

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: P348553

Luminaire Tested: **ARCH-N-PA1-60-750-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-60-750-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7706 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

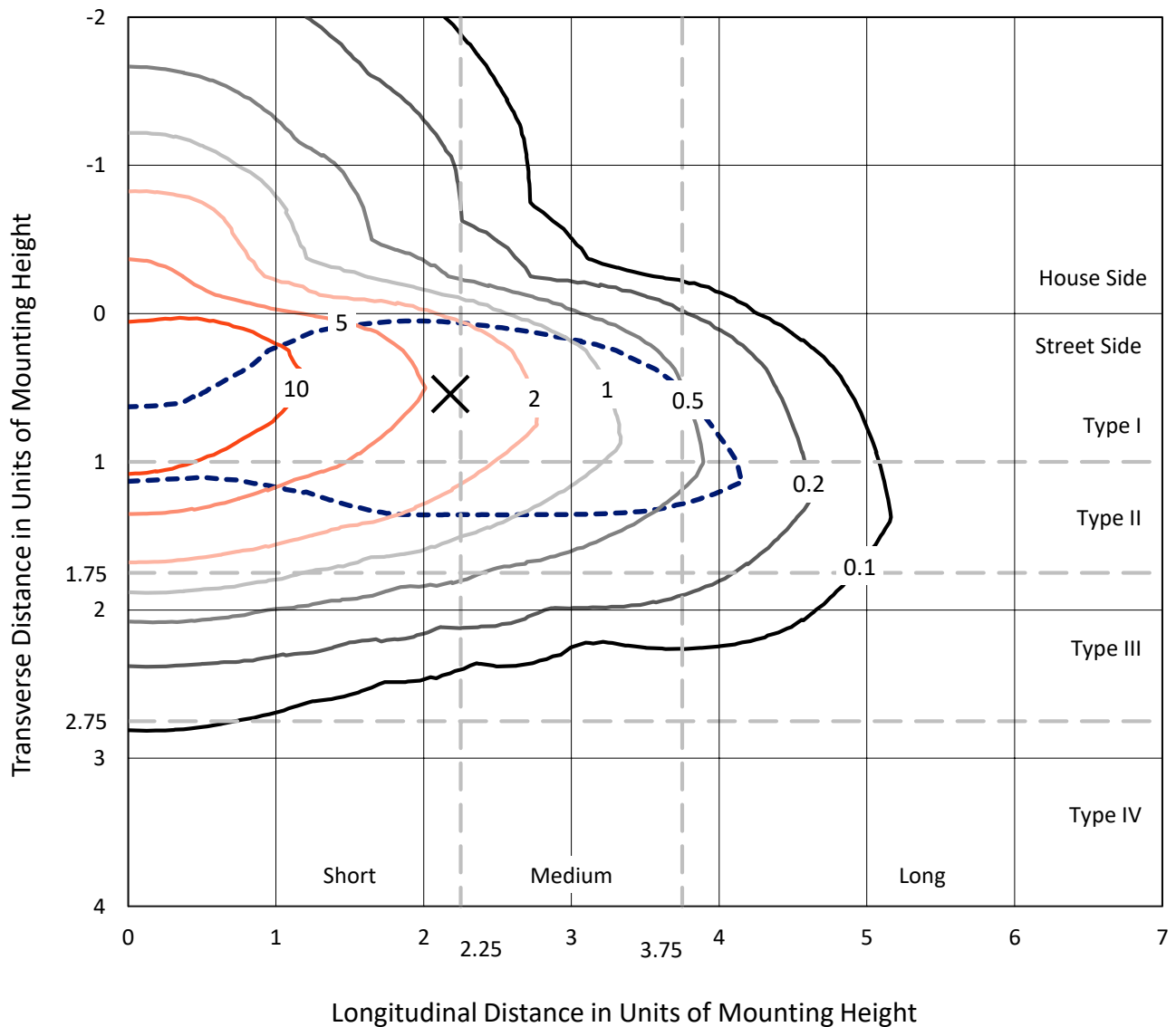
Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

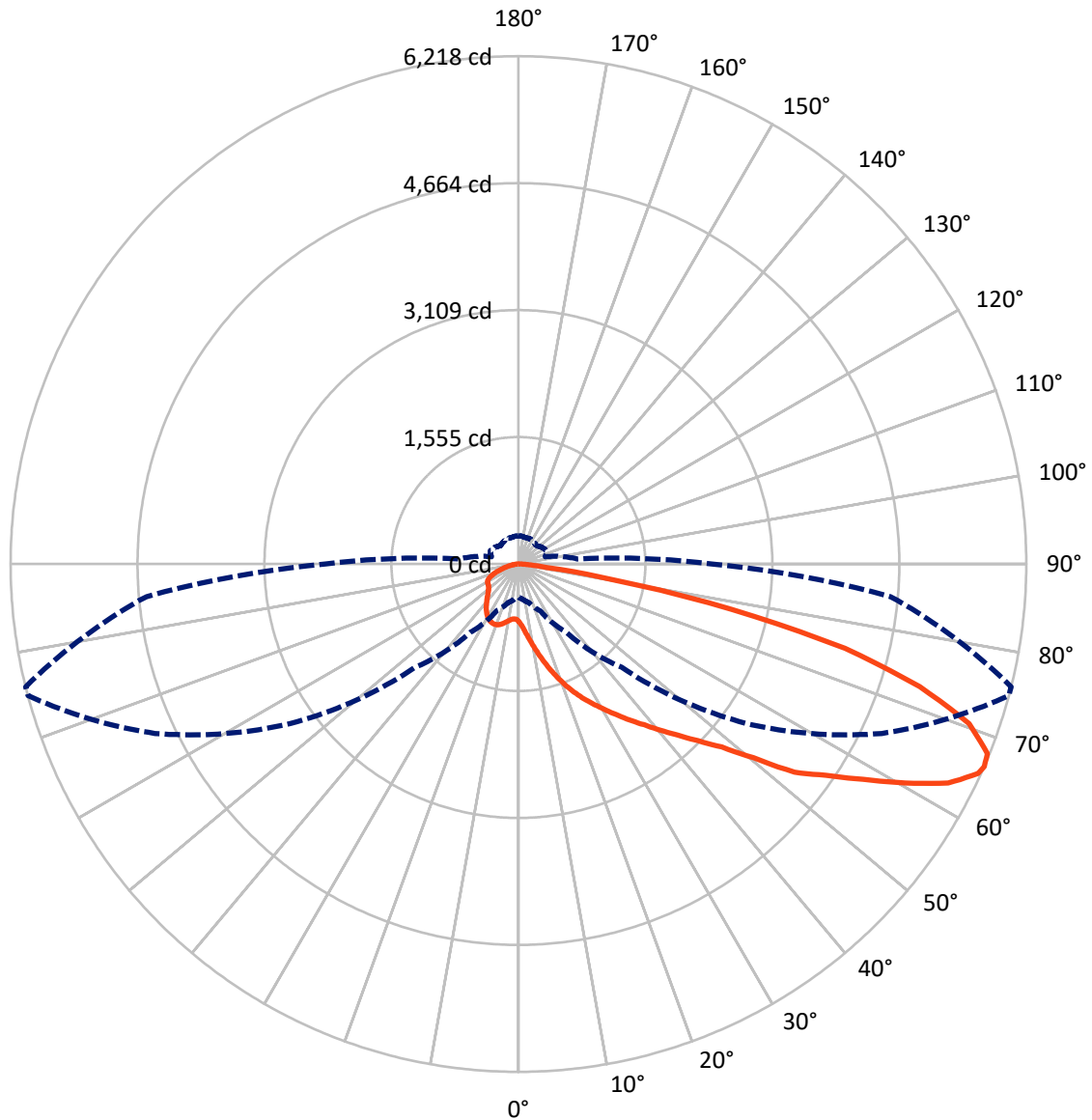
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.7 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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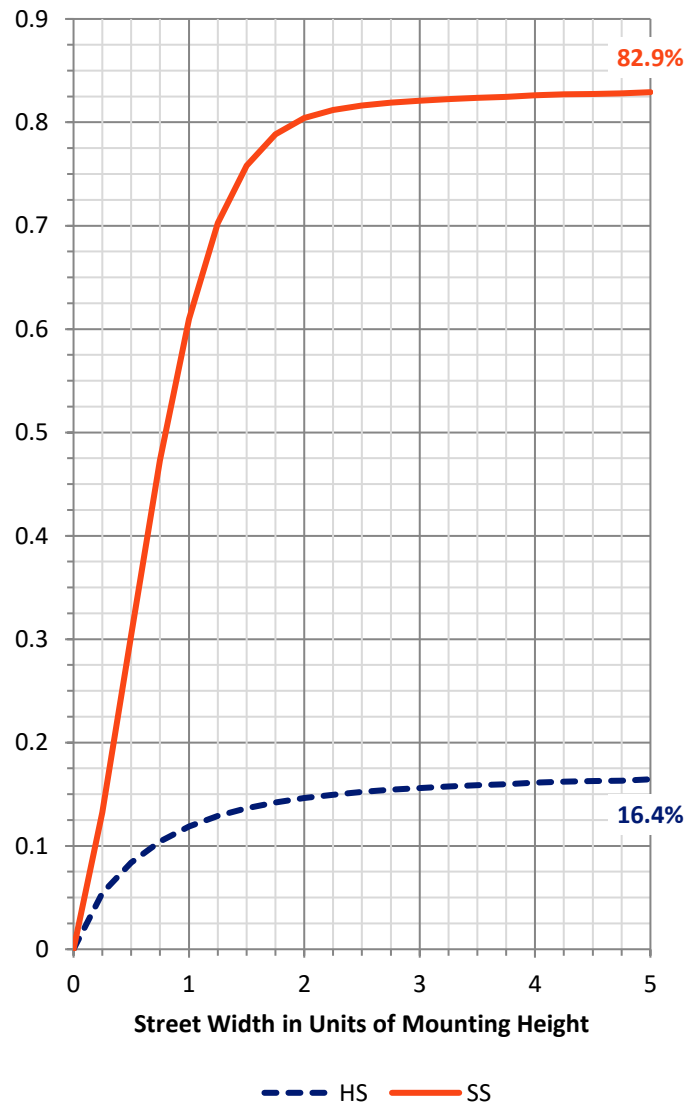
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1296.7 | 0.0 | 1296.7 |
| | % Fixture | 16.8 | 0.0 | 16.8 |
| Street Side | Lumens | 6409.3 | 0.0 | 6409.3 |
| | % Fixture | 83.2 | 0.0 | 83.2 |
| Total | Lumens | 7706.0 | 0.0 | 7706.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 85.1 | 1.1 |
| 10°-20° | 336.1 | 4.4 |
| 20°-30° | 653.0 | 8.5 |
| 30°-40° | 1065.9 | 13.8 |
| 40°-50° | 1456.3 | 18.9 |
| 50°-60° | 1696.3 | 22.0 |
| 60°-70° | 1520.7 | 19.7 |
| 70°-80° | 768.5 | 10.0 |
| 80°-90° | 124.1 | 1.6 |
| 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° | 7706.0 | 100.0 |
| 0°-180° | 7706.0 | 100.0 |



REPORT NUMBER: P348553

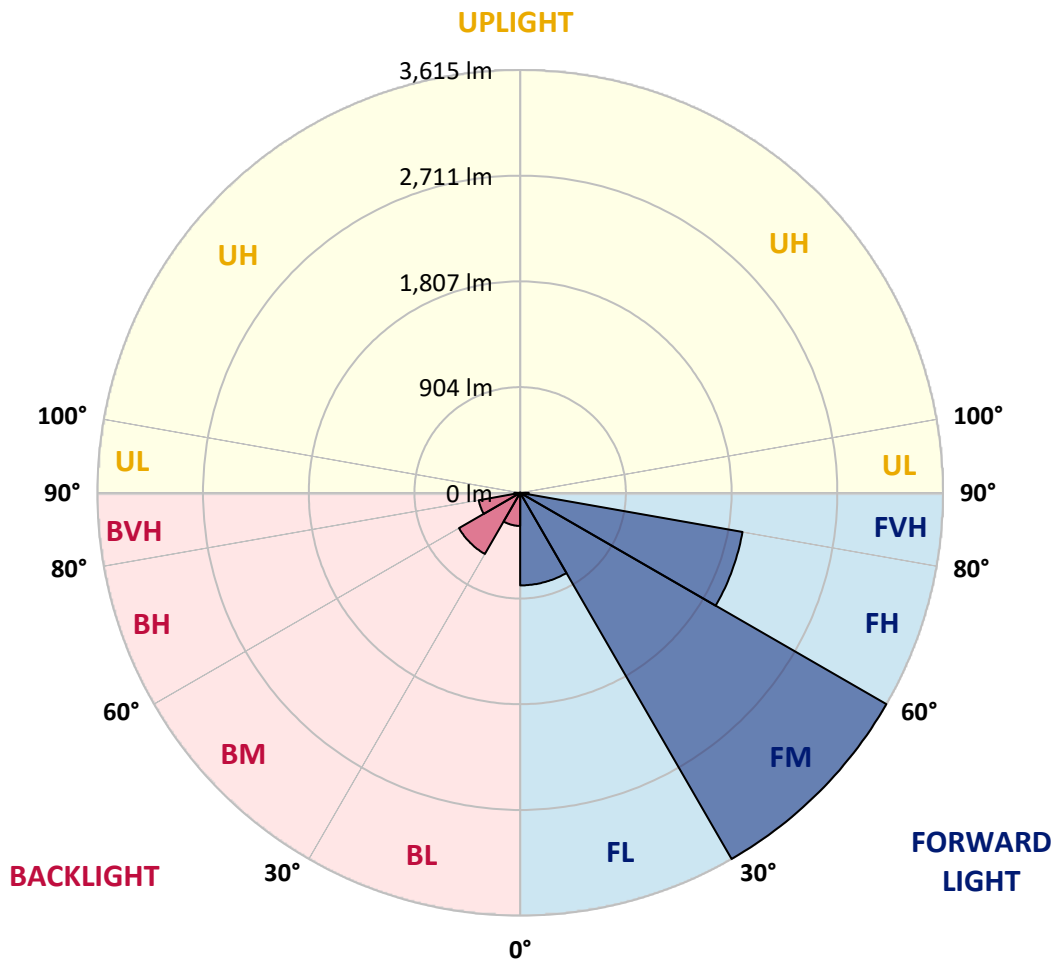
CATALOG NUMBER: ARCH-N-PA1-60-750-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 791.4 | 10.3 | | | |
| FM (30°-60°) | 3614.7 | 46.9 | | | |
| FH (60°-80°) | 1930.0 | 25.0 | | | G2/5000 |
| FVH (80°-90°) | 73.3 | 1.0 | | | G1/100 |
| BL (0°-30°) | 282.8 | 3.7 | B1/500 | | |
| BM (30°-60°) | 603.8 | 7.8 | B1/1000 | | |
| BH (60°-80°) | 359.2 | 4.7 | B1/500 | | G1/500 |
| BVH (80°-90°) | 50.8 | 0.7 | | | 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 II Short





REPORT NUMBER: P348553

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 |
| 2.5° | 934.2 | 920.1 | 918.8 | 898.1 | 893.4 | 853.9 | 824.9 | 794.5 | 760.0 | 753.2 | 726.0 |
| 5° | 1200.0 | 1198.7 | 1180.6 | 1146.9 | 1120.5 | 1053.0 | 986.3 | 915.6 | 838.2 | 825.6 | 764.4 |
| 7.5° | 1439.1 | 1437.0 | 1423.2 | 1386.8 | 1348.6 | 1265.7 | 1170.4 | 1062.1 | 936.6 | 918.0 | 816.5 |
| 10° | 1620.7 | 1619.9 | 1615.2 | 1588.5 | 1556.1 | 1476.5 | 1371.4 | 1223.6 | 1050.9 | 1025.5 | 881.6 |
| 12.5° | 1760.9 | 1762.5 | 1765.6 | 1756.2 | 1740.8 | 1673.0 | 1565.2 | 1394.6 | 1172.8 | 1147.7 | 954.1 |
| 15° | 1855.9 | 1860.6 | 1876.8 | 1890.1 | 1898.2 | 1856.6 | 1752.3 | 1569.7 | 1309.4 | 1279.3 | 1034.4 |
| 17.5° | 1903.7 | 1909.0 | 1937.0 | 1977.3 | 2014.4 | 2010.2 | 1927.3 | 1736.6 | 1440.4 | 1411.4 | 1120.7 |
| 20° | 1945.1 | 1949.0 | 1980.4 | 2028.8 | 2094.5 | 2123.5 | 2076.9 | 1897.2 | 1584.1 | 1549.5 | 1212.3 |
| 22.5° | 2064.9 | 2069.9 | 2079.3 | 2106.7 | 2164.8 | 2218.2 | 2195.7 | 2049.2 | 1715.6 | 1683.5 | 1299.2 |
| 25° | 2296.2 | 2302.2 | 2281.8 | 2258.5 | 2269.5 | 2306.6 | 2310.8 | 2187.8 | 1849.1 | 1812.7 | 1392.6 |
| 27.5° | 2574.8 | 2583.4 | 2548.6 | 2488.7 | 2436.4 | 2422.0 | 2417.0 | 2301.4 | 1976.5 | 1934.3 | 1484.9 |
| 30° | 2847.6 | 2862.5 | 2817.3 | 2739.6 | 2643.6 | 2576.1 | 2526.1 | 2412.6 | 2102.0 | 2061.8 | 1572.0 |
| 32.5° | 3114.2 | 3108.2 | 3042.5 | 2966.7 | 2854.2 | 2769.7 | 2648.8 | 2531.9 | 2243.3 | 2197.0 | 1658.6 |
| 35° | 3296.8 | 3298.9 | 3238.0 | 3148.0 | 3040.7 | 2975.8 | 2813.1 | 2660.6 | 2387.5 | 2344.8 | 1757.0 |
| 37.5° | 3452.2 | 3442.5 | 3373.5 | 3289.5 | 3197.1 | 3169.4 | 3005.4 | 2802.4 | 2543.6 | 2497.1 | 1861.6 |
| 40° | 3504.0 | 3492.8 | 3447.5 | 3387.1 | 3313.0 | 3310.7 | 3217.5 | 2963.0 | 2720.2 | 2674.2 | 1979.6 |
| 42.5° | 3472.6 | 3458.2 | 3439.7 | 3423.2 | 3400.4 | 3410.9 | 3416.9 | 3151.4 | 2914.3 | 2862.8 | 2116.2 |
| 45° | 3356.7 | 3335.0 | 3348.1 | 3383.9 | 3433.4 | 3492.5 | 3596.9 | 3359.9 | 3131.7 | 3088.6 | 2276.5 |
| 47.5° | 3178.6 | 3158.9 | 3199.8 | 3276.4 | 3410.9 | 3560.5 | 3767.2 | 3590.1 | 3391.3 | 3348.3 | 2504.9 |
| 50° | 2927.9 | 2933.7 | 2992.0 | 3131.5 | 3334.7 | 3591.9 | 3977.0 | 3894.9 | 3768.5 | 3728.5 | 2816.5 |
| 52.5° | 2516.7 | 2517.7 | 2682.0 | 2910.9 | 3199.8 | 3575.7 | 4093.4 | 4284.4 | 4283.6 | 4235.2 | 3113.2 |
| 55° | 2134.7 | 2158.0 | 2288.0 | 2592.3 | 2981.0 | 3510.8 | 4174.8 | 4473.8 | 4621.9 | 4565.1 | 3389.7 |
| 57.5° | 1761.7 | 1775.3 | 1898.5 | 2204.1 | 2668.9 | 3337.9 | 4258.2 | 4701.1 | 5011.7 | 4975.8 | 3733.4 |
| 60° | 1337.4 | 1358.3 | 1485.7 | 1768.0 | 2269.7 | 3031.0 | 4266.1 | 4938.4 | 5477.6 | 5441.5 | 4117.2 |
| 62.5° | 868.0 | 904.1 | 1023.4 | 1287.9 | 1786.8 | 2589.7 | 4084.0 | 5093.6 | 5919.2 | 5906.4 | 4457.8 |
| 65° | 498.9 | 526.1 | 609.0 | 813.1 | 1232.7 | 2035.6 | 3651.0 | 5033.9 | 6191.0 | 6183.7 | 4585.2 |
| 66° | 407.6 | 424.6 | 488.2 | 635.5 | 1017.1 | 1787.6 | 3399.4 | 4908.1 | 6218.0 | 6218.2 | 4570.6 |
| 67.5° | 326.0 | 333.6 | 362.1 | 454.9 | 750.6 | 1416.9 | 2949.7 | 4630.5 | 6184.5 | 6193.6 | 4476.2 |
| 70° | 269.7 | 273.6 | 282.5 | 305.0 | 409.7 | 854.4 | 2093.7 | 3909.2 | 5848.3 | 5855.4 | 4107.5 |
| 72.5° | 242.0 | 244.3 | 247.7 | 250.9 | 289.1 | 477.4 | 1278.8 | 3127.3 | 5127.6 | 5136.7 | 3545.9 |
| 75° | 219.2 | 220.5 | 220.0 | 220.3 | 242.5 | 304.3 | 660.8 | 2334.9 | 4146.0 | 4127.7 | 2716.3 |
| 77.5° | 192.5 | 193.9 | 191.2 | 191.8 | 214.5 | 233.9 | 328.8 | 1634.5 | 2797.9 | 2668.7 | 1530.4 |
| 80° | 162.7 | 163.8 | 162.7 | 164.6 | 186.8 | 176.6 | 191.2 | 919.6 | 1237.2 | 1170.2 | 544.1 |
| 82.5° | 123.0 | 127.4 | 130.5 | 137.9 | 153.8 | 125.6 | 127.9 | 358.1 | 376.7 | 358.7 | 166.9 |
| 85° | 53.9 | 65.7 | 98.4 | 105.4 | 115.6 | 75.3 | 84.0 | 146.0 | 153.3 | 148.6 | 60.7 |
| 87.5° | 14.1 | 15.4 | 48.7 | 61.2 | 64.1 | 34.0 | 43.7 | 66.4 | 70.1 | 66.4 | 20.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P348553

CATALOG NUMBER: ARCH-N-PA1-60-750-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 | 703.7 |
| 2.5° | 711.6 | 698.8 | 675.7 | 655.3 | 639.9 | 629.4 | 619.0 | 613.7 | 610.6 | 607.5 | 608.0 |
| 5° | 734.3 | 708.4 | 668.9 | 640.9 | 625.2 | 615.3 | 610.1 | 608.0 | 606.7 | 603.5 | 603.5 |
| 7.5° | 768.6 | 732.0 | 677.6 | 648.8 | 636.5 | 628.9 | 625.8 | 624.7 | 623.2 | 619.5 | 620.0 |
| 10° | 811.8 | 760.5 | 695.6 | 667.6 | 656.4 | 648.0 | 643.6 | 642.0 | 639.1 | 634.9 | 635.5 |
| 12.5° | 862.5 | 795.8 | 719.4 | 690.1 | 676.5 | 665.3 | 657.9 | 653.5 | 648.5 | 643.0 | 643.3 |
| 15° | 918.0 | 834.3 | 745.1 | 710.3 | 691.7 | 676.0 | 664.2 | 656.6 | 648.8 | 642.0 | 641.7 |
| 17.5° | 974.2 | 871.4 | 764.7 | 721.3 | 696.1 | 675.5 | 659.5 | 647.7 | 638.1 | 629.7 | 628.9 |
| 20° | 1034.9 | 904.9 | 775.7 | 720.2 | 687.8 | 663.2 | 642.0 | 627.3 | 616.6 | 608.2 | 606.9 |
| 22.5° | 1096.7 | 936.3 | 777.5 | 709.5 | 669.2 | 639.1 | 616.9 | 600.7 | 589.7 | 581.0 | 577.9 |
| 25° | 1153.2 | 960.6 | 769.9 | 688.8 | 643.3 | 610.9 | 589.1 | 572.7 | 563.8 | 553.6 | 550.4 |
| 27.5° | 1204.7 | 977.6 | 754.7 | 662.4 | 614.3 | 582.3 | 561.9 | 547.8 | 538.1 | 530.3 | 527.7 |
| 30° | 1251.0 | 986.8 | 729.9 | 631.0 | 584.4 | 555.4 | 538.1 | 528.5 | 520.1 | 510.1 | 508.3 |
| 32.5° | 1295.0 | 986.8 | 698.0 | 596.7 | 554.9 | 531.6 | 521.4 | 515.4 | 506.0 | 496.3 | 493.7 |
| 35° | 1338.9 | 980.8 | 660.3 | 560.9 | 527.7 | 514.6 | 514.1 | 507.0 | 492.6 | 479.5 | 476.1 |
| 37.5° | 1385.2 | 968.5 | 617.9 | 527.4 | 505.4 | 507.0 | 511.4 | 495.8 | 475.3 | 456.8 | 451.8 |
| 40° | 1437.5 | 951.5 | 574.0 | 498.4 | 486.9 | 503.6 | 504.4 | 479.5 | 439.8 | 422.8 | 418.3 |
| 42.5° | 1499.0 | 934.5 | 533.2 | 472.7 | 472.2 | 493.4 | 491.0 | 444.5 | 420.7 | 412.0 | 409.7 |
| 45° | 1579.9 | 924.8 | 494.4 | 448.4 | 460.7 | 476.9 | 468.3 | 425.1 | 415.2 | 410.2 | 408.1 |
| 47.5° | 1707.3 | 929.8 | 458.9 | 429.0 | 449.2 | 460.4 | 425.9 | 417.3 | 410.2 | 404.2 | 402.1 |
| 50° | 1866.9 | 926.9 | 430.1 | 415.7 | 436.1 | 443.2 | 406.8 | 407.1 | 403.4 | 396.6 | 393.5 |
| 52.5° | 1986.9 | 904.4 | 411.5 | 408.1 | 424.6 | 412.6 | 394.8 | 397.1 | 395.3 | 385.4 | 382.0 |
| 55° | 2102.8 | 885.0 | 402.1 | 405.2 | 416.2 | 374.4 | 380.6 | 386.4 | 384.6 | 374.9 | 373.3 |
| 57.5° | 2247.0 | 881.4 | 396.3 | 406.0 | 409.2 | 355.3 | 367.0 | 374.6 | 373.3 | 369.1 | 368.3 |
| 60° | 2423.6 | 882.4 | 391.1 | 407.3 | 401.3 | 341.1 | 354.2 | 363.9 | 364.7 | 363.9 | 363.4 |
| 62.5° | 2520.6 | 853.9 | 378.0 | 403.7 | 387.4 | 328.8 | 340.9 | 355.0 | 355.3 | 356.8 | 356.6 |
| 65° | 2438.2 | 768.6 | 353.7 | 390.8 | 364.2 | 318.6 | 329.4 | 344.8 | 340.9 | 347.9 | 347.9 |
| 66° | 2358.2 | 719.4 | 341.7 | 382.5 | 354.2 | 314.7 | 325.7 | 339.6 | 334.6 | 344.3 | 344.3 |
| 67.5° | 2194.6 | 636.5 | 319.9 | 364.7 | 340.1 | 309.2 | 321.5 | 330.9 | 324.1 | 338.5 | 337.5 |
| 70° | 1895.9 | 492.4 | 276.3 | 324.4 | 316.8 | 301.1 | 315.8 | 313.7 | 303.7 | 325.7 | 321.5 |
| 72.5° | 1598.4 | 374.1 | 221.8 | 271.6 | 281.5 | 290.9 | 307.7 | 291.7 | 279.1 | 294.6 | 285.4 |
| 75° | 1240.3 | 281.2 | 175.3 | 211.1 | 237.8 | 275.0 | 298.0 | 266.3 | 248.3 | 246.7 | 241.7 |
| 77.5° | 670.5 | 193.1 | 138.9 | 161.2 | 188.9 | 255.1 | 291.4 | 239.1 | 211.9 | 205.6 | 201.7 |
| 80° | 265.5 | 125.6 | 101.0 | 122.2 | 132.1 | 226.3 | 275.7 | 207.5 | 174.8 | 168.5 | 162.5 |
| 82.5° | 109.6 | 74.3 | 65.1 | 81.9 | 86.1 | 193.6 | 247.5 | 170.0 | 135.0 | 186.8 | 198.3 |
| 85° | 47.1 | 40.8 | 38.7 | 42.4 | 48.7 | 135.8 | 197.0 | 129.8 | 145.7 | 130.0 | 103.3 |
| 87.5° | 14.1 | 17.3 | 16.5 | 16.2 | 17.8 | 32.4 | 104.9 | 72.2 | 107.0 | 40.5 | 30.3 |
| 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)