

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: P840980

Luminaire Tested: **ARCH4-110-750-U-T4W-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P840980  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-110-750-U-T4W-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 13852 lumens  
Efficiency: N/A  
Efficacy: 123.0 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

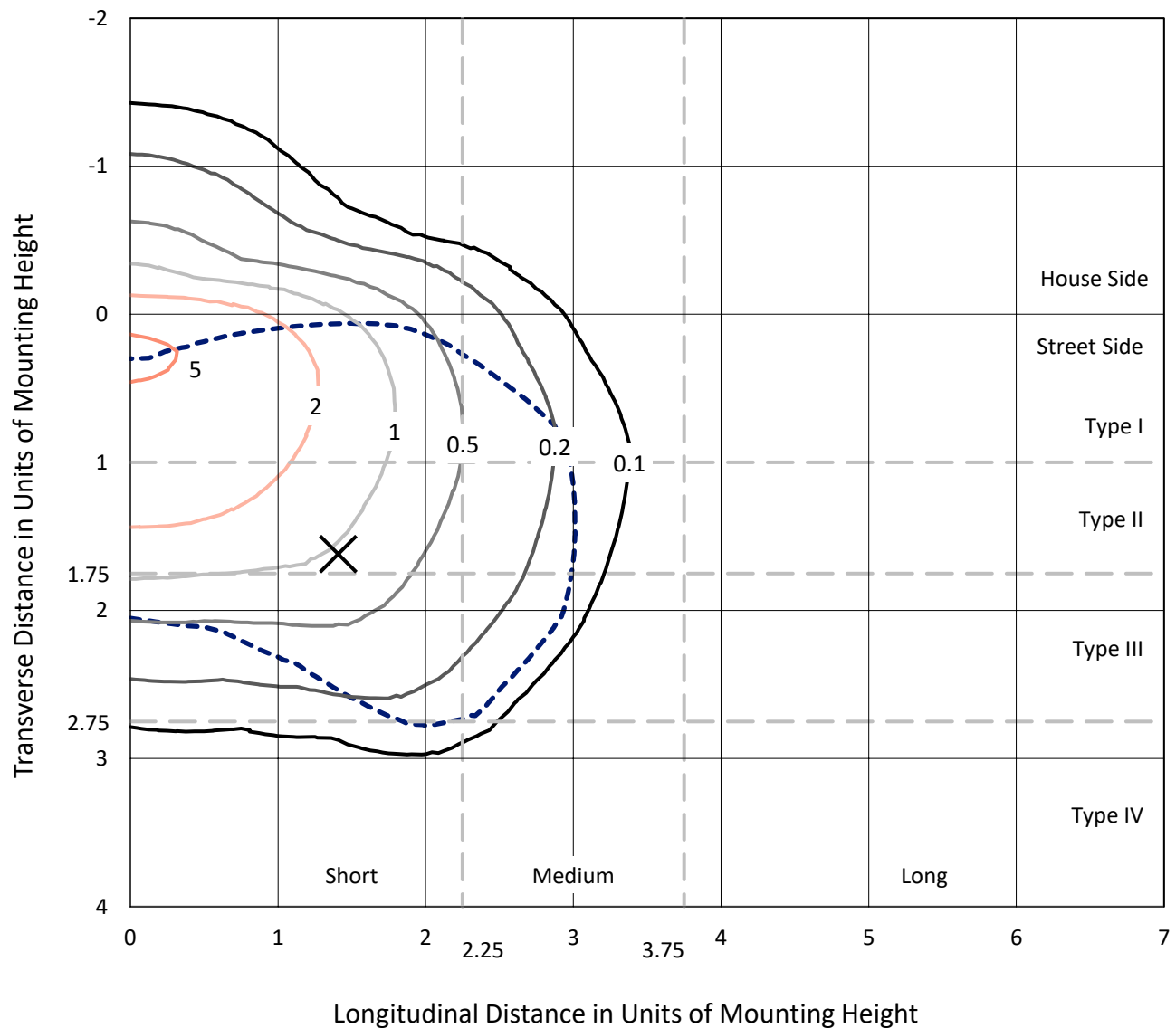
Input Watts (W): 112.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P840980  
CATALOG NUMBER: ARCH4-110-750-U-T4W-HSS

## Iso-Footcandle Lines of Horizontal Illumination

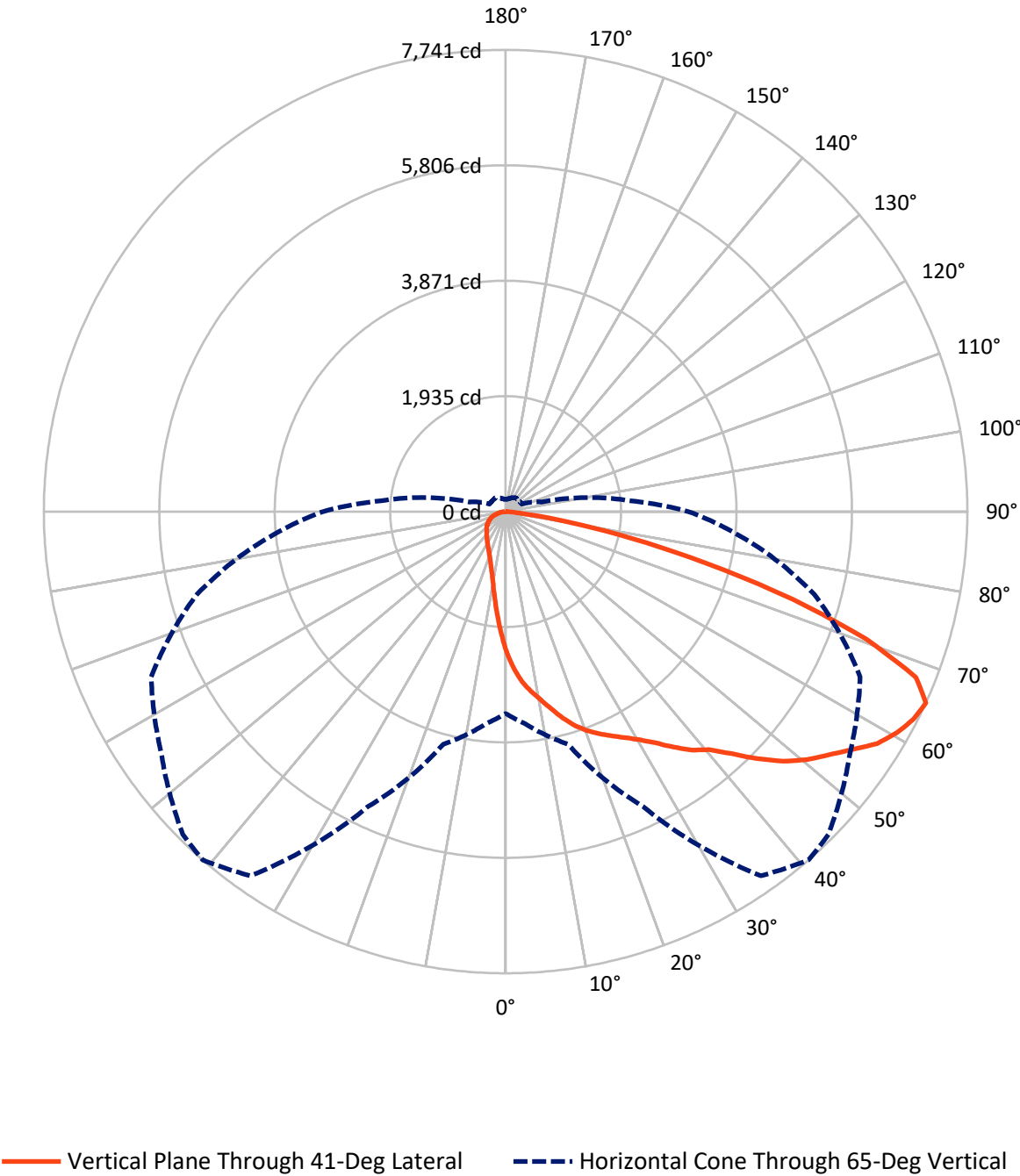
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
Type III - Short - N/A

REPORT NUMBER: P840980  
CATALOG NUMBER: ARCH4-110-750-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P840980

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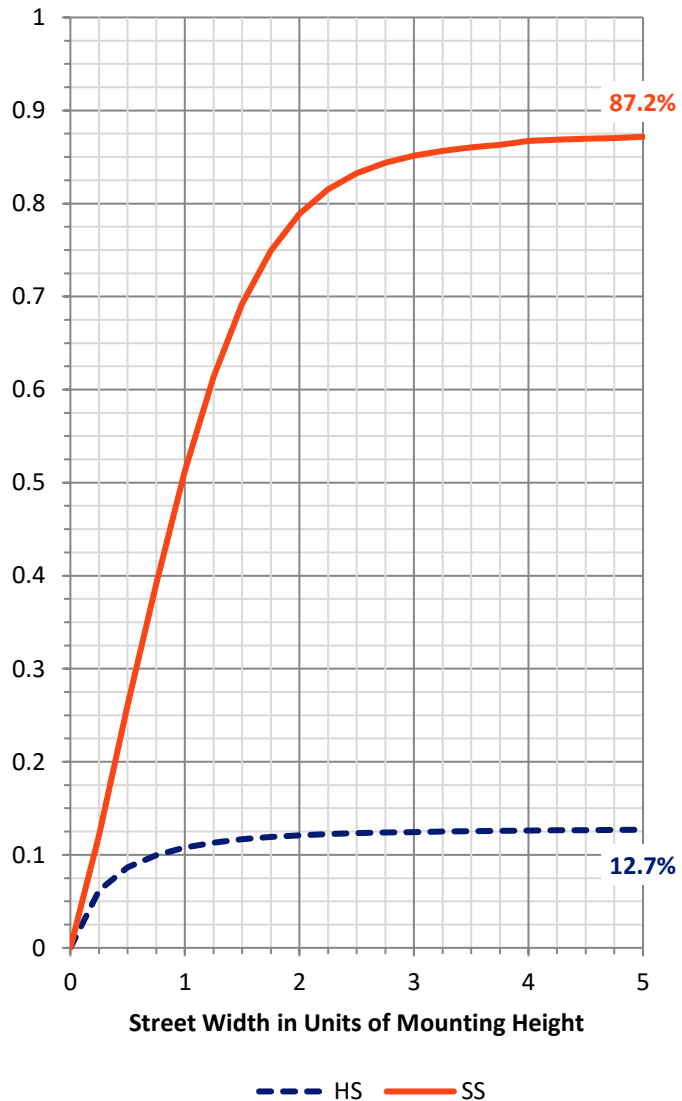
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1778.4   | 0.0    | 1778.4  |
|                    | % Fixture | 12.8     | 0.0    | 12.8    |
| <b>Street Side</b> | Lumens    | 12073.6  | 0.0    | 12073.6 |
|                    | % Fixture | 87.2     | 0.0    | 87.2    |
| <b>Total</b>       | Lumens    | 13852.0  | 0.0    | 13852.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 219.9   | 1.6       |
| 10°-20°   | 659.4   | 4.8       |
| 20°-30°   | 1134.5  | 8.2       |
| 30°-40°   | 1720.6  | 12.4      |
| 40°-50°   | 2520.7  | 18.2      |
| 50°-60°   | 3183.2  | 23.0      |
| 60°-70°   | 2984.8  | 21.5      |
| 70°-80°   | 1330.3  | 9.6       |
| 80°-90°   | 98.6    | 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°    | 13852.0 | 100.0     |
| 0°-180°   | 13852.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P840980

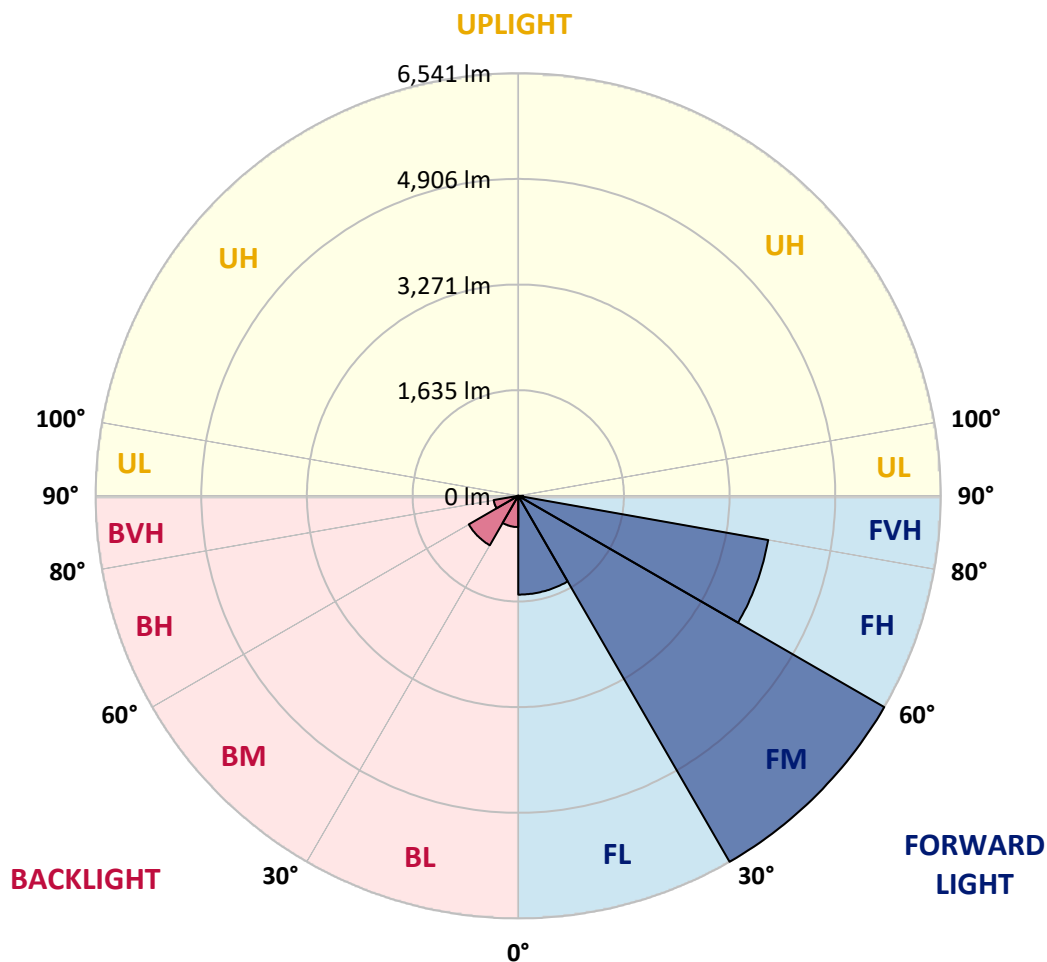
CATALOG NUMBER: ARCH4-110-750-U-T4W-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1529.8 | 11.0      |                         |      |         |
| FM   | (30°-60°)   | 6541.5 | 47.2      |                         |      |         |
| FH   | (60°-80°)   | 3928.8 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 73.6   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 484.1  | 3.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 883.1  | 6.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 386.3  | 2.8       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 25.0   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Short



REPORT NUMBER: P840980

CATALOG NUMBER: ARCH4-110-750-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 41°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 |
| 2.5°  | 2722.5 | 2713.8 | 2707.9 | 2675.8 | 2675.8 | 2632.0 | 2634.9 | 2594.0 | 2544.3 | 2465.5 | 2380.8 |
| 5°    | 2979.6 | 2967.9 | 2953.3 | 2921.2 | 2909.5 | 2865.7 | 2859.8 | 2801.4 | 2716.7 | 2579.4 | 2427.5 |
| 7.5°  | 3204.5 | 3192.8 | 3172.4 | 3125.7 | 3093.5 | 3040.9 | 3026.3 | 2950.4 | 2856.9 | 2687.5 | 2474.2 |
| 10°   | 3409.0 | 3400.2 | 3374.0 | 3315.5 | 3271.7 | 3207.4 | 3181.2 | 3078.9 | 2962.1 | 2775.1 | 2512.2 |
| 12.5° | 3616.4 | 3604.7 | 3569.7 | 3520.0 | 3467.4 | 3391.5 | 3359.3 | 3227.9 | 3078.9 | 2871.5 | 2567.7 |
| 15°   | 3809.2 | 3791.7 | 3765.4 | 3712.8 | 3666.1 | 3593.0 | 3558.0 | 3403.2 | 3222.1 | 2979.6 | 2640.7 |
| 17.5° | 3934.8 | 3920.2 | 3896.8 | 3867.6 | 3829.7 | 3774.2 | 3739.1 | 3587.2 | 3365.2 | 3084.8 | 2716.7 |
| 20°   | 4010.8 | 4004.9 | 3996.2 | 3978.6 | 3961.1 | 3923.1 | 3896.8 | 3753.7 | 3520.0 | 3187.0 | 2789.7 |
| 22.5° | 4069.2 | 4063.4 | 4060.4 | 4060.4 | 4063.4 | 4048.7 | 4031.2 | 3908.5 | 3669.0 | 3295.1 | 2856.9 |
| 25°   | 4159.8 | 4156.8 | 4151.0 | 4145.1 | 4165.6 | 4168.5 | 4162.7 | 4078.0 | 3855.9 | 3438.2 | 2941.6 |
| 27.5° | 4285.4 | 4276.6 | 4264.9 | 4259.1 | 4279.5 | 4294.1 | 4305.8 | 4247.4 | 4054.6 | 3584.3 | 3038.0 |
| 30°   | 4478.2 | 4451.9 | 4422.7 | 4402.2 | 4416.8 | 4440.2 | 4466.5 | 4431.4 | 4259.1 | 3765.4 | 3137.3 |
| 32.5° | 4706.0 | 4673.9 | 4606.7 | 4568.7 | 4606.7 | 4624.2 | 4644.7 | 4627.1 | 4472.3 | 3961.1 | 3236.7 |
| 35°   | 4983.5 | 4945.5 | 4875.4 | 4819.9 | 4887.1 | 4849.1 | 4840.4 | 4822.9 | 4673.9 | 4153.9 | 3347.7 |
| 37.5° | 5445.1 | 5389.6 | 5278.6 | 5155.9 | 5155.9 | 5074.1 | 5041.9 | 4989.4 | 4855.0 | 4326.3 | 3455.7 |
| 40°   | 5979.6 | 5906.6 | 5763.5 | 5582.4 | 5415.9 | 5246.4 | 5226.0 | 5188.0 | 5068.2 | 4524.9 | 3578.4 |
| 42.5° | 6566.8 | 6426.6 | 6227.9 | 6008.9 | 5740.1 | 5547.3 | 5500.6 | 5392.5 | 5275.6 | 4726.5 | 3701.1 |
| 45°   | 7218.2 | 6926.1 | 6636.9 | 6525.9 | 6081.9 | 5906.6 | 5819.0 | 5623.3 | 5491.8 | 4936.8 | 3829.7 |
| 47.5° | 7323.4 | 7095.5 | 6902.7 | 6885.2 | 6400.3 | 6254.2 | 6154.9 | 5874.5 | 5725.5 | 5161.7 | 3964.0 |
| 50°   | 7265.0 | 7127.7 | 7148.1 | 7078.0 | 6634.0 | 6537.6 | 6461.6 | 6143.2 | 5956.3 | 5377.9 | 4086.7 |
| 52.5° | 7019.6 | 7095.5 | 7212.4 | 7083.8 | 6856.0 | 6777.1 | 6739.1 | 6432.4 | 6172.4 | 5576.5 | 4197.7 |
| 55°   | 6727.5 | 6780.0 | 7031.3 | 7189.0 | 7113.1 | 7042.9 | 7007.9 | 6768.4 | 6385.7 | 5743.0 | 4300.0 |
| 57.5° | 6301.0 | 6277.6 | 6555.1 | 7171.5 | 7381.8 | 7340.9 | 7302.9 | 7098.5 | 6584.3 | 5862.8 | 4364.2 |
| 60°   | 5661.2 | 5611.6 | 5962.1 | 6820.9 | 7469.4 | 7533.7 | 7516.2 | 7317.5 | 6736.2 | 5859.9 | 4337.9 |
| 62.5° | 4554.1 | 4676.8 | 5161.7 | 6248.4 | 7507.4 | 7671.0 | 7638.9 | 7335.1 | 6785.9 | 5690.4 | 4171.4 |
| 65°   | 3385.6 | 3560.9 | 4037.1 | 5459.7 | 7454.8 | 7741.1 | 7653.5 | 7048.8 | 6555.1 | 5354.5 | 3806.3 |
| 67.5° | 2439.2 | 2594.0 | 2941.6 | 4492.8 | 6949.5 | 7419.8 | 7317.5 | 6581.4 | 6023.5 | 4878.4 | 3300.9 |
| 70°   | 1668.0 | 1779.0 | 2015.6 | 3271.7 | 5932.9 | 6414.9 | 6350.6 | 5883.2 | 5185.1 | 4311.7 | 2681.6 |
| 72.5° | 1177.2 | 1224.0 | 1375.9 | 2158.7 | 4507.4 | 5033.2 | 4957.2 | 4840.4 | 4165.6 | 3584.3 | 2085.7 |
| 75°   | 882.2  | 911.4  | 993.2  | 1396.3 | 3040.9 | 3487.9 | 3417.8 | 3485.0 | 3111.1 | 2713.8 | 1519.0 |
| 77.5° | 333.0  | 362.2  | 563.8  | 891.0  | 1799.4 | 2141.2 | 2071.1 | 2112.0 | 1729.3 | 1370.0 | 756.6  |
| 80°   | 90.6   | 96.4   | 187.0  | 423.6  | 817.9  | 1066.2 | 969.8  | 832.5  | 642.7  | 631.0  | 400.2  |
| 82.5° | 38.0   | 43.8   | 84.7   | 227.9  | 292.1  | 292.1  | 245.4  | 303.8  | 245.4  | 295.0  | 192.8  |
| 85°   | 14.6   | 17.5   | 20.4   | 58.4   | 38.0   | 40.9   | 43.8   | 58.4   | 49.7   | 61.3   | 43.8   |
| 87.5° | 0.0    | 0.0    | 0.0    | 2.9    | 2.9    | 5.8    | 2.9    | 5.8    | 8.8    | 8.8    | 8.8    |
| 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: P840980

CATALOG NUMBER: ARCH4-110-750-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 | 2360.3 |
| 2.5°  | 2345.7 | 2313.6 | 2266.8 | 2190.9 | 2112.0 | 2068.2 | 2012.7 | 2003.9 | 1945.5 | 1939.7 | 1916.3 |
| 5°    | 2360.3 | 2293.1 | 2173.4 | 2027.3 | 1884.2 | 1773.2 | 1691.4 | 1647.5 | 1562.8 | 1562.8 | 1539.5 |
| 7.5°  | 2372.0 | 2266.8 | 2074.0 | 1857.9 | 1662.1 | 1513.2 | 1402.2 | 1355.4 | 1279.5 | 1273.6 | 1256.1 |
| 10°   | 2374.9 | 2234.7 | 1965.9 | 1685.5 | 1446.0 | 1294.1 | 1186.0 | 1133.4 | 1066.2 | 1060.4 | 1048.7 |
| 12.5° | 2398.3 | 2217.2 | 1869.6 | 1536.5 | 1291.2 | 1127.6 | 1022.4 | 978.6  | 926.0  | 920.2  | 908.5  |
| 15°   | 2436.3 | 2217.2 | 1787.8 | 1410.9 | 1153.9 | 1002.0 | 911.4  | 870.5  | 832.5  | 826.7  | 820.8  |
| 17.5° | 2474.2 | 2211.3 | 1706.0 | 1294.1 | 1039.9 | 902.6  | 823.8  | 791.6  | 762.4  | 759.5  | 753.7  |
| 20°   | 2509.3 | 2208.4 | 1624.2 | 1194.8 | 952.3  | 820.8  | 759.5  | 730.3  | 706.9  | 706.9  | 704.0  |
| 22.5° | 2544.3 | 2202.6 | 1545.3 | 1101.3 | 876.4  | 759.5  | 706.9  | 674.8  | 657.3  | 657.3  | 654.3  |
| 25°   | 2596.9 | 2202.6 | 1472.3 | 1022.4 | 815.0  | 712.8  | 660.2  | 636.8  | 622.2  | 619.3  | 619.3  |
| 27.5° | 2658.3 | 2220.1 | 1408.0 | 952.3  | 762.4  | 666.0  | 625.1  | 601.8  | 584.2  | 578.4  | 581.3  |
| 30°   | 2725.5 | 2234.7 | 1349.6 | 891.0  | 712.8  | 631.0  | 587.2  | 563.8  | 546.3  | 540.4  | 543.3  |
| 32.5° | 2792.6 | 2252.2 | 1297.0 | 835.5  | 663.1  | 598.8  | 555.0  | 528.7  | 511.2  | 508.3  | 508.3  |
| 35°   | 2865.7 | 2269.8 | 1244.4 | 788.7  | 622.2  | 566.7  | 525.8  | 496.6  | 484.9  | 479.1  | 482.0  |
| 37.5° | 2938.7 | 2299.0 | 1194.8 | 744.9  | 593.0  | 537.5  | 499.5  | 470.3  | 461.5  | 458.6  | 458.6  |
| 40°   | 3026.3 | 2342.8 | 1174.3 | 715.7  | 566.7  | 511.2  | 479.1  | 449.9  | 441.1  | 441.1  | 441.1  |
| 42.5° | 3099.4 | 2377.8 | 1156.8 | 683.6  | 546.3  | 487.8  | 458.6  | 435.3  | 429.4  | 426.5  | 429.4  |
| 45°   | 3172.4 | 2410.0 | 1133.4 | 654.3  | 520.0  | 464.5  | 441.1  | 417.7  | 411.9  | 411.9  | 411.9  |
| 47.5° | 3245.4 | 2427.5 | 1101.3 | 625.1  | 496.6  | 444.0  | 423.6  | 403.1  | 397.3  | 397.3  | 397.3  |
| 50°   | 3303.8 | 2442.1 | 1054.5 | 593.0  | 470.3  | 426.5  | 406.0  | 385.6  | 379.8  | 379.8  | 379.8  |
| 52.5° | 3362.3 | 2445.0 | 1004.9 | 555.0  | 444.0  | 406.0  | 388.5  | 368.1  | 362.2  | 359.3  | 359.3  |
| 55°   | 3414.9 | 2442.1 | 946.5  | 511.2  | 414.8  | 382.7  | 368.1  | 350.5  | 338.9  | 327.2  | 333.0  |
| 57.5° | 3452.8 | 2439.2 | 879.3  | 467.4  | 385.6  | 359.3  | 353.5  | 330.1  | 306.7  | 277.5  | 283.4  |
| 60°   | 3438.2 | 2407.0 | 806.2  | 411.9  | 353.5  | 335.9  | 335.9  | 303.8  | 262.9  | 248.3  | 251.2  |
| 62.5° | 3344.7 | 2316.5 | 730.3  | 353.5  | 321.3  | 312.6  | 309.6  | 274.6  | 242.5  | 227.9  | 230.8  |
| 65°   | 3064.3 | 2088.6 | 619.3  | 300.9  | 289.2  | 286.3  | 286.3  | 254.1  | 224.9  | 207.4  | 210.3  |
| 67.5° | 2637.8 | 1752.7 | 505.4  | 254.1  | 257.1  | 262.9  | 262.9  | 233.7  | 204.5  | 187.0  | 189.9  |
| 70°   | 2114.9 | 1370.0 | 403.1  | 219.1  | 222.0  | 230.8  | 236.6  | 210.3  | 184.0  | 166.5  | 166.5  |
| 72.5° | 1592.0 | 1039.9 | 324.3  | 184.0  | 198.6  | 198.6  | 207.4  | 187.0  | 160.7  | 143.1  | 146.1  |
| 75°   | 1153.9 | 744.9  | 257.1  | 154.8  | 172.3  | 169.4  | 169.4  | 157.7  | 137.3  | 125.6  | 125.6  |
| 77.5° | 546.3  | 391.4  | 204.5  | 111.0  | 134.4  | 131.5  | 134.4  | 125.6  | 116.8  | 105.2  | 108.1  |
| 80°   | 268.7  | 192.8  | 131.5  | 78.9   | 93.5   | 96.4   | 105.2  | 99.3   | 96.4   | 87.6   | 87.6   |
| 82.5° | 128.5  | 76.0   | 61.3   | 55.5   | 64.3   | 67.2   | 73.0   | 73.0   | 76.0   | 70.1   | 70.1   |
| 85°   | 35.1   | 20.4   | 26.3   | 35.1   | 40.9   | 43.8   | 49.7   | 52.6   | 52.6   | 49.7   | 52.6   |
| 87.5° | 8.8    | 8.8    | 11.7   | 17.5   | 20.4   | 23.4   | 26.3   | 26.3   | 11.7   | 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)