

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: P959396

Luminaire Tested: **NAV-SB1A-760-U-T3-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959396  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-760-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 5700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3816.1 lumens  
Efficiency: N/A  
Efficacy: 123.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 30.9  
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

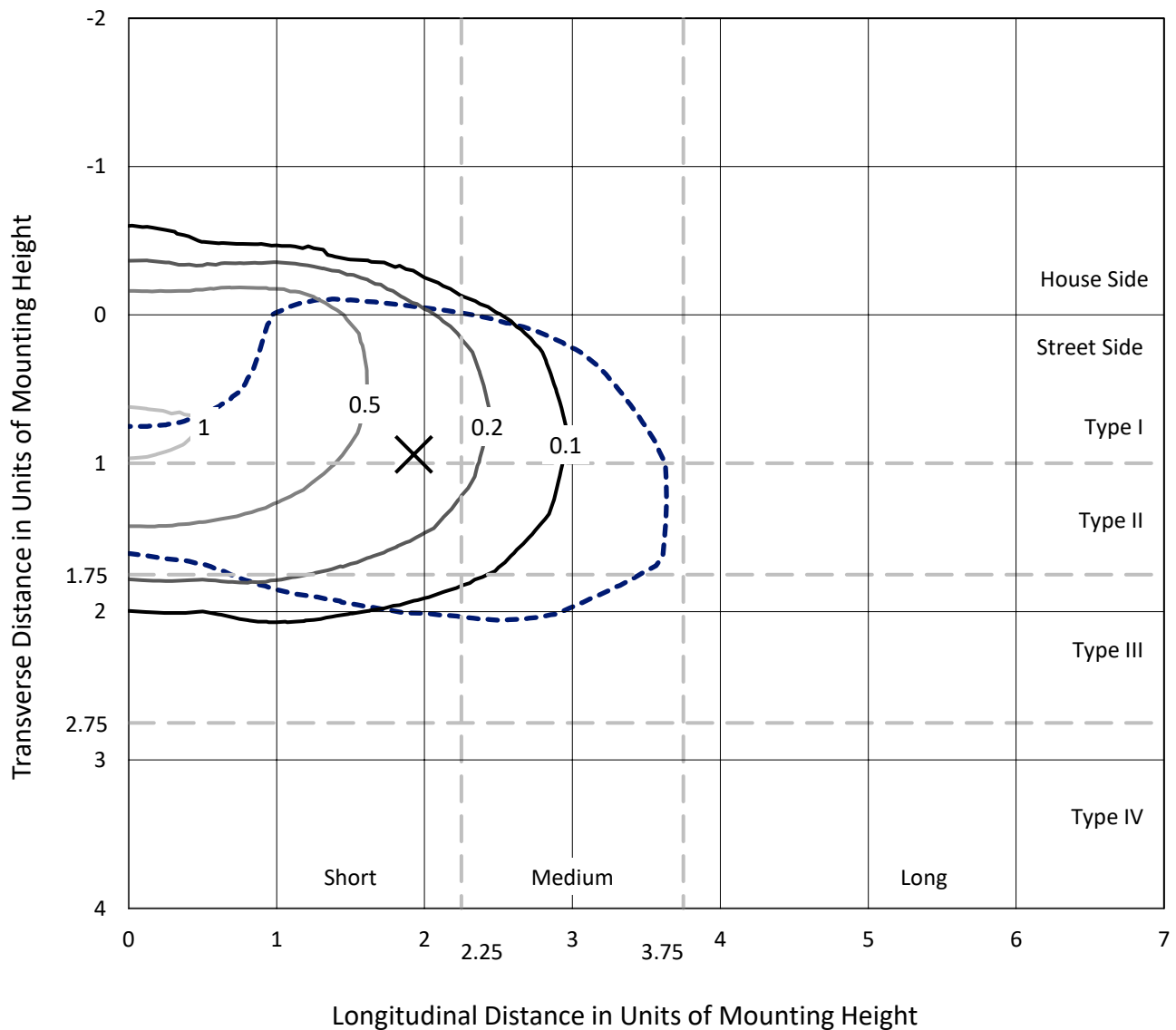


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

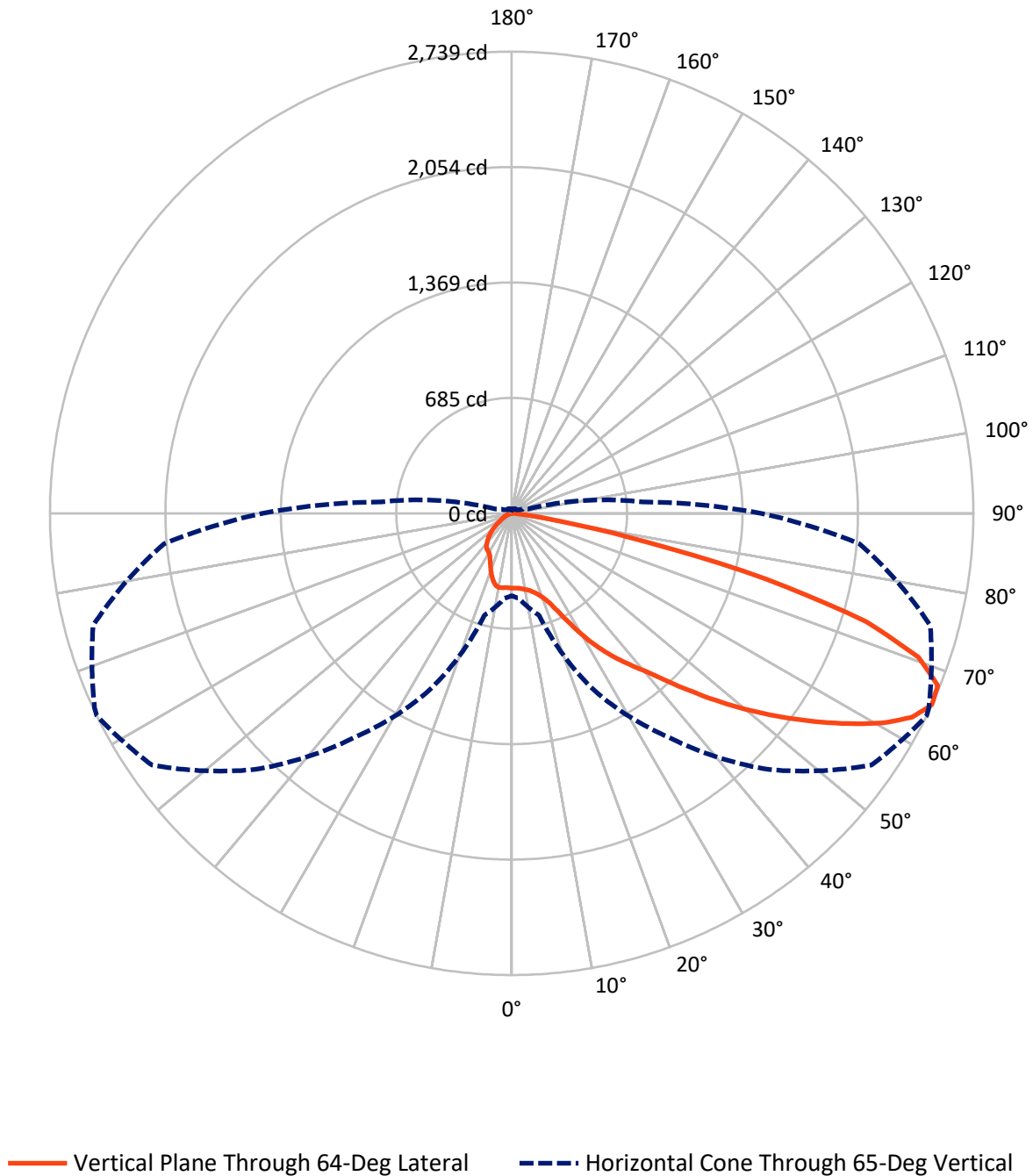


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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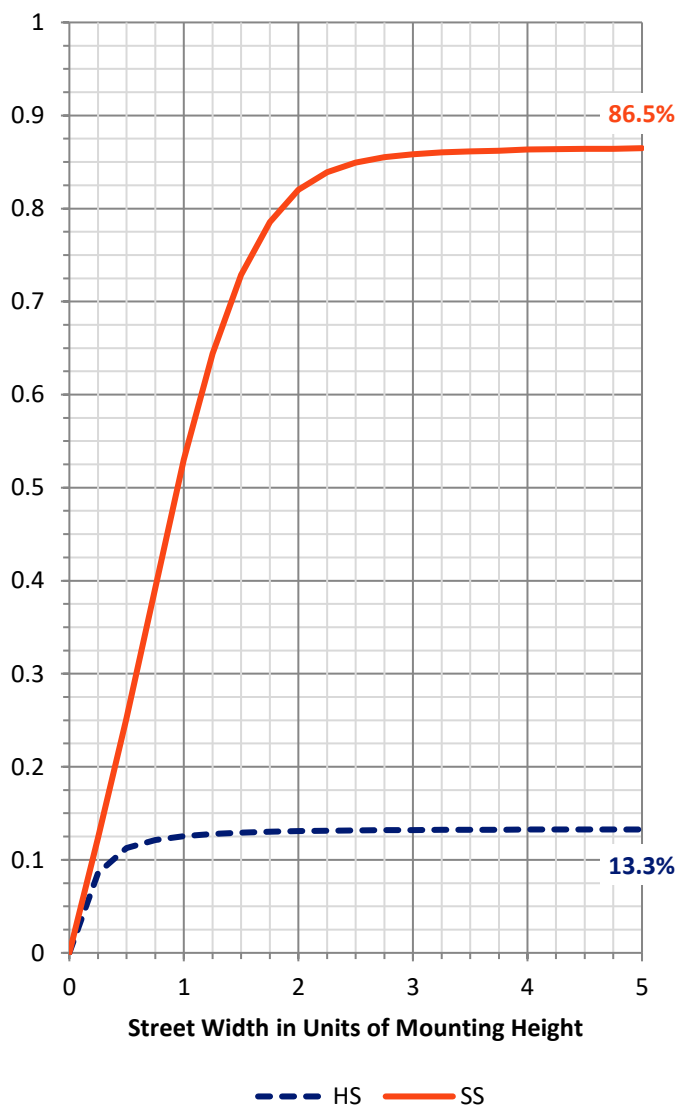
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 510.3    | 0.0    | 510.3  |
|                    | % Fixture | 13.4     | 0.0    | 13.4   |
| <b>Street Side</b> | Lumens    | 3305.7   | 0.0    | 3305.7 |
|                    | % Fixture | 86.6     | 0.0    | 86.6   |
| <b>Total</b>       | Lumens    | 3816.1   | 0.0    | 3816.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 40.9   | 1.1       |
| 10°-20°   | 111.1  | 2.9       |
| 20°-30°   | 210.5  | 5.5       |
| 30°-40°   | 425.9  | 11.2      |
| 40°-50°   | 725.5  | 19.0      |
| 50°-60°   | 986.6  | 25.9      |
| 60°-70°   | 926.5  | 24.3      |
| 70°-80°   | 371.2  | 9.7       |
| 80°-90°   | 18.0   | 0.5       |
| 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°    | 3816.1 | 100.0     |
| 0°-180°   | 3816.1 | 100.0     |

**Coefficient of Utilization**



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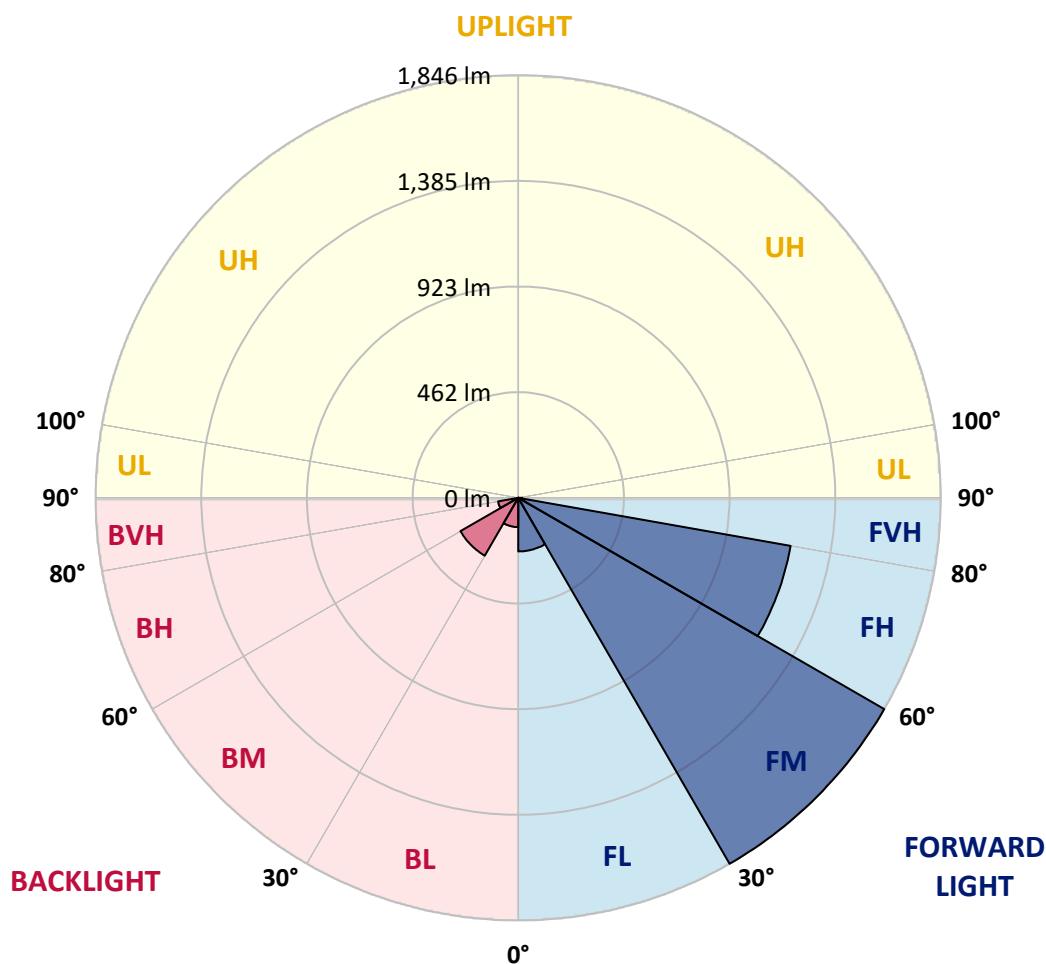
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 234.4  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 1846.2 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 1208.1 | 31.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 17.1   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 128.1  | 3.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 291.7  | 7.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 89.6   | 2.3       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.9    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 64°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  | 443.8  |
| 2.5°  | 442.3  | 445.4  | 444.6  | 443.8  | 443.6  | 444.1  | 444.3  | 444.1  | 444.1  | 444.1  | 444.3  |
| 5°    | 433.9  | 436.4  | 436.4  | 438.2  | 440.7  | 443.8  | 446.2  | 446.7  | 447.2  | 447.9  | 447.7  |
| 7.5°  | 417.8  | 419.8  | 421.4  | 427.2  | 433.6  | 441.8  | 448.7  | 452.3  | 452.8  | 455.6  | 456.6  |
| 10°   | 406.7  | 409.3  | 411.8  | 418.0  | 427.2  | 439.5  | 451.3  | 459.9  | 461.2  | 467.9  | 471.0  |
| 12.5° | 406.2  | 408.8  | 412.2  | 418.8  | 429.5  | 442.6  | 456.9  | 469.4  | 471.7  | 481.4  | 487.9  |
| 15°   | 411.6  | 414.7  | 417.8  | 426.0  | 437.5  | 453.4  | 468.6  | 484.3  | 486.6  | 500.4  | 507.3  |
| 17.5° | 422.6  | 426.7  | 429.0  | 437.2  | 449.5  | 467.1  | 487.4  | 505.2  | 507.3  | 523.4  | 532.1  |
| 20°   | 444.3  | 449.3  | 450.0  | 456.6  | 468.6  | 487.6  | 511.7  | 533.9  | 536.5  | 554.8  | 564.6  |
| 22.5° | 489.3  | 496.3  | 490.2  | 493.4  | 504.2  | 523.2  | 549.3  | 577.4  | 581.0  | 602.0  | 610.7  |
| 25°   | 568.7  | 578.4  | 562.5  | 556.9  | 561.5  | 581.2  | 614.0  | 649.5  | 653.6  | 670.6  | 674.9  |
| 27.5° | 724.5  | 712.0  | 687.9  | 664.4  | 650.6  | 661.8  | 698.6  | 742.6  | 747.7  | 764.1  | 759.0  |
| 30°   | 895.6  | 884.7  | 852.2  | 799.9  | 767.2  | 765.4  | 799.4  | 848.6  | 854.4  | 870.0  | 854.4  |
| 32.5° | 1067.0 | 1056.6 | 1021.2 | 957.0  | 900.3  | 872.1  | 895.6  | 950.1  | 953.1  | 963.2  | 940.1  |
| 35°   | 1235.6 | 1224.9 | 1189.6 | 1123.8 | 1054.0 | 990.0  | 985.4  | 1046.8 | 1047.9 | 1058.3 | 1024.1 |
| 37.5° | 1405.3 | 1396.3 | 1358.6 | 1294.2 | 1225.4 | 1137.1 | 1094.4 | 1138.4 | 1139.7 | 1149.9 | 1114.4 |
| 40°   | 1526.2 | 1530.0 | 1504.2 | 1454.4 | 1395.2 | 1298.8 | 1216.7 | 1235.8 | 1228.2 | 1245.4 | 1224.1 |
| 42.5° | 1630.1 | 1637.7 | 1615.3 | 1590.2 | 1555.9 | 1471.0 | 1368.2 | 1364.8 | 1352.5 | 1361.7 | 1339.8 |
| 45°   | 1719.8 | 1726.3 | 1706.1 | 1700.2 | 1699.4 | 1639.8 | 1533.6 | 1513.7 | 1496.6 | 1494.8 | 1468.4 |
| 47.5° | 1752.9 | 1765.2 | 1773.9 | 1793.5 | 1832.0 | 1806.9 | 1704.8 | 1673.8 | 1654.7 | 1640.6 | 1598.9 |
| 50°   | 1765.5 | 1778.5 | 1808.1 | 1865.4 | 1956.2 | 1967.0 | 1875.1 | 1840.4 | 1816.8 | 1791.3 | 1729.9 |
| 52.5° | 1748.5 | 1771.8 | 1811.7 | 1908.1 | 2040.0 | 2095.4 | 2038.6 | 2008.2 | 1981.3 | 1939.6 | 1848.6 |
| 55°   | 1649.0 | 1672.3 | 1753.9 | 1907.6 | 2081.6 | 2185.5 | 2193.2 | 2179.6 | 2149.4 | 2083.6 | 1944.5 |
| 57.5° | 1439.2 | 1473.7 | 1603.0 | 1842.6 | 2080.9 | 2263.0 | 2344.6 | 2354.3 | 2320.6 | 2226.4 | 2020.0 |
| 60°   | 1148.6 | 1195.5 | 1353.0 | 1698.6 | 2016.6 | 2304.9 | 2477.3 | 2526.0 | 2490.1 | 2367.1 | 2081.1 |
| 62.5° | 801.4  | 855.7  | 1004.9 | 1473.0 | 1869.8 | 2274.8 | 2574.3 | 2664.1 | 2637.0 | 2493.0 | 2104.6 |
| 65°   | 488.8  | 506.2  | 626.5  | 1159.2 | 1620.1 | 2148.4 | 2604.2 | 2738.8 | 2729.9 | 2570.0 | 2069.9 |
| 67.5° | 325.6  | 340.2  | 374.7  | 794.8  | 1257.6 | 1895.8 | 2532.7 | 2725.8 | 2728.3 | 2557.5 | 1942.5 |
| 70°   | 196.2  | 208.8  | 231.2  | 462.3  | 815.1  | 1500.6 | 2310.9 | 2559.5 | 2574.3 | 2389.9 | 1701.0 |
| 72.5° | 80.9   | 89.3   | 109.8  | 209.5  | 422.1  | 952.4  | 1840.1 | 2197.5 | 2232.0 | 2009.5 | 1305.4 |
| 75°   | 45.8   | 50.1   | 64.5   | 105.2  | 183.2  | 443.8  | 1114.6 | 1559.9 | 1610.9 | 1385.0 | 785.4  |
| 77.5° | 30.4   | 32.5   | 41.7   | 68.1   | 103.1  | 151.5  | 476.3  | 812.7  | 910.0  | 756.4  | 340.0  |
| 80°   | 20.5   | 22.2   | 28.7   | 45.5   | 67.0   | 65.0   | 151.7  | 301.1  | 370.4  | 259.9  | 82.9   |
| 82.5° | 13.8   | 14.0   | 20.5   | 29.9   | 42.4   | 31.5   | 44.8   | 93.6   | 117.7  | 75.2   | 31.5   |
| 85°   | 7.9    | 7.7    | 15.1   | 17.4   | 19.0   | 13.0   | 13.5   | 28.2   | 36.8   | 31.7   | 17.9   |
| 87.5° | 1.0    | 1.5    | 5.8    | 4.6    | 2.6    | 2.8    | 2.8    | 4.8    | 7.2    | 7.7    | 3.8    |
| 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°    | 443.8  | 443.8  | 443.8 | 443.8 | 443.8 | 443.8 | 443.8 | 443.8 | 443.8 | 443.8 | 443.8 |
| 2.5°  | 444.3  | 444.1  | 443.3 | 442.6 | 440.7 | 439.7 | 440.2 | 439.7 | 439.5 | 439.7 | 440.7 |
| 5°    | 447.7  | 446.9  | 444.8 | 442.3 | 438.7 | 434.4 | 431.5 | 427.5 | 423.6 | 421.4 | 421.9 |
| 7.5°  | 456.6  | 455.9  | 453.0 | 445.9 | 434.4 | 416.3 | 399.5 | 385.0 | 374.0 | 367.6 | 367.9 |
| 10°   | 471.0  | 469.7  | 465.4 | 449.5 | 419.3 | 379.7 | 346.7 | 319.3 | 301.3 | 292.9 | 292.1 |
| 12.5° | 487.9  | 486.4  | 478.7 | 446.2 | 390.6 | 328.7 | 283.2 | 252.8 | 236.2 | 228.7 | 228.0 |
| 15°   | 507.8  | 505.7  | 490.7 | 430.3 | 348.9 | 272.4 | 230.7 | 208.0 | 197.2 | 190.5 | 190.9 |
| 17.5° | 532.6  | 529.0  | 499.6 | 406.5 | 303.7 | 229.5 | 198.5 | 181.4 | 171.9 | 165.5 | 165.0 |
| 20°   | 564.9  | 558.9  | 506.8 | 378.1 | 262.0 | 202.3 | 176.8 | 162.5 | 155.3 | 149.6 | 148.6 |
| 22.5° | 609.9  | 601.5  | 515.5 | 347.4 | 232.6 | 183.7 | 160.6 | 150.2 | 144.3 | 137.9 | 136.8 |
| 25°   | 665.6  | 655.7  | 526.2 | 319.0 | 212.4 | 167.6 | 148.9 | 140.2 | 133.2 | 125.9 | 125.0 |
| 27.5° | 743.6  | 725.8  | 539.0 | 295.7 | 195.0 | 153.8 | 138.2 | 128.4 | 120.5 | 114.4 | 113.1 |
| 30°   | 830.7  | 801.2  | 550.2 | 281.7 | 179.1 | 140.9 | 124.0 | 114.4 | 106.9 | 102.6 | 101.8 |
| 32.5° | 913.1  | 873.1  | 557.7 | 275.5 | 164.7 | 126.4 | 108.8 | 98.2  | 92.6  | 91.3  | 92.0  |
| 35°   | 990.8  | 938.1  | 556.9 | 269.7 | 152.0 | 111.8 | 93.6  | 82.9  | 78.5  | 79.3  | 79.3  |
| 37.5° | 1080.4 | 1007.5 | 551.6 | 260.5 | 141.4 | 98.5  | 80.6  | 71.1  | 67.2  | 67.5  | 68.6  |
| 40°   | 1184.5 | 1087.5 | 548.3 | 243.0 | 130.0 | 86.2  | 69.8  | 62.1  | 59.3  | 58.3  | 58.1  |
| 42.5° | 1295.5 | 1165.0 | 548.8 | 223.3 | 115.6 | 75.2  | 62.4  | 56.1  | 53.5  | 52.7  | 52.5  |
| 45°   | 1407.0 | 1238.9 | 549.5 | 202.8 | 100.6 | 66.7  | 57.1  | 51.7  | 50.1  | 49.1  | 49.1  |
| 47.5° | 1511.9 | 1301.9 | 535.2 | 180.9 | 85.7  | 60.4  | 52.7  | 49.1  | 47.9  | 46.5  | 46.5  |
| 50°   | 1609.7 | 1343.9 | 500.6 | 155.3 | 73.9  | 55.2  | 49.4  | 46.8  | 45.5  | 44.3  | 44.3  |
| 52.5° | 1685.6 | 1350.4 | 443.6 | 128.9 | 65.7  | 51.5  | 47.4  | 45.0  | 43.5  | 42.2  | 41.9  |
| 55°   | 1719.3 | 1308.8 | 362.5 | 104.3 | 59.3  | 48.1  | 45.3  | 42.9  | 41.2  | 39.9  | 39.7  |
| 57.5° | 1710.7 | 1221.1 | 282.7 | 83.9  | 53.2  | 44.8  | 42.7  | 41.2  | 39.2  | 37.1  | 36.8  |
| 60°   | 1668.0 | 1103.6 | 213.1 | 69.8  | 47.6  | 41.2  | 39.9  | 38.6  | 35.8  | 32.7  | 32.2  |
| 62.5° | 1594.0 | 956.0  | 152.0 | 57.8  | 41.4  | 37.1  | 36.6  | 35.6  | 31.5  | 25.8  | 25.3  |
| 65°   | 1480.9 | 776.6  | 102.3 | 48.1  | 35.6  | 32.5  | 32.7  | 31.0  | 25.6  | 19.2  | 18.7  |
| 67.5° | 1315.7 | 568.0  | 65.5  | 39.4  | 29.7  | 27.2  | 27.4  | 26.3  | 21.7  | 16.4  | 15.6  |
| 70°   | 1105.2 | 376.1  | 42.7  | 29.9  | 23.8  | 21.0  | 22.5  | 22.8  | 18.4  | 13.3  | 12.8  |
| 72.5° | 810.2  | 222.0  | 29.9  | 22.2  | 17.4  | 14.6  | 18.4  | 19.0  | 14.9  | 9.9   | 9.4   |
| 75°   | 461.8  | 105.4  | 22.5  | 16.1  | 10.8  | 10.2  | 14.3  | 14.3  | 10.2  | 6.7   | 6.1   |
| 77.5° | 193.9  | 44.0   | 15.9  | 10.5  | 6.1   | 5.8   | 9.7   | 8.9   | 5.1   | 3.1   | 3.1   |
| 80°   | 56.1   | 19.7   | 8.4   | 5.1   | 2.6   | 2.3   | 3.8   | 2.8   | 1.2   | 0.5   | 0.5   |
| 82.5° | 22.0   | 8.7    | 3.3   | 2.0   | 1.0   | 1.0   | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 13.0   | 3.6    | 1.5   | 0.7   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 3.3    | 0.7    | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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)