

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: P191827

Luminaire Tested: **GLEON-AF-09-LED-E1-RW-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191827  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-09-LED-E1-RW-7050-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59672 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B5 - U0 - G5

Input Watts (W): 575  
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

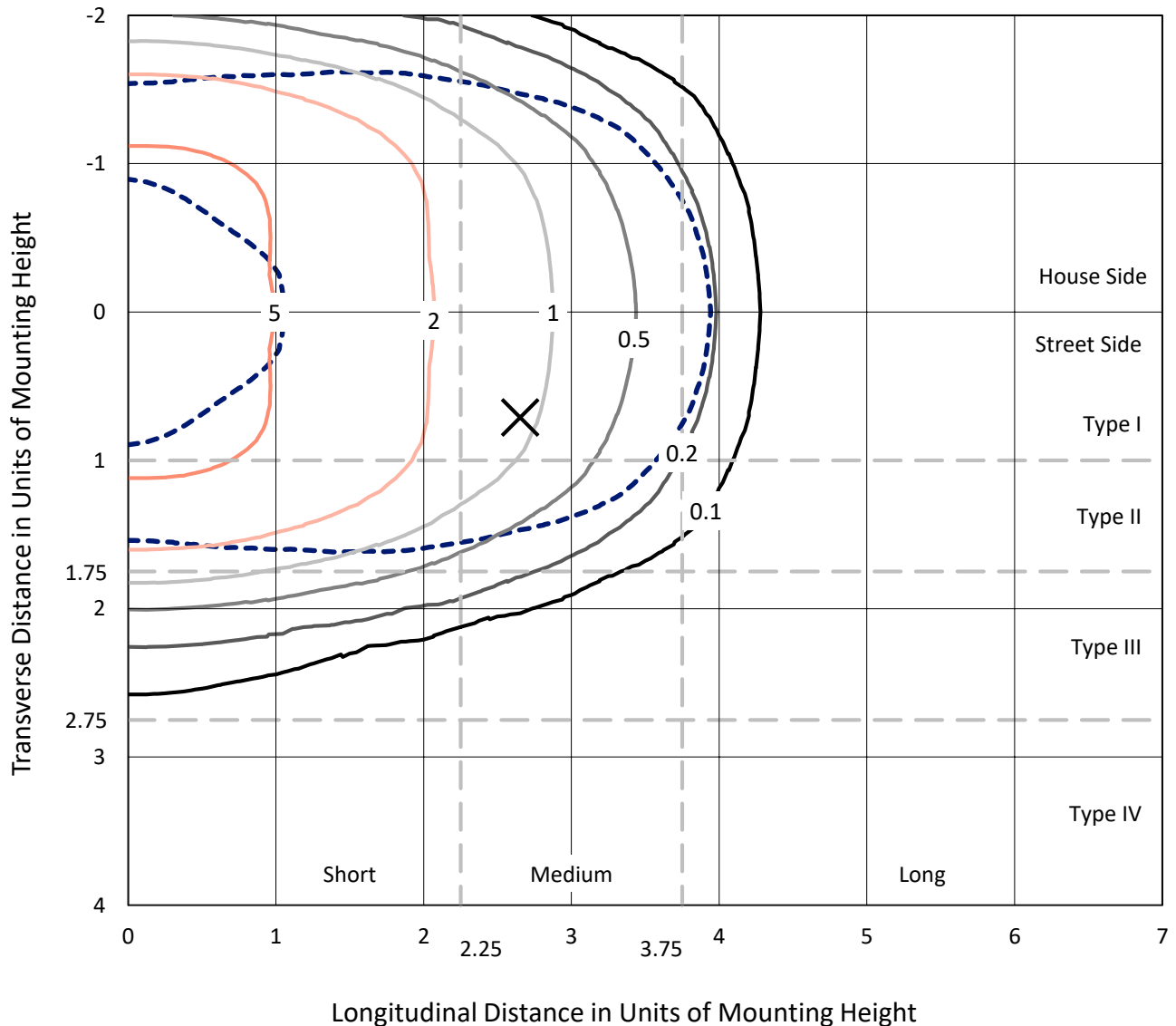


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

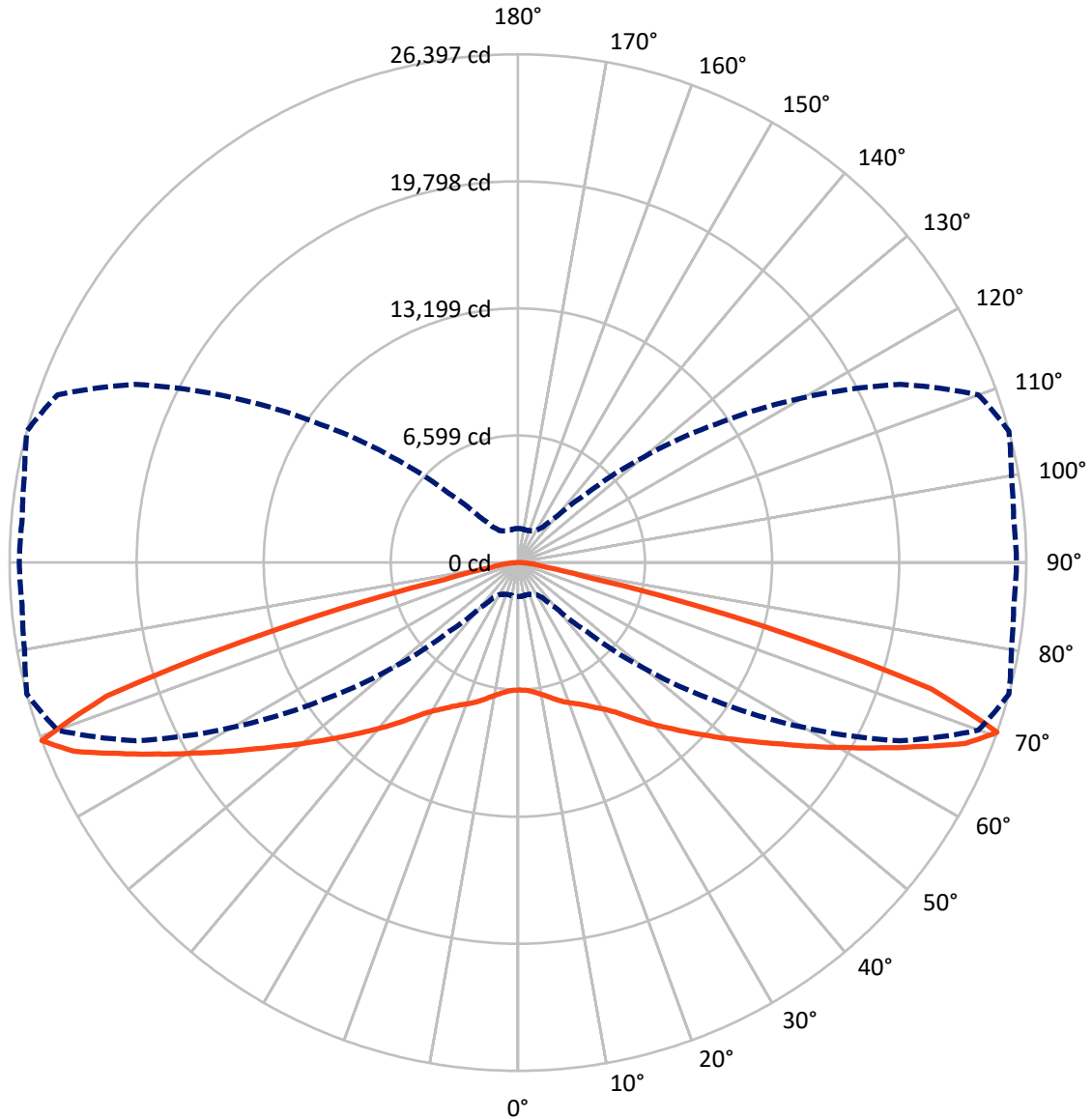


Based on 30 foot mounting height. Maximum calculated value = 7.4 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 29836.0  | 0.0    | 29836.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 29836.0  | 0.0    | 29836.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 59672.0  | 0.0    | 59672.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 634.8   | 1.1       |
| 10°-20°   | 1972.5  | 3.3       |
| 20°-30°   | 3712.5  | 6.2       |
| 30°-40°   | 6574.1  | 11.0      |
| 40°-50°   | 10994.0 | 18.4      |
| 50°-60°   | 15320.1 | 25.7      |
| 60°-70°   | 14207.0 | 23.8      |
| 70°-80°   | 5661.9  | 9.5       |
| 80°-90°   | 595.2   | 1.0       |
| 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°    | 59672.0 | 100.0     |
| 0°-180°   | 59672.0 | 100.0     |



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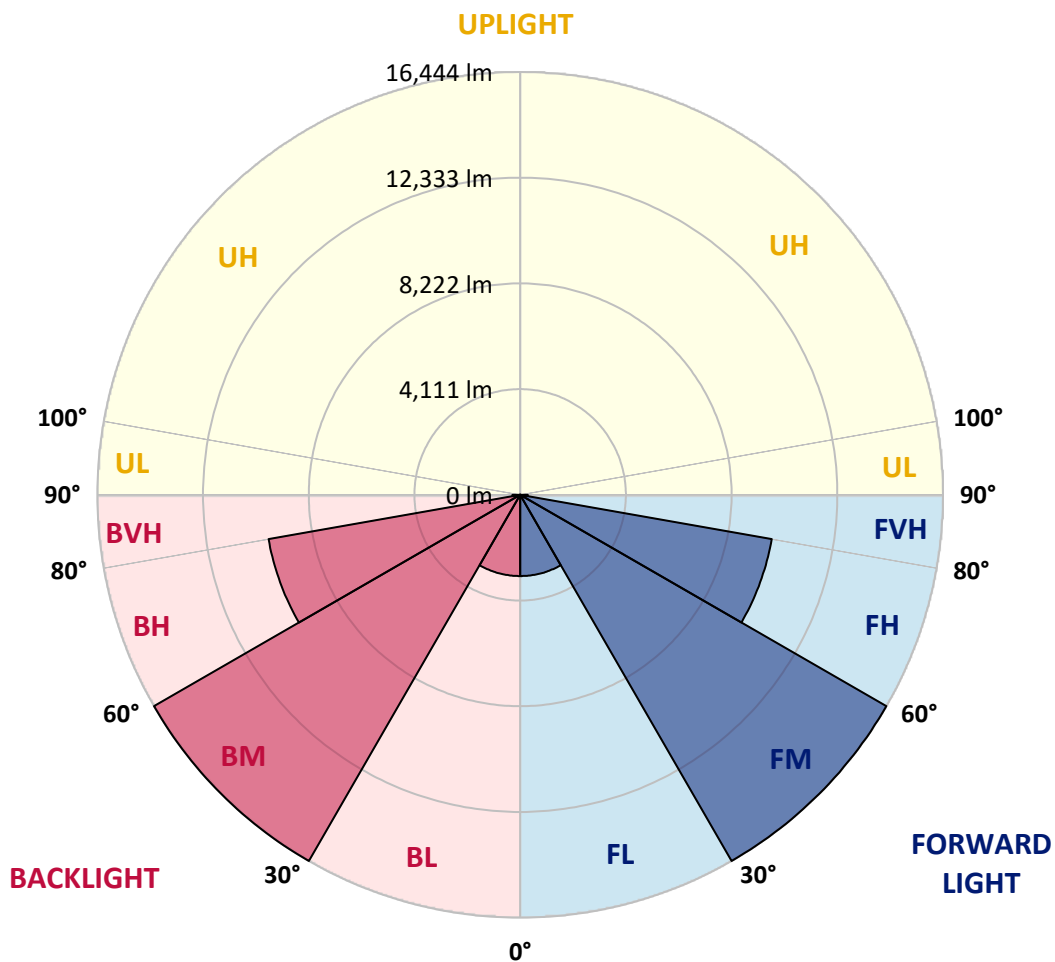
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 3159.9  | 5.3       |                         |      |          |
| FM   | (30°-60°)   | 16444.1 | 27.6      |                         |      |          |
| FH   | (60°-80°)   | 9934.4  | 16.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 297.6   | 0.5       |                         |      | G3/500   |
| BL   | (0°-30°)    | 3159.9  | 5.3       | B4/5000                 |      |          |
| BM   | (30°-60°)   | 16444.1 | 27.6      | B5                      |      |          |
| BH   | (60°-80°)   | 9934.4  | 16.6      | B5                      |      | G5       |
| BVH  | (80°-90°)   | 297.6   | 0.5       |                         |      | G3/500   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B5-U0-G5**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 10°     | 15°     | 20°     | 25°     | 30°     | 35°     | 40°     | 45°     | 50°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  |
| 2.5°  | 6607.7  | 6602.1  | 6607.7  | 6604.9  | 6610.6  | 6610.6  | 6616.2  | 6627.5  | 6627.5  | 6635.9  | 6633.1  |
| 5°    | 6542.9  | 6540.0  | 6548.5  | 6557.0  | 6565.4  | 6582.4  | 6599.3  | 6624.7  | 6644.4  | 6658.5  | 6672.6  |
| 7.5°  | 6416.0  | 6416.0  | 6427.2  | 6447.0  | 6466.7  | 6503.4  | 6542.9  | 6593.6  | 6644.4  | 6686.7  | 6723.4  |
| 10°   | 6311.6  | 6317.3  | 6331.4  | 6365.2  | 6399.0  | 6455.4  | 6509.0  | 6582.4  | 6652.9  | 6723.4  | 6779.8  |
| 12.5° | 6249.6  | 6258.0  | 6283.4  | 6334.2  | 6390.6  | 6466.7  | 6548.5  | 6641.6  | 6720.5  | 6805.1  | 6861.6  |
| 15°   | 6269.3  | 6275.0  | 6311.6  | 6373.7  | 6447.0  | 6542.9  | 6652.9  | 6762.8  | 6855.9  | 6946.2  | 7022.3  |
| 17.5° | 6379.3  | 6387.8  | 6430.1  | 6500.6  | 6576.7  | 6689.5  | 6808.0  | 6932.1  | 7047.7  | 7149.2  | 7242.3  |
| 20°   | 6576.7  | 6585.2  | 6638.8  | 6714.9  | 6805.1  | 6920.8  | 7039.2  | 7169.0  | 7298.7  | 7405.9  | 7510.2  |
| 22.5° | 6855.9  | 6870.0  | 6920.8  | 6996.9  | 7098.4  | 7222.5  | 7363.5  | 7501.7  | 7625.8  | 7724.5  | 7817.6  |
| 25°   | 7222.5  | 7253.6  | 7301.5  | 7386.1  | 7493.3  | 7606.1  | 7758.4  | 7899.4  | 8017.8  | 8110.9  | 8178.6  |
| 27.5° | 7741.5  | 7783.8  | 7820.4  | 7902.2  | 8006.6  | 8113.7  | 8266.0  | 8390.1  | 8502.9  | 8593.2  | 8643.9  |
| 30°   | 8429.6  | 8471.9  | 8508.6  | 8587.5  | 8683.4  | 8784.9  | 8928.8  | 9038.7  | 9109.3  | 9179.8  | 9176.9  |
| 32.5° | 9264.4  | 9309.5  | 9323.6  | 9408.2  | 9506.9  | 9616.9  | 9746.6  | 9808.7  | 9865.1  | 9873.5  | 9822.8  |
| 35°   | 10197.9 | 10220.4 | 10276.8 | 10389.6 | 10502.4 | 10592.7 | 10716.8 | 10747.8 | 10747.8 | 10705.5 | 10592.7 |
| 37.5° | 11221.6 | 11235.7 | 11314.7 | 11441.6 | 11557.2 | 11650.3 | 11734.9 | 11796.9 | 11765.9 | 11675.6 | 11486.7 |
| 40°   | 12344.0 | 12369.4 | 12482.2 | 12595.0 | 12724.8 | 12812.2 | 12902.4 | 12913.7 | 12882.7 | 12750.1 | 12493.5 |
| 42.5° | 13415.7 | 13438.3 | 13551.1 | 13728.7 | 13898.0 | 14019.2 | 14103.8 | 14120.8 | 14022.0 | 13900.8 | 13582.1 |
| 45°   | 14337.9 | 14397.1 | 14543.8 | 14752.5 | 14997.8 | 15169.9 | 15285.5 | 15333.4 | 15246.0 | 15088.1 | 14718.6 |
| 47.5° | 15068.3 | 15127.6 | 15336.3 | 15584.4 | 15889.0 | 16168.2 | 16360.0 | 16461.5 | 16439.0 | 16320.5 | 15917.2 |
| 50°   | 15604.2 | 15660.6 | 15886.2 | 16190.8 | 16546.1 | 16893.0 | 17220.2 | 17462.7 | 17547.3 | 17493.7 | 17124.3 |
| 52.5° | 15666.2 | 15759.3 | 16024.4 | 16433.3 | 16895.8 | 17369.6 | 17835.0 | 18246.7 | 18525.9 | 18568.2 | 18294.7 |
| 55°   | 14800.4 | 14893.5 | 15260.1 | 15866.5 | 16554.6 | 17327.3 | 18071.9 | 18765.6 | 19315.6 | 19597.6 | 19453.8 |
| 57.5° | 12758.6 | 12925.0 | 13311.4 | 14022.0 | 15034.5 | 16190.8 | 17378.1 | 18610.5 | 19730.1 | 20477.5 | 20621.3 |
| 60°   | 9777.6  | 9975.1  | 10364.2 | 11120.1 | 12248.1 | 13627.2 | 15212.2 | 17034.0 | 19011.0 | 20691.8 | 21695.8 |
| 62.5° | 6272.1  | 6458.3  | 6867.2  | 7524.3  | 8443.7  | 9938.4  | 11639.0 | 13802.1 | 16458.7 | 19112.5 | 21504.0 |
| 65°   | 3223.5  | 3325.0  | 3539.4  | 3937.0  | 4653.3  | 5770.1  | 7295.9  | 9453.3  | 12490.7 | 15764.9 | 19222.5 |
| 67.5° | 2041.8  | 2061.6  | 2109.5  | 2165.9  | 2349.2  | 2735.6  | 3446.3  | 4791.5  | 7290.2  | 10705.5 | 14752.5 |
| 70°   | 1765.4  | 1765.4  | 1742.9  | 1734.4  | 1757.0  | 1810.6  | 1920.6  | 2233.6  | 3076.8  | 5082.0  | 8508.6  |
| 72.5° | 1616.0  | 1599.1  | 1559.6  | 1528.5  | 1522.9  | 1522.9  | 1545.5  | 1593.4  | 1728.8  | 2070.0  | 3330.7  |
| 75°   | 1489.1  | 1441.1  | 1387.5  | 1350.9  | 1336.8  | 1322.7  | 1319.9  | 1328.3  | 1356.5  | 1410.1  | 1590.6  |
| 77.5° | 1334.0  | 1271.9  | 1209.9  | 1173.2  | 1156.3  | 1136.5  | 1119.6  | 1099.9  | 1085.8  | 1102.7  | 1181.7  |
| 80°   | 1147.8  | 1077.3  | 1029.4  | 1006.8  | 989.9   | 961.7   | 925.0   | 891.2   | 860.2   | 854.5   | 902.5   |
| 82.5° | 925.0   | 843.2   | 846.1   | 854.5   | 823.5   | 784.0   | 744.5   | 707.9   | 654.3   | 626.1   | 654.3   |
| 85°   | 747.4   | 705.1   | 685.3   | 738.9   | 693.8   | 634.5   | 572.5   | 507.6   | 423.0   | 355.3   | 386.4   |
| 87.5° | 290.5   | 290.5   | 434.3   | 668.4   | 600.7   | 490.7   | 420.2   | 358.2   | 222.8   | 172.0   | 174.9   |
| 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°    | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  | 6619.0  |
| 2.5°  | 6630.3  | 6635.9  | 6633.1  | 6630.3  | 6630.3  | 6627.5  | 6630.3  | 6630.3  |
| 5°    | 6681.1  | 6695.2  | 6695.2  | 6700.8  | 6700.8  | 6703.6  | 6706.4  | 6703.6  |
| 7.5°  | 6757.2  | 6782.6  | 6799.5  | 6819.2  | 6822.1  | 6824.9  | 6830.5  | 6824.9  |
| 10°   | 6833.4  | 6884.1  | 6920.8  | 6957.4  | 6974.4  | 6980.0  | 6985.6  | 6985.6  |
| 12.5° | 6929.2  | 6999.7  | 7064.6  | 7129.5  | 7160.5  | 7177.4  | 7177.4  | 7188.7  |
| 15°   | 7087.2  | 7157.7  | 7233.8  | 7321.2  | 7374.8  | 7403.0  | 7411.5  | 7411.5  |
| 17.5° | 7310.0  | 7372.0  | 7436.9  | 7521.5  | 7589.2  | 7625.8  | 7634.3  | 7631.5  |
| 20°   | 7569.4  | 7628.6  | 7665.3  | 7718.9  | 7778.1  | 7820.4  | 7831.7  | 7831.7  |
| 22.5° | 7865.5  | 7899.4  | 7905.0  | 7921.9  | 7969.9  | 8026.3  | 8051.7  | 8057.3  |
| 25°   | 8192.7  | 8201.1  | 8178.6  | 8178.6  | 8209.6  | 8263.2  | 8288.6  | 8291.4  |
| 27.5° | 8615.7  | 8573.4  | 8517.0  | 8497.3  | 8517.0  | 8579.1  | 8610.1  | 8621.4  |
| 30°   | 9143.1  | 9041.6  | 8911.8  | 8841.3  | 8830.1  | 8911.8  | 8968.2  | 8976.7  |
| 32.5° | 9746.6  | 9600.0  | 9427.9  | 9284.1  | 9247.4  | 9298.2  | 9365.9  | 9363.1  |
| 35°   | 10463.0 | 10288.1 | 10079.4 | 9896.1  | 9811.5  | 9862.2  | 9958.1  | 9969.4  |
| 37.5° | 11289.3 | 11060.8 | 10821.1 | 10589.9 | 10457.3 | 10471.4 | 10572.9 | 10606.8 |
| 40°   | 12211.5 | 11915.4 | 11613.6 | 11303.4 | 11114.4 | 11077.8 | 11201.8 | 11221.6 |
| 42.5° | 13198.5 | 12817.8 | 12437.1 | 12053.5 | 11811.0 | 11754.6 | 11898.4 | 11890.0 |
| 45°   | 14250.5 | 13765.4 | 13319.8 | 12896.8 | 12609.1 | 12524.5 | 12643.0 | 12643.0 |
| 47.5° | 15381.4 | 14783.5 | 14253.3 | 13773.9 | 13460.8 | 13339.6 | 13452.4 | 13460.8 |
| 50°   | 16580.0 | 15945.4 | 15322.2 | 14789.1 | 14414.1 | 14258.9 | 14405.6 | 14428.2 |
| 52.5° | 17772.9 | 17155.3 | 16526.4 | 15917.2 | 15463.2 | 15274.2 | 15443.4 | 15516.8 |
| 55°   | 18982.8 | 18376.4 | 17775.7 | 17180.7 | 16642.0 | 16419.2 | 16599.7 | 16692.8 |
| 57.5° | 20260.3 | 19699.1 | 19126.6 | 18525.9 | 18007.0 | 17660.1 | 17851.9 | 17976.0 |
| 60°   | 21757.9 | 21278.4 | 20683.4 | 20020.6 | 19496.1 | 19143.5 | 19253.5 | 19363.5 |
| 62.5° | 22942.3 | 23128.5 | 22623.7 | 21856.6 | 21182.5 | 20731.3 | 20838.5 | 20954.1 |
| 65°   | 22369.8 | 24279.1 | 24727.5 | 23952.0 | 23018.5 | 22316.3 | 22271.1 | 22330.4 |
| 67.5° | 18697.9 | 22406.5 | 25111.1 | 25850.0 | 25068.8 | 24093.0 | 23912.5 | 23999.9 |
| 70°   | 12507.6 | 17127.1 | 21898.9 | 25452.3 | 26397.1 | 26019.2 | 25841.5 | 25895.1 |
| 72.5° | 6007.0  | 9975.1  | 14856.8 | 19580.7 | 22457.3 | 23777.1 | 24200.2 | 24406.0 |
| 75°   | 2196.9  | 3959.6  | 7160.5  | 10790.1 | 13026.5 | 15079.6 | 16419.2 | 16966.3 |
| 77.5° | 1325.5  | 1599.1  | 2287.2  | 3443.5  | 3900.3  | 4365.7  | 4185.2  | 4275.4  |
| 80°   | 981.4   | 1108.3  | 1255.0  | 1410.1  | 1460.9  | 1460.9  | 1404.5  | 1359.3  |
| 82.5° | 688.1   | 769.9   | 840.4   | 925.0   | 947.6   | 905.3   | 744.5   | 592.2   |
| 85°   | 442.8   | 479.4   | 510.5   | 564.0   | 549.9   | 524.6   | 352.5   | 313.0   |
| 87.5° | 203.1   | 231.3   | 242.5   | 267.9   | 256.6   | 245.4   | 174.9   | 146.7   |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)