

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: P836274

Luminaire Tested: **ARCH3-160-740-U-T3-HSS**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836274  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-160-740-U-T3-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 16114 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 161  
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

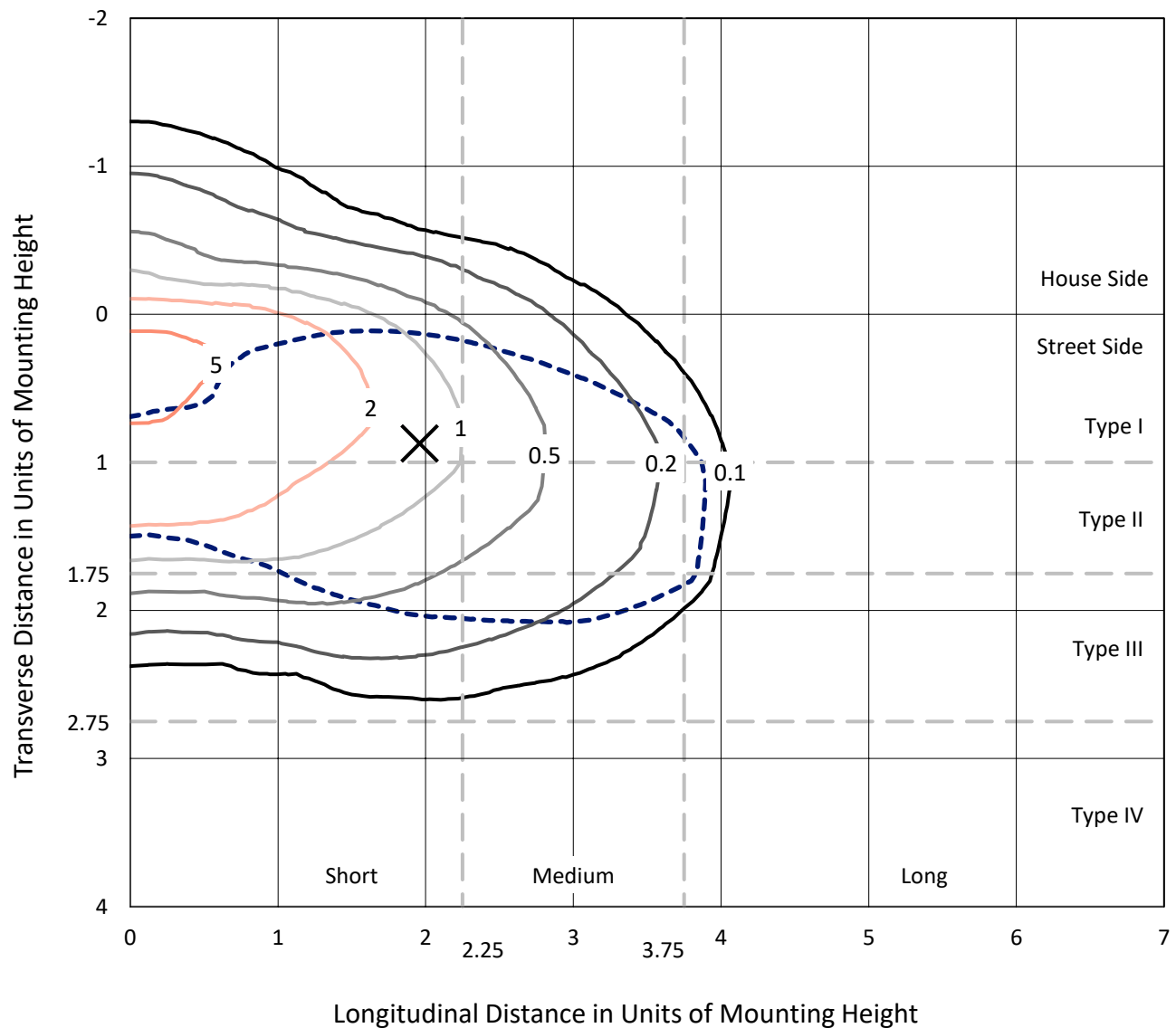


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

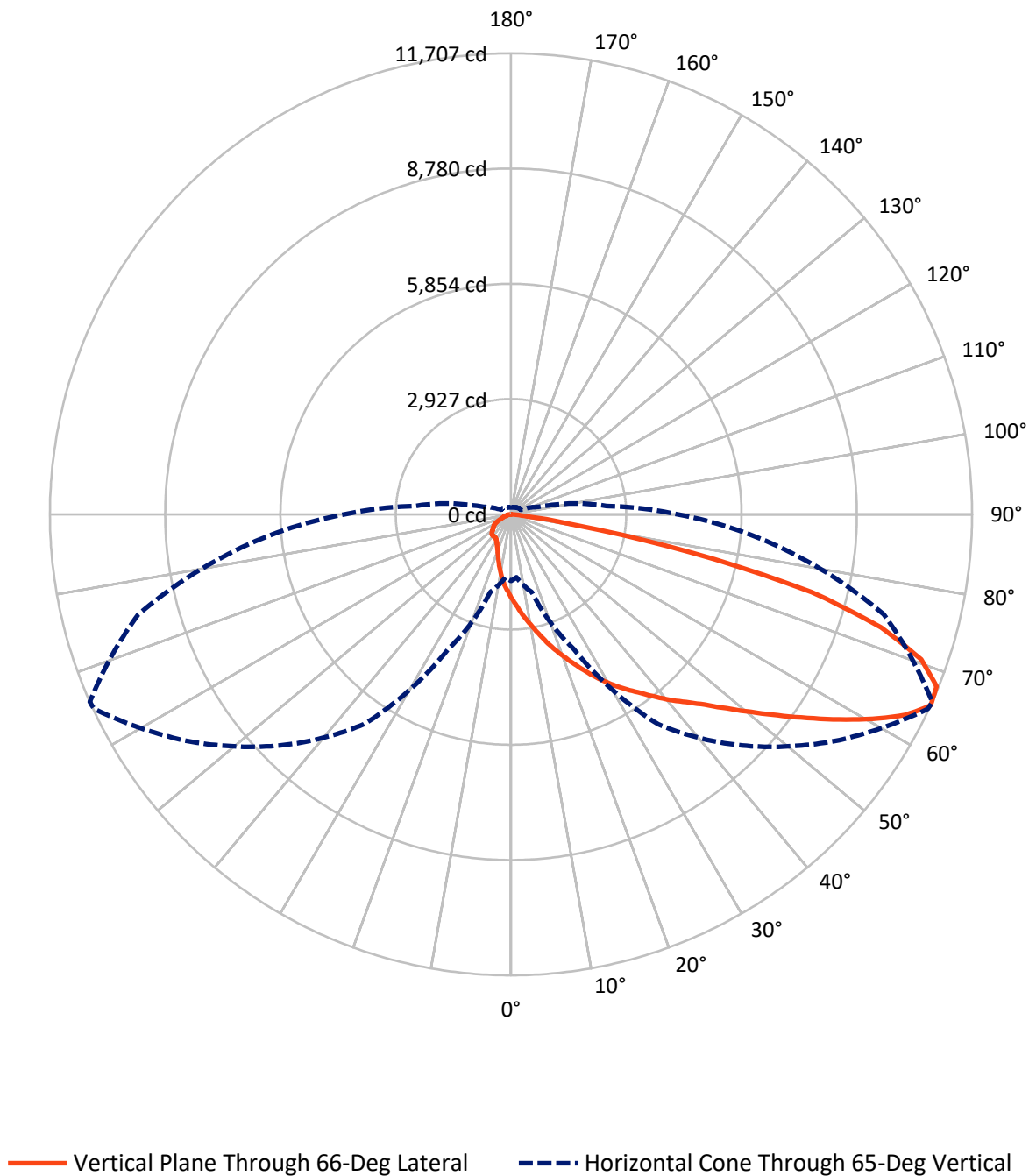


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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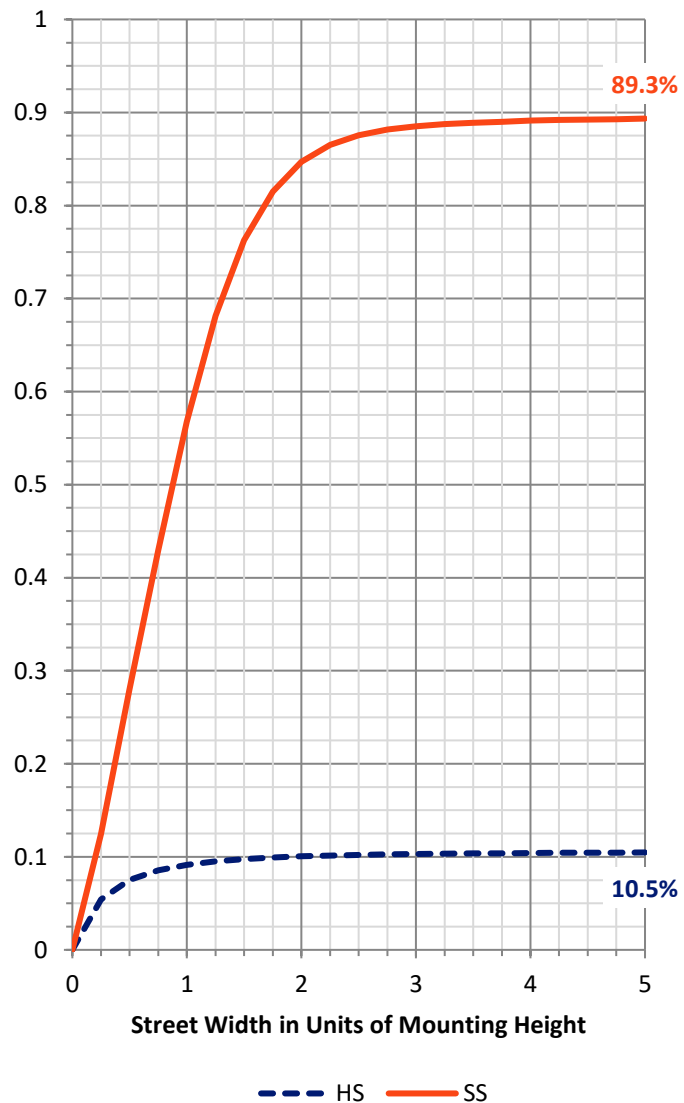
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1704.4   | 0.0    | 1704.4  |
|                    | % Fixture | 10.6     | 0.0    | 10.6    |
| <b>Street Side</b> | Lumens    | 14409.6  | 0.0    | 14409.6 |
|                    | % Fixture | 89.4     | 0.0    | 89.4    |
| <b>Total</b>       | Lumens    | 16114.0  | 0.0    | 16114.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 210.5   | 1.3       |
| 10°-20°   | 686.0   | 4.3       |
| 20°-30°   | 1241.3  | 7.7       |
| 30°-40°   | 1941.0  | 12.0      |
| 40°-50°   | 2944.5  | 18.3      |
| 50°-60°   | 3741.1  | 23.2      |
| 60°-70°   | 3495.6  | 21.7      |
| 70°-80°   | 1737.3  | 10.8      |
| 80°-90°   | 116.7   | 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°    | 16114.0 | 100.0     |
| 0°-180°   | 16114.0 | 100.0     |

**Coefficient of Utilization**



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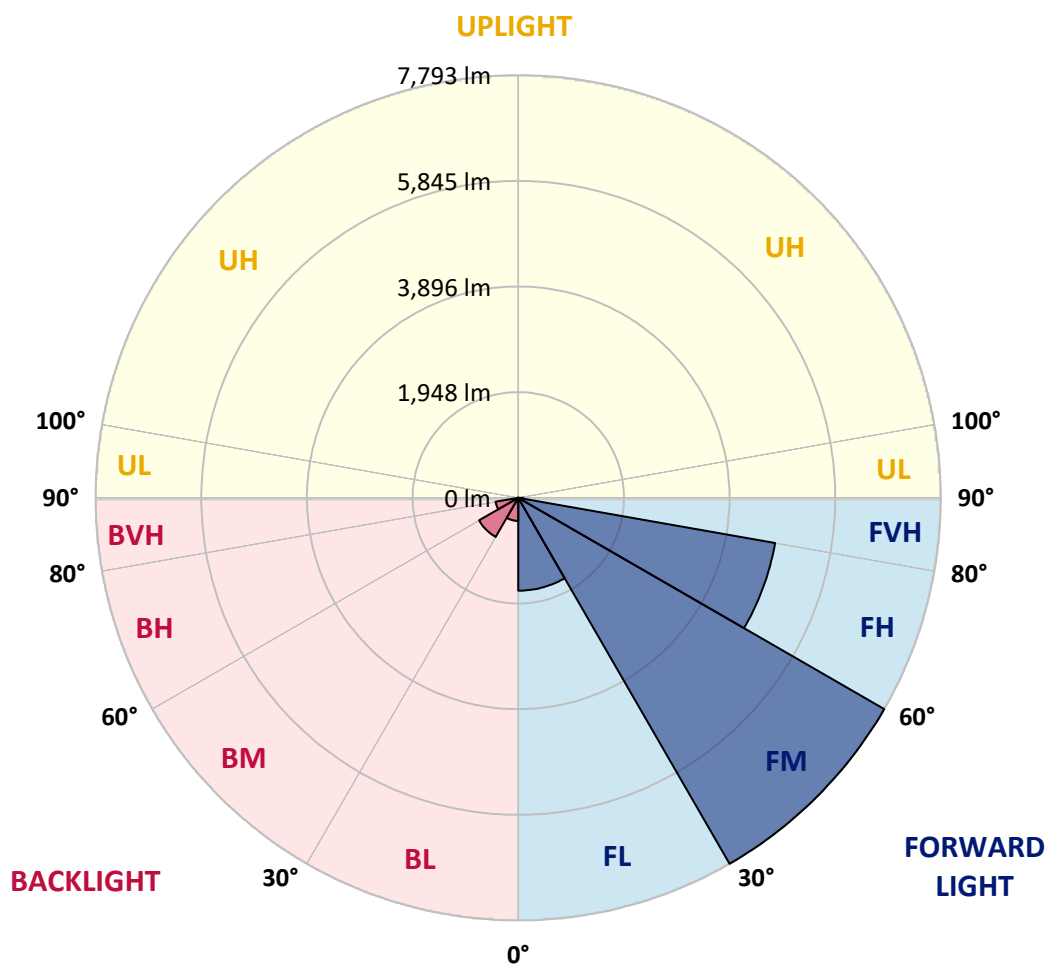
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1712.1 | 10.6      |                         |      |         |
| FM   | (30°-60°)   | 7792.9 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 4808.5 | 29.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 96.1   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 425.7  | 2.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 833.6  | 5.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 424.5  | 2.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 20.7   | 0.1       |                         |      | 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°    | 45°    | 55°     | 65°     | 66°     | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|
| 0°    | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6  | 2132.6  | 2132.6  | 2132.6 | 2132.6 |
| 2.5°  | 2490.8 | 2511.1 | 2521.3 | 2524.6 | 2446.9 | 2413.1 | 2379.3  | 2301.6  | 2284.7  | 2240.8 | 2183.3 |
| 5°    | 2930.2 | 2957.2 | 2950.5 | 2937.0 | 2842.3 | 2734.2 | 2646.3  | 2501.0  | 2477.3  | 2372.6 | 2244.1 |
| 7.5°  | 3362.8 | 3386.5 | 3379.7 | 3329.0 | 3224.2 | 3072.2 | 2926.8  | 2713.9  | 2680.1  | 2511.1 | 2305.0 |
| 10°   | 3724.4 | 3744.7 | 3741.3 | 3690.6 | 3565.6 | 3379.7 | 3204.0  | 2920.1  | 2879.5  | 2639.6 | 2355.7 |
| 12.5° | 4021.9 | 4048.9 | 4045.5 | 4011.7 | 3900.2 | 3697.4 | 3498.0  | 3156.7  | 3106.0  | 2795.0 | 2426.6 |
| 15°   | 4255.1 | 4288.9 | 4288.9 | 4275.3 | 4197.6 | 4028.6 | 3802.2  | 3416.9  | 3356.1  | 2974.1 | 2514.5 |
| 17.5° | 4397.0 | 4424.0 | 4447.7 | 4471.4 | 4417.3 | 4288.9 | 4082.7  | 3677.1  | 3612.9  | 3149.9 | 2605.8 |
| 20°   | 4471.4 | 4498.4 | 4515.3 | 4566.0 | 4576.1 | 4511.9 | 4349.7  | 3934.0  | 3866.4  | 3349.3 | 2710.5 |
| 22.5° | 4593.0 | 4616.7 | 4620.1 | 4664.0 | 4684.3 | 4701.2 | 4599.8  | 4187.5  | 4133.4  | 3569.0 | 2828.8 |
| 25°   | 4795.8 | 4822.9 | 4812.7 | 4833.0 | 4836.4 | 4856.6 | 4846.5  | 4478.1  | 4424.0  | 3819.1 | 2970.8 |
| 27.5° | 5056.1 | 5089.8 | 5083.1 | 5062.8 | 5032.4 | 5015.5 | 5059.4  | 4772.2  | 4721.5  | 4069.2 | 3116.1 |
| 30°   | 5336.6 | 5377.1 | 5367.0 | 5326.4 | 5245.3 | 5174.3 | 5235.2  | 5049.3  | 5002.0  | 4326.0 | 3278.3 |
| 32.5° | 5620.5 | 5667.8 | 5664.4 | 5596.8 | 5458.2 | 5336.6 | 5427.8  | 5309.5  | 5275.7  | 4603.2 | 3454.1 |
| 35°   | 5806.3 | 5867.2 | 5860.4 | 5819.9 | 5640.7 | 5536.0 | 5647.5  | 5576.5  | 5552.9  | 4941.1 | 3707.5 |
| 37.5° | 6107.1 | 6171.4 | 6113.9 | 6012.5 | 5806.3 | 5752.3 | 5887.5  | 5877.3  | 5860.4  | 5299.4 | 3974.5 |
| 40°   | 6837.2 | 6931.8 | 6779.7 | 6364.0 | 6026.0 | 5978.7 | 6171.4  | 6211.9  | 6195.0  | 5654.3 | 4214.5 |
| 42.5° | 7601.0 | 7742.9 | 7506.3 | 6931.8 | 6424.8 | 6252.5 | 6482.3  | 6539.7  | 6519.5  | 5958.4 | 4430.8 |
| 45°   | 8064.0 | 8124.8 | 7888.3 | 7442.1 | 7131.2 | 6583.7 | 6813.5  | 6908.1  | 6891.2  | 6323.4 | 4707.9 |
| 47.5° | 8442.5 | 8418.9 | 8148.5 | 7847.7 | 7905.2 | 7050.1 | 7188.7  | 7374.5  | 7361.0  | 6725.6 | 5012.1 |
| 50°   | 8523.6 | 8469.6 | 8361.4 | 8172.1 | 8324.2 | 7523.2 | 7584.1  | 7905.2  | 7891.6  | 7171.8 | 5319.7 |
| 52.5° | 7952.5 | 7881.5 | 8175.5 | 8334.4 | 8283.7 | 7868.0 | 8020.1  | 8486.5  | 8479.7  | 7655.1 | 5613.7 |
| 55°   | 6526.2 | 6468.8 | 7259.6 | 8080.9 | 8239.7 | 8111.3 | 8503.4  | 9091.4  | 9128.6  | 8168.8 | 5880.7 |
| 57.5° | 5133.8 | 5073.0 | 5850.3 | 7445.5 | 8077.5 | 8334.4 | 9067.8  | 9784.3  | 9831.6  | 8726.4 | 6134.2 |
| 60°   | 4092.8 | 4001.6 | 4596.4 | 6445.1 | 7773.3 | 8506.7 | 9611.9  | 10544.7 | 10551.5 | 9236.8 | 6289.6 |
| 62.5° | 2781.5 | 2680.1 | 3339.2 | 5177.7 | 7263.0 | 8533.8 | 10031.0 | 11200.4 | 11227.4 | 9618.7 | 6316.7 |
| 65°   | 1689.9 | 1605.4 | 2051.5 | 3781.9 | 6509.3 | 8304.0 | 10037.8 | 11683.7 | 11707.3 | 9794.4 | 6154.5 |
| 67.5° | 980.1  | 946.3  | 1172.8 | 2355.7 | 5258.8 | 7685.5 | 9615.3  | 11609.3 | 11653.3 | 9720.1 | 5786.1 |
| 70°   | 571.2  | 567.8  | 652.3  | 1166.0 | 3710.9 | 6458.6 | 8672.3  | 10984.1 | 11048.3 | 9331.4 | 5221.7 |
| 72.5° | 419.1  | 425.8  | 459.6  | 625.2  | 2149.5 | 4650.5 | 7344.1  | 9726.8  | 9824.8  | 8571.0 | 4417.3 |
| 75°   | 331.2  | 334.6  | 365.0  | 425.8  | 1128.8 | 2629.4 | 5502.2  | 7807.1  | 7884.9  | 7215.7 | 3450.7 |
| 77.5° | 246.7  | 253.5  | 277.1  | 300.8  | 523.9  | 1206.6 | 3095.8  | 4809.3  | 4680.9  | 3961.0 | 1666.2 |
| 80°   | 179.1  | 196.0  | 206.2  | 216.3  | 277.1  | 466.4  | 929.4   | 1676.3  | 1662.8  | 1730.4 | 787.5  |
| 82.5° | 114.9  | 128.4  | 138.6  | 145.3  | 165.6  | 223.1  | 277.1   | 375.1   | 405.6   | 672.6  | 314.3  |
| 85°   | 50.7   | 57.5   | 64.2   | 77.7   | 71.0   | 77.7   | 114.9   | 74.4    | 64.2    | 101.4  | 57.5   |
| 87.5° | 0.0    | 0.0    | 10.1   | 16.9   | 13.5   | 6.8    | 20.3    | 13.5    | 10.1    | 10.1   | 10.1   |
| 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°    | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 | 2132.6 |
| 2.5°  | 2152.9 | 2115.7 | 2038.0 | 1963.6 | 1919.7 | 1862.2 | 1811.5 | 1764.2 | 1760.8 | 1747.3 | 1723.7 |
| 5°    | 2179.9 | 2108.9 | 1963.6 | 1825.0 | 1720.3 | 1608.7 | 1514.1 | 1439.8 | 1412.7 | 1392.4 | 1365.4 |
| 7.5°  | 2207.0 | 2095.4 | 1879.1 | 1676.3 | 1510.7 | 1355.3 | 1243.7 | 1142.3 | 1111.9 | 1084.9 | 1068.0 |
| 10°   | 2217.1 | 2071.8 | 1781.1 | 1510.7 | 1294.4 | 1128.8 | 1010.5 | 936.2  | 909.1  | 895.6  | 885.5  |
| 12.5° | 2247.5 | 2058.2 | 1689.9 | 1355.3 | 1105.2 | 953.1  | 868.6  | 824.7  | 814.5  | 804.4  | 794.2  |
| 15°   | 2288.1 | 2058.2 | 1598.6 | 1203.2 | 956.5  | 834.8  | 784.1  | 753.7  | 746.9  | 743.5  | 736.8  |
| 17.5° | 2332.0 | 2058.2 | 1510.7 | 1074.7 | 848.3  | 757.1  | 719.9  | 703.0  | 699.6  | 696.2  | 692.8  |
| 20°   | 2392.8 | 2061.6 | 1416.1 | 963.2  | 770.6  | 699.6  | 669.2  | 648.9  | 645.5  | 642.1  | 642.1  |
| 22.5° | 2453.7 | 2068.4 | 1324.8 | 878.7  | 719.9  | 655.7  | 618.5  | 598.2  | 591.4  | 591.4  | 591.4  |
| 25°   | 2531.4 | 2088.7 | 1240.4 | 807.8  | 675.9  | 615.1  | 567.8  | 550.9  | 547.5  | 547.5  | 544.1  |
| 27.5° | 2622.7 | 2112.3 | 1166.0 | 753.7  | 632.0  | 567.8  | 520.5  | 503.6  | 496.8  | 496.8  | 493.4  |
| 30°   | 2720.7 | 2136.0 | 1105.2 | 713.1  | 588.1  | 520.5  | 476.5  | 456.3  | 449.5  | 452.9  | 449.5  |
| 32.5° | 2828.8 | 2169.8 | 1057.9 | 686.1  | 547.5  | 479.9  | 439.4  | 415.7  | 412.3  | 412.3  | 408.9  |
| 35°   | 3011.3 | 2264.4 | 1051.1 | 672.6  | 513.7  | 449.5  | 408.9  | 385.3  | 381.9  | 381.9  | 378.5  |
| 37.5° | 3207.3 | 2372.6 | 1081.5 | 665.8  | 486.7  | 422.5  | 385.3  | 361.6  | 358.2  | 358.2  | 358.2  |
| 40°   | 3373.0 | 2453.7 | 1115.3 | 665.8  | 469.8  | 398.8  | 365.0  | 344.7  | 344.7  | 344.7  | 344.7  |
| 42.5° | 3484.5 | 2460.4 | 1108.5 | 665.8  | 456.3  | 381.9  | 351.5  | 331.2  | 331.2  | 334.6  | 331.2  |
| 45°   | 3650.1 | 2494.2 | 1081.5 | 655.7  | 446.1  | 368.4  | 338.0  | 321.1  | 317.7  | 321.1  | 321.1  |
| 47.5° | 3846.1 | 2555.1 | 1054.5 | 615.1  | 442.7  | 354.9  | 327.8  | 307.6  | 304.2  | 307.6  | 304.2  |
| 50°   | 4032.0 | 2609.1 | 1041.0 | 561.0  | 436.0  | 341.4  | 314.3  | 294.0  | 290.7  | 294.0  | 290.7  |
| 52.5° | 4187.5 | 2632.8 | 1017.3 | 523.9  | 419.1  | 327.8  | 300.8  | 280.5  | 273.8  | 277.1  | 277.1  |
| 55°   | 4312.5 | 2626.0 | 983.5  | 493.4  | 388.7  | 314.3  | 283.9  | 267.0  | 256.9  | 256.9  | 253.5  |
| 57.5° | 4427.4 | 2629.4 | 953.1  | 463.0  | 354.9  | 294.0  | 270.4  | 250.1  | 236.6  | 233.2  | 229.8  |
| 60°   | 4471.4 | 2612.5 | 899.0  | 422.5  | 321.1  | 277.1  | 253.5  | 229.8  | 216.3  | 212.9  | 209.5  |
| 62.5° | 4410.5 | 2551.7 | 828.0  | 351.5  | 290.7  | 256.9  | 236.6  | 212.9  | 199.4  | 196.0  | 192.6  |
| 65°   | 4238.2 | 2436.8 | 719.9  | 277.1  | 263.6  | 233.2  | 216.3  | 199.4  | 182.5  | 175.7  | 172.4  |
| 67.5° | 3944.1 | 2271.2 | 584.7  | 223.1  | 233.2  | 212.9  | 202.8  | 182.5  | 162.2  | 155.5  | 152.1  |
| 70°   | 3525.0 | 2051.5 | 439.4  | 189.3  | 206.2  | 189.3  | 182.5  | 162.2  | 145.3  | 138.6  | 135.2  |
| 72.5° | 2937.0 | 1696.6 | 307.6  | 162.2  | 179.1  | 165.6  | 158.8  | 145.3  | 128.4  | 118.3  | 118.3  |
| 75°   | 2220.5 | 1216.7 | 202.8  | 138.6  | 148.7  | 141.9  | 131.8  | 121.7  | 111.5  | 104.8  | 101.4  |
| 77.5° | 956.5  | 473.2  | 125.0  | 104.8  | 121.7  | 118.3  | 104.8  | 98.0   | 94.6   | 87.9   | 87.9   |
| 80°   | 412.3  | 192.6  | 77.7   | 77.7   | 87.9   | 84.5   | 81.1   | 74.4   | 74.4   | 71.0   | 67.6   |
| 82.5° | 152.1  | 77.7   | 47.3   | 57.5   | 64.2   | 57.5   | 57.5   | 57.5   | 57.5   | 54.1   | 54.1   |
| 85°   | 37.2   | 23.7   | 23.7   | 33.8   | 37.2   | 33.8   | 37.2   | 33.8   | 33.8   | 33.8   | 30.4   |
| 87.5° | 10.1   | 10.1   | 13.5   | 13.5   | 13.5   | 13.5   | 13.5   | 10.1   | 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)