

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: P841980

Luminaire Tested: **ARCH4-250-740-U-T4W**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841980  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-250-740-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 37714 lumens  
Efficiency: N/A  
Efficacy: 151.2 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G4

Input Watts (W): 249.5  
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



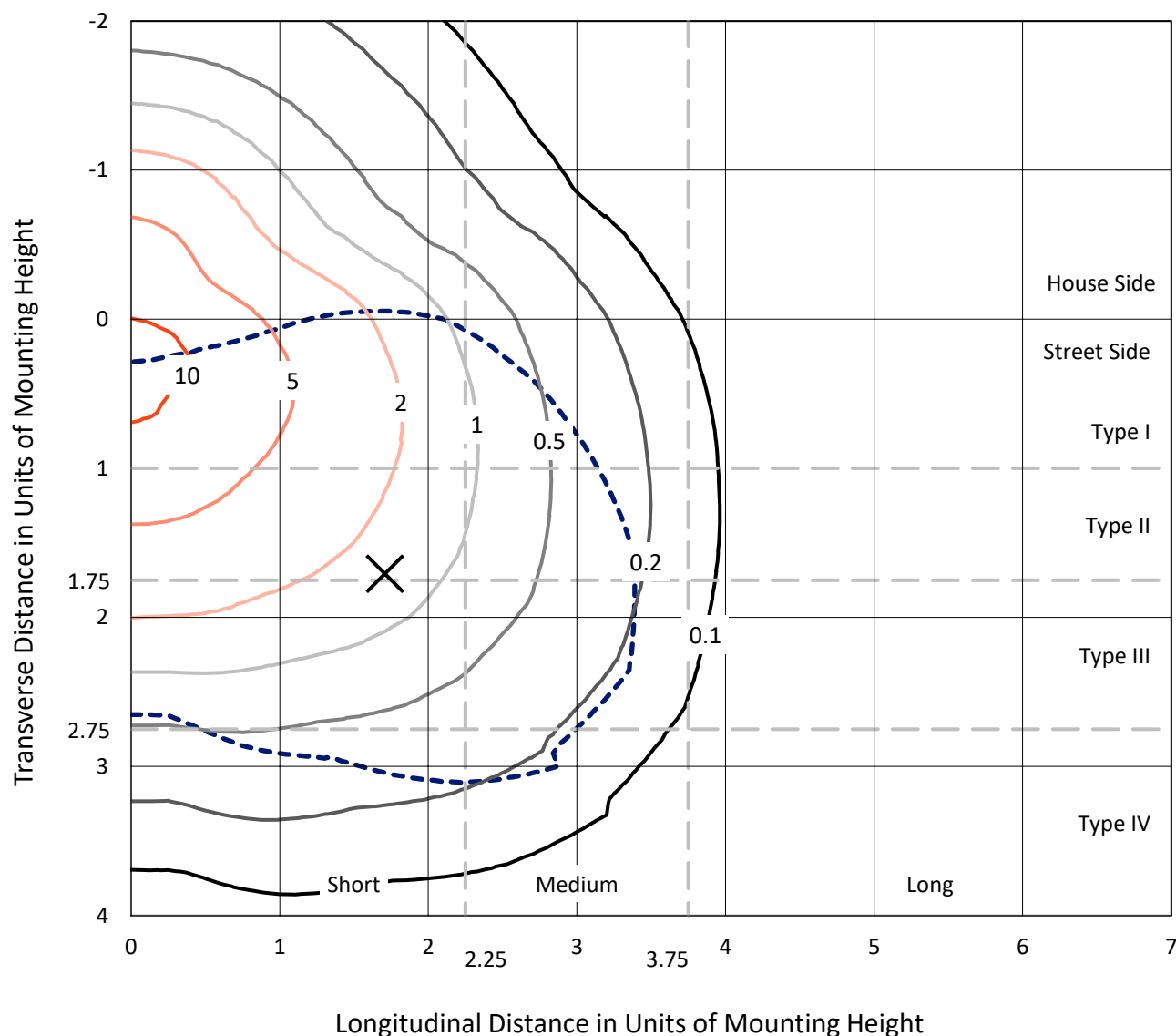
REPORT NUMBER: P841980

CATALOG NUMBER: ARCH4-250-740-U-T4W

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

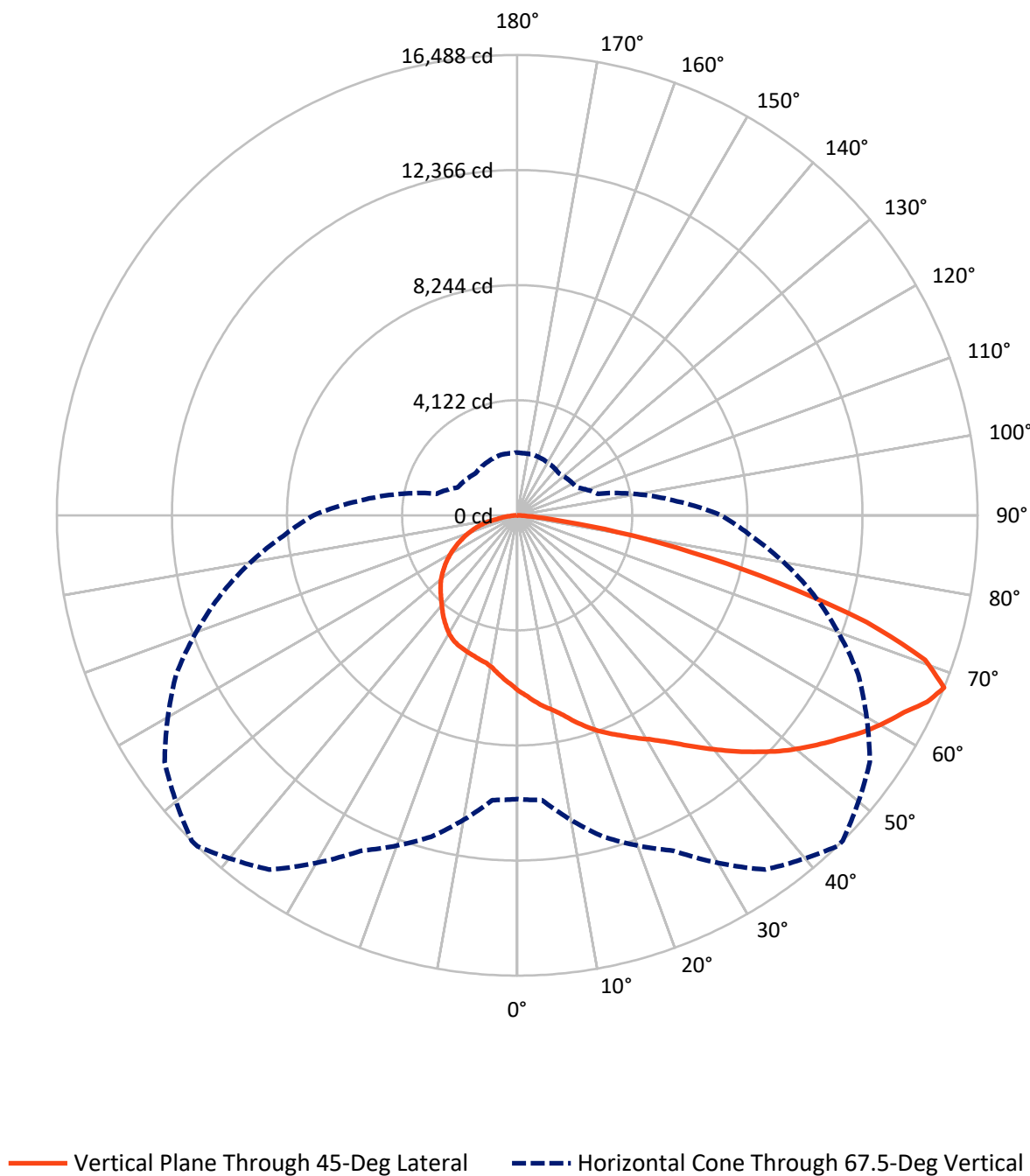


Based on 25 foot mounting height. Maximum calculated value = 11.7 fc

Type IV - Short - N/A

REPORT NUMBER: P841980  
CATALOG NUMBER: ARCH4-250-740-U-T4W

## Luminous Intensity Polar Plot



REPORT NUMBER: P841980

CATALOG NUMBER: ARCH4-250-740-U-T4W

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10075.3  | 0.0    | 10075.3 |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 27638.7  | 0.0    | 27638.7 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 37714.0  | 0.0    | 37714.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 602.2   | 1.6       |
| 10°-20°   | 1860.4  | 4.9       |
| 20°-30°   | 3211.2  | 8.5       |
| 30°-40°   | 4735.4  | 12.6      |
| 40°-50°   | 6415.6  | 17.0      |
| 50°-60°   | 7841.4  | 20.8      |
| 60°-70°   | 8087.3  | 21.4      |
| 70°-80°   | 4429.6  | 11.7      |
| 80°-90°   | 530.9   | 1.4       |
| 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°    | 37714.0 | 100.0     |
| 0°-180°   | 37714.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841980

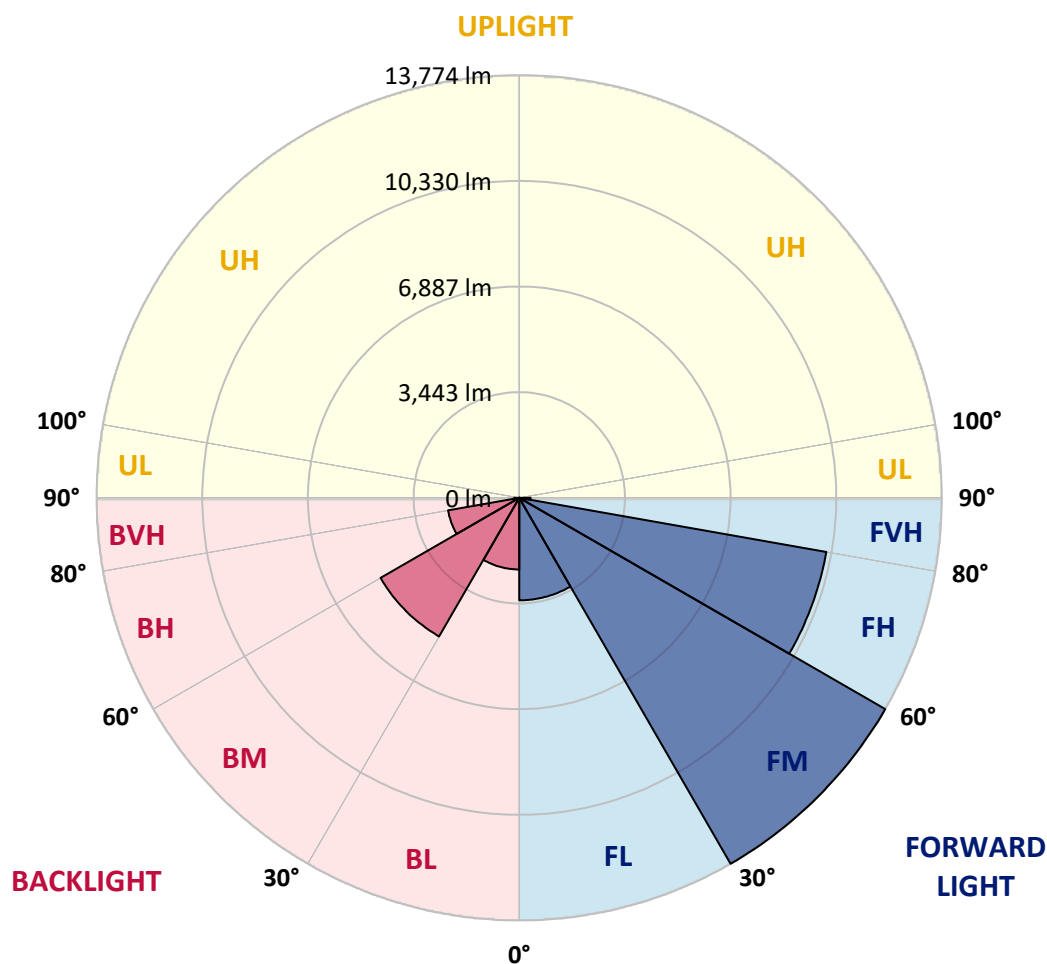
CATALOG NUMBER: ARCH4-250-740-U-T4W

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 3338.7  | 8.9       |                         |      |          |
| FM   | (30°-60°)   | 13773.5 | 36.5      |                         |      |          |
| FH   | (60°-80°)   | 10160.7 | 26.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 365.7   | 1.0       |                         |      | G3/500   |
| BL   | (0°-30°)    | 2335.1  | 6.2       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 5218.9  | 13.8      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 2356.2  | 6.2       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 165.2   | 0.4       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B4-U0-G4**

Type IV Short



REPORT NUMBER: P841980

CATALOG NUMBER: ARCH4-250-740-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0  | 6290.0 |
| 2.5°  | 6565.5  | 6559.7  | 6571.2  | 6531.0  | 6479.4  | 6473.6  | 6473.6  | 6439.2  | 6399.0  | 6318.7  | 6255.5 |
| 5°    | 6875.4  | 6863.9  | 6869.6  | 6812.2  | 6743.4  | 6708.9  | 6703.2  | 6628.6  | 6536.8  | 6410.5  | 6295.7 |
| 7.5°  | 7162.3  | 7150.8  | 7145.1  | 7082.0  | 6978.7  | 6921.3  | 6915.5  | 6806.5  | 6697.5  | 6502.3  | 6335.9 |
| 10°   | 7432.0  | 7420.6  | 7409.1  | 7323.0  | 7196.7  | 7110.7  | 7099.2  | 6961.4  | 6823.7  | 6582.7  | 6370.3 |
| 12.5° | 7776.4  | 7753.4  | 7742.0  | 7638.7  | 7455.0  | 7363.2  | 7346.0  | 7162.3  | 6990.1  | 6697.5  | 6439.2 |
| 15°   | 8137.9  | 8120.7  | 8103.5  | 8006.0  | 7799.3  | 7678.8  | 7650.1  | 7420.6  | 7185.3  | 6846.7  | 6542.5 |
| 17.5° | 8407.7  | 8390.5  | 8390.5  | 8304.4  | 8115.0  | 7977.3  | 7954.3  | 7678.8  | 7386.1  | 6984.4  | 6622.8 |
| 20°   | 8574.1  | 8556.9  | 8574.1  | 8522.5  | 8379.0  | 8264.2  | 8241.3  | 7937.1  | 7587.0  | 7110.7  | 6691.7 |
| 22.5° | 8694.6  | 8677.4  | 8706.1  | 8683.2  | 8579.9  | 8511.0  | 8493.8  | 8195.3  | 7793.6  | 7242.7  | 6760.6 |
| 25°   | 8907.0  | 8907.0  | 8907.0  | 8866.8  | 8769.2  | 8746.3  | 8746.3  | 8488.0  | 8057.6  | 7414.8  | 6863.9 |
| 27.5° | 9331.7  | 9308.7  | 9280.0  | 9165.2  | 8998.8  | 8993.1  | 9027.5  | 8786.5  | 8361.8  | 7638.7  | 6990.1 |
| 30°   | 9957.2  | 9945.7  | 9836.7  | 9595.7  | 9314.5  | 9285.8  | 9308.7  | 9107.8  | 8688.9  | 7874.0  | 7133.6 |
| 32.5° | 10766.4 | 10726.3 | 10502.4 | 10140.9 | 9739.1  | 9607.1  | 9653.1  | 9440.7  | 9033.2  | 8115.0  | 7271.4 |
| 35°   | 11340.3 | 11351.8 | 11191.1 | 10864.0 | 10387.6 | 10037.6 | 10072.0 | 9813.7  | 9406.3  | 8384.7  | 7443.5 |
| 37.5° | 12000.3 | 12040.5 | 11799.5 | 11552.7 | 11110.8 | 10513.9 | 10548.3 | 10198.3 | 9779.3  | 8723.3  | 7627.2 |
| 40°   | 12912.8 | 12832.5 | 12425.0 | 12132.3 | 11644.5 | 11013.2 | 11041.9 | 10628.7 | 10209.7 | 9044.7  | 7839.5 |
| 42.5° | 13676.1 | 13532.6 | 13039.1 | 12666.0 | 12080.7 | 11541.2 | 11569.9 | 11093.6 | 10645.9 | 9400.5  | 8074.8 |
| 45°   | 14772.3 | 14376.3 | 13664.6 | 13481.0 | 12528.3 | 12057.7 | 12086.4 | 11587.1 | 11105.0 | 9779.3  | 8327.3 |
| 47.5° | 15409.3 | 14778.0 | 14324.6 | 14227.1 | 13021.9 | 12591.4 | 12625.9 | 12109.4 | 11598.6 | 10209.7 | 8591.3 |
| 50°   | 15369.1 | 14961.7 | 14829.7 | 14588.6 | 13458.0 | 13090.7 | 13125.2 | 12648.8 | 12097.9 | 10634.4 | 8843.8 |
| 52.5° | 15105.1 | 15179.7 | 15110.9 | 14709.1 | 13894.2 | 13572.8 | 13613.0 | 13182.6 | 12608.7 | 11030.4 | 9079.1 |
| 55°   | 15512.6 | 15564.3 | 15432.3 | 14904.3 | 14376.3 | 14054.9 | 14100.8 | 13745.0 | 13113.7 | 11380.5 | 9280.0 |
| 57.5° | 16000.4 | 15816.8 | 15684.8 | 15248.6 | 14875.6 | 14577.1 | 14628.8 | 14318.9 | 13549.9 | 11661.7 | 9435.0 |
| 60°   | 15977.5 | 15593.0 | 15724.9 | 15271.6 | 15214.2 | 15059.2 | 15105.1 | 14789.5 | 13882.7 | 11868.3 | 9498.1 |
| 62.5° | 14801.0 | 14594.4 | 15260.1 | 15105.1 | 15489.6 | 15489.6 | 15547.0 | 15076.4 | 14083.6 | 11954.4 | 9463.7 |
| 65°   | 12757.9 | 12769.3 | 13940.1 | 14582.9 | 15816.8 | 16080.8 | 16126.7 | 15254.3 | 13968.8 | 11701.9 | 9142.3 |
| 67.5° | 10163.8 | 10238.4 | 11920.0 | 13257.2 | 15489.6 | 16482.5 | 16488.2 | 15415.0 | 13475.2 | 10990.2 | 8396.2 |
| 70°   | 7437.8  | 7495.2  | 9480.9  | 11105.0 | 13945.8 | 15593.0 | 15501.1 | 14961.7 | 12402.0 | 9750.6  | 7231.2 |
| 72.5° | 5027.4  | 5079.0  | 7122.1  | 8528.2  | 11443.6 | 13280.1 | 13079.3 | 13222.7 | 10571.3 | 8011.7  | 5813.6 |
| 75°   | 3380.3  | 3443.4  | 5067.6  | 6100.6  | 8419.2  | 10083.5 | 9635.8  | 10014.6 | 8178.1  | 6066.2  | 4241.1 |
| 77.5° | 2129.2  | 2169.4  | 3219.6  | 4000.1  | 5750.5  | 6863.9  | 6416.2  | 6422.0  | 4711.7  | 3265.5  | 2278.4 |
| 80°   | 1354.4  | 1365.9  | 1951.3  | 2307.1  | 3328.6  | 4126.4  | 3650.0  | 2967.1  | 2123.4  | 1733.2  | 1360.2 |
| 82.5° | 786.2   | 769.0   | 1165.0  | 1302.8  | 1584.0  | 1566.8  | 1297.0  | 1228.2  | 929.7   | 866.6   | 694.4  |
| 85°   | 315.6   | 292.7   | 510.8   | 476.3   | 482.1   | 510.8   | 378.8   | 378.8   | 304.2   | 235.3   | 172.2  |
| 87.5° | 63.1    | 63.1    | 68.9    | 63.1    | 63.1    | 68.9    | 51.7    | 51.7    | 45.9    | 45.9    | 45.9   |
| 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: P841980

CATALOG NUMBER: ARCH4-250-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 | 6290.0 |
| 2.5°  | 6244.1 | 6232.6 | 6203.9 | 6129.3 | 6089.1 | 6066.2 | 6031.7 | 6020.2 | 6014.5 | 6020.2 | 6037.5 |
| 5°    | 6261.3 | 6221.1 | 6140.8 | 6020.2 | 5939.9 | 5888.2 | 5830.9 | 5807.9 | 5790.7 | 5790.7 | 5807.9 |
| 7.5°  | 6272.8 | 6209.6 | 6071.9 | 5894.0 | 5779.2 | 5698.9 | 5630.0 | 5601.3 | 5595.6 | 5612.8 | 5618.5 |
| 10°   | 6278.5 | 6186.7 | 5991.6 | 5767.7 | 5618.5 | 5515.2 | 5446.3 | 5429.1 | 5446.3 | 5480.8 | 5486.5 |
| 12.5° | 6318.7 | 6192.4 | 5945.6 | 5681.6 | 5503.7 | 5400.4 | 5348.8 | 5348.8 | 5394.7 | 5457.8 | 5463.6 |
| 15°   | 6387.5 | 6232.6 | 5922.7 | 5612.8 | 5429.1 | 5337.3 | 5320.1 | 5348.8 | 5417.6 | 5515.2 | 5526.7 |
| 17.5° | 6439.2 | 6255.5 | 5871.0 | 5520.9 | 5331.6 | 5274.2 | 5302.9 | 5371.7 | 5469.3 | 5601.3 | 5612.8 |
| 20°   | 6473.6 | 6255.5 | 5796.4 | 5411.9 | 5234.0 | 5222.5 | 5302.9 | 5411.9 | 5515.2 | 5670.2 | 5687.4 |
| 22.5° | 6508.1 | 6244.1 | 5710.3 | 5279.9 | 5125.0 | 5159.4 | 5308.6 | 5446.3 | 5549.6 | 5716.1 | 5744.8 |
| 25°   | 6571.2 | 6261.3 | 5624.3 | 5147.9 | 5010.2 | 5107.7 | 5302.9 | 5469.3 | 5578.3 | 5750.5 | 5796.4 |
| 27.5° | 6657.3 | 6301.5 | 5561.1 | 5027.4 | 4895.4 | 5027.4 | 5262.7 | 5463.6 | 5578.3 | 5744.8 | 5796.4 |
| 30°   | 6749.1 | 6347.4 | 5486.5 | 4895.4 | 4763.4 | 4912.6 | 5176.6 | 5400.4 | 5532.4 | 5687.4 | 5750.5 |
| 32.5° | 6846.7 | 6399.0 | 5423.4 | 4751.9 | 4602.7 | 4757.7 | 5050.3 | 5302.9 | 5446.3 | 5589.8 | 5658.7 |
| 35°   | 6978.7 | 6490.8 | 5389.0 | 4637.1 | 4459.2 | 4597.0 | 4889.7 | 5176.6 | 5331.6 | 5463.6 | 5543.9 |
| 37.5° | 7139.4 | 6605.6 | 5371.7 | 4522.4 | 4304.3 | 4419.1 | 4717.5 | 5021.7 | 5188.1 | 5297.1 | 5371.7 |
| 40°   | 7323.0 | 6749.1 | 5366.0 | 4413.3 | 4149.3 | 4235.4 | 4539.6 | 4843.7 | 5004.4 | 5090.5 | 5153.7 |
| 42.5° | 7529.6 | 6909.8 | 5354.5 | 4304.3 | 3994.4 | 4063.2 | 4367.4 | 4665.8 | 4803.6 | 4878.2 | 4935.6 |
| 45°   | 7747.7 | 7070.5 | 5331.6 | 4172.3 | 3827.9 | 3908.3 | 4189.5 | 4453.5 | 4597.0 | 4660.1 | 4723.2 |
| 47.5° | 7965.8 | 7231.2 | 5285.6 | 4023.1 | 3678.7 | 3753.3 | 4000.1 | 4229.7 | 4344.4 | 4401.8 | 4465.0 |
| 50°   | 8178.1 | 7374.7 | 5176.6 | 3850.9 | 3523.8 | 3592.6 | 3782.0 | 3937.0 | 4023.1 | 4069.0 | 4132.1 |
| 52.5° | 8367.5 | 7472.2 | 5021.7 | 3650.0 | 3368.8 | 3403.2 | 3529.5 | 3661.5 | 3730.4 | 3736.1 | 3793.5 |
| 55°   | 8528.2 | 7523.9 | 4797.8 | 3443.4 | 3202.4 | 3208.1 | 3277.0 | 3380.3 | 3409.0 | 3386.0 | 3426.2 |
| 57.5° | 8620.0 | 7495.2 | 4551.1 | 3231.1 | 3030.2 | 3007.3 | 3058.9 | 3110.6 | 3116.3 | 3058.9 | 3099.1 |
| 60°   | 8643.0 | 7363.2 | 4229.7 | 3018.7 | 2858.0 | 2794.9 | 2812.1 | 2800.6 | 2789.2 | 2766.2 | 2800.6 |
| 62.5° | 8528.2 | 7082.0 | 3873.8 | 2812.1 | 2674.4 | 2576.8 | 2571.1 | 2565.3 | 2582.6 | 2588.3 | 2594.0 |
| 65°   | 8109.3 | 6554.0 | 3449.2 | 2599.8 | 2479.3 | 2347.3 | 2341.5 | 2410.4 | 2433.3 | 2398.9 | 2410.4 |
| 67.5° | 7300.0 | 5744.8 | 2984.3 | 2353.0 | 2232.5 | 2117.7 | 2163.6 | 2203.8 | 2244.0 | 2232.5 | 2244.0 |
| 70°   | 6152.2 | 4717.5 | 2559.6 | 2077.5 | 1962.7 | 1899.6 | 1951.3 | 1985.7 | 1991.4 | 1980.0 | 1991.4 |
| 72.5° | 4838.0 | 3684.5 | 2163.6 | 1796.3 | 1693.0 | 1664.3 | 1727.4 | 1756.1 | 1807.8 | 1830.8 | 1836.5 |
| 75°   | 3495.1 | 2720.3 | 1773.4 | 1492.1 | 1406.1 | 1406.1 | 1463.5 | 1515.1 | 1561.0 | 1532.3 | 1515.1 |
| 77.5° | 1951.3 | 1624.1 | 1274.1 | 1027.3 | 1044.5 | 1124.9 | 1147.8 | 1205.2 | 1251.1 | 1245.4 | 1233.9 |
| 80°   | 1182.2 | 1015.8 | 860.9  | 665.7  | 660.0  | 723.1  | 872.3  | 969.9  | 992.9  | 941.2  | 935.5  |
| 82.5° | 614.1  | 533.7  | 459.1  | 373.0  | 413.2  | 482.1  | 505.0  | 608.3  | 671.5  | 648.5  | 677.2  |
| 85°   | 155.0  | 149.2  | 166.4  | 172.2  | 212.3  | 235.3  | 258.3  | 304.2  | 200.9  | 97.6   | 97.6   |
| 87.5° | 45.9   | 45.9   | 57.4   | 57.4   | 74.6   | 91.8   | 86.1   | 86.1   | 45.9   | 5.7    | 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)