

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: P399139

Luminaire Tested: **ARCH-L-PA3-100-740-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-100-740-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16846 lumens
Efficiency: N/A
Efficacy: 165.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

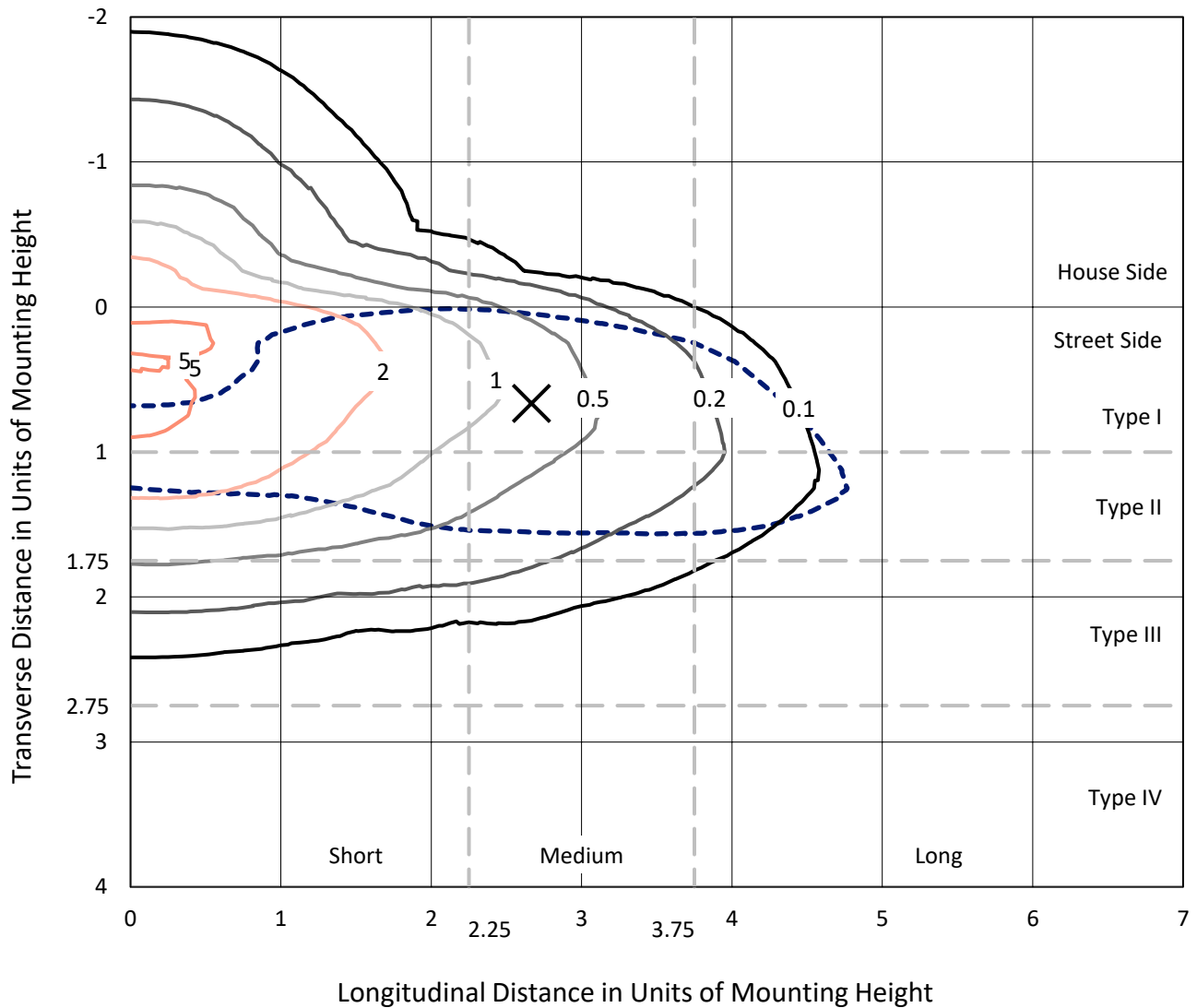
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399139
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Iso-Footcandle Lines of Horizontal Illumination

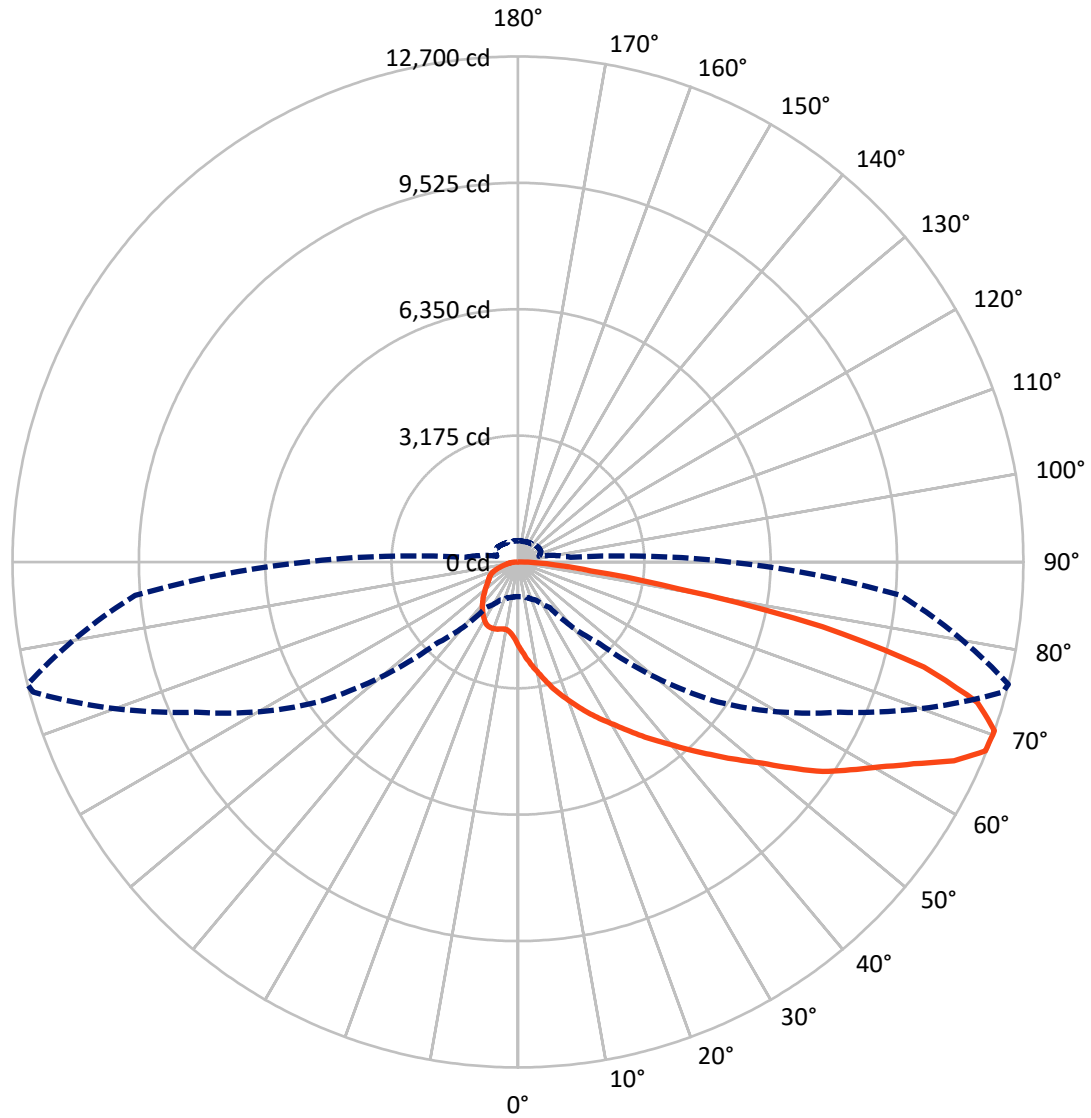
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P399139
CATALOG NUMBER: ARCH-L-PA3-100-740-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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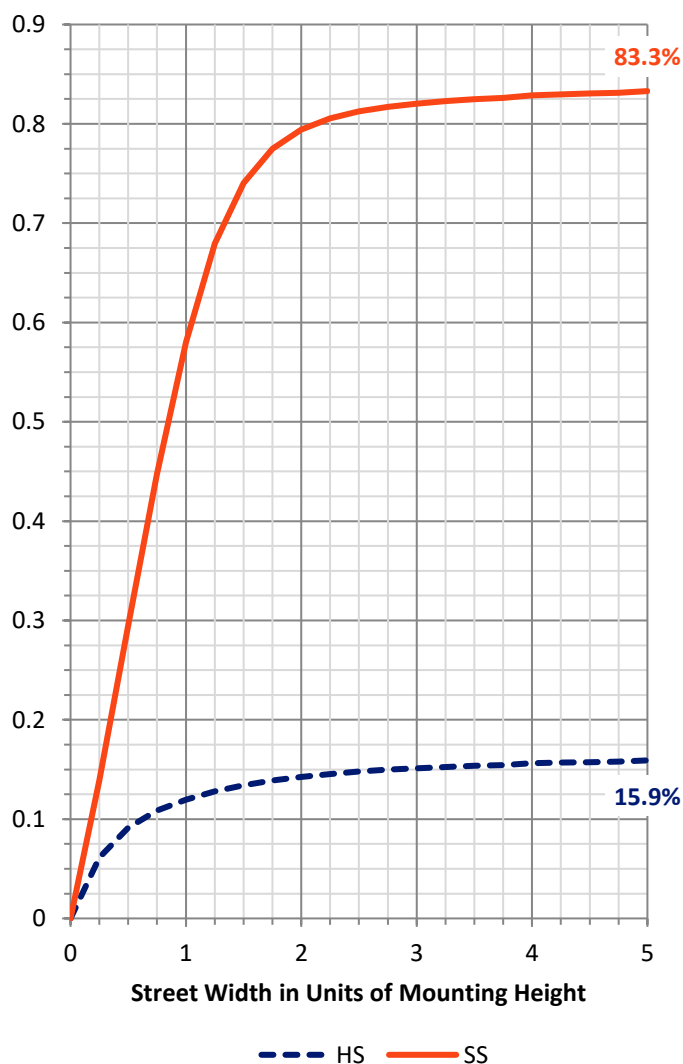
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2750.3 | 0.0 | 2750.3 |
| | % Fixture | 16.3 | 0.0 | 16.3 |
| Street Side | Lumens | 14095.7 | 0.0 | 14095.7 |
| | % Fixture | 83.7 | 0.0 | 83.7 |
| Total | Lumens | 16846.0 | 0.0 | 16846.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 218.9 | 1.3 |
| 10°-20° | 743.9 | 4.4 |
| 20°-30° | 1331.0 | 7.9 |
| 30°-40° | 2153.1 | 12.8 |
| 40°-50° | 3114.8 | 18.5 |
| 50°-60° | 3565.1 | 21.2 |
| 60°-70° | 3279.4 | 19.5 |
| 70°-80° | 2028.0 | 12.0 |
| 80°-90° | 411.8 | 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° | 16846.0 | 100.0 |
| 0°-180° | 16846.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P399139

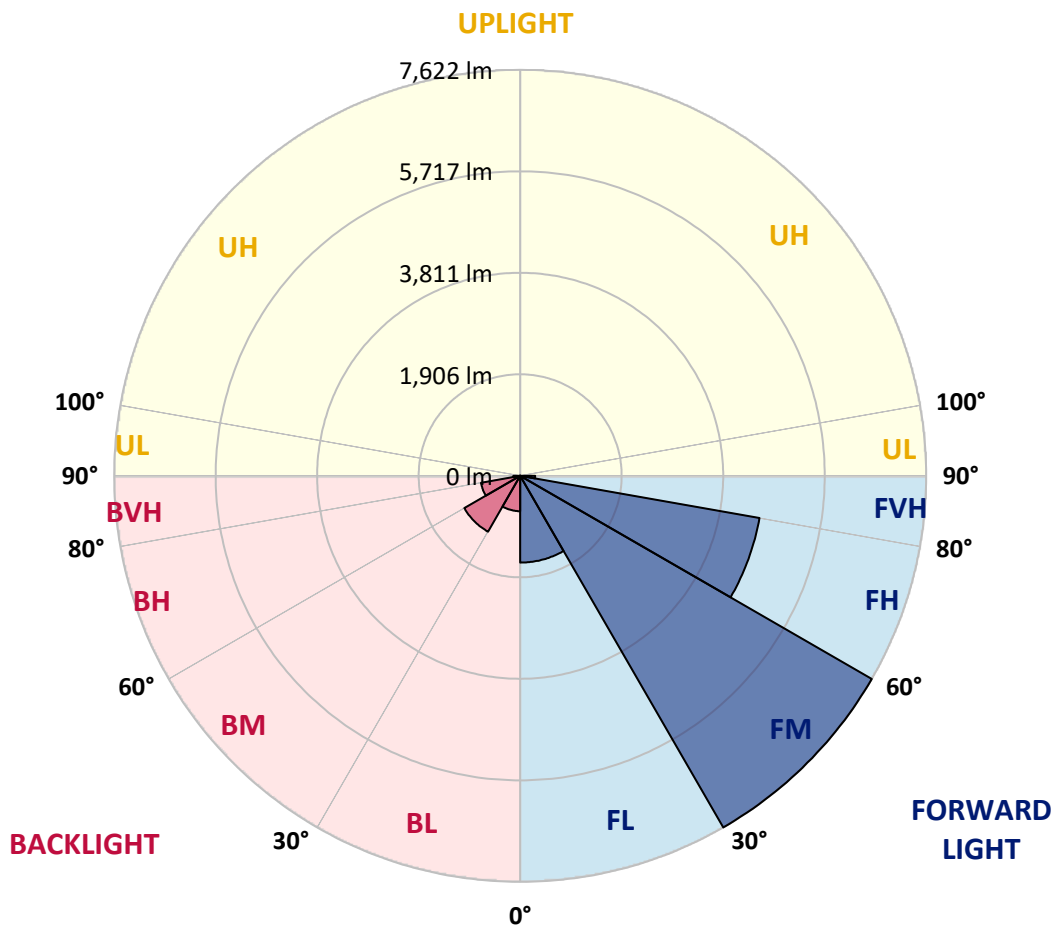
CATALOG NUMBER: ARCH-L-PA3-100-740-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1629.6 | 9.7 | | | |
| FM (30°-60°) | 7622.0 | 45.2 | | | |
| FH (60°-80°) | 4561.4 | 27.1 | | | G2/5000 |
| FVH (80°-90°) | 282.7 | 1.7 | | | G3/500 |
| BL (0°-30°) | 664.3 | 3.9 | B2/1000 | | |
| BM (30°-60°) | 1210.9 | 7.2 | B2/2500 | | |
| BH (60°-80°) | 746.0 | 4.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 129.1 | 0.8 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type II Medium





REPORT NUMBER: P399139

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0° | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 |
| 2.5° | 2684.8 | 2664.9 | 2662.7 | 2631.7 | 2602.9 | 2525.3 | 2470.0 | 2372.5 | 2275.0 | 2272.8 | 2175.3 |
| 5° | 3103.5 | 3083.6 | 3072.5 | 3034.8 | 2986.1 | 2884.2 | 2784.5 | 2633.9 | 2467.7 | 2456.7 | 2272.8 |
| 7.5° | 3387.1 | 3369.3 | 3347.2 | 3331.7 | 3285.2 | 3194.3 | 3072.5 | 2893.1 | 2664.9 | 2642.7 | 2385.8 |
| 10° | 3577.6 | 3566.5 | 3562.1 | 3551.0 | 3522.2 | 3449.1 | 3331.7 | 3141.2 | 2862.1 | 2837.7 | 2505.4 |
| 12.5° | 3659.5 | 3655.1 | 3675.0 | 3706.0 | 3717.1 | 3688.3 | 3575.3 | 3395.9 | 3079.1 | 3052.6 | 2649.4 |
| 15° | 3564.3 | 3568.7 | 3619.7 | 3726.0 | 3839.0 | 3901.0 | 3834.5 | 3659.5 | 3325.0 | 3287.4 | 2817.7 |
| 17.5° | 3520.0 | 3526.6 | 3562.1 | 3664.0 | 3823.5 | 4016.2 | 4047.2 | 3909.8 | 3562.1 | 3508.9 | 2995.0 |
| 20° | 3597.5 | 3606.4 | 3632.9 | 3712.7 | 3823.5 | 4029.5 | 4191.2 | 4149.1 | 3794.7 | 3739.3 | 3165.5 |
| 22.5° | 3794.7 | 3805.7 | 3803.5 | 3854.5 | 3929.8 | 4071.6 | 4270.9 | 4375.0 | 4038.3 | 3976.3 | 3342.8 |
| 25° | 4215.5 | 4206.7 | 4131.4 | 4107.0 | 4126.9 | 4217.8 | 4377.3 | 4592.1 | 4293.1 | 4231.1 | 3528.8 |
| 27.5° | 4787.1 | 4776.0 | 4638.6 | 4514.6 | 4403.8 | 4443.7 | 4527.9 | 4767.1 | 4552.3 | 4481.4 | 3706.0 |
| 30° | 5398.5 | 5385.2 | 5225.7 | 5024.1 | 4778.2 | 4720.6 | 4709.5 | 4920.0 | 4813.7 | 4738.3 | 3894.3 |
| 32.5° | 5994.4 | 5983.3 | 5812.7 | 5577.9 | 5239.0 | 5066.2 | 4959.9 | 5090.6 | 5110.5 | 5037.4 | 4100.4 |
| 35° | 6537.1 | 6537.1 | 6390.9 | 6111.8 | 5728.5 | 5467.1 | 5292.1 | 5301.0 | 5451.6 | 5367.5 | 4335.2 |
| 37.5° | 7020.0 | 7017.8 | 6858.3 | 6583.6 | 6215.9 | 5916.8 | 5699.7 | 5555.7 | 5777.3 | 5704.2 | 4581.1 |
| 40° | 7403.2 | 7387.7 | 7270.3 | 7031.1 | 6661.1 | 6364.3 | 6145.0 | 5854.8 | 6140.6 | 6074.1 | 4842.4 |
| 42.5° | 7682.3 | 7673.5 | 7593.7 | 7385.5 | 7033.3 | 6754.2 | 6603.5 | 6231.4 | 6552.6 | 6486.1 | 5148.1 |
| 45° | 7790.9 | 7808.6 | 7808.6 | 7611.5 | 7332.3 | 7077.6 | 7011.1 | 6645.6 | 6997.8 | 6931.4 | 5476.0 |
| 47.5° | 7615.9 | 7662.4 | 7757.7 | 7771.0 | 7525.1 | 7352.3 | 7374.4 | 7062.1 | 7456.4 | 7421.0 | 5834.9 |
| 50° | 7068.7 | 7155.1 | 7363.4 | 7739.9 | 7602.6 | 7562.7 | 7684.6 | 7487.4 | 7948.2 | 7937.1 | 6271.3 |
| 52.5° | 5657.6 | 5868.1 | 6517.1 | 7192.8 | 7549.4 | 7660.2 | 7992.5 | 7965.9 | 8581.7 | 8599.4 | 6840.6 |
| 55° | 4339.6 | 4419.3 | 5170.3 | 6320.0 | 7223.8 | 7629.2 | 8198.5 | 8433.3 | 9268.4 | 9290.6 | 7363.4 |
| 57.5° | 3508.9 | 3562.1 | 3971.9 | 5170.3 | 6481.7 | 7460.8 | 8360.2 | 8705.8 | 9795.7 | 9853.3 | 7828.6 |
| 60° | 2780.1 | 2857.6 | 3132.3 | 3956.4 | 5442.8 | 7055.4 | 8473.2 | 9009.3 | 10362.8 | 10449.1 | 8384.6 |
| 62.5° | 2066.8 | 2104.4 | 2363.6 | 2930.7 | 4308.6 | 6326.6 | 8413.4 | 9339.3 | 11058.3 | 11162.4 | 9053.6 |
| 65° | 1470.9 | 1504.1 | 1688.0 | 2084.5 | 3185.5 | 5340.9 | 8065.6 | 9585.2 | 11931.1 | 12037.4 | 9727.0 |
| 67.5° | 1101.0 | 1114.3 | 1218.4 | 1457.6 | 2146.5 | 4149.1 | 7361.1 | 9543.1 | 12569.1 | 12664.4 | 9997.2 |
| 70° | 870.6 | 875.0 | 926.0 | 1054.4 | 1395.6 | 2888.6 | 6127.3 | 8925.1 | 12615.6 | 12699.8 | 9656.1 |
| 72.5° | 722.2 | 719.9 | 748.7 | 810.8 | 972.5 | 1827.5 | 4539.0 | 7777.6 | 12017.5 | 12075.1 | 8703.6 |
| 75° | 595.9 | 600.3 | 620.3 | 655.7 | 742.1 | 1205.1 | 2941.8 | 6204.8 | 10602.0 | 10540.0 | 7303.5 |
| 77.5° | 500.6 | 498.4 | 507.3 | 538.3 | 600.3 | 866.1 | 1723.4 | 4483.6 | 7857.3 | 7826.3 | 4793.7 |
| 80° | 403.2 | 407.6 | 420.9 | 447.5 | 505.1 | 660.1 | 1019.0 | 2797.8 | 4215.5 | 4102.6 | 2290.5 |
| 82.5° | 270.3 | 312.3 | 338.9 | 369.9 | 436.4 | 487.3 | 646.8 | 1422.2 | 1885.1 | 1856.3 | 1038.9 |
| 85° | 128.5 | 170.6 | 252.5 | 288.0 | 354.4 | 305.7 | 438.6 | 677.9 | 943.7 | 932.6 | 374.4 |
| 87.5° | 26.6 | 26.6 | 135.1 | 161.7 | 219.3 | 130.7 | 243.7 | 294.6 | 456.3 | 427.5 | 152.8 |
| 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: P399139

CATALOG NUMBER: ARCH-L-PA3-100-740-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 | 2106.7 |
| 2.5° | 2117.7 | 2057.9 | 1938.3 | 1843.1 | 1745.6 | 1690.2 | 1621.5 | 1588.3 | 1581.7 | 1563.9 | 1577.2 |
| 5° | 2155.4 | 2038.0 | 1812.0 | 1663.6 | 1563.9 | 1515.2 | 1490.8 | 1482.0 | 1479.8 | 1475.3 | 1475.3 |
| 7.5° | 2206.3 | 2026.9 | 1732.3 | 1581.7 | 1517.4 | 1501.9 | 1508.6 | 1521.8 | 1524.1 | 1528.5 | 1526.3 |
| 10° | 2268.4 | 2029.1 | 1688.0 | 1561.7 | 1530.7 | 1532.9 | 1555.1 | 1572.8 | 1581.7 | 1588.3 | 1586.1 |
| 12.5° | 2354.8 | 2055.7 | 1681.3 | 1575.0 | 1561.7 | 1570.6 | 1592.7 | 1610.5 | 1619.3 | 1621.5 | 1621.5 |
| 15° | 2467.7 | 2111.1 | 1696.9 | 1603.8 | 1592.7 | 1599.4 | 1612.7 | 1619.3 | 1621.5 | 1619.3 | 1619.3 |
| 17.5° | 2591.8 | 2177.6 | 1719.0 | 1621.5 | 1603.8 | 1597.2 | 1592.7 | 1586.1 | 1572.8 | 1563.9 | 1563.9 |
| 20° | 2711.4 | 2237.4 | 1730.1 | 1619.3 | 1588.3 | 1561.7 | 1535.1 | 1501.9 | 1479.8 | 1462.0 | 1462.0 |
| 22.5° | 2831.0 | 2292.7 | 1730.1 | 1595.0 | 1546.2 | 1495.3 | 1439.9 | 1386.7 | 1353.5 | 1331.3 | 1331.3 |
| 25° | 2957.3 | 2345.9 | 1716.8 | 1552.9 | 1479.8 | 1406.7 | 1331.3 | 1264.9 | 1231.7 | 1209.5 | 1205.1 |
| 27.5° | 3063.6 | 2376.9 | 1681.3 | 1493.1 | 1397.8 | 1304.8 | 1218.4 | 1149.7 | 1125.3 | 1105.4 | 1105.4 |
| 30° | 3176.6 | 2396.9 | 1614.9 | 1415.5 | 1304.8 | 1198.4 | 1109.8 | 1054.4 | 1027.9 | 999.1 | 996.8 |
| 32.5° | 3302.9 | 2410.1 | 1539.6 | 1333.6 | 1209.5 | 1096.5 | 1021.2 | 976.9 | 919.3 | 888.3 | 883.9 |
| 35° | 3449.1 | 2427.9 | 1459.8 | 1240.5 | 1114.3 | 1012.4 | 968.0 | 894.9 | 839.6 | 813.0 | 810.8 |
| 37.5° | 3604.1 | 2441.2 | 1373.4 | 1158.6 | 1027.9 | 957.0 | 912.7 | 826.3 | 777.5 | 737.7 | 733.2 |
| 40° | 3768.1 | 2441.2 | 1284.8 | 1078.8 | 959.2 | 932.6 | 848.4 | 770.9 | 688.9 | 669.0 | 664.6 |
| 42.5° | 3949.7 | 2436.7 | 1196.2 | 1001.3 | 894.9 | 877.2 | 810.8 | 728.8 | 686.7 | 669.0 | 664.6 |
| 45° | 4142.4 | 2421.2 | 1112.0 | 912.7 | 828.5 | 793.0 | 742.1 | 719.9 | 702.2 | 702.2 | 702.2 |
| 47.5° | 4361.7 | 2407.9 | 1016.8 | 832.9 | 779.8 | 739.9 | 702.2 | 688.9 | 686.7 | 693.4 | 700.0 |
| 50° | 4643.1 | 2403.5 | 937.0 | 775.3 | 742.1 | 695.6 | 691.1 | 680.1 | 682.3 | 682.3 | 682.3 |
| 52.5° | 4984.2 | 2363.6 | 861.7 | 733.2 | 704.4 | 649.1 | 662.3 | 673.4 | 677.9 | 675.6 | 673.4 |
| 55° | 5234.5 | 2292.7 | 797.5 | 704.4 | 677.9 | 631.3 | 649.1 | 666.8 | 671.2 | 664.6 | 664.6 |
| 57.5° | 5460.5 | 2193.1 | 746.5 | 682.3 | 660.1 | 620.3 | 640.2 | 657.9 | 653.5 | 651.3 | 649.1 |
| 60° | 5719.7 | 2097.8 | 706.7 | 671.2 | 642.4 | 615.8 | 633.5 | 644.6 | 638.0 | 633.5 | 631.3 |
| 62.5° | 6001.0 | 2004.8 | 677.9 | 671.2 | 629.1 | 613.6 | 626.9 | 631.3 | 618.0 | 613.6 | 613.6 |
| 65° | 6131.7 | 1858.6 | 646.8 | 671.2 | 622.5 | 609.2 | 613.6 | 609.2 | 595.9 | 595.9 | 593.7 |
| 67.5° | 5916.8 | 1617.1 | 607.0 | 662.3 | 631.3 | 602.5 | 593.7 | 587.0 | 571.5 | 571.5 | 567.1 |
| 70° | 5323.1 | 1329.1 | 549.4 | 633.5 | 633.5 | 600.3 | 567.1 | 551.6 | 533.9 | 540.5 | 531.7 |
| 72.5° | 4547.8 | 1054.4 | 478.5 | 584.8 | 620.3 | 598.1 | 538.3 | 513.9 | 498.4 | 505.1 | 491.8 |
| 75° | 3683.9 | 817.4 | 394.3 | 507.3 | 587.0 | 587.0 | 509.5 | 476.3 | 458.5 | 458.5 | 443.0 |
| 77.5° | 2348.1 | 604.8 | 321.2 | 420.9 | 527.2 | 571.5 | 485.1 | 434.2 | 407.6 | 401.0 | 389.9 |
| 80° | 1163.0 | 425.3 | 263.6 | 334.5 | 449.7 | 536.1 | 467.4 | 385.4 | 347.8 | 334.5 | 314.6 |
| 82.5° | 618.0 | 294.6 | 210.4 | 261.4 | 358.9 | 482.9 | 445.3 | 332.3 | 285.8 | 265.8 | 243.7 |
| 85° | 276.9 | 181.6 | 168.4 | 199.4 | 272.5 | 396.5 | 401.0 | 272.5 | 219.3 | 261.4 | 192.7 |
| 87.5° | 101.9 | 82.0 | 82.0 | 101.9 | 157.3 | 166.1 | 283.5 | 175.0 | 139.6 | 95.3 | 75.3 |
| 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)