

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: P192177

Luminaire Tested: **GAN-AF-09-LED-U-T2-7050-ADJ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192177  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
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-T2-7050-ADJ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 52221 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G5

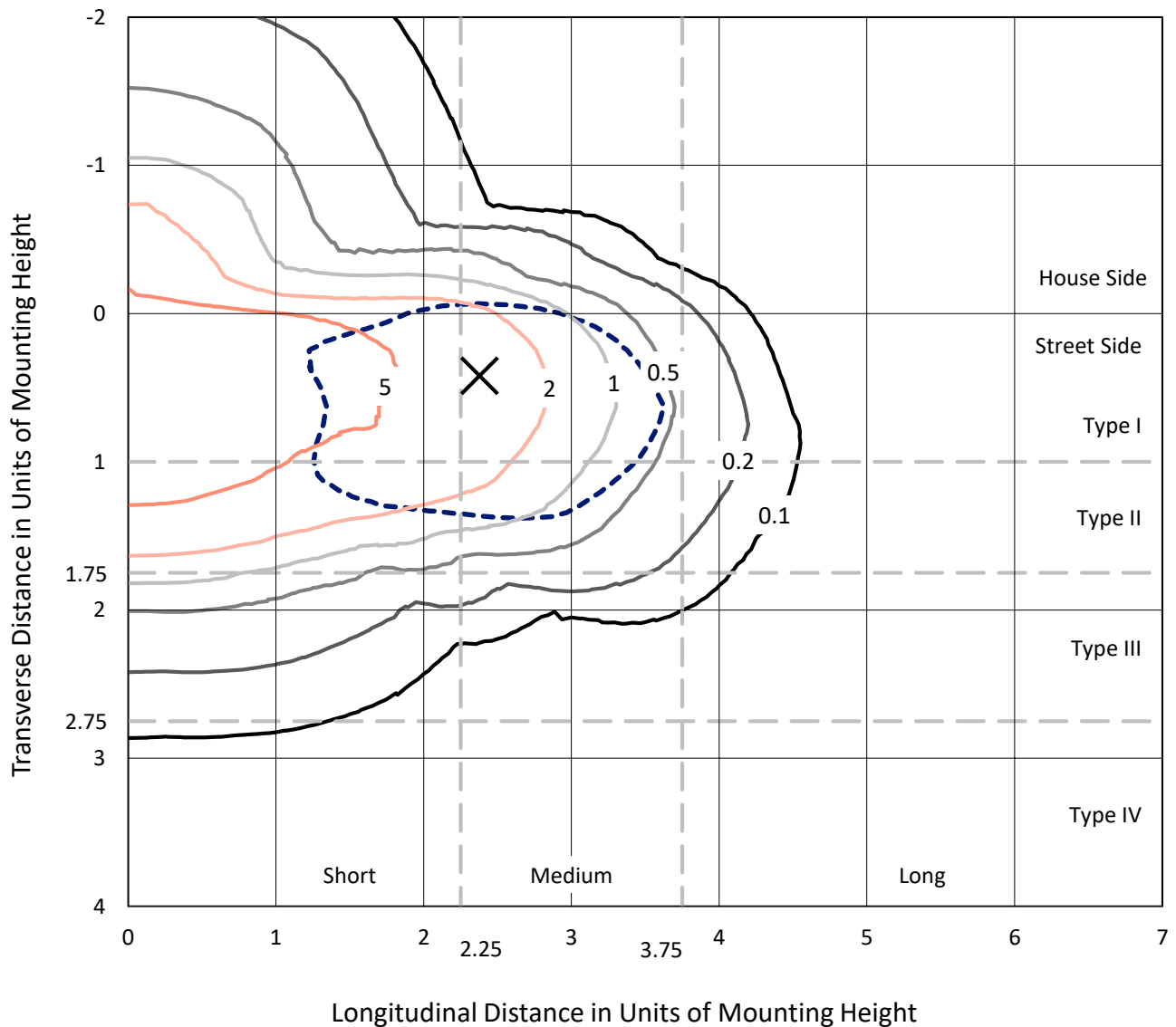
Input Watts (W): 501  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

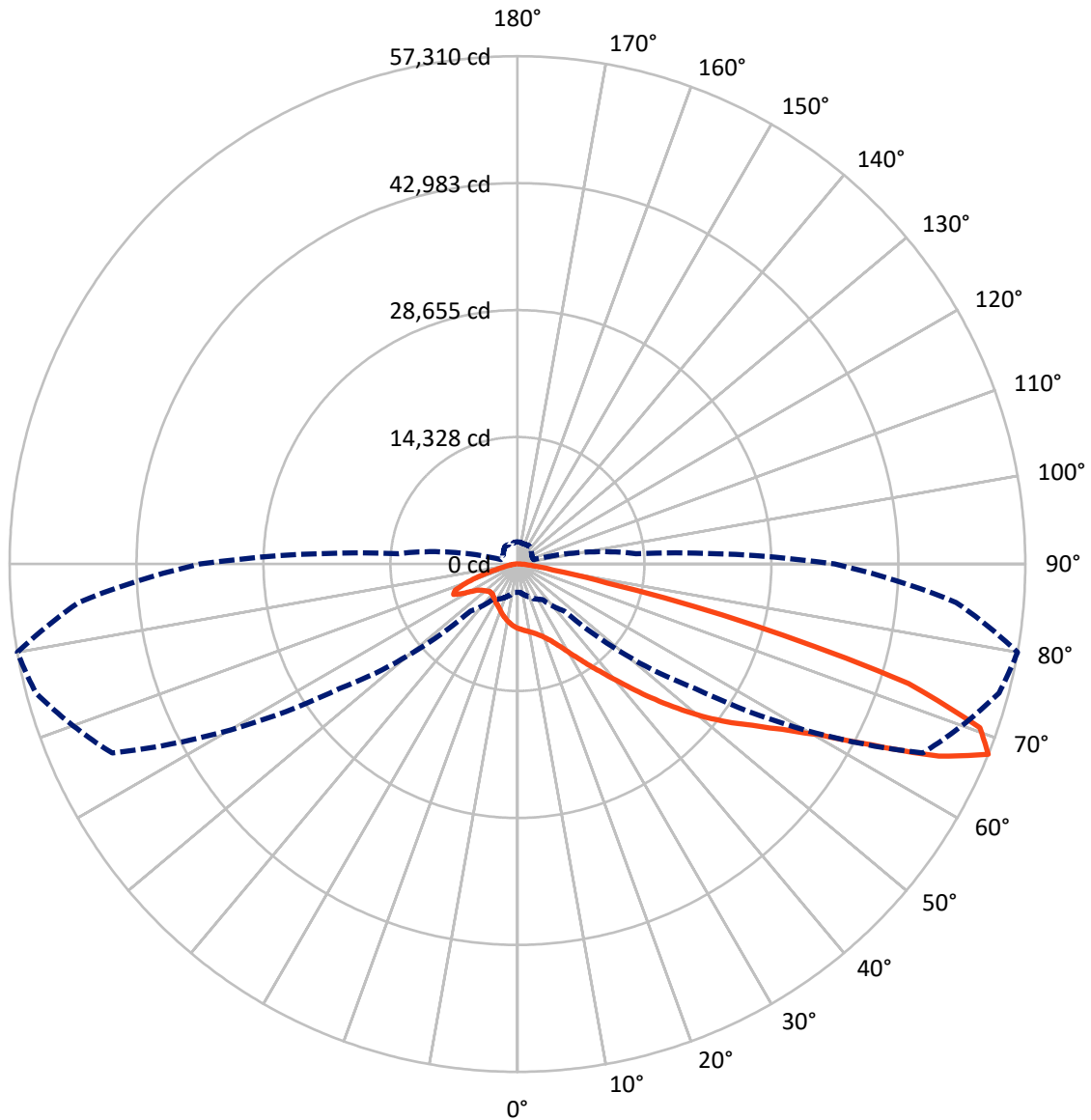
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.8 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9617.1   | 0.0    | 9617.1  |
|                    | % Fixture | 18.4     | 0.0    | 18.4    |
| <b>Street Side</b> | Lumens    | 42603.9  | 0.0    | 42603.9 |
|                    | % Fixture | 81.6     | 0.0    | 81.6    |
| <b>Total</b>       | Lumens    | 52221.0  | 0.0    | 52221.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 669.2   | 1.3       |
| 10°-20°   | 1927.9  | 3.7       |
| 20°-30°   | 3191.1  | 6.1       |
| 30°-40°   | 5219.8  | 10.0      |
| 40°-50°   | 8427.9  | 16.1      |
| 50°-60°   | 12167.4 | 23.3      |
| 60°-70°   | 13427.4 | 25.7      |
| 70°-80°   | 6189.2  | 11.9      |
| 80°-90°   | 1001.1  | 1.9       |
| 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°    | 52221.0 | 100.0     |
| 0°-180°   | 52221.0 | 100.0     |



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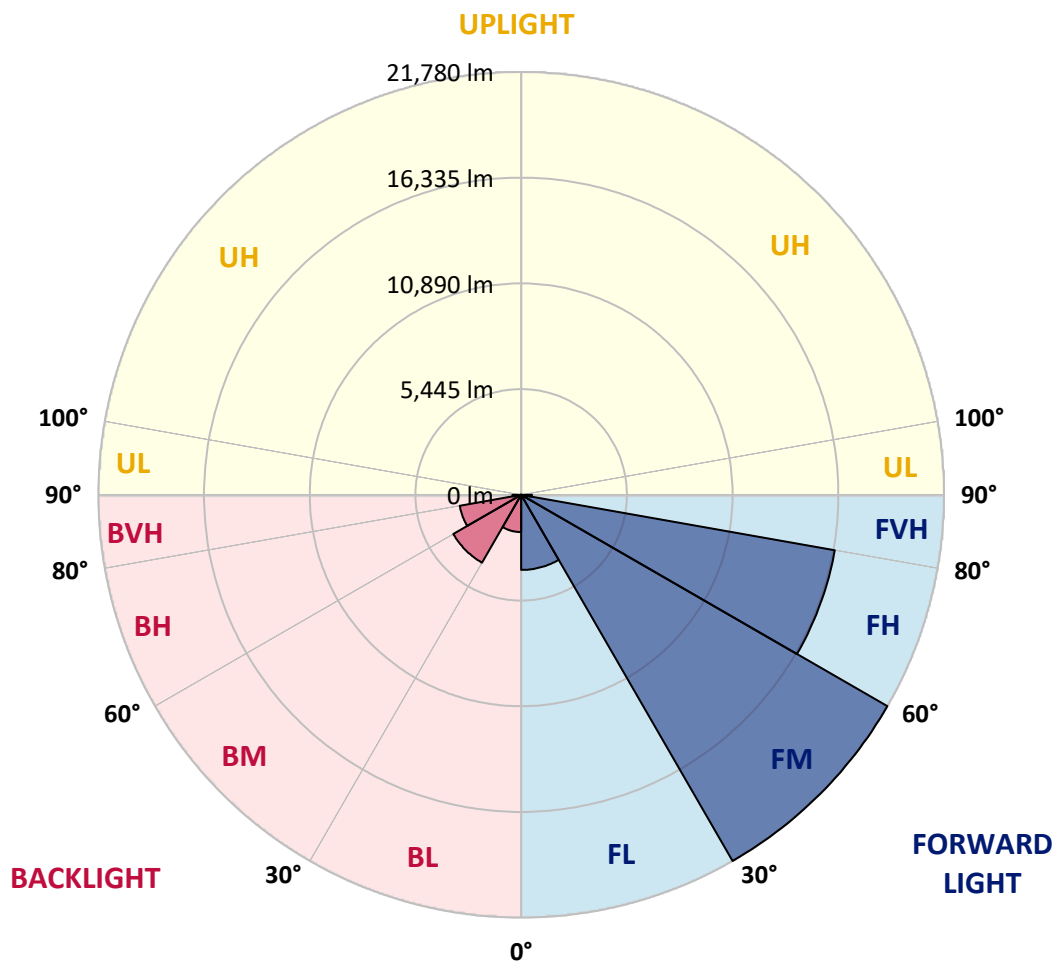
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3869.5  | 7.4       |                         |      |         |
| FM (30°-60°)   | 21780.0 | 41.7      |                         |      |         |
| FH (60°-80°)   | 16404.0 | 31.4      |                         |      | G5      |
| FVH (80°-90°)  | 550.4   | 1.1       |                         |      | G4/750  |
| BL (0°-30°)    | 1918.7  | 3.7       | B3/2500                 |      |         |
| BM (30°-60°)   | 4035.0  | 7.7       | B3/5000                 |      |         |
| BH (60°-80°)   | 3212.7  | 6.2       | B4/5000                 |      | G4/5000 |
| BVH (80°-90°)  | 450.7   | 0.9       |                         |      | G3/500  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 80°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  | 7255.0  |
| 2.5°  | 7936.3  | 7890.0  | 7897.7  | 7884.9  | 7846.3  | 7779.5  | 7707.5  | 7576.4  | 7440.1  | 7368.1  | 7311.6  |
| 5°    | 8599.6  | 8586.7  | 8568.7  | 8527.6  | 8429.9  | 8291.1  | 8118.8  | 7887.5  | 7638.1  | 7507.0  | 7381.0  |
| 7.5°  | 9095.8  | 9088.1  | 9064.9  | 9039.2  | 8944.1  | 8777.0  | 8517.3  | 8188.2  | 7825.8  | 7645.8  | 7450.4  |
| 10°   | 9136.9  | 9149.8  | 9167.7  | 9237.2  | 9250.0  | 9160.0  | 8895.2  | 8496.7  | 8021.1  | 7789.8  | 7540.4  |
| 12.5° | 8787.3  | 8815.5  | 8885.0  | 9062.3  | 9250.0  | 9360.6  | 9224.3  | 8820.7  | 8249.9  | 7969.7  | 7653.5  |
| 15°   | 8324.5  | 8339.9  | 8424.8  | 8669.0  | 9005.8  | 9347.7  | 9476.3  | 9178.0  | 8545.6  | 8201.1  | 7823.2  |
| 17.5° | 8126.5  | 8134.3  | 8193.4  | 8355.4  | 8669.0  | 9157.5  | 9617.7  | 9566.2  | 8908.1  | 8489.0  | 8031.4  |
| 20°   | 8026.3  | 8044.3  | 8129.1  | 8288.5  | 8486.5  | 8913.2  | 9638.2  | 9985.3  | 9340.0  | 8849.0  | 8293.7  |
| 22.5° | 8311.6  | 8303.9  | 8334.8  | 8414.5  | 8581.6  | 8838.7  | 9622.8  | 10417.2 | 9890.2  | 9311.7  | 8635.6  |
| 25°   | 8977.5  | 9005.8  | 8951.8  | 8861.8  | 8915.8  | 9095.8  | 9705.1  | 10885.1 | 10579.2 | 9905.6  | 9082.9  |
| 27.5° | 9926.2  | 9897.9  | 9818.2  | 9607.4  | 9496.8  | 9573.9  | 9977.6  | 11389.0 | 11435.3 | 10687.1 | 9674.2  |
| 30°   | 10872.2 | 10849.1 | 10772.0 | 10514.9 | 10288.7 | 10224.4 | 10507.2 | 11967.4 | 12455.9 | 11625.5 | 10399.2 |
| 32.5° | 11854.3 | 11828.6 | 11756.6 | 11499.5 | 11227.0 | 11077.9 | 11260.4 | 12635.9 | 13659.1 | 12746.4 | 11252.7 |
| 35°   | 13065.2 | 13016.4 | 12864.7 | 12507.3 | 12239.9 | 12124.3 | 12209.1 | 13476.5 | 15047.3 | 14073.0 | 12288.8 |
| 37.5° | 14204.1 | 14278.7 | 14124.4 | 13630.8 | 13283.7 | 13242.6 | 13337.7 | 14502.3 | 16543.6 | 15556.4 | 13479.1 |
| 40°   | 15348.1 | 15361.0 | 15222.2 | 14818.5 | 14461.2 | 14394.3 | 14633.4 | 15746.6 | 18309.8 | 17330.3 | 14926.5 |
| 42.5° | 16530.7 | 16556.4 | 16322.5 | 15949.7 | 15687.5 | 15700.3 | 15972.9 | 17204.3 | 20335.6 | 19420.4 | 16592.4 |
| 45°   | 17931.9 | 17970.4 | 17713.3 | 17224.9 | 16985.8 | 17466.5 | 17353.4 | 18839.4 | 22556.9 | 21795.9 | 18505.2 |
| 47.5° | 19397.3 | 19456.4 | 19261.0 | 18803.4 | 18505.2 | 19165.9 | 18734.0 | 20651.9 | 24947.8 | 24343.6 | 20605.6 |
| 50°   | 20196.8 | 20281.7 | 20471.9 | 20438.5 | 20374.2 | 20263.7 | 20273.9 | 22595.4 | 27413.3 | 26996.8 | 22765.1 |
| 52.5° | 19767.5 | 19764.9 | 20459.0 | 21302.3 | 22202.1 | 22268.9 | 22150.7 | 24644.4 | 29716.8 | 29590.8 | 24798.7 |
| 55°   | 17803.3 | 17937.0 | 18988.5 | 20621.0 | 23078.8 | 24613.6 | 24963.2 | 26991.6 | 31979.1 | 32125.7 | 26863.1 |
| 57.5° | 14533.2 | 14643.7 | 16062.8 | 18338.1 | 21896.2 | 26007.0 | 28963.5 | 30403.2 | 34508.9 | 35192.7 | 29611.4 |
| 60°   | 9856.7  | 9990.4  | 11494.4 | 14227.2 | 18713.4 | 25230.6 | 32771.0 | 36491.0 | 37537.4 | 39092.8 | 33467.7 |
| 62.5° | 5792.2  | 5913.0  | 7139.3  | 8974.9  | 13175.7 | 21623.6 | 34442.0 | 45152.3 | 42347.5 | 44977.5 | 39349.8 |
| 65°   | 3987.4  | 4069.7  | 4666.1  | 5586.5  | 7571.2  | 14564.0 | 32369.9 | 51132.2 | 49749.0 | 52268.5 | 46170.4 |
| 67.5° | 3208.5  | 3198.2  | 3671.2  | 4298.5  | 4874.4  | 7509.5  | 24477.3 | 50456.0 | 56258.5 | 57310.0 | 49710.5 |
| 70°   | 2642.9  | 2632.6  | 2953.9  | 3473.3  | 3894.9  | 4229.1  | 13332.6 | 42578.9 | 54931.9 | 55358.7 | 46450.6 |
| 72.5° | 2211.0  | 2221.2  | 2426.9  | 2812.5  | 3195.6  | 3185.3  | 5859.0  | 29953.3 | 43213.9 | 46165.2 | 37028.3 |
| 75°   | 1866.5  | 1871.6  | 2007.9  | 2280.4  | 2594.0  | 2565.7  | 3177.6  | 16227.4 | 25120.0 | 27174.2 | 20525.9 |
| 77.5° | 1588.8  | 1593.9  | 1681.4  | 1833.0  | 2056.7  | 2046.4  | 2318.9  | 7010.8  | 10478.9 | 10350.4 | 7021.1  |
| 80°   | 1416.6  | 1416.6  | 1457.7  | 1486.0  | 1609.4  | 1563.1  | 1719.9  | 3367.8  | 4429.6  | 4090.3  | 2802.3  |
| 82.5° | 1110.6  | 1115.8  | 1367.7  | 1357.4  | 1267.4  | 1208.3  | 1208.3  | 1984.7  | 2347.2  | 2169.8  | 1640.2  |
| 85°   | 624.7   | 622.2   | 881.8   | 1064.3  | 1115.8  | 851.0   | 843.2   | 1110.6  | 1277.7  | 1126.0  | 794.4   |
| 87.5° | 267.4   | 272.5   | 408.8   | 473.0   | 632.4   | 529.6   | 521.9   | 573.3   | 650.4   | 563.0   | 367.6   |
| 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°    | 7255.0  | 7255.0  | 7255.0 | 7255.0 | 7255.0 | 7255.0 | 7255.0 | 7255.0 | 7255.0 | 7255.0 | 7255.0 |
| 2.5°  | 7257.6  | 7190.7  | 7044.2 | 6861.7 | 6697.1 | 6589.2 | 6491.5 | 6350.1 | 6357.8 | 6260.1 | 6188.1 |
| 5°    | 7252.4  | 7113.6  | 6774.3 | 6370.6 | 5982.4 | 5702.2 | 5491.4 | 5301.1 | 5254.9 | 5164.9 | 5110.9 |
| 7.5°  | 7257.6  | 7031.3  | 6460.6 | 5815.3 | 5334.6 | 4979.8 | 4799.8 | 4699.6 | 4676.4 | 4645.6 | 4648.1 |
| 10°   | 7275.6  | 6956.8  | 6116.1 | 5296.0 | 4792.1 | 4558.2 | 4514.5 | 4545.3 | 4581.3 | 4591.6 | 4594.2 |
| 12.5° | 7316.7  | 6890.0  | 5738.2 | 4833.2 | 4452.8 | 4380.8 | 4455.3 | 4560.7 | 4630.2 | 4663.6 | 4661.0 |
| 15°   | 7409.3  | 6838.5  | 5375.7 | 4470.8 | 4265.1 | 4303.6 | 4442.5 | 4591.6 | 4691.9 | 4738.1 | 4740.7 |
| 17.5° | 7509.5  | 6764.0  | 5002.9 | 4193.1 | 4126.3 | 4224.0 | 4396.2 | 4571.0 | 4694.4 | 4745.8 | 4756.1 |
| 20°   | 7640.6  | 6671.4  | 4612.2 | 3984.9 | 3995.1 | 4105.7 | 4267.7 | 4442.5 | 4578.7 | 4622.4 | 4643.0 |
| 22.5° | 7812.9  | 6571.2  | 4270.2 | 3815.2 | 3846.0 | 3930.9 | 4056.8 | 4208.5 | 4326.8 | 4347.4 | 4365.3 |
| 25°   | 8044.3  | 6463.2  | 3997.7 | 3660.9 | 3673.8 | 3722.6 | 3807.5 | 3897.4 | 3979.7 | 3956.6 | 3974.6 |
| 27.5° | 8355.4  | 6370.6  | 3794.6 | 3519.5 | 3496.4 | 3506.7 | 3550.4 | 3578.7 | 3622.4 | 3558.1 | 3565.8 |
| 30°   | 8720.4  | 6270.4  | 3637.8 | 3396.1 | 3331.9 | 3313.9 | 3324.1 | 3339.6 | 3373.0 | 3285.6 | 3272.7 |
| 32.5° | 9144.6  | 6149.5  | 3491.3 | 3288.2 | 3198.2 | 3162.2 | 3167.3 | 3208.5 | 3337.0 | 3283.0 | 3254.7 |
| 35°   | 9638.2  | 6013.3  | 3337.0 | 3169.9 | 3108.2 | 3056.8 | 3051.6 | 3180.2 | 3563.2 | 3529.8 | 3504.1 |
| 37.5° | 10216.7 | 5877.0  | 3182.7 | 3036.2 | 3041.3 | 2984.8 | 2966.8 | 3113.3 | 3606.9 | 3475.8 | 3457.8 |
| 40°   | 10951.9 | 5805.0  | 3051.6 | 2894.8 | 2959.1 | 2951.4 | 2915.4 | 2989.9 | 3319.0 | 3079.9 | 3049.1 |
| 42.5° | 11862.0 | 5815.3  | 2953.9 | 2743.1 | 2861.4 | 2943.7 | 2887.1 | 2889.7 | 3007.9 | 2828.0 | 2799.7 |
| 45°   | 12985.5 | 5936.2  | 2884.5 | 2622.3 | 2750.8 | 2935.9 | 2876.8 | 2835.7 | 2846.0 | 2750.8 | 2735.4 |
| 47.5° | 14296.6 | 6185.5  | 2835.7 | 2522.0 | 2645.4 | 2907.7 | 2874.2 | 2820.3 | 2797.1 | 2745.7 | 2732.8 |
| 50°   | 15754.3 | 6548.0  | 2799.7 | 2426.9 | 2550.3 | 2861.4 | 2876.8 | 2804.8 | 2779.1 | 2758.6 | 2750.8 |
| 52.5° | 17186.3 | 6961.9  | 2745.7 | 2344.6 | 2475.8 | 2804.8 | 2884.5 | 2789.4 | 2761.1 | 2745.7 | 2738.0 |
| 55°   | 18782.8 | 7478.7  | 2663.4 | 2275.2 | 2414.1 | 2732.8 | 2884.5 | 2766.3 | 2735.4 | 2738.0 | 2735.4 |
| 57.5° | 20939.8 | 8314.2  | 2565.7 | 2216.1 | 2339.5 | 2645.4 | 2835.7 | 2740.6 | 2702.0 | 2704.6 | 2707.1 |
| 60°   | 24310.2 | 9787.3  | 2447.5 | 2157.0 | 2246.9 | 2542.6 | 2768.8 | 2684.0 | 2645.4 | 2655.7 | 2658.3 |
| 62.5° | 29266.9 | 11949.4 | 2293.2 | 2069.6 | 2149.3 | 2432.0 | 2676.3 | 2612.0 | 2573.4 | 2599.2 | 2599.2 |
| 65°   | 34418.9 | 13857.0 | 2103.0 | 1959.0 | 2046.4 | 2311.2 | 2560.6 | 2522.0 | 2483.5 | 2542.6 | 2540.0 |
| 67.5° | 35804.6 | 13430.3 | 1912.7 | 1838.2 | 1943.6 | 2177.5 | 2421.8 | 2401.2 | 2380.6 | 2483.5 | 2478.3 |
| 70°   | 31806.9 | 10782.3 | 1737.9 | 1714.8 | 1830.5 | 2033.6 | 2272.7 | 2272.7 | 2259.8 | 2336.9 | 2318.9 |
| 72.5° | 24233.1 | 7645.8  | 1570.8 | 1583.7 | 1701.9 | 1876.7 | 2110.7 | 2128.7 | 2108.1 | 2146.7 | 2131.3 |
| 75°   | 12972.6 | 4375.6  | 1403.7 | 1439.7 | 1542.5 | 1717.3 | 1930.7 | 1948.7 | 1935.9 | 1933.3 | 1941.0 |
| 77.5° | 4311.4  | 2139.0  | 1228.9 | 1285.4 | 1375.4 | 1552.8 | 1743.1 | 1771.3 | 1740.5 | 1735.3 | 1732.8 |
| 80°   | 1920.4  | 1344.6  | 1036.1 | 1110.6 | 1190.3 | 1365.1 | 1545.1 | 1568.2 | 1534.8 | 1581.1 | 1522.0 |
| 82.5° | 1234.0  | 884.4   | 830.4  | 912.7  | 989.8  | 1177.5 | 1347.1 | 1352.3 | 1321.4 | 1534.8 | 1308.6 |
| 85°   | 599.0   | 547.6   | 624.7  | 699.3  | 766.1  | 925.5  | 1115.8 | 1118.3 | 1041.2 | 948.7  | 915.2  |
| 87.5° | 298.2   | 318.8   | 416.5  | 483.3  | 516.7  | 635.0  | 812.4  | 797.0  | 763.6  | 694.1  | 640.1  |
| 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)