

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: P397924

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

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397924
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-S-PA1-60-750-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9083 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 64
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

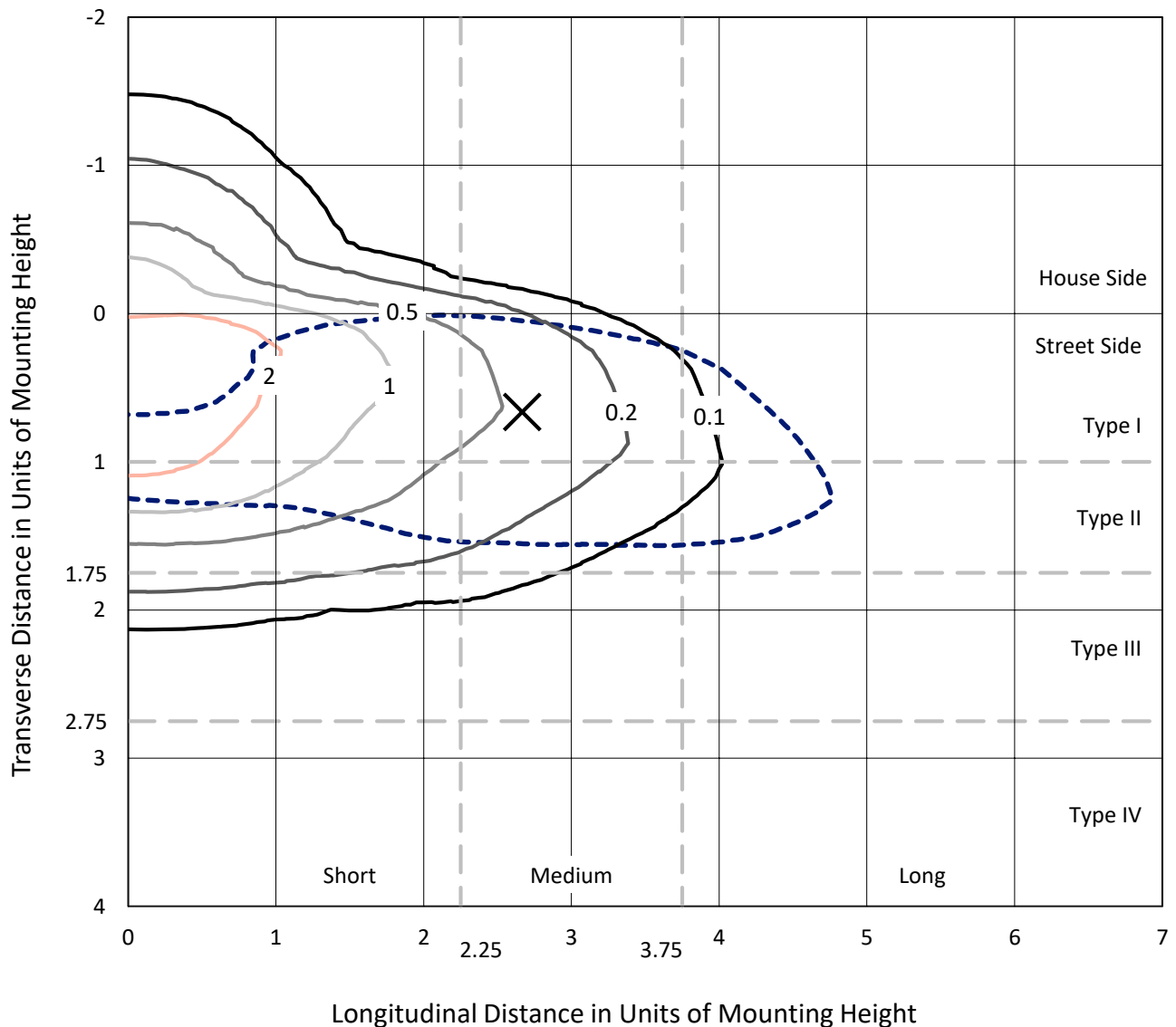


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

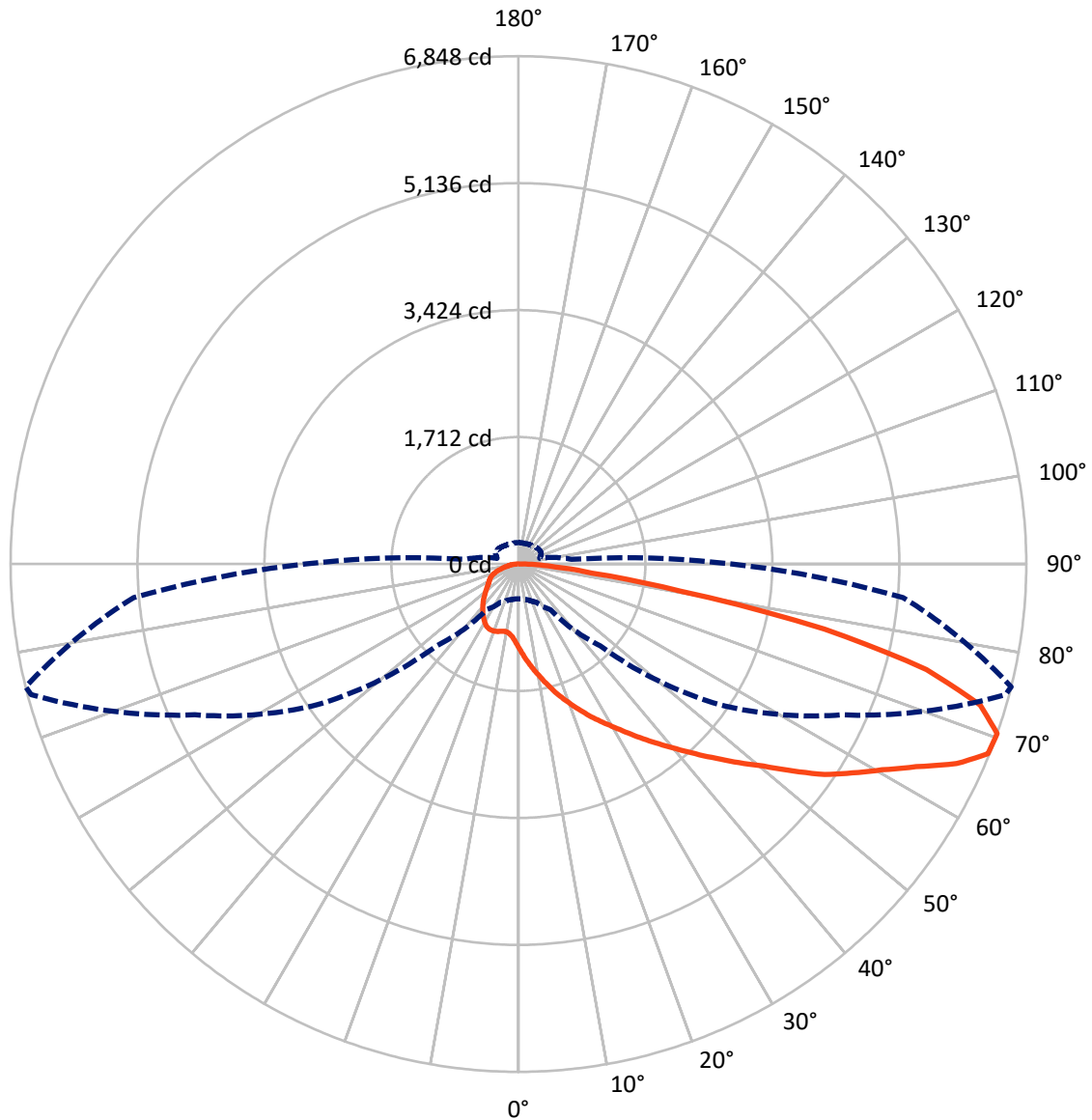


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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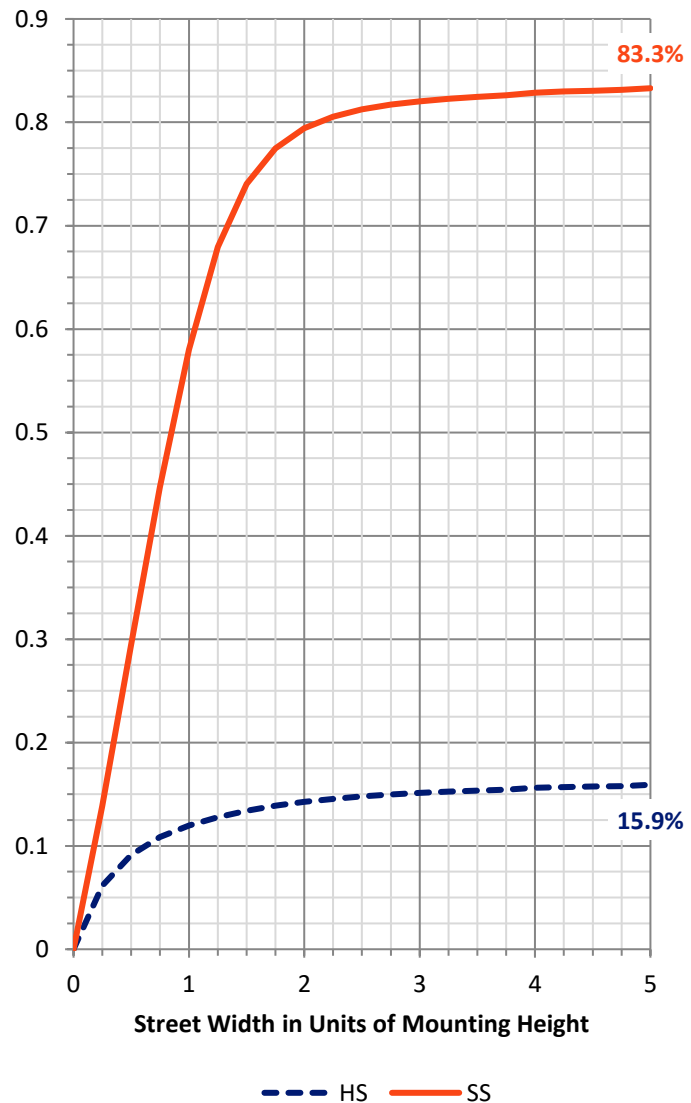
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1482.9 | 0.0 | 1482.9 |
| | % Fixture | 16.3 | 0.0 | 16.3 |
| Street Side | Lumens | 7600.1 | 0.0 | 7600.1 |
| | % Fixture | 83.7 | 0.0 | 83.7 |
| Total | Lumens | 9083.0 | 0.0 | 9083.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 118.0 | 1.3 |
| 10°-20° | 401.1 | 4.4 |
| 20°-30° | 717.7 | 7.9 |
| 30°-40° | 1160.9 | 12.8 |
| 40°-50° | 1679.4 | 18.5 |
| 50°-60° | 1922.2 | 21.2 |
| 60°-70° | 1768.2 | 19.5 |
| 70°-80° | 1093.4 | 12.0 |
| 80°-90° | 222.0 | 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° | 9083.0 | 100.0 |
| 0°-180° | 9083.0 | 100.0 |



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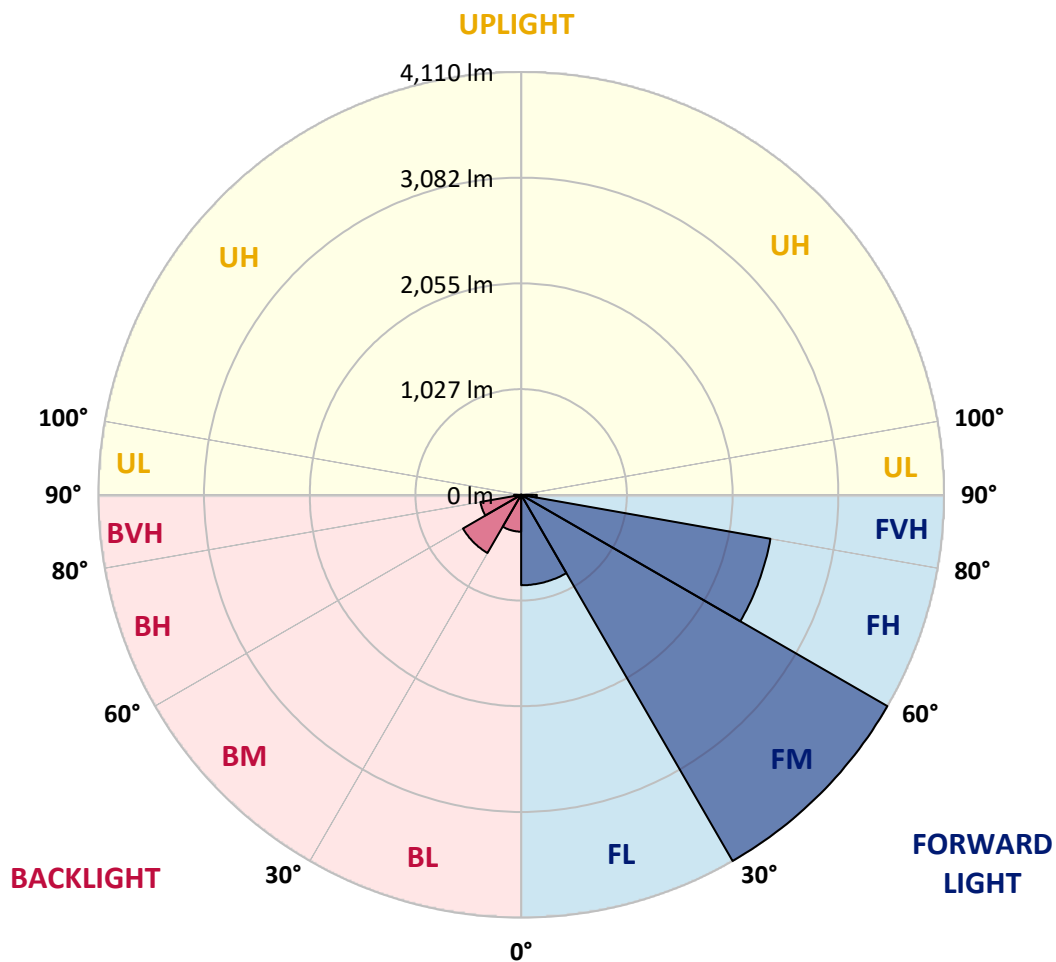
CATALOG NUMBER: ARCH-S-PA1-60-750-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 878.6 | 9.7 | | | |
| FM (30°-60°) | 4109.6 | 45.2 | | | |
| FH (60°-80°) | 2459.4 | 27.1 | | | G2/5000 |
| FVH (80°-90°) | 152.4 | 1.7 | | | G2/225 |
| BL (0°-30°) | 358.2 | 3.9 | B1/500 | | |
| BM (30°-60°) | 652.9 | 7.2 | B1/1000 | | |
| BH (60°-80°) | 402.2 | 4.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 69.6 | 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 II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 |
| 2.5° | 1447.6 | 1436.9 | 1435.7 | 1418.9 | 1403.4 | 1361.6 | 1331.7 | 1279.2 | 1226.6 | 1225.4 | 1172.9 |
| 5° | 1673.3 | 1662.6 | 1656.6 | 1636.3 | 1610.0 | 1555.1 | 1501.4 | 1420.1 | 1330.6 | 1324.6 | 1225.4 |
| 7.5° | 1826.2 | 1816.7 | 1804.7 | 1796.4 | 1771.3 | 1722.3 | 1656.6 | 1559.9 | 1436.9 | 1424.9 | 1286.4 |
| 10° | 1928.9 | 1923.0 | 1920.6 | 1914.6 | 1899.1 | 1859.7 | 1796.4 | 1693.6 | 1543.2 | 1530.0 | 1350.9 |
| 12.5° | 1973.1 | 1970.7 | 1981.5 | 1998.2 | 2004.2 | 1988.7 | 1927.8 | 1831.0 | 1660.2 | 1645.9 | 1428.5 |
| 15° | 1921.8 | 1924.2 | 1951.6 | 2009.0 | 2069.9 | 2103.3 | 2067.5 | 1973.1 | 1792.8 | 1772.5 | 1519.3 |
| 17.5° | 1897.9 | 1901.5 | 1920.6 | 1975.5 | 2061.5 | 2165.4 | 2182.2 | 2108.1 | 1920.6 | 1891.9 | 1614.8 |
| 20° | 1939.7 | 1944.5 | 1958.8 | 2001.8 | 2061.5 | 2172.6 | 2259.8 | 2237.1 | 2046.0 | 2016.1 | 1706.8 |
| 22.5° | 2046.0 | 2052.0 | 2050.8 | 2078.2 | 2118.9 | 2195.3 | 2302.8 | 2358.9 | 2177.4 | 2143.9 | 1802.3 |
| 25° | 2272.9 | 2268.2 | 2227.5 | 2214.4 | 2225.2 | 2274.1 | 2360.1 | 2476.0 | 2314.7 | 2281.3 | 1902.7 |
| 27.5° | 2581.1 | 2575.1 | 2501.1 | 2434.2 | 2374.5 | 2396.0 | 2441.3 | 2570.3 | 2454.5 | 2416.3 | 1998.2 |
| 30° | 2910.7 | 2903.6 | 2817.6 | 2708.9 | 2576.3 | 2545.3 | 2539.3 | 2652.7 | 2595.4 | 2554.8 | 2099.7 |
| 32.5° | 3232.0 | 3226.1 | 3134.1 | 3007.5 | 2824.7 | 2731.6 | 2674.2 | 2744.7 | 2755.5 | 2716.1 | 2210.8 |
| 35° | 3524.7 | 3524.7 | 3445.8 | 3295.3 | 3088.7 | 2947.8 | 2853.4 | 2858.2 | 2939.4 | 2894.0 | 2337.4 |
| 37.5° | 3785.0 | 3783.8 | 3697.8 | 3549.7 | 3351.5 | 3190.2 | 3073.2 | 2995.5 | 3115.0 | 3075.6 | 2470.0 |
| 40° | 3991.7 | 3983.3 | 3920.0 | 3791.0 | 3591.5 | 3431.5 | 3313.2 | 3156.8 | 3310.9 | 3275.0 | 2610.9 |
| 42.5° | 4142.2 | 4137.4 | 4094.4 | 3982.1 | 3792.2 | 3641.7 | 3560.5 | 3359.8 | 3533.0 | 3497.2 | 2775.8 |
| 45° | 4200.7 | 4210.2 | 4210.2 | 4103.9 | 3953.4 | 3816.1 | 3780.3 | 3583.2 | 3773.1 | 3737.3 | 2952.5 |
| 47.5° | 4106.3 | 4131.4 | 4182.8 | 4189.9 | 4057.4 | 3964.2 | 3976.1 | 3807.7 | 4020.3 | 4001.2 | 3146.0 |
| 50° | 3811.3 | 3857.9 | 3970.2 | 4173.2 | 4099.2 | 4077.7 | 4143.4 | 4037.0 | 4285.5 | 4279.5 | 3381.3 |
| 52.5° | 3050.5 | 3163.9 | 3513.9 | 3878.2 | 4070.5 | 4130.2 | 4309.4 | 4295.0 | 4627.1 | 4636.6 | 3688.3 |
| 55° | 2339.8 | 2382.8 | 2787.7 | 3407.6 | 3894.9 | 4113.5 | 4420.4 | 4547.1 | 4997.3 | 5009.3 | 3970.2 |
| 57.5° | 1891.9 | 1920.6 | 2141.5 | 2787.7 | 3494.8 | 4022.7 | 4507.6 | 4694.0 | 5281.6 | 5312.7 | 4221.0 |
| 60° | 1499.0 | 1540.8 | 1688.9 | 2133.2 | 2934.6 | 3804.1 | 4568.6 | 4857.6 | 5587.4 | 5634.0 | 4520.8 |
| 62.5° | 1114.4 | 1134.7 | 1274.4 | 1580.2 | 2323.1 | 3411.2 | 4536.3 | 5035.6 | 5962.4 | 6018.5 | 4881.5 |
| 65° | 793.1 | 811.0 | 910.1 | 1123.9 | 1717.5 | 2879.7 | 4348.8 | 5168.1 | 6433.0 | 6490.3 | 5244.6 |
| 67.5° | 593.6 | 600.8 | 656.9 | 785.9 | 1157.4 | 2237.1 | 3969.0 | 5145.4 | 6777.0 | 6828.3 | 5390.3 |
| 70° | 469.4 | 471.8 | 499.3 | 568.5 | 752.5 | 1557.5 | 3303.7 | 4812.2 | 6802.1 | 6847.5 | 5206.4 |
| 72.5° | 389.4 | 388.2 | 403.7 | 437.1 | 524.3 | 985.4 | 2447.3 | 4193.5 | 6479.6 | 6510.6 | 4692.8 |
| 75° | 321.3 | 323.7 | 334.4 | 353.5 | 400.1 | 649.7 | 1586.2 | 3345.5 | 5716.4 | 5682.9 | 3937.9 |
| 77.5° | 269.9 | 268.7 | 273.5 | 290.2 | 323.7 | 467.0 | 929.2 | 2417.5 | 4236.5 | 4219.8 | 2584.7 |
| 80° | 217.4 | 219.8 | 226.9 | 241.3 | 272.3 | 355.9 | 549.4 | 1508.5 | 2272.9 | 2212.0 | 1235.0 |
| 82.5° | 145.7 | 168.4 | 182.7 | 199.5 | 235.3 | 262.8 | 348.8 | 766.8 | 1016.4 | 1000.9 | 560.2 |
| 85° | 69.3 | 92.0 | 136.2 | 155.3 | 191.1 | 164.8 | 236.5 | 365.5 | 508.8 | 502.8 | 201.9 |
| 87.5° | 14.3 | 14.3 | 72.9 | 87.2 | 118.2 | 70.5 | 131.4 | 158.9 | 246.0 | 230.5 | 82.4 |
| 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-S-PA1-60-750-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 | 1135.9 |
| 2.5° | 1141.8 | 1109.6 | 1045.1 | 993.7 | 941.2 | 911.3 | 874.3 | 856.4 | 852.8 | 843.2 | 850.4 |
| 5° | 1162.1 | 1098.8 | 977.0 | 897.0 | 843.2 | 817.0 | 803.8 | 799.0 | 797.9 | 795.5 | 795.5 |
| 7.5° | 1189.6 | 1092.9 | 934.0 | 852.8 | 818.2 | 809.8 | 813.4 | 820.5 | 821.7 | 824.1 | 822.9 |
| 10° | 1223.1 | 1094.1 | 910.1 | 842.0 | 825.3 | 826.5 | 838.5 | 848.0 | 852.8 | 856.4 | 855.2 |
| 12.5° | 1269.6 | 1108.4 | 906.5 | 849.2 | 842.0 | 846.8 | 858.8 | 868.3 | 873.1 | 874.3 | 874.3 |
| 15° | 1330.6 | 1138.3 | 914.9 | 864.7 | 858.8 | 862.4 | 869.5 | 873.1 | 874.3 | 873.1 | 873.1 |
| 17.5° | 1397.4 | 1174.1 | 926.8 | 874.3 | 864.7 | 861.2 | 858.8 | 855.2 | 848.0 | 843.2 | 843.2 |
| 20° | 1461.9 | 1206.3 | 932.8 | 873.1 | 856.4 | 842.0 | 827.7 | 809.8 | 797.9 | 788.3 | 788.3 |
| 22.5° | 1526.4 | 1236.2 | 932.8 | 860.0 | 833.7 | 806.2 | 776.4 | 747.7 | 729.8 | 717.8 | 717.8 |
| 25° | 1594.5 | 1264.9 | 925.7 | 837.3 | 797.9 | 758.4 | 717.8 | 682.0 | 664.1 | 652.1 | 649.7 |
| 27.5° | 1651.8 | 1281.6 | 906.5 | 805.0 | 753.7 | 703.5 | 656.9 | 619.9 | 606.8 | 596.0 | 596.0 |
| 30° | 1712.8 | 1292.3 | 870.7 | 763.2 | 703.5 | 646.2 | 598.4 | 568.5 | 554.2 | 538.7 | 537.5 |
| 32.5° | 1780.8 | 1299.5 | 830.1 | 719.0 | 652.1 | 591.2 | 550.6 | 526.7 | 495.7 | 479.0 | 476.6 |
| 35° | 1859.7 | 1309.1 | 787.1 | 668.9 | 600.8 | 545.8 | 521.9 | 482.5 | 452.7 | 438.3 | 437.1 |
| 37.5° | 1943.3 | 1316.2 | 740.5 | 624.7 | 554.2 | 516.0 | 492.1 | 445.5 | 419.2 | 397.7 | 395.3 |
| 40° | 2031.7 | 1316.2 | 692.7 | 581.7 | 517.2 | 502.8 | 457.5 | 415.6 | 371.5 | 360.7 | 358.3 |
| 42.5° | 2129.6 | 1313.8 | 645.0 | 539.9 | 482.5 | 473.0 | 437.1 | 393.0 | 370.3 | 360.7 | 358.3 |
| 45° | 2233.5 | 1305.5 | 599.6 | 492.1 | 446.7 | 427.6 | 400.1 | 388.2 | 378.6 | 378.6 | 378.6 |
| 47.5° | 2351.8 | 1298.3 | 548.2 | 449.1 | 420.4 | 398.9 | 378.6 | 371.5 | 370.3 | 373.8 | 377.4 |
| 50° | 2503.4 | 1295.9 | 505.2 | 418.0 | 400.1 | 375.0 | 372.7 | 366.7 | 367.9 | 367.9 | 367.9 |
| 52.5° | 2687.4 | 1274.4 | 464.6 | 395.3 | 379.8 | 350.0 | 357.1 | 363.1 | 365.5 | 364.3 | 363.1 |
| 55° | 2822.4 | 1236.2 | 430.0 | 379.8 | 365.5 | 340.4 | 350.0 | 359.5 | 361.9 | 358.3 | 358.3 |
| 57.5° | 2944.2 | 1182.4 | 402.5 | 367.9 | 355.9 | 334.4 | 345.2 | 354.7 | 352.3 | 351.2 | 350.0 |
| 60° | 3083.9 | 1131.1 | 381.0 | 361.9 | 346.4 | 332.0 | 341.6 | 347.6 | 344.0 | 341.6 | 340.4 |
| 62.5° | 3235.6 | 1080.9 | 365.5 | 361.9 | 339.2 | 330.8 | 338.0 | 340.4 | 333.2 | 330.8 | 330.8 |
| 65° | 3306.1 | 1002.1 | 348.8 | 361.9 | 335.6 | 328.5 | 330.8 | 328.5 | 321.3 | 321.3 | 320.1 |
| 67.5° | 3190.2 | 871.9 | 327.3 | 357.1 | 340.4 | 324.9 | 320.1 | 316.5 | 308.2 | 308.2 | 305.8 |
| 70° | 2870.1 | 716.6 | 296.2 | 341.6 | 341.6 | 323.7 | 305.8 | 297.4 | 287.8 | 291.4 | 286.7 |
| 72.5° | 2452.1 | 568.5 | 258.0 | 315.3 | 334.4 | 322.5 | 290.2 | 277.1 | 268.7 | 272.3 | 265.2 |
| 75° | 1986.3 | 440.7 | 212.6 | 273.5 | 316.5 | 316.5 | 274.7 | 256.8 | 247.2 | 247.2 | 238.9 |
| 77.5° | 1266.1 | 326.1 | 173.2 | 226.9 | 284.3 | 308.2 | 261.6 | 234.1 | 219.8 | 216.2 | 210.2 |
| 80° | 627.1 | 229.3 | 142.1 | 180.4 | 242.5 | 289.0 | 252.0 | 207.8 | 187.5 | 180.4 | 169.6 |
| 82.5° | 333.2 | 158.9 | 113.5 | 140.9 | 193.5 | 260.4 | 240.1 | 179.2 | 154.1 | 143.3 | 131.4 |
| 85° | 149.3 | 97.9 | 90.8 | 107.5 | 146.9 | 213.8 | 216.2 | 146.9 | 118.2 | 140.9 | 103.9 |
| 87.5° | 54.9 | 44.2 | 44.2 | 54.9 | 84.8 | 89.6 | 152.9 | 94.4 | 75.2 | 51.4 | 40.6 |
| 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)