

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: P967716

Luminaire Tested: **NVN-SB5A-735-U-AFL**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967716  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB5A-735-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

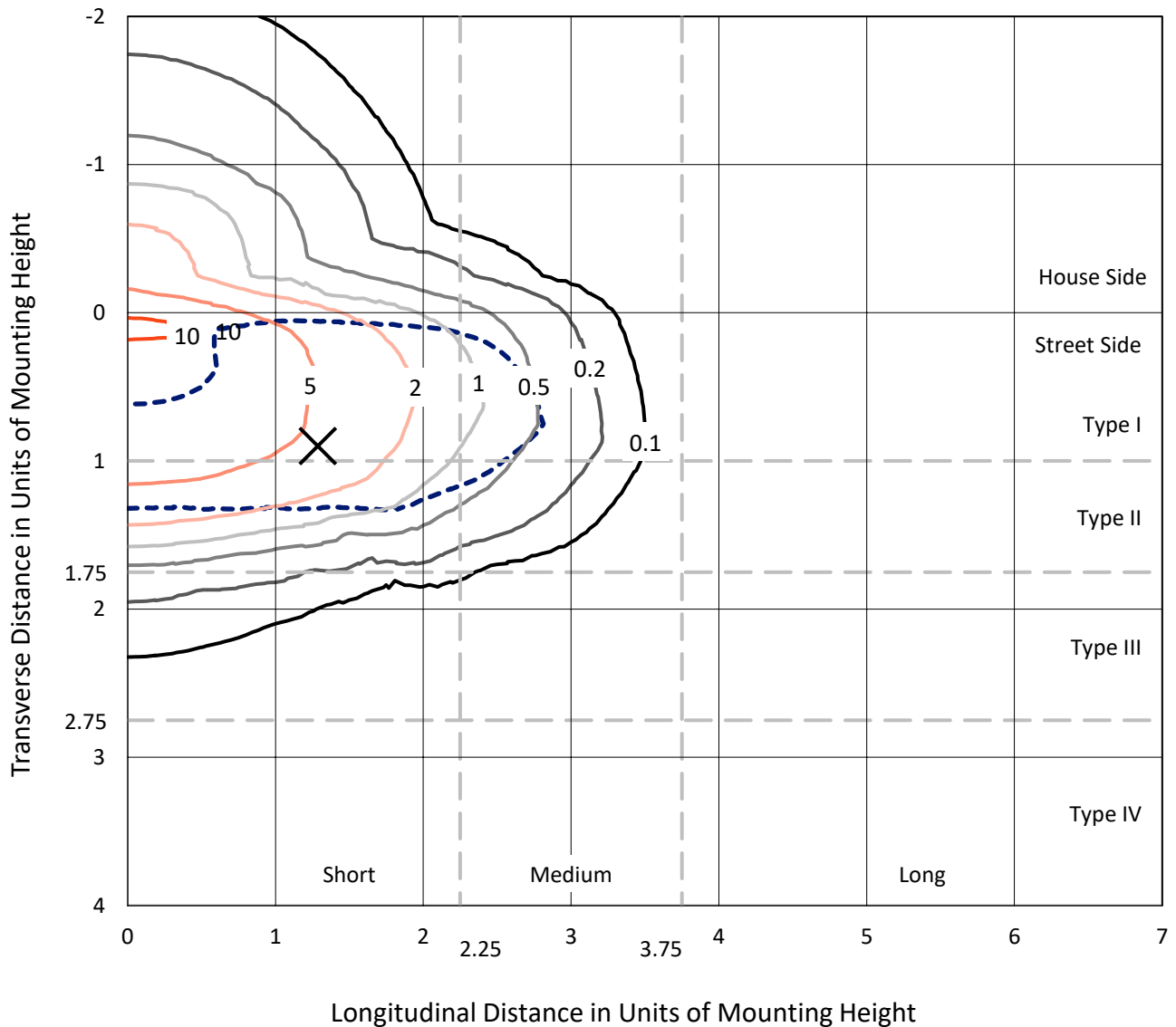
Lumens per Lamp: N/A  
Luminaire Lumens: 23621.1 lumens  
Efficiency: N/A  
Efficacy: 166.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2  
  
Input Watts (W): 141.7  
Input Voltage (V): NR  
Input Current (Ain): 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

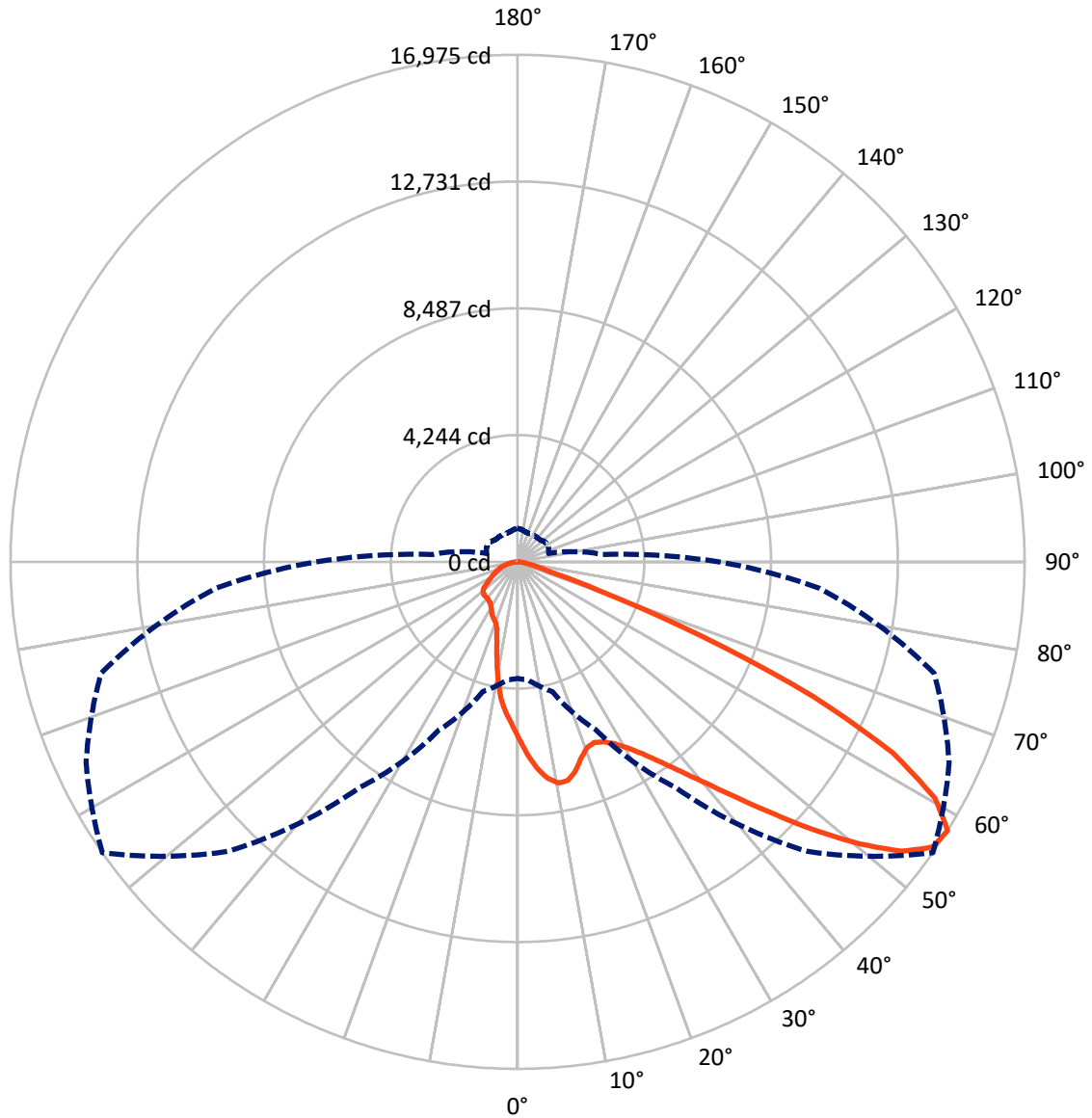
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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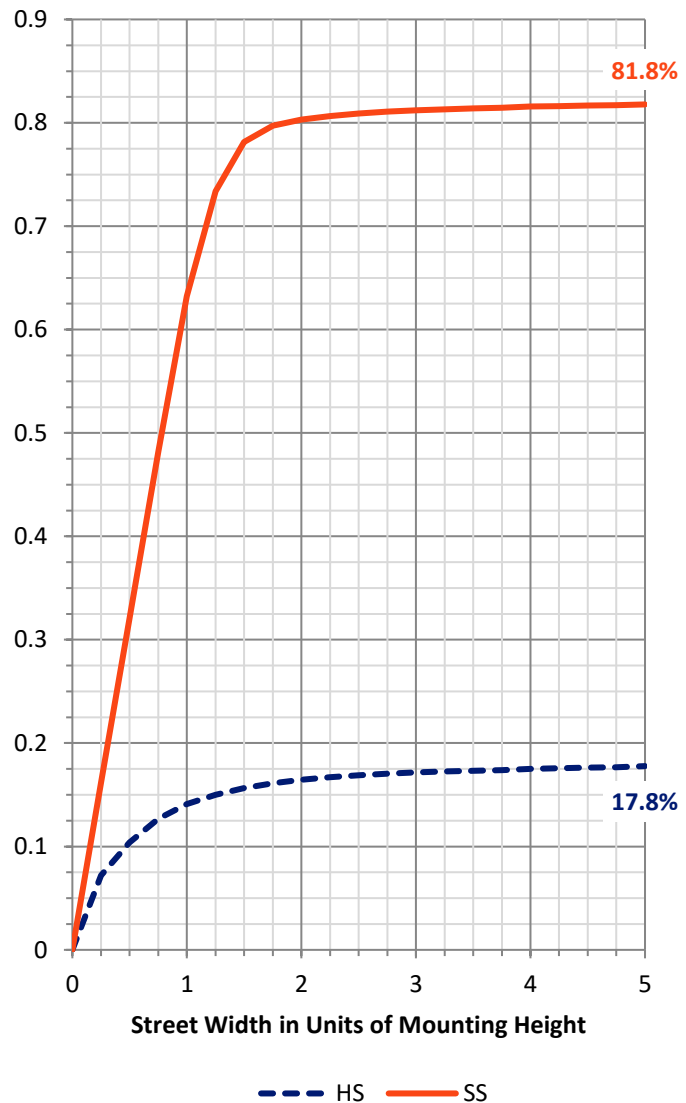
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4274.1   | 0.0    | 4274.1  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 19347.0  | 0.0    | 19347.0 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 23621.1  | 0.0    | 23621.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 549.2   | 2.3       |
| 10°-20°   | 1386.3  | 5.9       |
| 20°-30°   | 2212.1  | 9.4       |
| 30°-40°   | 3502.2  | 14.8      |
| 40°-50°   | 5360.5  | 22.7      |
| 50°-60°   | 5741.7  | 24.3      |
| 60°-70°   | 3612.1  | 15.3      |
| 70°-80°   | 1068.2  | 4.5       |
| 80°-90°   | 188.9   | 0.8       |
| 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°    | 23621.1 | 100.0     |
| 0°-180°   | 23621.1 | 100.0     |

**Coefficient of Utilization**

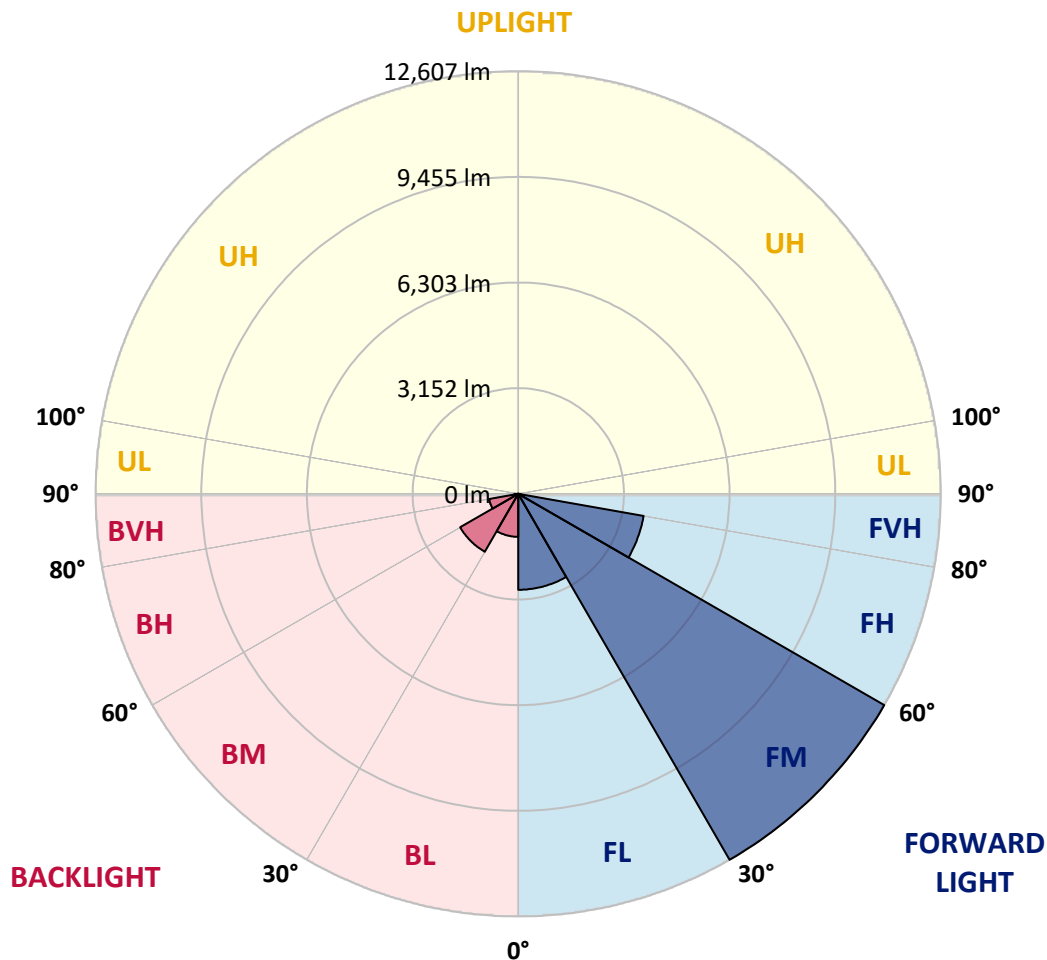


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2862.9  | 12.1      |                         |      |         |
| FM (30°-60°)   | 12606.8 | 53.4      |                         |      |         |
| FH (60°-80°)   | 3797.6  | 16.1      |                         |      | G2/5000 |
| FVH (80°-90°)  | 79.8    | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 1284.7  | 5.4       | B3/2500                 |      |         |
| BM (30°-60°)   | 1997.7  | 8.5       | B2/2500                 |      |         |
| BH (60°-80°)   | 882.7   | 3.7       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 109.1   | 0.5       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**  
 Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7  | 5918.7 |
| 2.5°  | 6790.5  | 6785.7  | 6812.6  | 6720.9  | 6658.7  | 6574.5  | 6463.3  | 6321.7  | 6169.0  | 6007.8  | 5938.2 |
| 5°    | 7402.3  | 7359.6  | 7387.7  | 7319.3  | 7251.0  | 7124.0  | 6959.0  | 6728.3  | 6446.2  | 6125.1  | 5954.1 |
| 7.5°  | 7305.9  | 7276.6  | 7348.6  | 7409.6  | 7461.0  | 7445.1  | 7324.1  | 7082.4  | 6718.5  | 6252.1  | 6004.1 |
| 10°   | 6528.0  | 6495.0  | 6596.4  | 6807.6  | 7117.8  | 7387.7  | 7534.2  | 7384.0  | 6997.0  | 6391.3  | 6053.0 |
| 12.5° | 5841.8  | 5825.9  | 5893.0  | 6064.0  | 6408.3  | 6926.1  | 7507.3  | 7647.7  | 7286.3  | 6556.1  | 6118.9 |
| 15°   | 5548.7  | 5529.2  | 5571.9  | 5658.6  | 5878.4  | 6360.7  | 7263.2  | 7828.5  | 7570.9  | 6746.6  | 6224.0 |
| 17.5° | 5484.0  | 5462.0  | 5480.3  | 5525.5  | 5667.1  | 6034.7  | 6894.4  | 7917.6  | 7867.6  | 6959.0  | 6311.8 |
| 20°   | 5603.7  | 5585.3  | 5587.8  | 5585.3  | 5684.2  | 5976.1  | 6637.9  | 7883.5  | 8126.4  | 7154.4  | 6397.3 |
| 22.5° | 5893.0  | 5862.5  | 5863.7  | 5799.0  | 5852.7  | 6078.7  | 6570.8  | 7791.8  | 8357.2  | 7325.4  | 6462.1 |
| 25°   | 6364.4  | 6309.5  | 6320.5  | 6155.5  | 6140.9  | 6308.3  | 6675.7  | 7721.0  | 8586.8  | 7462.2  | 6474.3 |
| 27.5° | 7009.2  | 6946.8  | 6913.9  | 6668.4  | 6551.2  | 6634.2  | 6889.4  | 7745.4  | 8804.1  | 7580.6  | 6443.8 |
| 30°   | 7815.0  | 7739.4  | 7672.2  | 7324.1  | 7111.7  | 7081.2  | 7221.6  | 7906.6  | 9060.6  | 7705.1  | 6391.3 |
| 32.5° | 8802.9  | 8715.1  | 8592.9  | 8131.3  | 7832.1  | 7672.2  | 7651.4  | 8193.6  | 9361.0  | 7863.9  | 6364.4 |
| 35°   | 9978.9  | 9864.1  | 9690.7  | 9093.6  | 8715.1  | 8387.8  | 8218.0  | 8607.5  | 9772.5  | 8103.2  | 6394.9 |
| 37.5° | 11190.2 | 11060.8 | 10902.0 | 10191.4 | 9726.1  | 9243.8  | 8909.2  | 9169.2  | 10320.7 | 8428.1  | 6475.5 |
| 40°   | 12307.5 | 12162.1 | 12014.4 | 11381.9 | 10882.4 | 10301.2 | 9755.4  | 9880.0  | 10991.2 | 8816.3  | 6612.3 |
| 42.5° | 12966.9 | 12859.4 | 12803.3 | 12461.3 | 12075.5 | 11485.7 | 10808.0 | 10722.5 | 11744.6 | 9263.3  | 6768.6 |
| 45°   | 12937.6 | 12893.6 | 13067.0 | 13208.7 | 13117.1 | 12789.8 | 12041.3 | 11654.2 | 12500.4 | 9650.4  | 6912.7 |
| 47.5° | 12246.5 | 12275.7 | 12662.8 | 13459.0 | 13809.4 | 13980.4 | 13445.5 | 12568.9 | 13157.4 | 9939.7  | 6977.4 |
| 50°   | 10365.9 | 10390.3 | 11286.7 | 13003.6 | 13987.8 | 14951.2 | 14838.8 | 13461.4 | 13666.6 | 10116.9 | 6962.7 |
| 52.5° | 8877.4  | 8893.3  | 9278.0  | 11653.0 | 13399.2 | 15439.7 | 16094.1 | 14302.7 | 14039.0 | 10165.6 | 6880.9 |
| 55°   | 6686.8  | 6741.7  | 7172.7  | 9142.4  | 11867.9 | 15052.5 | 16858.6 | 15169.8 | 14274.7 | 10170.6 | 6795.4 |
| 57.5° | 3906.3  | 3966.1  | 4498.5  | 6205.7  | 9224.2  | 13703.2 | 16974.5 | 15939.1 | 14434.7 | 10131.5 | 6744.2 |
| 60°   | 1913.5  | 1939.1  | 2171.2  | 3261.5  | 5687.9  | 11103.5 | 16041.7 | 16311.5 | 14523.8 | 10110.7 | 6741.7 |
| 62.5° | 1289.4  | 1285.9  | 1295.6  | 1609.5  | 2802.5  | 7133.7  | 14097.6 | 15659.4 | 14476.2 | 10031.4 | 6717.3 |
| 65°   | 1108.7  | 1095.3  | 1058.7  | 1129.6  | 1451.9  | 3262.8  | 10892.3 | 13713.0 | 14113.5 | 9832.3  | 6550.0 |
| 67.5° | 958.6   | 959.8   | 961.0   | 939.0   | 1036.7  | 1505.6  | 6656.2  | 10801.9 | 12811.8 | 8889.6  | 5905.2 |
| 70°   | 793.8   | 804.7   | 809.5   | 809.5   | 845.0   | 987.9   | 2841.5  | 7403.6  | 10105.9 | 6970.1  | 4756.2 |
| 72.5° | 722.9   | 699.7   | 702.1   | 689.9   | 689.9   | 752.2   | 1144.2  | 4197.0  | 6366.8  | 3920.9  | 2902.6 |
| 75°   | 589.8   | 604.4   | 606.9   | 598.3   | 570.2   | 573.9   | 679.0   | 1760.8  | 2724.2  | 1626.5  | 1434.8 |
| 77.5° | 509.2   | 509.2   | 514.0   | 508.0   | 486.0   | 429.8   | 453.0   | 682.5   | 926.8   | 666.8   | 716.8  |
| 80°   | 409.1   | 407.8   | 428.7   | 440.9   | 406.6   | 317.4   | 289.4   | 377.3   | 411.5   | 293.0   | 372.5  |
| 82.5° | 199.1   | 211.3   | 294.3   | 335.8   | 308.9   | 229.6   | 177.0   | 234.4   | 219.8   | 129.5   | 167.3  |
| 85°   | 116.0   | 109.9   | 131.9   | 186.9   | 177.0   | 127.0   | 85.5    | 122.1   | 114.8   | 65.9    | 67.1   |
| 87.5° | 36.6    | 34.2    | 26.9    | 63.4    | 51.2    | 35.4    | 23.2    | 35.4    | 31.8    | 14.7    | 14.7   |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5918.7 | 5918.7 | 5918.7 | 5918.7 | 5918.7 | 5918.7 | 5918.7 | 5918.7 | 5918.7 | 5918.7 |
| 2.5°  | 5851.5 | 5707.4 | 5564.5 | 5433.9 | 5354.5 | 5303.2 | 5252.0 | 5194.6 | 5172.6 | 5139.7 |
| 5°    | 5792.9 | 5514.5 | 5266.7 | 5052.9 | 4858.8 | 4706.1 | 4552.2 | 4427.7 | 4371.5 | 4409.4 |
| 7.5°  | 5758.8 | 5355.7 | 4973.5 | 4581.5 | 4204.2 | 3902.7 | 3640.1 | 3455.7 | 3372.7 | 3393.5 |
| 10°   | 5728.2 | 5176.2 | 4593.7 | 3974.6 | 3432.5 | 3058.9 | 2790.3 | 2649.8 | 2597.2 | 2608.3 |
| 12.5° | 5700.1 | 4974.7 | 4135.9 | 3321.4 | 2745.1 | 2498.3 | 2421.5 | 2422.7 | 2432.4 | 2439.8 |
| 15°   | 5695.2 | 4731.8 | 3624.2 | 2750.0 | 2373.8 | 2357.9 | 2440.9 | 2493.5 | 2521.6 | 2530.1 |
| 17.5° | 5687.9 | 4441.1 | 3102.8 | 2360.4 | 2283.5 | 2390.9 | 2467.9 | 2502.0 | 2524.1 | 2525.3 |
| 20°   | 5658.6 | 4072.4 | 2621.7 | 2174.7 | 2263.9 | 2356.7 | 2404.3 | 2431.2 | 2449.5 | 2455.6 |
| 22.5° | 5568.2 | 3662.1 | 2246.8 | 2091.7 | 2185.8 | 2260.2 | 2316.4 | 2346.9 | 2357.9 | 2365.3 |
| 25°   | 5405.8 | 3202.9 | 1988.0 | 2012.4 | 2077.1 | 2171.2 | 2216.3 | 2222.4 | 2218.7 | 2229.8 |
| 27.5° | 5193.4 | 2710.8 | 1826.8 | 1905.0 | 1988.0 | 2068.6 | 2092.9 | 2089.3 | 2082.0 | 2094.2 |
| 30°   | 4936.9 | 2268.8 | 1724.2 | 1784.0 | 1897.6 | 1970.9 | 1992.8 | 1984.3 | 1969.6 | 1983.1 |
| 32.5° | 4665.8 | 1907.3 | 1639.9 | 1699.8 | 1823.1 | 1895.1 | 1917.2 | 1908.5 | 1897.6 | 1908.5 |
| 35°   | 4413.0 | 1654.6 | 1561.8 | 1643.6 | 1764.5 | 1835.4 | 1863.4 | 1864.6 | 1864.6 | 1878.1 |
| 37.5° | 4181.1 | 1506.9 | 1497.1 | 1608.2 | 1724.2 | 1787.7 | 1828.0 | 1830.4 | 1778.0 | 1781.6 |
| 40°   | 3966.1 | 1444.5 | 1467.8 | 1585.0 | 1685.1 | 1746.2 | 1748.6 | 1611.8 | 1515.4 | 1512.9 |
| 42.5° | 3790.3 | 1432.3 | 1476.3 | 1582.6 | 1657.0 | 1659.5 | 1487.3 | 1381.1 | 1354.2 | 1355.5 |
| 45°   | 3625.4 | 1428.6 | 1495.9 | 1582.6 | 1615.5 | 1433.6 | 1317.5 | 1289.4 | 1291.9 | 1301.6 |
| 47.5° | 3441.0 | 1414.0 | 1499.5 | 1560.6 | 1495.9 | 1274.8 | 1240.7 | 1228.5 | 1223.5 | 1226.0 |
| 50°   | 3239.6 | 1361.5 | 1453.1 | 1516.6 | 1290.7 | 1206.4 | 1163.7 | 1160.1 | 1166.1 | 1169.8 |
| 52.5° | 3027.1 | 1276.0 | 1373.7 | 1437.3 | 1196.7 | 1146.6 | 1099.0 | 1107.5 | 1134.4 | 1143.0 |
| 55°   | 2887.9 | 1175.9 | 1268.7 | 1278.5 | 1130.8 | 1090.4 | 1050.1 | 1069.7 | 1119.7 | 1135.6 |
| 57.5° | 2851.2 | 1069.7 | 1149.0 | 1138.1 | 1046.5 | 1041.6 | 1017.2 | 1034.2 | 1097.8 | 1120.9 |
| 60°   | 2840.3 | 974.5  | 1031.9 | 1023.3 | 964.6  | 987.9  | 981.7  | 990.4  | 1012.3 | 1019.7 |
| 62.5° | 2754.8 | 898.7  | 926.8  | 914.6  | 891.4  | 931.7  | 946.4  | 928.0  | 945.2  | 953.7  |
| 65°   | 2537.5 | 837.6  | 824.2  | 815.7  | 825.4  | 862.1  | 891.4  | 854.7  | 870.6  | 895.0  |
| 67.5° | 2178.4 | 754.6  | 718.0  | 727.7  | 758.3  | 777.9  | 815.7  | 774.2  | 787.6  | 829.1  |
| 70°   | 1762.1 | 649.6  | 616.6  | 644.7  | 674.0  | 714.3  | 720.5  | 692.4  | 724.2  | 770.5  |
| 72.5° | 1246.7 | 543.4  | 520.2  | 577.6  | 587.3  | 639.9  | 626.4  | 612.9  | 656.9  | 672.8  |
| 75°   | 864.6  | 438.4  | 425.0  | 468.9  | 504.3  | 549.5  | 539.8  | 555.7  | 648.4  | 655.7  |
| 77.5° | 547.0  | 340.7  | 332.1  | 360.2  | 409.1  | 459.1  | 475.0  | 655.7  | 1107.5 | 1151.5 |
| 80°   | 317.4  | 254.0  | 244.3  | 266.2  | 308.9  | 355.4  | 457.9  | 804.7  | 730.2  | 721.7  |
| 82.5° | 177.0  | 174.7  | 162.4  | 168.5  | 206.3  | 256.5  | 647.2  | 566.6  | 460.3  | 475.0  |
| 85°   | 83.0   | 102.6  | 87.9   | 84.3   | 116.0  | 300.4  | 432.2  | 323.6  | 214.9  | 210.0  |
| 87.5° | 21.9   | 19.6   | 19.6   | 21.9   | 48.9   | 258.9  | 172.2  | 138.0  | 81.8   | 79.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)