

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: P237098

Luminaire Tested: **ARCH-L-AF72-250-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28888.1 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 251
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

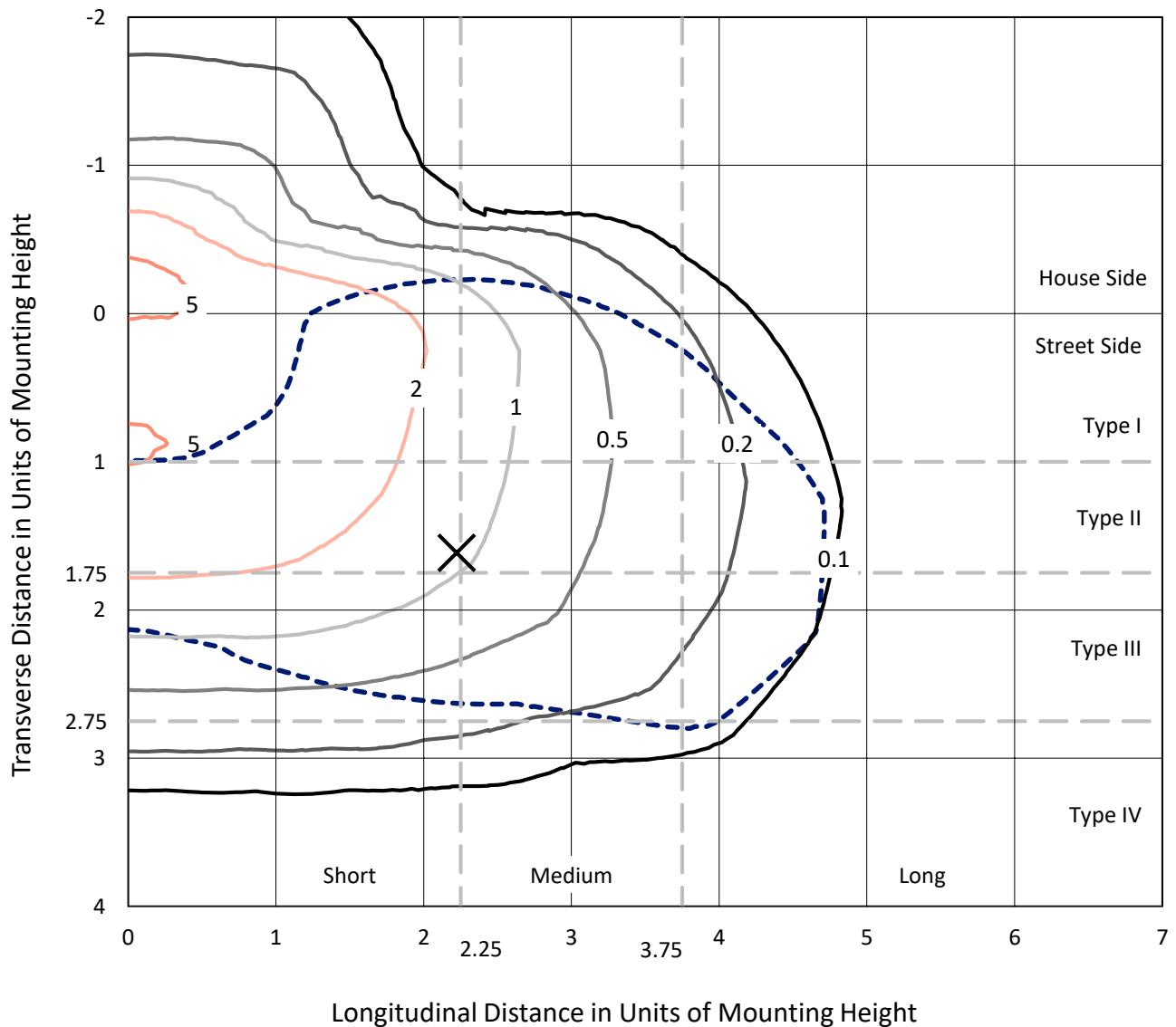


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

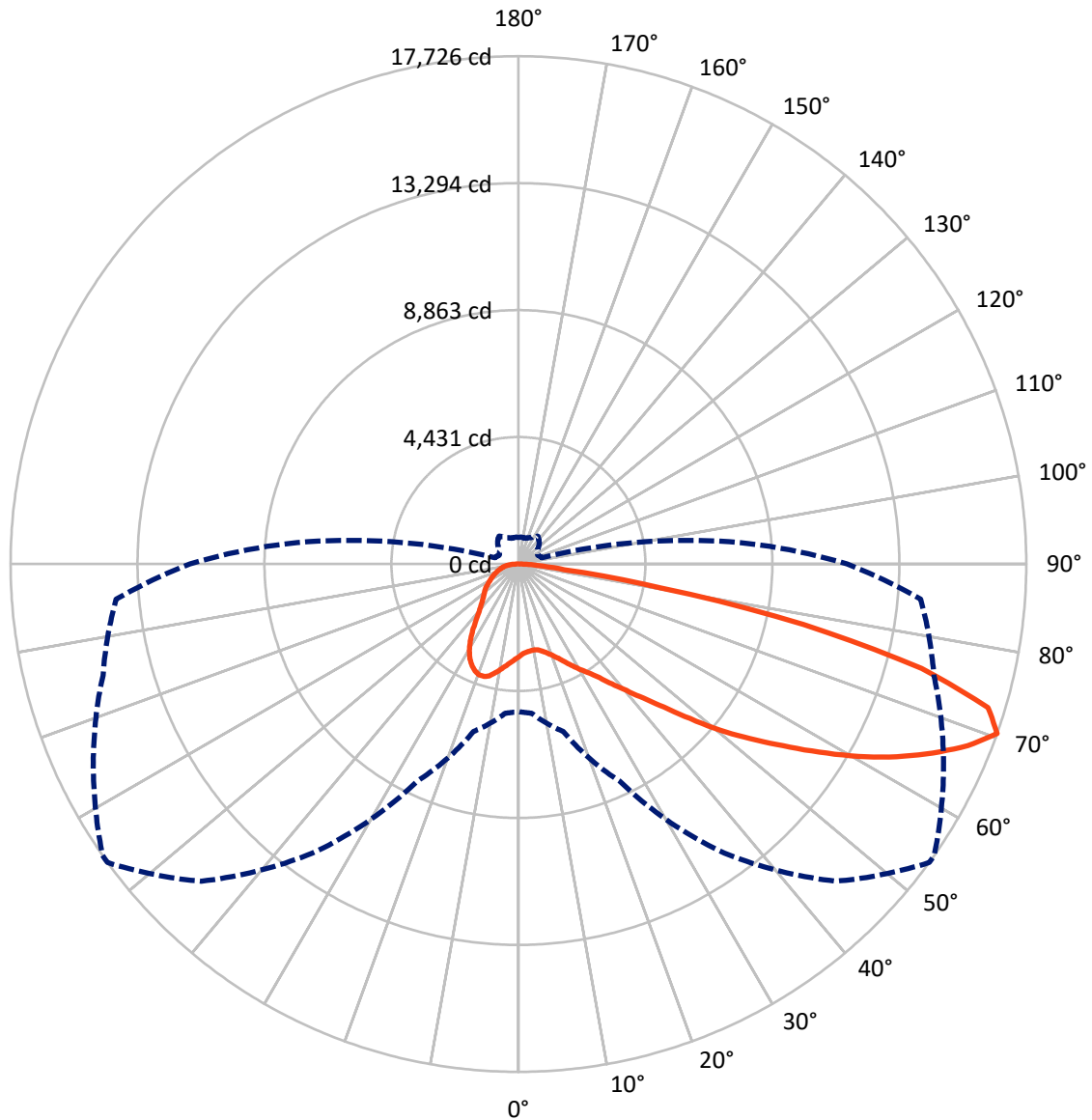


Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6551.7 | 0.0 | 6551.7 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 22336.4 | 0.0 | 22336.4 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 28888.1 | 0.0 | 28888.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 317.2 | 1.1 |
| 10°-20° | 1013.5 | 3.5 |
| 20°-30° | 1760.8 | 6.1 |
| 30°-40° | 2573.1 | 8.9 |
| 40°-50° | 4038.4 | 14.0 |
| 50°-60° | 6210.2 | 21.5 |
| 60°-70° | 7587.3 | 26.3 |
| 70°-80° | 4704.2 | 16.3 |
| 80°-90° | 683.4 | 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° | 28888.1 | 100.0 |
| 0°-180° | 28888.1 | 100.0 |



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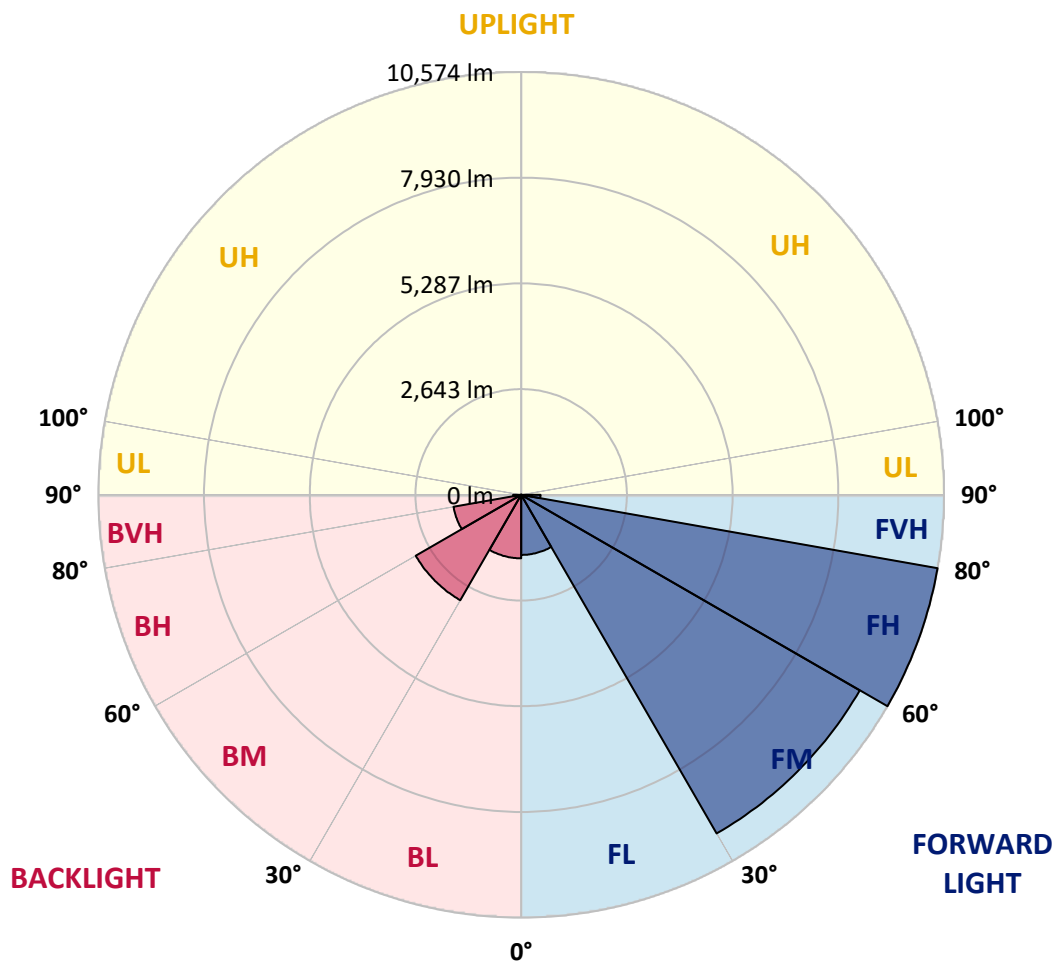
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1503.0 | 5.2 | | | |
| FM | (30°-60°) | 9777.3 | 33.8 | | | |
| FH | (60°-80°) | 10573.5 | 36.6 | | | G4/12000 |
| FVH | (80°-90°) | 482.6 | 1.7 | | | G3/500 |
| BL | (0°-30°) | 1588.4 | 5.5 | B3/2500 | | |
| BM | (30°-60°) | 3044.5 | 10.5 | B3/5000 | | |
| BH | (60°-80°) | 1718.0 | 5.9 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 200.8 | 0.7 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 54° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 |
| 2.5° | 3105.1 | 3094.4 | 3094.4 | 3110.4 | 3115.6 | 3131.5 | 3131.5 | 3136.8 | 3152.6 | 3179.1 | 3210.8 |
| 5° | 3009.8 | 3004.5 | 3009.8 | 3031.0 | 3041.5 | 3073.4 | 3083.9 | 3089.2 | 3120.9 | 3163.3 | 3210.8 |
| 7.5° | 2914.6 | 2909.4 | 2919.9 | 2951.6 | 2983.3 | 3031.0 | 3057.4 | 3062.7 | 3110.4 | 3168.5 | 3232.0 |
| 10° | 2882.9 | 2877.6 | 2893.4 | 2919.9 | 2951.6 | 3004.5 | 3046.9 | 3052.2 | 3120.9 | 3189.7 | 3279.6 |
| 12.5° | 2925.2 | 2919.9 | 2935.8 | 2962.3 | 2994.0 | 3031.0 | 3078.6 | 3083.9 | 3173.8 | 3263.7 | 3359.0 |
| 15° | 3031.0 | 3031.0 | 3036.3 | 3052.2 | 3083.9 | 3115.6 | 3158.0 | 3163.3 | 3258.4 | 3364.3 | 3459.4 |
| 17.5° | 3195.0 | 3184.3 | 3184.3 | 3179.1 | 3200.3 | 3216.2 | 3269.0 | 3274.4 | 3374.8 | 3470.1 | 3565.3 |
| 20° | 3396.0 | 3390.7 | 3369.5 | 3343.1 | 3337.8 | 3348.3 | 3401.3 | 3406.5 | 3507.1 | 3586.4 | 3676.4 |
| 22.5° | 3639.4 | 3644.6 | 3597.0 | 3538.8 | 3512.3 | 3528.3 | 3575.8 | 3581.1 | 3655.2 | 3724.0 | 3803.3 |
| 25° | 3962.0 | 3946.1 | 3877.3 | 3792.7 | 3739.8 | 3739.8 | 3787.4 | 3787.4 | 3856.2 | 3898.5 | 3951.4 |
| 27.5° | 4268.8 | 4237.1 | 4173.5 | 4051.9 | 3967.3 | 3983.2 | 4030.7 | 4030.7 | 4094.3 | 4110.1 | 4136.5 |
| 30° | 4602.1 | 4570.3 | 4491.0 | 4337.5 | 4226.4 | 4215.9 | 4274.1 | 4268.8 | 4353.4 | 4348.2 | 4327.0 |
| 32.5° | 5009.3 | 4993.4 | 4861.3 | 4665.5 | 4517.4 | 4480.3 | 4533.3 | 4538.5 | 4591.4 | 4575.6 | 4506.8 |
| 35° | 5580.6 | 5575.3 | 5453.7 | 5109.8 | 4914.2 | 4845.3 | 4877.1 | 4877.1 | 4914.2 | 4871.8 | 4755.4 |
| 37.5° | 6300.0 | 6310.6 | 6204.8 | 5697.0 | 5421.9 | 5305.5 | 5310.9 | 5305.5 | 5316.2 | 5268.5 | 5146.9 |
| 40° | 7019.4 | 7045.9 | 7040.6 | 6427.0 | 6077.9 | 5876.9 | 5802.8 | 5792.3 | 5818.6 | 5797.5 | 5681.2 |
| 42.5° | 7966.2 | 8029.8 | 7881.6 | 7326.2 | 6934.8 | 6596.2 | 6395.2 | 6368.8 | 6427.0 | 6453.4 | 6342.3 |
| 45° | 8950.1 | 8929.0 | 8696.2 | 8294.2 | 7939.8 | 7506.1 | 7125.2 | 7082.9 | 7125.2 | 7204.5 | 7088.2 |
| 47.5° | 9463.2 | 9447.4 | 9389.2 | 9188.1 | 9135.3 | 8638.1 | 8061.5 | 8024.4 | 7945.2 | 8056.1 | 7918.7 |
| 50° | 10309.6 | 10325.5 | 10087.4 | 10066.2 | 10288.4 | 10013.4 | 9119.4 | 9034.8 | 8892.0 | 8981.9 | 8865.5 |
| 52.5° | 10923.2 | 10854.4 | 10706.3 | 10891.5 | 11584.4 | 11436.3 | 10113.9 | 10076.9 | 9944.6 | 9923.4 | 9870.6 |
| 55° | 11171.9 | 11171.9 | 11198.2 | 11626.8 | 12616.0 | 12420.2 | 11193.0 | 11230.0 | 11050.1 | 10902.0 | 10970.8 |
| 57.5° | 11245.9 | 11277.6 | 11505.0 | 12213.9 | 13827.2 | 13187.2 | 12383.1 | 12436.0 | 12176.9 | 11880.7 | 12097.5 |
| 60° | 10880.9 | 10976.1 | 11521.0 | 12547.1 | 14509.6 | 14001.8 | 13636.9 | 13652.7 | 13277.1 | 12843.4 | 13224.2 |
| 62.5° | 9944.6 | 10061.0 | 11034.3 | 12684.7 | 14398.5 | 14837.6 | 14821.7 | 14858.8 | 14345.7 | 13806.1 | 14282.1 |
| 65° | 8796.8 | 8913.1 | 9949.9 | 12298.5 | 14313.8 | 15435.3 | 15906.1 | 16006.6 | 15345.4 | 14620.7 | 14943.4 |
| 67.5° | 7109.3 | 7262.7 | 8246.6 | 10997.2 | 13901.3 | 15927.2 | 16921.8 | 17027.5 | 16117.7 | 15043.8 | 14885.2 |
| 70° | 5152.2 | 5226.3 | 6051.4 | 8357.7 | 12219.1 | 15657.5 | 17725.7 | 17720.5 | 16371.6 | 15012.1 | 14091.8 |
| 72.5° | 2480.9 | 2539.1 | 3253.2 | 5189.2 | 8738.6 | 13287.7 | 17143.8 | 17244.4 | 16022.5 | 14551.9 | 12277.4 |
| 75° | 1020.9 | 1079.1 | 1317.2 | 2189.9 | 4586.2 | 8780.9 | 14530.8 | 14768.9 | 14551.9 | 13060.2 | 9606.0 |
| 77.5° | 634.7 | 655.9 | 772.3 | 1132.0 | 2094.7 | 4099.5 | 10172.0 | 10494.8 | 11531.5 | 10463.0 | 6342.3 |
| 80° | 476.1 | 491.9 | 576.5 | 793.5 | 1322.5 | 1512.8 | 5051.6 | 5459.0 | 6987.7 | 6003.8 | 2872.3 |
| 82.5° | 396.7 | 402.0 | 460.2 | 576.5 | 899.3 | 867.5 | 1618.6 | 1803.8 | 3258.4 | 2290.4 | 989.2 |
| 85° | 370.3 | 380.8 | 412.6 | 412.6 | 571.3 | 544.8 | 671.8 | 703.5 | 946.8 | 782.9 | 343.8 |
| 87.5° | 190.5 | 179.8 | 365.0 | 322.6 | 296.2 | 264.5 | 285.6 | 306.8 | 354.5 | 375.5 | 153.4 |
| 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-AF72-250-D-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 | 3232.0 |
| 2.5° | 3221.4 | 3237.3 | 3263.7 | 3290.2 | 3321.9 | 3359.0 | 3380.1 | 3406.5 | 3427.7 | 3417.2 | 3411.8 |
| 5° | 3237.3 | 3263.7 | 3321.9 | 3374.8 | 3438.3 | 3512.3 | 3560.0 | 3612.9 | 3655.2 | 3665.7 | 3649.9 |
| 7.5° | 3263.7 | 3311.4 | 3390.7 | 3485.9 | 3570.5 | 3665.7 | 3739.8 | 3813.9 | 3866.8 | 3877.3 | 3877.3 |
| 10° | 3327.2 | 3380.1 | 3485.9 | 3612.9 | 3713.3 | 3813.9 | 3898.5 | 3956.7 | 4004.3 | 4025.4 | 4025.4 |
| 12.5° | 3417.2 | 3480.6 | 3607.5 | 3761.0 | 3872.1 | 3967.3 | 4014.9 | 4041.3 | 4062.4 | 4083.6 | 4088.9 |
| 15° | 3522.9 | 3591.7 | 3745.1 | 3909.1 | 4025.4 | 4073.1 | 4073.1 | 4067.8 | 4067.8 | 4078.3 | 4088.9 |
| 17.5° | 3628.7 | 3702.8 | 3861.4 | 4036.1 | 4110.1 | 4083.6 | 4046.6 | 4030.7 | 4020.2 | 4014.9 | 4030.7 |
| 20° | 3739.8 | 3813.9 | 3972.5 | 4136.5 | 4115.3 | 4004.3 | 3951.4 | 3914.3 | 3882.6 | 3866.8 | 3887.9 |
| 22.5° | 3861.4 | 3930.3 | 4094.3 | 4205.4 | 4046.6 | 3877.3 | 3776.8 | 3718.6 | 3665.7 | 3634.0 | 3655.2 |
| 25° | 4004.3 | 4073.1 | 4231.7 | 4226.4 | 3925.0 | 3686.9 | 3528.3 | 3433.0 | 3374.8 | 3343.1 | 3343.1 |
| 27.5° | 4173.5 | 4231.7 | 4385.2 | 4173.5 | 3755.7 | 3433.0 | 3200.3 | 3110.4 | 3094.4 | 3068.0 | 3068.0 |
| 30° | 4348.2 | 4395.7 | 4528.0 | 4051.9 | 3522.9 | 3099.7 | 2845.8 | 2803.5 | 2808.8 | 2782.3 | 2787.6 |
| 32.5° | 4528.0 | 4575.6 | 4612.6 | 3872.1 | 3221.4 | 2724.2 | 2554.9 | 2523.2 | 2517.9 | 2496.7 | 2475.5 |
| 35° | 4781.9 | 4850.6 | 4623.2 | 3628.7 | 2856.4 | 2412.1 | 2290.4 | 2258.7 | 2227.0 | 2152.9 | 2152.9 |
| 37.5° | 5168.0 | 5242.1 | 4596.7 | 3327.2 | 2480.9 | 2168.8 | 2057.7 | 2015.4 | 1962.4 | 1888.4 | 1862.0 |
| 40° | 5697.0 | 5697.0 | 4538.5 | 2988.7 | 2179.4 | 1973.1 | 1867.3 | 1814.4 | 1756.2 | 1682.1 | 1666.3 |
| 42.5° | 6321.2 | 6173.1 | 4448.6 | 2644.8 | 1957.2 | 1840.8 | 1745.6 | 1687.5 | 1618.6 | 1534.0 | 1523.5 |
| 45° | 7051.2 | 6649.2 | 4321.7 | 2338.1 | 1793.2 | 1761.4 | 1703.3 | 1602.8 | 1486.4 | 1396.4 | 1380.6 |
| 47.5° | 7760.0 | 7077.6 | 4200.0 | 2121.2 | 1655.6 | 1729.7 | 1682.1 | 1512.8 | 1354.2 | 1227.2 | 1211.4 |
| 50° | 8537.5 | 7458.4 | 4057.2 | 1941.4 | 1549.9 | 1708.5 | 1655.6 | 1380.6 | 1206.1 | 1116.1 | 1105.5 |
| 52.5° | 9315.1 | 7844.6 | 3903.8 | 1750.9 | 1460.0 | 1666.3 | 1592.2 | 1285.4 | 1200.7 | 1079.1 | 1063.3 |
| 55° | 10135.1 | 8294.2 | 3724.0 | 1539.3 | 1354.2 | 1581.6 | 1507.5 | 1280.1 | 1237.8 | 1079.1 | 1042.1 |
| 57.5° | 10933.8 | 8791.4 | 3433.0 | 1333.0 | 1237.8 | 1454.6 | 1475.8 | 1248.4 | 1158.5 | 1068.5 | 1026.2 |
| 60° | 11817.1 | 9320.4 | 2951.6 | 1158.5 | 1137.3 | 1348.9 | 1433.5 | 1179.6 | 1068.5 | 1036.8 | 1015.6 |
| 62.5° | 12525.9 | 9796.5 | 2306.3 | 1036.8 | 1052.6 | 1264.3 | 1380.6 | 1137.3 | 1031.4 | 1005.0 | 999.7 |
| 65° | 12832.8 | 9807.0 | 1655.6 | 931.0 | 968.0 | 1184.9 | 1327.7 | 1100.3 | 999.7 | 989.2 | 983.9 |
| 67.5° | 12510.1 | 9267.5 | 1163.7 | 830.4 | 878.1 | 1110.8 | 1258.9 | 1063.3 | 968.0 | 973.3 | 962.7 |
| 70° | 11468.0 | 8130.2 | 851.6 | 735.3 | 793.5 | 1031.4 | 1184.9 | 1015.6 | 931.0 | 941.5 | 925.7 |
| 72.5° | 9595.5 | 6337.1 | 682.4 | 655.9 | 724.7 | 946.8 | 1110.8 | 962.7 | 872.8 | 878.1 | 846.4 |
| 75° | 7088.2 | 4200.0 | 571.3 | 587.2 | 645.4 | 867.5 | 1015.6 | 894.0 | 809.4 | 788.2 | 767.0 |
| 77.5° | 4215.9 | 2158.2 | 470.8 | 513.1 | 576.5 | 772.3 | 909.8 | 809.4 | 740.5 | 703.5 | 687.6 |
| 80° | 1740.3 | 872.8 | 386.2 | 433.7 | 502.5 | 687.6 | 804.0 | 708.8 | 661.2 | 624.2 | 603.0 |
| 82.5° | 692.9 | 428.5 | 306.8 | 354.5 | 423.2 | 597.7 | 703.5 | 624.2 | 576.5 | 550.1 | 491.9 |
| 85° | 264.5 | 211.5 | 206.3 | 248.6 | 317.4 | 460.2 | 581.9 | 523.6 | 486.6 | 417.9 | 402.0 |
| 87.5° | 105.8 | 95.2 | 95.2 | 121.6 | 179.8 | 290.9 | 417.9 | 365.0 | 380.8 | 301.5 | 306.8 |
| 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)