

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: P966282

Luminaire Tested: **NVN-SB4B-827-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966282
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4B-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15229.5 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

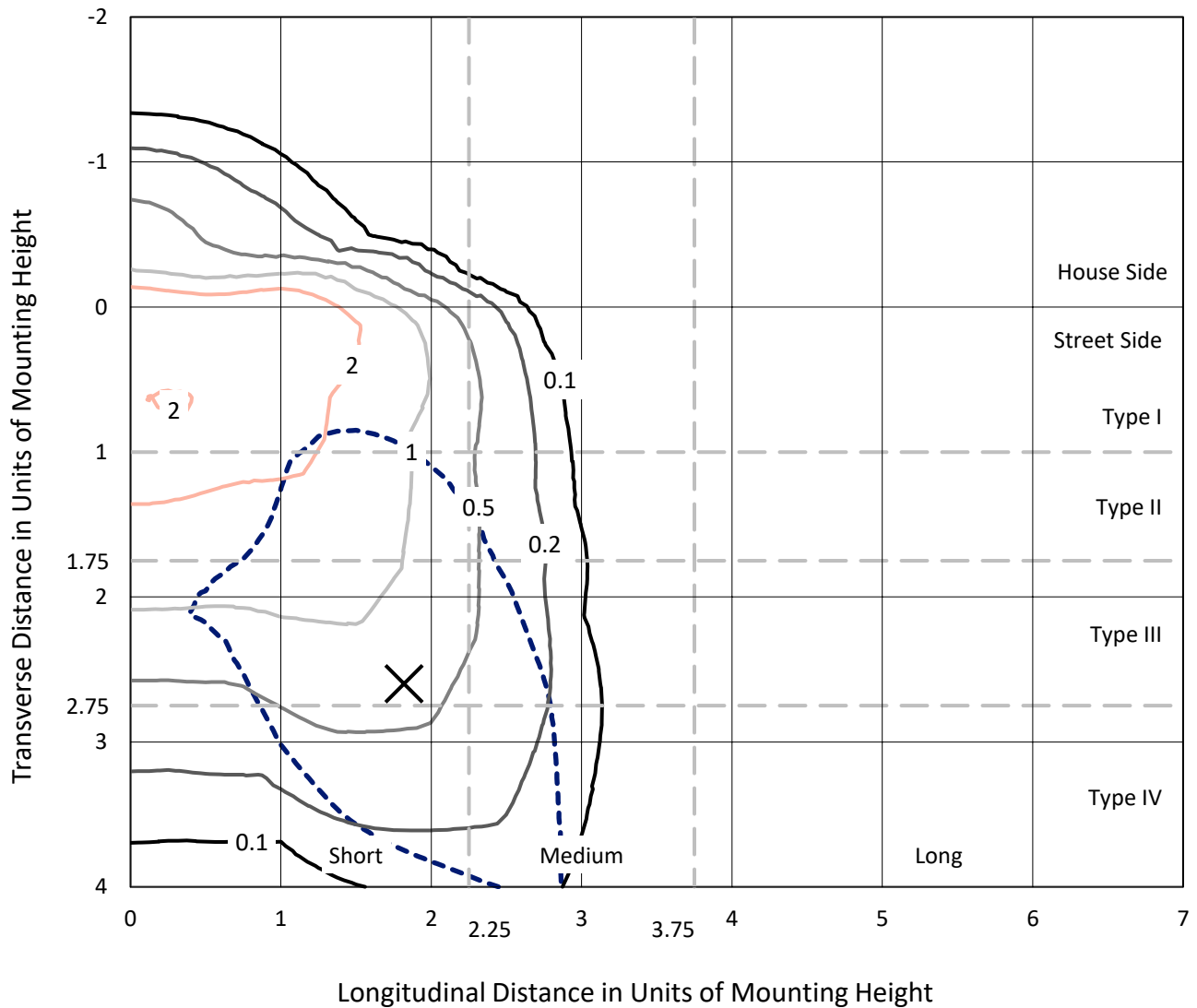
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

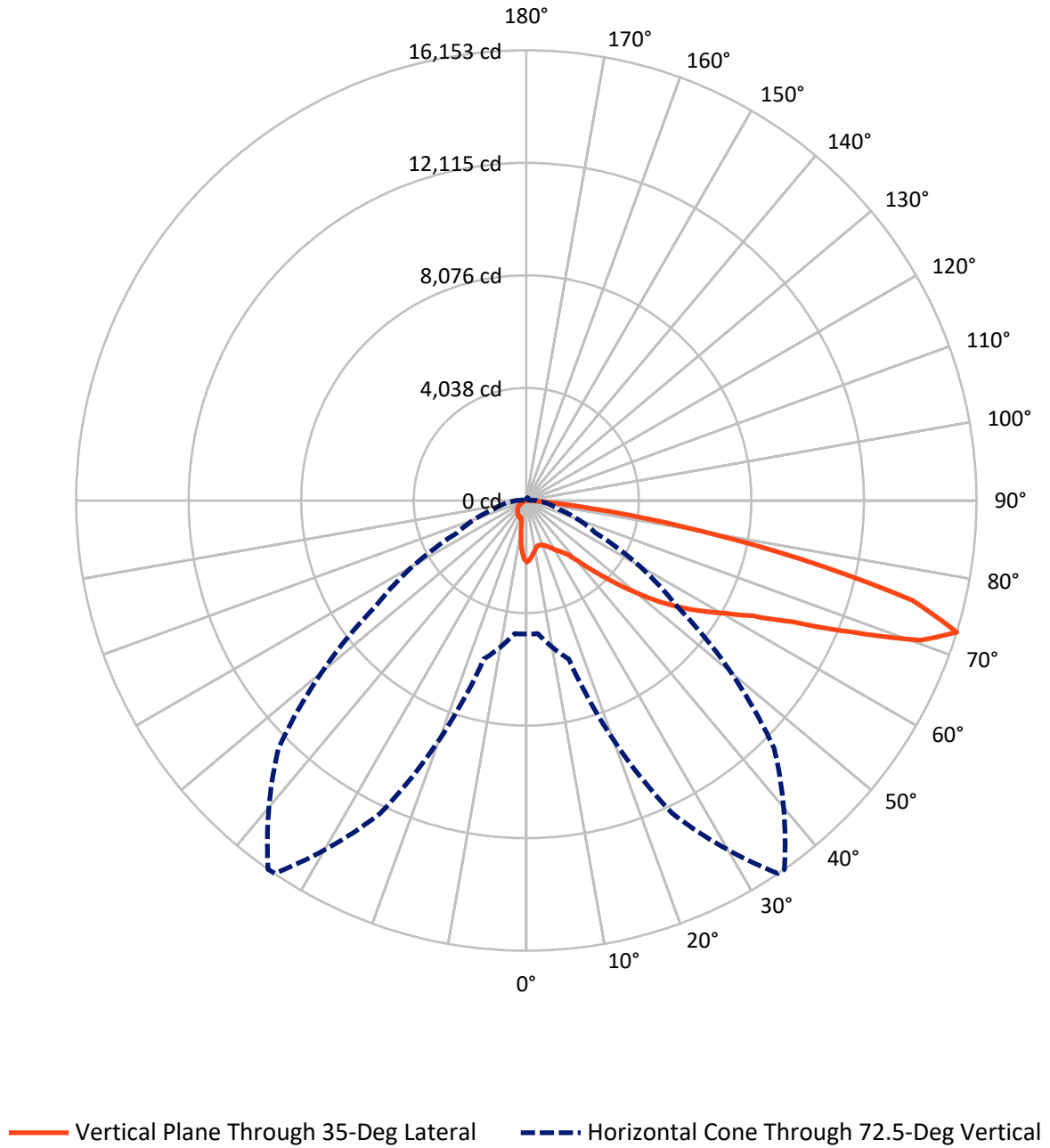
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1714.0 | 0.0 | 1714.0 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 13515.5 | 0.0 | 13515.5 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 15229.5 | 0.0 | 15229.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 181.4 | 1.2 |
| 10°-20° | 424.3 | 2.8 |
| 20°-30° | 689.3 | 4.5 |
| 30°-40° | 1150.1 | 7.6 |
| 40°-50° | 2175.9 | 14.3 |
| 50°-60° | 3457.6 | 22.7 |
| 60°-70° | 4277.3 | 28.1 |
| 70°-80° | 2658.8 | 17.5 |
| 80°-90° | 214.9 | 1.4 |
| 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° | 15229.5 | 100.0 |
| 0°-180° | 15229.5 | 100.0 |

Coefficient of Utilization



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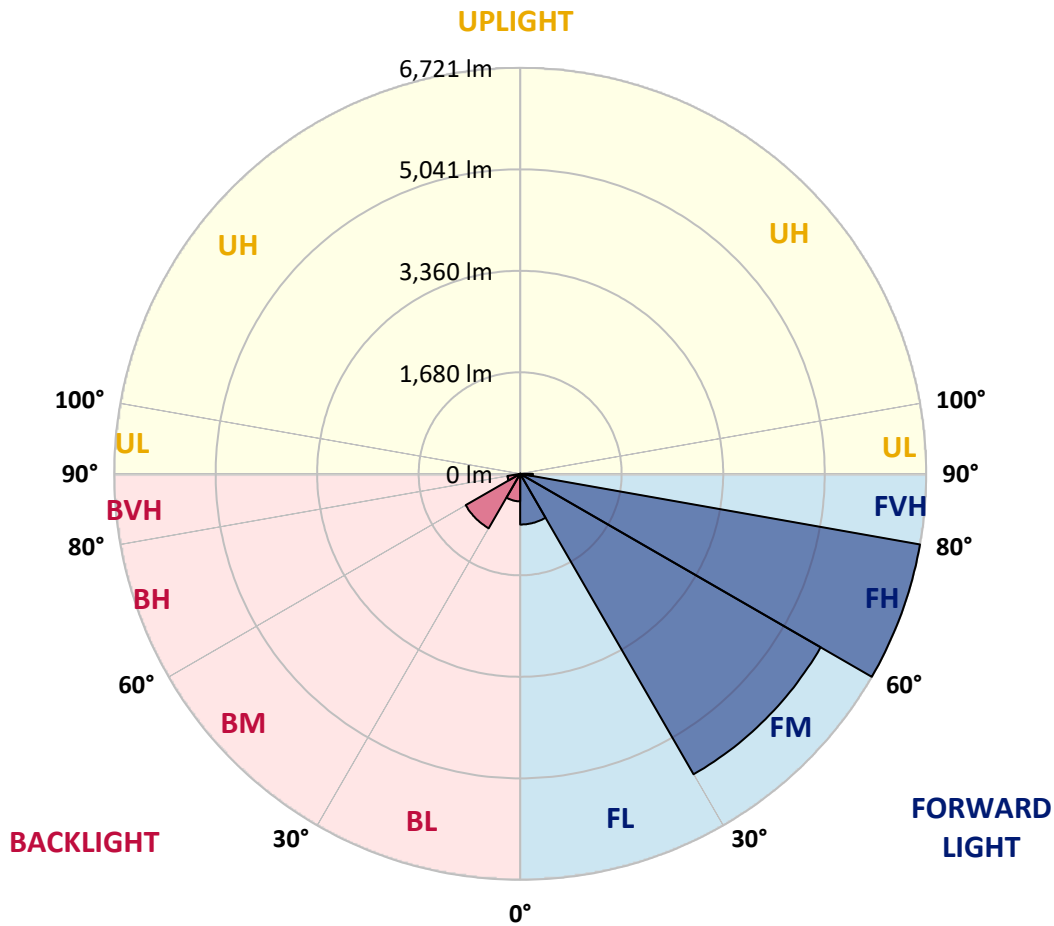
CATALOG NUMBER: NVN-SB4B-827-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 839.5 | 5.5 | | | |
| FM (30°-60°) | 5743.0 | 37.7 | | | |
| FH (60°-80°) | 6721.0 | 44.1 | | | G3/7500 |
| FVH (80°-90°) | 211.9 | 1.4 | | | G2/225 |
| BL (0°-30°) | 455.4 | 3.0 | B1/500 | | |
| BM (30°-60°) | 1040.6 | 6.8 | B2/2500 | | |
| BH (60°-80°) | 215.1 | 1.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.9 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 |
| 2.5° | 2109.0 | 2126.9 | 2130.3 | 2135.8 | 2135.8 | 2142.6 | 2153.7 | 2169.3 | 2194.9 | 2208.4 | 2217.3 |
| 5° | 1943.9 | 1957.3 | 1974.0 | 1987.5 | 2013.1 | 2016.5 | 2059.9 | 2102.4 | 2161.5 | 2206.1 | 2237.4 |
| 7.5° | 1777.7 | 1793.2 | 1815.6 | 1848.0 | 1881.4 | 1891.4 | 1957.3 | 2028.7 | 2122.5 | 2206.1 | 2258.6 |
| 10° | 1660.5 | 1661.6 | 1681.7 | 1714.0 | 1767.6 | 1779.9 | 1860.2 | 1961.7 | 2078.9 | 2192.8 | 2278.7 |
| 12.5° | 1594.6 | 1602.5 | 1611.4 | 1635.9 | 1687.3 | 1695.0 | 1780.9 | 1900.4 | 2035.4 | 2184.9 | 2302.1 |
| 15° | 1594.6 | 1600.2 | 1605.8 | 1618.1 | 1659.4 | 1666.0 | 1741.9 | 1861.3 | 2013.1 | 2188.3 | 2340.1 |
| 17.5° | 1611.4 | 1620.3 | 1615.8 | 1630.4 | 1673.8 | 1678.3 | 1745.3 | 1850.1 | 2012.0 | 2209.5 | 2398.1 |
| 20° | 1651.6 | 1658.2 | 1649.3 | 1658.2 | 1701.7 | 1710.7 | 1779.9 | 1871.3 | 2030.9 | 2246.3 | 2470.7 |
| 22.5° | 1715.1 | 1718.5 | 1697.3 | 1704.0 | 1748.6 | 1759.8 | 1840.1 | 1931.6 | 2076.6 | 2305.4 | 2567.7 |
| 25° | 1795.5 | 1802.2 | 1769.9 | 1777.7 | 1820.0 | 1833.4 | 1926.1 | 2022.0 | 2149.2 | 2386.9 | 2691.5 |
| 27.5° | 1888.2 | 1891.4 | 1863.6 | 1862.4 | 1917.2 | 1936.1 | 2029.8 | 2133.6 | 2246.3 | 2489.6 | 2847.8 |
| 30° | 1994.1 | 2004.2 | 1977.4 | 1972.9 | 2042.1 | 2057.7 | 2150.3 | 2270.9 | 2389.2 | 2643.6 | 3069.9 |
| 32.5° | 2077.8 | 2085.7 | 2070.0 | 2081.2 | 2151.5 | 2163.8 | 2296.5 | 2465.0 | 2613.4 | 2862.3 | 3372.2 |
| 35° | 2198.3 | 2202.8 | 2167.1 | 2187.1 | 2267.5 | 2298.8 | 2496.3 | 2737.3 | 2895.7 | 3136.8 | 3767.3 |
| 37.5° | 2634.7 | 2634.7 | 2482.9 | 2383.5 | 2460.6 | 2488.5 | 2769.7 | 3079.9 | 3243.9 | 3505.1 | 4265.0 |
| 40° | 3238.4 | 3228.3 | 3006.2 | 2803.2 | 2793.1 | 2847.8 | 3159.2 | 3511.8 | 3693.7 | 3947.0 | 4825.2 |
| 42.5° | 3882.2 | 3866.6 | 3564.2 | 3363.3 | 3329.8 | 3348.8 | 3608.8 | 4044.0 | 4229.3 | 4485.9 | 5427.8 |
| 45° | 4453.5 | 4449.1 | 4172.4 | 3902.3 | 3842.0 | 3902.3 | 4170.1 | 4666.7 | 4799.5 | 5069.5 | 6029.3 |
| 47.5° | 4932.3 | 4932.3 | 4730.3 | 4554.0 | 4522.7 | 4558.5 | 4930.0 | 5357.5 | 5345.2 | 5691.1 | 6615.0 |
| 50° | 5483.5 | 5479.1 | 5287.2 | 5211.3 | 5243.6 | 5293.8 | 5804.9 | 6085.0 | 5909.8 | 6301.5 | 7138.4 |
| 52.5° | 5869.7 | 5896.4 | 5830.6 | 5818.3 | 5983.4 | 6070.6 | 6693.1 | 6797.0 | 6415.4 | 6880.6 | 7530.2 |
| 55° | 6175.4 | 6206.7 | 6282.5 | 6368.4 | 6686.5 | 6800.4 | 7553.5 | 7472.0 | 6838.3 | 7382.9 | 7755.6 |
| 57.5° | 6608.4 | 6563.8 | 6681.0 | 6850.5 | 7364.9 | 7502.2 | 8387.2 | 8109.3 | 7178.6 | 7790.1 | 7780.1 |
| 60° | 7134.0 | 7140.7 | 7160.8 | 7375.0 | 8042.4 | 8218.7 | 9208.4 | 8711.9 | 7397.3 | 8040.1 | 7507.8 |
| 62.5° | 7765.6 | 7775.6 | 7817.0 | 8146.1 | 8951.7 | 9118.1 | 10083.3 | 9205.1 | 7497.8 | 7969.8 | 6804.8 |
| 65° | 7722.0 | 7764.5 | 8225.3 | 9351.3 | 10334.4 | 10498.5 | 11104.3 | 9551.1 | 7346.0 | 7327.0 | 5540.4 |
| 67.5° | 7034.7 | 7103.9 | 7875.0 | 10790.8 | 12418.9 | 12601.9 | 12338.5 | 9619.1 | 6691.0 | 5697.8 | 3614.5 |
| 70° | 6133.0 | 6157.6 | 7084.9 | 12085.3 | 14832.6 | 15017.8 | 13443.3 | 8870.3 | 5077.3 | 3178.1 | 1619.2 |
| 72.5° | 4789.4 | 4795.1 | 5883.1 | 12385.4 | 16142.6 | 16152.7 | 12576.2 | 6584.9 | 2730.6 | 1220.8 | 562.4 |
| 75° | 3421.3 | 3387.9 | 3940.3 | 10044.3 | 14202.1 | 14316.0 | 9428.3 | 3088.8 | 1043.3 | 577.0 | 280.1 |
| 77.5° | 1834.5 | 1871.3 | 2229.6 | 5956.7 | 9811.0 | 10005.2 | 5144.3 | 890.5 | 531.2 | 392.8 | 185.2 |
| 80° | 566.9 | 598.1 | 913.9 | 2727.3 | 5557.2 | 5674.4 | 1907.1 | 396.2 | 370.4 | 280.1 | 121.7 |
| 82.5° | 178.6 | 185.2 | 426.3 | 1146.1 | 2306.6 | 2360.2 | 552.4 | 224.3 | 253.3 | 185.2 | 71.4 |
| 85° | 51.4 | 52.5 | 189.7 | 427.4 | 570.2 | 581.4 | 155.1 | 87.0 | 145.0 | 114.9 | 36.8 |
| 87.5° | 5.5 | 17.8 | 71.4 | 71.4 | 50.2 | 49.1 | 16.7 | 19.0 | 41.3 | 14.6 | 6.7 |
| 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° | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 | 2207.2 |
| 2.5° | 2211.7 | 2212.9 | 2198.3 | 2173.8 | 2147.0 | 2124.7 | 2096.7 | 2074.5 | 2058.8 | 2054.4 | 2062.2 |
| 5° | 2227.3 | 2219.5 | 2178.2 | 2103.5 | 2014.2 | 1937.2 | 1851.3 | 1783.2 | 1738.6 | 1719.6 | 1726.3 |
| 7.5° | 2250.8 | 2228.5 | 2138.0 | 1990.8 | 1820.0 | 1668.3 | 1514.2 | 1394.9 | 1319.0 | 1281.0 | 1286.7 |
| 10° | 2270.9 | 2226.2 | 2071.1 | 1827.9 | 1566.7 | 1336.8 | 1129.3 | 985.3 | 905.0 | 867.0 | 868.2 |
| 12.5° | 2289.8 | 2225.1 | 1984.1 | 1634.8 | 1281.0 | 999.9 | 806.8 | 735.3 | 713.1 | 705.3 | 703.0 |
| 15° | 2325.5 | 2228.5 | 1874.7 | 1413.9 | 996.5 | 755.4 | 685.2 | 684.1 | 688.5 | 686.2 | 685.2 |
| 17.5° | 2374.6 | 2231.8 | 1750.8 | 1179.5 | 768.9 | 666.1 | 662.9 | 672.9 | 679.6 | 676.2 | 675.2 |
| 20° | 2438.3 | 2245.2 | 1619.2 | 947.4 | 660.6 | 643.9 | 651.7 | 660.6 | 666.1 | 660.6 | 659.5 |
| 22.5° | 2527.5 | 2268.6 | 1475.2 | 761.1 | 626.1 | 630.5 | 637.1 | 647.2 | 652.8 | 645.0 | 643.9 |
| 25° | 2636.9 | 2305.4 | 1333.5 | 661.7 | 609.3 | 614.9 | 624.9 | 636.1 | 642.8 | 635.0 | 633.9 |
| 27.5° | 2778.6 | 2364.6 | 1202.9 | 639.4 | 592.6 | 595.9 | 610.4 | 627.1 | 636.1 | 626.1 | 626.1 |
| 30° | 2983.9 | 2461.6 | 1090.2 | 649.4 | 582.5 | 574.7 | 594.8 | 618.2 | 628.2 | 619.3 | 618.2 |
| 32.5° | 3256.2 | 2599.0 | 1021.0 | 665.1 | 578.0 | 550.1 | 569.1 | 599.2 | 616.0 | 610.4 | 610.4 |
| 35° | 3613.3 | 2807.6 | 994.2 | 683.0 | 574.7 | 524.5 | 537.8 | 570.2 | 599.2 | 604.9 | 604.9 |
| 37.5° | 4046.3 | 3097.8 | 1002.0 | 690.7 | 564.7 | 503.3 | 509.9 | 537.8 | 575.8 | 593.7 | 598.1 |
| 40° | 4538.4 | 3435.9 | 1046.7 | 683.0 | 553.5 | 485.4 | 486.6 | 507.8 | 541.2 | 568.0 | 577.0 |
| 42.5° | 5046.1 | 3830.9 | 1129.3 | 653.9 | 543.5 | 469.8 | 466.5 | 480.9 | 503.3 | 522.2 | 530.0 |
| 45° | 5529.3 | 4237.0 | 1210.7 | 613.8 | 531.2 | 454.2 | 446.4 | 451.9 | 456.4 | 464.2 | 468.6 |
| 47.5° | 5951.2 | 4522.7 | 1187.4 | 577.0 | 514.4 | 436.3 | 422.9 | 420.7 | 407.3 | 406.2 | 405.1 |
| 50° | 6242.4 | 4585.2 | 1054.5 | 540.1 | 489.8 | 416.3 | 395.0 | 381.6 | 358.2 | 347.1 | 348.2 |
| 52.5° | 6335.0 | 4338.6 | 861.5 | 503.3 | 449.7 | 389.5 | 359.4 | 338.1 | 309.1 | 299.1 | 298.0 |
| 55° | 6212.2 | 3855.4 | 688.5 | 458.7 | 393.9 | 353.7 | 320.3 | 292.3 | 269.0 | 256.7 | 256.7 |
| 57.5° | 5912.1 | 3240.5 | 544.6 | 406.2 | 334.8 | 313.5 | 280.1 | 252.2 | 232.1 | 219.9 | 217.6 |
| 60° | 5414.4 | 2573.3 | 430.7 | 343.7 | 285.7 | 270.1 | 235.4 | 217.6 | 199.8 | 185.2 | 181.9 |
| 62.5° | 4658.9 | 1836.8 | 338.1 | 272.2 | 238.8 | 221.0 | 200.9 | 187.5 | 166.3 | 146.2 | 142.9 |
| 65° | 3635.6 | 1123.7 | 261.2 | 199.8 | 192.0 | 183.0 | 170.8 | 158.5 | 132.8 | 112.7 | 109.4 |
| 67.5° | 2293.2 | 532.3 | 186.3 | 150.7 | 151.8 | 147.3 | 141.8 | 131.7 | 112.7 | 94.8 | 92.7 |
| 70° | 1009.9 | 257.8 | 122.8 | 114.9 | 112.7 | 112.7 | 117.2 | 113.8 | 95.9 | 79.2 | 75.8 |
| 72.5° | 343.7 | 138.4 | 91.5 | 87.0 | 81.5 | 80.4 | 98.2 | 94.8 | 77.0 | 61.4 | 58.0 |
| 75° | 179.7 | 92.7 | 66.9 | 62.5 | 49.1 | 59.1 | 78.1 | 73.7 | 54.6 | 40.2 | 36.8 |
| 77.5° | 117.2 | 65.8 | 45.7 | 40.2 | 27.9 | 39.1 | 58.0 | 51.4 | 32.4 | 20.1 | 17.8 |
| 80° | 73.7 | 43.6 | 26.8 | 19.0 | 13.4 | 21.2 | 31.3 | 22.3 | 12.3 | 4.5 | 3.4 |
| 82.5° | 39.1 | 22.3 | 10.0 | 6.7 | 5.5 | 6.7 | 7.8 | 5.5 | 2.3 | 0.0 | 0.0 |
| 85° | 15.6 | 7.8 | 3.4 | 2.3 | 1.1 | 0.0 | 2.3 | 1.1 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.5 | 1.1 | 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)