

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: P191880

Luminaire Tested: **GLEON-AF-02-LED-E1-SL2-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191880
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-02-LED-E1-SL2-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9639 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

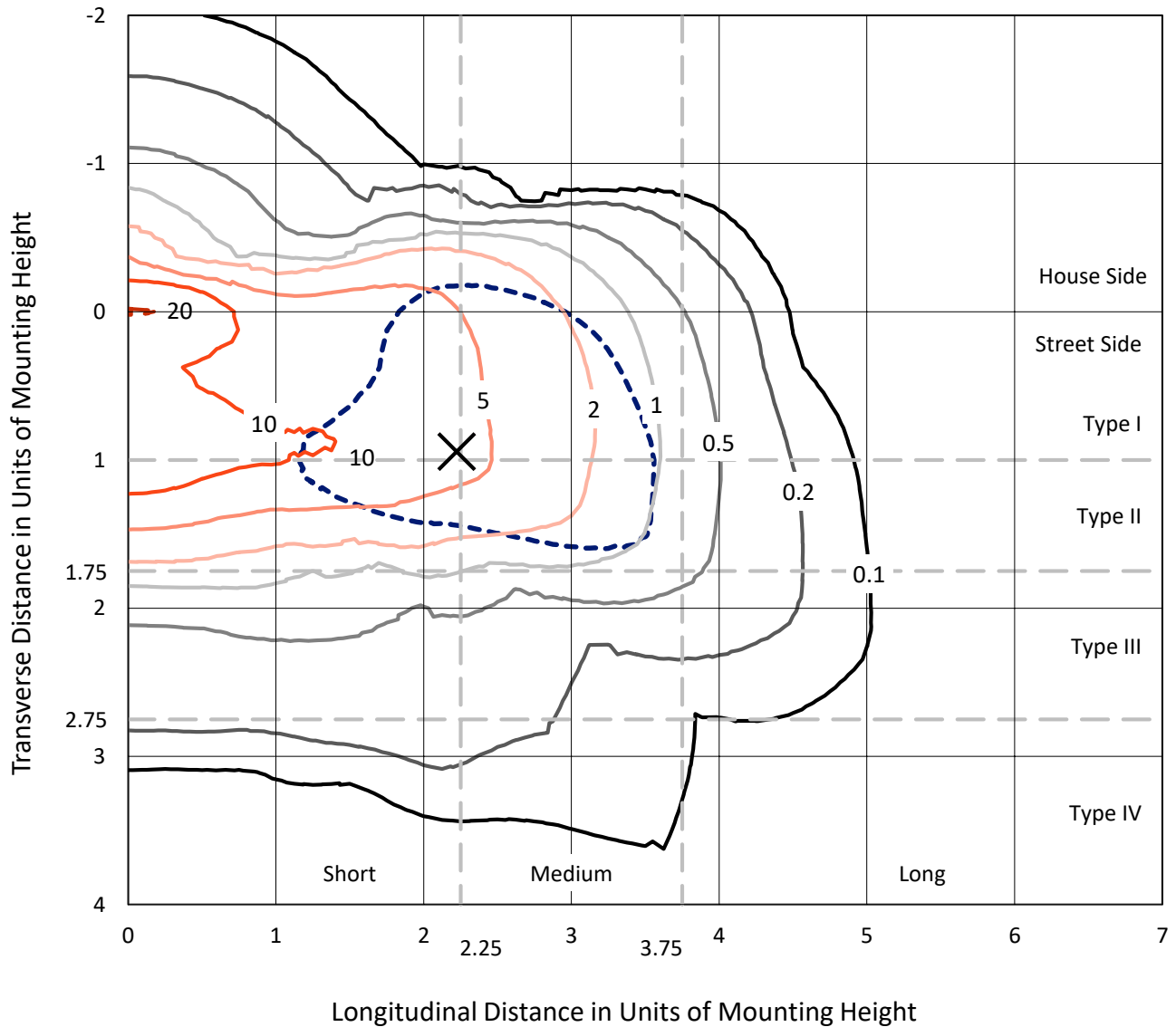
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

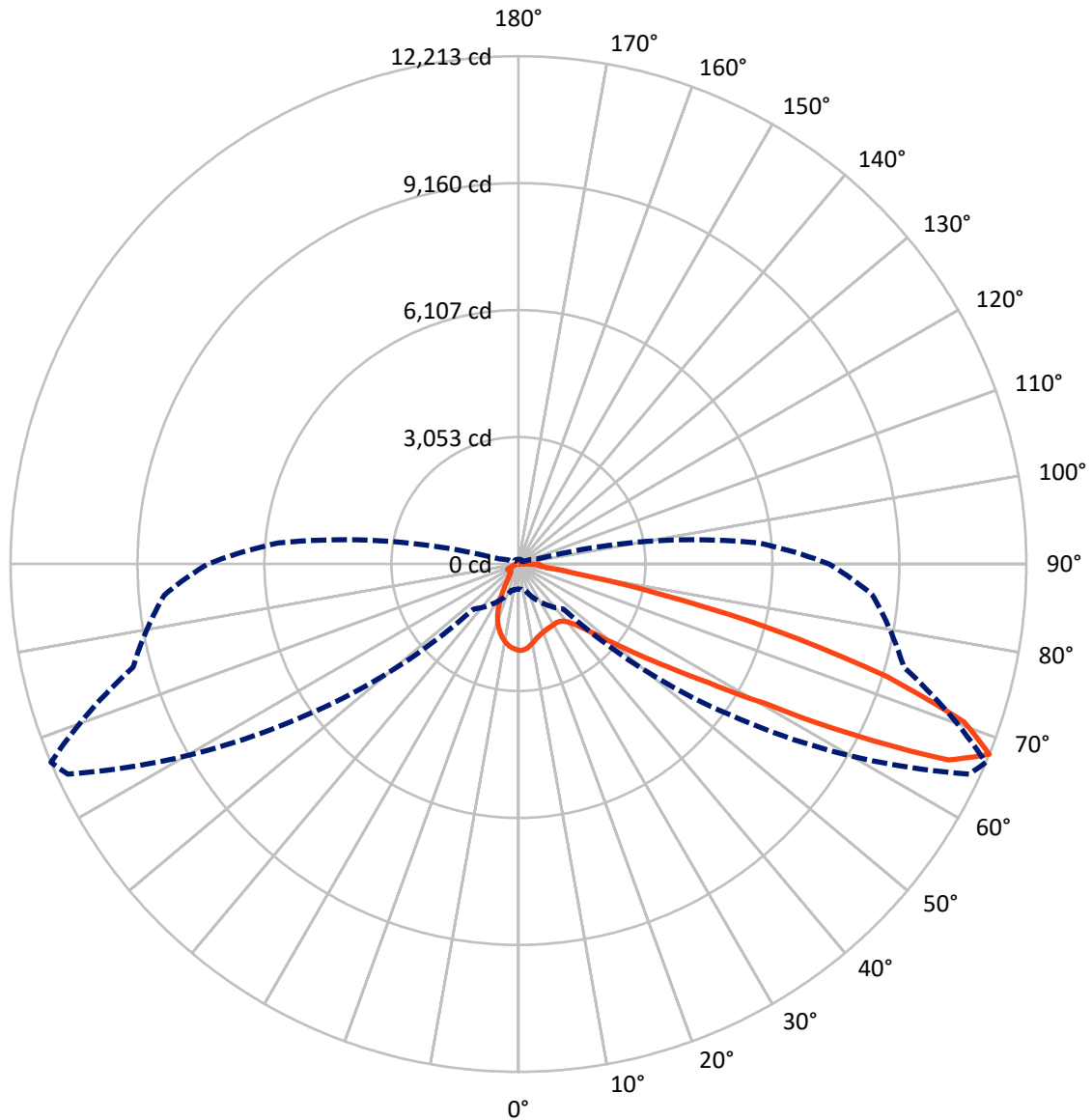
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.8 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1597.1 | 0.0 | 1597.1 |
| | % Fixture | 16.6 | 0.0 | 16.6 |
| Street Side | Lumens | 8041.9 | 0.0 | 8041.9 |
| | % Fixture | 83.4 | 0.0 | 83.4 |
| Total | Lumens | 9639.0 | 0.0 | 9639.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 177.4 | 1.8 |
| 10°-20° | 410.4 | 4.3 |
| 20°-30° | 556.3 | 5.8 |
| 30°-40° | 790.9 | 8.2 |
| 40°-50° | 1323.2 | 13.7 |
| 50°-60° | 2093.3 | 21.7 |
| 60°-70° | 2666.6 | 27.7 |
| 70°-80° | 1396.8 | 14.5 |
| 80°-90° | 224.0 | 2.3 |
| 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° | 9639.0 | 100.0 |
| 0°-180° | 9639.0 | 100.0 |



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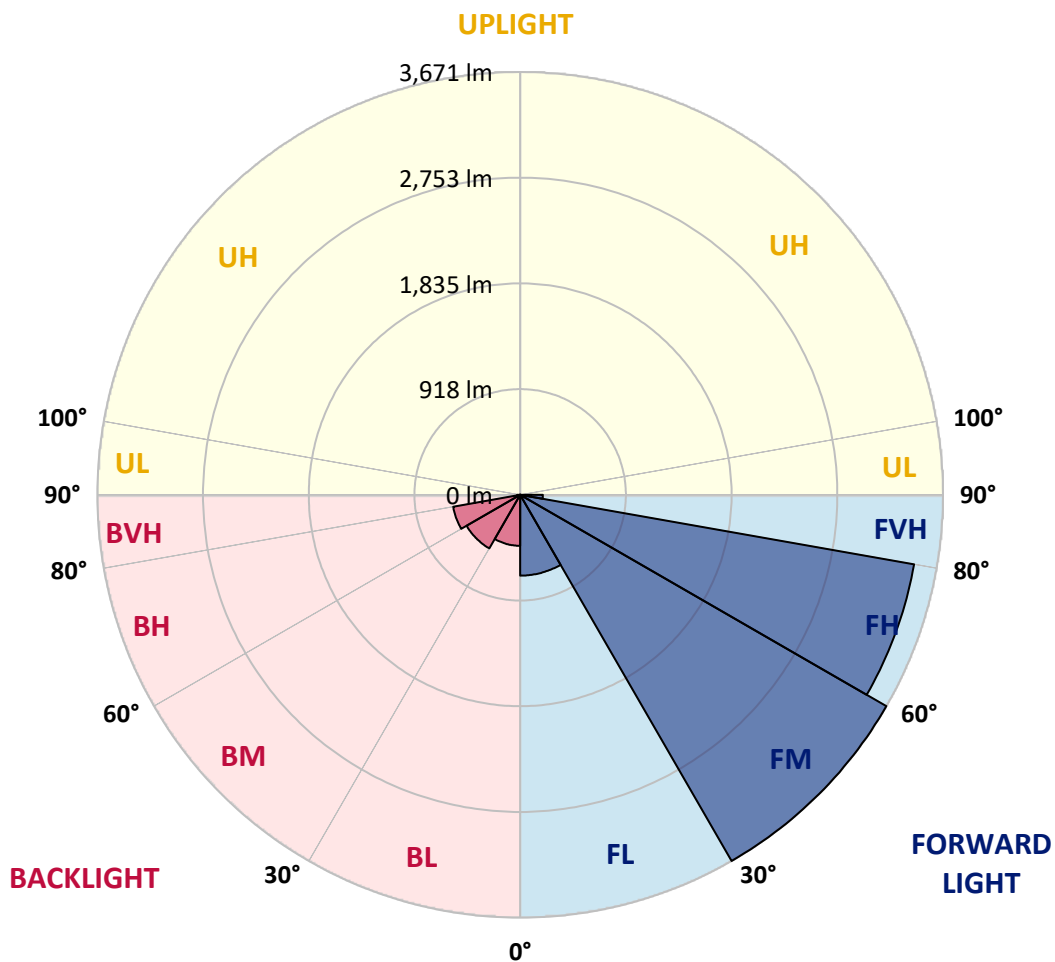
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 701.5 | 7.3 | | | |
| FM (30°-60°) | 3670.7 | 38.1 | | | |
| FH (60°-80°) | 3472.7 | 36.0 | | | G2/5000 |
| FVH (80°-90°) | 197.0 | 2.0 | | | G2/225 |
| BL (0°-30°) | 442.7 | 4.6 | B1/500 | | |
| BM (30°-60°) | 536.7 | 5.6 | B1/1000 | | |
| BH (60°-80°) | 590.7 | 6.1 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 27.0 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| 0° | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 |
| 2.5° | 1993.5 | 1996.9 | 2007.3 | 2014.0 | 2043.9 | 2056.8 | 2065.8 | 2074.8 | 2076.3 | 2080.5 | 2076.3 |
| 5° | 1784.4 | 1791.5 | 1811.0 | 1832.9 | 1890.9 | 1936.5 | 1984.5 | 2034.4 | 2043.5 | 2075.8 | 2084.8 |
| 7.5° | 1622.3 | 1620.4 | 1636.6 | 1662.7 | 1722.1 | 1785.4 | 1869.5 | 1968.8 | 1988.3 | 2061.0 | 2096.2 |
| 10° | 1504.0 | 1502.5 | 1519.6 | 1546.7 | 1603.3 | 1663.2 | 1758.3 | 1894.2 | 1921.8 | 2037.8 | 2107.2 |
| 12.5° | 1416.5 | 1417.0 | 1434.1 | 1464.0 | 1521.5 | 1581.9 | 1678.4 | 1822.0 | 1857.1 | 2010.7 | 2118.6 |
| 15° | 1358.5 | 1362.3 | 1376.1 | 1407.9 | 1464.0 | 1524.4 | 1619.0 | 1767.8 | 1807.2 | 1989.3 | 2131.4 |
| 17.5° | 1339.0 | 1345.2 | 1349.9 | 1373.2 | 1421.2 | 1481.6 | 1574.3 | 1727.8 | 1769.7 | 1974.5 | 2142.8 |
| 20° | 1357.1 | 1364.2 | 1355.2 | 1363.3 | 1393.7 | 1446.9 | 1539.1 | 1696.5 | 1739.2 | 1957.9 | 2144.2 |
| 22.5° | 1434.6 | 1441.2 | 1414.6 | 1391.3 | 1389.4 | 1421.7 | 1510.1 | 1671.7 | 1716.0 | 1945.5 | 2144.7 |
| 25° | 1571.0 | 1575.3 | 1530.6 | 1476.4 | 1423.6 | 1412.7 | 1489.7 | 1654.6 | 1701.7 | 1934.6 | 2135.7 |
| 27.5° | 1738.3 | 1741.6 | 1690.3 | 1610.4 | 1504.4 | 1434.1 | 1482.6 | 1644.7 | 1693.6 | 1925.1 | 2120.5 |
| 30° | 1941.7 | 1957.4 | 1888.5 | 1787.7 | 1633.2 | 1497.3 | 1496.8 | 1639.4 | 1684.6 | 1908.9 | 2090.5 |
| 32.5° | 2149.9 | 2156.6 | 2109.1 | 2006.9 | 1806.7 | 1608.5 | 1536.8 | 1643.2 | 1682.2 | 1889.5 | 2052.5 |
| 35° | 2361.0 | 2369.5 | 2338.6 | 2256.4 | 2043.9 | 1771.6 | 1614.7 | 1665.6 | 1696.9 | 1882.8 | 2025.9 |
| 37.5° | 2634.3 | 2645.7 | 2602.9 | 2507.9 | 2332.5 | 1992.6 | 1744.5 | 1721.7 | 1742.1 | 1901.8 | 2017.8 |
| 40° | 3066.4 | 3061.1 | 2936.1 | 2794.5 | 2648.1 | 2275.4 | 1929.9 | 1816.7 | 1828.6 | 1963.1 | 2042.5 |
| 42.5° | 3569.3 | 3556.4 | 3341.1 | 3118.7 | 2995.1 | 2617.7 | 2175.1 | 1981.7 | 1979.3 | 2083.9 | 2129.5 |
| 45° | 3970.5 | 3960.0 | 3766.1 | 3491.8 | 3392.9 | 3007.4 | 2492.2 | 2227.4 | 2209.8 | 2275.4 | 2290.2 |
| 47.5° | 4187.7 | 4188.2 | 4076.5 | 3852.6 | 3850.2 | 3502.7 | 2899.5 | 2583.0 | 2552.5 | 2583.4 | 2567.8 |
| 50° | 4111.6 | 4121.6 | 4109.7 | 4038.4 | 4267.5 | 4152.0 | 3431.4 | 3078.7 | 3017.4 | 3047.8 | 2987.5 |
| 52.5° | 3743.7 | 3756.6 | 3826.9 | 3936.2 | 4442.9 | 4936.8 | 4212.9 | 3694.8 | 3623.5 | 3612.5 | 3545.5 |
| 55° | 3091.6 | 3107.3 | 3250.8 | 3547.9 | 4297.0 | 5464.0 | 5445.9 | 4480.0 | 4366.4 | 4263.3 | 4234.7 |
| 57.5° | 2130.9 | 2157.1 | 2388.1 | 2829.2 | 3825.0 | 5623.2 | 6914.2 | 5599.4 | 5368.4 | 5008.1 | 5014.8 |
| 60° | 1201.2 | 1231.6 | 1504.0 | 1904.7 | 2872.4 | 5450.2 | 8031.2 | 7294.9 | 6807.3 | 5880.4 | 5929.8 |
| 62.5° | 763.9 | 796.7 | 1003.4 | 1323.3 | 1723.6 | 4518.5 | 8489.0 | 9652.1 | 9032.8 | 6955.6 | 7004.0 |
| 65° | 618.4 | 632.7 | 730.1 | 1092.3 | 1251.6 | 2722.2 | 8141.5 | 11593.9 | 11362.8 | 8320.2 | 8094.0 |
| 67.5° | 603.7 | 608.4 | 658.8 | 916.9 | 1200.2 | 1530.1 | 6494.0 | 11957.0 | 12213.2 | 9594.6 | 8547.9 |
| 70° | 596.5 | 613.2 | 742.5 | 875.1 | 1149.4 | 1290.5 | 3902.5 | 10961.7 | 11366.2 | 9927.8 | 7943.8 |
| 72.5° | 289.5 | 288.5 | 373.6 | 791.4 | 1294.8 | 1338.5 | 2005.0 | 8869.2 | 9275.2 | 8601.2 | 6527.8 |
| 75° | 233.4 | 213.4 | 203.9 | 290.0 | 1244.9 | 1382.3 | 1277.7 | 6102.8 | 6396.6 | 5766.7 | 4012.8 |
| 77.5° | 221.5 | 197.7 | 181.1 | 181.6 | 526.2 | 1465.9 | 1082.3 | 3377.7 | 3463.3 | 2604.8 | 1099.4 |
| 80° | 183.5 | 161.6 | 149.7 | 168.7 | 254.8 | 1396.1 | 1170.3 | 1528.7 | 1402.7 | 639.8 | 366.0 |
| 82.5° | 127.4 | 116.0 | 112.7 | 141.6 | 203.9 | 994.9 | 1360.9 | 821.4 | 688.8 | 320.4 | 225.8 |
| 85° | 81.3 | 69.4 | 77.0 | 103.1 | 158.8 | 459.2 | 1401.8 | 640.3 | 509.1 | 203.4 | 127.4 |
| 87.5° | 37.6 | 30.4 | 38.0 | 57.0 | 103.6 | 158.3 | 1333.8 | 719.2 | 524.3 | 107.4 | 80.3 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 | 2079.1 |
| 2.5° | 2080.1 | 2071.0 | 2063.9 | 2050.6 | 2035.9 | 2021.6 | 2008.8 | 1992.6 | 1987.8 | 1983.6 | 1990.2 |
| 5° | 2086.7 | 2077.7 | 2051.5 | 2010.7 | 1965.5 | 1923.2 | 1880.9 | 1844.8 | 1822.4 | 1810.1 | 1817.2 |
| 7.5° | 2096.7 | 2083.9 | 2029.7 | 1954.6 | 1873.3 | 1799.1 | 1722.6 | 1661.3 | 1616.1 | 1594.7 | 1600.9 |
| 10° | 2105.7 | 2081.0 | 1992.6 | 1879.9 | 1761.1 | 1650.8 | 1530.1 | 1430.3 | 1356.1 | 1317.1 | 1326.7 |
| 12.5° | 2109.5 | 2070.1 | 1940.8 | 1786.8 | 1623.7 | 1462.1 | 1284.4 | 1135.1 | 1028.6 | 989.6 | 981.6 |
| 15° | 2113.3 | 2057.7 | 1883.7 | 1680.8 | 1457.8 | 1229.2 | 980.1 | 801.4 | 713.0 | 693.5 | 689.2 |
| 17.5° | 2114.3 | 2036.3 | 1819.1 | 1565.7 | 1263.4 | 952.1 | 670.2 | 556.6 | 557.1 | 588.5 | 592.3 |
| 20° | 2104.3 | 2004.5 | 1740.7 | 1422.7 | 1030.5 | 658.3 | 460.1 | 440.6 | 512.4 | 590.8 | 600.3 |
| 22.5° | 2081.5 | 1962.2 | 1651.8 | 1255.8 | 763.9 | 433.5 | 356.0 | 377.4 | 470.1 | 566.1 | 577.1 |
| 25° | 2052.5 | 1910.8 | 1546.7 | 1062.4 | 505.8 | 309.9 | 298.5 | 324.7 | 387.4 | 451.6 | 457.7 |
| 27.5° | 2013.0 | 1850.0 | 1428.9 | 840.9 | 328.5 | 255.3 | 262.9 | 280.4 | 306.1 | 334.6 | 337.5 |
| 30° | 1962.2 | 1777.3 | 1302.9 | 613.2 | 248.1 | 229.6 | 240.5 | 250.0 | 261.0 | 277.1 | 278.5 |
| 32.5° | 1903.7 | 1707.4 | 1173.6 | 423.5 | 220.1 | 216.3 | 224.8 | 229.6 | 238.1 | 248.1 | 249.1 |
| 35° | 1854.8 | 1640.9 | 1039.6 | 299.5 | 208.2 | 206.3 | 212.0 | 213.9 | 222.0 | 232.9 | 233.9 |
| 37.5° | 1826.7 | 1586.7 | 901.2 | 241.5 | 200.1 | 197.3 | 200.6 | 200.6 | 212.0 | 228.2 | 230.5 |
| 40° | 1828.6 | 1556.7 | 762.9 | 218.2 | 193.5 | 189.7 | 190.1 | 190.1 | 204.9 | 222.5 | 223.9 |
| 42.5° | 1880.4 | 1564.3 | 640.3 | 209.1 | 188.2 | 184.0 | 181.6 | 183.0 | 195.4 | 206.8 | 207.7 |
| 45° | 2002.1 | 1618.0 | 525.2 | 203.4 | 183.0 | 181.6 | 176.3 | 175.9 | 180.6 | 185.9 | 185.9 |
| 47.5° | 2201.7 | 1724.0 | 447.3 | 199.6 | 178.7 | 178.3 | 172.1 | 165.9 | 165.4 | 167.3 | 167.3 |
| 50° | 2526.4 | 1906.6 | 395.0 | 195.4 | 175.9 | 172.1 | 164.9 | 155.4 | 152.1 | 153.5 | 153.5 |
| 52.5° | 3013.1 | 2232.2 | 375.0 | 189.7 | 169.7 | 163.5 | 155.4 | 145.9 | 143.1 | 143.6 | 143.6 |
| 55° | 3651.5 | 2732.2 | 372.2 | 183.0 | 163.0 | 153.1 | 146.4 | 139.3 | 135.9 | 136.9 | 136.9 |
| 57.5° | 4431.5 | 3423.8 | 423.0 | 172.5 | 154.0 | 142.6 | 138.8 | 134.0 | 131.7 | 133.1 | 132.6 |
| 60° | 5379.8 | 4328.9 | 627.4 | 161.6 | 145.0 | 133.1 | 133.1 | 129.3 | 127.4 | 128.8 | 128.3 |
| 62.5° | 6472.1 | 5368.4 | 882.2 | 153.5 | 135.5 | 125.5 | 127.4 | 125.5 | 123.6 | 124.5 | 124.1 |
| 65° | 7440.9 | 6045.8 | 826.1 | 147.4 | 126.0 | 118.4 | 121.7 | 120.7 | 119.3 | 120.3 | 119.8 |
| 67.5° | 7468.9 | 5794.8 | 463.9 | 140.7 | 116.9 | 111.2 | 116.0 | 115.5 | 114.6 | 115.5 | 115.0 |
| 70° | 6665.6 | 4893.1 | 261.4 | 128.3 | 107.4 | 102.7 | 109.3 | 108.9 | 107.9 | 109.8 | 109.3 |
| 72.5° | 5340.4 | 3550.7 | 191.1 | 113.1 | 97.9 | 93.6 | 101.2 | 100.8 | 100.8 | 103.6 | 102.2 |
| 75° | 3073.0 | 1827.2 | 152.6 | 97.0 | 87.9 | 84.6 | 91.3 | 91.7 | 92.7 | 96.5 | 93.6 |
| 77.5° | 876.0 | 569.4 | 124.5 | 82.2 | 75.6 | 74.2 | 80.8 | 81.8 | 82.2 | 86.5 | 82.7 |
| 80° | 325.6 | 262.4 | 102.7 | 68.9 | 61.8 | 62.3 | 68.4 | 69.9 | 70.3 | 74.6 | 69.9 |
| 82.5° | 207.7 | 173.0 | 83.2 | 53.2 | 48.5 | 48.0 | 55.6 | 57.5 | 57.5 | 58.0 | 55.1 |
| 85° | 121.2 | 103.6 | 62.7 | 38.5 | 34.2 | 32.8 | 41.4 | 44.7 | 43.3 | 42.3 | 40.4 |
| 87.5° | 81.3 | 71.3 | 38.5 | 21.4 | 18.5 | 17.6 | 24.2 | 26.6 | 25.7 | 24.2 | 22.8 |
| 90° | 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)