

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: P399865

Luminaire Tested: **ARCH-L-PA3-200-740-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399865  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-200-740-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28896 lumens  
Efficiency: N/A  
Efficacy: 143.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

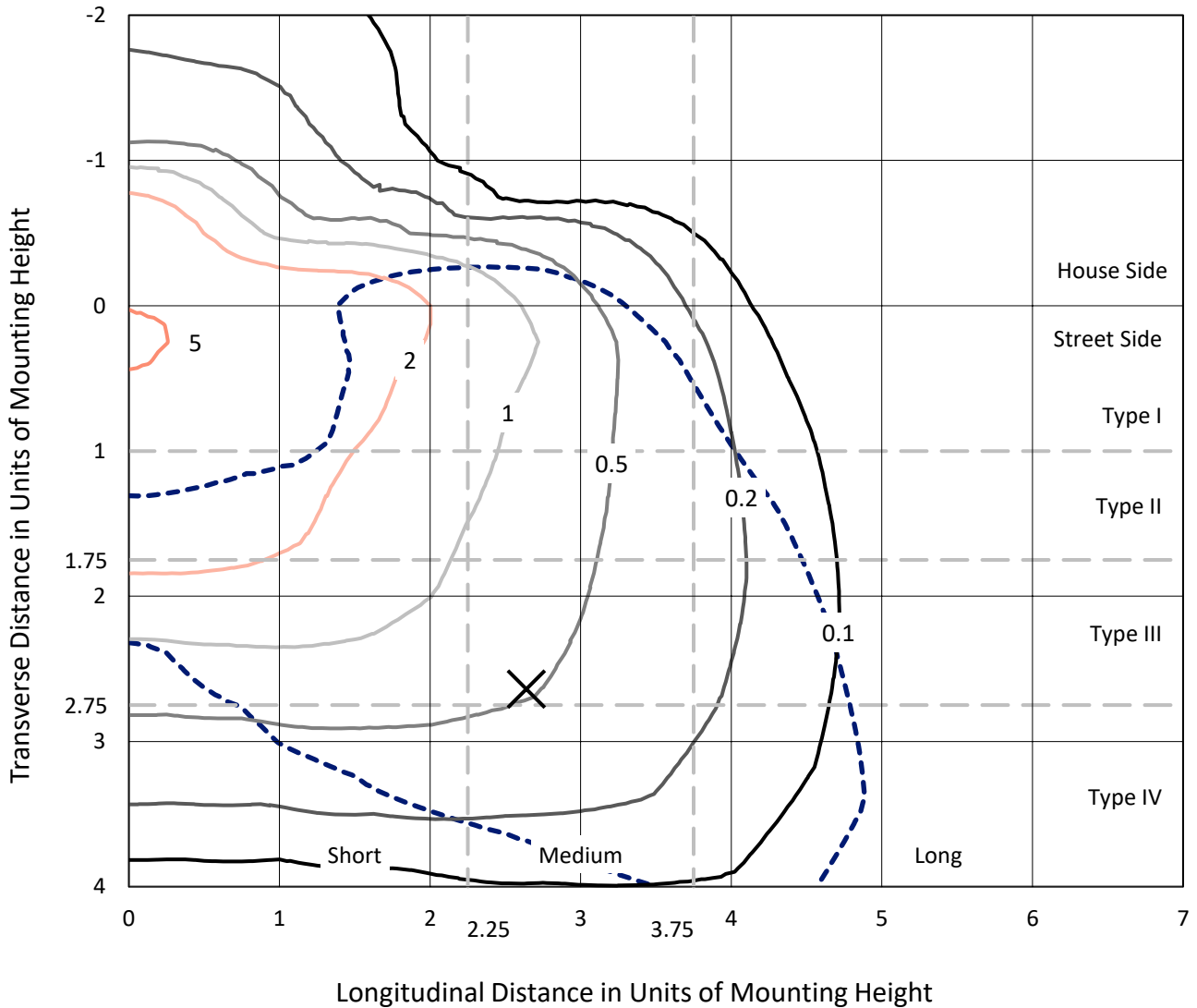
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399865  
 CATALOG NUMBER: ARCH-L-PA3-200-740-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

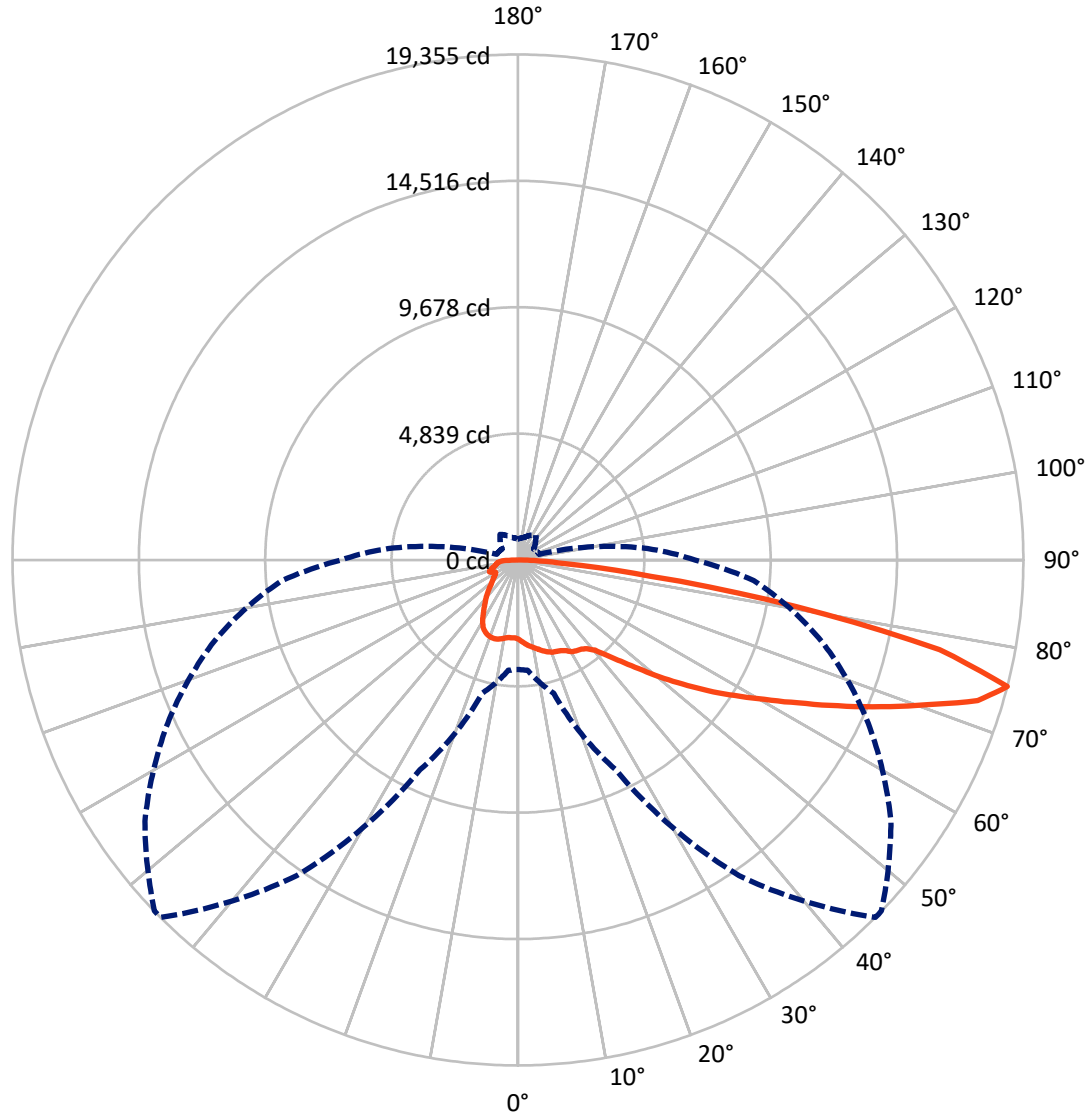
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399865  
CATALOG NUMBER: ARCH-L-PA3-200-740-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P399865  
 CATALOG NUMBER: ARCH-L-PA3-200-740-U-T4W

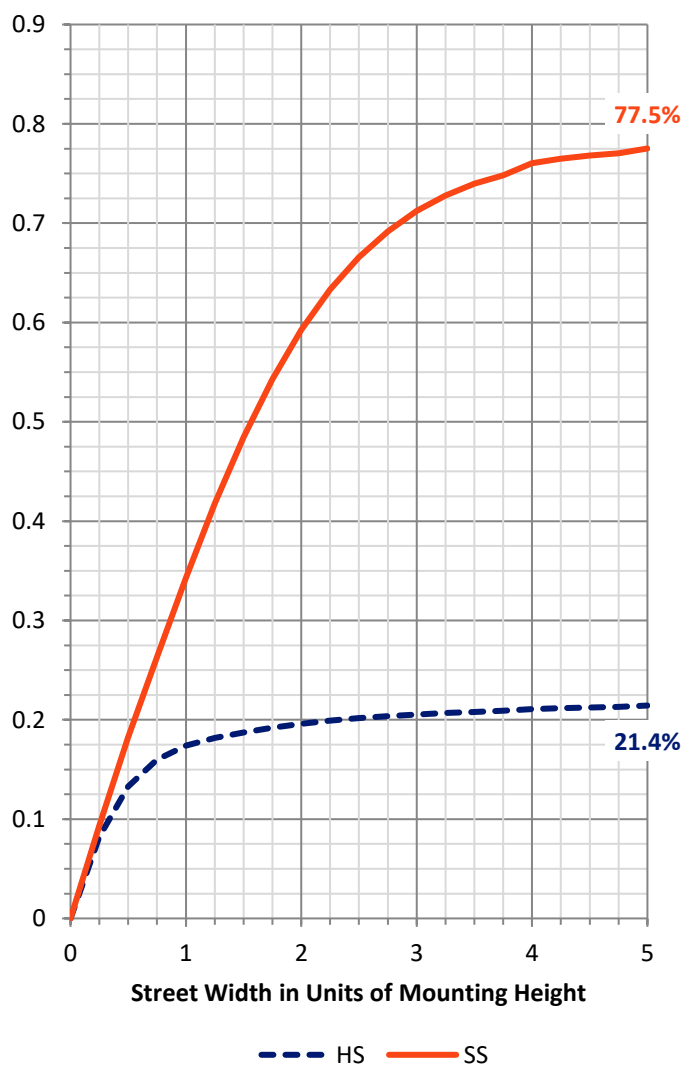
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6385.9   | 0.0    | 6385.9  |
|                    | % Fixture | 22.1     | 0.0    | 22.1    |
| <b>Street Side</b> | Lumens    | 22510.1  | 0.0    | 22510.1 |
|                    | % Fixture | 77.9     | 0.0    | 77.9    |
| <b>Total</b>       | Lumens    | 28896.0  | 0.0    | 28896.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 300.2   | 1.0       |
| 10°-20°   | 955.1   | 3.3       |
| 20°-30°   | 1628.3  | 5.6       |
| 30°-40°   | 2281.5  | 7.9       |
| 40°-50°   | 3351.8  | 11.6      |
| 50°-60°   | 5334.5  | 18.5      |
| 60°-70°   | 7588.3  | 26.3      |
| 70°-80°   | 6353.7  | 22.0      |
| 80°-90°   | 1102.7  | 3.8       |
| 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°    | 28896.0 | 100.0     |
| 0°-180°   | 28896.0 | 100.0     |

**Coefficient of Utilization**

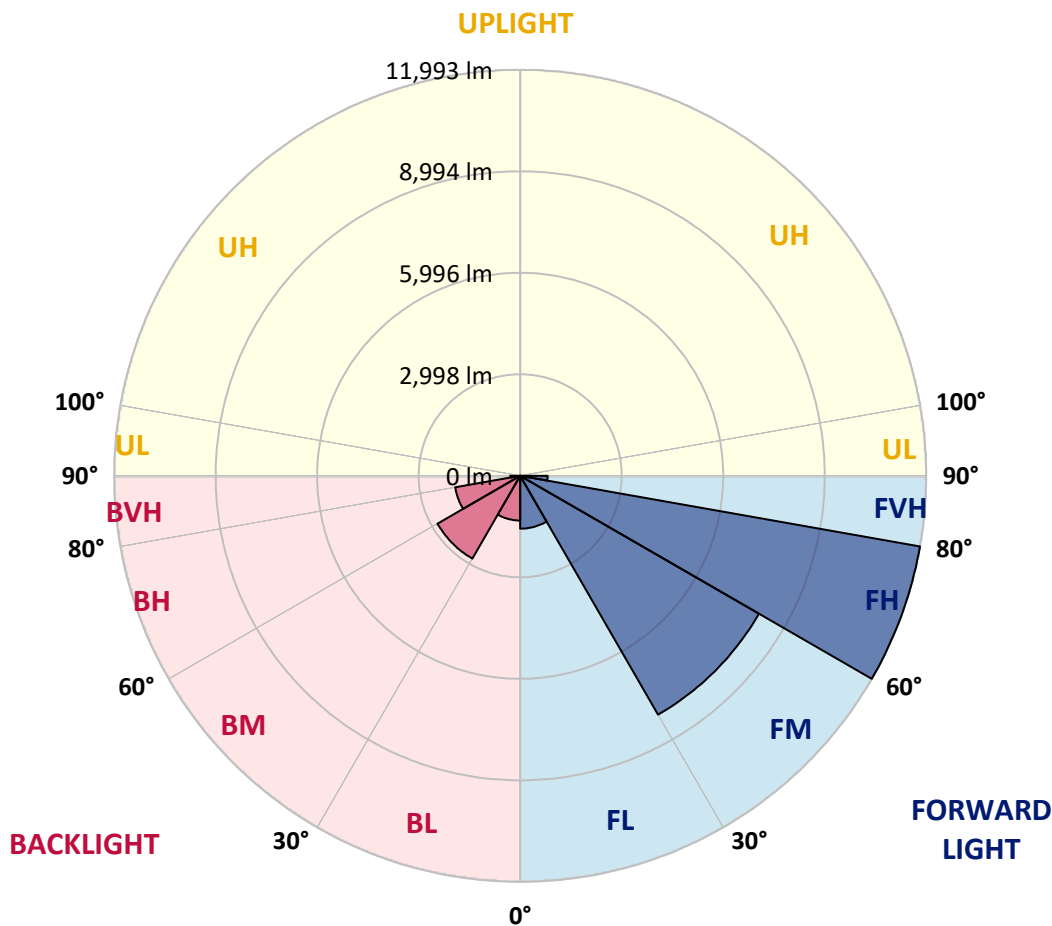


REPORT NUMBER: P399865  
 CATALOG NUMBER: ARCH-L-PA3-200-740-U-T4W

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1562.0  | 5.4       |                         |      |          |
| FM (30°-60°)   | 8144.9  | 28.2      |                         |      |          |
| FH (60°-80°)   | 11992.6 | 41.5      |                         |      | G4/12000 |
| FVH (80°-90°)  | 810.7   | 2.8       |                         |      | G5       |
| BL (0°-30°)    | 1321.6  | 4.6       | B3/2500                 |      |          |
| BM (30°-60°)   | 2822.9  | 9.8       | B3/5000                 |      |          |
| BH (60°-80°)   | 1949.4  | 6.7       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 292.0   | 1.0       |                         |      | G3/500   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G5**  
 Type IV Medium





REPORT NUMBER: P399865

CATALOG NUMBER: ARCH-L-PA3-200-740-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 46°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  | 3034.7  |
| 2.5°  | 3208.5  | 3193.0  | 3185.3  | 3185.3  | 3154.4  | 3135.1  | 3131.2  | 3104.2  | 3081.0  | 3057.9  | 3038.6  |
| 5°    | 3393.8  | 3382.2  | 3359.0  | 3339.7  | 3297.3  | 3243.2  | 3235.5  | 3177.6  | 3119.7  | 3065.6  | 3019.3  |
| 7.5°  | 3563.7  | 3540.5  | 3513.5  | 3474.9  | 3405.4  | 3332.0  | 3320.4  | 3239.3  | 3158.3  | 3077.2  | 3015.4  |
| 10°   | 3706.5  | 3683.4  | 3644.7  | 3590.7  | 3501.9  | 3413.1  | 3401.5  | 3316.6  | 3231.6  | 3135.1  | 3046.3  |
| 12.5° | 3841.7  | 3822.3  | 3764.4  | 3691.1  | 3586.8  | 3505.7  | 3494.2  | 3420.8  | 3332.0  | 3223.9  | 3108.1  |
| 15°   | 3957.5  | 3938.2  | 3876.4  | 3791.5  | 3671.8  | 3610.0  | 3594.6  | 3525.1  | 3436.3  | 3320.4  | 3200.7  |
| 17.5° | 4015.4  | 4015.4  | 3949.8  | 3857.1  | 3745.1  | 3698.8  | 3687.2  | 3602.3  | 3521.2  | 3409.2  | 3289.5  |
| 20°   | 4034.7  | 4042.4  | 3996.1  | 3884.1  | 3787.6  | 3768.3  | 3756.7  | 3687.2  | 3594.6  | 3486.4  | 3374.5  |
| 22.5° | 4046.3  | 4061.7  | 4023.1  | 3895.7  | 3814.6  | 3803.0  | 3795.3  | 3749.0  | 3675.6  | 3571.4  | 3459.4  |
| 25°   | 4084.9  | 4084.9  | 4057.9  | 3915.0  | 3849.4  | 3845.5  | 3845.5  | 3818.5  | 3768.3  | 3679.5  | 3567.5  |
| 27.5° | 4142.8  | 4138.9  | 4104.2  | 3957.5  | 3926.6  | 3938.2  | 3934.3  | 3930.5  | 3895.7  | 3806.9  | 3687.2  |
| 30°   | 4239.3  | 4239.3  | 4200.7  | 4042.4  | 4023.1  | 4073.3  | 4077.2  | 4084.9  | 4030.8  | 3891.8  | 3795.3  |
| 32.5° | 4386.0  | 4370.6  | 4332.0  | 4127.4  | 4096.5  | 4142.8  | 4150.5  | 4146.7  | 4100.3  | 3969.1  | 3922.7  |
| 35°   | 4837.8  | 4803.0  | 4664.0  | 4316.6  | 4162.1  | 4189.1  | 4193.0  | 4212.3  | 4220.0  | 4115.8  | 4092.6  |
| 37.5° | 5629.3  | 5582.9  | 5370.6  | 4764.4  | 4370.6  | 4305.0  | 4301.1  | 4351.3  | 4393.8  | 4301.1  | 4301.1  |
| 40°   | 6490.3  | 6451.7  | 6328.1  | 5536.6  | 4756.7  | 4540.5  | 4525.0  | 4571.4  | 4625.4  | 4559.8  | 4579.1  |
| 42.5° | 7231.6  | 7262.5  | 7274.0  | 6355.1  | 5335.8  | 4980.6  | 4938.2  | 4872.5  | 4957.5  | 4899.6  | 4976.8  |
| 45°   | 7787.6  | 7772.1  | 7984.5  | 7193.0  | 6084.9  | 5532.8  | 5474.8  | 5297.2  | 5405.3  | 5401.5  | 5571.4  |
| 47.5° | 8378.3  | 8351.3  | 8440.1  | 7980.6  | 6938.1  | 6208.4  | 6119.6  | 5857.1  | 6019.2  | 6131.2  | 6413.0  |
| 50°   | 8938.1  | 8945.8  | 8976.7  | 8602.2  | 7864.8  | 7030.8  | 6918.8  | 6567.5  | 6799.1  | 7034.7  | 7432.3  |
| 52.5° | 9667.8  | 9613.8  | 9575.2  | 9328.1  | 8903.4  | 7887.9  | 7814.6  | 7413.0  | 7737.4  | 8015.3  | 8544.3  |
| 55°   | 10304.9 | 10270.1 | 10247.0 | 10235.4 | 9772.1  | 8833.9  | 8756.7  | 8339.7  | 8806.8  | 9003.8  | 9783.7  |
| 57.5° | 10984.4 | 10965.1 | 11088.7 | 11285.6 | 11100.3 | 9795.2  | 9714.2  | 9312.6  | 9833.9  | 9972.9  | 11127.3 |
| 60°   | 11482.5 | 11494.1 | 11833.8 | 12335.8 | 12208.3 | 10837.7 | 10741.2 | 10386.0 | 10833.8 | 10957.4 | 12470.9 |
| 62.5° | 11486.3 | 11602.2 | 12389.8 | 13289.4 | 13436.1 | 12038.5 | 11926.5 | 11540.4 | 11860.9 | 11860.9 | 13675.5 |
| 65°   | 10389.8 | 10521.1 | 12289.4 | 13524.9 | 14679.4 | 13467.0 | 13358.9 | 12752.7 | 12872.4 | 12710.3 | 14806.8 |
| 67.5° | 9297.2  | 9451.6  | 11115.7 | 13544.2 | 15551.9 | 14996.0 | 14868.5 | 13965.1 | 13760.5 | 13351.2 | 15598.3 |
| 70°   | 8571.3  | 8679.4  | 10069.4 | 13293.3 | 16077.0 | 16594.4 | 16497.9 | 15115.6 | 14459.3 | 13887.9 | 15432.2 |
| 72.5° | 7216.1  | 7177.5  | 8505.7  | 12100.2 | 16370.5 | 18409.0 | 18328.0 | 16366.6 | 15065.5 | 13633.0 | 13162.0 |
| 75°   | 4189.1  | 4235.5  | 5277.9  | 8864.8  | 14756.6 | 19355.0 | 19347.3 | 17436.1 | 14799.0 | 12042.3 | 9069.4  |
| 77.5° | 1208.5  | 1243.2  | 1733.6  | 3895.7  | 9331.9  | 16509.5 | 17038.4 | 15945.8 | 12509.5 | 8582.9  | 4702.6  |
| 80°   | 529.0   | 556.0   | 752.9   | 1297.3  | 4019.3  | 10783.7 | 11247.0 | 10783.7 | 7544.3  | 3938.2  | 1845.5  |
| 82.5° | 312.7   | 332.0   | 490.3   | 803.1   | 1926.6  | 5131.2  | 5756.7  | 5027.0  | 3254.8  | 1671.8  | 764.5   |
| 85°   | 177.6   | 185.3   | 281.8   | 509.6   | 1212.3  | 1795.3  | 2015.4  | 1888.0  | 1586.9  | 949.8   | 401.5   |
| 87.5° | 81.1    | 84.9    | 139.0   | 239.4   | 679.5   | 606.2   | 629.3   | 834.0   | 918.9   | 579.1   | 200.8   |
| 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: P399865

CATALOG NUMBER: ARCH-L-PA3-200-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3034.7  | 3034.7  | 3034.7 | 3034.7 | 3034.7 | 3034.7 | 3034.7 | 3034.7 | 3034.7 | 3034.7 | 3034.7 |
| 2.5°  | 3030.9  | 3019.3  | 2996.1 | 2988.4 | 2976.8 | 2980.7 | 2984.5 | 2984.5 | 2988.4 | 2976.8 | 2976.8 |
| 5°    | 3000.0  | 2980.7  | 2957.5 | 2957.5 | 2957.5 | 2988.4 | 3015.4 | 3030.9 | 3038.6 | 3038.6 | 3030.9 |
| 7.5°  | 2988.4  | 2965.2  | 2938.2 | 2945.9 | 2953.6 | 2992.2 | 3042.4 | 3092.6 | 3108.1 | 3108.1 | 3100.3 |
| 10°   | 3011.5  | 2988.4  | 2969.1 | 2980.7 | 3000.0 | 3030.9 | 3069.5 | 3115.8 | 3154.4 | 3158.3 | 3154.4 |
| 12.5° | 3065.6  | 3038.6  | 3019.3 | 3042.4 | 3065.6 | 3084.9 | 3104.2 | 3123.5 | 3173.7 | 3181.4 | 3181.4 |
| 15°   | 3154.4  | 3127.4  | 3104.2 | 3123.5 | 3131.2 | 3131.2 | 3131.2 | 3131.2 | 3181.4 | 3189.2 | 3189.2 |
| 17.5° | 3243.2  | 3220.0  | 3196.9 | 3200.7 | 3177.6 | 3146.7 | 3135.1 | 3131.2 | 3158.3 | 3181.4 | 3185.3 |
| 20°   | 3328.1  | 3308.8  | 3285.7 | 3247.1 | 3189.2 | 3131.2 | 3111.9 | 3111.9 | 3127.4 | 3162.1 | 3162.1 |
| 22.5° | 3420.8  | 3397.6  | 3359.0 | 3270.2 | 3173.7 | 3092.6 | 3073.3 | 3084.9 | 3104.2 | 3150.5 | 3146.7 |
| 25°   | 3525.1  | 3494.2  | 3428.5 | 3262.5 | 3123.5 | 3027.0 | 3030.9 | 3065.6 | 3100.3 | 3150.5 | 3150.5 |
| 27.5° | 3640.9  | 3598.4  | 3467.1 | 3200.7 | 3011.5 | 2918.9 | 2953.6 | 3034.7 | 3084.9 | 3139.0 | 3146.7 |
| 30°   | 3768.3  | 3729.7  | 3498.0 | 3092.6 | 2830.1 | 2745.1 | 2830.1 | 2961.4 | 3038.6 | 3088.8 | 3100.3 |
| 32.5° | 3922.7  | 3891.8  | 3525.1 | 2953.6 | 2594.6 | 2521.2 | 2644.8 | 2806.9 | 2930.5 | 2988.4 | 3000.0 |
| 35°   | 4115.8  | 4084.9  | 3559.8 | 2795.3 | 2374.5 | 2297.3 | 2409.2 | 2575.3 | 2737.4 | 2810.8 | 2833.9 |
| 37.5° | 4366.7  | 4320.4  | 3590.7 | 2625.5 | 2189.2 | 2100.4 | 2154.4 | 2305.0 | 2451.7 | 2552.1 | 2579.1 |
| 40°   | 4687.2  | 4613.8  | 3617.7 | 2432.4 | 2027.0 | 1926.6 | 1945.9 | 2019.3 | 2104.2 | 2193.0 | 2227.8 |
| 42.5° | 5138.9  | 4992.2  | 3621.6 | 2227.8 | 1861.0 | 1768.3 | 1760.6 | 1783.8 | 1783.8 | 1783.8 | 1795.3 |
| 45°   | 5768.3  | 5490.3  | 3629.3 | 2034.7 | 1691.1 | 1594.6 | 1571.4 | 1563.7 | 1505.8 | 1393.8 | 1386.1 |
| 47.5° | 6563.6  | 6142.8  | 3664.0 | 1872.6 | 1513.5 | 1428.6 | 1397.7 | 1366.8 | 1258.7 | 1142.8 | 1119.7 |
| 50°   | 7582.9  | 6899.5  | 3733.5 | 1718.1 | 1362.9 | 1305.0 | 1266.4 | 1193.0 | 1073.3 | 984.5  | 961.4  |
| 52.5° | 8756.7  | 7799.1  | 3799.2 | 1556.0 | 1251.0 | 1212.3 | 1166.0 | 1077.2 | 949.8  | 895.7  | 888.0  |
| 55°   | 10104.1 | 8803.0  | 3930.5 | 1413.1 | 1154.4 | 1127.4 | 1084.9 | 1000.0 | 903.5  | 864.9  | 861.0  |
| 57.5° | 11482.5 | 9926.5  | 4115.8 | 1285.7 | 1061.8 | 1046.3 | 1046.3 | 973.0  | 911.2  | 895.7  | 895.7  |
| 60°   | 12810.7 | 10891.8 | 3972.9 | 1166.0 | 976.8  | 984.5  | 1057.9 | 1038.6 | 992.3  | 1011.6 | 1023.2 |
| 62.5° | 13841.5 | 11459.3 | 3223.9 | 1069.5 | 915.0  | 984.5  | 1173.7 | 1173.7 | 1119.7 | 1112.0 | 1112.0 |
| 65°   | 14281.7 | 11451.6 | 2266.4 | 996.1  | 891.9  | 1081.1 | 1308.9 | 1247.1 | 1104.2 | 1050.2 | 1038.6 |
| 67.5° | 14169.7 | 10949.7 | 1563.7 | 945.9  | 884.2  | 1181.5 | 1370.6 | 1196.9 | 1034.7 | 988.4  | 953.7  |
| 70°   | 13185.2 | 9887.9  | 1204.6 | 899.6  | 872.6  | 1139.0 | 1351.3 | 1139.0 | 980.7  | 938.2  | 907.3  |
| 72.5° | 10636.9 | 7930.4  | 1000.0 | 853.3  | 826.2  | 1054.0 | 1285.7 | 1084.9 | 938.2  | 891.9  | 861.0  |
| 75°   | 6783.7  | 4988.4  | 845.5  | 791.5  | 737.4  | 945.9  | 1196.9 | 1030.9 | 891.9  | 830.1  | 806.9  |
| 77.5° | 3262.5  | 2150.6  | 737.4  | 718.1  | 664.1  | 876.4  | 1108.1 | 961.4  | 830.1  | 779.9  | 764.5  |
| 80°   | 1320.4  | 984.5   | 640.9  | 644.8  | 610.0  | 834.0  | 1046.3 | 895.7  | 768.3  | 714.3  | 687.3  |
| 82.5° | 687.3   | 571.4   | 540.5  | 556.0  | 556.0  | 795.4  | 1000.0 | 841.7  | 714.3  | 691.1  | 602.3  |
| 85°   | 370.7   | 355.2   | 417.0  | 447.9  | 482.6  | 718.1  | 930.5  | 783.8  | 652.5  | 559.8  | 540.5  |
| 87.5° | 181.5   | 231.7   | 235.5  | 270.3  | 335.9  | 575.3  | 783.8  | 656.4  | 544.4  | 451.7  | 444.0  |
| 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)