

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: P236954

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-210-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 900mA 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: 19425.2 lumens
Efficiency: N/A
Efficacy: 92.1 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

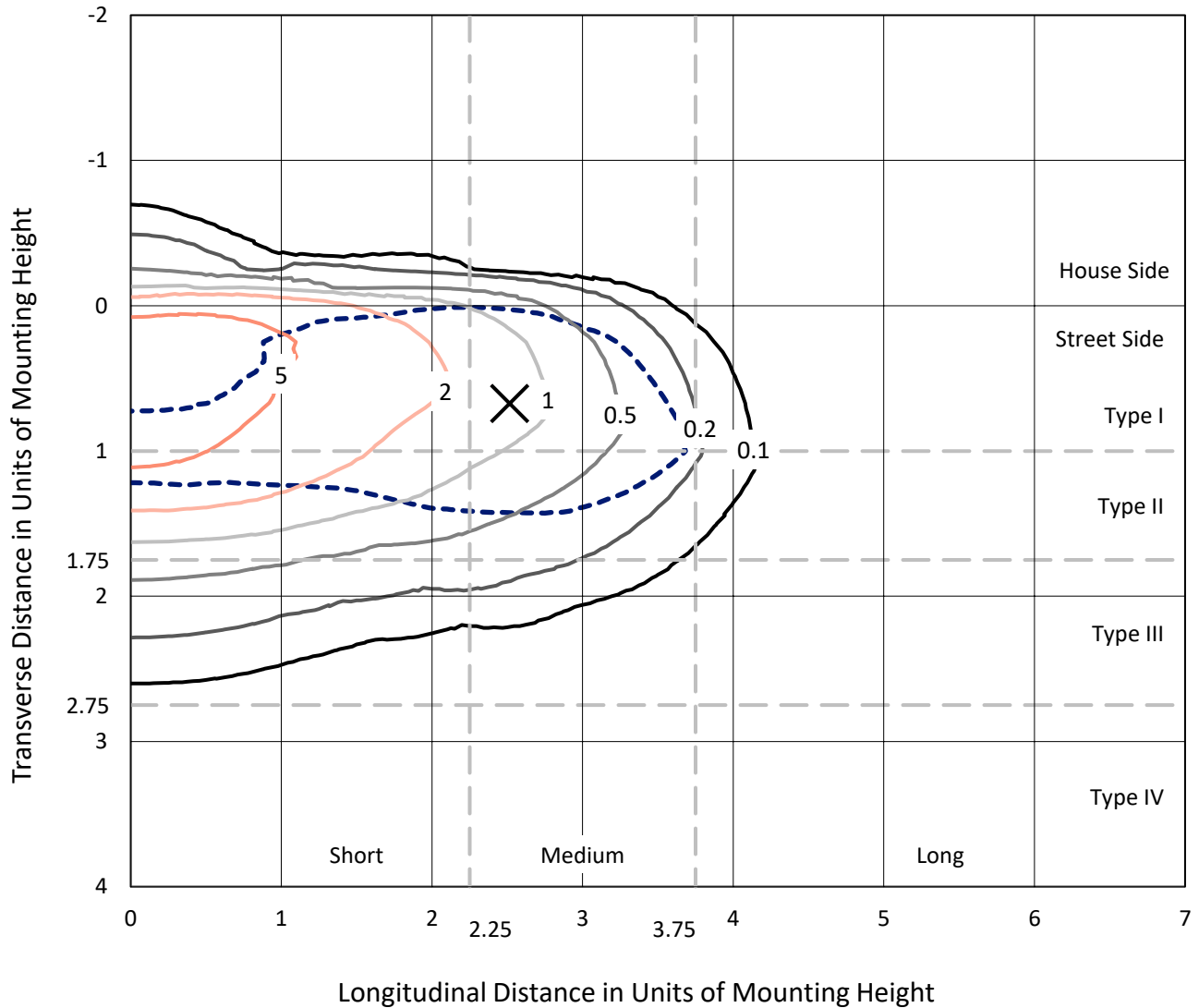
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P236954
 CATALOG NUMBER: ARCH-L-AF72-210-D-U-T2R-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

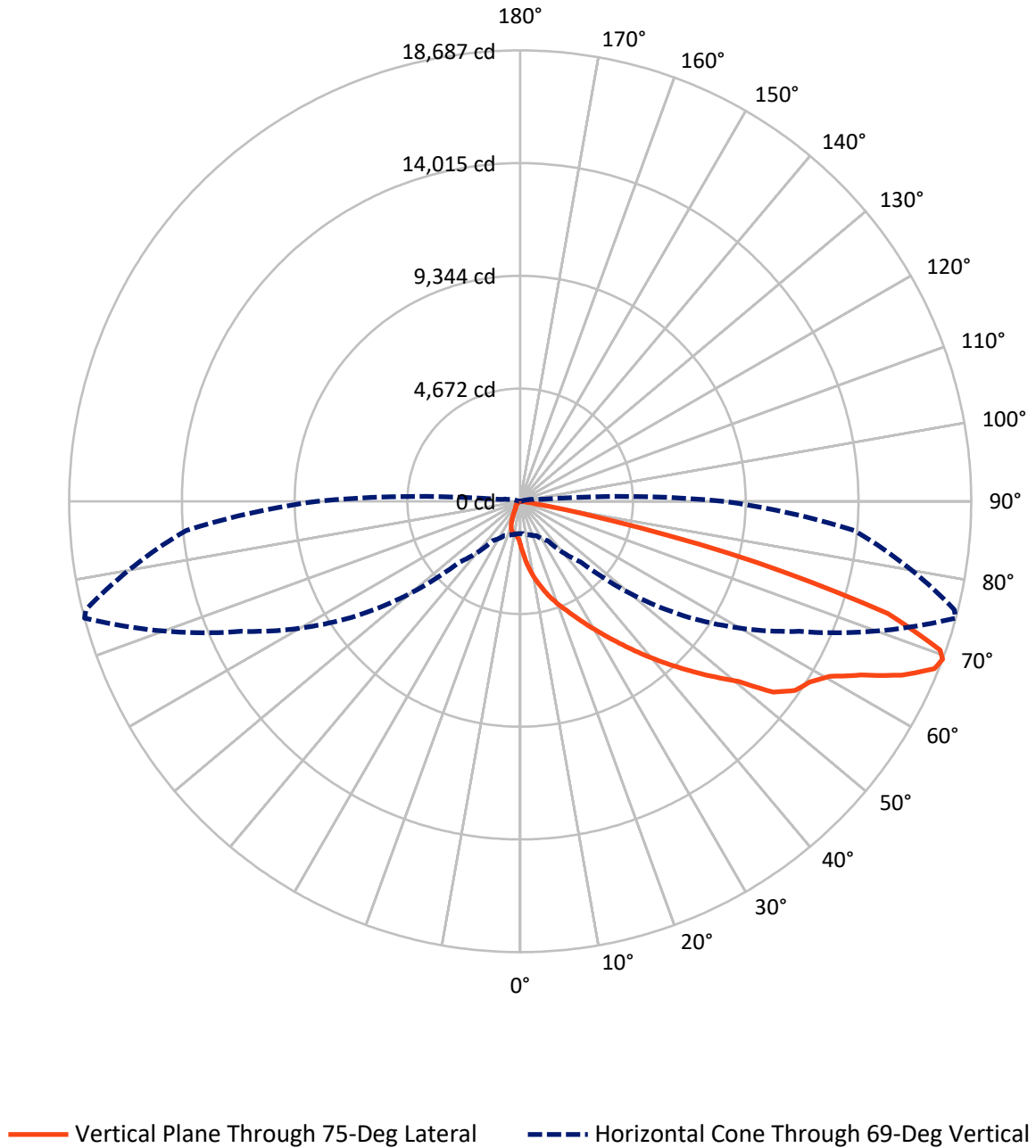
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Medium - N/A

REPORT NUMBER: P236954
CATALOG NUMBER: ARCH-L-AF72-210-D-U-T2R-7030-HSS

Luminous Intensity Polar Plot





REPORT NUMBER: P236954
 CATALOG NUMBER: ARCH-L-AF72-210-D-U-T2R-7030-HSS

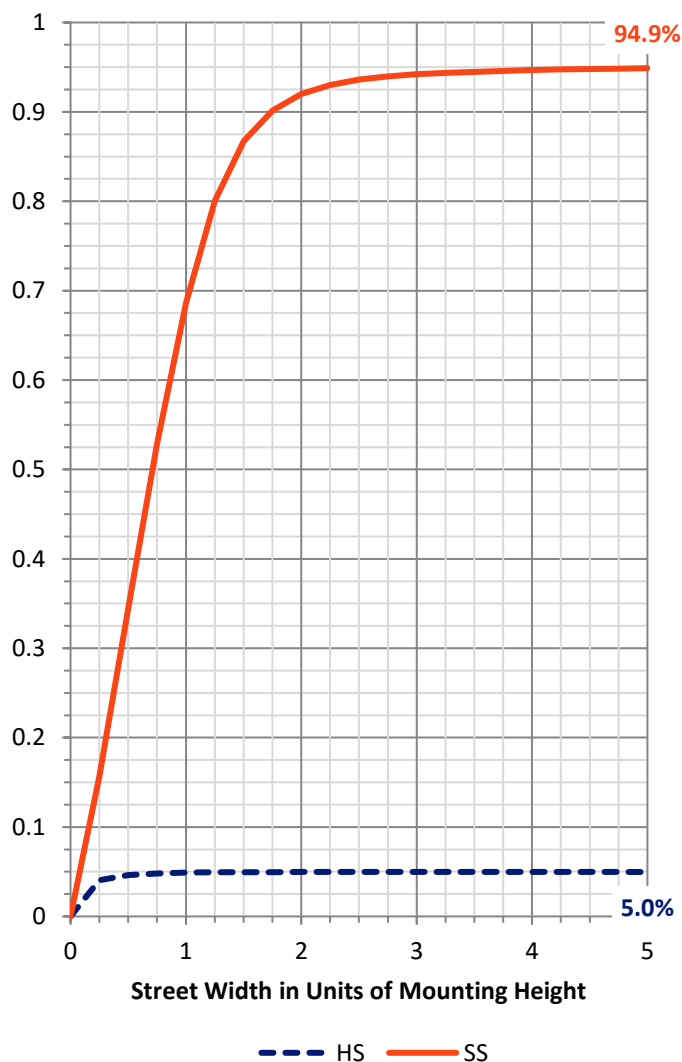
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 969.2 | 0.0 | 969.2 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 18456.0 | 0.0 | 18456.0 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 19425.2 | 0.0 | 19425.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 210.8 | 1.1 |
| 10°-20° | 753.5 | 3.9 |
| 20°-30° | 1438.5 | 7.4 |
| 30°-40° | 2580.4 | 13.3 |
| 40°-50° | 3953.3 | 20.4 |
| 50°-60° | 4594.7 | 23.7 |
| 60°-70° | 4068.7 | 20.9 |
| 70°-80° | 1755.0 | 9.0 |
| 80°-90° | 70.3 | 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° | 19425.2 | 100.0 |
| 0°-180° | 19425.2 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P236954

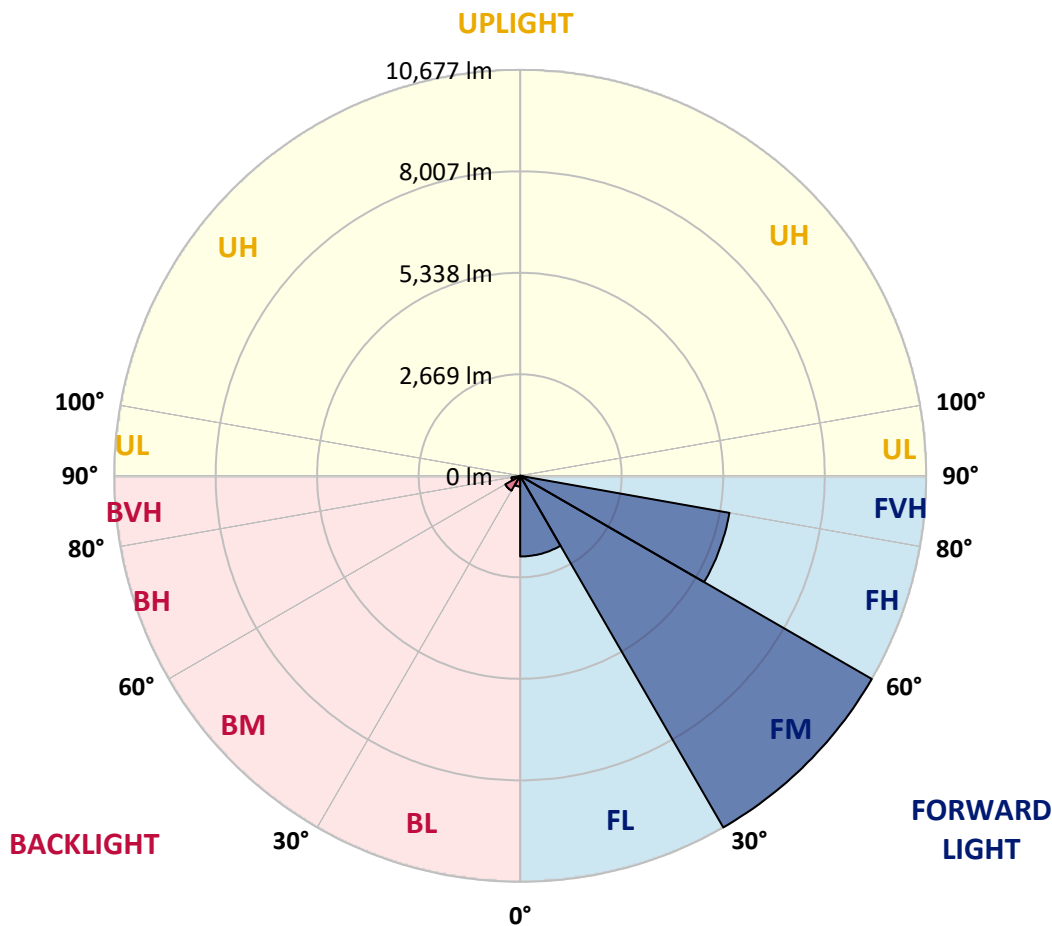
CATALOG NUMBER: ARCH-L-AF72-210-D-U-T2R-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2121.3 | 10.9 | | | |
| FM (30°-60°) | 10676.6 | 55.0 | | | |
| FH (60°-80°) | 5588.9 | 28.8 | | | G3/7500 |
| FVH (80°-90°) | 69.3 | 0.4 | | | G1/100 |
| BL (0°-30°) | 281.5 | 1.4 | B1/500 | | |
| BM (30°-60°) | 451.9 | 2.3 | B1/1000 | | |
| BH (60°-80°) | 234.8 | 1.2 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.0 | 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: P236954

CATALOG NUMBER: ARCH-L-AF72-210-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 |
| 2.5° | 2977.6 | 2948.3 | 2918.9 | 2885.3 | 2809.8 | 2679.8 | 2516.2 | 2340.2 | 2122.1 | 2084.3 | 1908.1 |
| 5° | 3615.1 | 3602.4 | 3573.1 | 3527.0 | 3443.1 | 3300.5 | 3116.0 | 2855.9 | 2491.1 | 2428.2 | 2054.9 |
| 7.5° | 4063.8 | 4055.3 | 4030.2 | 3975.7 | 3900.2 | 3757.7 | 3564.7 | 3283.7 | 2860.2 | 2788.9 | 2239.5 |
| 10° | 4466.3 | 4462.1 | 4441.2 | 4390.9 | 4315.4 | 4160.1 | 3954.7 | 3661.2 | 3212.4 | 3132.7 | 2453.3 |
| 12.5° | 4831.2 | 4835.4 | 4827.0 | 4801.8 | 4747.4 | 4600.6 | 4365.7 | 4047.0 | 3552.1 | 3464.1 | 2709.2 |
| 15° | 5045.0 | 5057.7 | 5091.3 | 5141.5 | 5158.3 | 5040.9 | 4797.7 | 4445.4 | 3900.2 | 3824.7 | 3002.8 |
| 17.5° | 4973.8 | 4986.4 | 5091.3 | 5263.1 | 5426.7 | 5443.6 | 5225.5 | 4822.8 | 4244.0 | 4168.6 | 3292.1 |
| 20° | 4801.8 | 4818.7 | 4927.7 | 5162.5 | 5481.2 | 5703.6 | 5615.5 | 5233.8 | 4571.2 | 4479.0 | 3568.9 |
| 22.5° | 4994.8 | 4994.8 | 5028.3 | 5170.9 | 5460.2 | 5808.3 | 5925.7 | 5644.8 | 4906.8 | 4793.4 | 3845.7 |
| 25° | 5657.3 | 5644.8 | 5573.6 | 5514.8 | 5607.0 | 5917.4 | 6160.6 | 6064.2 | 5300.9 | 5170.9 | 4139.3 |
| 27.5° | 6496.1 | 6554.8 | 6420.6 | 6206.8 | 5997.0 | 6131.3 | 6370.4 | 6479.4 | 5737.1 | 5602.9 | 4441.2 |
| 30° | 7435.5 | 7460.7 | 7301.4 | 7016.2 | 6647.2 | 6517.1 | 6617.8 | 6835.8 | 6211.0 | 6064.2 | 4755.7 |
| 32.5° | 8282.6 | 8261.7 | 8127.5 | 7829.7 | 7372.6 | 7091.7 | 6936.5 | 7121.0 | 6726.8 | 6559.1 | 5078.6 |
| 35° | 9033.3 | 9050.2 | 8886.6 | 8542.7 | 8093.9 | 7796.2 | 7427.1 | 7444.0 | 7305.5 | 7112.6 | 5451.9 |
| 37.5° | 9708.6 | 9679.2 | 9524.0 | 9180.2 | 8773.3 | 8450.4 | 8060.4 | 7779.4 | 7938.8 | 7737.5 | 5871.3 |
| 40° | 10258.0 | 10228.6 | 10065.0 | 9729.5 | 9347.9 | 9083.7 | 8777.6 | 8228.1 | 8605.6 | 8374.9 | 6320.0 |
| 42.5° | 10694.1 | 10660.5 | 10522.1 | 10199.3 | 9830.2 | 9595.2 | 9448.5 | 8781.7 | 9318.5 | 9087.8 | 6823.2 |
| 45° | 10908.0 | 10878.6 | 10794.7 | 10551.5 | 10228.6 | 10023.1 | 10094.4 | 9419.1 | 10081.8 | 9888.8 | 7376.8 |
| 47.5° | 10656.4 | 10643.7 | 10740.1 | 10698.2 | 10513.7 | 10404.6 | 10652.1 | 10115.3 | 10882.8 | 10694.1 | 8014.2 |
| 50° | 9893.1 | 9914.0 | 10195.0 | 10543.1 | 10631.2 | 10761.2 | 11109.3 | 10849.2 | 11742.5 | 11541.2 | 8748.2 |
| 52.5° | 8010.2 | 8152.7 | 8999.8 | 9838.6 | 10488.6 | 10979.3 | 11646.1 | 11897.7 | 13143.3 | 12946.1 | 9893.1 |
| 55° | 5980.3 | 6039.0 | 6961.7 | 8395.9 | 9914.0 | 10962.4 | 12044.4 | 12514.1 | 13835.2 | 13633.9 | 10195.0 |
| 57.5° | 4743.2 | 4764.1 | 5221.2 | 6684.8 | 8731.4 | 10585.0 | 12254.2 | 12736.5 | 14137.2 | 13969.4 | 10643.7 |
| 60° | 3724.1 | 3749.2 | 4080.5 | 5087.0 | 7066.5 | 9565.9 | 11952.2 | 12929.3 | 14728.4 | 14594.3 | 11428.0 |
| 62.5° | 2897.9 | 2923.0 | 3124.4 | 3715.7 | 5300.9 | 7997.4 | 11344.1 | 13239.7 | 15852.4 | 15789.5 | 12711.2 |
| 65° | 2243.6 | 2252.1 | 2390.5 | 2667.2 | 3745.0 | 6299.1 | 10601.9 | 13529.0 | 17370.6 | 17316.1 | 13751.4 |
| 67.5° | 1656.5 | 1669.2 | 1765.5 | 1937.5 | 2528.8 | 4525.1 | 9385.6 | 13306.8 | 18515.4 | 18356.1 | 14128.8 |
| 69° | 1337.8 | 1350.3 | 1434.2 | 1572.7 | 1996.2 | 3564.7 | 8274.3 | 12757.4 | 18687.3 | 18536.4 | 13889.7 |
| 70° | 1144.9 | 1153.2 | 1237.2 | 1354.6 | 1702.7 | 3027.9 | 7393.6 | 12283.5 | 18460.9 | 18314.1 | 13344.5 |
| 72.5° | 733.9 | 775.8 | 859.8 | 935.3 | 1128.1 | 2004.6 | 4990.5 | 10186.7 | 15928.0 | 15676.3 | 10450.8 |
| 75° | 406.8 | 419.3 | 570.4 | 662.6 | 750.7 | 1304.2 | 2776.3 | 6353.5 | 10132.1 | 9955.9 | 5590.2 |
| 77.5° | 335.5 | 343.8 | 402.6 | 503.2 | 503.2 | 729.8 | 1048.5 | 2503.6 | 3854.0 | 3476.6 | 1513.9 |
| 80° | 234.8 | 243.2 | 306.2 | 331.3 | 360.7 | 411.1 | 339.7 | 549.3 | 595.5 | 528.4 | 226.5 |
| 82.5° | 163.6 | 172.0 | 209.7 | 272.6 | 289.3 | 193.0 | 125.8 | 163.6 | 172.0 | 172.0 | 88.1 |
| 85° | 29.4 | 41.9 | 155.1 | 226.5 | 172.0 | 58.7 | 71.3 | 58.7 | 54.5 | 58.7 | 21.0 |
| 87.5° | 0.0 | 0.0 | 96.4 | 109.0 | 92.3 | 25.1 | 29.4 | 21.0 | 12.6 | 16.8 | 8.4 |
| 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: P236954
 CATALOG NUMBER: ARCH-L-AF72-210-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 | 1807.4 |
| 2.5° | 1820.0 | 1732.0 | 1581.1 | 1472.0 | 1379.7 | 1308.5 | 1279.1 | 1233.0 | 1199.4 | 1216.2 | 1195.2 |
| 5° | 1870.4 | 1715.3 | 1472.0 | 1316.8 | 1207.8 | 1115.5 | 1040.0 | 981.3 | 935.3 | 926.8 | 918.5 |
| 7.5° | 1950.1 | 1727.8 | 1409.1 | 1216.2 | 1052.6 | 910.0 | 792.5 | 704.5 | 637.4 | 637.4 | 612.3 |
| 10° | 2059.1 | 1761.4 | 1371.3 | 1115.5 | 872.3 | 679.4 | 561.9 | 478.1 | 444.5 | 440.4 | 432.0 |
| 12.5° | 2210.1 | 1824.3 | 1342.0 | 985.5 | 679.4 | 494.8 | 423.6 | 394.2 | 381.7 | 377.5 | 373.2 |
| 15° | 2415.6 | 1916.5 | 1308.5 | 826.2 | 515.8 | 406.8 | 377.5 | 352.3 | 339.7 | 335.5 | 331.3 |
| 17.5° | 2612.7 | 2000.4 | 1237.2 | 662.6 | 419.3 | 369.1 | 335.5 | 314.5 | 297.7 | 293.6 | 293.6 |
| 20° | 2797.2 | 2071.7 | 1115.5 | 515.8 | 377.5 | 331.3 | 297.7 | 272.6 | 255.7 | 251.7 | 251.7 |
| 22.5° | 2990.1 | 2130.4 | 964.5 | 419.3 | 343.8 | 293.6 | 260.0 | 234.8 | 218.1 | 213.9 | 209.7 |
| 25° | 3195.7 | 2172.4 | 792.5 | 373.2 | 310.3 | 260.0 | 222.3 | 201.2 | 188.7 | 184.5 | 180.3 |
| 27.5° | 3417.9 | 2189.1 | 629.2 | 339.7 | 272.6 | 226.5 | 193.0 | 172.0 | 163.6 | 159.4 | 159.4 |
| 30° | 3619.2 | 2172.4 | 486.4 | 302.0 | 239.1 | 197.1 | 167.7 | 151.0 | 142.6 | 138.4 | 138.4 |
| 32.5° | 3828.9 | 2130.4 | 390.0 | 268.4 | 209.7 | 167.7 | 142.6 | 130.0 | 125.8 | 121.6 | 121.6 |
| 35° | 4051.2 | 2075.9 | 335.5 | 239.1 | 180.3 | 146.7 | 125.8 | 117.5 | 113.2 | 109.0 | 109.0 |
| 37.5° | 4311.2 | 2008.8 | 306.2 | 213.9 | 159.4 | 130.0 | 109.0 | 104.9 | 100.6 | 100.6 | 100.6 |
| 40° | 4604.7 | 1924.9 | 285.1 | 193.0 | 142.6 | 113.2 | 96.4 | 92.3 | 88.1 | 88.1 | 88.1 |
| 42.5° | 4915.0 | 1828.5 | 264.2 | 172.0 | 125.8 | 96.4 | 83.9 | 83.9 | 79.6 | 79.6 | 75.5 |
| 45° | 5263.1 | 1732.0 | 243.2 | 151.0 | 109.0 | 83.9 | 71.3 | 67.0 | 67.0 | 63.0 | 63.0 |
| 47.5° | 5674.2 | 1644.0 | 222.3 | 134.2 | 96.4 | 71.3 | 63.0 | 58.7 | 54.5 | 50.4 | 50.4 |
| 50° | 6252.9 | 1635.6 | 197.1 | 117.5 | 88.1 | 58.7 | 50.4 | 46.1 | 41.9 | 37.7 | 37.7 |
| 52.5° | 6827.4 | 1560.1 | 167.7 | 96.4 | 71.3 | 50.4 | 37.7 | 33.6 | 29.4 | 29.4 | 25.1 |
| 55° | 6957.4 | 1434.2 | 146.7 | 83.9 | 54.5 | 37.7 | 29.4 | 21.0 | 21.0 | 16.8 | 16.8 |
| 57.5° | 7242.6 | 1375.6 | 125.8 | 67.0 | 41.9 | 29.4 | 16.8 | 12.6 | 12.6 | 12.6 | 12.6 |
| 60° | 7804.6 | 1358.7 | 109.0 | 58.7 | 29.4 | 21.0 | 12.6 | 8.4 | 8.4 | 4.2 | 4.2 |
| 62.5° | 8580.4 | 1342.0 | 92.3 | 50.4 | 21.0 | 12.6 | 8.4 | 4.2 | 0.0 | 0.0 | 0.0 |
| 65° | 9008.2 | 1228.7 | 75.5 | 37.7 | 16.8 | 12.6 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 8894.9 | 1014.9 | 67.0 | 25.1 | 12.6 | 8.4 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 69° | 8421.0 | 855.5 | 54.5 | 21.0 | 12.6 | 8.4 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 7850.8 | 738.0 | 50.4 | 16.8 | 8.4 | 4.2 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 5573.6 | 385.8 | 33.6 | 12.6 | 8.4 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 2604.3 | 172.0 | 21.0 | 8.4 | 4.2 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 574.6 | 79.6 | 12.6 | 8.4 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 109.0 | 29.4 | 8.4 | 4.2 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 37.7 | 12.6 | 4.2 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 12.6 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 4.2 | 0.0 | 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)