

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: P191618

Luminaire Tested: **GLEON-AF-10-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191618  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-10-LED-E1-5MQ-7050  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 61893 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G5

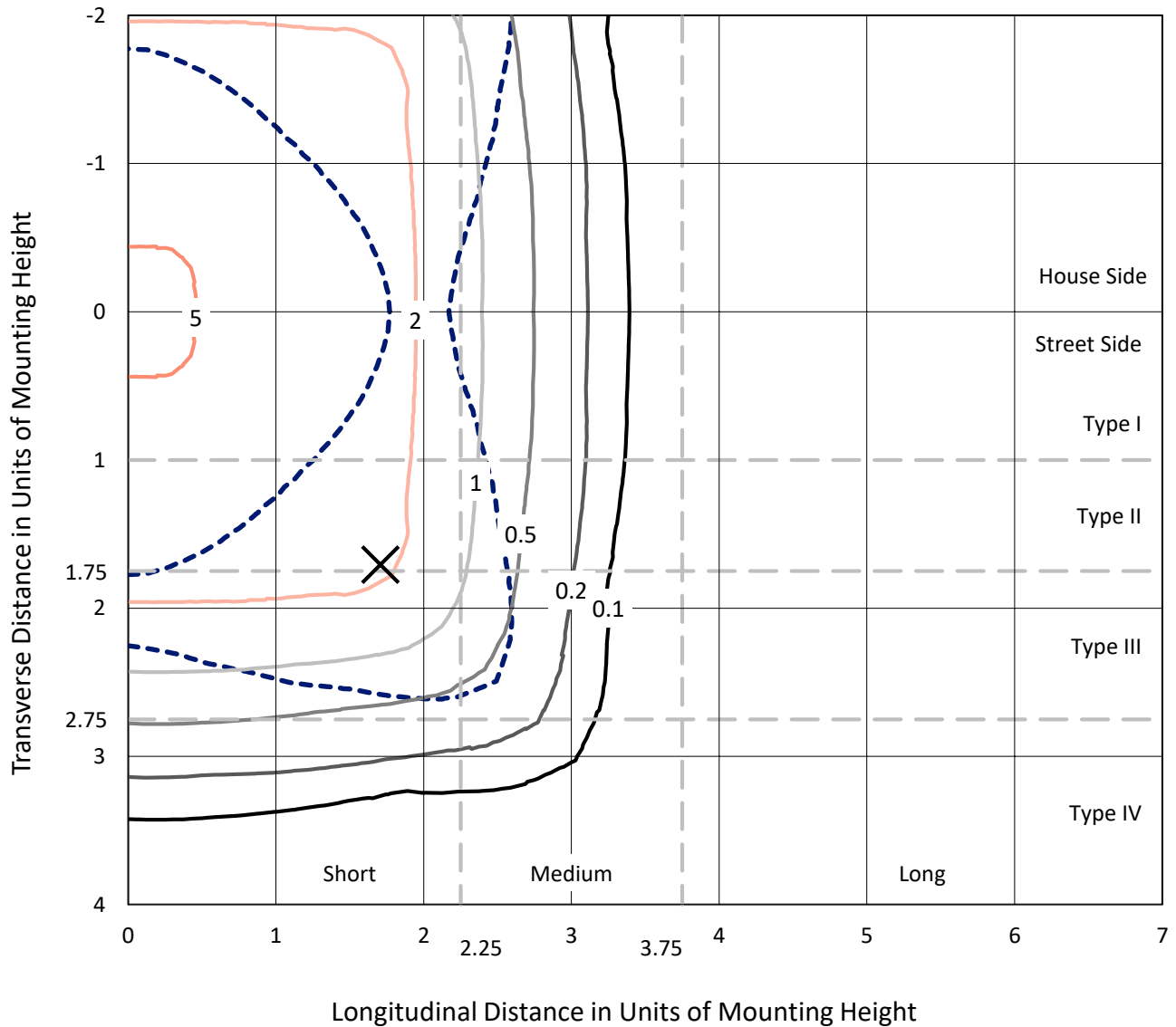
Input Watts (W): 558  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

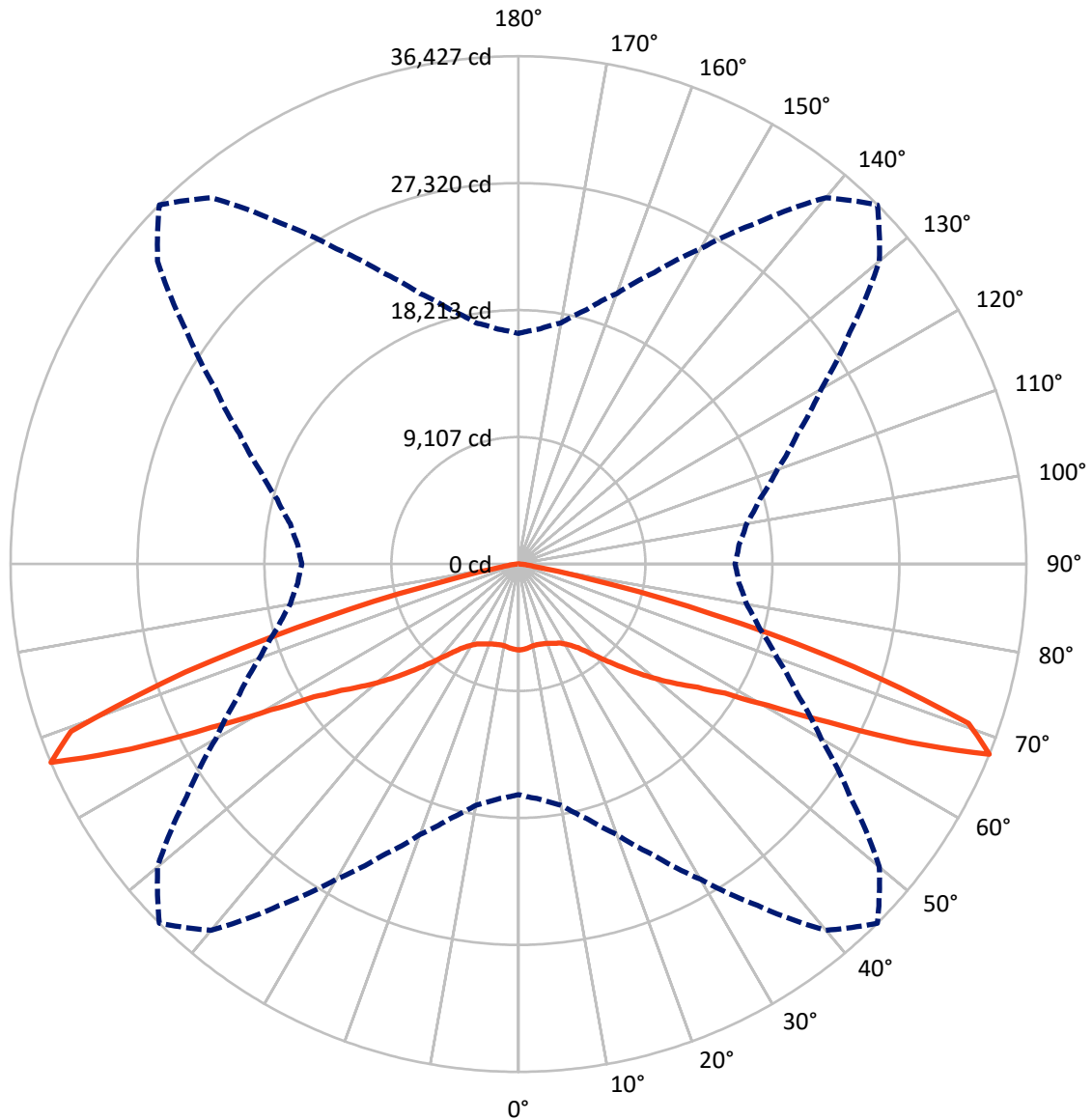
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 30946.5  | 0.0    | 30946.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 30946.5  | 0.0    | 30946.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 61893.0  | 0.0    | 61893.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 577.3   | 0.9       |
| 10°-20°   | 1675.2  | 2.7       |
| 20°-30°   | 2847.8  | 4.6       |
| 30°-40°   | 4655.2  | 7.5       |
| 40°-50°   | 8310.4  | 13.4      |
| 50°-60°   | 14011.6 | 22.6      |
| 60°-70°   | 21743.9 | 35.1      |
| 70°-80°   | 7639.9  | 12.3      |
| 80°-90°   | 431.8   | 0.7       |
| 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°    | 61893.0 | 100.0     |
| 0°-180°   | 61893.0 | 100.0     |



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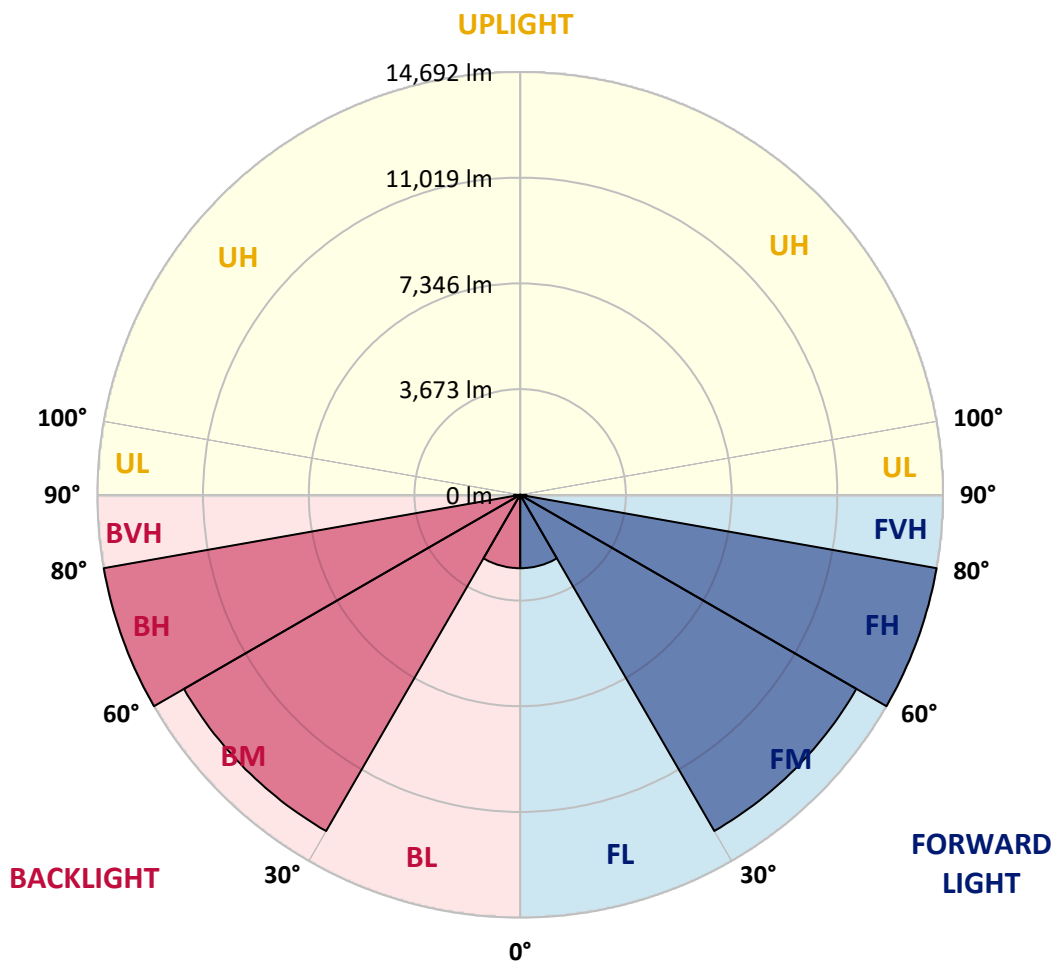
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|---------|-----------|-------------------------|------|--------|
|      |             |         |           | B                       | U    | G      |
| FL   | (0°-30°)    | 2550.1  | 4.1       |                         |      |        |
| FM   | (30°-60°)   | 13488.6 | 21.8      |                         |      |        |
| FH   | (60°-80°)   | 14691.9 | 23.7      |                         |      | G5     |
| FVH  | (80°-90°)   | 215.9   | 0.3       |                         |      | G2/225 |
| BL   | (0°-30°)    | 2550.1  | 4.1       | B4/5000                 |      |        |
| BM   | (30°-60°)   | 13488.6 | 21.8      | B5                      |      |        |
| BH   | (60°-80°)   | 14691.9 | 23.7      | B5                      |      | G5     |
| BVH  | (80°-90°)   | 215.9   | 0.3       |                         |      | G2/225 |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

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

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 10°     | 15°     | 20°     | 25°     | 30°     | 35°     | 40°     | 45°     | 50°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  |
| 2.5°  | 6145.1  | 6150.8  | 6150.8  | 6150.8  | 6148.0  | 6148.0  | 6142.3  | 6148.0  | 6145.1  | 6136.6  | 6139.4  |
| 5°    | 6093.9  | 6099.6  | 6099.6  | 6096.7  | 6105.3  | 6102.4  | 6093.9  | 6099.6  | 6096.7  | 6091.0  | 6093.9  |
| 7.5°  | 6019.9  | 6028.4  | 6028.4  | 6025.6  | 6034.1  | 6031.3  | 6025.6  | 6028.4  | 6028.4  | 6019.9  | 6019.9  |
| 10°   | 5937.3  | 5943.0  | 5943.0  | 5940.2  | 5954.4  | 5954.4  | 5951.6  | 5960.1  | 5963.0  | 5954.4  | 5948.7  |
| 12.5° | 5860.5  | 5869.0  | 5869.0  | 5880.4  | 5894.7  | 5900.3  | 5914.6  | 5926.0  | 5937.3  | 5934.5  | 5923.1  |
| 15°   | 5815.0  | 5820.7  | 5832.0  | 5846.3  | 5869.0  | 5889.0  | 5911.7  | 5937.3  | 5960.1  | 5965.8  | 5948.7  |
| 17.5° | 5786.5  | 5795.0  | 5812.1  | 5832.0  | 5863.3  | 5897.5  | 5931.7  | 5965.8  | 5997.1  | 6008.5  | 5988.6  |
| 20°   | 5778.0  | 5783.7  | 5800.7  | 5834.9  | 5877.6  | 5928.8  | 5977.2  | 6017.0  | 6059.7  | 6074.0  | 6059.7  |
| 22.5° | 5795.0  | 5806.4  | 5826.3  | 5866.2  | 5923.1  | 5988.6  | 6045.5  | 6099.6  | 6153.7  | 6179.3  | 6159.4  |
| 25°   | 5871.9  | 5883.3  | 5908.9  | 5960.1  | 6022.7  | 6091.0  | 6156.5  | 6219.1  | 6267.5  | 6293.1  | 6278.9  |
| 27.5° | 6014.2  | 6028.4  | 6059.7  | 6111.0  | 6179.3  | 6253.3  | 6324.4  | 6375.7  | 6415.5  | 6424.1  | 6407.0  |
| 30°   | 6227.7  | 6259.0  | 6296.0  | 6352.9  | 6432.6  | 6495.2  | 6566.4  | 6611.9  | 6660.3  | 6660.3  | 6646.1  |
| 32.5° | 6560.7  | 6592.0  | 6631.8  | 6685.9  | 6748.5  | 6816.9  | 6879.5  | 6919.3  | 6970.6  | 6973.4  | 6939.2  |
| 35°   | 7058.8  | 7073.0  | 7107.2  | 7141.3  | 7198.3  | 7258.0  | 7312.1  | 7337.7  | 7380.4  | 7383.3  | 7352.0  |
| 37.5° | 7716.3  | 7719.1  | 7741.9  | 7753.3  | 7804.5  | 7870.0  | 7921.2  | 7938.3  | 7978.1  | 7972.4  | 7941.1  |
| 40°   | 8481.9  | 8496.2  | 8504.7  | 8521.8  | 8575.9  | 8638.5  | 8692.6  | 8701.1  | 8743.8  | 8735.2  | 8695.4  |
| 42.5° | 9367.1  | 9372.8  | 9421.2  | 9446.8  | 9498.1  | 9529.4  | 9597.7  | 9606.2  | 9657.4  | 9634.7  | 9589.1  |
| 45°   | 10360.5 | 10411.7 | 10457.2 | 10508.5 | 10562.6 | 10599.6 | 10653.6 | 10642.3 | 10676.4 | 10642.3 | 10616.6 |
| 47.5° | 11405.1 | 11442.1 | 11544.5 | 11624.2 | 11712.5 | 11743.8 | 11820.6 | 11786.5 | 11820.6 | 11772.2 | 11763.7 |
| 50°   | 12555.0 | 12620.4 | 12708.7 | 12799.7 | 12893.7 | 12944.9 | 13044.5 | 13001.8 | 13047.4 | 13001.8 | 12976.2 |
| 52.5° | 13687.8 | 13704.9 | 13898.4 | 14032.2 | 14163.1 | 14222.9 | 14282.7 | 14262.7 | 14265.6 | 14262.7 | 14237.1 |
| 55°   | 14763.7 | 14803.5 | 14997.1 | 15179.2 | 15406.9 | 15574.9 | 15677.3 | 15665.9 | 15640.3 | 15614.7 | 15572.0 |
| 57.5° | 15976.2 | 16016.0 | 16238.1 | 16462.9 | 16721.9 | 16961.0 | 17168.8 | 17382.3 | 17464.8 | 17487.6 | 17393.6 |
| 60°   | 17615.7 | 17612.8 | 17908.8 | 18182.1 | 18552.1 | 18907.9 | 19363.3 | 19827.2 | 20359.5 | 20607.1 | 20279.8 |
| 62.5° | 19283.6 | 19351.9 | 19778.8 | 20262.7 | 21025.5 | 21768.4 | 22608.0 | 23433.5 | 24276.0 | 24961.9 | 24233.3 |
| 65°   | 19084.3 | 19346.2 | 19980.9 | 21076.7 | 22485.6 | 24159.3 | 25969.5 | 27885.0 | 29615.6 | 30805.3 | 29470.4 |
| 67.5° | 16539.8 | 16912.6 | 17558.7 | 18890.8 | 20652.6 | 23066.3 | 26106.1 | 29894.5 | 34297.7 | 36426.7 | 33788.2 |
| 70°   | 11988.6 | 12409.8 | 13087.2 | 14388.0 | 16132.7 | 18426.8 | 21728.5 | 26276.9 | 32106.1 | 34252.2 | 31346.1 |
| 72.5° | 5965.8  | 6193.5  | 6611.9  | 7440.2  | 8760.9  | 10622.3 | 13616.6 | 17988.5 | 23146.0 | 25115.6 | 22460.0 |
| 75°   | 2026.6  | 2131.9  | 2203.0  | 2473.4  | 2891.8  | 3623.3  | 5111.9  | 7864.3  | 11997.1 | 14382.3 | 11826.3 |
| 77.5° | 1169.8  | 1172.7  | 1221.1  | 1269.4  | 1340.6  | 1420.3  | 1619.5  | 2126.2  | 3677.4  | 5222.9  | 3805.5  |
| 80°   | 757.1   | 754.3   | 794.1   | 831.1   | 879.5   | 919.3   | 930.7   | 984.8   | 1135.7  | 1346.3  | 1204.0  |
| 82.5° | 392.8   | 441.2   | 529.4   | 577.8   | 668.9   | 686.0   | 663.2   | 643.3   | 680.3   | 705.9   | 723.0   |
| 85°   | 216.3   | 187.9   | 281.8   | 364.3   | 404.2   | 409.9   | 409.9   | 387.1   | 401.3   | 392.8   | 426.9   |
| 87.5° | 99.6    | 91.1    | 111.0   | 179.3   | 190.7   | 162.2   | 170.8   | 150.9   | 108.2   | 105.3   | 119.5   |
| 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):**

|       | 55°     | 60°     | 65°     | 70°     | 75°     | 80°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  | 6167.9  |
| 2.5°  | 6139.4  | 6142.3  | 6142.3  | 6150.8  | 6153.7  | 6159.4  | 6165.1  | 6167.9  |
| 5°    | 6091.0  | 6099.6  | 6093.9  | 6102.4  | 6102.4  | 6108.1  | 6108.1  | 6111.0  |
| 7.5°  | 6019.9  | 6028.4  | 6028.4  | 6028.4  | 6025.6  | 6034.1  | 6034.1  | 6034.1  |
| 10°   | 5945.9  | 5951.6  | 5948.7  | 5943.0  | 5937.3  | 5945.9  | 5943.0  | 5940.2  |
| 12.5° | 5923.1  | 5908.9  | 5897.5  | 5891.8  | 5880.4  | 5883.3  | 5874.7  | 5874.7  |
| 15°   | 5937.3  | 5911.7  | 5891.8  | 5883.3  | 5871.9  | 5866.2  | 5860.5  | 5863.3  |
| 17.5° | 5974.4  | 5943.0  | 5917.4  | 5903.2  | 5889.0  | 5880.4  | 5869.0  | 5871.9  |
| 20°   | 6039.8  | 6002.8  | 5965.8  | 5937.3  | 5911.7  | 5897.5  | 5889.0  | 5886.1  |
| 22.5° | 6136.6  | 6082.5  | 6028.4  | 5985.7  | 5951.6  | 5931.7  | 5923.1  | 5917.4  |
| 25°   | 6247.6  | 6187.8  | 6125.2  | 6076.8  | 6042.7  | 6017.0  | 6000.0  | 6000.0  |
| 27.5° | 6387.1  | 6338.7  | 6281.7  | 6224.8  | 6193.5  | 6167.9  | 6156.5  | 6150.8  |
| 30°   | 6620.5  | 6574.9  | 6529.4  | 6475.3  | 6435.4  | 6409.8  | 6389.9  | 6372.8  |
| 32.5° | 6919.3  | 6882.3  | 6845.3  | 6805.5  | 6768.5  | 6734.3  | 6703.0  | 6688.8  |
| 35°   | 7340.6  | 7312.1  | 7286.5  | 7240.9  | 7226.7  | 7206.8  | 7189.7  | 7175.5  |
| 37.5° | 7921.2  | 7909.8  | 7909.8  | 7861.4  | 7850.1  | 7841.5  | 7824.4  | 7827.3  |
| 40°   | 8684.0  | 8695.4  | 8681.2  | 8664.1  | 8655.6  | 8632.8  | 8632.8  | 8652.7  |
| 42.5° | 9586.3  | 9594.8  | 9626.1  | 9597.7  | 9629.0  | 9600.5  | 9583.4  | 9597.7  |
| 45°   | 10633.7 | 10665.0 | 10727.6 | 10699.2 | 10719.1 | 10670.7 | 10610.9 | 10613.8 |
| 47.5° | 11809.2 | 11837.7 | 11863.3 | 11843.4 | 11846.2 | 11766.5 | 11686.8 | 11666.9 |
| 50°   | 13030.3 | 13041.7 | 13055.9 | 13027.4 | 13033.1 | 12944.9 | 12853.8 | 12856.7 |
| 52.5° | 14237.1 | 14291.2 | 14348.1 | 14271.3 | 14254.2 | 14154.6 | 14026.5 | 13975.3 |
| 55°   | 15617.6 | 15694.4 | 15628.9 | 15495.2 | 15361.4 | 15227.6 | 15059.7 | 15031.2 |
| 57.5° | 17319.6 | 17188.7 | 16983.8 | 16730.5 | 16545.5 | 16357.6 | 16186.8 | 16115.7 |
| 60°   | 19687.7 | 19195.3 | 18825.3 | 18449.6 | 18213.4 | 17982.8 | 17758.0 | 17723.8 |
| 62.5° | 23035.0 | 22183.9 | 21446.8 | 20669.7 | 20035.0 | 19539.7 | 19144.1 | 19033.1 |
| 65°   | 27230.4 | 25218.1 | 23473.3 | 21845.2 | 20430.6 | 19363.3 | 18691.6 | 18395.5 |
| 67.5° | 29034.9 | 25061.5 | 22070.1 | 19758.9 | 17908.8 | 16616.6 | 15890.8 | 15529.3 |
| 70°   | 25514.1 | 20783.6 | 17530.3 | 15216.2 | 13531.2 | 12153.6 | 11496.1 | 11109.0 |
| 72.5° | 17553.0 | 13221.0 | 10454.4 | 8533.2  | 7186.9  | 6034.1  | 5578.7  | 5544.6  |
| 75°   | 7881.4  | 5220.1  | 3597.7  | 2772.3  | 2334.0  | 2029.4  | 1935.5  | 1864.3  |
| 77.5° | 2205.9  | 1630.9  | 1454.5  | 1360.5  | 1269.4  | 1164.1  | 1124.3  | 1132.8  |
| 80°   | 1073.0  | 1013.3  | 973.4   | 913.7   | 831.1   | 742.9   | 703.0   | 720.1   |
| 82.5° | 711.6   | 703.0   | 728.6   | 686.0   | 566.4   | 481.0   | 404.2   | 370.0   |
| 85°   | 432.6   | 438.3   | 446.9   | 449.7   | 381.4   | 267.6   | 182.2   | 204.9   |
| 87.5° | 170.8   | 196.4   | 213.5   | 222.0   | 207.8   | 128.1   | 102.5   | 105.3   |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)