

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: P883757

Luminaire Tested: **NVN-SB4B-730-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB4B-730-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22258 lumens  
Efficiency: N/A  
Efficacy: 151.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

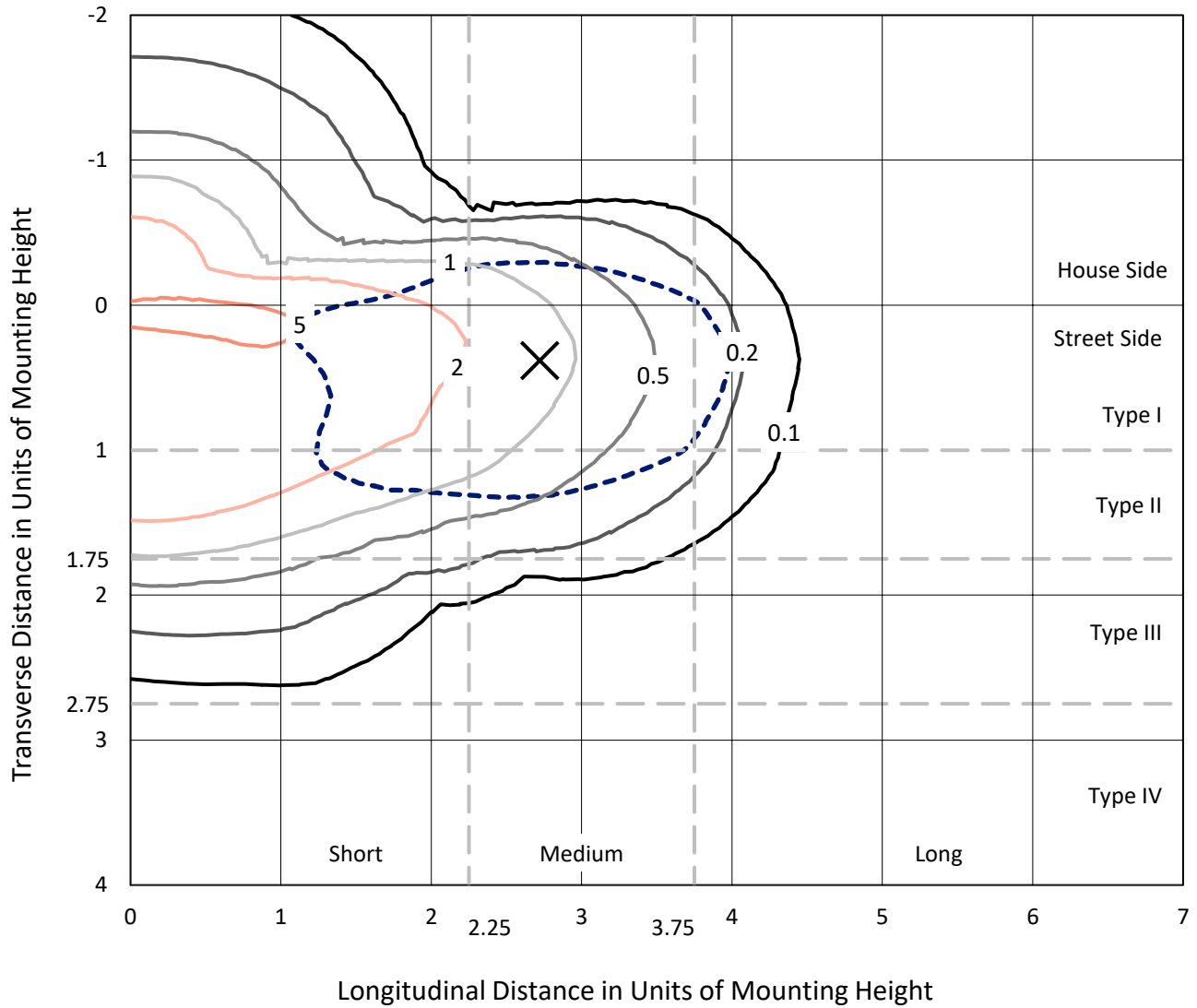
Input Watts (W): 147  
Input Voltage (V): 120.0  
Input Current (Ain): 1.255  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

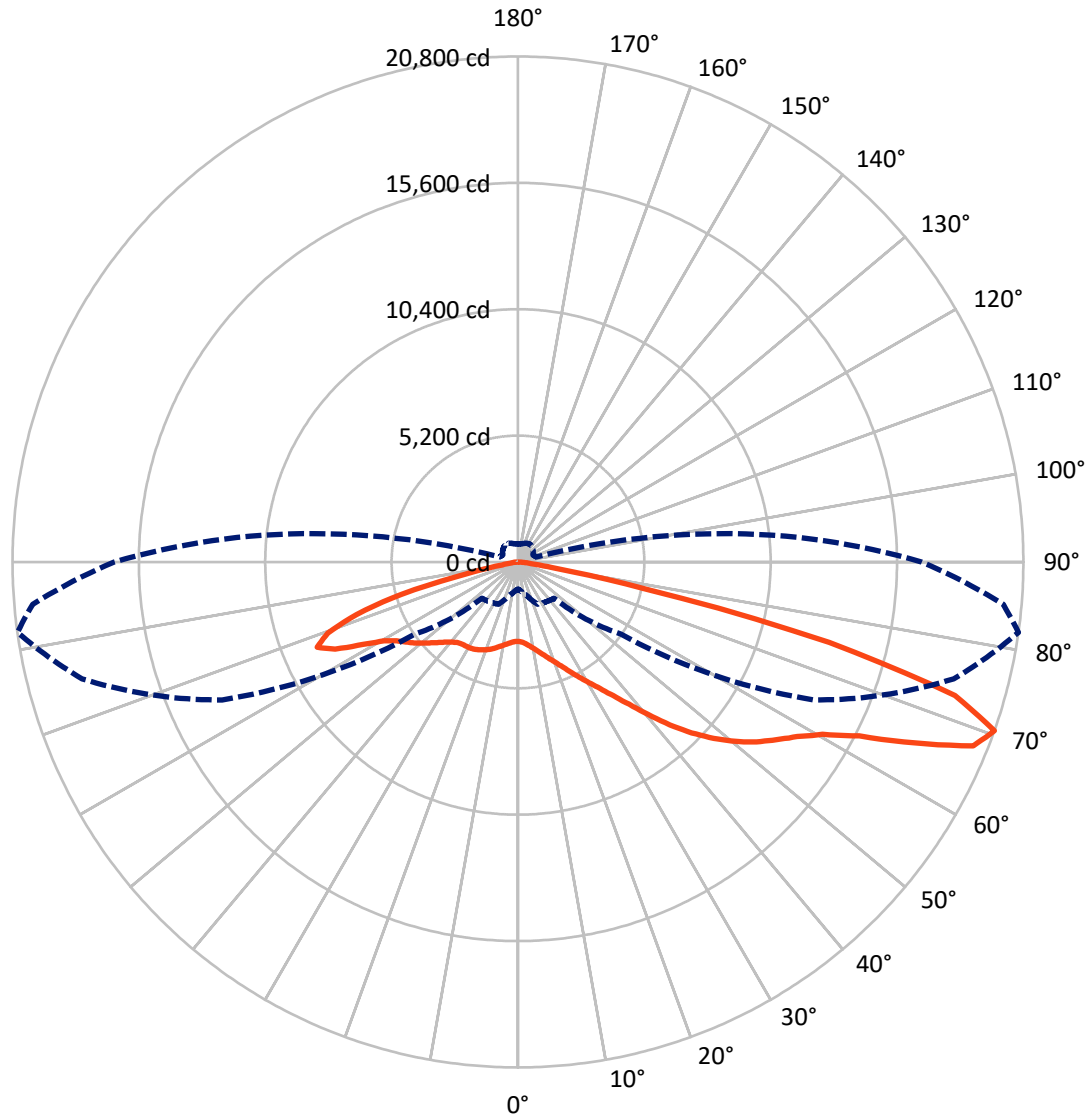
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5487.1   | 0.0    | 5487.1  |
|                    | % Fixture | 24.7     | 0.0    | 24.7    |
| <b>Street Side</b> | Lumens    | 16770.9  | 0.0    | 16770.9 |
|                    | % Fixture | 75.3     | 0.0    | 75.3    |
| <b>Total</b>       | Lumens    | 22258.0  | 0.0    | 22258.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 308.1   | 1.4       |
| 10°-20°   | 885.2   | 4.0       |
| 20°-30°   | 1480.9  | 6.7       |
| 30°-40°   | 2313.5  | 10.4      |
| 40°-50°   | 3684.6  | 16.6      |
| 50°-60°   | 5127.6  | 23.0      |
| 60°-70°   | 5363.7  | 24.1      |
| 70°-80°   | 2803.3  | 12.6      |
| 80°-90°   | 291.1   | 1.3       |
| 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°    | 22258.0 | 100.0     |
| 0°-180°   | 22258.0 | 100.0     |

**Coefficient of Utilization**



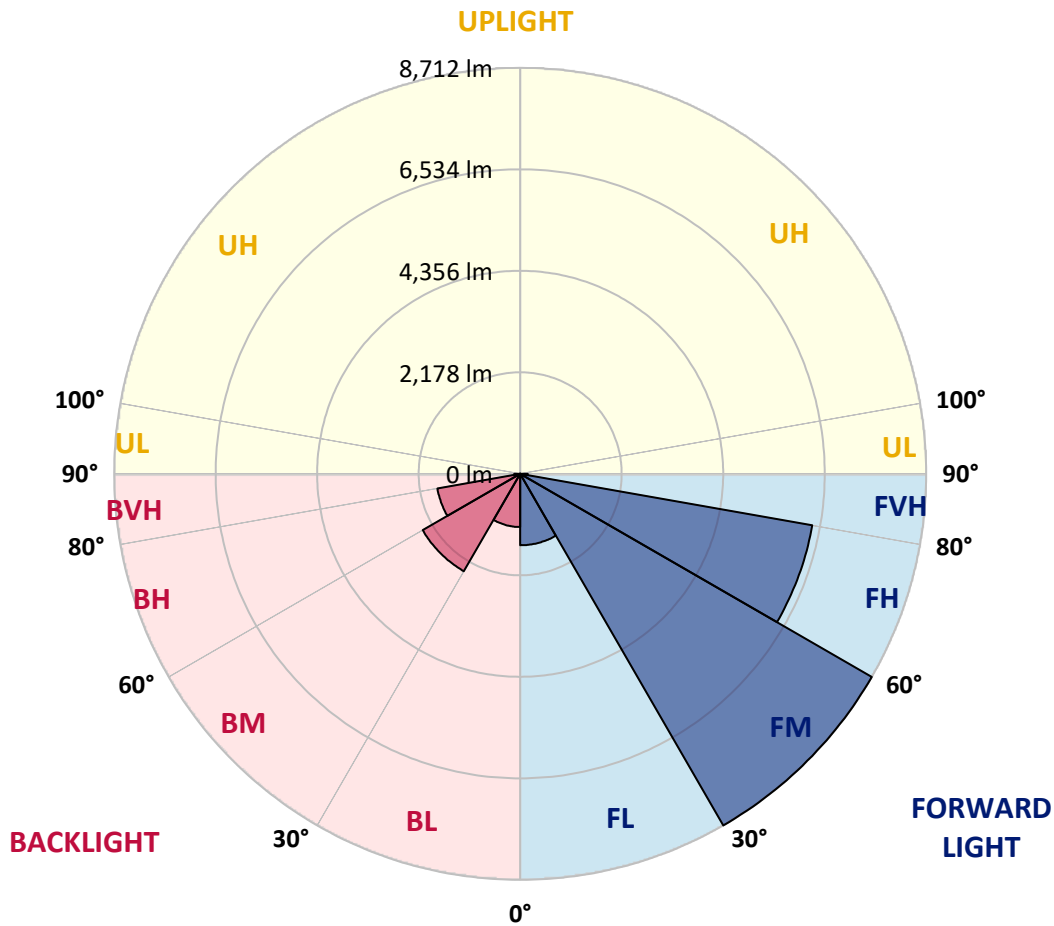
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 CATALOG NUMBER: NVN-SB4B-730-U-T2

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1532.7 | 6.9       |                         |      |         |
| FM (30°-60°)   | 8711.6 | 39.1      |                         |      |         |
| FH (60°-80°)   | 6363.6 | 28.6      |                         |      | G3/7500 |
| FVH (80°-90°)  | 163.0  | 0.7       |                         |      | G2/225  |
| BL (0°-30°)    | 1141.5 | 5.1       | B3/2500                 |      |         |
| BM (30°-60°)   | 2414.1 | 10.8      | B2/2500                 |      |         |
| BH (60°-80°)   | 1803.4 | 8.1       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 128.1  | 0.6       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium



REPORT NUMBER: P883757

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 75°     | 82°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3  | 3263.3  | 3263.3  | 3263.3  | 3263.3  |
| 2.5°  | 3341.3 | 3360.1 | 3354.2 | 3348.3 | 3348.3 | 3340.1 | 3338.9  | 3327.1  | 3317.6  | 3302.3  | 3298.7  |
| 5°    | 3383.8 | 3403.8 | 3401.5 | 3406.2 | 3421.6 | 3425.1 | 3428.7  | 3421.6  | 3402.7  | 3383.8  | 3375.5  |
| 7.5°  | 3346.0 | 3368.4 | 3375.5 | 3403.8 | 3451.1 | 3493.6 | 3525.5  | 3538.5  | 3520.8  | 3493.6  | 3480.6  |
| 10°   | 3218.4 | 3243.2 | 3268.0 | 3335.3 | 3419.2 | 3519.6 | 3604.6  | 3655.4  | 3651.9  | 3625.9  | 3603.4  |
| 12.5° | 2959.8 | 2985.7 | 3038.9 | 3170.0 | 3323.5 | 3500.7 | 3659.0  | 3765.3  | 3801.9  | 3783.0  | 3744.0  |
| 15°   | 2753.1 | 2775.5 | 2815.7 | 2950.3 | 3149.9 | 3419.2 | 3679.0  | 3885.7  | 3979.0  | 3968.4  | 3921.2  |
| 17.5° | 2747.2 | 2756.6 | 2781.4 | 2845.2 | 2998.7 | 3291.6 | 3657.8  | 4003.8  | 4182.2  | 4181.0  | 4121.9  |
| 20°   | 2851.1 | 2854.7 | 2868.8 | 2881.8 | 2969.2 | 3194.8 | 3603.4  | 4101.9  | 4410.1  | 4410.1  | 4346.3  |
| 22.5° | 2995.2 | 2992.8 | 3007.0 | 2995.2 | 3037.7 | 3186.5 | 3569.2  | 4188.1  | 4664.1  | 4682.9  | 4602.6  |
| 25°   | 3211.3 | 3199.5 | 3196.0 | 3168.8 | 3177.1 | 3263.3 | 3607.0  | 4286.1  | 4965.2  | 5004.2  | 4903.8  |
| 27.5° | 3499.5 | 3480.6 | 3467.6 | 3405.0 | 3383.8 | 3421.6 | 3722.7  | 4404.2  | 5300.6  | 5368.0  | 5240.4  |
| 30°   | 3875.1 | 3840.8 | 3821.9 | 3713.3 | 3636.5 | 3642.4 | 3897.5  | 4561.3  | 5651.4  | 5760.1  | 5598.3  |
| 32.5° | 4387.7 | 4334.5 | 4283.7 | 4105.4 | 3964.9 | 3918.8 | 4123.1  | 4778.6  | 6031.7  | 6205.4  | 5997.5  |
| 35°   | 4961.7 | 4919.2 | 4864.8 | 4589.6 | 4373.5 | 4267.2 | 4427.8  | 5082.2  | 6477.0  | 6752.2  | 6481.7  |
| 37.5° | 5514.4 | 5477.8 | 5503.8 | 5132.9 | 4854.2 | 4699.5 | 4827.0  | 5489.6  | 7026.2  | 7432.5  | 7088.8  |
| 40°   | 6086.1 | 6057.7 | 6061.3 | 5706.9 | 5382.1 | 5208.5 | 5311.3  | 6001.0  | 7655.7  | 8241.5  | 7818.7  |
| 42.5° | 6707.3 | 6686.0 | 6615.2 | 6301.0 | 5936.1 | 5774.3 | 5868.7  | 6591.6  | 8331.3  | 9162.8  | 8619.5  |
| 45°   | 7403.0 | 7390.0 | 7323.8 | 6963.6 | 6545.5 | 6363.6 | 6491.2  | 7243.5  | 9010.4  | 10029.7 | 9423.8  |
| 47.5° | 8004.1 | 8014.8 | 8006.5 | 7702.9 | 7269.5 | 7002.6 | 7154.9  | 7923.8  | 9642.3  | 10844.6 | 10195.0 |
| 50°   | 8293.5 | 8349.0 | 8430.5 | 8336.0 | 8066.7 | 7795.1 | 7824.6  | 8580.5  | 10244.6 | 11608.8 | 10934.4 |
| 52.5° | 8142.3 | 8247.4 | 8469.5 | 8620.6 | 8724.6 | 8667.9 | 8588.8  | 9232.4  | 10811.5 | 12298.5 | 11633.6 |
| 55°   | 7578.9 | 7726.6 | 8095.1 | 8460.0 | 8990.3 | 9402.5 | 9506.4  | 9955.3  | 11364.3 | 12905.6 | 12295.0 |
| 57.5° | 6552.6 | 6792.3 | 7123.0 | 7861.2 | 8754.1 | 9758.0 | 10576.5 | 10958.0 | 11950.1 | 13554.0 | 12987.1 |
| 60°   | 4792.8 | 5114.0 | 5525.1 | 6623.5 | 7927.4 | 9567.9 | 11487.1 | 12498.1 | 12782.7 | 14393.7 | 13888.2 |
| 62.5° | 3067.2 | 3265.7 | 3643.6 | 4678.2 | 6177.0 | 8593.5 | 11765.8 | 14423.2 | 14194.1 | 15770.9 | 15239.4 |
| 65°   | 2099.9 | 2227.5 | 2573.6 | 3154.6 | 3993.2 | 6396.7 | 11019.4 | 15866.5 | 16435.8 | 17953.5 | 17549.5 |
| 67.5° | 1525.9 | 1622.8 | 1918.1 | 2427.1 | 2601.9 | 3785.3 | 8551.0  | 15800.4 | 18614.9 | 20202.2 | 19573.9 |
| 70°   | 1112.6 | 1181.1 | 1429.1 | 1918.1 | 2001.9 | 2105.9 | 5180.2  | 13431.1 | 18567.6 | 20799.9 | 20047.5 |
| 72.5° | 824.4  | 871.6  | 1038.2 | 1488.2 | 1620.4 | 1422.0 | 2564.1  | 9761.6  | 15955.1 | 18813.3 | 18209.8 |
| 75°   | 596.4  | 631.9  | 754.7  | 1138.6 | 1296.8 | 1083.0 | 1279.1  | 5704.6  | 11129.2 | 13233.9 | 13340.2 |
| 77.5° | 455.9  | 483.1  | 563.4  | 833.8  | 1038.2 | 812.6  | 793.7   | 2624.3  | 5277.0  | 5303.0  | 5600.6  |
| 80°   | 366.1  | 383.8  | 427.5  | 587.0  | 796.0  | 608.3  | 517.3   | 1059.4  | 1667.7  | 1411.4  | 1481.1  |
| 82.5° | 269.3  | 298.8  | 361.4  | 412.2  | 569.3  | 419.3  | 315.3   | 535.0   | 634.2   | 545.7   | 550.4   |
| 85°   | 153.5  | 173.6  | 218.5  | 295.3  | 363.8  | 256.3  | 180.7   | 237.4   | 295.3   | 242.1   | 216.1   |
| 87.5° | 54.3   | 70.9   | 76.8   | 115.7  | 158.3  | 106.3  | 69.7    | 68.5    | 96.8    | 72.0    | 60.2    |
| 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: P883757

CATALOG NUMBER: NVN-SB4B-730-U-T2

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3263.3  | 3263.3  | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 | 3263.3 |
| 2.5°  | 3286.9  | 3281.0  | 3257.4 | 3225.5 | 3192.4 | 3160.5 | 3149.9 | 3127.5 | 3112.1 | 3103.9 | 3113.3 |
| 5°    | 3353.1  | 3334.2  | 3278.7 | 3207.8 | 3133.4 | 3053.1 | 2996.4 | 2944.4 | 2906.6 | 2871.2 | 2885.4 |
| 7.5°  | 3447.5  | 3414.5  | 3318.8 | 3194.8 | 3062.5 | 2929.1 | 2829.8 | 2754.3 | 2703.5 | 2670.4 | 2677.5 |
| 10°   | 3557.4  | 3506.6  | 3360.1 | 3174.7 | 2970.4 | 2779.1 | 2662.1 | 2597.2 | 2565.3 | 2547.6 | 2552.3 |
| 12.5° | 3683.8  | 3611.7  | 3402.7 | 3128.7 | 2829.8 | 2611.3 | 2531.0 | 2512.1 | 2513.3 | 2514.5 | 2516.9 |
| 15°   | 3839.7  | 3739.3  | 3436.9 | 3028.3 | 2646.8 | 2482.6 | 2468.4 | 2499.1 | 2531.0 | 2546.4 | 2545.2 |
| 17.5° | 4015.6  | 3873.9  | 3442.8 | 2862.9 | 2467.3 | 2399.9 | 2444.8 | 2511.0 | 2559.4 | 2580.6 | 2585.4 |
| 20°   | 4204.6  | 4010.9  | 3400.3 | 2629.1 | 2319.6 | 2332.6 | 2412.9 | 2498.0 | 2551.1 | 2578.3 | 2585.4 |
| 22.5° | 4420.8  | 4157.4  | 3298.7 | 2383.4 | 2199.2 | 2259.4 | 2353.9 | 2436.6 | 2492.1 | 2519.2 | 2526.3 |
| 25°   | 4667.6  | 4321.5  | 3139.3 | 2176.7 | 2095.2 | 2176.7 | 2271.2 | 2339.7 | 2384.6 | 2409.4 | 2416.5 |
| 27.5° | 4941.6  | 4492.8  | 2926.7 | 2012.5 | 2004.3 | 2091.7 | 2169.6 | 2222.8 | 2246.4 | 2265.3 | 2272.4 |
| 30°   | 5216.8  | 4648.7  | 2669.2 | 1888.5 | 1925.1 | 2007.8 | 2063.3 | 2087.0 | 2094.0 | 2097.6 | 2105.9 |
| 32.5° | 5514.4  | 4783.3  | 2398.8 | 1785.8 | 1849.6 | 1926.3 | 1959.4 | 1970.0 | 1937.0 | 1914.5 | 1921.6 |
| 35°   | 5874.7  | 4927.4  | 2134.2 | 1704.3 | 1775.2 | 1841.3 | 1851.9 | 1842.5 | 1803.5 | 1757.4 | 1759.8 |
| 37.5° | 6319.9  | 5107.0  | 1922.8 | 1646.4 | 1705.5 | 1749.2 | 1736.2 | 1733.8 | 1737.4 | 1683.0 | 1686.6 |
| 40°   | 6865.6  | 5340.8  | 1768.1 | 1601.5 | 1648.8 | 1658.2 | 1621.6 | 1641.7 | 1659.4 | 1576.7 | 1579.1 |
| 42.5° | 7471.5  | 5623.1  | 1670.0 | 1570.8 | 1601.5 | 1579.1 | 1522.4 | 1544.8 | 1542.5 | 1433.8 | 1432.6 |
| 45°   | 8089.2  | 5930.2  | 1635.8 | 1548.4 | 1557.8 | 1513.0 | 1450.4 | 1456.3 | 1406.7 | 1308.6 | 1312.2 |
| 47.5° | 8703.3  | 6259.7  | 1657.0 | 1529.5 | 1503.5 | 1452.7 | 1404.3 | 1378.3 | 1305.1 | 1231.9 | 1231.9 |
| 50°   | 9305.7  | 6605.7  | 1735.0 | 1491.7 | 1429.1 | 1399.6 | 1364.1 | 1318.1 | 1240.1 | 1177.5 | 1172.8 |
| 52.5° | 9864.3  | 6954.2  | 1822.4 | 1429.1 | 1335.8 | 1353.5 | 1331.1 | 1277.9 | 1201.1 | 1137.4 | 1138.6 |
| 55°   | 10393.4 | 7302.6  | 1856.6 | 1342.9 | 1248.4 | 1313.4 | 1300.4 | 1202.3 | 1110.2 | 1058.2 | 1053.5 |
| 57.5° | 10969.8 | 7721.8  | 1818.9 | 1233.0 | 1177.5 | 1267.3 | 1217.7 | 1109.0 | 1055.9 | 1016.9 | 1013.4 |
| 60°   | 11768.2 | 8379.7  | 1737.4 | 1097.2 | 1110.2 | 1198.8 | 1113.8 | 1068.9 | 1011.0 | 967.3  | 964.9  |
| 62.5° | 13094.5 | 9606.8  | 1606.3 | 962.6  | 1031.1 | 1097.2 | 1064.1 | 1019.3 | 960.2  | 917.7  | 917.7  |
| 65°   | 15055.1 | 11312.3 | 1359.4 | 857.5  | 942.5  | 998.0  | 1011.0 | 966.1  | 904.7  | 859.8  | 862.2  |
| 67.5° | 16708.6 | 12382.4 | 1028.7 | 770.1  | 851.6  | 917.7  | 954.3  | 910.6  | 845.6  | 801.9  | 803.1  |
| 70°   | 16617.7 | 11605.2 | 785.4  | 683.8  | 771.2  | 838.6  | 885.8  | 851.6  | 781.9  | 740.5  | 744.1  |
| 72.5° | 14759.9 | 9708.4  | 635.4  | 596.4  | 689.7  | 755.9  | 812.6  | 786.6  | 715.7  | 675.6  | 675.6  |
| 75°   | 10843.4 | 6891.6  | 507.9  | 507.9  | 588.2  | 669.7  | 732.3  | 715.7  | 650.8  | 622.4  | 614.2  |
| 77.5° | 4570.7  | 2891.3  | 398.0  | 421.6  | 489.0  | 575.2  | 653.1  | 659.0  | 602.3  | 637.8  | 578.7  |
| 80°   | 1215.3  | 797.2   | 303.5  | 331.9  | 383.8  | 474.8  | 568.1  | 565.7  | 504.3  | 471.2  | 438.2  |
| 82.5° | 463.0   | 314.2   | 216.1  | 233.9  | 277.6  | 363.8  | 450.0  | 464.2  | 402.7  | 348.4  | 348.4  |
| 85°   | 178.3   | 134.6   | 133.5  | 140.5  | 161.8  | 240.9  | 340.1  | 352.0  | 303.5  | 257.5  | 265.7  |
| 87.5° | 46.1    | 40.2    | 49.6   | 47.2   | 74.4   | 128.7  | 194.9  | 202.0  | 185.4  | 107.5  | 153.5  |
| 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)