

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: P399654

Luminaire Tested: **ARCH-L-PA3-170-750-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-750-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26039 lumens
Efficiency: N/A
Efficacy: 150.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

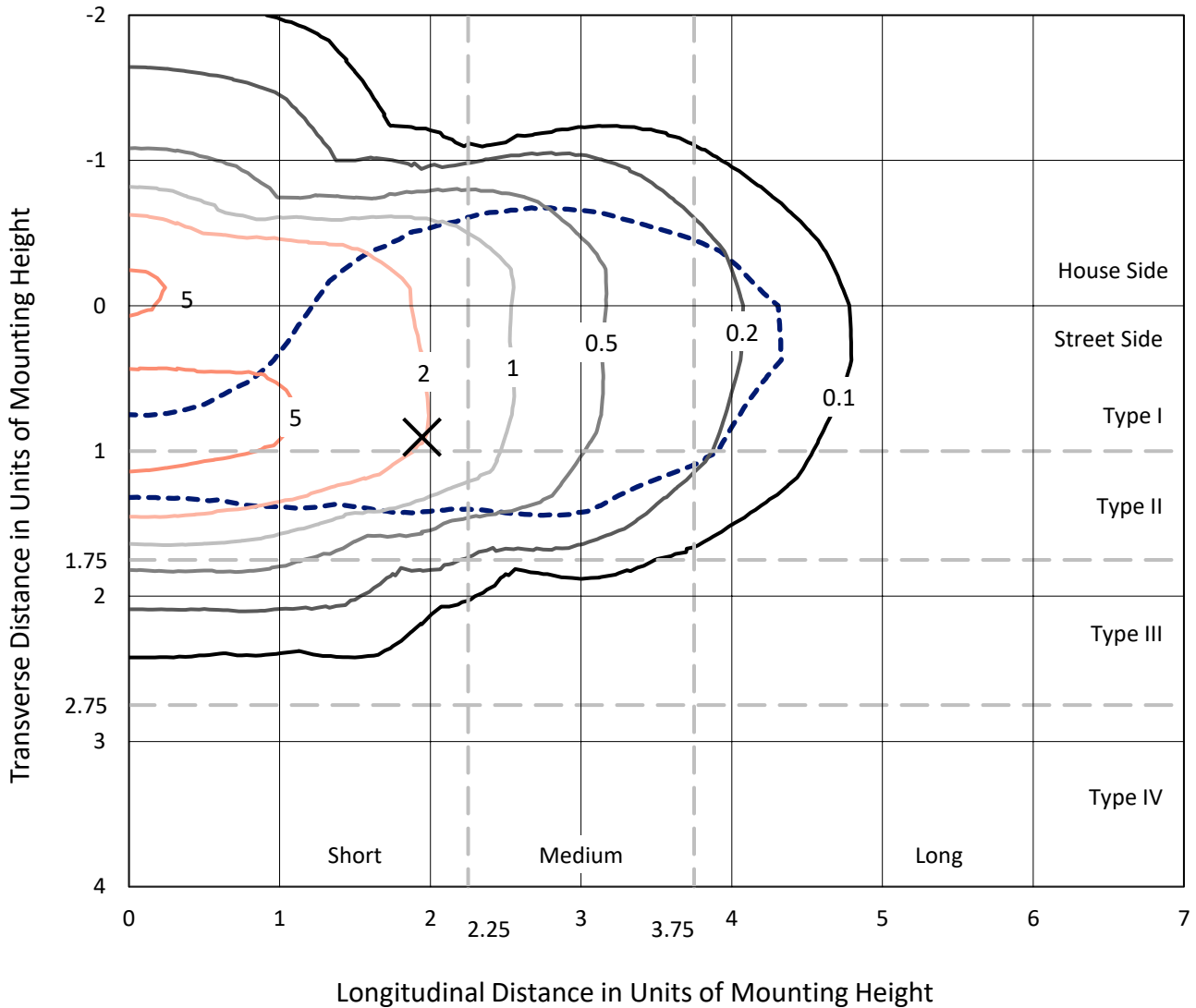
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

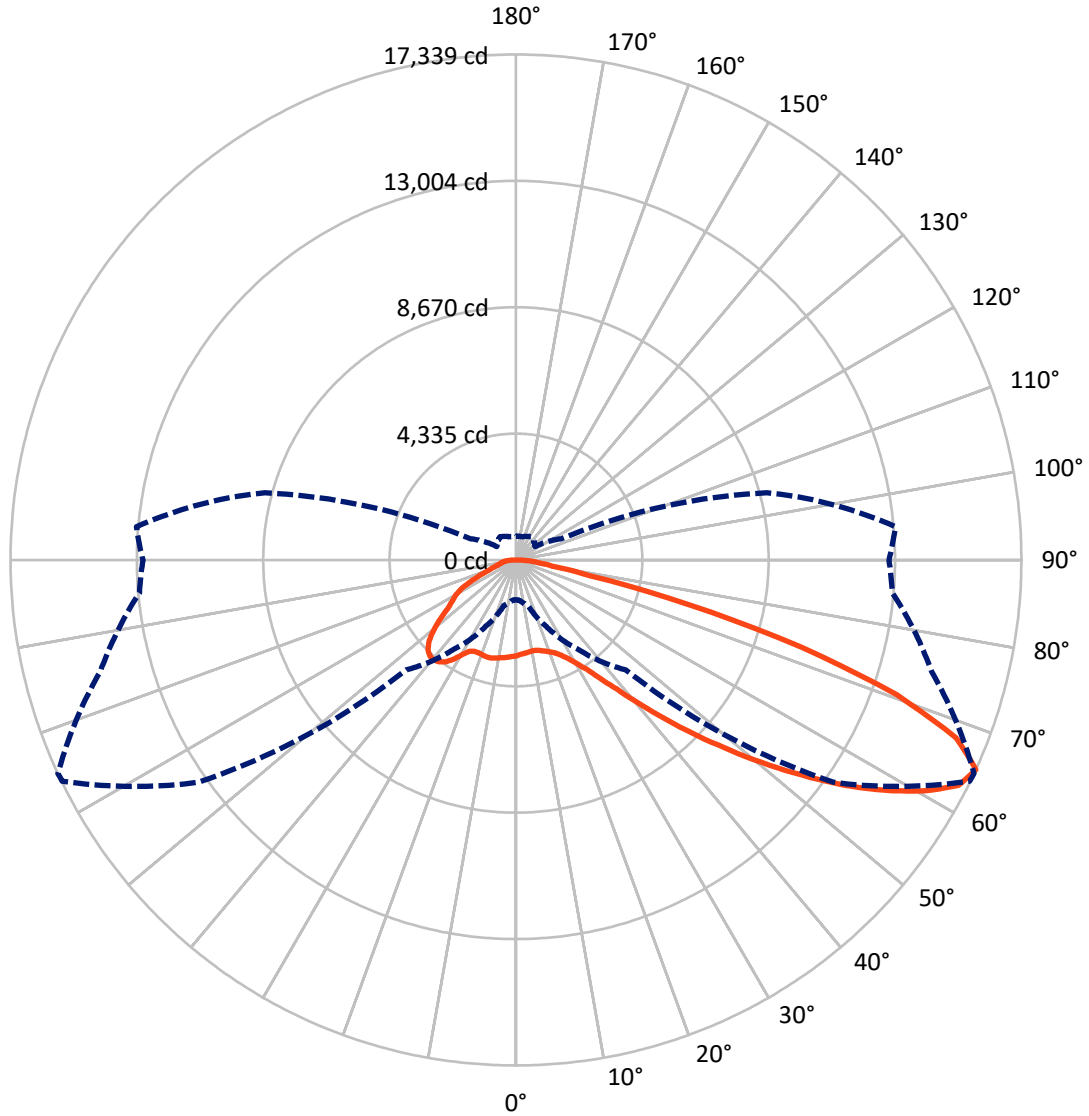
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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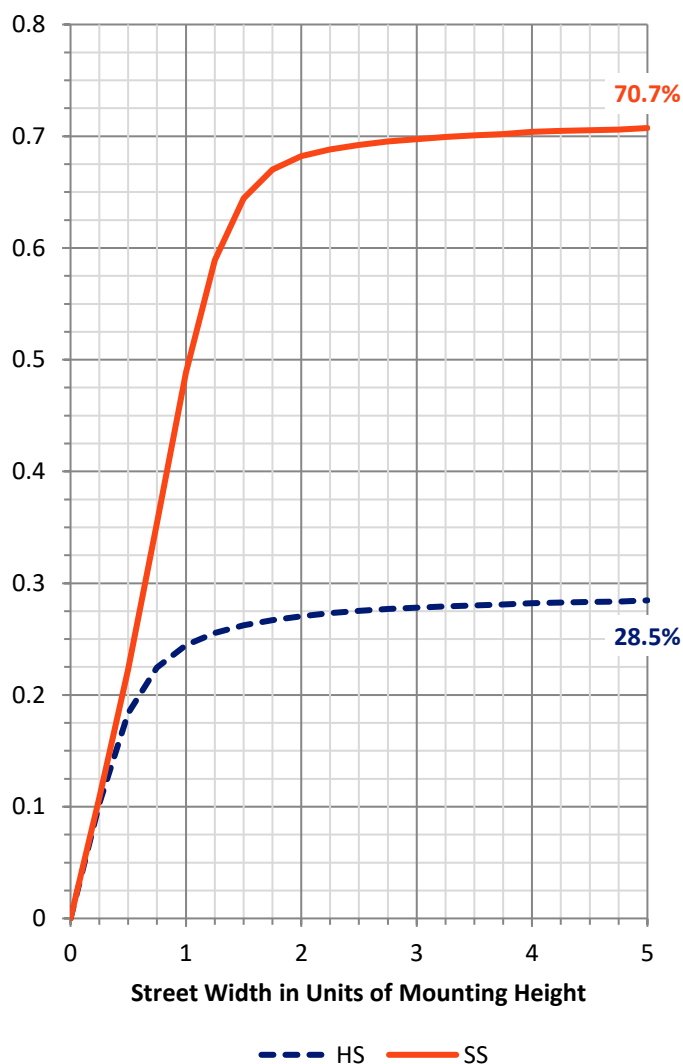
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7528.3 | 0.0 | 7528.3 |
| | % Fixture | 28.9 | 0.0 | 28.9 |
| Street Side | Lumens | 18510.7 | 0.0 | 18510.7 |
| | % Fixture | 71.1 | 0.0 | 71.1 |
| Total | Lumens | 26039.0 | 0.0 | 26039.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 313.5 | 1.2 |
| 10°-20° | 935.9 | 3.6 |
| 20°-30° | 1662.4 | 6.4 |
| 30°-40° | 2812.4 | 10.8 |
| 40°-50° | 4895.8 | 18.8 |
| 50°-60° | 6327.0 | 24.3 |
| 60°-70° | 5536.5 | 21.3 |
| 70°-80° | 3011.4 | 11.6 |
| 80°-90° | 544.1 | 2.1 |
| 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° | 26039.0 | 100.0 |
| 0°-180° | 26039.0 | 100.0 |

Coefficient of Utilization



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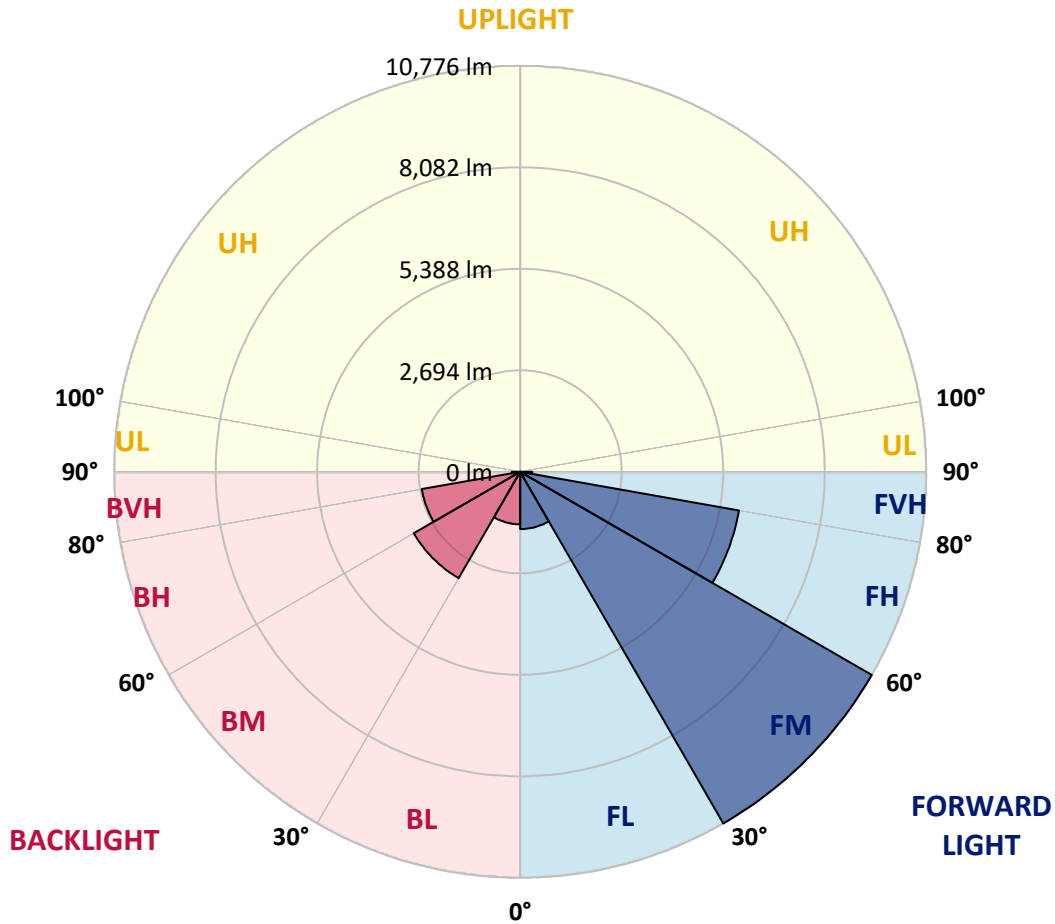
CATALOG NUMBER: ARCH-L-PA3-170-750-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1519.3 | 5.8 | | | |
| FM (30°-60°) | 10775.6 | 41.4 | | | |
| FH (60°-80°) | 5895.6 | 22.6 | | | G3/7500 |
| FVH (80°-90°) | 320.2 | 1.2 | | | G3/500 |
| BL (0°-30°) | 1392.5 | 5.3 | B3/2500 | | |
| BM (30°-60°) | 3259.6 | 12.5 | B3/5000 | | |
| BH (60°-80°) | 2652.3 | 10.2 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 223.9 | 0.9 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 |
| 2.5° | 3232.0 | 3228.6 | 3221.7 | 3228.6 | 3232.0 | 3238.9 | 3235.4 | 3242.3 | 3238.9 | 3249.1 | 3266.3 |
| 5° | 3149.8 | 3142.9 | 3139.5 | 3156.6 | 3166.9 | 3184.0 | 3190.9 | 3214.9 | 3211.4 | 3228.6 | 3256.0 |
| 7.5° | 3057.2 | 3057.2 | 3053.8 | 3074.4 | 3088.1 | 3118.9 | 3142.9 | 3184.0 | 3187.5 | 3218.3 | 3249.1 |
| 10° | 2985.2 | 2988.7 | 2985.2 | 3002.4 | 3022.9 | 3060.6 | 3101.8 | 3160.0 | 3163.5 | 3208.0 | 3238.9 |
| 12.5° | 2957.8 | 2957.8 | 2957.8 | 2981.8 | 3009.2 | 3060.6 | 3108.6 | 3170.3 | 3177.2 | 3225.2 | 3252.6 |
| 15° | 2995.5 | 2999.0 | 2992.1 | 3016.1 | 3046.9 | 3108.6 | 3153.2 | 3218.3 | 3225.2 | 3269.7 | 3286.9 |
| 17.5° | 3129.2 | 3142.9 | 3125.8 | 3139.5 | 3132.6 | 3180.6 | 3221.7 | 3286.9 | 3290.3 | 3328.0 | 3334.8 |
| 20° | 3393.1 | 3406.8 | 3379.4 | 3362.3 | 3300.6 | 3297.1 | 3314.3 | 3365.7 | 3365.7 | 3389.7 | 3372.5 |
| 22.5° | 3801.0 | 3814.7 | 3766.7 | 3701.6 | 3554.2 | 3482.2 | 3444.5 | 3468.5 | 3465.1 | 3475.4 | 3430.8 |
| 25° | 4342.5 | 4339.1 | 4280.8 | 4160.8 | 3924.3 | 3749.5 | 3657.0 | 3619.3 | 3619.3 | 3598.7 | 3543.9 |
| 27.5° | 5014.2 | 4962.8 | 4860.0 | 4716.1 | 4387.0 | 4143.7 | 3944.9 | 3848.9 | 3831.8 | 3770.1 | 3667.3 |
| 30° | 5730.6 | 5692.9 | 5545.5 | 5336.4 | 4956.0 | 4644.1 | 4315.1 | 4123.1 | 4112.8 | 3979.2 | 3824.9 |
| 32.5° | 6573.7 | 6512.0 | 6347.5 | 6097.3 | 5641.5 | 5202.8 | 4791.5 | 4500.1 | 4483.0 | 4270.5 | 4058.0 |
| 35° | 7656.8 | 7605.3 | 7286.6 | 7036.4 | 6450.3 | 5874.5 | 5387.8 | 5000.5 | 4986.8 | 4726.3 | 4455.6 |
| 37.5° | 8955.7 | 8822.1 | 8513.6 | 8044.0 | 7427.1 | 6745.1 | 6128.1 | 5641.5 | 5624.3 | 5336.4 | 4993.7 |
| 40° | 10114.2 | 9994.2 | 9720.0 | 9288.2 | 8626.7 | 7869.2 | 7033.0 | 6443.5 | 6426.3 | 6076.7 | 5644.9 |
| 42.5° | 10971.0 | 10888.8 | 10710.5 | 10460.3 | 9987.4 | 9528.1 | 8188.0 | 7413.4 | 7382.6 | 6930.1 | 6392.1 |
| 45° | 11468.0 | 11402.9 | 11300.1 | 11361.7 | 11354.9 | 11269.2 | 9565.8 | 8568.4 | 8469.0 | 7883.0 | 7224.9 |
| 47.5° | 11348.0 | 11289.8 | 11330.9 | 11810.7 | 12472.2 | 12969.2 | 11169.8 | 9750.9 | 9617.2 | 8852.9 | 8112.6 |
| 50° | 10480.9 | 10504.9 | 10720.8 | 11639.4 | 13123.4 | 14227.0 | 12948.6 | 11097.8 | 10919.6 | 9829.7 | 8955.7 |
| 52.5° | 8900.9 | 8959.2 | 9483.5 | 10768.8 | 13051.4 | 15042.7 | 14556.1 | 12489.3 | 12252.9 | 10782.5 | 9723.5 |
| 55° | 7070.7 | 7218.0 | 7896.7 | 9247.1 | 12112.3 | 15101.0 | 15769.3 | 13887.7 | 13627.2 | 11677.1 | 10391.8 |
| 57.5° | 5230.2 | 5449.5 | 6234.4 | 7475.1 | 10313.0 | 14179.0 | 16376.0 | 15224.4 | 14909.1 | 12564.8 | 11097.8 |
| 60° | 3317.7 | 3451.4 | 4356.2 | 5819.7 | 7893.2 | 11923.8 | 16297.2 | 16362.3 | 16088.1 | 13449.0 | 11834.7 |
| 62.5° | 2118.1 | 2183.2 | 2639.1 | 4150.5 | 5518.1 | 8828.9 | 15436.9 | 17222.6 | 17037.5 | 14254.4 | 12533.9 |
| 65° | 1360.7 | 1388.1 | 1621.1 | 2553.4 | 3756.4 | 5329.6 | 13294.8 | 17315.1 | 17339.1 | 14758.3 | 12965.8 |
| 67.5° | 1107.0 | 1120.8 | 1206.4 | 1576.6 | 2656.2 | 2944.1 | 9260.8 | 15999.0 | 16290.3 | 14628.0 | 12818.4 |
| 70° | 1007.6 | 1024.8 | 1113.9 | 1257.8 | 2056.4 | 2032.4 | 4483.0 | 13387.3 | 13863.7 | 13877.4 | 12163.7 |
| 72.5° | 850.0 | 874.0 | 993.9 | 1189.3 | 1590.3 | 1604.0 | 1898.8 | 9535.0 | 10237.6 | 12403.7 | 11180.1 |
| 75° | 709.5 | 723.2 | 826.0 | 1048.8 | 1347.0 | 1281.8 | 1333.2 | 5055.4 | 6069.9 | 9946.2 | 10134.7 |
| 77.5° | 575.8 | 589.5 | 664.9 | 836.3 | 1196.2 | 997.4 | 1048.8 | 2094.1 | 2587.7 | 6751.9 | 8284.0 |
| 80° | 411.3 | 425.0 | 510.7 | 651.2 | 904.8 | 898.0 | 778.0 | 1155.0 | 1254.4 | 3650.2 | 5381.0 |
| 82.5° | 294.8 | 305.0 | 387.3 | 466.1 | 627.2 | 901.4 | 586.1 | 784.9 | 822.6 | 1617.7 | 2169.5 |
| 85° | 198.8 | 198.8 | 267.3 | 308.5 | 404.4 | 568.9 | 473.0 | 531.2 | 555.2 | 767.7 | 586.1 |
| 87.5° | 85.7 | 85.7 | 143.9 | 157.7 | 212.5 | 263.9 | 353.0 | 267.3 | 274.2 | 414.7 | 239.9 |
| 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-L-PA3-170-750-U-T2U

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 | 3290.3 |
| 2.5° | 3276.6 | 3280.0 | 3286.9 | 3307.4 | 3321.1 | 3341.7 | 3352.0 | 3365.7 | 3365.7 | 3358.8 | 3362.3 |
| 5° | 3269.7 | 3280.0 | 3304.0 | 3341.7 | 3365.7 | 3403.4 | 3430.8 | 3451.4 | 3458.2 | 3451.4 | 3454.8 |
| 7.5° | 3266.3 | 3283.4 | 3324.6 | 3379.4 | 3413.7 | 3461.6 | 3499.3 | 3523.3 | 3540.5 | 3533.6 | 3537.0 |
| 10° | 3256.0 | 3283.4 | 3334.8 | 3403.4 | 3454.8 | 3502.8 | 3537.0 | 3547.3 | 3557.6 | 3550.8 | 3547.3 |
| 12.5° | 3269.7 | 3300.6 | 3355.4 | 3437.7 | 3495.9 | 3533.6 | 3543.9 | 3526.8 | 3502.8 | 3489.1 | 3485.6 |
| 15° | 3297.1 | 3328.0 | 3382.8 | 3468.5 | 3519.9 | 3533.6 | 3509.6 | 3454.8 | 3400.0 | 3369.1 | 3365.7 |
| 17.5° | 3334.8 | 3355.4 | 3400.0 | 3475.4 | 3516.5 | 3499.3 | 3451.4 | 3386.2 | 3345.1 | 3321.1 | 3324.6 |
| 20° | 3358.8 | 3358.8 | 3393.1 | 3451.4 | 3485.6 | 3471.9 | 3413.7 | 3341.7 | 3276.6 | 3245.7 | 3235.4 |
| 22.5° | 3393.1 | 3376.0 | 3379.4 | 3430.8 | 3478.8 | 3458.2 | 3334.8 | 3208.0 | 3115.5 | 3081.2 | 3077.8 |
| 25° | 3485.6 | 3437.7 | 3406.8 | 3437.7 | 3550.8 | 3382.8 | 3136.0 | 2988.7 | 2903.0 | 2872.1 | 2875.6 |
| 27.5° | 3598.7 | 3533.6 | 3468.5 | 3519.9 | 3609.0 | 3211.4 | 2882.4 | 2714.5 | 2663.1 | 2639.1 | 2649.4 |
| 30° | 3711.8 | 3626.2 | 3540.5 | 3725.6 | 3567.9 | 2944.1 | 2556.8 | 2392.3 | 2347.8 | 2330.6 | 2344.3 |
| 32.5° | 3920.9 | 3780.4 | 3677.6 | 3999.7 | 3441.1 | 2639.1 | 2203.8 | 2053.0 | 2011.9 | 1991.3 | 1984.4 |
| 35° | 4270.5 | 4092.3 | 3989.5 | 4239.7 | 3262.9 | 2299.8 | 1881.6 | 1775.4 | 1730.8 | 1686.3 | 1679.4 |
| 37.5° | 4774.3 | 4558.4 | 4465.9 | 4376.8 | 3012.7 | 1963.9 | 1634.9 | 1562.9 | 1497.8 | 1429.2 | 1425.8 |
| 40° | 5377.5 | 5096.5 | 5028.0 | 4438.4 | 2666.5 | 1648.6 | 1463.5 | 1394.9 | 1312.7 | 1247.6 | 1251.0 |
| 42.5° | 6073.3 | 5713.4 | 5566.1 | 4421.3 | 2238.1 | 1480.6 | 1340.1 | 1264.7 | 1192.7 | 1134.5 | 1131.0 |
| 45° | 6817.0 | 6409.2 | 6069.9 | 4301.4 | 1813.1 | 1364.1 | 1264.7 | 1175.6 | 1103.6 | 1038.5 | 1031.6 |
| 47.5° | 7639.6 | 7183.8 | 6536.0 | 4068.3 | 1497.8 | 1281.8 | 1220.1 | 1093.3 | 1028.2 | 987.1 | 987.1 |
| 50° | 8469.0 | 7924.1 | 6964.4 | 3715.3 | 1312.7 | 1220.1 | 1155.0 | 1048.8 | 997.4 | 963.1 | 963.1 |
| 52.5° | 9178.5 | 8695.2 | 7317.4 | 3293.7 | 1196.2 | 1168.7 | 1110.5 | 1028.2 | 973.4 | 942.5 | 939.1 |
| 55° | 9867.4 | 9411.6 | 7632.8 | 2875.6 | 1100.2 | 1100.2 | 1100.2 | 1011.1 | 949.4 | 922.0 | 918.5 |
| 57.5° | 10552.9 | 10165.6 | 7961.8 | 2601.4 | 1014.5 | 1041.9 | 1079.6 | 990.5 | 928.8 | 904.8 | 901.4 |
| 60° | 11327.5 | 11070.4 | 8342.2 | 2409.4 | 939.1 | 980.2 | 1052.2 | 966.5 | 894.5 | 874.0 | 870.6 |
| 62.5° | 12150.0 | 12150.0 | 8688.4 | 2138.7 | 870.6 | 928.8 | 1011.1 | 935.7 | 863.7 | 846.6 | 843.1 |
| 65° | 12794.4 | 13072.0 | 8911.2 | 1734.3 | 802.0 | 877.4 | 963.1 | 894.5 | 822.6 | 819.1 | 812.3 |
| 67.5° | 12869.8 | 13305.1 | 8770.6 | 1309.3 | 740.3 | 822.6 | 915.1 | 850.0 | 781.4 | 781.4 | 771.2 |
| 70° | 12328.3 | 12770.4 | 8331.9 | 980.2 | 695.8 | 767.7 | 853.4 | 795.2 | 730.0 | 736.9 | 719.7 |
| 72.5° | 11423.4 | 11533.1 | 7242.0 | 774.6 | 644.3 | 709.5 | 778.0 | 733.5 | 675.2 | 675.2 | 651.2 |
| 75° | 10230.7 | 9620.6 | 5261.0 | 647.8 | 582.7 | 640.9 | 702.6 | 664.9 | 613.5 | 596.4 | 582.7 |
| 77.5° | 8143.4 | 6971.3 | 3057.2 | 558.7 | 531.2 | 575.8 | 616.9 | 589.5 | 545.0 | 507.3 | 507.3 |
| 80° | 4962.8 | 4085.4 | 1350.4 | 483.3 | 469.6 | 503.8 | 531.2 | 500.4 | 462.7 | 425.0 | 414.7 |
| 82.5° | 1888.5 | 1576.6 | 654.6 | 414.7 | 411.3 | 431.8 | 452.4 | 421.6 | 394.1 | 377.0 | 325.6 |
| 85° | 517.5 | 476.4 | 449.0 | 346.2 | 339.3 | 335.9 | 359.9 | 346.2 | 308.5 | 253.6 | 226.2 |
| 87.5° | 195.4 | 222.8 | 243.3 | 212.5 | 226.2 | 209.1 | 239.9 | 219.4 | 195.4 | 126.8 | 113.1 |
| 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)