

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: P399402

Luminaire Tested: **ARCH-L-PA3-140-722-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399402
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-PA3-140-722-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16473 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

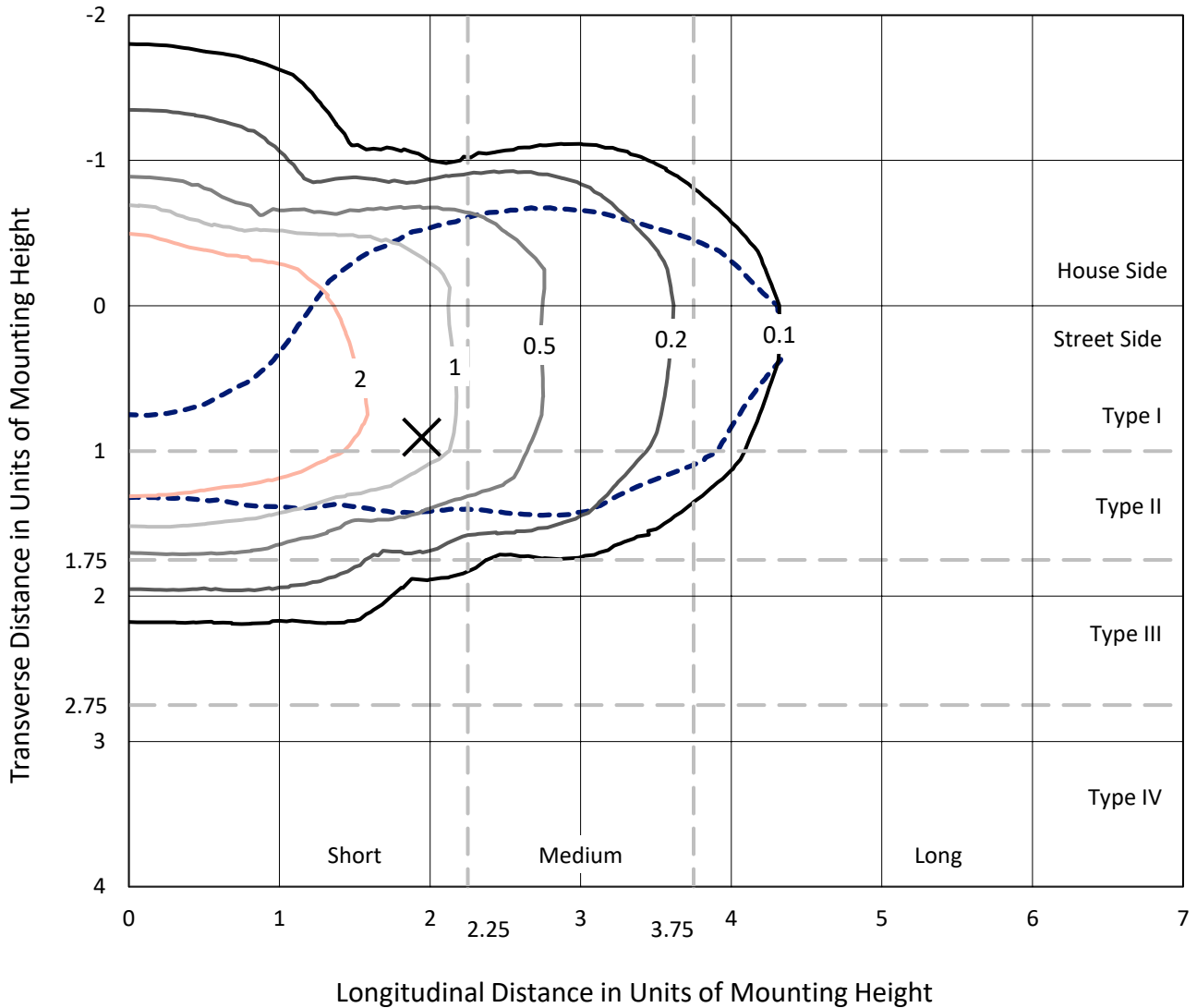
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

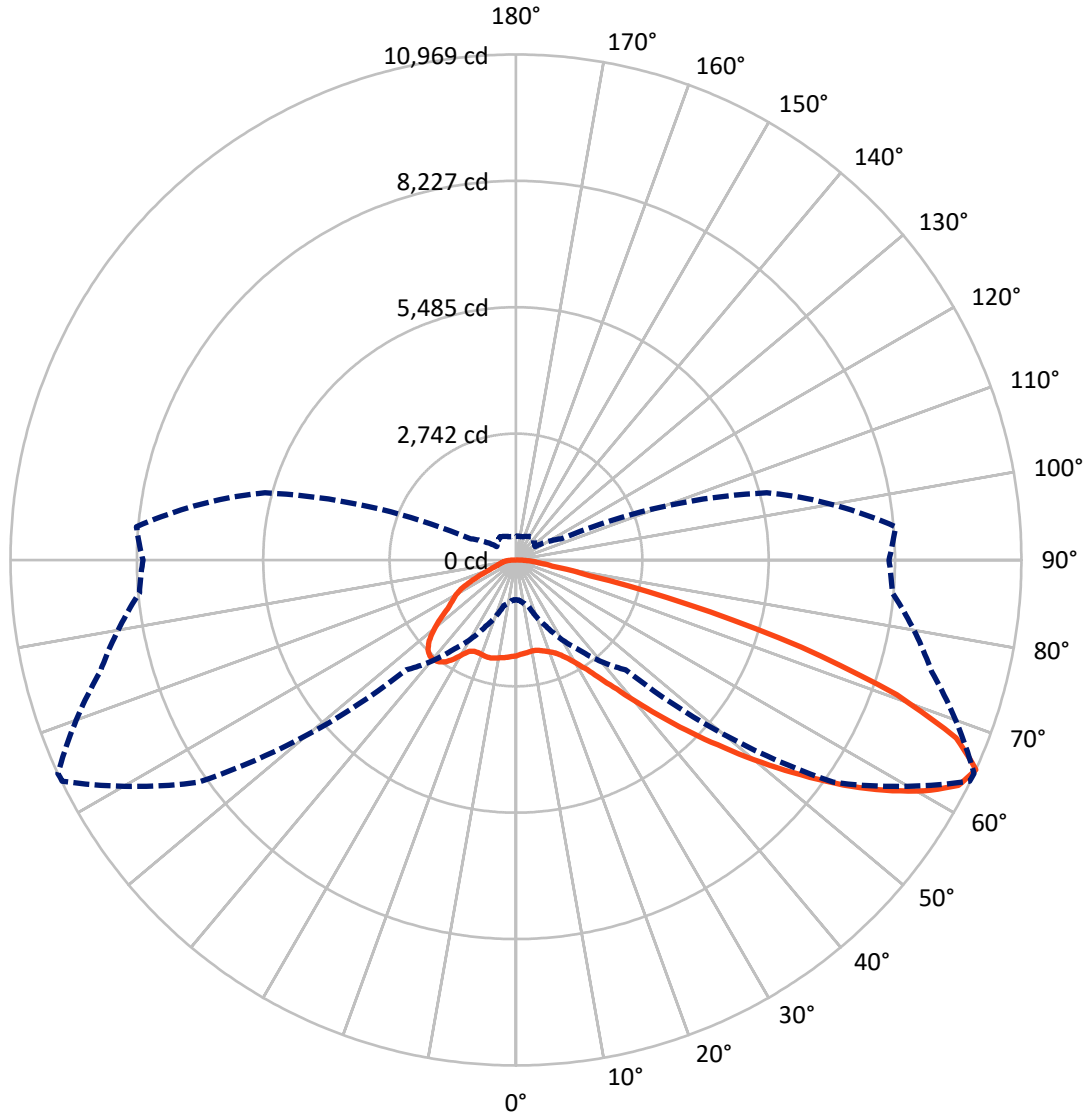
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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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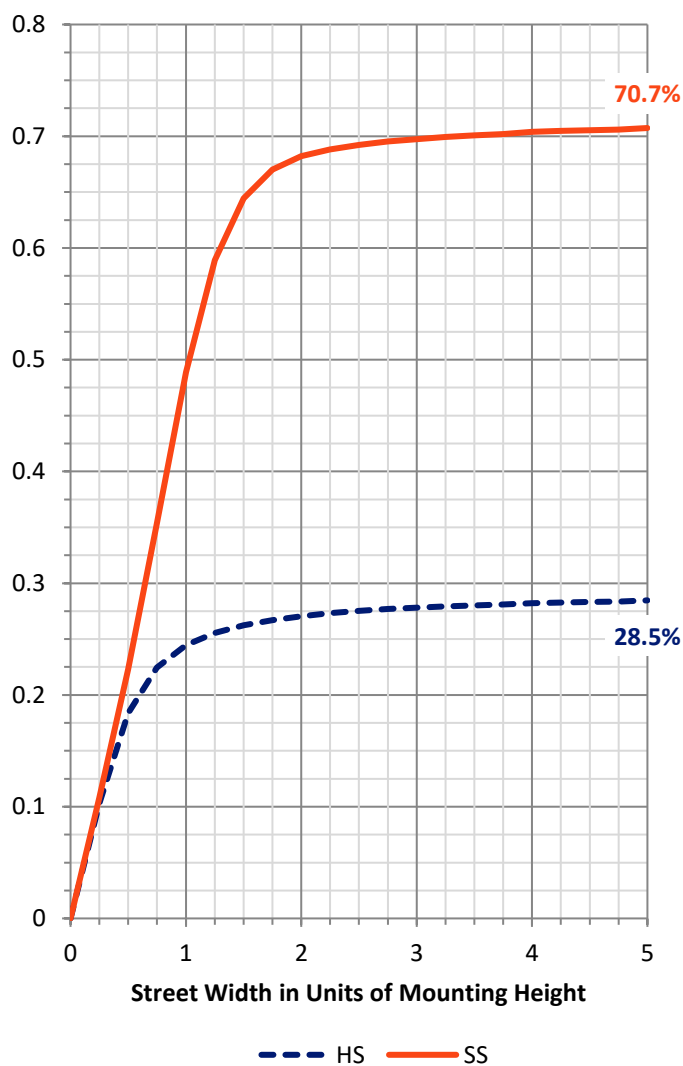
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4762.6 | 0.0 | 4762.6 |
| | % Fixture | 28.9 | 0.0 | 28.9 |
| Street Side | Lumens | 11710.4 | 0.0 | 11710.4 |
| | % Fixture | 71.1 | 0.0 | 71.1 |
| Total | Lumens | 16473.0 | 0.0 | 16473.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 198.3 | 1.2 |
| 10°-20° | 592.1 | 3.6 |
| 20°-30° | 1051.7 | 6.4 |
| 30°-40° | 1779.2 | 10.8 |
| 40°-50° | 3097.3 | 18.8 |
| 50°-60° | 4002.6 | 24.3 |
| 60°-70° | 3502.5 | 21.3 |
| 70°-80° | 1905.1 | 11.6 |
| 80°-90° | 344.2 | 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° | 16473.0 | 100.0 |
| 0°-180° | 16473.0 | 100.0 |

Coefficient of Utilization



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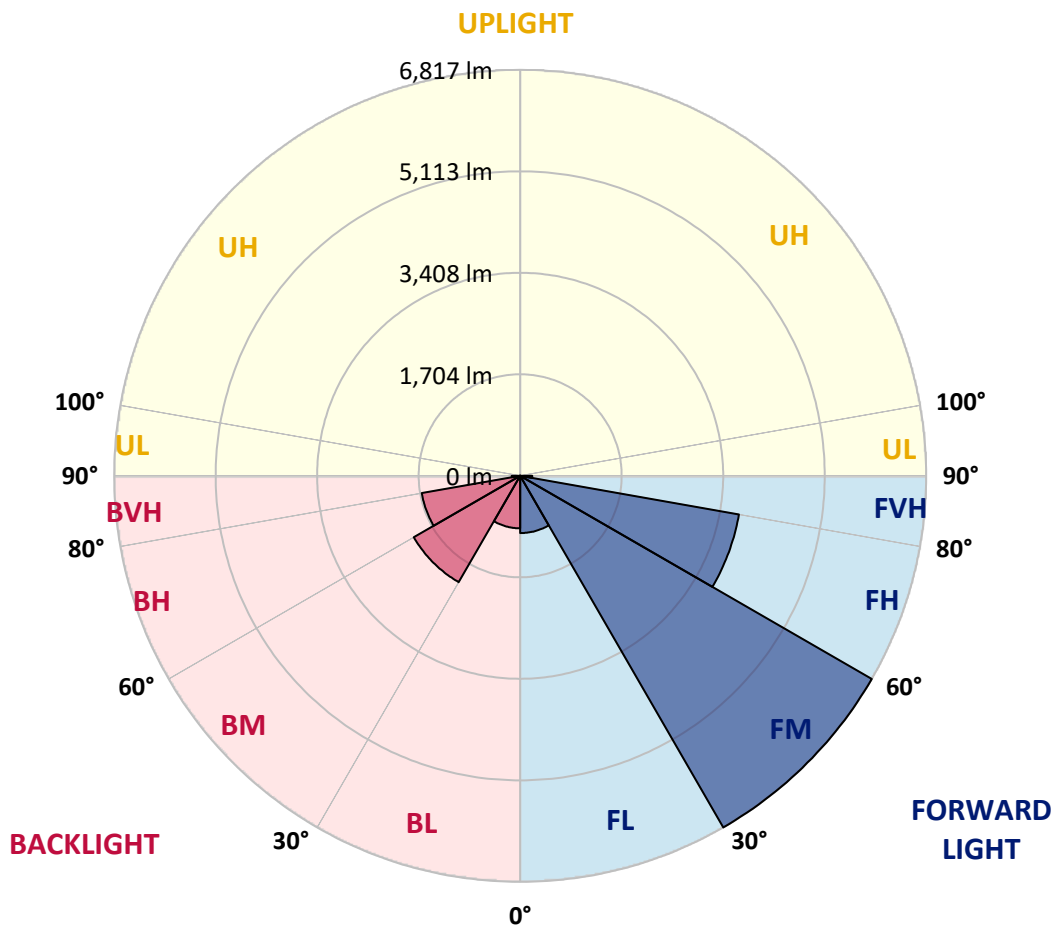
CATALOG NUMBER: ARCH-L-PA3-140-722-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 961.2 | 5.8 | | | |
| FM (30°-60°) | 6817.0 | 41.4 | | | |
| FH (60°-80°) | 3729.7 | 22.6 | | | G2/5000 |
| FVH (80°-90°) | 202.6 | 1.2 | | | G2/225 |
| BL (0°-30°) | 880.9 | 5.3 | B2/1000 | | |
| BM (30°-60°) | 2062.1 | 12.5 | B2/2500 | | |
| BH (60°-80°) | 1677.9 | 10.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 141.7 | 0.9 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|
| 0° | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 |
| 2.5° | 2044.7 | 2042.5 | 2038.2 | 2042.5 | 2044.7 | 2049.0 | 2046.8 | 2051.2 | 2049.0 | 2055.5 | 2066.3 |
| 5° | 1992.6 | 1988.3 | 1986.1 | 1997.0 | 2003.5 | 2014.3 | 2018.6 | 2033.8 | 2031.7 | 2042.5 | 2059.8 |
| 7.5° | 1934.1 | 1934.1 | 1931.9 | 1944.9 | 1953.6 | 1973.1 | 1988.3 | 2014.3 | 2016.5 | 2036.0 | 2055.5 |
| 10° | 1888.5 | 1890.7 | 1888.5 | 1899.4 | 1912.4 | 1936.2 | 1962.3 | 1999.1 | 2001.3 | 2029.5 | 2049.0 |
| 12.5° | 1871.2 | 1871.2 | 1871.2 | 1886.4 | 1903.7 | 1936.2 | 1966.6 | 2005.6 | 2010.0 | 2040.3 | 2057.7 |
| 15° | 1895.1 | 1897.2 | 1892.9 | 1908.1 | 1927.6 | 1966.6 | 1994.8 | 2036.0 | 2040.3 | 2068.5 | 2079.4 |
| 17.5° | 1979.6 | 1988.3 | 1977.4 | 1986.1 | 1981.8 | 2012.1 | 2038.2 | 2079.4 | 2081.5 | 2105.4 | 2109.7 |
| 20° | 2146.6 | 2155.2 | 2137.9 | 2127.1 | 2088.0 | 2085.9 | 2096.7 | 2129.2 | 2129.2 | 2144.4 | 2133.6 |
| 22.5° | 2404.6 | 2413.3 | 2382.9 | 2341.7 | 2248.5 | 2202.9 | 2179.1 | 2194.3 | 2192.1 | 2198.6 | 2170.4 |
| 25° | 2747.2 | 2745.0 | 2708.1 | 2632.3 | 2482.6 | 2372.1 | 2313.5 | 2289.7 | 2289.7 | 2276.7 | 2242.0 |
| 27.5° | 3172.2 | 3139.6 | 3074.6 | 2983.5 | 2775.4 | 2621.4 | 2495.7 | 2434.9 | 2424.1 | 2385.1 | 2320.0 |
| 30° | 3625.3 | 3601.5 | 3508.2 | 3376.0 | 3135.3 | 2938.0 | 2729.8 | 2608.4 | 2601.9 | 2517.3 | 2419.8 |
| 32.5° | 4158.7 | 4119.7 | 4015.6 | 3857.3 | 3568.9 | 3291.4 | 3031.2 | 2846.9 | 2836.1 | 2701.6 | 2567.2 |
| 35° | 4843.9 | 4811.4 | 4609.7 | 4451.4 | 4080.7 | 3716.4 | 3408.5 | 3163.5 | 3154.8 | 2990.0 | 2818.7 |
| 37.5° | 5665.6 | 5581.1 | 5385.9 | 5088.9 | 4698.6 | 4267.1 | 3876.8 | 3568.9 | 3558.1 | 3376.0 | 3159.1 |
| 40° | 6398.5 | 6322.6 | 6149.2 | 5876.0 | 5457.5 | 4978.3 | 4449.3 | 4076.3 | 4065.5 | 3844.3 | 3571.1 |
| 42.5° | 6940.6 | 6888.5 | 6775.8 | 6617.5 | 6318.3 | 6027.7 | 5180.0 | 4689.9 | 4670.4 | 4384.2 | 4043.8 |
| 45° | 7255.0 | 7213.8 | 7148.7 | 7187.8 | 7183.4 | 7129.2 | 6051.6 | 5420.6 | 5357.8 | 4987.0 | 4570.7 |
| 47.5° | 7179.1 | 7142.2 | 7168.2 | 7471.8 | 7890.3 | 8204.7 | 7066.3 | 6168.7 | 6084.1 | 5600.6 | 5132.3 |
| 50° | 6630.5 | 6645.7 | 6782.3 | 7363.4 | 8302.2 | 9000.4 | 8191.7 | 7020.8 | 6908.1 | 6218.5 | 5665.6 |
| 52.5° | 5631.0 | 5667.8 | 5999.6 | 6812.6 | 8256.7 | 9516.5 | 9208.6 | 7901.1 | 7751.5 | 6821.3 | 6151.3 |
| 55° | 4473.1 | 4566.3 | 4995.7 | 5849.9 | 7662.6 | 9553.3 | 9976.1 | 8785.8 | 8621.0 | 7387.2 | 6574.1 |
| 57.5° | 3308.8 | 3447.5 | 3944.1 | 4729.0 | 6524.3 | 8970.1 | 10359.9 | 9631.4 | 9431.9 | 7948.8 | 7020.8 |
| 60° | 2098.9 | 2183.4 | 2755.8 | 3681.7 | 4993.5 | 7543.3 | 10310.0 | 10351.2 | 10177.8 | 8508.2 | 7487.0 |
| 62.5° | 1340.0 | 1381.2 | 1669.6 | 2625.8 | 3490.9 | 5585.4 | 9765.8 | 10895.5 | 10778.4 | 9017.8 | 7929.3 |
| 65° | 860.8 | 878.1 | 1025.6 | 1615.3 | 2376.4 | 3371.6 | 8410.7 | 10954.0 | 10969.2 | 9336.5 | 8202.5 |
| 67.5° | 700.3 | 709.0 | 763.2 | 997.4 | 1680.4 | 1862.5 | 5858.6 | 10121.4 | 10305.7 | 9254.1 | 8109.3 |
| 70° | 637.5 | 648.3 | 704.7 | 795.7 | 1301.0 | 1285.8 | 2836.1 | 8469.2 | 8770.6 | 8779.3 | 7695.1 |
| 72.5° | 537.7 | 552.9 | 628.8 | 752.4 | 1006.1 | 1014.7 | 1201.2 | 6032.1 | 6476.6 | 7846.9 | 7072.8 |
| 75° | 448.8 | 457.5 | 522.5 | 663.5 | 852.1 | 810.9 | 843.5 | 3198.2 | 3840.0 | 6292.3 | 6411.5 |
| 77.5° | 364.3 | 372.9 | 420.6 | 529.1 | 756.7 | 631.0 | 663.5 | 1324.8 | 1637.0 | 4271.5 | 5240.7 |
| 80° | 260.2 | 268.9 | 323.1 | 412.0 | 572.4 | 568.1 | 492.2 | 730.7 | 793.6 | 2309.2 | 3404.2 |
| 82.5° | 186.5 | 193.0 | 245.0 | 294.9 | 396.8 | 570.3 | 370.8 | 496.5 | 520.4 | 1023.4 | 1372.5 |
| 85° | 125.8 | 125.8 | 169.1 | 195.1 | 255.9 | 359.9 | 299.2 | 336.1 | 351.3 | 485.7 | 370.8 |
| 87.5° | 54.2 | 54.2 | 91.1 | 99.7 | 134.4 | 167.0 | 223.3 | 169.1 | 173.5 | 262.4 | 151.8 |
| 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-PA3-140-722-U-T2U

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 | 2081.5 |
| 2.5° | 2072.8 | 2075.0 | 2079.4 | 2092.4 | 2101.0 | 2114.0 | 2120.6 | 2129.2 | 2129.2 | 2124.9 | 2127.1 |
| 5° | 2068.5 | 2075.0 | 2090.2 | 2114.0 | 2129.2 | 2153.1 | 2170.4 | 2183.4 | 2187.8 | 2183.4 | 2185.6 |
| 7.5° | 2066.3 | 2077.2 | 2103.2 | 2137.9 | 2159.6 | 2189.9 | 2213.8 | 2229.0 | 2239.8 | 2235.5 | 2237.6 |
| 10° | 2059.8 | 2077.2 | 2109.7 | 2153.1 | 2185.6 | 2216.0 | 2237.6 | 2244.1 | 2250.6 | 2246.3 | 2244.1 |
| 12.5° | 2068.5 | 2088.0 | 2122.7 | 2174.8 | 2211.6 | 2235.5 | 2242.0 | 2231.1 | 2216.0 | 2207.3 | 2205.1 |
| 15° | 2085.9 | 2105.4 | 2140.1 | 2194.3 | 2226.8 | 2235.5 | 2220.3 | 2185.6 | 2150.9 | 2131.4 | 2129.2 |
| 17.5° | 2109.7 | 2122.7 | 2150.9 | 2198.6 | 2224.6 | 2213.8 | 2183.4 | 2142.2 | 2116.2 | 2101.0 | 2103.2 |
| 20° | 2124.9 | 2124.9 | 2146.6 | 2183.4 | 2205.1 | 2196.4 | 2159.6 | 2114.0 | 2072.8 | 2053.3 | 2046.8 |
| 22.5° | 2146.6 | 2135.7 | 2137.9 | 2170.4 | 2200.8 | 2187.8 | 2109.7 | 2029.5 | 1970.9 | 1949.3 | 1947.1 |
| 25° | 2205.1 | 2174.8 | 2155.2 | 2174.8 | 2246.3 | 2140.1 | 1984.0 | 1890.7 | 1836.5 | 1817.0 | 1819.2 |
| 27.5° | 2276.7 | 2235.5 | 2194.3 | 2226.8 | 2283.2 | 2031.7 | 1823.5 | 1717.3 | 1684.7 | 1669.6 | 1676.1 |
| 30° | 2348.2 | 2294.0 | 2239.8 | 2356.9 | 2257.2 | 1862.5 | 1617.5 | 1513.4 | 1485.3 | 1474.4 | 1483.1 |
| 32.5° | 2480.5 | 2391.6 | 2326.5 | 2530.4 | 2176.9 | 1669.6 | 1394.2 | 1298.8 | 1272.8 | 1259.8 | 1255.4 |
| 35° | 2701.6 | 2588.9 | 2523.8 | 2682.1 | 2064.2 | 1454.9 | 1190.4 | 1123.2 | 1095.0 | 1066.8 | 1062.4 |
| 37.5° | 3020.4 | 2883.8 | 2825.2 | 2768.9 | 1905.9 | 1242.4 | 1034.3 | 988.7 | 947.5 | 904.2 | 902.0 |
| 40° | 3402.0 | 3224.2 | 3180.8 | 2807.9 | 1686.9 | 1042.9 | 925.8 | 882.5 | 830.4 | 789.2 | 791.4 |
| 42.5° | 3842.1 | 3614.5 | 3521.2 | 2797.0 | 1415.9 | 936.7 | 847.8 | 800.1 | 754.6 | 717.7 | 715.5 |
| 45° | 4312.7 | 4054.6 | 3840.0 | 2721.2 | 1147.0 | 863.0 | 800.1 | 743.7 | 698.2 | 657.0 | 652.6 |
| 47.5° | 4833.0 | 4544.7 | 4134.9 | 2573.7 | 947.5 | 810.9 | 771.9 | 691.7 | 650.5 | 624.5 | 624.5 |
| 50° | 5357.8 | 5013.0 | 4405.9 | 2350.4 | 830.4 | 771.9 | 730.7 | 663.5 | 631.0 | 609.3 | 609.3 |
| 52.5° | 5806.6 | 5500.9 | 4629.2 | 2083.7 | 756.7 | 739.4 | 702.5 | 650.5 | 615.8 | 596.3 | 594.1 |
| 55° | 6242.4 | 5954.0 | 4828.7 | 1819.2 | 696.0 | 696.0 | 696.0 | 639.6 | 600.6 | 583.3 | 581.1 |
| 57.5° | 6676.0 | 6431.0 | 5036.9 | 1645.7 | 641.8 | 659.1 | 683.0 | 626.6 | 587.6 | 572.4 | 570.3 |
| 60° | 7166.1 | 7003.5 | 5277.5 | 1524.3 | 594.1 | 620.1 | 665.7 | 611.4 | 565.9 | 552.9 | 550.7 |
| 62.5° | 7686.5 | 7686.5 | 5496.5 | 1353.0 | 550.7 | 587.6 | 639.6 | 591.9 | 546.4 | 535.6 | 533.4 |
| 65° | 8094.1 | 8269.7 | 5637.5 | 1097.1 | 507.4 | 555.1 | 609.3 | 565.9 | 520.4 | 518.2 | 513.9 |
| 67.5° | 8141.8 | 8417.2 | 5548.6 | 828.3 | 468.3 | 520.4 | 578.9 | 537.7 | 494.4 | 494.4 | 487.9 |
| 70° | 7799.2 | 8078.9 | 5271.0 | 620.1 | 440.2 | 485.7 | 539.9 | 503.0 | 461.8 | 466.2 | 455.3 |
| 72.5° | 7226.8 | 7296.2 | 4581.5 | 490.0 | 407.6 | 448.8 | 492.2 | 464.0 | 427.1 | 427.1 | 412.0 |
| 75° | 6472.2 | 6086.3 | 3328.3 | 409.8 | 368.6 | 405.5 | 444.5 | 420.6 | 388.1 | 377.3 | 368.6 |
| 77.5° | 5151.8 | 4410.2 | 1934.1 | 353.4 | 336.1 | 364.3 | 390.3 | 372.9 | 344.8 | 320.9 | 320.9 |
| 80° | 3139.6 | 2584.6 | 854.3 | 305.7 | 297.1 | 318.7 | 336.1 | 316.6 | 292.7 | 268.9 | 262.4 |
| 82.5° | 1194.7 | 997.4 | 414.1 | 262.4 | 260.2 | 273.2 | 286.2 | 266.7 | 249.3 | 238.5 | 206.0 |
| 85° | 327.4 | 301.4 | 284.0 | 219.0 | 214.7 | 212.5 | 227.7 | 219.0 | 195.1 | 160.5 | 143.1 |
| 87.5° | 123.6 | 140.9 | 153.9 | 134.4 | 143.1 | 132.3 | 151.8 | 138.8 | 123.6 | 80.2 | 71.6 |
| 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)