

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: P960910

Luminaire Tested: **NVN-SB1D-740-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960910  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB1D-740-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 4000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

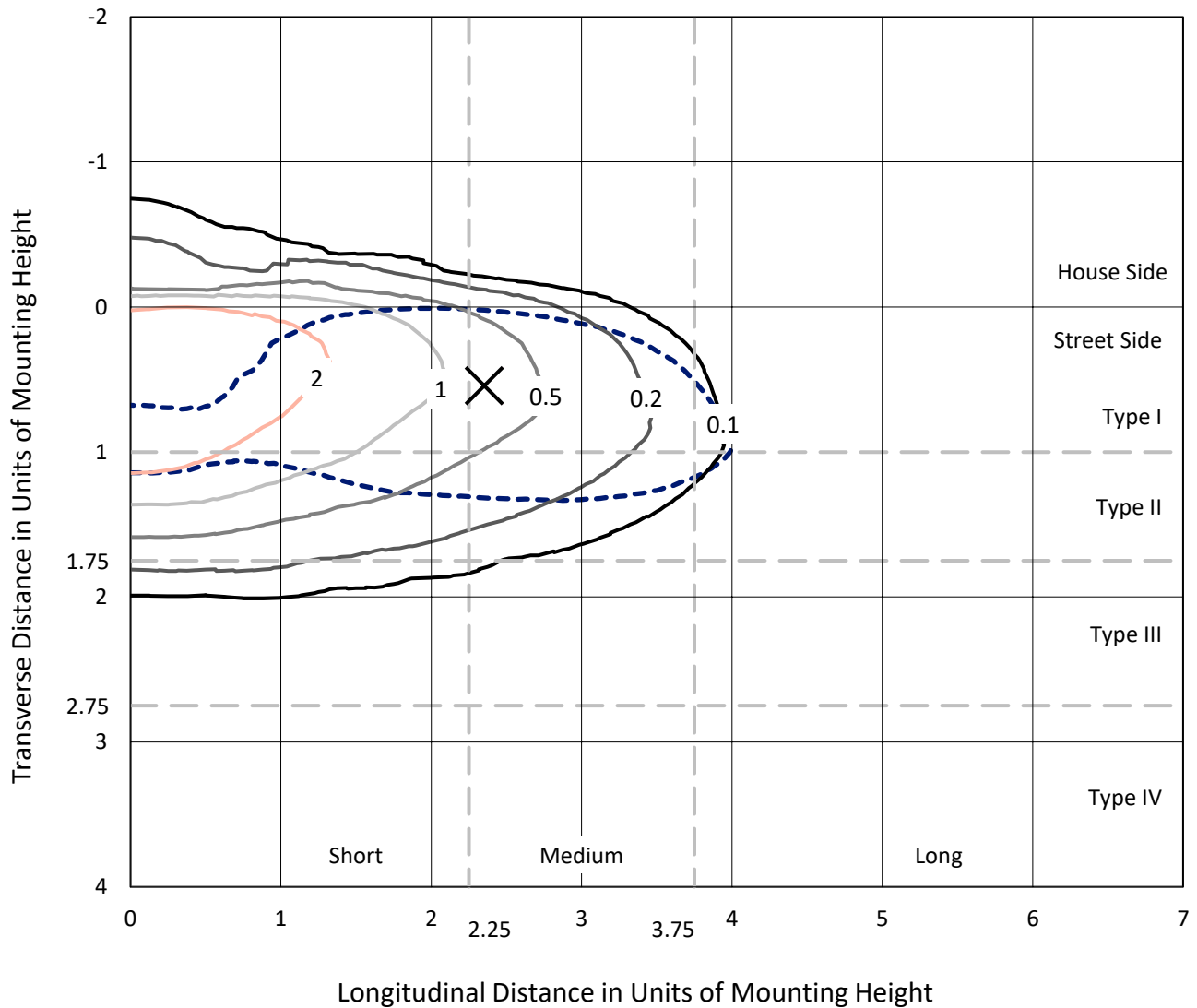
Lumens per Lamp: N/A  
Luminaire Lumens: 9345.9 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): 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

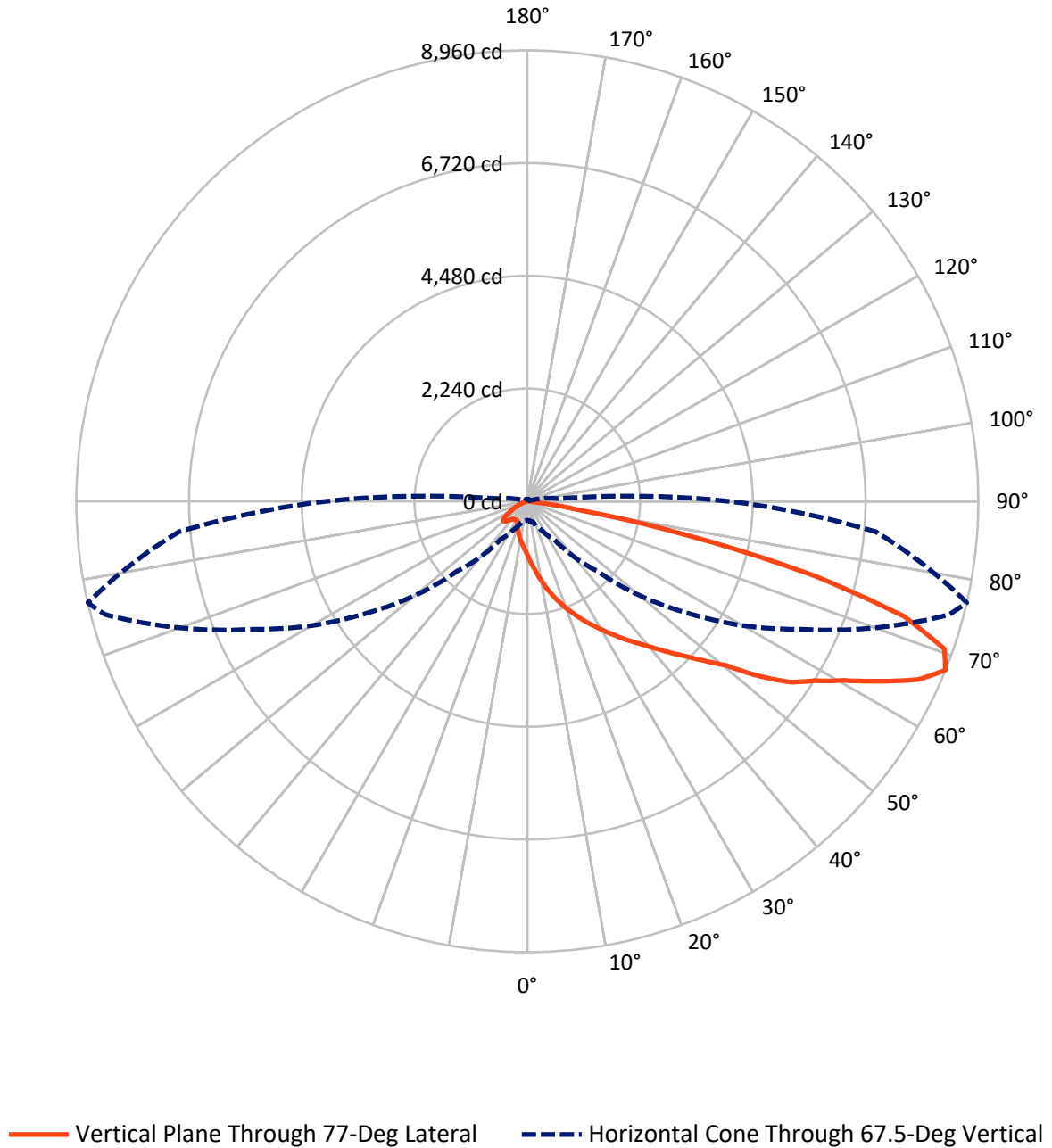
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 687.6    | 0.0    | 687.6  |
|                    | % Fixture | 7.4      | 0.0    | 7.4    |
| <b>Street Side</b> | Lumens    | 8658.4   | 0.0    | 8658.4 |
|                    | % Fixture | 92.6     | 0.0    | 92.6   |
| <b>Total</b>       | Lumens    | 9345.9   | 0.0    | 9345.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 110.0  | 1.2       |
| 10°-20°   | 385.2  | 4.1       |
| 20°-30°   | 743.3  | 8.0       |
| 30°-40°   | 1290.5 | 13.8      |
| 40°-50°   | 1873.7 | 20.0      |
| 50°-60°   | 2151.7 | 23.0      |
| 60°-70°   | 1868.1 | 20.0      |
| 70°-80°   | 879.9  | 9.4       |
| 80°-90°   | 43.5   | 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°    | 9345.9 | 100.0     |
| 0°-180°   | 9345.9 | 100.0     |

**Coefficient of Utilization**



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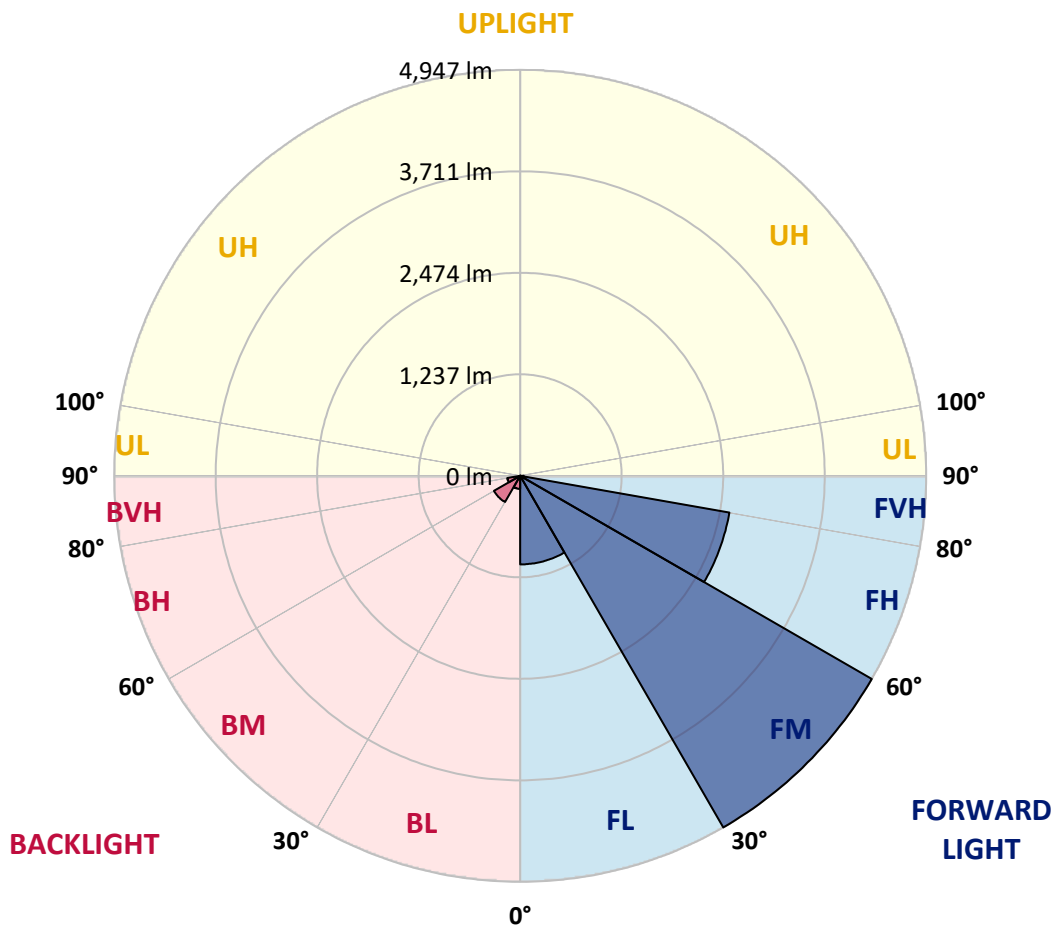
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1079.4 | 11.5      |                         |      |         |
| FM (30°-60°)   | 4947.5 | 52.9      |                         |      |         |
| FH (60°-80°)   | 2588.8 | 27.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 42.7   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 159.2  | 1.7       | B1/500                  |      |         |
| BM (30°-60°)   | 368.4  | 3.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 159.2  | 1.7       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 0.8    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 77°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 |
| 2.5°  | 1492.1 | 1501.4 | 1488.0 | 1462.5 | 1424.2 | 1399.2 | 1338.3 | 1280.8 | 1217.0 | 1196.7 | 1132.8 |
| 5°    | 1818.9 | 1827.0 | 1811.9 | 1784.0 | 1733.0 | 1684.2 | 1604.1 | 1484.0 | 1359.1 | 1319.2 | 1206.0 |
| 7.5°  | 2060.9 | 2065.5 | 2059.7 | 2034.1 | 1985.4 | 1930.3 | 1840.9 | 1698.7 | 1513.6 | 1469.4 | 1295.9 |
| 10°   | 2234.9 | 2250.1 | 2248.3 | 2238.4 | 2205.9 | 2161.2 | 2066.1 | 1904.1 | 1686.5 | 1629.6 | 1397.5 |
| 12.5° | 2350.4 | 2367.2 | 2377.2 | 2399.2 | 2397.5 | 2369.0 | 2285.4 | 2114.3 | 1858.8 | 1792.1 | 1511.9 |
| 15°   | 2384.1 | 2402.1 | 2439.8 | 2490.9 | 2536.2 | 2550.7 | 2492.1 | 2320.3 | 2048.7 | 1963.4 | 1629.0 |
| 17.5° | 2365.0 | 2392.9 | 2438.1 | 2518.7 | 2618.0 | 2683.6 | 2677.2 | 2519.3 | 2221.1 | 2123.5 | 1743.9 |
| 20°   | 2407.3 | 2434.1 | 2469.4 | 2537.3 | 2652.8 | 2771.8 | 2819.4 | 2709.7 | 2392.2 | 2290.1 | 1864.7 |
| 22.5° | 2641.8 | 2637.1 | 2640.6 | 2651.7 | 2720.8 | 2838.5 | 2936.6 | 2882.6 | 2561.7 | 2457.2 | 1992.4 |
| 25°   | 3013.2 | 2992.3 | 2956.9 | 2897.2 | 2879.7 | 2936.6 | 3038.7 | 3035.8 | 2740.4 | 2628.4 | 2123.0 |
| 27.5° | 3439.2 | 3435.7 | 3352.8 | 3208.8 | 3127.6 | 3105.5 | 3154.2 | 3185.0 | 2917.5 | 2797.9 | 2254.1 |
| 30°   | 3847.2 | 3856.5 | 3744.4 | 3584.3 | 3435.2 | 3348.7 | 3304.6 | 3326.6 | 3097.3 | 2980.7 | 2389.4 |
| 32.5° | 4202.4 | 4212.2 | 4090.4 | 3902.9 | 3718.4 | 3613.8 | 3521.1 | 3466.4 | 3293.5 | 3166.4 | 2537.9 |
| 35°   | 4502.4 | 4512.3 | 4372.4 | 4165.2 | 3968.5 | 3873.9 | 3768.8 | 3619.7 | 3490.8 | 3372.5 | 2703.3 |
| 37.5° | 4770.6 | 4767.7 | 4580.2 | 4371.2 | 4178.0 | 4103.2 | 4048.0 | 3808.3 | 3694.0 | 3579.6 | 2886.7 |
| 40°   | 4929.0 | 4941.2 | 4781.0 | 4550.6 | 4363.1 | 4308.6 | 4305.1 | 4042.2 | 3928.4 | 3817.6 | 3087.5 |
| 42.5° | 4975.5 | 4996.9 | 4880.8 | 4691.6 | 4521.6 | 4462.3 | 4553.5 | 4295.3 | 4201.2 | 4093.2 | 3314.4 |
| 45°   | 4891.8 | 4912.7 | 4859.9 | 4728.7 | 4629.5 | 4591.2 | 4767.1 | 4557.6 | 4492.6 | 4385.8 | 3570.4 |
| 47.5° | 4648.1 | 4674.2 | 4687.0 | 4659.1 | 4657.9 | 4696.9 | 4958.5 | 4833.8 | 4838.4 | 4729.3 | 3866.9 |
| 50°   | 4176.3 | 4220.3 | 4337.6 | 4436.3 | 4588.9 | 4780.4 | 5144.9 | 5133.3 | 5228.4 | 5134.4 | 4253.4 |
| 52.5° | 3318.5 | 3381.2 | 3785.1 | 4055.0 | 4398.0 | 4764.7 | 5349.8 | 5613.8 | 5912.7 | 5775.2 | 4798.4 |
| 55°   | 2666.7 | 2666.7 | 2995.3 | 3500.2 | 4025.4 | 4661.4 | 5439.2 | 5926.0 | 6378.7 | 6346.2 | 5182.0 |
| 57.5° | 2174.0 | 2200.2 | 2409.7 | 2856.0 | 3486.2 | 4415.4 | 5494.2 | 6122.2 | 6754.2 | 6730.5 | 5556.9 |
| 60°   | 1341.8 | 1398.1 | 1793.9 | 2234.4 | 2872.8 | 3977.2 | 5459.5 | 6320.7 | 7209.7 | 7228.9 | 6008.4 |
| 62.5° | 755.6  | 776.5  | 952.9  | 1607.6 | 2233.8 | 3388.1 | 5193.1 | 6431.6 | 7792.5 | 7873.7 | 6473.9 |
| 65°   | 521.7  | 532.2  | 600.1  | 1000.5 | 1548.4 | 2697.5 | 4672.5 | 6362.5 | 8376.3 | 8540.5 | 6868.5 |
| 67.5° | 378.9  | 384.2  | 426.6  | 611.1  | 918.7  | 1955.8 | 3856.5 | 6014.3 | 8685.6 | 8960.1 | 6944.0 |
| 70°   | 291.3  | 294.8  | 325.5  | 401.6  | 542.6  | 1207.1 | 2800.8 | 5321.9 | 8461.6 | 8789.5 | 6557.4 |
| 72.5° | 236.8  | 240.3  | 264.0  | 297.1  | 359.8  | 713.8  | 1697.5 | 4321.9 | 7472.7 | 7826.7 | 5582.5 |
| 75°   | 199.7  | 204.3  | 225.8  | 247.2  | 282.1  | 458.5  | 796.2  | 3009.7 | 5619.6 | 5851.7 | 3882.0 |
| 77.5° | 110.8  | 102.2  | 183.4  | 204.9  | 237.9  | 290.2  | 372.6  | 1771.3 | 3147.3 | 3211.7 | 1722.5 |
| 80°   | 69.1   | 71.3   | 145.7  | 164.8  | 182.9  | 146.3  | 170.7  | 681.9  | 1091.1 | 1036.5 | 333.7  |
| 82.5° | 4.1    | 9.3    | 112.0  | 119.0  | 125.4  | 62.6   | 64.4   | 231.5  | 262.9  | 241.4  | 59.2   |
| 85°   | 0.0    | 0.0    | 51.0   | 41.2   | 43.6   | 18.0   | 18.6   | 54.0   | 35.4   | 38.3   | 11.6   |
| 87.5° | 0.0    | 0.0    | 0.0    | 1.1    | 0.0    | 1.7    | 3.5    | 4.6    | 1.7    | 2.4    | 4.1    |
| 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°    | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 | 1077.7 |
| 2.5°  | 1092.2 | 1051.6 | 969.2  | 888.6  | 823.0  | 762.0  | 718.5  | 677.3  | 656.4  | 655.2  | 654.1  |
| 5°    | 1125.3 | 1040.0 | 875.1  | 729.5  | 612.2  | 518.2  | 457.4  | 413.8  | 391.8  | 384.2  | 383.0  |
| 7.5°  | 1171.8 | 1043.4 | 792.7  | 590.2  | 452.1  | 371.5  | 336.6  | 322.7  | 318.1  | 312.8  | 311.7  |
| 10°   | 1230.4 | 1051.6 | 719.0  | 475.3  | 356.3  | 315.7  | 301.8  | 296.0  | 292.5  | 289.0  | 287.8  |
| 12.5° | 1295.9 | 1059.1 | 646.0  | 394.6  | 313.3  | 292.5  | 282.6  | 275.6  | 271.0  | 267.0  | 265.8  |
| 15°   | 1359.8 | 1063.8 | 569.9  | 338.4  | 291.3  | 274.5  | 264.0  | 256.6  | 250.1  | 245.5  | 244.9  |
| 17.5° | 1423.0 | 1070.2 | 498.6  | 304.7  | 273.4  | 256.6  | 246.1  | 236.8  | 231.5  | 226.3  | 225.8  |
| 20°   | 1493.2 | 1069.0 | 431.2  | 280.8  | 255.3  | 238.5  | 227.6  | 218.8  | 213.6  | 207.8  | 207.2  |
| 22.5° | 1558.3 | 1063.2 | 372.0  | 260.6  | 236.8  | 220.6  | 208.4  | 199.7  | 194.4  | 189.7  | 189.2  |
| 25°   | 1633.1 | 1058.6 | 322.7  | 242.0  | 219.4  | 203.2  | 189.7  | 181.6  | 175.9  | 171.8  | 171.2  |
| 27.5° | 1705.1 | 1051.6 | 286.7  | 225.2  | 202.5  | 186.9  | 174.1  | 164.8  | 159.6  | 156.7  | 156.7  |
| 30°   | 1775.9 | 1049.9 | 273.4  | 208.9  | 187.5  | 171.8  | 159.0  | 150.3  | 146.3  | 145.1  | 144.5  |
| 32.5° | 1861.2 | 1054.5 | 279.1  | 203.2  | 173.5  | 157.8  | 145.7  | 139.3  | 135.2  | 135.2  | 135.2  |
| 35°   | 1952.3 | 1053.4 | 287.8  | 208.4  | 164.2  | 143.9  | 134.7  | 130.6  | 126.5  | 126.5  | 126.5  |
| 37.5° | 2066.6 | 1055.1 | 294.8  | 217.1  | 160.7  | 132.3  | 127.1  | 121.9  | 119.5  | 119.5  | 119.5  |
| 40°   | 2237.3 | 1112.5 | 291.3  | 224.6  | 159.6  | 124.2  | 113.8  | 112.0  | 110.3  | 110.3  | 110.3  |
| 42.5° | 2446.2 | 1237.3 | 296.0  | 225.2  | 159.0  | 118.4  | 104.4  | 107.9  | 103.9  | 103.3  | 102.7  |
| 45°   | 2674.8 | 1373.7 | 325.5  | 213.0  | 158.5  | 115.5  | 99.8   | 103.9  | 97.5   | 97.5   | 97.5   |
| 47.5° | 2901.8 | 1508.9 | 355.8  | 195.6  | 156.7  | 114.9  | 95.7   | 93.5   | 91.7   | 92.2   | 92.2   |
| 50°   | 3214.6 | 1619.2 | 367.4  | 171.8  | 152.6  | 113.8  | 88.3   | 88.8   | 87.6   | 88.8   | 88.8   |
| 52.5° | 3555.3 | 1642.5 | 353.4  | 145.1  | 141.0  | 110.3  | 83.0   | 85.3   | 84.8   | 85.9   | 85.9   |
| 55°   | 3767.7 | 1617.4 | 291.9  | 120.7  | 123.0  | 96.4   | 77.8   | 82.4   | 82.4   | 82.4   | 82.4   |
| 57.5° | 3987.0 | 1511.3 | 207.2  | 98.1   | 102.2  | 78.9   | 73.1   | 79.5   | 78.9   | 78.3   | 78.3   |
| 60°   | 4144.9 | 1339.5 | 136.4  | 80.7   | 81.3   | 65.0   | 67.9   | 74.8   | 74.3   | 71.3   | 71.3   |
| 62.5° | 4262.8 | 1149.6 | 87.6   | 68.5   | 62.1   | 58.6   | 62.1   | 67.9   | 65.6   | 59.2   | 58.0   |
| 65°   | 4249.3 | 886.8  | 67.3   | 58.6   | 51.0   | 51.0   | 54.0   | 59.2   | 52.3   | 41.8   | 40.6   |
| 67.5° | 4001.6 | 600.1  | 55.8   | 49.3   | 42.9   | 42.3   | 44.7   | 49.3   | 44.7   | 35.4   | 34.2   |
| 70°   | 3558.8 | 392.4  | 44.7   | 38.3   | 34.2   | 31.4   | 36.0   | 42.3   | 37.7   | 28.4   | 27.3   |
| 72.5° | 2888.4 | 239.1  | 33.6   | 27.9   | 24.9   | 20.3   | 28.4   | 34.8   | 30.1   | 20.9   | 19.8   |
| 75°   | 1868.8 | 121.9  | 23.2   | 18.0   | 13.3   | 12.2   | 20.9   | 26.1   | 20.9   | 12.8   | 11.1   |
| 77.5° | 715.0  | 51.0   | 12.8   | 8.1    | 7.0    | 5.8    | 11.6   | 15.7   | 8.7    | 2.9    | 2.4    |
| 80°   | 137.6  | 21.4   | 6.4    | 4.1    | 3.5    | 2.4    | 1.7    | 1.1    | 0.0    | 0.0    | 0.0    |
| 82.5° | 23.8   | 7.0    | 2.4    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 8.1    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 2.9    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 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)