

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: P191578

Luminaire Tested: **GAN-AF-10-LED-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191578  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-10-LED-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59848.8 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G5

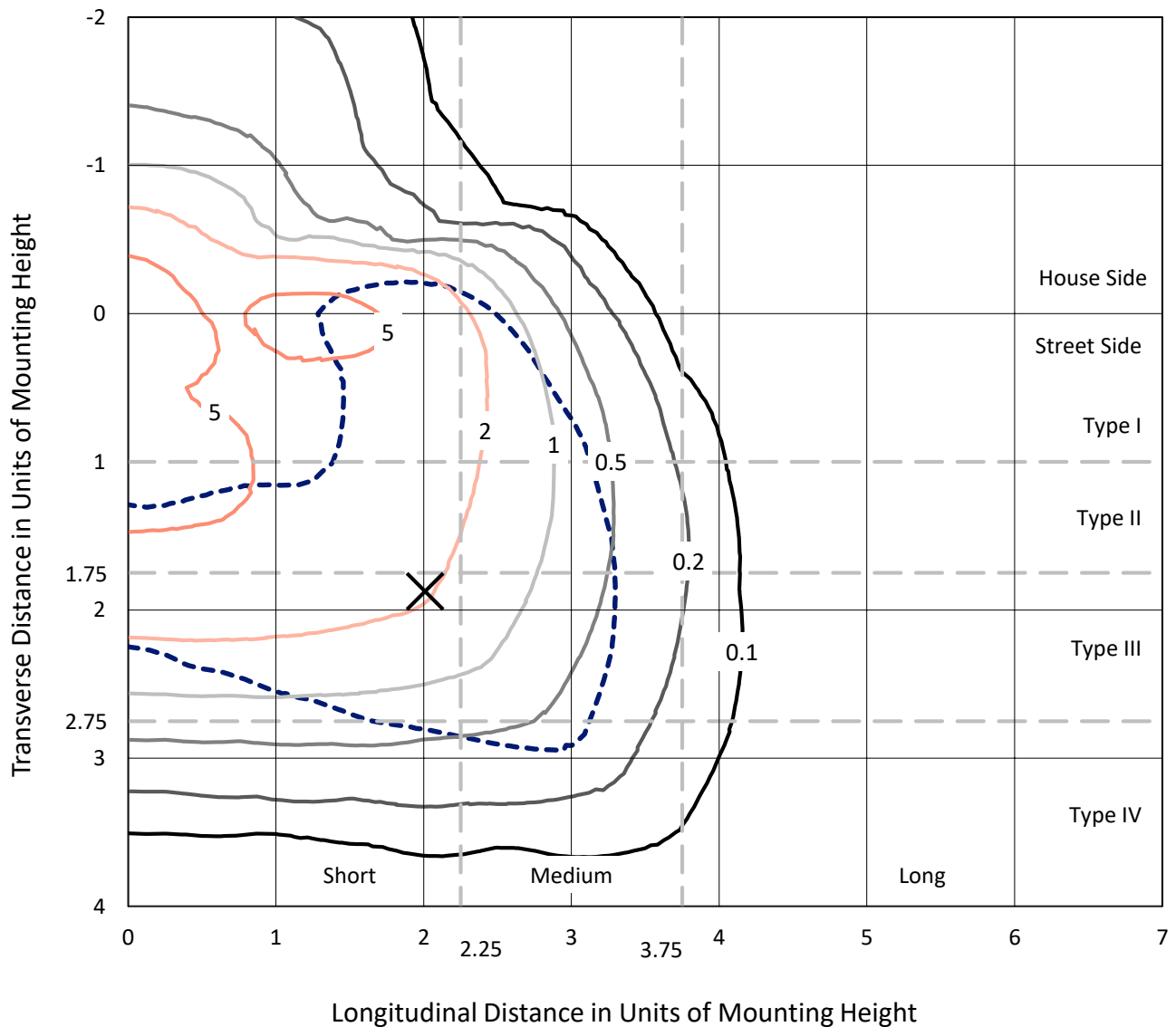
Input Watts (W): 558  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

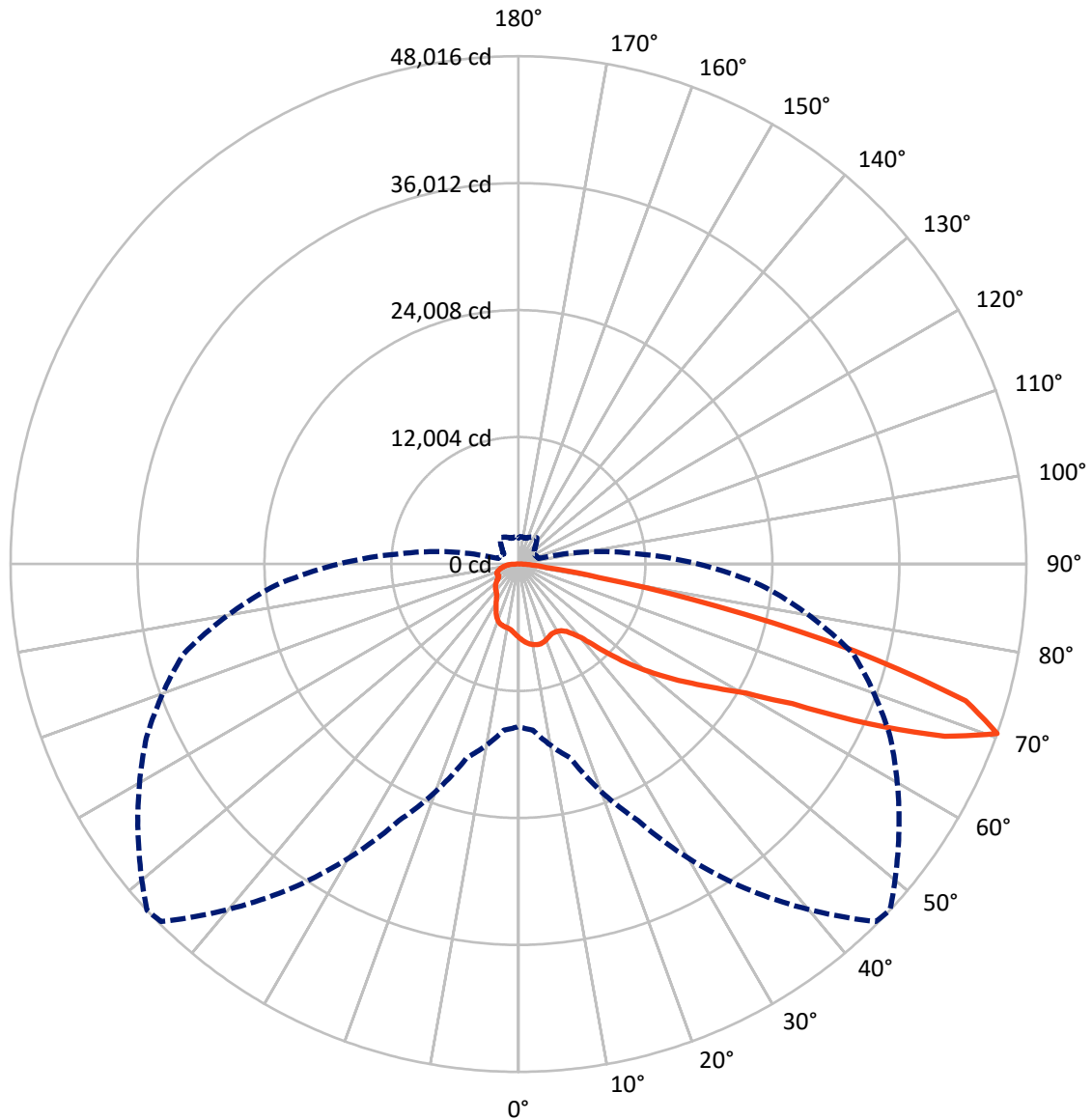
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12485.6  | 0.0    | 12485.6 |
|                    | % Fixture | 20.9     | 0.0    | 20.9    |
| <b>Street Side</b> | Lumens    | 47363.1  | 0.0    | 47363.1 |
|                    | % Fixture | 79.1     | 0.0    | 79.1    |
| <b>Total</b>       | Lumens    | 59848.8  | 0.0    | 59848.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 665.4   | 1.1       |
| 10°-20°   | 1952.1  | 3.3       |
| 20°-30°   | 2882.7  | 4.8       |
| 30°-40°   | 4189.9  | 7.0       |
| 40°-50°   | 7540.4  | 12.6      |
| 50°-60°   | 13062.9 | 21.8      |
| 60°-70°   | 18644.5 | 31.2      |
| 70°-80°   | 9571.1  | 16.0      |
| 80°-90°   | 1340.0  | 2.2       |
| 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°    | 59848.8 | 100.0     |
| 0°-180°   | 59848.8 | 100.0     |

**Coefficient of Utilization**



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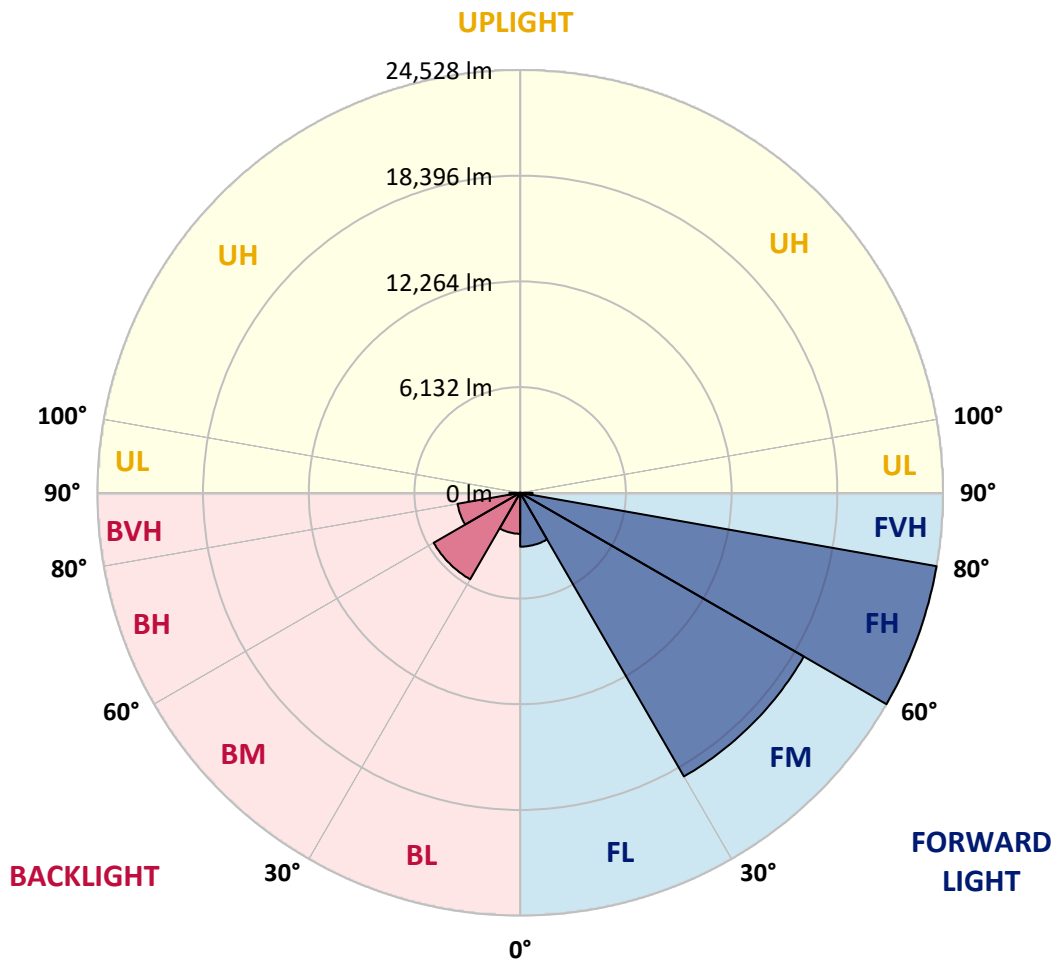
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3122.8  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 18997.7 | 31.7      |                         |      |         |
| FH   | (60°-80°)   | 24527.7 | 41.0      |                         |      | G5      |
| FVH  | (80°-90°)   | 715.0   | 1.2       |                         |      | G4/750  |
| BL   | (0°-30°)    | 2377.3  | 4.0       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 5795.5  | 9.7       | B4/8500                 |      |         |
| BH   | (60°-80°)   | 3687.9  | 6.2       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 625.0   | 1.0       |                         |      | G4/750  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 47°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  | 6944.3  |
| 2.5°  | 7351.9  | 7337.4  | 7331.6  | 7319.9  | 7305.4  | 7232.6  | 7218.0  | 7165.6  | 7092.8  | 7017.1  | 6938.5  |
| 5°    | 7835.3  | 7832.4  | 7800.3  | 7742.1  | 7648.9  | 7488.8  | 7451.0  | 7322.8  | 7151.0  | 6985.1  | 6819.1  |
| 7.5°  | 8260.4  | 8234.1  | 8173.1  | 8056.6  | 7893.5  | 7675.1  | 7622.7  | 7445.1  | 7209.2  | 6982.2  | 6758.0  |
| 10°   | 8571.9  | 8557.4  | 8423.5  | 8263.3  | 8050.7  | 7809.1  | 7747.9  | 7550.0  | 7290.8  | 7002.5  | 6723.0  |
| 12.5° | 8749.5  | 8720.5  | 8566.1  | 8374.0  | 8120.6  | 7884.8  | 7823.6  | 7622.7  | 7331.6  | 7002.5  | 6673.5  |
| 15°   | 8737.9  | 8717.5  | 8563.2  | 8353.5  | 8097.4  | 7890.6  | 7835.3  | 7634.4  | 7322.8  | 6973.5  | 6609.5  |
| 17.5° | 8505.0  | 8513.7  | 8382.7  | 8175.9  | 7966.3  | 7809.1  | 7759.6  | 7573.2  | 7264.6  | 6915.2  | 6533.8  |
| 20°   | 8097.4  | 8138.1  | 8050.7  | 7867.3  | 7750.9  | 7643.1  | 7611.1  | 7453.8  | 7174.4  | 6830.8  | 6452.3  |
| 22.5° | 7689.7  | 7727.6  | 7692.6  | 7538.3  | 7520.8  | 7456.8  | 7439.3  | 7325.8  | 7095.7  | 6778.4  | 6402.8  |
| 25°   | 7389.8  | 7424.8  | 7419.0  | 7284.9  | 7337.4  | 7334.5  | 7319.9  | 7264.6  | 7078.2  | 6778.4  | 6411.4  |
| 27.5° | 7308.3  | 7319.9  | 7308.3  | 7186.0  | 7258.8  | 7317.0  | 7305.4  | 7296.6  | 7130.7  | 6862.8  | 6522.1  |
| 30°   | 7587.8  | 7570.3  | 7480.0  | 7232.6  | 7299.6  | 7381.1  | 7369.4  | 7375.3  | 7287.9  | 7084.0  | 6769.6  |
| 32.5° | 8703.0  | 8624.4  | 8339.0  | 7643.1  | 7465.5  | 7509.2  | 7515.0  | 7611.1  | 7625.7  | 7424.8  | 7154.0  |
| 35°   | 10371.4 | 10284.0 | 9914.2  | 8743.8  | 7980.9  | 7829.5  | 7829.5  | 7975.0  | 8062.4  | 7913.9  | 7750.9  |
| 37.5° | 12138.7 | 12042.7 | 11844.6 | 10269.4 | 9064.1  | 8385.6  | 8371.0  | 8472.9  | 8598.1  | 8633.1  | 8673.8  |
| 40°   | 14147.8 | 14045.8 | 14101.2 | 11981.5 | 10575.2 | 9349.4  | 9142.6  | 9069.8  | 9407.6  | 9631.8  | 9957.9  |
| 42.5° | 16346.0 | 16299.5 | 16319.9 | 13888.6 | 12296.0 | 10790.6 | 10496.6 | 10121.0 | 10528.6 | 10927.5 | 11611.7 |
| 45°   | 18381.3 | 18422.1 | 18401.8 | 15929.7 | 14211.9 | 12549.3 | 12237.8 | 11509.8 | 11908.7 | 12592.9 | 13708.2 |
| 47.5° | 20163.3 | 19994.4 | 20256.5 | 18160.0 | 16357.7 | 14517.5 | 14133.2 | 13157.8 | 13562.5 | 14406.9 | 16293.7 |
| 50°   | 22326.6 | 22303.4 | 21919.0 | 21135.8 | 18952.0 | 16494.6 | 15990.9 | 14861.1 | 15490.0 | 16663.5 | 19551.9 |
| 52.5° | 24600.6 | 24178.5 | 23826.2 | 23450.5 | 21703.5 | 18521.1 | 17903.8 | 16558.6 | 17755.4 | 19231.6 | 23523.4 |
| 55°   | 25066.5 | 24877.2 | 25314.0 | 25945.8 | 24356.0 | 20626.3 | 19907.0 | 18687.1 | 20306.0 | 22166.5 | 28103.4 |
| 57.5° | 26062.3 | 26059.4 | 26962.0 | 28088.8 | 27087.2 | 22859.5 | 22134.5 | 21258.0 | 23173.9 | 25529.5 | 32965.8 |
| 60°   | 26734.9 | 26924.2 | 28601.3 | 30788.0 | 29768.9 | 25439.3 | 24772.4 | 24225.0 | 26435.0 | 29288.4 | 37496.4 |
| 62.5° | 27087.2 | 27343.5 | 29632.0 | 31882.7 | 33559.8 | 29733.9 | 29067.1 | 28278.0 | 30750.1 | 33411.3 | 40146.0 |
| 65°   | 25622.7 | 26126.4 | 29471.8 | 32829.0 | 36879.1 | 36695.7 | 36395.8 | 35009.9 | 36145.4 | 36669.5 | 39188.1 |
| 67.5° | 21569.6 | 22085.0 | 25980.8 | 31946.8 | 39249.2 | 43410.0 | 43474.1 | 41106.9 | 39464.7 | 36949.0 | 32948.4 |
| 70°   | 15367.8 | 15772.5 | 18995.7 | 26784.4 | 37444.0 | 47797.9 | 48016.3 | 43916.6 | 38803.8 | 32767.9 | 23019.7 |
| 72.5° | 7296.6  | 7544.2  | 10595.5 | 17432.1 | 29713.6 | 43794.4 | 44216.5 | 40329.4 | 32995.0 | 24260.0 | 12558.1 |
| 75°   | 2681.7  | 2757.4  | 3581.4  | 7416.0  | 17234.2 | 32296.2 | 32794.1 | 28909.9 | 21872.4 | 12077.6 | 4783.8  |
| 77.5° | 1607.3  | 1656.8  | 2009.1  | 3130.0  | 6778.4  | 18460.0 | 19196.6 | 15723.0 | 9559.0  | 4495.6  | 2352.6  |
| 80°   | 1123.9  | 1158.8  | 1441.2  | 1947.9  | 3202.9  | 7034.6  | 7689.7  | 6417.3  | 3808.4  | 2844.7  | 1712.0  |
| 82.5° | 760.0   | 777.4   | 1013.2  | 1316.0  | 2128.5  | 2512.8  | 2710.7  | 2853.4  | 2568.1  | 2116.8  | 1086.1  |
| 85°   | 497.9   | 515.4   | 687.1   | 867.7   | 1353.9  | 1298.6  | 1327.7  | 1680.0  | 1875.1  | 1438.4  | 602.7   |
| 87.5° | 285.3   | 297.0   | 413.5   | 463.0   | 663.9   | 550.3   | 556.2   | 885.2   | 1199.6  | 969.6   | 366.8   |
| 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°    | 6944.3  | 6944.3  | 6944.3 | 6944.3 | 6944.3 | 6944.3 | 6944.3 | 6944.3 | 6944.3 | 6944.3 | 6944.3 |
| 2.5°  | 6918.1  | 6880.3  | 6795.9 | 6743.4 | 6693.9 | 6682.2 | 6661.9 | 6659.0 | 6656.0 | 6656.0 | 6647.3 |
| 5°    | 6763.8  | 6699.7  | 6568.7 | 6495.9 | 6434.8 | 6428.9 | 6426.1 | 6440.6 | 6446.4 | 6452.3 | 6443.5 |
| 7.5°  | 6664.8  | 6577.5  | 6414.4 | 6309.6 | 6236.8 | 6219.3 | 6248.4 | 6315.4 | 6359.1 | 6376.6 | 6367.8 |
| 10°   | 6603.7  | 6495.9  | 6306.7 | 6193.1 | 6132.0 | 6123.2 | 6161.1 | 6239.7 | 6329.9 | 6364.9 | 6361.9 |
| 12.5° | 6533.8  | 6411.4  | 6210.5 | 6091.2 | 6056.3 | 6073.8 | 6123.2 | 6196.0 | 6289.2 | 6344.5 | 6347.4 |
| 15°   | 6463.9  | 6321.2  | 6114.5 | 6009.6 | 5995.1 | 6018.4 | 6065.0 | 6120.3 | 6193.1 | 6248.4 | 6254.2 |
| 17.5° | 6379.4  | 6231.0  | 6024.3 | 5916.5 | 5904.9 | 5916.5 | 5919.4 | 5948.6 | 5995.1 | 6047.5 | 6062.1 |
| 20°   | 6289.2  | 6137.8  | 5922.4 | 5814.6 | 5762.2 | 5715.6 | 5663.2 | 5669.0 | 5683.6 | 5736.0 | 5747.7 |
| 22.5° | 6225.2  | 6073.8  | 5843.7 | 5695.2 | 5555.4 | 5415.7 | 5310.9 | 5296.3 | 5302.2 | 5345.8 | 5360.4 |
| 25°   | 6231.0  | 6070.8  | 5823.4 | 5567.1 | 5261.3 | 5037.2 | 4897.4 | 4874.2 | 4871.2 | 4903.2 | 4923.7 |
| 27.5° | 6344.5  | 6184.4  | 5899.1 | 5436.1 | 4941.1 | 4609.2 | 4460.7 | 4443.2 | 4419.9 | 4428.7 | 4452.0 |
| 30°   | 6597.8  | 6449.3  | 6082.5 | 5302.2 | 4594.6 | 4189.9 | 4035.5 | 4018.0 | 3986.0 | 3971.5 | 3989.0 |
| 32.5° | 7011.3  | 6889.0  | 6350.4 | 5174.0 | 4248.1 | 3831.8 | 3674.5 | 3636.7 | 3616.3 | 3598.8 | 3613.4 |
| 35°   | 7698.4  | 7646.0  | 6708.5 | 5034.2 | 3942.4 | 3555.2 | 3412.5 | 3354.3 | 3325.1 | 3357.1 | 3380.4 |
| 37.5° | 8775.8  | 8804.8  | 7177.2 | 4815.8 | 3706.6 | 3371.7 | 3252.4 | 3185.4 | 3141.7 | 3167.9 | 3194.1 |
| 40°   | 10301.4 | 10321.9 | 7695.6 | 4507.2 | 3502.7 | 3263.9 | 3135.9 | 3074.7 | 3013.6 | 2967.0 | 2964.1 |
| 42.5° | 12304.7 | 12097.9 | 8205.1 | 4172.4 | 3266.9 | 3197.0 | 3054.3 | 2978.6 | 2885.4 | 2757.4 | 2731.2 |
| 45°   | 14680.6 | 13955.6 | 8592.3 | 3788.1 | 3002.0 | 3115.5 | 2964.1 | 2859.2 | 2713.7 | 2573.9 | 2559.3 |
| 47.5° | 17417.6 | 15950.1 | 8781.6 | 3389.1 | 2754.4 | 2996.1 | 2853.4 | 2687.5 | 2504.1 | 2434.1 | 2425.4 |
| 50°   | 20760.2 | 18317.3 | 8871.8 | 3002.0 | 2539.0 | 2838.9 | 2693.3 | 2498.3 | 2343.9 | 2329.4 | 2320.6 |
| 52.5° | 24565.8 | 21164.9 | 8901.0 | 2684.5 | 2361.4 | 2635.0 | 2562.3 | 2373.0 | 2250.7 | 2262.4 | 2262.4 |
| 55°   | 28548.8 | 24105.6 | 8505.0 | 2454.6 | 2198.3 | 2425.4 | 2474.9 | 2323.5 | 2221.6 | 2268.2 | 2285.7 |
| 57.5° | 32206.0 | 26711.6 | 7258.8 | 2276.9 | 2044.0 | 2265.3 | 2442.9 | 2370.1 | 2300.2 | 2489.5 | 2501.1 |
| 60°   | 35012.7 | 28251.9 | 5421.5 | 2116.8 | 1930.4 | 2210.0 | 2527.3 | 2547.7 | 2565.2 | 3016.5 | 3077.6 |
| 62.5° | 35600.9 | 27739.5 | 3726.9 | 1991.6 | 1878.0 | 2256.5 | 2681.7 | 2684.5 | 2664.2 | 2978.6 | 3016.5 |
| 65°   | 32901.8 | 24498.8 | 2710.7 | 1921.7 | 1834.4 | 2341.0 | 2812.7 | 2751.5 | 2617.6 | 2856.4 | 2786.4 |
| 67.5° | 26129.2 | 18457.0 | 2256.5 | 1869.2 | 1770.3 | 2335.2 | 2952.4 | 2812.7 | 2591.3 | 2798.1 | 2684.5 |
| 70°   | 16960.4 | 11160.4 | 2009.1 | 1825.7 | 1694.6 | 2224.5 | 3034.0 | 2806.9 | 2515.6 | 2603.0 | 2469.1 |
| 72.5° | 8275.0  | 4990.6  | 1843.1 | 1761.5 | 1616.0 | 2070.1 | 3031.0 | 2754.4 | 2437.1 | 2431.2 | 2358.4 |
| 75°   | 3237.7  | 2285.7  | 1691.7 | 1665.5 | 1482.1 | 1895.5 | 2949.5 | 2678.7 | 2343.9 | 2250.7 | 2224.5 |
| 77.5° | 1895.5  | 1630.5  | 1499.5 | 1522.8 | 1321.9 | 1720.8 | 2830.1 | 2547.7 | 2215.8 | 2105.1 | 2076.0 |
| 80°   | 1380.2  | 1220.0  | 1278.2 | 1316.0 | 1129.7 | 1546.1 | 2670.0 | 2387.6 | 2073.1 | 2128.5 | 2087.6 |
| 82.5° | 885.2   | 786.1   | 1036.6 | 1074.4 | 940.5  | 1368.5 | 2495.3 | 2218.7 | 1872.2 | 1700.5 | 1659.6 |
| 85°   | 451.3   | 497.9   | 771.6  | 818.2  | 725.0  | 1123.9 | 2282.7 | 1994.4 | 1645.1 | 1415.0 | 1438.4 |
| 87.5° | 253.3   | 340.6   | 492.0  | 550.3  | 512.5  | 864.8  | 1851.8 | 1645.1 | 1342.3 | 1091.9 | 960.9  |
| 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)