

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: P969824

Luminaire Tested: **NAV-SB6A-735-U-AFL**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969824  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6A-735-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

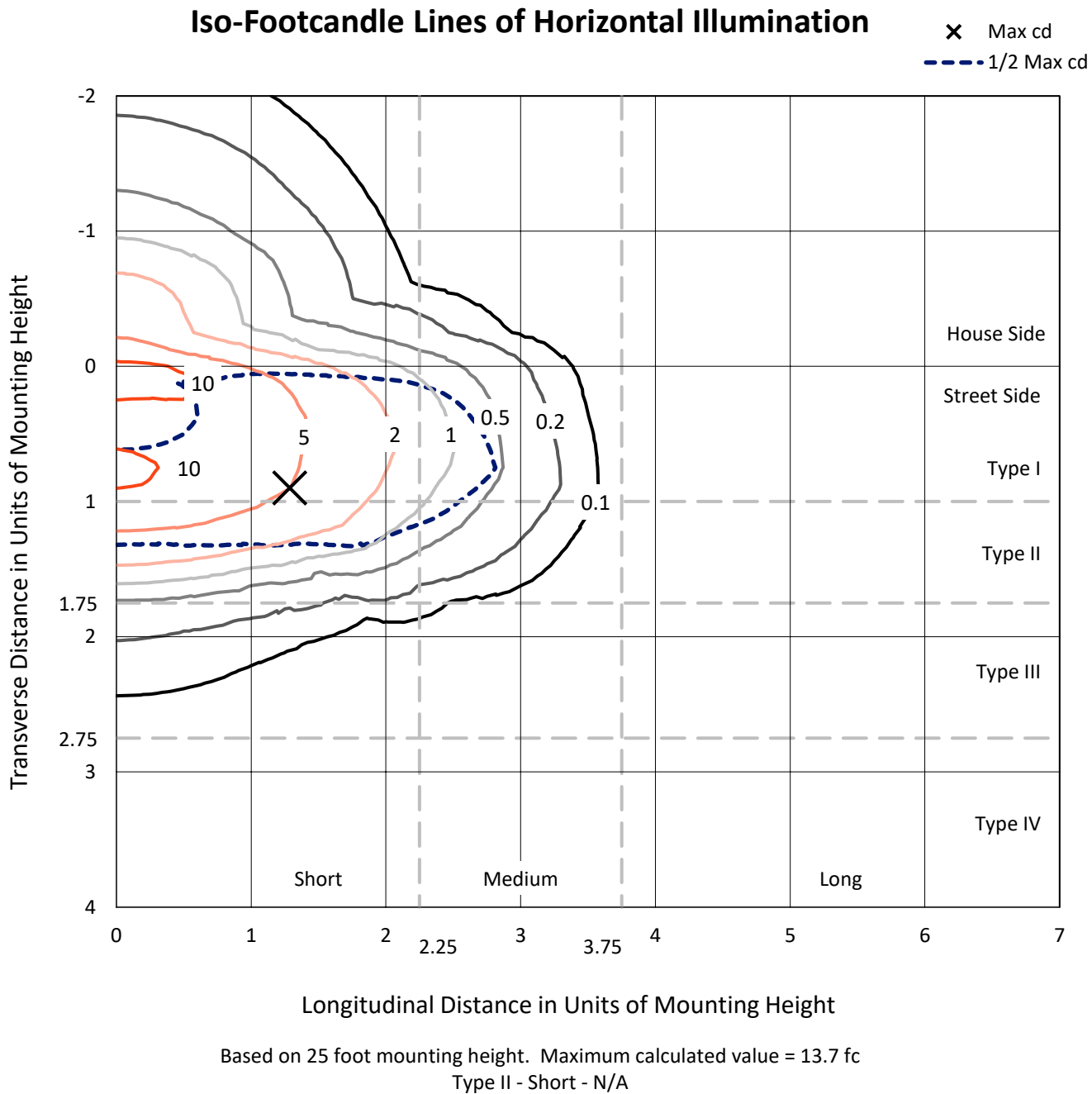
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28356.6 lumens  
Efficiency: N/A  
Efficacy: 165.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

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



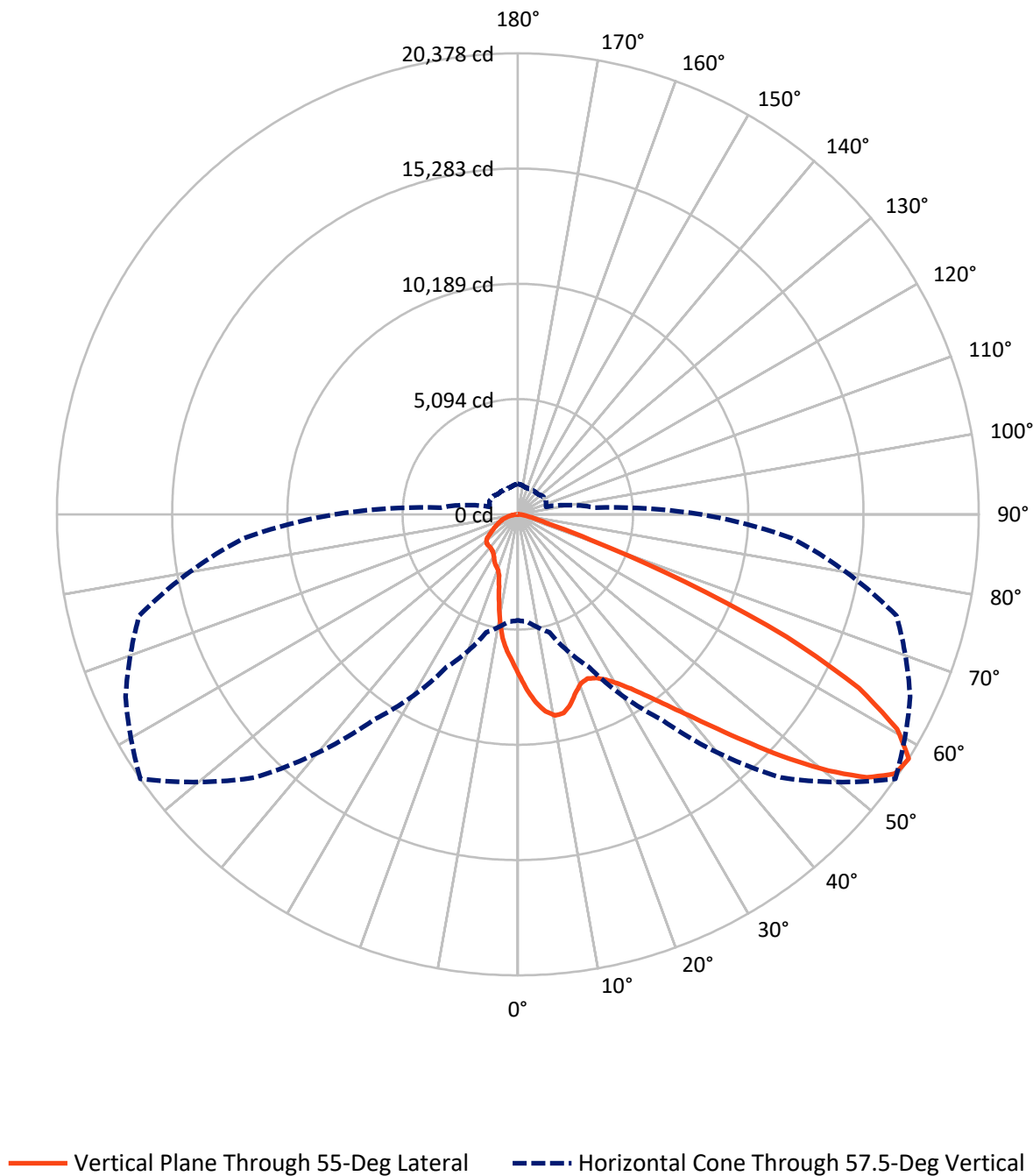
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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5131.0   | 0.0    | 5131.0  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 23225.6  | 0.0    | 23225.6 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 28356.6  | 0.0    | 28356.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 659.3   | 2.3       |
| 10°-20°   | 1664.2  | 5.9       |
| 20°-30°   | 2655.5  | 9.4       |
| 30°-40°   | 4204.4  | 14.8      |
| 40°-50°   | 6435.2  | 22.7      |
| 50°-60°   | 6892.7  | 24.3      |
| 60°-70°   | 4336.2  | 15.3      |
| 70°-80°   | 1282.3  | 4.5       |
| 80°-90°   | 226.7   | 0.8       |
| 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°    | 28356.6 | 100.0     |
| 0°-180°   | 28356.6 | 100.0     |

**Coefficient of Utilization**



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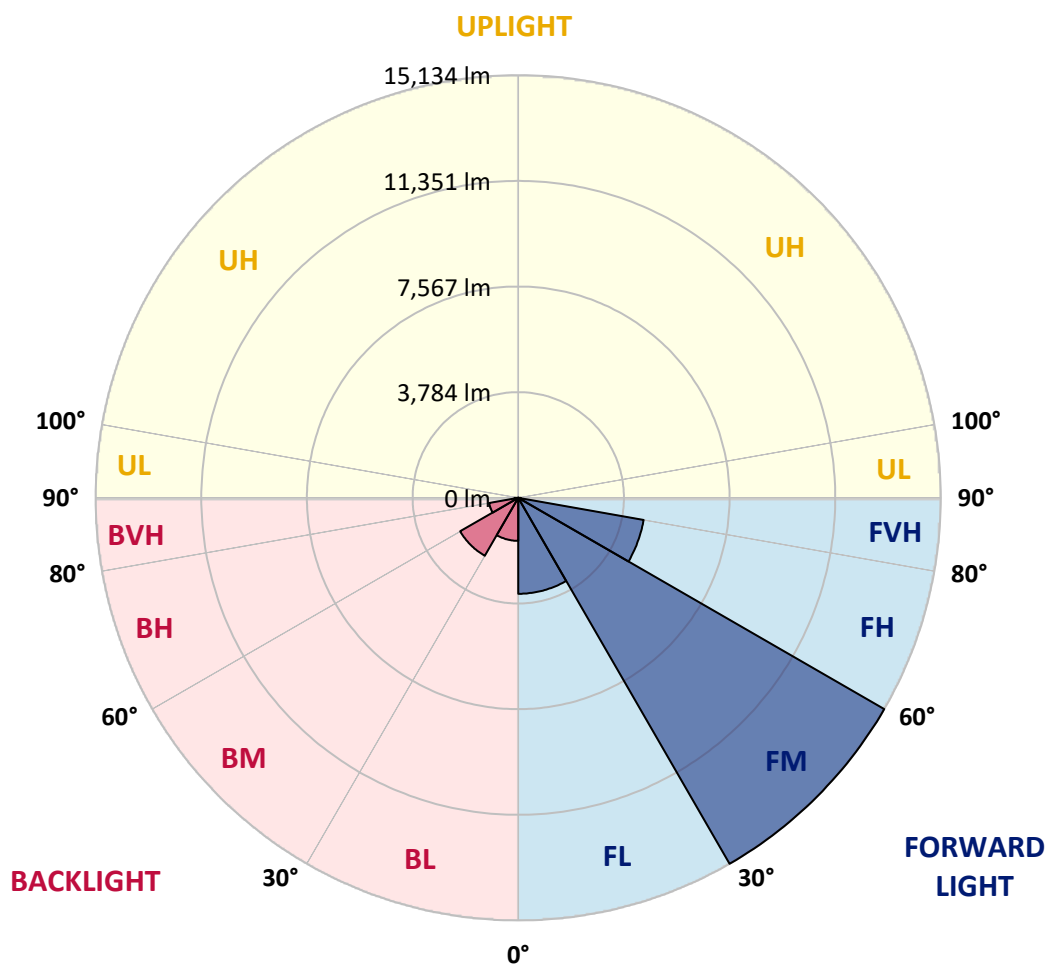
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3436.8  | 12.1      |                         |      |         |
| FM   | (30°-60°)   | 15134.1 | 53.4      |                         |      |         |
| FH   | (60°-80°)   | 4558.9  | 16.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 95.8    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1542.2  | 5.4       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2398.2  | 8.5       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1059.7  | 3.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 130.9   | 0.5       |                         |      | 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°     | 75°     | 85°     | 90°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3  | 7105.3 |
| 2.5°  | 8151.9  | 8146.1  | 8178.3  | 8068.4  | 7993.6  | 7892.4  | 7759.0  | 7589.0  | 7405.7  | 7212.3  | 7128.7 |
| 5°    | 8886.3  | 8835.0  | 8868.7  | 8786.6  | 8704.5  | 8552.1  | 8354.2  | 8077.1  | 7738.5  | 7352.9  | 7147.7 |
| 7.5°  | 8770.5  | 8735.4  | 8821.9  | 8895.2  | 8956.7  | 8937.6  | 8792.6  | 8502.3  | 8065.4  | 7505.5  | 7207.9 |
| 10°   | 7836.7  | 7797.2  | 7918.8  | 8172.4  | 8544.8  | 8868.7  | 9044.6  | 8864.3  | 8399.7  | 7672.5  | 7266.5 |
| 12.5° | 7012.9  | 6993.9  | 7074.4  | 7279.7  | 7693.0  | 8314.6  | 9012.4  | 9180.9  | 8747.0  | 7870.5  | 7345.7 |
| 15°   | 6661.1  | 6637.6  | 6688.9  | 6793.0  | 7056.9  | 7635.9  | 8719.2  | 9397.9  | 9088.6  | 8099.1  | 7471.7 |
| 17.5° | 6583.4  | 6557.0  | 6579.0  | 6633.2  | 6803.2  | 7244.5  | 8276.5  | 9504.9  | 9444.9  | 8354.2  | 7577.3 |
| 20°   | 6727.1  | 6705.0  | 6708.0  | 6705.0  | 6823.8  | 7174.2  | 7968.7  | 9463.9  | 9755.6  | 8588.8  | 7679.9 |
| 22.5° | 7074.4  | 7037.9  | 7039.3  | 6961.6  | 7026.1  | 7297.3  | 7888.1  | 9353.9  | 10032.7 | 8794.0  | 7757.6 |
| 25°   | 7640.4  | 7574.3  | 7587.6  | 7389.6  | 7372.0  | 7572.9  | 8014.1  | 9269.0  | 10308.2 | 8958.2  | 7772.3 |
| 27.5° | 8414.3  | 8339.5  | 8299.9  | 8005.4  | 7864.6  | 7964.2  | 8270.6  | 9298.3  | 10569.2 | 9100.4  | 7735.6 |
| 30°   | 9381.8  | 9290.9  | 9210.3  | 8792.6  | 8537.4  | 8500.8  | 8669.3  | 9491.7  | 10877.0 | 9249.9  | 7672.5 |
| 32.5° | 10567.7 | 10462.2 | 10315.6 | 9761.5  | 9402.3  | 9210.3  | 9185.3  | 9836.2  | 11237.7 | 9440.5  | 7640.4 |
| 35°   | 11979.4 | 11841.6 | 11633.4 | 10916.6 | 10462.2 | 10069.3 | 9865.5  | 10333.1 | 11731.6 | 9727.8  | 7676.9 |
| 37.5° | 13433.5 | 13278.2 | 13087.6 | 12234.5 | 11676.0 | 11097.0 | 10695.3 | 11007.5 | 12389.9 | 10117.7 | 7773.7 |
| 40°   | 14774.9 | 14600.4 | 14423.1 | 13663.8 | 13064.1 | 12366.4 | 11711.1 | 11860.7 | 13194.6 | 10583.8 | 7937.9 |
| 42.5° | 15566.5 | 15437.4 | 15370.1 | 14959.6 | 14496.4 | 13788.3 | 12974.8 | 12872.2 | 14099.1 | 11120.3 | 8125.5 |
| 45°   | 15531.3 | 15478.5 | 15686.7 | 15856.7 | 15746.8 | 15353.9 | 14455.3 | 13990.6 | 15006.5 | 11585.1 | 8298.5 |
| 47.5° | 14701.6 | 14736.7 | 15201.5 | 16157.2 | 16577.9 | 16783.1 | 16141.1 | 15088.6 | 15795.1 | 11932.4 | 8376.2 |
| 50°   | 12444.1 | 12473.4 | 13549.4 | 15610.4 | 16792.0 | 17948.6 | 17813.7 | 16160.1 | 16406.5 | 12145.0 | 8358.6 |
| 52.5° | 10657.1 | 10676.2 | 11138.0 | 13989.1 | 16085.4 | 18535.0 | 19320.6 | 17170.2 | 16853.6 | 12203.6 | 8260.4 |
| 55°   | 8027.3  | 8093.3  | 8610.7  | 10975.3 | 14247.2 | 18070.2 | 20238.3 | 18211.0 | 17136.5 | 12209.5 | 8157.8 |
| 57.5° | 4689.5  | 4761.2  | 5400.4  | 7449.7  | 11073.5 | 16450.4 | 20377.6 | 19134.5 | 17328.4 | 12162.6 | 8096.2 |
| 60°   | 2297.0  | 2327.9  | 2606.4  | 3915.4  | 6828.2  | 13329.5 | 19257.6 | 19581.6 | 17435.5 | 12137.7 | 8093.3 |
| 62.5° | 1548.0  | 1543.6  | 1555.3  | 1932.0  | 3364.3  | 8563.9  | 16923.9 | 18798.8 | 17378.4 | 12042.4 | 8064.0 |
| 65°   | 1331.1  | 1314.9  | 1270.9  | 1356.0  | 1743.0  | 3916.9  | 13075.9 | 16462.1 | 16942.9 | 11803.5 | 7863.1 |
| 67.5° | 1150.8  | 1152.2  | 1153.6  | 1127.3  | 1244.6  | 1807.5  | 7990.7  | 12967.4 | 15380.3 | 10671.8 | 7089.1 |
| 70°   | 952.8   | 966.1   | 971.9   | 971.9   | 1014.4  | 1185.9  | 3411.2  | 8887.8  | 12131.8 | 8367.4  | 5709.7 |
| 72.5° | 867.9   | 840.0   | 842.9   | 828.2   | 828.2   | 903.0   | 1373.6  | 5038.3  | 7643.2  | 4707.0  | 3484.5 |
| 75°   | 708.1   | 725.6   | 728.6   | 718.3   | 684.6   | 689.0   | 815.1   | 2113.9  | 3270.5  | 1952.6  | 1722.4 |
| 77.5° | 611.3   | 611.3   | 617.2   | 609.8   | 583.4   | 516.0   | 543.9   | 819.5   | 1112.6  | 800.4   | 860.5  |
| 80°   | 491.1   | 489.6   | 514.6   | 529.2   | 488.1   | 381.1   | 347.4   | 452.9   | 494.0   | 351.8   | 447.1  |
| 82.5° | 238.9   | 253.6   | 353.3   | 403.1   | 370.8   | 275.6   | 212.6   | 281.5   | 263.8   | 155.4   | 200.8  |
| 85°   | 139.3   | 131.9   | 158.4   | 224.3   | 212.6   | 152.4   | 102.6   | 146.6   | 137.8   | 79.1    | 80.7   |
| 87.5° | 44.0    | 41.0    | 32.3    | 76.3    | 61.6    | 42.5    | 27.9    | 42.5    | 38.1    | 17.6    | 17.6   |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7105.3 | 7105.3 | 7105.3 | 7105.3 | 7105.3 | 7105.3 | 7105.3 | 7105.3 | 7105.3 | 7105.3 |
| 2.5°  | 7024.6 | 6851.6 | 6680.1 | 6523.3 | 6428.0 | 6366.5 | 6304.9 | 6236.0 | 6209.6 | 6170.0 |
| 5°    | 6954.2 | 6620.1 | 6322.4 | 6066.0 | 5832.9 | 5649.6 | 5464.9 | 5315.3 | 5247.9 | 5293.4 |
| 7.5°  | 6913.2 | 6429.5 | 5970.6 | 5500.0 | 5047.1 | 4685.1 | 4369.9 | 4148.5 | 4048.9 | 4073.8 |
| 10°   | 6876.5 | 6214.0 | 5514.7 | 4771.5 | 4120.7 | 3672.1 | 3349.6 | 3181.0 | 3117.9 | 3131.2 |
| 12.5° | 6842.9 | 5972.1 | 4965.0 | 3987.2 | 3295.4 | 2999.3 | 2906.9 | 2908.3 | 2920.1 | 2928.8 |
| 15°   | 6837.0 | 5680.3 | 4350.8 | 3301.2 | 2849.7 | 2830.6 | 2930.4 | 2993.4 | 3027.1 | 3037.4 |
| 17.5° | 6828.2 | 5331.5 | 3724.8 | 2833.6 | 2741.3 | 2870.2 | 2962.6 | 3003.7 | 3030.0 | 3031.5 |
| 20°   | 6793.0 | 4888.8 | 3147.3 | 2610.8 | 2717.8 | 2829.2 | 2886.4 | 2918.6 | 2940.6 | 2947.9 |
| 22.5° | 6684.5 | 4396.2 | 2697.3 | 2511.1 | 2624.0 | 2713.4 | 2780.8 | 2817.5 | 2830.6 | 2839.5 |
| 25°   | 6489.6 | 3845.1 | 2386.5 | 2415.8 | 2493.5 | 2606.4 | 2660.6 | 2668.0 | 2663.6 | 2676.8 |
| 27.5° | 6234.5 | 3254.3 | 2193.0 | 2286.8 | 2386.5 | 2483.3 | 2512.6 | 2508.2 | 2499.4 | 2514.0 |
| 30°   | 5926.7 | 2723.6 | 2069.9 | 2141.7 | 2278.1 | 2366.0 | 2392.4 | 2382.1 | 2364.5 | 2380.7 |
| 32.5° | 5601.2 | 2289.7 | 1968.7 | 2040.6 | 2188.6 | 2275.1 | 2301.4 | 2291.2 | 2278.1 | 2291.2 |
| 35°   | 5297.8 | 1986.3 | 1874.9 | 1973.1 | 2118.3 | 2203.2 | 2237.0 | 2238.4 | 2238.4 | 2254.6 |
| 37.5° | 5019.2 | 1808.9 | 1797.2 | 1930.6 | 2069.9 | 2146.0 | 2194.4 | 2197.4 | 2134.4 | 2138.8 |
| 40°   | 4761.2 | 1734.2 | 1762.0 | 1902.7 | 2022.9 | 2096.2 | 2099.2 | 1935.0 | 1819.2 | 1816.3 |
| 42.5° | 4550.2 | 1719.5 | 1772.3 | 1899.8 | 1989.2 | 1992.2 | 1785.4 | 1657.9 | 1625.6 | 1627.2 |
| 45°   | 4352.3 | 1715.1 | 1795.7 | 1899.8 | 1939.4 | 1721.0 | 1581.7 | 1548.0 | 1550.9 | 1562.6 |
| 47.5° | 4131.0 | 1697.5 | 1800.1 | 1873.4 | 1795.7 | 1530.4 | 1489.3 | 1474.7 | 1468.8 | 1471.8 |
| 50°   | 3889.1 | 1634.5 | 1744.4 | 1820.6 | 1549.5 | 1448.3 | 1397.0 | 1392.6 | 1399.9 | 1404.4 |
| 52.5° | 3633.9 | 1531.9 | 1649.1 | 1725.4 | 1436.5 | 1376.5 | 1319.3 | 1329.5 | 1361.8 | 1372.1 |
| 55°   | 3466.9 | 1411.6 | 1523.0 | 1534.8 | 1357.4 | 1309.0 | 1260.6 | 1284.1 | 1344.3 | 1363.2 |
| 57.5° | 3422.9 | 1284.1 | 1379.4 | 1366.2 | 1256.2 | 1250.4 | 1221.1 | 1241.6 | 1317.8 | 1345.7 |
| 60°   | 3409.7 | 1169.8 | 1238.7 | 1228.5 | 1158.0 | 1185.9 | 1178.5 | 1188.9 | 1215.2 | 1224.1 |
| 62.5° | 3307.1 | 1078.9 | 1112.6 | 1098.0 | 1070.1 | 1118.5 | 1136.1 | 1114.1 | 1134.6 | 1144.8 |
| 65°   | 3046.2 | 1005.6 | 989.5  | 979.2  | 991.0  | 1034.9 | 1070.1 | 1026.1 | 1045.2 | 1074.5 |
| 67.5° | 2615.2 | 905.9  | 861.9  | 873.7  | 910.3  | 933.8  | 979.2  | 929.4  | 945.5  | 995.4  |
| 70°   | 2115.3 | 779.8  | 740.3  | 774.0  | 809.1  | 857.5  | 864.9  | 831.2  | 869.3  | 925.0  |
| 72.5° | 1496.7 | 652.3  | 624.4  | 693.4  | 705.1  | 768.1  | 752.0  | 735.8  | 788.6  | 807.7  |
| 75°   | 1037.8 | 526.2  | 510.1  | 562.9  | 605.5  | 659.7  | 647.9  | 667.0  | 778.4  | 787.2  |
| 77.5° | 656.7  | 409.0  | 398.7  | 432.4  | 491.1  | 551.1  | 570.2  | 787.2  | 1329.5 | 1382.3 |
| 80°   | 381.1  | 304.9  | 293.2  | 319.6  | 370.8  | 426.6  | 549.7  | 966.1  | 876.6  | 866.3  |
| 82.5° | 212.6  | 209.6  | 195.0  | 202.3  | 247.7  | 307.8  | 776.9  | 680.2  | 552.7  | 570.2  |
| 85°   | 99.7   | 123.1  | 105.6  | 101.2  | 139.3  | 360.6  | 519.0  | 388.5  | 258.0  | 252.2  |
| 87.5° | 26.3   | 23.5   | 23.5   | 26.3   | 58.6   | 310.8  | 206.7  | 165.6  | 98.2   | 95.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)