

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: P841553

Luminaire Tested: **ARCH4-190-750-U-T2U**

Issue Date: 5/27/2024

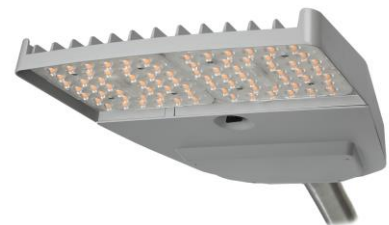
**Test Information**

Test Method: LM-79-08  
Report Number: P841553  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-190-750-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1530mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31398 lumens  
Efficiency: N/A  
Efficacy: 165.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

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

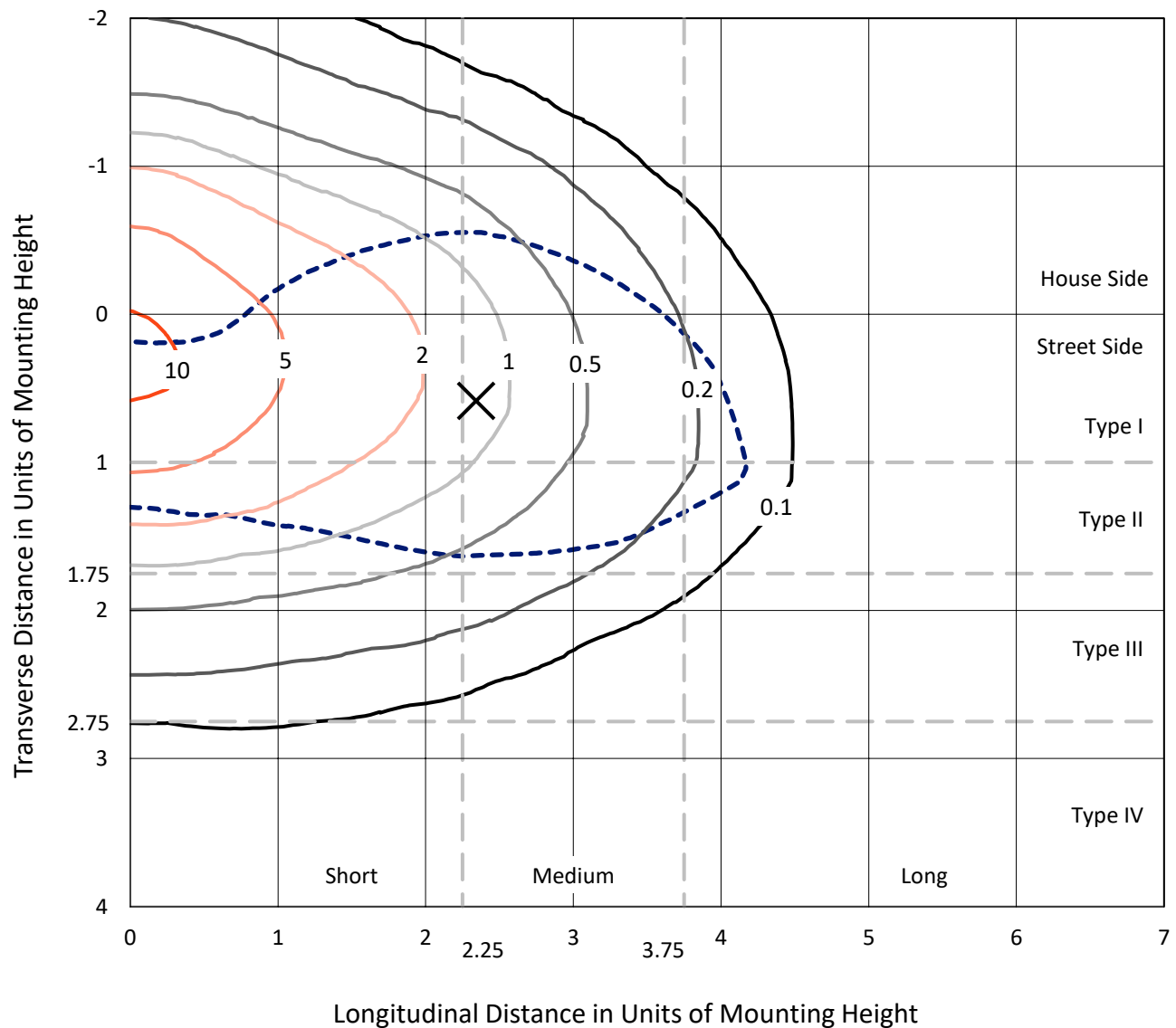


REPORT NUMBER: P841553

CATALOG NUMBER: ARCH4-190-750-U-T2U

## Iso-Footcandle Lines of Horizontal Illumination

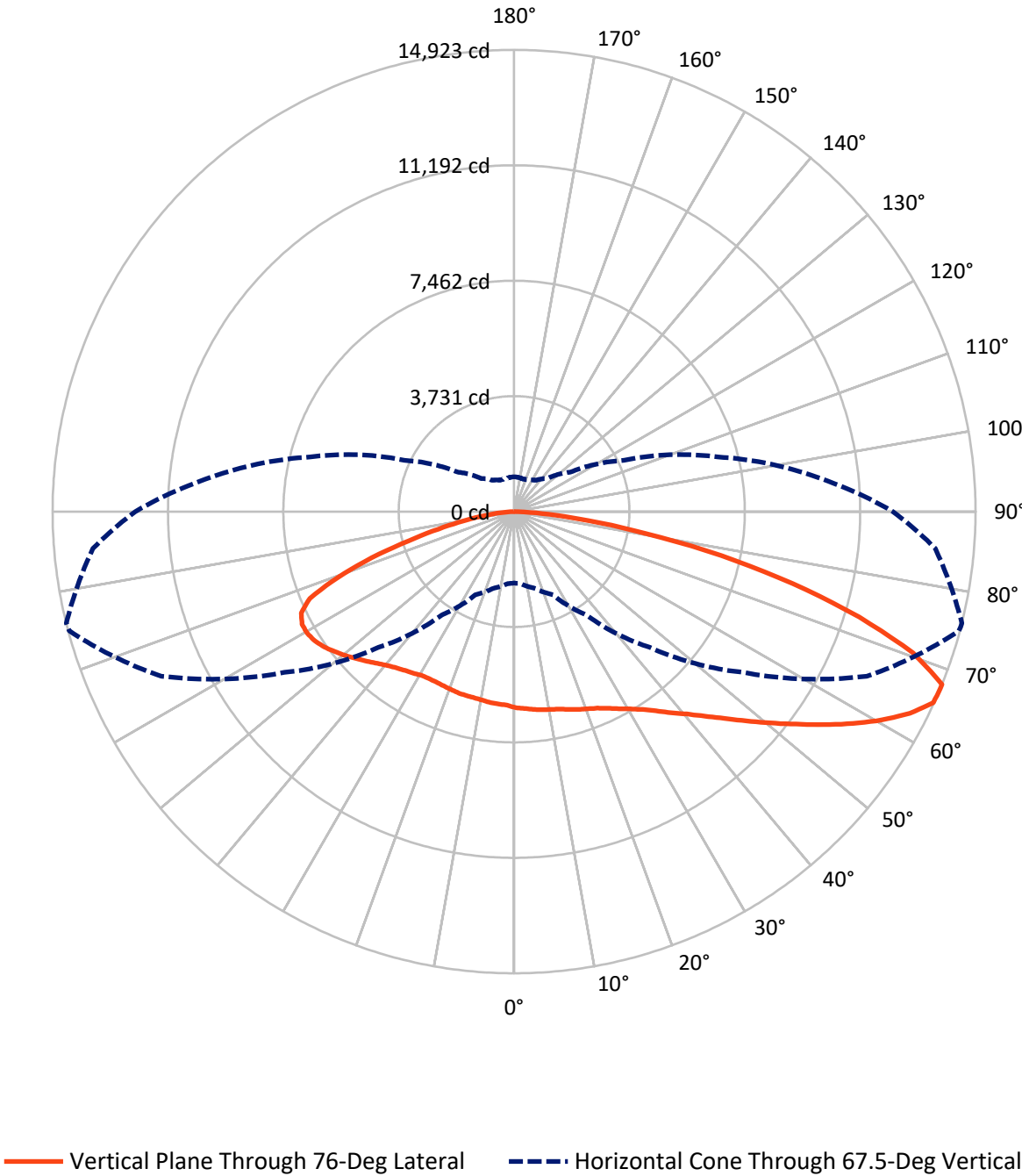
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc  
Type II - Medium - N/A

REPORT NUMBER: P841553  
CATALOG NUMBER: ARCH4-190-750-U-T2U

Luminous Intensity Polar Plot



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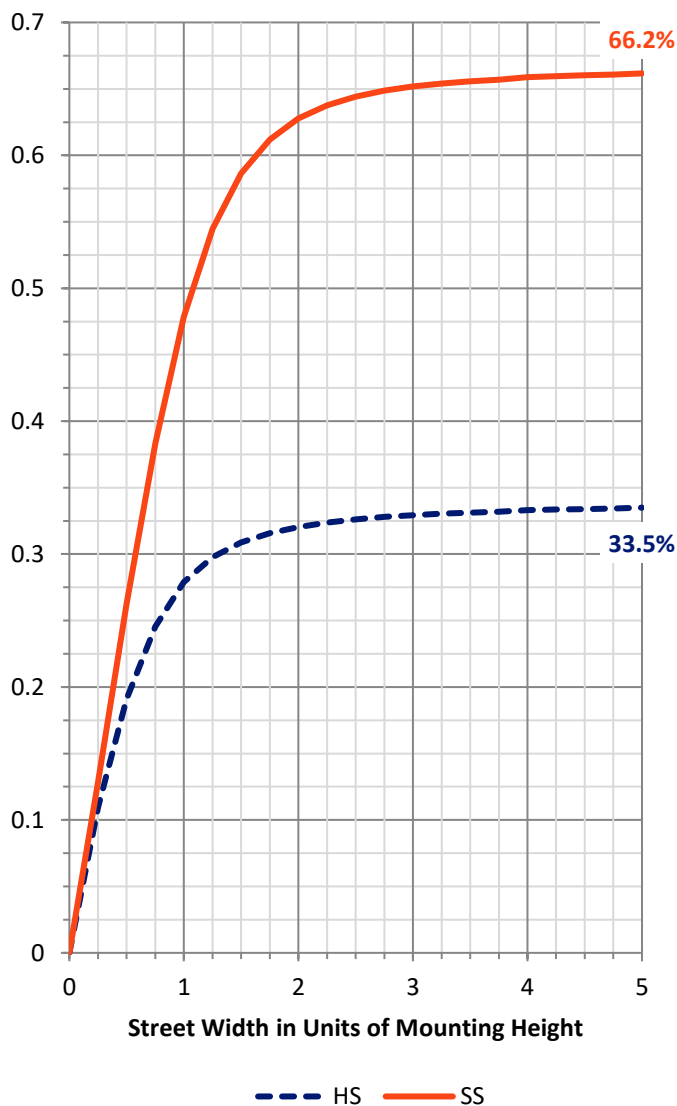
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10609.5  | 0.0    | 10609.5 |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 20788.5  | 0.0    | 20788.5 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 31398.0  | 0.0    | 31398.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 611.6   | 1.9       |
| 10°-20°   | 1869.7  | 6.0       |
| 20°-30°   | 3176.7  | 10.1      |
| 30°-40°   | 4520.0  | 14.4      |
| 40°-50°   | 5708.6  | 18.2      |
| 50°-60°   | 6180.6  | 19.7      |
| 60°-70°   | 5748.6  | 18.3      |
| 70°-80°   | 3087.5  | 9.8       |
| 80°-90°   | 494.7   | 1.6       |
| 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°    | 31398.0 | 100.0     |
| 0°-180°   | 31398.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841553

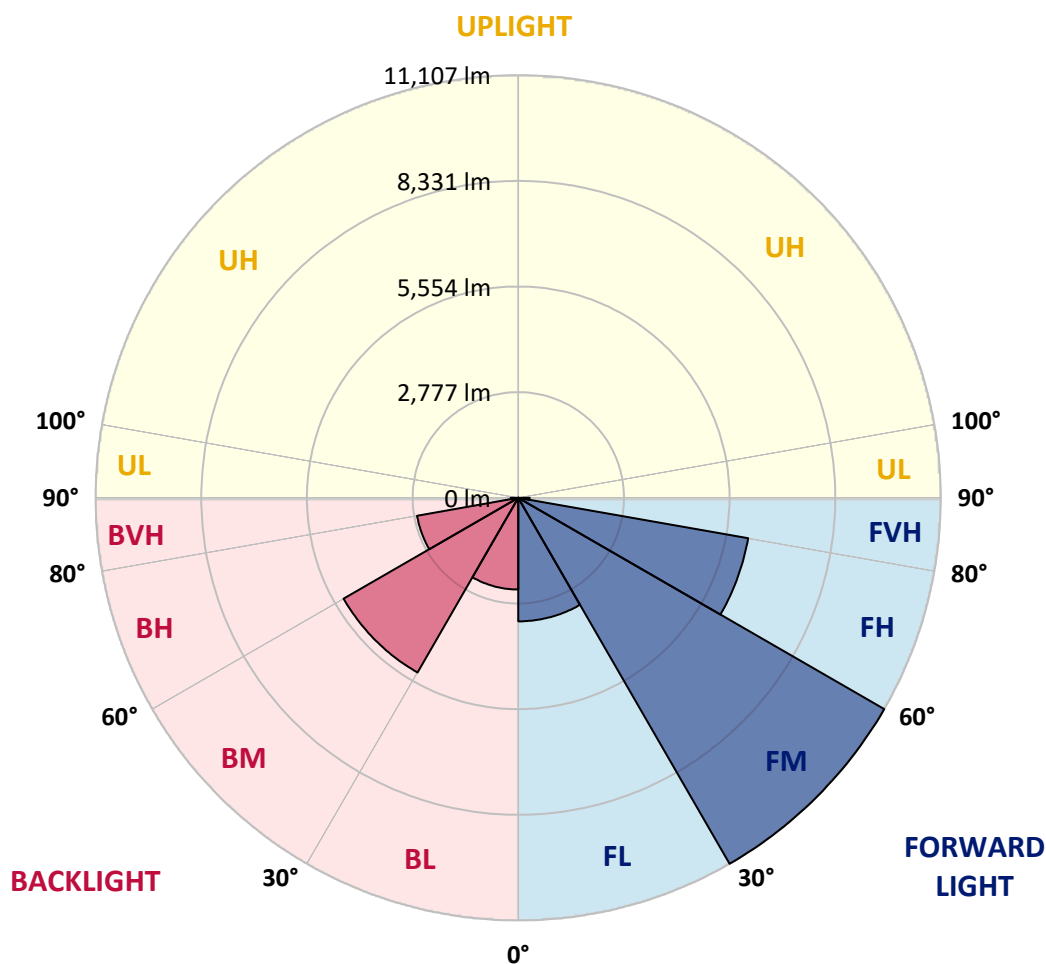
CATALOG NUMBER: ARCH4-190-750-U-T2U

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3246.9  | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 11107.4 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 6134.9  | 19.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 299.3   | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 2411.1  | 7.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 5301.7  | 16.9      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 2701.3  | 8.6       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 195.5   | 0.6       |                         |      | 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 II Medium



REPORT NUMBER: P841553

CATALOG NUMBER: ARCH4-190-750-U-T2U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  | 6342.3  |
| 2.5°  | 6534.7  | 6523.0  | 6476.4  | 6482.2  | 6482.2  | 6476.4  | 6406.4  | 6377.3  | 6377.3  | 6371.5  | 6307.4  |
| 5°    | 6767.9  | 6750.4  | 6697.9  | 6686.3  | 6662.9  | 6633.8  | 6523.0  | 6458.9  | 6429.8  | 6423.9  | 6336.5  |
| 7.5°  | 7041.8  | 7018.5  | 6954.4  | 6919.4  | 6861.1  | 6785.4  | 6645.5  | 6546.4  | 6476.4  | 6470.6  | 6348.2  |
| 10°   | 7315.8  | 7292.5  | 7216.7  | 7152.6  | 7071.0  | 6948.6  | 6767.9  | 6622.1  | 6511.4  | 6499.7  | 6354.0  |
| 12.5° | 7642.3  | 7619.0  | 7525.7  | 7444.1  | 7321.7  | 7158.4  | 6919.4  | 6721.2  | 6569.7  | 6552.2  | 6371.5  |
| 15°   | 7986.2  | 7951.2  | 7858.0  | 7764.7  | 7613.1  | 7403.3  | 7117.6  | 6855.3  | 6662.9  | 6633.8  | 6423.9  |
| 17.5° | 8271.8  | 8225.2  | 8149.4  | 8056.2  | 7887.1  | 7642.3  | 7315.8  | 6989.4  | 6750.4  | 6727.1  | 6476.4  |
| 20°   | 8516.7  | 8481.7  | 8400.1  | 8312.6  | 8131.9  | 7863.8  | 7502.4  | 7123.5  | 6832.0  | 6802.8  | 6517.2  |
| 22.5° | 8749.8  | 8703.2  | 8656.6  | 8592.5  | 8394.3  | 8097.0  | 7718.1  | 7286.7  | 6936.9  | 6901.9  | 6569.7  |
| 25°   | 9018.0  | 8965.5  | 8948.0  | 8913.1  | 8679.9  | 8376.8  | 7980.4  | 7490.7  | 7082.7  | 7041.8  | 6662.9  |
| 27.5° | 9350.3  | 9292.0  | 9257.0  | 9257.0  | 8977.2  | 8662.4  | 8260.2  | 7729.7  | 7251.7  | 7216.7  | 6779.5  |
| 30°   | 9700.0  | 9630.1  | 9577.6  | 9577.6  | 9262.8  | 8948.0  | 8534.2  | 7968.7  | 7444.1  | 7403.3  | 6931.1  |
| 32.5° | 10009.0 | 9939.0  | 9880.7  | 9874.9  | 9548.5  | 9233.7  | 8819.8  | 8231.0  | 7677.2  | 7624.8  | 7117.6  |
| 35°   | 10248.0 | 10183.9 | 10131.4 | 10143.1 | 9834.1  | 9525.1  | 9140.4  | 8580.8  | 7968.7  | 7910.4  | 7362.5  |
| 37.5° | 10393.7 | 10370.4 | 10341.3 | 10382.1 | 10096.4 | 9805.0  | 9472.7  | 8918.9  | 8301.0  | 8248.5  | 7665.6  |
| 40°   | 10469.5 | 10452.0 | 10568.6 | 10621.1 | 10317.9 | 10055.6 | 9805.0  | 9268.7  | 8662.4  | 8604.1  | 8015.3  |
| 42.5° | 10580.3 | 10726.0 | 10772.6 | 10761.0 | 10481.2 | 10248.0 | 10108.1 | 9647.6  | 9087.9  | 9035.5  | 8435.1  |
| 45°   | 10183.9 | 10148.9 | 10405.4 | 10545.3 | 10492.8 | 10370.4 | 10393.7 | 10102.3 | 9583.4  | 9531.0  | 8918.9  |
| 47.5° | 9653.4  | 9606.8  | 9752.5  | 10096.4 | 10300.5 | 10417.0 | 10650.2 | 10574.4 | 10154.7 | 10108.1 | 9484.3  |
| 50°   | 8534.2  | 8598.3  | 9140.4  | 9600.9  | 10003.2 | 10405.4 | 10865.9 | 11081.6 | 10784.3 | 10737.7 | 10090.6 |
| 52.5° | 7292.5  | 7356.6  | 7922.1  | 8983.0  | 9641.7  | 10317.9 | 11023.3 | 11588.7 | 11466.3 | 11413.9 | 10737.7 |
| 55°   | 6389.0  | 6528.9  | 7170.1  | 7939.6  | 9128.8  | 10044.0 | 11116.6 | 12107.5 | 12200.8 | 12154.2 | 11443.0 |
| 57.5° | 5491.2  | 5596.2  | 6080.0  | 6762.0  | 8429.2  | 9566.0  | 11110.7 | 12591.4 | 12970.3 | 12923.7 | 12160.0 |
| 60°   | 4436.1  | 4570.2  | 4954.9  | 5689.4  | 7496.5  | 8994.7  | 10947.5 | 12970.3 | 13710.6 | 13675.6 | 12853.7 |
| 62.5° | 3713.3  | 3754.1  | 4028.1  | 4663.5  | 6295.7  | 8271.8  | 10580.3 | 13174.3 | 14381.0 | 14357.7 | 13477.4 |
| 65°   | 2990.5  | 2996.3  | 3246.9  | 3777.4  | 5135.7  | 7374.1  | 9956.5  | 13098.5 | 14888.1 | 14899.8 | 13926.3 |
| 67.5° | 2308.4  | 2337.6  | 2564.9  | 2967.1  | 4080.5  | 6208.3  | 9064.6  | 12585.6 | 14894.0 | 14923.1 | 13669.8 |
| 70°   | 1597.2  | 1620.6  | 1964.5  | 2355.1  | 3153.7  | 4949.1  | 7858.0  | 11227.3 | 13669.8 | 13693.1 | 12253.3 |
| 72.5° | 1125.1  | 1136.7  | 1504.0  | 1882.9  | 2465.8  | 3730.8  | 5928.4  | 9286.1  | 11652.9 | 11670.3 | 10306.3 |
| 75°   | 839.4   | 851.1   | 1060.9  | 1428.2  | 1888.7  | 2582.4  | 4051.4  | 7111.8  | 9309.5  | 9309.5  | 8137.8  |
| 77.5° | 594.6   | 600.4   | 687.9   | 985.2   | 1259.1  | 1743.0  | 2436.7  | 4657.6  | 6832.0  | 6843.7  | 5928.4  |
| 80°   | 402.2   | 408.1   | 448.9   | 664.5   | 787.0   | 944.4   | 1323.3  | 2442.5  | 4307.9  | 4325.4  | 3765.8  |
| 82.5° | 209.9   | 221.5   | 250.7   | 338.1   | 396.4   | 524.6   | 682.0   | 1241.7  | 2384.2  | 2430.8  | 2261.8  |
| 85°   | 81.6    | 81.6    | 93.3    | 110.8   | 145.7   | 204.0   | 314.8   | 472.2   | 1078.4  | 1113.4  | 996.8   |
| 87.5° | 29.1    | 29.1    | 35.0    | 35.0    | 40.8    | 46.6    | 52.5    | 70.0    | 122.4   | 122.4   | 116.6   |
| 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: P841553

CATALOG NUMBER: ARCH4-190-750-U-T2U

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 6342.3  | 6342.3  | 6342.3 | 6342.3 | 6342.3 | 6342.3 | 6342.3 | 6342.3 | 6342.3 | 6342.3 | 6342.3 |
| 2.5°  | 6284.0  | 6284.0  | 6254.9 | 6266.5 | 6260.7 | 6249.1 | 6237.4 | 6254.9 | 6237.4 | 6196.6 | 6190.8 |
| 5°    | 6295.7  | 6284.0  | 6237.4 | 6231.6 | 6214.1 | 6190.8 | 6161.6 | 6173.3 | 6144.1 | 6109.2 | 6103.3 |
| 7.5°  | 6301.5  | 6278.2  | 6214.1 | 6190.8 | 6155.8 | 6109.2 | 6062.5 | 6062.5 | 6021.7 | 5986.7 | 5980.9 |
| 10°   | 6289.9  | 6260.7  | 6173.3 | 6126.6 | 6062.5 | 5992.6 | 5928.4 | 5911.0 | 5864.3 | 5823.5 | 5823.5 |
| 12.5° | 6295.7  | 6254.9  | 6144.1 | 6068.3 | 5980.9 | 5893.5 | 5811.9 | 5788.5 | 5747.7 | 5706.9 | 5701.1 |
| 15°   | 6330.7  | 6272.4  | 6132.5 | 6033.4 | 5905.1 | 5806.0 | 5718.6 | 5701.1 | 5666.1 | 5637.0 | 5637.0 |
| 17.5° | 6365.6  | 6289.9  | 6115.0 | 5975.1 | 5817.7 | 5706.9 | 5625.3 | 5625.3 | 5602.0 | 5584.5 | 5584.5 |
| 20°   | 6383.1  | 6295.7  | 6080.0 | 5893.5 | 5712.8 | 5596.2 | 5520.4 | 5532.0 | 5526.2 | 5520.4 | 5520.4 |
| 22.5° | 6423.9  | 6307.4  | 6050.9 | 5817.7 | 5602.0 | 5479.6 | 5409.6 | 5427.1 | 5421.3 | 5421.3 | 5427.1 |
| 25°   | 6488.1  | 6336.5  | 6027.5 | 5747.7 | 5497.1 | 5363.0 | 5287.2 | 5298.9 | 5298.9 | 5298.9 | 5298.9 |
| 27.5° | 6575.5  | 6394.8  | 6021.7 | 5683.6 | 5392.1 | 5240.6 | 5147.3 | 5147.3 | 5124.0 | 5129.8 | 5135.7 |
| 30°   | 6709.6  | 6505.5  | 6033.4 | 5625.3 | 5281.4 | 5089.0 | 4978.3 | 4960.8 | 4954.9 | 4966.6 | 4972.4 |
| 32.5° | 6872.8  | 6657.1  | 6103.3 | 5584.5 | 5164.8 | 4920.0 | 4780.1 | 4774.2 | 4756.7 | 4756.7 | 4756.7 |
| 35°   | 7076.8  | 6802.8  | 6167.4 | 5578.7 | 5048.2 | 4739.3 | 4587.7 | 4570.2 | 4529.4 | 4511.9 | 4511.9 |
| 37.5° | 7339.1  | 7030.2  | 6243.2 | 5537.9 | 4949.1 | 4564.4 | 4383.7 | 4325.4 | 4278.7 | 4272.9 | 4272.9 |
| 40°   | 7659.8  | 7286.7  | 6354.0 | 5491.2 | 4844.2 | 4383.7 | 4144.7 | 4045.6 | 4051.4 | 4074.7 | 4074.7 |
| 42.5° | 8038.7  | 7601.5  | 6493.9 | 5467.9 | 4692.6 | 4197.1 | 3864.9 | 3748.3 | 3789.1 | 3812.4 | 3818.2 |
| 45°   | 8481.7  | 7974.5  | 6651.3 | 5438.8 | 4552.7 | 3987.3 | 3567.6 | 3421.8 | 3439.3 | 3445.1 | 3451.0 |
| 47.5° | 8994.7  | 8388.4  | 6814.5 | 5415.5 | 4395.3 | 3725.0 | 3241.1 | 3048.7 | 3042.9 | 3007.9 | 3019.6 |
| 50°   | 9531.0  | 8825.6  | 6983.6 | 5374.7 | 4203.0 | 3416.0 | 2897.2 | 2669.8 | 2623.2 | 2570.7 | 2576.6 |
| 52.5° | 10102.3 | 9274.5  | 7140.9 | 5310.5 | 3964.0 | 3101.2 | 2570.7 | 2325.9 | 2232.6 | 2174.3 | 2186.0 |
| 55°   | 10731.8 | 9735.0  | 7292.5 | 5211.4 | 3713.3 | 2786.4 | 2279.3 | 2028.6 | 1912.0 | 1865.4 | 1871.2 |
| 57.5° | 11308.9 | 10178.0 | 7403.3 | 5089.0 | 3439.3 | 2500.8 | 2022.8 | 1778.0 | 1702.2 | 1696.3 | 1702.2 |
| 60°   | 11868.5 | 10551.1 | 7449.9 | 4920.0 | 3159.5 | 2238.5 | 1783.8 | 1597.2 | 1544.8 | 1573.9 | 1579.8 |
| 62.5° | 12340.7 | 10790.1 | 7426.6 | 4692.6 | 2873.9 | 1987.8 | 1591.4 | 1457.3 | 1422.4 | 1480.7 | 1486.5 |
| 65°   | 12614.7 | 10865.9 | 7263.4 | 4366.2 | 2564.9 | 1743.0 | 1410.7 | 1265.0 | 1247.5 | 1282.5 | 1299.9 |
| 67.5° | 12253.3 | 10393.7 | 6820.3 | 3917.3 | 2221.0 | 1515.6 | 1235.8 | 1119.2 | 1090.1 | 1119.2 | 1119.2 |
| 70°   | 10860.1 | 9006.3  | 5771.1 | 3206.1 | 1842.1 | 1294.1 | 1072.6 | 991.0  | 967.7  | 991.0  | 985.2  |
| 72.5° | 9047.1  | 7490.7  | 4546.9 | 2500.8 | 1451.5 | 1090.1 | 932.7  | 856.9  | 833.6  | 810.3  | 798.6  |
| 75°   | 7018.5  | 5689.4  | 3299.4 | 1836.2 | 1095.9 | 874.4  | 781.1  | 711.2  | 652.9  | 676.2  | 664.5  |
| 77.5° | 5141.5  | 3993.1  | 2337.6 | 1270.8 | 787.0  | 676.2  | 612.1  | 559.6  | 518.8  | 565.4  | 559.6  |
| 80°   | 3311.1  | 2582.4  | 1562.3 | 851.1  | 542.1  | 472.2  | 448.9  | 419.7  | 460.5  | 600.4  | 612.1  |
| 82.5° | 2022.8  | 1638.0  | 932.7  | 553.8  | 355.6  | 314.8  | 291.5  | 291.5  | 472.2  | 518.8  | 524.6  |
| 85°   | 903.5   | 868.6   | 507.2  | 285.6  | 198.2  | 180.7  | 163.2  | 209.9  | 192.4  | 139.9  | 145.7  |
| 87.5° | 145.7   | 151.6   | 110.8  | 99.1   | 75.8   | 75.8   | 58.3   | 40.8   | 29.1   | 17.5   | 17.5   |
| 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)