

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: P193301

Luminaire Tested: **GLEON-AF-03-LED-E1-T4W-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193301  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-AF-03-LED-E1-T4W-7030-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14099.9 lumens  
Efficiency: N/A  
Efficacy: 113.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 124  
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



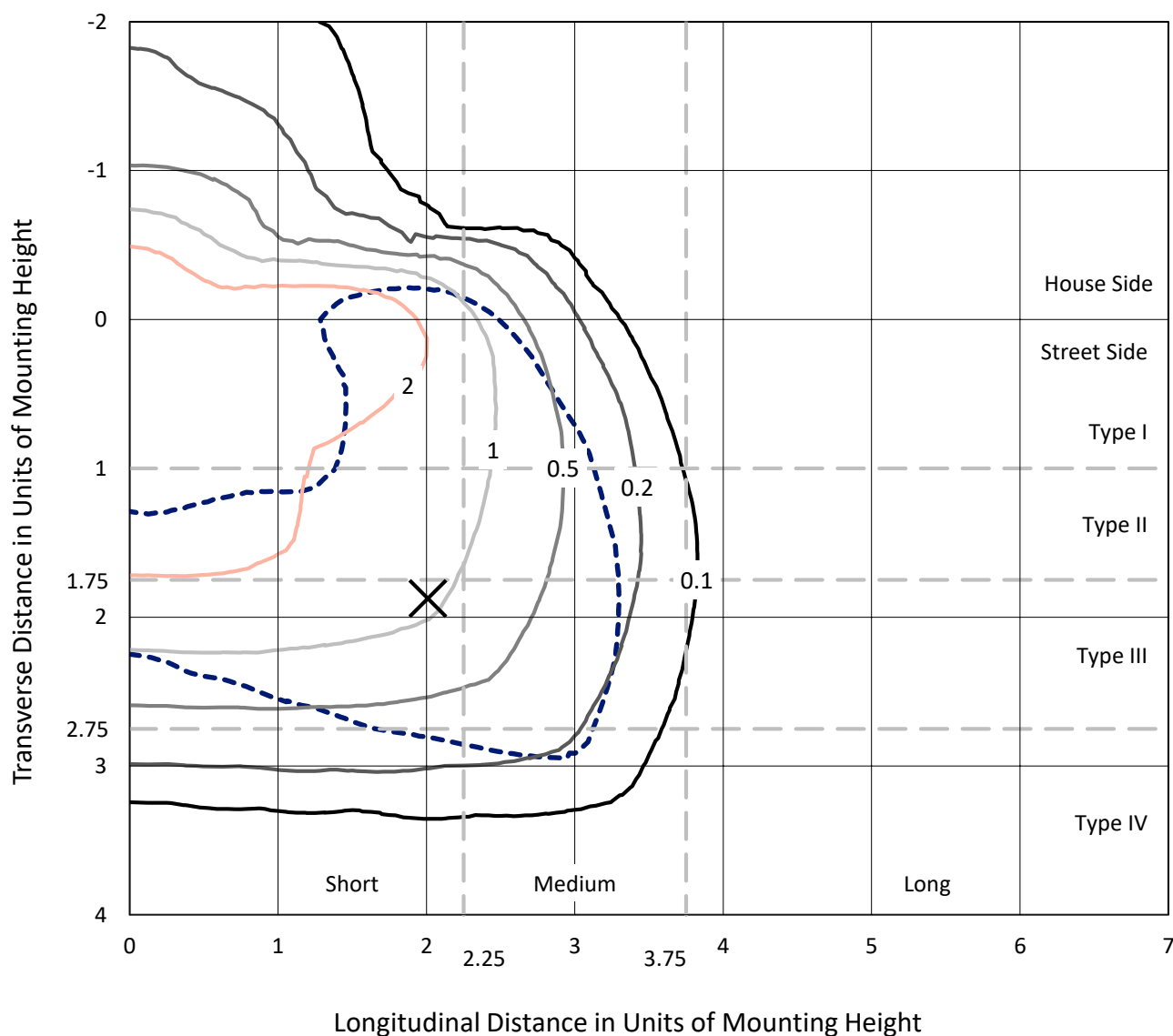
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

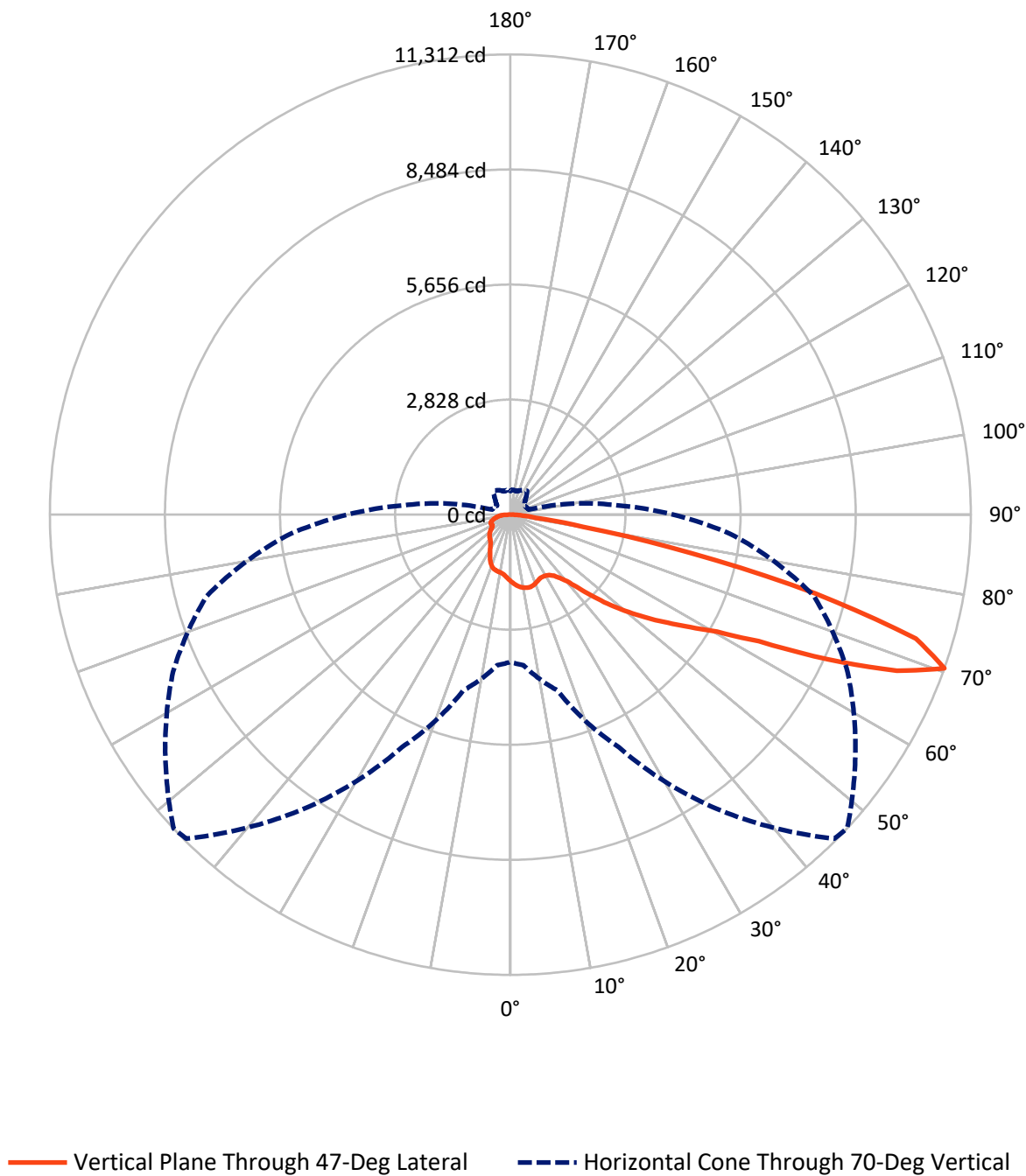


Based on 20 foot mounting height. Maximum calculated value = 4.7 fc  
Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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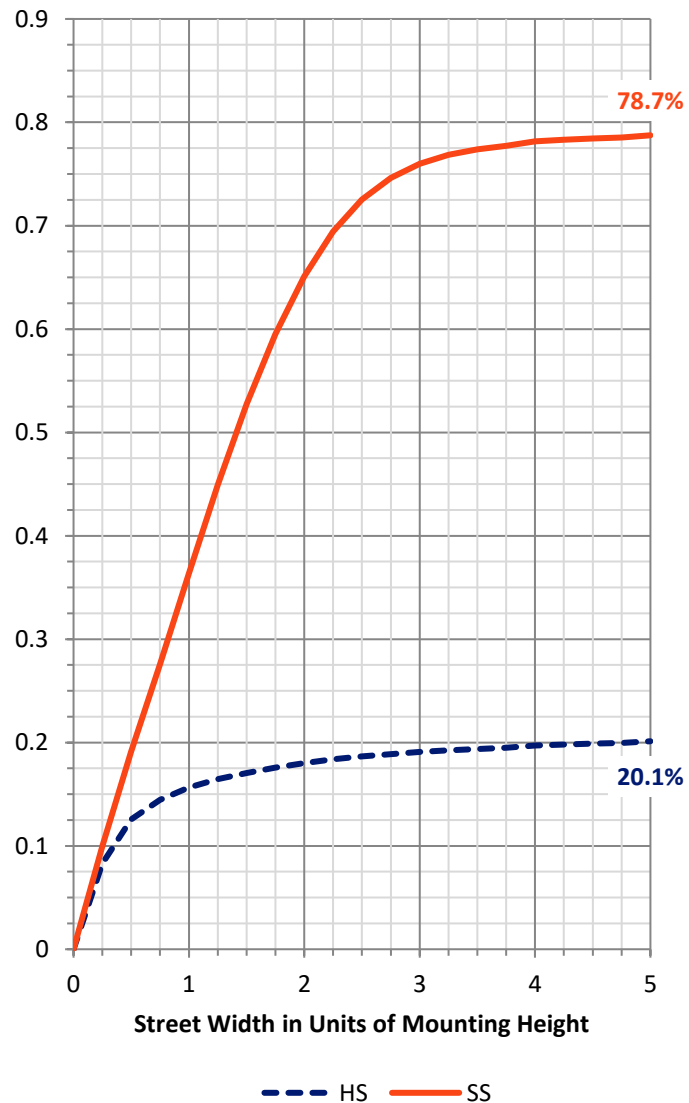
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2941.5   | 0.0    | 2941.5  |
|                    | % Fixture | 20.9     | 0.0    | 20.9    |
| <b>Street Side</b> | Lumens    | 11158.4  | 0.0    | 11158.4 |
|                    | % Fixture | 79.1     | 0.0    | 79.1    |
| <b>Total</b>       | Lumens    | 14099.9  | 0.0    | 14099.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 156.8   | 1.1       |
| 10°-20°   | 459.9   | 3.3       |
| 20°-30°   | 679.1   | 4.8       |
| 30°-40°   | 987.1   | 7.0       |
| 40°-50°   | 1776.4  | 12.6      |
| 50°-60°   | 3077.5  | 21.8      |
| 60°-70°   | 4392.5  | 31.2      |
| 70°-80°   | 2254.9  | 16.0      |
| 80°-90°   | 315.7   | 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°    | 14099.9 | 100.0     |
| 0°-180°   | 14099.9 | 100.0     |

**Coefficient of Utilization**



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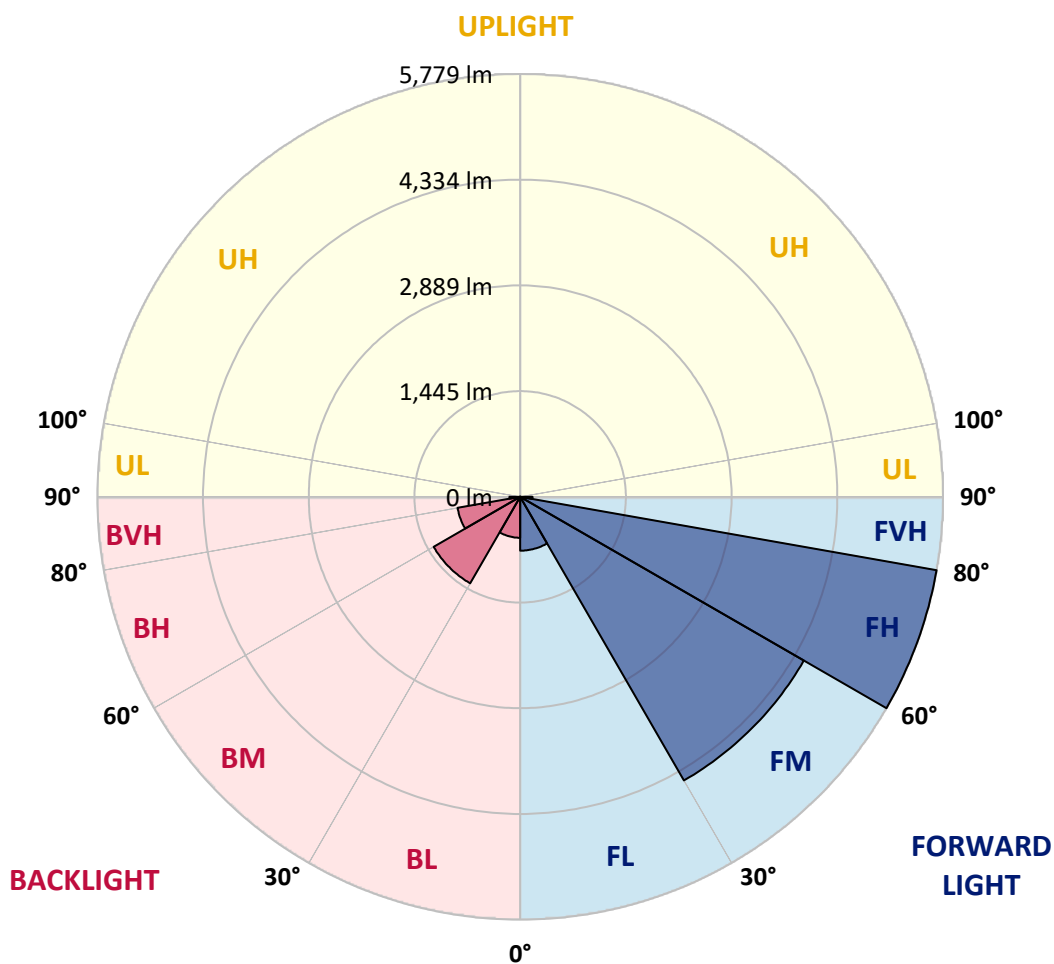
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 735.7  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 4475.7 | 31.7      |                         |      |         |
| FH   | (60°-80°)   | 5778.5 | 41.0      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 168.4  | 1.2       |                         |      | G2/225  |
| BL   | (0°-30°)    | 560.1  | 4.0       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1365.4 | 9.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 868.8  | 6.2       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 147.2  | 1.0       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 47°     | 55°     | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|
| 0°    | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0  | 1636.0  | 1636.0  | 1636.0 | 1636.0 | 1636.0 |
| 2.5°  | 1732.1 | 1728.6 | 1727.3 | 1724.5 | 1721.1 | 1703.9  | 1700.5  | 1688.2  | 1671.0 | 1653.2 | 1634.6 |
| 5°    | 1845.9 | 1845.3 | 1837.7 | 1824.0 | 1802.0 | 1764.3  | 1755.4  | 1725.2  | 1684.8 | 1645.7 | 1606.5 |
| 7.5°  | 1946.1 | 1939.9 | 1925.4 | 1898.1 | 1859.7 | 1808.2  | 1795.9  | 1754.0  | 1698.4 | 1644.9 | 1592.1 |
| 10°   | 2019.4 | 2016.1 | 1984.4 | 1946.8 | 1896.7 | 1839.7  | 1825.4  | 1778.7  | 1717.7 | 1649.7 | 1583.9 |
| 12.5° | 2061.2 | 2054.5 | 2018.1 | 1972.7 | 1913.1 | 1857.6  | 1843.2  | 1795.9  | 1727.3 | 1649.7 | 1572.2 |
| 15°   | 2058.6 | 2053.7 | 2017.5 | 1968.1 | 1907.6 | 1858.9  | 1845.9  | 1798.6  | 1725.2 | 1642.9 | 1557.2 |
| 17.5° | 2003.7 | 2005.8 | 1974.9 | 1926.2 | 1876.8 | 1839.7  | 1828.1  | 1784.2  | 1711.4 | 1629.2 | 1539.4 |
| 20°   | 1907.6 | 1917.3 | 1896.7 | 1853.5 | 1826.0 | 1800.7  | 1793.2  | 1756.2  | 1690.2 | 1609.3 | 1520.2 |
| 22.5° | 1811.6 | 1820.6 | 1812.3 | 1776.0 | 1771.8 | 1756.8  | 1752.6  | 1725.9  | 1671.6 | 1597.0 | 1508.5 |
| 25°   | 1740.9 | 1749.2 | 1747.8 | 1716.3 | 1728.6 | 1727.9  | 1724.5  | 1711.4  | 1667.7 | 1597.0 | 1510.5 |
| 27.5° | 1721.8 | 1724.5 | 1721.8 | 1693.0 | 1710.1 | 1723.8  | 1721.1  | 1718.9  | 1680.0 | 1616.8 | 1536.5 |
| 30°   | 1787.6 | 1783.5 | 1762.3 | 1703.9 | 1719.7 | 1739.0  | 1736.1  | 1737.5  | 1717.0 | 1668.9 | 1594.8 |
| 32.5° | 2050.4 | 2031.7 | 1964.6 | 1800.7 | 1758.8 | 1769.1  | 1770.4  | 1793.2  | 1796.5 | 1749.2 | 1685.5 |
| 35°   | 2443.4 | 2422.9 | 2335.8 | 2060.0 | 1880.3 | 1844.6  | 1844.6  | 1878.8  | 1899.5 | 1864.5 | 1826.0 |
| 37.5° | 2859.8 | 2837.1 | 2790.5 | 2419.4 | 2135.4 | 1975.6  | 1972.1  | 1996.1  | 2025.6 | 2033.9 | 2043.4 |
| 40°   | 3333.1 | 3309.1 | 3322.1 | 2822.7 | 2491.4 | 2202.6  | 2153.9  | 2136.8  | 2216.4 | 2269.2 | 2346.1 |
| 42.5° | 3851.1 | 3840.0 | 3844.9 | 3272.1 | 2896.8 | 2542.1  | 2472.9  | 2384.4  | 2480.4 | 2574.4 | 2735.7 |
| 45°   | 4330.5 | 4340.1 | 4335.3 | 3752.9 | 3348.2 | 2956.5  | 2883.2  | 2711.6  | 2805.6 | 2966.8 | 3229.4 |
| 47.5° | 4750.3 | 4710.5 | 4772.2 | 4278.4 | 3853.8 | 3420.3  | 3329.6  | 3099.9  | 3195.2 | 3394.1 | 3838.8 |
| 50°   | 5260.0 | 5254.5 | 5163.9 | 4979.4 | 4465.0 | 3886.1  | 3767.4  | 3501.2  | 3649.4 | 3925.8 | 4606.3 |
| 52.5° | 5795.7 | 5696.2 | 5613.3 | 5524.8 | 5113.3 | 4363.4  | 4218.0  | 3901.1  | 4183.0 | 4530.8 | 5541.9 |
| 55°   | 5905.5 | 5860.8 | 5963.8 | 6112.6 | 5738.1 | 4859.5  | 4690.0  | 4402.5  | 4783.9 | 5222.3 | 6620.9 |
| 57.5° | 6140.1 | 6139.4 | 6352.0 | 6617.5 | 6381.5 | 5385.5  | 5214.7  | 5008.2  | 5459.5 | 6014.5 | 7766.4 |
| 60°   | 6298.6 | 6343.1 | 6738.2 | 7253.4 | 7013.4 | 5993.3  | 5836.2  | 5707.2  | 6227.9 | 6900.2 | 8833.8 |
| 62.5° | 6381.5 | 6441.9 | 6981.1 | 7511.3 | 7906.4 | 7005.0  | 6848.1  | 6662.1  | 7244.4 | 7871.5 | 9458.1 |
| 65°   | 6036.5 | 6155.1 | 6943.3 | 7734.3 | 8688.4 | 8645.2  | 8574.5  | 8248.1  | 8515.5 | 8639.0 | 9232.4 |
| 67.5° | 5081.6 | 5203.0 | 6120.9 | 7526.5 | 9246.8 | 10227.1 | 10242.2 | 9684.4  | 9297.5 | 8704.9 | 7762.5 |
| 70°   | 3620.6 | 3715.9 | 4475.3 | 6310.2 | 8821.5 | 11260.8 | 11312.2 | 10346.5 | 9141.8 | 7719.8 | 5423.2 |
| 72.5° | 1718.9 | 1777.3 | 2496.2 | 4106.8 | 7000.2 | 10317.6 | 10417.1 | 9501.3  | 7773.4 | 5715.5 | 2958.5 |
| 75°   | 631.7  | 649.6  | 843.7  | 1747.2 | 4060.2 | 7608.7  | 7726.0  | 6811.0  | 5153.0 | 2845.4 | 1127.0 |
| 77.5° | 378.7  | 390.3  | 473.3  | 737.4  | 1597.0 | 4349.1  | 4522.6  | 3704.2  | 2252.1 | 1059.2 | 554.3  |
| 80°   | 264.7  | 273.0  | 339.6  | 458.9  | 754.6  | 1657.3  | 1811.6  | 1511.8  | 897.2  | 670.2  | 403.3  |
| 82.5° | 179.0  | 183.1  | 238.7  | 310.1  | 501.4  | 591.9   | 638.6   | 672.3   | 605.0  | 498.7  | 255.8  |
| 85°   | 117.4  | 121.4  | 161.9  | 204.5  | 318.9  | 305.9   | 312.8   | 395.8   | 441.7  | 338.8  | 142.0  |
| 87.5° | 67.2   | 69.9   | 97.5   | 109.0  | 156.3  | 129.7   | 131.0   | 208.5   | 282.7  | 228.5  | 86.5   |
| 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°    | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 | 1636.0 |
| 2.5°  | 1629.8 | 1621.0 | 1601.0 | 1588.7 | 1577.0 | 1574.3 | 1569.5 | 1568.9 | 1568.1 | 1568.1 | 1566.0 |
| 5°    | 1593.5 | 1578.4 | 1547.5 | 1530.4 | 1516.0 | 1514.7 | 1513.9 | 1517.4 | 1518.7 | 1520.2 | 1518.0 |
| 7.5°  | 1570.2 | 1549.7 | 1511.2 | 1486.5 | 1469.3 | 1465.2 | 1472.0 | 1487.9 | 1498.2 | 1502.4 | 1500.2 |
| 10°   | 1555.8 | 1530.4 | 1485.8 | 1459.0 | 1444.6 | 1442.5 | 1451.5 | 1470.0 | 1491.3 | 1499.5 | 1498.8 |
| 12.5° | 1539.4 | 1510.5 | 1463.2 | 1435.0 | 1426.8 | 1431.0 | 1442.5 | 1459.7 | 1481.7 | 1494.6 | 1495.4 |
| 15°   | 1522.8 | 1489.2 | 1440.5 | 1415.8 | 1412.4 | 1417.8 | 1428.9 | 1441.9 | 1459.0 | 1472.0 | 1473.5 |
| 17.5° | 1503.0 | 1468.0 | 1419.3 | 1393.9 | 1391.1 | 1393.9 | 1394.5 | 1401.5 | 1412.4 | 1424.7 | 1428.1 |
| 20°   | 1481.7 | 1446.0 | 1395.2 | 1369.9 | 1357.5 | 1346.5 | 1334.2 | 1335.5 | 1339.0 | 1351.3 | 1354.0 |
| 22.5° | 1466.6 | 1431.0 | 1376.7 | 1341.7 | 1308.8 | 1275.9 | 1251.2 | 1247.7 | 1249.2 | 1259.4 | 1262.8 |
| 25°   | 1468.0 | 1430.2 | 1372.0 | 1311.5 | 1239.5 | 1186.8 | 1153.8 | 1148.4 | 1147.7 | 1155.2 | 1160.0 |
| 27.5° | 1494.6 | 1457.0 | 1389.8 | 1280.7 | 1164.0 | 1085.9 | 1050.8 | 1046.8 | 1041.4 | 1043.3 | 1048.9 |
| 30°   | 1554.4 | 1519.5 | 1432.9 | 1249.2 | 1082.4 | 987.1  | 950.8  | 946.6  | 939.1  | 935.7  | 939.7  |
| 32.5° | 1651.8 | 1623.0 | 1496.1 | 1219.0 | 1000.9 | 902.7  | 865.7  | 856.8  | 852.0  | 847.9  | 851.2  |
| 35°   | 1813.7 | 1801.3 | 1580.4 | 1186.0 | 928.8  | 837.6  | 803.9  | 790.3  | 783.4  | 790.9  | 796.4  |
| 37.5° | 2067.5 | 2074.4 | 1690.9 | 1134.5 | 873.2  | 794.4  | 766.2  | 750.4  | 740.1  | 746.4  | 752.5  |
| 40°   | 2426.9 | 2431.8 | 1813.0 | 1061.9 | 825.2  | 768.9  | 738.8  | 724.4  | 709.9  | 699.0  | 698.2  |
| 42.5° | 2898.8 | 2850.1 | 1933.1 | 983.0  | 769.6  | 753.3  | 719.6  | 701.8  | 679.8  | 649.6  | 643.4  |
| 45°   | 3458.6 | 3287.8 | 2024.2 | 892.4  | 707.2  | 734.0  | 698.2  | 673.6  | 639.2  | 606.4  | 603.0  |
| 47.5° | 4103.4 | 3757.8 | 2068.9 | 798.4  | 648.9  | 705.9  | 672.3  | 633.1  | 589.9  | 573.5  | 571.4  |
| 50°   | 4890.9 | 4315.4 | 2090.1 | 707.2  | 598.2  | 668.7  | 634.5  | 588.6  | 552.2  | 548.8  | 546.8  |
| 52.5° | 5787.5 | 4986.3 | 2097.0 | 632.5  | 556.3  | 620.8  | 603.6  | 559.1  | 530.2  | 532.9  | 532.9  |
| 55°   | 6725.9 | 5679.1 | 2003.7 | 578.3  | 517.9  | 571.4  | 583.1  | 547.4  | 523.4  | 534.4  | 538.4  |
| 57.5° | 7587.5 | 6293.0 | 1710.1 | 536.5  | 481.5  | 533.7  | 575.6  | 558.5  | 541.9  | 586.5  | 589.2  |
| 60°   | 8248.7 | 6656.0 | 1277.2 | 498.7  | 454.8  | 520.6  | 595.5  | 600.3  | 604.3  | 710.6  | 725.1  |
| 62.5° | 8387.3 | 6535.3 | 878.0  | 469.2  | 442.5  | 531.6  | 631.7  | 632.5  | 627.7  | 701.8  | 710.6  |
| 65°   | 7751.4 | 5771.7 | 638.6  | 452.8  | 432.1  | 551.5  | 662.6  | 648.2  | 616.7  | 672.9  | 656.4  |
| 67.5° | 6155.8 | 4348.3 | 531.6  | 440.5  | 417.1  | 550.1  | 695.6  | 662.6  | 610.5  | 659.2  | 632.5  |
| 70°   | 3995.7 | 2629.4 | 473.3  | 430.2  | 399.3  | 524.1  | 714.8  | 661.2  | 592.6  | 613.3  | 581.7  |
| 72.5° | 1949.5 | 1175.7 | 434.2  | 414.9  | 380.7  | 487.8  | 714.1  | 648.9  | 574.1  | 572.7  | 555.6  |
| 75°   | 762.8  | 538.4  | 398.6  | 392.3  | 349.2  | 446.6  | 694.9  | 631.1  | 552.2  | 530.2  | 524.1  |
| 77.5° | 446.6  | 384.1  | 353.2  | 358.8  | 311.4  | 405.4  | 666.8  | 600.3  | 522.0  | 495.9  | 489.1  |
| 80°   | 325.1  | 287.5  | 301.1  | 310.1  | 266.1  | 364.3  | 629.0  | 562.4  | 488.4  | 501.4  | 491.8  |
| 82.5° | 208.5  | 185.2  | 244.2  | 253.2  | 221.6  | 322.5  | 588.0  | 522.7  | 441.1  | 400.7  | 391.0  |
| 85°   | 106.3  | 117.4  | 181.8  | 192.8  | 170.8  | 264.7  | 537.8  | 470.0  | 387.6  | 333.3  | 338.8  |
| 87.5° | 59.6   | 80.3   | 116.0  | 129.7  | 120.7  | 203.8  | 436.3  | 387.6  | 316.2  | 257.2  | 226.3  |
| 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)