

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: P967742

Luminaire Tested: **NVN-SB5A-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967742
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB5A-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23180.4 lumens
Efficiency: N/A
Efficacy: 163.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

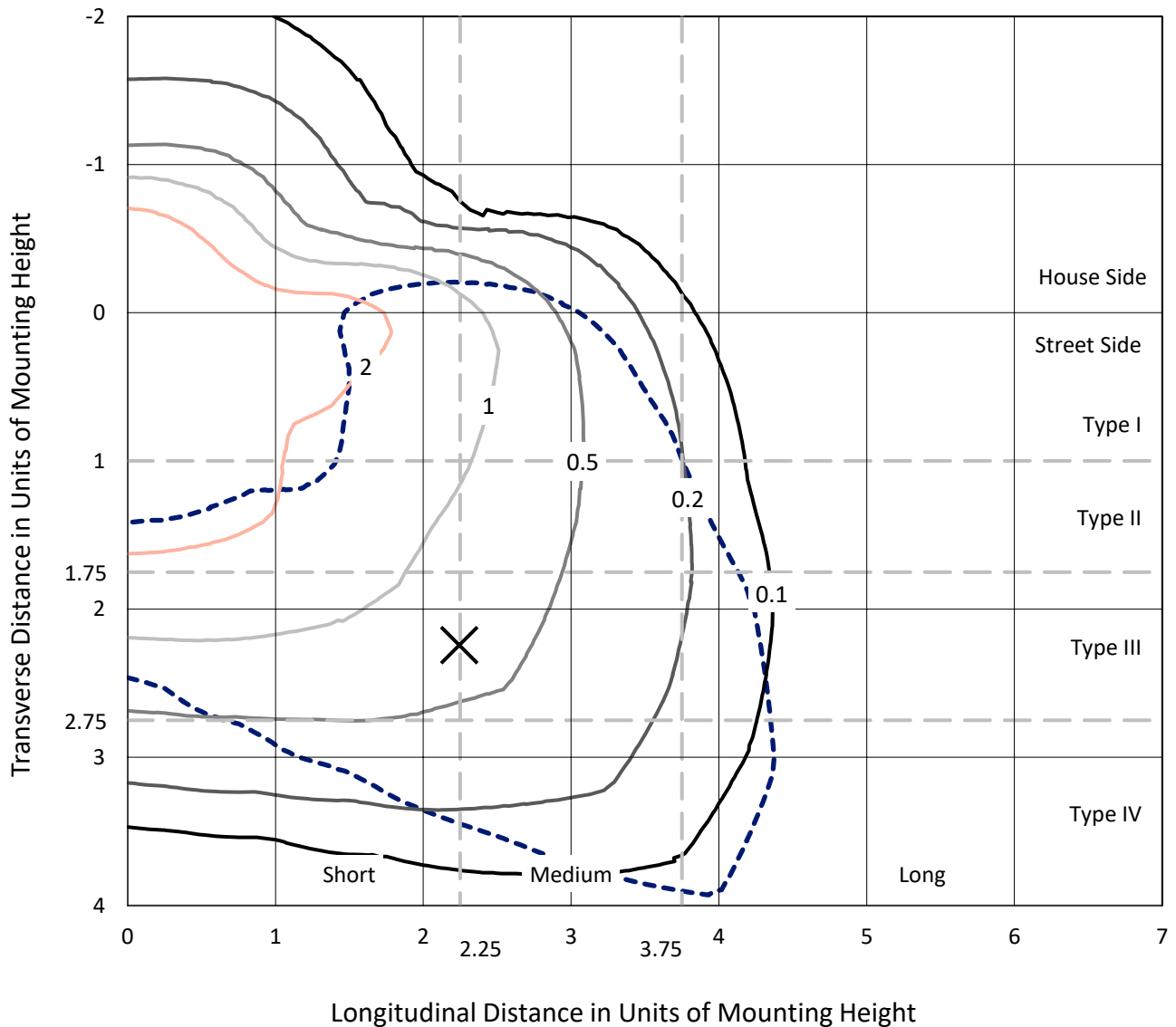
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

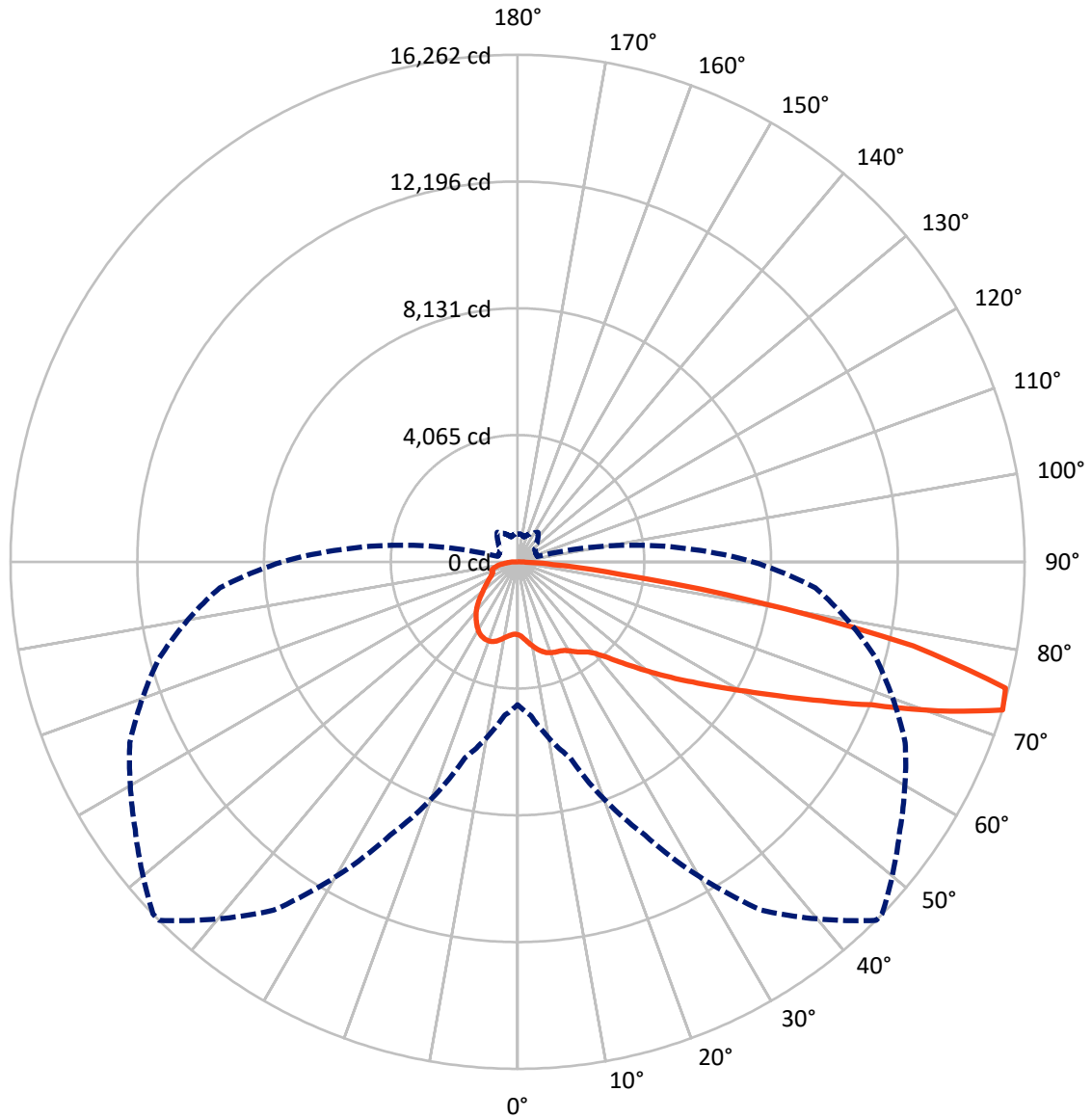
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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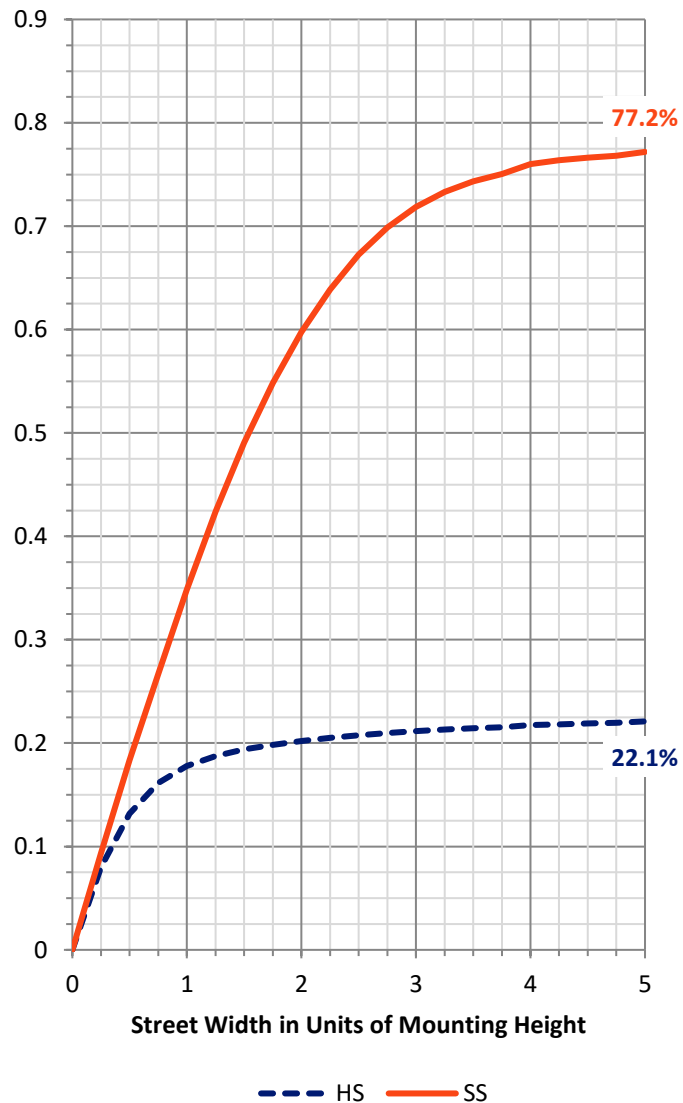
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5240.3 | 0.0 | 5240.3 |
| | % Fixture | 22.6 | 0.0 | 22.6 |
| Street Side | Lumens | 17940.1 | 0.0 | 17940.1 |
| | % Fixture | 77.4 | 0.0 | 77.4 |
| Total | Lumens | 23180.4 | 0.0 | 23180.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 238.0 | 1.0 |
| 10°-20° | 793.5 | 3.4 |
| 20°-30° | 1380.4 | 6.0 |
| 30°-40° | 1978.9 | 8.5 |
| 40°-50° | 2786.4 | 12.0 |
| 50°-60° | 4268.0 | 18.4 |
| 60°-70° | 6182.8 | 26.7 |
| 70°-80° | 4937.3 | 21.3 |
| 80°-90° | 614.9 | 2.7 |
| 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° | 23180.4 | 100.0 |
| 0°-180° | 23180.4 | 100.0 |

Coefficient of Utilization

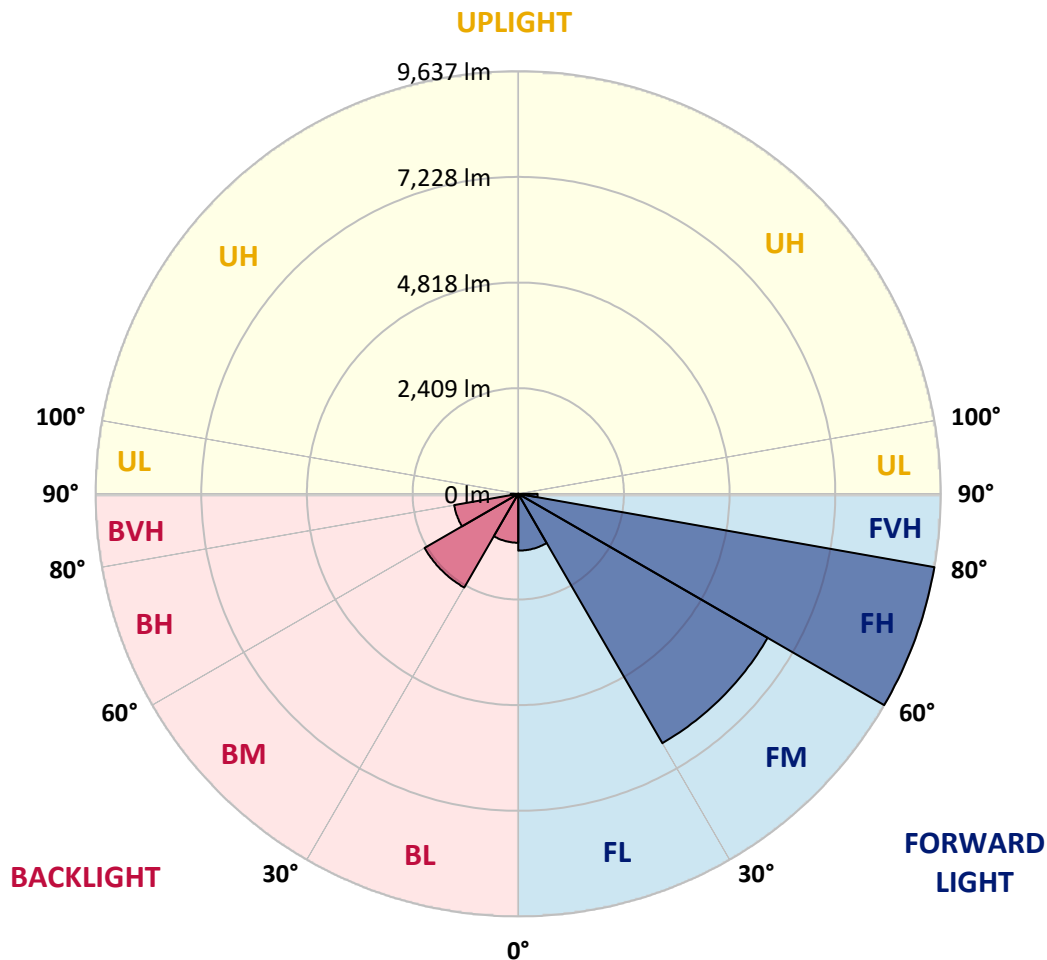


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 CATALOG NUMBER: NVN-SB5A-735-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1296.3 | 5.6 | | | |
| FM (30°-60°) | 6565.9 | 28.3 | | | |
| FH (60°-80°) | 9636.8 | 41.6 | | | G4/12000 |
| FVH (80°-90°) | 441.2 | 1.9 | | | G3/500 |
| BL (0°-30°) | 1115.7 | 4.8 | B3/2500 | | |
| BM (30°-60°) | 2467.4 | 10.6 | B2/2500 | | |
| BH (60°-80°) | 1483.4 | 6.4 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 173.8 | 0.7 | | | 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° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 |
| 2.5° | 2430.1 | 2446.0 | 2431.3 | 2417.9 | 2411.7 | 2395.8 | 2394.6 | 2384.9 | 2378.7 | 2361.6 | 2356.8 |
| 5° | 2599.8 | 2620.5 | 2596.1 | 2569.3 | 2544.8 | 2505.7 | 2500.9 | 2472.8 | 2441.0 | 2404.3 | 2383.6 |
| 7.5° | 2791.5 | 2809.8 | 2781.7 | 2741.5 | 2698.7 | 2633.9 | 2632.7 | 2581.5 | 2531.3 | 2469.1 | 2433.7 |
| 10° | 2958.8 | 2983.2 | 2945.3 | 2890.4 | 2836.7 | 2763.4 | 2754.9 | 2696.3 | 2632.7 | 2552.1 | 2498.4 |
| 12.5° | 3106.6 | 3123.6 | 3087.0 | 3019.9 | 2957.5 | 2884.2 | 2873.3 | 2808.6 | 2737.8 | 2646.1 | 2577.8 |
| 15° | 3223.7 | 3245.8 | 3196.9 | 3124.8 | 3058.9 | 2986.8 | 2977.1 | 2918.5 | 2847.7 | 2751.2 | 2663.3 |
| 17.5° | 3300.7 | 3319.1 | 3268.9 | 3188.4 | 3124.8 | 3065.1 | 3057.7 | 3008.9 | 2946.6 | 2848.9 | 2754.9 |
| 20° | 3330.0 | 3349.5 | 3297.0 | 3215.2 | 3156.6 | 3110.2 | 3106.6 | 3071.1 | 3028.4 | 2939.3 | 2844.0 |
| 22.5° | 3359.3 | 3377.6 | 3309.2 | 3223.7 | 3172.5 | 3143.2 | 3141.9 | 3118.8 | 3101.6 | 3028.4 | 2935.6 |
| 25° | 3477.7 | 3482.6 | 3391.0 | 3267.7 | 3194.4 | 3168.8 | 3167.6 | 3166.3 | 3173.7 | 3116.3 | 3034.5 |
| 27.5° | 3580.3 | 3579.1 | 3501.0 | 3385.0 | 3271.4 | 3217.7 | 3216.4 | 3228.6 | 3251.8 | 3204.3 | 3137.0 |
| 30° | 3730.5 | 3717.1 | 3624.3 | 3503.4 | 3399.6 | 3316.6 | 3309.2 | 3298.2 | 3316.6 | 3278.7 | 3239.6 |
| 32.5° | 4049.3 | 4006.5 | 3856.3 | 3641.4 | 3505.8 | 3442.4 | 3432.6 | 3364.2 | 3371.5 | 3348.4 | 3328.8 |
| 35° | 4505.9 | 4449.7 | 4249.5 | 3902.7 | 3637.7 | 3547.3 | 3542.5 | 3455.8 | 3441.1 | 3420.3 | 3427.7 |
| 37.5° | 5049.4 | 4979.8 | 4746.5 | 4281.2 | 3864.9 | 3669.5 | 3662.1 | 3584.0 | 3524.2 | 3502.2 | 3543.7 |
| 40° | 5595.2 | 5507.2 | 5314.3 | 4742.9 | 4199.4 | 3873.4 | 3850.2 | 3731.7 | 3663.4 | 3626.8 | 3714.7 |
| 42.5° | 6125.2 | 6051.9 | 5887.0 | 5260.6 | 4612.2 | 4171.3 | 4120.1 | 3917.3 | 3866.1 | 3831.9 | 3990.6 |
| 45° | 6594.0 | 6528.1 | 6407.3 | 5813.8 | 5095.8 | 4576.7 | 4526.7 | 4195.7 | 4180.0 | 4180.0 | 4409.4 |
| 47.5° | 6975.0 | 6960.4 | 6832.1 | 6378.0 | 5666.0 | 5038.4 | 4951.7 | 4582.9 | 4625.6 | 4691.5 | 5004.2 |
| 50° | 7397.5 | 7357.2 | 7220.5 | 6933.5 | 6336.4 | 5567.1 | 5496.3 | 5057.9 | 5217.9 | 5398.6 | 5863.8 |
| 52.5° | 7785.9 | 7807.8 | 7655.2 | 7512.3 | 7093.5 | 6156.9 | 6032.3 | 5618.3 | 5964.0 | 6263.2 | 6871.3 |
| 55° | 8185.1 | 8186.4 | 8143.6 | 8124.2 | 7887.3 | 6809.0 | 6672.2 | 6292.5 | 6842.0 | 7213.1 | 8045.9 |
| 57.5° | 8560.1 | 8562.5 | 8626.0 | 8798.2 | 8807.9 | 7561.2 | 7406.1 | 7120.4 | 7817.6 | 8196.2 | 9257.3 |
| 60° | 8894.6 | 8911.8 | 9085.2 | 9488.1 | 9617.6 | 8423.3 | 8276.8 | 8098.5 | 8826.3 | 9207.3 | 10531.0 |
| 62.5° | 9007.0 | 9069.3 | 9455.1 | 10027.9 | 10417.4 | 9480.8 | 9336.7 | 9230.4 | 9886.2 | 10240.4 | 11595.8 |
| 65° | 8816.5 | 8959.4 | 9705.5 | 10473.6 | 11240.5 | 10737.3 | 10594.5 | 10478.5 | 10987.7 | 11321.0 | 12470.0 |
| 67.5° | 8348.8 | 8533.2 | 9690.9 | 10941.3 | 12239.3 | 12249.1 | 12116.0 | 11843.7 | 12168.5 | 12296.7 | 12754.6 |
| 70° | 7116.7 | 7392.7 | 8837.2 | 11115.9 | 13386.0 | 14316.5 | 14188.3 | 13487.3 | 13346.8 | 12726.5 | 11953.6 |
| 72.5° | 4585.3 | 4956.5 | 6507.3 | 9678.6 | 13641.1 | 16261.7 | 16254.3 | 14970.9 | 13719.3 | 11891.3 | 9587.0 |
| 75° | 1672.9 | 1900.0 | 3023.5 | 6075.1 | 11450.5 | 16162.8 | 16210.4 | 14717.0 | 12523.9 | 9185.2 | 5972.5 |
| 77.5° | 609.4 | 666.8 | 986.7 | 2334.7 | 7042.2 | 12968.3 | 13067.2 | 11765.5 | 8914.2 | 4609.7 | 2366.5 |
| 80° | 319.9 | 351.7 | 505.5 | 906.1 | 3017.4 | 7701.6 | 7856.7 | 6992.1 | 4189.7 | 1388.5 | 709.5 |
| 82.5° | 177.0 | 191.7 | 283.3 | 492.1 | 1359.1 | 3293.3 | 3386.2 | 2762.2 | 1473.8 | 588.6 | 293.0 |
| 85° | 95.2 | 101.4 | 133.1 | 268.7 | 664.3 | 1141.7 | 1167.4 | 825.4 | 587.3 | 345.5 | 141.7 |
| 87.5° | 28.1 | 34.2 | 44.0 | 85.5 | 260.1 | 256.5 | 262.5 | 163.6 | 232.1 | 174.7 | 46.4 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 | 2338.4 |
| 2.5° | 2349.4 | 2345.8 | 2332.4 | 2326.2 | 2319.0 | 2317.7 | 2323.8 | 2325.0 | 2326.2 | 2327.5 | 2332.4 |
| 5° | 2371.4 | 2359.2 | 2347.0 | 2339.7 | 2342.1 | 2343.4 | 2355.6 | 2364.1 | 2370.2 | 2375.1 | 2377.5 |
| 7.5° | 2414.2 | 2404.3 | 2383.6 | 2382.4 | 2386.1 | 2397.1 | 2413.0 | 2432.4 | 2443.5 | 2452.0 | 2454.5 |
| 10° | 2477.6 | 2459.4 | 2434.9 | 2438.6 | 2446.0 | 2461.7 | 2494.7 | 2510.6 | 2529.0 | 2544.8 | 2541.2 |
| 12.5° | 2542.4 | 2526.5 | 2498.4 | 2500.9 | 2513.1 | 2541.2 | 2573.0 | 2592.4 | 2604.6 | 2616.8 | 2621.7 |
| 15° | 2626.7 | 2598.6 | 2568.0 | 2568.0 | 2590.0 | 2620.5 | 2635.2 | 2651.1 | 2658.3 | 2671.8 | 2676.7 |
| 17.5° | 2713.4 | 2676.7 | 2636.4 | 2633.9 | 2660.8 | 2675.5 | 2684.1 | 2686.4 | 2688.9 | 2703.5 | 2708.5 |
| 20° | 2800.0 | 2759.7 | 2702.3 | 2697.5 | 2703.5 | 2701.1 | 2699.8 | 2697.5 | 2701.1 | 2719.4 | 2726.8 |
| 22.5° | 2885.5 | 2839.1 | 2759.7 | 2737.8 | 2720.7 | 2697.5 | 2696.3 | 2695.0 | 2697.5 | 2715.7 | 2728.0 |
| 25° | 2985.6 | 2929.4 | 2823.3 | 2757.2 | 2699.8 | 2668.2 | 2671.8 | 2673.0 | 2675.5 | 2690.1 | 2709.7 |
| 27.5° | 3094.4 | 3032.1 | 2881.9 | 2751.2 | 2647.4 | 2625.4 | 2619.3 | 2623.0 | 2631.5 | 2654.7 | 2677.9 |
| 30° | 3203.0 | 3129.7 | 2935.6 | 2726.8 | 2581.5 | 2550.9 | 2531.3 | 2540.0 | 2566.8 | 2590.0 | 2615.6 |
| 32.5° | 3301.9 | 3228.6 | 2978.3 | 2673.0 | 2497.2 | 2449.5 | 2423.9 | 2434.9 | 2461.7 | 2470.4 | 2500.9 |
| 35° | 3418.0 | 3334.8 | 2996.6 | 2587.5 | 2405.6 | 2332.4 | 2298.2 | 2282.3 | 2295.7 | 2287.2 | 2314.0 |
| 37.5° | 3547.3 | 3460.7 | 2994.2 | 2475.2 | 2298.2 | 2213.9 | 2166.2 | 2106.5 | 2078.4 | 2049.1 | 2067.3 |
| 40° | 3739.1 | 3614.6 | 2964.9 | 2339.7 | 2165.0 | 2088.1 | 2002.6 | 1901.3 | 1837.8 | 1780.4 | 1784.0 |
| 42.5° | 4000.4 | 3828.2 | 2911.2 | 2190.7 | 2014.8 | 1942.8 | 1826.8 | 1708.4 | 1608.2 | 1513.0 | 1504.4 |
| 45° | 4390.0 | 4107.9 | 2844.0 | 2032.0 | 1852.5 | 1781.7 | 1655.9 | 1522.7 | 1409.2 | 1287.1 | 1272.4 |
| 47.5° | 4951.7 | 4484.0 | 2780.5 | 1851.3 | 1681.5 | 1616.7 | 1503.2 | 1379.9 | 1245.6 | 1127.1 | 1113.7 |
| 50° | 5723.4 | 5023.7 | 2721.9 | 1675.4 | 1513.0 | 1464.1 | 1373.8 | 1247.9 | 1112.4 | 1017.2 | 1011.1 |
| 52.5° | 6705.1 | 5757.6 | 2697.5 | 1505.6 | 1355.5 | 1337.1 | 1265.1 | 1147.9 | 1019.7 | 939.0 | 933.0 |
| 55° | 7832.2 | 6635.5 | 2697.5 | 1343.3 | 1217.5 | 1223.5 | 1173.5 | 1064.8 | 953.7 | 881.6 | 874.3 |
| 57.5° | 8982.6 | 7524.5 | 2648.6 | 1193.0 | 1100.2 | 1125.9 | 1094.1 | 998.9 | 898.7 | 824.3 | 812.0 |
| 60° | 10042.5 | 8269.4 | 2450.8 | 1056.3 | 996.4 | 1036.7 | 1016.0 | 934.2 | 812.0 | 749.8 | 740.0 |
| 62.5° | 10857.0 | 8689.5 | 2069.8 | 947.6 | 910.9 | 957.4 | 946.4 | 848.7 | 796.2 | 770.5 | 762.0 |
| 65° | 11264.9 | 8621.2 | 1582.6 | 851.2 | 838.9 | 910.9 | 887.8 | 884.1 | 842.6 | 813.2 | 803.5 |
| 67.5° | 11014.5 | 8032.5 | 1147.9 | 780.3 | 797.3 | 868.2 | 957.4 | 972.0 | 895.1 | 837.7 | 827.9 |
| 70° | 9916.8 | 6967.7 | 854.7 | 713.1 | 744.9 | 869.4 | 1091.7 | 1017.2 | 878.0 | 810.8 | 799.8 |
| 72.5° | 7544.1 | 5195.8 | 663.1 | 642.3 | 676.5 | 875.6 | 1151.5 | 996.4 | 829.1 | 896.3 | 889.0 |
| 75° | 4314.2 | 2852.6 | 532.4 | 555.7 | 591.0 | 818.2 | 1120.9 | 942.7 | 791.3 | 823.1 | 823.1 |
| 77.5° | 1644.8 | 1096.5 | 439.6 | 470.2 | 475.0 | 714.3 | 1072.1 | 939.0 | 753.5 | 735.1 | 670.3 |
| 80° | 570.3 | 428.7 | 363.9 | 373.6 | 367.6 | 635.0 | 1028.2 | 816.9 | 616.6 | 552.0 | 533.6 |
| 82.5° | 233.2 | 213.7 | 288.2 | 275.9 | 261.3 | 493.3 | 830.4 | 668.0 | 504.3 | 445.7 | 440.9 |
| 85° | 101.4 | 135.5 | 190.4 | 167.3 | 151.4 | 341.9 | 665.5 | 565.4 | 426.2 | 367.6 | 366.3 |
| 87.5° | 20.8 | 51.2 | 80.6 | 75.7 | 78.1 | 228.4 | 472.5 | 401.8 | 301.7 | 225.9 | 177.0 |
| 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)