

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: P348753

Luminaire Tested: **ARCH-N-PA1-30-727-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-30-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2908 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 31
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

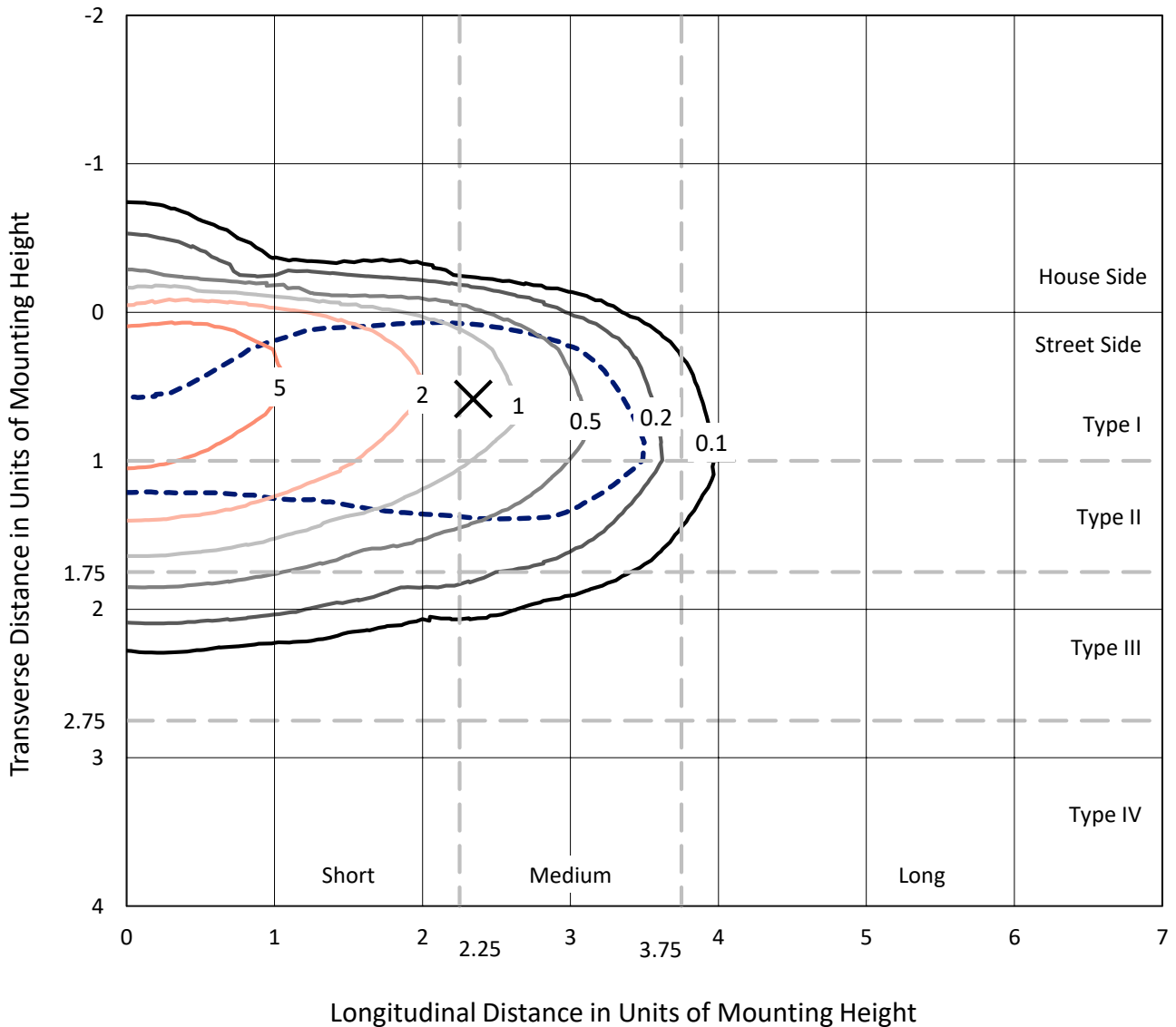


REPORT NUMBER: P348753

CATALOG NUMBER: ARCH-N-PA1-30-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

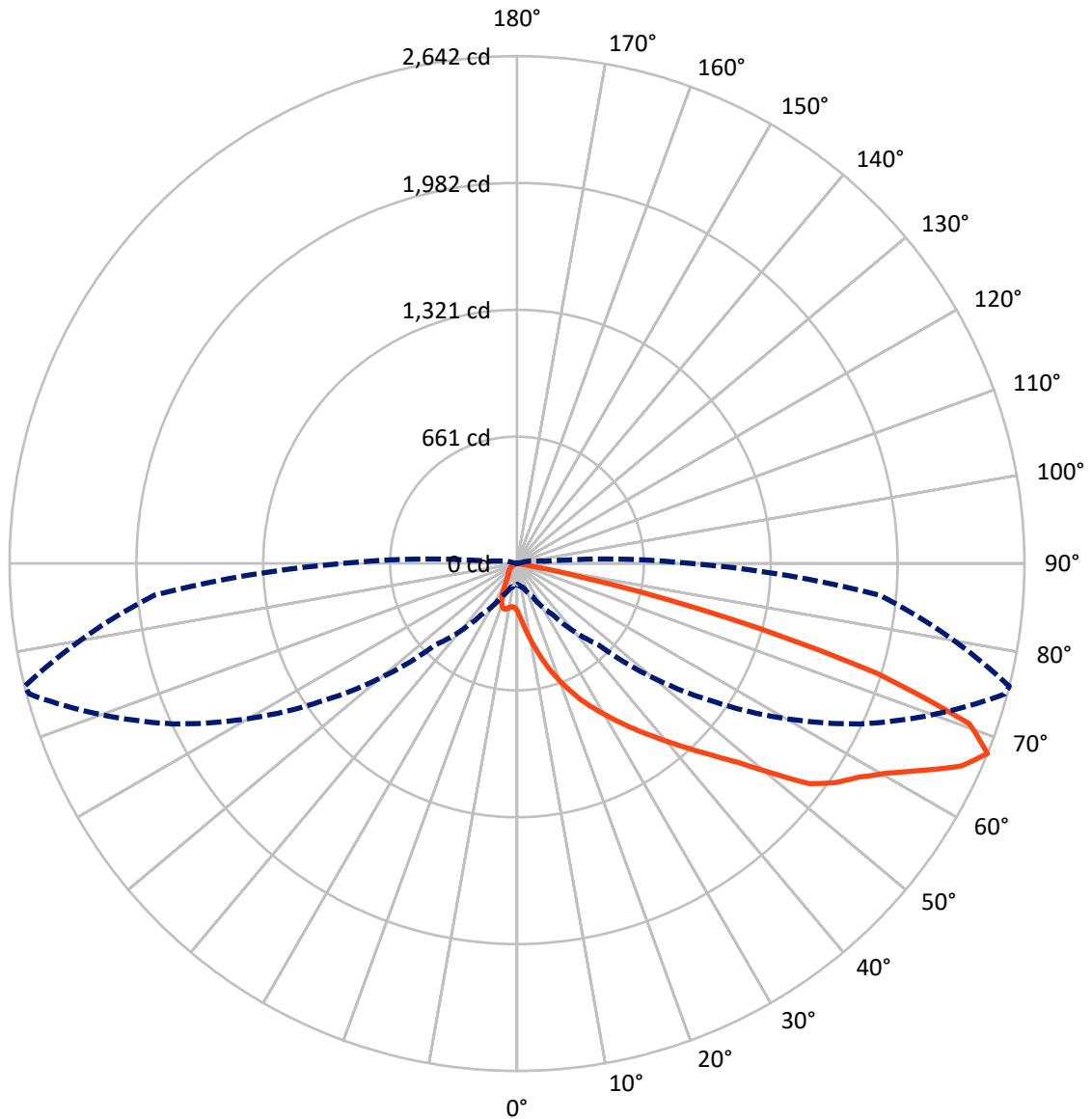
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.7 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P348753
CATALOG NUMBER: ARCH-N-PA1-30-727-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P348753

CATALOG NUMBER: ARCH-N-PA1-30-727-U-T2R-HSS

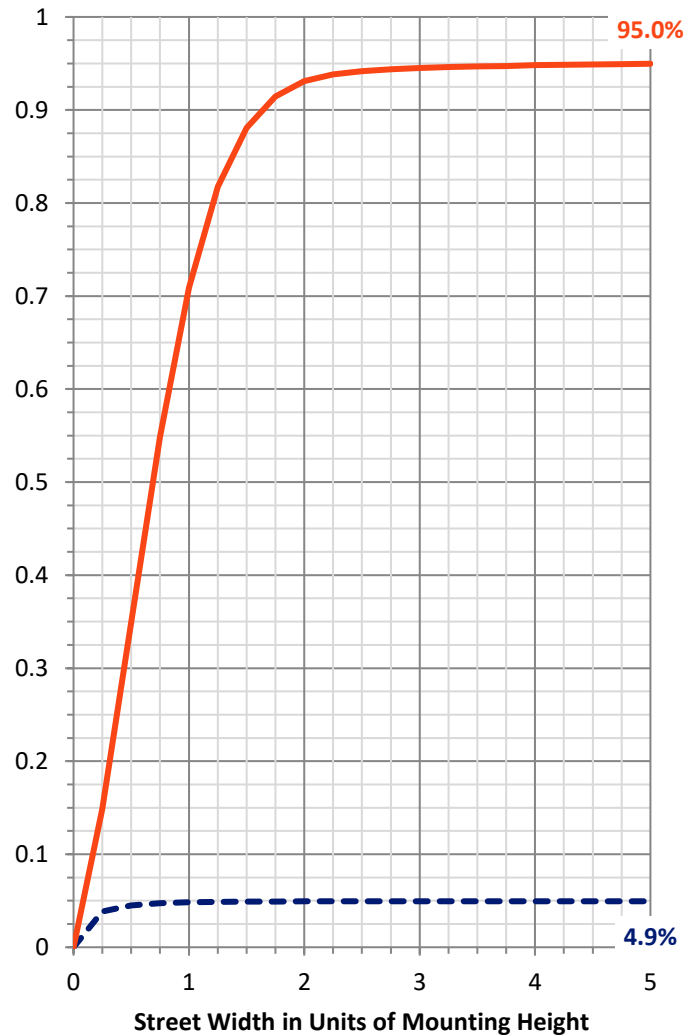
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 144.4 | 0.0 | 144.4 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 2763.6 | 0.0 | 2763.6 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 2908.0 | 0.0 | 2908.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 30.7 | 1.1 |
| 10°-20° | 121.6 | 4.2 |
| 20°-30° | 247.4 | 8.5 |
| 30°-40° | 429.4 | 14.8 |
| 40°-50° | 606.7 | 20.9 |
| 50°-60° | 688.1 | 23.7 |
| 60°-70° | 570.7 | 19.6 |
| 70°-80° | 206.7 | 7.1 |
| 80°-90° | 6.7 | 0.2 |
| 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° | 2908.0 | 100.0 |
| 0°-180° | 2908.0 | 100.0 |



--- HS — SS

REPORT NUMBER: P348753

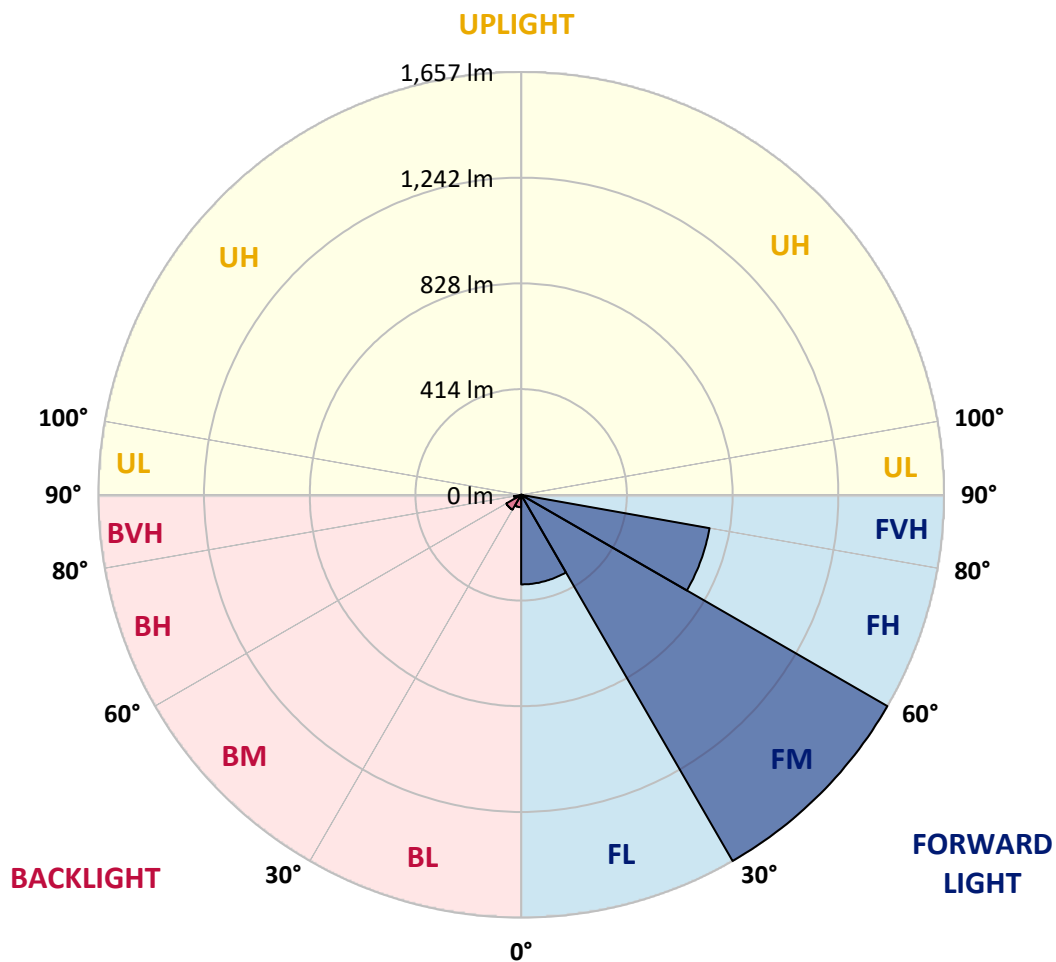
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 351.0 | 12.1 | | | |
| FM (30°-60°) | 1656.6 | 57.0 | | | |
| FH (60°-80°) | 749.5 | 25.8 | | | G1/1800 |
| FVH (80°-90°) | 6.5 | 0.2 | | | G0/10 |
| BL (0°-30°) | 48.7 | 1.7 | B0/110 | | |
| BM (30°-60°) | 67.6 | 2.3 | B0/220 | | |
| BH (60°-80°) | 27.9 | 1.0 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.2 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type II Medium





REPORT NUMBER: P348753

CATALOG NUMBER: ARCH-N-PA1-30-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 |
| 2.5° | 368.2 | 360.0 | 361.9 | 356.5 | 346.8 | 327.0 | 310.0 | 294.0 | 275.2 | 274.6 | 259.2 |
| 5° | 496.6 | 489.5 | 488.7 | 477.8 | 460.2 | 426.5 | 393.6 | 356.1 | 314.3 | 311.3 | 278.5 |
| 7.5° | 613.0 | 607.4 | 605.4 | 592.5 | 559.8 | 526.9 | 484.1 | 429.0 | 363.7 | 358.0 | 304.7 |
| 10° | 702.5 | 699.8 | 700.3 | 691.1 | 663.1 | 632.5 | 576.3 | 506.1 | 419.6 | 410.9 | 336.0 |
| 12.5° | 770.2 | 770.9 | 775.5 | 769.9 | 754.2 | 731.5 | 671.5 | 588.3 | 481.5 | 469.7 | 371.8 |
| 15° | 820.1 | 823.3 | 831.7 | 838.7 | 837.5 | 817.9 | 762.9 | 671.8 | 547.3 | 534.1 | 411.7 |
| 17.5° | 852.3 | 855.9 | 868.1 | 883.6 | 897.9 | 893.3 | 851.0 | 752.3 | 613.8 | 598.6 | 454.4 |
| 20° | 880.6 | 884.8 | 897.9 | 918.4 | 945.1 | 950.8 | 923.0 | 830.4 | 680.2 | 661.7 | 498.5 |
| 22.5° | 941.9 | 941.8 | 949.8 | 961.8 | 987.1 | 1001.9 | 984.3 | 902.9 | 745.8 | 726.5 | 543.4 |
| 25° | 1052.7 | 1048.5 | 1045.7 | 1036.3 | 1041.9 | 1051.1 | 1041.3 | 970.7 | 811.8 | 792.3 | 589.1 |
| 27.5° | 1184.5 | 1187.0 | 1164.4 | 1139.0 | 1119.4 | 1109.9 | 1093.9 | 1033.5 | 875.2 | 853.8 | 633.7 |
| 30° | 1323.5 | 1324.3 | 1297.5 | 1265.1 | 1221.9 | 1186.1 | 1158.4 | 1093.5 | 940.5 | 917.2 | 677.0 |
| 32.5° | 1448.9 | 1443.9 | 1417.4 | 1373.3 | 1318.8 | 1278.5 | 1220.8 | 1160.5 | 1009.5 | 987.0 | 725.1 |
| 35° | 1548.3 | 1542.4 | 1510.2 | 1470.0 | 1413.5 | 1372.9 | 1303.5 | 1227.4 | 1082.2 | 1060.1 | 773.4 |
| 37.5° | 1620.9 | 1614.0 | 1580.9 | 1539.6 | 1490.8 | 1467.2 | 1399.4 | 1300.2 | 1161.4 | 1137.7 | 824.3 |
| 40° | 1646.1 | 1640.1 | 1619.4 | 1589.2 | 1549.9 | 1544.6 | 1501.2 | 1383.9 | 1247.7 | 1222.5 | 881.9 |
| 42.5° | 1631.1 | 1625.2 | 1617.8 | 1607.6 | 1591.3 | 1596.4 | 1597.3 | 1479.3 | 1343.5 | 1318.7 | 945.4 |
| 45° | 1571.5 | 1566.2 | 1573.9 | 1588.8 | 1609.0 | 1634.3 | 1685.0 | 1581.9 | 1450.5 | 1424.0 | 1019.0 |
| 47.5° | 1483.7 | 1479.8 | 1501.0 | 1538.2 | 1597.4 | 1667.0 | 1765.1 | 1689.7 | 1570.7 | 1546.1 | 1110.7 |
| 50° | 1358.8 | 1358.2 | 1400.5 | 1468.4 | 1559.5 | 1682.8 | 1848.0 | 1812.3 | 1737.6 | 1711.7 | 1238.3 |
| 52.5° | 1164.4 | 1165.6 | 1248.8 | 1357.5 | 1492.8 | 1672.1 | 1901.2 | 1969.8 | 1931.8 | 1904.9 | 1348.7 |
| 55° | 979.2 | 986.9 | 1045.9 | 1202.6 | 1390.6 | 1632.4 | 1919.6 | 2043.3 | 2039.0 | 2013.5 | 1410.1 |
| 57.5° | 797.9 | 811.8 | 868.6 | 1015.0 | 1241.4 | 1540.7 | 1909.5 | 2075.1 | 2118.7 | 2099.2 | 1491.2 |
| 60° | 601.4 | 607.8 | 673.3 | 810.1 | 1049.9 | 1373.6 | 1836.5 | 2092.5 | 2227.8 | 2214.3 | 1608.8 |
| 62.5° | 382.6 | 398.6 | 456.7 | 588.7 | 817.5 | 1141.4 | 1713.4 | 2092.2 | 2364.3 | 2371.6 | 1760.5 |
| 65° | 201.6 | 220.2 | 251.0 | 364.8 | 561.8 | 882.1 | 1528.3 | 2072.6 | 2531.7 | 2542.0 | 1879.2 |
| 67.5° | 108.7 | 114.0 | 130.3 | 189.3 | 325.8 | 597.6 | 1256.2 | 1975.8 | 2628.6 | 2642.3 | 1895.7 |
| 70° | 79.5 | 82.4 | 88.6 | 104.7 | 164.0 | 347.1 | 916.7 | 1756.2 | 2503.7 | 2498.6 | 1684.3 |
| 72.5° | 61.0 | 65.6 | 70.2 | 76.7 | 94.3 | 185.3 | 570.7 | 1375.2 | 1997.7 | 1964.0 | 1259.0 |
| 75° | 48.2 | 48.9 | 55.4 | 61.3 | 70.7 | 105.5 | 253.4 | 801.0 | 1219.3 | 1139.6 | 652.9 |
| 77.5° | 38.5 | 39.0 | 42.8 | 47.9 | 56.8 | 69.3 | 78.5 | 315.1 | 389.3 | 347.3 | 141.7 |
| 80° | 22.8 | 24.1 | 31.9 | 37.0 | 47.1 | 43.7 | 28.7 | 68.4 | 60.8 | 55.0 | 23.8 |
| 82.5° | 12.7 | 13.8 | 18.0 | 29.2 | 32.9 | 20.9 | 14.3 | 18.5 | 14.3 | 13.9 | 6.8 |
| 85° | 0.0 | 0.6 | 11.6 | 18.1 | 13.4 | 4.6 | 6.0 | 6.1 | 4.2 | 3.9 | 2.7 |
| 87.5° | 0.0 | 0.0 | 3.6 | 3.4 | 0.5 | 0.8 | 1.4 | 2.0 | 1.7 | 1.7 | 1.4 |
| 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: P348753

CATALOG NUMBER: ARCH-N-PA1-30-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 | 246.7 |
| 2.5° | 251.5 | 244.6 | 231.6 | 218.9 | 208.2 | 199.4 | 191.5 | 188.3 | 185.8 | 185.4 | 183.4 |
| 5° | 262.7 | 248.8 | 224.0 | 203.6 | 190.0 | 180.3 | 172.0 | 166.9 | 163.0 | 161.4 | 160.0 |
| 7.5° | 279.7 | 258.7 | 223.0 | 199.5 | 183.2 | 166.9 | 151.6 | 135.1 | 124.7 | 120.8 | 118.5 |
| 10° | 300.3 | 271.7 | 226.8 | 198.4 | 169.8 | 135.4 | 110.1 | 89.1 | 80.5 | 77.7 | 77.0 |
| 12.5° | 324.4 | 287.8 | 233.4 | 191.3 | 141.3 | 96.2 | 75.9 | 68.8 | 66.9 | 66.0 | 66.0 |
| 15° | 352.1 | 305.6 | 238.1 | 170.6 | 104.5 | 72.8 | 65.7 | 62.4 | 60.4 | 59.2 | 59.4 |
| 17.5° | 380.3 | 322.9 | 235.9 | 140.7 | 77.1 | 64.7 | 59.5 | 55.9 | 53.1 | 52.0 | 51.7 |
| 20° | 408.9 | 338.9 | 223.1 | 104.7 | 65.2 | 58.7 | 52.9 | 48.9 | 46.1 | 45.0 | 44.7 |
| 22.5° | 438.4 | 352.6 | 200.7 | 76.8 | 58.6 | 52.1 | 46.4 | 42.4 | 39.8 | 38.7 | 38.2 |
| 25° | 467.2 | 363.7 | 169.3 | 62.2 | 52.4 | 45.9 | 40.4 | 36.7 | 34.3 | 33.3 | 33.1 |
| 27.5° | 494.1 | 370.7 | 133.0 | 54.9 | 46.9 | 40.3 | 35.3 | 32.0 | 29.9 | 29.2 | 29.1 |
| 30° | 518.3 | 371.3 | 98.4 | 49.6 | 42.0 | 35.4 | 30.8 | 27.9 | 26.1 | 25.4 | 25.1 |
| 32.5° | 542.8 | 365.9 | 71.6 | 44.7 | 37.6 | 31.2 | 26.8 | 24.5 | 23.2 | 22.6 | 22.6 |
| 35° | 565.9 | 353.6 | 55.8 | 40.5 | 33.3 | 27.1 | 23.6 | 21.9 | 21.2 | 20.5 | 20.5 |
| 37.5° | 588.4 | 335.9 | 47.4 | 36.8 | 29.2 | 23.7 | 20.8 | 19.7 | 19.1 | 18.5 | 18.5 |
| 40° | 611.4 | 313.6 | 43.1 | 33.4 | 25.9 | 21.0 | 18.5 | 17.6 | 16.9 | 16.4 | 16.3 |
| 42.5° | 639.5 | 287.8 | 40.3 | 30.2 | 22.9 | 18.6 | 16.3 | 15.3 | 14.8 | 14.3 | 14.0 |
| 45° | 672.1 | 265.7 | 38.0 | 27.0 | 20.5 | 16.6 | 14.1 | 13.1 | 12.4 | 11.7 | 11.6 |
| 47.5° | 719.2 | 249.6 | 34.9 | 23.6 | 18.2 | 14.4 | 12.2 | 11.1 | 9.9 | 9.3 | 9.2 |
| 50° | 779.2 | 236.4 | 31.0 | 20.5 | 15.9 | 12.2 | 10.2 | 8.8 | 7.8 | 7.1 | 7.1 |
| 52.5° | 809.0 | 219.0 | 27.4 | 17.8 | 13.4 | 10.3 | 8.3 | 6.6 | 6.1 | 5.5 | 5.5 |
| 55° | 821.0 | 205.8 | 23.8 | 15.2 | 11.1 | 8.5 | 6.5 | 5.1 | 4.7 | 4.3 | 4.2 |
| 57.5° | 854.6 | 202.0 | 20.8 | 12.9 | 9.2 | 6.8 | 5.0 | 3.8 | 3.6 | 3.1 | 3.1 |
| 60° | 908.8 | 203.9 | 18.0 | 11.0 | 7.4 | 5.2 | 3.7 | 2.9 | 2.7 | 2.2 | 2.2 |
| 62.5° | 967.2 | 201.4 | 15.2 | 9.4 | 5.7 | 3.8 | 2.5 | 2.2 | 2.2 | 1.3 | 1.1 |
| 65° | 978.4 | 179.4 | 13.0 | 7.8 | 4.5 | 2.8 | 1.7 | 1.4 | 1.9 | 0.3 | 0.0 |
| 67.5° | 908.1 | 139.1 | 11.2 | 6.0 | 3.3 | 2.2 | 1.3 | 0.6 | 1.7 | 0.0 | 0.0 |
| 70° | 726.2 | 88.4 | 9.0 | 4.3 | 2.5 | 1.8 | 1.0 | 0.3 | 1.3 | 0.0 | 0.0 |
| 72.5° | 513.5 | 51.3 | 7.1 | 3.1 | 2.2 | 1.4 | 0.8 | 0.0 | 0.8 | 0.0 | 0.0 |
| 75° | 259.7 | 27.4 | 4.5 | 2.3 | 1.7 | 1.0 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 |
| 77.5° | 56.2 | 12.7 | 2.8 | 1.7 | 1.1 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 12.2 | 5.6 | 1.8 | 1.0 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 4.5 | 2.9 | 0.9 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 2.4 | 1.5 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.3 | 0.5 | 0.1 | 0.1 | 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)