

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: P842228

Luminaire Tested: **ARCH4-290-722-U-T2U**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842228  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-290-722-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

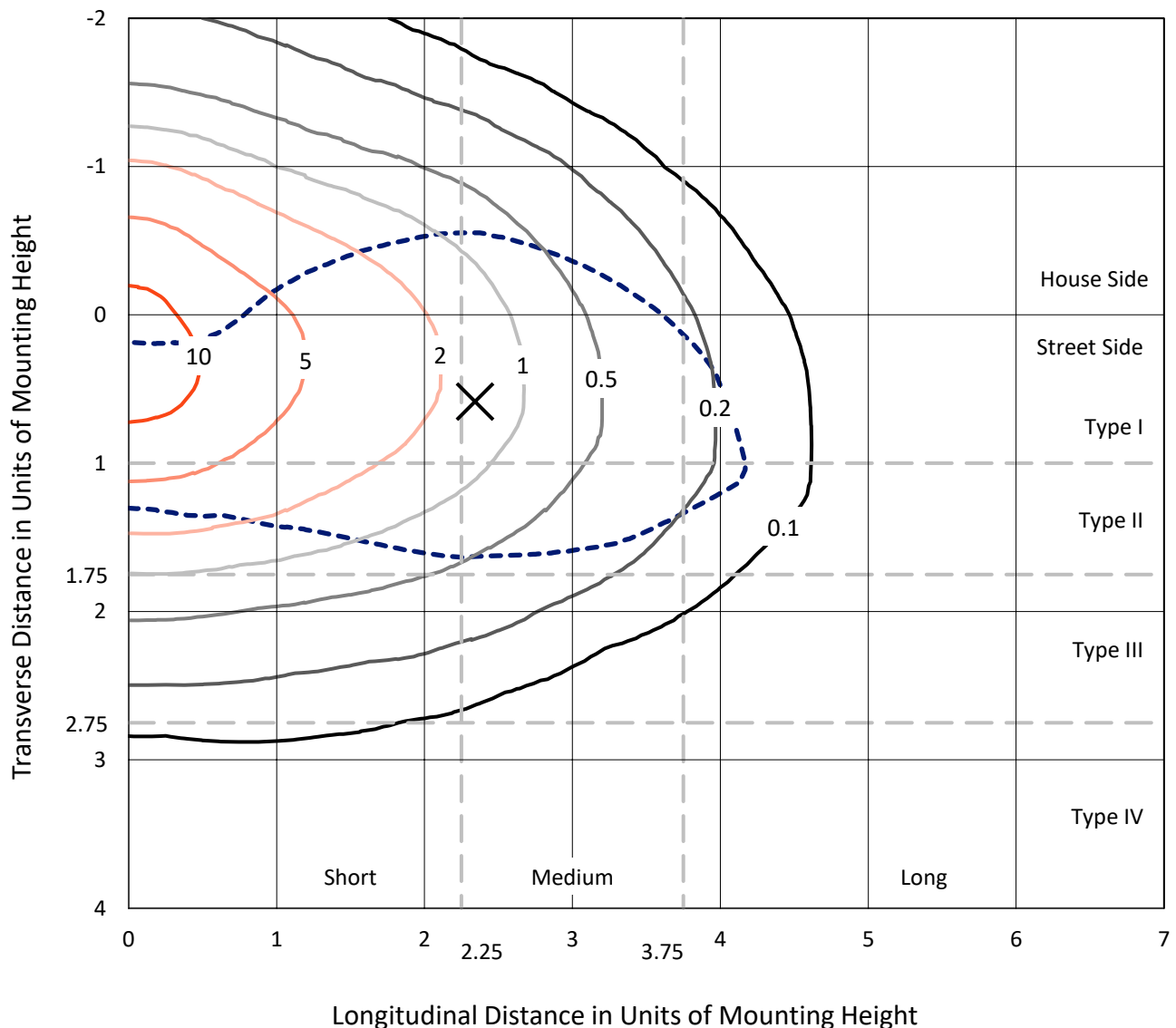
Lumens per Lamp: N/A  
Luminaire Lumens: 35949 lumens  
Efficiency: N/A  
Efficacy: 124.1 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 289.7  
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: 24 FT



## Iso-Footcandle Lines of Horizontal Illumination

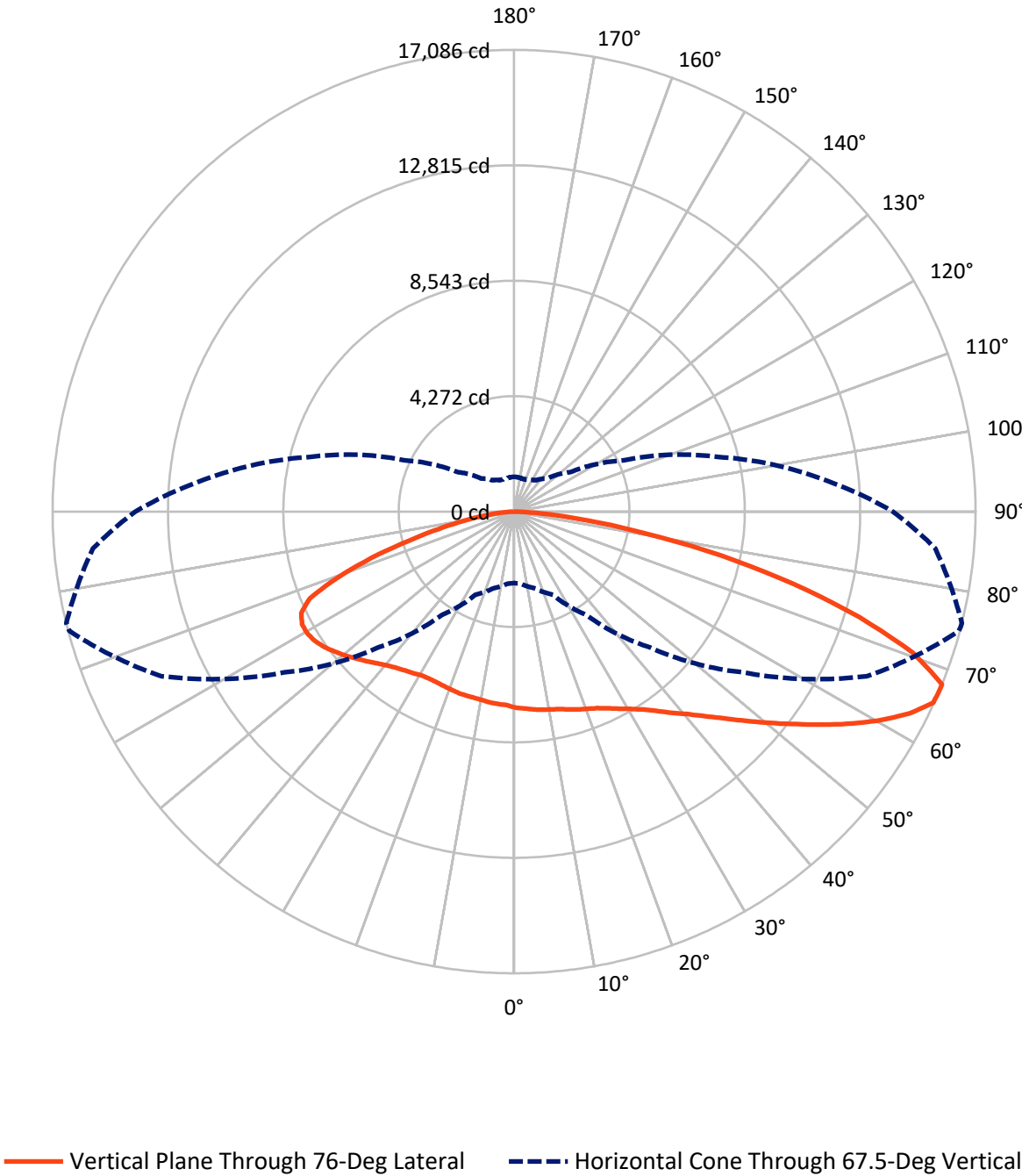
✖ Max cd  
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc  
Type II - Medium - N/A

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CATALOG NUMBER: ARCH4-290-722-U-T2U

Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12147.3  | 0.0    | 12147.3 |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 23801.6  | 0.0    | 23801.6 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 35949.0  | 0.0    | 35949.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 700.2   | 1.9       |
| 10°-20°   | 2140.7  | 6.0       |
| 20°-30°   | 3637.1  | 10.1      |
| 30°-40°   | 5175.2  | 14.4      |
| 40°-50°   | 6536.0  | 18.2      |
| 50°-60°   | 7076.4  | 19.7      |
| 60°-70°   | 6581.9  | 18.3      |
| 70°-80°   | 3535.0  | 9.8       |
| 80°-90°   | 566.5   | 1.6       |
| 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°    | 35949.0 | 100.0     |
| 0°-180°   | 35949.0 | 100.0     |

**Coefficient of Utilization**



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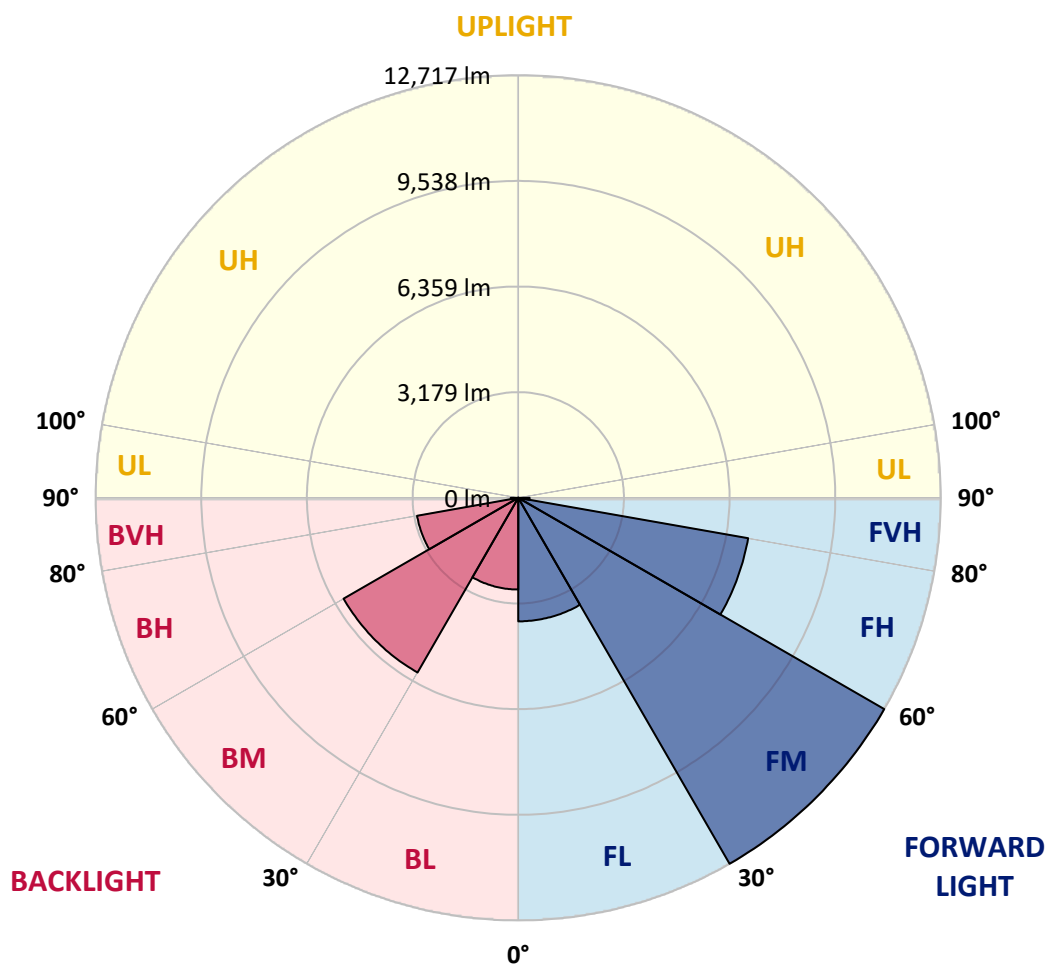
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3717.5  | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 12717.4 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 7024.1  | 19.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 342.7   | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 2760.5  | 7.7       | B4/5000                 |      |         |
| BM   | (30°-60°)   | 6070.2  | 16.9      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 3092.8  | 8.6       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 223.8   | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  | 7261.6  |
| 2.5°  | 7481.9  | 7468.5  | 7415.1  | 7421.8  | 7421.8  | 7415.1  | 7335.0  | 7301.7  | 7301.7  | 7295.0  | 7221.6  |
| 5°    | 7748.8  | 7728.8  | 7668.7  | 7655.4  | 7628.7  | 7595.3  | 7468.5  | 7395.1  | 7361.7  | 7355.1  | 7254.9  |
| 7.5°  | 8062.5  | 8035.8  | 7962.4  | 7922.4  | 7855.6  | 7768.9  | 7608.7  | 7495.2  | 7415.1  | 7408.5  | 7268.3  |
| 10°   | 8376.2  | 8349.5  | 8262.8  | 8189.3  | 8095.9  | 7955.7  | 7748.8  | 7582.0  | 7455.2  | 7441.8  | 7275.0  |
| 12.5° | 8750.0  | 8723.3  | 8616.5  | 8523.1  | 8382.9  | 8196.0  | 7922.4  | 7695.4  | 7521.9  | 7501.9  | 7295.0  |
| 15°   | 9143.8  | 9103.7  | 8996.9  | 8890.1  | 8716.6  | 8476.3  | 8149.3  | 7849.0  | 7628.7  | 7595.3  | 7355.1  |
| 17.5° | 9470.8  | 9417.4  | 9330.6  | 9223.9  | 9030.3  | 8750.0  | 8376.2  | 8002.5  | 7728.8  | 7702.1  | 7415.1  |
| 20°   | 9751.1  | 9711.1  | 9617.6  | 9517.5  | 9310.6  | 9003.6  | 8589.8  | 8156.0  | 7822.3  | 7788.9  | 7461.8  |
| 22.5° | 10018.1 | 9964.7  | 9911.3  | 9837.9  | 9611.0  | 9270.6  | 8836.7  | 8342.9  | 7942.4  | 7902.3  | 7521.9  |
| 25°   | 10325.1 | 10265.0 | 10245.0 | 10205.0 | 9938.0  | 9590.9  | 9137.1  | 8576.5  | 8109.3  | 8062.5  | 7628.7  |
| 27.5° | 10705.5 | 10638.8 | 10598.8 | 10598.8 | 10278.4 | 9918.0  | 9457.5  | 8850.1  | 8302.8  | 8262.8  | 7762.2  |
| 30°   | 11106.0 | 11025.9 | 10965.8 | 10965.8 | 10605.4 | 10245.0 | 9771.1  | 9123.7  | 8523.1  | 8476.3  | 7935.7  |
| 32.5° | 11459.7 | 11379.7 | 11312.9 | 11306.2 | 10932.5 | 10572.1 | 10098.2 | 9424.1  | 8790.0  | 8730.0  | 8149.3  |
| 35°   | 11733.4 | 11660.0 | 11599.9 | 11613.3 | 11259.5 | 10905.8 | 10465.3 | 9824.5  | 9123.7  | 9057.0  | 8429.6  |
| 37.5° | 11900.2 | 11873.5 | 11840.2 | 11886.9 | 11559.9 | 11226.1 | 10845.7 | 10211.7 | 9504.2  | 9444.1  | 8776.7  |
| 40°   | 11987.0 | 11967.0 | 12100.5 | 12160.5 | 11813.5 | 11513.1 | 11226.1 | 10612.1 | 9918.0  | 9851.2  | 9177.1  |
| 42.5° | 12113.8 | 12280.7 | 12334.1 | 12320.7 | 12000.4 | 11733.4 | 11573.2 | 11045.9 | 10405.2 | 10345.1 | 9657.7  |
| 45°   | 11660.0 | 11619.9 | 11913.6 | 12073.8 | 12013.7 | 11873.5 | 11900.2 | 11566.5 | 10972.5 | 10912.5 | 10211.7 |
| 47.5° | 11052.6 | 10999.2 | 11166.1 | 11559.9 | 11793.5 | 11926.9 | 12193.9 | 12107.1 | 11626.6 | 11573.2 | 10859.1 |
| 50°   | 9771.1  | 9844.6  | 10465.3 | 10992.5 | 11453.1 | 11913.6 | 12440.9 | 12687.8 | 12347.4 | 12294.0 | 11553.2 |
| 52.5° | 8349.5  | 8422.9  | 9070.3  | 10285.1 | 11039.3 | 11813.5 | 12621.1 | 13268.5 | 13128.3 | 13068.2 | 12294.0 |
| 55°   | 7315.0  | 7475.2  | 8209.4  | 9090.4  | 10451.9 | 11499.8 | 12727.9 | 13862.5 | 13969.3 | 13915.9 | 13101.6 |
| 57.5° | 6287.2  | 6407.3  | 6961.3  | 7742.2  | 9651.0  | 10952.5 | 12721.2 | 14416.4 | 14850.3 | 14796.9 | 13922.6 |
| 60°   | 5079.1  | 5232.6  | 5673.1  | 6514.1  | 8583.1  | 10298.4 | 12534.3 | 14850.3 | 15697.9 | 15657.9 | 14716.8 |
| 62.5° | 4251.5  | 4298.2  | 4611.9  | 5339.4  | 7208.2  | 9470.8  | 12113.8 | 15083.9 | 16465.5 | 16438.8 | 15430.9 |
| 65°   | 3423.9  | 3430.6  | 3717.6  | 4324.9  | 5880.0  | 8443.0  | 11399.7 | 14997.1 | 17046.1 | 17059.5 | 15944.9 |
| 67.5° | 2643.0  | 2676.4  | 2936.7  | 3397.2  | 4672.0  | 7108.1  | 10378.5 | 14409.8 | 17052.8 | 17086.2 | 15651.2 |
| 70°   | 1828.8  | 1855.5  | 2249.2  | 2696.4  | 3610.8  | 5666.5  | 8996.9  | 12854.7 | 15651.2 | 15677.9 | 14029.3 |
| 72.5° | 1288.1  | 1301.5  | 1722.0  | 2155.8  | 2823.2  | 4271.5  | 6787.7  | 10632.1 | 13341.9 | 13361.9 | 11800.1 |
| 75°   | 961.1   | 974.4   | 1214.7  | 1635.2  | 2162.5  | 2956.7  | 4638.6  | 8142.6  | 10658.8 | 10658.8 | 9317.3  |
| 77.5° | 680.8   | 687.5   | 787.6   | 1128.0  | 1441.6  | 1995.6  | 2789.8  | 5332.8  | 7822.3  | 7835.6  | 6787.7  |
| 80°   | 460.5   | 467.2   | 513.9   | 760.9   | 901.0   | 1081.2  | 1515.1  | 2796.5  | 4932.3  | 4952.3  | 4311.6  |
| 82.5° | 240.3   | 253.6   | 287.0   | 387.1   | 453.9   | 600.7   | 780.9   | 1421.6  | 2729.8  | 2783.2  | 2589.6  |
| 85°   | 93.4    | 93.4    | 106.8   | 126.8   | 166.9   | 233.6   | 360.4   | 540.6   | 1234.7  | 1274.8  | 1141.3  |
| 87.5° | 33.4    | 33.4    | 40.0    | 40.0    | 46.7    | 53.4    | 60.1    | 80.1    | 140.2   | 140.2   | 133.5   |
| 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°    | 7261.6  | 7261.6  | 7261.6 | 7261.6 | 7261.6 | 7261.6 | 7261.6 | 7261.6 | 7261.6 | 7261.6 | 7261.6 |
| 2.5°  | 7194.9  | 7194.9  | 7161.5 | 7174.9 | 7168.2 | 7154.8 | 7141.5 | 7161.5 | 7141.5 | 7094.8 | 7088.1 |
| 5°    | 7208.2  | 7194.9  | 7141.5 | 7134.8 | 7114.8 | 7088.1 | 7054.7 | 7068.1 | 7034.7 | 6994.6 | 6988.0 |
| 7.5°  | 7214.9  | 7188.2  | 7114.8 | 7088.1 | 7048.0 | 6994.6 | 6941.3 | 6941.3 | 6894.5 | 6854.5 | 6847.8 |
| 10°   | 7201.6  | 7168.2  | 7068.1 | 7014.7 | 6941.3 | 6861.2 | 6787.7 | 6767.7 | 6714.3 | 6667.6 | 6667.6 |
| 12.5° | 7208.2  | 7161.5  | 7034.7 | 6947.9 | 6847.8 | 6747.7 | 6654.3 | 6627.6 | 6580.8 | 6534.1 | 6527.4 |
| 15°   | 7248.3  | 7181.5  | 7021.3 | 6907.9 | 6761.0 | 6647.6 | 6547.5 | 6527.4 | 6487.4 | 6454.0 | 6454.0 |
| 17.5° | 7288.3  | 7201.6  | 7001.3 | 6841.1 | 6660.9 | 6534.1 | 6440.7 | 6440.7 | 6414.0 | 6394.0 | 6394.0 |
| 20°   | 7308.3  | 7208.2  | 6961.3 | 6747.7 | 6540.8 | 6407.3 | 6320.5 | 6333.9 | 6327.2 | 6320.5 | 6320.5 |
| 22.5° | 7355.1  | 7221.6  | 6927.9 | 6660.9 | 6414.0 | 6273.8 | 6193.7 | 6213.8 | 6207.1 | 6207.1 | 6213.8 |
| 25°   | 7428.5  | 7254.9  | 6901.2 | 6580.8 | 6293.8 | 6140.3 | 6053.6 | 6066.9 | 6066.9 | 6066.9 | 6066.9 |
| 27.5° | 7528.6  | 7321.7  | 6894.5 | 6507.4 | 6173.7 | 6000.2 | 5893.4 | 5893.4 | 5866.7 | 5873.4 | 5880.0 |
| 30°   | 7682.1  | 7448.5  | 6907.9 | 6440.7 | 6046.9 | 5826.6 | 5699.8 | 5679.8 | 5673.1 | 5686.5 | 5693.2 |
| 32.5° | 7869.0  | 7622.0  | 6988.0 | 6394.0 | 5913.4 | 5633.1 | 5472.9 | 5466.2 | 5446.2 | 5446.2 | 5446.2 |
| 35°   | 8102.6  | 7788.9  | 7061.4 | 6387.3 | 5779.9 | 5426.2 | 5252.7 | 5232.6 | 5185.9 | 5165.9 | 5165.9 |
| 37.5° | 8402.9  | 8049.2  | 7148.2 | 6340.6 | 5666.5 | 5226.0 | 5019.1 | 4952.3 | 4898.9 | 4892.2 | 4892.2 |
| 40°   | 8770.0  | 8342.9  | 7275.0 | 6287.2 | 5546.3 | 5019.1 | 4745.4 | 4632.0 | 4638.6 | 4665.3 | 4665.3 |
| 42.5° | 9203.8  | 8703.3  | 7435.1 | 6260.5 | 5372.8 | 4805.5 | 4425.0 | 4291.6 | 4338.3 | 4365.0 | 4371.7 |
| 45°   | 9711.1  | 9130.4  | 7615.4 | 6227.1 | 5212.6 | 4565.2 | 4084.7 | 3917.8 | 3937.8 | 3944.5 | 3951.2 |
| 47.5° | 10298.4 | 9604.3  | 7802.2 | 6200.4 | 5032.4 | 4264.9 | 3710.9 | 3490.6 | 3484.0 | 3443.9 | 3457.3 |
| 50°   | 10912.5 | 10104.9 | 7995.8 | 6153.7 | 4812.2 | 3911.1 | 3317.1 | 3056.8 | 3003.4 | 2943.4 | 2950.0 |
| 52.5° | 11566.5 | 10618.8 | 8176.0 | 6080.3 | 4538.5 | 3550.7 | 2943.4 | 2663.0 | 2556.2 | 2489.5 | 2502.9 |
| 55°   | 12287.4 | 11146.1 | 8349.5 | 5966.8 | 4251.5 | 3190.3 | 2609.6 | 2322.7 | 2189.2 | 2135.8 | 2142.4 |
| 57.5° | 12948.1 | 11653.3 | 8476.3 | 5826.6 | 3937.8 | 2863.3 | 2316.0 | 2035.7 | 1948.9 | 1942.2 | 1948.9 |
| 60°   | 13588.8 | 12080.5 | 8529.7 | 5633.1 | 3617.5 | 2562.9 | 2042.3 | 1828.8 | 1768.7 | 1802.1 | 1808.7 |
| 62.5° | 14129.5 | 12354.1 | 8503.0 | 5372.8 | 3290.4 | 2275.9 | 1822.1 | 1668.6 | 1628.5 | 1695.3 | 1701.9 |
| 65°   | 14443.1 | 12440.9 | 8316.2 | 4999.0 | 2936.7 | 1995.6 | 1615.2 | 1448.3 | 1428.3 | 1468.3 | 1488.4 |
| 67.5° | 14029.3 | 11900.2 | 7808.9 | 4485.1 | 2542.9 | 1735.3 | 1414.9 | 1281.5 | 1248.1 | 1281.5 | 1281.5 |
| 70°   | 12434.2 | 10311.8 | 6607.5 | 3670.9 | 2109.1 | 1481.7 | 1228.1 | 1134.6 | 1107.9 | 1134.6 | 1128.0 |
| 72.5° | 10358.5 | 8576.5  | 5205.9 | 2863.3 | 1661.9 | 1248.1 | 1067.9 | 981.1  | 954.4  | 927.7  | 914.4  |
| 75°   | 8035.8  | 6514.1  | 3777.6 | 2102.4 | 1254.8 | 1001.1 | 894.4  | 814.3  | 747.5  | 774.2  | 760.9  |
| 77.5° | 5886.7  | 4571.9  | 2676.4 | 1455.0 | 901.0  | 774.2  | 700.8  | 640.7  | 594.0  | 647.4  | 640.7  |
| 80°   | 3791.0  | 2956.7  | 1788.7 | 974.4  | 620.7  | 540.6  | 513.9  | 480.5  | 527.3  | 687.5  | 700.8  |
| 82.5° | 2316.0  | 1875.5  | 1067.9 | 634.1  | 407.1  | 360.4  | 333.7  | 333.7  | 540.6  | 594.0  | 600.7  |
| 85°   | 1034.5  | 994.5   | 580.7  | 327.0  | 226.9  | 206.9  | 186.9  | 240.3  | 220.3  | 160.2  | 166.9  |
| 87.5° | 166.9   | 173.5   | 126.8  | 113.5  | 86.8   | 86.8   | 66.7   | 46.7   | 33.4   | 20.0   | 20.0   |
| 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)