

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: LUMARK

Report Number: P961470

Luminaire Tested: **NAV-SB2A-750-U-T2U-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P961470  
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: LUMARK  
Catalog Number: NAV-SB2A-750-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 5000K, 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

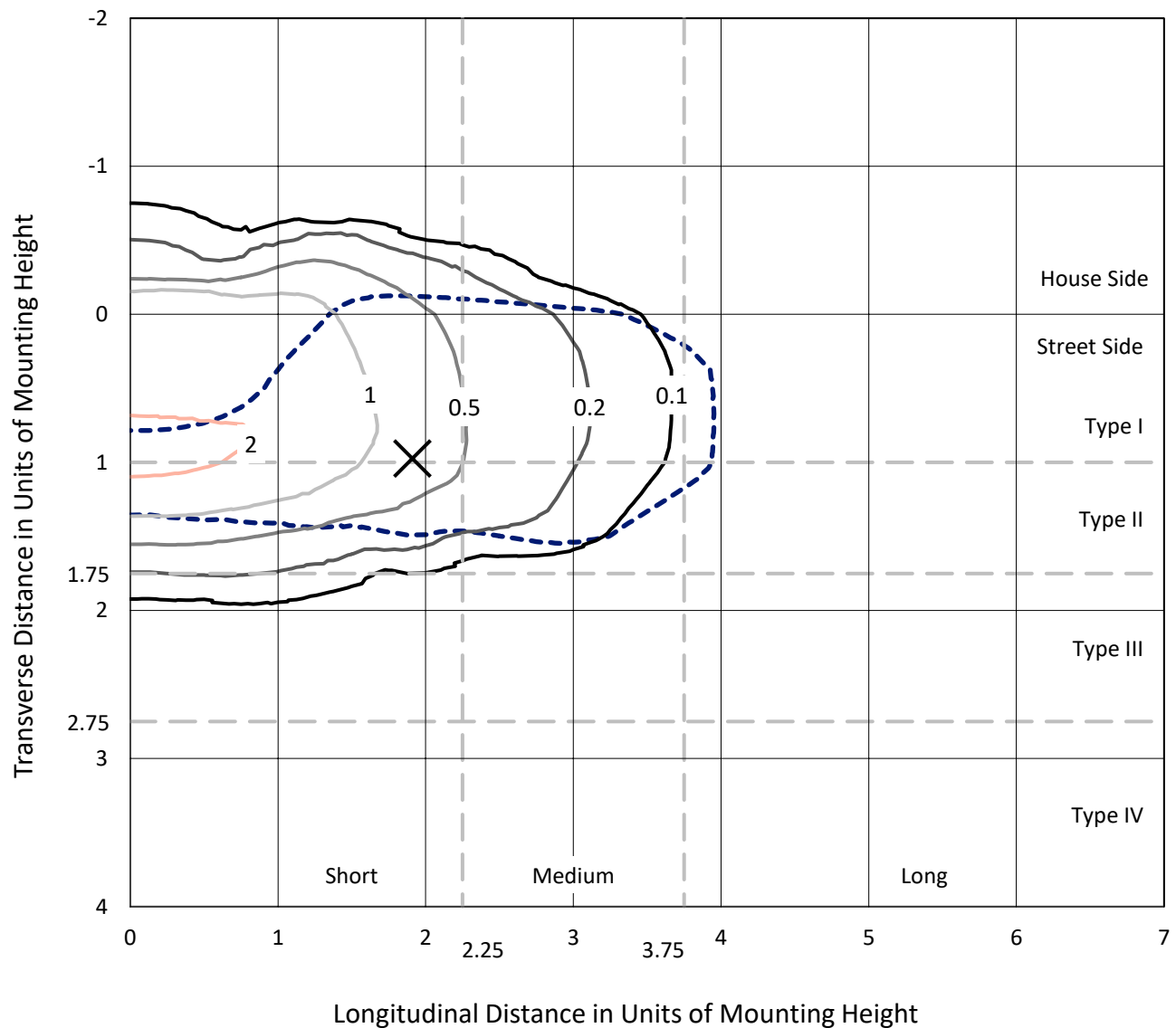


REPORT NUMBER: P961470

CATALOG NUMBER: NAV-SB2A-750-U-T2U-HSS

## Iso-Footcandle Lines of Horizontal Illumination

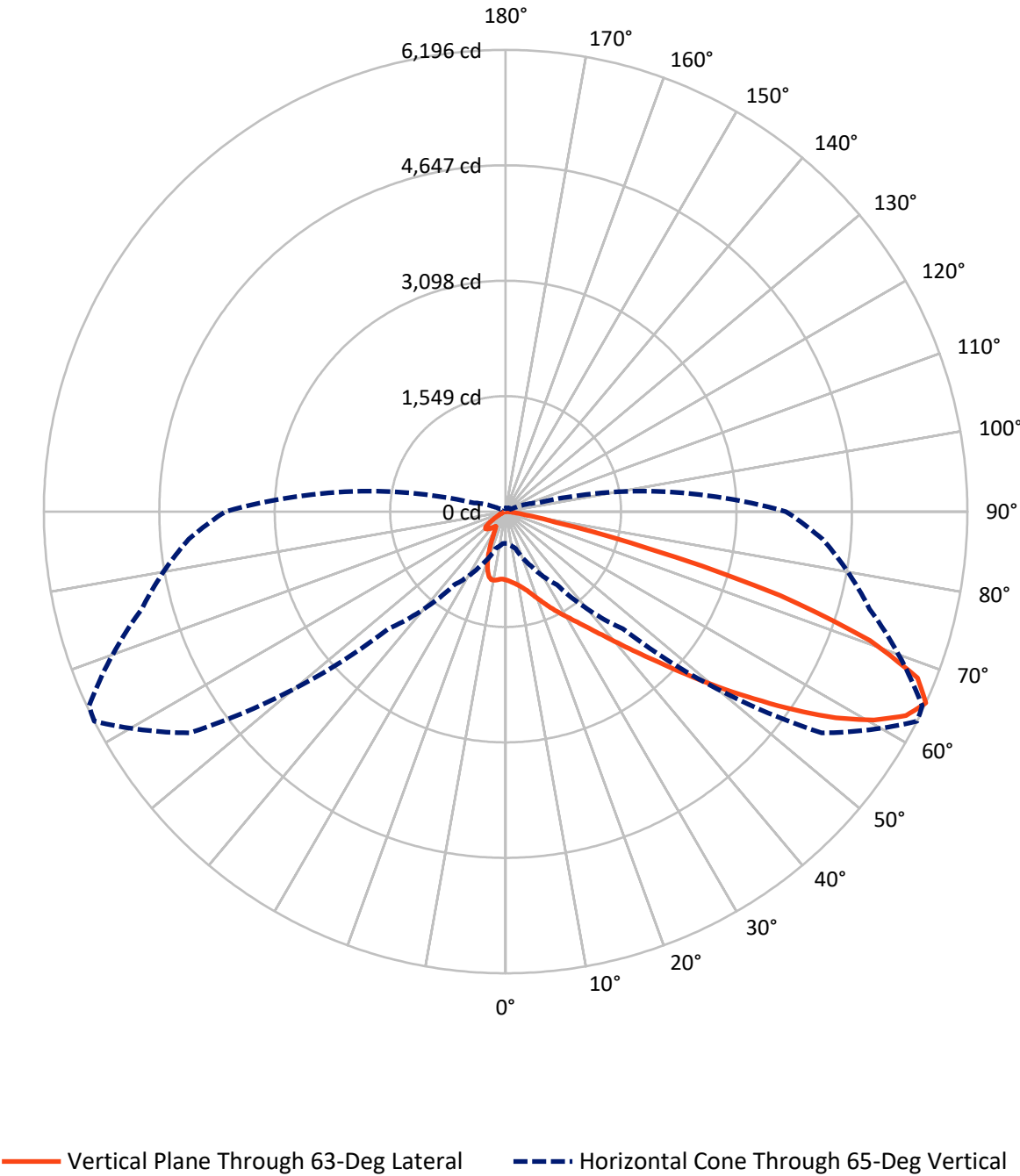
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
Type II - Short - N/A

REPORT NUMBER: P961470  
CATALOG NUMBER: NAV-SB2A-750-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961470

CATALOG NUMBER: NAV-SB2A-750-U-T2U-HSS

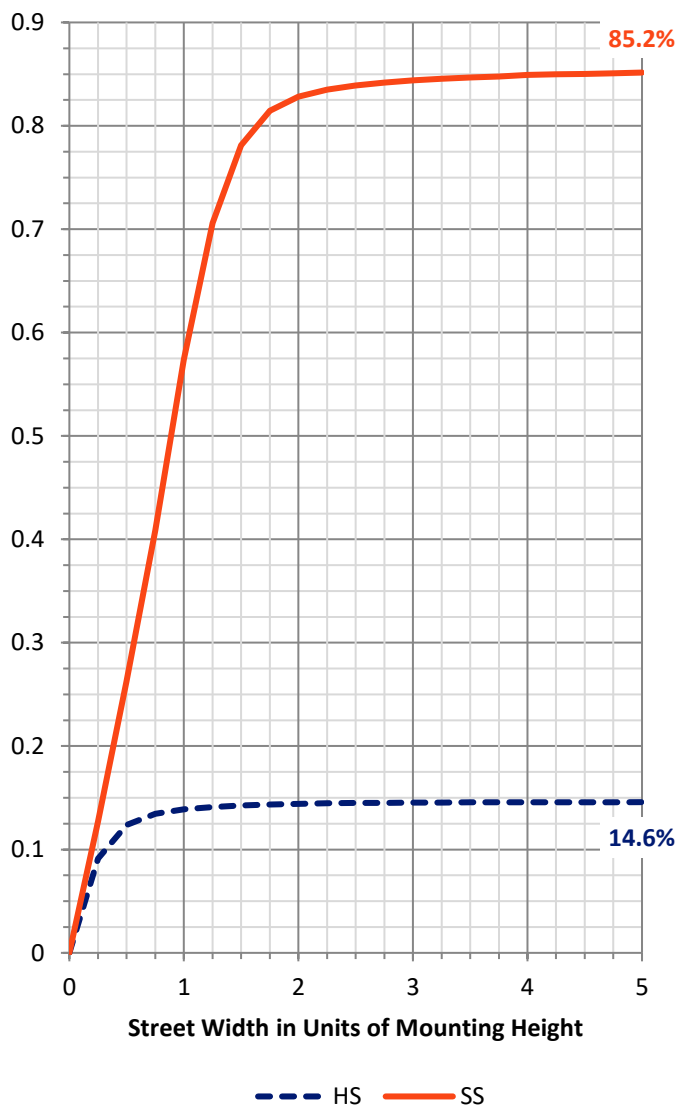
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1092.8   | 0.0    | 1092.8 |
|                    | % Fixture | 14.7     | 0.0    | 14.7   |
| <b>Street Side</b> | Lumens    | 6341.5   | 0.0    | 6341.5 |
|                    | % Fixture | 85.3     | 0.0    | 85.3   |
| <b>Total</b>       | 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**



REPORT NUMBER: P961470

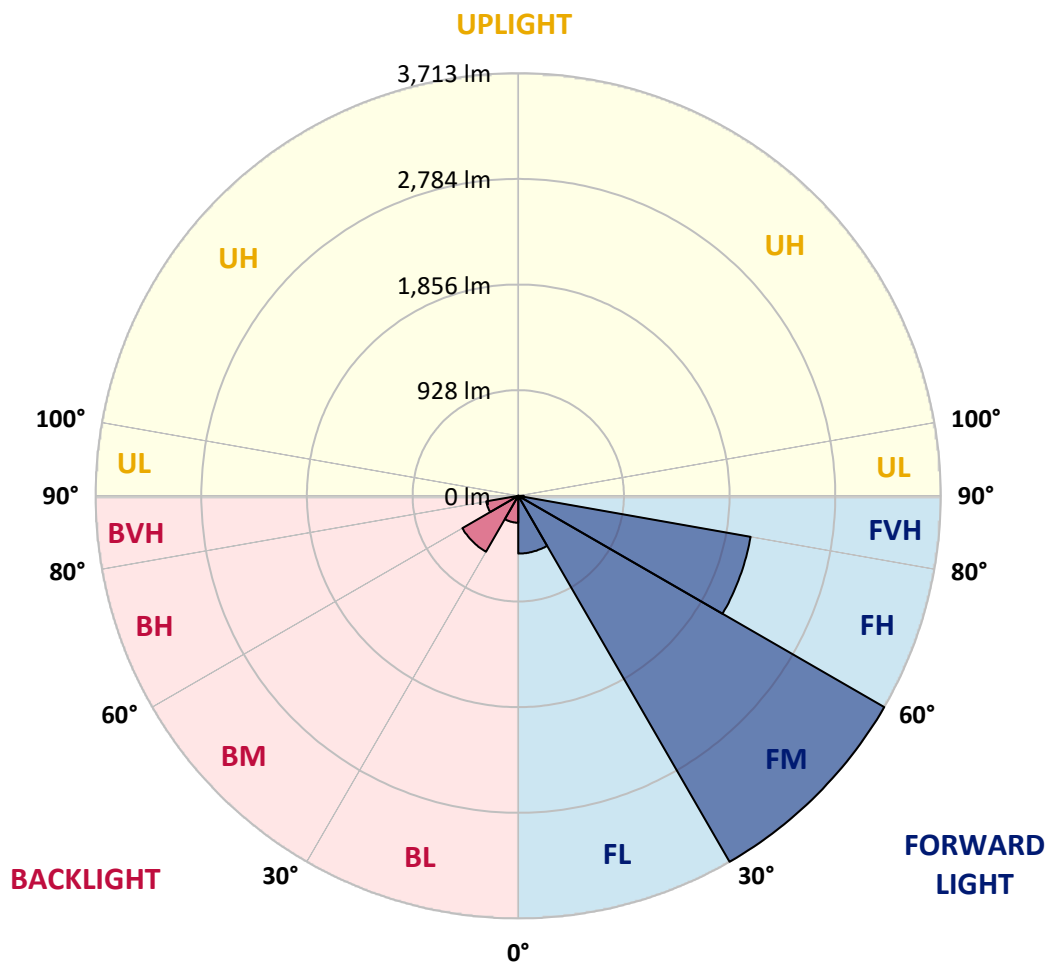
CATALOG NUMBER: NAV-SB2A-750-U-T2U-HSS

**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



REPORT NUMBER: P961470

CATALOG NUMBER: NAV-SB2A-750-U-T2U-HSS

**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    |

REPORT NUMBER: P961470

CATALOG NUMBER: NAV-SB2A-750-U-T2U-HSS

**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)