

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: P190969

Luminaire Tested: **GLEON-AF-01-LED-E1-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190969  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6540.8 lumens  
Efficiency: N/A  
Efficacy: 110.9 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): 59  
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

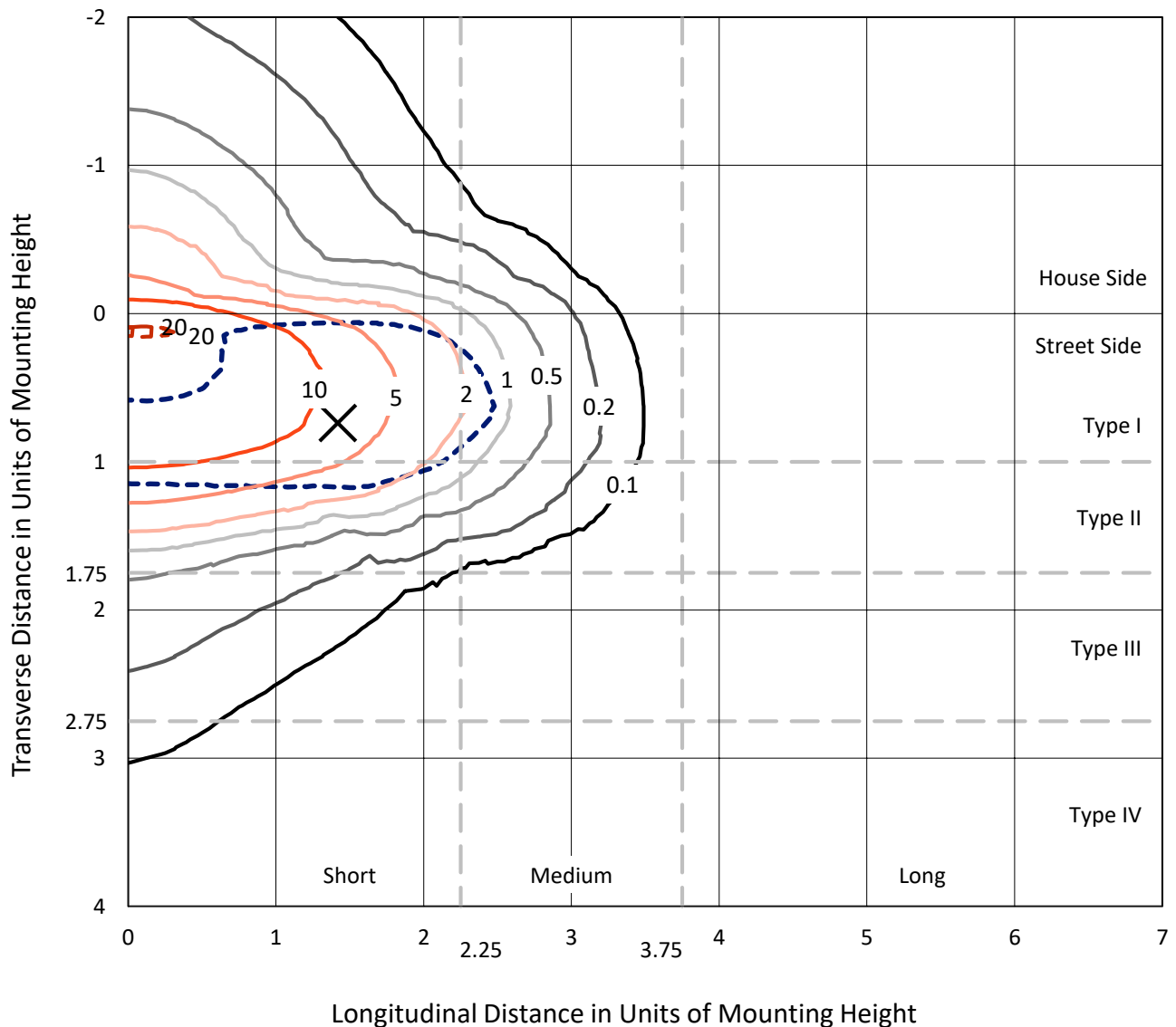


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

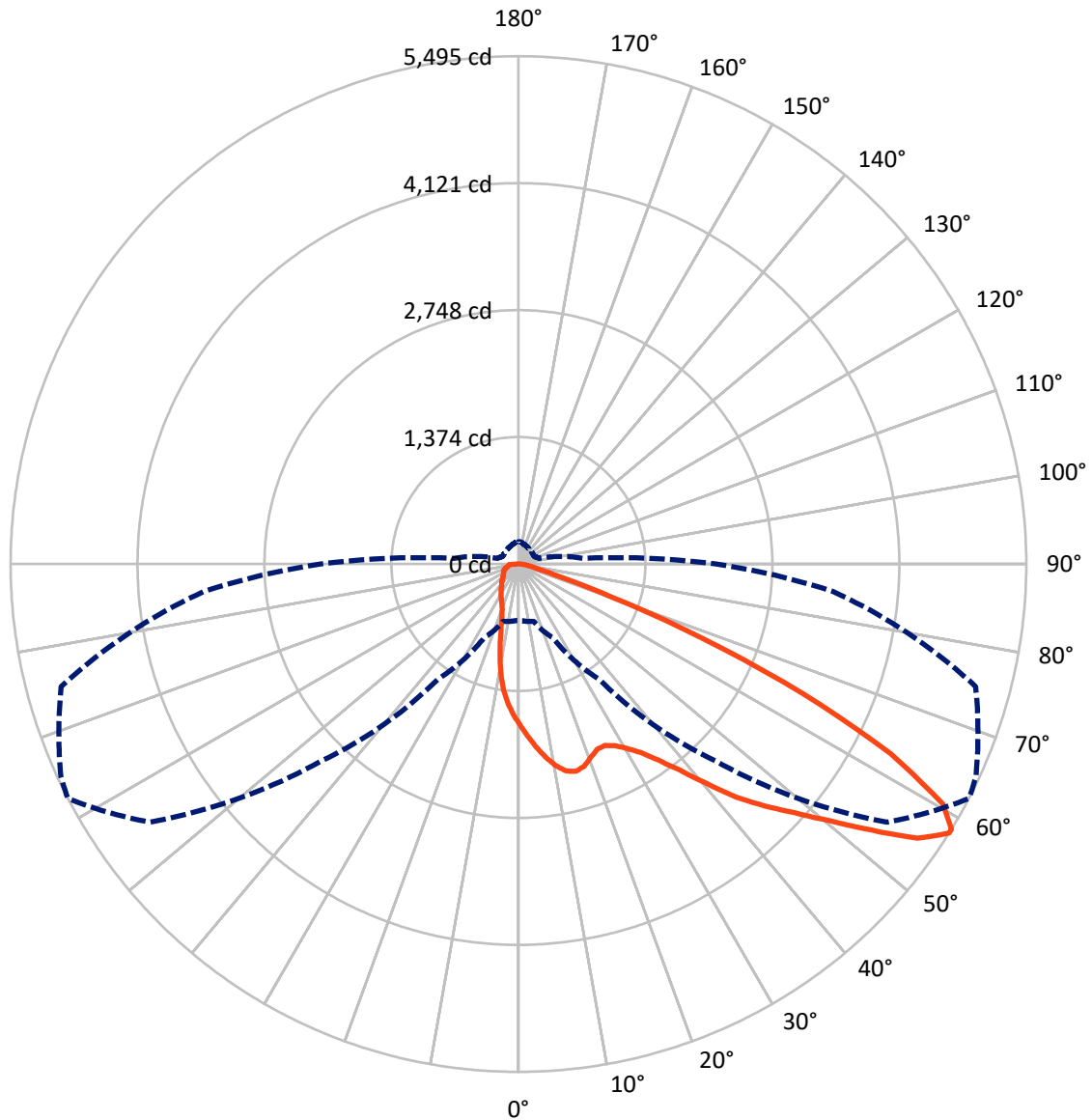


Based on 10 foot mounting height. Maximum calculated value = 21.2 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 997.5    | 0.0    | 997.5  |
|                    | % Fixture | 15.3     | 0.0    | 15.3   |
| <b>Street Side</b> | Lumens    | 5543.3   | 0.0    | 5543.3 |
|                    | % Fixture | 84.7     | 0.0    | 84.7   |
| <b>Total</b>       | Lumens    | 6540.8   | 0.0    | 6540.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 155.4  | 2.4       |
| 10°-20°   | 397.2  | 6.1       |
| 20°-30°   | 642.1  | 9.8       |
| 30°-40°   | 1019.3 | 15.6      |
| 40°-50°   | 1491.4 | 22.8      |
| 50°-60°   | 1559.9 | 23.8      |
| 60°-70°   | 921.6  | 14.1      |
| 70°-80°   | 259.6  | 4.0       |
| 80°-90°   | 94.3   | 1.4       |
| 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°    | 6540.8 | 100.0     |
| 0°-180°   | 6540.8 | 100.0     |



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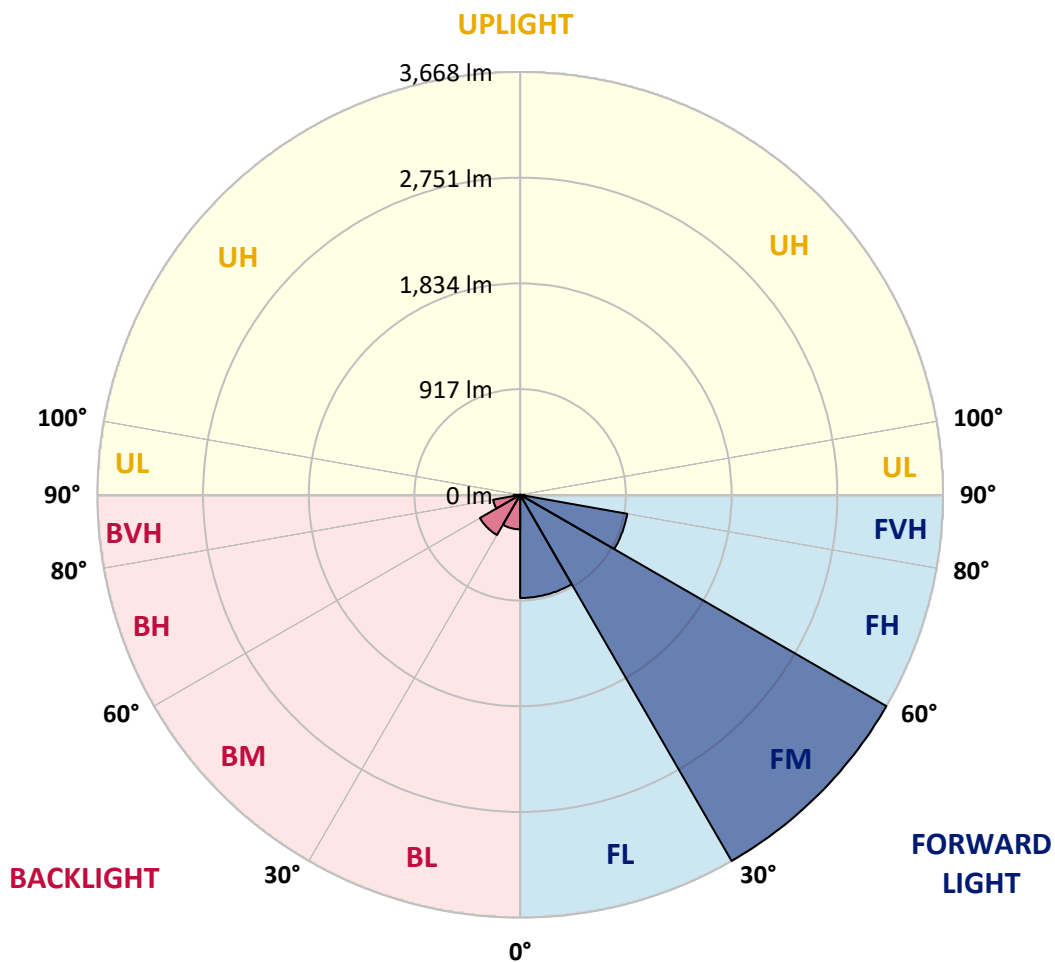
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 894.9  | 13.7      |                         |      |         |
| FM   | (30°-60°)   | 3668.0 | 56.1      |                         |      |         |
| FH   | (60°-80°)   | 943.2  | 14.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 37.2   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 299.8  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 402.6  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 238.0  | 3.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 57.1   | 0.9       |                         |      | G1/100  |
| 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°    | 62.5°  | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 |
| 2.5°  | 1985.3 | 1969.4 | 1959.2 | 1950.3 | 1938.5 | 1913.6 | 1880.0 | 1858.8 | 1848.0 | 1811.3 | 1767.9 |
| 5°    | 2180.0 | 2165.8 | 2155.4 | 2143.4 | 2122.4 | 2083.3 | 2029.1 | 1986.0 | 1964.7 | 1891.4 | 1804.6 |
| 7.5°  | 2134.4 | 2140.3 | 2158.4 | 2190.1 | 2217.2 | 2212.0 | 2163.6 | 2108.8 | 2080.8 | 1978.9 | 1847.0 |
| 10°   | 1859.7 | 1869.9 | 1901.3 | 1975.5 | 2095.6 | 2218.8 | 2256.4 | 2218.5 | 2190.1 | 2065.4 | 1890.8 |
| 12.5° | 1804.6 | 1804.3 | 1806.7 | 1826.5 | 1897.9 | 2071.3 | 2259.5 | 2297.6 | 2280.8 | 2148.0 | 1935.4 |
| 15°   | 1827.1 | 1827.7 | 1825.8 | 1834.2 | 1856.3 | 1925.0 | 2165.2 | 2328.1 | 2340.2 | 2231.2 | 1981.7 |
| 17.5° | 1886.2 | 1884.7 | 1877.5 | 1877.5 | 1885.6 | 1912.4 | 2054.4 | 2299.8 | 2355.2 | 2304.7 | 2022.3 |
| 20°   | 1985.3 | 1978.3 | 1959.5 | 1942.3 | 1933.6 | 1948.1 | 2008.8 | 2234.5 | 2329.1 | 2369.2 | 2055.9 |
| 22.5° | 2105.4 | 2099.9 | 2069.4 | 2032.5 | 2002.6 | 2002.3 | 2032.2 | 2177.6 | 2283.8 | 2429.8 | 2084.3 |
| 25°   | 2260.7 | 2251.8 | 2206.5 | 2147.4 | 2095.0 | 2075.0 | 2083.3 | 2174.8 | 2259.2 | 2495.7 | 2109.4 |
| 27.5° | 2443.0 | 2426.7 | 2373.1 | 2287.8 | 2210.8 | 2170.5 | 2158.4 | 2225.0 | 2281.7 | 2577.3 | 2144.6 |
| 30°   | 2664.2 | 2645.4 | 2576.7 | 2465.5 | 2356.8 | 2290.6 | 2265.0 | 2314.0 | 2356.2 | 2676.9 | 2201.0 |
| 32.5° | 2915.8 | 2888.7 | 2809.2 | 2686.7 | 2543.8 | 2442.7 | 2401.2 | 2431.7 | 2465.2 | 2796.6 | 2271.5 |
| 35°   | 3263.5 | 3231.2 | 3116.3 | 2947.2 | 2785.8 | 2646.9 | 2580.4 | 2602.6 | 2635.2 | 2975.3 | 2373.5 |
| 37.5° | 3500.7 | 3486.2 | 3409.8 | 3250.9 | 3075.4 | 2915.5 | 2812.6 | 2825.6 | 2844.0 | 3198.6 | 2504.0 |
| 40°   | 3498.6 | 3504.4 | 3506.0 | 3507.5 | 3388.0 | 3234.9 | 3124.3 | 3110.8 | 3107.1 | 3443.8 | 2652.5 |
| 42.5° | 3323.3 | 3347.3 | 3424.9 | 3582.4 | 3655.0 | 3584.8 | 3483.5 | 3444.4 | 3424.9 | 3732.6 | 2809.8 |
| 45°   | 3055.0 | 3067.9 | 3213.3 | 3520.7 | 3791.8 | 3931.3 | 3854.6 | 3731.4 | 3696.3 | 3998.1 | 2940.5 |
| 47.5° | 2916.7 | 2931.0 | 3022.4 | 3357.5 | 3790.2 | 4211.3 | 4255.6 | 4020.9 | 3958.1 | 4229.1 | 3053.2 |
| 50°   | 2587.5 | 2617.0 | 2732.2 | 3073.6 | 3651.9 | 4340.0 | 4674.8 | 4365.9 | 4235.9 | 4453.9 | 3166.2 |
| 52.5° | 1982.9 | 2028.5 | 2157.5 | 2606.6 | 3301.2 | 4276.2 | 5010.2 | 4784.1 | 4600.5 | 4686.9 | 3263.2 |
| 55°   | 1250.8 | 1284.6 | 1393.1 | 1840.9 | 2640.7 | 3944.5 | 5137.4 | 5236.6 | 5073.3 | 4907.3 | 3347.3 |
| 57.5° | 680.1  | 695.2  | 735.8  | 1016.4 | 1717.7 | 3211.1 | 4952.0 | 5494.1 | 5426.3 | 5094.6 | 3410.7 |
| 58°   | 608.6  | 618.8  | 644.0  | 880.9  | 1523.4 | 3010.6 | 4869.8 | 5495.0 | 5461.1 | 5122.0 | 3415.7 |
| 60°   | 451.5  | 446.3  | 423.8  | 502.7  | 847.9  | 2079.9 | 4372.6 | 5275.1 | 5374.6 | 5155.6 | 3391.7 |
| 62.5° | 396.7  | 384.1  | 338.2  | 333.0  | 412.5  | 958.2  | 3345.8 | 4518.7 | 4753.7 | 4964.0 | 3245.7 |
| 65°   | 372.7  | 359.2  | 300.0  | 280.9  | 297.6  | 405.3  | 1970.9 | 3388.9 | 3683.6 | 4383.1 | 2872.3 |
| 67.5° | 354.9  | 337.3  | 275.7  | 249.5  | 250.7  | 267.9  | 790.0  | 2134.4 | 2466.1 | 3328.0 | 2234.2 |
| 70°   | 337.6  | 318.4  | 255.0  | 224.8  | 217.8  | 211.9  | 314.1  | 1068.5 | 1369.3 | 2102.1 | 1424.5 |
| 72.5° | 319.1  | 300.3  | 236.8  | 205.4  | 191.6  | 172.2  | 205.1  | 437.0  | 610.5  | 994.5  | 646.2  |
| 75°   | 292.3  | 275.4  | 218.7  | 188.2  | 168.5  | 142.6  | 154.9  | 228.2  | 273.8  | 396.1  | 311.4  |
| 77.5° | 259.3  | 245.5  | 198.4  | 174.0  | 149.4  | 115.8  | 119.2  | 158.4  | 175.5  | 226.7  | 185.2  |
| 80°   | 186.4  | 191.3  | 176.5  | 156.5  | 133.1  | 93.9   | 91.5   | 115.5  | 124.7  | 145.7  | 120.4  |
| 82.5° | 130.9  | 133.7  | 146.0  | 127.9  | 110.0  | 74.0   | 67.4   | 81.3   | 86.8   | 95.7   | 65.0   |
| 85°   | 90.2   | 87.2   | 100.1  | 89.0   | 79.5   | 49.3   | 46.2   | 55.1   | 58.5   | 59.4   | 33.6   |
| 87.5° | 54.2   | 54.2   | 57.9   | 47.8   | 42.9   | 25.6   | 25.0   | 31.4   | 33.6   | 32.0   | 18.5   |
| 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°    | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 | 1737.4 |
| 2.5°  | 1742.1 | 1720.2 | 1673.6 | 1636.4 | 1589.3 | 1540.3 | 1512.8 | 1483.6 | 1463.6 | 1449.1 | 1472.2 |
| 5°    | 1755.3 | 1710.6 | 1614.5 | 1523.4 | 1422.6 | 1318.0 | 1238.5 | 1164.5 | 1113.1 | 1081.1 | 1111.2 |
| 7.5°  | 1776.3 | 1707.5 | 1554.5 | 1398.6 | 1217.8 | 1043.5 | 887.6  | 790.0  | 733.0  | 705.0  | 722.6  |
| 10°   | 1800.3 | 1702.6 | 1483.9 | 1229.5 | 970.8  | 751.3  | 634.7  | 595.4  | 582.5  | 577.1  | 579.6  |
| 12.5° | 1820.2 | 1692.2 | 1397.4 | 1025.0 | 729.1  | 593.2  | 559.7  | 558.7  | 561.5  | 562.1  | 563.0  |
| 15°   | 1834.5 | 1676.7 | 1269.0 | 811.9  | 583.1  | 540.5  | 538.7  | 544.2  | 549.4  | 551.6  | 552.9  |
| 17.5° | 1844.0 | 1645.0 | 1123.9 | 641.9  | 522.3  | 515.0  | 519.2  | 526.4  | 531.9  | 533.5  | 534.7  |
| 20°   | 1843.1 | 1598.5 | 951.1  | 535.3  | 489.4  | 489.4  | 496.8  | 502.4  | 502.7  | 500.8  | 501.8  |
| 22.5° | 1833.5 | 1534.7 | 783.6  | 478.6  | 460.1  | 465.3  | 472.8  | 467.6  | 446.0  | 431.8  | 432.7  |
| 25°   | 1817.5 | 1458.7 | 640.1  | 442.6  | 433.0  | 442.3  | 440.2  | 400.7  | 369.9  | 356.1  | 356.1  |
| 27.5° | 1803.4 | 1368.7 | 529.8  | 411.2  | 405.9  | 417.4  | 379.1  | 343.4  | 330.5  | 324.0  | 321.8  |
| 30°   | 1793.1 | 1271.7 | 456.1  | 380.9  | 380.3  | 372.0  | 329.0  | 319.1  | 316.9  | 311.7  | 309.9  |
| 32.5° | 1795.6 | 1173.4 | 409.0  | 354.6  | 356.7  | 318.4  | 304.9  | 307.1  | 305.2  | 299.7  | 297.2  |
| 35°   | 1815.9 | 1080.1 | 378.2  | 330.5  | 324.0  | 287.7  | 290.7  | 294.7  | 294.1  | 286.4  | 284.0  |
| 37.5° | 1852.3 | 991.8  | 357.9  | 310.5  | 282.7  | 272.3  | 277.2  | 283.4  | 281.8  | 276.6  | 274.8  |
| 40°   | 1890.5 | 908.6  | 341.3  | 294.7  | 258.4  | 261.8  | 266.1  | 269.5  | 271.1  | 272.6  | 271.4  |
| 42.5° | 1927.8 | 821.7  | 320.9  | 278.8  | 248.3  | 252.0  | 253.8  | 257.2  | 265.5  | 271.4  | 271.1  |
| 45°   | 1949.9 | 740.1  | 300.0  | 255.9  | 240.2  | 242.4  | 241.2  | 248.0  | 258.1  | 267.6  | 267.9  |
| 47.5° | 1974.6 | 676.7  | 283.4  | 235.0  | 232.5  | 234.1  | 230.4  | 237.1  | 246.4  | 258.1  | 259.3  |
| 50°   | 2004.5 | 638.8  | 270.2  | 218.4  | 222.1  | 222.1  | 221.2  | 227.3  | 240.2  | 253.8  | 256.2  |
| 52.5° | 2038.3 | 631.4  | 259.0  | 206.3  | 211.5  | 211.2  | 212.2  | 221.5  | 235.6  | 248.9  | 251.0  |
| 55°   | 2079.6 | 651.4  | 247.0  | 197.4  | 201.4  | 202.6  | 205.7  | 216.3  | 228.2  | 243.4  | 244.3  |
| 57.5° | 2127.6 | 692.0  | 237.4  | 190.4  | 192.2  | 196.2  | 201.1  | 210.6  | 223.6  | 240.2  | 241.2  |
| 58°   | 2135.6 | 700.7  | 235.9  | 189.8  | 190.4  | 195.0  | 200.5  | 209.7  | 222.7  | 240.9  | 241.8  |
| 60°   | 2135.9 | 729.4  | 232.5  | 187.0  | 183.2  | 191.0  | 197.1  | 206.3  | 221.2  | 243.1  | 245.2  |
| 62.5° | 2060.2 | 729.1  | 230.1  | 182.9  | 175.8  | 185.5  | 192.5  | 203.3  | 219.6  | 248.3  | 252.6  |
| 65°   | 1814.1 | 662.5  | 218.4  | 176.8  | 170.0  | 180.4  | 188.5  | 201.1  | 223.9  | 271.1  | 273.8  |
| 67.5° | 1418.9 | 543.0  | 196.5  | 168.2  | 162.3  | 175.5  | 186.1  | 200.8  | 228.5  | 276.3  | 278.1  |
| 70°   | 938.1  | 406.2  | 172.5  | 158.4  | 154.3  | 169.7  | 187.3  | 211.2  | 223.3  | 265.1  | 260.2  |
| 72.5° | 486.9  | 285.2  | 153.0  | 146.0  | 145.1  | 164.5  | 205.1  | 210.0  | 218.1  | 249.5  | 243.4  |
| 75°   | 255.6  | 198.0  | 136.2  | 132.5  | 134.0  | 163.3  | 242.1  | 204.5  | 211.2  | 238.7  | 250.4  |
| 77.5° | 156.5  | 159.9  | 121.6  | 120.1  | 123.2  | 159.6  | 241.8  | 197.4  | 201.4  | 219.6  | 232.5  |
| 80°   | 104.8  | 129.7  | 110.6  | 110.9  | 113.0  | 146.0  | 217.2  | 186.4  | 189.5  | 207.6  | 220.9  |
| 82.5° | 66.2   | 76.7   | 100.5  | 105.7  | 102.9  | 120.4  | 184.5  | 169.7  | 174.0  | 237.4  | 251.0  |
| 85°   | 33.6   | 48.1   | 87.2   | 101.7  | 92.7   | 84.4   | 149.7  | 148.7  | 150.9  | 171.2  | 178.9  |
| 87.5° | 15.4   | 26.5   | 68.0   | 88.7   | 69.9   | 52.7   | 108.7  | 110.3  | 118.9  | 121.6  | 121.6  |
| 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)