

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: P237464

Luminaire Tested: **ARCH-L-AF72-110-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-110-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11094 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

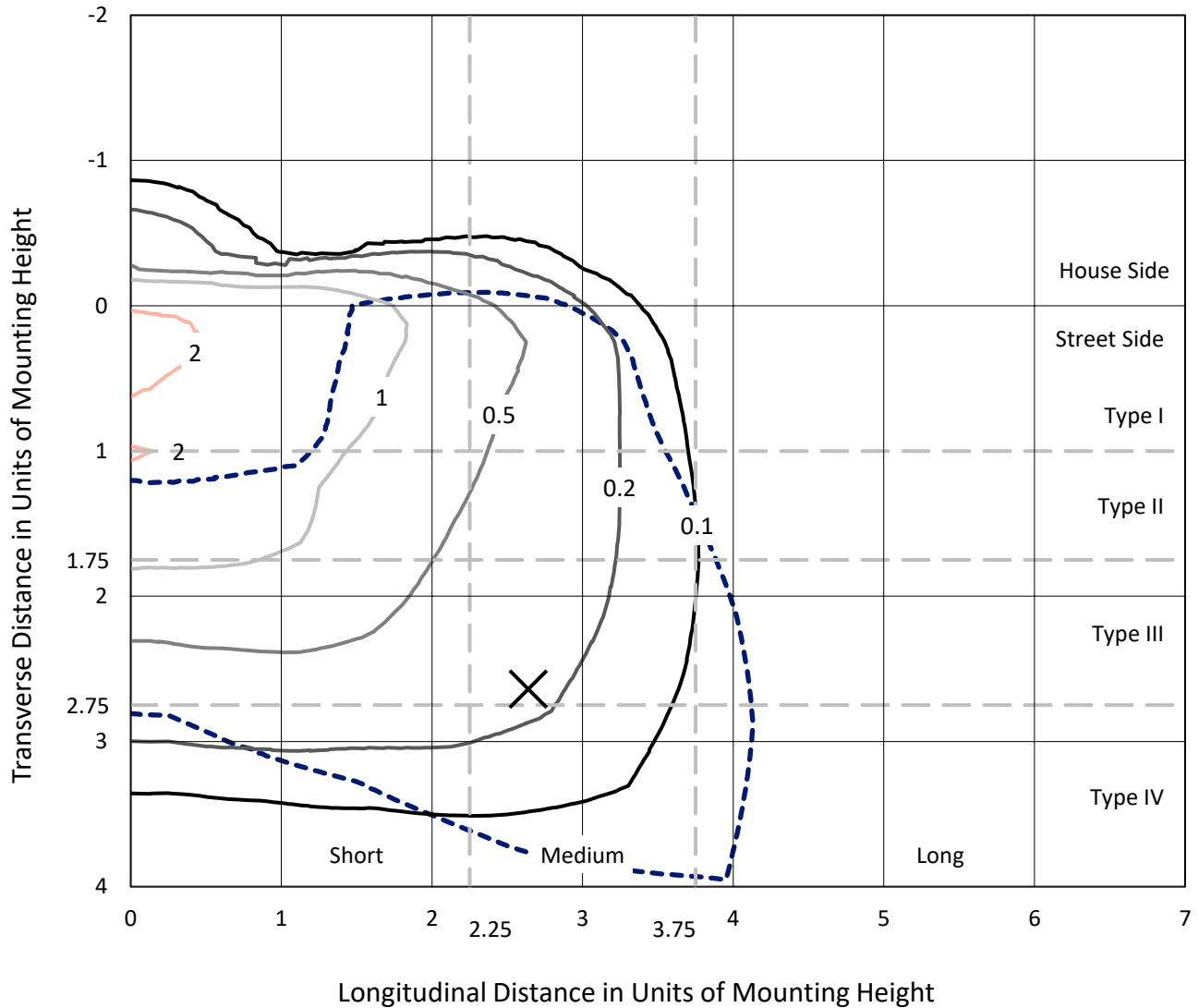
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

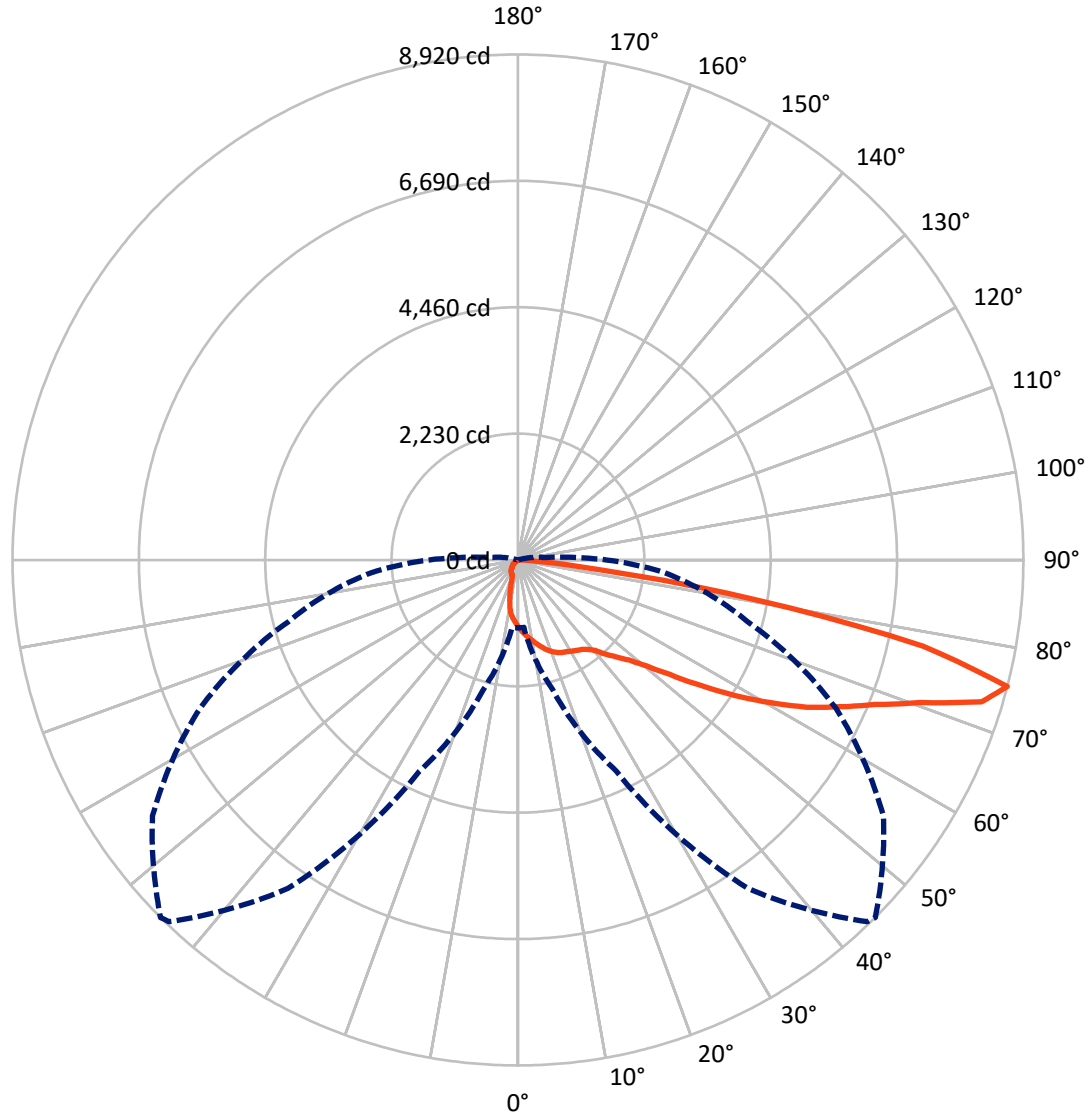
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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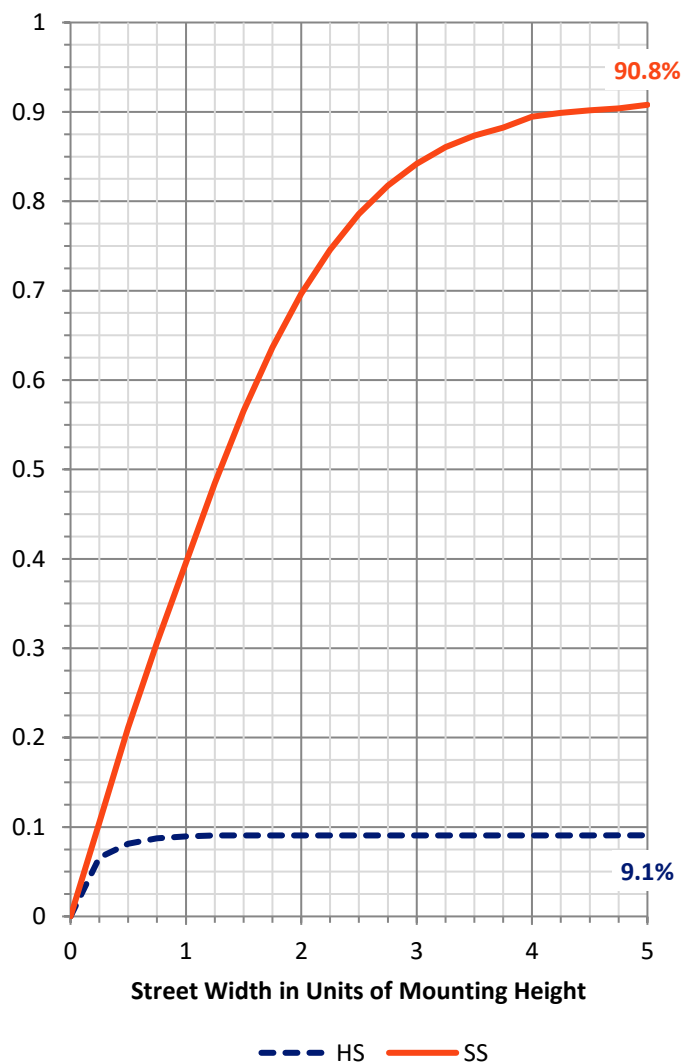
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1014.8 | 0.0 | 1014.8 |
| | % Fixture | 9.1 | 0.0 | 9.1 |
| Street Side | Lumens | 10079.2 | 0.0 | 10079.2 |
| | % Fixture | 90.9 | 0.0 | 90.9 |
| Total | Lumens | 11094.0 | 0.0 | 11094.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 112.0 | 1.0 |
| 10°-20° | 317.3 | 2.9 |
| 20°-30° | 525.4 | 4.7 |
| 30°-40° | 760.4 | 6.9 |
| 40°-50° | 1245.1 | 11.2 |
| 50°-60° | 2218.6 | 20.0 |
| 60°-70° | 3261.6 | 29.4 |
| 70°-80° | 2460.6 | 22.2 |
| 80°-90° | 193.0 | 1.7 |
| 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° | 11094.0 | 100.0 |
| 0°-180° | 11094.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P237464

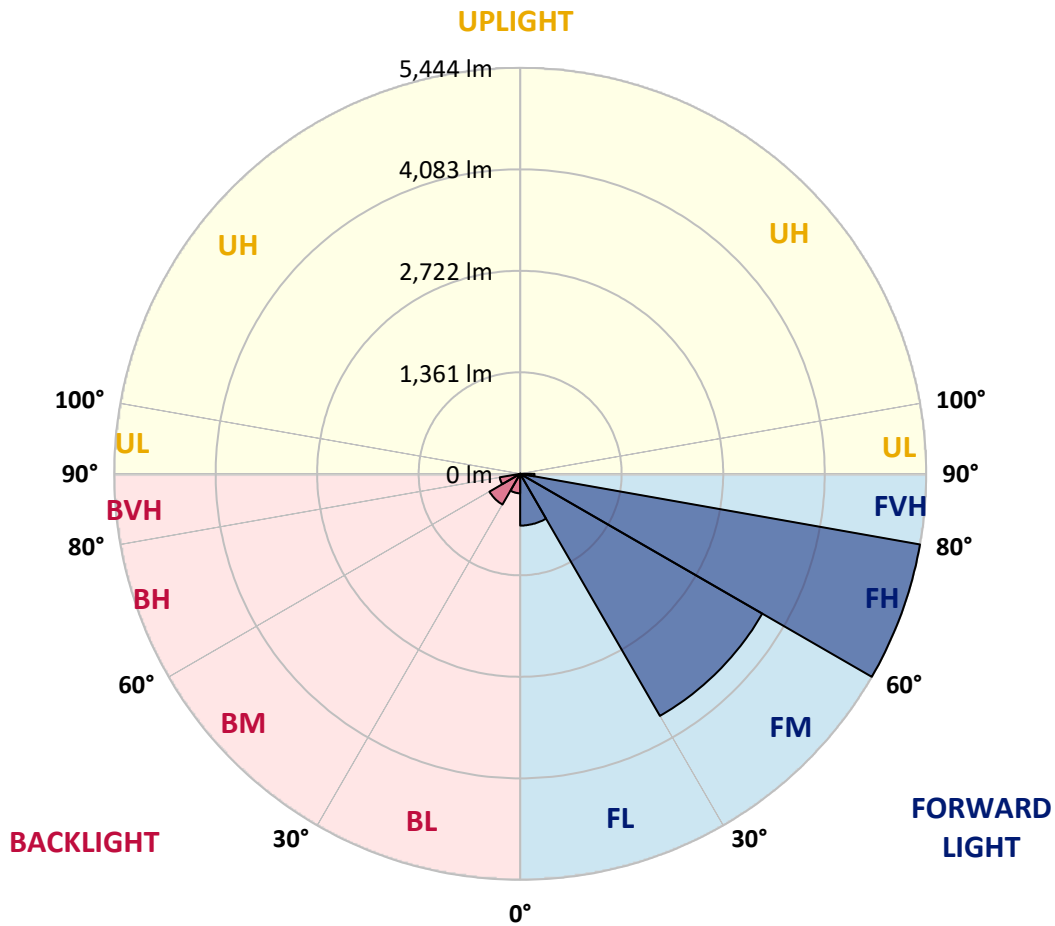
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 693.9 | 6.3 | | | |
| FM (30°-60°) | 3748.6 | 33.8 | | | |
| FH (60°-80°) | 5444.2 | 49.1 | | | G3/7500 |
| FVH (80°-90°) | 192.5 | 1.7 | | | G2/225 |
| BL (0°-30°) | 260.8 | 2.4 | B1/500 | | |
| BM (30°-60°) | 475.5 | 4.3 | B1/1000 | | |
| BH (60°-80°) | 277.9 | 2.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.5 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type IV Medium





REPORT NUMBER: P237464

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 |
| 2.5° | 1288.9 | 1288.9 | 1286.3 | 1283.7 | 1270.6 | 1257.4 | 1254.8 | 1246.9 | 1223.3 | 1207.6 | 1191.8 |
| 5° | 1396.6 | 1399.2 | 1393.9 | 1380.8 | 1351.9 | 1323.1 | 1320.4 | 1299.4 | 1254.8 | 1223.3 | 1189.2 |
| 7.5° | 1499.0 | 1504.2 | 1491.1 | 1467.5 | 1433.3 | 1391.3 | 1388.7 | 1349.3 | 1291.6 | 1246.9 | 1197.1 |
| 10° | 1585.6 | 1585.6 | 1567.2 | 1538.3 | 1501.6 | 1457.0 | 1451.7 | 1407.1 | 1341.4 | 1286.3 | 1220.7 |
| 12.5° | 1680.1 | 1677.5 | 1651.2 | 1611.8 | 1569.8 | 1527.8 | 1525.2 | 1470.1 | 1407.1 | 1336.2 | 1254.8 |
| 15° | 1766.7 | 1761.5 | 1727.3 | 1690.6 | 1646.0 | 1601.3 | 1598.7 | 1543.6 | 1478.0 | 1393.9 | 1304.7 |
| 17.5° | 1814.0 | 1811.3 | 1779.8 | 1743.1 | 1706.3 | 1672.2 | 1669.6 | 1611.8 | 1541.0 | 1454.3 | 1354.6 |
| 20° | 1821.8 | 1824.5 | 1798.2 | 1766.7 | 1745.7 | 1727.3 | 1727.3 | 1674.8 | 1598.7 | 1506.8 | 1407.1 |
| 22.5° | 1824.5 | 1832.3 | 1814.0 | 1772.0 | 1766.7 | 1769.3 | 1774.6 | 1732.6 | 1653.8 | 1567.2 | 1462.2 |
| 25° | 1842.8 | 1853.3 | 1840.2 | 1790.3 | 1785.1 | 1803.5 | 1808.7 | 1790.3 | 1719.5 | 1632.8 | 1525.2 |
| 27.5° | 1879.6 | 1890.1 | 1879.6 | 1816.6 | 1808.7 | 1827.1 | 1832.3 | 1842.8 | 1790.3 | 1695.8 | 1590.8 |
| 30° | 1953.1 | 1955.7 | 1932.1 | 1853.3 | 1837.6 | 1861.2 | 1869.1 | 1898.0 | 1856.0 | 1756.2 | 1653.8 |
| 32.5° | 2081.7 | 2055.5 | 1984.6 | 1879.6 | 1866.5 | 1892.7 | 1900.6 | 1932.1 | 1916.4 | 1814.0 | 1719.5 |
| 35° | 2344.3 | 2207.7 | 2045.0 | 1916.4 | 1903.2 | 1929.5 | 1940.0 | 1984.6 | 1992.5 | 1895.4 | 1800.8 |
| 37.5° | 2341.6 | 2218.2 | 2186.7 | 1987.2 | 1968.9 | 1987.2 | 2000.4 | 2055.5 | 2087.0 | 2003.0 | 1919.0 |
| 40° | 2507.0 | 2454.5 | 2454.5 | 2121.1 | 2060.7 | 2087.0 | 2100.1 | 2155.2 | 2210.4 | 2144.7 | 2058.1 |
| 42.5° | 3026.8 | 2992.7 | 2955.9 | 2378.4 | 2189.4 | 2262.9 | 2270.7 | 2304.9 | 2370.5 | 2349.5 | 2247.1 |
| 45° | 3606.9 | 3575.4 | 3433.7 | 2814.2 | 2409.9 | 2423.0 | 2441.4 | 2496.5 | 2591.0 | 2630.4 | 2509.6 |
| 47.5° | 4061.1 | 4029.6 | 3908.8 | 3339.2 | 2753.8 | 2638.3 | 2638.3 | 2745.9 | 2892.9 | 2992.7 | 2877.2 |
| 50° | 4426.0 | 4389.2 | 4315.7 | 3898.3 | 3318.2 | 2948.0 | 2932.3 | 3058.3 | 3276.2 | 3431.1 | 3352.3 |
| 52.5° | 4780.4 | 4672.7 | 4628.1 | 4475.9 | 3956.1 | 3396.9 | 3354.9 | 3444.2 | 3746.1 | 3937.7 | 3872.1 |
| 55° | 5016.6 | 5000.9 | 4953.6 | 5006.1 | 4625.5 | 3943.0 | 3906.2 | 3924.6 | 4302.6 | 4431.2 | 4349.9 |
| 57.5° | 5237.2 | 5234.5 | 5339.5 | 5583.7 | 5355.3 | 4567.7 | 4510.0 | 4481.1 | 4840.8 | 4809.3 | 4880.1 |
| 60° | 5510.2 | 5462.9 | 5707.1 | 6056.2 | 6024.7 | 5176.8 | 5111.1 | 5053.4 | 5252.9 | 5163.7 | 5515.4 |
| 62.5° | 5523.3 | 5510.2 | 6006.3 | 6507.7 | 6688.9 | 5796.3 | 5720.2 | 5512.8 | 5612.5 | 5510.2 | 6121.8 |
| 65° | 5021.9 | 5087.5 | 6132.3 | 6746.6 | 7245.4 | 6339.7 | 6247.8 | 5924.9 | 5932.8 | 5864.6 | 6835.9 |
| 67.5° | 4909.0 | 4943.1 | 5785.8 | 7003.9 | 7647.0 | 6888.4 | 6801.7 | 6400.1 | 6305.6 | 6310.8 | 7258.5 |
| 70° | 4628.1 | 4680.6 | 5355.3 | 6985.5 | 7964.7 | 7620.8 | 7534.2 | 7098.4 | 6870.0 | 6615.4 | 6933.0 |
| 72.5° | 3536.1 | 3625.3 | 4512.6 | 6124.5 | 7878.0 | 8579.0 | 8555.3 | 7983.1 | 7095.8 | 6074.6 | 5245.0 |
| 75° | 1197.1 | 1194.4 | 2370.5 | 4113.6 | 7077.4 | 8873.0 | 8920.2 | 7872.8 | 6190.1 | 4189.7 | 2604.1 |
| 77.5° | 257.3 | 259.9 | 488.3 | 1667.0 | 4701.6 | 7124.6 | 7305.8 | 5938.1 | 3992.8 | 1866.5 | 595.9 |
| 80° | 126.0 | 128.6 | 202.1 | 441.0 | 1879.6 | 3995.5 | 4279.0 | 3053.0 | 1475.3 | 372.8 | 99.8 |
| 82.5° | 63.0 | 65.6 | 105.0 | 233.6 | 695.7 | 1420.2 | 1517.3 | 1123.6 | 422.6 | 210.0 | 49.9 |
| 85° | 23.6 | 23.6 | 52.5 | 139.1 | 317.6 | 333.4 | 409.5 | 325.5 | 254.6 | 170.6 | 13.1 |
| 87.5° | 5.3 | 5.3 | 28.9 | 68.3 | 141.8 | 105.0 | 105.0 | 99.8 | 154.9 | 115.5 | 5.3 |
| 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: P237464

CATALOG NUMBER: ARCH-L-AF72-110-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 | 1186.6 |
| 2.5° | 1183.9 | 1173.4 | 1155.1 | 1136.7 | 1123.6 | 1107.8 | 1099.9 | 1092.1 | 1089.4 | 1086.8 | 1092.1 |
| 5° | 1170.8 | 1155.1 | 1120.9 | 1092.1 | 1065.8 | 1044.8 | 1029.1 | 1013.3 | 1005.4 | 1000.2 | 1002.8 |
| 7.5° | 1170.8 | 1147.2 | 1097.3 | 1052.7 | 1010.7 | 966.1 | 921.4 | 887.3 | 861.0 | 845.3 | 847.9 |
| 10° | 1183.9 | 1152.4 | 1086.8 | 1026.4 | 947.7 | 853.2 | 756.0 | 682.5 | 632.7 | 603.8 | 603.8 |
| 12.5° | 1212.8 | 1170.8 | 1089.4 | 994.9 | 861.0 | 695.7 | 548.7 | 459.4 | 422.6 | 401.6 | 404.3 |
| 15° | 1252.2 | 1202.3 | 1102.6 | 952.9 | 740.3 | 517.2 | 383.3 | 325.5 | 325.5 | 330.8 | 333.4 |
| 17.5° | 1296.8 | 1241.7 | 1113.1 | 889.9 | 585.4 | 370.1 | 301.9 | 296.6 | 304.5 | 317.6 | 317.6 |
| 20° | 1341.4 | 1281.1 | 1118.3 | 790.2 | 438.4 | 294.0 | 286.1 | 286.1 | 291.4 | 304.5 | 307.1 |
| 22.5° | 1396.6 | 1330.9 | 1113.1 | 666.8 | 328.1 | 278.3 | 275.6 | 275.6 | 275.6 | 291.4 | 291.4 |
| 25° | 1454.3 | 1388.7 | 1092.1 | 535.5 | 278.3 | 267.8 | 265.1 | 262.5 | 262.5 | 275.6 | 278.3 |
| 27.5° | 1520.0 | 1449.1 | 1042.2 | 409.5 | 262.5 | 257.3 | 254.6 | 249.4 | 249.4 | 259.9 | 259.9 |
| 30° | 1585.6 | 1517.3 | 966.1 | 309.8 | 249.4 | 246.8 | 241.5 | 236.3 | 231.0 | 241.5 | 241.5 |
| 32.5° | 1656.5 | 1588.2 | 866.3 | 246.8 | 231.0 | 231.0 | 228.4 | 220.5 | 215.3 | 220.5 | 223.1 |
| 35° | 1751.0 | 1669.6 | 753.4 | 215.3 | 207.4 | 207.4 | 207.4 | 204.8 | 194.3 | 199.5 | 199.5 |
| 37.5° | 1877.0 | 1782.5 | 622.2 | 199.5 | 189.0 | 183.8 | 183.8 | 183.8 | 175.9 | 178.5 | 178.5 |
| 40° | 2037.1 | 1913.7 | 496.2 | 186.4 | 175.9 | 162.8 | 157.5 | 160.1 | 154.9 | 154.9 | 152.3 |
| 42.5° | 2255.0 | 2055.5 | 372.8 | 175.9 | 165.4 | 147.0 | 136.5 | 133.9 | 128.6 | 126.0 | 126.0 |
| 45° | 2567.4 | 2228.7 | 267.8 | 165.4 | 157.5 | 128.6 | 118.1 | 110.3 | 97.1 | 89.3 | 89.3 |
| 47.5° | 2971.7 | 2425.6 | 199.5 | 154.9 | 149.6 | 112.9 | 99.8 | 84.0 | 65.6 | 60.4 | 60.4 |
| 50° | 3465.2 | 2646.1 | 168.0 | 139.1 | 136.5 | 99.8 | 78.8 | 55.1 | 36.8 | 31.5 | 34.1 |
| 52.5° | 3945.6 | 2853.5 | 149.6 | 123.4 | 120.8 | 86.6 | 57.8 | 28.9 | 15.8 | 15.8 | 15.8 |
| 55° | 4349.9 | 3000.5 | 136.5 | 110.3 | 105.0 | 68.3 | 31.5 | 13.1 | 7.9 | 7.9 | 7.9 |
| 57.5° | 4714.8 | 3084.5 | 123.4 | 97.1 | 84.0 | 47.3 | 13.1 | 5.3 | 5.3 | 2.6 | 2.6 |
| 60° | 5048.1 | 3134.4 | 107.6 | 84.0 | 65.6 | 26.3 | 5.3 | 2.6 | 2.6 | 0.0 | 0.0 |
| 62.5° | 5376.3 | 3171.2 | 91.9 | 68.3 | 49.9 | 10.5 | 2.6 | 2.6 | 0.0 | 0.0 | 0.0 |
| 65° | 5625.7 | 3158.0 | 73.5 | 55.1 | 31.5 | 5.3 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 5617.8 | 2979.5 | 55.1 | 42.0 | 15.8 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 5024.5 | 2509.6 | 36.8 | 26.3 | 5.3 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 3564.9 | 1609.2 | 23.6 | 15.8 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1569.8 | 488.3 | 13.1 | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 307.1 | 112.9 | 7.9 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 73.5 | 13.1 | 2.6 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 31.5 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 7.9 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.3 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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)