

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: P300401

Luminaire Tested: **GAA-AF-08-LED-U-T4FT-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300401  
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: GAA-AF-08-LED-U-T4FT-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

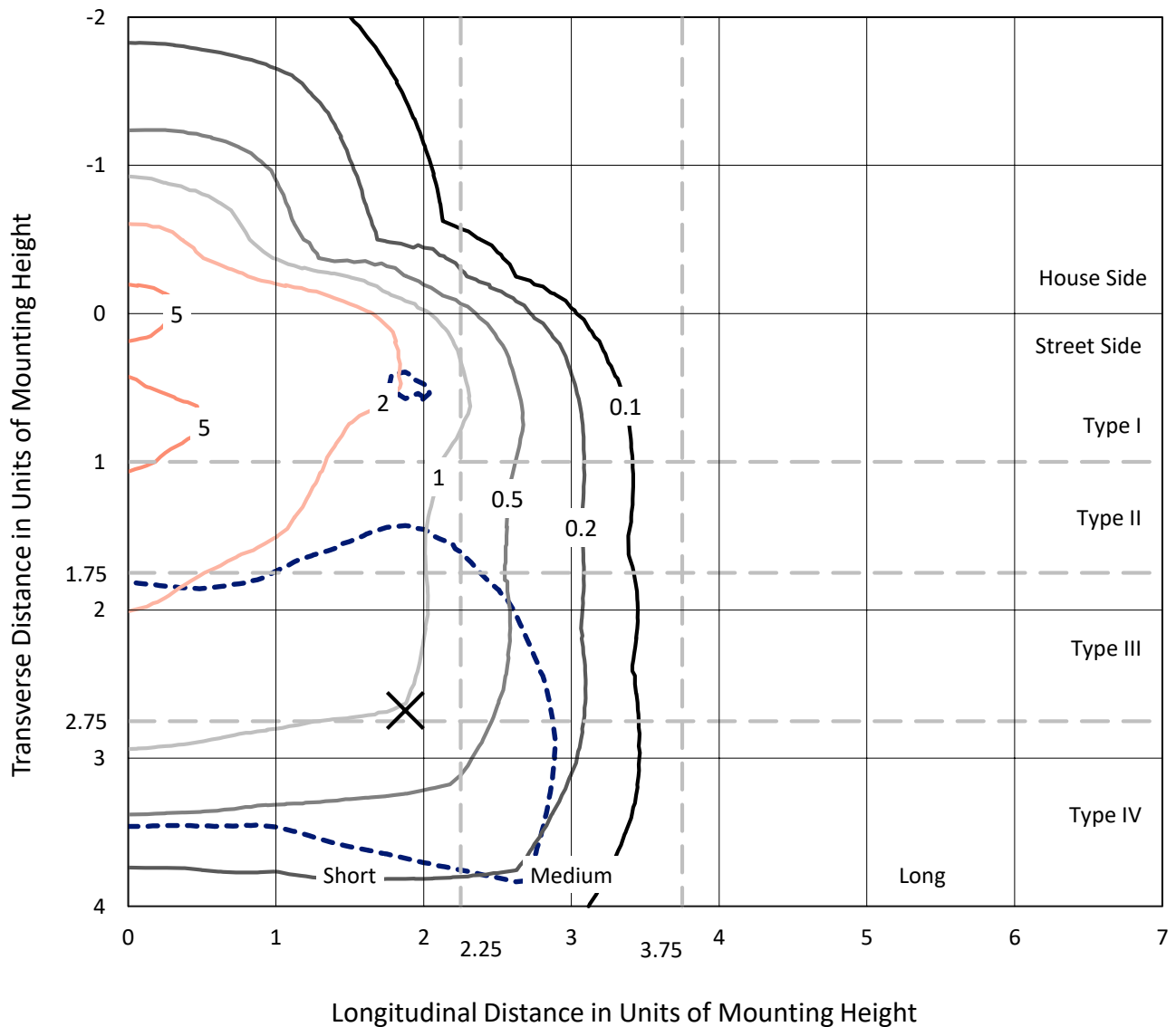
Lumens per Lamp: N/A  
Luminaire Lumens: 38640.2 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 334  
Input Voltage (V): NR  
Input Current (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

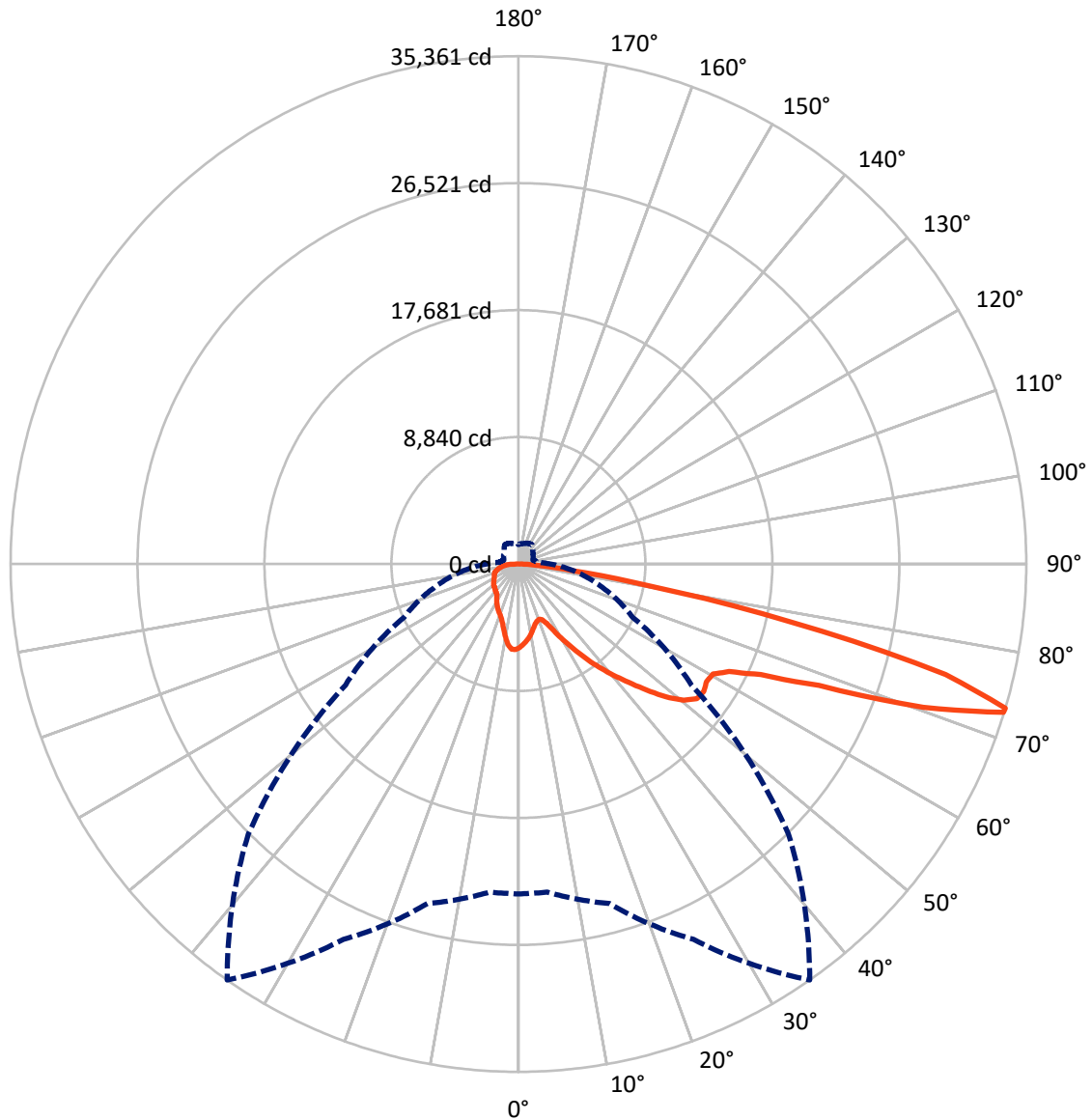
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.5 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7369.8   | 0.0    | 7369.8  |
|                    | % Fixture | 19.1     | 0.0    | 19.1    |
| <b>Street Side</b> | Lumens    | 31270.4  | 0.0    | 31270.4 |
|                    | % Fixture | 80.9     | 0.0    | 80.9    |
| <b>Total</b>       | Lumens    | 38640.2  | 0.0    | 38640.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 528.0   | 1.4       |
| 10°-20°   | 1317.7  | 3.4       |
| 20°-30°   | 2130.3  | 5.5       |
| 30°-40°   | 3572.2  | 9.2       |
| 40°-50°   | 5506.4  | 14.3      |
| 50°-60°   | 7387.4  | 19.1      |
| 60°-70°   | 9841.5  | 25.5      |
| 70°-80°   | 7506.1  | 19.4      |
| 80°-90°   | 850.8   | 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°    | 38640.2 | 100.0     |
| 0°-180°   | 38640.2 | 100.0     |

**Coefficient of Utilization**



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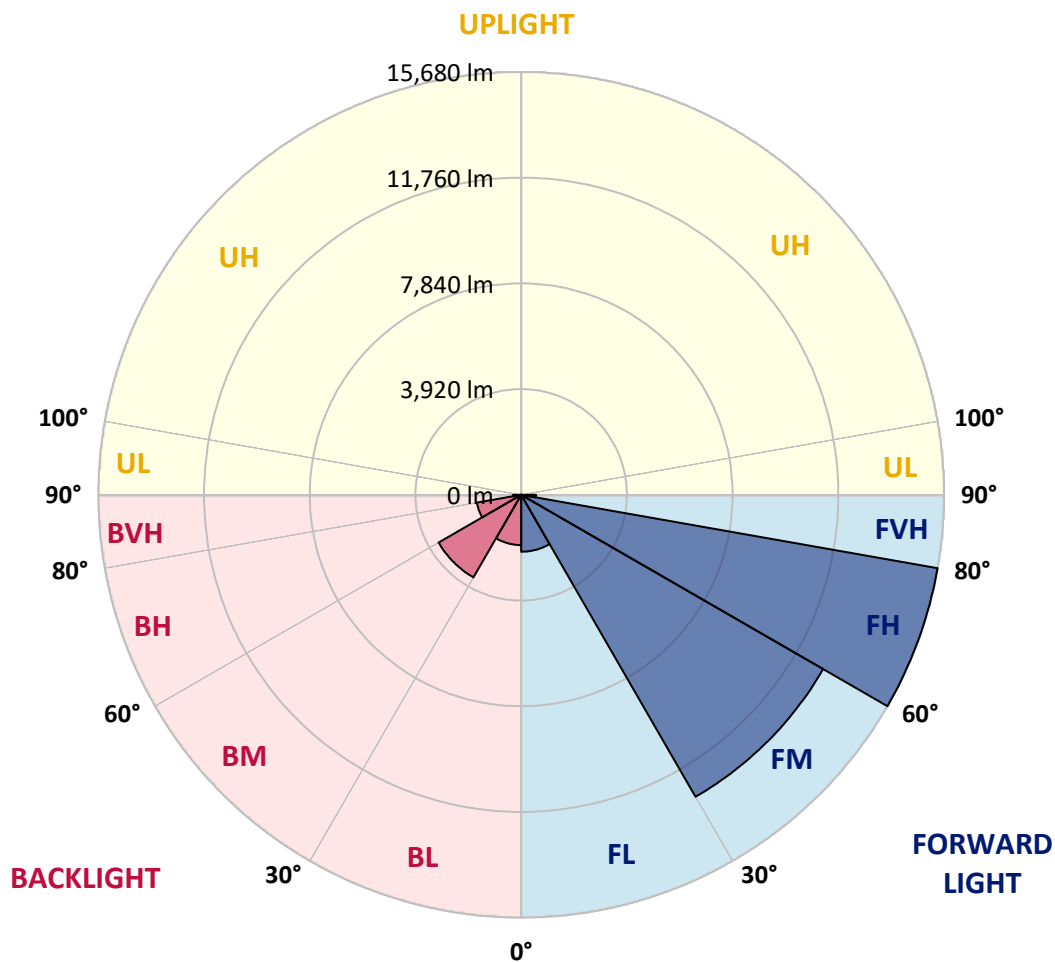
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2111.1  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 12929.3 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 15680.2 | 40.6      |                         |      | G5      |
| FVH  | (80°-90°)   | 549.9   | 1.4       |                         |      | G4/750  |
| BL   | (0°-30°)    | 1864.9  | 4.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3536.7  | 9.2       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1667.4  | 4.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 300.8   | 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°    | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  | 5832.0  |
| 2.5°  | 5601.9  | 5613.1  | 5600.1  | 5616.8  | 5644.6  | 5674.3  | 5694.7  | 5724.4  | 5757.8  | 5804.2  | 5815.3  |
| 5°    | 5338.4  | 5355.1  | 5355.1  | 5384.8  | 5438.6  | 5486.9  | 5531.4  | 5579.7  | 5650.2  | 5730.0  | 5761.5  |
| 7.5°  | 5049.0  | 5058.2  | 5074.9  | 5119.5  | 5197.4  | 5266.1  | 5329.2  | 5407.1  | 5503.6  | 5609.3  | 5665.0  |
| 10°   | 4700.1  | 4713.1  | 4739.1  | 4802.2  | 4907.9  | 5002.6  | 5093.5  | 5201.1  | 5323.6  | 5455.3  | 5525.8  |
| 12.5° | 4453.3  | 4449.6  | 4460.8  | 4507.1  | 4599.9  | 4715.0  | 4846.7  | 4984.0  | 5134.3  | 5288.3  | 5373.7  |
| 15°   | 4369.8  | 4349.4  | 4306.7  | 4295.6  | 4345.7  | 4460.8  | 4612.9  | 4781.8  | 4961.8  | 5147.3  | 5253.1  |
| 17.5° | 4421.8  | 4386.5  | 4269.6  | 4184.3  | 4176.9  | 4264.1  | 4425.5  | 4614.8  | 4822.6  | 5049.0  | 5180.7  |
| 20°   | 4748.4  | 4664.9  | 4377.3  | 4178.7  | 4110.1  | 4152.7  | 4293.8  | 4494.2  | 4739.1  | 5039.7  | 5208.5  |
| 22.5° | 5529.6  | 5407.1  | 4796.6  | 4427.4  | 4195.4  | 4143.5  | 4249.2  | 4462.6  | 4748.4  | 5154.7  | 5370.0  |
| 25°   | 6667.0  | 6492.6  | 5516.6  | 5047.1  | 4568.4  | 4291.9  | 4316.0  | 4535.0  | 4880.1  | 5421.9  | 5681.7  |
| 27.5° | 7565.1  | 7451.9  | 6457.3  | 5921.1  | 5247.5  | 4692.7  | 4533.1  | 4716.8  | 5149.2  | 5859.8  | 6125.2  |
| 30°   | 8099.5  | 8030.8  | 7463.0  | 6911.9  | 6114.0  | 5331.0  | 4948.8  | 5058.2  | 5570.4  | 6466.6  | 6685.6  |
| 32.5° | 8719.2  | 8678.4  | 8400.1  | 7893.5  | 7049.2  | 6169.7  | 5607.5  | 5568.5  | 6134.5  | 7195.8  | 7296.0  |
| 35°   | 9361.3  | 9348.3  | 9185.0  | 8821.3  | 8053.1  | 7275.6  | 6481.4  | 6218.0  | 6748.6  | 7952.9  | 7889.8  |
| 37.5° | 9958.8  | 9936.5  | 9841.9  | 9630.3  | 9103.3  | 8463.2  | 7372.1  | 6884.1  | 7411.1  | 8676.6  | 8396.4  |
| 40°   | 11059.1 | 10884.7 | 10560.0 | 10400.4 | 10164.7 | 9463.3  | 8079.1  | 7505.7  | 8097.6  | 9366.8  | 8834.3  |
| 42.5° | 12400.7 | 12116.8 | 11511.9 | 11292.9 | 11259.5 | 10251.9 | 8561.5  | 8108.8  | 8789.8  | 10051.5 | 9264.8  |
| 45°   | 13456.5 | 13189.3 | 12667.9 | 12391.4 | 12513.9 | 10966.3 | 9045.8  | 8752.6  | 9502.3  | 10769.6 | 9708.3  |
| 47.5° | 14582.8 | 14163.4 | 13473.2 | 13556.7 | 13823.9 | 11641.7 | 9539.4  | 9444.8  | 10283.5 | 11573.1 | 10259.4 |
| 50°   | 14623.6 | 14302.6 | 14000.2 | 14499.3 | 14914.9 | 12263.4 | 10157.3 | 10170.3 | 11239.1 | 12584.4 | 10992.3 |
| 52.5° | 13775.6 | 13707.0 | 14187.6 | 14972.5 | 15571.8 | 12755.1 | 10860.6 | 10919.9 | 12461.9 | 13745.9 | 11797.6 |
| 55°   | 13478.7 | 13400.8 | 13955.6 | 14807.3 | 15660.9 | 13161.4 | 11623.2 | 11730.8 | 13940.8 | 14970.6 | 12582.5 |
| 57.5° | 14202.4 | 14029.8 | 14067.0 | 14729.4 | 15443.8 | 13606.8 | 12454.5 | 12671.6 | 15547.7 | 16041.3 | 13087.2 |
| 60°   | 16225.0 | 15855.7 | 15154.3 | 15137.6 | 15560.7 | 14274.8 | 13415.7 | 13681.0 | 17217.7 | 16553.4 | 12890.5 |
| 62.5° | 19062.1 | 18692.8 | 17379.1 | 16523.7 | 16460.6 | 15377.0 | 14595.8 | 14666.3 | 18182.6 | 15859.4 | 11690.0 |
| 65°   | 22133.0 | 21802.8 | 20335.0 | 19127.0 | 18544.4 | 17202.8 | 15967.0 | 15106.1 | 17867.1 | 13950.1 | 9589.5  |
| 67.5° | 25860.9 | 25506.4 | 24244.7 | 23129.5 | 22569.1 | 20149.5 | 16930.1 | 14684.9 | 15865.0 | 10806.7 | 6893.4  |
| 70°   | 28467.9 | 28106.1 | 27608.8 | 28512.4 | 29883.7 | 24400.5 | 17054.4 | 12972.2 | 11849.6 | 7182.8  | 4149.0  |
| 72.5° | 25066.7 | 24897.8 | 25805.2 | 29610.9 | 35322.3 | 26979.8 | 15415.9 | 9444.8  | 6882.2  | 3813.2  | 2401.1  |
| 73°   | 22966.2 | 22929.1 | 24476.6 | 28840.9 | 35361.3 | 26582.7 | 14697.8 | 8778.6  | 5902.5  | 3373.4  | 2195.1  |
| 75°   | 10370.7 | 10669.4 | 14061.4 | 22029.1 | 30722.4 | 21904.8 | 10344.7 | 5036.0  | 3334.4  | 2330.6  | 1657.0  |
| 77.5° | 2492.0  | 2595.9  | 4399.5  | 10461.6 | 19401.7 | 13053.8 | 4687.1  | 2490.2  | 2132.0  | 1645.9  | 1209.8  |
| 80°   | 1061.4  | 1096.6  | 1694.1  | 3865.1  | 9134.9  | 5256.8  | 2159.9  | 1668.1  | 1475.2  | 1148.6  | 848.0   |
| 82.5° | 590.1   | 627.2   | 961.2   | 1753.5  | 3687.0  | 1792.5  | 1317.4  | 1161.6  | 970.5   | 692.1   | 551.1   |
| 85°   | 334.0   | 354.4   | 562.2   | 979.7   | 1562.4  | 720.0   | 788.6   | 771.9   | 547.4   | 356.3   | 270.9   |
| 87.5° | 157.7   | 170.7   | 270.9   | 454.6   | 612.3   | 282.0   | 400.8   | 441.6   | 343.3   | 217.1   | 141.0   |
| 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°    | 5832.0 | 5832.0 | 5832.0 | 5832.0 | 5832.0 | 5832.0 | 5832.0 | 5832.0 | 5832.0 | 5832.0 |
| 2.5°  | 5828.3 | 5861.7 | 5900.7 | 5921.1 | 5939.6 | 5961.9 | 5984.2 | 5984.2 | 5987.9 | 5989.7 |
| 5°    | 5787.5 | 5856.1 | 5917.4 | 5943.3 | 5948.9 | 5948.9 | 5943.3 | 5913.6 | 5887.7 | 5898.8 |
| 7.5°  | 5702.1 | 5802.3 | 5854.3 | 5845.0 | 5774.5 | 5692.8 | 5624.2 | 5540.7 | 5498.0 | 5490.6 |
| 10°   | 5579.7 | 5694.7 | 5704.0 | 5611.2 | 5436.8 | 5262.4 | 5117.6 | 4976.6 | 4909.8 | 4893.1 |
| 12.5° | 5444.2 | 5550.0 | 5490.6 | 5299.5 | 5019.3 | 4765.1 | 4581.4 | 4438.5 | 4375.4 | 4358.7 |
| 15°   | 5334.7 | 5407.1 | 5256.8 | 4956.2 | 4603.6 | 4334.6 | 4182.4 | 4076.7 | 4032.1 | 4019.1 |
| 17.5° | 5277.2 | 5292.0 | 5017.4 | 4611.1 | 4236.2 | 4011.7 | 3917.1 | 3867.0 | 3850.3 | 3841.0 |
| 20°   | 5305.0 | 5201.1 | 4789.2 | 4290.0 | 3935.6 | 3777.9 | 3755.6 | 3742.7 | 3738.9 | 3733.4 |
| 22.5° | 5444.2 | 5173.3 | 4579.5 | 3985.7 | 3672.1 | 3603.5 | 3622.0 | 3620.2 | 3616.5 | 3612.8 |
| 25°   | 5692.8 | 5197.4 | 4375.4 | 3696.3 | 3451.3 | 3436.5 | 3469.9 | 3469.9 | 3455.0 | 3455.0 |
| 27.5° | 6021.3 | 5247.5 | 4147.2 | 3421.6 | 3250.9 | 3252.8 | 3278.8 | 3271.3 | 3254.6 | 3243.5 |
| 30°   | 6422.1 | 5279.1 | 3880.0 | 3174.9 | 3063.5 | 3056.1 | 3063.5 | 3032.0 | 2981.9 | 2978.2 |
| 32.5° | 6832.1 | 5240.1 | 3570.1 | 2955.9 | 2865.0 | 2848.3 | 2842.7 | 2798.2 | 2740.7 | 2724.0 |
| 35°   | 7203.3 | 5097.2 | 3254.6 | 2781.5 | 2675.7 | 2638.6 | 2664.6 | 2649.7 | 2597.8 | 2584.8 |
| 37.5° | 7474.2 | 4831.9 | 2970.7 | 2627.5 | 2540.3 | 2531.0 | 2547.7 | 2553.2 | 2492.0 | 2479.0 |
| 40°   | 7656.0 | 4471.9 | 2727.7 | 2497.6 | 2514.3 | 2479.0 | 2423.4 | 2384.4 | 2365.8 | 2360.3 |
| 42.5° | 7802.6 | 4097.1 | 2523.6 | 2436.3 | 2519.8 | 2417.8 | 2297.2 | 2234.1 | 2267.5 | 2282.3 |
| 45°   | 7971.5 | 3731.5 | 2352.8 | 2360.3 | 2492.0 | 2347.3 | 2210.0 | 2148.7 | 2161.7 | 2165.4 |
| 47.5° | 8203.4 | 3286.2 | 2169.1 | 2237.8 | 2399.2 | 2299.0 | 2156.2 | 2068.9 | 2007.7 | 1979.9 |
| 50°   | 8524.4 | 2759.2 | 1978.0 | 2100.5 | 2308.3 | 2263.8 | 2072.7 | 1979.9 | 1866.7 | 1840.7 |
| 52.5° | 8747.1 | 2267.5 | 1820.3 | 1985.4 | 2226.7 | 2193.3 | 2005.9 | 1885.2 | 1766.5 | 1744.2 |
| 55°   | 8626.5 | 1883.4 | 1683.0 | 1857.4 | 2119.0 | 2106.1 | 1950.2 | 1788.8 | 1696.0 | 1677.4 |
| 57.5° | 8023.4 | 1640.3 | 1577.2 | 1736.8 | 1987.3 | 2031.8 | 1876.0 | 1707.1 | 1640.3 | 1627.3 |
| 60°   | 6873.0 | 1488.2 | 1510.4 | 1655.2 | 1879.7 | 1957.6 | 1801.7 | 1662.6 | 1618.0 | 1608.8 |
| 62.5° | 5332.9 | 1386.1 | 1460.3 | 1595.8 | 1796.2 | 1905.7 | 1760.9 | 1657.0 | 1640.3 | 1629.2 |
| 65°   | 3820.6 | 1304.5 | 1406.5 | 1536.4 | 1720.1 | 1857.4 | 1746.1 | 1649.6 | 1653.3 | 1644.0 |
| 67.5° | 2595.9 | 1232.1 | 1341.6 | 1469.6 | 1645.9 | 1814.7 | 1725.7 | 1623.6 | 1670.0 | 1658.9 |
| 70°   | 1816.6 | 1161.6 | 1265.5 | 1384.2 | 1553.1 | 1755.4 | 1688.6 | 1584.6 | 1580.9 | 1536.4 |
| 72.5° | 1417.6 | 1068.8 | 1161.6 | 1265.5 | 1434.3 | 1671.9 | 1614.3 | 1497.4 | 1436.2 | 1389.8 |
| 73°   | 1352.7 | 1046.5 | 1135.6 | 1239.5 | 1408.4 | 1651.4 | 1593.9 | 1473.3 | 1404.7 | 1362.0 |
| 75°   | 1118.9 | 950.0  | 1031.7 | 1124.5 | 1297.0 | 1555.0 | 1493.7 | 1363.8 | 1276.6 | 1250.6 |
| 77.5° | 879.5  | 812.7  | 890.7  | 974.2  | 1143.0 | 1413.9 | 1345.3 | 1221.0 | 1172.7 | 1150.4 |
| 80°   | 651.3  | 673.6  | 742.2  | 816.4  | 990.9  | 1263.6 | 1202.4 | 1078.1 | 1293.3 | 1239.5 |
| 82.5° | 458.3  | 510.3  | 573.4  | 640.2  | 831.3  | 1117.0 | 1042.8 | 914.8  | 946.3  | 786.8  |
| 85°   | 270.9  | 334.0  | 393.4  | 450.9  | 599.3  | 925.9  | 861.0  | 729.2  | 597.5  | 569.7  |
| 87.5° | 157.7  | 185.6  | 202.3  | 261.6  | 411.9  | 697.7  | 606.8  | 540.0  | 309.9  | 209.7  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)