

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: P652113

Luminaire Tested: **GALN-SA9A-840-U-SL3-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652113  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9A-840-U-SL3-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20389.2 lumens  
Efficiency: N/A  
Efficacy: 74.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

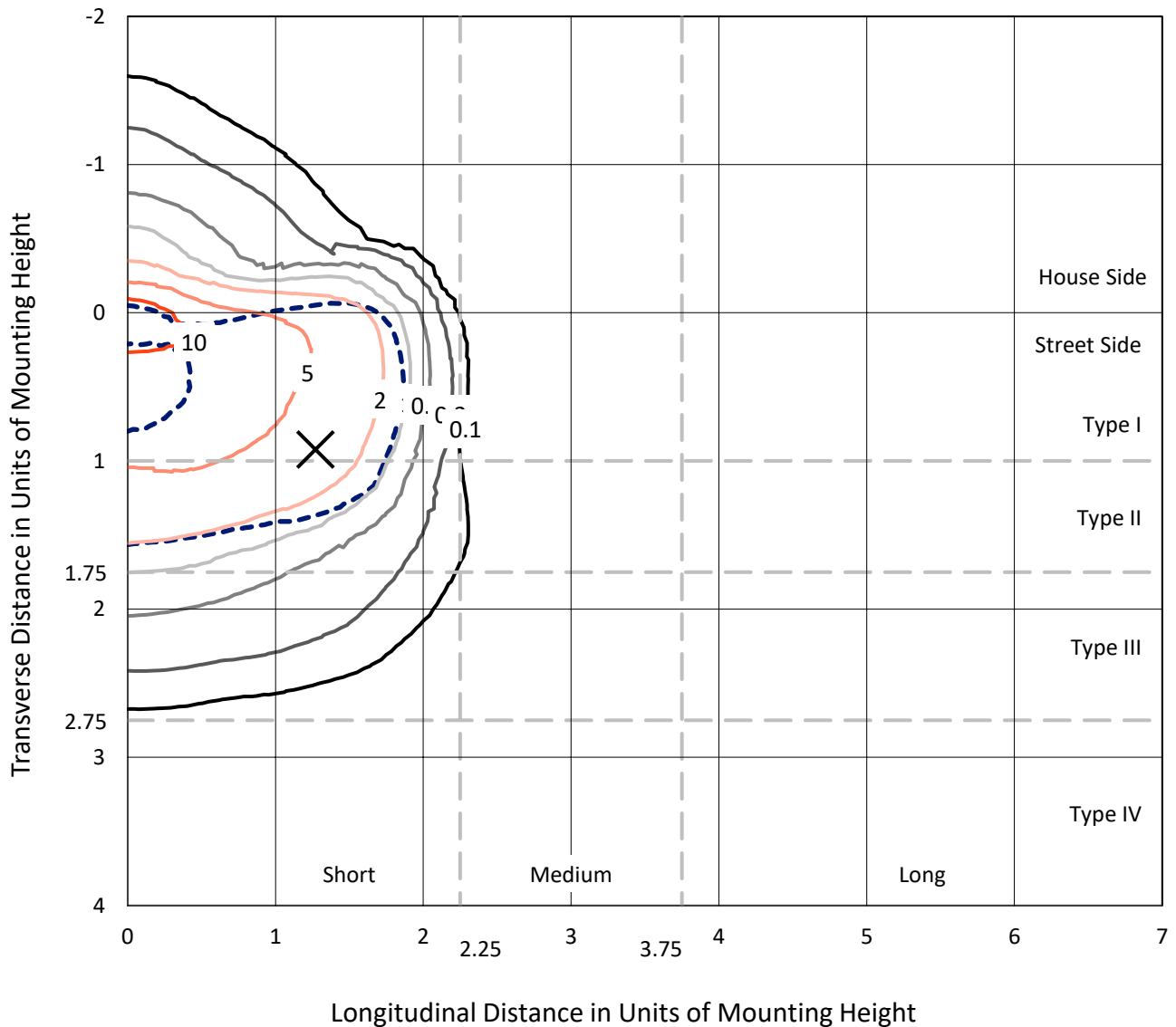
Input Watts (W): 274  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

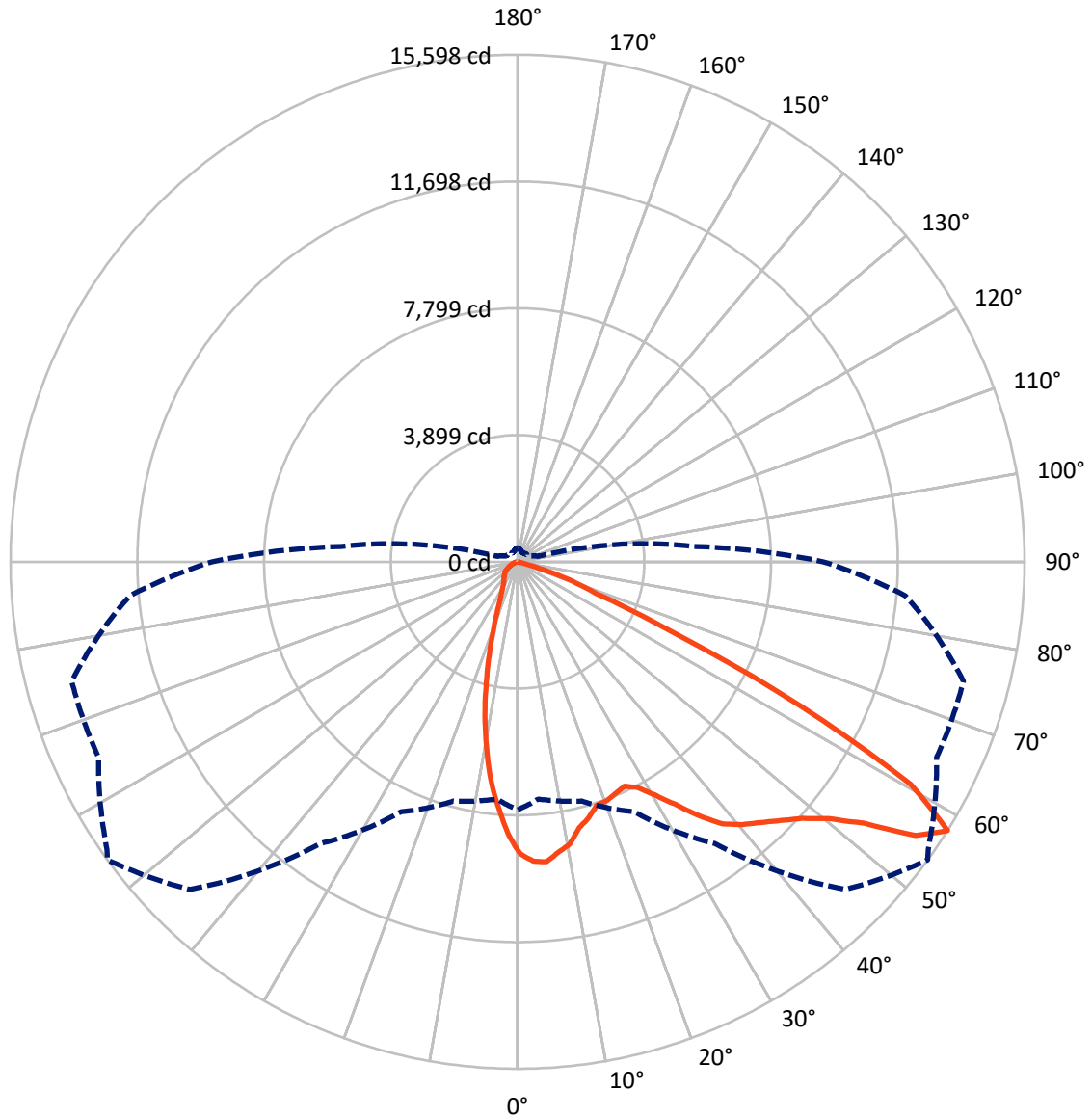
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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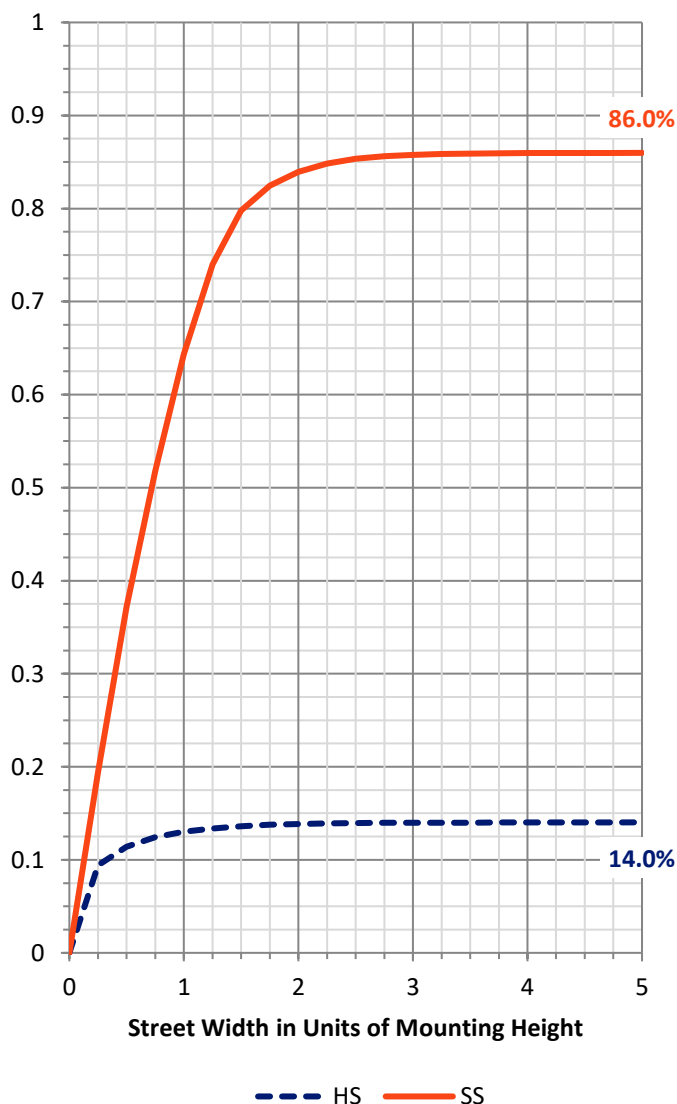
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2881.3   | 0.0    | 2881.3  |
|                    | % Fixture | 14.1     | 0.0    | 14.1    |
| <b>Street Side</b> | Lumens    | 17507.9  | 0.0    | 17507.9 |
|                    | % Fixture | 85.9     | 0.0    | 85.9    |
| <b>Total</b>       | Lumens    | 20389.2  | 0.0    | 20389.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 751.6   | 3.7       |
| 10°-20°   | 1604.7  | 7.9       |
| 20°-30°   | 2126.5  | 10.4      |
| 30°-40°   | 3090.4  | 15.2      |
| 40°-50°   | 4582.7  | 22.5      |
| 50°-60°   | 5730.4  | 28.1      |
| 60°-70°   | 2260.4  | 11.1      |
| 70°-80°   | 225.1   | 1.1       |
| 80°-90°   | 17.5    | 0.1       |
| 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°    | 20389.2 | 100.0     |
| 0°-180°   | 20389.2 | 100.0     |

**Coefficient of Utilization**



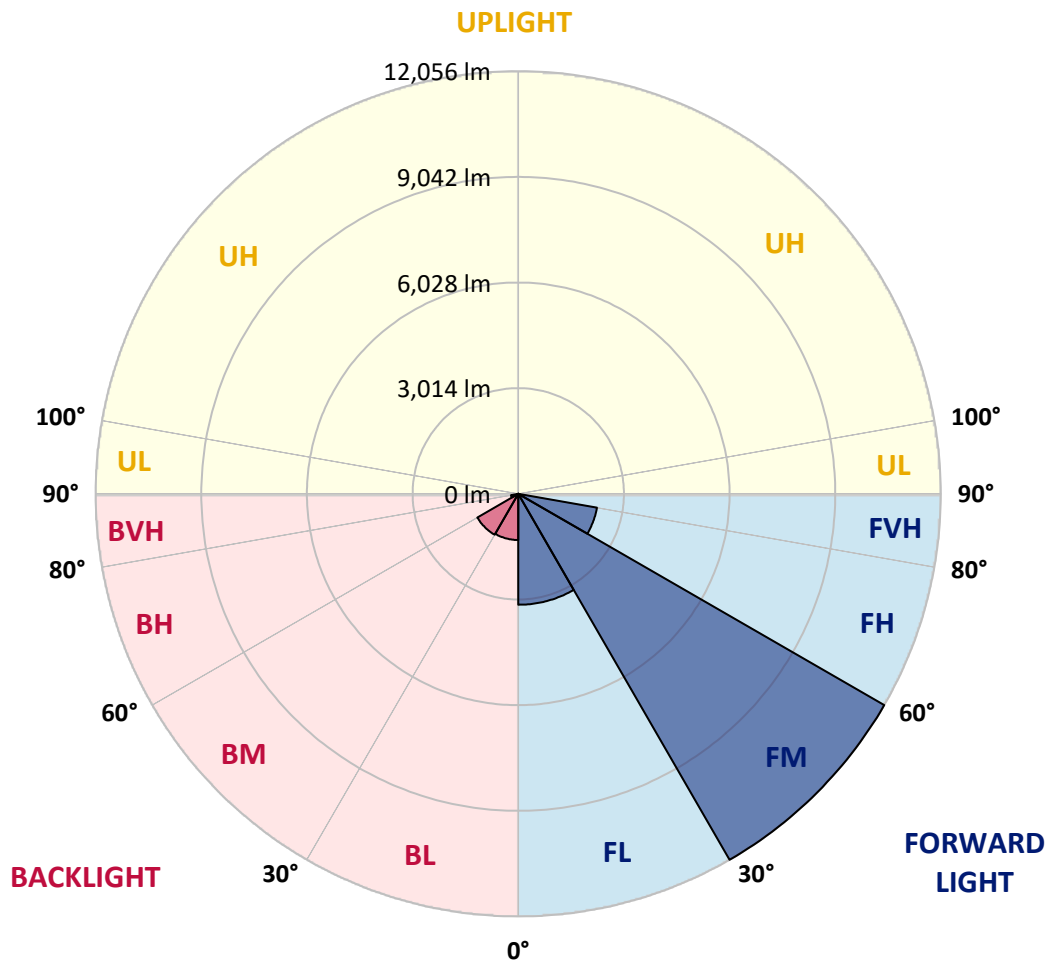
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3165.0  | 15.5      |                         |      |         |
| FM (30°-60°)   | 12056.1 | 59.1      |                         |      |         |
| FH (60°-80°)   | 2278.8  | 11.2      |                         |      | G2/5000 |
| FVH (80°-90°)  | 7.9     | 0.0       |                         |      | G0/10   |
| BL (0°-30°)    | 1317.8  | 6.5       | B3/2500                 |      |         |
| BM (30°-60°)   | 1347.4  | 6.6       | B2/2500                 |      |         |
| BH (60°-80°)   | 206.6   | 1.0       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 9.6     | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  | 8981.7  |
| 2.5°  | 9504.9  | 9406.3  | 9413.9  | 9379.8  | 9334.3  | 9368.4  | 9220.6  | 9254.7  | 9250.9  | 9050.0  | 8917.3  |
| 5°    | 9266.1  | 9372.2  | 9262.3  | 9353.3  | 9266.1  | 9360.8  | 9269.8  | 9201.6  | 9091.6  | 8943.8  | 8697.4  |
| 7.5°  | 8860.4  | 8758.0  | 8788.4  | 8902.1  | 8921.1  | 9133.3  | 9019.6  | 9106.9  | 9061.4  | 8769.4  | 8432.0  |
| 10°   | 8045.3  | 8022.5  | 8174.2  | 8325.8  | 8511.6  | 8739.1  | 8826.3  | 8777.0  | 8742.9  | 8632.9  | 8181.8  |
| 12.5° | 7419.7  | 7484.1  | 7480.4  | 7730.6  | 8045.3  | 8174.2  | 8401.7  | 8394.0  | 8583.7  | 8378.9  | 7946.7  |
| 15°   | 6824.5  | 6858.5  | 7017.8  | 7173.2  | 7522.1  | 7889.8  | 8170.4  | 8208.2  | 8435.7  | 8291.7  | 7764.7  |
| 17.5° | 6460.5  | 6411.2  | 6536.3  | 6722.1  | 7078.4  | 7560.0  | 7870.8  | 7961.8  | 8272.7  | 8242.4  | 7556.1  |
| 20°   | 6100.3  | 6100.3  | 6202.6  | 6422.5  | 6748.6  | 7290.8  | 7844.3  | 7817.8  | 8272.7  | 8185.5  | 7332.5  |
| 22.5° | 5979.0  | 6039.6  | 6066.1  | 6233.0  | 6619.7  | 7086.0  | 7730.6  | 7779.8  | 8337.2  | 8159.0  | 7233.9  |
| 25°   | 6145.8  | 6066.1  | 6073.8  | 6206.4  | 6570.4  | 6987.4  | 7647.1  | 7757.1  | 8454.7  | 8291.7  | 7154.3  |
| 27.5° | 6172.4  | 6251.9  | 6274.7  | 6365.7  | 6608.3  | 7017.8  | 7855.7  | 8079.4  | 8746.7  | 8602.6  | 7177.0  |
| 30°   | 6403.6  | 6483.2  | 6479.4  | 6634.9  | 6801.7  | 7264.2  | 8322.0  | 8367.5  | 9349.5  | 8993.1  | 7317.3  |
| 32.5° | 6684.2  | 6767.5  | 6794.1  | 6976.1  | 7108.8  | 7715.4  | 8890.7  | 9008.3  | 9929.5  | 9607.3  | 7685.1  |
| 35°   | 7032.9  | 7002.7  | 7123.9  | 7305.9  | 7590.3  | 8375.1  | 9584.5  | 9781.7  | 10555.1 | 10403.5 | 8064.2  |
| 37.5° | 7469.0  | 7431.1  | 7548.6  | 7844.3  | 8231.0  | 9156.1  | 10225.3 | 10354.2 | 11010.1 | 11142.8 | 8765.6  |
| 40°   | 7776.1  | 7791.2  | 8147.6  | 8545.7  | 8955.2  | 9899.2  | 10631.0 | 10756.1 | 11328.6 | 11832.8 | 9296.4  |
| 42.5° | 8287.9  | 8382.7  | 8811.1  | 9296.4  | 9724.8  | 10456.6 | 10960.8 | 11082.1 | 11476.5 | 12386.3 | 10012.9 |
| 45°   | 9031.0  | 8989.3  | 9463.2  | 10005.4 | 10479.3 | 11036.6 | 11351.3 | 11309.6 | 11563.7 | 12936.1 | 10464.1 |
| 47.5° | 9986.5  | 9994.0  | 10308.7 | 10771.3 | 11264.1 | 11540.9 | 11787.3 | 11639.4 | 11745.7 | 13516.2 | 11067.0 |
| 50°   | 10638.6 | 10695.4 | 10949.4 | 11423.4 | 11669.8 | 12094.4 | 12409.1 | 12318.1 | 12284.0 | 13865.0 | 11446.1 |
| 52.5° | 10805.3 | 10976.0 | 11112.5 | 11703.9 | 12280.2 | 12951.2 | 13353.1 | 13546.5 | 12939.9 | 13982.6 | 11927.6 |
| 55°   | 9546.6  | 9698.2  | 10179.8 | 10991.1 | 12511.5 | 14308.6 | 14862.1 | 14865.9 | 13796.8 | 14505.7 | 12265.1 |
| 57.5° | 7632.0  | 7324.9  | 7620.6  | 8481.2  | 10577.8 | 14251.7 | 15597.6 | 15419.4 | 14225.2 | 14198.6 | 11973.1 |
| 60°   | 5277.5  | 5201.8  | 5220.7  | 5562.0  | 7321.1  | 11336.2 | 13899.1 | 14130.4 | 13099.2 | 12306.8 | 9478.4  |
| 62.5° | 4181.9  | 4117.5  | 4034.0  | 3996.1  | 4545.9  | 7063.3  | 9804.5  | 10130.5 | 9159.9  | 7980.8  | 5618.8  |
| 65°   | 3275.7  | 3237.8  | 3249.2  | 3400.8  | 3397.1  | 4007.4  | 5361.0  | 5228.2  | 4185.7  | 3093.8  | 1766.8  |
| 67.5° | 2210.4  | 2267.3  | 2312.8  | 2771.5  | 3006.6  | 2790.4  | 2589.5  | 2513.7  | 1361.1  | 572.5   | 390.5   |
| 70°   | 1243.6  | 1251.2  | 1300.4  | 1732.6  | 2282.4  | 2164.9  | 1785.7  | 1785.7  | 678.7   | 208.5   | 223.7   |
| 72.5° | 678.7   | 655.9   | 610.4   | 746.9   | 1016.1  | 1031.2  | 796.2   | 693.8   | 200.9   | 136.5   | 125.1   |
| 75°   | 329.8   | 326.1   | 280.6   | 231.3   | 219.9   | 182.0   | 140.3   | 128.9   | 91.0    | 87.2    | 75.9    |
| 77.5° | 68.2    | 64.4    | 34.1    | 34.1    | 37.9    | 41.7    | 53.1    | 53.1    | 64.4    | 64.4    | 53.1    |
| 80°   | 0.0     | 0.0     | 3.8     | 15.1    | 26.6    | 37.9    | 45.5    | 45.5    | 53.1    | 53.1    | 41.7    |
| 82.5° | 0.0     | 0.0     | 3.8     | 11.4    | 22.7    | 34.1    | 41.7    | 45.5    | 53.1    | 56.9    | 45.5    |
| 85°   | 0.0     | 0.0     | 0.0     | 7.6     | 18.9    | 26.6    | 22.7    | 22.7    | 18.9    | 15.1    | 7.6     |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 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°    | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 | 8981.7 |
| 2.5°  | 8849.0 | 8841.4 | 8667.0 | 8568.4 | 8390.2 | 8234.8 | 8109.7 | 8018.7 | 8018.7 | 7961.8 | 7908.8 |
| 5°    | 8598.8 | 8534.3 | 8162.7 | 7923.9 | 7586.5 | 7336.3 | 7165.7 | 7032.9 | 6824.5 | 6881.3 | 6657.6 |
| 7.5°  | 8287.9 | 8124.9 | 7632.0 | 7268.0 | 6801.7 | 6445.3 | 6081.4 | 5759.1 | 5448.2 | 5307.9 | 5383.7 |
| 10°   | 7954.3 | 7669.9 | 7006.5 | 6430.1 | 5850.1 | 5198.0 | 4773.3 | 4257.7 | 3939.2 | 3920.2 | 3836.8 |
| 12.5° | 7601.6 | 7279.4 | 6471.8 | 5675.7 | 4913.6 | 4128.8 | 3480.5 | 2998.9 | 2782.9 | 2544.0 | 2589.5 |
| 15°   | 7336.3 | 6858.5 | 5876.6 | 4917.4 | 3905.1 | 3112.7 | 2460.6 | 2089.0 | 1884.3 | 1827.4 | 1808.5 |
| 17.5° | 7048.2 | 6536.3 | 5270.0 | 4109.8 | 3063.4 | 2240.7 | 1770.6 | 1592.3 | 1512.8 | 1512.8 | 1501.4 |
| 20°   | 6748.6 | 6172.4 | 4667.1 | 3359.1 | 2297.5 | 1672.0 | 1417.9 | 1361.1 | 1357.3 | 1353.5 | 1353.5 |
| 22.5° | 6551.5 | 5755.3 | 4121.2 | 2669.1 | 1732.6 | 1338.4 | 1232.1 | 1209.4 | 1224.6 | 1270.1 | 1270.1 |
| 25°   | 6342.9 | 5353.4 | 3518.4 | 2058.7 | 1342.2 | 1148.8 | 1088.1 | 1103.3 | 1141.2 | 1182.9 | 1167.7 |
| 27.5° | 6130.6 | 5091.8 | 2949.6 | 1615.1 | 1099.5 | 1004.7 | 982.0  | 1016.1 | 1057.8 | 1095.7 | 1084.3 |
| 30°   | 6081.4 | 4811.2 | 2411.3 | 1224.6 | 944.0  | 875.8  | 891.0  | 921.3  | 963.0  | 978.2  | 993.3  |
| 32.5° | 6157.1 | 4591.4 | 1975.3 | 1004.7 | 822.8  | 803.7  | 803.7  | 819.0  | 845.5  | 879.6  | 868.2  |
| 35°   | 6373.3 | 4466.2 | 1562.1 | 872.0  | 754.5  | 735.5  | 731.8  | 746.9  | 762.0  | 773.5  | 762.0  |
| 37.5° | 6703.1 | 4367.6 | 1277.6 | 773.5  | 709.0  | 678.7  | 671.0  | 667.2  | 682.5  | 686.3  | 693.8  |
| 40°   | 7123.9 | 4420.7 | 1084.3 | 712.7  | 663.5  | 629.4  | 606.6  | 606.6  | 606.6  | 618.0  | 621.8  |
| 42.5° | 7578.9 | 4492.8 | 936.5  | 678.7  | 621.8  | 580.0  | 557.3  | 549.8  | 557.3  | 572.5  | 568.7  |
| 45°   | 8056.6 | 4633.1 | 841.7  | 625.5  | 583.9  | 530.8  | 500.5  | 492.9  | 511.8  | 542.2  | 538.4  |
| 47.5° | 8504.0 | 4834.0 | 769.7  | 591.5  | 546.0  | 496.7  | 458.8  | 451.2  | 485.3  | 527.0  | 530.8  |
| 50°   | 8951.4 | 5182.7 | 743.1  | 564.9  | 519.4  | 462.6  | 428.4  | 420.8  | 458.8  | 511.8  | 523.2  |
| 52.5° | 9467.1 | 5558.1 | 724.2  | 530.8  | 489.1  | 436.0  | 398.1  | 390.5  | 432.2  | 500.5  | 504.3  |
| 55°   | 9804.5 | 5876.6 | 709.0  | 470.1  | 432.2  | 394.3  | 364.0  | 360.2  | 405.7  | 466.3  | 481.5  |
| 57.5° | 9410.1 | 5433.0 | 655.9  | 409.5  | 367.8  | 348.8  | 322.3  | 322.3  | 360.2  | 417.1  | 428.4  |
| 60°   | 7135.3 | 3575.3 | 466.3  | 329.8  | 310.9  | 299.5  | 288.1  | 288.1  | 318.5  | 360.2  | 364.0  |
| 62.5° | 4178.1 | 1926.0 | 299.5  | 265.4  | 265.4  | 254.0  | 235.1  | 235.1  | 265.4  | 288.1  | 291.9  |
| 65°   | 1239.8 | 618.0  | 242.6  | 227.5  | 223.7  | 204.7  | 185.8  | 182.0  | 204.7  | 216.1  | 212.4  |
| 67.5° | 356.4  | 284.3  | 200.9  | 189.6  | 185.8  | 155.4  | 144.1  | 140.3  | 144.1  | 136.5  | 132.7  |
| 70°   | 212.4  | 193.3  | 155.4  | 159.2  | 140.3  | 113.7  | 102.3  | 98.6   | 91.0   | 79.6   | 72.1   |
| 72.5° | 117.6  | 117.6  | 113.7  | 121.4  | 98.6   | 75.9   | 64.4   | 53.1   | 41.7   | 34.1   | 30.4   |
| 75°   | 72.1   | 75.9   | 79.6   | 83.4   | 64.4   | 49.3   | 41.7   | 26.6   | 15.1   | 7.6    | 7.6    |
| 77.5° | 49.3   | 53.1   | 56.9   | 60.6   | 53.1   | 45.5   | 34.1   | 18.9   | 3.8    | 0.0    | 0.0    |
| 80°   | 37.9   | 41.7   | 49.3   | 53.1   | 56.9   | 60.6   | 45.5   | 18.9   | 3.8    | 0.0    | 0.0    |
| 82.5° | 41.7   | 45.5   | 56.9   | 53.1   | 53.1   | 53.1   | 41.7   | 18.9   | 3.8    | 0.0    | 0.0    |
| 85°   | 7.6    | 11.4   | 18.9   | 18.9   | 26.6   | 34.1   | 26.6   | 7.6    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)