

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P210680

Luminaire Tested: **WPMLED-75-GL-UNV**

Test Date: 10/24/16

Test Information

Test Method: LM-79-08
Report Number: P210680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29002)
Test Lab: INNOVATION CENTER-P2
Test Date: 10/24/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WPMLED-75-GL-UNV
Description: LED WALL PACK
Light Source: CITIZEN 4000K
CLU038-1206
Ballast/Driver: (2) IPP ELECTRONIC DRIVERS
IPP LP1040-36-C0950

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8682.5 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.98' x L: 0.25' x H: 0.58')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U5 - G5

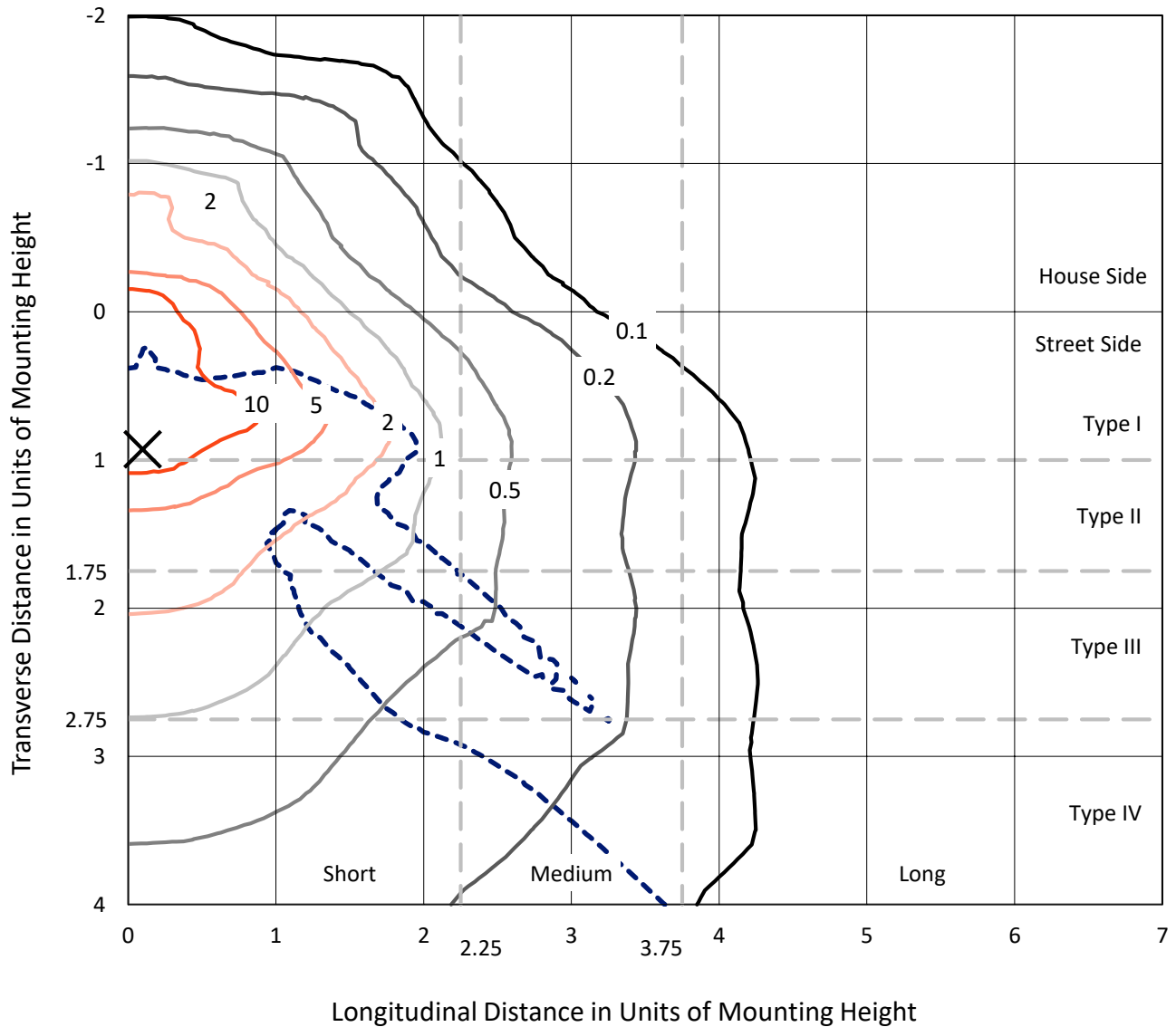
Input Watts (W): 76.3
Input Voltage (V): 120.1
Input Current (Ain): 0.642
Voltage Rise (V): NR
Power Factor: 0.9952
Total Harmonic Distortion (THDi): 9.74%
Frequency (hertz): 60
Stabilization Time: 1 HR
Operation Time: 3 HR
Ambient Temperature (°C): 24.8
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

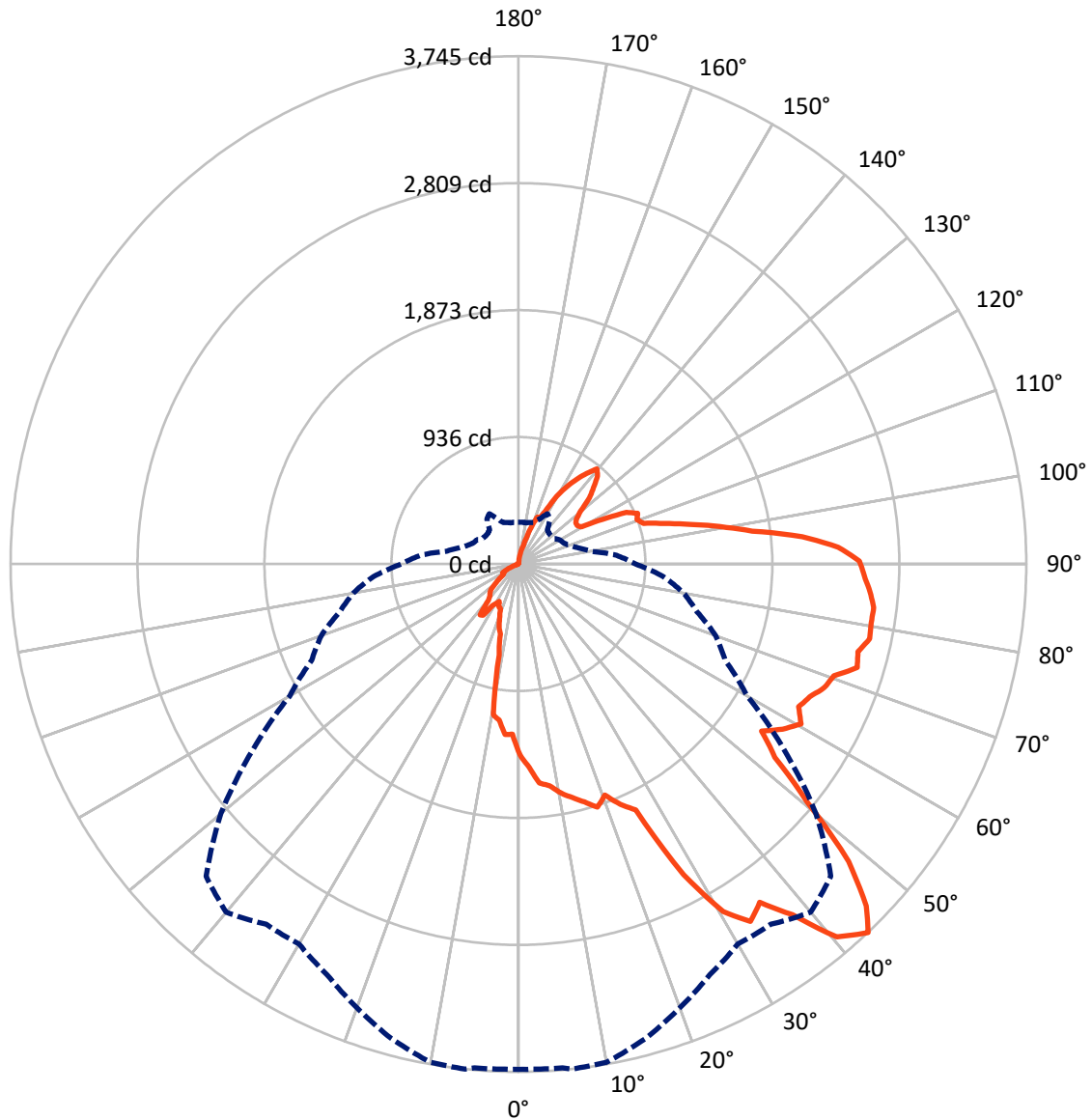
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 6-Deg Lateral - - - Horizontal Cone Through 43-Deg Vertical

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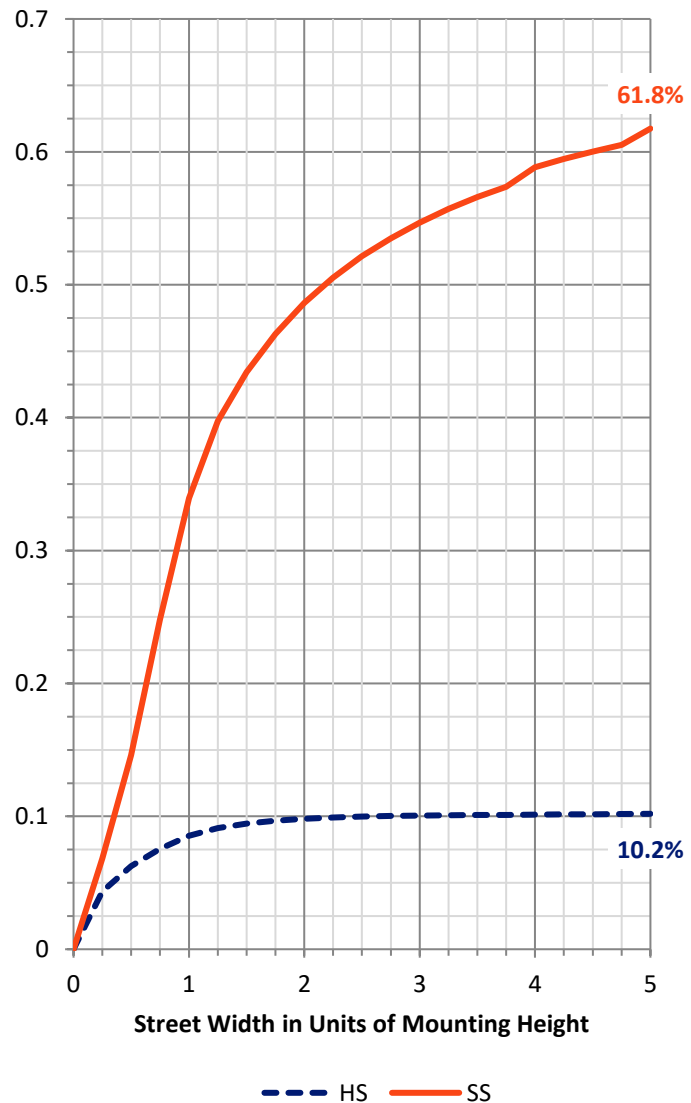
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	899.3	75.8	975.1
	% Fixture	10.4	0.9	11.2
Street Side	Lumens	5978.4	1729.0	7707.4
	% Fixture	68.9	19.9	88.8
Total	Lumens	6877.7	1804.8	8682.5
	% Fixture	79.2	20.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	1.6
10°-20°	358.4	4.1
20°-30°	530.2	6.1
30°-40°	839.3	9.7
40°-50°	1158.2	13.3
50°-60°	1089.6	12.5
60°-70°	964.2	11.1
70°-80°	940.2	10.8
80°-90°	862.8	9.9
90°-100°	624.0	7.2
100°-110°	370.4	4.3
110°-120°	245.5	2.8
120°-130°	178.0	2.1
130°-140°	191.5	2.2
140°-150°	132.0	1.5
150°-160°	51.5	0.6
160°-170°	11.7	0.1
170°-180°	0.2	0.0
0°-90°	6877.7	79.2
0°-180°	8682.5	100.0



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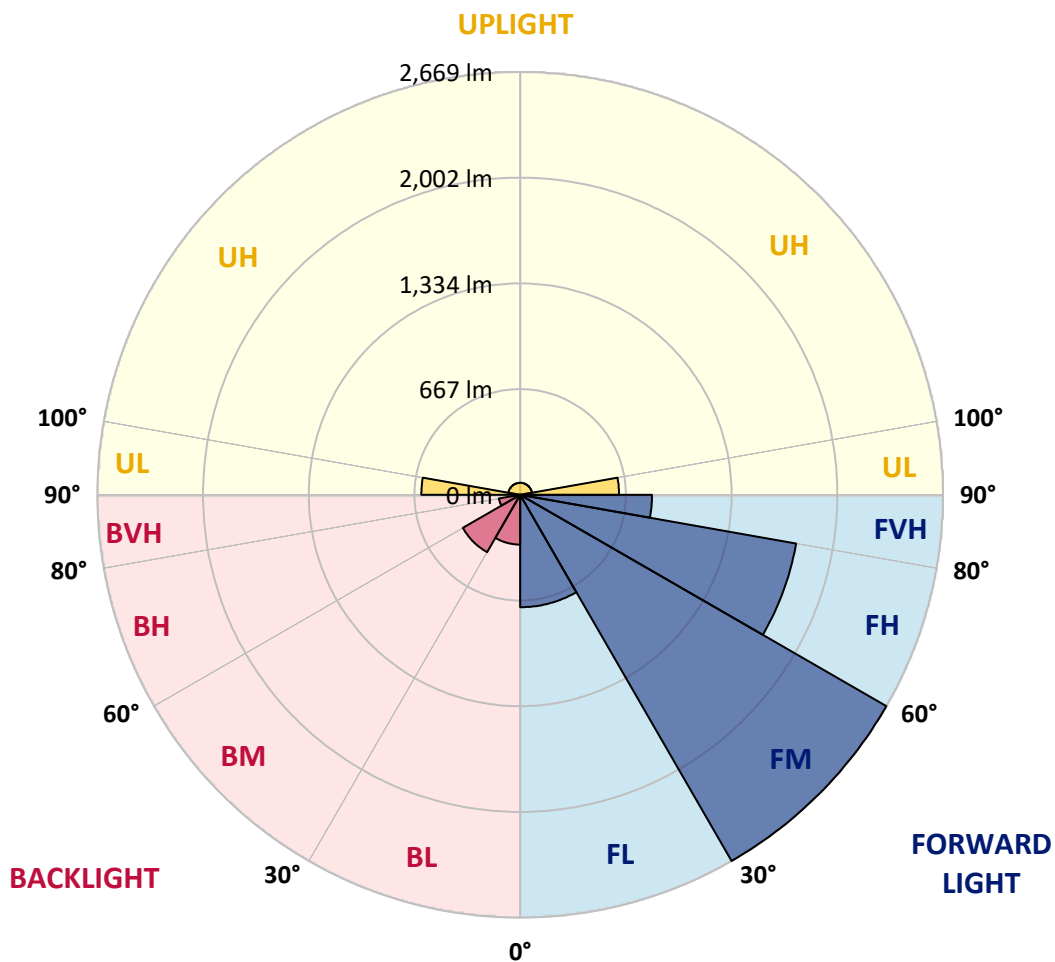
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	709.4	8.2			
FM (30°-60°)	2668.8	30.7			
FH (60°-80°)	1768.5	20.4			G1/1800
FVH (80°-90°)	831.7	9.6			G5
BL (0°-30°)	314.0	3.6	B1/500		
BM (30°-60°)	418.3	4.8	B1/1000		
BH (60°-80°)	135.9	1.6	B1/500		G1/500
BVH (80°-90°)	31.0	0.4			G1/100
UL (90°-100°)	624.0	7.2		U4/1000	
UH (100°-180°)	75.8	0.9		U3/500	

BUG Rating: B1-U5-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
0°	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8
2.5°	1497.4	1501.2	1500.3	1500.3	1506.0	1507.0	1498.3	1491.6	1501.2	1480.0	1494.5
5°	1622.5	1624.4	1623.4	1621.5	1617.7	1611.9	1597.4	1588.8	1601.3	1579.2	1581.1
7.5°	1643.6	1648.5	1650.4	1642.7	1648.5	1661.9	1665.8	1666.7	1696.6	1680.2	1682.1
10°	1695.6	1714.9	1717.7	1723.5	1735.1	1748.5	1727.4	1695.6	1692.7	1667.7	1658.1
12.5°	1775.5	1771.6	1767.8	1763.0	1738.9	1712.9	1689.8	1682.1	1712.0	1720.6	1695.6
15°	1791.8	1812.0	1820.7	1844.8	1869.8	1910.2	1884.2	1829.4	1748.5	1674.4	1692.7
17.5°	1878.4	1884.2	1885.2	1869.8	1844.8	1809.2	1774.5	1804.3	1877.5	1826.5	1714.9
20°	1776.4	1814.9	1819.7	1850.5	1893.8	1946.8	1938.1	1855.4	1758.2	1738.9	1808.2
22.5°	1917.9	1921.8	1925.6	1912.1	1880.4	1829.4	1788.0	1846.7	1884.2	1739.9	1642.7
25°	1993.9	2014.1	2009.3	2002.6	1998.7	1997.8	1942.9	1813.0	1717.7	1772.6	1689.8
27.5°	2601.1	2599.2	2594.4	2552.1	2432.7	2248.0	2054.6	1937.1	1827.4	1643.6	1668.7
30°	2953.4	2963.0	2975.5	2956.2	2887.9	2788.8	2550.1	2196.0	1933.3	1755.3	1570.5
32.5°	3095.8	3128.5	3142.0	3128.5	3084.2	3032.3	2831.1	2621.4	2272.0	1901.5	1705.2
35°	3011.1	3045.7	3065.0	3105.4	3156.4	3174.7	3061.1	2912.9	2642.5	2285.5	1925.6
37.5°	3269.0	3295.9	3281.5	3219.9	3131.4	3141.0	3147.7	3138.1	2986.1	2733.0	2337.5
40°	3571.2	3596.2	3616.4	3579.8	3448.0	3303.6	3166.0	3167.0	3194.9	3069.8	2846.5
42.5°	3712.6	3718.4	3726.1	3719.4	3620.2	3483.6	3321.9	3217.0	3252.6	3314.2	3202.6
43°	3726.1	3729.9	3745.3	3731.9	3623.1	3482.6	3341.2	3236.3	3244.0	3352.7	3257.4
45°	3559.6	3585.6	3598.1	3640.5	3554.8	3362.3	3232.4	3229.5	3224.7	3372.9	3448.0
47.5°	3213.2	3239.2	3277.7	3327.7	3362.3	3261.3	3040.9	2938.0	3062.1	3270.0	3525.0
50°	2732.0	2748.4	2760.9	2867.7	2944.7	2969.7	2868.7	2739.7	2725.3	2959.1	3415.3
52.5°	2353.8	2352.9	2368.3	2417.3	2489.5	2519.3	2462.6	2472.2	2450.1	2601.1	3104.4
55°	2166.2	2162.3	2174.8	2177.7	2174.8	2146.0	2079.6	2121.9	2149.8	2254.7	2723.4
57.5°	2297.1	2289.4	2298.0	2274.9	2183.5	2094.0	1973.7	1942.9	1949.7	1949.7	2307.6
60°	2384.6	2379.8	2394.2	2378.9	2287.4	2160.4	1961.2	1851.5	1840.9	1793.8	1980.5
62.5°	2314.4	2314.4	2319.2	2317.3	2268.2	2175.8	1967.0	1828.4	1798.6	1817.8	1877.5
65°	2362.5	2342.3	2360.6	2349.0	2307.6	2230.7	2023.8	1853.4	1781.3	1824.6	1847.7
67.5°	2435.6	2422.2	2433.7	2406.8	2326.9	2233.5	2006.4	1807.2	1724.5	1780.3	1860.2
70°	2476.0	2468.3	2468.3	2445.3	2377.9	2274.0	2054.6	1867.9	1765.9	1778.4	1826.5
72.5°	2605.0	2595.4	2612.7	2569.4	2494.3	2375.0	2108.4	1905.4	1789.0	1754.3	1771.6
75°	2580.9	2573.2	2585.7	2539.6	2478.9	2375.0	2121.0	1935.2	1871.7	1811.1	1751.4
77.5°	2633.9	2630.0	2648.3	2603.1	2543.4	2436.6	2181.6	1976.6	1929.4	1856.3	1754.3
80°	2631.0	2617.5	2637.7	2592.5	2520.3	2416.4	2168.1	1997.8	1970.8	1902.5	1765.9
82.5°	2621.4	2611.7	2639.6	2597.3	2534.7	2434.7	2180.6	2002.6	1964.1	1905.4	1759.1
85°	2592.5	2581.9	2601.1	2563.6	2500.1	2383.7	2128.6	1971.8	1974.7	1877.5	1671.5
87.5°	2533.8	2532.8	2552.1	2520.3	2455.8	2357.7	2111.3	1954.5	1897.7	1697.5	1493.5
90°	2494.3	2498.2	2515.5	2489.5	2427.0	2290.3	1997.8	1839.0	1684.1	1480.0	1322.2
92.5°	2343.2	2344.2	2360.6	2325.0	2237.4	2069.9	1786.1	1595.5	1450.2	1315.5	1224.1
95°	2094.0	2095.0	2102.7	2069.0	1974.7	1773.6	1508.0	1366.5	1289.5	1190.4	1123.0
97.5°	1747.6	1736.0	1740.8	1706.2	1639.8	1515.7	1322.2	1205.8	1140.3	1067.2	1029.7
100°	1519.5	1508.0	1511.8	1473.3	1405.0	1295.3	1147.1	1061.4	1016.2	949.8	900.7
102.5°	1300.1	1293.4	1297.2	1270.3	1216.4	1134.6	1018.1	944.0	903.6	839.1	818.9
105°	1121.1	1110.5	1117.3	1099.0	1048.9	990.2	895.0	832.4	810.3	781.4	757.3
107.5°	970.0	963.3	969.1	948.8	912.3	877.6	820.9	795.8	778.5	744.8	708.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
110°	927.7	929.6	932.5	920.0	891.1	865.1	835.3	790.1	740.0	671.7	608.2
112.5°	941.1	952.7	955.6	939.2	906.5	864.2	800.6	723.7	635.1	545.6	504.3
115°	873.8	877.6	883.4	868.0	823.7	759.3	673.6	579.3	509.1	469.6	448.4
117.5°	707.3	698.6	700.6	687.1	642.8	586.1	526.4	482.1	459.0	441.7	424.4
120°	535.0	536.0	538.9	539.9	532.2	516.8	492.7	481.2	456.1	441.7	435.9
122.5°	508.1	513.9	518.7	523.5	520.6	519.7	502.3	485.0	467.7	457.1	451.3
125°	512.9	515.8	519.7	525.4	527.4	534.1	513.9	501.4	484.0	478.3	460.0
127.5°	534.1	537.9	542.7	548.5	555.3	552.4	529.3	517.7	513.9	494.6	454.2
130°	589.9	599.5	603.4	607.2	597.6	589.9	581.2	568.7	538.9	498.5	459.0
132.5°	715.0	716.0	716.9	716.9	691.9	674.6	648.6	613.0	574.5	534.1	493.7
135°	785.3	787.2	789.1	786.2	763.1	753.5	723.7	683.2	641.9	591.8	545.6
137.5°	872.8	871.9	872.8	875.7	858.4	849.7	805.5	752.5	691.9	635.1	580.3
140°	910.4	909.4	909.4	907.5	886.3	868.0	812.2	751.6	689.0	634.2	563.9
142.5°	826.6	835.3	836.3	839.1	822.8	802.6	752.5	697.7	637.1	577.4	499.4
145°	748.7	755.4	758.3	759.3	741.9	717.9	670.7	619.7	562.0	496.6	403.2
147.5°	670.7	671.7	673.6	667.8	639.0	613.0	573.5	522.5	461.9	391.7	322.4
150°	569.7	569.7	573.5	561.0	531.2	502.3	460.0	411.9	370.5	327.2	281.0
152.5°	431.1	428.2	432.1	431.1	408.0	395.5	374.3	351.2	328.2	304.1	273.3
155°	368.6	368.6	369.5	370.5	364.7	358.9	348.4	340.7	322.4	288.7	248.3
157.5°	371.5	373.4	374.3	375.3	365.7	355.1	330.1	298.3	265.6	222.3	167.4
160°	301.2	298.3	303.1	301.2	278.1	260.8	233.8	203.0	170.3	132.8	114.5
162.5°	205.9	203.0	205.9	203.0	184.8	170.3	143.4	128.0	121.3	113.6	103.9
165°	129.9	129.9	129.9	130.9	128.0	124.1	117.4	109.7	102.0	91.4	80.8
167.5°	100.1	99.1	101.0	101.0	98.2	90.5	85.6	79.9	72.2	46.2	24.1
170°	57.7	55.8	58.7	57.7	51.0	31.8	24.1	12.5	4.8	3.8	4.8
172.5°	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
177.5°	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8
2.5°	1482.0	1475.2	1470.4	1465.6	1478.1	1455.0	1445.4	1439.6	1417.5	1411.7	1391.5
5°	1572.4	1558.0	1542.6	1520.5	1521.4	1488.7	1473.3	1457.9	1420.4	1394.4	1343.4
7.5°	1640.8	1616.7	1598.4	1575.3	1570.5	1514.7	1487.7	1466.6	1411.7	1362.6	1273.1
10°	1671.5	1676.4	1632.1	1590.7	1593.6	1541.6	1500.3	1475.2	1403.1	1316.5	1232.7
12.5°	1669.6	1630.2	1649.4	1610.9	1583.0	1531.0	1482.9	1439.6	1345.3	1247.2	1225.0
15°	1721.6	1650.4	1598.4	1596.5	1553.2	1490.6	1433.9	1376.1	1258.7	1178.8	1202.9
17.5°	1640.8	1662.9	1589.8	1521.4	1509.9	1420.4	1369.4	1310.7	1175.0	1120.1	1144.2
20°	1683.1	1559.9	1568.6	1470.4	1437.7	1357.8	1312.6	1248.1	1109.6	1073.0	1063.4
22.5°	1707.2	1570.5	1482.0	1451.2	1383.8	1317.4	1279.9	1216.4	1072.0	1050.9	999.8
25°	1552.2	1607.1	1458.9	1441.6	1370.3	1308.8	1268.3	1205.8	1055.7	1027.8	961.4
27.5°	1595.5	1522.4	1528.2	1431.0	1389.6	1317.4	1273.1	1197.1	1052.8	1027.8	945.0
30°	1618.6	1511.8	1556.1	1433.9	1406.9	1338.6	1281.8	1190.4	1041.2	1016.2	948.8
32.5°	1539.7	1587.8	1510.8	1484.9	1422.3	1350.1	1286.6	1179.8	1028.7	984.5	885.3
35°	1671.5	1586.9	1527.2	1550.3	1417.5	1351.1	1283.7	1151.9	1019.1	950.8	811.2
37.5°	1943.9	1626.3	1619.6	1578.2	1431.0	1344.4	1245.2	1109.6	986.4	869.0	742.9
40°	2371.2	1861.1	1701.4	1591.7	1458.9	1320.3	1203.9	1074.9	921.9	793.0	624.5
42.5°	2791.7	2285.5	1900.6	1658.1	1523.4	1348.2	1223.1	1072.0	869.9	734.2	549.5
43°	2864.8	2393.3	1948.7	1682.1	1548.4	1363.6	1237.5	1073.0	863.2	726.6	539.9
45°	3136.2	2833.1	2223.9	1818.8	1689.8	1455.0	1291.4	1058.6	838.2	681.3	523.5
47.5°	3408.5	3229.5	2573.2	2028.6	1849.6	1533.0	1274.1	988.3	783.3	614.0	500.4
50°	3623.1	3426.8	2759.0	2200.8	1864.0	1473.3	1168.3	883.4	686.1	549.5	464.8
52.5°	3541.3	3480.7	2956.2	2340.4	1813.0	1364.6	1055.7	797.8	611.1	499.4	422.5
55°	3099.6	3376.8	3181.4	2463.5	1756.2	1291.4	986.4	754.5	587.0	478.3	379.2
57.5°	2546.3	2931.2	3238.2	2493.4	1702.3	1245.2	946.9	724.6	570.7	449.4	342.6
60°	2161.4	2356.7	2896.6	2468.3	1635.9	1171.1	923.8	713.1	553.3	410.9	314.7
62.5°	1977.6	1937.1	2224.9	2269.1	1582.1	1121.1	918.1	707.3	524.5	356.1	288.7
65°	1886.1	1771.6	1771.6	1860.2	1532.0	1083.6	878.6	676.5	471.5	319.5	268.5
67.5°	1953.5	1686.0	1583.0	1524.3	1431.0	1063.4	866.1	704.4	455.2	302.2	246.4
70°	1958.3	1642.7	1522.4	1337.6	1290.5	1087.4	881.5	700.6	412.8	283.9	228.1
72.5°	1941.0	1625.4	1459.8	1202.9	1115.3	1081.6	895.9	613.0	365.7	255.0	220.4
75°	1879.4	1581.1	1402.1	1091.3	1001.8	995.0	851.7	559.1	328.2	229.0	204.0
77.5°	1826.5	1493.5	1327.0	1020.1	920.0	905.5	770.8	481.2	280.0	204.0	186.7
80°	1786.1	1381.9	1187.5	964.2	852.6	825.7	663.0	409.0	241.5	180.0	172.3
82.5°	1695.6	1261.6	1049.9	897.8	778.5	748.7	588.9	346.4	198.2	155.9	150.1
85°	1512.8	1153.8	960.4	842.0	708.3	678.4	471.5	276.2	159.7	134.7	132.8
87.5°	1320.3	1076.8	899.8	779.5	657.3	577.4	387.8	224.2	133.8	119.3	120.3
90°	1187.5	989.3	842.0	706.3	600.5	508.1	333.0	180.9	117.4	111.6	114.5
92.5°	1084.5	901.7	760.2	627.4	569.7	409.9	271.4	156.9	112.6	111.6	108.7
95°	1021.0	836.3	687.1	571.6	475.4	339.7	223.3	139.5	107.8	108.7	104.9
97.5°	951.7	750.6	615.9	523.5	428.2	288.7	185.7	129.9	103.9	105.9	101.0
100°	822.8	654.4	576.4	500.4	352.2	241.5	165.5	127.0	103.0	103.0	98.2
102.5°	706.3	582.2	533.1	428.2	290.6	207.9	153.0	125.1	103.9	100.1	94.3
105°	665.9	524.5	479.2	376.3	252.1	181.9	144.3	122.2	103.0	96.2	89.5
107.5°	614.0	435.9	411.9	311.8	227.1	168.4	143.4	121.3	102.0	91.4	83.7



REPORT NUMBER: P210680

CATALOG NUMBER: WPMLED-75-GL-UNV

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	533.1	391.7	352.2	277.1	208.8	166.5	146.3	117.4	97.2	87.6	77.0
112.5°	482.1	376.3	316.6	254.1	203.0	171.3	148.2	110.7	91.4	81.8	72.2
115°	453.3	374.3	294.5	245.4	206.9	179.0	132.8	104.9	86.6	77.0	68.3
117.5°	454.2	380.1	294.5	244.4	210.7	160.7	121.3	97.2	81.8	72.2	65.4
120°	461.0	383.0	306.0	249.2	192.5	139.5	114.5	92.4	77.9	68.3	62.6
122.5°	461.9	392.6	306.0	235.8	165.5	129.9	112.6	86.6	74.1	64.5	58.7
125°	461.0	382.0	293.5	213.6	156.9	129.9	112.6	81.8	70.2	61.6	54.9
127.5°	445.6	382.0	284.8	217.5	169.4	140.5	109.7	77.0	66.4	57.7	50.0
130°	447.5	393.6	300.2	247.3	196.3	150.1	95.3	71.2	61.6	52.9	47.2
132.5°	472.5	419.6	333.0	290.6	225.2	145.3	82.8	62.6	55.8	49.1	42.3
135°	512.0	463.8	378.2	311.8	219.4	123.2	74.1	54.9	50.0	44.3	38.5
137.5°	535.0	474.4	387.8	283.9	181.9	101.0	67.4	49.1	45.2	40.4	34.6
140°	503.3	428.2	335.8	225.2	148.2	89.5	52.9	42.3	39.5	35.6	30.8
142.5°	429.2	337.8	256.0	182.8	130.9	81.8	42.3	36.6	33.7	30.8	26.9
145°	332.0	259.8	206.9	164.6	104.9	70.2	34.6	30.8	28.9	26.0	23.1
147.5°	273.3	228.1	186.7	142.4	96.2	51.0	26.9	26.0	24.1	22.1	19.2
150°	250.2	213.6	173.2	108.7	75.1	31.8	22.1	22.1	20.2	18.3	15.4
152.5°	241.5	195.4	124.1	86.6	65.4	18.3	18.3	17.3	16.4	14.4	12.5
155°	202.1	125.1	93.3	78.9	42.3	14.4	14.4	13.5	12.5	10.6	9.6
157.5°	115.5	101.0	88.5	69.3	13.5	10.6	10.6	9.6	8.7	8.7	8.7
160°	106.8	96.2	81.8	26.0	7.7	7.7	7.7	7.7	7.7	7.7	7.7
162.5°	95.3	79.9	30.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
165°	63.5	22.1	5.8	5.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7
167.5°	6.7	5.8	5.8	5.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7
170°	5.8	5.8	5.8	5.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7
172.5°	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
177.5°	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



REPORT NUMBER: P210680

CATALOG NUMBER: WPMLED-75-GL-UNV

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8	1410.8
2.5°	1372.3	1344.4	1310.7	1294.3	1256.8	1238.5	1234.7	1232.7	1221.2	1218.3	1224.1
5°	1294.3	1250.1	1227.0	1252.0	1266.4	1300.1	1330.9	1335.7	1325.1	1311.6	1292.4
7.5°	1232.7	1253.9	1285.7	1310.7	1284.7	1239.5	1194.2	1151.9	1138.4	1133.6	1144.2
10°	1265.4	1303.0	1263.5	1201.0	1119.2	1107.6	1127.8	1122.1	1096.1	1075.9	1081.6
12.5°	1278.9	1230.8	1128.8	1108.6	1107.6	1089.3	1089.3	1108.6	1077.8	965.2	849.7
15°	1201.9	1100.9	1066.2	1079.7	1076.8	1076.8	959.4	779.5	670.7	621.7	590.9
17.5°	1076.8	1012.4	1021.0	1030.6	962.3	778.5	655.3	595.7	544.7	515.8	500.4
20°	973.9	959.4	946.9	890.1	708.3	600.5	547.6	507.1	476.3	472.5	456.1
22.5°	931.5	914.2	837.2	706.3	595.7	524.5	486.0	468.6	435.9	404.2	393.6
25°	930.6	838.2	702.5	608.2	542.7	492.7	459.0	412.8	386.9	365.7	348.4
27.5°	887.3	744.8	611.1	558.1	517.7	475.4	409.9	381.1	345.5	333.9	346.4
30°	816.0	631.3	558.1	526.4	496.6	440.7	385.9	349.3	343.5	325.3	319.5
32.5°	737.1	568.7	524.5	502.3	458.1	395.5	353.2	338.7	317.6	328.2	333.0
35°	626.5	525.4	499.4	462.9	420.5	364.7	338.7	319.5	333.9	316.6	368.6
37.5°	560.1	486.9	462.9	440.7	380.1	343.5	327.2	321.4	320.5	341.6	468.6
40°	505.2	449.4	417.6	397.4	360.9	331.0	322.4	318.5	345.5	433.0	450.4
42.5°	461.9	407.1	376.3	359.9	329.1	323.3	318.5	327.2	402.2	419.6	385.9
43°	456.1	399.4	366.6	354.1	326.2	318.5	318.5	331.0	405.1	428.2	363.8
45°	444.6	371.5	338.7	330.1	315.6	305.1	321.4	367.6	399.4	347.4	298.3
47.5°	426.3	345.5	319.5	310.8	303.1	300.2	319.5	371.5	336.8	275.2	273.3
50°	381.1	327.2	304.1	298.3	295.4	299.3	334.9	338.7	271.4	261.8	269.4
52.5°	342.6	306.0	292.5	287.7	288.7	287.7	316.6	282.9	260.8	256.9	236.7
55°	315.6	284.8	280.0	279.1	271.4	278.1	293.5	256.0	249.2	225.2	194.4
57.5°	296.4	270.4	271.4	262.7	251.2	264.6	260.8	243.5	219.4	184.8	155.9
60°	280.0	264.6	254.1	243.5	222.3	241.5	242.5	221.3	182.8	147.2	129.0
62.5°	264.6	254.1	235.8	219.4	195.4	233.8	217.5	185.7	147.2	118.4	110.7
65°	247.3	237.7	212.7	190.5	182.8	209.8	190.5	150.1	113.6	97.2	93.3
67.5°	231.9	214.6	188.6	170.3	174.2	183.8	156.9	118.4	86.6	77.9	70.2
70°	217.5	192.5	168.4	154.9	160.7	154.0	122.2	87.6	68.3	54.9	41.4
72.5°	204.0	183.8	154.9	142.4	144.3	128.0	93.3	64.5	46.2	27.9	11.5
75°	186.7	168.4	142.4	129.0	121.3	98.2	70.2	43.3	27.9	16.4	8.7
77.5°	169.4	149.2	128.0	112.6	98.2	71.2	54.9	39.5	26.0	14.4	7.7
80°	154.0	131.8	112.6	96.2	81.8	64.5	50.0	35.6	23.1	13.5	6.7
82.5°	137.6	117.4	99.1	86.6	74.1	58.7	45.2	31.8	20.2	11.5	6.7
85°	123.2	106.8	91.4	79.9	68.3	52.9	40.4	27.9	17.3	9.6	4.8
87.5°	112.6	101.0	88.5	77.9	64.5	50.0	37.5	25.0	15.4	8.7	4.8
90°	106.8	96.2	85.6	76.0	61.6	47.2	34.6	23.1	13.5	7.7	4.8
92.5°	102.0	92.4	82.8	73.1	58.7	44.3	30.8	20.2	12.5	6.7	3.8
95°	95.3	86.6	79.9	69.3	55.8	40.4	27.9	18.3	11.5	5.8	3.8
97.5°	92.4	79.9	75.1	65.4	52.0	36.6	25.0	16.4	9.6	4.8	3.8
100°	87.6	77.0	67.4	60.6	48.1	32.7	23.1	14.4	8.7	4.8	3.8
102.5°	83.7	73.1	64.5	53.9	42.3	30.8	20.2	12.5	7.7	3.8	3.8
105°	77.9	69.3	61.6	51.0	37.5	26.9	18.3	11.5	5.8	3.8	3.8
107.5°	73.1	65.4	56.8	48.1	34.6	24.1	16.4	9.6	5.8	3.8	2.9

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 CATALOG NUMBER: WPMLED-75-GL-UNV

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	69.3	61.6	53.9	44.3	31.8	22.1	14.4	8.7	4.8	3.8	2.9	0°
112.5°	64.5	58.7	51.0	40.4	29.8	19.2	13.5	7.7	4.8	3.8	2.9	2.5°
115°	61.6	55.8	48.1	38.5	27.9	19.2	12.5	7.7	5.8	4.8	3.8	5°
117.5°	58.7	53.9	45.2	35.6	26.0	18.3	12.5	7.7	5.8	4.8	3.8	7.5°
120°	55.8	49.1	41.4	31.8	23.1	16.4	11.5	7.7	5.8	4.8	3.8	10°
122.5°	52.0	44.3	36.6	27.9	20.2	14.4	9.6	7.7	5.8	4.8	3.8	12.5°
125°	48.1	40.4	32.7	25.0	18.3	12.5	8.7	6.7	5.8	4.8	3.8	15°
127.5°	43.3	36.6	28.9	22.1	16.4	11.5	8.7	6.7	5.8	4.8	3.8	17.5°
130°	39.5	32.7	25.0	19.2	14.4	10.6	7.7	6.7	5.8	4.8	3.8	20°
132.5°	35.6	28.9	23.1	18.3	13.5	9.6	7.7	6.7	5.8	4.8	3.8	22.5°
135°	31.8	26.0	20.2	15.4	11.5	8.7	7.7	6.7	5.8	4.8	3.8	25°
137.5°	28.9	23.1	18.3	14.4	10.6	8.7	7.7	6.7	5.8	4.8	3.8	27.5°
140°	25.0	20.2	16.4	12.5	9.6	7.7	6.7	6.7	5.8	4.8	3.8	30°
142.5°	22.1	18.3	14.4	10.6	8.7	7.7	6.7	6.7	5.8	4.8	3.8	32.5°
145°	19.2	15.4	12.5	9.6	8.7	7.7	6.7	6.7	5.8	4.8	3.8	35°
147.5°	16.4	12.5	10.6	8.7	7.7	7.7	6.7	6.7	5.8	4.8	3.8	37.5°
150°	12.5	10.6	9.6	8.7	7.7	7.7	6.7	6.7	5.8	4.8	3.8	40°
152.5°	10.6	9.6	8.7	7.7	7.7	7.7	6.7	6.7	5.8	4.8	3.8	42.5°
155°	8.7	8.7	7.7	7.7	7.7	7.7	6.7	5.8	5.8	4.8	3.8	43°
157.5°	8.7	7.7	7.7	7.7	7.7	7.7	6.7	5.8	5.8	3.8	3.8	45°
160°	7.7	7.7	7.7	7.7	7.7	7.7	6.7	5.8	5.8	3.8	3.8	47.5°
162.5°	7.7	7.7	7.7	7.7	7.7	7.7	6.7	5.8	4.8	3.8	3.8	50°
165°	7.7	7.7	7.7	7.7	7.7	7.7	6.7	5.8	5.8	3.8	3.8	52.5°
167.5°	7.7	7.7	7.7	7.7	7.7	7.7	6.7	5.8	4.8	3.8	2.9	55°
170°	7.7	7.7	7.7	7.7	7.7	6.7	6.7	5.8	4.8	3.8	2.9	57.5°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

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REPORT NUMBER: P
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DISTRIBUTION (continued):

160°	165°	170°	175°	180°
1410.8	1410.8	1410.8	1410.8	1410.8
1236.6	1252.9	1258.7	1254.9	1229.8
1277.0	1274.1	1264.5	1260.6	1259.7
1150.0	1155.7	1159.6	1159.6	1153.8
1101.9	1128.8	1129.8	1126.9	1122.1
779.5	730.4	696.7	684.2	672.7
565.8	548.5	537.9	531.2	523.5
487.9	488.9	491.7	485.0	479.2
436.9	425.3	412.8	411.9	406.1
384.0	366.6	355.1	352.2	348.4
339.7	354.1	348.4	346.4	342.6
324.3	323.3	312.8	308.9	309.9
331.0	344.5	333.9	331.0	327.2
332.0	402.2	356.1	362.8	368.6
388.8	533.1	481.2	453.3	438.8
436.9	494.6	487.9	464.8	447.5
460.0	398.4	358.0	346.4	344.5
339.7	324.3	313.7	313.7	313.7
325.3	315.6	308.9	309.9	308.9
286.8	299.3	302.2	299.3	295.4
284.8	281.0	277.1	276.2	271.4
253.1	239.6	233.8	218.4	213.6
209.8	193.4	194.4	180.9	175.1
171.3	159.7	153.0	140.5	138.6
141.5	129.0	131.8	128.0	127.0
119.3	121.3	129.0	136.6	140.5
105.9	110.7	122.2	124.1	123.2
87.6	92.4	95.3	90.5	86.6
61.6	62.6	60.6	56.8	55.8
32.7	27.9	26.9	22.1	21.2
5.8	5.8	4.8	4.8	4.8
5.8	5.8	5.8	5.8	5.8
5.8	6.7	5.8	5.8	5.8
6.7	6.7	6.7	6.7	6.7
5.8	6.7	6.7	6.7	5.8
4.8	4.8	4.8	4.8	4.8
4.8	4.8	4.8	4.8	4.8
3.8	4.8	4.8	4.8	4.8
3.8	4.8	4.8	4.8	3.8
3.8	4.8	4.8	3.8	3.8
3.8	3.8	3.8	3.8	3.8
3.8	3.8	3.8	3.8	3.8
2.9	2.9	2.9	2.9	2.9
2.9	2.9	2.9	2.9	2.9
2.9	2.9	1.9	1.9	1.9

CANDELA DISTRIBUTION:

	160°
110°	2.9
112.5°	2.9
115°	3.8
117.5°	3.8
120°	3.8
122.5°	3.8
125°	3.8
127.5°	3.8
130°	3.8
132.5°	3.8
135°	3.8
137.5°	3.8
140°	3.8
142.5°	3.8
145°	3.8
147.5°	3.8
150°	3.8
152.5°	3.8
155°	2.9
157.5°	2.9
160°	2.9
162.5°	2.9
165°	2.9
167.5°	2.9
170°	2.9
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0



'210680
WPMLED-75-GL-UNV

TION (continued):

165°	170°	175°	180°
2.9	1.9	1.9	1.9
2.9	1.9	1.9	1.0
2.9	2.9	2.9	1.9
3.8	2.9	2.9	2.9
3.8	2.9	2.9	2.9
3.8	2.9	2.9	2.9
3.8	2.9	2.9	1.9
3.8	2.9	2.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	2.9	1.9	1.9
2.9	1.9	1.9	1.0
2.9	1.9	1.9	1.9
2.9	1.9	1.9	1.0
2.9	1.9	1.9	1.0
2.9	1.9	1.9	1.0
2.9	1.9	1.9	1.0
2.9	1.9	1.0	1.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0

(END OF REPORT)