

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

Room 6A33, No.1388, Wuzhong road, Shanghai, China

Xiao Xiang, 15921313292, Gary.Xiao@rabweb.com

Prepared By

Deliver Co., Ltd.

Block 11, 78 Keling Road, SSTP, Suzhou, China

0512-66801950, kevin.jia@szdeliver.com

Project Number

DLF2201106

Report Number

DLF2201106-4a

Test Date

2022/1/12

Issue Date

2022/1/13

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		13957
Minimum Luminaire Efficacy (lm/W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Standard 105	Premium 120	154.6
Power (Input Wattage) (W) (Goniophotometer - Section 4.2)	IES LM-79-2008	Worst Case		90.3
Total Harmonic Distortion (A%) (THD & PF - section 4.3)	ANSI C82.77:2014	20.00%		17.13%
Power Factor (THD & PF - section 4.3)	ANSI C82.77:2014	0.9		0.896
Allowable CCTs* (K) (Integrating Sphere - Section 4.1)	IES LM-79-2008	7 step 4 step	5029±355 5029±220	4942
Minimum CRI (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥70		84
Minimum R9 (Integrating Sphere - Section 4.1)	IES LM-79-2008 CIE 13.3-1995	≥-40		16
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		93
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%		0.66%
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		0.211

2.0 Test List

Test Item	Test	Test Date	Model Number	Sample No.
1	Integrating Sphere Test	2022/1/12	ALEDM5T/480	D1
2	Goniophotometer Test	2022/1/12	ALEDM5T/480	D1
3	THD and PF Test	2022/1/12	ALEDM5T/480	D1

Remark(If any)

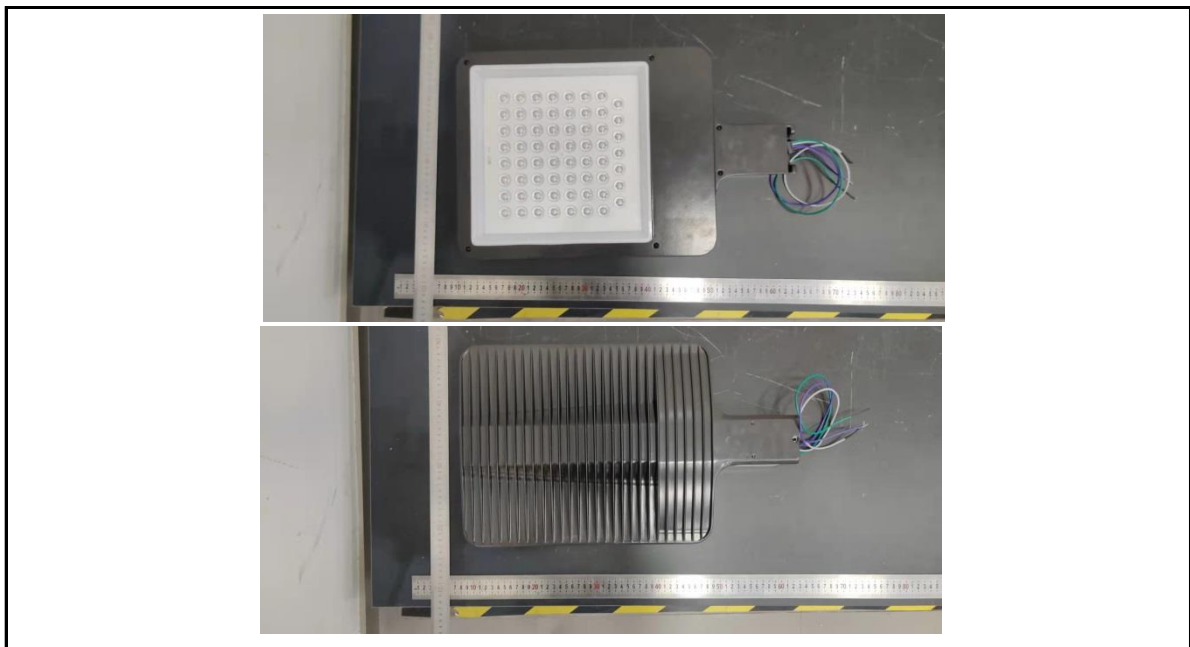
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3.0 Production Description

Luminaire Description: 90W/12,000 lm @ 5000K

Electrical Specification: 480V,50/60HZ

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	ALEDM5T/480	Sample ID.	D1
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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

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
479.93	60	0.209	90.0	0.896

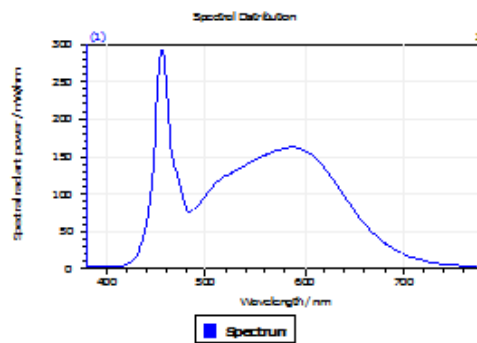
Test Result

CCT (K)	CRI	R9	Duv
4942	84	16	0.0008

Rf	Rg	IES Rcs,h1
84	93	-12%

4.1 Integrating Sphere Test

Results



Spectral values

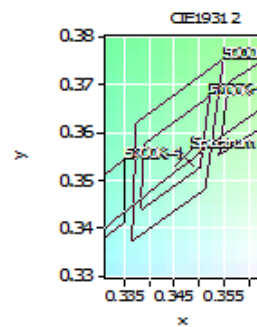
DominantWavelength	572.68 nm
Purity	0.106
PeakWavelength	456.00 nm
Radiant Power	31.82 W
Width50%	19.50 nm

Color Coordinates

Correlated Color Temporal 4942 K

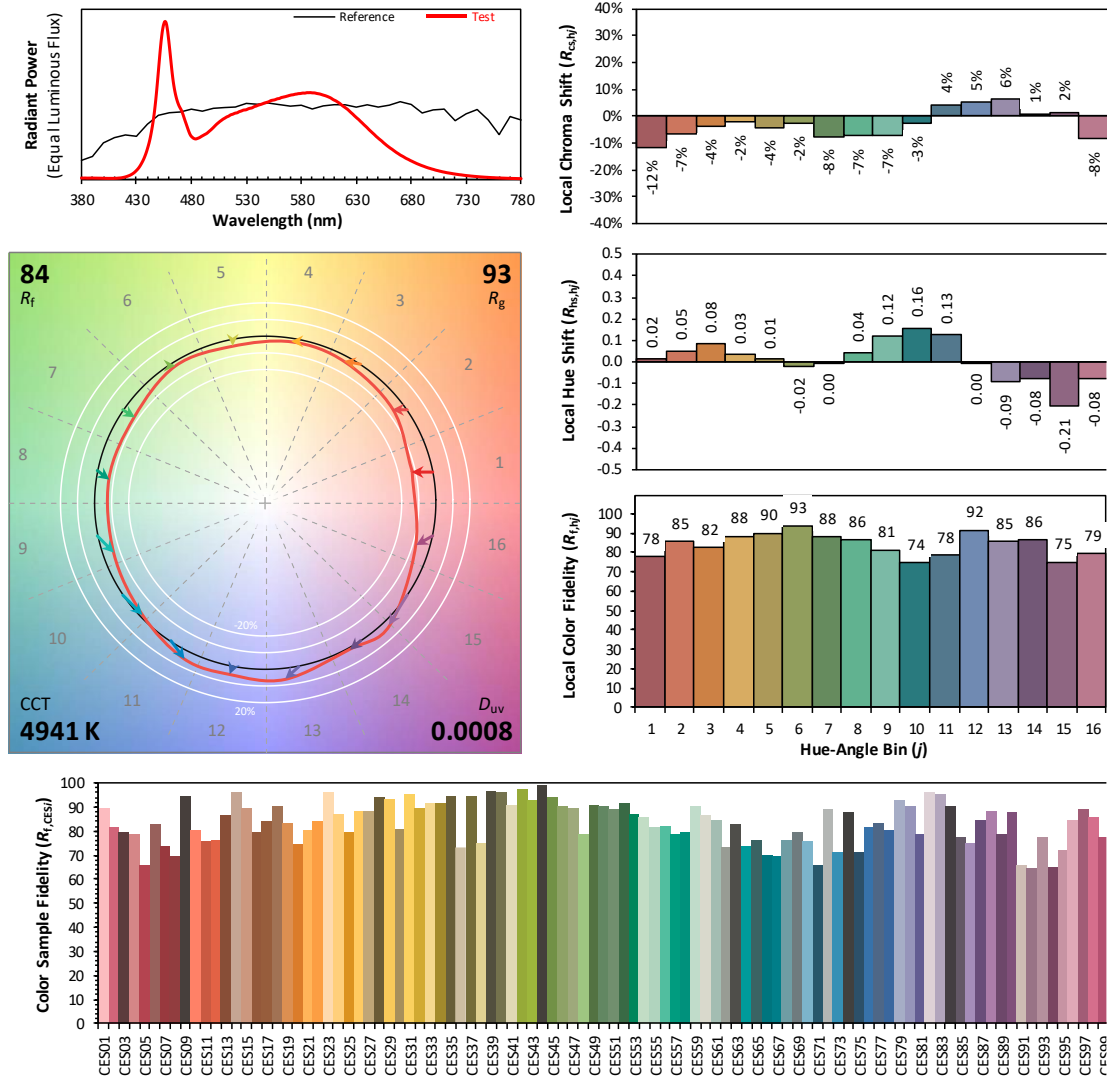
x: 0.3469 u: 0.2115 u': 0.2115
y: 0.3547 v: 0.3243 v': 0.4864

ResultsCRICRI01	83.7	ResultsCRICRI09	16.4
ResultsCRICRI02	93.6	ResultsCRICRI10	83.1
ResultsCRICRI03	94.8	ResultsCRICRI11	78.9
ResultsCRICRI04	79.6	ResultsCRICRI12	57.1
ResultsCRICRI05	82.8	ResultsCRICRI13	87.2
ResultsCRICRI06	88.6	ResultsCRICRI14	97.9
ResultsCRICRI07	85.1	ResultsCRICRI15	78.2
ResultsCRICRI08	67.3	ResultsCRICRI16	72.2
ResultsCRI	84.4		



PlanckDistance 8.0E-004

4.1 Integrating Sphere Test



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

x 0.3469
 y 0.3547
 u' 0.2115
 v' 0.4864

CIE 13.3-1995
 (CRI)

R_a 85

R_g 18

Colors 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.	ALEDM5T/480	Sample ID.	D1
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	479.98	60	0.211	90.3	0.893

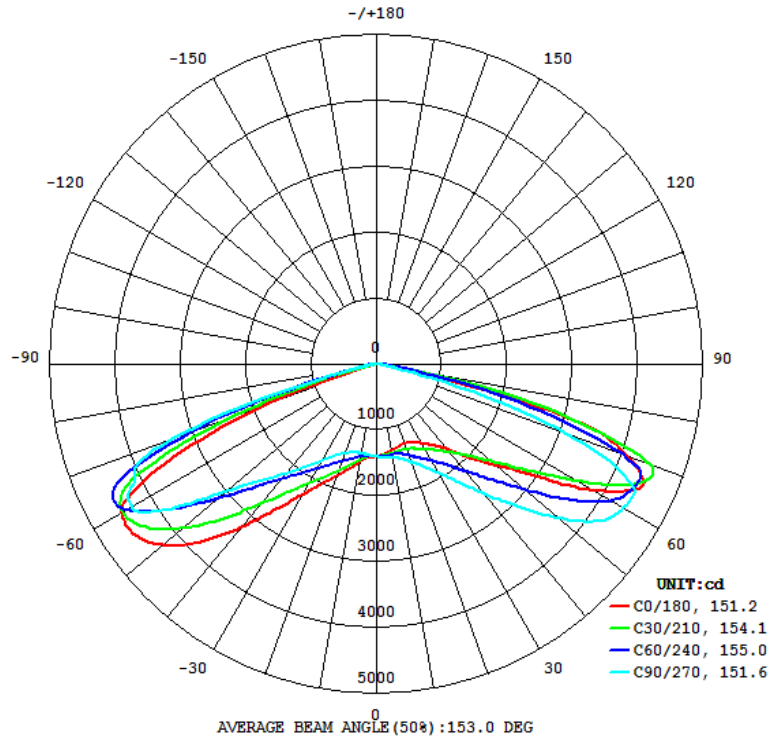
Test Result

Flux (lm)	Field Angle(10%)		Beam Angle(50%)		Luminous Efficacy (lm/W)
	C0-180	C90-270	C0-180	C90-270	
13957	159.4	159.7	151.2	151.6	154.6

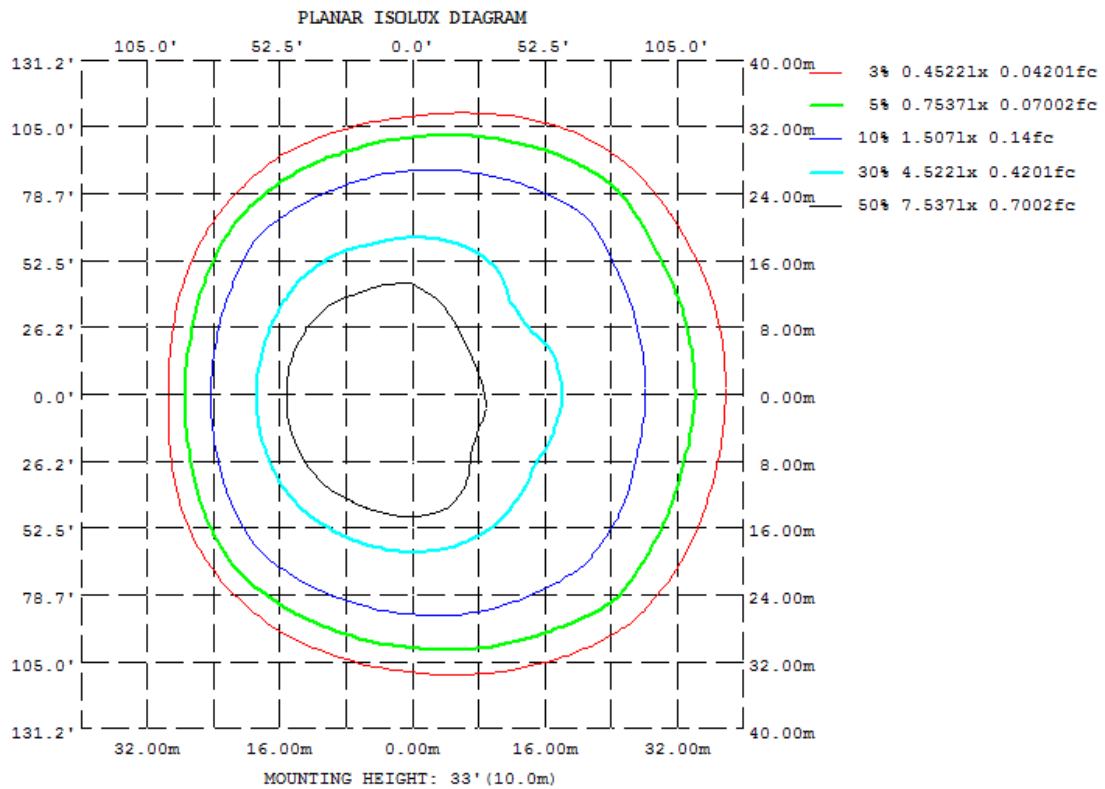
Zonal Lumen Requirement (0° - 90°)	Zonal Lumen Requirement (80° - 90°)	BUG rating
100.00%	0.66%	B3-U0-G2

4.2 Goniophotometer Test

Light Distrubtion Curve



Isolux Plot



4.2 Goniophotometer Test

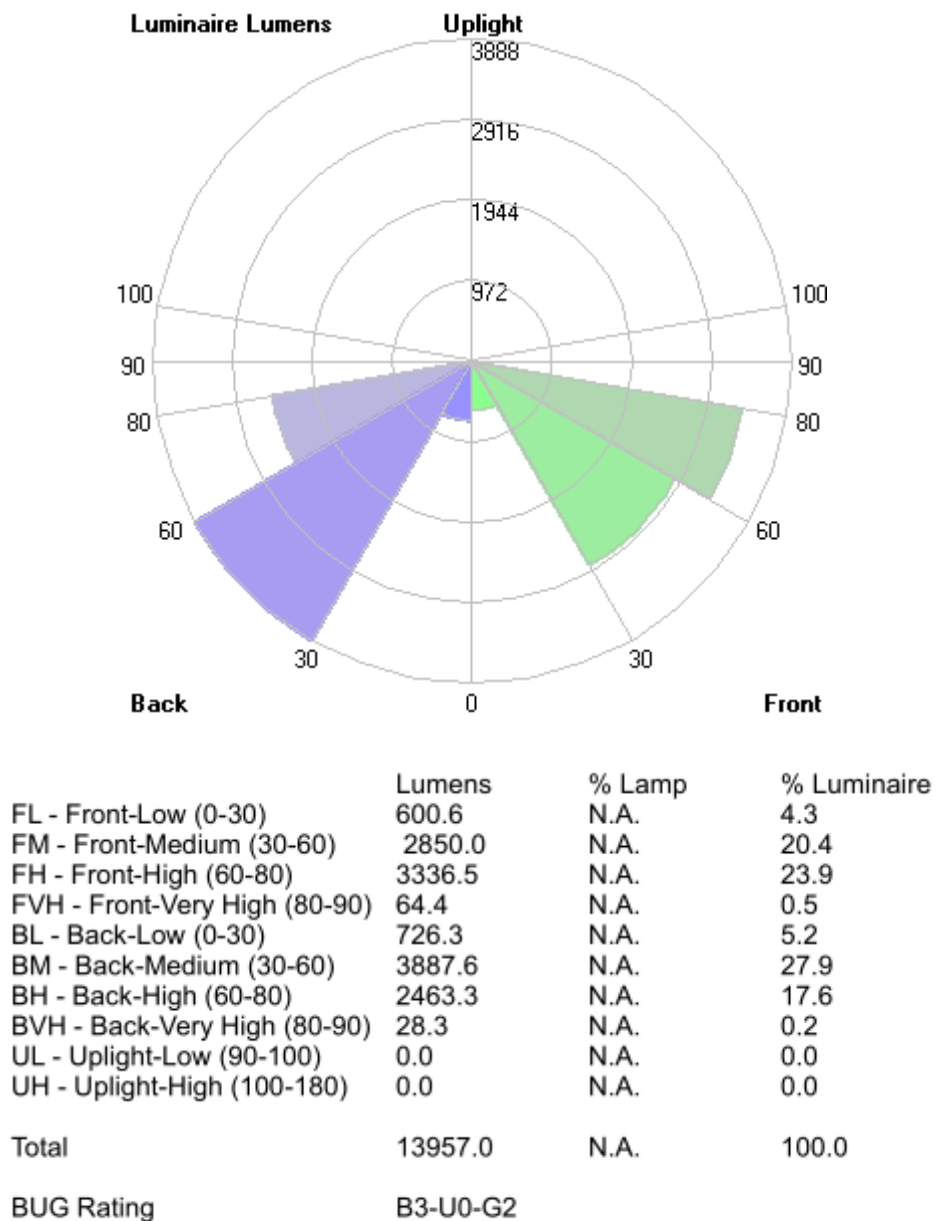
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315
10	1338	1393	1444	1504	1502	1449	1380	1345
20	1286	1435	1592	1779	1803	1651	1448	1362
30	1397	1572	1917	2157	2288	1936	1694	1487
40	1697	1876	2567	2805	3235	2458	2163	1739
50	2400	2511	3645	3867	4277	3463	2993	2205
60	3851	3763	4370	4622	4503	4570	4329	3480
70	4069	4501	3116	3048	1810	3108	3346	5000
80	393.3	648.7	120.5	169.7	85.93	140.4	153.5	524.5
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							

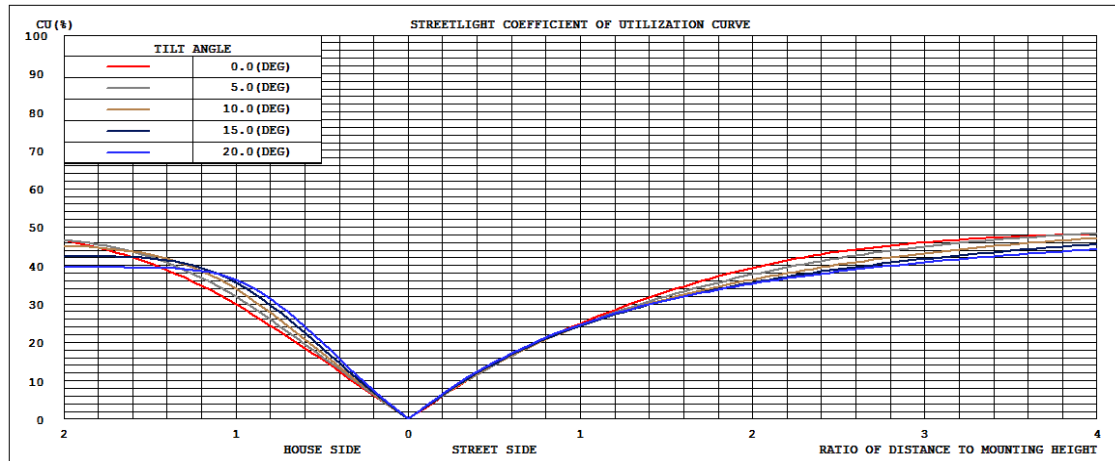
	Zonal (lm)		Total (lm)	Percent
0-10	134.79	0 - 10	134.79	0.97%
10-20	419.10	0 - 20	553.89	3.97%
20-30	773.03	0 - 30	1326.92	9.51%
30-40	1288.77	0 - 40	2615.69	18.74%
40-50	2123.90	0 - 50	4739.59	33.96%
50-60	3324.90	0 - 60	8064.49	57.78%
60-70	4047.08	0 - 70	12111.57	86.78%
70-80	1752.73	0 - 80	13864.30	99.34%
80-90	92.72	0 - 90	13957.02	100.00%
90-100	0.00	0 - 100	13957.02	100.00%
100-110	0.00	0 - 110	13957.02	100.00%
110-120	0.00	0 - 120	13957.02	100.00%
120-130	0.00	0 - 130	13957.02	100.00%
130-140	0.00	0 - 140	13957.02	100.00%
140-150	0.00	0 - 150	13957.02	100.00%
150-160	0.00	0 - 160	13957.02	100.00%
160-170	0.00	0 - 170	13957.02	100.00%
170-180	0.00	0 - 180	13957.02	100.00%

4.2 Goniophotometer Test

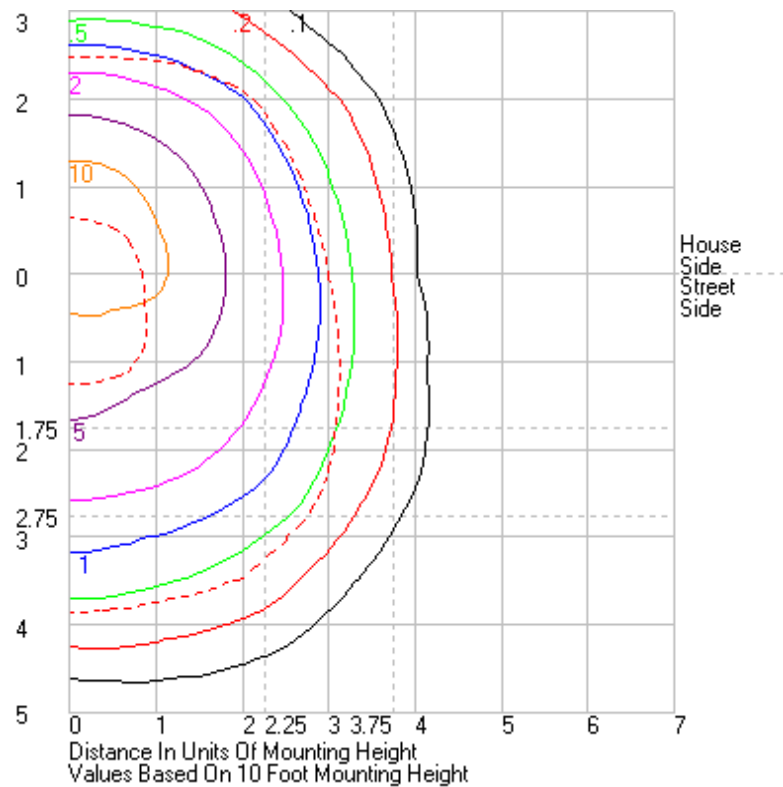
LCS/BUG



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	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99	1408.99
1	1402.48	1403.54	1404.27	1407.36	1409.82	1412.26	1413.62	1414.27	1414.55	1414.71	1414.74	1415.36	1411.03	1410.05	1409.14	1408.51	1408	1407.34	1406.43	1405.71	1404.85	1404.18	1404.27	1404.53	1402.48
2	1395.55	1397.33	1401.27	1406.21	1411.36	1416.5	1418.79	1419.88	1420.7	1421.08	1420.71	1421.11	1416.19	1413.73	1412.14	1410.54	1408.71	1406.66	1404.8	1403.27	1399.35	1397.43	1397.61	1395.55	
3	1385.67	1388.98	1395.39	1404.24	1412.96	1419.29	1424.39	1426.74	1428.76	1429.86	1428.12	1425.3	1418.85	1417.04	1415.92	1414.12	1409.83	1405.73	1401.91	1399.62	1396.37	1391.67	1388.05	1387.09	1385.67
4	1379.59	1382.59	1389.96	1400.22	1413.43	1423.34	1429.8	1433.66	1436.51	1436.3	1431.62	1427.36	1420.26	1417.54	1416.6	1415.31	1411.7	1405.27	1400.53	1395.99	1389.2	1384.03	1381.36	1380.36	1379.59
5	1375.78	1380.26	1387.31	1398.77	1413.19	1426.92	1435.59	1441.63	1444.52	1441.86	1436.98	1431.71	1423.15	1420.33	1418.48	1416.5	1414.87	1404.81	1397.5	1390.49	1382.34	1378.79	1376.41	1376.19	1375.78
6	1370.01	1378.69	1388.55	1399.85	1412.99	1427.43	1438.87	1448.1	1453.17	1448.98	1444.97	1440.21	1431.78	1427.05	1422.17	1418.23	1417.05	1403.24	1392.12	1382.72	1375.6	1372.77	1373.32	1371.1	1370.01
7	1361	1371.22	1387.96	1401.46	1412.09	1425.62	1439.84	1452.66	1461.3	1459.47	1457.88	1453.78	1443.59	1438.68	1429.98	1423.23	1417.26	1399.78	1385.86	1372.47	1366.76	1367.99	1367.49	1362.09	1361
8	1354.2	1366.12	1383.51	1401.48	1408.47	1421.67	1439.62	1457.37	1469.91	1472.64	1473.68	1471.22	1459.24	1451.61	1441.52	1429.5	1416.84	1397.92	1381.77	1364.68	1357.51	1361.08	1359.43	1354.62	1354.2
9	1346.22	1361.31	1381.17	1398.59	1404.03	1417.12	1440.72	1462.94	1479.5	1486.62	1492.39	1491.69	1480.15	1469.91	1455.3	1438.82	1419.32	1400.39	1380.25	1358.95	1349.54	1353.35	1352.55	1347.62	1346.22
10	1337.66	1354.41	1379.61	1393.19	1400.62	1416.15	1444.07	1471.41	1491.81	1503.7	1512.92	1514.93	1501.87	1491.39	1472.45	1449.48	1426.13	1405.61	1380.07	1357.13	1343.41	1344.8	1346.89	1339.74	1337.66
11	1331.55	1349.63	1375.15	1387.09	1399.24	1417.93	1450.24	1480.81	1504.96	1522.78	1536.05	1540.78	1528.81	1513.26	1492.57	1462.88	1436.07	1412.62	1381.84	1356.17	1339.83	1337.95	1340.87	1334.83	1331.55
12	1324.97	1344.55	1371.5	1383.71	1400.54	1421.91	1458.33	1492.79	1520.86	1545.73	1560.62	1567.9	1556.16	1540.25	1512.59	1479.31	1447.88	1419.53	1383.21	1355.2	1338.71	1334.15	1335.71	1329.01	1324.97
13	1316.86	1339.77	1368.54	1383.63	1403.71	1429.51	1469.97	1507.29	1538.68	1571.93	1588.01	1596.19	1583.42	1564.66	1536.81	1496.78	1460.69	1426.97	1386.03	1356.16	1338.73	1331.95	1331.87	1322.87	1316.86
14	1309.75	1334.89	1366.96	1386.1	1409.58	1440.11	1483.83	1524.31	1558.91	1596.95	1613.91	1623.74	1614.04	1591.67	1559.98	1518.54	1474.05	1436.24	1391.66	1359.89	1339.41	1332.47	1327.55	1317.16	1309.75
15	1302.3	1330.49	1365.83	1390.15	1418.3	1452.23	1496.82	1543.37	1582.22	1626.66	1642.65	1653.09	1642.42	1619.76	1584.75	1539.75	1489.1	1446.73	1398.36	1365.96	1342.41	1336.54	1323.79	1311.77	1302.3
16	1295.85	1327.67	1365.8	1396.86	1428.48	1466.48	1513.13	1563.34	1608.13	1655.11	1673.51	1683.02	1671.74	1643.34	1610.3	1560.63	1506.29	1456.85	1404.52	1372.28	1347.59	1340.84	1321.06	1307.11	1295.85
17	1290.67	1325.19	1368	1405.46	1440.04	1481.46	1529.72	1583.93	1633.66	1684.13	1704.66	1714.11	1702.45	1674.88	1636.35	1582.58	1522.03	1466.81	1411.88	1377.99	1356.19	1344.59	1319.08	1303.26	1290.67
18	1286.38	1323.63	1370.99	1414.03	1452.57	1497.85	1548.99	1606.88	1661.69	1715.23	1739.05	1747.57	1733.45	1703.54	1664.82	1603.74	1538.82	1477.92	1421.15	1385.23	1363.48	1348.81	1318.68	1299.82	1286.38
19	1284.34	1323.15	1374.94	1424.36	1467.24	1516.61	1570.2	1631.05	1689.6	1745.4	1774.57	1781.12	1767.78	1733.4	1693.78	1627.09	1555.26	1491.07	1432.91	1394.59	1372.25	1353.92	1320.51	1296.21	1284.34
20	1285.83	1323.35	1379.99	1435.07	1483.47	1536.72	1592.41	1656.83	1719.33	1778.75	1811.82	1818.25	1803.06	1769.22	1724.6	1650.92	1572.94	1505.7	1447.67	1407.11	1382.2	1361.5	1324.11	1294.03	1285.83
21	1290.29	1326.22	1384.88	1446.13	1502.38	1557.33	1615.78	1683.76	1750.41	1811.47	1850.8	1855.65	1839.67	1800.07	1756.33	1674.23	1593.16	1521.33	1463.53	1421.32	1395.22	1368.93	1328.69	1295.41	1290.29
22	1296.13	1331.32	1392.04	1457.58	1521.78	1577.08	1639.04	1710.71	1781.99	1844.23	1888.51	1894.16	1876.11	1836.89	1786.87	1699.09	1613.14	1538.58	1479.64	1437.52	1409.94	1376.36	1333.2	1299.27	1296.13
23	1302.7	1337.9	1401.24	1469.38	1542.94	1597.29	1664.87	1739.9	1815.12	1879.68	1930.39	1935.8	1916.5	1871.82	1820.68	1722.86	1636.22	1555.03	1496.27	1452.75	1426.8	1384.09	1340.53	1304.33	1302.7
24	1309.74	1344.92	1412.82	1480.95	1561.25	1620.12	1692.75	1769.91	1846.97	1915.42	1969.98	1977.4	1960.58	1909.65	1854.22	1749.86	1659.53	1574.69	1516.14	1469.7	1445.05	1392.88	1350.07	1310.4	1309.74
25	1320.55	1354.58	1425.52	1493.41	1580.07	1643.99	1722.51	1802.45	1882.68	1953.38	2010.93	2023.47	2006.22	1954.62	1888.21	1778.78	1682.67	1595.89	1540.06	1489.93	1461.92	1402.55	1360.85	1319.84	1320.55
26	1332.94	1366.84	1438.43	1507	1600.72	1672.03	1756.79	1837.22	1917.43	1992.73	2054.78	2073.3	2055.07	1997.07	1924.49	1808.91	1708.99	1621.27	1565.14	1513	1478.16	1415.53	1373.35	1331.13	1332.94
27	1346.12	1380.34	1450.63	1521	1621.44	1701.23	1792.61	1871.51	1954.2	2031.74	2096.49	2123.52	2108.69	2047.99	1961.63	1841.3	1737	1648.86	1593.44	1538.81	1497.09	1431.1	1387.94	1344.15	1346.12
28	1362.35	1396.48	1466.14	1537.06	1645.57	1734.57	1832.31	1912.31	1995.01	2073.82	2145.05	2181.14	2162.68	2101.17	2003.62	1871.85	1767.97	1678.92	1623.93	1566.47	1518.41	1449.58	1404.58	1358.01	1362.35
29	1379.98	1413.62	1482.3	1553.11	1669.61	1770.22	1873.16	1953.05	2035.9	2114.83	2194.47	2241.09	2222.95	2154.5	2044.28	1903.86	1799.64	1711.76	1657.4	1596.54	1540.7	1470.03	1423.06	1373.77	1379.98
30	1397.14	1433.66	1498.75	1571.51	1697.52	1809.89	1917.07	1997.75	2079.48	2156.97	2248.06	2304.29	2287.74	2219.62	2087.96	1936.21	1833.82	1745.66	1693.6	1629.97	1564.97	1487.07	1441.28	1391.38	1397.14
31	1416.97	1455.22	1516.96	1591.39	1727.83	1851.36	1965.94	2045.24	2126.68	2205.01	2306.73	2374.87	2354.05	2279.72	2138.09	1970.35	1869.08	1782.62	1731.55	1664.47	1589.89	1502.61	1459.06	1411.28	1416.97
32	1436.68	1477.21	1535.99	1612.67	1761.07	1896.23	2013.86	2096.71	2174.55	2253.75	2365.53	2445.68	2428.63	2350.78	2188.34	2009.5	1905.87	1822.19	1772.21	1702.19	1615.7	1521.56	1477.09	1432.07	1436.68
33	1458.51	1502.4	1557.12	1638.03	1797.53	1946.01	2071.48	2151.88	2226.45	2309.11	2431.2	2526.4	2509.28	2426.37	2246.63	2050.01	1945.37	1863.53	1815.51	1741.97	1642.78	1544.47	1497.34	1454.96	1458.51
34	1483.81	1527.61	1581.02	1664.73	1833.7	1997.57	2126.66	2209.79	2280.58	2367.07	2502.79	2611.39	2596.32	2501.86	2306.55	2094.42	1985.18	1907.03	1859	1784.2	1672.1	1567.67	1518.68	1478.12	1483.81
35	1508.63	1555.75	1606.4	1693.97	1872.11	2054.08	2191.55	2273.45	2338.26	2428.14	2574.99	2698.53	2690.11	2593.61	2369.81	2144.24	2027.08	1953.77	1905.43	1828.09	1704.08	1592.92	1541.77	1502.69	1508.63
36	1538.99	1587.52	1633.51	1726.78	1915.49	2115.67	2257.1	2341	2401.49	2497.84	2654.9	2798.77	2786.45	2677.94	2440.37	2196.46	2070.74	2001.83	1952.55	1874.32	1737.48	1618.01	1565.67	1530.92	1538.99
37	1570.33	1619.67	1659.99	1758.5	1959.63	2180.07	2327.53	2411.02	2463.57	2566.15	2736.66	2895.99	2895.45	2775.85	2510.41	2257.01	2117.25	2052.5	2001.6	1923.18	1773.25	1644.59	1591.32	1560.47	1570.33
38	1606.02	1659.77	1689.08	1795.98	2012.43	2251.41	2404.44	2489.95	2533.61	2643.72	2824.57	3001.08	3002.15	2885.56	2591.9</										

Page 13 of 17

Page 14 of 17

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.	ALEDM5T/480	Sample ID.	D1
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
479.93	60	0.209	90.0	0.896	17.13%

5.0 Equipment Information

Test Equipment			
Equipment ID	Equipment Name	Last Calibration Date	Calibration Due Date
DLF107	Integrating Sphere System	2021/12/26	2022/12/25
DLF108	Auxiliary Lamp	2021/12/26	2022/12/25
DLF122	Measurement Standard Lamp Standard Lamp Type: 220 V, 0.4720 A, Tungsten, Omni-derectional	2021/12/26	2022/12/25
DLF116	AC Power Source	2021/12/26	2022/12/25
DLF113	Power Meter	2021/12/26	2022/12/25
DLF112	Temperature Recorder	2021/12/26	2022/12/25
DLF114	Temperature & Humidity Datalogger	2021/12/26	2022/12/25
DLF101	Goniophotometer	2021/12/26	2022/12/25
DLF125	Standard Lamp Standard Lamp Type: 76.58 V, 6.7875 A, Tungsten, Omni-derectional	2021/12/26	2022/12/25
DLF104	AC Power Source	2021/12/26	2022/12/25
DLF507	DC Power Source	2021/12/26	2022/12/25
DLF102	Power Meter	2021/12/26	2022/12/25
DLF111	Temperature & Humidity Datalogger	2021/12/26	2022/12/25
DLF119	Power Meter	2021/12/26	2022/12/25
DLF031	Temperature data logger	2021/12/26	2022/12/25
DLF022	Digital power meter	2021/12/26	2022/12/25
DLF003	Temperature & Humidity Datalogger	2021/12/26	2022/12/25

***** End of Test Report*****