

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: P348594

Luminaire Tested: **ARCH-N-PA1-50-730-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-730-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6179 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 52
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

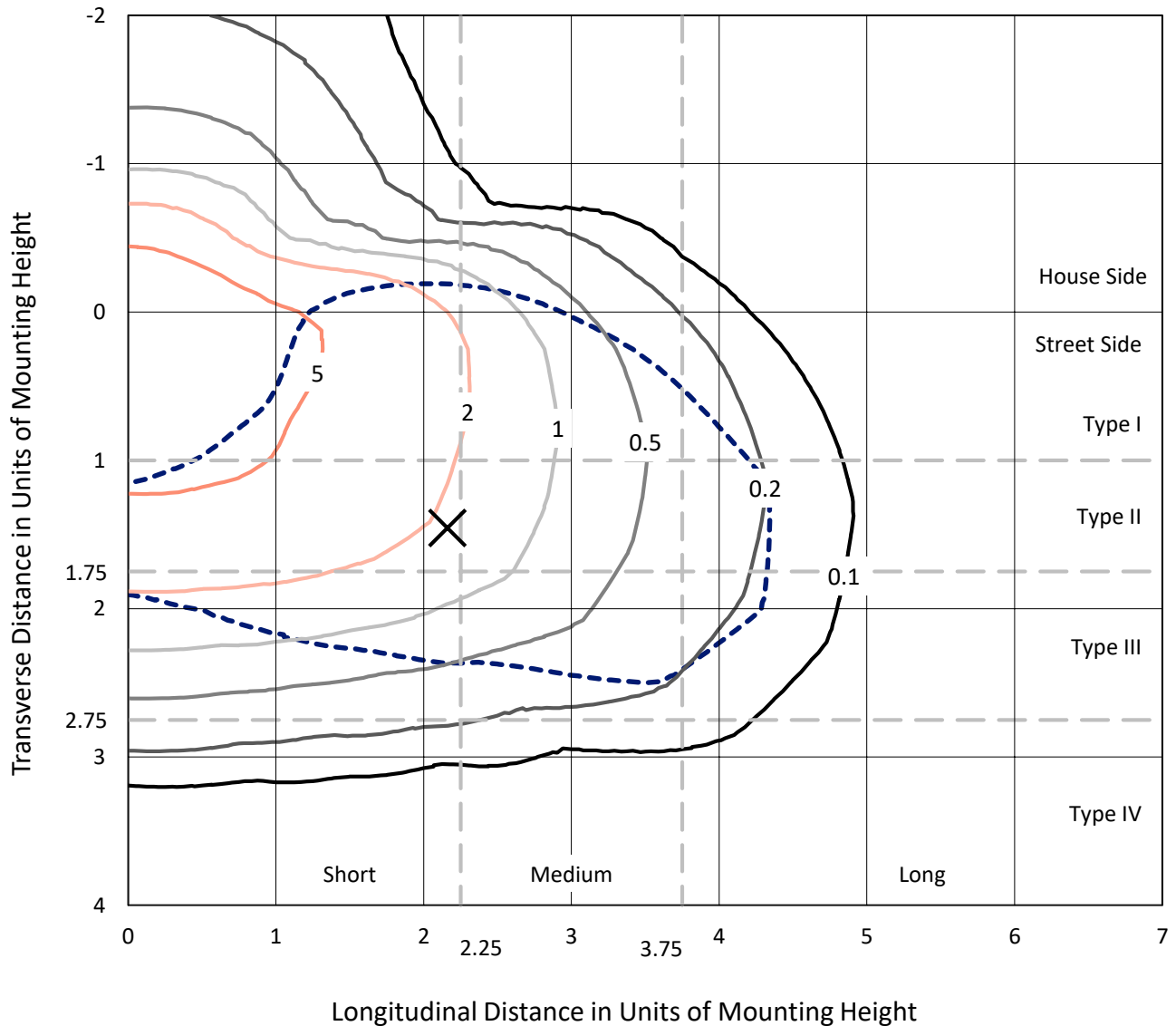


REPORT NUMBER: P348594

CATALOG NUMBER: ARCH-N-PA1-50-730-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

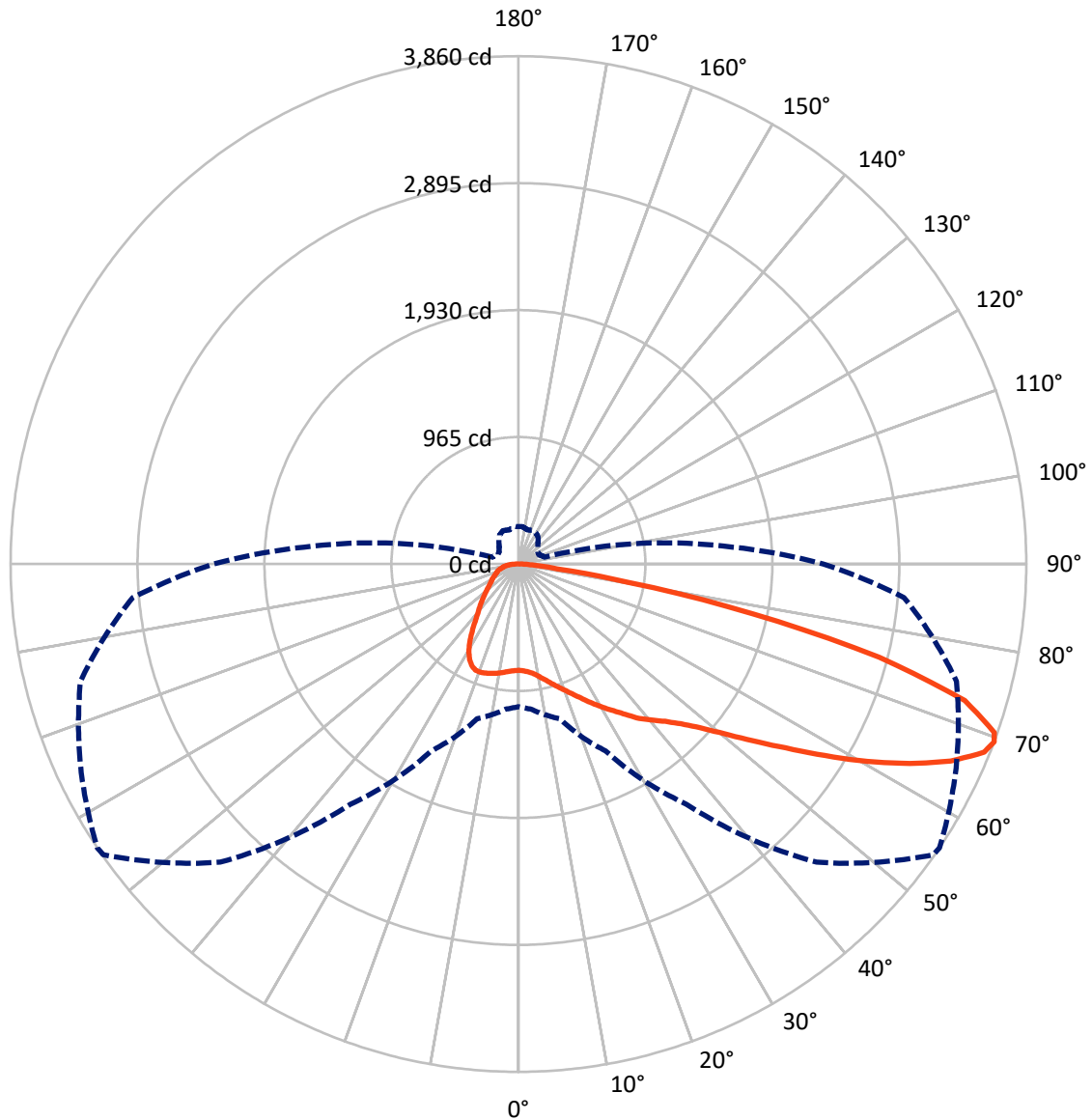


Based on 10 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P348594

CATALOG NUMBER: ARCH-N-PA1-50-730-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P348594

CATALOG NUMBER: ARCH-N-PA1-50-730-U-T3

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1376.1 | 0.0 | 1376.1 |
| | % Fixture | 22.3 | 0.0 | 22.3 |
| Street Side | Lumens | 4802.9 | 0.0 | 4802.9 |
| | % Fixture | 77.7 | 0.0 | 77.7 |
| Total | Lumens | 6179.0 | 0.0 | 6179.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.3 | 1.3 |
| 10°-20° | 255.1 | 4.1 |
| 20°-30° | 445.4 | 7.2 |
| 30°-40° | 639.7 | 10.4 |
| 40°-50° | 885.3 | 14.3 |
| 50°-60° | 1297.2 | 21.0 |
| 60°-70° | 1581.5 | 25.6 |
| 70°-80° | 874.4 | 14.2 |
| 80°-90° | 121.1 | 2.0 |
| 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° | 6179.0 | 100.0 |
| 0°-180° | 6179.0 | 100.0 |



REPORT NUMBER: P348594

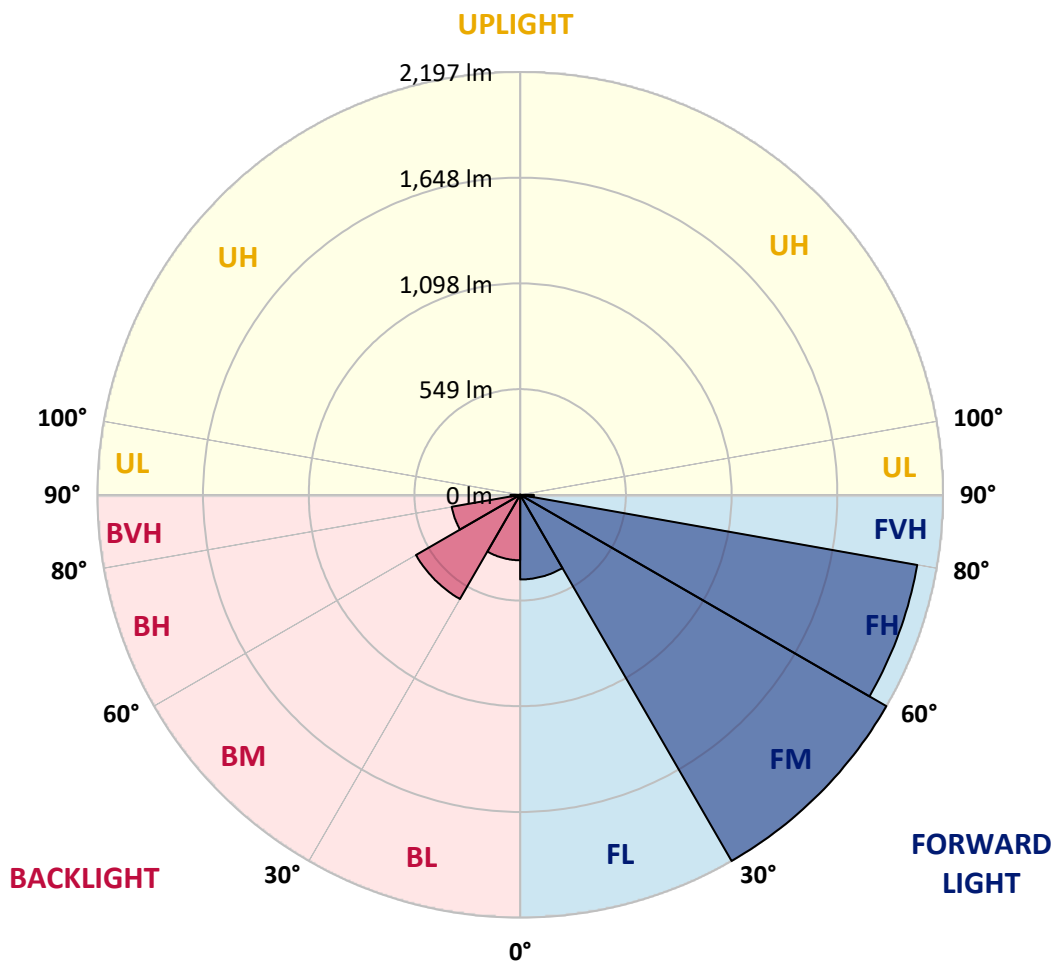
CATALOG NUMBER: ARCH-N-PA1-50-730-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 439.8 | 7.1 | | | |
| FM | (30°-60°) | 2196.9 | 35.6 | | | |
| FH | (60°-80°) | 2095.0 | 33.9 | | | G2/5000 |
| FVH | (80°-90°) | 71.3 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 340.1 | 5.5 | B1/500 | | |
| BM | (30°-60°) | 625.4 | 10.1 | B1/1000 | | |
| BH | (60°-80°) | 360.8 | 5.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 49.8 | 0.8 | | | 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: P348594

CATALOG NUMBER: ARCH-N-PA1-50-730-U-T3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 |
| 2.5° | 812.9 | 813.8 | 813.1 | 814.8 | 812.9 | 814.2 | 813.1 | 813.1 | 812.5 | 810.6 | 808.4 |
| 5° | 825.7 | 827.4 | 826.3 | 828.0 | 825.7 | 826.1 | 824.2 | 824.2 | 822.3 | 818.2 | 814.0 |
| 7.5° | 845.7 | 847.6 | 846.8 | 848.5 | 845.3 | 845.3 | 842.7 | 842.5 | 838.7 | 832.1 | 827.2 |
| 10° | 869.5 | 872.1 | 871.2 | 873.8 | 871.2 | 872.1 | 869.5 | 869.5 | 864.4 | 855.1 | 848.9 |
| 12.5° | 904.2 | 907.4 | 905.1 | 904.9 | 903.8 | 905.5 | 903.4 | 903.0 | 898.3 | 885.5 | 877.0 |
| 15° | 950.6 | 954.0 | 949.2 | 948.7 | 942.8 | 942.1 | 942.1 | 941.5 | 938.5 | 923.2 | 909.1 |
| 17.5° | 1004.1 | 1005.1 | 1000.9 | 994.1 | 986.4 | 981.5 | 980.9 | 982.6 | 982.6 | 964.7 | 942.3 |
| 20° | 1056.4 | 1058.3 | 1054.9 | 1047.3 | 1037.5 | 1030.3 | 1025.1 | 1028.5 | 1028.3 | 1007.1 | 975.3 |
| 22.5° | 1113.5 | 1118.0 | 1112.8 | 1103.1 | 1091.6 | 1083.5 | 1074.5 | 1077.5 | 1077.7 | 1051.5 | 1007.7 |
| 25° | 1187.3 | 1183.3 | 1180.1 | 1166.3 | 1149.9 | 1141.6 | 1133.3 | 1136.3 | 1135.4 | 1099.4 | 1041.1 |
| 27.5° | 1252.7 | 1253.5 | 1249.3 | 1234.6 | 1215.7 | 1197.3 | 1196.9 | 1198.8 | 1195.6 | 1149.2 | 1072.6 |
| 30° | 1328.7 | 1329.1 | 1323.2 | 1310.0 | 1289.3 | 1265.7 | 1260.1 | 1263.3 | 1256.5 | 1196.5 | 1105.8 |
| 32.5° | 1404.3 | 1406.4 | 1399.8 | 1383.8 | 1367.2 | 1338.5 | 1327.4 | 1329.5 | 1312.5 | 1244.8 | 1140.1 |
| 35° | 1470.5 | 1473.4 | 1471.3 | 1460.7 | 1442.6 | 1417.9 | 1404.7 | 1403.4 | 1382.3 | 1304.0 | 1185.4 |
| 37.5° | 1537.9 | 1540.7 | 1538.4 | 1529.4 | 1522.2 | 1496.0 | 1489.0 | 1489.0 | 1452.4 | 1364.4 | 1243.1 |
| 40° | 1607.3 | 1611.6 | 1608.8 | 1596.5 | 1590.3 | 1578.4 | 1561.6 | 1557.5 | 1517.9 | 1437.0 | 1337.2 |
| 42.5° | 1671.8 | 1677.4 | 1688.4 | 1681.2 | 1668.6 | 1670.3 | 1636.5 | 1634.4 | 1605.4 | 1544.3 | 1455.3 |
| 45° | 1763.3 | 1771.4 | 1790.2 | 1784.6 | 1782.1 | 1772.7 | 1732.5 | 1730.6 | 1719.5 | 1688.6 | 1602.0 |
| 47.5° | 1863.2 | 1874.2 | 1908.1 | 1909.2 | 1936.6 | 1919.0 | 1864.2 | 1857.6 | 1860.2 | 1861.5 | 1781.0 |
| 50° | 1955.1 | 1967.3 | 2022.8 | 2049.0 | 2113.7 | 2117.6 | 2030.1 | 2024.1 | 2034.1 | 2063.5 | 1989.6 |
| 52.5° | 2028.6 | 2043.9 | 2113.3 | 2194.2 | 2305.1 | 2336.6 | 2234.2 | 2229.7 | 2237.2 | 2287.8 | 2225.5 |
| 55° | 2082.4 | 2099.0 | 2174.6 | 2321.9 | 2499.0 | 2554.6 | 2469.2 | 2464.9 | 2469.6 | 2534.1 | 2482.0 |
| 57.5° | 2095.0 | 2099.0 | 2208.7 | 2407.9 | 2662.7 | 2796.2 | 2756.8 | 2748.3 | 2725.3 | 2781.5 | 2765.1 |
| 60° | 2036.0 | 2052.2 | 2180.6 | 2438.1 | 2789.3 | 3034.3 | 3057.3 | 3046.7 | 2982.2 | 3028.2 | 3015.0 |
| 62.5° | 1916.4 | 1945.3 | 2075.6 | 2392.1 | 2838.9 | 3228.9 | 3352.2 | 3339.4 | 3228.3 | 3258.1 | 3194.6 |
| 65° | 1721.0 | 1733.3 | 1870.2 | 2233.6 | 2775.9 | 3353.4 | 3615.0 | 3608.6 | 3468.8 | 3422.2 | 3227.8 |
| 67.5° | 1371.5 | 1394.7 | 1510.9 | 1902.1 | 2518.2 | 3338.7 | 3818.3 | 3817.7 | 3625.9 | 3483.1 | 3110.1 |
| 69° | 1083.5 | 1107.5 | 1218.2 | 1566.9 | 2228.2 | 3204.4 | 3852.4 | 3859.8 | 3670.2 | 3446.0 | 2942.0 |
| 70° | 863.8 | 891.7 | 967.7 | 1319.7 | 1970.9 | 3027.3 | 3824.1 | 3837.5 | 3661.7 | 3384.9 | 2786.8 |
| 72.5° | 367.6 | 390.2 | 444.2 | 680.3 | 1201.2 | 2260.6 | 3496.5 | 3547.1 | 3464.3 | 3098.0 | 2303.2 |
| 75° | 160.5 | 167.5 | 192.0 | 277.4 | 533.2 | 1230.3 | 2739.1 | 2832.8 | 2962.2 | 2618.6 | 1715.7 |
| 77.5° | 117.5 | 120.5 | 133.9 | 162.8 | 239.3 | 464.7 | 1761.4 | 1815.9 | 2136.3 | 1905.5 | 1052.4 |
| 80° | 90.9 | 93.0 | 103.5 | 119.6 | 156.2 | 188.0 | 803.3 | 850.2 | 1201.2 | 978.7 | 438.3 |
| 82.5° | 72.4 | 73.9 | 81.1 | 88.1 | 107.9 | 113.9 | 266.7 | 295.9 | 443.4 | 270.3 | 116.0 |
| 85° | 67.3 | 69.0 | 71.5 | 64.3 | 69.2 | 66.8 | 115.4 | 120.7 | 133.9 | 106.2 | 48.5 |
| 87.5° | 30.4 | 36.0 | 70.9 | 50.0 | 36.8 | 29.4 | 47.3 | 49.4 | 55.6 | 55.8 | 21.5 |
| 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: P348594

CATALOG NUMBER: ARCH-N-PA1-50-730-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 | 807.8 |
| 2.5° | 809.7 | 809.1 | 810.2 | 807.6 | 810.8 | 810.6 | 809.5 | 809.9 | 812.1 | 811.9 | 812.1 |
| 5° | 814.6 | 814.2 | 815.5 | 813.6 | 817.4 | 818.7 | 818.9 | 820.8 | 823.1 | 823.8 | 823.8 |
| 7.5° | 827.0 | 827.0 | 827.6 | 825.1 | 827.6 | 827.4 | 826.3 | 828.2 | 830.6 | 830.8 | 830.6 |
| 10° | 848.3 | 848.5 | 847.4 | 840.8 | 838.7 | 832.9 | 827.6 | 827.8 | 830.8 | 833.1 | 833.8 |
| 12.5° | 875.1 | 874.2 | 869.5 | 857.4 | 848.5 | 836.8 | 831.2 | 831.0 | 834.0 | 835.9 | 836.5 |
| 15° | 905.7 | 903.4 | 891.3 | 871.5 | 855.7 | 844.2 | 835.3 | 833.1 | 831.4 | 829.3 | 829.5 |
| 17.5° | 934.7 | 929.4 | 909.1 | 881.7 | 865.1 | 849.7 | 832.5 | 818.7 | 809.1 | 803.6 | 801.9 |
| 20° | 964.1 | 953.6 | 924.5 | 891.3 | 870.2 | 842.3 | 809.1 | 781.0 | 763.5 | 755.4 | 754.0 |
| 22.5° | 990.9 | 974.1 | 938.7 | 901.3 | 866.1 | 817.2 | 765.0 | 724.2 | 699.9 | 689.0 | 689.9 |
| 25° | 1017.1 | 993.6 | 953.6 | 908.3 | 845.7 | 772.9 | 703.7 | 653.5 | 625.4 | 613.3 | 612.8 |
| 27.5° | 1040.0 | 1013.4 | 969.8 | 902.5 | 807.6 | 709.9 | 631.1 | 582.2 | 558.8 | 548.3 | 546.6 |
| 30° | 1066.4 | 1038.3 | 991.3 | 880.6 | 751.8 | 637.1 | 560.3 | 525.8 | 509.2 | 498.7 | 496.8 |
| 32.5° | 1098.6 | 1072.2 | 1009.0 | 840.8 | 680.5 | 561.1 | 504.9 | 480.9 | 465.7 | 454.0 | 451.9 |
| 35° | 1145.4 | 1116.9 | 1013.4 | 783.8 | 602.2 | 501.1 | 464.3 | 439.6 | 419.1 | 404.0 | 402.5 |
| 37.5° | 1204.2 | 1172.9 | 1003.2 | 709.9 | 526.2 | 462.1 | 430.4 | 400.0 | 373.4 | 352.1 | 348.7 |
| 40° | 1288.9 | 1241.6 | 974.9 | 624.7 | 470.2 | 432.1 | 397.4 | 362.7 | 329.7 | 304.8 | 299.9 |
| 42.5° | 1390.6 | 1322.3 | 931.5 | 540.0 | 429.1 | 401.7 | 364.6 | 321.6 | 290.1 | 272.5 | 269.9 |
| 45° | 1520.0 | 1406.2 | 871.2 | 466.0 | 388.7 | 371.2 | 329.3 | 289.7 | 270.1 | 257.1 | 255.0 |
| 47.5° | 1667.8 | 1500.3 | 808.0 | 405.7 | 354.4 | 342.7 | 301.0 | 275.4 | 259.9 | 249.7 | 247.8 |
| 50° | 1849.3 | 1606.5 | 741.0 | 356.3 | 319.9 | 308.4 | 287.6 | 267.6 | 255.2 | 247.3 | 245.4 |
| 52.5° | 2054.1 | 1726.3 | 692.7 | 317.4 | 291.4 | 283.1 | 280.6 | 263.3 | 253.3 | 247.3 | 245.4 |
| 55° | 2274.6 | 1848.3 | 640.5 | 284.6 | 266.7 | 269.1 | 275.9 | 263.7 | 256.9 | 249.7 | 246.9 |
| 57.5° | 2495.4 | 1974.3 | 582.4 | 256.9 | 247.1 | 258.6 | 272.7 | 264.6 | 258.8 | 251.8 | 249.3 |
| 60° | 2669.9 | 2054.1 | 492.3 | 233.7 | 231.6 | 247.1 | 265.0 | 258.2 | 250.8 | 251.0 | 250.5 |
| 62.5° | 2751.5 | 2049.9 | 392.9 | 213.1 | 216.1 | 231.6 | 252.7 | 248.2 | 242.0 | 250.3 | 251.0 |
| 65° | 2705.7 | 1947.7 | 305.9 | 194.3 | 199.5 | 215.4 | 239.9 | 243.3 | 245.4 | 261.4 | 263.5 |
| 67.5° | 2513.7 | 1748.9 | 236.9 | 178.0 | 184.3 | 204.3 | 241.2 | 265.0 | 267.8 | 284.6 | 284.4 |
| 69° | 2315.1 | 1562.4 | 205.8 | 169.4 | 176.9 | 207.1 | 257.8 | 278.8 | 268.4 | 286.3 | 283.7 |
| 70° | 2148.6 | 1414.9 | 189.2 | 163.7 | 173.5 | 212.0 | 268.8 | 278.6 | 265.2 | 280.6 | 276.3 |
| 72.5° | 1654.8 | 1017.9 | 160.5 | 153.0 | 162.0 | 202.9 | 272.0 | 272.5 | 257.8 | 260.8 | 253.5 |
| 75° | 1135.0 | 643.3 | 140.1 | 138.6 | 144.5 | 182.8 | 261.8 | 260.3 | 238.4 | 234.1 | 228.2 |
| 77.5° | 625.8 | 326.7 | 119.0 | 124.7 | 128.8 | 162.0 | 238.0 | 235.9 | 217.8 | 208.8 | 206.7 |
| 80° | 241.4 | 143.0 | 100.5 | 110.9 | 113.5 | 140.3 | 208.6 | 206.7 | 191.6 | 180.1 | 176.9 |
| 82.5° | 91.1 | 74.9 | 83.0 | 96.0 | 95.1 | 115.8 | 176.7 | 175.6 | 160.9 | 144.1 | 139.0 |
| 85° | 42.1 | 44.9 | 65.8 | 79.2 | 73.0 | 85.8 | 141.3 | 143.3 | 125.4 | 105.4 | 105.4 |
| 87.5° | 17.9 | 25.1 | 46.6 | 59.8 | 49.2 | 57.9 | 103.7 | 99.0 | 90.9 | 63.0 | 59.2 |
| 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)