

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: P842273

Luminaire Tested: **ARCH4-290-750-U-T2U**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842273  
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: ARCH4-290-750-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

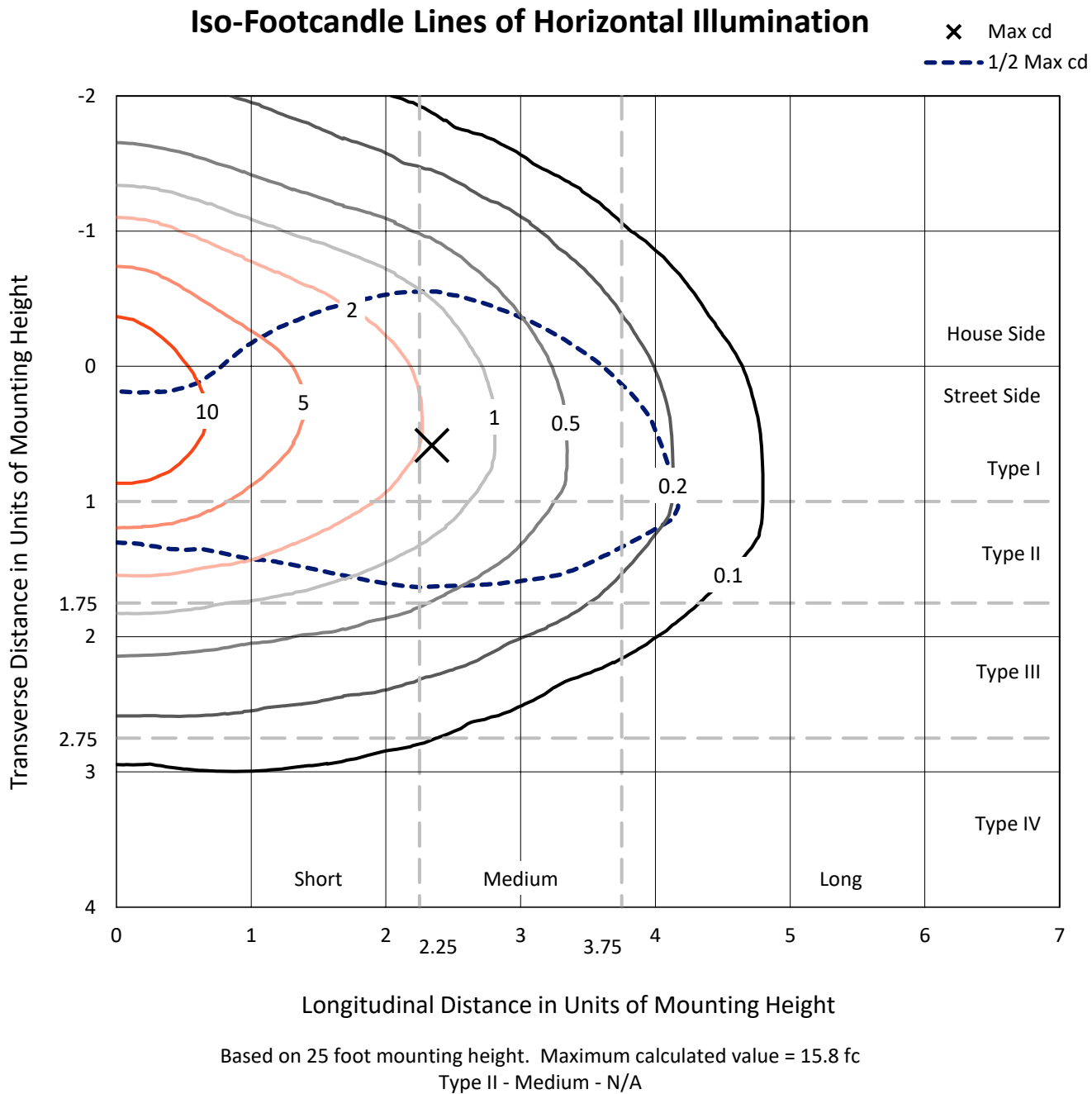
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 43138 lumens  
Efficiency: N/A  
Efficacy: 148.9 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

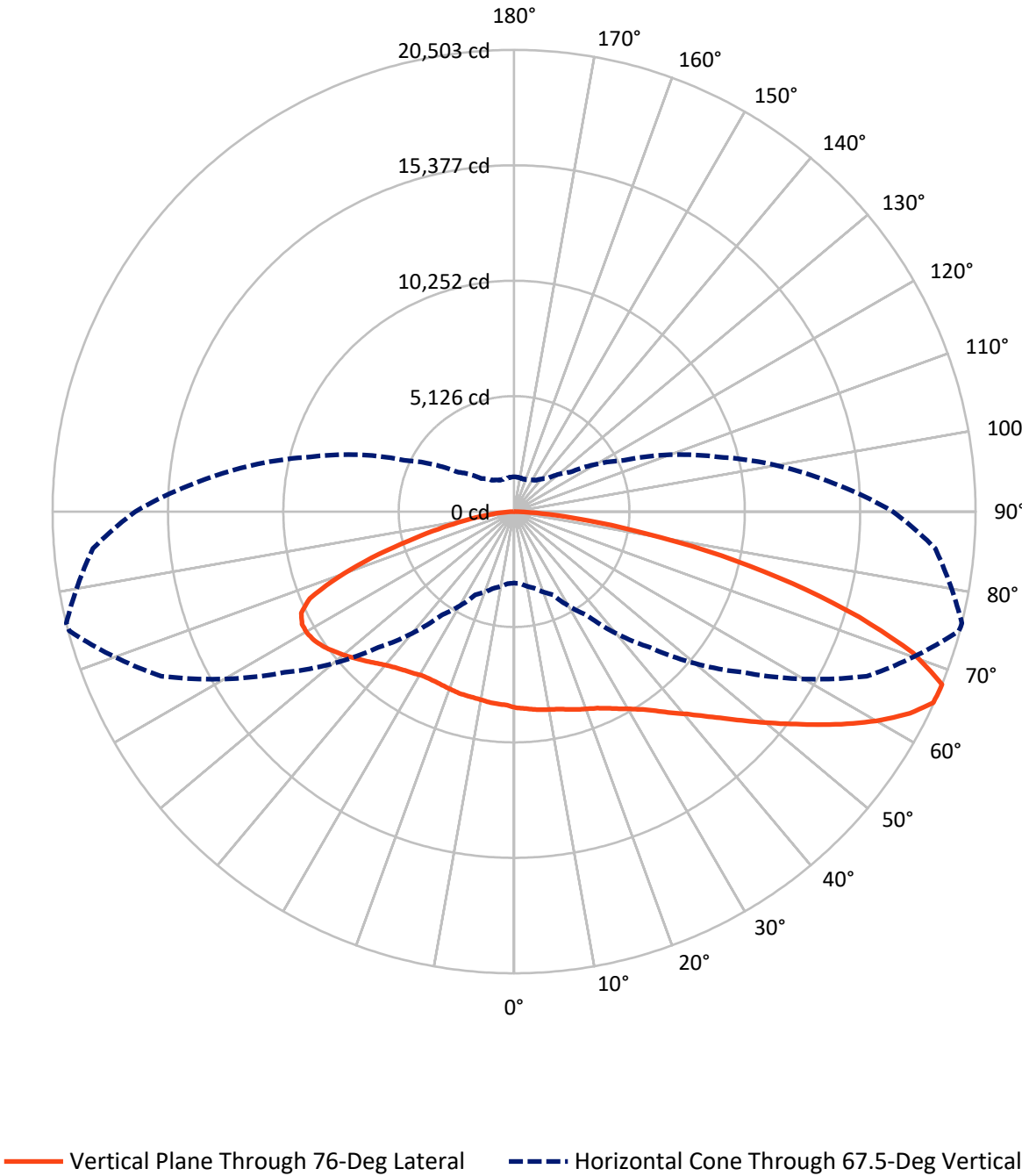


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Luminous Intensity Polar Plot



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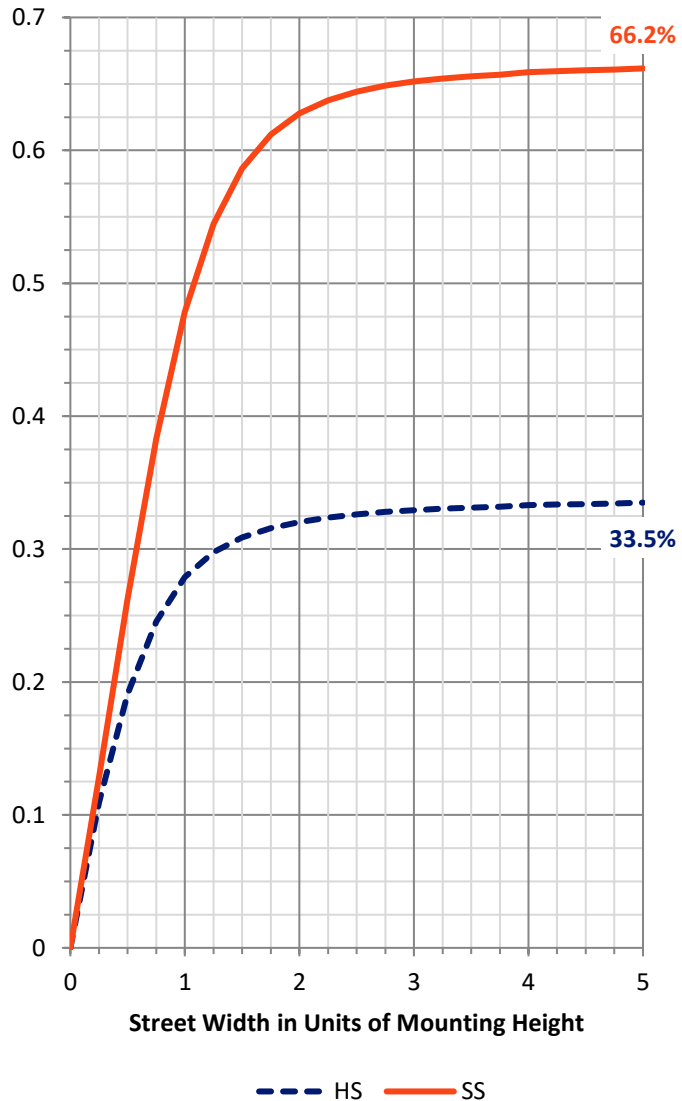
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 14576.5  | 0.0    | 14576.5 |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 28561.5  | 0.0    | 28561.5 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 43138.0  | 0.0    | 43138.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 840.2   | 1.9       |
| 10°-20°   | 2568.8  | 6.0       |
| 20°-30°   | 4364.5  | 10.1      |
| 30°-40°   | 6210.1  | 14.4      |
| 40°-50°   | 7843.0  | 18.2      |
| 50°-60°   | 8491.6  | 19.7      |
| 60°-70°   | 7898.1  | 18.3      |
| 70°-80°   | 4242.0  | 9.8       |
| 80°-90°   | 679.7   | 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°    | 43138.0 | 100.0     |
| 0°-180°   | 43138.0 | 100.0     |

**Coefficient of Utilization**



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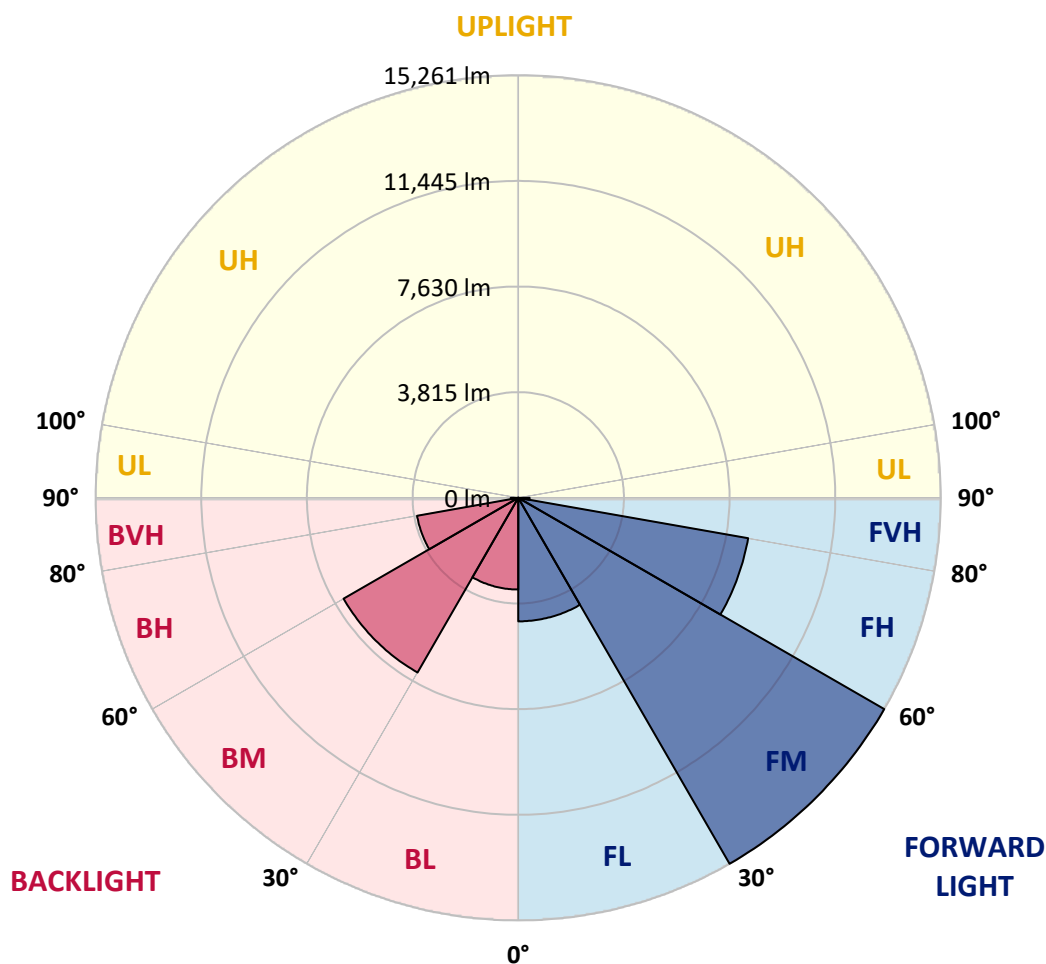
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 4460.9  | 10.3      |                         |      |          |
| FM   | (30°-60°)   | 15260.6 | 35.4      |                         |      |          |
| FH   | (60°-80°)   | 8428.8  | 19.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 411.2   | 1.0       |                         |      | G3/500   |
| BL   | (0°-30°)    | 3312.6  | 7.7       | B4/5000                 |      |          |
| BM   | (30°-60°)   | 7284.1  | 16.9      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 3711.3  | 8.6       | B4/5000                 |      | G4/5000  |
| BVH  | (80°-90°)   | 268.5   | 0.6       |                         |      | G3/500   |
| 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°    | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  | 8713.8  |
| 2.5°  | 8978.1  | 8962.1  | 8898.0  | 8906.0  | 8906.0  | 8898.0  | 8801.9  | 8761.8  | 8761.8  | 8753.8  | 8665.7  |
| 5°    | 9298.4  | 9274.4  | 9202.3  | 9186.3  | 9154.3  | 9114.2  | 8962.1  | 8874.0  | 8833.9  | 8825.9  | 8705.8  |
| 7.5°  | 9674.9  | 9642.8  | 9554.7  | 9506.7  | 9426.6  | 9322.5  | 9130.2  | 8994.1  | 8898.0  | 8890.0  | 8721.8  |
| 10°   | 10051.3 | 10019.2 | 9915.1  | 9827.0  | 9714.9  | 9546.7  | 9298.4  | 9098.2  | 8946.0  | 8930.0  | 8729.8  |
| 12.5° | 10499.8 | 10467.7 | 10339.6 | 10227.5 | 10059.3 | 9835.0  | 9506.7  | 9234.4  | 9026.1  | 9002.1  | 8753.8  |
| 15°   | 10972.3 | 10924.3 | 10796.1 | 10668.0 | 10459.7 | 10171.4 | 9779.0  | 9418.6  | 9154.3  | 9114.2  | 8825.9  |
| 17.5° | 11364.8 | 11300.7 | 11196.6 | 11068.4 | 10836.2 | 10499.8 | 10051.3 | 9602.8  | 9274.4  | 9242.4  | 8898.0  |
| 20°   | 11701.1 | 11653.1 | 11541.0 | 11420.8 | 11172.5 | 10804.1 | 10307.6 | 9787.0  | 9386.5  | 9346.5  | 8954.1  |
| 22.5° | 12021.5 | 11957.4 | 11893.3 | 11805.3 | 11532.9 | 11124.5 | 10603.9 | 10011.2 | 9530.7  | 9482.6  | 9026.1  |
| 25°   | 12389.9 | 12317.8 | 12293.8 | 12245.7 | 11925.4 | 11508.9 | 10964.3 | 10291.6 | 9730.9  | 9674.9  | 9154.3  |
| 27.5° | 12846.4 | 12766.3 | 12718.3 | 12718.3 | 12333.8 | 11901.4 | 11348.7 | 10619.9 | 9963.2  | 9915.1  | 9314.5  |
| 30°   | 13327.0 | 13230.9 | 13158.8 | 13158.8 | 12726.3 | 12293.8 | 11725.2 | 10948.3 | 10227.5 | 10171.4 | 9522.7  |
| 32.5° | 13751.4 | 13655.3 | 13575.2 | 13567.2 | 13118.7 | 12686.2 | 12117.6 | 11308.7 | 10547.8 | 10475.8 | 9779.0  |
| 35°   | 14079.8 | 13991.7 | 13919.6 | 13935.6 | 13511.2 | 13086.7 | 12558.1 | 11789.2 | 10948.3 | 10868.2 | 10115.4 |
| 37.5° | 14280.0 | 14248.0 | 14207.9 | 14264.0 | 13871.6 | 13471.1 | 13014.6 | 12253.8 | 11404.8 | 11332.7 | 10531.8 |
| 40°   | 14384.1 | 14360.1 | 14520.3 | 14592.4 | 14175.9 | 13815.5 | 13471.1 | 12734.3 | 11901.4 | 11821.3 | 11012.4 |
| 42.5° | 14536.3 | 14736.5 | 14800.6 | 14784.6 | 14400.2 | 14079.8 | 13887.6 | 13254.9 | 12486.0 | 12413.9 | 11589.0 |
| 45°   | 13991.7 | 13943.7 | 14296.0 | 14488.3 | 14416.2 | 14248.0 | 14280.0 | 13879.6 | 13166.8 | 13094.7 | 12253.8 |
| 47.5° | 13262.9 | 13198.8 | 13399.0 | 13871.6 | 14151.9 | 14312.1 | 14632.4 | 14528.3 | 13951.7 | 13887.6 | 13030.6 |
| 50°   | 11725.2 | 11813.3 | 12558.1 | 13190.8 | 13743.4 | 14296.0 | 14928.8 | 15225.1 | 14816.6 | 14752.6 | 13863.6 |
| 52.5° | 10019.2 | 10107.3 | 10884.2 | 12341.9 | 13246.9 | 14175.9 | 15145.0 | 15921.9 | 15753.7 | 15681.6 | 14752.6 |
| 55°   | 8777.9  | 8970.1  | 9851.1  | 10908.2 | 12542.1 | 13799.5 | 15273.1 | 16634.7 | 16762.8 | 16698.7 | 15721.6 |
| 57.5° | 7544.5  | 7688.6  | 8353.4  | 9290.4  | 11581.0 | 13142.8 | 15265.1 | 17299.4 | 17820.0 | 17755.9 | 16706.8 |
| 60°   | 6094.8  | 6279.0  | 6807.6  | 7816.8  | 10299.6 | 12357.9 | 15040.9 | 17820.0 | 18837.1 | 18789.1 | 17659.8 |
| 62.5° | 5101.7  | 5157.8  | 5534.2  | 6407.2  | 8649.7  | 11364.8 | 14536.3 | 18100.3 | 19758.2 | 19726.1 | 18516.8 |
| 65°   | 4108.6  | 4116.6  | 4461.0  | 5189.8  | 7055.9  | 10131.4 | 13679.4 | 17996.2 | 20455.0 | 20471.0 | 19133.5 |
| 67.5° | 3171.6  | 3211.6  | 3524.0  | 4076.6  | 5606.3  | 8529.6  | 12454.0 | 17291.4 | 20463.0 | 20503.0 | 18781.1 |
| 70°   | 2194.5  | 2226.5  | 2699.0  | 3235.6  | 4332.9  | 6799.6  | 10796.1 | 15425.3 | 18781.1 | 18813.1 | 16834.9 |
| 72.5° | 1545.7  | 1561.8  | 2066.3  | 2586.9  | 3387.8  | 5125.8  | 8145.1  | 12758.3 | 16010.0 | 16034.0 | 14159.9 |
| 75°   | 1153.3  | 1169.3  | 1457.6  | 1962.2  | 2594.9  | 3548.0  | 5566.2  | 9771.0  | 12790.4 | 12790.4 | 11180.5 |
| 77.5° | 816.9   | 824.9   | 945.1   | 1353.5  | 1729.9  | 2394.7  | 3347.8  | 6399.2  | 9386.5  | 9402.6  | 8145.1  |
| 80°   | 552.6   | 560.6   | 616.7   | 913.0   | 1081.2  | 1297.5  | 1818.0  | 3355.8  | 5918.6  | 5942.7  | 5173.8  |
| 82.5° | 288.3   | 304.3   | 344.4   | 464.5   | 544.6   | 720.8   | 937.1   | 1705.9  | 3275.7  | 3339.7  | 3107.5  |
| 85°   | 112.1   | 112.1   | 128.1   | 152.2   | 200.2   | 280.3   | 432.5   | 648.7   | 1481.7  | 1529.7  | 1369.5  |
| 87.5° | 40.0    | 40.0    | 48.1    | 48.1    | 56.1    | 64.1    | 72.1    | 96.1    | 168.2   | 168.2   | 160.2   |
| 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°    | 8713.8  | 8713.8  | 8713.8  | 8713.8 | 8713.8 | 8713.8 | 8713.8 | 8713.8 | 8713.8 | 8713.8 | 8713.8 |
| 2.5°  | 8633.7  | 8633.7  | 8593.6  | 8609.7 | 8601.7 | 8585.6 | 8569.6 | 8593.6 | 8569.6 | 8513.6 | 8505.5 |
| 5°    | 8649.7  | 8633.7  | 8569.6  | 8561.6 | 8537.6 | 8505.5 | 8465.5 | 8481.5 | 8441.5 | 8393.4 | 8385.4 |
| 7.5°  | 8657.7  | 8625.7  | 8537.6  | 8505.5 | 8457.5 | 8393.4 | 8329.3 | 8329.3 | 8273.3 | 8225.2 | 8217.2 |
| 10°   | 8641.7  | 8601.7  | 8481.5  | 8417.4 | 8329.3 | 8233.2 | 8145.1 | 8121.1 | 8057.0 | 8001.0 | 8001.0 |
| 12.5° | 8649.7  | 8593.6  | 8441.5  | 8337.4 | 8217.2 | 8097.1 | 7985.0 | 7952.9 | 7896.9 | 7840.8 | 7832.8 |
| 15°   | 8697.8  | 8617.7  | 8425.5  | 8289.3 | 8113.1 | 7977.0 | 7856.8 | 7832.8 | 7784.7 | 7744.7 | 7744.7 |
| 17.5° | 8745.8  | 8641.7  | 8401.4  | 8209.2 | 7993.0 | 7840.8 | 7728.7 | 7728.7 | 7696.6 | 7672.6 | 7672.6 |
| 20°   | 8769.8  | 8649.7  | 8353.4  | 8097.1 | 7848.8 | 7688.6 | 7584.5 | 7600.5 | 7592.5 | 7584.5 | 7584.5 |
| 22.5° | 8825.9  | 8665.7  | 8313.3  | 7993.0 | 7696.6 | 7528.5 | 7432.3 | 7456.4 | 7448.4 | 7448.4 | 7456.4 |
| 25°   | 8914.0  | 8705.8  | 8281.3  | 7896.9 | 7552.5 | 7368.3 | 7264.2 | 7280.2 | 7280.2 | 7280.2 | 7280.2 |
| 27.5° | 9034.1  | 8785.9  | 8273.3  | 7808.8 | 7408.3 | 7200.1 | 7071.9 | 7071.9 | 7039.9 | 7047.9 | 7055.9 |
| 30°   | 9218.3  | 8938.0  | 8289.3  | 7728.7 | 7256.1 | 6991.8 | 6839.7 | 6815.7 | 6807.6 | 6823.7 | 6831.7 |
| 32.5° | 9442.6  | 9146.3  | 8385.4  | 7672.6 | 7096.0 | 6759.6 | 6567.4 | 6559.4 | 6535.3 | 6535.3 | 6535.3 |
| 35°   | 9722.9  | 9346.5  | 8473.5  | 7664.6 | 6935.8 | 6511.3 | 6303.1 | 6279.0 | 6223.0 | 6199.0 | 6199.0 |
| 37.5° | 10083.3 | 9658.8  | 8577.6  | 7608.5 | 6799.6 | 6271.0 | 6022.8 | 5942.7 | 5878.6 | 5870.6 | 5870.6 |
| 40°   | 10523.8 | 10011.2 | 8729.8  | 7544.5 | 6655.5 | 6022.8 | 5694.4 | 5558.2 | 5566.2 | 5598.3 | 5598.3 |
| 42.5° | 11044.4 | 10443.7 | 8922.0  | 7512.4 | 6447.2 | 5766.5 | 5310.0 | 5149.8 | 5205.8 | 5237.9 | 5245.9 |
| 45°   | 11653.1 | 10956.3 | 9138.3  | 7472.4 | 6255.0 | 5478.1 | 4901.5 | 4701.3 | 4725.3 | 4733.3 | 4741.3 |
| 47.5° | 12357.9 | 11524.9 | 9362.5  | 7440.4 | 6038.8 | 5117.7 | 4453.0 | 4188.7 | 4180.7 | 4132.6 | 4148.7 |
| 50°   | 13094.7 | 12125.6 | 9594.8  | 7384.3 | 5774.5 | 4693.3 | 3980.5 | 3668.1 | 3604.0 | 3532.0 | 3540.0 |
| 52.5° | 13879.6 | 12742.3 | 9811.0  | 7296.2 | 5446.1 | 4260.8 | 3532.0 | 3195.6 | 3067.4 | 2987.4 | 3003.4 |
| 55°   | 14744.5 | 13375.0 | 10019.2 | 7160.0 | 5101.7 | 3828.3 | 3131.5 | 2787.1 | 2626.9 | 2562.9 | 2570.9 |
| 57.5° | 15537.4 | 13983.7 | 10171.4 | 6991.8 | 4725.3 | 3435.9 | 2779.1 | 2442.7 | 2338.6 | 2330.6 | 2338.6 |
| 60°   | 16306.3 | 14496.3 | 10235.5 | 6759.6 | 4340.9 | 3075.5 | 2450.8 | 2194.5 | 2122.4 | 2162.4 | 2170.4 |
| 62.5° | 16955.0 | 14824.6 | 10203.5 | 6447.2 | 3948.4 | 2731.1 | 2186.5 | 2002.2 | 1954.2 | 2034.3 | 2042.3 |
| 65°   | 17331.5 | 14928.8 | 9979.2  | 5998.7 | 3524.0 | 2394.7 | 1938.2 | 1738.0 | 1713.9 | 1762.0 | 1786.0 |
| 67.5° | 16834.9 | 14280.0 | 9370.5  | 5382.0 | 3051.4 | 2082.3 | 1697.9 | 1537.7 | 1497.7 | 1537.7 | 1537.7 |
| 70°   | 14920.7 | 12373.9 | 7928.9  | 4404.9 | 2530.8 | 1778.0 | 1473.7 | 1361.5 | 1329.5 | 1361.5 | 1353.5 |
| 72.5° | 12430.0 | 10291.6 | 6247.0  | 3435.9 | 1994.2 | 1497.7 | 1281.4 | 1177.3 | 1145.3 | 1113.2 | 1097.2 |
| 75°   | 9642.8  | 7816.8  | 4533.1  | 2522.8 | 1505.7 | 1201.3 | 1073.2 | 977.1  | 897.0  | 929.0  | 913.0  |
| 77.5° | 7063.9  | 5486.2  | 3211.6  | 1746.0 | 1081.2 | 929.0  | 840.9  | 768.9  | 712.8  | 776.9  | 768.9  |
| 80°   | 4549.1  | 3548.0  | 2146.4  | 1169.3 | 744.8  | 648.7  | 616.7  | 576.6  | 632.7  | 824.9  | 840.9  |
| 82.5° | 2779.1  | 2250.5  | 1281.4  | 760.9  | 488.5  | 432.5  | 400.4  | 400.4  | 648.7  | 712.8  | 720.8  |
| 85°   | 1241.4  | 1193.3  | 696.8   | 392.4  | 272.3  | 248.3  | 224.3  | 288.3  | 264.3  | 192.2  | 200.2  |
| 87.5° | 200.2   | 208.2   | 152.2   | 136.2  | 104.1  | 104.1  | 80.1   | 56.1   | 40.0   | 24.0   | 24.0   |
| 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)