

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: P800072

Luminaire Tested: **ARCH2-70-750-U-T4W-HSS**

Issue Date: 4/4/2024

#### Test Information

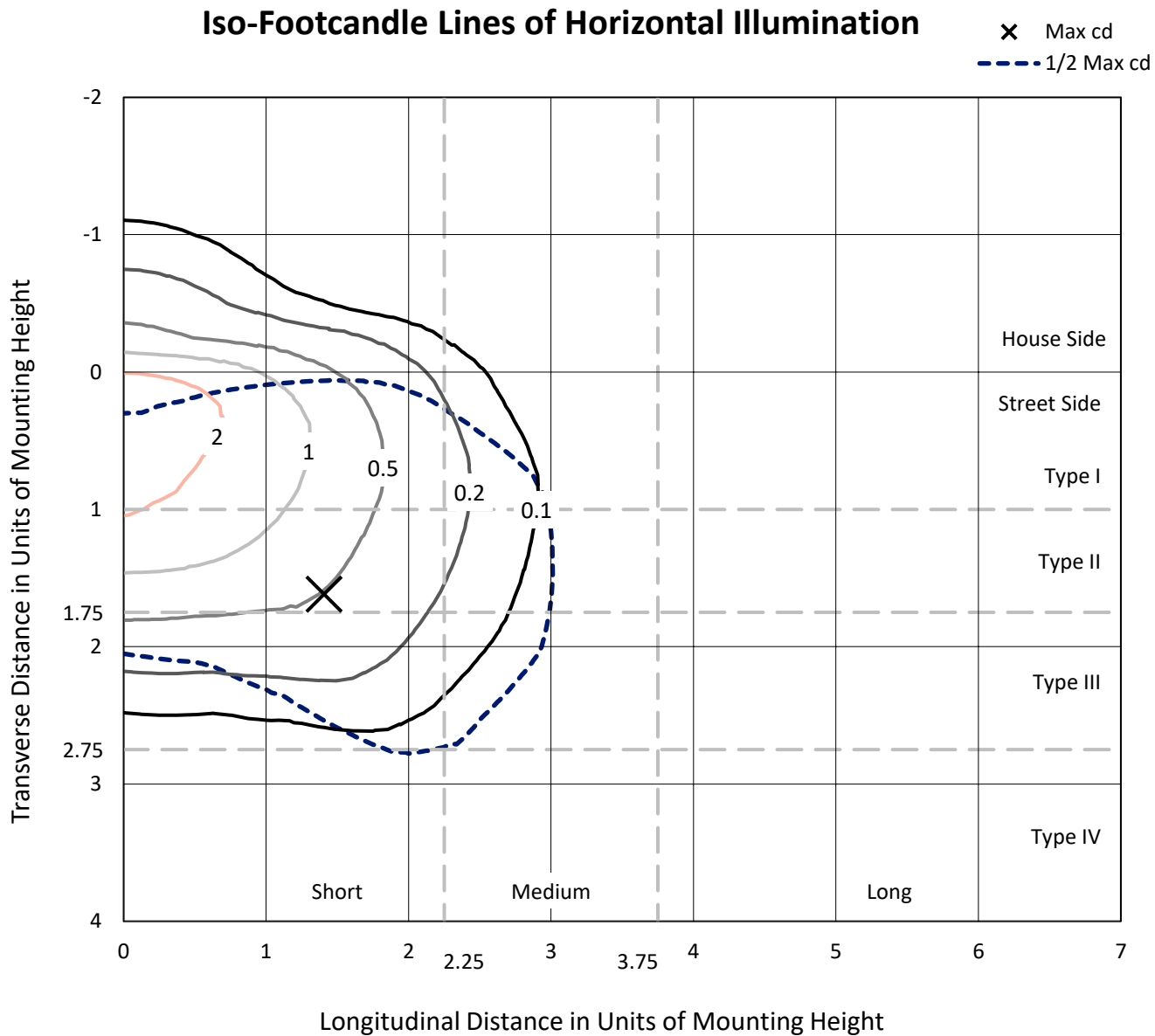
Test Method: LM-79-08  
Report Number: P800072  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-70-750-U-T4W-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 555mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7238 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.6  
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



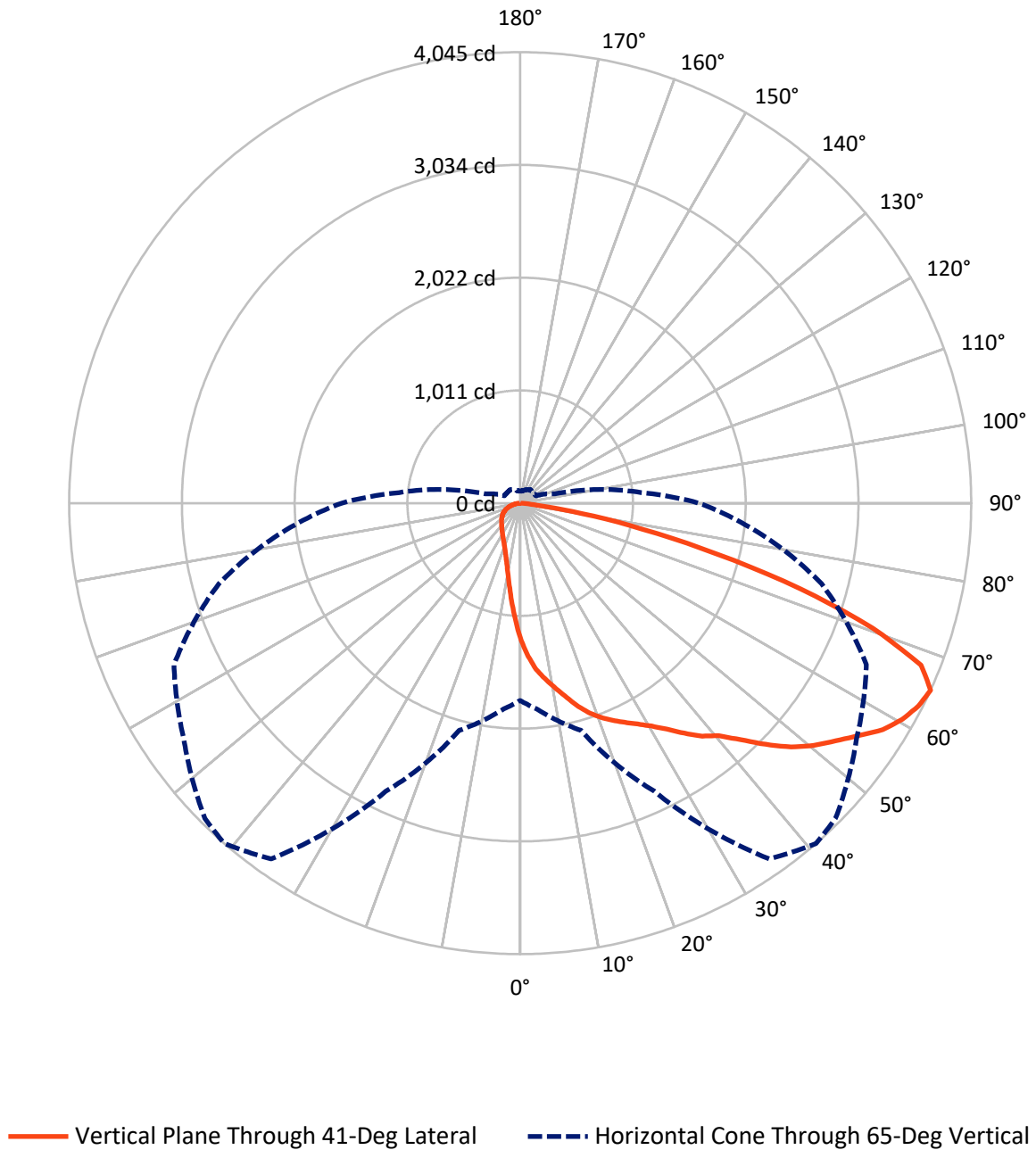
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CATALOG NUMBER: ARCH2-70-750-U-T4W-HSS



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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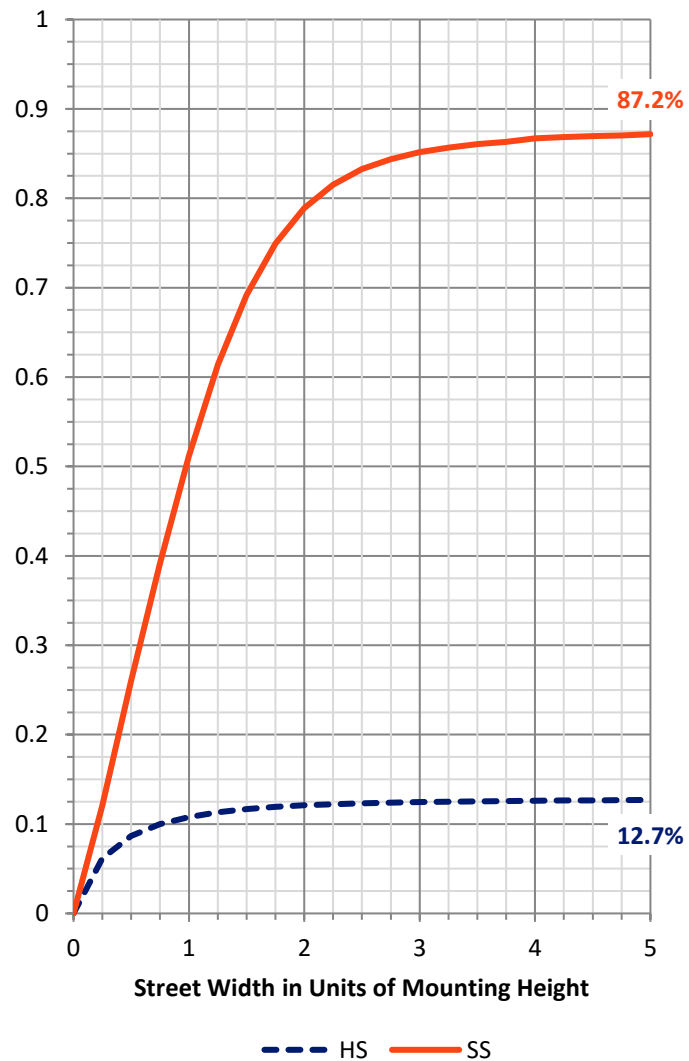
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 929.2    | 0.0    | 929.2  |
|                    | % Fixture | 12.8     | 0.0    | 12.8   |
| <b>Street Side</b> | Lumens    | 6308.8   | 0.0    | 6308.8 |
|                    | % Fixture | 87.2     | 0.0    | 87.2   |
| <b>Total</b>       | Lumens    | 7238.0   | 0.0    | 7238.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 114.9  | 1.6       |
| 10°-20°   | 344.6  | 4.8       |
| 20°-30°   | 592.8  | 8.2       |
| 30°-40°   | 899.1  | 12.4      |
| 40°-50°   | 1317.1 | 18.2      |
| 50°-60°   | 1663.3 | 23.0      |
| 60°-70°   | 1559.6 | 21.5      |
| 70°-80°   | 695.1  | 9.6       |
| 80°-90°   | 51.5   | 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°    | 7238.0 | 100.0     |
| 0°-180°   | 7238.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P800072

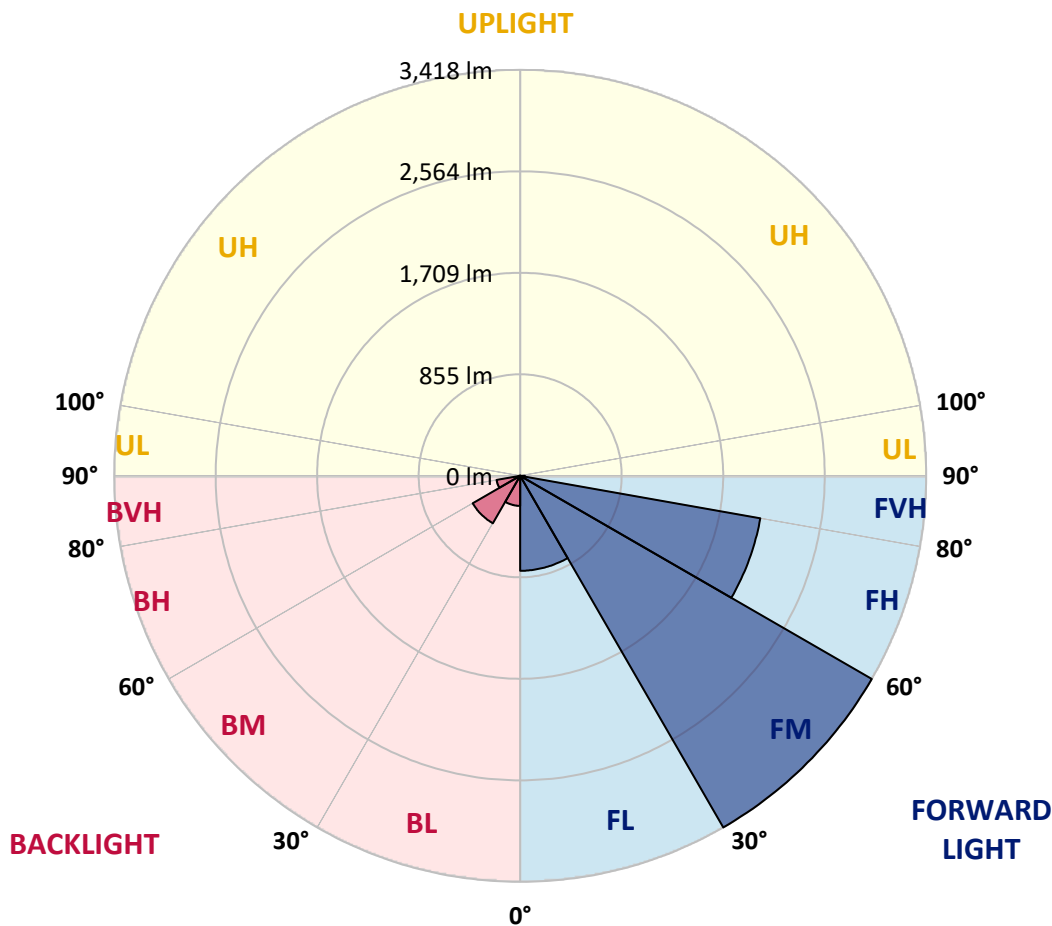
CATALOG NUMBER: ARCH2-70-750-U-T4W-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 799.3  | 11.0      |                         |      |         |
| FM   | (30°-60°)   | 3418.1 | 47.2      |                         |      |         |
| FH   | (60°-80°)   | 2052.9 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 38.5   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 252.9  | 3.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 461.4  | 6.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 201.9  | 2.8       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 13.0   | 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



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CATALOG NUMBER: ARCH2-70-750-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 41°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 |
| 2.5°  | 1422.6 | 1418.0 | 1415.0 | 1398.2 | 1398.2 | 1375.3 | 1376.8 | 1355.4 | 1329.5 | 1288.3 | 1244.0 |
| 5°    | 1556.9 | 1550.8 | 1543.2 | 1526.4 | 1520.3 | 1497.4 | 1494.3 | 1463.8 | 1419.5 | 1347.8 | 1268.4 |
| 7.5°  | 1674.4 | 1668.3 | 1657.7 | 1633.2 | 1616.4 | 1589.0 | 1581.3 | 1541.6 | 1492.8 | 1404.3 | 1292.8 |
| 10°   | 1781.3 | 1776.7 | 1763.0 | 1732.4 | 1709.5 | 1676.0 | 1662.2 | 1608.8 | 1547.8 | 1450.1 | 1312.7 |
| 12.5° | 1889.7 | 1883.6 | 1865.2 | 1839.3 | 1811.8 | 1772.1 | 1755.3 | 1686.7 | 1608.8 | 1500.4 | 1341.7 |
| 15°   | 1990.4 | 1981.2 | 1967.5 | 1940.0 | 1915.6 | 1877.5 | 1859.1 | 1778.2 | 1683.6 | 1556.9 | 1379.9 |
| 17.5° | 2056.0 | 2048.4 | 2036.2 | 2020.9 | 2001.1 | 1972.1 | 1953.8 | 1874.4 | 1758.4 | 1611.9 | 1419.5 |
| 20°   | 2095.7 | 2092.7 | 2088.1 | 2078.9 | 2069.8 | 2049.9 | 2036.2 | 1961.4 | 1839.3 | 1665.3 | 1457.7 |
| 22.5° | 2126.3 | 2123.2 | 2121.7 | 2121.7 | 2123.2 | 2115.6 | 2106.4 | 2042.3 | 1917.1 | 1721.8 | 1492.8 |
| 25°   | 2173.6 | 2172.0 | 2169.0 | 2165.9 | 2176.6 | 2178.1 | 2175.1 | 2130.8 | 2014.8 | 1796.6 | 1537.1 |
| 27.5° | 2239.2 | 2234.6 | 2228.5 | 2225.5 | 2236.2 | 2243.8 | 2249.9 | 2219.4 | 2118.6 | 1872.9 | 1587.4 |
| 30°   | 2339.9 | 2326.2 | 2310.9 | 2300.3 | 2307.9 | 2320.1 | 2333.8 | 2315.5 | 2225.5 | 1967.5 | 1639.3 |
| 32.5° | 2459.0 | 2442.2 | 2407.1 | 2387.3 | 2407.1 | 2416.3 | 2426.9 | 2417.8 | 2336.9 | 2069.8 | 1691.2 |
| 35°   | 2604.0 | 2584.2 | 2547.5 | 2518.5 | 2553.6 | 2533.8 | 2529.2 | 2520.1 | 2442.2 | 2170.5 | 1749.2 |
| 37.5° | 2845.2 | 2816.2 | 2758.2 | 2694.1 | 2694.1 | 2651.3 | 2634.5 | 2607.1 | 2536.8 | 2260.6 | 1805.7 |
| 40°   | 3124.5 | 3086.3 | 3011.6 | 2916.9 | 2829.9 | 2741.4 | 2730.7 | 2710.9 | 2648.3 | 2364.4 | 1869.8 |
| 42.5° | 3431.3 | 3358.0 | 3254.2 | 3139.8 | 2999.3 | 2898.6 | 2874.2 | 2817.7 | 2756.6 | 2469.7 | 1933.9 |
| 45°   | 3771.7 | 3619.1 | 3467.9 | 3409.9 | 3177.9 | 3086.3 | 3040.6 | 2938.3 | 2869.6 | 2579.6 | 2001.1 |
| 47.5° | 3826.6 | 3707.6 | 3606.8 | 3597.7 | 3344.3 | 3268.0 | 3216.1 | 3069.6 | 2991.7 | 2697.1 | 2071.3 |
| 50°   | 3796.1 | 3724.4 | 3735.1 | 3698.4 | 3466.4 | 3416.0 | 3376.4 | 3210.0 | 3112.3 | 2810.1 | 2135.4 |
| 52.5° | 3667.9 | 3707.6 | 3768.6 | 3701.5 | 3582.4 | 3541.2 | 3521.4 | 3361.1 | 3225.2 | 2913.9 | 2193.4 |
| 55°   | 3515.3 | 3542.7 | 3674.0 | 3756.4 | 3716.7 | 3680.1 | 3661.8 | 3536.6 | 3336.7 | 3000.9 | 2246.8 |
| 57.5° | 3292.4 | 3280.2 | 3425.2 | 3747.3 | 3857.2 | 3835.8 | 3816.0 | 3709.1 | 3440.5 | 3063.5 | 2280.4 |
| 60°   | 2958.1 | 2932.2 | 3115.3 | 3564.1 | 3903.0 | 3936.5 | 3927.4 | 3823.6 | 3519.8 | 3061.9 | 2266.7 |
| 62.5° | 2379.6 | 2443.7 | 2697.1 | 3264.9 | 3922.8 | 4008.3 | 3991.5 | 3832.7 | 3545.8 | 2973.4 | 2179.7 |
| 65°   | 1769.1 | 1860.7 | 2109.5 | 2852.8 | 3895.3 | 4044.9 | 3999.1 | 3683.2 | 3425.2 | 2797.9 | 1988.9 |
| 67.5° | 1274.5 | 1355.4 | 1537.1 | 2347.6 | 3631.3 | 3877.0 | 3823.6 | 3438.9 | 3147.4 | 2549.1 | 1724.8 |
| 70°   | 871.6  | 929.6  | 1053.2 | 1709.5 | 3100.1 | 3351.9 | 3318.4 | 3074.1 | 2709.3 | 2252.9 | 1401.2 |
| 72.5° | 615.1  | 639.6  | 718.9  | 1128.0 | 2355.2 | 2630.0 | 2590.3 | 2529.2 | 2176.6 | 1872.9 | 1089.8 |
| 75°   | 461.0  | 476.2  | 519.0  | 729.6  | 1589.0 | 1822.5 | 1785.9 | 1821.0 | 1625.6 | 1418.0 | 793.7  |
| 77.5° | 174.0  | 189.3  | 294.6  | 465.5  | 940.3  | 1118.8 | 1082.2 | 1103.6 | 903.6  | 715.9  | 395.3  |
| 80°   | 47.3   | 50.4   | 97.7   | 221.3  | 427.4  | 557.1  | 506.8  | 435.0  | 335.8  | 329.7  | 209.1  |
| 82.5° | 19.8   | 22.9   | 44.3   | 119.1  | 152.6  | 152.6  | 128.2  | 158.7  | 128.2  | 154.2  | 100.7  |
| 85°   | 7.6    | 9.2    | 10.7   | 30.5   | 19.8   | 21.4   | 22.9   | 30.5   | 25.9   | 32.1   | 22.9   |
| 87.5° | 0.0    | 0.0    | 0.0    | 1.5    | 1.5    | 3.1    | 1.5    | 3.1    | 4.6    | 4.6    | 4.6    |
| 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: P800072

CATALOG NUMBER: ARCH2-70-750-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 | 1233.3 |
| 2.5°  | 1225.7 | 1208.9 | 1184.5 | 1144.8 | 1103.6 | 1080.7 | 1051.7 | 1047.1 | 1016.6 | 1013.5 | 1001.3 |
| 5°    | 1233.3 | 1198.2 | 1135.6 | 1059.3 | 984.5  | 926.5  | 883.8  | 860.9  | 816.6  | 816.6  | 804.4  |
| 7.5°  | 1239.4 | 1184.5 | 1083.7 | 970.8  | 868.5  | 790.7  | 732.7  | 708.2  | 668.6  | 665.5  | 656.3  |
| 10°   | 1240.9 | 1167.7 | 1027.3 | 880.7  | 755.6  | 676.2  | 619.7  | 592.2  | 557.1  | 554.1  | 548.0  |
| 12.5° | 1253.2 | 1158.5 | 976.9  | 802.9  | 674.7  | 589.2  | 534.2  | 511.3  | 483.9  | 480.8  | 474.7  |
| 15°   | 1273.0 | 1158.5 | 934.1  | 737.2  | 602.9  | 523.5  | 476.2  | 454.9  | 435.0  | 432.0  | 428.9  |
| 17.5° | 1292.8 | 1155.5 | 891.4  | 676.2  | 543.4  | 471.7  | 430.4  | 413.6  | 398.4  | 396.9  | 393.8  |
| 20°   | 1311.2 | 1153.9 | 848.7  | 624.3  | 497.6  | 428.9  | 396.9  | 381.6  | 369.4  | 369.4  | 367.9  |
| 22.5° | 1329.5 | 1150.9 | 807.5  | 575.4  | 457.9  | 396.9  | 369.4  | 352.6  | 343.4  | 343.4  | 341.9  |
| 25°   | 1357.0 | 1150.9 | 769.3  | 534.2  | 425.9  | 372.4  | 345.0  | 332.8  | 325.1  | 323.6  | 323.6  |
| 27.5° | 1389.0 | 1160.1 | 735.7  | 497.6  | 398.4  | 348.0  | 326.6  | 314.4  | 305.3  | 302.2  | 303.8  |
| 30°   | 1424.1 | 1167.7 | 705.2  | 465.5  | 372.4  | 329.7  | 306.8  | 294.6  | 285.4  | 282.4  | 283.9  |
| 32.5° | 1459.2 | 1176.8 | 677.7  | 436.5  | 346.5  | 312.9  | 290.0  | 276.3  | 267.1  | 265.6  | 265.6  |
| 35°   | 1497.4 | 1186.0 | 650.2  | 412.1  | 325.1  | 296.1  | 274.7  | 259.5  | 253.4  | 250.3  | 251.9  |
| 37.5° | 1535.5 | 1201.3 | 624.3  | 389.2  | 309.9  | 280.9  | 261.0  | 245.7  | 241.2  | 239.6  | 239.6  |
| 40°   | 1581.3 | 1224.2 | 613.6  | 374.0  | 296.1  | 267.1  | 250.3  | 235.1  | 230.5  | 230.5  | 230.5  |
| 42.5° | 1619.5 | 1242.5 | 604.4  | 357.2  | 285.4  | 254.9  | 239.6  | 227.4  | 224.4  | 222.9  | 224.4  |
| 45°   | 1657.7 | 1259.3 | 592.2  | 341.9  | 271.7  | 242.7  | 230.5  | 218.3  | 215.2  | 215.2  | 215.2  |
| 47.5° | 1695.8 | 1268.4 | 575.4  | 326.6  | 259.5  | 232.0  | 221.3  | 210.6  | 207.6  | 207.6  | 207.6  |
| 50°   | 1726.3 | 1276.1 | 551.0  | 309.9  | 245.7  | 222.9  | 212.2  | 201.5  | 198.4  | 198.4  | 198.4  |
| 52.5° | 1756.9 | 1277.6 | 525.1  | 290.0  | 232.0  | 212.2  | 203.0  | 192.3  | 189.3  | 187.7  | 187.7  |
| 55°   | 1784.3 | 1276.1 | 494.5  | 267.1  | 216.7  | 200.0  | 192.3  | 183.2  | 177.1  | 171.0  | 174.0  |
| 57.5° | 1804.2 | 1274.5 | 459.4  | 244.2  | 201.5  | 187.7  | 184.7  | 172.5  | 160.3  | 145.0  | 148.1  |
| 60°   | 1796.6 | 1257.7 | 421.3  | 215.2  | 184.7  | 175.5  | 175.5  | 158.7  | 137.4  | 129.7  | 131.3  |
| 62.5° | 1747.7 | 1210.4 | 381.6  | 184.7  | 167.9  | 163.3  | 161.8  | 143.5  | 126.7  | 119.1  | 120.6  |
| 65°   | 1601.2 | 1091.4 | 323.6  | 157.2  | 151.1  | 149.6  | 149.6  | 132.8  | 117.5  | 108.4  | 109.9  |
| 67.5° | 1378.3 | 915.8  | 264.1  | 132.8  | 134.3  | 137.4  | 137.4  | 122.1  | 106.8  | 97.7   | 99.2   |
| 70°   | 1105.1 | 715.9  | 210.6  | 114.5  | 116.0  | 120.6  | 123.6  | 109.9  | 96.2   | 87.0   | 87.0   |
| 72.5° | 831.9  | 543.4  | 169.4  | 96.2   | 103.8  | 103.8  | 108.4  | 97.7   | 84.0   | 74.8   | 76.3   |
| 75°   | 602.9  | 389.2  | 134.3  | 80.9   | 90.1   | 88.5   | 88.5   | 82.4   | 71.7   | 65.6   | 65.6   |
| 77.5° | 285.4  | 204.5  | 106.8  | 58.0   | 70.2   | 68.7   | 70.2   | 65.6   | 61.1   | 54.9   | 56.5   |
| 80°   | 140.4  | 100.7  | 68.7   | 41.2   | 48.8   | 50.4   | 54.9   | 51.9   | 50.4   | 45.8   | 45.8   |
| 82.5° | 67.2   | 39.7   | 32.1   | 29.0   | 33.6   | 35.1   | 38.2   | 38.2   | 39.7   | 36.6   | 36.6   |
| 85°   | 18.3   | 10.7   | 13.7   | 18.3   | 21.4   | 22.9   | 25.9   | 27.5   | 27.5   | 25.9   | 27.5   |
| 87.5° | 4.6    | 4.6    | 6.1    | 9.2    | 10.7   | 12.2   | 13.7   | 13.7   | 6.1    | 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)