

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: P841901

Luminaire Tested: **ARCH4-240-740-U-T2R-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841901  
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: ARCH4-240-740-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 940mA 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: 26090 lumens  
Efficiency: N/A  
Efficacy: 108.6 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

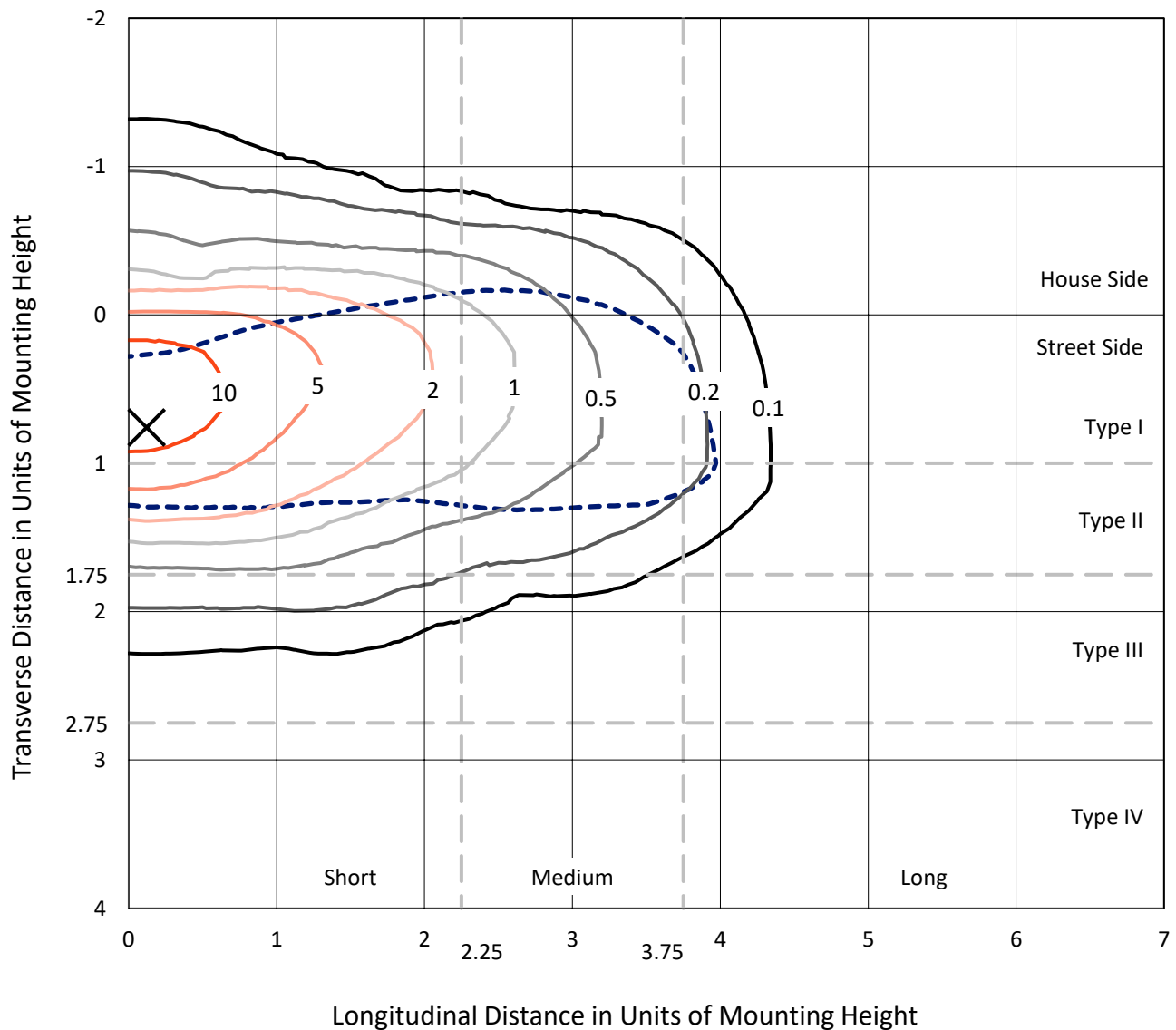
Input Watts (W): 240.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

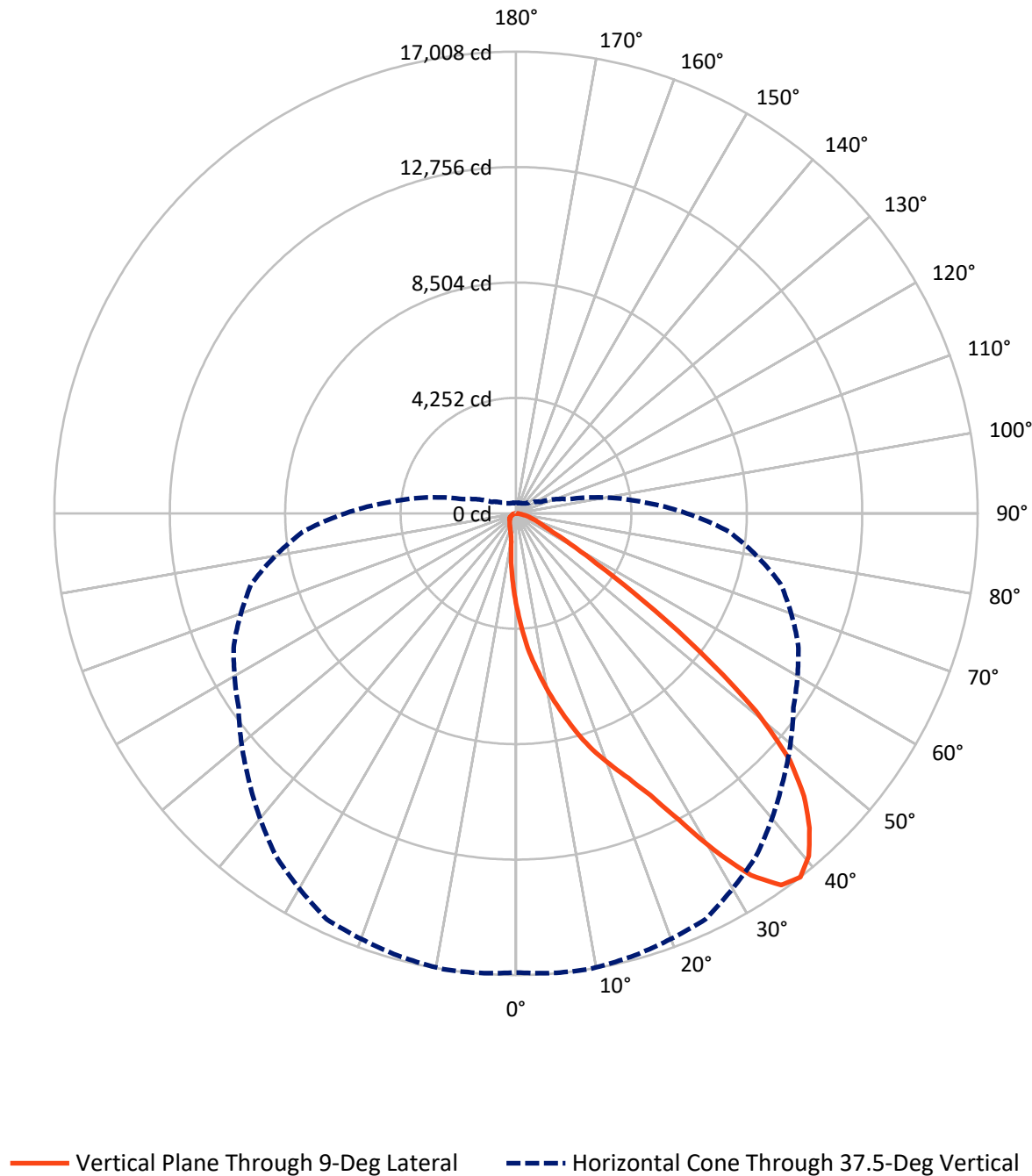
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.3 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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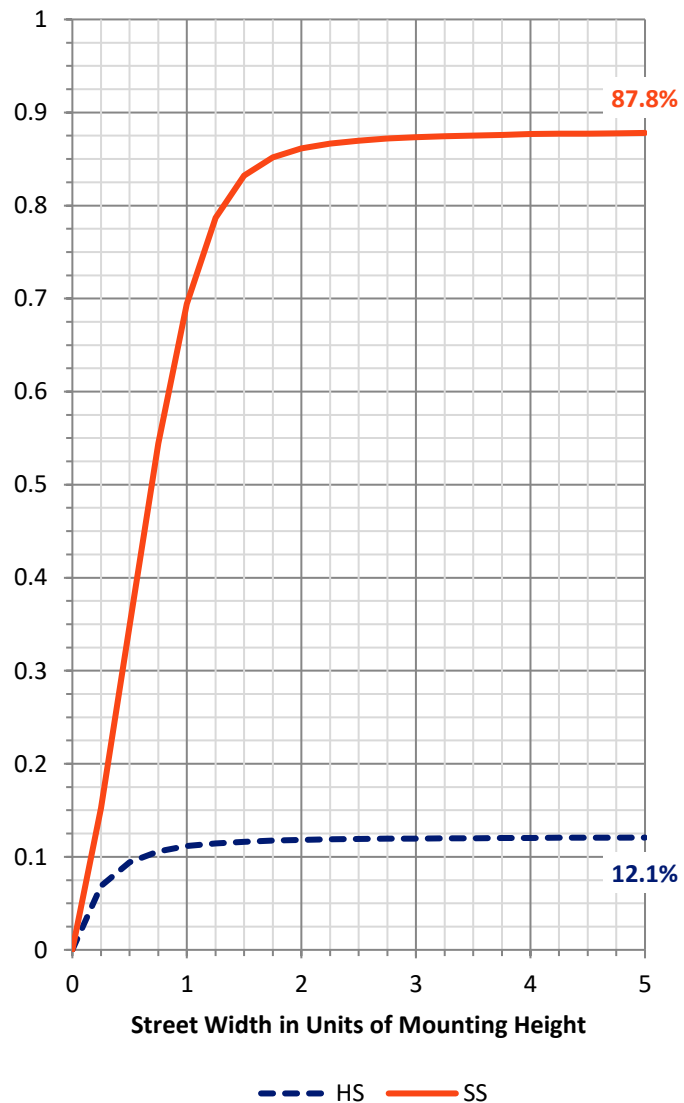
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3173.0   | 0.0    | 3173.0  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 22917.0  | 0.0    | 22917.0 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 26090.0  | 0.0    | 26090.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 346.7   | 1.3       |
| 10°-20°   | 1204.9  | 4.6       |
| 20°-30°   | 2475.7  | 9.5       |
| 30°-40°   | 4376.0  | 16.8      |
| 40°-50°   | 5813.2  | 22.3      |
| 50°-60°   | 5513.4  | 21.1      |
| 60°-70°   | 4206.3  | 16.1      |
| 70°-80°   | 2039.2  | 7.8       |
| 80°-90°   | 114.8   | 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°    | 26090.0 | 100.0     |
| 0°-180°   | 26090.0 | 100.0     |

**Coefficient of Utilization**



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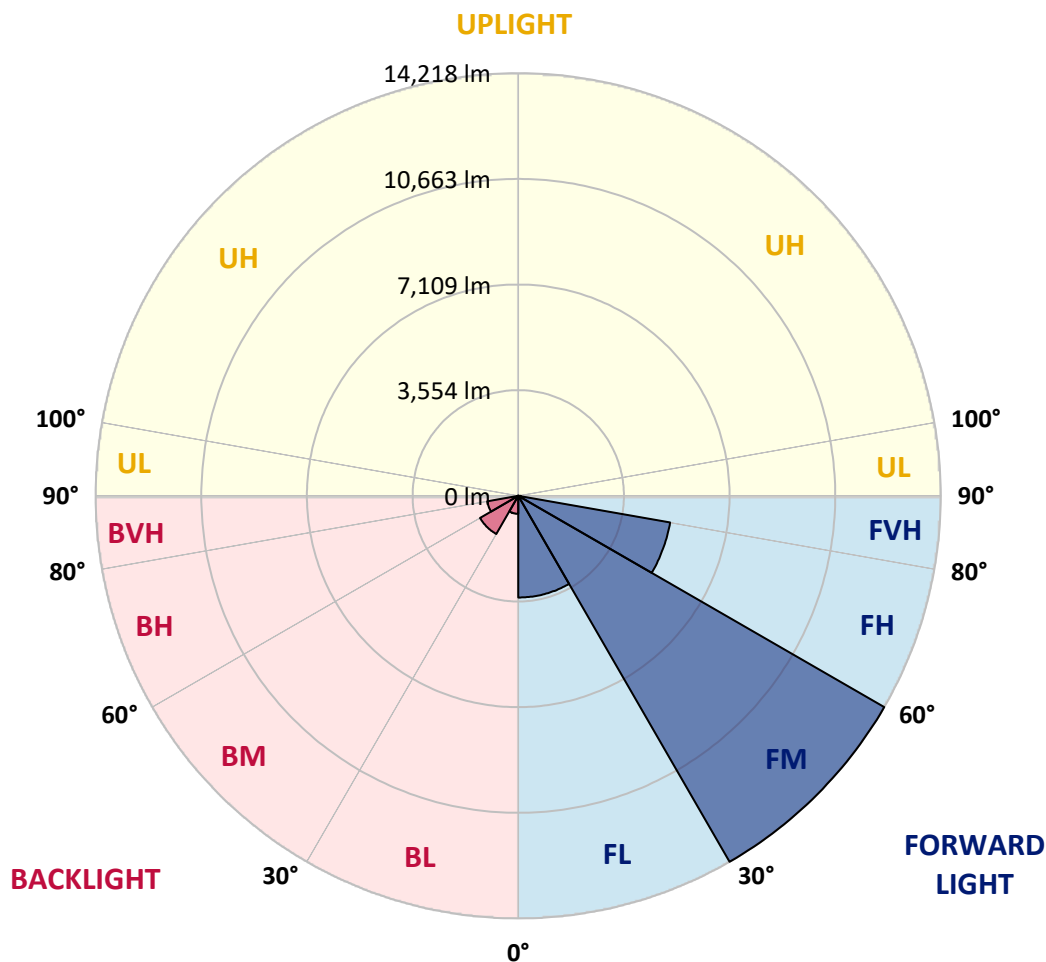
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3421.7  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 14217.8 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 5186.6  | 19.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 90.9    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 605.5   | 2.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1484.8  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1058.8  | 4.1       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 23.9    | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 9°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  | 3448.8  |
| 2.5°  | 4273.5  | 4198.5  | 4284.2  | 4273.5  | 4198.5  | 4150.3  | 4000.4  | 3952.2  | 3775.5  | 3646.9  | 3534.5  |
| 5°    | 5151.8  | 5076.8  | 5151.8  | 5130.3  | 5023.2  | 4905.4  | 4659.1  | 4498.4  | 4182.5  | 3904.0  | 3652.3  |
| 7.5°  | 5880.1  | 5880.1  | 5912.2  | 5917.6  | 5789.0  | 5606.9  | 5301.7  | 5060.7  | 4616.2  | 4187.8  | 3786.2  |
| 10°   | 6667.3  | 6672.6  | 6742.3  | 6694.1  | 6522.7  | 6276.4  | 5890.8  | 5585.5  | 5050.0  | 4487.7  | 3914.7  |
| 12.5° | 7508.1  | 7513.4  | 7534.8  | 7513.4  | 7309.9  | 6994.0  | 6528.1  | 6126.4  | 5510.6  | 4830.4  | 4091.4  |
| 15°   | 8348.8  | 8354.2  | 8381.0  | 8343.5  | 8118.6  | 7749.0  | 7218.9  | 6726.2  | 5997.9  | 5216.0  | 4305.6  |
| 17.5° | 9136.1  | 9146.8  | 9168.2  | 9120.0  | 8884.4  | 8445.2  | 7904.4  | 7309.9  | 6517.3  | 5628.4  | 4546.6  |
| 20°   | 9843.0  | 9853.7  | 9869.7  | 9805.5  | 9569.8  | 9130.7  | 8547.0  | 7925.8  | 7047.5  | 6051.4  | 4809.0  |
| 22.5° | 10555.2 | 10565.9 | 10592.7 | 10507.0 | 10244.6 | 9741.2  | 9168.2  | 8525.6  | 7609.8  | 6517.3  | 5114.3  |
| 25°   | 11465.6 | 11476.3 | 11497.7 | 11374.6 | 11015.8 | 10426.7 | 9821.5  | 9162.8  | 8220.3  | 7042.2  | 5489.1  |
| 27.5° | 12799.1 | 12788.3 | 12788.3 | 12563.4 | 11947.6 | 11181.8 | 10480.2 | 9810.8  | 8879.0  | 7604.5  | 5901.5  |
| 30°   | 14448.5 | 14421.7 | 14405.6 | 14100.4 | 13222.1 | 12033.3 | 11155.0 | 10416.0 | 9510.9  | 8198.9  | 6346.0  |
| 32.5° | 15926.5 | 15926.5 | 15894.4 | 15573.1 | 14641.3 | 13179.3 | 11872.6 | 11005.0 | 10121.4 | 8798.7  | 6806.5  |
| 35°   | 16799.4 | 16836.9 | 16820.8 | 16579.9 | 15899.7 | 14411.0 | 12841.9 | 11711.9 | 10764.1 | 9425.2  | 7358.1  |
| 37.5° | 16917.2 | 16992.2 | 17008.3 | 16863.7 | 16504.9 | 15417.8 | 13918.3 | 12477.7 | 11470.9 | 10100.0 | 7893.6  |
| 40°   | 16440.6 | 16601.3 | 16601.3 | 16579.9 | 16451.3 | 15894.4 | 14823.3 | 13366.7 | 12199.3 | 10801.5 | 8434.5  |
| 42.5° | 15707.0 | 15873.0 | 15851.5 | 15931.9 | 15899.7 | 15781.9 | 15332.1 | 14196.8 | 12927.6 | 11524.5 | 8927.2  |
| 45°   | 14748.4 | 14919.7 | 14876.9 | 15021.5 | 15085.7 | 15214.3 | 15278.5 | 14775.1 | 13645.2 | 12311.7 | 9478.8  |
| 47.5° | 13211.4 | 13500.6 | 13564.9 | 13821.9 | 14089.7 | 14491.3 | 14796.6 | 14984.0 | 14314.6 | 13157.9 | 10078.6 |
| 50°   | 10940.8 | 11347.8 | 11476.3 | 12017.2 | 12750.9 | 13580.9 | 14073.6 | 14726.9 | 14785.9 | 14025.4 | 10726.6 |
| 52.5° | 7834.7  | 8306.0  | 8504.1  | 9393.1  | 10903.3 | 12349.2 | 13238.2 | 14159.3 | 14967.9 | 14855.5 | 11428.1 |
| 55°   | 5066.1  | 5467.7  | 5660.5  | 6495.9  | 8504.1  | 10774.8 | 12252.8 | 13425.6 | 14866.2 | 15615.9 | 12231.4 |
| 57.5° | 3122.1  | 3352.4  | 3480.9  | 4198.5  | 6046.1  | 8755.8  | 10962.2 | 12750.9 | 14555.6 | 16274.6 | 13066.8 |
| 60°   | 2104.6  | 2238.5  | 2302.8  | 2640.1  | 4107.5  | 6544.1  | 9189.6  | 12044.0 | 14148.6 | 16719.1 | 13827.3 |
| 62.5° | 1397.7  | 1440.6  | 1504.8  | 1713.7  | 2709.8  | 4594.8  | 7058.2  | 10780.1 | 13843.3 | 16745.9 | 14389.6 |
| 65°   | 1081.8  | 1103.2  | 1130.0  | 1221.0  | 1670.8  | 3213.2  | 4964.3  | 8734.4  | 13388.1 | 16178.2 | 14566.3 |
| 67.5° | 851.5   | 872.9   | 905.0   | 953.2   | 1210.3  | 2179.6  | 3379.2  | 6399.5  | 12456.3 | 15289.2 | 14277.1 |
| 70°   | 669.4   | 685.5   | 706.9   | 749.7   | 942.5   | 1579.8  | 2233.1  | 4252.1  | 10576.6 | 14443.1 | 13366.7 |
| 72.5° | 530.2   | 546.2   | 567.7   | 610.5   | 765.8   | 1156.7  | 1531.6  | 2650.8  | 8156.0  | 13409.6 | 11615.5 |
| 75°   | 417.7   | 428.4   | 444.5   | 487.3   | 615.9   | 899.7   | 1038.9  | 1585.2  | 5542.7  | 11519.1 | 9050.4  |
| 77.5° | 208.9   | 257.1   | 294.5   | 337.4   | 449.8   | 621.2   | 690.8   | 878.3   | 2340.2  | 5912.2  | 4316.3  |
| 80°   | 123.2   | 149.9   | 160.7   | 187.4   | 294.5   | 374.9   | 374.9   | 353.4   | 739.0   | 2270.6  | 1761.9  |
| 82.5° | 69.6    | 96.4    | 101.7   | 107.1   | 176.7   | 214.2   | 171.4   | 128.5   | 149.9   | 760.4   | 514.1   |
| 85°   | 21.4    | 32.1    | 37.5    | 42.8    | 58.9    | 64.3    | 58.9    | 53.6    | 42.8    | 75.0    | 48.2    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 5.4     | 10.7    | 10.7    | 10.7    | 16.1    | 16.1    | 16.1    |
| 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°    | 3448.8  | 3448.8 | 3448.8 | 3448.8 | 3448.8 | 3448.8 | 3448.8 | 3448.8 | 3448.8 | 3448.8 | 3448.8 |
| 2.5°  | 3470.2  | 3400.6 | 3266.7 | 3143.5 | 3025.7 | 2940.0 | 2859.7 | 2784.7 | 2731.2 | 2688.3 | 2683.0 |
| 5°    | 3518.4  | 3379.2 | 3122.1 | 2881.1 | 2661.6 | 2479.5 | 2324.2 | 2201.0 | 2110.0 | 2045.7 | 2040.4 |
| 7.5°  | 3582.7  | 3368.5 | 2977.5 | 2618.7 | 2292.0 | 2029.6 | 1804.7 | 1638.7 | 1520.9 | 1472.7 | 1435.2 |
| 10°   | 3636.2  | 3357.7 | 2832.9 | 2356.3 | 1927.9 | 1595.9 | 1328.1 | 1162.1 | 1076.4 | 1044.3 | 1028.2 |
| 12.5° | 3727.3  | 3368.5 | 2709.8 | 2115.3 | 1611.9 | 1221.0 | 1017.5 | 926.5  | 889.0  | 862.2  | 856.8  |
| 15°   | 3861.1  | 3416.7 | 2591.9 | 1879.7 | 1290.6 | 985.4  | 867.6  | 808.6  | 771.2  | 765.8  | 760.4  |
| 17.5° | 3995.0  | 3459.5 | 2484.8 | 1638.7 | 1071.1 | 856.8  | 776.5  | 728.3  | 701.5  | 696.2  | 696.2  |
| 20°   | 4150.3  | 3513.0 | 2367.0 | 1408.4 | 915.7  | 771.2  | 706.9  | 669.4  | 637.3  | 631.9  | 631.9  |
| 22.5° | 4332.4  | 3588.0 | 2254.6 | 1204.9 | 814.0  | 706.9  | 653.3  | 610.5  | 583.7  | 578.4  | 578.4  |
| 25°   | 4578.7  | 3700.5 | 2163.5 | 1055.0 | 744.4  | 653.3  | 605.1  | 567.7  | 546.2  | 535.5  | 535.5  |
| 27.5° | 4851.9  | 3855.8 | 2099.3 | 963.9  | 696.2  | 610.5  | 562.3  | 530.2  | 508.7  | 498.0  | 498.0  |
| 30°   | 5157.1  | 4027.1 | 2056.4 | 926.5  | 669.4  | 573.0  | 530.2  | 498.0  | 471.3  | 465.9  | 465.9  |
| 32.5° | 5494.5  | 4225.3 | 2029.6 | 931.8  | 664.1  | 546.2  | 498.0  | 465.9  | 444.5  | 433.8  | 433.8  |
| 35°   | 5869.4  | 4444.9 | 2013.6 | 963.9  | 674.8  | 524.8  | 471.3  | 439.1  | 417.7  | 407.0  | 407.0  |
| 37.5° | 6287.1  | 4701.9 | 2013.6 | 996.1  | 701.5  | 519.5  | 444.5  | 412.4  | 396.3  | 385.6  | 385.6  |
| 40°   | 6678.0  | 4975.0 | 2035.0 | 1033.6 | 728.3  | 519.5  | 423.1  | 396.3  | 374.9  | 364.2  | 364.2  |
| 42.5° | 6983.2  | 5130.3 | 2051.1 | 1071.1 | 744.4  | 514.1  | 401.6  | 374.9  | 358.8  | 348.1  | 348.1  |
| 45°   | 7331.3  | 5296.3 | 2018.9 | 1087.1 | 744.4  | 503.4  | 385.6  | 358.8  | 342.7  | 332.0  | 332.0  |
| 47.5° | 7716.9  | 5499.8 | 2013.6 | 1097.8 | 728.3  | 482.0  | 369.5  | 342.7  | 332.0  | 321.3  | 321.3  |
| 50°   | 8107.9  | 5724.8 | 2024.3 | 1092.5 | 706.9  | 449.8  | 348.1  | 332.0  | 316.0  | 305.2  | 305.2  |
| 52.5° | 8552.3  | 5960.4 | 2045.7 | 1081.8 | 658.7  | 412.4  | 332.0  | 316.0  | 299.9  | 289.2  | 283.8  |
| 55°   | 9045.0  | 6217.4 | 2088.5 | 1060.3 | 594.4  | 374.9  | 316.0  | 299.9  | 278.5  | 267.8  | 262.4  |
| 57.5° | 9612.7  | 6533.4 | 2136.7 | 1017.5 | 524.8  | 342.7  | 299.9  | 278.5  | 246.3  | 230.3  | 224.9  |
| 60°   | 10153.6 | 6892.2 | 2190.3 | 915.7  | 455.2  | 310.6  | 283.8  | 251.7  | 219.6  | 208.9  | 203.5  |
| 62.5° | 10662.3 | 7245.7 | 2217.1 | 733.7  | 385.6  | 283.8  | 267.8  | 230.3  | 198.1  | 187.4  | 182.1  |
| 65°   | 10989.0 | 7631.2 | 2158.2 | 498.0  | 316.0  | 262.4  | 246.3  | 214.2  | 182.1  | 166.0  | 166.0  |
| 67.5° | 11010.4 | 7813.3 | 1954.7 | 326.7  | 257.1  | 235.6  | 224.9  | 192.8  | 160.7  | 149.9  | 144.6  |
| 70°   | 10469.5 | 7540.2 | 1494.1 | 257.1  | 214.2  | 203.5  | 203.5  | 171.4  | 139.2  | 128.5  | 123.2  |
| 72.5° | 9227.1  | 6678.0 | 953.2  | 208.9  | 182.1  | 171.4  | 171.4  | 144.6  | 123.2  | 107.1  | 101.7  |
| 75°   | 7283.1  | 5151.8 | 508.7  | 171.4  | 149.9  | 144.6  | 133.9  | 117.8  | 101.7  | 91.0   | 85.7   |
| 77.5° | 3347.0  | 2270.6 | 235.6  | 123.2  | 112.5  | 112.5  | 101.7  | 85.7   | 80.3   | 69.6   | 69.6   |
| 80°   | 1322.7  | 771.2  | 117.8  | 80.3   | 75.0   | 75.0   | 75.0   | 58.9   | 58.9   | 48.2   | 42.8   |
| 82.5° | 364.2   | 160.7  | 58.9   | 48.2   | 48.2   | 48.2   | 42.8   | 37.5   | 37.5   | 32.1   | 32.1   |
| 85°   | 37.5    | 26.8   | 26.8   | 26.8   | 26.8   | 21.4   | 21.4   | 16.1   | 10.7   | 10.7   | 10.7   |
| 87.5° | 16.1    | 16.1   | 16.1   | 16.1   | 16.1   | 10.7   | 5.4    | 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)