

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: P841685

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

Issue Date: 5/27/2024

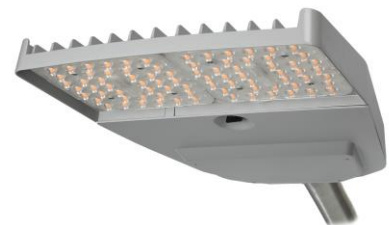
### Test Information

Test Method: LM-79-08  
Report Number: P841685  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
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-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23660 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

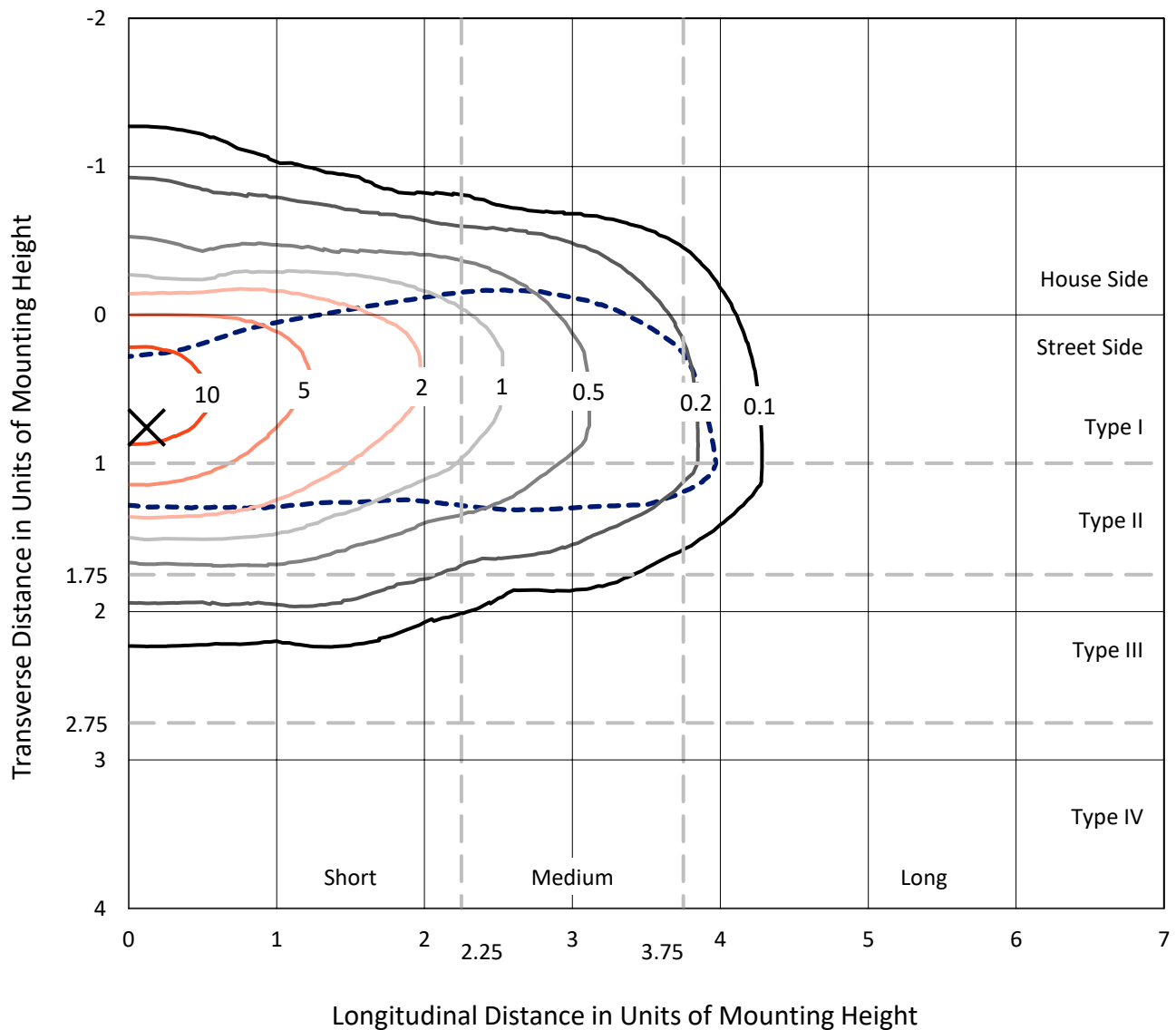
Input Watts (W): 213.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

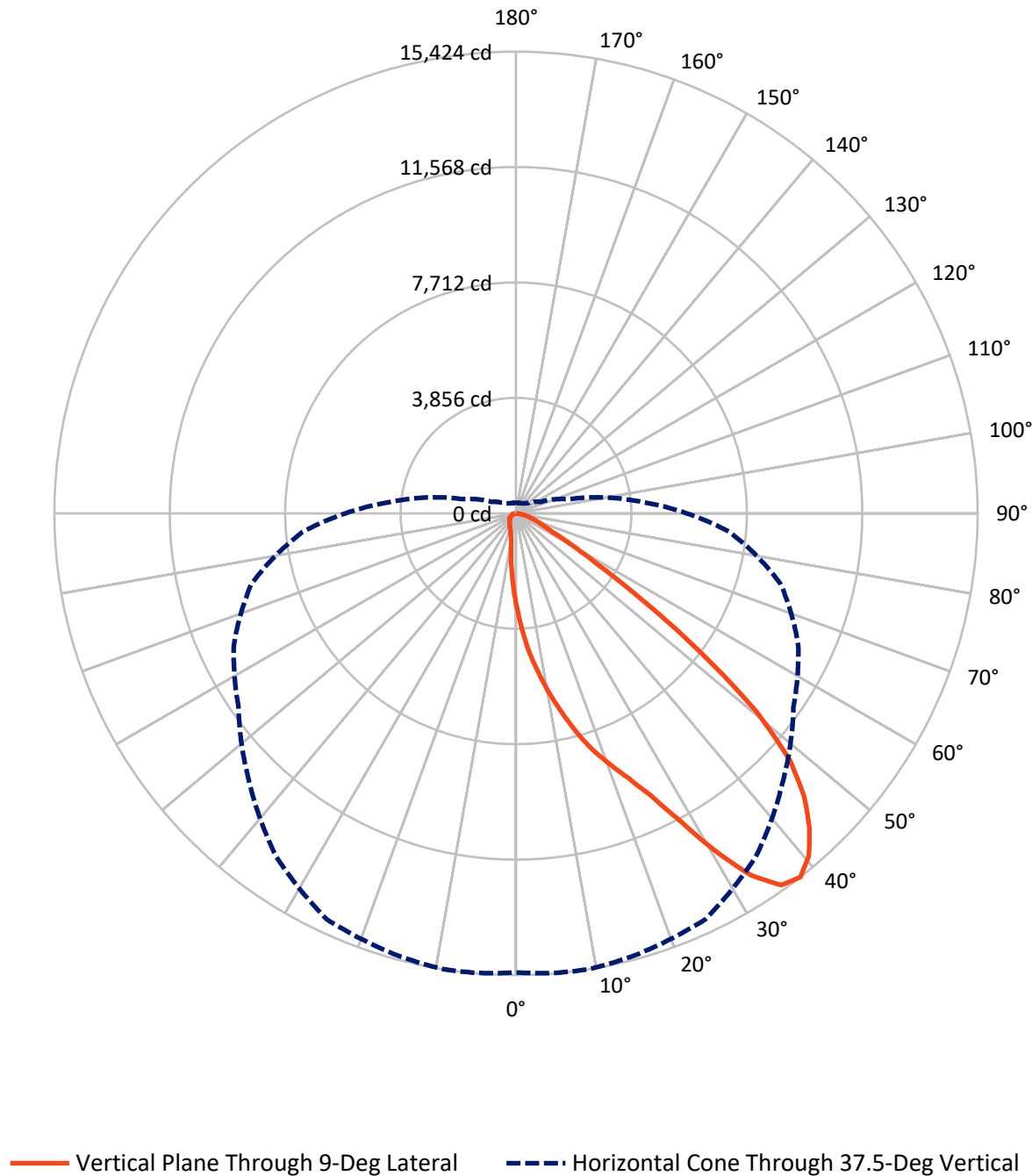
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.8 fc  
Type II - Short - N/A

REPORT NUMBER: P841685  
CATALOG NUMBER: ARCH4-210-740-U-T2R-HSS

## Luminous Intensity Polar Plot



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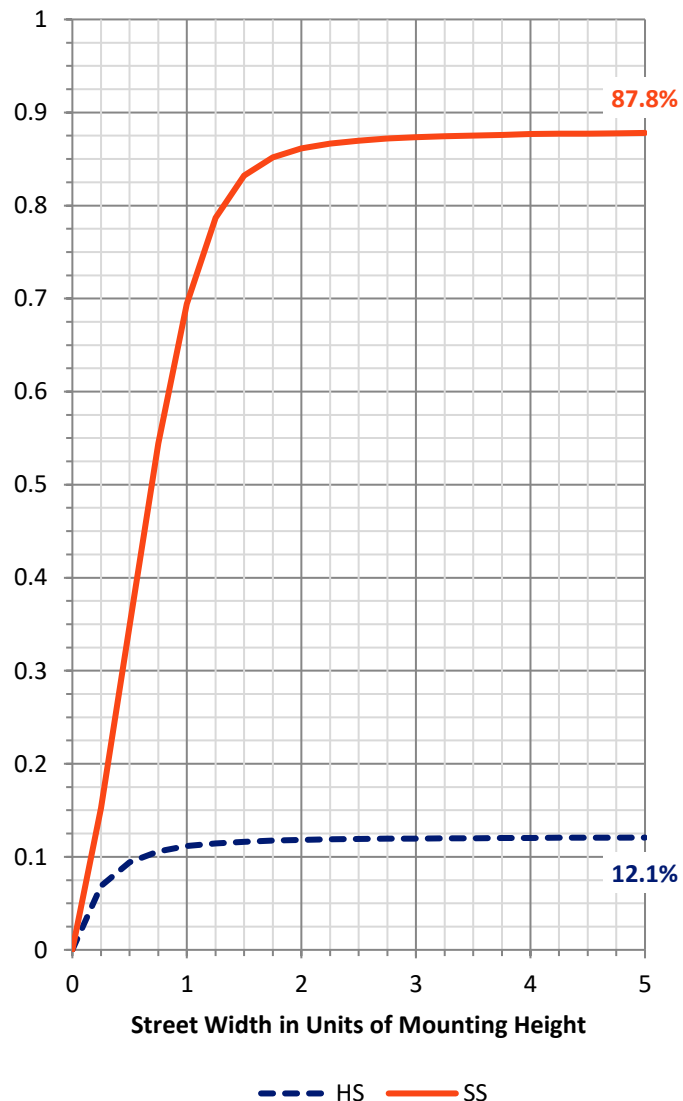
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2877.5   | 0.0    | 2877.5  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 20782.5  | 0.0    | 20782.5 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 23660.0  | 0.0    | 23660.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 314.4   | 1.3       |
| 10°-20°   | 1092.6  | 4.6       |
| 20°-30°   | 2245.1  | 9.5       |
| 30°-40°   | 3968.4  | 16.8      |
| 40°-50°   | 5271.7  | 22.3      |
| 50°-60°   | 4999.9  | 21.1      |
| 60°-70°   | 3814.5  | 16.1      |
| 70°-80°   | 1849.2  | 7.8       |
| 80°-90°   | 104.1   | 0.4       |
| 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°    | 23660.0 | 100.0     |
| 0°-180°   | 23660.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841685

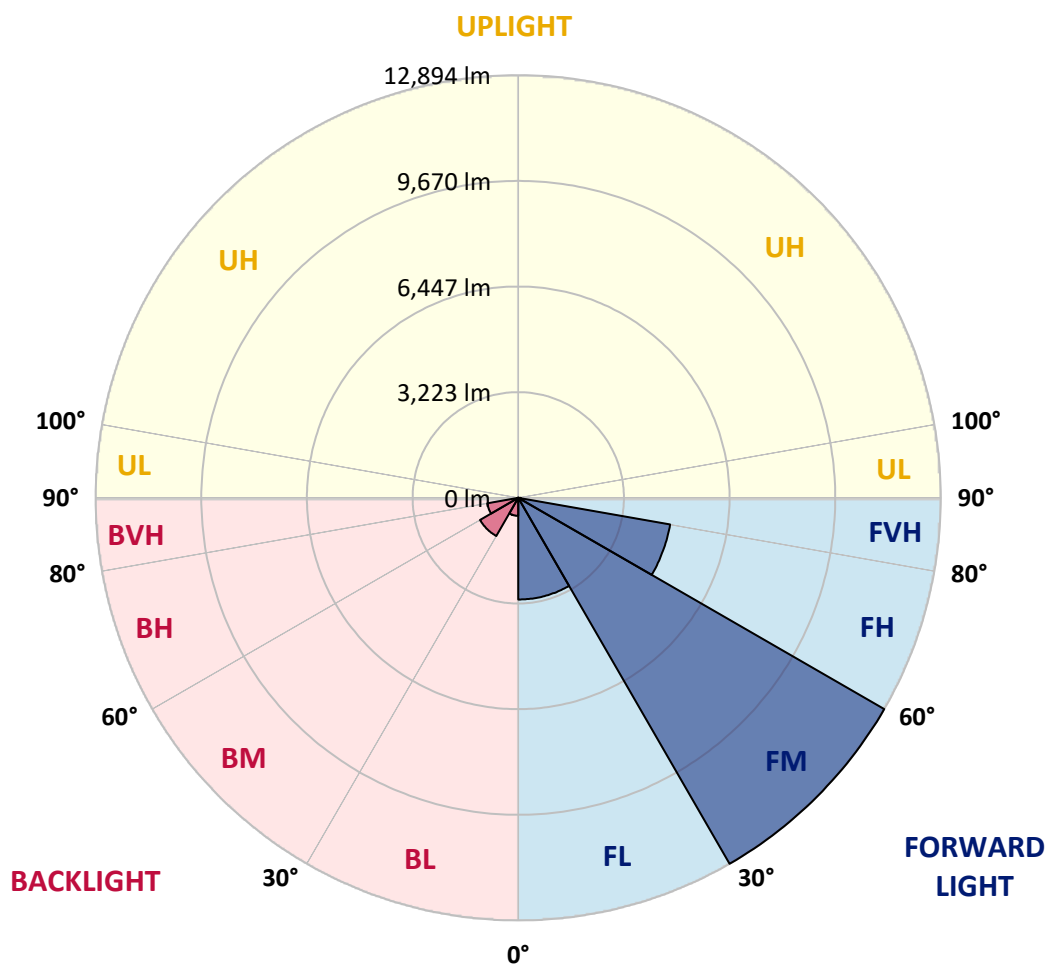
CATALOG NUMBER: ARCH4-210-740-U-T2R-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3103.0  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 12893.6 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 4703.5  | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 82.4    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 549.1   | 2.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1346.5  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 960.2   | 4.1       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 21.7    | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short



REPORT NUMBER: P841685

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

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 9°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  | 3127.6  |
| 2.5°  | 3875.5  | 3807.5  | 3885.2  | 3875.5  | 3807.5  | 3763.8  | 3627.8  | 3584.1  | 3423.8  | 3307.3  | 3205.3  |
| 5°    | 4671.9  | 4603.9  | 4671.9  | 4652.5  | 4555.4  | 4448.5  | 4225.1  | 4079.4  | 3792.9  | 3540.4  | 3312.1  |
| 7.5°  | 5332.4  | 5332.4  | 5361.5  | 5366.4  | 5249.8  | 5084.7  | 4807.9  | 4589.4  | 4186.3  | 3797.8  | 3433.5  |
| 10°   | 6046.3  | 6051.2  | 6114.3  | 6070.6  | 5915.2  | 5691.8  | 5342.1  | 5065.3  | 4579.6  | 4069.7  | 3550.1  |
| 12.5° | 6808.8  | 6813.6  | 6833.1  | 6813.6  | 6629.1  | 6342.5  | 5920.0  | 5555.8  | 4997.3  | 4380.5  | 3710.3  |
| 15°   | 7571.2  | 7576.1  | 7600.4  | 7566.4  | 7362.4  | 7027.3  | 6546.5  | 6099.7  | 5439.2  | 4730.2  | 3904.6  |
| 17.5° | 8285.1  | 8294.8  | 8314.3  | 8270.6  | 8056.9  | 7658.7  | 7168.1  | 6629.1  | 5910.3  | 5104.1  | 4123.1  |
| 20°   | 8926.2  | 8935.9  | 8950.5  | 8892.2  | 8678.5  | 8280.3  | 7750.9  | 7187.6  | 6391.1  | 5487.8  | 4361.1  |
| 22.5° | 9572.1  | 9581.8  | 9606.1  | 9528.4  | 9290.4  | 8833.9  | 8314.3  | 7731.5  | 6901.0  | 5910.3  | 4637.9  |
| 25°   | 10397.7 | 10407.4 | 10426.8 | 10315.1 | 9989.8  | 9455.5  | 8906.8  | 8309.4  | 7454.7  | 6386.3  | 4977.9  |
| 27.5° | 11607.0 | 11597.2 | 11597.2 | 11393.3 | 10834.8 | 10140.3 | 9504.1  | 8897.1  | 8052.0  | 6896.2  | 5351.8  |
| 30°   | 13102.8 | 13078.5 | 13063.9 | 12787.1 | 11990.6 | 10912.5 | 10116.0 | 9445.8  | 8625.1  | 7435.3  | 5754.9  |
| 32.5° | 14443.1 | 14443.1 | 14414.0 | 14122.6 | 13277.6 | 11951.8 | 10766.8 | 9980.0  | 9178.7  | 7979.2  | 6172.6  |
| 35°   | 15234.7 | 15268.7 | 15254.2 | 15035.6 | 14418.9 | 13068.8 | 11645.8 | 10621.1 | 9761.5  | 8547.4  | 6672.8  |
| 37.5° | 15341.6 | 15409.6 | 15424.1 | 15293.0 | 14967.6 | 13981.8 | 12622.0 | 11315.6 | 10402.6 | 9159.3  | 7158.4  |
| 40°   | 14909.4 | 15055.1 | 15055.1 | 15035.6 | 14919.1 | 14414.0 | 13442.7 | 12121.7 | 11063.0 | 9795.5  | 7648.9  |
| 42.5° | 14244.0 | 14394.6 | 14375.1 | 14448.0 | 14418.9 | 14312.0 | 13904.1 | 12874.5 | 11723.5 | 10451.1 | 8095.7  |
| 45°   | 13374.7 | 13530.1 | 13491.3 | 13622.4 | 13680.7 | 13797.2 | 13855.5 | 13399.0 | 12374.3 | 11165.0 | 8595.9  |
| 47.5° | 11980.9 | 12243.2 | 12301.4 | 12534.5 | 12777.4 | 13141.6 | 13418.4 | 13588.4 | 12981.3 | 11932.3 | 9139.9  |
| 50°   | 9921.8  | 10290.9 | 10407.4 | 10897.9 | 11563.3 | 12316.0 | 12762.8 | 13355.3 | 13408.7 | 12719.1 | 9727.5  |
| 52.5° | 7105.0  | 7532.4  | 7712.1  | 8518.2  | 9887.8  | 11199.0 | 12005.2 | 12840.5 | 13573.8 | 13471.8 | 10363.7 |
| 55°   | 4594.2  | 4958.5  | 5133.3  | 5890.9  | 7712.1  | 9771.2  | 11111.6 | 12175.2 | 13481.6 | 14161.5 | 11092.2 |
| 57.5° | 2831.3  | 3040.1  | 3156.7  | 3807.5  | 5483.0  | 7940.3  | 9941.2  | 11563.3 | 13199.9 | 14758.8 | 11849.8 |
| 60°   | 1908.6  | 2030.0  | 2088.3  | 2394.2  | 3724.9  | 5934.6  | 8333.7  | 10922.2 | 12830.8 | 15161.9 | 12539.4 |
| 62.5° | 1267.5  | 1306.4  | 1364.7  | 1554.1  | 2457.4  | 4166.8  | 6400.8  | 9776.1  | 12554.0 | 15186.2 | 13049.3 |
| 65°   | 981.0   | 1000.4  | 1024.7  | 1107.3  | 1515.2  | 2913.9  | 4501.9  | 7920.9  | 12141.2 | 14671.4 | 13209.6 |
| 67.5° | 772.2   | 791.6   | 820.7   | 864.5   | 1097.6  | 1976.6  | 3064.4  | 5803.5  | 11296.1 | 13865.2 | 12947.3 |
| 70°   | 607.1   | 621.6   | 641.1   | 679.9   | 854.7   | 1432.7  | 2025.1  | 3856.0  | 9591.5  | 13097.9 | 12121.7 |
| 72.5° | 480.8   | 495.4   | 514.8   | 553.6   | 694.5   | 1049.0  | 1388.9  | 2404.0  | 7396.4  | 12160.6 | 10533.7 |
| 75°   | 378.8   | 388.5   | 403.1   | 441.9   | 558.5   | 815.9   | 942.2   | 1437.5  | 5026.4  | 10446.3 | 8207.4  |
| 77.5° | 189.4   | 233.1   | 267.1   | 306.0   | 407.9   | 563.4   | 626.5   | 796.5   | 2122.3  | 5361.5  | 3914.3  |
| 80°   | 111.7   | 136.0   | 145.7   | 170.0   | 267.1   | 340.0   | 340.0   | 320.5   | 670.2   | 2059.1  | 1597.8  |
| 82.5° | 63.1    | 87.4    | 92.3    | 97.1    | 160.3   | 194.3   | 155.4   | 116.6   | 136.0   | 689.6   | 466.2   |
| 85°   | 19.4    | 29.1    | 34.0    | 38.9    | 53.4    | 58.3    | 53.4    | 48.6    | 38.9    | 68.0    | 43.7    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 4.9     | 9.7     | 9.7     | 9.7     | 14.6    | 14.6    | 14.6    |
| 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: P841685

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

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 | 3127.6 |
| 2.5°  | 3147.0 | 3083.9 | 2962.4 | 2850.7 | 2743.9 | 2666.2 | 2593.4 | 2525.4 | 2476.8 | 2437.9 | 2433.1 |
| 5°    | 3190.7 | 3064.4 | 2831.3 | 2612.8 | 2413.7 | 2248.5 | 2107.7 | 1996.0 | 1913.4 | 1855.2 | 1850.3 |
| 7.5°  | 3249.0 | 3054.7 | 2700.2 | 2374.8 | 2078.6 | 1840.6 | 1636.6 | 1486.1 | 1379.2 | 1335.5 | 1301.5 |
| 10°   | 3297.5 | 3045.0 | 2569.1 | 2136.8 | 1748.3 | 1447.2 | 1204.4 | 1053.9 | 976.2  | 947.0  | 932.4  |
| 12.5° | 3380.1 | 3054.7 | 2457.4 | 1918.3 | 1461.8 | 1107.3 | 922.7  | 840.2  | 806.2  | 781.9  | 777.0  |
| 15°   | 3501.5 | 3098.4 | 2350.5 | 1704.6 | 1170.4 | 893.6  | 786.7  | 733.3  | 699.3  | 694.5  | 689.6  |
| 17.5° | 3622.9 | 3137.3 | 2253.4 | 1486.1 | 971.3  | 777.0  | 704.2  | 660.5  | 636.2  | 631.3  | 631.3  |
| 20°   | 3763.8 | 3185.8 | 2146.6 | 1277.3 | 830.5  | 699.3  | 641.1  | 607.1  | 577.9  | 573.1  | 573.1  |
| 22.5° | 3928.9 | 3253.8 | 2044.6 | 1092.7 | 738.2  | 641.1  | 592.5  | 553.6  | 529.4  | 524.5  | 524.5  |
| 25°   | 4152.3 | 3355.8 | 1962.0 | 956.7  | 675.0  | 592.5  | 548.8  | 514.8  | 495.4  | 485.6  | 485.6  |
| 27.5° | 4400.0 | 3496.7 | 1903.7 | 874.2  | 631.3  | 553.6  | 509.9  | 480.8  | 461.4  | 451.7  | 451.7  |
| 30°   | 4676.8 | 3652.1 | 1864.9 | 840.2  | 607.1  | 519.6  | 480.8  | 451.7  | 427.4  | 422.5  | 422.5  |
| 32.5° | 4982.7 | 3831.8 | 1840.6 | 845.0  | 602.2  | 495.4  | 451.7  | 422.5  | 403.1  | 393.4  | 393.4  |
| 35°   | 5322.7 | 4030.9 | 1826.0 | 874.2  | 611.9  | 475.9  | 427.4  | 398.2  | 378.8  | 369.1  | 369.1  |
| 37.5° | 5701.5 | 4264.0 | 1826.0 | 903.3  | 636.2  | 471.1  | 403.1  | 373.9  | 359.4  | 349.7  | 349.7  |
| 40°   | 6056.0 | 4511.7 | 1845.5 | 937.3  | 660.5  | 471.1  | 383.7  | 359.4  | 340.0  | 330.2  | 330.2  |
| 42.5° | 6332.8 | 4652.5 | 1860.0 | 971.3  | 675.0  | 466.2  | 364.2  | 340.0  | 325.4  | 315.7  | 315.7  |
| 45°   | 6648.5 | 4803.0 | 1830.9 | 985.9  | 675.0  | 456.5  | 349.7  | 325.4  | 310.8  | 301.1  | 301.1  |
| 47.5° | 6998.2 | 4987.6 | 1826.0 | 995.6  | 660.5  | 437.1  | 335.1  | 310.8  | 301.1  | 291.4  | 291.4  |
| 50°   | 7352.7 | 5191.6 | 1835.7 | 990.7  | 641.1  | 407.9  | 315.7  | 301.1  | 286.5  | 276.8  | 276.8  |
| 52.5° | 7755.8 | 5405.2 | 1855.2 | 981.0  | 597.3  | 373.9  | 301.1  | 286.5  | 272.0  | 262.2  | 257.4  |
| 55°   | 8202.6 | 5638.4 | 1894.0 | 961.6  | 539.1  | 340.0  | 286.5  | 272.0  | 252.5  | 242.8  | 238.0  |
| 57.5° | 8717.4 | 5924.9 | 1937.7 | 922.7  | 475.9  | 310.8  | 272.0  | 252.5  | 223.4  | 208.8  | 204.0  |
| 60°   | 9207.9 | 6250.3 | 1986.3 | 830.5  | 412.8  | 281.7  | 257.4  | 228.3  | 199.1  | 189.4  | 184.5  |
| 62.5° | 9669.2 | 6570.8 | 2010.6 | 665.3  | 349.7  | 257.4  | 242.8  | 208.8  | 179.7  | 170.0  | 165.1  |
| 65°   | 9965.5 | 6920.5 | 1957.2 | 451.7  | 286.5  | 238.0  | 223.4  | 194.3  | 165.1  | 150.6  | 150.6  |
| 67.5° | 9984.9 | 7085.6 | 1772.6 | 296.2  | 233.1  | 213.7  | 204.0  | 174.8  | 145.7  | 136.0  | 131.1  |
| 70°   | 9494.4 | 6837.9 | 1355.0 | 233.1  | 194.3  | 184.5  | 184.5  | 155.4  | 126.3  | 116.6  | 111.7  |
| 72.5° | 8367.7 | 6056.0 | 864.5  | 189.4  | 165.1  | 155.4  | 155.4  | 131.1  | 111.7  | 97.1   | 92.3   |
| 75°   | 6604.8 | 4671.9 | 461.4  | 155.4  | 136.0  | 131.1  | 121.4  | 106.8  | 92.3   | 82.6   | 77.7   |
| 77.5° | 3035.3 | 2059.1 | 213.7  | 111.7  | 102.0  | 102.0  | 92.3   | 77.7   | 72.8   | 63.1   | 63.1   |
| 80°   | 1199.5 | 699.3  | 106.8  | 72.8   | 68.0   | 68.0   | 68.0   | 53.4   | 53.4   | 43.7   | 38.9   |
| 82.5° | 330.2  | 145.7  | 53.4   | 43.7   | 43.7   | 43.7   | 38.9   | 34.0   | 34.0   | 29.1   | 29.1   |
| 85°   | 34.0   | 24.3   | 24.3   | 24.3   | 24.3   | 19.4   | 19.4   | 14.6   | 9.7    | 9.7    | 9.7    |
| 87.5° | 14.6   | 14.6   | 14.6   | 14.6   | 14.6   | 9.7    | 4.9    | 0.0    | 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)