

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: P191739

Luminaire Tested: **GLEON-AF-01-LED-E1-AFL-7050-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191739  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-01-LED-E1-AFL-7050-1200-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5596 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 67  
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

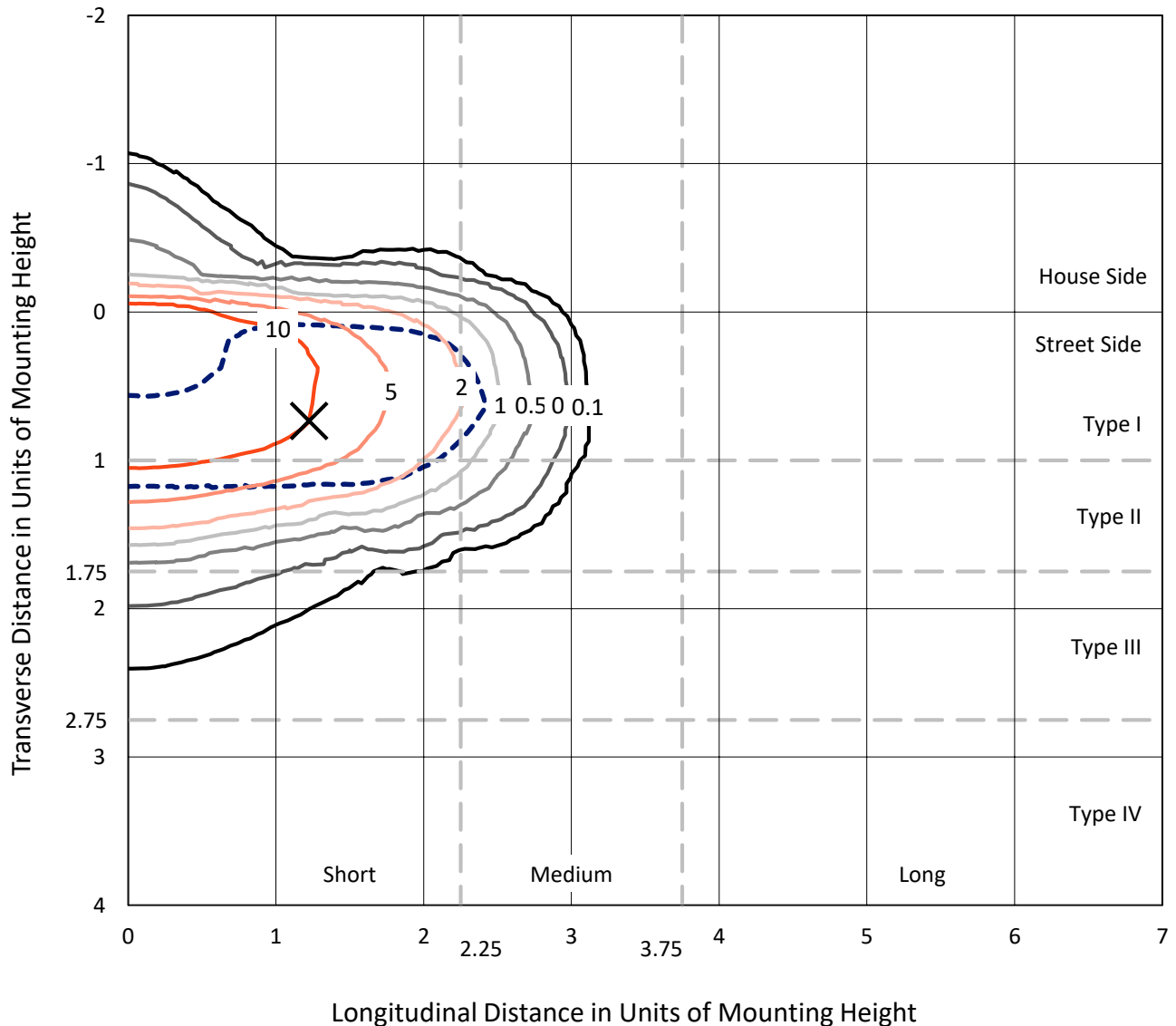


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

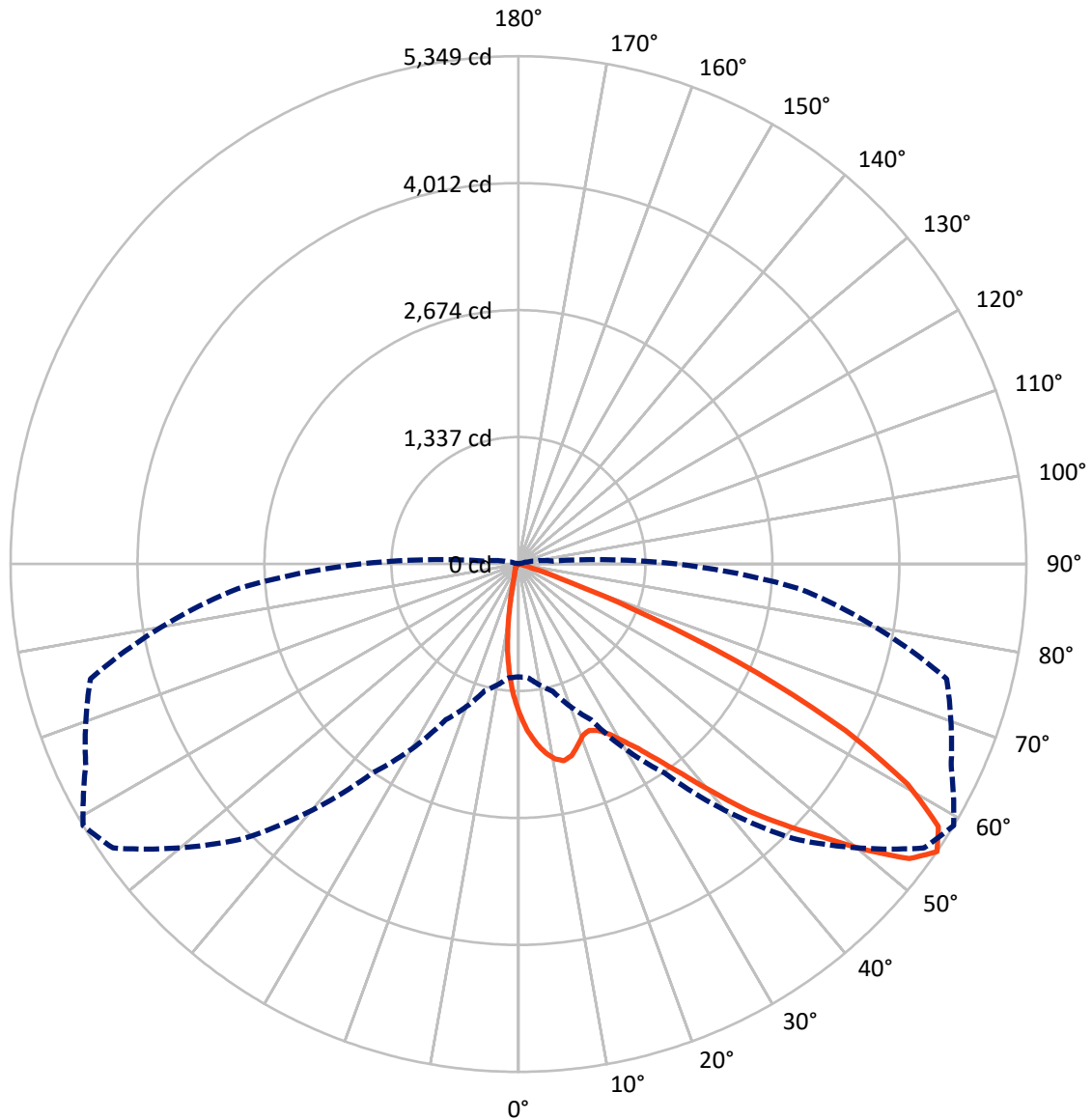


Based on 10 foot mounting height. Maximum calculated value = 19.6 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 312.6    | 0.0    | 312.6  |
|                    | % Fixture | 5.6      | 0.0    | 5.6    |
| <b>Street Side</b> | Lumens    | 5283.4   | 0.0    | 5283.4 |
|                    | % Fixture | 94.4     | 0.0    | 94.4   |
| <b>Total</b>       | Lumens    | 5596.0   | 0.0    | 5596.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 131.9  | 2.4       |
| 10°-20°   | 315.9  | 5.6       |
| 20°-30°   | 537.6  | 9.6       |
| 30°-40°   | 924.5  | 16.5      |
| 40°-50°   | 1427.3 | 25.5      |
| 50°-60°   | 1434.9 | 25.6      |
| 60°-70°   | 735.8  | 13.1      |
| 70°-80°   | 79.7   | 1.4       |
| 80°-90°   | 8.3    | 0.1       |
| 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°    | 5596.0 | 100.0     |
| 0°-180°   | 5596.0 | 100.0     |

**Coefficient of Utilization**



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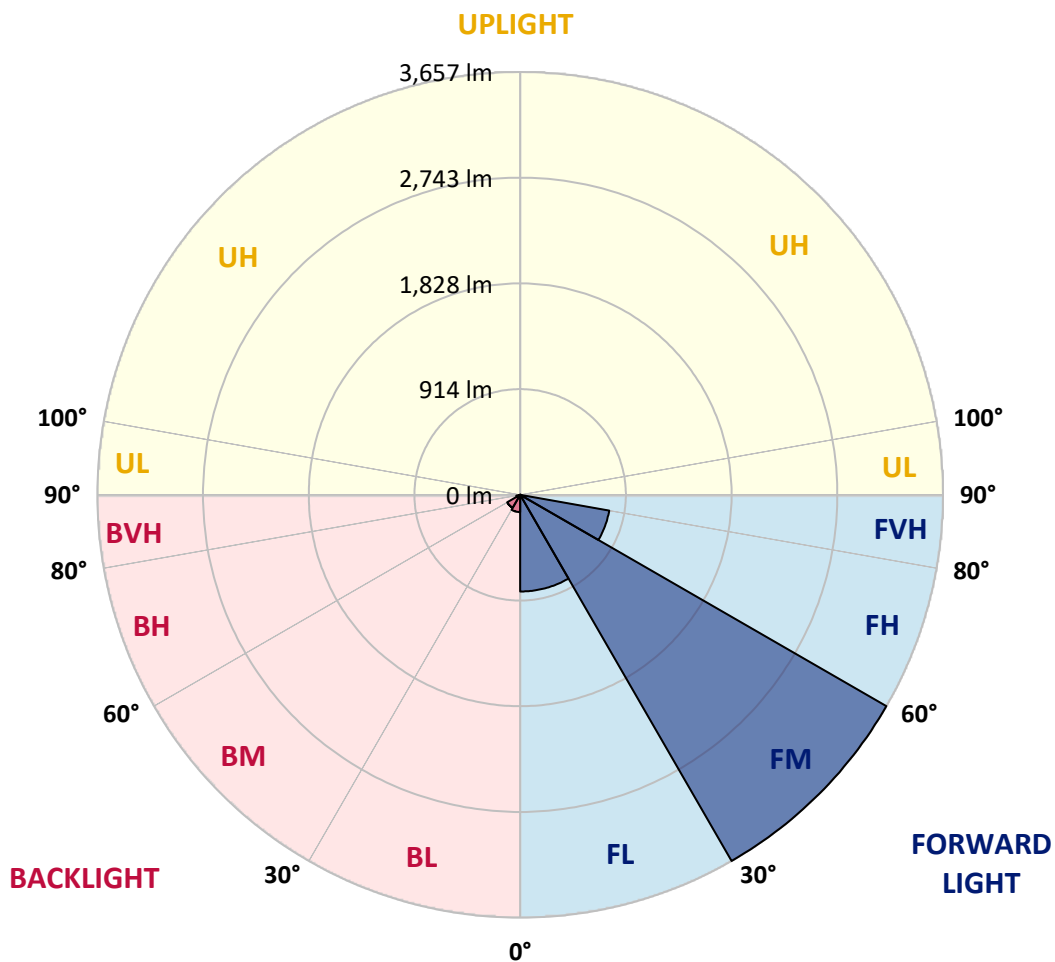
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 836.2  | 14.9      |                         |      |         |
| FM (30°-60°)   | 3657.0 | 65.3      |                         |      |         |
| FH (60°-80°)   | 782.1  | 14.0      |                         |      | G1/1800 |
| FVH (80°-90°)  | 8.2    | 0.1       |                         |      | G0/10   |
| BL (0°-30°)    | 149.2  | 2.7       | B1/500                  |      |         |
| BM (30°-60°)   | 129.7  | 2.3       | B0/220                  |      |         |
| BH (60°-80°)   | 33.5   | 0.6       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.2    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 59°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 |
| 2.5°  | 1863.9 | 1844.1 | 1838.1 | 1834.2 | 1816.0 | 1793.2 | 1762.2 | 1747.6 | 1717.9 | 1670.0 | 1611.3 |
| 5°    | 2034.6 | 2031.0 | 2017.8 | 2010.5 | 1991.0 | 1958.7 | 1909.1 | 1885.4 | 1838.1 | 1757.5 | 1652.2 |
| 7.5°  | 1960.0 | 1982.8 | 2000.9 | 2031.3 | 2069.6 | 2068.3 | 2026.7 | 2001.9 | 1949.1 | 1842.7 | 1697.8 |
| 10°   | 1671.7 | 1690.2 | 1719.9 | 1788.9 | 1929.6 | 2053.8 | 2102.7 | 2084.8 | 2042.5 | 1921.0 | 1741.7 |
| 12.5° | 1615.2 | 1613.2 | 1618.5 | 1638.7 | 1712.3 | 1889.3 | 2089.8 | 2125.8 | 2117.2 | 1992.7 | 1783.3 |
| 15°   | 1645.3 | 1643.0 | 1642.3 | 1649.2 | 1667.1 | 1741.7 | 1993.0 | 2096.4 | 2162.8 | 2059.1 | 1818.6 |
| 17.5° | 1729.5 | 1719.6 | 1714.3 | 1708.7 | 1703.4 | 1721.9 | 1876.8 | 2014.1 | 2169.7 | 2117.2 | 1848.0 |
| 20°   | 1873.8 | 1857.3 | 1837.8 | 1806.1 | 1776.4 | 1767.1 | 1827.9 | 1929.6 | 2144.9 | 2161.4 | 1867.2 |
| 22.5° | 2055.1 | 2034.0 | 2000.3 | 1942.5 | 1882.0 | 1847.0 | 1852.0 | 1902.9 | 2107.9 | 2209.6 | 1876.1 |
| 25°   | 2258.9 | 2231.8 | 2186.9 | 2106.6 | 2017.8 | 1955.7 | 1923.3 | 1941.2 | 2091.1 | 2266.1 | 1886.3 |
| 27.5° | 2477.1 | 2447.1 | 2388.3 | 2279.0 | 2178.3 | 2094.4 | 2028.3 | 2026.0 | 2119.8 | 2340.1 | 1902.9 |
| 30°   | 2693.5 | 2688.8 | 2612.2 | 2496.6 | 2363.2 | 2261.2 | 2166.1 | 2153.8 | 2200.1 | 2442.5 | 1935.5 |
| 32.5° | 2982.1 | 2947.4 | 2853.6 | 2734.7 | 2580.8 | 2458.3 | 2345.7 | 2317.3 | 2323.3 | 2561.7 | 1986.1 |
| 35°   | 3346.0 | 3308.0 | 3175.9 | 3011.8 | 2839.7 | 2695.1 | 2570.6 | 2532.0 | 2517.4 | 2756.9 | 2071.3 |
| 37.5° | 3581.1 | 3580.5 | 3497.6 | 3330.5 | 3145.9 | 2986.4 | 2851.0 | 2805.7 | 2776.3 | 2992.7 | 2203.4 |
| 40°   | 3587.4 | 3602.9 | 3613.8 | 3612.2 | 3480.7 | 3333.8 | 3213.6 | 3157.8 | 3089.4 | 3307.7 | 2374.1 |
| 42.5° | 3394.9 | 3434.8 | 3530.9 | 3694.1 | 3772.0 | 3713.6 | 3612.2 | 3557.4 | 3455.7 | 3644.9 | 2582.2 |
| 45°   | 3134.7 | 3162.4 | 3330.5 | 3631.0 | 3929.9 | 4090.0 | 4012.8 | 3914.7 | 3780.6 | 3996.6 | 2768.7 |
| 47.5° | 3018.1 | 3023.0 | 3131.7 | 3461.6 | 3941.8 | 4398.5 | 4445.4 | 4285.9 | 4075.8 | 4279.9 | 2914.7 |
| 50°   | 2669.7 | 2678.6 | 2828.5 | 3168.0 | 3802.4 | 4544.1 | 4880.0 | 4728.7 | 4397.8 | 4498.2 | 2967.9 |
| 52.5° | 2012.2 | 2024.7 | 2214.9 | 2685.5 | 3419.3 | 4482.0 | 5191.1 | 5154.4 | 4750.5 | 4604.9 | 2970.9 |
| 55°   | 1187.2 | 1203.7 | 1385.4 | 1807.7 | 2689.5 | 4087.1 | 5214.2 | 5348.9 | 5028.9 | 4668.0 | 2966.2 |
| 57.5° | 554.5  | 566.0  | 670.1  | 931.3  | 1672.7 | 3230.1 | 4866.1 | 5215.5 | 5182.5 | 4701.3 | 2998.9 |
| 60°   | 294.6  | 297.9  | 323.0  | 403.2  | 755.9  | 2048.2 | 4186.8 | 4709.6 | 5042.5 | 4747.6 | 3038.9 |
| 62.5° | 225.2  | 226.2  | 224.9  | 234.5  | 317.7  | 909.2  | 3164.7 | 3871.8 | 4478.7 | 4712.9 | 2994.6 |
| 65°   | 195.2  | 196.8  | 187.6  | 185.3  | 203.8  | 324.3  | 1880.1 | 2759.8 | 3519.4 | 4244.9 | 2693.1 |
| 67.5° | 175.0  | 175.7  | 164.5  | 154.9  | 158.2  | 175.4  | 741.7  | 1510.9 | 2329.5 | 3111.5 | 1952.1 |
| 70°   | 161.2  | 160.5  | 148.3  | 133.1  | 128.8  | 119.9  | 235.8  | 553.8  | 1113.2 | 1577.9 | 907.8  |
| 72.5° | 142.7  | 143.0  | 137.1  | 117.2  | 107.0  | 83.9   | 109.3  | 161.5  | 332.2  | 430.0  | 212.7  |
| 75°   | 126.5  | 124.8  | 117.6  | 105.0  | 88.2   | 55.2   | 54.2   | 72.0   | 102.4  | 101.7  | 45.9   |
| 77.5° | 91.5   | 89.8   | 92.1   | 86.2   | 67.7   | 35.7   | 27.1   | 34.7   | 41.6   | 40.3   | 12.9   |
| 80°   | 67.0   | 66.0   | 59.4   | 71.7   | 59.8   | 24.4   | 16.8   | 18.5   | 21.5   | 18.2   | 4.0    |
| 82.5° | 45.9   | 45.6   | 41.9   | 39.6   | 34.0   | 14.9   | 10.6   | 11.6   | 13.9   | 10.2   | 2.0    |
| 85°   | 7.3    | 8.3    | 30.4   | 24.1   | 20.1   | 6.6    | 7.3    | 7.9    | 9.2    | 5.6    | 0.7    |
| 87.5° | 0.0    | 0.0    | 14.2   | 12.5   | 4.0    | 2.6    | 4.3    | 4.6    | 4.6    | 3.0    | 0.0    |
| 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°    | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 | 1575.3 |
| 2.5°  | 1581.2 | 1548.2 | 1487.1 | 1424.0 | 1365.6 | 1295.9 | 1248.0 | 1212.0 | 1170.4 | 1159.1 | 1183.6 |
| 5°    | 1592.1 | 1529.7 | 1398.2 | 1255.2 | 1120.8 | 971.9  | 858.0  | 767.8  | 686.2  | 658.5  | 683.6  |
| 7.5°  | 1609.3 | 1516.5 | 1302.1 | 1066.7 | 832.9  | 600.4  | 441.2  | 336.5  | 269.8  | 250.0  | 260.6  |
| 10°   | 1626.4 | 1497.3 | 1190.9 | 843.4  | 523.8  | 292.3  | 190.2  | 151.9  | 137.7  | 134.7  | 136.4  |
| 12.5° | 1640.6 | 1471.6 | 1055.1 | 599.7  | 280.0  | 156.5  | 124.5  | 118.2  | 116.2  | 116.2  | 116.9  |
| 15°   | 1649.2 | 1432.6 | 894.3  | 381.4  | 161.2  | 118.2  | 108.6  | 106.7  | 106.7  | 107.0  | 107.7  |
| 17.5° | 1648.2 | 1383.1 | 718.3  | 230.8  | 120.5  | 104.7  | 99.1   | 97.4   | 97.1   | 97.8   | 98.1   |
| 20°   | 1636.0 | 1318.3 | 541.6  | 152.2  | 105.0  | 95.4   | 89.8   | 86.9   | 86.5   | 87.2   | 87.8   |
| 22.5° | 1612.9 | 1238.4 | 387.4  | 117.2  | 94.8   | 86.5   | 79.6   | 76.9   | 76.9   | 77.6   | 78.3   |
| 25°   | 1584.8 | 1140.7 | 264.9  | 99.4   | 85.5   | 76.9   | 70.3   | 68.0   | 68.7   | 70.3   | 70.7   |
| 27.5° | 1549.8 | 1030.7 | 180.0  | 85.2   | 74.3   | 67.4   | 62.4   | 60.8   | 62.4   | 64.7   | 65.4   |
| 30°   | 1519.8 | 916.1  | 128.5  | 73.6   | 63.1   | 58.1   | 55.2   | 55.2   | 57.5   | 61.8   | 62.7   |
| 32.5° | 1496.7 | 805.1  | 99.1   | 65.1   | 54.8   | 50.5   | 48.9   | 50.5   | 54.2   | 58.5   | 59.4   |
| 35°   | 1493.7 | 713.7  | 83.9   | 58.1   | 48.9   | 44.6   | 43.9   | 46.9   | 50.5   | 53.8   | 54.5   |
| 37.5° | 1516.5 | 629.1  | 75.6   | 52.5   | 43.6   | 39.6   | 39.0   | 42.6   | 46.2   | 50.2   | 51.2   |
| 40°   | 1559.7 | 562.7  | 69.7   | 47.2   | 39.3   | 35.0   | 33.7   | 36.3   | 41.3   | 46.6   | 47.9   |
| 42.5° | 1615.9 | 507.9  | 63.1   | 41.9   | 35.0   | 29.1   | 27.4   | 30.4   | 35.7   | 41.3   | 42.9   |
| 45°   | 1669.4 | 460.7  | 55.8   | 36.0   | 29.4   | 22.5   | 21.8   | 25.8   | 28.4   | 34.0   | 35.3   |
| 47.5° | 1698.8 | 419.1  | 49.5   | 29.4   | 22.8   | 18.2   | 18.2   | 19.2   | 21.8   | 28.4   | 29.7   |
| 50°   | 1688.9 | 385.7  | 42.9   | 21.8   | 15.9   | 13.9   | 13.9   | 13.5   | 17.5   | 22.8   | 23.8   |
| 52.5° | 1669.0 | 366.6  | 37.0   | 16.8   | 10.9   | 9.9    | 8.9    | 9.9    | 12.2   | 14.5   | 14.9   |
| 55°   | 1666.1 | 363.3  | 31.0   | 13.5   | 7.6    | 6.6    | 5.0    | 5.0    | 5.0    | 4.6    | 4.0    |
| 57.5° | 1689.2 | 368.5  | 26.1   | 10.9   | 5.6    | 4.3    | 2.6    | 0.0    | 0.0    | 0.0    | 0.0    |
| 60°   | 1713.0 | 374.2  | 22.5   | 7.6    | 4.0    | 2.3    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    |
| 62.5° | 1673.3 | 361.6  | 18.8   | 4.6    | 3.0    | 1.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 65°   | 1469.9 | 307.8  | 14.9   | 3.3    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 1045.5 | 206.1  | 9.9    | 2.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 477.2  | 86.2   | 6.3    | 0.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 102.0  | 26.7   | 4.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 20.8   | 19.5   | 1.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 6.6    | 30.7   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 4.0    | 22.1   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 0.7    | 3.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)