

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: P399481

Luminaire Tested: **ARCH-L-PA3-150-727-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399481
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-150-727-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20052 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

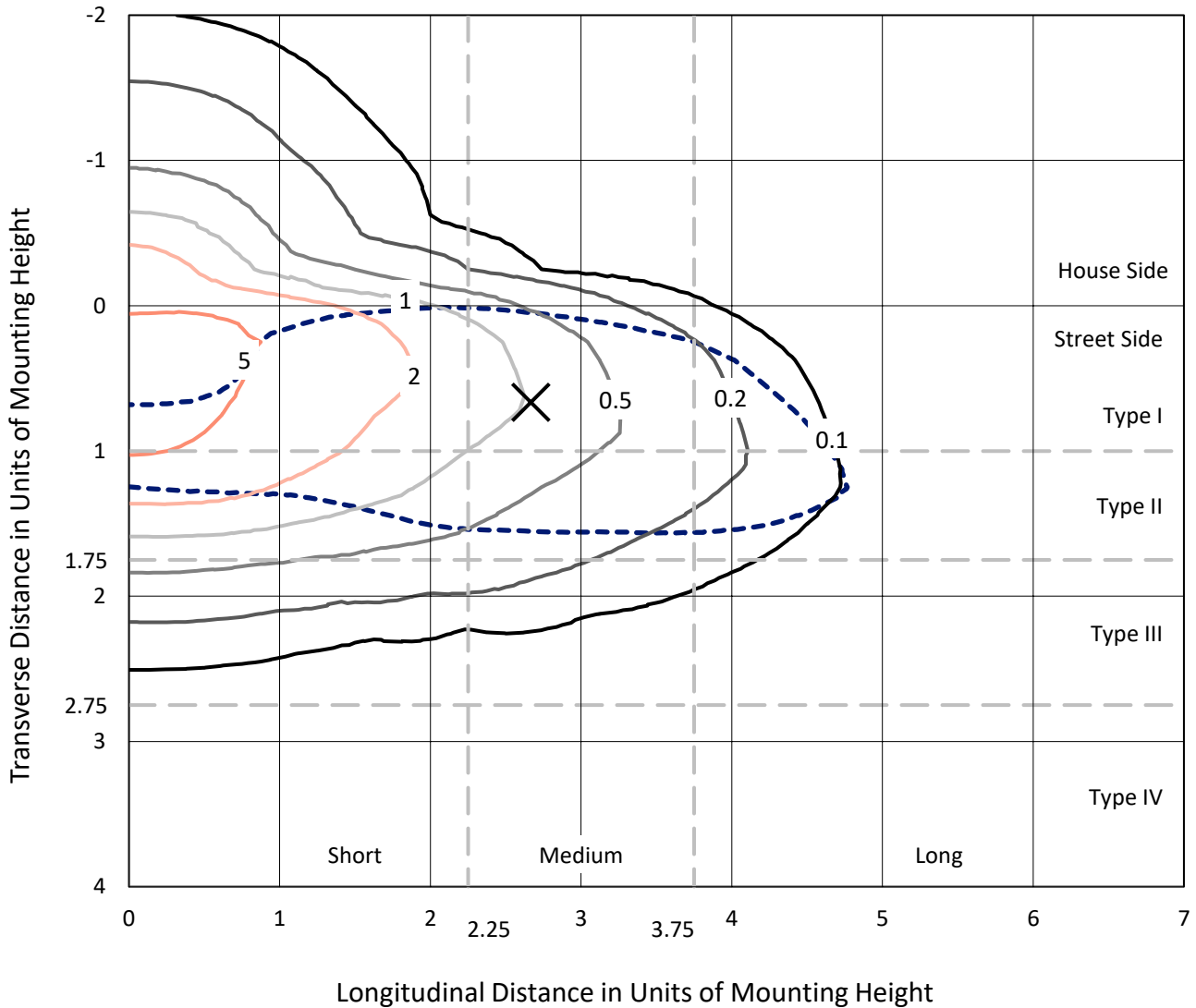
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

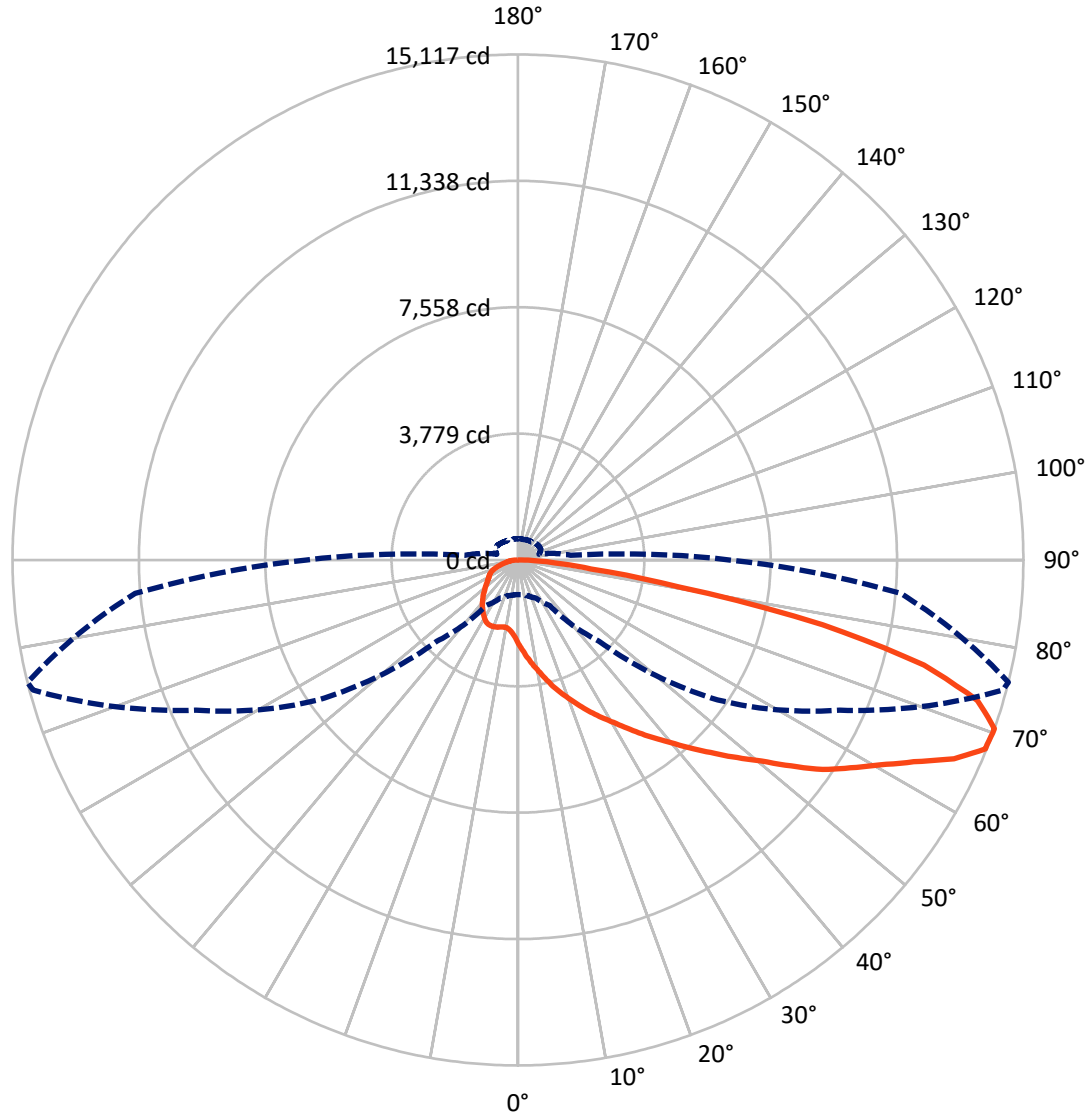
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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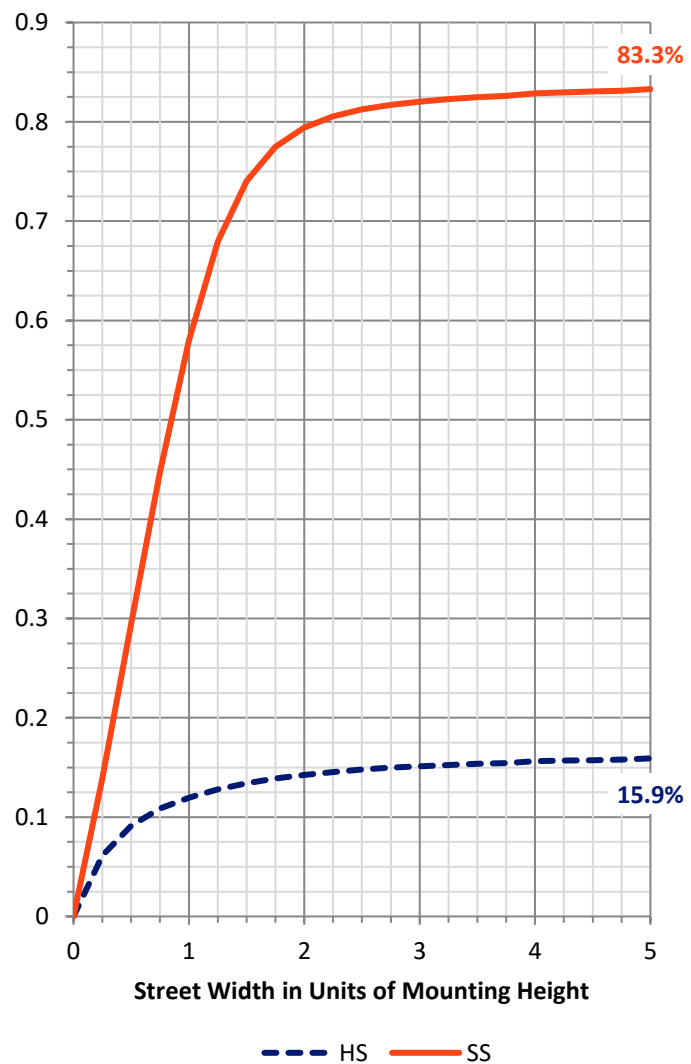
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3273.7 | 0.0 | 3273.7 |
| | % Fixture | 16.3 | 0.0 | 16.3 |
| Street Side | Lumens | 16778.3 | 0.0 | 16778.3 |
| | % Fixture | 83.7 | 0.0 | 83.7 |
| Total | Lumens | 20052.0 | 0.0 | 20052.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 260.5 | 1.3 |
| 10°-20° | 885.5 | 4.4 |
| 20°-30° | 1584.3 | 7.9 |
| 30°-40° | 2562.9 | 12.8 |
| 40°-50° | 3707.6 | 18.5 |
| 50°-60° | 4243.5 | 21.2 |
| 60°-70° | 3903.6 | 19.5 |
| 70°-80° | 2413.9 | 12.0 |
| 80°-90° | 490.2 | 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° | 20052.0 | 100.0 |
| 0°-180° | 20052.0 | 100.0 |



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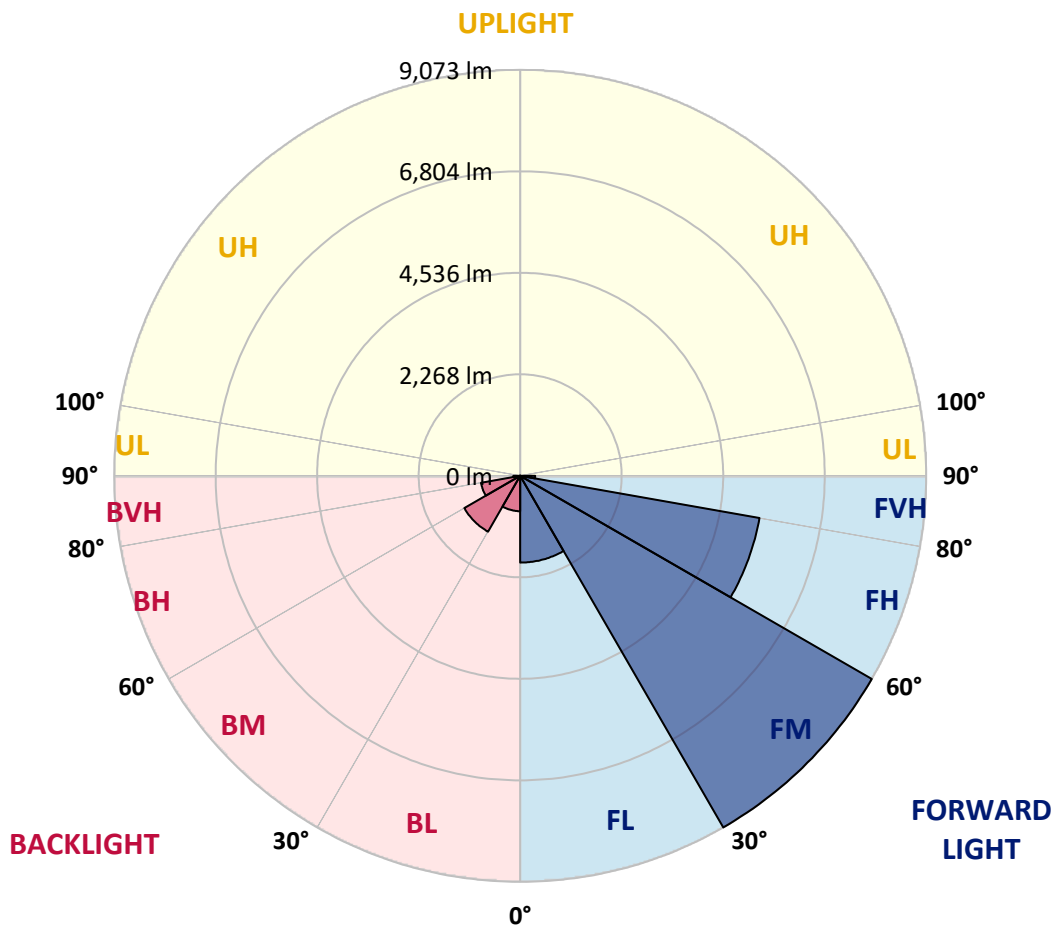
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1939.7 | 9.7 | | | |
| FM (30°-60°) | 9072.6 | 45.2 | | | |
| FH (60°-80°) | 5429.5 | 27.1 | | | G3/7500 |
| FVH (80°-90°) | 336.5 | 1.7 | | | G3/500 |
| BL (0°-30°) | 790.7 | 3.9 | B2/1000 | | |
| BM (30°-60°) | 1441.4 | 7.2 | B2/2500 | | |
| BH (60°-80°) | 887.9 | 4.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 153.7 | 0.8 | | | G2/225 |
| 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 Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0° | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 |
| 2.5° | 3195.8 | 3172.1 | 3169.4 | 3132.5 | 3098.2 | 3005.9 | 2940.0 | 2824.0 | 2708.0 | 2705.3 | 2589.3 |
| 5° | 3694.1 | 3670.4 | 3657.2 | 3612.4 | 3554.4 | 3433.1 | 3314.4 | 3135.1 | 2937.4 | 2924.2 | 2705.3 |
| 7.5° | 4031.7 | 4010.6 | 3984.2 | 3965.7 | 3910.4 | 3802.3 | 3657.2 | 3443.6 | 3172.1 | 3145.7 | 2839.8 |
| 10° | 4258.4 | 4245.2 | 4240.0 | 4226.8 | 4192.5 | 4105.5 | 3965.7 | 3739.0 | 3406.7 | 3377.7 | 2982.2 |
| 12.5° | 4356.0 | 4350.7 | 4374.4 | 4411.4 | 4424.5 | 4390.3 | 4255.8 | 4042.2 | 3665.1 | 3633.5 | 3153.6 |
| 15° | 4242.6 | 4247.9 | 4308.5 | 4435.1 | 4569.6 | 4643.4 | 4564.3 | 4356.0 | 3957.8 | 3913.0 | 3354.0 |
| 17.5° | 4189.9 | 4197.8 | 4240.0 | 4361.3 | 4551.1 | 4780.5 | 4817.4 | 4653.9 | 4240.0 | 4176.7 | 3564.9 |
| 20° | 4282.1 | 4292.7 | 4324.3 | 4419.3 | 4551.1 | 4796.3 | 4988.8 | 4938.7 | 4516.8 | 4450.9 | 3768.0 |
| 22.5° | 4516.8 | 4530.0 | 4527.4 | 4588.0 | 4677.7 | 4846.4 | 5083.7 | 5207.7 | 4806.9 | 4733.0 | 3978.9 |
| 25° | 5017.8 | 5007.3 | 4917.6 | 4888.6 | 4912.3 | 5020.5 | 5210.3 | 5466.1 | 5110.1 | 5036.3 | 4200.4 |
| 27.5° | 5698.1 | 5684.9 | 5521.4 | 5373.8 | 5241.9 | 5289.4 | 5389.6 | 5674.4 | 5418.6 | 5334.2 | 4411.4 |
| 30° | 6425.9 | 6410.0 | 6220.2 | 5980.2 | 5687.6 | 5619.0 | 5605.8 | 5856.3 | 5729.7 | 5640.1 | 4635.5 |
| 32.5° | 7135.2 | 7122.0 | 6918.9 | 6639.4 | 6236.0 | 6030.3 | 5903.8 | 6059.3 | 6083.1 | 5996.1 | 4880.7 |
| 35° | 7781.2 | 7781.2 | 7607.1 | 7274.9 | 6818.7 | 6507.6 | 6299.3 | 6309.8 | 6489.1 | 6388.9 | 5160.2 |
| 37.5° | 8356.0 | 8353.4 | 8163.5 | 7836.5 | 7398.8 | 7042.9 | 6784.5 | 6613.1 | 6876.8 | 6789.7 | 5452.9 |
| 40° | 8812.2 | 8793.7 | 8653.9 | 8369.2 | 7928.8 | 7575.5 | 7314.5 | 6969.0 | 7309.2 | 7230.1 | 5764.0 |
| 42.5° | 9144.4 | 9133.8 | 9038.9 | 8791.1 | 8371.8 | 8039.6 | 7860.3 | 7417.3 | 7799.6 | 7720.5 | 6127.9 |
| 45° | 9273.6 | 9294.7 | 9294.7 | 9060.0 | 8727.8 | 8424.5 | 8345.4 | 7910.4 | 8329.6 | 8250.5 | 6518.1 |
| 47.5° | 9065.3 | 9120.7 | 9234.0 | 9249.9 | 8957.2 | 8751.5 | 8777.9 | 8406.1 | 8875.4 | 8833.3 | 6945.3 |
| 50° | 8414.0 | 8516.8 | 8764.7 | 9212.9 | 9049.5 | 9002.0 | 9147.0 | 8912.4 | 9460.8 | 9447.6 | 7464.8 |
| 52.5° | 6734.4 | 6984.9 | 7757.4 | 8561.7 | 8986.2 | 9118.0 | 9513.5 | 9481.9 | 10214.9 | 10236.0 | 8142.4 |
| 55° | 5165.5 | 5260.4 | 6154.3 | 7522.8 | 8598.6 | 9081.1 | 9758.8 | 10038.3 | 11032.3 | 11058.7 | 8764.7 |
| 57.5° | 4176.7 | 4240.0 | 4727.8 | 6154.3 | 7715.3 | 8880.7 | 9951.2 | 10362.6 | 11659.9 | 11728.4 | 9318.4 |
| 60° | 3309.2 | 3401.5 | 3728.4 | 4709.3 | 6478.6 | 8398.2 | 10085.7 | 10723.8 | 12334.9 | 12437.7 | 9980.3 |
| 62.5° | 2460.1 | 2505.0 | 2813.5 | 3488.5 | 5128.6 | 7530.7 | 10014.5 | 11116.7 | 13162.9 | 13286.8 | 10776.6 |
| 65° | 1750.8 | 1790.4 | 2009.2 | 2481.2 | 3791.7 | 6357.3 | 9600.6 | 11409.4 | 14201.8 | 14328.3 | 11578.1 |
| 67.5° | 1310.5 | 1326.3 | 1450.2 | 1735.0 | 2555.1 | 4938.7 | 8762.1 | 11359.3 | 14961.2 | 15074.5 | 11899.8 |
| 70° | 1036.3 | 1041.5 | 1102.2 | 1255.1 | 1661.2 | 3438.4 | 7293.4 | 10623.6 | 15016.5 | 15116.7 | 11493.8 |
| 72.5° | 859.6 | 857.0 | 891.2 | 965.1 | 1157.6 | 2175.4 | 5402.8 | 9257.8 | 14304.6 | 14373.1 | 10360.0 |
| 75° | 709.3 | 714.6 | 738.3 | 780.5 | 883.3 | 1434.4 | 3501.7 | 7385.7 | 12619.7 | 12545.9 | 8693.5 |
| 77.5° | 595.9 | 593.3 | 603.8 | 640.7 | 714.6 | 1031.0 | 2051.4 | 5336.9 | 9352.7 | 9315.8 | 5706.0 |
| 80° | 479.9 | 485.2 | 501.0 | 532.6 | 601.2 | 785.8 | 1212.9 | 3330.3 | 5017.8 | 4883.3 | 2726.4 |
| 82.5° | 321.7 | 371.8 | 403.4 | 440.3 | 519.4 | 580.1 | 769.9 | 1692.8 | 2243.9 | 2209.6 | 1236.7 |
| 85° | 152.9 | 203.0 | 300.6 | 342.8 | 421.9 | 363.9 | 522.1 | 806.9 | 1123.3 | 1110.1 | 445.6 |
| 87.5° | 31.6 | 31.6 | 160.8 | 192.5 | 261.0 | 155.6 | 290.0 | 350.7 | 543.2 | 508.9 | 181.9 |
| 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-PA3-150-727-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 | 2507.6 |
| 2.5° | 2520.8 | 2449.6 | 2307.2 | 2193.8 | 2077.8 | 2011.9 | 1930.1 | 1890.6 | 1882.7 | 1861.6 | 1877.4 |
| 5° | 2565.6 | 2425.8 | 2156.9 | 1980.2 | 1861.6 | 1803.6 | 1774.6 | 1764.0 | 1761.4 | 1756.1 | 1756.1 |
| 7.5° | 2626.2 | 2412.7 | 2062.0 | 1882.7 | 1806.2 | 1787.7 | 1795.7 | 1811.5 | 1814.1 | 1819.4 | 1816.7 |
| 10° | 2700.1 | 2415.3 | 2009.2 | 1858.9 | 1822.0 | 1824.7 | 1851.0 | 1872.1 | 1882.7 | 1890.6 | 1887.9 |
| 12.5° | 2802.9 | 2446.9 | 2001.3 | 1874.8 | 1858.9 | 1869.5 | 1895.9 | 1916.9 | 1927.5 | 1930.1 | 1930.1 |
| 15° | 2937.4 | 2512.9 | 2019.8 | 1909.0 | 1895.9 | 1903.8 | 1919.6 | 1927.5 | 1930.1 | 1927.5 | 1927.5 |
| 17.5° | 3085.0 | 2592.0 | 2046.1 | 1930.1 | 1909.0 | 1901.1 | 1895.9 | 1887.9 | 1872.1 | 1861.6 | 1861.6 |
| 20° | 3227.4 | 2663.2 | 2059.3 | 1927.5 | 1890.6 | 1858.9 | 1827.3 | 1787.7 | 1761.4 | 1740.3 | 1740.3 |
| 22.5° | 3369.8 | 2729.1 | 2059.3 | 1898.5 | 1840.5 | 1779.8 | 1713.9 | 1650.6 | 1611.1 | 1584.7 | 1584.7 |
| 25° | 3520.1 | 2792.4 | 2043.5 | 1848.4 | 1761.4 | 1674.4 | 1584.7 | 1505.6 | 1466.1 | 1439.7 | 1434.4 |
| 27.5° | 3646.7 | 2829.3 | 2001.3 | 1777.2 | 1663.8 | 1553.1 | 1450.2 | 1368.5 | 1339.5 | 1315.8 | 1315.8 |
| 30° | 3781.2 | 2853.0 | 1922.2 | 1684.9 | 1553.1 | 1426.5 | 1321.0 | 1255.1 | 1223.5 | 1189.2 | 1186.6 |
| 32.5° | 3931.5 | 2868.8 | 1832.6 | 1587.3 | 1439.7 | 1305.2 | 1215.6 | 1162.8 | 1094.3 | 1057.4 | 1052.1 |
| 35° | 4105.5 | 2889.9 | 1737.6 | 1476.6 | 1326.3 | 1205.0 | 1152.3 | 1065.3 | 999.3 | 967.7 | 965.1 |
| 37.5° | 4290.1 | 2905.7 | 1634.8 | 1379.0 | 1223.5 | 1139.1 | 1086.4 | 983.5 | 925.5 | 878.1 | 872.8 |
| 40° | 4485.2 | 2905.7 | 1529.3 | 1284.1 | 1141.7 | 1110.1 | 1009.9 | 917.6 | 820.0 | 796.3 | 791.0 |
| 42.5° | 4701.4 | 2900.5 | 1423.9 | 1191.8 | 1065.3 | 1044.2 | 965.1 | 867.5 | 817.4 | 796.3 | 791.0 |
| 45° | 4930.8 | 2882.0 | 1323.7 | 1086.4 | 986.2 | 944.0 | 883.3 | 857.0 | 835.9 | 835.9 | 835.9 |
| 47.5° | 5191.8 | 2866.2 | 1210.3 | 991.4 | 928.2 | 880.7 | 835.9 | 820.0 | 817.4 | 825.3 | 833.2 |
| 50° | 5526.7 | 2860.9 | 1115.4 | 922.9 | 883.3 | 828.0 | 822.7 | 809.5 | 812.1 | 812.1 | 812.1 |
| 52.5° | 5932.8 | 2813.5 | 1025.7 | 872.8 | 838.5 | 772.6 | 788.4 | 801.6 | 806.9 | 804.2 | 801.6 |
| 55° | 6230.7 | 2729.1 | 949.2 | 838.5 | 806.9 | 751.5 | 772.6 | 793.7 | 798.9 | 791.0 | 791.0 |
| 57.5° | 6499.7 | 2610.4 | 888.6 | 812.1 | 785.8 | 738.3 | 762.0 | 783.1 | 777.9 | 775.2 | 772.6 |
| 60° | 6808.2 | 2497.0 | 841.1 | 798.9 | 764.7 | 733.0 | 754.1 | 767.3 | 759.4 | 754.1 | 751.5 |
| 62.5° | 7143.1 | 2386.3 | 806.9 | 798.9 | 748.8 | 730.4 | 746.2 | 751.5 | 735.7 | 730.4 | 730.4 |
| 65° | 7298.6 | 2212.3 | 769.9 | 798.9 | 740.9 | 725.1 | 730.4 | 725.1 | 709.3 | 709.3 | 706.7 |
| 67.5° | 7042.9 | 1924.9 | 722.5 | 788.4 | 751.5 | 717.2 | 706.7 | 698.7 | 680.3 | 680.3 | 675.0 |
| 70° | 6336.2 | 1582.1 | 653.9 | 754.1 | 754.1 | 714.6 | 675.0 | 656.6 | 635.5 | 643.4 | 632.8 |
| 72.5° | 5413.3 | 1255.1 | 569.5 | 696.1 | 738.3 | 711.9 | 640.7 | 611.7 | 593.3 | 601.2 | 585.4 |
| 75° | 4385.0 | 973.0 | 469.3 | 603.8 | 698.7 | 698.7 | 606.5 | 566.9 | 545.8 | 545.8 | 527.4 |
| 77.5° | 2795.0 | 719.8 | 382.3 | 501.0 | 627.6 | 680.3 | 577.5 | 516.8 | 485.2 | 477.3 | 464.1 |
| 80° | 1384.3 | 506.3 | 313.8 | 398.2 | 535.3 | 638.1 | 556.4 | 458.8 | 414.0 | 398.2 | 374.4 |
| 82.5° | 735.7 | 350.7 | 250.5 | 311.1 | 427.2 | 574.8 | 530.0 | 395.5 | 340.1 | 316.4 | 290.0 |
| 85° | 329.6 | 216.2 | 200.4 | 237.3 | 324.3 | 472.0 | 477.3 | 324.3 | 261.0 | 311.1 | 229.4 |
| 87.5° | 121.3 | 97.6 | 97.6 | 121.3 | 187.2 | 197.8 | 337.5 | 208.3 | 166.1 | 113.4 | 89.7 |
| 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)