

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: P573539

Luminaire Tested: **ARCH-S-PA2-90-727-U-T3-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-90-727-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7989 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

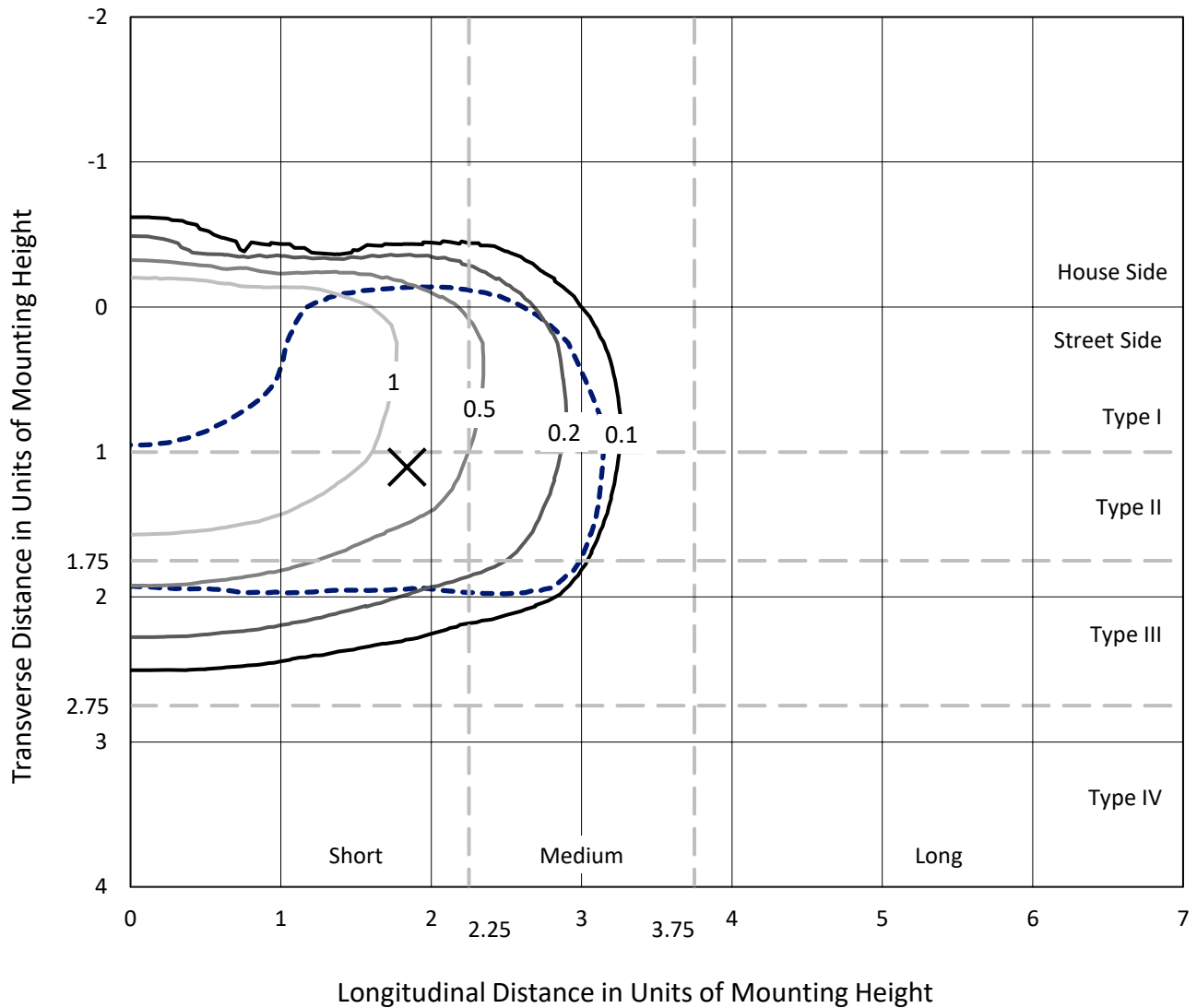
Input Watts (W): 92.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

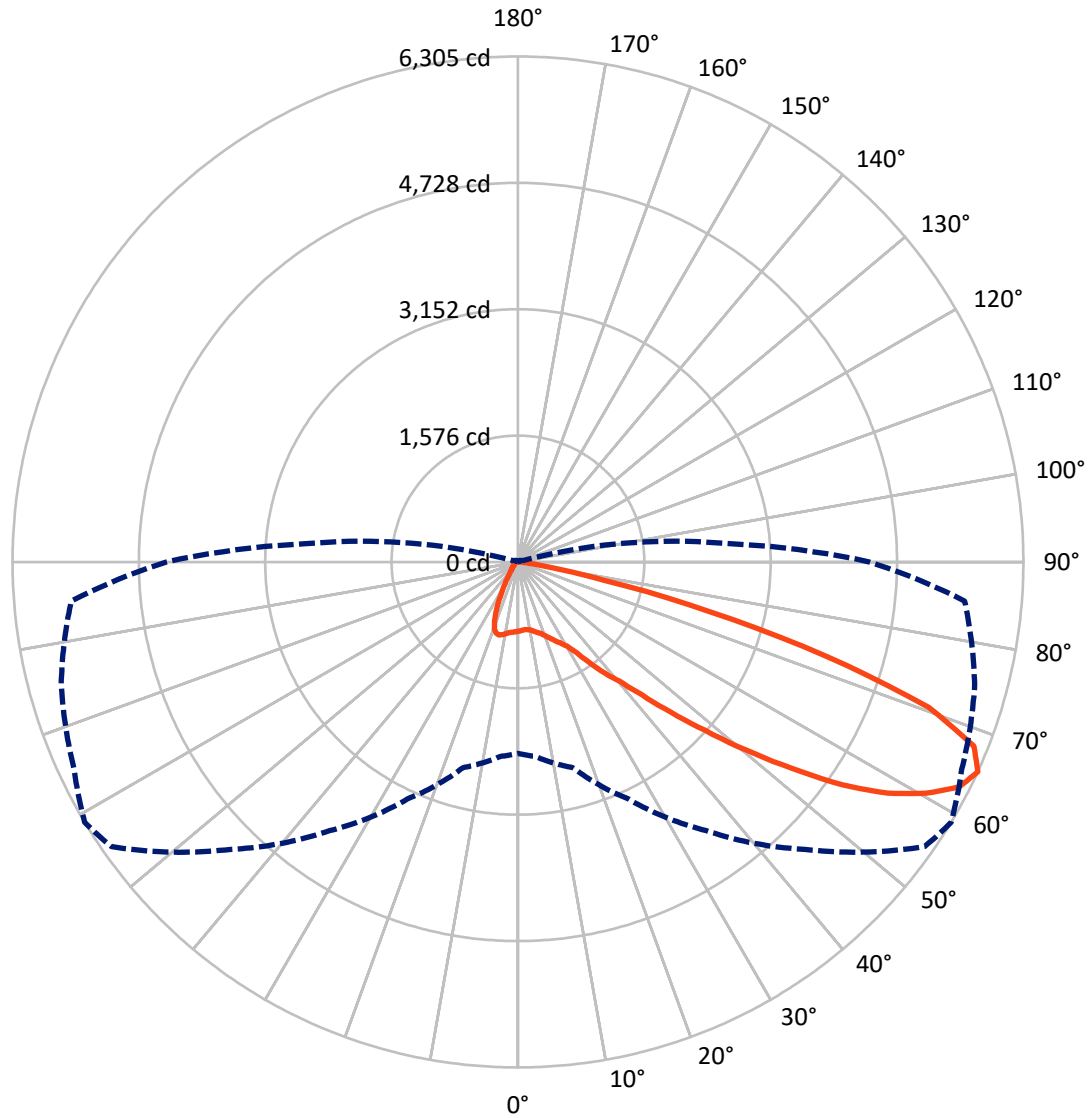
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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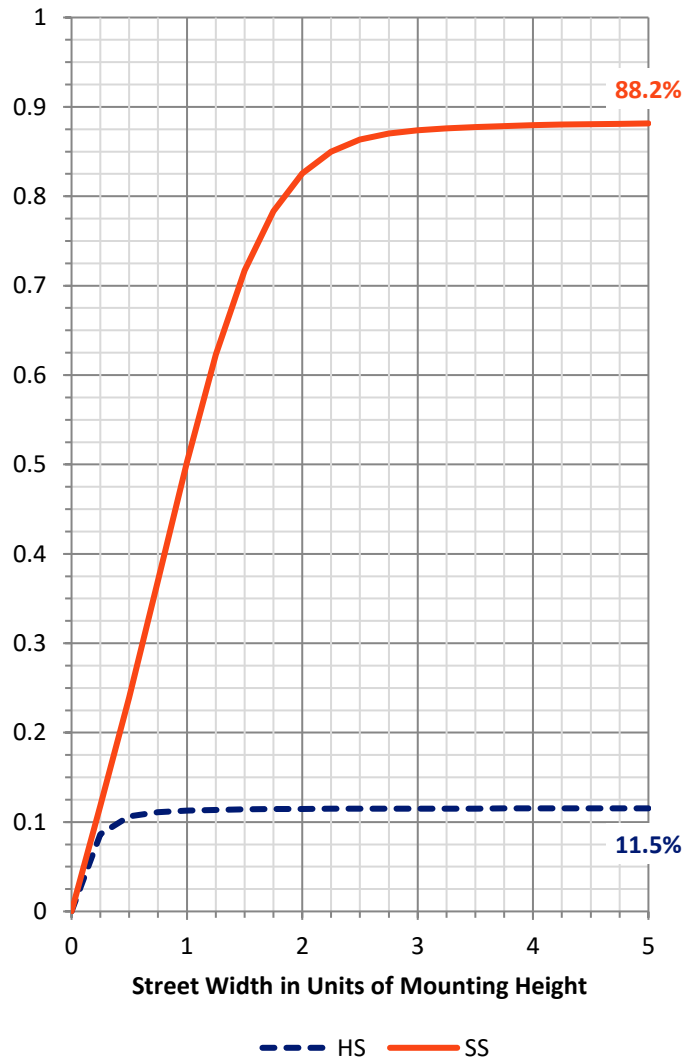
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 932.0 | 0.0 | 932.0 |
| | % Fixture | 11.7 | 0.0 | 11.7 |
| Street Side | Lumens | 7057.0 | 0.0 | 7057.0 |
| | % Fixture | 88.3 | 0.0 | 88.3 |
| Total | Lumens | 7989.0 | 0.0 | 7989.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 81.6 | 1.0 |
| 10°-20° | 231.8 | 2.9 |
| 20°-30° | 393.6 | 4.9 |
| 30°-40° | 697.3 | 8.7 |
| 40°-50° | 1315.3 | 16.5 |
| 50°-60° | 2225.5 | 27.9 |
| 60°-70° | 2313.8 | 29.0 |
| 70°-80° | 693.8 | 8.7 |
| 80°-90° | 36.4 | 0.5 |
| 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° | 7989.0 | 100.0 |
| 0°-180° | 7989.0 | 100.0 |

Coefficient of Utilization



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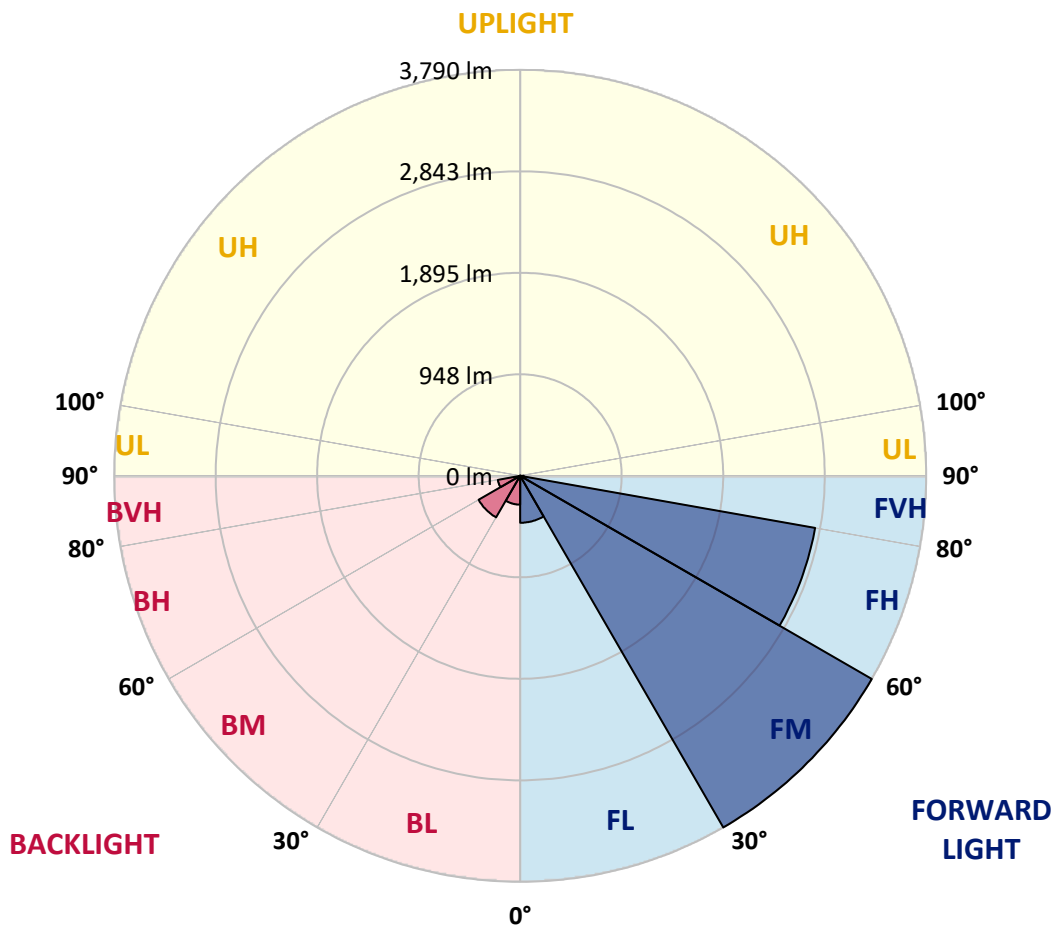
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 438.1 | 5.5 | | | |
| FM (30°-60°) | 3790.0 | 47.4 | | | |
| FH (60°-80°) | 2795.6 | 35.0 | | | G2/5000 |
| FVH (80°-90°) | 33.3 | 0.4 | | | G1/100 |
| BL (0°-30°) | 268.8 | 3.4 | B1/500 | | |
| BM (30°-60°) | 448.0 | 5.6 | B1/1000 | | |
| BH (60°-80°) | 212.1 | 2.7 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.1 | 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° | 55° | 59° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 |
| 2.5° | 840.0 | 837.1 | 837.1 | 842.9 | 845.9 | 848.8 | 854.6 | 854.6 | 854.6 | 860.4 | 863.3 |
| 5° | 799.3 | 799.3 | 802.3 | 808.1 | 819.7 | 828.4 | 845.9 | 848.8 | 851.7 | 866.2 | 872.0 |
| 7.5° | 773.2 | 773.2 | 776.1 | 787.7 | 802.3 | 822.6 | 845.9 | 851.7 | 860.4 | 880.7 | 895.3 |
| 10° | 770.3 | 767.4 | 773.2 | 784.8 | 802.3 | 828.4 | 854.6 | 863.3 | 880.7 | 906.9 | 927.2 |
| 12.5° | 779.0 | 776.1 | 781.9 | 793.5 | 811.0 | 837.1 | 872.0 | 886.5 | 906.9 | 941.8 | 970.8 |
| 15° | 784.8 | 781.9 | 787.7 | 802.3 | 822.6 | 854.6 | 895.3 | 912.7 | 938.9 | 988.3 | 1017.3 |
| 17.5° | 802.3 | 799.3 | 802.3 | 813.9 | 834.2 | 869.1 | 921.4 | 938.9 | 982.5 | 1037.7 | 1069.7 |
| 20° | 880.7 | 877.8 | 860.4 | 854.6 | 857.5 | 889.5 | 956.3 | 985.4 | 1037.7 | 1107.5 | 1130.7 |
| 22.5° | 1043.5 | 1031.9 | 999.9 | 947.6 | 912.7 | 924.3 | 999.9 | 1031.9 | 1101.6 | 1180.1 | 1197.6 |
| 25° | 1261.5 | 1252.8 | 1206.3 | 1116.2 | 1017.3 | 988.3 | 1049.3 | 1092.9 | 1177.2 | 1264.4 | 1258.6 |
| 27.5° | 1508.6 | 1491.1 | 1447.5 | 1322.5 | 1188.8 | 1092.9 | 1110.4 | 1148.1 | 1241.2 | 1334.2 | 1305.1 |
| 30° | 1723.7 | 1717.9 | 1668.4 | 1563.8 | 1406.8 | 1264.4 | 1203.4 | 1223.7 | 1308.0 | 1406.8 | 1372.0 |
| 32.5° | 1921.3 | 1903.9 | 1863.2 | 1764.4 | 1619.0 | 1473.7 | 1351.6 | 1351.6 | 1421.4 | 1537.6 | 1485.3 |
| 35° | 2139.3 | 2127.7 | 2078.3 | 1979.5 | 1839.9 | 1668.4 | 1558.0 | 1546.4 | 1604.5 | 1735.3 | 1621.9 |
| 37.5° | 2363.1 | 2334.1 | 2310.8 | 2209.1 | 2069.6 | 1921.3 | 1787.6 | 1761.5 | 1790.5 | 1886.5 | 1746.9 |
| 40° | 2642.2 | 2642.2 | 2589.9 | 2496.9 | 2366.1 | 2209.1 | 2023.1 | 1956.2 | 1947.5 | 2072.5 | 1964.9 |
| 42.5° | 2967.7 | 2959.0 | 2915.4 | 2828.2 | 2703.2 | 2557.9 | 2322.5 | 2261.4 | 2255.6 | 2406.8 | 2278.9 |
| 45° | 3342.7 | 3336.9 | 3284.6 | 3211.9 | 3124.7 | 2964.8 | 2732.3 | 2671.3 | 2636.4 | 2810.8 | 2659.6 |
| 47.5° | 3685.7 | 3665.4 | 3647.9 | 3656.6 | 3607.2 | 3427.0 | 3209.0 | 3136.3 | 3133.4 | 3270.0 | 3075.3 |
| 50° | 3921.1 | 3909.5 | 3970.6 | 4028.7 | 4121.7 | 4008.3 | 3749.6 | 3685.7 | 3636.3 | 3816.5 | 3508.4 |
| 52.5° | 4075.2 | 4069.4 | 4191.5 | 4357.1 | 4549.0 | 4540.3 | 4310.6 | 4272.9 | 4232.2 | 4281.6 | 3895.0 |
| 55° | 4136.2 | 4136.2 | 4281.6 | 4586.8 | 4924.0 | 5069.3 | 4961.7 | 4909.4 | 4767.0 | 4665.3 | 4319.4 |
| 57.5° | 4063.6 | 4054.9 | 4243.8 | 4642.0 | 5156.5 | 5455.9 | 5502.4 | 5441.3 | 5217.5 | 5104.2 | 4790.2 |
| 60° | 3755.5 | 3761.3 | 3985.1 | 4487.9 | 5139.1 | 5612.8 | 5912.2 | 5857.0 | 5633.2 | 5464.6 | 5185.6 |
| 62.5° | 3179.9 | 3229.3 | 3464.8 | 4011.3 | 4767.0 | 5487.9 | 6147.7 | 6176.7 | 5935.5 | 5726.2 | 5537.3 |
| 65° | 2389.3 | 2432.9 | 2656.7 | 3261.3 | 4089.7 | 5069.3 | 6191.3 | 6304.6 | 6109.9 | 5897.7 | 5592.5 |
| 67.5° | 1453.4 | 1467.9 | 1741.1 | 2197.5 | 3011.3 | 4223.4 | 5886.1 | 6133.1 | 5993.6 | 5644.8 | 5046.0 |
| 70° | 677.3 | 715.0 | 848.8 | 1200.5 | 1906.8 | 3110.2 | 5086.7 | 5435.5 | 5278.6 | 4845.5 | 3836.8 |
| 72.5° | 264.5 | 276.1 | 360.4 | 555.2 | 1011.5 | 1956.2 | 3796.2 | 4028.7 | 3921.1 | 3441.5 | 2287.6 |
| 75° | 130.8 | 139.5 | 174.4 | 264.5 | 462.2 | 808.1 | 2319.5 | 2470.7 | 2293.4 | 1729.5 | 967.9 |
| 77.5° | 95.9 | 95.9 | 116.3 | 162.8 | 252.9 | 299.4 | 976.7 | 1095.8 | 1034.8 | 668.5 | 264.5 |
| 80° | 63.9 | 69.8 | 81.4 | 110.5 | 159.9 | 145.3 | 369.2 | 438.9 | 366.2 | 206.4 | 93.0 |
| 82.5° | 37.8 | 40.7 | 61.0 | 78.5 | 107.5 | 84.3 | 125.0 | 139.5 | 151.1 | 101.7 | 43.6 |
| 85° | 20.3 | 20.3 | 40.7 | 58.1 | 58.1 | 37.8 | 43.6 | 49.4 | 58.1 | 61.0 | 23.3 |
| 87.5° | 5.8 | 5.8 | 26.2 | 34.9 | 23.3 | 20.3 | 23.3 | 23.3 | 26.2 | 32.0 | 11.6 |
| 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-PA2-90-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 | 863.3 |
| 2.5° | 866.2 | 866.2 | 869.1 | 869.1 | 872.0 | 872.0 | 872.0 | 872.0 | 874.9 | 877.8 | 877.8 |
| 5° | 874.9 | 877.8 | 877.8 | 877.8 | 877.8 | 872.0 | 869.1 | 866.2 | 866.2 | 869.1 | 869.1 |
| 7.5° | 898.2 | 901.1 | 898.2 | 892.4 | 883.6 | 872.0 | 860.4 | 860.4 | 857.5 | 860.4 | 857.5 |
| 10° | 933.1 | 933.1 | 930.1 | 915.6 | 901.1 | 877.8 | 854.6 | 837.1 | 825.5 | 822.6 | 816.8 |
| 12.5° | 976.7 | 976.7 | 967.9 | 941.8 | 915.6 | 872.0 | 811.0 | 752.8 | 706.3 | 686.0 | 680.2 |
| 15° | 1020.3 | 1020.3 | 1008.6 | 970.8 | 918.5 | 813.9 | 686.0 | 563.9 | 494.1 | 465.1 | 447.6 |
| 17.5° | 1072.6 | 1066.8 | 1046.4 | 994.1 | 886.5 | 697.6 | 491.2 | 366.2 | 311.0 | 284.9 | 284.9 |
| 20° | 1127.8 | 1122.0 | 1084.2 | 997.0 | 805.2 | 500.0 | 319.7 | 252.9 | 238.3 | 232.5 | 232.5 |
| 22.5° | 1188.8 | 1174.3 | 1116.2 | 973.7 | 633.7 | 340.1 | 241.3 | 223.8 | 218.0 | 215.1 | 215.1 |
| 25° | 1238.3 | 1215.0 | 1139.4 | 909.8 | 453.4 | 238.3 | 212.2 | 206.4 | 194.7 | 191.8 | 186.0 |
| 27.5° | 1276.0 | 1241.2 | 1148.1 | 773.2 | 299.4 | 197.7 | 188.9 | 177.3 | 165.7 | 154.1 | 154.1 |
| 30° | 1325.5 | 1281.9 | 1154.0 | 601.7 | 203.5 | 171.5 | 162.8 | 148.2 | 133.7 | 122.1 | 122.1 |
| 32.5° | 1424.3 | 1360.3 | 1156.9 | 421.5 | 168.6 | 151.1 | 133.7 | 116.3 | 101.7 | 95.9 | 93.0 |
| 35° | 1531.8 | 1444.6 | 1124.9 | 273.2 | 148.2 | 127.9 | 107.5 | 93.0 | 78.5 | 75.6 | 75.6 |
| 37.5° | 1651.0 | 1569.6 | 1055.1 | 186.0 | 130.8 | 107.5 | 87.2 | 72.7 | 63.9 | 61.0 | 61.0 |
| 40° | 1851.6 | 1755.6 | 938.9 | 148.2 | 113.4 | 90.1 | 72.7 | 61.0 | 55.2 | 52.3 | 52.3 |
| 42.5° | 2139.3 | 1973.7 | 793.5 | 127.9 | 98.8 | 75.6 | 58.1 | 49.4 | 46.5 | 43.6 | 43.6 |
| 45° | 2470.7 | 2217.8 | 624.9 | 116.3 | 87.2 | 63.9 | 49.4 | 43.6 | 40.7 | 37.8 | 37.8 |
| 47.5° | 2851.5 | 2470.7 | 494.1 | 101.7 | 75.6 | 55.2 | 43.6 | 37.8 | 34.9 | 32.0 | 32.0 |
| 50° | 3211.9 | 2668.4 | 372.1 | 90.1 | 66.9 | 46.5 | 37.8 | 34.9 | 32.0 | 29.1 | 29.1 |
| 52.5° | 3508.4 | 2802.1 | 282.0 | 78.5 | 58.1 | 40.7 | 34.9 | 32.0 | 26.2 | 26.2 | 26.2 |
| 55° | 3865.9 | 2906.7 | 215.1 | 69.8 | 52.3 | 37.8 | 32.0 | 26.2 | 23.3 | 20.3 | 20.3 |
| 57.5° | 4176.9 | 2944.5 | 157.0 | 61.0 | 46.5 | 34.9 | 29.1 | 23.3 | 17.4 | 14.5 | 14.5 |
| 60° | 4386.2 | 2912.5 | 113.4 | 52.3 | 40.7 | 29.1 | 23.3 | 17.4 | 11.6 | 8.7 | 8.7 |
| 62.5° | 4534.5 | 2842.8 | 87.2 | 46.5 | 34.9 | 26.2 | 20.3 | 14.5 | 8.7 | 5.8 | 5.8 |
| 65° | 4386.2 | 2627.7 | 69.8 | 40.7 | 29.1 | 23.3 | 14.5 | 11.6 | 5.8 | 2.9 | 2.9 |
| 67.5° | 3793.2 | 2203.3 | 55.2 | 34.9 | 26.2 | 20.3 | 14.5 | 8.7 | 2.9 | 0.0 | 0.0 |
| 70° | 2726.5 | 1572.5 | 46.5 | 32.0 | 23.3 | 17.4 | 11.6 | 5.8 | 2.9 | 0.0 | 0.0 |
| 72.5° | 1520.2 | 811.0 | 43.6 | 29.1 | 23.3 | 17.4 | 11.6 | 5.8 | 2.9 | 0.0 | 0.0 |
| 75° | 616.2 | 279.0 | 40.7 | 29.1 | 23.3 | 14.5 | 11.6 | 5.8 | 2.9 | 0.0 | 0.0 |
| 77.5° | 180.2 | 95.9 | 34.9 | 26.2 | 23.3 | 17.4 | 11.6 | 5.8 | 2.9 | 0.0 | 0.0 |
| 80° | 63.9 | 43.6 | 26.2 | 23.3 | 17.4 | 14.5 | 11.6 | 8.7 | 2.9 | 0.0 | 0.0 |
| 82.5° | 29.1 | 17.4 | 11.6 | 8.7 | 8.7 | 8.7 | 8.7 | 5.8 | 2.9 | 0.0 | 0.0 |
| 85° | 11.6 | 8.7 | 5.8 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 0.0 | 0.0 |
| 87.5° | 8.7 | 5.8 | 2.9 | 2.9 | 2.9 | 2.9 | 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)