

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: P965639

Luminaire Tested: **NVN-SB4A-740-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965639
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-SB4A-740-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19827.6 lumens
Efficiency: N/A
Efficacy: 173.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

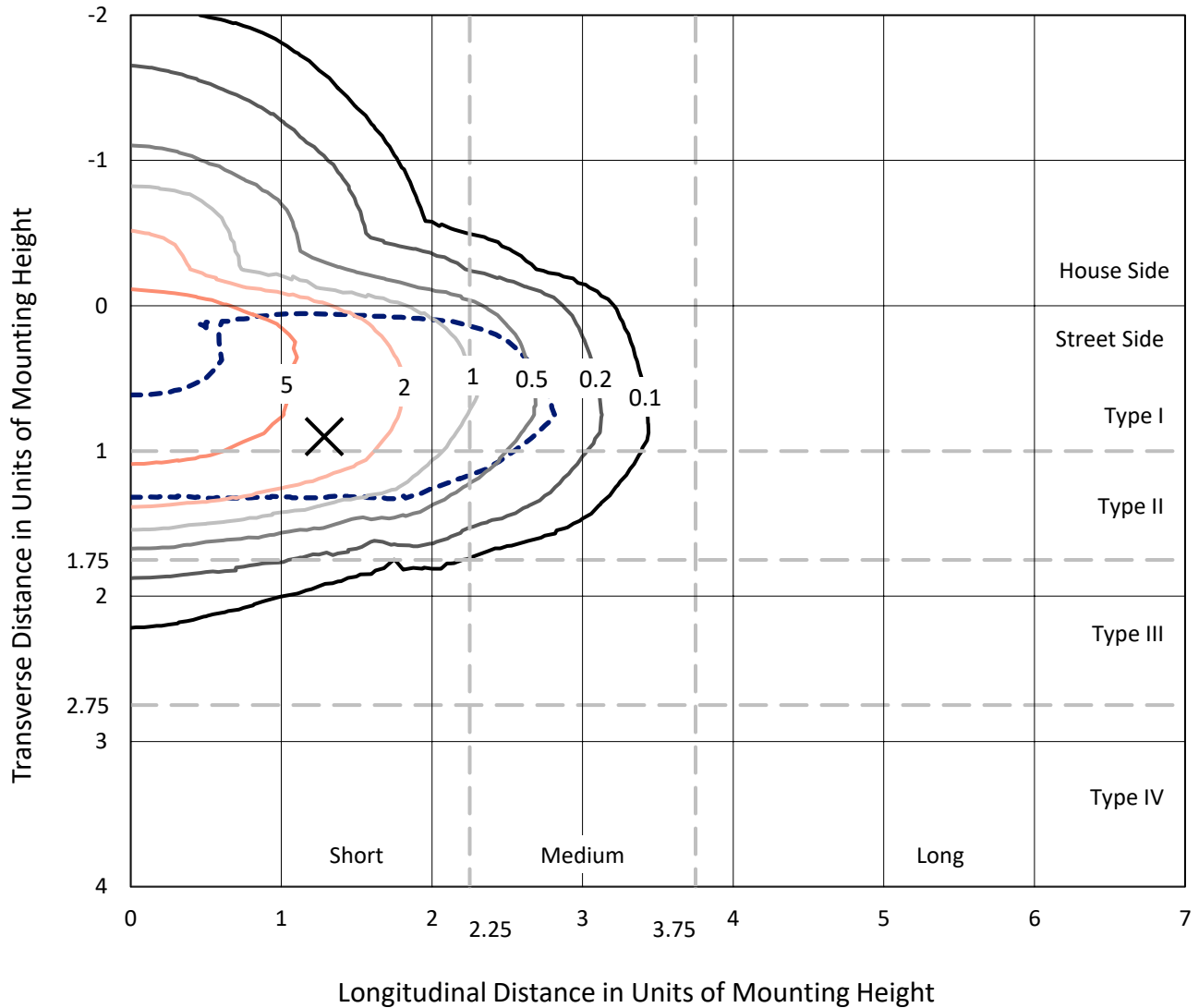
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

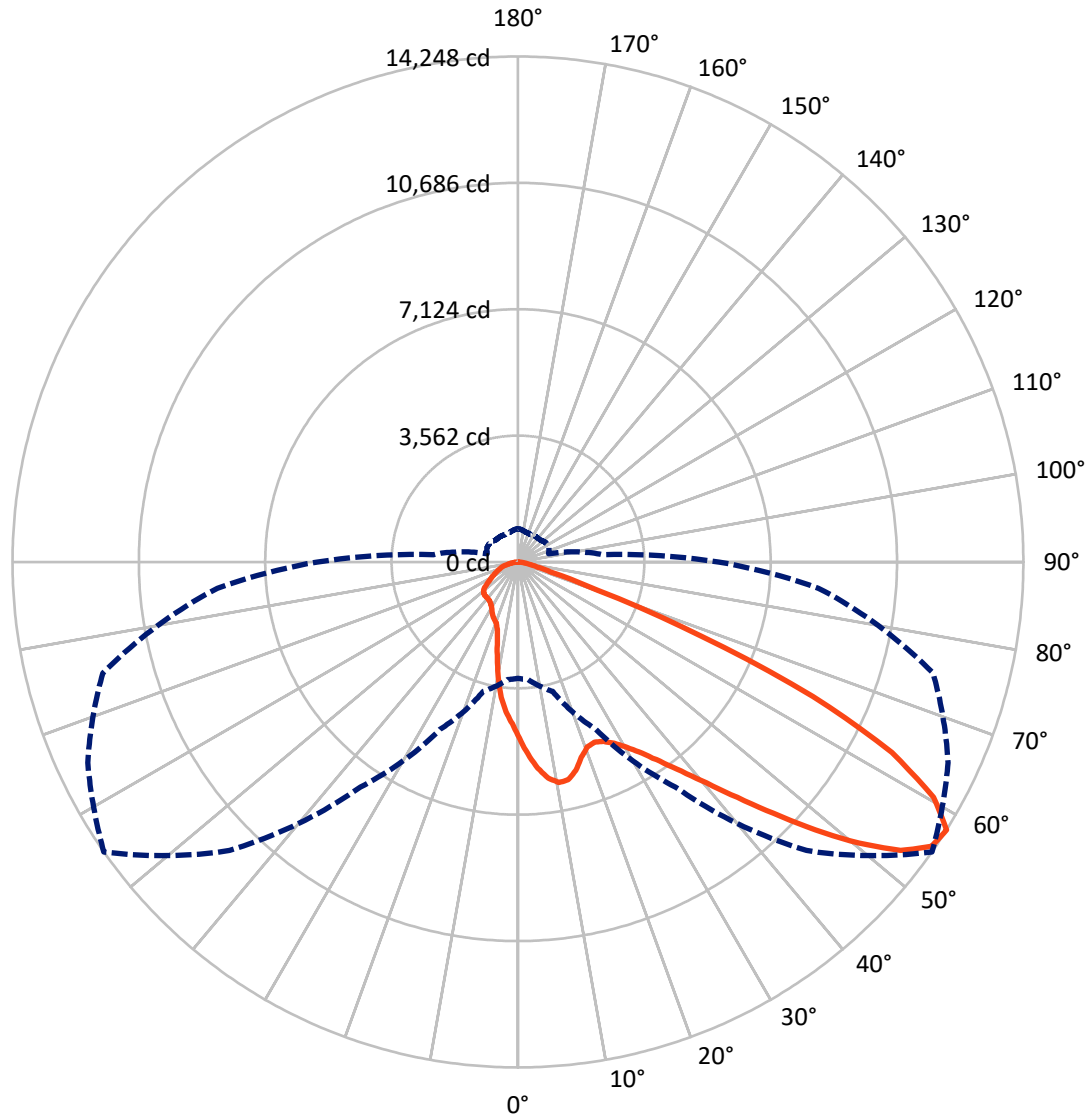
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 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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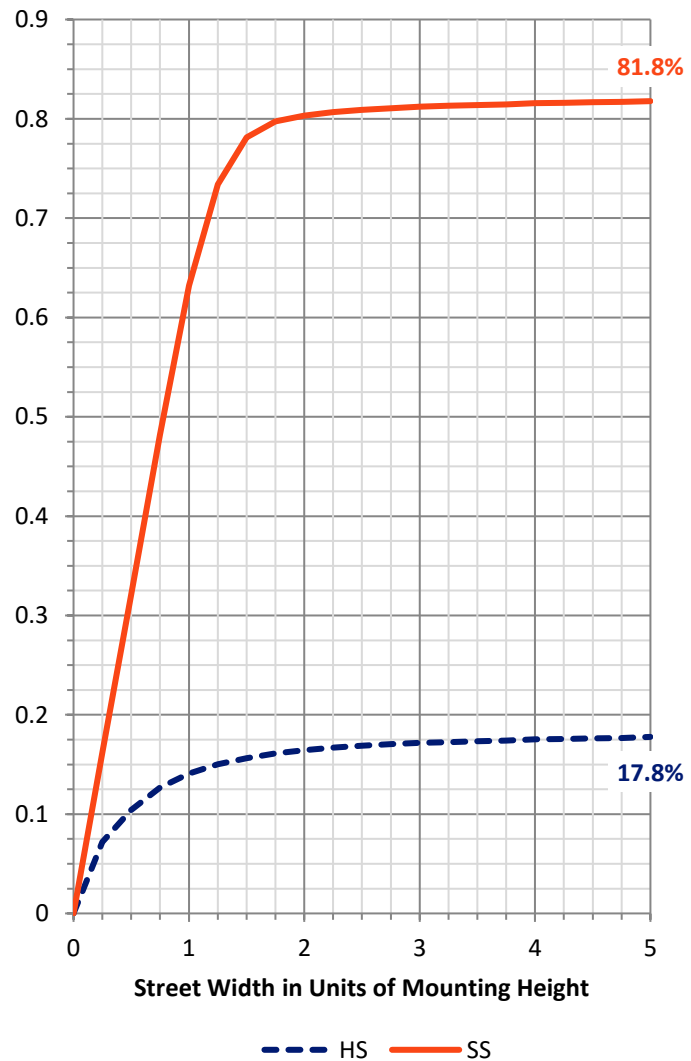
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3587.7 | 0.0 | 3587.7 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 16239.9 | 0.0 | 16239.9 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 19827.6 | 0.0 | 19827.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 461.0 | 2.3 |
| 10°-20° | 1163.6 | 5.9 |
| 20°-30° | 1856.8 | 9.4 |
| 30°-40° | 2939.8 | 14.8 |
| 40°-50° | 4499.7 | 22.7 |
| 50°-60° | 4819.5 | 24.3 |
| 60°-70° | 3032.0 | 15.3 |
| 70°-80° | 896.6 | 4.5 |
| 80°-90° | 158.5 | 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° | 19827.6 | 100.0 |
| 0°-180° | 19827.6 | 100.0 |

Coefficient of Utilization



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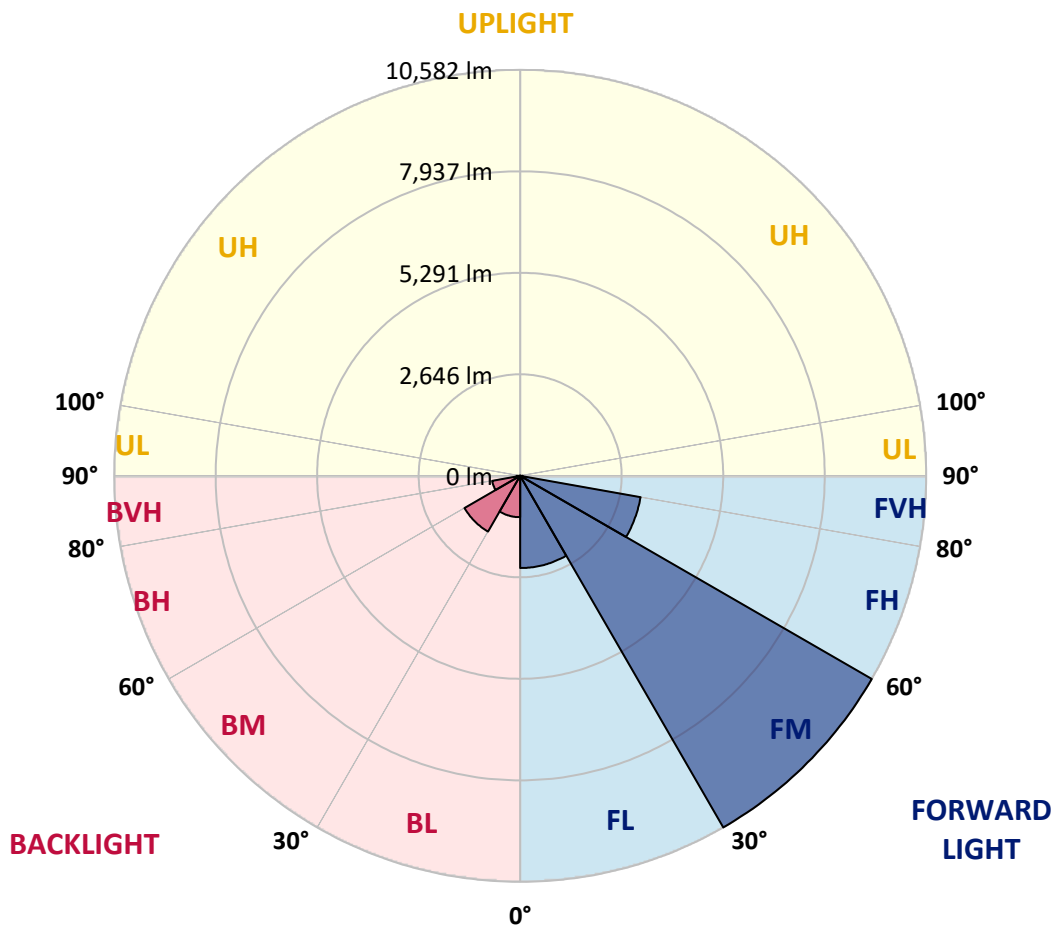
CATALOG NUMBER: NVN-SB4A-740-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2403.1 | 12.1 | | | |
| FM (30°-60°) | 10582.1 | 53.4 | | | |
| FH (60°-80°) | 3187.7 | 16.1 | | | G2/5000 |
| FVH (80°-90°) | 67.0 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1078.3 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 1676.9 | 8.5 | B2/2500 | | |
| BH (60°-80°) | 740.9 | 3.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 91.5 | 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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0° | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 |
| 2.5° | 5700.0 | 5695.9 | 5718.5 | 5641.6 | 5589.3 | 5518.6 | 5425.3 | 5306.4 | 5178.3 | 5043.0 | 4984.6 |
| 5° | 6213.5 | 6177.7 | 6201.2 | 6143.8 | 6086.4 | 5979.8 | 5841.5 | 5647.7 | 5411.0 | 5141.4 | 4997.9 |
| 7.5° | 6132.6 | 6108.0 | 6168.4 | 6219.7 | 6262.7 | 6249.4 | 6148.0 | 5945.0 | 5639.5 | 5248.0 | 5039.9 |
| 10° | 5479.6 | 5452.0 | 5537.0 | 5714.4 | 5974.7 | 6201.2 | 6324.2 | 6198.2 | 5873.2 | 5364.8 | 5080.9 |
| 12.5° | 4903.6 | 4890.3 | 4946.6 | 5090.2 | 5379.2 | 5813.8 | 6301.7 | 6419.6 | 6116.2 | 5503.2 | 5136.3 |
| 15° | 4657.6 | 4641.2 | 4677.1 | 4749.8 | 4934.3 | 5339.2 | 6096.7 | 6571.3 | 6355.0 | 5663.1 | 5224.4 |
| 17.5° | 4603.3 | 4584.8 | 4600.2 | 4638.1 | 4757.0 | 5065.5 | 5787.2 | 6646.1 | 6604.1 | 5841.5 | 5298.2 |
| 20° | 4703.7 | 4688.3 | 4690.4 | 4688.3 | 4771.4 | 5016.3 | 5571.9 | 6617.4 | 6821.4 | 6005.5 | 5370.0 |
| 22.5° | 4946.6 | 4921.0 | 4922.0 | 4867.7 | 4912.8 | 5102.4 | 5515.5 | 6540.5 | 7015.1 | 6149.0 | 5424.3 |
| 25° | 5342.3 | 5296.2 | 5305.4 | 5167.0 | 5154.7 | 5295.2 | 5603.7 | 6481.1 | 7207.8 | 6263.8 | 5434.5 |
| 27.5° | 5883.5 | 5831.2 | 5803.5 | 5597.5 | 5499.1 | 5568.8 | 5783.0 | 6501.6 | 7390.2 | 6363.2 | 5408.9 |
| 30° | 6560.0 | 6496.4 | 6440.1 | 6148.0 | 5969.6 | 5944.0 | 6061.8 | 6636.9 | 7605.5 | 6467.7 | 5364.8 |
| 32.5° | 7389.2 | 7315.4 | 7212.9 | 6825.5 | 6574.4 | 6440.1 | 6422.6 | 6877.7 | 7857.6 | 6601.0 | 5342.3 |
| 35° | 8376.3 | 8279.9 | 8134.4 | 7633.2 | 7315.4 | 7040.7 | 6898.2 | 7225.2 | 8203.1 | 6801.9 | 5367.9 |
| 37.5° | 9393.1 | 9284.4 | 9151.2 | 8554.6 | 8164.1 | 7759.2 | 7478.4 | 7696.7 | 8663.3 | 7074.6 | 5435.6 |
| 40° | 10331.0 | 10209.0 | 10085.0 | 9554.0 | 9134.8 | 8646.9 | 8188.7 | 8293.3 | 9226.0 | 7400.5 | 5550.4 |
| 42.5° | 10884.5 | 10794.3 | 10747.1 | 10460.1 | 10136.2 | 9641.2 | 9072.3 | 9000.5 | 9858.4 | 7775.6 | 5681.6 |
| 45° | 10859.9 | 10823.0 | 10968.5 | 11087.4 | 11010.6 | 10735.8 | 10107.5 | 9782.6 | 10492.9 | 8100.6 | 5802.5 |
| 47.5° | 10279.7 | 10304.3 | 10629.2 | 11297.6 | 11591.6 | 11735.1 | 11286.3 | 10550.3 | 11044.4 | 8343.5 | 5856.8 |
| 50° | 8701.2 | 8721.7 | 9474.1 | 10915.2 | 11741.3 | 12550.0 | 12455.7 | 11299.6 | 11471.8 | 8492.1 | 5844.5 |
| 52.5° | 7451.7 | 7465.1 | 7787.9 | 9781.6 | 11247.3 | 12960.0 | 13509.4 | 12005.7 | 11784.3 | 8533.1 | 5775.9 |
| 55° | 5612.9 | 5659.0 | 6020.8 | 7674.2 | 9962.0 | 12635.1 | 14151.0 | 12733.5 | 11982.1 | 8537.2 | 5704.1 |
| 57.5° | 3279.0 | 3329.2 | 3776.1 | 5209.0 | 7742.8 | 11502.6 | 14248.4 | 13379.2 | 12116.4 | 8504.4 | 5661.1 |
| 60° | 1606.2 | 1627.7 | 1822.4 | 2737.8 | 4774.4 | 9320.3 | 13465.3 | 13691.8 | 12191.2 | 8487.0 | 5659.0 |
| 62.5° | 1082.4 | 1079.3 | 1087.5 | 1350.9 | 2352.4 | 5988.0 | 11833.5 | 13144.5 | 12151.3 | 8420.4 | 5638.5 |
| 65° | 930.7 | 919.4 | 888.7 | 948.1 | 1218.7 | 2738.8 | 9143.0 | 11510.7 | 11846.8 | 8253.3 | 5498.1 |
| 67.5° | 804.6 | 805.6 | 806.7 | 788.2 | 870.2 | 1263.8 | 5587.3 | 9067.2 | 10754.3 | 7462.0 | 4956.9 |
| 70° | 666.2 | 675.5 | 679.6 | 679.6 | 709.3 | 829.2 | 2385.2 | 6214.6 | 8482.9 | 5850.7 | 3992.4 |
| 72.5° | 606.8 | 587.3 | 589.4 | 579.1 | 579.1 | 631.4 | 960.4 | 3522.9 | 5344.3 | 3291.3 | 2436.4 |
| 75° | 495.1 | 507.4 | 509.4 | 502.2 | 478.7 | 481.7 | 569.9 | 1478.0 | 2286.8 | 1365.3 | 1204.4 |
| 77.5° | 427.4 | 427.4 | 431.5 | 426.4 | 408.0 | 360.8 | 380.3 | 573.0 | 778.0 | 559.6 | 601.7 |
| 80° | 343.4 | 342.3 | 359.8 | 370.0 | 341.3 | 266.5 | 242.9 | 316.7 | 345.4 | 246.0 | 312.6 |
| 82.5° | 167.1 | 177.3 | 247.0 | 281.9 | 259.3 | 192.7 | 148.6 | 196.8 | 184.5 | 108.6 | 140.4 |
| 85° | 97.4 | 92.2 | 110.7 | 156.8 | 148.6 | 106.6 | 71.8 | 102.5 | 96.4 | 55.4 | 56.4 |
| 87.5° | 30.7 | 28.7 | 22.5 | 53.3 | 43.0 | 29.7 | 19.5 | 29.7 | 26.6 | 12.3 | 12.3 |
| 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° | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 | 4968.2 |
| 2.5° | 4911.8 | 4790.8 | 4670.9 | 4561.2 | 4494.6 | 4451.6 | 4408.5 | 4360.3 | 4341.9 | 4314.2 |
| 5° | 4862.6 | 4628.9 | 4420.8 | 4241.4 | 4078.5 | 3950.3 | 3821.2 | 3716.6 | 3669.5 | 3701.3 |
| 7.5° | 4833.9 | 4495.6 | 4174.8 | 3845.8 | 3529.1 | 3275.9 | 3055.5 | 2900.7 | 2831.0 | 2848.5 |
| 10° | 4808.3 | 4345.0 | 3856.0 | 3336.4 | 2881.3 | 2567.6 | 2342.1 | 2224.2 | 2180.2 | 2189.4 |
| 12.5° | 4784.7 | 4175.8 | 3471.7 | 2788.0 | 2304.2 | 2097.1 | 2032.6 | 2033.6 | 2041.8 | 2048.0 |
| 15° | 4780.6 | 3971.9 | 3042.2 | 2308.3 | 1992.6 | 1979.3 | 2049.0 | 2093.0 | 2116.6 | 2123.8 |
| 17.5° | 4774.4 | 3727.9 | 2604.5 | 1981.3 | 1916.7 | 2007.0 | 2071.5 | 2100.2 | 2118.7 | 2119.7 |
| 20° | 4749.8 | 3418.4 | 2200.7 | 1825.5 | 1900.4 | 1978.2 | 2018.2 | 2040.8 | 2056.1 | 2061.3 |
| 22.5° | 4674.0 | 3074.0 | 1886.0 | 1755.8 | 1834.7 | 1897.3 | 1944.4 | 1970.0 | 1979.3 | 1985.4 |
| 25° | 4537.7 | 2688.6 | 1668.7 | 1689.2 | 1743.5 | 1822.4 | 1860.4 | 1865.5 | 1862.4 | 1871.6 |
| 27.5° | 4359.3 | 2275.5 | 1533.4 | 1599.0 | 1668.7 | 1736.4 | 1756.8 | 1753.8 | 1747.6 | 1757.9 |
| 30° | 4144.1 | 1904.4 | 1447.3 | 1497.5 | 1592.8 | 1654.4 | 1672.8 | 1665.6 | 1653.3 | 1664.6 |
| 32.5° | 3916.5 | 1601.0 | 1376.6 | 1426.8 | 1530.3 | 1590.8 | 1609.2 | 1602.1 | 1592.8 | 1602.1 |
| 35° | 3704.3 | 1388.9 | 1311.0 | 1379.6 | 1481.1 | 1540.6 | 1564.1 | 1565.2 | 1565.2 | 1576.4 |
| 37.5° | 3509.6 | 1264.8 | 1256.6 | 1349.9 | 1447.3 | 1500.6 | 1534.4 | 1536.5 | 1492.4 | 1495.5 |
| 40° | 3329.2 | 1212.6 | 1232.0 | 1330.4 | 1414.5 | 1465.7 | 1467.8 | 1353.0 | 1272.0 | 1270.0 |
| 42.5° | 3181.6 | 1202.3 | 1239.2 | 1328.4 | 1390.9 | 1393.0 | 1248.4 | 1159.3 | 1136.7 | 1137.8 |
| 45° | 3043.2 | 1199.2 | 1255.6 | 1328.4 | 1356.1 | 1203.4 | 1106.0 | 1082.4 | 1084.4 | 1092.6 |
| 47.5° | 2888.4 | 1186.9 | 1258.7 | 1309.9 | 1255.6 | 1070.1 | 1041.4 | 1031.1 | 1027.0 | 1029.1 |
| 50° | 2719.3 | 1142.9 | 1219.8 | 1273.0 | 1083.4 | 1012.7 | 976.8 | 973.7 | 978.9 | 982.0 |
| 52.5° | 2541.0 | 1071.1 | 1153.1 | 1206.4 | 1004.5 | 962.5 | 922.5 | 929.7 | 952.2 | 959.4 |
| 55° | 2424.1 | 987.1 | 1065.0 | 1073.2 | 949.1 | 915.3 | 881.5 | 897.9 | 939.9 | 953.2 |
| 57.5° | 2393.4 | 897.9 | 964.5 | 955.3 | 878.4 | 874.3 | 853.8 | 868.2 | 921.5 | 941.0 |
| 60° | 2384.1 | 817.9 | 866.1 | 859.0 | 809.7 | 829.2 | 824.1 | 831.3 | 849.7 | 855.9 |
| 62.5° | 2312.4 | 754.4 | 778.0 | 767.7 | 748.2 | 782.1 | 794.4 | 779.0 | 793.3 | 800.5 |
| 65° | 2130.0 | 703.2 | 691.9 | 684.7 | 692.9 | 723.6 | 748.2 | 717.5 | 730.8 | 751.3 |
| 67.5° | 1828.6 | 633.4 | 602.7 | 610.9 | 636.5 | 652.9 | 684.7 | 649.8 | 661.1 | 696.0 |
| 70° | 1479.1 | 545.3 | 517.6 | 541.2 | 565.8 | 599.6 | 604.8 | 581.2 | 607.8 | 646.8 |
| 72.5° | 1046.5 | 456.1 | 436.6 | 484.8 | 493.0 | 537.1 | 525.8 | 514.6 | 551.4 | 564.8 |
| 75° | 725.7 | 368.0 | 356.7 | 393.6 | 423.3 | 461.2 | 453.0 | 466.4 | 544.3 | 550.4 |
| 77.5° | 459.2 | 286.0 | 278.8 | 302.4 | 343.4 | 385.4 | 398.7 | 550.4 | 929.7 | 966.6 |
| 80° | 266.5 | 213.2 | 205.0 | 223.4 | 259.3 | 298.3 | 384.4 | 675.5 | 612.9 | 605.8 |
| 82.5° | 148.6 | 146.6 | 136.3 | 141.4 | 173.2 | 215.2 | 543.2 | 475.6 | 386.4 | 398.7 |
| 85° | 69.7 | 86.1 | 73.8 | 70.7 | 97.4 | 252.2 | 362.8 | 271.6 | 180.4 | 176.3 |
| 87.5° | 18.4 | 16.4 | 16.4 | 18.4 | 41.0 | 217.3 | 144.5 | 115.8 | 68.7 | 66.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)