

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: P1211066

Luminaire Tested: **ARCH4-160-727-U-T3RE-HSS**

Issue Date: 11/5/2025

### Test Information

Test Method: LM-79-08  
Report Number: P1211066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2510-578-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/5/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-160-727-U-T3RE-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III  
ROADWAY ILLUMINANCE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

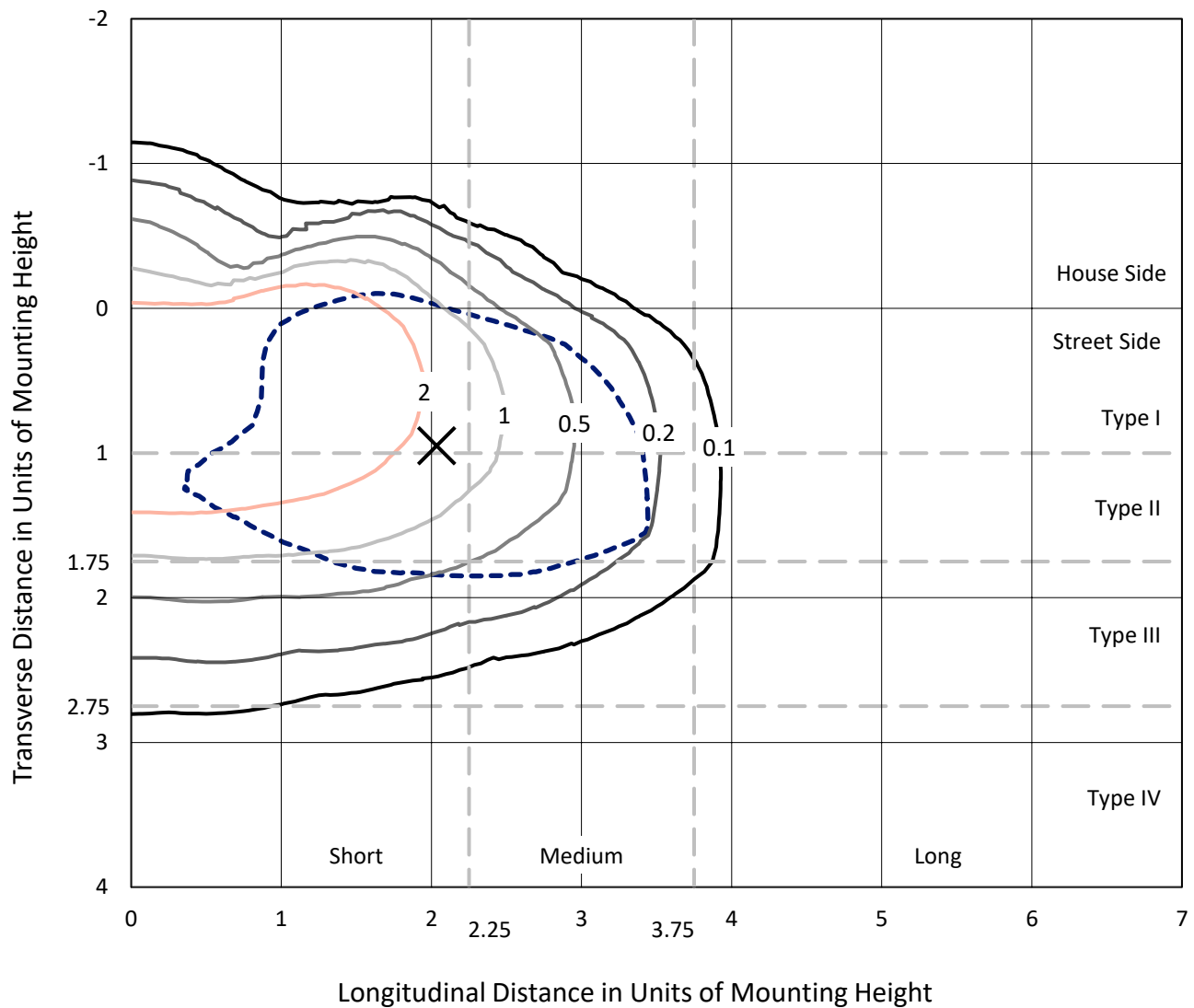
Lumens per Lamp: N/A  
Luminaire Lumens: 17255 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 160.7  
Input Voltage (V): NR  
Input Current (Ain): 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: P1211066  
CATALOG NUMBER: ARCH4-160-727-U-T3RE-HSS

## Iso-Footcandle Lines of Horizontal Illumination

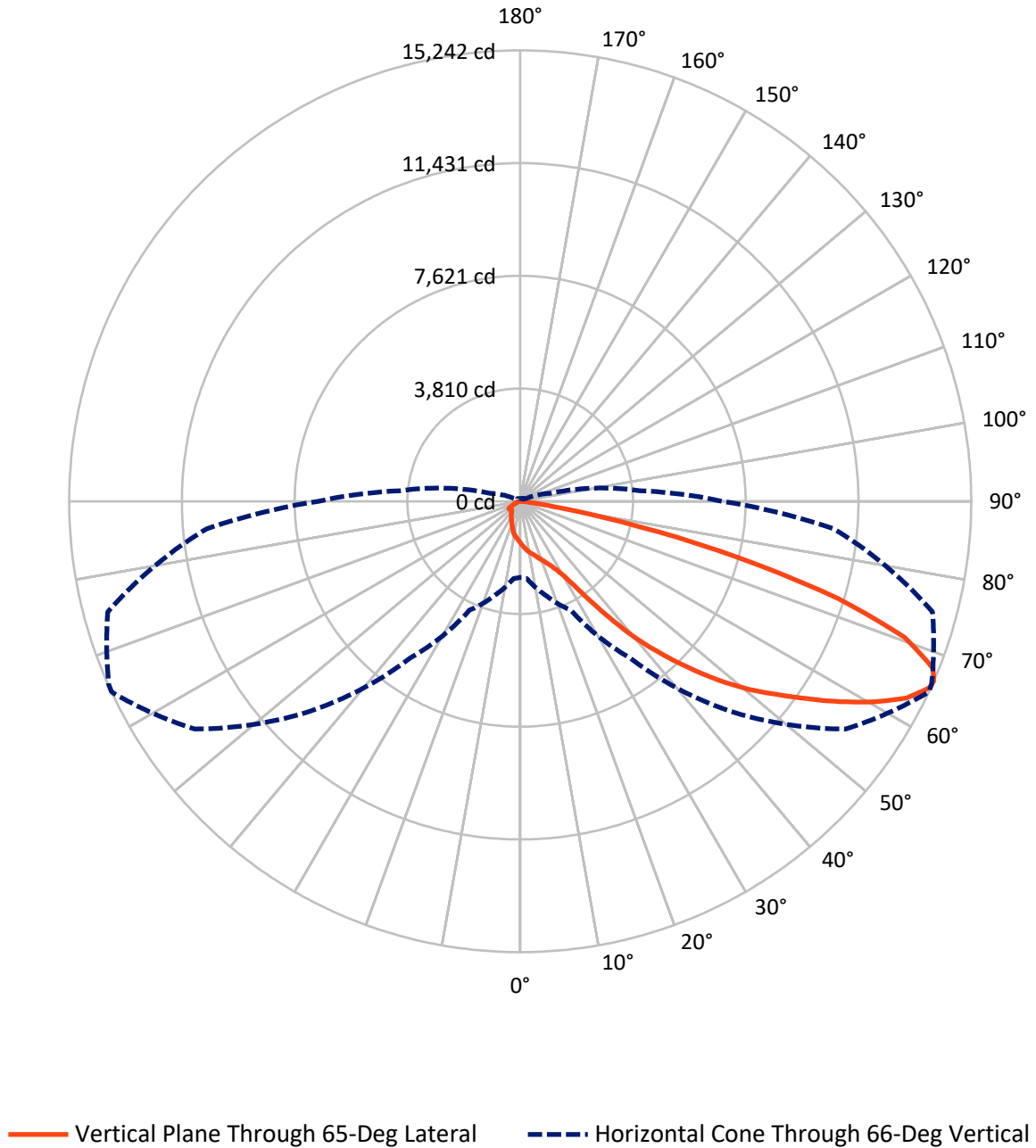
✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
Type III - Short - N/A

REPORT NUMBER: P1211066  
CATALOG NUMBER: ARCH4-160-727-U-T3RE-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P1211066

CATALOG NUMBER: ARCH4-160-727-U-T3RE-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2036.4   | 0.0    | 2036.4  |
|                    | % Fixture | 11.8     | 0.0    | 11.8    |
| <b>Street Side</b> | Lumens    | 15218.6  | 0.0    | 15218.6 |
|                    | % Fixture | 88.2     | 0.0    | 88.2    |
| <b>Total</b>       | Lumens    | 17255.0  | 0.0    | 17255.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 133.3   | 0.8       |
| 10°-20°   | 394.5   | 2.3       |
| 20°-30°   | 722.1   | 4.2       |
| 30°-40°   | 1467.3  | 8.5       |
| 40°-50°   | 3098.5  | 18.0      |
| 50°-60°   | 4763.4  | 27.6      |
| 60°-70°   | 4794.8  | 27.8      |
| 70°-80°   | 1791.6  | 10.4      |
| 80°-90°   | 89.5    | 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°    | 17255.0 | 100.0     |
| 0°-180°   | 17255.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P1211066

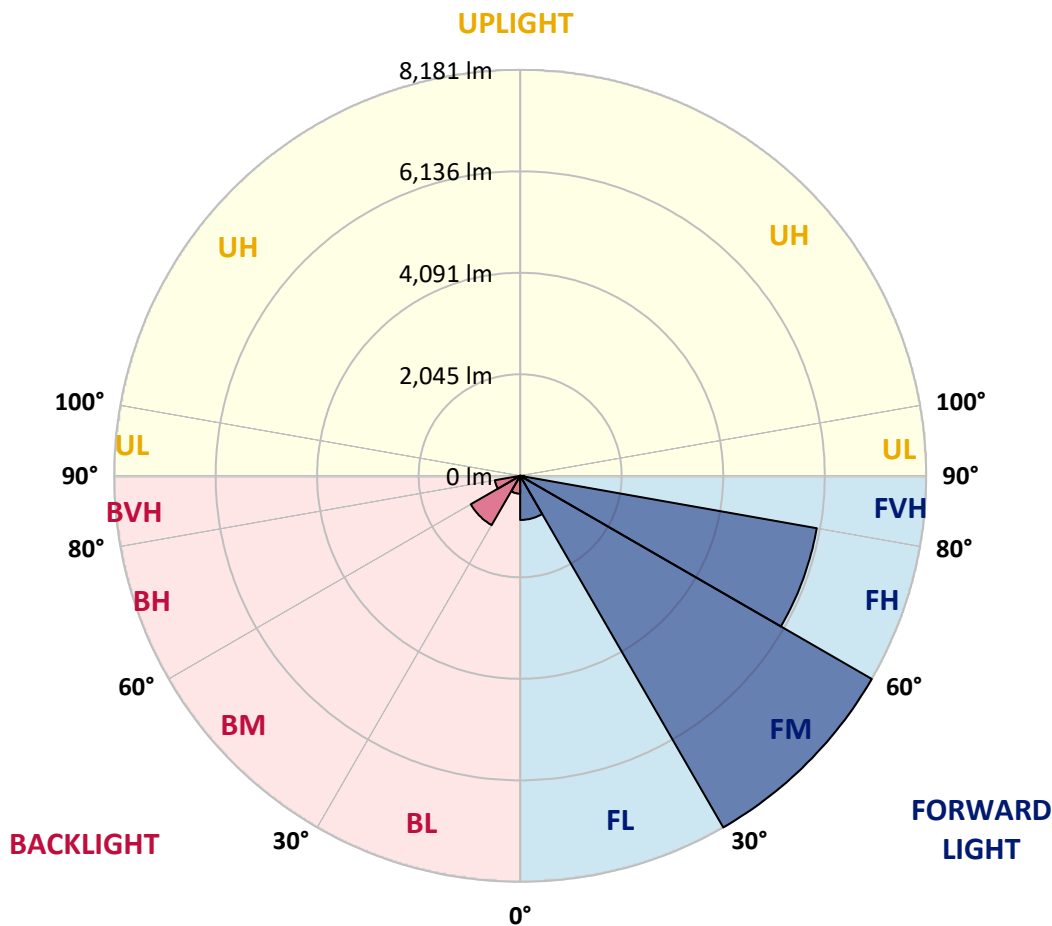
CATALOG NUMBER: ARCH4-160-727-U-T3RE-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 889.5  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 8181.1 | 47.4      |                         |      |         |
| FH   | (60°-80°)   | 6069.0 | 35.2      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 79.0   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 360.4  | 2.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1148.2 | 6.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 517.3  | 3.0       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 10.5   | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type III Short



REPORT NUMBER: P1211066

CATALOG NUMBER: ARCH4-160-727-U-T3RE-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8  | 1405.8  | 1405.8  | 1405.8  | 1405.8  | 1405.8  |
| 2.5°  | 1603.0 | 1606.2 | 1599.9 | 1587.4 | 1574.9 | 1559.2  | 1534.2  | 1493.5  | 1487.2  | 1459.0  | 1427.7  |
| 5°    | 1712.6 | 1718.9 | 1709.5 | 1706.4 | 1700.1 | 1678.2  | 1643.7  | 1584.3  | 1578.0  | 1521.6  | 1449.6  |
| 7.5°  | 1750.2 | 1759.6 | 1753.3 | 1753.3 | 1753.3 | 1743.9  | 1728.3  | 1675.1  | 1665.7  | 1593.7  | 1484.1  |
| 10°   | 1778.4 | 1784.6 | 1781.5 | 1794.0 | 1803.4 | 1797.2  | 1787.8  | 1756.5  | 1747.1  | 1675.1  | 1531.0  |
| 12.5° | 1822.2 | 1825.3 | 1828.5 | 1834.7 | 1850.4 | 1856.7  | 1853.5  | 1825.3  | 1819.1  | 1769.0  | 1590.5  |
| 15°   | 1862.9 | 1862.9 | 1866.0 | 1894.2 | 1916.1 | 1928.7  | 1931.8  | 1909.9  | 1903.6  | 1862.9  | 1665.7  |
| 17.5° | 1900.5 | 1903.6 | 1913.0 | 1944.3 | 1981.9 | 2006.9  | 2022.6  | 2013.2  | 2003.8  | 1972.5  | 1753.3  |
| 20°   | 1956.8 | 1963.1 | 1972.5 | 2016.3 | 2053.9 | 2094.6  | 2125.9  | 2122.8  | 2119.7  | 2097.7  | 1856.7  |
| 22.5° | 2053.9 | 2060.2 | 2075.8 | 2116.5 | 2154.1 | 2204.2  | 2257.4  | 2254.3  | 2244.9  | 2229.2  | 1978.8  |
| 25°   | 2201.1 | 2201.1 | 2210.5 | 2244.9 | 2291.9 | 2351.3  | 2401.4  | 2410.8  | 2401.4  | 2392.0  | 2132.2  |
| 27.5° | 2385.8 | 2388.9 | 2388.9 | 2426.5 | 2470.3 | 2545.5  | 2608.1  | 2617.5  | 2617.5  | 2608.1  | 2338.8  |
| 30°   | 2642.5 | 2633.1 | 2626.9 | 2658.2 | 2705.1 | 2814.7  | 2924.3  | 2943.1  | 2933.7  | 2949.4  | 2630.0  |
| 32.5° | 3084.0 | 3068.3 | 3015.1 | 3021.4 | 3049.5 | 3199.8  | 3384.6  | 3450.3  | 3447.2  | 3475.4  | 3099.6  |
| 35°   | 3694.5 | 3663.2 | 3584.9 | 3519.2 | 3516.1 | 3678.9  | 3960.7  | 4208.0  | 4204.9  | 4301.9  | 3813.5  |
| 37.5° | 4383.3 | 4424.0 | 4276.9 | 4164.2 | 4129.7 | 4258.1  | 4621.3  | 5156.7  | 5184.9  | 5353.9  | 4749.7  |
| 40°   | 5303.8 | 5328.9 | 5141.0 | 4981.3 | 4818.5 | 4865.5  | 5344.5  | 6177.4  | 6227.5  | 6415.3  | 5685.8  |
| 42.5° | 6105.4 | 6130.4 | 6020.8 | 5826.7 | 5620.1 | 5532.4  | 6074.0  | 7104.1  | 7144.8  | 7404.7  | 6650.1  |
| 45°   | 6650.1 | 6668.9 | 6706.5 | 6725.3 | 6490.5 | 6308.9  | 6966.4  | 8055.9  | 8106.0  | 8406.6  | 7592.6  |
| 47.5° | 7075.9 | 7091.6 | 7166.7 | 7354.6 | 7307.6 | 7163.6  | 7874.3  | 9045.3  | 9057.8  | 9392.9  | 8509.9  |
| 50°   | 7273.2 | 7310.8 | 7495.5 | 7783.5 | 7990.2 | 8030.9  | 8860.6  | 9981.5  | 10015.9 | 10335.3 | 9377.2  |
| 52.5° | 7054.0 | 7066.6 | 7533.1 | 8074.7 | 8491.1 | 8904.4  | 9850.0  | 10848.7 | 10948.9 | 11186.9 | 10156.8 |
| 55°   | 6315.1 | 6405.9 | 7113.5 | 8065.3 | 8885.6 | 9734.1  | 10908.2 | 11784.9 | 11875.7 | 12026.0 | 10842.5 |
| 57.5° | 5457.2 | 5557.4 | 6418.4 | 7661.4 | 9054.7 | 10501.2 | 11888.2 | 12780.5 | 12843.2 | 12883.9 | 11471.8 |
| 60°   | 4715.2 | 4809.1 | 5695.2 | 6888.1 | 8885.6 | 11042.9 | 12799.3 | 13769.9 | 13823.1 | 13713.6 | 11788.0 |
| 62.5° | 3804.1 | 3898.0 | 4790.4 | 5864.3 | 8221.9 | 11152.4 | 13475.6 | 14649.7 | 14671.6 | 14374.2 | 11593.9 |
| 65°   | 2868.0 | 2930.6 | 3675.7 | 4596.2 | 7060.3 | 10570.1 | 13629.0 | 15197.6 | 15175.7 | 14565.2 | 11011.6 |
| 66°   | 2570.5 | 2623.7 | 3281.2 | 4064.0 | 6456.0 | 10037.8 | 13422.4 | 15241.5 | 15219.6 | 14424.3 | 10629.6 |
| 67.5° | 2216.7 | 2232.4 | 2774.0 | 3325.1 | 5400.9 | 8907.6  | 12793.1 | 15041.1 | 15059.9 | 14036.1 | 9931.4  |
| 70°   | 1731.4 | 1728.3 | 2041.4 | 2313.8 | 3688.3 | 6337.0  | 10670.3 | 13779.3 | 13870.1 | 12570.8 | 8469.2  |
| 72.5° | 1108.4 | 1070.8 | 1252.4 | 1415.2 | 2147.8 | 3678.9  | 7780.4  | 11230.7 | 11384.1 | 9875.0  | 6308.9  |
| 75°   | 660.6  | 623.1  | 666.9  | 707.6  | 1030.1 | 1769.0  | 4574.3  | 7642.7  | 7789.8  | 6330.8  | 3754.0  |
| 77.5° | 494.7  | 479.0  | 482.2  | 447.7  | 457.1  | 663.8   | 2088.3  | 4038.9  | 4145.4  | 2592.4  | 1424.6  |
| 80°   | 378.8  | 338.1  | 316.2  | 331.9  | 300.6  | 263.0   | 776.5   | 1390.1  | 1455.9  | 613.7   | 297.4   |
| 82.5° | 253.6  | 219.2  | 203.5  | 222.3  | 191.0  | 147.2   | 187.9   | 269.3   | 263.0   | 165.9   | 115.8   |
| 85°   | 131.5  | 112.7  | 112.7  | 112.7  | 97.1   | 72.0    | 81.4    | 109.6   | 109.6   | 87.7    | 68.9    |
| 87.5° | 37.6   | 34.4   | 40.7   | 37.6   | 28.2   | 28.2    | 31.3    | 37.6    | 37.6    | 34.4    | 31.3    |
| 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: P1211066

CATALOG NUMBER: ARCH4-160-727-U-T3RE-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 | 1405.8 |
| 2.5°  | 1402.7 | 1390.1 | 1355.7 | 1330.7 | 1305.6 | 1283.7 | 1258.6 | 1252.4 | 1239.9 | 1243.0 | 1236.7 |
| 5°    | 1412.1 | 1377.6 | 1318.1 | 1261.8 | 1217.9 | 1180.4 | 1133.4 | 1114.6 | 1089.6 | 1080.2 | 1073.9 |
| 7.5°  | 1424.6 | 1374.5 | 1286.8 | 1208.5 | 1133.4 | 1058.3 | 983.1  | 939.3  | 911.1  | 898.6  | 889.2  |
| 10°   | 1452.8 | 1387.0 | 1271.2 | 1149.1 | 1020.7 | 914.2  | 839.1  | 807.8  | 789.0  | 785.9  | 782.7  |
| 12.5° | 1490.3 | 1405.8 | 1255.5 | 1073.9 | 904.8  | 804.7  | 757.7  | 748.3  | 745.2  | 745.2  | 742.0  |
| 15°   | 1546.7 | 1437.1 | 1230.5 | 986.2  | 814.0  | 745.2  | 723.2  | 707.6  | 701.3  | 701.3  | 701.3  |
| 17.5° | 1603.0 | 1474.7 | 1192.9 | 895.5  | 751.4  | 707.6  | 685.7  | 676.3  | 670.0  | 673.2  | 670.0  |
| 20°   | 1675.1 | 1518.5 | 1142.8 | 817.2  | 710.7  | 676.3  | 654.4  | 645.0  | 641.8  | 641.8  | 641.8  |
| 22.5° | 1756.5 | 1568.6 | 1080.2 | 757.7  | 676.3  | 645.0  | 623.1  | 613.7  | 607.4  | 610.5  | 610.5  |
| 25°   | 1866.0 | 1631.2 | 1014.4 | 698.2  | 641.8  | 613.7  | 588.6  | 576.1  | 576.1  | 579.2  | 582.4  |
| 27.5° | 2006.9 | 1706.4 | 948.7  | 660.6  | 610.5  | 582.4  | 554.2  | 541.7  | 544.8  | 551.0  | 551.0  |
| 30°   | 2213.6 | 1809.7 | 882.9  | 619.9  | 576.1  | 544.8  | 519.7  | 507.2  | 513.5  | 526.0  | 526.0  |
| 32.5° | 2507.9 | 1978.8 | 826.6  | 573.0  | 526.0  | 491.6  | 466.5  | 457.1  | 472.8  | 497.8  | 497.8  |
| 35°   | 3033.9 | 2288.7 | 792.1  | 526.0  | 472.8  | 432.1  | 400.8  | 391.4  | 413.3  | 444.6  | 444.6  |
| 37.5° | 3738.4 | 2786.5 | 804.7  | 485.3  | 428.9  | 382.0  | 347.5  | 335.0  | 350.7  | 378.8  | 388.2  |
| 40°   | 4524.2 | 3387.7 | 914.2  | 450.9  | 388.2  | 341.3  | 306.8  | 294.3  | 303.7  | 316.2  | 319.4  |
| 42.5° | 5310.1 | 4026.4 | 1120.9 | 425.8  | 356.9  | 306.8  | 275.5  | 266.1  | 272.4  | 275.5  | 278.7  |
| 45°   | 6092.8 | 4658.9 | 1380.7 | 410.2  | 328.7  | 278.7  | 247.3  | 247.3  | 250.5  | 250.5  | 250.5  |
| 47.5° | 6834.9 | 5275.7 | 1653.1 | 407.0  | 303.7  | 250.5  | 225.4  | 228.6  | 228.6  | 231.7  | 231.7  |
| 50°   | 7536.2 | 5826.7 | 1928.7 | 416.4  | 281.8  | 225.4  | 206.6  | 206.6  | 206.6  | 209.8  | 206.6  |
| 52.5° | 8121.7 | 6308.9 | 2216.7 | 432.1  | 259.9  | 206.6  | 187.9  | 187.9  | 187.9  | 191.0  | 187.9  |
| 55°   | 8675.9 | 6747.2 | 2511.0 | 454.0  | 241.1  | 191.0  | 172.2  | 165.9  | 165.9  | 169.1  | 165.9  |
| 57.5° | 9126.7 | 7038.4 | 2789.7 | 457.1  | 225.4  | 175.3  | 159.7  | 150.3  | 150.3  | 150.3  | 150.3  |
| 60°   | 9145.5 | 6869.3 | 2871.1 | 400.8  | 206.6  | 159.7  | 144.0  | 131.5  | 134.6  | 134.6  | 134.6  |
| 62.5° | 8547.5 | 5980.1 | 2307.5 | 300.6  | 184.7  | 144.0  | 131.5  | 119.0  | 119.0  | 119.0  | 119.0  |
| 65°   | 7373.4 | 4652.6 | 1352.6 | 238.0  | 159.7  | 128.4  | 115.8  | 106.5  | 106.5  | 106.5  | 103.3  |
| 66°   | 6822.3 | 4079.6 | 1036.3 | 216.0  | 150.3  | 125.2  | 112.7  | 103.3  | 100.2  | 97.1   | 97.1   |
| 67.5° | 5923.8 | 3224.9 | 648.1  | 191.0  | 137.8  | 115.8  | 103.3  | 93.9   | 90.8   | 87.7   | 87.7   |
| 70°   | 4461.6 | 2047.6 | 316.2  | 147.2  | 119.0  | 100.2  | 90.8   | 81.4   | 78.3   | 75.1   | 72.0   |
| 72.5° | 3131.0 | 1199.2 | 165.9  | 112.7  | 97.1   | 87.7   | 78.3   | 68.9   | 65.7   | 62.6   | 62.6   |
| 75°   | 1769.0 | 579.2  | 109.6  | 81.4   | 78.3   | 72.0   | 65.7   | 56.4   | 53.2   | 53.2   | 53.2   |
| 77.5° | 670.0  | 200.4  | 75.1   | 59.5   | 62.6   | 56.4   | 47.0   | 47.0   | 43.8   | 47.0   | 43.8   |
| 80°   | 175.3  | 87.7   | 47.0   | 43.8   | 47.0   | 40.7   | 34.4   | 37.6   | 37.6   | 37.6   | 37.6   |
| 82.5° | 93.9   | 50.1   | 28.2   | 31.3   | 28.2   | 28.2   | 21.9   | 25.0   | 28.2   | 25.0   | 28.2   |
| 85°   | 65.7   | 25.0   | 15.7   | 15.7   | 12.5   | 12.5   | 9.4    | 12.5   | 15.7   | 12.5   | 12.5   |
| 87.5° | 34.4   | 9.4    | 9.4    | 9.4    | 9.4    | 6.3    | 3.1    | 0.0    | 3.1    | 3.1    | 3.1    |
| 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)