

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: P573280

Luminaire Tested: **ARCH-S-PA2-50-830-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-50-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4669 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

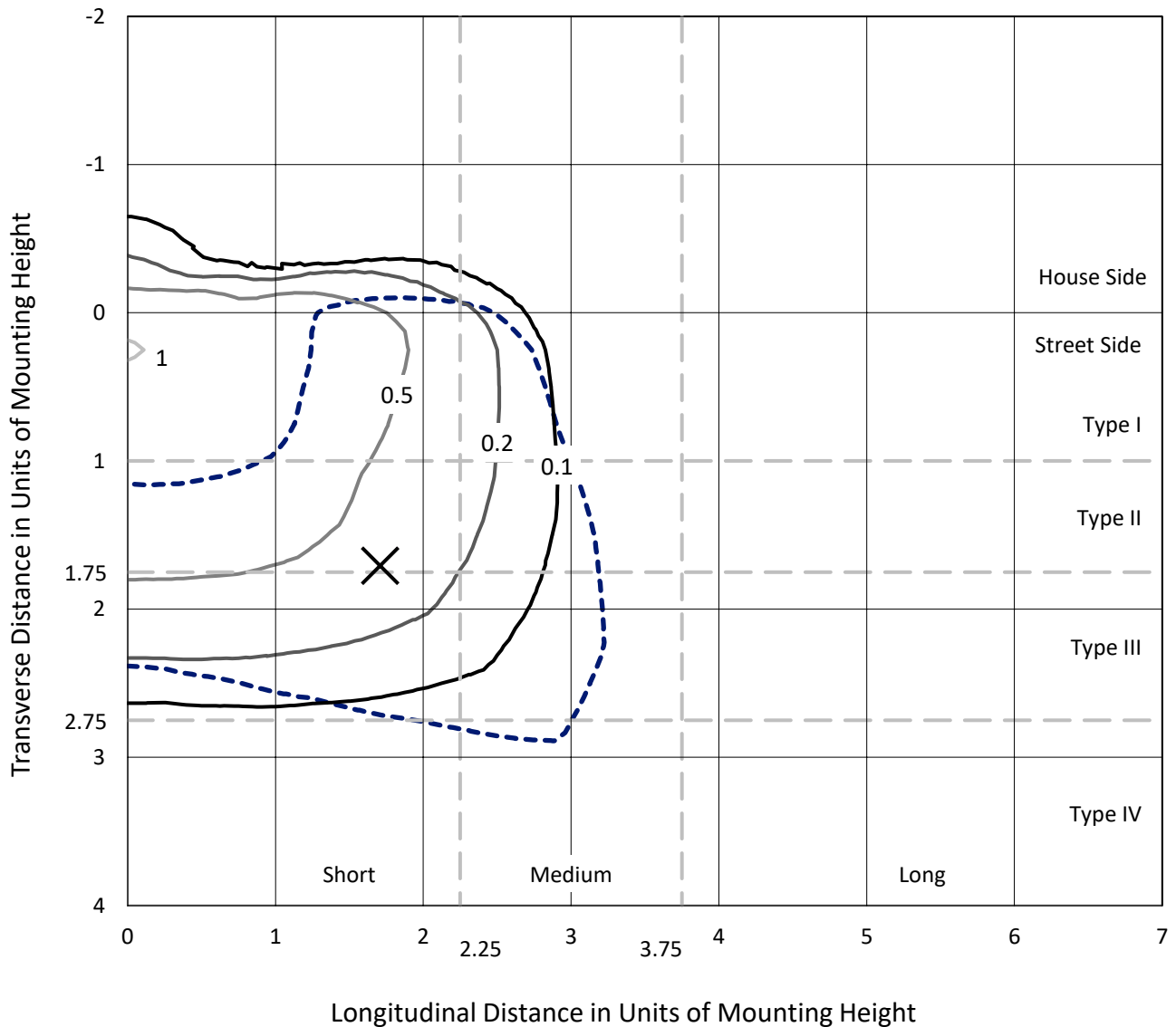
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

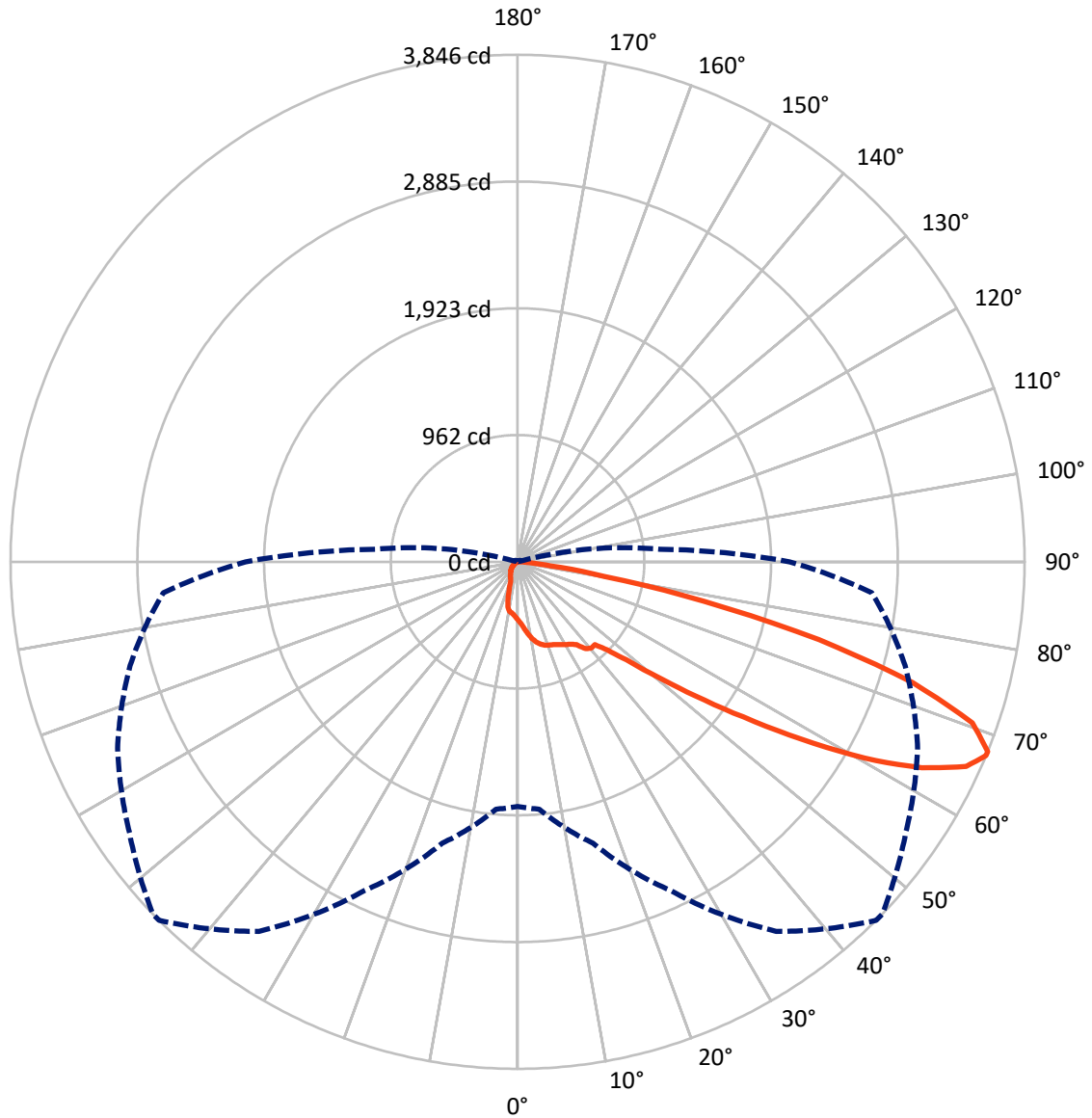
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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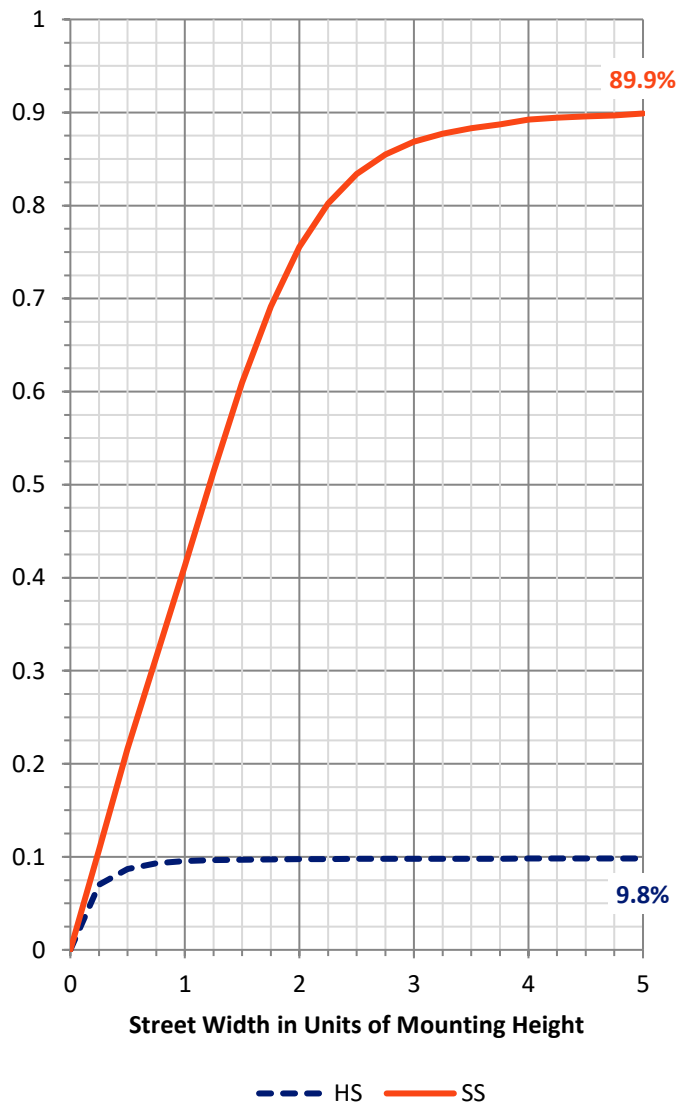
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 462.6 | 0.0 | 462.6 |
| | % Fixture | 9.9 | 0.0 | 9.9 |
| Street Side | Lumens | 4206.4 | 0.0 | 4206.4 |
| | % Fixture | 90.1 | 0.0 | 90.1 |
| Total | Lumens | 4669.0 | 0.0 | 4669.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.3 | 0.9 |
| 10°-20° | 134.0 | 2.9 |
| 20°-30° | 214.3 | 4.6 |
| 30°-40° | 308.4 | 6.6 |
| 40°-50° | 541.1 | 11.6 |
| 50°-60° | 1140.2 | 24.4 |
| 60°-70° | 1576.7 | 33.8 |
| 70°-80° | 660.1 | 14.1 |
| 80°-90° | 49.9 | 1.1 |
| 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° | 4669.0 | 100.0 |
| 0°-180° | 4669.0 | 100.0 |

Coefficient of Utilization

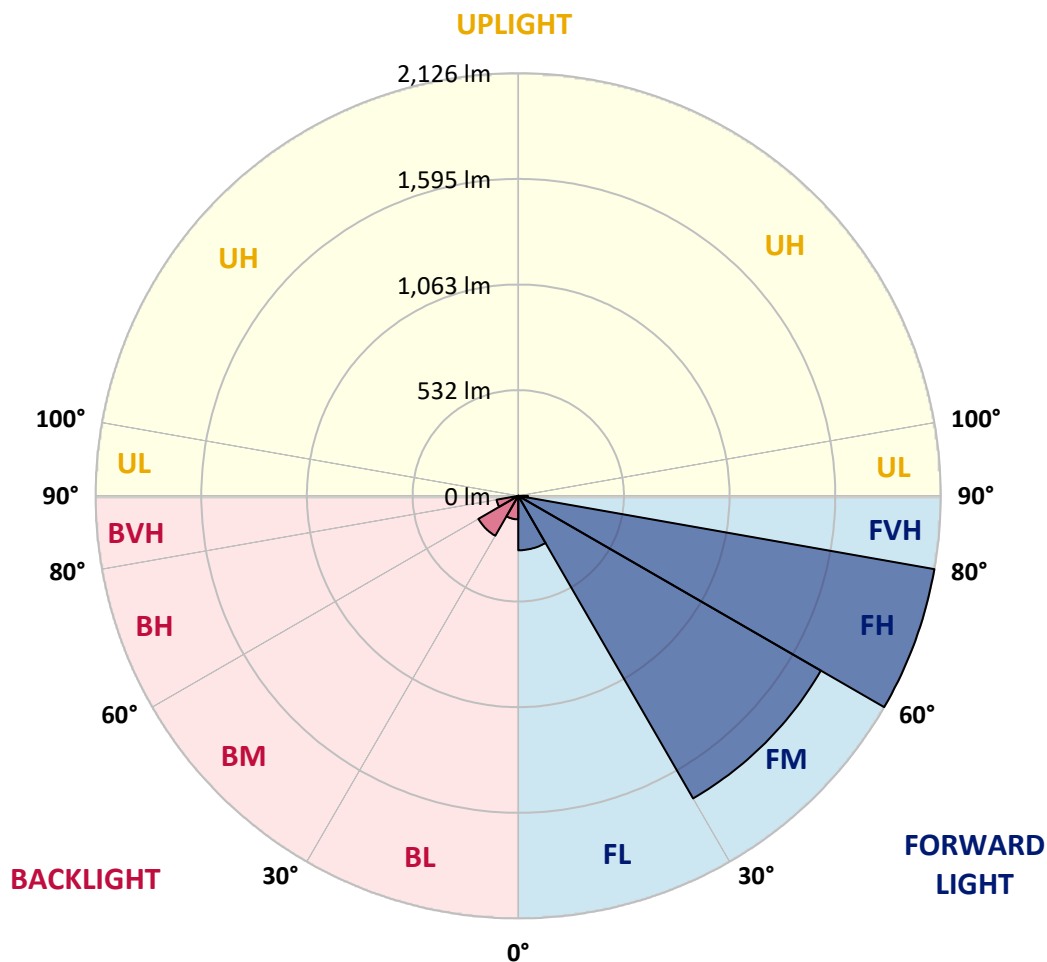


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 274.0 | 5.9 | | | |
| FM (30°-60°) | 1757.9 | 37.7 | | | |
| FH (60°-80°) | 2126.2 | 45.5 | | | G2/5000 |
| FVH (80°-90°) | 48.2 | 1.0 | | | G1/100 |
| BL (0°-30°) | 118.6 | 2.5 | B1/500 | | |
| BM (30°-60°) | 231.8 | 5.0 | B1/1000 | | |
| BH (60°-80°) | 110.6 | 2.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.7 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 |
| 2.5° | 491.6 | 483.0 | 481.2 | 479.5 | 474.3 | 467.4 | 469.2 | 464.0 | 455.4 | 450.2 | 445.0 |
| 5° | 552.0 | 543.3 | 539.9 | 529.5 | 519.2 | 503.7 | 503.7 | 489.9 | 474.3 | 460.5 | 446.7 |
| 7.5° | 614.0 | 607.1 | 600.2 | 584.7 | 569.2 | 548.5 | 546.8 | 526.1 | 501.9 | 481.2 | 458.8 |
| 10° | 665.8 | 660.6 | 652.0 | 633.0 | 612.3 | 589.9 | 584.7 | 565.8 | 534.7 | 507.1 | 477.8 |
| 12.5° | 707.2 | 702.0 | 689.9 | 671.0 | 645.1 | 622.7 | 620.9 | 596.8 | 565.8 | 536.4 | 500.2 |
| 15° | 738.2 | 729.6 | 715.8 | 695.1 | 669.2 | 648.5 | 645.1 | 624.4 | 595.1 | 562.3 | 519.2 |
| 17.5° | 743.4 | 738.2 | 726.2 | 703.7 | 681.3 | 664.1 | 662.3 | 646.8 | 620.9 | 586.4 | 541.6 |
| 20° | 729.6 | 727.9 | 717.5 | 700.3 | 683.0 | 674.4 | 672.7 | 662.3 | 641.6 | 610.6 | 565.8 |
| 22.5° | 708.9 | 707.2 | 700.3 | 691.7 | 684.8 | 683.0 | 683.0 | 679.6 | 667.5 | 638.2 | 596.8 |
| 25° | 695.1 | 693.4 | 689.9 | 684.8 | 684.8 | 695.1 | 696.8 | 700.3 | 689.9 | 667.5 | 622.7 |
| 27.5° | 696.8 | 693.4 | 689.9 | 684.8 | 691.7 | 710.6 | 712.4 | 721.0 | 712.4 | 691.7 | 652.0 |
| 30° | 721.0 | 715.8 | 705.5 | 693.4 | 702.0 | 727.9 | 729.6 | 740.0 | 733.1 | 722.7 | 684.8 |
| 32.5° | 758.9 | 755.5 | 734.8 | 714.1 | 719.3 | 745.1 | 748.6 | 767.6 | 776.2 | 760.7 | 714.1 |
| 35° | 814.1 | 802.1 | 776.2 | 755.5 | 752.0 | 771.0 | 776.2 | 807.2 | 829.7 | 791.7 | 731.3 |
| 37.5° | 859.0 | 848.6 | 807.2 | 774.5 | 793.4 | 836.6 | 838.3 | 876.2 | 857.3 | 795.2 | 758.9 |
| 40° | 1010.8 | 1009.0 | 936.6 | 833.1 | 812.4 | 860.7 | 867.6 | 874.5 | 865.9 | 834.8 | 819.3 |
| 42.5° | 1255.7 | 1235.0 | 1153.9 | 995.2 | 853.8 | 859.0 | 862.4 | 898.6 | 943.5 | 929.7 | 934.9 |
| 45° | 1521.3 | 1504.1 | 1412.7 | 1212.6 | 995.2 | 952.1 | 955.6 | 1014.2 | 1100.5 | 1117.7 | 1145.3 |
| 47.5° | 1766.2 | 1738.6 | 1686.9 | 1485.1 | 1236.7 | 1110.8 | 1117.7 | 1188.4 | 1331.6 | 1369.5 | 1412.7 |
| 50° | 1973.2 | 1954.3 | 1906.0 | 1773.1 | 1533.4 | 1360.9 | 1367.8 | 1426.5 | 1612.7 | 1673.1 | 1728.3 |
| 52.5° | 2273.4 | 2247.5 | 2154.3 | 2092.2 | 1911.1 | 1686.9 | 1671.4 | 1733.5 | 1947.4 | 1987.0 | 2061.2 |
| 55° | 2549.3 | 2495.9 | 2440.7 | 2414.8 | 2338.9 | 2076.7 | 2071.5 | 2083.6 | 2261.3 | 2282.0 | 2414.8 |
| 57.5° | 2666.6 | 2656.3 | 2702.8 | 2789.1 | 2806.3 | 2535.5 | 2513.1 | 2466.5 | 2606.2 | 2604.5 | 2759.8 |
| 60° | 2740.8 | 2740.8 | 2865.0 | 3078.9 | 3216.8 | 3025.4 | 2994.3 | 2849.5 | 2899.5 | 2901.2 | 3044.4 |
| 62.5° | 2694.2 | 2706.3 | 2899.5 | 3222.0 | 3499.7 | 3441.1 | 3420.4 | 3177.2 | 3173.7 | 3134.1 | 3184.1 |
| 65° | 2406.2 | 2426.9 | 2737.3 | 3142.7 | 3603.2 | 3741.2 | 3732.6 | 3456.6 | 3356.6 | 3211.7 | 3099.6 |
| 67° | 1962.9 | 2000.8 | 2376.8 | 2856.4 | 3485.9 | 3844.7 | 3846.4 | 3577.3 | 3358.3 | 3082.3 | 2801.2 |
| 67.5° | 1855.9 | 1883.5 | 2209.5 | 2752.9 | 3422.1 | 3846.4 | 3846.4 | 3592.9 | 3347.9 | 3042.6 | 2697.7 |
| 70° | 1183.2 | 1190.1 | 1545.5 | 2130.2 | 2923.6 | 3660.1 | 3673.9 | 3475.6 | 3049.5 | 2463.1 | 1893.9 |
| 72.5° | 584.7 | 569.2 | 815.9 | 1371.3 | 2194.0 | 3132.3 | 3168.6 | 2968.5 | 2413.1 | 1609.3 | 1000.4 |
| 75° | 229.4 | 244.9 | 355.3 | 729.6 | 1374.7 | 2361.3 | 2388.9 | 2159.5 | 1552.4 | 829.7 | 395.0 |
| 77.5° | 101.8 | 101.8 | 151.8 | 327.7 | 722.7 | 1448.9 | 1462.7 | 1317.8 | 819.3 | 341.5 | 120.7 |
| 80° | 55.2 | 58.6 | 79.3 | 143.2 | 363.9 | 665.8 | 726.2 | 653.7 | 370.8 | 150.1 | 41.4 |
| 82.5° | 27.6 | 29.3 | 48.3 | 81.1 | 182.8 | 251.8 | 265.6 | 277.7 | 170.8 | 93.1 | 17.2 |
| 85° | 10.3 | 12.1 | 25.9 | 46.6 | 82.8 | 84.5 | 84.5 | 108.7 | 93.1 | 70.7 | 8.6 |
| 87.5° | 1.7 | 3.4 | 12.1 | 19.0 | 32.8 | 29.3 | 25.9 | 34.5 | 51.7 | 44.8 | 5.2 |
| 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-PA2-50-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 | 441.6 |
| 2.5° | 441.6 | 438.1 | 431.2 | 426.0 | 422.6 | 419.1 | 415.7 | 415.7 | 414.0 | 414.0 | 415.7 |
| 5° | 441.6 | 434.7 | 420.9 | 412.2 | 405.3 | 400.2 | 396.7 | 396.7 | 395.0 | 396.7 | 398.4 |
| 7.5° | 450.2 | 439.8 | 420.9 | 405.3 | 396.7 | 388.1 | 384.6 | 382.9 | 382.9 | 384.6 | 382.9 |
| 10° | 464.0 | 450.2 | 426.0 | 405.3 | 393.3 | 381.2 | 362.2 | 345.0 | 329.4 | 322.5 | 320.8 |
| 12.5° | 481.2 | 464.0 | 434.7 | 410.5 | 391.5 | 350.1 | 298.4 | 265.6 | 244.9 | 234.6 | 231.1 |
| 15° | 500.2 | 479.5 | 445.0 | 417.4 | 365.7 | 288.1 | 220.8 | 184.6 | 172.5 | 174.2 | 175.9 |
| 17.5° | 520.9 | 498.5 | 460.5 | 414.0 | 313.9 | 213.9 | 162.1 | 153.5 | 158.7 | 163.9 | 163.9 |
| 20° | 541.6 | 517.5 | 476.1 | 388.1 | 246.7 | 158.7 | 144.9 | 146.6 | 151.8 | 157.0 | 157.0 |
| 22.5° | 569.2 | 543.3 | 491.6 | 343.2 | 182.8 | 138.0 | 138.0 | 141.4 | 144.9 | 150.1 | 150.1 |
| 25° | 598.5 | 572.7 | 501.9 | 288.1 | 136.3 | 129.4 | 131.1 | 134.5 | 138.0 | 143.2 | 143.2 |
| 27.5° | 629.6 | 603.7 | 500.2 | 222.5 | 119.0 | 119.0 | 120.7 | 125.9 | 129.4 | 134.5 | 134.5 |
| 30° | 664.1 | 641.6 | 481.2 | 162.1 | 110.4 | 108.7 | 108.7 | 113.8 | 119.0 | 122.5 | 124.2 |
| 32.5° | 693.4 | 674.4 | 448.5 | 122.5 | 103.5 | 100.0 | 98.3 | 100.0 | 105.2 | 108.7 | 110.4 |
| 35° | 717.5 | 710.6 | 400.2 | 105.2 | 96.6 | 91.4 | 88.0 | 86.2 | 88.0 | 88.0 | 89.7 |
| 37.5° | 762.4 | 764.1 | 343.2 | 98.3 | 91.4 | 84.5 | 77.6 | 72.4 | 69.0 | 67.3 | 65.5 |
| 40° | 846.9 | 845.2 | 282.9 | 93.1 | 86.2 | 77.6 | 67.3 | 60.4 | 51.7 | 48.3 | 48.3 |
| 42.5° | 965.9 | 940.0 | 215.6 | 88.0 | 81.1 | 70.7 | 56.9 | 46.6 | 37.9 | 36.2 | 36.2 |
| 45° | 1179.8 | 1072.9 | 162.1 | 84.5 | 75.9 | 62.1 | 46.6 | 34.5 | 29.3 | 27.6 | 27.6 |
| 47.5° | 1416.1 | 1226.4 | 129.4 | 79.3 | 70.7 | 55.2 | 36.2 | 27.6 | 22.4 | 22.4 | 22.4 |
| 50° | 1676.6 | 1373.0 | 108.7 | 74.2 | 62.1 | 46.6 | 29.3 | 22.4 | 20.7 | 19.0 | 20.7 |
| 52.5° | 1961.2 | 1488.5 | 94.9 | 67.3 | 53.5 | 37.9 | 24.1 | 20.7 | 17.2 | 17.2 | 17.2 |
| 55° | 2216.4 | 1566.2 | 79.3 | 58.6 | 44.8 | 31.0 | 22.4 | 17.2 | 15.5 | 13.8 | 12.1 |
| 57.5° | 2447.6 | 1607.6 | 63.8 | 50.0 | 34.5 | 25.9 | 19.0 | 13.8 | 12.1 | 8.6 | 8.6 |
| 60° | 2566.6 | 1569.6 | 50.0 | 39.7 | 27.6 | 20.7 | 15.5 | 12.1 | 8.6 | 5.2 | 5.2 |
| 62.5° | 2585.6 | 1471.3 | 39.7 | 31.0 | 24.1 | 17.2 | 12.1 | 8.6 | 5.2 | 3.4 | 3.4 |
| 65° | 2420.0 | 1298.8 | 32.8 | 25.9 | 19.0 | 13.8 | 10.3 | 6.9 | 3.4 | 1.7 | 1.7 |
| 67° | 2123.3 | 1117.7 | 29.3 | 22.4 | 17.2 | 12.1 | 8.6 | 5.2 | 3.4 | 1.7 | 0.0 |
| 67.5° | 2064.6 | 1084.9 | 27.6 | 22.4 | 17.2 | 12.1 | 8.6 | 5.2 | 3.4 | 1.7 | 0.0 |
| 70° | 1355.7 | 750.3 | 25.9 | 20.7 | 15.5 | 10.3 | 6.9 | 5.2 | 1.7 | 0.0 | 0.0 |
| 72.5° | 740.0 | 377.7 | 24.1 | 19.0 | 13.8 | 10.3 | 6.9 | 3.4 | 1.7 | 0.0 | 0.0 |
| 75° | 270.8 | 143.2 | 20.7 | 17.2 | 12.1 | 10.3 | 6.9 | 3.4 | 1.7 | 0.0 | 0.0 |
| 77.5° | 91.4 | 50.0 | 19.0 | 17.2 | 13.8 | 10.3 | 6.9 | 3.4 | 1.7 | 0.0 | 0.0 |
| 80° | 31.0 | 22.4 | 15.5 | 13.8 | 10.3 | 8.6 | 6.9 | 3.4 | 1.7 | 0.0 | 0.0 |
| 82.5° | 12.1 | 6.9 | 5.2 | 5.2 | 5.2 | 6.9 | 6.9 | 5.2 | 1.7 | 0.0 | 0.0 |
| 85° | 5.2 | 3.4 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 |
| 87.5° | 5.2 | 3.4 | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)