

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: P799410

Luminaire Tested: **ARCH2-110-740-U-T2R-HSS**

Issue Date: 4/4/2024

### Test Information

Test Method: LM-79-08  
Report Number: P799410  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-110-740-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

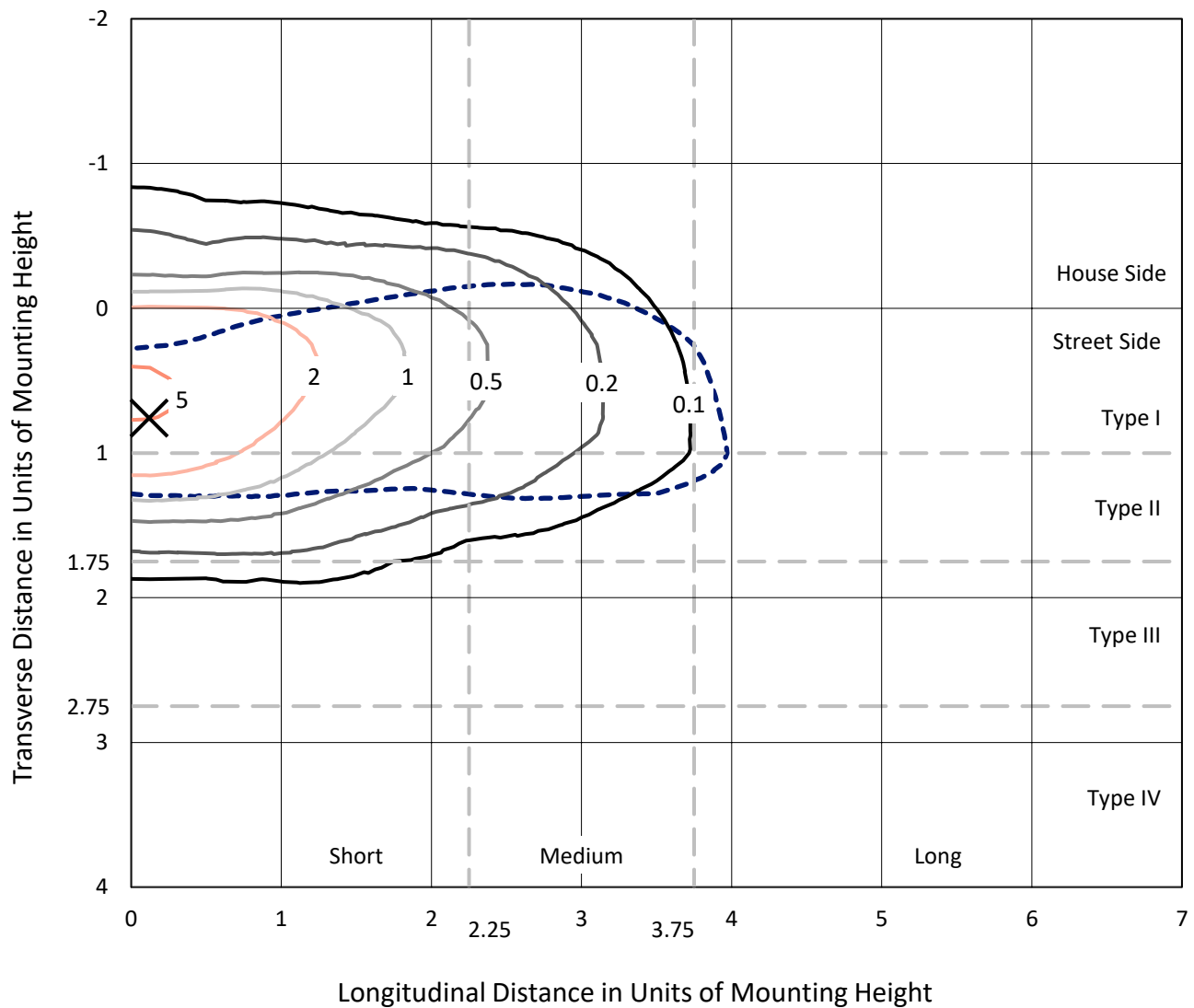
Lumens per Lamp: N/A  
Luminaire Lumens: 9778 lumens  
Efficiency: N/A  
Efficacy: 89.3 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 109.5  
Input Voltage (V): NR  
Input Current (Ain): 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

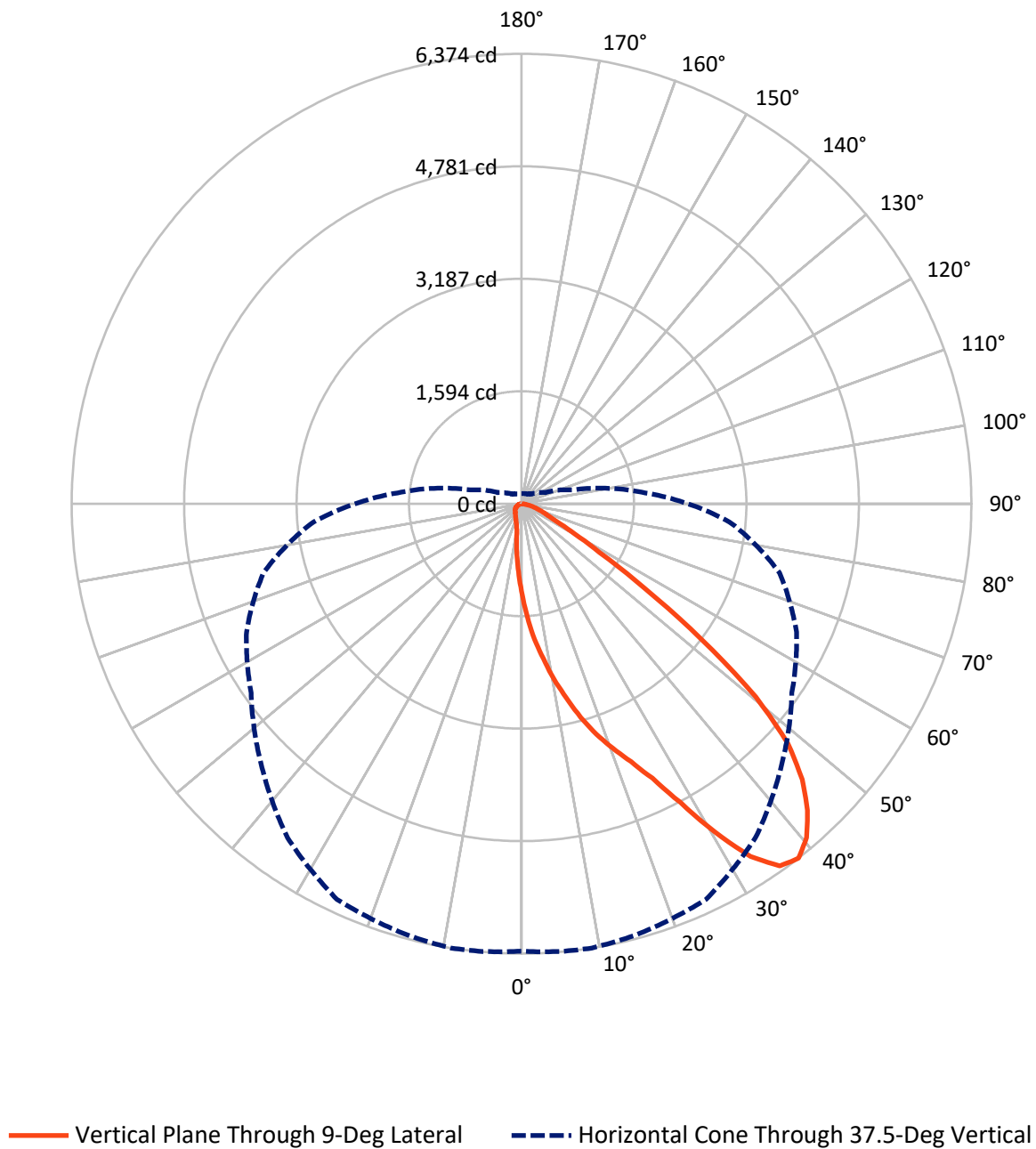


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
Type II - Short - N/A

REPORT NUMBER: P799410

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## Luminous Intensity Polar Plot



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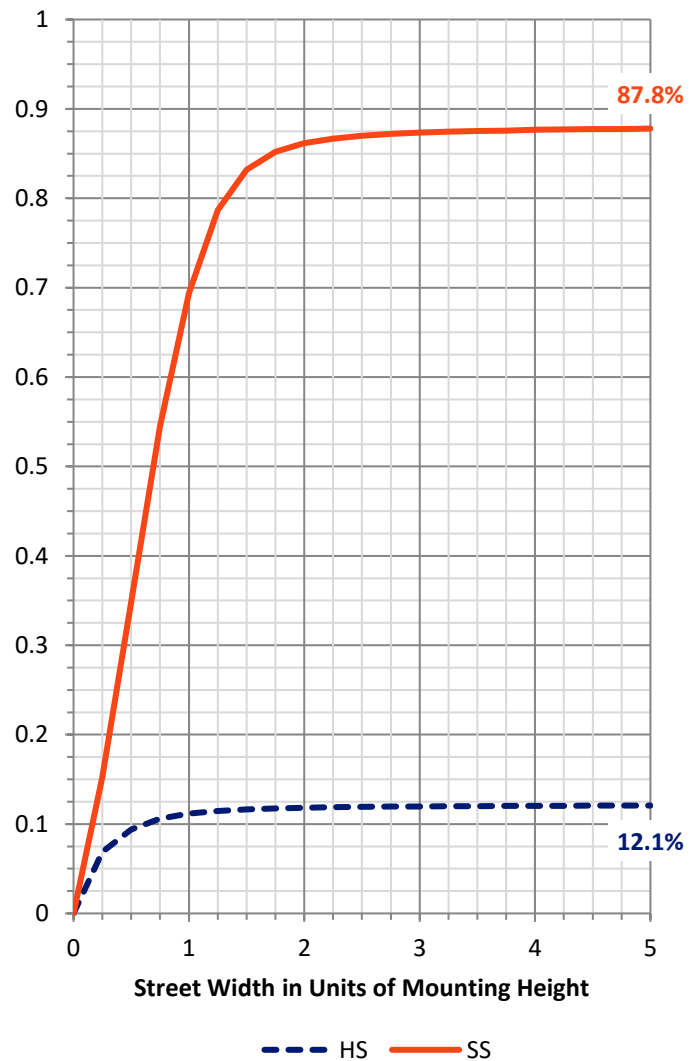
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1189.2   | 0.0    | 1189.2 |
|                    | % Fixture | 12.2     | 0.0    | 12.2   |
| <b>Street Side</b> | Lumens    | 8588.8   | 0.0    | 8588.8 |
|                    | % Fixture | 87.8     | 0.0    | 87.8   |
| <b>Total</b>       | Lumens    | 9778.0   | 0.0    | 9778.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 129.9  | 1.3       |
| 10°-20°   | 451.6  | 4.6       |
| 20°-30°   | 927.9  | 9.5       |
| 30°-40°   | 1640.0 | 16.8      |
| 40°-50°   | 2178.7 | 22.3      |
| 50°-60°   | 2066.3 | 21.1      |
| 60°-70°   | 1576.4 | 16.1      |
| 70°-80°   | 764.2  | 7.8       |
| 80°-90°   | 43.0   | 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°    | 9778.0 | 100.0     |
| 0°-180°   | 9778.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P799410

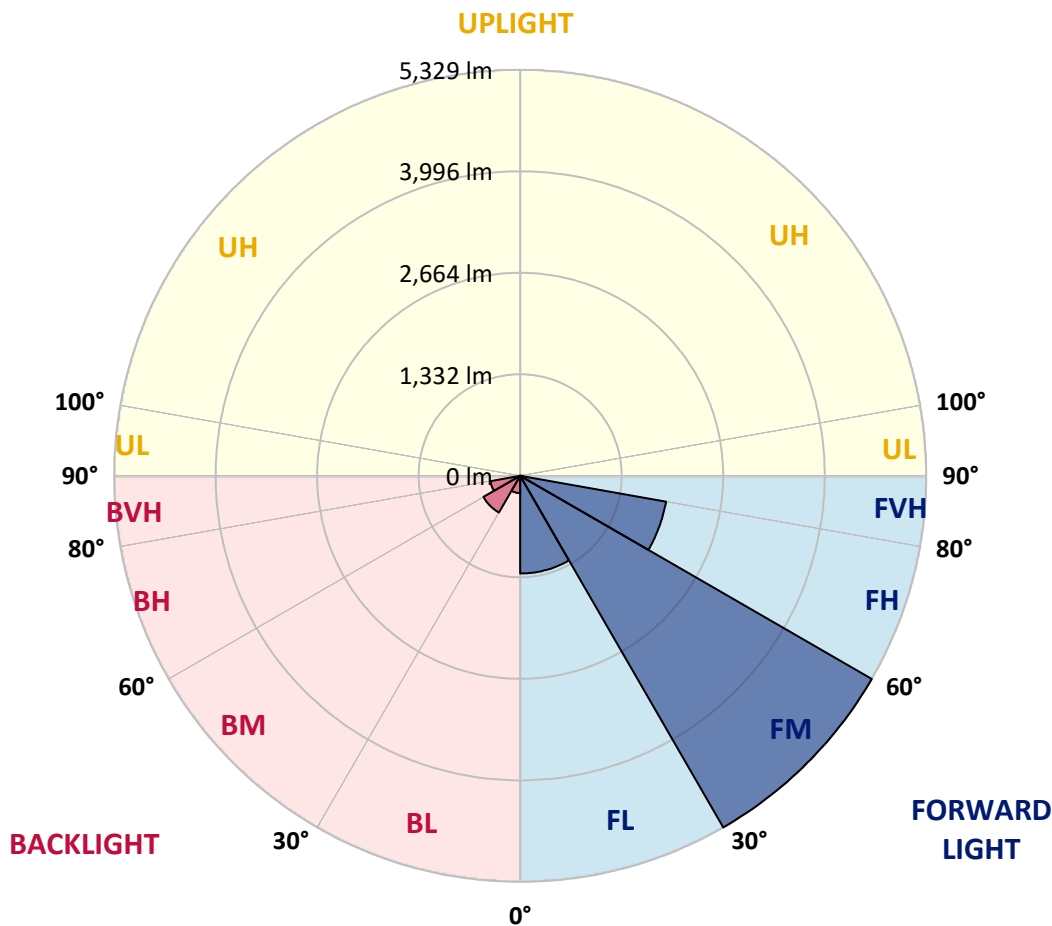
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1282.4 | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 5328.5 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 1943.8 | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 34.1   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 226.9  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 556.5  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 396.8  | 4.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 9.0    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type II Short



REPORT NUMBER: P799410

CATALOG NUMBER: ARCH2-110-740-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 9°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 |
| 2.5°  | 1601.6 | 1573.5 | 1605.6 | 1601.6 | 1573.5 | 1555.5 | 1499.3 | 1481.2 | 1415.0 | 1366.8 | 1324.6 |
| 5°    | 1930.8 | 1902.7 | 1930.8 | 1922.7 | 1882.6 | 1838.4 | 1746.1 | 1685.9 | 1567.5 | 1463.1 | 1368.8 |
| 7.5°  | 2203.7 | 2203.7 | 2215.8 | 2217.8 | 2169.6 | 2101.4 | 1987.0 | 1896.7 | 1730.1 | 1569.5 | 1419.0 |
| 10°   | 2498.8 | 2500.8 | 2526.9 | 2508.8 | 2444.6 | 2352.3 | 2207.7 | 2093.3 | 1892.6 | 1681.9 | 1467.1 |
| 12.5° | 2813.9 | 2815.9 | 2823.9 | 2815.9 | 2739.6 | 2621.2 | 2446.6 | 2296.1 | 2065.2 | 1810.3 | 1533.4 |
| 15°   | 3129.0 | 3131.0 | 3141.0 | 3127.0 | 3042.7 | 2904.2 | 2705.5 | 2520.8 | 2247.9 | 1954.9 | 1613.7 |
| 17.5° | 3424.0 | 3428.0 | 3436.1 | 3418.0 | 3329.7 | 3165.1 | 2962.4 | 2739.6 | 2442.6 | 2109.4 | 1704.0 |
| 20°   | 3688.9 | 3693.0 | 3699.0 | 3674.9 | 3586.6 | 3422.0 | 3203.2 | 2970.4 | 2641.3 | 2268.0 | 1802.3 |
| 22.5° | 3955.9 | 3959.9 | 3969.9 | 3937.8 | 3839.5 | 3650.8 | 3436.1 | 3195.2 | 2852.0 | 2442.6 | 1916.7 |
| 25°   | 4297.1 | 4301.1 | 4309.1 | 4263.0 | 4128.5 | 3907.7 | 3680.9 | 3434.0 | 3080.8 | 2639.3 | 2057.2 |
| 27.5° | 4796.8 | 4792.8 | 4792.8 | 4708.5 | 4477.7 | 4190.7 | 3927.8 | 3676.9 | 3327.7 | 2850.0 | 2211.8 |
| 30°   | 5415.0 | 5405.0 | 5398.9 | 5284.5 | 4955.4 | 4509.8 | 4180.7 | 3903.7 | 3564.5 | 3072.8 | 2378.3 |
| 32.5° | 5968.9 | 5968.9 | 5956.9 | 5836.5 | 5487.2 | 4939.3 | 4449.6 | 4124.5 | 3793.3 | 3297.6 | 2550.9 |
| 35°   | 6296.1 | 6310.1 | 6304.1 | 6213.8 | 5958.9 | 5400.9 | 4812.9 | 4389.4 | 4034.1 | 3532.4 | 2757.7 |
| 37.5° | 6340.2 | 6368.3 | 6374.4 | 6320.2 | 6185.7 | 5778.3 | 5216.3 | 4676.4 | 4299.1 | 3785.3 | 2958.4 |
| 40°   | 6161.6 | 6221.8 | 6221.8 | 6213.8 | 6165.6 | 5956.9 | 5555.5 | 5009.6 | 4572.0 | 4048.2 | 3161.1 |
| 42.5° | 5886.6 | 5948.9 | 5940.8 | 5970.9 | 5958.9 | 5914.7 | 5746.2 | 5320.7 | 4845.0 | 4319.1 | 3345.7 |
| 45°   | 5527.4 | 5591.6 | 5575.6 | 5629.7 | 5653.8 | 5702.0 | 5726.1 | 5537.4 | 5113.9 | 4614.2 | 3552.5 |
| 47.5° | 4951.4 | 5059.7 | 5083.8 | 5180.2 | 5280.5 | 5431.0 | 5545.4 | 5615.7 | 5364.8 | 4931.3 | 3777.2 |
| 50°   | 4100.4 | 4252.9 | 4301.1 | 4503.8 | 4778.8 | 5089.9 | 5274.5 | 5519.4 | 5541.4 | 5256.4 | 4020.1 |
| 52.5° | 2936.3 | 3112.9 | 3187.2 | 3520.3 | 4086.3 | 4628.2 | 4961.4 | 5306.6 | 5609.7 | 5567.5 | 4283.0 |
| 55°   | 1898.7 | 2049.2 | 2121.4 | 2434.5 | 3187.2 | 4038.2 | 4592.1 | 5031.6 | 5571.5 | 5852.5 | 4584.1 |
| 57.5° | 1170.1 | 1256.4 | 1304.6 | 1573.5 | 2265.9 | 3281.5 | 4108.4 | 4778.8 | 5455.1 | 6099.4 | 4897.2 |
| 60°   | 788.8  | 838.9  | 863.0  | 989.5  | 1539.4 | 2452.6 | 3444.1 | 4513.8 | 5302.6 | 6266.0 | 5182.2 |
| 62.5° | 523.8  | 539.9  | 564.0  | 642.3  | 1015.6 | 1722.0 | 2645.3 | 4040.2 | 5188.2 | 6276.0 | 5392.9 |
| 65°   | 405.4  | 413.5  | 423.5  | 457.6  | 626.2  | 1204.2 | 1860.5 | 3273.5 | 5017.6 | 6063.3 | 5459.1 |
| 67.5° | 319.1  | 327.1  | 339.2  | 357.3  | 453.6  | 816.9  | 1266.4 | 2398.4 | 4668.4 | 5730.1 | 5350.8 |
| 70°   | 250.9  | 256.9  | 264.9  | 281.0  | 353.2  | 592.1  | 836.9  | 1593.6 | 3963.9 | 5413.0 | 5009.6 |
| 72.5° | 198.7  | 204.7  | 212.7  | 228.8  | 287.0  | 433.5  | 574.0  | 993.5  | 3056.7 | 5025.6 | 4353.3 |
| 75°   | 156.5  | 160.6  | 166.6  | 182.6  | 230.8  | 337.2  | 389.4  | 594.1  | 2077.3 | 4317.1 | 3391.9 |
| 77.5° | 78.3   | 96.3   | 110.4  | 126.4  | 168.6  | 232.8  | 258.9  | 329.2  | 877.1  | 2215.8 | 1617.7 |
| 80°   | 46.2   | 56.2   | 60.2   | 70.2   | 110.4  | 140.5  | 140.5  | 132.5  | 277.0  | 851.0  | 660.3  |
| 82.5° | 26.1   | 36.1   | 38.1   | 40.1   | 66.2   | 80.3   | 64.2   | 48.2   | 56.2   | 285.0  | 192.7  |
| 85°   | 8.0    | 12.0   | 14.0   | 16.1   | 22.1   | 24.1   | 22.1   | 20.1   | 16.1   | 28.1   | 18.1   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 2.0    | 4.0    | 4.0    | 4.0    | 6.0    | 6.0    | 6.0    |
| 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: P799410

CATALOG NUMBER: ARCH2-110-740-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 | 1292.5 |
| 2.5°  | 1300.6 | 1274.5 | 1224.3 | 1178.1 | 1134.0 | 1101.9 | 1071.8 | 1043.7 | 1023.6 | 1007.5 | 1005.5 |
| 5°    | 1318.6 | 1266.4 | 1170.1 | 1079.8 | 997.5  | 929.3  | 871.1  | 824.9  | 790.8  | 766.7  | 764.7  |
| 7.5°  | 1342.7 | 1262.4 | 1115.9 | 981.4  | 859.0  | 760.7  | 676.4  | 614.2  | 570.0  | 551.9  | 537.9  |
| 10°   | 1362.8 | 1258.4 | 1061.7 | 883.1  | 722.5  | 598.1  | 497.7  | 435.5  | 403.4  | 391.4  | 385.4  |
| 12.5° | 1396.9 | 1262.4 | 1015.6 | 792.8  | 604.1  | 457.6  | 381.3  | 347.2  | 333.2  | 323.1  | 321.1  |
| 15°   | 1447.1 | 1280.5 | 971.4  | 704.5  | 483.7  | 369.3  | 325.1  | 303.1  | 289.0  | 287.0  | 285.0  |
| 17.5° | 1497.3 | 1296.5 | 931.3  | 614.2  | 401.4  | 321.1  | 291.0  | 273.0  | 262.9  | 260.9  | 260.9  |
| 20°   | 1555.5 | 1316.6 | 887.1  | 527.9  | 343.2  | 289.0  | 264.9  | 250.9  | 238.8  | 236.8  | 236.8  |
| 22.5° | 1623.7 | 1344.7 | 845.0  | 451.6  | 305.1  | 264.9  | 244.9  | 228.8  | 218.8  | 216.8  | 216.8  |
| 25°   | 1716.0 | 1386.9 | 810.8  | 395.4  | 279.0  | 244.9  | 226.8  | 212.7  | 204.7  | 200.7  | 200.7  |
| 27.5° | 1818.4 | 1445.1 | 786.8  | 361.3  | 260.9  | 228.8  | 210.7  | 198.7  | 190.7  | 186.7  | 186.7  |
| 30°   | 1932.8 | 1509.3 | 770.7  | 347.2  | 250.9  | 214.8  | 198.7  | 186.7  | 176.6  | 174.6  | 174.6  |
| 32.5° | 2059.2 | 1583.6 | 760.7  | 349.2  | 248.9  | 204.7  | 186.7  | 174.6  | 166.6  | 162.6  | 162.6  |
| 35°   | 2199.7 | 1665.8 | 754.6  | 361.3  | 252.9  | 196.7  | 176.6  | 164.6  | 156.5  | 152.5  | 152.5  |
| 37.5° | 2356.3 | 1762.2 | 754.6  | 373.3  | 262.9  | 194.7  | 166.6  | 154.5  | 148.5  | 144.5  | 144.5  |
| 40°   | 2502.8 | 1864.5 | 762.7  | 387.4  | 273.0  | 194.7  | 158.6  | 148.5  | 140.5  | 136.5  | 136.5  |
| 42.5° | 2617.2 | 1922.7 | 768.7  | 401.4  | 279.0  | 192.7  | 150.5  | 140.5  | 134.5  | 130.5  | 130.5  |
| 45°   | 2747.6 | 1985.0 | 756.7  | 407.4  | 279.0  | 188.7  | 144.5  | 134.5  | 128.5  | 124.4  | 124.4  |
| 47.5° | 2892.1 | 2061.2 | 754.6  | 411.4  | 273.0  | 180.6  | 138.5  | 128.5  | 124.4  | 120.4  | 120.4  |
| 50°   | 3038.7 | 2145.5 | 758.7  | 409.4  | 264.9  | 168.6  | 130.5  | 124.4  | 118.4  | 114.4  | 114.4  |
| 52.5° | 3205.2 | 2233.8 | 766.7  | 405.4  | 246.9  | 154.5  | 124.4  | 118.4  | 112.4  | 108.4  | 106.4  |
| 55°   | 3389.9 | 2330.2 | 782.7  | 397.4  | 222.8  | 140.5  | 118.4  | 112.4  | 104.4  | 100.4  | 98.3   |
| 57.5° | 3602.6 | 2448.6 | 800.8  | 381.3  | 196.7  | 128.5  | 112.4  | 104.4  | 92.3   | 86.3   | 84.3   |
| 60°   | 3805.3 | 2583.1 | 820.9  | 343.2  | 170.6  | 116.4  | 106.4  | 94.3   | 82.3   | 78.3   | 76.3   |
| 62.5° | 3996.0 | 2715.5 | 830.9  | 275.0  | 144.5  | 106.4  | 100.4  | 86.3   | 74.3   | 70.2   | 68.2   |
| 65°   | 4118.4 | 2860.0 | 808.8  | 186.7  | 118.4  | 98.3   | 92.3   | 80.3   | 68.2   | 62.2   | 62.2   |
| 67.5° | 4126.5 | 2928.3 | 732.6  | 122.4  | 96.3   | 88.3   | 84.3   | 72.3   | 60.2   | 56.2   | 54.2   |
| 70°   | 3923.8 | 2825.9 | 560.0  | 96.3   | 80.3   | 76.3   | 76.3   | 64.2   | 52.2   | 48.2   | 46.2   |
| 72.5° | 3458.1 | 2502.8 | 357.3  | 78.3   | 68.2   | 64.2   | 64.2   | 54.2   | 46.2   | 40.1   | 38.1   |
| 75°   | 2729.6 | 1930.8 | 190.7  | 64.2   | 56.2   | 54.2   | 50.2   | 44.2   | 38.1   | 34.1   | 32.1   |
| 77.5° | 1254.4 | 851.0  | 88.3   | 46.2   | 42.1   | 42.1   | 38.1   | 32.1   | 30.1   | 26.1   | 26.1   |
| 80°   | 495.7  | 289.0  | 44.2   | 30.1   | 28.1   | 28.1   | 28.1   | 22.1   | 22.1   | 18.1   | 16.1   |
| 82.5° | 136.5  | 60.2   | 22.1   | 18.1   | 18.1   | 18.1   | 16.1   | 14.0   | 14.0   | 12.0   | 12.0   |
| 85°   | 14.0   | 10.0   | 10.0   | 10.0   | 10.0   | 8.0    | 8.0    | 6.0    | 4.0    | 4.0    | 4.0    |
| 87.5° | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 4.0    | 2.0    | 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)