

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: P191631

Luminaire Tested: **GLEON-AF-03-LED-E1-5NQ-7050-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191631  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
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-E1-5NQ-7050-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12351 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 96  
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

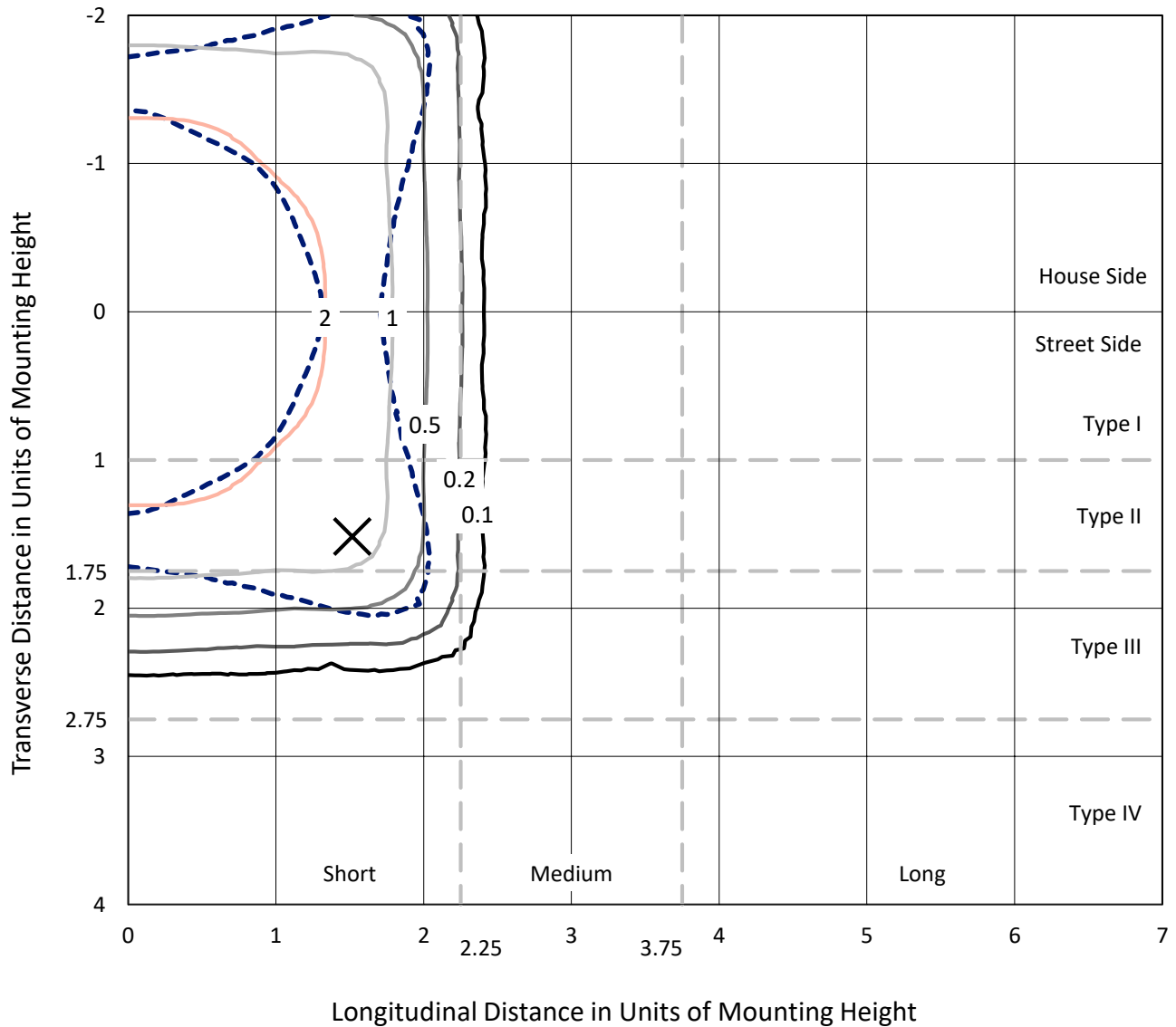


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

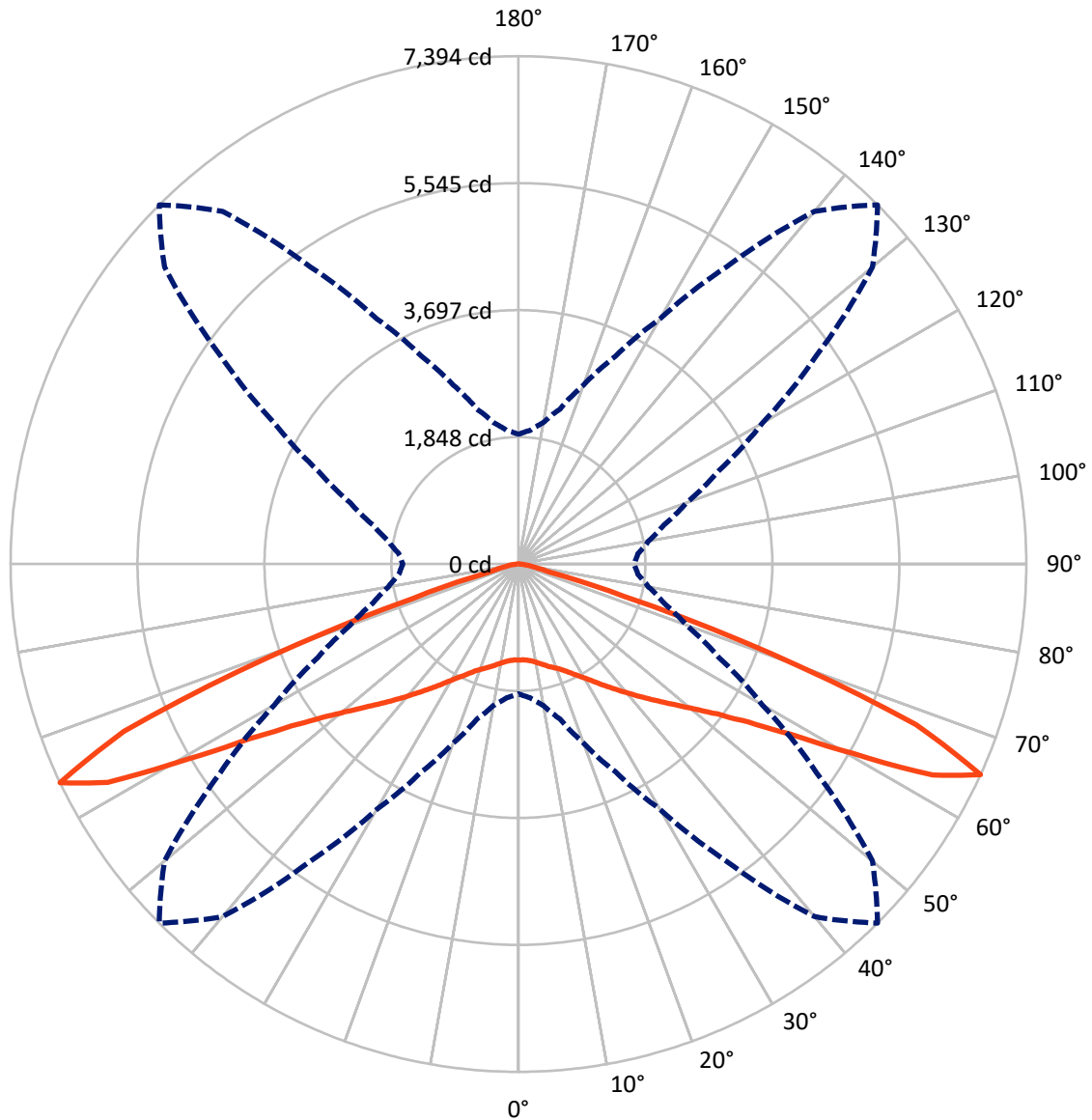


Based on 20 foot mounting height. Maximum calculated value = 3.5 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6175.5   | 0.0    | 6175.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 6175.5   | 0.0    | 6175.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 12351.0  | 0.0    | 12351.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 136.2   | 1.1       |
| 10°-20°   | 436.9   | 3.5       |
| 20°-30°   | 816.8   | 6.6       |
| 30°-40°   | 1381.5  | 11.2      |
| 40°-50°   | 2258.9  | 18.3      |
| 50°-60°   | 3592.0  | 29.1      |
| 60°-70°   | 3247.0  | 26.3      |
| 70°-80°   | 410.9   | 3.3       |
| 80°-90°   | 70.7    | 0.6       |
| 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°    | 12351.0 | 100.0     |
| 0°-180°   | 12351.0 | 100.0     |

**Coefficient of Utilization**



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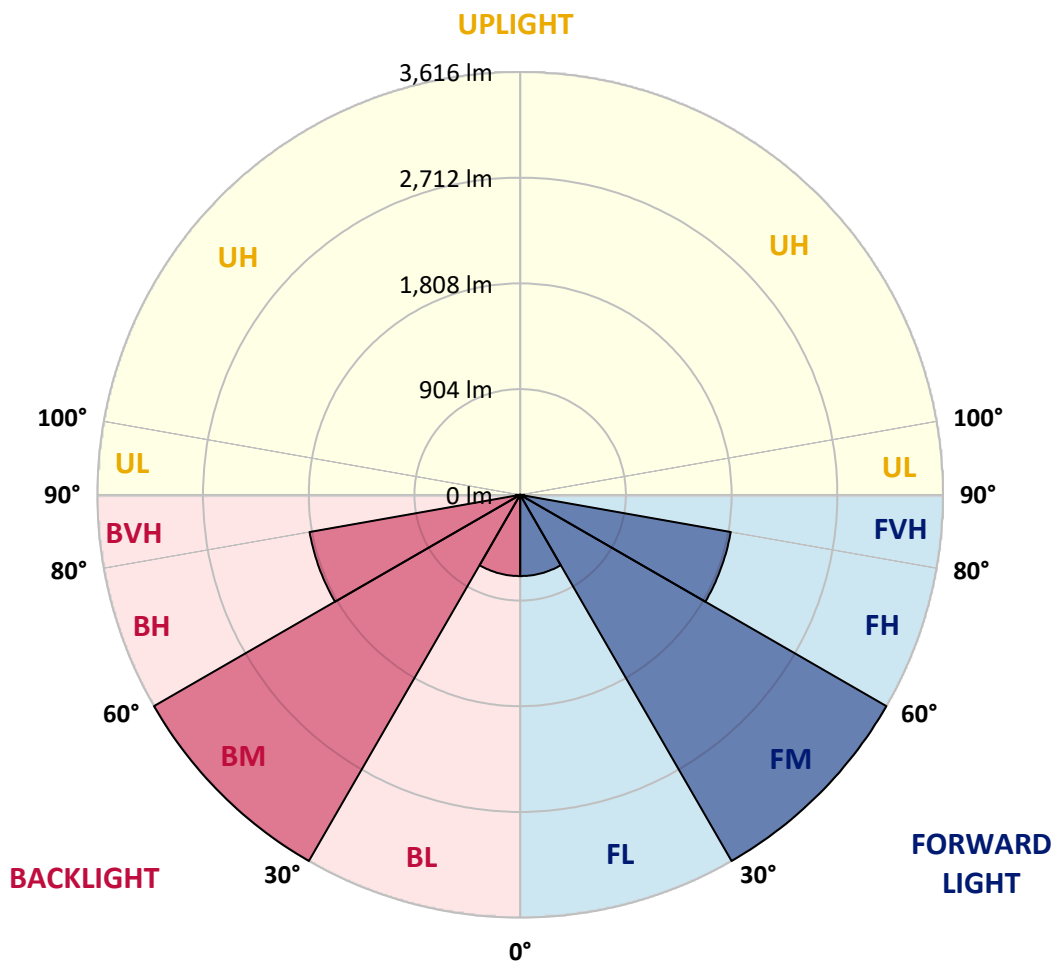
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 695.0  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 3616.2 | 29.3      |                         |      |         |
| FH   | (60°-80°)   | 1828.9 | 14.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 35.3   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 695.0  | 5.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 3616.2 | 29.3      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1828.9 | 14.8      | B3/2500                 |      | G2/5000 |
| BVH  | (80°-90°)   | 35.3   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 |
| 2.5°  | 1398.7 | 1399.8 | 1401.0 | 1399.8 | 1401.0 | 1399.3 | 1398.1 | 1399.8 | 1398.1 | 1396.4 | 1397.5 |
| 5°    | 1410.8 | 1411.4 | 1411.4 | 1409.7 | 1411.4 | 1410.2 | 1408.5 | 1410.8 | 1409.1 | 1407.4 | 1408.5 |
| 7.5°  | 1431.1 | 1433.4 | 1431.7 | 1429.9 | 1431.1 | 1429.9 | 1428.8 | 1429.3 | 1428.8 | 1427.0 | 1427.6 |
| 10°   | 1458.3 | 1460.0 | 1458.8 | 1458.3 | 1459.4 | 1458.8 | 1457.7 | 1457.1 | 1457.7 | 1455.9 | 1455.9 |
| 12.5° | 1491.2 | 1490.7 | 1490.1 | 1490.7 | 1492.4 | 1492.4 | 1491.8 | 1492.4 | 1493.5 | 1494.1 | 1493.0 |
| 15°   | 1523.6 | 1524.8 | 1524.8 | 1524.8 | 1528.3 | 1531.1 | 1532.9 | 1534.0 | 1536.3 | 1536.9 | 1534.6 |
| 17.5° | 1564.1 | 1564.1 | 1563.5 | 1564.1 | 1567.6 | 1572.2 | 1573.9 | 1576.3 | 1578.6 | 1580.3 | 1577.4 |
| 20°   | 1609.2 | 1610.4 | 1610.4 | 1611.5 | 1616.2 | 1621.4 | 1621.4 | 1622.5 | 1621.4 | 1622.5 | 1620.8 |
| 22.5° | 1664.2 | 1667.7 | 1667.7 | 1668.2 | 1672.9 | 1679.2 | 1677.5 | 1679.2 | 1676.3 | 1678.6 | 1676.3 |
| 25°   | 1735.9 | 1741.1 | 1740.0 | 1740.0 | 1743.4 | 1747.5 | 1748.1 | 1751.5 | 1751.0 | 1753.8 | 1752.1 |
| 27.5° | 1816.9 | 1825.0 | 1827.3 | 1826.7 | 1829.0 | 1833.1 | 1834.2 | 1838.3 | 1836.0 | 1838.3 | 1837.1 |
| 30°   | 1914.1 | 1917.5 | 1922.2 | 1923.9 | 1926.8 | 1930.8 | 1930.8 | 1931.4 | 1928.5 | 1932.0 | 1933.7 |
| 32.5° | 2014.7 | 2021.1 | 2025.7 | 2036.1 | 2041.3 | 2044.2 | 2043.6 | 2044.8 | 2041.9 | 2046.5 | 2050.0 |
| 35°   | 2147.8 | 2152.4 | 2159.9 | 2168.0 | 2175.0 | 2174.4 | 2172.6 | 2173.2 | 2173.2 | 2177.3 | 2180.7 |
| 37.5° | 2308.0 | 2309.2 | 2319.0 | 2330.6 | 2334.0 | 2330.6 | 2320.1 | 2317.8 | 2312.6 | 2317.8 | 2323.6 |
| 40°   | 2477.5 | 2481.5 | 2501.2 | 2508.7 | 2510.4 | 2504.1 | 2489.0 | 2480.4 | 2468.8 | 2475.2 | 2483.3 |
| 42.5° | 2655.1 | 2663.2 | 2681.1 | 2694.4 | 2700.2 | 2696.1 | 2675.3 | 2662.0 | 2647.0 | 2650.4 | 2658.5 |
| 45°   | 2851.7 | 2861.6 | 2887.0 | 2899.7 | 2910.7 | 2904.4 | 2884.1 | 2863.9 | 2840.2 | 2841.9 | 2854.6 |
| 47.5° | 3071.5 | 3081.4 | 3114.3 | 3135.7 | 3141.5 | 3140.4 | 3117.8 | 3090.1 | 3057.7 | 3056.5 | 3067.5 |
| 50°   | 3318.0 | 3327.8 | 3368.9 | 3401.8 | 3418.6 | 3416.9 | 3390.3 | 3350.9 | 3311.6 | 3312.2 | 3326.1 |
| 52.5° | 3558.6 | 3570.7 | 3613.5 | 3670.2 | 3703.2 | 3726.9 | 3710.7 | 3673.7 | 3625.7 | 3626.8 | 3639.6 |
| 55°   | 3784.2 | 3804.4 | 3853.6 | 3930.5 | 3991.8 | 4058.4 | 4077.5 | 4076.3 | 4047.4 | 4055.5 | 4068.2 |
| 57.5° | 3893.5 | 3923.6 | 3999.4 | 4120.8 | 4245.8 | 4381.1 | 4495.7 | 4581.3 | 4617.7 | 4672.7 | 4660.0 |
| 60°   | 3686.4 | 3734.4 | 3846.1 | 4024.8 | 4271.8 | 4554.1 | 4856.6 | 5152.2 | 5404.4 | 5594.7 | 5485.4 |
| 62.5° | 3018.3 | 3080.8 | 3216.2 | 3445.2 | 3818.9 | 4270.7 | 4849.7 | 5548.4 | 6309.7 | 6769.0 | 6441.0 |
| 65°   | 1888.6 | 1953.4 | 2091.1 | 2336.3 | 2773.6 | 3335.3 | 4120.8 | 5278.9 | 6701.3 | 7393.7 | 6726.2 |
| 67.5° | 736.4  | 771.6  | 846.3  | 1003.0 | 1331.6 | 1831.4 | 2619.8 | 3934.0 | 5635.2 | 6242.0 | 5530.5 |
| 70°   | 369.0  | 372.5  | 386.4  | 415.3  | 485.9  | 631.1  | 960.2  | 1823.8 | 3231.8 | 3903.3 | 3115.5 |
| 72.5° | 266.7  | 267.2  | 274.2  | 286.9  | 309.5  | 341.9  | 404.3  | 558.2  | 1051.0 | 1606.3 | 985.1  |
| 75°   | 204.2  | 206.5  | 210.6  | 217.5  | 229.6  | 245.8  | 268.4  | 321.6  | 398.5  | 462.2  | 388.7  |
| 77.5° | 157.3  | 162.0  | 164.9  | 171.2  | 178.7  | 189.7  | 196.1  | 216.3  | 251.6  | 264.9  | 260.9  |
| 80°   | 119.7  | 123.8  | 130.2  | 135.4  | 140.6  | 145.8  | 143.5  | 152.7  | 171.2  | 182.2  | 176.4  |
| 82.5° | 76.4   | 81.0   | 99.5   | 104.1  | 106.4  | 109.9  | 105.9  | 106.4  | 114.5  | 121.5  | 114.5  |
| 85°   | 49.2   | 52.1   | 63.1   | 68.8   | 69.4   | 71.7   | 70.0   | 65.9   | 65.9   | 60.2   | 67.7   |
| 87.5° | 22.6   | 23.1   | 28.3   | 33.5   | 34.7   | 31.2   | 30.7   | 29.5   | 23.7   | 22.6   | 24.3   |
| 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 | 1397.5 |
| 2.5°  | 1396.9 | 1398.1 | 1398.7 | 1400.4 | 1401.0 | 1401.0 | 1401.6 | 1402.7 |
| 5°    | 1407.9 | 1409.7 | 1410.2 | 1412.6 | 1413.1 | 1412.6 | 1413.7 | 1414.3 |
| 7.5°  | 1427.6 | 1430.5 | 1431.7 | 1434.0 | 1432.2 | 1434.5 | 1435.1 | 1435.1 |
| 10°   | 1456.5 | 1459.4 | 1460.0 | 1462.3 | 1461.2 | 1462.3 | 1462.3 | 1461.2 |
| 12.5° | 1494.7 | 1495.3 | 1493.5 | 1495.3 | 1493.0 | 1494.1 | 1492.4 | 1491.2 |
| 15°   | 1536.9 | 1535.2 | 1531.1 | 1531.1 | 1527.7 | 1528.3 | 1527.7 | 1527.1 |
| 17.5° | 1578.0 | 1574.5 | 1571.6 | 1570.5 | 1567.6 | 1567.0 | 1565.3 | 1565.3 |
| 20°   | 1623.1 | 1621.4 | 1619.6 | 1617.3 | 1614.4 | 1611.5 | 1611.0 | 1612.1 |
| 22.5° | 1677.5 | 1676.9 | 1676.9 | 1675.8 | 1671.7 | 1668.8 | 1667.1 | 1667.1 |
| 25°   | 1750.4 | 1745.2 | 1745.2 | 1744.6 | 1742.9 | 1741.1 | 1737.6 | 1739.4 |
| 27.5° | 1832.5 | 1829.6 | 1831.9 | 1831.4 | 1829.6 | 1829.6 | 1827.3 | 1827.3 |
| 30°   | 1933.7 | 1932.6 | 1936.1 | 1933.2 | 1927.4 | 1926.8 | 1924.5 | 1921.6 |
| 32.5° | 2050.6 | 2049.4 | 2054.6 | 2051.2 | 2041.9 | 2036.7 | 2032.1 | 2029.8 |
| 35°   | 2180.7 | 2181.3 | 2187.7 | 2185.4 | 2175.0 | 2171.5 | 2163.4 | 2162.2 |
| 37.5° | 2323.0 | 2332.3 | 2343.3 | 2345.6 | 2336.9 | 2334.6 | 2325.9 | 2321.3 |
| 40°   | 2490.2 | 2502.4 | 2519.1 | 2523.2 | 2513.9 | 2512.2 | 2500.0 | 2493.7 |
| 42.5° | 2668.4 | 2689.2 | 2710.0 | 2713.5 | 2704.2 | 2695.0 | 2683.4 | 2678.8 |
| 45°   | 2867.4 | 2892.2 | 2919.4 | 2926.4 | 2912.5 | 2901.5 | 2886.4 | 2886.4 |
| 47.5° | 3090.6 | 3121.9 | 3152.5 | 3171.6 | 3158.9 | 3147.3 | 3129.4 | 3117.8 |
| 50°   | 3354.4 | 3397.2 | 3437.1 | 3456.8 | 3436.5 | 3414.6 | 3383.3 | 3372.9 |
| 52.5° | 3685.3 | 3731.5 | 3766.3 | 3755.8 | 3724.6 | 3693.9 | 3659.8 | 3645.9 |
| 55°   | 4107.5 | 4123.2 | 4123.2 | 4083.8 | 4021.3 | 3969.9 | 3916.1 | 3898.1 |
| 57.5° | 4635.7 | 4575.5 | 4482.9 | 4365.5 | 4218.0 | 4089.6 | 4002.8 | 3961.8 |
| 60°   | 5256.3 | 4967.1 | 4640.3 | 4319.2 | 4055.5 | 3838.0 | 3709.0 | 3650.0 |
| 62.5° | 5669.9 | 4913.3 | 4258.5 | 3743.1 | 3363.7 | 3101.6 | 2923.5 | 2854.0 |
| 65°   | 5299.1 | 4097.7 | 3220.8 | 2604.2 | 2190.6 | 1923.9 | 1747.5 | 1682.7 |
| 67.5° | 3881.4 | 2567.7 | 1715.1 | 1229.2 | 900.6  | 718.4  | 646.1  | 616.0  |
| 70°   | 1742.3 | 904.1  | 554.1  | 432.7  | 373.1  | 342.4  | 329.1  | 324.5  |
| 72.5° | 525.2  | 380.0  | 320.5  | 289.2  | 265.5  | 250.5  | 239.5  | 238.3  |
| 75°   | 317.0  | 263.8  | 234.3  | 215.8  | 200.7  | 188.6  | 182.8  | 181.1  |
| 77.5° | 221.5  | 193.8  | 179.9  | 166.6  | 155.0  | 145.8  | 140.6  | 136.5  |
| 80°   | 155.6  | 142.3  | 135.9  | 128.4  | 120.9  | 112.2  | 104.7  | 101.2  |
| 82.5° | 104.1  | 101.2  | 101.2  | 96.6   | 90.2   | 82.1   | 67.1   | 63.6   |
| 85°   | 67.1   | 66.5   | 67.7   | 65.9   | 61.3   | 52.6   | 43.4   | 41.1   |
| 87.5° | 31.2   | 31.8   | 35.3   | 34.7   | 33.5   | 27.8   | 22.0   | 20.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)