

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: P841686

Luminaire Tested: **ARCH4-210-740-U-T2R**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841686  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-210-740-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

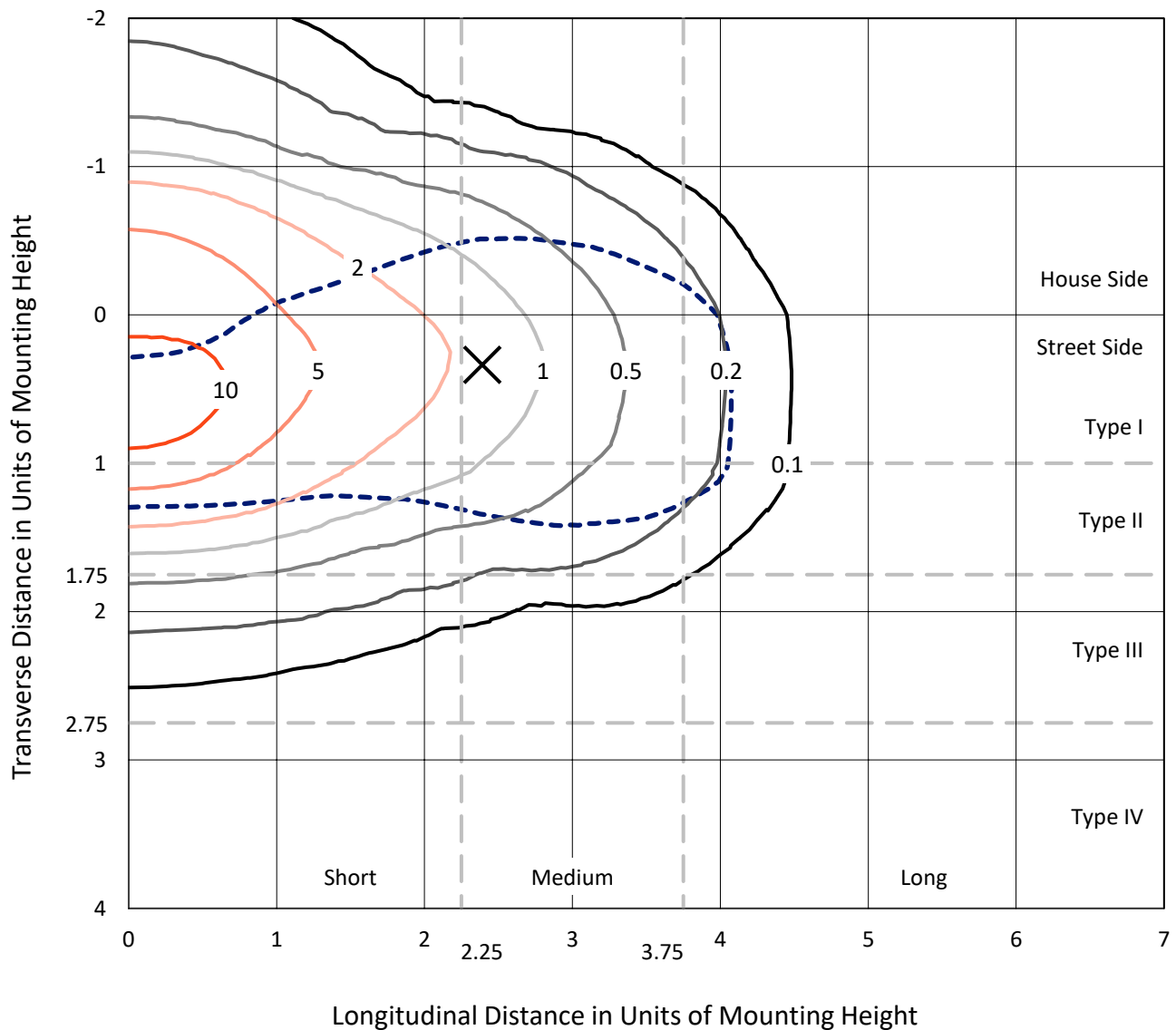
Lumens per Lamp: N/A  
Luminaire Lumens: 34132 lumens  
Efficiency: N/A  
Efficacy: 160.2 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 213.1  
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



## Iso-Footcandle Lines of Horizontal Illumination

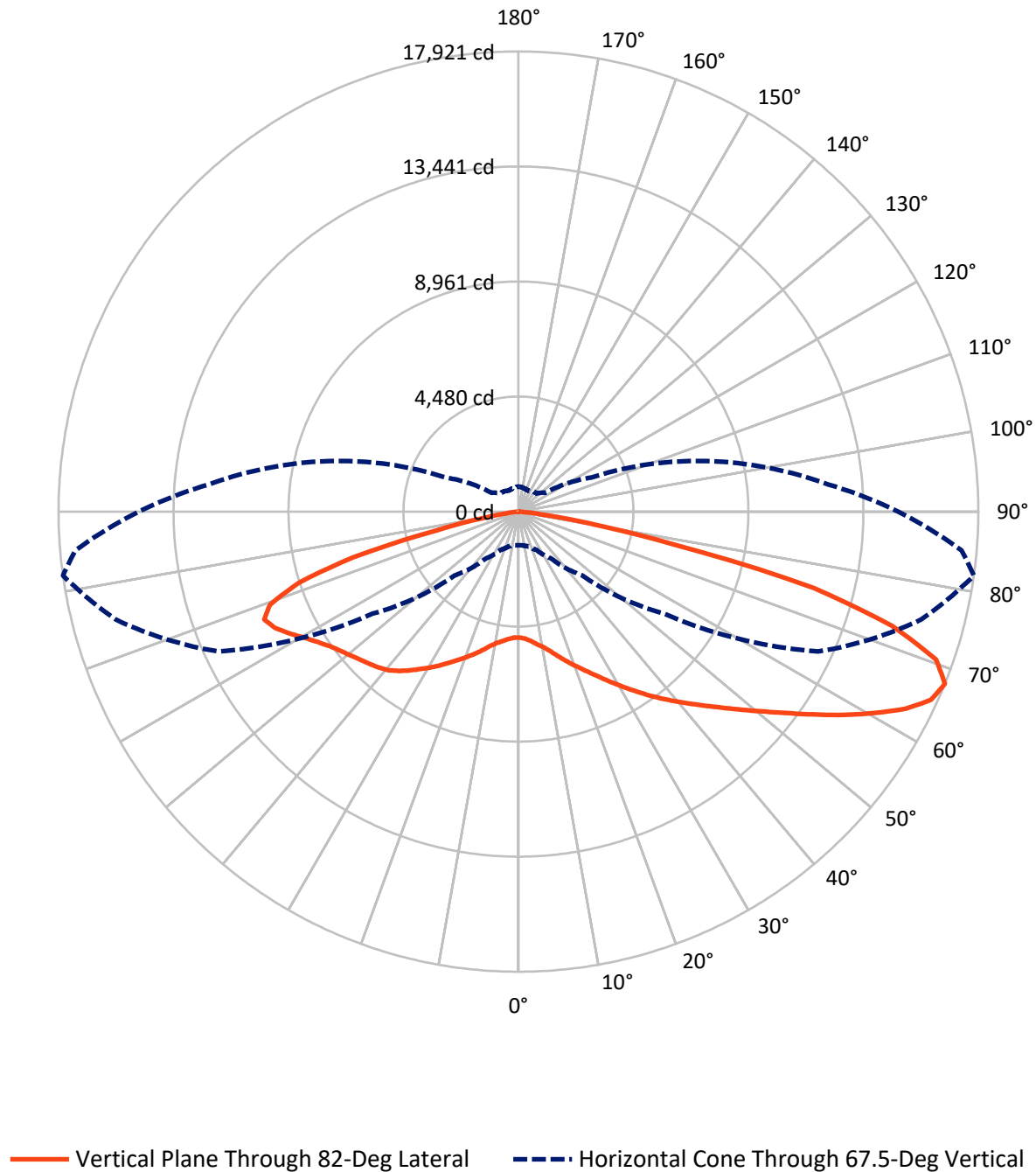
✖ Max cd  
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc  
Type II - Medium - N/A

REPORT NUMBER: P841686  
CATALOG NUMBER: ARCH4-210-740-U-T2R

## Luminous Intensity Polar Plot



REPORT NUMBER: P841686

CATALOG NUMBER: ARCH4-210-740-U-T2R

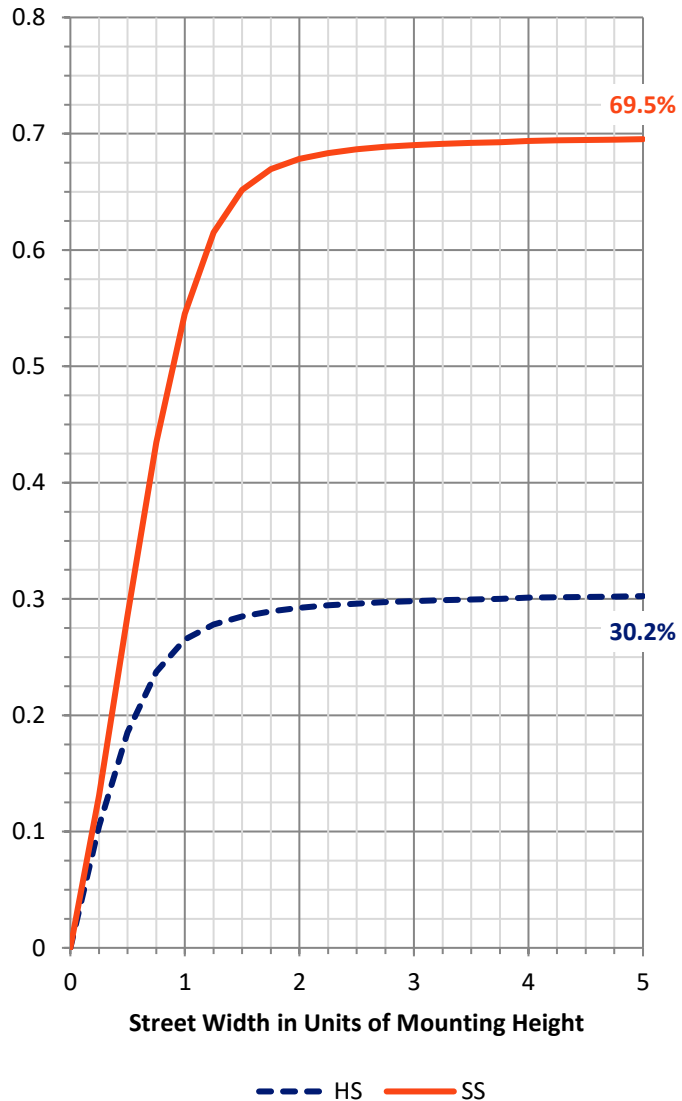
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10394.6  | 0.0    | 10394.6 |
|                    | % Fixture | 30.5     | 0.0    | 30.5    |
| <b>Street Side</b> | Lumens    | 23737.4  | 0.0    | 23737.4 |
|                    | % Fixture | 69.5     | 0.0    | 69.5    |
| <b>Total</b>       | Lumens    | 34132.0  | 0.0    | 34132.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 507.1   | 1.5       |
| 10°-20°   | 1826.4  | 5.4       |
| 20°-30°   | 3670.7  | 10.8      |
| 30°-40°   | 5766.2  | 16.9      |
| 40°-50°   | 7024.4  | 20.6      |
| 50°-60°   | 6637.2  | 19.4      |
| 60°-70°   | 5480.8  | 16.1      |
| 70°-80°   | 2984.5  | 8.7       |
| 80°-90°   | 234.7   | 0.7       |
| 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°    | 34132.0 | 100.0     |
| 0°-180°   | 34132.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841686

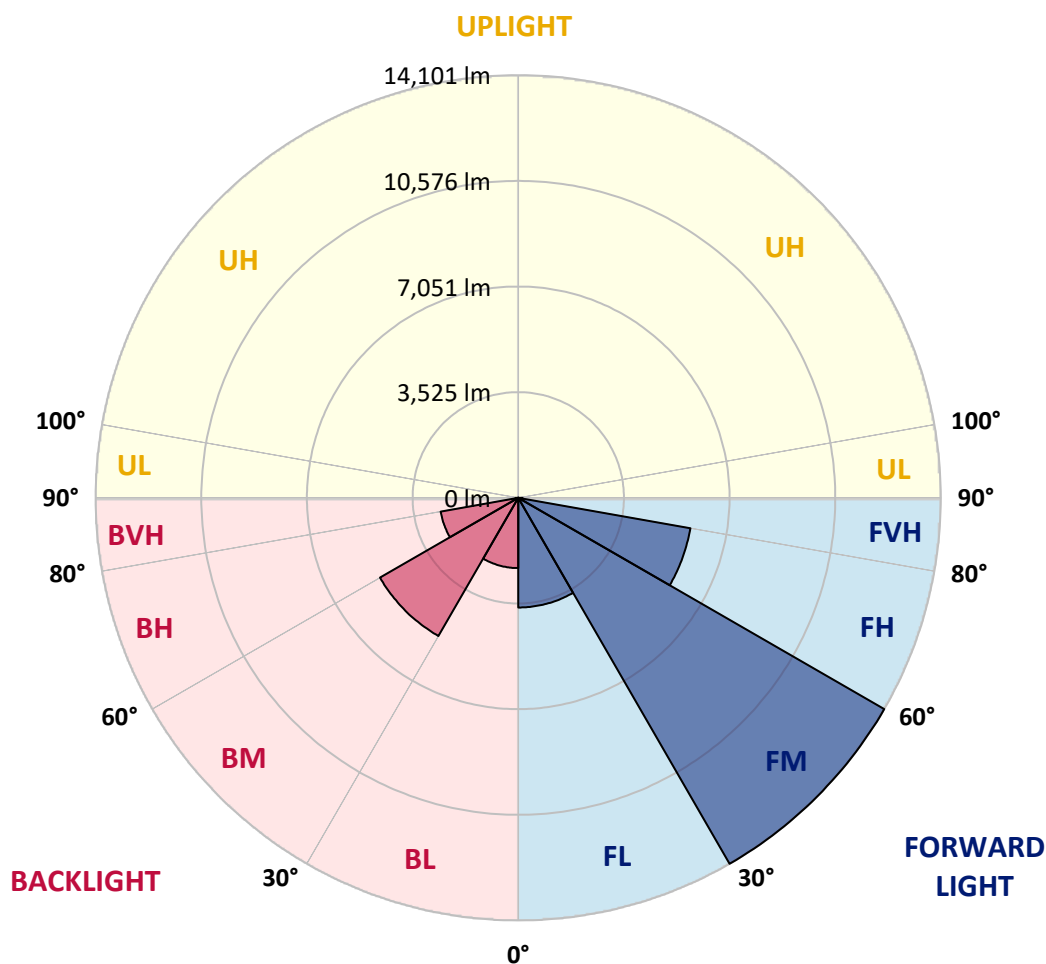
CATALOG NUMBER: ARCH4-210-740-U-T2R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3660.2  | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 14101.4 | 41.3      |                         |      |         |
| FH   | (60°-80°)   | 5834.4  | 17.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 141.4   | 0.4       |                         |      | G2/225  |
| BL   | (0°-30°)    | 2344.1  | 6.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 5326.4  | 15.6      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 2630.9  | 7.7       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 93.2    | 0.3       |                         |      | G1/100  |
| 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: P841686

CATALOG NUMBER: ARCH4-210-740-U-T2R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 82°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  | 4906.5  |
| 2.5°  | 5129.5  | 5129.5  | 5169.1  | 5169.1  | 5134.4  | 5079.9  | 5065.0  | 5005.6  | 4951.1  | 4951.1  | 4956.0  |
| 5°    | 5620.1  | 5615.2  | 5644.9  | 5605.3  | 5521.0  | 5412.0  | 5337.6  | 5208.8  | 5099.7  | 5065.0  | 5060.1  |
| 7.5°  | 6219.8  | 6214.8  | 6229.7  | 6165.3  | 6006.7  | 5828.3  | 5679.6  | 5471.4  | 5293.0  | 5218.7  | 5198.9  |
| 10°   | 6888.9  | 6883.9  | 6869.0  | 6760.0  | 6546.9  | 6269.4  | 6046.3  | 5758.9  | 5491.3  | 5372.3  | 5347.5  |
| 12.5° | 7657.0  | 7647.1  | 7612.4  | 7453.9  | 7161.4  | 6804.6  | 6482.5  | 6110.8  | 5753.9  | 5590.4  | 5535.9  |
| 15°   | 8514.4  | 8499.6  | 8435.1  | 8241.9  | 7850.3  | 7399.3  | 6983.0  | 6507.3  | 6071.1  | 5858.0  | 5783.7  |
| 17.5° | 9416.4  | 9416.4  | 9317.3  | 9029.9  | 8593.7  | 8033.7  | 7518.3  | 6913.6  | 6403.2  | 6140.5  | 6051.3  |
| 20°   | 10333.3 | 10328.3 | 10204.4 | 9857.5  | 9342.1  | 8697.8  | 8043.6  | 7379.5  | 6745.1  | 6428.0  | 6318.9  |
| 22.5° | 11299.7 | 11289.8 | 11136.2 | 10739.7 | 10125.1 | 9396.6  | 8633.4  | 7840.4  | 7121.8  | 6740.2  | 6601.4  |
| 25°   | 12409.9 | 12395.0 | 12206.7 | 11721.0 | 10992.4 | 10169.7 | 9297.5  | 8380.6  | 7553.0  | 7087.1  | 6923.6  |
| 27.5° | 13589.4 | 13569.6 | 13346.6 | 12781.6 | 11983.7 | 10992.4 | 10031.0 | 9005.1  | 8028.7  | 7473.7  | 7290.3  |
| 30°   | 14640.1 | 14625.2 | 14382.4 | 13802.5 | 12885.6 | 11810.2 | 10729.8 | 9629.5  | 8529.3  | 7885.0  | 7657.0  |
| 32.5° | 15433.0 | 15433.0 | 15215.0 | 14645.0 | 13693.5 | 12593.2 | 11433.5 | 10219.3 | 9049.7  | 8326.1  | 8058.5  |
| 35°   | 15913.8 | 15928.6 | 15740.3 | 15284.4 | 14387.3 | 13331.7 | 12162.1 | 10913.2 | 9604.8  | 8796.9  | 8509.5  |
| 37.5° | 15983.2 | 16032.7 | 15923.7 | 15616.4 | 14868.1 | 13946.2 | 12875.7 | 11582.2 | 10179.7 | 9272.7  | 8950.6  |
| 40°   | 15661.0 | 15695.7 | 15700.7 | 15581.7 | 15066.3 | 14387.3 | 13505.1 | 12290.9 | 10789.3 | 9773.3  | 9401.6  |
| 42.5° | 15016.7 | 15041.5 | 15086.1 | 15120.8 | 14922.6 | 14580.6 | 13985.9 | 12950.1 | 11438.5 | 10283.7 | 9847.6  |
| 45°   | 14184.1 | 14179.2 | 14253.5 | 14402.2 | 14392.3 | 14471.6 | 14253.5 | 13549.8 | 12112.5 | 10863.6 | 10343.2 |
| 47.5° | 12940.2 | 12915.4 | 13178.1 | 13515.1 | 13683.6 | 14055.3 | 14258.5 | 14020.6 | 12846.0 | 11502.9 | 10908.2 |
| 50°   | 10992.4 | 10967.7 | 11542.6 | 12335.5 | 12831.1 | 13396.1 | 13985.9 | 14303.1 | 13614.2 | 12221.5 | 11522.7 |
| 52.5° | 8623.5  | 8598.7  | 9327.2  | 10714.9 | 11795.3 | 12618.0 | 13435.8 | 14367.5 | 14342.7 | 13024.4 | 12216.6 |
| 55°   | 6413.1  | 6393.3  | 7102.0  | 8603.6  | 10353.1 | 11716.0 | 12761.7 | 14199.0 | 15026.6 | 13946.2 | 13059.1 |
| 57.5° | 4519.9  | 4510.0  | 5124.5  | 6368.5  | 8499.6  | 10615.8 | 12112.5 | 13871.9 | 15656.1 | 14947.3 | 14010.7 |
| 60°   | 3171.9  | 3157.0  | 3603.0  | 4564.5  | 6428.0  | 8955.5  | 11468.2 | 13435.8 | 16126.9 | 15933.6 | 15021.7 |
| 62.5° | 2136.0  | 2126.1  | 2443.3  | 3246.2  | 4564.5  | 6893.8  | 10491.9 | 13143.4 | 16394.5 | 16924.8 | 16042.6 |
| 65°   | 1620.6  | 1615.7  | 1759.4  | 2200.5  | 3231.3  | 4951.1  | 8940.7  | 13108.7 | 16429.2 | 17668.2 | 16909.9 |
| 67.5° | 1308.4  | 1313.3  | 1392.6  | 1645.4  | 2235.2  | 3518.8  | 6933.5  | 12890.6 | 16245.8 | 17921.0 | 17331.2 |
| 70°   | 1070.5  | 1070.5  | 1105.2  | 1273.7  | 1650.4  | 2373.9  | 4842.0  | 11899.4 | 15735.4 | 17261.8 | 16830.6 |
| 72.5° | 817.7   | 822.7   | 931.7   | 1030.9  | 1244.0  | 1665.2  | 3102.5  | 9847.6  | 14531.0 | 15219.9 | 14892.8 |
| 75°   | 649.2   | 644.3   | 708.7   | 847.5   | 966.4   | 1189.4  | 1903.1  | 7062.3  | 12365.3 | 11894.4 | 11686.3 |
| 77.5° | 465.9   | 460.9   | 510.5   | 629.4   | 733.5   | 842.5   | 1134.9  | 3563.4  | 6725.3  | 6180.2  | 6026.5  |
| 80°   | 317.2   | 307.3   | 351.9   | 436.1   | 485.7   | 495.6   | 555.1   | 1367.9  | 2934.0  | 2765.5  | 2730.8  |
| 82.5° | 163.5   | 163.5   | 188.3   | 247.8   | 252.8   | 257.7   | 247.8   | 441.1   | 971.4   | 907.0   | 867.3   |
| 85°   | 64.4    | 64.4    | 69.4    | 84.3    | 84.3    | 89.2    | 89.2    | 114.0   | 104.1   | 99.1    | 94.2    |
| 87.5° | 5.0     | 5.0     | 9.9     | 9.9     | 14.9    | 14.9    | 14.9    | 19.8    | 24.8    | 24.8    | 24.8    |
| 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: P841686

CATALOG NUMBER: ARCH4-210-740-U-T2R

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4906.5  | 4906.5  | 4906.5 | 4906.5 | 4906.5 | 4906.5 | 4906.5 | 4906.5 | 4906.5 | 4906.5 | 4906.5 |
| 2.5°  | 4946.1  | 4926.3  | 4861.9 | 4847.0 | 4837.1 | 4822.2 | 4827.2 | 4792.5 | 4777.6 | 4782.6 | 4762.7 |
| 5°    | 5035.3  | 5000.6  | 4921.3 | 4886.6 | 4876.7 | 4861.9 | 4876.7 | 4851.9 | 4827.2 | 4837.1 | 4827.2 |
| 7.5°  | 5159.2  | 5109.7  | 5010.5 | 4975.8 | 4970.9 | 4956.0 | 4975.8 | 4956.0 | 4936.2 | 4946.1 | 4926.3 |
| 10°   | 5288.1  | 5223.6  | 5114.6 | 5079.9 | 5079.9 | 5075.0 | 5094.8 | 5065.0 | 5045.2 | 5050.2 | 5040.3 |
| 12.5° | 5476.4  | 5392.1  | 5273.2 | 5243.5 | 5228.6 | 5243.5 | 5248.4 | 5208.8 | 5174.1 | 5179.0 | 5164.2 |
| 15°   | 5704.4  | 5610.2  | 5481.4 | 5436.8 | 5426.8 | 5421.9 | 5402.1 | 5352.5 | 5307.9 | 5302.9 | 5288.1 |
| 17.5° | 5952.2  | 5833.2  | 5679.6 | 5635.0 | 5590.4 | 5575.5 | 5526.0 | 5461.5 | 5392.1 | 5392.1 | 5372.3 |
| 20°   | 6190.1  | 6056.3  | 5872.9 | 5808.5 | 5744.0 | 5684.6 | 5600.3 | 5496.2 | 5407.0 | 5392.1 | 5372.3 |
| 22.5° | 6447.8  | 6289.2  | 6076.1 | 5981.9 | 5867.9 | 5749.0 | 5605.3 | 5466.5 | 5352.5 | 5327.7 | 5312.9 |
| 25°   | 6735.2  | 6537.0  | 6284.2 | 6145.5 | 5962.1 | 5778.7 | 5565.6 | 5387.2 | 5253.4 | 5213.7 | 5203.8 |
| 27.5° | 7052.4  | 6814.5  | 6507.3 | 6304.1 | 6036.4 | 5749.0 | 5476.4 | 5263.3 | 5099.7 | 5050.2 | 5035.3 |
| 30°   | 7374.6  | 7092.1  | 6710.4 | 6413.1 | 6036.4 | 5654.8 | 5312.9 | 5065.0 | 4876.7 | 4807.3 | 4797.4 |
| 32.5° | 7696.7  | 7379.5  | 6893.8 | 6472.6 | 5977.0 | 5496.2 | 5099.7 | 4807.3 | 4594.2 | 4510.0 | 4529.8 |
| 35°   | 8083.3  | 7696.7  | 7062.3 | 6497.3 | 5877.8 | 5302.9 | 4856.9 | 4514.9 | 4296.9 | 4222.5 | 4237.4 |
| 37.5° | 8484.7  | 8013.9  | 7196.1 | 6477.5 | 5739.1 | 5084.9 | 4584.3 | 4252.3 | 3979.7 | 3850.8 | 3865.7 |
| 40°   | 8831.6  | 8301.3  | 7290.3 | 6408.1 | 5560.7 | 4837.1 | 4316.7 | 3880.6 | 3503.9 | 3380.0 | 3365.1 |
| 42.5° | 9158.7  | 8514.4  | 7339.9 | 6304.1 | 5357.5 | 4549.6 | 3935.1 | 3375.0 | 2998.4 | 2844.8 | 2849.7 |
| 45°   | 9500.7  | 8722.6  | 7320.0 | 6165.3 | 5104.7 | 4212.6 | 3444.4 | 2879.4 | 2547.4 | 2408.6 | 2413.6 |
| 47.5° | 9892.2  | 8945.6  | 7300.2 | 6016.6 | 4797.4 | 3776.5 | 2973.6 | 2443.3 | 2155.9 | 2056.7 | 2046.8 |
| 50°   | 10308.5 | 9193.4  | 7275.4 | 5833.2 | 4455.5 | 3290.8 | 2507.7 | 2036.9 | 1794.1 | 1729.7 | 1714.8 |
| 52.5° | 10779.3 | 9461.0  | 7260.6 | 5615.2 | 4044.1 | 2775.4 | 2091.4 | 1680.1 | 1516.5 | 1471.9 | 1467.0 |
| 55°   | 11344.3 | 9773.3  | 7280.4 | 5352.5 | 3548.5 | 2289.7 | 1739.6 | 1447.2 | 1338.1 | 1313.3 | 1308.4 |
| 57.5° | 12033.2 | 10174.7 | 7339.9 | 5045.2 | 3028.1 | 1868.4 | 1481.8 | 1303.4 | 1234.0 | 1214.2 | 1214.2 |
| 60°   | 12781.6 | 10630.7 | 7448.9 | 4698.3 | 2507.7 | 1541.3 | 1313.3 | 1189.4 | 1159.7 | 1184.5 | 1184.5 |
| 62.5° | 13589.4 | 11165.9 | 7642.2 | 4277.0 | 2022.1 | 1303.4 | 1179.5 | 1095.3 | 1075.5 | 1125.0 | 1130.0 |
| 65°   | 14337.8 | 11686.3 | 7766.1 | 3771.5 | 1605.7 | 1130.0 | 1075.5 | 1001.1 | 1011.0 | 1060.6 | 1055.6 |
| 67.5° | 14798.7 | 12117.5 | 7592.6 | 3137.2 | 1273.7 | 1001.1 | 966.4  | 902.0  | 926.8  | 966.4  | 971.4  |
| 70°   | 14516.2 | 11874.6 | 6735.2 | 2369.0 | 996.2  | 872.3  | 847.5  | 807.8  | 827.7  | 877.2  | 897.0  |
| 72.5° | 13133.4 | 10635.6 | 5238.5 | 1600.8 | 802.9  | 733.5  | 743.4  | 723.6  | 748.4  | 793.0  | 837.6  |
| 75°   | 10660.4 | 8038.7  | 3513.8 | 1025.9 | 634.4  | 624.5  | 639.3  | 624.5  | 634.4  | 679.0  | 703.8  |
| 77.5° | 5565.6  | 3920.2  | 1749.5 | 639.3  | 470.8  | 485.7  | 510.5  | 515.4  | 545.2  | 555.1  | 565.0  |
| 80°   | 2597.0  | 1764.3  | 728.5  | 356.8  | 312.2  | 342.0  | 391.5  | 396.5  | 406.4  | 421.3  | 426.2  |
| 82.5° | 847.5   | 530.3   | 337.0  | 193.3  | 178.4  | 193.3  | 252.8  | 302.3  | 307.3  | 337.0  | 337.0  |
| 85°   | 89.2    | 54.5    | 74.3   | 79.3   | 69.4   | 84.3   | 114.0  | 109.0  | 49.6   | 29.7   | 29.7   |
| 87.5° | 24.8    | 19.8    | 24.8   | 24.8   | 19.8   | 19.8   | 14.9   | 5.0    | 0.0    | 0.0    | 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)