

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: P969996

Luminaire Tested: **NAV-SB6A-830-U-T2U**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P969996  
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-SB6A-830-U-T2U  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 25389.3 lumens  
Efficiency: N/A  
Efficacy: 148.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - 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

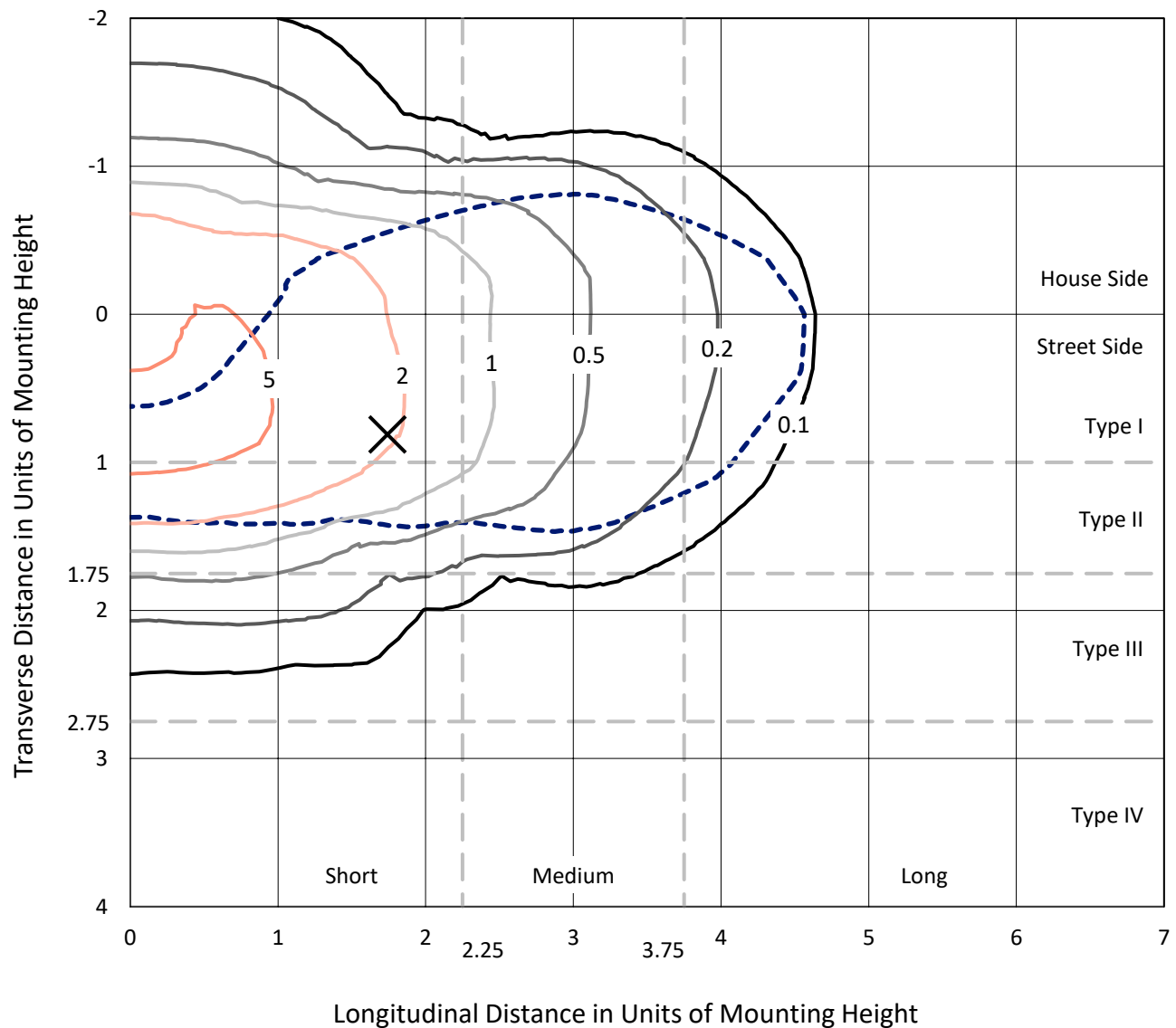


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## Iso-Footcandle Lines of Horizontal Illumination

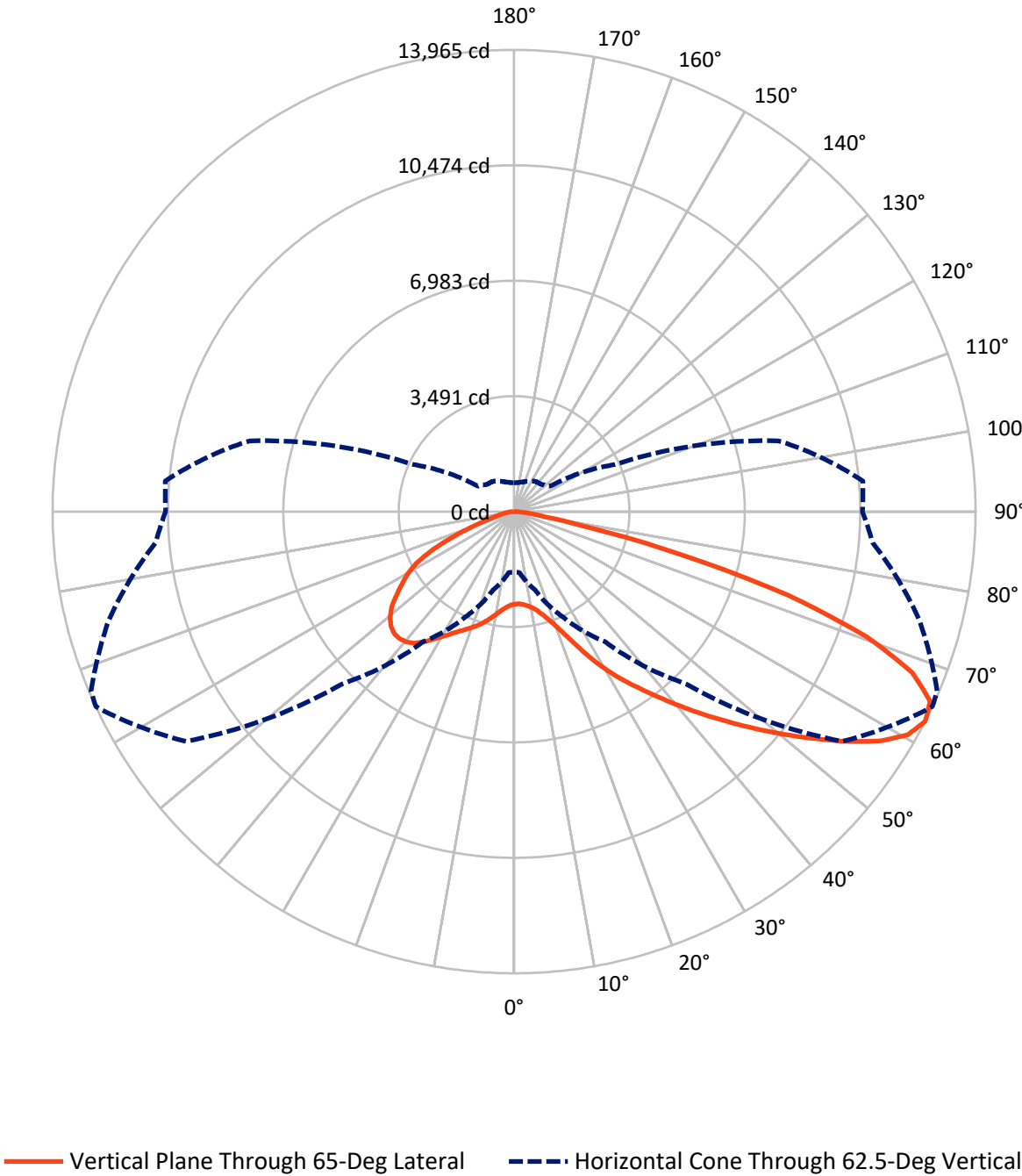
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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    | 8011.7   | 0.0    | 8011.7  |
|                    | % Fixture | 31.6     | 0.0    | 31.6    |
| <b>Street Side</b> | Lumens    | 17377.5  | 0.0    | 17377.5 |
|                    | % Fixture | 68.4     | 0.0    | 68.4    |
| <b>Total</b>       | Lumens    | 25389.3  | 0.0    | 25389.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 278.9   | 1.1       |
| 10°-20°   | 945.9   | 3.7       |
| 20°-30°   | 1917.9  | 7.6       |
| 30°-40°   | 3318.9  | 13.1      |
| 40°-50°   | 5022.5  | 19.8      |
| 50°-60°   | 5888.6  | 23.2      |
| 60°-70°   | 4936.9  | 19.4      |
| 70°-80°   | 2725.6  | 10.7      |
| 80°-90°   | 354.0   | 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°    | 25389.3 | 100.0     |
| 0°-180°   | 25389.3 | 100.0     |

**Coefficient of Utilization**



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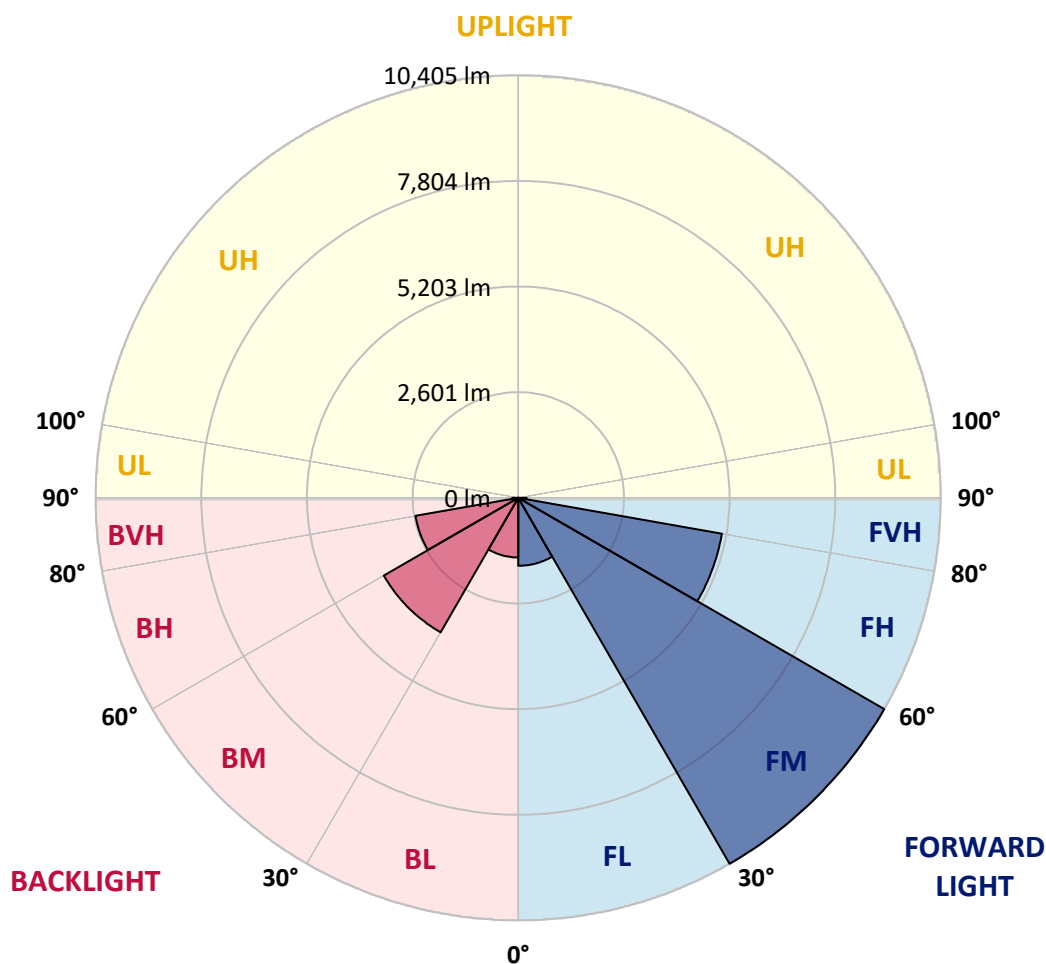
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1673.5  | 6.6       |                         |      |         |
| FM   | (30°-60°)   | 10405.3 | 41.0      |                         |      |         |
| FH   | (60°-80°)   | 5092.3  | 20.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 206.3   | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1469.3  | 5.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3824.7  | 15.1      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2570.1  | 10.1      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 147.7   | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  | 2797.7  |
| 2.5°  | 2779.4  | 2771.4  | 2778.1  | 2778.1  | 2780.6  | 2779.4  | 2788.6  | 2791.2  | 2795.2  | 2803.1  | 2803.1  |
| 5°    | 2751.7  | 2750.4  | 2762.2  | 2772.7  | 2783.3  | 2792.5  | 2804.4  | 2821.5  | 2824.1  | 2833.3  | 2845.2  |
| 7.5°  | 2742.5  | 2734.6  | 2753.0  | 2766.2  | 2791.2  | 2813.6  | 2845.2  | 2874.2  | 2886.0  | 2890.0  | 2912.4  |
| 10°   | 2813.6  | 2800.4  | 2817.5  | 2825.4  | 2846.5  | 2868.9  | 2905.8  | 2951.9  | 2965.1  | 2980.9  | 3005.9  |
| 12.5° | 2934.8  | 2920.3  | 2945.3  | 2957.1  | 2976.9  | 2996.7  | 3021.7  | 3066.5  | 3073.1  | 3102.1  | 3125.7  |
| 15°   | 3100.7  | 3083.6  | 3099.4  | 3114.0  | 3146.9  | 3165.3  | 3190.3  | 3233.8  | 3233.8  | 3256.2  | 3273.3  |
| 17.5° | 3326.0  | 3303.6  | 3315.5  | 3320.7  | 3341.8  | 3369.5  | 3411.6  | 3449.8  | 3469.5  | 3461.6  | 3438.0  |
| 20°   | 3661.9  | 3634.2  | 3634.2  | 3607.9  | 3600.0  | 3622.4  | 3677.7  | 3730.4  | 3751.5  | 3710.6  | 3652.7  |
| 22.5° | 4166.4  | 4126.9  | 4104.5  | 4014.9  | 3979.4  | 3981.9  | 4037.3  | 4101.8  | 4119.0  | 4046.5  | 3916.1  |
| 25°   | 4807.9  | 4746.0  | 4715.6  | 4583.9  | 4503.5  | 4433.7  | 4477.2  | 4560.2  | 4583.9  | 4494.4  | 4283.6  |
| 27.5° | 5449.3  | 5453.3  | 5424.3  | 5266.2  | 5133.2  | 5005.5  | 4983.0  | 5070.0  | 5095.1  | 4993.6  | 4732.8  |
| 30°   | 6349.1  | 6255.5  | 6200.2  | 6010.5  | 5820.8  | 5641.7  | 5549.5  | 5585.0  | 5591.6  | 5470.4  | 5167.4  |
| 32.5° | 7124.9  | 7101.2  | 6982.6  | 6816.7  | 6572.9  | 6292.4  | 6138.3  | 6081.6  | 6071.1  | 5898.6  | 5538.9  |
| 35°   | 8008.7  | 7995.5  | 7870.5  | 7672.8  | 7409.4  | 7019.5  | 6741.5  | 6579.6  | 6566.4  | 6324.0  | 5906.5  |
| 37.5° | 8907.0  | 8907.0  | 8784.6  | 8568.6  | 8295.8  | 7808.6  | 7385.6  | 7128.8  | 7086.6  | 6770.5  | 6280.5  |
| 40°   | 9623.6  | 9580.2  | 9602.6  | 9511.7  | 9199.5  | 8681.9  | 8100.9  | 7728.2  | 7671.5  | 7292.2  | 6678.3  |
| 42.5° | 10030.6 | 10016.2 | 10150.6 | 10251.9 | 10124.2 | 9710.5  | 8888.6  | 8377.5  | 8298.5  | 7866.5  | 7136.8  |
| 45°   | 10121.6 | 10105.8 | 10345.5 | 10717.0 | 10896.1 | 10726.1 | 9744.8  | 9061.2  | 8965.1  | 8467.1  | 7628.0  |
| 47.5° | 9912.2  | 9880.5  | 10232.2 | 10818.4 | 11392.7 | 11691.7 | 10672.2 | 9802.8  | 9663.2  | 9052.0  | 8132.6  |
| 50°   | 9282.5  | 9252.2  | 9784.3  | 10562.8 | 11559.9 | 12347.7 | 11678.5 | 10589.2 | 10375.8 | 9679.0  | 8642.3  |
| 52.5° | 7913.9  | 7928.4  | 8762.2  | 9831.8  | 11340.0 | 12756.0 | 12545.3 | 11417.7 | 11160.8 | 10320.4 | 9120.4  |
| 55°   | 6164.7  | 6196.2  | 7221.0  | 8398.6  | 10460.1 | 12694.1 | 13136.7 | 12271.3 | 12015.8 | 10923.7 | 9614.4  |
| 57.5° | 4414.1  | 4553.7  | 5513.9  | 6679.6  | 8770.1  | 11712.8 | 13265.8 | 13082.7 | 12835.0 | 11582.4 | 10097.9 |
| 60°   | 2861.0  | 2886.0  | 3874.0  | 5048.9  | 6678.3  | 9968.7  | 13003.7 | 13697.8 | 13504.2 | 12254.2 | 10502.3 |
| 62.5° | 1833.6  | 1850.7  | 2452.7  | 3531.4  | 4806.5  | 7375.2  | 12121.1 | 13965.2 | 13906.0 | 12698.0 | 10890.8 |
| 65°   | 1347.6  | 1334.3  | 1647.9  | 2334.1  | 3237.8  | 4548.3  | 10407.4 | 13836.2 | 13953.3 | 12976.0 | 11212.2 |
| 67.5° | 1124.9  | 1106.5  | 1260.5  | 1616.2  | 2385.5  | 2583.1  | 7700.5  | 12997.1 | 13426.5 | 12944.4 | 11448.0 |
| 70°   | 1024.8  | 1009.0  | 1102.5  | 1200.0  | 1861.2  | 1729.5  | 3881.9  | 11299.2 | 11960.4 | 12584.7 | 11409.8 |
| 72.5° | 868.1   | 840.4   | 968.1   | 1065.6  | 1447.6  | 1326.5  | 1604.3  | 8679.2  | 9485.3  | 11432.2 | 10872.4 |
| 75°   | 673.1   | 654.7   | 764.0   | 937.9   | 1088.0  | 1035.4  | 1014.2  | 5270.2  | 6150.1  | 8841.2  | 9511.7  |
| 77.5° | 533.5   | 508.4   | 608.5   | 731.0   | 978.7   | 781.2   | 738.9   | 2269.6  | 3141.6  | 5644.3  | 7117.0  |
| 80°   | 401.8   | 379.4   | 462.4   | 578.3   | 752.1   | 588.8   | 478.2   | 926.0   | 1184.2  | 2859.6  | 3578.9  |
| 82.5° | 285.9   | 266.1   | 322.7   | 424.1   | 505.8   | 528.2   | 293.8   | 519.0   | 583.5   | 1102.5  | 799.6   |
| 85°   | 183.1   | 171.3   | 216.1   | 266.1   | 321.4   | 339.9   | 179.2   | 271.3   | 297.7   | 454.5   | 333.2   |
| 87.5° | 100.1   | 81.7    | 115.9   | 123.8   | 148.8   | 135.7   | 85.6    | 98.8    | 106.7   | 164.6   | 140.9   |
| 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°    | 2797.7  | 2797.7  | 2797.7 | 2797.7 | 2797.7 | 2797.7 | 2797.7 | 2797.7 | 2797.7 | 2797.7 | 2797.7 |
| 2.5°  | 2808.3  | 2812.3  | 2825.4 | 2829.4 | 2838.6 | 2850.5 | 2858.4 | 2866.3 | 2866.3 | 2874.2 | 2874.2 |
| 5°    | 2846.5  | 2855.8  | 2883.4 | 2897.9 | 2921.6 | 2945.3 | 2959.8 | 2976.9 | 2987.5 | 2992.7 | 2995.4 |
| 7.5°  | 2920.3  | 2934.8  | 2974.2 | 2999.4 | 3040.1 | 3073.1 | 3095.5 | 3119.2 | 3124.5 | 3139.0 | 3133.6 |
| 10°   | 3020.4  | 3037.5  | 3082.3 | 3129.7 | 3178.4 | 3219.3 | 3240.3 | 3257.4 | 3264.1 | 3266.7 | 3260.1 |
| 12.5° | 3135.0  | 3160.0  | 3218.0 | 3275.9 | 3327.4 | 3362.9 | 3368.2 | 3364.2 | 3345.7 | 3329.9 | 3329.9 |
| 15°   | 3275.9  | 3298.3  | 3362.9 | 3426.1 | 3476.2 | 3482.7 | 3449.8 | 3428.7 | 3406.4 | 3402.4 | 3402.4 |
| 17.5° | 3444.5  | 3456.4  | 3515.6 | 3577.6 | 3581.6 | 3559.1 | 3510.4 | 3490.6 | 3469.5 | 3455.1 | 3456.4 |
| 20°   | 3640.8  | 3636.9  | 3679.0 | 3705.4 | 3677.7 | 3609.2 | 3535.4 | 3502.5 | 3481.4 | 3464.3 | 3465.6 |
| 22.5° | 3875.3  | 3845.0  | 3839.8 | 3833.1 | 3759.4 | 3615.8 | 3515.6 | 3473.5 | 3440.6 | 3416.8 | 3424.8 |
| 25°   | 4216.4  | 4100.5  | 4020.2 | 3975.4 | 3809.4 | 3580.2 | 3452.4 | 3358.9 | 3297.0 | 3256.2 | 3272.0 |
| 27.5° | 4643.2  | 4448.3  | 4245.4 | 4136.1 | 3809.4 | 3507.8 | 3299.7 | 3148.2 | 3046.7 | 3004.6 | 3025.7 |
| 30°   | 5050.3  | 4846.1  | 4547.1 | 4329.7 | 3800.2 | 3389.3 | 3053.4 | 2842.5 | 2724.0 | 2681.9 | 2706.9 |
| 32.5° | 5398.0  | 5175.3  | 4867.1 | 4541.8 | 3777.8 | 3196.9 | 2747.7 | 2514.6 | 2399.9 | 2349.9 | 2374.9 |
| 35°   | 5720.7  | 5483.6  | 5188.5 | 4775.0 | 3718.5 | 2915.0 | 2411.8 | 2234.0 | 2106.3 | 2025.9 | 2052.3 |
| 37.5° | 6051.3  | 5769.4  | 5492.9 | 4985.7 | 3611.8 | 2585.7 | 2153.6 | 2002.1 | 1852.0 | 1744.0 | 1772.9 |
| 40°   | 6411.0  | 6073.7  | 5818.2 | 5110.9 | 3436.6 | 2272.2 | 1953.4 | 1815.2 | 1655.8 | 1541.2 | 1563.5 |
| 42.5° | 6831.1  | 6438.6  | 6180.4 | 5175.3 | 3196.9 | 2049.6 | 1823.1 | 1687.4 | 1537.2 | 1443.7 | 1462.2 |
| 45°   | 7269.8  | 6840.3  | 6511.0 | 5174.1 | 2929.6 | 1945.6 | 1780.9 | 1646.6 | 1480.5 | 1383.1 | 1398.9 |
| 47.5° | 7729.5  | 7260.6  | 6796.9 | 5089.7 | 2697.7 | 1960.0 | 1757.2 | 1558.3 | 1375.1 | 1280.3 | 1293.6 |
| 50°   | 8190.5  | 7720.3  | 7073.5 | 4931.7 | 2598.9 | 1928.4 | 1668.9 | 1434.5 | 1218.4 | 1132.8 | 1138.1 |
| 52.5° | 8647.6  | 8208.9  | 7311.9 | 4706.5 | 2498.7 | 1811.2 | 1555.6 | 1273.8 | 1153.8 | 1094.6 | 1094.6 |
| 55°   | 9107.3  | 8692.4  | 7571.4 | 4378.5 | 2248.5 | 1674.2 | 1365.9 | 1213.2 | 1102.5 | 1048.5 | 1043.2 |
| 57.5° | 9568.3  | 9250.8  | 7817.8 | 4050.5 | 1933.7 | 1505.6 | 1261.9 | 1139.4 | 1051.1 | 1005.0 | 997.1  |
| 60°   | 10047.8 | 9889.7  | 8072.0 | 3748.8 | 1622.8 | 1289.6 | 1185.5 | 1080.1 | 990.6  | 939.2  | 935.2  |
| 62.5° | 10541.7 | 10593.2 | 8270.8 | 3360.3 | 1337.0 | 1157.8 | 1117.0 | 1009.0 | 922.1  | 873.3  | 872.0  |
| 65°   | 11039.7 | 11271.5 | 8401.3 | 2821.5 | 1084.0 | 1032.7 | 1043.2 | 931.3  | 843.1  | 800.8  | 799.6  |
| 67.5° | 11415.1 | 11760.1 | 8364.4 | 2135.2 | 889.1  | 914.2  | 951.0  | 849.6  | 766.6  | 733.7  | 735.0  |
| 70°   | 11457.2 | 11702.2 | 8000.8 | 1462.2 | 744.3  | 798.3  | 848.3  | 769.3  | 683.7  | 659.9  | 661.2  |
| 72.5° | 10896.1 | 10911.8 | 6987.8 | 955.0  | 629.7  | 700.8  | 740.3  | 687.6  | 604.6  | 580.9  | 579.5  |
| 75°   | 9424.8  | 9024.3  | 5130.6 | 629.7  | 526.8  | 602.0  | 638.9  | 602.0  | 521.6  | 526.8  | 508.4  |
| 77.5° | 7140.7  | 6391.2  | 3115.3 | 447.8  | 439.9  | 505.8  | 555.9  | 529.5  | 461.0  | 517.6  | 455.7  |
| 80°   | 3679.0  | 3457.7  | 1389.7 | 334.6  | 347.8  | 404.4  | 457.0  | 422.8  | 364.9  | 347.8  | 317.4  |
| 82.5° | 843.1   | 980.0   | 548.0  | 239.7  | 251.6  | 291.1  | 349.1  | 317.4  | 262.1  | 221.3  | 218.6  |
| 85°   | 295.1   | 322.7   | 242.4  | 150.2  | 147.5  | 181.7  | 237.1  | 212.1  | 177.8  | 142.3  | 150.2  |
| 87.5° | 93.5    | 122.5   | 90.9   | 60.6   | 63.2   | 81.7   | 109.4  | 100.1  | 83.0   | 54.0   | 56.7   |
| 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)