

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: P967705

Luminaire Tested: **NVN-SB5A-730-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB5A-730-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19336.6 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

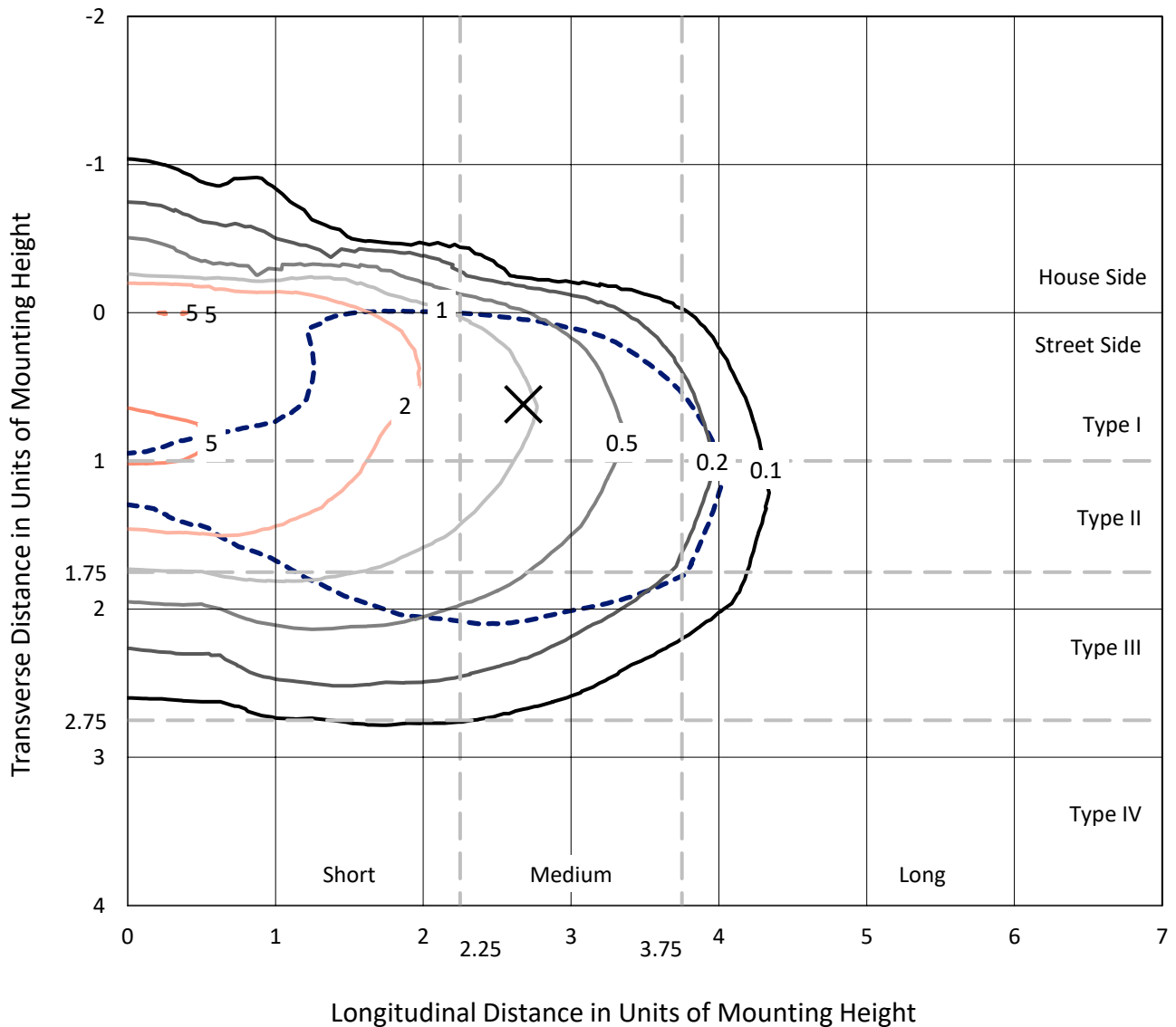
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

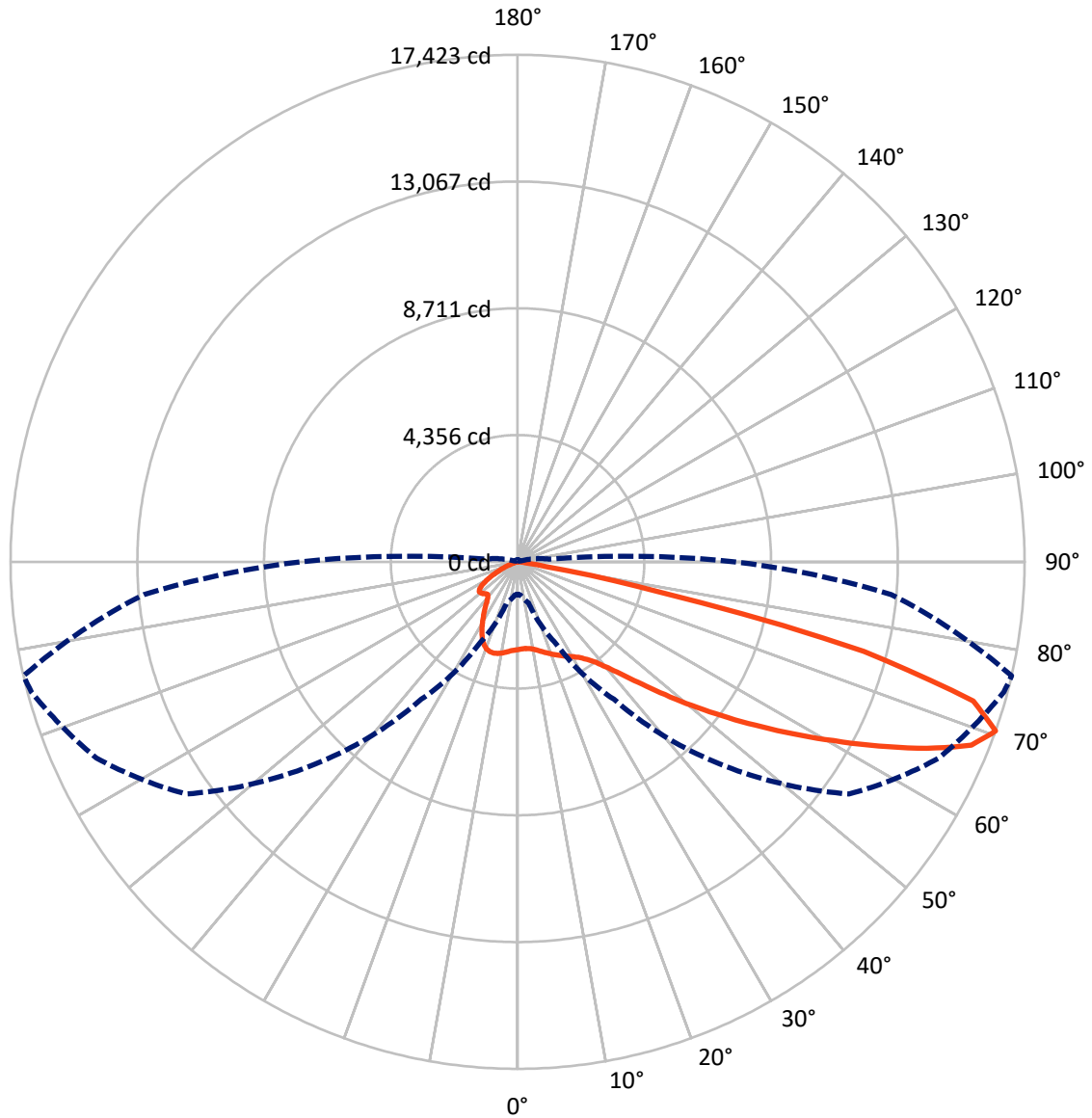
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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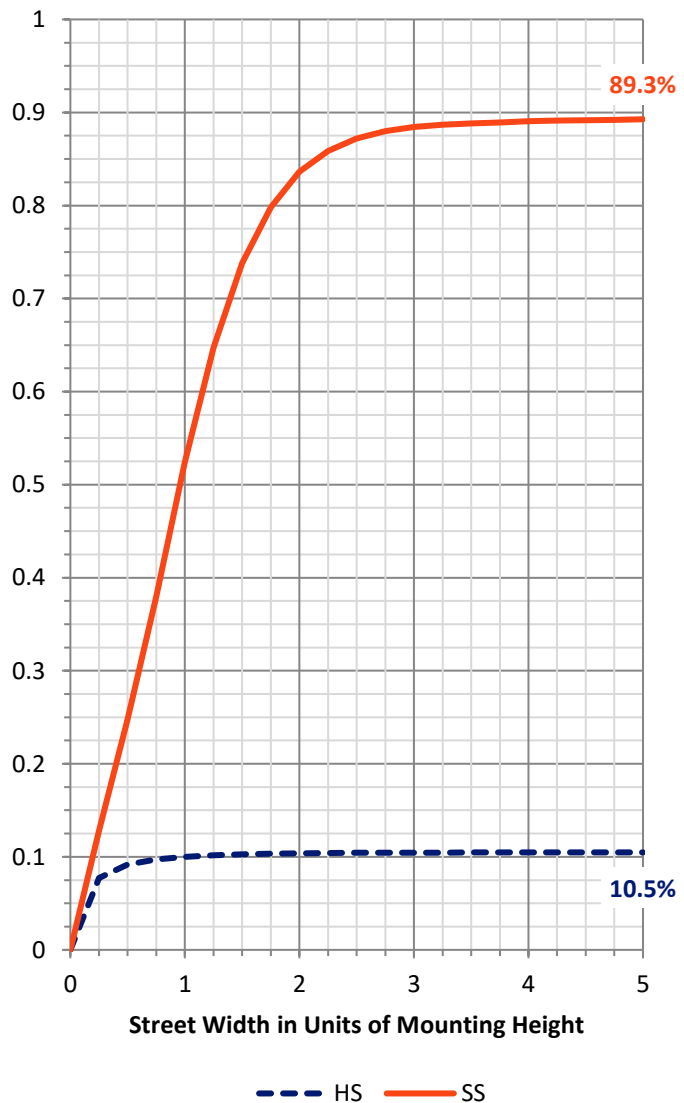
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2038.4 | 0.0 | 2038.4 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 17298.3 | 0.0 | 17298.3 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 19336.6 | 0.0 | 19336.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 259.9 | 1.3 |
| 10°-20° | 617.1 | 3.2 |
| 20°-30° | 954.5 | 4.9 |
| 30°-40° | 1731.9 | 9.0 |
| 40°-50° | 3269.2 | 16.9 |
| 50°-60° | 4723.7 | 24.4 |
| 60°-70° | 5028.2 | 26.0 |
| 70°-80° | 2664.6 | 13.8 |
| 80°-90° | 87.5 | 0.5 |
| 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° | 19336.6 | 100.0 |
| 0°-180° | 19336.6 | 100.0 |

Coefficient of Utilization

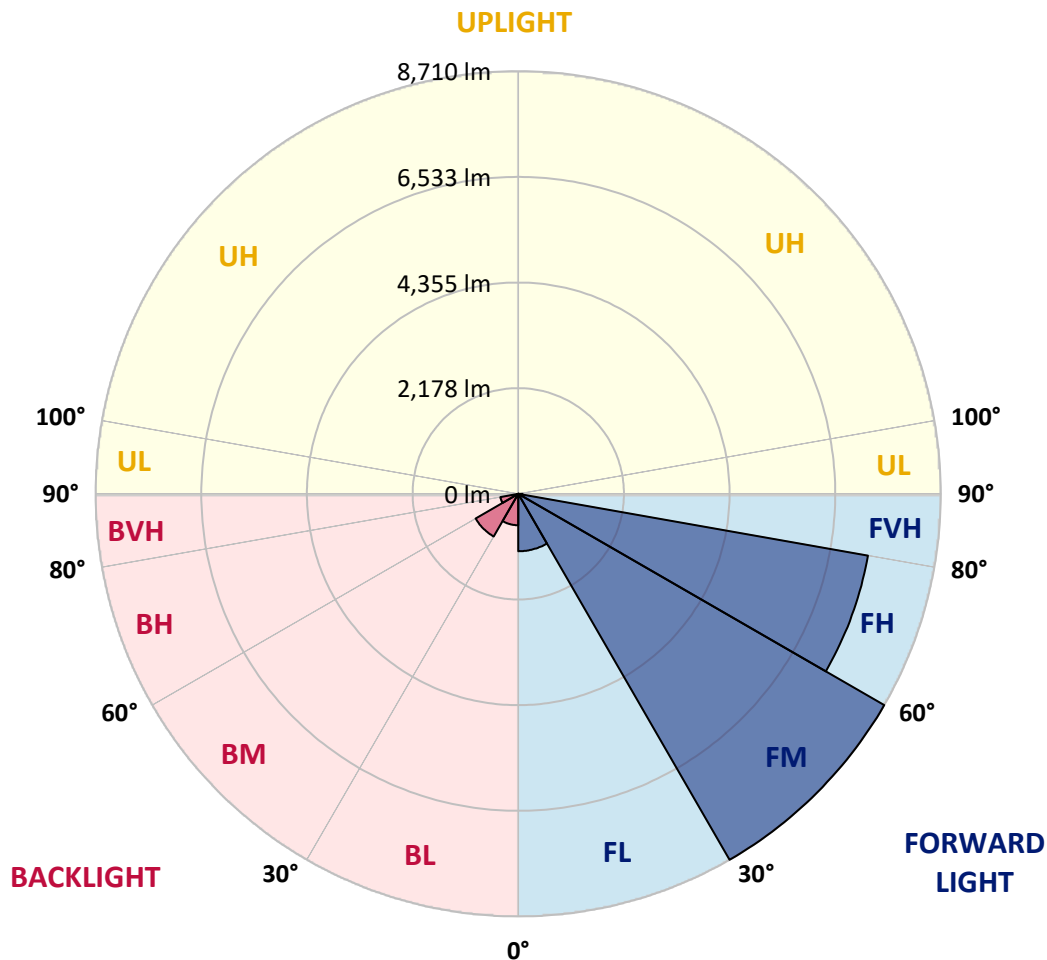


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1183.9 | 6.1 | | | |
| FM (30°-60°) | 8710.1 | 45.0 | | | |
| FH (60°-80°) | 7319.2 | 37.9 | | | G3/7500 |
| FVH (80°-90°) | 85.1 | 0.4 | | | G1/100 |
| BL (0°-30°) | 647.6 | 3.3 | B2/1000 | | |
| BM (30°-60°) | 1014.7 | 5.2 | B2/2500 | | |
| BH (60°-80°) | 373.7 | 1.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.4 | 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-G3
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 |
| 2.5° | 2831.8 | 2857.4 | 2853.8 | 2870.8 | 2877.0 | 2901.4 | 2925.8 | 2958.8 | 2995.4 | 2994.2 | 3018.6 |
| 5° | 2671.8 | 2697.5 | 2703.5 | 2726.8 | 2756.0 | 2793.9 | 2844.0 | 2910.0 | 2978.3 | 2989.3 | 3038.1 |
| 7.5° | 2482.5 | 2509.4 | 2525.3 | 2571.7 | 2625.4 | 2703.5 | 2785.3 | 2881.9 | 2995.4 | 3011.2 | 3105.3 |
| 10° | 2293.2 | 2317.7 | 2338.4 | 2404.3 | 2489.8 | 2605.9 | 2739.0 | 2878.2 | 3030.8 | 3054.0 | 3187.1 |
| 12.5° | 2176.1 | 2199.2 | 2222.4 | 2279.8 | 2386.1 | 2527.8 | 2708.5 | 2895.3 | 3089.5 | 3122.4 | 3298.2 |
| 15° | 2134.6 | 2155.3 | 2173.6 | 2224.9 | 2323.8 | 2485.0 | 2702.3 | 2930.7 | 3164.0 | 3207.8 | 3432.5 |
| 17.5° | 2140.6 | 2151.6 | 2163.8 | 2202.9 | 2299.4 | 2465.4 | 2713.3 | 2991.8 | 3251.8 | 3290.9 | 3566.9 |
| 20° | 2176.1 | 2182.1 | 2183.4 | 2210.2 | 2295.7 | 2463.0 | 2735.3 | 3050.4 | 3334.8 | 3387.4 | 3699.9 |
| 22.5° | 2221.2 | 2223.6 | 2221.2 | 2239.5 | 2318.9 | 2481.3 | 2764.6 | 3121.2 | 3427.7 | 3476.5 | 3834.3 |
| 25° | 2432.4 | 2386.1 | 2327.5 | 2292.0 | 2358.0 | 2516.7 | 2808.6 | 3216.4 | 3529.1 | 3576.6 | 3965.0 |
| 27.5° | 3088.2 | 2955.1 | 2745.1 | 2509.4 | 2438.6 | 2568.0 | 2869.6 | 3312.9 | 3631.6 | 3674.3 | 4105.4 |
| 30° | 4153.0 | 3978.4 | 3621.8 | 3090.7 | 2697.5 | 2675.5 | 2949.0 | 3409.4 | 3740.3 | 3786.7 | 4255.6 |
| 32.5° | 5220.3 | 5177.6 | 4766.0 | 4030.9 | 3279.9 | 2914.8 | 3080.8 | 3540.0 | 3884.3 | 3921.0 | 4458.3 |
| 35° | 6299.8 | 6213.0 | 5876.0 | 5149.5 | 4177.5 | 3402.1 | 3300.7 | 3711.0 | 4073.7 | 4115.2 | 4753.8 |
| 37.5° | 7126.4 | 7073.9 | 6865.1 | 6266.7 | 5242.3 | 4154.2 | 3676.8 | 3976.0 | 4348.4 | 4394.8 | 5132.4 |
| 40° | 7856.7 | 7832.2 | 7761.4 | 7367.0 | 6432.9 | 5138.4 | 4261.7 | 4386.3 | 4729.3 | 4784.4 | 5596.4 |
| 42.5° | 8430.6 | 8488.0 | 8528.3 | 8418.4 | 7660.0 | 6261.9 | 5048.1 | 4962.6 | 5260.6 | 5316.8 | 6187.4 |
| 45° | 9017.9 | 9037.5 | 9199.9 | 9358.7 | 8878.8 | 7436.6 | 5934.6 | 5637.9 | 5921.2 | 5990.8 | 6895.7 |
| 47.5° | 9395.3 | 9473.5 | 9759.2 | 10038.8 | 9903.2 | 8601.6 | 6887.1 | 6435.3 | 6686.9 | 6817.5 | 7689.3 |
| 50° | 9423.3 | 9571.1 | 9964.3 | 10451.5 | 10649.3 | 9710.3 | 7922.6 | 7343.8 | 7611.2 | 7755.4 | 8536.8 |
| 52.5° | 8955.7 | 9185.2 | 9794.6 | 10507.7 | 11052.4 | 10649.3 | 8993.6 | 8252.3 | 8595.4 | 8783.5 | 9416.1 |
| 55° | 6866.4 | 7166.7 | 9155.9 | 10202.4 | 11068.3 | 11361.3 | 10036.4 | 9198.7 | 9692.0 | 9904.5 | 10366.0 |
| 57.5° | 5982.3 | 6133.7 | 7198.5 | 9672.5 | 10774.0 | 11648.3 | 10979.1 | 10099.8 | 10885.1 | 11148.8 | 11263.6 |
| 60° | 4977.3 | 5176.4 | 6037.2 | 8805.5 | 10374.6 | 11676.4 | 11811.9 | 11262.4 | 12178.2 | 12475.0 | 12086.6 |
| 62.5° | 3382.5 | 3598.7 | 4454.6 | 7315.7 | 9828.8 | 11662.9 | 12494.4 | 12459.1 | 13615.5 | 13934.2 | 12783.9 |
| 65° | 2095.4 | 2231.0 | 2795.2 | 5973.7 | 9065.6 | 11677.5 | 13208.9 | 13912.2 | 15132.1 | 15455.7 | 13323.7 |
| 67.5° | 1655.9 | 1718.1 | 2012.4 | 4586.6 | 7750.4 | 11347.9 | 13922.0 | 15278.6 | 16559.6 | 16816.0 | 13488.5 |
| 70° | 1112.4 | 1150.3 | 1464.1 | 3074.8 | 5766.1 | 9826.4 | 13908.5 | 15964.9 | 17294.7 | 17422.9 | 12887.7 |
| 72.5° | 586.1 | 615.4 | 856.0 | 1423.8 | 3482.6 | 6984.8 | 11723.9 | 15144.3 | 16563.3 | 16370.3 | 11015.7 |
| 75° | 293.0 | 341.9 | 576.4 | 722.9 | 1487.3 | 3895.4 | 7280.3 | 11940.1 | 13036.7 | 12289.3 | 7067.9 |
| 77.5° | 222.2 | 268.7 | 476.2 | 476.2 | 517.7 | 1311.5 | 3083.3 | 6512.2 | 6006.7 | 5001.7 | 2074.7 |
| 80° | 141.7 | 183.2 | 416.4 | 360.2 | 216.2 | 333.3 | 803.5 | 1824.4 | 1276.0 | 970.8 | 377.3 |
| 82.5° | 83.0 | 119.7 | 346.8 | 238.1 | 120.8 | 123.3 | 227.1 | 388.3 | 331.0 | 257.7 | 116.0 |
| 85° | 33.0 | 78.1 | 238.1 | 94.0 | 47.7 | 30.5 | 68.4 | 83.0 | 68.4 | 51.2 | 29.3 |
| 87.5° | 0.0 | 18.3 | 41.5 | 0.0 | 3.7 | 2.5 | 4.9 | 6.1 | 6.1 | 4.9 | 9.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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 CATALOG NUMBER: NVN-SB5A-730-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 | 3016.2 |
| 2.5° | 3029.6 | 3032.1 | 3039.3 | 3040.6 | 3023.4 | 3001.5 | 2993.0 | 2989.3 | 2974.7 | 2973.4 | 2975.9 |
| 5° | 3066.2 | 3077.3 | 3066.2 | 3034.5 | 2958.8 | 2852.6 | 2771.9 | 2706.0 | 2646.1 | 2627.9 | 2616.8 |
| 7.5° | 3139.5 | 3150.4 | 3117.5 | 2993.0 | 2802.5 | 2591.2 | 2400.8 | 2266.4 | 2145.5 | 2100.3 | 2082.0 |
| 10° | 3244.5 | 3259.2 | 3155.4 | 2903.8 | 2566.8 | 2227.3 | 1905.0 | 1677.8 | 1500.8 | 1428.7 | 1398.2 |
| 12.5° | 3376.4 | 3382.5 | 3176.2 | 2768.3 | 2260.3 | 1775.5 | 1318.8 | 1075.8 | 918.3 | 859.7 | 841.3 |
| 15° | 3521.7 | 3513.2 | 3178.5 | 2583.9 | 1842.6 | 1255.3 | 860.9 | 707.0 | 643.5 | 624.0 | 624.0 |
| 17.5° | 3674.3 | 3639.0 | 3129.7 | 2317.7 | 1384.8 | 858.4 | 638.7 | 602.0 | 591.0 | 586.1 | 584.9 |
| 20° | 3824.6 | 3745.1 | 3040.6 | 1969.6 | 993.9 | 641.1 | 580.0 | 569.1 | 562.9 | 560.5 | 558.0 |
| 22.5° | 3961.3 | 3825.8 | 2887.9 | 1565.5 | 721.7 | 566.6 | 548.3 | 538.5 | 527.6 | 522.6 | 521.4 |
| 25° | 4094.4 | 3872.1 | 2673.0 | 1188.2 | 577.6 | 529.9 | 515.3 | 497.0 | 482.4 | 476.2 | 473.8 |
| 27.5° | 4223.8 | 3901.5 | 2404.3 | 879.2 | 515.3 | 495.8 | 468.9 | 443.3 | 432.2 | 429.9 | 427.4 |
| 30° | 4361.9 | 3911.2 | 2099.1 | 655.7 | 477.4 | 453.0 | 414.0 | 384.7 | 378.5 | 379.8 | 379.8 |
| 32.5° | 4530.4 | 3925.9 | 1791.4 | 537.3 | 445.7 | 401.7 | 355.4 | 324.8 | 319.9 | 324.8 | 323.6 |
| 35° | 4731.8 | 3955.2 | 1494.7 | 494.6 | 417.6 | 349.2 | 299.2 | 273.6 | 268.7 | 272.3 | 271.1 |
| 37.5° | 5005.4 | 4002.8 | 1217.5 | 486.1 | 394.4 | 305.2 | 251.5 | 230.8 | 230.8 | 232.1 | 230.8 |
| 40° | 5369.3 | 4129.8 | 969.5 | 479.9 | 382.2 | 272.3 | 212.5 | 204.0 | 207.6 | 210.0 | 210.0 |
| 42.5° | 5812.6 | 4399.7 | 802.3 | 472.5 | 368.8 | 257.7 | 192.9 | 189.3 | 195.4 | 197.8 | 197.8 |
| 45° | 6309.5 | 4741.6 | 743.6 | 460.3 | 356.6 | 267.4 | 184.4 | 179.5 | 186.9 | 188.1 | 189.3 |
| 47.5° | 6823.6 | 5076.2 | 736.4 | 446.9 | 344.4 | 282.1 | 181.9 | 171.0 | 179.5 | 180.7 | 181.9 |
| 50° | 7343.8 | 5294.7 | 743.6 | 426.2 | 324.8 | 282.1 | 183.2 | 162.4 | 169.7 | 173.4 | 174.7 |
| 52.5° | 7867.7 | 5394.9 | 738.8 | 381.0 | 290.6 | 265.0 | 183.2 | 155.1 | 162.4 | 164.8 | 164.8 |
| 55° | 8375.7 | 5375.4 | 664.3 | 313.9 | 246.6 | 234.4 | 178.2 | 148.9 | 153.9 | 155.1 | 155.1 |
| 57.5° | 8777.4 | 5103.1 | 526.3 | 244.3 | 200.3 | 195.4 | 162.4 | 141.7 | 145.3 | 144.1 | 144.1 |
| 60° | 8987.4 | 4504.7 | 376.1 | 188.1 | 157.5 | 153.9 | 142.9 | 131.9 | 134.3 | 128.2 | 127.0 |
| 62.5° | 8989.9 | 3713.5 | 251.5 | 148.9 | 125.8 | 122.1 | 122.1 | 118.5 | 116.0 | 103.8 | 100.1 |
| 65° | 8798.2 | 2835.5 | 167.3 | 118.5 | 101.4 | 95.2 | 102.6 | 101.4 | 92.8 | 75.7 | 73.3 |
| 67.5° | 8363.5 | 1858.5 | 127.0 | 92.8 | 78.1 | 74.5 | 81.8 | 85.5 | 79.3 | 63.4 | 62.3 |
| 70° | 7469.6 | 1081.9 | 105.1 | 72.1 | 58.6 | 54.9 | 65.9 | 73.3 | 65.9 | 51.2 | 48.9 |
| 72.5° | 6204.5 | 583.7 | 85.5 | 53.7 | 40.3 | 36.6 | 52.5 | 59.9 | 52.5 | 37.8 | 36.6 |
| 75° | 4026.0 | 312.6 | 65.9 | 35.4 | 20.8 | 23.2 | 39.1 | 44.0 | 36.6 | 24.4 | 21.9 |
| 77.5° | 1351.8 | 138.0 | 41.5 | 17.1 | 9.7 | 9.7 | 23.2 | 26.9 | 17.1 | 8.5 | 7.3 |
| 80° | 301.7 | 57.4 | 17.1 | 7.3 | 3.7 | 3.7 | 4.9 | 4.9 | 2.5 | 0.0 | 0.0 |
| 82.5° | 98.9 | 23.2 | 7.3 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 37.8 | 8.5 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 14.7 | 1.2 | 0.0 | 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 | 0.0 |

(END OF REPORT)