

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: P967802

Luminaire Tested: **NAV-SB5A-750-U-T4FT**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P967802  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5A-750-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 24286.4 lumens  
Efficiency: N/A  
Efficacy: 171.4 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



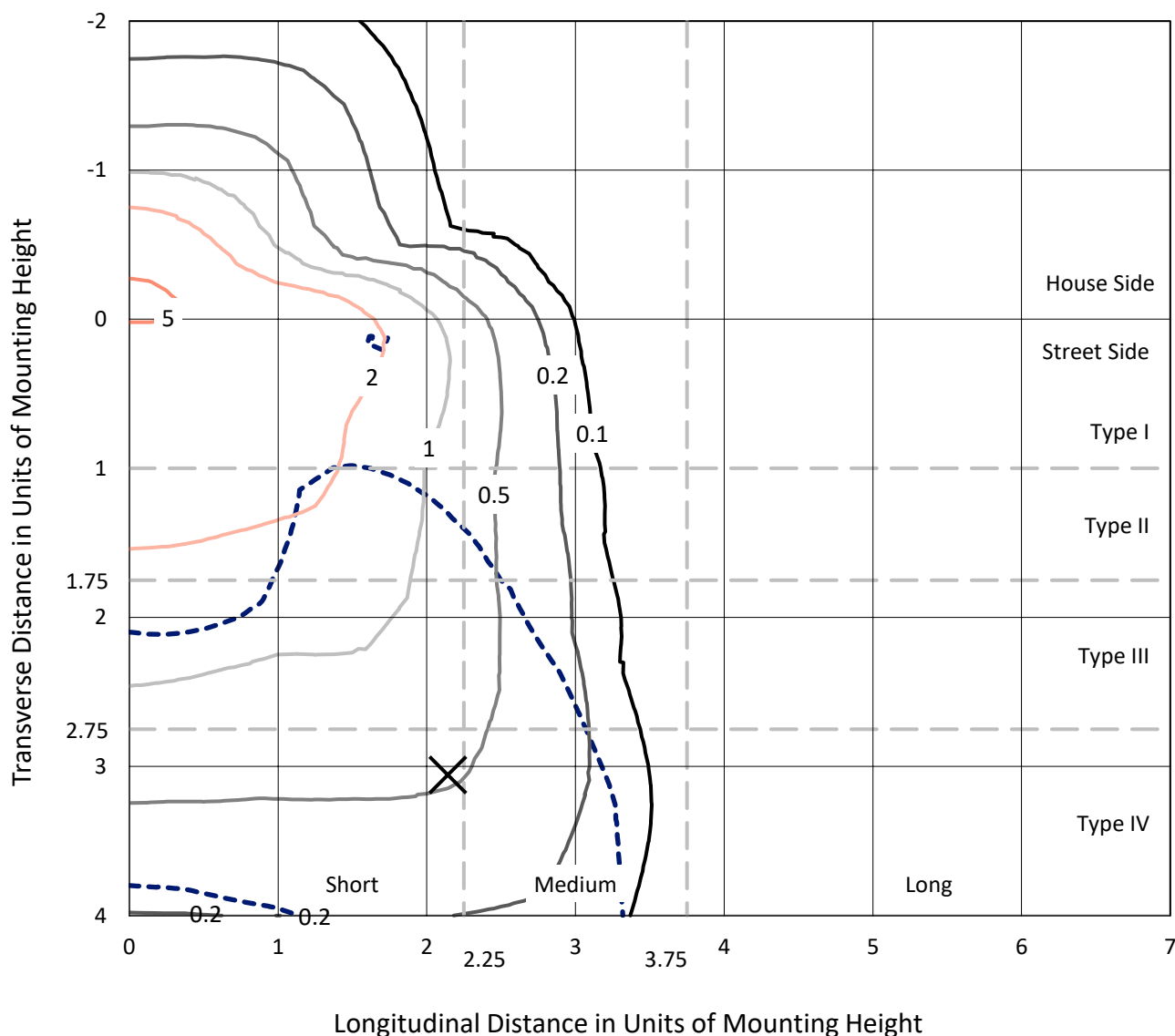
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

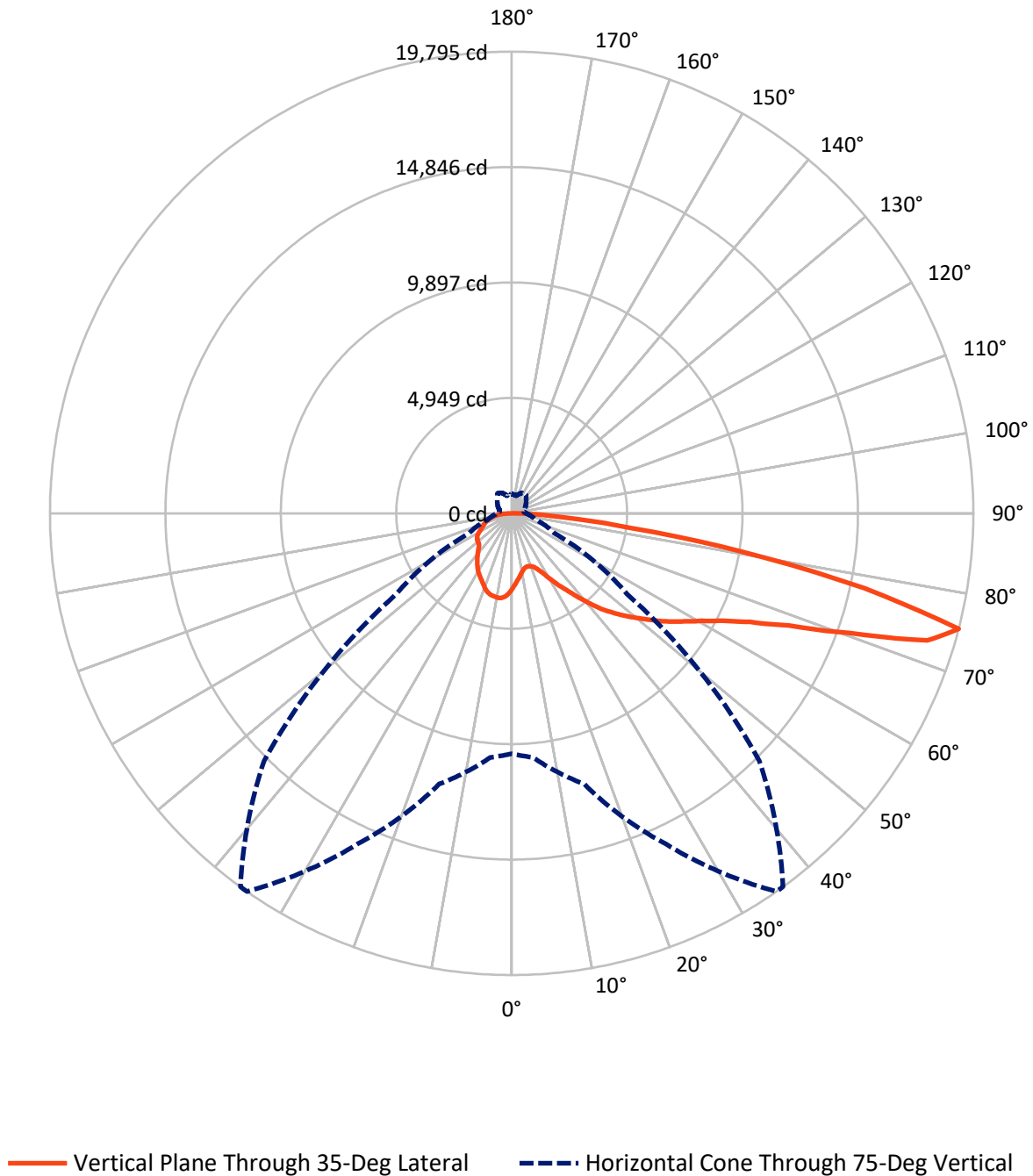


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc

Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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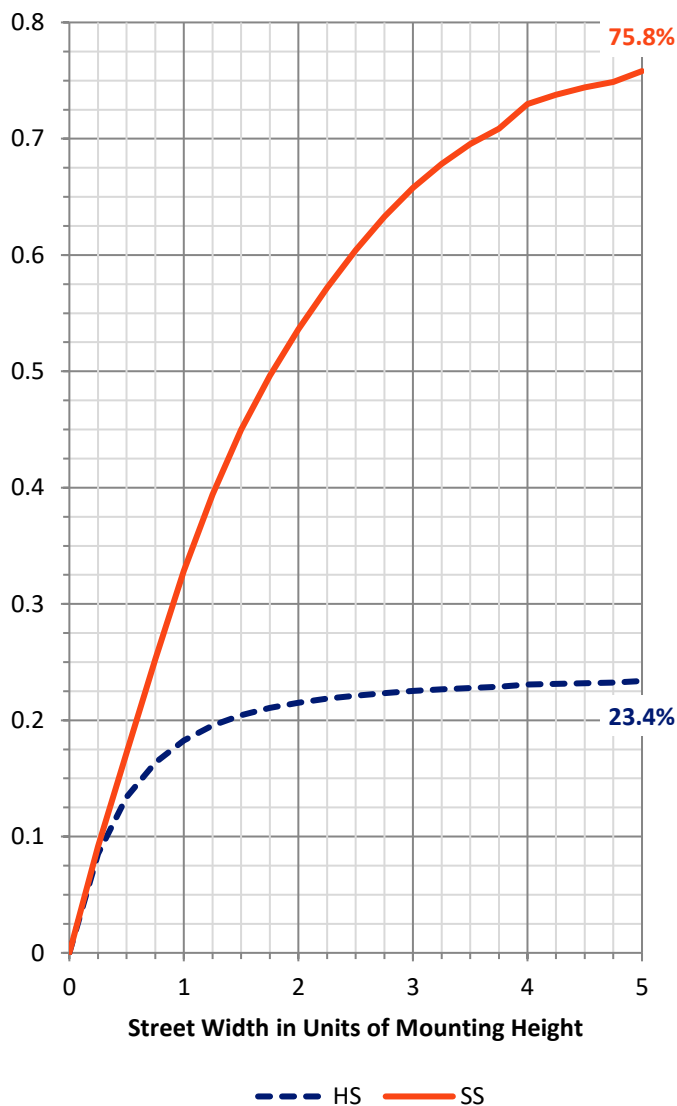
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5779.6   | 0.0    | 5779.6  |
|                    | % Fixture | 23.8     | 0.0    | 23.8    |
| <b>Street Side</b> | Lumens    | 18506.8  | 0.0    | 18506.8 |
|                    | % Fixture | 76.2     | 0.0    | 76.2    |
| <b>Total</b>       | Lumens    | 24286.4  | 0.0    | 24286.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 306.4   | 1.3       |
| 10°-20°   | 883.8   | 3.6       |
| 20°-30°   | 1484.2  | 6.1       |
| 30°-40°   | 2306.6  | 9.5       |
| 40°-50°   | 3423.7  | 14.1      |
| 50°-60°   | 4726.6  | 19.5      |
| 60°-70°   | 5734.4  | 23.6      |
| 70°-80°   | 4739.0  | 19.5      |
| 80°-90°   | 681.6   | 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°    | 24286.4 | 100.0     |
| 0°-180°   | 24286.4 | 100.0     |

**Coefficient of Utilization**



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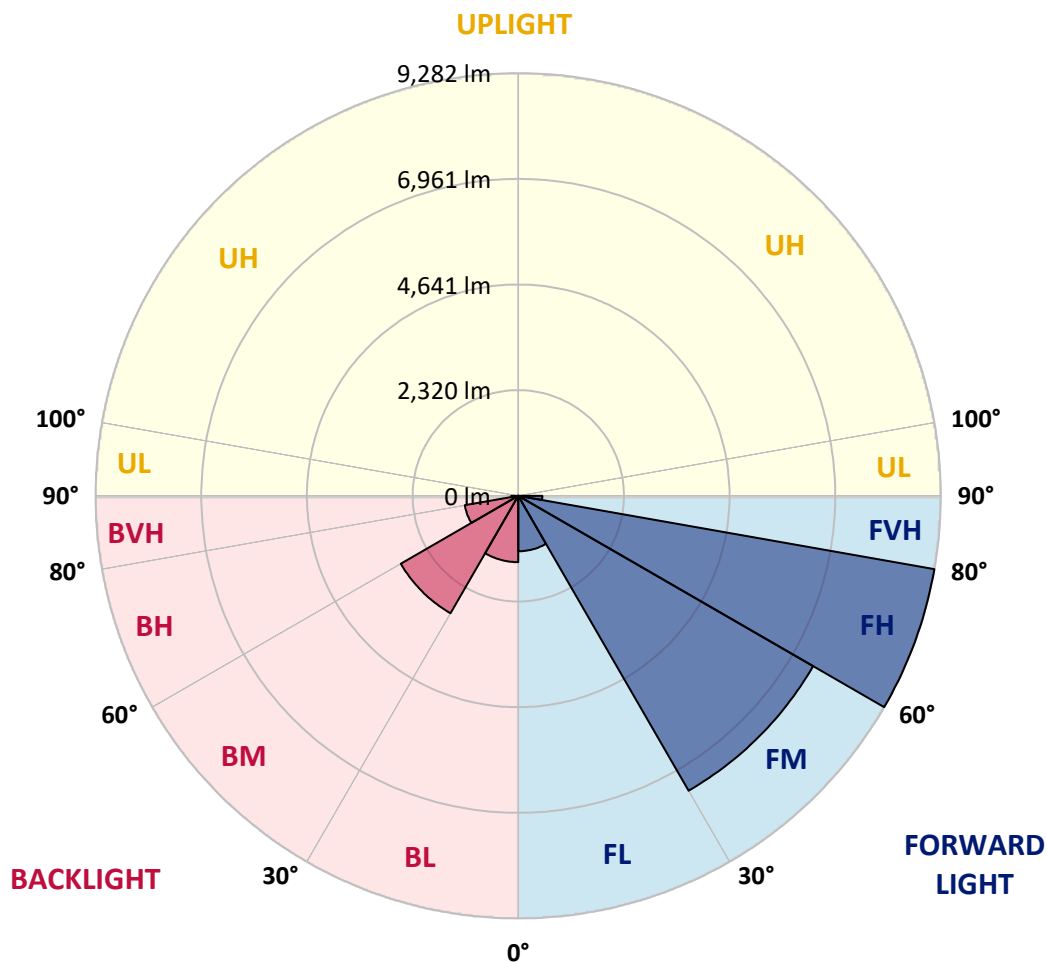
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1217.9 | 5.0       |                         |      |          |
| FM   | (30°-60°)   | 7478.9 | 30.8      |                         |      |          |
| FH   | (60°-80°)   | 9281.9 | 38.2      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 528.1  | 2.2       |                         |      | G4/750   |
| BL   | (0°-30°)    | 1456.5 | 6.0       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2978.0 | 12.3      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1191.6 | 4.9       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 153.5  | 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°    | 3236.3  | 3236.3  | 3236.3  | 3236.3  | 3236.3  | 3236.3  | 3236.3  | 3236.3  | 3236.3 | 3236.3 | 3236.3  |
| 2.5°  | 2984.3  | 3002.6  | 3010.5  | 3006.5  | 3026.2  | 3023.6  | 3051.2  | 3085.4  | 3132.6 | 3178.5 | 3245.6  |
| 5°    | 2754.5  | 2774.2  | 2791.3  | 2807.0  | 2845.1  | 2856.9  | 2900.2  | 2965.8  | 3052.6 | 3140.5 | 3250.8  |
| 7.5°  | 2540.5  | 2557.6  | 2583.8  | 2612.7  | 2677.0  | 2688.9  | 2761.0  | 2863.4  | 2984.3 | 3112.9 | 3265.2  |
| 10°   | 2365.9  | 2382.9  | 2410.5  | 2443.3  | 2523.4  | 2537.9  | 2629.7  | 2766.3  | 2923.8 | 3086.7 | 3280.9  |
| 12.5° | 2291.0  | 2296.3  | 2312.0  | 2344.9  | 2414.5  | 2423.6  | 2524.7  | 2681.0  | 2864.8 | 3067.0 | 3304.6  |
| 15°   | 2287.1  | 2297.6  | 2298.9  | 2316.0  | 2373.7  | 2377.7  | 2470.9  | 2625.8  | 2828.0 | 3063.0 | 3340.1  |
| 17.5° | 2326.4  | 2334.3  | 2322.5  | 2333.0  | 2381.6  | 2388.1  | 2461.7  | 2599.6  | 2816.2 | 3080.1 | 3400.4  |
| 20°   | 2431.5  | 2438.1  | 2402.6  | 2388.1  | 2423.6  | 2428.8  | 2501.1  | 2616.6  | 2828.0 | 3115.5 | 3483.2  |
| 22.5° | 2654.7  | 2658.6  | 2572.0  | 2512.9  | 2515.6  | 2518.1  | 2581.2  | 2686.2  | 2874.0 | 3179.9 | 3588.2  |
| 25°   | 3002.6  | 3000.0  | 2862.1  | 2747.9  | 2682.3  | 2667.9  | 2709.9  | 2799.2  | 2951.4 | 3265.2 | 3723.4  |
| 27.5° | 3409.7  | 3389.9  | 3252.1  | 3081.4  | 2938.3  | 2917.3  | 2908.1  | 2946.2  | 3061.7 | 3378.1 | 3888.8  |
| 30°   | 3869.2  | 3850.7  | 3702.4  | 3479.2  | 3280.9  | 3246.8  | 3160.2  | 3140.5  | 3225.8 | 3531.7 | 4118.6  |
| 32.5° | 4373.3  | 4361.5  | 4184.3  | 3913.8  | 3648.6  | 3609.2  | 3463.5  | 3410.9  | 3477.9 | 3764.1 | 4439.0  |
| 35°   | 4796.1  | 4785.5  | 4638.5  | 4360.1  | 4035.8  | 3987.4  | 3838.9  | 3779.9  | 3814.0 | 4062.2 | 4857.8  |
| 37.5° | 5178.1  | 5172.9  | 5046.8  | 4827.5  | 4492.8  | 4433.7  | 4267.0  | 4247.3  | 4240.7 | 4454.6 | 5365.9  |
| 40°   | 5532.6  | 5519.4  | 5388.2  | 5272.6  | 5024.5  | 4970.6  | 4823.6  | 4806.5  | 4756.7 | 4937.8 | 5940.9  |
| 42.5° | 5925.1  | 5891.0  | 5700.6  | 5646.8  | 5579.9  | 5535.2  | 5447.3  | 5449.9  | 5339.6 | 5482.7 | 6550.1  |
| 45°   | 6245.5  | 6225.8  | 6030.2  | 5998.7  | 6070.9  | 6052.5  | 6128.7  | 6148.4  | 5934.3 | 6053.9 | 7182.9  |
| 47.5° | 6589.5  | 6571.1  | 6405.6  | 6383.4  | 6579.0  | 6584.2  | 6853.4  | 6859.9  | 6514.7 | 6647.2 | 7817.1  |
| 50°   | 7013.6  | 6987.3  | 6823.2  | 6850.8  | 7070.0  | 7089.7  | 7582.0  | 7537.4  | 7049.0 | 7249.9 | 8445.9  |
| 52.5° | 7293.2  | 7309.0  | 7273.5  | 7318.2  | 7617.5  | 7635.8  | 8298.9  | 8184.6  | 7578.1 | 7844.6 | 9063.0  |
| 55°   | 7499.3  | 7530.9  | 7641.2  | 7743.6  | 8195.2  | 8213.5  | 8975.0  | 8800.4  | 8016.6 | 8396.1 | 9643.3  |
| 57.5° | 7764.6  | 7719.9  | 7926.0  | 8125.6  | 8744.0  | 8792.6  | 9632.8  | 9393.8  | 8405.2 | 8871.4 | 10041.1 |
| 60°   | 8145.3  | 8113.8  | 8273.9  | 8569.3  | 9358.5  | 9435.8  | 10328.6 | 9928.3  | 8690.2 | 9248.2 | 10118.6 |
| 62.5° | 8917.3  | 8838.5  | 8863.5  | 9124.8  | 10133.0 | 10235.4 | 11113.8 | 10394.3 | 8831.9 | 9395.2 | 9703.7  |
| 65°   | 10071.3 | 9936.1  | 9810.1  | 9991.2  | 11224.1 | 11325.1 | 12000.0 | 10760.6 | 8779.4 | 9110.3 | 8602.2  |
| 67.5° | 11524.7 | 11390.8 | 11235.8 | 11406.5 | 12831.1 | 12911.1 | 13093.7 | 10966.7 | 8365.8 | 8012.7 | 6655.1  |
| 70°   | 12723.4 | 12673.5 | 12858.6 | 13561.1 | 15397.8 | 15400.4 | 14495.9 | 10796.0 | 7232.8 | 5681.0 | 3850.7  |
| 72.5° | 12564.6 | 12534.3 | 13509.8 | 15681.4 | 18632.8 | 18563.3 | 15823.1 | 9504.1  | 4872.2 | 2562.8 | 1442.9  |
| 75°   | 10307.6 | 10503.3 | 12014.4 | 15643.3 | 19794.7 | 19785.6 | 15010.5 | 6042.0  | 2015.4 | 1062.1 | 745.7   |
| 77.5° | 5527.3  | 5837.2  | 7799.9  | 11549.7 | 15452.9 | 15685.4 | 10553.2 | 2113.8  | 865.2  | 680.1  | 516.0   |
| 80°   | 1802.7  | 2073.1  | 3108.9  | 5880.5  | 10041.1 | 9997.8  | 4523.0  | 829.7   | 592.1  | 481.9  | 357.1   |
| 82.5° | 765.5   | 796.9   | 1389.1  | 2776.8  | 5153.2  | 5073.0  | 1440.2  | 476.6   | 416.2  | 329.5  | 220.6   |
| 85°   | 299.3   | 334.8   | 613.2   | 1284.0  | 2231.9  | 2183.4  | 519.9   | 236.4   | 266.5  | 215.4  | 131.3   |
| 87.5° | 98.5    | 119.5   | 219.2   | 439.8   | 694.5   | 669.6   | 127.3   | 81.4    | 115.5  | 98.5   | 47.3    |
| 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°    | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 | 3236.3 |
| 2.5°  | 3263.9 | 3284.9 | 3309.8 | 3346.6 | 3378.1 | 3404.3 | 3431.9 | 3449.0 | 3455.6 | 3475.3 | 3473.9 |
| 5°    | 3287.5 | 3333.5 | 3395.2 | 3455.6 | 3514.6 | 3550.1 | 3581.7 | 3597.3 | 3611.8 | 3622.4 | 3624.9 |
| 7.5°  | 3326.9 | 3386.0 | 3483.2 | 3561.9 | 3611.8 | 3640.7 | 3661.7 | 3656.5 | 3661.7 | 3664.4 | 3668.3 |
| 10°   | 3361.1 | 3443.8 | 3559.3 | 3634.1 | 3672.2 | 3673.5 | 3668.3 | 3649.9 | 3640.7 | 3642.0 | 3644.6 |
| 12.5° | 3401.8 | 3493.6 | 3618.4 | 3681.4 | 3691.9 | 3663.0 | 3640.7 | 3609.2 | 3597.3 | 3592.1 | 3589.4 |
| 15°   | 3456.9 | 3561.9 | 3682.7 | 3706.3 | 3680.1 | 3643.4 | 3605.2 | 3554.1 | 3527.7 | 3506.7 | 3513.4 |
| 17.5° | 3523.8 | 3639.4 | 3732.6 | 3715.5 | 3659.0 | 3598.7 | 3537.0 | 3459.5 | 3405.7 | 3383.3 | 3384.7 |
| 20°   | 3617.0 | 3720.7 | 3770.7 | 3695.8 | 3610.5 | 3518.6 | 3413.6 | 3319.1 | 3269.1 | 3246.8 | 3244.2 |
| 22.5° | 3730.0 | 3829.7 | 3807.5 | 3661.7 | 3541.0 | 3393.9 | 3262.6 | 3193.0 | 3168.1 | 3152.3 | 3155.0 |
| 25°   | 3865.2 | 3950.6 | 3833.7 | 3611.8 | 3426.7 | 3228.4 | 3127.4 | 3105.0 | 3093.2 | 3081.4 | 3081.4 |
| 27.5° | 4041.2 | 4087.1 | 3853.4 | 3538.3 | 3248.1 | 3052.6 | 3015.8 | 3019.6 | 3015.8 | 2996.1 | 3000.0 |
| 30°   | 4273.5 | 4264.3 | 3871.7 | 3418.8 | 3043.3 | 2893.7 | 2896.2 | 2913.4 | 2915.9 | 2902.8 | 2909.4 |
| 32.5° | 4579.4 | 4486.2 | 3881.0 | 3263.9 | 2847.7 | 2754.5 | 2757.1 | 2775.5 | 2788.6 | 2766.3 | 2776.8 |
| 35°   | 4949.6 | 4744.8 | 3866.5 | 3069.6 | 2696.7 | 2621.8 | 2602.2 | 2607.4 | 2611.4 | 2590.4 | 2604.8 |
| 37.5° | 5381.7 | 5035.0 | 3802.1 | 2854.2 | 2572.0 | 2491.9 | 2449.9 | 2414.5 | 2393.5 | 2373.7 | 2386.9 |
| 40°   | 5855.6 | 5351.4 | 3684.1 | 2644.2 | 2432.8 | 2354.0 | 2291.0 | 2224.0 | 2153.2 | 2126.9 | 2138.8 |
| 42.5° | 6351.8 | 5677.1 | 3541.0 | 2443.3 | 2272.6 | 2208.4 | 2141.3 | 2044.2 | 1937.9 | 1884.1 | 1890.6 |
| 45°   | 6866.5 | 6010.5 | 3400.4 | 2245.1 | 2108.5 | 2081.0 | 2003.5 | 1886.6 | 1771.1 | 1702.8 | 1697.6 |
| 47.5° | 7370.7 | 6325.6 | 3194.3 | 2045.5 | 1954.9 | 1985.1 | 1924.7 | 1817.0 | 1688.4 | 1580.8 | 1569.0 |
| 50°   | 7852.5 | 6621.0 | 2856.9 | 1843.4 | 1830.2 | 1956.2 | 1898.5 | 1743.5 | 1596.5 | 1458.7 | 1446.8 |
| 52.5° | 8330.4 | 6859.9 | 2424.9 | 1659.5 | 1763.2 | 1948.3 | 1864.4 | 1693.6 | 1513.8 | 1369.4 | 1353.6 |
| 55°   | 8736.1 | 6983.3 | 2008.8 | 1501.9 | 1666.0 | 1881.4 | 1823.7 | 1634.6 | 1397.0 | 1243.3 | 1230.2 |
| 57.5° | 8967.2 | 6883.6 | 1662.1 | 1347.1 | 1532.2 | 1771.1 | 1754.1 | 1508.5 | 1257.8 | 1139.6 | 1123.8 |
| 60°   | 8867.4 | 6479.2 | 1378.5 | 1211.9 | 1404.8 | 1651.7 | 1633.2 | 1383.9 | 1151.4 | 1039.9 | 1024.1 |
| 62.5° | 8317.3 | 5708.5 | 1154.0 | 1093.7 | 1289.2 | 1529.5 | 1512.5 | 1287.9 | 1070.0 | 962.4  | 945.3  |
| 65°   | 7209.1 | 4643.8 | 979.4  | 995.2  | 1172.4 | 1382.5 | 1407.4 | 1207.9 | 1005.7 | 900.7  | 883.6  |
| 67.5° | 5498.5 | 3363.6 | 842.9  | 909.9  | 1058.2 | 1238.1 | 1310.3 | 1150.2 | 951.8  | 852.1  | 836.3  |
| 70°   | 3133.9 | 1910.3 | 727.3  | 827.2  | 957.1  | 1104.1 | 1235.4 | 1104.1 | 894.1  | 811.4  | 800.8  |
| 72.5° | 1188.2 | 877.0  | 628.8  | 744.5  | 860.0  | 991.3  | 1152.7 | 1032.0 | 827.2  | 765.5  | 754.9  |
| 75°   | 634.2  | 534.3  | 529.1  | 647.3  | 748.4  | 881.0  | 1049.0 | 961.0  | 777.3  | 808.7  | 835.0  |
| 77.5° | 431.9  | 378.1  | 442.5  | 554.0  | 626.3  | 758.9  | 938.7  | 853.4  | 673.5  | 670.9  | 618.4  |
| 80°   | 299.3  | 267.8  | 359.8  | 446.4  | 484.4  | 638.1  | 819.3  | 732.6  | 548.8  | 512.0  | 489.7  |
| 82.5° | 179.9  | 174.7  | 269.2  | 333.4  | 342.7  | 492.3  | 678.8  | 614.5  | 449.1  | 391.2  | 393.9  |
| 85°   | 98.5   | 103.7  | 172.0  | 195.7  | 199.6  | 344.0  | 531.8  | 475.3  | 345.3  | 290.2  | 292.7  |
| 87.5° | 27.6   | 35.5   | 63.0   | 77.5   | 95.8   | 178.6  | 316.4  | 282.3  | 173.3  | 120.7  | 120.7  |
| 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)