

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: STREETWORKS

Report Number: P649917

Luminaire Tested: **GLAN-SA5A-835-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P649917  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA5A-835-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14750.2 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

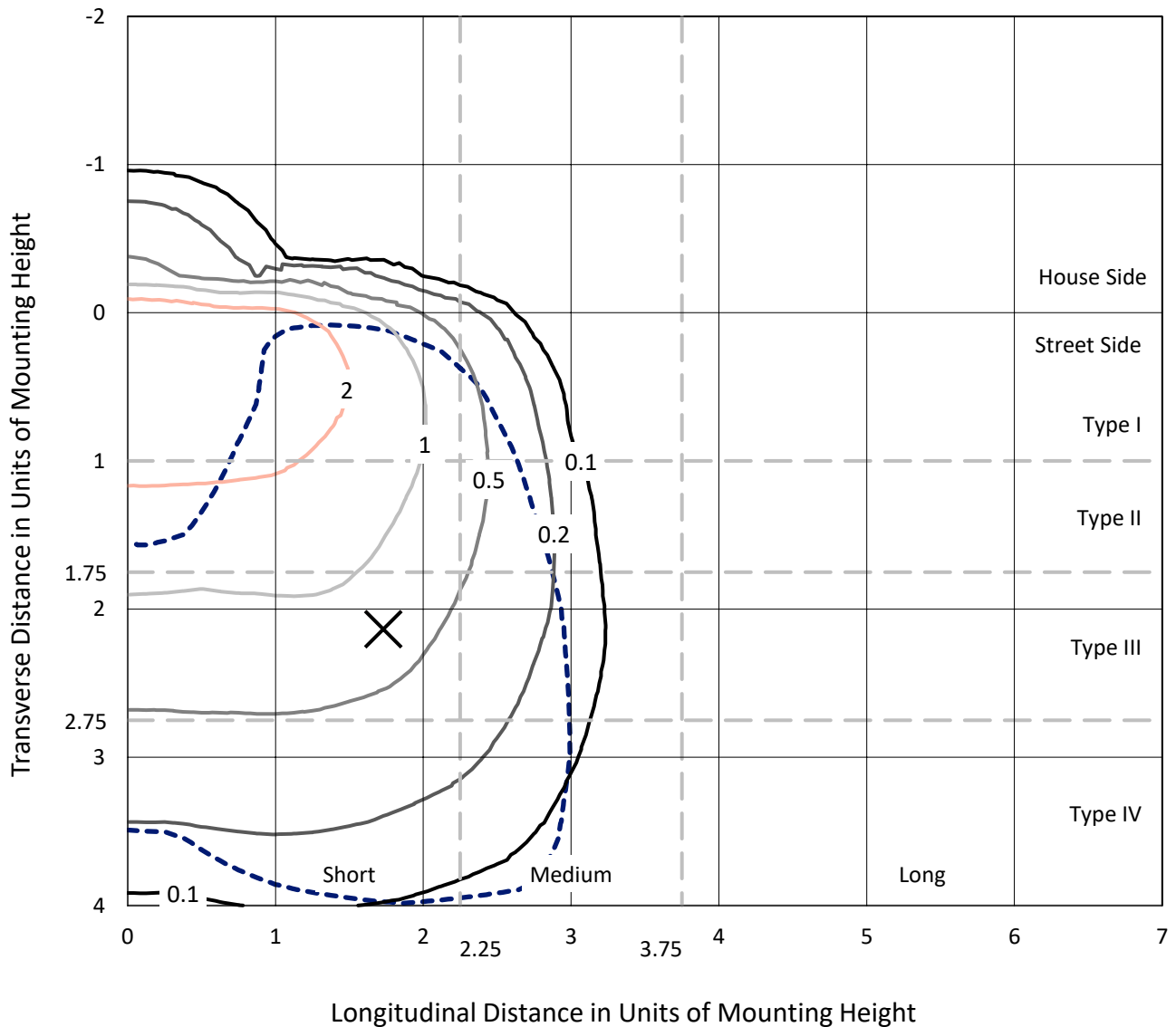
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

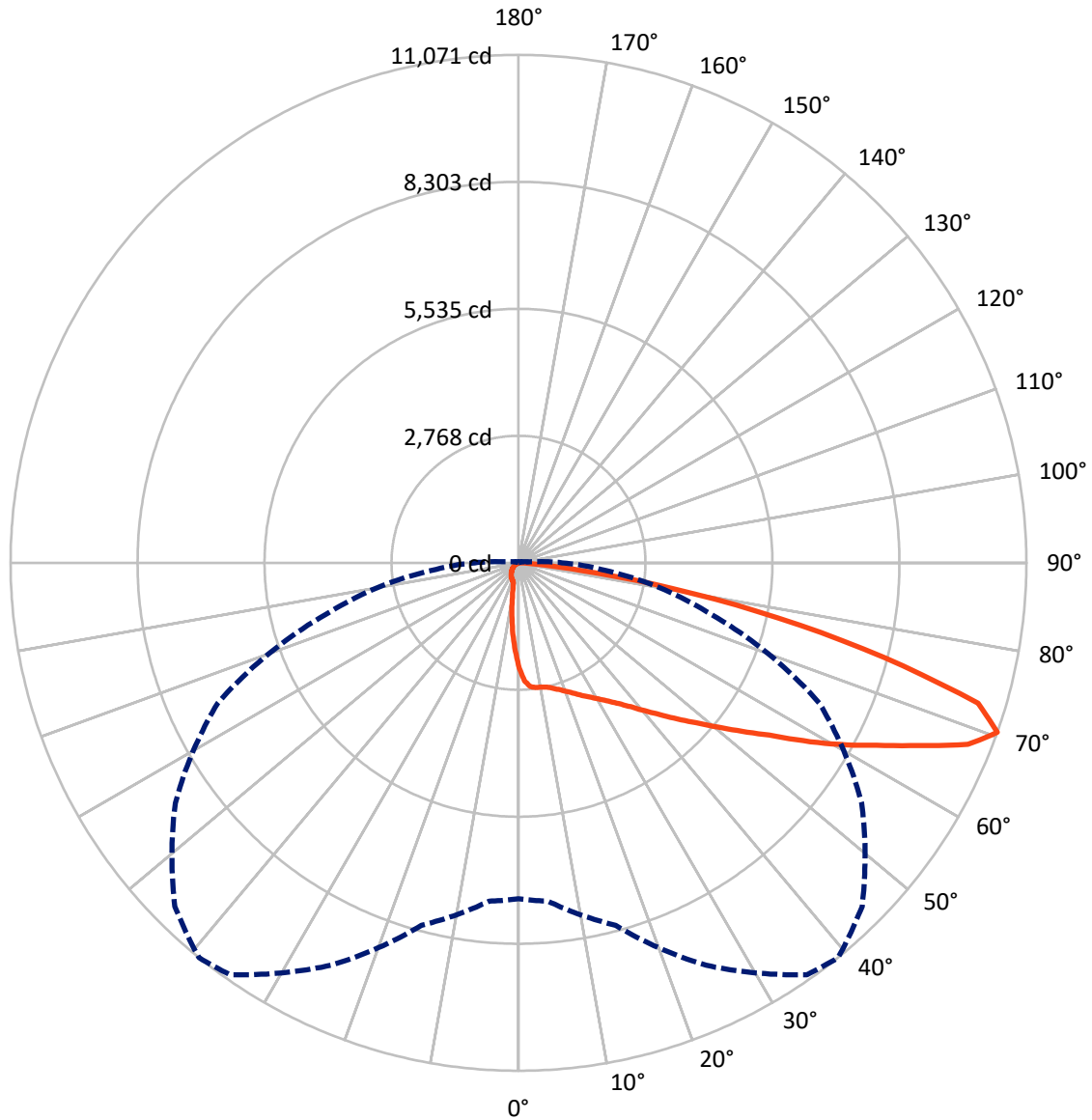
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 961.8    | 0.0    | 961.8   |
|                    | % Fixture | 6.5      | 0.0    | 6.5     |
| <b>Street Side</b> | Lumens    | 13788.4  | 0.0    | 13788.4 |
|                    | % Fixture | 93.5     | 0.0    | 93.5    |
| <b>Total</b>       | Lumens    | 14750.2  | 0.0    | 14750.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 196.3   | 1.3       |
| 10°-20°   | 510.1   | 3.5       |
| 20°-30°   | 854.6   | 5.8       |
| 30°-40°   | 1325.4  | 9.0       |
| 40°-50°   | 2100.4  | 14.2      |
| 50°-60°   | 3078.9  | 20.9      |
| 60°-70°   | 3946.4  | 26.8      |
| 70°-80°   | 2479.8  | 16.8      |
| 80°-90°   | 258.3   | 1.8       |
| 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°    | 14750.2 | 100.0     |
| 0°-180°   | 14750.2 | 100.0     |

**Coefficient of Utilization**



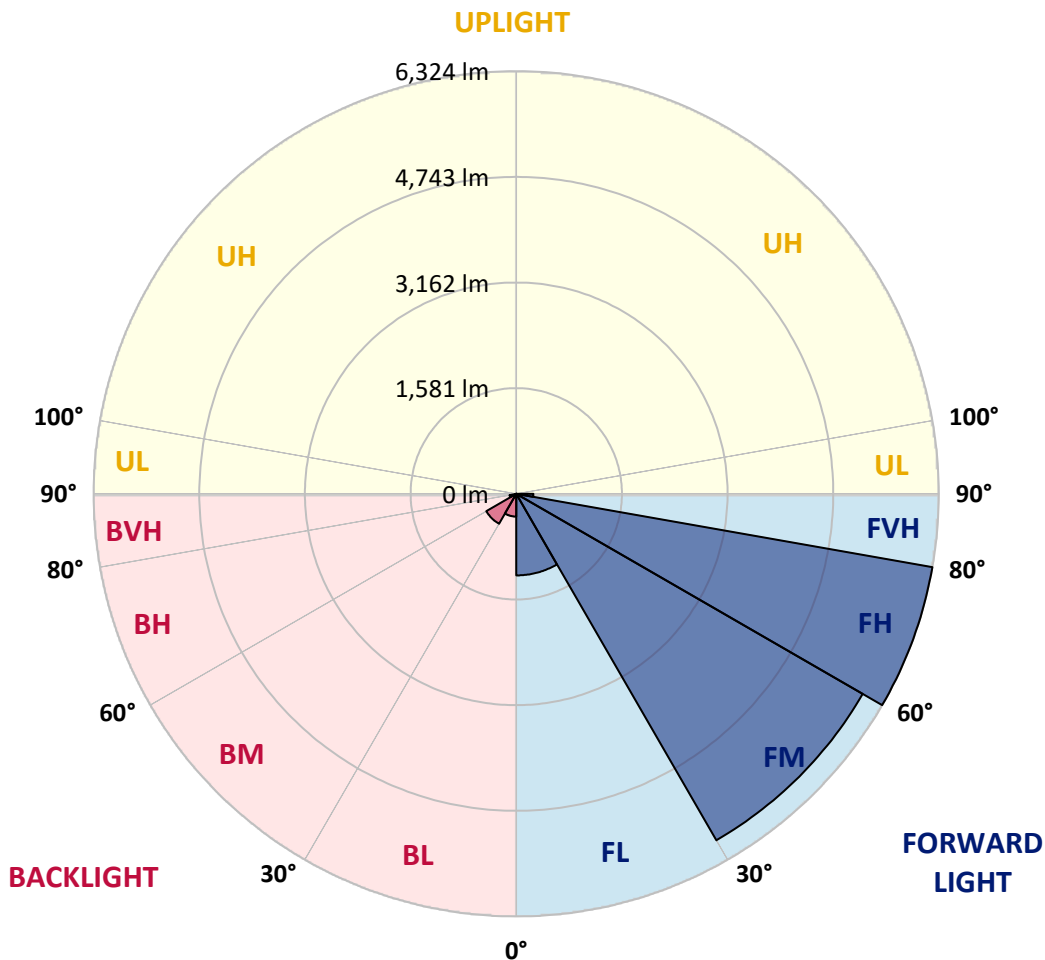
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1220.5 | 8.3       |                         |      |         |
| FM (30°-60°)   | 5987.1 | 40.6      |                         |      |         |
| FH (60°-80°)   | 6324.4 | 42.9      |                         |      | G3/7500 |
| FVH (80°-90°)  | 256.4  | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 340.6  | 2.3       | B1/500                  |      |         |
| BM (30°-60°)   | 517.6  | 3.5       | B1/1000                 |      |         |
| BH (60°-80°)   | 101.7  | 0.7       | 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-G3**

Type IV Short





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CATALOG NUMBER: GLAN-SA5A-835-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 39°     | 45°     | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6  | 2301.6  | 2301.6  | 2301.6 | 2301.6 | 2301.6 | 2301.6 |
| 2.5°  | 2659.4 | 2650.5 | 2638.6 | 2624.7 | 2585.0  | 2578.1  | 2554.3  | 2503.7 | 2443.3 | 2393.7 | 2325.4 |
| 5°    | 2785.2 | 2790.2 | 2781.3 | 2756.5 | 2727.7  | 2710.9  | 2681.1  | 2602.8 | 2524.5 | 2424.4 | 2312.4 |
| 7.5°  | 2813.9 | 2823.9 | 2813.0 | 2789.2 | 2761.4  | 2743.6  | 2719.8  | 2652.4 | 2561.2 | 2447.3 | 2293.6 |
| 10°   | 2811.0 | 2822.9 | 2816.0 | 2794.1 | 2771.4  | 2754.5  | 2728.8  | 2675.2 | 2601.8 | 2482.0 | 2299.5 |
| 12.5° | 2806.0 | 2821.9 | 2820.9 | 2810.0 | 2791.2  | 2778.3  | 2762.4  | 2714.8 | 2646.5 | 2532.5 | 2332.2 |
| 15°   | 2792.2 | 2812.0 | 2829.8 | 2838.8 | 2839.7  | 2839.7  | 2819.9  | 2769.4 | 2703.9 | 2598.9 | 2374.8 |
| 17.5° | 2798.1 | 2820.9 | 2865.5 | 2891.3 | 2909.2  | 2907.1  | 2886.3  | 2831.8 | 2759.4 | 2667.3 | 2419.5 |
| 20°   | 2834.8 | 2865.5 | 2928.0 | 2979.5 | 2997.3  | 2991.4  | 2963.7  | 2900.2 | 2817.9 | 2725.8 | 2463.1 |
| 22.5° | 2925.0 | 2952.8 | 3031.1 | 3091.5 | 3104.4  | 3088.5  | 3048.8  | 2962.6 | 2888.3 | 2789.2 | 2515.6 |
| 25°   | 3059.8 | 3092.5 | 3164.9 | 3210.5 | 3210.5  | 3201.5  | 3146.0  | 3044.9 | 2967.6 | 2877.4 | 2584.1 |
| 27.5° | 3223.3 | 3251.1 | 3322.4 | 3363.1 | 3339.3  | 3313.5  | 3258.0  | 3136.1 | 3061.8 | 2988.4 | 2666.3 |
| 30°   | 3388.8 | 3406.7 | 3482.0 | 3499.9 | 3475.1  | 3442.4  | 3382.9  | 3261.0 | 3195.6 | 3139.0 | 2785.2 |
| 32.5° | 3545.5 | 3584.1 | 3646.6 | 3642.6 | 3608.9  | 3593.0  | 3538.5  | 3408.7 | 3372.0 | 3366.0 | 2951.8 |
| 35°   | 3702.1 | 3731.8 | 3787.3 | 3801.2 | 3771.5  | 3768.5  | 3728.8  | 3632.7 | 3633.7 | 3672.3 | 3211.5 |
| 37.5° | 3836.9 | 3863.6 | 3929.0 | 3959.8 | 3965.7  | 3980.6  | 3964.7  | 3901.3 | 3991.5 | 4097.5 | 3555.4 |
| 40°   | 3949.8 | 3987.5 | 4070.8 | 4124.3 | 4185.8  | 4240.3  | 4243.2  | 4257.2 | 4438.5 | 4620.9 | 4004.4 |
| 42.5° | 4038.1 | 4090.6 | 4211.5 | 4310.6 | 4451.4  | 4520.8  | 4576.3  | 4652.6 | 4957.9 | 5230.5 | 4533.6 |
| 45°   | 4153.0 | 4213.6 | 4364.2 | 4519.8 | 4739.8  | 4853.8  | 4931.2  | 5135.3 | 5568.5 | 5940.2 | 5076.8 |
| 47.5° | 4343.4 | 4375.1 | 4528.7 | 4755.7 | 5045.1  | 5207.7  | 5358.3  | 5667.6 | 6223.7 | 6556.7 | 5528.8 |
| 50°   | 4588.2 | 4609.0 | 4725.0 | 5040.2 | 5414.8  | 5628.9  | 5903.5  | 6267.3 | 6903.6 | 7068.1 | 5784.6 |
| 52.5° | 4858.7 | 4865.7 | 4952.9 | 5353.4 | 5829.1  | 6098.8  | 6406.0  | 6855.0 | 7457.7 | 7432.9 | 5954.0 |
| 55°   | 5173.0 | 5163.1 | 5237.4 | 5693.3 | 6319.8  | 6628.0  | 6985.8  | 7456.7 | 7938.4 | 7691.6 | 6051.2 |
| 57.5° | 5532.8 | 5506.1 | 5578.4 | 6144.4 | 6948.2  | 7316.9  | 7680.7  | 7976.0 | 8311.1 | 7908.7 | 6097.8 |
| 60°   | 5909.5 | 5855.9 | 5942.2 | 6650.9 | 7688.6  | 8038.5  | 8340.8  | 8420.1 | 8703.6 | 8081.1 | 6017.5 |
| 62.5° | 6209.7 | 6210.8 | 6371.3 | 7190.1 | 8449.8  | 8756.1  | 8916.7  | 8988.1 | 9041.6 | 8043.4 | 5595.2 |
| 65°   | 6678.6 | 6694.5 | 6951.2 | 7938.4 | 9331.0  | 9596.7  | 9706.7  | 9474.8 | 9056.4 | 7575.6 | 4960.9 |
| 67.5° | 7162.3 | 7212.8 | 7682.6 | 8969.3 | 10349.0 | 10563.1 | 10421.3 | 9568.9 | 8652.1 | 6508.1 | 3761.5 |
| 70°   | 7319.9 | 7403.2 | 8177.3 | 9678.9 | 10959.5 | 11070.5 | 10590.8 | 9129.8 | 7232.6 | 4351.3 | 1893.1 |
| 72.5° | 6707.3 | 6842.2 | 7892.8 | 9420.2 | 10570.0 | 10473.9 | 9475.7  | 7656.9 | 4598.1 | 1652.3 | 577.9  |
| 75°   | 4729.9 | 4789.4 | 6559.7 | 7814.5 | 8501.4  | 8228.8  | 7207.9  | 4936.1 | 1891.2 | 463.8  | 198.3  |
| 77.5° | 2442.3 | 2413.5 | 3901.3 | 5184.9 | 6063.1  | 5780.6  | 4720.0  | 2555.2 | 716.6  | 193.2  | 122.9  |
| 80°   | 1262.7 | 1283.6 | 1688.0 | 2716.9 | 3701.1  | 3405.7  | 2516.6  | 1184.4 | 381.6  | 107.0  | 94.2   |
| 82.5° | 707.7  | 664.1  | 970.4  | 1186.5 | 1730.6  | 1356.9  | 965.4   | 838.5  | 166.5  | 64.4   | 89.2   |
| 85°   | 128.9  | 134.8  | 532.3  | 641.3  | 600.6   | 381.6   | 311.2   | 560.0  | 48.5   | 35.7   | 62.5   |
| 87.5° | 2.0    | 2.0    | 103.1  | 184.4  | 117.0   | 53.6    | 98.1    | 80.3   | 9.9    | 13.9   | 10.9   |
| 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°    | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 | 2301.6 |
| 2.5°  | 2290.6 | 2252.9 | 2182.6 | 2113.2 | 2025.0 | 1952.6 | 1904.1 | 1853.5 | 1802.0 | 1805.9 | 1817.8 |
| 5°    | 2251.0 | 2185.6 | 2046.8 | 1900.1 | 1759.3 | 1632.5 | 1507.6 | 1395.6 | 1350.0 | 1308.4 | 1310.4 |
| 7.5°  | 2211.3 | 2119.2 | 1915.9 | 1686.0 | 1472.9 | 1256.8 | 1100.2 | 971.4  | 903.0  | 851.4  | 836.6  |
| 10°   | 2193.5 | 2071.6 | 1796.0 | 1479.9 | 1177.6 | 941.6  | 740.4  | 635.3  | 554.1  | 528.3  | 535.3  |
| 12.5° | 2201.4 | 2047.8 | 1688.0 | 1293.5 | 933.7  | 656.2  | 515.4  | 461.9  | 444.0  | 441.1  | 439.1  |
| 15°   | 2216.3 | 2030.9 | 1581.9 | 1087.4 | 685.9  | 487.7  | 433.2  | 423.2  | 421.3  | 419.3  | 420.2  |
| 17.5° | 2236.1 | 2016.1 | 1468.9 | 894.0  | 526.3  | 426.2  | 410.4  | 405.4  | 404.4  | 404.4  | 404.4  |
| 20°   | 2255.9 | 1999.2 | 1343.1 | 721.6  | 439.1  | 402.4  | 392.5  | 389.5  | 388.5  | 388.5  | 387.6  |
| 22.5° | 2278.8 | 1984.4 | 1215.2 | 567.0  | 404.4  | 385.5  | 376.6  | 374.7  | 373.6  | 372.7  | 372.7  |
| 25°   | 2311.4 | 1965.5 | 1079.4 | 463.8  | 382.6  | 369.7  | 360.8  | 358.8  | 357.8  | 353.8  | 354.9  |
| 27.5° | 2355.0 | 1951.6 | 939.7  | 400.4  | 362.8  | 349.9  | 344.0  | 341.0  | 339.0  | 336.0  | 337.0  |
| 30°   | 2414.5 | 1939.7 | 791.0  | 365.7  | 340.0  | 329.1  | 323.1  | 321.1  | 319.2  | 316.2  | 316.2  |
| 32.5° | 2517.6 | 1944.7 | 634.4  | 338.0  | 319.2  | 306.3  | 300.4  | 298.3  | 296.4  | 293.4  | 293.4  |
| 35°   | 2672.2 | 1973.5 | 507.5  | 314.2  | 294.4  | 281.5  | 275.5  | 275.5  | 272.6  | 268.6  | 267.6  |
| 37.5° | 2925.0 | 2046.8 | 407.4  | 291.4  | 270.6  | 258.7  | 251.7  | 249.8  | 246.8  | 240.9  | 239.8  |
| 40°   | 3223.3 | 2160.8 | 343.0  | 268.6  | 248.8  | 236.9  | 231.0  | 225.0  | 217.0  | 211.1  | 210.2  |
| 42.5° | 3598.0 | 2277.7 | 297.4  | 245.8  | 228.0  | 217.0  | 210.2  | 200.2  | 188.3  | 180.4  | 179.4  |
| 45°   | 3988.5 | 2384.8 | 266.6  | 225.0  | 208.1  | 199.2  | 191.3  | 175.5  | 160.6  | 150.6  | 149.6  |
| 47.5° | 4280.0 | 2404.6 | 241.9  | 205.1  | 191.3  | 182.4  | 171.5  | 151.7  | 131.9  | 122.9  | 120.0  |
| 50°   | 4417.7 | 2308.4 | 216.1  | 185.3  | 174.5  | 164.5  | 150.6  | 127.9  | 106.0  | 95.1   | 93.2   |
| 52.5° | 4466.3 | 2142.0 | 195.3  | 167.5  | 157.6  | 145.7  | 128.9  | 103.1  | 83.2   | 72.3   | 71.3   |
| 55°   | 4446.4 | 1931.8 | 176.4  | 150.6  | 137.8  | 123.9  | 107.0  | 82.3   | 61.5   | 52.5   | 50.6   |
| 57.5° | 4342.4 | 1664.2 | 157.6  | 133.8  | 117.9  | 104.1  | 85.3   | 61.5   | 41.7   | 33.7   | 32.7   |
| 60°   | 4061.9 | 1299.5 | 138.7  | 114.9  | 100.1  | 85.3   | 67.4   | 43.6   | 25.8   | 18.9   | 18.9   |
| 62.5° | 3588.1 | 964.4  | 120.9  | 96.2   | 84.3   | 68.4   | 47.6   | 27.7   | 13.9   | 9.9    | 8.9    |
| 65°   | 2998.3 | 711.7  | 101.1  | 81.3   | 70.4   | 53.6   | 33.7   | 16.8   | 7.0    | 3.0    | 2.0    |
| 67.5° | 2092.4 | 439.1  | 84.3   | 66.4   | 57.5   | 38.7   | 20.8   | 7.0    | 3.0    | 0.0    | 0.0    |
| 70°   | 950.6  | 209.1  | 64.4   | 50.6   | 43.6   | 27.7   | 10.9   | 4.0    | 2.0    | 0.0    | 0.0    |
| 72.5° | 295.3  | 110.0  | 45.6   | 36.6   | 29.8   | 17.9   | 6.0    | 3.0    | 2.0    | 0.0    | 0.0    |
| 75°   | 136.8  | 70.4   | 28.7   | 19.8   | 16.8   | 8.9    | 4.0    | 2.0    | 1.0    | 0.0    | 0.0    |
| 77.5° | 102.1  | 54.5   | 16.8   | 10.9   | 8.9    | 6.0    | 3.0    | 2.0    | 1.0    | 0.0    | 0.0    |
| 80°   | 89.2   | 27.7   | 9.9    | 7.0    | 4.9    | 4.0    | 2.0    | 1.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 80.3   | 13.9   | 6.0    | 4.0    | 3.0    | 2.0    | 1.0    | 1.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 43.6   | 7.9    | 4.0    | 3.0    | 2.0    | 1.0    | 1.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.9    | 4.0    | 3.0    | 2.0    | 2.0    | 1.0    | 1.0    | 1.0    | 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)