

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: P967876

Luminaire Tested: **NVN-SB5A-830-U-SL3**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P967876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB5A-830-U-SL3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 20396.5 lumens  
Efficiency: N/A  
Efficacy: 143.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 141.7  
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

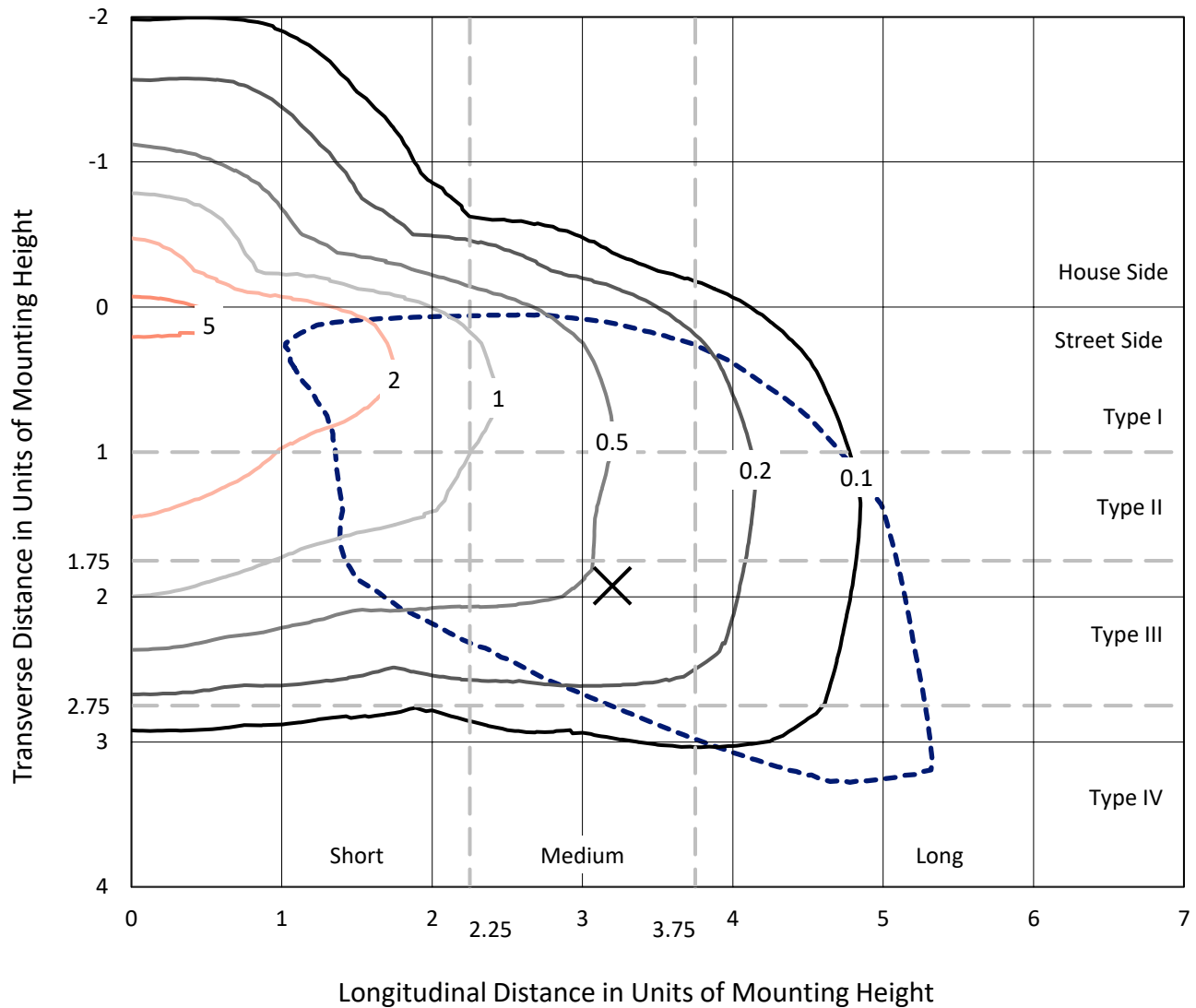


REPORT NUMBER: P967876

CATALOG NUMBER: NVN-SB5A-830-U-SL3

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

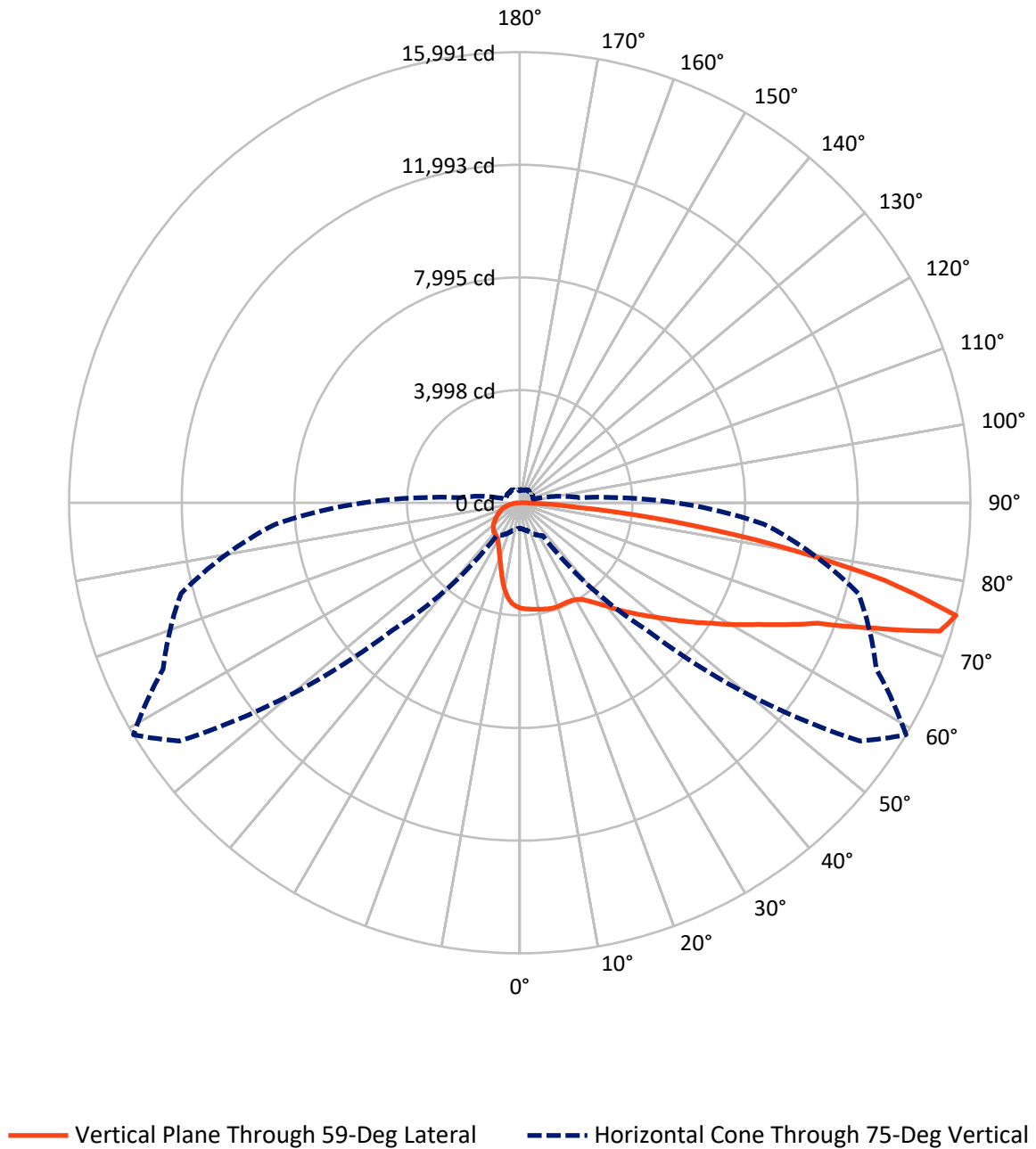


Based on 25 foot mounting height. Maximum calculated value = 6 fc  
Type IV - Medium - N/A

REPORT NUMBER: P967876

CATALOG NUMBER: NVN-SB5A-830-U-SL3

## Luminous Intensity Polar Plot



REPORT NUMBER: P967876

CATALOG NUMBER: NVN-SB5A-830-U-SL3

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3825.5   | 0.0    | 3825.5  |
|                    | % Fixture | 18.8     | 0.0    | 18.8    |
| <b>Street Side</b> | Lumens    | 16571.0  | 0.0    | 16571.0 |
|                    | % Fixture | 81.2     | 0.0    | 81.2    |
| <b>Total</b>       | Lumens    | 20396.5  | 0.0    | 20396.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 335.7   | 1.6       |
| 10°-20°   | 858.0   | 4.2       |
| 20°-30°   | 1303.3  | 6.4       |
| 30°-40°   | 1937.3  | 9.5       |
| 40°-50°   | 2881.1  | 14.1      |
| 50°-60°   | 3910.8  | 19.2      |
| 60°-70°   | 4774.4  | 23.4      |
| 70°-80°   | 3746.9  | 18.4      |
| 80°-90°   | 649.1   | 3.2       |
| 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°    | 20396.5 | 100.0     |
| 0°-180°   | 20396.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P967876

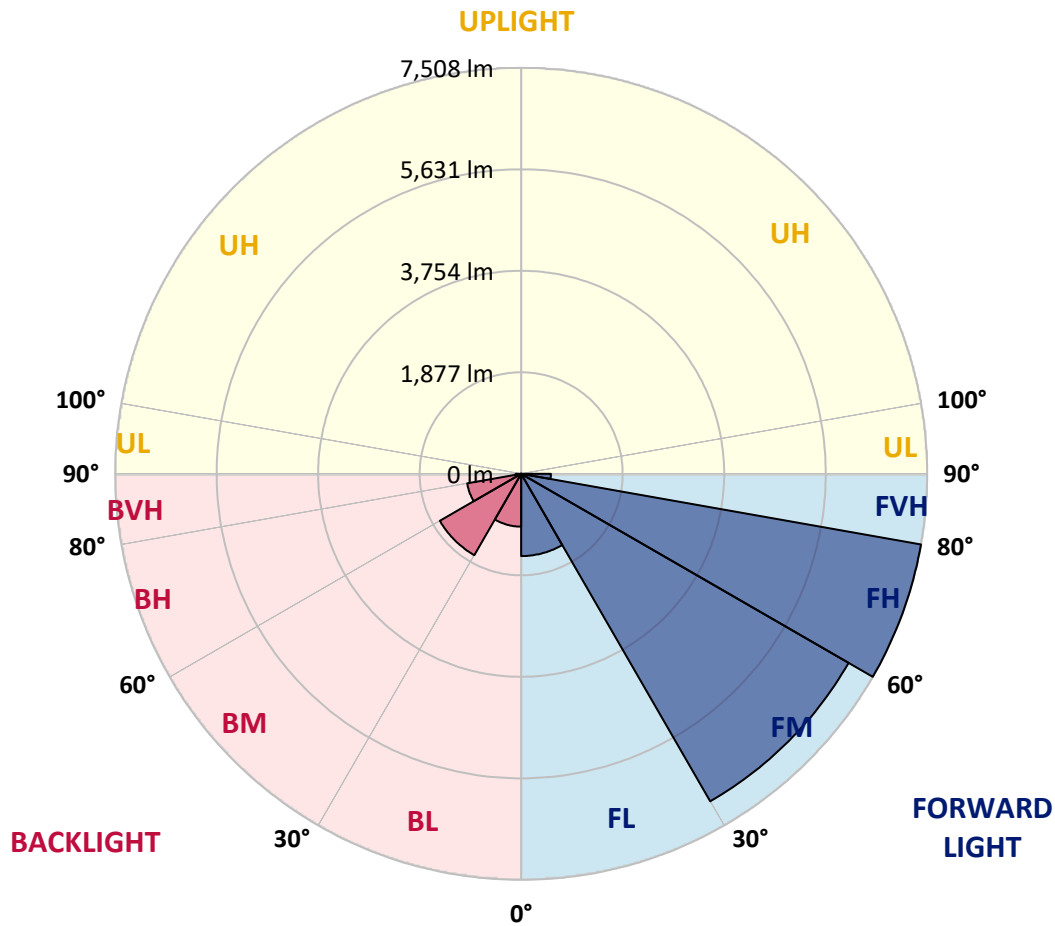
CATALOG NUMBER: NVN-SB5A-830-U-SL3

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1520.8 | 7.5       |                         |      |          |
| FM   | (30°-60°)   | 6992.8 | 34.3      |                         |      |          |
| FH   | (60°-80°)   | 7507.7 | 36.8      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 549.7  | 2.7       |                         |      | G4/750   |
| BL   | (0°-30°)    | 976.2  | 4.8       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 1736.4 | 8.5       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 1013.5 | 5.0       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 99.4   | 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-G4**

Type IV Medium



REPORT NUMBER: P967876

CATALOG NUMBER: NVN-SB5A-830-U-SL3

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7  | 3743.7  | 3743.7  | 3743.7  | 3743.7  |
| 2.5°  | 3775.6 | 3762.4 | 3775.6 | 3770.1 | 3767.9 | 3763.5 | 3764.6  | 3772.2  | 3767.9  | 3773.3  | 3754.7  |
| 5°    | 3750.3 | 3742.6 | 3755.8 | 3752.5 | 3766.8 | 3768.9 | 3783.3  | 3792.0  | 3797.5  | 3798.5  | 3784.3  |
| 7.5°  | 3708.7 | 3701.0 | 3719.6 | 3735.0 | 3765.6 | 3774.5 | 3804.1  | 3818.3  | 3826.0  | 3839.1  | 3818.3  |
| 10°   | 3556.1 | 3552.9 | 3598.9 | 3657.1 | 3729.5 | 3774.5 | 3819.5  | 3843.5  | 3855.6  | 3890.8  | 3866.6  |
| 12.5° | 3286.2 | 3290.6 | 3350.9 | 3462.9 | 3607.7 | 3752.5 | 3837.0  | 3872.1  | 3890.8  | 3934.7  | 3923.7  |
| 15°   | 3028.4 | 3027.2 | 3093.0 | 3212.7 | 3415.6 | 3656.0 | 3845.8  | 3906.1  | 3937.9  | 4002.6  | 3993.9  |
| 17.5° | 2879.1 | 2874.7 | 2920.8 | 3011.9 | 3200.6 | 3507.9 | 3823.9  | 3924.7  | 3992.8  | 4074.0  | 4066.3  |
| 20°   | 2851.7 | 2842.9 | 2867.0 | 2912.0 | 3045.9 | 3345.4 | 3766.8  | 3924.7  | 4036.7  | 4142.0  | 4137.6  |
| 22.5° | 2951.5 | 2937.2 | 2927.4 | 2921.9 | 2981.1 | 3211.5 | 3702.0  | 3911.6  | 4101.4  | 4239.7  | 4232.0  |
| 25°   | 3152.3 | 3130.4 | 3079.9 | 3030.5 | 3013.0 | 3151.3 | 3645.0  | 3908.3  | 4198.0  | 4371.3  | 4342.8  |
| 27.5° | 3477.1 | 3449.6 | 3347.6 | 3229.2 | 3122.7 | 3181.9 | 3619.8  | 3928.1  | 4304.4  | 4510.7  | 4453.6  |
| 30°   | 3879.8 | 3850.2 | 3721.8 | 3539.6 | 3348.8 | 3296.1 | 3651.6  | 3986.2  | 4440.5  | 4696.1  | 4584.2  |
| 32.5° | 4240.7 | 4207.8 | 4098.2 | 3912.7 | 3654.8 | 3493.6 | 3752.5  | 4097.0  | 4654.4  | 4953.9  | 4780.6  |
| 35°   | 4561.1 | 4522.7 | 4424.0 | 4252.8 | 4030.1 | 3771.2 | 3934.7  | 4293.4  | 4958.3  | 5373.2  | 5047.2  |
| 37.5° | 4875.0 | 4830.0 | 4722.5 | 4541.4 | 4385.6 | 4140.9 | 4185.9  | 4545.8  | 5362.1  | 5882.2  | 5400.5  |
| 40°   | 5226.1 | 5161.4 | 5030.8 | 4851.9 | 4700.5 | 4574.4 | 4516.2  | 4855.2  | 5772.5  | 6450.5  | 5841.6  |
| 42.5° | 5566.3 | 5504.8 | 5349.0 | 5196.4 | 5006.6 | 4970.4 | 4899.1  | 5217.2  | 6221.2  | 7074.9  | 6289.3  |
| 45°   | 5932.7 | 5859.2 | 5670.4 | 5477.3 | 5357.8 | 5233.8 | 5269.9  | 5579.4  | 6661.3  | 7711.3  | 6758.8  |
| 47.5° | 6276.1 | 6193.9 | 5971.1 | 5756.0 | 5690.2 | 5455.4 | 5610.1  | 5977.7  | 7118.8  | 8356.4  | 7224.1  |
| 50°   | 6461.6 | 6380.3 | 6194.9 | 6000.8 | 5949.1 | 5728.6 | 5978.7  | 6415.5  | 7598.3  | 8999.4  | 7670.7  |
| 52.5° | 6616.3 | 6528.5 | 6286.0 | 6178.5 | 6163.1 | 6026.0 | 6433.0  | 6915.8  | 8077.7  | 9567.8  | 8101.9  |
| 55°   | 6780.9 | 6683.2 | 6373.8 | 6277.2 | 6347.4 | 6359.5 | 6971.7  | 7483.1  | 8584.7  | 10121.9 | 8508.9  |
| 57.5° | 6970.6 | 6846.7 | 6458.2 | 6360.6 | 6527.4 | 6750.1 | 7590.6  | 8071.2  | 9082.8  | 10635.4 | 8871.1  |
| 60°   | 7149.5 | 7024.4 | 6620.7 | 6493.4 | 6721.6 | 7203.3 | 8300.4  | 8783.3  | 9646.8  | 11093.0 | 9213.4  |
| 62.5° | 7184.6 | 7081.5 | 6750.1 | 6749.0 | 6985.0 | 7732.1 | 9140.9  | 9502.0  | 10139.4 | 11545.0 | 9520.6  |
| 65°   | 6576.8 | 6512.0 | 6315.6 | 6739.2 | 7362.4 | 8493.6 | 10076.9 | 10421.5 | 10766.0 | 11940.0 | 9790.5  |
| 67.5° | 5005.5 | 5014.3 | 5000.1 | 5817.5 | 7057.3 | 9587.5 | 11431.9 | 11405.7 | 11539.6 | 12383.2 | 10101.1 |
| 70°   | 2288.8 | 2340.4 | 2676.2 | 4015.8 | 5654.0 | 9713.7 | 13672.5 | 13331.3 | 12510.5 | 12957.1 | 10369.8 |
| 72.5° | 1236.6 | 1276.0 | 1413.3 | 1945.3 | 3399.2 | 8636.2 | 15346.9 | 15589.3 | 13801.9 | 13343.3 | 10074.7 |
| 75°   | 907.4  | 929.4  | 1024.8 | 1236.6 | 1427.5 | 6418.8 | 14746.7 | 15990.9 | 13963.3 | 12442.5 | 8699.9  |
| 77.5° | 679.2  | 689.1  | 767.0  | 979.8  | 730.7  | 3383.8 | 11783.1 | 13243.5 | 11953.1 | 10222.8 | 6426.4  |
| 80°   | 492.6  | 503.6  | 561.8  | 735.1  | 512.4  | 1237.7 | 8090.9  | 9295.7  | 8186.4  | 6516.4  | 3202.8  |
| 82.5° | 340.1  | 344.5  | 369.7  | 500.3  | 357.7  | 480.6  | 4590.8  | 5451.1  | 4570.0  | 2286.6  | 864.6   |
| 85°   | 205.2  | 210.6  | 221.6  | 291.8  | 203.0  | 228.3  | 1981.6  | 2049.6  | 1366.0  | 546.4   | 268.9   |
| 87.5° | 84.5   | 90.0   | 98.7   | 122.9  | 80.1   | 63.7   | 327.0   | 410.4   | 255.6   | 160.2   | 83.4    |
| 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: P967876

CATALOG NUMBER: NVN-SB5A-830-U-SL3

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 | 3743.7 |
| 2.5°  | 3749.2 | 3741.6 | 3720.6 | 3692.2 | 3665.8 | 3632.9 | 3618.7 | 3606.6 | 3595.6 | 3574.8 | 3564.8 |
| 5°    | 3772.2 | 3751.4 | 3695.4 | 3623.1 | 3540.8 | 3450.8 | 3363.0 | 3302.7 | 3251.1 | 3212.7 | 3180.9 |
| 7.5°  | 3807.4 | 3767.9 | 3665.8 | 3517.7 | 3329.0 | 3135.9 | 2961.4 | 2837.4 | 2744.1 | 2710.1 | 2650.9 |
| 10°   | 3843.5 | 3796.4 | 3618.7 | 3357.5 | 3031.6 | 2734.3 | 2502.7 | 2375.5 | 2300.9 | 2276.7 | 2239.4 |
| 12.5° | 3886.4 | 3817.2 | 3545.2 | 3134.8 | 2699.1 | 2373.3 | 2171.4 | 2096.8 | 2058.4 | 2045.2 | 2048.6 |
| 15°   | 3948.9 | 3834.8 | 3434.3 | 2856.1 | 2382.1 | 2110.0 | 1979.4 | 1927.8 | 1908.0 | 1907.0 | 1911.3 |
| 17.5° | 3996.1 | 3838.1 | 3262.1 | 2557.6 | 2138.5 | 1950.9 | 1843.4 | 1823.6 | 1836.8 | 1856.5 | 1864.2 |
| 20°   | 4048.7 | 3808.5 | 3036.0 | 2285.5 | 1967.3 | 1811.5 | 1766.5 | 1779.7 | 1811.5 | 1840.1 | 1849.9 |
| 22.5° | 4086.1 | 3754.7 | 2762.8 | 2073.8 | 1819.2 | 1731.4 | 1729.2 | 1756.6 | 1774.2 | 1788.5 | 1796.1 |
| 25°   | 4119.0 | 3663.7 | 2473.1 | 1896.0 | 1697.4 | 1683.2 | 1707.2 | 1698.5 | 1686.4 | 1698.5 | 1706.2 |
| 27.5° | 4143.2 | 3519.8 | 2214.2 | 1740.2 | 1611.8 | 1650.2 | 1636.0 | 1616.2 | 1615.1 | 1621.7 | 1632.6 |
| 30°   | 4135.5 | 3327.9 | 2001.3 | 1592.0 | 1551.4 | 1588.7 | 1554.7 | 1551.4 | 1548.2 | 1551.4 | 1563.5 |
| 32.5° | 4135.5 | 3109.5 | 1837.8 | 1490.0 | 1513.1 | 1498.9 | 1495.5 | 1487.8 | 1474.7 | 1473.5 | 1487.8 |
| 35°   | 4158.5 | 2891.2 | 1697.4 | 1435.2 | 1481.2 | 1447.2 | 1449.5 | 1430.8 | 1403.3 | 1390.2 | 1403.3 |
| 37.5° | 4205.7 | 2715.6 | 1558.1 | 1408.9 | 1425.3 | 1424.2 | 1415.4 | 1383.6 | 1335.4 | 1293.7 | 1307.9 |
| 40°   | 4319.8 | 2664.1 | 1462.6 | 1396.8 | 1398.9 | 1412.1 | 1389.1 | 1327.7 | 1217.9 | 1149.8 | 1158.7 |
| 42.5° | 4498.6 | 2750.7 | 1441.8 | 1367.1 | 1381.4 | 1394.6 | 1349.6 | 1206.9 | 1129.0 | 1088.4 | 1088.4 |
| 45°   | 4725.8 | 2902.2 | 1486.8 | 1324.3 | 1339.7 | 1362.7 | 1228.9 | 1160.8 | 1125.8 | 1126.9 | 1132.3 |
| 47.5° | 5013.2 | 3061.3 | 1570.1 | 1287.1 | 1279.4 | 1292.5 | 1148.8 | 1107.1 | 1058.8 | 1070.9 | 1101.6 |
| 50°   | 5345.7 | 3222.5 | 1649.1 | 1236.6 | 1212.5 | 1169.6 | 1097.3 | 1057.7 | 996.3  | 967.7  | 975.4  |
| 52.5° | 5705.6 | 3378.4 | 1680.9 | 1175.2 | 1140.0 | 1090.6 | 1062.1 | 1013.8 | 939.2  | 892.1  | 890.9  |
| 55°   | 6046.8 | 3519.8 | 1645.8 | 1101.6 | 1067.6 | 1029.2 | 1024.8 | 995.2  | 915.1  | 849.2  | 849.2  |
| 57.5° | 6369.3 | 3638.4 | 1558.1 | 1027.0 | 994.0  | 971.1  | 1000.7 | 986.4  | 885.5  | 800.9  | 796.6  |
| 60°   | 6642.6 | 3719.6 | 1430.8 | 951.3  | 928.2  | 916.1  | 961.1  | 956.7  | 843.8  | 749.4  | 746.1  |
| 62.5° | 6859.8 | 3751.4 | 1290.4 | 878.8  | 873.4  | 851.5  | 906.3  | 906.3  | 791.1  | 698.9  | 695.7  |
| 65°   | 7030.0 | 3720.6 | 1147.7 | 807.6  | 818.6  | 785.7  | 839.4  | 832.8  | 735.1  | 653.9  | 649.5  |
| 67.5° | 7180.2 | 3619.8 | 989.7  | 737.4  | 762.6  | 720.9  | 769.2  | 753.8  | 673.7  | 609.0  | 604.5  |
| 70°   | 7247.2 | 3385.0 | 809.7  | 667.1  | 697.8  | 657.2  | 698.9  | 670.5  | 604.5  | 560.7  | 551.9  |
| 72.5° | 6709.5 | 2813.3 | 637.4  | 593.6  | 619.9  | 587.0  | 623.2  | 590.3  | 529.9  | 510.2  | 493.7  |
| 75°   | 5550.9 | 2111.1 | 490.5  | 513.5  | 533.2  | 508.0  | 532.2  | 508.0  | 453.2  | 467.4  | 426.8  |
| 77.5° | 4031.2 | 1425.3 | 375.3  | 429.1  | 437.8  | 424.7  | 445.5  | 418.0  | 368.7  | 365.4  | 348.9  |
| 80°   | 2004.6 | 835.0  | 294.1  | 339.1  | 335.8  | 327.0  | 351.1  | 337.9  | 296.2  | 313.9  | 310.5  |
| 82.5° | 580.5  | 357.7  | 213.9  | 238.1  | 231.5  | 233.7  | 251.2  | 257.9  | 386.2  | 382.9  | 391.8  |
| 85°   | 182.1  | 140.4  | 128.3  | 132.7  | 126.2  | 129.5  | 148.1  | 294.1  | 272.1  | 159.1  | 172.3  |
| 87.5° | 47.2   | 48.3   | 31.8   | 34.0   | 35.2   | 41.7   | 47.2   | 178.9  | 85.6   | 56.0   | 59.2   |
| 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)