

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: P842636

Luminaire Tested: **ARCH4-70-750-U-T4W-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-70-750-U-T4W-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 9320 lumens  
Efficiency: N/A  
Efficacy: 126.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

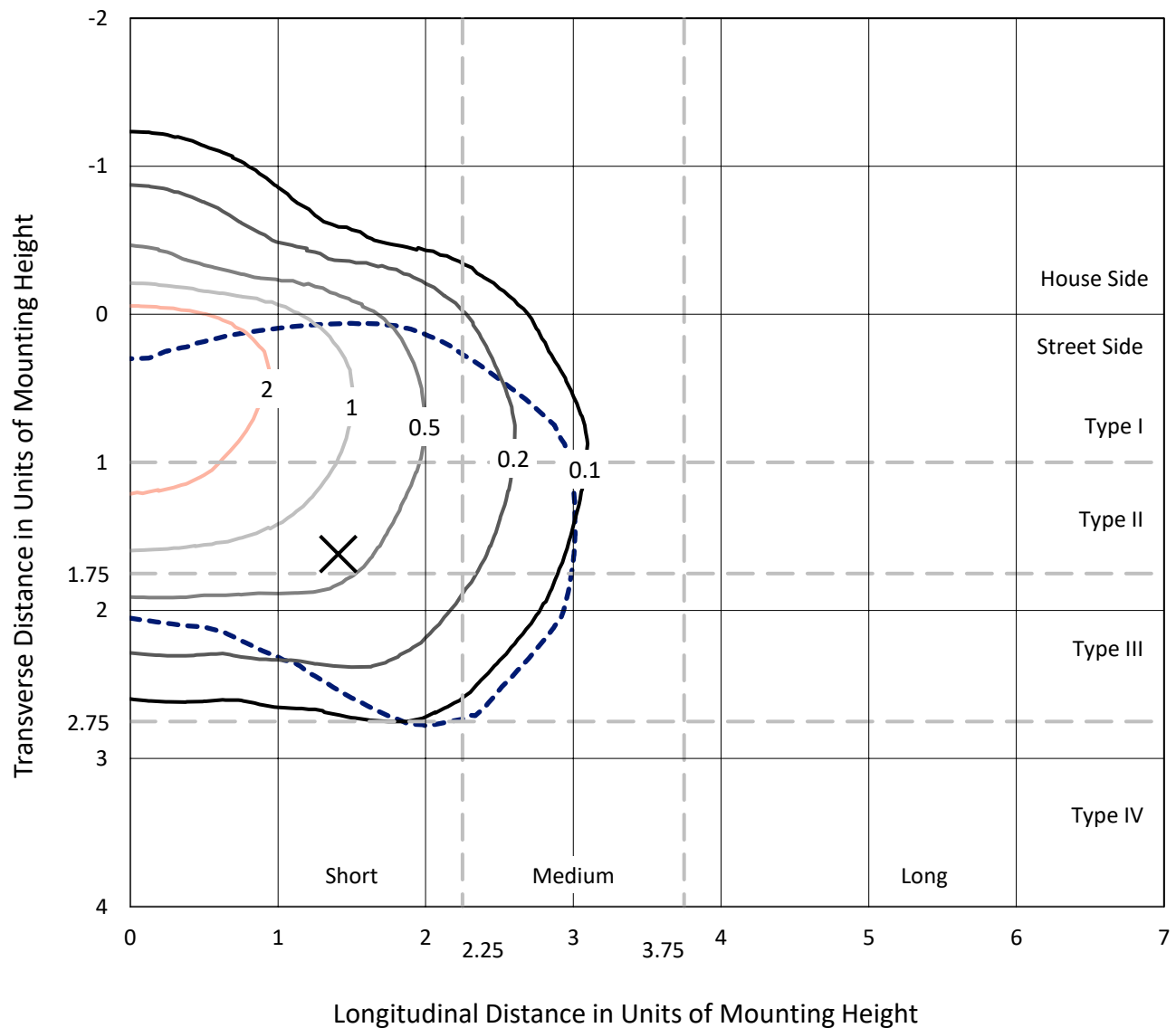
Input Watts (W): 73.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

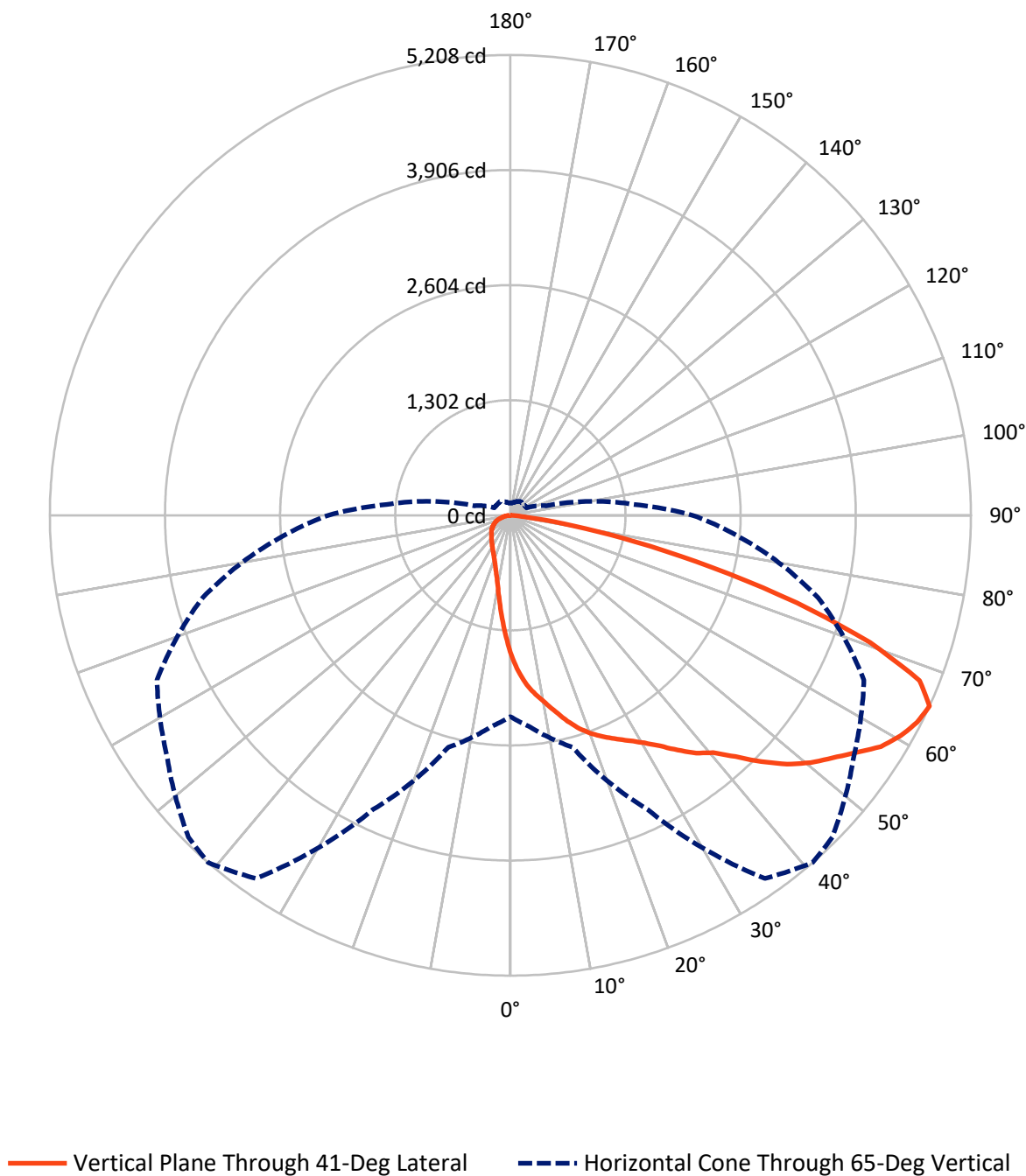
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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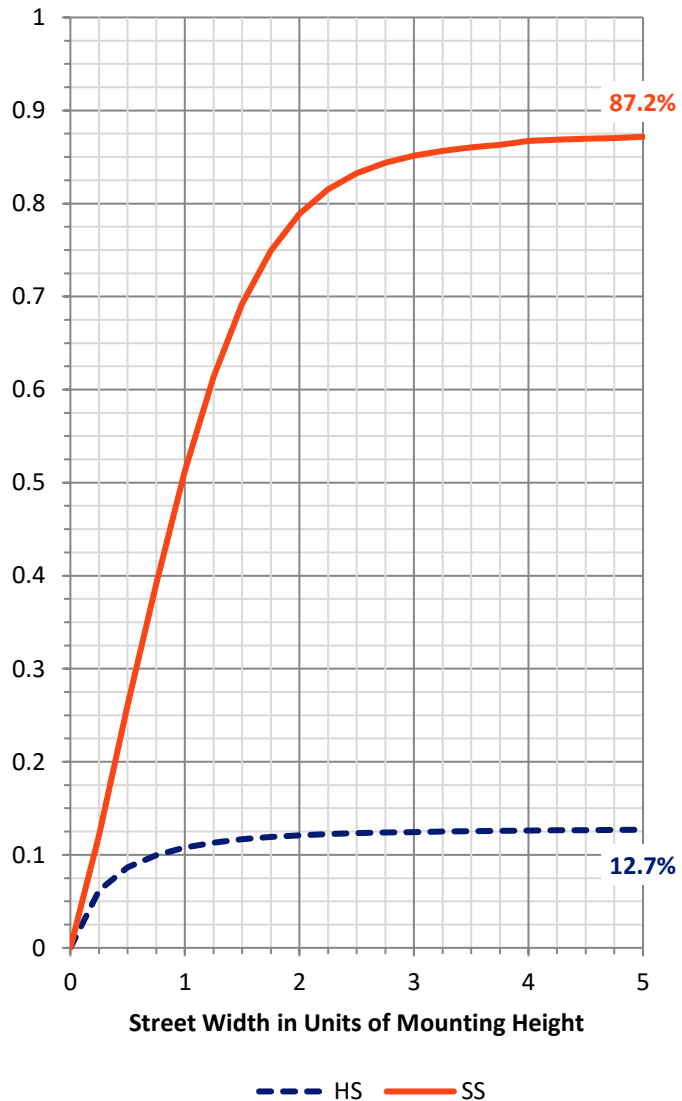
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1196.5   | 0.0    | 1196.5 |
|                    | % Fixture | 12.8     | 0.0    | 12.8   |
| <b>Street Side</b> | Lumens    | 8123.5   | 0.0    | 8123.5 |
|                    | % Fixture | 87.2     | 0.0    | 87.2   |
| <b>Total</b>       | Lumens    | 9320.0   | 0.0    | 9320.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 148.0  | 1.6       |
| 10°-20°   | 443.7  | 4.8       |
| 20°-30°   | 763.3  | 8.2       |
| 30°-40°   | 1157.7 | 12.4      |
| 40°-50°   | 1696.0 | 18.2      |
| 50°-60°   | 2141.7 | 23.0      |
| 60°-70°   | 2008.2 | 21.5      |
| 70°-80°   | 895.1  | 9.6       |
| 80°-90°   | 66.3   | 0.7       |
| 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°    | 9320.0 | 100.0     |
| 0°-180°   | 9320.0 | 100.0     |

**Coefficient of Utilization**



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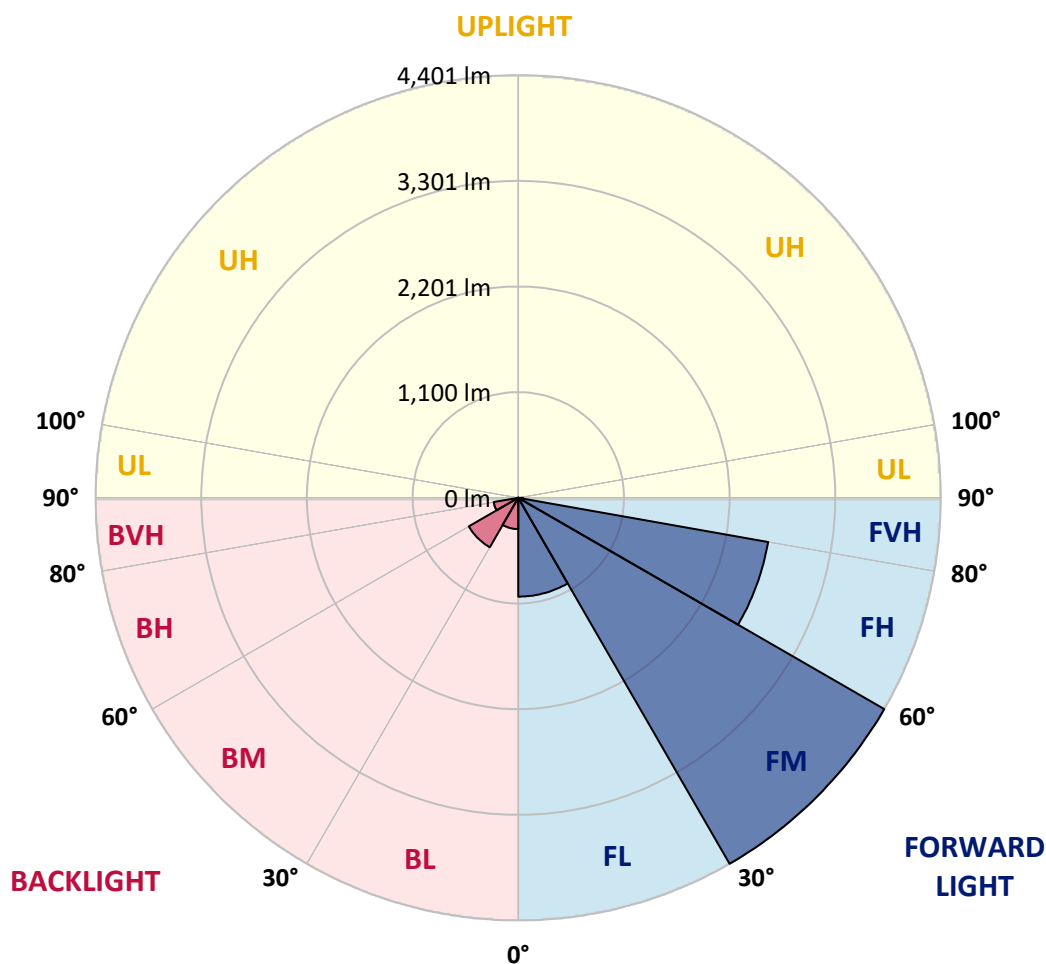
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1029.3 | 11.0      |                         |      |         |
| FM   | (30°-60°)   | 4401.3 | 47.2      |                         |      |         |
| FH   | (60°-80°)   | 2643.4 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 49.5   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 325.7  | 3.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 594.1  | 6.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 259.9  | 2.8       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 16.8   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 41°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 |
| 2.5°  | 1831.8 | 1825.9 | 1822.0 | 1800.3 | 1800.3 | 1770.9 | 1772.8 | 1745.3 | 1711.9 | 1658.8 | 1601.8 |
| 5°    | 2004.8 | 1996.9 | 1987.1 | 1965.4 | 1957.6 | 1928.1 | 1924.2 | 1884.9 | 1827.9 | 1735.5 | 1633.3 |
| 7.5°  | 2156.1 | 2148.2 | 2134.5 | 2103.0 | 2081.4 | 2046.0 | 2036.2 | 1985.1 | 1922.2 | 1808.2 | 1664.7 |
| 10°   | 2293.7 | 2287.8 | 2270.1 | 2230.8 | 2201.3 | 2158.1 | 2140.4 | 2071.6 | 1993.0 | 1867.2 | 1690.3 |
| 12.5° | 2433.2 | 2425.4 | 2401.8 | 2368.4 | 2333.0 | 2281.9 | 2260.3 | 2171.8 | 2071.6 | 1932.0 | 1727.6 |
| 15°   | 2562.9 | 2551.1 | 2533.5 | 2498.1 | 2466.6 | 2417.5 | 2393.9 | 2289.7 | 2167.9 | 2004.8 | 1776.8 |
| 17.5° | 2647.5 | 2637.6 | 2621.9 | 2602.2 | 2576.7 | 2539.4 | 2515.8 | 2413.6 | 2264.2 | 2075.5 | 1827.9 |
| 20°   | 2698.6 | 2694.6 | 2688.7 | 2676.9 | 2665.1 | 2639.6 | 2621.9 | 2525.6 | 2368.4 | 2144.3 | 1877.0 |
| 22.5° | 2737.9 | 2733.9 | 2732.0 | 2732.0 | 2733.9 | 2724.1 | 2712.3 | 2629.8 | 2468.6 | 2217.0 | 1922.2 |
| 25°   | 2798.8 | 2796.8 | 2792.9 | 2789.0 | 2802.7 | 2804.7 | 2800.8 | 2743.8 | 2594.4 | 2313.3 | 1979.2 |
| 27.5° | 2883.3 | 2877.4 | 2869.5 | 2865.6 | 2879.4 | 2889.2 | 2897.1 | 2857.8 | 2728.0 | 2411.6 | 2044.1 |
| 30°   | 3013.0 | 2995.3 | 2975.7 | 2961.9 | 2971.8 | 2987.5 | 3005.2 | 2981.6 | 2865.6 | 2533.5 | 2110.9 |
| 32.5° | 3166.3 | 3144.7 | 3099.5 | 3074.0 | 3099.5 | 3111.3 | 3125.1 | 3113.3 | 3009.1 | 2665.1 | 2177.7 |
| 35°   | 3353.0 | 3327.5 | 3280.3 | 3243.0 | 3288.2 | 3262.6 | 3256.7 | 3244.9 | 3144.7 | 2794.9 | 2252.4 |
| 37.5° | 3663.6 | 3626.2 | 3551.6 | 3469.0 | 3469.0 | 3414.0 | 3392.4 | 3357.0 | 3266.6 | 2910.8 | 2325.1 |
| 40°   | 4023.3 | 3974.1 | 3877.8 | 3756.0 | 3643.9 | 3529.9 | 3516.2 | 3490.6 | 3410.0 | 3044.5 | 2407.7 |
| 42.5° | 4418.3 | 4324.0 | 4190.3 | 4042.9 | 3862.1 | 3732.4 | 3700.9 | 3628.2 | 3549.6 | 3180.1 | 2490.2 |
| 45°   | 4856.6 | 4660.1 | 4465.5 | 4390.8 | 4092.1 | 3974.1 | 3915.2 | 3783.5 | 3695.0 | 3321.6 | 2576.7 |
| 47.5° | 4927.4 | 4774.1 | 4644.3 | 4632.6 | 4306.3 | 4208.0 | 4141.2 | 3952.5 | 3852.3 | 3472.9 | 2667.1 |
| 50°   | 4888.1 | 4795.7 | 4809.4 | 4762.3 | 4463.5 | 4398.7 | 4347.6 | 4133.3 | 4007.5 | 3618.4 | 2749.7 |
| 52.5° | 4723.0 | 4774.1 | 4852.7 | 4766.2 | 4612.9 | 4559.8 | 4534.3 | 4327.9 | 4153.0 | 3752.0 | 2824.3 |
| 55°   | 4526.4 | 4561.8 | 4730.8 | 4837.0 | 4785.9 | 4738.7 | 4715.1 | 4553.9 | 4296.5 | 3864.1 | 2893.1 |
| 57.5° | 4239.5 | 4223.7 | 4410.5 | 4825.2 | 4966.7 | 4939.2 | 4913.6 | 4776.0 | 4430.1 | 3944.6 | 2936.4 |
| 60°   | 3809.0 | 3775.6 | 4011.5 | 4589.3 | 5025.6 | 5068.9 | 5057.1 | 4923.4 | 4532.3 | 3942.7 | 2918.7 |
| 62.5° | 3064.1 | 3146.7 | 3472.9 | 4204.1 | 5051.2 | 5161.3 | 5139.6 | 4935.2 | 4565.7 | 3828.7 | 2806.7 |
| 65°   | 2278.0 | 2395.9 | 2716.2 | 3673.4 | 5015.8 | 5208.4 | 5149.5 | 4742.6 | 4410.5 | 3602.7 | 2561.0 |
| 67.5° | 1641.1 | 1745.3 | 1979.2 | 3022.9 | 4675.8 | 4992.2 | 4923.4 | 4428.1 | 4052.7 | 3282.3 | 2221.0 |
| 70°   | 1122.3 | 1197.0 | 1356.2 | 2201.3 | 3991.8 | 4316.1 | 4272.9 | 3958.4 | 3488.7 | 2901.0 | 1804.3 |
| 72.5° | 792.1  | 823.5  | 925.7  | 1452.5 | 3032.7 | 3386.5 | 3335.4 | 3256.7 | 2802.7 | 2411.6 | 1403.3 |
| 75°   | 593.6  | 613.2  | 668.3  | 939.5  | 2046.0 | 2346.7 | 2299.6 | 2344.8 | 2093.2 | 1825.9 | 1022.0 |
| 77.5° | 224.1  | 243.7  | 379.3  | 599.5  | 1210.7 | 1440.7 | 1393.5 | 1421.0 | 1163.5 | 921.8  | 509.1  |
| 80°   | 60.9   | 64.9   | 125.8  | 285.0  | 550.3  | 717.4  | 652.5  | 560.2  | 432.4  | 424.5  | 269.3  |
| 82.5° | 25.6   | 29.5   | 57.0   | 153.3  | 196.5  | 196.5  | 165.1  | 204.4  | 165.1  | 198.5  | 129.7  |
| 85°   | 9.8    | 11.8   | 13.8   | 39.3   | 25.6   | 27.5   | 29.5   | 39.3   | 33.4   | 41.3   | 29.5   |
| 87.5° | 0.0    | 0.0    | 0.0    | 2.0    | 2.0    | 3.9    | 2.0    | 3.9    | 5.9    | 5.9    | 5.9    |
| 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°    | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 | 1588.1 |
| 2.5°  | 1578.3 | 1556.6 | 1525.2 | 1474.1 | 1421.0 | 1391.5 | 1354.2 | 1348.3 | 1309.0 | 1305.1 | 1289.3 |
| 5°    | 1588.1 | 1542.9 | 1462.3 | 1364.0 | 1267.7 | 1193.0 | 1138.0 | 1108.5 | 1051.5 | 1051.5 | 1035.8 |
| 7.5°  | 1595.9 | 1525.2 | 1395.5 | 1250.0 | 1118.3 | 1018.1 | 943.4  | 912.0  | 860.9  | 856.9  | 845.1  |
| 10°   | 1597.9 | 1503.6 | 1322.7 | 1134.1 | 972.9  | 870.7  | 798.0  | 762.6  | 717.4  | 713.5  | 705.6  |
| 12.5° | 1613.6 | 1491.8 | 1257.9 | 1033.8 | 868.7  | 758.7  | 687.9  | 658.4  | 623.0  | 619.1  | 611.3  |
| 15°   | 1639.2 | 1491.8 | 1202.9 | 949.3  | 776.4  | 674.1  | 613.2  | 585.7  | 560.2  | 556.2  | 552.3  |
| 17.5° | 1664.7 | 1487.8 | 1147.8 | 870.7  | 699.7  | 607.3  | 554.3  | 532.6  | 513.0  | 511.0  | 507.1  |
| 20°   | 1688.3 | 1485.9 | 1092.8 | 803.9  | 640.7  | 552.3  | 511.0  | 491.4  | 475.6  | 475.6  | 473.7  |
| 22.5° | 1711.9 | 1481.9 | 1039.7 | 741.0  | 589.6  | 511.0  | 475.6  | 454.0  | 442.2  | 442.2  | 440.3  |
| 25°   | 1747.3 | 1481.9 | 990.6  | 687.9  | 548.4  | 479.6  | 444.2  | 428.5  | 418.6  | 416.7  | 416.7  |
| 27.5° | 1788.6 | 1493.7 | 947.3  | 640.7  | 513.0  | 448.1  | 420.6  | 404.9  | 393.1  | 389.2  | 391.1  |
| 30°   | 1833.8 | 1503.6 | 908.0  | 599.5  | 479.6  | 424.5  | 395.1  | 379.3  | 367.5  | 363.6  | 365.6  |
| 32.5° | 1879.0 | 1515.4 | 872.7  | 562.1  | 446.2  | 402.9  | 373.4  | 355.7  | 344.0  | 342.0  | 342.0  |
| 35°   | 1928.1 | 1527.2 | 837.3  | 530.7  | 418.6  | 381.3  | 353.8  | 334.1  | 326.3  | 322.3  | 324.3  |
| 37.5° | 1977.2 | 1546.8 | 803.9  | 501.2  | 399.0  | 361.6  | 336.1  | 316.4  | 310.5  | 308.6  | 308.6  |
| 40°   | 2036.2 | 1576.3 | 790.1  | 481.5  | 381.3  | 344.0  | 322.3  | 302.7  | 296.8  | 296.8  | 296.8  |
| 42.5° | 2085.3 | 1599.9 | 778.3  | 459.9  | 367.5  | 328.2  | 308.6  | 292.9  | 288.9  | 287.0  | 288.9  |
| 45°   | 2134.5 | 1621.5 | 762.6  | 440.3  | 349.8  | 312.5  | 296.8  | 281.1  | 277.1  | 277.1  | 277.1  |
| 47.5° | 2183.6 | 1633.3 | 741.0  | 420.6  | 334.1  | 298.7  | 285.0  | 271.2  | 267.3  | 267.3  | 267.3  |
| 50°   | 2222.9 | 1643.1 | 709.5  | 399.0  | 316.4  | 287.0  | 273.2  | 259.4  | 255.5  | 255.5  | 255.5  |
| 52.5° | 2262.2 | 1645.1 | 676.1  | 373.4  | 298.7  | 273.2  | 261.4  | 247.6  | 243.7  | 241.7  | 241.7  |
| 55°   | 2297.6 | 1643.1 | 636.8  | 344.0  | 279.1  | 257.5  | 247.6  | 235.9  | 228.0  | 220.1  | 224.1  |
| 57.5° | 2323.2 | 1641.1 | 591.6  | 314.5  | 259.4  | 241.7  | 237.8  | 222.1  | 206.4  | 186.7  | 190.6  |
| 60°   | 2313.3 | 1619.5 | 542.5  | 277.1  | 237.8  | 226.0  | 226.0  | 204.4  | 176.9  | 167.1  | 169.0  |
| 62.5° | 2250.4 | 1558.6 | 491.4  | 237.8  | 216.2  | 210.3  | 208.3  | 184.8  | 163.1  | 153.3  | 155.3  |
| 65°   | 2061.8 | 1405.3 | 416.7  | 202.4  | 194.6  | 192.6  | 192.6  | 171.0  | 151.3  | 139.5  | 141.5  |
| 67.5° | 1774.8 | 1179.3 | 340.0  | 171.0  | 173.0  | 176.9  | 176.9  | 157.2  | 137.6  | 125.8  | 127.8  |
| 70°   | 1423.0 | 921.8  | 271.2  | 147.4  | 149.4  | 155.3  | 159.2  | 141.5  | 123.8  | 112.0  | 112.0  |
| 72.5° | 1071.2 | 699.7  | 218.2  | 123.8  | 133.7  | 133.7  | 139.5  | 125.8  | 108.1  | 96.3   | 98.3   |
| 75°   | 776.4  | 501.2  | 173.0  | 104.2  | 116.0  | 114.0  | 114.0  | 106.1  | 92.4   | 84.5   | 84.5   |
| 77.5° | 367.5  | 263.4  | 137.6  | 74.7   | 90.4   | 88.4   | 90.4   | 84.5   | 78.6   | 70.8   | 72.7   |
| 80°   | 180.8  | 129.7  | 88.4   | 53.1   | 62.9   | 64.9   | 70.8   | 66.8   | 64.9   | 59.0   | 59.0   |
| 82.5° | 86.5   | 51.1   | 41.3   | 37.3   | 43.2   | 45.2   | 49.1   | 49.1   | 51.1   | 47.2   | 47.2   |
| 85°   | 23.6   | 13.8   | 17.7   | 23.6   | 27.5   | 29.5   | 33.4   | 35.4   | 35.4   | 33.4   | 35.4   |
| 87.5° | 5.9    | 5.9    | 7.9    | 11.8   | 13.8   | 15.7   | 17.7   | 17.7   | 7.9    | 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)