

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: P967901

Luminaire Tested: **NVN-SB5A-835-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967901
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: STREETWORKS
Catalog Number: NVN-SB5A-835-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 350mA 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: 18368 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

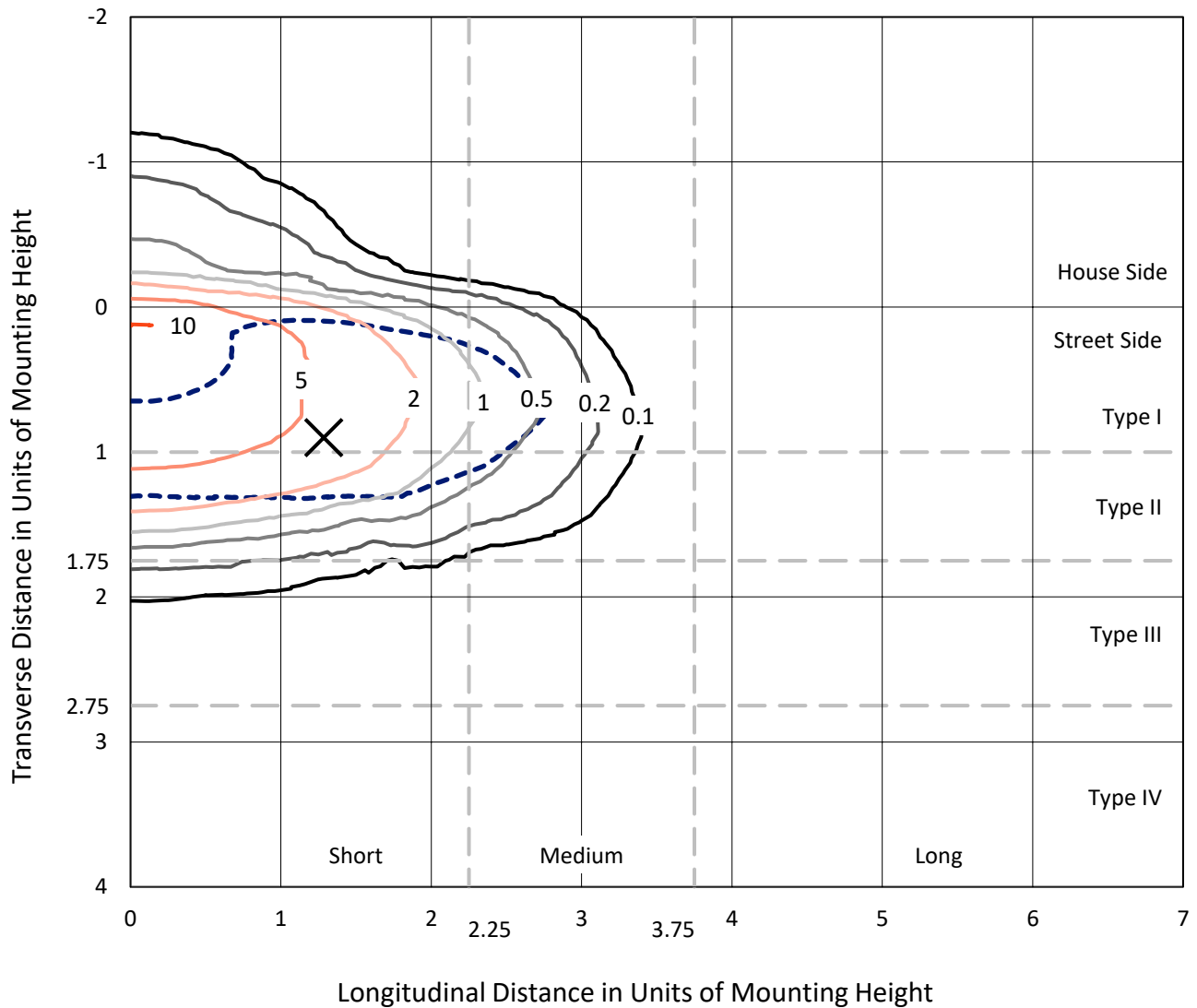
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

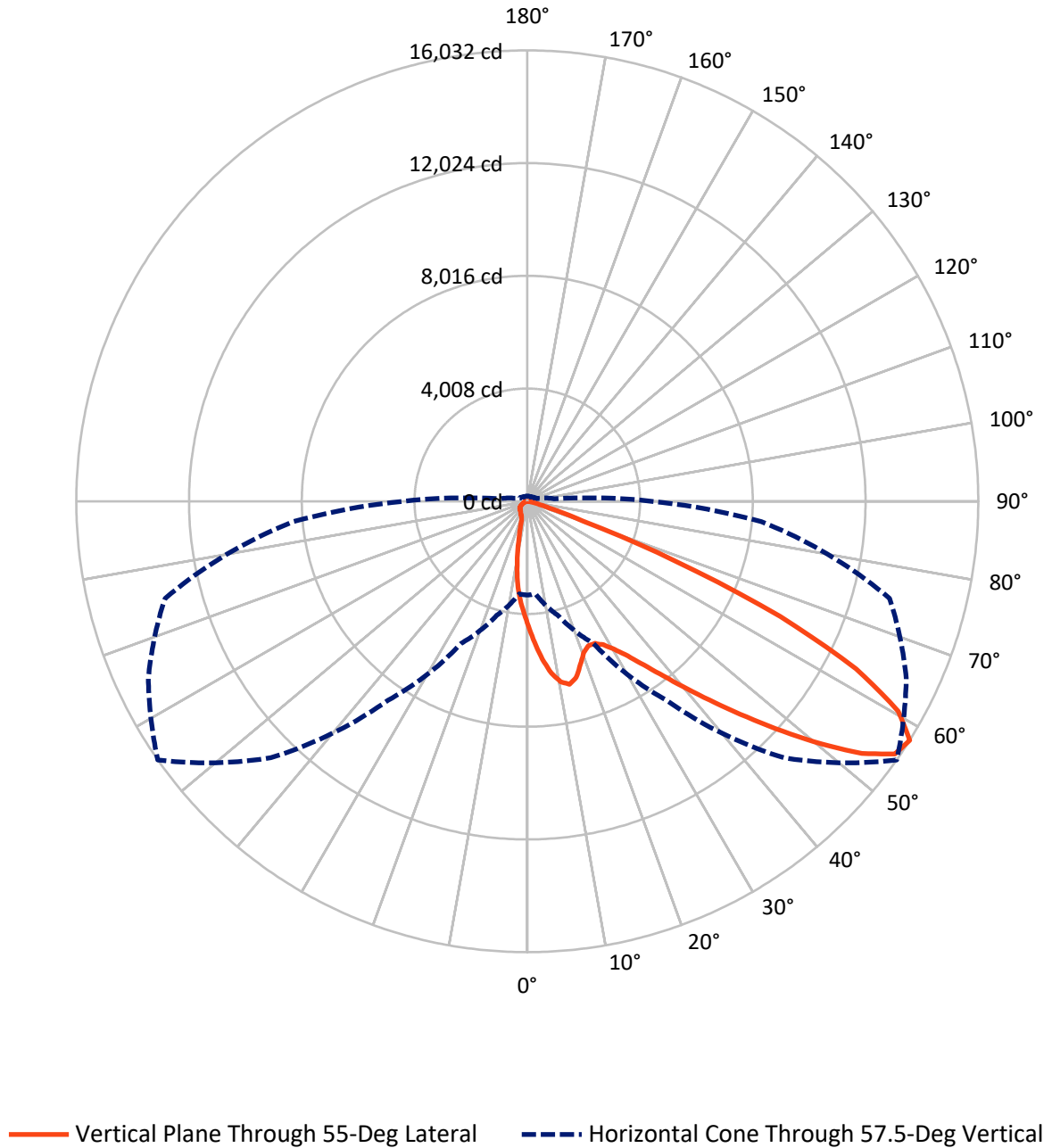
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Short - N/A

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CATALOG NUMBER: NVN-SB5A-835-U-AFL-HSS

Luminous Intensity Polar Plot



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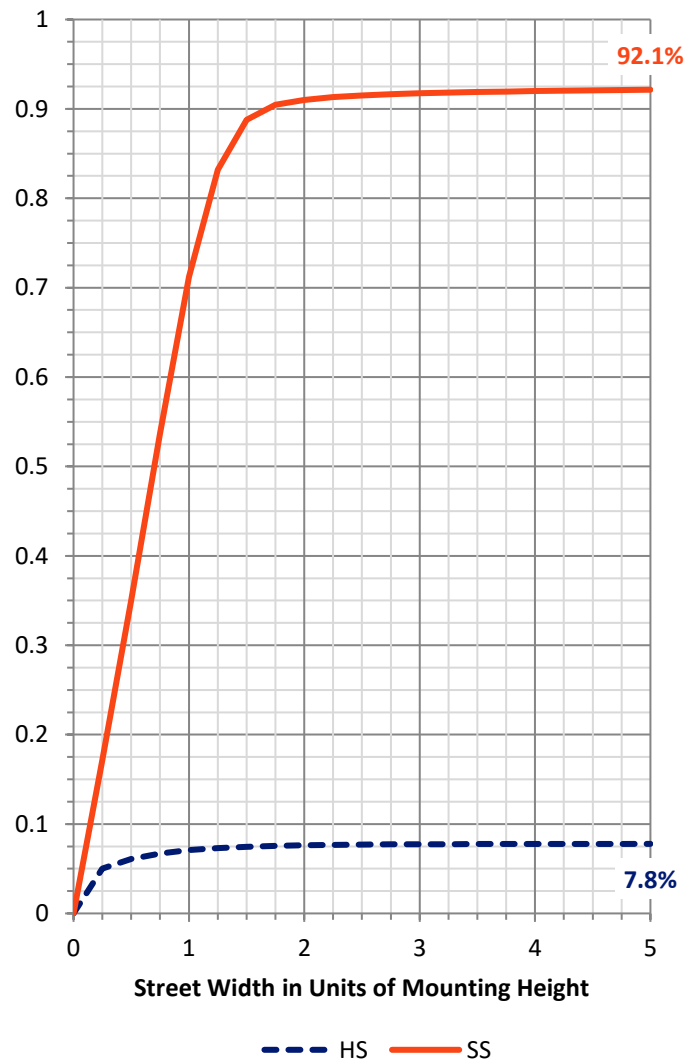
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1434.5 | 0.0 | 1434.5 |
| | % Fixture | 7.8 | 0.0 | 7.8 |
| Street Side | Lumens | 16933.5 | 0.0 | 16933.5 |
| | % Fixture | 92.2 | 0.0 | 92.2 |
| Total | Lumens | 18368.0 | 0.0 | 18368.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 411.8 | 2.2 |
| 10°-20° | 994.8 | 5.4 |
| 20°-30° | 1591.7 | 8.7 |
| 30°-40° | 2694.0 | 14.7 |
| 40°-50° | 4422.9 | 24.1 |
| 50°-60° | 4861.1 | 26.5 |
| 60°-70° | 2788.3 | 15.2 |
| 70°-80° | 569.7 | 3.1 |
| 80°-90° | 33.6 | 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° | 18368.0 | 100.0 |
| 0°-180° | 18368.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P967901

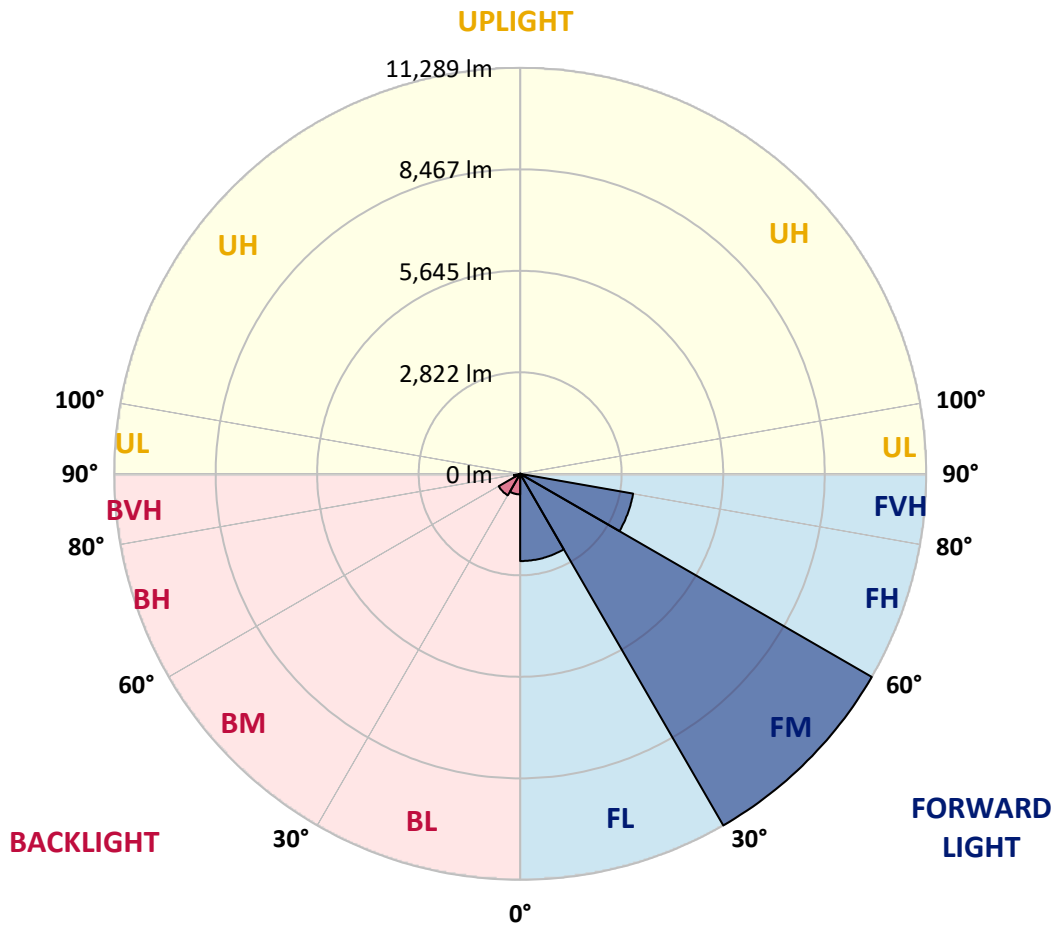
CATALOG NUMBER: NVN-SB5A-835-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2425.6 | 13.2 | | | |
| FM (30°-60°) | 11289.1 | 61.5 | | | |
| FH (60°-80°) | 3187.5 | 17.4 | | | G2/5000 |
| FVH (80°-90°) | 31.3 | 0.2 | | | G1/100 |
| BL (0°-30°) | 572.7 | 3.1 | B2/1000 | | |
| BM (30°-60°) | 688.9 | 3.8 | B1/1000 | | |
| BH (60°-80°) | 170.6 | 0.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.3 | 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-G2

Type II Short



REPORT NUMBER: P967901
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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0° | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 |
| 2.5° | 5492.1 | 5423.0 | 5412.7 | 5399.2 | 5267.8 | 5169.2 | 5026.5 | 4870.2 | 4694.7 | 4515.7 | 4436.4 |
| 5° | 6344.9 | 6290.5 | 6280.3 | 6216.9 | 6067.4 | 5899.8 | 5646.0 | 5325.5 | 4998.2 | 4613.1 | 4447.8 |
| 7.5° | 6510.2 | 6500.0 | 6546.5 | 6544.2 | 6523.8 | 6391.3 | 6177.3 | 5795.6 | 5304.0 | 4733.1 | 4477.2 |
| 10° | 5772.9 | 5798.9 | 5937.1 | 6058.4 | 6385.6 | 6575.9 | 6529.5 | 6214.6 | 5618.8 | 4870.2 | 4510.0 |
| 12.5° | 5101.2 | 5070.7 | 5169.2 | 5306.3 | 5686.8 | 6253.1 | 6675.6 | 6564.6 | 5979.0 | 5025.4 | 4558.8 |
| 15° | 4679.9 | 4667.4 | 4723.0 | 4786.4 | 5076.3 | 5647.2 | 6505.7 | 6848.8 | 6325.6 | 5208.8 | 4632.4 |
| 17.5° | 4545.2 | 4535.0 | 4551.9 | 4567.8 | 4755.8 | 5197.6 | 6101.4 | 7023.3 | 6657.5 | 5418.4 | 4713.9 |
| 20° | 4655.0 | 4641.4 | 4639.2 | 4626.7 | 4704.9 | 5006.1 | 5735.5 | 7035.8 | 6955.3 | 5608.7 | 4784.2 |
| 22.5° | 4975.6 | 4959.7 | 4904.2 | 4854.4 | 4861.2 | 5032.1 | 5572.4 | 6911.2 | 7179.6 | 5786.5 | 4828.3 |
| 25° | 5556.6 | 5530.5 | 5415.0 | 5247.4 | 5140.9 | 5213.4 | 5597.3 | 6747.0 | 7393.6 | 5925.8 | 4806.8 |
| 27.5° | 6283.8 | 6249.7 | 6101.4 | 5852.2 | 5608.7 | 5520.3 | 5777.4 | 6633.7 | 7571.5 | 6032.2 | 4760.3 |
| 30° | 6996.1 | 6952.0 | 6805.9 | 6612.2 | 6256.5 | 5977.9 | 6102.5 | 6683.5 | 7783.3 | 6143.2 | 4699.2 |
| 32.5° | 7765.2 | 7723.3 | 7529.5 | 7289.5 | 6995.0 | 6620.1 | 6547.6 | 6927.1 | 8042.7 | 6298.4 | 4656.2 |
| 35° | 8738.1 | 8672.4 | 8397.2 | 8069.8 | 7757.2 | 7377.8 | 7150.2 | 7347.2 | 8388.1 | 6535.2 | 4679.9 |
| 37.5° | 9845.7 | 9757.4 | 9460.6 | 9008.7 | 8601.1 | 8176.3 | 7884.1 | 7924.9 | 8894.3 | 6852.3 | 4753.5 |
| 40° | 10890.0 | 10809.6 | 10535.6 | 10109.7 | 9597.7 | 9082.4 | 8770.9 | 8680.3 | 9593.2 | 7238.6 | 4882.7 |
| 42.5° | 11516.4 | 11443.9 | 11328.4 | 11148.3 | 10716.8 | 10191.2 | 9798.2 | 9602.3 | 10420.0 | 7700.6 | 5040.1 |
| 45° | 11551.4 | 11488.1 | 11643.2 | 11852.8 | 11767.8 | 11417.8 | 10938.7 | 10579.7 | 11250.2 | 8134.4 | 5203.2 |
| 47.5° | 10989.7 | 10946.7 | 11417.8 | 12149.5 | 12514.2 | 12661.4 | 12219.7 | 11475.6 | 11935.4 | 8445.9 | 5270.0 |
| 50° | 9458.4 | 9442.6 | 10412.1 | 11755.3 | 12798.5 | 13751.0 | 13570.9 | 12309.2 | 12466.7 | 8606.7 | 5206.6 |
| 52.5° | 8201.2 | 8143.4 | 8708.6 | 10493.6 | 12385.1 | 14324.1 | 14891.5 | 13127.0 | 12838.1 | 8637.3 | 5058.3 |
| 55° | 6220.3 | 6169.3 | 6878.4 | 8382.4 | 11052.0 | 14120.2 | 15857.7 | 13970.7 | 13104.3 | 8559.2 | 4792.1 |
| 57.5° | 3336.7 | 3304.9 | 4200.9 | 5579.3 | 8639.5 | 12897.1 | 16032.1 | 14863.2 | 13328.6 | 8351.9 | 4419.4 |
| 60° | 1299.1 | 1293.4 | 1628.7 | 2706.9 | 5250.8 | 10492.5 | 15152.1 | 15399.0 | 13469.0 | 8097.0 | 4108.0 |
| 62.5° | 786.1 | 803.0 | 857.4 | 1215.2 | 2319.6 | 6518.2 | 13123.6 | 14789.6 | 13563.0 | 7863.7 | 3850.8 |
| 65° | 650.2 | 651.3 | 658.0 | 834.8 | 1111.1 | 2727.3 | 9879.8 | 12784.9 | 13330.8 | 7448.1 | 3486.1 |
| 67.5° | 557.3 | 567.4 | 593.5 | 662.6 | 783.7 | 1196.1 | 5687.9 | 9903.6 | 11918.4 | 6480.8 | 2917.6 |
| 70° | 439.4 | 453.0 | 485.8 | 544.8 | 604.9 | 748.7 | 2102.2 | 6589.5 | 9105.1 | 4884.9 | 2206.3 |
| 72.5° | 370.3 | 369.2 | 386.2 | 442.8 | 480.2 | 526.6 | 808.7 | 3692.3 | 5291.6 | 2332.1 | 1091.8 |
| 75° | 286.6 | 297.9 | 319.4 | 370.3 | 393.0 | 381.7 | 438.3 | 1348.9 | 1895.9 | 706.7 | 371.5 |
| 77.5° | 224.3 | 233.3 | 252.6 | 302.4 | 325.0 | 270.7 | 252.6 | 482.5 | 609.4 | 253.7 | 167.6 |
| 80° | 100.8 | 108.8 | 172.2 | 223.1 | 265.1 | 186.9 | 137.0 | 246.9 | 270.7 | 115.5 | 85.0 |
| 82.5° | 18.1 | 30.5 | 100.8 | 117.8 | 135.9 | 121.2 | 71.3 | 128.0 | 132.5 | 46.4 | 29.4 |
| 85° | 1.1 | 2.3 | 35.2 | 43.0 | 54.3 | 39.7 | 21.5 | 50.9 | 44.2 | 15.9 | 11.3 |
| 87.5° | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 5.6 | 6.8 | 9.0 | 6.8 | 5.6 | 4.5 |
| 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: P967901
 CATALOG NUMBER: NVN-SB5A-835-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 | 4426.3 |
| 2.5° | 4354.9 | 4194.1 | 4037.8 | 3909.8 | 3835.0 | 3708.1 | 3624.3 | 3610.8 | 3575.6 | 3606.3 |
| 5° | 4271.1 | 3983.4 | 3692.3 | 3431.8 | 3217.8 | 2941.3 | 2735.2 | 2648.1 | 2572.1 | 2598.2 |
| 7.5° | 4231.4 | 3777.2 | 3324.2 | 2879.1 | 2421.6 | 1979.8 | 1651.4 | 1514.3 | 1410.1 | 1424.9 |
| 10° | 4178.2 | 3563.2 | 2853.1 | 2173.5 | 1560.8 | 1124.6 | 898.2 | 814.4 | 767.9 | 769.1 |
| 12.5° | 4137.4 | 3307.3 | 2305.9 | 1473.5 | 950.3 | 718.1 | 647.9 | 627.5 | 613.9 | 615.0 |
| 15° | 4117.0 | 3005.9 | 1765.8 | 982.0 | 679.6 | 608.2 | 591.2 | 582.2 | 573.1 | 571.9 |
| 17.5° | 4083.1 | 2670.7 | 1292.3 | 717.0 | 594.6 | 569.7 | 554.9 | 544.8 | 533.4 | 531.2 |
| 20° | 4032.0 | 2290.2 | 944.6 | 606.0 | 557.3 | 538.0 | 517.6 | 504.0 | 490.5 | 488.1 |
| 22.5° | 3938.0 | 1888.0 | 726.0 | 560.7 | 530.0 | 508.5 | 483.6 | 467.8 | 454.2 | 451.9 |
| 25° | 3763.7 | 1510.8 | 611.6 | 532.3 | 506.2 | 480.2 | 453.0 | 431.5 | 419.0 | 416.8 |
| 27.5° | 3542.8 | 1186.9 | 554.9 | 506.2 | 475.7 | 451.9 | 421.4 | 401.0 | 389.6 | 387.3 |
| 30° | 3282.3 | 914.0 | 522.1 | 476.8 | 439.4 | 419.0 | 391.9 | 374.8 | 368.1 | 368.1 |
| 32.5° | 3001.4 | 730.5 | 508.5 | 447.4 | 407.7 | 385.1 | 363.6 | 356.8 | 354.5 | 353.4 |
| 35° | 2737.5 | 634.3 | 501.7 | 423.6 | 379.5 | 357.9 | 348.8 | 349.9 | 354.5 | 354.5 |
| 37.5° | 2503.0 | 603.7 | 498.4 | 406.6 | 354.5 | 335.3 | 340.9 | 351.1 | 346.6 | 346.6 |
| 40° | 2291.3 | 607.1 | 496.1 | 394.1 | 334.2 | 322.8 | 334.2 | 326.2 | 314.9 | 313.8 |
| 42.5° | 2129.3 | 635.4 | 491.6 | 384.0 | 321.6 | 313.8 | 309.2 | 296.7 | 295.6 | 297.9 |
| 45° | 2011.6 | 660.3 | 490.5 | 379.5 | 308.1 | 293.4 | 287.7 | 275.2 | 297.9 | 303.5 |
| 47.5° | 1872.2 | 660.3 | 490.5 | 363.6 | 285.5 | 279.7 | 270.7 | 257.1 | 279.7 | 285.5 |
| 50° | 1692.1 | 618.4 | 471.2 | 345.4 | 267.3 | 263.9 | 248.0 | 231.0 | 226.5 | 229.9 |
| 52.5° | 1464.4 | 542.5 | 422.5 | 320.5 | 249.2 | 242.4 | 223.1 | 210.6 | 207.3 | 207.3 |
| 55° | 1205.1 | 454.2 | 356.8 | 284.3 | 229.9 | 217.5 | 203.9 | 198.2 | 194.9 | 192.5 |
| 57.5° | 979.7 | 372.6 | 286.6 | 252.6 | 211.8 | 196.0 | 191.4 | 184.6 | 179.0 | 175.6 |
| 60° | 804.1 | 293.4 | 236.7 | 224.3 | 193.7 | 179.0 | 177.8 | 168.7 | 154.1 | 151.8 |
| 62.5° | 620.6 | 215.1 | 199.4 | 194.9 | 175.6 | 163.1 | 160.8 | 142.7 | 120.0 | 115.5 |
| 65° | 438.3 | 167.6 | 160.8 | 171.1 | 156.3 | 144.9 | 139.3 | 112.1 | 88.4 | 85.0 |
| 67.5° | 308.1 | 140.4 | 126.9 | 149.5 | 135.9 | 121.2 | 117.8 | 95.1 | 73.6 | 71.3 |
| 70° | 219.8 | 114.4 | 104.2 | 128.0 | 108.8 | 106.5 | 99.6 | 79.2 | 60.1 | 57.8 |
| 72.5° | 155.2 | 87.2 | 80.5 | 111.0 | 74.7 | 91.7 | 81.6 | 61.2 | 45.3 | 43.0 |
| 75° | 114.4 | 62.3 | 56.6 | 64.6 | 54.3 | 69.1 | 57.8 | 40.8 | 28.3 | 27.2 |
| 77.5° | 83.8 | 39.7 | 33.9 | 31.7 | 31.7 | 43.0 | 31.7 | 17.0 | 12.5 | 11.3 |
| 80° | 58.9 | 18.1 | 15.9 | 13.6 | 12.5 | 10.1 | 4.5 | 2.3 | 1.1 | 1.1 |
| 82.5° | 35.2 | 7.9 | 7.9 | 5.6 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 7.9 | 3.4 | 3.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.1 | 1.1 | 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)