

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: P1211258

Luminaire Tested: **ARCH4-220-727-U-T3RE-HSS**

Issue Date: 11/5/2025

### Test Information

Test Method: LM-79-08  
Report Number: P1211258  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2510-578-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/5/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-220-727-U-T3RE-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III  
ROADWAY ILLUMINANCE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 22248 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 221.8  
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

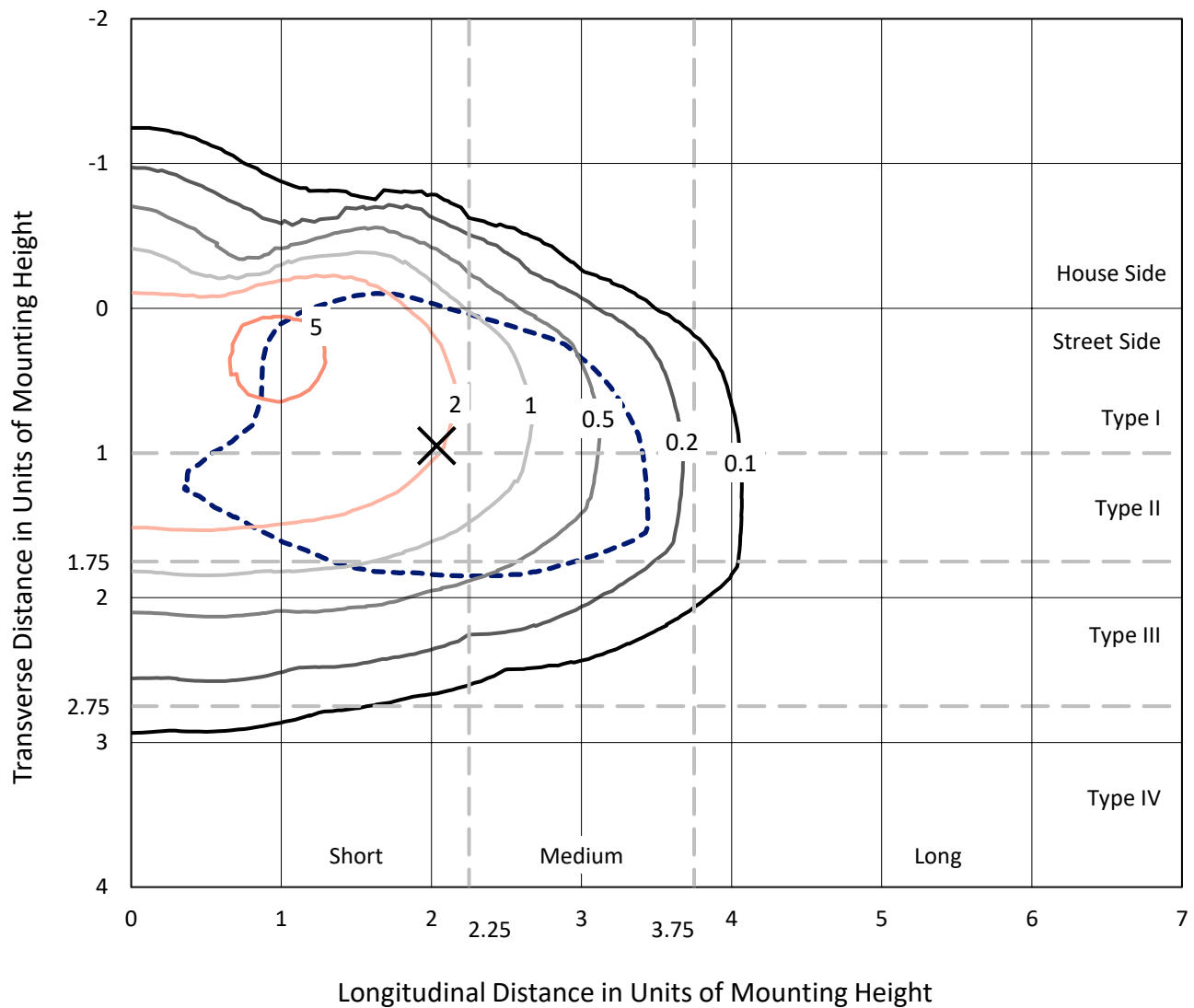


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## Iso-Footcandle Lines of Horizontal Illumination

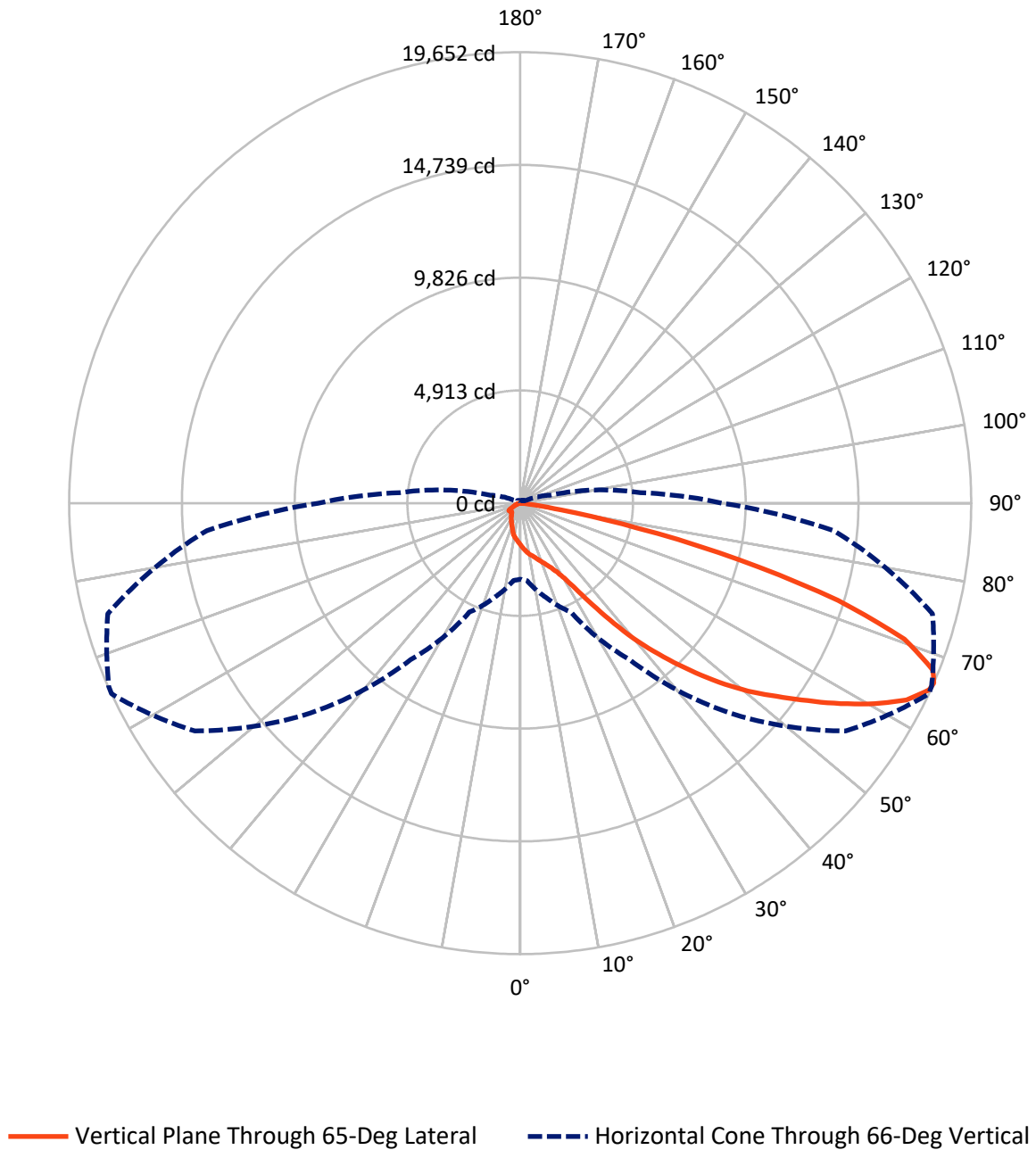
✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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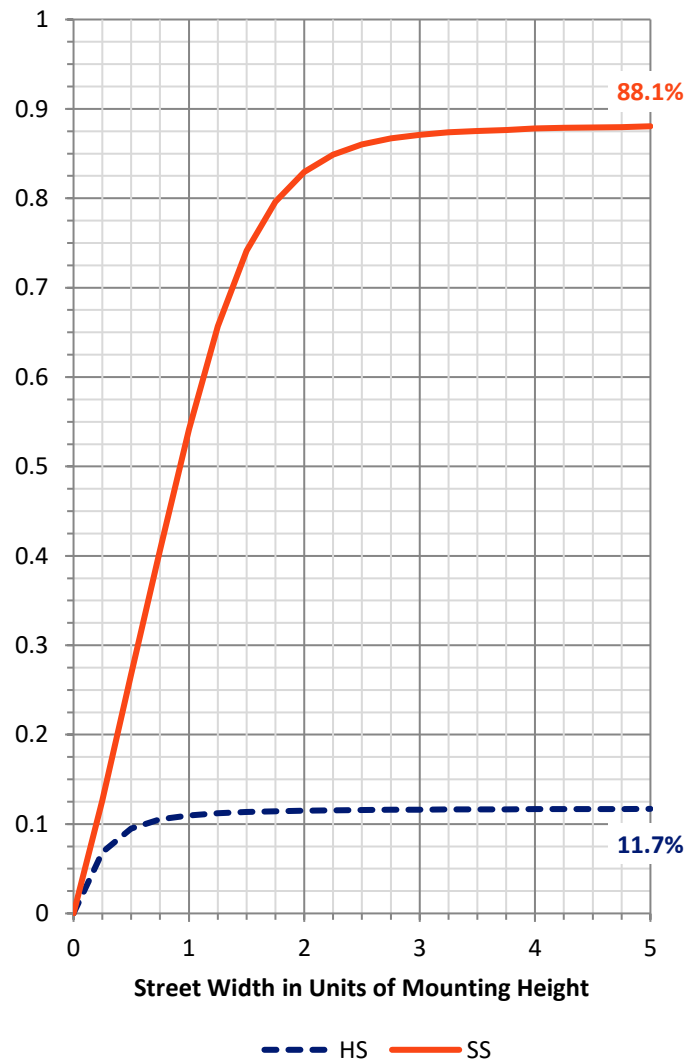
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2625.7   | 0.0    | 2625.7  |
|                    | % Fixture | 11.8     | 0.0    | 11.8    |
| <b>Street Side</b> | Lumens    | 19622.3  | 0.0    | 19622.3 |
|                    | % Fixture | 88.2     | 0.0    | 88.2    |
| <b>Total</b>       | Lumens    | 22248.0  | 0.0    | 22248.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 171.8   | 0.8       |
| 10°-20°   | 508.7   | 2.3       |
| 20°-30°   | 931.1   | 4.2       |
| 30°-40°   | 1891.9  | 8.5       |
| 40°-50°   | 3995.1  | 18.0      |
| 50°-60°   | 6141.8  | 27.6      |
| 60°-70°   | 6182.2  | 27.8      |
| 70°-80°   | 2310.0  | 10.4      |
| 80°-90°   | 115.4   | 0.5       |
| 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°    | 22248.0 | 100.0     |
| 0°-180°   | 22248.0 | 100.0     |

**Coefficient of Utilization**



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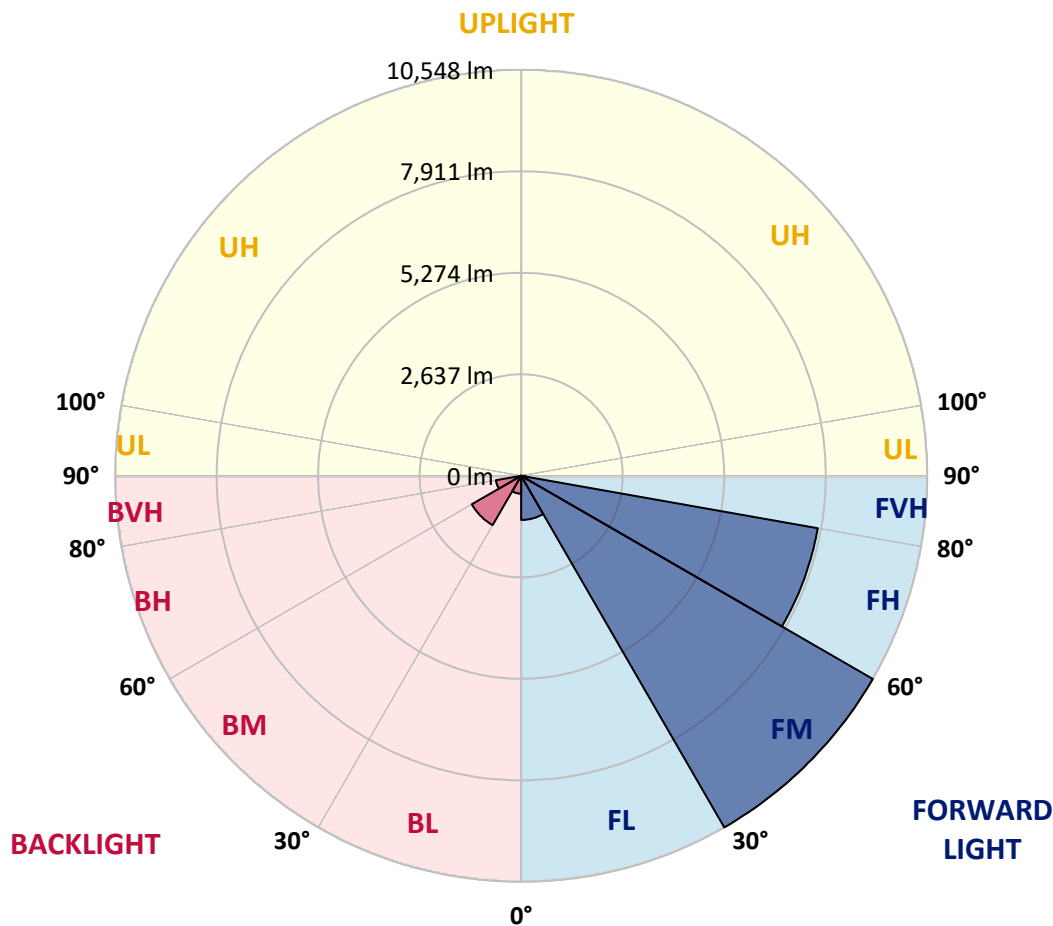
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1146.9  | 5.2       |                         |      |          |
| FM   | (30°-60°)   | 10548.4 | 47.4      |                         |      |          |
| FH   | (60°-80°)   | 7825.2  | 35.2      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 101.8   | 0.5       |                         |      | G2/225   |
| BL   | (0°-30°)    | 464.7   | 2.1       | B1/500                  |      |          |
| BM   | (30°-60°)   | 1480.4  | 6.7       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 667.0   | 3.0       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 13.6    | 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-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 1812.6 | 1812.6 | 1812.6 | 1812.6  | 1812.6  | 1812.6  | 1812.6  | 1812.6  | 1812.6  | 1812.6  | 1812.6  |
| 2.5°  | 2066.9 | 2071.0 | 2062.9 | 2046.7  | 2030.6  | 2010.4  | 1978.1  | 1925.6  | 1917.5  | 1881.2  | 1840.8  |
| 5°    | 2208.2 | 2216.3 | 2204.2 | 2200.1  | 2192.1  | 2163.8  | 2119.4  | 2042.7  | 2034.6  | 1962.0  | 1869.1  |
| 7.5°  | 2256.6 | 2268.8 | 2260.7 | 2260.7  | 2260.7  | 2248.6  | 2228.4  | 2159.8  | 2147.7  | 2054.8  | 1913.5  |
| 10°   | 2293.0 | 2301.1 | 2297.0 | 2313.2  | 2325.3  | 2317.2  | 2305.1  | 2264.7  | 2252.6  | 2159.8  | 1974.1  |
| 12.5° | 2349.5 | 2353.5 | 2357.6 | 2365.6  | 2385.8  | 2393.9  | 2389.9  | 2353.5  | 2345.5  | 2280.9  | 2050.8  |
| 15°   | 2402.0 | 2402.0 | 2406.0 | 2442.3  | 2470.6  | 2486.8  | 2490.8  | 2462.5  | 2454.5  | 2402.0  | 2147.7  |
| 17.5° | 2450.4 | 2454.5 | 2466.6 | 2506.9  | 2555.4  | 2587.7  | 2607.9  | 2595.8  | 2583.6  | 2543.3  | 2260.7  |
| 20°   | 2523.1 | 2531.2 | 2543.3 | 2599.8  | 2648.2  | 2700.7  | 2741.1  | 2737.0  | 2733.0  | 2704.7  | 2393.9  |
| 22.5° | 2648.2 | 2656.3 | 2676.5 | 2729.0  | 2777.4  | 2842.0  | 2910.6  | 2906.6  | 2894.5  | 2874.3  | 2551.3  |
| 25°   | 2838.0 | 2838.0 | 2850.1 | 2894.5  | 2955.0  | 3031.7  | 3096.3  | 3108.4  | 3096.3  | 3084.2  | 2749.2  |
| 27.5° | 3076.1 | 3080.2 | 3080.2 | 3128.6  | 3185.1  | 3282.0  | 3362.8  | 3374.9  | 3374.9  | 3362.8  | 3015.6  |
| 30°   | 3407.2 | 3395.1 | 3387.0 | 3427.4  | 3487.9  | 3629.2  | 3770.5  | 3794.7  | 3782.6  | 3802.8  | 3391.0  |
| 32.5° | 3976.4 | 3956.2 | 3887.6 | 3895.6  | 3932.0  | 4125.8  | 4363.9  | 4448.7  | 4444.7  | 4481.0  | 3996.6  |
| 35°   | 4763.6 | 4723.2 | 4622.3 | 4537.5  | 4533.5  | 4743.4  | 5106.7  | 5425.6  | 5421.6  | 5546.8  | 4917.0  |
| 37.5° | 5651.7 | 5704.2 | 5514.5 | 5369.1  | 5324.7  | 5490.2  | 5958.5  | 6648.8  | 6685.2  | 6903.2  | 6124.0  |
| 40°   | 6838.6 | 6870.9 | 6628.7 | 6422.8  | 6212.9  | 6273.4  | 6891.1  | 7964.9  | 8029.5  | 8271.7  | 7331.1  |
| 42.5° | 7872.0 | 7904.3 | 7763.0 | 7512.7  | 7246.3  | 7133.3  | 7831.7  | 9159.8  | 9212.3  | 9547.4  | 8574.5  |
| 45°   | 8574.5 | 8598.7 | 8647.1 | 8671.3  | 8368.6  | 8134.4  | 8982.2  | 10387.0 | 10451.6 | 10839.2 | 9789.6  |
| 47.5° | 9123.5 | 9143.7 | 9240.6 | 9482.8  | 9422.2  | 9236.5  | 10152.9 | 11662.7 | 11678.9 | 12110.8 | 10972.4 |
| 50°   | 9377.8 | 9426.3 | 9664.4 | 10035.8 | 10302.3 | 10354.8 | 11424.5 | 12869.8 | 12914.2 | 13325.9 | 12090.6 |
| 52.5° | 9095.2 | 9111.4 | 9712.9 | 10411.3 | 10948.2 | 11481.1 | 12700.2 | 13988.0 | 14117.2 | 14424.0 | 13095.8 |
| 55°   | 8142.5 | 8259.6 | 9171.9 | 10399.2 | 11456.8 | 12550.8 | 14064.7 | 15195.0 | 15312.1 | 15505.9 | 13979.9 |
| 57.5° | 7036.4 | 7165.6 | 8275.7 | 9878.4  | 11674.8 | 13539.9 | 15328.3 | 16478.8 | 16559.5 | 16612.0 | 14791.3 |
| 60°   | 6079.6 | 6200.7 | 7343.2 | 8881.3  | 11456.8 | 14238.3 | 16503.0 | 17754.5 | 17823.1 | 17681.8 | 15199.1 |
| 62.5° | 4904.9 | 5026.0 | 6176.5 | 7561.2  | 10601.0 | 14379.6 | 17375.0 | 18888.8 | 18917.1 | 18533.6 | 14948.8 |
| 65°   | 3697.8 | 3778.6 | 4739.4 | 5926.2  | 9103.3  | 13628.7 | 17572.8 | 19595.3 | 19567.0 | 18779.8 | 14197.9 |
| 66°   | 3314.3 | 3383.0 | 4230.7 | 5239.9  | 8324.2  | 12942.4 | 17306.4 | 19651.8 | 19623.6 | 18598.2 | 13705.4 |
| 67.5° | 2858.2 | 2878.3 | 3576.7 | 4287.2  | 6963.7  | 11485.1 | 16494.9 | 19393.5 | 19417.7 | 18097.6 | 12805.2 |
| 70°   | 2232.4 | 2228.4 | 2632.1 | 2983.3  | 4755.5  | 8170.8  | 13757.9 | 17766.6 | 17883.6 | 16208.3 | 10919.9 |
| 72.5° | 1429.1 | 1380.6 | 1614.8 | 1824.7  | 2769.3  | 4743.4  | 10031.8 | 14480.5 | 14678.3 | 12732.5 | 8134.4  |
| 75°   | 851.8  | 803.4  | 859.9  | 912.3   | 1328.2  | 2280.9  | 5898.0  | 9854.2  | 10043.9 | 8162.7  | 4840.3  |
| 77.5° | 637.8  | 617.7  | 621.7  | 577.3   | 589.4   | 855.8   | 2692.6  | 5207.7  | 5344.9  | 3342.6  | 1836.8  |
| 80°   | 488.5  | 436.0  | 407.7  | 427.9   | 387.5   | 339.1   | 1001.2  | 1792.4  | 1877.2  | 791.2   | 383.5   |
| 82.5° | 327.0  | 282.6  | 262.4  | 286.6   | 246.3   | 189.7   | 242.2   | 347.2   | 339.1   | 214.0   | 149.4   |
| 85°   | 169.6  | 145.3  | 145.3  | 145.3   | 125.1   | 92.8    | 105.0   | 141.3   | 141.3   | 113.0   | 88.8    |
| 87.5° | 48.4   | 44.4   | 52.5   | 48.4    | 36.3    | 36.3    | 40.4    | 48.4    | 48.4    | 44.4    | 40.4    |
| 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°    | 1812.6  | 1812.6 | 1812.6 | 1812.6 | 1812.6 | 1812.6 | 1812.6 | 1812.6 | 1812.6 | 1812.6 | 1812.6 |
| 2.5°  | 1808.5  | 1792.4 | 1748.0 | 1715.7 | 1683.4 | 1655.1 | 1622.8 | 1614.8 | 1598.6 | 1602.7 | 1594.6 |
| 5°    | 1820.7  | 1776.3 | 1699.6 | 1626.9 | 1570.4 | 1521.9 | 1461.4 | 1437.2 | 1404.9 | 1392.7 | 1384.7 |
| 7.5°  | 1836.8  | 1772.2 | 1659.2 | 1558.3 | 1461.4 | 1364.5 | 1267.6 | 1211.1 | 1174.7 | 1158.6 | 1146.5 |
| 10°   | 1873.1  | 1788.4 | 1639.0 | 1481.6 | 1316.0 | 1178.8 | 1081.9 | 1041.5 | 1017.3 | 1013.3 | 1009.2 |
| 12.5° | 1921.6  | 1812.6 | 1618.8 | 1384.7 | 1166.7 | 1037.5 | 976.9  | 964.8  | 960.8  | 960.8  | 956.8  |
| 15°   | 1994.2  | 1853.0 | 1586.5 | 1271.6 | 1049.6 | 960.8  | 932.5  | 912.3  | 904.3  | 904.3  | 904.3  |
| 17.5° | 2066.9  | 1901.4 | 1538.1 | 1154.6 | 968.9  | 912.3  | 884.1  | 872.0  | 863.9  | 867.9  | 863.9  |
| 20°   | 2159.8  | 1957.9 | 1473.5 | 1053.6 | 916.4  | 872.0  | 843.7  | 831.6  | 827.6  | 827.6  | 827.6  |
| 22.5° | 2264.7  | 2022.5 | 1392.7 | 976.9  | 872.0  | 831.6  | 803.4  | 791.2  | 783.2  | 787.2  | 787.2  |
| 25°   | 2406.0  | 2103.2 | 1308.0 | 900.2  | 827.6  | 791.2  | 758.9  | 742.8  | 742.8  | 746.8  | 750.9  |
| 27.5° | 2587.7  | 2200.1 | 1223.2 | 851.8  | 787.2  | 750.9  | 714.5  | 698.4  | 702.4  | 710.5  | 710.5  |
| 30°   | 2854.1  | 2333.4 | 1138.4 | 799.3  | 742.8  | 702.4  | 670.1  | 654.0  | 662.1  | 678.2  | 678.2  |
| 32.5° | 3233.6  | 2551.3 | 1065.8 | 738.8  | 678.2  | 633.8  | 601.5  | 589.4  | 609.6  | 641.9  | 641.9  |
| 35°   | 3911.8  | 2951.0 | 1021.3 | 678.2  | 609.6  | 557.1  | 516.7  | 504.6  | 532.9  | 573.2  | 573.2  |
| 37.5° | 4820.1  | 3592.9 | 1037.5 | 625.7  | 553.1  | 492.5  | 448.1  | 432.0  | 452.1  | 488.5  | 500.6  |
| 40°   | 5833.4  | 4368.0 | 1178.8 | 581.3  | 500.6  | 440.0  | 395.6  | 379.5  | 391.6  | 407.7  | 411.8  |
| 42.5° | 6846.7  | 5191.5 | 1445.2 | 549.0  | 460.2  | 395.6  | 355.3  | 343.1  | 351.2  | 355.3  | 359.3  |
| 45°   | 7855.9  | 6007.0 | 1780.3 | 528.8  | 423.9  | 359.3  | 318.9  | 318.9  | 323.0  | 323.0  | 323.0  |
| 47.5° | 8812.6  | 6802.2 | 2131.5 | 524.8  | 391.6  | 323.0  | 290.7  | 294.7  | 294.7  | 298.7  | 298.7  |
| 50°   | 9716.9  | 7512.7 | 2486.8 | 536.9  | 363.3  | 290.7  | 266.4  | 266.4  | 266.4  | 270.5  | 266.4  |
| 52.5° | 10471.8 | 8134.4 | 2858.2 | 557.1  | 335.1  | 266.4  | 242.2  | 242.2  | 242.2  | 246.3  | 242.2  |
| 55°   | 11186.4 | 8699.6 | 3237.6 | 585.4  | 310.8  | 246.3  | 222.0  | 214.0  | 214.0  | 218.0  | 214.0  |
| 57.5° | 11767.7 | 9075.0 | 3596.9 | 589.4  | 290.7  | 226.1  | 205.9  | 193.8  | 193.8  | 193.8  | 193.8  |
| 60°   | 11791.9 | 8857.0 | 3701.9 | 516.7  | 266.4  | 205.9  | 185.7  | 169.6  | 173.6  | 173.6  | 173.6  |
| 62.5° | 11020.8 | 7710.6 | 2975.2 | 387.5  | 238.2  | 185.7  | 169.6  | 153.4  | 153.4  | 153.4  | 153.4  |
| 65°   | 9507.0  | 5998.9 | 1744.0 | 306.8  | 205.9  | 165.5  | 149.4  | 137.3  | 137.3  | 137.3  | 133.2  |
| 66°   | 8796.5  | 5260.1 | 1336.2 | 278.5  | 193.8  | 161.5  | 145.3  | 133.2  | 129.2  | 125.1  | 125.1  |
| 67.5° | 7637.9  | 4158.0 | 835.6  | 246.3  | 177.6  | 149.4  | 133.2  | 121.1  | 117.1  | 113.0  | 113.0  |
| 70°   | 5752.6  | 2640.2 | 407.7  | 189.7  | 153.4  | 129.2  | 117.1  | 105.0  | 100.9  | 96.9   | 92.8   |
| 72.5° | 4036.9  | 1546.1 | 214.0  | 145.3  | 125.1  | 113.0  | 100.9  | 88.8   | 84.8   | 80.7   | 80.7   |
| 75°   | 2280.9  | 746.8  | 141.3  | 105.0  | 100.9  | 92.8   | 84.8   | 72.7   | 68.6   | 68.6   | 68.6   |
| 77.5° | 863.9   | 258.4  | 96.9   | 76.7   | 80.7   | 72.7   | 60.6   | 60.6   | 56.5   | 60.6   | 56.5   |
| 80°   | 226.1   | 113.0  | 60.6   | 56.5   | 60.6   | 52.5   | 44.4   | 48.4   | 48.4   | 48.4   | 48.4   |
| 82.5° | 121.1   | 64.6   | 36.3   | 40.4   | 36.3   | 36.3   | 28.3   | 32.3   | 36.3   | 32.3   | 36.3   |
| 85°   | 84.8    | 32.3   | 20.2   | 20.2   | 16.1   | 16.1   | 12.1   | 16.1   | 20.2   | 16.1   | 16.1   |
| 87.5° | 44.4    | 12.1   | 12.1   | 12.1   | 12.1   | 8.1    | 4.0    | 0.0    | 4.0    | 4.0    | 4.0    |
| 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)