

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: P397984

Luminaire Tested: **ARCH-S-PA1-70-730-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397984
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-730-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9112 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 74
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

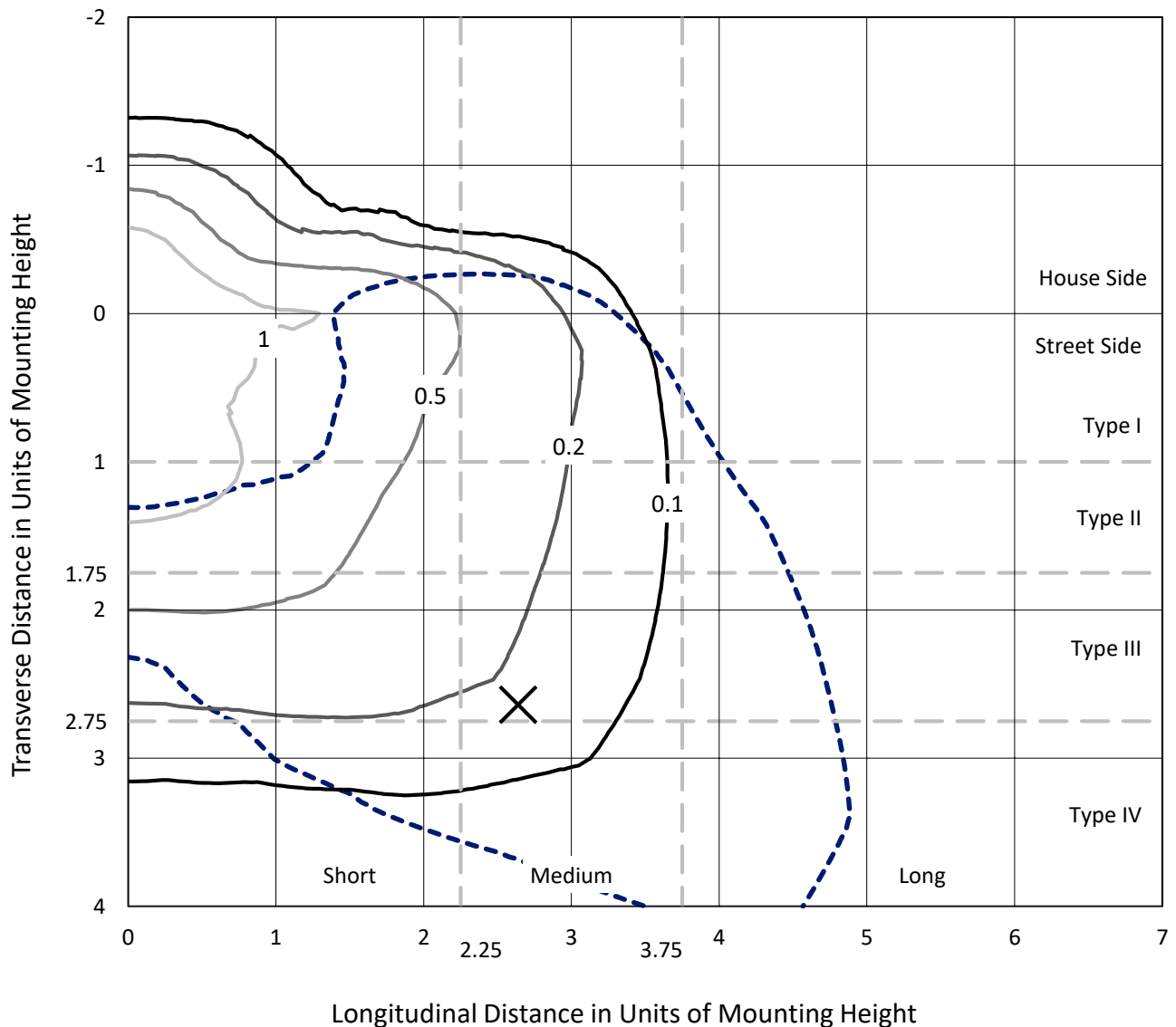


REPORT NUMBER: P397984

CATALOG NUMBER: ARCH-S-PA1-70-730-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

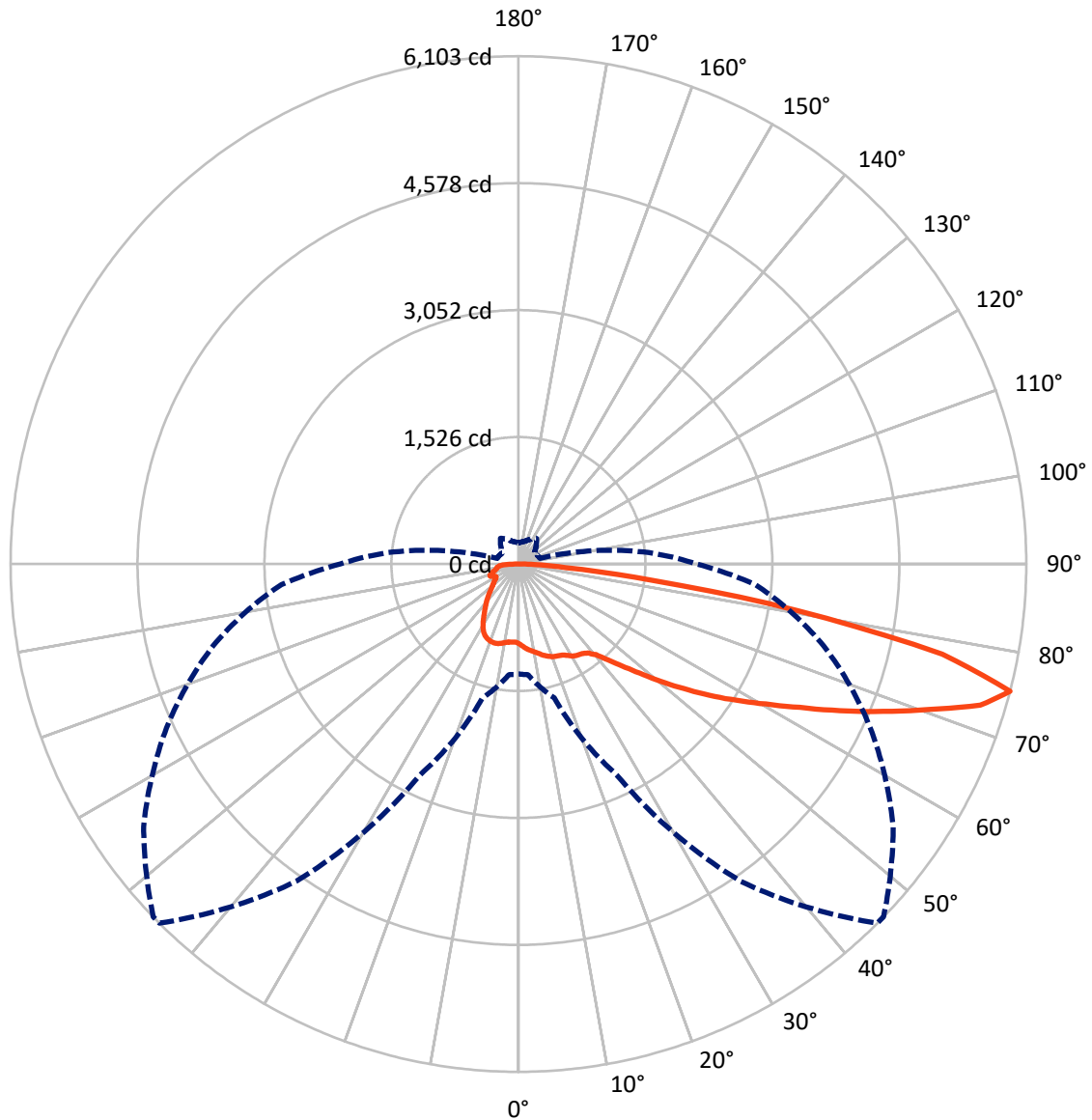


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2013.7 | 0.0 | 2013.7 |
| | % Fixture | 22.1 | 0.0 | 22.1 |
| Street Side | Lumens | 7098.3 | 0.0 | 7098.3 |
| | % Fixture | 77.9 | 0.0 | 77.9 |
| Total | Lumens | 9112.0 | 0.0 | 9112.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 94.7 | 1.0 |
| 10°-20° | 301.2 | 3.3 |
| 20°-30° | 513.5 | 5.6 |
| 30°-40° | 719.4 | 7.9 |
| 40°-50° | 1057.0 | 11.6 |
| 50°-60° | 1682.2 | 18.5 |
| 60°-70° | 2392.9 | 26.3 |
| 70°-80° | 2003.6 | 22.0 |
| 80°-90° | 347.7 | 3.8 |
| 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° | 9112.0 | 100.0 |
| 0°-180° | 9112.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P397984

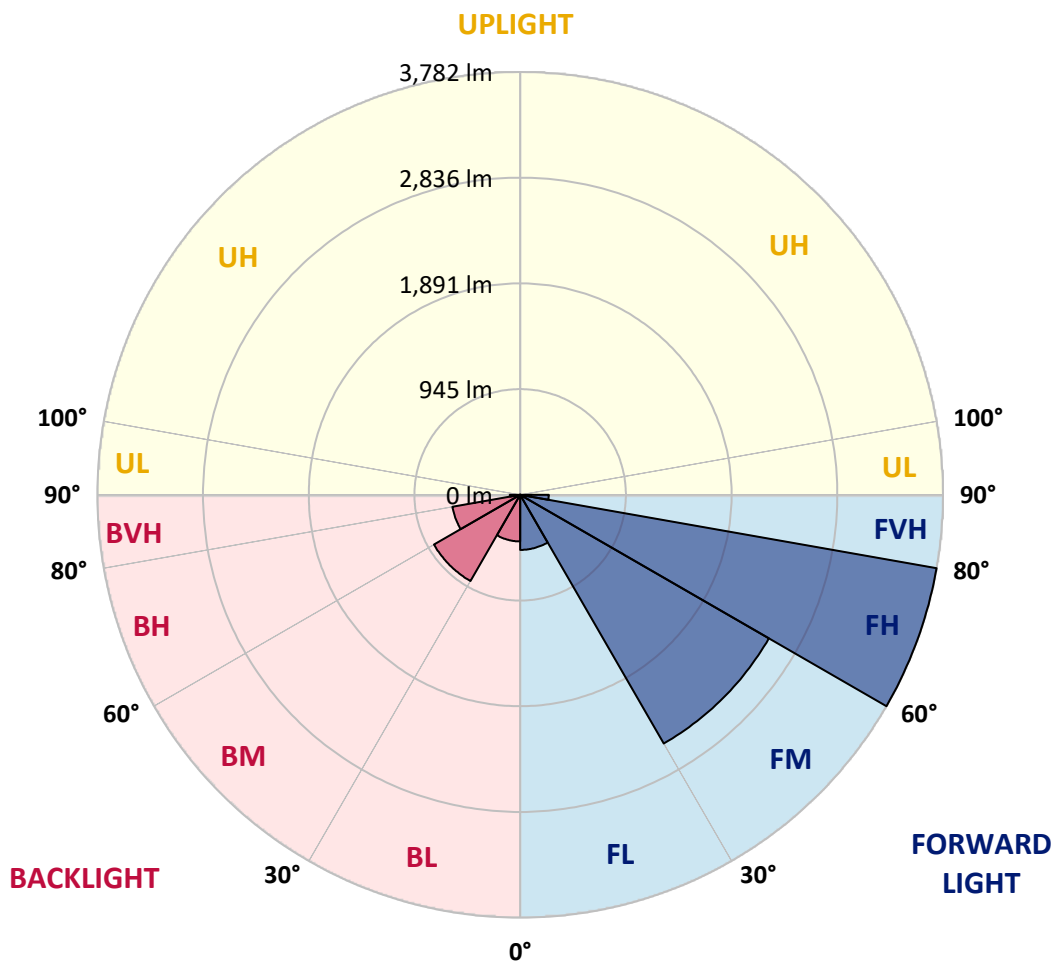
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 492.6 | 5.4 | | | |
| FM (30°-60°) | 2568.4 | 28.2 | | | |
| FH (60°-80°) | 3781.7 | 41.5 | | | G2/5000 |
| FVH (80°-90°) | 255.6 | 2.8 | | | G3/500 |
| BL (0°-30°) | 416.8 | 4.6 | B1/500 | | |
| BM (30°-60°) | 890.1 | 9.8 | B1/1000 | | |
| BH (60°-80°) | 614.7 | 6.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 92.1 | 1.0 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Medium





REPORT NUMBER: P397984

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 |
| 2.5° | 1011.7 | 1006.9 | 1004.4 | 1004.4 | 994.7 | 988.6 | 987.4 | 978.9 | 971.6 | 964.3 | 958.2 |
| 5° | 1070.2 | 1066.5 | 1059.2 | 1053.1 | 1039.7 | 1022.7 | 1020.3 | 1002.0 | 983.7 | 966.7 | 952.1 |
| 7.5° | 1123.8 | 1116.5 | 1107.9 | 1095.8 | 1073.8 | 1050.7 | 1047.1 | 1021.5 | 995.9 | 970.4 | 950.9 |
| 10° | 1168.8 | 1161.5 | 1149.3 | 1132.3 | 1104.3 | 1076.3 | 1072.6 | 1045.8 | 1019.1 | 988.6 | 960.6 |
| 12.5° | 1211.4 | 1205.3 | 1187.1 | 1163.9 | 1131.1 | 1105.5 | 1101.8 | 1078.7 | 1050.7 | 1016.6 | 980.1 |
| 15° | 1247.9 | 1241.9 | 1222.4 | 1195.6 | 1157.8 | 1138.4 | 1133.5 | 1111.6 | 1083.6 | 1047.1 | 1009.3 |
| 17.5° | 1266.2 | 1266.2 | 1245.5 | 1216.3 | 1181.0 | 1166.4 | 1162.7 | 1135.9 | 1110.4 | 1075.1 | 1037.3 |
| 20° | 1272.3 | 1274.7 | 1260.1 | 1224.8 | 1194.4 | 1188.3 | 1184.6 | 1162.7 | 1133.5 | 1099.4 | 1064.1 |
| 22.5° | 1275.9 | 1280.8 | 1268.6 | 1228.5 | 1202.9 | 1199.2 | 1196.8 | 1182.2 | 1159.1 | 1126.2 | 1090.9 |
| 25° | 1288.1 | 1288.1 | 1279.6 | 1234.6 | 1213.9 | 1212.6 | 1212.6 | 1204.1 | 1188.3 | 1160.3 | 1125.0 |
| 27.5° | 1306.4 | 1305.2 | 1294.2 | 1247.9 | 1238.2 | 1241.9 | 1240.6 | 1239.4 | 1228.5 | 1200.5 | 1162.7 |
| 30° | 1336.8 | 1336.8 | 1324.6 | 1274.7 | 1268.6 | 1284.5 | 1285.7 | 1288.1 | 1271.1 | 1227.2 | 1196.8 |
| 32.5° | 1383.1 | 1378.2 | 1366.0 | 1301.5 | 1291.8 | 1306.4 | 1308.8 | 1307.6 | 1293.0 | 1251.6 | 1237.0 |
| 35° | 1525.5 | 1514.6 | 1470.7 | 1361.2 | 1312.5 | 1321.0 | 1322.2 | 1328.3 | 1330.7 | 1297.9 | 1290.6 |
| 37.5° | 1775.1 | 1760.5 | 1693.6 | 1502.4 | 1378.2 | 1357.5 | 1356.3 | 1372.1 | 1385.5 | 1356.3 | 1356.3 |
| 40° | 2046.6 | 2034.5 | 1995.5 | 1745.9 | 1500.0 | 1431.8 | 1426.9 | 1441.5 | 1458.6 | 1437.9 | 1444.0 |
| 42.5° | 2280.4 | 2290.1 | 2293.8 | 2004.0 | 1682.6 | 1570.6 | 1557.2 | 1536.5 | 1563.3 | 1545.0 | 1569.4 |
| 45° | 2455.7 | 2450.8 | 2517.8 | 2268.2 | 1918.8 | 1744.7 | 1726.4 | 1670.4 | 1704.5 | 1703.3 | 1756.9 |
| 47.5° | 2642.0 | 2633.5 | 2661.5 | 2516.6 | 2187.9 | 1957.7 | 1929.7 | 1847.0 | 1898.1 | 1933.4 | 2022.3 |
| 50° | 2818.5 | 2821.0 | 2830.7 | 2712.6 | 2480.1 | 2217.1 | 2181.8 | 2071.0 | 2144.0 | 2218.3 | 2343.7 |
| 52.5° | 3048.6 | 3031.6 | 3019.4 | 2941.5 | 2807.6 | 2487.4 | 2464.2 | 2337.6 | 2439.9 | 2527.5 | 2694.3 |
| 55° | 3249.5 | 3238.6 | 3231.3 | 3227.6 | 3081.5 | 2785.7 | 2761.3 | 2629.8 | 2777.1 | 2839.2 | 3085.2 |
| 57.5° | 3463.8 | 3457.7 | 3496.7 | 3558.8 | 3500.3 | 3088.8 | 3063.2 | 2936.6 | 3101.0 | 3144.8 | 3508.9 |
| 60° | 3620.9 | 3624.5 | 3731.7 | 3889.9 | 3849.8 | 3417.5 | 3387.1 | 3275.1 | 3416.3 | 3455.3 | 3932.5 |
| 62.5° | 3622.1 | 3658.6 | 3907.0 | 4190.7 | 4236.9 | 3796.2 | 3760.9 | 3639.1 | 3740.2 | 3740.2 | 4312.4 |
| 65° | 3276.3 | 3317.7 | 3875.3 | 4264.9 | 4629.0 | 4246.7 | 4212.6 | 4021.4 | 4059.2 | 4008.0 | 4669.1 |
| 67.5° | 2931.8 | 2980.5 | 3505.2 | 4271.0 | 4904.1 | 4728.8 | 4688.6 | 4403.7 | 4339.2 | 4210.1 | 4918.7 |
| 70° | 2702.9 | 2737.0 | 3175.3 | 4191.9 | 5069.7 | 5232.8 | 5202.4 | 4766.5 | 4559.6 | 4379.4 | 4866.4 |
| 72.5° | 2275.5 | 2263.3 | 2682.2 | 3815.7 | 5162.2 | 5805.1 | 5779.5 | 5161.0 | 4750.7 | 4299.0 | 4150.5 |
| 75° | 1321.0 | 1335.6 | 1664.3 | 2795.4 | 4653.3 | 6103.4 | 6100.9 | 5498.3 | 4666.7 | 3797.4 | 2859.9 |
| 77.5° | 381.1 | 392.0 | 546.7 | 1228.5 | 2942.7 | 5206.1 | 5372.9 | 5028.3 | 3944.7 | 2706.5 | 1482.9 |
| 80° | 166.8 | 175.3 | 237.4 | 409.1 | 1267.4 | 3400.5 | 3546.6 | 3400.5 | 2379.0 | 1241.9 | 582.0 |
| 82.5° | 98.6 | 104.7 | 154.6 | 253.2 | 607.5 | 1618.1 | 1815.3 | 1585.2 | 1026.4 | 527.2 | 241.1 |
| 85° | 56.0 | 58.4 | 88.9 | 160.7 | 382.3 | 566.1 | 635.5 | 595.4 | 500.4 | 299.5 | 126.6 |
| 87.5° | 25.6 | 26.8 | 43.8 | 75.5 | 214.3 | 191.1 | 198.5 | 263.0 | 289.8 | 182.6 | 63.3 |
| 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-PA1-70-730-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|-------|-------|-------|--------|--------|--------|
| 0° | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 | 957.0 |
| 2.5° | 955.7 | 952.1 | 944.8 | 942.3 | 938.7 | 939.9 | 941.1 | 941.1 | 942.3 | 938.7 | 938.7 |
| 5° | 946.0 | 939.9 | 932.6 | 932.6 | 932.6 | 942.3 | 950.9 | 955.7 | 958.2 | 958.2 | 955.7 |
| 7.5° | 942.3 | 935.0 | 926.5 | 929.0 | 931.4 | 943.6 | 959.4 | 975.2 | 980.1 | 980.1 | 977.7 |
| 10° | 949.7 | 942.3 | 936.3 | 939.9 | 946.0 | 955.7 | 967.9 | 982.5 | 994.7 | 995.9 | 994.7 |
| 12.5° | 966.7 | 958.2 | 952.1 | 959.4 | 966.7 | 972.8 | 978.9 | 985.0 | 1000.8 | 1003.2 | 1003.2 |
| 15° | 994.7 | 986.2 | 978.9 | 985.0 | 987.4 | 987.4 | 987.4 | 987.4 | 1003.2 | 1005.7 | 1005.7 |
| 17.5° | 1022.7 | 1015.4 | 1008.1 | 1009.3 | 1002.0 | 992.3 | 988.6 | 987.4 | 995.9 | 1003.2 | 1004.4 |
| 20° | 1049.5 | 1043.4 | 1036.1 | 1023.9 | 1005.7 | 987.4 | 981.3 | 981.3 | 986.2 | 997.1 | 997.1 |
| 22.5° | 1078.7 | 1071.4 | 1059.2 | 1031.2 | 1000.8 | 975.2 | 969.1 | 972.8 | 978.9 | 993.5 | 992.3 |
| 25° | 1111.6 | 1101.8 | 1081.1 | 1028.8 | 985.0 | 954.5 | 955.7 | 966.7 | 977.7 | 993.5 | 993.5 |
| 27.5° | 1148.1 | 1134.7 | 1093.3 | 1009.3 | 949.7 | 920.4 | 931.4 | 957.0 | 972.8 | 989.8 | 992.3 |
| 30° | 1188.3 | 1176.1 | 1103.1 | 975.2 | 892.4 | 865.6 | 892.4 | 933.8 | 958.2 | 974.0 | 977.7 |
| 32.5° | 1237.0 | 1227.2 | 1111.6 | 931.4 | 818.2 | 795.0 | 834.0 | 885.1 | 924.1 | 942.3 | 946.0 |
| 35° | 1297.9 | 1288.1 | 1122.5 | 881.5 | 748.8 | 724.4 | 759.7 | 812.1 | 863.2 | 886.3 | 893.6 |
| 37.5° | 1377.0 | 1362.4 | 1132.3 | 827.9 | 690.3 | 662.3 | 679.4 | 726.9 | 773.1 | 804.8 | 813.3 |
| 40° | 1478.1 | 1454.9 | 1140.8 | 767.0 | 639.2 | 607.5 | 613.6 | 636.8 | 663.5 | 691.5 | 702.5 |
| 42.5° | 1620.5 | 1574.2 | 1142.0 | 702.5 | 586.8 | 557.6 | 555.2 | 562.5 | 562.5 | 562.5 | 566.1 |
| 45° | 1819.0 | 1731.3 | 1144.5 | 641.6 | 533.3 | 502.8 | 495.5 | 493.1 | 474.8 | 439.5 | 437.1 |
| 47.5° | 2069.8 | 1937.1 | 1155.4 | 590.5 | 477.3 | 450.5 | 440.7 | 431.0 | 396.9 | 360.4 | 353.1 |
| 50° | 2391.2 | 2175.7 | 1177.3 | 541.8 | 429.8 | 411.5 | 399.3 | 376.2 | 338.5 | 310.5 | 303.2 |
| 52.5° | 2761.3 | 2459.4 | 1198.0 | 490.7 | 394.5 | 382.3 | 367.7 | 339.7 | 299.5 | 282.5 | 280.0 |
| 55° | 3186.2 | 2775.9 | 1239.4 | 445.6 | 364.0 | 355.5 | 342.1 | 315.3 | 284.9 | 272.7 | 271.5 |
| 57.5° | 3620.9 | 3130.2 | 1297.9 | 405.4 | 334.8 | 329.9 | 329.9 | 306.8 | 287.3 | 282.5 | 282.5 |
| 60° | 4039.7 | 3434.6 | 1252.8 | 367.7 | 308.0 | 310.5 | 333.6 | 327.5 | 312.9 | 319.0 | 322.6 |
| 62.5° | 4364.8 | 3613.6 | 1016.6 | 337.2 | 288.5 | 310.5 | 370.1 | 370.1 | 353.1 | 350.6 | 350.6 |
| 65° | 4503.6 | 3611.1 | 714.7 | 314.1 | 281.2 | 340.9 | 412.7 | 393.3 | 348.2 | 331.2 | 327.5 |
| 67.5° | 4468.2 | 3452.8 | 493.1 | 298.3 | 278.8 | 372.6 | 432.2 | 377.4 | 326.3 | 311.7 | 300.7 |
| 70° | 4157.8 | 3118.0 | 379.9 | 283.7 | 275.2 | 359.2 | 426.1 | 359.2 | 309.2 | 295.9 | 286.1 |
| 72.5° | 3354.2 | 2500.8 | 315.3 | 269.1 | 260.5 | 332.4 | 405.4 | 342.1 | 295.9 | 281.2 | 271.5 |
| 75° | 2139.2 | 1573.0 | 266.6 | 249.6 | 232.5 | 298.3 | 377.4 | 325.1 | 281.2 | 261.8 | 254.5 |
| 77.5° | 1028.8 | 678.2 | 232.5 | 226.5 | 209.4 | 276.4 | 349.4 | 303.2 | 261.8 | 245.9 | 241.1 |
| 80° | 416.4 | 310.5 | 202.1 | 203.3 | 192.4 | 263.0 | 329.9 | 282.5 | 242.3 | 225.2 | 216.7 |
| 82.5° | 216.7 | 180.2 | 170.5 | 175.3 | 175.3 | 250.8 | 315.3 | 265.4 | 225.2 | 217.9 | 189.9 |
| 85° | 116.9 | 112.0 | 131.5 | 141.2 | 152.2 | 226.5 | 293.4 | 247.2 | 205.8 | 176.5 | 170.5 |
| 87.5° | 57.2 | 73.1 | 74.3 | 85.2 | 105.9 | 181.4 | 247.2 | 207.0 | 171.7 | 142.4 | 140.0 |
| 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)