

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: P799431

Luminaire Tested: **ARCH2-110-750-U-T3**

Issue Date: 4/4/2024

### Test Information

Test Method: LM-79-08  
Report Number: P799431  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-110-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 13755 lumens  
Efficiency: N/A  
Efficacy: 125.6 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 109.5  
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

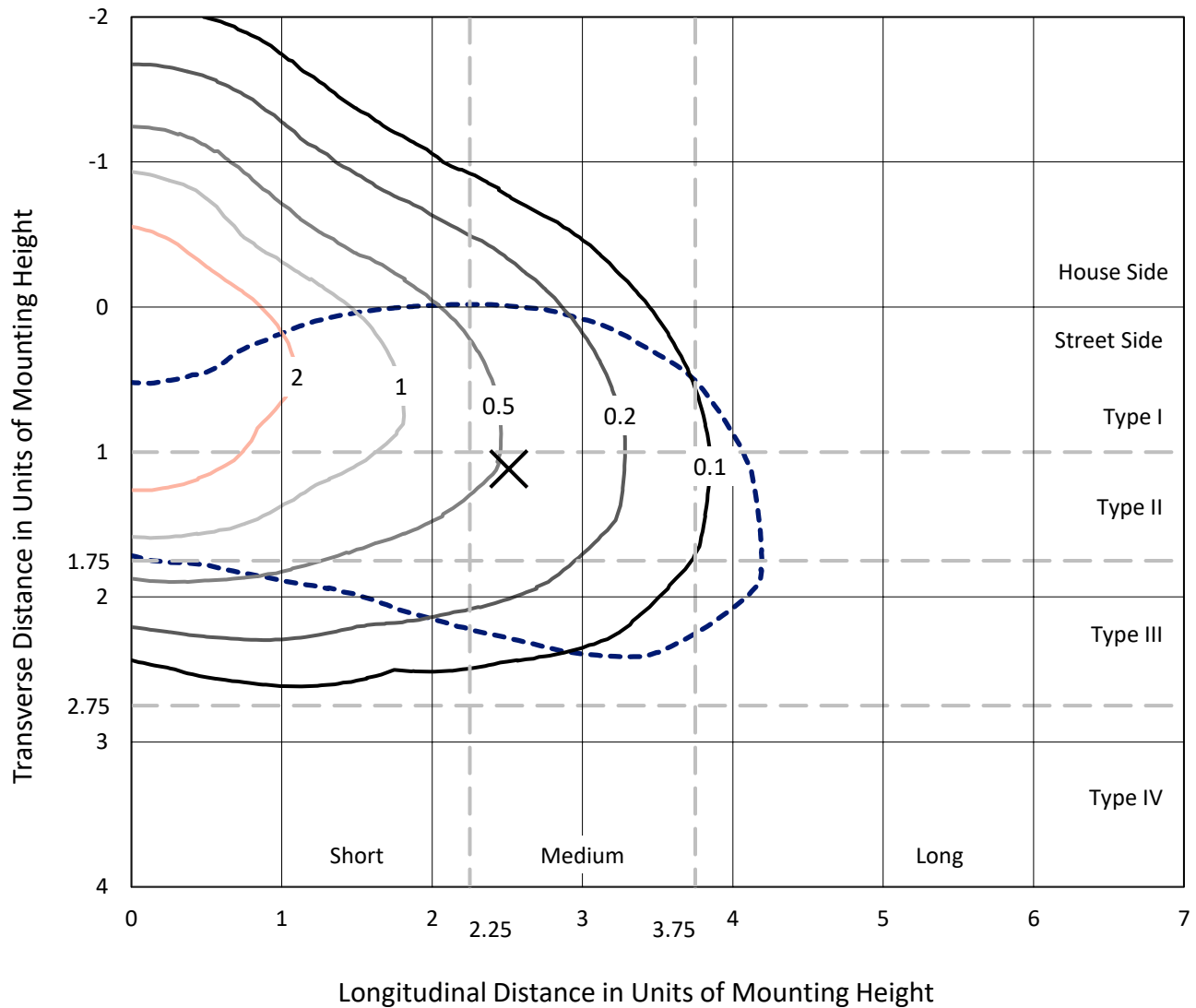


REPORT NUMBER: P799431

CATALOG NUMBER: ARCH2-110-750-U-T3

## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
- - - 1/2 Max cd

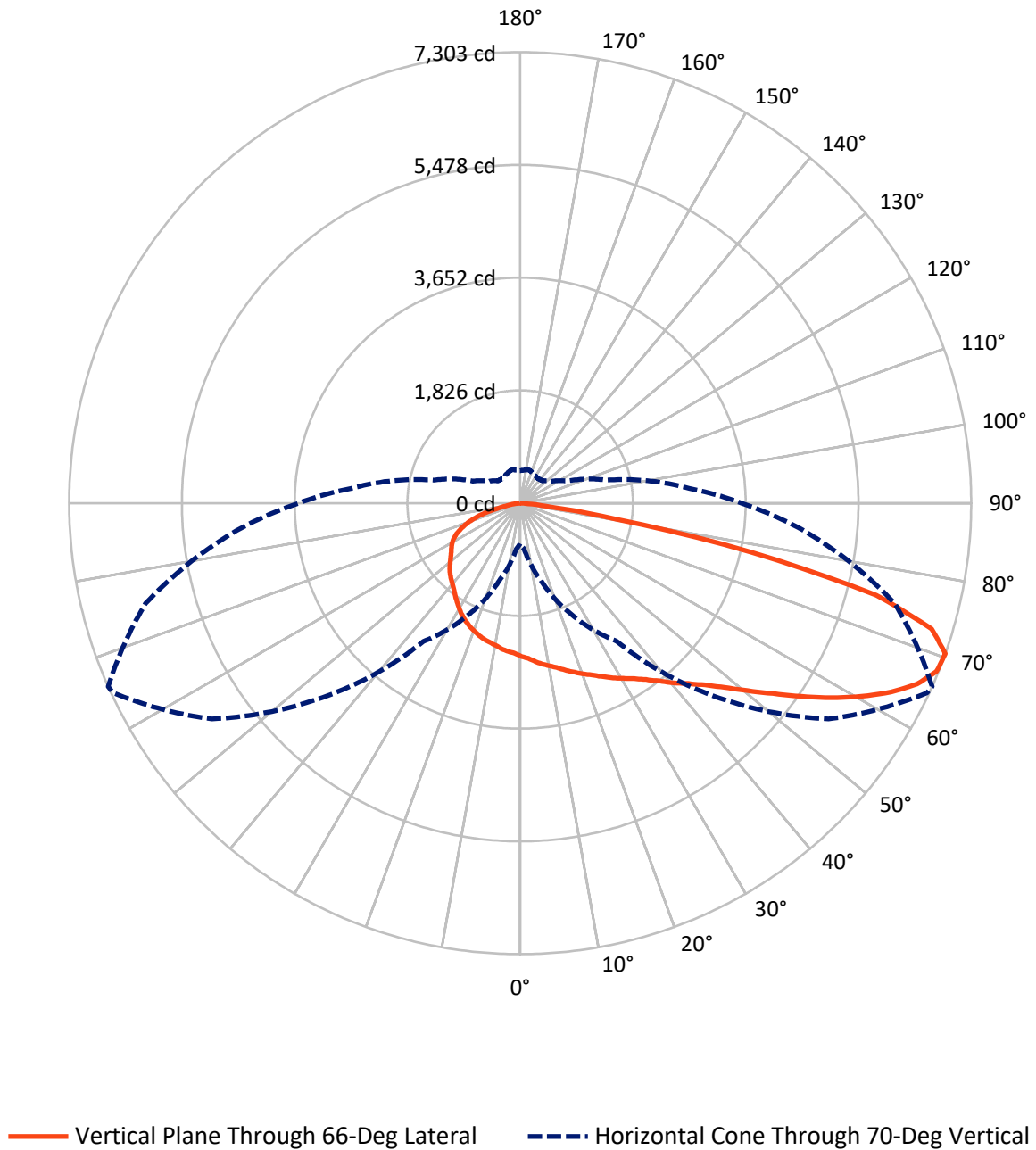


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
Type III - Medium - N/A

REPORT NUMBER: P799431

CATALOG NUMBER: ARCH2-110-750-U-T3

## Luminous Intensity Polar Plot



REPORT NUMBER: P799431

CATALOG NUMBER: ARCH2-110-750-U-T3

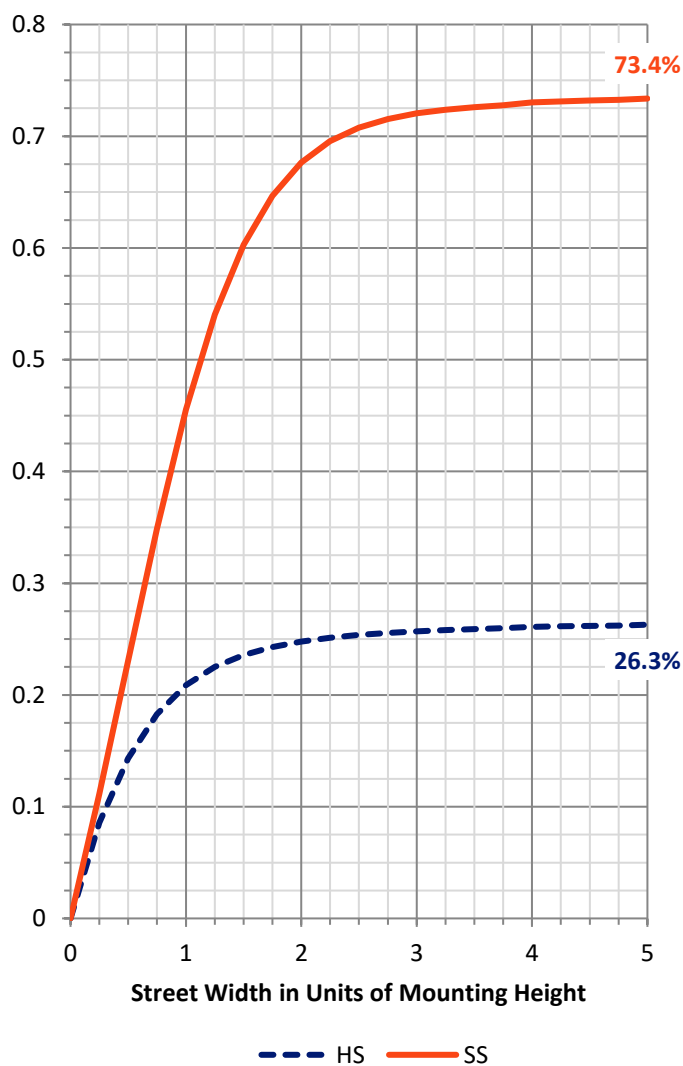
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3644.8   | 0.0    | 3644.8  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 10110.2  | 0.0    | 10110.2 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 13755.0  | 0.0    | 13755.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 238.5   | 1.7       |
| 10°-20°   | 715.5   | 5.2       |
| 20°-30°   | 1199.5  | 8.7       |
| 30°-40°   | 1796.0  | 13.1      |
| 40°-50°   | 2401.2  | 17.5      |
| 50°-60°   | 2803.5  | 20.4      |
| 60°-70°   | 2787.7  | 20.3      |
| 70°-80°   | 1650.3  | 12.0      |
| 80°-90°   | 162.7   | 1.2       |
| 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°    | 13755.0 | 100.0     |
| 0°-180°   | 13755.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P799431

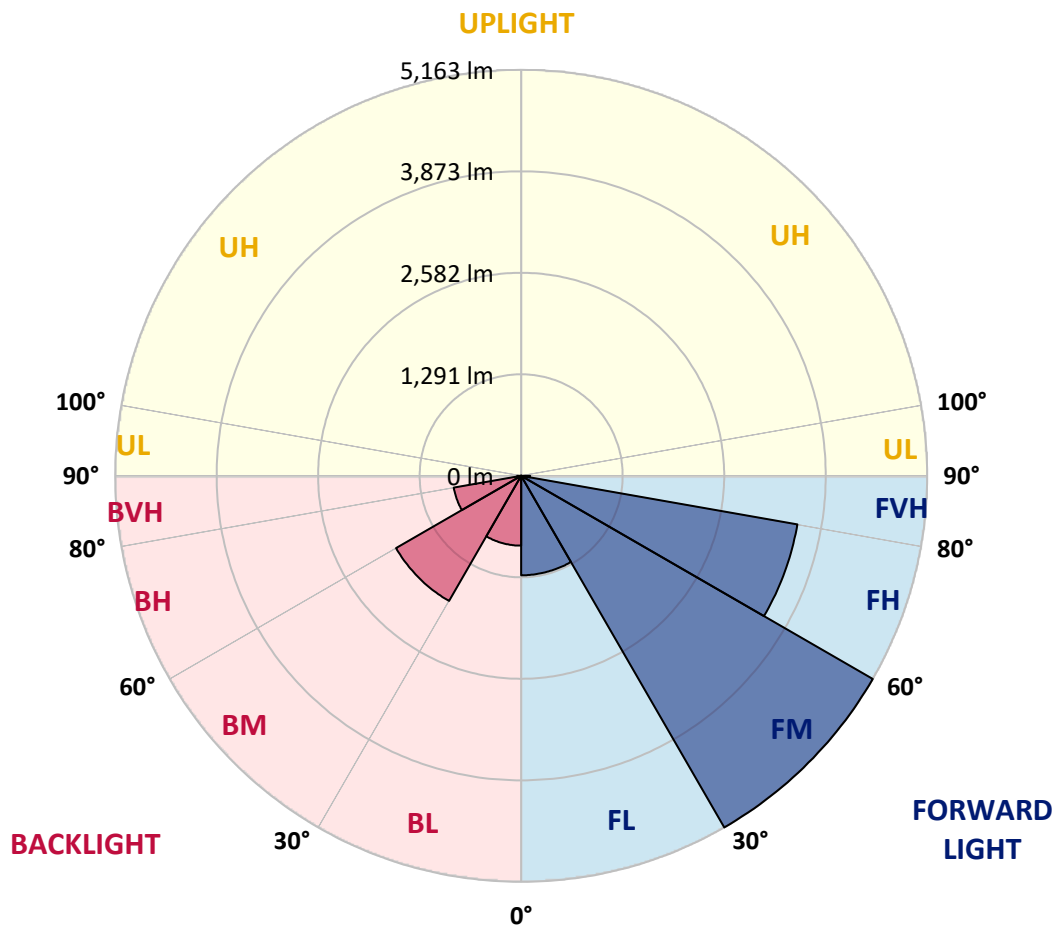
CATALOG NUMBER: ARCH2-110-750-U-T3

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1265.1 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 5163.4 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 3567.4 | 25.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 114.3  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 888.4  | 6.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1837.3 | 13.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 870.6  | 6.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 48.3   | 0.4       |                         |      | 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 Medium



REPORT NUMBER: P799431

CATALOG NUMBER: ARCH2-110-750-U-T3

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 |
| 2.5°  | 2573.7 | 2569.7 | 2567.6 | 2559.5 | 2541.3 | 2549.4 | 2531.1 | 2519.0 | 2516.9 | 2488.5 | 2472.3 |
| 5°    | 2679.2 | 2677.2 | 2673.1 | 2660.9 | 2632.5 | 2636.6 | 2606.2 | 2583.9 | 2577.8 | 2533.2 | 2498.7 |
| 7.5°  | 2768.4 | 2764.4 | 2762.3 | 2746.1 | 2715.7 | 2713.7 | 2677.2 | 2644.7 | 2634.6 | 2573.7 | 2521.0 |
| 10°   | 2837.4 | 2831.3 | 2835.4 | 2819.1 | 2786.7 | 2780.6 | 2734.0 | 2691.4 | 2681.2 | 2604.2 | 2531.1 |
| 12.5° | 2896.2 | 2892.2 | 2898.2 | 2884.0 | 2857.7 | 2851.6 | 2804.9 | 2750.2 | 2738.0 | 2648.8 | 2553.4 |
| 15°   | 2961.1 | 2946.9 | 2959.1 | 2953.0 | 2934.7 | 2932.7 | 2890.1 | 2829.3 | 2813.1 | 2705.6 | 2587.9 |
| 17.5° | 2995.6 | 2987.5 | 3001.7 | 3003.7 | 2995.6 | 3009.8 | 2969.2 | 2896.2 | 2882.0 | 2758.3 | 2618.4 |
| 20°   | 3019.9 | 3007.8 | 3024.0 | 3036.2 | 3042.2 | 3070.6 | 3038.2 | 2967.2 | 2951.0 | 2809.0 | 2646.7 |
| 22.5° | 3103.1 | 3076.7 | 3078.7 | 3086.9 | 3090.9 | 3131.5 | 3111.2 | 3042.2 | 3026.0 | 2871.9 | 2681.2 |
| 25°   | 3312.0 | 3259.2 | 3224.8 | 3200.4 | 3172.0 | 3206.5 | 3194.3 | 3127.4 | 3113.2 | 2946.9 | 2723.8 |
| 27.5° | 3636.5 | 3569.6 | 3500.6 | 3429.6 | 3318.1 | 3303.9 | 3283.6 | 3222.7 | 3206.5 | 3022.0 | 2766.4 |
| 30°   | 4005.6 | 3938.7 | 3857.6 | 3744.0 | 3535.1 | 3425.6 | 3378.9 | 3312.0 | 3293.7 | 3088.9 | 2807.0 |
| 32.5° | 4372.7 | 4313.9 | 4232.8 | 4094.8 | 3796.7 | 3573.6 | 3474.2 | 3405.3 | 3387.0 | 3161.9 | 2855.6 |
| 35°   | 4658.7 | 4622.2 | 4569.4 | 4397.0 | 4056.3 | 3748.0 | 3612.1 | 3529.0 | 3508.7 | 3277.5 | 2944.9 |
| 37.5° | 4889.9 | 4863.5 | 4818.9 | 4638.4 | 4244.9 | 3922.5 | 3770.3 | 3675.0 | 3652.7 | 3403.2 | 3040.2 |
| 40°   | 5230.6 | 5161.7 | 5125.2 | 4863.5 | 4409.2 | 4080.7 | 3948.8 | 3849.4 | 3825.1 | 3537.1 | 3117.3 |
| 42.5° | 5520.6 | 5469.9 | 5425.3 | 5064.3 | 4565.4 | 4216.5 | 4117.2 | 4025.9 | 3993.4 | 3668.9 | 3200.4 |
| 45°   | 5569.3 | 5589.6 | 5567.3 | 5163.7 | 4812.8 | 4350.4 | 4287.5 | 4228.7 | 4198.3 | 3847.4 | 3326.2 |
| 47.5° | 5571.3 | 5571.3 | 5439.5 | 5220.5 | 5119.1 | 4500.5 | 4470.1 | 4490.3 | 4457.9 | 4074.6 | 3476.3 |
| 50°   | 5425.3 | 5451.7 | 5382.7 | 5234.7 | 5200.2 | 4650.6 | 4693.2 | 4802.7 | 4770.2 | 4315.9 | 3638.5 |
| 52.5° | 5123.1 | 5210.3 | 5208.3 | 5212.4 | 5082.6 | 4778.3 | 4928.4 | 5177.9 | 5123.1 | 4587.7 | 3810.9 |
| 55°   | 4589.7 | 4764.1 | 4920.3 | 5054.2 | 4981.2 | 4855.4 | 5216.4 | 5577.4 | 5520.6 | 4891.9 | 3985.3 |
| 57.5° | 4133.4 | 4244.9 | 4439.6 | 4818.9 | 4861.5 | 4922.3 | 5486.2 | 5995.2 | 5944.5 | 5228.6 | 4167.9 |
| 60°   | 3612.1 | 3766.3 | 3961.0 | 4500.5 | 4715.5 | 5009.5 | 5782.3 | 6402.9 | 6354.2 | 5569.3 | 4344.3 |
| 62.5° | 2811.0 | 3009.8 | 3399.2 | 4011.7 | 4502.5 | 5064.3 | 6015.5 | 6761.9 | 6739.6 | 5891.8 | 4502.5 |
| 65°   | 1959.2 | 2135.6 | 2681.2 | 3411.4 | 4163.8 | 5040.0 | 6202.1 | 7082.3 | 7062.0 | 6155.5 | 4614.1 |
| 67.5° | 1143.9 | 1348.7 | 1965.3 | 2746.1 | 3565.5 | 4871.6 | 6262.9 | 7270.9 | 7270.9 | 6315.7 | 4644.5 |
| 70°   | 653.1  | 748.4  | 1296.0 | 2001.8 | 2734.0 | 4407.2 | 6092.6 | 7268.9 | 7303.4 | 6279.2 | 4518.7 |
| 72.5° | 456.3  | 498.9  | 872.1  | 1346.7 | 1853.7 | 3565.5 | 5646.4 | 6918.0 | 6964.7 | 5934.4 | 4088.8 |
| 75°   | 354.9  | 385.3  | 614.5  | 918.8  | 1168.2 | 2421.6 | 4670.8 | 5833.0 | 5956.7 | 5058.2 | 3305.9 |
| 77.5° | 269.7  | 292.1  | 359.0  | 574.0  | 748.4  | 1391.3 | 3082.8 | 3825.1 | 3833.2 | 3097.0 | 1772.6 |
| 80°   | 196.7  | 219.0  | 239.3  | 350.9  | 397.5  | 651.0  | 1164.2 | 1598.2 | 1553.6 | 1498.8 | 959.3  |
| 82.5° | 117.6  | 139.9  | 146.0  | 190.6  | 194.7  | 277.9  | 407.7  | 515.2  | 494.9  | 659.2  | 450.3  |
| 85°   | 50.7   | 71.0   | 75.0   | 87.2   | 83.2   | 113.6  | 162.3  | 135.9  | 121.7  | 139.9  | 97.4   |
| 87.5° | 12.2   | 20.3   | 20.3   | 22.3   | 18.3   | 28.4   | 30.4   | 22.3   | 20.3   | 24.3   | 24.3   |
| 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: P799431

CATALOG NUMBER: ARCH2-110-750-U-T3

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 | 2482.5 |
| 2.5°  | 2468.3 | 2462.2 | 2464.2 | 2429.7 | 2419.6 | 2409.5 | 2403.4 | 2399.3 | 2395.3 | 2401.3 | 2407.4 |
| 5°    | 2486.5 | 2472.3 | 2456.1 | 2405.4 | 2385.1 | 2362.8 | 2346.6 | 2332.4 | 2326.3 | 2326.3 | 2332.4 |
| 7.5°  | 2500.7 | 2476.4 | 2441.9 | 2375.0 | 2338.5 | 2308.0 | 2281.7 | 2263.4 | 2253.3 | 2253.3 | 2259.4 |
| 10°   | 2502.7 | 2468.3 | 2413.5 | 2332.4 | 2283.7 | 2239.1 | 2208.7 | 2188.4 | 2174.2 | 2174.2 | 2178.2 |
| 12.5° | 2514.9 | 2468.3 | 2397.3 | 2299.9 | 2239.1 | 2184.3 | 2147.8 | 2117.4 | 2111.3 | 2111.3 | 2115.4 |
| 15°   | 2535.2 | 2478.4 | 2387.1 | 2271.5 | 2198.5 | 2135.6 | 2095.1 | 2062.6 | 2050.5 | 2058.6 | 2060.6 |
| 17.5° | 2553.4 | 2484.5 | 2368.9 | 2235.0 | 2147.8 | 2078.9 | 2034.2 | 2005.8 | 1989.6 | 2007.9 | 2007.9 |
| 20°   | 2565.6 | 2484.5 | 2342.5 | 2188.4 | 2093.1 | 2016.0 | 1973.4 | 1938.9 | 1926.7 | 1949.1 | 1951.1 |
| 22.5° | 2583.9 | 2482.5 | 2314.1 | 2141.7 | 2034.2 | 1953.1 | 1910.5 | 1884.2 | 1878.1 | 1902.4 | 1910.5 |
| 25°   | 2604.2 | 2486.5 | 2283.7 | 2089.0 | 1969.3 | 1890.2 | 1857.8 | 1845.6 | 1849.7 | 1880.1 | 1890.2 |
| 27.5° | 2626.5 | 2494.6 | 2253.3 | 2030.2 | 1898.4 | 1827.4 | 1809.1 | 1815.2 | 1831.4 | 1870.0 | 1882.1 |
| 30°   | 2646.7 | 2496.7 | 2210.7 | 1961.2 | 1817.2 | 1750.3 | 1758.4 | 1784.8 | 1809.1 | 1847.7 | 1861.8 |
| 32.5° | 2673.1 | 2498.7 | 2166.1 | 1886.2 | 1730.0 | 1681.3 | 1717.8 | 1760.4 | 1784.8 | 1821.3 | 1837.5 |
| 35°   | 2738.0 | 2533.2 | 2131.6 | 1813.2 | 1648.9 | 1622.5 | 1683.4 | 1738.1 | 1752.3 | 1784.8 | 1799.0 |
| 37.5° | 2813.1 | 2590.0 | 2113.3 | 1738.1 | 1569.8 | 1563.7 | 1640.8 | 1695.5 | 1699.6 | 1719.9 | 1734.1 |
| 40°   | 2859.7 | 2614.3 | 2093.1 | 1675.3 | 1498.8 | 1502.9 | 1582.0 | 1624.6 | 1616.4 | 1630.6 | 1640.8 |
| 42.5° | 2906.3 | 2622.4 | 2050.5 | 1622.5 | 1431.9 | 1435.9 | 1496.8 | 1527.2 | 1531.3 | 1561.7 | 1575.9 |
| 45°   | 2985.4 | 2644.7 | 2003.8 | 1573.8 | 1371.0 | 1356.8 | 1393.3 | 1433.9 | 1486.6 | 1545.5 | 1561.7 |
| 47.5° | 3090.9 | 2691.4 | 1955.1 | 1515.0 | 1312.2 | 1265.6 | 1279.8 | 1350.8 | 1405.5 | 1460.3 | 1470.4 |
| 50°   | 3198.4 | 2738.0 | 1910.5 | 1444.0 | 1253.4 | 1168.2 | 1174.3 | 1239.2 | 1283.8 | 1326.4 | 1332.5 |
| 52.5° | 3303.9 | 2778.6 | 1872.0 | 1377.1 | 1186.5 | 1052.6 | 1077.0 | 1143.9 | 1174.3 | 1194.6 | 1200.7 |
| 55°   | 3409.3 | 2813.1 | 1837.5 | 1320.3 | 1109.4 | 961.3  | 983.7  | 1046.5 | 1077.0 | 1087.1 | 1091.1 |
| 57.5° | 3518.9 | 2853.6 | 1811.1 | 1271.7 | 1022.2 | 880.2  | 894.4  | 939.0  | 967.4  | 979.6  | 975.5  |
| 60°   | 3610.1 | 2888.1 | 1796.9 | 1221.0 | 935.0  | 805.2  | 801.1  | 841.7  | 882.2  | 894.4  | 890.4  |
| 62.5° | 3681.1 | 2910.4 | 1774.6 | 1156.0 | 857.9  | 730.1  | 709.9  | 762.6  | 805.2  | 813.3  | 819.4  |
| 65°   | 3719.6 | 2912.4 | 1719.9 | 1072.9 | 778.8  | 649.0  | 634.8  | 687.5  | 713.9  | 722.0  | 722.0  |
| 67.5° | 3713.6 | 2880.0 | 1612.4 | 961.3  | 705.8  | 576.0  | 563.8  | 596.3  | 634.8  | 640.9  | 634.8  |
| 70°   | 3587.8 | 2746.1 | 1440.0 | 843.7  | 618.6  | 511.1  | 488.8  | 521.2  | 557.7  | 535.4  | 525.3  |
| 72.5° | 3230.9 | 2399.3 | 1186.5 | 713.9  | 521.2  | 430.0  | 419.8  | 452.3  | 454.3  | 458.4  | 448.2  |
| 75°   | 2549.4 | 1786.8 | 888.3  | 555.7  | 421.9  | 361.0  | 359.0  | 352.9  | 361.0  | 377.2  | 365.1  |
| 77.5° | 1338.6 | 892.4  | 480.7  | 340.7  | 306.3  | 290.0  | 275.8  | 273.8  | 298.1  | 308.3  | 296.1  |
| 80°   | 726.1  | 501.0  | 275.8  | 204.8  | 186.6  | 188.6  | 206.9  | 202.8  | 229.2  | 235.3  | 225.1  |
| 82.5° | 316.4  | 237.3  | 135.9  | 123.7  | 123.7  | 121.7  | 127.8  | 142.0  | 170.4  | 170.4  | 135.9  |
| 85°   | 69.0   | 58.8   | 52.7   | 60.8   | 69.0   | 69.0   | 69.0   | 69.0   | 48.7   | 26.4   | 18.3   |
| 87.5° | 22.3   | 22.3   | 22.3   | 24.3   | 26.4   | 26.4   | 22.3   | 16.2   | 10.1   | 2.0    | 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)