

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: P399725

Luminaire Tested: **ARCH-L-PA3-180-750-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399725
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-180-750-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18480 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

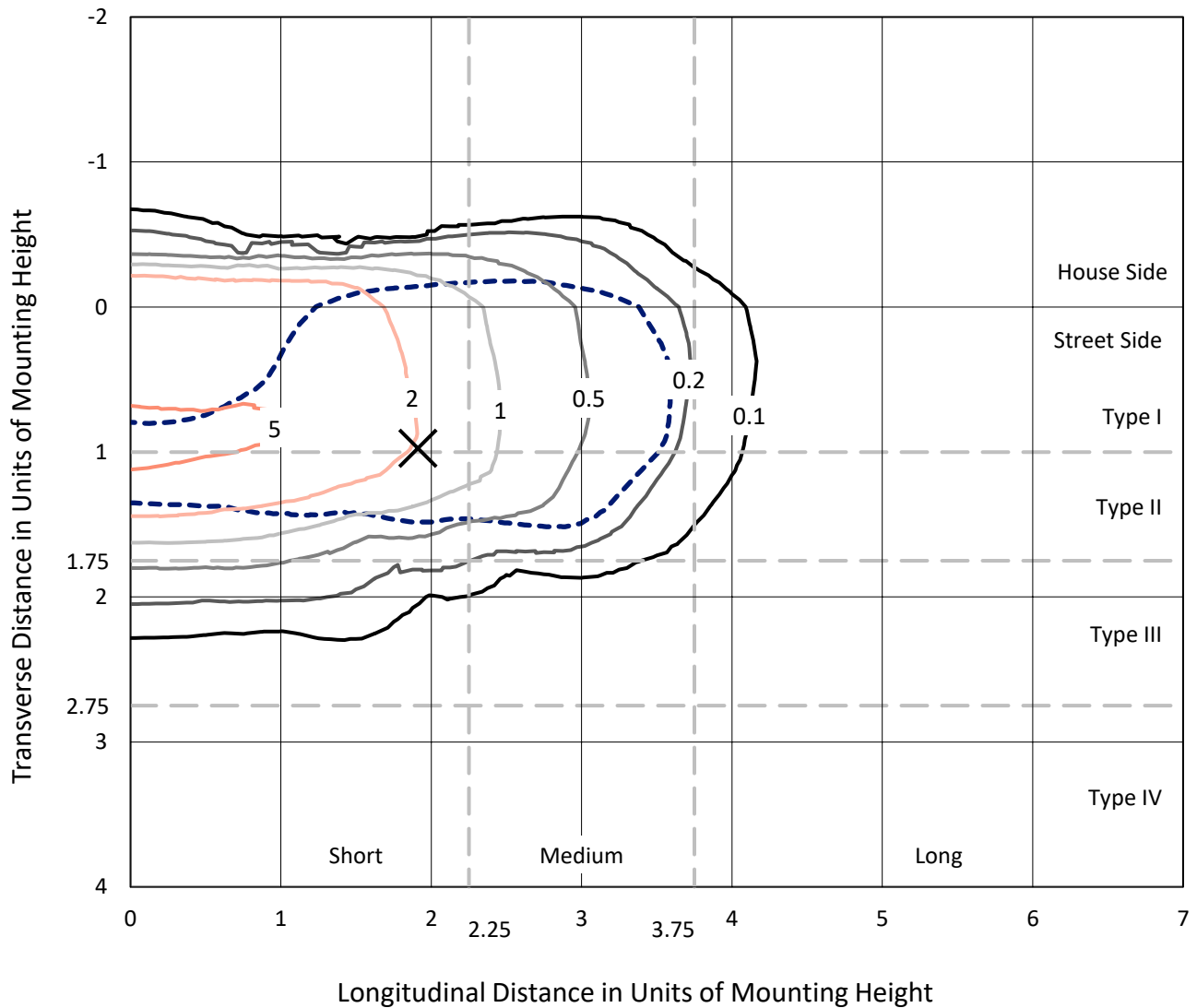
Input Watts (W): 181
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399725
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

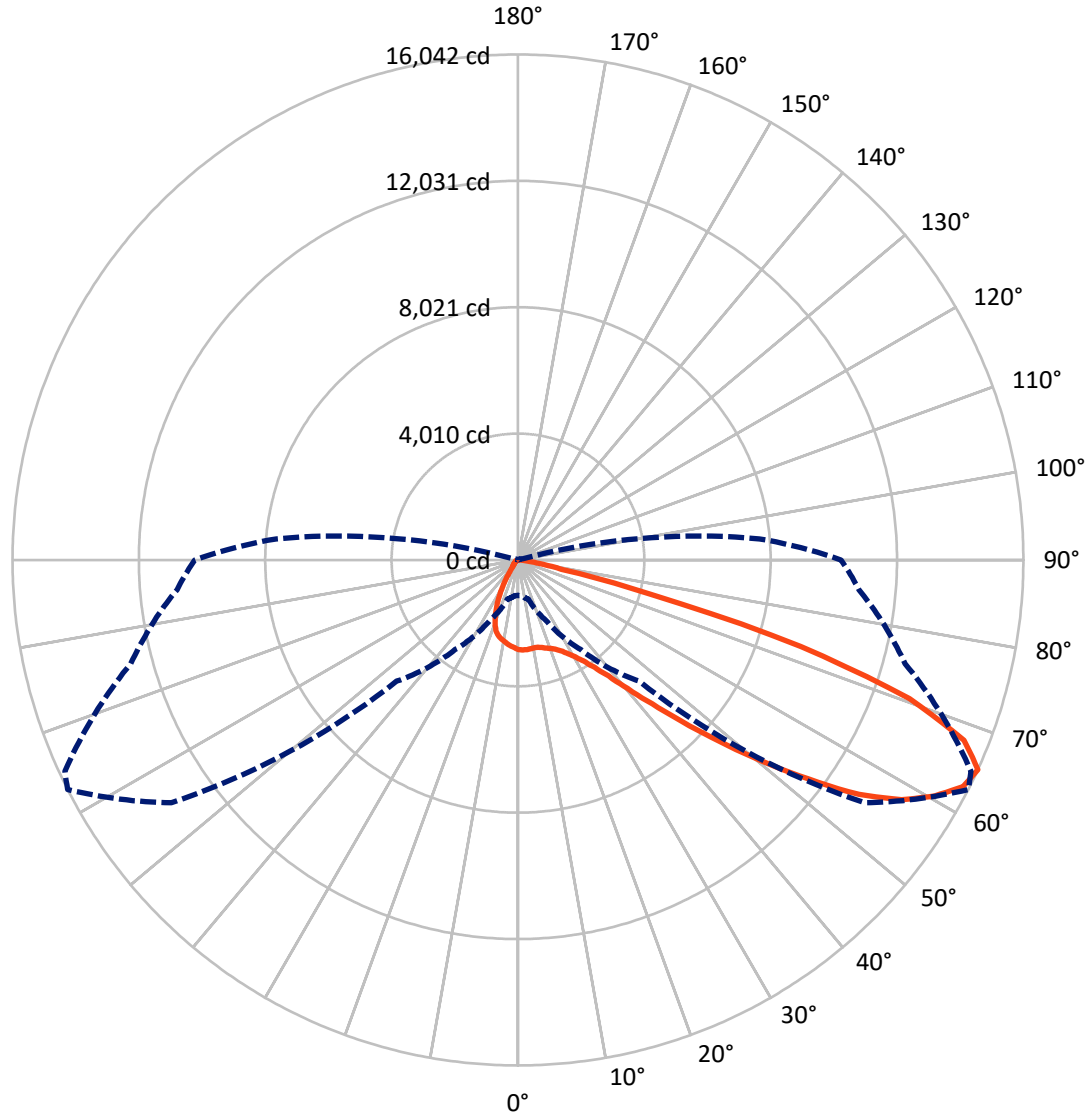
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Short - N/A

REPORT NUMBER: P399725
CATALOG NUMBER: ARCH-L-PA3-180-750-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399725
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T2U-HSS

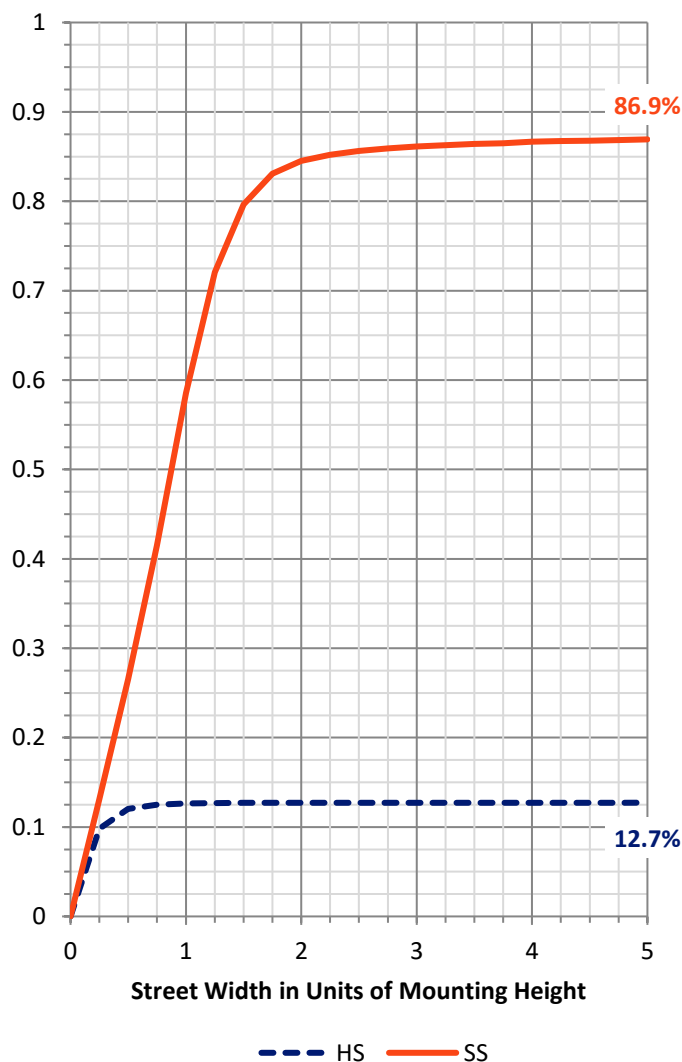
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2378.4 | 0.0 | 2378.4 |
| | % Fixture | 12.9 | 0.0 | 12.9 |
| Street Side | Lumens | 16101.6 | 0.0 | 16101.6 |
| | % Fixture | 87.1 | 0.0 | 87.1 |
| Total | Lumens | 18480.0 | 0.0 | 18480.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 259.8 | 1.4 |
| 10°-20° | 640.8 | 3.5 |
| 20°-30° | 949.8 | 5.1 |
| 30°-40° | 1763.6 | 9.5 |
| 40°-50° | 3736.0 | 20.2 |
| 50°-60° | 5165.9 | 28.0 |
| 60°-70° | 4135.5 | 22.4 |
| 70°-80° | 1718.2 | 9.3 |
| 80°-90° | 110.3 | 0.6 |
| 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° | 18480.0 | 100.0 |
| 0°-180° | 18480.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P399725

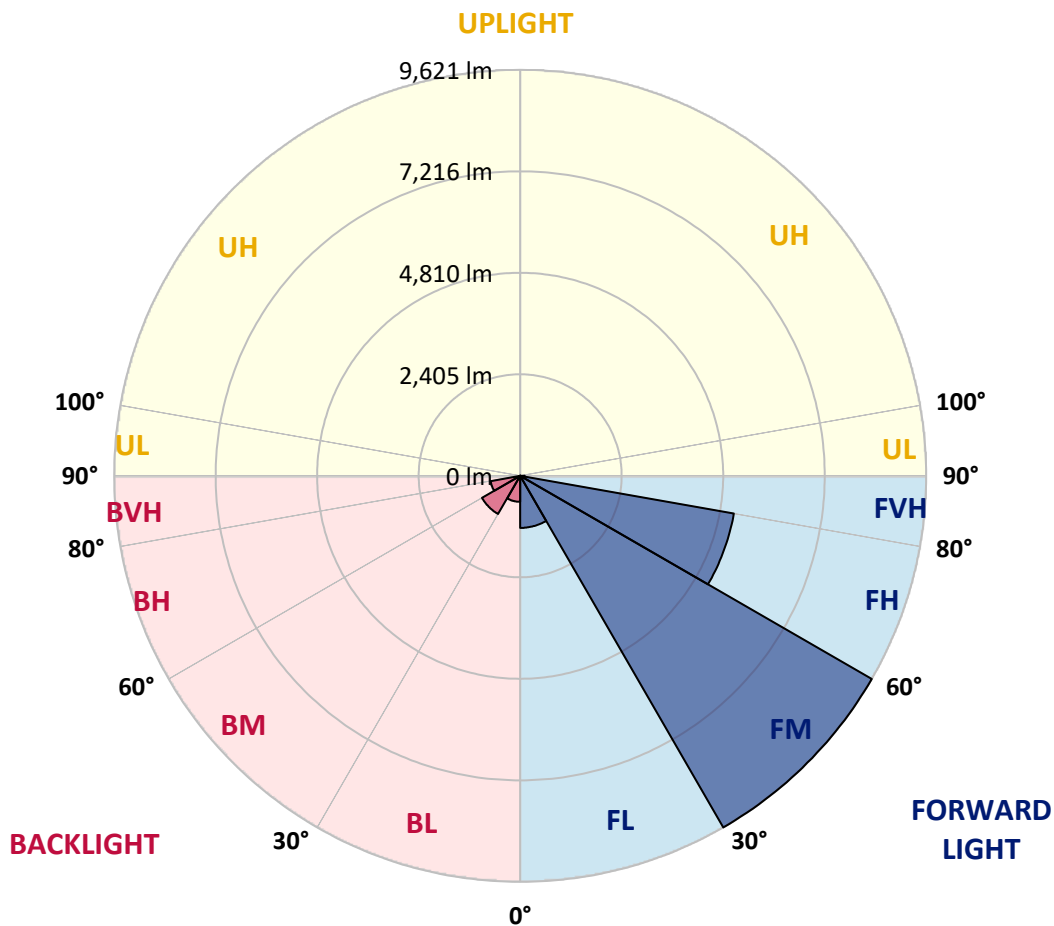
CATALOG NUMBER: ARCH-L-PA3-180-750-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1234.0 | 6.7 | | | |
| FM (30°-60°) | 9620.8 | 52.1 | | | |
| FH (60°-80°) | 5141.5 | 27.8 | | | G3/7500 |
| FVH (80°-90°) | 105.3 | 0.6 | | | G2/225 |
| BL (0°-30°) | 616.4 | 3.3 | B2/1000 | | |
| BM (30°-60°) | 1044.8 | 5.7 | B2/2500 | | |
| BH (60°-80°) | 712.2 | 3.9 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 5.0 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type II Short





REPORT NUMBER: P399725

CATALOG NUMBER: ARCH-L-PA3-180-750-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 |
| 2.5° | 2895.7 | 2888.7 | 2881.7 | 2878.3 | 2878.3 | 2874.8 | 2860.8 | 2857.3 | 2850.3 | 2843.4 | 2836.4 |
| 5° | 2867.8 | 2857.3 | 2853.8 | 2857.3 | 2860.8 | 2867.8 | 2860.8 | 2860.8 | 2853.8 | 2846.9 | 2832.9 |
| 7.5° | 2798.0 | 2791.0 | 2794.5 | 2805.0 | 2808.5 | 2832.9 | 2836.4 | 2846.9 | 2846.9 | 2839.9 | 2829.4 |
| 10° | 2714.3 | 2710.8 | 2710.8 | 2728.2 | 2745.7 | 2780.6 | 2805.0 | 2832.9 | 2836.4 | 2836.4 | 2818.9 |
| 12.5° | 2651.5 | 2648.0 | 2658.5 | 2679.4 | 2714.3 | 2759.6 | 2801.5 | 2843.4 | 2850.3 | 2853.8 | 2825.9 |
| 15° | 2613.1 | 2613.1 | 2627.1 | 2668.9 | 2717.8 | 2780.6 | 2829.4 | 2885.2 | 2892.2 | 2888.7 | 2850.3 |
| 17.5° | 2578.2 | 2581.7 | 2609.6 | 2679.4 | 2735.2 | 2818.9 | 2878.3 | 2941.1 | 2944.5 | 2941.1 | 2878.3 |
| 20° | 2564.3 | 2571.2 | 2613.1 | 2703.8 | 2766.6 | 2860.8 | 2937.6 | 3000.4 | 3003.8 | 2989.9 | 2906.2 |
| 22.5° | 2602.6 | 2606.1 | 2658.5 | 2756.1 | 2815.5 | 2920.1 | 3017.8 | 3077.1 | 3080.6 | 3059.7 | 2948.0 |
| 25° | 2735.2 | 2735.2 | 2780.6 | 2864.3 | 2916.6 | 3021.3 | 3126.0 | 3195.7 | 3195.7 | 3171.3 | 3042.2 |
| 27.5° | 3045.7 | 3017.8 | 3007.3 | 3031.8 | 3049.2 | 3160.8 | 3272.5 | 3359.7 | 3356.2 | 3321.3 | 3164.3 |
| 30° | 3645.8 | 3576.0 | 3464.4 | 3338.8 | 3276.0 | 3352.7 | 3457.4 | 3569.0 | 3565.5 | 3509.7 | 3314.4 |
| 32.5° | 4654.0 | 4552.9 | 4287.7 | 3956.3 | 3687.7 | 3600.4 | 3698.1 | 3820.2 | 3823.7 | 3757.4 | 3555.1 |
| 35° | 6067.0 | 5906.5 | 5432.0 | 4971.5 | 4357.5 | 4026.1 | 4054.0 | 4186.5 | 4228.4 | 4193.5 | 3959.8 |
| 37.5° | 7427.6 | 7281.1 | 6827.6 | 6189.1 | 5355.3 | 4678.5 | 4559.9 | 4675.0 | 4723.8 | 4723.8 | 4476.1 |
| 40° | 8798.7 | 8627.8 | 8226.6 | 7584.6 | 6705.5 | 5697.2 | 5271.6 | 5365.8 | 5418.1 | 5428.6 | 5104.1 |
| 42.5° | 9897.7 | 9786.1 | 9479.0 | 8980.1 | 8156.8 | 7483.5 | 6297.3 | 6244.9 | 6293.8 | 6255.4 | 5833.3 |
| 45° | 10658.3 | 10571.0 | 10358.2 | 10169.8 | 9768.6 | 9430.2 | 7668.4 | 7316.0 | 7347.4 | 7214.8 | 6653.1 |
| 47.5° | 10815.3 | 10717.6 | 10672.2 | 10933.9 | 11220.0 | 11303.7 | 9353.5 | 8589.4 | 8558.0 | 8264.9 | 7504.4 |
| 50° | 10131.5 | 10141.9 | 10309.4 | 11056.0 | 12249.1 | 13002.7 | 11307.2 | 10026.8 | 9911.7 | 9259.3 | 8296.3 |
| 52.5° | 8655.7 | 8823.2 | 9245.3 | 10455.9 | 12563.1 | 14237.8 | 13260.9 | 11551.4 | 11373.5 | 10225.6 | 8889.4 |
| 55° | 6771.7 | 6988.0 | 7682.3 | 9074.3 | 11907.2 | 14789.0 | 14907.6 | 13135.3 | 12730.6 | 10951.3 | 9350.0 |
| 57.5° | 5034.3 | 5100.6 | 5910.0 | 7179.9 | 10354.7 | 14248.2 | 15751.9 | 14356.4 | 13836.5 | 11530.5 | 9807.0 |
| 60° | 3136.4 | 3178.3 | 4033.0 | 5466.9 | 7842.8 | 12249.1 | 15751.9 | 15197.2 | 14701.8 | 12050.3 | 10225.6 |
| 62.5° | 1950.2 | 1964.2 | 2285.2 | 3747.0 | 5330.9 | 9084.8 | 15099.5 | 15849.6 | 15451.9 | 12423.6 | 10585.0 |
| 65° | 1123.4 | 1137.3 | 1287.4 | 2117.7 | 3467.9 | 5439.0 | 13431.8 | 16041.5 | 15863.5 | 12720.1 | 10864.1 |
| 67.5° | 819.9 | 826.8 | 886.2 | 1189.7 | 2267.7 | 2794.5 | 10089.6 | 15270.4 | 15493.7 | 12866.7 | 10857.1 |
| 70° | 711.7 | 722.2 | 798.9 | 928.0 | 1636.2 | 1716.5 | 5135.5 | 13187.6 | 13812.1 | 12657.3 | 10532.7 |
| 72.5° | 547.7 | 561.7 | 676.8 | 872.2 | 1200.1 | 1235.0 | 1859.5 | 9384.8 | 10330.3 | 11349.0 | 9643.0 |
| 75° | 376.8 | 390.7 | 505.9 | 718.7 | 990.8 | 924.5 | 1022.2 | 4319.1 | 5449.5 | 7612.5 | 7340.4 |
| 77.5° | 240.7 | 244.2 | 317.5 | 523.3 | 854.8 | 655.9 | 701.2 | 1409.5 | 1978.1 | 3443.4 | 3464.4 |
| 80° | 160.5 | 164.0 | 195.4 | 338.4 | 586.1 | 607.0 | 432.6 | 652.4 | 715.2 | 1004.8 | 697.8 |
| 82.5° | 97.7 | 97.7 | 132.6 | 212.8 | 355.9 | 502.4 | 282.6 | 341.9 | 366.3 | 387.3 | 181.4 |
| 85° | 38.4 | 38.4 | 80.2 | 139.6 | 223.3 | 233.7 | 177.9 | 198.9 | 209.3 | 226.8 | 83.7 |
| 87.5° | 10.5 | 10.5 | 45.4 | 76.8 | 97.7 | 108.2 | 108.2 | 97.7 | 104.7 | 129.1 | 41.9 |
| 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: P399725
 CATALOG NUMBER: ARCH-L-PA3-180-750-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 | 2846.9 |
| 2.5° | 2832.9 | 2822.4 | 2808.5 | 2794.5 | 2780.6 | 2770.1 | 2759.6 | 2759.6 | 2752.7 | 2742.2 | 2735.2 |
| 5° | 2825.9 | 2808.5 | 2777.1 | 2752.7 | 2714.3 | 2686.4 | 2665.4 | 2648.0 | 2637.5 | 2613.1 | 2609.6 |
| 7.5° | 2815.5 | 2794.5 | 2749.2 | 2700.3 | 2637.5 | 2588.7 | 2539.8 | 2505.0 | 2470.1 | 2442.2 | 2435.2 |
| 10° | 2798.0 | 2773.6 | 2707.3 | 2637.5 | 2550.3 | 2459.6 | 2344.5 | 2211.9 | 2089.8 | 2020.0 | 1999.1 |
| 12.5° | 2798.0 | 2766.6 | 2679.4 | 2585.2 | 2459.6 | 2236.3 | 1943.3 | 1650.2 | 1423.4 | 1322.3 | 1294.3 |
| 15° | 2815.5 | 2773.6 | 2658.5 | 2529.4 | 2295.6 | 1842.1 | 1367.6 | 980.4 | 732.6 | 655.9 | 638.4 |
| 17.5° | 2832.9 | 2773.6 | 2627.1 | 2452.6 | 1995.6 | 1336.2 | 778.0 | 516.3 | 436.1 | 418.7 | 418.7 |
| 20° | 2839.9 | 2766.6 | 2585.2 | 2309.6 | 1594.4 | 830.3 | 464.0 | 387.3 | 355.9 | 345.4 | 345.4 |
| 22.5° | 2867.8 | 2770.1 | 2553.8 | 2103.7 | 1158.3 | 488.4 | 366.3 | 324.5 | 293.1 | 282.6 | 282.6 |
| 25° | 2937.6 | 2812.0 | 2560.8 | 1842.1 | 743.1 | 369.8 | 310.5 | 268.6 | 237.2 | 223.3 | 223.3 |
| 27.5° | 3049.2 | 2906.2 | 2599.1 | 1538.6 | 467.5 | 317.5 | 261.7 | 216.3 | 191.9 | 177.9 | 177.9 |
| 30° | 3174.8 | 3010.8 | 2616.6 | 1189.7 | 348.9 | 268.6 | 212.8 | 171.0 | 153.5 | 143.0 | 139.6 |
| 32.5° | 3394.6 | 3192.2 | 2602.6 | 816.4 | 286.1 | 226.8 | 171.0 | 136.1 | 122.1 | 118.6 | 118.6 |
| 35° | 3747.0 | 3509.7 | 2574.7 | 512.9 | 237.2 | 181.4 | 136.1 | 111.6 | 101.2 | 97.7 | 94.2 |
| 37.5° | 4224.9 | 3973.7 | 2491.0 | 338.4 | 195.4 | 143.0 | 111.6 | 94.2 | 83.7 | 80.2 | 80.2 |
| 40° | 4807.6 | 4504.0 | 2330.5 | 258.2 | 167.5 | 115.1 | 94.2 | 80.2 | 73.3 | 69.8 | 69.8 |
| 42.5° | 5473.9 | 5093.6 | 2075.8 | 223.3 | 139.6 | 97.7 | 80.2 | 66.3 | 62.8 | 59.3 | 59.3 |
| 45° | 6203.1 | 5711.2 | 1723.5 | 198.9 | 118.6 | 80.2 | 66.3 | 59.3 | 52.3 | 52.3 | 48.8 |
| 47.5° | 6977.6 | 6332.2 | 1325.7 | 174.4 | 101.2 | 69.8 | 59.3 | 48.8 | 45.4 | 41.9 | 41.9 |
| 50° | 7724.2 | 6886.9 | 931.5 | 150.0 | 83.7 | 59.3 | 48.8 | 41.9 | 38.4 | 34.9 | 34.9 |
| 52.5° | 8251.0 | 7221.8 | 659.4 | 129.1 | 69.8 | 52.3 | 38.4 | 31.4 | 27.9 | 27.9 | 27.9 |
| 55° | 8673.1 | 7431.1 | 460.5 | 108.2 | 59.3 | 45.4 | 31.4 | 24.4 | 24.4 | 20.9 | 20.9 |
| 57.5° | 9070.9 | 7567.2 | 338.4 | 90.7 | 48.8 | 34.9 | 24.4 | 17.4 | 17.4 | 14.0 | 14.0 |
| 60° | 9482.5 | 7640.5 | 258.2 | 73.3 | 41.9 | 27.9 | 17.4 | 14.0 | 10.5 | 10.5 | 10.5 |
| 62.5° | 9897.7 | 7685.8 | 198.9 | 59.3 | 34.9 | 20.9 | 14.0 | 10.5 | 7.0 | 3.5 | 3.5 |
| 65° | 10260.5 | 7699.8 | 153.5 | 45.4 | 27.9 | 14.0 | 10.5 | 3.5 | 0.0 | 0.0 | 0.0 |
| 67.5° | 10368.7 | 7539.3 | 118.6 | 34.9 | 20.9 | 10.5 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 10075.6 | 7113.6 | 90.7 | 27.9 | 17.4 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 8941.8 | 5965.8 | 69.8 | 17.4 | 14.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 6398.4 | 3181.8 | 48.8 | 14.0 | 10.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 2944.5 | 1231.5 | 34.9 | 10.5 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 575.7 | 307.0 | 14.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 132.6 | 52.3 | 7.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 45.4 | 17.4 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 17.4 | 7.0 | 3.5 | 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)