

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: P841550

Luminaire Tested: **ARCH4-190-750-U-T2R-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841550  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-190-750-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1530mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

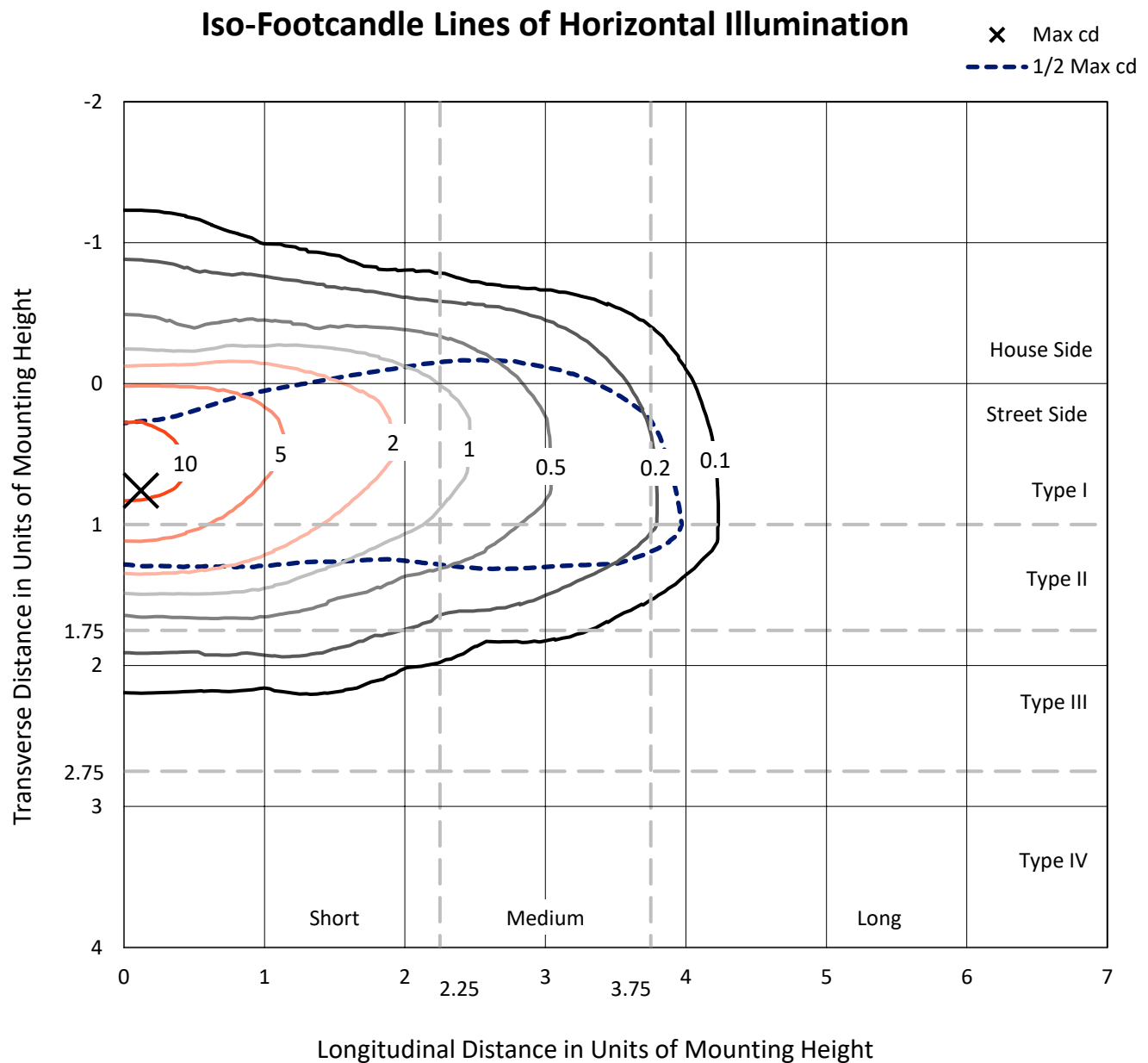
Lumens per Lamp: N/A  
Luminaire Lumens: 21757 lumens  
Efficiency: N/A  
Efficacy: 114.5 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 190  
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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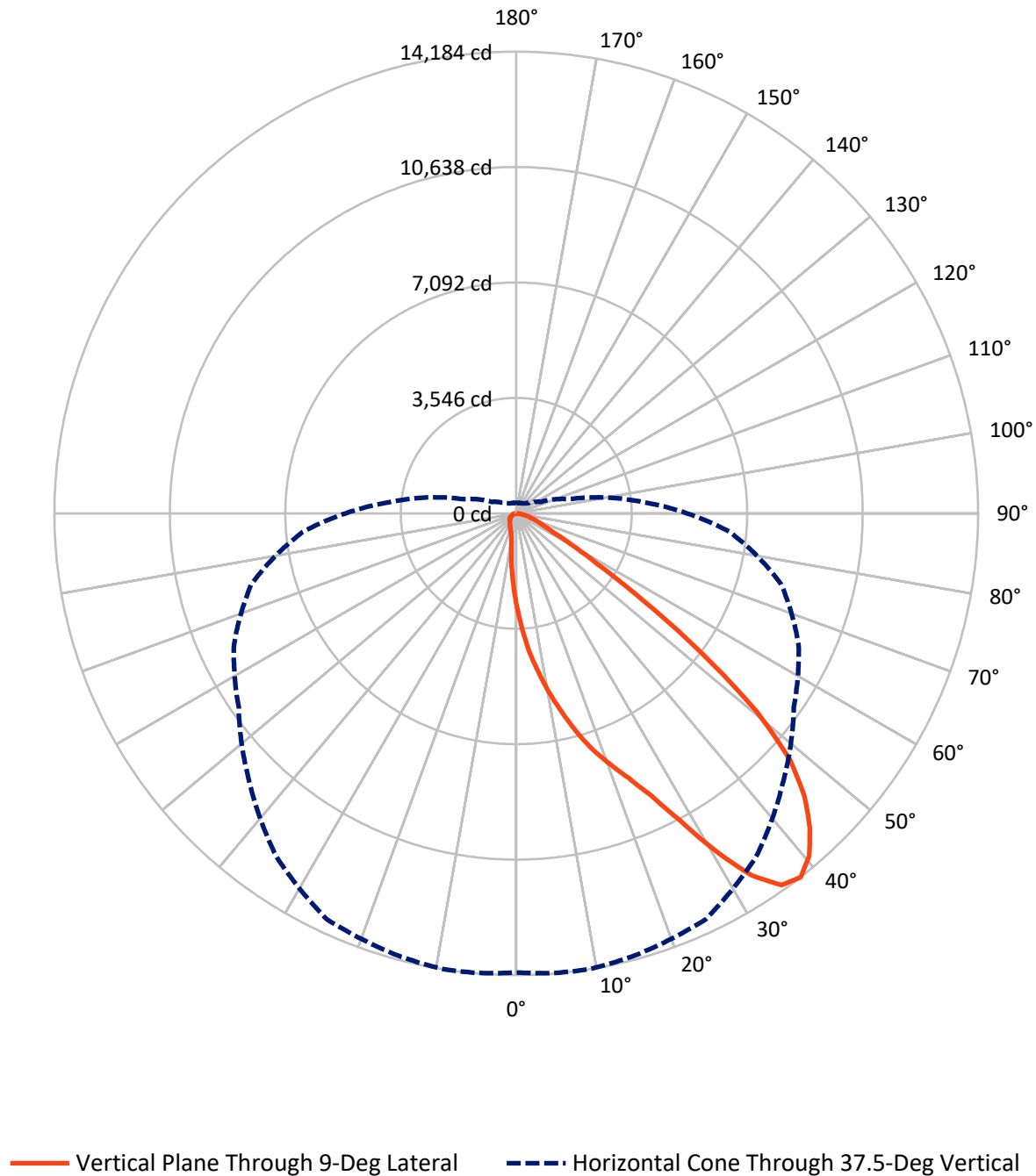


Based on 25 foot mounting height. Maximum calculated value = 12.7 fc

Type II - Short - N/A

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## Luminous Intensity Polar Plot



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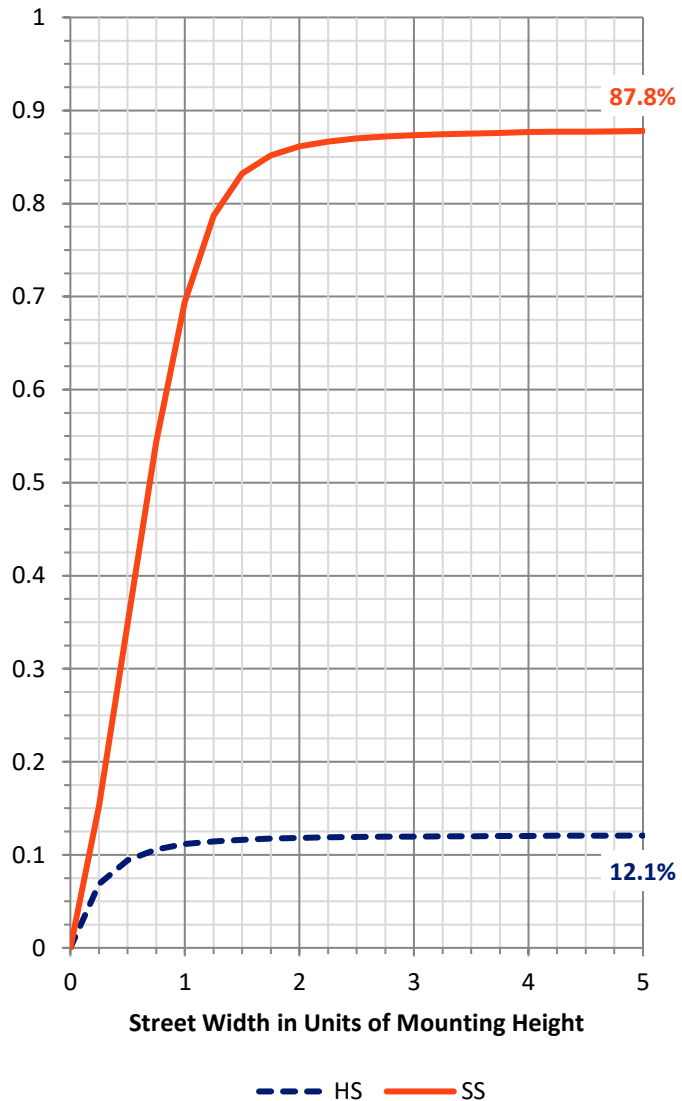
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2646.0   | 0.0    | 2646.0  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 19111.0  | 0.0    | 19111.0 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 21757.0  | 0.0    | 21757.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 289.1   | 1.3       |
| 10°-20°   | 1004.8  | 4.6       |
| 20°-30°   | 2064.6  | 9.5       |
| 30°-40°   | 3649.2  | 16.8      |
| 40°-50°   | 4847.7  | 22.3      |
| 50°-60°   | 4597.7  | 21.1      |
| 60°-70°   | 3507.7  | 16.1      |
| 70°-80°   | 1700.5  | 7.8       |
| 80°-90°   | 95.7    | 0.4       |
| 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°    | 21757.0 | 100.0     |
| 0°-180°   | 21757.0 | 100.0     |

**Coefficient of Utilization**



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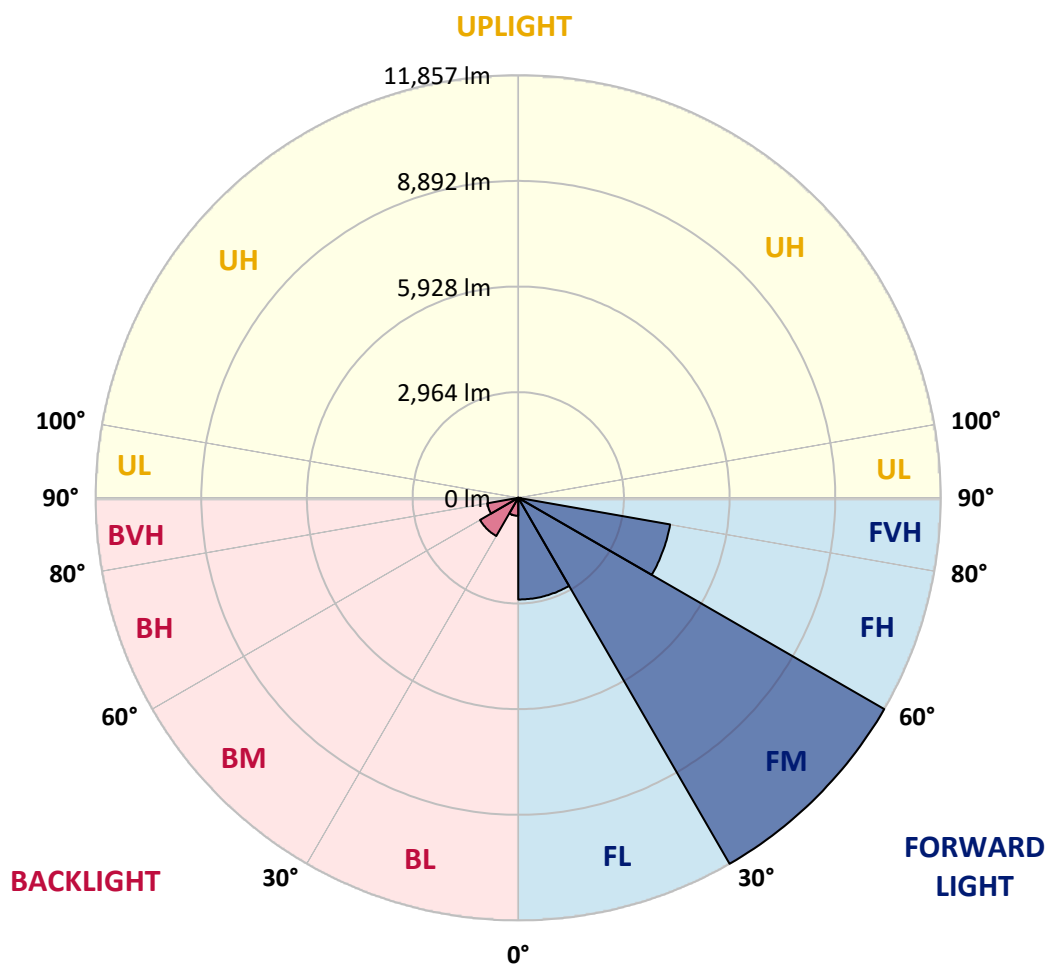
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2853.4  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 11856.5 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 4325.2  | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 75.8    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 505.0   | 2.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1238.2  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 883.0   | 4.1       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 19.9    | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 9°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  | 2876.0  |
| 2.5°  | 3563.8  | 3501.2  | 3572.7  | 3563.8  | 3501.2  | 3461.0  | 3336.0  | 3295.8  | 3148.4  | 3041.2  | 2947.5  |
| 5°    | 4296.2  | 4233.6  | 4296.2  | 4278.3  | 4189.0  | 4090.7  | 3885.3  | 3751.3  | 3487.8  | 3255.6  | 3045.7  |
| 7.5°  | 4903.5  | 4903.5  | 4930.3  | 4934.8  | 4827.6  | 4675.8  | 4421.2  | 4220.2  | 3849.6  | 3492.3  | 3157.4  |
| 10°   | 5560.0  | 5564.5  | 5622.5  | 5582.3  | 5439.4  | 5234.0  | 4912.4  | 4657.9  | 4211.3  | 3742.4  | 3264.5  |
| 12.5° | 6261.1  | 6265.6  | 6283.5  | 6265.6  | 6095.9  | 5832.4  | 5443.9  | 5108.9  | 4595.4  | 4028.2  | 3411.9  |
| 15°   | 6962.3  | 6966.7  | 6989.1  | 6957.8  | 6770.2  | 6462.1  | 6020.0  | 5609.1  | 5001.8  | 4349.7  | 3590.5  |
| 17.5° | 7618.8  | 7627.7  | 7645.5  | 7605.4  | 7408.9  | 7042.7  | 6591.6  | 6095.9  | 5434.9  | 4693.6  | 3791.5  |
| 20°   | 8208.2  | 8217.2  | 8230.6  | 8177.0  | 7980.5  | 7614.3  | 7127.5  | 6609.5  | 5877.1  | 5046.4  | 4010.3  |
| 22.5° | 8802.2  | 8811.1  | 8833.5  | 8762.0  | 8543.2  | 8123.4  | 7645.5  | 7109.6  | 6346.0  | 5434.9  | 4264.9  |
| 25°   | 9561.4  | 9570.3  | 9588.2  | 9485.5  | 9186.3  | 8695.0  | 8190.4  | 7641.1  | 6855.1  | 5872.6  | 4577.5  |
| 27.5° | 10673.4 | 10664.5 | 10664.5 | 10476.9 | 9963.3  | 9324.7  | 8739.7  | 8181.5  | 7404.4  | 6341.5  | 4921.4  |
| 30°   | 12048.9 | 12026.6 | 12013.2 | 11758.6 | 11026.2 | 10034.8 | 9302.4  | 8686.1  | 7931.4  | 6837.2  | 5292.0  |
| 32.5° | 13281.5 | 13281.5 | 13254.7 | 12986.7 | 12209.7 | 10990.5 | 9900.8  | 9177.3  | 8440.5  | 7337.4  | 5676.1  |
| 35°   | 14009.4 | 14040.7 | 14027.3 | 13826.3 | 13259.1 | 12017.6 | 10709.1 | 9766.8  | 8976.4  | 7859.9  | 6136.1  |
| 37.5° | 14107.6 | 14170.2 | 14183.6 | 14063.0 | 13763.8 | 12857.2 | 11606.8 | 10405.4 | 9565.9  | 8422.6  | 6582.7  |
| 40°   | 13710.2 | 13844.2 | 13844.2 | 13826.3 | 13719.1 | 13254.7 | 12361.5 | 11146.8 | 10173.2 | 9007.6  | 7033.7  |
| 42.5° | 13098.4 | 13236.8 | 13218.9 | 13285.9 | 13259.1 | 13160.9 | 12785.7 | 11839.0 | 10780.6 | 9610.5  | 7444.6  |
| 45°   | 12299.0 | 12441.9 | 12406.2 | 12526.7 | 12580.3 | 12687.5 | 12741.1 | 12321.3 | 11379.0 | 10267.0 | 7904.6  |
| 47.5° | 11017.3 | 11258.4 | 11312.0 | 11526.4 | 11749.7 | 12084.6 | 12339.2 | 12495.5 | 11937.2 | 10972.6 | 8404.7  |
| 50°   | 9123.7  | 9463.2  | 9570.3  | 10021.4 | 10633.2 | 11325.4 | 11736.3 | 12281.1 | 12330.2 | 11696.1 | 8945.1  |
| 52.5° | 6533.5  | 6926.5  | 7091.8  | 7833.1  | 9092.5  | 10298.3 | 11039.6 | 11807.7 | 12482.1 | 12388.3 | 9530.1  |
| 55°   | 4224.7  | 4559.6  | 4720.4  | 5417.1  | 7091.8  | 8985.3  | 10217.9 | 11195.9 | 12397.2 | 13022.4 | 10200.0 |
| 57.5° | 2603.6  | 2795.6  | 2902.8  | 3501.2  | 5042.0  | 7301.7  | 9141.6  | 10633.2 | 12138.2 | 13571.7 | 10896.7 |
| 60°   | 1755.1  | 1866.7  | 1920.3  | 2201.7  | 3425.3  | 5457.3  | 7663.4  | 10043.7 | 11798.8 | 13942.4 | 11530.8 |
| 62.5° | 1165.6  | 1201.3  | 1254.9  | 1429.1  | 2259.7  | 3831.7  | 5886.0  | 8989.8  | 11544.2 | 13964.7 | 11999.8 |
| 65°   | 902.1   | 920.0   | 942.3   | 1018.2  | 1393.3  | 2679.5  | 4139.8  | 7283.8  | 11164.6 | 13491.4 | 12147.1 |
| 67.5° | 710.1   | 727.9   | 754.7   | 794.9   | 1009.3  | 1817.6  | 2818.0  | 5336.7  | 10387.6 | 12750.0 | 11906.0 |
| 70°   | 558.2   | 571.6   | 589.5   | 625.2   | 786.0   | 1317.4  | 1862.3  | 3545.9  | 8820.1  | 12044.4 | 11146.8 |
| 72.5° | 442.1   | 455.5   | 473.4   | 509.1   | 638.6   | 964.6   | 1277.2  | 2210.6  | 6801.5  | 11182.5 | 9686.4  |
| 75°   | 348.3   | 357.3   | 370.7   | 406.4   | 513.6   | 750.3   | 866.4   | 1321.9  | 4622.2  | 9606.1  | 7547.3  |
| 77.5° | 174.2   | 214.4   | 245.6   | 281.3   | 375.1   | 518.0   | 576.1   | 732.4   | 1951.6  | 4930.3  | 3599.5  |
| 80°   | 102.7   | 125.0   | 134.0   | 156.3   | 245.6   | 312.6   | 312.6   | 294.7   | 616.3   | 1893.5  | 1469.3  |
| 82.5° | 58.1    | 80.4    | 84.9    | 89.3    | 147.4   | 178.6   | 142.9   | 107.2   | 125.0   | 634.2   | 428.7   |
| 85°   | 17.9    | 26.8    | 31.3    | 35.7    | 49.1    | 53.6    | 49.1    | 44.7    | 35.7    | 62.5    | 40.2    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 4.5     | 8.9     | 8.9     | 8.9     | 13.4    | 13.4    | 13.4    |
| 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°    | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 | 2876.0 |
| 2.5°  | 2893.9 | 2835.8 | 2724.2 | 2621.5 | 2523.2 | 2451.8 | 2384.8 | 2322.2 | 2277.6 | 2241.9 | 2237.4 |
| 5°    | 2934.1 | 2818.0 | 2603.6 | 2402.6 | 2219.5 | 2067.7 | 1938.2 | 1835.5 | 1759.5 | 1706.0 | 1701.5 |
| 7.5°  | 2987.7 | 2809.0 | 2483.0 | 2183.8 | 1911.4 | 1692.6 | 1505.0 | 1366.6 | 1268.3 | 1228.1 | 1196.8 |
| 10°   | 3032.3 | 2800.1 | 2362.4 | 1965.0 | 1607.7 | 1330.8 | 1107.5 | 969.1  | 897.6  | 870.8  | 857.4  |
| 12.5° | 3108.2 | 2809.0 | 2259.7 | 1764.0 | 1344.2 | 1018.2 | 848.5  | 772.6  | 741.3  | 719.0  | 714.5  |
| 15°   | 3219.9 | 2849.2 | 2161.5 | 1567.5 | 1076.3 | 821.7  | 723.5  | 674.3  | 643.1  | 638.6  | 634.2  |
| 17.5° | 3331.5 | 2884.9 | 2072.2 | 1366.6 | 893.2  | 714.5  | 647.5  | 607.4  | 585.0  | 580.6  | 580.6  |
| 20°   | 3461.0 | 2929.6 | 1973.9 | 1174.5 | 763.7  | 643.1  | 589.5  | 558.2  | 531.4  | 527.0  | 527.0  |
| 22.5° | 3612.9 | 2992.1 | 1880.1 | 1004.8 | 678.8  | 589.5  | 544.8  | 509.1  | 486.8  | 482.3  | 482.3  |
| 25°   | 3818.3 | 3085.9 | 1804.2 | 879.8  | 620.8  | 544.8  | 504.6  | 473.4  | 455.5  | 446.6  | 446.6  |
| 27.5° | 4046.1 | 3215.4 | 1750.6 | 803.9  | 580.6  | 509.1  | 468.9  | 442.1  | 424.3  | 415.3  | 415.3  |
| 30°   | 4300.6 | 3358.3 | 1714.9 | 772.6  | 558.2  | 477.8  | 442.1  | 415.3  | 393.0  | 388.5  | 388.5  |
| 32.5° | 4582.0 | 3523.6 | 1692.6 | 777.1  | 553.8  | 455.5  | 415.3  | 388.5  | 370.7  | 361.7  | 361.7  |
| 35°   | 4894.6 | 3706.7 | 1679.2 | 803.9  | 562.7  | 437.7  | 393.0  | 366.2  | 348.3  | 339.4  | 339.4  |
| 37.5° | 5242.9 | 3921.0 | 1679.2 | 830.6  | 585.0  | 433.2  | 370.7  | 343.9  | 330.5  | 321.5  | 321.5  |
| 40°   | 5568.9 | 4148.8 | 1697.0 | 861.9  | 607.4  | 433.2  | 352.8  | 330.5  | 312.6  | 303.7  | 303.7  |
| 42.5° | 5823.5 | 4278.3 | 1710.4 | 893.2  | 620.8  | 428.7  | 334.9  | 312.6  | 299.2  | 290.3  | 290.3  |
| 45°   | 6113.8 | 4416.7 | 1683.6 | 906.6  | 620.8  | 419.8  | 321.5  | 299.2  | 285.8  | 276.9  | 276.9  |
| 47.5° | 6435.3 | 4586.4 | 1679.2 | 915.5  | 607.4  | 401.9  | 308.1  | 285.8  | 276.9  | 268.0  | 268.0  |
| 50°   | 6761.3 | 4774.0 | 1688.1 | 911.0  | 589.5  | 375.1  | 290.3  | 276.9  | 263.5  | 254.6  | 254.6  |
| 52.5° | 7132.0 | 4970.5 | 1706.0 | 902.1  | 549.3  | 343.9  | 276.9  | 263.5  | 250.1  | 241.2  | 236.7  |
| 55°   | 7542.8 | 5184.9 | 1741.7 | 884.2  | 495.7  | 312.6  | 263.5  | 250.1  | 232.2  | 223.3  | 218.8  |
| 57.5° | 8016.2 | 5448.3 | 1781.9 | 848.5  | 437.7  | 285.8  | 250.1  | 232.2  | 205.4  | 192.0  | 187.6  |
| 60°   | 8467.3 | 5747.6 | 1826.5 | 763.7  | 379.6  | 259.0  | 236.7  | 209.9  | 183.1  | 174.2  | 169.7  |
| 62.5° | 8891.5 | 6042.3 | 1848.9 | 611.8  | 321.5  | 236.7  | 223.3  | 192.0  | 165.2  | 156.3  | 151.8  |
| 65°   | 9163.9 | 6363.8 | 1799.7 | 415.3  | 263.5  | 218.8  | 205.4  | 178.6  | 151.8  | 138.4  | 138.4  |
| 67.5° | 9181.8 | 6515.7 | 1630.0 | 272.4  | 214.4  | 196.5  | 187.6  | 160.8  | 134.0  | 125.0  | 120.6  |
| 70°   | 8730.8 | 6287.9 | 1246.0 | 214.4  | 178.6  | 169.7  | 169.7  | 142.9  | 116.1  | 107.2  | 102.7  |
| 72.5° | 7694.7 | 5568.9 | 794.9  | 174.2  | 151.8  | 142.9  | 142.9  | 120.6  | 102.7  | 89.3   | 84.9   |
| 75°   | 6073.6 | 4296.2 | 424.3  | 142.9  | 125.0  | 120.6  | 111.6  | 98.2   | 84.9   | 75.9   | 71.5   |
| 77.5° | 2791.2 | 1893.5 | 196.5  | 102.7  | 93.8   | 93.8   | 84.9   | 71.5   | 67.0   | 58.1   | 58.1   |
| 80°   | 1103.1 | 643.1  | 98.2   | 67.0   | 62.5   | 62.5   | 62.5   | 49.1   | 49.1   | 40.2   | 35.7   |
| 82.5° | 303.7  | 134.0  | 49.1   | 40.2   | 40.2   | 40.2   | 35.7   | 31.3   | 31.3   | 26.8   | 26.8   |
| 85°   | 31.3   | 22.3   | 22.3   | 22.3   | 22.3   | 17.9   | 17.9   | 13.4   | 8.9    | 8.9    | 8.9    |
| 87.5° | 13.4   | 13.4   | 13.4   | 13.4   | 13.4   | 8.9    | 4.5    | 0.0    | 0.0    | 0.0    | 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)