

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: P962059

Luminaire Tested: **NVN-SB2B-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962059
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: STREETWORKS
Catalog Number: NVN-SB2B-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA 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: 7671.1 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

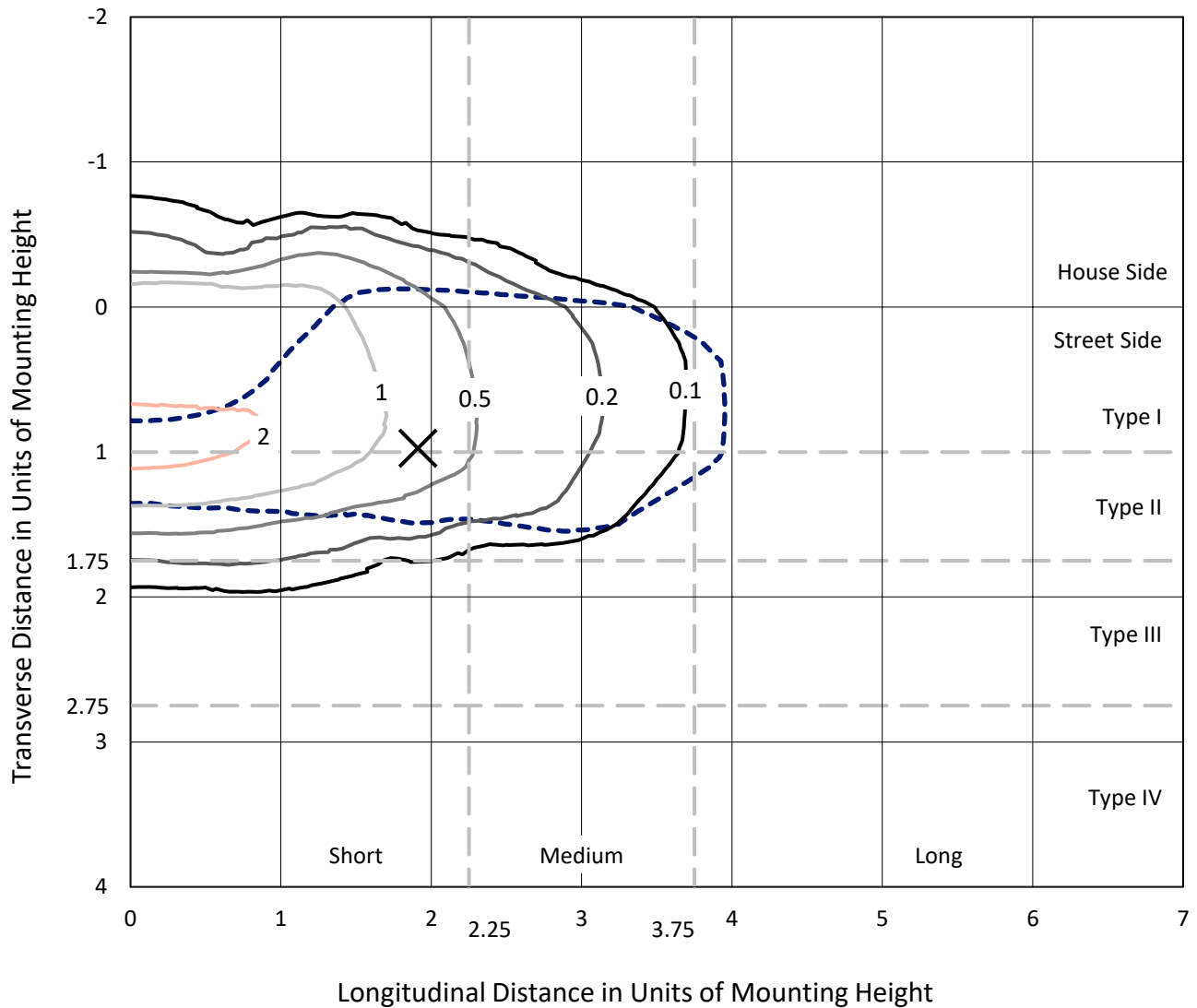
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

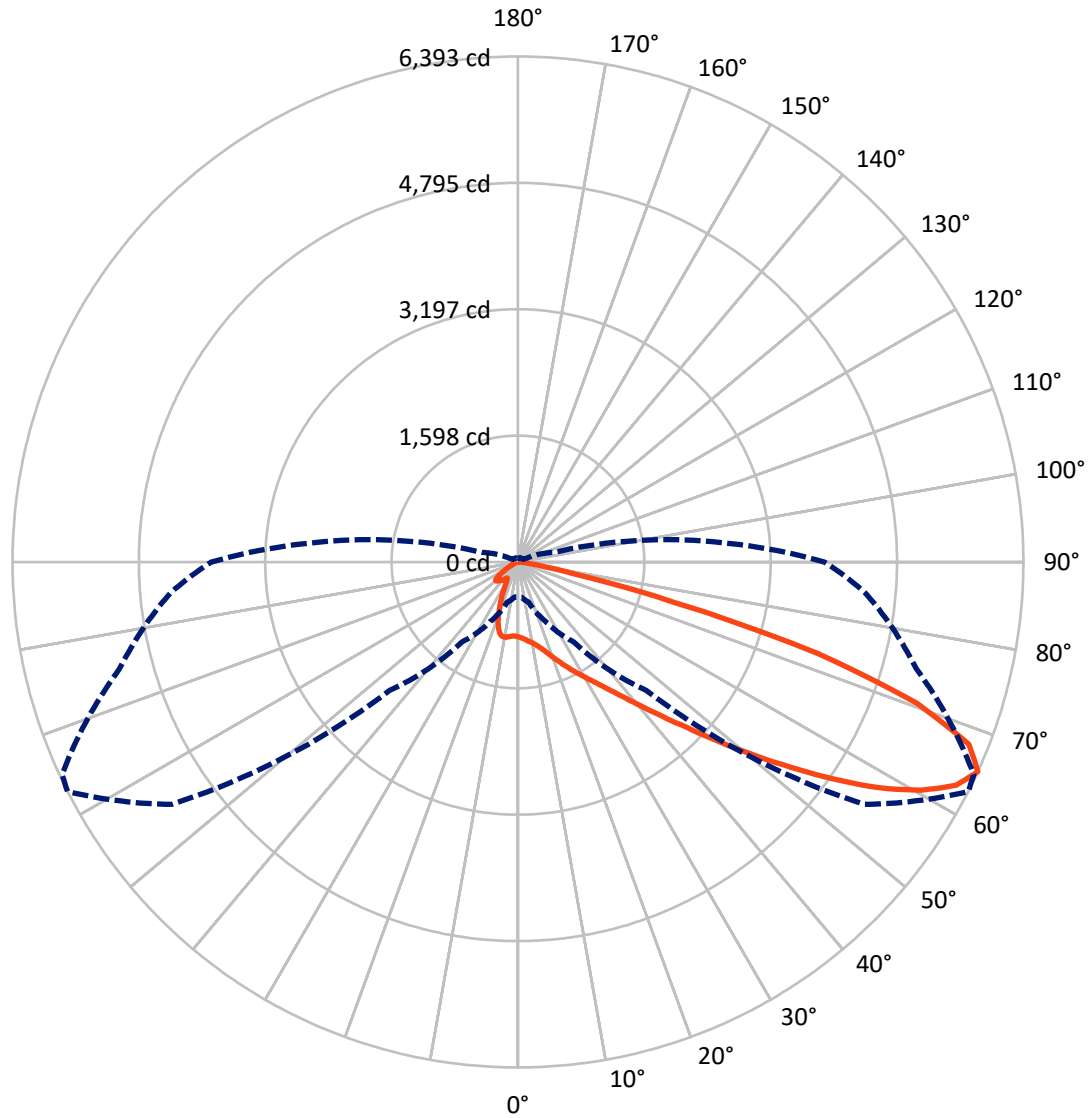
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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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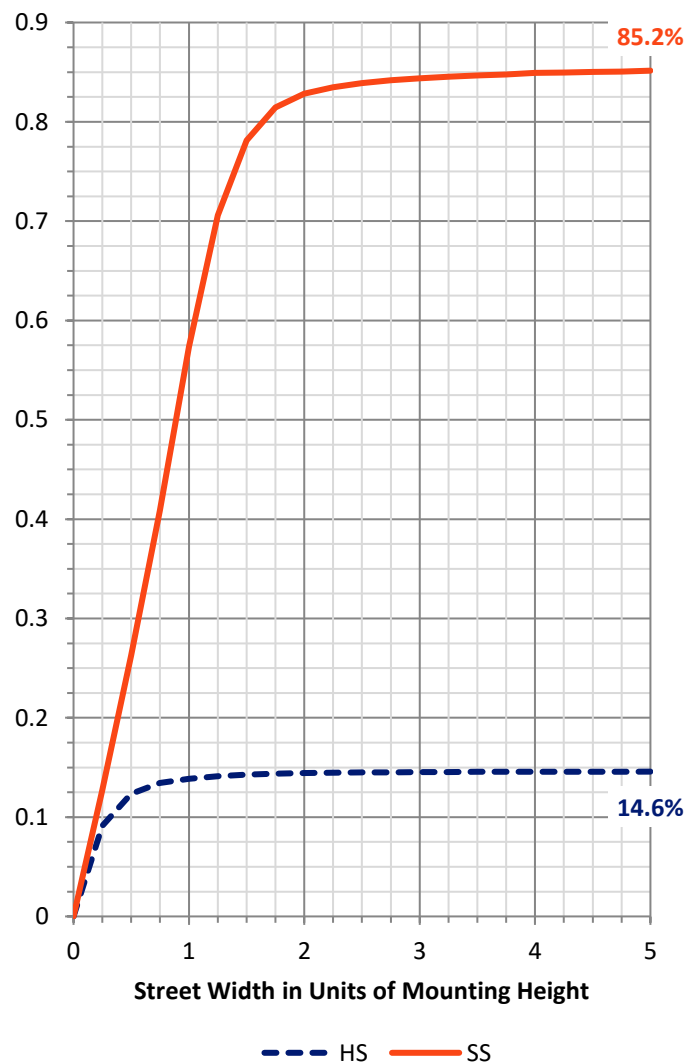
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1127.6 | 0.0 | 1127.6 |
| | % Fixture | 14.7 | 0.0 | 14.7 |
| Street Side | Lumens | 6543.5 | 0.0 | 6543.5 |
| | % Fixture | 85.3 | 0.0 | 85.3 |
| Total | Lumens | 7671.1 | 0.0 | 7671.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 89.2 | 1.2 |
| 10°-20° | 247.5 | 3.2 |
| 20°-30° | 431.0 | 5.6 |
| 30°-40° | 776.8 | 10.1 |
| 40°-50° | 1540.6 | 20.1 |
| 50°-60° | 2098.5 | 27.4 |
| 60°-70° | 1675.0 | 21.8 |
| 70°-80° | 758.0 | 9.9 |
| 80°-90° | 54.5 | 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° | 7671.1 | 100.0 |
| 0°-180° | 7671.1 | 100.0 |

Coefficient of Utilization



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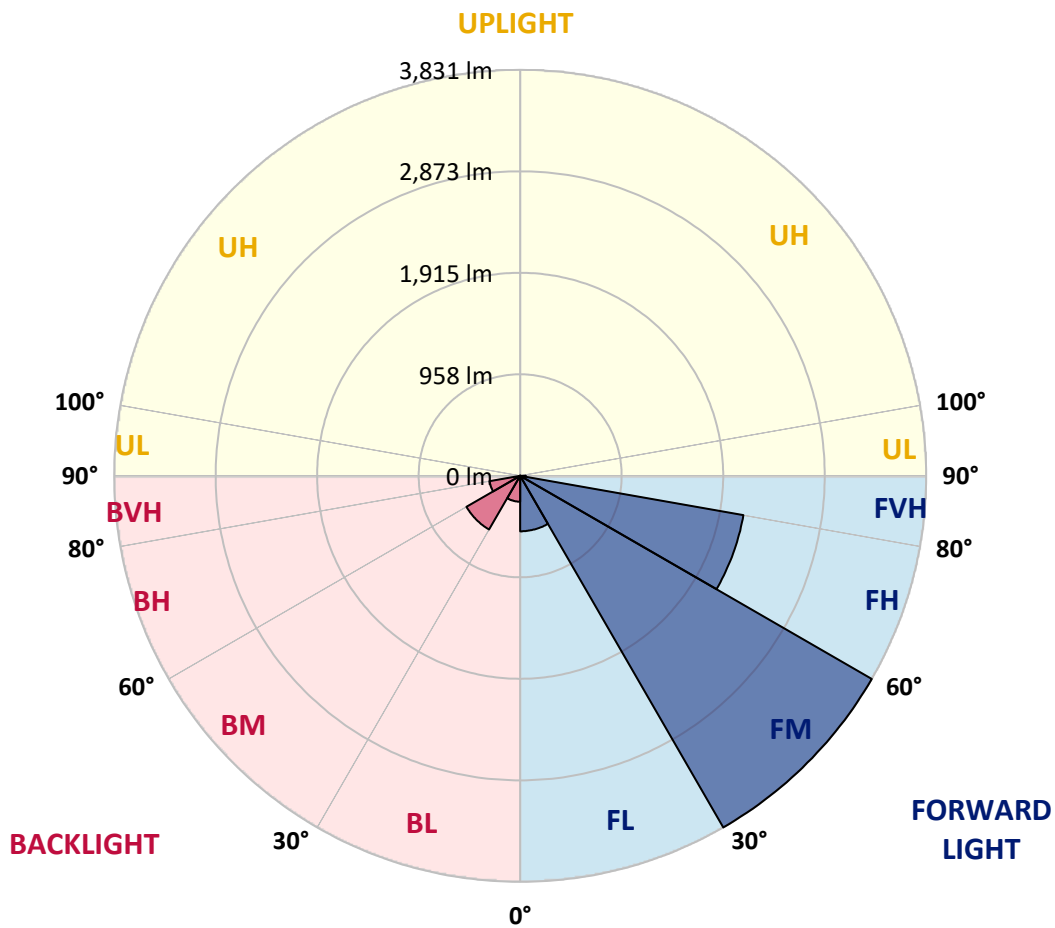
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 523.6 | 6.8 | | | |
| FM (30°-60°) | 3830.8 | 49.9 | | | |
| FH (60°-80°) | 2138.7 | 27.9 | | | G2/5000 |
| FVH (80°-90°) | 50.4 | 0.7 | | | G1/100 |
| BL (0°-30°) | 244.0 | 3.2 | B1/500 | | |
| BM (30°-60°) | 585.2 | 7.6 | B1/1000 | | |
| BH (60°-80°) | 294.4 | 3.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 4.0 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 |
| 2.5° | 968.9 | 966.3 | 970.0 | 968.4 | 967.3 | 965.2 | 964.2 | 963.1 | 961.0 | 959.4 | 953.0 |
| 5° | 971.6 | 970.0 | 973.6 | 976.8 | 980.0 | 983.2 | 984.7 | 986.9 | 984.7 | 980.5 | 974.2 |
| 7.5° | 949.4 | 948.3 | 956.2 | 965.8 | 980.0 | 992.1 | 1005.3 | 1012.7 | 1013.2 | 1011.7 | 1004.8 |
| 10° | 947.8 | 945.2 | 953.0 | 964.7 | 983.2 | 1004.8 | 1028.1 | 1043.9 | 1046.0 | 1052.9 | 1045.4 |
| 12.5° | 972.6 | 970.0 | 981.0 | 993.7 | 1012.7 | 1035.5 | 1063.9 | 1086.1 | 1089.3 | 1098.7 | 1093.5 |
| 15° | 1014.3 | 1010.6 | 1023.3 | 1039.7 | 1063.9 | 1089.8 | 1119.8 | 1139.9 | 1142.6 | 1154.1 | 1144.6 |
| 17.5° | 1062.8 | 1059.1 | 1073.9 | 1091.3 | 1117.8 | 1153.1 | 1188.0 | 1210.1 | 1213.3 | 1220.7 | 1203.2 |
| 20° | 1125.1 | 1120.4 | 1132.0 | 1147.8 | 1175.8 | 1218.0 | 1259.7 | 1291.4 | 1290.9 | 1290.9 | 1262.4 |
| 22.5° | 1197.4 | 1190.0 | 1200.1 | 1212.8 | 1239.1 | 1290.3 | 1345.7 | 1383.2 | 1383.2 | 1368.4 | 1321.4 |
| 25° | 1275.0 | 1267.6 | 1278.7 | 1290.3 | 1313.5 | 1371.6 | 1436.5 | 1483.0 | 1485.0 | 1459.7 | 1384.8 |
| 27.5° | 1372.1 | 1362.6 | 1371.0 | 1384.8 | 1398.5 | 1457.7 | 1534.6 | 1588.4 | 1589.6 | 1550.5 | 1444.9 |
| 30° | 1558.9 | 1532.1 | 1505.6 | 1490.9 | 1497.2 | 1555.7 | 1638.1 | 1697.7 | 1703.0 | 1649.2 | 1510.3 |
| 32.5° | 1900.9 | 1895.6 | 1802.8 | 1681.4 | 1618.1 | 1661.3 | 1753.7 | 1825.4 | 1828.6 | 1759.5 | 1595.3 |
| 35° | 2432.3 | 2426.0 | 2276.6 | 2045.5 | 1839.2 | 1802.8 | 1894.0 | 1979.0 | 1976.9 | 1898.8 | 1705.6 |
| 37.5° | 3066.7 | 3060.9 | 2864.1 | 2554.8 | 2220.8 | 2016.5 | 2075.0 | 2164.3 | 2177.4 | 2075.0 | 1848.2 |
| 40° | 3608.6 | 3587.0 | 3462.4 | 3164.3 | 2727.3 | 2371.1 | 2332.6 | 2391.7 | 2405.5 | 2284.0 | 2029.2 |
| 42.5° | 4019.2 | 4000.8 | 3937.4 | 3751.2 | 3340.6 | 2895.7 | 2636.0 | 2658.7 | 2674.0 | 2528.4 | 2237.1 |
| 45° | 4231.9 | 4227.7 | 4253.0 | 4235.6 | 3965.4 | 3539.5 | 3069.9 | 2975.4 | 2981.2 | 2799.1 | 2473.0 |
| 47.5° | 4262.0 | 4259.9 | 4375.4 | 4539.1 | 4502.6 | 4265.7 | 3626.6 | 3370.1 | 3349.5 | 3104.6 | 2729.5 |
| 50° | 4084.7 | 4080.4 | 4302.1 | 4608.7 | 4861.5 | 4875.7 | 4258.9 | 3815.0 | 3769.6 | 3420.8 | 2997.0 |
| 52.5° | 3518.4 | 3517.4 | 3881.5 | 4391.8 | 4987.6 | 5409.8 | 4883.7 | 4303.7 | 4227.7 | 3755.4 | 3279.9 |
| 55° | 2707.3 | 2726.8 | 3144.3 | 3747.5 | 4757.5 | 5666.8 | 5444.7 | 4846.2 | 4729.6 | 4092.1 | 3540.6 |
| 57.5° | 1917.8 | 1946.3 | 2358.9 | 2896.2 | 4044.0 | 5514.8 | 5824.0 | 5389.8 | 5264.2 | 4427.7 | 3805.0 |
| 60° | 1030.1 | 1055.4 | 1468.7 | 2109.9 | 3008.6 | 4948.1 | 6024.1 | 5861.6 | 5742.9 | 4746.5 | 4043.5 |
| 62.5° | 613.8 | 622.2 | 793.1 | 1362.1 | 2034.9 | 3780.2 | 5939.2 | 6220.9 | 6123.3 | 5014.0 | 4250.9 |
| 65° | 440.6 | 442.3 | 528.3 | 831.7 | 1235.4 | 2296.7 | 5343.3 | 6393.0 | 6362.9 | 5215.6 | 4404.5 |
| 67.5° | 370.9 | 369.9 | 405.8 | 552.6 | 841.7 | 1150.5 | 4095.2 | 6149.7 | 6277.4 | 5343.3 | 4491.5 |
| 70° | 318.3 | 319.8 | 362.0 | 404.8 | 632.7 | 651.2 | 2036.0 | 5354.4 | 5626.7 | 5377.2 | 4486.3 |
| 72.5° | 237.0 | 242.2 | 281.3 | 368.9 | 477.6 | 448.0 | 702.9 | 3970.1 | 4462.5 | 5066.3 | 4253.5 |
| 75° | 167.3 | 169.9 | 197.9 | 310.3 | 356.2 | 326.2 | 358.9 | 2052.4 | 2683.6 | 3884.1 | 3481.5 |
| 77.5° | 128.7 | 133.6 | 149.9 | 216.9 | 351.0 | 229.1 | 219.6 | 710.3 | 1091.3 | 2346.3 | 2386.9 |
| 80° | 69.7 | 78.1 | 108.1 | 156.7 | 246.4 | 162.1 | 108.8 | 282.9 | 369.9 | 1097.2 | 920.3 |
| 82.5° | 35.9 | 40.1 | 75.4 | 113.0 | 140.4 | 141.4 | 53.8 | 117.7 | 152.5 | 338.8 | 126.2 |
| 85° | 14.2 | 17.4 | 50.6 | 62.3 | 72.3 | 69.7 | 24.3 | 47.5 | 54.8 | 93.9 | 38.5 |
| 87.5° | 3.2 | 5.2 | 18.4 | 14.2 | 13.7 | 14.8 | 5.8 | 11.1 | 10.6 | 11.1 | 6.9 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 | 946.8 |
| 2.5° | 952.5 | 950.5 | 944.6 | 938.3 | 930.9 | 926.7 | 924.0 | 923.5 | 919.8 | 917.2 | 919.8 |
| 5° | 968.4 | 966.3 | 955.2 | 942.0 | 927.7 | 916.7 | 906.1 | 896.7 | 882.9 | 880.3 | 879.2 |
| 7.5° | 1000.1 | 994.2 | 976.3 | 958.4 | 931.4 | 899.2 | 860.2 | 815.4 | 775.2 | 763.1 | 757.3 |
| 10° | 1039.1 | 1031.1 | 1008.5 | 976.8 | 917.2 | 829.6 | 735.1 | 647.5 | 577.9 | 558.3 | 550.9 |
| 12.5° | 1083.4 | 1076.6 | 1046.5 | 987.9 | 857.6 | 698.7 | 554.1 | 445.4 | 377.8 | 361.0 | 356.2 |
| 15° | 1136.2 | 1126.2 | 1084.4 | 971.1 | 751.0 | 530.9 | 380.5 | 316.1 | 291.8 | 288.6 | 285.5 |
| 17.5° | 1192.2 | 1175.8 | 1118.3 | 910.3 | 607.4 | 377.3 | 294.0 | 275.5 | 265.0 | 261.8 | 260.1 |
| 20° | 1243.3 | 1222.2 | 1138.4 | 818.6 | 453.9 | 294.0 | 263.3 | 251.2 | 241.7 | 238.0 | 235.9 |
| 22.5° | 1294.6 | 1264.4 | 1138.4 | 693.4 | 340.4 | 260.7 | 241.7 | 230.6 | 219.6 | 214.7 | 212.2 |
| 25° | 1347.9 | 1307.7 | 1118.3 | 554.1 | 273.9 | 239.0 | 221.1 | 209.0 | 199.5 | 193.7 | 191.6 |
| 27.5° | 1399.5 | 1344.2 | 1072.4 | 422.2 | 243.8 | 220.1 | 202.1 | 190.5 | 181.5 | 177.3 | 177.3 |
| 30° | 1448.6 | 1380.1 | 1008.0 | 320.3 | 224.3 | 201.6 | 184.7 | 174.7 | 165.7 | 161.4 | 162.1 |
| 32.5° | 1515.2 | 1425.4 | 939.4 | 262.8 | 207.4 | 184.2 | 168.9 | 159.4 | 151.5 | 148.3 | 148.3 |
| 35° | 1607.5 | 1492.4 | 880.3 | 258.1 | 193.1 | 169.9 | 154.7 | 145.7 | 137.8 | 135.1 | 135.1 |
| 37.5° | 1738.4 | 1600.6 | 849.1 | 289.8 | 181.5 | 157.2 | 143.0 | 133.6 | 126.2 | 124.0 | 123.5 |
| 40° | 1899.8 | 1747.3 | 866.0 | 321.4 | 173.6 | 146.2 | 132.4 | 123.0 | 116.6 | 114.0 | 113.5 |
| 42.5° | 2091.4 | 1928.3 | 959.4 | 345.6 | 168.3 | 136.6 | 122.4 | 111.9 | 107.6 | 106.6 | 106.6 |
| 45° | 2311.5 | 2127.3 | 1102.5 | 371.6 | 159.9 | 127.7 | 112.4 | 104.4 | 101.4 | 100.8 | 100.2 |
| 47.5° | 2561.7 | 2345.8 | 1268.1 | 403.7 | 151.5 | 119.3 | 104.4 | 99.2 | 96.6 | 95.5 | 95.5 |
| 50° | 2809.6 | 2565.9 | 1438.6 | 421.7 | 144.6 | 111.3 | 98.2 | 93.9 | 91.8 | 91.3 | 91.3 |
| 52.5° | 3069.4 | 2792.2 | 1576.3 | 404.8 | 138.8 | 105.1 | 92.9 | 89.7 | 87.6 | 87.1 | 87.1 |
| 55° | 3316.8 | 2975.4 | 1600.1 | 343.6 | 127.2 | 98.7 | 87.1 | 85.5 | 82.8 | 82.8 | 82.3 |
| 57.5° | 3530.0 | 3067.2 | 1432.2 | 252.3 | 115.6 | 89.2 | 81.3 | 79.6 | 77.6 | 77.1 | 76.6 |
| 60° | 3725.8 | 3040.8 | 1105.6 | 169.9 | 102.9 | 79.6 | 73.9 | 72.9 | 70.7 | 68.1 | 67.5 |
| 62.5° | 3836.2 | 2924.7 | 756.2 | 110.8 | 90.2 | 69.7 | 65.4 | 64.9 | 60.2 | 54.8 | 53.8 |
| 65° | 3877.8 | 2686.2 | 471.8 | 80.8 | 75.4 | 59.7 | 56.5 | 55.5 | 48.6 | 42.7 | 42.2 |
| 67.5° | 3841.4 | 2293.5 | 238.0 | 63.9 | 59.7 | 49.6 | 46.4 | 46.4 | 41.7 | 36.4 | 35.9 |
| 70° | 3695.7 | 1719.3 | 100.2 | 51.1 | 45.9 | 38.0 | 38.0 | 40.1 | 35.4 | 29.5 | 29.0 |
| 72.5° | 3379.6 | 1156.8 | 53.3 | 39.1 | 34.3 | 27.0 | 31.2 | 32.7 | 28.0 | 22.1 | 22.1 |
| 75° | 2686.7 | 705.6 | 36.9 | 29.0 | 21.6 | 19.0 | 23.8 | 24.8 | 19.0 | 14.8 | 14.2 |
| 77.5° | 1837.6 | 405.3 | 24.8 | 18.4 | 13.7 | 11.1 | 16.4 | 15.3 | 10.0 | 6.9 | 7.4 |
| 80° | 806.9 | 168.9 | 14.2 | 8.4 | 5.2 | 4.2 | 5.8 | 4.2 | 3.2 | 2.2 | 2.2 |
| 82.5° | 94.5 | 39.6 | 5.2 | 3.2 | 2.2 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 19.5 | 4.7 | 2.7 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.7 | 1.0 | 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)