

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: P399696

Luminaire Tested: **ARCH-L-PA3-180-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-180-727-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17848 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

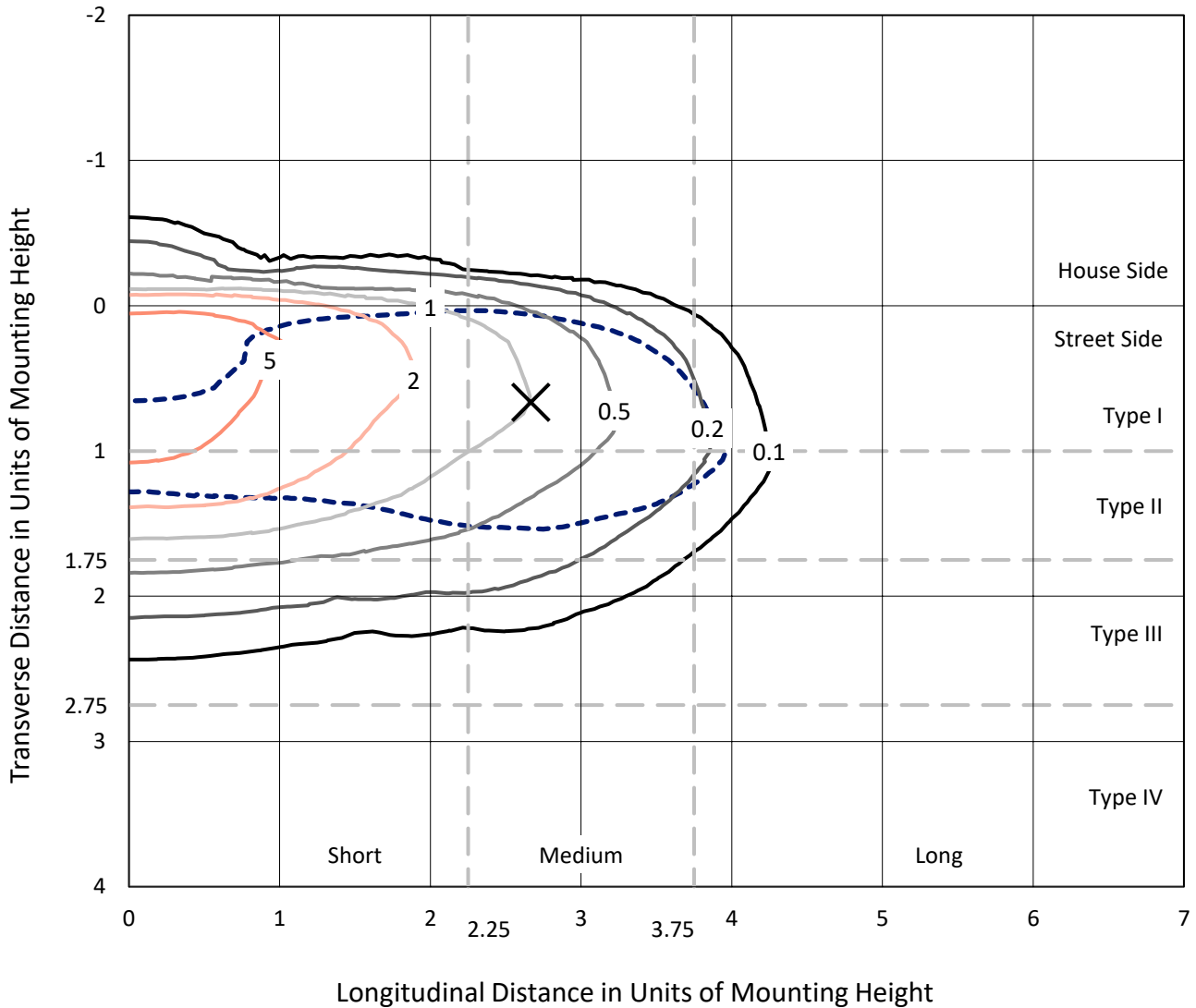
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399696
 CATALOG NUMBER: ARCH-L-PA3-180-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

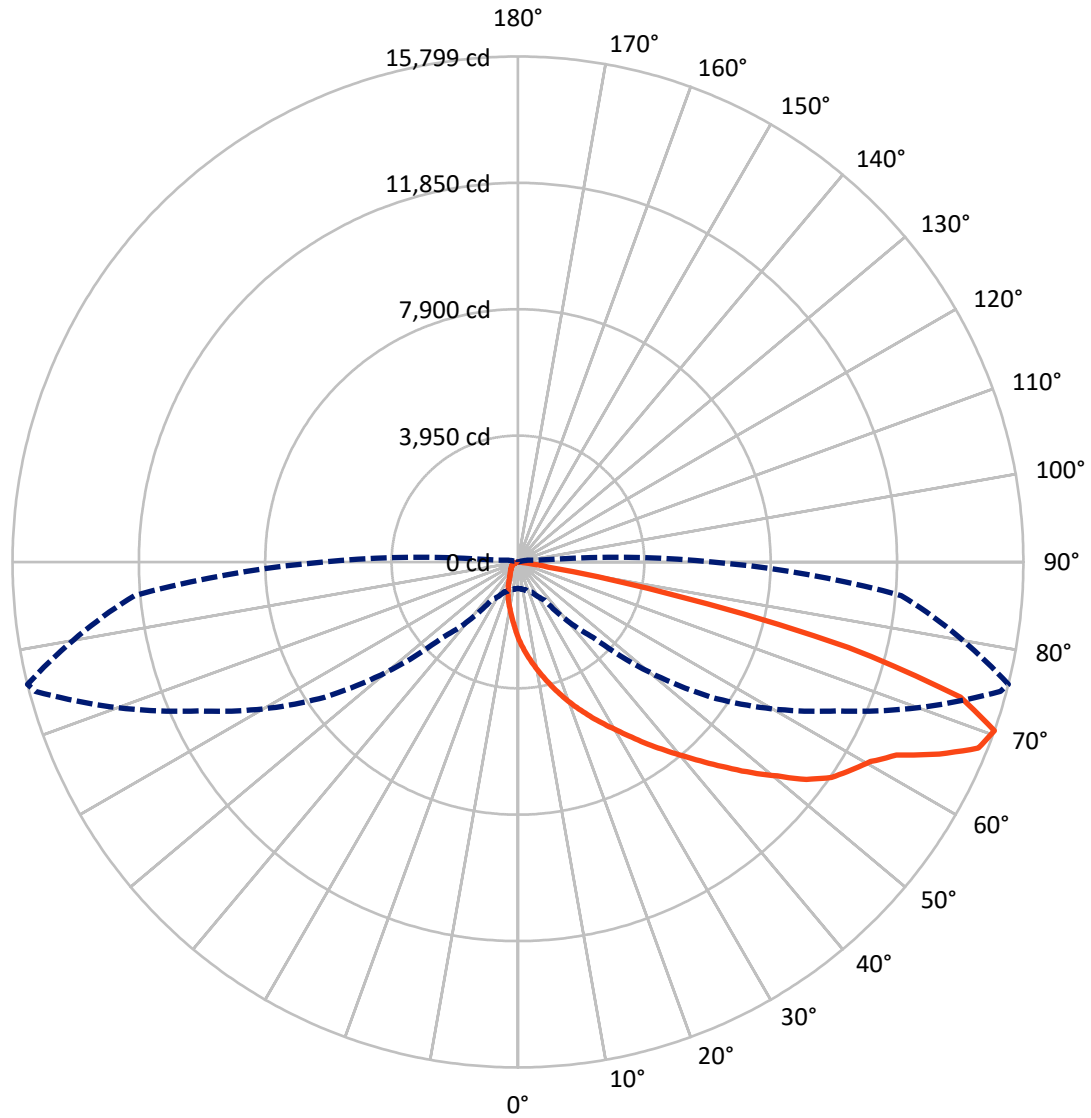
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P399696
CATALOG NUMBER: ARCH-L-PA3-180-727-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399696
 CATALOG NUMBER: ARCH-L-PA3-180-727-U-T2R-HSS

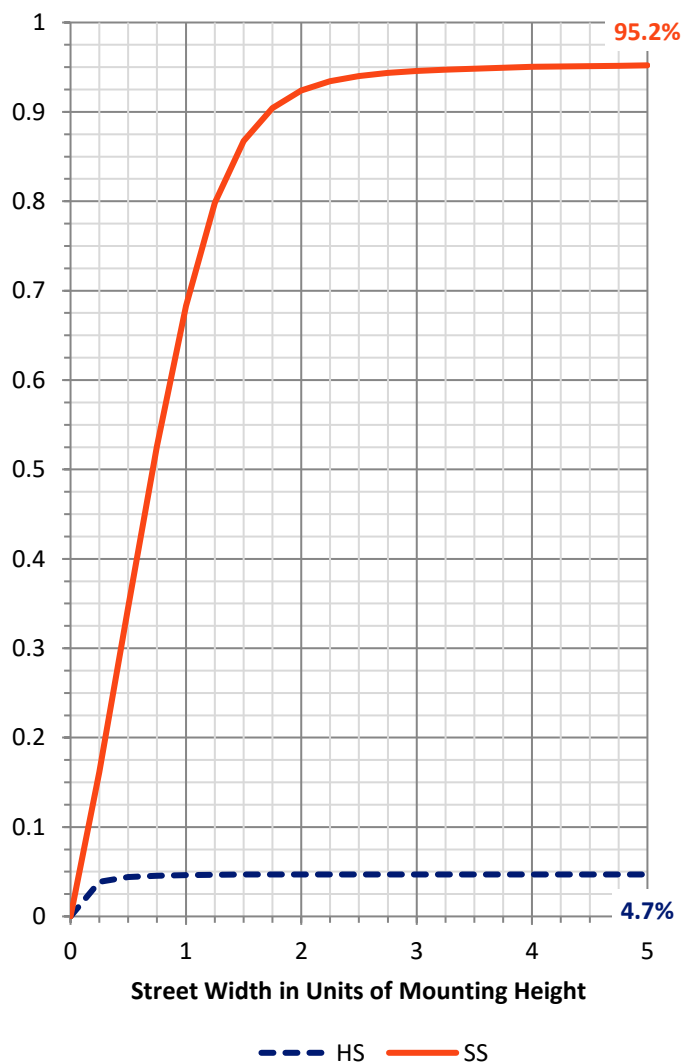
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 841.8 | 0.0 | 841.8 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 17006.2 | 0.0 | 17006.2 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 17848.0 | 0.0 | 17848.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 225.1 | 1.3 |
| 10°-20° | 726.4 | 4.1 |
| 20°-30° | 1352.8 | 7.6 |
| 30°-40° | 2392.9 | 13.4 |
| 40°-50° | 3659.2 | 20.5 |
| 50°-60° | 4148.7 | 23.2 |
| 60°-70° | 3556.5 | 19.9 |
| 70°-80° | 1722.5 | 9.7 |
| 80°-90° | 63.9 | 0.4 |
| 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° | 17848.0 | 100.0 |
| 0°-180° | 17848.0 | 100.0 |

Coefficient of Utilization

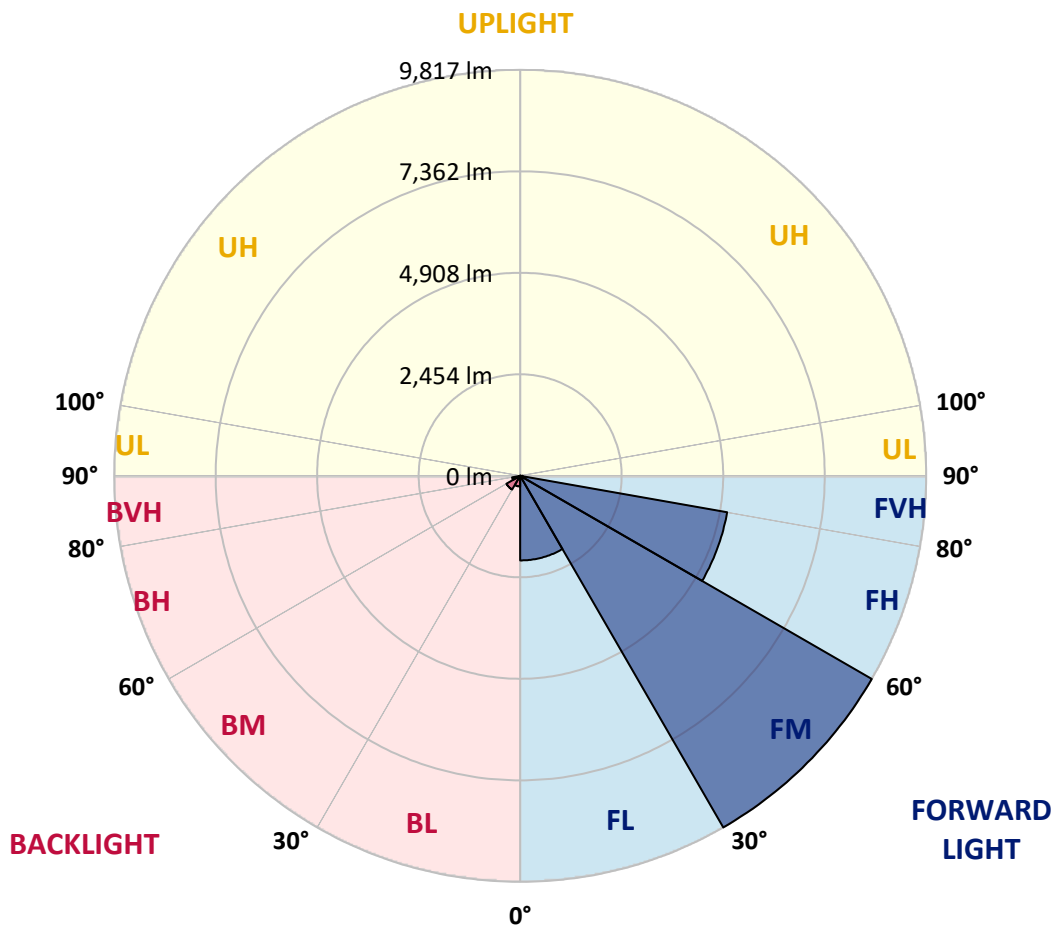


REPORT NUMBER: P399696
 CATALOG NUMBER: ARCH-L-PA3-180-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2046.1 | 11.5 | | | |
| FM (30°-60°) | 9816.6 | 55.0 | | | |
| FH (60°-80°) | 5080.8 | 28.5 | | | G3/7500 |
| FVH (80°-90°) | 62.8 | 0.4 | | | G1/100 |
| BL (0°-30°) | 258.2 | 1.4 | B1/500 | | |
| BM (30°-60°) | 384.2 | 2.2 | B1/1000 | | |
| BH (60°-80°) | 198.2 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.1 | 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 II Medium





REPORT NUMBER: P399696

CATALOG NUMBER: ARCH-L-PA3-180-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|--------|--------|---------|---------|---------|---------|---------|
| 0° | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 |
| 2.5° | 3265.7 | 3247.8 | 3230.0 | 3161.7 | 3099.3 | 3042.8 | 2935.8 | 2796.2 | 2671.4 | 2644.6 | 2499.0 |
| 5° | 3836.2 | 3815.4 | 3788.6 | 3720.3 | 3640.1 | 3545.0 | 3387.5 | 3173.5 | 2953.7 | 2906.1 | 2635.7 |
| 7.5° | 4222.5 | 4204.6 | 4166.0 | 4133.3 | 4053.1 | 3961.0 | 3785.7 | 3536.1 | 3233.0 | 3173.5 | 2793.2 |
| 10° | 4486.9 | 4475.0 | 4469.1 | 4442.4 | 4382.9 | 4308.6 | 4133.3 | 3871.8 | 3515.3 | 3446.9 | 2959.6 |
| 12.5° | 4582.0 | 4582.0 | 4611.7 | 4656.3 | 4665.2 | 4641.5 | 4481.0 | 4219.5 | 3812.4 | 3741.1 | 3155.7 |
| 15° | 4454.2 | 4469.1 | 4534.5 | 4677.1 | 4825.7 | 4923.7 | 4822.7 | 4579.0 | 4139.3 | 4062.0 | 3387.5 |
| 17.5° | 4418.6 | 4433.4 | 4478.0 | 4602.8 | 4801.9 | 5063.4 | 5113.9 | 4926.7 | 4448.3 | 4382.9 | 3625.2 |
| 20° | 4519.6 | 4534.5 | 4573.1 | 4680.1 | 4831.6 | 5096.1 | 5307.1 | 5262.5 | 4775.2 | 4706.8 | 3865.9 |
| 22.5° | 4760.3 | 4769.2 | 4769.2 | 4852.4 | 4986.1 | 5182.3 | 5428.9 | 5580.4 | 5110.9 | 5036.7 | 4103.6 |
| 25° | 5277.3 | 5259.5 | 5188.2 | 5146.6 | 5232.8 | 5393.2 | 5583.4 | 5859.8 | 5485.4 | 5384.3 | 4359.2 |
| 27.5° | 5954.8 | 6014.3 | 5841.9 | 5642.8 | 5577.5 | 5669.6 | 5800.3 | 6106.4 | 5847.9 | 5740.9 | 4590.9 |
| 30° | 6873.0 | 6849.3 | 6623.4 | 6338.2 | 6055.9 | 6023.2 | 6067.8 | 6317.4 | 6210.4 | 6109.4 | 4849.5 |
| 32.5° | 7627.8 | 7672.4 | 7434.6 | 7087.0 | 6665.0 | 6465.9 | 6418.4 | 6569.9 | 6596.7 | 6531.3 | 5155.5 |
| 35° | 8403.3 | 8450.9 | 8219.1 | 7832.8 | 7330.6 | 6997.8 | 6861.1 | 6881.9 | 7075.1 | 6991.9 | 5476.4 |
| 37.5° | 9098.7 | 9140.3 | 8911.5 | 8516.3 | 8014.1 | 7607.0 | 7410.9 | 7250.4 | 7538.6 | 7464.4 | 5815.2 |
| 40° | 9627.6 | 9633.5 | 9479.0 | 9125.4 | 8650.0 | 8228.0 | 8005.2 | 7690.2 | 8028.9 | 7978.4 | 6168.8 |
| 42.5° | 10002.0 | 10013.9 | 9901.0 | 9597.9 | 9158.1 | 8765.9 | 8584.6 | 8210.2 | 8593.5 | 8548.9 | 6578.9 |
| 45° | 10177.3 | 10198.1 | 10186.2 | 9906.9 | 9541.4 | 9202.7 | 9143.2 | 8762.9 | 9211.6 | 9170.0 | 7051.3 |
| 47.5° | 10010.9 | 10010.9 | 10162.5 | 10123.8 | 9788.1 | 9562.2 | 9630.6 | 9339.4 | 9883.1 | 9844.5 | 7532.7 |
| 50° | 9318.6 | 9327.5 | 9636.5 | 10079.3 | 9883.1 | 9832.6 | 10046.6 | 9903.9 | 10492.3 | 10516.1 | 8109.2 |
| 52.5° | 7500.0 | 7485.2 | 8528.1 | 9378.0 | 9817.8 | 9954.5 | 10429.9 | 10480.4 | 11223.3 | 11294.6 | 8682.7 |
| 55° | 5604.2 | 5595.3 | 6593.7 | 8135.9 | 9360.2 | 9892.1 | 10643.8 | 10994.5 | 11847.3 | 11891.9 | 9110.6 |
| 57.5° | 4436.4 | 4412.6 | 4962.4 | 6558.1 | 8326.1 | 9612.7 | 10652.8 | 11092.5 | 12195.0 | 12272.2 | 9526.6 |
| 60° | 3411.3 | 3390.5 | 3800.5 | 4879.2 | 6861.1 | 8869.9 | 10397.2 | 11098.5 | 12530.7 | 12667.4 | 10085.2 |
| 62.5° | 2439.6 | 2463.4 | 2778.3 | 3500.4 | 5277.3 | 7820.9 | 10064.4 | 11181.7 | 13128.0 | 13282.5 | 10878.6 |
| 65° | 1646.2 | 1634.3 | 1895.8 | 2383.1 | 3753.0 | 6409.5 | 9553.3 | 11357.0 | 14203.7 | 14474.1 | 11829.5 |
| 67.5° | 1144.0 | 1152.9 | 1271.8 | 1551.1 | 2383.1 | 4920.8 | 8703.5 | 11455.1 | 15315.0 | 15526.0 | 12495.1 |
| 70° | 826.1 | 838.0 | 903.3 | 1043.0 | 1456.0 | 3337.0 | 7357.4 | 11006.4 | 15615.1 | 15799.4 | 12031.5 |
| 72.5° | 543.8 | 567.6 | 665.6 | 739.9 | 930.1 | 2089.0 | 5420.0 | 9482.0 | 14322.5 | 14459.2 | 10094.1 |
| 75° | 294.2 | 300.1 | 427.9 | 552.7 | 662.6 | 1301.5 | 3233.0 | 6394.6 | 10715.2 | 10670.6 | 6656.1 |
| 77.5° | 228.8 | 237.7 | 264.5 | 395.2 | 445.7 | 716.1 | 1277.7 | 2888.3 | 5075.3 | 4938.6 | 2270.2 |
| 80° | 139.7 | 145.6 | 184.2 | 234.7 | 312.0 | 416.0 | 374.4 | 784.5 | 1031.1 | 965.7 | 332.8 |
| 82.5° | 83.2 | 89.1 | 109.9 | 196.1 | 246.6 | 196.1 | 130.7 | 190.2 | 193.1 | 190.2 | 83.2 |
| 85° | 14.9 | 14.9 | 77.3 | 136.7 | 130.7 | 56.5 | 77.3 | 62.4 | 56.5 | 59.4 | 17.8 |
| 87.5° | 0.0 | 0.0 | 29.7 | 41.6 | 59.4 | 20.8 | 29.7 | 14.9 | 14.9 | 14.9 | 8.9 |
| 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: P399696
 CATALOG NUMBER: ARCH-L-PA3-180-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 | 2389.1 |
| 2.5° | 2409.9 | 2308.8 | 2100.8 | 1919.6 | 1738.3 | 1604.6 | 1503.6 | 1399.6 | 1363.9 | 1319.3 | 1295.6 |
| 5° | 2451.5 | 2252.4 | 1839.3 | 1509.5 | 1230.2 | 1016.2 | 879.6 | 796.4 | 742.9 | 704.2 | 695.3 |
| 7.5° | 2513.9 | 2207.8 | 1628.4 | 1182.6 | 876.6 | 662.6 | 549.7 | 493.3 | 463.6 | 445.7 | 439.8 |
| 10° | 2588.2 | 2169.2 | 1420.4 | 921.2 | 618.1 | 466.5 | 404.1 | 380.3 | 368.5 | 362.5 | 359.5 |
| 12.5° | 2692.2 | 2154.3 | 1245.0 | 710.2 | 466.5 | 383.3 | 350.6 | 335.8 | 326.9 | 317.9 | 315.0 |
| 15° | 2828.8 | 2160.3 | 1084.6 | 549.7 | 386.3 | 341.7 | 315.0 | 300.1 | 288.2 | 279.3 | 279.3 |
| 17.5° | 2971.5 | 2169.2 | 927.1 | 445.7 | 350.6 | 312.0 | 282.3 | 261.5 | 252.6 | 243.7 | 240.7 |
| 20° | 3105.2 | 2166.2 | 775.6 | 380.3 | 317.9 | 279.3 | 249.6 | 228.8 | 213.9 | 205.0 | 205.0 |
| 22.5° | 3233.0 | 2148.4 | 632.9 | 341.7 | 291.2 | 246.6 | 213.9 | 193.1 | 181.3 | 172.3 | 172.3 |
| 25° | 3369.7 | 2112.7 | 517.0 | 312.0 | 258.5 | 216.9 | 184.2 | 163.4 | 154.5 | 145.6 | 145.6 |
| 27.5° | 3476.6 | 2053.3 | 422.0 | 285.3 | 228.8 | 187.2 | 157.5 | 139.7 | 130.7 | 124.8 | 124.8 |
| 30° | 3592.5 | 1967.1 | 350.6 | 255.5 | 199.1 | 160.5 | 133.7 | 118.9 | 109.9 | 107.0 | 107.0 |
| 32.5° | 3720.3 | 1872.0 | 300.1 | 225.8 | 169.4 | 136.7 | 112.9 | 104.0 | 95.1 | 92.1 | 92.1 |
| 35° | 3868.9 | 1788.8 | 270.4 | 196.1 | 148.6 | 115.9 | 98.1 | 89.1 | 83.2 | 83.2 | 83.2 |
| 37.5° | 4038.2 | 1702.7 | 243.7 | 172.3 | 127.8 | 98.1 | 83.2 | 80.2 | 77.3 | 74.3 | 74.3 |
| 40° | 4222.5 | 1610.5 | 219.9 | 151.5 | 109.9 | 83.2 | 71.3 | 71.3 | 68.3 | 68.3 | 68.3 |
| 42.5° | 4430.5 | 1530.3 | 199.1 | 133.7 | 95.1 | 71.3 | 62.4 | 62.4 | 59.4 | 59.4 | 59.4 |
| 45° | 4656.3 | 1456.0 | 181.3 | 118.9 | 83.2 | 62.4 | 56.5 | 53.5 | 50.5 | 50.5 | 50.5 |
| 47.5° | 4923.7 | 1414.4 | 166.4 | 104.0 | 71.3 | 53.5 | 47.5 | 44.6 | 41.6 | 38.6 | 38.6 |
| 50° | 5265.5 | 1432.3 | 151.5 | 86.2 | 62.4 | 44.6 | 38.6 | 35.7 | 32.7 | 29.7 | 29.7 |
| 52.5° | 5535.9 | 1423.3 | 130.7 | 74.3 | 50.5 | 35.7 | 29.7 | 26.7 | 23.8 | 20.8 | 20.8 |
| 55° | 5732.0 | 1387.7 | 112.9 | 62.4 | 38.6 | 29.7 | 23.8 | 17.8 | 14.9 | 14.9 | 14.9 |
| 57.5° | 5925.1 | 1352.0 | 95.1 | 50.5 | 29.7 | 20.8 | 14.9 | 11.9 | 11.9 | 11.9 | 11.9 |
| 60° | 6225.2 | 1301.5 | 83.2 | 41.6 | 23.8 | 14.9 | 8.9 | 8.9 | 5.9 | 5.9 | 5.9 |
| 62.5° | 6590.7 | 1239.1 | 68.3 | 35.7 | 17.8 | 11.9 | 5.9 | 5.9 | 0.0 | 0.0 | 0.0 |
| 65° | 6991.9 | 1129.2 | 56.5 | 26.7 | 14.9 | 8.9 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 6899.8 | 906.3 | 47.5 | 17.8 | 11.9 | 5.9 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 6103.4 | 612.1 | 38.6 | 14.9 | 8.9 | 5.9 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 4781.1 | 362.5 | 26.7 | 11.9 | 5.9 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 3060.6 | 181.3 | 17.8 | 8.9 | 5.9 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1025.2 | 89.1 | 11.9 | 5.9 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 145.6 | 29.7 | 5.9 | 3.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 32.7 | 11.9 | 3.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 11.9 | 5.9 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.9 | 3.0 | 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)