

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: LUMARK

Report Number: P969974

Luminaire Tested: **NAV-SB6A-827-U-T4W**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969974  
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: LUMARK  
Catalog Number: NAV-SB6A-827-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24198.2 lumens  
Efficiency: N/A  
Efficacy: 141.6 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): 170.9  
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

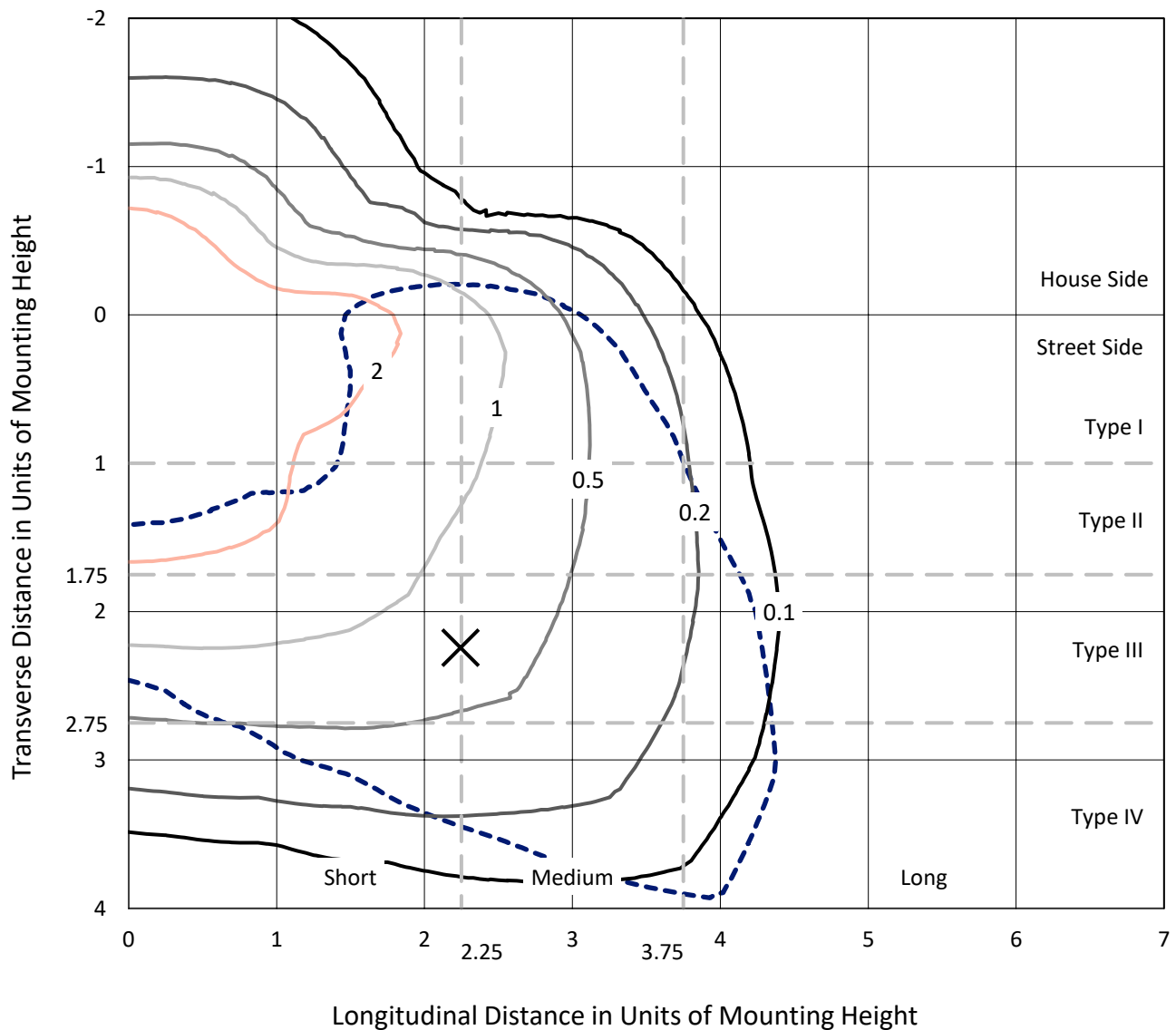


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## Iso-Footcandle Lines of Horizontal Illumination

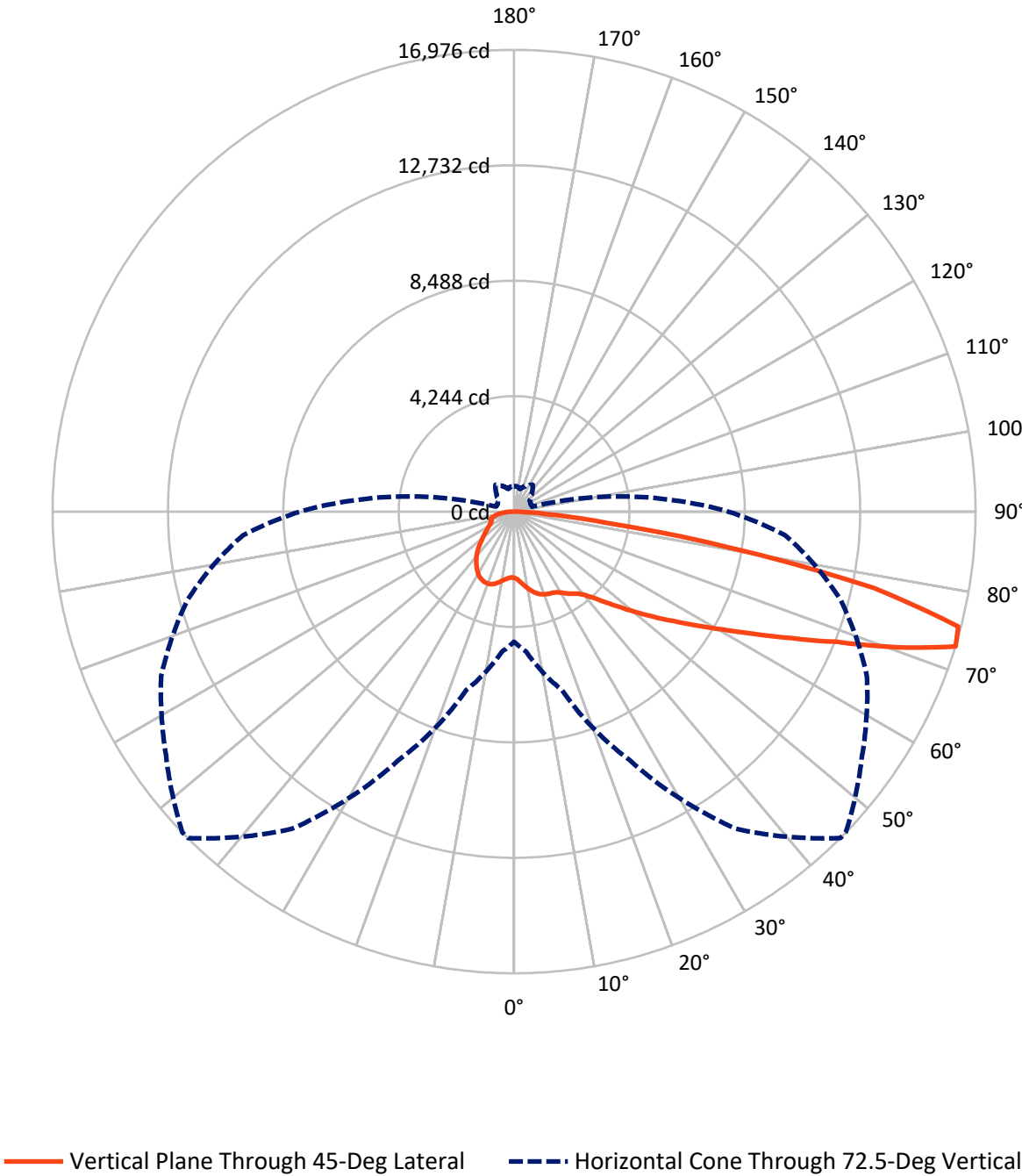
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5470.4   | 0.0    | 5470.4  |
|                    | % Fixture | 22.6     | 0.0    | 22.6    |
| <b>Street Side</b> | Lumens    | 18727.8  | 0.0    | 18727.8 |
|                    | % Fixture | 77.4     | 0.0    | 77.4    |
| <b>Total</b>       | Lumens    | 24198.2  | 0.0    | 24198.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 248.5   | 1.0       |
| 10°-20°   | 828.4   | 3.4       |
| 20°-30°   | 1441.0  | 6.0       |
| 30°-40°   | 2065.8  | 8.5       |
| 40°-50°   | 2908.8  | 12.0      |
| 50°-60°   | 4455.4  | 18.4      |
| 60°-70°   | 6454.3  | 26.7      |
| 70°-80°   | 5154.1  | 21.3      |
| 80°-90°   | 641.9   | 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°    | 24198.2 | 100.0     |
| 0°-180°   | 24198.2 | 100.0     |

**Coefficient of Utilization**



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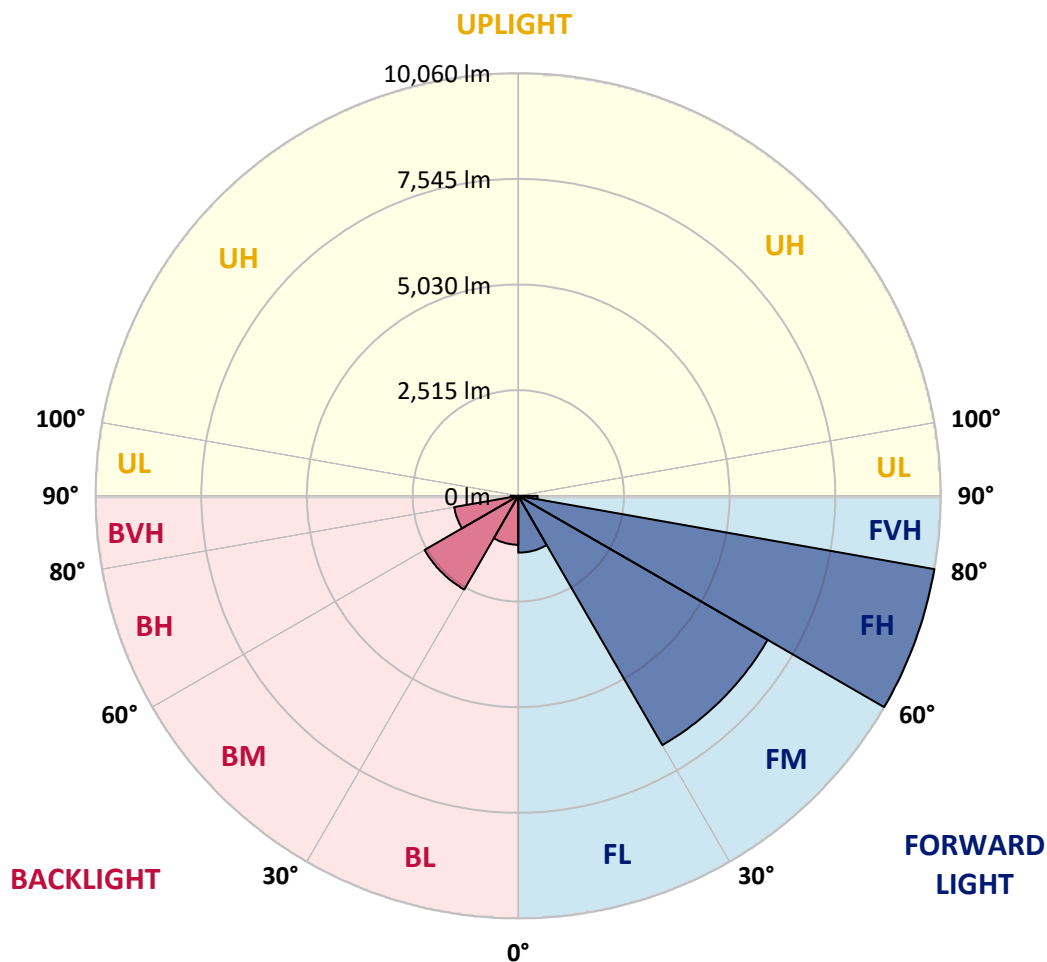
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1353.2  | 5.6       |                         |      |          |
| FM   | (30°-60°)   | 6854.2  | 28.3      |                         |      |          |
| FH   | (60°-80°)   | 10059.9 | 41.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 460.5   | 1.9       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1164.7  | 4.8       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2575.8  | 10.6      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1548.5  | 6.4       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 181.4   | 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°    | 2441.1 | 2441.1 | 2441.1  | 2441.1  | 2441.1  | 2441.1  | 2441.1  | 2441.1  | 2441.1  | 2441.1  | 2441.1  |
| 2.5°  | 2536.8 | 2553.3 | 2538.0  | 2524.0  | 2517.6  | 2501.0  | 2499.8  | 2489.5  | 2483.2  | 2465.3  | 2460.2  |
| 5°    | 2713.9 | 2735.6 | 2710.1  | 2682.0  | 2656.6  | 2615.8  | 2610.7  | 2581.4  | 2548.3  | 2509.9  | 2488.3  |
| 7.5°  | 2914.1 | 2933.1 | 2903.8  | 2861.8  | 2817.2  | 2749.7  | 2748.3  | 2694.8  | 2642.6  | 2577.6  | 2540.6  |
| 10°   | 3088.7 | 3114.2 | 3074.7  | 3017.3  | 2961.2  | 2884.8  | 2875.8  | 2814.6  | 2748.3  | 2664.2  | 2608.1  |
| 12.5° | 3242.9 | 3260.8 | 3222.5  | 3152.4  | 3087.4  | 3010.9  | 2999.5  | 2931.9  | 2858.0  | 2762.4  | 2690.9  |
| 15°   | 3365.3 | 3388.2 | 3337.3  | 3262.1  | 3193.2  | 3118.0  | 3107.8  | 3046.6  | 2972.7  | 2871.9  | 2780.2  |
| 17.5° | 3445.6 | 3464.7 | 3412.4  | 3328.4  | 3262.1  | 3199.6  | 3192.0  | 3141.0  | 3075.9  | 2973.9  | 2875.8  |
| 20°   | 3476.2 | 3496.6 | 3441.8  | 3356.4  | 3295.2  | 3246.8  | 3242.9  | 3206.0  | 3161.3  | 3068.3  | 2968.9  |
| 22.5° | 3506.8 | 3525.9 | 3454.6  | 3365.3  | 3311.8  | 3281.2  | 3279.9  | 3255.7  | 3237.9  | 3161.3  | 3064.4  |
| 25°   | 3630.4 | 3635.6 | 3539.9  | 3411.2  | 3334.7  | 3308.0  | 3306.6  | 3305.4  | 3313.0  | 3253.1  | 3167.8  |
| 27.5° | 3737.6 | 3736.2 | 3654.6  | 3533.6  | 3415.0  | 3358.9  | 3357.7  | 3370.4  | 3394.6  | 3344.9  | 3274.8  |
| 30°   | 3894.3 | 3880.3 | 3783.5  | 3657.2  | 3548.9  | 3462.2  | 3454.6  | 3443.1  | 3462.2  | 3422.7  | 3381.9  |
| 32.5° | 4227.0 | 4182.4 | 4025.6  | 3801.3  | 3659.8  | 3593.4  | 3583.3  | 3512.0  | 3519.5  | 3495.4  | 3475.0  |
| 35°   | 4703.8 | 4645.2 | 4436.1  | 4074.1  | 3797.4  | 3703.1  | 3698.0  | 3607.5  | 3592.2  | 3570.6  | 3578.2  |
| 37.5° | 5271.1 | 5198.4 | 4955.0  | 4469.2  | 4034.5  | 3830.6  | 3822.9  | 3741.4  | 3678.9  | 3656.0  | 3699.3  |
| 40°   | 5840.9 | 5749.1 | 5547.7  | 4951.1  | 4383.8  | 4043.5  | 4019.2  | 3895.6  | 3824.2  | 3785.9  | 3877.8  |
| 42.5° | 6394.1 | 6317.6 | 6145.5  | 5491.5  | 4814.7  | 4354.5  | 4301.0  | 4089.3  | 4035.8  | 4000.2  | 4165.8  |
| 45°   | 6883.6 | 6814.7 | 6688.5  | 6069.0  | 5319.4  | 4777.7  | 4725.5  | 4380.0  | 4363.4  | 4363.4  | 4603.1  |
| 47.5° | 7281.3 | 7266.0 | 7132.2  | 6658.0  | 5914.8  | 5259.6  | 5169.1  | 4784.1  | 4828.7  | 4897.6  | 5223.9  |
| 50°   | 7722.4 | 7680.3 | 7537.5  | 7237.9  | 6614.6  | 5811.5  | 5737.6  | 5280.0  | 5447.0  | 5635.7  | 6121.3  |
| 52.5° | 8127.7 | 8150.7 | 7991.3  | 7842.2  | 7405.0  | 6427.3  | 6297.2  | 5865.0  | 6225.8  | 6538.2  | 7173.0  |
| 55°   | 8544.6 | 8545.8 | 8501.2  | 8480.8  | 8233.5  | 7108.0  | 6965.2  | 6568.7  | 7142.4  | 7529.9  | 8399.3  |
| 57.5° | 8935.9 | 8938.5 | 9004.7  | 9184.5  | 9194.7  | 7893.2  | 7731.3  | 7433.0  | 8160.8  | 8556.1  | 9663.8  |
| 60°   | 9285.2 | 9303.0 | 9484.0  | 9904.8  | 10039.9 | 8793.2  | 8640.2  | 8454.1  | 9213.8  | 9611.5  | 10993.3 |
| 62.5° | 9402.5 | 9467.5 | 9870.3  | 10468.1 | 10874.8 | 9897.1  | 9746.6  | 9635.7  | 10320.3 | 10689.9 | 12104.9 |
| 65°   | 9203.6 | 9352.8 | 10131.6 | 10933.5 | 11734.0 | 11208.8 | 11059.6 | 10938.6 | 11470.2 | 11818.1 | 13017.6 |
| 67.5° | 8715.4 | 8907.9 | 10116.3 | 11421.7 | 12776.7 | 12786.9 | 12648.0 | 12363.8 | 12702.8 | 12836.6 | 13314.6 |
| 70°   | 7429.2 | 7717.3 | 9225.3  | 11603.9 | 13973.7 | 14945.0 | 14811.2 | 14079.5 | 13932.9 | 13285.3 | 12478.5 |
| 72.5° | 4786.6 | 5174.2 | 6793.1  | 10103.6 | 14240.1 | 16975.7 | 16968.1 | 15628.3 | 14321.7 | 12413.5 | 10008.0 |
| 75°   | 1746.4 | 1983.5 | 3156.3  | 6341.9  | 11953.2 | 16872.4 | 16922.1 | 15363.2 | 13073.8 | 9588.6  | 6234.8  |
| 77.5° | 636.1  | 696.0  | 1030.0  | 2437.3  | 7351.4  | 13537.8 | 13641.0 | 12282.2 | 9305.6  | 4812.2  | 2470.5  |
| 80°   | 333.9  | 367.2  | 527.8   | 945.9   | 3149.9  | 8039.8  | 8201.6  | 7299.1  | 4373.7  | 1449.4  | 740.7   |
| 82.5° | 184.8  | 200.2  | 295.7   | 513.7   | 1418.8  | 3438.0  | 3534.8  | 2883.4  | 1538.6  | 614.4   | 306.0   |
| 85°   | 99.4   | 105.8  | 139.0   | 280.4   | 693.4   | 1191.9  | 1218.6  | 861.7   | 613.2   | 360.8   | 147.9   |
| 87.5° | 29.3   | 35.7   | 45.9    | 89.3    | 271.5   | 267.7   | 274.1   | 170.8   | 242.2   | 182.2   | 48.5    |
| 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°    | 2441.1  | 2441.1 | 2441.1 | 2441.1 | 2441.1 | 2441.1 | 2441.1 | 2441.1 | 2441.1 | 2441.1 | 2441.1 |
| 2.5°  | 2452.6  | 2448.7 | 2434.8 | 2428.4 | 2420.7 | 2419.4 | 2425.9 | 2427.1 | 2428.4 | 2429.7 | 2434.8 |
| 5°    | 2475.6  | 2462.8 | 2450.1 | 2442.4 | 2444.9 | 2446.3 | 2459.0 | 2467.9 | 2474.2 | 2479.4 | 2481.9 |
| 7.5°  | 2520.2  | 2509.9 | 2488.3 | 2487.1 | 2490.9 | 2502.3 | 2518.9 | 2539.2 | 2550.7 | 2559.6 | 2562.2 |
| 10°   | 2586.5  | 2567.3 | 2541.8 | 2545.7 | 2553.3 | 2569.9 | 2604.3 | 2620.8 | 2640.0 | 2656.6 | 2652.7 |
| 12.5° | 2654.0  | 2637.4 | 2608.1 | 2610.7 | 2623.4 | 2652.7 | 2685.9 | 2706.3 | 2719.0 | 2731.7 | 2736.9 |
| 15°   | 2742.0  | 2712.7 | 2680.8 | 2680.8 | 2703.7 | 2735.6 | 2750.9 | 2767.5 | 2775.1 | 2789.1 | 2794.3 |
| 17.5° | 2832.5  | 2794.3 | 2752.1 | 2749.7 | 2777.6 | 2792.9 | 2801.8 | 2804.4 | 2807.0 | 2822.2 | 2827.4 |
| 20°   | 2923.0  | 2880.9 | 2821.0 | 2815.9 | 2822.2 | 2819.8 | 2818.4 | 2815.9 | 2819.8 | 2838.8 | 2846.5 |
| 22.5° | 3012.2  | 2963.8 | 2880.9 | 2858.0 | 2840.1 | 2815.9 | 2814.6 | 2813.3 | 2815.9 | 2835.0 | 2847.8 |
| 25°   | 3116.7  | 3058.1 | 2947.2 | 2878.4 | 2818.4 | 2785.3 | 2789.1 | 2790.4 | 2792.9 | 2808.3 | 2828.7 |
| 27.5° | 3230.2  | 3165.2 | 3008.4 | 2871.9 | 2763.6 | 2740.6 | 2734.3 | 2738.2 | 2747.1 | 2771.3 | 2795.5 |
| 30°   | 3343.7  | 3267.2 | 3064.4 | 2846.5 | 2694.8 | 2663.0 | 2642.6 | 2651.5 | 2679.6 | 2703.7 | 2730.5 |
| 32.5° | 3446.9  | 3370.4 | 3109.1 | 2790.4 | 2606.9 | 2557.2 | 2530.3 | 2541.8 | 2569.9 | 2578.8 | 2610.7 |
| 35°   | 3568.0  | 3481.3 | 3128.2 | 2701.2 | 2511.2 | 2434.8 | 2399.0 | 2382.5 | 2396.6 | 2387.6 | 2415.6 |
| 37.5° | 3703.1  | 3612.6 | 3125.6 | 2583.9 | 2399.0 | 2311.1 | 2261.4 | 2198.9 | 2169.6 | 2139.0 | 2158.1 |
| 40°   | 3903.3  | 3773.2 | 3095.1 | 2442.4 | 2260.1 | 2179.8 | 2090.6 | 1984.8 | 1918.5 | 1858.5 | 1862.4 |
| 42.5° | 4176.1  | 3996.3 | 3039.0 | 2286.9 | 2103.3 | 2028.1 | 1907.0 | 1783.4 | 1678.8 | 1579.4 | 1570.5 |
| 45°   | 4582.7  | 4288.2 | 2968.9 | 2121.1 | 1933.8 | 1859.9 | 1728.6 | 1589.6 | 1471.1 | 1343.6 | 1328.3 |
| 47.5° | 5169.1  | 4680.9 | 2902.6 | 1932.5 | 1755.3 | 1687.8 | 1569.2 | 1440.4 | 1300.2 | 1176.6 | 1162.6 |
| 50°   | 5974.7  | 5244.3 | 2841.4 | 1749.0 | 1579.4 | 1528.4 | 1434.1 | 1302.8 | 1161.3 | 1061.9 | 1055.4 |
| 52.5° | 6999.6  | 6010.4 | 2815.9 | 1571.7 | 1415.0 | 1395.8 | 1320.6 | 1198.2 | 1064.4 | 980.3  | 973.9  |
| 55°   | 8176.2  | 6927.0 | 2815.9 | 1402.2 | 1270.9 | 1277.3 | 1225.0 | 1111.6 | 995.6  | 920.3  | 912.8  |
| 57.5° | 9377.0  | 7855.0 | 2764.9 | 1245.4 | 1148.5 | 1175.3 | 1142.2 | 1042.7 | 938.2  | 860.5  | 847.7  |
| 60°   | 10483.5 | 8632.6 | 2558.4 | 1102.7 | 1040.2 | 1082.3 | 1060.6 | 975.2  | 847.7  | 782.7  | 772.5  |
| 62.5° | 11333.7 | 9071.0 | 2160.7 | 989.2  | 951.0  | 999.4  | 987.9  | 885.9  | 831.2  | 804.3  | 795.4  |
| 65°   | 11759.5 | 8999.7 | 1652.1 | 888.5  | 875.8  | 951.0  | 926.7  | 922.9  | 879.6  | 849.0  | 838.8  |
| 67.5° | 11498.1 | 8385.2 | 1198.2 | 814.6  | 832.4  | 906.3  | 999.4  | 1014.6 | 934.4  | 874.4  | 864.3  |
| 70°   | 10352.2 | 7273.7 | 892.4  | 744.5  | 777.6  | 907.6  | 1139.6 | 1061.9 | 916.6  | 846.4  | 835.0  |
| 72.5° | 7875.4  | 5424.0 | 692.2  | 670.6  | 706.2  | 914.0  | 1202.1 | 1040.2 | 865.5  | 935.6  | 928.0  |
| 75°   | 4503.6  | 2977.8 | 555.8  | 580.0  | 616.9  | 854.0  | 1170.2 | 984.1  | 826.0  | 859.2  | 859.2  |
| 77.5° | 1717.1  | 1144.7 | 458.9  | 490.8  | 495.9  | 745.7  | 1119.2 | 980.3  | 786.5  | 767.4  | 699.9  |
| 80°   | 595.3   | 447.4  | 379.9  | 390.1  | 383.7  | 662.9  | 1073.4 | 852.8  | 643.7  | 576.2  | 557.1  |
| 82.5° | 243.4   | 223.0  | 300.8  | 288.1  | 272.8  | 515.0  | 866.8  | 697.3  | 526.4  | 465.2  | 460.2  |
| 85°   | 105.8   | 141.4  | 198.8  | 174.7  | 158.1  | 356.9  | 694.7  | 590.2  | 444.8  | 383.7  | 382.4  |
| 87.5° | 21.6    | 53.5   | 84.2   | 79.0   | 81.6   | 238.4  | 493.3  | 419.4  | 314.9  | 235.9  | 184.8  |
| 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)