

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: P841524

Luminaire Tested: **ARCH4-190-730-U-T2R**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841524  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-190-730-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1530mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 29892 lumens  
Efficiency: N/A  
Efficacy: 157.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 190  
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



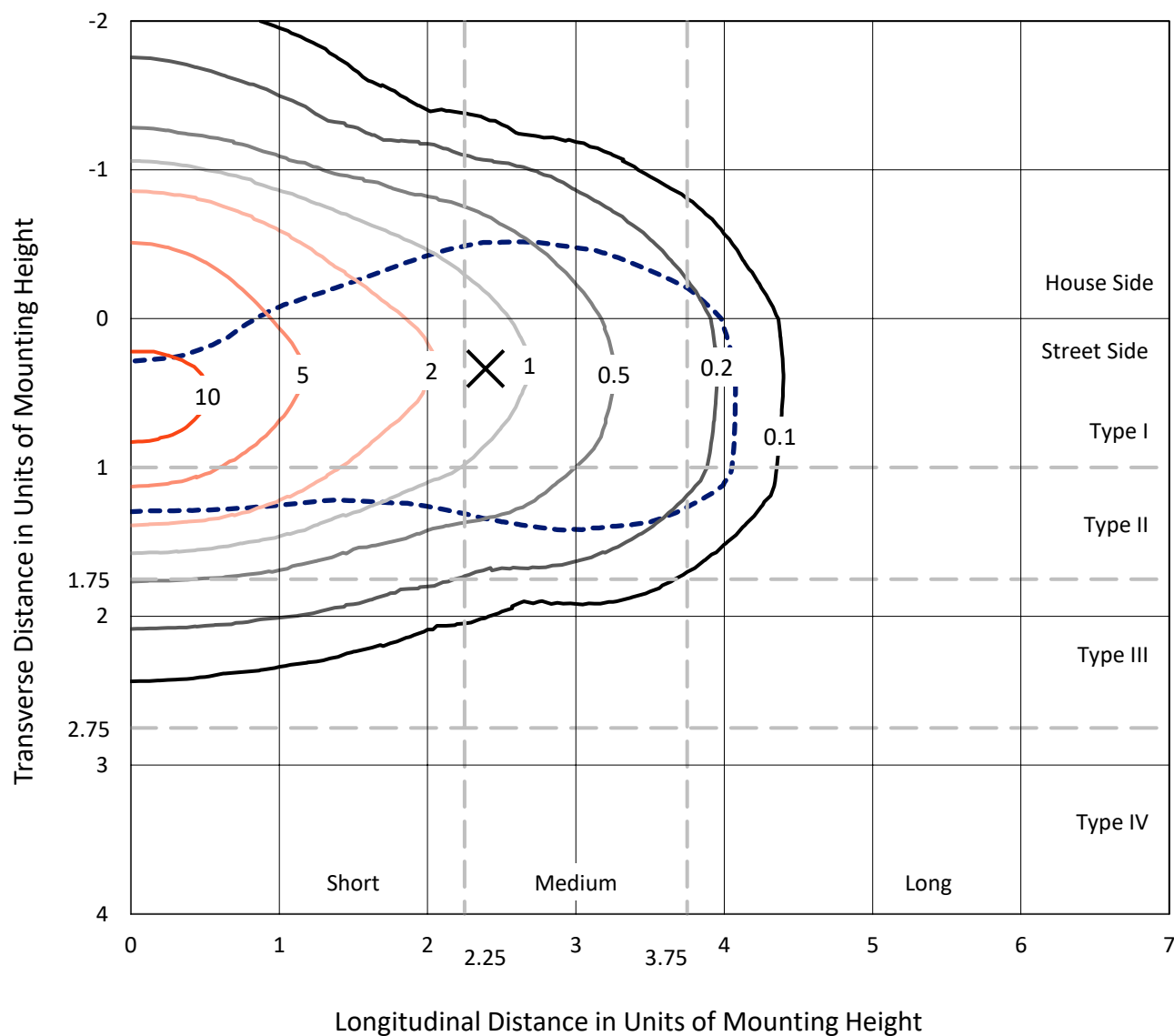
REPORT NUMBER: P841524

CATALOG NUMBER: ARCH4-190-730-U-T2R

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

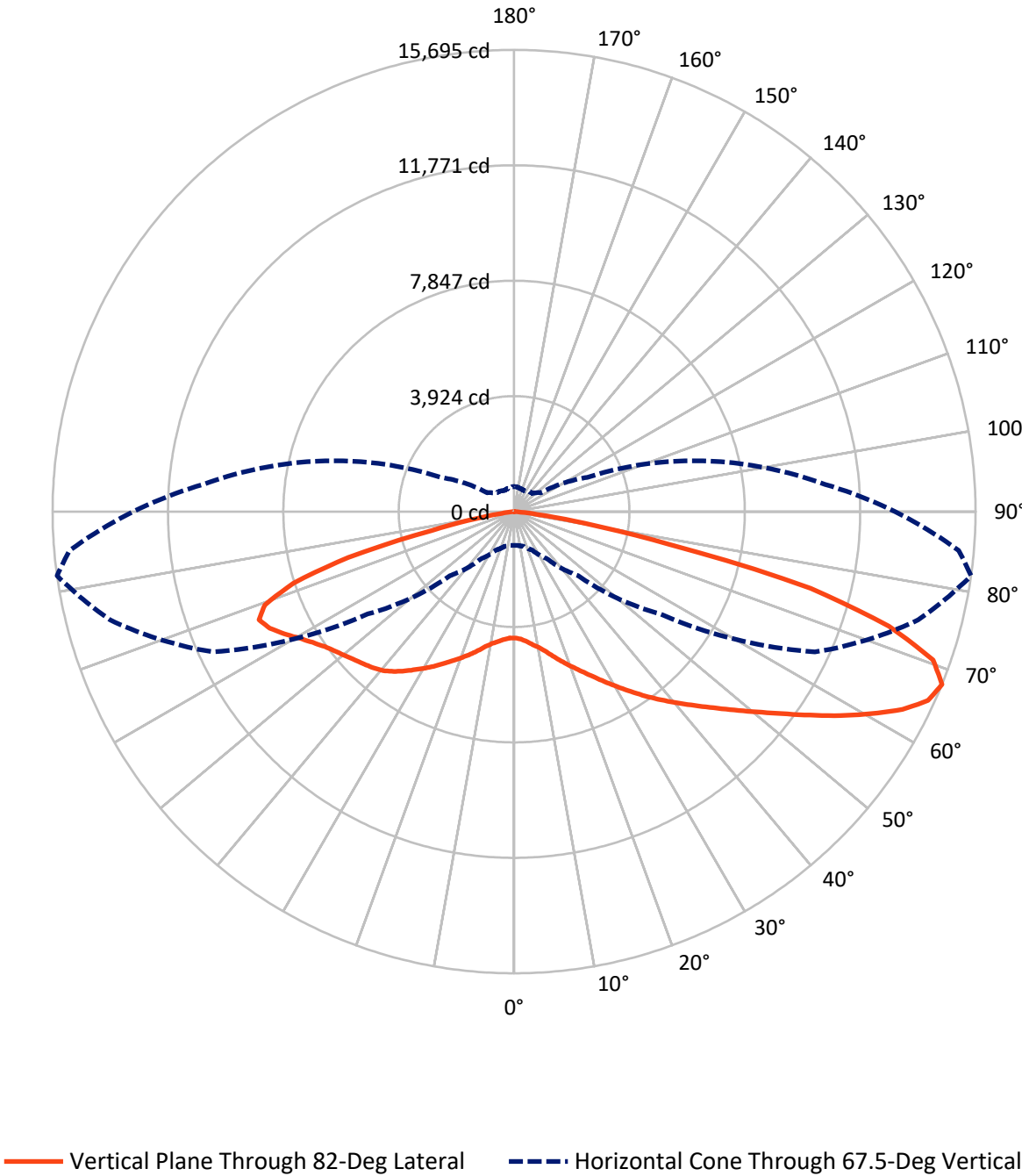
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc  
Type II - Medium - N/A

REPORT NUMBER: P841524  
CATALOG NUMBER: ARCH4-190-730-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P841524

CATALOG NUMBER: ARCH4-190-730-U-T2R

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9103.3   | 0.0    | 9103.3  |
|                    | % Fixture | 30.5     | 0.0    | 30.5    |
| <b>Street Side</b> | Lumens    | 20788.7  | 0.0    | 20788.7 |
|                    | % Fixture | 69.5     | 0.0    | 69.5    |
| <b>Total</b>       | Lumens    | 29892.0  | 0.0    | 29892.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 444.1   | 1.5       |
| 10°-20°   | 1599.6  | 5.4       |
| 20°-30°   | 3214.7  | 10.8      |
| 30°-40°   | 5049.9  | 16.9      |
| 40°-50°   | 6151.8  | 20.6      |
| 50°-60°   | 5812.7  | 19.4      |
| 60°-70°   | 4799.9  | 16.1      |
| 70°-80°   | 2613.8  | 8.7       |
| 80°-90°   | 205.5   | 0.7       |
| 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°    | 29892.0 | 100.0     |
| 0°-180°   | 29892.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841524

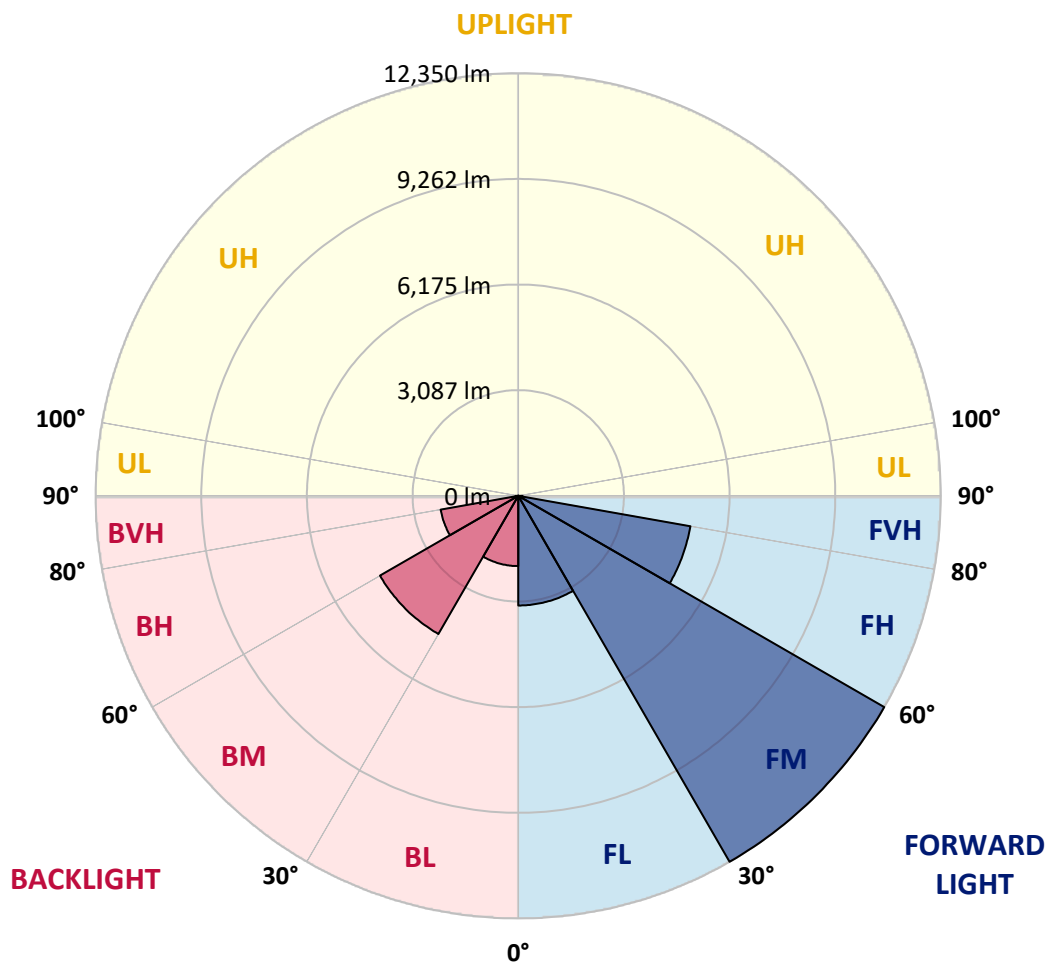
CATALOG NUMBER: ARCH4-190-730-U-T2R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3205.5  | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 12349.7 | 41.3      |                         |      |         |
| FH   | (60°-80°)   | 5109.6  | 17.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 123.9   | 0.4       |                         |      | G2/225  |
| BL   | (0°-30°)    | 2052.9  | 6.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4664.7  | 15.6      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2304.1  | 7.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 81.6    | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium



REPORT NUMBER: P841524

CATALOG NUMBER: ARCH4-190-730-U-T2R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 82°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  | 4297.0  |
| 2.5°  | 4492.3  | 4492.3  | 4527.0  | 4527.0  | 4496.6  | 4448.9  | 4435.9  | 4383.8  | 4336.0  | 4336.0  | 4340.4  |
| 5°    | 4922.0  | 4917.6  | 4943.7  | 4909.0  | 4835.2  | 4739.7  | 4674.6  | 4561.7  | 4466.2  | 4435.9  | 4431.5  |
| 7.5°  | 5447.2  | 5442.8  | 5455.8  | 5399.4  | 5260.5  | 5104.3  | 4974.1  | 4791.8  | 4635.5  | 4570.4  | 4553.0  |
| 10°   | 6033.1  | 6028.8  | 6015.7  | 5920.3  | 5733.6  | 5490.6  | 5295.2  | 5043.5  | 4809.1  | 4705.0  | 4683.3  |
| 12.5° | 6705.9  | 6697.2  | 6666.8  | 6527.9  | 6271.8  | 5959.3  | 5677.2  | 5351.7  | 5039.2  | 4895.9  | 4848.2  |
| 15°   | 7456.7  | 7443.7  | 7387.3  | 7218.0  | 6875.1  | 6480.2  | 6115.6  | 5698.9  | 5316.9  | 5130.3  | 5065.2  |
| 17.5° | 8246.7  | 8246.7  | 8159.9  | 7908.1  | 7526.2  | 7035.7  | 6584.3  | 6054.8  | 5607.7  | 5377.7  | 5299.6  |
| 20°   | 9049.7  | 9045.3  | 8936.8  | 8633.0  | 8181.6  | 7617.3  | 7044.4  | 6462.8  | 5907.2  | 5629.5  | 5534.0  |
| 22.5° | 9896.0  | 9887.3  | 9752.8  | 9405.6  | 8867.4  | 8229.3  | 7560.9  | 6866.5  | 6237.1  | 5902.9  | 5781.4  |
| 25°   | 10868.3 | 10855.2 | 10690.3 | 10265.0 | 9626.9  | 8906.4  | 8142.5  | 7339.6  | 6614.7  | 6206.7  | 6063.5  |
| 27.5° | 11901.3 | 11883.9 | 11688.6 | 11193.8 | 10495.0 | 9626.9  | 8784.9  | 7886.4  | 7031.4  | 6545.3  | 6384.7  |
| 30°   | 12821.4 | 12808.4 | 12595.7 | 12087.9 | 11284.9 | 10343.1 | 9396.9  | 8433.3  | 7469.8  | 6905.5  | 6705.9  |
| 32.5° | 13515.9 | 13515.9 | 13324.9 | 12825.8 | 11992.4 | 11028.9 | 10013.2 | 8949.8  | 7925.5  | 7291.8  | 7057.4  |
| 35°   | 13936.9 | 13949.9 | 13785.0 | 13385.7 | 12600.1 | 11675.6 | 10651.3 | 9557.5  | 8411.6  | 7704.1  | 7452.4  |
| 37.5° | 13997.7 | 14041.1 | 13945.6 | 13676.5 | 13021.1 | 12213.8 | 11276.3 | 10143.4 | 8915.1  | 8120.8  | 7838.7  |
| 40°   | 13715.5 | 13745.9 | 13750.3 | 13646.1 | 13194.7 | 12600.1 | 11827.5 | 10764.1 | 9449.0  | 8559.2  | 8233.7  |
| 42.5° | 13151.3 | 13173.0 | 13212.1 | 13242.4 | 13068.8 | 12769.3 | 12248.5 | 11341.4 | 10017.6 | 9006.3  | 8624.3  |
| 45°   | 12422.1 | 12417.8 | 12482.9 | 12613.1 | 12604.4 | 12673.9 | 12482.9 | 11866.6 | 10607.8 | 9514.1  | 9058.3  |
| 47.5° | 11332.7 | 11311.0 | 11541.0 | 11836.2 | 11983.7 | 12309.3 | 12487.2 | 12278.9 | 11250.2 | 10074.0 | 9553.1  |
| 50°   | 9626.9  | 9605.2  | 10108.7 | 10803.2 | 11237.2 | 11732.0 | 12248.5 | 12526.3 | 11923.0 | 10703.3 | 10091.3 |
| 52.5° | 7552.2  | 7530.5  | 8168.6  | 9383.9  | 10330.1 | 11050.6 | 11766.7 | 12582.7 | 12561.0 | 11406.5 | 10699.0 |
| 55°   | 5616.4  | 5599.1  | 6219.7  | 7534.9  | 9067.0  | 10260.6 | 11176.4 | 12435.1 | 13160.0 | 12213.8 | 11436.9 |
| 57.5° | 3958.4  | 3949.7  | 4487.9  | 5577.4  | 7443.7  | 9297.1  | 10607.8 | 12148.7 | 13711.2 | 13090.5 | 12270.2 |
| 60°   | 2777.8  | 2764.8  | 3155.4  | 3997.5  | 5629.5  | 7843.0  | 10043.6 | 11766.7 | 14123.5 | 13954.3 | 13155.6 |
| 62.5° | 1870.7  | 1862.0  | 2139.8  | 2842.9  | 3997.5  | 6037.4  | 9188.5  | 11510.6 | 14357.9 | 14822.3 | 14049.8 |
| 65°   | 1419.3  | 1415.0  | 1540.8  | 1927.1  | 2829.9  | 4336.0  | 7830.0  | 11480.3 | 14388.3 | 15473.4 | 14809.3 |
| 67.5° | 1145.9  | 1150.2  | 1219.6  | 1441.0  | 1957.5  | 3081.7  | 6072.2  | 11289.3 | 14227.7 | 15694.8 | 15178.3 |
| 70°   | 937.5   | 937.5   | 967.9   | 1115.5  | 1445.3  | 2079.0  | 4240.5  | 10421.2 | 13780.7 | 15117.5 | 14739.9 |
| 72.5° | 716.2   | 720.5   | 816.0   | 902.8   | 1089.4  | 1458.4  | 2717.1  | 8624.3  | 12725.9 | 13329.3 | 13042.8 |
| 75°   | 568.6   | 564.2   | 620.7   | 742.2   | 846.4   | 1041.7  | 1666.7  | 6185.0  | 10829.2 | 10416.9 | 10234.6 |
| 77.5° | 408.0   | 403.7   | 447.1   | 551.2   | 642.4   | 737.9   | 993.9   | 3120.7  | 5889.9  | 5412.4  | 5277.9  |
| 80°   | 277.8   | 269.1   | 308.2   | 382.0   | 425.4   | 434.0   | 486.1   | 1197.9  | 2569.5  | 2421.9  | 2391.5  |
| 82.5° | 143.2   | 143.2   | 164.9   | 217.0   | 221.4   | 225.7   | 217.0   | 386.3   | 850.7   | 794.3   | 759.6   |
| 85°   | 56.4    | 56.4    | 60.8    | 73.8    | 73.8    | 78.1    | 78.1    | 99.8    | 91.1    | 86.8    | 82.5    |
| 87.5° | 4.3     | 4.3     | 8.7     | 8.7     | 13.0    | 13.0    | 13.0    | 17.4    | 21.7    | 21.7    | 21.7    |
| 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: P841524

CATALOG NUMBER: ARCH4-190-730-U-T2R

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4297.0  | 4297.0  | 4297.0 | 4297.0 | 4297.0 | 4297.0 | 4297.0 | 4297.0 | 4297.0 | 4297.0 | 4297.0 |
| 2.5°  | 4331.7  | 4314.3  | 4257.9 | 4244.9 | 4236.2 | 4223.2 | 4227.5 | 4197.1 | 4184.1 | 4188.5 | 4171.1 |
| 5°    | 4409.8  | 4379.4  | 4310.0 | 4279.6 | 4270.9 | 4257.9 | 4270.9 | 4249.2 | 4227.5 | 4236.2 | 4227.5 |
| 7.5°  | 4518.3  | 4474.9  | 4388.1 | 4357.7 | 4353.4 | 4340.4 | 4357.7 | 4340.4 | 4323.0 | 4331.7 | 4314.3 |
| 10°   | 4631.2  | 4574.7  | 4479.3 | 4448.9 | 4448.9 | 4444.5 | 4461.9 | 4435.9 | 4418.5 | 4422.8 | 4414.1 |
| 12.5° | 4796.1  | 4722.3  | 4618.1 | 4592.1 | 4579.1 | 4592.1 | 4596.4 | 4561.7 | 4531.3 | 4535.7 | 4522.7 |
| 15°   | 4995.8  | 4913.3  | 4800.4 | 4761.4 | 4752.7 | 4748.4 | 4731.0 | 4687.6 | 4648.5 | 4644.2 | 4631.2 |
| 17.5° | 5212.8  | 5108.6  | 4974.1 | 4935.0 | 4895.9 | 4882.9 | 4839.5 | 4783.1 | 4722.3 | 4722.3 | 4705.0 |
| 20°   | 5421.1  | 5303.9  | 5143.3 | 5086.9 | 5030.5 | 4978.4 | 4904.6 | 4813.5 | 4735.3 | 4722.3 | 4705.0 |
| 22.5° | 5646.8  | 5507.9  | 5321.3 | 5238.8 | 5139.0 | 5034.8 | 4909.0 | 4787.4 | 4687.6 | 4665.9 | 4652.9 |
| 25°   | 5898.6  | 5724.9  | 5503.6 | 5382.1 | 5221.5 | 5060.9 | 4874.2 | 4718.0 | 4600.8 | 4566.1 | 4557.4 |
| 27.5° | 6176.3  | 5968.0  | 5698.9 | 5520.9 | 5286.6 | 5034.8 | 4796.1 | 4609.5 | 4466.2 | 4422.8 | 4409.8 |
| 30°   | 6458.5  | 6211.1  | 5876.9 | 5616.4 | 5286.6 | 4952.4 | 4652.9 | 4435.9 | 4270.9 | 4210.2 | 4201.5 |
| 32.5° | 6740.6  | 6462.8  | 6037.4 | 5668.5 | 5234.5 | 4813.5 | 4466.2 | 4210.2 | 4023.5 | 3949.7 | 3967.1 |
| 35°   | 7079.1  | 6740.6  | 6185.0 | 5690.2 | 5147.7 | 4644.2 | 4253.6 | 3954.1 | 3763.1 | 3698.0 | 3711.0 |
| 37.5° | 7430.7  | 7018.4  | 6302.2 | 5672.9 | 5026.1 | 4453.2 | 4014.8 | 3724.0 | 3485.3 | 3372.5 | 3385.5 |
| 40°   | 7734.5  | 7270.1  | 6384.7 | 5612.1 | 4869.9 | 4236.2 | 3780.5 | 3398.5 | 3068.6 | 2960.1 | 2947.1 |
| 42.5° | 8021.0  | 7456.7  | 6428.1 | 5520.9 | 4691.9 | 3984.5 | 3446.2 | 2955.8 | 2625.9 | 2491.4 | 2495.7 |
| 45°   | 8320.5  | 7639.0  | 6410.7 | 5399.4 | 4470.6 | 3689.3 | 3016.6 | 2521.8 | 2230.9 | 2109.4 | 2113.8 |
| 47.5° | 8663.4  | 7834.4  | 6393.4 | 5269.2 | 4201.5 | 3307.4 | 2604.2 | 2139.8 | 1888.1 | 1801.3 | 1792.6 |
| 50°   | 9028.0  | 8051.4  | 6371.7 | 5108.6 | 3902.0 | 2882.0 | 2196.2 | 1783.9 | 1571.2 | 1514.8 | 1501.8 |
| 52.5° | 9440.3  | 8285.8  | 6358.6 | 4917.6 | 3541.7 | 2430.6 | 1831.6 | 1471.4 | 1328.2 | 1289.1 | 1284.7 |
| 55°   | 9935.1  | 8559.2  | 6376.0 | 4687.6 | 3107.7 | 2005.2 | 1523.5 | 1267.4 | 1171.9 | 1150.2 | 1145.9 |
| 57.5° | 10538.4 | 8910.8  | 6428.1 | 4418.5 | 2652.0 | 1636.3 | 1297.8 | 1141.5 | 1080.8 | 1063.4 | 1063.4 |
| 60°   | 11193.8 | 9310.1  | 6523.6 | 4114.7 | 2196.2 | 1349.9 | 1150.2 | 1041.7 | 1015.6 | 1037.3 | 1037.3 |
| 62.5° | 11901.3 | 9778.8  | 6692.8 | 3745.7 | 1770.9 | 1141.5 | 1033.0 | 959.2  | 941.9  | 985.3  | 989.6  |
| 65°   | 12556.7 | 10234.6 | 6801.3 | 3303.0 | 1406.3 | 989.6  | 941.9  | 876.8  | 885.4  | 928.8  | 924.5  |
| 67.5° | 12960.3 | 10612.2 | 6649.4 | 2747.4 | 1115.5 | 876.8  | 846.4  | 789.9  | 811.6  | 846.4  | 850.7  |
| 70°   | 12712.9 | 10399.5 | 5898.6 | 2074.7 | 872.4  | 763.9  | 742.2  | 707.5  | 724.8  | 768.2  | 785.6  |
| 72.5° | 11502.0 | 9314.4  | 4587.8 | 1401.9 | 703.1  | 642.4  | 651.1  | 633.7  | 655.4  | 694.5  | 733.5  |
| 75°   | 9336.1  | 7040.1  | 3077.3 | 898.5  | 555.6  | 546.9  | 559.9  | 546.9  | 555.6  | 594.6  | 616.3  |
| 77.5° | 4874.2  | 3433.2  | 1532.1 | 559.9  | 412.3  | 425.4  | 447.1  | 451.4  | 477.4  | 486.1  | 494.8  |
| 80°   | 2274.4  | 1545.2  | 638.0  | 312.5  | 273.4  | 299.5  | 342.9  | 347.2  | 355.9  | 368.9  | 373.3  |
| 82.5° | 742.2   | 464.4   | 295.1  | 169.3  | 156.3  | 169.3  | 221.4  | 264.8  | 269.1  | 295.1  | 295.1  |
| 85°   | 78.1    | 47.7    | 65.1   | 69.4   | 60.8   | 73.8   | 99.8   | 95.5   | 43.4   | 26.0   | 26.0   |
| 87.5° | 21.7    | 17.4    | 21.7   | 21.7   | 17.4   | 17.4   | 13.0   | 4.3    | 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)