

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: P348541

Luminaire Tested: **ARCH-N-PA1-19-740-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348541
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-19-740-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 370mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3041 lumens
Efficiency: N/A
Efficacy: 160.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

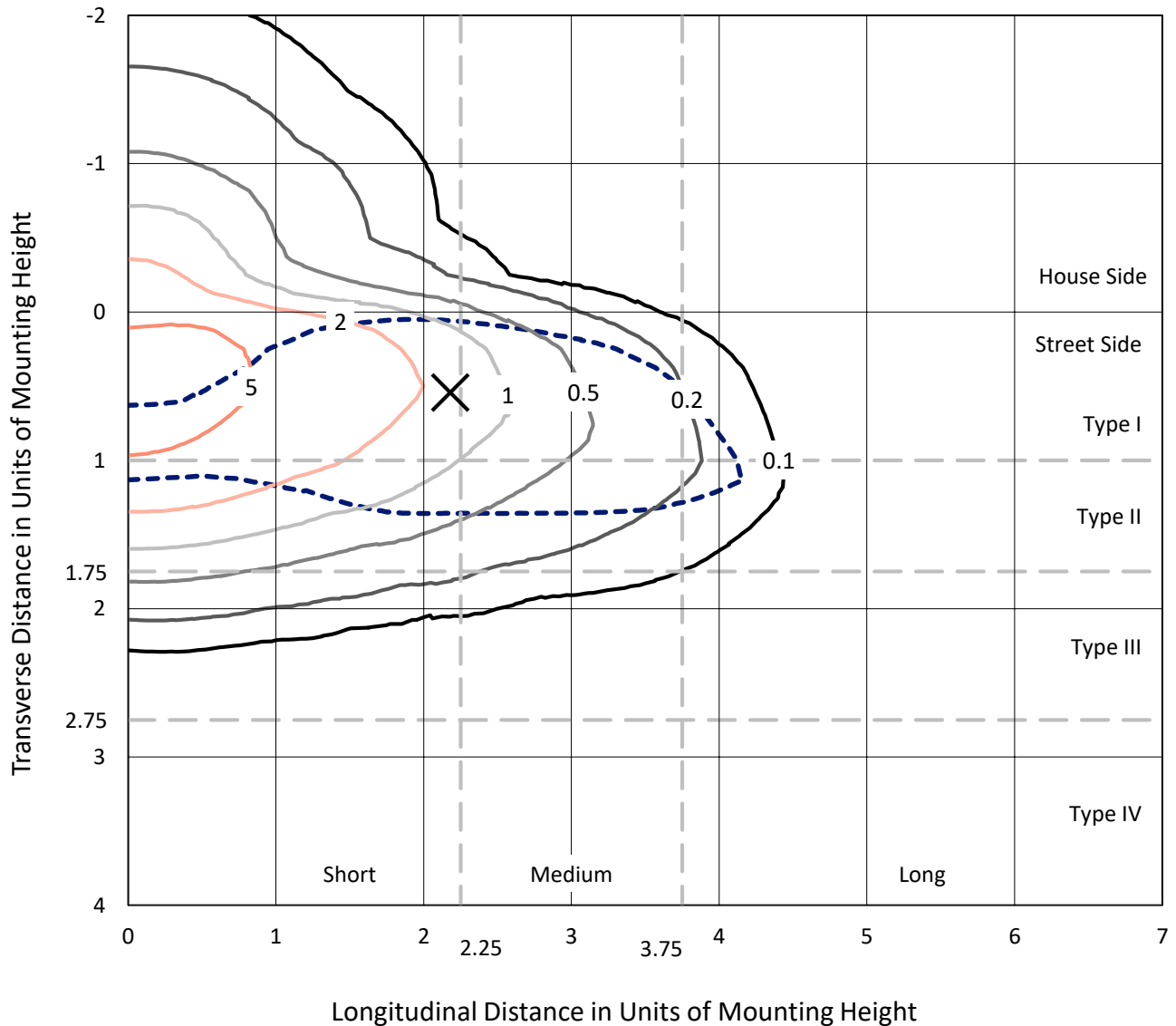
Input Watts (W): 19
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

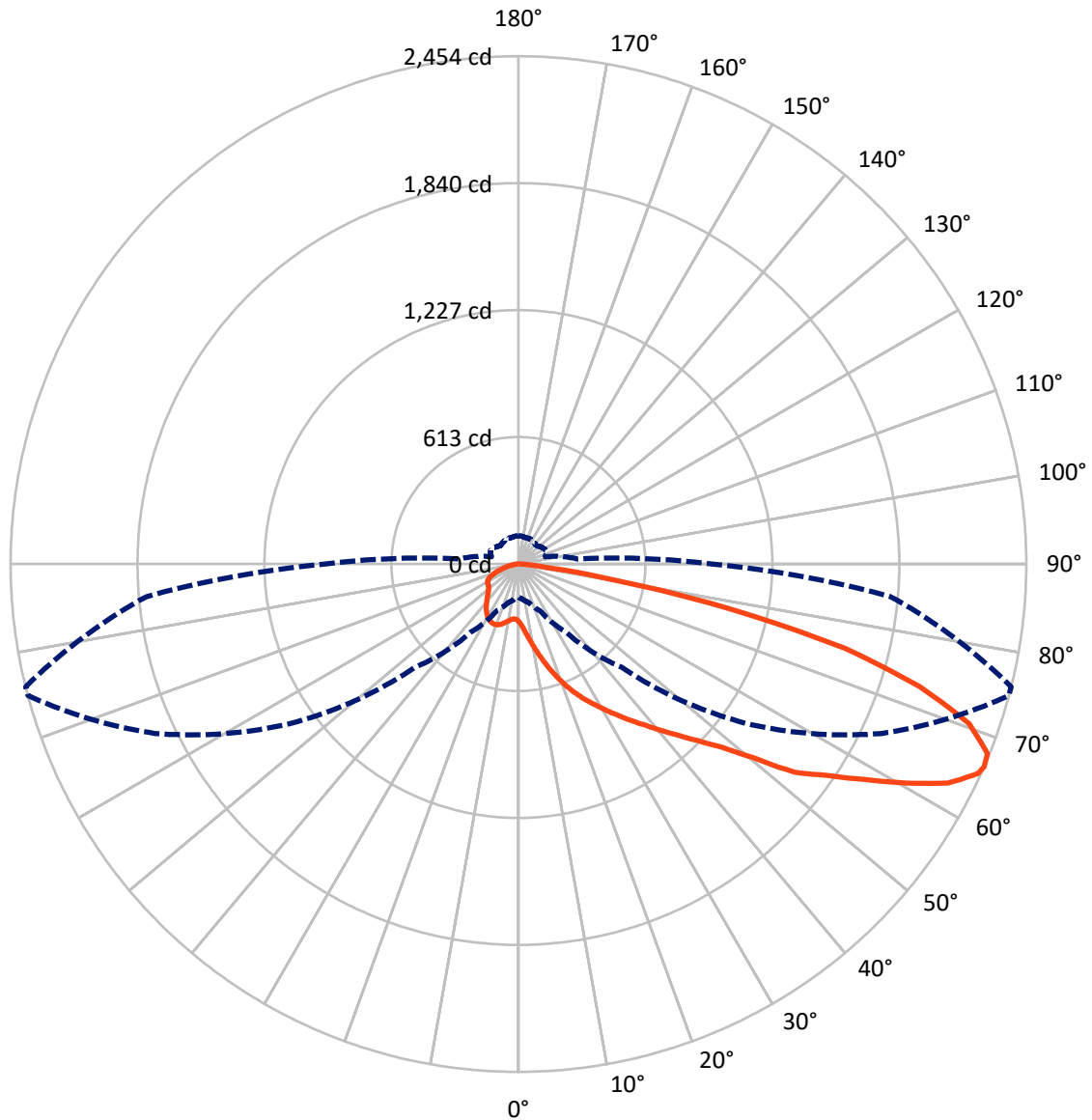
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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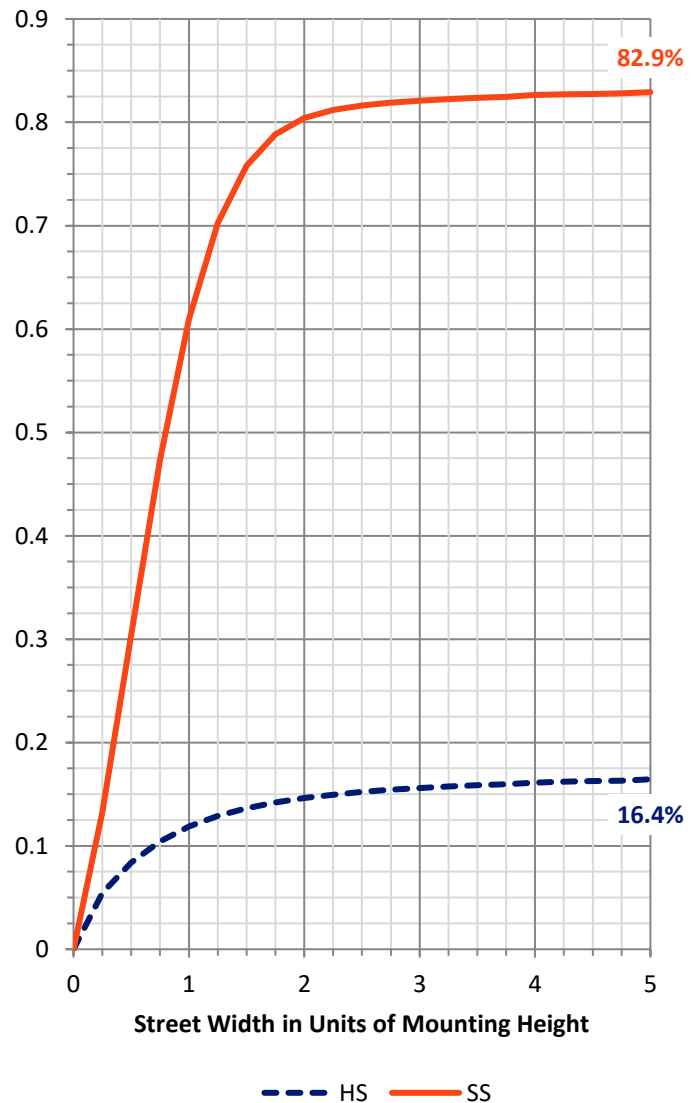
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 511.7 | 0.0 | 511.7 |
| | % Fixture | 16.8 | 0.0 | 16.8 |
| Street Side | Lumens | 2529.3 | 0.0 | 2529.3 |
| | % Fixture | 83.2 | 0.0 | 83.2 |
| Total | Lumens | 3041.0 | 0.0 | 3041.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 33.6 | 1.1 |
| 10°-20° | 132.6 | 4.4 |
| 20°-30° | 257.7 | 8.5 |
| 30°-40° | 420.6 | 13.8 |
| 40°-50° | 574.7 | 18.9 |
| 50°-60° | 669.4 | 22.0 |
| 60°-70° | 600.1 | 19.7 |
| 70°-80° | 303.3 | 10.0 |
| 80°-90° | 49.0 | 1.6 |
| 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° | 3041.0 | 100.0 |
| 0°-180° | 3041.0 | 100.0 |

Coefficient of Utilization



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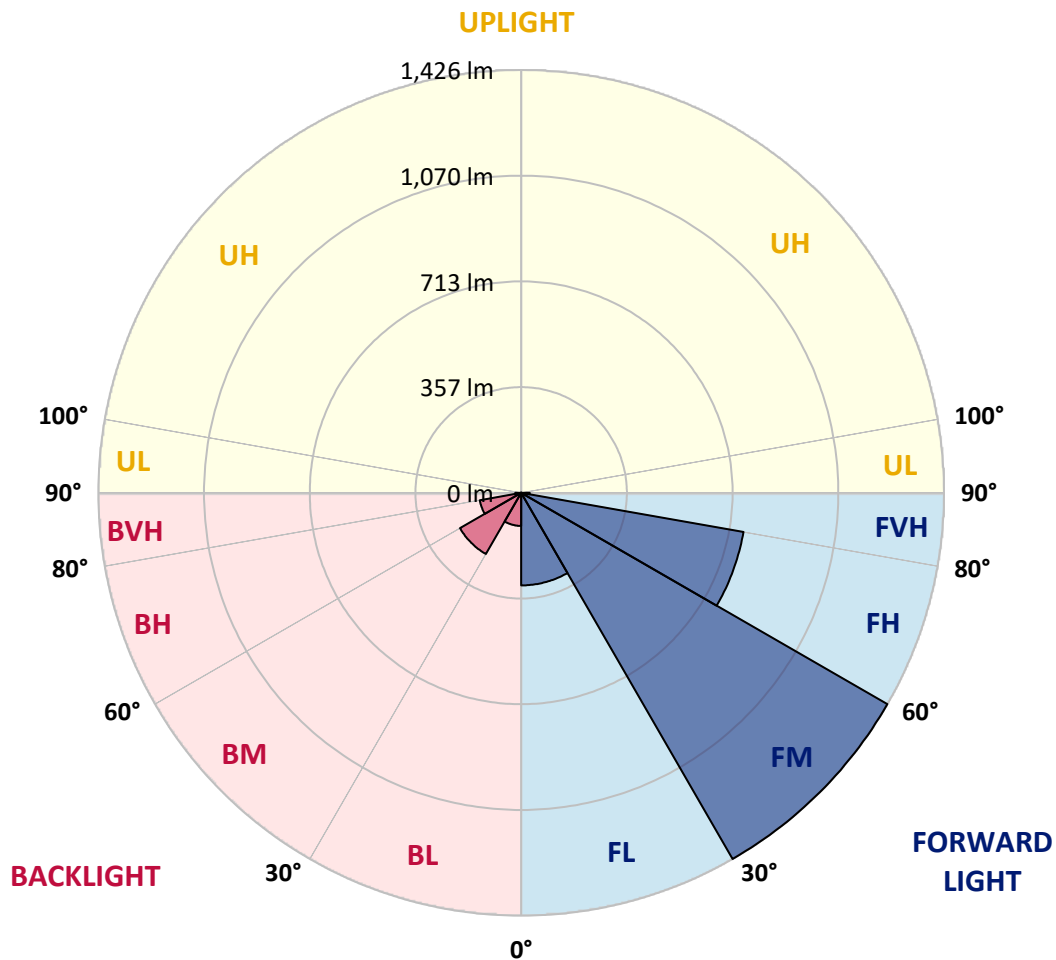
CATALOG NUMBER: ARCH-N-PA1-19-740-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 312.3 | 10.3 | | | |
| FM (30°-60°) | 1426.4 | 46.9 | | | |
| FH (60°-80°) | 761.6 | 25.0 | | | G1/1800 |
| FVH (80°-90°) | 28.9 | 1.0 | | | G1/100 |
| BL (0°-30°) | 111.6 | 3.7 | B1/500 | | |
| BM (30°-60°) | 238.3 | 7.8 | B1/1000 | | |
| BH (60°-80°) | 141.8 | 4.7 | B1/500 | | G1/500 |
| BVH (80°-90°) | 20.1 | 0.7 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 |
| 2.5° | 368.7 | 363.1 | 362.6 | 354.4 | 352.6 | 337.0 | 325.5 | 313.5 | 299.9 | 297.2 | 286.5 |
| 5° | 473.6 | 473.0 | 465.9 | 452.6 | 442.2 | 415.5 | 389.2 | 361.3 | 330.8 | 325.8 | 301.7 |
| 7.5° | 567.9 | 567.1 | 561.6 | 547.3 | 532.2 | 499.5 | 461.9 | 419.1 | 369.6 | 362.3 | 322.2 |
| 10° | 639.6 | 639.3 | 637.4 | 626.9 | 614.1 | 582.7 | 541.2 | 482.8 | 414.7 | 404.7 | 347.9 |
| 12.5° | 694.9 | 695.5 | 696.8 | 693.0 | 686.9 | 660.2 | 617.7 | 550.4 | 462.8 | 452.9 | 376.5 |
| 15° | 732.4 | 734.2 | 740.6 | 745.9 | 749.1 | 732.7 | 691.5 | 619.4 | 516.7 | 504.8 | 408.2 |
| 17.5° | 751.3 | 753.3 | 764.4 | 780.3 | 794.9 | 793.3 | 760.6 | 685.3 | 568.4 | 557.0 | 442.3 |
| 20° | 767.6 | 769.1 | 781.5 | 800.6 | 826.5 | 838.0 | 819.6 | 748.7 | 625.1 | 611.5 | 478.4 |
| 22.5° | 814.9 | 816.8 | 820.5 | 831.4 | 854.3 | 875.4 | 866.5 | 808.7 | 677.0 | 664.3 | 512.7 |
| 25° | 906.1 | 908.5 | 900.4 | 891.3 | 895.6 | 910.3 | 911.9 | 863.4 | 729.7 | 715.3 | 549.5 |
| 27.5° | 1016.1 | 1019.5 | 1005.8 | 982.1 | 961.5 | 955.8 | 953.8 | 908.2 | 780.0 | 763.3 | 586.0 |
| 30° | 1123.8 | 1129.6 | 1111.8 | 1081.1 | 1043.2 | 1016.6 | 996.9 | 952.1 | 829.5 | 813.6 | 620.4 |
| 32.5° | 1229.0 | 1226.6 | 1200.7 | 1170.7 | 1126.3 | 1093.0 | 1045.3 | 999.1 | 885.3 | 867.0 | 654.5 |
| 35° | 1301.0 | 1301.8 | 1277.8 | 1242.3 | 1199.9 | 1174.3 | 1110.1 | 1049.9 | 942.2 | 925.3 | 693.4 |
| 37.5° | 1362.3 | 1358.5 | 1331.3 | 1298.1 | 1261.7 | 1250.7 | 1186.0 | 1105.9 | 1003.8 | 985.4 | 734.6 |
| 40° | 1382.8 | 1378.3 | 1360.5 | 1336.6 | 1307.4 | 1306.5 | 1269.7 | 1169.3 | 1073.5 | 1055.3 | 781.2 |
| 42.5° | 1370.4 | 1364.7 | 1357.4 | 1350.9 | 1341.9 | 1346.0 | 1348.4 | 1243.6 | 1150.1 | 1129.7 | 835.1 |
| 45° | 1324.7 | 1316.1 | 1321.2 | 1335.4 | 1354.9 | 1378.2 | 1419.4 | 1325.9 | 1235.9 | 1218.8 | 898.4 |
| 47.5° | 1254.3 | 1246.6 | 1262.7 | 1293.0 | 1346.0 | 1405.1 | 1486.6 | 1416.7 | 1338.3 | 1321.4 | 988.5 |
| 50° | 1155.4 | 1157.7 | 1180.7 | 1235.8 | 1316.0 | 1417.5 | 1569.4 | 1537.0 | 1487.2 | 1471.4 | 1111.5 |
| 52.5° | 993.2 | 993.6 | 1058.4 | 1148.7 | 1262.7 | 1411.1 | 1615.4 | 1690.7 | 1690.4 | 1671.3 | 1228.5 |
| 55° | 842.4 | 851.6 | 902.9 | 1023.0 | 1176.4 | 1385.5 | 1647.5 | 1765.5 | 1823.9 | 1801.5 | 1337.7 |
| 57.5° | 695.2 | 700.6 | 749.2 | 869.8 | 1053.2 | 1317.2 | 1680.4 | 1855.2 | 1977.7 | 1963.6 | 1473.3 |
| 60° | 527.8 | 536.0 | 586.3 | 697.7 | 895.7 | 1196.1 | 1683.5 | 1948.8 | 2161.6 | 2147.4 | 1624.8 |
| 62.5° | 342.5 | 356.8 | 403.9 | 508.2 | 705.1 | 1022.0 | 1611.7 | 2010.1 | 2335.9 | 2330.8 | 1759.2 |
| 65° | 196.9 | 207.6 | 240.3 | 320.9 | 486.5 | 803.3 | 1440.8 | 1986.5 | 2443.1 | 2440.3 | 1809.5 |
| 66° | 160.8 | 167.6 | 192.6 | 250.8 | 401.4 | 705.4 | 1341.5 | 1936.9 | 2453.8 | 2453.9 | 1803.7 |
| 67.5° | 128.6 | 131.6 | 142.9 | 179.5 | 296.2 | 559.1 | 1164.0 | 1827.3 | 2440.6 | 2444.2 | 1766.4 |
| 70° | 106.4 | 108.0 | 111.5 | 120.4 | 161.7 | 337.2 | 826.2 | 1542.7 | 2307.9 | 2310.7 | 1620.9 |
| 72.5° | 95.5 | 96.4 | 97.8 | 99.0 | 114.1 | 188.4 | 504.6 | 1234.1 | 2023.5 | 2027.1 | 1399.3 |
| 75° | 86.5 | 87.0 | 86.8 | 86.9 | 95.7 | 120.1 | 260.8 | 921.4 | 1636.1 | 1628.9 | 1071.9 |
| 77.5° | 76.0 | 76.5 | 75.5 | 75.7 | 84.7 | 92.3 | 129.8 | 645.0 | 1104.1 | 1053.1 | 603.9 |
| 80° | 64.2 | 64.6 | 64.2 | 64.9 | 73.7 | 69.7 | 75.5 | 362.9 | 488.2 | 461.8 | 214.7 |
| 82.5° | 48.5 | 50.3 | 51.5 | 54.4 | 60.7 | 49.6 | 50.5 | 141.3 | 148.7 | 141.5 | 65.9 |
| 85° | 21.3 | 25.9 | 38.8 | 41.6 | 45.6 | 29.7 | 33.1 | 57.6 | 60.5 | 58.6 | 24.0 |
| 87.5° | 5.6 | 6.1 | 19.2 | 24.2 | 25.3 | 13.4 | 17.2 | 26.2 | 27.7 | 26.2 | 7.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: ARCH-N-PA1-19-740-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 | 277.7 |
| 2.5° | 280.8 | 275.8 | 266.7 | 258.6 | 252.5 | 248.4 | 244.3 | 242.2 | 241.0 | 239.7 | 239.9 |
| 5° | 289.8 | 279.6 | 264.0 | 252.9 | 246.7 | 242.8 | 240.8 | 239.9 | 239.4 | 238.2 | 238.2 |
| 7.5° | 303.3 | 288.9 | 267.4 | 256.0 | 251.2 | 248.2 | 246.9 | 246.5 | 245.9 | 244.5 | 244.7 |
| 10° | 320.3 | 300.1 | 274.5 | 263.5 | 259.0 | 255.7 | 254.0 | 253.3 | 252.2 | 250.6 | 250.8 |
| 12.5° | 340.4 | 314.1 | 283.9 | 272.3 | 267.0 | 262.5 | 259.6 | 257.9 | 255.9 | 253.8 | 253.9 |
| 15° | 362.3 | 329.2 | 294.0 | 280.3 | 273.0 | 266.8 | 262.1 | 259.1 | 256.0 | 253.3 | 253.2 |
| 17.5° | 384.5 | 343.9 | 301.8 | 284.6 | 274.7 | 266.6 | 260.3 | 255.6 | 251.8 | 248.5 | 248.2 |
| 20° | 408.4 | 357.1 | 306.1 | 284.2 | 271.4 | 261.7 | 253.3 | 247.6 | 243.3 | 240.0 | 239.5 |
| 22.5° | 432.8 | 369.5 | 306.8 | 280.0 | 264.1 | 252.2 | 243.4 | 237.0 | 232.7 | 229.3 | 228.1 |
| 25° | 455.1 | 379.1 | 303.8 | 271.8 | 253.9 | 241.1 | 232.5 | 226.0 | 222.5 | 218.5 | 217.2 |
| 27.5° | 475.4 | 385.8 | 297.8 | 261.4 | 242.4 | 229.8 | 221.8 | 216.2 | 212.4 | 209.3 | 208.2 |
| 30° | 493.7 | 389.4 | 288.0 | 249.0 | 230.6 | 219.2 | 212.4 | 208.5 | 205.2 | 201.3 | 200.6 |
| 32.5° | 511.0 | 389.4 | 275.4 | 235.5 | 219.0 | 209.8 | 205.8 | 203.4 | 199.7 | 195.8 | 194.8 |
| 35° | 528.4 | 387.0 | 260.6 | 221.3 | 208.2 | 203.1 | 202.9 | 200.1 | 194.4 | 189.2 | 187.9 |
| 37.5° | 546.6 | 382.2 | 243.8 | 208.1 | 199.5 | 200.1 | 201.8 | 195.6 | 187.6 | 180.3 | 178.3 |
| 40° | 567.3 | 375.5 | 226.5 | 196.7 | 192.1 | 198.7 | 199.0 | 189.2 | 173.5 | 166.8 | 165.1 |
| 42.5° | 591.6 | 368.8 | 210.4 | 186.6 | 186.3 | 194.7 | 193.8 | 175.4 | 166.0 | 162.6 | 161.7 |
| 45° | 623.5 | 364.9 | 195.1 | 177.0 | 181.8 | 188.2 | 184.8 | 167.8 | 163.8 | 161.9 | 161.1 |
| 47.5° | 673.7 | 366.9 | 181.1 | 169.3 | 177.3 | 181.7 | 168.1 | 164.7 | 161.9 | 159.5 | 158.7 |
| 50° | 736.7 | 365.8 | 169.7 | 164.0 | 172.1 | 174.9 | 160.5 | 160.6 | 159.2 | 156.5 | 155.3 |
| 52.5° | 784.1 | 356.9 | 162.4 | 161.1 | 167.6 | 162.8 | 155.8 | 156.7 | 156.0 | 152.1 | 150.7 |
| 55° | 829.8 | 349.3 | 158.7 | 159.9 | 164.3 | 147.7 | 150.2 | 152.5 | 151.8 | 147.9 | 147.3 |
| 57.5° | 886.7 | 347.8 | 156.4 | 160.2 | 161.5 | 140.2 | 144.8 | 147.8 | 147.3 | 145.7 | 145.4 |
| 60° | 956.4 | 348.2 | 154.3 | 160.7 | 158.4 | 134.6 | 139.8 | 143.6 | 143.9 | 143.6 | 143.4 |
| 62.5° | 994.7 | 337.0 | 149.2 | 159.3 | 152.9 | 129.8 | 134.5 | 140.1 | 140.2 | 140.8 | 140.7 |
| 65° | 962.2 | 303.3 | 139.6 | 154.2 | 143.7 | 125.7 | 130.0 | 136.1 | 134.5 | 137.3 | 137.3 |
| 66° | 930.6 | 283.9 | 134.8 | 150.9 | 139.8 | 124.2 | 128.5 | 134.0 | 132.0 | 135.9 | 135.9 |
| 67.5° | 866.1 | 251.2 | 126.3 | 143.9 | 134.2 | 122.0 | 126.9 | 130.6 | 127.9 | 133.6 | 133.2 |
| 70° | 748.2 | 194.3 | 109.0 | 128.0 | 125.0 | 118.8 | 124.6 | 123.8 | 119.9 | 128.5 | 126.9 |
| 72.5° | 630.8 | 147.6 | 87.5 | 107.2 | 111.1 | 114.8 | 121.4 | 115.1 | 110.2 | 116.2 | 112.6 |
| 75° | 489.5 | 111.0 | 69.2 | 83.3 | 93.8 | 108.5 | 117.6 | 105.1 | 98.0 | 97.4 | 95.4 |
| 77.5° | 264.6 | 76.2 | 54.8 | 63.6 | 74.5 | 100.7 | 115.0 | 94.4 | 83.6 | 81.1 | 79.6 |
| 80° | 104.8 | 49.6 | 39.9 | 48.2 | 52.1 | 89.3 | 108.8 | 81.9 | 69.0 | 66.5 | 64.1 |
| 82.5° | 43.3 | 29.3 | 25.7 | 32.3 | 34.0 | 76.4 | 97.7 | 67.1 | 53.3 | 73.7 | 78.3 |
| 85° | 18.6 | 16.1 | 15.3 | 16.7 | 19.2 | 53.6 | 77.7 | 51.2 | 57.5 | 51.3 | 40.8 |
| 87.5° | 5.6 | 6.8 | 6.5 | 6.4 | 7.0 | 12.8 | 41.4 | 28.5 | 42.2 | 16.0 | 12.0 |
| 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)