

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: P199126

Luminaire Tested: **XNV-AF-01-LED-U-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199126
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-5MQ-8030
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5256 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

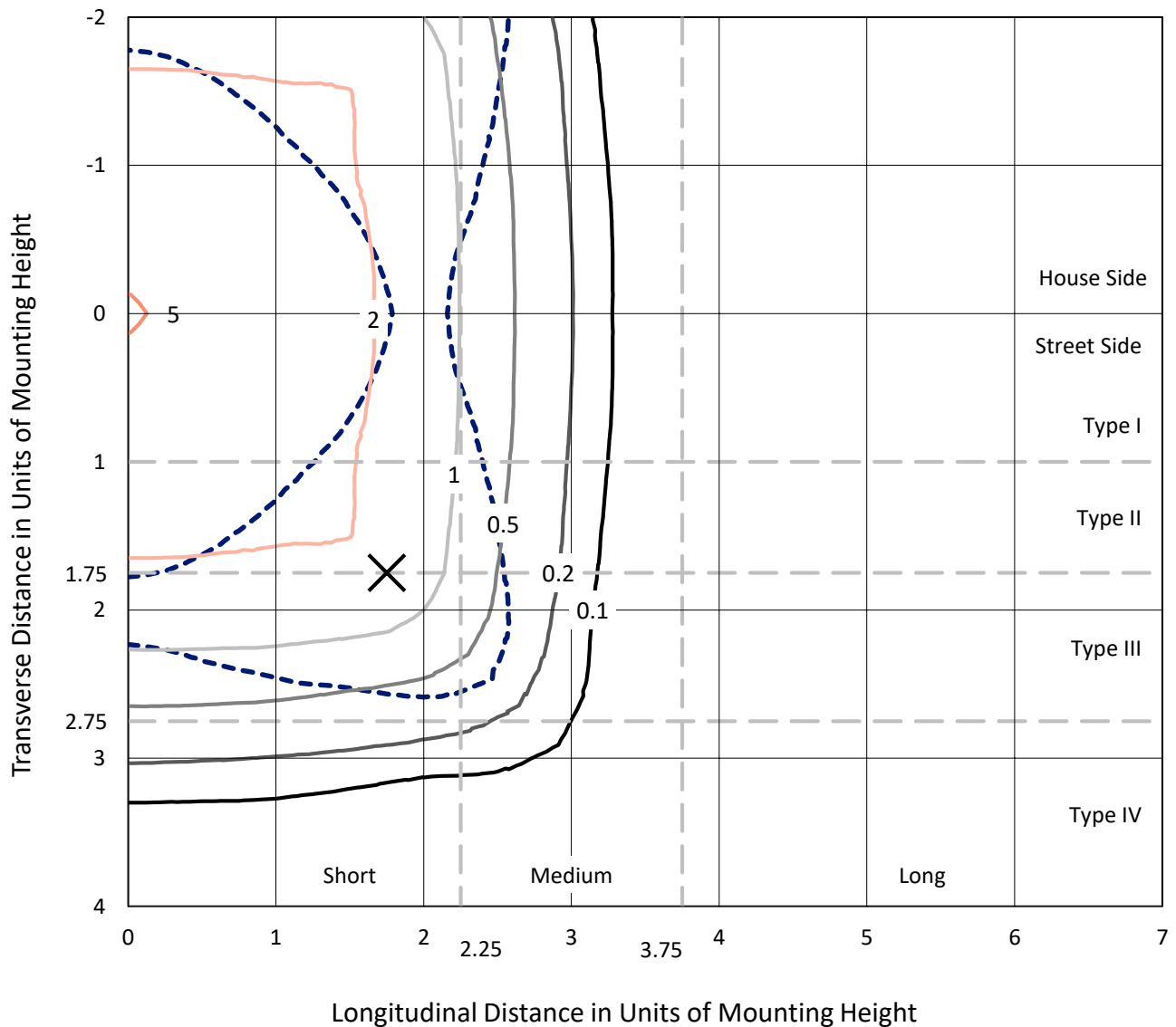
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

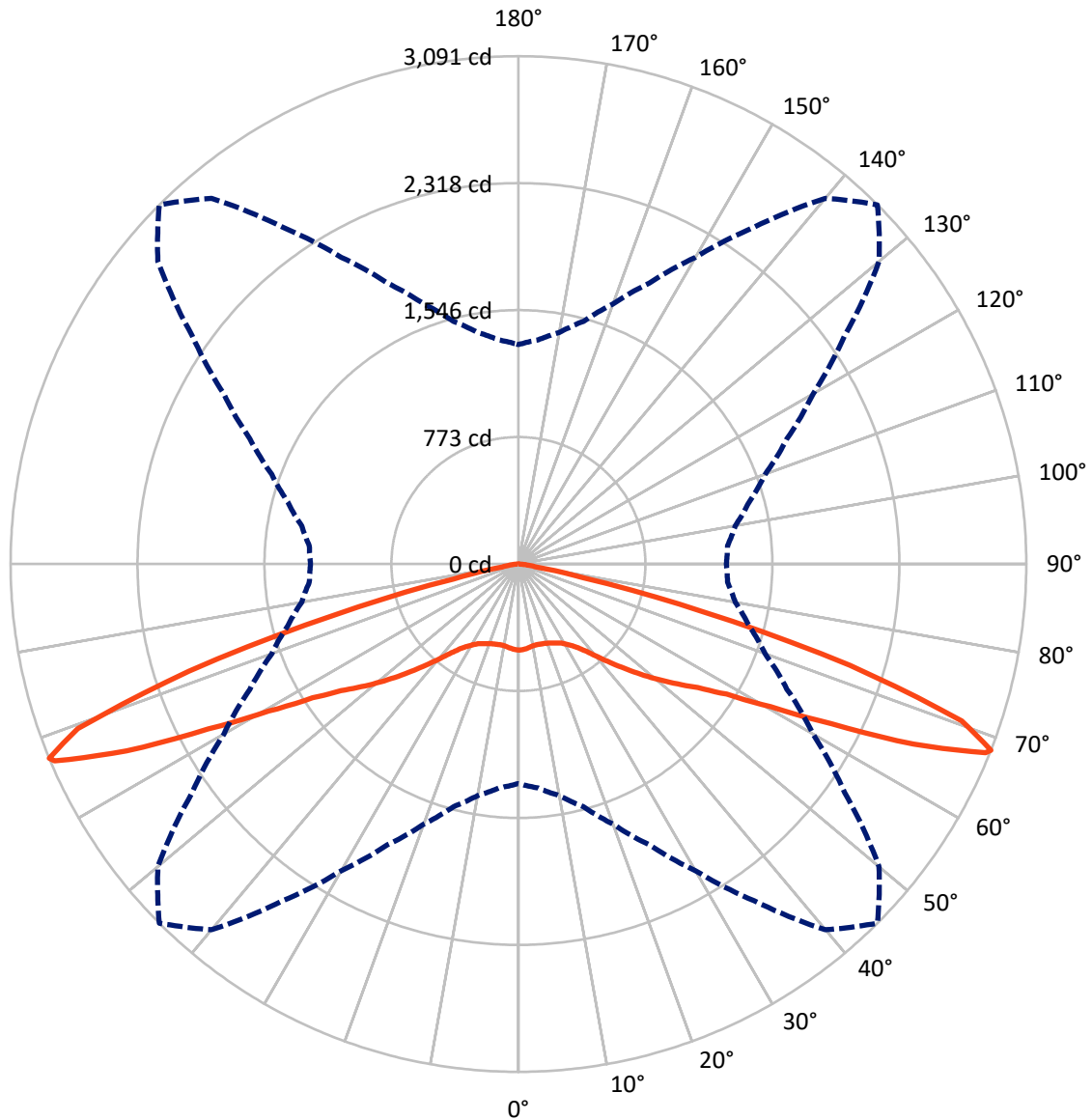
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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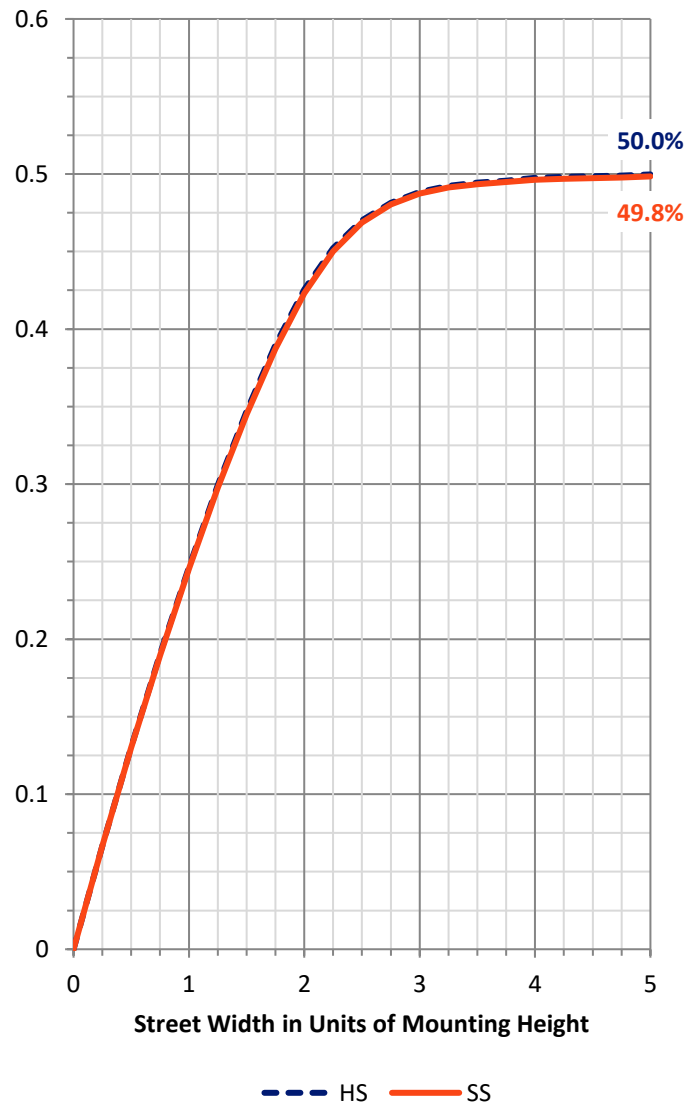
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2628.0 | 0.0 | 2628.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2628.0 | 0.0 | 2628.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 5256.0 | 0.0 | 5256.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 49.1 | 0.9 |
| 10°-20° | 142.3 | 2.7 |
| 20°-30° | 241.9 | 4.6 |
| 30°-40° | 395.9 | 7.5 |
| 40°-50° | 707.5 | 13.5 |
| 50°-60° | 1194.8 | 22.7 |
| 60°-70° | 1852.7 | 35.2 |
| 70°-80° | 637.0 | 12.1 |
| 80°-90° | 35.0 | 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° | 5256.0 | 100.0 |
| 0°-180° | 5256.0 | 100.0 |



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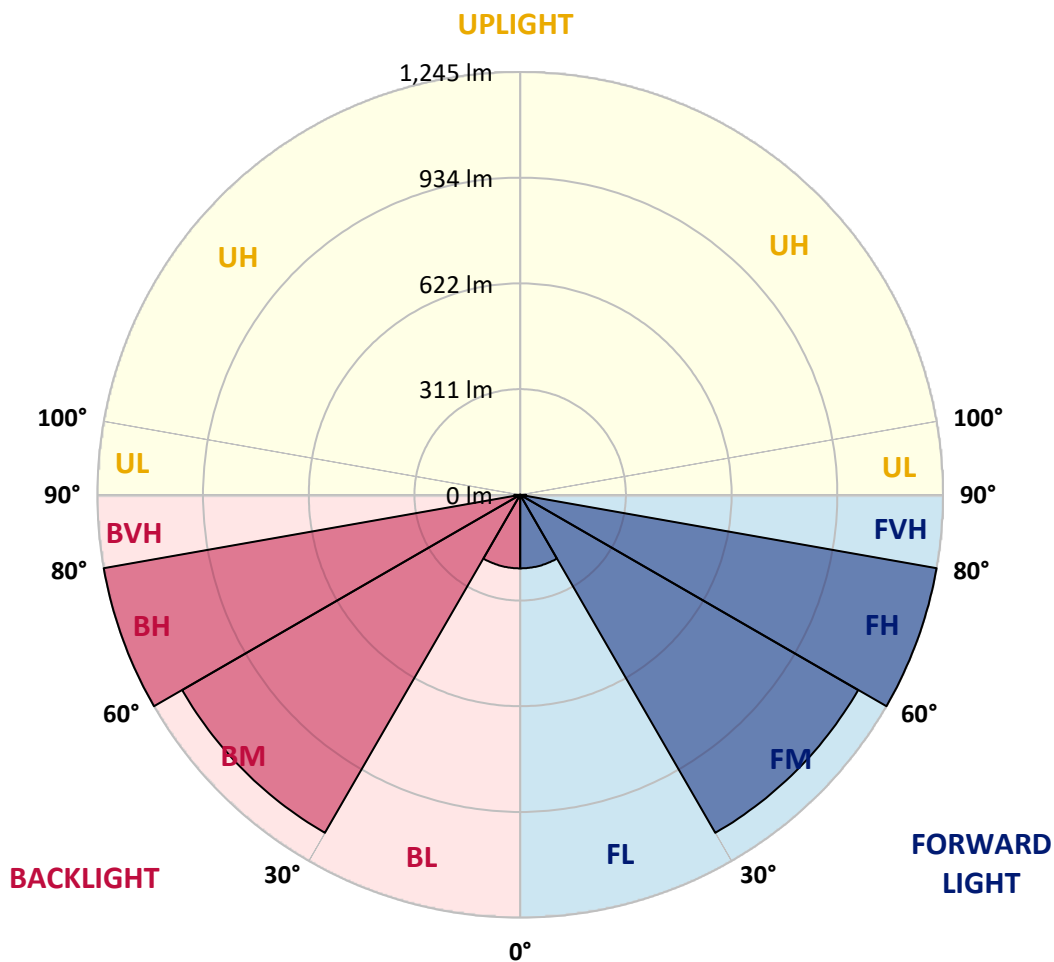
CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 216.6 | 4.1 | | | |
| FM | (30°-60°) | 1149.1 | 21.9 | | | |
| FH | (60°-80°) | 1244.8 | 23.7 | | | G1/1800 |
| FVH | (80°-90°) | 17.5 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 216.6 | 4.1 | B1/500 | | |
| BM | (30°-60°) | 1149.1 | 21.9 | B2/2500 | | |
| BH | (60°-80°) | 1244.8 | 23.7 | B3/2500 | | G1/1800 |
| BVH | (80°-90°) | 17.5 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 |
| 2.5° | 526.6 | 526.6 | 527.2 | 526.9 | 525.9 | 524.9 | 524.0 | 523.0 | 522.4 | 521.7 | 521.1 |
| 5° | 521.1 | 521.1 | 522.0 | 521.4 | 520.8 | 519.8 | 519.2 | 518.2 | 517.5 | 516.9 | 517.2 |
| 7.5° | 514.0 | 514.6 | 515.3 | 515.0 | 513.7 | 513.4 | 512.4 | 512.1 | 511.4 | 510.5 | 510.8 |
| 10° | 507.9 | 508.2 | 508.9 | 508.5 | 508.2 | 507.2 | 506.9 | 506.6 | 506.3 | 505.0 | 504.7 |
| 12.5° | 501.8 | 502.4 | 503.1 | 503.4 | 503.1 | 503.4 | 503.7 | 504.0 | 503.7 | 503.1 | 503.1 |
| 15° | 496.9 | 497.6 | 498.6 | 499.5 | 499.8 | 501.8 | 503.1 | 504.3 | 505.3 | 505.6 | 504.7 |
| 17.5° | 494.4 | 495.3 | 496.6 | 498.6 | 500.2 | 502.4 | 504.7 | 506.6 | 508.2 | 508.5 | 507.6 |
| 20° | 494.0 | 495.0 | 496.9 | 499.2 | 502.1 | 505.0 | 508.5 | 511.4 | 513.0 | 514.0 | 513.0 |
| 22.5° | 496.3 | 497.6 | 500.2 | 503.1 | 506.6 | 510.5 | 515.0 | 518.2 | 521.4 | 522.7 | 521.7 |
| 25° | 502.7 | 504.0 | 506.9 | 510.5 | 514.3 | 519.2 | 523.7 | 527.8 | 531.1 | 532.7 | 531.4 |
| 27.5° | 516.3 | 516.6 | 519.8 | 523.7 | 528.2 | 532.3 | 538.1 | 540.1 | 542.6 | 544.3 | 542.6 |
| 30° | 535.2 | 535.9 | 538.8 | 544.9 | 549.1 | 554.6 | 557.8 | 559.7 | 562.6 | 564.2 | 562.3 |
| 32.5° | 564.2 | 564.9 | 567.4 | 573.2 | 577.1 | 581.3 | 585.1 | 586.4 | 589.3 | 591.2 | 589.0 |
| 35° | 605.1 | 606.4 | 608.6 | 612.5 | 615.7 | 618.9 | 621.8 | 620.9 | 622.8 | 625.4 | 623.1 |
| 37.5° | 661.1 | 660.8 | 661.4 | 664.3 | 667.5 | 669.5 | 674.0 | 671.7 | 673.6 | 675.9 | 674.6 |
| 40° | 726.4 | 726.4 | 726.1 | 731.3 | 732.5 | 734.5 | 739.3 | 736.4 | 739.0 | 741.6 | 739.3 |
| 42.5° | 800.8 | 802.1 | 803.7 | 807.9 | 811.4 | 812.0 | 814.3 | 813.0 | 816.2 | 818.5 | 816.2 |
| 45° | 886.4 | 888.3 | 890.3 | 899.9 | 901.5 | 902.8 | 904.4 | 900.2 | 903.8 | 905.7 | 905.1 |
| 47.5° | 975.2 | 978.8 | 982.9 | 992.9 | 999.4 | 1002.3 | 1003.5 | 998.7 | 999.0 | 1001.9 | 1002.3 |
| 50° | 1075.6 | 1079.5 | 1083.7 | 1095.0 | 1101.1 | 1106.2 | 1107.8 | 1102.4 | 1103.0 | 1105.2 | 1105.9 |
| 52.5° | 1168.3 | 1172.8 | 1181.9 | 1197.0 | 1205.7 | 1214.7 | 1215.3 | 1208.6 | 1211.5 | 1213.1 | 1211.8 |
| 55° | 1255.6 | 1261.3 | 1273.3 | 1293.5 | 1309.3 | 1327.0 | 1335.1 | 1327.7 | 1327.7 | 1326.4 | 1325.7 |
| 57.5° | 1357.3 | 1363.7 | 1375.9 | 1399.4 | 1421.3 | 1446.7 | 1468.6 | 1476.0 | 1489.5 | 1494.1 | 1487.0 |
| 60° | 1510.5 | 1517.2 | 1529.8 | 1560.7 | 1588.4 | 1625.4 | 1661.4 | 1690.7 | 1738.3 | 1764.1 | 1740.9 |
| 62.5° | 1650.5 | 1660.8 | 1690.4 | 1744.5 | 1804.3 | 1872.9 | 1952.4 | 2009.0 | 2095.6 | 2138.7 | 2080.5 |
| 65° | 1618.6 | 1639.5 | 1697.5 | 1782.4 | 1906.0 | 2054.7 | 2216.6 | 2372.1 | 2551.0 | 2642.8 | 2524.3 |
| 67.5° | 1413.9 | 1431.6 | 1494.1 | 1592.9 | 1747.0 | 1952.1 | 2203.7 | 2525.6 | 2894.8 | 3066.6 | 2857.1 |
| 68° | 1335.7 | 1368.8 | 1431.0 | 1529.1 | 1684.6 | 1886.1 | 2154.8 | 2502.4 | 2905.4 | 3091.1 | 2864.8 |
| 70° | 1024.1 | 1036.1 | 1095.6 | 1183.8 | 1351.5 | 1549.1 | 1820.4 | 2216.6 | 2672.0 | 2863.2 | 2630.5 |
| 72.5° | 486.6 | 493.7 | 532.3 | 619.2 | 725.8 | 886.7 | 1126.2 | 1499.8 | 1910.2 | 2109.1 | 1877.1 |
| 75° | 178.3 | 179.9 | 188.9 | 209.5 | 249.4 | 309.9 | 424.8 | 657.2 | 973.0 | 1160.3 | 976.8 |
| 77.5° | 96.2 | 96.6 | 100.1 | 105.2 | 112.3 | 120.4 | 137.8 | 184.7 | 298.0 | 405.5 | 314.8 |
| 80° | 60.5 | 60.2 | 63.7 | 67.9 | 72.7 | 76.6 | 78.2 | 83.7 | 94.3 | 110.4 | 101.4 |
| 82.5° | 30.9 | 33.8 | 41.8 | 46.3 | 53.4 | 54.7 | 53.1 | 52.8 | 56.0 | 60.5 | 62.4 |
| 85° | 17.1 | 15.1 | 22.2 | 29.6 | 32.2 | 33.2 | 33.5 | 31.5 | 30.9 | 30.3 | 31.9 |
| 87.5° | 8.7 | 8.0 | 9.7 | 14.8 | 15.8 | 12.9 | 13.2 | 11.3 | 7.7 | 7.7 | 8.0 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 | 524.3 |
| 2.5° | 520.4 | 520.8 | 520.1 | 520.1 | 520.1 | 520.4 | 520.1 | 519.8 |
| 5° | 516.3 | 516.9 | 516.9 | 517.2 | 517.5 | 517.5 | 517.5 | 517.5 |
| 7.5° | 510.1 | 510.5 | 511.1 | 511.1 | 511.1 | 511.1 | 511.1 | 511.1 |
| 10° | 504.3 | 503.7 | 503.4 | 502.7 | 502.7 | 501.8 | 502.1 | 502.4 |
| 12.5° | 501.4 | 500.2 | 499.5 | 498.6 | 497.9 | 496.9 | 496.9 | 497.3 |
| 15° | 502.7 | 500.8 | 498.9 | 498.2 | 497.6 | 496.9 | 496.3 | 496.6 |
| 17.5° | 505.3 | 503.1 | 500.8 | 499.5 | 498.2 | 497.3 | 496.9 | 497.3 |
| 20° | 510.8 | 507.6 | 504.0 | 501.8 | 499.2 | 498.6 | 497.6 | 498.6 |
| 22.5° | 518.2 | 514.3 | 509.8 | 505.6 | 502.7 | 501.4 | 500.2 | 501.1 |
| 25° | 527.2 | 523.0 | 518.5 | 513.7 | 510.5 | 509.5 | 507.9 | 507.9 |
| 27.5° | 539.8 | 536.2 | 532.3 | 527.8 | 524.6 | 523.7 | 521.1 | 521.1 |
| 30° | 559.7 | 556.2 | 552.6 | 548.8 | 545.5 | 544.6 | 541.4 | 541.4 |
| 32.5° | 586.1 | 582.2 | 580.0 | 576.8 | 574.2 | 572.6 | 568.7 | 568.4 |
| 35° | 621.5 | 618.0 | 617.6 | 615.4 | 612.8 | 613.1 | 609.3 | 608.6 |
| 37.5° | 672.4 | 669.5 | 670.4 | 668.5 | 666.2 | 668.2 | 665.9 | 665.9 |
| 40° | 737.4 | 736.4 | 737.4 | 736.1 | 736.4 | 736.7 | 734.8 | 735.4 |
| 42.5° | 815.9 | 813.3 | 819.1 | 818.5 | 817.5 | 820.1 | 815.6 | 812.4 |
| 45° | 906.3 | 905.4 | 911.2 | 912.1 | 910.2 | 911.8 | 903.8 | 903.4 |
| 47.5° | 1004.5 | 1004.5 | 1009.7 | 1009.0 | 1007.1 | 1007.4 | 997.8 | 991.6 |
| 50° | 1106.9 | 1106.2 | 1111.4 | 1110.1 | 1107.5 | 1107.2 | 1097.2 | 1091.1 |
| 52.5° | 1213.4 | 1213.4 | 1220.8 | 1217.3 | 1211.1 | 1208.2 | 1196.0 | 1188.0 |
| 55° | 1331.2 | 1329.6 | 1331.8 | 1320.2 | 1308.3 | 1299.7 | 1284.5 | 1278.4 |
| 57.5° | 1480.2 | 1461.5 | 1445.5 | 1430.6 | 1413.9 | 1403.6 | 1385.9 | 1379.5 |
| 60° | 1691.7 | 1641.8 | 1620.2 | 1590.6 | 1562.9 | 1549.1 | 1525.6 | 1513.0 |
| 62.5° | 1984.6 | 1901.8 | 1843.3 | 1777.9 | 1714.8 | 1670.4 | 1634.7 | 1618.9 |
| 65° | 2323.1 | 2142.9 | 1993.9 | 1853.9 | 1735.1 | 1640.8 | 1588.4 | 1571.9 |
| 67.5° | 2451.9 | 2121.0 | 1863.9 | 1663.0 | 1518.8 | 1406.5 | 1343.7 | 1330.5 |
| 68° | 2424.5 | 2070.8 | 1803.7 | 1598.0 | 1453.2 | 1339.9 | 1277.4 | 1265.5 |
| 70° | 2138.7 | 1747.0 | 1465.1 | 1260.4 | 1125.2 | 1017.4 | 973.3 | 954.3 |
| 72.5° | 1458.0 | 1122.0 | 860.6 | 688.4 | 587.4 | 519.2 | 478.6 | 464.8 |
| 75° | 671.1 | 453.5 | 302.9 | 226.3 | 192.1 | 175.7 | 163.2 | 160.0 |
| 77.5° | 195.7 | 142.3 | 122.3 | 113.3 | 106.5 | 100.7 | 96.6 | 96.2 |
| 80° | 93.0 | 87.2 | 84.6 | 78.9 | 72.7 | 67.3 | 63.4 | 64.0 |
| 82.5° | 62.4 | 60.8 | 60.8 | 55.0 | 45.4 | 38.9 | 32.2 | 29.0 |
| 85° | 33.2 | 34.4 | 36.4 | 34.4 | 29.9 | 22.2 | 14.5 | 15.8 |
| 87.5° | 11.3 | 12.9 | 13.5 | 13.2 | 11.9 | 9.0 | 6.8 | 6.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)