

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: P962534

Luminaire Tested: **NAV-SB2C-750-U-T4W**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P962534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-750-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 16209.3 lumens  
Efficiency: N/A  
Efficacy: 160.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

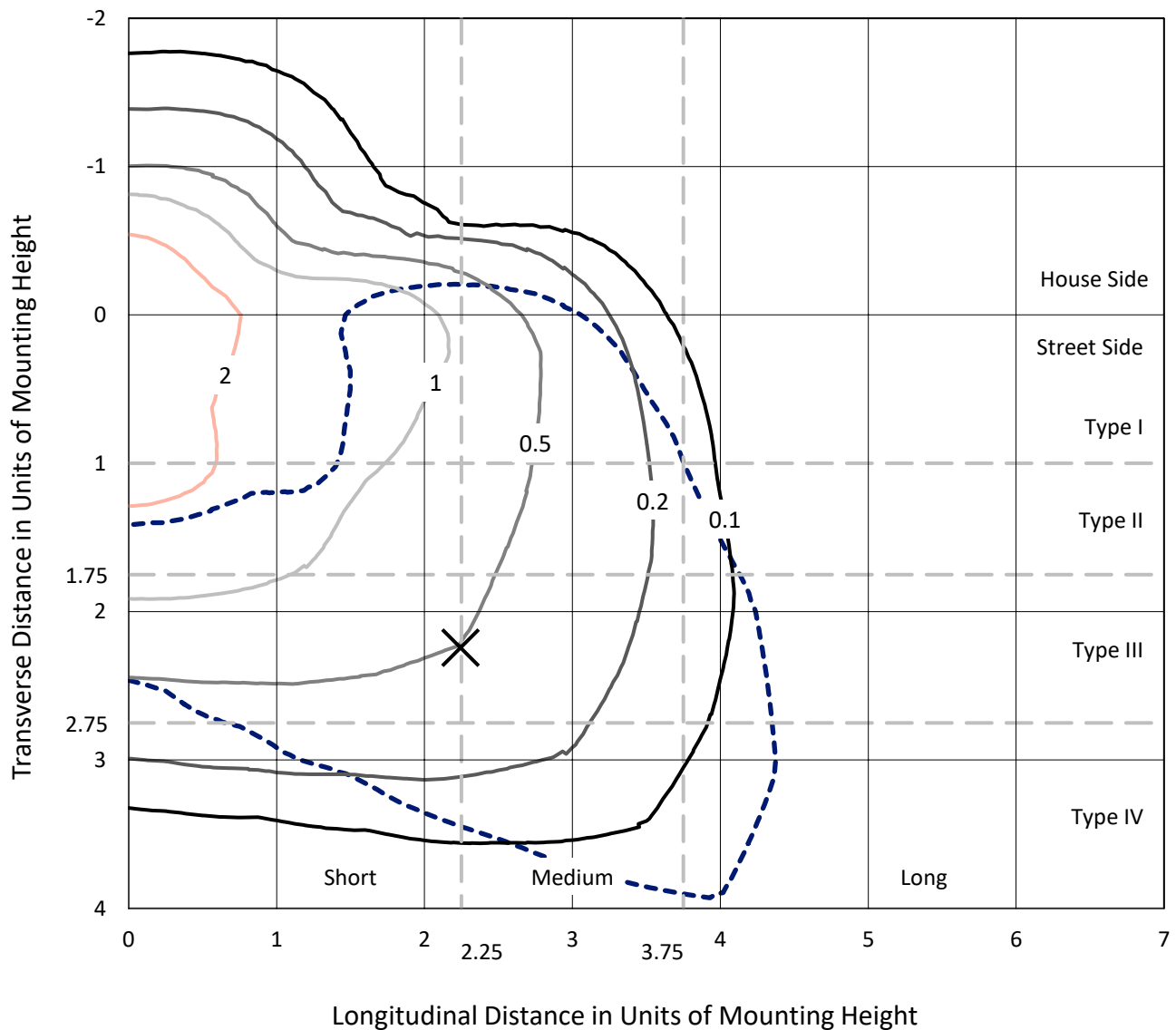
Input Watts (W): 100.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

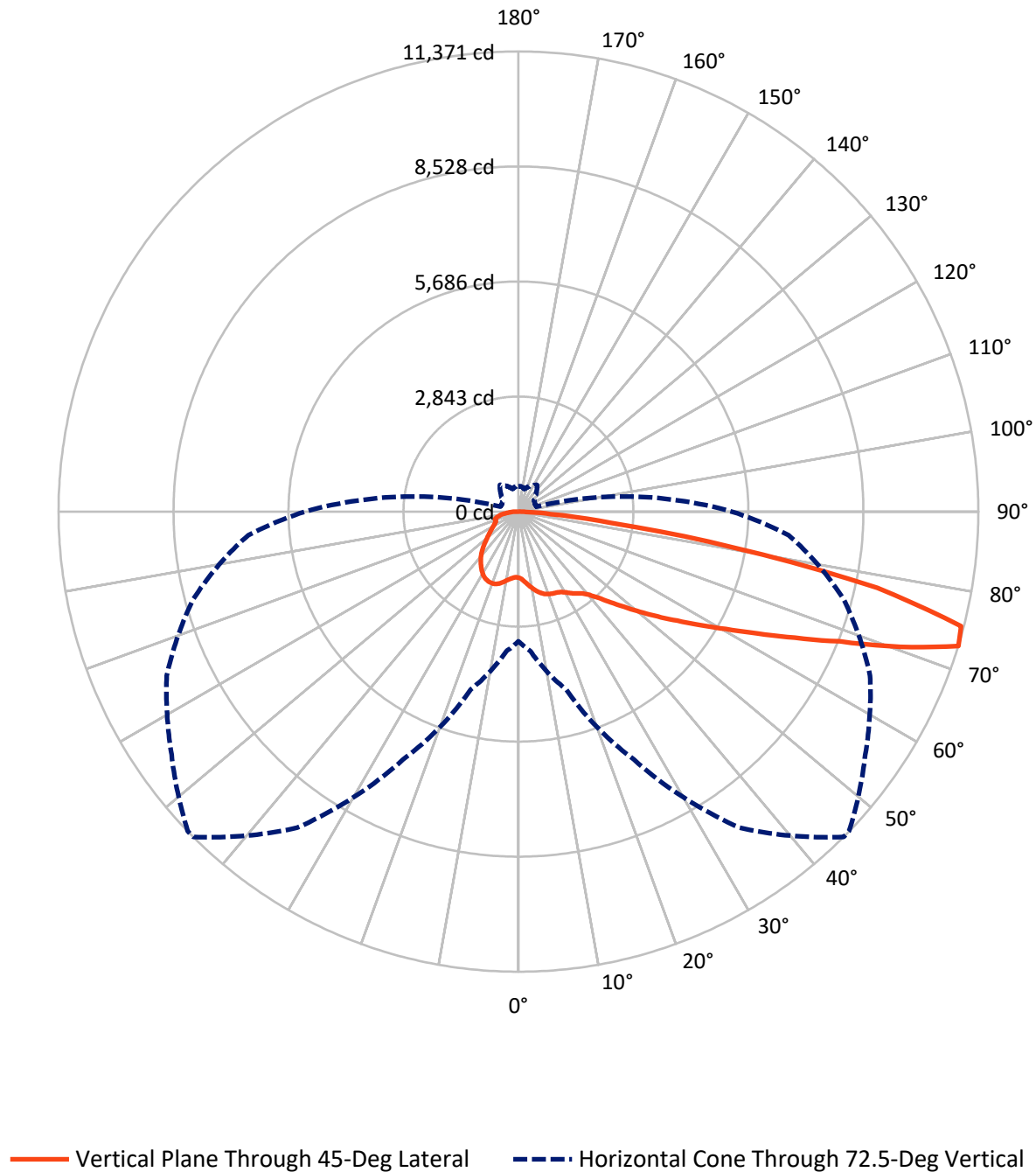
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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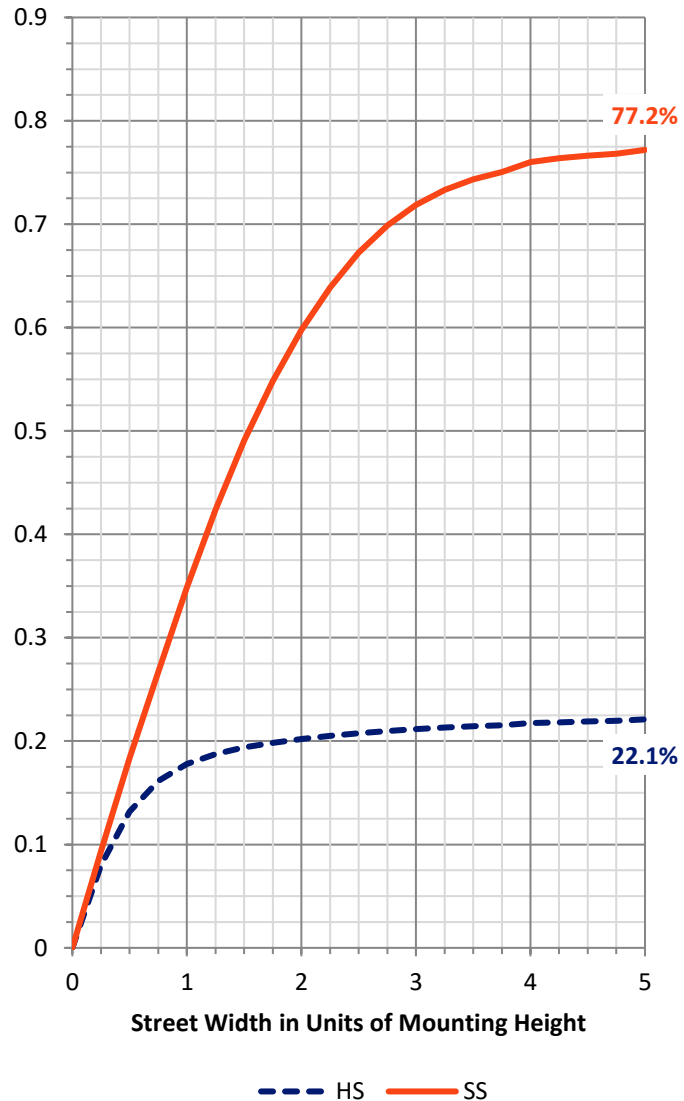
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3664.4   | 0.0    | 3664.4  |
|                    | % Fixture | 22.6     | 0.0    | 22.6    |
| <b>Street Side</b> | Lumens    | 12545.0  | 0.0    | 12545.0 |
|                    | % Fixture | 77.4     | 0.0    | 77.4    |
| <b>Total</b>       | Lumens    | 16209.3  | 0.0    | 16209.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 166.4   | 1.0       |
| 10°-20°   | 554.9   | 3.4       |
| 20°-30°   | 965.3   | 6.0       |
| 30°-40°   | 1383.8  | 8.5       |
| 40°-50°   | 1948.5  | 12.0      |
| 50°-60°   | 2984.5  | 18.4      |
| 60°-70°   | 4323.4  | 26.7      |
| 70°-80°   | 3452.5  | 21.3      |
| 80°-90°   | 430.0   | 2.7       |
| 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°    | 16209.3 | 100.0     |
| 0°-180°   | 16209.3 | 100.0     |

**Coefficient of Utilization**



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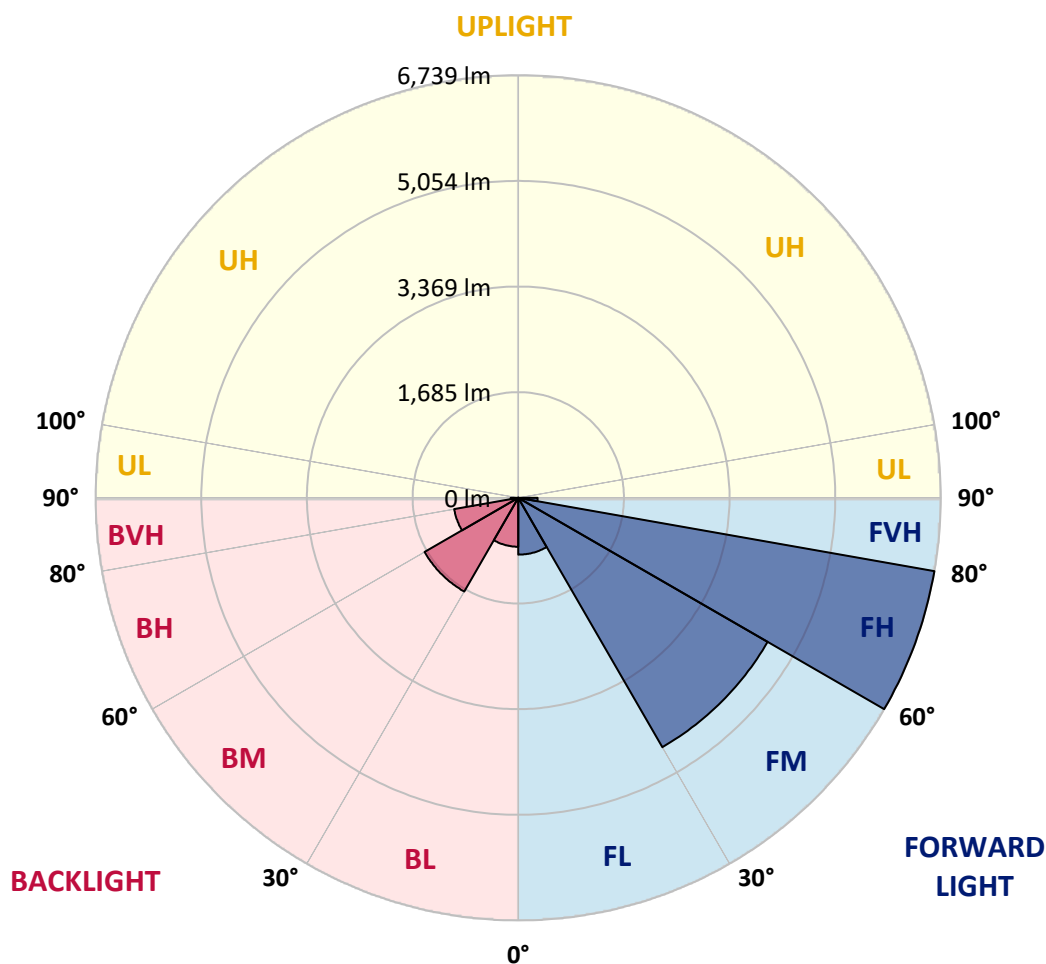
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 906.5  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 4591.3 | 28.3      |                         |      |         |
| FH   | (60°-80°)   | 6738.7 | 41.6      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 308.5  | 1.9       |                         |      | G3/500  |
| BL   | (0°-30°)    | 780.2  | 4.8       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1725.4 | 10.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1037.3 | 6.4       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 121.5  | 0.7       |                         |      | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 46°     | 55°     | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|
| 0°    | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2  | 1635.2  | 1635.2  | 1635.2 | 1635.2 | 1635.2 |
| 2.5°  | 1699.2 | 1710.3 | 1700.1 | 1690.7 | 1686.4 | 1675.4  | 1674.4  | 1667.7  | 1663.4 | 1651.5 | 1648.0 |
| 5°    | 1817.9 | 1832.5 | 1815.4 | 1796.6 | 1779.5 | 1752.2  | 1748.8  | 1729.2  | 1706.9 | 1681.3 | 1666.8 |
| 7.5°  | 1952.0 | 1964.8 | 1945.1 | 1917.0 | 1887.1 | 1841.8  | 1841.0  | 1805.1  | 1770.1 | 1726.6 | 1701.8 |
| 10°   | 2069.0 | 2086.1 | 2059.6 | 2021.2 | 1983.6 | 1932.3  | 1926.4  | 1885.4  | 1841.0 | 1784.6 | 1747.1 |
| 12.5° | 2172.3 | 2184.3 | 2158.6 | 2111.7 | 2068.1 | 2016.9  | 2009.2  | 1964.0  | 1914.4 | 1850.4 | 1802.6 |
| 15°   | 2254.3 | 2269.7 | 2235.5 | 2185.1 | 2139.0 | 2088.6  | 2081.8  | 2040.8  | 1991.3 | 1923.8 | 1862.3 |
| 17.5° | 2308.1 | 2320.9 | 2285.9 | 2229.5 | 2185.1 | 2143.3  | 2138.1  | 2104.0  | 2060.5 | 1992.1 | 1926.4 |
| 20°   | 2328.6 | 2342.2 | 2305.5 | 2248.3 | 2207.3 | 2174.8  | 2172.3  | 2147.6  | 2117.6 | 2055.3 | 1988.7 |
| 22.5° | 2349.1 | 2361.9 | 2314.0 | 2254.3 | 2218.4 | 2197.9  | 2197.1  | 2180.9  | 2168.9 | 2117.6 | 2052.8 |
| 25°   | 2431.9 | 2435.3 | 2371.2 | 2285.0 | 2233.8 | 2215.8  | 2215.0  | 2214.1  | 2219.2 | 2179.1 | 2122.0 |
| 27.5° | 2503.7 | 2502.7 | 2448.1 | 2367.0 | 2287.6 | 2250.0  | 2249.2  | 2257.7  | 2274.0 | 2240.6 | 2193.7 |
| 30°   | 2608.6 | 2599.3 | 2534.3 | 2449.9 | 2377.3 | 2319.2  | 2314.0  | 2306.4  | 2319.2 | 2292.7 | 2265.4 |
| 32.5° | 2831.6 | 2801.6 | 2696.6 | 2546.3 | 2451.5 | 2407.1  | 2400.3  | 2352.5  | 2357.6 | 2341.4 | 2327.7 |
| 35°   | 3150.8 | 3111.6 | 2971.6 | 2729.1 | 2543.7 | 2480.6  | 2477.1  | 2416.5  | 2406.3 | 2391.7 | 2396.9 |
| 37.5° | 3530.8 | 3482.2 | 3319.1 | 2993.7 | 2702.6 | 2566.0  | 2560.9  | 2506.2  | 2464.3 | 2448.9 | 2478.0 |
| 40°   | 3912.5 | 3851.0 | 3716.1 | 3316.5 | 2936.5 | 2708.6  | 2692.4  | 2609.5  | 2561.7 | 2536.1 | 2597.6 |
| 42.5° | 4283.2 | 4231.9 | 4116.6 | 3678.6 | 3225.2 | 2916.9  | 2881.1  | 2739.3  | 2703.4 | 2679.6 | 2790.6 |
| 45°   | 4611.1 | 4564.9 | 4480.4 | 4065.4 | 3563.3 | 3200.4  | 3165.4  | 2934.0  | 2922.9 | 2922.9 | 3083.4 |
| 47.5° | 4877.5 | 4867.2 | 4777.5 | 4459.9 | 3962.0 | 3523.1  | 3462.6  | 3204.7  | 3234.6 | 3280.6 | 3499.2 |
| 50°   | 5172.9 | 5144.7 | 5049.0 | 4848.5 | 4430.9 | 3893.0  | 3843.3  | 3536.9  | 3648.7 | 3775.1 | 4100.4 |
| 52.5° | 5444.4 | 5459.8 | 5353.1 | 5253.1 | 4960.3 | 4305.3  | 4218.3  | 3928.7  | 4170.4 | 4379.6 | 4804.9 |
| 55°   | 5723.7 | 5724.5 | 5694.6 | 5681.0 | 5515.3 | 4761.3  | 4665.7  | 4400.1  | 4784.4 | 5043.9 | 5626.3 |
| 57.5° | 5985.8 | 5987.5 | 6031.9 | 6152.4 | 6159.1 | 5287.4  | 5178.9  | 4979.0  | 5466.6 | 5731.4 | 6473.4 |
| 60°   | 6219.8 | 6231.7 | 6353.0 | 6634.7 | 6725.2 | 5890.2  | 5787.7  | 5663.0  | 6171.9 | 6438.3 | 7364.0 |
| 62.5° | 6298.3 | 6341.9 | 6611.7 | 7012.2 | 7284.6 | 6629.6  | 6528.8  | 6454.6  | 6913.1 | 7160.8 | 8108.6 |
| 65°   | 6165.1 | 6265.0 | 6786.7 | 7323.8 | 7860.1 | 7508.3  | 7408.4  | 7327.3  | 7683.3 | 7916.5 | 8720.0 |
| 67.5° | 5838.1 | 5967.0 | 6776.5 | 7650.9 | 8558.5 | 8565.4  | 8472.3  | 8281.9  | 8509.0 | 8598.7 | 8918.9 |
| 70°   | 4976.5 | 5169.5 | 6179.6 | 7773.0 | 9360.4 | 10011.1 | 9921.4  | 9431.2  | 9333.0 | 8899.3 | 8358.8 |
| 72.5° | 3206.4 | 3465.9 | 4550.4 | 6768.0 | 9538.9 | 11371.3 | 11366.2 | 10468.7 | 9593.5 | 8315.2 | 6703.9 |
| 75°   | 1169.8 | 1328.7 | 2114.3 | 4248.1 | 8007.0 | 11302.2 | 11335.5 | 10291.1 | 8757.5 | 6423.0 | 4176.4 |
| 77.5° | 426.1  | 466.3  | 689.9  | 1632.6 | 4924.4 | 9068.4  | 9137.6  | 8227.3  | 6233.4 | 3223.4 | 1654.9 |
| 80°   | 223.8  | 245.9  | 353.5  | 633.6  | 2110.0 | 5385.6  | 5494.0  | 4889.4  | 2929.8 | 970.9  | 496.1  |
| 82.5° | 123.8  | 134.1  | 198.1  | 344.1  | 950.4  | 2303.0  | 2367.9  | 1931.5  | 1030.6 | 411.5  | 204.9  |
| 85°   | 66.6   | 70.8   | 93.1   | 187.9  | 464.5  | 798.4   | 816.3   | 577.3   | 410.7  | 241.7  | 99.0   |
| 87.5° | 19.7   | 23.9   | 30.7   | 59.8   | 181.8  | 179.3   | 183.6   | 114.4   | 162.3  | 122.1  | 32.5   |
| 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°    | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 | 1635.2 |
| 2.5°  | 1642.9 | 1640.3 | 1631.0 | 1626.7 | 1621.6 | 1620.7 | 1624.9 | 1625.9 | 1626.7 | 1627.5 | 1631.0 |
| 5°    | 1658.2 | 1649.7 | 1641.2 | 1636.1 | 1637.7 | 1638.7 | 1647.2 | 1653.1 | 1657.4 | 1660.8 | 1662.6 |
| 7.5°  | 1688.2 | 1681.3 | 1666.8 | 1665.9 | 1668.5 | 1676.2 | 1687.3 | 1701.0 | 1708.7 | 1714.6 | 1716.4 |
| 10°   | 1732.6 | 1719.7 | 1702.6 | 1705.2 | 1710.3 | 1721.5 | 1744.6 | 1755.6 | 1768.4 | 1779.5 | 1776.9 |
| 12.5° | 1777.8 | 1766.7 | 1747.1 | 1748.8 | 1757.4 | 1776.9 | 1799.2 | 1812.8 | 1821.3 | 1829.9 | 1833.3 |
| 15°   | 1836.7 | 1817.1 | 1795.7 | 1795.7 | 1811.1 | 1832.5 | 1842.7 | 1853.8 | 1858.9 | 1868.4 | 1871.8 |
| 17.5° | 1897.4 | 1871.8 | 1843.6 | 1841.8 | 1860.7 | 1870.9 | 1876.9 | 1878.5 | 1880.3 | 1890.5 | 1893.9 |
| 20°   | 1958.0 | 1929.8 | 1889.7 | 1886.2 | 1890.5 | 1888.8 | 1887.9 | 1886.2 | 1888.8 | 1901.6 | 1906.7 |
| 22.5° | 2017.7 | 1985.3 | 1929.8 | 1914.4 | 1902.5 | 1886.2 | 1885.4 | 1884.6 | 1886.2 | 1899.0 | 1907.6 |
| 25°   | 2087.8 | 2048.5 | 1974.3 | 1928.1 | 1887.9 | 1865.8 | 1868.4 | 1869.2 | 1870.9 | 1881.1 | 1894.8 |
| 27.5° | 2163.8 | 2120.2 | 2015.2 | 1923.8 | 1851.3 | 1835.9 | 1831.6 | 1834.1 | 1840.2 | 1856.4 | 1872.6 |
| 30°   | 2239.7 | 2188.6 | 2052.8 | 1906.7 | 1805.1 | 1783.8 | 1770.1 | 1776.1 | 1794.9 | 1811.1 | 1829.0 |
| 32.5° | 2308.9 | 2257.7 | 2082.7 | 1869.2 | 1746.2 | 1712.9 | 1694.9 | 1702.6 | 1721.5 | 1727.4 | 1748.8 |
| 35°   | 2390.1 | 2332.0 | 2095.4 | 1809.4 | 1682.1 | 1631.0 | 1607.0 | 1595.9 | 1605.4 | 1599.3 | 1618.2 |
| 37.5° | 2480.6 | 2419.9 | 2093.8 | 1730.8 | 1607.0 | 1548.2 | 1514.8 | 1472.9 | 1453.3 | 1432.8 | 1445.7 |
| 40°   | 2614.7 | 2527.5 | 2073.3 | 1636.1 | 1513.9 | 1460.1 | 1400.4 | 1329.5 | 1285.1 | 1245.0 | 1247.5 |
| 42.5° | 2797.3 | 2677.0 | 2035.6 | 1531.9 | 1409.0 | 1358.5 | 1277.5 | 1194.6 | 1124.6 | 1058.0 | 1052.0 |
| 45°   | 3069.8 | 2872.5 | 1988.7 | 1420.9 | 1295.4 | 1245.8 | 1157.8 | 1064.8 | 985.4  | 900.1  | 889.8  |
| 47.5° | 3462.6 | 3135.5 | 1944.3 | 1294.5 | 1175.8 | 1130.6 | 1051.1 | 964.9  | 870.9  | 788.1  | 778.8  |
| 50°   | 4002.2 | 3512.9 | 1903.3 | 1171.6 | 1058.0 | 1023.8 | 960.6  | 872.7  | 777.9  | 711.2  | 707.0  |
| 52.5° | 4688.8 | 4026.1 | 1886.2 | 1052.9 | 947.8  | 935.0  | 884.7  | 802.7  | 713.0  | 656.6  | 652.4  |
| 55°   | 5476.9 | 4640.1 | 1886.2 | 939.3  | 851.4  | 855.6  | 820.6  | 744.6  | 666.9  | 616.5  | 611.4  |
| 57.5° | 6281.2 | 5261.7 | 1852.1 | 834.2  | 769.4  | 787.3  | 765.1  | 698.4  | 628.4  | 576.4  | 567.8  |
| 60°   | 7022.4 | 5782.5 | 1713.8 | 738.6  | 696.8  | 725.0  | 710.4  | 653.2  | 567.8  | 524.3  | 517.4  |
| 62.5° | 7592.0 | 6076.3 | 1447.3 | 662.7  | 637.0  | 669.4  | 661.7  | 593.5  | 556.8  | 538.8  | 532.8  |
| 65°   | 7877.2 | 6028.5 | 1106.7 | 595.1  | 586.6  | 637.0  | 620.7  | 618.2  | 589.2  | 568.7  | 561.9  |
| 67.5° | 7702.2 | 5616.9 | 802.7  | 545.6  | 557.6  | 607.1  | 669.4  | 679.7  | 625.9  | 585.8  | 578.9  |
| 70°   | 6934.4 | 4872.3 | 597.7  | 498.7  | 520.9  | 607.9  | 763.4  | 711.2  | 614.0  | 567.0  | 559.3  |
| 72.5° | 5275.4 | 3633.3 | 463.7  | 449.2  | 473.0  | 612.2  | 805.2  | 696.8  | 579.8  | 626.8  | 621.7  |
| 75°   | 3016.8 | 1994.6 | 372.3  | 388.5  | 413.3  | 572.2  | 783.9  | 659.2  | 553.3  | 575.5  | 575.5  |
| 77.5° | 1150.2 | 766.8  | 307.4  | 328.7  | 332.2  | 499.5  | 749.7  | 656.6  | 526.8  | 514.0  | 468.8  |
| 80°   | 398.7  | 299.7  | 254.5  | 261.3  | 257.1  | 444.0  | 718.9  | 571.2  | 431.2  | 385.9  | 373.2  |
| 82.5° | 163.1  | 149.4  | 201.5  | 193.0  | 182.8  | 345.0  | 580.7  | 467.1  | 352.7  | 311.7  | 308.2  |
| 85°   | 70.8   | 94.8   | 133.2  | 117.0  | 105.9  | 239.1  | 465.4  | 395.3  | 298.0  | 257.1  | 256.1  |
| 87.5° | 14.6   | 35.9   | 56.4   | 53.0   | 54.6   | 159.7  | 330.5  | 281.0  | 210.9  | 158.0  | 123.8  |
| 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)