

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: P650758

Luminaire Tested: **GALN-SA2C-840-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P650758  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2C-840-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9519.3 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

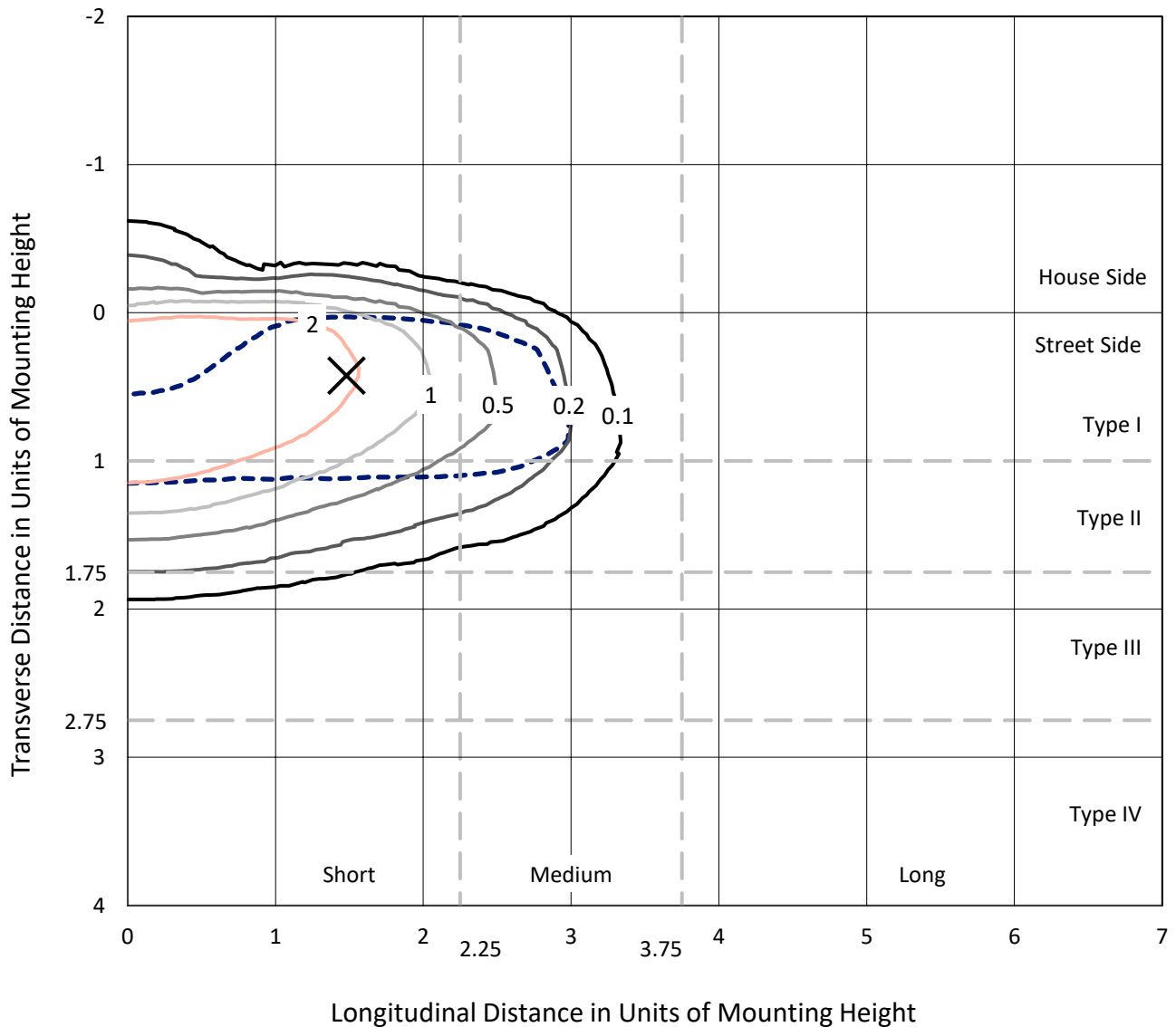
Input Watts (W): 108  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

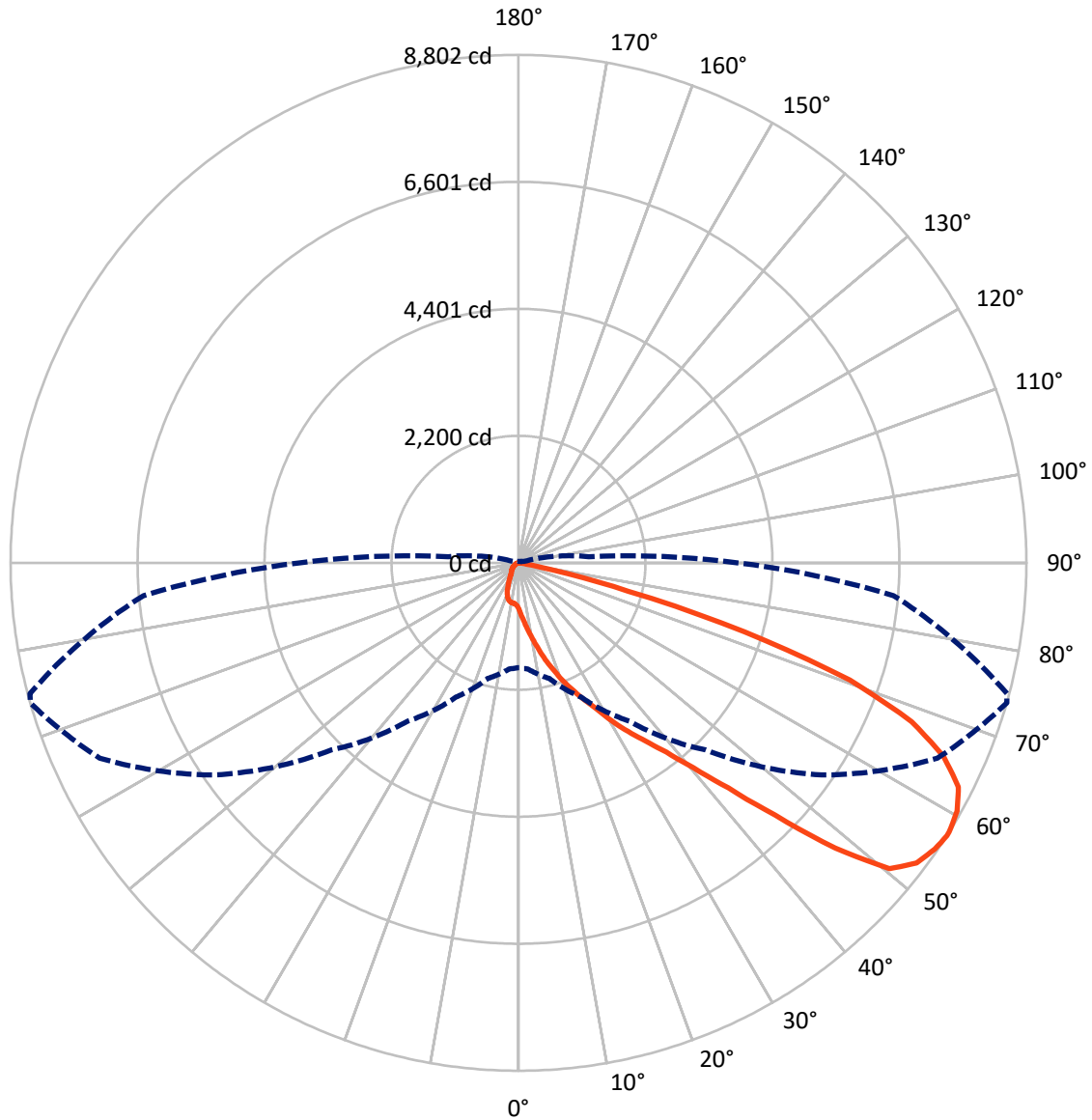
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral      - - - Horizontal Cone Through 57-Deg Vertical

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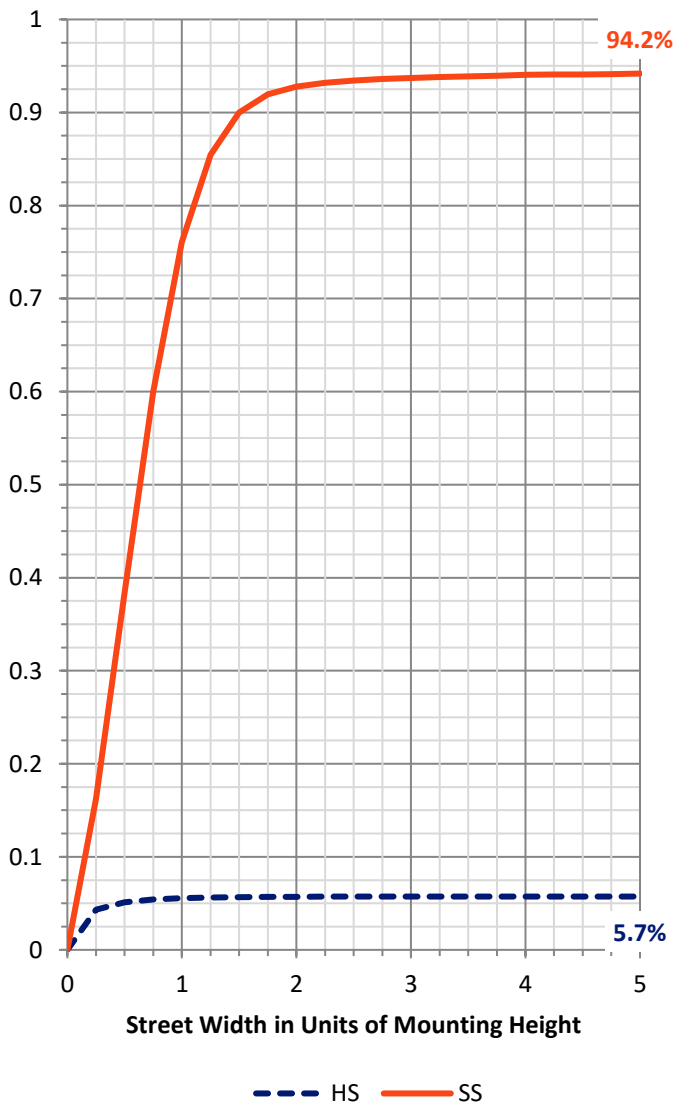
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 549.0    | 0.0    | 549.0  |
|                    | % Fixture | 5.8      | 0.0    | 5.8    |
| <b>Street Side</b> | Lumens    | 8970.2   | 0.0    | 8970.2 |
|                    | % Fixture | 94.2     | 0.0    | 94.2   |
| <b>Total</b>       | Lumens    | 9519.3   | 0.0    | 9519.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.2   | 1.0       |
| 10°-20°   | 379.3  | 4.0       |
| 20°-30°   | 811.6  | 8.5       |
| 30°-40°   | 1491.7 | 15.7      |
| 40°-50°   | 2286.8 | 24.0      |
| 50°-60°   | 2419.1 | 25.4      |
| 60°-70°   | 1579.7 | 16.6      |
| 70°-80°   | 431.6  | 4.5       |
| 80°-90°   | 23.2   | 0.2       |
| 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°    | 9519.3 | 100.0     |
| 0°-180°   | 9519.3 | 100.0     |

**Coefficient of Utilization**



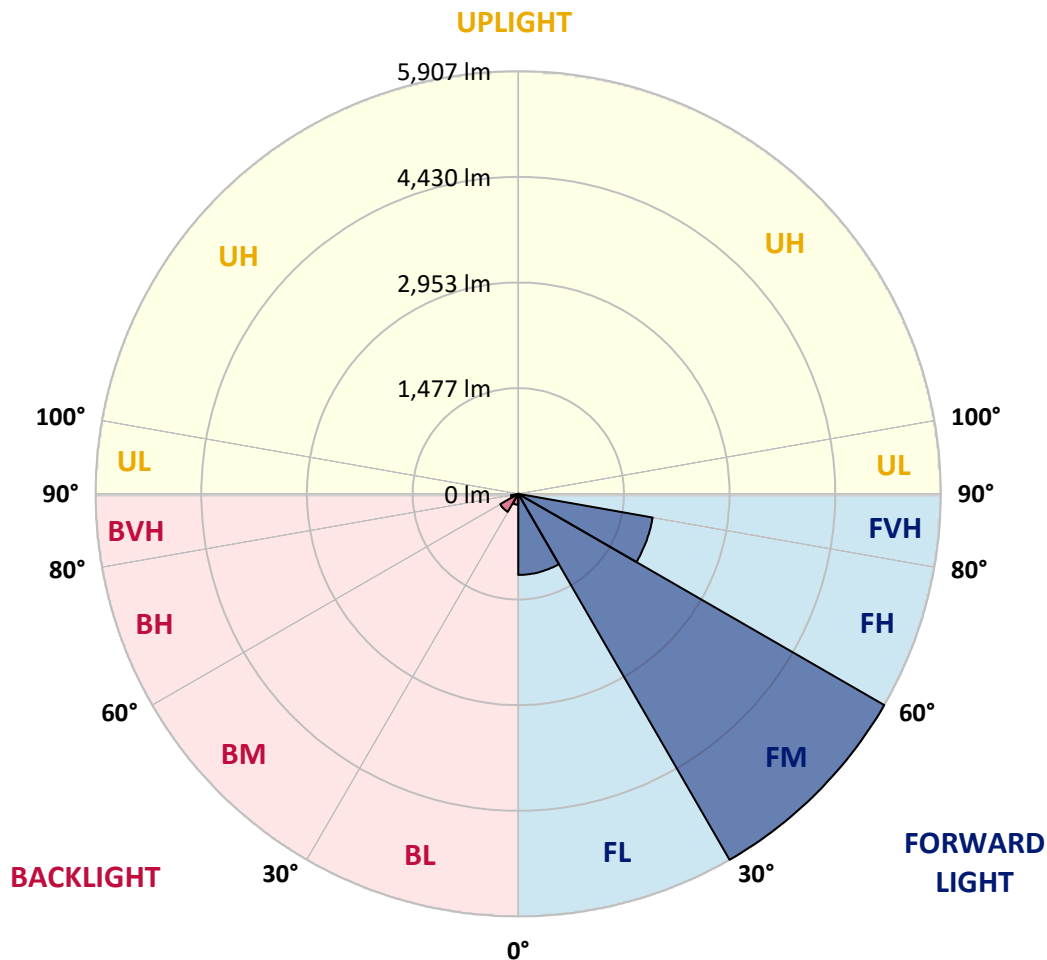
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1133.7 | 11.9      |                         |      |         |
| FM (30°-60°)   | 5906.9 | 62.1      |                         |      |         |
| FH (60°-80°)   | 1908.3 | 20.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 21.3   | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 153.4  | 1.6       | B1/500                  |      |         |
| BM (30°-60°)   | 290.7  | 3.1       | B1/1000                 |      |         |
| BH (60°-80°)   | 103.1  | 1.1       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 1.9    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 74°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  | 797.3  |
| 2.5°  | 1166.6 | 1156.0 | 1135.0 | 1127.8 | 1096.9 | 1049.0 | 1006.8 | 950.3  | 905.7  | 901.0  | 847.1  |
| 5°    | 1562.2 | 1538.6 | 1528.8 | 1481.4 | 1407.2 | 1337.4 | 1217.9 | 1127.2 | 1022.7 | 1014.8 | 906.3  |
| 7.5°  | 1943.5 | 1910.6 | 1900.7 | 1856.0 | 1769.3 | 1659.5 | 1504.4 | 1339.5 | 1173.8 | 1158.7 | 985.8  |
| 10°   | 2219.5 | 2224.1 | 2206.4 | 2176.8 | 2106.5 | 1994.7 | 1803.4 | 1578.1 | 1342.1 | 1323.0 | 1075.2 |
| 12.5° | 2417.3 | 2416.7 | 2420.0 | 2419.3 | 2381.8 | 2297.0 | 2095.9 | 1836.3 | 1527.4 | 1489.9 | 1177.7 |
| 15°   | 2546.1 | 2548.1 | 2558.0 | 2592.1 | 2596.1 | 2543.5 | 2375.9 | 2083.4 | 1742.3 | 1695.7 | 1288.8 |
| 17.5° | 2676.2 | 2690.1 | 2705.8 | 2738.0 | 2767.0 | 2745.9 | 2627.6 | 2341.1 | 1936.9 | 1902.0 | 1407.8 |
| 20°   | 2891.2 | 2910.3 | 2901.0 | 2920.8 | 2935.8 | 2937.9 | 2846.4 | 2579.0 | 2172.8 | 2114.4 | 1543.8 |
| 22.5° | 3234.9 | 3234.2 | 3210.6 | 3175.1 | 3145.5 | 3144.2 | 3061.4 | 2823.5 | 2387.1 | 2330.6 | 1680.6 |
| 25°   | 3669.4 | 3671.3 | 3625.3 | 3524.1 | 3450.5 | 3360.5 | 3265.2 | 3037.8 | 2616.4 | 2546.8 | 1824.5 |
| 27.5° | 4167.5 | 4155.0 | 4085.4 | 3946.1 | 3800.1 | 3646.3 | 3509.0 | 3286.8 | 2859.7 | 2801.8 | 1989.5 |
| 30°   | 4615.1 | 4610.5 | 4529.0 | 4358.8 | 4166.9 | 4012.4 | 3813.3 | 3599.1 | 3174.4 | 3103.5 | 2174.2 |
| 32.5° | 5031.8 | 5038.3 | 4925.3 | 4749.2 | 4563.9 | 4385.7 | 4175.4 | 3897.4 | 3483.3 | 3382.8 | 2375.2 |
| 35°   | 5357.2 | 5363.7 | 5246.7 | 5100.2 | 4909.6 | 4761.7 | 4561.2 | 4215.5 | 3788.3 | 3703.5 | 2606.6 |
| 37.5° | 5530.7 | 5539.2 | 5471.5 | 5361.0 | 5242.1 | 5167.9 | 4981.2 | 4625.0 | 4159.0 | 4107.7 | 2880.0 |
| 40°   | 5563.5 | 5573.4 | 5543.8 | 5514.2 | 5507.6 | 5560.9 | 5506.4 | 5107.4 | 4672.9 | 4592.8 | 3287.5 |
| 42.5° | 5464.9 | 5478.0 | 5491.2 | 5556.9 | 5691.0 | 5886.2 | 6076.1 | 5762.0 | 5334.8 | 5227.0 | 3785.7 |
| 45°   | 5206.0 | 5204.6 | 5256.6 | 5426.8 | 5727.1 | 6143.8 | 6671.6 | 6581.6 | 6236.5 | 6108.4 | 4489.6 |
| 47.5° | 4763.0 | 4756.4 | 4868.8 | 5111.3 | 5579.3 | 6191.2 | 7157.3 | 7576.7 | 7387.3 | 7269.0 | 5246.1 |
| 50°   | 4088.0 | 4120.2 | 4297.0 | 4635.5 | 5211.8 | 6047.9 | 7307.1 | 8229.3 | 8331.8 | 8206.2 | 5857.3 |
| 52.5° | 3297.4 | 3296.0 | 3573.4 | 4032.8 | 4667.7 | 5732.4 | 7202.7 | 8347.5 | 8638.7 | 8542.8 | 6158.3 |
| 55°   | 2440.3 | 2457.4 | 2745.9 | 3209.3 | 3961.2 | 5156.7 | 6861.6 | 8226.0 | 8755.7 | 8688.0 | 6356.8 |
| 57°   | 1815.3 | 1845.5 | 2076.8 | 2567.2 | 3346.0 | 4586.8 | 6407.4 | 8008.4 | 8801.7 | 8764.9 | 6521.8 |
| 57.5° | 1694.4 | 1695.7 | 1921.1 | 2366.7 | 3165.9 | 4368.0 | 6277.2 | 7917.8 | 8800.4 | 8780.0 | 6548.7 |
| 60°   | 1043.0 | 1075.9 | 1231.6 | 1599.8 | 2317.4 | 3409.1 | 5405.1 | 7396.5 | 8732.0 | 8761.6 | 6663.7 |
| 62.5° | 624.4  | 638.2  | 739.4  | 964.2  | 1493.9 | 2488.3 | 4423.2 | 6729.4 | 8553.9 | 8644.0 | 6655.8 |
| 65°   | 401.6  | 404.9  | 450.9  | 583.7  | 933.9  | 1681.8 | 3408.4 | 5848.1 | 8093.2 | 8258.8 | 6395.6 |
| 67.5° | 310.2  | 315.5  | 333.9  | 383.2  | 541.6  | 1047.6 | 2410.7 | 4907.6 | 7347.9 | 7561.5 | 5764.6 |
| 70°   | 275.3  | 278.0  | 284.6  | 300.3  | 358.2  | 591.5  | 1499.8 | 3833.7 | 6093.2 | 6153.7 | 4511.3 |
| 72.5° | 224.8  | 232.0  | 252.4  | 257.6  | 283.9  | 369.4  | 834.7  | 2573.0 | 4093.9 | 4109.0 | 2523.8 |
| 75°   | 174.2  | 175.5  | 205.7  | 220.8  | 239.3  | 254.3  | 372.6  | 1297.4 | 1966.4 | 1861.3 | 972.7  |
| 77.5° | 130.1  | 136.1  | 149.9  | 168.9  | 195.2  | 182.1  | 166.9  | 489.0  | 610.6  | 599.4  | 282.6  |
| 80°   | 83.4   | 86.8   | 104.5  | 126.8  | 151.8  | 119.0  | 94.0   | 143.3  | 134.1  | 138.0  | 67.7   |
| 82.5° | 42.0   | 42.7   | 67.0   | 103.2  | 96.6   | 59.8   | 59.1   | 58.5   | 50.0   | 49.3   | 31.5   |
| 85°   | 4.6    | 9.8    | 43.4   | 59.1   | 43.4   | 19.7   | 27.6   | 26.9   | 26.3   | 26.9   | 18.4   |
| 87.5° | 0.7    | 0.7    | 7.2    | 8.6    | 5.9    | 6.6    | 7.9    | 8.6    | 10.5   | 9.8    | 7.9    |
| 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):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 797.3  | 797.3  | 797.3 | 797.3 | 797.3 | 797.3 | 797.3 | 797.3 | 797.3 | 797.3 | 797.3 |
| 2.5°  | 820.9  | 794.6  | 746.0 | 699.3 | 664.5 | 642.1 | 613.2 | 602.7 | 587.6 | 585.6 | 578.4 |
| 5°    | 856.4  | 806.4  | 721.7 | 654.6 | 600.7 | 559.9 | 524.4 | 494.9 | 471.2 | 466.0 | 468.6 |
| 7.5°  | 907.0  | 832.8  | 714.4 | 623.1 | 548.2 | 478.4 | 421.9 | 387.1 | 362.1 | 353.0 | 354.2 |
| 10°   | 964.2  | 867.6  | 713.1 | 589.5 | 475.2 | 389.7 | 328.0 | 297.0 | 282.6 | 277.4 | 271.5 |
| 12.5° | 1031.8 | 907.6  | 709.8 | 537.7 | 395.0 | 310.8 | 266.8 | 248.4 | 234.6 | 230.7 | 230.7 |
| 15°   | 1108.1 | 950.3  | 694.1 | 473.2 | 320.8 | 257.0 | 227.4 | 212.9 | 208.3 | 204.4 | 204.4 |
| 17.5° | 1187.7 | 992.5  | 661.2 | 393.7 | 266.2 | 220.2 | 201.8 | 193.3 | 186.6 | 182.1 | 182.1 |
| 20°   | 1278.3 | 1033.8 | 608.6 | 323.4 | 224.8 | 196.5 | 182.1 | 172.2 | 166.9 | 163.0 | 161.6 |
| 22.5° | 1364.4 | 1067.3 | 541.6 | 265.5 | 195.9 | 176.8 | 163.7 | 153.1 | 147.8 | 145.9 | 145.9 |
| 25°   | 1453.8 | 1087.7 | 460.7 | 219.5 | 178.8 | 160.4 | 145.9 | 137.3 | 132.8 | 131.4 | 130.8 |
| 27.5° | 1540.5 | 1099.5 | 389.7 | 191.9 | 163.0 | 145.2 | 131.4 | 124.9 | 120.3 | 119.0 | 119.6 |
| 30°   | 1645.8 | 1101.5 | 320.8 | 172.2 | 149.2 | 130.8 | 118.3 | 112.4 | 109.8 | 108.4 | 107.8 |
| 32.5° | 1752.2 | 1098.9 | 269.5 | 160.4 | 136.1 | 118.3 | 107.8 | 103.2 | 101.2 | 99.2  | 99.2  |
| 35°   | 1871.8 | 1085.1 | 229.3 | 148.5 | 123.5 | 107.8 | 98.6  | 94.6  | 92.0  | 90.1  | 89.4  |
| 37.5° | 2020.3 | 1077.8 | 206.4 | 135.4 | 112.4 | 97.9  | 89.4  | 85.4  | 83.4  | 80.8  | 80.1  |
| 40°   | 2254.3 | 1110.0 | 199.1 | 123.5 | 101.2 | 88.7  | 80.8  | 76.3  | 73.6  | 71.0  | 70.3  |
| 42.5° | 2546.1 | 1166.6 | 187.3 | 111.8 | 91.3  | 80.1  | 72.3  | 67.0  | 62.4  | 59.1  | 57.9  |
| 45°   | 2924.1 | 1240.9 | 168.9 | 99.2  | 82.8  | 71.0  | 63.7  | 57.2  | 51.3  | 48.6  | 47.9  |
| 47.5° | 3320.4 | 1312.5 | 152.5 | 89.4  | 73.6  | 63.1  | 55.2  | 47.9  | 42.7  | 40.8  | 40.1  |
| 50°   | 3563.6 | 1326.9 | 142.0 | 78.2  | 64.4  | 54.6  | 46.7  | 40.1  | 36.8  | 34.8  | 34.8  |
| 52.5° | 3674.6 | 1304.0 | 127.5 | 68.4  | 55.8  | 47.9  | 40.1  | 34.8  | 32.9  | 31.5  | 30.9  |
| 55°   | 3752.1 | 1268.5 | 108.4 | 59.1  | 47.9  | 40.8  | 35.5  | 31.5  | 28.9  | 27.6  | 26.9  |
| 57°   | 3797.5 | 1220.5 | 94.0  | 51.9  | 41.4  | 35.5  | 31.5  | 28.3  | 25.7  | 23.0  | 23.0  |
| 57.5° | 3799.5 | 1202.1 | 90.1  | 51.3  | 39.4  | 34.1  | 30.9  | 27.6  | 24.3  | 21.7  | 21.0  |
| 60°   | 3741.0 | 1075.9 | 72.3  | 43.4  | 31.5  | 28.9  | 25.7  | 21.7  | 17.1  | 14.5  | 13.8  |
| 62.5° | 3553.1 | 915.5  | 59.8  | 36.8  | 25.7  | 22.4  | 18.4  | 16.4  | 11.9  | 8.6   | 8.6   |
| 65°   | 3268.5 | 742.7  | 51.3  | 29.6  | 21.0  | 16.4  | 12.4  | 11.9  | 7.2   | 4.0   | 3.3   |
| 67.5° | 2857.0 | 578.4  | 43.4  | 24.3  | 17.7  | 11.9  | 8.6   | 7.9   | 4.0   | 1.3   | 0.0   |
| 70°   | 2176.8 | 394.3  | 36.2  | 19.7  | 13.1  | 8.6   | 5.9   | 4.6   | 2.6   | 0.7   | 0.0   |
| 72.5° | 1254.7 | 216.9  | 30.2  | 15.1  | 9.8   | 6.6   | 4.6   | 2.6   | 2.6   | 0.0   | 0.0   |
| 75°   | 448.3  | 93.4   | 23.0  | 11.2  | 7.9   | 5.3   | 3.3   | 1.3   | 1.9   | 0.7   | 0.0   |
| 77.5° | 142.6  | 50.0   | 15.1  | 8.6   | 6.6   | 4.0   | 2.6   | 1.3   | 1.3   | 0.7   | 0.0   |
| 80°   | 42.0   | 26.3   | 9.2   | 7.2   | 4.6   | 3.3   | 1.9   | 0.7   | 1.3   | 0.7   | 0.0   |
| 82.5° | 23.0   | 13.1   | 7.2   | 5.3   | 4.6   | 2.6   | 1.9   | 0.7   | 0.7   | 0.7   | 0.0   |
| 85°   | 11.9   | 7.9    | 5.9   | 5.3   | 4.6   | 2.6   | 1.9   | 0.7   | 0.0   | 0.7   | 0.7   |
| 87.5° | 6.6    | 5.9    | 5.9   | 5.3   | 4.6   | 3.3   | 1.9   | 0.7   | 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)