

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: P194087

Luminaire Tested: **GAN-AF-09-LED-U-T4FT-8030-1200**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P194087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
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-T4FT-8030-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 47920 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 575  
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

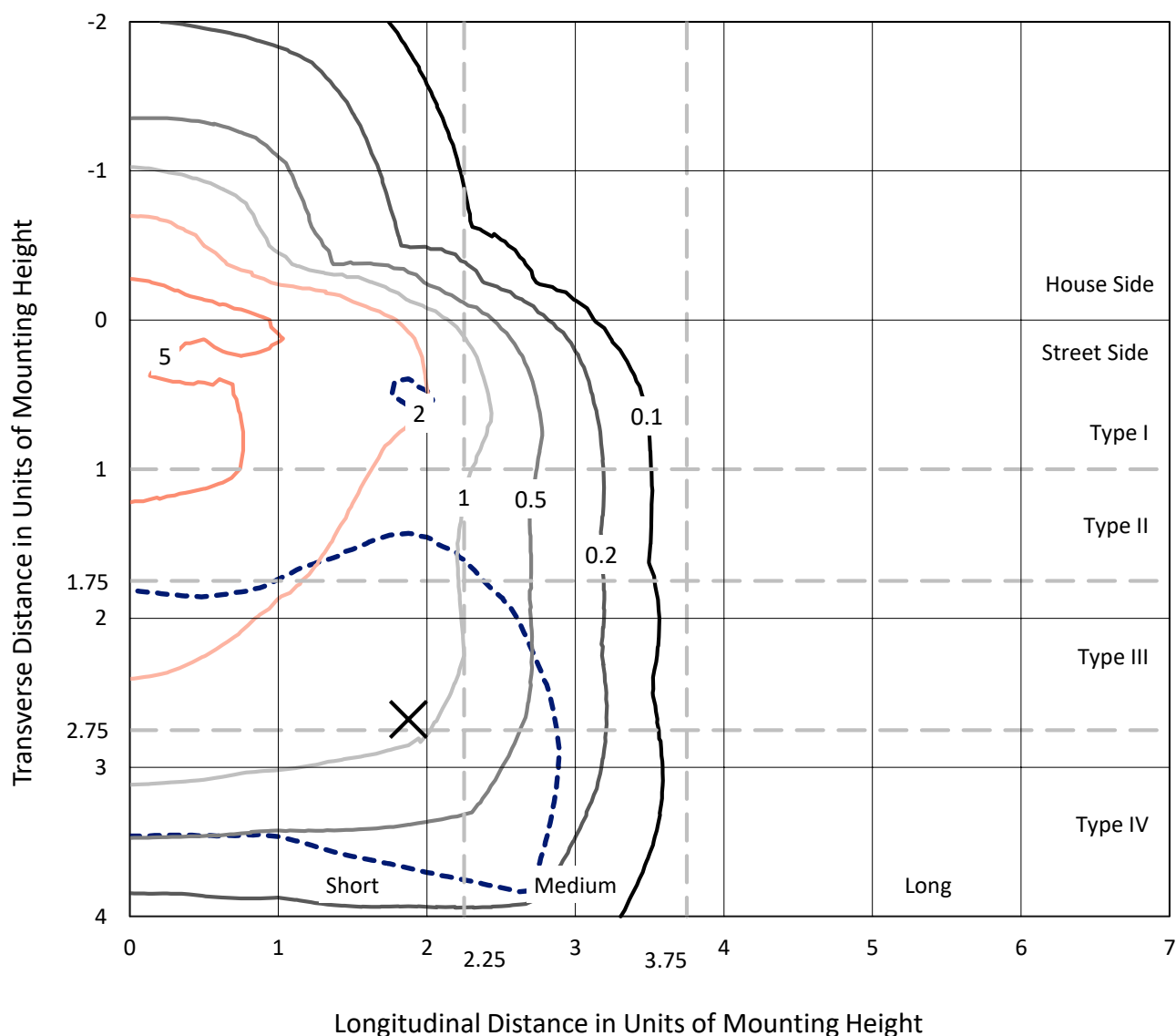


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

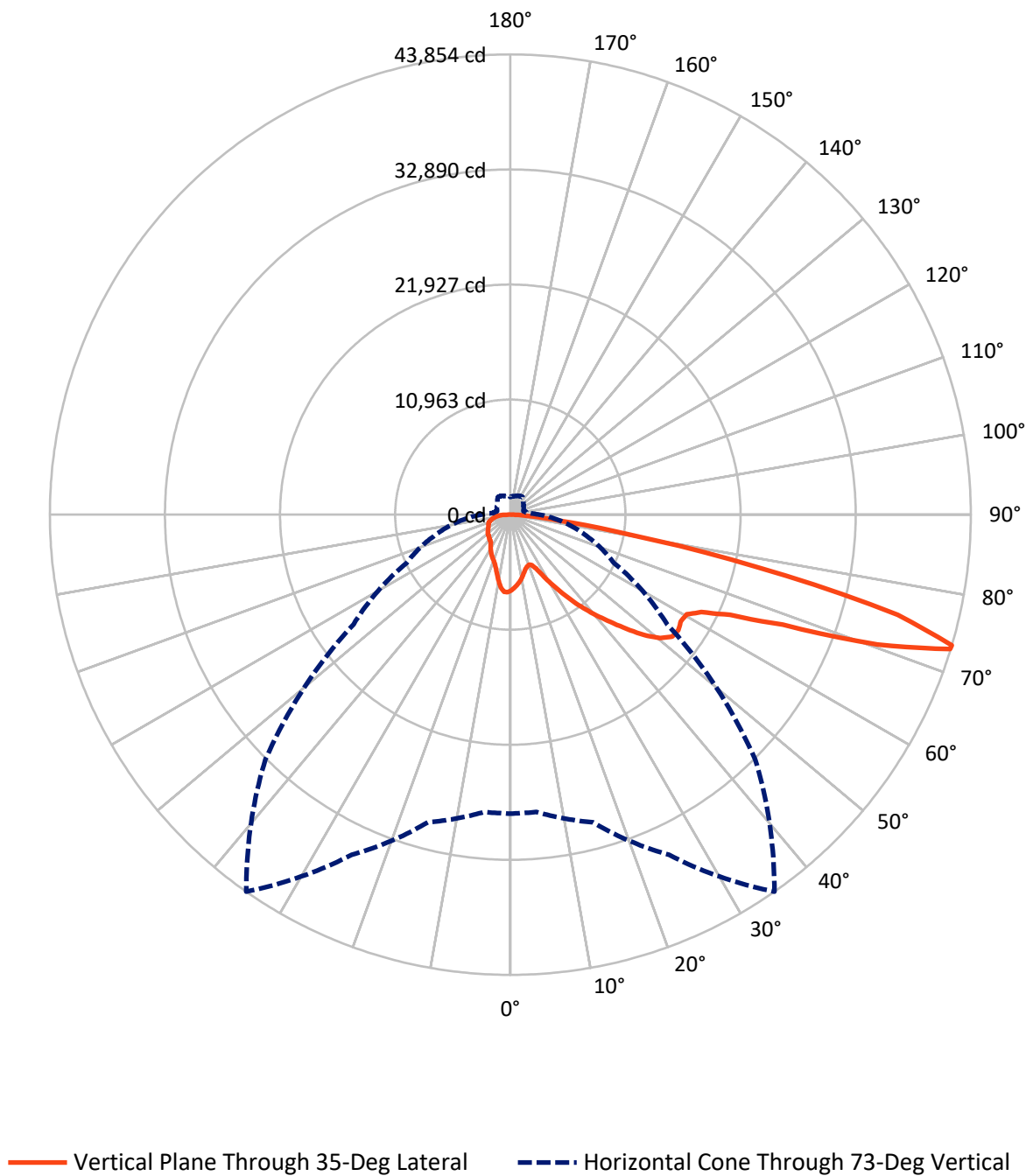


Based on 30 foot mounting height. Maximum calculated value = 8 fc  
Type IV - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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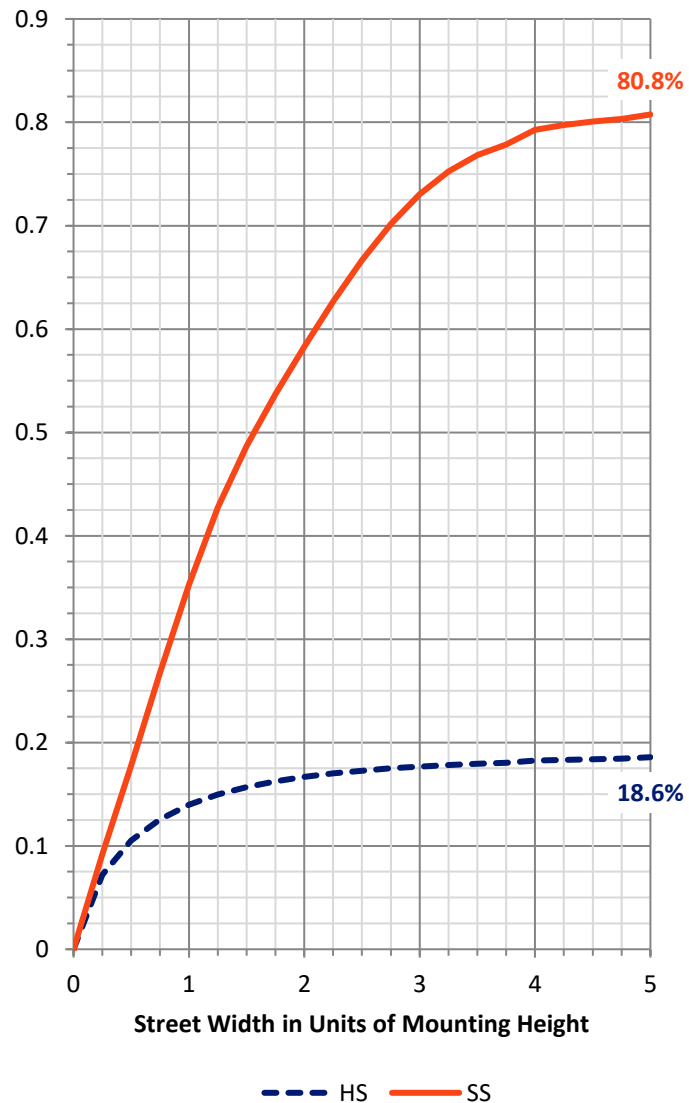
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9139.7   | 0.0    | 9139.7  |
|                    | % Fixture | 19.1     | 0.0    | 19.1    |
| <b>Street Side</b> | Lumens    | 38780.3  | 0.0    | 38780.3 |
|                    | % Fixture | 80.9     | 0.0    | 80.9    |
| <b>Total</b>       | Lumens    | 47920.0  | 0.0    | 47920.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 654.8   | 1.4       |
| 10°-20°   | 1634.2  | 3.4       |
| 20°-30°   | 2641.9  | 5.5       |
| 30°-40°   | 4430.1  | 9.2       |
| 40°-50°   | 6828.8  | 14.3      |
| 50°-60°   | 9161.5  | 19.1      |
| 60°-70°   | 12205.0 | 25.5      |
| 70°-80°   | 9308.7  | 19.4      |
| 80°-90°   | 1055.1  | 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°    | 47920.0 | 100.0     |
| 0°-180°   | 47920.0 | 100.0     |

**Coefficient of Utilization**



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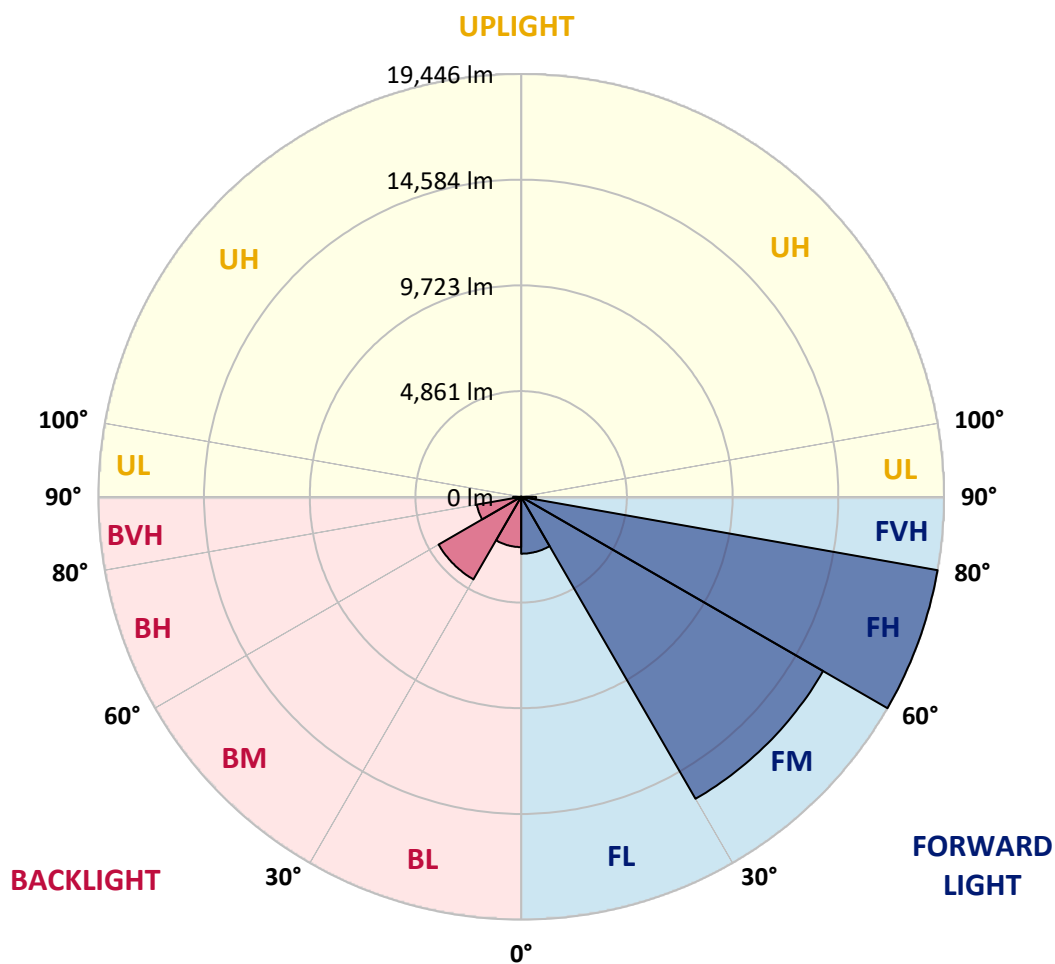
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2618.0  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 16034.3 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 19445.9 | 40.6      |                         |      | G5      |
| FVH  | (80°-90°)   | 682.0   | 1.4       |                         |      | G4/750  |
| BL   | (0°-30°)    | 2312.8  | 4.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4386.0  | 9.2       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2067.8  | 4.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 373.1   | 0.8       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  | 7232.6  |
| 2.5°  | 6947.3  | 6961.1  | 6945.0  | 6965.7  | 7000.2  | 7037.0  | 7062.3  | 7099.1  | 7140.6  | 7198.1  | 7211.9  |
| 5°    | 6620.5  | 6641.2  | 6641.2  | 6678.0  | 6744.8  | 6804.6  | 6859.8  | 6919.7  | 7007.1  | 7106.1  | 7145.2  |
| 7.5°  | 6261.5  | 6273.0  | 6293.7  | 6349.0  | 6445.6  | 6530.8  | 6609.0  | 6705.6  | 6825.3  | 6956.5  | 7025.5  |
| 10°   | 5828.9  | 5845.0  | 5877.2  | 5955.5  | 6086.6  | 6204.0  | 6316.7  | 6450.2  | 6602.1  | 6765.5  | 6852.9  |
| 12.5° | 5522.8  | 5518.2  | 5532.0  | 5589.6  | 5704.6  | 5847.3  | 6010.7  | 6181.0  | 6367.4  | 6558.4  | 6664.2  |
| 15°   | 5419.3  | 5394.0  | 5341.0  | 5327.2  | 5389.4  | 5532.0  | 5720.7  | 5930.1  | 6153.4  | 6383.5  | 6514.6  |
| 17.5° | 5483.7  | 5440.0  | 5295.0  | 5189.2  | 5180.0  | 5288.1  | 5488.3  | 5723.0  | 5980.8  | 6261.5  | 6424.9  |
| 20°   | 5888.7  | 5785.2  | 5428.5  | 5182.3  | 5097.1  | 5150.0  | 5324.9  | 5573.5  | 5877.2  | 6250.0  | 6459.4  |
| 22.5° | 6857.5  | 6705.6  | 5948.6  | 5490.6  | 5203.0  | 5138.5  | 5269.7  | 5534.3  | 5888.7  | 6392.7  | 6659.6  |
| 25°   | 8268.1  | 8051.8  | 6841.4  | 6259.2  | 5665.5  | 5322.6  | 5352.6  | 5624.1  | 6052.1  | 6724.1  | 7046.2  |
| 27.5° | 9381.9  | 9241.5  | 8008.1  | 7343.1  | 6507.7  | 5819.7  | 5621.8  | 5849.6  | 6385.8  | 7267.1  | 7596.2  |
| 30°   | 10044.7 | 9959.5  | 9255.4  | 8571.9  | 7582.4  | 6611.3  | 6137.3  | 6273.0  | 6908.1  | 8019.6  | 8291.2  |
| 32.5° | 10813.3 | 10762.6 | 10417.5 | 9789.2  | 8742.2  | 7651.4  | 6954.2  | 6905.8  | 7607.7  | 8924.0  | 9048.2  |
| 35°   | 11609.5 | 11593.4 | 11390.9 | 10939.8 | 9987.1  | 9022.9  | 8038.0  | 7711.3  | 8369.4  | 9862.9  | 9784.6  |
| 37.5° | 12350.4 | 12322.8 | 12205.5 | 11943.1 | 11289.6 | 10495.7 | 9142.6  | 8537.4  | 9190.9  | 10760.3 | 10412.9 |
| 40°   | 13715.0 | 13498.7 | 13096.0 | 12898.1 | 12605.9 | 11736.0 | 10019.3 | 9308.3  | 10042.4 | 11616.4 | 10955.9 |
| 42.5° | 15378.8 | 15026.7 | 14276.5 | 14005.0 | 13963.6 | 12714.0 | 10617.7 | 10056.2 | 10900.7 | 12465.5 | 11489.8 |
| 45°   | 16688.2 | 16356.8 | 15710.2 | 15367.3 | 15519.2 | 13600.0 | 11218.3 | 10854.7 | 11784.4 | 13356.1 | 12039.8 |
| 47.5° | 18085.0 | 17564.9 | 16708.9 | 16812.4 | 17143.8 | 14437.6 | 11830.4 | 11713.0 | 12753.2 | 14352.5 | 12723.2 |
| 50°   | 18135.6 | 17737.5 | 17362.4 | 17981.4 | 18496.9 | 15208.5 | 12596.7 | 12612.8 | 13938.3 | 15606.6 | 13632.2 |
| 52.5° | 17084.0 | 16998.8 | 17594.8 | 18568.2 | 19311.5 | 15818.3 | 13468.8 | 13542.5 | 15454.7 | 17047.2 | 14630.9 |
| 55°   | 16715.8 | 16619.1 | 17307.2 | 18363.4 | 19422.0 | 16322.3 | 14414.6 | 14548.1 | 17288.8 | 18565.9 | 15604.3 |
| 57.5° | 17613.3 | 17399.2 | 17445.3 | 18266.8 | 19152.7 | 16874.6 | 15445.5 | 15714.8 | 19281.6 | 19893.7 | 16230.2 |
| 60°   | 20121.5 | 19663.6 | 18793.8 | 18773.0 | 19297.7 | 17703.0 | 16637.5 | 16966.6 | 21352.7 | 20528.8 | 15986.3 |
| 62.5° | 23640.0 | 23182.1 | 21552.9 | 20492.0 | 20413.8 | 19069.9 | 18101.1 | 18188.5 | 22549.3 | 19668.2 | 14497.4 |
| 65°   | 27448.5 | 27038.9 | 25218.7 | 23720.6 | 22998.0 | 21334.3 | 19801.7 | 18733.9 | 22158.1 | 17300.3 | 11892.5 |
| 67.5° | 32071.6 | 31632.1 | 30067.3 | 28684.2 | 27989.3 | 24988.5 | 20996.0 | 18211.6 | 19675.1 | 13402.1 | 8548.9  |
| 70°   | 35304.7 | 34856.0 | 34239.3 | 35360.0 | 37060.5 | 30260.5 | 21150.2 | 16087.6 | 14695.4 | 8907.9  | 5145.4  |
| 72.5° | 31086.7 | 30877.3 | 32002.5 | 36722.3 | 43805.3 | 33459.2 | 19118.2 | 11713.0 | 8535.1  | 4728.9  | 2977.7  |
| 73°   | 28481.7 | 28435.7 | 30354.9 | 35767.3 | 43853.6 | 32966.7 | 18227.7 | 10886.9 | 7320.1  | 4183.5  | 2722.3  |
| 75°   | 12861.3 | 13231.8 | 17438.4 | 27319.6 | 38100.7 | 27165.5 | 12829.1 | 6245.4  | 4135.2  | 2890.3  | 2055.0  |
| 77.5° | 3090.5  | 3219.4  | 5456.1  | 12974.1 | 24061.2 | 16188.8 | 5812.8  | 3088.2  | 2644.1  | 2041.1  | 1500.4  |
| 80°   | 1316.3  | 1360.0  | 2101.0  | 4793.4  | 11328.7 | 6519.3  | 2678.6  | 2068.8  | 1829.4  | 1424.4  | 1051.6  |
| 82.5° | 731.8   | 777.8   | 1192.0  | 2174.6  | 4572.4  | 2222.9  | 1633.8  | 1440.5  | 1203.5  | 858.3   | 683.5   |
| 85°   | 414.2   | 439.5   | 697.3   | 1215.0  | 1937.6  | 892.9   | 978.0   | 957.3   | 678.8   | 441.8   | 336.0   |
| 87.5° | 195.6   | 211.7   | 336.0   | 563.8   | 759.4   | 349.8   | 497.1   | 547.7   | 425.7   | 269.2   | 174.9   |
| 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):**

|       | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7232.6  | 7232.6 | 7232.6 | 7232.6 | 7232.6 | 7232.6 | 7232.6 | 7232.6 | 7232.6 | 7232.6 |
| 2.5°  | 7228.0  | 7269.4 | 7317.8 | 7343.1 | 7366.1 | 7393.7 | 7421.3 | 7421.3 | 7425.9 | 7428.2 |
| 5°    | 7177.4  | 7262.5 | 7338.5 | 7370.7 | 7377.6 | 7377.6 | 7370.7 | 7333.9 | 7301.7 | 7315.5 |
| 7.5°  | 7071.5  | 7195.8 | 7260.2 | 7248.7 | 7161.3 | 7060.0 | 6974.9 | 6871.3 | 6818.4 | 6809.2 |
| 10°   | 6919.7  | 7062.3 | 7073.8 | 6958.8 | 6742.5 | 6526.2 | 6346.7 | 6171.8 | 6088.9 | 6068.2 |
| 12.5° | 6751.7  | 6882.8 | 6809.2 | 6572.2 | 6224.7 | 5909.4 | 5681.6 | 5504.4 | 5426.2 | 5405.5 |
| 15°   | 6615.9  | 6705.6 | 6519.3 | 6146.5 | 5709.2 | 5375.6 | 5186.9 | 5055.7 | 5000.5 | 4984.4 |
| 17.5° | 6544.6  | 6563.0 | 6222.4 | 5718.4 | 5253.6 | 4975.2 | 4857.8 | 4795.7 | 4775.0 | 4763.4 |
| 20°   | 6579.1  | 6450.2 | 5939.4 | 5320.3 | 4880.8 | 4685.2 | 4657.6 | 4641.5 | 4636.9 | 4630.0 |
| 22.5° | 6751.7  | 6415.7 | 5679.3 | 4942.9 | 4554.0 | 4468.9 | 4491.9 | 4489.6 | 4485.0 | 4480.4 |
| 25°   | 7060.0  | 6445.6 | 5426.2 | 4584.0 | 4280.2 | 4261.8 | 4303.2 | 4303.2 | 4284.8 | 4284.8 |
| 27.5° | 7467.3  | 6507.7 | 5143.1 | 4243.4 | 4031.7 | 4034.0 | 4066.2 | 4057.0 | 4036.3 | 4022.5 |
| 30°   | 7964.4  | 6546.9 | 4811.8 | 3937.3 | 3799.3 | 3790.0 | 3799.3 | 3760.1 | 3698.0 | 3693.4 |
| 32.5° | 8473.0  | 6498.5 | 4427.5 | 3665.8 | 3553.0 | 3532.3 | 3525.4 | 3470.2 | 3398.8 | 3378.1 |
| 35°   | 8933.2  | 6321.3 | 4036.3 | 3449.5 | 3318.3 | 3272.3 | 3304.5 | 3286.1 | 3221.7 | 3205.5 |
| 37.5° | 9269.2  | 5992.3 | 3684.2 | 3258.5 | 3150.3 | 3138.8 | 3159.5 | 3166.4 | 3090.5 | 3074.4 |
| 40°   | 9494.7  | 5545.8 | 3382.7 | 3097.4 | 3118.1 | 3074.4 | 3005.3 | 2957.0 | 2934.0 | 2927.1 |
| 42.5° | 9676.5  | 5081.0 | 3129.6 | 3021.5 | 3125.0 | 2998.4 | 2848.9 | 2770.6 | 2812.0 | 2830.5 |
| 45°   | 9885.9  | 4627.7 | 2917.9 | 2927.1 | 3090.5 | 2911.0 | 2740.7 | 2664.8 | 2680.9 | 2685.5 |
| 47.5° | 10173.5 | 4075.4 | 2690.1 | 2775.2 | 2975.4 | 2851.2 | 2674.0 | 2565.8 | 2489.9 | 2455.4 |
| 50°   | 10571.6 | 3421.9 | 2453.1 | 2604.9 | 2862.7 | 2807.4 | 2570.4 | 2455.4 | 2315.0 | 2282.8 |
| 52.5° | 10847.8 | 2812.0 | 2257.5 | 2462.3 | 2761.4 | 2720.0 | 2487.6 | 2338.0 | 2190.7 | 2163.1 |
| 55°   | 10698.2 | 2335.7 | 2087.2 | 2303.5 | 2628.0 | 2611.8 | 2418.5 | 2218.3 | 2103.3 | 2080.3 |
| 57.5° | 9950.3  | 2034.2 | 1956.0 | 2153.9 | 2464.6 | 2519.8 | 2326.5 | 2117.1 | 2034.2 | 2018.1 |
| 60°   | 8523.6  | 1845.5 | 1873.2 | 2052.7 | 2331.1 | 2427.7 | 2234.4 | 2061.9 | 2006.6 | 1995.1 |
| 62.5° | 6613.6  | 1719.0 | 1811.0 | 1979.0 | 2227.5 | 2363.3 | 2183.8 | 2055.0 | 2034.2 | 2020.4 |
| 65°   | 4738.1  | 1617.7 | 1744.3 | 1905.4 | 2133.2 | 2303.5 | 2165.4 | 2045.8 | 2050.4 | 2038.8 |
| 67.5° | 3219.4  | 1528.0 | 1663.8 | 1822.5 | 2041.1 | 2250.6 | 2140.1 | 2013.5 | 2071.1 | 2057.3 |
| 70°   | 2252.9  | 1440.5 | 1569.4 | 1716.7 | 1926.1 | 2176.9 | 2094.1 | 1965.2 | 1960.6 | 1905.4 |
| 72.5° | 1758.1  | 1325.5 | 1440.5 | 1569.4 | 1778.8 | 2073.4 | 2002.0 | 1857.1 | 1781.1 | 1723.6 |
| 73°   | 1677.6  | 1297.9 | 1408.3 | 1537.2 | 1746.6 | 2048.1 | 1976.7 | 1827.1 | 1742.0 | 1689.1 |
| 75°   | 1387.6  | 1178.2 | 1279.5 | 1394.5 | 1608.5 | 1928.4 | 1852.5 | 1691.4 | 1583.2 | 1551.0 |
| 77.5° | 1090.8  | 1007.9 | 1104.6 | 1208.1 | 1417.5 | 1753.5 | 1668.4 | 1514.2 | 1454.3 | 1426.7 |
| 80°   | 807.7   | 835.3  | 920.5  | 1012.5 | 1228.8 | 1567.1 | 1491.2 | 1337.0 | 1603.9 | 1537.2 |
| 82.5° | 568.4   | 632.8  | 711.1  | 793.9  | 1030.9 | 1385.3 | 1293.3 | 1134.5 | 1173.6 | 975.7  |
| 85°   | 336.0   | 414.2  | 487.9  | 559.2  | 743.3  | 1148.3 | 1067.7 | 904.4  | 741.0  | 706.5  |
| 87.5° | 195.6   | 230.1  | 250.8  | 324.5  | 510.9  | 865.2  | 752.5  | 669.6  | 384.3  | 260.0  |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)