

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: P197839

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115513)  
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-CG-MS/DIM-7050  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
WIDE DISTRIBUTION WITH CLEAR 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: 8220.4 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

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

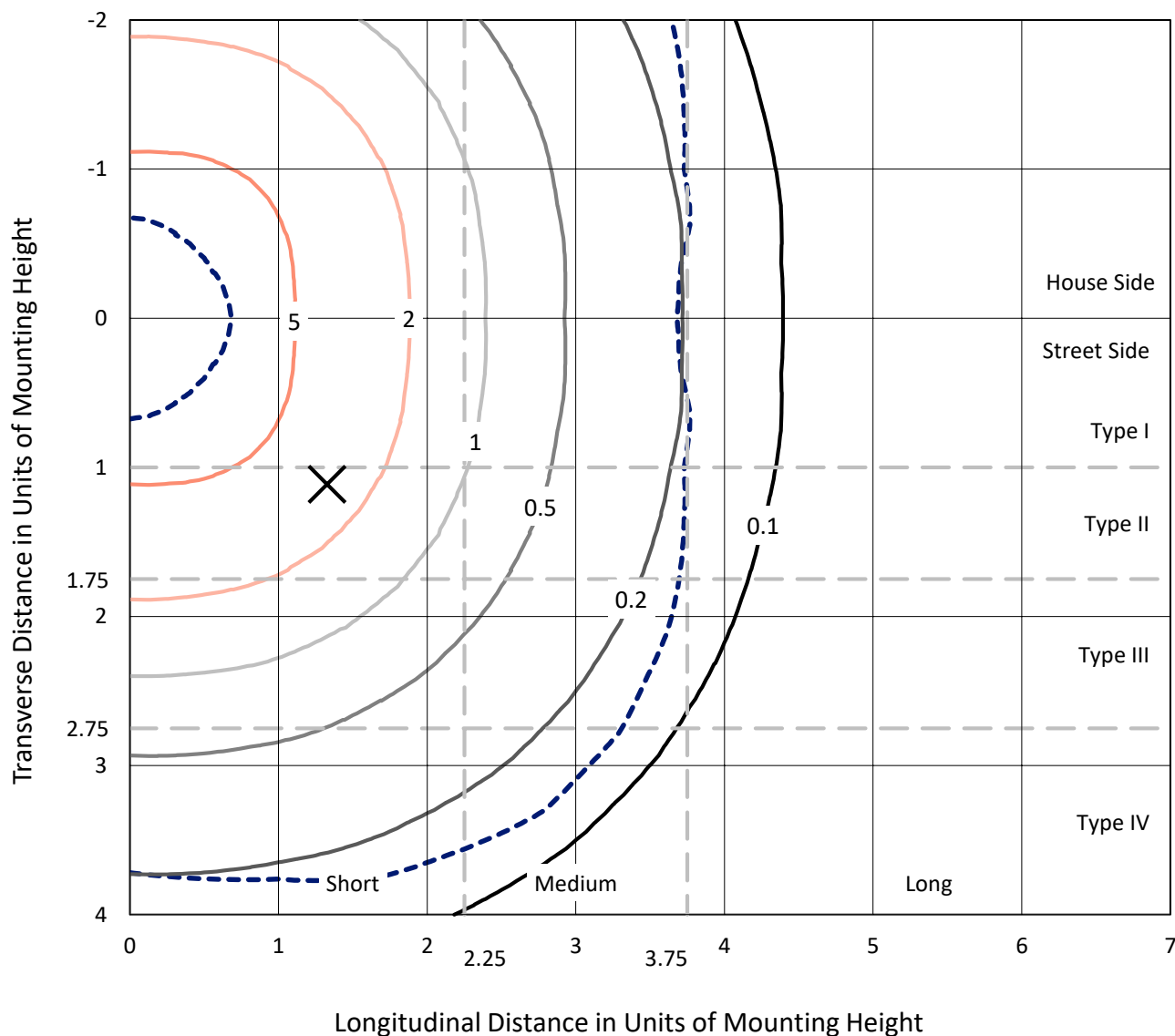


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

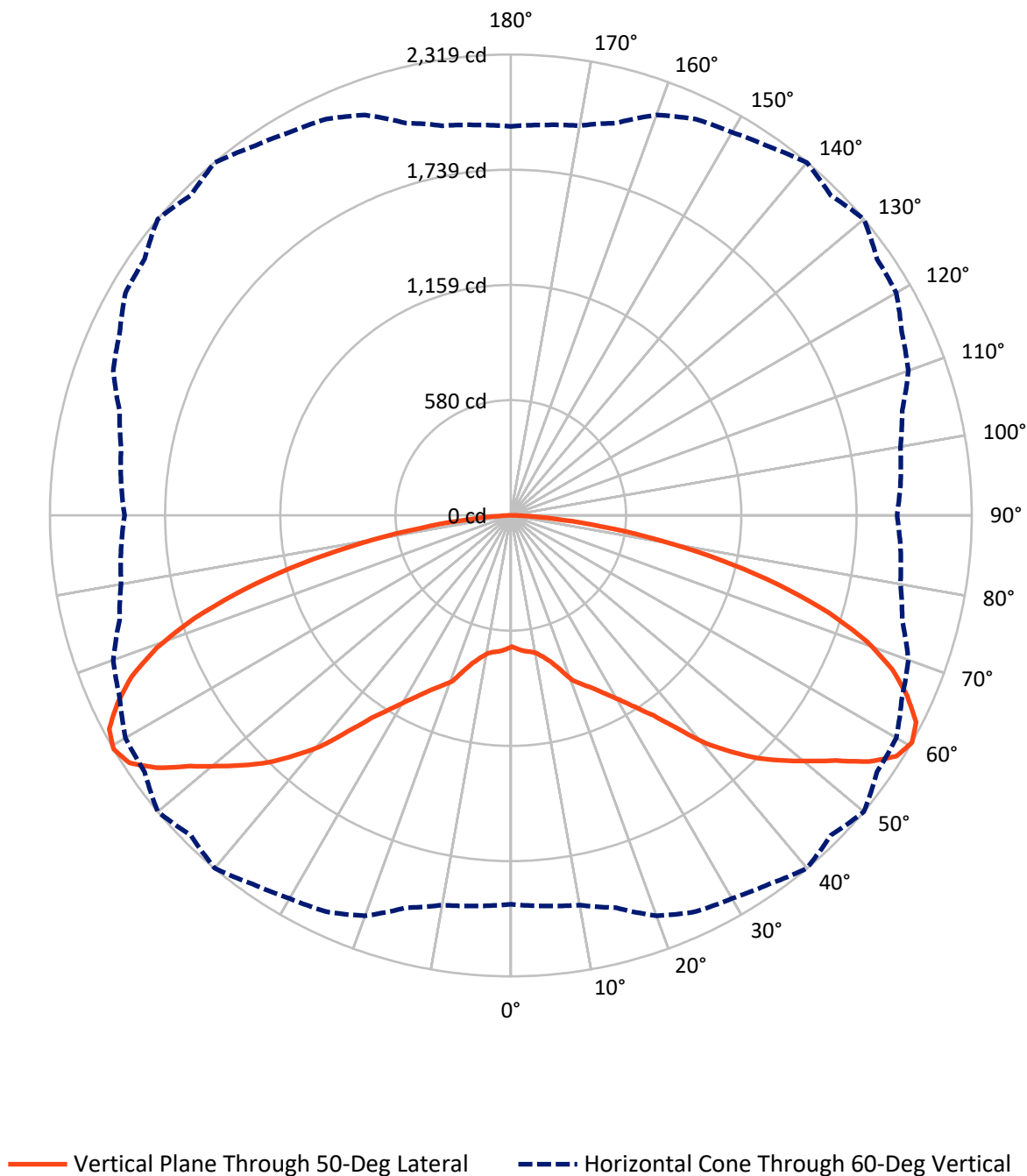


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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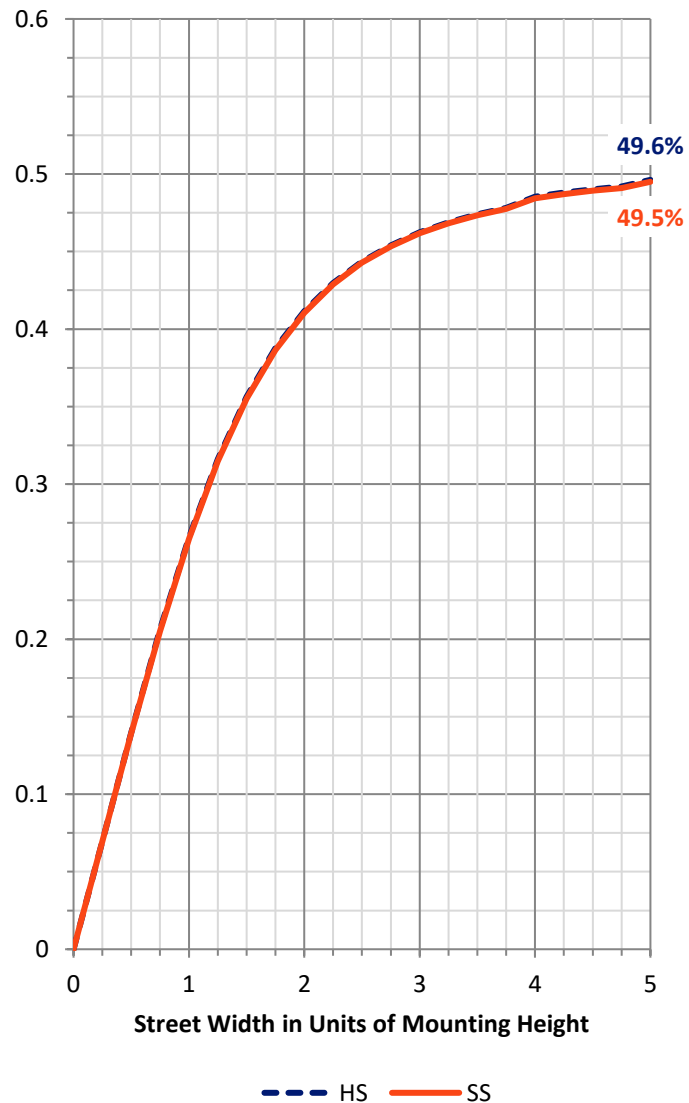
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 4110.2   | 0.0    | 4110.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 4110.2   | 0.0    | 4110.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 8220.4   | 0.0    | 8220.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 65.7   | 0.8       |
| 10°-20°   | 221.8  | 2.7       |
| 20°-30°   | 447.7  | 5.4       |
| 30°-40°   | 773.9  | 9.4       |
| 40°-50°   | 1285.4 | 15.6      |
| 50°-60°   | 1826.7 | 22.2      |
| 60°-70°   | 1995.4 | 24.3      |
| 70°-80°   | 1325.6 | 16.1      |
| 80°-90°   | 278.2  | 3.4       |
| 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°    | 8220.4 | 100.0     |
| 0°-180°   | 8220.4 | 100.0     |

**Coefficient of Utilization**



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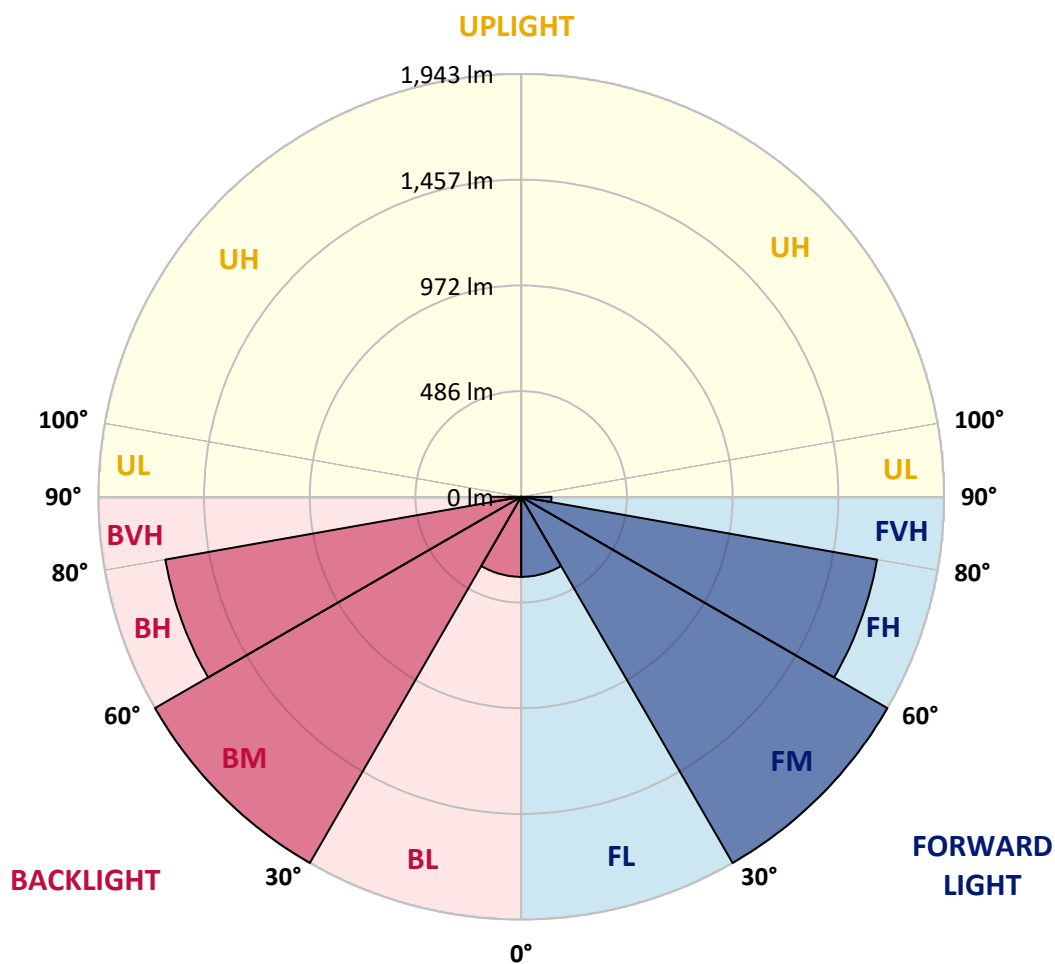
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 367.6  | 4.5       |                         |      |         |
| FM   | (30°-60°)   | 1943.0 | 23.6      |                         |      |         |
| FH   | (60°-80°)   | 1660.5 | 20.2      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 139.1  | 1.7       |                         |      | G2/225  |
| BL   | (0°-30°)    | 367.6  | 4.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1943.0 | 23.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1660.5 | 20.2      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 139.1  | 1.7       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  |
| 2.5°  | 673.2  | 673.2  | 673.2  | 673.2  | 673.2  | 673.2  | 673.2  | 673.2  | 671.5  | 673.2  | 673.2  |
| 5°    | 680.0  | 680.0  | 680.0  | 681.7  | 681.7  | 681.7  | 683.4  | 683.4  | 683.4  | 685.1  | 685.1  |
| 7.5°  | 685.1  | 685.1  | 685.1  | 685.1  | 686.8  | 686.8  | 686.8  | 688.5  | 688.5  | 690.2  | 691.9  |
| 10°   | 707.2  | 707.2  | 707.2  | 707.2  | 707.2  | 705.5  | 705.5  | 705.5  | 703.8  | 703.8  | 703.8  |
| 12.5° | 734.4  | 736.1  | 737.8  | 737.8  | 737.8  | 737.8  | 734.4  | 731.0  | 731.0  | 731.0  | 731.0  |
| 15°   | 759.9  | 761.6  | 763.3  | 766.7  | 768.4  | 770.1  | 770.1  | 770.1  | 770.1  | 770.1  | 766.7  |
| 17.5° | 800.6  | 802.3  | 802.3  | 804.0  | 805.7  | 805.7  | 807.4  | 812.5  | 819.3  | 822.7  | 819.3  |
| 20°   | 863.5  | 866.9  | 868.6  | 868.6  | 870.3  | 868.6  | 872.0  | 875.4  | 880.5  | 883.9  | 885.6  |
| 22.5° | 909.4  | 912.8  | 917.9  | 917.9  | 917.9  | 916.2  | 919.6  | 921.3  | 919.6  | 919.6  | 923.0  |
| 25°   | 945.1  | 948.5  | 951.9  | 953.6  | 957.0  | 963.8  | 970.6  | 970.6  | 965.5  | 963.8  | 963.8  |
| 27.5° | 991.0  | 996.1  | 996.1  | 997.8  | 1001.2 | 1006.3 | 1013.1 | 1018.2 | 1021.6 | 1018.2 | 1016.5 |
| 30°   | 1050.5 | 1053.9 | 1055.6 | 1053.9 | 1060.7 | 1062.4 | 1064.1 | 1067.5 | 1077.7 | 1084.5 | 1076.0 |
| 32.5° | 1096.4 | 1101.5 | 1106.6 | 1113.4 | 1128.7 | 1135.5 | 1133.8 | 1137.2 | 1140.6 | 1147.4 | 1149.1 |
| 35°   | 1166.1 | 1174.6 | 1176.3 | 1181.4 | 1200.1 | 1210.3 | 1225.6 | 1234.1 | 1232.4 | 1223.9 | 1235.8 |
| 37.5° | 1271.5 | 1281.7 | 1283.4 | 1291.9 | 1310.6 | 1319.1 | 1336.1 | 1358.2 | 1363.3 | 1351.4 | 1358.2 |
| 40°   | 1382.0 | 1395.6 | 1407.5 | 1426.2 | 1456.8 | 1467.0 | 1487.4 | 1499.3 | 1516.3 | 1518.0 | 1506.1 |
| 42.5° | 1475.5 | 1490.8 | 1490.8 | 1523.1 | 1557.1 | 1586.0 | 1611.5 | 1613.2 | 1625.1 | 1642.1 | 1625.1 |
| 45°   | 1575.8 | 1587.7 | 1592.8 | 1620.0 | 1640.4 | 1677.8 | 1715.2 | 1728.8 | 1733.9 | 1737.3 | 1742.4 |
| 47.5° | 1667.6 | 1682.9 | 1688.0 | 1711.8 | 1733.9 | 1767.9 | 1791.7 | 1832.5 | 1842.7 | 1829.1 | 1842.7 |
| 50°   | 1725.4 | 1742.4 | 1756.0 | 1805.3 | 1844.4 | 1873.3 | 1893.7 | 1929.4 | 1949.8 | 1939.6 | 1941.3 |
| 52.5° | 1815.5 | 1820.6 | 1834.2 | 1861.4 | 1917.5 | 1995.7 | 2019.5 | 2031.4 | 2060.3 | 2075.6 | 2048.4 |
| 55°   | 1937.9 | 1954.9 | 1965.1 | 1997.4 | 2026.3 | 2082.4 | 2172.5 | 2191.2 | 2184.4 | 2232.0 | 2186.1 |
| 57.5° | 1958.3 | 1983.8 | 2016.1 | 2077.3 | 2128.3 | 2158.9 | 2215.0 | 2279.6 | 2277.9 | 2284.7 | 2286.4 |
| 60°   | 1956.6 | 1971.9 | 1990.6 | 2043.3 | 2143.6 | 2199.7 | 2225.2 | 2264.3 | 2317.0 | 2276.2 | 2318.7 |
| 62.5° | 1944.7 | 1966.8 | 1987.2 | 2024.6 | 2079.0 | 2158.9 | 2230.3 | 2225.2 | 2296.6 | 2264.3 | 2288.1 |
| 65°   | 1873.3 | 1893.7 | 1931.1 | 1980.4 | 2046.7 | 2084.1 | 2155.5 | 2201.4 | 2191.2 | 2235.4 | 2191.2 |
| 67.5° | 1749.2 | 1767.9 | 1798.5 | 1856.3 | 1926.0 | 1980.4 | 2005.9 | 2082.4 | 2073.9 | 2123.2 | 2070.5 |
| 70°   | 1579.2 | 1603.0 | 1638.7 | 1679.5 | 1747.5 | 1805.3 | 1834.2 | 1883.5 | 1907.3 | 1903.9 | 1900.5 |
| 72.5° | 1375.2 | 1395.6 | 1424.5 | 1468.7 | 1526.5 | 1582.6 | 1604.7 | 1642.1 | 1681.2 | 1669.3 | 1672.7 |
| 75°   | 1147.4 | 1164.4 | 1186.5 | 1213.7 | 1268.1 | 1312.3 | 1337.8 | 1371.8 | 1402.4 | 1393.9 | 1390.5 |
| 77.5° | 883.9  | 904.3  | 928.1  | 953.6  | 975.7  | 1016.5 | 1035.2 | 1059.0 | 1084.5 | 1079.4 | 1081.1 |
| 80°   | 618.8  | 635.8  | 651.1  | 678.3  | 695.3  | 708.9  | 729.3  | 739.5  | 758.2  | 754.8  | 759.9  |
| 82.5° | 377.4  | 389.3  | 399.5  | 413.1  | 428.4  | 425.0  | 426.7  | 438.6  | 453.9  | 445.4  | 459.0  |
| 85°   | 185.3  | 183.6  | 193.8  | 197.2  | 207.4  | 205.7  | 204.0  | 210.8  | 219.3  | 214.2  | 214.2  |
| 87.5° | 47.6   | 47.6   | 47.6   | 49.3   | 54.4   | 59.5   | 54.4   | 57.8   | 61.2   | 62.9   | 61.2   |
| 90°   | 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  | 659.6  |
| 2.5°  | 671.5  | 673.2  | 671.5  | 673.2  | 673.2  | 673.2  | 673.2  | 671.5  |
| 5°    | 685.1  | 683.4  | 683.4  | 683.4  | 681.7  | 680.0  | 680.0  | 680.0  |
| 7.5°  | 691.9  | 691.9  | 690.2  | 688.5  | 686.8  | 686.8  | 690.2  | 688.5  |
| 10°   | 707.2  | 708.9  | 710.6  | 712.3  | 710.6  | 708.9  | 708.9  | 707.2  |
| 12.5° | 731.0  | 732.7  | 736.1  | 739.5  | 739.5  | 737.8  | 734.4  | 732.7  |
| 15°   | 765.0  | 763.3  | 765.0  | 768.4  | 768.4  | 763.3  | 758.2  | 756.5  |
| 17.5° | 812.5  | 807.4  | 804.0  | 804.0  | 807.4  | 802.3  | 797.2  | 798.9  |
| 20°   | 878.8  | 870.3  | 868.6  | 863.5  | 868.6  | 868.6  | 860.1  | 860.1  |
| 22.5° | 926.4  | 919.6  | 912.8  | 907.7  | 914.5  | 917.9  | 909.4  | 902.6  |
| 25°   | 970.6  | 968.9  | 958.7  | 953.6  | 953.6  | 955.3  | 943.4  | 945.1  |
| 27.5° | 1014.8 | 1014.8 | 1008.0 | 999.5  | 996.1  | 1001.2 | 991.0  | 987.6  |
| 30°   | 1067.5 | 1062.4 | 1067.5 | 1055.6 | 1047.1 | 1052.2 | 1052.2 | 1045.4 |
| 32.5° | 1135.5 | 1128.7 | 1133.8 | 1120.2 | 1108.3 | 1106.6 | 1098.1 | 1087.9 |
| 35°   | 1232.4 | 1215.4 | 1206.9 | 1200.1 | 1176.3 | 1174.6 | 1172.9 | 1164.4 |
| 37.5° | 1354.8 | 1332.7 | 1314.0 | 1315.7 | 1281.7 | 1273.2 | 1273.2 | 1261.3 |
| 40°   | 1501.0 | 1487.4 | 1460.2 | 1450.0 | 1416.0 | 1393.9 | 1392.2 | 1370.1 |
| 42.5° | 1603.0 | 1608.1 | 1572.4 | 1548.6 | 1521.4 | 1487.4 | 1489.1 | 1465.3 |
| 45°   | 1715.2 | 1705.0 | 1672.7 | 1633.6 | 1621.7 | 1584.3 | 1586.0 | 1562.2 |
| 47.5° | 1822.3 | 1784.9 | 1767.9 | 1725.4 | 1706.7 | 1664.2 | 1669.3 | 1652.3 |
| 50°   | 1927.7 | 1886.9 | 1868.2 | 1822.3 | 1791.7 | 1747.5 | 1742.4 | 1706.7 |
| 52.5° | 2039.9 | 2000.8 | 1975.3 | 1909.0 | 1868.2 | 1834.2 | 1820.6 | 1803.6 |
| 55°   | 2186.1 | 2147.0 | 2084.1 | 2019.5 | 1988.9 | 1936.2 | 1931.1 | 1909.0 |
| 57.5° | 2250.7 | 2220.1 | 2153.8 | 2111.3 | 2050.1 | 1995.7 | 1975.3 | 1932.8 |
| 60°   | 2249.0 | 2238.8 | 2170.8 | 2128.3 | 2038.2 | 1990.6 | 1968.5 | 1943.0 |
| 62.5° | 2230.3 | 2218.4 | 2138.5 | 2090.9 | 2009.3 | 1968.5 | 1951.5 | 1919.2 |
| 65°   | 2192.9 | 2152.1 | 2080.7 | 2041.6 | 1953.2 | 1917.5 | 1880.1 | 1851.2 |
| 67.5° | 2087.5 | 2002.5 | 1970.2 | 1920.9 | 1834.2 | 1796.8 | 1761.1 | 1732.2 |
| 70°   | 1890.3 | 1827.4 | 1798.5 | 1737.3 | 1662.5 | 1638.7 | 1594.5 | 1562.2 |
| 72.5° | 1638.7 | 1604.7 | 1574.1 | 1507.8 | 1455.1 | 1431.3 | 1387.1 | 1359.9 |
| 75°   | 1359.9 | 1339.5 | 1297.0 | 1247.7 | 1200.1 | 1191.6 | 1144.0 | 1133.8 |
| 77.5° | 1055.6 | 1036.9 | 1002.9 | 967.2  | 945.1  | 928.1  | 885.6  | 882.2  |
| 80°   | 739.5  | 727.6  | 700.4  | 685.1  | 669.8  | 654.5  | 625.6  | 622.2  |
| 82.5° | 436.9  | 428.4  | 430.1  | 414.8  | 406.3  | 402.9  | 380.8  | 382.5  |
| 85°   | 210.8  | 204.0  | 204.0  | 204.0  | 195.5  | 193.8  | 180.2  | 181.9  |
| 87.5° | 61.2   | 54.4   | 54.4   | 54.4   | 51.0   | 51.0   | 44.2   | 45.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)