

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: P198548

Luminaire Tested: **XNV-AF-01-LED-U-SL3-7030-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)
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-SL3-7030-800-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3672 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 44
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

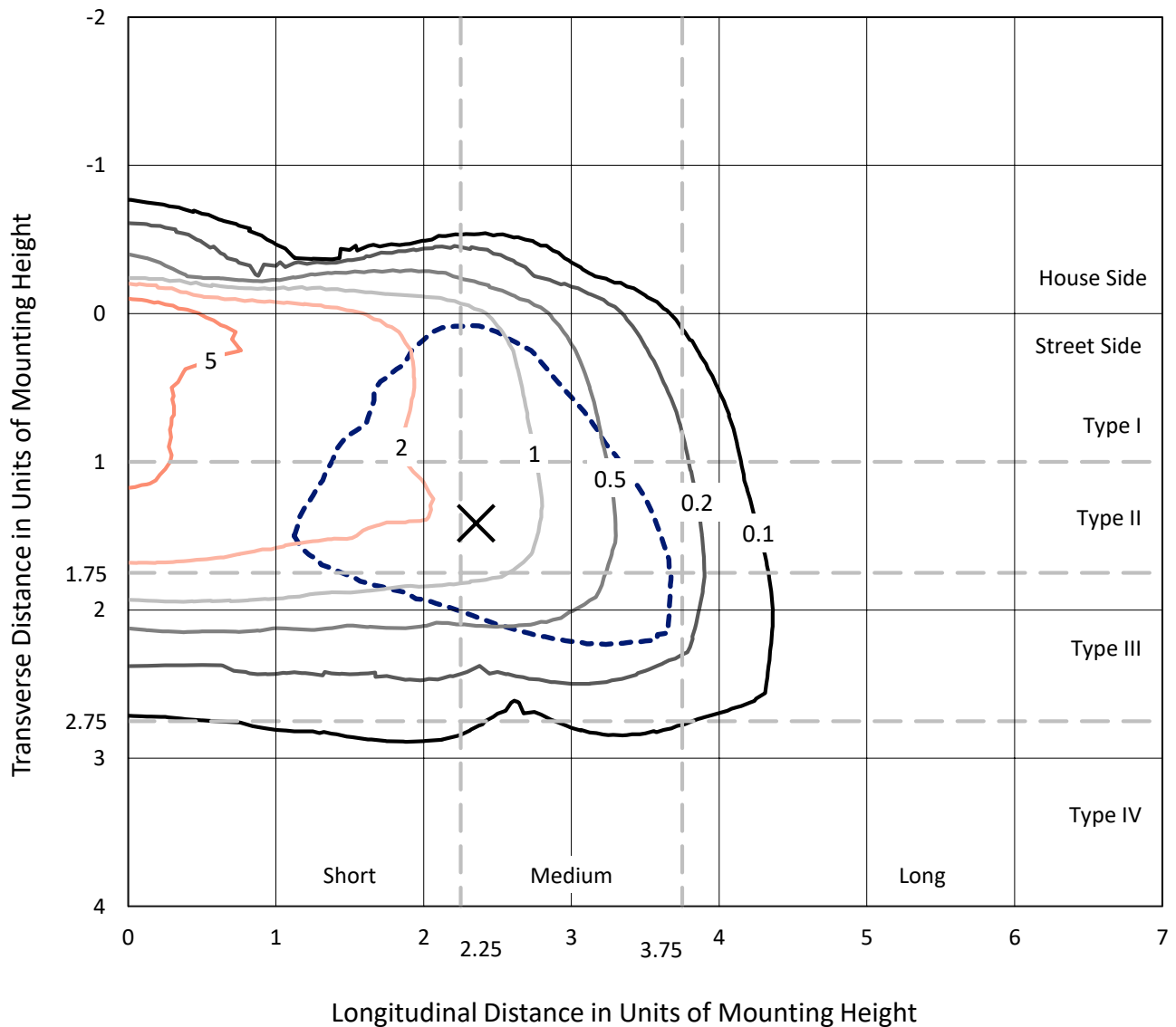


REPORT NUMBER: P198548

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

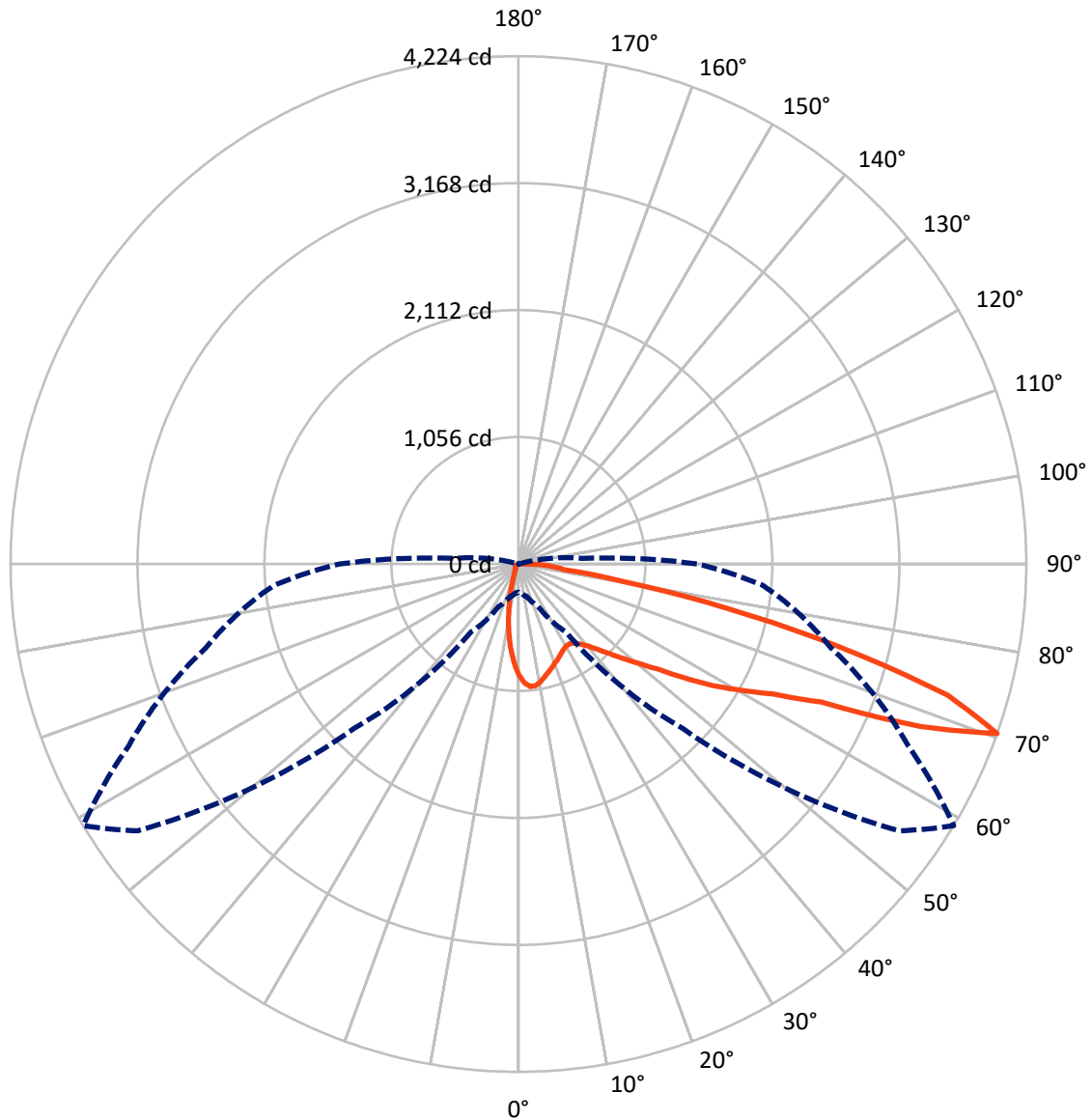


Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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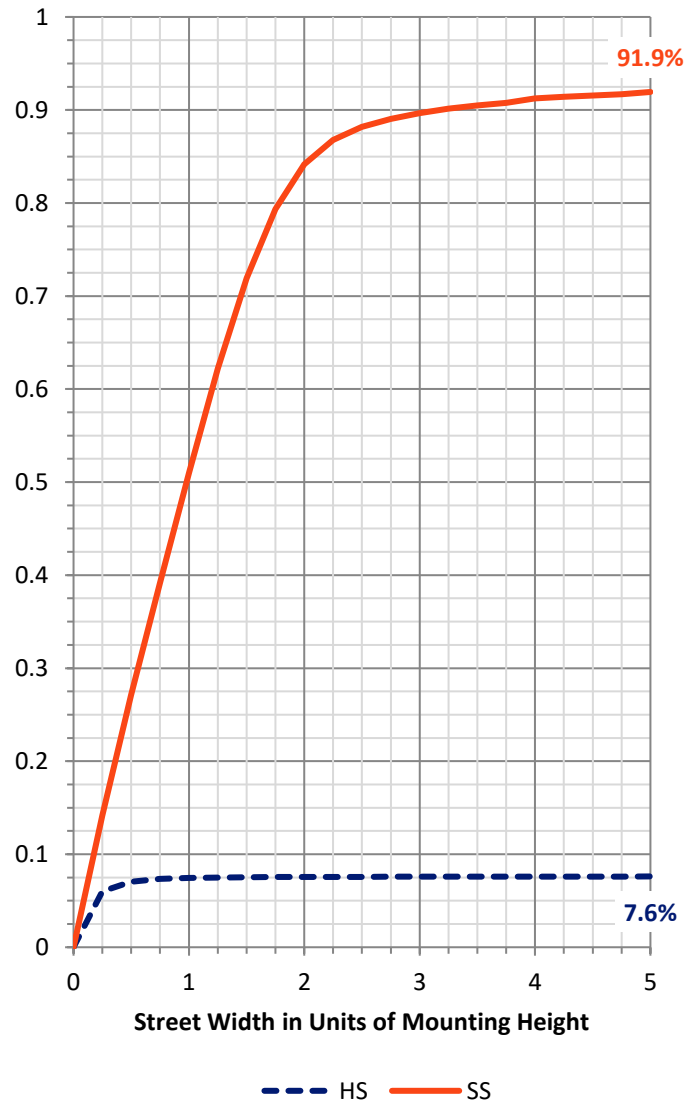
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 282.3 | 0.0 | 282.3 |
| | % Fixture | 7.7 | 0.0 | 7.7 |
| Street Side | Lumens | 3389.7 | 0.0 | 3389.7 |
| | % Fixture | 92.3 | 0.0 | 92.3 |
| Total | Lumens | 3672.0 | 0.0 | 3672.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 76.4 | 2.1 |
| 10°-20° | 160.1 | 4.4 |
| 20°-30° | 216.8 | 5.9 |
| 30°-40° | 312.9 | 8.5 |
| 40°-50° | 519.6 | 14.1 |
| 50°-60° | 794.7 | 21.6 |
| 60°-70° | 988.5 | 26.9 |
| 70°-80° | 546.4 | 14.9 |
| 80°-90° | 56.7 | 1.5 |
| 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° | 3672.0 | 100.0 |
| 0°-180° | 3672.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P198548

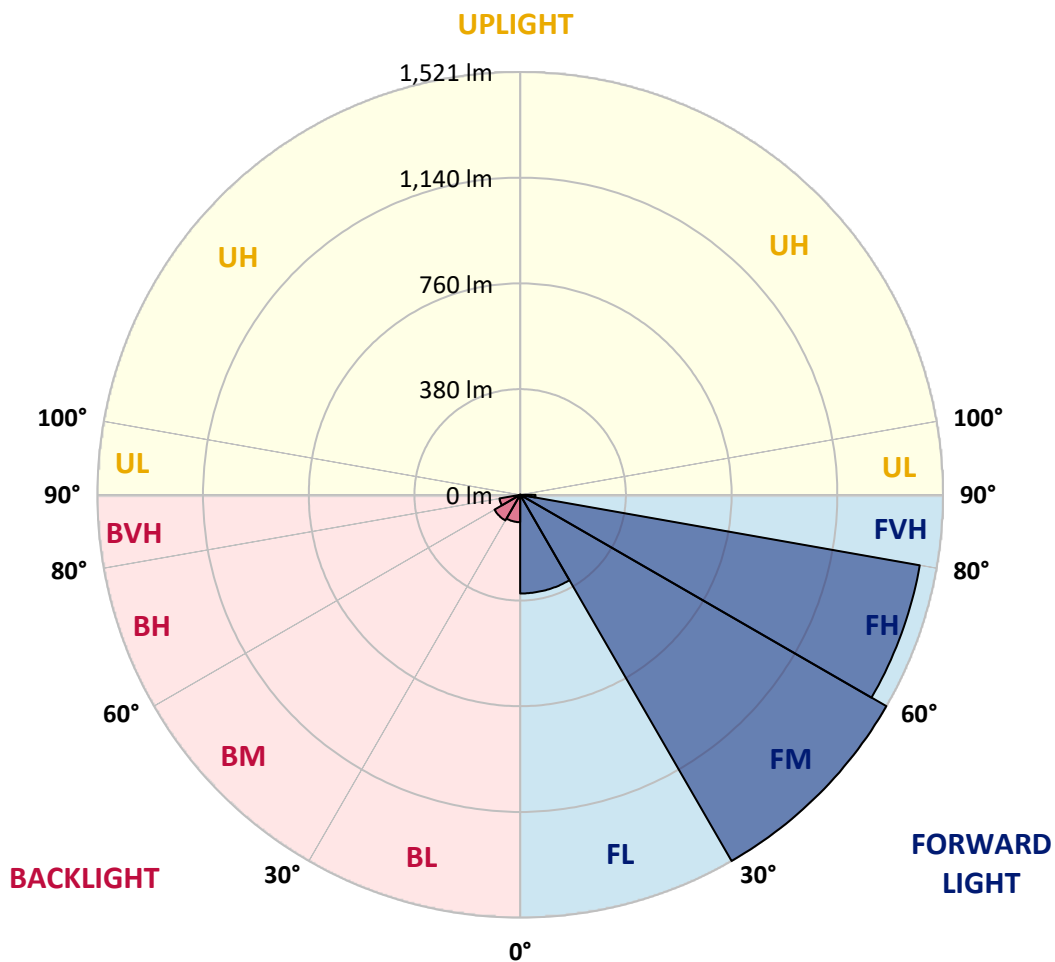
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 354.9 | 9.7 | | | |
| FM | (30°-60°) | 1520.6 | 41.4 | | | |
| FH | (60°-80°) | 1459.2 | 39.7 | | | G1/1800 |
| FVH | (80°-90°) | 55.0 | 1.5 | | | G1/100 |
| BL | (0°-30°) | 98.4 | 2.7 | B0/110 | | |
| BM | (30°-60°) | 106.5 | 2.9 | B0/220 | | |
| BH | (60°-80°) | 75.7 | 2.1 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 1.6 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type III Medium





REPORT NUMBER: P198548

CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030-800-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 |
| 2.5° | 1049.6 | 1047.9 | 1041.0 | 1039.6 | 1031.8 | 1016.3 | 998.3 | 991.1 | 976.4 | 953.2 | 927.4 |
| 5° | 1067.0 | 1067.8 | 1068.4 | 1065.4 | 1064.2 | 1051.5 | 1031.6 | 1023.0 | 1003.3 | 965.1 | 918.0 |
| 7.5° | 1001.6 | 1003.9 | 1010.8 | 1013.8 | 1027.1 | 1032.1 | 1028.0 | 1022.4 | 1006.9 | 961.8 | 895.6 |
| 10° | 932.7 | 936.8 | 944.3 | 949.3 | 965.6 | 978.9 | 995.8 | 997.2 | 993.9 | 950.7 | 870.3 |
| 12.5° | 873.4 | 877.3 | 885.6 | 895.6 | 912.2 | 929.3 | 954.6 | 963.4 | 974.5 | 943.5 | 852.3 |
| 15° | 822.4 | 823.5 | 831.6 | 844.0 | 865.9 | 889.5 | 919.4 | 932.4 | 954.0 | 940.7 | 838.5 |
| 17.5° | 777.8 | 778.1 | 783.4 | 794.7 | 821.3 | 852.3 | 887.2 | 904.4 | 931.8 | 936.8 | 826.3 |
| 20° | 748.5 | 748.2 | 748.5 | 754.6 | 778.1 | 814.9 | 857.3 | 875.3 | 910.5 | 932.1 | 813.8 |
| 22.5° | 738.5 | 737.1 | 730.7 | 728.5 | 743.5 | 775.9 | 826.6 | 850.1 | 891.4 | 930.7 | 804.7 |
| 25° | 750.7 | 749.8 | 736.3 | 723.5 | 724.9 | 745.1 | 795.3 | 824.1 | 876.4 | 935.7 | 802.5 |
| 27.5° | 790.0 | 788.4 | 767.6 | 742.6 | 726.9 | 730.5 | 772.0 | 802.2 | 864.5 | 947.9 | 805.5 |
| 30° | 841.5 | 841.8 | 819.7 | 789.5 | 752.3 | 731.8 | 759.5 | 788.1 | 856.5 | 966.2 | 812.2 |
| 32.5° | 898.9 | 898.6 | 882.8 | 847.9 | 800.5 | 757.3 | 765.1 | 789.2 | 857.6 | 993.1 | 824.9 |
| 35° | 958.2 | 955.1 | 949.8 | 919.1 | 863.7 | 801.9 | 790.3 | 808.0 | 869.2 | 1028.5 | 846.5 |
| 37.5° | 1026.6 | 1025.5 | 1030.7 | 998.3 | 941.8 | 867.6 | 834.6 | 846.5 | 898.6 | 1080.9 | 881.4 |
| 40° | 1135.4 | 1129.3 | 1131.8 | 1087.8 | 1029.9 | 955.9 | 896.7 | 899.7 | 945.4 | 1150.1 | 936.5 |
| 42.5° | 1342.9 | 1318.3 | 1272.0 | 1189.5 | 1126.9 | 1054.0 | 977.8 | 972.6 | 1011.6 | 1234.1 | 1009.1 |
| 45° | 1590.8 | 1562.6 | 1446.0 | 1301.6 | 1223.8 | 1159.3 | 1078.1 | 1064.0 | 1093.1 | 1334.1 | 1102.8 |
| 47.5° | 1797.8 | 1767.3 | 1612.7 | 1418.8 | 1322.4 | 1267.8 | 1189.2 | 1172.6 | 1190.6 | 1450.1 | 1215.2 |
| 50° | 1868.4 | 1851.5 | 1715.8 | 1516.3 | 1421.9 | 1389.7 | 1328.5 | 1300.8 | 1305.2 | 1575.3 | 1346.5 |
| 52.5° | 1836.0 | 1830.2 | 1739.3 | 1583.1 | 1513.8 | 1524.4 | 1481.1 | 1452.1 | 1447.1 | 1712.2 | 1491.7 |
| 55° | 1767.6 | 1764.8 | 1720.5 | 1620.2 | 1595.0 | 1647.6 | 1695.3 | 1670.1 | 1623.0 | 1857.6 | 1611.6 |
| 57.5° | 1669.8 | 1680.3 | 1712.2 | 1691.7 | 1694.7 | 1777.8 | 1894.2 | 1907.2 | 1836.8 | 1973.4 | 1700.5 |
| 60° | 1408.6 | 1436.8 | 1582.8 | 1768.4 | 1910.5 | 1994.4 | 2107.2 | 2131.5 | 2018.0 | 2052.6 | 1803.3 |
| 62.5° | 1041.3 | 1081.7 | 1289.7 | 1630.7 | 2029.3 | 2406.3 | 2390.5 | 2379.7 | 2190.8 | 2158.7 | 1990.3 |
| 65° | 611.6 | 659.0 | 834.9 | 1274.2 | 1850.1 | 2671.1 | 2919.6 | 2770.0 | 2454.3 | 2379.2 | 2288.1 |
| 67.5° | 304.7 | 305.0 | 384.5 | 672.6 | 1367.3 | 2486.4 | 3691.9 | 3605.5 | 3014.4 | 2704.1 | 2405.5 |
| 70° | 234.3 | 240.7 | 284.5 | 390.9 | 691.4 | 1936.5 | 3868.9 | 4223.8 | 3577.2 | 2689.7 | 2041.0 |
| 72.5° | 198.6 | 202.8 | 253.2 | 340.2 | 516.9 | 1063.1 | 3349.3 | 3733.5 | 3413.5 | 2272.5 | 1504.4 |
| 75° | 142.9 | 146.3 | 224.1 | 308.6 | 475.9 | 527.4 | 2297.5 | 2768.9 | 2561.2 | 1598.6 | 828.0 |
| 77.5° | 35.5 | 35.2 | 78.1 | 250.4 | 425.8 | 439.3 | 1318.3 | 1775.6 | 1469.5 | 654.6 | 212.7 |
| 80° | 15.8 | 15.2 | 17.7 | 52.6 | 396.1 | 414.7 | 579.8 | 896.7 | 563.7 | 106.1 | 65.1 |
| 82.5° | 11.1 | 10.5 | 11.1 | 19.4 | 132.4 | 384.8 | 350.4 | 388.6 | 206.4 | 36.3 | 27.7 |
| 85° | 3.6 | 3.3 | 6.1 | 16.3 | 37.1 | 221.9 | 341.8 | 290.3 | 153.5 | 15.5 | 18.6 |
| 87.5° | 0.6 | 0.6 | 2.2 | 8.9 | 10.8 | 74.0 | 200.6 | 201.1 | 69.0 | 9.1 | 8.3 |
| 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° | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 | 928.5 |
| 2.5° | 914.4 | 898.0 | 875.1 | 852.1 | 831.3 | 810.0 | 792.8 | 784.8 | 781.2 | 776.2 | 765.4 |
| 5° | 893.3 | 863.7 | 813.3 | 763.7 | 717.4 | 673.1 | 635.2 | 613.6 | 590.3 | 589.2 | 577.8 |
| 7.5° | 859.5 | 817.4 | 737.9 | 660.9 | 590.3 | 522.7 | 464.5 | 426.9 | 401.1 | 385.0 | 374.0 |
| 10° | 821.9 | 767.9 | 662.6 | 554.3 | 458.2 | 367.9 | 293.1 | 244.3 | 214.7 | 199.7 | 191.1 |
| 12.5° | 792.0 | 724.1 | 588.4 | 452.1 | 331.6 | 228.0 | 158.4 | 123.0 | 107.2 | 101.1 | 98.3 |
| 15° | 766.2 | 683.9 | 518.8 | 360.7 | 221.3 | 131.0 | 91.7 | 80.1 | 77.6 | 77.6 | 77.3 |
| 17.5° | 740.2 | 645.1 | 451.2 | 270.9 | 139.3 | 85.9 | 72.3 | 70.6 | 70.9 | 71.7 | 71.7 |
| 20° | 715.5 | 608.3 | 386.1 | 193.1 | 91.4 | 68.7 | 65.6 | 65.1 | 65.9 | 67.0 | 66.8 |
| 22.5° | 695.6 | 575.9 | 325.2 | 132.7 | 70.4 | 62.3 | 60.4 | 59.6 | 60.1 | 60.9 | 60.7 |
| 25° | 681.4 | 548.2 | 269.2 | 92.5 | 61.2 | 56.8 | 54.6 | 53.5 | 52.9 | 53.5 | 53.2 |
| 27.5° | 672.8 | 524.9 | 216.6 | 69.5 | 54.8 | 51.2 | 48.5 | 46.3 | 44.9 | 44.9 | 44.3 |
| 30° | 667.3 | 503.0 | 169.8 | 57.6 | 49.6 | 45.7 | 41.8 | 38.8 | 36.6 | 36.0 | 35.7 |
| 32.5° | 667.0 | 484.2 | 126.9 | 51.0 | 44.6 | 40.2 | 35.5 | 31.6 | 29.1 | 28.5 | 28.3 |
| 35° | 674.0 | 469.0 | 93.4 | 46.0 | 40.2 | 34.9 | 29.6 | 25.5 | 23.3 | 23.3 | 23.0 |
| 37.5° | 692.0 | 460.1 | 70.6 | 42.1 | 36.6 | 30.5 | 24.9 | 21.1 | 19.1 | 19.7 | 19.7 |
| 40° | 725.5 | 458.4 | 57.6 | 39.1 | 33.5 | 26.6 | 20.2 | 17.2 | 16.3 | 17.2 | 17.2 |
| 42.5° | 776.7 | 467.3 | 51.2 | 36.8 | 30.7 | 22.7 | 16.9 | 14.7 | 14.4 | 15.2 | 15.2 |
| 45° | 843.5 | 484.8 | 47.6 | 34.9 | 27.7 | 18.8 | 14.1 | 12.7 | 12.5 | 13.6 | 13.6 |
| 47.5° | 924.4 | 508.3 | 44.3 | 32.7 | 24.7 | 15.5 | 11.9 | 10.8 | 10.8 | 11.9 | 12.2 |
| 50° | 1020.2 | 540.2 | 41.0 | 30.5 | 22.2 | 13.0 | 10.0 | 9.1 | 9.4 | 10.5 | 10.8 |
| 52.5° | 1130.5 | 579.2 | 37.9 | 28.5 | 19.4 | 10.5 | 8.3 | 7.8 | 8.0 | 9.1 | 9.4 |
| 55° | 1225.5 | 613.3 | 34.3 | 26.6 | 15.8 | 8.6 | 6.9 | 6.6 | 6.9 | 8.3 | 8.3 |
| 57.5° | 1308.3 | 646.0 | 31.0 | 23.5 | 12.5 | 6.9 | 5.5 | 5.5 | 6.1 | 7.5 | 7.8 |
| 60° | 1418.3 | 697.5 | 28.3 | 19.9 | 9.4 | 5.3 | 4.4 | 4.7 | 5.5 | 6.6 | 6.9 |
| 62.5° | 1613.0 | 785.0 | 24.7 | 16.6 | 6.9 | 4.2 | 3.6 | 3.9 | 5.0 | 6.4 | 6.6 |
| 65° | 1856.8 | 867.9 | 20.5 | 13.9 | 5.3 | 3.0 | 2.8 | 3.6 | 5.0 | 6.4 | 6.6 |
| 67.5° | 1831.8 | 754.8 | 16.1 | 11.1 | 3.9 | 2.5 | 2.2 | 3.3 | 4.7 | 6.4 | 6.6 |
| 70° | 1485.6 | 529.1 | 11.9 | 7.5 | 3.0 | 2.2 | 2.2 | 3.3 | 4.7 | 6.1 | 6.4 |
| 72.5° | 1030.5 | 294.5 | 9.1 | 5.0 | 2.8 | 2.2 | 1.9 | 3.0 | 4.4 | 6.1 | 6.4 |
| 75° | 490.3 | 90.3 | 7.2 | 3.6 | 2.5 | 1.9 | 1.7 | 3.0 | 4.4 | 6.1 | 6.4 |
| 77.5° | 94.2 | 23.0 | 5.8 | 3.0 | 2.2 | 1.9 | 1.7 | 2.8 | 4.4 | 5.8 | 6.1 |
| 80° | 31.9 | 10.2 | 4.7 | 2.8 | 2.2 | 1.9 | 1.7 | 2.8 | 4.2 | 5.5 | 5.8 |
| 82.5° | 17.5 | 5.8 | 4.2 | 2.5 | 2.2 | 1.7 | 1.4 | 2.5 | 3.9 | 5.5 | 5.8 |
| 85° | 13.6 | 4.2 | 3.3 | 2.5 | 2.2 | 1.7 | 1.4 | 2.5 | 3.9 | 5.3 | 5.5 |
| 87.5° | 6.9 | 3.0 | 2.8 | 2.5 | 2.2 | 1.7 | 1.4 | 2.2 | 3.6 | 5.0 | 5.5 |
| 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)