

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: P961324

Luminaire Tested: **NVN-SB2A-722-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961324
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB2A-722-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5850.7 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

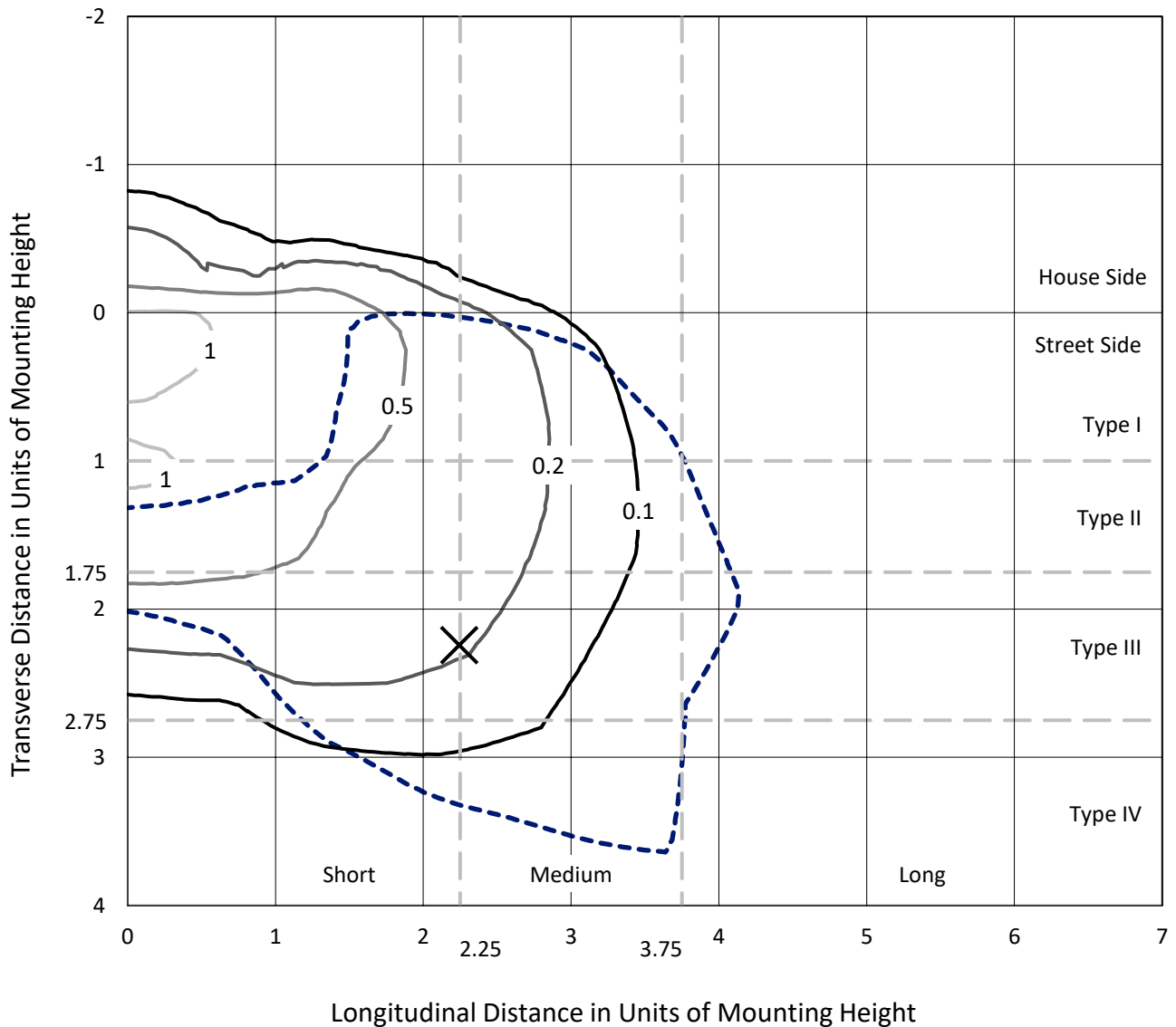
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961324
 CATALOG NUMBER: NVN-SB2A-722-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

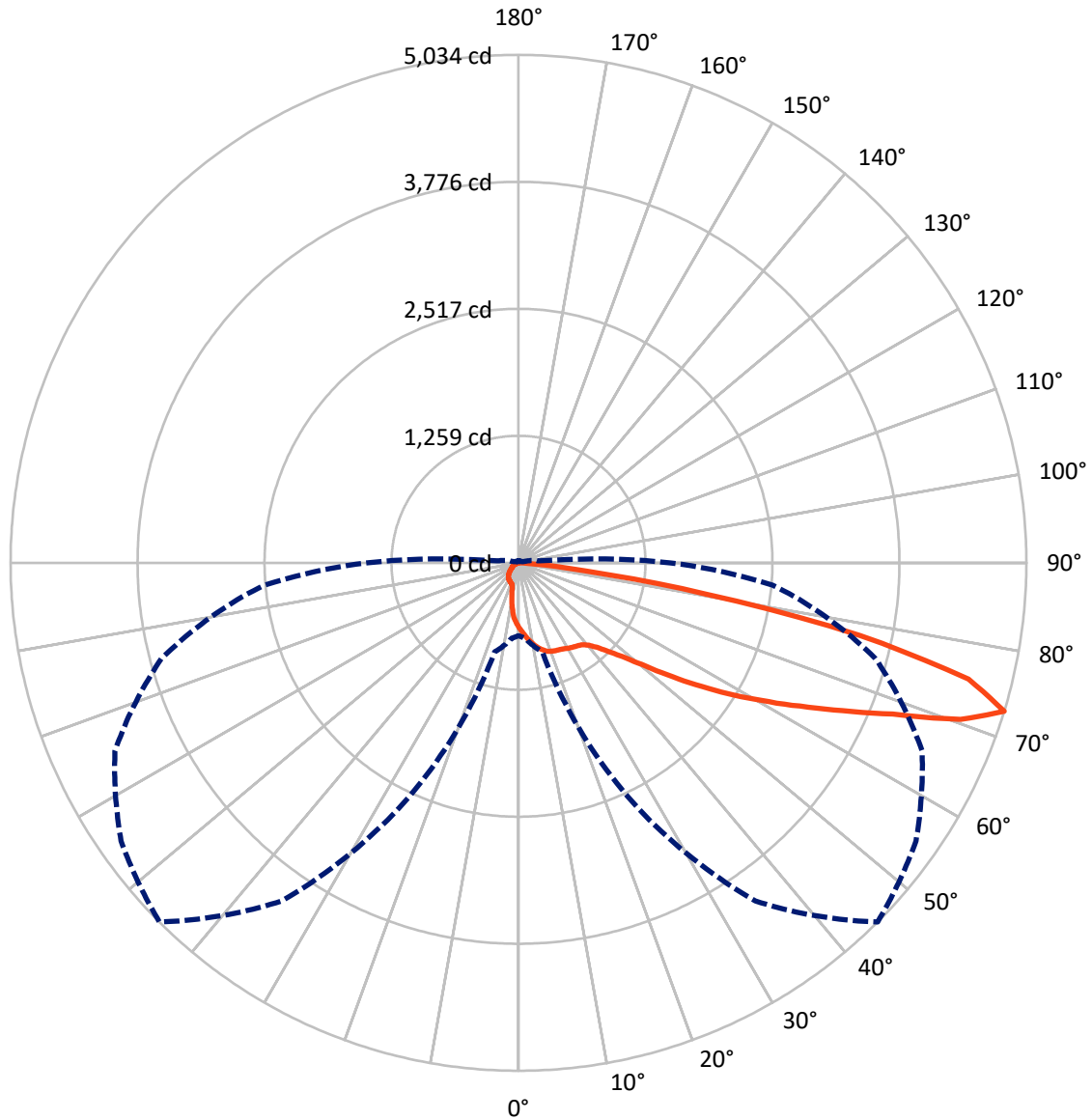
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P961324
CATALOG NUMBER: NVN-SB2A-722-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P961324
 CATALOG NUMBER: NVN-SB2A-722-U-T4W-HSS

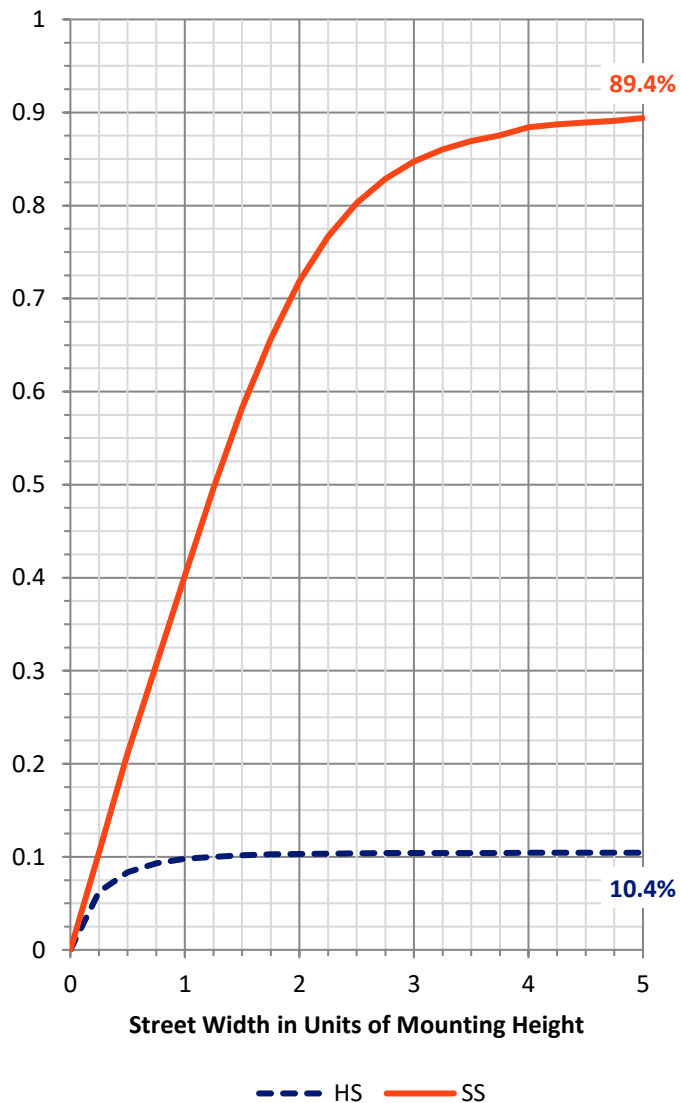
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 614.7 | 0.0 | 614.7 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 5236.0 | 0.0 | 5236.0 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 5850.7 | 0.0 | 5850.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 60.4 | 1.0 |
| 10°-20° | 176.5 | 3.0 |
| 20°-30° | 289.8 | 5.0 |
| 30°-40° | 411.1 | 7.0 |
| 40°-50° | 679.4 | 11.6 |
| 50°-60° | 1220.5 | 20.9 |
| 60°-70° | 1694.8 | 29.0 |
| 70°-80° | 1229.3 | 21.0 |
| 80°-90° | 88.9 | 1.5 |
| 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° | 5850.7 | 100.0 |
| 0°-180° | 5850.7 | 100.0 |

Coefficient of Utilization



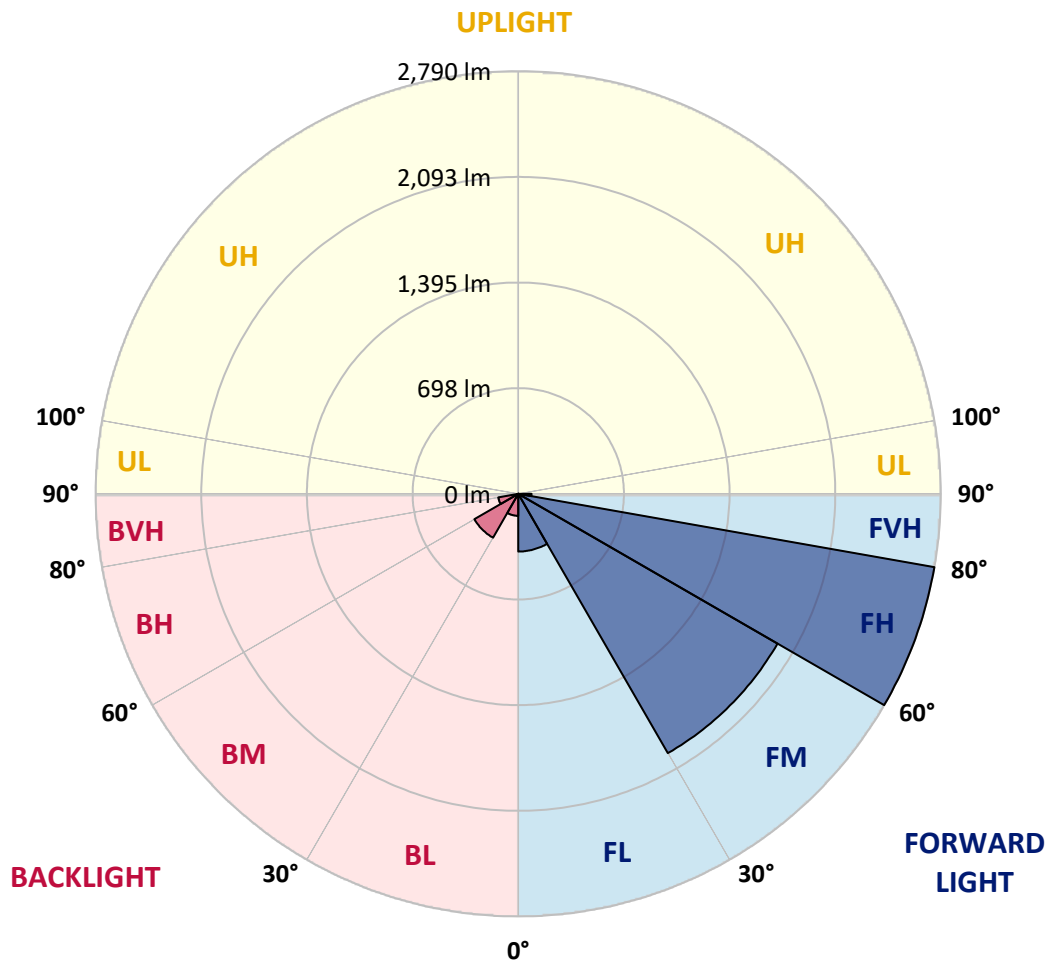
REPORT NUMBER: P961324
 CATALOG NUMBER: NVN-SB2A-722-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 381.1 | 6.5 | | | |
| FM (30°-60°) | 1976.7 | 33.8 | | | |
| FH (60°-80°) | 2790.0 | 47.7 | | | G2/5000 |
| FVH (80°-90°) | 88.1 | 1.5 | | | G1/100 |
| BL (0°-30°) | 145.6 | 2.5 | B1/500 | | |
| BM (30°-60°) | 334.3 | 5.7 | B1/1000 | | |
| BH (60°-80°) | 134.1 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.7 | 0.0 | | | 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 IV Short



REPORT NUMBER: P961324
 CATALOG NUMBER: NVN-SB2A-722-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 |
| 2.5° | 700.1 | 701.3 | 700.5 | 695.7 | 687.7 | 683.3 | 680.9 | 672.9 | 667.7 | 658.6 | 648.9 |
| 5° | 764.3 | 769.2 | 766.4 | 756.8 | 741.6 | 730.8 | 727.6 | 711.2 | 696.5 | 679.3 | 659.3 |
| 7.5° | 832.6 | 835.1 | 829.8 | 817.4 | 797.1 | 778.7 | 775.9 | 753.2 | 729.6 | 703.3 | 676.1 |
| 10° | 891.7 | 894.5 | 886.5 | 868.6 | 845.4 | 822.7 | 818.7 | 793.6 | 765.6 | 733.2 | 698.4 |
| 12.5° | 941.3 | 944.0 | 933.7 | 912.1 | 886.5 | 862.9 | 859.1 | 832.6 | 801.9 | 766.0 | 722.8 |
| 15° | 978.8 | 984.0 | 970.1 | 946.9 | 919.3 | 895.7 | 893.7 | 867.8 | 837.8 | 797.9 | 751.9 |
| 17.5° | 1000.8 | 1005.9 | 992.8 | 964.8 | 941.3 | 921.3 | 918.9 | 897.4 | 869.4 | 831.1 | 780.3 |
| 20° | 1004.4 | 1009.1 | 995.2 | 970.8 | 951.3 | 935.3 | 934.1 | 918.5 | 898.1 | 861.4 | 811.1 |
| 22.5° | 993.5 | 999.6 | 986.8 | 967.2 | 953.7 | 945.3 | 943.6 | 934.9 | 923.3 | 892.2 | 839.8 |
| 25° | 982.4 | 987.2 | 977.6 | 960.4 | 953.2 | 952.4 | 953.7 | 952.0 | 949.7 | 923.3 | 873.4 |
| 27.5° | 981.6 | 986.8 | 976.0 | 959.6 | 955.6 | 964.0 | 965.2 | 972.8 | 974.8 | 951.6 | 905.7 |
| 30° | 988.4 | 992.0 | 981.6 | 964.4 | 962.5 | 981.6 | 982.1 | 995.6 | 998.8 | 975.6 | 937.7 |
| 32.5° | 1003.2 | 1007.2 | 996.8 | 971.6 | 968.8 | 995.6 | 996.8 | 1014.7 | 1020.0 | 1001.2 | 971.2 |
| 35° | 1037.9 | 1042.7 | 1030.7 | 991.6 | 981.6 | 1008.8 | 1012.4 | 1033.5 | 1043.9 | 1028.3 | 1005.9 |
| 37.5° | 1124.5 | 1110.6 | 1094.2 | 1032.0 | 1010.8 | 1029.5 | 1035.6 | 1060.3 | 1078.6 | 1060.7 | 1047.4 |
| 40° | 1339.8 | 1295.9 | 1244.8 | 1100.6 | 1061.9 | 1073.9 | 1078.6 | 1103.4 | 1128.5 | 1111.0 | 1104.6 |
| 42.5° | 1662.9 | 1611.0 | 1528.7 | 1258.7 | 1139.0 | 1144.9 | 1148.5 | 1170.1 | 1205.6 | 1191.7 | 1193.3 |
| 45° | 1950.8 | 1932.0 | 1848.2 | 1528.7 | 1283.1 | 1253.6 | 1258.0 | 1269.2 | 1321.4 | 1316.3 | 1326.7 |
| 47.5° | 2172.1 | 2161.3 | 2096.6 | 1838.6 | 1526.7 | 1386.5 | 1398.9 | 1404.1 | 1479.6 | 1497.9 | 1525.9 |
| 50° | 2342.2 | 2338.2 | 2280.3 | 2114.2 | 1845.0 | 1582.6 | 1587.0 | 1575.8 | 1688.9 | 1734.4 | 1787.5 |
| 52.5° | 2502.7 | 2516.3 | 2473.5 | 2370.1 | 2184.9 | 1839.4 | 1838.6 | 1785.9 | 1938.5 | 2007.2 | 2097.8 |
| 55° | 2647.7 | 2652.5 | 2656.9 | 2631.3 | 2526.7 | 2131.7 | 2124.1 | 2037.9 | 2227.9 | 2299.1 | 2397.3 |
| 57.5° | 2783.9 | 2785.8 | 2825.0 | 2877.3 | 2882.5 | 2445.6 | 2431.6 | 2328.2 | 2544.3 | 2595.0 | 2655.3 |
| 60° | 2875.3 | 2884.6 | 2967.2 | 3112.5 | 3176.1 | 2769.4 | 2761.9 | 2656.5 | 2866.1 | 2889.7 | 2878.5 |
| 62.5° | 2743.5 | 2799.5 | 3007.9 | 3296.2 | 3453.2 | 3128.5 | 3124.9 | 3025.9 | 3204.8 | 3185.6 | 3089.8 |
| 65° | 2220.8 | 2315.5 | 2682.0 | 3420.4 | 3725.2 | 3529.5 | 3534.6 | 3429.2 | 3552.6 | 3490.3 | 3261.4 |
| 67.5° | 1553.5 | 1653.3 | 2087.0 | 3430.4 | 4029.1 | 4000.3 | 4030.2 | 3864.9 | 3922.1 | 3782.2 | 3302.2 |
| 70° | 1074.3 | 1125.8 | 1408.1 | 3215.5 | 4265.8 | 4648.8 | 4648.1 | 4400.0 | 4289.4 | 3915.2 | 3094.6 |
| 72.5° | 722.4 | 749.2 | 914.5 | 2551.0 | 4091.7 | 5034.2 | 5011.0 | 4809.0 | 4413.2 | 3661.6 | 2528.3 |
| 75° | 304.7 | 324.3 | 423.3 | 1433.7 | 3237.2 | 4605.7 | 4543.0 | 4249.9 | 3921.2 | 2883.3 | 1577.5 |
| 77.5° | 96.7 | 105.1 | 167.0 | 513.1 | 1783.1 | 3461.9 | 3395.7 | 2654.0 | 2628.1 | 1446.5 | 576.7 |
| 80° | 45.9 | 53.5 | 93.9 | 206.0 | 701.6 | 1882.9 | 1873.7 | 1204.1 | 1130.6 | 390.5 | 115.8 |
| 82.5° | 20.0 | 23.6 | 51.9 | 110.2 | 313.9 | 671.7 | 685.3 | 409.7 | 339.1 | 148.1 | 35.6 |
| 85° | 6.4 | 8.4 | 24.0 | 50.7 | 132.6 | 167.0 | 164.9 | 97.5 | 136.5 | 80.7 | 12.4 |
| 87.5° | 0.0 | 0.0 | 8.0 | 11.6 | 13.5 | 9.6 | 10.8 | 8.4 | 37.9 | 22.3 | 4.4 |
| 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: P961324
 CATALOG NUMBER: NVN-SB2A-722-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 | 640.9 |
| 2.5° | 644.1 | 637.8 | 626.6 | 616.2 | 607.0 | 597.8 | 592.2 | 584.2 | 583.4 | 583.4 | 585.5 |
| 5° | 648.5 | 638.2 | 618.2 | 597.1 | 572.7 | 549.5 | 526.3 | 504.0 | 496.8 | 491.6 | 493.9 |
| 7.5° | 661.3 | 644.9 | 613.4 | 573.1 | 526.7 | 476.0 | 440.4 | 402.1 | 387.3 | 379.4 | 380.6 |
| 10° | 679.7 | 657.3 | 609.4 | 538.7 | 463.6 | 394.5 | 343.9 | 302.3 | 286.4 | 279.5 | 279.5 |
| 12.5° | 700.1 | 672.5 | 602.2 | 496.0 | 394.5 | 311.9 | 262.4 | 243.2 | 240.8 | 240.8 | 240.8 |
| 15° | 724.5 | 690.8 | 589.9 | 445.7 | 322.3 | 246.8 | 229.2 | 230.0 | 232.5 | 234.0 | 234.0 |
| 17.5° | 749.6 | 710.4 | 570.3 | 389.4 | 258.4 | 222.0 | 222.4 | 223.7 | 225.6 | 227.2 | 227.2 |
| 20° | 776.7 | 730.0 | 544.3 | 329.4 | 221.6 | 214.8 | 216.1 | 217.2 | 218.8 | 219.7 | 220.1 |
| 22.5° | 805.9 | 748.4 | 513.5 | 270.8 | 209.3 | 208.9 | 209.3 | 210.4 | 212.5 | 212.5 | 213.3 |
| 25° | 837.0 | 768.7 | 478.5 | 228.1 | 202.8 | 202.8 | 203.7 | 204.5 | 206.0 | 206.0 | 206.4 |
| 27.5° | 869.0 | 787.5 | 441.3 | 205.6 | 197.3 | 196.9 | 196.9 | 198.0 | 198.8 | 199.3 | 199.7 |
| 30° | 904.2 | 809.4 | 404.2 | 200.9 | 192.9 | 190.9 | 189.7 | 190.4 | 191.3 | 191.7 | 192.5 |
| 32.5° | 940.0 | 830.7 | 370.9 | 202.8 | 188.5 | 184.9 | 180.9 | 180.1 | 180.1 | 181.7 | 182.9 |
| 35° | 980.0 | 853.8 | 345.4 | 209.6 | 186.1 | 176.1 | 169.7 | 166.2 | 166.6 | 168.9 | 170.1 |
| 37.5° | 1028.0 | 881.8 | 326.7 | 215.7 | 184.5 | 166.2 | 155.7 | 151.4 | 148.5 | 151.4 | 150.6 |
| 40° | 1090.6 | 922.9 | 313.1 | 220.5 | 182.6 | 154.6 | 140.5 | 133.4 | 128.2 | 129.8 | 128.9 |
| 42.5° | 1182.8 | 987.6 | 307.9 | 220.9 | 178.1 | 140.9 | 124.9 | 115.4 | 107.8 | 108.2 | 106.6 |
| 45° | 1312.3 | 1089.8 | 334.7 | 215.7 | 168.5 | 126.2 | 108.6 | 95.8 | 91.0 | 89.9 | 88.3 |
| 47.5° | 1489.5 | 1238.8 | 396.6 | 204.9 | 154.6 | 111.8 | 92.7 | 81.9 | 78.3 | 76.3 | 75.0 |
| 50° | 1727.2 | 1430.1 | 465.2 | 192.9 | 140.5 | 98.2 | 79.4 | 72.7 | 70.3 | 68.3 | 67.9 |
| 52.5° | 2002.7 | 1624.1 | 521.5 | 180.9 | 126.6 | 86.3 | 71.1 | 67.1 | 65.1 | 63.4 | 63.1 |
| 55° | 2255.5 | 1758.0 | 518.3 | 168.1 | 113.1 | 76.7 | 65.1 | 62.7 | 60.3 | 58.7 | 57.9 |
| 57.5° | 2412.8 | 1776.7 | 427.3 | 154.2 | 97.5 | 69.1 | 59.6 | 57.9 | 55.1 | 53.1 | 52.7 |
| 60° | 2485.1 | 1669.7 | 299.5 | 135.8 | 81.9 | 61.9 | 53.5 | 52.7 | 49.1 | 46.3 | 45.5 |
| 62.5° | 2498.3 | 1470.8 | 199.7 | 113.1 | 68.3 | 55.1 | 47.6 | 46.3 | 41.5 | 36.7 | 34.3 |
| 65° | 2444.8 | 1186.4 | 138.2 | 88.3 | 58.3 | 48.0 | 40.7 | 38.3 | 33.1 | 28.4 | 26.8 |
| 67.5° | 2275.5 | 833.0 | 96.2 | 63.4 | 49.5 | 37.9 | 32.4 | 31.6 | 27.6 | 23.6 | 22.3 |
| 70° | 1965.2 | 474.8 | 64.3 | 47.6 | 39.2 | 25.9 | 25.5 | 26.3 | 22.3 | 19.2 | 17.5 |
| 72.5° | 1506.7 | 217.2 | 40.0 | 34.7 | 26.8 | 17.5 | 20.4 | 20.8 | 17.2 | 14.3 | 12.8 |
| 75° | 886.9 | 93.1 | 25.1 | 22.3 | 13.5 | 11.6 | 14.8 | 15.2 | 11.6 | 9.2 | 8.0 |
| 77.5° | 301.9 | 35.2 | 16.0 | 13.2 | 6.8 | 6.4 | 9.6 | 9.6 | 6.4 | 3.6 | 2.8 |
| 80° | 68.7 | 13.2 | 8.0 | 5.2 | 3.2 | 2.8 | 3.2 | 2.8 | 1.6 | 0.4 | 0.0 |
| 82.5° | 19.6 | 5.2 | 3.2 | 1.9 | 1.2 | 1.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 5.6 | 2.4 | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.4 | 0.4 | 0.0 | 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)