

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: P842088

Luminaire Tested: **ARCH4-270-722-U-T4W**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-270-722-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 32857 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 269  
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

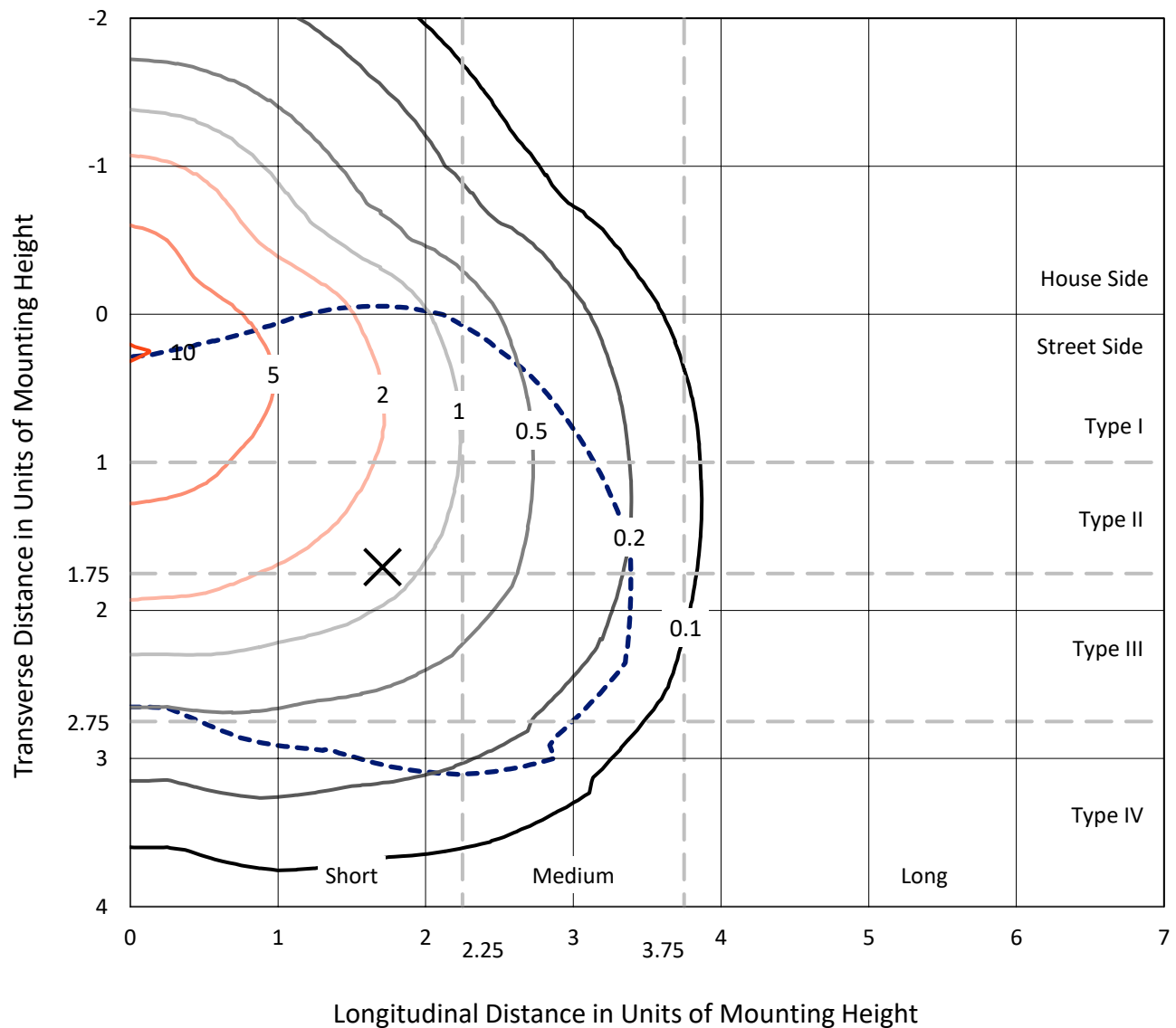


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## Iso-Footcandle Lines of Horizontal Illumination

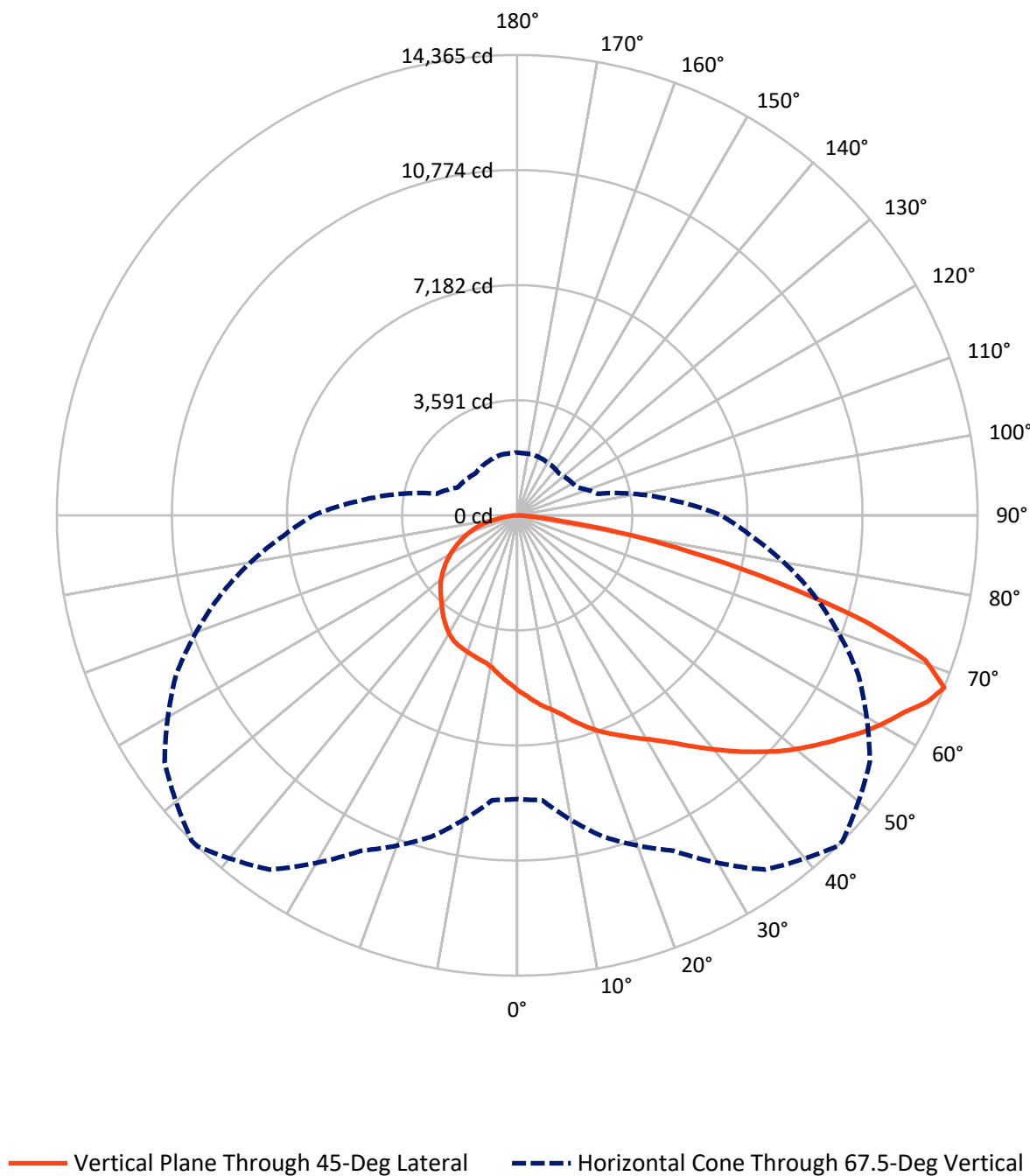
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc  
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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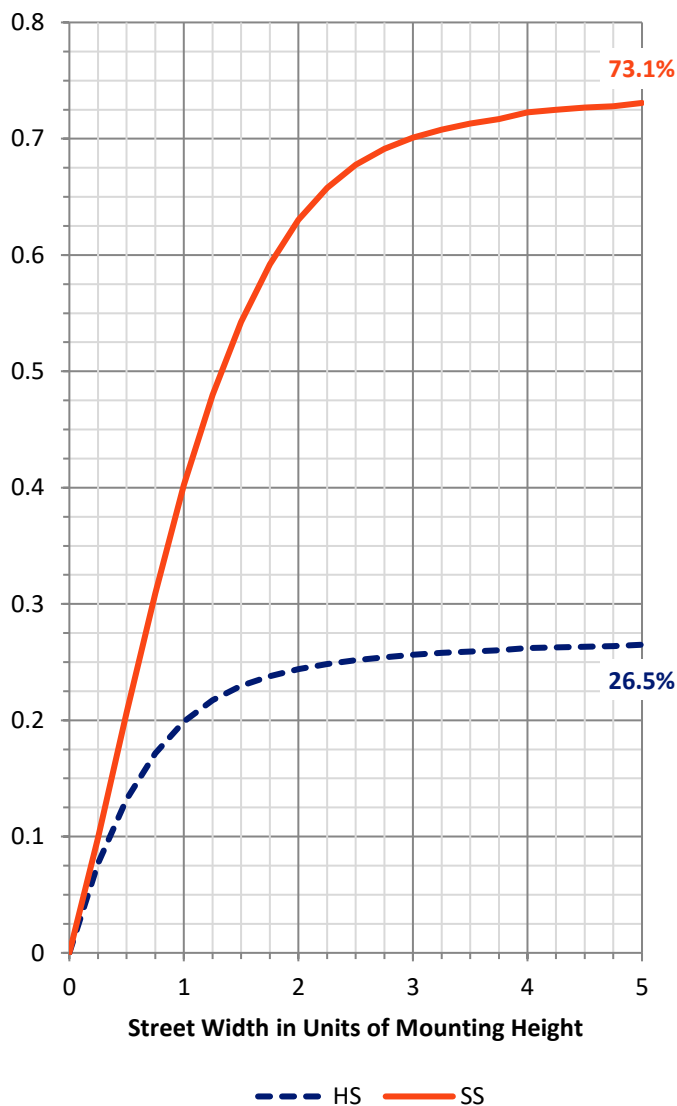
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8777.8   | 0.0    | 8777.8  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 24079.2  | 0.0    | 24079.2 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 32857.0  | 0.0    | 32857.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 524.7   | 1.6       |
| 10°-20°   | 1620.8  | 4.9       |
| 20°-30°   | 2797.7  | 8.5       |
| 30°-40°   | 4125.6  | 12.6      |
| 40°-50°   | 5589.4  | 17.0      |
| 50°-60°   | 6831.5  | 20.8      |
| 60°-70°   | 7045.7  | 21.4      |
| 70°-80°   | 3859.2  | 11.7      |
| 80°-90°   | 462.6   | 1.4       |
| 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°    | 32857.0 | 100.0     |
| 0°-180°   | 32857.0 | 100.0     |

**Coefficient of Utilization**



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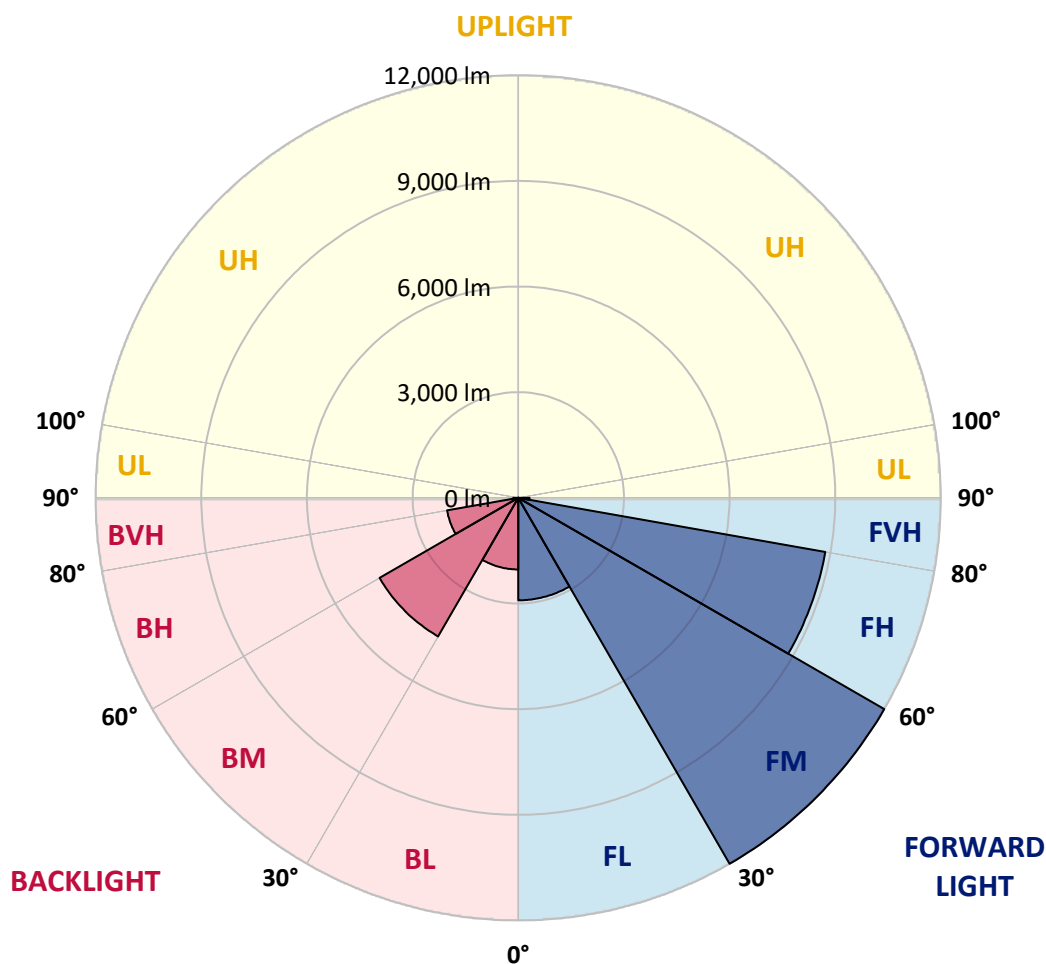
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2908.7  | 8.9       |                         |      |          |
| FM   | (30°-60°)   | 11999.7 | 36.5      |                         |      |          |
| FH   | (60°-80°)   | 8852.2  | 26.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 318.6   | 1.0       |                         |      | G3/500   |
| BL   | (0°-30°)    | 2034.4  | 6.2       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 4546.7  | 13.8      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 2052.8  | 6.2       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 143.9   | 0.4       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9  | 5479.9 |
| 2.5°  | 5719.9  | 5714.9  | 5724.9  | 5689.9  | 5644.9  | 5639.9  | 5639.9  | 5609.9  | 5574.9  | 5504.9  | 5449.9 |
| 5°    | 5989.9  | 5979.9  | 5984.9  | 5934.9  | 5874.9  | 5844.9  | 5839.9  | 5774.9  | 5694.9  | 5584.9  | 5484.9 |
| 7.5°  | 6239.9  | 6229.9  | 6224.9  | 6169.9  | 6079.9  | 6029.9  | 6024.9  | 5929.9  | 5834.9  | 5664.9  | 5519.9 |
| 10°   | 6474.9  | 6464.9  | 6454.9  | 6379.9  | 6269.9  | 6194.9  | 6184.9  | 6064.9  | 5944.9  | 5734.9  | 5549.9 |
| 12.5° | 6774.9  | 6754.9  | 6744.9  | 6654.9  | 6494.9  | 6414.9  | 6399.9  | 6239.9  | 6089.9  | 5834.9  | 5609.9 |
| 15°   | 7089.9  | 7074.9  | 7059.9  | 6974.9  | 6794.9  | 6689.9  | 6664.9  | 6464.9  | 6259.9  | 5964.9  | 5699.9 |
| 17.5° | 7324.9  | 7309.9  | 7309.9  | 7234.9  | 7069.9  | 6949.9  | 6929.9  | 6689.9  | 6434.9  | 6084.9  | 5769.9 |
| 20°   | 7469.9  | 7454.9  | 7469.9  | 7424.9  | 7299.9  | 7199.9  | 7179.9  | 6914.9  | 6609.9  | 6194.9  | 5829.9 |
| 22.5° | 7574.9  | 7559.9  | 7584.9  | 7564.9  | 7474.9  | 7414.9  | 7399.9  | 7139.9  | 6789.9  | 6309.9  | 5889.9 |
| 25°   | 7759.9  | 7759.9  | 7759.9  | 7724.9  | 7639.9  | 7619.9  | 7619.9  | 7394.9  | 7019.9  | 6459.9  | 5979.9 |
| 27.5° | 8129.9  | 8109.9  | 8084.9  | 7984.9  | 7839.9  | 7834.9  | 7864.9  | 7654.9  | 7284.9  | 6654.9  | 6089.9 |
| 30°   | 8674.9  | 8664.9  | 8569.9  | 8359.9  | 8114.9  | 8089.9  | 8109.9  | 7934.9  | 7569.9  | 6859.9  | 6214.9 |
| 32.5° | 9379.9  | 9344.9  | 9149.9  | 8834.9  | 8484.9  | 8369.9  | 8409.9  | 8224.9  | 7869.9  | 7069.9  | 6334.9 |
| 35°   | 9879.9  | 9889.9  | 9749.9  | 9464.9  | 9049.9  | 8744.9  | 8774.9  | 8549.9  | 8194.9  | 7304.9  | 6484.9 |
| 37.5° | 10454.9 | 10489.9 | 10279.9 | 10064.9 | 9679.9  | 9159.9  | 9189.9  | 8884.9  | 8519.9  | 7599.9  | 6644.9 |
| 40°   | 11249.8 | 11179.8 | 10824.9 | 10569.9 | 10144.9 | 9594.9  | 9619.9  | 9259.9  | 8894.9  | 7879.9  | 6829.9 |
| 42.5° | 11914.8 | 11789.8 | 11359.8 | 11034.8 | 10524.9 | 10054.9 | 10079.9 | 9664.9  | 9274.9  | 8189.9  | 7034.9 |
| 45°   | 12869.8 | 12524.8 | 11904.8 | 11744.8 | 10914.8 | 10504.9 | 10529.9 | 10094.9 | 9674.9  | 8519.9  | 7254.9 |
| 47.5° | 13424.8 | 12874.8 | 12479.8 | 12394.8 | 11344.8 | 10969.8 | 10999.8 | 10549.9 | 10104.9 | 8894.9  | 7484.9 |
| 50°   | 13389.8 | 13034.8 | 12919.8 | 12709.8 | 11724.8 | 11404.8 | 11434.8 | 11019.8 | 10539.9 | 9264.9  | 7704.9 |
| 52.5° | 13159.8 | 13224.8 | 13164.8 | 12814.8 | 12104.8 | 11824.8 | 11859.8 | 11484.8 | 10984.8 | 9609.9  | 7909.9 |
| 55°   | 13514.8 | 13559.8 | 13444.8 | 12984.8 | 12524.8 | 12244.8 | 12284.8 | 11974.8 | 11424.8 | 9914.9  | 8084.9 |
| 57.5° | 13939.8 | 13779.8 | 13664.8 | 13284.8 | 12959.8 | 12699.8 | 12744.8 | 12474.8 | 11804.8 | 10159.9 | 8219.9 |
| 60°   | 13919.8 | 13584.8 | 13699.8 | 13304.8 | 13254.8 | 13119.8 | 13159.8 | 12884.8 | 12094.8 | 10339.9 | 8274.9 |
| 62.5° | 12894.8 | 12714.8 | 13294.8 | 13159.8 | 13494.8 | 13494.8 | 13544.8 | 13134.8 | 12269.8 | 10414.9 | 8244.9 |
| 65°   | 11114.8 | 11124.8 | 12144.8 | 12704.8 | 13779.8 | 14009.8 | 14049.8 | 13289.8 | 12169.8 | 10194.9 | 7964.9 |
| 67.5° | 8854.9  | 8919.9  | 10384.9 | 11549.8 | 13494.8 | 14359.8 | 14364.8 | 13429.8 | 11739.8 | 9574.9  | 7314.9 |
| 70°   | 6479.9  | 6529.9  | 8259.9  | 9674.9  | 12149.8 | 13584.8 | 13504.8 | 13034.8 | 10804.9 | 8494.9  | 6299.9 |
| 72.5° | 4379.9  | 4424.9  | 6204.9  | 7429.9  | 9969.9  | 11569.8 | 11394.8 | 11519.8 | 9209.9  | 6979.9  | 5064.9 |
| 75°   | 2945.0  | 3000.0  | 4414.9  | 5314.9  | 7334.9  | 8784.9  | 8394.9  | 8724.9  | 7124.9  | 5284.9  | 3694.9 |
| 77.5° | 1855.0  | 1890.0  | 2805.0  | 3485.0  | 5009.9  | 5979.9  | 5589.9  | 5594.9  | 4104.9  | 2845.0  | 1985.0 |
| 80°   | 1180.0  | 1190.0  | 1700.0  | 2010.0  | 2900.0  | 3595.0  | 3180.0  | 2585.0  | 1850.0  | 1510.0  | 1185.0 |
| 82.5° | 685.0   | 670.0   | 1015.0  | 1135.0  | 1380.0  | 1365.0  | 1130.0  | 1070.0  | 810.0   | 755.0   | 605.0  |
| 85°   | 275.0   | 255.0   | 445.0   | 415.0   | 420.0   | 445.0   | 330.0   | 330.0   | 265.0   | 205.0   | 150.0  |
| 87.5° | 55.0    | 55.0    | 60.0    | 55.0    | 55.0    | 60.0    | 45.0    | 45.0    | 40.0    | 40.0    | 40.0   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 | 5479.9 |
| 2.5°  | 5439.9 | 5429.9 | 5404.9 | 5339.9 | 5304.9 | 5284.9 | 5254.9 | 5244.9 | 5239.9 | 5244.9 | 5259.9 |
| 5°    | 5454.9 | 5419.9 | 5349.9 | 5244.9 | 5174.9 | 5129.9 | 5079.9 | 5059.9 | 5044.9 | 5044.9 | 5059.9 |
| 7.5°  | 5464.9 | 5409.9 | 5289.9 | 5134.9 | 5034.9 | 4964.9 | 4904.9 | 4879.9 | 4874.9 | 4889.9 | 4894.9 |
| 10°   | 5469.9 | 5389.9 | 5219.9 | 5024.9 | 4894.9 | 4804.9 | 4744.9 | 4729.9 | 4744.9 | 4774.9 | 4779.9 |
| 12.5° | 5504.9 | 5394.9 | 5179.9 | 4949.9 | 4794.9 | 4704.9 | 4659.9 | 4659.9 | 4699.9 | 4754.9 | 4759.9 |
| 15°   | 5564.9 | 5429.9 | 5159.9 | 4889.9 | 4729.9 | 4649.9 | 4634.9 | 4659.9 | 4719.9 | 4804.9 | 4814.9 |
| 17.5° | 5609.9 | 5449.9 | 5114.9 | 4809.9 | 4644.9 | 4594.9 | 4619.9 | 4679.9 | 4764.9 | 4879.9 | 4889.9 |
| 20°   | 5639.9 | 5449.9 | 5049.9 | 4714.9 | 4559.9 | 4549.9 | 4619.9 | 4714.9 | 4804.9 | 4939.9 | 4954.9 |
| 22.5° | 5669.9 | 5439.9 | 4974.9 | 4599.9 | 4464.9 | 4494.9 | 4624.9 | 4744.9 | 4834.9 | 4979.9 | 5004.9 |
| 25°   | 5724.9 | 5454.9 | 4899.9 | 4484.9 | 4364.9 | 4449.9 | 4619.9 | 4764.9 | 4859.9 | 5009.9 | 5049.9 |
| 27.5° | 5799.9 | 5489.9 | 4844.9 | 4379.9 | 4264.9 | 4379.9 | 4584.9 | 4759.9 | 4859.9 | 5004.9 | 5049.9 |
| 30°   | 5879.9 | 5529.9 | 4779.9 | 4264.9 | 4149.9 | 4279.9 | 4509.9 | 4704.9 | 4819.9 | 4954.9 | 5009.9 |
| 32.5° | 5964.9 | 5574.9 | 4724.9 | 4139.9 | 4009.9 | 4144.9 | 4399.9 | 4619.9 | 4744.9 | 4869.9 | 4929.9 |
| 35°   | 6079.9 | 5654.9 | 4694.9 | 4039.9 | 3884.9 | 4004.9 | 4259.9 | 4509.9 | 4644.9 | 4759.9 | 4829.9 |
| 37.5° | 6219.9 | 5754.9 | 4679.9 | 3939.9 | 3749.9 | 3849.9 | 4109.9 | 4374.9 | 4519.9 | 4614.9 | 4679.9 |
| 40°   | 6379.9 | 5879.9 | 4674.9 | 3844.9 | 3615.0 | 3689.9 | 3954.9 | 4219.9 | 4359.9 | 4434.9 | 4489.9 |
| 42.5° | 6559.9 | 6019.9 | 4664.9 | 3749.9 | 3480.0 | 3540.0 | 3804.9 | 4064.9 | 4184.9 | 4249.9 | 4299.9 |
| 45°   | 6749.9 | 6159.9 | 4644.9 | 3634.9 | 3335.0 | 3405.0 | 3649.9 | 3879.9 | 4004.9 | 4059.9 | 4114.9 |
| 47.5° | 6939.9 | 6299.9 | 4604.9 | 3505.0 | 3205.0 | 3270.0 | 3485.0 | 3684.9 | 3784.9 | 3834.9 | 3889.9 |
| 50°   | 7124.9 | 6424.9 | 4509.9 | 3355.0 | 3070.0 | 3130.0 | 3295.0 | 3430.0 | 3505.0 | 3545.0 | 3600.0 |
| 52.5° | 7289.9 | 6509.9 | 4374.9 | 3180.0 | 2935.0 | 2965.0 | 3075.0 | 3190.0 | 3250.0 | 3255.0 | 3305.0 |
| 55°   | 7429.9 | 6554.9 | 4179.9 | 3000.0 | 2790.0 | 2795.0 | 2855.0 | 2945.0 | 2970.0 | 2950.0 | 2985.0 |
| 57.5° | 7509.9 | 6529.9 | 3964.9 | 2815.0 | 2640.0 | 2620.0 | 2665.0 | 2710.0 | 2715.0 | 2665.0 | 2700.0 |
| 60°   | 7529.9 | 6414.9 | 3684.9 | 2630.0 | 2490.0 | 2435.0 | 2450.0 | 2440.0 | 2430.0 | 2410.0 | 2440.0 |
| 62.5° | 7429.9 | 6169.9 | 3375.0 | 2450.0 | 2330.0 | 2245.0 | 2240.0 | 2235.0 | 2250.0 | 2255.0 | 2260.0 |
| 65°   | 7064.9 | 5709.9 | 3005.0 | 2265.0 | 2160.0 | 2045.0 | 2040.0 | 2100.0 | 2120.0 | 2090.0 | 2100.0 |
| 67.5° | 6359.9 | 5004.9 | 2600.0 | 2050.0 | 1945.0 | 1845.0 | 1885.0 | 1920.0 | 1955.0 | 1945.0 | 1955.0 |
| 70°   | 5359.9 | 4109.9 | 2230.0 | 1810.0 | 1710.0 | 1655.0 | 1700.0 | 1730.0 | 1735.0 | 1725.0 | 1735.0 |
| 72.5° | 4214.9 | 3210.0 | 1885.0 | 1565.0 | 1475.0 | 1450.0 | 1505.0 | 1530.0 | 1575.0 | 1595.0 | 1600.0 |
| 75°   | 3045.0 | 2370.0 | 1545.0 | 1300.0 | 1225.0 | 1225.0 | 1275.0 | 1320.0 | 1360.0 | 1335.0 | 1320.0 |
| 77.5° | 1700.0 | 1415.0 | 1110.0 | 895.0  | 910.0  | 980.0  | 1000.0 | 1050.0 | 1090.0 | 1085.0 | 1075.0 |
| 80°   | 1030.0 | 885.0  | 750.0  | 580.0  | 575.0  | 630.0  | 760.0  | 845.0  | 865.0  | 820.0  | 815.0  |
| 82.5° | 535.0  | 465.0  | 400.0  | 325.0  | 360.0  | 420.0  | 440.0  | 530.0  | 585.0  | 565.0  | 590.0  |
| 85°   | 135.0  | 130.0  | 145.0  | 150.0  | 185.0  | 205.0  | 225.0  | 265.0  | 175.0  | 85.0   | 85.0   |
| 87.5° | 40.0   | 40.0   | 50.0   | 50.0   | 65.0   | 80.0   | 75.0   | 75.0   | 40.0   | 5.0    | 0.0    |
| 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)