

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: McGRAW-EDISON

Report Number: P197911

Luminaire Tested: **TT-C5-LED-E1-WQ-SG-MS/DIM-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197911  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115558)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C5-LED-E1-WQ-SG-MS/DIM-7050  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
WIDE DISTRIBUTION WITH SOFTENING GLASS LENS AND DIMMING OCCUPANCY SENSOR  
Light Source: (160) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8124.8 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

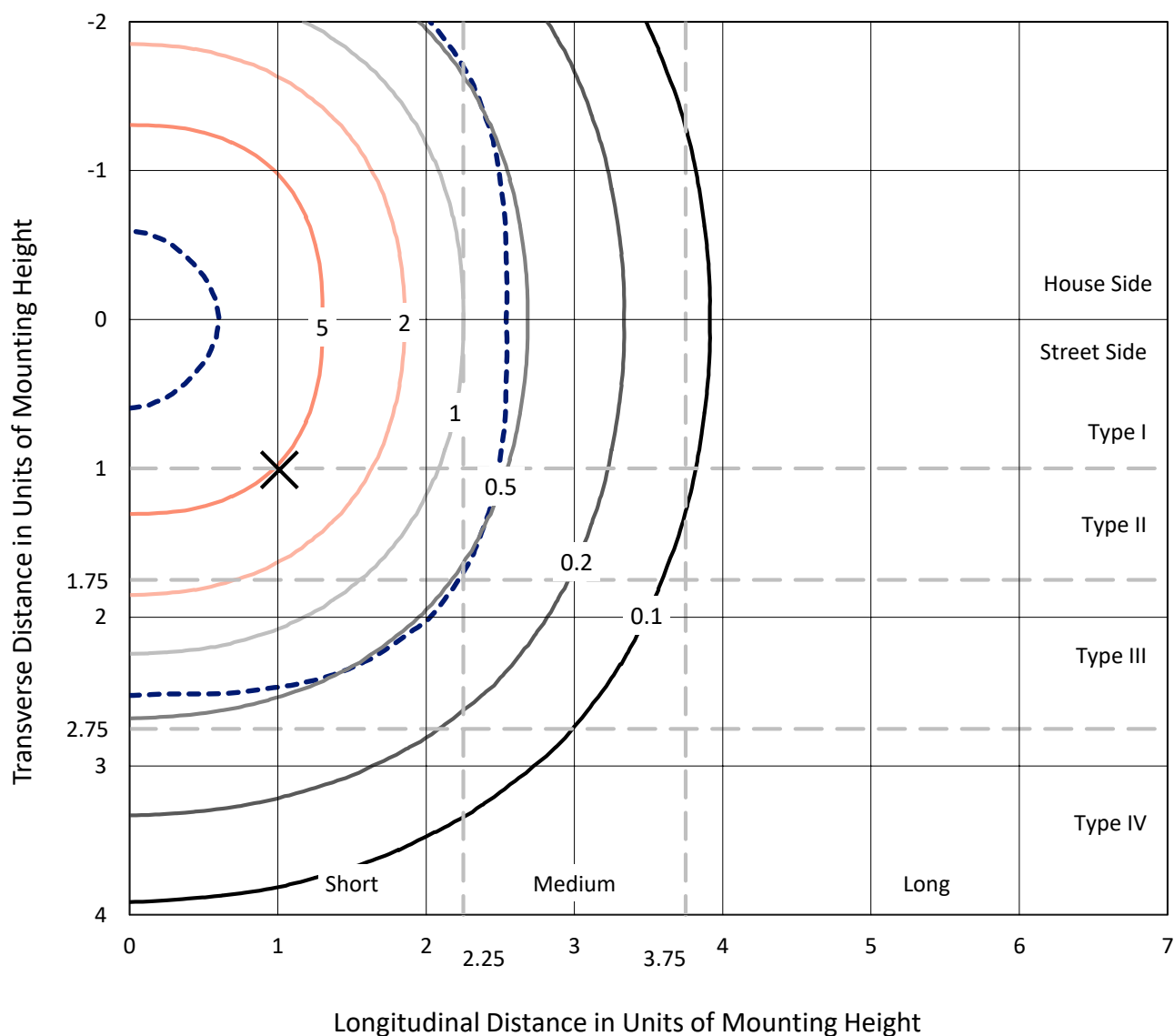


REPORT NUMBER: P197911

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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

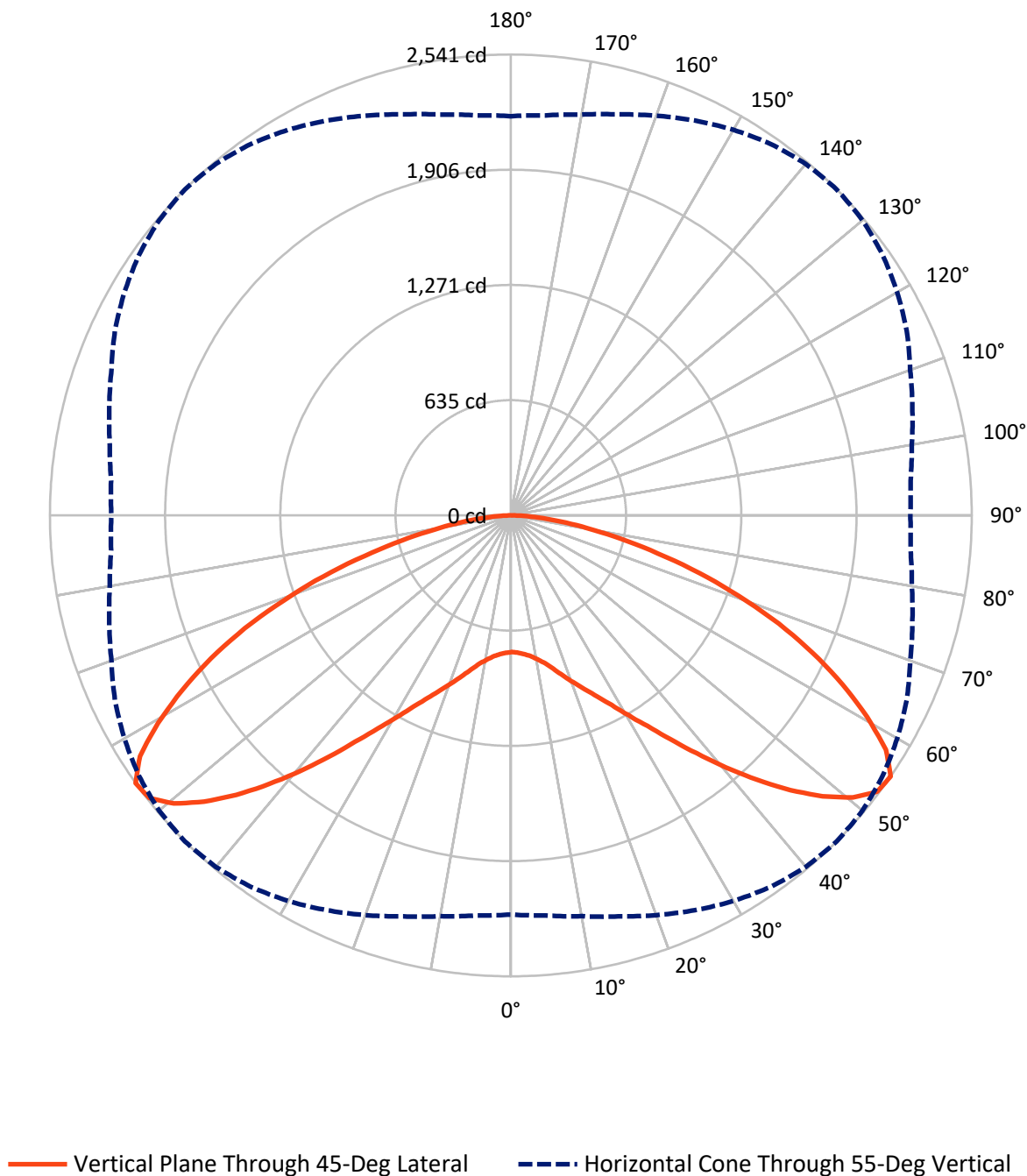


Based on 10 foot mounting height. Maximum calculated value = 8.3 fc  
Type V - Short - Full Cutoff

REPORT NUMBER: P197911

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## Luminous Intensity Polar Plot



REPORT NUMBER: P197911

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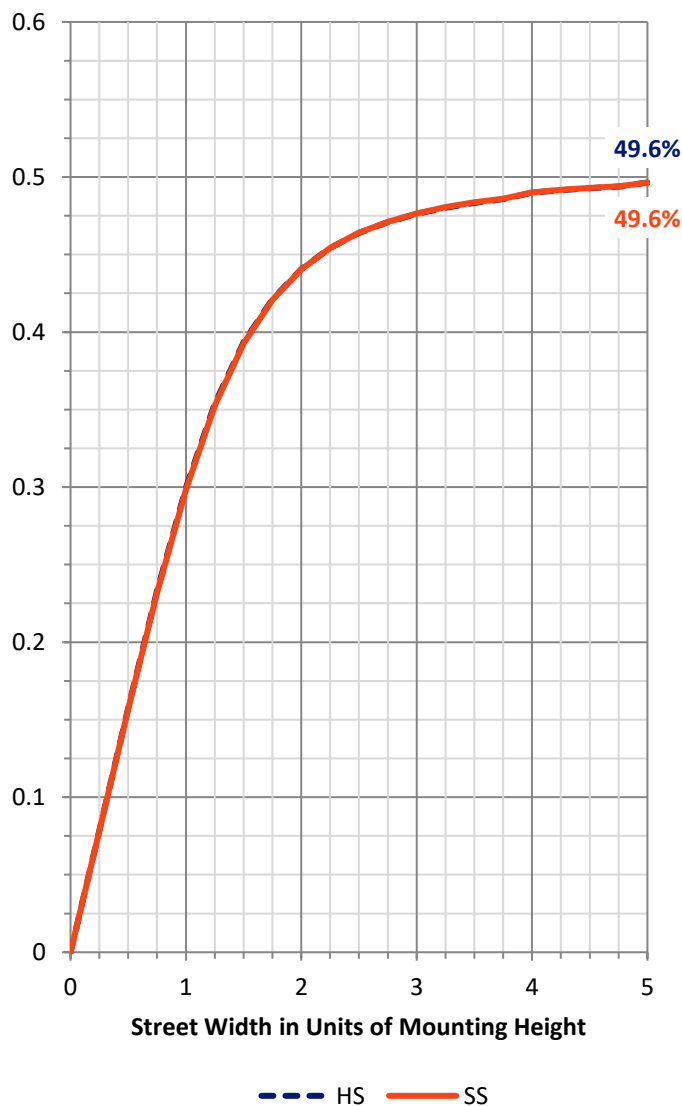
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 4062.4   | 0.0    | 4062.4 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 4062.4   | 0.0    | 4062.4 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 8124.8   | 0.0    | 8124.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 74.4   | 0.9       |
| 10°-20°   | 252.2  | 3.1       |
| 20°-30°   | 513.6  | 6.3       |
| 30°-40°   | 937.9  | 11.5      |
| 40°-50°   | 1592.6 | 19.6      |
| 50°-60°   | 2074.0 | 25.5      |
| 60°-70°   | 1677.4 | 20.6      |
| 70°-80°   | 824.3  | 10.1      |
| 80°-90°   | 178.4  | 2.2       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 8124.8 | 100.0     |
| 0°-180°   | 8124.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P197911

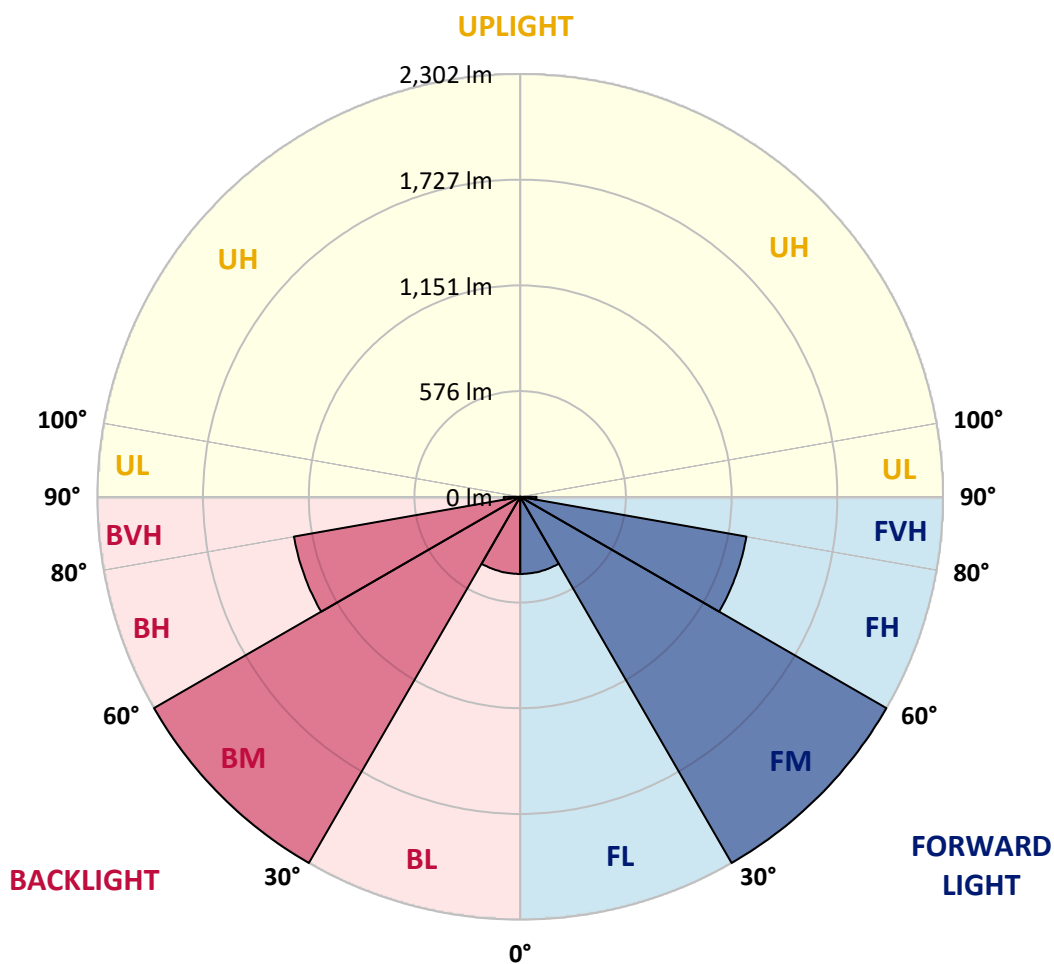
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 420.1  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 2302.3 | 28.3      |                         |      |         |
| FH   | (60°-80°)   | 1250.8 | 15.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 89.2   | 1.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 420.1  | 5.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2302.3 | 28.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1250.8 | 15.4      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 89.2   | 1.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Short



REPORT NUMBER: P197911

CATALOG NUMBER: TT-C5-LED-E1-WQ-SG-MS/DIM-7050

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  |
| 2.5°  | 756.1  | 756.1  | 756.1  | 756.1  | 756.1  | 756.1  | 757.8  | 757.8  | 757.8  | 757.8  | 757.8  |
| 5°    | 766.1  | 766.1  | 766.1  | 767.8  | 767.8  | 767.8  | 767.8  | 767.8  | 767.8  | 767.8  | 767.8  |
| 7.5°  | 781.1  | 779.4  | 781.1  | 781.1  | 781.1  | 782.8  | 782.8  | 781.1  | 782.8  | 782.8  | 782.8  |
| 10°   | 802.7  | 801.0  | 802.7  | 802.7  | 802.7  | 804.4  | 804.4  | 804.4  | 804.4  | 806.1  | 806.1  |
| 12.5° | 834.3  | 832.6  | 834.3  | 836.0  | 834.3  | 836.0  | 836.0  | 836.0  | 836.0  | 836.0  | 836.0  |
| 15°   | 874.2  | 872.5  | 874.2  | 875.8  | 874.2  | 877.5  | 877.5  | 875.8  | 875.8  | 877.5  | 877.5  |
| 17.5° | 922.3  | 919.1  | 920.6  | 922.3  | 922.3  | 925.7  | 925.7  | 924.0  | 925.7  | 927.3  | 925.7  |
| 20°   | 972.1  | 968.9  | 970.6  | 975.5  | 975.5  | 977.2  | 980.5  | 978.9  | 980.5  | 982.2  | 980.5  |
| 22.5° | 1027.0 | 1025.3 | 1027.0 | 1032.0 | 1032.0 | 1033.7 | 1038.6 | 1038.6 | 1038.6 | 1040.3 | 1038.6 |
| 25°   | 1086.9 | 1085.2 | 1086.9 | 1091.8 | 1091.8 | 1095.2 | 1101.8 | 1101.8 | 1103.5 | 1105.2 | 1103.5 |
| 27.5° | 1156.7 | 1155.0 | 1158.3 | 1163.4 | 1165.1 | 1170.0 | 1178.3 | 1180.0 | 1181.6 | 1183.3 | 1180.0 |
| 30°   | 1238.2 | 1234.8 | 1239.7 | 1248.0 | 1251.4 | 1258.0 | 1268.1 | 1271.3 | 1273.0 | 1277.9 | 1274.7 |
| 32.5° | 1331.1 | 1327.9 | 1334.5 | 1344.4 | 1349.5 | 1359.4 | 1372.8 | 1376.0 | 1380.9 | 1384.3 | 1379.4 |
| 35°   | 1440.8 | 1439.2 | 1445.9 | 1460.8 | 1469.2 | 1480.7 | 1499.1 | 1504.0 | 1507.4 | 1514.0 | 1507.4 |
| 37.5° | 1562.1 | 1560.4 | 1572.2 | 1588.8 | 1603.8 | 1622.0 | 1641.9 | 1650.2 | 1655.3 | 1663.6 | 1655.3 |
| 40°   | 1696.8 | 1695.1 | 1710.0 | 1730.1 | 1748.3 | 1771.6 | 1796.6 | 1808.1 | 1818.1 | 1826.5 | 1816.4 |
| 42.5° | 1834.8 | 1834.8 | 1853.0 | 1874.6 | 1901.3 | 1929.5 | 1957.7 | 1971.0 | 1987.6 | 1992.5 | 1981.0 |
| 45°   | 1967.7 | 1969.3 | 1987.6 | 2014.1 | 2052.4 | 2088.9 | 2120.5 | 2137.2 | 2155.4 | 2160.5 | 2145.5 |
| 47.5° | 2094.0 | 2095.7 | 2112.2 | 2147.2 | 2190.4 | 2231.9 | 2270.1 | 2293.4 | 2311.6 | 2313.3 | 2301.7 |
| 50°   | 2197.0 | 2203.7 | 2225.3 | 2256.9 | 2301.7 | 2344.9 | 2391.5 | 2421.4 | 2439.6 | 2444.7 | 2433.0 |
| 52.5° | 2237.0 | 2248.5 | 2273.5 | 2313.3 | 2364.8 | 2409.7 | 2461.2 | 2499.4 | 2521.0 | 2529.4 | 2519.5 |
| 55°   | 2200.3 | 2213.7 | 2243.6 | 2288.5 | 2344.9 | 2401.4 | 2454.6 | 2499.4 | 2529.4 | 2541.1 | 2531.1 |
| 57.5° | 2118.8 | 2120.5 | 2150.5 | 2195.3 | 2246.8 | 2305.0 | 2356.5 | 2398.1 | 2426.3 | 2438.1 | 2436.4 |
| 60°   | 1977.6 | 1977.6 | 2006.0 | 2049.2 | 2088.9 | 2148.8 | 2192.1 | 2223.6 | 2243.6 | 2256.9 | 2253.5 |
| 62.5° | 1788.2 | 1788.2 | 1813.0 | 1857.9 | 1897.9 | 1949.4 | 1991.0 | 2024.2 | 2037.4 | 2052.4 | 2055.8 |
| 65°   | 1577.1 | 1577.1 | 1600.4 | 1645.3 | 1681.8 | 1728.4 | 1768.2 | 1799.8 | 1813.0 | 1831.4 | 1828.0 |
| 67.5° | 1352.7 | 1351.2 | 1372.8 | 1410.9 | 1445.9 | 1489.1 | 1527.3 | 1557.2 | 1572.2 | 1593.8 | 1578.8 |
| 70°   | 1121.7 | 1121.7 | 1140.1 | 1170.0 | 1194.8 | 1238.2 | 1274.7 | 1304.6 | 1316.2 | 1334.5 | 1326.2 |
| 72.5° | 902.4  | 900.7  | 915.7  | 939.0  | 958.9  | 997.1  | 1018.7 | 1052.0 | 1061.9 | 1086.9 | 1073.6 |
| 75°   | 704.6  | 701.4  | 712.9  | 729.6  | 742.8  | 767.8  | 784.5  | 811.0  | 819.3  | 836.0  | 829.3  |
| 77.5° | 530.2  | 528.5  | 533.4  | 545.1  | 555.0  | 575.1  | 581.7  | 594.9  | 601.6  | 618.2  | 605.0  |
| 80°   | 380.6  | 375.7  | 380.6  | 387.2  | 390.6  | 405.6  | 407.1  | 412.2  | 415.4  | 427.2  | 413.7  |
| 82.5° | 256.0  | 249.4  | 252.6  | 257.5  | 257.5  | 265.9  | 267.6  | 265.9  | 272.5  | 275.9  | 269.3  |
| 85°   | 146.2  | 141.3  | 143.0  | 146.2  | 144.7  | 149.6  | 149.6  | 147.9  | 152.8  | 152.8  | 149.6  |
| 87.5° | 48.3   | 44.9   | 46.6   | 48.3   | 48.3   | 49.8   | 51.5   | 49.8   | 53.2   | 53.2   | 49.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P197911

CATALOG NUMBER: TT-C5-LED-E1-WQ-SG-MS/DIM-7050

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  | 752.9  |
| 2.5°  | 757.8  | 757.8  | 757.8  | 757.8  | 757.8  | 757.8  | 757.8  | 757.8  |
| 5°    | 767.8  | 767.8  | 767.8  | 767.8  | 767.8  | 766.1  | 766.1  | 766.1  |
| 7.5°  | 782.8  | 782.8  | 782.8  | 782.8  | 782.8  | 781.1  | 781.1  | 781.1  |
| 10°   | 806.1  | 804.4  | 804.4  | 804.4  | 804.4  | 802.7  | 804.4  | 802.7  |
| 12.5° | 836.0  | 837.5  | 837.5  | 836.0  | 837.5  | 834.3  | 834.3  | 834.3  |
| 15°   | 877.5  | 875.8  | 875.8  | 875.8  | 875.8  | 874.2  | 874.2  | 874.2  |
| 17.5° | 924.0  | 924.0  | 922.3  | 922.3  | 920.6  | 919.1  | 919.1  | 919.1  |
| 20°   | 978.9  | 977.2  | 975.5  | 973.8  | 972.1  | 968.9  | 967.2  | 967.2  |
| 22.5° | 1035.4 | 1033.7 | 1032.0 | 1030.4 | 1028.7 | 1025.3 | 1022.1 | 1022.1 |
| 25°   | 1098.4 | 1095.2 | 1093.5 | 1090.3 | 1086.9 | 1083.5 | 1081.9 | 1080.2 |
| 27.5° | 1174.9 | 1171.7 | 1166.6 | 1161.7 | 1155.0 | 1153.3 | 1150.1 | 1150.1 |
| 30°   | 1266.4 | 1261.4 | 1254.6 | 1246.5 | 1239.7 | 1233.1 | 1229.8 | 1228.1 |
| 32.5° | 1372.8 | 1366.2 | 1354.4 | 1344.4 | 1332.8 | 1326.2 | 1321.3 | 1317.9 |
| 35°   | 1497.4 | 1487.4 | 1474.1 | 1459.1 | 1444.2 | 1432.6 | 1424.3 | 1424.3 |
| 37.5° | 1643.6 | 1628.6 | 1608.7 | 1590.4 | 1568.8 | 1555.5 | 1545.5 | 1538.9 |
| 40°   | 1803.2 | 1781.6 | 1756.6 | 1733.3 | 1708.5 | 1690.1 | 1675.2 | 1676.9 |
| 42.5° | 1961.1 | 1942.7 | 1912.8 | 1884.6 | 1853.0 | 1828.0 | 1809.8 | 1808.1 |
| 45°   | 2127.2 | 2103.9 | 2067.3 | 2030.8 | 1994.2 | 1964.3 | 1942.7 | 1939.3 |
| 47.5° | 2281.7 | 2256.9 | 2213.7 | 2168.8 | 2128.9 | 2095.7 | 2072.4 | 2069.0 |
| 50°   | 2408.2 | 2378.2 | 2333.4 | 2285.1 | 2241.9 | 2205.4 | 2180.4 | 2173.7 |
| 52.5° | 2489.6 | 2456.3 | 2408.2 | 2349.9 | 2303.4 | 2261.8 | 2231.9 | 2223.6 |
| 55°   | 2502.8 | 2459.7 | 2408.2 | 2343.2 | 2291.7 | 2245.1 | 2212.0 | 2202.0 |
| 57.5° | 2411.4 | 2364.8 | 2318.4 | 2261.8 | 2210.3 | 2160.5 | 2133.8 | 2120.5 |
| 60°   | 2233.6 | 2197.0 | 2158.8 | 2107.3 | 2065.8 | 2019.2 | 1997.6 | 1991.0 |
| 62.5° | 2029.1 | 1997.6 | 1962.6 | 1909.6 | 1874.6 | 1833.1 | 1813.0 | 1804.9 |
| 65°   | 1809.8 | 1773.3 | 1740.0 | 1696.8 | 1658.5 | 1623.7 | 1595.5 | 1592.1 |
| 67.5° | 1567.1 | 1529.0 | 1500.6 | 1462.5 | 1424.3 | 1391.0 | 1372.8 | 1362.8 |
| 70°   | 1311.3 | 1279.6 | 1251.4 | 1209.8 | 1185.0 | 1153.3 | 1140.1 | 1130.0 |
| 72.5° | 1057.0 | 1038.6 | 1003.8 | 977.2  | 949.0  | 924.0  | 915.7  | 905.7  |
| 75°   | 817.6  | 796.0  | 769.5  | 752.9  | 731.3  | 718.0  | 711.2  | 704.6  |
| 77.5° | 599.9  | 581.7  | 566.7  | 560.1  | 550.1  | 536.8  | 531.9  | 526.8  |
| 80°   | 415.4  | 407.1  | 397.3  | 395.6  | 388.9  | 378.9  | 377.2  | 375.7  |
| 82.5° | 269.3  | 264.3  | 260.9  | 260.9  | 257.5  | 250.9  | 249.4  | 249.4  |
| 85°   | 149.6  | 147.9  | 149.6  | 147.9  | 144.7  | 141.3  | 141.3  | 141.3  |
| 87.5° | 49.8   | 49.8   | 51.5   | 53.2   | 48.3   | 48.3   | 46.6   | 46.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)