

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: P965693

Luminaire Tested: **NAV-SB4A-750-U-T4FT-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P965693  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-750-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 14761 lumens  
Efficiency: N/A  
Efficacy: 129.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 114  
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



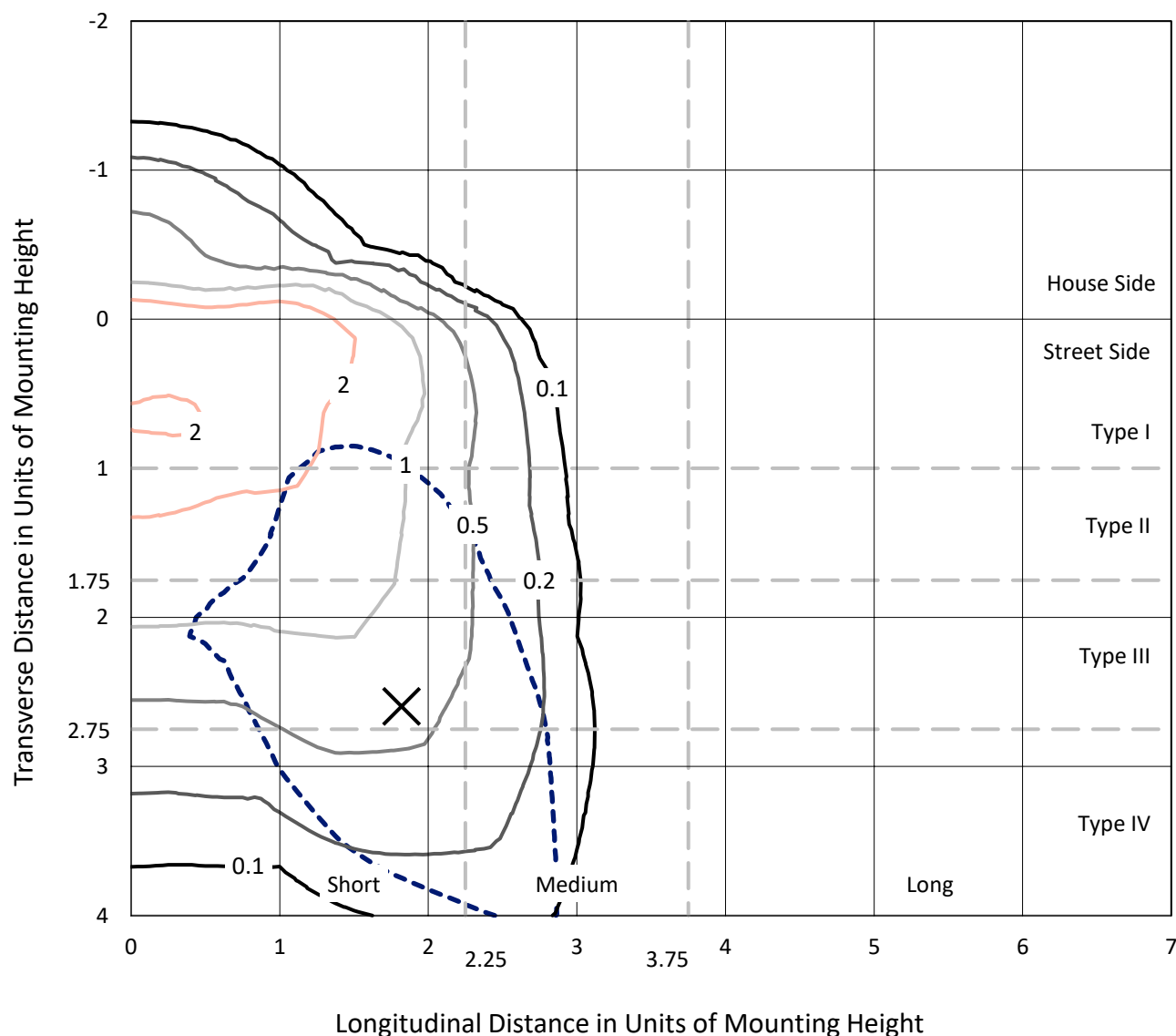
REPORT NUMBER: P965693

CATALOG NUMBER: NAV-SB4A-750-U-T4FT-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

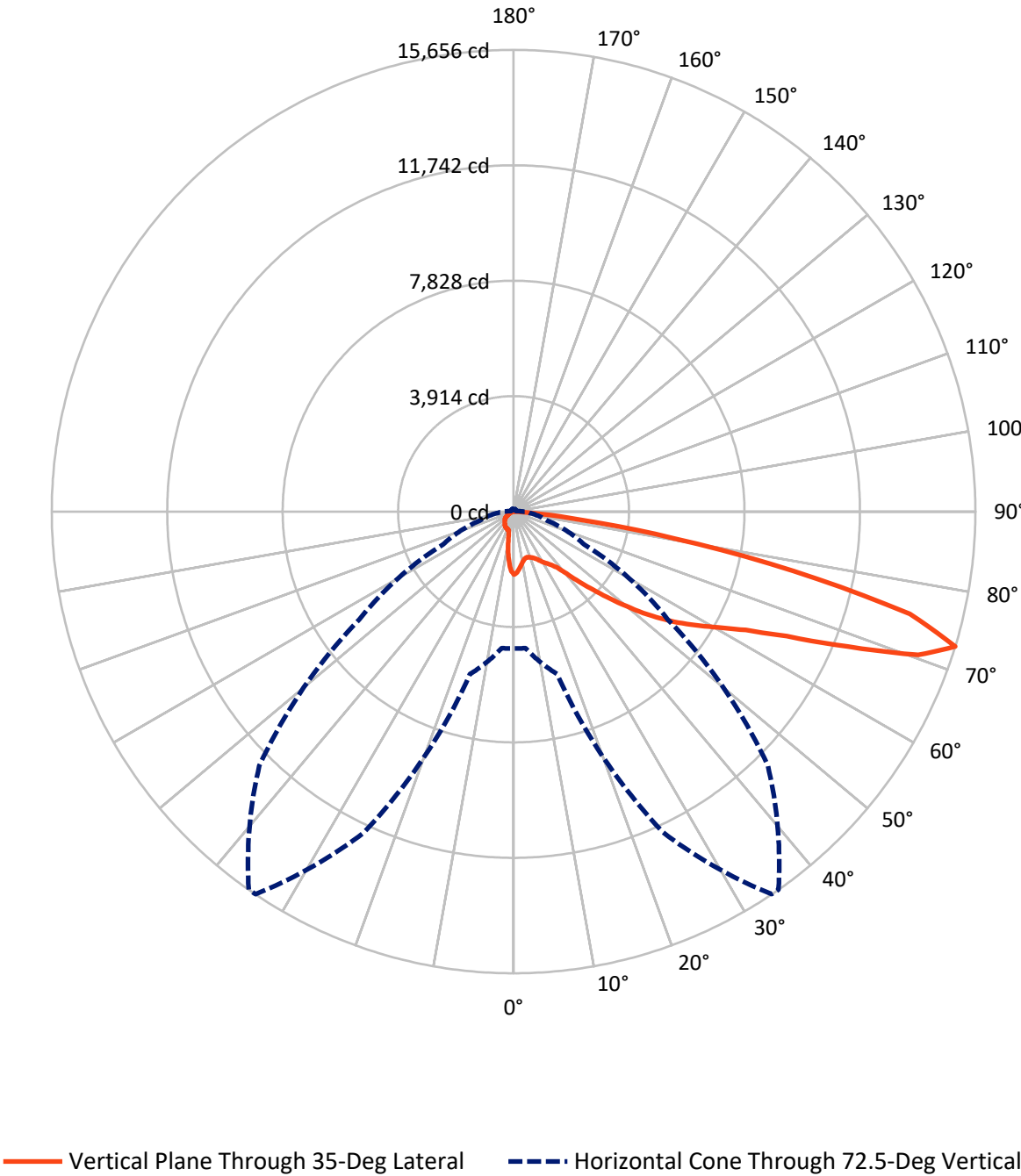


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc

Type IV - Short - N/A

REPORT NUMBER: P965693  
CATALOG NUMBER: NAV-SB4A-750-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965693

CATALOG NUMBER: NAV-SB4A-750-U-T4FT-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1661.3   | 0.0    | 1661.3  |
|                    | % Fixture | 11.3     | 0.0    | 11.3    |
| <b>Street Side</b> | Lumens    | 13099.7  | 0.0    | 13099.7 |
|                    | % Fixture | 88.7     | 0.0    | 88.7    |
| <b>Total</b>       | Lumens    | 14761.0  | 0.0    | 14761.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 175.8   | 1.2       |
| 10°-20°   | 411.3   | 2.8       |
| 20°-30°   | 668.1   | 4.5       |
| 30°-40°   | 1114.7  | 7.6       |
| 40°-50°   | 2109.0  | 14.3      |
| 50°-60°   | 3351.2  | 22.7      |
| 60°-70°   | 4145.7  | 28.1      |
| 70°-80°   | 2577.0  | 17.5      |
| 80°-90°   | 208.3   | 1.4       |
| 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°    | 14761.0 | 100.0     |
| 0°-180°   | 14761.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P965693

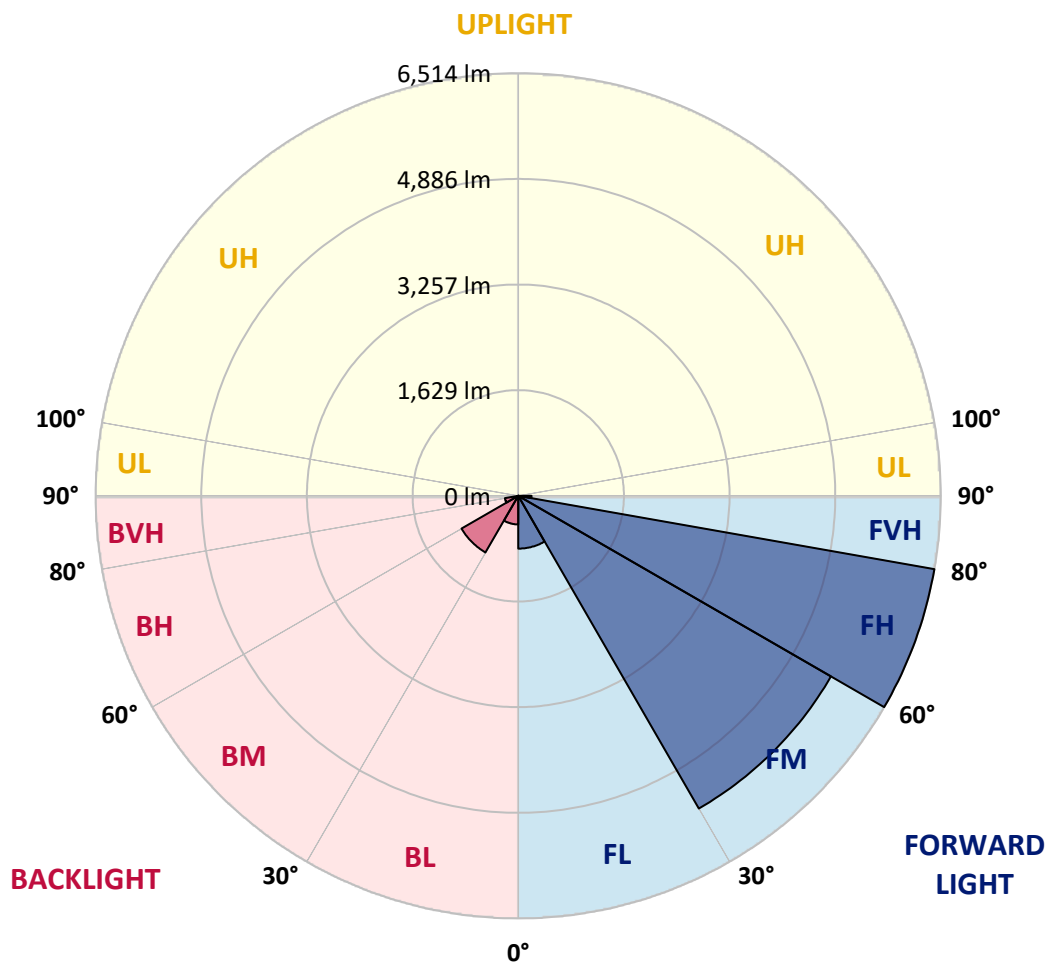
CATALOG NUMBER: NAV-SB4A-750-U-T4FT-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 813.7  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 5566.4 | 37.7      |                         |      |         |
| FH   | (60°-80°)   | 6514.2 | 44.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 205.4  | 1.4       |                         |      | G2/225  |
| BL   | (0°-30°)    | 441.4  | 3.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1008.6 | 6.8       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 208.5  | 1.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 2.8    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type IV Short



REPORT NUMBER: P965693

CATALOG NUMBER: NAV-SB4A-750-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 34°     | 35°     | 45°     | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 2139.4 | 2139.4 | 2139.4 | 2139.4  | 2139.4  | 2139.4  | 2139.4  | 2139.4 | 2139.4 | 2139.4 | 2139.4 |
| 2.5°  | 2044.2 | 2061.5 | 2064.8 | 2070.2  | 2070.2  | 2076.6  | 2087.4  | 2102.6 | 2127.5 | 2140.4 | 2149.1 |
| 5°    | 1884.2 | 1897.1 | 1913.4 | 1926.3  | 1951.2  | 1954.4  | 1996.6  | 2037.7 | 2095.0 | 2138.3 | 2168.6 |
| 7.5°  | 1722.9 | 1738.1 | 1759.7 | 1791.1  | 1823.6  | 1833.3  | 1897.1  | 1966.4 | 2057.2 | 2138.3 | 2189.1 |
| 10°   | 1609.4 | 1610.5 | 1630.0 | 1661.3  | 1713.2  | 1725.1  | 1803.0  | 1901.4 | 2014.9 | 2125.3 | 2208.6 |
| 12.5° | 1545.6 | 1553.2 | 1561.8 | 1585.6  | 1635.4  | 1643.0  | 1726.2  | 1841.9 | 1972.8 | 2117.8 | 2231.3 |
| 15°   | 1545.6 | 1551.0 | 1556.4 | 1568.2  | 1608.3  | 1614.8  | 1688.4  | 1804.1 | 1951.2 | 2120.9 | 2268.1 |
| 17.5° | 1561.8 | 1570.5 | 1566.1 | 1580.1  | 1622.4  | 1626.7  | 1691.6  | 1793.2 | 1950.1 | 2141.5 | 2324.3 |
| 20°   | 1600.7 | 1607.2 | 1598.6 | 1607.2  | 1649.4  | 1658.0  | 1725.1  | 1813.8 | 1968.5 | 2177.2 | 2394.6 |
| 22.5° | 1662.3 | 1665.6 | 1645.1 | 1651.6  | 1694.8  | 1705.7  | 1783.5  | 1872.3 | 2012.8 | 2234.5 | 2488.7 |
| 25°   | 1740.2 | 1746.7 | 1715.3 | 1722.9  | 1764.0  | 1777.0  | 1866.8  | 1959.8 | 2083.1 | 2313.5 | 2608.7 |
| 27.5° | 1830.0 | 1833.3 | 1806.3 | 1805.1  | 1858.1  | 1876.6  | 1967.4  | 2067.9 | 2177.2 | 2413.1 | 2760.2 |
| 30°   | 1932.7 | 1942.5 | 1916.5 | 1912.2  | 1979.3  | 1994.4  | 2084.2  | 2201.0 | 2315.7 | 2562.3 | 2975.5 |
| 32.5° | 2013.9 | 2021.5 | 2006.3 | 2017.2  | 2085.3  | 2097.1  | 2225.9  | 2389.2 | 2533.1 | 2774.3 | 3268.5 |
| 35°   | 2130.7 | 2135.1 | 2100.4 | 2119.9  | 2197.8  | 2228.0  | 2419.5  | 2653.1 | 2806.7 | 3040.4 | 3651.5 |
| 37.5° | 2553.6 | 2553.6 | 2406.5 | 2310.2  | 2384.9  | 2411.9  | 2684.5  | 2985.2 | 3144.2 | 3397.3 | 4133.8 |
| 40°   | 3138.8 | 3129.0 | 2913.8 | 2717.0  | 2707.2  | 2760.2  | 3062.0  | 3403.7 | 3580.0 | 3825.5 | 4676.8 |
| 42.5° | 3762.8 | 3747.7 | 3454.6 | 3259.9  | 3227.4  | 3245.9  | 3497.8  | 3919.6 | 4099.2 | 4347.9 | 5260.8 |
| 45°   | 4316.6 | 4312.3 | 4044.0 | 3782.2  | 3723.9  | 3782.2  | 4041.9  | 4523.2 | 4651.9 | 4913.6 | 5843.8 |
| 47.5° | 4780.6 | 4780.6 | 4584.8 | 4414.0  | 4383.6  | 4418.3  | 4778.4  | 5192.6 | 5180.8 | 5516.0 | 6411.6 |
| 50°   | 5314.9 | 5310.5 | 5124.5 | 5051.0  | 5082.4  | 5131.0  | 5626.4  | 5897.8 | 5728.0 | 6107.7 | 6918.9 |
| 52.5° | 5689.2 | 5715.1 | 5651.2 | 5639.3  | 5799.4  | 5883.8  | 6487.3  | 6587.9 | 6218.1 | 6669.1 | 7298.5 |
| 55°   | 5985.5 | 6015.7 | 6089.3 | 6172.5  | 6480.9  | 6591.2  | 7321.3  | 7242.2 | 6628.0 | 7155.7 | 7516.9 |
| 57.5° | 6405.1 | 6361.9 | 6475.4 | 6639.8  | 7138.4  | 7271.5  | 8129.2  | 7859.8 | 6957.8 | 7550.6 | 7540.8 |
| 60°   | 6914.5 | 6921.0 | 6940.5 | 7148.1  | 7794.9  | 7965.9  | 8925.2  | 8443.9 | 7169.8 | 7792.8 | 7276.9 |
| 62.5° | 7526.7 | 7536.4 | 7576.5 | 7895.6  | 8676.4  | 8837.6  | 9773.2  | 8922.0 | 7267.1 | 7724.6 | 6595.5 |
| 65°   | 7484.6 | 7525.7 | 7972.3 | 9063.7  | 10016.5 | 10175.5 | 10762.8 | 9257.3 | 7120.1 | 7101.7 | 5370.1 |
| 67.5° | 6818.3 | 6885.3 | 7632.8 | 10458.9 | 12036.9 | 12214.3 | 11959.1 | 9323.2 | 6485.2 | 5522.6 | 3503.2 |
| 70°   | 5944.4 | 5968.2 | 6867.0 | 11713.5 | 14376.3 | 14555.9 | 13029.8 | 8597.5 | 4921.2 | 3080.3 | 1569.4 |
| 72.5° | 4642.1 | 4647.6 | 5702.1 | 12004.5 | 15646.1 | 15655.8 | 12189.4 | 6382.4 | 2646.7 | 1183.3 | 545.1  |
| 75°   | 3316.1 | 3283.7 | 3819.0 | 9735.3  | 13765.2 | 13875.6 | 9138.3  | 2993.8 | 1011.3 | 559.1  | 271.5  |
| 77.5° | 1778.2 | 1813.8 | 2161.0 | 5773.5  | 9509.2  | 9697.4  | 4986.1  | 863.2  | 514.9  | 380.7  | 179.6  |
| 80°   | 549.4  | 579.7  | 885.8  | 2643.4  | 5386.3  | 5499.8  | 1848.4  | 384.0  | 359.1  | 271.5  | 117.9  |
| 82.5° | 173.0  | 179.6  | 413.2  | 1110.8  | 2235.6  | 2287.6  | 535.4   | 217.4  | 245.5  | 179.6  | 69.2   |
| 85°   | 49.7   | 50.8   | 183.9  | 414.2   | 552.7   | 563.5   | 150.4   | 84.4   | 140.6  | 111.4  | 35.7   |
| 87.5° | 5.4    | 17.3   | 69.2   | 69.2    | 48.7    | 47.6    | 16.2    | 18.3   | 40.0   | 14.0   | 6.5    |
| 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: P965693

CATALOG NUMBER: NAV-SB4A-750-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 | 2139.4 |
| 2.5°  | 2143.7 | 2144.8 | 2130.7 | 2106.9 | 2081.0 | 2059.3 | 2032.3 | 2010.6 | 1995.5 | 1991.2 | 1998.7 |
| 5°    | 2158.9 | 2151.3 | 2111.3 | 2038.8 | 1952.2 | 1877.6 | 1794.4 | 1728.4 | 1685.1 | 1666.8 | 1673.2 |
| 7.5°  | 2181.5 | 2159.9 | 2072.3 | 1929.6 | 1764.0 | 1616.9 | 1467.7 | 1352.0 | 1278.4 | 1241.7 | 1247.0 |
| 10°   | 2201.0 | 2157.7 | 2007.5 | 1771.6 | 1518.5 | 1295.7 | 1094.6 | 955.0  | 877.2  | 840.4  | 841.4  |
| 12.5° | 2219.4 | 2156.7 | 1923.0 | 1584.5 | 1241.7 | 969.1  | 782.0  | 712.8  | 691.2  | 683.6  | 681.4  |
| 15°   | 2254.0 | 2159.9 | 1817.0 | 1370.3 | 965.9  | 732.3  | 664.1  | 663.0  | 667.4  | 665.1  | 664.1  |
| 17.5° | 2301.6 | 2163.2 | 1697.0 | 1143.2 | 745.2  | 645.8  | 642.5  | 652.2  | 658.7  | 655.5  | 654.4  |
| 20°   | 2363.2 | 2176.2 | 1569.4 | 918.3  | 640.3  | 624.1  | 631.6  | 640.3  | 645.8  | 640.3  | 639.2  |
| 22.5° | 2449.8 | 2198.8 | 1429.9 | 737.6  | 606.8  | 611.1  | 617.6  | 627.3  | 632.7  | 625.1  | 624.1  |
| 25°   | 2555.7 | 2234.5 | 1292.5 | 641.3  | 590.5  | 595.9  | 605.7  | 616.5  | 623.0  | 615.4  | 614.4  |
| 27.5° | 2693.2 | 2291.9 | 1165.9 | 619.7  | 574.3  | 577.6  | 591.6  | 607.8  | 616.5  | 606.8  | 606.8  |
| 30°   | 2892.1 | 2386.0 | 1056.7 | 629.5  | 564.6  | 557.0  | 576.5  | 599.2  | 609.0  | 600.2  | 599.2  |
| 32.5° | 3156.1 | 2519.0 | 989.6  | 644.6  | 560.3  | 533.2  | 551.7  | 580.8  | 597.1  | 591.6  | 591.6  |
| 35°   | 3502.1 | 2721.3 | 963.7  | 661.9  | 557.0  | 508.3  | 521.3  | 552.7  | 580.8  | 586.2  | 586.2  |
| 37.5° | 3921.9 | 3002.4 | 971.3  | 669.5  | 547.2  | 487.8  | 494.3  | 521.3  | 558.1  | 575.4  | 579.7  |
| 40°   | 4398.8 | 3330.2 | 1014.5 | 661.9  | 536.5  | 470.5  | 471.6  | 492.1  | 524.6  | 550.5  | 559.1  |
| 42.5° | 4890.9 | 3713.1 | 1094.6 | 633.8  | 526.7  | 455.3  | 452.1  | 466.2  | 487.8  | 506.1  | 513.7  |
| 45°   | 5359.2 | 4106.8 | 1173.5 | 594.9  | 514.9  | 440.2  | 432.7  | 438.1  | 442.4  | 450.0  | 454.3  |
| 47.5° | 5768.1 | 4383.6 | 1150.8 | 559.1  | 498.6  | 422.9  | 409.9  | 407.7  | 394.7  | 393.7  | 392.6  |
| 50°   | 6050.4 | 4444.2 | 1022.1 | 523.5  | 474.8  | 403.4  | 382.8  | 369.9  | 347.2  | 336.4  | 337.4  |
| 52.5° | 6140.2 | 4205.2 | 835.0  | 487.8  | 435.8  | 377.5  | 348.3  | 327.7  | 299.6  | 289.9  | 288.7  |
| 55°   | 6021.2 | 3736.8 | 667.4  | 444.5  | 381.8  | 342.9  | 310.4  | 283.4  | 260.7  | 248.8  | 248.8  |
| 57.5° | 5730.3 | 3140.9 | 527.8  | 393.7  | 324.5  | 303.9  | 271.5  | 244.5  | 225.0  | 213.1  | 210.9  |
| 60°   | 5247.8 | 2494.1 | 417.5  | 333.1  | 276.9  | 261.8  | 228.2  | 210.9  | 193.6  | 179.6  | 176.3  |
| 62.5° | 4515.6 | 1780.3 | 327.7  | 263.9  | 231.4  | 214.1  | 194.6  | 181.7  | 161.1  | 141.7  | 138.5  |
| 65°   | 3523.7 | 1089.2 | 253.1  | 193.6  | 186.0  | 177.4  | 165.4  | 153.5  | 128.7  | 109.3  | 106.0  |
| 67.5° | 2222.6 | 515.9  | 180.6  | 146.1  | 147.1  | 142.8  | 137.4  | 127.6  | 109.3  | 91.9   | 89.8   |
| 70°   | 978.9  | 249.9  | 119.0  | 111.4  | 109.3  | 109.3  | 113.6  | 110.3  | 93.0   | 76.8   | 73.6   |
| 72.5° | 333.1  | 134.1  | 88.7   | 84.4   | 78.9   | 77.9   | 95.2   | 91.9   | 74.6   | 59.4   | 56.3   |
| 75°   | 174.1  | 89.8   | 64.9   | 60.6   | 47.6   | 57.3   | 75.7   | 71.3   | 53.0   | 38.9   | 35.7   |
| 77.5° | 113.6  | 63.9   | 44.4   | 38.9   | 27.1   | 37.8   | 56.3   | 49.7   | 31.4   | 19.5   | 17.3   |
| 80°   | 71.3   | 42.2   | 25.9   | 18.3   | 13.0   | 20.5   | 30.2   | 21.6   | 11.9   | 4.3    | 3.3    |
| 82.5° | 37.8   | 21.6   | 9.7    | 6.5    | 5.4    | 6.5    | 7.6    | 5.4    | 2.2    | 0.0    | 0.0    |
| 85°   | 15.2   | 7.6    | 3.3    | 2.2    | 1.1    | 0.0    | 2.2    | 1.1    | 0.0    | 0.0    | 0.0    |
| 87.5° | 5.4    | 1.1    | 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)