

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: P265992

Luminaire Tested: **ARCH-AF24-100-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-100-D-U-T4W-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8562.5 lumens
Efficiency: N/A
Efficacy: 89.2 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

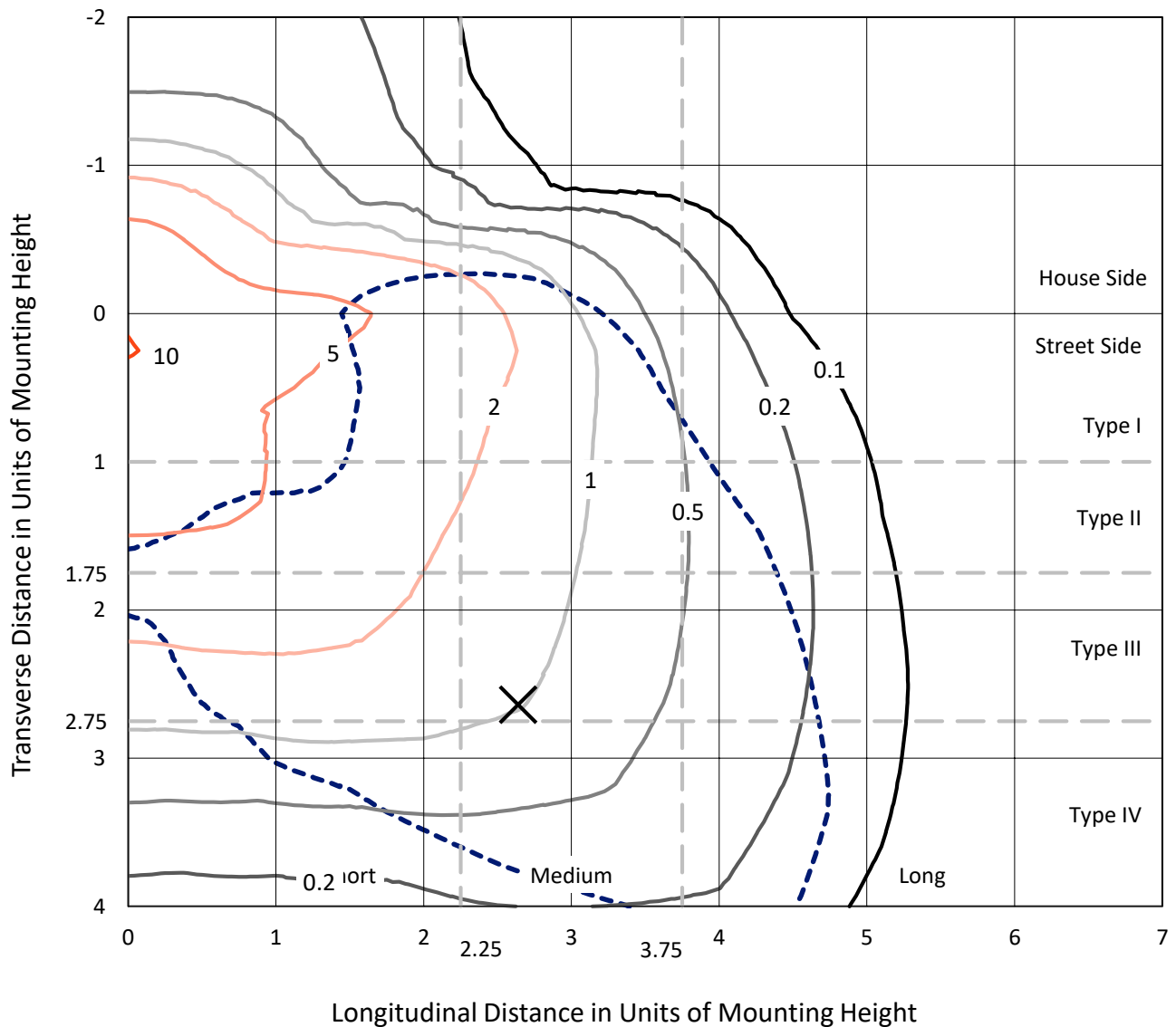
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

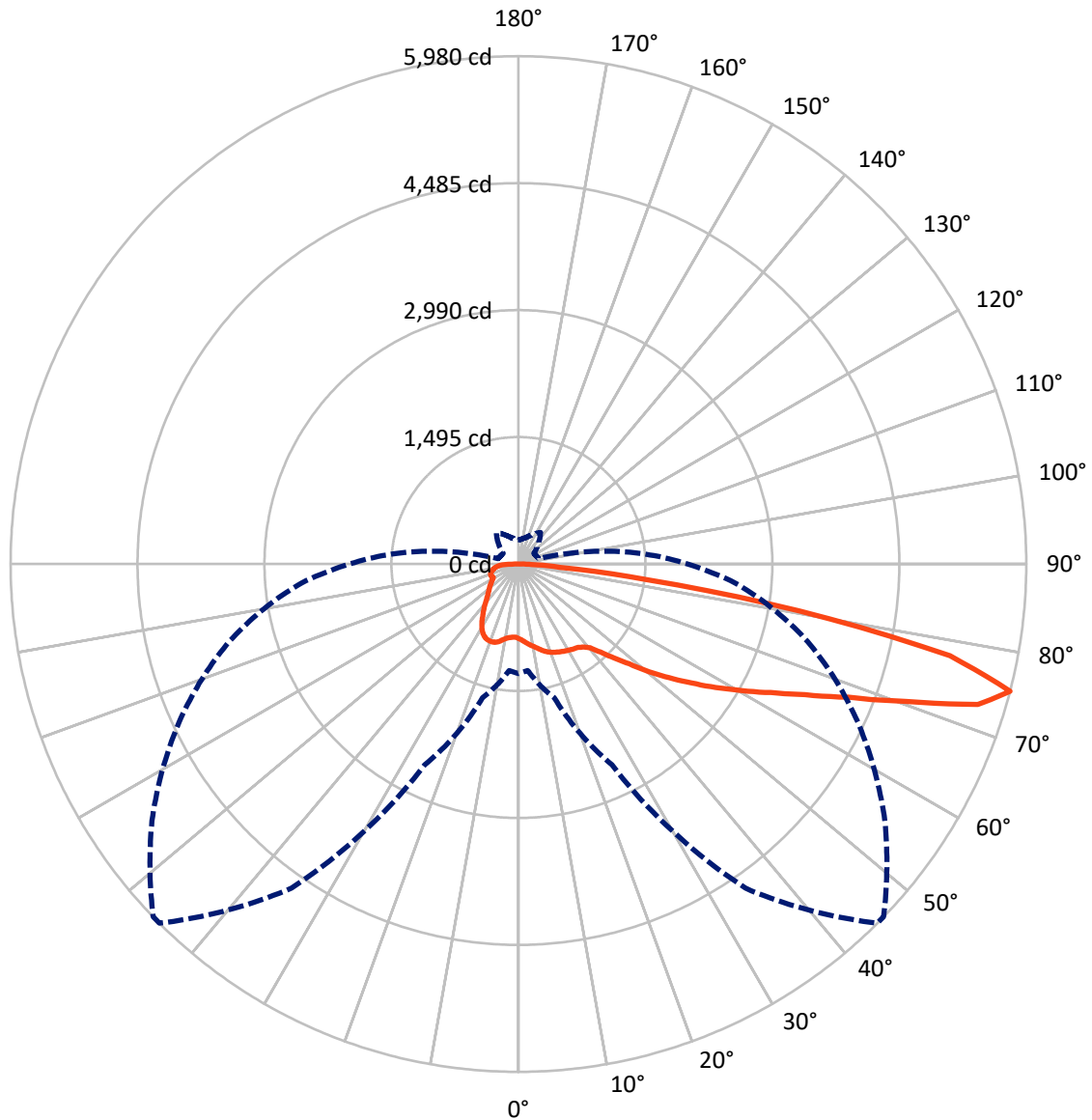
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.3 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 | 1983.6 | 0.0 | 1983.6 |
| | % Fixture | 23.2 | 0.0 | 23.2 |
| Street Side | Lumens | 6578.9 | 0.0 | 6578.9 |
| | % Fixture | 76.8 | 0.0 | 76.8 |
| Total | Lumens | 8562.5 | 0.0 | 8562.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 87.0 | 1.0 |
| 10°-20° | 281.9 | 3.3 |
| 20°-30° | 483.7 | 5.6 |
| 30°-40° | 676.5 | 7.9 |
| 40°-50° | 992.4 | 11.6 |
| 50°-60° | 1545.9 | 18.1 |
| 60°-70° | 2224.5 | 26.0 |
| 70°-80° | 1937.7 | 22.6 |
| 80°-90° | 332.8 | 3.9 |
| 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° | 8562.5 | 100.0 |
| 0°-180° | 8562.5 | 100.0 |

Coefficient of Utilization



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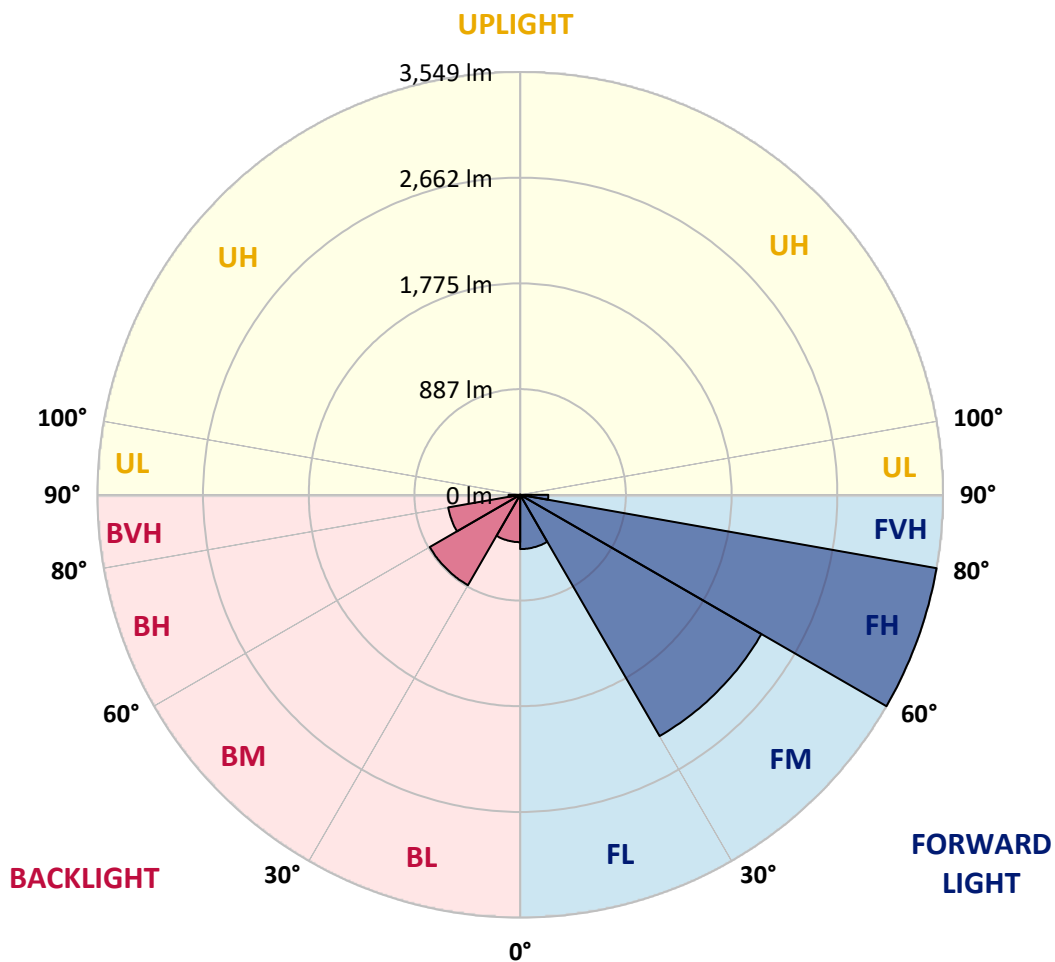
CATALOG NUMBER: ARCH-AF24-100-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 455.3 | 5.3 | | | |
| FM | (30°-60°) | 2338.2 | 27.3 | | | |
| FH | (60°-80°) | 3549.2 | 41.5 | | | G2/5000 |
| FVH | (80°-90°) | 236.1 | 2.8 | | | G3/500 |
| BL | (0°-30°) | 397.3 | 4.6 | B1/500 | | |
| BM | (30°-60°) | 876.6 | 10.2 | B1/1000 | | |
| BH | (60°-80°) | 613.0 | 7.2 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 96.7 | 1.1 | | | 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





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 |
| 2.5° | 921.1 | 914.5 | 914.5 | 909.4 | 909.4 | 901.1 | 897.8 | 896.1 | 887.7 | 882.8 | 877.7 |
| 5° | 974.4 | 966.0 | 964.4 | 952.7 | 947.7 | 929.3 | 927.7 | 916.1 | 901.1 | 886.1 | 874.4 |
| 7.5° | 1022.7 | 1017.7 | 1009.3 | 997.7 | 982.7 | 959.4 | 957.8 | 939.4 | 914.5 | 894.4 | 877.7 |
| 10° | 1057.7 | 1054.3 | 1042.7 | 1027.8 | 1011.0 | 987.6 | 986.0 | 966.0 | 936.0 | 912.8 | 889.4 |
| 12.5° | 1099.3 | 1094.2 | 1079.4 | 1059.3 | 1041.0 | 1019.3 | 1017.7 | 1001.0 | 967.7 | 937.7 | 907.7 |
| 15° | 1139.3 | 1132.7 | 1114.3 | 1094.2 | 1074.4 | 1056.0 | 1056.0 | 1037.6 | 1002.7 | 967.7 | 932.7 |
| 17.5° | 1159.3 | 1155.8 | 1137.7 | 1116.0 | 1099.3 | 1086.1 | 1084.3 | 1067.6 | 1032.7 | 996.0 | 957.8 |
| 20° | 1165.9 | 1167.5 | 1150.9 | 1127.6 | 1116.0 | 1109.2 | 1107.6 | 1095.9 | 1057.7 | 1022.7 | 986.0 |
| 22.5° | 1164.3 | 1169.2 | 1155.8 | 1131.0 | 1127.6 | 1127.6 | 1127.6 | 1114.3 | 1084.3 | 1049.3 | 1012.7 |
| 25° | 1170.9 | 1177.6 | 1167.5 | 1137.7 | 1137.7 | 1144.4 | 1144.4 | 1137.7 | 1110.9 | 1081.0 | 1044.3 |
| 27.5° | 1194.2 | 1199.2 | 1191.0 | 1149.2 | 1150.9 | 1160.9 | 1159.3 | 1160.9 | 1144.4 | 1116.0 | 1079.4 |
| 30° | 1222.6 | 1229.2 | 1219.2 | 1167.5 | 1165.9 | 1175.9 | 1175.9 | 1184.2 | 1172.6 | 1142.6 | 1112.6 |
| 32.5° | 1299.2 | 1297.5 | 1265.8 | 1187.6 | 1182.6 | 1192.6 | 1192.6 | 1200.9 | 1194.2 | 1170.9 | 1142.6 |
| 35° | 1527.4 | 1502.3 | 1432.3 | 1252.5 | 1202.7 | 1207.5 | 1207.5 | 1222.6 | 1225.8 | 1207.5 | 1182.6 |
| 37.5° | 1760.6 | 1752.2 | 1699.0 | 1425.8 | 1275.9 | 1239.2 | 1237.5 | 1259.2 | 1274.2 | 1259.2 | 1242.5 |
| 40° | 1995.3 | 1988.8 | 1977.1 | 1657.3 | 1429.2 | 1295.8 | 1290.9 | 1309.2 | 1335.8 | 1325.8 | 1315.8 |
| 42.5° | 2213.7 | 2210.3 | 2221.9 | 1885.5 | 1624.0 | 1417.4 | 1402.4 | 1380.8 | 1419.1 | 1415.8 | 1415.8 |
| 45° | 2385.1 | 2393.4 | 2400.1 | 2098.7 | 1835.4 | 1574.0 | 1555.7 | 1482.5 | 1534.0 | 1547.3 | 1557.3 |
| 47.5° | 2481.7 | 2488.5 | 2511.8 | 2306.8 | 2047.0 | 1755.6 | 1742.3 | 1622.2 | 1690.6 | 1730.6 | 1758.9 |
| 50° | 2619.9 | 2601.8 | 2621.7 | 2510.0 | 2301.8 | 1992.0 | 1955.4 | 1810.5 | 1897.1 | 1967.1 | 2033.8 |
| 52.5° | 2753.2 | 2723.2 | 2739.9 | 2745.0 | 2591.7 | 2223.6 | 2185.2 | 2032.1 | 2140.3 | 2250.3 | 2368.6 |
| 55° | 2873.1 | 2871.5 | 2888.1 | 2973.1 | 2871.5 | 2471.7 | 2428.5 | 2276.8 | 2433.5 | 2551.6 | 2751.6 |
| 57.5° | 2969.7 | 2986.4 | 3059.6 | 3237.9 | 3194.6 | 2741.5 | 2693.3 | 2561.6 | 2746.6 | 2864.9 | 3196.3 |
| 60° | 3083.1 | 3109.8 | 3231.3 | 3462.7 | 3489.5 | 3024.8 | 2974.7 | 2879.8 | 3068.0 | 3187.9 | 3711.0 |
| 62.5° | 3121.3 | 3159.7 | 3409.4 | 3699.3 | 3797.6 | 3334.6 | 3289.6 | 3226.3 | 3406.2 | 3514.3 | 4224.0 |
| 65° | 2866.5 | 2939.9 | 3507.7 | 3820.9 | 4129.0 | 3707.7 | 3669.3 | 3614.4 | 3742.6 | 3814.3 | 4572.1 |
| 67.5° | 2796.6 | 2829.9 | 3316.3 | 3995.8 | 4440.5 | 4187.3 | 4149.0 | 4054.1 | 4057.5 | 4027.5 | 4685.3 |
| 70° | 2698.2 | 2734.9 | 3119.6 | 4127.4 | 4886.9 | 4843.7 | 4796.9 | 4517.0 | 4345.6 | 4164.1 | 4462.2 |
| 72.5° | 2298.6 | 2286.8 | 2688.3 | 3772.6 | 5101.7 | 5656.4 | 5601.4 | 5015.1 | 4558.8 | 4045.7 | 3766.0 |
| 75° | 1290.9 | 1257.5 | 1630.7 | 2609.9 | 4658.7 | 5979.5 | 5977.9 | 5266.7 | 4408.8 | 3524.4 | 2563.4 |
| 77.5° | 374.8 | 364.7 | 537.9 | 1094.2 | 3136.3 | 5195.0 | 5258.3 | 4750.2 | 3679.3 | 2531.8 | 1407.5 |
| 80° | 176.5 | 179.9 | 231.6 | 361.5 | 1339.2 | 3352.8 | 3534.4 | 3128.0 | 2198.6 | 1167.5 | 581.4 |
| 82.5° | 111.6 | 113.2 | 158.2 | 233.2 | 566.3 | 1522.4 | 1672.3 | 1407.5 | 871.0 | 504.7 | 256.5 |
| 85° | 70.0 | 70.0 | 104.9 | 153.3 | 338.1 | 486.3 | 528.1 | 479.6 | 373.1 | 274.8 | 140.0 |
| 87.5° | 38.3 | 38.3 | 63.3 | 88.3 | 185.0 | 156.6 | 161.5 | 191.6 | 233.2 | 168.3 | 70.0 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 | 877.7 |
| 2.5° | 876.0 | 872.8 | 867.9 | 866.1 | 864.4 | 862.8 | 864.4 | 867.9 | 864.4 | 864.4 | 866.1 |
| 5° | 871.0 | 867.9 | 861.1 | 861.1 | 862.8 | 864.4 | 872.8 | 877.7 | 879.4 | 879.4 | 879.4 |
| 7.5° | 871.0 | 866.1 | 861.1 | 862.8 | 866.1 | 872.8 | 886.1 | 894.4 | 901.1 | 902.7 | 902.7 |
| 10° | 879.4 | 872.8 | 869.4 | 872.8 | 882.8 | 887.7 | 901.1 | 914.5 | 922.7 | 926.1 | 926.1 |
| 12.5° | 894.4 | 887.7 | 887.7 | 894.4 | 907.7 | 914.5 | 926.1 | 936.0 | 946.0 | 951.0 | 951.0 |
| 15° | 919.4 | 911.2 | 912.8 | 924.4 | 939.4 | 946.0 | 954.4 | 957.8 | 966.0 | 972.8 | 972.8 |
| 17.5° | 942.7 | 934.3 | 937.7 | 951.0 | 961.0 | 964.4 | 969.5 | 967.7 | 971.1 | 976.1 | 977.7 |
| 20° | 969.5 | 961.0 | 962.8 | 971.1 | 972.8 | 969.5 | 969.5 | 964.4 | 962.8 | 971.1 | 974.4 |
| 22.5° | 996.0 | 987.6 | 986.0 | 980.9 | 972.8 | 964.4 | 959.4 | 954.4 | 951.0 | 959.4 | 962.8 |
| 25° | 1027.8 | 1016.1 | 1007.7 | 986.0 | 964.4 | 949.4 | 942.7 | 939.4 | 937.7 | 946.0 | 949.4 |
| 27.5° | 1062.7 | 1050.9 | 1026.0 | 979.4 | 944.4 | 919.4 | 914.5 | 914.5 | 917.8 | 922.7 | 926.1 |
| 30° | 1095.9 | 1084.3 | 1039.2 | 964.4 | 909.4 | 872.8 | 867.9 | 872.8 | 881.1 | 886.1 | 891.1 |
| 32.5° | 1129.3 | 1117.6 | 1047.7 | 941.1 | 857.8 | 811.2 | 807.8 | 816.1 | 829.5 | 832.8 | 836.1 |
| 35° | 1174.3 | 1162.5 | 1057.7 | 907.7 | 792.8 | 742.9 | 739.6 | 744.5 | 756.3 | 761.1 | 766.2 |
| 37.5° | 1237.5 | 1230.9 | 1072.7 | 871.0 | 732.8 | 678.0 | 667.9 | 664.6 | 671.3 | 669.5 | 676.2 |
| 40° | 1320.8 | 1325.8 | 1099.3 | 822.8 | 674.5 | 617.9 | 596.3 | 586.4 | 579.6 | 566.3 | 572.9 |
| 42.5° | 1442.4 | 1445.7 | 1129.3 | 767.8 | 624.6 | 561.4 | 533.0 | 514.6 | 501.3 | 479.6 | 483.0 |
| 45° | 1620.6 | 1592.3 | 1164.3 | 709.5 | 579.6 | 516.3 | 483.0 | 461.4 | 443.0 | 424.7 | 426.3 |
| 47.5° | 1857.2 | 1770.5 | 1202.7 | 661.2 | 534.6 | 479.6 | 449.7 | 424.7 | 403.1 | 388.1 | 389.8 |
| 50° | 2148.7 | 1992.0 | 1240.9 | 616.2 | 489.7 | 451.4 | 424.7 | 398.0 | 376.4 | 361.5 | 359.9 |
| 52.5° | 2533.4 | 2258.6 | 1265.8 | 566.3 | 444.8 | 426.3 | 403.1 | 378.0 | 351.4 | 333.1 | 331.5 |
| 55° | 2933.1 | 2568.3 | 1287.5 | 506.4 | 401.5 | 398.0 | 386.5 | 358.2 | 326.4 | 303.2 | 299.9 |
| 57.5° | 3372.9 | 2899.8 | 1304.2 | 448.1 | 368.0 | 374.8 | 371.4 | 338.1 | 303.2 | 281.4 | 279.8 |
| 60° | 3772.6 | 3242.9 | 1250.9 | 396.4 | 338.1 | 351.4 | 354.8 | 326.4 | 308.2 | 313.1 | 314.8 |
| 62.5° | 4175.6 | 3507.7 | 1047.7 | 358.2 | 318.1 | 336.4 | 364.7 | 363.2 | 354.8 | 363.2 | 364.7 |
| 65° | 4320.6 | 3562.7 | 742.9 | 326.4 | 298.1 | 343.2 | 396.4 | 393.1 | 354.8 | 339.7 | 336.4 |
| 67.5° | 4238.9 | 3399.5 | 499.6 | 301.6 | 283.1 | 351.4 | 429.7 | 393.1 | 341.4 | 321.5 | 314.8 |
| 70° | 3850.9 | 2998.2 | 366.4 | 276.5 | 269.9 | 349.8 | 448.1 | 391.4 | 334.8 | 313.1 | 304.9 |
| 72.5° | 3071.3 | 2313.6 | 294.9 | 253.1 | 249.9 | 341.4 | 458.0 | 388.1 | 328.2 | 304.9 | 294.9 |
| 75° | 1988.8 | 1439.1 | 248.2 | 229.8 | 219.8 | 328.2 | 453.0 | 378.0 | 319.7 | 289.9 | 283.1 |
| 77.5° | 922.7 | 619.7 | 211.6 | 203.1 | 191.6 | 308.2 | 438.1 | 358.2 | 301.6 | 273.2 | 264.8 |
| 80° | 429.7 | 293.1 | 178.3 | 176.5 | 171.5 | 291.5 | 418.2 | 334.8 | 279.8 | 256.5 | 243.3 |
| 82.5° | 229.8 | 176.5 | 144.8 | 144.8 | 149.8 | 271.5 | 393.1 | 306.5 | 251.5 | 239.8 | 204.9 |
| 85° | 121.6 | 101.6 | 104.9 | 113.2 | 128.3 | 239.8 | 359.9 | 276.5 | 219.8 | 183.3 | 178.3 |
| 87.5° | 61.7 | 64.9 | 64.9 | 76.6 | 98.3 | 194.9 | 296.5 | 228.2 | 186.6 | 149.8 | 146.6 |
| 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)