

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: P971081

Luminaire Tested: **NAV-SB6C-835-U-T2U**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P971081  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6C-835-U-T2U  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 43755.2 lumens  
Efficiency: N/A  
Efficacy: 145.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

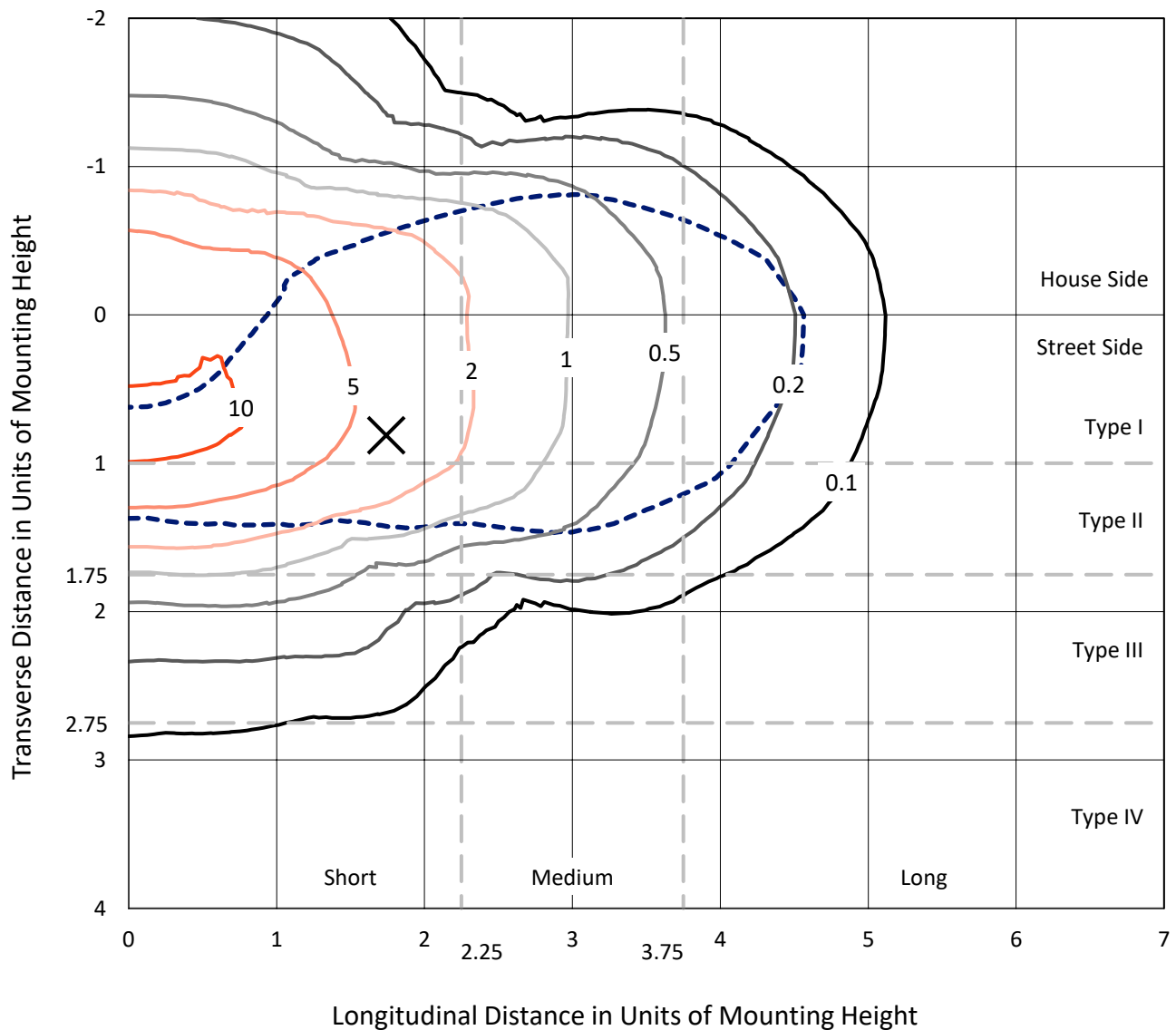
Input Watts (W): 300.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P971081  
CATALOG NUMBER: NAV-SB6C-835-U-T2U

## Iso-Footcandle Lines of Horizontal Illumination

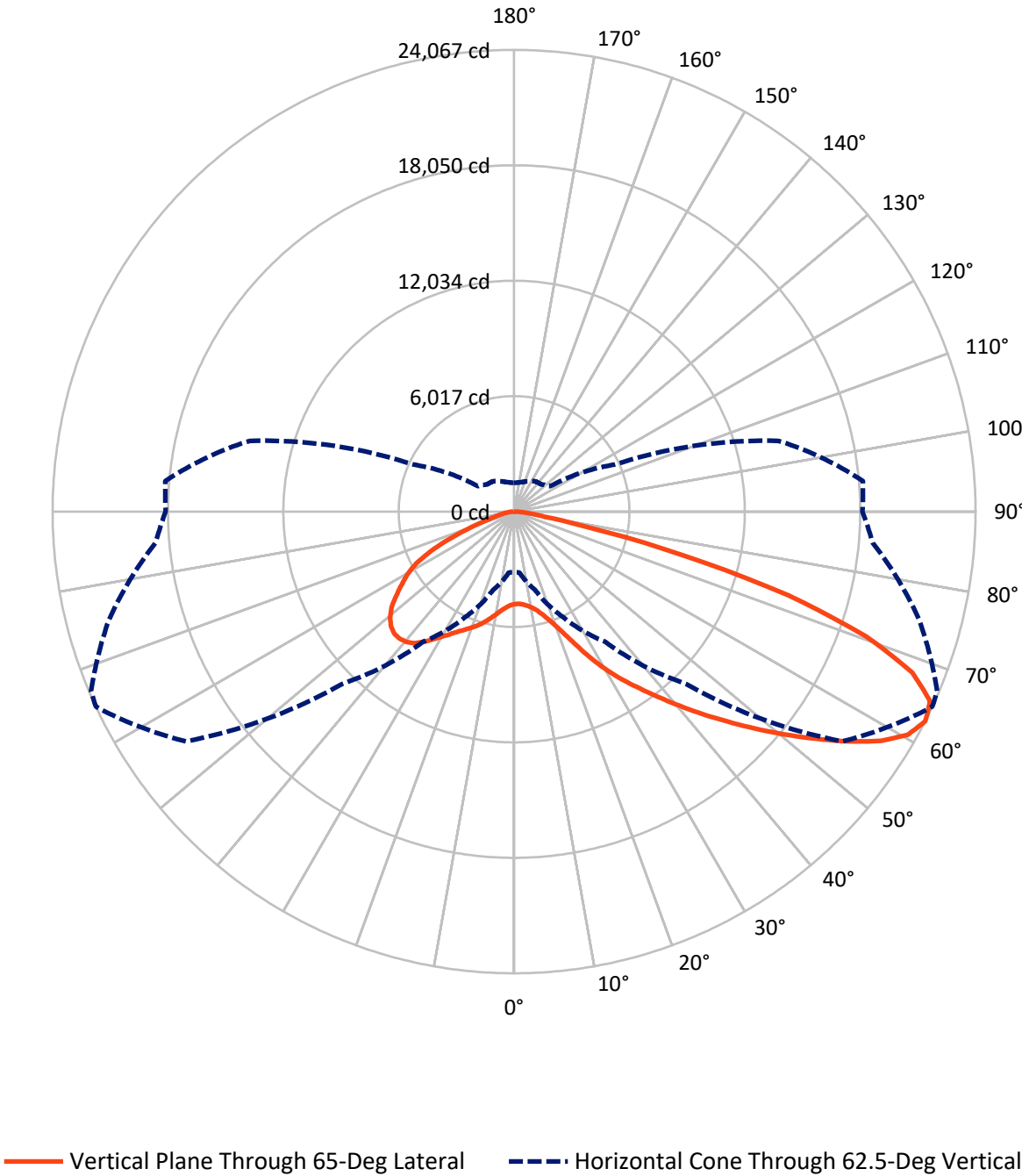
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 fc  
Type II - Short - N/A

REPORT NUMBER: P971081  
CATALOG NUMBER: NAV-SB6C-835-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P971081

CATALOG NUMBER: NAV-SB6C-835-U-T2U

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 13807.2  | 0.0    | 13807.2 |
|                    | % Fixture | 31.6     | 0.0    | 31.6    |
| <b>Street Side</b> | Lumens    | 29948.0  | 0.0    | 29948.0 |
|                    | % Fixture | 68.4     | 0.0    | 68.4    |
| <b>Total</b>       | Lumens    | 43755.2  | 0.0    | 43755.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 480.7   | 1.1       |
| 10°-20°   | 1630.1  | 3.7       |
| 20°-30°   | 3305.3  | 7.6       |
| 30°-40°   | 5719.7  | 13.1      |
| 40°-50°   | 8655.7  | 19.8      |
| 50°-60°   | 10148.2 | 23.2      |
| 60°-70°   | 8508.1  | 19.4      |
| 70°-80°   | 4697.1  | 10.7      |
| 80°-90°   | 610.1   | 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°    | 43755.2 | 100.0     |
| 0°-180°   | 43755.2 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P971081

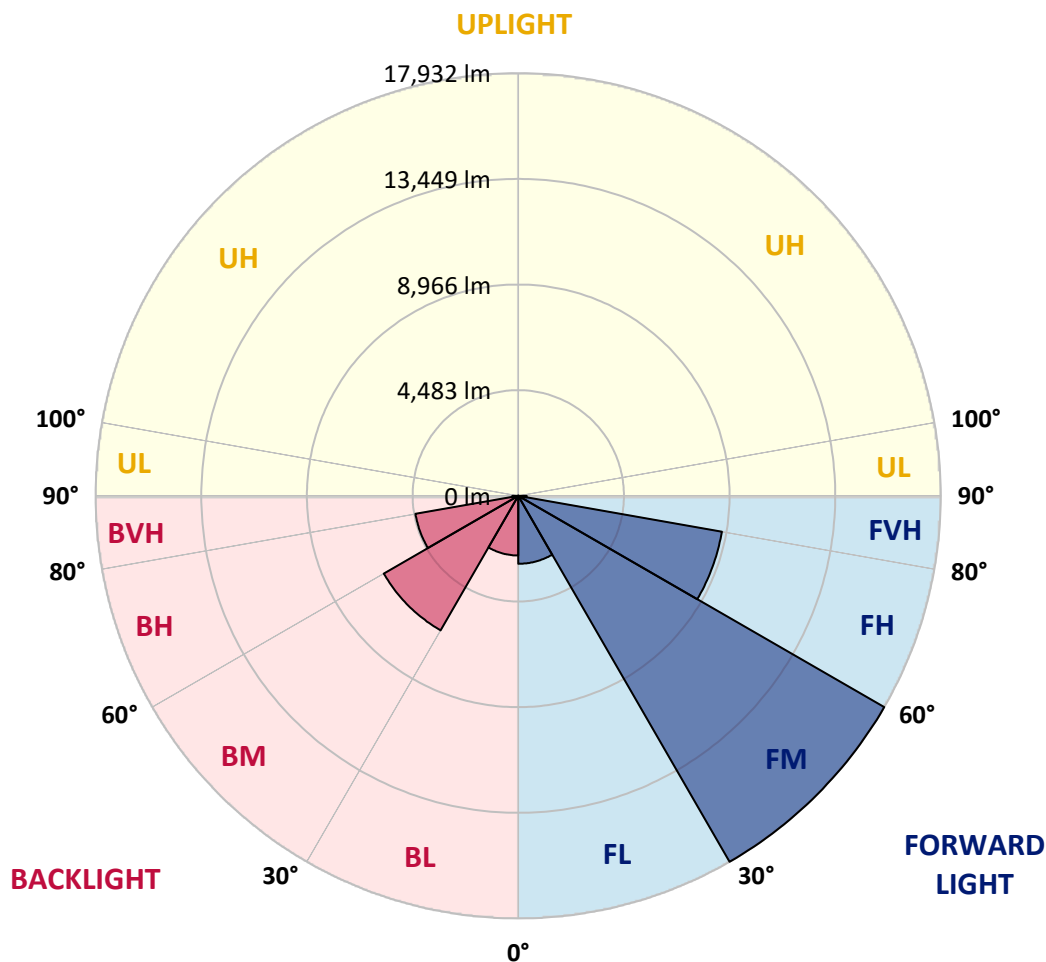
CATALOG NUMBER: NAV-SB6C-835-U-T2U

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2884.1  | 6.6       |                         |      |          |
| FM   | (30°-60°)   | 17932.3 | 41.0      |                         |      |          |
| FH   | (60°-80°)   | 8776.0  | 20.1      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 355.6   | 0.8       |                         |      | G3/500   |
| BL   | (0°-30°)    | 2532.1  | 5.8       | B4/5000                 |      |          |
| BM   | (30°-60°)   | 6591.4  | 15.1      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 4429.2  | 10.1      | B4/5000                 |      | G4/5000  |
| BVH  | (80°-90°)   | 254.5   | 0.6       |                         |      | G3/500   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B4-U0-G4**

Type II Short



REPORT NUMBER: P971081

CATALOG NUMBER: NAV-SB6C-835-U-T2U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  | 4821.6  |
| 2.5°  | 4789.8  | 4776.2  | 4787.6  | 4787.6  | 4792.1  | 4789.8  | 4805.7  | 4810.3  | 4817.1  | 4830.7  | 4830.7  |
| 5°    | 4742.2  | 4739.9  | 4760.3  | 4778.5  | 4796.7  | 4812.6  | 4833.0  | 4862.5  | 4867.0  | 4882.9  | 4903.4  |
| 7.5°  | 4726.3  | 4712.6  | 4744.4  | 4767.2  | 4810.3  | 4848.9  | 4903.4  | 4953.3  | 4973.7  | 4980.6  | 5019.1  |
| 10°   | 4848.9  | 4826.2  | 4855.7  | 4869.3  | 4905.6  | 4944.2  | 5007.7  | 5087.3  | 5109.9  | 5137.2  | 5180.3  |
| 12.5° | 5057.8  | 5032.8  | 5075.9  | 5096.3  | 5130.3  | 5164.5  | 5207.5  | 5284.7  | 5296.1  | 5346.0  | 5386.9  |
| 15°   | 5343.7  | 5314.2  | 5341.5  | 5366.5  | 5423.2  | 5454.9  | 5498.1  | 5573.0  | 5573.0  | 5611.6  | 5641.1  |
| 17.5° | 5731.9  | 5693.4  | 5713.8  | 5722.9  | 5759.2  | 5806.8  | 5879.5  | 5945.3  | 5979.3  | 5965.7  | 5924.9  |
| 20°   | 6310.8  | 6263.2  | 6263.2  | 6217.8  | 6204.1  | 6242.7  | 6338.1  | 6428.8  | 6465.2  | 6394.8  | 6294.9  |
| 22.5° | 7180.2  | 7112.2  | 7073.5  | 6919.2  | 6857.9  | 6862.5  | 6957.8  | 7069.0  | 7098.5  | 6973.7  | 6748.9  |
| 25°   | 8285.8  | 8179.1  | 8126.8  | 7899.9  | 7761.4  | 7641.1  | 7716.0  | 7859.0  | 7899.9  | 7745.5  | 7382.3  |
| 27.5° | 9391.3  | 9398.1  | 9348.2  | 9075.8  | 8846.5  | 8626.3  | 8587.7  | 8737.5  | 8780.7  | 8605.8  | 8156.3  |
| 30°   | 10941.8 | 10780.5 | 10685.2 | 10358.3 | 10031.5 | 9722.7  | 9563.9  | 9625.1  | 9636.4  | 9427.6  | 8905.5  |
| 32.5° | 12278.8 | 12238.0 | 12033.6 | 11747.6 | 11327.7 | 10844.1 | 10578.5 | 10480.9 | 10462.8 | 10165.3 | 9545.6  |
| 35°   | 13802.0 | 13779.4 | 13563.7 | 13223.2 | 12769.1 | 12097.3 | 11618.3 | 11339.0 | 11316.3 | 10898.6 | 10179.0 |
| 37.5° | 15350.2 | 15350.2 | 15139.1 | 14766.9 | 14296.9 | 13457.0 | 12728.2 | 12285.6 | 12213.0 | 11668.2 | 10823.7 |
| 40°   | 16585.1 | 16510.2 | 16548.8 | 16392.2 | 15854.2 | 14962.0 | 13960.9 | 13318.5 | 13220.9 | 12567.1 | 11509.3 |
| 42.5° | 17286.6 | 17261.6 | 17493.2 | 17667.9 | 17447.8 | 16735.0 | 15318.4 | 14437.6 | 14301.4 | 13556.9 | 12299.3 |
| 45°   | 17443.2 | 17416.0 | 17829.2 | 18469.3 | 18778.0 | 18485.2 | 16794.0 | 15615.9 | 15450.1 | 14592.0 | 13146.0 |
| 47.5° | 17082.3 | 17027.8 | 17633.9 | 18644.1 | 19633.9 | 20149.1 | 18392.1 | 16893.8 | 16653.3 | 15599.9 | 14015.4 |
| 50°   | 15997.2 | 15945.0 | 16862.1 | 18203.7 | 19922.1 | 21279.6 | 20126.5 | 18249.1 | 17881.3 | 16680.4 | 14894.0 |
| 52.5° | 13638.5 | 13663.6 | 15100.5 | 16943.9 | 19543.1 | 21983.4 | 21620.1 | 19677.0 | 19234.3 | 17786.0 | 15718.0 |
| 55°   | 10623.9 | 10678.4 | 12444.5 | 14474.0 | 18026.7 | 21876.7 | 22639.4 | 21148.0 | 20707.6 | 18825.7 | 16569.2 |
| 57.5° | 7607.0  | 7847.6  | 9502.6  | 11511.6 | 15114.1 | 20185.5 | 22861.9 | 22546.3 | 22119.6 | 19960.7 | 17402.3 |
| 60°   | 4930.6  | 4973.7  | 6676.2  | 8701.2  | 11509.3 | 17179.9 | 22410.2 | 23606.5 | 23272.8 | 21118.5 | 18099.2 |
| 62.5° | 3160.0  | 3189.5  | 4226.9  | 6086.0  | 8283.5  | 12710.1 | 20889.2 | 24067.3 | 23965.1 | 21883.5 | 18769.0 |
| 65°   | 2322.2  | 2299.6  | 2839.9  | 4022.6  | 5579.8  | 7838.6  | 17935.9 | 23844.9 | 24046.9 | 22362.5 | 19322.9 |
| 67.5° | 1938.7  | 1906.9  | 2172.5  | 2785.3  | 4111.1  | 4451.6  | 13270.9 | 22398.8 | 23138.9 | 22308.0 | 19729.2 |
| 70°   | 1766.1  | 1738.9  | 1900.0  | 2068.0  | 3207.6  | 2980.6  | 6689.9  | 19472.6 | 20612.2 | 21688.3 | 19663.4 |
| 72.5° | 1496.0  | 1448.3  | 1668.5  | 1836.5  | 2494.8  | 2286.0  | 2764.9  | 14957.5 | 16346.8 | 19701.9 | 18737.2 |
| 75°   | 1160.0  | 1128.2  | 1316.6  | 1616.3  | 1875.0  | 1784.3  | 1747.9  | 9082.5  | 10599.0 | 15236.7 | 16392.2 |
| 77.5° | 919.4   | 876.3   | 1048.8  | 1259.9  | 1686.6  | 1346.1  | 1273.5  | 3911.3  | 5414.2  | 9727.2  | 12265.2 |
| 80°   | 692.4   | 653.7   | 796.8   | 996.6   | 1296.2  | 1014.7  | 824.0   | 1595.8  | 2040.8  | 4928.3  | 6167.8  |
| 82.5° | 492.6   | 458.6   | 556.2   | 730.9   | 871.7   | 910.3   | 506.2   | 894.4   | 1005.6  | 1900.0  | 1377.9  |
| 85°   | 315.5   | 295.1   | 372.3   | 458.6   | 553.9   | 585.7   | 308.7   | 467.6   | 513.0   | 783.2   | 574.3   |
| 87.5° | 172.5   | 140.7   | 199.8   | 213.4   | 256.6   | 233.8   | 147.6   | 170.3   | 183.9   | 283.7   | 242.9   |
| 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: P971081

CATALOG NUMBER: NAV-SB6C-835-U-T2U

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°    | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4821.6  | 4821.6  | 4821.6  | 4821.6 | 4821.6 | 4821.6 | 4821.6 | 4821.6 | 4821.6 | 4821.6 | 4821.6 |
| 2.5°  | 4839.8  | 4846.6  | 4869.3  | 4876.1 | 4892.0 | 4912.4 | 4926.0 | 4939.7 | 4939.7 | 4953.3 | 4953.3 |
| 5°    | 4905.6  | 4921.5  | 4969.2  | 4994.2 | 5035.0 | 5075.9 | 5100.8 | 5130.3 | 5148.5 | 5157.6 | 5162.1 |
| 7.5°  | 5032.8  | 5057.8  | 5125.8  | 5169.0 | 5239.3 | 5296.1 | 5334.7 | 5375.5 | 5384.6 | 5409.5 | 5400.5 |
| 10°   | 5205.3  | 5234.8  | 5312.0  | 5393.7 | 5477.7 | 5548.0 | 5584.4 | 5613.9 | 5625.2 | 5629.8 | 5618.4 |
| 12.5° | 5402.8  | 5445.9  | 5545.8  | 5645.7 | 5734.2 | 5795.5 | 5804.6 | 5797.8 | 5765.9 | 5738.8 | 5738.8 |
| 15°   | 5645.7  | 5684.2  | 5795.5  | 5904.4 | 5990.7 | 6002.1 | 5945.3 | 5909.0 | 5870.4 | 5863.6 | 5863.6 |
| 17.5° | 5936.3  | 5956.7  | 6058.8  | 6165.5 | 6172.3 | 6133.7 | 6049.8 | 6015.7 | 5979.3 | 5954.4 | 5956.7 |
| 20°   | 6274.4  | 6267.7  | 6340.3  | 6385.7 | 6338.1 | 6220.0 | 6092.9 | 6036.1 | 5999.8 | 5970.3 | 5972.6 |
| 22.5° | 6678.6  | 6626.3  | 6617.3  | 6605.9 | 6478.8 | 6231.4 | 6058.8 | 5986.2 | 5929.4 | 5888.5 | 5902.2 |
| 25°   | 7266.5  | 7066.8  | 6928.3  | 6851.1 | 6565.0 | 6170.1 | 5949.8 | 5788.7 | 5682.0 | 5611.6 | 5638.8 |
| 27.5° | 8002.0  | 7666.1  | 7316.4  | 7128.1 | 6565.0 | 6045.2 | 5686.5 | 5425.4 | 5250.7 | 5178.0 | 5214.4 |
| 30°   | 8703.5  | 8351.6  | 7836.3  | 7461.7 | 6549.1 | 5840.9 | 5262.0 | 4898.8 | 4694.5 | 4621.8 | 4665.0 |
| 32.5° | 9302.8  | 8919.1  | 8387.9  | 7827.2 | 6510.6 | 5509.5 | 4735.4 | 4333.6 | 4136.1 | 4049.8 | 4092.9 |
| 35°   | 9859.0  | 9450.3  | 8941.8  | 8229.0 | 6408.4 | 5023.6 | 4156.5 | 3850.0 | 3629.8 | 3491.4 | 3536.8 |
| 37.5° | 10428.8 | 9942.9  | 9466.2  | 8592.3 | 6224.5 | 4456.2 | 3711.5 | 3450.6 | 3191.7 | 3005.6 | 3055.5 |
| 40°   | 11048.5 | 10467.3 | 10027.0 | 8807.9 | 5922.7 | 3915.9 | 3366.5 | 3128.2 | 2853.5 | 2656.0 | 2694.6 |
| 42.5° | 11772.6 | 11096.1 | 10651.2 | 8919.1 | 5509.5 | 3532.3 | 3141.8 | 2907.9 | 2649.2 | 2488.0 | 2519.8 |
| 45°   | 12528.6 | 11788.5 | 11221.0 | 8916.9 | 5048.6 | 3352.9 | 3069.2 | 2837.6 | 2551.5 | 2383.5 | 2410.8 |
| 47.5° | 13320.8 | 12512.7 | 11713.6 | 8771.5 | 4649.1 | 3377.9 | 3028.3 | 2685.5 | 2370.0 | 2206.5 | 2229.2 |
| 50°   | 14115.3 | 13304.9 | 12190.3 | 8499.2 | 4478.8 | 3323.4 | 2876.1 | 2472.1 | 2099.8 | 1952.2 | 1961.3 |
| 52.5° | 14903.0 | 14147.0 | 12601.1 | 8110.9 | 4306.3 | 3121.3 | 2681.0 | 2195.1 | 1988.6 | 1886.4 | 1886.4 |
| 55°   | 15695.3 | 14980.2 | 13048.4 | 7545.7 | 3875.0 | 2885.3 | 2354.0 | 2090.7 | 1900.0 | 1807.0 | 1797.8 |
| 57.5° | 16489.8 | 15942.7 | 13472.9 | 6980.5 | 3332.5 | 2594.7 | 2174.7 | 1963.6 | 1811.5 | 1732.0 | 1718.4 |
| 60°   | 17316.1 | 17043.7 | 13911.0 | 6460.6 | 2796.7 | 2222.4 | 2043.0 | 1861.5 | 1707.1 | 1618.6 | 1611.7 |
| 62.5° | 18167.4 | 18256.0 | 14253.8 | 5790.9 | 2304.1 | 1995.4 | 1925.1 | 1738.9 | 1589.1 | 1505.0 | 1502.8 |
| 65°   | 19025.4 | 19425.0 | 14478.5 | 4862.5 | 1868.3 | 1779.7 | 1797.8 | 1604.9 | 1452.8 | 1380.2 | 1377.9 |
| 67.5° | 19672.4 | 20267.2 | 14415.0 | 3679.7 | 1532.3 | 1575.4 | 1639.0 | 1464.2 | 1321.2 | 1264.4 | 1266.7 |
| 70°   | 19745.1 | 20167.3 | 13788.4 | 2519.8 | 1282.6 | 1375.7 | 1462.0 | 1325.7 | 1178.1 | 1137.3 | 1139.6 |
| 72.5° | 18778.0 | 18805.3 | 12042.7 | 1645.8 | 1085.1 | 1207.7 | 1275.8 | 1185.0 | 1041.9 | 1001.1 | 998.9  |
| 75°   | 16242.4 | 15552.2 | 8842.0  | 1085.1 | 908.0  | 1037.4 | 1101.0 | 1037.4 | 898.9  | 908.0  | 876.3  |
| 77.5° | 12306.0 | 11014.3 | 5368.7  | 771.8  | 758.2  | 871.7  | 958.0  | 912.6  | 794.5  | 892.2  | 785.5  |
| 80°   | 6340.3  | 5958.9  | 2394.9  | 576.6  | 599.3  | 696.9  | 787.7  | 728.7  | 628.8  | 599.3  | 547.0  |
| 82.5° | 1452.8  | 1688.9  | 944.3   | 413.2  | 433.6  | 501.6  | 601.6  | 547.0  | 451.7  | 381.4  | 376.8  |
| 85°   | 508.5   | 556.2   | 417.7   | 258.8  | 254.2  | 313.2  | 408.6  | 365.5  | 306.5  | 245.2  | 258.8  |
| 87.5° | 161.1   | 211.2   | 156.6   | 104.4  | 109.0  | 140.7  | 188.4  | 172.5  | 143.0  | 93.1   | 97.6   |
| 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)