

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: P237076

Luminaire Tested: **ARCH-L-AF72-230-D-U-T3-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237076  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T3-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25825.6 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

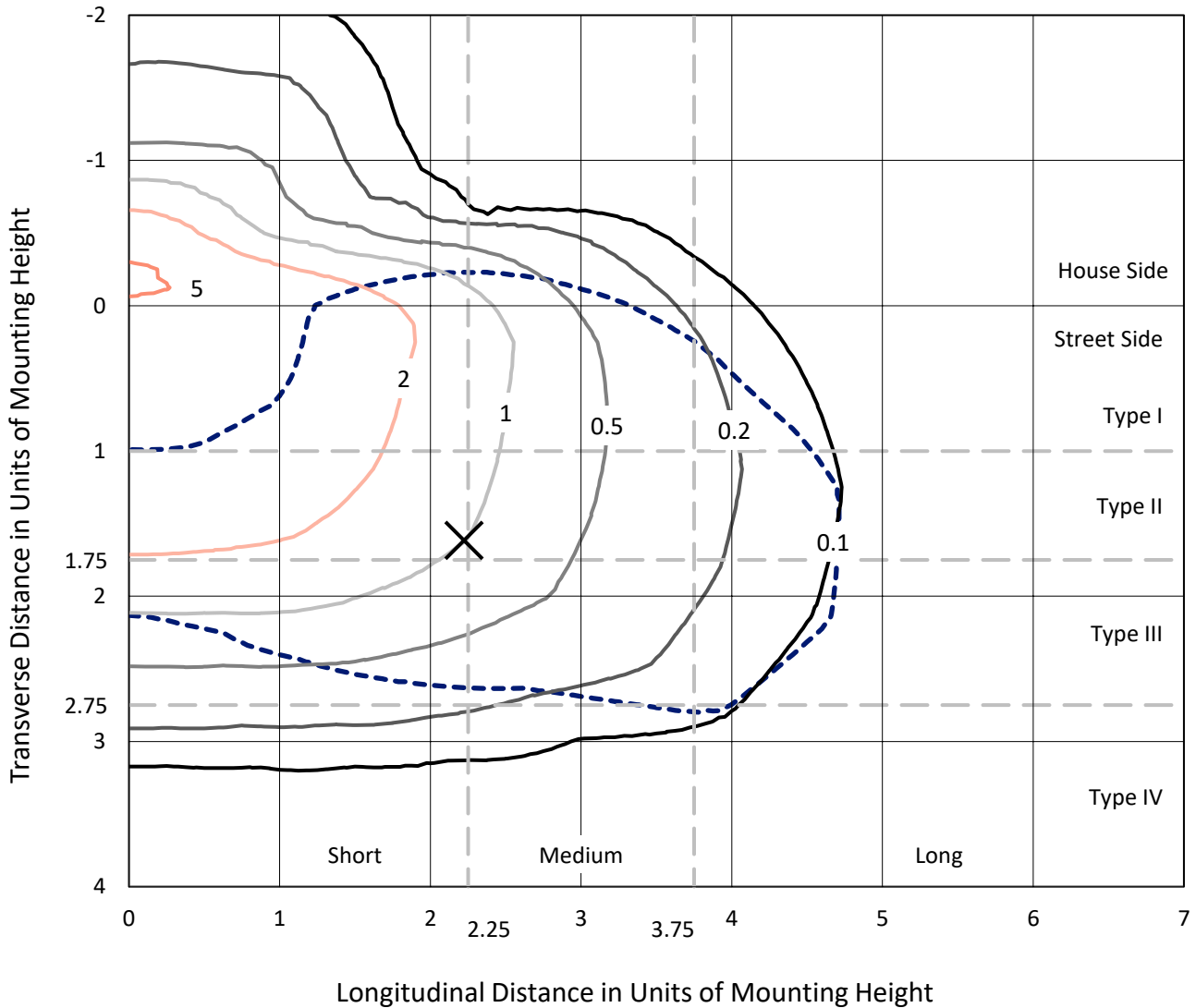
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P237076  
 CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7030

### Iso-Footcandle Lines of Horizontal Illumination

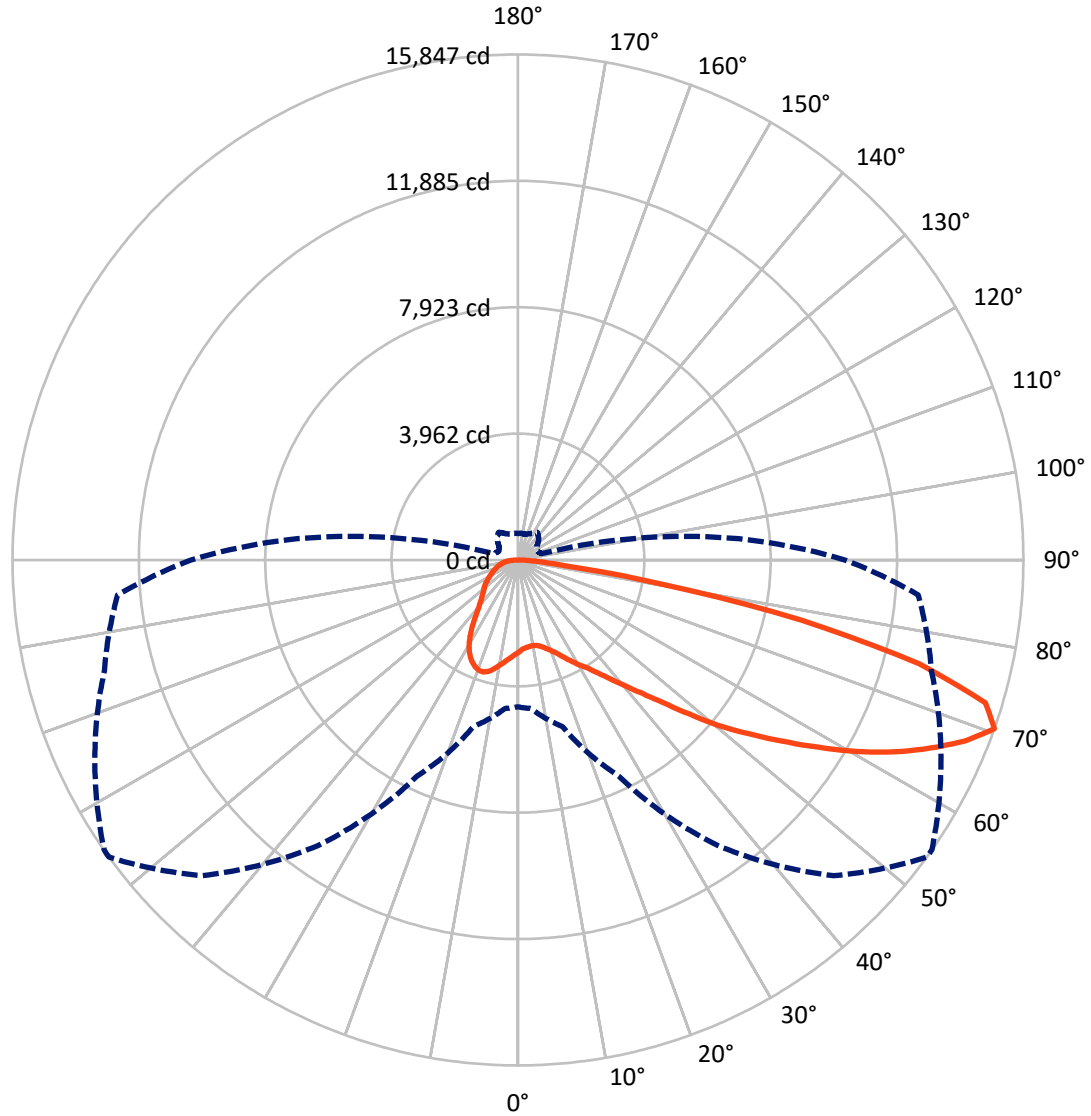
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type III - Short - N/A

REPORT NUMBER: P237076  
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P237076  
 CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7030

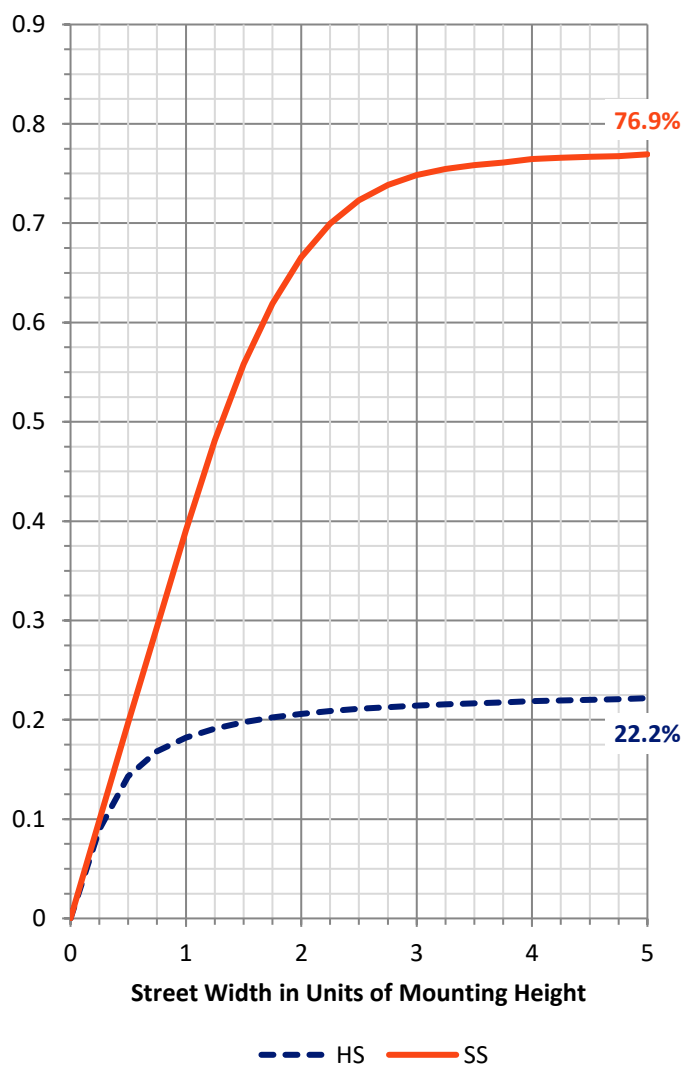
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5857.1   | 0.0    | 5857.1  |
|                    | % Fixture | 22.7     | 0.0    | 22.7    |
| <b>Street Side</b> | Lumens    | 19968.4  | 0.0    | 19968.4 |
|                    | % Fixture | 77.3     | 0.0    | 77.3    |
| <b>Total</b>       | Lumens    | 25825.6  | 0.0    | 25825.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 283.6   | 1.1       |
| 10°-20°   | 906.0   | 3.5       |
| 20°-30°   | 1574.1  | 6.1       |
| 30°-40°   | 2300.4  | 8.9       |
| 40°-50°   | 3610.3  | 14.0      |
| 50°-60°   | 5551.8  | 21.5      |
| 60°-70°   | 6783.0  | 26.3      |
| 70°-80°   | 4205.5  | 16.3      |
| 80°-90°   | 610.9   | 2.4       |
| 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°    | 25825.6 | 100.0     |
| 0°-180°   | 25825.6 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P237076

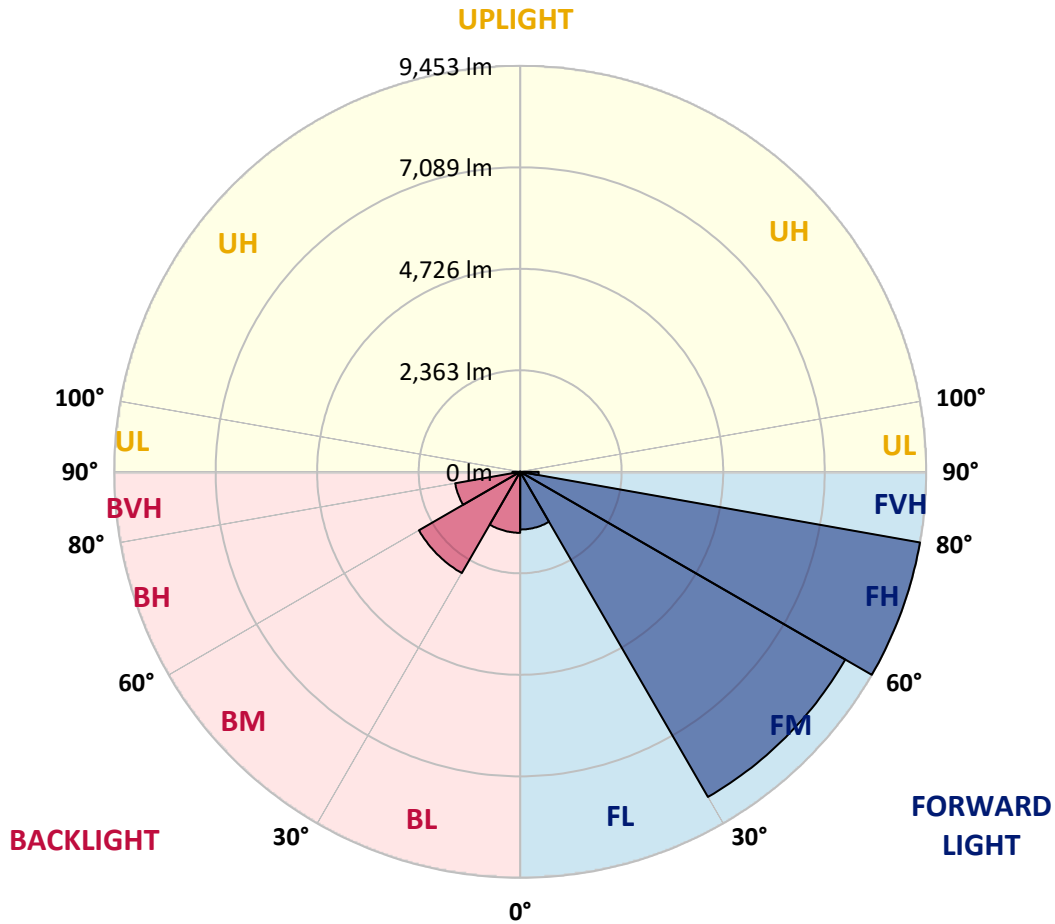
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7030

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1343.7 | 5.2       |                         |      |          |
| FM (30°-60°)   | 8740.8 | 33.8      |                         |      |          |
| FH (60°-80°)   | 9452.6 | 36.6      |                         |      | G4/12000 |
| FVH (80°-90°)  | 431.4  | 1.7       |                         |      | G3/500   |
| BL (0°-30°)    | 1420.0 | 5.5       | B3/2500                 |      |          |
| BM (30°-60°)   | 2721.7 | 10.5      | B3/5000                 |      |          |
| BH (60°-80°)   | 1535.9 | 5.9       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 179.5  | 0.7       |                         |      | 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 III Short





REPORT NUMBER: P237076

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  | 2889.4  |
| 2.5°  | 2775.8  | 2766.5  | 2766.5  | 2780.6  | 2785.3  | 2799.5  | 2799.5  | 2804.2  | 2818.5  | 2842.1  | 2870.5  |
| 5°    | 2690.7  | 2686.0  | 2690.7  | 2709.6  | 2719.1  | 2747.6  | 2756.9  | 2761.6  | 2790.1  | 2827.8  | 2870.5  |
| 7.5°  | 2605.7  | 2600.9  | 2610.3  | 2638.7  | 2667.1  | 2709.6  | 2733.3  | 2738.0  | 2780.6  | 2832.6  | 2889.4  |
| 10°   | 2577.2  | 2572.5  | 2586.7  | 2610.3  | 2638.7  | 2686.0  | 2723.9  | 2728.5  | 2790.1  | 2851.5  | 2932.0  |
| 12.5° | 2615.1  | 2610.3  | 2624.5  | 2648.2  | 2676.6  | 2709.6  | 2752.2  | 2756.9  | 2837.4  | 2917.8  | 3002.9  |
| 15°   | 2709.6  | 2709.6  | 2714.4  | 2728.5  | 2756.9  | 2785.3  | 2823.2  | 2827.8  | 2913.0  | 3007.6  | 3092.7  |
| 17.5° | 2856.2  | 2846.8  | 2846.8  | 2842.1  | 2861.0  | 2875.1  | 2922.4  | 2927.2  | 3017.0  | 3102.2  | 3187.3  |
| 20°   | 3036.0  | 3031.2  | 3012.3  | 2988.7  | 2984.0  | 2993.3  | 3040.6  | 3045.4  | 3135.3  | 3206.2  | 3286.6  |
| 22.5° | 3253.5  | 3258.2  | 3215.6  | 3163.6  | 3140.0  | 3154.2  | 3196.7  | 3201.6  | 3267.7  | 3329.1  | 3400.0  |
| 25°   | 3541.9  | 3527.8  | 3466.2  | 3390.7  | 3343.4  | 3343.4  | 3386.0  | 3386.0  | 3447.3  | 3485.3  | 3532.5  |
| 27.5° | 3816.2  | 3787.9  | 3731.1  | 3622.4  | 3546.7  | 3560.9  | 3603.5  | 3603.5  | 3660.1  | 3674.4  | 3698.0  |
| 30°   | 4114.1  | 4085.7  | 4014.8  | 3877.7  | 3778.4  | 3768.9  | 3820.9  | 3816.2  | 3892.0  | 3887.1  | 3868.3  |
| 32.5° | 4478.3  | 4464.2  | 4345.9  | 4170.9  | 4038.4  | 4005.3  | 4052.7  | 4057.5  | 4104.7  | 4090.5  | 4029.1  |
| 35°   | 4989.0  | 4984.3  | 4875.4  | 4568.1  | 4393.2  | 4331.7  | 4360.1  | 4360.1  | 4393.2  | 4355.3  | 4251.3  |
| 37.5° | 5632.1  | 5641.6  | 5547.0  | 5093.0  | 4847.2  | 4743.1  | 4747.9  | 4743.1  | 4752.6  | 4709.9  | 4601.2  |
| 40°   | 6275.3  | 6298.9  | 6294.2  | 5745.6  | 5433.6  | 5253.8  | 5187.6  | 5178.2  | 5201.9  | 5182.9  | 5078.8  |
| 42.5° | 7121.7  | 7178.5  | 7046.1  | 6549.5  | 6199.6  | 5896.9  | 5717.2  | 5693.6  | 5745.6  | 5769.2  | 5670.0  |
| 45°   | 8001.3  | 7982.4  | 7774.4  | 7414.9  | 7098.1  | 6710.3  | 6369.9  | 6332.0  | 6369.9  | 6440.8  | 6336.7  |
| 47.5° | 8460.1  | 8445.8  | 8393.9  | 8214.1  | 8166.8  | 7722.3  | 7206.8  | 7173.8  | 7102.8  | 7202.2  | 7079.1  |
| 50°   | 9216.7  | 9230.9  | 9018.0  | 8999.1  | 9197.8  | 8951.8  | 8152.6  | 8077.0  | 7949.2  | 8029.7  | 7925.6  |
| 52.5° | 9765.1  | 9703.8  | 9571.3  | 9736.8  | 10356.3 | 10223.9 | 9041.6  | 9008.5  | 8890.3  | 8871.5  | 8824.1  |
| 55°   | 9987.5  | 9987.5  | 10011.1 | 10394.2 | 11278.5 | 11103.5 | 10006.4 | 10039.5 | 9878.6  | 9746.3  | 9807.7  |
| 57.5° | 10053.7 | 10082.0 | 10285.3 | 10919.1 | 12361.4 | 11789.2 | 11070.3 | 11117.6 | 10885.9 | 10621.1 | 10815.0 |
| 60°   | 9727.4  | 9812.5  | 10299.6 | 11217.0 | 12971.4 | 12517.4 | 12191.1 | 12205.4 | 11869.6 | 11481.8 | 11822.3 |
| 62.5° | 8890.3  | 8994.4  | 9864.5  | 11339.9 | 12872.1 | 13264.6 | 13250.4 | 13283.5 | 12824.9 | 12342.5 | 12768.0 |
| 65°   | 7864.2  | 7968.2  | 8895.2  | 10994.8 | 12796.5 | 13799.0 | 14219.9 | 14309.6 | 13718.6 | 13070.6 | 13359.1 |
| 67.5° | 6355.6  | 6492.8  | 7372.4  | 9831.3  | 12427.5 | 14238.7 | 15127.8 | 15222.3 | 14409.0 | 13449.0 | 13307.1 |
| 70°   | 4606.0  | 4672.2  | 5409.9  | 7471.7  | 10923.7 | 13997.5 | 15846.5 | 15841.8 | 14636.0 | 13420.7 | 12597.8 |
| 72.5° | 2217.9  | 2269.9  | 2908.3  | 4639.0  | 7812.1  | 11879.0 | 15326.5 | 15416.3 | 14323.9 | 13009.3 | 10975.7 |
| 75°   | 912.7   | 964.6   | 1177.5  | 1957.8  | 4100.0  | 7849.9  | 12990.3 | 13203.1 | 13009.3 | 11675.7 | 8587.7  |
| 77.5° | 567.5   | 586.4   | 690.4   | 1012.0  | 1872.6  | 3664.9  | 9093.6  | 9382.2  | 10309.0 | 9353.8  | 5670.0  |
| 80°   | 425.6   | 439.8   | 515.4   | 709.3   | 1182.1  | 1352.5  | 4516.1  | 4880.3  | 6246.9  | 5367.4  | 2567.8  |
| 82.5° | 354.6   | 359.4   | 411.4   | 515.4   | 803.9   | 775.5   | 1447.0  | 1612.5  | 2913.0  | 2047.6  | 884.4   |
| 85°   | 331.0   | 340.5   | 368.9   | 368.9   | 510.7   | 487.1   | 600.6   | 628.9   | 846.4   | 700.0   | 307.3   |
| 87.5° | 170.2   | 160.8   | 326.2   | 288.5   | 264.9   | 236.4   | 255.3   | 274.2   | 316.9   | 335.8   | 137.1   |
| 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: P237076

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7030

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2889.4  | 2889.4 | 2889.4 | 2889.4 | 2889.4 | 2889.4 | 2889.4 | 2889.4 | 2889.4 | 2889.4 | 2889.4 |
| 2.5°  | 2879.8  | 2894.1 | 2917.8 | 2941.4 | 2969.7 | 3002.9 | 3021.8 | 3045.4 | 3064.2 | 3054.9 | 3050.2 |
| 5°    | 2894.1  | 2917.8 | 2969.7 | 3017.0 | 3073.8 | 3140.0 | 3182.5 | 3229.8 | 3267.7 | 3277.1 | 3262.9 |
| 7.5°  | 2917.8  | 2960.3 | 3031.2 | 3116.4 | 3192.0 | 3277.1 | 3343.4 | 3409.6 | 3456.9 | 3466.2 | 3466.2 |
| 10°   | 2974.5  | 3021.8 | 3116.4 | 3229.8 | 3319.8 | 3409.6 | 3485.3 | 3537.3 | 3579.8 | 3598.7 | 3598.7 |
| 12.5° | 3054.9  | 3111.6 | 3225.2 | 3362.2 | 3461.6 | 3546.7 | 3589.2 | 3612.8 | 3631.8 | 3650.7 | 3655.5 |
| 15°   | 3149.5  | 3210.9 | 3348.0 | 3494.6 | 3598.7 | 3641.3 | 3641.3 | 3636.5 | 3636.5 | 3646.0 | 3655.5 |
| 17.5° | 3244.0  | 3310.2 | 3452.1 | 3608.2 | 3674.4 | 3650.7 | 3617.6 | 3603.5 | 3594.0 | 3589.2 | 3603.5 |
| 20°   | 3343.4  | 3409.6 | 3551.4 | 3698.0 | 3679.1 | 3579.8 | 3532.5 | 3499.3 | 3471.0 | 3456.9 | 3475.7 |
| 22.5° | 3452.1  | 3513.6 | 3660.1 | 3759.5 | 3617.6 | 3466.2 | 3376.4 | 3324.4 | 3277.1 | 3248.8 | 3267.7 |
| 25°   | 3579.8  | 3641.3 | 3783.1 | 3778.4 | 3508.9 | 3296.1 | 3154.2 | 3069.1 | 3017.0 | 2988.7 | 2988.7 |
| 27.5° | 3731.1  | 3783.1 | 3920.2 | 3731.1 | 3357.5 | 3069.1 | 2861.0 | 2780.6 | 2766.5 | 2742.7 | 2742.7 |
| 30°   | 3887.1  | 3929.7 | 4047.9 | 3622.4 | 3149.5 | 2771.2 | 2544.1 | 2506.3 | 2511.1 | 2487.4 | 2492.1 |
| 32.5° | 4047.9  | 4090.5 | 4123.7 | 3461.6 | 2879.8 | 2435.4 | 2284.1 | 2255.6 | 2251.0 | 2232.0 | 2213.1 |
| 35°   | 4275.0  | 4336.4 | 4133.1 | 3244.0 | 2553.6 | 2156.3 | 2047.6 | 2019.2 | 1990.9 | 1924.7 | 1924.7 |
| 37.5° | 4620.1  | 4686.3 | 4109.5 | 2974.5 | 2217.9 | 1938.8 | 1839.6 | 1801.6 | 1754.3 | 1688.3 | 1664.6 |
| 40°   | 5093.0  | 5093.0 | 4057.5 | 2671.8 | 1948.3 | 1763.9 | 1669.3 | 1622.1 | 1569.9 | 1503.9 | 1489.6 |
| 42.5° | 5651.0  | 5518.6 | 3977.0 | 2364.5 | 1749.7 | 1645.7 | 1560.5 | 1508.6 | 1447.0 | 1371.4 | 1361.9 |
| 45°   | 6303.6  | 5944.2 | 3863.5 | 2090.1 | 1603.1 | 1574.8 | 1522.7 | 1432.8 | 1328.8 | 1248.4 | 1234.2 |
| 47.5° | 6937.3  | 6327.3 | 3754.8 | 1896.3 | 1480.1 | 1546.3 | 1503.9 | 1352.5 | 1210.6 | 1097.1 | 1082.9 |
| 50°   | 7632.5  | 6667.8 | 3627.1 | 1735.5 | 1385.5 | 1527.5 | 1480.1 | 1234.2 | 1078.2 | 997.7  | 988.4  |
| 52.5° | 8327.6  | 7013.1 | 3490.0 | 1565.2 | 1305.2 | 1489.6 | 1423.4 | 1149.1 | 1073.5 | 964.6  | 950.5  |
| 55°   | 9060.6  | 7414.9 | 3329.1 | 1376.1 | 1210.6 | 1414.0 | 1347.7 | 1144.4 | 1106.6 | 964.6  | 931.6  |
| 57.5° | 9774.7  | 7859.4 | 3069.1 | 1191.7 | 1106.6 | 1300.4 | 1319.5 | 1116.0 | 1035.7 | 955.3  | 917.4  |
| 60°   | 10564.4 | 8332.3 | 2638.7 | 1035.7 | 1016.7 | 1205.9 | 1281.5 | 1054.6 | 955.3  | 926.8  | 908.0  |
| 62.5° | 11198.1 | 8757.9 | 2061.8 | 926.8  | 941.0  | 1130.2 | 1234.2 | 1016.7 | 922.1  | 898.4  | 893.7  |
| 65°   | 11472.3 | 8767.4 | 1480.1 | 832.3  | 865.5  | 1059.3 | 1187.0 | 983.7  | 893.7  | 884.4  | 879.5  |
| 67.5° | 11183.9 | 8285.0 | 1040.3 | 742.4  | 785.0  | 993.0  | 1125.5 | 950.5  | 865.5  | 870.1  | 860.6  |
| 70°   | 10252.3 | 7268.4 | 761.3  | 657.3  | 709.3  | 922.1  | 1059.3 | 908.0  | 832.3  | 841.8  | 827.5  |
| 72.5° | 8578.3  | 5665.2 | 610.0  | 586.4  | 647.9  | 846.4  | 993.0  | 860.6  | 780.2  | 785.0  | 756.6  |
| 75°   | 6336.7  | 3754.8 | 510.7  | 524.9  | 576.9  | 775.5  | 908.0  | 799.2  | 723.6  | 704.6  | 685.7  |
| 77.5° | 3768.9  | 1929.4 | 420.8  | 458.7  | 515.4  | 690.4  | 813.3  | 723.6  | 662.0  | 628.9  | 614.8  |
| 80°   | 1555.9  | 780.2  | 345.3  | 387.8  | 449.3  | 614.8  | 718.8  | 633.7  | 591.1  | 558.0  | 539.0  |
| 82.5° | 619.5   | 383.1  | 274.2  | 316.9  | 378.4  | 534.4  | 628.9  | 558.0  | 515.4  | 491.7  | 439.8  |
| 85°   | 236.4   | 189.1  | 184.4  | 222.3  | 283.7  | 411.4  | 520.2  | 468.1  | 435.1  | 373.5  | 359.4  |
| 87.5° | 94.6    | 85.1   | 85.1   | 108.7  | 160.8  | 260.0  | 373.5  | 326.2  | 340.5  | 269.6  | 274.2  |
| 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)