

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: P959904

Luminaire Tested: **NAV-SB1B-760-U-AFL**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P959904  
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-SB1B-760-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 5700K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 6212.5 lumens  
Efficiency: N/A  
Efficacy: 156.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

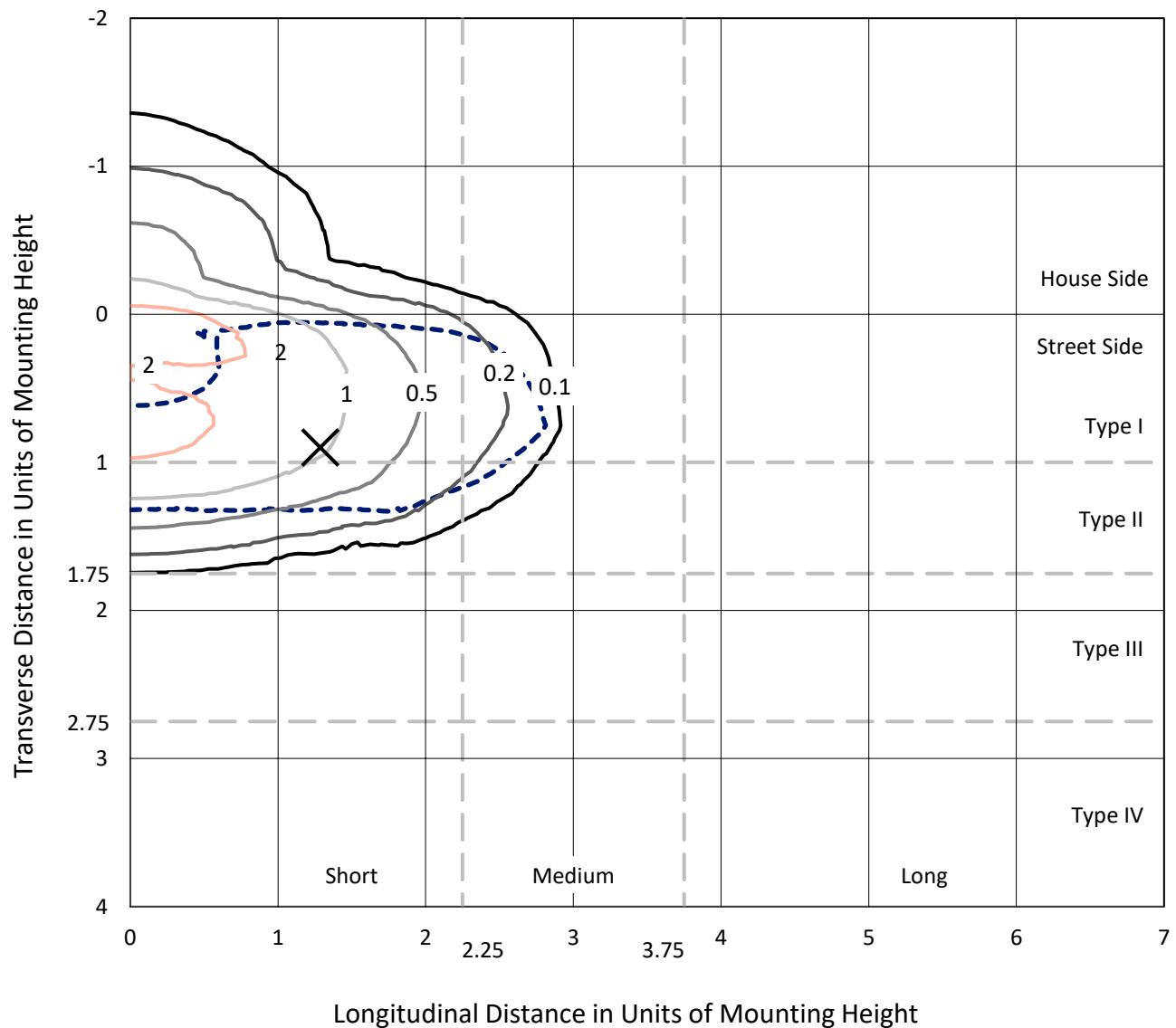
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

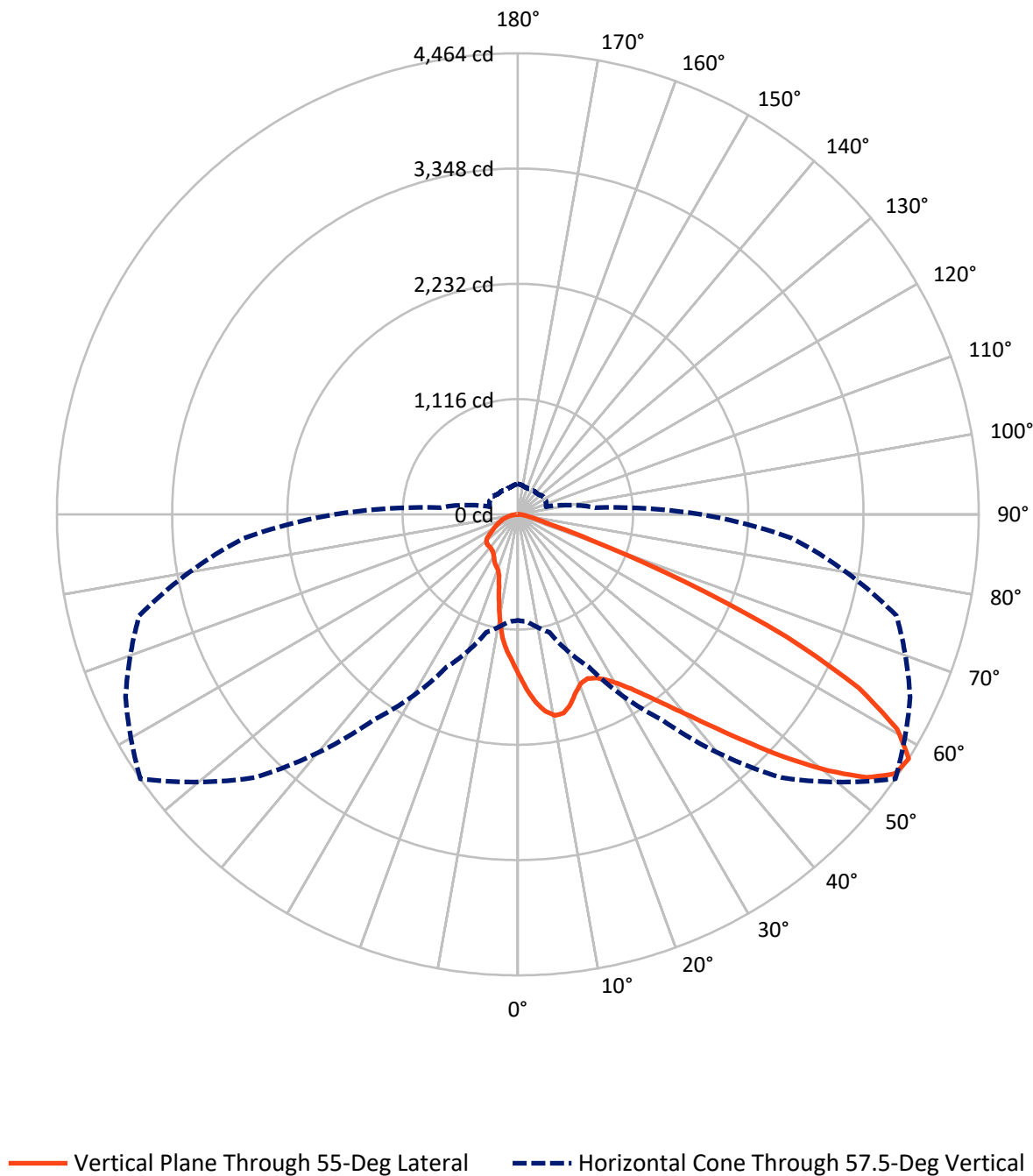
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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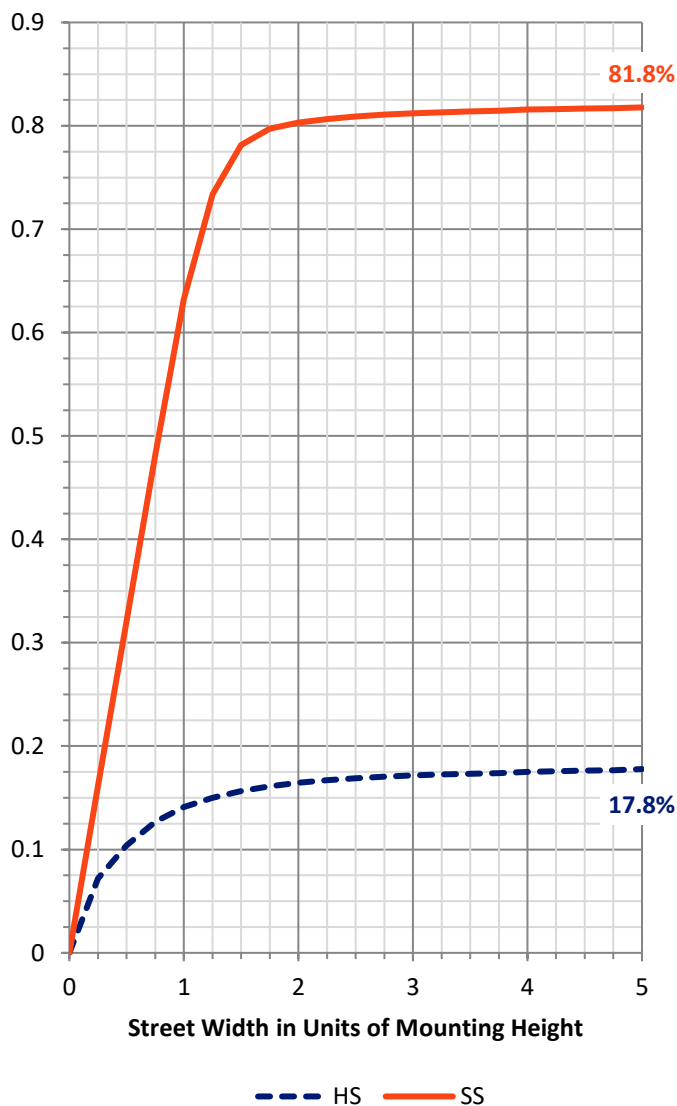
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1124.1   | 0.0    | 1124.1 |
|                    | % Fixture | 18.1     | 0.0    | 18.1   |
| <b>Street Side</b> | Lumens    | 5088.4   | 0.0    | 5088.4 |
|                    | % Fixture | 81.9     | 0.0    | 81.9   |
| <b>Total</b>       | Lumens    | 6212.5   | 0.0    | 6212.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 144.4  | 2.3       |
| 10°-20°   | 364.6  | 5.9       |
| 20°-30°   | 581.8  | 9.4       |
| 30°-40°   | 921.1  | 14.8      |
| 40°-50°   | 1409.9 | 22.7      |
| 50°-60°   | 1510.1 | 24.3      |
| 60°-70°   | 950.0  | 15.3      |
| 70°-80°   | 280.9  | 4.5       |
| 80°-90°   | 49.7   | 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°    | 6212.5 | 100.0     |
| 0°-180°   | 6212.5 | 100.0     |

**Coefficient of Utilization**



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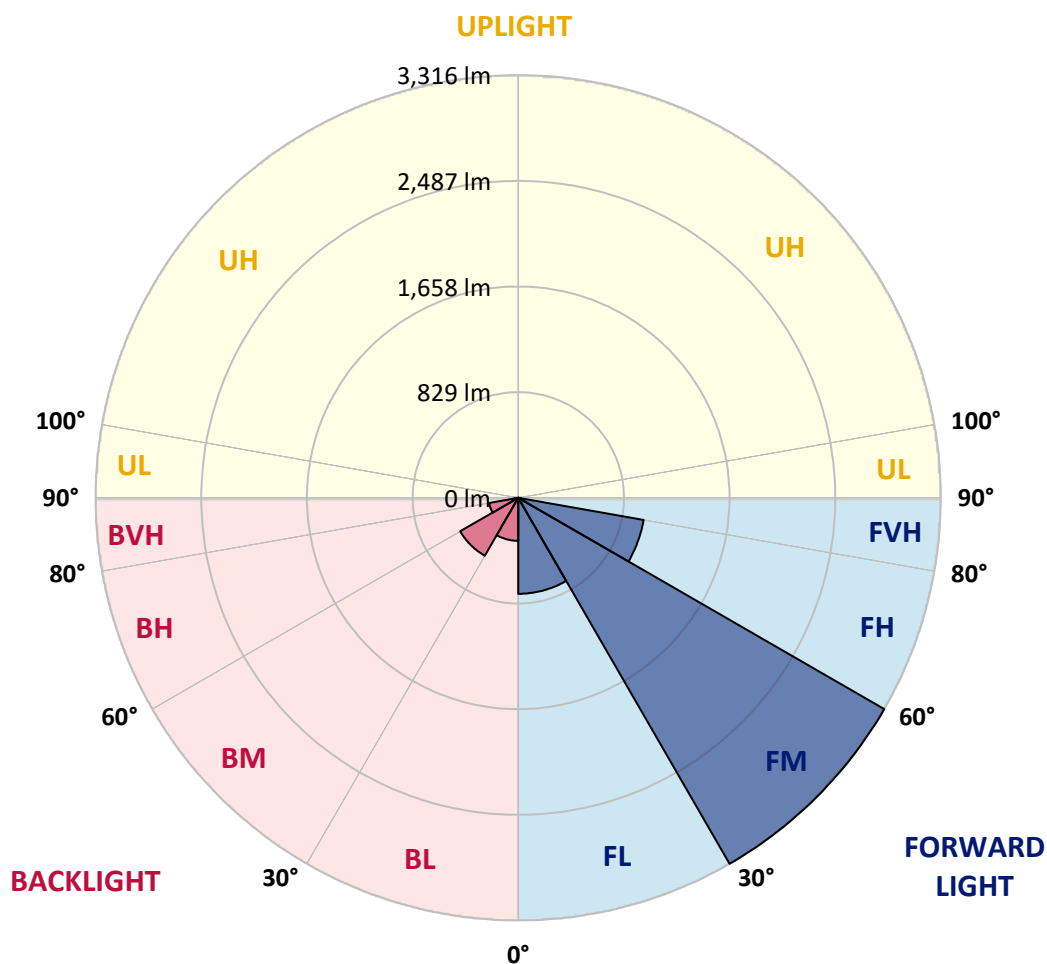
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 753.0  | 12.1      |                         |      |         |
| FM   | (30°-60°)   | 3315.7 | 53.4      |                         |      |         |
| FH   | (60°-80°)   | 998.8  | 16.1      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 21.0   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 337.9  | 5.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 525.4  | 8.5       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 232.2  | 3.7       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 28.7   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 |
| 2.5°  | 1786.0 | 1784.7 | 1791.7 | 1767.6 | 1751.3 | 1729.1 | 1699.9 | 1662.7 | 1622.5 | 1580.1 | 1561.8 |
| 5°    | 1946.9 | 1935.6 | 1943.0 | 1925.1 | 1907.0 | 1873.6 | 1830.2 | 1769.6 | 1695.4 | 1610.9 | 1566.0 |
| 7.5°  | 1921.5 | 1913.8 | 1932.7 | 1948.8 | 1962.3 | 1958.1 | 1926.3 | 1862.7 | 1767.0 | 1644.3 | 1579.1 |
| 10°   | 1716.9 | 1708.3 | 1734.9 | 1790.5 | 1872.1 | 1943.0 | 1981.5 | 1942.1 | 1840.3 | 1680.9 | 1592.0 |
| 12.5° | 1536.5 | 1532.3 | 1549.9 | 1594.9 | 1685.4 | 1821.6 | 1974.5 | 2011.5 | 1916.3 | 1724.3 | 1609.4 |
| 15°   | 1459.4 | 1454.2 | 1465.4 | 1488.3 | 1546.1 | 1672.9 | 1910.3 | 2058.9 | 1991.2 | 1774.4 | 1636.9 |
| 17.5° | 1442.3 | 1436.5 | 1441.4 | 1453.2 | 1490.5 | 1587.2 | 1813.2 | 2082.4 | 2069.3 | 1830.2 | 1660.1 |
| 20°   | 1473.8 | 1469.0 | 1469.6 | 1469.0 | 1495.0 | 1571.7 | 1745.8 | 2073.4 | 2137.3 | 1881.7 | 1682.5 |
| 22.5° | 1549.9 | 1541.9 | 1542.2 | 1525.2 | 1539.3 | 1598.7 | 1728.2 | 2049.3 | 2198.0 | 1926.6 | 1699.6 |
| 25°   | 1673.9 | 1659.5 | 1662.3 | 1619.0 | 1615.1 | 1659.1 | 1755.8 | 2030.7 | 2258.4 | 1962.6 | 1702.8 |
| 27.5° | 1843.5 | 1827.1 | 1818.5 | 1753.9 | 1723.0 | 1744.9 | 1812.0 | 2037.1 | 2315.6 | 1993.7 | 1694.7 |
| 30°   | 2055.4 | 2035.5 | 2017.8 | 1926.3 | 1870.4 | 1862.4 | 1899.3 | 2079.5 | 2383.0 | 2026.5 | 1680.9 |
| 32.5° | 2315.3 | 2292.1 | 2260.0 | 2138.6 | 2059.9 | 2017.8 | 2012.4 | 2155.0 | 2462.0 | 2068.2 | 1673.9 |
| 35°   | 2624.5 | 2594.3 | 2548.8 | 2391.6 | 2292.1 | 2206.0 | 2161.4 | 2263.8 | 2570.2 | 2131.2 | 1681.9 |
| 37.5° | 2943.1 | 2909.1 | 2867.3 | 2680.4 | 2558.0 | 2431.2 | 2343.1 | 2411.6 | 2714.4 | 2216.7 | 1703.1 |
| 40°   | 3237.0 | 3198.7 | 3159.9 | 2993.5 | 2862.2 | 2709.3 | 2565.8 | 2598.5 | 2890.7 | 2318.8 | 1739.1 |
| 42.5° | 3410.4 | 3382.1 | 3367.3 | 3277.4 | 3176.0 | 3020.8 | 2842.5 | 2820.1 | 3088.9 | 2436.3 | 1780.2 |
| 45°   | 3402.7 | 3391.1 | 3436.7 | 3473.9 | 3449.8 | 3363.8 | 3166.9 | 3065.2 | 3287.7 | 2538.1 | 1818.0 |
| 47.5° | 3220.9 | 3228.6 | 3330.4 | 3539.8 | 3632.0 | 3677.0 | 3536.2 | 3305.7 | 3460.5 | 2614.3 | 1835.1 |
| 50°   | 2726.3 | 2732.8 | 2968.5 | 3420.0 | 3678.8 | 3932.3 | 3902.7 | 3540.5 | 3594.4 | 2660.8 | 1831.3 |
| 52.5° | 2334.8 | 2339.0 | 2440.1 | 3064.9 | 3524.1 | 4060.7 | 4232.8 | 3761.7 | 3692.4 | 2673.6 | 1809.7 |
| 55°   | 1758.7 | 1773.1 | 1886.5 | 2404.5 | 3121.3 | 3959.0 | 4433.9 | 3989.7 | 3754.4 | 2674.9 | 1787.3 |
| 57.5° | 1027.4 | 1043.1 | 1183.2 | 1632.1 | 2426.1 | 3604.0 | 4464.4 | 4192.0 | 3796.4 | 2664.7 | 1773.8 |
| 60°   | 503.3  | 510.0  | 571.0  | 857.8  | 1496.0 | 2920.3 | 4219.1 | 4290.0 | 3819.9 | 2659.2 | 1773.1 |
| 62.5° | 339.2  | 338.1  | 340.7  | 423.3  | 737.1  | 1876.2 | 3707.7 | 4118.6 | 3807.4 | 2638.4 | 1766.7 |
| 65°   | 291.6  | 288.1  | 278.5  | 297.0  | 381.8  | 858.1  | 2864.8 | 3606.6 | 3711.9 | 2586.0 | 1722.7 |
| 67.5° | 252.2  | 252.5  | 252.8  | 246.9  | 272.6  | 396.0  | 1750.6 | 2841.0 | 3369.6 | 2338.0 | 1553.1 |
| 70°   | 208.8  | 211.7  | 212.9  | 212.9  | 222.2  | 259.8  | 747.3  | 1947.2 | 2657.9 | 1833.2 | 1250.9 |
| 72.5° | 190.1  | 184.0  | 184.7  | 181.4  | 181.4  | 197.8  | 300.9  | 1103.8 | 1674.5 | 1031.3 | 763.4  |
| 75°   | 155.1  | 159.0  | 159.6  | 157.3  | 150.0  | 151.0  | 178.6  | 463.1  | 716.5  | 427.7  | 377.4  |
| 77.5° | 134.0  | 134.0  | 135.2  | 133.6  | 127.8  | 113.1  | 119.1  | 179.5  | 243.7  | 175.4  | 188.5  |
| 80°   | 107.6  | 107.3  | 112.7  | 115.9  | 106.9  | 83.5   | 76.2   | 99.2   | 108.2  | 77.1   | 98.0   |
| 82.5° | 52.4   | 55.6   | 77.4   | 88.4   | 81.3   | 60.4   | 46.5   | 61.7   | 57.8   | 34.0   | 44.0   |
| 85°   | 30.5   | 28.9   | 34.6   | 49.1   | 46.5   | 33.4   | 22.4   | 32.1   | 30.2   | 17.3   | 17.6   |
| 87.5° | 9.6    | 9.0    | 7.1    | 16.7   | 13.5   | 9.3    | 6.1    | 9.3    | 8.3    | 3.9    | 3.9    |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 | 1556.7 |
| 2.5°  | 1539.0 | 1501.1 | 1463.5 | 1429.2 | 1408.2 | 1394.8 | 1381.3 | 1366.2 | 1360.4 | 1351.8 |
| 5°    | 1523.6 | 1450.4 | 1385.2 | 1328.9 | 1277.9 | 1237.8 | 1197.3 | 1164.5 | 1149.7 | 1159.7 |
| 7.5°  | 1514.5 | 1408.6 | 1308.1 | 1205.0 | 1105.8 | 1026.4 | 957.4  | 908.9  | 887.0  | 892.5  |
| 10°   | 1506.5 | 1361.4 | 1208.2 | 1045.4 | 902.8  | 804.5  | 733.8  | 696.9  | 683.1  | 686.0  |
| 12.5° | 1499.2 | 1308.4 | 1087.7 | 873.5  | 722.0  | 657.1  | 636.8  | 637.1  | 639.7  | 641.6  |
| 15°   | 1497.9 | 1244.5 | 953.2  | 723.2  | 624.3  | 620.1  | 642.0  | 655.8  | 663.2  | 665.4  |
| 17.5° | 1496.0 | 1168.1 | 816.1  | 620.8  | 600.5  | 628.8  | 649.0  | 658.0  | 663.8  | 664.2  |
| 20°   | 1488.3 | 1071.0 | 689.5  | 571.9  | 595.4  | 619.8  | 632.3  | 639.4  | 644.2  | 645.9  |
| 22.5° | 1464.5 | 963.2  | 590.9  | 550.1  | 574.9  | 594.5  | 609.3  | 617.3  | 620.1  | 622.1  |
| 25°   | 1421.8 | 842.4  | 522.9  | 529.3  | 546.3  | 571.0  | 582.9  | 584.6  | 583.5  | 586.4  |
| 27.5° | 1365.9 | 713.0  | 480.4  | 501.0  | 522.9  | 544.1  | 550.4  | 549.5  | 547.6  | 550.8  |
| 30°   | 1298.5 | 596.8  | 453.5  | 469.2  | 499.1  | 518.3  | 524.1  | 521.9  | 518.0  | 521.5  |
| 32.5° | 1227.1 | 501.6  | 431.3  | 447.0  | 479.5  | 498.5  | 504.2  | 501.9  | 499.1  | 501.9  |
| 35°   | 1160.7 | 435.2  | 410.7  | 432.2  | 464.1  | 482.7  | 490.1  | 490.4  | 490.4  | 493.9  |
| 37.5° | 1099.6 | 396.3  | 393.7  | 423.0  | 453.5  | 470.2  | 480.7  | 481.4  | 467.6  | 468.5  |
| 40°   | 1043.1 | 380.0  | 386.0  | 416.9  | 443.2  | 459.3  | 459.9  | 423.9  | 398.5  | 397.9  |
| 42.5° | 996.9  | 376.7  | 388.3  | 416.3  | 435.8  | 436.4  | 391.1  | 363.3  | 356.2  | 356.5  |
| 45°   | 953.6  | 375.8  | 393.4  | 416.3  | 424.9  | 377.0  | 346.6  | 339.2  | 339.8  | 342.3  |
| 47.5° | 905.1  | 371.9  | 394.4  | 410.4  | 393.4  | 335.3  | 326.3  | 323.1  | 321.8  | 322.5  |
| 50°   | 852.1  | 358.1  | 382.2  | 398.9  | 339.5  | 317.3  | 306.1  | 305.1  | 306.7  | 307.7  |
| 52.5° | 796.1  | 335.6  | 361.3  | 378.0  | 314.8  | 301.6  | 289.0  | 291.3  | 298.4  | 300.6  |
| 55°   | 759.5  | 309.2  | 333.6  | 336.3  | 297.4  | 286.8  | 276.2  | 281.4  | 294.5  | 298.7  |
| 57.5° | 749.9  | 281.4  | 302.2  | 299.3  | 275.2  | 274.0  | 267.5  | 272.0  | 288.7  | 294.8  |
| 60°   | 747.0  | 256.2  | 271.4  | 269.2  | 253.7  | 259.8  | 258.2  | 260.5  | 266.2  | 268.1  |
| 62.5° | 724.6  | 236.4  | 243.7  | 240.6  | 234.4  | 245.1  | 248.9  | 244.1  | 248.6  | 250.8  |
| 65°   | 667.4  | 220.3  | 216.8  | 214.5  | 217.1  | 226.7  | 234.4  | 224.8  | 229.0  | 235.4  |
| 67.5° | 573.0  | 198.4  | 188.8  | 191.4  | 199.5  | 204.6  | 214.5  | 203.6  | 207.2  | 218.0  |
| 70°   | 463.4  | 170.9  | 162.2  | 169.5  | 177.3  | 187.9  | 189.5  | 182.1  | 190.4  | 202.6  |
| 72.5° | 327.9  | 142.9  | 136.8  | 151.9  | 154.5  | 168.3  | 164.7  | 161.2  | 172.8  | 176.9  |
| 75°   | 227.3  | 115.3  | 111.7  | 123.3  | 132.6  | 144.5  | 142.0  | 146.2  | 170.6  | 172.5  |
| 77.5° | 143.9  | 89.6   | 87.3   | 94.7   | 107.6  | 120.7  | 124.9  | 172.5  | 291.3  | 302.9  |
| 80°   | 83.5   | 66.8   | 64.3   | 70.0   | 81.3   | 93.5   | 120.4  | 211.7  | 192.1  | 189.8  |
| 82.5° | 46.5   | 45.9   | 42.7   | 44.3   | 54.3   | 67.4   | 170.3  | 149.0  | 121.1  | 124.9  |
| 85°   | 21.8   | 27.0   | 23.2   | 22.1   | 30.5   | 79.0   | 113.7  | 85.1   | 56.5   | 55.2   |
| 87.5° | 5.7    | 5.1    | 5.1    | 5.7    | 12.8   | 68.1   | 45.3   | 36.3   | 21.5   | 20.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)