

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: P397822

Luminaire Tested: **ARCH-S-PA1-50-722-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-722-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2200K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5748 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 54
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

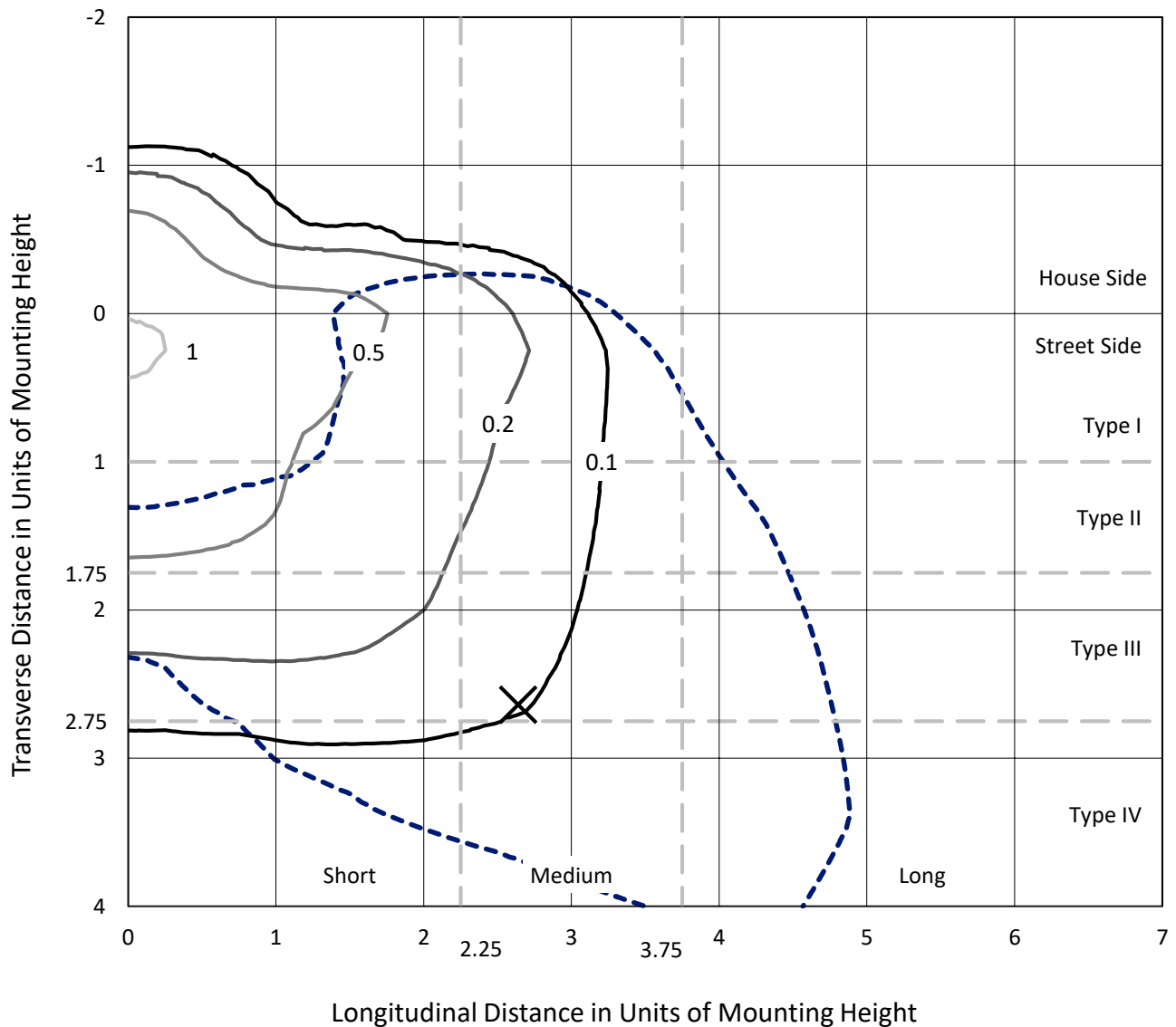


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

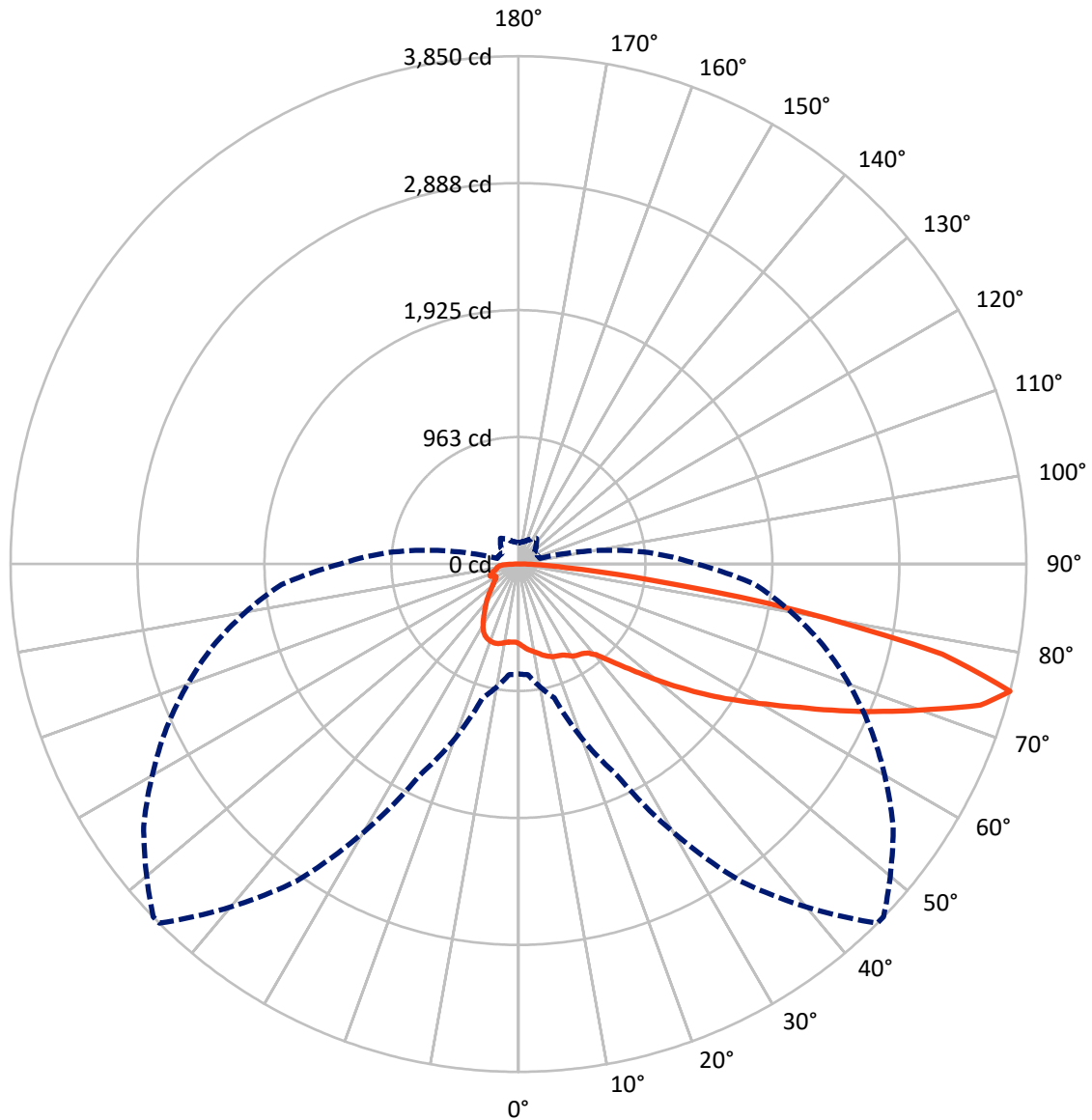


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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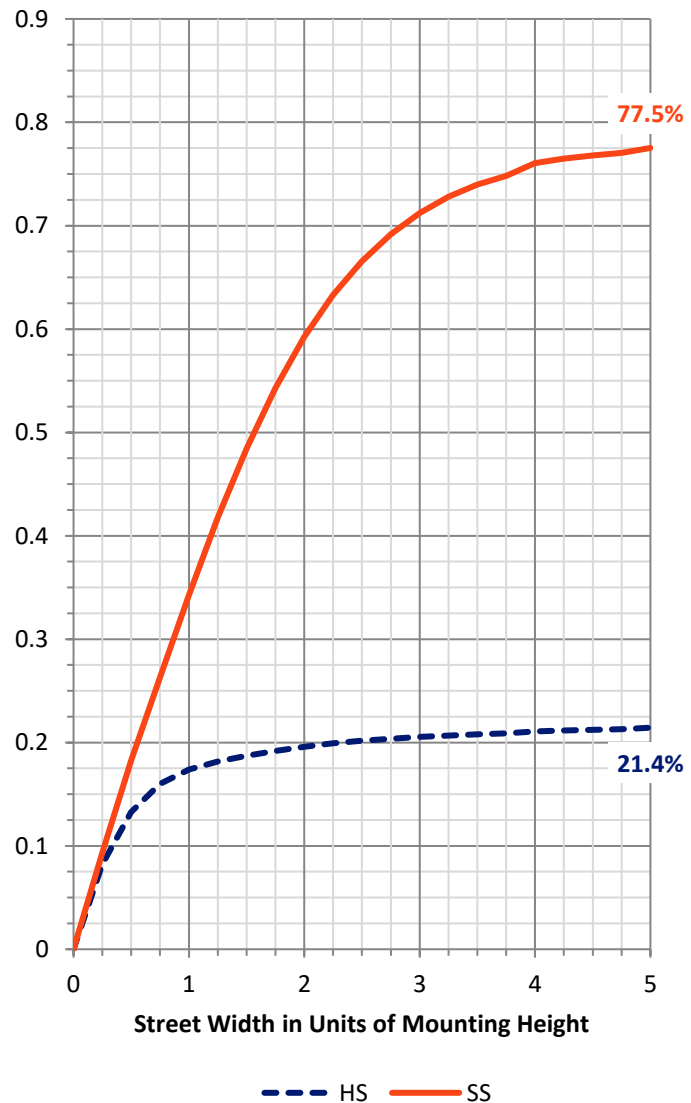
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1270.3 | 0.0 | 1270.3 |
| | % Fixture | 22.1 | 0.0 | 22.1 |
| Street Side | Lumens | 4477.7 | 0.0 | 4477.7 |
| | % Fixture | 77.9 | 0.0 | 77.9 |
| Total | Lumens | 5748.0 | 0.0 | 5748.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 59.7 | 1.0 |
| 10°-20° | 190.0 | 3.3 |
| 20°-30° | 323.9 | 5.6 |
| 30°-40° | 453.8 | 7.9 |
| 40°-50° | 666.7 | 11.6 |
| 50°-60° | 1061.1 | 18.5 |
| 60°-70° | 1509.5 | 26.3 |
| 70°-80° | 1263.9 | 22.0 |
| 80°-90° | 219.3 | 3.8 |
| 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° | 5748.0 | 100.0 |
| 0°-180° | 5748.0 | 100.0 |

Coefficient of Utilization



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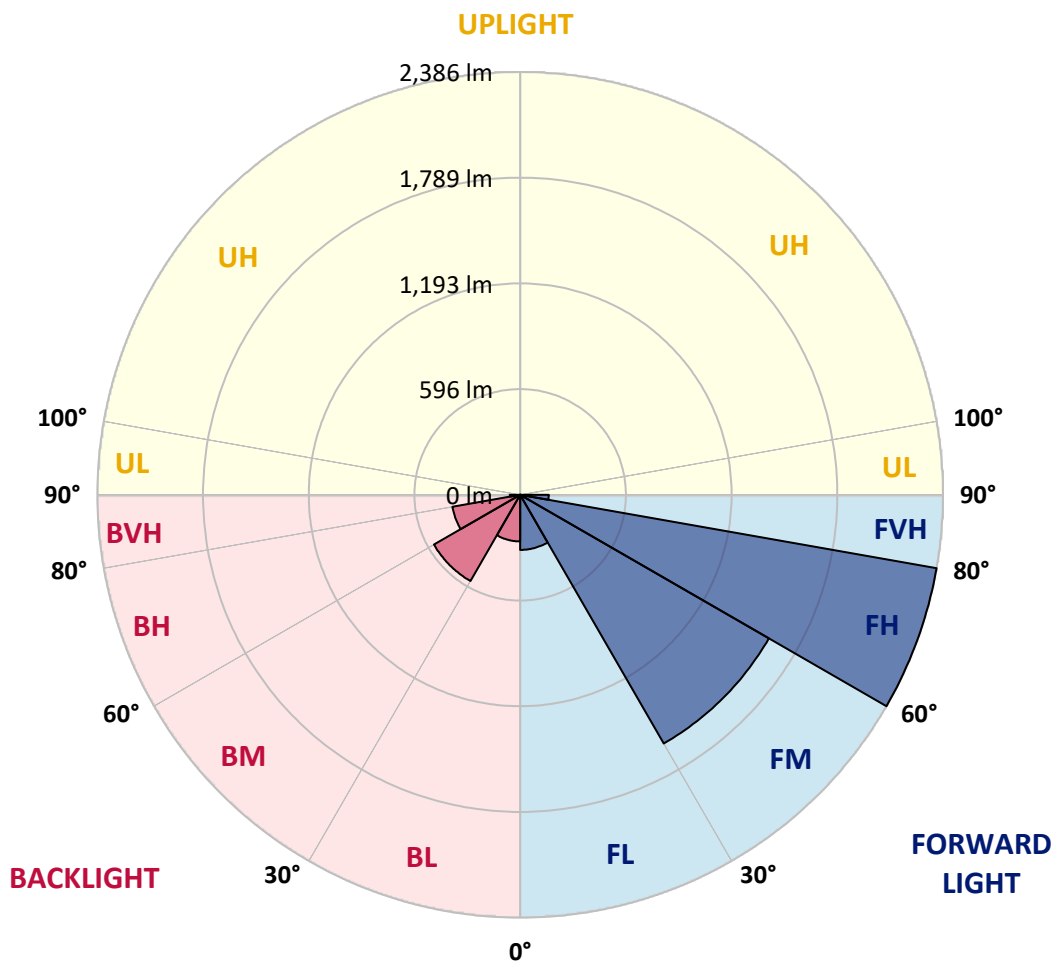
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 310.7 | 5.4 | | | |
| FM (30°-60°) | 1620.2 | 28.2 | | | |
| FH (60°-80°) | 2385.6 | 41.5 | | | G2/5000 |
| FVH (80°-90°) | 161.3 | 2.8 | | | G2/225 |
| BL (0°-30°) | 262.9 | 4.6 | B1/500 | | |
| BM (30°-60°) | 561.5 | 9.8 | B1/1000 | | |
| BH (60°-80°) | 387.8 | 6.7 | B1/500 | | G1/500 |
| BVH (80°-90°) | 58.1 | 1.0 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 |
| 2.5° | 638.2 | 635.2 | 633.6 | 633.6 | 627.5 | 623.6 | 622.9 | 617.5 | 612.9 | 608.3 | 604.4 |
| 5° | 675.1 | 672.8 | 668.2 | 664.3 | 655.9 | 645.1 | 643.6 | 632.1 | 620.6 | 609.8 | 600.6 |
| 7.5° | 708.9 | 704.3 | 698.9 | 691.2 | 677.4 | 662.8 | 660.5 | 644.4 | 628.2 | 612.1 | 599.8 |
| 10° | 737.3 | 732.7 | 725.0 | 714.3 | 696.6 | 678.9 | 676.6 | 659.7 | 642.8 | 623.6 | 606.0 |
| 12.5° | 764.2 | 760.3 | 748.8 | 734.2 | 713.5 | 697.4 | 695.1 | 680.5 | 662.8 | 641.3 | 618.3 |
| 15° | 787.2 | 783.4 | 771.1 | 754.2 | 730.4 | 718.1 | 715.0 | 701.2 | 683.5 | 660.5 | 636.7 |
| 17.5° | 798.7 | 798.7 | 785.7 | 767.3 | 745.0 | 735.8 | 733.5 | 716.6 | 700.4 | 678.2 | 654.4 |
| 20° | 802.6 | 804.1 | 794.9 | 772.6 | 753.4 | 749.6 | 747.3 | 733.5 | 715.0 | 693.5 | 671.3 |
| 22.5° | 804.9 | 808.0 | 800.3 | 774.9 | 758.8 | 756.5 | 755.0 | 745.7 | 731.2 | 710.4 | 688.1 |
| 25° | 812.6 | 812.6 | 807.2 | 778.8 | 765.7 | 765.0 | 765.0 | 759.6 | 749.6 | 731.9 | 709.7 |
| 27.5° | 824.1 | 823.3 | 816.4 | 787.2 | 781.1 | 783.4 | 782.6 | 781.8 | 774.9 | 757.3 | 733.5 |
| 30° | 843.3 | 843.3 | 835.6 | 804.1 | 800.3 | 810.3 | 811.0 | 812.6 | 801.8 | 774.2 | 755.0 |
| 32.5° | 872.5 | 869.4 | 861.7 | 821.0 | 814.9 | 824.1 | 825.6 | 824.9 | 815.6 | 789.5 | 780.3 |
| 35° | 962.3 | 955.4 | 927.8 | 858.6 | 827.9 | 833.3 | 834.1 | 837.9 | 839.4 | 818.7 | 814.1 |
| 37.5° | 1119.8 | 1110.6 | 1068.3 | 947.7 | 869.4 | 856.3 | 855.6 | 865.6 | 874.0 | 855.6 | 855.6 |
| 40° | 1291.0 | 1283.4 | 1258.8 | 1101.3 | 946.2 | 903.2 | 900.1 | 909.3 | 920.1 | 907.0 | 910.9 |
| 42.5° | 1438.5 | 1444.7 | 1447.0 | 1264.2 | 1061.4 | 990.7 | 982.3 | 969.2 | 986.1 | 974.6 | 990.0 |
| 45° | 1549.1 | 1546.0 | 1588.3 | 1430.8 | 1210.4 | 1100.6 | 1089.1 | 1053.7 | 1075.2 | 1074.5 | 1108.3 |
| 47.5° | 1666.6 | 1661.2 | 1678.9 | 1587.5 | 1380.1 | 1235.0 | 1217.3 | 1165.1 | 1197.3 | 1219.6 | 1275.7 |
| 50° | 1778.0 | 1779.5 | 1785.7 | 1711.2 | 1564.5 | 1398.6 | 1376.3 | 1306.4 | 1352.5 | 1399.3 | 1478.4 |
| 52.5° | 1923.1 | 1912.4 | 1904.7 | 1855.5 | 1771.1 | 1569.1 | 1554.5 | 1474.6 | 1539.1 | 1594.4 | 1699.6 |
| 55° | 2049.9 | 2042.9 | 2038.3 | 2036.0 | 1943.9 | 1757.2 | 1741.9 | 1658.9 | 1751.9 | 1791.0 | 1946.2 |
| 57.5° | 2185.0 | 2181.2 | 2205.8 | 2244.9 | 2208.1 | 1948.5 | 1932.3 | 1852.5 | 1956.2 | 1983.8 | 2213.4 |
| 60° | 2284.1 | 2286.4 | 2354.0 | 2453.8 | 2428.5 | 2155.8 | 2136.6 | 2066.0 | 2155.1 | 2179.6 | 2480.7 |
| 62.5° | 2284.9 | 2307.9 | 2464.6 | 2643.5 | 2672.7 | 2394.7 | 2372.4 | 2295.6 | 2359.4 | 2359.4 | 2720.3 |
| 65° | 2066.7 | 2092.9 | 2444.6 | 2690.4 | 2920.0 | 2678.9 | 2657.4 | 2536.8 | 2560.6 | 2528.3 | 2945.4 |
| 67.5° | 1849.4 | 1880.1 | 2211.1 | 2694.2 | 3093.6 | 2983.0 | 2957.7 | 2777.9 | 2737.2 | 2655.8 | 3102.8 |
| 70° | 1705.0 | 1726.5 | 2003.0 | 2644.3 | 3198.0 | 3301.0 | 3281.8 | 3006.8 | 2876.2 | 2762.6 | 3069.8 |
| 72.5° | 1435.4 | 1427.8 | 1692.0 | 2407.0 | 3256.4 | 3661.9 | 3645.8 | 3255.6 | 2996.8 | 2711.9 | 2618.2 |
| 75° | 833.3 | 842.5 | 1049.9 | 1763.4 | 2935.4 | 3850.1 | 3848.6 | 3468.4 | 2943.8 | 2395.5 | 1804.1 |
| 77.5° | 240.4 | 247.3 | 344.8 | 774.9 | 1856.3 | 3284.1 | 3389.3 | 3171.9 | 2488.4 | 1707.3 | 935.5 |
| 80° | 105.2 | 110.6 | 149.8 | 258.1 | 799.5 | 2145.1 | 2237.2 | 2145.1 | 1500.7 | 783.4 | 367.1 |
| 82.5° | 62.2 | 66.0 | 97.5 | 159.7 | 383.2 | 1020.7 | 1145.1 | 1000.0 | 647.4 | 332.6 | 152.1 |
| 85° | 35.3 | 36.9 | 56.1 | 101.4 | 241.2 | 357.1 | 400.9 | 375.6 | 315.7 | 188.9 | 79.9 |
| 87.5° | 16.1 | 16.9 | 27.6 | 47.6 | 135.2 | 120.6 | 125.2 | 165.9 | 182.8 | 115.2 | 39.9 |
| 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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CATALOG NUMBER: ARCH-S-PA1-50-722-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 | 603.7 |
| 2.5° | 602.9 | 600.6 | 596.0 | 594.4 | 592.1 | 592.9 | 593.7 | 593.7 | 594.4 | 592.1 | 592.1 |
| 5° | 596.8 | 592.9 | 588.3 | 588.3 | 588.3 | 594.4 | 599.8 | 602.9 | 604.4 | 604.4 | 602.9 |
| 7.5° | 594.4 | 589.8 | 584.5 | 586.0 | 587.5 | 595.2 | 605.2 | 615.2 | 618.3 | 618.3 | 616.7 |
| 10° | 599.1 | 594.4 | 590.6 | 592.9 | 596.8 | 602.9 | 610.6 | 619.8 | 627.5 | 628.2 | 627.5 |
| 12.5° | 609.8 | 604.4 | 600.6 | 605.2 | 609.8 | 613.7 | 617.5 | 621.3 | 631.3 | 632.9 | 632.9 |
| 15° | 627.5 | 622.1 | 617.5 | 621.3 | 622.9 | 622.9 | 622.9 | 622.9 | 632.9 | 634.4 | 634.4 |
| 17.5° | 645.1 | 640.5 | 635.9 | 636.7 | 632.1 | 625.9 | 623.6 | 622.9 | 628.2 | 632.9 | 633.6 |
| 20° | 662.0 | 658.2 | 653.6 | 645.9 | 634.4 | 622.9 | 619.0 | 619.0 | 622.1 | 629.0 | 629.0 |
| 22.5° | 680.5 | 675.9 | 668.2 | 650.5 | 631.3 | 615.2 | 611.3 | 613.7 | 617.5 | 626.7 | 625.9 |
| 25° | 701.2 | 695.1 | 682.0 | 649.0 | 621.3 | 602.1 | 602.9 | 609.8 | 616.7 | 626.7 | 626.7 |
| 27.5° | 724.2 | 715.8 | 689.7 | 636.7 | 599.1 | 580.6 | 587.5 | 603.7 | 613.7 | 624.4 | 625.9 |
| 30° | 749.6 | 741.9 | 695.8 | 615.2 | 563.0 | 546.1 | 563.0 | 589.1 | 604.4 | 614.4 | 616.7 |
| 32.5° | 780.3 | 774.2 | 701.2 | 587.5 | 516.1 | 501.5 | 526.1 | 558.4 | 582.9 | 594.4 | 596.8 |
| 35° | 818.7 | 812.6 | 708.1 | 556.0 | 472.3 | 457.0 | 479.2 | 512.3 | 544.5 | 559.1 | 563.7 |
| 37.5° | 868.6 | 859.4 | 714.3 | 522.3 | 435.5 | 417.8 | 428.6 | 458.5 | 487.7 | 507.7 | 513.0 |
| 40° | 932.4 | 917.8 | 719.6 | 483.9 | 403.2 | 383.2 | 387.1 | 401.7 | 418.6 | 436.2 | 443.1 |
| 42.5° | 1022.2 | 993.1 | 720.4 | 443.1 | 370.2 | 351.8 | 350.2 | 354.8 | 354.8 | 354.8 | 357.1 |
| 45° | 1147.4 | 1092.1 | 721.9 | 404.7 | 336.4 | 317.2 | 312.6 | 311.0 | 299.5 | 277.3 | 275.7 |
| 47.5° | 1305.6 | 1221.9 | 728.9 | 372.5 | 301.1 | 284.2 | 278.0 | 271.9 | 250.4 | 227.3 | 222.7 |
| 50° | 1508.4 | 1372.5 | 742.7 | 341.8 | 271.1 | 259.6 | 251.9 | 237.3 | 213.5 | 195.8 | 191.2 |
| 52.5° | 1741.9 | 1551.4 | 755.7 | 309.5 | 248.8 | 241.2 | 231.9 | 214.3 | 188.9 | 178.2 | 176.6 |
| 55° | 2009.9 | 1751.1 | 781.8 | 281.1 | 229.6 | 224.3 | 215.8 | 198.9 | 179.7 | 172.0 | 171.3 |
| 57.5° | 2284.1 | 1974.6 | 818.7 | 255.8 | 211.2 | 208.1 | 208.1 | 193.5 | 181.3 | 178.2 | 178.2 |
| 60° | 2548.3 | 2166.6 | 790.3 | 231.9 | 194.3 | 195.8 | 210.4 | 206.6 | 197.4 | 201.2 | 203.5 |
| 62.5° | 2753.4 | 2279.5 | 641.3 | 212.7 | 182.0 | 195.8 | 233.5 | 233.5 | 222.7 | 221.2 | 221.2 |
| 65° | 2840.9 | 2278.0 | 450.8 | 198.1 | 177.4 | 215.0 | 260.4 | 248.1 | 219.7 | 208.9 | 206.6 |
| 67.5° | 2818.6 | 2178.1 | 311.0 | 188.2 | 175.9 | 235.0 | 272.6 | 238.1 | 205.8 | 196.6 | 189.7 |
| 70° | 2622.8 | 1966.9 | 239.6 | 178.9 | 173.6 | 226.6 | 268.8 | 226.6 | 195.1 | 186.6 | 180.5 |
| 72.5° | 2115.9 | 1577.5 | 198.9 | 169.7 | 164.4 | 209.7 | 255.8 | 215.8 | 186.6 | 177.4 | 171.3 |
| 75° | 1349.4 | 992.3 | 168.2 | 157.4 | 146.7 | 188.2 | 238.1 | 205.1 | 177.4 | 165.1 | 160.5 |
| 77.5° | 649.0 | 427.8 | 146.7 | 142.9 | 132.1 | 174.3 | 220.4 | 191.2 | 165.1 | 155.1 | 152.1 |
| 80° | 262.7 | 195.8 | 127.5 | 128.3 | 121.3 | 165.9 | 208.1 | 178.2 | 152.8 | 142.1 | 136.7 |
| 82.5° | 136.7 | 113.7 | 107.5 | 110.6 | 110.6 | 158.2 | 198.9 | 167.4 | 142.1 | 137.5 | 119.8 |
| 85° | 73.7 | 70.7 | 82.9 | 89.1 | 96.0 | 142.9 | 185.1 | 155.9 | 129.8 | 111.4 | 107.5 |
| 87.5° | 36.1 | 46.1 | 46.8 | 53.8 | 66.8 | 114.4 | 155.9 | 130.6 | 108.3 | 89.9 | 88.3 |
| 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)