

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: P194830

Luminaire Tested: **GLEON-AF-02-LED-E1-T3R-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194830  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)  
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-T3R-7060  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12453 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 113  
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

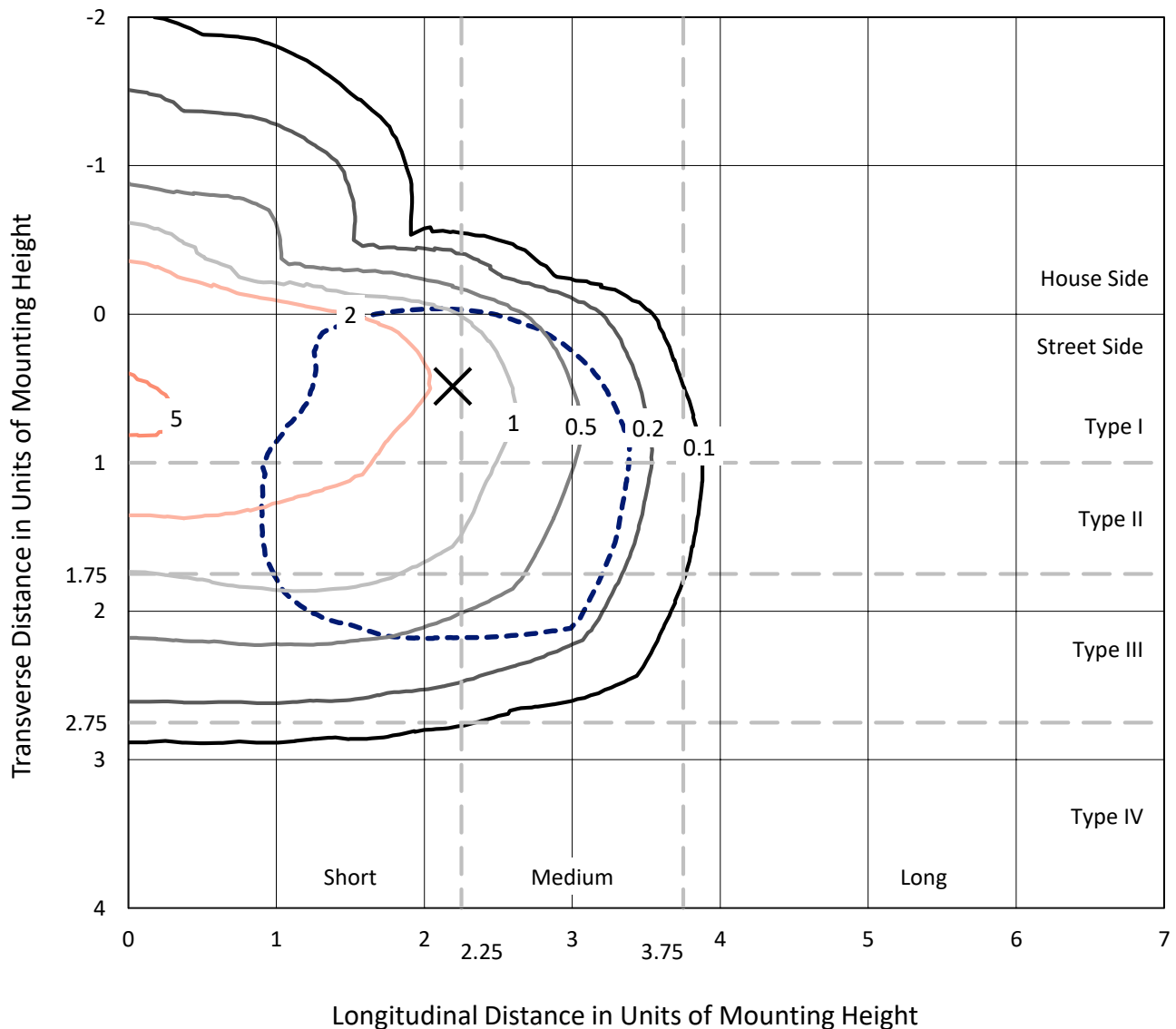


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

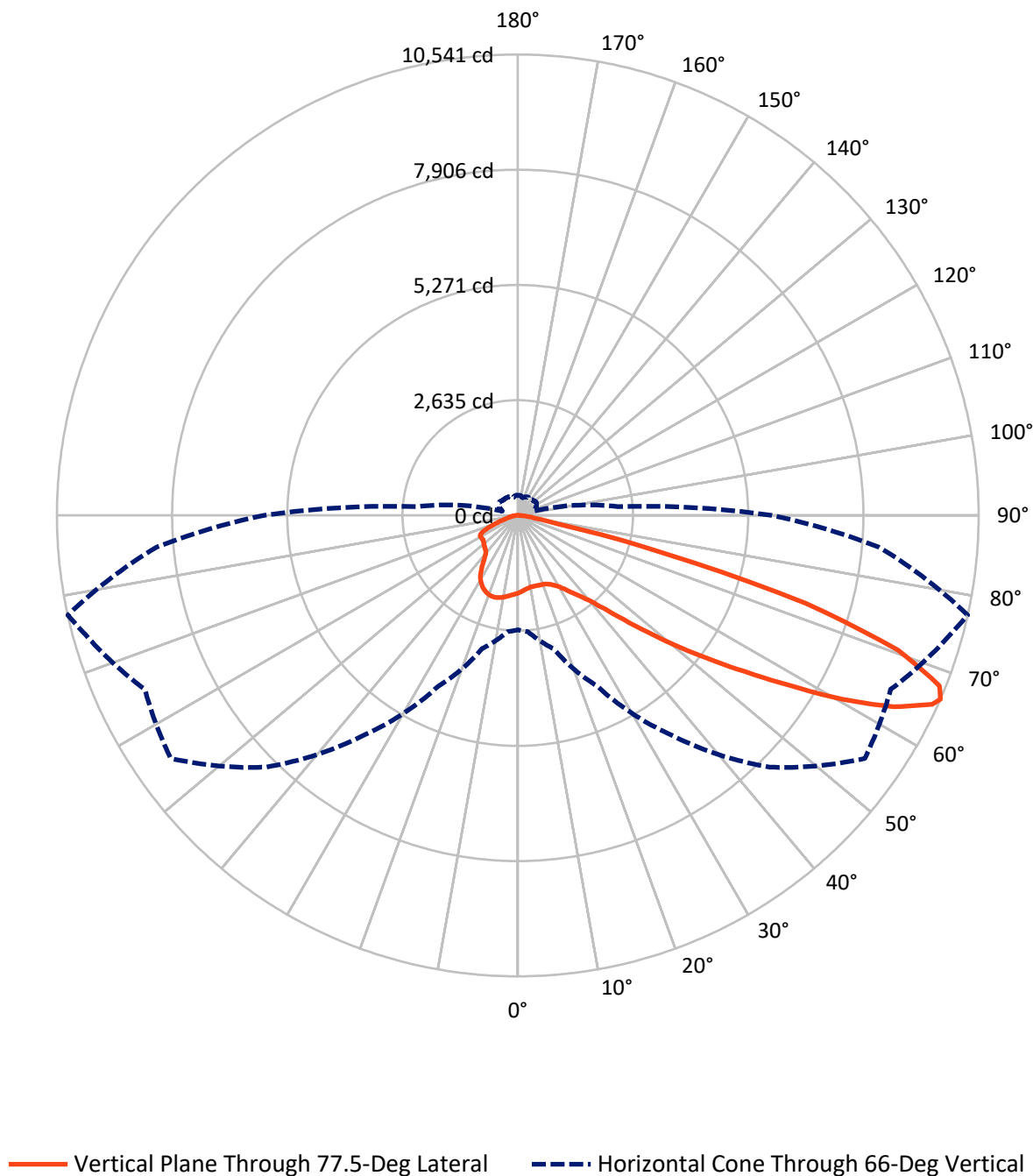


Based on 20 foot mounting height. Maximum calculated value = 5.5 fc  
Type III - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2127.5   | 0.0    | 2127.5  |
|                    | % Fixture | 17.1     | 0.0    | 17.1    |
| <b>Street Side</b> | Lumens    | 10325.5  | 0.0    | 10325.5 |
|                    | % Fixture | 82.9     | 0.0    | 82.9    |
| <b>Total</b>       | Lumens    | 12453.0  | 0.0    | 12453.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 158.5   | 1.3       |
| 10°-20°   | 447.3   | 3.6       |
| 20°-30°   | 763.4   | 6.1       |
| 30°-40°   | 1222.0  | 9.8       |
| 40°-50°   | 1887.9  | 15.2      |
| 50°-60°   | 2677.7  | 21.5      |
| 60°-70°   | 3582.0  | 28.8      |
| 70°-80°   | 1555.6  | 12.5      |
| 80°-90°   | 158.6   | 1.3       |
| 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°    | 12453.0 | 100.0     |
| 0°-180°   | 12453.0 | 100.0     |

**Coefficient of Utilization**



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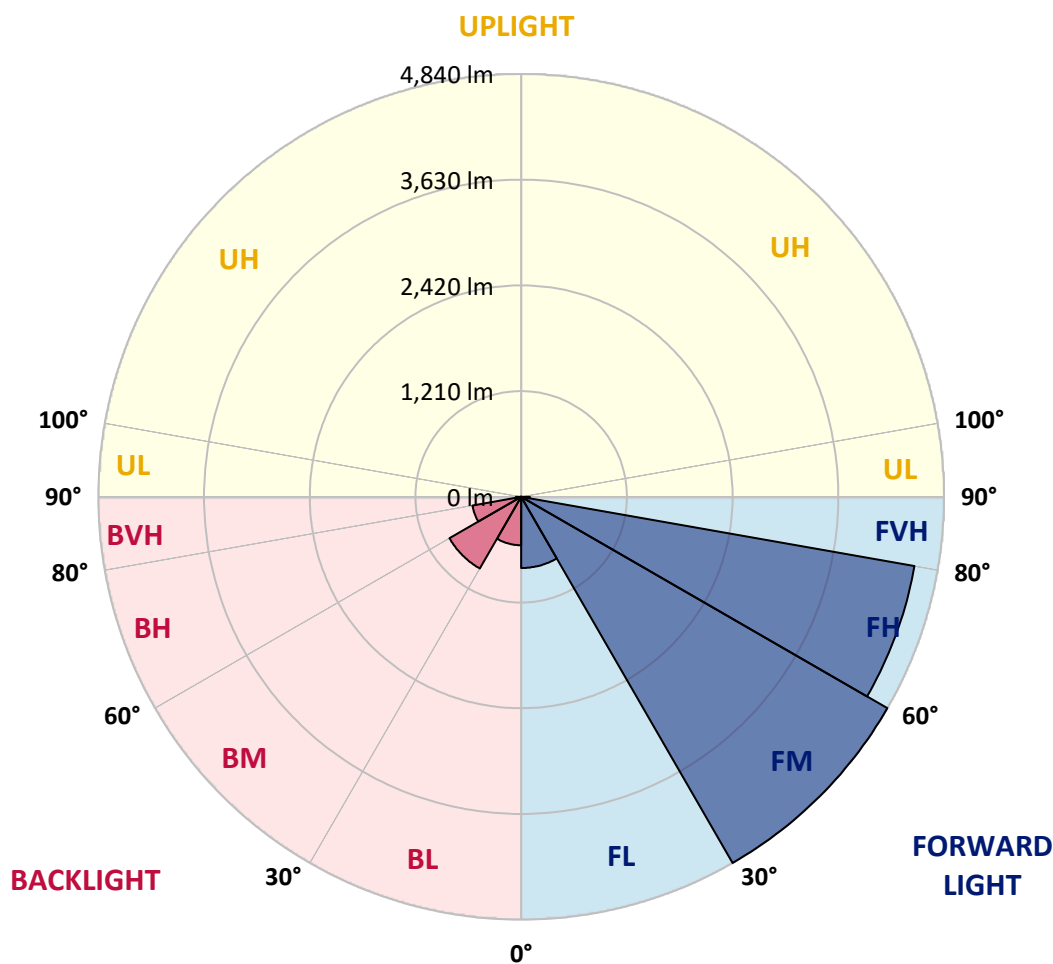
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 815.1  | 6.5       |                         |      |         |
| FM   | (30°-60°)   | 4839.9 | 38.9      |                         |      |         |
| FH   | (60°-80°)   | 4571.0 | 36.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 99.5   | 0.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 554.1  | 4.4       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 947.7  | 7.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 566.6  | 4.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 59.1   | 0.5       |                         |      | 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 III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°    | 75°     | 77.5°   | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|--------|
| 0°    | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6  | 1774.6 | 1774.6  | 1774.6  | 1774.6 |
| 2.5°  | 1569.8 | 1580.4 | 1589.3 | 1597.5 | 1614.0 | 1641.0 | 1672.2  | 1697.5 | 1734.0  | 1741.1  | 1760.5 |
| 5°    | 1425.7 | 1425.7 | 1432.8 | 1445.1 | 1467.5 | 1508.1 | 1550.4  | 1606.9 | 1686.4  | 1705.2  | 1757.0 |
| 7.5°  | 1355.7 | 1356.3 | 1360.4 | 1371.0 | 1390.4 | 1427.5 | 1473.9  | 1540.4 | 1648.1  | 1679.3  | 1767.6 |
| 10°   | 1381.6 | 1375.7 | 1366.9 | 1361.6 | 1364.5 | 1386.3 | 1430.4  | 1504.5 | 1624.6  | 1664.6  | 1791.1 |
| 12.5° | 1526.3 | 1515.1 | 1484.5 | 1443.9 | 1405.1 | 1389.2 | 1415.1  | 1487.5 | 1614.6  | 1661.1  | 1822.3 |
| 15°   | 1762.8 | 1758.1 | 1701.1 | 1616.9 | 1522.8 | 1443.9 | 1426.3  | 1481.0 | 1615.7  | 1665.2  | 1859.3 |
| 17.5° | 2059.4 | 2052.9 | 1977.6 | 1855.2 | 1701.7 | 1548.1 | 1465.7  | 1486.3 | 1619.9  | 1672.2  | 1895.2 |
| 20°   | 2358.9 | 2338.9 | 2257.7 | 2111.8 | 1914.7 | 1689.9 | 1531.0  | 1499.8 | 1625.2  | 1679.9  | 1932.9 |
| 22.5° | 2582.5 | 2566.0 | 2493.0 | 2351.2 | 2124.1 | 1854.0 | 1618.7  | 1523.4 | 1642.2  | 1702.2  | 1979.4 |
| 25°   | 2779.0 | 2780.2 | 2707.8 | 2570.7 | 2335.9 | 2028.2 | 1731.7  | 1586.3 | 1685.8  | 1748.1  | 2042.9 |
| 27.5° | 3022.0 | 3007.9 | 2940.2 | 2804.3 | 2545.4 | 2204.1 | 1868.2  | 1672.8 | 1750.5  | 1813.4  | 2126.5 |
| 30°   | 3312.7 | 3302.7 | 3224.4 | 3070.3 | 2777.8 | 2393.0 | 2024.1  | 1773.4 | 1834.0  | 1899.4  | 2235.9 |
| 32.5° | 3654.5 | 3649.8 | 3568.6 | 3370.4 | 3046.1 | 2615.4 | 2207.1  | 1906.4 | 1958.8  | 2026.4  | 2393.0 |
| 35°   | 4055.8 | 4056.4 | 3960.5 | 3722.2 | 3339.8 | 2874.3 | 2414.8  | 2077.6 | 2110.6  | 2181.2  | 2580.1 |
| 37.5° | 4303.0 | 4333.0 | 4297.1 | 4054.1 | 3672.2 | 3163.8 | 2684.3  | 2304.8 | 2283.6  | 2354.8  | 2780.8 |
| 40°   | 4355.9 | 4392.4 | 4506.0 | 4382.4 | 4044.1 | 3482.7 | 2923.2  | 2523.1 | 2496.6  | 2583.7  | 3039.1 |
| 42.5° | 4281.8 | 4332.4 | 4572.4 | 4659.5 | 4438.9 | 3875.8 | 3244.4  | 2847.3 | 2813.7  | 2930.8  | 3360.3 |
| 45°   | 4237.7 | 4275.3 | 4553.0 | 4803.7 | 4781.3 | 4320.0 | 3653.4  | 3254.4 | 3242.1  | 3395.7  | 3731.0 |
| 47.5° | 4161.2 | 4195.3 | 4462.4 | 4837.2 | 4982.6 | 4727.2 | 4144.7  | 3752.2 | 3776.3  | 3977.6  | 4149.4 |
| 50°   | 4202.3 | 4216.5 | 4361.2 | 4751.9 | 5040.8 | 5025.5 | 4693.7  | 4328.9 | 4411.2  | 4662.5  | 4623.1 |
| 52.5° | 4196.5 | 4232.9 | 4349.4 | 4611.9 | 5048.5 | 5209.7 | 5234.4  | 4972.0 | 5145.6  | 5433.9  | 5148.5 |
| 55°   | 3392.7 | 3459.8 | 4211.2 | 4576.6 | 5075.5 | 5390.3 | 5715.7  | 5649.8 | 5973.4  | 6309.4  | 5741.6 |
| 57.5° | 3239.7 | 3282.1 | 3698.7 | 4650.7 | 5219.1 | 5735.1 | 6251.2  | 6395.9 | 6937.2  | 7327.3  | 6464.2 |
| 60°   | 3209.7 | 3262.1 | 3693.4 | 4741.3 | 5510.4 | 6297.0 | 7044.9  | 7299.1 | 8109.9  | 8537.1  | 7302.0 |
| 62.5° | 3116.2 | 3172.6 | 3658.7 | 4729.6 | 5924.0 | 7074.3 | 8061.1  | 8259.4 | 9222.0  | 9637.4  | 8002.8 |
| 65°   | 2819.6 | 2872.6 | 3375.6 | 4539.5 | 6202.9 | 7904.0 | 9263.8  | 9139.6 | 10099.9 | 10412.3 | 8352.3 |
| 66°   | 2616.6 | 2668.4 | 3152.6 | 4315.9 | 6138.2 | 8139.3 | 9689.8  | 9412.0 | 10296.4 | 10541.2 | 8284.1 |
| 67.5° | 2245.3 | 2285.9 | 2719.6 | 3815.2 | 5794.0 | 8205.2 | 10048.1 | 9616.8 | 10317.0 | 10403.5 | 7894.0 |
| 70°   | 1418.6 | 1430.4 | 1767.6 | 2633.7 | 4385.9 | 7116.1 | 9502.6  | 9108.4 | 9466.2  | 9232.0  | 6617.7 |
| 72.5° | 615.5  | 611.3  | 848.5  | 1339.8 | 2483.0 | 4774.9 | 7686.8  | 7515.6 | 7425.6  | 6891.3  | 4632.5 |
| 75°   | 342.4  | 347.2  | 440.7  | 621.9  | 1009.1 | 2345.4 | 5028.5  | 4811.9 | 4062.9  | 3466.8  | 2100.6 |
| 77.5° | 274.8  | 281.3  | 365.4  | 441.3  | 453.1  | 817.9  | 2353.0  | 1914.7 | 1152.7  | 925.0   | 583.7  |
| 80°   | 217.1  | 228.9  | 318.9  | 343.6  | 305.4  | 337.2  | 760.2   | 607.8  | 456.0   | 418.4   | 302.4  |
| 82.5° | 171.8  | 180.1  | 273.6  | 260.1  | 213.6  | 227.1  | 364.2   | 354.8  | 296.6   | 270.1   | 174.8  |
| 85°   | 123.6  | 138.9  | 224.8  | 195.9  | 140.0  | 153.0  | 241.8   | 231.8  | 170.0   | 138.9   | 77.1   |
| 87.5° | 50.6   | 65.9   | 158.9  | 130.0  | 78.3   | 71.2   | 120.6   | 113.6  | 80.6    | 58.8    | 38.2   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 | 1774.6 |
| 2.5°  | 1772.8 | 1787.0 | 1805.2 | 1816.4 | 1822.3 | 1826.4 | 1832.9 | 1832.3 | 1834.0 | 1834.6 | 1837.0 |
| 5°    | 1784.6 | 1808.2 | 1834.6 | 1841.7 | 1841.7 | 1835.2 | 1828.7 | 1818.2 | 1814.0 | 1812.9 | 1814.0 |
| 7.5°  | 1815.2 | 1841.1 | 1864.0 | 1855.8 | 1838.2 | 1812.3 | 1778.7 | 1749.3 | 1733.4 | 1728.1 | 1727.0 |
| 10°   | 1854.0 | 1885.2 | 1894.6 | 1863.5 | 1811.7 | 1749.3 | 1682.8 | 1634.6 | 1606.9 | 1599.3 | 1596.9 |
| 12.5° | 1901.1 | 1930.5 | 1917.6 | 1851.7 | 1755.8 | 1655.2 | 1563.4 | 1486.3 | 1428.6 | 1410.4 | 1409.2 |
| 15°   | 1952.9 | 1975.8 | 1930.5 | 1815.2 | 1672.2 | 1524.0 | 1360.4 | 1227.4 | 1155.6 | 1132.7 | 1130.9 |
| 17.5° | 2001.1 | 2012.9 | 1922.9 | 1751.7 | 1549.3 | 1309.2 | 1092.1 | 989.7  | 965.0  | 970.9  | 972.0  |
| 20°   | 2042.3 | 2042.3 | 1897.0 | 1660.5 | 1355.7 | 1026.2 | 889.1  | 887.3  | 905.0  | 922.6  | 926.1  |
| 22.5° | 2087.6 | 2060.6 | 1851.7 | 1531.6 | 1081.5 | 839.6  | 819.6  | 836.1  | 856.1  | 875.5  | 878.5  |
| 25°   | 2143.5 | 2075.3 | 1788.7 | 1336.3 | 850.2  | 762.6  | 770.2  | 783.7  | 793.8  | 806.1  | 807.9  |
| 27.5° | 2205.9 | 2094.1 | 1705.8 | 1067.4 | 737.9  | 714.3  | 720.2  | 724.9  | 723.7  | 728.4  | 729.6  |
| 30°   | 2280.6 | 2115.9 | 1592.2 | 834.3  | 691.4  | 673.1  | 662.5  | 658.4  | 658.4  | 666.1  | 669.0  |
| 32.5° | 2380.7 | 2148.2 | 1429.2 | 714.9  | 669.0  | 643.7  | 609.6  | 594.3  | 600.2  | 626.1  | 631.9  |
| 35°   | 2490.7 | 2183.0 | 1208.6 | 674.3  | 664.3  | 630.2  | 577.2  | 549.0  | 549.6  | 573.7  | 581.3  |
| 37.5° | 2610.7 | 2227.1 | 966.7  | 666.7  | 674.9  | 630.8  | 560.2  | 521.3  | 505.4  | 505.4  | 508.4  |
| 40°   | 2764.3 | 2272.4 | 782.6  | 672.0  | 697.3  | 637.8  | 551.3  | 499.6  | 454.8  | 456.0  | 458.4  |
| 42.5° | 2964.4 | 2311.2 | 683.7  | 683.1  | 724.3  | 647.2  | 550.7  | 470.7  | 431.9  | 458.4  | 482.5  |
| 45°   | 3186.8 | 2330.6 | 640.2  | 693.1  | 746.1  | 653.1  | 541.3  | 466.0  | 434.8  | 513.7  | 559.6  |
| 47.5° | 3442.7 | 2319.5 | 616.1  | 696.7  | 751.4  | 653.1  | 530.7  | 477.2  | 455.4  | 594.9  | 648.4  |
| 50°   | 3723.4 | 2287.1 | 592.5  | 689.6  | 749.6  | 651.9  | 540.7  | 488.4  | 463.1  | 609.0  | 646.1  |
| 52.5° | 4053.5 | 2260.0 | 567.8  | 674.3  | 737.3  | 645.5  | 552.5  | 483.7  | 438.9  | 553.7  | 579.6  |
| 55°   | 4430.1 | 2267.7 | 540.2  | 652.5  | 717.8  | 633.1  | 548.4  | 464.8  | 413.6  | 487.8  | 503.7  |
| 57.5° | 4911.4 | 2358.9 | 507.2  | 624.9  | 691.4  | 612.5  | 533.7  | 456.0  | 406.0  | 442.5  | 451.9  |
| 60°   | 5448.6 | 2517.8 | 466.0  | 597.2  | 658.4  | 579.6  | 522.5  | 460.1  | 409.5  | 438.9  | 443.7  |
| 62.5° | 5842.8 | 2610.1 | 430.7  | 556.6  | 613.7  | 543.1  | 508.4  | 465.4  | 418.9  | 451.3  | 450.1  |
| 65°   | 5949.9 | 2458.3 | 386.6  | 497.2  | 553.1  | 504.8  | 490.7  | 471.3  | 423.1  | 461.3  | 456.0  |
| 66°   | 5799.8 | 2294.8 | 367.2  | 469.5  | 522.5  | 486.0  | 481.9  | 470.7  | 421.3  | 462.5  | 453.7  |
| 67.5° | 5435.6 | 1959.4 | 333.6  | 428.9  | 473.7  | 457.8  | 467.8  | 465.4  | 416.6  | 461.3  | 448.9  |
| 70°   | 4433.0 | 1336.8 | 285.4  | 357.2  | 394.2  | 403.1  | 440.7  | 446.6  | 401.3  | 440.7  | 413.6  |
| 72.5° | 3097.3 | 814.3  | 252.4  | 277.1  | 318.9  | 343.6  | 403.6  | 420.7  | 380.7  | 384.8  | 358.9  |
| 75°   | 1496.9 | 432.5  | 228.9  | 214.8  | 247.7  | 287.1  | 358.9  | 385.4  | 348.3  | 321.9  | 312.4  |
| 77.5° | 466.6  | 264.2  | 194.2  | 173.0  | 194.2  | 231.8  | 300.1  | 337.7  | 310.1  | 269.5  | 266.0  |
| 80°   | 250.7  | 194.2  | 149.5  | 138.9  | 153.6  | 181.8  | 235.9  | 281.8  | 266.5  | 241.8  | 215.9  |
| 82.5° | 165.3  | 125.9  | 110.6  | 107.7  | 117.1  | 138.9  | 175.3  | 233.6  | 233.6  | 207.1  | 150.6  |
| 85°   | 85.3   | 77.1   | 75.9   | 75.9   | 81.8   | 92.4   | 119.4  | 180.1  | 191.8  | 109.4  | 90.6   |
| 87.5° | 42.4   | 44.1   | 41.2   | 43.0   | 45.9   | 45.3   | 57.1   | 90.6   | 108.3  | 66.5   | 55.3   |
| 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)