

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: P400503

Luminaire Tested: **ARCH-L-PA3-90-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-90-730-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 400mA 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: 10201 lumens
Efficiency: N/A
Efficacy: 109.7 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

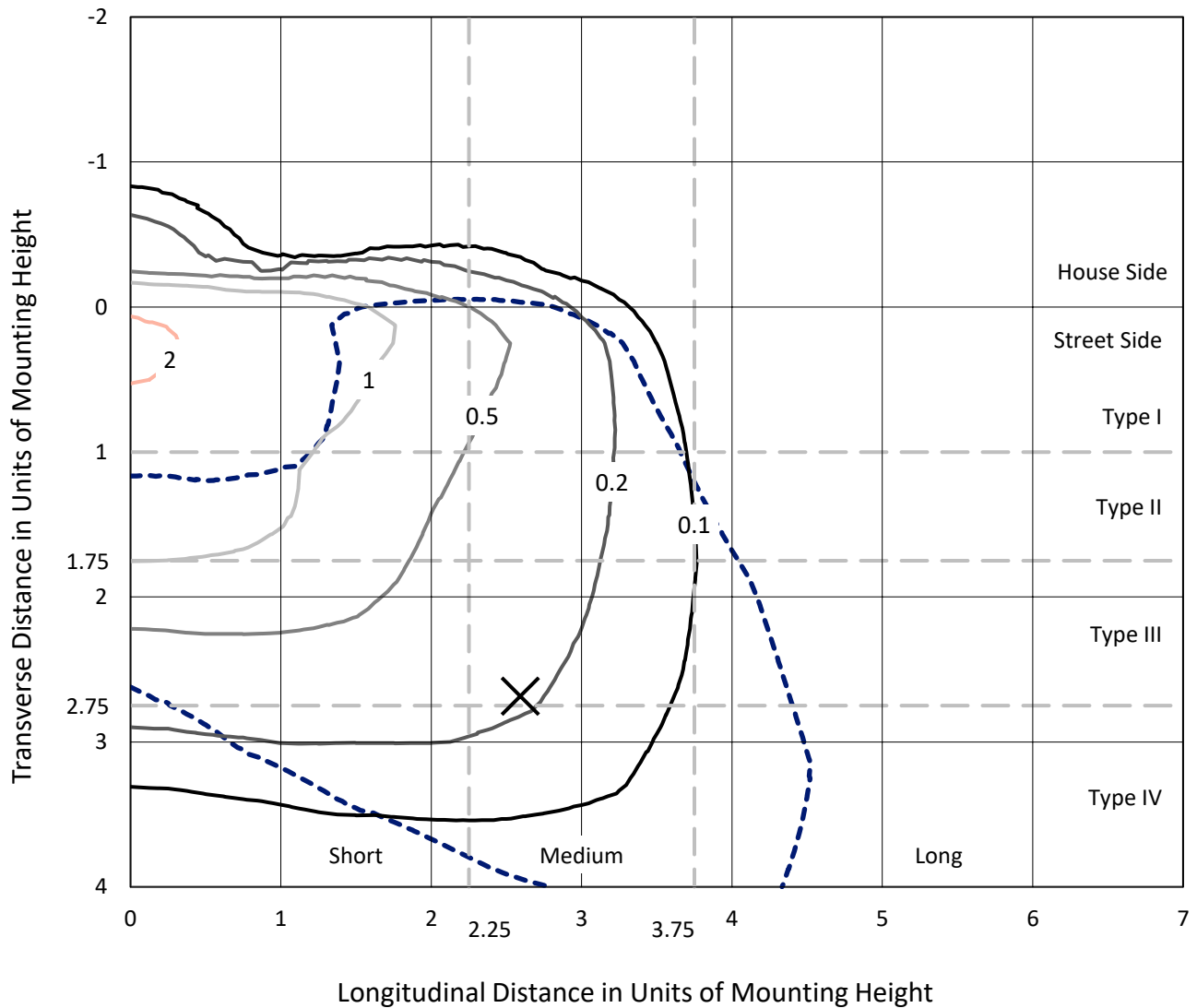
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400503
 CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

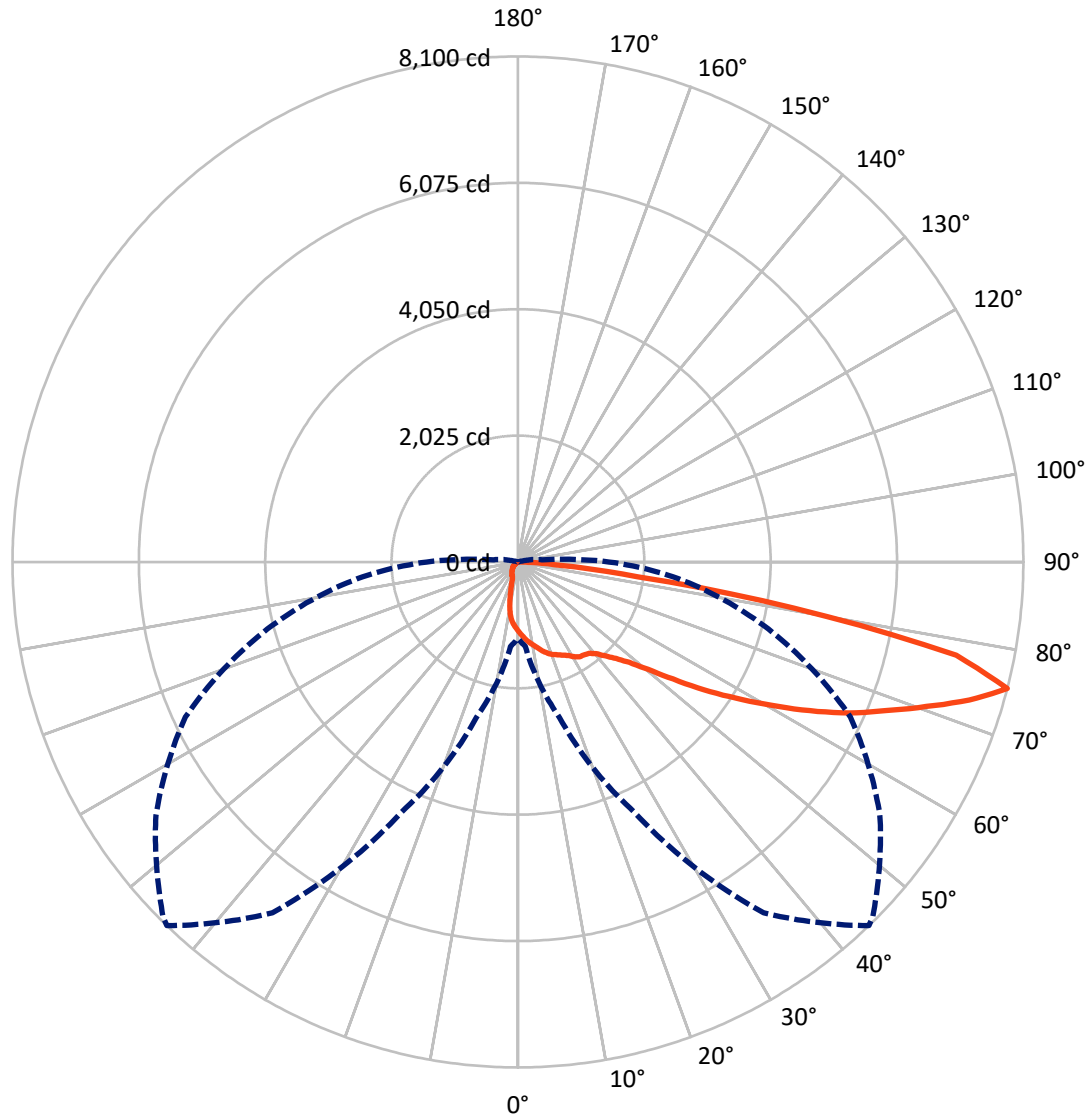
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P400503
CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P400503
 CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W-HSS

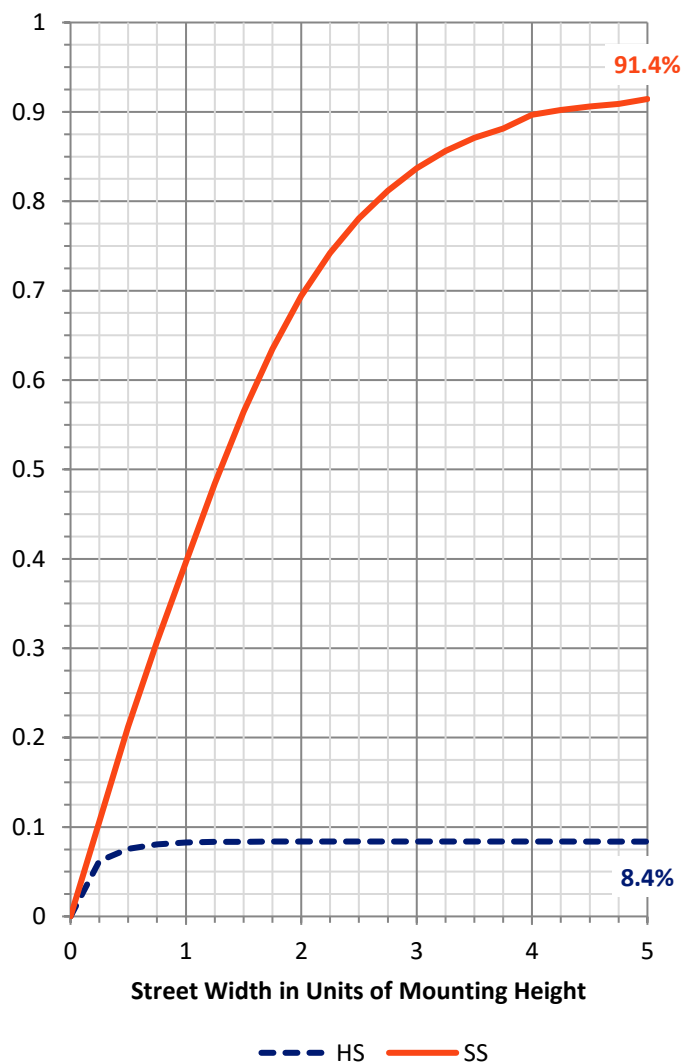
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 860.3 | 0.0 | 860.3 |
| | % Fixture | 8.4 | 0.0 | 8.4 |
| Street Side | Lumens | 9340.7 | 0.0 | 9340.7 |
| | % Fixture | 91.6 | 0.0 | 91.6 |
| Total | Lumens | 10201.0 | 0.0 | 10201.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 104.7 | 1.0 |
| 10°-20° | 293.4 | 2.9 |
| 20°-30° | 484.2 | 4.7 |
| 30°-40° | 702.8 | 6.9 |
| 40°-50° | 1142.5 | 11.2 |
| 50°-60° | 2014.0 | 19.7 |
| 60°-70° | 2894.5 | 28.4 |
| 70°-80° | 2317.9 | 22.7 |
| 80°-90° | 247.0 | 2.4 |
| 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° | 10201.0 | 100.0 |
| 0°-180° | 10201.0 | 100.0 |

Coefficient of Utilization

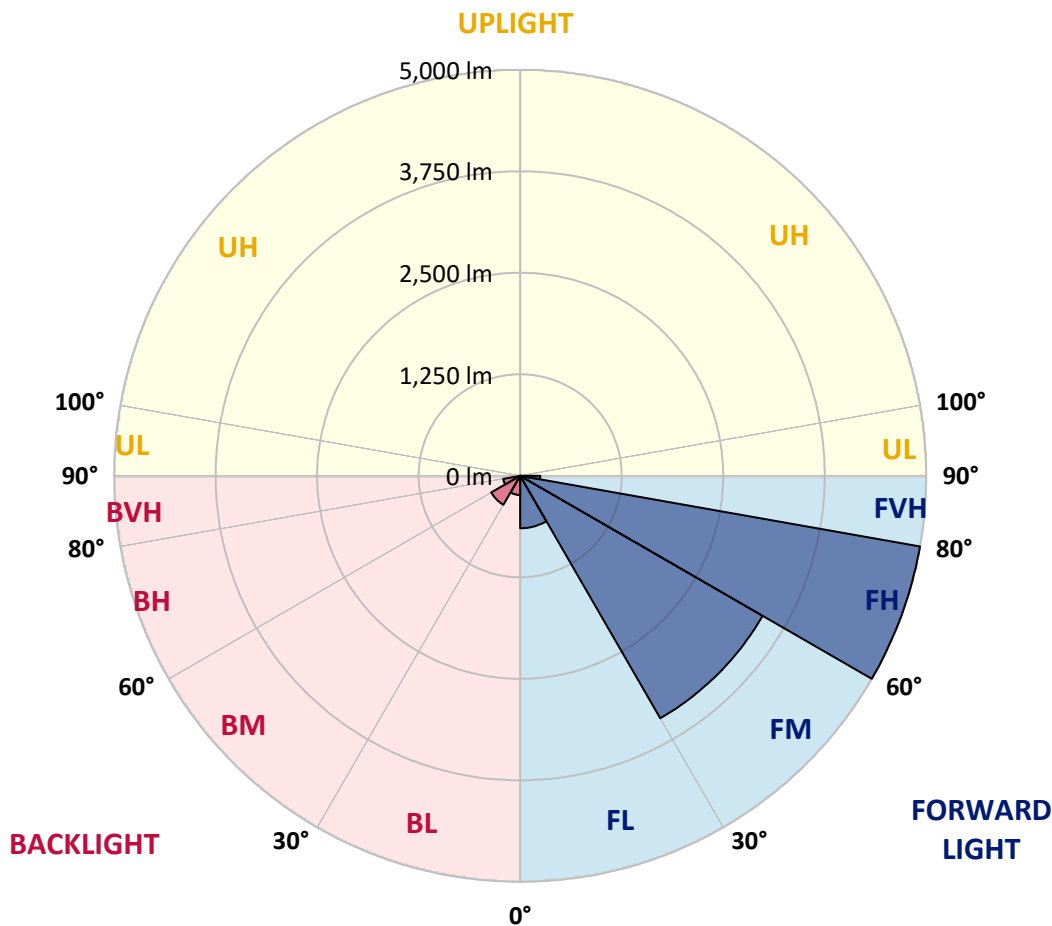


REPORT NUMBER: P400503
 CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 646.0 | 6.3 | | | |
| FM (30°-60°) | 3448.0 | 33.8 | | | |
| FH (60°-80°) | 5000.4 | 49.0 | | | G3/7500 |
| FVH (80°-90°) | 246.3 | 2.4 | | | G3/500 |
| BL (0°-30°) | 236.3 | 2.3 | B1/500 | | |
| BM (30°-60°) | 411.2 | 4.0 | B1/1000 | | |
| BH (60°-80°) | 212.1 | 2.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.6 | 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: P400503

CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 |
| 2.5° | 1210.1 | 1208.2 | 1202.6 | 1193.1 | 1183.7 | 1174.3 | 1172.4 | 1157.4 | 1140.5 | 1127.3 | 1116.0 |
| 5° | 1317.4 | 1315.5 | 1306.1 | 1285.4 | 1264.7 | 1240.2 | 1238.3 | 1202.6 | 1170.6 | 1134.8 | 1104.7 |
| 7.5° | 1428.4 | 1424.6 | 1407.7 | 1375.7 | 1339.9 | 1302.3 | 1298.5 | 1245.8 | 1198.8 | 1151.7 | 1108.5 |
| 10° | 1515.0 | 1511.2 | 1486.7 | 1449.1 | 1400.2 | 1353.1 | 1347.5 | 1292.9 | 1245.8 | 1185.6 | 1127.3 |
| 12.5° | 1599.6 | 1592.1 | 1560.1 | 1518.7 | 1458.5 | 1413.3 | 1407.7 | 1351.2 | 1294.8 | 1232.7 | 1161.2 |
| 15° | 1678.7 | 1669.3 | 1639.2 | 1586.5 | 1522.5 | 1479.2 | 1475.4 | 1415.2 | 1356.9 | 1285.4 | 1206.3 |
| 17.5° | 1733.3 | 1729.5 | 1693.7 | 1635.4 | 1573.3 | 1537.5 | 1533.8 | 1471.7 | 1413.3 | 1338.1 | 1253.4 |
| 20° | 1761.5 | 1761.5 | 1727.6 | 1663.6 | 1607.2 | 1582.7 | 1577.1 | 1518.7 | 1462.3 | 1390.7 | 1302.3 |
| 22.5° | 1767.1 | 1772.8 | 1746.4 | 1676.8 | 1635.4 | 1614.7 | 1610.9 | 1560.1 | 1505.5 | 1439.7 | 1356.9 |
| 25° | 1778.4 | 1778.4 | 1765.3 | 1690.0 | 1659.9 | 1654.2 | 1652.3 | 1607.2 | 1558.2 | 1492.4 | 1411.4 |
| 27.5° | 1791.6 | 1791.6 | 1782.2 | 1708.8 | 1697.5 | 1695.6 | 1693.7 | 1673.0 | 1633.5 | 1556.4 | 1475.4 |
| 30° | 1825.5 | 1827.4 | 1819.8 | 1746.4 | 1738.9 | 1759.6 | 1763.4 | 1752.1 | 1703.1 | 1607.2 | 1541.3 |
| 32.5° | 1910.2 | 1893.2 | 1872.5 | 1772.8 | 1786.0 | 1812.3 | 1814.2 | 1791.6 | 1738.9 | 1661.7 | 1620.3 |
| 35° | 2122.8 | 2023.1 | 1929.0 | 1795.4 | 1801.0 | 1827.4 | 1831.1 | 1829.2 | 1797.2 | 1731.4 | 1710.7 |
| 37.5° | 2320.4 | 2179.3 | 2045.7 | 1848.1 | 1829.2 | 1857.5 | 1865.0 | 1897.0 | 1872.5 | 1827.4 | 1833.0 |
| 40° | 2435.2 | 2380.6 | 2286.5 | 1993.0 | 1885.7 | 1929.0 | 1936.5 | 1985.4 | 1976.0 | 1957.2 | 1993.0 |
| 42.5° | 2789.0 | 2792.8 | 2691.2 | 2209.4 | 1989.2 | 2058.8 | 2068.2 | 2107.8 | 2120.9 | 2130.3 | 2216.9 |
| 45° | 3199.3 | 3212.5 | 3188.0 | 2598.9 | 2184.9 | 2207.5 | 2220.7 | 2273.4 | 2322.3 | 2382.5 | 2540.6 |
| 47.5° | 3692.4 | 3681.1 | 3590.7 | 3075.1 | 2525.6 | 2399.5 | 2408.9 | 2510.5 | 2595.2 | 2726.9 | 2952.8 |
| 50° | 4129.0 | 4157.2 | 3985.9 | 3519.2 | 3005.4 | 2702.5 | 2693.0 | 2792.8 | 2945.2 | 3129.7 | 3413.8 |
| 52.5° | 4569.3 | 4527.9 | 4296.5 | 3959.6 | 3573.8 | 3114.6 | 3086.4 | 3140.9 | 3355.5 | 3573.8 | 3865.5 |
| 55° | 4686.0 | 4689.8 | 4610.7 | 4441.4 | 4048.0 | 3615.2 | 3568.1 | 3564.4 | 3831.6 | 3980.3 | 4339.7 |
| 57.5° | 4915.6 | 4925.0 | 4943.8 | 4977.7 | 4791.4 | 4115.8 | 4066.9 | 4014.2 | 4273.9 | 4360.4 | 4815.9 |
| 60° | 5149.0 | 5160.3 | 5275.1 | 5457.6 | 5333.4 | 4655.9 | 4603.2 | 4479.0 | 4623.9 | 4740.6 | 5316.5 |
| 62.5° | 5118.9 | 5197.9 | 5531.0 | 5894.2 | 5879.2 | 5248.7 | 5182.8 | 4883.6 | 4975.8 | 5077.5 | 5775.7 |
| 65° | 4622.0 | 4706.7 | 5455.7 | 6014.7 | 6426.8 | 5834.0 | 5726.7 | 5301.4 | 5307.0 | 5429.4 | 6217.9 |
| 67.5° | 4177.9 | 4270.1 | 4985.2 | 5963.8 | 6788.1 | 6359.0 | 6248.0 | 5721.1 | 5632.6 | 5835.9 | 6455.0 |
| 70° | 3921.9 | 4014.2 | 4610.7 | 5805.8 | 6889.8 | 6940.6 | 6844.6 | 6201.0 | 6020.3 | 6206.6 | 6189.7 |
| 72.5° | 3069.4 | 3214.3 | 4132.7 | 5504.7 | 6998.9 | 7563.5 | 7488.2 | 6808.8 | 6349.6 | 5818.9 | 4712.4 |
| 75° | 1223.3 | 1356.9 | 2580.1 | 4430.1 | 6861.5 | 8099.8 | 8041.5 | 7081.7 | 5877.3 | 4155.3 | 2412.6 |
| 77.5° | 368.9 | 395.2 | 717.0 | 2190.6 | 5030.4 | 7181.5 | 7162.6 | 5954.4 | 4159.1 | 1929.0 | 658.7 |
| 80° | 122.3 | 135.5 | 220.2 | 604.1 | 2296.0 | 4486.5 | 4571.2 | 3794.0 | 1889.5 | 442.3 | 133.6 |
| 82.5° | 50.8 | 56.5 | 111.0 | 242.8 | 813.0 | 1932.7 | 1904.5 | 1699.4 | 658.7 | 274.8 | 48.9 |
| 85° | 13.2 | 16.9 | 50.8 | 139.3 | 297.3 | 666.2 | 700.1 | 570.2 | 372.6 | 227.7 | 15.1 |
| 87.5° | 0.0 | 0.0 | 24.5 | 56.5 | 133.6 | 201.4 | 210.8 | 173.1 | 210.8 | 171.3 | 7.5 |
| 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: P400503

CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 | 1110.3 |
| 2.5° | 1106.6 | 1097.2 | 1080.2 | 1068.9 | 1053.9 | 1050.1 | 1042.6 | 1033.2 | 1031.3 | 1021.9 | 1023.8 |
| 5° | 1087.8 | 1072.7 | 1042.6 | 1021.9 | 997.4 | 989.9 | 976.7 | 967.3 | 959.8 | 946.6 | 948.5 |
| 7.5° | 1084.0 | 1061.4 | 1020.0 | 980.5 | 941.0 | 912.7 | 873.2 | 841.2 | 814.9 | 786.6 | 792.3 |
| 10° | 1097.2 | 1068.9 | 1010.6 | 956.0 | 884.5 | 794.2 | 690.7 | 622.9 | 589.0 | 555.2 | 558.9 |
| 12.5° | 1123.5 | 1089.6 | 1014.4 | 931.6 | 786.6 | 632.3 | 489.3 | 397.1 | 372.6 | 357.6 | 359.4 |
| 15° | 1163.0 | 1121.6 | 1025.7 | 884.5 | 654.9 | 457.3 | 325.6 | 286.1 | 295.5 | 301.1 | 301.1 |
| 17.5° | 1204.4 | 1157.4 | 1035.1 | 799.8 | 506.2 | 319.9 | 265.4 | 261.6 | 274.8 | 287.9 | 287.9 |
| 20° | 1255.2 | 1195.0 | 1036.9 | 692.6 | 365.1 | 259.7 | 250.3 | 250.3 | 259.7 | 274.8 | 274.8 |
| 22.5° | 1304.2 | 1236.4 | 1020.0 | 570.2 | 278.5 | 240.9 | 240.9 | 240.9 | 246.5 | 261.6 | 263.5 |
| 25° | 1362.5 | 1287.2 | 984.3 | 440.4 | 239.0 | 229.6 | 229.6 | 231.5 | 235.2 | 248.4 | 250.3 |
| 27.5° | 1424.6 | 1339.9 | 924.0 | 321.8 | 218.3 | 216.4 | 218.3 | 220.2 | 222.1 | 235.2 | 239.0 |
| 30° | 1496.1 | 1398.3 | 846.9 | 240.9 | 199.5 | 199.5 | 205.1 | 208.9 | 208.9 | 220.2 | 223.9 |
| 32.5° | 1578.9 | 1475.4 | 754.7 | 199.5 | 180.7 | 178.8 | 188.2 | 193.8 | 193.8 | 203.2 | 207.0 |
| 35° | 1682.4 | 1554.5 | 643.6 | 176.9 | 165.6 | 161.8 | 165.6 | 175.0 | 178.8 | 186.3 | 188.2 |
| 37.5° | 1819.8 | 1648.6 | 525.1 | 163.7 | 154.3 | 146.8 | 146.8 | 148.7 | 156.2 | 163.7 | 165.6 |
| 40° | 1994.8 | 1752.1 | 408.4 | 154.3 | 143.0 | 135.5 | 129.9 | 128.0 | 126.1 | 131.7 | 135.5 |
| 42.5° | 2215.0 | 1868.8 | 304.9 | 144.9 | 133.6 | 122.3 | 114.8 | 107.3 | 97.9 | 96.0 | 97.9 |
| 45° | 2497.3 | 2011.8 | 225.8 | 137.4 | 128.0 | 111.0 | 97.9 | 84.7 | 67.7 | 62.1 | 64.0 |
| 47.5° | 2830.4 | 2160.5 | 176.9 | 129.9 | 124.2 | 97.9 | 80.9 | 58.3 | 41.4 | 37.6 | 39.5 |
| 50° | 3184.2 | 2303.5 | 150.6 | 120.4 | 116.7 | 84.7 | 58.3 | 35.8 | 24.5 | 24.5 | 26.3 |
| 52.5° | 3485.3 | 2384.4 | 137.4 | 112.9 | 105.4 | 69.6 | 37.6 | 20.7 | 15.1 | 15.1 | 16.9 |
| 55° | 3777.0 | 2427.7 | 128.0 | 105.4 | 90.3 | 48.9 | 20.7 | 13.2 | 9.4 | 9.4 | 9.4 |
| 57.5° | 4078.1 | 2446.5 | 116.7 | 96.0 | 71.5 | 30.1 | 11.3 | 7.5 | 5.6 | 5.6 | 5.6 |
| 60° | 4345.4 | 2410.8 | 99.7 | 79.0 | 47.0 | 15.1 | 5.6 | 5.6 | 3.8 | 1.9 | 1.9 |
| 62.5° | 4569.3 | 2343.0 | 69.6 | 56.5 | 28.2 | 7.5 | 3.8 | 1.9 | 0.0 | 0.0 | 0.0 |
| 65° | 4706.7 | 2233.9 | 45.2 | 37.6 | 16.9 | 5.6 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 4667.2 | 2028.7 | 28.2 | 24.5 | 7.5 | 3.8 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 4211.8 | 1663.6 | 20.7 | 15.1 | 5.6 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 3035.6 | 1125.4 | 15.1 | 9.4 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1460.4 | 400.9 | 9.4 | 7.5 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 357.6 | 88.5 | 5.6 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 79.0 | 16.9 | 3.8 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 26.3 | 7.5 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 9.4 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.6 | 1.9 | 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)