

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: P962100

Luminaire Tested: **NVN-SB2B-830-U-T4W**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P962100  
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-SB2B-830-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 10351.5 lumens  
Efficiency: N/A  
Efficacy: 140.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 73.9  
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



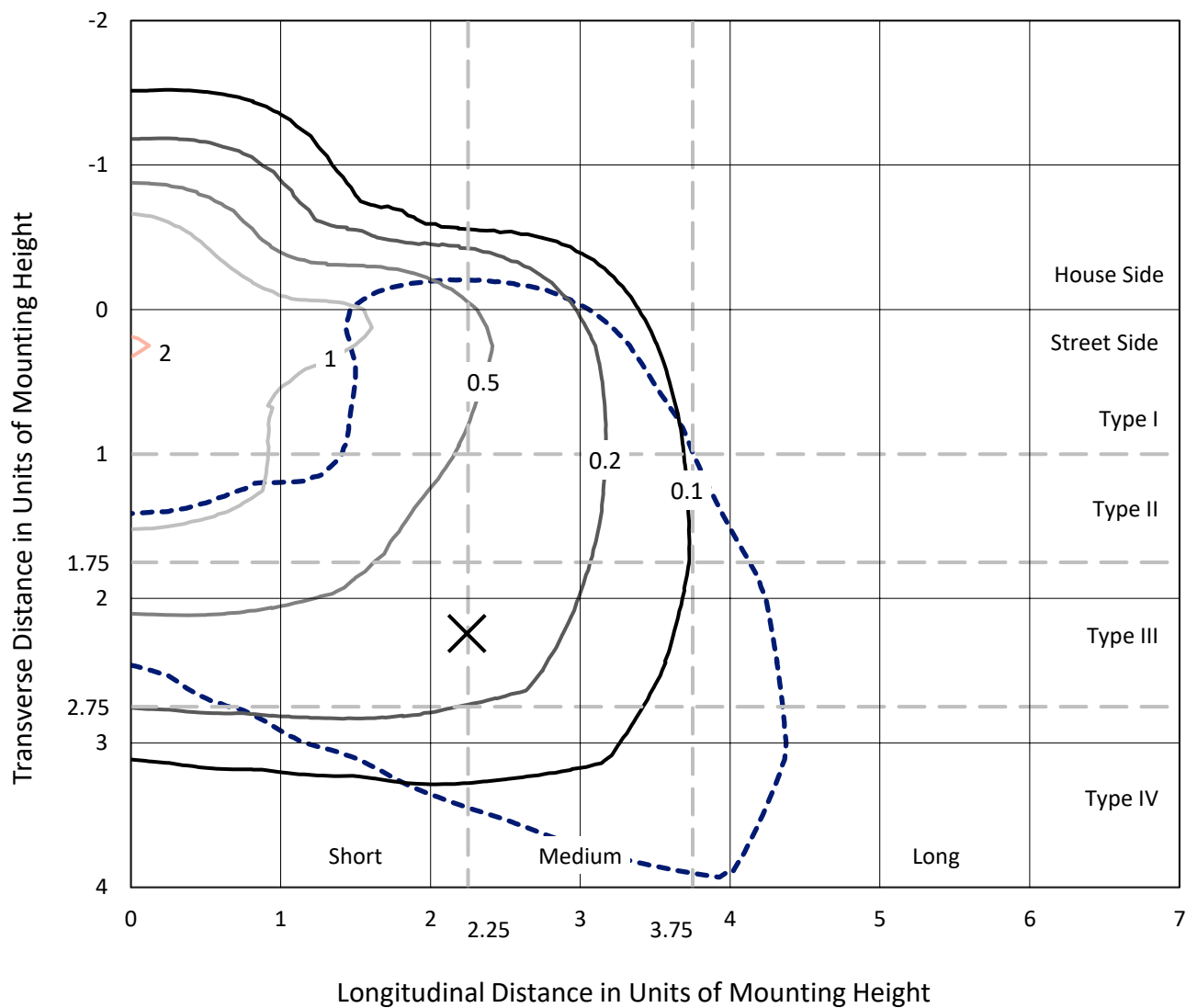
REPORT NUMBER: P962100

CATALOG NUMBER: NVN-SB2B-830-U-T4W

## Iso-Footcandle Lines of Horizontal Illumination

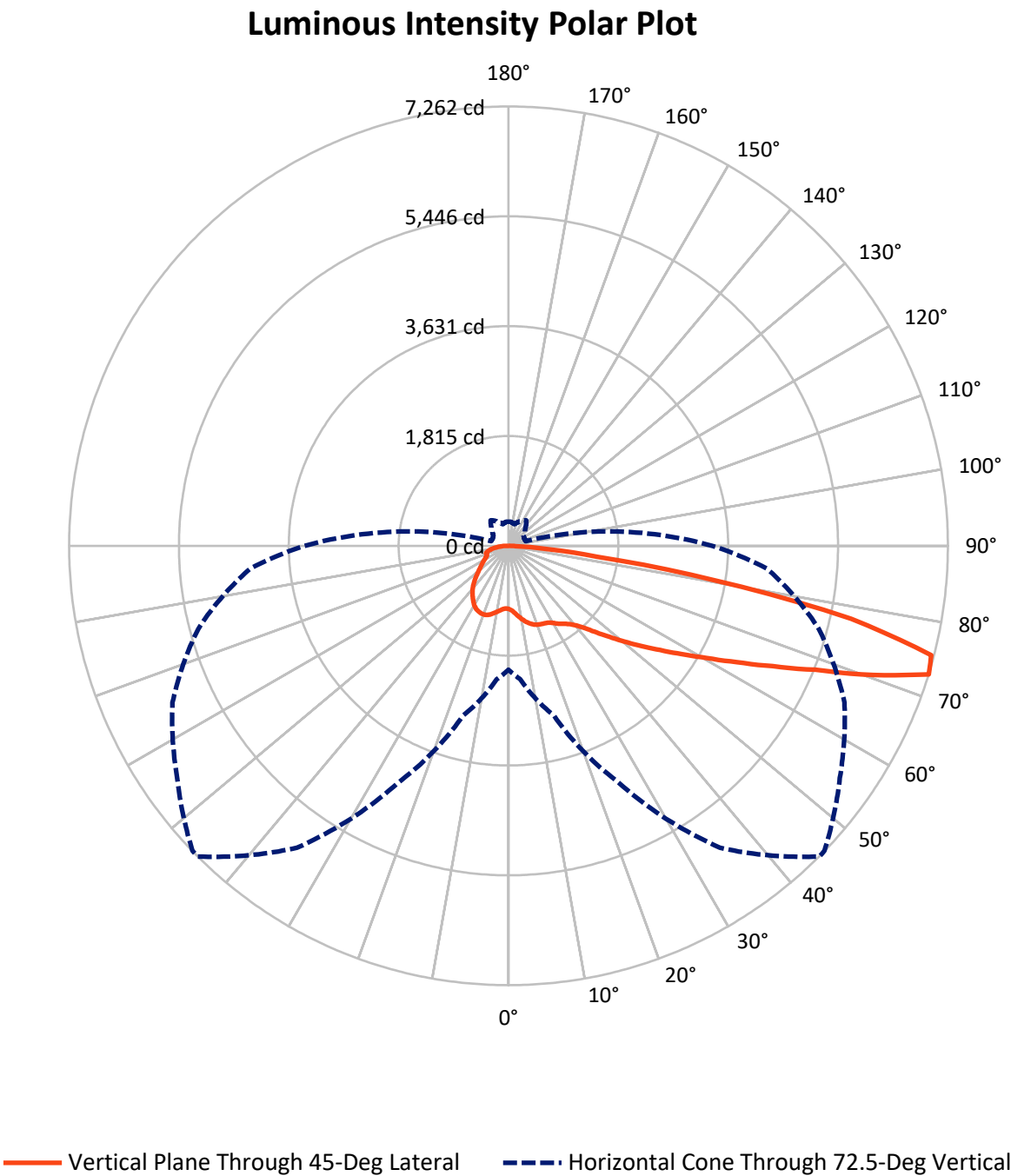
× Max cd

--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
Type IV - Short - N/A

REPORT NUMBER: P962100  
CATALOG NUMBER: NVN-SB2B-830-U-T4W



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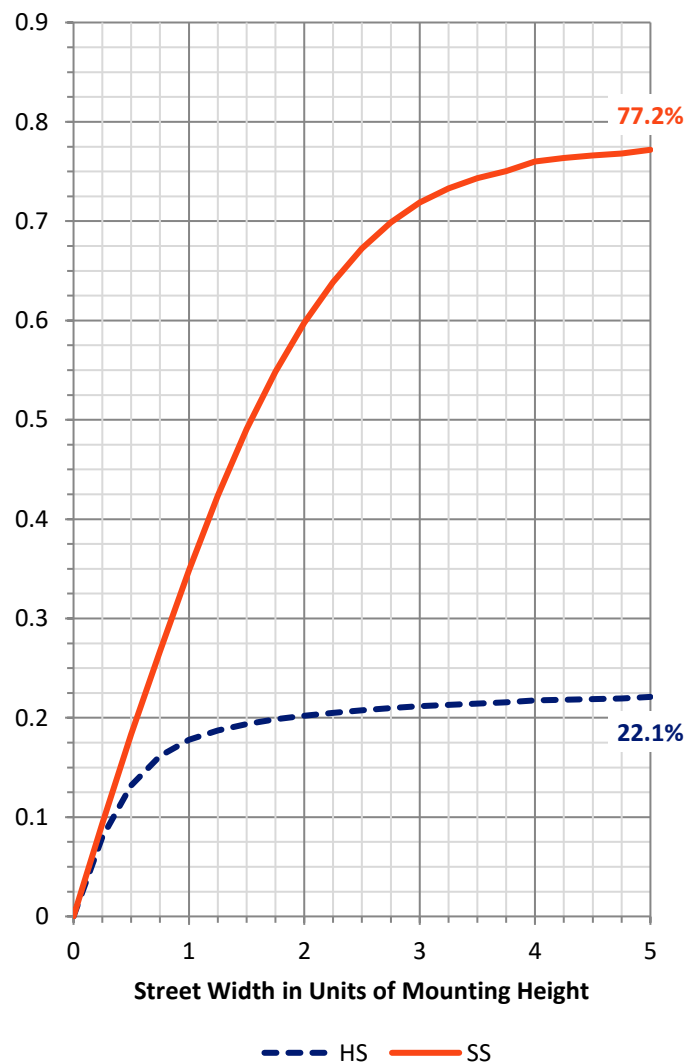
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2340.1   | 0.0    | 2340.1  |
|                    | % Fixture | 22.6     | 0.0    | 22.6    |
| <b>Street Side</b> | Lumens    | 8011.3   | 0.0    | 8011.3  |
|                    | % Fixture | 77.4     | 0.0    | 77.4    |
| <b>Total</b>       | Lumens    | 10351.5  | 0.0    | 10351.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 106.3   | 1.0       |
| 10°-20°   | 354.4   | 3.4       |
| 20°-30°   | 616.4   | 6.0       |
| 30°-40°   | 883.7   | 8.5       |
| 40°-50°   | 1244.3  | 12.0      |
| 50°-60°   | 1905.9  | 18.4      |
| 60°-70°   | 2761.0  | 26.7      |
| 70°-80°   | 2204.8  | 21.3      |
| 80°-90°   | 274.6   | 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°    | 10351.5 | 100.0     |
| 0°-180°   | 10351.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P962100

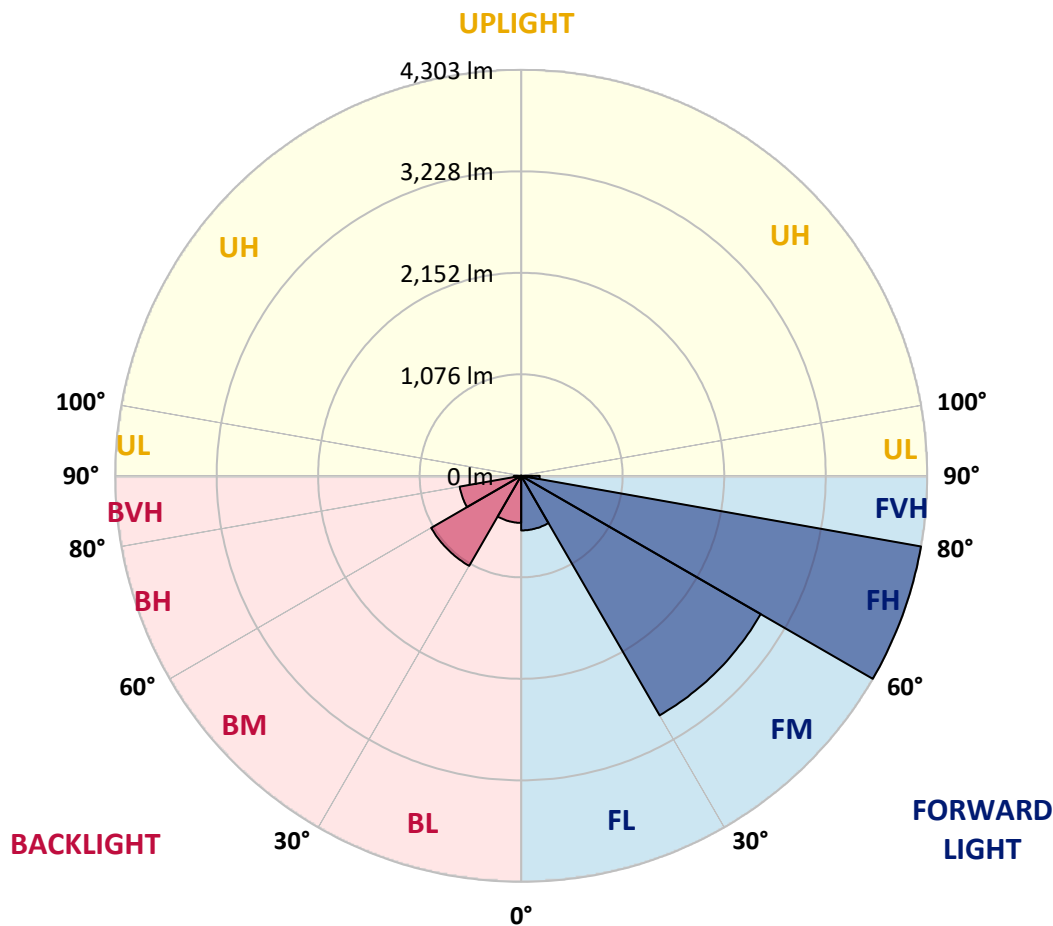
CATALOG NUMBER: NVN-SB2B-830-U-T4W

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 578.9  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 2932.1 | 28.3      |                         |      |         |
| FH   | (60°-80°)   | 4303.4 | 41.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 197.0  | 1.9       |                         |      | G2/225  |
| BL   | (0°-30°)    | 498.2  | 4.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1101.9 | 10.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 662.4  | 6.4       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 77.6   | 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: P962100

CATALOG NUMBER: NVN-SB2B-830-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 |
| 2.5°  | 1085.2 | 1092.2 | 1085.7 | 1079.7 | 1077.0 | 1069.9 | 1069.4 | 1065.0 | 1062.2 | 1054.6 | 1052.5 |
| 5°    | 1160.9 | 1170.2 | 1159.3 | 1147.3 | 1136.4 | 1119.0 | 1116.7 | 1104.2 | 1090.1 | 1073.7 | 1064.5 |
| 7.5°  | 1246.6 | 1254.7 | 1242.2 | 1224.3 | 1205.1 | 1176.2 | 1175.7 | 1152.8 | 1130.4 | 1102.6 | 1086.8 |
| 10°   | 1321.3 | 1332.2 | 1315.3 | 1290.8 | 1266.8 | 1234.0 | 1230.2 | 1204.1 | 1175.7 | 1139.7 | 1115.7 |
| 12.5° | 1387.2 | 1394.9 | 1378.5 | 1348.6 | 1320.7 | 1288.0 | 1283.1 | 1254.2 | 1222.6 | 1181.7 | 1151.2 |
| 15°   | 1439.6 | 1449.5 | 1427.6 | 1395.4 | 1366.0 | 1333.8 | 1329.4 | 1303.3 | 1271.6 | 1228.6 | 1189.3 |
| 17.5° | 1473.9 | 1482.1 | 1459.8 | 1423.8 | 1395.4 | 1368.7 | 1365.4 | 1343.7 | 1315.8 | 1272.2 | 1230.2 |
| 20°   | 1487.1 | 1495.8 | 1472.3 | 1435.8 | 1409.6 | 1388.9 | 1387.2 | 1371.4 | 1352.4 | 1312.5 | 1270.0 |
| 22.5° | 1500.2 | 1508.3 | 1477.7 | 1439.6 | 1416.8 | 1403.6 | 1403.1 | 1392.7 | 1385.1 | 1352.4 | 1310.9 |
| 25°   | 1553.1 | 1555.2 | 1514.3 | 1459.2 | 1426.5 | 1415.1 | 1414.5 | 1414.0 | 1417.3 | 1391.6 | 1355.0 |
| 27.5° | 1598.8 | 1598.3 | 1563.4 | 1511.6 | 1460.8 | 1436.8 | 1436.3 | 1441.8 | 1452.1 | 1430.9 | 1400.9 |
| 30°   | 1665.9 | 1659.9 | 1618.5 | 1564.5 | 1518.1 | 1481.0 | 1477.7 | 1472.8 | 1481.0 | 1464.1 | 1446.7 |
| 32.5° | 1808.2 | 1789.1 | 1722.1 | 1626.1 | 1565.6 | 1537.2 | 1532.9 | 1502.3 | 1505.6 | 1495.3 | 1486.5 |
| 35°   | 2012.2 | 1987.1 | 1897.7 | 1742.8 | 1624.4 | 1584.1 | 1582.0 | 1543.2 | 1536.7 | 1527.5 | 1530.6 |
| 37.5° | 2254.8 | 2223.7 | 2119.6 | 1911.8 | 1725.9 | 1638.7 | 1635.4 | 1600.4 | 1573.8 | 1563.9 | 1582.5 |
| 40°   | 2498.6 | 2459.3 | 2373.2 | 2118.0 | 1875.3 | 1729.7 | 1719.3 | 1666.4 | 1635.9 | 1619.6 | 1658.9 |
| 42.5° | 2735.2 | 2702.5 | 2628.9 | 2349.2 | 2059.6 | 1862.7 | 1839.9 | 1749.4 | 1726.4 | 1711.1 | 1782.1 |
| 45°   | 2944.6 | 2915.2 | 2861.2 | 2596.2 | 2275.6 | 2043.8 | 2021.4 | 1873.7 | 1866.6 | 1866.6 | 1969.1 |
| 47.5° | 3114.8 | 3108.2 | 3051.0 | 2848.2 | 2530.2 | 2250.0 | 2211.2 | 2046.5 | 2065.6 | 2095.1 | 2234.7 |
| 50°   | 3303.5 | 3285.4 | 3224.4 | 3096.2 | 2829.6 | 2486.0 | 2454.5 | 2258.7 | 2330.1 | 2410.8 | 2618.6 |
| 52.5° | 3476.9 | 3486.6 | 3418.5 | 3354.7 | 3167.7 | 2749.5 | 2693.8 | 2509.0 | 2663.3 | 2796.9 | 3068.4 |
| 55°   | 3655.2 | 3655.8 | 3636.7 | 3627.9 | 3522.1 | 3040.7 | 2979.6 | 2809.9 | 3055.3 | 3221.2 | 3593.0 |
| 57.5° | 3822.6 | 3823.7 | 3852.1 | 3928.9 | 3933.3 | 3376.6 | 3307.3 | 3179.7 | 3491.0 | 3660.1 | 4133.9 |
| 60°   | 3972.0 | 3979.7 | 4057.1 | 4237.0 | 4294.9 | 3761.5 | 3696.0 | 3616.5 | 3941.4 | 4111.6 | 4702.7 |
| 62.5° | 4022.2 | 4050.0 | 4222.3 | 4478.0 | 4652.0 | 4233.8 | 4169.4 | 4121.9 | 4414.8 | 4572.9 | 5178.2 |
| 65°   | 3937.1 | 4000.9 | 4334.1 | 4677.1 | 5019.5 | 4794.8 | 4731.1 | 4679.2 | 4906.7 | 5055.5 | 5568.7 |
| 67.5° | 3728.2 | 3810.6 | 4327.5 | 4886.0 | 5465.6 | 5470.0 | 5410.6 | 5288.9 | 5433.9 | 5491.2 | 5695.7 |
| 70°   | 3178.0 | 3301.3 | 3946.4 | 4964.0 | 5977.7 | 6393.1 | 6335.9 | 6022.9 | 5960.2 | 5683.2 | 5338.0 |
| 72.5° | 2047.6 | 2213.4 | 2906.0 | 4322.1 | 6091.6 | 7261.8 | 7258.5 | 6685.5 | 6126.5 | 5310.2 | 4281.2 |
| 75°   | 747.0  | 848.5  | 1350.1 | 2712.9 | 5113.3 | 7217.6 | 7239.0 | 6572.0 | 5592.7 | 4101.8 | 2667.0 |
| 77.5° | 272.1  | 297.8  | 440.6  | 1042.6 | 3144.8 | 5791.1 | 5835.3 | 5254.0 | 3980.7 | 2058.5 | 1056.8 |
| 80°   | 142.9  | 157.0  | 225.8  | 404.6  | 1347.5 | 3439.3 | 3508.5 | 3122.5 | 1870.9 | 620.0  | 316.8  |
| 82.5° | 79.0   | 85.6   | 126.5  | 219.8  | 606.9  | 1470.7 | 1512.2 | 1233.5 | 658.2  | 262.8  | 130.9  |
| 85°   | 42.5   | 45.3   | 59.4   | 119.9  | 296.6  | 509.8  | 521.3  | 368.6  | 262.3  | 154.4  | 63.2   |
| 87.5° | 12.5   | 15.3   | 19.7   | 38.1   | 116.1  | 114.5  | 117.3  | 73.1   | 103.6  | 78.0   | 20.7   |
| 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: P962100

CATALOG NUMBER: NVN-SB2B-830-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 | 1044.3 |
| 2.5°  | 1049.2 | 1047.6 | 1041.5 | 1038.8 | 1035.6 | 1034.9 | 1037.7 | 1038.2 | 1038.8 | 1039.4 | 1041.5 |
| 5°    | 1059.0 | 1053.5 | 1048.1 | 1044.8 | 1045.9 | 1046.4 | 1051.9 | 1055.8 | 1058.4 | 1060.7 | 1061.7 |
| 7.5°  | 1078.1 | 1073.7 | 1064.5 | 1063.8 | 1065.5 | 1070.4 | 1077.5 | 1086.3 | 1091.1 | 1095.0 | 1096.0 |
| 10°   | 1106.4 | 1098.3 | 1087.3 | 1089.0 | 1092.2 | 1099.3 | 1114.1 | 1121.1 | 1129.3 | 1136.4 | 1134.8 |
| 12.5° | 1135.3 | 1128.2 | 1115.7 | 1116.7 | 1122.3 | 1134.8 | 1148.9 | 1157.6 | 1163.2 | 1168.6 | 1170.8 |
| 15°   | 1172.9 | 1160.4 | 1146.8 | 1146.8 | 1156.6 | 1170.2 | 1176.8 | 1183.9 | 1187.2 | 1193.1 | 1195.4 |
| 17.5° | 1211.7 | 1195.4 | 1177.3 | 1176.2 | 1188.2 | 1194.7 | 1198.6 | 1199.7 | 1200.8 | 1207.3 | 1209.5 |
| 20°   | 1250.4 | 1232.4 | 1206.7 | 1204.6 | 1207.3 | 1206.2 | 1205.7 | 1204.6 | 1206.2 | 1214.4 | 1217.7 |
| 22.5° | 1288.5 | 1267.8 | 1232.4 | 1222.6 | 1214.9 | 1204.6 | 1204.1 | 1203.5 | 1204.6 | 1212.8 | 1218.2 |
| 25°   | 1333.3 | 1308.2 | 1260.8 | 1231.3 | 1205.7 | 1191.5 | 1193.1 | 1193.7 | 1194.7 | 1201.3 | 1210.0 |
| 27.5° | 1381.8 | 1354.0 | 1286.9 | 1228.6 | 1182.2 | 1172.4 | 1169.7 | 1171.4 | 1175.2 | 1185.5 | 1195.9 |
| 30°   | 1430.4 | 1397.6 | 1310.9 | 1217.7 | 1152.8 | 1139.2 | 1130.4 | 1134.3 | 1146.3 | 1156.6 | 1168.1 |
| 32.5° | 1474.5 | 1441.8 | 1330.0 | 1193.7 | 1115.2 | 1093.9 | 1082.4 | 1087.3 | 1099.3 | 1103.1 | 1116.7 |
| 35°   | 1526.3 | 1489.2 | 1338.1 | 1155.5 | 1074.3 | 1041.5 | 1026.2 | 1019.2 | 1025.2 | 1021.3 | 1033.4 |
| 37.5° | 1584.1 | 1545.4 | 1337.1 | 1105.4 | 1026.2 | 988.6  | 967.4  | 940.6  | 928.1  | 915.0  | 923.2  |
| 40°   | 1669.7 | 1614.1 | 1324.0 | 1044.8 | 966.8  | 932.4  | 894.3  | 849.0  | 820.7  | 795.1  | 796.7  |
| 42.5° | 1786.5 | 1709.5 | 1300.0 | 978.3  | 899.7  | 867.6  | 815.8  | 762.9  | 718.2  | 675.7  | 671.8  |
| 45°   | 1960.4 | 1834.4 | 1270.0 | 907.4  | 827.3  | 795.6  | 739.4  | 680.0  | 629.2  | 574.7  | 568.3  |
| 47.5° | 2211.2 | 2002.3 | 1241.7 | 826.7  | 750.9  | 722.0  | 671.3  | 616.2  | 556.2  | 503.3  | 497.3  |
| 50°   | 2555.8 | 2243.4 | 1215.4 | 748.1  | 675.7  | 653.8  | 613.5  | 557.3  | 496.8  | 454.3  | 451.5  |
| 52.5° | 2994.2 | 2571.1 | 1204.6 | 672.4  | 605.3  | 597.1  | 565.0  | 512.6  | 455.3  | 419.3  | 416.7  |
| 55°   | 3497.6 | 2963.2 | 1204.6 | 599.8  | 543.7  | 546.4  | 524.1  | 475.5  | 425.9  | 393.7  | 390.4  |
| 57.5° | 4011.2 | 3360.2 | 1182.7 | 532.8  | 491.3  | 502.8  | 488.6  | 446.1  | 401.4  | 368.1  | 362.6  |
| 60°   | 4484.6 | 3692.8 | 1094.4 | 471.7  | 445.0  | 463.0  | 453.7  | 417.2  | 362.6  | 334.9  | 330.5  |
| 62.5° | 4848.4 | 3880.4 | 924.3  | 423.1  | 406.8  | 427.5  | 422.6  | 378.9  | 355.6  | 344.1  | 340.3  |
| 65°   | 5030.5 | 3849.9 | 706.7  | 380.1  | 374.6  | 406.8  | 396.5  | 394.8  | 376.3  | 363.2  | 358.9  |
| 67.5° | 4918.7 | 3587.0 | 512.6  | 348.5  | 356.1  | 387.8  | 427.5  | 434.1  | 399.7  | 374.1  | 369.7  |
| 70°   | 4428.4 | 3111.5 | 381.7  | 318.5  | 332.6  | 388.3  | 487.5  | 454.3  | 392.1  | 362.1  | 357.2  |
| 72.5° | 3368.9 | 2320.3 | 296.1  | 286.8  | 302.1  | 390.9  | 514.2  | 445.0  | 370.2  | 400.3  | 397.0  |
| 75°   | 1926.6 | 1273.9 | 237.8  | 248.2  | 263.9  | 365.3  | 500.6  | 421.0  | 353.3  | 367.6  | 367.6  |
| 77.5° | 734.5  | 489.6  | 196.3  | 209.9  | 212.2  | 319.0  | 478.8  | 419.3  | 336.4  | 328.3  | 299.4  |
| 80°   | 254.6  | 191.4  | 162.5  | 166.9  | 164.1  | 283.5  | 459.1  | 364.8  | 275.4  | 246.5  | 238.3  |
| 82.5° | 104.1  | 95.4   | 128.7  | 123.2  | 116.6  | 220.3  | 370.8  | 298.3  | 225.2  | 199.1  | 196.9  |
| 85°   | 45.3   | 60.6   | 85.1   | 74.7   | 67.6   | 152.7  | 297.1  | 252.5  | 190.3  | 164.1  | 163.6  |
| 87.5° | 9.2    | 22.9   | 36.0   | 33.8   | 34.8   | 102.0  | 211.0  | 179.4  | 134.7  | 100.9  | 79.0   |
| 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)