

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: P960802

Luminaire Tested: **NVN-SB1D-727-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB1D-727-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8251.3 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

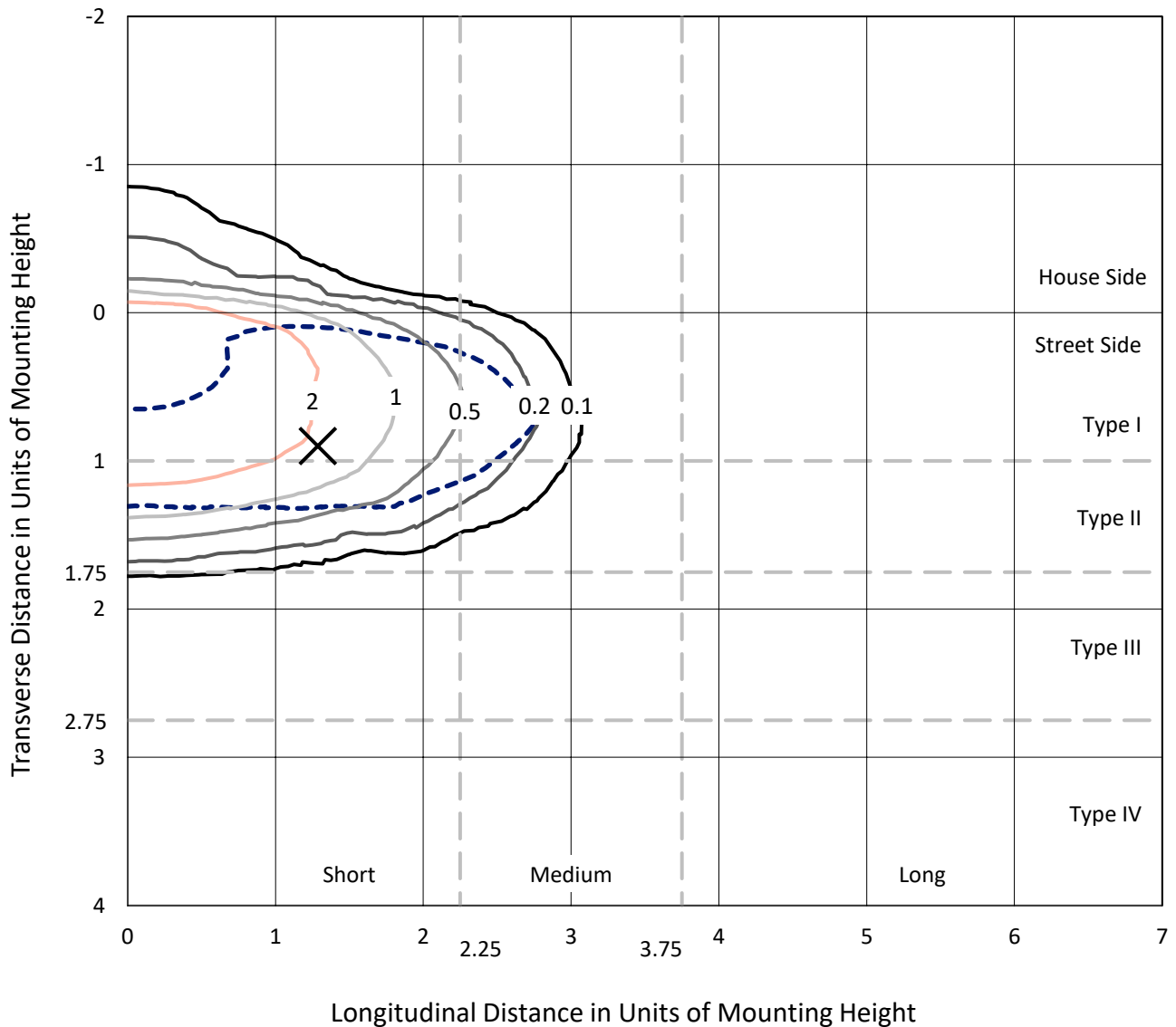
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

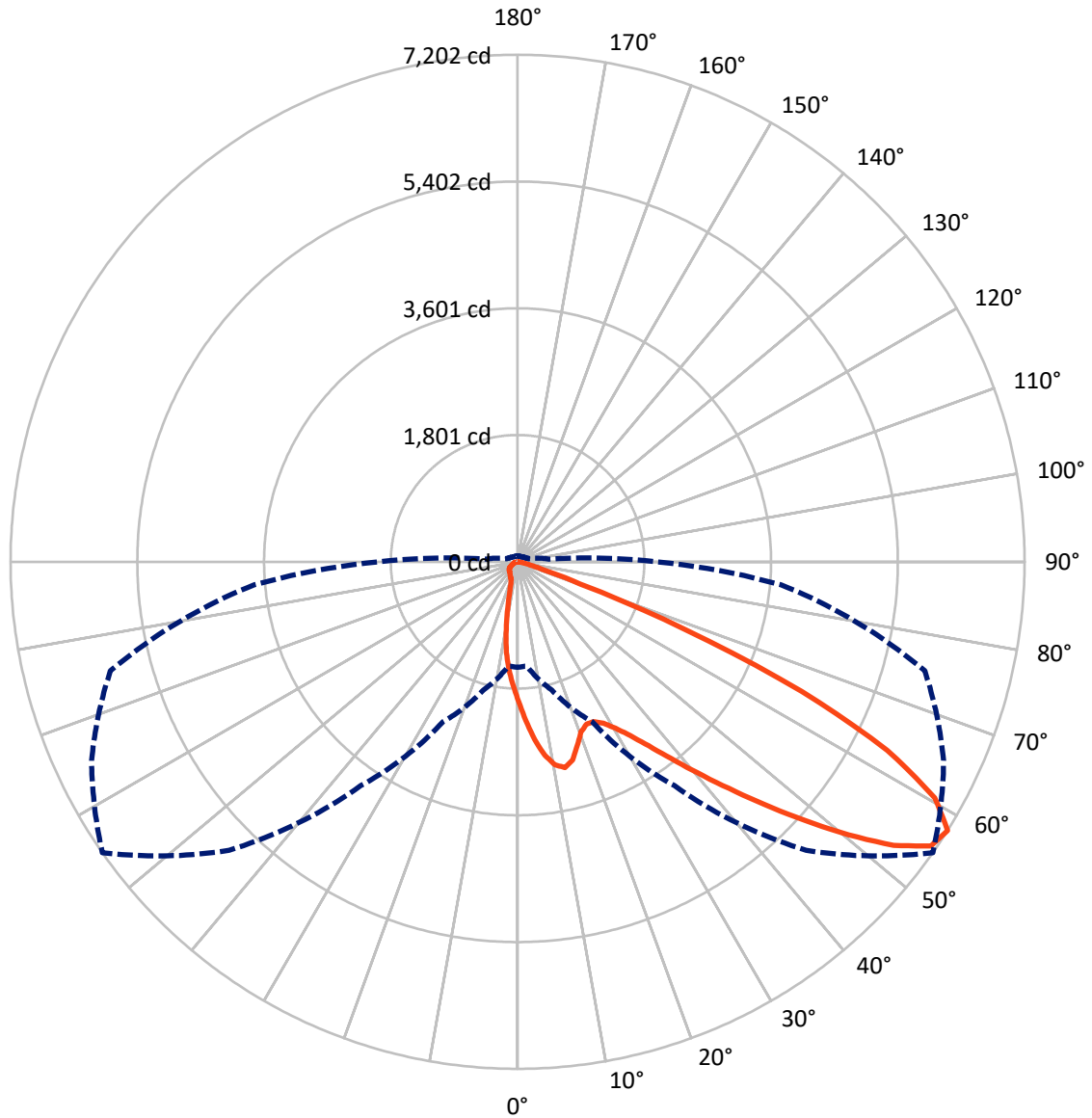
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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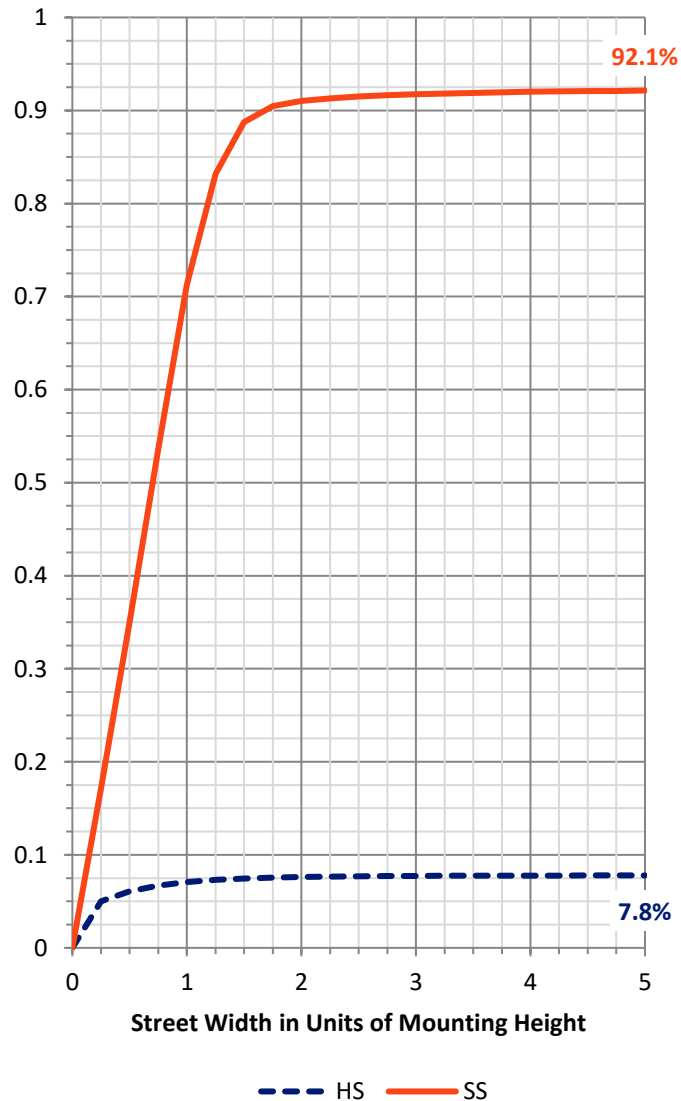
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 644.4 | 0.0 | 644.4 |
| | % Fixture | 7.8 | 0.0 | 7.8 |
| Street Side | Lumens | 7606.9 | 0.0 | 7606.9 |
| | % Fixture | 92.2 | 0.0 | 92.2 |
| Total | Lumens | 8251.3 | 0.0 | 8251.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 185.0 | 2.2 |
| 10°-20° | 446.9 | 5.4 |
| 20°-30° | 715.0 | 8.7 |
| 30°-40° | 1210.2 | 14.7 |
| 40°-50° | 1986.9 | 24.1 |
| 50°-60° | 2183.7 | 26.5 |
| 60°-70° | 1252.6 | 15.2 |
| 70°-80° | 255.9 | 3.1 |
| 80°-90° | 15.1 | 0.2 |
| 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° | 8251.3 | 100.0 |
| 0°-180° | 8251.3 | 100.0 |

Coefficient of Utilization

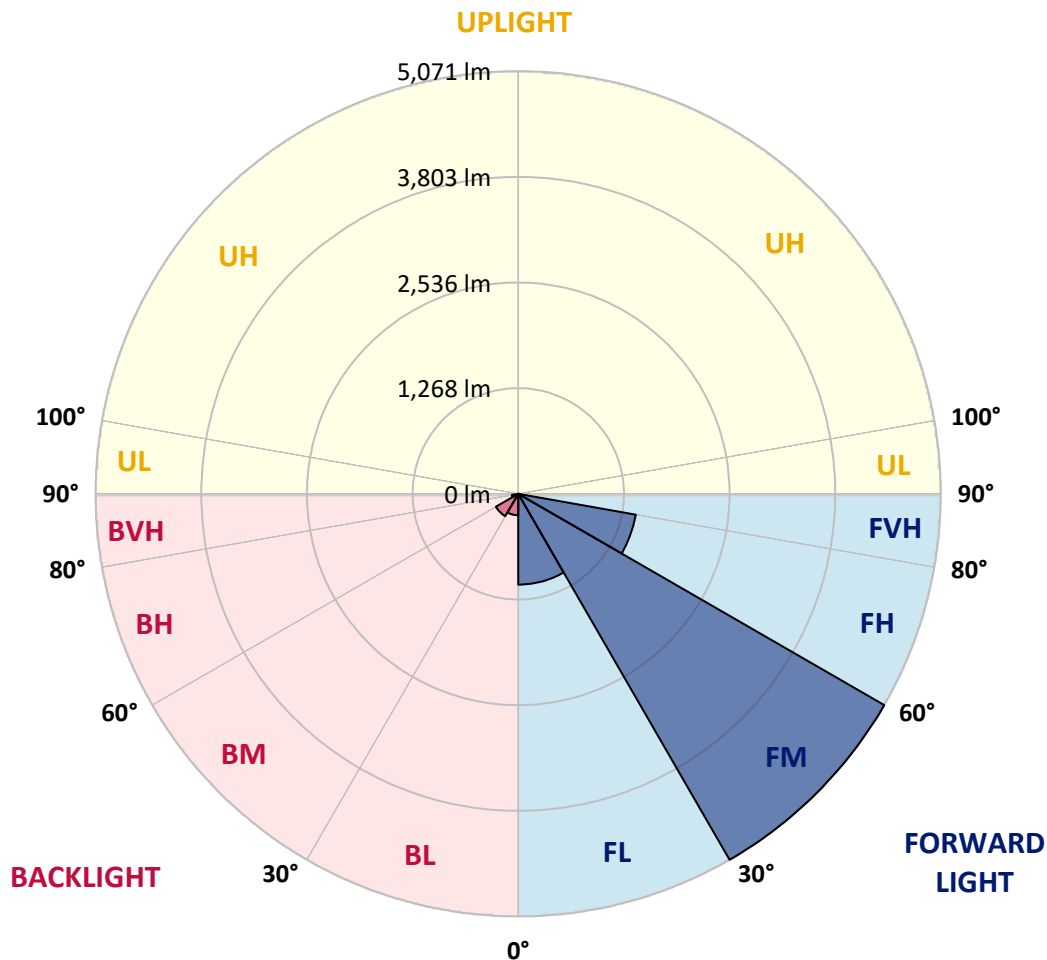


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1089.6 | 13.2 | | | |
| FM (30°-60°) | 5071.3 | 61.5 | | | |
| FH (60°-80°) | 1431.9 | 17.4 | | | G1/1800 |
| FVH (80°-90°) | 14.1 | 0.2 | | | G1/100 |
| BL (0°-30°) | 257.3 | 3.1 | B1/500 | | |
| BM (30°-60°) | 309.5 | 3.8 | B1/1000 | | |
| BH (60°-80°) | 76.6 | 0.9 | B0/110 | | G0/110 |
| BVH (80°-90°) | 1.0 | 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-G1
 Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 |
| 2.5° | 2467.1 | 2436.1 | 2431.5 | 2425.4 | 2366.4 | 2322.1 | 2258.0 | 2187.8 | 2108.9 | 2028.6 | 1992.9 |
| 5° | 2850.2 | 2825.8 | 2821.2 | 2792.7 | 2725.6 | 2650.2 | 2536.4 | 2392.4 | 2245.3 | 2072.3 | 1998.0 |
| 7.5° | 2924.5 | 2919.9 | 2940.8 | 2939.8 | 2930.6 | 2871.1 | 2775.0 | 2603.5 | 2382.6 | 2126.3 | 2011.3 |
| 10° | 2593.2 | 2605.0 | 2667.0 | 2721.5 | 2868.6 | 2954.0 | 2933.1 | 2791.7 | 2524.1 | 2187.8 | 2026.0 |
| 12.5° | 2291.6 | 2277.9 | 2322.1 | 2383.6 | 2554.6 | 2809.0 | 2998.8 | 2948.9 | 2685.9 | 2257.5 | 2047.8 |
| 15° | 2102.3 | 2096.7 | 2121.6 | 2150.1 | 2280.4 | 2536.8 | 2922.5 | 3076.6 | 2841.6 | 2339.9 | 2081.0 |
| 17.5° | 2041.8 | 2037.2 | 2044.8 | 2051.9 | 2136.4 | 2334.8 | 2740.8 | 3155.1 | 2990.6 | 2434.1 | 2117.5 |
| 20° | 2091.1 | 2085.1 | 2084.0 | 2078.4 | 2113.5 | 2248.8 | 2576.5 | 3160.6 | 3124.5 | 2519.6 | 2149.1 |
| 22.5° | 2235.1 | 2227.9 | 2203.0 | 2180.7 | 2183.8 | 2260.5 | 2503.3 | 3104.6 | 3225.3 | 2599.4 | 2169.0 |
| 25° | 2496.1 | 2484.4 | 2432.5 | 2357.2 | 2309.4 | 2341.9 | 2514.4 | 3030.8 | 3321.4 | 2662.0 | 2159.3 |
| 27.5° | 2822.7 | 2807.5 | 2740.8 | 2628.9 | 2519.6 | 2479.9 | 2595.3 | 2980.0 | 3401.3 | 2709.8 | 2138.5 |
| 30° | 3142.8 | 3123.0 | 3057.3 | 2970.3 | 2810.5 | 2685.4 | 2741.4 | 3002.3 | 3496.4 | 2759.7 | 2111.0 |
| 32.5° | 3488.3 | 3469.4 | 3382.4 | 3274.6 | 3142.2 | 2973.8 | 2941.3 | 3111.8 | 3612.9 | 2829.4 | 2091.6 |
| 35° | 3925.3 | 3895.8 | 3772.2 | 3625.1 | 3484.7 | 3314.2 | 3211.9 | 3300.5 | 3768.1 | 2935.7 | 2102.3 |
| 37.5° | 4422.9 | 4383.2 | 4250.0 | 4046.9 | 3863.7 | 3673.0 | 3541.7 | 3560.0 | 3995.6 | 3078.2 | 2135.4 |
| 40° | 4892.0 | 4855.8 | 4732.7 | 4541.5 | 4311.5 | 4080.0 | 3940.1 | 3899.4 | 4309.4 | 3251.7 | 2193.4 |
| 42.5° | 5173.4 | 5140.8 | 5088.9 | 5008.0 | 4814.1 | 4578.1 | 4401.6 | 4313.5 | 4680.9 | 3459.3 | 2264.1 |
| 45° | 5189.2 | 5160.7 | 5230.4 | 5324.5 | 5286.3 | 5129.1 | 4913.8 | 4752.6 | 5053.8 | 3654.1 | 2337.4 |
| 47.5° | 4936.8 | 4917.4 | 5129.1 | 5457.8 | 5621.6 | 5687.7 | 5489.3 | 5155.0 | 5361.6 | 3794.0 | 2367.4 |
| 50° | 4248.9 | 4241.8 | 4677.3 | 5280.7 | 5749.3 | 6177.2 | 6096.3 | 5529.6 | 5600.3 | 3866.3 | 2338.9 |
| 52.5° | 3684.2 | 3658.2 | 3912.1 | 4714.0 | 5563.6 | 6434.6 | 6689.6 | 5896.8 | 5767.2 | 3880.0 | 2272.2 |
| 55° | 2794.3 | 2771.4 | 3089.9 | 3765.5 | 4964.8 | 6343.1 | 7123.5 | 6275.9 | 5886.7 | 3844.9 | 2152.7 |
| 57.5° | 1498.9 | 1484.6 | 1887.1 | 2506.3 | 3881.1 | 5793.6 | 7202.0 | 6676.8 | 5987.4 | 3751.8 | 1985.3 |
| 60° | 583.5 | 581.1 | 731.6 | 1216.0 | 2358.7 | 4713.5 | 6806.6 | 6917.5 | 6050.5 | 3637.3 | 1845.4 |
| 62.5° | 353.1 | 360.7 | 385.2 | 545.9 | 1042.0 | 2928.1 | 5895.4 | 6643.7 | 6092.7 | 3532.6 | 1729.9 |
| 65° | 292.0 | 292.5 | 295.6 | 374.9 | 499.1 | 1225.2 | 4438.1 | 5743.2 | 5988.5 | 3345.8 | 1566.1 |
| 67.5° | 250.3 | 254.9 | 266.6 | 297.7 | 352.1 | 537.3 | 2555.1 | 4448.8 | 5354.0 | 2911.3 | 1310.7 |
| 70° | 197.4 | 203.6 | 218.2 | 244.8 | 271.7 | 336.3 | 944.3 | 2960.1 | 4090.2 | 2194.4 | 991.1 |
| 72.5° | 166.4 | 165.8 | 173.5 | 199.0 | 215.8 | 236.6 | 363.3 | 1658.7 | 2377.1 | 1047.6 | 490.5 |
| 75° | 128.7 | 133.8 | 143.5 | 166.4 | 176.5 | 171.5 | 196.9 | 606.0 | 851.7 | 317.4 | 166.9 |
| 77.5° | 100.8 | 104.9 | 113.5 | 135.8 | 146.1 | 121.6 | 113.5 | 216.8 | 273.8 | 114.0 | 75.3 |
| 80° | 45.3 | 48.9 | 77.3 | 100.2 | 119.1 | 83.9 | 61.6 | 110.9 | 121.6 | 51.9 | 38.1 |
| 82.5° | 8.1 | 13.7 | 45.3 | 52.9 | 61.1 | 54.4 | 32.1 | 57.5 | 59.6 | 20.9 | 13.2 |
| 85° | 0.5 | 1.0 | 15.8 | 19.4 | 24.4 | 17.8 | 9.6 | 22.9 | 19.9 | 7.1 | 5.1 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 2.6 | 3.1 | 4.1 | 3.1 | 2.6 | 2.0 |
| 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° | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 | 1988.4 |
| 2.5° | 1956.3 | 1884.1 | 1813.8 | 1756.3 | 1722.7 | 1665.7 | 1628.1 | 1622.1 | 1606.3 | 1620.0 |
| 5° | 1918.6 | 1789.4 | 1658.7 | 1541.6 | 1445.5 | 1321.3 | 1228.8 | 1189.5 | 1155.5 | 1167.2 |
| 7.5° | 1900.9 | 1696.8 | 1493.3 | 1293.3 | 1087.8 | 889.4 | 741.8 | 680.3 | 633.4 | 640.0 |
| 10° | 1876.9 | 1600.6 | 1281.7 | 976.4 | 701.1 | 505.2 | 403.4 | 365.8 | 344.9 | 345.4 |
| 12.5° | 1858.6 | 1485.6 | 1035.9 | 661.9 | 426.9 | 322.6 | 291.0 | 281.9 | 275.7 | 276.2 |
| 15° | 1849.4 | 1350.3 | 793.2 | 441.2 | 305.2 | 273.3 | 265.6 | 261.5 | 257.5 | 257.0 |
| 17.5° | 1834.1 | 1199.8 | 580.6 | 322.1 | 267.1 | 255.9 | 249.3 | 244.8 | 239.6 | 238.6 |
| 20° | 1811.3 | 1028.8 | 424.4 | 272.2 | 250.3 | 241.7 | 232.5 | 226.4 | 220.3 | 219.2 |
| 22.5° | 1769.0 | 848.2 | 326.2 | 251.8 | 238.1 | 228.5 | 217.3 | 210.1 | 204.0 | 203.1 |
| 25° | 1690.7 | 678.8 | 274.7 | 239.1 | 227.4 | 215.8 | 203.6 | 193.8 | 188.3 | 187.3 |
| 27.5° | 1591.5 | 533.2 | 249.3 | 227.4 | 213.7 | 203.1 | 189.3 | 180.1 | 175.1 | 174.0 |
| 30° | 1474.5 | 410.6 | 234.5 | 214.2 | 197.4 | 188.3 | 176.0 | 168.4 | 165.3 | 165.3 |
| 32.5° | 1348.3 | 328.2 | 228.5 | 201.0 | 183.2 | 173.0 | 163.3 | 160.3 | 159.3 | 158.8 |
| 35° | 1229.7 | 285.0 | 225.4 | 190.2 | 170.5 | 160.8 | 156.7 | 157.2 | 159.3 | 159.3 |
| 37.5° | 1124.4 | 271.2 | 223.9 | 182.7 | 159.3 | 150.6 | 153.1 | 157.7 | 155.7 | 155.7 |
| 40° | 1029.3 | 272.8 | 222.8 | 177.0 | 150.1 | 145.0 | 150.1 | 146.6 | 141.4 | 140.9 |
| 42.5° | 956.5 | 285.5 | 220.8 | 172.5 | 144.5 | 140.9 | 138.9 | 133.4 | 132.8 | 133.8 |
| 45° | 903.6 | 296.6 | 220.3 | 170.5 | 138.4 | 131.8 | 129.3 | 123.6 | 133.8 | 136.3 |
| 47.5° | 841.0 | 296.6 | 220.3 | 163.3 | 128.2 | 125.7 | 121.6 | 115.5 | 125.7 | 128.2 |
| 50° | 760.1 | 277.8 | 211.7 | 155.2 | 120.0 | 118.6 | 111.4 | 103.8 | 101.8 | 103.3 |
| 52.5° | 657.8 | 243.7 | 189.7 | 144.0 | 111.9 | 108.9 | 100.2 | 94.6 | 93.1 | 93.1 |
| 55° | 541.3 | 204.0 | 160.3 | 127.7 | 103.3 | 97.7 | 91.5 | 89.1 | 87.5 | 86.5 |
| 57.5° | 440.1 | 167.4 | 128.7 | 113.5 | 95.1 | 88.0 | 86.0 | 82.9 | 80.4 | 78.8 |
| 60° | 361.2 | 131.8 | 106.3 | 100.8 | 87.0 | 80.4 | 79.8 | 75.8 | 69.2 | 68.2 |
| 62.5° | 278.8 | 96.7 | 89.6 | 87.5 | 78.8 | 73.3 | 72.3 | 64.1 | 53.9 | 51.9 |
| 65° | 196.9 | 75.3 | 72.3 | 76.9 | 70.2 | 65.1 | 62.6 | 50.3 | 39.7 | 38.1 |
| 67.5° | 138.4 | 63.1 | 57.0 | 67.1 | 61.1 | 54.4 | 52.9 | 42.7 | 33.1 | 32.1 |
| 70° | 98.7 | 51.4 | 46.8 | 57.5 | 48.9 | 47.9 | 44.8 | 35.6 | 27.0 | 25.9 |
| 72.5° | 69.7 | 39.2 | 36.1 | 49.8 | 33.6 | 41.2 | 36.6 | 27.5 | 20.4 | 19.4 |
| 75° | 51.4 | 28.0 | 25.4 | 29.0 | 24.4 | 31.1 | 25.9 | 18.3 | 12.7 | 12.2 |
| 77.5° | 37.6 | 17.8 | 15.3 | 14.2 | 14.2 | 19.4 | 14.2 | 7.6 | 5.6 | 5.1 |
| 80° | 26.4 | 8.1 | 7.1 | 6.1 | 5.6 | 4.6 | 2.0 | 1.0 | 0.5 | 0.5 |
| 82.5° | 15.8 | 3.6 | 3.6 | 2.6 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 3.6 | 1.5 | 1.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.5 | 0.5 | 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 |

(END OF REPORT)