

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: P190893

Luminaire Tested: **GLEON-AF-05-LED-E1-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190893  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-05-LED-E1-5WQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32055.2 lumens  
Efficiency: N/A  
Efficacy: 114.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G4

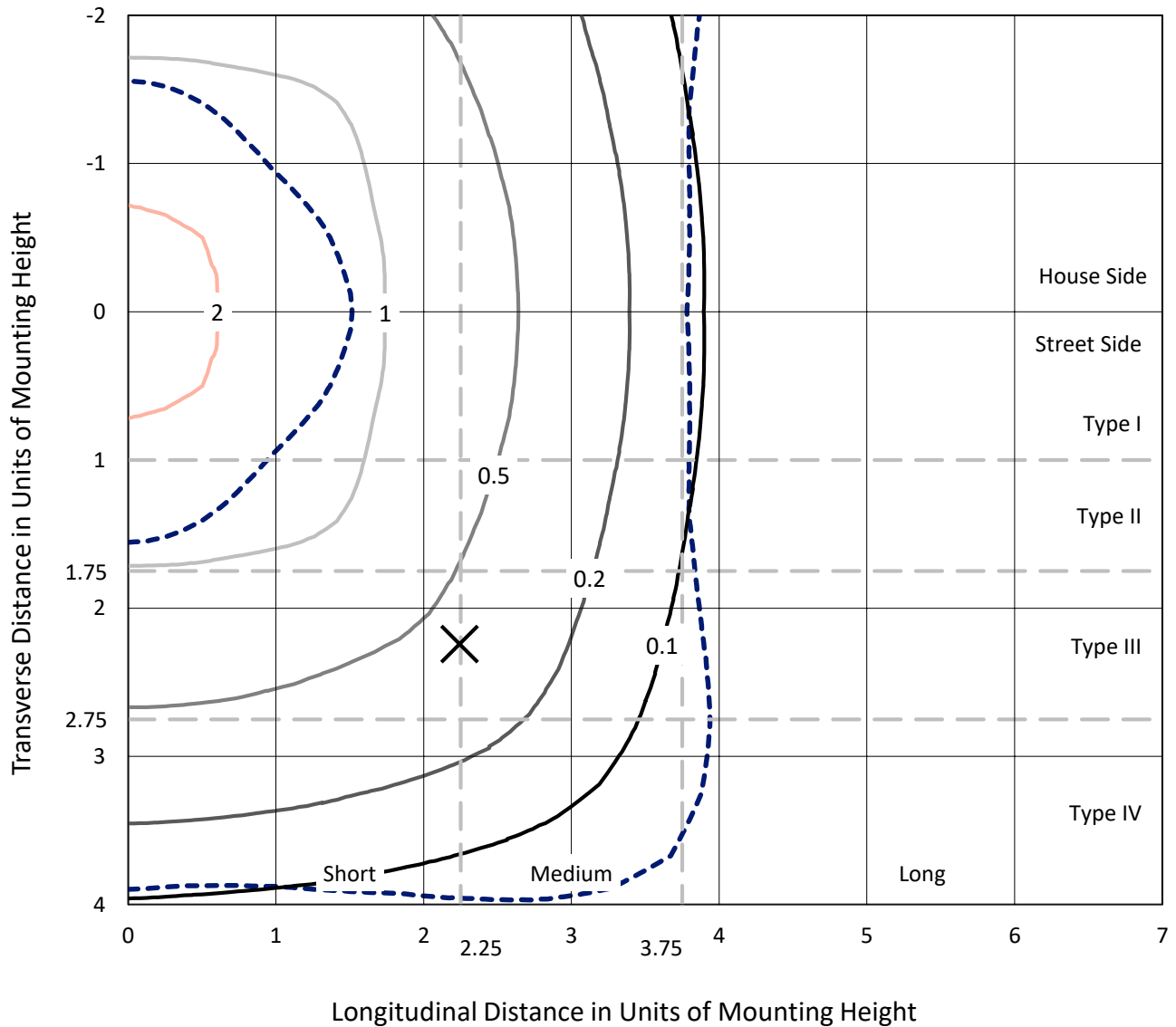
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

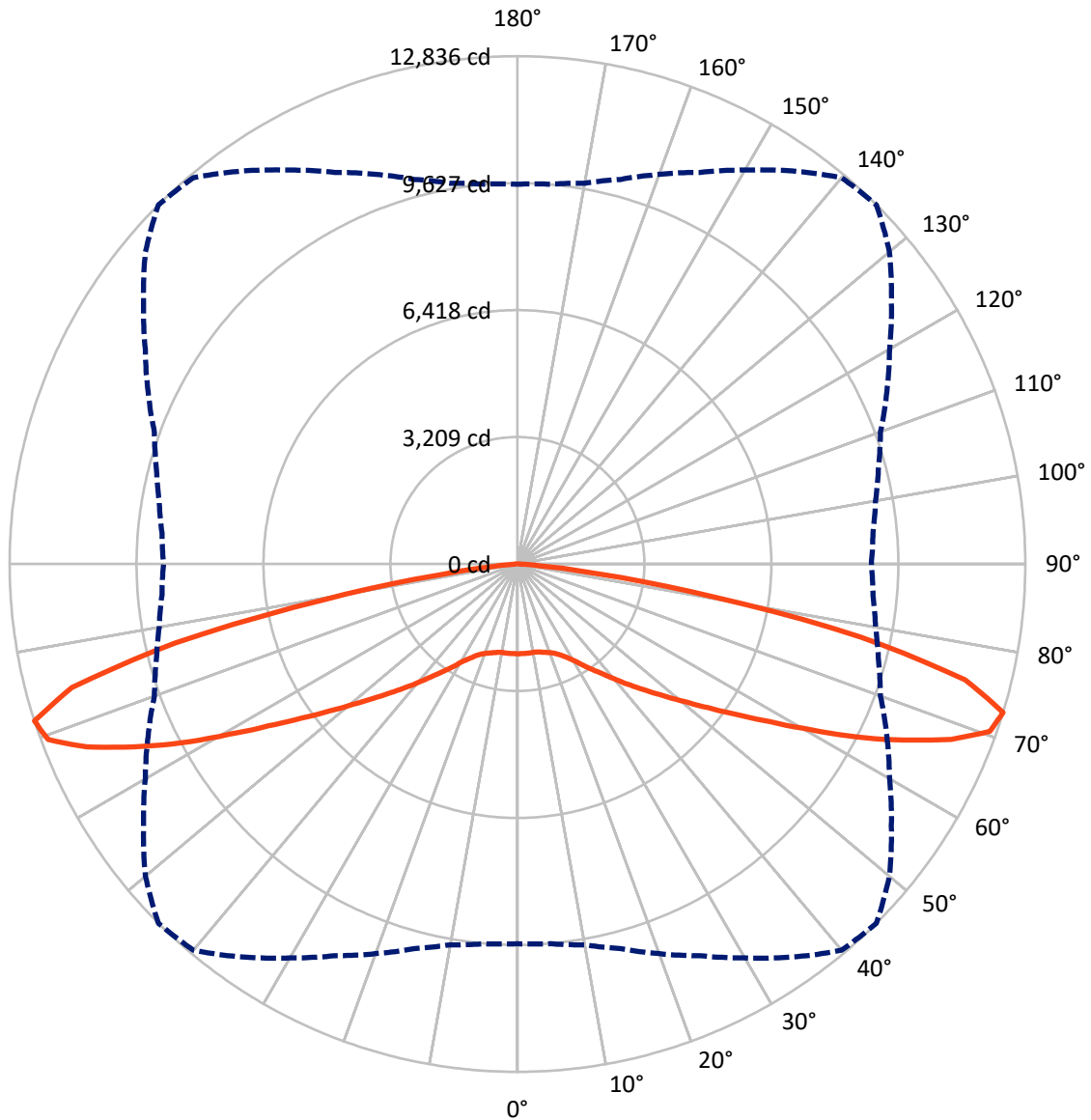
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.5 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 16027.6  | 0.0    | 16027.6 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 16027.6  | 0.0    | 16027.6 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 32055.2  | 0.0    | 32055.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 216.8   | 0.7       |
| 10°-20°   | 658.3   | 2.1       |
| 20°-30°   | 1203.0  | 3.8       |
| 30°-40°   | 2074.2  | 6.5       |
| 40°-50°   | 3545.9  | 11.1      |
| 50°-60°   | 5747.4  | 17.9      |
| 60°-70°   | 9534.7  | 29.7      |
| 70°-80°   | 8397.8  | 26.2      |
| 80°-90°   | 677.1   | 2.1       |
| 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°    | 32055.2 | 100.0     |
| 0°-180°   | 32055.2 | 100.0     |



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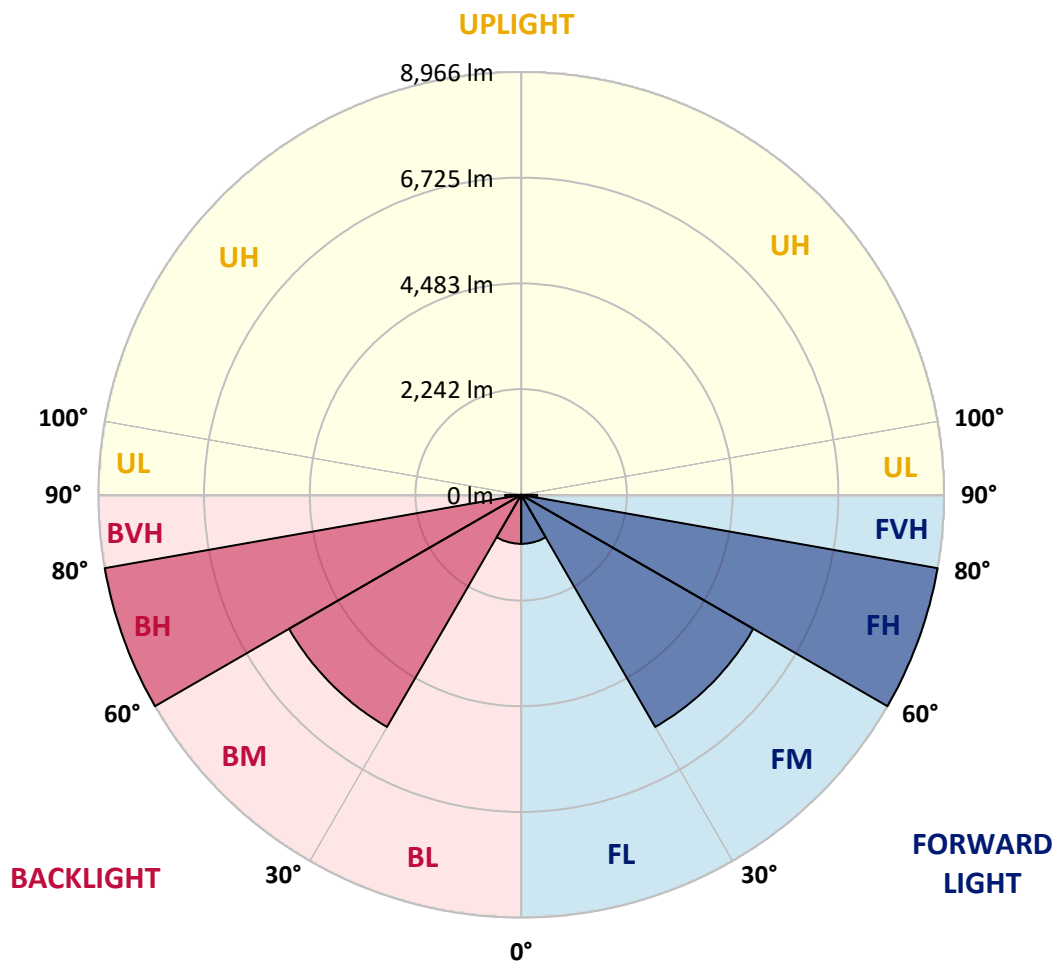
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1039.1 | 3.2       |                         |      |          |
| FM   | (30°-60°)   | 5683.7 | 17.7      |                         |      |          |
| FH   | (60°-80°)   | 8966.3 | 28.0      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 338.5  | 1.1       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1039.1 | 3.2       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 5683.7 | 17.7      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 8966.3 | 28.0      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 338.5  | 1.1       |                         |      | G3/500   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 10°     | 15°     | 20°     | 25°     | 30°     | 35°     | 40°     | 45°     | 50°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  |
| 2.5°  | 2270.0  | 2271.5  | 2273.0  | 2271.5  | 2271.5  | 2270.0  | 2268.5  | 2270.0  | 2268.5  | 2265.6  | 2267.1  |
| 5°    | 2277.4  | 2280.3  | 2280.3  | 2277.4  | 2278.8  | 2277.4  | 2274.4  | 2275.9  | 2273.0  | 2268.5  | 2268.5  |
| 7.5°  | 2286.2  | 2287.6  | 2287.6  | 2284.7  | 2286.2  | 2283.2  | 2280.3  | 2278.8  | 2275.9  | 2270.0  | 2265.6  |
| 10°   | 2299.4  | 2300.9  | 2299.4  | 2296.4  | 2296.4  | 2292.0  | 2284.7  | 2281.8  | 2275.9  | 2267.1  | 2262.7  |
| 12.5° | 2314.1  | 2315.6  | 2314.1  | 2311.2  | 2309.7  | 2302.4  | 2296.4  | 2292.0  | 2287.6  | 2280.3  | 2273.0  |
| 15°   | 2334.7  | 2337.6  | 2334.7  | 2328.8  | 2324.5  | 2318.5  | 2315.6  | 2317.1  | 2318.5  | 2312.7  | 2305.3  |
| 17.5° | 2372.9  | 2374.4  | 2370.0  | 2356.8  | 2350.8  | 2345.0  | 2345.0  | 2347.9  | 2352.4  | 2349.4  | 2342.0  |
| 20°   | 2443.5  | 2439.1  | 2428.8  | 2412.6  | 2405.3  | 2394.9  | 2393.5  | 2394.9  | 2394.9  | 2393.5  | 2387.7  |
| 22.5° | 2531.7  | 2528.7  | 2515.5  | 2495.0  | 2484.6  | 2478.8  | 2469.9  | 2462.7  | 2461.1  | 2456.7  | 2450.9  |
| 25°   | 2637.6  | 2636.0  | 2619.9  | 2602.3  | 2594.9  | 2587.6  | 2580.2  | 2570.0  | 2561.1  | 2550.8  | 2544.9  |
| 27.5° | 2772.8  | 2767.0  | 2743.5  | 2734.6  | 2724.3  | 2719.9  | 2709.6  | 2697.8  | 2690.5  | 2677.3  | 2669.9  |
| 30°   | 2921.3  | 2921.3  | 2902.2  | 2899.2  | 2899.2  | 2888.9  | 2877.2  | 2856.6  | 2843.4  | 2830.2  | 2825.7  |
| 32.5° | 3069.8  | 3071.3  | 3052.2  | 3058.0  | 3062.4  | 3069.8  | 3072.7  | 3065.4  | 3056.6  | 3055.1  | 3046.2  |
| 35°   | 3284.5  | 3278.6  | 3259.4  | 3263.8  | 3262.4  | 3261.0  | 3261.0  | 3277.1  | 3280.0  | 3283.0  | 3265.4  |
| 37.5° | 3550.6  | 3550.6  | 3531.4  | 3531.4  | 3522.6  | 3513.8  | 3502.1  | 3512.3  | 3528.5  | 3533.0  | 3521.2  |
| 40°   | 3854.9  | 3865.2  | 3841.7  | 3840.2  | 3843.1  | 3815.2  | 3802.0  | 3818.2  | 3828.4  | 3846.1  | 3832.8  |
| 42.5° | 4213.6  | 4206.3  | 4182.7  | 4179.8  | 4163.6  | 4154.8  | 4143.1  | 4156.2  | 4172.4  | 4184.2  | 4188.7  |
| 45°   | 4557.7  | 4551.7  | 4525.3  | 4525.3  | 4509.2  | 4501.8  | 4507.6  | 4529.7  | 4537.1  | 4553.3  | 4569.4  |
| 47.5° | 4897.3  | 4889.9  | 4872.3  | 4879.7  | 4881.1  | 4894.3  | 4913.4  | 4934.0  | 4954.6  | 4976.7  | 4984.0  |
| 50°   | 5244.3  | 5245.7  | 5226.6  | 5244.3  | 5266.3  | 5303.1  | 5354.5  | 5388.3  | 5430.9  | 5458.9  | 5467.7  |
| 52.5° | 5560.4  | 5566.2  | 5586.8  | 5628.0  | 5672.1  | 5744.1  | 5832.4  | 5914.7  | 5985.2  | 6032.2  | 6029.4  |
| 55°   | 5939.7  | 5948.5  | 5998.5  | 6069.1  | 6141.1  | 6249.8  | 6380.8  | 6526.2  | 6643.9  | 6711.5  | 6668.9  |
| 57.5° | 6424.8  | 6444.0  | 6499.8  | 6595.4  | 6702.7  | 6843.8  | 7023.2  | 7242.3  | 7424.6  | 7515.7  | 7446.6  |
| 60°   | 7090.8  | 7102.6  | 7170.2  | 7276.0  | 7405.4  | 7580.4  | 7820.0  | 8114.0  | 8371.4  | 8491.9  | 8412.5  |
| 62.5° | 7968.6  | 7990.6  | 8045.0  | 8152.3  | 8284.7  | 8483.1  | 8775.7  | 9143.2  | 9463.7  | 9631.4  | 9452.0  |
| 65°   | 9016.8  | 9087.4  | 9132.9  | 9241.7  | 9365.2  | 9575.4  | 9881.3  | 10275.3 | 10619.4 | 10729.6 | 10522.3 |
| 67.5° | 10054.8 | 10116.5 | 10196.0 | 10320.9 | 10445.9 | 10682.6 | 10966.3 | 11348.5 | 11726.4 | 11826.3 | 11504.4 |
| 70°   | 10509.1 | 10544.4 | 10667.8 | 10838.4 | 11078.0 | 11357.4 | 11685.3 | 12114.5 | 12582.1 | 12664.4 | 12255.7 |
| 72.5° | 9599.0  | 9634.3  | 9772.5  | 10062.2 | 10479.6 | 10923.7 | 11495.6 | 12126.3 | 12743.8 | 12836.4 | 12273.4 |
| 75°   | 7259.9  | 7202.6  | 7406.9  | 7790.7  | 8353.7  | 8972.7  | 9772.5  | 10676.6 | 11569.1 | 11685.3 | 11013.4 |
| 77.5° | 3752.0  | 3744.6  | 3899.0  | 4375.4  | 5047.2  | 5751.4  | 6632.1  | 7653.9  | 8527.2  | 8880.0  | 8333.2  |
| 80°   | 1057.1  | 1068.9  | 1142.3  | 1379.0  | 1771.6  | 2280.3  | 2968.4  | 3925.5  | 4640.0  | 5004.6  | 4698.8  |
| 82.5° | 414.6   | 446.9   | 474.9   | 518.9   | 570.4   | 645.4   | 861.5   | 1282.1  | 1720.2  | 2055.3  | 1683.4  |
| 85°   | 148.5   | 158.8   | 224.9   | 266.1   | 270.5   | 285.2   | 324.9   | 379.3   | 457.3   | 545.4   | 448.5   |
| 87.5° | 55.9    | 61.8    | 72.0    | 119.1   | 117.6   | 107.3   | 130.8   | 136.8   | 102.9   | 94.1    | 116.1   |
| 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°    | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  | 2270.0  |
| 2.5°  | 2264.1  | 2265.6  | 2265.6  | 2267.1  | 2268.5  | 2268.5  | 2271.5  | 2271.5  |
| 5°    | 2265.6  | 2265.6  | 2262.7  | 2264.1  | 2262.7  | 2262.7  | 2264.1  | 2264.1  |
| 7.5°  | 2262.7  | 2261.2  | 2258.3  | 2256.7  | 2253.9  | 2253.9  | 2253.9  | 2253.9  |
| 10°   | 2258.3  | 2256.7  | 2253.9  | 2252.3  | 2250.9  | 2250.9  | 2250.9  | 2250.9  |
| 12.5° | 2270.0  | 2265.6  | 2262.7  | 2261.2  | 2261.2  | 2261.2  | 2261.2  | 2261.2  |
| 15°   | 2300.9  | 2290.6  | 2283.2  | 2283.2  | 2284.7  | 2287.6  | 2287.6  | 2290.6  |
| 17.5° | 2339.1  | 2327.3  | 2320.0  | 2314.1  | 2317.1  | 2321.5  | 2324.5  | 2327.3  |
| 20°   | 2384.7  | 2378.8  | 2368.5  | 2362.6  | 2362.6  | 2368.5  | 2371.4  | 2372.9  |
| 22.5° | 2447.9  | 2443.5  | 2439.1  | 2431.8  | 2431.8  | 2434.6  | 2440.6  | 2440.6  |
| 25°   | 2542.0  | 2539.1  | 2536.1  | 2530.3  | 2528.7  | 2528.7  | 2531.7  | 2534.7  |
| 27.5° | 2659.6  | 2661.1  | 2658.1  | 2656.7  | 2652.3  | 2650.8  | 2655.2  | 2653.7  |
| 30°   | 2816.9  | 2824.3  | 2831.6  | 2825.7  | 2818.4  | 2813.9  | 2809.5  | 2803.7  |
| 32.5° | 3030.1  | 3021.3  | 3015.4  | 3005.1  | 2991.9  | 2980.2  | 2971.3  | 2961.0  |
| 35°   | 3231.5  | 3216.8  | 3210.9  | 3219.7  | 3218.3  | 3210.9  | 3200.6  | 3191.8  |
| 37.5° | 3478.5  | 3475.6  | 3478.5  | 3494.7  | 3491.7  | 3499.1  | 3478.5  | 3477.0  |
| 40°   | 3790.2  | 3793.1  | 3813.8  | 3832.8  | 3843.1  | 3853.5  | 3841.7  | 3829.9  |
| 42.5° | 4151.9  | 4150.4  | 4157.8  | 4184.2  | 4201.9  | 4213.6  | 4188.7  | 4185.7  |
| 45°   | 4534.1  | 4523.8  | 4529.7  | 4551.7  | 4569.4  | 4582.6  | 4554.7  | 4554.7  |
| 47.5° | 4954.6  | 4937.0  | 4917.8  | 4942.9  | 4953.1  | 4961.9  | 4939.9  | 4932.6  |
| 50°   | 5423.6  | 5386.9  | 5345.7  | 5356.0  | 5356.0  | 5353.0  | 5325.1  | 5323.6  |
| 52.5° | 5961.7  | 5894.0  | 5819.1  | 5791.1  | 5775.0  | 5757.4  | 5708.8  | 5685.3  |
| 55°   | 6580.6  | 6479.3  | 6361.6  | 6289.5  | 6251.4  | 6202.9  | 6122.0  | 6099.9  |
| 57.5° | 7304.0  | 7145.2  | 6942.4  | 6854.1  | 6768.9  | 6689.5  | 6599.8  | 6574.8  |
| 60°   | 8161.1  | 7927.4  | 7658.3  | 7495.2  | 7402.5  | 7326.1  | 7233.4  | 7229.0  |
| 62.5° | 9116.7  | 8747.8  | 8443.4  | 8296.4  | 8228.7  | 8161.1  | 8072.9  | 8084.7  |
| 65°   | 10088.5 | 9703.4  | 9418.2  | 9299.0  | 9235.8  | 9180.0  | 9091.8  | 9105.0  |
| 67.5° | 11047.2 | 10692.8 | 10379.7 | 10257.6 | 10187.1 | 10116.5 | 10037.1 | 10050.4 |
| 70°   | 11735.2 | 11295.6 | 10942.8 | 10672.2 | 10503.1 | 10312.1 | 10188.6 | 10157.7 |
| 72.5° | 11538.2 | 10860.5 | 10300.3 | 9763.7  | 9449.0  | 9193.3  | 9019.8  | 8944.8  |
| 75°   | 9985.6  | 9059.5  | 8339.0  | 7680.4  | 7309.9  | 7008.5  | 6789.4  | 6652.7  |
| 77.5° | 7415.8  | 6374.8  | 5523.6  | 4764.9  | 4165.1  | 3762.3  | 3478.5  | 3294.7  |
| 80°   | 4059.3  | 3087.5  | 2256.7  | 1586.4  | 1165.9  | 968.8   | 855.7   | 801.3   |
| 82.5° | 1264.4  | 816.0   | 601.3   | 518.9   | 482.2   | 461.7   | 427.8   | 373.5   |
| 85°   | 402.8   | 352.8   | 327.9   | 313.1   | 298.5   | 260.2   | 179.3   | 163.2   |
| 87.5° | 155.8   | 160.3   | 158.8   | 150.0   | 152.9   | 110.3   | 88.2    | 77.9    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)