

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: P841456

Luminaire Tested: **ARCH4-180-730-U-T3**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841456  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-180-730-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 28597 lumens  
Efficiency: N/A  
Efficacy: 158.9 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 180  
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



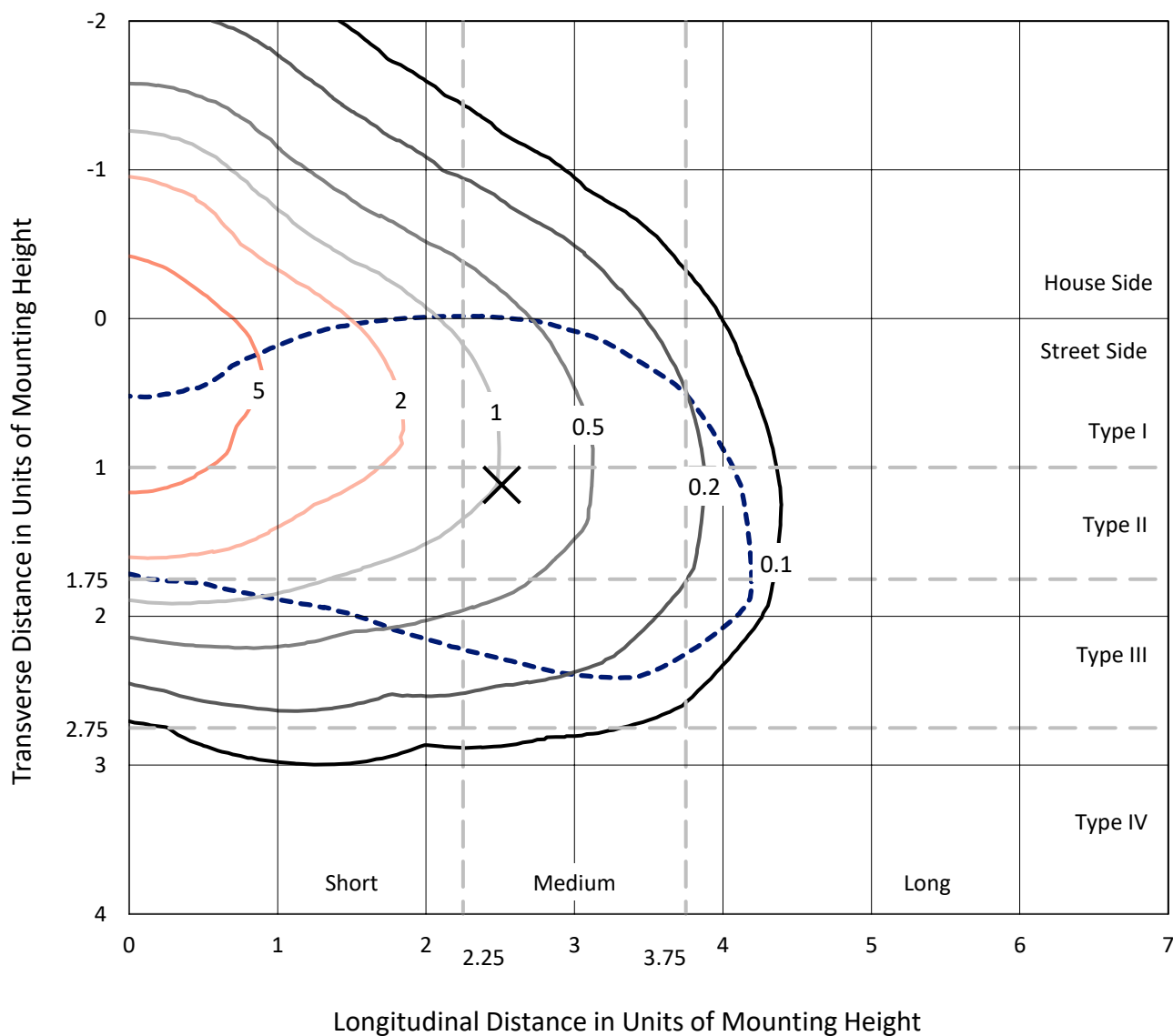
REPORT NUMBER: P841456

CATALOG NUMBER: ARCH4-180-730-U-T3

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

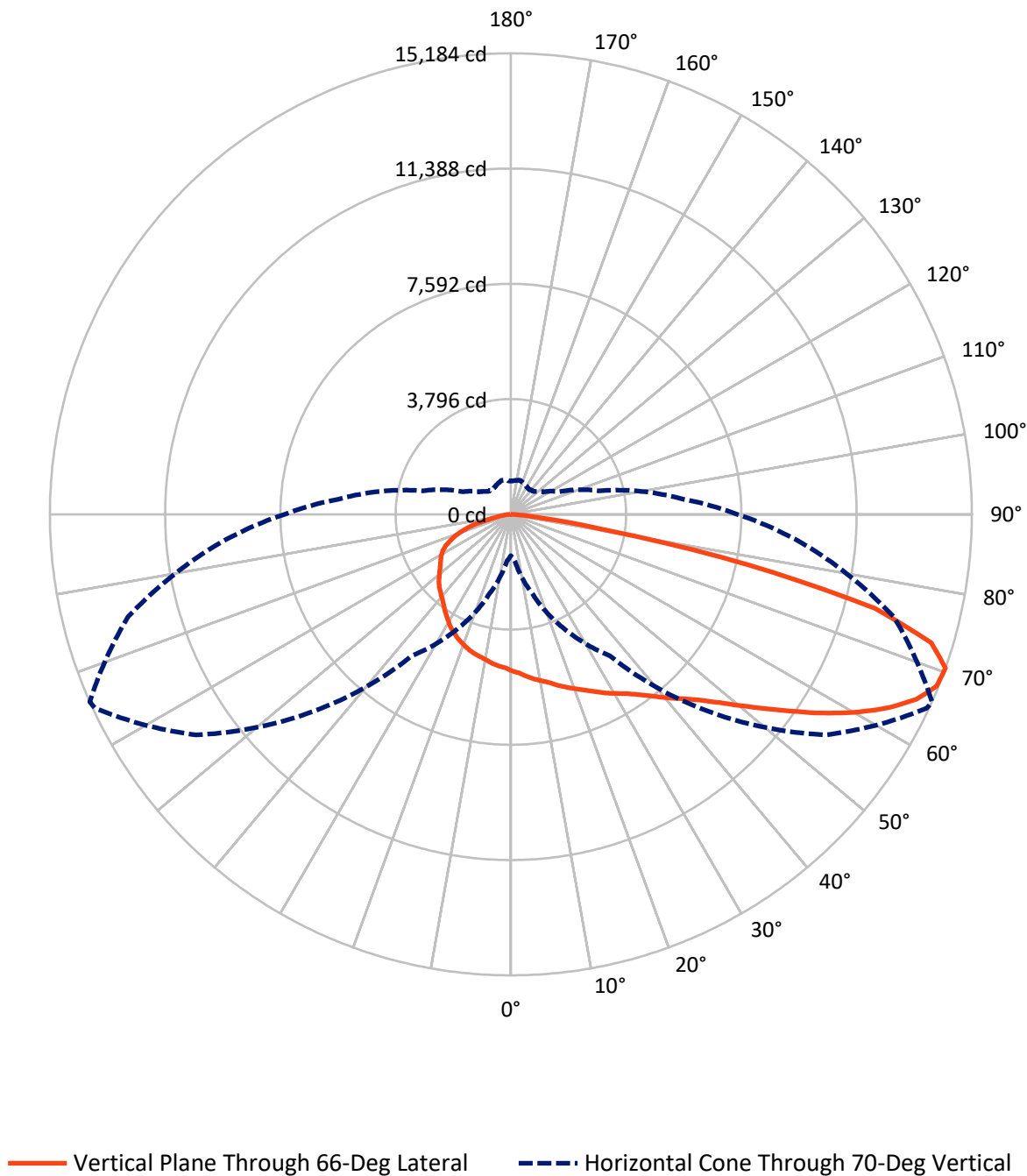
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc  
Type III - Medium - N/A

REPORT NUMBER: P841456  
CATALOG NUMBER: ARCH4-180-730-U-T3

## Luminous Intensity Polar Plot



REPORT NUMBER: P841456

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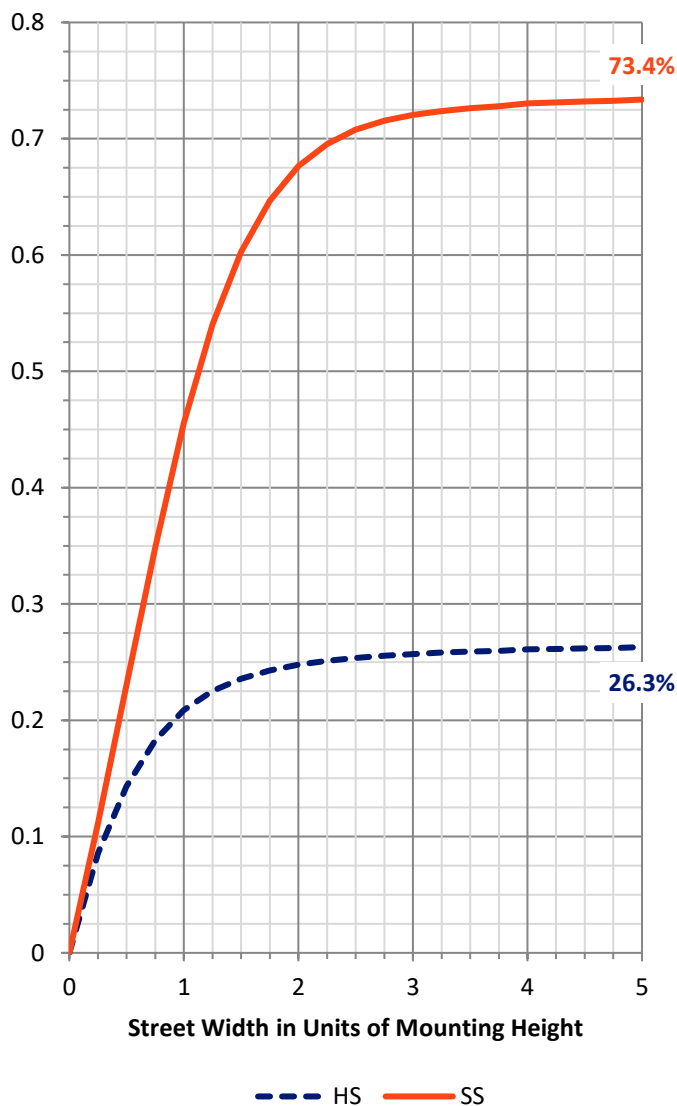
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7577.6   | 0.0    | 7577.6  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 21019.4  | 0.0    | 21019.4 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 28597.0  | 0.0    | 28597.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 495.9   | 1.7       |
| 10°-20°   | 1487.6  | 5.2       |
| 20°-30°   | 2493.7  | 8.7       |
| 30°-40°   | 3733.9  | 13.1      |
| 40°-50°   | 4992.2  | 17.5      |
| 50°-60°   | 5828.6  | 20.4      |
| 60°-70°   | 5795.7  | 20.3      |
| 70°-80°   | 3431.1  | 12.0      |
| 80°-90°   | 338.2   | 1.2       |
| 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°    | 28597.0 | 100.0     |
| 0°-180°   | 28597.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841456

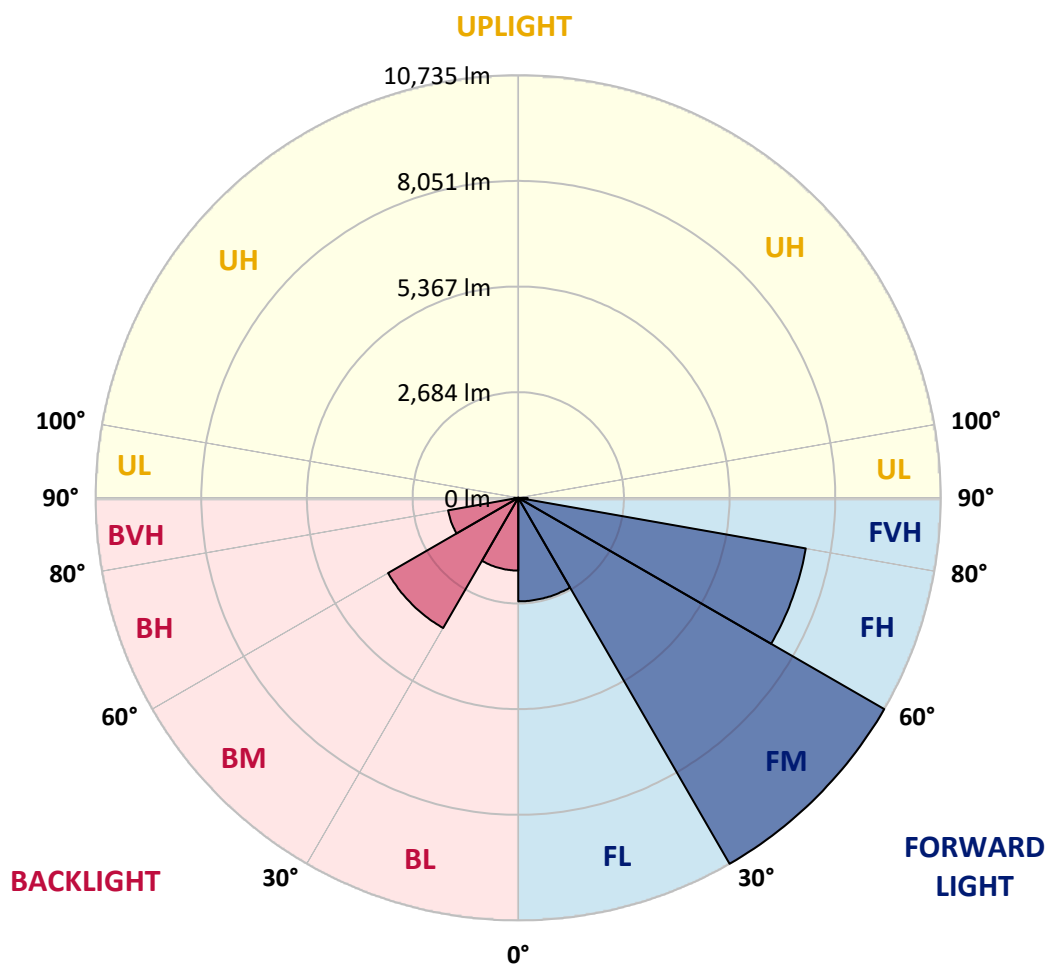
CATALOG NUMBER: ARCH4-180-730-U-T3

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2630.2  | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 10734.9 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 7416.7  | 25.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 237.7   | 0.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1847.1  | 6.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3819.9  | 13.4      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1810.1  | 6.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 100.5   | 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 III Medium



REPORT NUMBER: P841456

CATALOG NUMBER: ARCH4-180-730-U-T3

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1  | 5161.1 |
| 2.5°  | 5350.9  | 5342.4  | 5338.2  | 5321.3  | 5283.4  | 5300.3  | 5262.3  | 5237.0  | 5232.8  | 5173.8  | 5140.0 |
| 5°    | 5570.1  | 5565.9  | 5557.5  | 5532.2  | 5473.1  | 5481.6  | 5418.3  | 5371.9  | 5359.3  | 5266.5  | 5194.8 |
| 7.5°  | 5755.6  | 5747.2  | 5743.0  | 5709.3  | 5646.0  | 5641.8  | 5565.9  | 5498.4  | 5477.4  | 5350.9  | 5241.2 |
| 10°   | 5899.0  | 5886.4  | 5894.8  | 5861.1  | 5793.6  | 5780.9  | 5684.0  | 5595.4  | 5574.3  | 5414.1  | 5262.3 |
| 12.5° | 6021.3  | 6012.9  | 6025.5  | 5996.0  | 5941.2  | 5928.5  | 5831.5  | 5717.7  | 5692.4  | 5506.9  | 5308.7 |
| 15°   | 6156.2  | 6126.7  | 6152.0  | 6139.4  | 6101.4  | 6097.2  | 6008.6  | 5882.1  | 5848.4  | 5624.9  | 5380.4 |
| 17.5° | 6227.9  | 6211.0  | 6240.6  | 6244.8  | 6227.9  | 6257.4  | 6173.1  | 6021.3  | 5991.8  | 5734.6  | 5443.6 |
| 20°   | 6278.5  | 6253.2  | 6286.9  | 6312.2  | 6324.9  | 6383.9  | 6316.5  | 6168.9  | 6135.1  | 5840.0  | 5502.7 |
| 22.5° | 6451.4  | 6396.6  | 6400.8  | 6417.7  | 6426.1  | 6510.4  | 6468.3  | 6324.9  | 6291.2  | 5970.7  | 5574.3 |
| 25°   | 6885.7  | 6776.1  | 6704.4  | 6653.8  | 6594.7  | 6666.4  | 6641.1  | 6502.0  | 6472.5  | 6126.7  | 5662.9 |
| 27.5° | 7560.3  | 7421.2  | 7277.8  | 7130.3  | 6898.3  | 6868.8  | 6826.7  | 6700.2  | 6666.4  | 6282.7  | 5751.4 |
| 30°   | 8327.8  | 8188.6  | 8020.0  | 7783.8  | 7349.5  | 7121.8  | 7024.8  | 6885.7  | 6847.7  | 6421.9  | 5835.8 |
| 32.5° | 9091.0  | 8968.7  | 8800.0  | 8513.3  | 7893.5  | 7429.6  | 7223.0  | 7079.7  | 7041.7  | 6573.7  | 5937.0 |
| 35°   | 9685.5  | 9609.6  | 9500.0  | 9141.6  | 8433.2  | 7792.3  | 7509.7  | 7336.9  | 7294.7  | 6814.0  | 6122.5 |
| 37.5° | 10166.2 | 10111.4 | 10018.6 | 9643.3  | 8825.3  | 8154.9  | 7838.6  | 7640.5  | 7594.1  | 7075.4  | 6320.7 |
| 40°   | 10874.6 | 10731.2 | 10655.3 | 10111.4 | 9166.9  | 8483.8  | 8209.7  | 8003.1  | 7952.5  | 7353.7  | 6480.9 |
| 42.5° | 11477.6 | 11372.1 | 11279.4 | 10528.8 | 9491.5  | 8766.3  | 8559.7  | 8369.9  | 8302.5  | 7627.8  | 6653.8 |
| 45°   | 11578.8 | 11620.9 | 11574.5 | 10735.4 | 10006.0 | 9044.6  | 8913.9  | 8791.6  | 8728.3  | 7998.9  | 6915.2 |
| 47.5° | 11583.0 | 11583.0 | 11308.9 | 10853.5 | 10642.7 | 9356.6  | 9293.4  | 9335.5  | 9268.1  | 8471.1  | 7227.2 |
| 50°   | 11279.4 | 11334.2 | 11190.8 | 10883.0 | 10811.3 | 9668.6  | 9757.2  | 9984.9  | 9917.4  | 8972.9  | 7564.6 |
| 52.5° | 10651.1 | 10832.4 | 10828.2 | 10836.6 | 10566.8 | 9934.3  | 10246.3 | 10765.0 | 10651.1 | 9537.9  | 7923.0 |
| 55°   | 9542.1  | 9904.8  | 10229.4 | 10507.7 | 10355.9 | 10094.5 | 10845.1 | 11595.6 | 11477.6 | 10170.4 | 8285.6 |
| 57.5° | 8593.4  | 8825.3  | 9230.1  | 10018.6 | 10107.2 | 10233.7 | 11405.9 | 12464.2 | 12358.8 | 10870.4 | 8665.1 |
| 60°   | 7509.7  | 7830.2  | 8235.0  | 9356.6  | 9803.6  | 10415.0 | 12021.5 | 13311.8 | 13210.6 | 11578.8 | 9031.9 |
| 62.5° | 5844.2  | 6257.4  | 7067.0  | 8340.4  | 9360.8  | 10528.8 | 12506.4 | 14058.1 | 14011.7 | 12249.2 | 9360.8 |
| 65°   | 4073.2  | 4440.1  | 5574.3  | 7092.3  | 8656.7  | 10478.2 | 12894.3 | 14724.3 | 14682.2 | 12797.4 | 9592.7 |
| 67.5° | 2378.2  | 2804.0  | 4085.9  | 5709.3  | 7412.8  | 10128.3 | 13020.8 | 15116.5 | 15116.5 | 13130.5 | 9656.0 |
| 70°   | 1357.7  | 1555.9  | 2694.4  | 4161.8  | 5684.0  | 9162.7  | 12666.6 | 15112.3 | 15183.9 | 13054.6 | 9394.6 |
| 72.5° | 948.7   | 1037.3  | 1813.1  | 2799.8  | 3854.0  | 7412.8  | 11739.0 | 14382.8 | 14479.8 | 12337.7 | 8500.6 |
| 75°   | 737.9   | 801.2   | 1277.6  | 1910.1  | 2428.8  | 5034.6  | 9710.8  | 12126.9 | 12384.1 | 10516.2 | 6873.0 |
| 77.5° | 560.8   | 607.2   | 746.3   | 1193.3  | 1555.9  | 2892.6  | 6409.2  | 7952.5  | 7969.4  | 6438.7  | 3685.3 |
| 80°   | 409.0   | 455.4   | 497.6   | 729.5   | 826.5   | 1353.5  | 2420.3  | 3322.7  | 3229.9  | 3116.1  | 1994.4 |
| 82.5° | 244.6   | 290.9   | 303.6   | 396.4   | 404.8   | 577.7   | 847.5   | 1071.0  | 1028.8  | 1370.4  | 936.1  |
| 85°   | 105.4   | 147.6   | 156.0   | 181.3   | 172.9   | 236.1   | 337.3   | 282.5   | 253.0   | 290.9   | 202.4  |
| 87.5° | 25.3    | 42.2    | 42.2    | 46.4    | 37.9    | 59.0    | 63.2    | 46.4    | 42.2    | 50.6    | 50.6   |
| 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: P841456

CATALOG NUMBER: ARCH4-180-730-U-T3

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 | 5161.1 |
| 2.5°  | 5131.6 | 5118.9 | 5123.2 | 5051.5 | 5030.4 | 5009.3 | 4996.7 | 4988.2 | 4979.8 | 4992.4 | 5005.1 |
| 5°    | 5169.5 | 5140.0 | 5106.3 | 5000.9 | 4958.7 | 4912.3 | 4878.6 | 4849.1 | 4836.4 | 4836.4 | 4849.1 |
| 7.5°  | 5199.1 | 5148.5 | 5076.8 | 4937.6 | 4861.7 | 4798.5 | 4743.7 | 4705.7 | 4684.6 | 4684.6 | 4697.3 |
| 10°   | 5203.3 | 5131.6 | 5017.7 | 4849.1 | 4747.9 | 4655.1 | 4591.9 | 4549.7 | 4520.2 | 4520.2 | 4528.6 |
| 12.5° | 5228.6 | 5131.6 | 4984.0 | 4781.6 | 4655.1 | 4541.3 | 4465.4 | 4402.1 | 4389.5 | 4389.5 | 4397.9 |
| 15°   | 5270.7 | 5152.7 | 4962.9 | 4722.6 | 4570.8 | 4440.1 | 4355.7 | 4288.3 | 4263.0 | 4279.8 | 4284.1 |
| 17.5° | 5308.7 | 5165.3 | 4925.0 | 4646.7 | 4465.4 | 4322.0 | 4229.2 | 4170.2 | 4136.5 | 4174.4 | 4174.4 |
| 20°   | 5334.0 | 5165.3 | 4870.2 | 4549.7 | 4351.5 | 4191.3 | 4102.7 | 4031.1 | 4005.8 | 4052.1 | 4056.4 |
| 22.5° | 5371.9 | 5161.1 | 4811.1 | 4452.7 | 4229.2 | 4060.6 | 3972.0 | 3917.2 | 3904.6 | 3955.2 | 3972.0 |
| 25°   | 5414.1 | 5169.5 | 4747.9 | 4343.1 | 4094.3 | 3929.9 | 3862.4 | 3837.1 | 3845.5 | 3908.8 | 3929.9 |
| 27.5° | 5460.5 | 5186.4 | 4684.6 | 4220.8 | 3946.7 | 3799.1 | 3761.2 | 3773.8 | 3807.6 | 3887.7 | 3913.0 |
| 30°   | 5502.7 | 5190.6 | 4596.1 | 4077.4 | 3778.1 | 3638.9 | 3655.8 | 3710.6 | 3761.2 | 3841.3 | 3870.8 |
| 32.5° | 5557.5 | 5194.8 | 4503.3 | 3921.4 | 3596.8 | 3495.6 | 3571.5 | 3660.0 | 3710.6 | 3786.5 | 3820.2 |
| 35°   | 5692.4 | 5266.5 | 4431.6 | 3769.6 | 3428.1 | 3373.3 | 3499.8 | 3613.6 | 3643.1 | 3710.6 | 3740.1 |
| 37.5° | 5848.4 | 5384.6 | 4393.7 | 3613.6 | 3263.6 | 3251.0 | 3411.2 | 3525.1 | 3533.5 | 3575.7 | 3605.2 |
| 40°   | 5945.4 | 5435.2 | 4351.5 | 3482.9 | 3116.1 | 3124.5 | 3288.9 | 3377.5 | 3360.6 | 3390.1 | 3411.2 |
| 42.5° | 6042.4 | 5452.1 | 4263.0 | 3373.3 | 2976.9 | 2985.3 | 3111.8 | 3175.1 | 3183.5 | 3246.8 | 3276.3 |
| 45°   | 6206.8 | 5498.4 | 4166.0 | 3272.1 | 2850.4 | 2820.9 | 2896.8 | 2981.1 | 3090.8 | 3213.0 | 3246.8 |
| 47.5° | 6426.1 | 5595.4 | 4064.8 | 3149.8 | 2728.1 | 2631.2 | 2660.7 | 2808.2 | 2922.1 | 3035.9 | 3057.0 |
| 50°   | 6649.6 | 5692.4 | 3972.0 | 3002.2 | 2605.9 | 2428.8 | 2441.4 | 2576.3 | 2669.1 | 2757.7 | 2770.3 |
| 52.5° | 6868.8 | 5776.7 | 3891.9 | 2863.1 | 2466.7 | 2188.4 | 2239.0 | 2378.2 | 2441.4 | 2483.6 | 2496.2 |
| 55°   | 7088.1 | 5848.4 | 3820.2 | 2745.0 | 2306.5 | 1998.7 | 2045.0 | 2175.8 | 2239.0 | 2260.1 | 2268.5 |
| 57.5° | 7315.8 | 5932.7 | 3765.4 | 2643.8 | 2125.2 | 1830.0 | 1859.5 | 1952.3 | 2011.3 | 2036.6 | 2028.2 |
| 60°   | 7505.5 | 6004.4 | 3735.9 | 2538.4 | 1943.8 | 1674.0 | 1665.6 | 1749.9 | 1834.2 | 1859.5 | 1851.1 |
| 62.5° | 7653.1 | 6050.8 | 3689.5 | 2403.5 | 1783.6 | 1518.0 | 1475.8 | 1585.4 | 1674.0 | 1690.9 | 1703.5 |
| 65°   | 7733.2 | 6055.0 | 3575.7 | 2230.6 | 1619.2 | 1349.3 | 1319.8 | 1429.4 | 1484.2 | 1501.1 | 1501.1 |
| 67.5° | 7720.6 | 5987.6 | 3352.2 | 1998.7 | 1467.4 | 1197.5 | 1172.2 | 1239.7 | 1319.8 | 1332.4 | 1319.8 |
| 70°   | 7459.1 | 5709.3 | 2993.8 | 1754.1 | 1286.1 | 1062.6 | 1016.2 | 1083.7 | 1159.6 | 1113.2 | 1092.1 |
| 72.5° | 6717.0 | 4988.2 | 2466.7 | 1484.2 | 1083.7 | 893.9  | 872.8  | 940.3  | 944.5  | 952.9  | 931.9  |
| 75°   | 5300.3 | 3714.8 | 1846.9 | 1155.3 | 877.1  | 750.6  | 746.3  | 733.7  | 750.6  | 784.3  | 759.0  |
| 77.5° | 2782.9 | 1855.3 | 999.3  | 708.4  | 636.7  | 603.0  | 573.5  | 569.2  | 619.8  | 640.9  | 615.6  |
| 80°   | 1509.5 | 1041.5 | 573.5  | 425.9  | 387.9  | 392.1  | 430.1  | 421.7  | 476.5  | 489.1  | 468.0  |
| 82.5° | 657.8  | 493.3  | 282.5  | 257.2  | 257.2  | 253.0  | 265.6  | 295.2  | 354.2  | 354.2  | 282.5  |
| 85°   | 143.4  | 122.3  | 109.6  | 126.5  | 143.4  | 143.4  | 143.4  | 143.4  | 101.2  | 54.8   | 37.9   |
| 87.5° | 46.4   | 46.4   | 46.4   | 50.6   | 54.8   | 54.8   | 46.4   | 33.7   | 21.1   | 4.2    | 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)