

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: P841665

Luminaire Tested: **ARCH4-210-727-U-T4W**

Issue Date: 5/27/2024

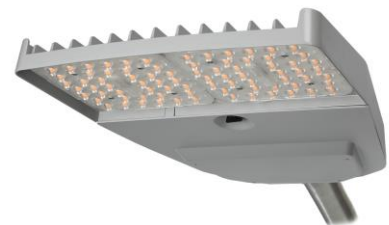
### Test Information

Test Method: LM-79-08  
Report Number: P841665  
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: ARCH4-210-727-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 30546 lumens  
Efficiency: N/A  
Efficacy: 143.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 213.1  
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

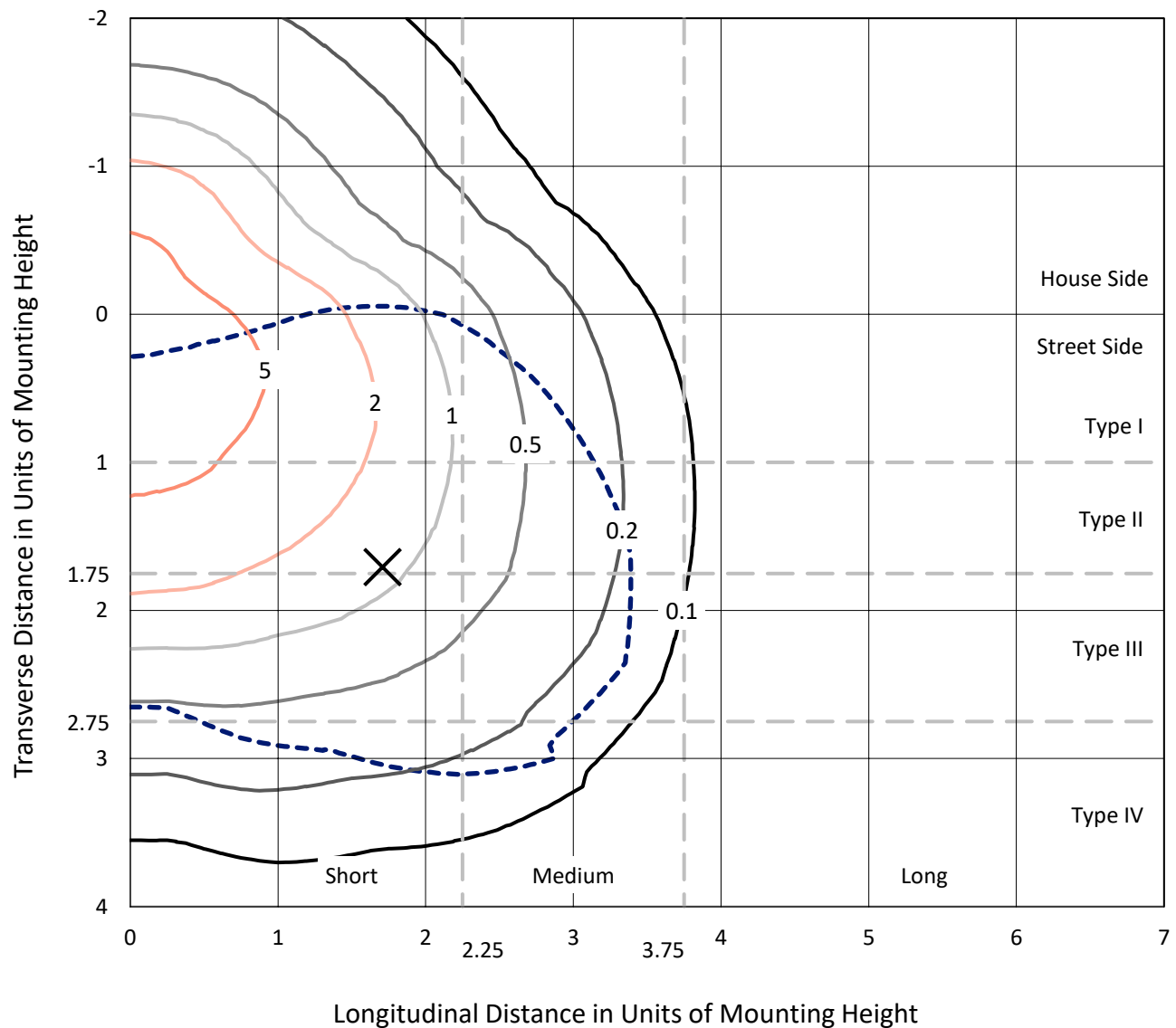


REPORT NUMBER: P841665

CATALOG NUMBER: ARCH4-210-727-U-T4W

## Iso-Footcandle Lines of Horizontal Illumination

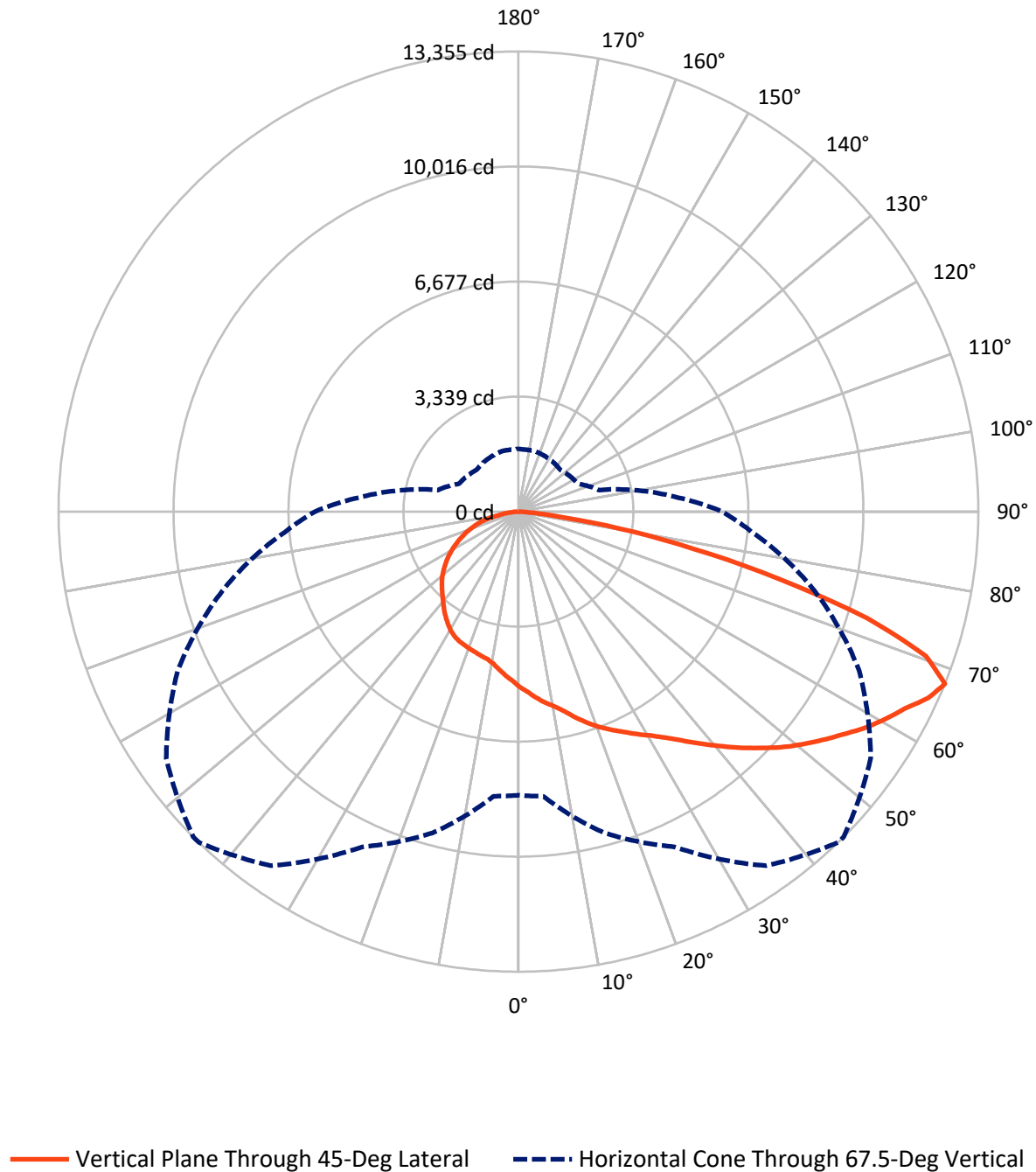
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc  
Type IV - Short - N/A

REPORT NUMBER: P841665  
CATALOG NUMBER: ARCH4-210-727-U-T4W

## Luminous Intensity Polar Plot



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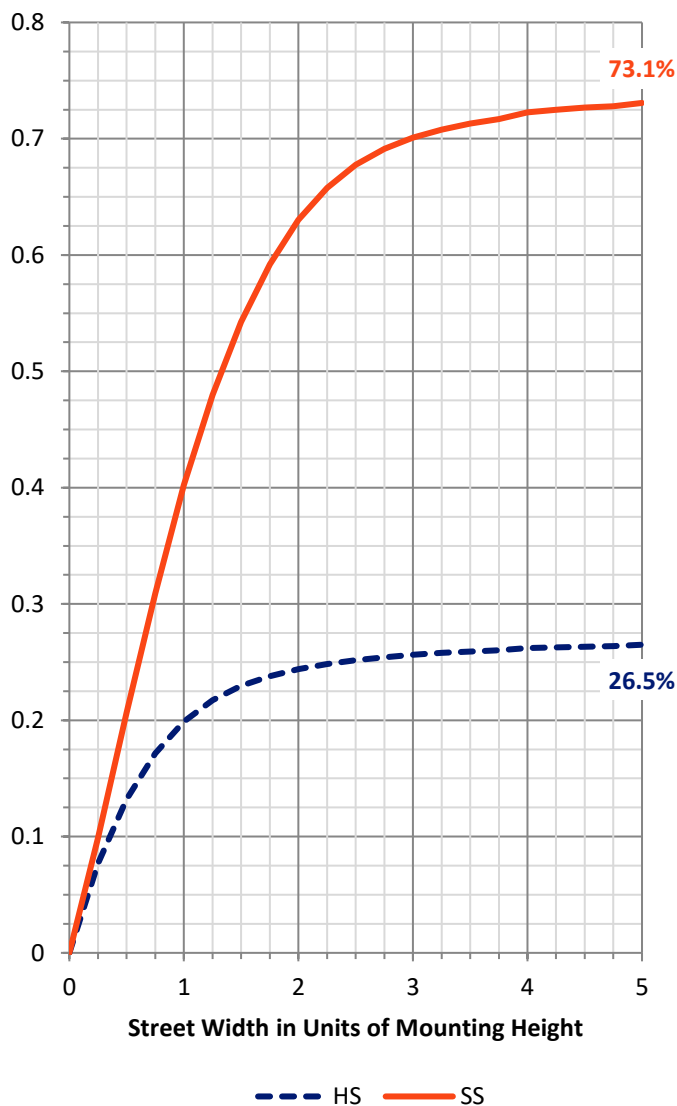
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8160.4   | 0.0    | 8160.4  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 22385.6  | 0.0    | 22385.6 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 30546.0  | 0.0    | 30546.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 487.8   | 1.6       |
| 10°-20°   | 1506.8  | 4.9       |
| 20°-30°   | 2600.9  | 8.5       |
| 30°-40°   | 3835.4  | 12.6      |
| 40°-50°   | 5196.2  | 17.0      |
| 50°-60°   | 6351.0  | 20.8      |
| 60°-70°   | 6550.2  | 21.4      |
| 70°-80°   | 3587.7  | 11.7      |
| 80°-90°   | 430.0   | 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°    | 30546.0 | 100.0     |
| 0°-180°   | 30546.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841665

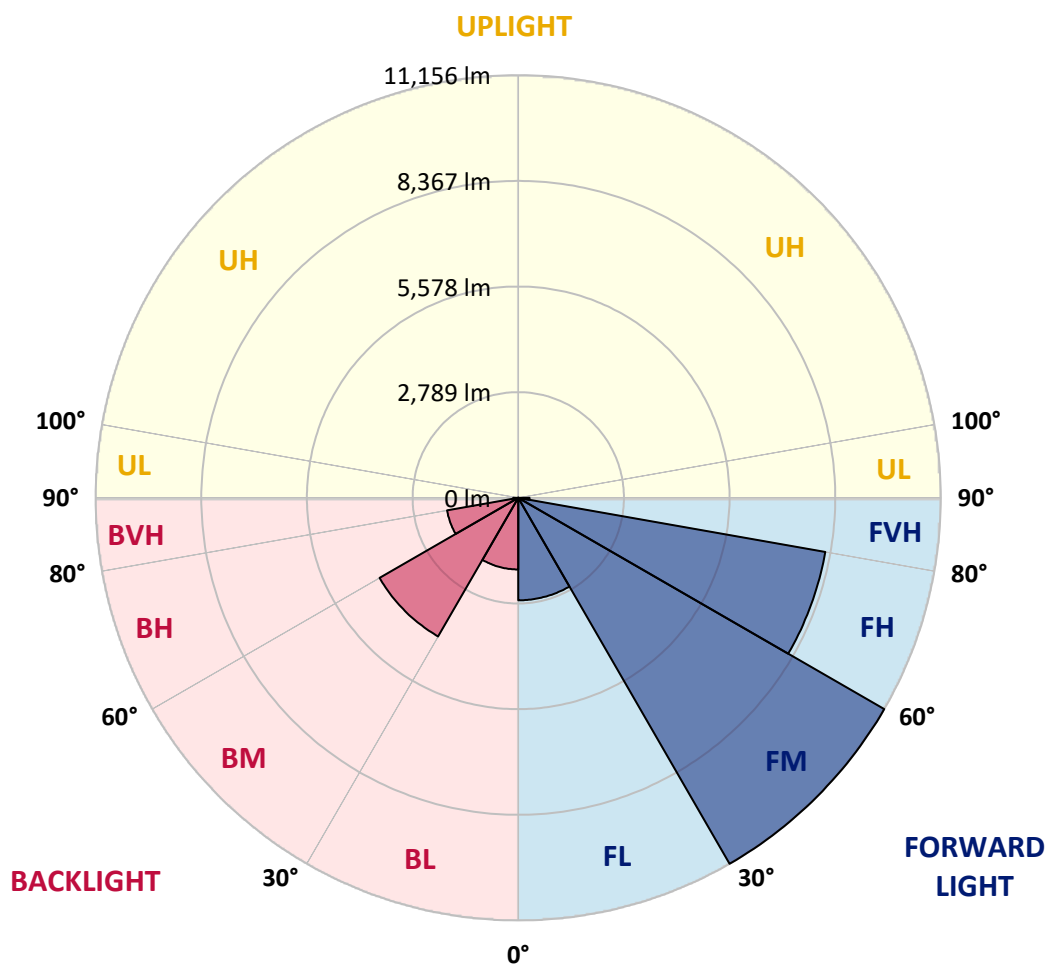
CATALOG NUMBER: ARCH4-210-727-U-T4W

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2704.1  | 8.9       |                         |      |          |
| FM   | (30°-60°)   | 11155.7 | 36.5      |                         |      |          |
| FH   | (60°-80°)   | 8229.5  | 26.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 296.2   | 1.0       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1891.3  | 6.2       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 4226.9  | 13.8      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1908.4  | 6.2       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 133.8   | 0.4       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type IV Short



REPORT NUMBER: P841665

CATALOG NUMBER: ARCH4-210-727-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°    | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 5094.5  | 5094.5  | 5094.5  | 5094.5  | 5094.5  | 5094.5  | 5094.5  | 5094.5  | 5094.5  | 5094.5 | 5094.5 |
| 2.5°  | 5317.6  | 5313.0  | 5322.3  | 5289.7  | 5247.9  | 5243.2  | 5243.2  | 5215.3  | 5182.8  | 5117.7 | 5066.6 |
| 5°    | 5568.6  | 5559.3  | 5564.0  | 5517.5  | 5461.7  | 5433.8  | 5429.2  | 5368.7  | 5294.4  | 5192.1 | 5099.1 |
| 7.5°  | 5801.0  | 5791.7  | 5787.1  | 5736.0  | 5652.3  | 5605.8  | 5601.2  | 5512.8  | 5424.5  | 5266.5 | 5131.7 |
| 10°   | 6019.5  | 6010.2  | 6000.9  | 5931.2  | 5828.9  | 5759.2  | 5749.9  | 5638.3  | 5526.8  | 5331.6 | 5159.6 |
| 12.5° | 6298.4  | 6279.8  | 6270.5  | 6186.8  | 6038.1  | 5963.7  | 5949.8  | 5801.0  | 5661.6  | 5424.5 | 5215.3 |
| 15°   | 6591.2  | 6577.3  | 6563.3  | 6484.3  | 6317.0  | 6219.4  | 6196.1  | 6010.2  | 5819.6  | 5545.4 | 5299.0 |
| 17.5° | 6809.7  | 6795.8  | 6795.8  | 6726.0  | 6572.6  | 6461.1  | 6442.5  | 6219.4  | 5982.3  | 5656.9 | 5364.1 |
| 20°   | 6944.5  | 6930.6  | 6944.5  | 6902.7  | 6786.5  | 6693.5  | 6674.9  | 6428.5  | 6145.0  | 5759.2 | 5419.9 |
| 22.5° | 7042.1  | 7028.2  | 7051.4  | 7032.8  | 6949.1  | 6893.4  | 6879.4  | 6637.7  | 6312.3  | 5866.1 | 5475.7 |
| 25°   | 7214.1  | 7214.1  | 7214.1  | 7181.6  | 7102.5  | 7083.9  | 7083.9  | 6874.8  | 6526.2  | 6005.6 | 5559.3 |
| 27.5° | 7558.1  | 7539.5  | 7516.2  | 7423.3  | 7288.5  | 7283.8  | 7311.7  | 7116.5  | 6772.5  | 6186.8 | 5661.6 |
| 30°   | 8064.7  | 8055.4  | 7967.1  | 7771.9  | 7544.1  | 7520.9  | 7539.5  | 7376.8  | 7037.5  | 6377.4 | 5777.8 |
| 32.5° | 8720.1  | 8687.6  | 8506.3  | 8213.5  | 7888.1  | 7781.2  | 7818.4  | 7646.4  | 7316.4  | 6572.6 | 5889.3 |
| 35°   | 9185.0  | 9194.3  | 9064.1  | 8799.2  | 8413.4  | 8129.8  | 8157.7  | 7948.5  | 7618.5  | 6791.1 | 6028.8 |
| 37.5° | 9719.5  | 9752.1  | 9556.8  | 9356.9  | 8999.0  | 8515.6  | 8543.5  | 8260.0  | 7920.6  | 7065.4 | 6177.5 |
| 40°   | 10458.6 | 10393.5 | 10063.5 | 9826.4  | 9431.3  | 8920.0  | 8943.3  | 8608.6  | 8269.3  | 7325.7 | 6349.5 |
| 42.5° | 11076.8 | 10960.6 | 10560.8 | 10258.7 | 9784.6  | 9347.7  | 9370.9  | 8985.1  | 8622.5  | 7613.9 | 6540.1 |
| 45°   | 11964.6 | 11643.9 | 11067.5 | 10918.8 | 10147.2 | 9766.0  | 9789.2  | 9384.8  | 8994.4  | 7920.6 | 6744.6 |
| 47.5° | 12480.6 | 11969.3 | 11602.1 | 11523.0 | 10546.9 | 10198.3 | 10226.2 | 9807.8  | 9394.1  | 8269.3 | 6958.4 |
| 50°   | 12448.0 | 12118.0 | 12011.1 | 11815.9 | 10900.2 | 10602.7 | 10630.6 | 10244.8 | 9798.5  | 8613.2 | 7163.0 |
| 52.5° | 12234.2 | 12294.6 | 12238.9 | 11913.5 | 11253.4 | 10993.1 | 11025.7 | 10677.1 | 10212.2 | 8934.0 | 7353.5 |
| 55°   | 12564.2 | 12606.1 | 12499.2 | 12071.5 | 11643.9 | 11383.6 | 11420.8 | 11132.6 | 10621.3 | 9217.5 | 7516.2 |
| 57.5° | 12959.4 | 12810.6 | 12703.7 | 12350.4 | 12048.3 | 11806.6 | 11848.4 | 11597.4 | 10974.5 | 9445.3 | 7641.7 |
| 60°   | 12940.8 | 12629.3 | 12736.2 | 12369.0 | 12322.5 | 12197.0 | 12234.2 | 11978.6 | 11244.1 | 9612.6 | 7692.9 |
| 62.5° | 11987.9 | 11820.5 | 12359.7 | 12234.2 | 12545.7 | 12545.7 | 12592.1 | 12211.0 | 11406.8 | 9682.3 | 7665.0 |
| 65°   | 10333.1 | 10342.4 | 11290.6 | 11811.2 | 12810.6 | 13024.4 | 13061.6 | 12355.1 | 11313.9 | 9477.8 | 7404.7 |
| 67.5° | 8232.1  | 8292.5  | 9654.4  | 10737.5 | 12545.7 | 13349.8 | 13354.5 | 12485.2 | 10914.1 | 8901.4 | 6800.4 |
| 70°   | 6024.1  | 6070.6  | 7678.9  | 8994.4  | 11295.3 | 12629.3 | 12555.0 | 12118.0 | 10044.9 | 7897.4 | 5856.8 |
| 72.5° | 4071.9  | 4113.7  | 5768.5  | 6907.3  | 9268.6  | 10756.1 | 10593.4 | 10709.6 | 8562.1  | 6489.0 | 4708.7 |
| 75°   | 2737.8  | 2789.0  | 4104.4  | 4941.1  | 6819.0  | 8167.0  | 7804.4  | 8111.2  | 6623.8  | 4913.2 | 3435.1 |
| 77.5° | 1724.5  | 1757.0  | 2607.7  | 3239.8  | 4657.6  | 5559.3  | 5196.8  | 5201.4  | 3816.2  | 2644.9 | 1845.4 |
| 80°   | 1097.0  | 1106.3  | 1580.4  | 1868.6  | 2696.0  | 3342.1  | 2956.3  | 2403.2  | 1719.9  | 1403.8 | 1101.6 |
| 82.5° | 636.8   | 622.9   | 943.6   | 1055.2  | 1282.9  | 1269.0  | 1050.5  | 994.7   | 753.0   | 701.9  | 562.4  |
| 85°   | 255.7   | 237.1   | 413.7   | 385.8   | 390.5   | 413.7   | 306.8   | 306.8   | 246.4   | 190.6  | 139.4  |
| 87.5° | 51.1    | 51.1    | 55.8    | 51.1    | 51.1    | 55.8    | 41.8    | 41.8    | 37.2    | 37.2   | 37.2   |
| 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: P841665

CATALOG NUMBER: ARCH4-210-727-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 | 5094.5 |
| 2.5°  | 5057.3 | 5048.0 | 5024.8 | 4964.3 | 4931.8 | 4913.2 | 4885.3 | 4876.0 | 4871.4 | 4876.0 | 4890.0 |
| 5°    | 5071.3 | 5038.7 | 4973.6 | 4876.0 | 4810.9 | 4769.1 | 4722.6 | 4704.0 | 4690.1 | 4690.1 | 4704.0 |
| 7.5°  | 5080.5 | 5029.4 | 4917.9 | 4773.8 | 4680.8 | 4615.7 | 4559.9 | 4536.7 | 4532.1 | 4546.0 | 4550.6 |
| 10°   | 5085.2 | 5010.8 | 4852.8 | 4671.5 | 4550.6 | 4467.0 | 4411.2 | 4397.3 | 4411.2 | 4439.1 | 4443.7 |
| 12.5° | 5117.7 | 5015.5 | 4815.6 | 4601.8 | 4457.7 | 4374.0 | 4332.2 | 4332.2 | 4369.4 | 4420.5 | 4425.1 |
| 15°   | 5173.5 | 5048.0 | 4797.0 | 4546.0 | 4397.3 | 4322.9 | 4308.9 | 4332.2 | 4388.0 | 4467.0 | 4476.3 |
| 17.5° | 5215.3 | 5066.6 | 4755.2 | 4471.6 | 4318.2 | 4271.8 | 4295.0 | 4350.8 | 4429.8 | 4536.7 | 4546.0 |
| 20°   | 5243.2 | 5066.6 | 4694.7 | 4383.3 | 4239.2 | 4229.9 | 4295.0 | 4383.3 | 4467.0 | 4592.5 | 4606.4 |
| 22.5° | 5271.1 | 5057.3 | 4625.0 | 4276.4 | 4150.9 | 4178.8 | 4299.6 | 4411.2 | 4494.9 | 4629.7 | 4652.9 |
| 25°   | 5322.3 | 5071.3 | 4555.3 | 4169.5 | 4057.9 | 4137.0 | 4295.0 | 4429.8 | 4518.1 | 4657.6 | 4694.7 |
| 27.5° | 5392.0 | 5103.8 | 4504.2 | 4071.9 | 3965.0 | 4071.9 | 4262.5 | 4425.1 | 4518.1 | 4652.9 | 4694.7 |
| 30°   | 5466.4 | 5141.0 | 4443.7 | 3965.0 | 3858.1 | 3978.9 | 4192.7 | 4374.0 | 4480.9 | 4606.4 | 4657.6 |
| 32.5° | 5545.4 | 5182.8 | 4392.6 | 3848.8 | 3727.9 | 3853.4 | 4090.5 | 4295.0 | 4411.2 | 4527.4 | 4583.2 |
| 35°   | 5652.3 | 5257.2 | 4364.7 | 3755.8 | 3611.7 | 3723.3 | 3960.3 | 4192.7 | 4318.2 | 4425.1 | 4490.2 |
| 37.5° | 5782.4 | 5350.1 | 4350.8 | 3662.8 | 3486.2 | 3579.2 | 3820.9 | 4067.2 | 4202.0 | 4290.3 | 4350.8 |
| 40°   | 5931.2 | 5466.4 | 4346.1 | 3574.5 | 3360.7 | 3430.4 | 3676.8 | 3923.1 | 4053.3 | 4123.0 | 4174.1 |
| 42.5° | 6098.5 | 5596.5 | 4336.8 | 3486.2 | 3235.2 | 3291.0 | 3537.3 | 3779.0 | 3890.6 | 3951.0 | 3997.5 |
| 45°   | 6275.2 | 5726.7 | 4318.2 | 3379.3 | 3100.4 | 3165.5 | 3393.2 | 3607.1 | 3723.3 | 3774.4 | 3825.5 |
| 47.5° | 6451.8 | 5856.8 | 4281.0 | 3258.4 | 2979.5 | 3040.0 | 3239.8 | 3425.8 | 3518.7 | 3565.2 | 3616.3 |
| 50°   | 6623.8 | 5973.0 | 4192.7 | 3119.0 | 2854.0 | 2909.8 | 3063.2 | 3188.7 | 3258.4 | 3295.6 | 3346.7 |
| 52.5° | 6777.2 | 6052.0 | 4067.2 | 2956.3 | 2728.5 | 2756.4 | 2858.7 | 2965.6 | 3021.4 | 3026.0 | 3072.5 |
| 55°   | 6907.3 | 6093.9 | 3885.9 | 2789.0 | 2593.7 | 2598.4 | 2654.2 | 2737.8 | 2761.1 | 2742.5 | 2775.0 |
| 57.5° | 6981.7 | 6070.6 | 3686.1 | 2617.0 | 2454.3 | 2435.7 | 2477.5 | 2519.4 | 2524.0 | 2477.5 | 2510.1 |
| 60°   | 7000.3 | 5963.7 | 3425.8 | 2445.0 | 2314.8 | 2263.7 | 2277.6 | 2268.4 | 2259.1 | 2240.5 | 2268.4 |
| 62.5° | 6907.3 | 5736.0 | 3137.6 | 2277.6 | 2166.1 | 2087.1 | 2082.4 | 2077.8 | 2091.7 | 2096.4 | 2101.0 |
| 65°   | 6568.0 | 5308.3 | 2793.6 | 2105.7 | 2008.0 | 1901.1 | 1896.5 | 1952.3 | 1970.9 | 1943.0 | 1952.3 |
| 67.5° | 5912.6 | 4652.9 | 2417.1 | 1905.8 | 1808.2 | 1715.2 | 1752.4 | 1784.9 | 1817.5 | 1808.2 | 1817.5 |
| 70°   | 4982.9 | 3820.9 | 2073.1 | 1682.7 | 1589.7 | 1538.6 | 1580.4 | 1608.3 | 1612.9 | 1603.6 | 1612.9 |
| 72.5° | 3918.5 | 2984.2 | 1752.4 | 1454.9 | 1371.2 | 1348.0 | 1399.1 | 1422.4 | 1464.2 | 1482.8 | 1487.4 |
| 75°   | 2830.8 | 2203.3 | 1436.3 | 1208.5 | 1138.8 | 1138.8 | 1185.3 | 1227.1 | 1264.3 | 1241.1 | 1227.1 |
| 77.5° | 1580.4 | 1315.5 | 1031.9 | 832.0  | 846.0  | 911.1  | 929.7  | 976.1  | 1013.3 | 1008.7 | 999.4  |
| 80°   | 957.5  | 822.7  | 697.2  | 539.2  | 534.5  | 585.7  | 706.5  | 785.6  | 804.1  | 762.3  | 757.7  |
| 82.5° | 497.4  | 432.3  | 371.9  | 302.1  | 334.7  | 390.5  | 409.0  | 492.7  | 543.8  | 525.3  | 548.5  |
| 85°   | 125.5  | 120.9  | 134.8  | 139.4  | 172.0  | 190.6  | 209.2  | 246.4  | 162.7  | 79.0   | 79.0   |
| 87.5° | 37.2   | 37.2   | 46.5   | 46.5   | 60.4   | 74.4   | 69.7   | 69.7   | 37.2   | 4.6    | 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)