

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: P572962

Luminaire Tested: **ARCH-S-PA2-20-722-U-T2U**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-15)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-20-722-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 220mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2682 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

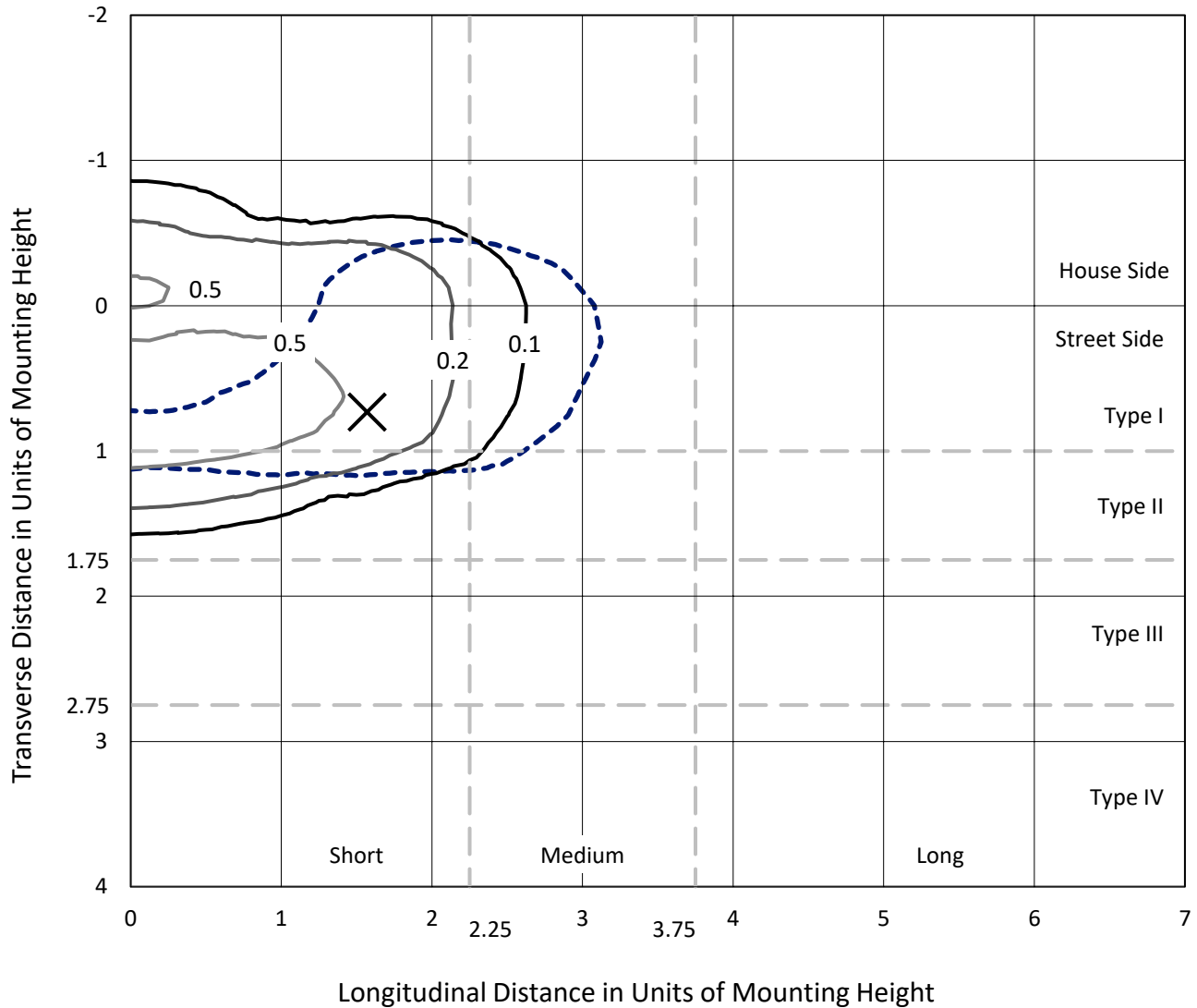
Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

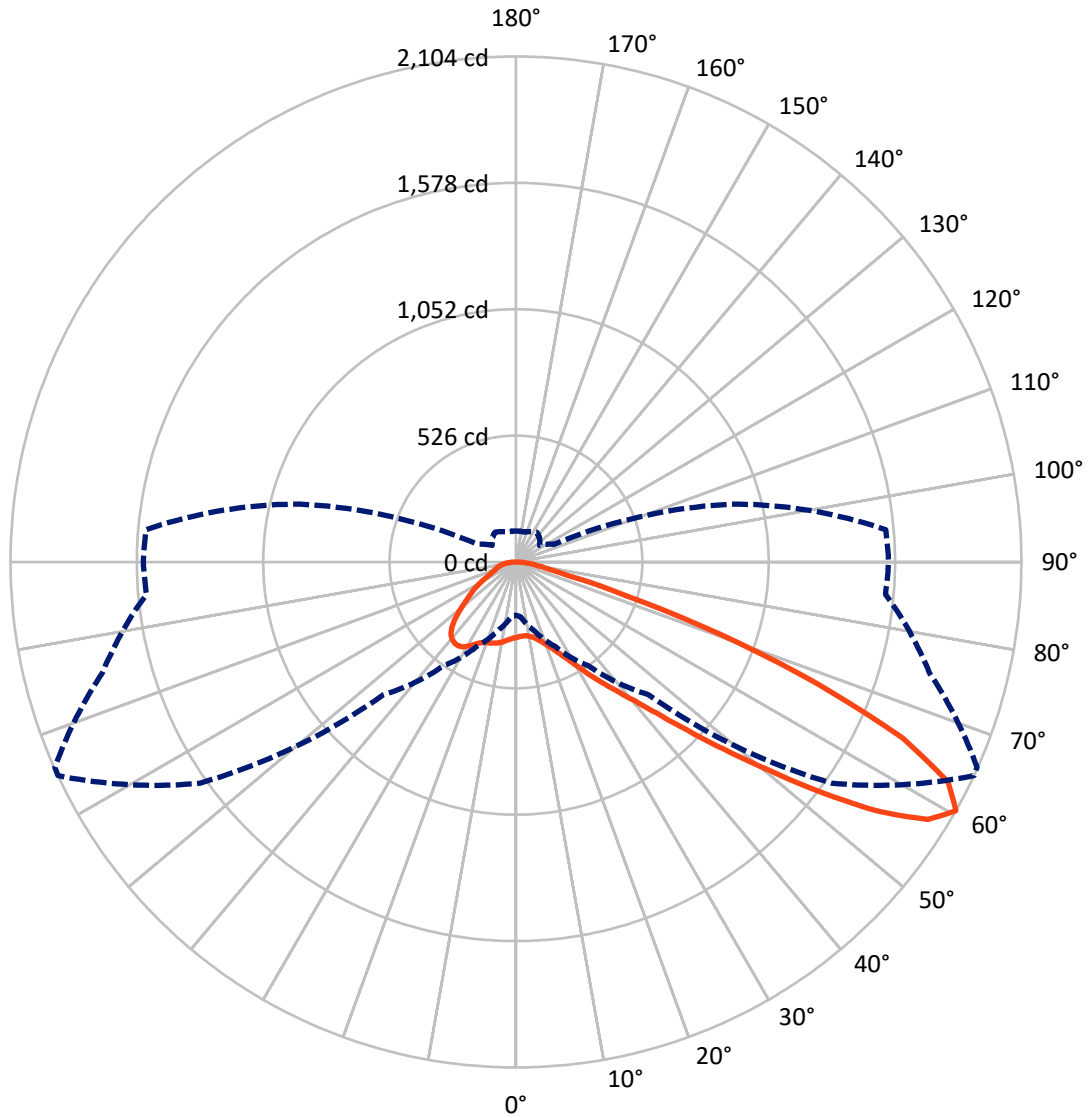
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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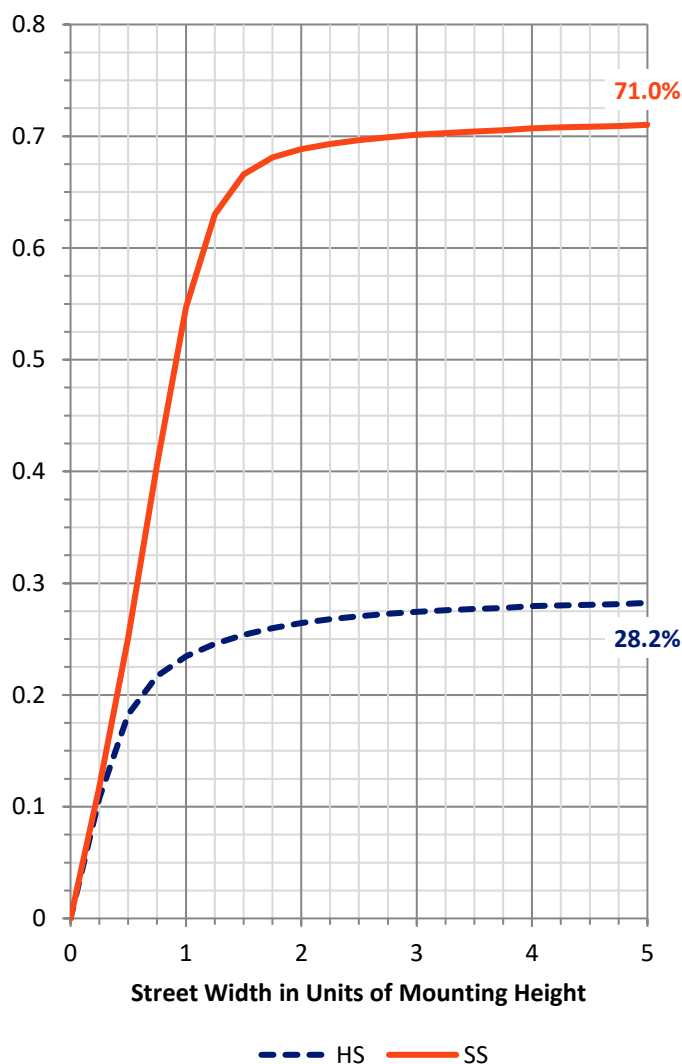
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 767.8 | 0.0 | 767.8 |
| | % Fixture | 28.6 | 0.0 | 28.6 |
| Street Side | Lumens | 1914.2 | 0.0 | 1914.2 |
| | % Fixture | 71.4 | 0.0 | 71.4 |
| Total | Lumens | 2682.0 | 0.0 | 2682.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 30.4 | 1.1 |
| 10°-20° | 97.8 | 3.6 |
| 20°-30° | 187.6 | 7.0 |
| 30°-40° | 325.8 | 12.1 |
| 40°-50° | 552.5 | 20.6 |
| 50°-60° | 688.0 | 25.7 |
| 60°-70° | 554.4 | 20.7 |
| 70°-80° | 209.9 | 7.8 |
| 80°-90° | 35.6 | 1.3 |
| 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° | 2682.0 | 100.0 |
| 0°-180° | 2682.0 | 100.0 |

Coefficient of Utilization



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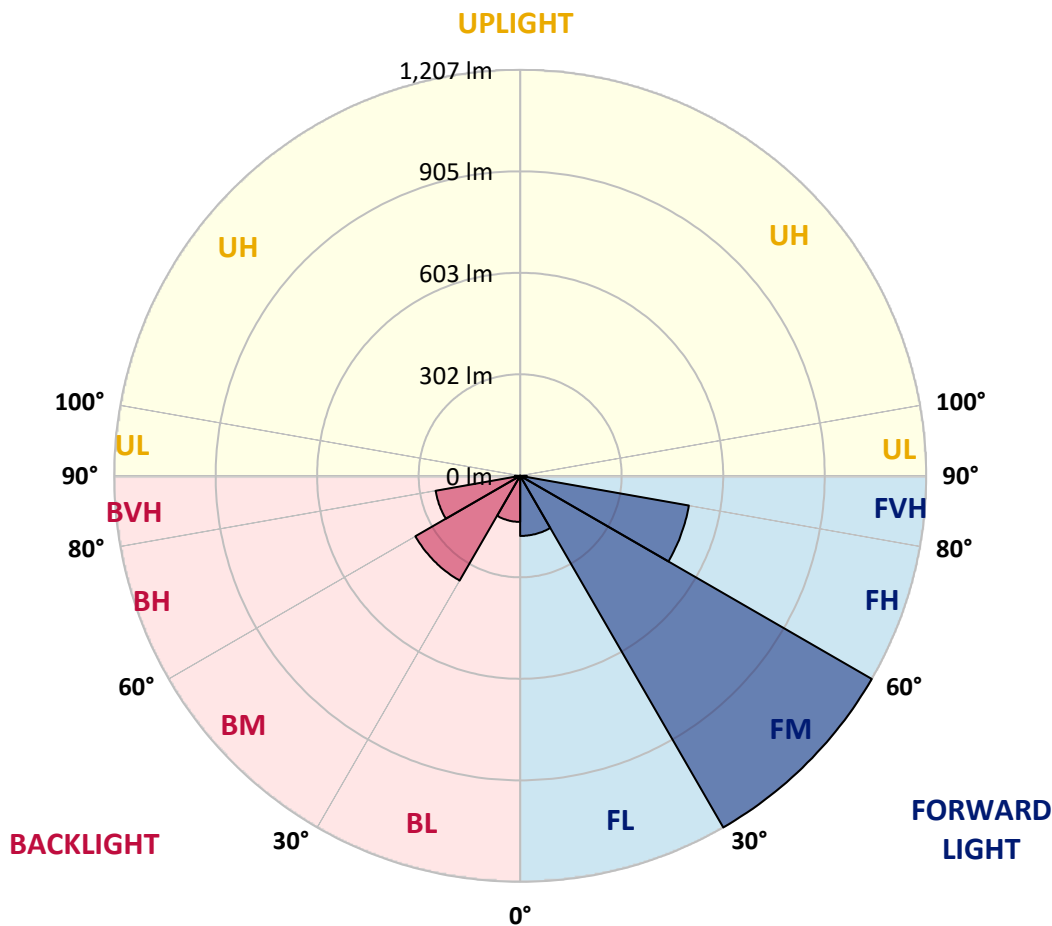
CATALOG NUMBER: ARCH-S-PA2-20-722-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 178.8 | 6.7 | | | |
| FM (30°-60°) | 1206.6 | 45.0 | | | |
| FH (60°-80°) | 509.0 | 19.0 | | | G0/660 |
| FVH (80°-90°) | 19.8 | 0.7 | | | G1/100 |
| BL (0°-30°) | 137.0 | 5.1 | B1/500 | | |
| BM (30°-60°) | 359.6 | 13.4 | B1/1000 | | |
| BH (60°-80°) | 255.3 | 9.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 15.9 | 0.6 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 |
| 2.5° | 307.3 | 307.3 | 307.3 | 308.1 | 308.8 | 309.5 | 311.0 | 311.0 | 311.0 | 311.7 | 313.2 |
| 5° | 301.4 | 300.7 | 301.4 | 302.2 | 303.7 | 305.1 | 308.1 | 309.5 | 309.5 | 312.5 | 315.4 |
| 7.5° | 302.2 | 300.7 | 300.7 | 301.4 | 302.9 | 304.4 | 307.3 | 309.5 | 310.3 | 313.9 | 319.1 |
| 10° | 309.5 | 307.3 | 307.3 | 308.1 | 308.1 | 309.5 | 311.7 | 314.7 | 315.4 | 319.1 | 324.2 |
| 12.5° | 325.0 | 322.8 | 322.0 | 319.8 | 317.6 | 319.1 | 321.3 | 322.0 | 322.8 | 325.0 | 330.1 |
| 15° | 357.3 | 353.6 | 347.8 | 343.4 | 337.5 | 333.8 | 333.1 | 333.8 | 333.8 | 334.5 | 337.5 |
| 17.5° | 403.6 | 399.2 | 390.4 | 380.9 | 366.9 | 355.1 | 351.4 | 348.5 | 348.5 | 346.3 | 346.3 |
| 20° | 460.3 | 453.6 | 443.3 | 429.4 | 408.8 | 387.5 | 375.0 | 368.4 | 366.1 | 362.5 | 357.3 |
| 22.5° | 525.7 | 521.3 | 508.0 | 486.7 | 455.8 | 427.2 | 406.6 | 391.9 | 391.9 | 383.1 | 372.0 |
| 25° | 602.9 | 594.8 | 579.4 | 554.4 | 512.5 | 471.3 | 443.3 | 422.0 | 419.8 | 405.8 | 388.2 |
| 27.5° | 677.9 | 672.7 | 653.6 | 620.5 | 570.5 | 522.7 | 483.8 | 458.8 | 455.1 | 433.1 | 405.8 |
| 30° | 769.1 | 763.2 | 734.5 | 688.2 | 634.5 | 580.1 | 534.5 | 502.2 | 498.5 | 468.3 | 430.1 |
| 32.5° | 882.3 | 862.4 | 827.1 | 774.2 | 705.1 | 644.1 | 591.9 | 557.3 | 552.9 | 518.3 | 472.8 |
| 35° | 1019.8 | 1002.9 | 941.8 | 886.0 | 803.6 | 723.5 | 661.0 | 615.4 | 609.5 | 568.3 | 511.0 |
| 37.5° | 1116.8 | 1108.7 | 1066.8 | 1022.7 | 928.6 | 820.5 | 744.1 | 680.8 | 674.9 | 620.5 | 546.3 |
| 40° | 1177.8 | 1169.8 | 1158.0 | 1145.5 | 1093.3 | 971.2 | 844.0 | 758.0 | 748.5 | 697.0 | 616.9 |
| 42.5° | 1209.5 | 1202.8 | 1205.0 | 1230.0 | 1244.7 | 1225.6 | 986.7 | 861.0 | 854.3 | 791.8 | 702.9 |
| 45° | 1191.1 | 1186.7 | 1208.0 | 1274.2 | 1346.2 | 1487.4 | 1169.8 | 996.2 | 978.6 | 904.3 | 807.3 |
| 47.5° | 1102.8 | 1089.6 | 1139.6 | 1252.1 | 1406.5 | 1612.4 | 1390.3 | 1163.1 | 1144.0 | 1037.4 | 913.2 |
| 50° | 921.2 | 917.6 | 985.9 | 1128.6 | 1383.0 | 1661.6 | 1626.3 | 1360.2 | 1346.2 | 1180.8 | 1030.8 |
| 52.5° | 752.1 | 750.7 | 803.6 | 934.5 | 1233.0 | 1627.1 | 1797.6 | 1594.7 | 1552.8 | 1324.9 | 1158.7 |
| 55° | 583.8 | 583.0 | 630.1 | 727.9 | 983.7 | 1464.6 | 1878.5 | 1833.7 | 1802.8 | 1482.2 | 1290.3 |
| 57.5° | 399.2 | 394.1 | 455.1 | 529.4 | 738.9 | 1160.2 | 1825.6 | 2022.6 | 2003.5 | 1649.1 | 1430.0 |
| 60° | 222.0 | 229.4 | 297.0 | 388.9 | 528.6 | 781.6 | 1605.0 | 2104.2 | 2101.3 | 1782.2 | 1544.0 |
| 62.5° | 157.3 | 160.3 | 189.0 | 276.4 | 347.8 | 447.8 | 1238.1 | 2019.7 | 2043.2 | 1855.7 | 1608.7 |
| 65° | 130.9 | 132.3 | 146.3 | 204.4 | 254.4 | 258.8 | 772.0 | 1769.0 | 1799.8 | 1832.9 | 1622.7 |
| 67.5° | 123.5 | 124.3 | 131.6 | 150.7 | 199.2 | 187.5 | 344.8 | 1350.6 | 1416.1 | 1649.1 | 1531.5 |
| 70° | 112.5 | 113.2 | 124.3 | 133.1 | 161.0 | 147.8 | 177.2 | 897.0 | 985.2 | 1303.6 | 1320.5 |
| 72.5° | 96.3 | 98.5 | 107.3 | 125.0 | 130.9 | 122.8 | 136.8 | 479.4 | 566.9 | 872.0 | 1019.8 |
| 75° | 83.1 | 84.6 | 91.2 | 105.9 | 122.8 | 97.8 | 116.2 | 218.4 | 255.9 | 511.7 | 645.5 |
| 77.5° | 66.9 | 67.6 | 77.2 | 86.8 | 102.9 | 79.4 | 90.4 | 130.9 | 137.5 | 250.0 | 291.9 |
| 80° | 50.7 | 50.7 | 57.3 | 69.1 | 76.5 | 76.5 | 66.2 | 91.2 | 94.8 | 119.1 | 115.4 |
| 82.5° | 39.0 | 38.2 | 43.4 | 48.5 | 55.1 | 64.0 | 50.0 | 60.3 | 61.8 | 72.1 | 61.8 |
| 85° | 25.7 | 25.7 | 28.7 | 33.1 | 36.8 | 35.3 | 39.0 | 35.3 | 36.8 | 44.8 | 33.8 |
| 87.5° | 11.0 | 11.0 | 15.4 | 14.7 | 16.2 | 16.9 | 19.1 | 16.9 | 16.9 | 20.6 | 15.4 |
| 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° | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 | 314.7 |
| 2.5° | 313.9 | 314.7 | 316.1 | 316.9 | 319.1 | 319.8 | 319.8 | 321.3 | 321.3 | 322.8 | 322.8 |
| 5° | 316.1 | 318.4 | 320.6 | 322.8 | 325.0 | 325.7 | 327.2 | 327.9 | 327.9 | 329.4 | 328.6 |
| 7.5° | 320.6 | 322.8 | 327.2 | 329.4 | 332.3 | 333.8 | 333.1 | 333.8 | 333.1 | 333.8 | 333.8 |
| 10° | 326.4 | 329.4 | 334.5 | 337.5 | 339.7 | 340.4 | 338.2 | 336.0 | 333.1 | 333.1 | 333.1 |
| 12.5° | 333.1 | 335.3 | 341.9 | 344.1 | 345.6 | 343.4 | 337.5 | 333.1 | 330.9 | 331.6 | 330.9 |
| 15° | 339.7 | 341.9 | 347.0 | 349.2 | 349.2 | 342.6 | 337.5 | 336.0 | 335.3 | 336.0 | 336.0 |
| 17.5° | 346.3 | 348.5 | 352.9 | 352.9 | 350.7 | 345.6 | 340.4 | 335.3 | 331.6 | 329.4 | 329.4 |
| 20° | 355.1 | 355.1 | 356.6 | 356.6 | 355.9 | 347.8 | 335.3 | 322.8 | 315.4 | 311.0 | 310.3 |
| 22.5° | 366.9 | 363.9 | 361.0 | 361.0 | 363.9 | 342.6 | 318.4 | 299.2 | 287.5 | 286.0 | 283.1 |
| 25° | 379.4 | 372.8 | 365.4 | 370.6 | 365.4 | 329.4 | 294.8 | 269.1 | 255.1 | 250.0 | 251.4 |
| 27.5° | 392.6 | 382.3 | 371.3 | 386.0 | 358.1 | 303.7 | 261.7 | 233.1 | 219.8 | 216.2 | 216.2 |
| 30° | 411.0 | 395.6 | 379.4 | 402.2 | 344.1 | 274.2 | 222.8 | 202.2 | 194.8 | 191.9 | 191.2 |
| 32.5° | 446.3 | 422.8 | 399.2 | 416.9 | 328.6 | 236.0 | 196.3 | 183.8 | 175.0 | 172.0 | 174.2 |
| 35° | 477.9 | 444.8 | 429.4 | 423.5 | 304.4 | 205.1 | 180.1 | 169.1 | 161.8 | 158.1 | 158.1 |
| 37.5° | 506.6 | 475.0 | 463.2 | 423.5 | 272.8 | 186.0 | 169.8 | 161.0 | 151.5 | 148.5 | 148.5 |
| 40° | 569.1 | 527.2 | 506.6 | 417.6 | 233.8 | 176.5 | 164.7 | 154.4 | 146.3 | 143.4 | 142.6 |
| 42.5° | 655.1 | 598.5 | 551.4 | 404.4 | 200.7 | 172.0 | 161.8 | 150.0 | 143.4 | 141.2 | 140.4 |
| 45° | 746.3 | 696.3 | 594.1 | 380.9 | 179.4 | 167.6 | 161.0 | 148.5 | 140.4 | 138.2 | 137.5 |
| 47.5° | 856.5 | 805.1 | 643.3 | 344.8 | 164.7 | 164.7 | 160.3 | 146.3 | 139.0 | 136.8 | 136.8 |
| 50° | 978.6 | 936.0 | 705.8 | 303.7 | 153.7 | 162.5 | 158.8 | 146.3 | 138.2 | 136.0 | 135.3 |
| 52.5° | 1103.6 | 1083.7 | 771.3 | 263.2 | 142.6 | 159.5 | 158.1 | 146.3 | 136.8 | 134.5 | 134.5 |
| 55° | 1262.4 | 1246.2 | 847.0 | 233.1 | 133.8 | 153.7 | 158.1 | 144.8 | 134.5 | 133.1 | 133.1 |
| 57.5° | 1418.3 | 1412.4 | 905.8 | 206.6 | 127.2 | 146.3 | 155.9 | 142.6 | 132.3 | 131.6 | 131.6 |
| 60° | 1551.3 | 1545.5 | 930.8 | 173.5 | 120.6 | 139.0 | 151.5 | 139.0 | 128.7 | 129.4 | 129.4 |
| 62.5° | 1633.7 | 1599.9 | 912.4 | 143.4 | 114.0 | 132.3 | 146.3 | 134.5 | 125.0 | 127.2 | 126.5 |
| 65° | 1648.4 | 1569.7 | 841.1 | 119.8 | 106.6 | 125.0 | 140.4 | 129.4 | 119.8 | 125.0 | 124.3 |
| 67.5° | 1540.3 | 1409.4 | 707.3 | 104.4 | 99.3 | 116.9 | 133.8 | 122.0 | 114.0 | 121.3 | 119.1 |
| 70° | 1306.5 | 1144.8 | 523.5 | 92.6 | 91.9 | 107.3 | 125.0 | 113.2 | 105.9 | 109.5 | 106.6 |
| 72.5° | 972.7 | 826.4 | 338.9 | 83.8 | 83.8 | 96.3 | 112.5 | 102.2 | 94.8 | 95.6 | 92.6 |
| 75° | 606.6 | 508.0 | 192.6 | 75.7 | 75.7 | 85.3 | 100.0 | 89.7 | 84.6 | 81.6 | 85.3 |
| 77.5° | 275.7 | 223.5 | 101.5 | 67.6 | 68.4 | 72.8 | 86.0 | 76.5 | 70.6 | 66.2 | 68.4 |
| 80° | 102.2 | 91.2 | 66.2 | 58.1 | 59.6 | 60.3 | 69.1 | 61.0 | 55.9 | 52.9 | 51.5 |
| 82.5° | 52.9 | 49.3 | 44.8 | 46.3 | 48.5 | 46.3 | 53.7 | 45.6 | 39.7 | 37.5 | 31.6 |
| 85° | 26.5 | 25.7 | 27.2 | 30.9 | 33.8 | 28.7 | 32.4 | 29.4 | 24.3 | 17.6 | 17.6 |
| 87.5° | 10.3 | 11.0 | 10.3 | 14.0 | 15.4 | 13.2 | 14.7 | 10.3 | 7.4 | 3.7 | 2.9 |
| 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)