

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: P841912

Luminaire Tested: **ARCH4-240-750-U-T2U-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841912  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-240-750-U-T2U-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 940mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 26235 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

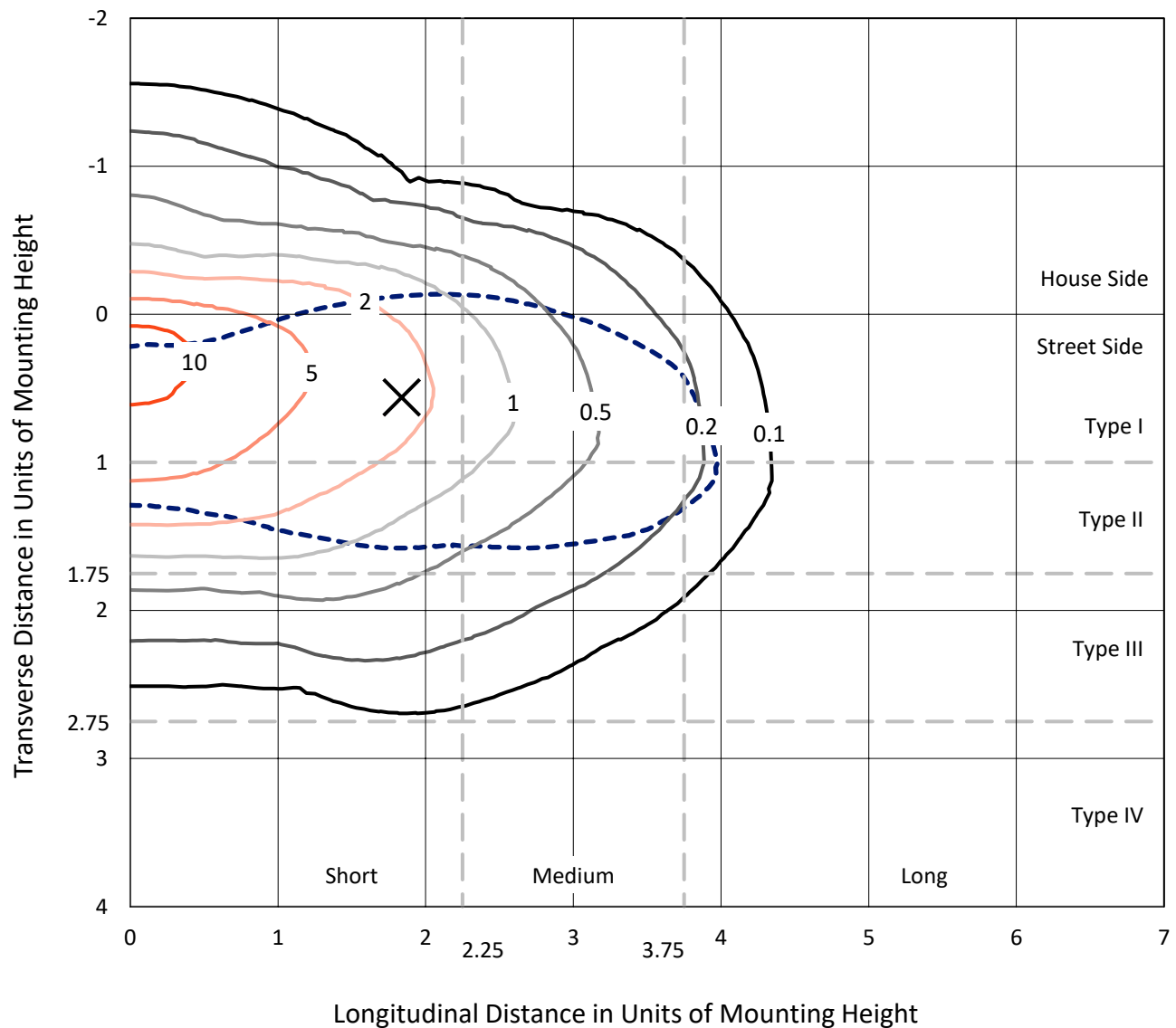
Input Watts (W): 240.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

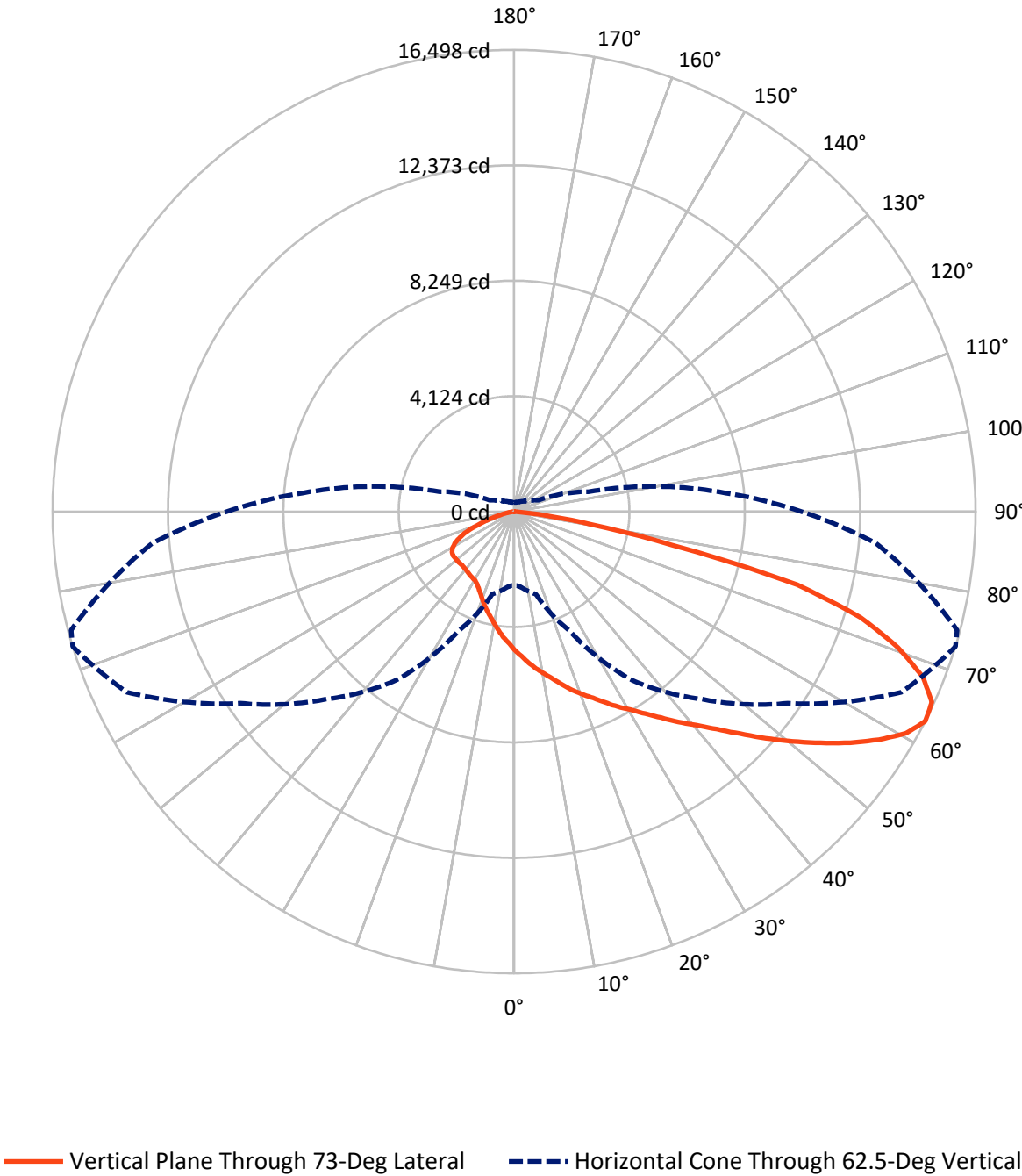
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 fc  
Type II - Short - N/A

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Luminous Intensity Polar Plot



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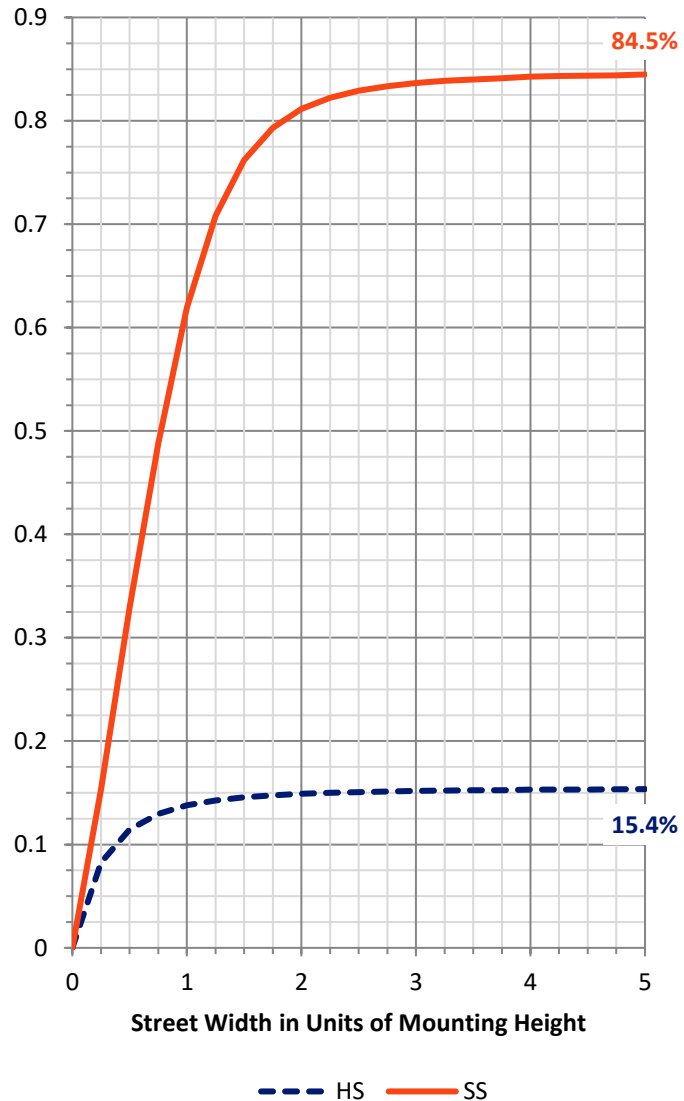
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4066.8   | 0.0    | 4066.8  |
|                    | % Fixture | 15.5     | 0.0    | 15.5    |
| <b>Street Side</b> | Lumens    | 22168.2  | 0.0    | 22168.2 |
|                    | % Fixture | 84.5     | 0.0    | 84.5    |
| <b>Total</b>       | Lumens    | 26235.0  | 0.0    | 26235.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 479.9   | 1.8       |
| 10°-20°   | 1448.1  | 5.5       |
| 20°-30°   | 2410.4  | 9.2       |
| 30°-40°   | 3637.0  | 13.9      |
| 40°-50°   | 5083.6  | 19.4      |
| 50°-60°   | 5615.2  | 21.4      |
| 60°-70°   | 4891.5  | 18.6      |
| 70°-80°   | 2470.9  | 9.4       |
| 80°-90°   | 198.3   | 0.8       |
| 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°    | 26235.0 | 100.0     |
| 0°-180°   | 26235.0 | 100.0     |

**Coefficient of Utilization**



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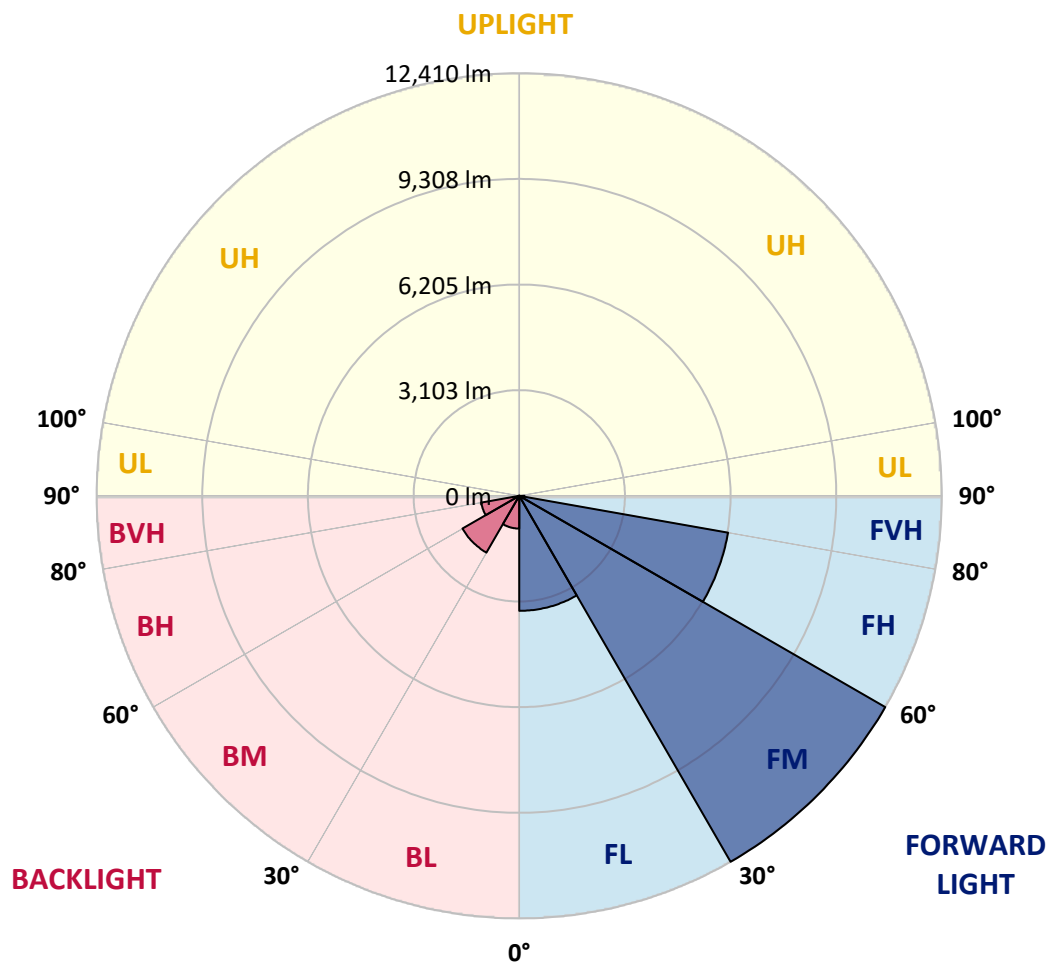
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3377.2  | 12.9      |                         |      |         |
| FM   | (30°-60°)   | 12410.1 | 47.3      |                         |      |         |
| FH   | (60°-80°)   | 6227.3  | 23.7      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 153.5   | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 961.2   | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1925.6  | 7.3       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1135.1  | 4.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 44.8    | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 73°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  | 4967.7  |
| 2.5°  | 5653.6  | 5716.5  | 5682.2  | 5705.1  | 5590.8  | 5516.4  | 5430.7  | 5264.9  | 5173.4  | 5162.0  | 5053.4  |
| 5°    | 6482.5  | 6551.1  | 6494.0  | 6476.8  | 6276.7  | 6105.2  | 5910.9  | 5619.3  | 5425.0  | 5390.7  | 5150.6  |
| 7.5°  | 7311.4  | 7374.3  | 7305.7  | 7254.3  | 6985.6  | 6682.6  | 6396.8  | 5968.0  | 5665.1  | 5607.9  | 5230.6  |
| 10°   | 7894.5  | 7951.7  | 7900.2  | 7848.8  | 7568.7  | 7260.0  | 6854.1  | 6293.9  | 5882.3  | 5790.8  | 5282.1  |
| 12.5° | 8334.7  | 8369.0  | 8346.1  | 8300.4  | 8037.4  | 7705.9  | 7317.1  | 6659.7  | 6128.1  | 6013.8  | 5362.1  |
| 15°   | 8694.8  | 8752.0  | 8723.4  | 8689.1  | 8437.6  | 8106.0  | 7734.4  | 7042.7  | 6413.9  | 6271.0  | 5482.1  |
| 17.5° | 8934.9  | 8974.9  | 8980.6  | 8980.6  | 8757.7  | 8431.9  | 8071.7  | 7391.5  | 6699.8  | 6516.8  | 5596.5  |
| 20°   | 9043.5  | 9089.3  | 9117.8  | 9163.6  | 8980.6  | 8700.5  | 8334.7  | 7688.7  | 6968.4  | 6762.6  | 5705.1  |
| 22.5° | 9095.0  | 9135.0  | 9209.3  | 9312.2  | 9163.6  | 8929.2  | 8591.9  | 7963.1  | 7237.1  | 7019.9  | 5830.8  |
| 25°   | 9135.0  | 9186.4  | 9295.1  | 9489.4  | 9386.5  | 9186.4  | 8894.9  | 8277.5  | 7557.2  | 7334.3  | 6013.8  |
| 27.5° | 9243.6  | 9306.5  | 9409.4  | 9643.8  | 9518.0  | 9420.8  | 9215.0  | 8614.8  | 7894.5  | 7665.8  | 6236.7  |
| 30°   | 9620.9  | 9672.3  | 9666.6  | 9815.3  | 9660.9  | 9632.3  | 9489.4  | 8940.6  | 8220.4  | 7991.7  | 6499.7  |
| 32.5° | 10306.9 | 10358.3 | 10232.6 | 10175.4 | 9838.1  | 9843.8  | 9786.7  | 9289.3  | 8609.1  | 8374.7  | 6802.7  |
| 35°   | 11044.3 | 11101.5 | 10935.7 | 10838.5 | 10272.6 | 10106.8 | 10135.4 | 9723.8  | 9043.5  | 8809.2  | 7179.9  |
| 37.5° | 11701.7 | 11770.3 | 11627.4 | 11484.5 | 10912.8 | 10529.8 | 10524.1 | 10209.7 | 9540.9  | 9300.8  | 7597.3  |
| 40°   | 12061.8 | 12141.9 | 12227.6 | 12147.6 | 11547.4 | 11124.3 | 10941.4 | 10707.0 | 10032.5 | 9786.7  | 8048.9  |
| 42.5° | 12233.3 | 12456.3 | 12610.6 | 12559.2 | 12067.6 | 11638.8 | 11421.6 | 11227.2 | 10632.7 | 10392.6 | 8586.2  |
| 45°   | 11753.2 | 11758.9 | 12084.7 | 12364.8 | 12273.4 | 11987.5 | 11947.5 | 11810.3 | 11318.7 | 11090.0 | 9192.2  |
| 47.5° | 11152.9 | 11107.2 | 11335.9 | 11833.2 | 12090.4 | 12164.7 | 12399.1 | 12456.3 | 12101.9 | 11873.2 | 9809.5  |
| 50°   | 9712.4  | 9740.9  | 10484.1 | 11198.7 | 11701.7 | 12181.9 | 12719.2 | 13119.4 | 12907.9 | 12690.7 | 10461.2 |
| 52.5° | 7900.2  | 7968.8  | 8820.6  | 10392.6 | 11187.2 | 12010.4 | 12907.9 | 13782.5 | 13731.1 | 13525.3 | 11112.9 |
| 55°   | 6333.9  | 6442.5  | 7345.7  | 9049.2  | 10529.8 | 11627.4 | 12987.9 | 14388.5 | 14582.8 | 14394.2 | 11753.2 |
| 57.5° | 4841.9  | 4956.2  | 5716.5  | 7465.8  | 9689.5  | 11004.3 | 12930.8 | 14920.1 | 15377.4 | 15257.4 | 12342.0 |
| 60°   | 3647.1  | 3761.5  | 4247.4  | 6053.8  | 8637.7  | 10306.9 | 12644.9 | 15268.8 | 16092.0 | 15966.2 | 12770.7 |
| 62.5° | 2612.4  | 2703.9  | 3064.1  | 4710.4  | 7357.2  | 9478.0  | 11941.8 | 15274.5 | 16497.9 | 16395.0 | 12976.5 |
| 65°   | 1880.7  | 1880.7  | 2172.3  | 3361.3  | 6156.7  | 8483.3  | 10878.5 | 14571.4 | 16412.1 | 16383.5 | 12833.6 |
| 67.5° | 1354.8  | 1366.2  | 1600.6  | 2349.5  | 4910.5  | 7277.1  | 9500.9  | 13319.5 | 15749.0 | 15891.9 | 12319.1 |
| 70°   | 960.4   | 989.0   | 1097.6  | 1640.6  | 3710.0  | 5745.1  | 8026.0  | 11678.8 | 14554.3 | 14805.8 | 11324.4 |
| 72.5° | 743.1   | 760.3   | 834.6   | 1143.3  | 2709.6  | 4270.2  | 6396.8  | 9849.6  | 12959.3 | 13245.2 | 9969.6  |
| 75°   | 571.7   | 588.8   | 646.0   | 840.3   | 1943.6  | 2995.5  | 4544.6  | 7643.0  | 10449.8 | 10958.6 | 8008.8  |
| 77.5° | 417.3   | 440.2   | 480.2   | 611.7   | 1131.9  | 1903.6  | 2755.4  | 4298.8  | 5768.0  | 6008.1  | 4195.9  |
| 80°   | 194.4   | 222.9   | 280.1   | 394.4   | 611.7   | 897.5   | 977.5   | 1657.8  | 2772.5  | 2898.3  | 2275.2  |
| 82.5° | 108.6   | 137.2   | 160.1   | 240.1   | 308.7   | 320.1   | 331.6   | 417.3   | 1046.1  | 1154.7  | 954.7   |
| 85°   | 51.4    | 68.6    | 74.3    | 102.9   | 102.9   | 91.5    | 108.6   | 80.0    | 171.5   | 205.8   | 200.1   |
| 87.5° | 0.0     | 5.7     | 11.4    | 28.6    | 22.9    | 17.1    | 17.1    | 17.1    | 17.1    | 22.9    | 17.1    |
| 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°    | 4967.7  | 4967.7 | 4967.7 | 4967.7 | 4967.7 | 4967.7 | 4967.7 | 4967.7 | 4967.7 | 4967.7 | 4967.7 |
| 2.5°  | 5002.0  | 4927.6 | 4756.1 | 4607.5 | 4510.3 | 4424.6 | 4310.3 | 4258.8 | 4167.3 | 4184.5 | 4133.0 |
| 5°    | 5030.5  | 4893.3 | 4590.4 | 4310.3 | 4104.5 | 3921.5 | 3721.5 | 3607.1 | 3481.4 | 3469.9 | 3429.9 |
| 7.5°  | 5047.7  | 4836.2 | 4401.7 | 4007.3 | 3692.9 | 3412.8 | 3144.1 | 2995.5 | 2841.1 | 2806.8 | 2772.5 |
| 10°   | 5030.5  | 4750.4 | 4207.4 | 3692.9 | 3275.6 | 2926.9 | 2623.9 | 2435.2 | 2275.2 | 2235.2 | 2200.9 |
| 12.5° | 5047.7  | 4704.7 | 4024.4 | 3401.3 | 2904.0 | 2509.6 | 2166.6 | 1972.2 | 1823.6 | 1783.6 | 1760.7 |
| 15°   | 5087.7  | 4676.1 | 3870.1 | 3138.4 | 2572.4 | 2132.3 | 1795.0 | 1629.2 | 1509.2 | 1469.1 | 1457.7 |
| 17.5° | 5122.0  | 4647.5 | 3704.3 | 2881.1 | 2240.9 | 1800.7 | 1509.2 | 1372.0 | 1269.1 | 1229.1 | 1217.6 |
| 20°   | 5167.7  | 4607.5 | 3538.5 | 2635.3 | 1949.3 | 1537.7 | 1280.5 | 1160.5 | 1080.4 | 1051.8 | 1046.1 |
| 22.5° | 5207.7  | 4578.9 | 3384.2 | 2389.5 | 1680.7 | 1326.2 | 1109.0 | 1011.8 | 954.7  | 926.1  | 926.1  |
| 25°   | 5310.6  | 4590.4 | 3252.7 | 2160.8 | 1480.6 | 1160.5 | 977.5  | 903.2  | 857.5  | 840.3  | 840.3  |
| 27.5° | 5430.7  | 4636.1 | 3149.8 | 1966.5 | 1309.1 | 1034.7 | 886.1  | 823.2  | 800.3  | 777.4  | 783.2  |
| 30°   | 5602.2  | 4727.6 | 3081.2 | 1806.4 | 1183.3 | 937.5  | 811.7  | 766.0  | 743.1  | 737.4  | 737.4  |
| 32.5° | 5819.4  | 4876.2 | 3075.5 | 1703.5 | 1091.9 | 863.2  | 760.3  | 720.3  | 708.8  | 703.1  | 703.1  |
| 35°   | 6076.7  | 5007.7 | 3041.2 | 1657.8 | 1034.7 | 811.7  | 720.3  | 691.7  | 686.0  | 686.0  | 686.0  |
| 37.5° | 6385.3  | 5224.9 | 3018.3 | 1594.9 | 1006.1 | 783.2  | 691.7  | 668.8  | 668.8  | 668.8  | 668.8  |
| 40°   | 6705.5  | 5402.1 | 2984.0 | 1537.7 | 994.7  | 766.0  | 674.5  | 646.0  | 646.0  | 646.0  | 646.0  |
| 42.5° | 7088.5  | 5659.4 | 2972.6 | 1509.2 | 977.5  | 754.6  | 651.7  | 617.4  | 623.1  | 623.1  | 628.8  |
| 45°   | 7551.5  | 5950.9 | 2966.9 | 1480.6 | 971.8  | 743.1  | 628.8  | 588.8  | 594.5  | 588.8  | 588.8  |
| 47.5° | 8020.3  | 6288.2 | 2984.0 | 1463.4 | 966.1  | 731.7  | 611.7  | 560.2  | 560.2  | 554.5  | 554.5  |
| 50°   | 8511.9  | 6596.9 | 2995.5 | 1446.3 | 954.7  | 708.8  | 583.1  | 537.4  | 525.9  | 514.5  | 520.2  |
| 52.5° | 8974.9  | 6882.7 | 3001.2 | 1417.7 | 920.4  | 674.5  | 560.2  | 508.8  | 491.6  | 474.5  | 480.2  |
| 55°   | 9438.0  | 7157.1 | 3012.6 | 1383.4 | 874.6  | 640.2  | 531.6  | 480.2  | 457.3  | 434.5  | 434.5  |
| 57.5° | 9855.3  | 7397.2 | 2984.0 | 1297.6 | 823.2  | 606.0  | 503.1  | 445.9  | 411.6  | 388.7  | 388.7  |
| 60°   | 10141.1 | 7568.7 | 2898.3 | 1171.9 | 754.6  | 565.9  | 474.5  | 411.6  | 371.6  | 354.4  | 354.4  |
| 62.5° | 10278.3 | 7597.3 | 2743.9 | 966.1  | 668.8  | 525.9  | 440.2  | 377.3  | 343.0  | 331.6  | 331.6  |
| 65°   | 10146.8 | 7471.5 | 2503.8 | 726.0  | 577.4  | 480.2  | 405.9  | 348.7  | 314.4  | 285.8  | 285.8  |
| 67.5° | 9689.5  | 7117.1 | 2172.3 | 548.8  | 491.6  | 434.5  | 371.6  | 320.1  | 280.1  | 257.2  | 257.2  |
| 70°   | 8769.1  | 6379.6 | 1680.7 | 440.2  | 417.3  | 377.3  | 337.3  | 285.8  | 251.5  | 222.9  | 222.9  |
| 72.5° | 7563.0  | 5407.8 | 1183.3 | 354.4  | 354.4  | 320.1  | 285.8  | 251.5  | 217.2  | 194.4  | 194.4  |
| 75°   | 5802.3  | 4001.6 | 794.6  | 285.8  | 291.5  | 268.7  | 234.4  | 205.8  | 182.9  | 165.8  | 165.8  |
| 77.5° | 3167.0  | 1977.9 | 485.9  | 211.5  | 217.2  | 205.8  | 182.9  | 165.8  | 154.3  | 137.2  | 137.2  |
| 80°   | 1537.7  | 868.9  | 280.1  | 148.6  | 154.3  | 148.6  | 137.2  | 120.0  | 120.0  | 108.6  | 108.6  |
| 82.5° | 646.0   | 325.8  | 148.6  | 102.9  | 102.9  | 91.5   | 85.7   | 85.7   | 85.7   | 80.0   | 80.0   |
| 85°   | 160.1   | 62.9   | 62.9   | 57.2   | 57.2   | 57.2   | 51.4   | 51.4   | 51.4   | 40.0   | 45.7   |
| 87.5° | 22.9    | 22.9   | 22.9   | 22.9   | 22.9   | 22.9   | 17.1   | 5.7    | 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)