

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: P884271

Luminaire Tested: **NVN-SB5A-730-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884271
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB5A-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22146 lumens
Efficiency: N/A
Efficacy: 156.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

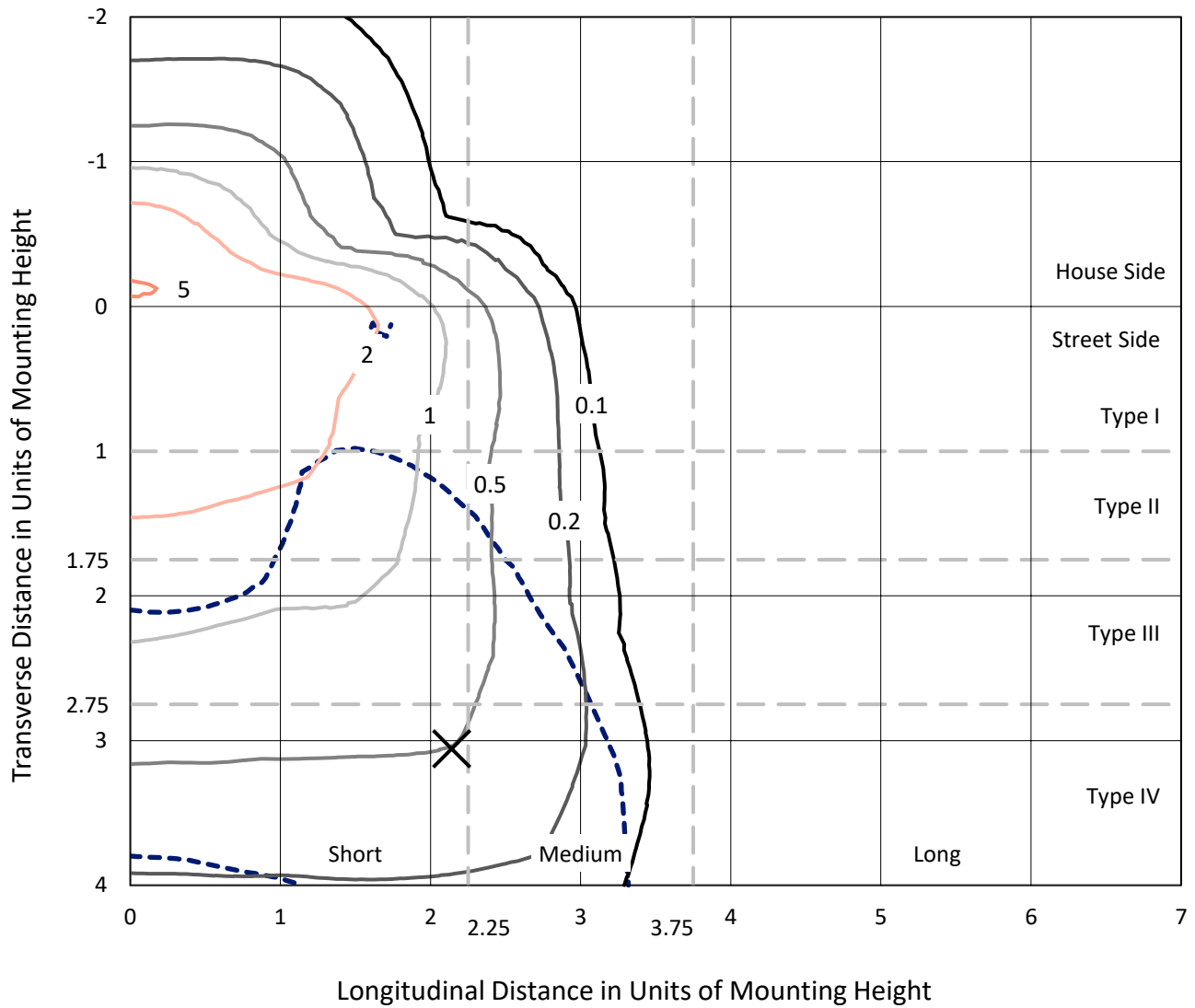
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

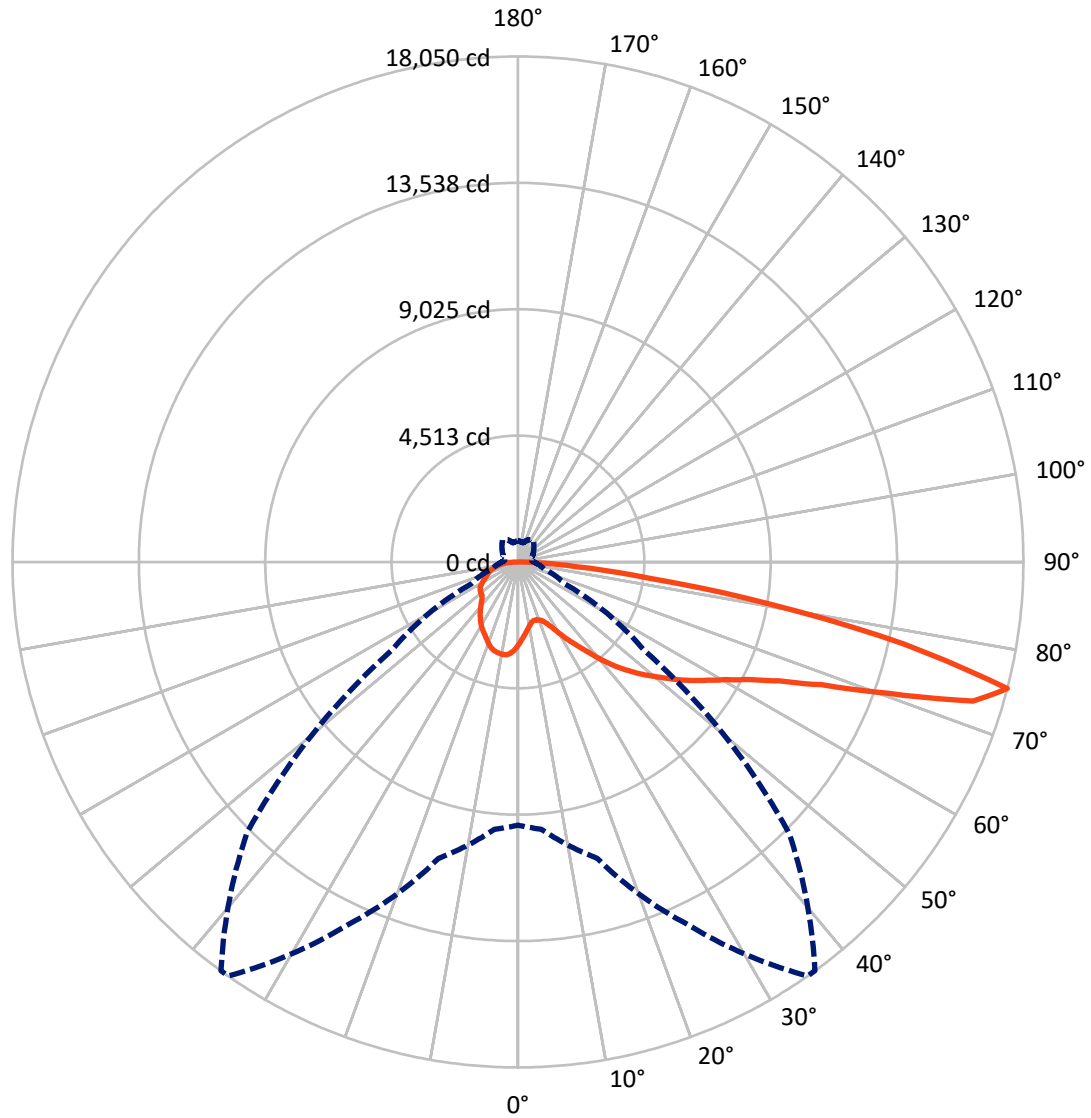
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5270.2 | 0.0 | 5270.2 |
| | % Fixture | 23.8 | 0.0 | 23.8 |
| Street Side | Lumens | 16875.8 | 0.0 | 16875.8 |
| | % Fixture | 76.2 | 0.0 | 76.2 |
| Total | Lumens | 22146.0 | 0.0 | 22146.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 279.4 | 1.3 |
| 10°-20° | 805.9 | 3.6 |
| 20°-30° | 1353.4 | 6.1 |
| 30°-40° | 2103.3 | 9.5 |
| 40°-50° | 3121.9 | 14.1 |
| 50°-60° | 4310.0 | 19.5 |
| 60°-70° | 5229.0 | 23.6 |
| 70°-80° | 4321.4 | 19.5 |
| 80°-90° | 621.5 | 2.8 |
| 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° | 22146.0 | 100.0 |
| 0°-180° | 22146.0 | 100.0 |

Coefficient of Utilization



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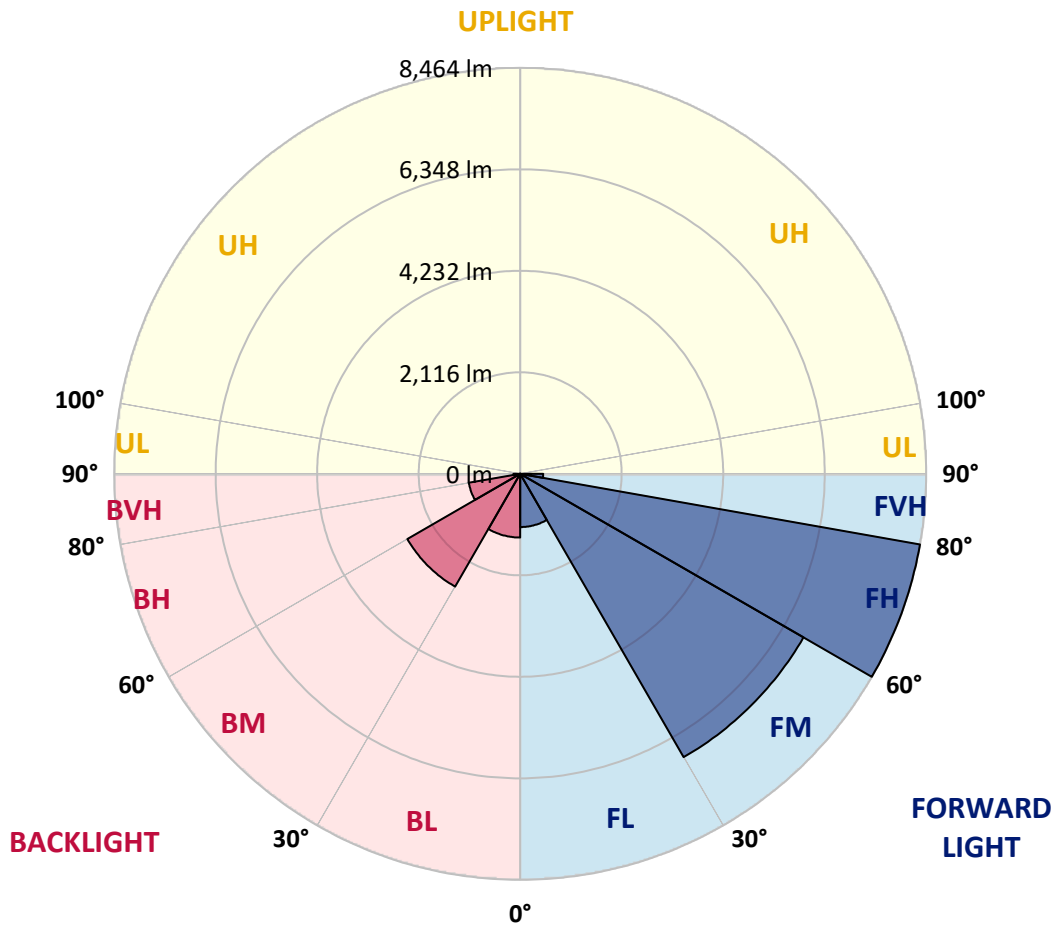
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1110.6 | 5.0 | | | |
| FM (30°-60°) | 6819.8 | 30.8 | | | |
| FH (60°-80°) | 8463.9 | 38.2 | | | G4/12000 |
| FVH (80°-90°) | 481.6 | 2.2 | | | G3/500 |
| BL (0°-30°) | 1328.2 | 6.0 | B3/2500 | | |
| BM (30°-60°) | 2715.5 | 12.3 | B3/5000 | | |
| BH (60°-80°) | 1086.6 | 4.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 140.0 | 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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0° | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 |
| 2.5° | 2721.2 | 2738.0 | 2745.2 | 2741.6 | 2759.6 | 2757.2 | 2782.3 | 2813.4 | 2856.5 | 2898.4 | 2959.5 |
| 5° | 2511.7 | 2529.7 | 2545.3 | 2559.6 | 2594.3 | 2605.1 | 2644.6 | 2704.5 | 2783.5 | 2863.7 | 2964.3 |
| 7.5° | 2316.6 | 2332.2 | 2356.1 | 2382.4 | 2441.1 | 2451.9 | 2517.7 | 2611.1 | 2721.2 | 2838.6 | 2977.4 |
| 10° | 2157.4 | 2172.9 | 2198.1 | 2228.0 | 2301.0 | 2314.2 | 2398.0 | 2522.5 | 2666.2 | 2814.6 | 2991.8 |
| 12.5° | 2089.1 | 2093.9 | 2108.3 | 2138.2 | 2201.7 | 2210.0 | 2302.2 | 2444.7 | 2612.3 | 2796.7 | 3013.4 |
| 15° | 2085.5 | 2095.1 | 2096.3 | 2111.9 | 2164.5 | 2168.1 | 2253.1 | 2394.4 | 2578.8 | 2793.1 | 3045.7 |
| 17.5° | 2121.4 | 2128.6 | 2117.9 | 2127.4 | 2171.7 | 2177.7 | 2244.8 | 2370.5 | 2568.0 | 2808.6 | 3100.8 |
| 20° | 2217.2 | 2223.2 | 2190.9 | 2177.7 | 2210.0 | 2214.8 | 2280.7 | 2386.0 | 2578.8 | 2841.0 | 3176.2 |
| 22.5° | 2420.7 | 2424.3 | 2345.3 | 2291.4 | 2293.8 | 2296.2 | 2353.7 | 2449.5 | 2620.7 | 2899.6 | 3272.0 |
| 25° | 2738.0 | 2735.6 | 2609.9 | 2505.7 | 2445.9 | 2432.7 | 2471.0 | 2552.4 | 2691.3 | 2977.4 | 3395.3 |
| 27.5° | 3109.1 | 3091.2 | 2965.5 | 2809.8 | 2679.3 | 2660.2 | 2651.8 | 2686.5 | 2791.9 | 3080.4 | 3546.1 |
| 30° | 3528.2 | 3511.4 | 3376.1 | 3172.6 | 2991.8 | 2960.7 | 2881.7 | 2863.7 | 2941.5 | 3220.5 | 3755.6 |
| 32.5° | 3987.9 | 3977.1 | 3815.5 | 3568.9 | 3327.0 | 3291.1 | 3158.2 | 3110.3 | 3171.4 | 3432.4 | 4047.7 |
| 35° | 4373.4 | 4363.8 | 4229.7 | 3975.9 | 3680.2 | 3635.9 | 3500.6 | 3446.7 | 3477.9 | 3704.1 | 4429.6 |
| 37.5° | 4721.8 | 4717.0 | 4602.0 | 4402.1 | 4096.8 | 4043.0 | 3890.9 | 3873.0 | 3867.0 | 4062.1 | 4893.0 |
| 40° | 5045.0 | 5033.0 | 4913.3 | 4808.0 | 4581.7 | 4532.6 | 4398.5 | 4383.0 | 4337.5 | 4502.7 | 5417.3 |
| 42.5° | 5403.0 | 5371.8 | 5198.3 | 5149.2 | 5088.1 | 5047.4 | 4967.2 | 4969.6 | 4869.0 | 4999.5 | 5972.8 |
| 45° | 5695.1 | 5677.1 | 5498.8 | 5470.0 | 5535.9 | 5519.1 | 5588.5 | 5606.5 | 5411.4 | 5520.3 | 6549.9 |
| 47.5° | 6008.8 | 5992.0 | 5841.2 | 5820.8 | 5999.2 | 6004.0 | 6249.4 | 6255.4 | 5940.5 | 6061.4 | 7128.1 |
| 50° | 6395.5 | 6371.5 | 6221.9 | 6247.0 | 6446.9 | 6464.9 | 6913.8 | 6873.1 | 6427.8 | 6611.0 | 7701.6 |
| 52.5° | 6650.5 | 6664.8 | 6632.5 | 6673.2 | 6946.2 | 6962.9 | 7567.5 | 7463.4 | 6910.3 | 7153.3 | 8264.3 |
| 55° | 6838.4 | 6867.2 | 6967.7 | 7061.1 | 7472.9 | 7489.7 | 8184.1 | 8024.8 | 7310.1 | 7656.1 | 8793.5 |
| 57.5° | 7080.3 | 7039.6 | 7227.5 | 7409.5 | 7973.4 | 8017.7 | 8783.9 | 8566.0 | 7664.5 | 8089.5 | 9156.2 |
| 60° | 7427.4 | 7398.7 | 7544.8 | 7814.1 | 8533.7 | 8604.3 | 9418.4 | 9053.2 | 7924.3 | 8433.1 | 9226.8 |
| 62.5° | 8131.4 | 8059.6 | 8082.3 | 8320.6 | 9240.0 | 9333.4 | 10134.3 | 9478.3 | 8053.6 | 8567.2 | 8848.5 |
| 65° | 9183.7 | 9060.4 | 8945.5 | 9110.7 | 10234.9 | 10327.1 | 10942.4 | 9812.3 | 8005.7 | 8307.4 | 7844.1 |
| 67.5° | 10509.0 | 10386.9 | 10245.7 | 10401.3 | 11700.3 | 11773.3 | 11939.7 | 10000.2 | 7628.6 | 7306.5 | 6068.6 |
| 70° | 11602.1 | 11556.6 | 11725.4 | 12365.9 | 14040.8 | 14043.2 | 13218.3 | 9844.6 | 6595.4 | 5180.3 | 3511.4 |
| 72.5° | 11457.2 | 11429.7 | 12319.2 | 14299.4 | 16990.7 | 16927.2 | 14428.7 | 8666.5 | 4442.8 | 2336.9 | 1315.7 |
| 75° | 9399.2 | 9577.6 | 10955.6 | 14264.7 | 18050.2 | 18041.8 | 13687.6 | 5509.5 | 1837.7 | 968.5 | 680.0 |
| 77.5° | 5040.2 | 5322.8 | 7112.6 | 10531.8 | 14091.1 | 14303.0 | 9623.1 | 1927.5 | 789.0 | 620.2 | 470.5 |
| 80° | 1643.8 | 1890.4 | 2835.0 | 5362.3 | 9156.2 | 9116.7 | 4124.4 | 756.6 | 539.9 | 439.4 | 325.6 |
| 82.5° | 698.0 | 726.7 | 1266.6 | 2532.1 | 4699.0 | 4626.0 | 1313.3 | 434.6 | 379.5 | 300.5 | 201.1 |
| 85° | 273.0 | 305.3 | 559.1 | 1170.9 | 2035.2 | 1990.9 | 474.1 | 215.5 | 243.0 | 196.3 | 119.7 |
| 87.5° | 89.8 | 108.9 | 199.9 | 401.1 | 633.3 | 610.6 | 116.1 | 74.2 | 105.4 | 89.8 | 43.1 |
| 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-T4FT

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 | 2951.1 |
| 2.5° | 2976.2 | 2995.4 | 3018.1 | 3051.7 | 3080.4 | 3104.3 | 3129.5 | 3145.1 | 3151.0 | 3169.0 | 3167.8 |
| 5° | 2997.8 | 3039.7 | 3096.0 | 3151.0 | 3204.9 | 3237.2 | 3266.0 | 3280.3 | 3293.5 | 3303.1 | 3305.5 |
| 7.5° | 3033.7 | 3087.6 | 3176.2 | 3248.0 | 3293.5 | 3319.8 | 3339.0 | 3334.2 | 3339.0 | 3341.4 | 3345.0 |
| 10° | 3064.8 | 3140.3 | 3245.6 | 3313.9 | 3348.6 | 3349.8 | 3345.0 | 3328.2 | 3319.8 | 3321.0 | 3323.4 |
| 12.5° | 3102.0 | 3185.8 | 3299.5 | 3357.0 | 3366.5 | 3340.2 | 3319.8 | 3291.1 | 3280.3 | 3275.5 | 3273.2 |
| 15° | 3152.2 | 3248.0 | 3358.2 | 3379.7 | 3355.8 | 3322.2 | 3287.5 | 3240.8 | 3216.9 | 3197.7 | 3203.7 |
| 17.5° | 3213.3 | 3318.6 | 3403.6 | 3388.1 | 3336.6 | 3281.5 | 3225.3 | 3154.6 | 3105.5 | 3085.2 | 3086.4 |
| 20° | 3298.3 | 3392.9 | 3438.4 | 3370.1 | 3292.3 | 3208.5 | 3112.7 | 3026.5 | 2981.0 | 2960.7 | 2958.3 |
| 22.5° | 3401.3 | 3492.2 | 3471.9 | 3339.0 | 3228.9 | 3094.8 | 2975.0 | 2911.6 | 2888.8 | 2874.5 | 2876.9 |
| 25° | 3524.6 | 3602.4 | 3495.8 | 3293.5 | 3124.7 | 2943.9 | 2851.7 | 2831.4 | 2820.6 | 2809.8 | 2809.8 |
| 27.5° | 3685.0 | 3726.9 | 3513.8 | 3226.5 | 2961.9 | 2783.5 | 2750.0 | 2753.6 | 2750.0 | 2732.0 | 2735.6 |
| 30° | 3896.9 | 3888.5 | 3530.6 | 3117.5 | 2775.1 | 2638.6 | 2641.0 | 2656.6 | 2659.0 | 2647.0 | 2653.0 |
| 32.5° | 4175.8 | 4090.8 | 3538.9 | 2976.2 | 2596.7 | 2511.7 | 2514.1 | 2530.9 | 2542.9 | 2522.5 | 2532.1 |
| 35° | 4513.5 | 4326.7 | 3525.8 | 2799.1 | 2459.1 | 2390.8 | 2372.9 | 2377.6 | 2381.2 | 2362.1 | 2375.2 |
| 37.5° | 4907.3 | 4591.3 | 3467.1 | 2602.7 | 2345.3 | 2272.3 | 2234.0 | 2201.7 | 2182.5 | 2164.5 | 2176.5 |
| 40° | 5339.5 | 4879.8 | 3359.4 | 2411.2 | 2218.4 | 2146.6 | 2089.1 | 2028.1 | 1963.4 | 1939.5 | 1950.2 |
| 42.5° | 5792.1 | 5176.7 | 3228.9 | 2228.0 | 2072.4 | 2013.7 | 1952.6 | 1864.0 | 1767.1 | 1718.0 | 1724.0 |
| 45° | 6261.4 | 5480.8 | 3100.8 | 2047.2 | 1922.7 | 1897.6 | 1826.9 | 1720.4 | 1615.0 | 1552.8 | 1548.0 |
| 47.5° | 6721.1 | 5768.1 | 2912.8 | 1865.2 | 1782.6 | 1810.2 | 1755.1 | 1656.9 | 1539.6 | 1441.4 | 1430.7 |
| 50° | 7160.5 | 6037.5 | 2605.1 | 1680.9 | 1668.9 | 1783.8 | 1731.2 | 1589.9 | 1455.8 | 1330.1 | 1319.3 |
| 52.5° | 7596.3 | 6255.4 | 2211.2 | 1513.3 | 1607.8 | 1776.6 | 1700.0 | 1544.4 | 1380.4 | 1248.7 | 1234.3 |
| 55° | 7966.2 | 6367.9 | 1831.7 | 1369.6 | 1519.3 | 1715.6 | 1662.9 | 1490.5 | 1273.8 | 1133.8 | 1121.8 |
| 57.5° | 8176.9 | 6276.9 | 1515.7 | 1228.3 | 1397.1 | 1615.0 | 1599.5 | 1375.6 | 1146.9 | 1039.2 | 1024.8 |
| 60° | 8085.9 | 5908.2 | 1257.1 | 1105.0 | 1281.0 | 1506.1 | 1489.3 | 1261.9 | 1049.9 | 948.2 | 933.8 |
| 62.5° | 7584.3 | 5205.4 | 1052.3 | 997.3 | 1175.7 | 1394.7 | 1379.2 | 1174.5 | 975.7 | 877.5 | 862.0 |
| 65° | 6573.8 | 4234.5 | 893.1 | 907.5 | 1069.1 | 1260.7 | 1283.4 | 1101.4 | 917.1 | 821.3 | 805.7 |
| 67.5° | 5013.9 | 3067.2 | 768.6 | 829.7 | 964.9 | 1129.0 | 1194.8 | 1048.7 | 868.0 | 777.0 | 762.6 |
| 70° | 2857.7 | 1741.9 | 663.3 | 754.2 | 872.8 | 1006.8 | 1126.6 | 1006.8 | 815.3 | 739.9 | 730.3 |
| 72.5° | 1083.5 | 799.7 | 573.5 | 678.8 | 784.2 | 903.9 | 1051.1 | 941.0 | 754.2 | 698.0 | 688.4 |
| 75° | 578.2 | 487.3 | 482.5 | 590.2 | 682.4 | 803.3 | 956.6 | 876.4 | 708.7 | 737.5 | 761.4 |
| 77.5° | 393.9 | 344.8 | 403.5 | 505.2 | 571.1 | 692.0 | 856.0 | 778.2 | 614.2 | 611.8 | 563.9 |
| 80° | 273.0 | 244.2 | 328.0 | 407.0 | 441.8 | 581.8 | 747.1 | 668.0 | 500.4 | 466.9 | 446.6 |
| 82.5° | 164.0 | 159.2 | 245.4 | 304.1 | 312.5 | 449.0 | 619.0 | 560.3 | 409.4 | 356.8 | 359.2 |
| 85° | 89.8 | 94.6 | 156.8 | 178.4 | 182.0 | 313.7 | 484.9 | 433.4 | 314.9 | 264.6 | 267.0 |
| 87.5° | 25.1 | 32.3 | 57.5 | 70.6 | 87.4 | 162.8 | 288.5 | 257.4 | 158.0 | 110.1 | 110.1 |
| 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)