

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: P964757

Luminaire Tested: **NAV-SB3C-835-U-T2U**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P964757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3C-835-U-T2U  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

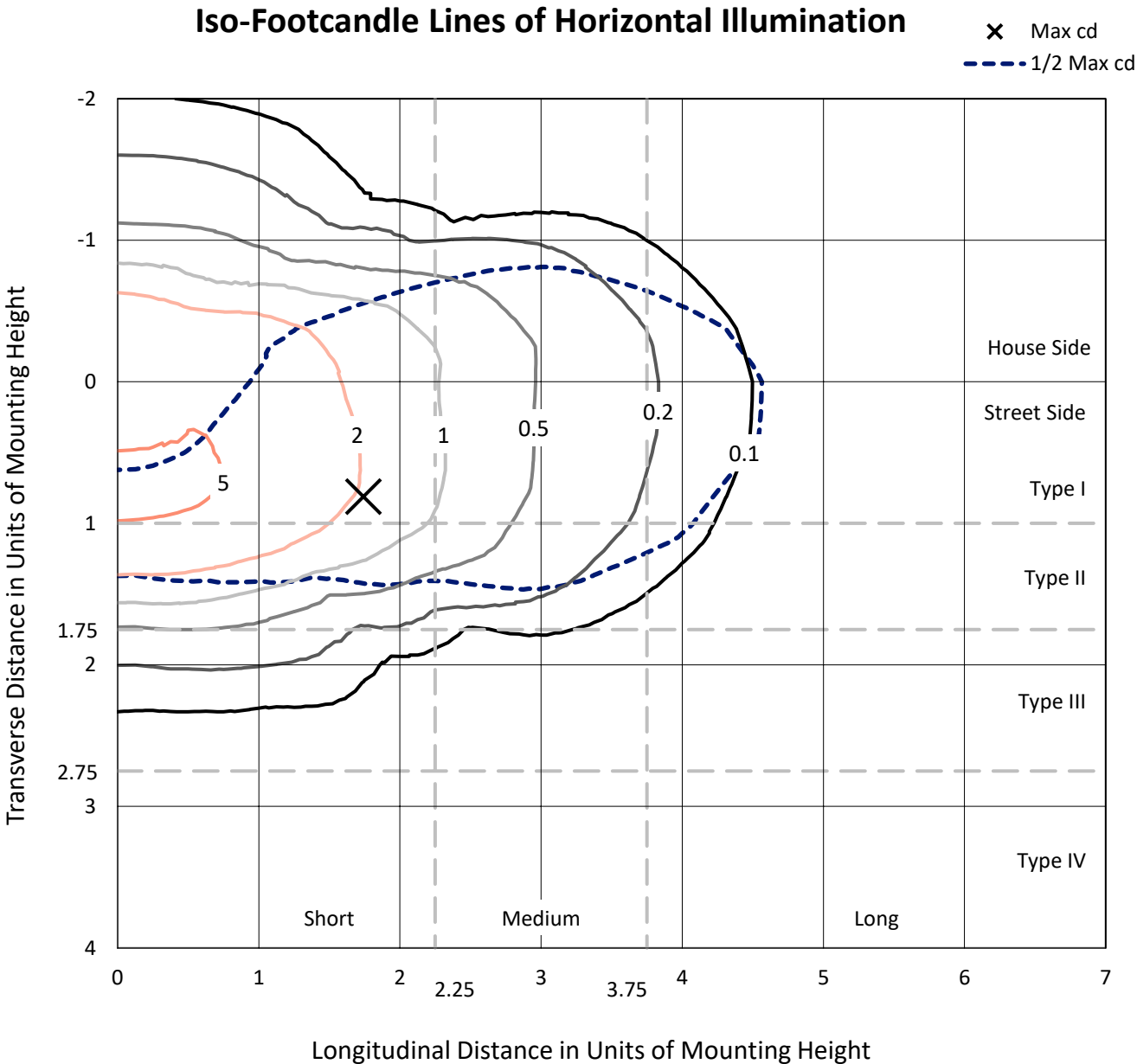
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21649 lumens  
Efficiency: N/A  
Efficacy: 145.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 149.1  
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



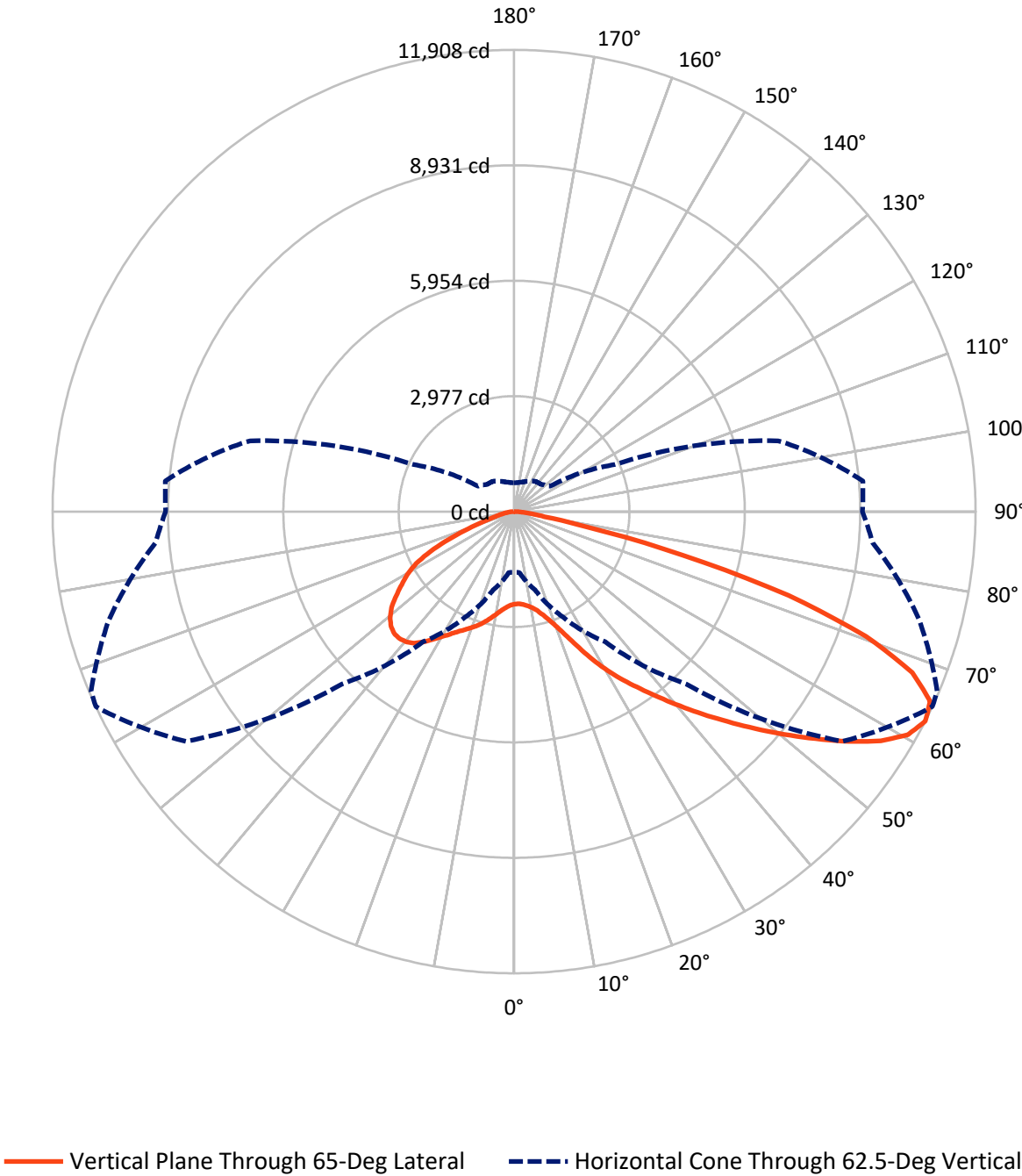
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Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
Type II - Short - N/A

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Luminous Intensity Polar Plot



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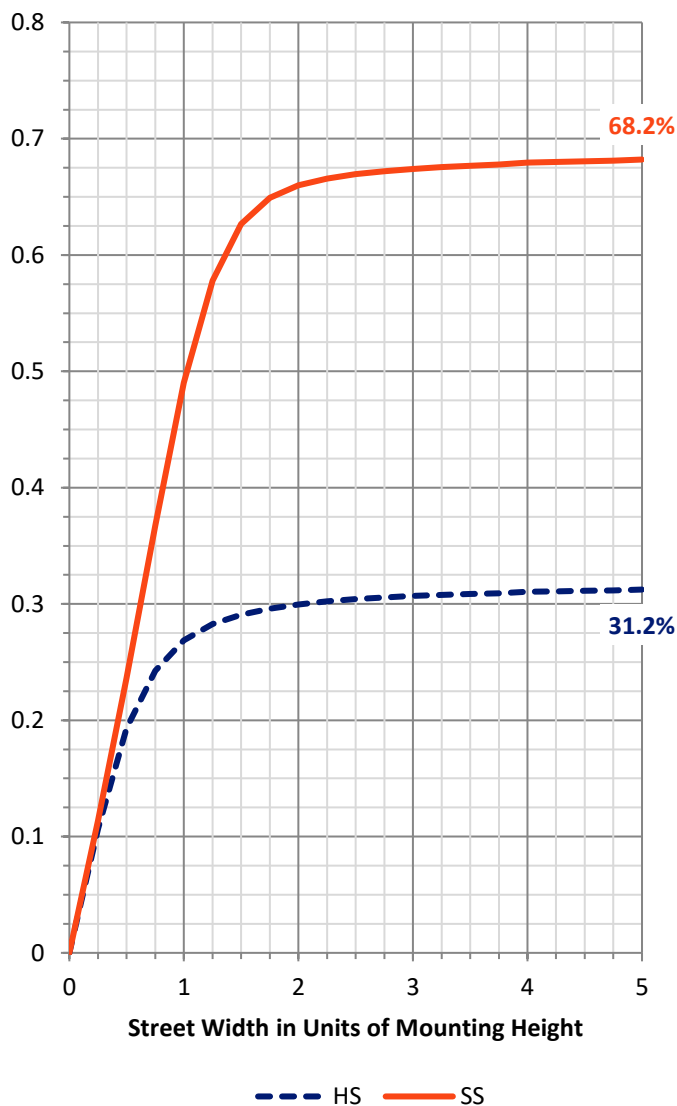
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6831.5   | 0.0    | 6831.5  |
|                    | % Fixture | 31.6     | 0.0    | 31.6    |
| <b>Street Side</b> | Lumens    | 14817.5  | 0.0    | 14817.5 |
|                    | % Fixture | 68.4     | 0.0    | 68.4    |
| <b>Total</b>       | Lumens    | 21649.0  | 0.0    | 21649.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 237.8   | 1.1       |
| 10°-20°   | 806.6   | 3.7       |
| 20°-30°   | 1635.4  | 7.6       |
| 30°-40°   | 2830.0  | 13.1      |
| 40°-50°   | 4282.6  | 19.8      |
| 50°-60°   | 5021.1  | 23.2      |
| 60°-70°   | 4209.6  | 19.4      |
| 70°-80°   | 2324.0  | 10.7      |
| 80°-90°   | 301.9   | 1.4       |
| 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°    | 21649.0 | 100.0     |
| 0°-180°   | 21649.0 | 100.0     |

**Coefficient of Utilization**



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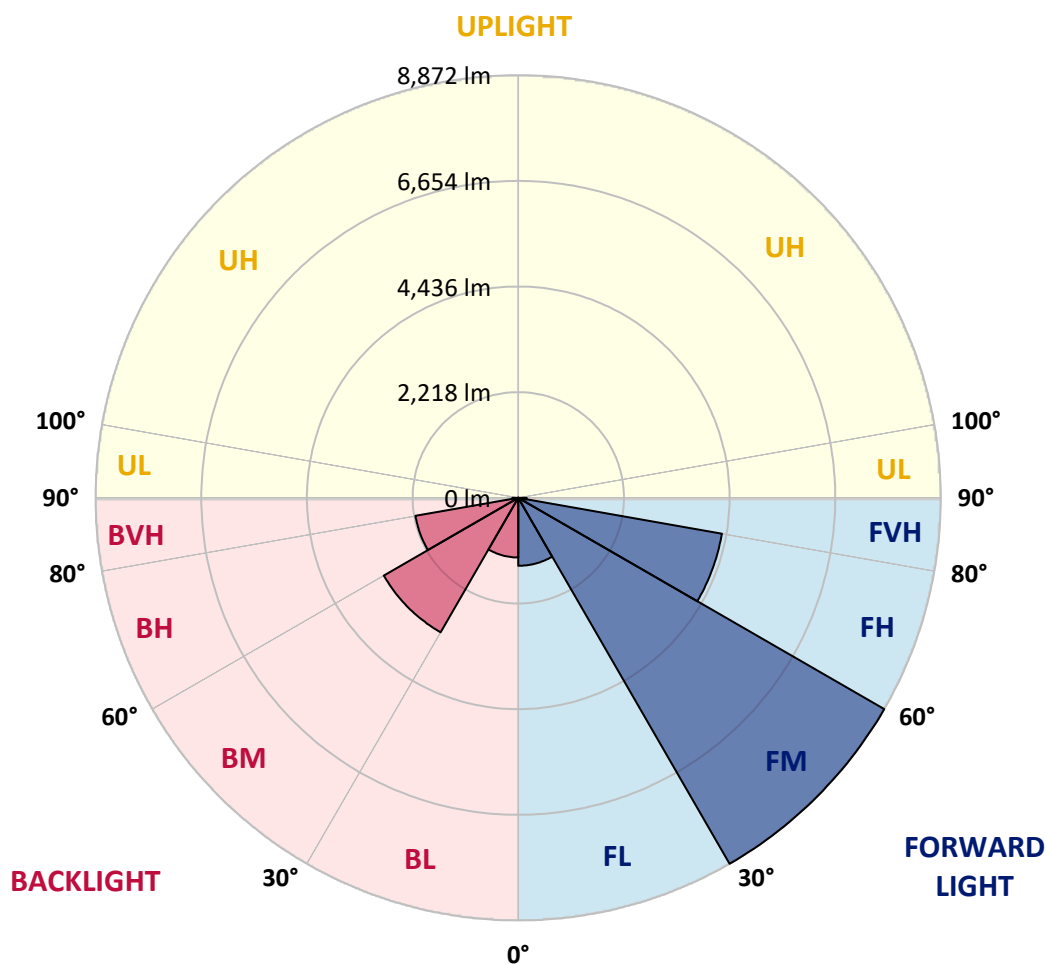
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1427.0 | 6.6       |                         |      |         |
| FM   | (30°-60°)   | 8872.5 | 41.0      |                         |      |         |
| FH   | (60°-80°)   | 4342.2 | 20.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 175.9  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1252.8 | 5.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3261.3 | 15.1      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2191.5 | 10.1      | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 125.9  | 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-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 67°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0°    | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6  | 2385.6  | 2385.6  | 2385.6  | 2385.6  | 2385.6 |
| 2.5°  | 2369.9 | 2363.1 | 2368.8 | 2368.8 | 2371.0 | 2369.9  | 2377.8  | 2380.0  | 2383.4  | 2390.1  | 2390.1 |
| 5°    | 2346.3 | 2345.2 | 2355.3 | 2364.3 | 2373.3 | 2381.2  | 2391.2  | 2405.9  | 2408.1  | 2415.9  | 2426.1 |
| 7.5°  | 2338.4 | 2331.7 | 2347.5 | 2358.6 | 2380.0 | 2399.1  | 2426.1  | 2450.8  | 2460.9  | 2464.2  | 2483.4 |
| 10°   | 2399.1 | 2387.8 | 2402.5 | 2409.3 | 2427.2 | 2446.3  | 2477.7  | 2517.0  | 2528.3  | 2541.8  | 2563.1 |
| 12.5° | 2502.4 | 2490.1 | 2511.5 | 2521.5 | 2538.4 | 2555.2  | 2576.5  | 2614.8  | 2620.4  | 2645.1  | 2665.3 |
| 15°   | 2644.0 | 2629.3 | 2642.9 | 2655.2 | 2683.2 | 2699.0  | 2720.4  | 2757.4  | 2757.4  | 2776.5  | 2791.1 |
| 17.5° | 2836.1 | 2816.9 | 2827.1 | 2831.6 | 2849.5 | 2873.1  | 2909.1  | 2941.6  | 2958.5  | 2951.7  | 2931.5 |
| 20°   | 3122.5 | 3098.9 | 3098.9 | 3076.3 | 3069.7 | 3088.7  | 3135.9  | 3180.9  | 3198.8  | 3164.0  | 3114.6 |
| 22.5° | 3552.6 | 3518.9 | 3499.9 | 3423.4 | 3393.2 | 3395.4  | 3442.6  | 3497.6  | 3512.2  | 3450.4  | 3339.2 |
| 25°   | 4099.6 | 4046.8 | 4021.0 | 3908.6 | 3840.2 | 3780.6  | 3817.7  | 3888.4  | 3908.6  | 3832.3  | 3652.6 |
| 27.5° | 4646.6 | 4649.9 | 4625.2 | 4490.4 | 4377.1 | 4268.1  | 4248.9  | 4323.1  | 4344.5  | 4258.0  | 4035.5 |
| 30°   | 5413.7 | 5334.0 | 5286.7 | 5125.1 | 4963.4 | 4810.5  | 4731.9  | 4762.3  | 4767.9  | 4664.6  | 4406.3 |
| 32.5° | 6075.3 | 6055.1 | 5953.9 | 5812.5 | 5604.7 | 5365.5  | 5234.0  | 5185.7  | 5176.8  | 5029.6  | 4723.0 |
| 35°   | 6829.0 | 6817.7 | 6711.0 | 6542.5 | 6317.9 | 5985.4  | 5748.4  | 5610.2  | 5599.1  | 5392.4  | 5036.3 |
| 37.5° | 7594.9 | 7594.9 | 7490.5 | 7306.3 | 7073.7 | 6658.2  | 6297.7  | 6078.7  | 6042.7  | 5773.1  | 5355.3 |
| 40°   | 8205.9 | 8168.8 | 8188.0 | 8110.4 | 7844.2 | 7402.9  | 6907.6  | 6589.7  | 6541.3  | 6218.0  | 5694.5 |
| 42.5° | 8553.0 | 8540.6 | 8655.2 | 8741.7 | 8632.8 | 8280.1  | 7579.2  | 7143.4  | 7076.0  | 6707.6  | 6085.4 |
| 45°   | 8630.5 | 8617.0 | 8821.5 | 9138.2 | 9290.9 | 9146.1  | 8309.3  | 7726.3  | 7644.3  | 7219.8  | 6504.3 |
| 47.5° | 8451.9 | 8425.0 | 8724.8 | 9224.7 | 9714.3 | 9969.4  | 9099.9  | 8358.7  | 8239.7  | 7718.5  | 6934.5 |
| 50°   | 7915.0 | 7889.2 | 8343.0 | 9006.8 | 9857.0 | 10528.7 | 9958.1  | 9029.2  | 8847.3  | 8253.1  | 7369.1 |
| 52.5° | 6748.1 | 6760.4 | 7471.3 | 8383.4 | 9669.4 | 10876.9 | 10697.1 | 9735.7  | 9516.7  | 8800.1  | 7776.9 |
| 55°   | 5256.5 | 5283.5 | 6157.3 | 7161.4 | 8919.1 | 10824.1 | 11201.4 | 10463.5 | 10245.6 | 9314.5  | 8198.1 |
| 57.5° | 3763.8 | 3882.8 | 4701.6 | 5695.6 | 7478.1 | 9987.3  | 11311.5 | 11155.4 | 10944.2 | 9876.1  | 8610.3 |
| 60°   | 2439.5 | 2460.9 | 3303.3 | 4305.1 | 5694.5 | 8500.2  | 11088.0 | 11679.9 | 11514.8 | 10449.0 | 8955.1 |
| 62.5° | 1563.4 | 1578.1 | 2091.3 | 3011.2 | 4098.5 | 6288.7  | 10335.5 | 11907.9 | 11857.4 | 10827.4 | 9286.4 |
| 65°   | 1149.0 | 1137.8 | 1405.1 | 1990.2 | 2760.7 | 3878.3  | 8874.2  | 11797.9 | 11897.8 | 11064.5 | 9560.5 |
| 67.5° | 959.2  | 943.5  | 1074.9 | 1378.1 | 2034.1 | 2202.5  | 6566.0  | 11082.4 | 11448.5 | 11037.5 | 9761.5 |
| 70°   | 873.8  | 860.4  | 940.1  | 1023.3 | 1587.0 | 1474.8  | 3310.0  | 9634.6  | 10198.4 | 10730.8 | 9729.0 |
| 72.5° | 740.2  | 716.6  | 825.5  | 908.7  | 1234.4 | 1131.1  | 1368.1  | 7400.6  | 8088.0  | 9748.1  | 9270.7 |
| 75°   | 573.9  | 558.2  | 651.5  | 799.7  | 927.7  | 882.8   | 864.9   | 4493.8  | 5244.1  | 7538.8  | 8110.4 |
| 77.5° | 454.9  | 433.6  | 519.0  | 623.4  | 834.6  | 666.0   | 630.1   | 1935.2  | 2678.7  | 4812.8  | 6068.5 |
| 80°   | 342.6  | 323.5  | 394.2  | 493.0  | 641.3  | 502.0   | 407.7   | 789.6   | 1009.7  | 2438.4  | 3051.6 |
| 82.5° | 243.7  | 226.8  | 275.2  | 361.6  | 431.3  | 450.4   | 250.5   | 442.5   | 497.5   | 940.1   | 681.7  |
| 85°   | 156.1  | 146.1  | 184.2  | 226.8  | 274.1  | 289.8   | 152.7   | 231.3   | 253.8   | 387.4   | 284.1  |
| 87.5° | 85.4   | 69.6   | 98.8   | 105.6  | 126.9  | 115.7   | 73.0    | 84.3    | 91.0    | 140.4   | 120.1  |
| 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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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2385.6 | 2385.6  | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6 | 2385.6 |
| 2.5°  | 2394.6 | 2398.0  | 2409.3 | 2412.5 | 2420.4 | 2430.6 | 2437.2 | 2444.0 | 2444.0 | 2450.8 | 2450.8 |
| 5°    | 2427.2 | 2435.1  | 2458.7 | 2471.0 | 2491.2 | 2511.5 | 2523.8 | 2538.4 | 2547.3 | 2551.8 | 2554.1 |
| 7.5°  | 2490.1 | 2502.4  | 2536.2 | 2557.5 | 2592.3 | 2620.4 | 2639.5 | 2659.7 | 2664.2 | 2676.6 | 2672.1 |
| 10°   | 2575.4 | 2590.1  | 2628.2 | 2668.7 | 2710.2 | 2745.1 | 2763.0 | 2777.6 | 2783.2 | 2785.4 | 2779.9 |
| 12.5° | 2673.2 | 2694.5  | 2743.9 | 2793.3 | 2837.1 | 2867.4 | 2871.9 | 2868.6 | 2852.9 | 2839.4 | 2839.4 |
| 15°   | 2793.3 | 2812.4  | 2867.4 | 2921.4 | 2964.1 | 2969.6 | 2941.6 | 2923.6 | 2904.5 | 2901.2 | 2901.2 |
| 17.5° | 2937.1 | 2947.2  | 2997.7 | 3050.5 | 3053.9 | 3034.8 | 2993.3 | 2976.4 | 2958.5 | 2946.1 | 2947.2 |
| 20°   | 3104.4 | 3101.1  | 3137.0 | 3159.5 | 3135.9 | 3077.5 | 3014.6 | 2986.5 | 2968.6 | 2953.9 | 2955.1 |
| 22.5° | 3304.4 | 3278.6  | 3274.1 | 3268.4 | 3205.6 | 3083.1 | 2997.7 | 2961.8 | 2933.8 | 2913.6 | 2920.2 |
| 25°   | 3595.3 | 3496.5  | 3427.9 | 3389.8 | 3248.2 | 3052.8 | 2943.8 | 2864.1 | 2811.3 | 2776.5 | 2789.9 |
| 27.5° | 3959.2 | 3793.0  | 3620.0 | 3526.8 | 3248.2 | 2991.1 | 2813.5 | 2684.4 | 2597.9 | 2562.0 | 2579.9 |
| 30°   | 4306.2 | 4132.2  | 3877.2 | 3691.8 | 3240.3 | 2889.9 | 2603.5 | 2423.8 | 2322.8 | 2286.8 | 2308.1 |
| 32.5° | 4602.8 | 4412.9  | 4150.1 | 3872.8 | 3221.3 | 2726.0 | 2342.9 | 2144.1 | 2046.4 | 2003.8 | 2025.1 |
| 35°   | 4878.0 | 4675.7  | 4424.2 | 4071.5 | 3170.7 | 2485.6 | 2056.6 | 1904.9 | 1796.0 | 1727.4 | 1749.9 |
| 37.5° | 5159.8 | 4919.5  | 4683.6 | 4251.2 | 3079.7 | 2204.8 | 1836.4 | 1707.2 | 1579.2 | 1487.1 | 1511.8 |
| 40°   | 5466.5 | 5179.0  | 4961.1 | 4357.9 | 2930.4 | 1937.5 | 1665.6 | 1547.7 | 1411.8 | 1314.2 | 1333.2 |
| 42.5° | 5824.8 | 5490.1  | 5269.9 | 4412.9 | 2726.0 | 1747.6 | 1554.5 | 1438.8 | 1310.8 | 1231.0 | 1246.7 |
| 45°   | 6198.8 | 5832.7  | 5551.9 | 4411.8 | 2497.9 | 1659.0 | 1518.5 | 1403.9 | 1262.5 | 1179.4 | 1192.8 |
| 47.5° | 6590.9 | 6191.0  | 5795.6 | 4340.0 | 2300.3 | 1671.3 | 1498.3 | 1328.7 | 1172.6 | 1091.7 | 1103.0 |
| 50°   | 6983.9 | 6583.0  | 6031.5 | 4205.2 | 2216.0 | 1644.3 | 1423.1 | 1223.1 | 1038.9 | 966.0  | 970.5  |
| 52.5° | 7373.6 | 6999.6  | 6234.8 | 4013.1 | 2130.7 | 1544.4 | 1326.5 | 1086.1 | 983.9  | 933.4  | 933.4  |
| 55°   | 7765.6 | 7411.9  | 6456.1 | 3733.5 | 1917.3 | 1427.5 | 1164.7 | 1034.4 | 940.1  | 894.0  | 889.6  |
| 57.5° | 8158.8 | 7888.1  | 6666.1 | 3453.7 | 1648.8 | 1283.8 | 1076.0 | 971.6  | 896.3  | 857.0  | 850.2  |
| 60°   | 8567.6 | 8432.8  | 6882.9 | 3196.6 | 1383.7 | 1099.6 | 1010.9 | 921.0  | 844.6  | 800.8  | 797.4  |
| 62.5° | 8988.7 | 9032.6  | 7052.4 | 2865.2 | 1140.0 | 987.3  | 952.4  | 860.4  | 786.2  | 744.7  | 743.5  |
| 65°   | 9413.4 | 9611.0  | 7163.6 | 2405.9 | 924.3  | 880.6  | 889.6  | 794.1  | 718.8  | 682.9  | 681.7  |
| 67.5° | 9733.5 | 10027.7 | 7132.2 | 1820.7 | 758.2  | 779.5  | 811.0  | 724.5  | 653.6  | 625.7  | 626.7  |
| 70°   | 9769.4 | 9978.3  | 6822.2 | 1246.7 | 634.6  | 680.6  | 723.3  | 655.9  | 582.9  | 562.7  | 563.9  |
| 72.5° | 9290.9 | 9304.4  | 5958.4 | 814.3  | 536.9  | 597.6  | 631.2  | 586.3  | 515.6  | 495.3  | 494.2  |
| 75°   | 8036.3 | 7694.9  | 4374.8 | 536.9  | 449.3  | 513.3  | 544.8  | 513.3  | 444.7  | 449.3  | 433.6  |
| 77.5° | 6088.7 | 5449.6  | 2656.3 | 381.9  | 375.2  | 431.3  | 474.0  | 451.5  | 393.1  | 441.4  | 388.6  |
| 80°   | 3137.0 | 2948.3  | 1185.0 | 285.3  | 296.5  | 344.8  | 389.7  | 360.5  | 311.1  | 296.5  | 270.7  |
| 82.5° | 718.8  | 835.7   | 467.2  | 204.4  | 214.5  | 248.3  | 297.7  | 270.7  | 223.6  | 188.7  | 186.4  |
| 85°   | 251.6  | 275.2   | 206.6  | 128.0  | 125.8  | 155.0  | 202.1  | 180.8  | 151.6  | 121.3  | 128.0  |
| 87.5° | 79.7   | 104.4   | 77.5   | 51.7   | 53.9   | 69.6   | 93.2   | 85.4   | 70.7   | 46.0   | 48.3   |
| 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)