

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: P841724

Luminaire Tested: **ARCH4-220-722-U-T2U**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841724  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-220-722-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 29456 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 221.8  
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

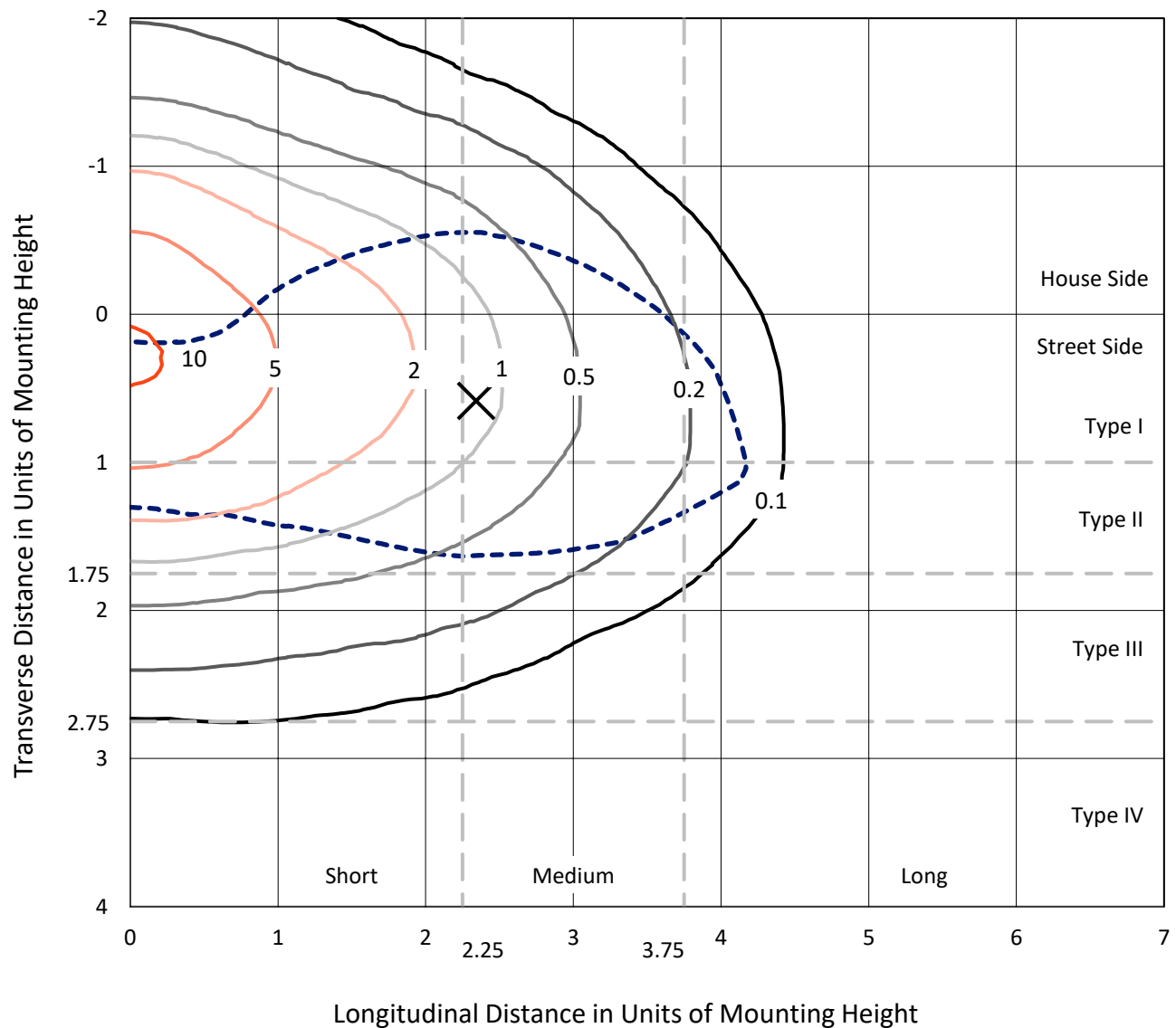


REPORT NUMBER: P841724

CATALOG NUMBER: ARCH4-220-722-U-T2U

## Iso-Footcandle Lines of Horizontal Illumination

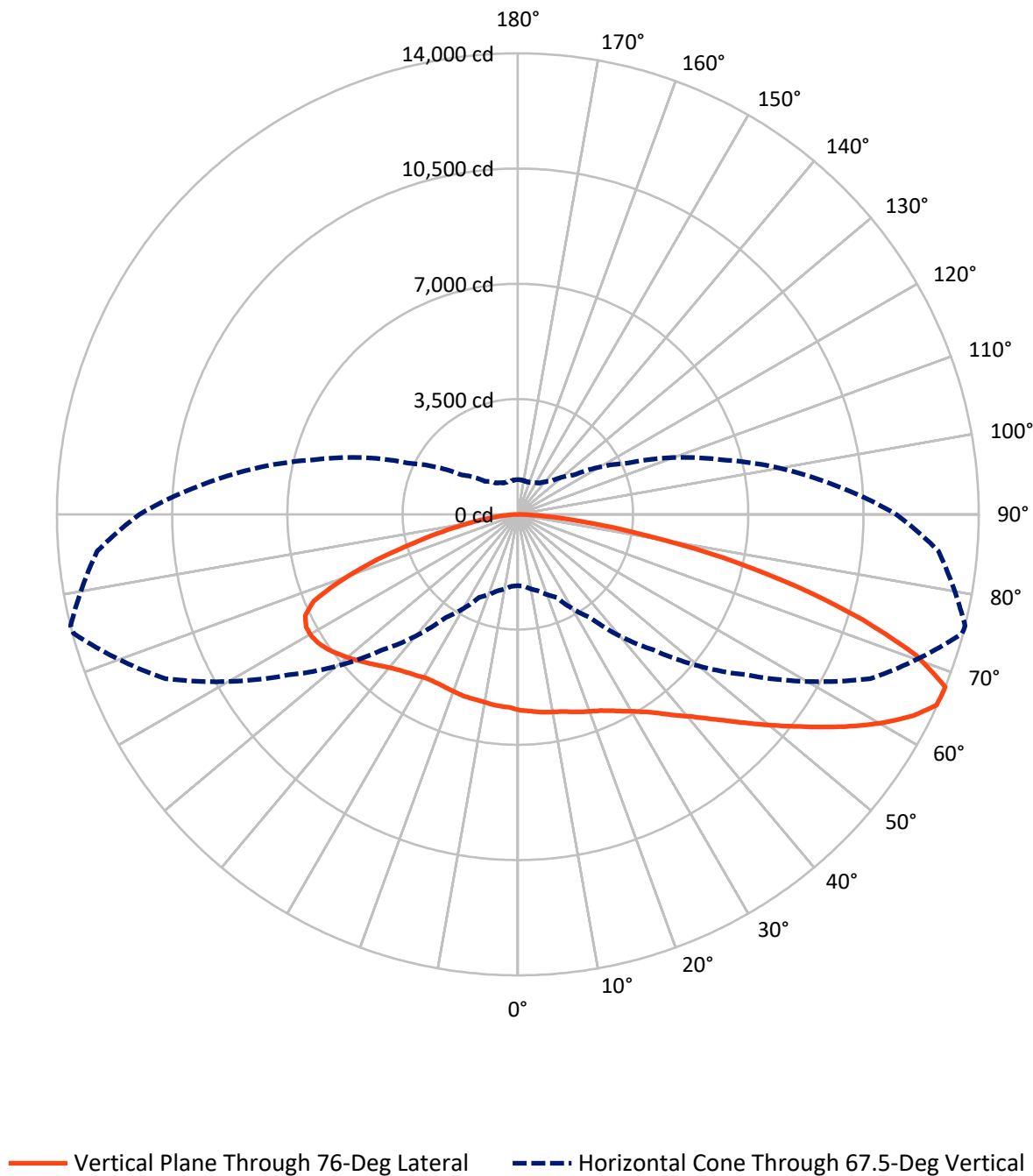
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 fc  
Type II - Medium - N/A

REPORT NUMBER: P841724  
CATALOG NUMBER: ARCH4-220-722-U-T2U

## Luminous Intensity Polar Plot



REPORT NUMBER: P841724

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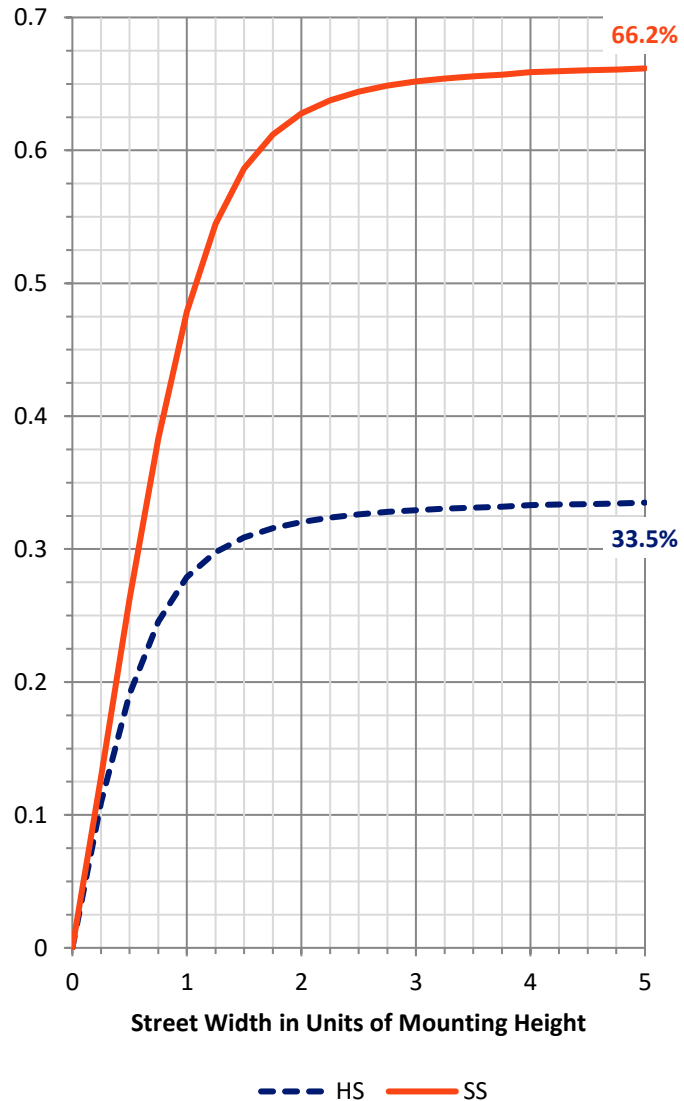
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9953.3   | 0.0    | 9953.3  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 19502.7  | 0.0    | 19502.7 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 29456.0  | 0.0    | 29456.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 573.7   | 1.9       |
| 10°-20°   | 1754.1  | 6.0       |
| 20°-30°   | 2980.2  | 10.1      |
| 30°-40°   | 4240.4  | 14.4      |
| 40°-50°   | 5355.5  | 18.2      |
| 50°-60°   | 5798.3  | 19.7      |
| 60°-70°   | 5393.1  | 18.3      |
| 70°-80°   | 2896.6  | 9.8       |
| 80°-90°   | 464.1   | 1.6       |
| 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°    | 29456.0 | 100.0     |
| 0°-180°   | 29456.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841724

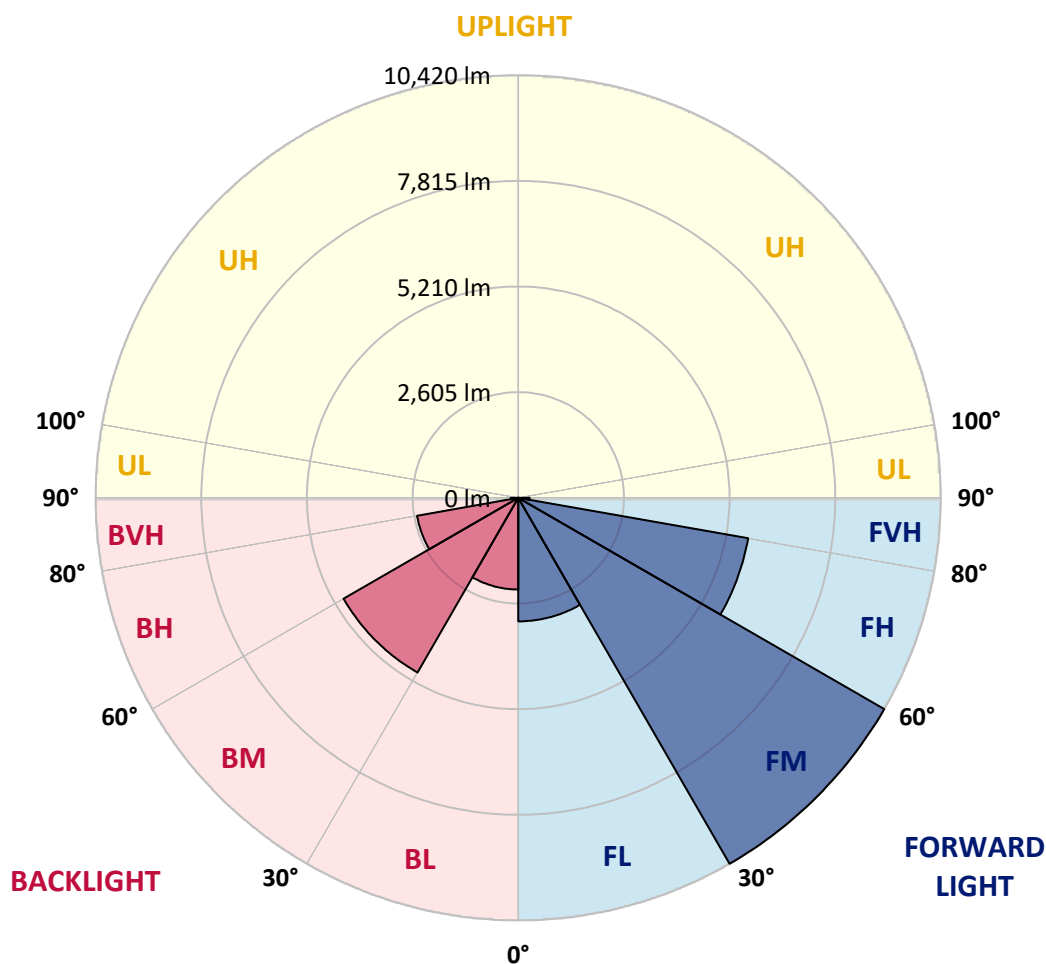
CATALOG NUMBER: ARCH4-220-722-U-T2U

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3046.1  | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 10420.4 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 5755.4  | 19.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 280.8   | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 2261.9  | 7.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4973.8  | 16.9      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2534.2  | 8.6       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 183.4   | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**

Type II Medium



REPORT NUMBER: P841724

CATALOG NUMBER: ARCH4-220-722-U-T2U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°      | 15°     | 25°     | 35°    | 45°    | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|--------|---------|---------|---------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 5950.0 | 5950.0  | 5950.0  | 5950.0  | 5950.0 | 5950.0 | 5950.0  | 5950.0  | 5950.0  | 5950.0  | 5950.0  |
| 2.5°  | 6130.5 | 6119.6  | 6075.8  | 6081.3  | 6081.3 | 6075.8 | 6010.2  | 5982.9  | 5982.9  | 5977.4  | 5917.2  |
| 5°    | 6349.3 | 6332.9  | 6283.6  | 6272.7  | 6250.8 | 6223.5 | 6119.6  | 6059.4  | 6032.1  | 6026.6  | 5944.6  |
| 7.5°  | 6606.3 | 6584.4  | 6524.3  | 6491.5  | 6436.8 | 6365.7 | 6234.4  | 6141.5  | 6075.8  | 6070.4  | 5955.5  |
| 10°   | 6863.3 | 6841.5  | 6770.4  | 6710.2  | 6633.6 | 6518.8 | 6349.3  | 6212.5  | 6108.6  | 6097.7  | 5961.0  |
| 12.5° | 7169.6 | 7147.7  | 7060.2  | 6983.6  | 6868.8 | 6715.7 | 6491.5  | 6305.5  | 6163.3  | 6146.9  | 5977.4  |
| 15°   | 7492.2 | 7459.4  | 7371.9  | 7284.4  | 7142.2 | 6945.4 | 6677.4  | 6431.3  | 6250.8  | 6223.5  | 6026.6  |
| 17.5° | 7760.2 | 7716.5  | 7645.4  | 7557.9  | 7399.3 | 7169.6 | 6863.3  | 6557.1  | 6332.9  | 6311.0  | 6075.8  |
| 20°   | 7989.9 | 7957.1  | 7880.5  | 7798.5  | 7629.0 | 7377.4 | 7038.3  | 6682.9  | 6409.4  | 6382.1  | 6114.1  |
| 22.5° | 8208.7 | 8164.9  | 8121.2  | 8061.0  | 7875.1 | 7596.2 | 7240.7  | 6836.0  | 6507.9  | 6475.1  | 6163.3  |
| 25°   | 8460.2 | 8411.0  | 8394.6  | 8361.8  | 8143.0 | 7858.7 | 7486.8  | 7027.4  | 6644.6  | 6606.3  | 6250.8  |
| 27.5° | 8771.9 | 8717.3  | 8684.4  | 8684.4  | 8421.9 | 8126.6 | 7749.3  | 7251.6  | 6803.2  | 6770.4  | 6360.2  |
| 30°   | 9100.1 | 9034.4  | 8985.2  | 8985.2  | 8689.9 | 8394.6 | 8006.3  | 7475.8  | 6983.6  | 6945.4  | 6502.4  |
| 32.5° | 9389.9 | 9324.3  | 9269.6  | 9264.1  | 8957.9 | 8662.6 | 8274.3  | 7721.9  | 7202.4  | 7153.2  | 6677.4  |
| 35°   | 9614.1 | 9554.0  | 9504.8  | 9515.7  | 9225.9 | 8936.0 | 8575.1  | 8050.1  | 7475.8  | 7421.2  | 6907.1  |
| 37.5° | 9750.9 | 9729.0  | 9701.6  | 9739.9  | 9471.9 | 9198.5 | 8886.8  | 8367.3  | 7787.6  | 7738.3  | 7191.5  |
| 40°   | 9822.0 | 9805.5  | 9914.9  | 9964.1  | 9679.8 | 9433.7 | 9198.5  | 8695.4  | 8126.6  | 8071.9  | 7519.6  |
| 42.5° | 9925.9 | 10062.6 | 10106.3 | 10095.4 | 9832.9 | 9614.1 | 9482.9  | 9050.9  | 8525.8  | 8476.6  | 7913.3  |
| 45°   | 9554.0 | 9521.2  | 9761.8  | 9893.0  | 9843.8 | 9729.0 | 9750.9  | 9477.4  | 8990.7  | 8941.5  | 8367.3  |
| 47.5° | 9056.3 | 9012.6  | 9149.3  | 9471.9  | 9663.4 | 9772.7 | 9991.5  | 9920.4  | 9526.6  | 9482.9  | 8897.7  |
| 50°   | 8006.3 | 8066.5  | 8575.1  | 9007.1  | 9384.4 | 9761.8 | 10193.8 | 10396.2 | 10117.3 | 10073.5 | 9466.5  |
| 52.5° | 6841.5 | 6901.6  | 7432.1  | 8427.4  | 9045.4 | 9679.8 | 10341.5 | 10872.0 | 10757.1 | 10707.9 | 10073.5 |
| 55°   | 5993.8 | 6125.0  | 6726.6  | 7448.5  | 8564.1 | 9422.7 | 10429.0 | 11358.7 | 11446.2 | 11402.4 | 10735.2 |
| 57.5° | 5151.6 | 5250.0  | 5704.0  | 6343.8  | 7907.9 | 8974.3 | 10423.5 | 11812.6 | 12168.1 | 12124.3 | 11407.9 |
| 60°   | 4161.8 | 4287.5  | 4648.5  | 5337.5  | 7032.9 | 8438.3 | 10270.4 | 12168.1 | 12862.6 | 12829.8 | 12058.7 |
| 62.5° | 3483.6 | 3521.9  | 3778.9  | 4375.0  | 5906.3 | 7760.2 | 9925.9  | 12359.5 | 13491.5 | 13469.6 | 12643.8 |
| 65°   | 2805.5 | 2811.0  | 3046.1  | 3543.8  | 4818.0 | 6918.0 | 9340.7  | 12288.4 | 13967.3 | 13978.2 | 13064.9 |
| 67.5° | 2165.6 | 2193.0  | 2406.3  | 2783.6  | 3828.2 | 5824.3 | 8504.0  | 11807.1 | 13972.8 | 14000.1 | 12824.3 |
| 70°   | 1498.4 | 1520.3  | 1843.0  | 2209.4  | 2958.6 | 4643.0 | 7371.9  | 10532.9 | 12824.3 | 12846.2 | 11495.4 |
| 72.5° | 1055.5 | 1066.4  | 1410.9  | 1766.4  | 2313.3 | 3500.0 | 5561.8  | 8711.8  | 10932.1 | 10948.5 | 9668.8  |
| 75°   | 787.5  | 798.4   | 995.3   | 1339.9  | 1771.9 | 2422.7 | 3800.8  | 6671.9  | 8733.7  | 8733.7  | 7634.4  |
| 77.5° | 557.8  | 563.3   | 645.3   | 924.2   | 1181.3 | 1635.2 | 2286.0  | 4369.6  | 6409.4  | 6420.4  | 5561.8  |
| 80°   | 377.3  | 382.8   | 421.1   | 623.4   | 738.3  | 885.9  | 1241.4  | 2291.4  | 4041.4  | 4057.8  | 3532.8  |
| 82.5° | 196.9  | 207.8   | 235.2   | 317.2   | 371.9  | 492.2  | 639.8   | 1164.9  | 2236.7  | 2280.5  | 2121.9  |
| 85°   | 76.6   | 76.6    | 87.5    | 103.9   | 136.7  | 191.4  | 295.3   | 443.0   | 1011.7  | 1044.5  | 935.2   |
| 87.5° | 27.3   | 27.3    | 32.8    | 32.8    | 38.3   | 43.8   | 49.2    | 65.6    | 114.8   | 114.8   | 109.4   |
| 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: P841724

CATALOG NUMBER: ARCH4-220-722-U-T2U

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5950.0  | 5950.0  | 5950.0 | 5950.0 | 5950.0 | 5950.0 | 5950.0 | 5950.0 | 5950.0 | 5950.0 | 5950.0 |
| 2.5°  | 5895.4  | 5895.4  | 5868.0 | 5879.0 | 5873.5 | 5862.5 | 5851.6 | 5868.0 | 5851.6 | 5813.3 | 5807.9 |
| 5°    | 5906.3  | 5895.4  | 5851.6 | 5846.1 | 5829.7 | 5807.9 | 5780.5 | 5791.5 | 5764.1 | 5731.3 | 5725.8 |
| 7.5°  | 5911.8  | 5889.9  | 5829.7 | 5807.9 | 5775.0 | 5731.3 | 5687.5 | 5687.5 | 5649.3 | 5616.5 | 5611.0 |
| 10°   | 5900.8  | 5873.5  | 5791.5 | 5747.7 | 5687.5 | 5621.9 | 5561.8 | 5545.4 | 5501.6 | 5463.3 | 5463.3 |
| 12.5° | 5906.3  | 5868.0  | 5764.1 | 5693.0 | 5611.0 | 5528.9 | 5452.4 | 5430.5 | 5392.2 | 5353.9 | 5348.5 |
| 15°   | 5939.1  | 5884.4  | 5753.2 | 5660.2 | 5539.9 | 5446.9 | 5364.9 | 5348.5 | 5315.7 | 5288.3 | 5288.3 |
| 17.5° | 5971.9  | 5900.8  | 5736.8 | 5605.5 | 5457.9 | 5353.9 | 5277.4 | 5277.4 | 5255.5 | 5239.1 | 5239.1 |
| 20°   | 5988.3  | 5906.3  | 5704.0 | 5528.9 | 5359.4 | 5250.0 | 5178.9 | 5189.9 | 5184.4 | 5178.9 | 5178.9 |
| 22.5° | 6026.6  | 5917.2  | 5676.6 | 5457.9 | 5255.5 | 5140.7 | 5075.0 | 5091.4 | 5086.0 | 5086.0 | 5091.4 |
| 25°   | 6086.8  | 5944.6  | 5654.7 | 5392.2 | 5157.1 | 5031.3 | 4960.2 | 4971.1 | 4971.1 | 4971.1 | 4971.1 |
| 27.5° | 6168.8  | 5999.3  | 5649.3 | 5332.1 | 5058.6 | 4916.4 | 4828.9 | 4828.9 | 4807.1 | 4812.5 | 4818.0 |
| 30°   | 6294.6  | 6103.2  | 5660.2 | 5277.4 | 4954.7 | 4774.3 | 4670.3 | 4653.9 | 4648.5 | 4659.4 | 4664.9 |
| 32.5° | 6447.7  | 6245.4  | 5725.8 | 5239.1 | 4845.4 | 4615.7 | 4484.4 | 4478.9 | 4462.5 | 4462.5 | 4462.5 |
| 35°   | 6639.1  | 6382.1  | 5786.0 | 5233.6 | 4736.0 | 4446.1 | 4303.9 | 4287.5 | 4249.3 | 4232.8 | 4232.8 |
| 37.5° | 6885.2  | 6595.4  | 5857.1 | 5195.4 | 4643.0 | 4282.1 | 4112.5 | 4057.8 | 4014.1 | 4008.6 | 4008.6 |
| 40°   | 7186.0  | 6836.0  | 5961.0 | 5151.6 | 4544.6 | 4112.5 | 3888.3 | 3795.3 | 3800.8 | 3822.7 | 3822.7 |
| 42.5° | 7541.5  | 7131.3  | 6092.2 | 5129.7 | 4402.4 | 3937.5 | 3625.8 | 3516.4 | 3554.7 | 3576.6 | 3582.1 |
| 45°   | 7957.1  | 7481.3  | 6239.9 | 5102.4 | 4271.1 | 3740.7 | 3346.9 | 3210.2 | 3226.6 | 3232.1 | 3237.5 |
| 47.5° | 8438.3  | 7869.6  | 6393.0 | 5080.5 | 4123.5 | 3494.6 | 3040.6 | 2860.2 | 2854.7 | 2821.9 | 2832.8 |
| 50°   | 8941.5  | 8279.8  | 6551.6 | 5042.2 | 3943.0 | 3204.7 | 2718.0 | 2504.7 | 2461.0 | 2411.7 | 2417.2 |
| 52.5° | 9477.4  | 8700.8  | 6699.3 | 4982.1 | 3718.8 | 2909.4 | 2411.7 | 2182.0 | 2094.5 | 2039.9 | 2050.8 |
| 55°   | 10068.0 | 9132.9  | 6841.5 | 4889.1 | 3483.6 | 2614.1 | 2138.3 | 1903.1 | 1793.8 | 1750.0 | 1755.5 |
| 57.5° | 10609.5 | 9548.5  | 6945.4 | 4774.3 | 3226.6 | 2346.1 | 1897.7 | 1668.0 | 1596.9 | 1591.4 | 1596.9 |
| 60°   | 11134.5 | 9898.5  | 6989.1 | 4615.7 | 2964.1 | 2100.0 | 1673.5 | 1498.4 | 1449.2 | 1476.6 | 1482.0 |
| 62.5° | 11577.4 | 10122.7 | 6967.2 | 4402.4 | 2696.1 | 1864.9 | 1493.0 | 1367.2 | 1334.4 | 1389.1 | 1394.5 |
| 65°   | 11834.5 | 10193.8 | 6814.1 | 4096.1 | 2406.3 | 1635.2 | 1323.4 | 1186.7 | 1170.3 | 1203.1 | 1219.5 |
| 67.5° | 11495.4 | 9750.9  | 6398.5 | 3675.0 | 2083.6 | 1421.9 | 1159.4 | 1050.0 | 1022.7 | 1050.0 | 1050.0 |
| 70°   | 10188.4 | 8449.3  | 5414.1 | 3007.8 | 1728.1 | 1214.1 | 1006.3 | 929.7  | 907.8  | 929.7  | 924.2  |
| 72.5° | 8487.6  | 7027.4  | 4265.7 | 2346.1 | 1361.7 | 1022.7 | 875.0  | 803.9  | 782.0  | 760.2  | 749.2  |
| 75°   | 6584.4  | 5337.5  | 3095.3 | 1722.7 | 1028.1 | 820.3  | 732.8  | 667.2  | 612.5  | 634.4  | 623.4  |
| 77.5° | 4823.5  | 3746.1  | 2193.0 | 1192.2 | 738.3  | 634.4  | 574.2  | 525.0  | 486.7  | 530.5  | 525.0  |
| 80°   | 3106.3  | 2422.7  | 1465.6 | 798.4  | 508.6  | 443.0  | 421.1  | 393.8  | 432.0  | 563.3  | 574.2  |
| 82.5° | 1897.7  | 1536.7  | 875.0  | 519.5  | 333.6  | 295.3  | 273.4  | 273.4  | 443.0  | 486.7  | 492.2  |
| 85°   | 847.7   | 814.9   | 475.8  | 268.0  | 185.9  | 169.5  | 153.1  | 196.9  | 180.5  | 131.3  | 136.7  |
| 87.5° | 136.7   | 142.2   | 103.9  | 93.0   | 71.1   | 71.1   | 54.7   | 38.3   | 27.3   | 16.4   | 16.4   |
| 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)