

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: P800311

Luminaire Tested: **ARCH2-90-740-U-T3**

Issue Date: 4/4/2024

### Test Information

Test Method: LM-79-08  
Report Number: P800311  
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: ARCH2-90-740-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

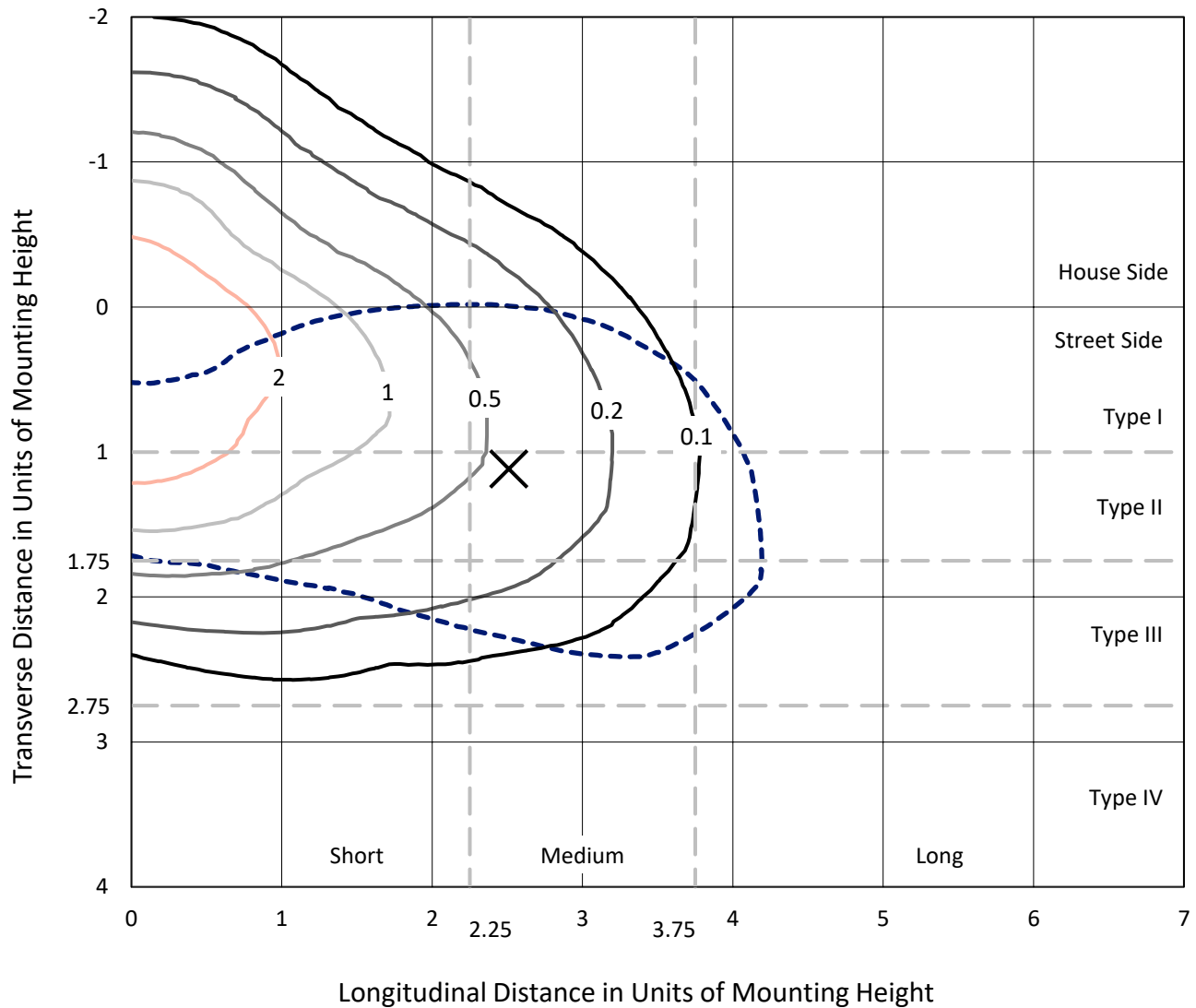
Lumens per Lamp: N/A  
Luminaire Lumens: 12463 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 93.7  
Input Voltage (V): NR  
Input Current (Ain): 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: P800311  
CATALOG NUMBER: ARCH2-90-740-U-T3

## Iso-Footcandle Lines of Horizontal Illumination

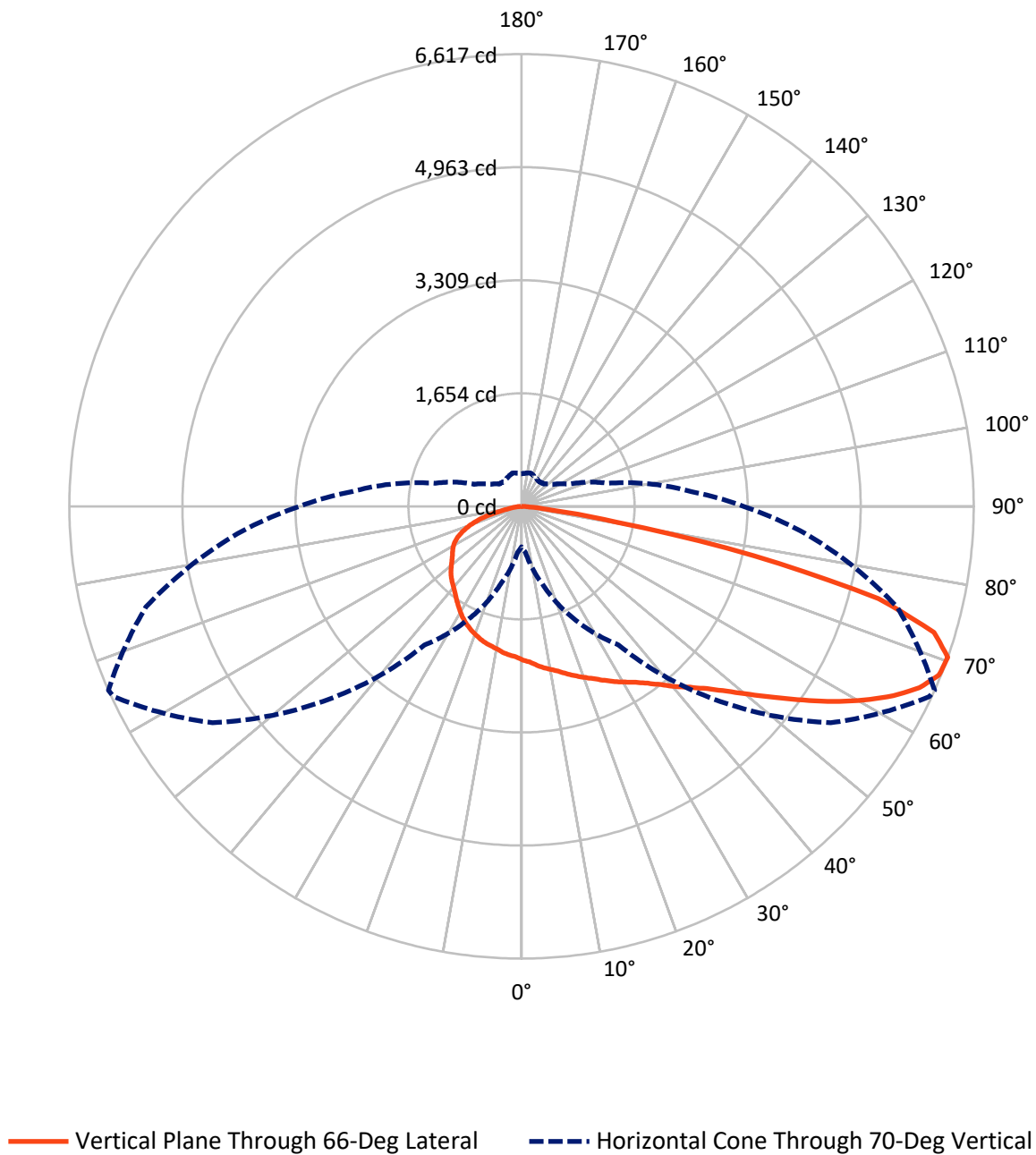
✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
Type III - Medium - N/A

REPORT NUMBER: P800311  
CATALOG NUMBER: ARCH2-90-740-U-T3

## Luminous Intensity Polar Plot



REPORT NUMBER: P800311

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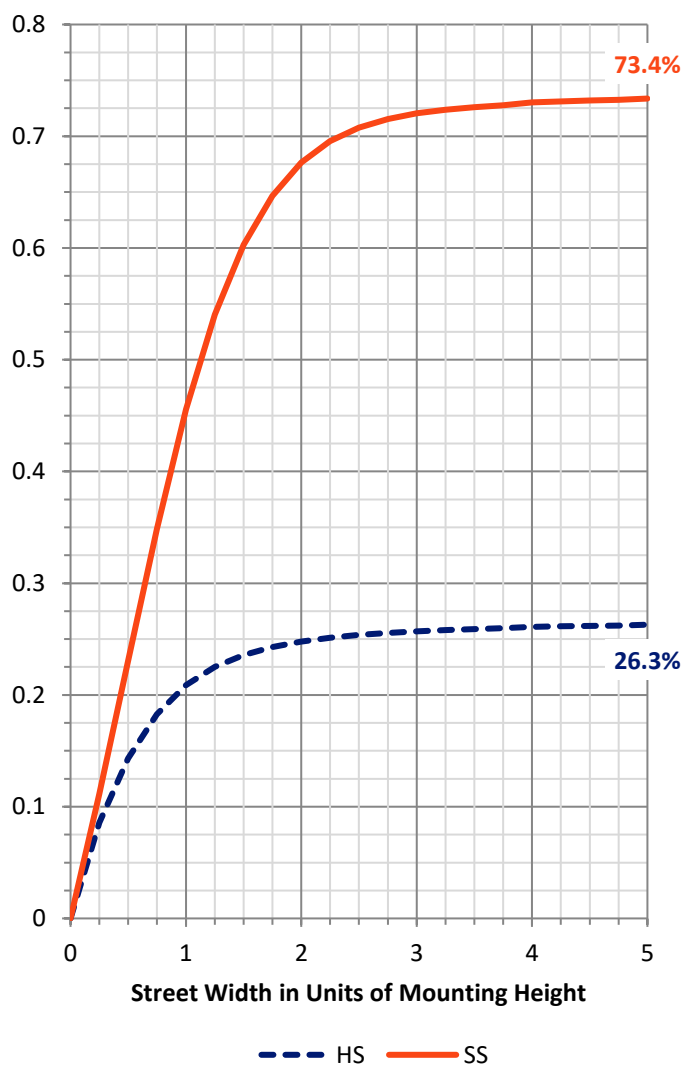
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3302.4   | 0.0    | 3302.4  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 9160.6   | 0.0    | 9160.6  |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 12463.0  | 0.0    | 12463.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 216.1   | 1.7       |
| 10°-20°   | 648.3   | 5.2       |
| 20°-30°   | 1086.8  | 8.7       |
| 30°-40°   | 1627.3  | 13.1      |
| 40°-50°   | 2175.7  | 17.5      |
| 50°-60°   | 2540.2  | 20.4      |
| 60°-70°   | 2525.8  | 20.3      |
| 70°-80°   | 1495.3  | 12.0      |
| 80°-90°   | 147.4   | 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°    | 12463.0 | 100.0     |
| 0°-180°   | 12463.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P800311

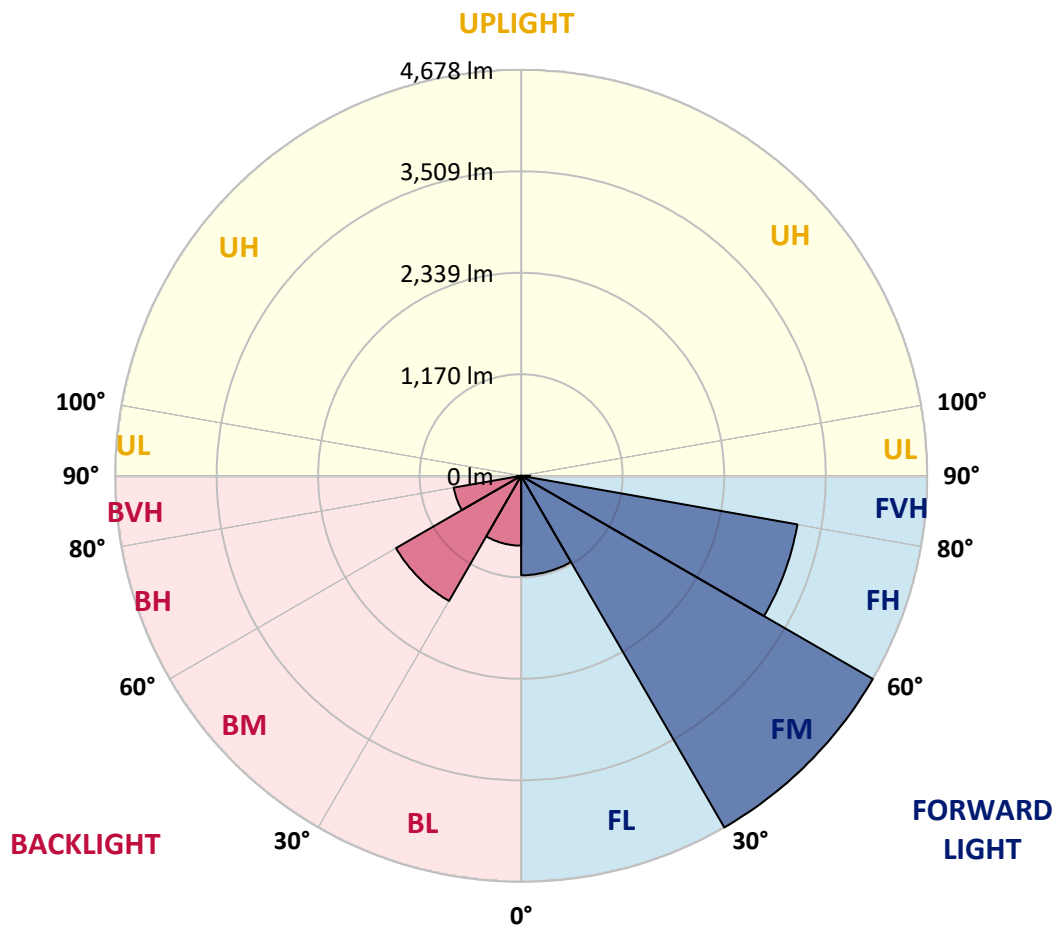
CATALOG NUMBER: ARCH2-90-740-U-T3

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1146.3 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 4678.4 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 3232.3 | 25.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 103.6  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 805.0  | 6.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1664.8 | 13.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 788.9  | 6.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 43.8   | 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: P800311

CATALOG NUMBER: ARCH2-90-740-U-T3

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 |
| 2.5°  | 2332.0 | 2328.3 | 2326.5 | 2319.1 | 2302.6 | 2309.9 | 2293.4 | 2282.4 | 2280.5 | 2254.8 | 2240.1 |
| 5°    | 2427.5 | 2425.7 | 2422.0 | 2411.0 | 2385.3 | 2388.9 | 2361.4 | 2341.2 | 2335.7 | 2295.2 | 2264.0 |
| 7.5°  | 2508.4 | 2504.7 | 2502.9 | 2488.2 | 2460.6 | 2458.8 | 2425.7 | 2396.3 | 2387.1 | 2332.0 | 2284.2 |
| 10°   | 2570.9 | 2565.4 | 2569.0 | 2554.3 | 2524.9 | 2519.4 | 2477.2 | 2438.6 | 2429.4 | 2359.5 | 2293.4 |
| 12.5° | 2624.2 | 2620.5 | 2626.0 | 2613.1 | 2589.3 | 2583.7 | 2541.5 | 2491.9 | 2480.8 | 2400.0 | 2313.6 |
| 15°   | 2683.0 | 2670.1 | 2681.1 | 2675.6 | 2659.1 | 2657.2 | 2618.7 | 2563.5 | 2548.8 | 2451.4 | 2344.8 |
| 17.5° | 2714.2 | 2706.9 | 2719.7 | 2721.6 | 2714.2 | 2727.1 | 2690.3 | 2624.2 | 2611.3 | 2499.2 | 2372.4 |
| 20°   | 2736.3 | 2725.2 | 2739.9 | 2751.0 | 2756.5 | 2782.2 | 2752.8 | 2688.5 | 2673.8 | 2545.1 | 2398.1 |
| 22.5° | 2811.6 | 2787.7 | 2789.6 | 2796.9 | 2800.6 | 2837.3 | 2819.0 | 2756.5 | 2741.8 | 2602.1 | 2429.4 |
| 25°   | 3000.9 | 2953.1 | 2921.9 | 2899.8 | 2874.1 | 2905.3 | 2894.3 | 2833.7 | 2820.8 | 2670.1 | 2468.0 |
| 27.5° | 3294.9 | 3234.3 | 3171.8 | 3107.5 | 3006.4 | 2993.5 | 2975.2 | 2920.0 | 2905.3 | 2738.1 | 2506.6 |
| 30°   | 3629.4 | 3568.7 | 3495.2 | 3392.3 | 3203.0 | 3103.8 | 3061.5 | 3000.9 | 2984.3 | 2798.7 | 2543.3 |
| 32.5° | 3962.0 | 3908.7 | 3835.2 | 3710.2 | 3440.1 | 3237.9 | 3147.9 | 3085.4 | 3068.9 | 2864.9 | 2587.4 |
| 35°   | 4221.1 | 4188.0 | 4140.2 | 3984.0 | 3675.3 | 3396.0 | 3272.9 | 3197.5 | 3179.1 | 2969.6 | 2668.3 |
| 37.5° | 4430.6 | 4406.7 | 4366.3 | 4202.7 | 3846.2 | 3554.0 | 3416.2 | 3329.8 | 3309.6 | 3083.6 | 2754.6 |
| 40°   | 4739.3 | 4676.8 | 4643.7 | 4406.7 | 3995.1 | 3697.4 | 3577.9 | 3487.9 | 3465.8 | 3204.9 | 2824.5 |
| 42.5° | 5002.1 | 4956.2 | 4915.7 | 4588.6 | 4136.6 | 3820.5 | 3730.4 | 3647.7 | 3618.3 | 3324.3 | 2899.8 |
| 45°   | 5046.2 | 5064.6 | 5044.4 | 4678.7 | 4360.8 | 3941.8 | 3884.8 | 3831.5 | 3803.9 | 3486.0 | 3013.8 |
| 47.5° | 5048.0 | 5048.0 | 4928.6 | 4730.1 | 4638.2 | 4077.8 | 4050.2 | 4068.6 | 4039.2 | 3691.8 | 3149.7 |
| 50°   | 4915.7 | 4939.6 | 4877.1 | 4743.0 | 4711.7 | 4213.7 | 4252.3 | 4351.6 | 4322.2 | 3910.5 | 3296.8 |
| 52.5° | 4641.9 | 4720.9 | 4719.1 | 4722.8 | 4605.2 | 4329.5 | 4465.5 | 4691.5 | 4641.9 | 4156.8 | 3453.0 |
| 55°   | 4158.6 | 4316.6 | 4458.1 | 4579.4 | 4513.3 | 4399.3 | 4726.4 | 5053.5 | 5002.1 | 4432.4 | 3611.0 |
| 57.5° | 3745.1 | 3846.2 | 4022.6 | 4366.3 | 4404.9 | 4460.0 | 4970.9 | 5432.1 | 5386.2 | 4737.5 | 3776.4 |
| 60°   | 3272.9 | 3412.5 | 3588.9 | 4077.8 | 4272.5 | 4539.0 | 5239.1 | 5801.5 | 5757.4 | 5046.2 | 3936.3 |
| 62.5° | 2547.0 | 2727.1 | 3079.9 | 3634.9 | 4079.6 | 4588.6 | 5450.5 | 6126.7 | 6106.5 | 5338.4 | 4079.6 |
| 65°   | 1775.2 | 1935.0 | 2429.4 | 3090.9 | 3772.7 | 4566.6 | 5619.5 | 6417.1 | 6398.7 | 5577.3 | 4180.7 |
| 67.5° | 1036.4 | 1222.0 | 1780.7 | 2488.2 | 3230.6 | 4414.0 | 5674.7 | 6588.0 | 6588.0 | 5722.5 | 4208.2 |
| 70°   | 591.7  | 678.1  | 1174.3 | 1813.8 | 2477.2 | 3993.2 | 5520.3 | 6586.1 | 6617.4 | 5689.4 | 4094.3 |
| 72.5° | 413.5  | 452.1  | 790.2  | 1220.2 | 1679.6 | 3230.6 | 5116.0 | 6268.2 | 6310.5 | 5377.0 | 3704.7 |
| 75°   | 321.6  | 349.2  | 556.8  | 832.5  | 1058.5 | 2194.2 | 4232.1 | 5285.1 | 5397.2 | 4583.1 | 2995.4 |
| 77.5° | 244.4  | 264.6  | 325.3  | 520.1  | 678.1  | 1260.6 | 2793.2 | 3465.8 | 3473.2 | 2806.1 | 1606.1 |
| 80°   | 178.3  | 198.5  | 216.8  | 317.9  | 360.2  | 589.9  | 1054.8 | 1448.1 | 1407.6 | 1358.0 | 869.2  |
| 82.5° | 106.6  | 126.8  | 132.3  | 172.7  | 176.4  | 251.8  | 369.4  | 466.8  | 448.4  | 597.2  | 408.0  |
| 85°   | 45.9   | 64.3   | 68.0   | 79.0   | 75.3   | 102.9  | 147.0  | 123.1  | 110.3  | 126.8  | 88.2   |
| 87.5° | 11.0   | 18.4   | 18.4   | 20.2   | 16.5   | 25.7   | 27.6   | 20.2   | 18.4   | 22.1   | 22.1   |
| 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: P800311

CATALOG NUMBER: ARCH2-90-740-U-T3

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 | 2249.3 |
| 2.5°  | 2236.4 | 2230.9 | 2232.7 | 2201.5 | 2192.3 | 2183.1 | 2177.6 | 2173.9 | 2170.3 | 2175.8 | 2181.3 |
| 5°    | 2253.0 | 2240.1 | 2225.4 | 2179.5 | 2161.1 | 2140.9 | 2126.2 | 2113.3 | 2107.8 | 2107.8 | 2113.3 |
| 7.5°  | 2265.8 | 2243.8 | 2212.5 | 2151.9 | 2118.8 | 2091.2 | 2067.4 | 2050.8 | 2041.6 | 2041.6 | 2047.1 |
| 10°   | 2267.7 | 2236.4 | 2186.8 | 2113.3 | 2069.2 | 2028.8 | 2001.2 | 1982.8 | 1970.0 | 1970.0 | 1973.6 |
| 12.5° | 2278.7 | 2236.4 | 2172.1 | 2083.9 | 2028.8 | 1979.2 | 1946.1 | 1918.5 | 1913.0 | 1913.0 | 1916.7 |
| 15°   | 2297.1 | 2245.6 | 2162.9 | 2058.2 | 1992.0 | 1935.0 | 1898.3 | 1868.9 | 1857.9 | 1865.2 | 1867.1 |
| 17.5° | 2313.6 | 2251.1 | 2146.4 | 2025.1 | 1946.1 | 1883.6 | 1843.2 | 1817.4 | 1802.7 | 1819.3 | 1819.3 |
| 20°   | 2324.6 | 2251.1 | 2122.5 | 1982.8 | 1896.5 | 1826.6 | 1788.0 | 1756.8 | 1745.8 | 1766.0 | 1767.8 |
| 22.5° | 2341.2 | 2249.3 | 2096.8 | 1940.6 | 1843.2 | 1769.7 | 1731.1 | 1707.2 | 1701.7 | 1723.7 | 1731.1 |
| 25°   | 2359.5 | 2253.0 | 2069.2 | 1892.8 | 1784.4 | 1712.7 | 1683.3 | 1672.3 | 1675.9 | 1703.5 | 1712.7 |
| 27.5° | 2379.8 | 2260.3 | 2041.6 | 1839.5 | 1720.0 | 1655.7 | 1639.2 | 1644.7 | 1659.4 | 1694.3 | 1705.3 |
| 30°   | 2398.1 | 2262.2 | 2003.0 | 1777.0 | 1646.5 | 1585.9 | 1593.2 | 1617.1 | 1639.2 | 1674.1 | 1687.0 |
| 32.5° | 2422.0 | 2264.0 | 1962.6 | 1709.0 | 1567.5 | 1523.4 | 1556.5 | 1595.1 | 1617.1 | 1650.2 | 1664.9 |
| 35°   | 2480.8 | 2295.2 | 1931.4 | 1642.9 | 1494.0 | 1470.1 | 1525.3 | 1574.9 | 1587.7 | 1617.1 | 1630.0 |
| 37.5° | 2548.8 | 2346.7 | 1914.8 | 1574.9 | 1422.3 | 1416.8 | 1486.7 | 1536.3 | 1540.0 | 1558.3 | 1571.2 |
| 40°   | 2591.1 | 2368.7 | 1896.5 | 1517.9 | 1358.0 | 1361.7 | 1433.4 | 1472.0 | 1464.6 | 1477.5 | 1486.7 |
| 42.5° | 2633.4 | 2376.1 | 1857.9 | 1470.1 | 1297.4 | 1301.1 | 1356.2 | 1383.8 | 1387.4 | 1415.0 | 1427.9 |
| 45°   | 2705.0 | 2396.3 | 1815.6 | 1426.0 | 1242.3 | 1229.4 | 1262.5 | 1299.2 | 1347.0 | 1400.3 | 1415.0 |
| 47.5° | 2800.6 | 2438.6 | 1771.5 | 1372.7 | 1189.0 | 1146.7 | 1159.6 | 1223.9 | 1273.5 | 1323.1 | 1332.3 |
| 50°   | 2898.0 | 2480.8 | 1731.1 | 1308.4 | 1135.7 | 1058.5 | 1064.0 | 1122.8 | 1163.2 | 1201.8 | 1207.3 |
| 52.5° | 2993.5 | 2517.6 | 1696.2 | 1247.8 | 1075.0 | 953.7  | 975.8  | 1036.4 | 1064.0 | 1082.4 | 1087.9 |
| 55°   | 3089.1 | 2548.8 | 1664.9 | 1196.3 | 1005.2 | 871.0  | 891.3  | 948.2  | 975.8  | 985.0  | 988.7  |
| 57.5° | 3188.3 | 2585.6 | 1641.0 | 1152.2 | 926.2  | 797.5  | 810.4  | 850.8  | 876.6  | 887.6  | 883.9  |
| 60°   | 3271.0 | 2616.8 | 1628.2 | 1106.3 | 847.2  | 729.5  | 725.9  | 762.6  | 799.4  | 810.4  | 806.7  |
| 62.5° | 3335.3 | 2637.0 | 1607.9 | 1047.5 | 777.3  | 661.6  | 643.2  | 691.0  | 729.5  | 736.9  | 742.4  |
| 65°   | 3370.3 | 2638.9 | 1558.3 | 972.1  | 705.7  | 588.0  | 575.2  | 623.0  | 646.9  | 654.2  | 654.2  |
| 67.5° | 3364.7 | 2609.5 | 1460.9 | 871.0  | 639.5  | 521.9  | 510.9  | 540.3  | 575.2  | 580.7  | 575.2  |
| 70°   | 3250.8 | 2488.2 | 1304.7 | 764.5  | 560.5  | 463.1  | 442.9  | 472.3  | 505.4  | 485.1  | 476.0  |
| 72.5° | 2927.4 | 2173.9 | 1075.0 | 646.9  | 472.3  | 389.6  | 380.4  | 409.8  | 411.6  | 415.3  | 406.1  |
| 75°   | 2309.9 | 1619.0 | 804.9  | 503.5  | 382.2  | 327.1  | 325.3  | 319.8  | 327.1  | 341.8  | 330.8  |
| 77.5° | 1212.9 | 808.6  | 435.5  | 308.7  | 277.5  | 262.8  | 249.9  | 248.1  | 270.1  | 279.3  | 268.3  |
| 80°   | 657.9  | 453.9  | 249.9  | 185.6  | 169.1  | 170.9  | 187.4  | 183.8  | 207.7  | 213.2  | 204.0  |
| 82.5° | 286.7  | 215.0  | 123.1  | 112.1  | 112.1  | 110.3  | 115.8  | 128.6  | 154.4  | 154.4  | 123.1  |
| 85°   | 62.5   | 53.3   | 47.8   | 55.1   | 62.5   | 62.5   | 62.5   | 62.5   | 44.1   | 23.9   | 16.5   |
| 87.5° | 20.2   | 20.2   | 20.2   | 22.1   | 23.9   | 23.9   | 20.2   | 14.7   | 9.2    | 1.8    | 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)