

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: P971359

Luminaire Tested: **NAV-SB6D-727-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P971359  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6D-727-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

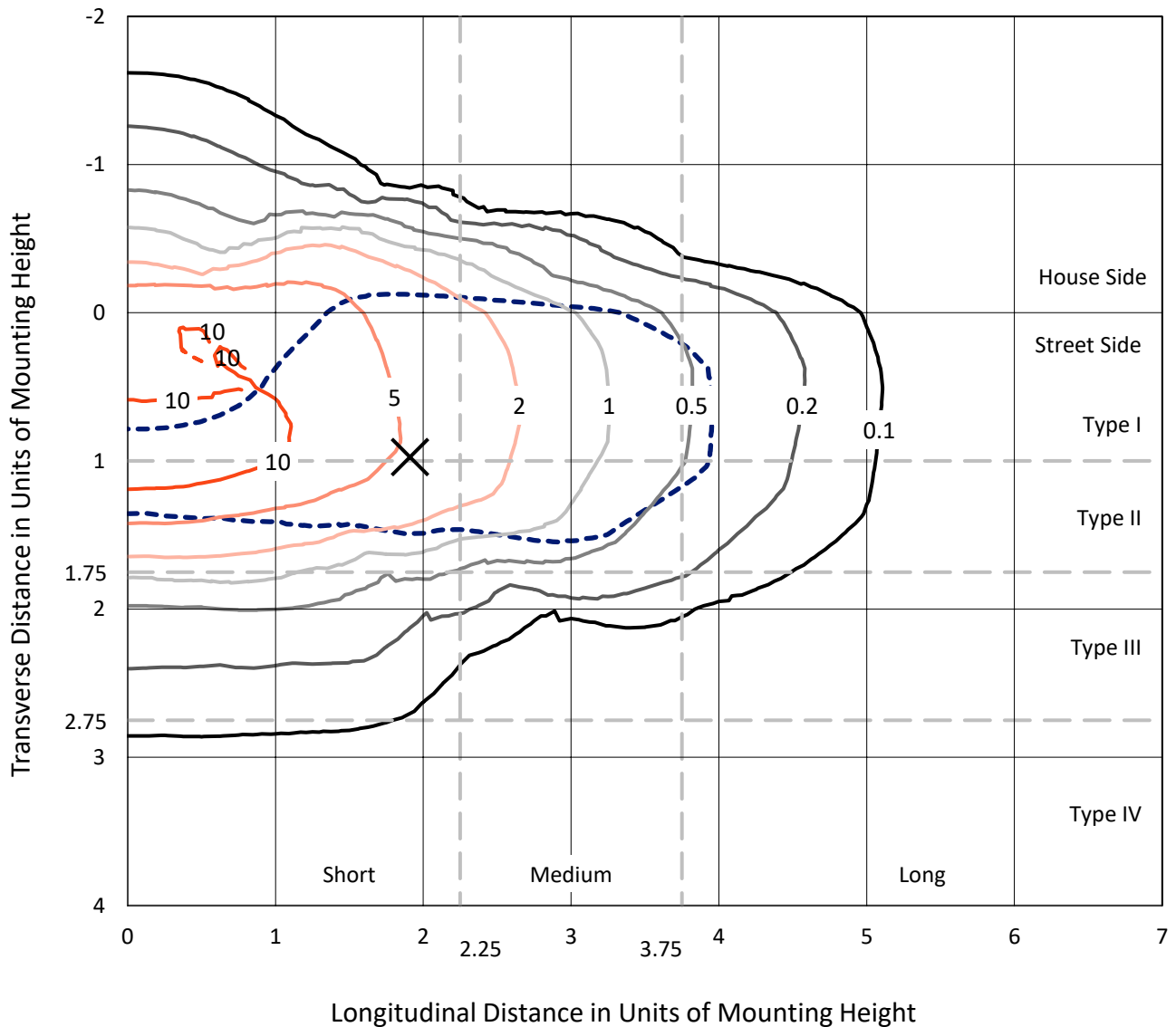
Lumens per Lamp: N/A  
Luminaire Lumens: 44836.6 lumens  
Efficiency: N/A  
Efficacy: 101.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 440.1  
Input Voltage (V): NR  
Input Current (Ain): 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

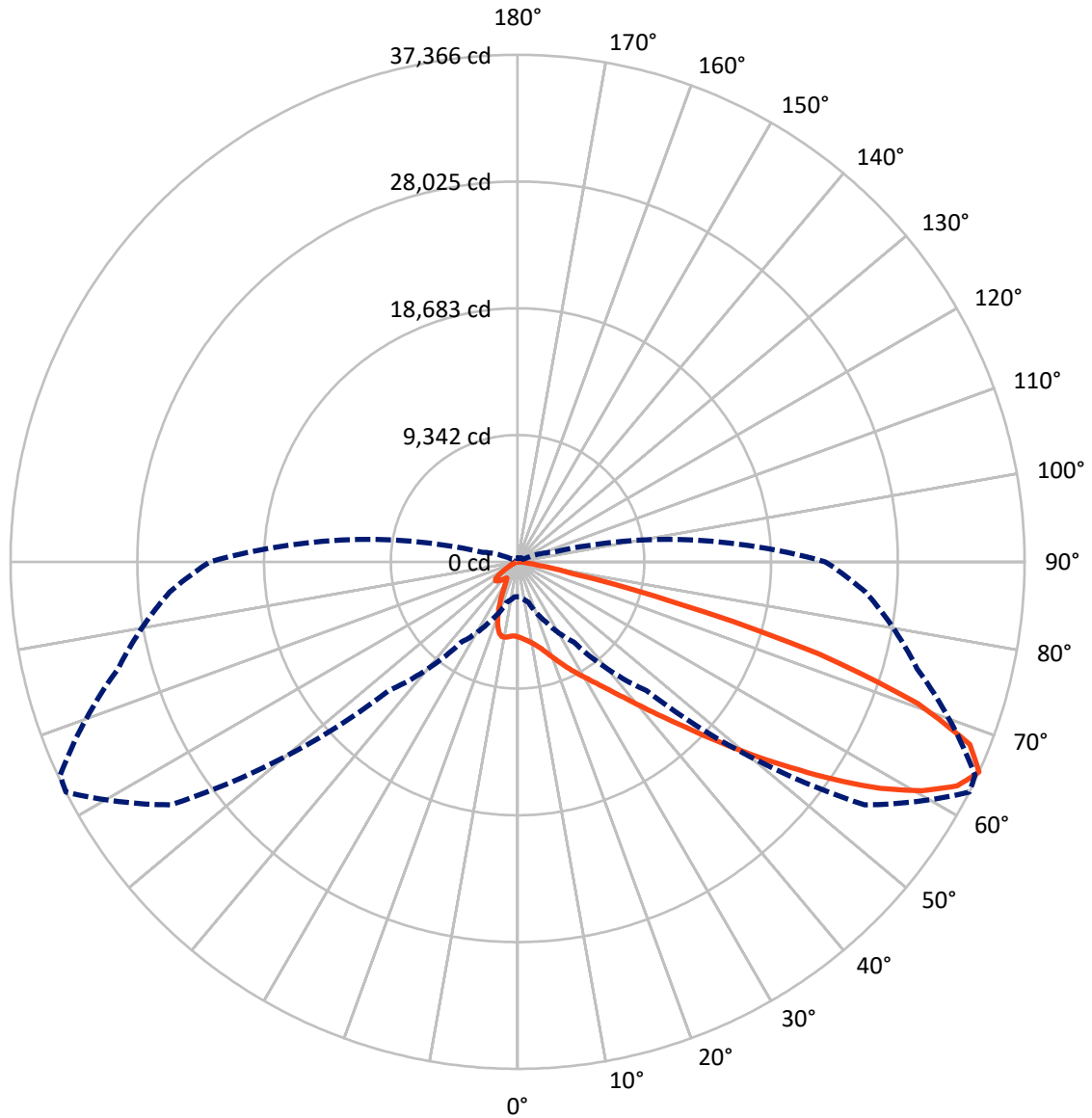
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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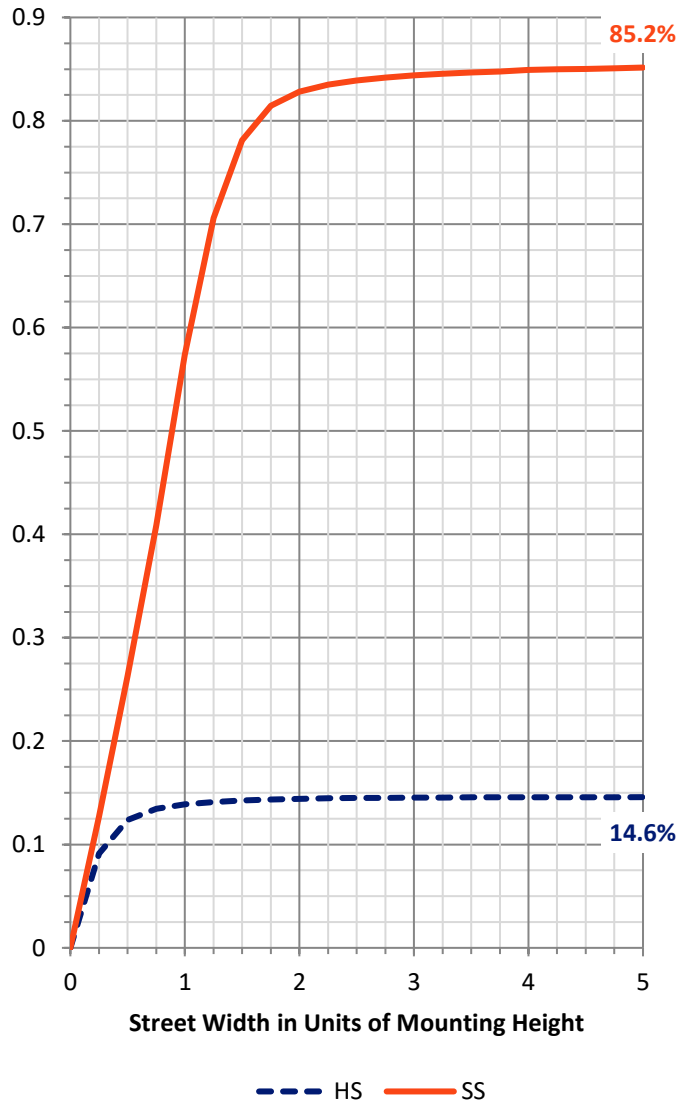
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6590.6   | 0.0    | 6590.6  |
|                    | % Fixture | 14.7     | 0.0    | 14.7    |
| <b>Street Side</b> | Lumens    | 38245.9  | 0.0    | 38245.9 |
|                    | % Fixture | 85.3     | 0.0    | 85.3    |
| <b>Total</b>       | Lumens    | 44836.6  | 0.0    | 44836.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 521.4   | 1.2       |
| 10°-20°   | 1446.6  | 3.2       |
| 20°-30°   | 2519.0  | 5.6       |
| 30°-40°   | 4540.1  | 10.1      |
| 40°-50°   | 9004.6  | 20.1      |
| 50°-60°   | 12265.7 | 27.4      |
| 60°-70°   | 9790.4  | 21.8      |
| 70°-80°   | 4430.4  | 9.9       |
| 80°-90°   | 318.5   | 0.7       |
| 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°    | 44836.6 | 100.0     |
| 0°-180°   | 44836.6 | 100.0     |

**Coefficient of Utilization**



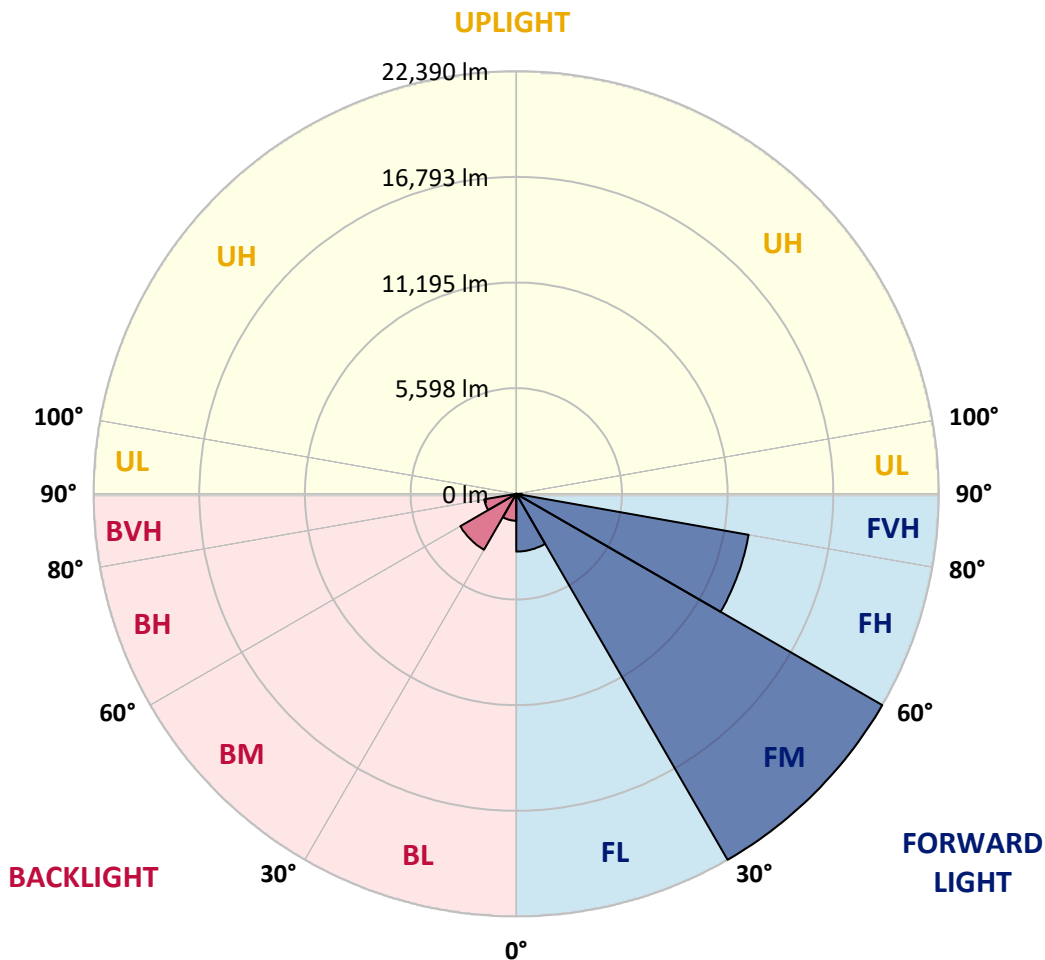
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3060.6  | 6.8       |                         |      |         |
| FM (30°-60°)   | 22390.3 | 49.9      |                         |      |         |
| FH (60°-80°)   | 12500.2 | 27.9      |                         |      | G5      |
| FVH (80°-90°)  | 294.8   | 0.7       |                         |      | G3/500  |
| BL (0°-30°)    | 1426.3  | 3.2       | B3/2500                 |      |         |
| BM (30°-60°)   | 3420.1  | 7.6       | B3/5000                 |      |         |
| BH (60°-80°)   | 1720.5  | 3.8       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 23.6    | 0.1       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 63°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  | 5533.7  |
| 2.5°  | 5663.2  | 5647.9  | 5669.4  | 5660.2  | 5654.0  | 5641.6  | 5635.4  | 5629.3  | 5617.0  | 5607.7  | 5570.7  |
| 5°    | 5678.7  | 5669.4  | 5691.0  | 5709.5  | 5728.0  | 5746.6  | 5755.8  | 5768.1  | 5755.8  | 5731.1  | 5694.1  |
| 7.5°  | 5549.1  | 5542.9  | 5589.2  | 5644.7  | 5728.0  | 5798.9  | 5876.0  | 5919.3  | 5922.3  | 5913.1  | 5872.9  |
| 10°   | 5539.8  | 5524.4  | 5570.7  | 5638.5  | 5746.6  | 5872.9  | 6008.7  | 6101.2  | 6113.6  | 6153.7  | 6110.5  |
| 12.5° | 5684.9  | 5669.4  | 5734.2  | 5808.2  | 5919.3  | 6051.9  | 6218.5  | 6348.0  | 6366.5  | 6422.0  | 6391.2  |
| 15°   | 5928.5  | 5906.9  | 5981.0  | 6076.6  | 6218.5  | 6369.6  | 6545.4  | 6662.6  | 6678.1  | 6745.9  | 6690.4  |
| 17.5° | 6212.3  | 6190.7  | 6277.1  | 6378.9  | 6533.0  | 6739.8  | 6943.4  | 7072.9  | 7091.4  | 7134.5  | 7032.7  |
| 20°   | 6576.3  | 6548.5  | 6616.4  | 6708.9  | 6872.4  | 7119.1  | 7362.8  | 7547.9  | 7544.8  | 7544.8  | 7378.3  |
| 22.5° | 6998.8  | 6955.6  | 7014.3  | 7088.3  | 7242.5  | 7541.7  | 7865.6  | 8084.6  | 8084.6  | 7998.3  | 7723.7  |
| 25°   | 7452.3  | 7409.1  | 7473.9  | 7541.7  | 7677.5  | 8016.7  | 8396.2  | 8667.6  | 8679.9  | 8531.9  | 8093.8  |
| 27.5° | 8019.8  | 7964.4  | 8013.7  | 8093.8  | 8174.1  | 8519.5  | 8969.9  | 9284.4  | 9290.7  | 9062.4  | 8445.5  |
| 30°   | 9111.7  | 8954.4  | 8800.2  | 8713.8  | 8750.8  | 9093.3  | 9574.4  | 9923.0  | 9953.9  | 9639.2  | 8828.0  |
| 32.5° | 11110.6 | 11079.7 | 10536.8 | 9827.4  | 9457.3  | 9710.1  | 10250.0 | 10669.4 | 10688.0 | 10283.9 | 9324.6  |
| 35°   | 14216.6 | 14179.6 | 13306.8 | 11955.7 | 10749.7 | 10536.8 | 11070.4 | 11567.0 | 11554.7 | 11098.2 | 9969.3  |
| 37.5° | 17924.3 | 17890.4 | 16739.9 | 14932.3 | 12979.8 | 11786.1 | 12128.4 | 12649.7 | 12726.8 | 12128.4 | 10802.1 |
| 40°   | 21092.1 | 20965.7 | 20237.7 | 18495.0 | 15940.9 | 13858.9 | 13633.7 | 13979.2 | 14059.4 | 13349.9 | 11860.1 |
| 42.5° | 23491.9 | 23383.9 | 23013.8 | 21925.0 | 19525.2 | 16924.9 | 15407.3 | 15539.9 | 15629.4 | 14778.0 | 13075.4 |
| 45°   | 24735.0 | 24710.3 | 24858.4 | 24756.6 | 23177.3 | 20688.1 | 17942.8 | 17390.7 | 17424.6 | 16360.4 | 14454.2 |
| 47.5° | 24910.8 | 24898.5 | 25574.0 | 26530.2 | 26317.4 | 24932.4 | 21197.0 | 19697.9 | 19577.6 | 18146.4 | 15953.3 |
| 50°   | 23874.4 | 23849.7 | 25145.2 | 26937.4 | 28414.8 | 28498.2 | 24892.3 | 22298.2 | 22032.9 | 19994.1 | 17517.1 |
| 52.5° | 20564.7 | 20558.5 | 22686.8 | 25669.6 | 29152.0 | 31619.7 | 28544.4 | 25154.5 | 24710.3 | 21949.7 | 19170.5 |
| 55°   | 15823.7 | 15937.8 | 18377.7 | 21903.4 | 27807.2 | 33121.8 | 31823.3 | 28325.4 | 27643.7 | 23917.6 | 20694.2 |
| 57.5° | 11209.3 | 11375.9 | 13787.9 | 16928.0 | 23636.9 | 32233.6 | 34041.1 | 31502.5 | 30768.3 | 25879.4 | 22239.6 |
| 60°   | 6021.1  | 6169.1  | 8584.3  | 12332.0 | 17585.0 | 28920.7 | 35210.1 | 34260.1 | 33566.1 | 27742.4 | 23633.8 |
| 62.5° | 3587.3  | 3636.7  | 4636.1  | 7961.2  | 11894.0 | 22094.6 | 34713.5 | 36360.6 | 35790.0 | 29306.3 | 24846.0 |
| 65°   | 2575.6  | 2584.8  | 3087.6  | 4861.3  | 7220.9  | 13423.9 | 31231.0 | 37366.3 | 37190.4 | 30484.6 | 25743.7 |
| 67.5° | 2168.4  | 2162.2  | 2372.1  | 3229.6  | 4919.9  | 6724.3  | 23936.1 | 35944.3 | 36690.7 | 31231.0 | 26252.6 |
| 70°   | 1860.0  | 1869.2  | 2116.0  | 2365.8  | 3698.4  | 3806.3  | 11900.1 | 31295.8 | 32887.4 | 31428.4 | 26221.8 |
| 72.5° | 1385.0  | 1415.8  | 1644.1  | 2156.1  | 2791.5  | 2618.8  | 4108.6  | 23205.1 | 26083.0 | 29611.6 | 24861.5 |
| 75°   | 977.8   | 993.2   | 1156.7  | 1813.7  | 2082.1  | 1906.3  | 2097.5  | 11995.8 | 15685.0 | 22702.3 | 20348.8 |
| 77.5° | 752.7   | 780.4   | 876.0   | 1267.7  | 2051.2  | 1338.6  | 1283.2  | 4151.8  | 6378.9  | 13713.9 | 13951.4 |
| 80°   | 407.1   | 456.5   | 632.3   | 916.1   | 1440.5  | 947.0   | 635.4   | 1653.3  | 2162.2  | 6412.8  | 5379.4  |
| 82.5° | 209.7   | 234.4   | 441.1   | 660.1   | 820.5   | 826.7   | 314.7   | 687.9   | 891.4   | 1980.3  | 737.2   |
| 85°   | 83.3    | 101.8   | 296.1   | 364.0   | 422.6   | 407.1   | 141.9   | 277.6   | 320.8   | 549.1   | 225.2   |
| 87.5° | 18.6    | 30.9    | 107.9   | 83.3    | 80.2    | 86.4    | 33.9    | 64.8    | 61.7    | 64.8    | 40.1    |
| 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°    | 5533.7  | 5533.7  | 5533.7 | 5533.7 | 5533.7 | 5533.7 | 5533.7 | 5533.7 | 5533.7 | 5533.7 | 5533.7 |
| 2.5°  | 5567.6  | 5555.3  | 5521.4 | 5484.4 | 5441.1 | 5416.5 | 5401.0 | 5398.0 | 5376.3 | 5361.0 | 5376.3 |
| 5°    | 5660.2  | 5647.9  | 5583.1 | 5505.9 | 5422.7 | 5357.9 | 5296.2 | 5240.6 | 5160.5 | 5145.0 | 5138.8 |
| 7.5°  | 5845.3  | 5811.3  | 5706.4 | 5601.5 | 5444.2 | 5256.1 | 5027.8 | 4765.6 | 4531.2 | 4460.3 | 4426.4 |
| 10°   | 6073.4  | 6027.2  | 5894.6 | 5709.5 | 5361.0 | 4848.9 | 4296.8 | 3784.7 | 3377.6 | 3263.5 | 3220.2 |
| 12.5° | 6332.6  | 6292.5  | 6116.7 | 5774.2 | 5012.4 | 4083.9 | 3238.8 | 2603.4 | 2208.6 | 2109.9 | 2082.1 |
| 15°   | 6641.1  | 6582.4  | 6338.7 | 5675.5 | 4389.4 | 3103.1 | 2223.9 | 1847.7 | 1705.8 | 1687.3 | 1668.7 |
| 17.5° | 6968.0  | 6872.4  | 6536.1 | 5320.9 | 3550.3 | 2205.5 | 1718.1 | 1610.2 | 1548.5 | 1529.9 | 1520.7 |
| 20°   | 7267.1  | 7143.8  | 6653.4 | 4784.1 | 2652.7 | 1718.1 | 1539.1 | 1468.2 | 1412.8 | 1391.1 | 1378.8 |
| 22.5° | 7566.4  | 7390.6  | 6653.4 | 4053.1 | 1989.5 | 1523.8 | 1412.8 | 1348.0 | 1283.2 | 1255.4 | 1239.9 |
| 25°   | 7877.9  | 7643.5  | 6536.1 | 3238.8 | 1600.8 | 1397.3 | 1292.4 | 1221.5 | 1165.9 | 1132.0 | 1119.7 |
| 27.5° | 8180.2  | 7856.3  | 6267.8 | 2467.7 | 1425.1 | 1286.3 | 1181.4 | 1113.6 | 1061.1 | 1036.4 | 1036.4 |
| 30°   | 8467.1  | 8066.1  | 5891.5 | 1872.4 | 1311.0 | 1178.3 | 1079.6 | 1021.0 | 968.5  | 943.9  | 947.0  |
| 32.5° | 8855.7  | 8331.4  | 5490.5 | 1536.1 | 1212.3 | 1076.6 | 987.1  | 931.5  | 885.3  | 866.7  | 866.7  |
| 35°   | 9395.6  | 8723.1  | 5145.0 | 1508.4 | 1128.9 | 993.2  | 903.7  | 851.4  | 805.0  | 789.7  | 789.7  |
| 37.5° | 10160.5 | 9355.5  | 4963.0 | 1693.4 | 1061.1 | 919.2  | 835.9  | 780.4  | 737.2  | 724.9  | 721.8  |
| 40°   | 11104.3 | 10212.9 | 5061.8 | 1878.5 | 1014.9 | 854.4  | 774.2  | 718.7  | 681.7  | 666.2  | 663.2  |
| 42.5° | 12224.0 | 11270.9 | 5607.7 | 2020.4 | 984.0  | 798.9  | 715.7  | 653.9  | 629.2  | 623.1  | 623.1  |
| 45°   | 13510.3 | 12433.9 | 6443.7 | 2171.6 | 934.6  | 746.5  | 657.0  | 610.7  | 592.2  | 589.2  | 586.1  |
| 47.5° | 14972.4 | 13710.8 | 7412.2 | 2359.7 | 885.3  | 697.1  | 610.7  | 579.9  | 564.5  | 558.3  | 558.3  |
| 50°   | 16422.1 | 14997.1 | 8408.5 | 2464.5 | 845.2  | 650.9  | 573.7  | 549.1  | 536.7  | 533.6  | 533.6  |
| 52.5° | 17939.8 | 16320.4 | 9213.5 | 2365.8 | 811.3  | 613.9  | 542.8  | 524.4  | 512.0  | 508.9  | 508.9  |
| 55°   | 19386.4 | 17390.7 | 9352.3 | 2008.1 | 743.3  | 576.8  | 508.9  | 499.7  | 484.3  | 484.3  | 481.2  |
| 57.5° | 20632.5 | 17927.4 | 8371.5 | 1474.5 | 675.5  | 521.3  | 475.0  | 465.8  | 453.5  | 450.4  | 447.3  |
| 60°   | 21776.9 | 17773.2 | 6462.1 | 993.2  | 601.5  | 465.8  | 431.8  | 425.7  | 413.3  | 397.9  | 394.8  |
| 62.5° | 22421.6 | 17094.5 | 4420.1 | 647.8  | 527.5  | 407.1  | 382.5  | 379.4  | 351.7  | 320.8  | 314.7  |
| 65°   | 22665.3 | 15700.3 | 2757.6 | 471.9  | 441.1  | 348.6  | 330.0  | 323.9  | 283.8  | 249.9  | 246.7  |
| 67.5° | 22452.4 | 13405.5 | 1391.1 | 373.2  | 348.6  | 290.0  | 271.4  | 271.4  | 243.6  | 212.8  | 209.7  |
| 70°   | 21601.1 | 10049.5 | 586.1  | 299.2  | 268.3  | 222.1  | 222.1  | 234.4  | 206.6  | 172.7  | 169.6  |
| 72.5° | 19753.5 | 6761.3  | 311.5  | 228.3  | 200.5  | 157.3  | 181.9  | 191.3  | 163.5  | 129.6  | 129.6  |
| 75°   | 15703.4 | 4124.1  | 216.0  | 169.6  | 126.5  | 111.0  | 138.8  | 144.9  | 111.0  | 86.4   | 83.3   |
| 77.5° | 10740.4 | 2369.0  | 144.9  | 107.9  | 80.2   | 64.8   | 95.6   | 89.5   | 58.6   | 40.1   | 43.2   |
| 80°   | 4716.2  | 987.1   | 83.3   | 49.3   | 30.9   | 24.7   | 33.9   | 24.7   | 18.6   | 12.3   | 12.3   |
| 82.5° | 552.2   | 231.3   | 30.9   | 18.6   | 12.3   | 6.1    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 114.1   | 27.8    | 15.4   | 6.1    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 21.6    | 6.1     | 3.1    | 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)