

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: P193172

Luminaire Tested: **GLEON-AF-04-LED-E1-T3-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-T3-7030-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15303.9 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 129  
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

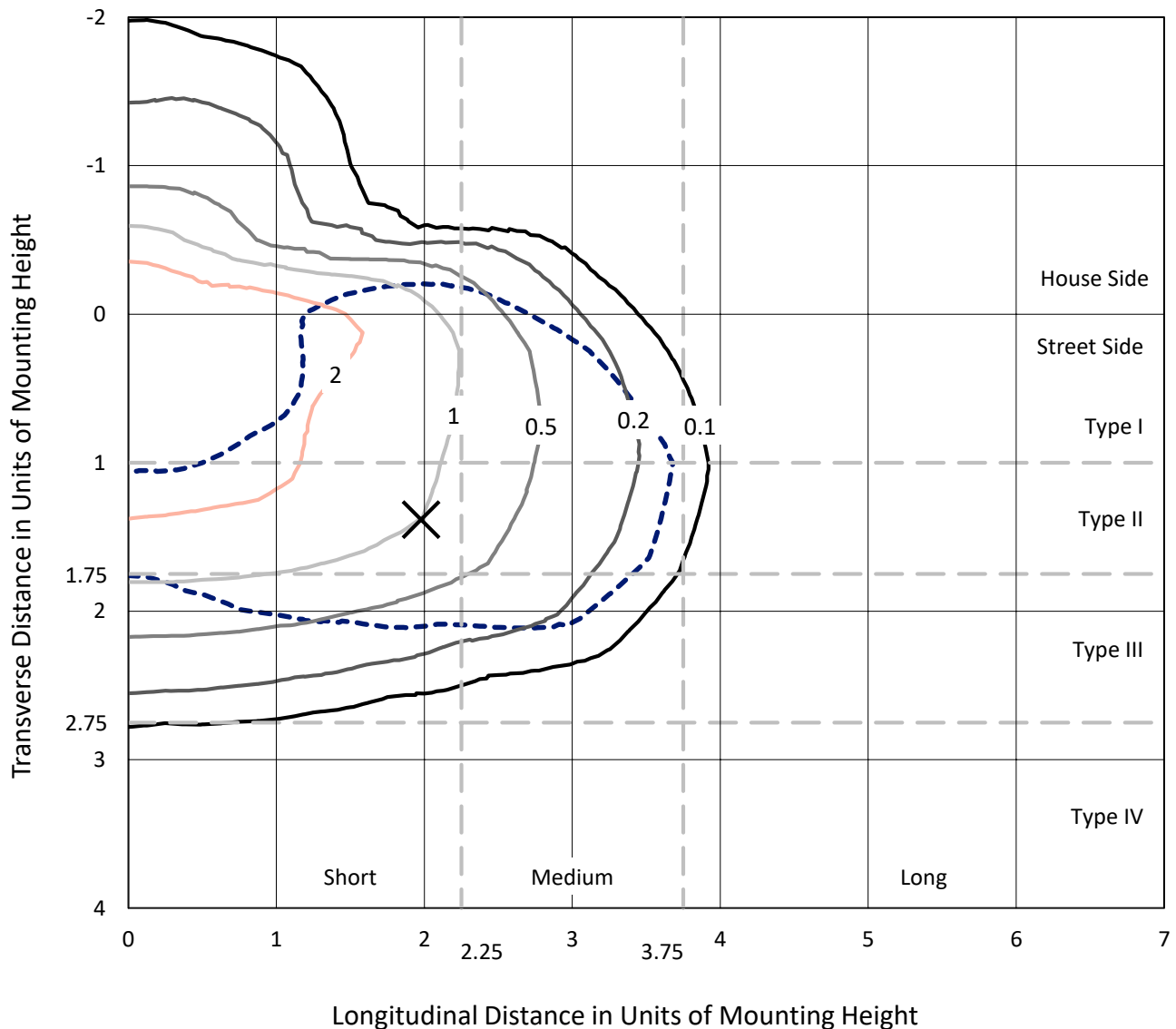


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

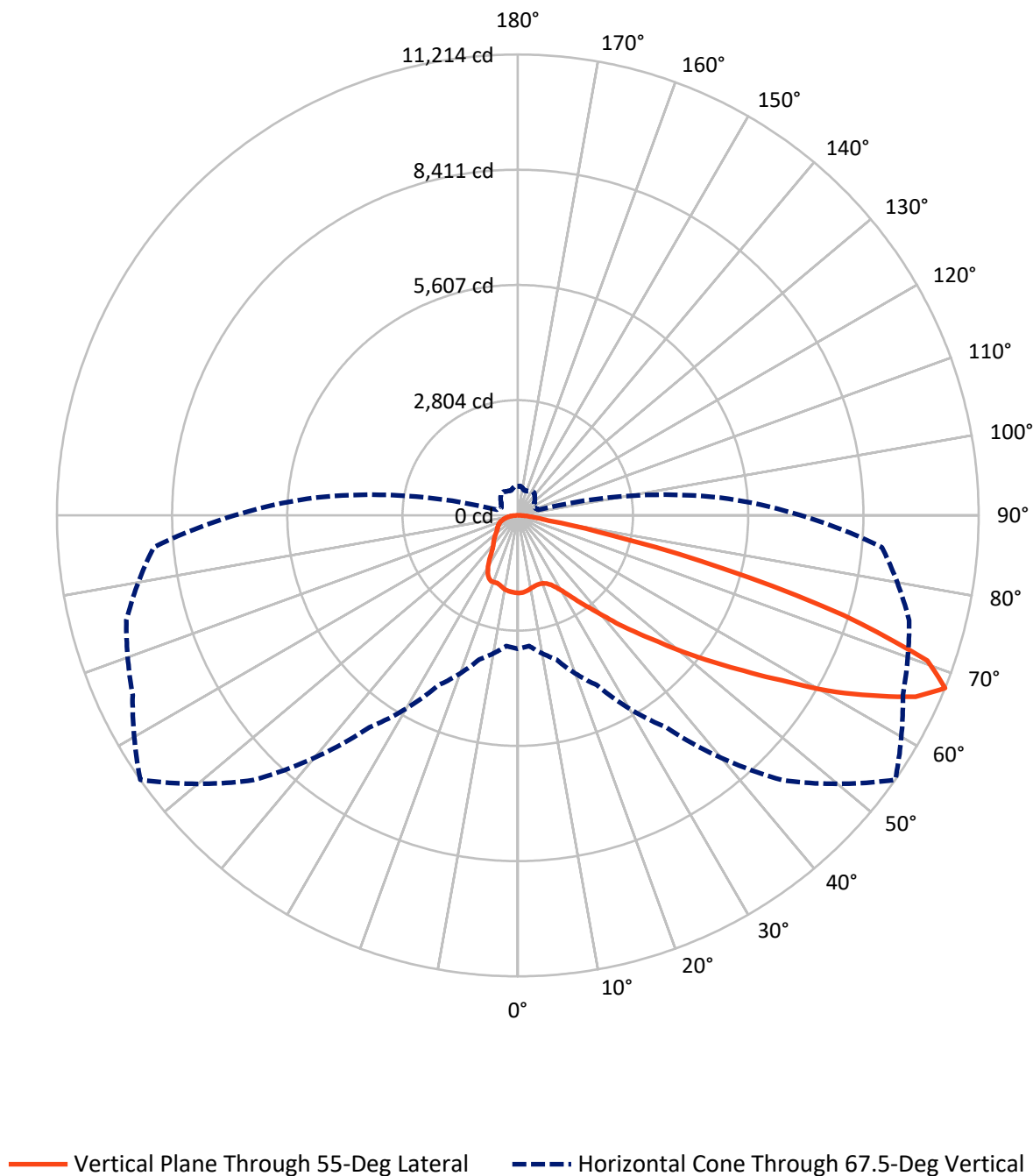


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
Type III - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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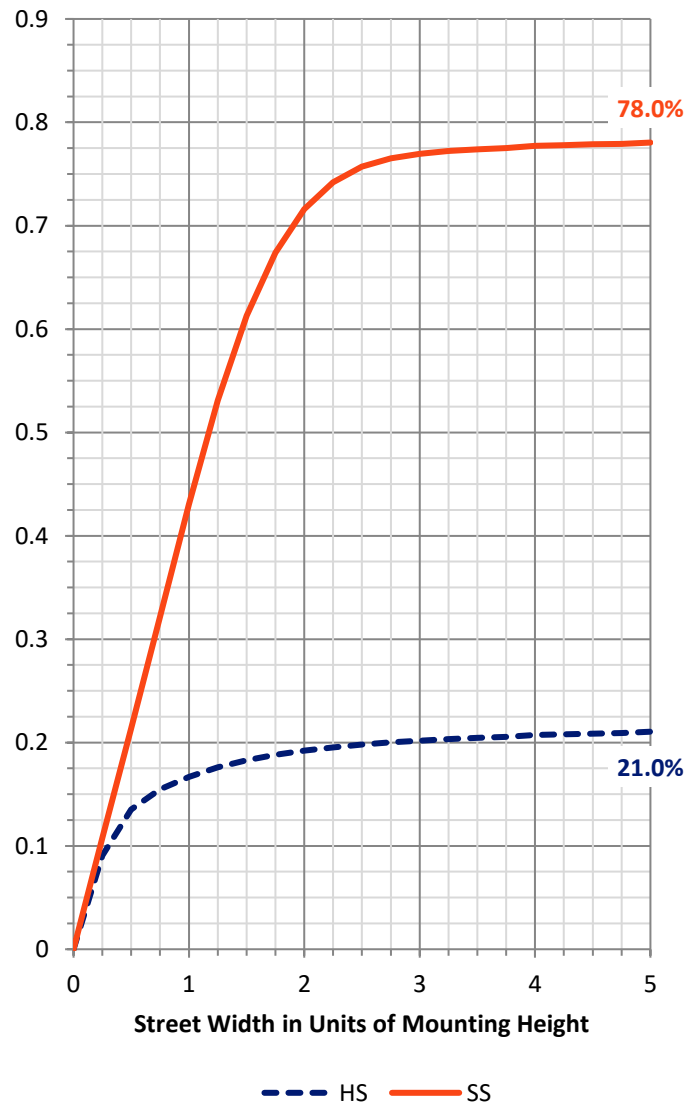
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3306.0   | 0.0    | 3306.0  |
|                    | % Fixture | 21.6     | 0.0    | 21.6    |
| <b>Street Side</b> | Lumens    | 11998.0  | 0.0    | 11998.0 |
|                    | % Fixture | 78.4     | 0.0    | 78.4    |
| <b>Total</b>       | Lumens    | 15303.9  | 0.0    | 15303.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 176.1   | 1.2       |
| 10°-20°   | 498.9   | 3.3       |
| 20°-30°   | 835.7   | 5.5       |
| 30°-40°   | 1374.2  | 9.0       |
| 40°-50°   | 2313.2  | 15.1      |
| 50°-60°   | 3640.8  | 23.8      |
| 60°-70°   | 4344.9  | 28.4      |
| 70°-80°   | 1865.8  | 12.2      |
| 80°-90°   | 254.4   | 1.7       |
| 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°    | 15303.9 | 100.0     |
| 0°-180°   | 15303.9 | 100.0     |

**Coefficient of Utilization**



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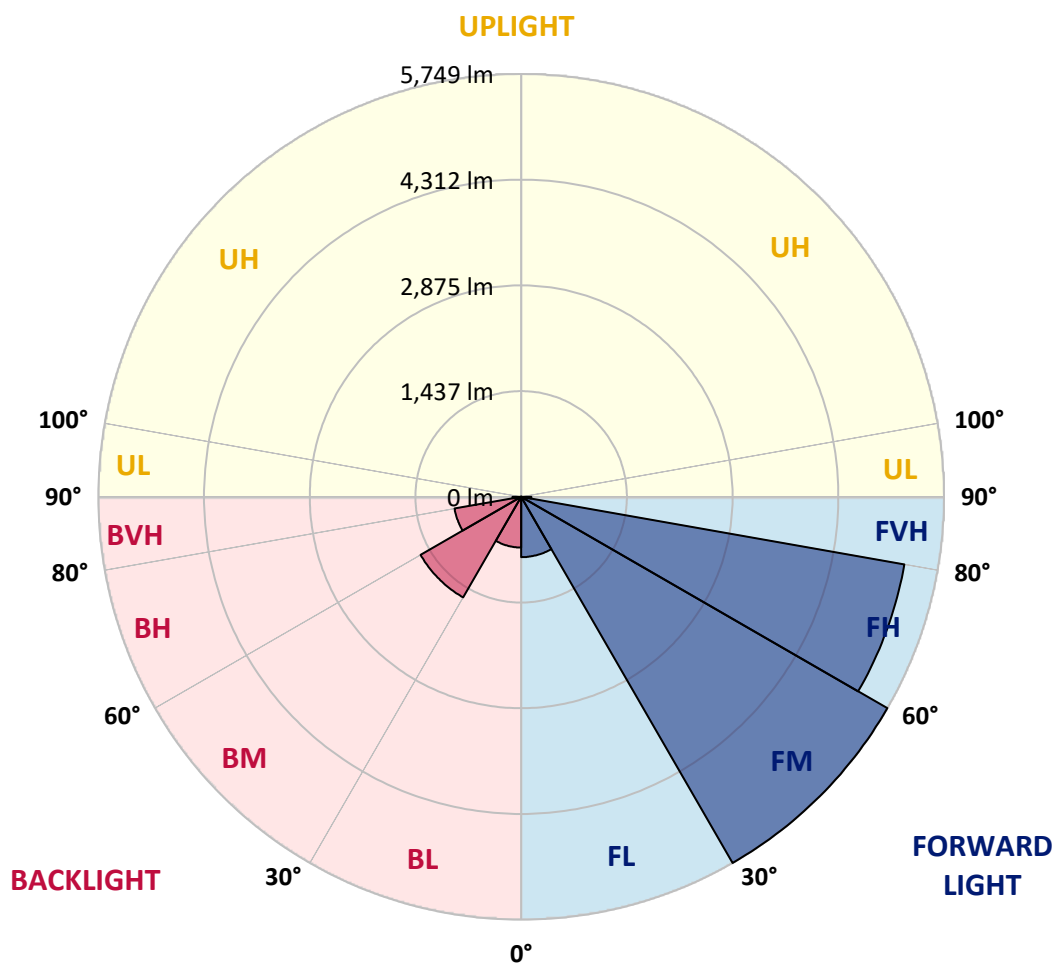
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 820.3  | 5.4       |                         |      |         |
| FM   | (30°-60°)   | 5749.3 | 37.6      |                         |      |         |
| FH   | (60°-80°)   | 5290.6 | 34.6      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 137.7  | 0.9       |                         |      | G2/225  |
| BL   | (0°-30°)    | 690.3  | 4.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1578.9 | 10.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 920.0  | 6.0       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 116.7  | 0.8       |                         |      | 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 III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 0°    | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1  | 1887.1  | 1887.1 | 1887.1 | 1887.1 |
| 2.5°  | 1870.8 | 1871.6 | 1873.1 | 1879.0 | 1884.1 | 1882.7 | 1883.4  | 1880.5  | 1879.8 | 1875.3 | 1879.8 |
| 5°    | 1847.2 | 1849.4 | 1850.2 | 1859.8 | 1865.7 | 1867.1 | 1864.9  | 1861.2  | 1856.9 | 1852.4 | 1854.5 |
| 7.5°  | 1793.3 | 1799.2 | 1799.9 | 1813.2 | 1822.9 | 1835.4 | 1836.1  | 1836.8  | 1834.7 | 1831.7 | 1836.1 |
| 10°   | 1759.3 | 1760.7 | 1760.0 | 1769.6 | 1777.0 | 1791.1 | 1799.2  | 1813.2  | 1819.1 | 1820.6 | 1823.5 |
| 12.5° | 1757.0 | 1755.6 | 1753.4 | 1753.4 | 1751.1 | 1757.0 | 1771.8  | 1791.8  | 1805.8 | 1810.3 | 1813.9 |
| 15°   | 1780.7 | 1780.0 | 1772.6 | 1761.5 | 1747.4 | 1743.0 | 1755.6  | 1777.7  | 1796.2 | 1805.8 | 1809.6 |
| 17.5° | 1833.9 | 1829.4 | 1817.6 | 1792.5 | 1762.3 | 1750.5 | 1751.9  | 1770.3  | 1791.8 | 1804.3 | 1808.0 |
| 20°   | 1931.4 | 1931.4 | 1906.3 | 1859.0 | 1805.1 | 1777.0 | 1763.7  | 1774.8  | 1795.4 | 1812.5 | 1817.6 |
| 22.5° | 2100.1 | 2101.5 | 2059.4 | 1981.8 | 1890.8 | 1830.9 | 1797.8  | 1795.4  | 1819.9 | 1839.1 | 1845.1 |
| 25°   | 2338.8 | 2332.9 | 2273.6 | 2162.9 | 2024.7 | 1925.5 | 1867.9  | 1854.5  | 1875.3 | 1896.7 | 1904.2 |
| 27.5° | 2616.8 | 2595.2 | 2525.1 | 2391.2 | 2212.4 | 2067.5 | 1978.8  | 1957.4  | 1977.4 | 2001.7 | 2009.1 |
| 30°   | 2891.6 | 2869.4 | 2786.0 | 2639.6 | 2440.8 | 2257.6 | 2130.3  | 2095.6  | 2123.7 | 2158.4 | 2162.9 |
| 32.5° | 3166.7 | 3166.7 | 3073.6 | 2902.8 | 2686.2 | 2484.4 | 2332.1  | 2290.7  | 2337.3 | 2379.4 | 2389.1 |
| 35°   | 3495.6 | 3497.1 | 3406.9 | 3201.4 | 2968.6 | 2755.0 | 2587.2  | 2556.8  | 2627.0 | 2656.6 | 2679.6 |
| 37.5° | 3899.9 | 3908.1 | 3792.1 | 3543.8 | 3288.6 | 3063.9 | 2864.3  | 2822.9  | 2893.1 | 2973.7 | 3047.7 |
| 40°   | 4336.8 | 4347.2 | 4219.3 | 3913.2 | 3658.2 | 3423.2 | 3207.3  | 3132.7  | 3249.5 | 3403.2 | 3498.6 |
| 42.5° | 4753.8 | 4807.0 | 4683.5 | 4368.6 | 4094.4 | 3851.2 | 3632.4  | 3523.7  | 3670.0 | 3902.2 | 3984.9 |
| 45°   | 5356.1 | 5394.5 | 5179.4 | 4894.2 | 4636.2 | 4364.2 | 4074.4  | 3959.8  | 4164.5 | 4457.3 | 4474.2 |
| 47.5° | 5757.5 | 5728.7 | 5619.3 | 5441.8 | 5278.6 | 5024.3 | 4588.2  | 4462.4  | 4734.5 | 5078.9 | 4983.7 |
| 50°   | 5971.1 | 5980.0 | 5965.2 | 5975.6 | 5981.5 | 5821.9 | 5217.9  | 5045.7  | 5370.2 | 5786.4 | 5566.9 |
| 52.5° | 6170.8 | 6111.6 | 6160.4 | 6402.8 | 6695.5 | 6636.4 | 5903.2  | 5723.5  | 6051.8 | 6571.4 | 6183.3 |
| 55°   | 6166.3 | 6076.1 | 6235.0 | 6663.0 | 7298.0 | 7366.0 | 6672.7  | 6465.6  | 6772.4 | 7413.4 | 6836.8 |
| 57.5° | 5948.2 | 5952.7 | 6197.3 | 6757.6 | 7717.8 | 8052.0 | 7565.5  | 7255.2  | 7536.7 | 8266.3 | 7433.2 |
| 60°   | 5648.1 | 5688.8 | 6041.4 | 6742.2 | 8054.1 | 8614.4 | 8661.1  | 8106.0  | 8285.5 | 9041.8 | 7927.1 |
| 62.5° | 5163.9 | 5206.9 | 5693.2 | 6581.0 | 8003.1 | 9156.3 | 9651.5  | 9071.2  | 9068.3 | 9511.9 | 8072.0 |
| 65°   | 4400.4 | 4387.9 | 4898.6 | 5978.5 | 7575.2 | 9556.9 | 10635.4 | 9905.9  | 9658.2 | 9519.2 | 7780.7 |
| 67.5° | 3245.0 | 3188.8 | 3627.2 | 4553.4 | 6296.4 | 9108.3 | 11214.2 | 10340.6 | 9859.2 | 8893.1 | 6890.7 |
| 70°   | 1683.9 | 1627.6 | 1982.5 | 2658.9 | 4140.9 | 7108.7 | 10573.3 | 10115.8 | 9415.0 | 7454.6 | 5398.3 |
| 72.5° | 720.0  | 710.4  | 854.5  | 1166.5 | 2003.2 | 4100.3 | 8290.7  | 8755.7  | 8078.5 | 5554.2 | 3711.4 |
| 75°   | 484.1  | 481.2  | 535.2  | 635.7  | 901.1  | 1663.9 | 5188.4  | 6215.1  | 5910.5 | 3443.9 | 2087.5 |
| 77.5° | 379.9  | 376.3  | 408.1  | 456.8  | 584.0  | 656.4  | 2302.5  | 3336.7  | 3088.3 | 1499.0 | 913.6  |
| 80°   | 297.1  | 294.2  | 314.1  | 340.8  | 419.9  | 414.0  | 757.7   | 1327.6  | 1027.5 | 574.3  | 444.2  |
| 82.5° | 234.4  | 234.4  | 250.5  | 251.3  | 297.8  | 282.3  | 395.5   | 584.6   | 513.0  | 334.9  | 272.0  |
| 85°   | 214.3  | 214.3  | 231.4  | 187.7  | 194.4  | 178.1  | 245.4   | 346.7   | 325.3  | 137.4  | 118.2  |
| 87.5° | 107.9  | 105.0  | 194.4  | 166.3  | 105.7  | 94.6   | 119.7   | 167.8   | 180.4  | 76.2   | 59.1   |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 | 1887.1 |
| 2.5°  | 1878.2 | 1877.5 | 1879.0 | 1879.8 | 1885.7 | 1893.8 | 1897.5 | 1902.6 | 1905.6 | 1904.2 |
| 5°    | 1856.1 | 1857.6 | 1863.5 | 1867.9 | 1878.2 | 1891.6 | 1898.9 | 1904.9 | 1910.1 | 1907.8 |
| 7.5°  | 1837.6 | 1841.3 | 1850.2 | 1853.9 | 1859.8 | 1863.5 | 1862.8 | 1864.9 | 1869.4 | 1864.2 |
| 10°   | 1827.3 | 1831.7 | 1838.4 | 1833.2 | 1819.1 | 1799.2 | 1780.7 | 1771.1 | 1774.1 | 1770.3 |
| 12.5° | 1816.9 | 1822.9 | 1817.6 | 1793.3 | 1754.0 | 1728.3 | 1714.2 | 1715.7 | 1722.3 | 1723.8 |
| 15°   | 1811.0 | 1813.2 | 1791.1 | 1745.2 | 1705.3 | 1701.6 | 1709.1 | 1707.5 | 1708.3 | 1708.3 |
| 17.5° | 1811.0 | 1805.1 | 1763.7 | 1717.9 | 1700.8 | 1694.2 | 1671.3 | 1642.5 | 1629.9 | 1625.4 |
| 20°   | 1820.6 | 1805.1 | 1754.8 | 1724.5 | 1687.5 | 1630.7 | 1570.0 | 1516.8 | 1493.1 | 1486.5 |
| 22.5° | 1849.4 | 1822.9 | 1780.0 | 1727.5 | 1622.5 | 1527.1 | 1431.1 | 1367.5 | 1324.7 | 1317.2 |
| 25°   | 1907.8 | 1878.2 | 1829.4 | 1688.3 | 1519.0 | 1383.0 | 1273.6 | 1202.6 | 1159.8 | 1153.9 |
| 27.5° | 2009.9 | 1990.6 | 1856.1 | 1601.8 | 1381.6 | 1235.9 | 1134.6 | 1079.9 | 1048.2 | 1045.9 |
| 30°   | 2163.6 | 2153.9 | 1842.7 | 1473.9 | 1212.2 | 1093.2 | 1044.5 | 1012.8 | 989.1  | 988.2  |
| 32.5° | 2409.0 | 2331.4 | 1799.2 | 1318.0 | 1057.7 | 992.0  | 972.1  | 952.8  | 934.3  | 934.3  |
| 35°   | 2724.6 | 2474.8 | 1716.4 | 1150.9 | 963.8  | 935.8  | 910.6  | 880.4  | 855.9  | 854.5  |
| 37.5° | 3095.8 | 2563.5 | 1567.8 | 1016.3 | 919.5  | 898.1  | 861.2  | 816.0  | 773.2  | 765.8  |
| 40°   | 3470.5 | 2590.1 | 1358.6 | 933.6  | 891.4  | 860.4  | 815.3  | 762.1  | 720.7  | 718.5  |
| 42.5° | 3814.2 | 2539.0 | 1136.9 | 876.7  | 863.3  | 821.9  | 774.6  | 727.3  | 694.9  | 694.2  |
| 45°   | 4102.4 | 2406.8 | 950.5  | 822.7  | 833.7  | 787.2  | 745.1  | 706.7  | 681.6  | 676.4  |
| 47.5° | 4373.7 | 2219.8 | 819.8  | 765.8  | 804.2  | 768.0  | 732.6  | 696.3  | 672.0  | 668.2  |
| 50°   | 4688.7 | 2018.0 | 728.1  | 710.4  | 778.4  | 761.3  | 742.9  | 705.2  | 664.6  | 660.2  |
| 52.5° | 5070.0 | 1843.5 | 656.4  | 661.6  | 758.4  | 770.3  | 769.5  | 730.3  | 659.4  | 653.5  |
| 55°   | 5495.8 | 1649.9 | 602.4  | 621.6  | 750.3  | 786.4  | 776.2  | 754.0  | 663.8  | 654.9  |
| 57.5° | 5915.0 | 1423.6 | 564.8  | 591.3  | 738.5  | 785.0  | 744.4  | 712.6  | 674.1  | 661.6  |
| 60°   | 6229.1 | 1119.9 | 535.9  | 564.8  | 712.6  | 760.7  | 709.6  | 667.5  | 672.0  | 662.3  |
| 62.5° | 6249.8 | 865.6  | 501.2  | 541.8  | 673.4  | 736.2  | 686.7  | 647.6  | 681.6  | 672.7  |
| 65°   | 5882.4 | 654.1  | 467.9  | 514.5  | 631.3  | 720.7  | 664.6  | 636.4  | 701.5  | 691.8  |
| 67.5° | 4952.5 | 526.3  | 439.8  | 486.4  | 589.1  | 688.3  | 644.5  | 626.0  | 719.3  | 702.2  |
| 70°   | 3575.4 | 448.7  | 412.5  | 452.4  | 551.4  | 651.1  | 626.8  | 607.6  | 671.2  | 644.5  |
| 72.5° | 2201.2 | 388.9  | 381.5  | 407.3  | 522.6  | 612.8  | 600.3  | 572.8  | 604.6  | 583.2  |
| 75°   | 1099.1 | 337.1  | 346.7  | 363.0  | 482.0  | 569.1  | 555.9  | 528.5  | 532.9  | 528.5  |
| 77.5° | 526.3  | 288.3  | 306.0  | 318.6  | 429.5  | 519.6  | 505.7  | 477.5  | 472.3  | 473.1  |
| 80°   | 333.3  | 241.0  | 258.0  | 266.8  | 383.6  | 461.9  | 448.0  | 419.9  | 479.0  | 444.2  |
| 82.5° | 208.4  | 195.9  | 200.3  | 216.6  | 334.2  | 402.1  | 383.6  | 358.5  | 431.7  | 341.6  |
| 85°   | 115.3  | 136.8  | 142.7  | 156.7  | 257.2  | 336.3  | 317.8  | 286.0  | 256.5  | 252.1  |
| 87.5° | 68.8   | 81.3   | 83.5   | 93.9   | 172.9  | 243.2  | 215.1  | 204.0  | 169.3  | 168.6  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)