

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: P192877

Luminaire Tested: **GAN-AF-09-LED-U-SL3-7030-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P192877  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-09-LED-U-SL3-7030-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 43969.2 lumens  
Efficiency: N/A  
Efficacy: 87.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 501  
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: 28.75 FT

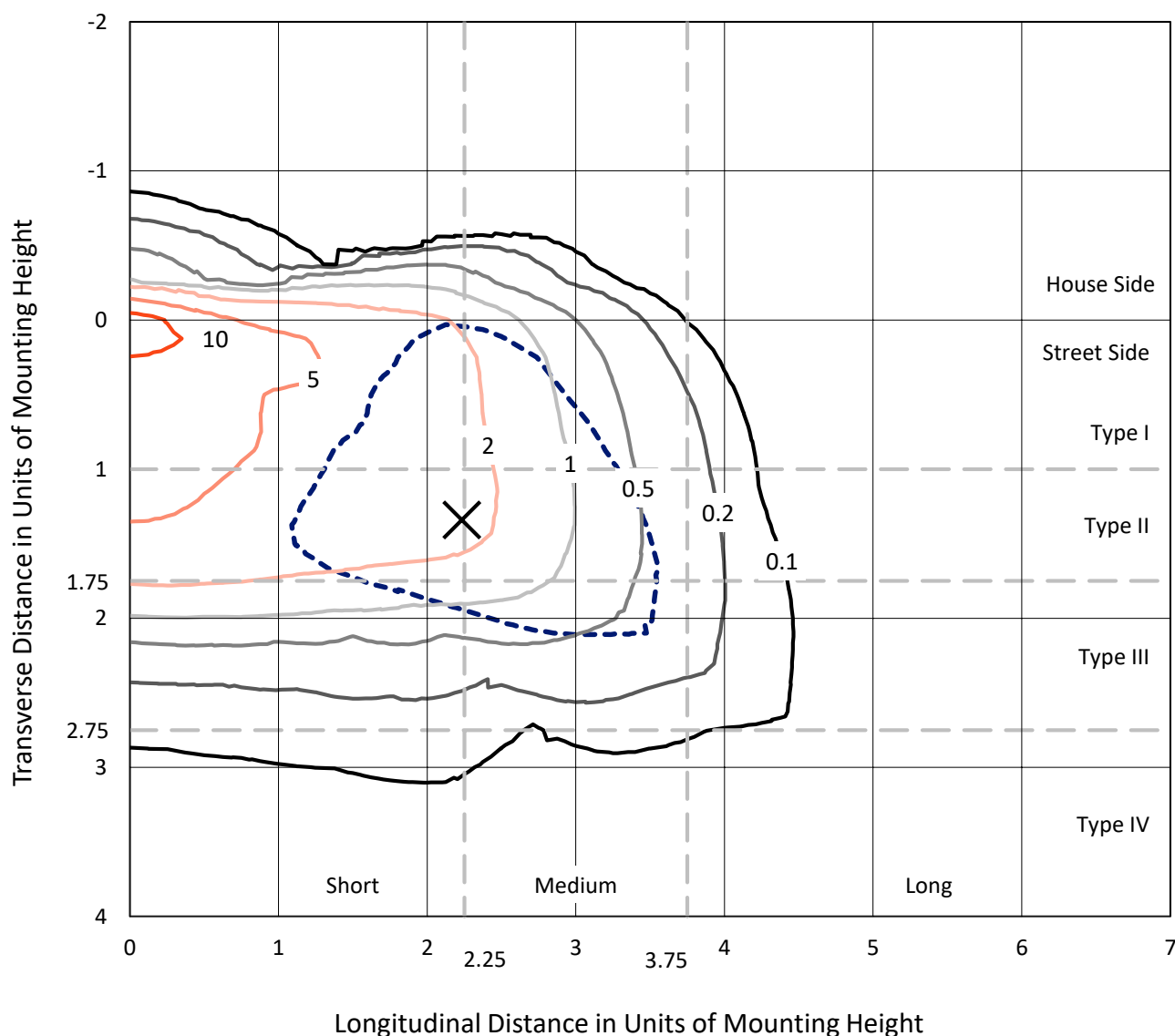


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

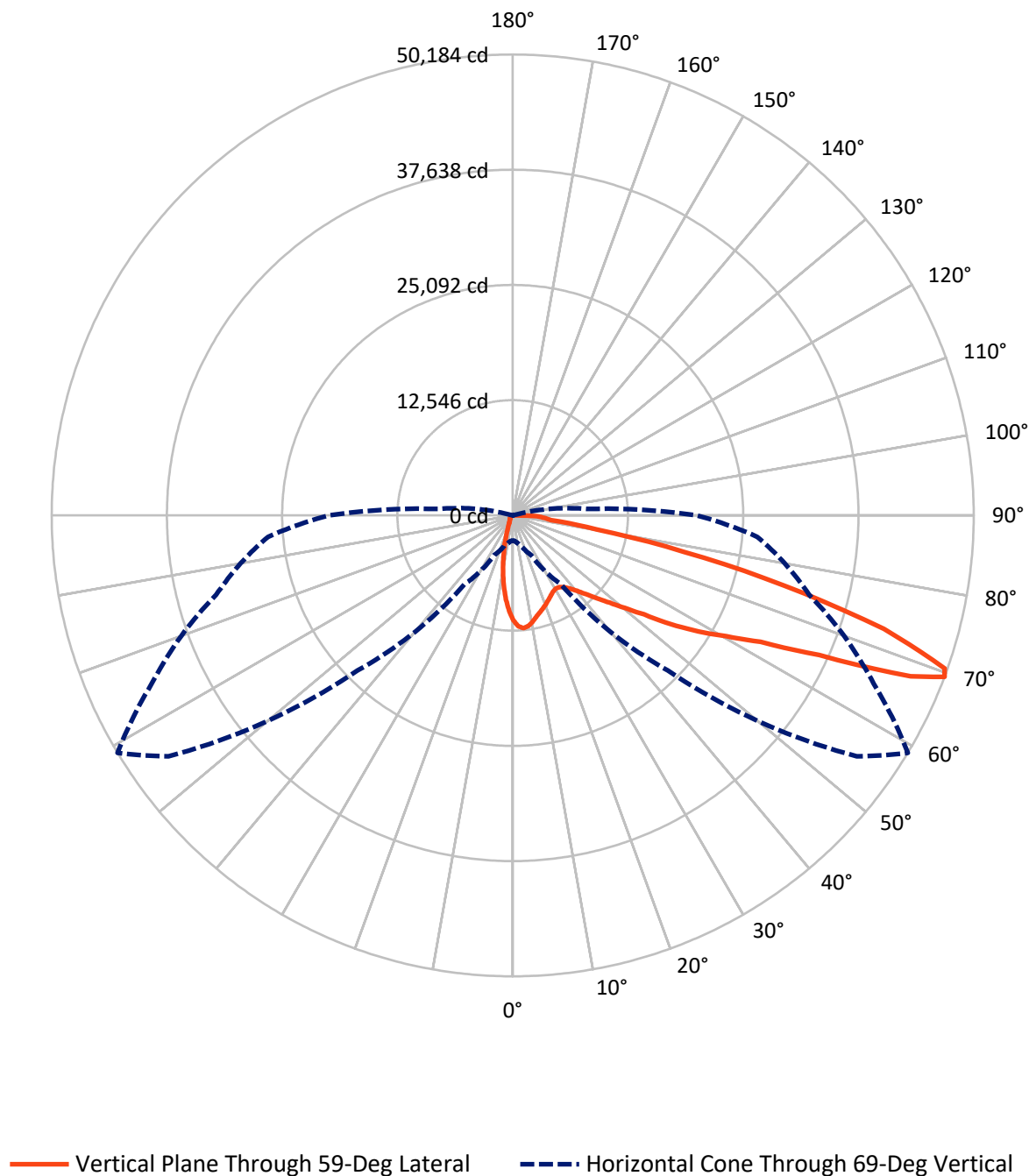


Based on 30 foot mounting height. Maximum calculated value = 12.8 fc  
 Type III - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3580.7   | 0.0    | 3580.7  |
|                    | % Fixture | 8.1      | 0.0    | 8.1     |
| <b>Street Side</b> | Lumens    | 40388.5  | 0.0    | 40388.5 |
|                    | % Fixture | 91.9     | 0.0    | 91.9    |
| <b>Total</b>       | Lumens    | 43969.2  | 0.0    | 43969.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 929.0   | 2.1       |
| 10°-20°   | 1919.5  | 4.4       |
| 20°-30°   | 2582.9  | 5.9       |
| 30°-40°   | 3750.2  | 8.5       |
| 40°-50°   | 6244.4  | 14.2      |
| 50°-60°   | 9741.2  | 22.2      |
| 60°-70°   | 12054.0 | 27.4      |
| 70°-80°   | 6108.8  | 13.9      |
| 80°-90°   | 639.2   | 1.5       |
| 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°    | 43969.2 | 100.0     |
| 0°-180°   | 43969.2 | 100.0     |

**Coefficient of Utilization**



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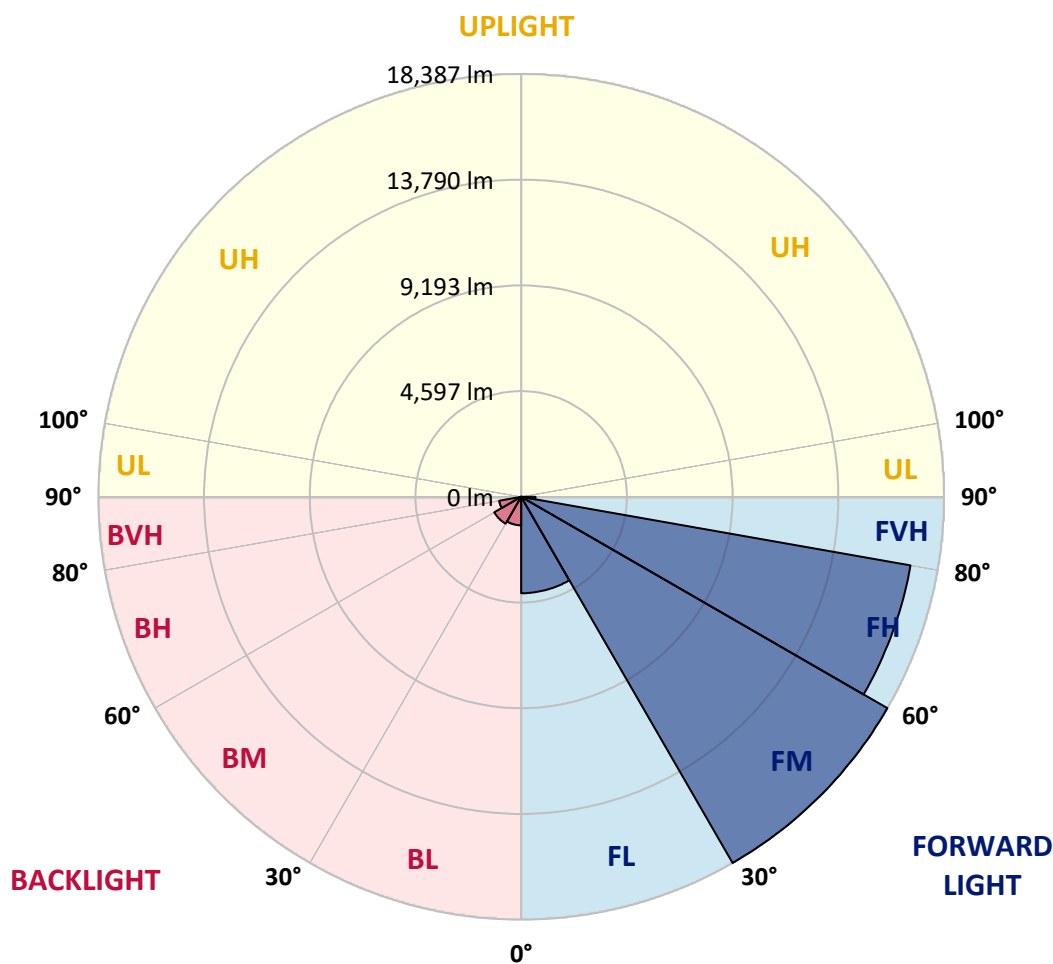
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4192.0  | 9.5       |                         |      |         |
| FM   | (30°-60°)   | 18386.6 | 41.8      |                         |      |         |
| FH   | (60°-80°)   | 17190.4 | 39.1      |                         |      | G5      |
| FVH  | (80°-90°)   | 619.5   | 1.4       |                         |      | G4/750  |
| BL   | (0°-30°)    | 1239.4  | 2.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 1349.2  | 3.1       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 972.4   | 2.2       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 19.7    | 0.0       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 |
| 2.5°  | 12543.5 | 12538.6 | 12483.9 | 12459.1 | 12414.2 | 12319.7 | 12173.1 | 12096.0 | 11971.6 | 11755.3 | 11464.5 |
| 5°    | 12429.2 | 12488.9 | 12521.1 | 12523.7 | 12556.0 | 12521.1 | 12389.4 | 12324.8 | 12153.1 | 11805.1 | 11282.9 |
| 7.5°  | 11653.4 | 11675.8 | 11767.8 | 11847.3 | 12001.5 | 12148.2 | 12195.4 | 12168.1 | 12066.1 | 11693.3 | 10999.5 |
| 10°   | 10823.0 | 10845.4 | 10954.8 | 11059.2 | 11268.0 | 11494.3 | 11733.1 | 11782.7 | 11825.0 | 11534.1 | 10726.0 |
| 12.5° | 10106.9 | 10129.3 | 10241.2 | 10378.0 | 10621.6 | 10900.0 | 11270.5 | 11352.6 | 11539.1 | 11382.4 | 10507.3 |
| 15°   | 9490.4  | 9500.3  | 9609.7  | 9778.7  | 10069.7 | 10427.7 | 10847.8 | 10979.7 | 11265.6 | 11275.5 | 10315.8 |
| 17.5° | 8965.7  | 8990.6  | 9057.7  | 9219.3  | 9537.6  | 9980.2  | 10470.0 | 10658.9 | 10994.5 | 11186.0 | 10129.3 |
| 20°   | 8644.9  | 8669.8  | 8667.3  | 8756.8  | 9042.8  | 9515.2  | 10092.1 | 10318.2 | 10726.0 | 11093.9 | 9962.7  |
| 22.5° | 8582.9  | 8582.9  | 8518.2  | 8505.8  | 8674.8  | 9070.1  | 9699.2  | 9975.2  | 10484.8 | 11054.2 | 9845.9  |
| 25°   | 8804.1  | 8794.2  | 8632.6  | 8500.8  | 8508.2  | 8744.4  | 9318.7  | 9646.9  | 10281.0 | 11081.6 | 9783.7  |
| 27.5° | 9271.5  | 9259.0  | 9055.2  | 8804.1  | 8602.7  | 8600.3  | 9030.4  | 9383.4  | 10119.4 | 11210.9 | 9808.5  |
| 30°   | 9918.0  | 9913.0  | 9691.8  | 9376.0  | 9010.5  | 8674.8  | 8930.9  | 9251.6  | 10014.9 | 11444.6 | 9865.8  |
| 32.5° | 10624.1 | 10616.6 | 10450.0 | 10116.9 | 9654.3  | 9010.5  | 9035.3  | 9303.9  | 10044.8 | 11755.3 | 10005.0 |
| 35°   | 11372.5 | 11360.0 | 11287.9 | 10997.1 | 10487.4 | 9629.6  | 9378.5  | 9587.3  | 10233.8 | 12220.3 | 10278.4 |
| 37.5° | 12183.1 | 12195.4 | 12247.6 | 11969.3 | 11434.6 | 10497.3 | 9952.8  | 10094.5 | 10614.1 | 12851.8 | 10723.6 |
| 40°   | 13378.9 | 13376.5 | 13393.9 | 13028.4 | 12513.7 | 11559.0 | 10755.8 | 10800.6 | 11250.7 | 13689.7 | 11399.8 |
| 42.5° | 15549.6 | 15397.8 | 14937.8 | 14192.0 | 13674.8 | 12772.3 | 11767.8 | 11720.6 | 12028.9 | 14726.5 | 12347.1 |
| 45°   | 18466.0 | 18142.7 | 16949.3 | 15519.6 | 14858.2 | 14139.8 | 13013.5 | 12861.8 | 13058.2 | 15972.2 | 13515.7 |
| 47.5° | 20974.7 | 20639.1 | 18950.8 | 16902.1 | 16113.9 | 15437.6 | 14472.9 | 14199.5 | 14264.2 | 17367.0 | 14997.6 |
| 50°   | 21827.5 | 21663.4 | 20189.0 | 18105.5 | 17329.7 | 17071.1 | 16166.1 | 15833.0 | 15741.0 | 18980.6 | 16715.6 |
| 52.5° | 21531.6 | 21519.1 | 20537.1 | 18886.1 | 18443.6 | 18761.9 | 18296.9 | 17911.5 | 17573.4 | 20681.2 | 18463.5 |
| 55°   | 21056.8 | 21118.8 | 20678.9 | 19569.9 | 19555.0 | 20305.9 | 21210.8 | 20890.2 | 19910.6 | 22528.6 | 19970.2 |
| 57.5° | 19746.4 | 20012.5 | 20599.2 | 20862.8 | 21474.5 | 22242.7 | 23637.5 | 23826.5 | 22667.9 | 23943.4 | 21220.8 |
| 60°   | 16021.9 | 16606.2 | 18525.7 | 21049.3 | 23948.3 | 25862.8 | 26566.4 | 26728.1 | 24930.4 | 25119.4 | 22909.1 |
| 62.5° | 11372.5 | 11969.3 | 14403.3 | 18672.3 | 23985.5 | 30619.2 | 30929.9 | 30296.0 | 27421.8 | 26862.3 | 25820.5 |
| 65°   | 6036.8  | 6496.8  | 8485.8  | 13478.4 | 20795.7 | 31723.1 | 38560.6 | 36670.9 | 31817.6 | 30290.9 | 29582.4 |
| 67.5° | 3088.0  | 3227.3  | 4017.9  | 6596.2  | 14296.3 | 28177.5 | 45400.4 | 46730.6 | 39393.4 | 33692.3 | 29400.9 |
| 69°   | 2732.5  | 2814.5  | 3339.2  | 4768.7  | 9154.7  | 23866.3 | 45733.5 | 50184.1 | 43359.1 | 33408.9 | 26718.2 |
| 70°   | 2645.5  | 2717.6  | 3195.0  | 4316.3  | 7155.6  | 20014.9 | 44458.0 | 49880.7 | 44373.6 | 32329.7 | 24714.1 |
| 72.5° | 2245.2  | 2307.3  | 2844.3  | 3814.0  | 5815.6  | 9935.4  | 36113.9 | 42267.6 | 39818.6 | 26932.0 | 17889.1 |
| 75°   | 1501.8  | 1705.6  | 2730.0  | 3575.3  | 5410.3  | 5644.0  | 23809.1 | 30544.5 | 28374.0 | 18165.1 | 9318.7  |
| 77.5° | 360.5   | 387.9   | 770.8   | 2844.3  | 4947.8  | 4967.7  | 12245.1 | 18988.0 | 15487.4 | 6474.3  | 2202.8  |
| 80°   | 193.9   | 186.5   | 216.4   | 564.5   | 4607.1  | 4661.9  | 5512.2  | 9216.8  | 5529.6  | 1074.1  | 726.0   |
| 82.5° | 136.8   | 129.3   | 139.2   | 236.2   | 1449.6  | 4246.7  | 3988.1  | 4172.1  | 2292.4  | 412.8   | 325.7   |
| 85°   | 49.7    | 47.2    | 77.0    | 213.8   | 454.9   | 2441.6  | 4097.4  | 3441.1  | 1857.3  | 188.9   | 238.7   |
| 87.5° | 17.4    | 15.0    | 29.8    | 116.9   | 139.2   | 1039.3  | 2528.6  | 2600.7  | 731.0   | 114.4   | 111.9   |
| 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°    | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 | 11444.6 |
| 2.5°  | 11342.6 | 11188.4 | 10905.0 | 10614.1 | 10345.6 | 10022.4 | 9860.7  | 9701.6  | 9634.5  | 9609.7  | 9492.8  |
| 5°    | 11014.4 | 10753.4 | 10151.8 | 9547.5  | 8990.6  | 8398.9  | 8008.4  | 7695.2  | 7511.2  | 7421.7  | 7280.0  |
| 7.5°  | 10594.3 | 10166.6 | 9254.1  | 8321.7  | 7454.0  | 6598.7  | 5964.7  | 5477.3  | 5141.7  | 4980.1  | 4833.4  |
| 10°   | 10186.5 | 9617.1  | 8319.2  | 7048.8  | 5870.2  | 4736.5  | 3861.2  | 3227.3  | 2821.9  | 2635.6  | 2516.1  |
| 12.5° | 9821.0  | 9082.6  | 7416.7  | 5808.1  | 4328.8  | 3001.1  | 2110.9  | 1606.2  | 1355.1  | 1268.1  | 1225.8  |
| 15°   | 9495.2  | 8590.3  | 6563.9  | 4629.6  | 2931.4  | 1715.6  | 1153.7  | 982.1   | 942.4   | 942.4   | 937.3   |
| 17.5° | 9186.9  | 8107.9  | 5740.9  | 3523.2  | 1839.9  | 1049.2  | 877.7   | 855.3   | 855.3   | 865.3   | 865.3   |
| 20°   | 8891.1  | 7647.9  | 4945.3  | 2528.6  | 1158.5  | 832.9   | 793.1   | 788.2   | 793.1   | 805.6   | 805.6   |
| 22.5° | 8637.5  | 7230.2  | 4201.9  | 1735.5  | 860.3   | 750.8   | 731.0   | 723.6   | 726.0   | 733.4   | 738.5   |
| 25°   | 8448.6  | 6877.3  | 3500.7  | 1176.0  | 740.9   | 683.8   | 661.3   | 648.9   | 638.9   | 638.9   | 644.0   |
| 27.5° | 8329.2  | 6578.8  | 2821.9  | 855.3   | 666.4   | 621.5   | 586.7   | 566.8   | 544.5   | 532.1   | 537.0   |
| 30°   | 8242.2  | 6295.4  | 2185.5  | 698.7   | 596.7   | 552.0   | 507.2   | 474.8   | 442.6   | 427.6   | 432.6   |
| 32.5° | 8209.8  | 6066.6  | 1633.5  | 616.7   | 534.6   | 484.8   | 430.2   | 387.9   | 353.0   | 340.7   | 343.1   |
| 35°   | 8296.9  | 5885.1  | 1196.0  | 556.9   | 484.8   | 422.8   | 360.5   | 313.2   | 285.9   | 278.5   | 280.9   |
| 37.5° | 8525.6  | 5788.2  | 895.1   | 507.2   | 440.1   | 370.5   | 300.9   | 256.1   | 238.7   | 238.7   | 241.1   |
| 40°   | 8958.2  | 5785.8  | 718.6   | 472.4   | 400.3   | 320.7   | 248.7   | 216.4   | 206.4   | 211.3   | 213.8   |
| 42.5° | 9589.8  | 5917.5  | 626.6   | 440.1   | 365.5   | 273.4   | 206.4   | 184.0   | 181.5   | 186.5   | 188.9   |
| 45°   | 10452.5 | 6158.6  | 576.8   | 412.8   | 328.3   | 228.8   | 174.0   | 159.1   | 159.1   | 166.6   | 169.1   |
| 47.5° | 11509.3 | 6511.8  | 534.6   | 385.3   | 290.8   | 191.4   | 149.1   | 139.2   | 141.7   | 149.1   | 151.7   |
| 50°   | 12782.2 | 6956.7  | 492.3   | 355.5   | 263.6   | 159.1   | 129.3   | 121.9   | 124.3   | 134.3   | 136.8   |
| 52.5° | 14231.8 | 7556.0  | 457.5   | 328.3   | 228.8   | 131.7   | 109.4   | 104.5   | 109.4   | 119.3   | 121.9   |
| 55°   | 15474.9 | 8093.1  | 415.1   | 305.8   | 184.0   | 109.4   | 89.5    | 89.5    | 94.5    | 107.0   | 109.4   |
| 57.5° | 16670.9 | 8654.9  | 377.9   | 263.6   | 144.2   | 87.0    | 74.7    | 77.0    | 84.5    | 96.9    | 99.4    |
| 60°   | 18426.1 | 9607.1  | 333.1   | 221.2   | 109.4   | 69.6    | 62.2    | 64.7    | 74.7    | 87.0    | 89.5    |
| 62.5° | 21407.2 | 11056.7 | 288.5   | 184.0   | 84.5    | 54.7    | 49.7    | 54.7    | 67.0    | 82.1    | 84.5    |
| 65°   | 24097.4 | 11646.0 | 236.2   | 154.2   | 64.7    | 42.3    | 42.3    | 49.7    | 64.7    | 79.5    | 82.1    |
| 67.5° | 22598.2 | 9803.7  | 184.0   | 121.9   | 49.7    | 32.3    | 34.9    | 47.2    | 62.2    | 79.5    | 82.1    |
| 69°   | 19985.1 | 8016.0  | 156.7   | 96.9    | 42.3    | 29.8    | 32.3    | 47.2    | 62.2    | 77.0    | 79.5    |
| 70°   | 17948.8 | 6767.7  | 139.2   | 82.1    | 37.2    | 29.8    | 32.3    | 44.8    | 62.2    | 77.0    | 79.5    |
| 72.5° | 12021.4 | 3654.9  | 111.9   | 59.6    | 34.9    | 27.4    | 27.4    | 44.8    | 59.6    | 74.7    | 77.0    |
| 75°   | 5166.6  | 1009.4  | 89.5    | 42.3    | 29.8    | 24.9    | 24.9    | 42.3    | 57.2    | 72.1    | 77.0    |
| 77.5° | 944.8   | 256.1   | 72.1    | 37.2    | 29.8    | 24.9    | 22.4    | 39.8    | 54.7    | 69.6    | 72.1    |
| 80°   | 375.5   | 126.8   | 57.2    | 32.3    | 27.4    | 22.4    | 19.8    | 37.2    | 52.2    | 67.0    | 69.6    |
| 82.5° | 226.2   | 72.1    | 47.2    | 29.8    | 27.4    | 19.8    | 17.4    | 32.3    | 49.7    | 64.7    | 67.0    |
| 85°   | 184.0   | 49.7    | 37.2    | 29.8    | 24.9    | 19.8    | 15.0    | 29.8    | 44.8    | 62.2    | 64.7    |
| 87.5° | 89.5    | 34.9    | 34.9    | 27.4    | 24.9    | 19.8    | 15.0    | 27.4    | 42.3    | 59.6    | 62.2    |
| 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)