

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: P397784

Luminaire Tested: **ARCH-S-PA1-40-750-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397784
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-750-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6102 lumens
Efficiency: N/A
Efficacy: 152.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 40
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

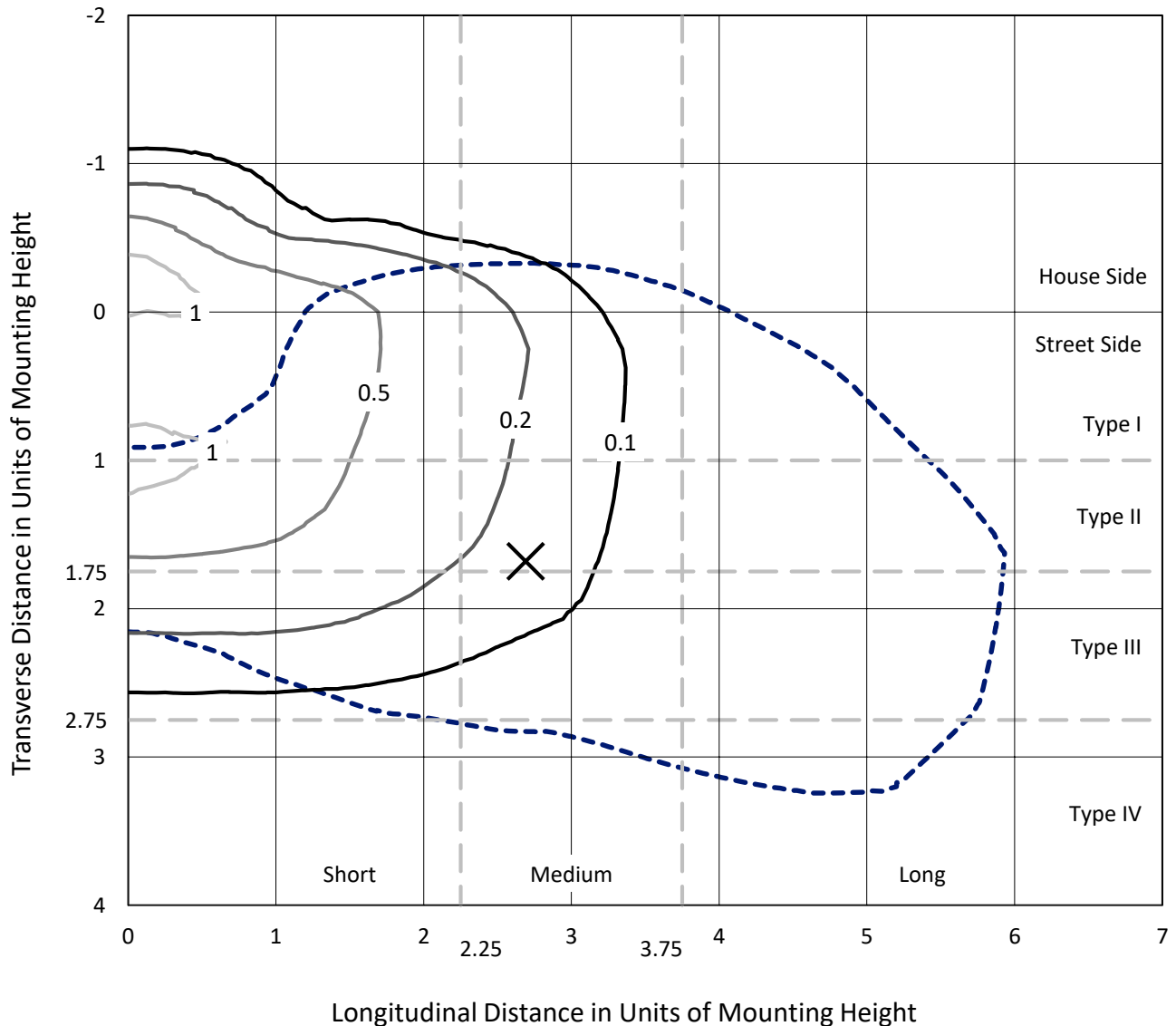


REPORT NUMBER: P397784

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

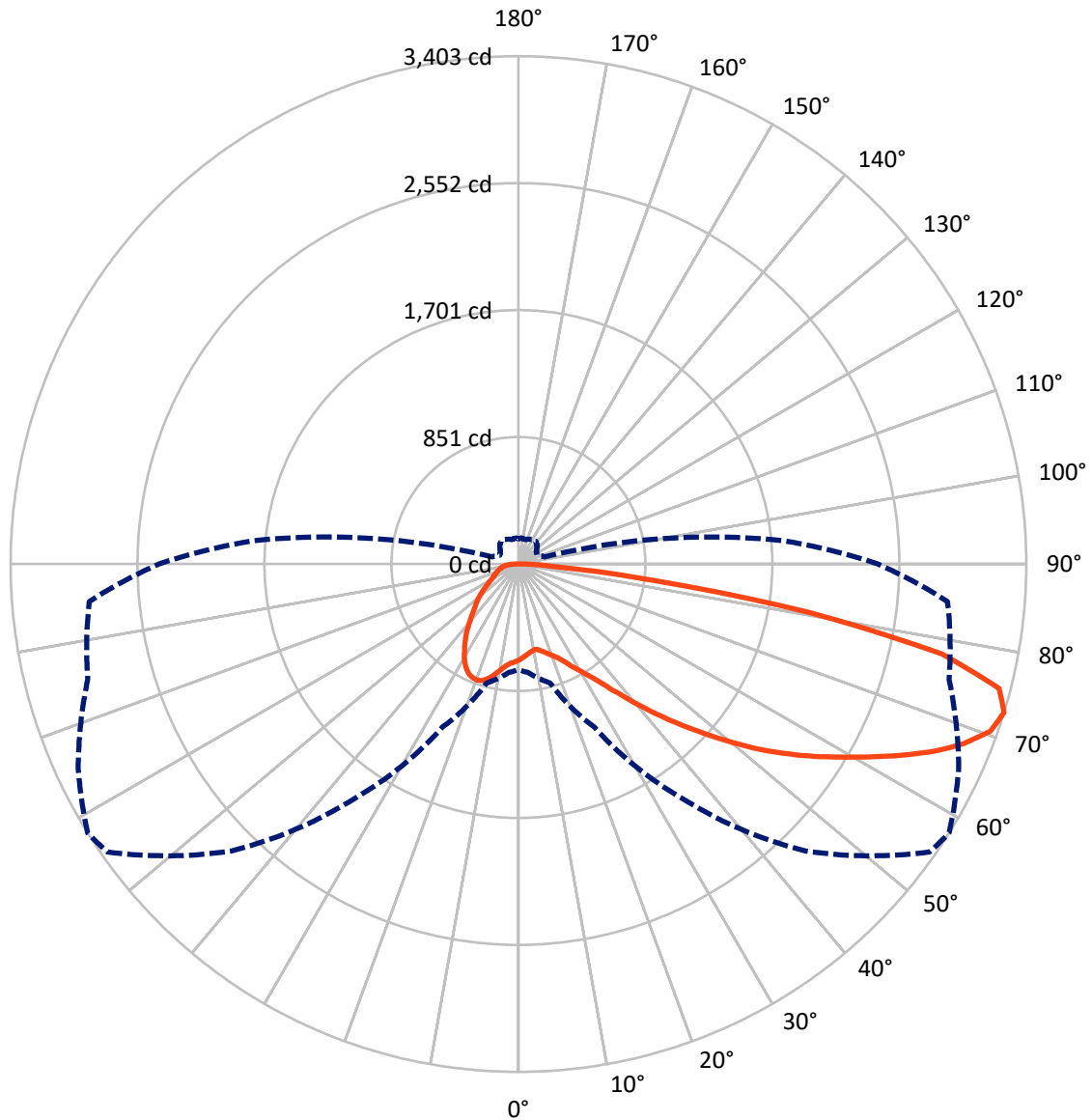


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397784

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P397784

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T3

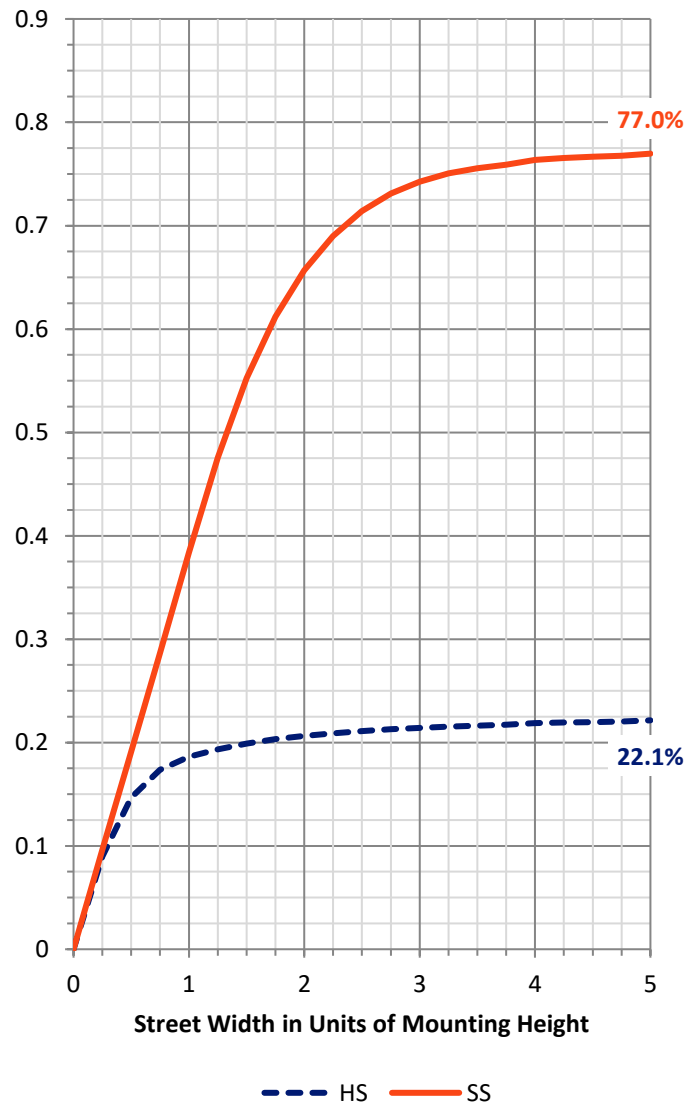
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1383.9 | 0.0 | 1383.9 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 4718.1 | 0.0 | 4718.1 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 6102.0 | 0.0 | 6102.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.0 | 1.0 |
| 10°-20° | 196.9 | 3.2 |
| 20°-30° | 352.7 | 5.8 |
| 30°-40° | 530.6 | 8.7 |
| 40°-50° | 859.2 | 14.1 |
| 50°-60° | 1293.4 | 21.2 |
| 60°-70° | 1522.2 | 24.9 |
| 70°-80° | 1079.4 | 17.7 |
| 80°-90° | 205.7 | 3.4 |
| 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° | 6102.0 | 100.0 |
| 0°-180° | 6102.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P397784

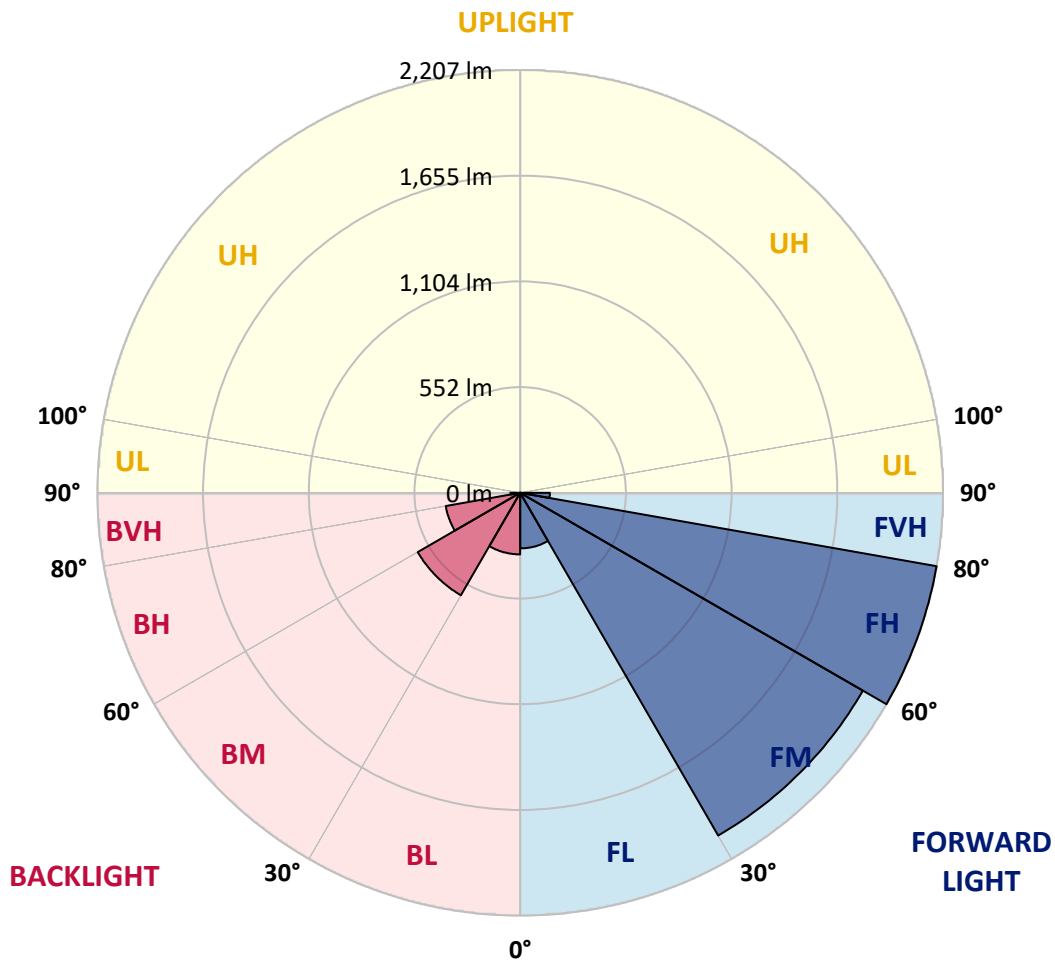
CATALOG NUMBER: ARCH-S-PA1-40-750-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 290.2 | 4.8 | | | |
| FM | (30°-60°) | 2065.7 | 33.9 | | | |
| FH | (60°-80°) | 2207.1 | 36.2 | | | G2/5000 |
| FVH | (80°-90°) | 155.1 | 2.5 | | | G2/225 |
| BL | (0°-30°) | 321.4 | 5.3 | B1/500 | | |
| BM | (30°-60°) | 617.5 | 10.1 | B1/1000 | | |
| BH | (60°-80°) | 394.4 | 6.5 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 50.5 | 0.8 | | | 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 Medium





REPORT NUMBER: P397784

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 |
| 2.5° | 619.5 | 616.2 | 617.0 | 617.0 | 620.3 | 621.9 | 622.7 | 625.1 | 626.7 | 630.7 | 636.4 |
| 5° | 590.5 | 588.0 | 588.9 | 589.7 | 595.3 | 600.9 | 605.8 | 609.0 | 613.8 | 620.3 | 628.3 |
| 7.5° | 569.5 | 567.9 | 568.7 | 570.3 | 575.2 | 581.6 | 589.7 | 594.5 | 601.7 | 613.8 | 627.5 |
| 10° | 554.2 | 554.2 | 555.0 | 558.2 | 563.1 | 571.1 | 577.6 | 583.2 | 597.7 | 619.5 | 640.4 |
| 12.5° | 542.1 | 542.1 | 544.5 | 551.0 | 559.0 | 567.1 | 582.4 | 588.9 | 608.2 | 638.0 | 663.0 |
| 15° | 541.3 | 542.1 | 542.9 | 548.6 | 557.4 | 575.2 | 597.7 | 607.4 | 630.7 | 666.2 | 695.2 |
| 17.5° | 554.2 | 555.0 | 551.8 | 553.4 | 563.9 | 588.9 | 618.7 | 629.9 | 659.7 | 698.4 | 728.2 |
| 20° | 593.7 | 593.7 | 584.0 | 575.2 | 582.4 | 609.8 | 643.6 | 654.9 | 687.9 | 730.6 | 760.4 |
| 22.5° | 674.2 | 678.3 | 655.7 | 636.4 | 625.1 | 640.4 | 671.0 | 683.1 | 720.2 | 766.1 | 795.9 |
| 25° | 771.7 | 775.7 | 745.1 | 717.7 | 696.8 | 694.4 | 714.5 | 727.4 | 758.0 | 805.5 | 830.5 |
| 27.5° | 866.0 | 858.7 | 830.5 | 804.7 | 778.2 | 756.4 | 771.7 | 783.0 | 818.4 | 854.7 | 870.0 |
| 30° | 940.1 | 934.4 | 907.0 | 888.5 | 863.5 | 835.4 | 826.5 | 838.6 | 867.6 | 901.4 | 909.5 |
| 32.5° | 1022.2 | 1018.2 | 990.8 | 966.7 | 945.7 | 919.1 | 899.8 | 905.4 | 921.5 | 945.7 | 950.5 |
| 35° | 1127.0 | 1135.8 | 1106.8 | 1057.7 | 1034.3 | 1008.5 | 994.8 | 996.5 | 1008.5 | 1023.8 | 1015.8 |
| 37.5° | 1237.3 | 1247.8 | 1249.4 | 1172.1 | 1140.7 | 1117.3 | 1102.8 | 1108.4 | 1122.9 | 1133.4 | 1108.4 |
| 40° | 1441.9 | 1431.5 | 1389.6 | 1332.4 | 1284.0 | 1261.5 | 1241.3 | 1240.5 | 1251.0 | 1269.5 | 1224.4 |
| 42.5° | 1713.4 | 1703.7 | 1619.1 | 1545.0 | 1468.5 | 1442.7 | 1403.3 | 1386.3 | 1391.2 | 1414.5 | 1351.7 |
| 45° | 1973.6 | 1969.6 | 1901.9 | 1815.7 | 1723.9 | 1673.9 | 1583.7 | 1542.6 | 1538.6 | 1557.1 | 1482.2 |
| 47.5° | 2204.8 | 2187.1 | 2137.9 | 2071.1 | 2061.4 | 1930.9 | 1765.0 | 1709.4 | 1690.0 | 1700.5 | 1616.7 |
| 50° | 2452.1 | 2391.7 | 2324.0 | 2282.9 | 2353.0 | 2231.4 | 1947.8 | 1889.8 | 1842.3 | 1849.5 | 1762.5 |
| 52.5° | 2583.4 | 2481.9 | 2437.6 | 2449.7 | 2543.9 | 2497.2 | 2146.8 | 2075.9 | 1999.4 | 2009.8 | 1907.5 |
| 55° | 2470.6 | 2469.8 | 2489.1 | 2564.1 | 2695.4 | 2641.4 | 2336.1 | 2256.3 | 2172.6 | 2175.0 | 2074.3 |
| 57.5° | 2315.9 | 2347.4 | 2447.2 | 2612.4 | 2883.0 | 2792.8 | 2522.2 | 2437.6 | 2361.1 | 2349.0 | 2263.6 |
| 60° | 2175.0 | 2209.6 | 2354.6 | 2604.3 | 2948.3 | 2931.4 | 2699.4 | 2625.3 | 2563.2 | 2527.8 | 2462.6 |
| 62.5° | 1960.7 | 1986.5 | 2191.9 | 2552.8 | 2893.5 | 3031.3 | 2879.0 | 2828.3 | 2781.6 | 2708.2 | 2676.8 |
| 65° | 1708.6 | 1717.4 | 1934.1 | 2382.8 | 2825.0 | 3069.9 | 3057.9 | 3035.3 | 2990.2 | 2882.2 | 2888.7 |
| 67.5° | 1435.5 | 1453.2 | 1643.3 | 2111.3 | 2675.2 | 3052.2 | 3196.4 | 3214.9 | 3161.8 | 2999.9 | 3024.0 |
| 70° | 1144.7 | 1166.4 | 1310.6 | 1736.0 | 2420.7 | 2975.7 | 3324.5 | 3354.3 | 3252.0 | 3038.5 | 3049.0 |
| 72.5° | 708.1 | 729.0 | 825.7 | 1205.9 | 1918.8 | 2718.7 | 3364.0 | 3402.6 | 3254.4 | 2987.0 | 2886.3 |
| 75° | 244.9 | 247.3 | 323.0 | 578.4 | 1139.0 | 2052.5 | 3235.1 | 3326.1 | 3152.1 | 2799.3 | 2511.7 |
| 77.5° | 112.0 | 116.0 | 143.4 | 238.4 | 505.1 | 1107.6 | 2671.2 | 2899.2 | 2841.2 | 2506.1 | 1933.3 |
| 80° | 77.3 | 78.9 | 99.1 | 142.6 | 291.6 | 389.9 | 1686.0 | 1983.3 | 2084.8 | 1940.6 | 1238.9 |
| 82.5° | 58.0 | 59.6 | 76.5 | 96.7 | 210.2 | 189.3 | 642.0 | 921.5 | 1145.5 | 1124.5 | 518.0 |
| 85° | 55.6 | 54.8 | 59.6 | 64.4 | 140.2 | 112.8 | 207.8 | 285.2 | 447.1 | 382.6 | 130.5 |
| 87.5° | 24.2 | 26.6 | 61.2 | 36.2 | 73.3 | 52.4 | 90.2 | 105.5 | 136.1 | 118.4 | 46.7 |
| 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: P397784

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 |
| 2.5° | 638.8 | 640.4 | 645.2 | 652.5 | 656.5 | 664.6 | 670.2 | 673.4 | 675.9 | 676.7 | 676.7 |
| 5° | 633.2 | 636.4 | 646.9 | 658.9 | 670.2 | 687.1 | 702.4 | 711.3 | 717.7 | 720.2 | 721.0 |
| 7.5° | 634.8 | 642.8 | 658.1 | 675.9 | 690.4 | 712.1 | 730.6 | 748.4 | 762.9 | 768.5 | 768.5 |
| 10° | 650.1 | 661.4 | 682.3 | 705.7 | 724.2 | 746.7 | 766.1 | 781.4 | 798.3 | 808.0 | 809.6 |
| 12.5° | 673.4 | 687.1 | 714.5 | 740.3 | 761.2 | 779.0 | 796.7 | 808.0 | 816.0 | 823.3 | 824.9 |
| 15° | 706.5 | 723.4 | 750.8 | 777.4 | 795.9 | 807.2 | 812.0 | 812.0 | 811.2 | 812.0 | 813.6 |
| 17.5° | 739.5 | 755.6 | 783.0 | 809.6 | 818.4 | 812.0 | 806.4 | 804.7 | 803.9 | 802.3 | 803.1 |
| 20° | 771.7 | 787.0 | 810.4 | 830.5 | 823.3 | 800.7 | 793.5 | 792.7 | 790.2 | 788.6 | 787.0 |
| 22.5° | 803.9 | 815.2 | 834.5 | 841.8 | 812.8 | 780.6 | 771.7 | 766.9 | 763.7 | 759.6 | 755.6 |
| 25° | 841.0 | 844.2 | 858.7 | 847.4 | 787.0 | 743.5 | 730.6 | 723.4 | 720.2 | 716.1 | 712.9 |
| 27.5° | 875.6 | 875.6 | 878.0 | 838.6 | 749.2 | 694.4 | 675.0 | 662.2 | 661.4 | 660.5 | 659.7 |
| 30° | 907.0 | 903.0 | 895.0 | 812.0 | 700.0 | 634.0 | 605.0 | 592.1 | 596.9 | 600.9 | 601.7 |
| 32.5° | 944.1 | 936.0 | 913.5 | 775.7 | 641.2 | 566.3 | 530.9 | 525.2 | 530.9 | 535.7 | 532.5 |
| 35° | 1002.1 | 987.6 | 932.8 | 733.9 | 584.8 | 504.3 | 470.4 | 462.4 | 460.8 | 460.0 | 453.5 |
| 37.5° | 1085.1 | 1060.1 | 948.1 | 688.7 | 529.2 | 449.5 | 424.5 | 407.6 | 392.3 | 376.2 | 373.8 |
| 40° | 1186.6 | 1143.9 | 958.6 | 637.2 | 470.4 | 403.6 | 377.0 | 355.2 | 329.5 | 301.3 | 298.1 |
| 42.5° | 1297.7 | 1234.1 | 963.4 | 580.0 | 418.9 | 365.7 | 332.7 | 305.3 | 276.3 | 254.6 | 250.5 |
| 45° | 1417.8 | 1331.6 | 959.4 | 525.2 | 377.0 | 333.5 | 296.4 | 266.6 | 243.3 | 228.0 | 224.7 |
| 47.5° | 1534.6 | 1443.5 | 948.1 | 481.7 | 344.8 | 306.1 | 268.2 | 240.9 | 223.1 | 206.2 | 202.2 |
| 50° | 1684.4 | 1550.7 | 934.4 | 447.9 | 309.3 | 278.7 | 250.5 | 221.5 | 201.4 | 193.3 | 191.7 |
| 52.5° | 1850.3 | 1657.8 | 918.3 | 405.2 | 274.7 | 257.0 | 239.2 | 213.5 | 207.0 | 191.7 | 189.3 |
| 55° | 2030.0 | 1785.1 | 915.1 | 351.2 | 244.1 | 241.7 | 228.0 | 220.7 | 222.3 | 191.7 | 187.7 |
| 57.5° | 2219.3 | 1921.2 | 922.4 | 297.2 | 219.1 | 228.0 | 232.8 | 227.2 | 224.7 | 195.7 | 187.7 |
| 60° | 2416.6 | 2052.5 | 900.6 | 247.3 | 199.8 | 216.7 | 238.4 | 223.9 | 206.2 | 194.1 | 188.5 |
| 62.5° | 2608.4 | 2162.9 | 806.4 | 211.9 | 185.3 | 213.5 | 235.2 | 211.9 | 191.7 | 191.7 | 189.3 |
| 65° | 2747.7 | 2212.0 | 630.7 | 186.1 | 175.6 | 209.4 | 229.6 | 203.8 | 187.7 | 193.3 | 190.1 |
| 67.5° | 2763.8 | 2161.3 | 423.7 | 165.9 | 167.6 | 202.2 | 216.7 | 196.6 | 183.7 | 198.2 | 193.3 |
| 70° | 2664.7 | 2029.2 | 259.4 | 150.6 | 157.1 | 189.3 | 205.4 | 189.3 | 178.0 | 194.1 | 186.9 |
| 72.5° | 2407.8 | 1782.7 | 182.9 | 137.7 | 145.8 | 177.2 | 194.9 | 182.9 | 170.0 | 175.6 | 168.4 |
| 75° | 1975.2 | 1381.5 | 145.0 | 125.7 | 134.5 | 165.9 | 186.1 | 173.2 | 160.3 | 157.9 | 153.1 |
| 77.5° | 1399.2 | 885.3 | 116.8 | 116.0 | 122.4 | 152.2 | 174.0 | 161.9 | 149.0 | 144.2 | 141.0 |
| 80° | 804.7 | 434.2 | 100.7 | 104.7 | 111.2 | 138.6 | 159.5 | 149.0 | 136.9 | 129.7 | 124.9 |
| 82.5° | 307.7 | 151.4 | 88.6 | 91.0 | 98.3 | 124.1 | 145.0 | 136.1 | 124.1 | 130.5 | 109.6 |
| 85° | 99.9 | 83.0 | 72.5 | 74.9 | 82.2 | 103.1 | 128.1 | 120.8 | 107.1 | 95.1 | 87.8 |
| 87.5° | 44.3 | 45.1 | 38.7 | 42.7 | 51.6 | 68.5 | 93.4 | 88.6 | 78.1 | 65.2 | 62.8 |
| 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)