

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: P453593

Luminaire Tested: **GLAN-SA4C-827-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453593  
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-SA4C-827-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA 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: 16817 lumens  
Efficiency: N/A  
Efficacy: 79.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

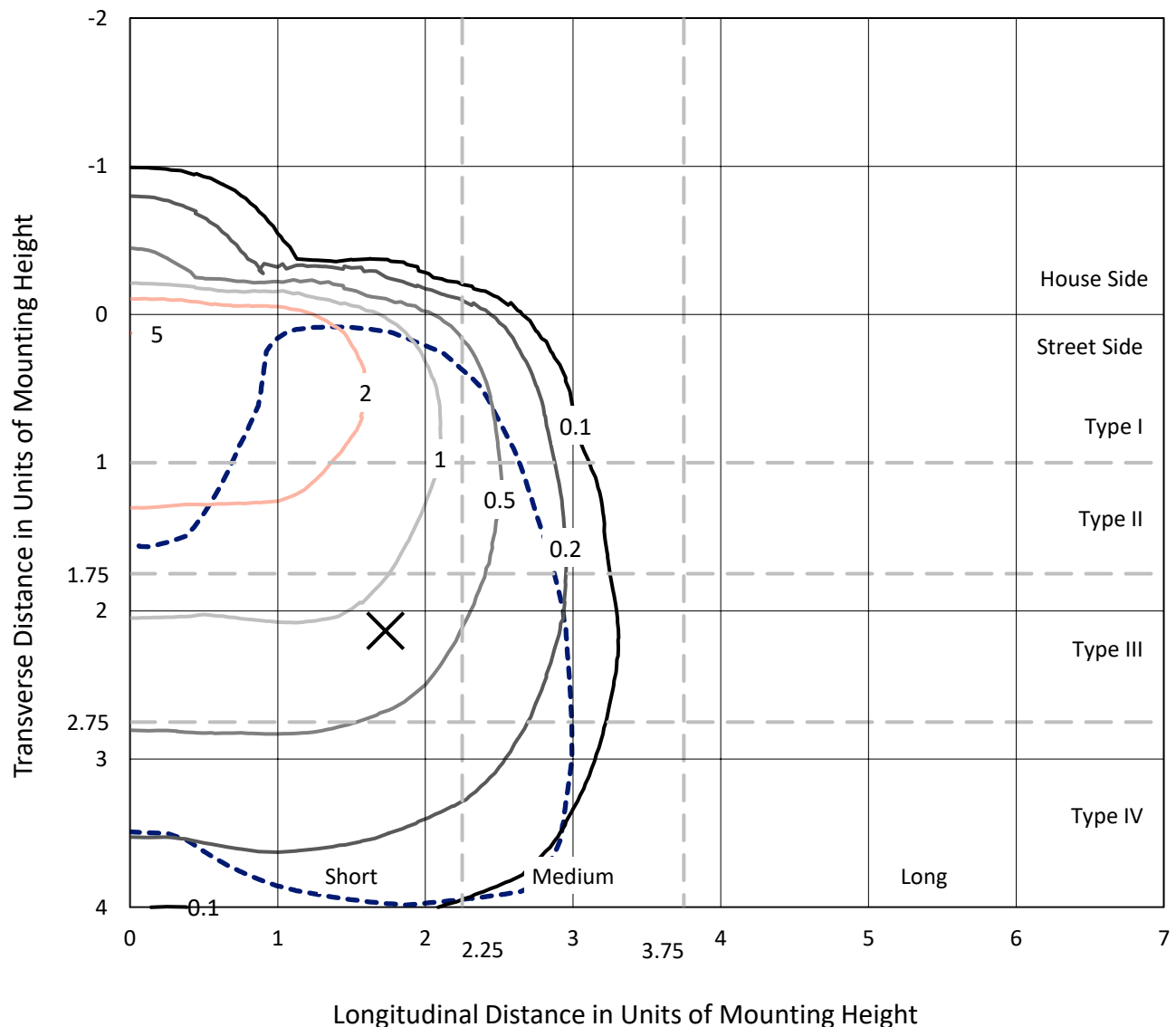


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## Iso-Footcandle Lines of Horizontal Illumination

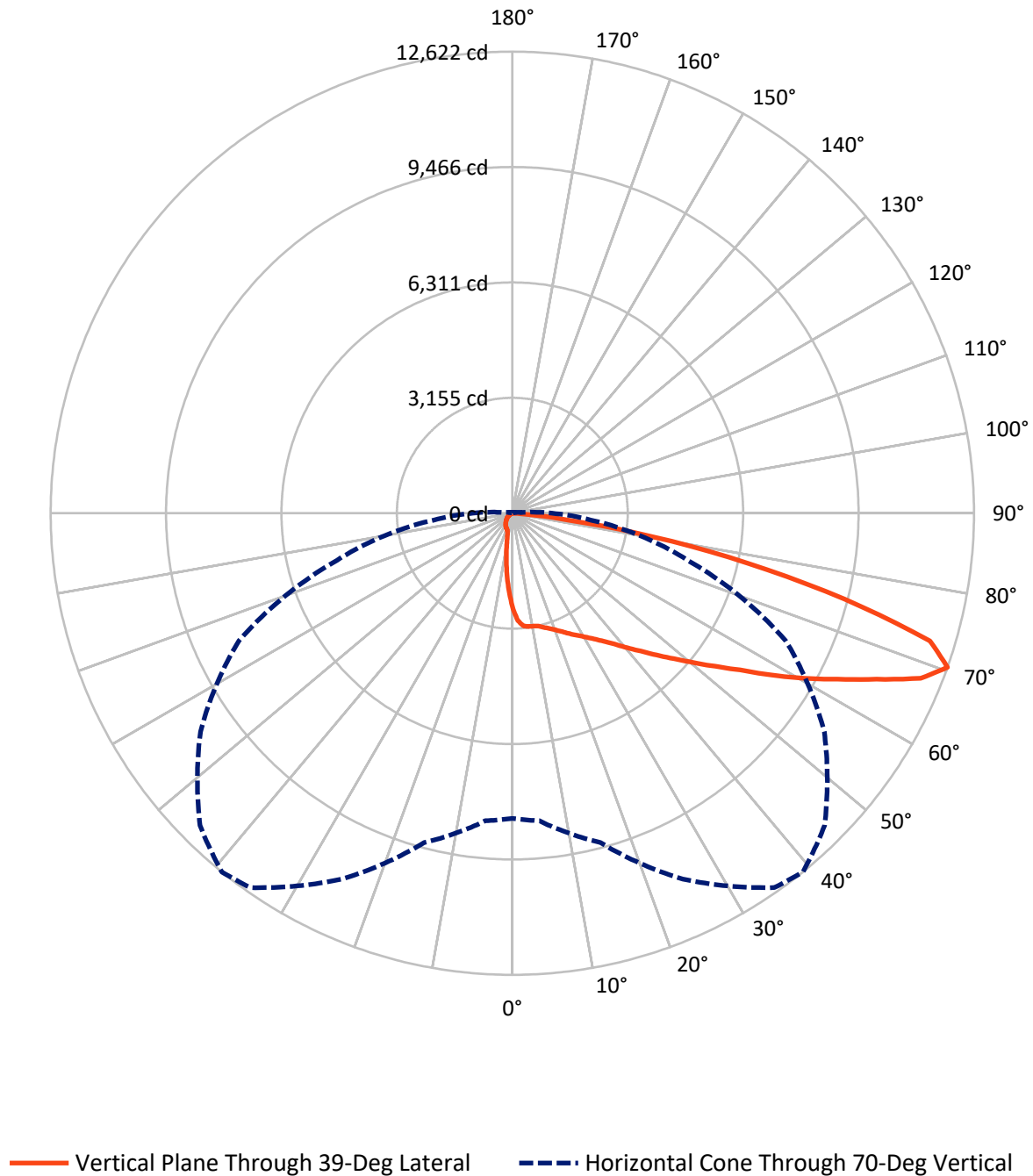
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1096.5   | 0.0    | 1096.5  |
|                    | % Fixture | 6.5      | 0.0    | 6.5     |
| <b>Street Side</b> | Lumens    | 15720.4  | 0.0    | 15720.4 |
|                    | % Fixture | 93.5     | 0.0    | 93.5    |
| <b>Total</b>       | Lumens    | 16817.0  | 0.0    | 16817.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 223.8   | 1.3       |
| 10°-20°   | 581.6   | 3.5       |
| 20°-30°   | 974.4   | 5.8       |
| 30°-40°   | 1511.1  | 9.0       |
| 40°-50°   | 2394.7  | 14.2      |
| 50°-60°   | 3510.3  | 20.9      |
| 60°-70°   | 4499.3  | 26.8      |
| 70°-80°   | 2827.2  | 16.8      |
| 80°-90°   | 294.5   | 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°    | 16817.0 | 100.0     |
| 0°-180°   | 16817.0 | 100.0     |

**Coefficient of Utilization**



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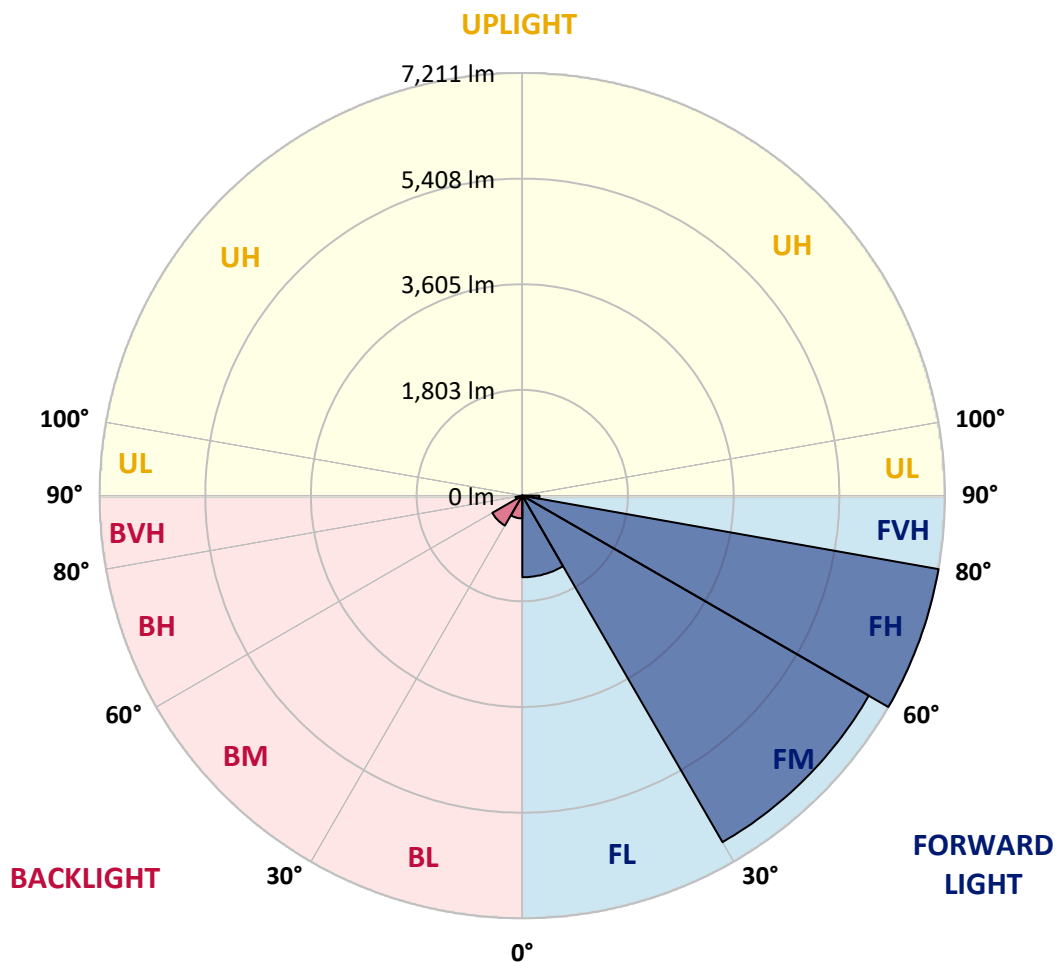
CATALOG NUMBER: GLAN-SA4C-827-U-SL4-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1391.5 | 8.3       |                         |      |         |
| FM   | (30°-60°)   | 6826.0 | 40.6      |                         |      |         |
| FH   | (60°-80°)   | 7210.6 | 42.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 292.4  | 1.7       |                         |      | G3/500  |
| BL   | (0°-30°)    | 388.3  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 590.1  | 3.5       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 116.0  | 0.7       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 2.2    | 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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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 35°     | 39°     | 45°     | 55°     | 65°     | 75°    | 85°    |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 2624.0 | 2624.0 | 2624.0 | 2624.0  | 2624.0  | 2624.0  | 2624.0  | 2624.0  | 2624.0  | 2624.0 | 2624.0 |
| 2.5°  | 3032.0 | 3021.8 | 3008.3 | 2992.4  | 2947.2  | 2939.3  | 2912.2  | 2854.6  | 2785.6  | 2729.1 | 2651.2 |
| 5°    | 3175.5 | 3181.2 | 3171.0 | 3142.7  | 3110.0  | 3090.7  | 3056.8  | 2967.6  | 2878.3  | 2764.2 | 2636.5 |
| 7.5°  | 3208.3 | 3219.6 | 3207.1 | 3180.0  | 3148.4  | 3128.0  | 3100.9  | 3024.1  | 2920.1  | 2790.1 | 2615.0 |
| 10°   | 3204.9 | 3218.4 | 3210.5 | 3185.7  | 3159.7  | 3140.5  | 3111.1  | 3050.1  | 2966.4  | 2829.7 | 2621.8 |
| 12.5° | 3199.2 | 3217.3 | 3216.2 | 3203.8  | 3182.3  | 3167.6  | 3149.5  | 3095.3  | 3017.3  | 2887.3 | 2659.1 |
| 15°   | 3183.4 | 3206.0 | 3226.4 | 3236.5  | 3237.7  | 3237.7  | 3215.1  | 3157.4  | 3082.8  | 2963.1 | 2707.7 |
| 17.5° | 3190.2 | 3216.2 | 3267.0 | 3296.4  | 3316.8  | 3314.5  | 3290.8  | 3228.6  | 3146.1  | 3041.0 | 2758.5 |
| 20°   | 3232.0 | 3267.0 | 3338.2 | 3397.0  | 3417.3  | 3410.6  | 3378.9  | 3306.6  | 3212.8  | 3107.7 | 2808.2 |
| 22.5° | 3334.8 | 3366.5 | 3455.8 | 3524.7  | 3539.4  | 3521.3  | 3476.1  | 3377.8  | 3293.0  | 3180.0 | 2868.1 |
| 25°   | 3488.5 | 3525.8 | 3608.3 | 3660.3  | 3660.3  | 3650.1  | 3586.9  | 3471.6  | 3383.4  | 3280.6 | 2946.1 |
| 27.5° | 3675.0 | 3706.6 | 3788.0 | 3834.3  | 3807.2  | 3777.8  | 3714.5  | 3575.6  | 3490.8  | 3407.2 | 3039.9 |
| 30°   | 3863.7 | 3884.1 | 3969.9 | 3990.3  | 3962.0  | 3924.7  | 3856.9  | 3717.9  | 3643.4  | 3578.9 | 3175.5 |
| 32.5° | 4042.3 | 4086.3 | 4157.5 | 4153.0  | 4114.6  | 4096.5  | 4034.4  | 3886.3  | 3844.5  | 3837.7 | 3365.4 |
| 35°   | 4220.8 | 4254.7 | 4318.0 | 4333.8  | 4299.9  | 4296.5  | 4251.3  | 4141.7  | 4142.8  | 4186.9 | 3661.4 |
| 37.5° | 4374.5 | 4405.0 | 4479.6 | 4514.6  | 4521.4  | 4538.4  | 4520.3  | 4448.0  | 4550.8  | 4671.7 | 4053.6 |
| 40°   | 4503.3 | 4546.3 | 4641.2 | 4702.2  | 4772.3  | 4834.5  | 4837.8  | 4853.7  | 5060.5  | 5268.4 | 4565.5 |
| 42.5° | 4603.9 | 4663.8 | 4801.7 | 4914.7  | 5075.2  | 5154.3  | 5217.5  | 5304.6  | 5652.6  | 5963.4 | 5169.0 |
| 45°   | 4735.0 | 4803.9 | 4975.7 | 5153.1  | 5404.0  | 5534.0  | 5622.1  | 5854.9  | 6348.7  | 6772.5 | 5788.2 |
| 47.5° | 4952.0 | 4988.1 | 5163.3 | 5422.1  | 5752.1  | 5937.4  | 6109.2  | 6461.8  | 7095.7  | 7475.4 | 6303.5 |
| 50°   | 5231.1 | 5254.8 | 5387.1 | 5746.4  | 6173.6  | 6417.7  | 6730.7  | 7145.4  | 7871.0  | 8058.5 | 6595.1 |
| 52.5° | 5539.6 | 5547.5 | 5647.0 | 6103.5  | 6646.0  | 6953.3  | 7303.7  | 7815.6  | 8502.7  | 8474.4 | 6788.3 |
| 55°   | 5897.8 | 5886.5 | 5971.3 | 6491.1  | 7205.3  | 7556.8  | 7964.8  | 8501.5  | 9050.8  | 8769.4 | 6899.1 |
| 57.5° | 6308.1 | 6277.6 | 6360.0 | 7005.3  | 7921.8  | 8342.2  | 8756.9  | 9093.7  | 9475.7  | 9016.9 | 6952.2 |
| 60°   | 6737.5 | 6676.5 | 6774.8 | 7582.8  | 8766.0  | 9164.9  | 9509.6  | 9600.0  | 9923.2  | 9213.5 | 6860.7 |
| 62.5° | 7079.9 | 7081.0 | 7264.1 | 8197.5  | 9633.9  | 9983.1  | 10166.1 | 10247.5 | 10308.5 | 9170.5 | 6379.3 |
| 65°   | 7614.4 | 7632.5 | 7925.2 | 9050.8  | 10638.5 | 10941.4 | 11066.8 | 10802.4 | 10325.5 | 8637.1 | 5656.0 |
| 67.5° | 8165.9 | 8223.5 | 8759.2 | 10226.0 | 11799.1 | 12043.2 | 11881.6 | 10909.7 | 9864.4  | 7420.1 | 4288.6 |
| 70°   | 8345.6 | 8440.5 | 9323.1 | 11035.2 | 12495.2 | 12621.8 | 12074.8 | 10409.1 | 8246.1  | 4961.0 | 2158.4 |
| 72.5° | 7647.2 | 7800.9 | 8998.8 | 10740.2 | 12051.1 | 11941.5 | 10803.5 | 8729.8  | 5242.4  | 1883.8 | 658.8  |
| 75°   | 5392.7 | 5460.5 | 7478.8 | 8909.5  | 9692.6  | 9381.9  | 8217.9  | 5627.8  | 2156.2  | 528.9  | 226.0  |
| 77.5° | 2784.5 | 2751.7 | 4448.0 | 5911.4  | 6912.7  | 6590.6  | 5381.4  | 2913.3  | 817.0   | 220.4  | 140.1  |
| 80°   | 1439.7 | 1463.4 | 1924.5 | 3097.5  | 4219.7  | 3882.9  | 2869.3  | 1350.4  | 435.1   | 122.0  | 107.4  |
| 82.5° | 806.9  | 757.1  | 1106.3 | 1352.7  | 1973.1  | 1547.1  | 1100.7  | 956.0   | 189.9   | 73.5   | 101.7  |
| 85°   | 146.9  | 153.7  | 606.8  | 731.2   | 684.8   | 435.1   | 354.8   | 638.5   | 55.4    | 40.7   | 71.2   |
| 87.5° | 2.3    | 2.3    | 117.5  | 210.2   | 133.3   | 61.0    | 111.9   | 91.5    | 11.3    | 15.8   | 12.4   |
| 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°    | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 | 2624.0 |
| 2.5°  | 2611.6 | 2568.7 | 2488.4 | 2409.3 | 2308.7 | 2226.2 | 2170.9 | 2113.2 | 2054.5 | 2059.0 | 2072.6 |
| 5°    | 2566.4 | 2491.8 | 2333.6 | 2166.3 | 2005.9 | 1861.2 | 1718.8 | 1591.1 | 1539.2 | 1491.7 | 1494.0 |
| 7.5°  | 2521.2 | 2416.1 | 2184.4 | 1922.3 | 1679.3 | 1432.9 | 1254.4 | 1107.5 | 1029.5 | 970.7  | 953.8  |
| 10°   | 2500.9 | 2361.9 | 2047.7 | 1687.2 | 1342.5 | 1073.6 | 844.2  | 724.4  | 631.7  | 602.3  | 610.2  |
| 12.5° | 2509.9 | 2334.7 | 1924.5 | 1474.7 | 1064.5 | 748.1  | 587.6  | 526.6  | 506.3  | 502.9  | 500.6  |
| 15°   | 2526.8 | 2315.5 | 1803.6 | 1239.7 | 782.0  | 556.0  | 493.8  | 482.5  | 480.3  | 478.0  | 479.2  |
| 17.5° | 2549.4 | 2298.6 | 1674.8 | 1019.3 | 600.1  | 485.9  | 467.9  | 462.2  | 461.1  | 461.1  | 461.1  |
| 20°   | 2572.0 | 2279.4 | 1531.2 | 822.7  | 500.6  | 458.8  | 447.5  | 444.1  | 443.0  | 443.0  | 441.9  |
| 22.5° | 2598.0 | 2262.4 | 1385.5 | 646.4  | 461.1  | 439.6  | 429.4  | 427.2  | 426.0  | 424.9  | 424.9  |
| 25°   | 2635.3 | 2240.9 | 1230.6 | 528.9  | 436.2  | 421.5  | 411.3  | 409.1  | 408.0  | 403.4  | 404.6  |
| 27.5° | 2685.1 | 2225.1 | 1071.3 | 456.5  | 413.6  | 398.9  | 392.1  | 388.7  | 386.5  | 383.1  | 384.2  |
| 30°   | 2752.9 | 2211.6 | 901.8  | 417.0  | 387.6  | 375.2  | 368.4  | 366.1  | 363.9  | 360.5  | 360.5  |
| 32.5° | 2870.4 | 2217.2 | 723.2  | 385.4  | 363.9  | 349.2  | 342.4  | 340.2  | 337.9  | 334.5  | 334.5  |
| 35°   | 3046.7 | 2250.0 | 578.6  | 358.2  | 335.6  | 320.9  | 314.2  | 314.2  | 310.8  | 306.2  | 305.1  |
| 37.5° | 3334.8 | 2333.6 | 464.5  | 332.2  | 308.5  | 294.9  | 287.0  | 284.8  | 281.4  | 274.6  | 273.5  |
| 40°   | 3675.0 | 2463.6 | 391.0  | 306.2  | 283.6  | 270.1  | 263.3  | 256.5  | 247.5  | 240.7  | 239.6  |
| 42.5° | 4102.2 | 2596.9 | 339.0  | 280.3  | 259.9  | 247.5  | 239.6  | 228.3  | 214.7  | 205.7  | 204.5  |
| 45°   | 4547.4 | 2719.0 | 304.0  | 256.5  | 237.3  | 227.1  | 218.1  | 200.0  | 183.1  | 171.8  | 170.6  |
| 47.5° | 4879.7 | 2741.6 | 275.7  | 233.9  | 218.1  | 207.9  | 195.5  | 172.9  | 150.3  | 140.1  | 136.7  |
| 50°   | 5036.7 | 2631.9 | 246.4  | 211.3  | 198.9  | 187.6  | 171.8  | 145.8  | 120.9  | 108.5  | 106.2  |
| 52.5° | 5092.1 | 2442.1 | 222.6  | 191.0  | 179.7  | 166.1  | 146.9  | 117.5  | 94.9   | 82.5   | 81.4   |
| 55°   | 5069.5 | 2202.5 | 201.2  | 171.8  | 157.1  | 141.3  | 122.0  | 93.8   | 70.1   | 59.9   | 57.6   |
| 57.5° | 4950.8 | 1897.4 | 179.7  | 152.6  | 134.5  | 118.7  | 97.2   | 70.1   | 47.5   | 38.4   | 37.3   |
| 60°   | 4631.0 | 1481.5 | 158.2  | 131.1  | 114.1  | 97.2   | 76.8   | 49.7   | 29.4   | 21.5   | 21.5   |
| 62.5° | 4090.9 | 1099.6 | 137.9  | 109.6  | 96.1   | 78.0   | 54.2   | 31.6   | 15.8   | 11.3   | 10.2   |
| 65°   | 3418.5 | 811.4  | 115.3  | 92.7   | 80.2   | 61.0   | 38.4   | 19.2   | 7.9    | 3.4    | 2.3    |
| 67.5° | 2385.6 | 500.6  | 96.1   | 75.7   | 65.5   | 44.1   | 23.7   | 7.9    | 3.4    | 0.0    | 0.0    |
| 70°   | 1083.7 | 238.4  | 73.5   | 57.6   | 49.7   | 31.6   | 12.4   | 4.5    | 2.3    | 0.0    | 0.0    |
| 72.5° | 336.8  | 125.4  | 52.0   | 41.8   | 33.9   | 20.3   | 6.8    | 3.4    | 2.3    | 0.0    | 0.0    |
| 75°   | 156.0  | 80.2   | 32.8   | 22.6   | 19.2   | 10.2   | 4.5    | 2.3    | 1.1    | 0.0    | 0.0    |
| 77.5° | 116.4  | 62.2   | 19.2   | 12.4   | 10.2   | 6.8    | 3.4    | 2.3    | 1.1    | 0.0    | 0.0    |
| 80°   | 101.7  | 31.6   | 11.3   | 7.9    | 5.7    | 4.5    | 2.3    | 1.1    | 0.0    | 0.0    | 0.0    |
| 82.5° | 91.5   | 15.8   | 6.8    | 4.5    | 3.4    | 2.3    | 1.1    | 1.1    | 0.0    | 0.0    | 0.0    |
| 85°   | 49.7   | 9.0    | 4.5    | 3.4    | 2.3    | 1.1    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 9.0    | 4.5    | 3.4    | 2.3    | 2.3    | 1.1    | 1.1    | 1.1    | 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)