

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: P971404

Luminaire Tested: **NAV-SB6D-735-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P971404  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6D-735-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 53929.3 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 440.1  
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



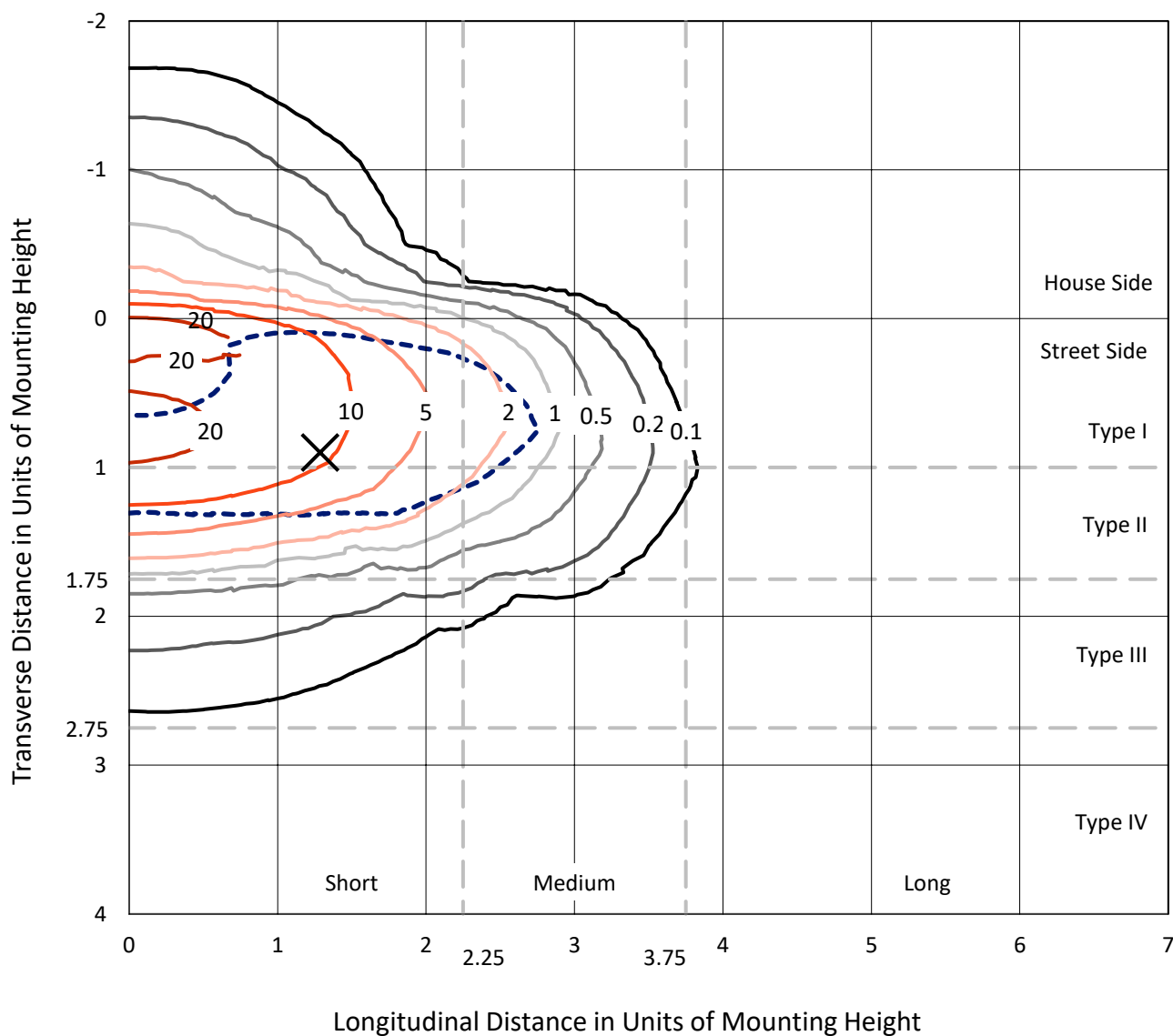
REPORT NUMBER: P971404

CATALOG NUMBER: NAV-SB6D-735-U-AFL-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

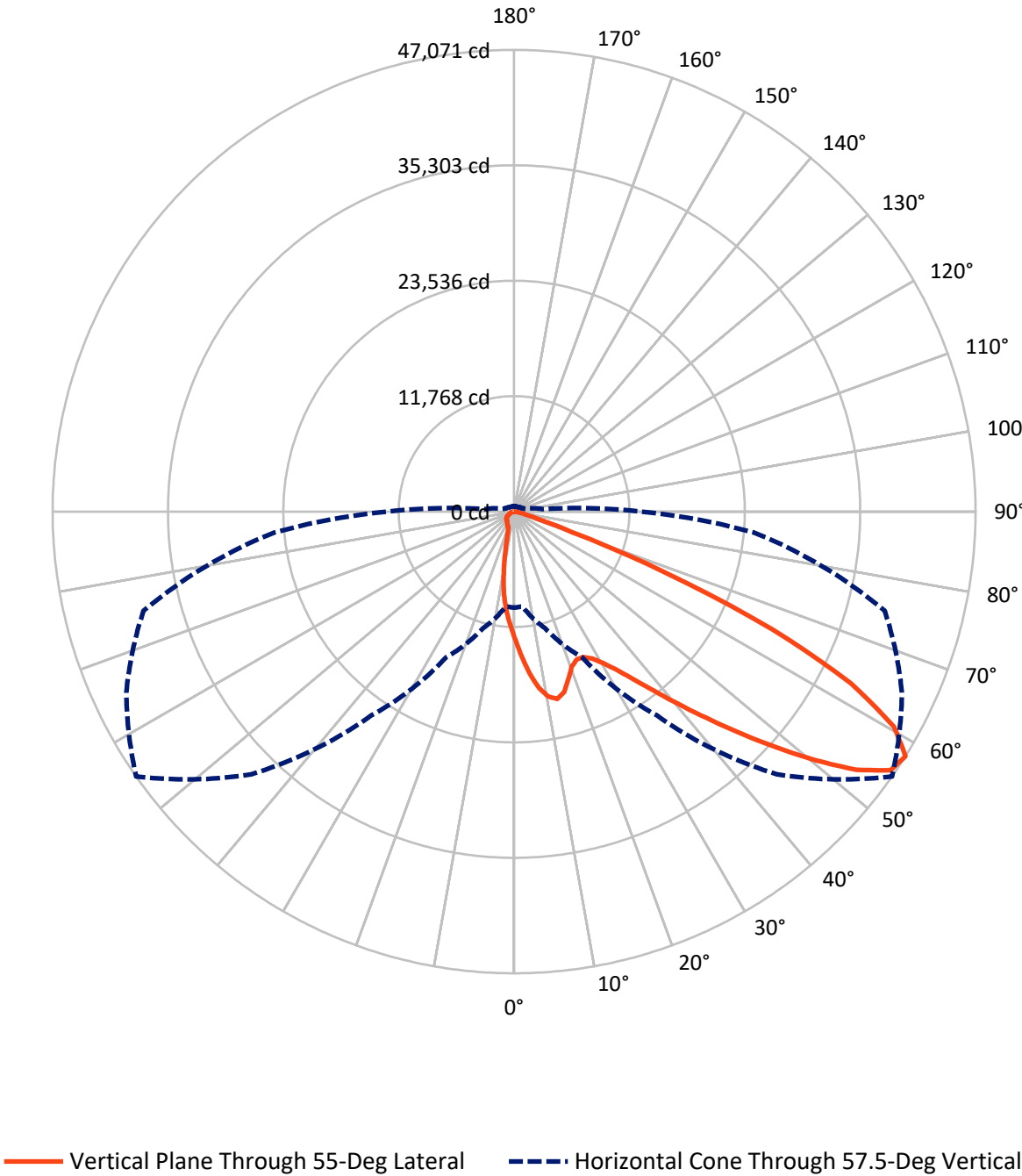


Based on 25 foot mounting height. Maximum calculated value = 29.8 fc

Type II - Short - N/A

REPORT NUMBER: P971404  
CATALOG NUMBER: NAV-SB6D-735-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P971404

CATALOG NUMBER: NAV-SB6D-735-U-AFL-HSS

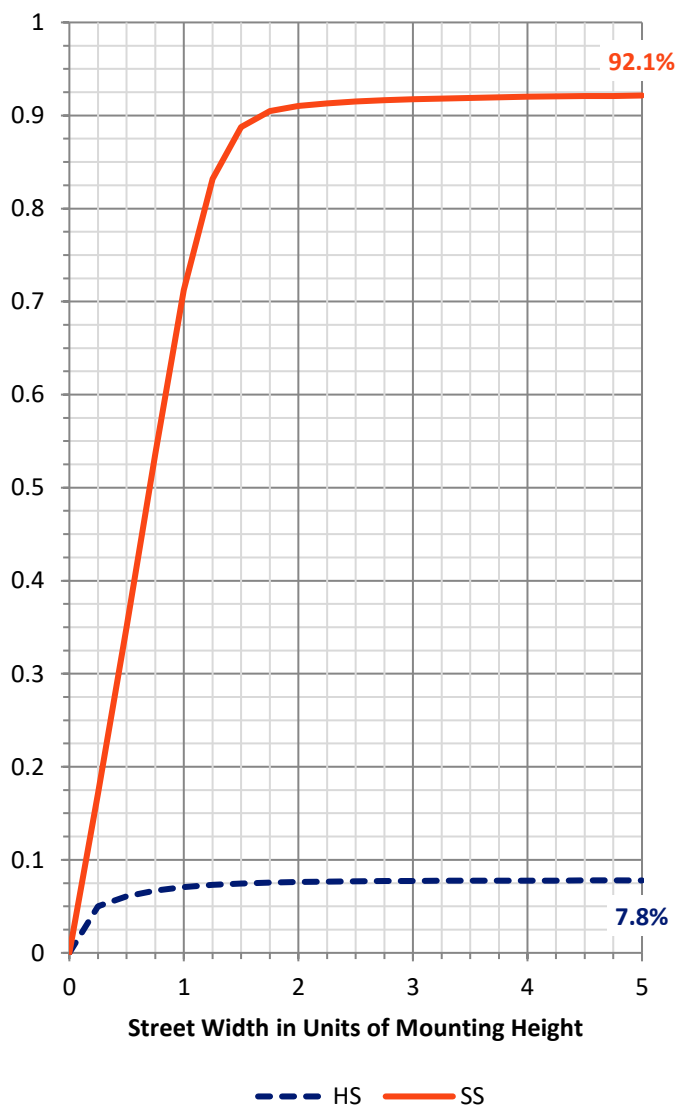
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4211.7   | 0.0    | 4211.7  |
|                    | % Fixture | 7.8      | 0.0    | 7.8     |
| <b>Street Side</b> | Lumens    | 49717.7  | 0.0    | 49717.7 |
|                    | % Fixture | 92.2     | 0.0    | 92.2    |
| <b>Total</b>       | Lumens    | 53929.3  | 0.0    | 53929.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1209.2  | 2.2       |
| 10°-20°   | 2920.8  | 5.4       |
| 20°-30°   | 4673.2  | 8.7       |
| 30°-40°   | 7909.6  | 14.7      |
| 40°-50°   | 12985.9 | 24.1      |
| 50°-60°   | 14272.5 | 26.5      |
| 60°-70°   | 8186.7  | 15.2      |
| 70°-80°   | 1672.8  | 3.1       |
| 80°-90°   | 98.7    | 0.2       |
| 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°    | 53929.3 | 100.0     |
| 0°-180°   | 53929.3 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P971404

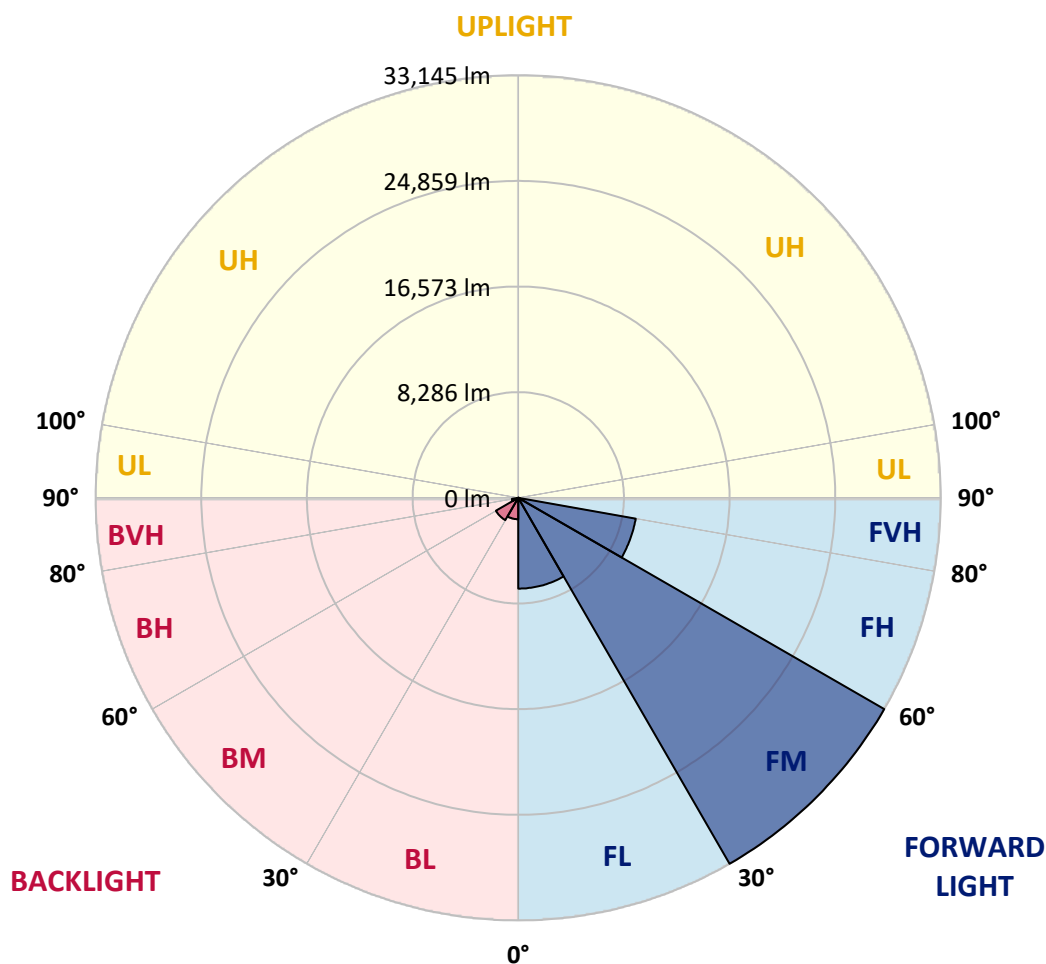
CATALOG NUMBER: NAV-SB6D-735-U-AFL-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 7121.7  | 13.2      |                         |      |          |
| FM   | (30°-60°)   | 33145.4 | 61.5      |                         |      |          |
| FH   | (60°-80°)   | 9358.6  | 17.4      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 92.0    | 0.2       |                         |      | G1/100   |
| BL   | (0°-30°)    | 1681.4  | 3.1       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2022.7  | 3.8       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 500.9   | 0.9       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 6.6     | 0.0       |                         |      | G0/10    |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type II Short



REPORT NUMBER: P971404

CATALOG NUMBER: NAV-SB6D-735-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 |
| 2.5°  | 16124.9 | 15922.0 | 15892.1 | 15852.1 | 15466.4 | 15177.1 | 14758.1 | 14299.2 | 13783.8 | 13258.4 | 13025.6 |
| 5°    | 18628.9 | 18469.3 | 18439.3 | 18253.1 | 17814.2 | 17322.0 | 16577.1 | 15636.0 | 14674.9 | 13544.4 | 13058.8 |
| 7.5°  | 19114.4 | 19084.5 | 19220.8 | 19214.1 | 19154.3 | 18765.2 | 18136.7 | 17016.0 | 15572.8 | 13896.8 | 13145.3 |
| 10°   | 16949.5 | 17026.1 | 17431.8 | 17787.5 | 18748.6 | 19307.2 | 19170.9 | 18246.4 | 16497.3 | 14299.2 | 13241.8 |
| 12.5° | 14977.6 | 14887.8 | 15177.1 | 15579.5 | 16696.8 | 18359.5 | 19599.8 | 19274.0 | 17554.8 | 14754.8 | 13384.8 |
| 15°   | 13740.5 | 13703.9 | 13866.9 | 14053.2 | 14904.4 | 16580.4 | 19101.1 | 20108.7 | 18572.3 | 15293.5 | 13600.8 |
| 17.5° | 13344.8 | 13314.9 | 13364.8 | 13411.3 | 13963.4 | 15260.2 | 17913.9 | 20620.7 | 19546.6 | 15908.7 | 13840.3 |
| 20°   | 13667.4 | 13627.5 | 13620.8 | 13584.2 | 13813.7 | 14698.3 | 16839.8 | 20657.3 | 20421.3 | 16467.3 | 14046.5 |
| 22.5° | 14608.5 | 14561.9 | 14399.0 | 14252.6 | 14272.6 | 14774.8 | 16360.9 | 20291.5 | 21079.6 | 16989.5 | 14176.2 |
| 25°   | 16314.4 | 16237.9 | 15898.7 | 15406.6 | 15093.9 | 15306.8 | 16434.1 | 19809.4 | 21708.2 | 17398.5 | 14113.0 |
| 27.5° | 18449.3 | 18349.6 | 17913.9 | 17182.3 | 16467.3 | 16208.0 | 16962.8 | 19476.8 | 22230.3 | 17711.1 | 13976.6 |
| 30°   | 20541.0 | 20411.2 | 19982.3 | 19413.7 | 18369.4 | 17551.5 | 17917.2 | 19623.1 | 22852.1 | 18036.9 | 13797.1 |
| 32.5° | 22798.9 | 22675.9 | 22107.2 | 21402.2 | 20537.6 | 19437.0 | 19224.1 | 20338.2 | 23613.6 | 18492.5 | 13670.7 |
| 35°   | 25655.4 | 25462.5 | 24654.5 | 23693.5 | 22775.6 | 21661.6 | 20993.2 | 21571.8 | 24627.9 | 19187.5 | 13740.5 |
| 37.5° | 28907.7 | 28648.2 | 27777.0 | 26450.2 | 25253.0 | 24006.0 | 23148.1 | 23267.8 | 26114.3 | 20118.6 | 13956.7 |
| 40°   | 31973.6 | 31737.6 | 30932.9 | 29682.5 | 28179.4 | 26666.3 | 25751.9 | 25485.8 | 28166.1 | 21252.6 | 14335.8 |
| 42.5° | 33812.6 | 33599.8 | 33260.6 | 32731.8 | 31464.9 | 29921.9 | 28768.0 | 28192.7 | 30593.6 | 22609.3 | 14798.0 |
| 45°   | 33915.7 | 33729.5 | 34185.1 | 34800.3 | 34550.9 | 33523.3 | 32116.6 | 31062.5 | 33031.1 | 23883.0 | 15276.9 |
| 47.5° | 32266.3 | 32139.9 | 33523.3 | 35671.5 | 36742.3 | 37174.6 | 35877.7 | 33692.9 | 35043.0 | 24797.5 | 15473.1 |
| 50°   | 27770.3 | 27723.8 | 30570.3 | 34514.3 | 37577.0 | 40373.6 | 39844.9 | 36140.4 | 36602.6 | 25269.6 | 15286.8 |
| 52.5° | 24079.2 | 23909.6 | 25568.9 | 30809.8 | 36363.2 | 42056.3 | 43722.3 | 38541.3 | 37693.4 | 25359.4 | 14851.2 |
| 55°   | 18263.0 | 18113.4 | 20195.2 | 24611.3 | 32449.2 | 41457.7 | 46558.9 | 41018.8 | 38474.8 | 25130.0 | 14069.8 |
| 57.5° | 9796.6  | 9703.5  | 12333.9 | 16380.9 | 25366.1 | 37866.3 | 47071.0 | 43639.2 | 39133.3 | 24521.5 | 12975.7 |
| 60°   | 3814.2  | 3797.6  | 4781.9  | 7947.6  | 15416.5 | 30806.5 | 44487.2 | 45212.0 | 39545.6 | 23773.2 | 12061.2 |
| 62.5° | 2307.8  | 2357.7  | 2517.3  | 3568.1  | 6810.4  | 19137.7 | 38531.4 | 43423.0 | 39821.6 | 23088.2 | 11306.4 |
| 65°   | 1908.8  | 1912.1  | 1932.0  | 2450.8  | 3262.2  | 8007.5  | 29007.4 | 37537.0 | 39139.9 | 21867.8 | 10235.5 |
| 67.5° | 1636.1  | 1666.0  | 1742.5  | 1945.3  | 2301.1  | 3511.6  | 16700.1 | 29077.3 | 34993.1 | 19027.9 | 8566.2  |
| 70°   | 1290.3  | 1330.1  | 1426.6  | 1599.5  | 1775.7  | 2198.1  | 6171.9  | 19347.2 | 26732.8 | 14342.4 | 6477.9  |
| 72.5° | 1087.4  | 1084.0  | 1134.0  | 1300.2  | 1410.0  | 1546.3  | 2374.3  | 10840.8 | 15536.2 | 6847.0  | 3205.7  |
| 75°   | 841.3   | 874.5   | 937.8   | 1087.4  | 1153.9  | 1120.6  | 1286.9  | 3960.5  | 5566.7  | 2075.0  | 1090.7  |
| 77.5° | 658.5   | 685.0   | 741.6   | 887.9   | 954.4   | 794.8   | 741.6   | 1416.7  | 1789.0  | 744.9   | 492.2   |
| 80°   | 295.9   | 319.3   | 505.4   | 655.1   | 778.2   | 548.7   | 402.4   | 725.0   | 794.8   | 339.2   | 249.4   |
| 82.5° | 53.2    | 89.8    | 295.9   | 345.8   | 399.0   | 355.8   | 209.5   | 375.8   | 389.1   | 136.3   | 86.5    |
| 85°   | 3.3     | 6.7     | 103.1   | 126.4   | 159.6   | 116.4   | 63.1    | 149.6   | 129.7   | 46.5    | 33.2    |
| 87.5° | 0.0     | 0.0     | 0.0     | 3.3     | 3.3     | 16.6    | 20.0    | 26.6    | 20.0    | 16.6    | 13.3    |
| 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: P971404

CATALOG NUMBER: NAV-SB6D-735-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 | 12995.7 |
| 2.5°  | 12786.2 | 12313.9 | 11855.0 | 11479.3 | 11259.8 | 10887.3 | 10641.2 | 10601.4 | 10498.3 | 10588.0 |
| 5°    | 12540.1 | 11695.5 | 10840.8 | 10076.0 | 9447.4  | 8636.0  | 8030.9  | 7774.7  | 7552.0  | 7628.5  |
| 7.5°  | 12423.7 | 11090.2 | 9760.0  | 8453.2  | 7109.7  | 5812.8  | 4848.5  | 4446.0  | 4140.1  | 4183.3  |
| 10°   | 12267.4 | 10461.7 | 8376.7  | 6381.4  | 4582.4  | 3302.1  | 2637.0  | 2390.9  | 2254.6  | 2258.0  |
| 12.5° | 12147.7 | 9710.1  | 6770.5  | 4326.3  | 2790.0  | 2108.3  | 1902.1  | 1842.2  | 1802.4  | 1805.6  |
| 15°   | 12087.8 | 8825.6  | 5184.2  | 2883.1  | 1995.3  | 1785.8  | 1735.8  | 1709.3  | 1682.6  | 1679.4  |
| 17.5° | 11988.1 | 7841.2  | 3794.2  | 2104.9  | 1745.9  | 1672.7  | 1629.4  | 1599.5  | 1566.3  | 1559.6  |
| 20°   | 11838.4 | 6724.0  | 2773.3  | 1779.1  | 1636.1  | 1579.5  | 1519.7  | 1479.8  | 1439.9  | 1433.3  |
| 22.5° | 11562.4 | 5543.4  | 2131.6  | 1646.0  | 1556.3  | 1493.1  | 1419.9  | 1373.4  | 1333.5  | 1326.9  |
| 25°   | 11050.3 | 4436.1  | 1795.7  | 1562.9  | 1486.5  | 1410.0  | 1330.1  | 1267.0  | 1230.4  | 1223.7  |
| 27.5° | 10401.8 | 3485.0  | 1629.4  | 1486.5  | 1396.7  | 1326.9  | 1237.1  | 1177.2  | 1143.9  | 1137.2  |
| 30°   | 9636.9  | 2683.6  | 1533.0  | 1399.9  | 1290.3  | 1230.4  | 1150.6  | 1100.7  | 1080.8  | 1080.8  |
| 32.5° | 8812.3  | 2144.9  | 1493.1  | 1313.5  | 1197.1  | 1130.7  | 1067.4  | 1047.6  | 1040.9  | 1037.5  |
| 35°   | 8037.4  | 1862.2  | 1473.1  | 1243.7  | 1114.0  | 1050.8  | 1024.2  | 1027.6  | 1040.9  | 1040.9  |
| 37.5° | 7349.1  | 1772.4  | 1463.2  | 1193.8  | 1040.9  | 984.3   | 1000.9  | 1030.8  | 1017.6  | 1017.6  |
| 40°   | 6727.3  | 1782.4  | 1456.5  | 1157.2  | 981.0   | 947.7   | 981.0   | 957.8   | 924.4   | 921.2   |
| 42.5° | 6251.8  | 1865.5  | 1443.2  | 1127.3  | 944.4   | 921.2   | 907.8   | 871.2   | 868.0   | 874.5   |
| 45°   | 5905.9  | 1938.7  | 1439.9  | 1114.0  | 904.5   | 861.3   | 844.6   | 808.1   | 874.5   | 891.2   |
| 47.5° | 5496.9  | 1938.7  | 1439.9  | 1067.4  | 838.0   | 821.3   | 794.8   | 754.9   | 821.3   | 838.0   |
| 50°   | 4968.2  | 1815.7  | 1383.3  | 1014.2  | 784.8   | 774.8   | 728.3   | 678.3   | 665.1   | 675.1   |
| 52.5° | 4299.8  | 1592.8  | 1240.4  | 941.1   | 731.5   | 711.7   | 655.1   | 618.5   | 608.5   | 608.5   |
| 55°   | 3538.2  | 1333.5  | 1047.6  | 834.7   | 675.1   | 638.5   | 598.6   | 582.0   | 571.9   | 565.3   |
| 57.5° | 2876.5  | 1094.1  | 841.3   | 741.6   | 621.9   | 575.3   | 562.0   | 542.0   | 525.4   | 515.5   |
| 60°   | 2361.0  | 861.3   | 695.1   | 658.5   | 568.7   | 525.4   | 522.1   | 495.5   | 452.2   | 445.6   |
| 62.5° | 1822.3  | 631.8   | 585.3   | 571.9   | 515.5   | 478.9   | 472.2   | 419.0   | 352.5   | 339.2   |
| 65°   | 1286.9  | 492.2   | 472.2   | 502.1   | 458.9   | 425.7   | 409.0   | 329.2   | 259.4   | 249.4   |
| 67.5° | 904.5   | 412.4   | 372.5   | 438.9   | 399.0   | 355.8   | 345.8   | 279.3   | 216.2   | 209.5   |
| 70°   | 645.1   | 335.9   | 306.0   | 375.8   | 319.3   | 312.6   | 292.6   | 232.8   | 176.2   | 169.6   |
| 72.5° | 455.6   | 256.0   | 236.1   | 325.8   | 219.5   | 269.4   | 239.4   | 179.6   | 133.0   | 126.4   |
| 75°   | 335.9   | 182.9   | 166.3   | 189.5   | 159.6   | 202.8   | 169.6   | 119.7   | 83.1    | 79.8    |
| 77.5° | 246.1   | 116.4   | 99.7    | 93.1    | 93.1    | 126.4   | 93.1    | 49.9    | 36.6    | 33.2    |
| 80°   | 172.9   | 53.2    | 46.5    | 39.9    | 36.6    | 29.9    | 13.3    | 6.7     | 3.3     | 3.3     |
| 82.5° | 103.1   | 23.3    | 23.3    | 16.6    | 9.9     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 85°   | 23.3    | 9.9     | 9.9     | 3.3     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 87.5° | 3.3     | 3.3     | 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     |

(END OF REPORT)