

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: P348664

Luminaire Tested: **ARCH-N-PA1-50-750-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-750-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6783 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 52
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

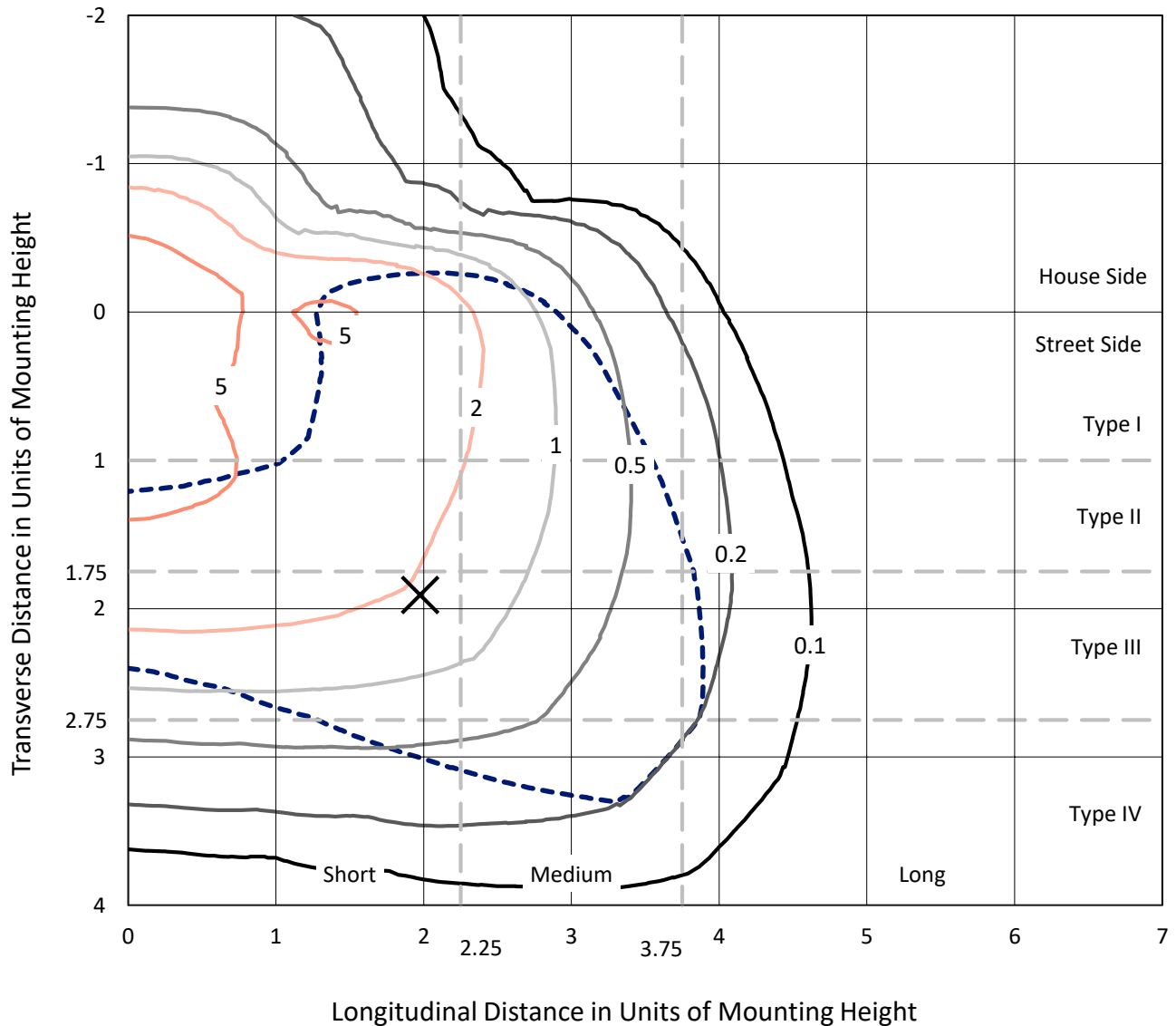


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Iso-Footcandle Lines of Horizontal Illumination

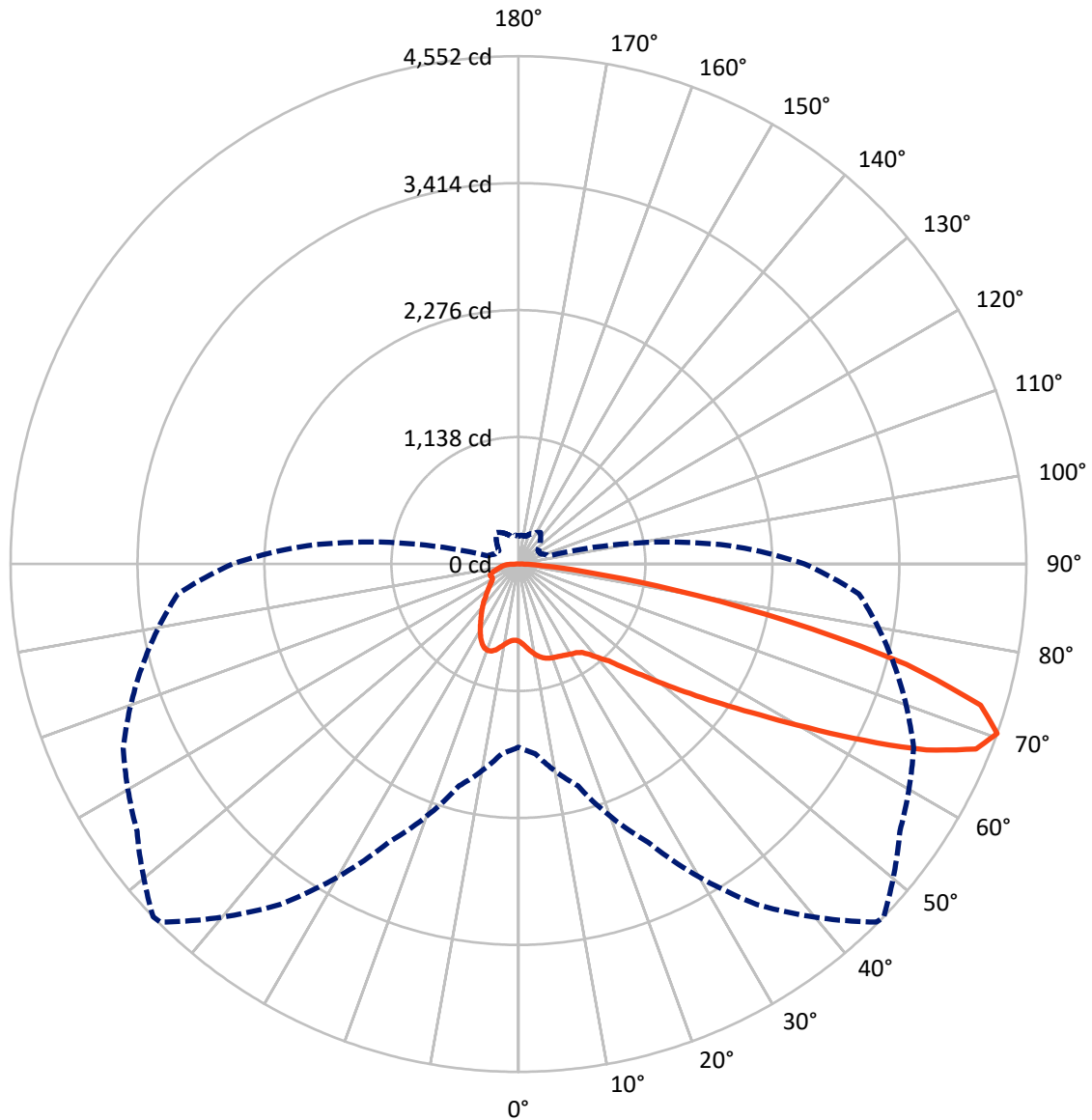
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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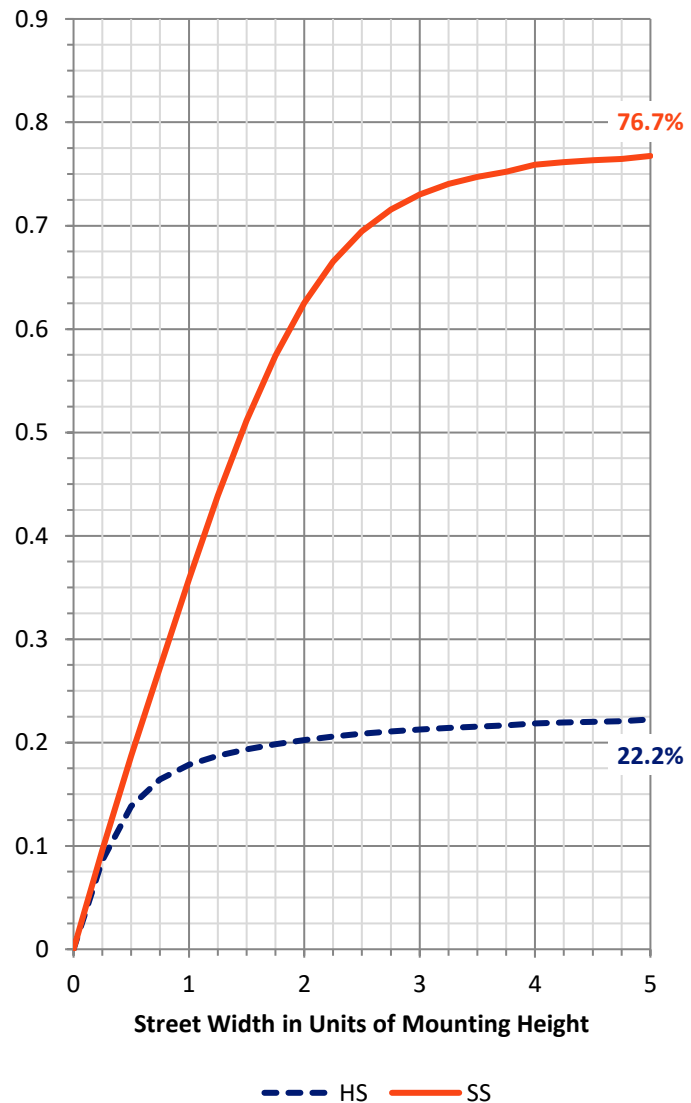
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1554.6 | 0.0 | 1554.6 |
| | % Fixture | 22.9 | 0.0 | 22.9 |
| Street Side | Lumens | 5228.4 | 0.0 | 5228.4 |
| | % Fixture | 77.1 | 0.0 | 77.1 |
| Total | Lumens | 6783.0 | 0.0 | 6783.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.4 | 1.0 |
| 10°-20° | 234.7 | 3.5 |
| 20°-30° | 391.4 | 5.8 |
| 30°-40° | 555.4 | 8.2 |
| 40°-50° | 816.9 | 12.0 |
| 50°-60° | 1383.4 | 20.4 |
| 60°-70° | 1963.7 | 29.0 |
| 70°-80° | 1193.0 | 17.6 |
| 80°-90° | 174.1 | 2.6 |
| 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° | 6783.0 | 100.0 |
| 0°-180° | 6783.0 | 100.0 |



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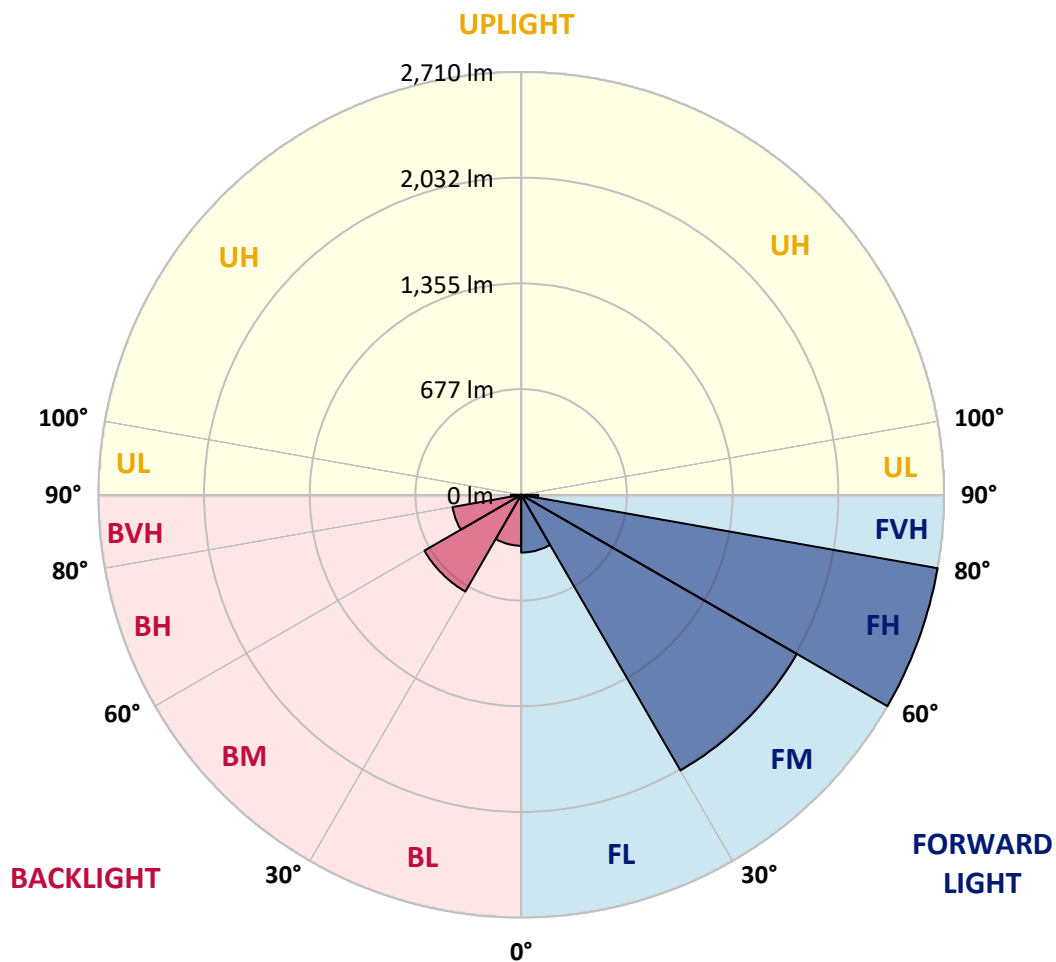
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 370.1 | 5.5 | | | |
| FM | (30°-60°) | 2040.0 | 30.1 | | | |
| FH | (60°-80°) | 2709.8 | 39.9 | | | G2/5000 |
| FVH | (80°-90°) | 108.5 | 1.6 | | | G2/225 |
| BL | (0°-30°) | 326.4 | 4.8 | B1/500 | | |
| BM | (30°-60°) | 715.6 | 10.6 | B1/1000 | | |
| BH | (60°-80°) | 447.0 | 6.6 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 65.7 | 1.0 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 |
| 2.5° | 725.6 | 726.1 | 727.0 | 724.7 | 718.2 | 716.4 | 715.7 | 708.9 | 704.5 | 698.0 | 692.4 |
| 5° | 783.7 | 784.1 | 782.7 | 776.2 | 761.9 | 751.2 | 750.2 | 734.9 | 721.0 | 706.1 | 695.0 |
| 7.5° | 844.3 | 845.0 | 840.5 | 828.2 | 808.0 | 789.5 | 788.3 | 767.4 | 746.3 | 723.8 | 707.1 |
| 10° | 897.9 | 895.1 | 887.9 | 870.7 | 846.8 | 824.1 | 823.1 | 801.3 | 776.9 | 749.8 | 727.5 |
| 12.5° | 933.6 | 931.3 | 922.0 | 901.1 | 874.9 | 854.0 | 852.2 | 832.0 | 808.3 | 778.6 | 751.9 |
| 15° | 953.4 | 955.0 | 942.5 | 918.8 | 893.2 | 875.6 | 874.0 | 859.6 | 838.5 | 808.5 | 777.9 |
| 17.5° | 955.9 | 957.3 | 945.2 | 921.8 | 900.9 | 888.8 | 888.1 | 878.6 | 863.3 | 834.5 | 802.5 |
| 20° | 941.1 | 942.0 | 932.0 | 912.7 | 899.0 | 895.3 | 895.1 | 890.9 | 879.5 | 854.0 | 822.9 |
| 22.5° | 919.5 | 920.2 | 913.0 | 899.0 | 894.4 | 900.2 | 901.8 | 900.2 | 892.1 | 868.2 | 838.9 |
| 25° | 914.1 | 913.7 | 906.2 | 892.1 | 896.0 | 908.3 | 910.4 | 911.1 | 905.5 | 884.7 | 859.4 |
| 27.5° | 939.9 | 938.3 | 924.1 | 901.4 | 903.9 | 918.8 | 921.6 | 928.3 | 924.8 | 906.5 | 882.6 |
| 30° | 1014.4 | 1011.6 | 982.6 | 936.6 | 924.1 | 931.8 | 935.3 | 945.9 | 946.6 | 931.3 | 913.4 |
| 32.5° | 1140.2 | 1136.7 | 1084.7 | 1002.6 | 958.2 | 945.0 | 948.3 | 964.3 | 972.9 | 961.0 | 941.8 |
| 35° | 1299.2 | 1295.3 | 1227.0 | 1114.7 | 1015.3 | 970.3 | 972.6 | 985.4 | 1002.6 | 985.9 | 960.3 |
| 37.5° | 1465.0 | 1455.5 | 1389.8 | 1246.5 | 1106.1 | 1024.4 | 1024.4 | 1026.0 | 1034.1 | 999.3 | 982.1 |
| 40° | 1629.8 | 1620.3 | 1560.9 | 1401.6 | 1223.6 | 1109.6 | 1104.2 | 1068.3 | 1061.8 | 1031.8 | 1026.0 |
| 42.5° | 1783.0 | 1780.2 | 1745.2 | 1576.9 | 1361.5 | 1193.4 | 1186.0 | 1124.9 | 1126.3 | 1107.7 | 1108.0 |
| 45° | 1946.0 | 1946.0 | 1917.4 | 1753.8 | 1522.1 | 1328.0 | 1320.6 | 1230.8 | 1244.7 | 1236.1 | 1256.8 |
| 47.5° | 2079.0 | 2083.1 | 2079.2 | 1938.1 | 1709.0 | 1499.1 | 1485.6 | 1377.5 | 1416.5 | 1445.9 | 1506.1 |
| 50° | 2214.8 | 2221.3 | 2222.0 | 2140.3 | 1934.8 | 1702.5 | 1687.1 | 1572.2 | 1659.3 | 1743.8 | 1861.9 |
| 52.5° | 2411.8 | 2426.5 | 2368.2 | 2342.0 | 2211.5 | 1943.9 | 1928.8 | 1822.7 | 1968.0 | 2086.6 | 2290.2 |
| 55° | 2594.5 | 2581.8 | 2540.2 | 2556.5 | 2507.7 | 2218.7 | 2207.3 | 2114.3 | 2312.0 | 2466.2 | 2730.6 |
| 57.5° | 2693.4 | 2692.5 | 2734.3 | 2803.9 | 2827.1 | 2557.6 | 2548.1 | 2457.6 | 2699.9 | 2815.8 | 3144.0 |
| 60° | 2809.5 | 2811.1 | 2914.6 | 3072.7 | 3168.4 | 2979.6 | 2975.5 | 2906.7 | 3076.7 | 3142.1 | 3468.3 |
| 62.5° | 2825.7 | 2855.0 | 3033.3 | 3305.3 | 3487.8 | 3472.7 | 3482.0 | 3311.4 | 3413.7 | 3402.6 | 3710.4 |
| 65° | 2638.9 | 2677.4 | 3000.1 | 3375.7 | 3805.3 | 4011.9 | 4020.5 | 3718.3 | 3679.5 | 3625.2 | 3797.0 |
| 67.5° | 2255.9 | 2313.0 | 2663.5 | 3222.7 | 3910.0 | 4410.5 | 4422.6 | 4033.7 | 3900.0 | 3700.6 | 3588.5 |
| 70° | 1641.6 | 1705.0 | 2057.8 | 2752.4 | 3723.4 | 4537.9 | 4551.6 | 4173.3 | 3908.4 | 3485.9 | 3063.4 |
| 72.5° | 991.7 | 1041.3 | 1332.2 | 2026.3 | 3142.6 | 4305.8 | 4330.2 | 3996.4 | 3568.3 | 2952.7 | 2262.1 |
| 75° | 435.5 | 468.0 | 644.2 | 1167.6 | 2249.8 | 3562.5 | 3592.9 | 3420.7 | 2899.3 | 2145.8 | 1337.1 |
| 77.5° | 185.5 | 194.8 | 264.2 | 507.2 | 1271.8 | 2434.4 | 2476.1 | 2499.4 | 1967.1 | 1167.6 | 565.0 |
| 80° | 115.6 | 119.3 | 149.5 | 229.6 | 595.2 | 1367.3 | 1412.3 | 1470.6 | 976.8 | 429.2 | 197.3 |
| 82.5° | 70.3 | 74.5 | 99.4 | 138.8 | 309.9 | 619.8 | 641.4 | 682.5 | 379.1 | 185.5 | 102.1 |
| 85° | 42.2 | 45.3 | 60.8 | 87.7 | 176.4 | 243.7 | 243.5 | 269.3 | 178.5 | 119.3 | 53.9 |
| 87.5° | 20.2 | 22.5 | 32.5 | 45.5 | 88.9 | 91.5 | 85.7 | 97.0 | 108.4 | 78.2 | 27.2 |
| 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-N-PA1-50-750-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 | 691.1 |
| 2.5° | 690.6 | 689.7 | 686.6 | 684.3 | 683.9 | 682.5 | 681.3 | 682.0 | 682.9 | 683.2 | 683.2 |
| 5° | 690.4 | 687.8 | 683.9 | 682.2 | 684.3 | 687.1 | 690.6 | 695.2 | 698.0 | 700.1 | 701.5 |
| 7.5° | 701.5 | 696.6 | 692.2 | 691.3 | 695.5 | 702.9 | 710.8 | 720.5 | 727.3 | 731.9 | 732.8 |
| 10° | 720.1 | 714.0 | 709.6 | 710.6 | 718.0 | 728.7 | 739.8 | 752.3 | 762.6 | 768.8 | 769.3 |
| 12.5° | 741.4 | 735.6 | 731.4 | 735.4 | 747.7 | 760.7 | 772.3 | 783.2 | 792.5 | 798.8 | 798.8 |
| 15° | 766.0 | 761.9 | 757.0 | 766.0 | 782.7 | 794.4 | 799.2 | 804.6 | 809.7 | 814.3 | 813.4 |
| 17.5° | 789.7 | 785.8 | 783.2 | 793.9 | 811.3 | 816.6 | 813.4 | 809.4 | 809.4 | 812.0 | 812.5 |
| 20° | 810.1 | 806.7 | 808.3 | 818.7 | 827.8 | 822.2 | 810.1 | 797.6 | 792.5 | 793.9 | 795.3 |
| 22.5° | 828.0 | 826.4 | 831.3 | 836.1 | 829.6 | 810.1 | 787.9 | 770.9 | 764.6 | 764.2 | 764.6 |
| 25° | 848.9 | 848.7 | 854.7 | 845.9 | 817.1 | 781.1 | 751.2 | 734.7 | 731.2 | 734.0 | 738.6 |
| 27.5° | 874.9 | 877.5 | 880.5 | 848.2 | 791.6 | 737.2 | 706.8 | 695.5 | 698.9 | 705.7 | 710.1 |
| 30° | 908.1 | 915.1 | 908.6 | 842.4 | 754.9 | 687.1 | 658.1 | 654.8 | 664.4 | 673.9 | 678.5 |
| 32.5° | 940.4 | 951.3 | 935.5 | 827.3 | 707.5 | 634.0 | 611.4 | 610.5 | 622.1 | 631.4 | 637.9 |
| 35° | 966.4 | 988.0 | 955.7 | 797.4 | 652.8 | 585.0 | 568.5 | 562.2 | 566.4 | 577.3 | 584.7 |
| 37.5° | 1000.3 | 1036.2 | 969.6 | 751.6 | 593.3 | 544.6 | 525.3 | 510.9 | 507.2 | 511.6 | 515.3 |
| 40° | 1062.2 | 1109.8 | 976.1 | 687.8 | 535.3 | 504.2 | 484.7 | 463.6 | 448.9 | 438.3 | 438.5 |
| 42.5° | 1163.4 | 1205.7 | 971.9 | 610.3 | 481.7 | 464.7 | 442.7 | 418.3 | 394.6 | 370.5 | 368.6 |
| 45° | 1327.8 | 1348.2 | 959.4 | 528.1 | 434.5 | 423.4 | 402.7 | 378.4 | 346.8 | 319.4 | 316.9 |
| 47.5° | 1590.8 | 1545.5 | 939.9 | 456.4 | 393.0 | 388.4 | 369.3 | 341.2 | 307.8 | 285.8 | 283.9 |
| 50° | 1949.4 | 1830.4 | 930.4 | 399.3 | 356.3 | 357.7 | 342.2 | 312.4 | 280.9 | 264.6 | 262.8 |
| 52.5° | 2378.4 | 2162.1 | 948.7 | 355.2 | 326.8 | 331.7 | 320.1 | 292.3 | 265.8 | 253.0 | 251.2 |
| 55° | 2823.4 | 2505.6 | 968.5 | 323.1 | 299.0 | 308.5 | 304.6 | 281.6 | 257.7 | 245.8 | 244.2 |
| 57.5° | 3204.3 | 2762.1 | 929.0 | 297.1 | 274.1 | 289.0 | 292.5 | 274.8 | 253.5 | 242.8 | 241.0 |
| 60° | 3444.1 | 2865.4 | 825.5 | 272.8 | 254.4 | 273.5 | 285.5 | 273.0 | 255.1 | 254.2 | 252.8 |
| 62.5° | 3557.9 | 2856.4 | 670.2 | 253.5 | 242.1 | 266.7 | 290.6 | 283.4 | 273.7 | 282.0 | 282.7 |
| 65° | 3506.8 | 2719.9 | 499.1 | 240.7 | 233.3 | 269.3 | 305.9 | 303.2 | 279.0 | 287.4 | 288.5 |
| 67.5° | 3170.7 | 2394.2 | 369.6 | 229.6 | 223.5 | 276.5 | 333.8 | 309.7 | 268.6 | 274.6 | 270.9 |
| 70° | 2562.7 | 1898.1 | 285.1 | 217.0 | 213.6 | 275.5 | 346.3 | 305.7 | 257.2 | 258.6 | 248.6 |
| 72.5° | 1767.2 | 1294.4 | 231.9 | 205.4 | 199.2 | 251.2 | 337.5 | 296.0 | 247.7 | 237.0 | 223.8 |
| 75° | 961.0 | 694.8 | 197.1 | 193.4 | 173.9 | 220.5 | 321.3 | 289.0 | 239.1 | 224.9 | 217.5 |
| 77.5° | 378.1 | 288.3 | 171.1 | 176.9 | 152.0 | 194.8 | 303.2 | 275.8 | 227.3 | 208.7 | 205.0 |
| 80° | 154.4 | 147.2 | 141.8 | 153.0 | 130.7 | 170.4 | 281.3 | 260.2 | 213.1 | 193.6 | 186.2 |
| 82.5° | 87.5 | 91.5 | 110.3 | 120.7 | 106.1 | 156.9 | 270.9 | 247.7 | 196.2 | 173.4 | 164.6 |
| 85° | 44.8 | 53.6 | 76.8 | 86.6 | 78.0 | 133.5 | 249.5 | 216.8 | 157.4 | 132.8 | 133.5 |
| 87.5° | 21.6 | 29.9 | 48.5 | 54.3 | 50.6 | 96.6 | 186.4 | 157.2 | 122.6 | 97.0 | 94.0 |
| 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)