

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: P967670

Luminaire Tested: **NVN-SB5A-727-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967670
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB5A-727-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16464.6 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

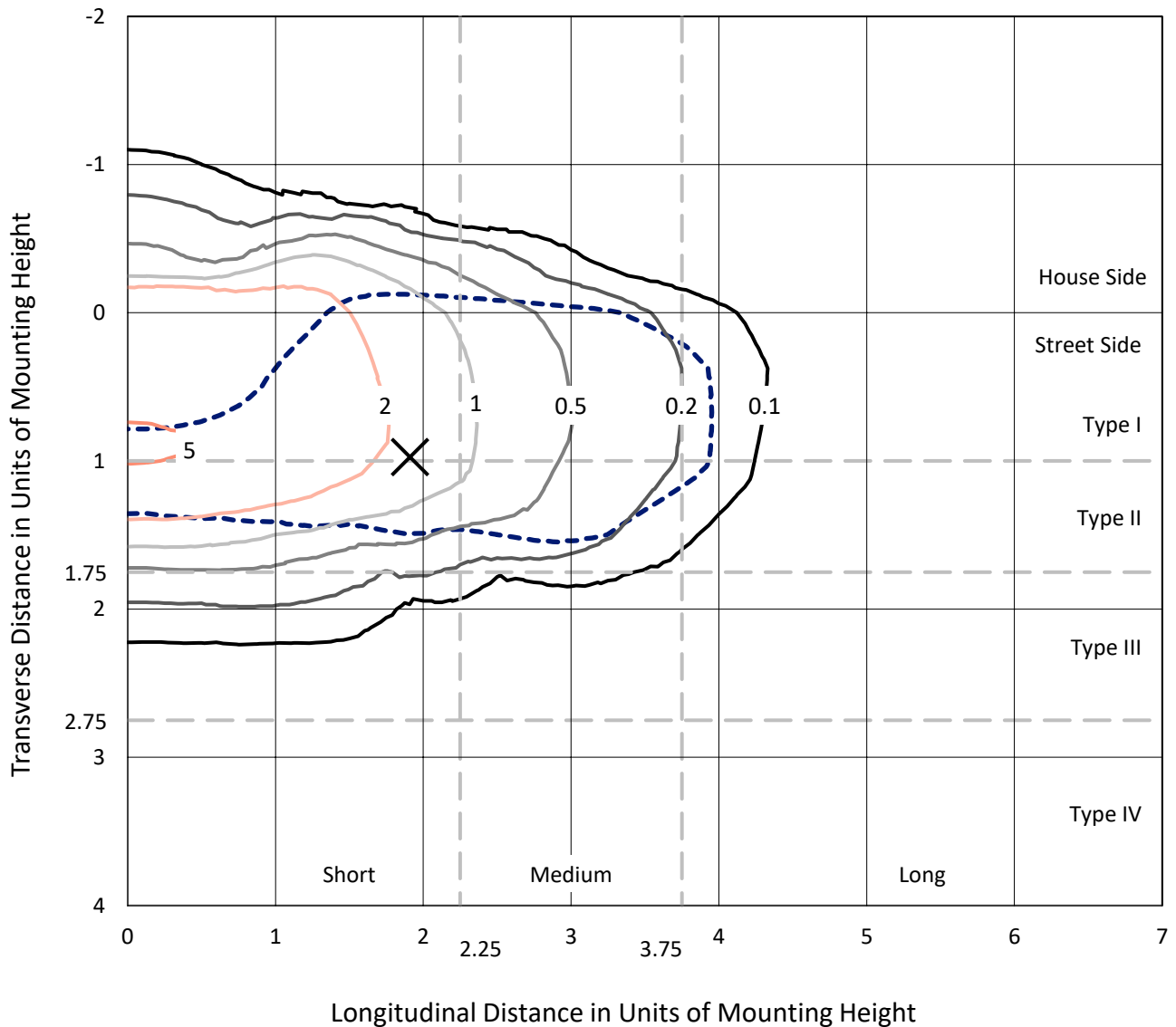
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

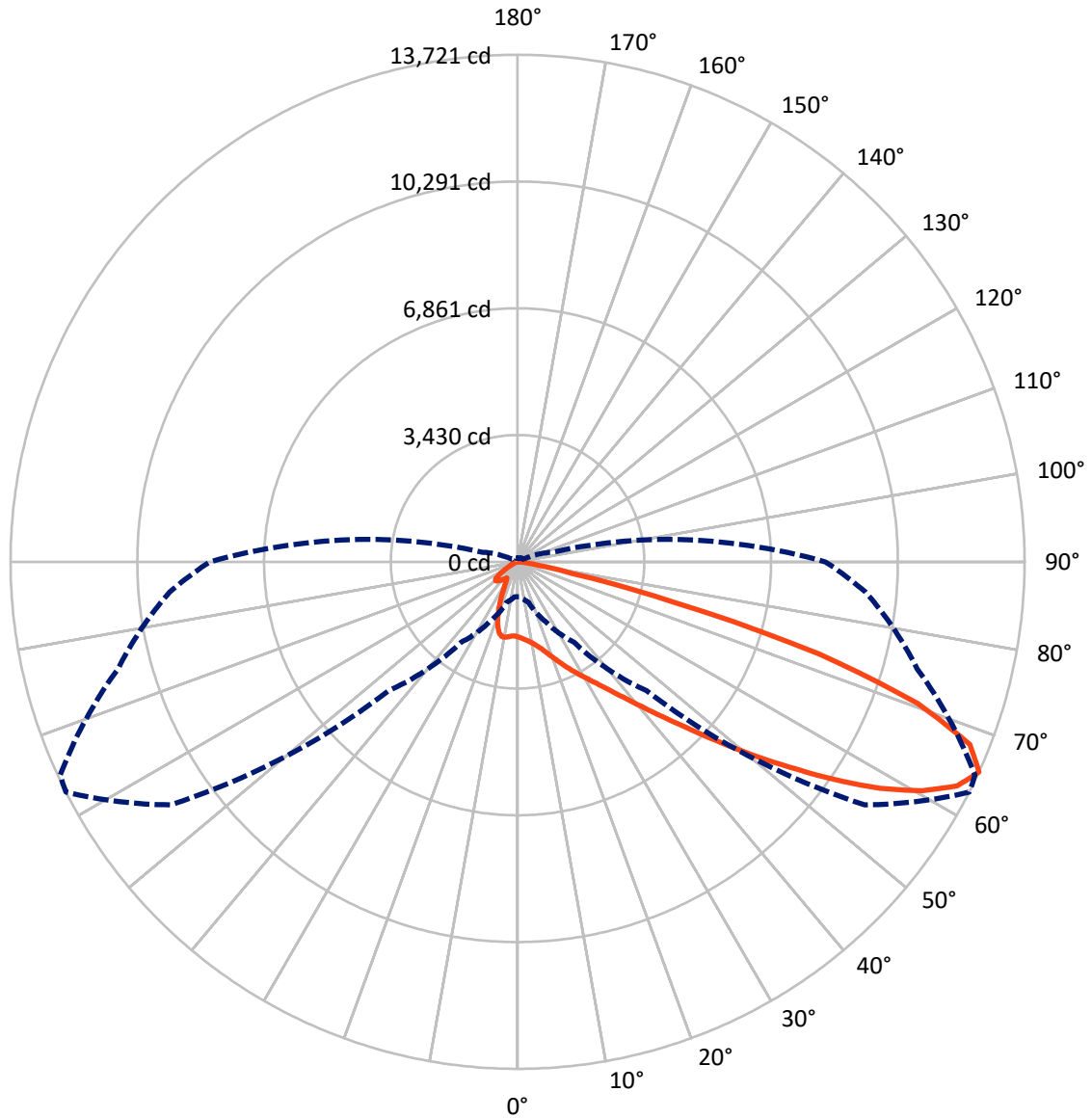
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2420.2 | 0.0 | 2420.2 |
| | % Fixture | 14.7 | 0.0 | 14.7 |
| Street Side | Lumens | 14044.4 | 0.0 | 14044.4 |
| | % Fixture | 85.3 | 0.0 | 85.3 |
| Total | Lumens | 16464.6 | 0.0 | 16464.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 191.5 | 1.2 |
| 10°-20° | 531.2 | 3.2 |
| 20°-30° | 925.0 | 5.6 |
| 30°-40° | 1667.2 | 10.1 |
| 40°-50° | 3306.6 | 20.1 |
| 50°-60° | 4504.1 | 27.4 |
| 60°-70° | 3595.2 | 21.8 |
| 70°-80° | 1626.9 | 9.9 |
| 80°-90° | 116.9 | 0.7 |
| 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° | 16464.6 | 100.0 |
| 0°-180° | 16464.6 | 100.0 |

Coefficient of Utilization



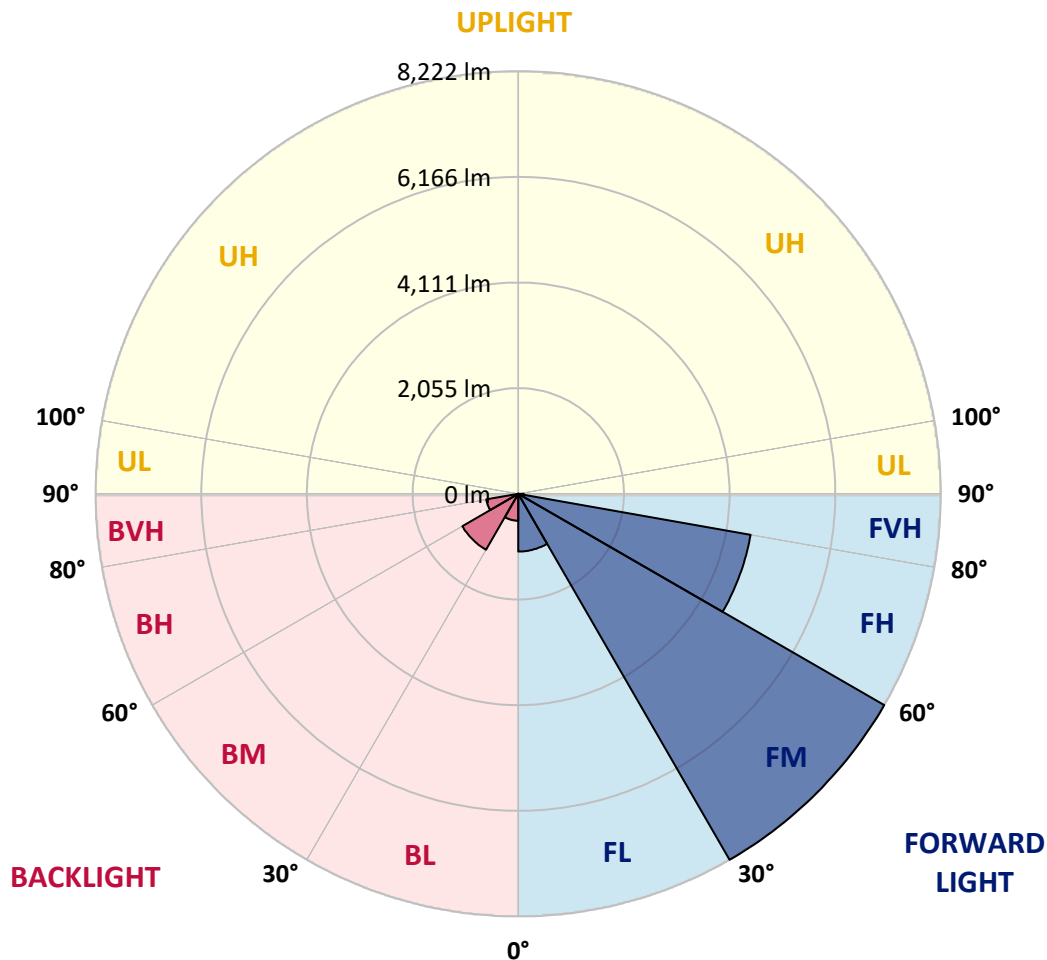
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1123.9 | 6.8 | | | |
| FM (30°-60°) | 8222.0 | 49.9 | | | |
| FH (60°-80°) | 4590.2 | 27.9 | | | G2/5000 |
| FVH (80°-90°) | 108.3 | 0.7 | | | G2/225 |
| BL (0°-30°) | 523.8 | 3.2 | B2/1000 | | |
| BM (30°-60°) | 1255.9 | 7.6 | B2/2500 | | |
| BH (60°-80°) | 631.8 | 3.8 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 8.7 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 |
| 2.5° | 2079.6 | 2074.0 | 2081.9 | 2078.5 | 2076.2 | 2071.7 | 2069.4 | 2067.1 | 2062.6 | 2059.2 | 2045.6 |
| 5° | 2085.3 | 2081.9 | 2089.8 | 2096.6 | 2103.4 | 2110.2 | 2113.5 | 2118.2 | 2113.5 | 2104.5 | 2090.9 |
| 7.5° | 2037.7 | 2035.4 | 2052.5 | 2072.9 | 2103.4 | 2129.4 | 2157.7 | 2173.6 | 2174.7 | 2171.4 | 2156.6 |
| 10° | 2034.3 | 2028.7 | 2045.6 | 2070.5 | 2110.2 | 2156.6 | 2206.5 | 2240.4 | 2245.0 | 2259.7 | 2243.8 |
| 12.5° | 2087.5 | 2081.9 | 2105.7 | 2132.8 | 2173.6 | 2222.3 | 2283.5 | 2331.1 | 2337.8 | 2358.2 | 2346.9 |
| 15° | 2177.0 | 2169.1 | 2196.3 | 2231.4 | 2283.5 | 2338.9 | 2403.5 | 2446.6 | 2452.3 | 2477.2 | 2456.8 |
| 17.5° | 2281.2 | 2273.3 | 2305.0 | 2342.4 | 2399.0 | 2475.0 | 2549.7 | 2597.2 | 2604.0 | 2619.9 | 2582.5 |
| 20° | 2414.9 | 2404.6 | 2429.7 | 2463.6 | 2523.7 | 2614.3 | 2703.7 | 2771.7 | 2770.6 | 2770.6 | 2709.4 |
| 22.5° | 2570.1 | 2554.2 | 2575.7 | 2602.9 | 2659.6 | 2769.4 | 2888.3 | 2968.8 | 2968.8 | 2937.0 | 2836.3 |
| 25° | 2736.5 | 2720.8 | 2744.5 | 2769.4 | 2819.3 | 2943.9 | 3083.2 | 3182.8 | 3187.3 | 3133.0 | 2972.2 |
| 27.5° | 2945.0 | 2924.6 | 2942.7 | 2972.2 | 3001.6 | 3128.5 | 3293.8 | 3409.4 | 3411.6 | 3327.9 | 3101.3 |
| 30° | 3345.9 | 3288.2 | 3231.5 | 3199.8 | 3213.5 | 3339.1 | 3515.9 | 3643.9 | 3655.2 | 3539.6 | 3241.8 |
| 32.5° | 4079.9 | 4068.6 | 3869.3 | 3608.7 | 3472.8 | 3565.7 | 3763.9 | 3918.0 | 3924.7 | 3776.4 | 3424.1 |
| 35° | 5220.5 | 5207.0 | 4886.4 | 4390.3 | 3947.4 | 3869.3 | 4065.3 | 4247.6 | 4243.1 | 4075.4 | 3660.9 |
| 37.5° | 6582.0 | 6569.5 | 6147.1 | 5483.3 | 4766.4 | 4328.0 | 4453.7 | 4645.2 | 4673.5 | 4453.7 | 3966.6 |
| 40° | 7745.3 | 7698.9 | 7431.6 | 6791.5 | 5853.8 | 5089.1 | 5006.5 | 5133.3 | 5162.8 | 4902.3 | 4355.2 |
| 42.5° | 8626.5 | 8586.9 | 8451.0 | 8051.2 | 7169.9 | 6215.1 | 5657.8 | 5706.5 | 5739.3 | 5426.7 | 4801.4 |
| 45° | 9083.0 | 9073.9 | 9128.3 | 9090.9 | 8511.0 | 7596.9 | 6588.8 | 6386.1 | 6398.6 | 6007.7 | 5307.8 |
| 47.5° | 9147.6 | 9143.0 | 9391.2 | 9742.2 | 9664.1 | 9155.5 | 7783.8 | 7233.3 | 7189.1 | 6663.6 | 5858.3 |
| 50° | 8767.0 | 8757.9 | 9233.6 | 9891.8 | 10434.3 | 10464.8 | 9140.7 | 8188.2 | 8090.7 | 7342.1 | 6432.5 |
| 52.5° | 7551.6 | 7549.3 | 8330.9 | 9426.2 | 10705.0 | 11611.2 | 10481.9 | 9237.1 | 9073.9 | 8060.2 | 7039.6 |
| 55° | 5810.7 | 5852.5 | 6748.5 | 8043.2 | 10211.2 | 12162.8 | 11685.9 | 10401.5 | 10151.1 | 8782.8 | 7599.1 |
| 57.5° | 4116.2 | 4177.4 | 5063.1 | 6216.2 | 8679.8 | 11836.6 | 12500.3 | 11568.2 | 11298.6 | 9503.3 | 8166.7 |
| 60° | 2211.0 | 2265.4 | 3152.3 | 4528.4 | 6457.4 | 10620.0 | 12929.7 | 12580.7 | 12325.9 | 10187.4 | 8678.7 |
| 62.5° | 1317.3 | 1335.5 | 1702.4 | 2923.5 | 4367.6 | 8113.4 | 12747.2 | 13352.1 | 13142.6 | 10761.7 | 9123.8 |
| 65° | 945.8 | 949.1 | 1133.9 | 1785.1 | 2651.6 | 4929.4 | 11468.4 | 13721.4 | 13656.8 | 11194.3 | 9453.4 |
| 67.5° | 796.3 | 794.0 | 871.0 | 1185.9 | 1806.7 | 2469.2 | 8789.7 | 13199.2 | 13473.3 | 11468.4 | 9640.3 |
| 70° | 683.1 | 686.4 | 777.1 | 868.8 | 1358.1 | 1397.7 | 4369.9 | 11492.2 | 12076.8 | 11541.0 | 9629.0 |
| 72.5° | 508.6 | 519.9 | 603.7 | 791.7 | 1025.1 | 961.7 | 1508.7 | 8521.2 | 9578.0 | 10873.8 | 9129.5 |
| 75° | 359.1 | 364.7 | 424.8 | 666.0 | 764.5 | 700.0 | 770.2 | 4405.0 | 5759.7 | 8336.5 | 7472.4 |
| 77.5° | 276.3 | 286.6 | 321.6 | 465.6 | 753.3 | 491.6 | 471.2 | 1524.6 | 2342.4 | 5035.9 | 5123.2 |
| 80° | 149.5 | 167.6 | 232.2 | 336.4 | 529.0 | 347.8 | 233.3 | 607.1 | 794.0 | 2354.8 | 1975.4 |
| 82.5° | 77.0 | 86.1 | 162.0 | 242.4 | 301.2 | 303.6 | 115.5 | 252.6 | 327.4 | 727.1 | 270.7 |
| 85° | 30.5 | 37.4 | 108.8 | 133.7 | 155.2 | 149.5 | 52.1 | 102.0 | 117.8 | 201.6 | 82.7 |
| 87.5° | 6.8 | 11.4 | 39.7 | 30.5 | 29.4 | 31.7 | 12.5 | 23.8 | 22.7 | 23.8 | 14.8 |
| 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° | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 |
| 2.5° | 2044.5 | 2040.0 | 2027.6 | 2013.9 | 1998.0 | 1989.0 | 1983.4 | 1982.2 | 1974.3 | 1968.6 | 1974.3 |
| 5° | 2078.5 | 2074.0 | 2050.2 | 2021.8 | 1991.3 | 1967.5 | 1944.8 | 1924.4 | 1895.0 | 1889.3 | 1887.0 |
| 7.5° | 2146.5 | 2133.9 | 2095.5 | 2057.0 | 1999.2 | 1930.1 | 1846.2 | 1750.0 | 1663.9 | 1637.8 | 1625.4 |
| 10° | 2230.3 | 2213.3 | 2164.6 | 2096.6 | 1968.6 | 1780.6 | 1577.8 | 1389.8 | 1240.2 | 1198.4 | 1182.5 |
| 12.5° | 2325.4 | 2310.7 | 2246.1 | 2120.4 | 1840.6 | 1499.7 | 1189.3 | 956.0 | 811.0 | 774.8 | 764.5 |
| 15° | 2438.7 | 2417.2 | 2327.7 | 2084.1 | 1611.8 | 1139.5 | 816.6 | 678.4 | 626.4 | 619.6 | 612.7 |
| 17.5° | 2558.7 | 2523.7 | 2400.1 | 1953.9 | 1303.7 | 809.9 | 630.9 | 591.2 | 568.6 | 561.8 | 558.4 |
| 20° | 2668.6 | 2623.3 | 2443.2 | 1756.7 | 974.2 | 630.9 | 565.2 | 539.2 | 518.8 | 510.9 | 506.4 |
| 22.5° | 2778.5 | 2713.9 | 2443.2 | 1488.3 | 730.6 | 559.5 | 518.8 | 495.0 | 471.2 | 461.0 | 455.3 |
| 25° | 2892.9 | 2806.8 | 2400.1 | 1189.3 | 587.8 | 513.1 | 474.6 | 448.5 | 428.1 | 415.7 | 411.1 |
| 27.5° | 3003.9 | 2885.0 | 2301.6 | 906.1 | 523.3 | 472.3 | 433.8 | 408.9 | 389.6 | 380.6 | 380.6 |
| 30° | 3109.2 | 2961.9 | 2163.5 | 687.6 | 481.4 | 432.7 | 396.5 | 374.9 | 355.7 | 346.6 | 347.8 |
| 32.5° | 3251.9 | 3059.4 | 2016.2 | 564.1 | 445.2 | 395.3 | 362.4 | 342.0 | 325.1 | 318.3 | 318.3 |
| 35° | 3450.2 | 3203.2 | 1889.3 | 553.9 | 414.6 | 364.7 | 331.9 | 312.6 | 295.6 | 290.0 | 290.0 |
| 37.5° | 3731.1 | 3435.4 | 1822.4 | 621.9 | 389.6 | 337.5 | 307.0 | 286.6 | 270.7 | 266.2 | 265.1 |
| 40° | 4077.7 | 3750.4 | 1858.7 | 689.8 | 372.7 | 313.8 | 284.3 | 263.9 | 250.3 | 244.7 | 243.5 |
| 42.5° | 4488.9 | 4138.8 | 2059.2 | 741.9 | 361.3 | 293.4 | 262.8 | 240.2 | 231.0 | 228.8 | 228.8 |
| 45° | 4961.2 | 4565.9 | 2366.2 | 797.4 | 343.2 | 274.1 | 241.3 | 224.3 | 217.5 | 216.4 | 215.2 |
| 47.5° | 5498.1 | 5034.8 | 2721.9 | 866.5 | 325.1 | 255.9 | 224.3 | 213.0 | 207.3 | 205.0 | 205.0 |
| 50° | 6030.4 | 5507.1 | 3087.7 | 905.0 | 310.4 | 239.0 | 210.6 | 201.6 | 197.1 | 196.0 | 196.0 |
| 52.5° | 6587.7 | 5993.1 | 3383.3 | 868.8 | 297.9 | 225.4 | 199.4 | 192.6 | 188.0 | 186.9 | 186.9 |
| 55° | 7118.9 | 6386.1 | 3434.3 | 737.4 | 273.0 | 211.8 | 186.9 | 183.5 | 177.8 | 177.8 | 176.7 |
| 57.5° | 7576.5 | 6583.2 | 3074.1 | 541.4 | 248.0 | 191.5 | 174.5 | 171.1 | 166.5 | 165.3 | 164.2 |
| 60° | 7996.7 | 6526.6 | 2373.0 | 364.7 | 220.9 | 171.1 | 158.6 | 156.3 | 151.8 | 146.2 | 144.9 |
| 62.5° | 8233.5 | 6277.3 | 1623.2 | 237.9 | 193.7 | 149.5 | 140.4 | 139.3 | 129.1 | 117.8 | 115.5 |
| 65° | 8323.0 | 5765.4 | 1012.6 | 173.3 | 162.0 | 128.0 | 121.2 | 118.9 | 104.2 | 91.7 | 90.6 |
| 67.5° | 8244.8 | 4922.7 | 510.9 | 137.0 | 128.0 | 106.5 | 99.6 | 99.6 | 89.5 | 78.1 | 77.0 |
| 70° | 7932.2 | 3690.3 | 215.2 | 109.9 | 98.5 | 81.6 | 81.6 | 86.1 | 75.8 | 63.4 | 62.3 |
| 72.5° | 7253.7 | 2482.9 | 114.4 | 83.8 | 73.6 | 57.8 | 66.8 | 70.2 | 60.1 | 47.6 | 47.6 |
| 75° | 5766.5 | 1514.4 | 79.3 | 62.3 | 46.4 | 40.8 | 50.9 | 53.2 | 40.8 | 31.7 | 30.5 |
| 77.5° | 3944.0 | 869.9 | 53.2 | 39.7 | 29.4 | 23.8 | 35.2 | 32.8 | 21.5 | 14.8 | 15.9 |
| 80° | 1731.8 | 362.4 | 30.5 | 18.1 | 11.4 | 9.0 | 12.5 | 9.0 | 6.8 | 4.5 | 4.5 |
| 82.5° | 202.7 | 85.0 | 11.4 | 6.8 | 4.5 | 2.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 41.9 | 10.1 | 5.6 | 2.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 7.9 | 2.3 | 1.1 | 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)