

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: P961439

Luminaire Tested: **NVN-SB2A-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961439
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-SB2A-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 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: 7434.3 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

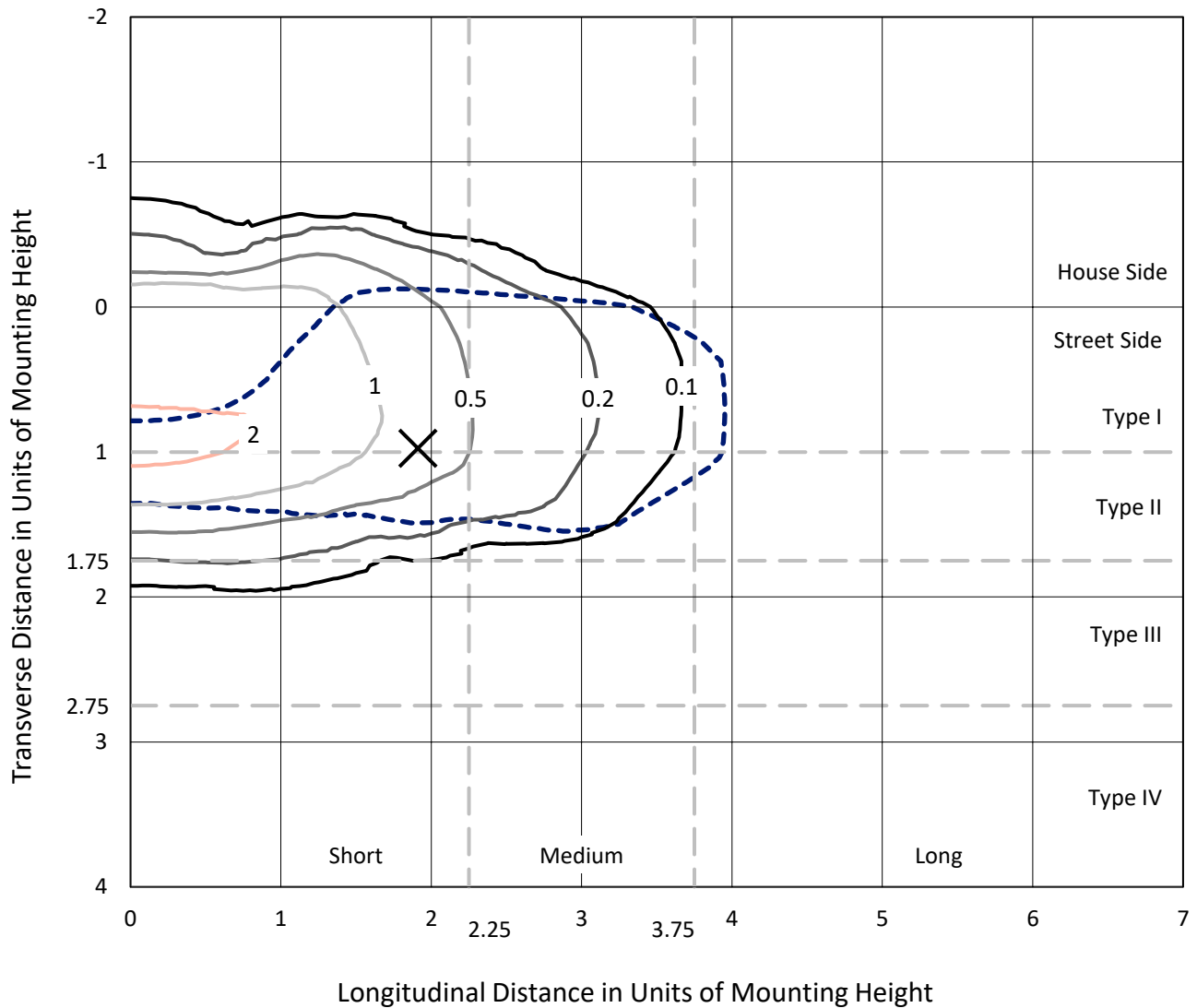
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

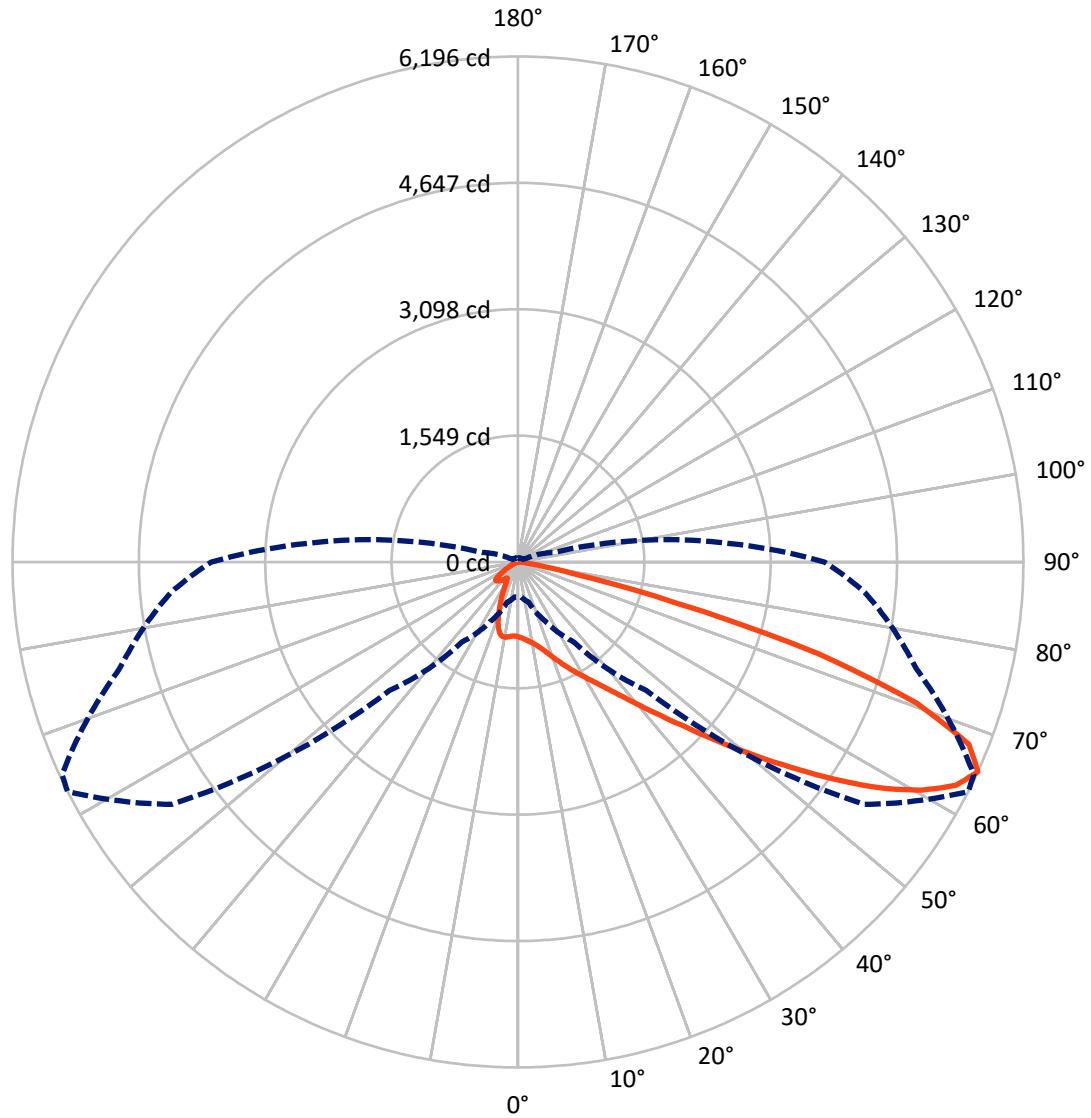
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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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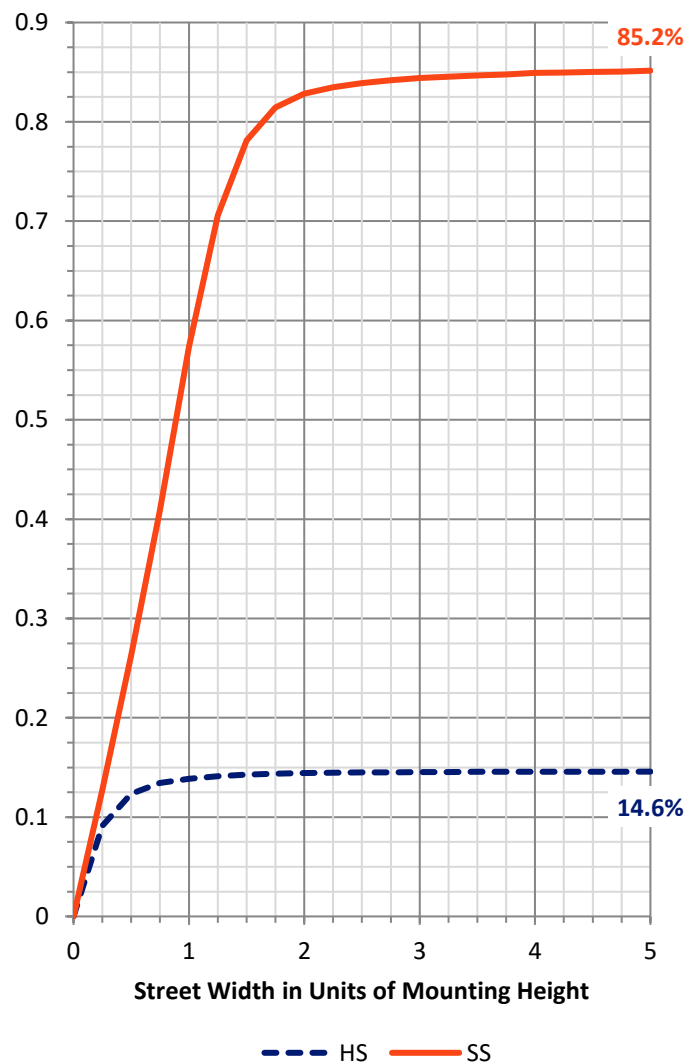
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1092.8 | 0.0 | 1092.8 |
| | % Fixture | 14.7 | 0.0 | 14.7 |
| Street Side | Lumens | 6341.5 | 0.0 | 6341.5 |
| | % Fixture | 85.3 | 0.0 | 85.3 |
| Total | Lumens | 7434.3 | 0.0 | 7434.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.4 | 1.2 |
| 10°-20° | 239.9 | 3.2 |
| 20°-30° | 417.7 | 5.6 |
| 30°-40° | 752.8 | 10.1 |
| 40°-50° | 1493.0 | 20.1 |
| 50°-60° | 2033.8 | 27.4 |
| 60°-70° | 1623.3 | 21.8 |
| 70°-80° | 734.6 | 9.9 |
| 80°-90° | 52.8 | 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° | 7434.3 | 100.0 |
| 0°-180° | 7434.3 | 100.0 |

Coefficient of Utilization



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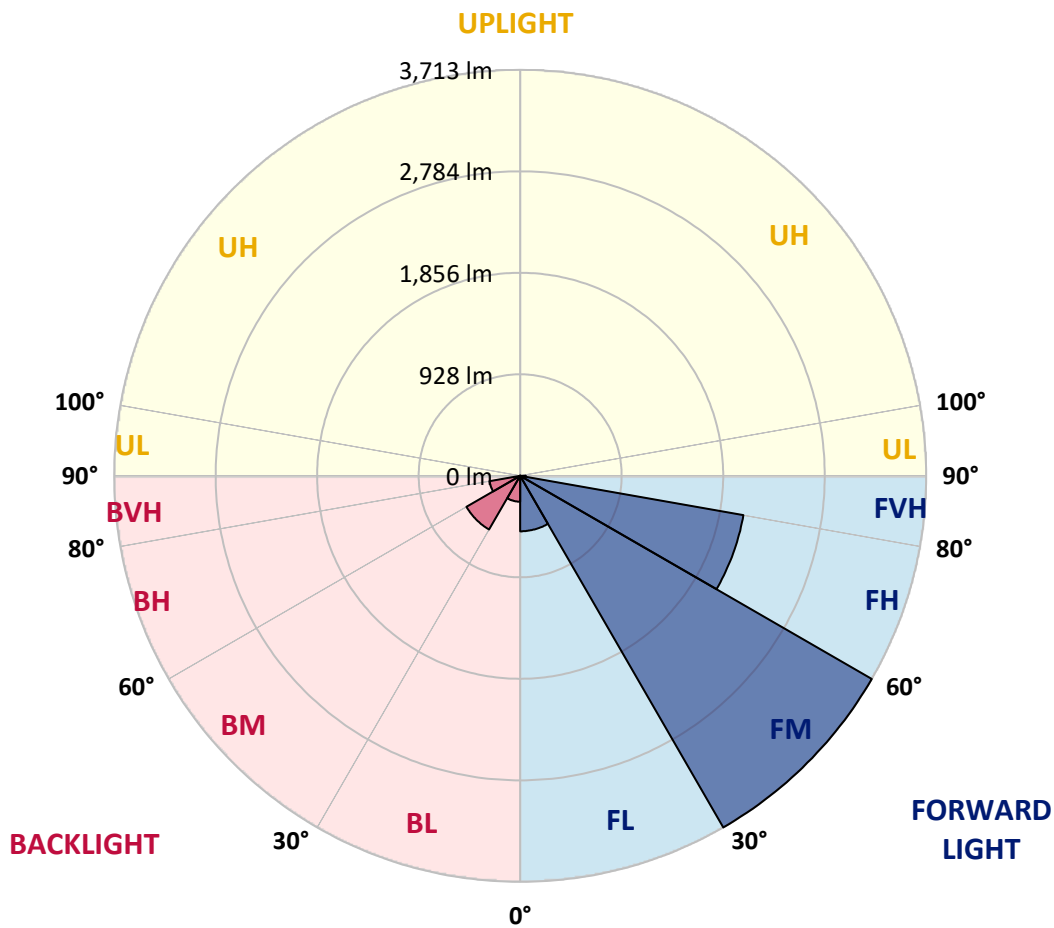
CATALOG NUMBER: NVN-SB2A-740-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 507.5 | 6.8 | | | |
| FM (30°-60°) | 3712.5 | 49.9 | | | |
| FH (60°-80°) | 2072.7 | 27.9 | | | G2/5000 |
| FVH (80°-90°) | 48.9 | 0.7 | | | G1/100 |
| BL (0°-30°) | 236.5 | 3.2 | B1/500 | | |
| BM (30°-60°) | 567.1 | 7.6 | B1/1000 | | |
| BH (60°-80°) | 285.3 | 3.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.9 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 |
| 2.5° | 939.0 | 936.4 | 940.0 | 938.5 | 937.5 | 935.4 | 934.4 | 933.4 | 931.3 | 929.8 | 923.6 |
| 5° | 941.6 | 940.0 | 943.6 | 946.7 | 949.8 | 952.8 | 954.4 | 956.4 | 954.4 | 950.3 | 944.1 |
| 7.5° | 920.1 | 919.1 | 926.7 | 935.9 | 949.8 | 961.6 | 974.3 | 981.4 | 982.0 | 980.4 | 973.7 |
| 10° | 918.6 | 916.0 | 923.6 | 934.9 | 952.8 | 973.7 | 996.3 | 1011.7 | 1013.7 | 1020.4 | 1013.2 |
| 12.5° | 942.6 | 940.0 | 950.8 | 963.1 | 981.4 | 1003.5 | 1031.0 | 1052.6 | 1055.6 | 1064.9 | 1059.7 |
| 15° | 983.0 | 979.4 | 991.7 | 1007.6 | 1031.0 | 1056.2 | 1085.3 | 1104.7 | 1107.3 | 1118.6 | 1109.4 |
| 17.5° | 1030.0 | 1026.4 | 1040.8 | 1057.7 | 1083.2 | 1117.6 | 1151.3 | 1172.7 | 1175.8 | 1183.0 | 1166.1 |
| 20° | 1090.4 | 1085.8 | 1097.1 | 1112.4 | 1139.5 | 1180.4 | 1220.8 | 1251.5 | 1251.0 | 1251.0 | 1223.3 |
| 22.5° | 1160.5 | 1153.3 | 1163.1 | 1175.3 | 1200.9 | 1250.5 | 1304.2 | 1340.5 | 1340.5 | 1326.1 | 1280.6 |
| 25° | 1235.6 | 1228.5 | 1239.2 | 1250.5 | 1272.9 | 1329.2 | 1392.2 | 1437.2 | 1439.2 | 1414.7 | 1342.0 |
| 27.5° | 1329.7 | 1320.5 | 1328.7 | 1342.0 | 1355.4 | 1412.7 | 1487.3 | 1539.4 | 1540.5 | 1502.6 | 1400.4 |
| 30° | 1510.8 | 1484.7 | 1459.2 | 1444.8 | 1451.0 | 1507.8 | 1587.5 | 1645.3 | 1650.5 | 1598.3 | 1463.8 |
| 32.5° | 1842.2 | 1837.1 | 1747.1 | 1629.4 | 1568.1 | 1610.1 | 1699.6 | 1769.0 | 1772.1 | 1705.2 | 1546.1 |
| 35° | 2357.3 | 2351.1 | 2206.4 | 1982.4 | 1782.4 | 1747.1 | 1835.6 | 1917.9 | 1915.9 | 1840.2 | 1653.0 |
| 37.5° | 2972.0 | 2966.4 | 2775.6 | 2475.9 | 2152.2 | 1954.3 | 2011.0 | 2097.5 | 2110.3 | 2011.0 | 1791.1 |
| 40° | 3497.3 | 3476.3 | 3355.6 | 3066.6 | 2643.2 | 2297.9 | 2260.6 | 2317.8 | 2331.2 | 2213.6 | 1966.6 |
| 42.5° | 3895.2 | 3877.3 | 3815.9 | 3635.4 | 3237.5 | 2806.3 | 2554.7 | 2576.6 | 2591.5 | 2450.4 | 2168.0 |
| 45° | 4101.3 | 4097.2 | 4121.7 | 4104.9 | 3843.0 | 3430.3 | 2975.1 | 2883.5 | 2889.2 | 2712.8 | 2396.7 |
| 47.5° | 4130.4 | 4128.4 | 4240.4 | 4399.0 | 4363.6 | 4134.0 | 3514.6 | 3266.1 | 3246.2 | 3008.9 | 2645.2 |
| 50° | 3958.6 | 3954.6 | 4169.3 | 4466.4 | 4711.4 | 4725.2 | 4127.4 | 3697.3 | 3653.3 | 3315.2 | 2904.5 |
| 52.5° | 3409.9 | 3408.8 | 3761.6 | 4256.3 | 4833.7 | 5242.9 | 4732.9 | 4170.8 | 4097.2 | 3639.5 | 3178.6 |
| 55° | 2623.7 | 2642.7 | 3047.2 | 3631.8 | 4610.7 | 5492.0 | 5276.6 | 4696.7 | 4583.6 | 3965.7 | 3431.3 |
| 57.5° | 1858.6 | 1886.2 | 2286.2 | 2806.9 | 3919.2 | 5344.7 | 5644.4 | 5223.4 | 5101.7 | 4291.1 | 3687.5 |
| 60° | 998.4 | 1022.8 | 1423.3 | 2044.8 | 2915.7 | 4795.4 | 5838.2 | 5680.7 | 5565.5 | 4600.0 | 3918.7 |
| 62.5° | 594.8 | 603.0 | 768.7 | 1320.0 | 1972.1 | 3663.5 | 5755.8 | 6028.9 | 5934.3 | 4859.2 | 4119.7 |
| 65° | 427.0 | 428.6 | 512.0 | 806.1 | 1197.3 | 2225.8 | 5178.4 | 6195.7 | 6166.5 | 5054.6 | 4268.5 |
| 67.5° | 359.6 | 358.5 | 393.3 | 535.5 | 815.8 | 1115.0 | 3968.8 | 5959.9 | 6083.7 | 5178.4 | 4353.0 |
| 70° | 308.4 | 310.0 | 350.9 | 392.3 | 613.3 | 631.1 | 1973.1 | 5189.2 | 5453.0 | 5211.1 | 4347.8 |
| 72.5° | 229.6 | 234.7 | 272.6 | 357.5 | 462.9 | 434.2 | 681.2 | 3847.6 | 4324.8 | 4909.9 | 4122.2 |
| 75° | 162.2 | 164.7 | 191.8 | 300.7 | 345.2 | 316.1 | 347.8 | 1989.0 | 2600.7 | 3764.2 | 3374.0 |
| 77.5° | 124.7 | 129.4 | 145.2 | 210.2 | 340.1 | 222.0 | 212.8 | 688.4 | 1057.7 | 2273.9 | 2313.3 |
| 80° | 67.5 | 75.6 | 104.9 | 151.9 | 238.8 | 157.0 | 105.4 | 274.1 | 358.5 | 1063.3 | 892.0 |
| 82.5° | 34.7 | 38.8 | 73.2 | 109.5 | 136.0 | 137.0 | 52.2 | 114.1 | 147.8 | 328.3 | 122.3 |
| 85° | 13.8 | 16.9 | 49.1 | 60.4 | 70.1 | 67.5 | 23.6 | 46.0 | 53.2 | 91.0 | 37.3 |
| 87.5° | 3.1 | 5.1 | 17.9 | 13.8 | 13.3 | 14.3 | 5.6 | 10.8 | 10.2 | 10.8 | 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° | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 | 917.6 |
| 2.5° | 923.1 | 921.2 | 915.5 | 909.4 | 902.2 | 898.1 | 895.5 | 895.0 | 891.4 | 888.9 | 891.4 |
| 5° | 938.5 | 936.4 | 925.7 | 913.0 | 899.1 | 888.4 | 878.1 | 869.0 | 855.7 | 853.1 | 852.1 |
| 7.5° | 969.2 | 963.6 | 946.2 | 928.8 | 902.7 | 871.5 | 833.6 | 790.2 | 751.3 | 739.5 | 733.9 |
| 10° | 1007.1 | 999.4 | 977.3 | 946.7 | 888.9 | 804.0 | 712.5 | 627.5 | 560.1 | 541.1 | 533.9 |
| 12.5° | 1050.0 | 1043.3 | 1014.2 | 957.5 | 831.1 | 677.1 | 537.0 | 431.6 | 366.2 | 349.8 | 345.2 |
| 15° | 1101.2 | 1091.4 | 1051.0 | 941.1 | 727.7 | 514.6 | 368.8 | 306.4 | 282.8 | 279.7 | 276.6 |
| 17.5° | 1155.4 | 1139.5 | 1083.7 | 882.2 | 588.7 | 365.7 | 284.8 | 267.0 | 256.8 | 253.7 | 252.2 |
| 20° | 1205.0 | 1184.5 | 1103.2 | 793.2 | 439.8 | 284.8 | 255.2 | 243.4 | 234.2 | 230.6 | 228.6 |
| 22.5° | 1254.6 | 1225.4 | 1103.2 | 672.1 | 329.8 | 252.7 | 234.2 | 223.6 | 212.8 | 208.2 | 205.6 |
| 25° | 1306.3 | 1267.4 | 1083.7 | 537.0 | 265.5 | 231.6 | 214.3 | 202.5 | 193.3 | 187.7 | 185.6 |
| 27.5° | 1356.4 | 1302.7 | 1039.2 | 409.2 | 236.3 | 213.3 | 195.9 | 184.6 | 175.9 | 171.9 | 171.9 |
| 30° | 1403.9 | 1337.4 | 976.8 | 310.5 | 217.4 | 195.4 | 179.0 | 169.3 | 160.6 | 156.5 | 157.0 |
| 32.5° | 1468.4 | 1381.4 | 910.4 | 254.7 | 201.0 | 178.5 | 163.7 | 154.5 | 146.8 | 143.7 | 143.7 |
| 35° | 1557.9 | 1446.4 | 853.1 | 250.1 | 187.2 | 164.7 | 149.9 | 141.1 | 133.5 | 130.9 | 130.9 |
| 37.5° | 1684.7 | 1551.2 | 822.9 | 280.7 | 175.9 | 152.4 | 138.6 | 129.4 | 122.3 | 120.2 | 119.7 |
| 40° | 1841.2 | 1693.4 | 839.3 | 311.5 | 168.3 | 141.7 | 128.3 | 119.2 | 113.1 | 110.5 | 110.0 |
| 42.5° | 2026.8 | 1868.8 | 929.8 | 335.0 | 163.2 | 132.4 | 118.7 | 108.4 | 104.3 | 103.3 | 103.3 |
| 45° | 2240.1 | 2061.7 | 1068.5 | 360.1 | 155.0 | 123.8 | 109.0 | 101.3 | 98.2 | 97.7 | 97.2 |
| 47.5° | 2482.5 | 2273.3 | 1229.0 | 391.2 | 146.8 | 115.6 | 101.3 | 96.1 | 93.6 | 92.6 | 92.6 |
| 50° | 2722.9 | 2486.6 | 1394.2 | 408.7 | 140.1 | 107.9 | 95.1 | 91.0 | 89.0 | 88.5 | 88.5 |
| 52.5° | 2974.5 | 2706.1 | 1527.7 | 392.3 | 134.5 | 101.8 | 90.0 | 86.9 | 84.9 | 84.4 | 84.4 |
| 55° | 3214.4 | 2883.5 | 1550.7 | 332.9 | 123.3 | 95.6 | 84.4 | 82.8 | 80.3 | 80.3 | 79.7 |
| 57.5° | 3421.0 | 2972.5 | 1388.1 | 244.5 | 112.0 | 86.4 | 78.7 | 77.2 | 75.1 | 74.7 | 74.2 |
| 60° | 3610.8 | 2947.0 | 1071.4 | 164.7 | 99.7 | 77.2 | 71.6 | 70.6 | 68.6 | 66.0 | 65.5 |
| 62.5° | 3717.7 | 2834.4 | 732.9 | 107.4 | 87.4 | 67.5 | 63.4 | 62.9 | 58.3 | 53.2 | 52.2 |
| 65° | 3758.2 | 2603.3 | 457.3 | 78.2 | 73.2 | 57.8 | 54.7 | 53.7 | 47.0 | 41.4 | 40.9 |
| 67.5° | 3722.8 | 2222.7 | 230.6 | 61.9 | 57.8 | 48.1 | 45.0 | 45.0 | 40.4 | 35.3 | 34.7 |
| 70° | 3581.7 | 1666.3 | 97.2 | 49.6 | 44.5 | 36.8 | 36.8 | 38.8 | 34.2 | 28.6 | 28.1 |
| 72.5° | 3275.3 | 1121.0 | 51.7 | 37.8 | 33.2 | 26.0 | 30.1 | 31.7 | 27.1 | 21.5 | 21.5 |
| 75° | 2603.8 | 683.8 | 35.8 | 28.1 | 21.0 | 18.4 | 23.1 | 24.1 | 18.4 | 14.3 | 13.8 |
| 77.5° | 1780.8 | 392.8 | 24.1 | 17.9 | 13.3 | 10.8 | 15.9 | 14.9 | 9.7 | 6.7 | 7.2 |
| 80° | 782.0 | 163.7 | 13.8 | 8.2 | 5.1 | 4.1 | 5.6 | 4.1 | 3.1 | 2.0 | 2.0 |
| 82.5° | 91.5 | 38.3 | 5.1 | 3.1 | 2.0 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 19.0 | 4.6 | 2.6 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.6 | 1.0 | 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 | 0.0 |

(END OF REPORT)