

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: P968436

Luminaire Tested: **NVN-SB5B-835-U-SL4**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968436  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB5B-835-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

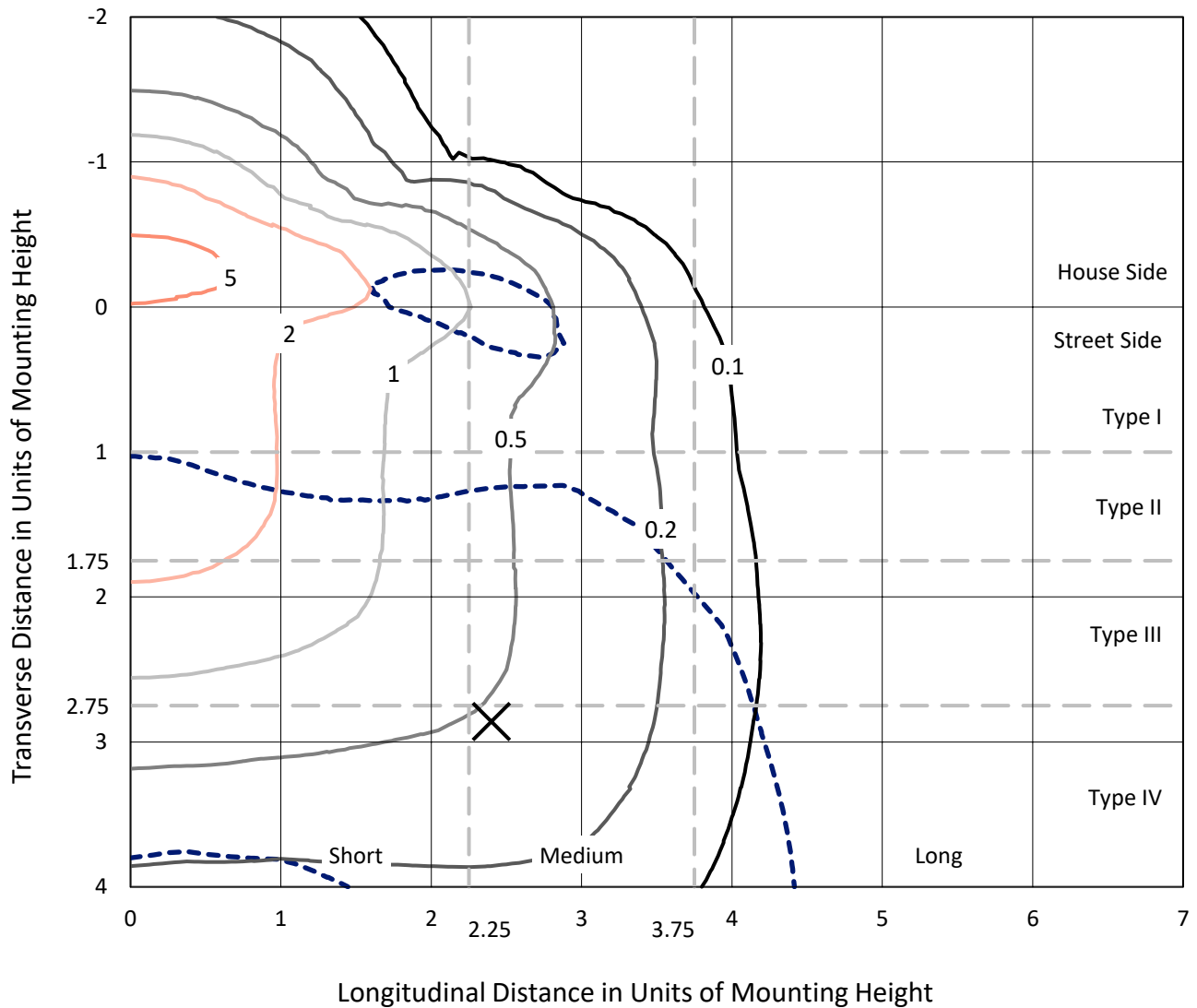
Lumens per Lamp: N/A  
Luminaire Lumens: 26806.8 lumens  
Efficiency: N/A  
Efficacy: 146.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 182.7  
Input Voltage (V): NR  
Input Current (Ain): 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: P968436  
 CATALOG NUMBER: NVN-SB5B-835-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

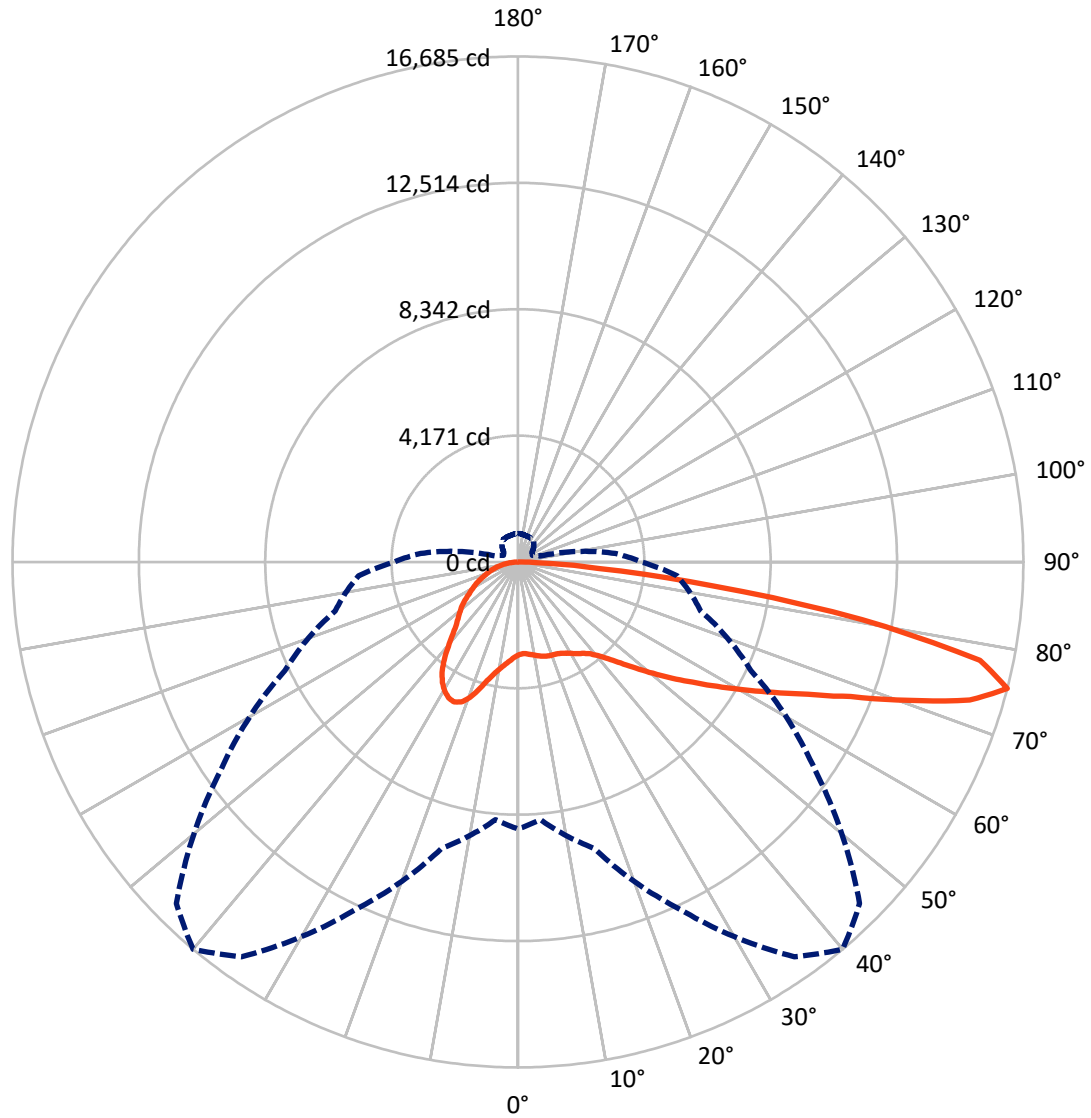
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P968436  
CATALOG NUMBER: NVN-SB5B-835-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P968436  
 CATALOG NUMBER: NVN-SB5B-835-U-SL4

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8305.7   | 0.0    | 8305.7  |
|                    | % Fixture | 31.0     | 0.0    | 31.0    |
| <b>Street Side</b> | Lumens    | 18501.2  | 0.0    | 18501.2 |
|                    | % Fixture | 69.0     | 0.0    | 69.0    |
| <b>Total</b>       | Lumens    | 26806.8  | 0.0    | 26806.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 306.0   | 1.1       |
| 10°-20°   | 1027.3  | 3.8       |
| 20°-30°   | 1875.8  | 7.0       |
| 30°-40°   | 2660.4  | 9.9       |
| 40°-50°   | 3592.4  | 13.4      |
| 50°-60°   | 4832.7  | 18.0      |
| 60°-70°   | 6133.8  | 22.9      |
| 70°-80°   | 5566.8  | 20.8      |
| 80°-90°   | 811.5   | 3.0       |
| 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°    | 26806.8 | 100.0     |
| 0°-180°   | 26806.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P968436

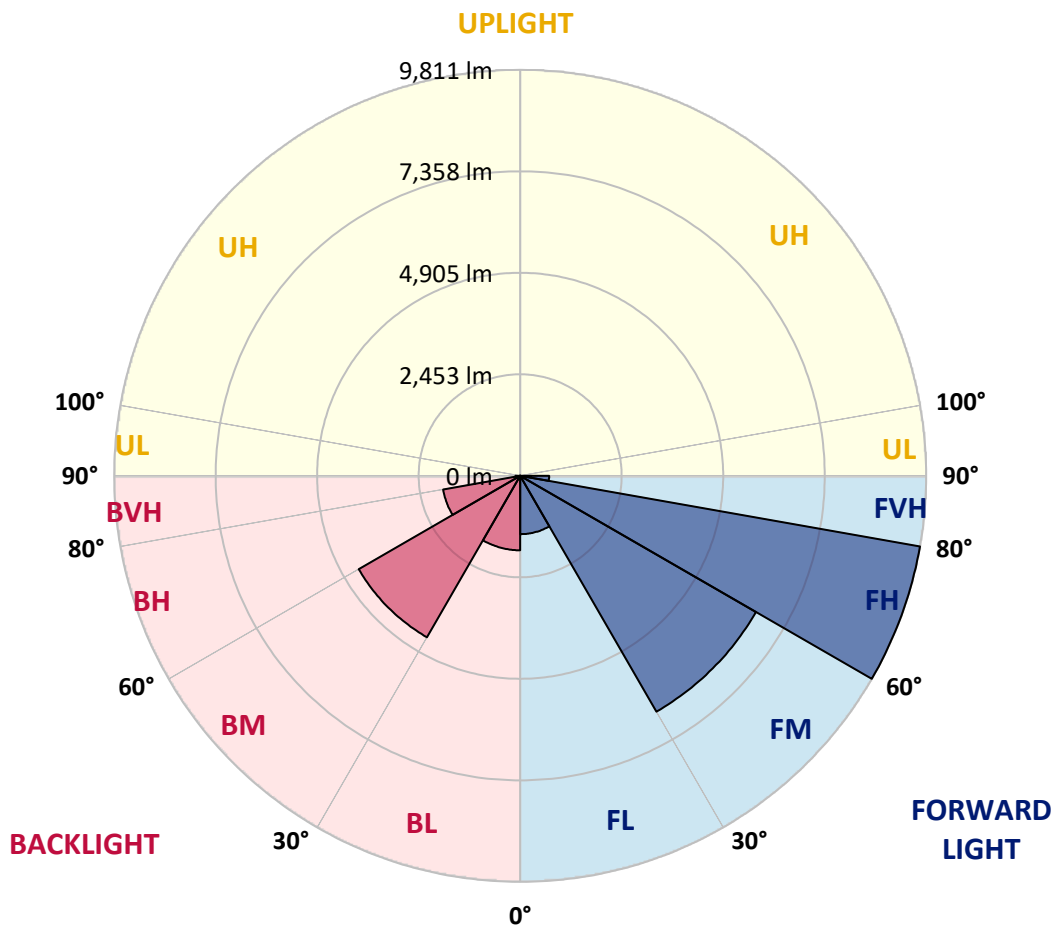
CATALOG NUMBER: NVN-SB5B-835-U-SL4

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1410.1 | 5.3       |                         |      |          |
| FM (30°-60°)   | 6580.5 | 24.5      |                         |      |          |
| FH (60°-80°)   | 9810.9 | 36.6      |                         |      | G4/12000 |
| FVH (80°-90°)  | 699.7  | 2.6       |                         |      | G4/750   |
| BL (0°-30°)    | 1799.1 | 6.7       | B3/2500                 |      |          |
| BM (30°-60°)   | 4505.1 | 16.8      | B3/5000                 |      |          |
| BH (60°-80°)   | 1889.8 | 7.0       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 111.7  | 0.4       |                         |      | G2/225   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

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

Type IV Medium



REPORT NUMBER: P968436  
 CATALOG NUMBER: NVN-SB5B-835-U-SL4

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°    | 75°    | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0°    | 3065.4  | 3065.4  | 3065.4  | 3065.4  | 3065.4  | 3065.4  | 3065.4  | 3065.4  | 3065.4 | 3065.4 | 3065.4 |
| 2.5°  | 3018.5  | 3035.5  | 3031.2  | 3025.6  | 3025.6  | 3027.0  | 3025.6  | 3035.5  | 3045.5 | 3055.4 | 3071.1 |
| 5°    | 3049.8  | 3066.8  | 3058.3  | 3051.2  | 3045.5  | 3044.0  | 3039.8  | 3038.4  | 3044.0 | 3056.9 | 3078.2 |
| 7.5°  | 3110.9  | 3128.0  | 3115.2  | 3102.4  | 3091.0  | 3085.4  | 3079.6  | 3071.1  | 3066.8 | 3074.0 | 3103.8 |
| 10°   | 3179.1  | 3196.2  | 3180.6  | 3157.8  | 3139.4  | 3132.2  | 3126.6  | 3118.0  | 3112.3 | 3116.6 | 3149.3 |
| 12.5° | 3247.4  | 3264.4  | 3243.1  | 3211.8  | 3187.6  | 3183.4  | 3176.3  | 3173.5  | 3172.1 | 3170.6 | 3203.3 |
| 15°   | 3311.4  | 3325.6  | 3298.6  | 3261.7  | 3236.0  | 3228.9  | 3221.8  | 3226.1  | 3233.2 | 3241.7 | 3278.7 |
| 17.5° | 3361.2  | 3375.3  | 3335.6  | 3287.2  | 3263.0  | 3260.2  | 3255.9  | 3270.2  | 3290.0 | 3311.4 | 3356.9 |
| 20°   | 3406.6  | 3420.8  | 3369.7  | 3304.3  | 3275.8  | 3275.8  | 3277.2  | 3307.1  | 3335.6 | 3366.8 | 3429.3 |
| 22.5° | 3470.6  | 3482.0  | 3419.4  | 3329.8  | 3288.6  | 3291.5  | 3302.9  | 3332.7  | 3368.3 | 3410.9 | 3497.6 |
| 25°   | 3565.9  | 3574.4  | 3497.6  | 3378.2  | 3331.2  | 3339.8  | 3349.8  | 3363.9  | 3398.1 | 3447.9 | 3564.4 |
| 27.5° | 3719.4  | 3726.5  | 3625.6  | 3463.5  | 3392.4  | 3406.6  | 3420.8  | 3410.9  | 3426.6 | 3469.2 | 3618.5 |
| 30°   | 3935.5  | 3939.8  | 3811.9  | 3597.1  | 3496.2  | 3503.3  | 3506.1  | 3464.9  | 3435.1 | 3469.2 | 3656.9 |
| 32.5° | 4191.4  | 4190.0  | 4037.9  | 3759.2  | 3614.3  | 3607.1  | 3582.9  | 3501.9  | 3432.2 | 3462.0 | 3691.0 |
| 35°   | 4588.1  | 4572.5  | 4376.3  | 3986.7  | 3747.8  | 3703.7  | 3647.0  | 3543.1  | 3446.5 | 3455.0 | 3720.9 |
| 37.5° | 5245.0  | 5196.6  | 4925.1  | 4359.2  | 3946.9  | 3834.6  | 3750.7  | 3609.9  | 3477.7 | 3452.1 | 3756.4 |
| 40°   | 5985.8  | 5924.6  | 5626.0  | 4869.7  | 4245.4  | 4064.9  | 3929.8  | 3705.2  | 3528.9 | 3464.9 | 3809.0 |
| 42.5° | 6864.4  | 6777.7  | 6456.4  | 5471.0  | 4623.7  | 4362.1  | 4158.7  | 3826.0  | 3604.2 | 3506.1 | 3880.1 |
| 45°   | 7943.5  | 7828.4  | 7373.4  | 6149.3  | 5100.0  | 4751.7  | 4480.1  | 4009.5  | 3719.4 | 3585.8 | 3986.7 |
| 47.5° | 9034.1  | 9062.5  | 8415.7  | 6925.6  | 5671.5  | 5232.2  | 4882.5  | 4285.3  | 3887.2 | 3713.8 | 4158.7 |
| 50°   | 10192.9 | 10212.8 | 9452.1  | 7785.8  | 6319.8  | 5775.4  | 5334.6  | 4593.8  | 4120.4 | 3895.7 | 4416.1 |
| 52.5° | 11097.2 | 11099.9 | 10393.3 | 8685.7  | 6995.2  | 6372.5  | 5822.3  | 4946.4  | 4390.5 | 4137.4 | 4758.8 |
| 55°   | 11663.0 | 11655.9 | 11053.1 | 9537.4  | 7771.6  | 6999.5  | 6362.6  | 5347.4  | 4720.3 | 4421.7 | 5189.6 |
| 57.5° | 12073.9 | 12052.6 | 11508.0 | 10269.7 | 8599.0  | 7740.3  | 6973.9  | 5802.3  | 5109.9 | 4760.2 | 5756.8 |
| 60°   | 12230.3 | 12217.5 | 11816.6 | 10902.3 | 9469.2  | 8559.3  | 7679.1  | 6311.3  | 5552.1 | 5159.7 | 6486.2 |
| 62.5° | 12290.1 | 12314.1 | 12119.4 | 11515.2 | 10400.5 | 9466.3  | 8454.0  | 6919.9  | 6049.8 | 5611.9 | 7255.5 |
| 65°   | 12500.5 | 12544.6 | 12504.7 | 12317.0 | 11452.6 | 10528.4 | 9482.0  | 7643.6  | 6592.9 | 6096.7 | 8058.8 |
| 67.5° | 12917.0 | 12961.1 | 12978.1 | 13276.7 | 12737.9 | 11852.1 | 10764.4 | 8545.0  | 7228.4 | 6600.0 | 8663.0 |
| 70°   | 12907.1 | 12894.3 | 13195.7 | 14040.2 | 14347.3 | 13684.8 | 12493.3 | 9654.0  | 7986.3 | 7018.0 | 8739.8 |
| 72.5° | 11748.3 | 11645.9 | 12358.2 | 14031.7 | 15686.7 | 15598.6 | 14604.7 | 11084.3 | 8640.2 | 7069.2 | 7583.9 |
| 75°   | 8813.8  | 8540.7  | 9799.0  | 12645.4 | 15909.9 | 16684.8 | 15946.8 | 11971.5 | 8485.3 | 6245.9 | 5277.7 |
| 77.5° | 3769.2  | 3494.7  | 4977.7  | 9361.1  | 14239.3 | 15597.1 | 14715.6 | 10444.5 | 6773.4 | 4130.3 | 2591.9 |
| 80°   | 986.8   | 985.3   | 1504.3  | 4244.1  | 9683.9  | 11518.0 | 10104.8 | 6745.0  | 3870.1 | 1475.8 | 715.1  |
| 82.5° | 408.1   | 398.1   | 553.1   | 1650.7  | 4731.7  | 6463.4  | 5274.9  | 3008.5  | 1397.6 | 399.5  | 237.4  |
| 85°   | 152.1   | 150.7   | 268.8   | 570.1   | 1669.2  | 2665.8  | 1929.4  | 769.2   | 348.3  | 194.7  | 106.6  |
| 87.5° | 42.6    | 41.2    | 58.3    | 197.6   | 406.6   | 617.0   | 329.8   | 126.6   | 98.1   | 76.8   | 31.3   |
| 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: P968436  
 CATALOG NUMBER: NVN-SB5B-835-U-SL4

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 | 3065.4 |
| 2.5°  | 3075.3 | 3082.5 | 3095.3 | 3105.2 | 3118.0 | 3132.2 | 3152.1 | 3164.9 | 3177.7 | 3186.2 | 3180.6 |
| 5°    | 3088.1 | 3103.8 | 3136.5 | 3169.2 | 3207.5 | 3243.1 | 3284.3 | 3314.2 | 3338.4 | 3345.5 | 3348.4 |
| 7.5°  | 3116.6 | 3142.1 | 3197.6 | 3253.0 | 3314.2 | 3372.5 | 3432.2 | 3483.4 | 3524.7 | 3540.2 | 3541.7 |
| 10°   | 3166.3 | 3200.5 | 3278.7 | 3356.9 | 3438.0 | 3527.4 | 3604.2 | 3678.2 | 3736.5 | 3760.6 | 3762.1 |
| 12.5° | 3228.9 | 3271.6 | 3373.9 | 3482.0 | 3594.3 | 3718.0 | 3817.5 | 3908.5 | 3981.0 | 4013.7 | 4013.7 |
| 15°   | 3309.9 | 3365.4 | 3496.2 | 3641.2 | 3806.1 | 3978.2 | 4104.7 | 4205.7 | 4286.8 | 4326.5 | 4323.7 |
| 17.5° | 3398.1 | 3472.0 | 3637.0 | 3855.9 | 4091.9 | 4318.0 | 4465.8 | 4539.8 | 4623.7 | 4662.1 | 4660.7 |
| 20°   | 3483.4 | 3574.4 | 3810.4 | 4128.9 | 4443.1 | 4683.4 | 4802.8 | 4822.7 | 4828.5 | 4832.7 | 4844.0 |
| 22.5° | 3571.5 | 3693.8 | 4027.9 | 4473.0 | 4809.9 | 4976.3 | 4993.4 | 4908.0 | 4788.6 | 4733.1 | 4748.8 |
| 25°   | 3668.3 | 3830.3 | 4312.3 | 4852.6 | 5125.6 | 5145.5 | 5014.7 | 4807.1 | 4581.0 | 4477.2 | 4492.9 |
| 27.5° | 3762.1 | 3988.2 | 4653.5 | 5215.2 | 5353.1 | 5178.2 | 4896.6 | 4602.4 | 4329.4 | 4219.9 | 4232.7 |
| 30°   | 3855.9 | 4168.7 | 5030.3 | 5532.2 | 5456.9 | 5097.1 | 4710.4 | 4382.0 | 4107.6 | 3992.4 | 4005.2 |
| 32.5° | 3951.2 | 4379.1 | 5464.0 | 5761.1 | 5438.3 | 4925.1 | 4478.6 | 4134.5 | 3892.8 | 3772.0 | 3787.7 |
| 35°   | 4059.2 | 4637.9 | 5874.9 | 5886.3 | 5314.7 | 4672.1 | 4173.0 | 3838.8 | 3628.4 | 3531.7 | 3553.1 |
| 37.5° | 4200.0 | 4966.3 | 6237.4 | 5917.5 | 5098.6 | 4300.9 | 3793.3 | 3489.1 | 3315.7 | 3271.6 | 3302.9 |
| 40°   | 4374.9 | 5361.6 | 6514.7 | 5867.7 | 4778.7 | 3850.2 | 3378.2 | 3135.1 | 3037.0 | 3046.9 | 3081.0 |
| 42.5° | 4602.4 | 5803.8 | 6709.4 | 5739.8 | 4333.6 | 3385.3 | 3014.2 | 2906.2 | 2953.0 | 2992.9 | 3029.9 |
| 45°   | 4898.1 | 6263.1 | 6830.3 | 5522.3 | 3830.3 | 2991.5 | 2799.5 | 2825.1 | 2860.7 | 2864.9 | 2893.4 |
| 47.5° | 5276.3 | 6728.0 | 6909.9 | 5193.8 | 3317.1 | 2714.2 | 2663.1 | 2668.7 | 2661.6 | 2631.8 | 2654.5 |
| 50°   | 5748.3 | 7180.1 | 6981.1 | 4758.8 | 2880.6 | 2540.8 | 2472.5 | 2452.6 | 2354.5 | 2257.8 | 2270.6 |
| 52.5° | 6285.8 | 7595.2 | 7010.9 | 4218.5 | 2540.8 | 2395.7 | 2284.8 | 2159.7 | 1976.3 | 1946.5 | 1956.4 |
| 55°   | 6882.9 | 7979.1 | 6934.1 | 3554.5 | 2255.0 | 2209.5 | 2041.7 | 1891.0 | 1871.0 | 1845.5 | 1849.7 |
| 57.5° | 7596.7 | 8392.9 | 6777.7 | 2813.7 | 1962.1 | 1992.0 | 1828.4 | 1845.5 | 1809.9 | 1770.2 | 1763.0 |
| 60°   | 8377.2 | 8820.8 | 6503.3 | 2138.4 | 1659.3 | 1720.4 | 1772.9 | 1771.6 | 1761.6 | 1728.9 | 1717.5 |
| 62.5° | 9079.6 | 9102.3 | 5963.0 | 1637.9 | 1393.4 | 1509.9 | 1653.5 | 1652.1 | 1643.6 | 1625.1 | 1618.0 |
| 65°   | 9497.6 | 9059.7 | 5061.6 | 1289.6 | 1174.4 | 1336.5 | 1491.5 | 1502.9 | 1504.3 | 1502.9 | 1502.9 |
| 67.5° | 9423.6 | 8560.6 | 3824.7 | 1026.5 | 993.8  | 1160.2 | 1330.8 | 1346.4 | 1357.8 | 1360.7 | 1363.5 |
| 70°   | 8587.7 | 7464.5 | 2493.8 | 819.0  | 833.2  | 1005.2 | 1178.6 | 1194.3 | 1204.3 | 1215.6 | 1221.3 |
| 72.5° | 6693.9 | 5488.2 | 1427.5 | 662.6  | 692.4  | 871.6  | 1028.0 | 1046.4 | 1052.2 | 1073.5 | 1082.0 |
| 75°   | 4079.1 | 3227.5 | 770.6  | 521.8  | 568.7  | 745.1  | 878.6  | 900.0  | 910.0  | 935.5  | 938.4  |
| 77.5° | 1939.3 | 1397.6 | 439.3  | 406.6  | 457.9  | 608.5  | 742.2  | 766.4  | 739.3  | 753.6  | 742.2  |
| 80°   | 655.5  | 519.0  | 277.3  | 310.0  | 349.7  | 474.9  | 594.3  | 618.5  | 561.6  | 558.7  | 553.1  |
| 82.5° | 228.9  | 210.4  | 176.3  | 206.1  | 226.1  | 339.8  | 449.3  | 480.5  | 418.0  | 416.6  | 396.7  |
| 85°   | 89.6   | 85.3   | 98.1   | 112.3  | 135.1  | 209.0  | 295.7  | 311.4  | 257.4  | 207.6  | 204.7  |
| 87.5° | 18.4   | 19.9   | 24.2   | 25.6   | 41.2   | 72.5   | 106.6  | 130.8  | 103.8  | 88.1   | 81.1   |
| 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)