

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: P966711

Luminaire Tested: **NAV-SB4C-740-U-T2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4C-740-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32250.6 lumens  
Efficiency: N/A  
Efficacy: 160.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 200.7  
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



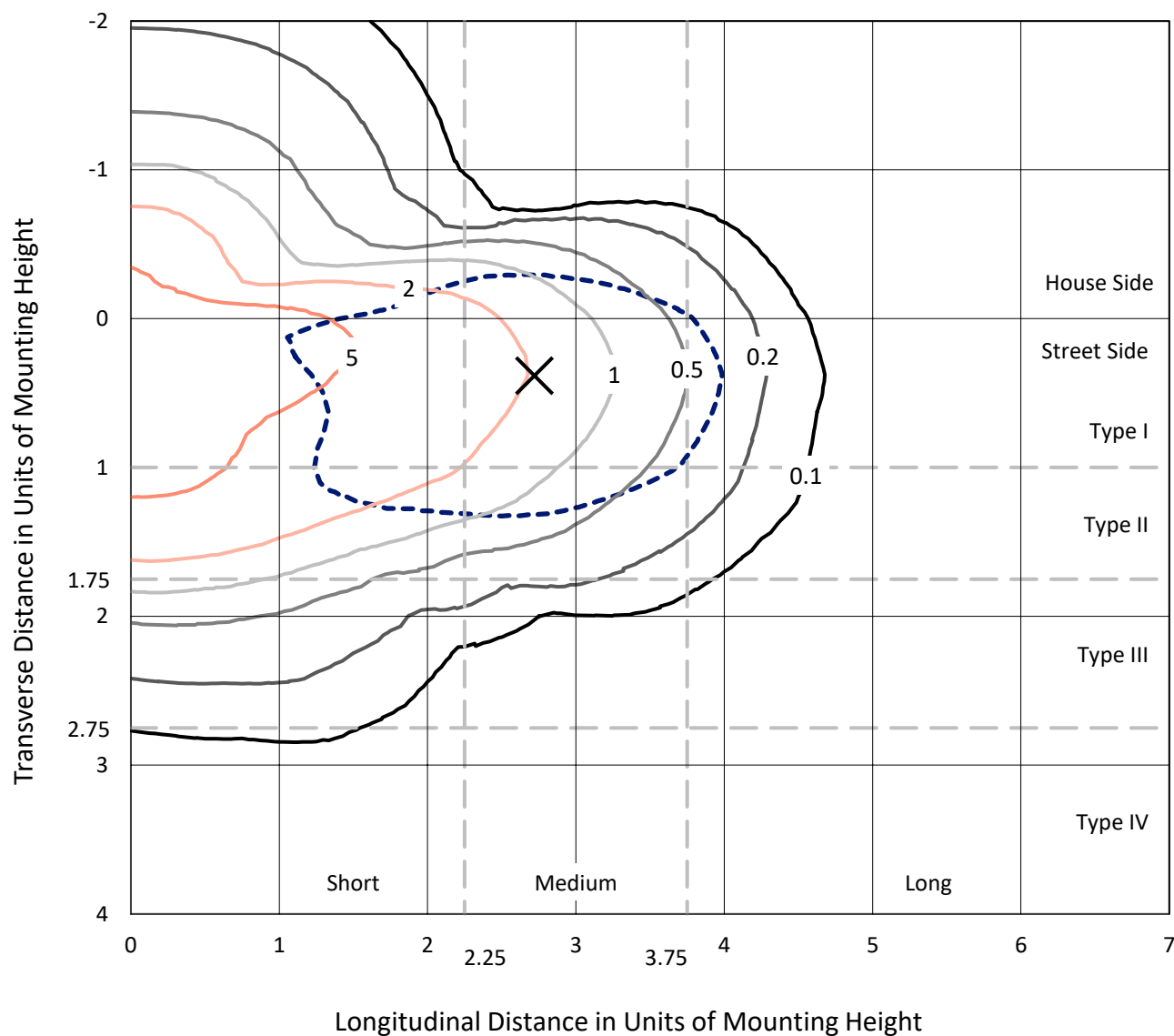
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

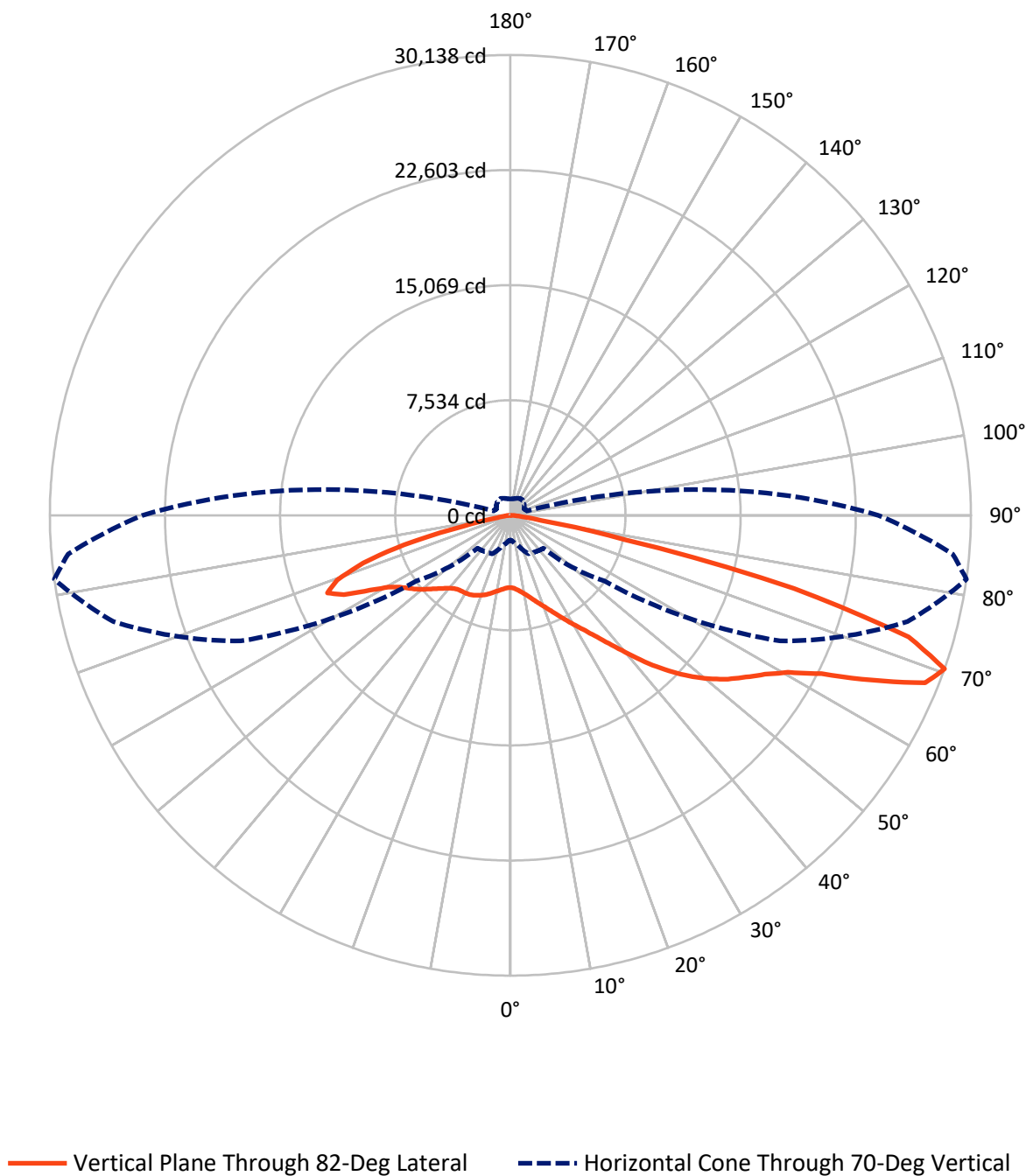
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc  
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7950.6   | 0.0    | 7950.6  |
|                    | % Fixture | 24.7     | 0.0    | 24.7    |
| <b>Street Side</b> | Lumens    | 24300.0  | 0.0    | 24300.0 |
|                    | % Fixture | 75.3     | 0.0    | 75.3    |
| <b>Total</b>       | Lumens    | 32250.6  | 0.0    | 32250.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 446.4   | 1.4       |
| 10°-20°   | 1282.6  | 4.0       |
| 20°-30°   | 2145.7  | 6.7       |
| 30°-40°   | 3352.2  | 10.4      |
| 40°-50°   | 5338.8  | 16.6      |
| 50°-60°   | 7429.5  | 23.0      |
| 60°-70°   | 7771.6  | 24.1      |
| 70°-80°   | 4061.9  | 12.6      |
| 80°-90°   | 421.8   | 1.3       |
| 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°    | 32250.6 | 100.0     |
| 0°-180°   | 32250.6 | 100.0     |

**Coefficient of Utilization**



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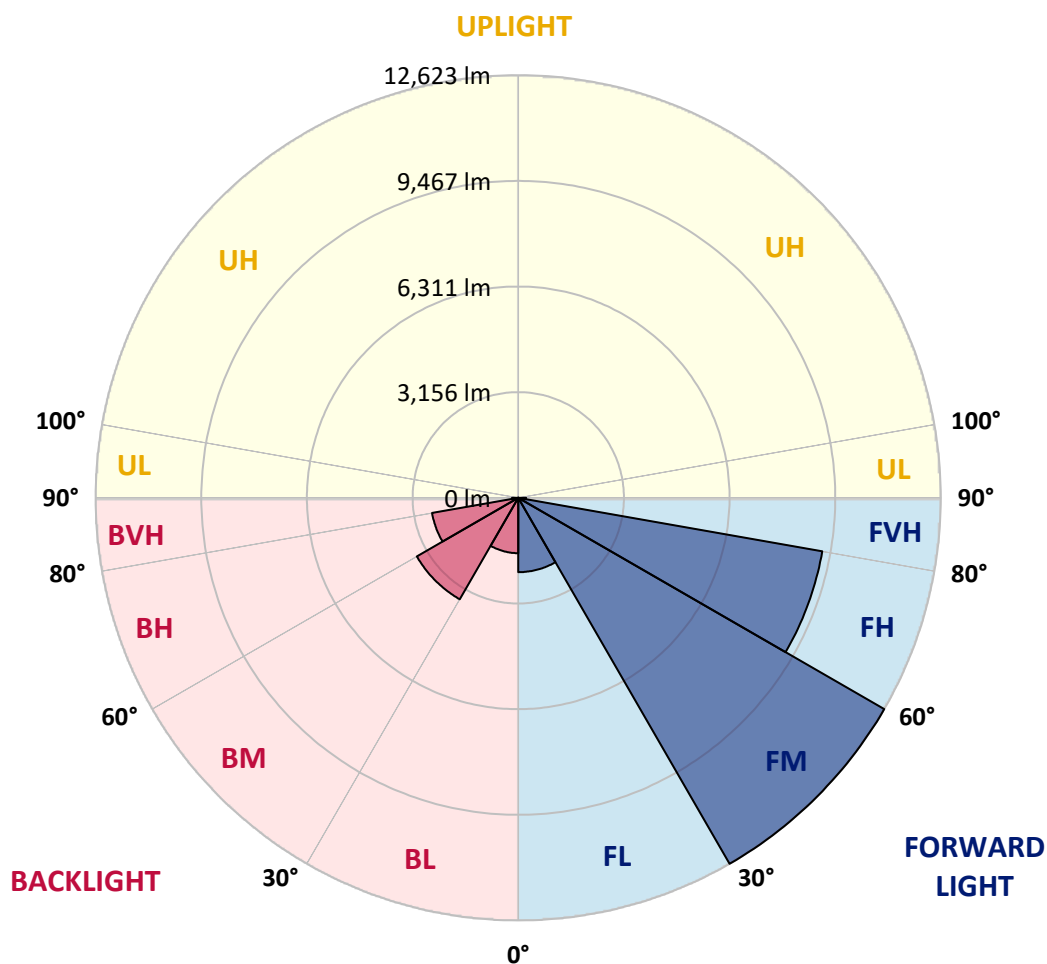
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2220.8  | 6.9       |                         |      |          |
| FM   | (30°-60°)   | 12622.6 | 39.1      |                         |      |          |
| FH   | (60°-80°)   | 9220.6  | 28.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 236.1   | 0.7       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1654.0  | 5.1       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 3497.9  | 10.8      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 2613.0  | 8.1       | B4/5000                 |      | G4/5000  |
| BVH  | (80°-90°)   | 185.7   | 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 Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 82°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  | 4728.3  |
| 2.5°  | 4841.3  | 4868.6  | 4860.1  | 4851.5  | 4851.5  | 4839.5  | 4837.9  | 4820.8  | 4807.0  | 4784.8  | 4779.7  |
| 5°    | 4902.9  | 4932.0  | 4928.6  | 4935.4  | 4957.6  | 4962.7  | 4968.0  | 4957.6  | 4930.2  | 4902.9  | 4890.9  |
| 7.5°  | 4848.1  | 4880.6  | 4890.9  | 4932.0  | 5000.5  | 5062.1  | 5108.3  | 5127.0  | 5101.4  | 5062.1  | 5043.2  |
| 10°   | 4663.3  | 4699.2  | 4735.2  | 4832.8  | 4954.2  | 5099.7  | 5222.9  | 5296.5  | 5291.4  | 5253.7  | 5221.2  |
| 12.5° | 4288.5  | 4326.2  | 4403.2  | 4593.1  | 4815.7  | 5072.3  | 5301.6  | 5455.7  | 5508.7  | 5481.3  | 5424.8  |
| 15°   | 3989.1  | 4021.6  | 4079.7  | 4274.9  | 4564.0  | 4954.2  | 5330.7  | 5630.2  | 5765.4  | 5749.9  | 5681.6  |
| 17.5° | 3980.5  | 3994.2  | 4030.1  | 4122.5  | 4345.0  | 4769.4  | 5300.0  | 5801.3  | 6059.7  | 6058.1  | 5972.5  |
| 20°   | 4131.1  | 4136.2  | 4156.8  | 4175.5  | 4302.2  | 4629.1  | 5221.2  | 5943.4  | 6390.1  | 6390.1  | 6297.6  |
| 22.5° | 4339.8  | 4336.5  | 4357.0  | 4339.8  | 4401.5  | 4617.1  | 5171.5  | 6068.3  | 6757.9  | 6785.3  | 6669.0  |
| 25°   | 4653.1  | 4636.0  | 4630.8  | 4591.5  | 4603.4  | 4728.3  | 5226.4  | 6210.4  | 7194.4  | 7250.8  | 7105.3  |
| 27.5° | 5070.6  | 5043.2  | 5024.4  | 4933.7  | 4902.9  | 4957.6  | 5394.1  | 6381.4  | 7680.3  | 7777.9  | 7593.1  |
| 30°   | 5614.8  | 5565.1  | 5537.8  | 5380.3  | 5269.1  | 5277.6  | 5647.3  | 6609.1  | 8188.6  | 8346.1  | 8111.6  |
| 32.5° | 6357.5  | 6280.5  | 6206.9  | 5948.5  | 5744.8  | 5678.1  | 5974.2  | 6924.0  | 8739.7  | 8991.2  | 8690.1  |
| 35°   | 7189.2  | 7127.5  | 7048.8  | 6650.1  | 6337.0  | 6182.9  | 6415.7  | 7363.8  | 9384.8  | 9783.5  | 9391.7  |
| 37.5° | 7990.1  | 7937.1  | 7974.7  | 7437.3  | 7033.4  | 6809.3  | 6994.1  | 7954.2  | 10180.6 | 10769.3 | 10271.2 |
| 40°   | 8818.4  | 8777.3  | 8782.4  | 8269.1  | 7798.4  | 7546.9  | 7695.7  | 8695.2  | 11092.7 | 11941.5 | 11328.8 |
| 42.5° | 9718.5  | 9687.7  | 9585.0  | 9129.8  | 8601.0  | 8366.6  | 8503.5  | 9550.8  | 12071.5 | 13276.3 | 12489.1 |
| 45°   | 10726.5 | 10707.7 | 10611.8 | 10089.9 | 9484.0  | 9220.5  | 9405.3  | 10495.5 | 13055.5 | 14532.4 | 13654.5 |
| 47.5° | 11597.6 | 11612.9 | 11600.9 | 11161.1 | 10533.1 | 10146.4 | 10367.1 | 11481.1 | 13971.2 | 15713.2 | 14772.0 |
| 50°   | 12016.8 | 12097.3 | 12215.3 | 12078.4 | 11688.2 | 11294.6 | 11337.4 | 12432.6 | 14843.8 | 16820.5 | 15843.3 |
| 52.5° | 11797.7 | 11950.1 | 12271.8 | 12490.9 | 12641.4 | 12559.3 | 12444.6 | 13377.3 | 15665.3 | 17819.8 | 16856.3 |
| 55°   | 10981.4 | 11195.4 | 11729.3 | 12258.1 | 13026.5 | 13623.7 | 13774.4 | 14424.6 | 16466.2 | 18699.5 | 17814.7 |
| 57.5° | 9494.4  | 9841.7  | 10320.9 | 11390.4 | 12684.2 | 14138.8 | 15324.8 | 15877.6 | 17315.0 | 19639.0 | 18817.6 |
| 60°   | 6944.5  | 7409.9  | 8005.5  | 9597.0  | 11486.3 | 13863.3 | 16644.2 | 18109.1 | 18521.4 | 20855.7 | 20123.2 |
| 62.5° | 4444.3  | 4731.8  | 5279.4  | 6778.5  | 8950.1  | 12451.5 | 17048.0 | 20898.5 | 20566.5 | 22851.0 | 22081.0 |
| 65°   | 3042.7  | 3227.5  | 3729.0  | 4570.9  | 5785.9  | 9268.5  | 15966.5 | 22989.7 | 23814.5 | 26013.6 | 25428.3 |
| 67.5° | 2211.0  | 2351.4  | 2779.2  | 3516.8  | 3770.1  | 5484.8  | 12389.9 | 22893.9 | 26972.0 | 29272.0 | 28361.4 |
| 70°   | 1612.0  | 1711.3  | 2070.7  | 2779.2  | 2900.6  | 3051.2  | 7505.8  | 19461.0 | 26903.5 | 30137.9 | 29047.7 |
| 72.5° | 1194.5  | 1262.9  | 1504.3  | 2156.3  | 2347.9  | 2060.5  | 3715.2  | 14144.0 | 23118.1 | 27259.4 | 26384.9 |
| 75°   | 864.2   | 915.5   | 1093.6  | 1649.7  | 1879.0  | 1569.3  | 1853.3  | 8265.6  | 16125.6 | 19175.2 | 19329.2 |
| 77.5° | 660.6   | 700.0   | 816.3   | 1208.2  | 1504.3  | 1177.4  | 1149.9  | 3802.5  | 7646.1  | 7683.8  | 8115.0  |
| 80°   | 530.5   | 556.2   | 619.5   | 850.5   | 1153.4  | 881.3   | 749.6   | 1535.0  | 2416.3  | 2045.0  | 2145.9  |
| 82.5° | 390.2   | 433.0   | 523.7   | 597.3   | 824.8   | 607.5   | 456.9   | 775.2   | 919.0   | 790.6   | 797.4   |
| 85°   | 222.4   | 251.5   | 316.6   | 427.8   | 527.1   | 371.4   | 261.8   | 344.0   | 427.8   | 350.9   | 313.1   |
| 87.5° | 78.7    | 102.7   | 111.2   | 167.7   | 229.3   | 154.1   | 101.0   | 99.2    | 140.3   | 104.3   | 87.2    |
| 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°    | 4728.3  | 4728.3  | 4728.3 | 4728.3 | 4728.3 | 4728.3 | 4728.3 | 4728.3 | 4728.3 | 4728.3 | 4728.3 |
| 2.5°  | 4762.6  | 4754.1  | 4719.8 | 4673.6 | 4625.6 | 4579.5 | 4564.0 | 4531.5 | 4509.3 | 4497.3 | 4511.0 |
| 5°    | 4858.4  | 4831.0  | 4750.6 | 4647.9 | 4540.1 | 4423.7 | 4341.6 | 4266.3 | 4211.5 | 4160.2 | 4180.8 |
| 7.5°  | 4995.3  | 4947.4  | 4808.8 | 4629.1 | 4437.4 | 4244.0 | 4100.3 | 3990.7 | 3917.1 | 3869.3 | 3879.5 |
| 10°   | 5154.4  | 5080.8  | 4868.6 | 4600.0 | 4304.0 | 4026.7 | 3857.3 | 3763.2 | 3717.0 | 3691.3 | 3698.1 |
| 12.5° | 5337.6  | 5233.1  | 4930.2 | 4533.3 | 4100.3 | 3783.7 | 3667.3 | 3640.0 | 3641.6 | 3643.4 | 3646.7 |
| 15°   | 5563.5  | 5418.0  | 4979.9 | 4387.8 | 3835.0 | 3597.1 | 3576.6 | 3621.1 | 3667.3 | 3689.6 | 3687.8 |
| 17.5° | 5818.4  | 5613.1  | 4988.5 | 4148.2 | 3574.9 | 3477.4 | 3542.4 | 3638.2 | 3708.4 | 3739.2 | 3746.1 |
| 20°   | 6092.3  | 5811.6  | 4926.9 | 3809.4 | 3361.0 | 3379.8 | 3496.2 | 3619.4 | 3696.5 | 3735.8 | 3746.1 |
| 22.5° | 6405.4  | 6023.8  | 4779.7 | 3453.4 | 3186.4 | 3273.7 | 3410.6 | 3530.4 | 3610.9 | 3650.2 | 3660.5 |
| 25°   | 6763.1  | 6261.6  | 4548.6 | 3153.9 | 3035.8 | 3153.9 | 3290.9 | 3390.1 | 3455.2 | 3491.0 | 3501.3 |
| 27.5° | 7160.1  | 6509.8  | 4240.6 | 2916.0 | 2904.1 | 3030.7 | 3143.7 | 3220.7 | 3254.9 | 3282.3 | 3292.5 |
| 30°   | 7558.9  | 6735.7  | 3867.5 | 2736.3 | 2789.4 | 2909.3 | 2989.6 | 3023.9 | 3034.1 | 3039.3 | 3051.2 |
| 32.5° | 7990.1  | 6930.7  | 3475.7 | 2587.5 | 2679.9 | 2791.2 | 2839.0 | 2854.4 | 2806.6 | 2774.1 | 2784.3 |
| 35°   | 8512.0  | 7139.5  | 3092.3 | 2469.4 | 2572.1 | 2668.0 | 2683.3 | 2669.6 | 2613.1 | 2546.4 | 2549.9 |
| 37.5° | 9157.2  | 7399.7  | 2786.1 | 2385.6 | 2471.2 | 2534.4 | 2515.7 | 2512.2 | 2517.3 | 2438.6 | 2443.7 |
| 40°   | 9947.8  | 7738.5  | 2561.8 | 2320.5 | 2389.0 | 2402.7 | 2349.6 | 2378.7 | 2404.3 | 2284.6 | 2288.0 |
| 42.5° | 10825.7 | 8147.5  | 2419.8 | 2276.0 | 2320.5 | 2288.0 | 2205.9 | 2238.4 | 2235.0 | 2077.6 | 2075.8 |
| 45°   | 11720.8 | 8592.5  | 2370.2 | 2243.5 | 2257.3 | 2192.2 | 2101.5 | 2110.1 | 2038.2 | 1896.1 | 1901.3 |
| 47.5° | 12610.6 | 9069.9  | 2401.0 | 2216.2 | 2178.5 | 2104.9 | 2034.7 | 1997.1 | 1891.0 | 1784.9 | 1784.9 |
| 50°   | 13483.4 | 9571.3  | 2513.9 | 2161.4 | 2070.7 | 2027.9 | 1976.6 | 1909.8 | 1796.8 | 1706.2 | 1699.3 |
| 52.5° | 14292.8 | 10076.2 | 2640.5 | 2070.7 | 1935.5 | 1961.1 | 1928.6 | 1851.7 | 1740.4 | 1648.0 | 1649.7 |
| 55°   | 15059.5 | 10581.0 | 2690.2 | 1945.8 | 1808.8 | 1903.0 | 1884.2 | 1742.1 | 1608.6 | 1533.3 | 1526.5 |
| 57.5° | 15894.6 | 11188.5 | 2635.4 | 1786.6 | 1706.2 | 1836.2 | 1764.3 | 1606.9 | 1529.9 | 1473.4 | 1468.3 |
| 60°   | 17051.5 | 12141.7 | 2517.3 | 1589.8 | 1608.6 | 1737.0 | 1613.8 | 1548.8 | 1464.9 | 1401.6 | 1398.1 |
| 62.5° | 18973.3 | 13919.8 | 2327.4 | 1394.7 | 1493.9 | 1589.8 | 1541.9 | 1476.8 | 1391.3 | 1329.7 | 1329.7 |
| 65°   | 21814.0 | 16390.9 | 1969.7 | 1242.4 | 1365.6 | 1446.1 | 1464.9 | 1399.8 | 1310.9 | 1245.8 | 1249.3 |
| 67.5° | 24209.9 | 17941.3 | 1490.6 | 1115.8 | 1233.9 | 1329.7 | 1382.7 | 1319.4 | 1225.3 | 1161.9 | 1163.7 |
| 70°   | 24078.1 | 16815.3 | 1138.1 | 990.9  | 1117.5 | 1215.0 | 1283.5 | 1233.9 | 1132.9 | 1073.0 | 1078.1 |
| 72.5° | 21386.2 | 14066.9 | 920.7  | 864.2  | 999.4  | 1095.2 | 1177.4 | 1139.7 | 1037.1 | 978.9  | 978.9  |
| 75°   | 15711.5 | 9985.4  | 735.8  | 735.8  | 852.2  | 970.3  | 1061.0 | 1037.1 | 942.9  | 901.9  | 889.9  |
| 77.5° | 6622.7  | 4189.3  | 576.7  | 610.9  | 708.5  | 833.4  | 946.4  | 954.9  | 872.8  | 924.1  | 838.6  |
| 80°   | 1761.0  | 1155.2  | 439.8  | 480.8  | 556.2  | 688.0  | 823.2  | 819.7  | 730.7  | 682.9  | 634.9  |
| 82.5° | 670.9   | 455.2   | 313.1  | 338.9  | 402.1  | 527.1  | 652.0  | 672.5  | 583.5  | 504.8  | 504.8  |
| 85°   | 258.4   | 195.1   | 193.4  | 203.7  | 234.4  | 349.1  | 492.8  | 509.9  | 439.8  | 373.1  | 385.1  |
| 87.5° | 66.7    | 58.2    | 71.9   | 68.5   | 107.8  | 186.5  | 282.4  | 292.6  | 268.7  | 155.7  | 222.4  |
| 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)