

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: P961077

Luminaire Tested: **NVN-SB1D-835-U-T4W**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P961077  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB1D-835-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 9658.6 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

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

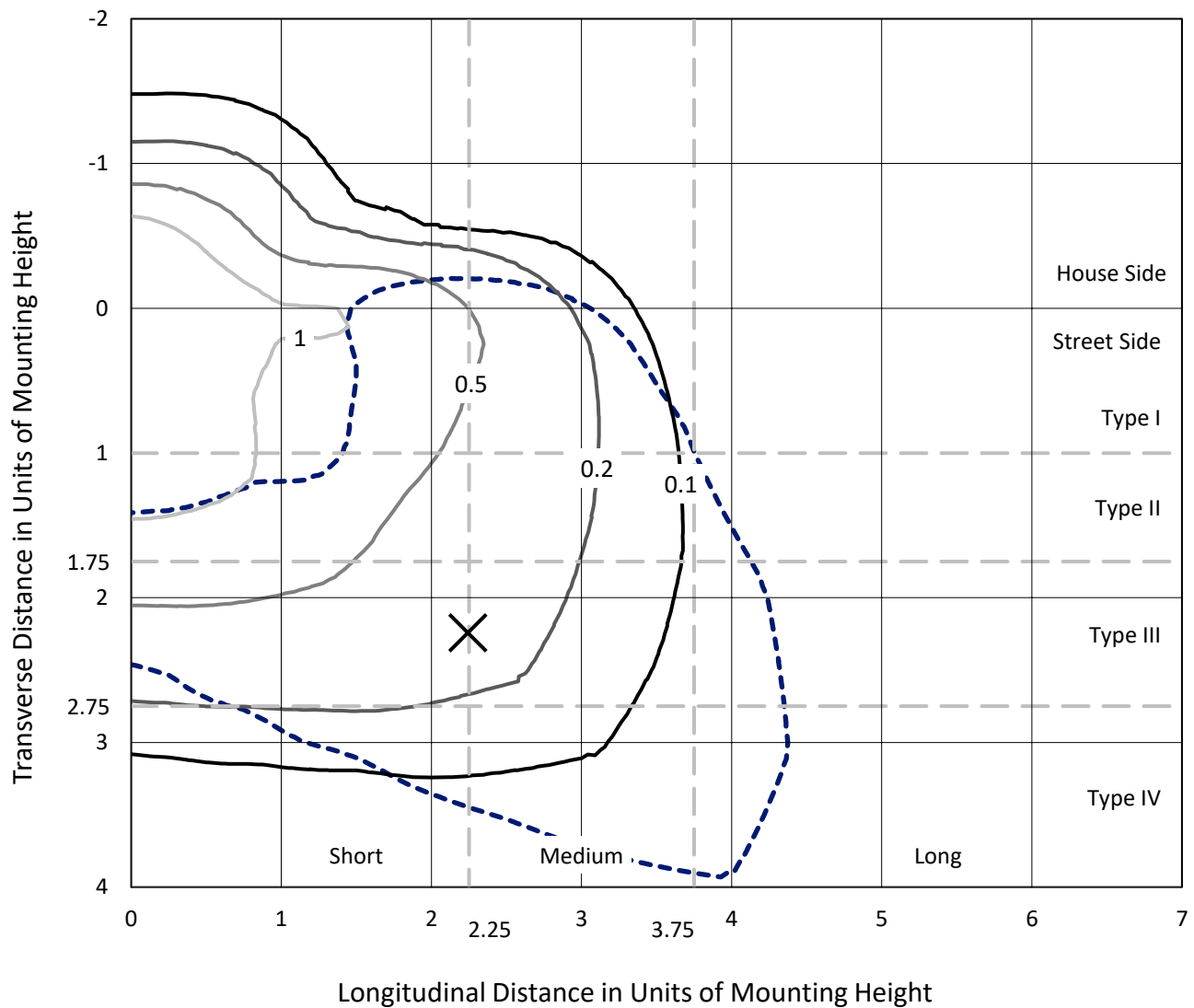


REPORT NUMBER: P961077

CATALOG NUMBER: NVN-SB1D-835-U-T4W

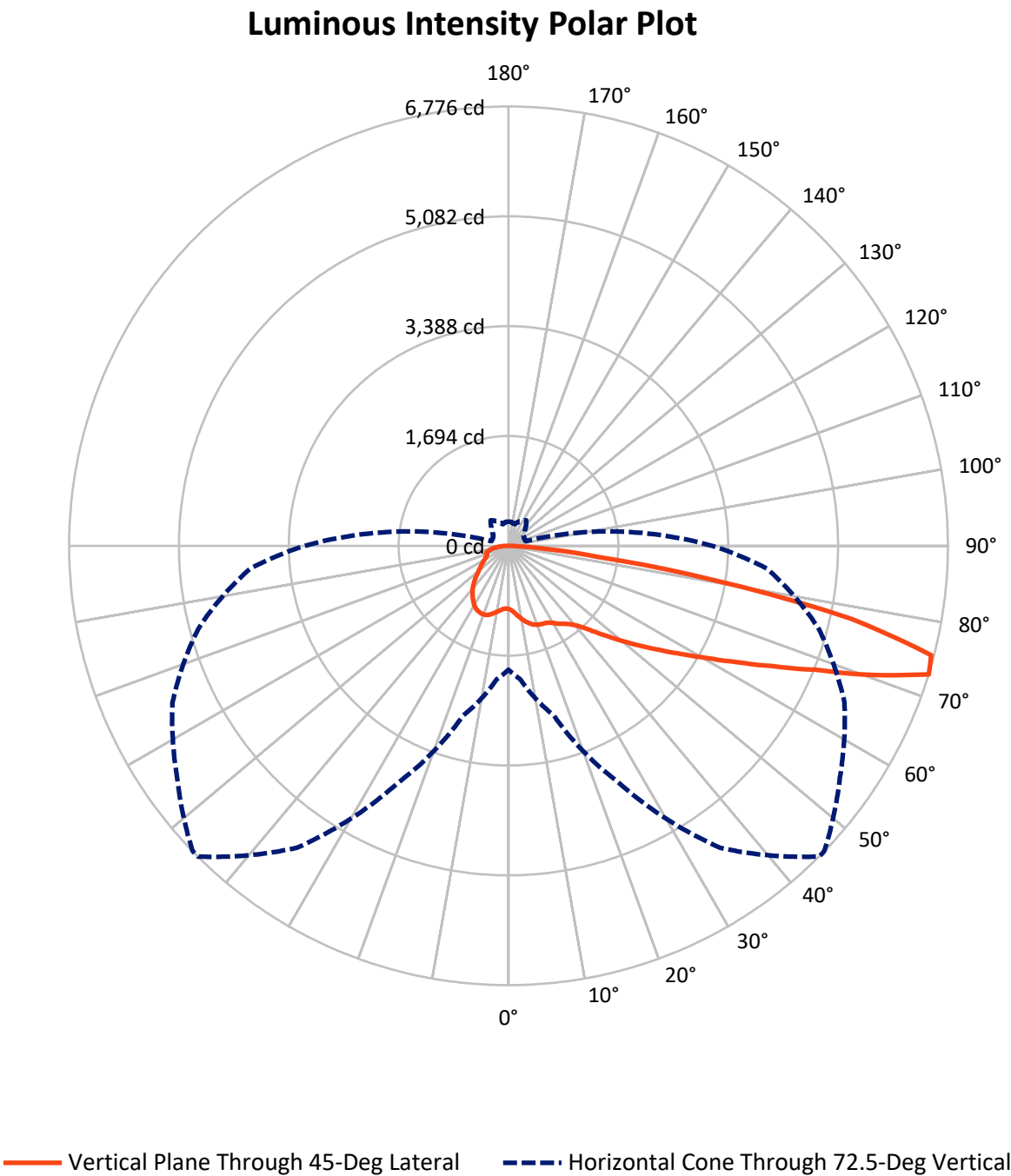
## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
Type IV - Short - N/A

REPORT NUMBER: P961077  
CATALOG NUMBER: NVN-SB1D-835-U-T4W



REPORT NUMBER: P961077

CATALOG NUMBER: NVN-SB1D-835-U-T4W

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2183.5   | 0.0    | 2183.5 |
|                    | % Fixture | 22.6     | 0.0    | 22.6   |
| <b>Street Side</b> | Lumens    | 7475.1   | 0.0    | 7475.1 |
|                    | % Fixture | 77.4     | 0.0    | 77.4   |
| <b>Total</b>       | Lumens    | 9658.6   | 0.0    | 9658.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 99.2   | 1.0       |
| 10°-20°   | 330.6  | 3.4       |
| 20°-30°   | 575.2  | 6.0       |
| 30°-40°   | 824.6  | 8.5       |
| 40°-50°   | 1161.0 | 12.0      |
| 50°-60°   | 1778.3 | 18.4      |
| 60°-70°   | 2576.2 | 26.7      |
| 70°-80°   | 2057.2 | 21.3      |
| 80°-90°   | 256.2  | 2.7       |
| 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°    | 9658.6 | 100.0     |
| 0°-180°   | 9658.6 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P961077

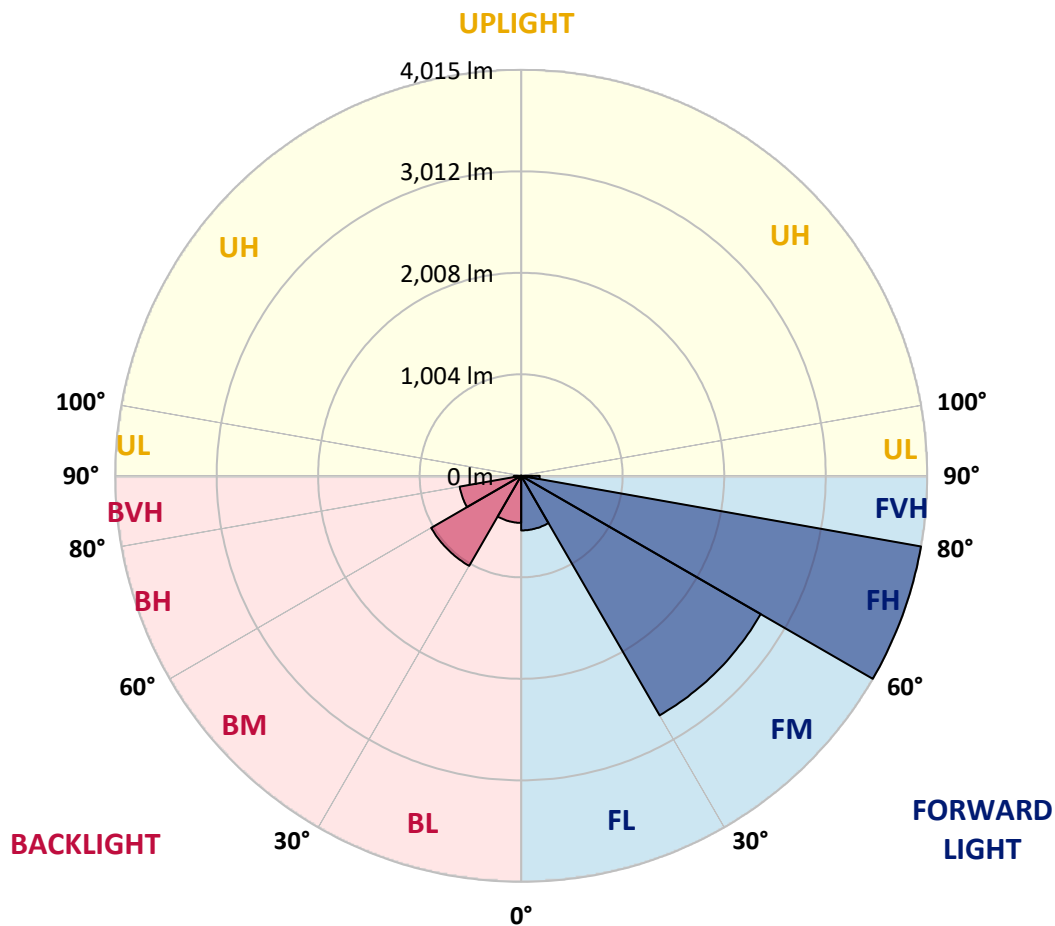
CATALOG NUMBER: NVN-SB1D-835-U-T4W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 540.1  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 2735.8 | 28.3      |                         |      |         |
| FH   | (60°-80°)   | 4015.4 | 41.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 183.8  | 1.9       |                         |      | G2/225  |
| BL   | (0°-30°)    | 464.9  | 4.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1028.1 | 10.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 618.1  | 6.4       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 72.4   | 0.7       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type IV Short



REPORT NUMBER: P961077

CATALOG NUMBER: NVN-SB1D-835-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  |
| 2.5°  | 1012.5 | 1019.2 | 1013.0 | 1007.5 | 1004.9 | 998.2  | 997.7  | 993.7  | 991.2  | 984.0  | 982.0  |
| 5°    | 1083.2 | 1091.9 | 1081.7 | 1070.5 | 1060.4 | 1044.1 | 1042.0 | 1030.3 | 1017.1 | 1001.8 | 993.2  |
| 7.5°  | 1163.2 | 1170.8 | 1159.1 | 1142.3 | 1124.4 | 1097.5 | 1097.0 | 1075.6 | 1054.7 | 1028.8 | 1014.0 |
| 10°   | 1232.9 | 1243.0 | 1227.2 | 1204.4 | 1181.9 | 1151.4 | 1147.9 | 1123.4 | 1097.0 | 1063.4 | 1041.0 |
| 12.5° | 1294.4 | 1301.5 | 1286.3 | 1258.3 | 1232.4 | 1201.8 | 1197.2 | 1170.2 | 1140.7 | 1102.6 | 1074.1 |
| 15°   | 1343.3 | 1352.4 | 1332.1 | 1302.1 | 1274.6 | 1244.6 | 1240.5 | 1216.1 | 1186.5 | 1146.4 | 1109.7 |
| 17.5° | 1375.3 | 1382.9 | 1362.1 | 1328.5 | 1302.1 | 1277.1 | 1274.1 | 1253.7 | 1227.7 | 1187.1 | 1147.9 |
| 20°   | 1387.5 | 1395.6 | 1373.8 | 1339.7 | 1315.3 | 1295.9 | 1294.4 | 1279.6 | 1261.9 | 1224.7 | 1185.0 |
| 22.5° | 1399.7 | 1407.3 | 1378.8 | 1343.3 | 1321.8 | 1309.6 | 1309.1 | 1299.5 | 1292.3 | 1261.9 | 1223.1 |
| 25°   | 1449.0 | 1451.1 | 1413.0 | 1361.6 | 1331.1 | 1320.3 | 1319.8 | 1319.4 | 1322.4 | 1298.5 | 1264.3 |
| 27.5° | 1491.8 | 1491.3 | 1458.8 | 1410.4 | 1363.0 | 1340.7 | 1340.2 | 1345.3 | 1354.9 | 1335.1 | 1307.1 |
| 30°   | 1554.4 | 1548.8 | 1510.1 | 1459.8 | 1416.6 | 1381.9 | 1378.8 | 1374.3 | 1381.9 | 1366.1 | 1349.8 |
| 32.5° | 1687.2 | 1669.4 | 1606.8 | 1517.3 | 1460.8 | 1434.3 | 1430.3 | 1401.8 | 1404.8 | 1395.1 | 1387.0 |
| 35°   | 1877.5 | 1854.1 | 1770.7 | 1626.2 | 1515.8 | 1478.0 | 1476.0 | 1439.9 | 1433.8 | 1425.2 | 1428.2 |
| 37.5° | 2103.9 | 2074.9 | 1977.7 | 1783.9 | 1610.4 | 1529.0 | 1525.9 | 1493.3 | 1468.4 | 1459.3 | 1476.5 |
| 40°   | 2331.4 | 2294.7 | 2214.3 | 1976.2 | 1749.8 | 1614.0 | 1604.2 | 1554.9 | 1526.4 | 1511.2 | 1547.7 |
| 42.5° | 2552.1 | 2521.6 | 2452.9 | 2192.0 | 1921.8 | 1738.1 | 1716.7 | 1632.2 | 1610.9 | 1596.6 | 1662.8 |
| 45°   | 2747.5 | 2720.0 | 2669.7 | 2422.4 | 2123.3 | 1907.0 | 1886.1 | 1748.2 | 1741.7 | 1741.7 | 1837.3 |
| 47.5° | 2906.3 | 2900.2 | 2846.7 | 2657.5 | 2360.9 | 2099.3 | 2063.2 | 1909.6 | 1927.3 | 1954.9 | 2085.1 |
| 50°   | 3082.4 | 3065.6 | 3008.6 | 2889.0 | 2640.2 | 2319.7 | 2290.2 | 2107.5 | 2174.1 | 2249.5 | 2443.3 |
| 52.5° | 3244.1 | 3253.4 | 3189.7 | 3130.1 | 2955.7 | 2565.4 | 2513.5 | 2341.0 | 2485.0 | 2609.6 | 2863.0 |
| 55°   | 3410.5 | 3411.0 | 3393.3 | 3385.1 | 3286.4 | 2837.1 | 2780.1 | 2621.8 | 2850.8 | 3005.5 | 3352.5 |
| 57.5° | 3566.7 | 3567.7 | 3594.2 | 3665.9 | 3670.0 | 3150.5 | 3085.9 | 2966.9 | 3257.3 | 3415.1 | 3857.3 |
| 60°   | 3706.1 | 3713.3 | 3785.5 | 3953.4 | 4007.3 | 3509.7 | 3448.7 | 3374.4 | 3677.6 | 3836.4 | 4387.9 |
| 62.5° | 3752.9 | 3778.9 | 3939.7 | 4178.3 | 4340.6 | 3950.3 | 3890.3 | 3846.1 | 4119.3 | 4266.9 | 4831.6 |
| 65°   | 3673.6 | 3733.2 | 4044.0 | 4364.0 | 4683.5 | 4473.9 | 4414.4 | 4366.1 | 4578.3 | 4717.2 | 5195.9 |
| 67.5° | 3478.7 | 3555.5 | 4037.9 | 4558.9 | 5099.8 | 5103.8 | 5048.3 | 4934.9 | 5070.3 | 5123.7 | 5314.5 |
| 70°   | 2965.3 | 3080.3 | 3682.2 | 4631.7 | 5577.5 | 5965.2 | 5911.8 | 5619.8 | 5561.2 | 5302.7 | 4980.7 |
| 72.5° | 1910.6 | 2065.3 | 2711.4 | 4032.8 | 5683.8 | 6775.8 | 6772.7 | 6237.9 | 5716.4 | 4954.7 | 3994.6 |
| 75°   | 697.1  | 791.7  | 1259.8 | 2531.3 | 4771.1 | 6734.6 | 6754.3 | 6132.2 | 5218.3 | 3827.2 | 2488.6 |
| 77.5° | 253.9  | 277.8  | 411.1  | 972.8  | 2934.3 | 5403.5 | 5444.7 | 4902.4 | 3714.3 | 1920.7 | 986.0  |
| 80°   | 133.4  | 146.6  | 210.6  | 377.5  | 1257.3 | 3209.1 | 3273.6 | 2913.5 | 1745.7 | 578.5  | 295.6  |
| 82.5° | 73.8   | 79.8   | 118.1  | 205.0  | 566.3  | 1372.3 | 1410.9 | 1150.9 | 614.1  | 245.3  | 122.1  |
| 85°   | 39.7   | 42.2   | 55.5   | 111.9  | 276.8  | 475.7  | 486.5  | 344.0  | 244.8  | 144.0  | 59.0   |
| 87.5° | 11.7   | 14.2   | 18.3   | 35.6   | 108.3  | 106.8  | 109.4  | 68.2   | 96.7   | 72.8   | 19.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P961077

CATALOG NUMBER: NVN-SB1D-835-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  | 974.4  |
| 2.5°  | 979.0  | 977.4  | 971.8  | 969.2  | 966.3  | 965.8  | 968.2  | 968.7  | 969.2  | 969.8  | 971.8  |
| 5°    | 988.1  | 983.0  | 978.0  | 974.9  | 975.9  | 976.4  | 981.4  | 985.0  | 987.6  | 989.6  | 990.7  |
| 7.5°  | 1005.9 | 1001.8 | 993.2  | 992.7  | 994.2  | 998.8  | 1005.4 | 1013.5 | 1018.1 | 1021.7 | 1022.7 |
| 10°   | 1032.4 | 1024.7 | 1014.5 | 1016.1 | 1019.2 | 1025.7 | 1039.5 | 1046.1 | 1053.7 | 1060.4 | 1058.8 |
| 12.5° | 1059.3 | 1052.7 | 1041.0 | 1042.0 | 1047.1 | 1058.8 | 1072.0 | 1080.1 | 1085.3 | 1090.4 | 1092.4 |
| 15°   | 1094.4 | 1082.7 | 1070.0 | 1070.0 | 1079.2 | 1091.9 | 1098.0 | 1104.6 | 1107.7 | 1113.3 | 1115.3 |
| 17.5° | 1130.6 | 1115.3 | 1098.5 | 1097.5 | 1108.6 | 1114.8 | 1118.4 | 1119.4 | 1120.4 | 1126.5 | 1128.5 |
| 20°   | 1166.7 | 1149.9 | 1126.0 | 1123.9 | 1126.5 | 1125.4 | 1124.9 | 1123.9 | 1125.4 | 1133.1 | 1136.2 |
| 22.5° | 1202.3 | 1183.0 | 1149.9 | 1140.7 | 1133.6 | 1123.9 | 1123.4 | 1122.9 | 1123.9 | 1131.6 | 1136.6 |
| 25°   | 1244.0 | 1220.7 | 1176.4 | 1148.9 | 1124.9 | 1111.7 | 1113.3 | 1113.8 | 1114.8 | 1120.9 | 1129.0 |
| 27.5° | 1289.3 | 1263.3 | 1200.8 | 1146.4 | 1103.1 | 1094.0 | 1091.4 | 1093.0 | 1096.4 | 1106.2 | 1115.8 |
| 30°   | 1334.6 | 1304.1 | 1223.1 | 1136.2 | 1075.6 | 1062.9 | 1054.7 | 1058.3 | 1069.5 | 1079.2 | 1089.9 |
| 32.5° | 1375.9 | 1345.3 | 1241.0 | 1113.8 | 1040.5 | 1020.7 | 1009.9 | 1014.5 | 1025.7 | 1029.3 | 1042.0 |
| 35°   | 1424.1 | 1389.6 | 1248.7 | 1078.2 | 1002.3 | 971.8  | 957.6  | 951.0  | 956.5  | 952.9  | 964.2  |
| 37.5° | 1478.0 | 1442.0 | 1247.6 | 1031.4 | 957.6  | 922.5  | 902.6  | 877.7  | 866.0  | 853.8  | 861.4  |
| 40°   | 1558.0 | 1506.0 | 1235.3 | 974.9  | 902.1  | 870.0  | 834.5  | 792.2  | 765.8  | 741.8  | 743.3  |
| 42.5° | 1666.9 | 1595.1 | 1213.0 | 912.8  | 839.6  | 809.5  | 761.2  | 711.9  | 670.1  | 630.4  | 626.9  |
| 45°   | 1829.1 | 1711.6 | 1185.0 | 846.6  | 771.8  | 742.3  | 689.9  | 634.5  | 587.1  | 536.3  | 530.1  |
| 47.5° | 2063.2 | 1868.4 | 1158.6 | 771.3  | 700.6  | 673.6  | 626.4  | 574.9  | 519.0  | 469.7  | 464.0  |
| 50°   | 2384.8 | 2093.3 | 1134.2 | 698.1  | 630.4  | 610.1  | 572.4  | 520.0  | 463.5  | 423.8  | 421.3  |
| 52.5° | 2793.8 | 2399.0 | 1123.9 | 627.4  | 564.8  | 557.2  | 527.2  | 478.3  | 424.9  | 391.2  | 388.7  |
| 55°   | 3263.5 | 2764.8 | 1123.9 | 559.6  | 507.3  | 509.8  | 488.9  | 443.7  | 397.4  | 367.4  | 364.3  |
| 57.5° | 3742.8 | 3135.3 | 1103.6 | 497.1  | 458.5  | 469.1  | 455.9  | 416.3  | 374.4  | 343.5  | 338.4  |
| 60°   | 4184.5 | 3445.6 | 1021.2 | 440.1  | 415.2  | 431.9  | 423.3  | 389.2  | 338.4  | 312.4  | 308.3  |
| 62.5° | 4523.8 | 3620.7 | 862.4  | 394.8  | 379.6  | 398.9  | 394.3  | 353.6  | 331.7  | 321.0  | 317.5  |
| 65°   | 4693.7 | 3592.2 | 659.4  | 354.6  | 349.5  | 379.6  | 369.9  | 368.4  | 351.1  | 338.9  | 334.8  |
| 67.5° | 4589.4 | 3346.9 | 478.3  | 325.1  | 332.2  | 361.7  | 398.9  | 405.0  | 373.0  | 349.0  | 345.0  |
| 70°   | 4132.0 | 2903.2 | 356.2  | 297.1  | 310.4  | 362.2  | 454.9  | 423.8  | 365.8  | 337.8  | 333.2  |
| 72.5° | 3143.4 | 2165.0 | 276.2  | 267.6  | 281.9  | 364.8  | 479.8  | 415.2  | 345.5  | 373.5  | 370.4  |
| 75°   | 1797.6 | 1188.6 | 221.8  | 231.5  | 246.3  | 340.9  | 467.1  | 392.8  | 329.7  | 343.0  | 343.0  |
| 77.5° | 685.3  | 456.9  | 183.2  | 195.9  | 197.9  | 297.7  | 446.7  | 391.2  | 314.0  | 306.3  | 279.3  |
| 80°   | 237.6  | 178.6  | 151.6  | 155.7  | 153.1  | 264.6  | 428.4  | 340.4  | 257.0  | 230.0  | 222.3  |
| 82.5° | 97.2   | 89.1   | 120.0  | 115.0  | 108.9  | 205.5  | 345.9  | 278.3  | 210.1  | 185.7  | 183.7  |
| 85°   | 42.2   | 56.5   | 79.3   | 69.7   | 63.1   | 142.5  | 277.3  | 235.5  | 177.5  | 153.1  | 152.6  |
| 87.5° | 8.6    | 21.3   | 33.6   | 31.6   | 32.6   | 95.1   | 196.9  | 167.4  | 125.7  | 94.1   | 73.8   |
| 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)