

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: P961024

Luminaire Tested: **NVN-SB1D-830-U-SL3-HSS**

Issue Date: 1/21/2025

### Test Information

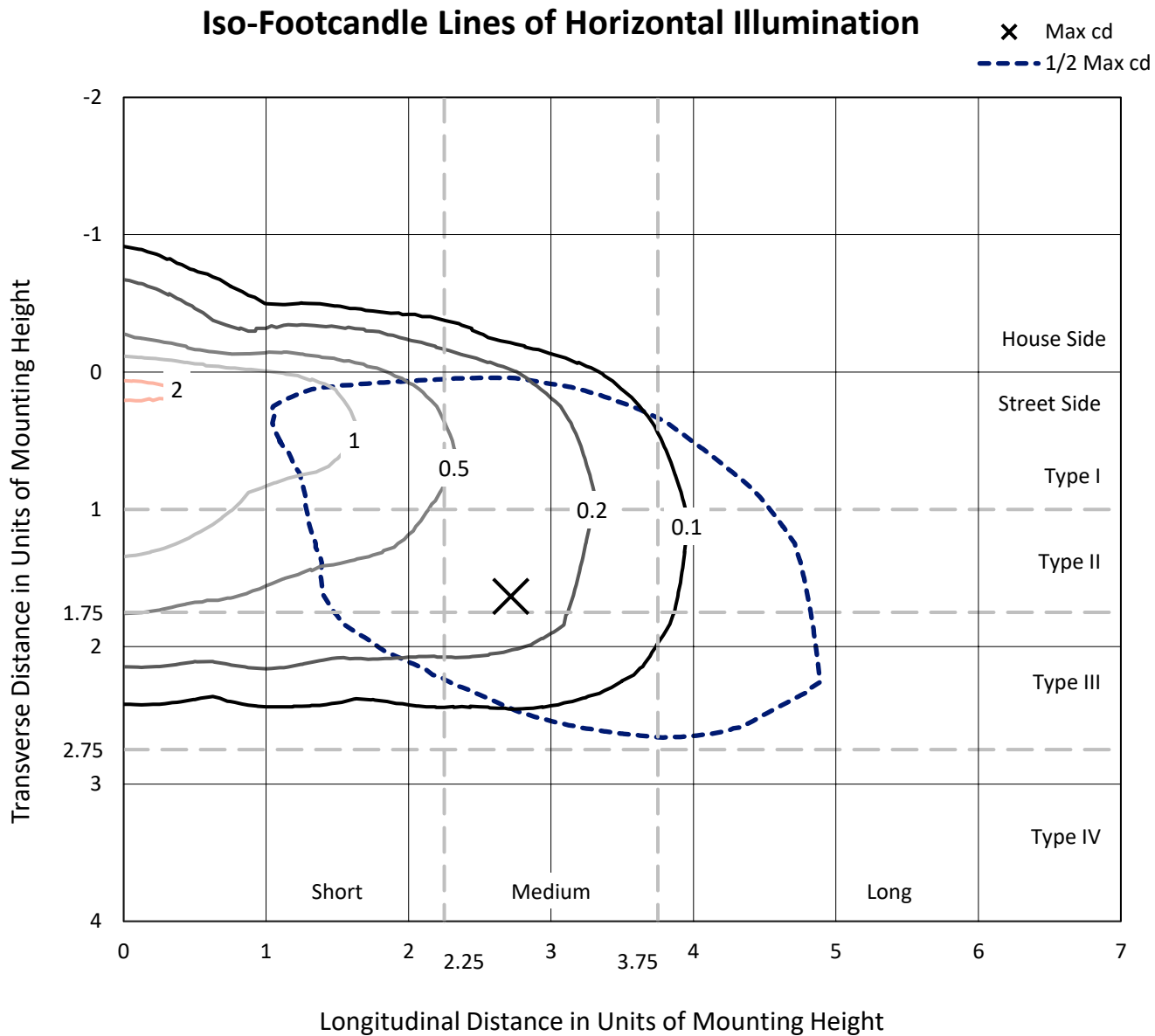
Test Method: LM-79-08  
Report Number: P961024  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB1D-830-U-SL3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7550.1 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - 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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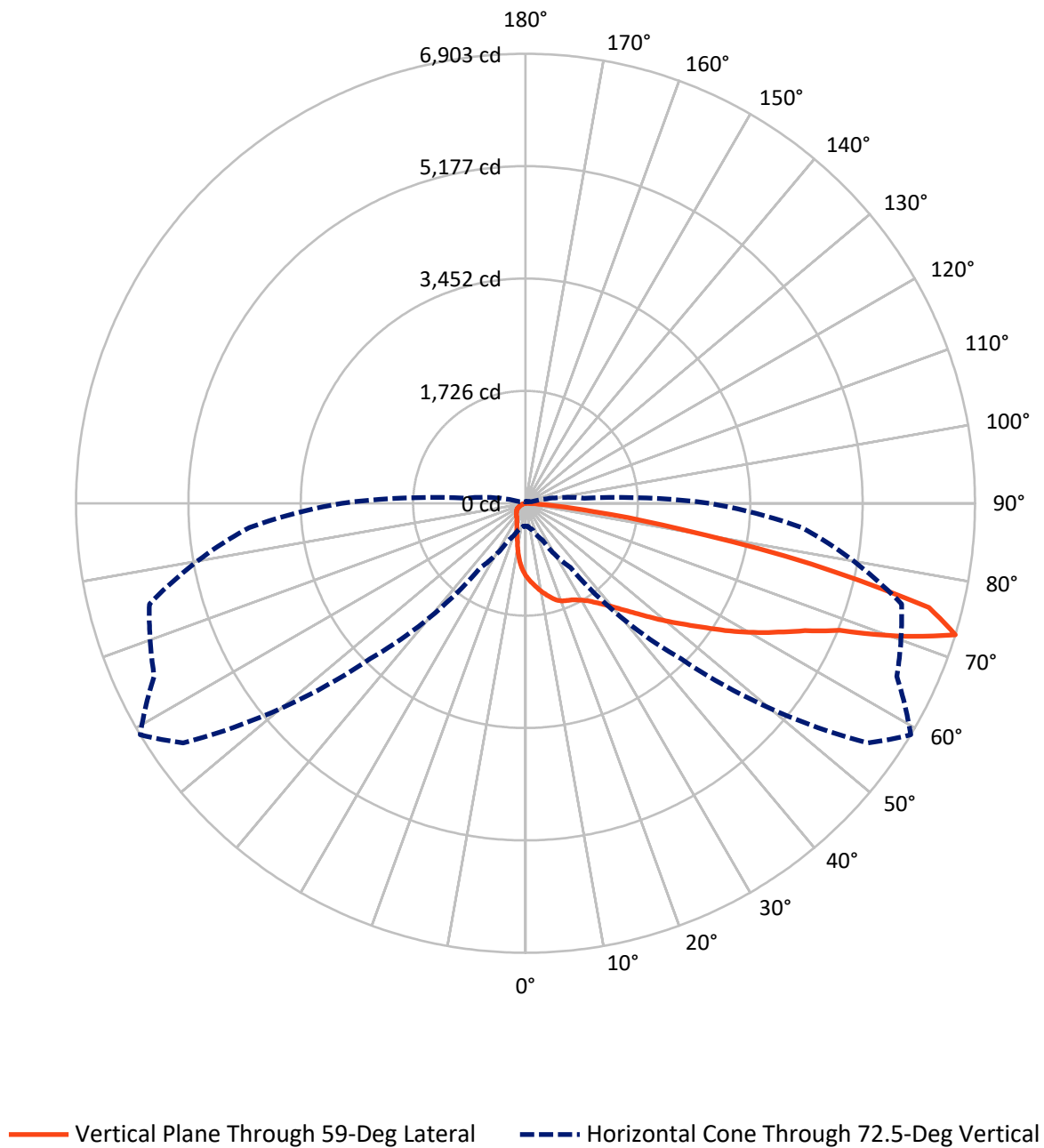


Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 797.4    | 0.0    | 797.4  |
|                    | % Fixture | 10.6     | 0.0    | 10.6   |
| <b>Street Side</b> | Lumens    | 6752.7   | 0.0    | 6752.7 |
|                    | % Fixture | 89.4     | 0.0    | 89.4   |
| <b>Total</b>       | Lumens    | 7550.1   | 0.0    | 7550.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 101.0  | 1.3       |
| 10°-20°   | 268.3  | 3.6       |
| 20°-30°   | 425.2  | 5.6       |
| 30°-40°   | 682.4  | 9.0       |
| 40°-50°   | 1089.9 | 14.4      |
| 50°-60°   | 1578.1 | 20.9      |
| 60°-70°   | 1872.8 | 24.8      |
| 70°-80°   | 1390.3 | 18.4      |
| 80°-90°   | 142.1  | 1.9       |
| 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°    | 7550.1 | 100.0     |
| 0°-180°   | 7550.1 | 100.0     |

**Coefficient of Utilization**



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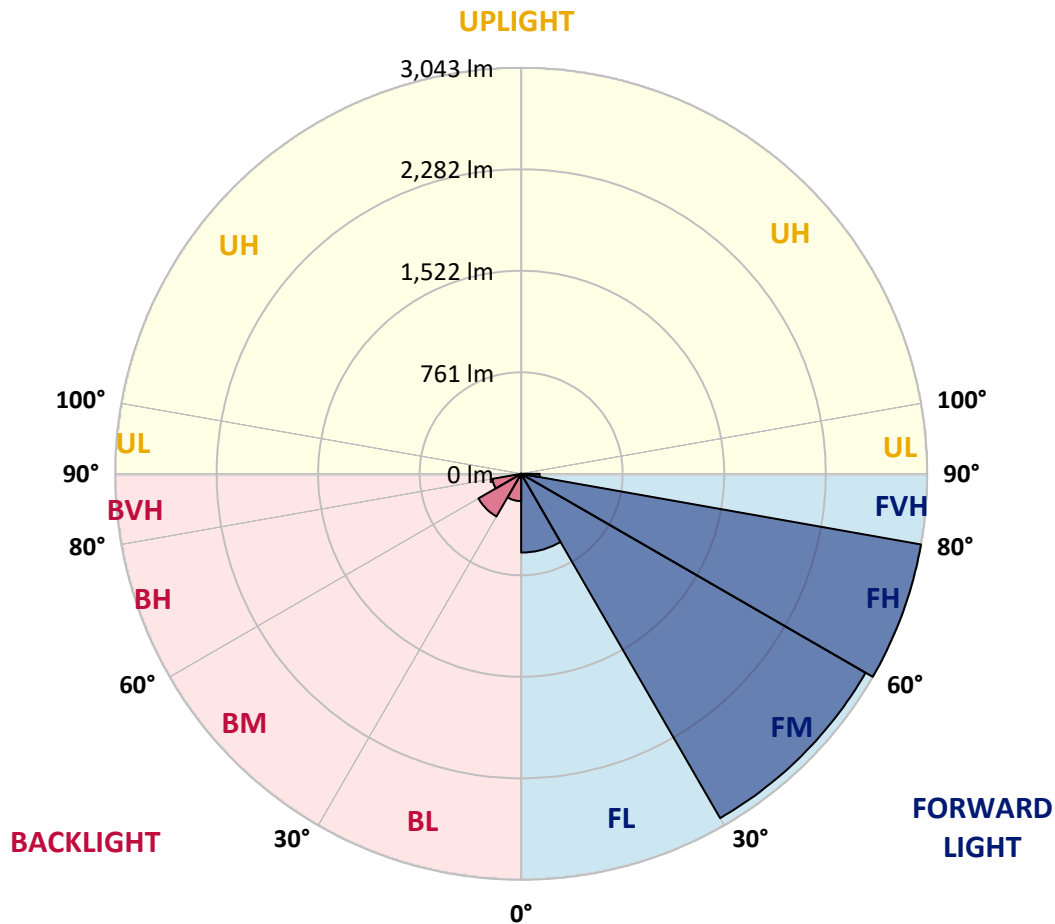
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 590.3  | 7.8       |                         |      |         |
| FM   | (30°-60°)   | 2980.7 | 39.5      |                         |      |         |
| FH   | (60°-80°)   | 3043.1 | 40.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 138.6  | 1.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 204.3  | 2.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 369.7  | 4.9       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 219.9  | 2.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 3.5    | 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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 59°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 |
| 2.5°  | 1238.7 | 1231.8 | 1232.9 | 1221.0 | 1212.6 | 1203.8 | 1186.4 | 1184.0 | 1171.7 | 1150.0 | 1127.8 |
| 5°    | 1346.6 | 1342.2 | 1338.3 | 1325.0 | 1307.7 | 1286.1 | 1257.0 | 1246.6 | 1224.0 | 1186.4 | 1143.1 |
| 7.5°  | 1425.6 | 1420.1 | 1422.1 | 1408.8 | 1395.0 | 1370.8 | 1331.0 | 1311.7 | 1281.7 | 1224.5 | 1158.9 |
| 10°   | 1440.8 | 1437.9 | 1450.7 | 1455.6 | 1455.6 | 1440.3 | 1401.4 | 1382.2 | 1338.3 | 1265.4 | 1175.2 |
| 12.5° | 1355.0 | 1355.6 | 1387.6 | 1426.1 | 1476.3 | 1490.7 | 1464.5 | 1443.8 | 1400.5 | 1308.7 | 1195.9 |
| 15°   | 1255.0 | 1255.5 | 1286.6 | 1335.9 | 1418.2 | 1500.5 | 1521.2 | 1507.9 | 1463.0 | 1355.6 | 1220.0 |
| 17.5° | 1194.8 | 1192.4 | 1213.1 | 1253.5 | 1339.8 | 1455.6 | 1555.6 | 1564.6 | 1528.1 | 1407.3 | 1246.6 |
| 20°   | 1186.4 | 1182.0 | 1192.9 | 1213.1 | 1274.7 | 1399.4 | 1559.6 | 1601.6 | 1595.1 | 1466.0 | 1277.1 |
| 22.5° | 1237.8 | 1230.8 | 1225.0 | 1225.9 | 1252.0 | 1352.6 | 1549.8 | 1622.3 | 1664.1 | 1536.5 | 1319.1 |
| 25°   | 1339.3 | 1328.4 | 1309.2 | 1284.5 | 1279.2 | 1342.7 | 1542.8 | 1644.9 | 1728.3 | 1626.7 | 1374.3 |
| 27.5° | 1463.5 | 1448.2 | 1411.2 | 1374.3 | 1342.7 | 1370.3 | 1557.2 | 1680.9 | 1800.7 | 1731.6 | 1438.4 |
| 30°   | 1600.0 | 1581.4 | 1544.4 | 1474.4 | 1424.0 | 1431.9 | 1591.2 | 1728.3 | 1893.4 | 1850.4 | 1518.7 |
| 32.5° | 1800.7 | 1757.3 | 1692.7 | 1585.8 | 1519.3 | 1498.6 | 1642.5 | 1788.3 | 2008.2 | 2008.7 | 1635.1 |
| 35°   | 1972.7 | 1948.5 | 1883.4 | 1750.4 | 1613.9 | 1586.7 | 1710.0 | 1873.1 | 2167.5 | 2218.2 | 1797.7 |
| 37.5° | 2085.6 | 2052.6 | 1995.4 | 1895.3 | 1760.7 | 1677.4 | 1800.2 | 1977.1 | 2336.0 | 2456.7 | 1998.3 |
| 40°   | 2211.7 | 2179.3 | 2103.3 | 2009.2 | 1931.3 | 1833.2 | 1914.1 | 2096.9 | 2520.9 | 2701.8 | 2227.5 |
| 42.5° | 2364.1 | 2321.7 | 2232.0 | 2130.5 | 2049.1 | 2038.3 | 2062.9 | 2246.3 | 2710.6 | 2967.9 | 2466.1 |
| 45°   | 2543.0 | 2503.0 | 2400.0 | 2271.9 | 2200.5 | 2181.2 | 2250.2 | 2420.3 | 2922.1 | 3259.7 | 2707.1 |
| 47.5° | 2710.6 | 2664.3 | 2553.4 | 2436.5 | 2357.2 | 2296.5 | 2449.3 | 2625.8 | 3161.6 | 3564.8 | 2934.9 |
| 50°   | 2853.1 | 2805.7 | 2704.3 | 2579.5 | 2525.8 | 2446.4 | 2645.1 | 2855.0 | 3399.2 | 3874.9 | 3143.0 |
| 52.5° | 2950.7 | 2908.7 | 2789.5 | 2704.7 | 2668.3 | 2628.3 | 2874.3 | 3098.1 | 3635.9 | 4158.8 | 3348.5 |
| 55°   | 2928.5 | 2891.0 | 2786.1 | 2780.1 | 2777.6 | 2819.6 | 3148.4 | 3373.6 | 3876.9 | 4427.5 | 3553.1 |
| 57.5° | 2858.0 | 2815.6 | 2684.5 | 2774.7 | 2862.0 | 2990.1 | 3445.1 | 3699.4 | 4141.1 | 4680.9 | 3750.2 |
| 60°   | 2650.4 | 2635.7 | 2555.8 | 2764.3 | 2897.5 | 3157.2 | 3784.2 | 4026.7 | 4427.0 | 4903.7 | 3925.2 |
| 62.5° | 2211.3 | 2224.1 | 2223.6 | 2786.1 | 2961.5 | 3347.4 | 4092.3 | 4358.0 | 4706.5 | 5118.1 | 4080.9 |
| 65°   | 1655.8 | 1700.2 | 1756.8 | 2590.9 | 3047.3 | 3687.1 | 4460.5 | 4717.4 | 4990.4 | 5367.5 | 4239.2 |
| 67.5° | 1112.5 | 1148.0 | 1186.4 | 2125.5 | 2792.0 | 4044.0 | 5072.2 | 5209.8 | 5330.5 | 5644.1 | 4417.1 |
| 70°   | 636.8  | 648.2  | 701.9  | 1327.5 | 2152.1 | 3945.4 | 6068.5 | 6118.2 | 5837.8 | 5984.7 | 4546.8 |
| 72.5° | 356.9  | 352.9  | 423.9  | 630.0  | 1202.7 | 3378.5 | 6417.4 | 6903.0 | 6291.8 | 5979.2 | 4257.4 |
| 75°   | 238.6  | 239.0  | 291.8  | 397.3  | 468.7  | 2365.1 | 5530.2 | 6400.7 | 6019.6 | 5301.9 | 3478.6 |
| 77.5° | 162.7  | 168.1  | 214.4  | 307.1  | 216.9  | 1153.9 | 3658.5 | 4483.7 | 4873.6 | 4094.3 | 2401.6 |
| 80°   | 70.5   | 71.0   | 141.4  | 220.4  | 146.4  | 367.3  | 1896.8 | 2402.1 | 3056.7 | 2299.1 | 951.4  |
| 82.5° | 36.5   | 41.4   | 90.2   | 142.5  | 92.1   | 128.6  | 896.2  | 1049.5 | 1282.6 | 674.9  | 195.2  |
| 85°   | 12.8   | 15.3   | 55.7   | 70.0   | 46.3   | 45.8   | 312.0  | 318.0  | 271.6  | 101.6  | 53.7   |
| 87.5° | 0.0    | 2.5    | 21.7   | 17.2   | 5.9    | 5.4    | 37.0   | 31.1   | 24.6   | 14.2   | 17.7   |
| 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°    | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 | 1116.5 |
| 2.5°  | 1117.5 | 1104.1 | 1082.5 | 1055.9 | 1024.8 | 1008.1 | 983.9  | 969.1  | 955.8  | 956.3  | 967.1  |
| 5°    | 1119.0 | 1096.8 | 1041.6 | 982.9  | 917.9  | 870.0  | 816.8  | 779.3  | 750.7  | 743.8  | 754.2  |
| 7.5°  | 1123.4 | 1085.9 | 995.7  | 898.1  | 789.7  | 709.3  | 635.9  | 589.6  | 563.4  | 556.5  | 563.4  |
| 10°   | 1129.3 | 1074.1 | 943.9  | 794.6  | 660.0  | 563.4  | 502.2  | 472.7  | 460.8  | 452.0  | 457.5  |
| 12.5° | 1134.3 | 1061.8 | 878.9  | 687.7  | 544.7  | 469.2  | 422.9  | 398.3  | 388.0  | 381.5  | 385.0  |
| 15°   | 1142.6 | 1045.5 | 808.4  | 588.0  | 466.8  | 405.2  | 361.3  | 343.1  | 340.1  | 341.1  | 342.6  |
| 17.5° | 1151.0 | 1029.7 | 729.5  | 510.1  | 409.6  | 349.0  | 322.4  | 319.4  | 323.4  | 327.3  | 328.8  |
| 20°   | 1160.4 | 1007.1 | 649.6  | 451.5  | 356.9  | 310.1  | 303.2  | 305.1  | 307.1  | 314.0  | 316.0  |
| 22.5° | 1174.1 | 978.5  | 579.6  | 401.7  | 313.0  | 291.3  | 287.9  | 289.4  | 290.8  | 297.8  | 299.7  |
| 25°   | 1193.9 | 947.9  | 523.0  | 355.9  | 285.4  | 276.0  | 272.5  | 272.5  | 274.6  | 281.0  | 283.4  |
| 27.5° | 1214.6 | 904.6  | 477.1  | 313.5  | 269.2  | 259.3  | 253.4  | 253.4  | 255.8  | 263.2  | 266.2  |
| 30°   | 1237.8 | 865.1  | 441.2  | 282.0  | 255.3  | 242.5  | 234.6  | 232.7  | 235.6  | 245.0  | 247.4  |
| 32.5° | 1279.6 | 839.5  | 415.5  | 267.2  | 243.0  | 227.2  | 216.4  | 210.9  | 213.9  | 224.8  | 227.8  |
| 35°   | 1343.3 | 833.5  | 397.8  | 259.7  | 231.1  | 213.4  | 198.1  | 189.7  | 192.3  | 203.6  | 207.0  |
| 37.5° | 1417.7 | 845.8  | 380.6  | 249.9  | 219.9  | 200.1  | 179.9  | 169.1  | 173.0  | 183.4  | 186.3  |
| 40°   | 1524.6 | 897.2  | 367.3  | 242.5  | 208.5  | 184.4  | 161.6  | 150.9  | 157.2  | 166.2  | 167.6  |
| 42.5° | 1653.7 | 988.3  | 363.8  | 235.6  | 194.7  | 167.6  | 144.9  | 137.0  | 142.0  | 150.4  | 151.8  |
| 45°   | 1813.9 | 1104.6 | 379.6  | 226.7  | 179.5  | 151.3  | 131.6  | 127.2  | 128.6  | 137.0  | 140.9  |
| 47.5° | 1986.0 | 1224.0 | 422.9  | 218.8  | 166.2  | 138.1  | 121.3  | 117.4  | 116.3  | 124.2  | 129.1  |
| 50°   | 2160.0 | 1329.9 | 474.2  | 213.0  | 156.7  | 127.2  | 113.4  | 108.4  | 106.0  | 110.9  | 112.9  |
| 52.5° | 2332.1 | 1414.2 | 507.7  | 203.1  | 147.4  | 116.3  | 106.5  | 99.1   | 94.6   | 97.1   | 99.1   |
| 55°   | 2506.5 | 1488.2 | 509.7  | 188.3  | 138.5  | 109.5  | 99.5   | 91.2   | 85.8   | 85.8   | 86.7   |
| 57.5° | 2669.7 | 1553.2 | 480.6  | 168.6  | 126.2  | 103.0  | 90.2   | 83.3   | 77.4   | 75.4   | 76.0   |
| 60°   | 2814.1 | 1601.6 | 432.3  | 146.4  | 115.3  | 94.6   | 80.9   | 75.4   | 68.1   | 64.1   | 63.1   |
| 62.5° | 2942.8 | 1625.2 | 366.2  | 123.7  | 102.0  | 84.8   | 72.0   | 66.0   | 56.2   | 51.2   | 50.7   |
| 65°   | 3051.7 | 1601.0 | 297.2  | 102.5  | 90.7   | 73.9   | 61.6   | 55.7   | 44.9   | 38.9   | 38.9   |
| 67.5° | 3159.7 | 1490.7 | 224.8  | 86.3   | 78.8   | 62.1   | 50.7   | 45.3   | 37.4   | 32.5   | 32.5   |
| 70°   | 3173.5 | 1258.5 | 157.2  | 72.5   | 65.6   | 47.8   | 40.9   | 37.4   | 30.5   | 26.1   | 25.6   |
| 72.5° | 2825.0 | 905.5  | 95.6   | 59.1   | 51.2   | 34.0   | 32.5   | 29.6   | 22.7   | 19.7   | 19.3   |
| 75°   | 2258.1 | 555.0  | 56.2   | 44.4   | 34.0   | 24.2   | 24.2   | 21.2   | 15.3   | 12.8   | 12.8   |
| 77.5° | 1560.7 | 290.4  | 33.0   | 28.6   | 20.2   | 14.2   | 15.8   | 12.8   | 7.4    | 5.9    | 5.9    |
| 80°   | 625.0  | 110.4  | 17.7   | 13.3   | 9.3    | 6.5    | 5.4    | 3.0    | 1.4    | 1.0    | 1.4    |
| 82.5° | 124.7  | 29.1   | 5.9    | 3.5    | 3.5    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 32.1   | 6.5    | 1.4    | 1.0    | 1.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 9.8    | 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)