

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: P965754

Luminaire Tested: **NVN-SB4A-827-U-T3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965754  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB4A-827-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

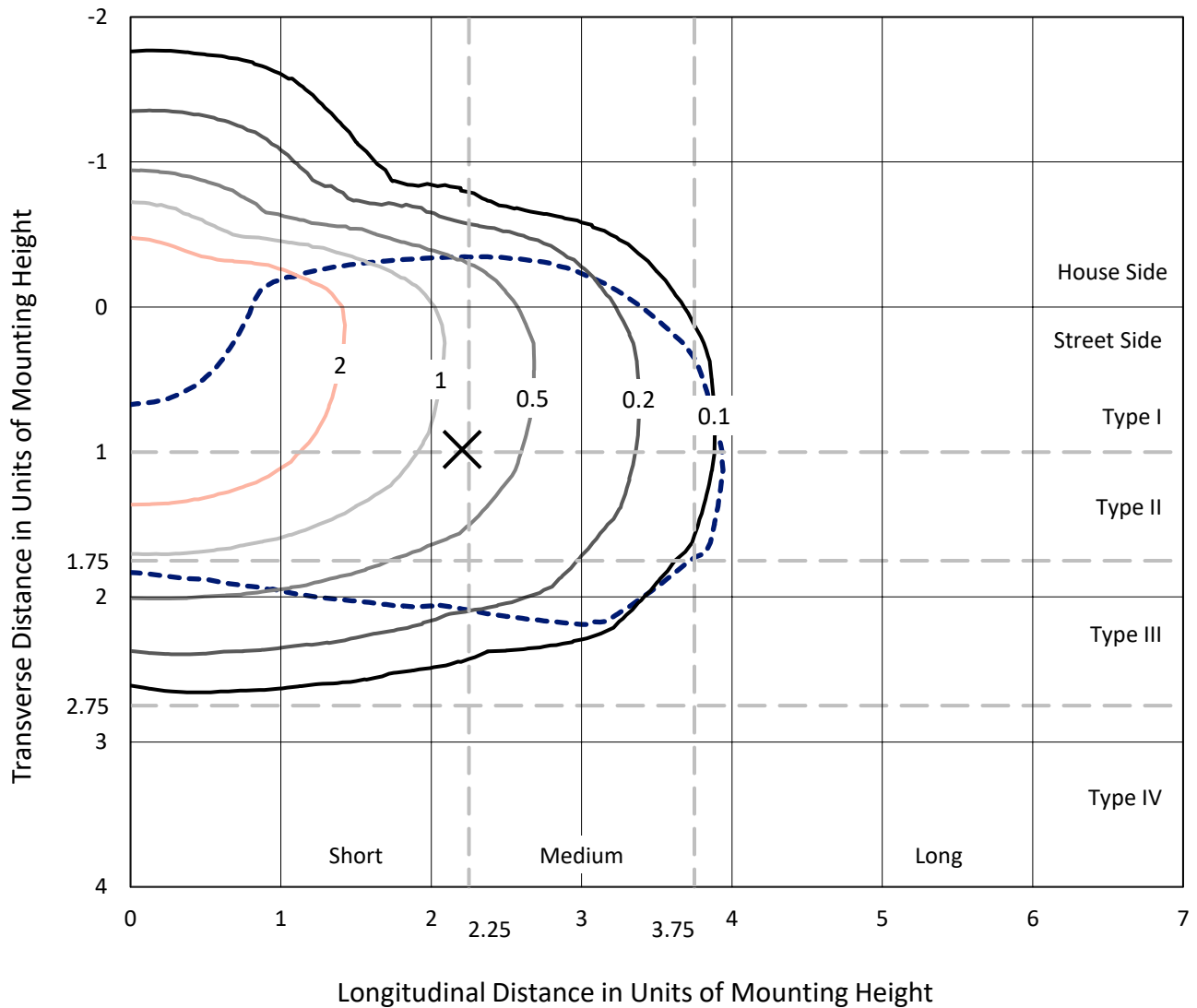
Lumens per Lamp: N/A  
Luminaire Lumens: 16035.1 lumens  
Efficiency: N/A  
Efficacy: 140.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

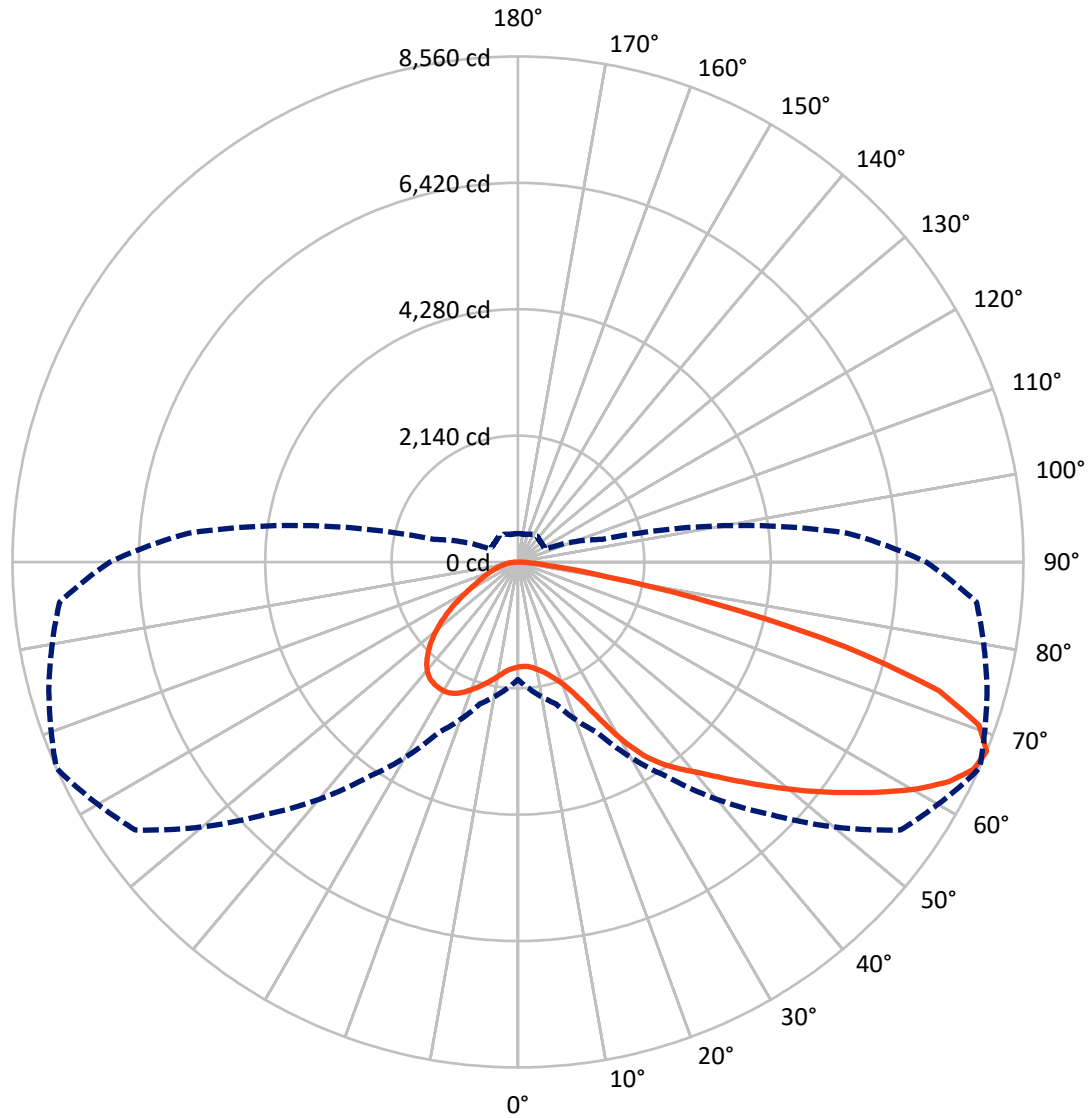
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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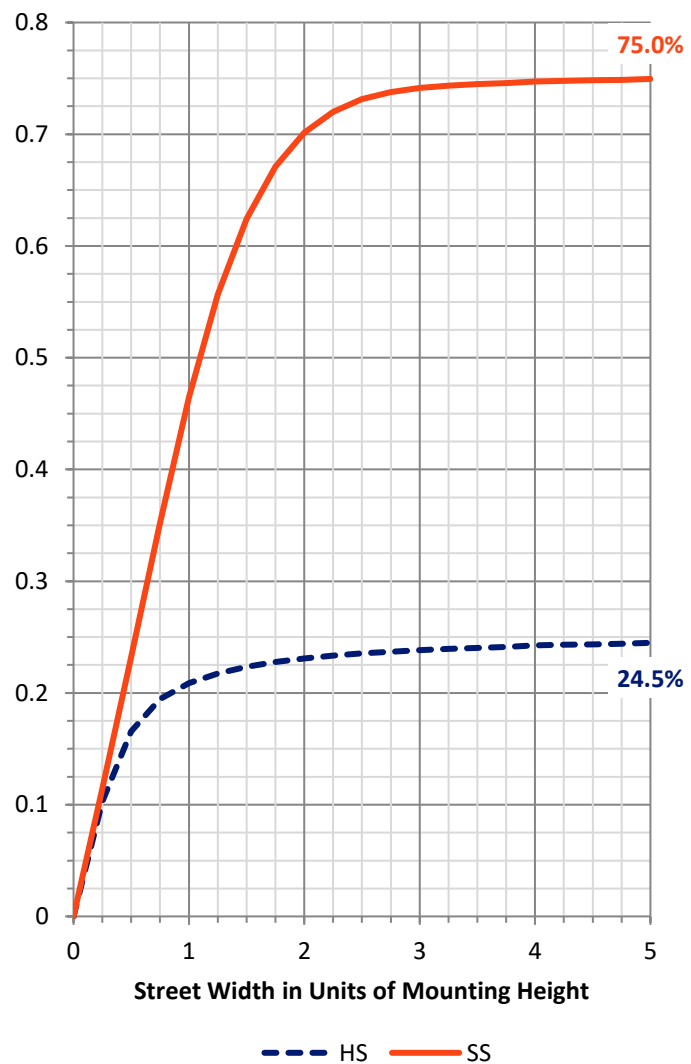
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3987.1   | 0.0    | 3987.1  |
|                    | % Fixture | 24.9     | 0.0    | 24.9    |
| <b>Street Side</b> | Lumens    | 12048.0  | 0.0    | 12048.0 |
|                    | % Fixture | 75.1     | 0.0    | 75.1    |
| <b>Total</b>       | Lumens    | 16035.1  | 0.0    | 16035.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 176.3   | 1.1       |
| 10°-20°   | 582.6   | 3.6       |
| 20°-30°   | 1122.9  | 7.0       |
| 30°-40°   | 1968.8  | 12.3      |
| 40°-50°   | 2927.0  | 18.3      |
| 50°-60°   | 3710.3  | 23.1      |
| 60°-70°   | 3630.4  | 22.6      |
| 70°-80°   | 1731.7  | 10.8      |
| 80°-90°   | 185.1   | 1.2       |
| 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°    | 16035.1 | 100.0     |
| 0°-180°   | 16035.1 | 100.0     |

**Coefficient of Utilization**



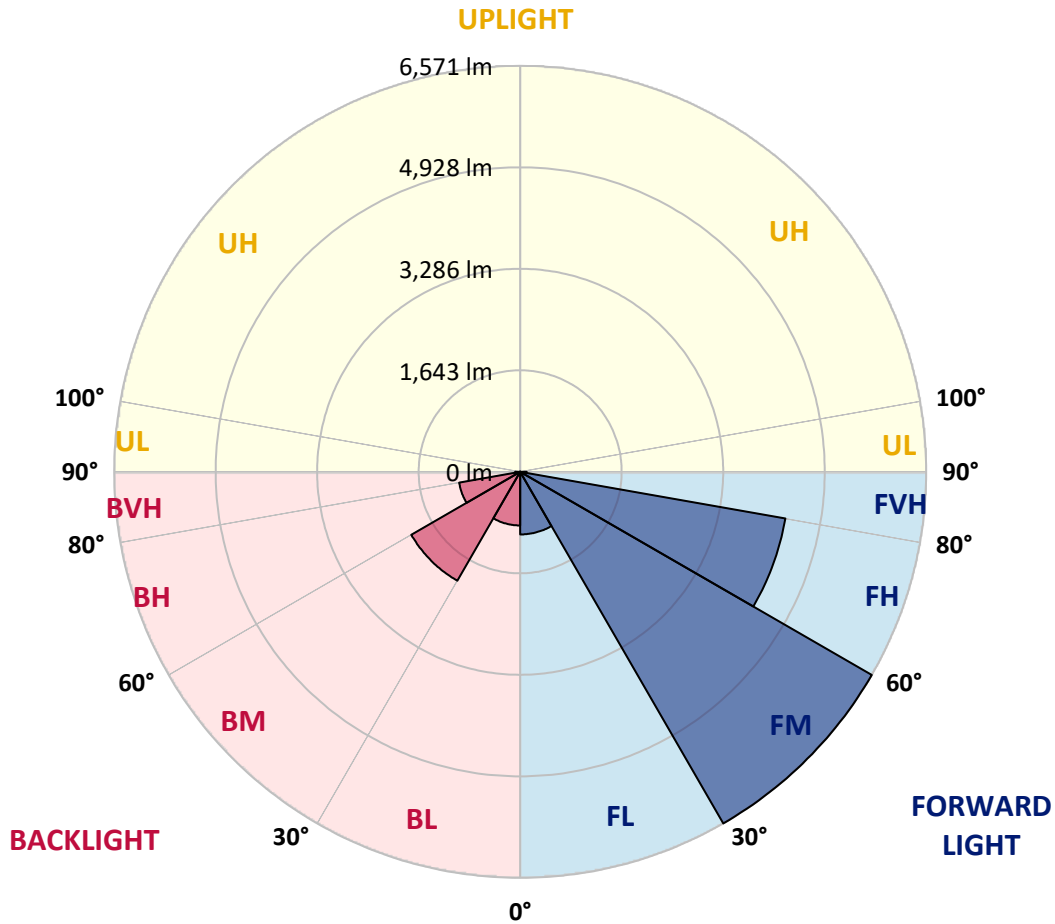
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1013.3 | 6.3       |                         |      |         |
| FM (30°-60°)   | 6571.0 | 41.0      |                         |      |         |
| FH (60°-80°)   | 4358.8 | 27.2      |                         |      | G2/5000 |
| FVH (80°-90°)  | 104.9  | 0.7       |                         |      | G2/225  |
| BL (0°-30°)    | 868.5  | 5.4       | B2/1000                 |      |         |
| BM (30°-60°)   | 2035.1 | 12.7      | B2/2500                 |      |         |
| BH (60°-80°)   | 1003.4 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 80.1   | 0.5       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type III Short



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CATALOG NUMBER: NVN-SB4A-827-U-T3

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 |
| 2.5°  | 1759.9 | 1770.1 | 1767.5 | 1763.3 | 1762.5 | 1764.2 | 1766.7 | 1769.3 | 1768.4 | 1772.6 | 1779.3 |
| 5°    | 1754.9 | 1765.0 | 1764.2 | 1764.2 | 1767.5 | 1774.3 | 1778.5 | 1782.7 | 1778.5 | 1783.6 | 1792.8 |
| 7.5°  | 1758.3 | 1765.9 | 1769.3 | 1772.6 | 1781.0 | 1793.6 | 1803.8 | 1813.0 | 1808.0 | 1813.8 | 1825.7 |
| 10°   | 1801.2 | 1807.2 | 1810.6 | 1810.6 | 1816.4 | 1830.8 | 1840.9 | 1857.7 | 1853.5 | 1862.7 | 1877.9 |
| 12.5° | 1879.6 | 1885.5 | 1885.5 | 1882.1 | 1886.3 | 1895.6 | 1899.0 | 1917.5 | 1909.9 | 1925.1 | 1940.2 |
| 15°   | 1975.7 | 1987.5 | 1978.1 | 1972.3 | 1973.9 | 1983.3 | 1982.4 | 1996.7 | 1989.1 | 2001.7 | 2015.3 |
| 17.5° | 2081.8 | 2096.9 | 2081.8 | 2081.0 | 2077.6 | 2087.7 | 2088.5 | 2101.1 | 2087.7 | 2096.9 | 2106.3 |
| 20°   | 2207.3 | 2228.4 | 2215.7 | 2219.9 | 2212.4 | 2216.6 | 2220.8 | 2239.3 | 2218.3 | 2225.1 | 2222.5 |
| 22.5° | 2384.3 | 2409.6 | 2396.0 | 2412.0 | 2407.0 | 2403.6 | 2402.8 | 2435.6 | 2402.8 | 2405.4 | 2380.9 |
| 25°   | 2642.0 | 2672.4 | 2648.8 | 2670.7 | 2670.7 | 2681.7 | 2694.3 | 2736.4 | 2681.7 | 2665.6 | 2602.5 |
| 27.5° | 3022.8 | 3053.2 | 3006.8 | 3020.4 | 3016.2 | 3043.1 | 3029.6 | 3134.0 | 3075.1 | 3049.0 | 2921.8 |
| 30°   | 3481.2 | 3535.1 | 3447.5 | 3444.1 | 3439.9 | 3482.8 | 3502.2 | 3571.3 | 3511.5 | 3485.4 | 3332.1 |
| 32.5° | 3976.6 | 4033.1 | 3928.5 | 3898.2 | 3882.2 | 3908.3 | 3892.3 | 3947.9 | 3906.7 | 3866.2 | 3676.7 |
| 35°   | 4500.6 | 4556.2 | 4456.8 | 4397.9 | 4333.8 | 4279.1 | 4221.8 | 4236.0 | 4197.3 | 4135.8 | 3939.5 |
| 37.5° | 4996.0 | 5097.9 | 4992.6 | 4929.4 | 4811.5 | 4704.4 | 4544.4 | 4477.8 | 4441.6 | 4385.2 | 4187.2 |
| 40°   | 5500.7 | 5558.8 | 5478.7 | 5424.8 | 5296.8 | 5129.1 | 4873.0 | 4732.3 | 4683.4 | 4628.7 | 4461.0 |
| 42.5° | 5872.2 | 5927.8 | 5884.8 | 5847.7 | 5747.5 | 5552.8 | 5221.8 | 5045.7 | 4974.9 | 4913.4 | 4771.1 |
| 45°   | 6167.0 | 6208.3 | 6181.4 | 6194.9 | 6151.8 | 5963.1 | 5583.2 | 5381.9 | 5308.6 | 5233.5 | 5121.5 |
| 47.5° | 6285.8 | 6329.7 | 6372.6 | 6452.7 | 6526.0 | 6387.0 | 5971.5 | 5745.8 | 5668.2 | 5591.7 | 5481.3 |
| 50°   | 6272.4 | 6317.0 | 6441.7 | 6611.9 | 6839.4 | 6793.0 | 6381.0 | 6133.4 | 6061.7 | 5974.1 | 5872.2 |
| 52.5° | 6164.6 | 6215.1 | 6375.2 | 6658.2 | 7020.5 | 7097.2 | 6798.1 | 6533.6 | 6466.1 | 6361.7 | 6259.8 |
| 55°   | 5881.4 | 5911.8 | 6151.8 | 6552.9 | 7063.5 | 7309.5 | 7206.7 | 6959.9 | 6892.4 | 6746.7 | 6635.4 |
| 57.5° | 5356.5 | 5400.4 | 5750.0 | 6269.0 | 6955.6 | 7453.5 | 7565.6 | 7408.1 | 7343.2 | 7133.4 | 7017.2 |
| 60°   | 4671.6 | 4741.5 | 5141.7 | 5792.2 | 6681.0 | 7452.7 | 7891.7 | 7848.6 | 7794.7 | 7514.2 | 7392.9 |
| 62.5° | 3896.5 | 3977.4 | 4362.4 | 5118.1 | 6200.7 | 7241.2 | 8095.6 | 8217.7 | 8189.9 | 7865.5 | 7710.5 |
| 65°   | 2992.5 | 3048.1 | 3431.5 | 4246.2 | 5453.5 | 6787.1 | 8119.1 | 8469.6 | 8474.6 | 8132.6 | 7876.5 |
| 67.5° | 1992.5 | 2152.6 | 2485.3 | 3186.3 | 4452.6 | 6044.9 | 7911.9 | 8510.9 | 8559.8 | 8224.4 | 7793.1 |
| 70°   | 972.2  | 1182.8 | 1508.9 | 2070.8 | 3186.3 | 4906.7 | 7370.2 | 8172.2 | 8280.9 | 7956.6 | 7296.0 |
| 72.5° | 403.5  | 471.8  | 649.5  | 1021.9 | 1829.0 | 3311.0 | 6281.6 | 7253.8 | 7455.2 | 7050.0 | 6134.2 |
| 75°   | 272.1  | 294.9  | 371.6  | 524.0  | 833.2  | 1632.7 | 4530.1 | 5408.8 | 5733.1 | 5324.6 | 4352.4 |
| 77.5° | 209.8  | 224.1  | 270.4  | 366.4  | 495.4  | 617.6  | 2424.7 | 3259.6 | 3427.3 | 3172.8 | 2264.6 |
| 80°   | 165.1  | 176.1  | 202.2  | 267.1  | 351.4  | 330.3  | 826.5  | 1476.9 | 1573.8 | 1320.2 | 728.0  |
| 82.5° | 143.2  | 147.4  | 144.9  | 181.1  | 233.4  | 192.9  | 271.3  | 545.1  | 601.6  | 436.4  | 237.6  |
| 85°   | 103.6  | 115.4  | 120.4  | 112.0  | 123.8  | 97.7   | 111.2  | 192.9  | 212.3  | 189.5  | 134.0  |
| 87.5° | 42.1   | 62.3   | 76.7   | 72.5   | 45.5   | 27.8   | 34.5   | 56.5   | 64.9   | 70.7   | 43.8   |
| 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°    | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 | 1778.5 |
| 2.5°  | 1780.2 | 1786.1 | 1790.3 | 1795.4 | 1798.8 | 1803.8 | 1813.8 | 1819.8 | 1820.6 | 1824.8 | 1824.0 |
| 5°    | 1796.2 | 1804.6 | 1813.8 | 1827.4 | 1842.5 | 1855.1 | 1874.5 | 1888.0 | 1893.1 | 1897.3 | 1896.5 |
| 7.5°  | 1830.8 | 1842.5 | 1859.4 | 1882.9 | 1904.9 | 1921.8 | 1945.3 | 1961.3 | 1977.3 | 1983.3 | 1984.1 |
| 10°   | 1882.1 | 1899.0 | 1923.4 | 1955.4 | 1979.0 | 2000.9 | 2025.4 | 2038.8 | 2054.8 | 2061.6 | 2065.0 |
| 12.5° | 1946.2 | 1963.9 | 1995.9 | 2040.6 | 2062.4 | 2077.6 | 2086.0 | 2082.6 | 2086.0 | 2091.9 | 2093.6 |
| 15°   | 2019.5 | 2038.8 | 2075.1 | 2123.1 | 2138.3 | 2124.7 | 2106.3 | 2089.4 | 2086.9 | 2088.5 | 2094.5 |
| 17.5° | 2106.3 | 2120.5 | 2162.6 | 2203.1 | 2192.2 | 2136.6 | 2096.1 | 2069.2 | 2055.6 | 2051.4 | 2057.4 |
| 20°   | 2227.5 | 2227.5 | 2262.1 | 2287.4 | 2214.1 | 2119.7 | 2056.6 | 2012.7 | 1984.9 | 1973.1 | 1970.6 |
| 22.5° | 2375.0 | 2361.5 | 2383.4 | 2365.7 | 2209.9 | 2072.5 | 1984.9 | 1909.1 | 1866.9 | 1850.1 | 1847.6 |
| 25°   | 2562.0 | 2546.0 | 2540.2 | 2430.6 | 2179.6 | 1997.5 | 1855.1 | 1763.3 | 1726.3 | 1717.0 | 1718.7 |
| 27.5° | 2844.3 | 2803.8 | 2727.1 | 2465.9 | 2123.9 | 1879.6 | 1703.6 | 1618.5 | 1597.4 | 1598.2 | 1600.7 |
| 30°   | 3220.0 | 3139.2 | 2951.3 | 2471.9 | 2033.0 | 1712.8 | 1548.5 | 1487.9 | 1477.7 | 1481.9 | 1496.3 |
| 32.5° | 3567.9 | 3491.3 | 3180.4 | 2444.9 | 1893.1 | 1549.4 | 1409.5 | 1369.1 | 1353.9 | 1358.9 | 1365.7 |
| 35°   | 3840.9 | 3819.9 | 3392.7 | 2407.0 | 1721.2 | 1396.0 | 1284.8 | 1250.3 | 1220.8 | 1214.0 | 1219.1 |
| 37.5° | 4098.8 | 4090.3 | 3551.9 | 2353.9 | 1551.0 | 1287.3 | 1184.6 | 1139.1 | 1096.1 | 1072.5 | 1073.4 |
| 40°   | 4381.8 | 4373.4 | 3656.4 | 2272.2 | 1400.3 | 1193.0 | 1094.4 | 1034.5 | 981.5  | 938.5  | 942.8  |
| 42.5° | 4700.2 | 4650.5 | 3706.1 | 2155.1 | 1272.1 | 1112.9 | 1021.1 | 940.2  | 870.3  | 830.7  | 833.2  |
| 45°   | 5048.2 | 4936.2 | 3705.3 | 2006.0 | 1164.3 | 1039.7 | 942.8  | 828.2  | 763.3  | 726.2  | 724.6  |
| 47.5° | 5417.2 | 5209.2 | 3659.8 | 1840.9 | 1059.8 | 958.8  | 821.4  | 733.8  | 690.8  | 668.1  | 663.1  |
| 50°   | 5798.0 | 5464.4 | 3582.3 | 1651.3 | 952.8  | 866.9  | 745.6  | 685.8  | 652.9  | 631.9  | 624.3  |
| 52.5° | 6156.2 | 5696.1 | 3488.8 | 1436.4 | 844.2  | 777.7  | 711.9  | 665.5  | 631.0  | 607.4  | 597.4  |
| 55°   | 6488.9 | 5895.8 | 3356.5 | 1216.6 | 755.7  | 717.8  | 695.9  | 657.1  | 617.6  | 589.8  | 578.8  |
| 57.5° | 6784.6 | 6025.6 | 3128.2 | 1010.1 | 692.5  | 676.5  | 679.1  | 642.8  | 597.4  | 573.7  | 558.5  |
| 60°   | 7030.6 | 6120.7 | 2790.4 | 818.9  | 641.1  | 636.1  | 652.9  | 615.8  | 562.8  | 535.9  | 524.0  |
| 62.5° | 7178.1 | 6119.0 | 2375.8 | 670.7  | 597.4  | 599.0  | 618.4  | 582.2  | 528.3  | 503.0  | 495.4  |
| 65°   | 7165.4 | 5969.1 | 1920.8 | 573.7  | 555.2  | 556.9  | 582.2  | 545.1  | 499.6  | 484.4  | 483.6  |
| 67.5° | 6911.8 | 5603.5 | 1473.5 | 510.6  | 508.9  | 516.5  | 545.9  | 519.8  | 482.0  | 480.2  | 482.8  |
| 70°   | 6225.2 | 4844.4 | 1061.6 | 460.0  | 460.8  | 471.8  | 510.6  | 503.8  | 472.6  | 476.0  | 475.2  |
| 72.5° | 4991.8 | 3693.5 | 712.8  | 406.9  | 407.7  | 425.5  | 476.8  | 491.2  | 463.4  | 508.0  | 514.8  |
| 75°   | 3324.5 | 2303.4 | 458.3  | 350.4  | 351.4  | 374.0  | 447.4  | 466.8  | 438.1  | 506.4  | 510.6  |
| 77.5° | 1597.4 | 1035.5 | 331.9  | 294.9  | 294.9  | 315.9  | 386.7  | 417.9  | 373.2  | 393.4  | 360.6  |
| 80°   | 551.9  | 389.2  | 261.2  | 237.6  | 232.6  | 246.8  | 326.1  | 362.2  | 321.8  | 296.5  | 278.0  |
| 82.5° | 217.4  | 202.2  | 209.8  | 184.5  | 167.7  | 176.9  | 253.6  | 299.1  | 236.8  | 214.0  | 213.2  |
| 85°   | 124.6  | 131.4  | 148.3  | 122.2  | 96.9   | 108.6  | 186.1  | 214.8  | 178.7  | 157.5  | 160.9  |
| 87.5° | 33.7   | 46.3   | 68.3   | 63.1   | 43.8   | 46.3   | 88.5   | 118.8  | 102.8  | 79.2   | 81.7   |
| 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)