

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: P573124

Luminaire Tested: **ARCH-S-PA2-40-722-U-T2U**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573124
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-PA2-40-722-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4865 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

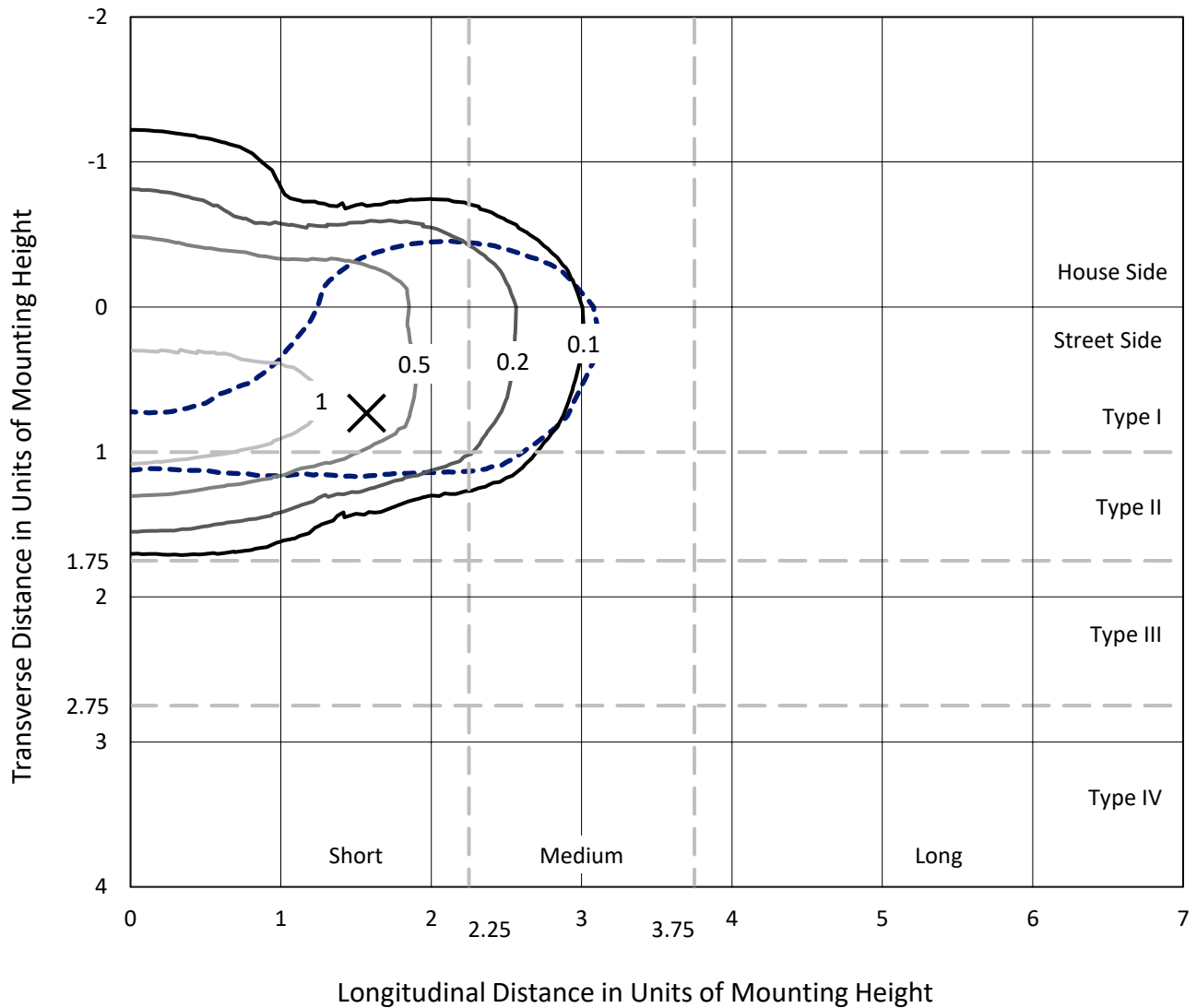
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

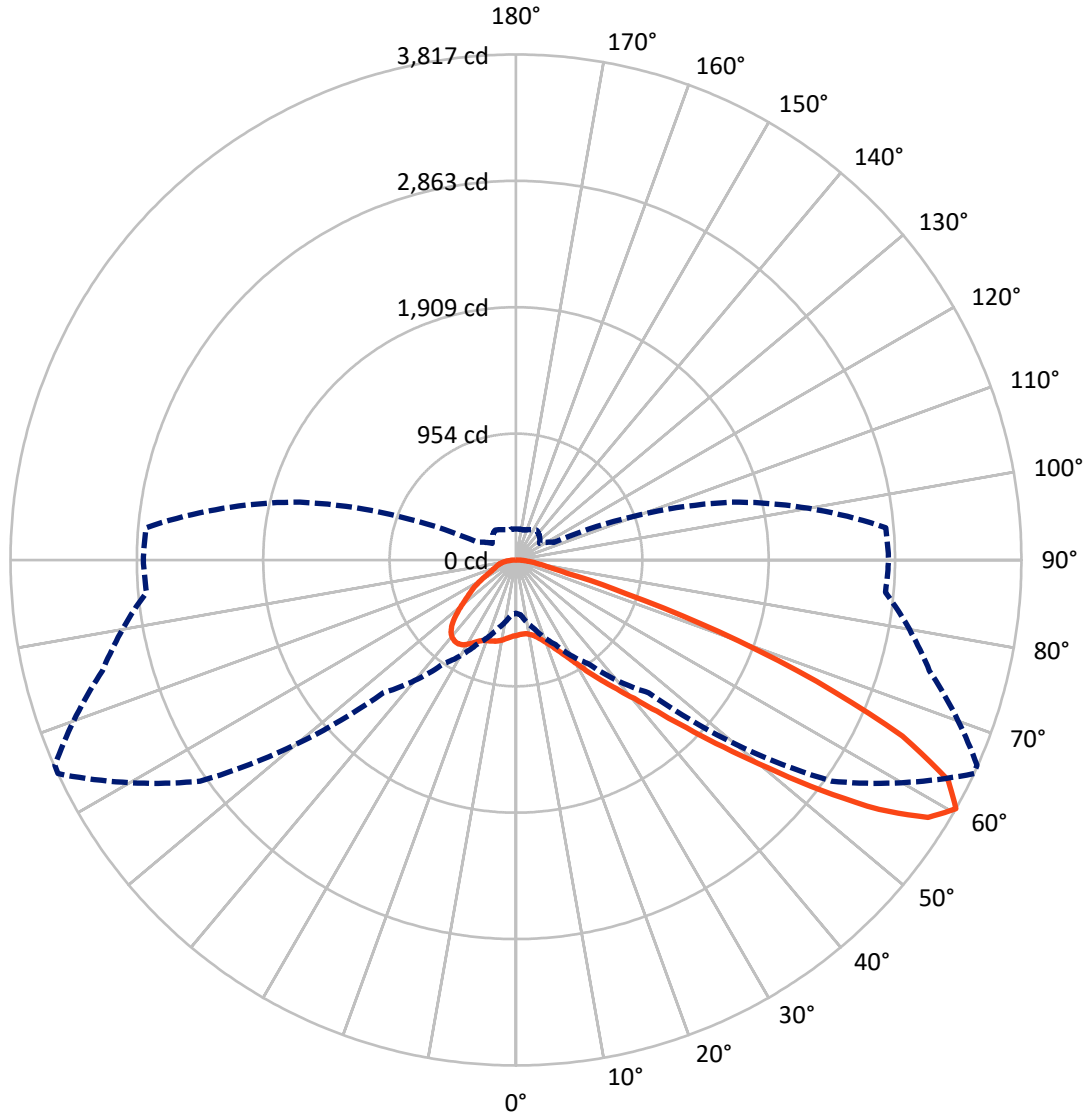
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 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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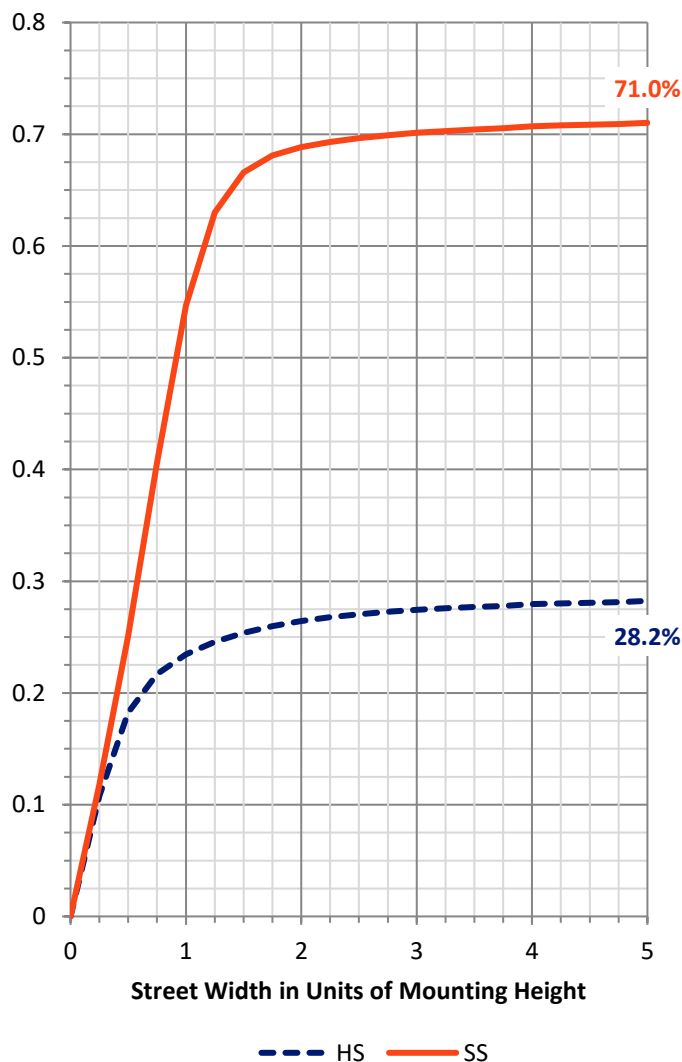
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1392.7 | 0.0 | 1392.7 |
| | % Fixture | 28.6 | 0.0 | 28.6 |
| Street Side | Lumens | 3472.3 | 0.0 | 3472.3 |
| | % Fixture | 71.4 | 0.0 | 71.4 |
| Total | Lumens | 4865.0 | 0.0 | 4865.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 55.2 | 1.1 |
| 10°-20° | 177.5 | 3.6 |
| 20°-30° | 340.2 | 7.0 |
| 30°-40° | 590.9 | 12.1 |
| 40°-50° | 1002.2 | 20.6 |
| 50°-60° | 1248.0 | 25.7 |
| 60°-70° | 1005.6 | 20.7 |
| 70°-80° | 380.8 | 7.8 |
| 80°-90° | 64.6 | 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° | 4865.0 | 100.0 |
| 0°-180° | 4865.0 | 100.0 |

Coefficient of Utilization



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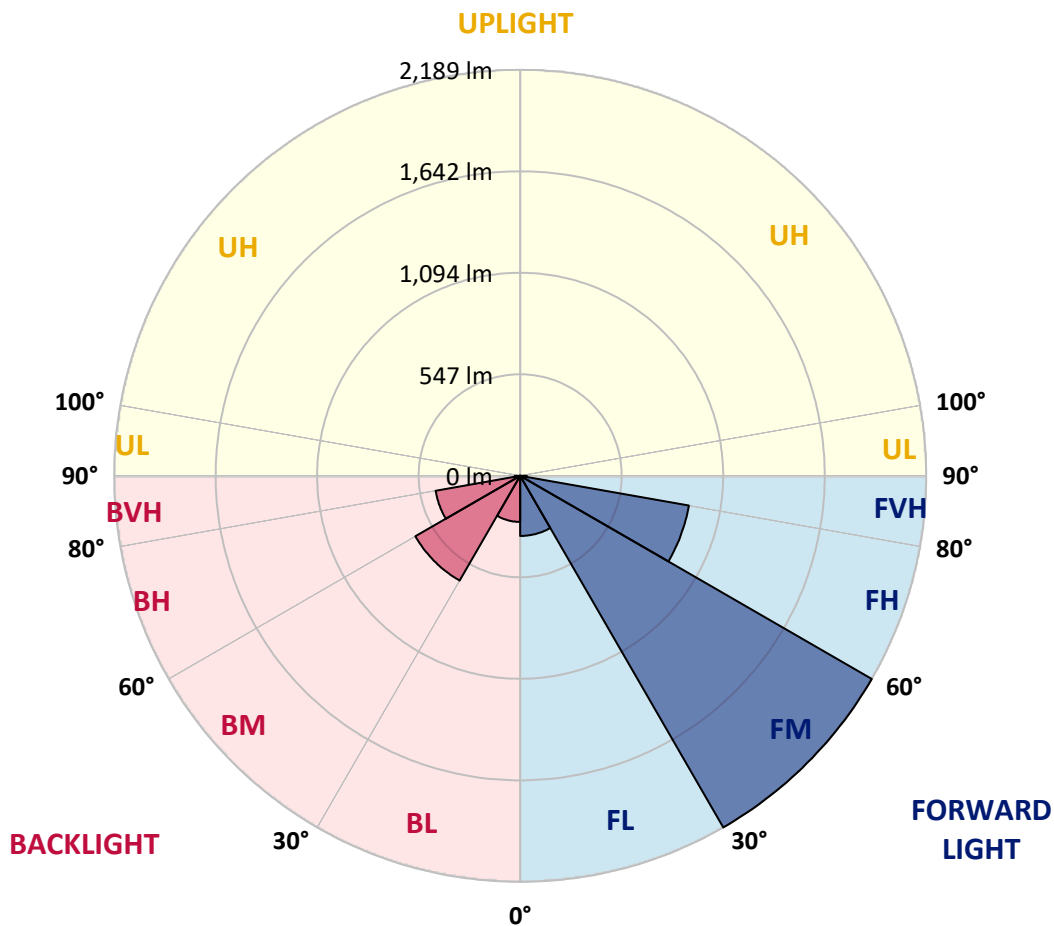
CATALOG NUMBER: ARCH-S-PA2-40-722-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 324.3 | 6.7 | | | |
| FM (30°-60°) | 2188.8 | 45.0 | | | |
| FH (60°-80°) | 923.4 | 19.0 | | | G1/1800 |
| FVH (80°-90°) | 35.8 | 0.7 | | | G1/100 |
| BL (0°-30°) | 248.6 | 5.1 | B1/500 | | |
| BM (30°-60°) | 652.3 | 13.4 | B1/1000 | | |
| BH (60°-80°) | 463.1 | 9.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 28.8 | 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° | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 |
| 2.5° | 557.5 | 557.5 | 557.5 | 558.8 | 560.1 | 561.5 | 564.1 | 564.1 | 564.1 | 565.5 | 568.1 |
| 5° | 546.8 | 545.5 | 546.8 | 548.1 | 550.8 | 553.5 | 558.8 | 561.5 | 561.5 | 566.8 | 572.1 |
| 7.5° | 548.1 | 545.5 | 545.5 | 546.8 | 549.5 | 552.1 | 557.5 | 561.5 | 562.8 | 569.5 | 578.8 |
| 10° | 561.5 | 557.5 | 557.5 | 558.8 | 558.8 | 561.5 | 565.5 | 570.8 | 572.1 | 578.8 | 588.1 |
| 12.5° | 589.5 | 585.5 | 584.1 | 580.1 | 576.1 | 578.8 | 582.8 | 584.1 | 585.5 | 589.5 | 598.8 |
| 15° | 648.2 | 641.5 | 630.8 | 622.8 | 612.2 | 605.5 | 604.2 | 605.5 | 605.5 | 606.8 | 612.2 |
| 17.5° | 732.2 | 724.2 | 708.2 | 690.8 | 665.5 | 644.2 | 637.5 | 632.2 | 632.2 | 628.2 | 628.2 |
| 20° | 834.9 | 822.9 | 804.2 | 778.9 | 741.5 | 702.8 | 680.2 | 668.2 | 664.2 | 657.5 | 648.2 |
| 22.5° | 953.6 | 945.6 | 921.6 | 882.9 | 826.9 | 774.9 | 737.5 | 710.8 | 710.8 | 694.8 | 674.8 |
| 25° | 1093.6 | 1078.9 | 1050.9 | 1005.6 | 929.6 | 854.9 | 804.2 | 765.5 | 761.5 | 736.2 | 704.2 |
| 27.5° | 1229.6 | 1220.3 | 1185.6 | 1125.6 | 1034.9 | 948.2 | 877.6 | 832.2 | 825.5 | 785.5 | 736.2 |
| 30° | 1395.0 | 1384.3 | 1332.3 | 1248.3 | 1151.0 | 1052.3 | 969.6 | 910.9 | 904.2 | 849.5 | 780.2 |
| 32.5° | 1600.4 | 1564.4 | 1500.4 | 1404.4 | 1279.0 | 1168.3 | 1073.6 | 1010.9 | 1002.9 | 940.2 | 857.5 |
| 35° | 1849.8 | 1819.1 | 1708.4 | 1607.1 | 1457.7 | 1312.3 | 1199.0 | 1116.3 | 1105.6 | 1030.9 | 926.9 |
| 37.5° | 2025.8 | 2011.2 | 1935.2 | 1855.1 | 1684.4 | 1488.4 | 1349.7 | 1235.0 | 1224.3 | 1125.6 | 990.9 |
| 40° | 2136.5 | 2121.9 | 2100.5 | 2077.9 | 1983.2 | 1761.8 | 1531.1 | 1375.0 | 1357.7 | 1264.3 | 1118.9 |
| 42.5° | 2193.9 | 2181.9 | 2185.9 | 2231.2 | 2257.9 | 2223.2 | 1789.8 | 1561.7 | 1549.7 | 1436.4 | 1275.0 |
| 45° | 2160.5 | 2152.5 | 2191.2 | 2311.3 | 2441.9 | 2698.0 | 2121.9 | 1807.1 | 1775.1 | 1640.4 | 1464.4 |
| 47.5° | 2000.5 | 1976.5 | 2067.2 | 2271.2 | 2551.3 | 2924.7 | 2522.0 | 2109.9 | 2075.2 | 1881.8 | 1656.4 |
| 50° | 1671.1 | 1664.4 | 1788.5 | 2047.2 | 2508.6 | 3014.1 | 2950.1 | 2467.3 | 2441.9 | 2141.9 | 1869.8 |
| 52.5° | 1364.3 | 1361.7 | 1457.7 | 1695.1 | 2236.6 | 2951.4 | 3260.8 | 2892.7 | 2816.7 | 2403.3 | 2101.9 |
| 55° | 1058.9 | 1057.6 | 1143.0 | 1320.3 | 1784.5 | 2656.7 | 3407.5 | 3326.2 | 3270.2 | 2688.7 | 2340.6 |
| 57.5° | 724.2 | 714.8 | 825.5 | 960.2 | 1340.3 | 2104.5 | 3311.5 | 3668.9 | 3634.3 | 2991.4 | 2594.0 |
| 60° | 402.8 | 416.1 | 538.8 | 705.5 | 958.9 | 1417.7 | 2911.4 | 3817.0 | 3811.6 | 3232.8 | 2800.7 |
| 62.5° | 285.4 | 290.7 | 342.8 | 501.5 | 630.8 | 812.2 | 2245.9 | 3663.6 | 3706.3 | 3366.2 | 2918.1 |
| 65° | 237.4 | 240.1 | 265.4 | 370.8 | 461.4 | 469.5 | 1400.4 | 3208.8 | 3264.8 | 3324.8 | 2943.4 |
| 67.5° | 224.1 | 225.4 | 238.7 | 273.4 | 361.4 | 340.1 | 625.5 | 2450.0 | 2568.6 | 2991.4 | 2778.0 |
| 70° | 204.1 | 205.4 | 225.4 | 241.4 | 292.1 | 268.1 | 321.4 | 1627.1 | 1787.1 | 2364.6 | 2395.3 |
| 72.5° | 174.7 | 178.7 | 194.7 | 226.7 | 237.4 | 222.7 | 248.1 | 869.6 | 1028.3 | 1581.7 | 1849.8 |
| 75° | 150.7 | 153.4 | 165.4 | 192.0 | 222.7 | 177.4 | 210.7 | 396.1 | 464.1 | 928.2 | 1171.0 |
| 77.5° | 121.4 | 122.7 | 140.0 | 157.4 | 186.7 | 144.0 | 164.0 | 237.4 | 249.4 | 453.4 | 529.5 |
| 80° | 92.0 | 92.0 | 104.0 | 125.4 | 138.7 | 138.7 | 120.0 | 165.4 | 172.0 | 216.1 | 209.4 |
| 82.5° | 70.7 | 69.4 | 78.7 | 88.0 | 100.0 | 116.0 | 90.7 | 109.4 | 112.0 | 130.7 | 112.0 |
| 85° | 46.7 | 46.7 | 52.0 | 60.0 | 66.7 | 64.0 | 70.7 | 64.0 | 66.7 | 81.4 | 61.3 |
| 87.5° | 20.0 | 20.0 | 28.0 | 26.7 | 29.3 | 30.7 | 34.7 | 30.7 | 30.7 | 37.3 | 28.0 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 | 570.8 |
| 2.5° | 569.5 | 570.8 | 573.5 | 574.8 | 578.8 | 580.1 | 580.1 | 582.8 | 582.8 | 585.5 | 585.5 |
| 5° | 573.5 | 577.5 | 581.5 | 585.5 | 589.5 | 590.8 | 593.5 | 594.8 | 594.8 | 597.5 | 596.2 |
| 7.5° | 581.5 | 585.5 | 593.5 | 597.5 | 602.8 | 605.5 | 604.2 | 605.5 | 604.2 | 605.5 | 605.5 |
| 10° | 592.1 | 597.5 | 606.8 | 612.2 | 616.2 | 617.5 | 613.5 | 609.5 | 604.2 | 604.2 | 604.2 |
| 12.5° | 604.2 | 608.2 | 620.2 | 624.2 | 626.8 | 622.8 | 612.2 | 604.2 | 600.2 | 601.5 | 600.2 |
| 15° | 616.2 | 620.2 | 629.5 | 633.5 | 633.5 | 621.5 | 612.2 | 609.5 | 608.2 | 609.5 | 609.5 |
| 17.5° | 628.2 | 632.2 | 640.2 | 640.2 | 636.2 | 626.8 | 617.5 | 608.2 | 601.5 | 597.5 | 597.5 |
| 20° | 644.2 | 644.2 | 646.8 | 646.8 | 645.5 | 630.8 | 608.2 | 585.5 | 572.1 | 564.1 | 562.8 |
| 22.5° | 665.5 | 660.2 | 654.8 | 654.8 | 660.2 | 621.5 | 577.5 | 542.8 | 521.5 | 518.8 | 513.5 |
| 25° | 688.2 | 676.2 | 662.8 | 672.2 | 662.8 | 597.5 | 534.8 | 488.1 | 462.8 | 453.4 | 456.1 |
| 27.5° | 712.2 | 693.5 | 673.5 | 700.2 | 649.5 | 550.8 | 474.8 | 422.8 | 398.8 | 392.1 | 392.1 |
| 30° | 745.5 | 717.5 | 688.2 | 729.5 | 624.2 | 497.5 | 404.1 | 366.8 | 353.4 | 348.1 | 346.8 |
| 32.5° | 809.5 | 766.9 | 724.2 | 756.2 | 596.2 | 428.1 | 356.1 | 333.4 | 317.4 | 312.1 | 316.1 |
| 35° | 866.9 | 806.9 | 778.9 | 768.2 | 552.1 | 372.1 | 326.7 | 306.7 | 293.4 | 286.7 | 286.7 |
| 37.5° | 918.9 | 861.6 | 840.2 | 768.2 | 494.8 | 337.4 | 308.1 | 292.1 | 274.7 | 269.4 | 269.4 |
| 40° | 1032.3 | 956.2 | 918.9 | 757.5 | 424.1 | 320.1 | 298.7 | 280.1 | 265.4 | 260.1 | 258.7 |
| 42.5° | 1188.3 | 1085.6 | 1000.3 | 733.5 | 364.1 | 312.1 | 293.4 | 272.1 | 260.1 | 256.1 | 254.7 |
| 45° | 1353.7 | 1263.0 | 1077.6 | 690.8 | 325.4 | 304.1 | 292.1 | 269.4 | 254.7 | 250.7 | 249.4 |
| 47.5° | 1553.7 | 1460.4 | 1167.0 | 625.5 | 298.7 | 298.7 | 290.7 | 265.4 | 252.1 | 248.1 | 248.1 |
| 50° | 1775.1 | 1697.8 | 1280.3 | 550.8 | 278.7 | 294.7 | 288.1 | 265.4 | 250.7 | 246.7 | 245.4 |
| 52.5° | 2001.8 | 1965.8 | 1399.0 | 477.5 | 258.7 | 289.4 | 286.7 | 265.4 | 248.1 | 244.1 | 244.1 |
| 55° | 2289.9 | 2260.6 | 1536.4 | 422.8 | 242.7 | 278.7 | 286.7 | 262.7 | 244.1 | 241.4 | 241.4 |
| 57.5° | 2572.6 | 2562.0 | 1643.1 | 374.8 | 230.7 | 265.4 | 282.7 | 258.7 | 240.1 | 238.7 | 238.7 |
| 60° | 2814.0 | 2803.4 | 1688.4 | 314.7 | 218.7 | 252.1 | 274.7 | 252.1 | 233.4 | 234.7 | 234.7 |
| 62.5° | 2963.4 | 2902.1 | 1655.1 | 260.1 | 206.7 | 240.1 | 265.4 | 244.1 | 226.7 | 230.7 | 229.4 |
| 65° | 2990.1 | 2847.4 | 1525.7 | 217.4 | 193.4 | 226.7 | 254.7 | 234.7 | 217.4 | 226.7 | 225.4 |
| 67.5° | 2794.0 | 2556.6 | 1283.0 | 189.4 | 180.0 | 212.1 | 242.7 | 221.4 | 206.7 | 220.1 | 216.1 |
| 70° | 2369.9 | 2076.5 | 949.6 | 168.0 | 166.7 | 194.7 | 226.7 | 205.4 | 192.0 | 198.7 | 193.4 |
| 72.5° | 1764.4 | 1499.0 | 614.8 | 152.0 | 152.0 | 174.7 | 204.1 | 185.4 | 172.0 | 173.4 | 168.0 |
| 75° | 1100.3 | 921.6 | 349.4 | 137.4 | 137.4 | 154.7 | 181.4 | 162.7 | 153.4 | 148.0 | 154.7 |
| 77.5° | 500.1 | 405.4 | 184.0 | 122.7 | 124.0 | 132.0 | 156.0 | 138.7 | 128.0 | 120.0 | 124.0 |
| 80° | 185.4 | 165.4 | 120.0 | 105.4 | 108.0 | 109.4 | 125.4 | 110.7 | 101.4 | 96.0 | 93.4 |
| 82.5° | 96.0 | 89.4 | 81.4 | 84.0 | 88.0 | 84.0 | 97.4 | 82.7 | 72.0 | 68.0 | 57.3 |
| 85° | 48.0 | 46.7 | 49.3 | 56.0 | 61.3 | 52.0 | 58.7 | 53.3 | 44.0 | 32.0 | 32.0 |
| 87.5° | 18.7 | 20.0 | 18.7 | 25.3 | 28.0 | 24.0 | 26.7 | 18.7 | 13.3 | 6.7 | 5.3 |
| 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)