

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: P836493

Luminaire Tested: **ARCH3-190-740-U-T4W**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836493  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-190-740-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1440mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 25249 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 189.4  
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

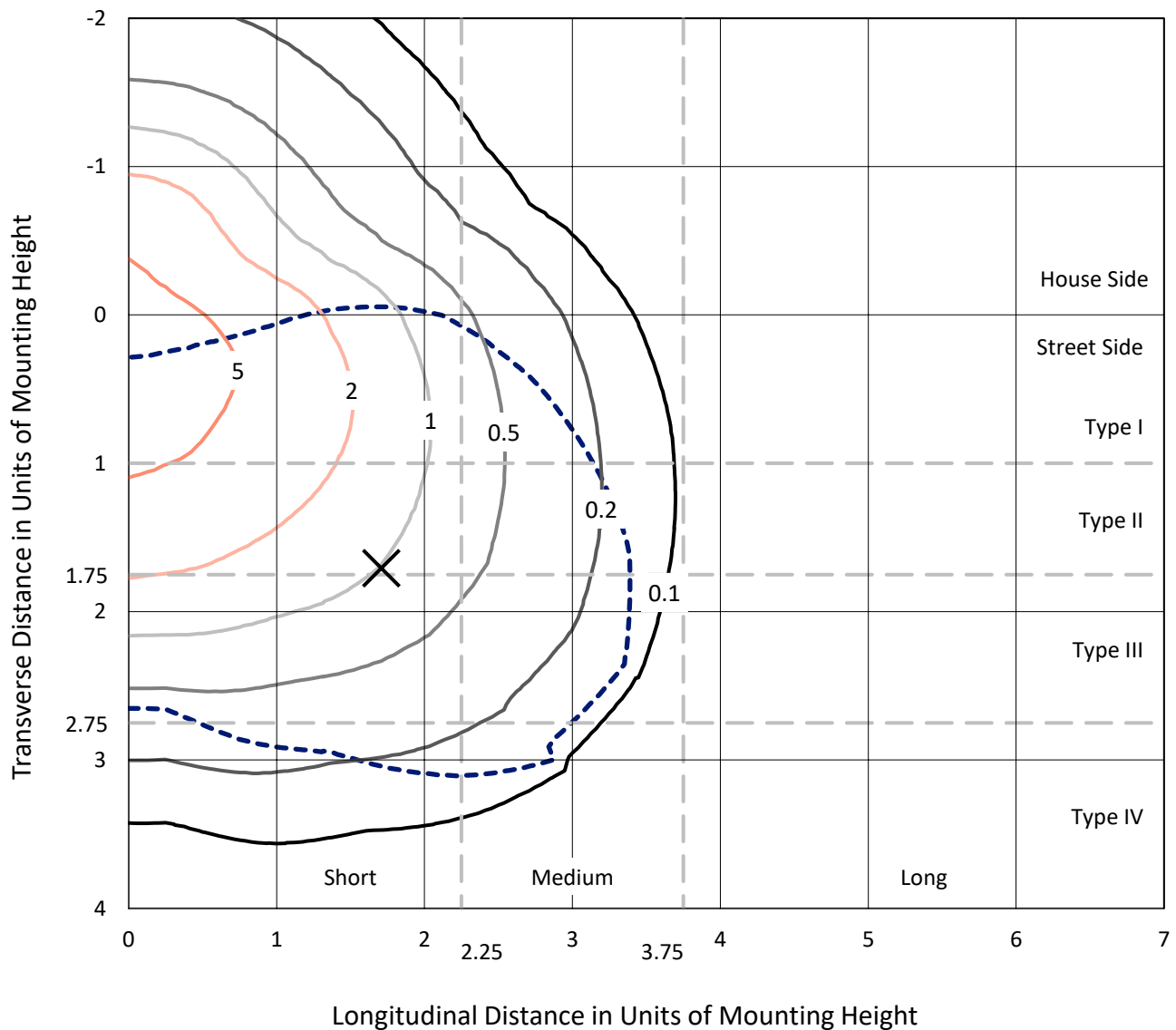


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## Iso-Footcandle Lines of Horizontal Illumination

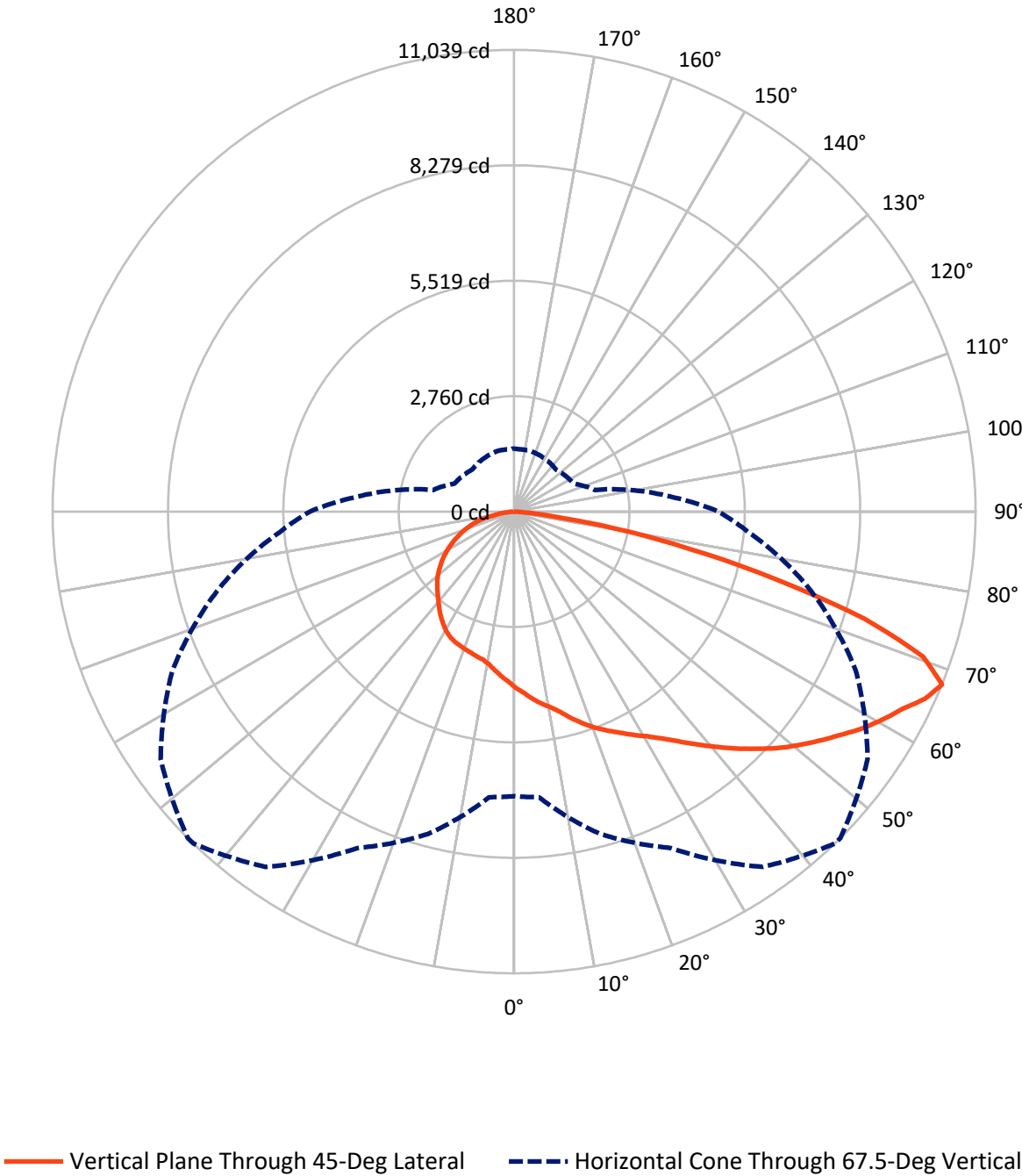
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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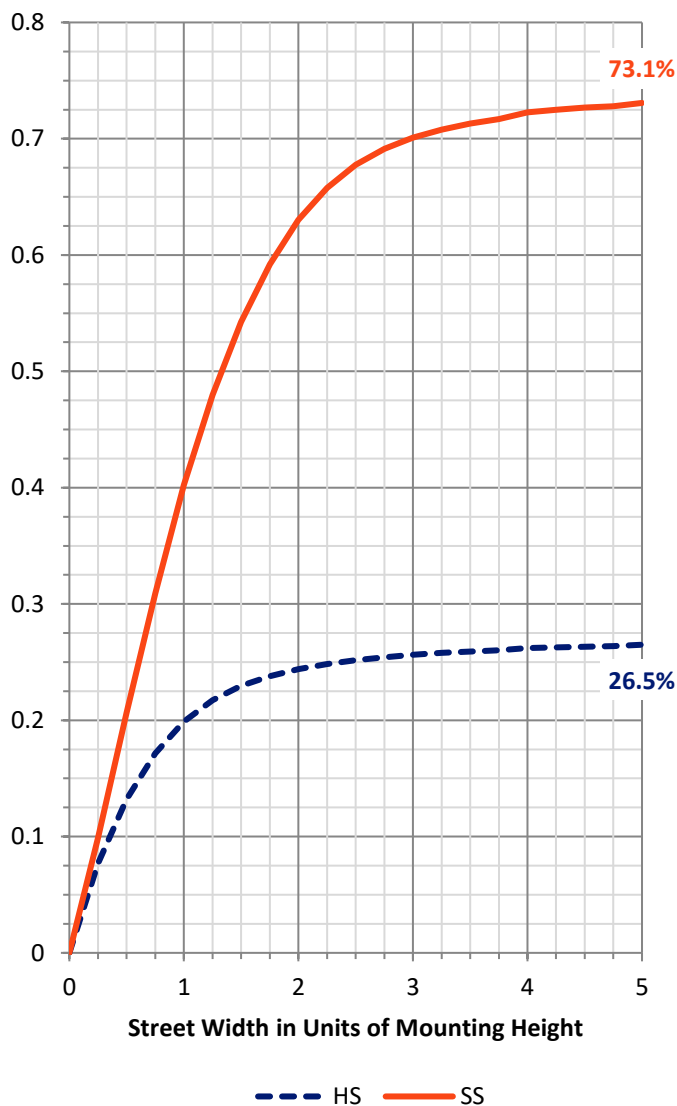
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6745.3   | 0.0    | 6745.3  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 18503.7  | 0.0    | 18503.7 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 25249.0  | 0.0    | 25249.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 403.2   | 1.6       |
| 10°-20°   | 1245.5  | 4.9       |
| 20°-30°   | 2149.9  | 8.5       |
| 30°-40°   | 3170.3  | 12.6      |
| 40°-50°   | 4295.1  | 17.0      |
| 50°-60°   | 5249.7  | 20.8      |
| 60°-70°   | 5414.3  | 21.4      |
| 70°-80°   | 2965.6  | 11.7      |
| 80°-90°   | 355.4   | 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°    | 25249.0 | 100.0     |
| 0°-180°   | 25249.0 | 100.0     |

**Coefficient of Utilization**



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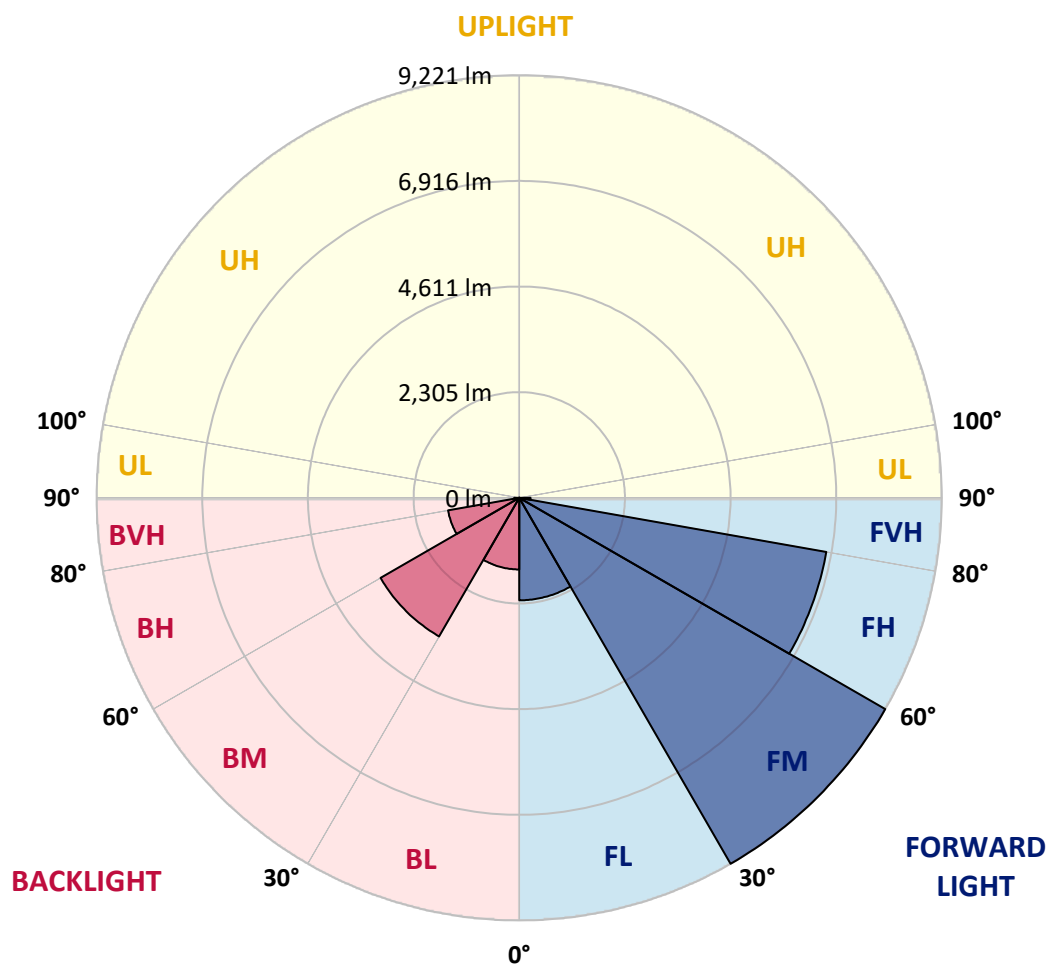
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2235.2 | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 9221.2 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 6802.5 | 26.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 244.9  | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1563.3 | 6.2       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3494.0 | 13.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1577.4 | 6.2       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 110.6  | 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-G3**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°    | 75°    | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0°    | 4211.1  | 4211.1  | 4211.1  | 4211.1  | 4211.1  | 4211.1  | 4211.1  | 4211.1  | 4211.1 | 4211.1 | 4211.1 |
| 2.5°  | 4395.5  | 4391.6  | 4399.3  | 4372.4  | 4337.8  | 4334.0  | 4334.0  | 4311.0  | 4284.1 | 4230.3 | 4188.0 |
| 5°    | 4603.0  | 4595.3  | 4599.1  | 4560.7  | 4514.6  | 4491.5  | 4487.7  | 4437.7  | 4376.3 | 4291.7 | 4214.9 |
| 7.5°  | 4795.1  | 4787.4  | 4783.5  | 4741.3  | 4672.1  | 4633.7  | 4629.9  | 4556.9  | 4483.9 | 4353.2 | 4241.8 |
| 10°   | 4975.7  | 4968.0  | 4960.3  | 4902.7  | 4818.1  | 4760.5  | 4752.8  | 4660.6  | 4568.4 | 4407.0 | 4264.8 |
| 12.5° | 5206.2  | 5190.8  | 5183.1  | 5114.0  | 4991.0  | 4929.5  | 4918.0  | 4795.1  | 4679.8 | 4483.9 | 4311.0 |
| 15°   | 5448.2  | 5436.7  | 5425.2  | 5359.9  | 5221.6  | 5140.9  | 5121.7  | 4968.0  | 4810.4 | 4583.7 | 4380.1 |
| 17.5° | 5628.8  | 5617.3  | 5617.3  | 5559.7  | 5432.9  | 5340.7  | 5325.3  | 5140.9  | 4944.9 | 4676.0 | 4433.9 |
| 20°   | 5740.3  | 5728.7  | 5740.3  | 5705.7  | 5609.6  | 5532.8  | 5517.4  | 5313.8  | 5079.4 | 4760.5 | 4480.0 |
| 22.5° | 5820.9  | 5809.4  | 5828.6  | 5813.3  | 5744.1  | 5698.0  | 5686.5  | 5486.7  | 5217.7 | 4848.9 | 4526.1 |
| 25°   | 5963.1  | 5963.1  | 5963.1  | 5936.2  | 5870.9  | 5855.5  | 5855.5  | 5682.6  | 5394.5 | 4964.1 | 4595.3 |
| 27.5° | 6247.4  | 6232.1  | 6212.8  | 6136.0  | 6024.6  | 6020.7  | 6043.8  | 5882.4  | 5598.1 | 5114.0 | 4679.8 |
| 30°   | 6666.2  | 6658.5  | 6585.5  | 6424.2  | 6235.9  | 6216.7  | 6232.1  | 6097.6  | 5817.1 | 5271.5 | 4775.9 |
| 32.5° | 7208.0  | 7181.1  | 7031.2  | 6789.2  | 6520.2  | 6431.8  | 6462.6  | 6320.4  | 6047.6 | 5432.9 | 4868.1 |
| 35°   | 7592.2  | 7599.9  | 7492.3  | 7273.3  | 6954.4  | 6720.0  | 6743.1  | 6570.2  | 6297.4 | 5613.5 | 4983.3 |
| 37.5° | 8034.0  | 8060.9  | 7899.6  | 7734.4  | 7438.5  | 7038.9  | 7062.0  | 6827.6  | 6547.1 | 5840.1 | 5106.3 |
| 40°   | 8645.0  | 8591.2  | 8318.4  | 8122.4  | 7795.8  | 7373.2  | 7392.4  | 7115.8  | 6835.3 | 6055.3 | 5248.4 |
| 42.5° | 9156.0  | 9059.9  | 8729.5  | 8479.7  | 8087.8  | 7726.7  | 7745.9  | 7427.0  | 7127.3 | 6293.5 | 5406.0 |
| 45°   | 9889.8  | 9624.7  | 9148.3  | 9025.3  | 8387.5  | 8072.5  | 8091.7  | 7757.4  | 7434.7 | 6547.1 | 5575.0 |
| 47.5° | 10316.3 | 9893.7  | 9590.1  | 9524.8  | 8718.0  | 8429.8  | 8452.8  | 8107.0  | 7765.1 | 6835.3 | 5751.8 |
| 50°   | 10289.4 | 10016.6 | 9928.3  | 9766.9  | 9010.0  | 8764.1  | 8787.1  | 8468.2  | 8099.4 | 7119.6 | 5920.8 |
| 52.5° | 10112.7 | 10162.6 | 10116.5 | 9847.6  | 9302.0  | 9086.8  | 9113.7  | 8825.5  | 8441.3 | 7384.7 | 6078.4 |
| 55°   | 10385.5 | 10420.1 | 10331.7 | 9978.2  | 9624.7  | 9409.6  | 9440.3  | 9202.1  | 8779.4 | 7619.1 | 6212.8 |
| 57.5° | 10712.1 | 10589.1 | 10500.7 | 10208.7 | 9959.0  | 9759.2  | 9793.8  | 9586.3  | 9071.4 | 7807.4 | 6316.6 |
| 60°   | 10696.7 | 10439.3 | 10527.6 | 10224.1 | 10185.7 | 10081.9 | 10112.7 | 9901.4  | 9294.3 | 7945.7 | 6358.8 |
| 62.5° | 9909.0  | 9770.7  | 10216.4 | 10112.7 | 10370.1 | 10370.1 | 10408.5 | 10093.5 | 9428.8 | 8003.3 | 6335.8 |
| 65°   | 8541.2  | 8548.9  | 9332.7  | 9763.0  | 10589.1 | 10765.9 | 10796.6 | 10212.6 | 9351.9 | 7834.3 | 6120.6 |
| 67.5° | 6804.5  | 6854.5  | 7980.3  | 8875.5  | 10370.1 | 11034.8 | 11038.6 | 10320.2 | 9021.5 | 7357.8 | 5621.1 |
| 70°   | 4979.5  | 5017.9  | 6347.3  | 7434.7  | 9336.6  | 10439.3 | 10377.8 | 10016.6 | 8303.0 | 6527.9 | 4841.2 |
| 72.5° | 3365.8  | 3400.3  | 4768.2  | 5709.5  | 7661.4  | 8890.9  | 8756.4  | 8852.4  | 7077.3 | 5363.7 | 3892.2 |
| 75°   | 2263.1  | 2305.3  | 3392.7  | 4084.3  | 5636.5  | 6750.8  | 6451.1  | 6704.6  | 5475.1 | 4061.2 | 2839.4 |
| 77.5° | 1425.5  | 1452.4  | 2155.5  | 2678.0  | 3849.9  | 4595.3  | 4295.6  | 4299.4  | 3154.4 | 2186.2 | 1525.4 |
| 80°   | 906.8   | 914.4   | 1306.3  | 1544.6  | 2228.5  | 2762.5  | 2443.6  | 1986.4  | 1421.6 | 1160.3 | 910.6  |
| 82.5° | 526.4   | 514.9   | 780.0   | 872.2   | 1060.4  | 1048.9  | 868.3   | 822.2   | 622.4  | 580.2  | 464.9  |
| 85°   | 211.3   | 196.0   | 342.0   | 318.9   | 322.7   | 342.0   | 253.6   | 253.6   | 203.6  | 157.5  | 115.3  |
| 87.5° | 42.3    | 42.3    | 46.1    | 42.3    | 42.3    | 46.1    | 34.6    | 34.6    | 30.7   | 30.7   | 30.7   |
| 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°    | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 | 4211.1 |
| 2.5°  | 4180.3 | 4172.6 | 4153.4 | 4103.5 | 4076.6 | 4061.2 | 4038.2 | 4030.5 | 4026.6 | 4030.5 | 4042.0 |
| 5°    | 4191.8 | 4164.9 | 4111.2 | 4030.5 | 3976.7 | 3942.1 | 3903.7 | 3888.3 | 3876.8 | 3876.8 | 3888.3 |
| 7.5°  | 4199.5 | 4157.3 | 4065.1 | 3945.9 | 3869.1 | 3815.3 | 3769.2 | 3750.0 | 3746.1 | 3757.7 | 3761.5 |
| 10°   | 4203.4 | 4141.9 | 4011.3 | 3861.4 | 3761.5 | 3692.4 | 3646.3 | 3634.7 | 3646.3 | 3669.3 | 3673.1 |
| 12.5° | 4230.3 | 4145.7 | 3980.5 | 3803.8 | 3684.7 | 3615.5 | 3580.9 | 3580.9 | 3611.7 | 3653.9 | 3657.8 |
| 15°   | 4276.4 | 4172.6 | 3965.2 | 3757.7 | 3634.7 | 3573.2 | 3561.7 | 3580.9 | 3627.0 | 3692.4 | 3700.0 |
| 17.5° | 4311.0 | 4188.0 | 3930.6 | 3696.2 | 3569.4 | 3531.0 | 3550.2 | 3596.3 | 3661.6 | 3750.0 | 3757.7 |
| 20°   | 4334.0 | 4188.0 | 3880.6 | 3623.2 | 3504.1 | 3496.4 | 3550.2 | 3623.2 | 3692.4 | 3796.1 | 3807.6 |
| 22.5° | 4357.1 | 4180.3 | 3823.0 | 3534.8 | 3431.1 | 3454.1 | 3554.0 | 3646.3 | 3715.4 | 3826.8 | 3846.0 |
| 25°   | 4399.3 | 4191.8 | 3765.4 | 3446.5 | 3354.2 | 3419.6 | 3550.2 | 3661.6 | 3734.6 | 3849.9 | 3880.6 |
| 27.5° | 4457.0 | 4218.7 | 3723.1 | 3365.8 | 3277.4 | 3365.8 | 3523.3 | 3657.8 | 3734.6 | 3846.0 | 3880.6 |
| 30°   | 4518.4 | 4249.5 | 3673.1 | 3277.4 | 3189.0 | 3288.9 | 3465.7 | 3615.5 | 3703.9 | 3807.6 | 3849.9 |
| 32.5° | 4583.7 | 4284.1 | 3630.9 | 3181.3 | 3081.4 | 3185.2 | 3381.1 | 3550.2 | 3646.3 | 3742.3 | 3788.4 |
| 35°   | 4672.1 | 4345.5 | 3607.8 | 3104.5 | 2985.4 | 3077.6 | 3273.6 | 3465.7 | 3569.4 | 3657.8 | 3711.6 |
| 37.5° | 4779.7 | 4422.4 | 3596.3 | 3027.7 | 2881.7 | 2958.5 | 3158.3 | 3361.9 | 3473.4 | 3546.4 | 3596.3 |
| 40°   | 4902.7 | 4518.4 | 3592.5 | 2954.7 | 2777.9 | 2835.5 | 3039.2 | 3242.8 | 3350.4 | 3408.0 | 3450.3 |
| 42.5° | 5041.0 | 4626.0 | 3584.8 | 2881.7 | 2674.2 | 2720.3 | 2923.9 | 3123.7 | 3215.9 | 3265.9 | 3304.3 |
| 45°   | 5187.0 | 4733.6 | 3569.4 | 2793.3 | 2562.7 | 2616.5 | 2804.8 | 2981.5 | 3077.6 | 3119.9 | 3162.1 |
| 47.5° | 5333.0 | 4841.2 | 3538.7 | 2693.4 | 2462.9 | 2512.8 | 2678.0 | 2831.7 | 2908.5 | 2947.0 | 2989.2 |
| 50°   | 5475.1 | 4937.2 | 3465.7 | 2578.1 | 2359.1 | 2405.2 | 2532.0 | 2635.8 | 2693.4 | 2724.1 | 2766.4 |
| 52.5° | 5601.9 | 5002.5 | 3361.9 | 2443.6 | 2255.4 | 2278.4 | 2363.0 | 2451.3 | 2497.4 | 2501.3 | 2539.7 |
| 55°   | 5709.5 | 5037.1 | 3212.1 | 2305.3 | 2143.9 | 2147.8 | 2193.9 | 2263.1 | 2282.3 | 2266.9 | 2293.8 |
| 57.5° | 5771.0 | 5017.9 | 3046.9 | 2163.2 | 2028.7 | 2013.3 | 2047.9 | 2082.5 | 2086.3 | 2047.9 | 2074.8 |
| 60°   | 5786.4 | 4929.5 | 2831.7 | 2021.0 | 1913.4 | 1871.2 | 1882.7 | 1875.0 | 1867.3 | 1851.9 | 1875.0 |
| 62.5° | 5709.5 | 4741.3 | 2593.5 | 1882.7 | 1790.5 | 1725.1 | 1721.3 | 1717.5 | 1729.0 | 1732.8 | 1736.7 |
| 65°   | 5429.0 | 4387.8 | 2309.2 | 1740.5 | 1659.8 | 1571.5 | 1567.6 | 1613.7 | 1629.1 | 1606.0 | 1613.7 |
| 67.5° | 4887.3 | 3846.0 | 1997.9 | 1575.3 | 1494.6 | 1417.8 | 1448.5 | 1475.4 | 1502.3 | 1494.6 | 1502.3 |
| 70°   | 4118.8 | 3158.3 | 1713.6 | 1390.9 | 1314.0 | 1271.8 | 1306.3 | 1329.4 | 1333.2 | 1325.6 | 1333.2 |
| 72.5° | 3239.0 | 2466.7 | 1448.5 | 1202.6 | 1133.4 | 1114.2 | 1156.5 | 1175.7 | 1210.3 | 1225.7 | 1229.5 |
| 75°   | 2339.9 | 1821.2 | 1187.2 | 999.0  | 941.3  | 941.3  | 979.8  | 1014.3 | 1045.1 | 1025.9 | 1014.3 |
| 77.5° | 1306.3 | 1087.3 | 853.0  | 687.8  | 699.3  | 753.1  | 768.4  | 806.9  | 837.6  | 833.8  | 826.1  |
| 80°   | 791.5  | 680.1  | 576.3  | 445.7  | 441.9  | 484.1  | 584.0  | 649.3  | 664.7  | 630.1  | 626.3  |
| 82.5° | 411.1  | 357.3  | 307.4  | 249.7  | 276.6  | 322.7  | 338.1  | 407.3  | 449.5  | 434.2  | 453.4  |
| 85°   | 103.7  | 99.9   | 111.4  | 115.3  | 142.2  | 157.5  | 172.9  | 203.6  | 134.5  | 65.3   | 65.3   |
| 87.5° | 30.7   | 30.7   | 38.4   | 38.4   | 49.9   | 61.5   | 57.6   | 57.6   | 30.7   | 3.8    | 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)