

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: P573053

Luminaire Tested: **ARCH-S-PA2-30-727-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573053  
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-PA2-30-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 320mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

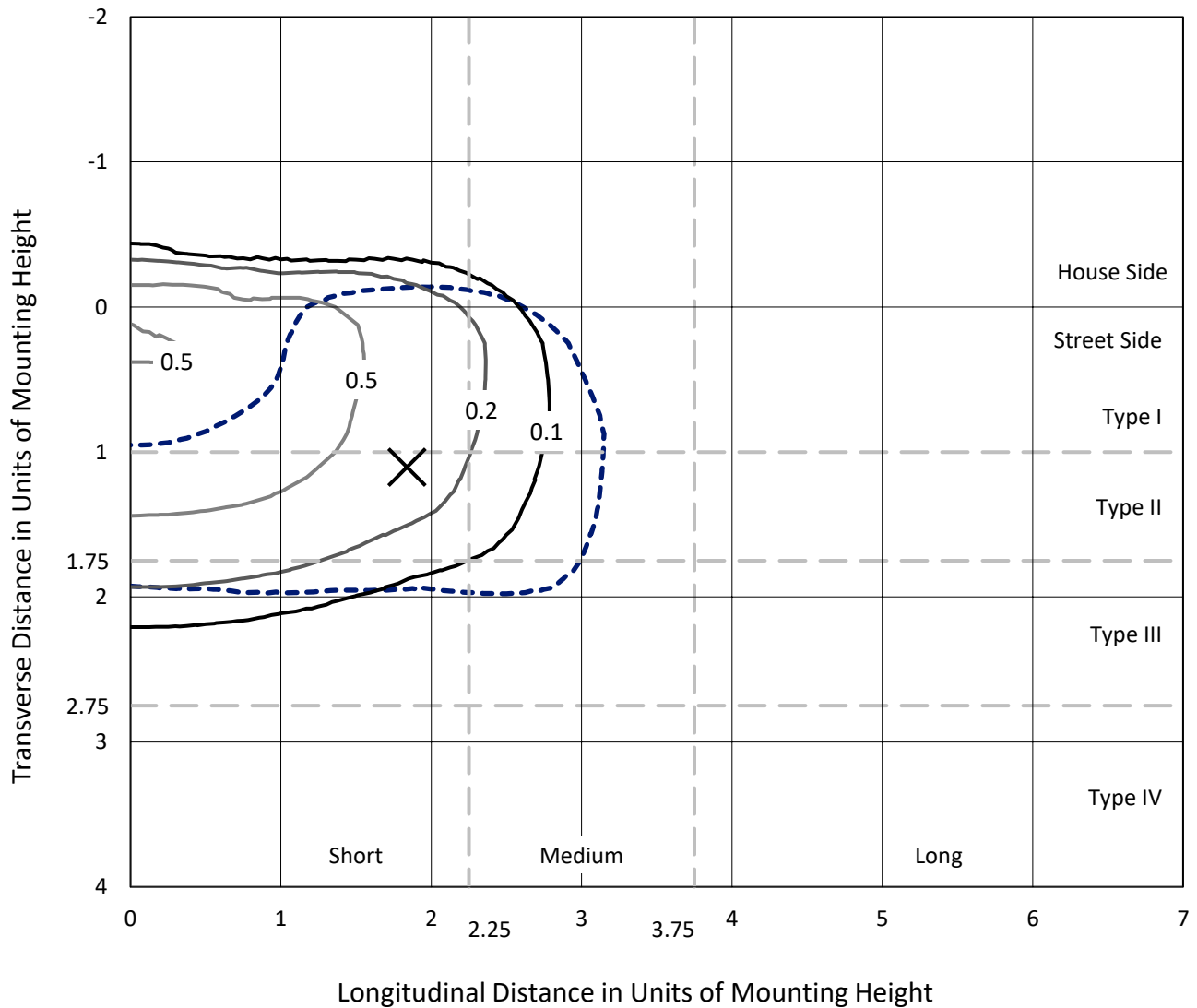
Lumens per Lamp: N/A  
Luminaire Lumens: 3265 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 33.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P573053  
 CATALOG NUMBER: ARCH-S-PA2-30-727-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

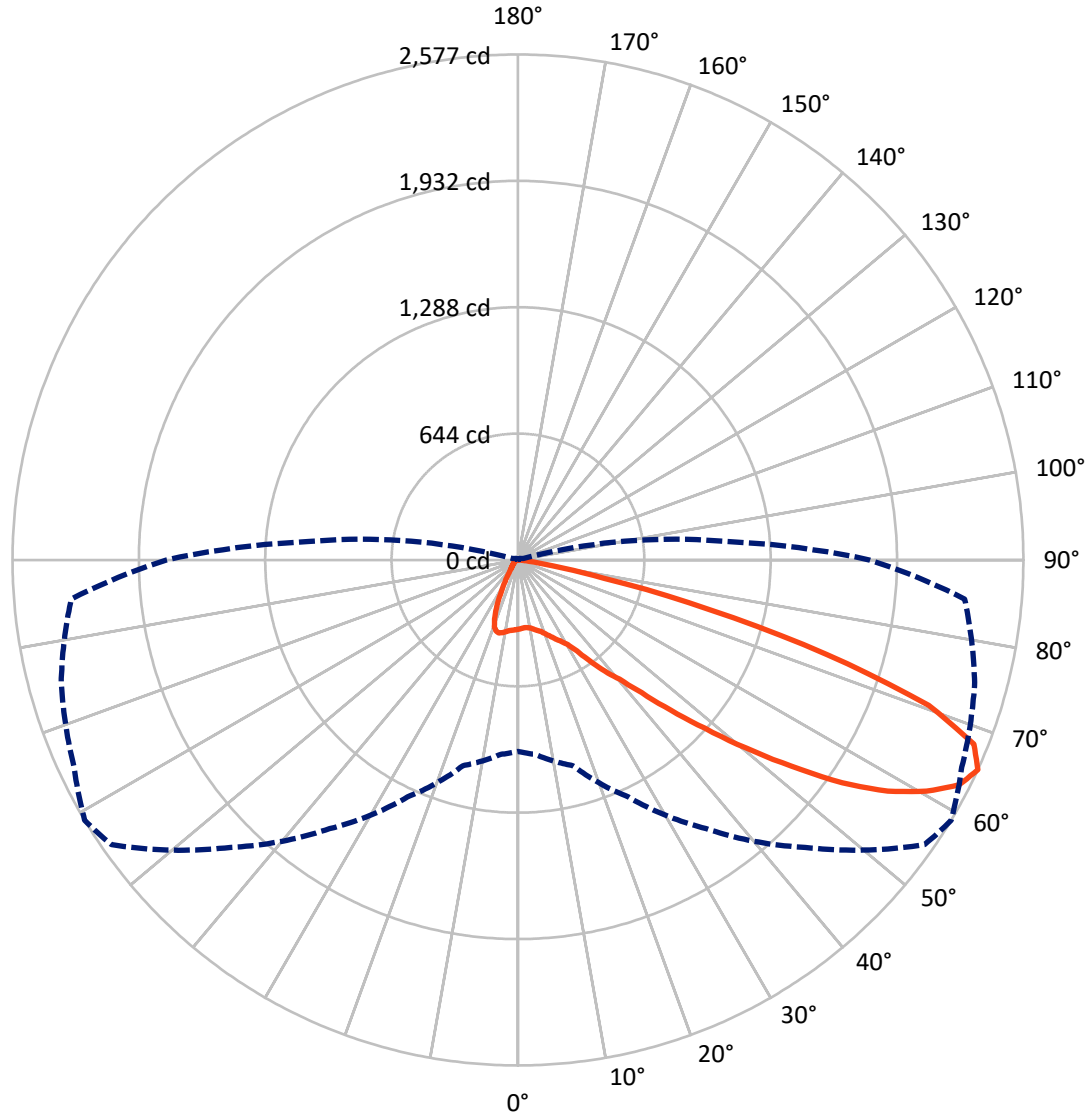
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type III - Short - N/A

REPORT NUMBER: P573053  
CATALOG NUMBER: ARCH-S-PA2-30-727-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P573053  
 CATALOG NUMBER: ARCH-S-PA2-30-727-U-T3-HSS

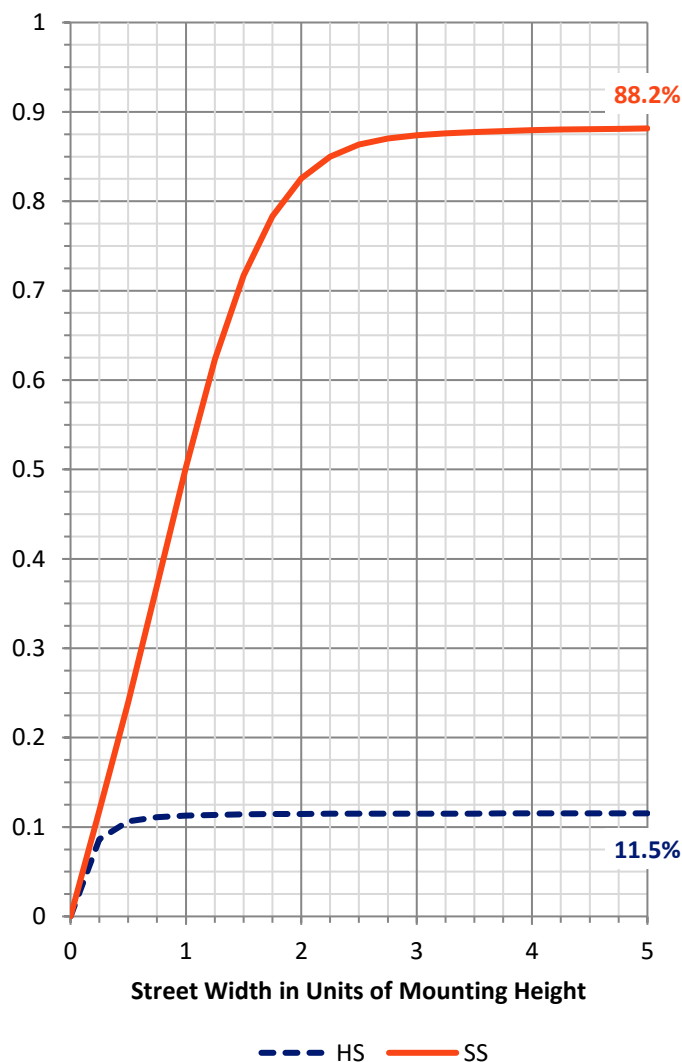
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 380.9    | 0.0    | 380.9  |
|                    | % Fixture | 11.7     | 0.0    | 11.7   |
| <b>Street Side</b> | Lumens    | 2884.1   | 0.0    | 2884.1 |
|                    | % Fixture | 88.3     | 0.0    | 88.3   |
| <b>Total</b>       | Lumens    | 3265.0   | 0.0    | 3265.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 33.3   | 1.0       |
| 10°-20°   | 94.7   | 2.9       |
| 20°-30°   | 160.9  | 4.9       |
| 30°-40°   | 285.0  | 8.7       |
| 40°-50°   | 537.6  | 16.5      |
| 50°-60°   | 909.5  | 27.9      |
| 60°-70°   | 945.6  | 29.0      |
| 70°-80°   | 283.6  | 8.7       |
| 80°-90°   | 14.9   | 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°    | 3265.0 | 100.0     |
| 0°-180°   | 3265.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P573053

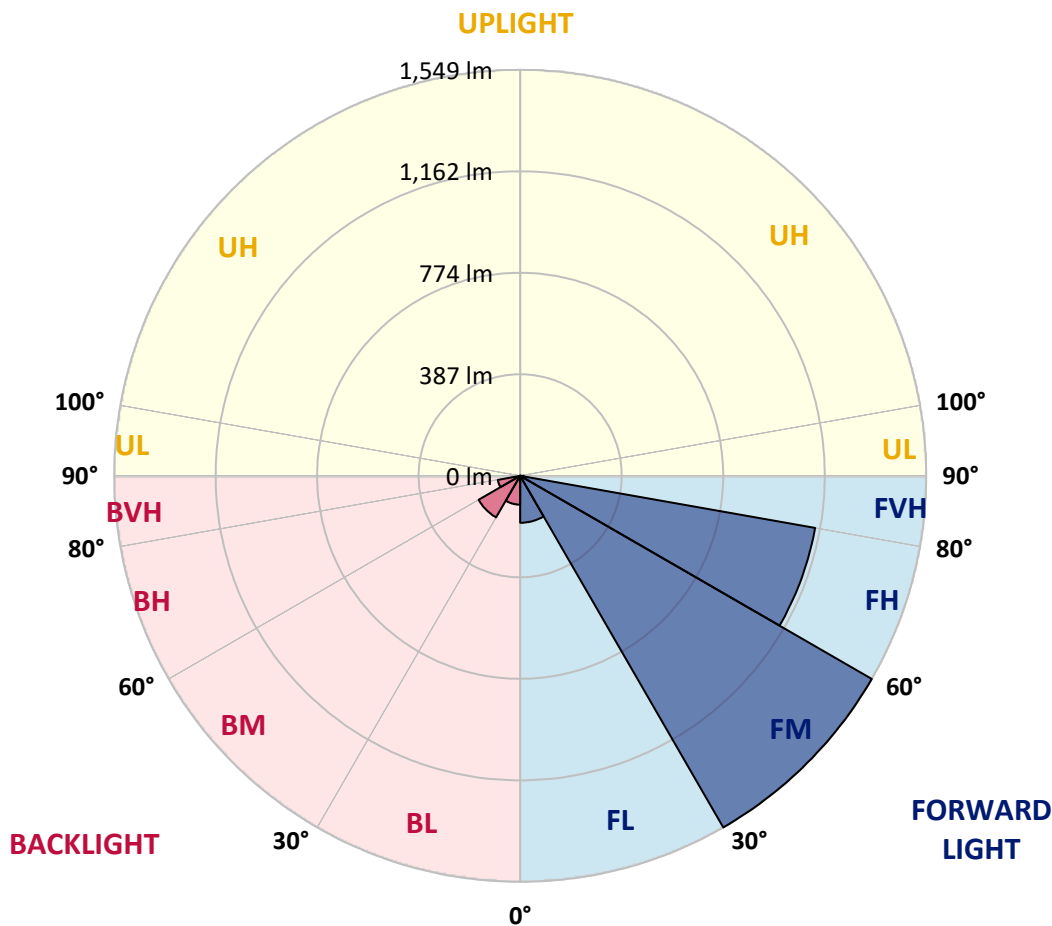
CATALOG NUMBER: ARCH-S-PA2-30-727-U-T3-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 179.1  | 5.5       |                         |      |         |
| FM (30°-60°)   | 1548.9 | 47.4      |                         |      |         |
| FH (60°-80°)   | 1142.5 | 35.0      |                         |      | G1/1800 |
| FVH (80°-90°)  | 13.6   | 0.4       |                         |      | G1/100  |
| BL (0°-30°)    | 109.9  | 3.4       | B0/110                  |      |         |
| BM (30°-60°)   | 183.1  | 5.6       | B0/220                  |      |         |
| BH (60°-80°)   | 86.7   | 2.7       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 1.3    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**

Type III Short





REPORT NUMBER: P573053

CATALOG NUMBER: ARCH-S-PA2-30-727-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 59°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  |
| 2.5°  | 343.3  | 342.1  | 342.1  | 344.5  | 345.7  | 346.9  | 349.3  | 349.3  | 349.3  | 351.6  | 352.8  |
| 5°    | 326.7  | 326.7  | 327.9  | 330.2  | 335.0  | 338.6  | 345.7  | 346.9  | 348.1  | 354.0  | 356.4  |
| 7.5°  | 316.0  | 316.0  | 317.2  | 321.9  | 327.9  | 336.2  | 345.7  | 348.1  | 351.6  | 359.9  | 365.9  |
| 10°   | 314.8  | 313.6  | 316.0  | 320.7  | 327.9  | 338.6  | 349.3  | 352.8  | 359.9  | 370.6  | 379.0  |
| 12.5° | 318.4  | 317.2  | 319.6  | 324.3  | 331.4  | 342.1  | 356.4  | 362.3  | 370.6  | 384.9  | 396.8  |
| 15°   | 320.7  | 319.6  | 321.9  | 327.9  | 336.2  | 349.3  | 365.9  | 373.0  | 383.7  | 403.9  | 415.8  |
| 17.5° | 327.9  | 326.7  | 327.9  | 332.6  | 340.9  | 355.2  | 376.6  | 383.7  | 401.5  | 424.1  | 437.2  |
| 20°   | 359.9  | 358.8  | 351.6  | 349.3  | 350.4  | 363.5  | 390.8  | 402.7  | 424.1  | 452.6  | 462.1  |
| 22.5° | 426.5  | 421.7  | 408.6  | 387.3  | 373.0  | 377.8  | 408.6  | 421.7  | 450.2  | 482.3  | 489.4  |
| 25°   | 515.6  | 512.0  | 493.0  | 456.2  | 415.8  | 403.9  | 428.8  | 446.7  | 481.1  | 516.8  | 514.4  |
| 27.5° | 616.5  | 609.4  | 591.6  | 540.5  | 485.9  | 446.7  | 453.8  | 469.2  | 507.2  | 545.3  | 533.4  |
| 30°   | 704.4  | 702.1  | 681.9  | 639.1  | 575.0  | 516.8  | 491.8  | 500.1  | 534.6  | 575.0  | 560.7  |
| 32.5° | 785.2  | 778.1  | 761.5  | 721.1  | 661.7  | 602.3  | 552.4  | 552.4  | 580.9  | 628.4  | 607.0  |
| 35°   | 874.3  | 869.6  | 849.4  | 809.0  | 752.0  | 681.9  | 636.7  | 632.0  | 655.7  | 709.2  | 662.9  |
| 37.5° | 965.8  | 953.9  | 944.4  | 902.8  | 845.8  | 785.2  | 730.6  | 719.9  | 731.8  | 771.0  | 713.9  |
| 40°   | 1079.8 | 1079.8 | 1058.4 | 1020.4 | 967.0  | 902.8  | 826.8  | 799.5  | 795.9  | 847.0  | 803.0  |
| 42.5° | 1212.9 | 1209.3 | 1191.5 | 1155.9 | 1104.8 | 1045.4 | 949.2  | 924.2  | 921.8  | 983.6  | 931.3  |
| 45°   | 1366.1 | 1363.7 | 1342.4 | 1312.7 | 1277.0 | 1211.7 | 1116.7 | 1091.7 | 1077.5 | 1148.7 | 1087.0 |
| 47.5° | 1506.3 | 1498.0 | 1490.9 | 1494.4 | 1474.2 | 1400.6 | 1311.5 | 1281.8 | 1280.6 | 1336.4 | 1256.8 |
| 50°   | 1602.5 | 1597.8 | 1622.7 | 1646.5 | 1684.5 | 1638.2 | 1532.4 | 1506.3 | 1486.1 | 1559.8 | 1433.8 |
| 52.5° | 1665.5 | 1663.1 | 1713.0 | 1780.7 | 1859.1 | 1855.5 | 1761.7 | 1746.3 | 1729.6 | 1749.8 | 1591.8 |
| 55°   | 1690.4 | 1690.4 | 1749.8 | 1874.6 | 2012.4 | 2071.8 | 2027.8 | 2006.4 | 1948.2 | 1906.6 | 1765.3 |
| 57.5° | 1660.7 | 1657.2 | 1734.4 | 1897.1 | 2107.4 | 2229.7 | 2248.8 | 2223.8 | 2132.3 | 2086.0 | 1957.7 |
| 60°   | 1534.8 | 1537.2 | 1628.7 | 1834.2 | 2100.3 | 2293.9 | 2416.3 | 2393.7 | 2302.2 | 2233.3 | 2119.3 |
| 62.5° | 1299.6 | 1319.8 | 1416.0 | 1639.3 | 1948.2 | 2242.8 | 2512.5 | 2524.4 | 2425.8 | 2340.2 | 2263.0 |
| 65°   | 976.5  | 994.3  | 1085.8 | 1332.9 | 1671.4 | 2071.8 | 2530.3 | 2576.6 | 2497.0 | 2410.3 | 2285.6 |
| 67.5° | 594.0  | 599.9  | 711.6  | 898.1  | 1230.7 | 1726.1 | 2405.6 | 2506.5 | 2449.5 | 2307.0 | 2062.2 |
| 70°   | 276.8  | 292.2  | 346.9  | 490.6  | 779.3  | 1271.1 | 2078.9 | 2221.4 | 2157.3 | 1980.3 | 1568.1 |
| 72.5° | 108.1  | 112.9  | 147.3  | 226.9  | 413.4  | 799.5  | 1551.4 | 1646.5 | 1602.5 | 1406.5 | 934.9  |
| 75°   | 53.5   | 57.0   | 71.3   | 108.1  | 188.9  | 330.2  | 948.0  | 1009.7 | 937.3  | 706.8  | 395.6  |
| 77.5° | 39.2   | 39.2   | 47.5   | 66.5   | 103.4  | 122.4  | 399.1  | 447.9  | 422.9  | 273.2  | 108.1  |
| 80°   | 26.1   | 28.5   | 33.3   | 45.1   | 65.3   | 59.4   | 150.9  | 179.4  | 149.7  | 84.3   | 38.0   |
| 82.5° | 15.4   | 16.6   | 24.9   | 32.1   | 44.0   | 34.5   | 51.1   | 57.0   | 61.8   | 41.6   | 17.8   |
| 85°   | 8.3    | 8.3    | 16.6   | 23.8   | 23.8   | 15.4   | 17.8   | 20.2   | 23.8   | 24.9   | 9.5    |
| 87.5° | 2.4    | 2.4    | 10.7   | 14.3   | 9.5    | 8.3    | 9.5    | 9.5    | 10.7   | 13.1   | 4.8    |
| 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: P573053  
 CATALOG NUMBER: ARCH-S-PA2-30-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 352.8  | 352.8  | 352.8 | 352.8 | 352.8 | 352.8 | 352.8 | 352.8 | 352.8 | 352.8 | 352.8 |
| 2.5°  | 354.0  | 354.0  | 355.2 | 355.2 | 356.4 | 356.4 | 356.4 | 356.4 | 357.6 | 358.8 | 358.8 |
| 5°    | 357.6  | 358.8  | 358.8 | 358.8 | 358.8 | 356.4 | 355.2 | 354.0 | 354.0 | 355.2 | 355.2 |
| 7.5°  | 367.1  | 368.3  | 367.1 | 364.7 | 361.1 | 356.4 | 351.6 | 351.6 | 350.4 | 351.6 | 350.4 |
| 10°   | 381.3  | 381.3  | 380.1 | 374.2 | 368.3 | 358.8 | 349.3 | 342.1 | 337.4 | 336.2 | 333.8 |
| 12.5° | 399.1  | 399.1  | 395.6 | 384.9 | 374.2 | 356.4 | 331.4 | 307.7 | 288.7 | 280.4 | 278.0 |
| 15°   | 417.0  | 417.0  | 412.2 | 396.8 | 375.4 | 332.6 | 280.4 | 230.5 | 201.9 | 190.1 | 182.9 |
| 17.5° | 438.3  | 436.0  | 427.7 | 406.3 | 362.3 | 285.1 | 200.8 | 149.7 | 127.1 | 116.4 | 116.4 |
| 20°   | 460.9  | 458.5  | 443.1 | 407.5 | 329.1 | 204.3 | 130.7 | 103.4 | 97.4  | 95.0  | 95.0  |
| 22.5° | 485.9  | 479.9  | 456.2 | 398.0 | 259.0 | 139.0 | 98.6  | 91.5  | 89.1  | 87.9  | 87.9  |
| 25°   | 506.1  | 496.6  | 465.7 | 371.8 | 185.3 | 97.4  | 86.7  | 84.3  | 79.6  | 78.4  | 76.0  |
| 27.5° | 521.5  | 507.2  | 469.2 | 316.0 | 122.4 | 80.8  | 77.2  | 72.5  | 67.7  | 63.0  | 63.0  |
| 30°   | 541.7  | 523.9  | 471.6 | 245.9 | 83.2  | 70.1  | 66.5  | 60.6  | 54.6  | 49.9  | 49.9  |
| 32.5° | 582.1  | 556.0  | 472.8 | 172.3 | 68.9  | 61.8  | 54.6  | 47.5  | 41.6  | 39.2  | 38.0  |
| 35°   | 626.0  | 590.4  | 459.7 | 111.7 | 60.6  | 52.3  | 44.0  | 38.0  | 32.1  | 30.9  | 30.9  |
| 37.5° | 674.7  | 641.5  | 431.2 | 76.0  | 53.5  | 44.0  | 35.6  | 29.7  | 26.1  | 24.9  | 24.9  |
| 40°   | 756.7  | 717.5  | 383.7 | 60.6  | 46.3  | 36.8  | 29.7  | 24.9  | 22.6  | 21.4  | 21.4  |
| 42.5° | 874.3  | 806.6  | 324.3 | 52.3  | 40.4  | 30.9  | 23.8  | 20.2  | 19.0  | 17.8  | 17.8  |
| 45°   | 1009.7 | 906.4  | 255.4 | 47.5  | 35.6  | 26.1  | 20.2  | 17.8  | 16.6  | 15.4  | 15.4  |
| 47.5° | 1165.4 | 1009.7 | 201.9 | 41.6  | 30.9  | 22.6  | 17.8  | 15.4  | 14.3  | 13.1  | 13.1  |
| 50°   | 1312.7 | 1090.5 | 152.1 | 36.8  | 27.3  | 19.0  | 15.4  | 14.3  | 13.1  | 11.9  | 11.9  |
| 52.5° | 1433.8 | 1145.2 | 115.2 | 32.1  | 23.8  | 16.6  | 14.3  | 13.1  | 10.7  | 10.7  | 10.7  |
| 55°   | 1579.9 | 1187.9 | 87.9  | 28.5  | 21.4  | 15.4  | 13.1  | 10.7  | 9.5   | 8.3   | 8.3   |
| 57.5° | 1707.1 | 1203.4 | 64.1  | 24.9  | 19.0  | 14.3  | 11.9  | 9.5   | 7.1   | 5.9   | 5.9   |
| 60°   | 1792.6 | 1190.3 | 46.3  | 21.4  | 16.6  | 11.9  | 9.5   | 7.1   | 4.8   | 3.6   | 3.6   |
| 62.5° | 1853.2 | 1161.8 | 35.6  | 19.0  | 14.3  | 10.7  | 8.3   | 5.9   | 3.6   | 2.4   | 2.4   |
| 65°   | 1792.6 | 1073.9 | 28.5  | 16.6  | 11.9  | 9.5   | 5.9   | 4.8   | 2.4   | 1.2   | 1.2   |
| 67.5° | 1550.3 | 900.5  | 22.6  | 14.3  | 10.7  | 8.3   | 5.9   | 3.6   | 1.2   | 0.0   | 0.0   |
| 70°   | 1114.3 | 642.7  | 19.0  | 13.1  | 9.5   | 7.1   | 4.8   | 2.4   | 1.2   | 0.0   | 0.0   |
| 72.5° | 621.3  | 331.4  | 17.8  | 11.9  | 9.5   | 7.1   | 4.8   | 2.4   | 1.2   | 0.0   | 0.0   |
| 75°   | 251.8  | 114.0  | 16.6  | 11.9  | 9.5   | 5.9   | 4.8   | 2.4   | 1.2   | 0.0   | 0.0   |
| 77.5° | 73.7   | 39.2   | 14.3  | 10.7  | 9.5   | 7.1   | 4.8   | 2.4   | 1.2   | 0.0   | 0.0   |
| 80°   | 26.1   | 17.8   | 10.7  | 9.5   | 7.1   | 5.9   | 4.8   | 3.6   | 1.2   | 0.0   | 0.0   |
| 82.5° | 11.9   | 7.1    | 4.8   | 3.6   | 3.6   | 3.6   | 3.6   | 2.4   | 1.2   | 0.0   | 0.0   |
| 85°   | 4.8    | 3.6    | 2.4   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 0.0   | 0.0   |
| 87.5° | 3.6    | 2.4    | 1.2   | 1.2   | 1.2   | 1.2   | 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)