

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: P841188

Luminaire Tested: **ARCH4-140-740-U-T4W**

Issue Date: 5/27/2024

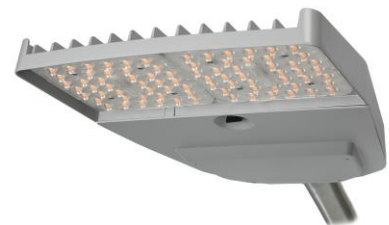
### Test Information

Test Method: LM-79-08  
Report Number: P841188  
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: ARCH4-140-740-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23951 lumens  
Efficiency: N/A  
Efficacy: 169.5 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

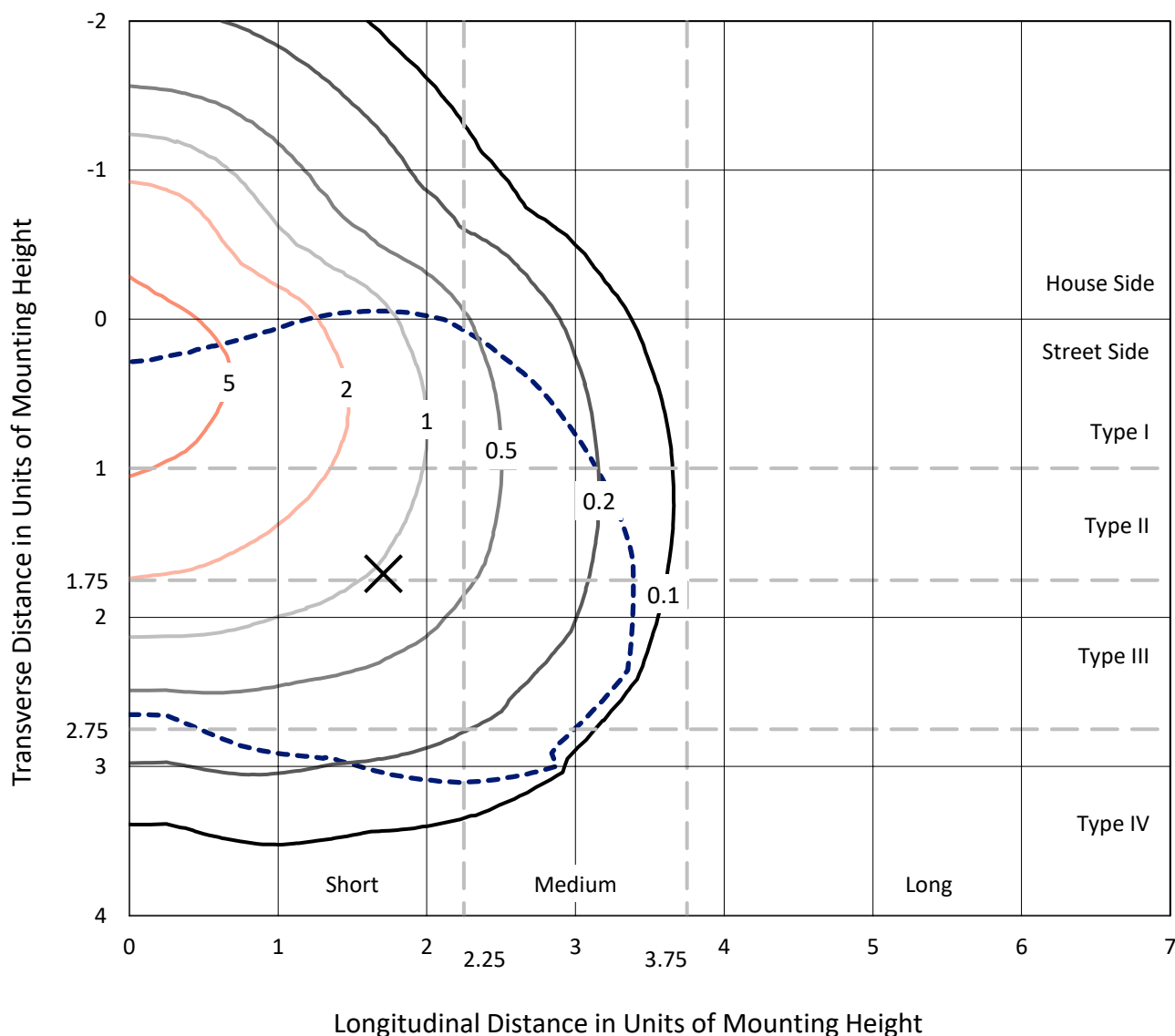
Input Watts (W): 141.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P841188  
 CATALOG NUMBER: ARCH4-140-740-U-T4W

## Iso-Footcandle Lines of Horizontal Illumination

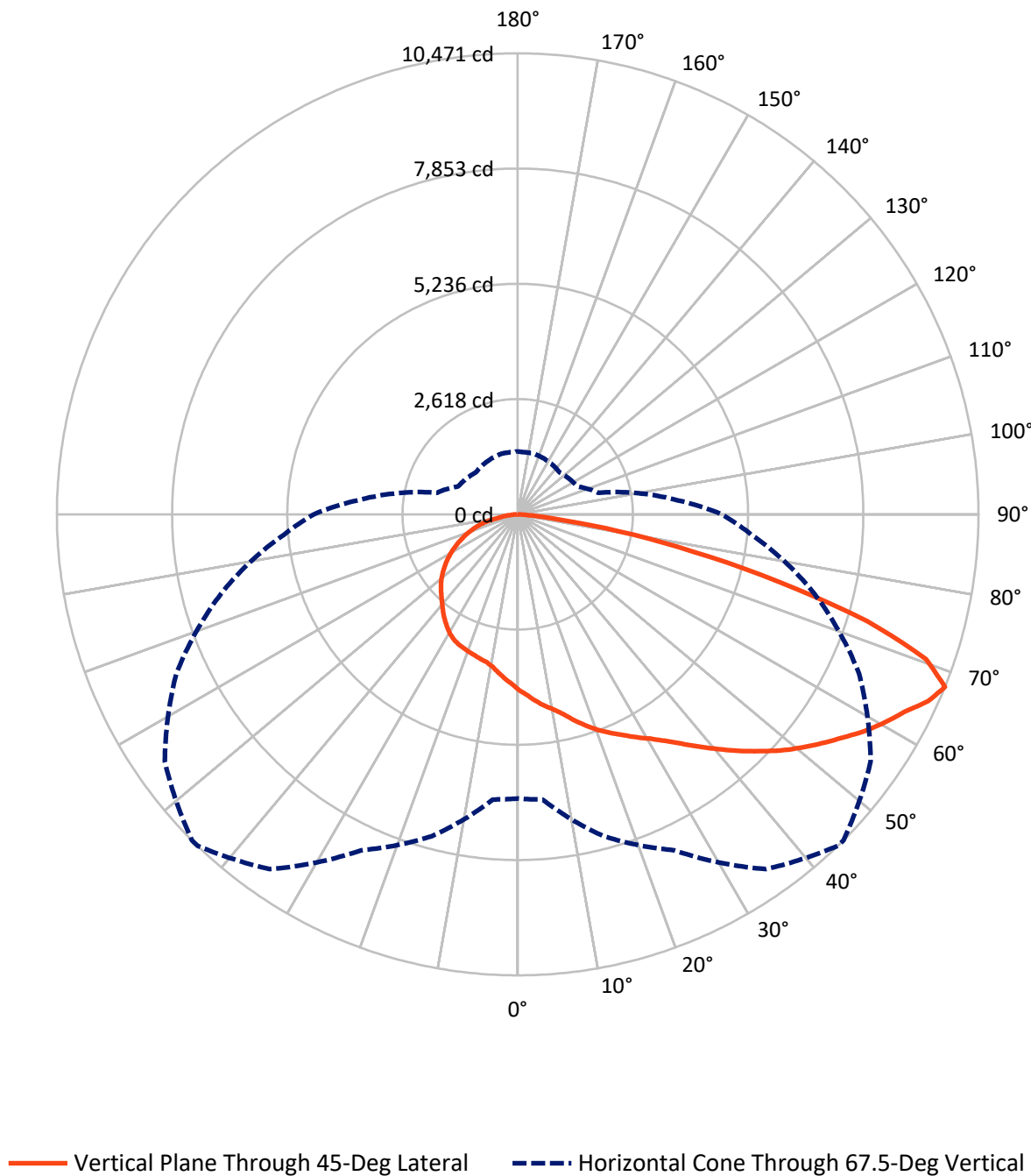
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P841188  
CATALOG NUMBER: ARCH4-140-740-U-T4W

## Luminous Intensity Polar Plot



REPORT NUMBER: P841188

CATALOG NUMBER: ARCH4-140-740-U-T4W

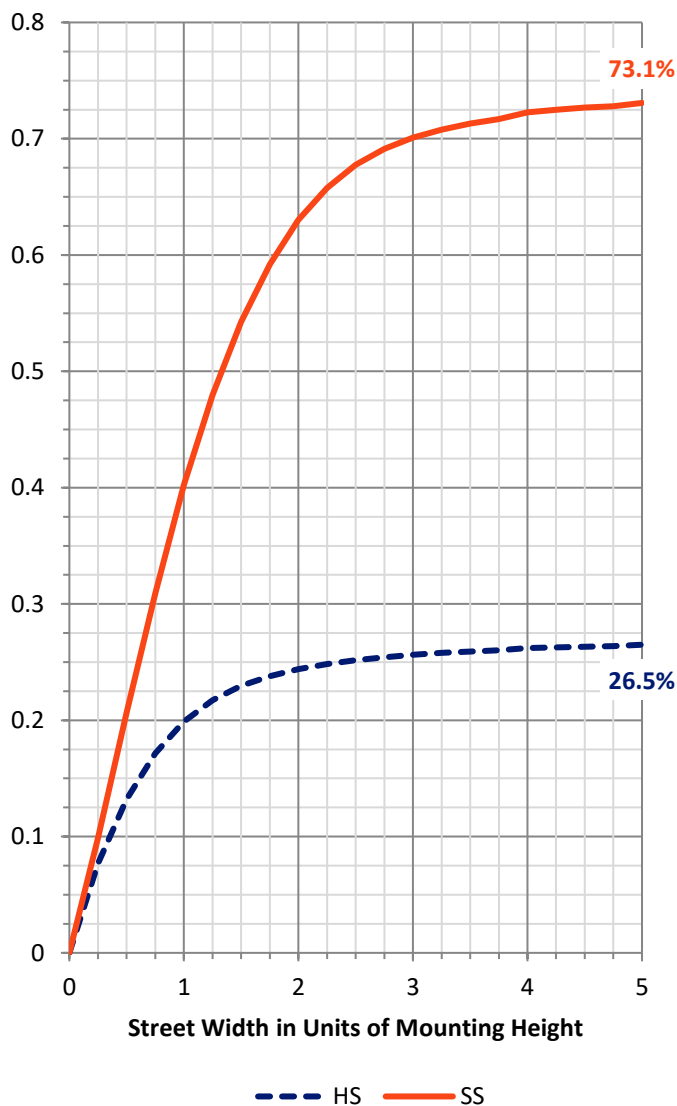
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6398.5   | 0.0    | 6398.5  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 17552.5  | 0.0    | 17552.5 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 23951.0  | 0.0    | 23951.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 382.5   | 1.6       |
| 10°-20°   | 1181.5  | 4.9       |
| 20°-30°   | 2039.3  | 8.5       |
| 30°-40°   | 3007.3  | 12.6      |
| 40°-50°   | 4074.3  | 17.0      |
| 50°-60°   | 4979.8  | 20.8      |
| 60°-70°   | 5136.0  | 21.4      |
| 70°-80°   | 2813.1  | 11.7      |
| 80°-90°   | 337.2   | 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°    | 23951.0 | 100.0     |
| 0°-180°   | 23951.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841188

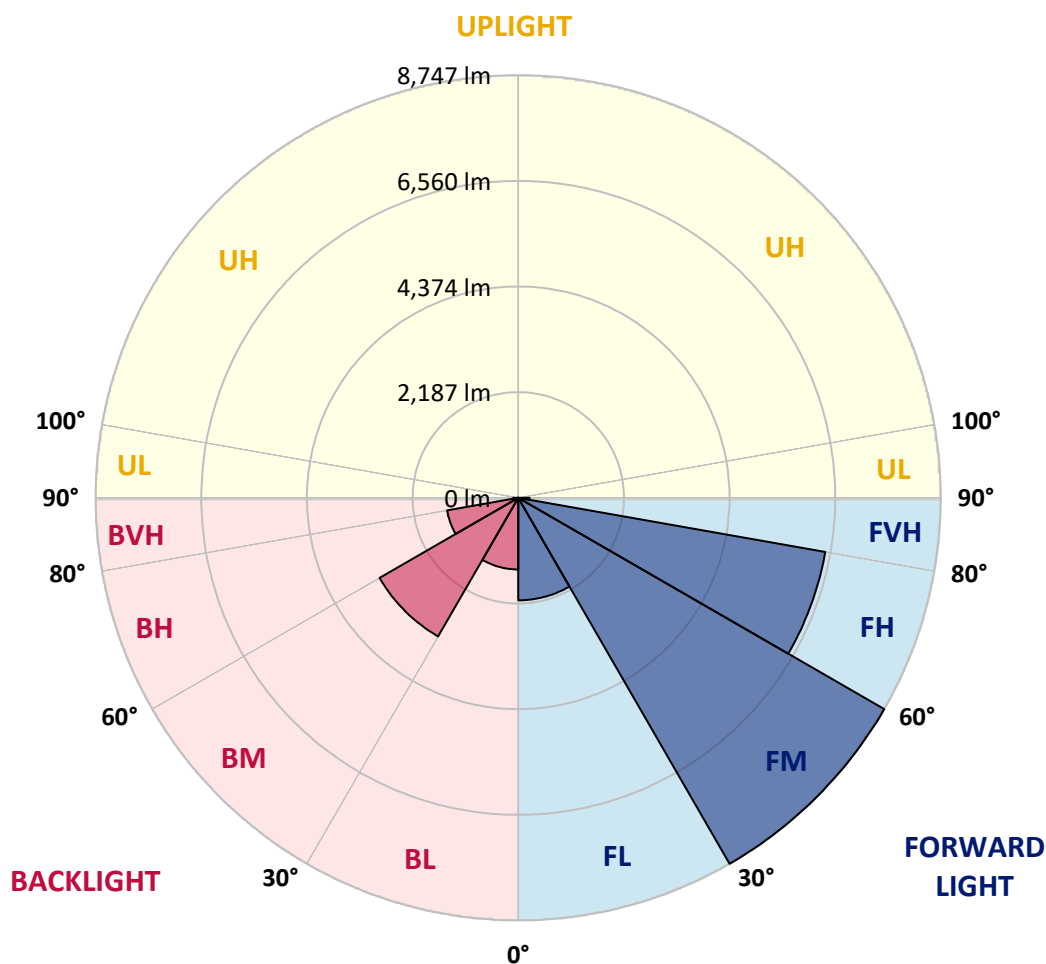
CATALOG NUMBER: ARCH4-140-740-U-T4W

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2120.3 | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 8747.1 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 6452.8 | 26.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 232.3  | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1483.0 | 6.2       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3314.3 | 13.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1496.3 | 6.2       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 104.9  | 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-G3**

Type IV Short



REPORT NUMBER: P841188

CATALOG NUMBER: ARCH4-140-740-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°    | 25°    | 35°     | 44°     | 45°     | 55°    | 65°    | 75°    | 85°    |
|-------|---------|---------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 3994.6  | 3994.6  | 3994.6 | 3994.6 | 3994.6  | 3994.6  | 3994.6  | 3994.6 | 3994.6 | 3994.6 | 3994.6 |
| 2.5°  | 4169.5  | 4165.9  | 4173.2 | 4147.6 | 4114.8  | 4111.2  | 4111.2  | 4089.3 | 4063.8 | 4012.8 | 3972.7 |
| 5°    | 4366.3  | 4359.0  | 4362.7 | 4326.2 | 4282.5  | 4260.6  | 4257.0  | 4209.6 | 4151.3 | 4071.1 | 3998.2 |
| 7.5°  | 4548.6  | 4541.3  | 4537.6 | 4497.5 | 4431.9  | 4395.5  | 4391.8  | 4322.6 | 4253.3 | 4129.4 | 4023.7 |
| 10°   | 4719.9  | 4712.6  | 4705.3 | 4650.6 | 4570.4  | 4515.8  | 4508.5  | 4421.0 | 4333.5 | 4180.5 | 4045.6 |
| 12.5° | 4938.5  | 4924.0  | 4916.7 | 4851.1 | 4734.4  | 4676.1  | 4665.2  | 4548.6 | 4439.2 | 4253.3 | 4089.3 |
| 15°   | 5168.2  | 5157.2  | 5146.3 | 5084.3 | 4953.1  | 4876.6  | 4858.4  | 4712.6 | 4563.1 | 4348.1 | 4154.9 |
| 17.5° | 5339.5  | 5328.5  | 5328.5 | 5273.9 | 5153.6  | 5066.1  | 5051.5  | 4876.6 | 4690.7 | 4435.6 | 4206.0 |
| 20°   | 5445.2  | 5434.2  | 5445.2 | 5412.4 | 5321.2  | 5248.3  | 5233.8  | 5040.6 | 4818.3 | 4515.8 | 4249.7 |
| 22.5° | 5521.7  | 5510.8  | 5529.0 | 5514.4 | 5448.8  | 5405.1  | 5394.1  | 5204.6 | 4949.5 | 4599.6 | 4293.4 |
| 25°   | 5656.5  | 5656.5  | 5656.5 | 5631.0 | 5569.1  | 5554.5  | 5554.5  | 5390.5 | 5117.1 | 4708.9 | 4359.0 |
| 27.5° | 5926.3  | 5911.7  | 5893.5 | 5820.6 | 5714.9  | 5711.2  | 5733.1  | 5580.0 | 5310.3 | 4851.1 | 4439.2 |
| 30°   | 6323.5  | 6316.2  | 6247.0 | 6093.9 | 5915.3  | 5897.1  | 5911.7  | 5784.1 | 5518.1 | 5000.5 | 4530.3 |
| 32.5° | 6837.4  | 6811.9  | 6669.8 | 6440.2 | 6185.0  | 6101.2  | 6130.4  | 5995.5 | 5736.7 | 5153.6 | 4617.8 |
| 35°   | 7201.9  | 7209.2  | 7107.1 | 6899.4 | 6596.9  | 6374.6  | 6396.4  | 6232.4 | 5973.6 | 5324.9 | 4727.2 |
| 37.5° | 7621.0  | 7646.5  | 7493.5 | 7336.7 | 7056.1  | 6677.1  | 6698.9  | 6476.6 | 6210.5 | 5539.9 | 4843.8 |
| 40°   | 8200.5  | 8149.5  | 7890.7 | 7704.9 | 7395.1  | 6994.1  | 7012.4  | 6750.0 | 6483.9 | 5744.0 | 4978.6 |
| 42.5° | 8685.3  | 8594.2  | 8280.7 | 8043.8 | 7672.1  | 7329.5  | 7347.7  | 7045.2 | 6760.9 | 5970.0 | 5128.1 |
| 45°   | 9381.4  | 9129.9  | 8678.0 | 8561.4 | 7956.3  | 7657.5  | 7675.7  | 7358.6 | 7052.5 | 6210.5 | 5288.4 |
| 47.5° | 9786.0  | 9385.1  | 9097.1 | 9035.2 | 8269.8  | 7996.4  | 8018.3  | 7690.3 | 7365.9 | 6483.9 | 5456.1 |
| 50°   | 9760.5  | 9501.7  | 9417.9 | 9264.8 | 8546.8  | 8313.5  | 8335.4  | 8032.9 | 7683.0 | 6753.6 | 5616.5 |
| 52.5° | 9592.8  | 9640.2  | 9596.5 | 9341.3 | 8823.8  | 8619.7  | 8645.2  | 8371.8 | 8007.4 | 7005.1 | 5765.9 |
| 55°   | 9851.6  | 9884.4  | 9800.6 | 9465.2 | 9129.9  | 8925.8  | 8955.0  | 8729.0 | 8328.1 | 7227.4 | 5893.5 |
| 57.5° | 10161.4 | 10044.7 | 9960.9 | 9683.9 | 9447.0  | 9257.5  | 9290.3  | 9093.5 | 8605.1 | 7406.0 | 5991.9 |
| 60°   | 10146.8 | 9902.6  | 9986.4 | 9698.5 | 9662.1  | 9563.6  | 9592.8  | 9392.3 | 8816.5 | 7537.2 | 6032.0 |
| 62.5° | 9399.6  | 9268.4  | 9691.2 | 9592.8 | 9837.0  | 9837.0  | 9873.4  | 9574.6 | 8944.1 | 7591.9 | 6010.1 |
| 65°   | 8102.1  | 8109.4  | 8852.9 | 9261.1 | 10044.7 | 10212.4 | 10241.6 | 9687.6 | 8871.2 | 7431.5 | 5806.0 |
| 67.5° | 6454.7  | 6502.1  | 7570.0 | 8419.2 | 9837.0  | 10467.5 | 10471.2 | 9789.6 | 8557.7 | 6979.6 | 5332.2 |
| 70°   | 4723.5  | 4760.0  | 6021.0 | 7052.5 | 8856.6  | 9902.6  | 9844.3  | 9501.7 | 7876.2 | 6192.3 | 4592.3 |
| 72.5° | 3192.7  | 3225.5  | 4523.1 | 5416.0 | 7267.5  | 8433.8  | 8306.2  | 8397.3 | 6713.5 | 5088.0 | 3692.1 |
| 75°   | 2146.7  | 2186.8  | 3218.3 | 3874.3 | 5346.7  | 6403.7  | 6119.4  | 6360.0 | 5193.7 | 3852.4 | 2693.4 |
| 77.5° | 1352.2  | 1377.7  | 2044.7 | 2540.3 | 3652.0  | 4359.0  | 4074.8  | 4078.4 | 2992.3 | 2073.8 | 1446.9 |
| 80°   | 860.1   | 867.4   | 1239.2 | 1465.2 | 2113.9  | 2620.5  | 2318.0  | 1884.3 | 1348.5 | 1100.7 | 863.8  |
| 82.5° | 499.3   | 488.4   | 739.9  | 827.3  | 1005.9  | 995.0   | 823.7   | 780.0  | 590.4  | 550.3  | 441.0  |
| 85°   | 200.5   | 185.9   | 324.4  | 302.5  | 306.2   | 324.4   | 240.5   | 240.5  | 193.2  | 149.4  | 109.3  |
| 87.5° | 40.1    | 40.1    | 43.7   | 40.1   | 40.1    | 43.7    | 32.8    | 32.8   | 29.2   | 29.2   | 29.2   |
| 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: P841188

CATALOG NUMBER: ARCH4-140-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 | 3994.6 |
| 2.5°  | 3965.4 | 3958.1 | 3939.9 | 3892.5 | 3867.0 | 3852.4 | 3830.6 | 3823.3 | 3819.6 | 3823.3 | 3834.2 |
| 5°    | 3976.3 | 3950.8 | 3899.8 | 3823.3 | 3772.2 | 3739.4 | 3703.0 | 3688.4 | 3677.5 | 3677.5 | 3688.4 |
| 7.5°  | 3983.6 | 3943.5 | 3856.1 | 3743.1 | 3670.2 | 3619.2 | 3575.4 | 3557.2 | 3553.6 | 3564.5 | 3568.1 |
| 10°   | 3987.3 | 3929.0 | 3805.0 | 3662.9 | 3568.1 | 3502.5 | 3458.8 | 3447.9 | 3458.8 | 3480.7 | 3484.3 |
| 12.5° | 4012.8 | 3932.6 | 3775.9 | 3608.2 | 3495.3 | 3429.6 | 3396.8 | 3396.8 | 3426.0 | 3466.1 | 3469.7 |
| 15°   | 4056.5 | 3958.1 | 3761.3 | 3564.5 | 3447.9 | 3389.6 | 3378.6 | 3396.8 | 3440.6 | 3502.5 | 3509.8 |
| 17.5° | 4089.3 | 3972.7 | 3728.5 | 3506.2 | 3385.9 | 3349.5 | 3367.7 | 3411.4 | 3473.4 | 3557.2 | 3564.5 |
| 20°   | 4111.2 | 3972.7 | 3681.1 | 3436.9 | 3324.0 | 3316.7 | 3367.7 | 3436.9 | 3502.5 | 3600.9 | 3611.9 |
| 22.5° | 4133.1 | 3965.4 | 3626.5 | 3353.1 | 3254.7 | 3276.6 | 3371.3 | 3458.8 | 3524.4 | 3630.1 | 3648.3 |
| 25°   | 4173.2 | 3976.3 | 3571.8 | 3269.3 | 3181.8 | 3243.8 | 3367.7 | 3473.4 | 3542.6 | 3652.0 | 3681.1 |
| 27.5° | 4227.8 | 4001.9 | 3531.7 | 3192.7 | 3108.9 | 3192.7 | 3342.2 | 3469.7 | 3542.6 | 3648.3 | 3681.1 |
| 30°   | 4286.1 | 4031.0 | 3484.3 | 3108.9 | 3025.1 | 3119.8 | 3287.5 | 3429.6 | 3513.5 | 3611.9 | 3652.0 |
| 32.5° | 4348.1 | 4063.8 | 3444.2 | 3017.8 | 2923.0 | 3021.4 | 3207.3 | 3367.7 | 3458.8 | 3549.9 | 3593.7 |
| 35°   | 4431.9 | 4122.1 | 3422.4 | 2944.9 | 2831.9 | 2919.4 | 3105.3 | 3287.5 | 3385.9 | 3469.7 | 3520.8 |
| 37.5° | 4534.0 | 4195.0 | 3411.4 | 2872.0 | 2733.5 | 2806.4 | 2995.9 | 3189.1 | 3294.8 | 3364.0 | 3411.4 |
| 40°   | 4650.6 | 4286.1 | 3407.8 | 2802.8 | 2635.1 | 2689.8 | 2882.9 | 3076.1 | 3178.2 | 3232.8 | 3272.9 |
| 42.5° | 4781.8 | 4388.2 | 3400.5 | 2733.5 | 2536.7 | 2580.4 | 2773.6 | 2963.1 | 3050.6 | 3098.0 | 3134.4 |
| 45°   | 4920.3 | 4490.2 | 3385.9 | 2649.7 | 2431.0 | 2482.0 | 2660.6 | 2828.3 | 2919.4 | 2959.5 | 2999.6 |
| 47.5° | 5058.8 | 4592.3 | 3356.8 | 2554.9 | 2336.2 | 2383.6 | 2540.3 | 2686.1 | 2759.0 | 2795.5 | 2835.6 |
| 50°   | 5193.7 | 4683.4 | 3287.5 | 2445.6 | 2237.8 | 2281.6 | 2401.8 | 2500.3 | 2554.9 | 2584.1 | 2624.2 |
| 52.5° | 5313.9 | 4745.4 | 3189.1 | 2318.0 | 2139.4 | 2161.3 | 2241.5 | 2325.3 | 2369.0 | 2372.7 | 2409.1 |
| 55°   | 5416.0 | 4778.2 | 3047.0 | 2186.8 | 2033.7 | 2037.4 | 2081.1 | 2146.7 | 2164.9 | 2150.4 | 2175.9 |
| 57.5° | 5474.3 | 4760.0 | 2890.2 | 2052.0 | 1924.4 | 1909.8 | 1942.6 | 1975.4 | 1979.1 | 1942.6 | 1968.1 |
| 60°   | 5488.9 | 4676.1 | 2686.1 | 1917.1 | 1815.1 | 1775.0 | 1785.9 | 1778.6 | 1771.3 | 1756.7 | 1778.6 |
| 62.5° | 5416.0 | 4497.5 | 2460.2 | 1785.9 | 1698.4 | 1636.5 | 1632.8 | 1629.2 | 1640.1 | 1643.8 | 1647.4 |
| 65°   | 5149.9 | 4162.2 | 2190.5 | 1651.0 | 1574.5 | 1490.7 | 1487.0 | 1530.8 | 1545.3 | 1523.5 | 1530.8 |
| 67.5° | 4636.0 | 3648.3 | 1895.2 | 1494.3 | 1417.8 | 1344.9 | 1374.0 | 1399.6 | 1425.1 | 1417.8 | 1425.1 |
| 70°   | 3907.1 | 2995.9 | 1625.5 | 1319.4 | 1246.5 | 1206.4 | 1239.2 | 1261.1 | 1264.7 | 1257.4 | 1264.7 |
| 72.5° | 3072.5 | 2339.9 | 1374.0 | 1140.8 | 1075.2 | 1057.0 | 1097.0 | 1115.3 | 1148.1 | 1162.7 | 1166.3 |
| 75°   | 2219.6 | 1727.6 | 1126.2 | 947.6  | 892.9  | 892.9  | 929.4  | 962.2  | 991.4  | 973.1  | 962.2  |
| 77.5° | 1239.2 | 1031.4 | 809.1  | 652.4  | 663.3  | 714.4  | 728.9  | 765.4  | 794.5  | 790.9  | 783.6  |
| 80°   | 750.8  | 645.1  | 546.7  | 422.8  | 419.1  | 459.2  | 554.0  | 616.0  | 630.5  | 597.7  | 594.1  |
| 82.5° | 390.0  | 339.0  | 291.6  | 236.9  | 262.4  | 306.2  | 320.7  | 386.3  | 426.4  | 411.8  | 430.1  |
| 85°   | 98.4   | 94.8   | 105.7  | 109.3  | 134.9  | 149.4  | 164.0  | 193.2  | 127.6  | 62.0   | 62.0   |
| 87.5° | 29.2   | 29.2   | 36.4   | 36.4   | 47.4   | 58.3   | 54.7   | 54.7   | 29.2   | 3.6    | 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)