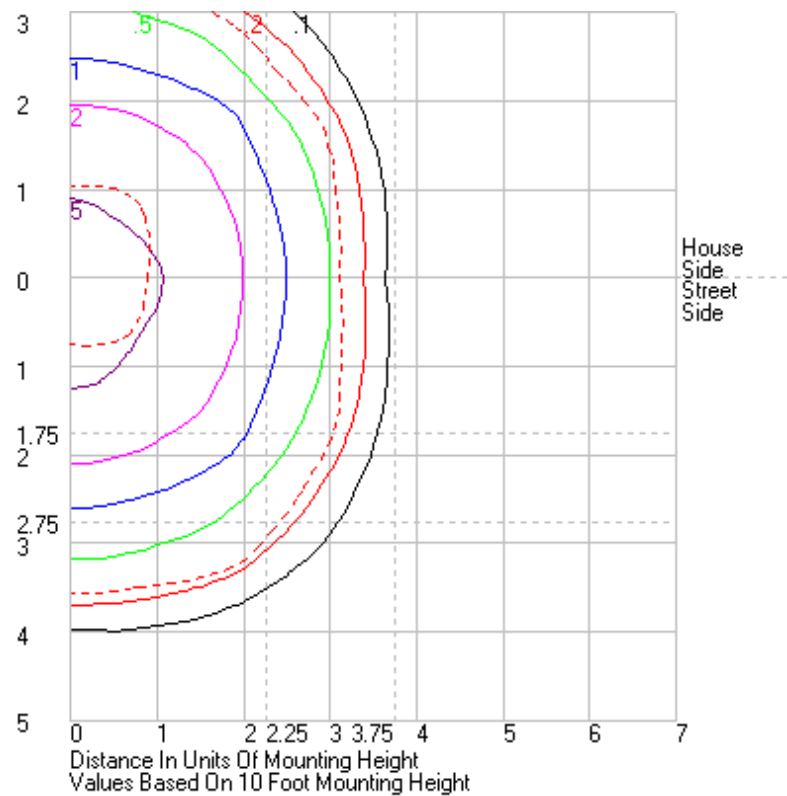


	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	415.1	N.A.	5.3
FM - Front-Medium (30-60)	1881.1	N.A.	24.0
FH - Front-High (60-80)	1829.3	N.A.	23.4
FVH - Front-Very High (80-90)	20.1	N.A.	0.3
BL - Back-Low (0-30)	388.0	N.A.	5.0
BM - Back-Medium (30-60)	1639.9	N.A.	21.0
BH - Back-High (60-80)	1637.1	N.A.	20.9
BVH - Back-Very High (80-90)	14.9	N.A.	0.2
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	7825.5	N.A.	100.0
BUG Rating	B3-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	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64	984.64
1	991.43	990.11	988.12	985.48	983.05	979.88	977.91	977.28	977.02	976.44	977.84	978.32	980.58	980.96	983.39	985.23	986.42	987.32	989.09	991.2	992.31	991.97	992.82	992.14	991.43
2	994.28	992.47	988	983.06	978.41	972.41	966.87	965.42	965.62	966.42	967.6	969.5	972.38	975.66	979.91	984	986.83	988.88	991.81	995.66	997.46	998.14	999.02	995.86	994.28
3	993.81	989.32	982.84	977.64	971.36	964.31	956.54	954.38	953.11	953.4	956.77	960.23	964.66	968.9	973.33	977.73	984.55	987.88	991.17	996.5	1000.14	1000.14	998.77	995.87	993.81
4	990.14	985.37	977.93	970.44	965.05	958.04	948.95	944.89	941.73	941.57	944.7	950.02	955.79	961.34	966.74	972.12	976.53	982.22	986.72	993.31	996.71	998.98	998.5	994.86	990.14
5	985.48	977.63	969.02	963.14	956.86	949.37	939.38	934.58	931.51	930.74	931.85	939.29	946.55	953.12	958.13	963.42	968.14	976.07	980.5	989.09	992.1	993.8	995.73	989.76	985.48
6	983.22	973.13	961.8	954.8	947.36	941.18	930.64	926.15	922.09	920.78	921.67	928.25	935.73	944.08	948.8	953.3	957.16	964.2	971.14	980.64	985.19	988.84	987.91	989.31	983.22
7	981.03	968.44	956.85	946.63	939.63	932.52	921.43	916.61	913.08	911.09	911.44	916.96	924.96	932.12	938.21	941.92	945.92	956.57	964.83	974.62	975.53	980.59	984.98	987.49	981.03
8	978.28	964.71	951.62	941.09	930.27	921.6	912.55	908.15	905.08	901.8	901.35	905.66	913.68	920.16	926.1	929.35	938.77	950.46	960	969.58	969.67	973.21	981.18	985.65	978.28
9	975.01	961.66	948.28	935.5	923.53	914.05	905.85	901.1	897.12	893.42	892.15	894	901.69	908.05	914.17	919.57	932.05	943.41	953.33	963.49	964.64	966.93	976.57	982.41	975.01
10	971.03	957.94	944.2	930.74	917.25	907.43	899.08	894.53	889.95	884.36	883.81	884.43	892.05	897.87	901.94	912.86	926.16	938.49	947.04	956.54	959.72	964.46	973.04	978.13	971.03
11	967	953.89	942.82	928.17	914.87	902.3	894.81	889.59	883.85	877.36	876.31	877.15	884.55	888.58	892.12	906.11	919.71	931.24	939.6	948.74	956.12	961.97	968.66	973	967
12	963.37	951.62	941.24	927.69	913.7	898.86	892.77	884.82	877.88	872.5	870.97	872.2	879.36	882.55	884.44	899.86	913.19	924.51	932.41	942.02	951.84	960.19	964.47	969.8	963.37
13	962.45	949.59	939.9	927.68	913.89	898.57	893.81	882.8	874.97	868.46	867.68	869.28	876.91	878.21	879.15	894.21	906.6	917.98	926.87	936.59	948.89	959.29	962.2	966.5	962.45
14	961.59	950.27	939.64	928.56	914.81	900.09	896.95	883.67	871.96	865.68	864.27	868.76	877.6	876.91	877.96	889.72	900.15	912.95	922.86	931.7	945.68	957.07	960.87	966.49	961.59
15	963.5	950.93	941.64	929.95	918.11	904.63	902.3	887.71	871.28	864.94	862.94	869.07	879.7	877.6	877.14	885.9	896.74	909.6	921.14	929.91	944.39	957.45	962.51	965.43	963.5
16	970.31	955.14	944.37	932.65	923.45	909.77	907.48	891.3	872.14	864.27	862.69	869.38	883.96	879.17	876.72	884.14	894.26	907.6	922.13	929.29	944.87	956.95	964.94	968.49	970.31
17	979.74	962.98	947.46	936.2	928.57	915.39	913.65	895.8	872.81	864.47	863.14	871.69	887.91	883.27	878.33	883.92	892.22	909.06	925.94	932.03	946.24	956.45	966.85	974.71	979.74
18	990.18	970.48	951.55	941.7	934.85	921.01	919.39	901	873.97	866.69	864.71	875.89	894.32	885.74	880.77	885.26	891.14	912.88	932.42	936.67	949.16	959.46	971.94	984.12	990.18
19	1000.36	979.49	958.39	945.84	940.07	926.64	925.06	907.33	877.81	870.08	867.56	880.41	899.74	890.78	883.95	886.25	892.72	918.22	940.8	943.32	953.56	963.85	978.73	992.52	1000.36
20	1009.64	986.83	964.52	949.29	946.02	933.61	931.75	913.8	883.14	873.96	871.02	886.67	906.68	895.81	887.33	888.73	895.05	923.23	948.39	951.79	959.66	966.8	985.77	1001.63	1009.64
21	1018.71	993.72	969.61	953.42	952.19	941.52	939.88	921.68	888.75	879.55	875.93	893.43	913.99	902.38	892.29	891.2	899.1	929.09	955.88	959.97	965.3	969.46	991.56	1009.46	1018.71
22	1026.39	1001.93	974.05	960.02	959.61	950.14	948.11	929.56	896.42	884.75	880.47	900.39	922.1	909.89	897.63	894.54	903.39	934.85	963.8	968.07	971.32	974.68	998.27	1016.44	1026.39
23	1034.61	1010.95	980.43	967	967.6	961.54	958.98	940.22	905.3	890.98	886.28	909.57	931.9	918.71	903.31	898.81	907.97	939.88	971.3	976.94	977.61	981.45	1004.93	1024.65	1034.61
24	1042.89	1019.93	986.57	974.35	977.04	973.64	970.51	950.6	914.3	896.6	893.12	919.24	943.09	928.7	909.74	902.66	913.61	948.37	979.78	986.14	984.79	988.94	1012.22	1033.71	1042.89
25	1053.19	1029.89	994.99	982.56	986.79	986.88	983.33	961.82	924.4	904.4	901.32	928.8	954.21	939.72	917.19	908.07	919.87	956.51	990.7	998.12	994.03	997.05	1020.34	1043.3	1053.19
26	1064.84	1040.21	1005.04	992.76	998.54	1002.94	998.85	974.29	936.37	912.56	911.09	939.03	965.88	951.58	925.47	913.97	927.23	966.6	1003	1009.91	1003.84	1004.5	1029.95	1056.35	1064.84
27	1078.39	1052.93	1015.59	1001.98	1008.01	1017.91	1013.4	986.51	948.02	921.11	920.55	950.47	978.78	963.76	934.54	920.48	935.64	978.33	1017.56	1025.89	1014.28	1013.48	1040.31	1068.91	1078.39
28	1093.85	1066	1028.55	1014.09	1018.19	1035.79	1028.56	1000.77	960.21	931.61	931.04	961.25	989.97	975.28	942.65	928.04	944.72	991.01	1033.28	1040.82	1025.81	1023.71	1051.33	1083.37	1093.85
29	1110.68	1080.76	1040.88	1025.58	1029.89	1053.02	1042.79	1015.48	973.53	942.92	942.32	973.01	1002.82	987.9	950.78	936.77	955.94	1004.17	1049.08	1058.25	1038.52	1034.61	1063.4	1100.13	1110.68
30	1129.24	1096.52	1055.54	1038.44	1042.48	1071	1059.69	1030.45	987.04	954.19	954.09	985.24	1015.11	1001.27	959.16	946.37	967.79	1017.11	1065.51	1077.84	1054.67	1048.48	1077.76	1118.73	1129.24
31	1149.62	1115.43	1071.92	1053.44	1059.31	1091.82	1080.35	1049.23	1002.84	967.79	966.81	998.07	1028.46	1014.66	968.63	957.65	979.63	1031.09	1081.99	1096.19	1070.6	1064.38	1093.17	1138.45	1149.62
32	1170.69	1135.27	1089.07	1069.95	1075.27	1112.77	1099.12	1066.81	1019.6	981.35	980.89	1012.87	1043.83	1028.23	979.42	969.87	992.9	1046.45	1099.61	1116.44	1088.04	1081.29	1110.22	1159.6	1170.69
33	1195.19	1158.46	1110.11	1087.83	1094.63	1133.97	1121.16	1088.04	1036.86	996.87	996.5	1028.36	1058.68	1043.93	992.41	981.92	1006.86	1060.92	1116.65	1137.42	1107.33	1099.84	1130.16	1182.59	1195.19
34	1224.19	1184.64	1131.27	1107.62	1116.28	1158.66	1143.64	1108.01	1057.05	1013.29	1012.52	1043.11	1073.25	1059.05	1006.41	995.11	1021.83	1079.07	1137.05	1157.8	1125.58	1119.33	1151.97	1209.1	1224.19
35	1259.23	1214.95	1157.77	1128.08	1137.27	1180.45	1165.03	1130.07	1076.01	1029.68	1028.91	1059.13	1088.91	1075.69	1021.65	1011.26	1039.87	1099.12	1160.37	1180.7	1146.98	1141.23	1174.71	1238.46	1259.23
36	1298.92	1252.41	1185.81	1153.31	1161.48	1206.92	1190.41	1152.91	1097.38	1047.06	1045.17	1075.27	1105.28	1093.2	1036.5	1028.6	1057.69	1120.48	1183.32	1205.28	1168.48	1164.82	1201.44	1271.22	1298.92
37	1342.62	1290.44	1215.88	1177.93	1185.74	1233.96	1214.76	1176.87	1117.7	1062.78	1060.32	1091.41	1121.98	1110.01	1052.13	1045.32	1077.26	1144.45	1208	1229.68	1190.71	1190.5	1230.82	1307.53	1342.62
38	1389.47	1332.88	1249.83	1204.08	1209.88	1260.2	1240.84	1202.3	1138.19	1080.26	1077.95	1109.08	1138.98	1129.5	1070.36	1063.84	1097	1167.21	1233.84	1254.38	1215.8	1218.42	1262.39	1347.39	1389.47
39	1439.53	1377.82	1283.3	1233.01	1237.54	1291.57	1269.09	1229.45	1159.86	1098.37	1094.34	1125.87	1157.38	1150.02	1087.81	1080.92	1117.77	1192.57	1260.78	1278.97	1240.4	1248.57	1295.45	1391.91	1439.53
40	1491.95	1424.15	1320.74	1261.86	1263.18	1320.33	1297.45	1256.79	1181.13	1116.7	1110.91	1144.17	1175.8	1171.88	1106.69	1100.45	1139.5	1220.19	1290.01	1308.37	1265.26	1276.54	133		

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161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	ALEDS5T	Sample ID.	F1
Temperature (°C)	25.3	Humidity (%RH)	56.0

Test Method

The samples were tested according to the ANSI C82.77:2002.

The total harmonic distortion shall be measured to the 40th order.

The ambient temperature condition was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion were calculated.

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD
120.01	60	0.448	53.6	0.997	4.03%
277.05	60	0.207	52.6	0.919	7.79%

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*****