

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: P959194

Luminaire Tested: **NAV-SB1A-722-U-SL2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959194  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-722-U-SL2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

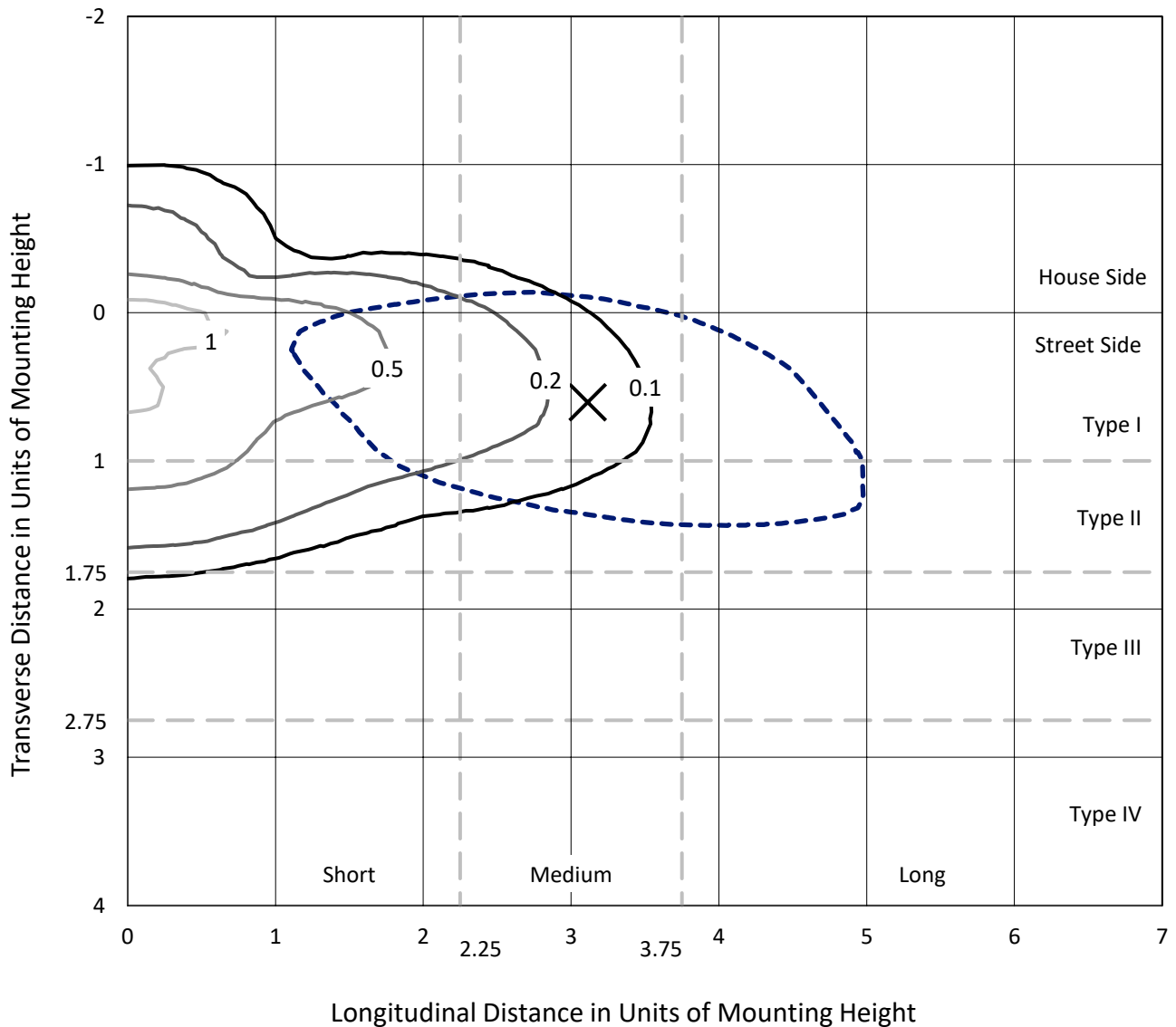
Lumens per Lamp: N/A  
Luminaire Lumens: 3776.1 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

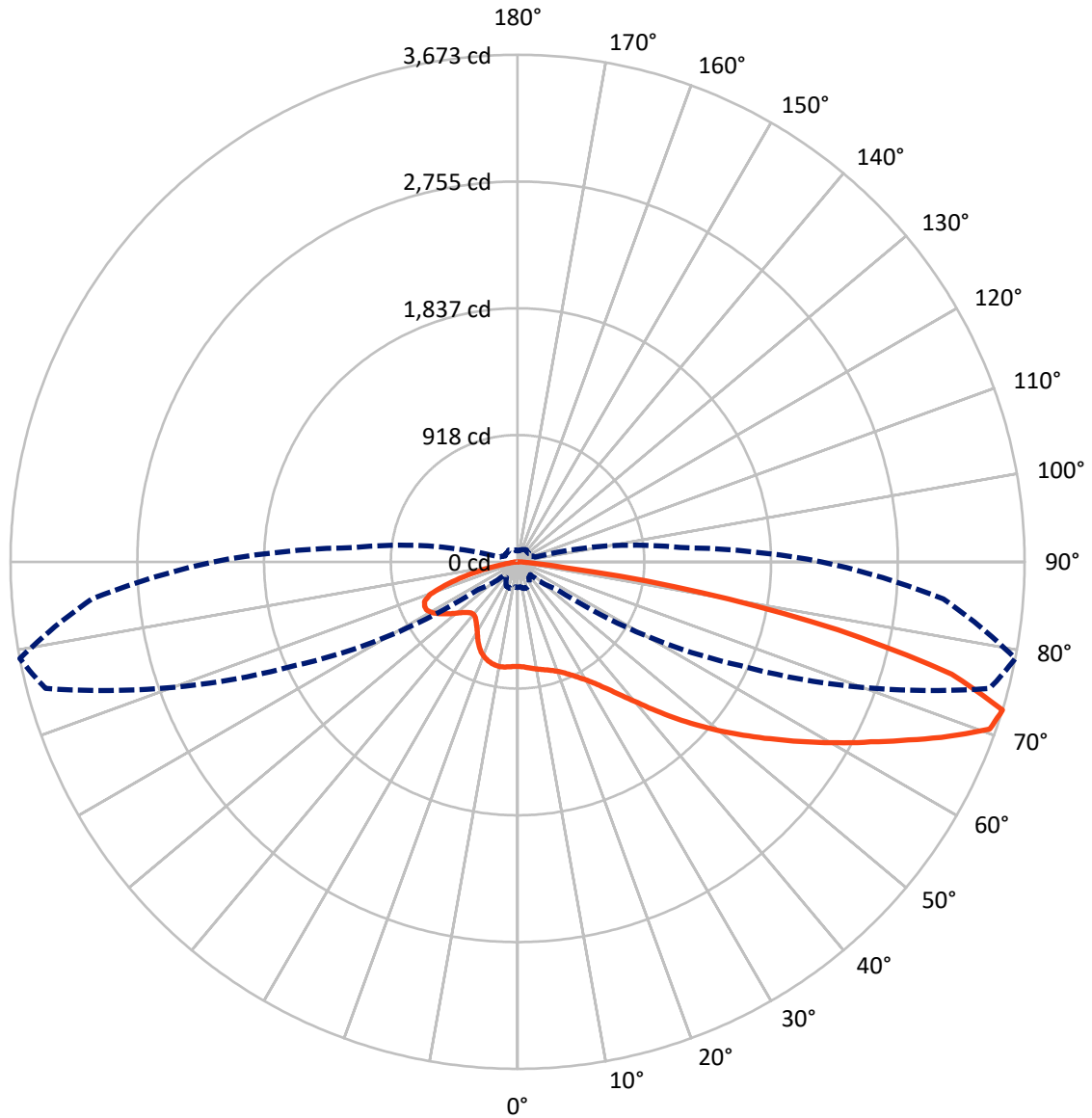
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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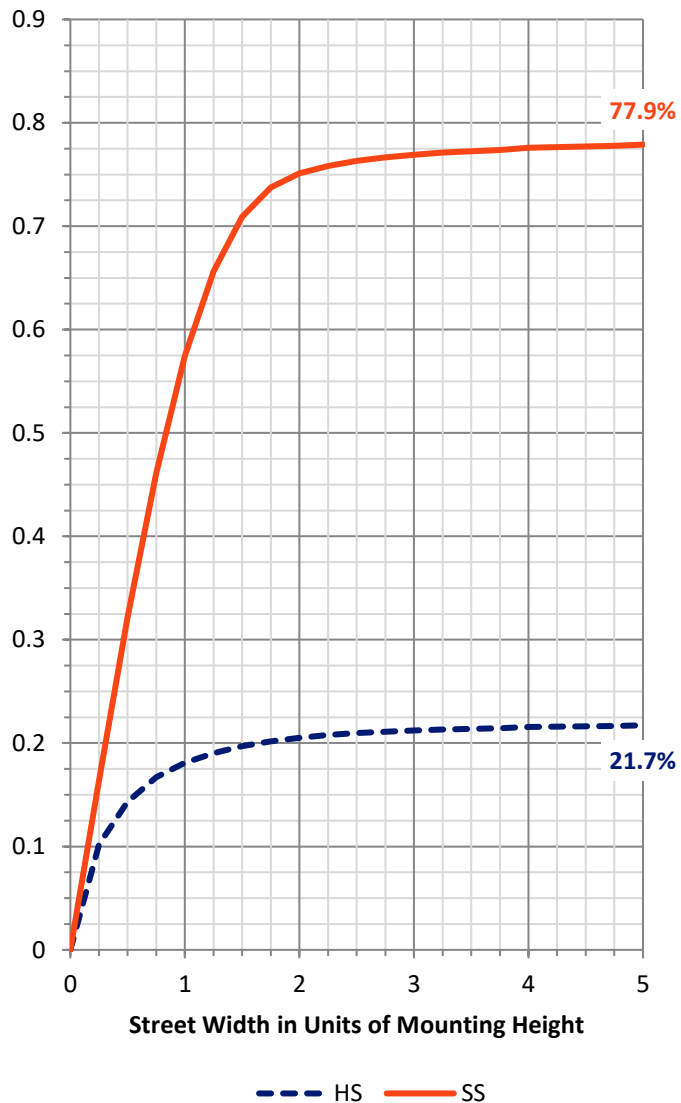
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 830.9    | 0.0    | 830.9  |
|                    | % Fixture | 22.0     | 0.0    | 22.0   |
| <b>Street Side</b> | Lumens    | 2945.1   | 0.0    | 2945.1 |
|                    | % Fixture | 78.0     | 0.0    | 78.0   |
| <b>Total</b>       | Lumens    | 3776.1   | 0.0    | 3776.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.8   | 1.8       |
| 10°-20°   | 179.9  | 4.8       |
| 20°-30°   | 290.3  | 7.7       |
| 30°-40°   | 435.7  | 11.5      |
| 40°-50°   | 618.0  | 16.4      |
| 50°-60°   | 780.5  | 20.7      |
| 60°-70°   | 792.7  | 21.0      |
| 70°-80°   | 540.2  | 14.3      |
| 80°-90°   | 70.1   | 1.9       |
| 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°    | 3776.1 | 100.0     |
| 0°-180°   | 3776.1 | 100.0     |

**Coefficient of Utilization**

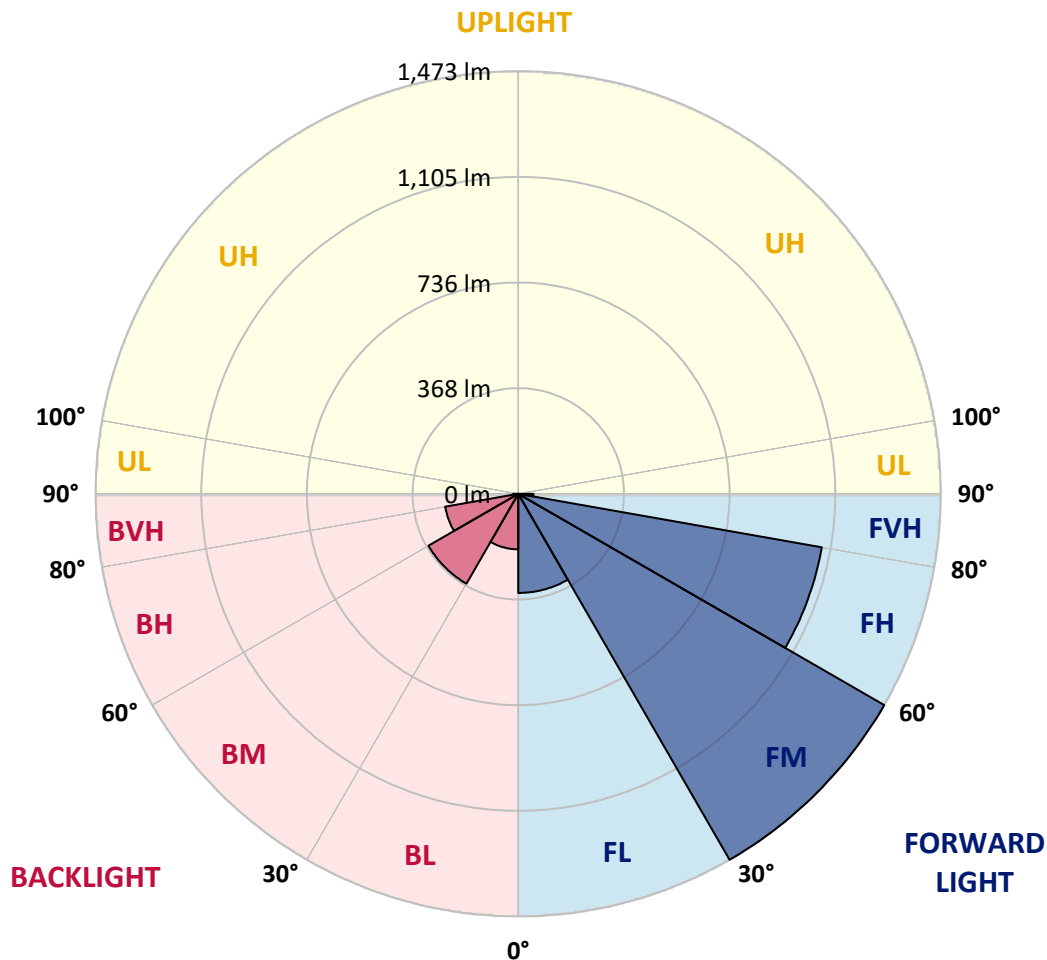


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 345.4  | 9.1       |                         |      |         |
| FM (30°-60°)   | 1472.8 | 39.0      |                         |      |         |
| FH (60°-80°)   | 1074.2 | 28.4      |                         |      | G1/1800 |
| FVH (80°-90°)  | 52.8   | 1.4       |                         |      | G1/100  |
| BL (0°-30°)    | 193.6  | 5.1       | B1/500                  |      |         |
| BM (30°-60°)   | 361.4  | 9.6       | B1/1000                 |      |         |
| BH (60°-80°)   | 258.7  | 6.9       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 17.3   | 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 Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 79°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  | 758.0  |
| 2.5°  | 758.4  | 754.8  | 757.1  | 756.2  | 757.2  | 758.4  | 758.8  | 759.4  | 761.4  | 761.2  | 761.1  |
| 5°    | 756.9  | 753.3  | 756.2  | 755.2  | 757.8  | 760.7  | 763.0  | 765.2  | 768.4  | 769.8  | 767.8  |
| 7.5°  | 753.4  | 751.0  | 754.0  | 757.1  | 761.8  | 766.0  | 769.4  | 774.4  | 779.0  | 779.8  | 781.2  |
| 10°   | 733.7  | 731.8  | 738.8  | 746.6  | 759.8  | 771.2  | 778.6  | 784.4  | 789.4  | 790.2  | 792.2  |
| 12.5° | 713.1  | 710.8  | 718.6  | 729.3  | 750.6  | 771.2  | 786.8  | 794.4  | 798.8  | 801.3  | 804.3  |
| 15°   | 709.7  | 707.9  | 712.3  | 721.5  | 739.2  | 765.8  | 792.3  | 806.4  | 810.2  | 813.1  | 814.4  |
| 17.5° | 726.0  | 722.6  | 724.5  | 727.6  | 738.0  | 760.9  | 796.7  | 819.9  | 825.7  | 828.9  | 828.9  |
| 20°   | 764.0  | 759.2  | 756.4  | 750.0  | 748.2  | 761.6  | 796.3  | 836.3  | 843.9  | 847.9  | 848.9  |
| 22.5° | 814.6  | 811.4  | 805.3  | 789.1  | 771.6  | 771.4  | 803.9  | 857.3  | 871.5  | 875.2  | 872.9  |
| 25°   | 875.7  | 870.8  | 863.3  | 841.3  | 807.6  | 790.8  | 816.7  | 884.1  | 907.8  | 908.9  | 901.8  |
| 27.5° | 946.0  | 938.8  | 928.4  | 899.4  | 853.9  | 821.1  | 836.3  | 914.8  | 949.6  | 949.1  | 934.8  |
| 30°   | 1020.1 | 1012.9 | 1001.9 | 966.8  | 909.4  | 862.1  | 863.5  | 947.9  | 999.1  | 996.9  | 972.3  |
| 32.5° | 1074.2 | 1068.8 | 1066.6 | 1039.5 | 973.3  | 910.4  | 894.6  | 984.7  | 1060.3 | 1058.2 | 1023.9 |
| 35°   | 1115.7 | 1108.7 | 1111.4 | 1097.6 | 1043.0 | 964.5  | 932.7  | 1028.5 | 1134.6 | 1134.4 | 1091.6 |
| 37.5° | 1156.9 | 1150.7 | 1152.9 | 1143.7 | 1107.5 | 1033.3 | 979.3  | 1082.0 | 1226.6 | 1231.0 | 1173.5 |
| 40°   | 1194.4 | 1187.9 | 1196.7 | 1188.1 | 1157.7 | 1106.4 | 1032.3 | 1142.6 | 1333.3 | 1341.6 | 1272.5 |
| 42.5° | 1217.0 | 1211.9 | 1226.4 | 1226.6 | 1201.2 | 1168.1 | 1090.4 | 1209.2 | 1456.7 | 1475.5 | 1394.4 |
| 45°   | 1224.8 | 1223.0 | 1245.0 | 1249.6 | 1239.8 | 1203.9 | 1142.7 | 1282.0 | 1589.8 | 1623.3 | 1533.2 |
| 47.5° | 1216.5 | 1213.0 | 1243.4 | 1260.3 | 1268.1 | 1220.6 | 1186.0 | 1360.6 | 1725.6 | 1774.7 | 1684.6 |
| 50°   | 1174.0 | 1167.5 | 1212.6 | 1248.3 | 1276.1 | 1231.6 | 1229.8 | 1451.5 | 1880.0 | 1933.7 | 1836.8 |
| 52.5° | 1098.0 | 1093.0 | 1144.3 | 1206.4 | 1258.6 | 1237.0 | 1278.9 | 1550.8 | 2026.5 | 2096.1 | 1992.8 |
| 55°   | 1000.7 | 994.1  | 1050.6 | 1131.7 | 1214.8 | 1235.2 | 1328.1 | 1661.8 | 2199.5 | 2270.1 | 2154.0 |
| 57.5° | 846.5  | 833.3  | 904.9  | 1000.7 | 1143.5 | 1233.0 | 1379.2 | 1772.3 | 2375.3 | 2459.8 | 2325.9 |
| 60°   | 621.6  | 602.0  | 689.7  | 803.4  | 1004.1 | 1211.7 | 1442.5 | 1896.1 | 2586.3 | 2662.3 | 2513.7 |
| 62.5° | 361.9  | 350.5  | 407.8  | 513.9  | 756.9  | 1085.8 | 1478.0 | 2040.2 | 2793.5 | 2873.5 | 2698.3 |
| 65°   | 281.1  | 277.9  | 282.8  | 291.0  | 421.3  | 812.9  | 1368.4 | 2180.6 | 3057.3 | 3113.1 | 2890.6 |
| 67.5° | 257.1  | 254.7  | 256.9  | 241.5  | 213.7  | 452.8  | 1082.6 | 2216.2 | 3339.7 | 3373.6 | 3059.0 |
| 70°   | 228.5  | 225.7  | 232.9  | 219.8  | 168.2  | 205.9  | 699.5  | 2087.1 | 3564.3 | 3628.1 | 3187.0 |
| 72.5° | 186.1  | 183.0  | 199.8  | 193.7  | 141.7  | 132.2  | 351.4  | 1780.5 | 3540.8 | 3673.0 | 3095.4 |
| 75°   | 143.0  | 141.2  | 161.2  | 166.2  | 115.4  | 104.0  | 168.6  | 1323.5 | 3116.0 | 3249.1 | 2667.8 |
| 77.5° | 111.0  | 109.7  | 119.8  | 138.1  | 93.1   | 80.7   | 103.6  | 839.5  | 2348.2 | 2371.5 | 1838.4 |
| 80°   | 83.3   | 79.3   | 88.7   | 106.9  | 72.5   | 58.9   | 70.3   | 489.5  | 1484.3 | 1345.4 | 800.1  |
| 82.5° | 52.2   | 50.1   | 57.9   | 71.3   | 51.1   | 40.6   | 45.7   | 270.5  | 594.8  | 350.3  | 154.4  |
| 85°   | 29.7   | 29.0   | 31.6   | 40.8   | 27.8   | 23.4   | 26.1   | 119.4  | 108.6  | 74.7   | 46.5   |
| 87.5° | 12.0   | 11.6   | 14.3   | 18.1   | 10.1   | 8.6    | 9.2    | 28.8   | 24.0   | 22.1   | 15.4   |
| 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°    | 758.0  | 758.0  | 758.0 | 758.0 | 758.0 | 758.0 | 758.0 | 758.0 | 758.0 | 758.0 | 758.0 |
| 2.5°  | 760.2  | 760.2  | 757.4 | 753.1 | 748.0 | 744.9 | 739.6 | 738.2 | 732.9 | 731.2 | 733.8 |
| 5°    | 769.4  | 767.8  | 759.2 | 746.8 | 729.9 | 714.3 | 697.1 | 686.3 | 671.2 | 665.7 | 669.7 |
| 7.5°  | 780.9  | 776.6  | 761.8 | 734.6 | 699.0 | 664.1 | 627.8 | 600.2 | 573.9 | 564.5 | 565.7 |
| 10°   | 791.6  | 785.4  | 760.2 | 712.7 | 651.2 | 590.6 | 532.7 | 492.2 | 461.4 | 448.8 | 451.6 |
| 12.5° | 802.2  | 790.8  | 749.6 | 676.1 | 583.0 | 500.9 | 439.2 | 407.6 | 388.7 | 373.5 | 378.5 |
| 15°   | 812.1  | 796.1  | 733.3 | 627.2 | 508.3 | 425.1 | 379.6 | 354.3 | 339.2 | 329.1 | 331.0 |
| 17.5° | 823.7  | 800.7  | 708.7 | 565.1 | 437.3 | 372.5 | 335.4 | 320.2 | 317.2 | 316.0 | 316.8 |
| 20°   | 839.9  | 804.9  | 676.3 | 495.6 | 384.9 | 330.6 | 311.4 | 310.0 | 309.8 | 309.2 | 311.2 |
| 22.5° | 857.3  | 810.0  | 633.6 | 432.4 | 340.4 | 304.4 | 301.0 | 298.2 | 296.4 | 296.2 | 298.4 |
| 25°   | 877.8  | 811.6  | 580.0 | 380.7 | 302.4 | 292.0 | 288.0 | 283.8 | 282.6 | 282.6 | 283.8 |
| 27.5° | 897.8  | 806.2  | 517.7 | 335.8 | 281.1 | 280.6 | 275.4 | 274.1 | 273.9 | 274.5 | 276.0 |
| 30°   | 917.8  | 796.0  | 455.8 | 294.2 | 268.7 | 268.7 | 266.8 | 267.8 | 268.7 | 270.6 | 272.0 |
| 32.5° | 944.7  | 785.2  | 404.1 | 263.4 | 257.9 | 255.8 | 257.7 | 259.6 | 260.5 | 263.0 | 265.3 |
| 35°   | 984.3  | 777.6  | 363.0 | 246.7 | 246.7 | 244.1 | 245.1 | 244.7 | 242.9 | 241.7 | 244.5 |
| 37.5° | 1036.7 | 777.2  | 328.9 | 238.9 | 237.3 | 236.9 | 237.1 | 234.5 | 227.6 | 219.1 | 219.4 |
| 40°   | 1099.6 | 788.0  | 302.8 | 233.5 | 232.3 | 234.7 | 233.5 | 226.5 | 207.4 | 192.7 | 192.4 |
| 42.5° | 1184.1 | 818.8  | 286.1 | 226.9 | 230.5 | 233.5 | 228.7 | 204.5 | 191.6 | 181.7 | 181.3 |
| 45°   | 1283.5 | 868.7  | 277.5 | 220.0 | 227.1 | 230.7 | 207.6 | 196.9 | 186.5 | 174.8 | 173.9 |
| 47.5° | 1396.2 | 931.6  | 275.4 | 213.3 | 219.6 | 221.7 | 198.5 | 193.7 | 181.9 | 169.2 | 168.2 |
| 50°   | 1518.8 | 1006.1 | 280.8 | 205.5 | 208.5 | 200.9 | 195.6 | 191.2 | 179.0 | 166.4 | 165.0 |
| 52.5° | 1645.6 | 1088.1 | 291.6 | 195.0 | 197.5 | 189.1 | 194.3 | 190.5 | 177.1 | 160.2 | 159.0 |
| 55°   | 1770.3 | 1170.9 | 302.0 | 182.6 | 186.3 | 178.6 | 191.0 | 188.2 | 169.0 | 149.9 | 148.8 |
| 57.5° | 1897.0 | 1253.2 | 312.2 | 171.6 | 175.6 | 168.4 | 185.5 | 181.7 | 159.8 | 140.2 | 139.8 |
| 60°   | 2028.6 | 1333.1 | 317.0 | 161.0 | 163.8 | 159.0 | 177.3 | 170.8 | 149.4 | 130.4 | 129.9 |
| 62.5° | 2151.8 | 1399.5 | 309.2 | 150.4 | 152.2 | 150.2 | 166.6 | 157.7 | 139.0 | 119.4 | 119.2 |
| 65°   | 2275.4 | 1439.1 | 285.3 | 140.0 | 140.4 | 139.4 | 151.4 | 143.8 | 126.8 | 109.9 | 108.6 |
| 67.5° | 2387.5 | 1461.3 | 247.1 | 128.8 | 127.8 | 127.4 | 137.2 | 128.6 | 115.0 | 100.2 | 99.1  |
| 70°   | 2411.3 | 1405.0 | 188.8 | 115.6 | 115.6 | 114.7 | 121.7 | 112.9 | 102.1 | 90.1  | 89.7  |
| 72.5° | 2202.3 | 1181.8 | 134.1 | 100.7 | 102.3 | 100.2 | 106.1 | 98.7  | 88.9  | 80.9  | 78.5  |
| 75°   | 1775.9 | 866.6  | 97.5  | 85.3  | 88.0  | 84.7  | 90.1  | 84.9  | 76.5  | 76.3  | 68.7  |
| 77.5° | 1220.3 | 535.9  | 70.7  | 70.3  | 72.3  | 68.0  | 74.1  | 71.3  | 63.8  | 60.4  | 56.5  |
| 80°   | 520.7  | 213.7  | 51.6  | 54.3  | 54.3  | 50.3  | 57.5  | 58.3  | 51.8  | 50.1  | 50.1  |
| 82.5° | 103.6  | 60.7   | 36.2  | 37.3  | 35.2  | 33.9  | 40.8  | 45.1  | 62.3  | 69.3  | 69.5  |
| 85°   | 31.2   | 22.3   | 21.7  | 20.4  | 17.9  | 18.1  | 24.0  | 45.3  | 56.0  | 32.0  | 27.6  |
| 87.5° | 8.6    | 5.6    | 5.8   | 4.6   | 3.8   | 5.0   | 8.2   | 34.3  | 18.8  | 8.0   | 6.8   |
| 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)