

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: P573243

Luminaire Tested: **ARCH-S-PA2-50-740-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-50-740-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8015 lumens
Efficiency: N/A
Efficacy: 149.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

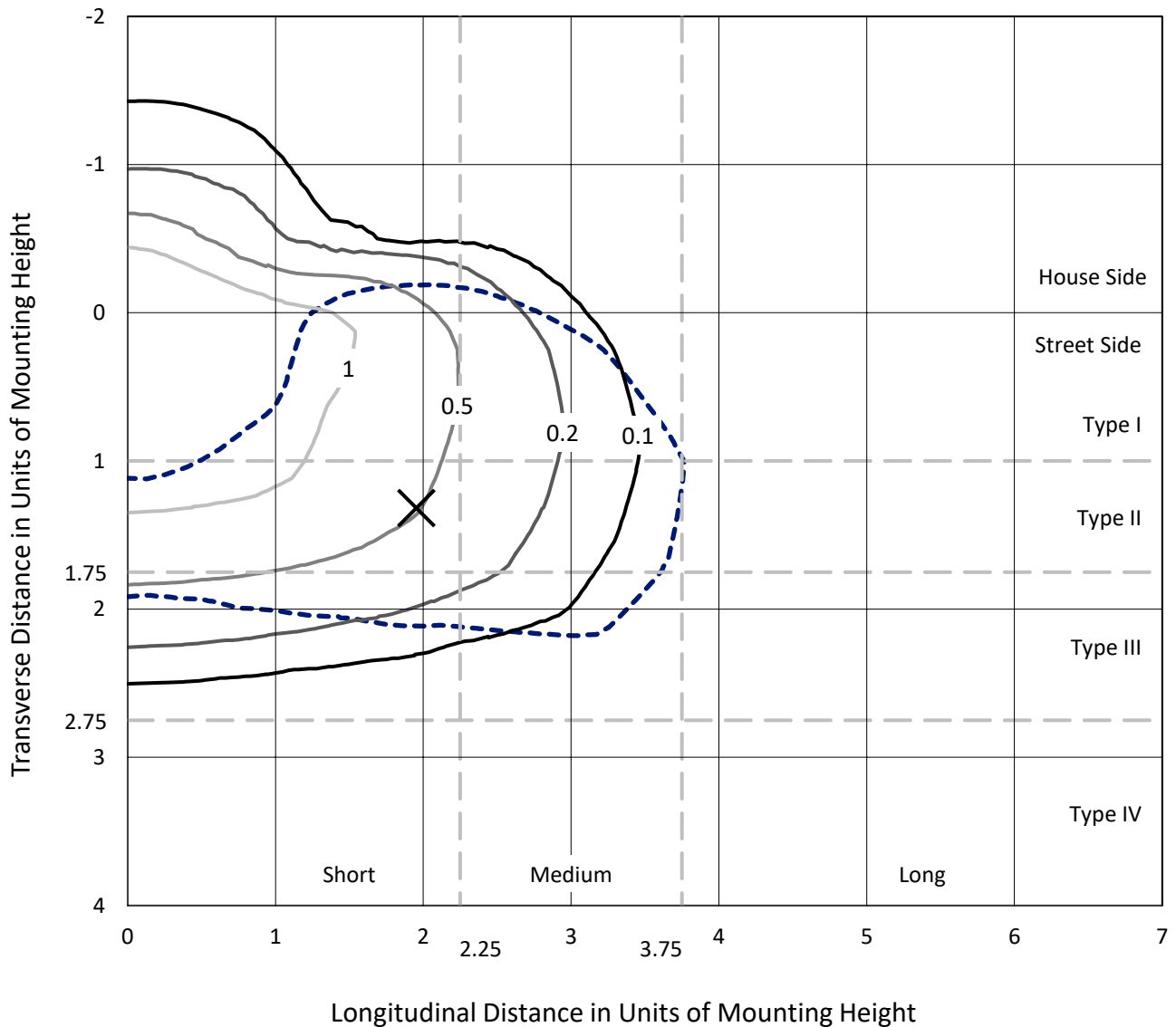
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

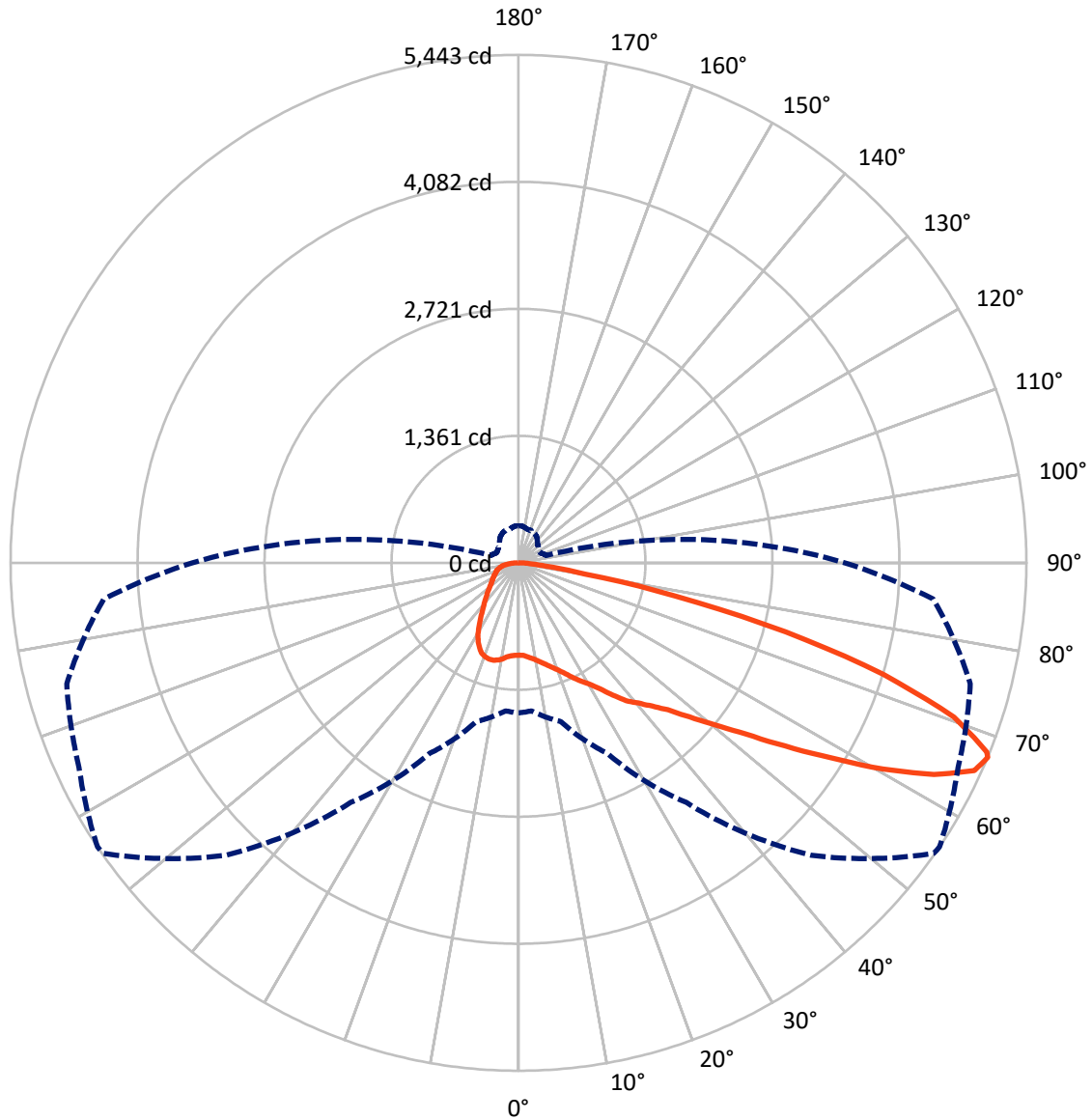
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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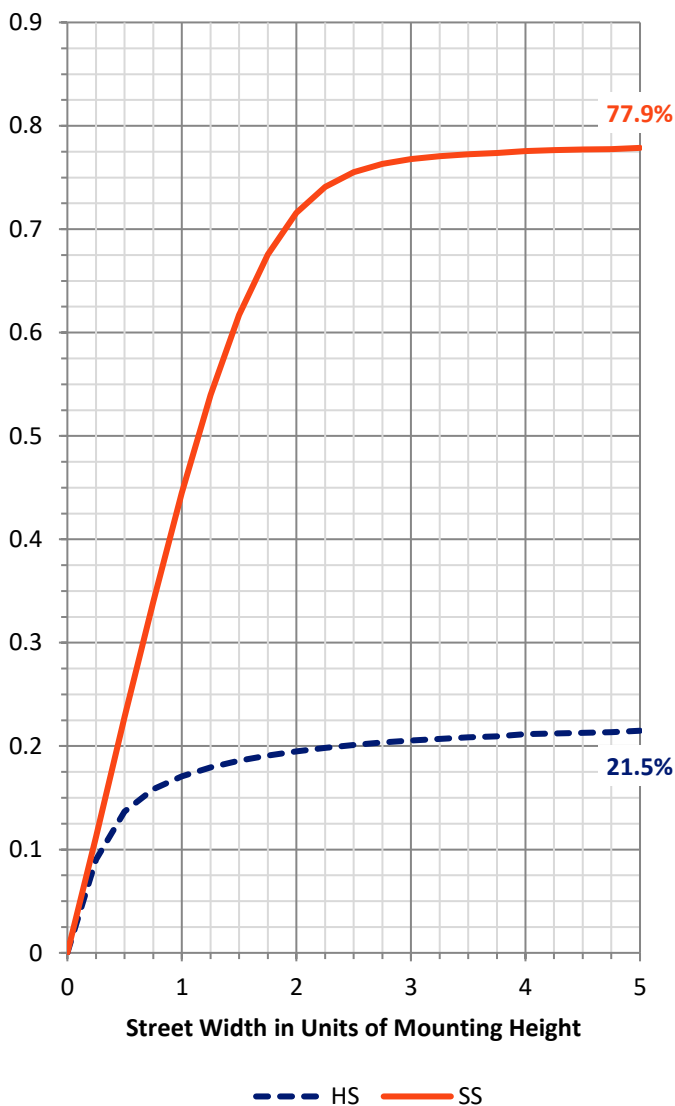
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1753.5 | 0.0 | 1753.5 |
| | % Fixture | 21.9 | 0.0 | 21.9 |
| Street Side | Lumens | 6261.5 | 0.0 | 6261.5 |
| | % Fixture | 78.1 | 0.0 | 78.1 |
| Total | Lumens | 8015.0 | 0.0 | 8015.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 97.3 | 1.2 |
| 10°-20° | 312.2 | 3.9 |
| 20°-30° | 543.4 | 6.8 |
| 30°-40° | 796.7 | 9.9 |
| 40°-50° | 1165.7 | 14.5 |
| 50°-60° | 1821.8 | 22.7 |
| 60°-70° | 2165.3 | 27.0 |
| 70°-80° | 986.1 | 12.3 |
| 80°-90° | 126.5 | 1.6 |
| 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° | 8015.0 | 100.0 |
| 0°-180° | 8015.0 | 100.0 |

Coefficient of Utilization



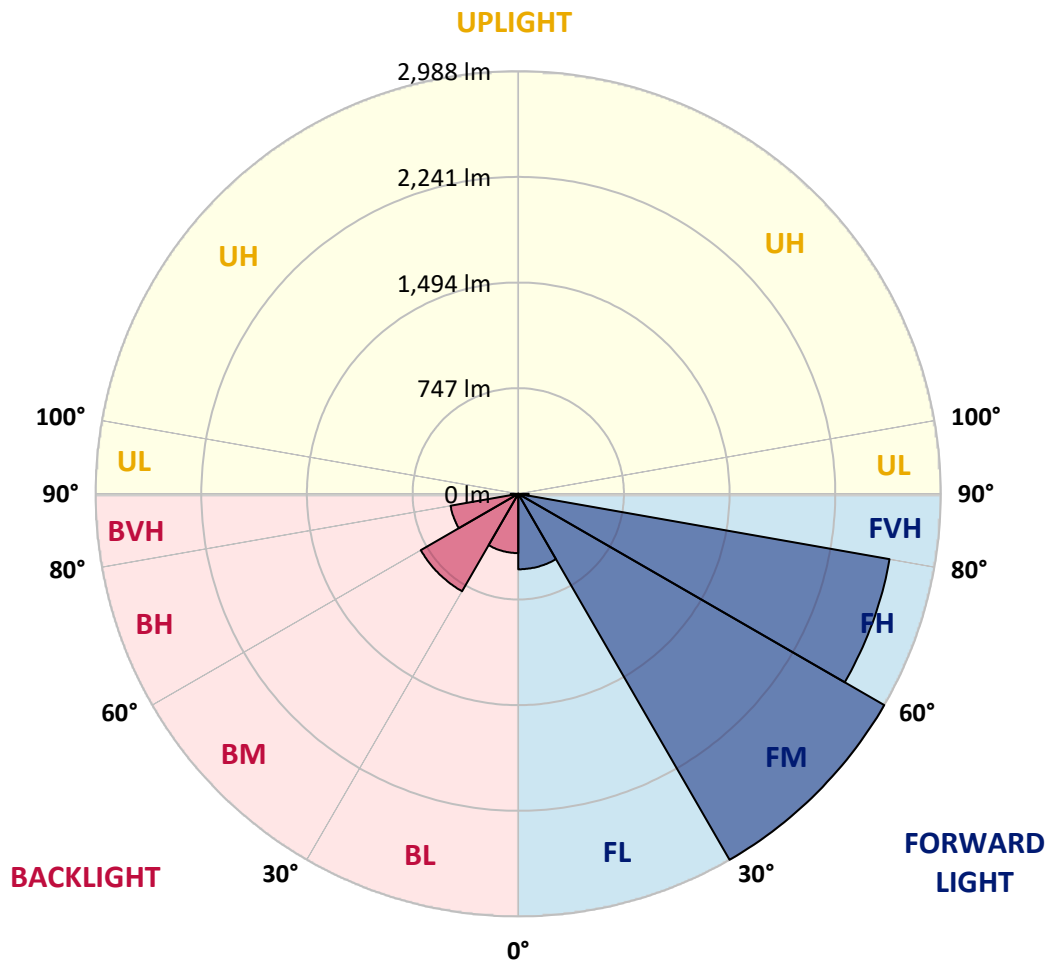
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 533.9 | 6.7 | | | |
| FM | (30°-60°) | 2988.2 | 37.3 | | | |
| FH | (60°-80°) | 2665.7 | 33.3 | | | G2/5000 |
| FVH | (80°-90°) | 73.7 | 0.9 | | | G1/100 |
| BL | (0°-30°) | 419.1 | 5.2 | B1/500 | | |
| BM | (30°-60°) | 796.0 | 9.9 | B1/1000 | | |
| BH | (60°-80°) | 485.8 | 6.1 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 52.7 | 0.7 | | | 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 III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 |
| 2.5° | 1004.7 | 1000.4 | 998.2 | 1000.4 | 998.2 | 993.9 | 996.0 | 993.9 | 991.7 | 989.5 | 989.5 |
| 5° | 1017.7 | 1013.4 | 1011.2 | 1013.4 | 1015.6 | 1011.2 | 1011.2 | 1011.2 | 1004.7 | 1002.6 | 998.2 |
| 7.5° | 1026.4 | 1019.9 | 1019.9 | 1024.3 | 1028.6 | 1030.8 | 1035.1 | 1032.9 | 1026.4 | 1022.1 | 1013.4 |
| 10° | 1054.6 | 1046.0 | 1046.0 | 1046.0 | 1050.3 | 1054.6 | 1059.0 | 1061.1 | 1059.0 | 1056.8 | 1050.3 |
| 12.5° | 1098.0 | 1089.4 | 1089.4 | 1089.4 | 1089.4 | 1087.2 | 1093.7 | 1095.9 | 1100.2 | 1100.2 | 1089.4 |
| 15° | 1156.6 | 1145.8 | 1141.4 | 1132.8 | 1130.6 | 1126.3 | 1134.9 | 1134.9 | 1141.4 | 1143.6 | 1132.8 |
| 17.5° | 1213.1 | 1200.0 | 1195.7 | 1187.0 | 1178.3 | 1167.5 | 1176.2 | 1178.3 | 1191.4 | 1193.5 | 1176.2 |
| 20° | 1271.6 | 1267.3 | 1260.8 | 1247.8 | 1232.6 | 1221.7 | 1230.4 | 1228.2 | 1239.1 | 1243.4 | 1221.7 |
| 22.5° | 1347.6 | 1336.7 | 1332.4 | 1315.0 | 1297.7 | 1286.8 | 1286.8 | 1291.2 | 1302.0 | 1302.0 | 1269.5 |
| 25° | 1438.7 | 1423.5 | 1412.7 | 1393.2 | 1371.5 | 1358.4 | 1360.6 | 1365.0 | 1380.1 | 1369.3 | 1319.4 |
| 27.5° | 1551.6 | 1536.4 | 1521.2 | 1482.1 | 1460.4 | 1434.4 | 1432.2 | 1436.6 | 1460.4 | 1432.2 | 1367.1 |
| 30° | 1657.9 | 1651.4 | 1638.4 | 1608.0 | 1573.3 | 1529.9 | 1510.3 | 1512.5 | 1529.9 | 1490.8 | 1408.4 |
| 32.5° | 1749.1 | 1740.4 | 1733.9 | 1712.2 | 1688.3 | 1636.2 | 1610.2 | 1612.3 | 1610.2 | 1562.4 | 1458.3 |
| 35° | 1857.6 | 1844.5 | 1840.2 | 1820.7 | 1790.3 | 1755.6 | 1744.7 | 1740.4 | 1727.4 | 1662.3 | 1523.4 |
| 37.5° | 1961.7 | 1948.7 | 1942.2 | 1931.3 | 1907.5 | 1877.1 | 1877.1 | 1874.9 | 1848.9 | 1757.7 | 1588.5 |
| 40° | 2085.4 | 2070.2 | 2050.7 | 2044.2 | 2024.6 | 2002.9 | 1985.6 | 1974.7 | 1929.2 | 1846.7 | 1714.3 |
| 42.5° | 2235.1 | 2226.5 | 2215.6 | 2187.4 | 2157.0 | 2152.7 | 2102.8 | 2098.4 | 2065.9 | 2018.1 | 1892.3 |
| 45° | 2450.0 | 2432.6 | 2417.4 | 2408.7 | 2371.9 | 2332.8 | 2263.4 | 2246.0 | 2246.0 | 2235.1 | 2100.6 |
| 47.5° | 2667.0 | 2636.6 | 2658.3 | 2651.8 | 2643.1 | 2599.7 | 2465.2 | 2467.3 | 2463.0 | 2491.2 | 2406.6 |
| 50° | 2812.4 | 2795.0 | 2855.8 | 2884.0 | 2944.7 | 2944.7 | 2751.6 | 2727.7 | 2745.1 | 2827.6 | 2719.1 |
| 52.5° | 2925.2 | 2914.4 | 2983.8 | 3094.5 | 3274.6 | 3292.0 | 3092.3 | 3042.4 | 3066.3 | 3183.4 | 3140.0 |
| 55° | 3016.4 | 3005.5 | 3085.8 | 3278.9 | 3567.5 | 3673.9 | 3485.1 | 3463.4 | 3415.6 | 3541.5 | 3554.5 |
| 57.5° | 3070.6 | 3046.7 | 3168.3 | 3426.5 | 3806.3 | 4051.5 | 3945.1 | 3938.6 | 3828.0 | 3945.1 | 4003.7 |
| 60° | 2988.1 | 2973.0 | 3140.0 | 3487.3 | 3999.4 | 4407.4 | 4485.5 | 4485.5 | 4288.0 | 4350.9 | 4422.5 |
| 62.5° | 2721.2 | 2701.7 | 2877.5 | 3346.2 | 4023.3 | 4698.1 | 5021.5 | 4995.4 | 4730.7 | 4728.5 | 4665.6 |
| 65° | 2213.4 | 2189.6 | 2387.0 | 2881.8 | 3721.6 | 4732.9 | 5383.9 | 5368.7 | 5062.7 | 4975.9 | 4680.8 |
| 67° | 1608.0 | 1592.8 | 1762.1 | 2252.5 | 3135.7 | 4431.2 | 5429.4 | 5442.5 | 5195.1 | 5010.6 | 4461.6 |
| 67.5° | 1443.1 | 1440.9 | 1582.0 | 2068.0 | 2964.3 | 4320.6 | 5399.1 | 5412.1 | 5192.9 | 4982.4 | 4374.8 |
| 70° | 672.7 | 703.1 | 835.5 | 1184.8 | 1998.6 | 3402.6 | 4900.0 | 4949.9 | 4915.1 | 4656.9 | 3684.7 |
| 72.5° | 312.5 | 325.5 | 384.1 | 572.9 | 1074.2 | 2193.9 | 3971.2 | 4090.5 | 4242.4 | 3995.0 | 2918.7 |
| 75° | 193.1 | 197.5 | 230.0 | 297.3 | 505.6 | 1054.6 | 2827.6 | 2957.8 | 3187.8 | 3005.5 | 1866.2 |
| 77.5° | 151.9 | 154.1 | 175.8 | 212.7 | 295.1 | 453.5 | 1551.6 | 1714.3 | 2013.8 | 1777.3 | 939.6 |
| 80° | 112.8 | 117.2 | 134.5 | 164.9 | 208.3 | 232.2 | 659.7 | 720.5 | 972.2 | 744.3 | 390.6 |
| 82.5° | 82.5 | 86.8 | 104.2 | 119.4 | 145.4 | 147.6 | 269.1 | 284.3 | 416.6 | 301.6 | 169.3 |
| 85° | 69.4 | 69.4 | 80.3 | 89.0 | 97.7 | 82.5 | 132.4 | 130.2 | 160.6 | 136.7 | 67.3 |
| 87.5° | 32.6 | 34.7 | 76.0 | 56.4 | 47.7 | 34.7 | 39.1 | 41.2 | 49.9 | 54.3 | 26.0 |
| 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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 CATALOG NUMBER: ARCH-S-PA2-50-740-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 | 989.5 |
| 2.5° | 987.4 | 987.4 | 987.4 | 989.5 | 991.7 | 991.7 | 993.9 | 993.9 | 996.0 | 998.2 | 1002.6 |
| 5° | 996.0 | 996.0 | 993.9 | 996.0 | 1000.4 | 1002.6 | 1006.9 | 1011.2 | 1015.6 | 1019.9 | 1022.1 |
| 7.5° | 1013.4 | 1011.2 | 1011.2 | 1011.2 | 1015.6 | 1019.9 | 1026.4 | 1030.8 | 1037.3 | 1039.4 | 1043.8 |
| 10° | 1046.0 | 1041.6 | 1041.6 | 1043.8 | 1046.0 | 1039.4 | 1037.3 | 1035.1 | 1041.6 | 1046.0 | 1050.3 |
| 12.5° | 1085.0 | 1080.7 | 1078.5 | 1072.0 | 1063.3 | 1050.3 | 1039.4 | 1030.8 | 1032.9 | 1037.3 | 1043.8 |
| 15° | 1126.3 | 1117.6 | 1113.2 | 1098.0 | 1076.3 | 1048.1 | 1030.8 | 1019.9 | 1019.9 | 1019.9 | 1026.4 |
| 17.5° | 1169.7 | 1161.0 | 1143.6 | 1115.4 | 1074.2 | 1035.1 | 1013.4 | 993.9 | 985.2 | 983.0 | 987.4 |
| 20° | 1210.9 | 1197.9 | 1169.7 | 1126.3 | 1061.1 | 1009.1 | 980.9 | 948.3 | 935.3 | 926.6 | 930.9 |
| 22.5° | 1249.9 | 1232.6 | 1193.5 | 1126.3 | 1039.4 | 970.0 | 920.1 | 876.7 | 855.0 | 850.7 | 852.8 |
| 25° | 1291.2 | 1269.5 | 1217.4 | 1113.2 | 991.7 | 911.4 | 842.0 | 796.4 | 768.2 | 763.9 | 770.4 |
| 27.5° | 1332.4 | 1299.9 | 1236.9 | 1078.5 | 937.5 | 831.1 | 757.3 | 713.9 | 698.8 | 690.1 | 692.2 |
| 30° | 1367.1 | 1336.7 | 1256.5 | 1030.8 | 863.7 | 737.8 | 670.5 | 651.0 | 640.2 | 635.8 | 635.8 |
| 32.5° | 1412.7 | 1384.5 | 1269.5 | 974.3 | 776.9 | 653.2 | 609.8 | 594.6 | 585.9 | 575.1 | 577.2 |
| 35° | 1469.1 | 1443.1 | 1263.0 | 902.7 | 694.4 | 596.8 | 562.0 | 540.3 | 520.8 | 505.6 | 503.4 |
| 37.5° | 1545.1 | 1525.5 | 1230.4 | 815.9 | 618.5 | 555.5 | 520.8 | 492.6 | 464.4 | 440.5 | 436.2 |
| 40° | 1670.9 | 1625.4 | 1182.7 | 720.5 | 566.4 | 523.0 | 481.7 | 447.0 | 412.3 | 386.3 | 379.8 |
| 42.5° | 1831.5 | 1736.0 | 1117.6 | 622.8 | 523.0 | 488.3 | 447.0 | 401.5 | 368.9 | 345.0 | 345.0 |
| 45° | 2018.1 | 1855.4 | 1039.4 | 549.0 | 477.4 | 453.5 | 403.6 | 364.6 | 345.0 | 329.8 | 327.7 |
| 47.5° | 2239.5 | 1974.7 | 939.6 | 490.4 | 440.5 | 423.2 | 373.2 | 349.4 | 336.4 | 323.3 | 321.2 |
| 50° | 2536.8 | 2135.3 | 865.8 | 440.5 | 403.6 | 388.4 | 364.6 | 345.0 | 332.0 | 323.3 | 321.2 |
| 52.5° | 2877.5 | 2341.5 | 813.8 | 401.5 | 373.2 | 366.7 | 362.4 | 347.2 | 334.2 | 327.7 | 325.5 |
| 55° | 3246.4 | 2595.4 | 763.9 | 368.9 | 349.4 | 358.1 | 366.7 | 351.5 | 342.9 | 334.2 | 329.8 |
| 57.5° | 3593.6 | 2810.2 | 683.6 | 340.7 | 332.0 | 347.2 | 364.6 | 353.7 | 342.9 | 336.4 | 334.2 |
| 60° | 3830.1 | 2918.7 | 572.9 | 314.7 | 314.7 | 332.0 | 358.1 | 342.9 | 332.0 | 334.2 | 334.2 |
| 62.5° | 3906.1 | 2877.5 | 453.5 | 290.8 | 297.3 | 314.7 | 338.5 | 329.8 | 325.5 | 336.4 | 336.4 |
| 65° | 3793.2 | 2710.4 | 362.4 | 271.3 | 279.9 | 293.0 | 327.7 | 336.4 | 349.4 | 373.2 | 375.4 |
| 67° | 3498.1 | 2441.3 | 306.0 | 256.1 | 264.7 | 286.4 | 340.7 | 371.1 | 371.1 | 397.1 | 397.1 |
| 67.5° | 3411.3 | 2350.2 | 297.3 | 251.7 | 262.6 | 286.4 | 347.2 | 379.8 | 371.1 | 401.5 | 401.5 |
| 70° | 2773.3 | 1848.9 | 251.7 | 238.7 | 253.9 | 301.6 | 375.4 | 381.9 | 362.4 | 390.6 | 388.4 |
| 72.5° | 2057.2 | 1336.7 | 230.0 | 225.7 | 236.5 | 284.3 | 373.2 | 366.7 | 338.5 | 347.2 | 340.7 |
| 75° | 1271.6 | 774.7 | 212.7 | 208.3 | 214.8 | 251.7 | 345.0 | 334.2 | 301.6 | 295.1 | 288.6 |
| 77.5° | 614.1 | 392.8 | 182.3 | 188.8 | 195.3 | 219.2 | 303.8 | 293.0 | 264.7 | 249.6 | 247.4 |
| 80° | 266.9 | 201.8 | 156.2 | 167.1 | 169.3 | 186.6 | 251.7 | 238.7 | 212.7 | 188.8 | 188.8 |
| 82.5° | 132.4 | 112.8 | 123.7 | 138.9 | 134.5 | 149.7 | 197.5 | 175.8 | 156.2 | 130.2 | 125.9 |
| 85° | 60.8 | 65.1 | 91.1 | 104.2 | 91.1 | 93.3 | 134.5 | 123.7 | 97.7 | 73.8 | 76.0 |
| 87.5° | 21.7 | 30.4 | 52.1 | 62.9 | 45.6 | 43.4 | 71.6 | 52.1 | 30.4 | 8.7 | 10.9 |
| 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)