

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: P573407

Luminaire Tested: **ARCH-S-PA2-70-740-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573407  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-740-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10669 lumens  
Efficiency: N/A  
Efficacy: 145.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

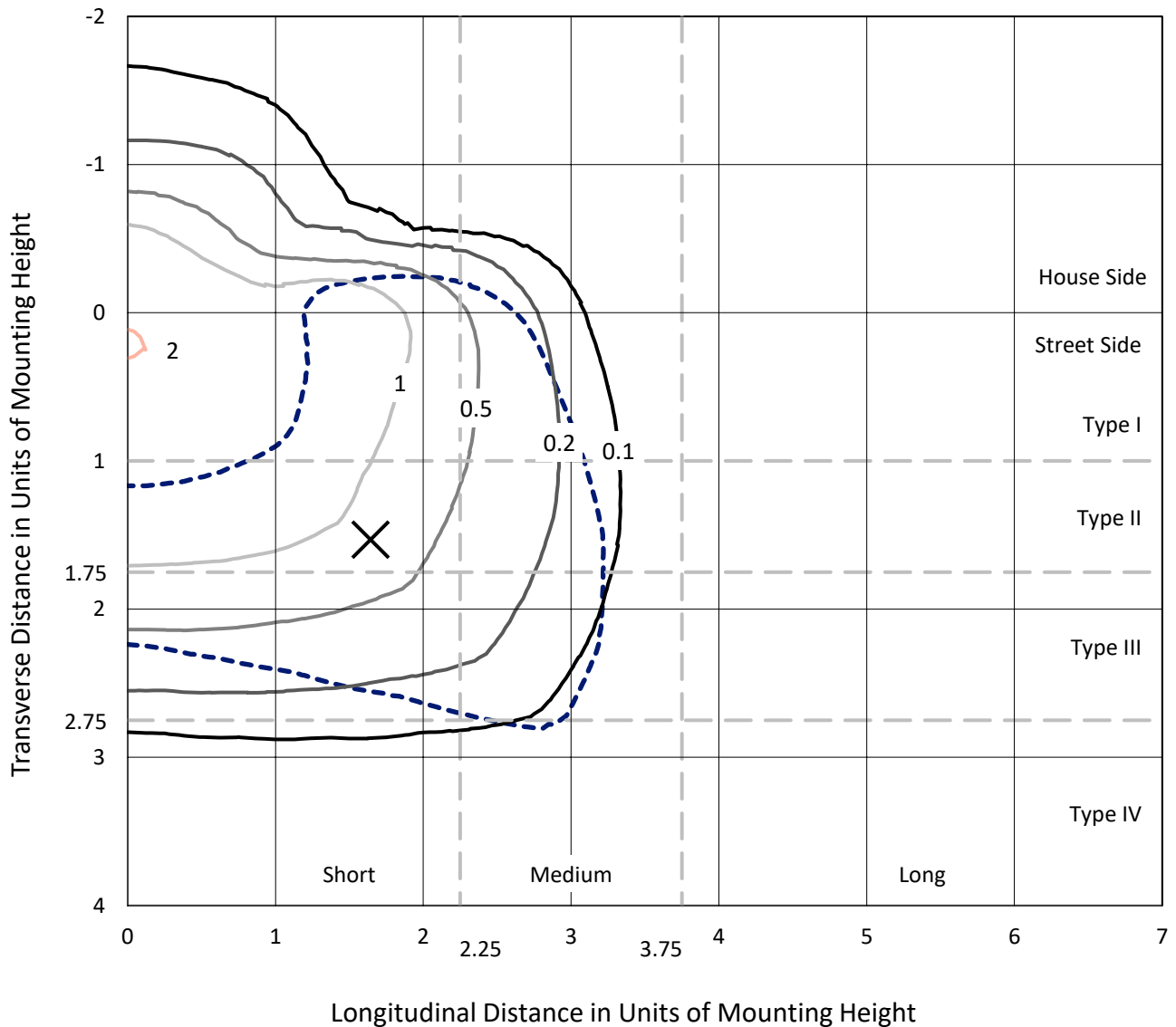
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P573407  
 CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

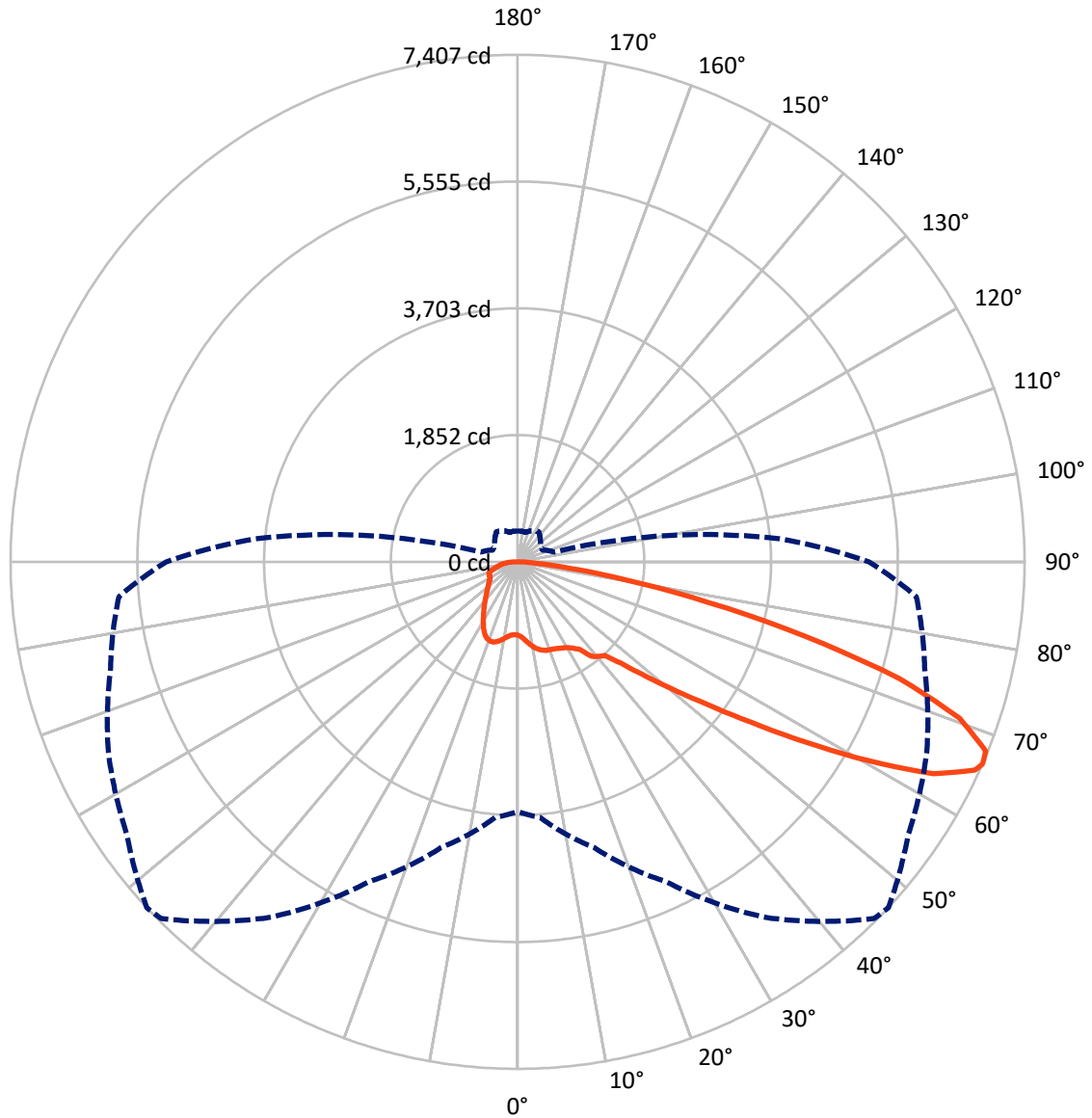
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P573407  
CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P573407  
 CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W

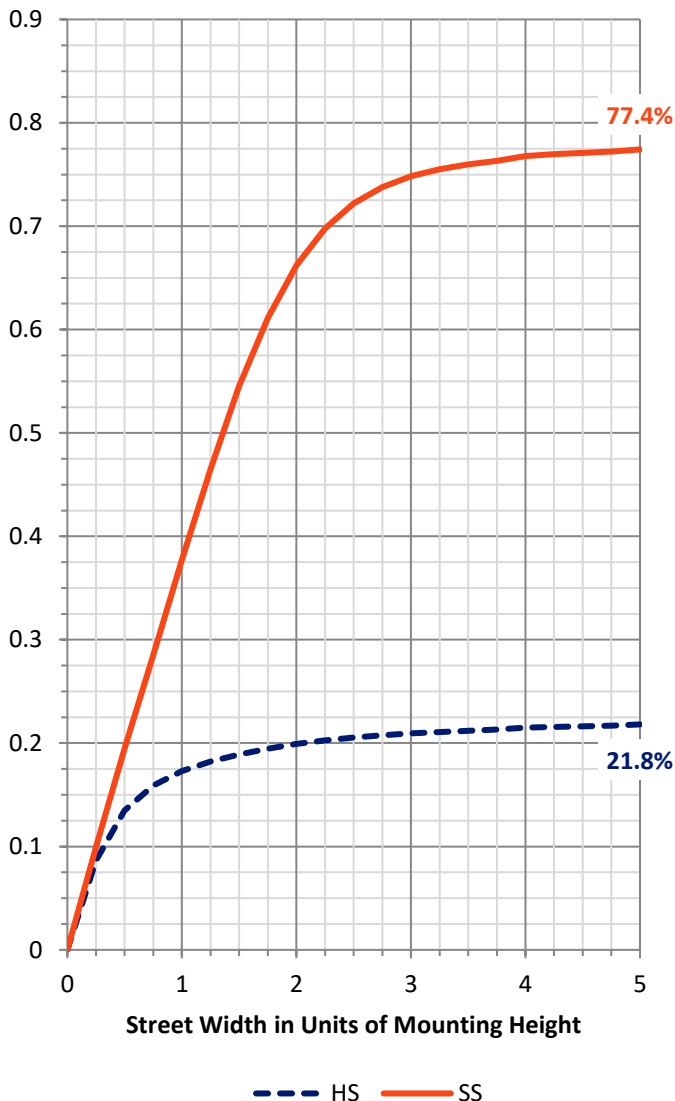
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2372.0   | 0.0    | 2372.0  |
|                    | % Fixture | 22.2     | 0.0    | 22.2    |
| <b>Street Side</b> | Lumens    | 8297.0   | 0.0    | 8297.0  |
|                    | % Fixture | 77.8     | 0.0    | 77.8    |
| <b>Total</b>       | Lumens    | 10669.0  | 0.0    | 10669.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 109.1   | 1.0       |
| 10°-20°   | 358.1   | 3.4       |
| 20°-30°   | 597.2   | 5.6       |
| 30°-40°   | 867.3   | 8.1       |
| 40°-50°   | 1326.4  | 12.4      |
| 50°-60°   | 2507.2  | 23.5      |
| 60°-70°   | 3239.7  | 30.4      |
| 70°-80°   | 1456.2  | 13.6      |
| 80°-90°   | 207.7   | 1.9       |
| 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°    | 10669.0 | 100.0     |
| 0°-180°   | 10669.0 | 100.0     |

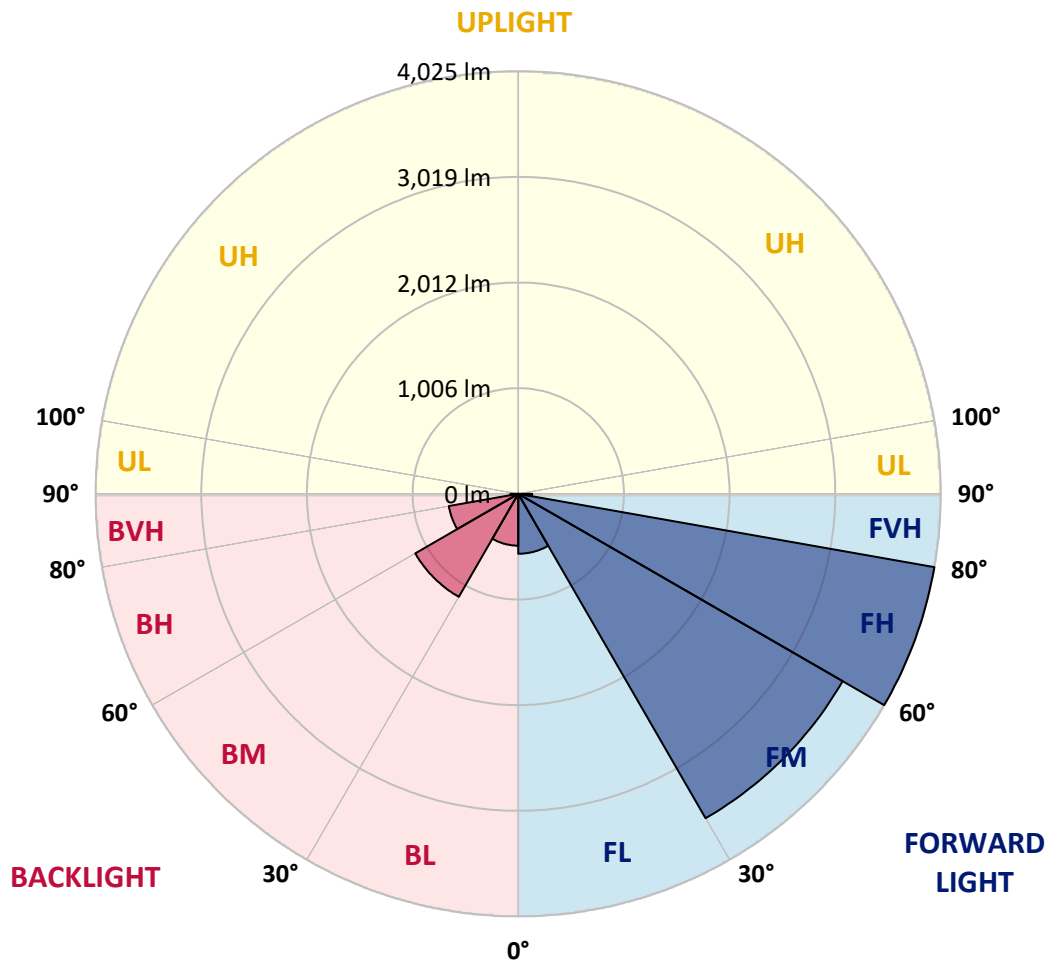


REPORT NUMBER: P573407  
 CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 570.8  | 5.4       |                         |      |         |
| FM   | (30°-60°)   | 3567.9 | 33.4      |                         |      |         |
| FH   | (60°-80°)   | 4024.8 | 37.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 133.5  | 1.3       |                         |      | G2/225  |
| BL   | (0°-30°)    | 493.6  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1133.0 | 10.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 671.2  | 6.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 74.2   | 0.7       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**  
 Type III Short





REPORT NUMBER: P573407

CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 47°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 |
| 2.5°  | 1133.4 | 1124.7 | 1118.9 | 1116.0 | 1110.2 | 1098.6 | 1098.6 | 1095.7 | 1084.2 | 1078.4 | 1075.5 |
| 5°    | 1223.3 | 1217.5 | 1203.0 | 1191.4 | 1174.0 | 1150.8 | 1147.9 | 1130.5 | 1107.3 | 1090.0 | 1078.4 |
| 7.5°  | 1310.3 | 1304.5 | 1290.0 | 1272.6 | 1243.6 | 1214.6 | 1205.9 | 1182.7 | 1145.0 | 1118.9 | 1098.6 |
| 10°   | 1385.6 | 1376.9 | 1359.5 | 1336.4 | 1304.5 | 1272.6 | 1263.9 | 1237.8 | 1200.1 | 1162.4 | 1127.6 |
| 12.5° | 1434.9 | 1429.1 | 1408.8 | 1379.8 | 1345.0 | 1313.2 | 1307.4 | 1284.2 | 1246.5 | 1205.9 | 1162.4 |
| 15°   | 1458.1 | 1455.2 | 1432.0 | 1403.0 | 1368.2 | 1342.1 | 1339.2 | 1319.0 | 1287.1 | 1246.5 | 1197.2 |
| 17.5° | 1452.3 | 1449.4 | 1429.1 | 1400.1 | 1374.0 | 1359.5 | 1359.5 | 1345.0 | 1319.0 | 1284.2 | 1232.0 |
| 20°   | 1423.3 | 1423.3 | 1405.9 | 1385.6 | 1371.1 | 1368.2 | 1368.2 | 1365.3 | 1347.9 | 1319.0 | 1266.8 |
| 22.5° | 1394.3 | 1394.3 | 1382.7 | 1368.2 | 1365.3 | 1376.9 | 1379.8 | 1385.6 | 1379.8 | 1356.6 | 1310.3 |
| 25°   | 1400.1 | 1397.2 | 1382.7 | 1365.3 | 1368.2 | 1394.3 | 1400.1 | 1414.6 | 1411.7 | 1394.3 | 1353.7 |
| 27.5° | 1463.9 | 1461.0 | 1423.3 | 1388.5 | 1385.6 | 1417.5 | 1423.3 | 1443.6 | 1443.6 | 1429.1 | 1403.0 |
| 30°   | 1623.3 | 1629.1 | 1559.6 | 1472.6 | 1429.1 | 1449.4 | 1455.2 | 1478.4 | 1490.0 | 1495.8 | 1475.5 |
| 32.5° | 1866.8 | 1858.1 | 1753.8 | 1611.7 | 1516.1 | 1495.8 | 1504.5 | 1524.8 | 1565.4 | 1577.0 | 1527.7 |
| 35°   | 2113.2 | 2119.0 | 2017.6 | 1837.8 | 1655.2 | 1579.9 | 1574.1 | 1603.0 | 1663.9 | 1611.7 | 1524.8 |
| 37.5° | 2342.2 | 2333.5 | 2214.7 | 2020.5 | 1837.8 | 1750.9 | 1753.8 | 1742.2 | 1690.0 | 1585.6 | 1545.1 |
| 40°   | 2591.5 | 2568.3 | 2469.8 | 2220.5 | 1988.6 | 1843.6 | 1817.6 | 1719.0 | 1675.5 | 1632.0 | 1626.2 |
| 42.5° | 2837.9 | 2840.8 | 2759.7 | 2513.3 | 2168.3 | 1910.3 | 1869.7 | 1768.3 | 1797.3 | 1788.6 | 1782.8 |
| 45°   | 3148.1 | 3148.1 | 3066.9 | 2837.9 | 2452.4 | 2159.6 | 2104.5 | 1982.8 | 2029.2 | 2064.0 | 2133.5 |
| 47.5° | 3432.2 | 3414.8 | 3391.6 | 3197.4 | 2823.4 | 2484.3 | 2461.1 | 2321.9 | 2443.7 | 2551.0 | 2693.0 |
| 50°   | 3733.7 | 3710.5 | 3696.0 | 3577.1 | 3310.4 | 2977.1 | 2907.5 | 2762.6 | 3029.3 | 3229.3 | 3493.1 |
| 52.5° | 4203.3 | 4162.7 | 4087.3 | 4020.6 | 3916.3 | 3530.7 | 3443.8 | 3336.5 | 3681.5 | 3933.7 | 4472.9 |
| 55°   | 4626.5 | 4591.7 | 4519.2 | 4568.5 | 4554.0 | 4203.3 | 4127.9 | 4026.4 | 4400.4 | 4707.7 | 5325.1 |
| 57.5° | 4783.0 | 4785.9 | 4884.5 | 5148.3 | 5287.4 | 5084.5 | 4977.3 | 4875.8 | 5191.8 | 5333.8 | 5890.4 |
| 60°   | 4855.5 | 4846.8 | 5101.9 | 5530.9 | 5983.1 | 6044.0 | 5907.8 | 5699.1 | 5817.9 | 5826.6 | 6368.7 |
| 62.5° | 4699.0 | 4722.2 | 5072.9 | 5690.4 | 6400.6 | 6838.3 | 6818.0 | 6452.7 | 6342.6 | 6220.8 | 6496.2 |
| 65°   | 4104.7 | 4136.6 | 4652.6 | 5406.3 | 6467.2 | 7319.5 | 7339.8 | 6913.7 | 6606.4 | 6267.2 | 6133.9 |
| 66°   | 3652.5 | 3748.2 | 4322.1 | 5159.9 | 6345.5 | 7368.8 | 7406.5 | 6962.9 | 6594.8 | 6157.1 | 5846.9 |
| 67.5° | 3064.0 | 3058.2 | 3698.9 | 4617.8 | 6006.3 | 7325.3 | 7374.6 | 6893.4 | 6438.3 | 5832.4 | 5272.9 |
| 70°   | 1875.5 | 1933.5 | 2484.3 | 3446.7 | 4971.5 | 6783.2 | 6849.9 | 6403.5 | 5762.8 | 4939.6 | 3898.9 |
| 72.5° | 962.4  | 1058.1 | 1420.4 | 2240.8 | 3609.0 | 5606.3 | 5832.4 | 5377.3 | 4710.6 | 3574.2 | 2379.9 |
| 75°   | 510.2  | 504.4  | 669.6  | 1214.6 | 2304.6 | 4206.2 | 4325.0 | 4032.2 | 3255.4 | 2130.6 | 1211.7 |
| 77.5° | 272.5  | 287.0  | 350.8  | 623.2  | 1266.8 | 2687.2 | 2837.9 | 2600.2 | 1855.2 | 1090.0 | 579.8  |
| 80°   | 185.5  | 194.2  | 237.7  | 350.8  | 687.0  | 1458.1 | 1597.2 | 1385.6 | 971.1  | 516.0  | 272.5  |
| 82.5° | 118.9  | 124.6  | 162.3  | 217.4  | 411.6  | 707.3  | 745.0  | 710.2  | 475.4  | 292.8  | 165.2  |
| 85°   | 72.5   | 75.4   | 98.6   | 139.1  | 258.0  | 287.0  | 298.6  | 301.5  | 266.7  | 191.3  | 89.9   |
| 87.5° | 34.8   | 37.7   | 55.1   | 69.6   | 121.7  | 104.4  | 95.7   | 98.6   | 147.8  | 113.1  | 40.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P573407

CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 | 1072.6 |
| 2.5°  | 1072.6 | 1069.7 | 1063.9 | 1061.0 | 1063.9 | 1063.9 | 1063.9 | 1066.8 | 1072.6 | 1072.6 | 1075.5 |
| 5°    | 1072.6 | 1066.8 | 1061.0 | 1061.0 | 1066.8 | 1072.6 | 1078.4 | 1090.0 | 1095.7 | 1098.6 | 1098.6 |
| 7.5°  | 1087.1 | 1081.3 | 1075.5 | 1075.5 | 1084.2 | 1095.7 | 1107.3 | 1121.8 | 1136.3 | 1147.9 | 1147.9 |
| 10°   | 1116.0 | 1107.3 | 1101.5 | 1104.4 | 1118.9 | 1133.4 | 1147.9 | 1165.3 | 1179.8 | 1194.3 | 1194.3 |
| 12.5° | 1147.9 | 1139.2 | 1130.5 | 1136.3 | 1156.6 | 1174.0 | 1188.5 | 1197.2 | 1211.7 | 1223.3 | 1223.3 |
| 15°   | 1179.8 | 1165.3 | 1162.4 | 1174.0 | 1194.3 | 1205.9 | 1211.7 | 1211.7 | 1217.5 | 1229.1 | 1229.1 |
| 17.5° | 1214.6 | 1200.1 | 1197.2 | 1208.8 | 1226.2 | 1226.2 | 1214.6 | 1205.9 | 1203.0 | 1211.7 | 1214.6 |
| 20°   | 1249.4 | 1234.9 | 1234.9 | 1243.6 | 1240.7 | 1220.4 | 1200.1 | 1185.6 | 1174.0 | 1182.7 | 1185.6 |
| 22.5° | 1292.9 | 1278.4 | 1272.6 | 1261.0 | 1234.9 | 1194.3 | 1162.4 | 1145.0 | 1136.3 | 1142.1 | 1147.9 |
| 25°   | 1336.4 | 1324.8 | 1310.3 | 1269.7 | 1208.8 | 1145.0 | 1104.4 | 1090.0 | 1092.9 | 1104.4 | 1110.2 |
| 27.5° | 1391.4 | 1385.6 | 1350.8 | 1263.9 | 1162.4 | 1075.5 | 1034.9 | 1032.0 | 1043.6 | 1061.0 | 1069.7 |
| 30°   | 1458.1 | 1449.4 | 1388.5 | 1246.5 | 1098.6 | 994.3  | 965.3  | 971.1  | 988.5  | 1003.0 | 1011.7 |
| 32.5° | 1504.5 | 1498.7 | 1405.9 | 1205.9 | 1020.4 | 921.8  | 898.6  | 898.6  | 907.3  | 927.6  | 936.3  |
| 35°   | 1519.0 | 1542.2 | 1417.5 | 1145.0 | 927.6  | 858.0  | 834.9  | 820.4  | 820.4  | 837.8  | 843.6  |
| 37.5° | 1568.3 | 1620.4 | 1423.3 | 1063.9 | 852.2  | 800.1  | 771.1  | 745.0  | 736.3  | 733.4  | 733.4  |
| 40°   | 1681.3 | 1742.2 | 1420.4 | 959.5  | 779.8  | 742.1  | 707.3  | 678.3  | 655.1  | 623.2  | 626.1  |
| 42.5° | 1878.4 | 1924.8 | 1411.7 | 849.4  | 716.0  | 689.9  | 655.1  | 620.3  | 582.7  | 547.9  | 545.0  |
| 45°   | 2258.2 | 2188.6 | 1388.5 | 753.7  | 658.0  | 643.5  | 611.6  | 571.1  | 524.7  | 492.8  | 492.8  |
| 47.5° | 2858.2 | 2666.9 | 1374.0 | 663.8  | 605.9  | 603.0  | 574.0  | 530.5  | 484.1  | 460.9  | 458.0  |
| 50°   | 3681.5 | 3327.8 | 1397.2 | 600.1  | 559.5  | 568.2  | 545.0  | 504.4  | 466.7  | 446.4  | 443.5  |
| 52.5° | 4626.5 | 4038.0 | 1423.3 | 559.5  | 524.7  | 542.1  | 530.5  | 492.8  | 455.1  | 437.7  | 434.8  |
| 55°   | 5357.0 | 4614.9 | 1385.6 | 521.8  | 489.9  | 516.0  | 516.0  | 481.2  | 449.3  | 431.9  | 431.9  |
| 57.5° | 5870.1 | 4846.8 | 1255.2 | 487.0  | 460.9  | 492.8  | 501.5  | 475.4  | 446.4  | 440.6  | 440.6  |
| 60°   | 6090.4 | 4835.2 | 1026.2 | 455.1  | 440.6  | 469.6  | 492.8  | 469.6  | 452.2  | 466.7  | 469.6  |
| 62.5° | 5971.5 | 4583.0 | 797.2  | 431.9  | 426.1  | 463.8  | 501.5  | 492.8  | 472.5  | 484.1  | 489.9  |
| 65°   | 5435.3 | 4139.5 | 600.1  | 411.6  | 408.7  | 466.7  | 524.7  | 507.3  | 458.0  | 460.9  | 463.8  |
| 66°   | 5133.8 | 3840.9 | 550.8  | 405.8  | 402.9  | 469.6  | 536.3  | 501.5  | 446.4  | 452.2  | 449.3  |
| 67.5° | 4490.3 | 3371.3 | 484.1  | 394.2  | 391.3  | 469.6  | 550.8  | 489.9  | 431.9  | 440.6  | 431.9  |
| 70°   | 3293.0 | 2385.7 | 414.5  | 379.7  | 373.9  | 460.9  | 547.9  | 466.7  | 400.0  | 394.2  | 379.7  |
| 72.5° | 1910.3 | 1443.6 | 368.1  | 362.4  | 347.9  | 405.8  | 513.1  | 429.0  | 365.2  | 347.9  | 333.4  |
| 75°   | 939.2  | 733.4  | 327.6  | 342.1  | 304.4  | 356.6  | 463.8  | 397.1  | 336.3  | 313.1  | 304.4  |
| 77.5° | 431.9  | 371.0  | 295.7  | 313.1  | 269.6  | 307.3  | 423.2  | 362.4  | 298.6  | 263.8  | 255.1  |
| 80°   | 234.8  | 231.9  | 249.3  | 260.9  | 226.1  | 269.6  | 373.9  | 316.0  | 252.2  | 214.5  | 202.9  |
| 82.5° | 144.9  | 147.8  | 182.6  | 200.0  | 176.8  | 234.8  | 330.5  | 263.8  | 191.3  | 150.7  | 153.6  |
| 85°   | 75.4   | 84.1   | 121.7  | 133.3  | 116.0  | 173.9  | 249.3  | 176.8  | 107.3  | 78.3   | 78.3   |
| 87.5° | 26.1   | 34.8   | 60.9   | 72.5   | 63.8   | 104.4  | 156.5  | 84.1   | 23.2   | 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)