

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: STREETWORKS

Report Number: P962973

Luminaire Tested: **NVN-SB2D-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962973
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: STREETWORKS
Catalog Number: NVN-SB2D-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21214.4 lumens
Efficiency: N/A
Efficacy: 143.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

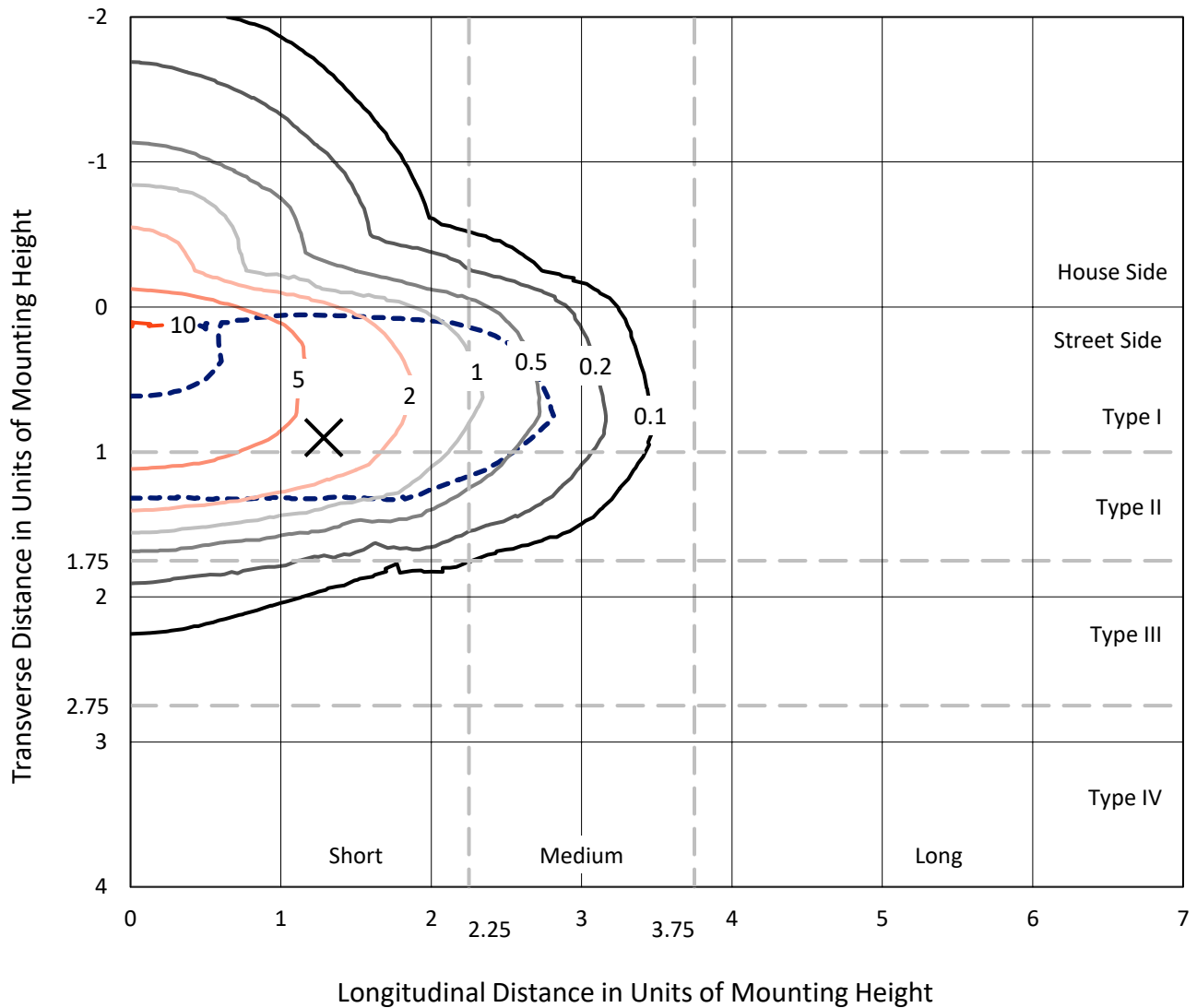
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

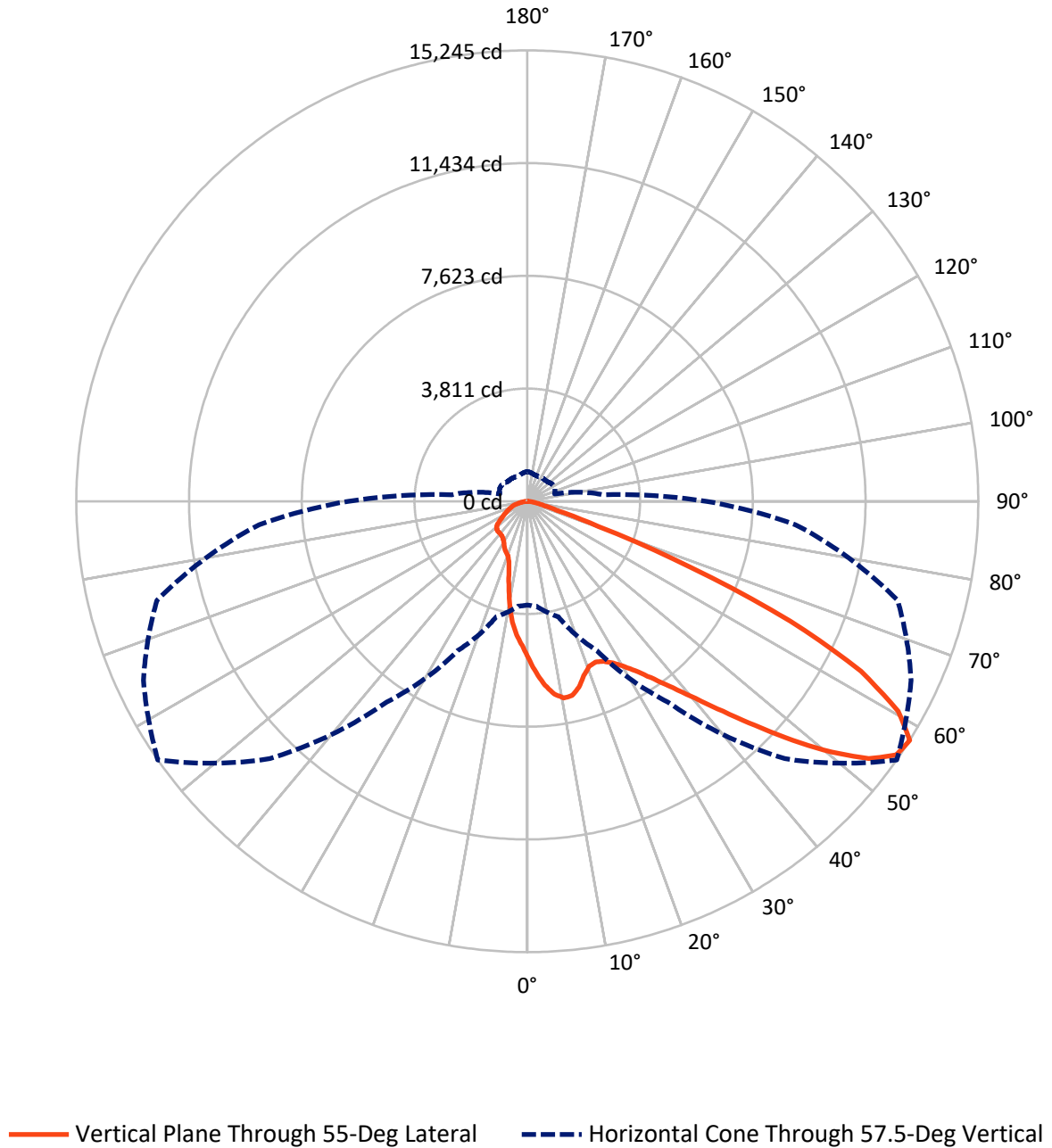
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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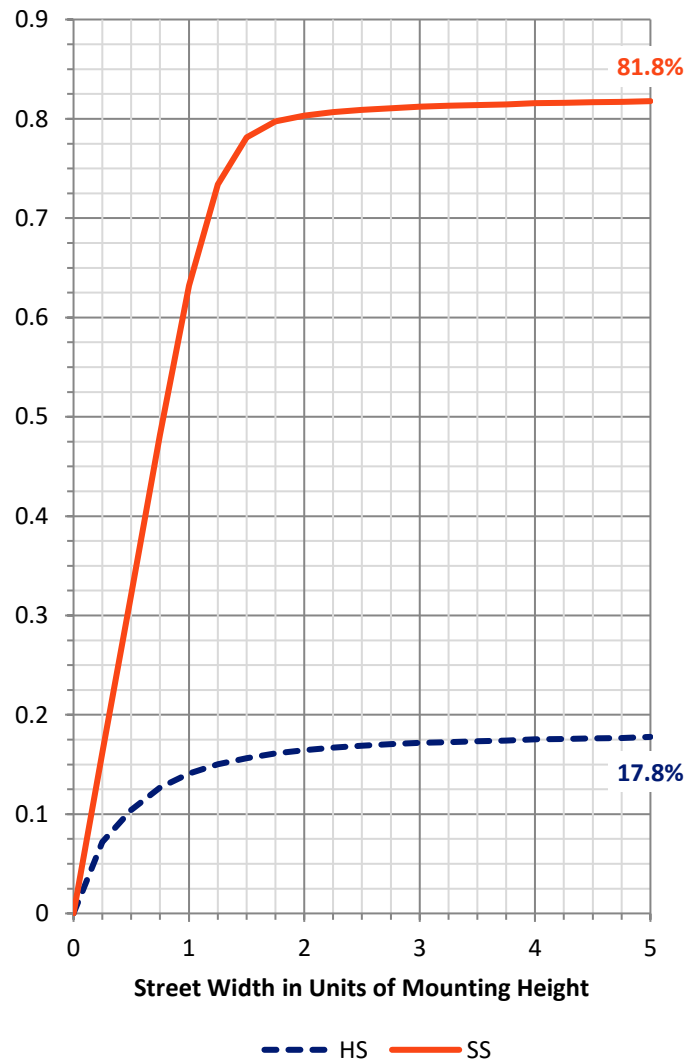
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3838.7 | 0.0 | 3838.7 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 17375.8 | 0.0 | 17375.8 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 21214.4 | 0.0 | 21214.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 493.3 | 2.3 |
| 10°-20° | 1245.0 | 5.9 |
| 20°-30° | 1986.7 | 9.4 |
| 30°-40° | 3145.4 | 14.8 |
| 40°-50° | 4814.4 | 22.7 |
| 50°-60° | 5156.7 | 24.3 |
| 60°-70° | 3244.1 | 15.3 |
| 70°-80° | 959.3 | 4.5 |
| 80°-90° | 169.6 | 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° | 21214.4 | 100.0 |
| 0°-180° | 21214.4 | 100.0 |

Coefficient of Utilization



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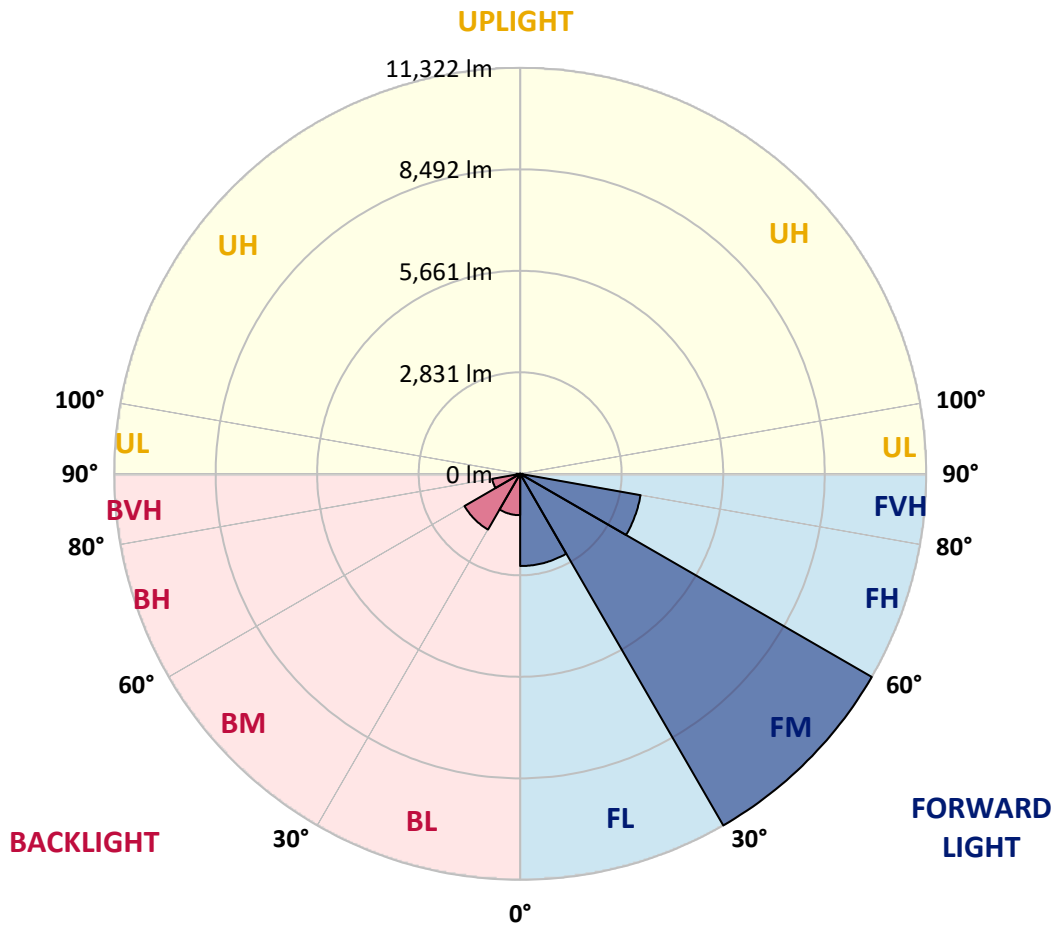
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2571.2 | 12.1 | | | |
| FM (30°-60°) | 11322.3 | 53.4 | | | |
| FH (60°-80°) | 3410.6 | 16.1 | | | G2/5000 |
| FVH (80°-90°) | 71.7 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1153.8 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 1794.2 | 8.5 | B2/2500 | | |
| BH (60°-80°) | 792.8 | 3.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 98.0 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0° | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 |
| 2.5° | 6098.6 | 6094.3 | 6118.4 | 6036.1 | 5980.3 | 5904.6 | 5804.8 | 5677.6 | 5540.4 | 5395.7 | 5333.2 |
| 5° | 6648.2 | 6609.7 | 6634.9 | 6573.5 | 6512.1 | 6398.0 | 6250.0 | 6042.8 | 5789.4 | 5501.0 | 5347.4 |
| 7.5° | 6561.4 | 6535.2 | 6599.9 | 6654.7 | 6700.7 | 6686.5 | 6577.9 | 6360.7 | 6034.0 | 5615.1 | 5392.4 |
| 10° | 5862.9 | 5833.3 | 5924.3 | 6114.0 | 6392.6 | 6634.9 | 6766.5 | 6631.6 | 6284.1 | 5740.1 | 5436.3 |
| 12.5° | 5246.6 | 5232.3 | 5292.6 | 5446.1 | 5755.4 | 6220.4 | 6742.4 | 6868.5 | 6543.9 | 5888.1 | 5495.5 |
| 15° | 4983.3 | 4965.8 | 5004.2 | 5082.1 | 5279.5 | 5712.6 | 6523.1 | 7030.9 | 6799.4 | 6059.2 | 5589.8 |
| 17.5° | 4925.2 | 4905.4 | 4921.9 | 4962.5 | 5089.7 | 5419.8 | 6191.9 | 7110.9 | 7065.9 | 6250.0 | 5668.8 |
| 20° | 5032.8 | 5016.2 | 5018.4 | 5016.2 | 5105.1 | 5367.2 | 5961.6 | 7080.2 | 7298.4 | 6425.5 | 5745.5 |
| 22.5° | 5292.6 | 5265.2 | 5266.2 | 5208.1 | 5256.4 | 5459.4 | 5901.2 | 6998.0 | 7505.8 | 6579.1 | 5803.7 |
| 25° | 5715.9 | 5666.6 | 5676.4 | 5528.4 | 5515.2 | 5665.5 | 5995.6 | 6934.3 | 7711.9 | 6701.9 | 5814.6 |
| 27.5° | 6295.0 | 6239.1 | 6209.4 | 5989.0 | 5883.7 | 5958.3 | 6187.5 | 6956.3 | 7907.2 | 6808.3 | 5787.3 |
| 30° | 7018.8 | 6950.8 | 6890.5 | 6577.9 | 6387.1 | 6359.7 | 6485.8 | 7101.1 | 8137.5 | 6920.1 | 5740.1 |
| 32.5° | 7906.0 | 7827.1 | 7717.4 | 7302.8 | 7034.2 | 6890.5 | 6871.8 | 7358.8 | 8407.3 | 7062.7 | 5715.9 |
| 35° | 8962.1 | 8859.1 | 8703.3 | 8167.0 | 7827.1 | 7533.1 | 7380.7 | 7730.6 | 8776.8 | 7277.6 | 5743.4 |
| 37.5° | 10050.0 | 9933.8 | 9791.2 | 9152.9 | 8735.2 | 8301.9 | 8001.5 | 8235.1 | 9269.2 | 7569.3 | 5815.7 |
| 40° | 11053.5 | 10923.0 | 10790.3 | 10222.2 | 9773.7 | 9251.6 | 8761.4 | 8873.3 | 9871.3 | 7918.1 | 5938.5 |
| 42.5° | 11645.7 | 11549.2 | 11498.8 | 11191.7 | 10845.1 | 10315.5 | 9706.8 | 9630.0 | 10548.0 | 8319.5 | 6079.0 |
| 45° | 11619.4 | 11579.9 | 11735.6 | 11862.8 | 11780.6 | 11486.7 | 10814.5 | 10466.8 | 11226.8 | 8667.1 | 6208.3 |
| 47.5° | 10998.7 | 11025.0 | 11372.7 | 12087.7 | 12402.4 | 12555.9 | 12075.6 | 11288.2 | 11816.8 | 8927.0 | 6266.4 |
| 50° | 9309.8 | 9331.7 | 10136.7 | 11678.6 | 12562.6 | 13427.8 | 13326.9 | 12089.9 | 12274.2 | 9086.0 | 6253.3 |
| 52.5° | 7973.0 | 7987.2 | 8332.6 | 10465.7 | 12033.9 | 13866.5 | 14454.3 | 12845.5 | 12608.6 | 9129.9 | 6179.8 |
| 55° | 6005.5 | 6054.8 | 6441.9 | 8210.9 | 10658.7 | 13518.8 | 15140.9 | 13624.2 | 12820.3 | 9134.3 | 6103.1 |
| 57.5° | 3508.3 | 3562.1 | 4040.2 | 5573.3 | 8284.4 | 12307.1 | 15245.0 | 14315.0 | 12964.0 | 9099.2 | 6057.0 |
| 60° | 1718.5 | 1741.6 | 1950.0 | 2929.2 | 5108.4 | 9972.2 | 14407.2 | 14649.6 | 13044.0 | 9080.6 | 6054.8 |
| 62.5° | 1158.1 | 1154.8 | 1163.6 | 1445.5 | 2516.9 | 6406.9 | 12661.3 | 14063.9 | 13001.2 | 9009.3 | 6032.8 |
| 65° | 995.8 | 983.7 | 950.8 | 1014.4 | 1304.0 | 2930.4 | 9782.5 | 12315.8 | 12675.6 | 8830.6 | 5882.7 |
| 67.5° | 860.9 | 862.0 | 863.0 | 843.4 | 931.1 | 1352.2 | 5978.0 | 9701.3 | 11506.4 | 7983.9 | 5303.6 |
| 70° | 712.9 | 722.7 | 727.1 | 727.1 | 758.9 | 887.2 | 2551.9 | 6649.2 | 9076.2 | 6259.9 | 4271.6 |
| 72.5° | 649.2 | 628.4 | 630.6 | 619.6 | 619.6 | 675.6 | 1027.6 | 3769.3 | 5718.2 | 3521.5 | 2606.8 |
| 75° | 529.7 | 542.8 | 545.1 | 537.4 | 512.2 | 515.5 | 609.8 | 1581.5 | 2446.7 | 1460.8 | 1288.6 |
| 77.5° | 457.4 | 457.4 | 461.7 | 456.2 | 436.4 | 386.0 | 406.8 | 613.1 | 832.4 | 598.8 | 643.8 |
| 80° | 367.4 | 366.3 | 384.9 | 395.9 | 365.2 | 285.2 | 259.9 | 338.9 | 369.6 | 263.2 | 334.5 |
| 82.5° | 178.8 | 189.7 | 264.3 | 301.6 | 277.5 | 206.1 | 159.0 | 210.5 | 197.4 | 116.2 | 150.3 |
| 85° | 104.1 | 98.7 | 118.5 | 167.8 | 159.0 | 114.1 | 76.8 | 109.7 | 103.1 | 59.2 | 60.3 |
| 87.5° | 32.9 | 30.7 | 24.1 | 57.0 | 46.0 | 31.8 | 20.8 | 31.8 | 28.5 | 13.1 | 13.1 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 | 5315.6 |
| 2.5° | 5255.3 | 5125.9 | 4997.6 | 4880.2 | 4809.0 | 4762.9 | 4716.8 | 4665.3 | 4645.6 | 4616.0 |
| 5° | 5202.7 | 4952.6 | 4730.0 | 4538.1 | 4363.7 | 4226.6 | 4088.4 | 3976.6 | 3926.2 | 3960.2 |
| 7.5° | 5171.9 | 4810.1 | 4466.8 | 4114.8 | 3775.9 | 3505.0 | 3269.2 | 3103.6 | 3029.1 | 3047.7 |
| 10° | 5144.6 | 4648.9 | 4125.7 | 3569.8 | 3082.8 | 2747.2 | 2505.9 | 2379.8 | 2332.7 | 2342.5 |
| 12.5° | 5119.4 | 4467.9 | 3714.5 | 2983.0 | 2465.3 | 2243.8 | 2174.7 | 2175.9 | 2184.6 | 2191.1 |
| 15° | 5115.0 | 4249.6 | 3255.0 | 2469.7 | 2132.0 | 2117.8 | 2192.3 | 2239.4 | 2264.6 | 2272.3 |
| 17.5° | 5108.4 | 3988.7 | 2786.7 | 2119.9 | 2050.8 | 2147.3 | 2216.4 | 2247.1 | 2266.9 | 2267.9 |
| 20° | 5082.1 | 3657.4 | 2354.6 | 1953.2 | 2033.3 | 2116.6 | 2159.4 | 2183.5 | 2200.0 | 2205.4 |
| 22.5° | 5000.9 | 3288.9 | 2017.9 | 1878.6 | 1963.1 | 2030.0 | 2080.4 | 2107.8 | 2117.8 | 2124.3 |
| 25° | 4855.0 | 2876.7 | 1785.4 | 1807.4 | 1865.5 | 1950.0 | 1990.4 | 1996.0 | 1992.7 | 2002.5 |
| 27.5° | 4664.3 | 2434.7 | 1640.6 | 1710.8 | 1785.4 | 1857.8 | 1879.7 | 1876.5 | 1869.8 | 1880.8 |
| 30° | 4433.9 | 2037.6 | 1548.6 | 1602.3 | 1704.3 | 1770.1 | 1789.8 | 1782.2 | 1768.9 | 1781.0 |
| 32.5° | 4190.4 | 1713.0 | 1472.8 | 1526.6 | 1637.3 | 1702.0 | 1721.8 | 1714.1 | 1704.3 | 1714.1 |
| 35° | 3963.5 | 1486.0 | 1402.7 | 1476.1 | 1584.8 | 1648.3 | 1673.5 | 1674.6 | 1674.6 | 1686.7 |
| 37.5° | 3755.1 | 1353.3 | 1344.5 | 1444.3 | 1548.6 | 1605.6 | 1641.7 | 1643.9 | 1596.7 | 1600.0 |
| 40° | 3562.1 | 1297.3 | 1318.3 | 1423.5 | 1513.4 | 1568.2 | 1570.5 | 1447.6 | 1361.0 | 1358.8 |
| 42.5° | 3404.1 | 1286.4 | 1325.9 | 1421.3 | 1488.2 | 1490.4 | 1335.8 | 1240.4 | 1216.3 | 1217.3 |
| 45° | 3256.1 | 1283.1 | 1343.5 | 1421.3 | 1450.9 | 1287.5 | 1183.4 | 1158.1 | 1160.3 | 1169.1 |
| 47.5° | 3090.5 | 1270.0 | 1346.7 | 1401.6 | 1343.5 | 1144.9 | 1114.3 | 1103.3 | 1098.9 | 1101.1 |
| 50° | 2909.5 | 1222.8 | 1305.0 | 1362.1 | 1159.2 | 1083.5 | 1045.2 | 1041.8 | 1047.3 | 1050.6 |
| 52.5° | 2718.7 | 1146.1 | 1233.8 | 1290.8 | 1074.7 | 1029.8 | 987.0 | 994.7 | 1018.8 | 1026.5 |
| 55° | 2593.7 | 1056.2 | 1139.5 | 1148.2 | 1015.6 | 979.4 | 943.1 | 960.7 | 1005.6 | 1019.9 |
| 57.5° | 2560.8 | 960.7 | 1032.0 | 1022.1 | 939.8 | 935.5 | 913.6 | 928.9 | 985.9 | 1006.8 |
| 60° | 2550.9 | 875.1 | 926.7 | 919.0 | 866.4 | 887.2 | 881.7 | 889.4 | 909.2 | 915.7 |
| 62.5° | 2474.1 | 807.2 | 832.4 | 821.4 | 800.6 | 836.8 | 849.9 | 833.5 | 848.8 | 856.5 |
| 65° | 2278.9 | 752.3 | 740.3 | 732.6 | 741.4 | 774.3 | 800.6 | 767.7 | 782.0 | 803.9 |
| 67.5° | 1956.5 | 677.7 | 644.8 | 653.6 | 681.0 | 698.6 | 732.6 | 695.3 | 707.4 | 744.7 |
| 70° | 1582.5 | 583.4 | 553.8 | 579.0 | 605.4 | 641.5 | 647.1 | 621.9 | 650.4 | 692.0 |
| 72.5° | 1119.7 | 488.0 | 467.2 | 518.8 | 527.5 | 574.6 | 562.6 | 550.5 | 590.0 | 604.2 |
| 75° | 776.4 | 393.7 | 381.6 | 421.2 | 452.9 | 493.5 | 484.7 | 499.0 | 582.3 | 589.0 |
| 77.5° | 491.3 | 306.0 | 298.3 | 323.5 | 367.4 | 412.4 | 426.6 | 589.0 | 994.7 | 1034.2 |
| 80° | 285.2 | 228.1 | 219.4 | 239.0 | 277.5 | 319.2 | 411.2 | 722.7 | 655.8 | 648.1 |
| 82.5° | 159.0 | 156.8 | 145.9 | 151.4 | 185.3 | 230.3 | 581.3 | 508.9 | 413.5 | 426.6 |
| 85° | 74.6 | 92.1 | 78.9 | 75.6 | 104.1 | 269.8 | 388.3 | 290.6 | 193.0 | 188.6 |
| 87.5° | 19.8 | 17.5 | 17.5 | 19.8 | 43.9 | 232.5 | 154.7 | 123.9 | 73.5 | 71.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)