

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: P398009

Luminaire Tested: **ARCH-S-PA1-70-760-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398009
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-PA1-70-760-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10070 lumens
Efficiency: N/A
Efficacy: 136.1 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

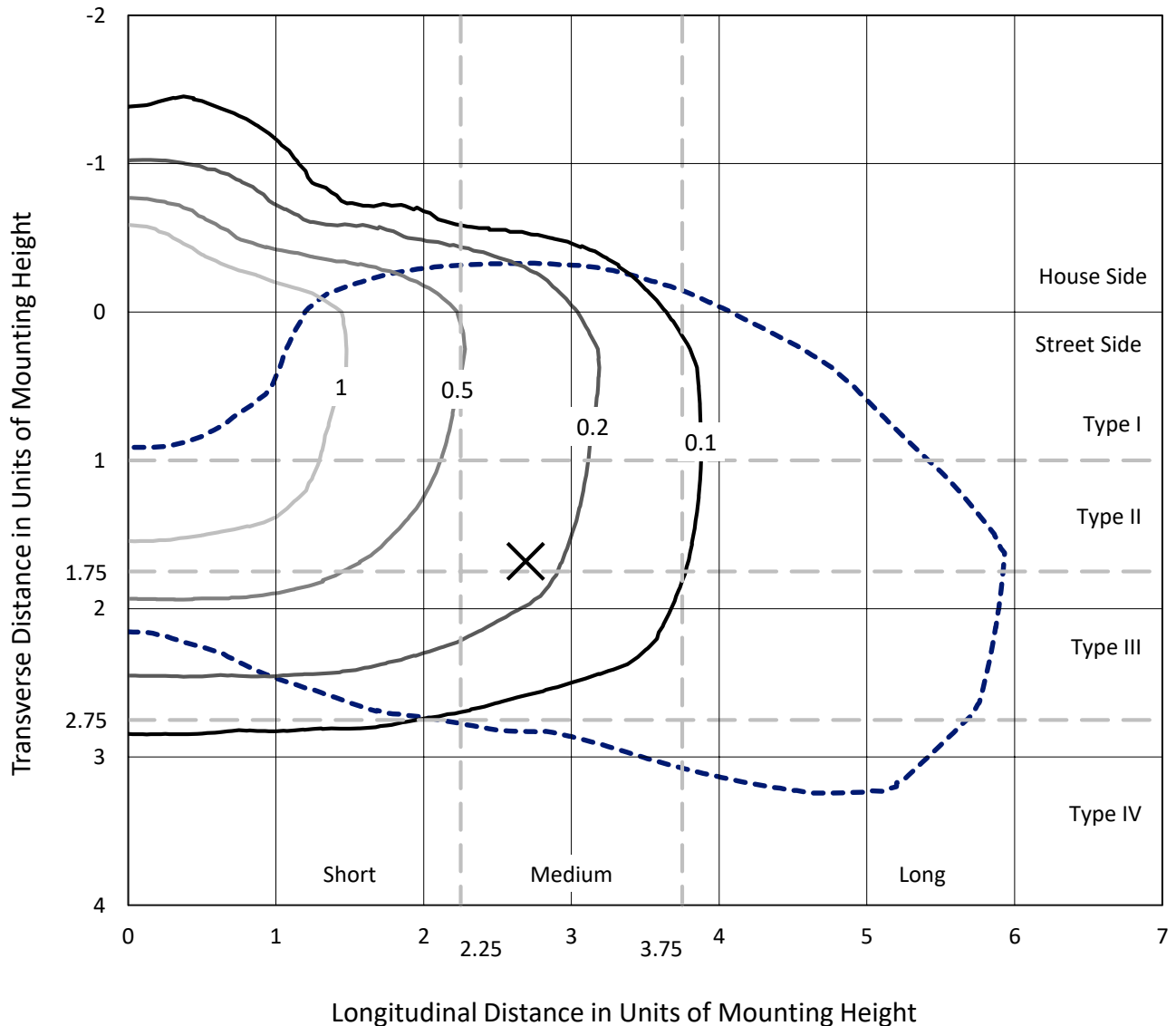


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

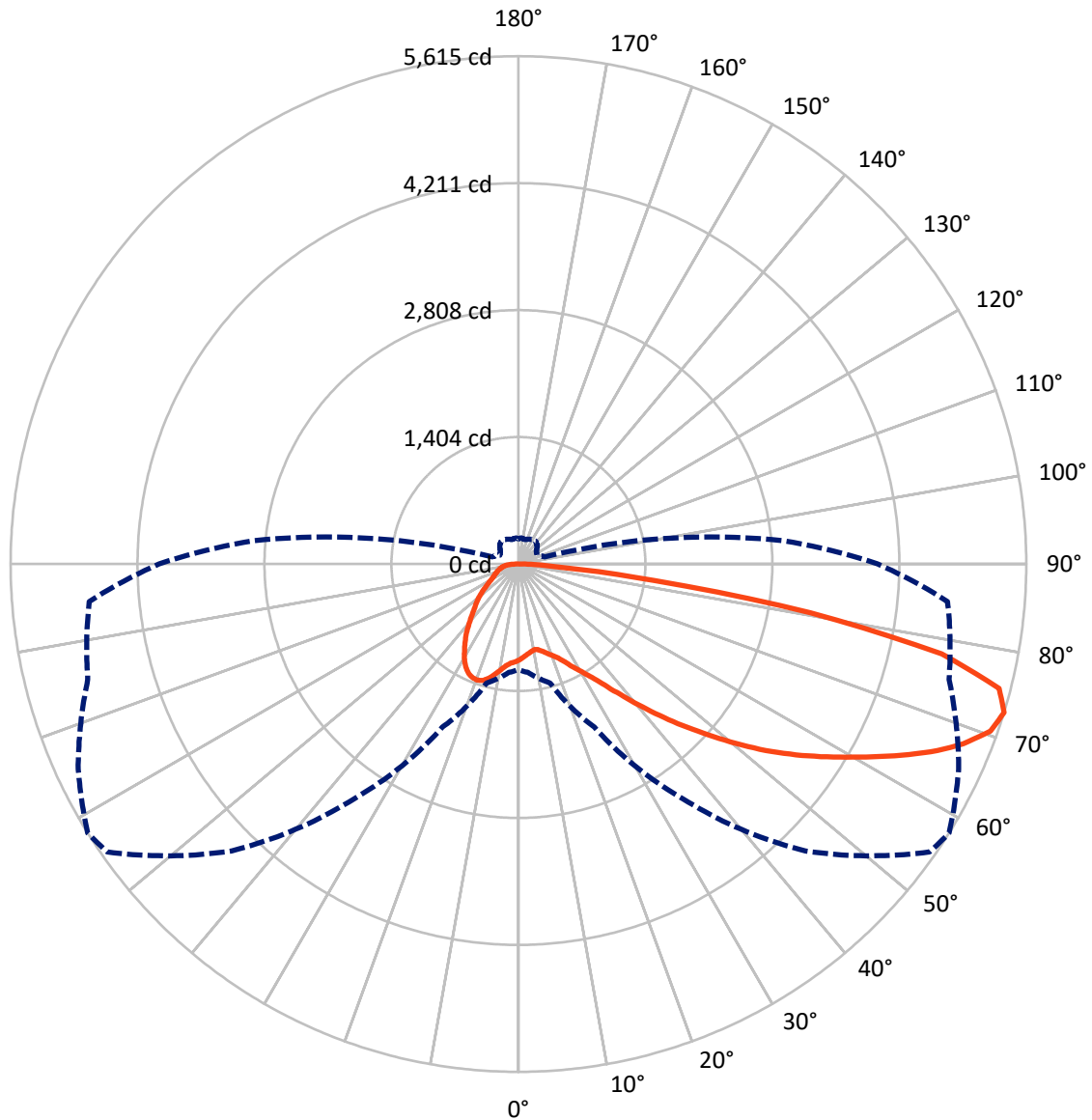


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2283.8 | 0.0 | 2283.8 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 7786.2 | 0.0 | 7786.2 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 10070.0 | 0.0 | 10070.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 102.3 | 1.0 |
| 10°-20° | 324.9 | 3.2 |
| 20°-30° | 582.1 | 5.8 |
| 30°-40° | 875.6 | 8.7 |
| 40°-50° | 1417.9 | 14.1 |
| 50°-60° | 2134.4 | 21.2 |
| 60°-70° | 2512.0 | 24.9 |
| 70°-80° | 1781.2 | 17.7 |
| 80°-90° | 339.4 | 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° | 10070.0 | 100.0 |
| 0°-180° | 10070.0 | 100.0 |



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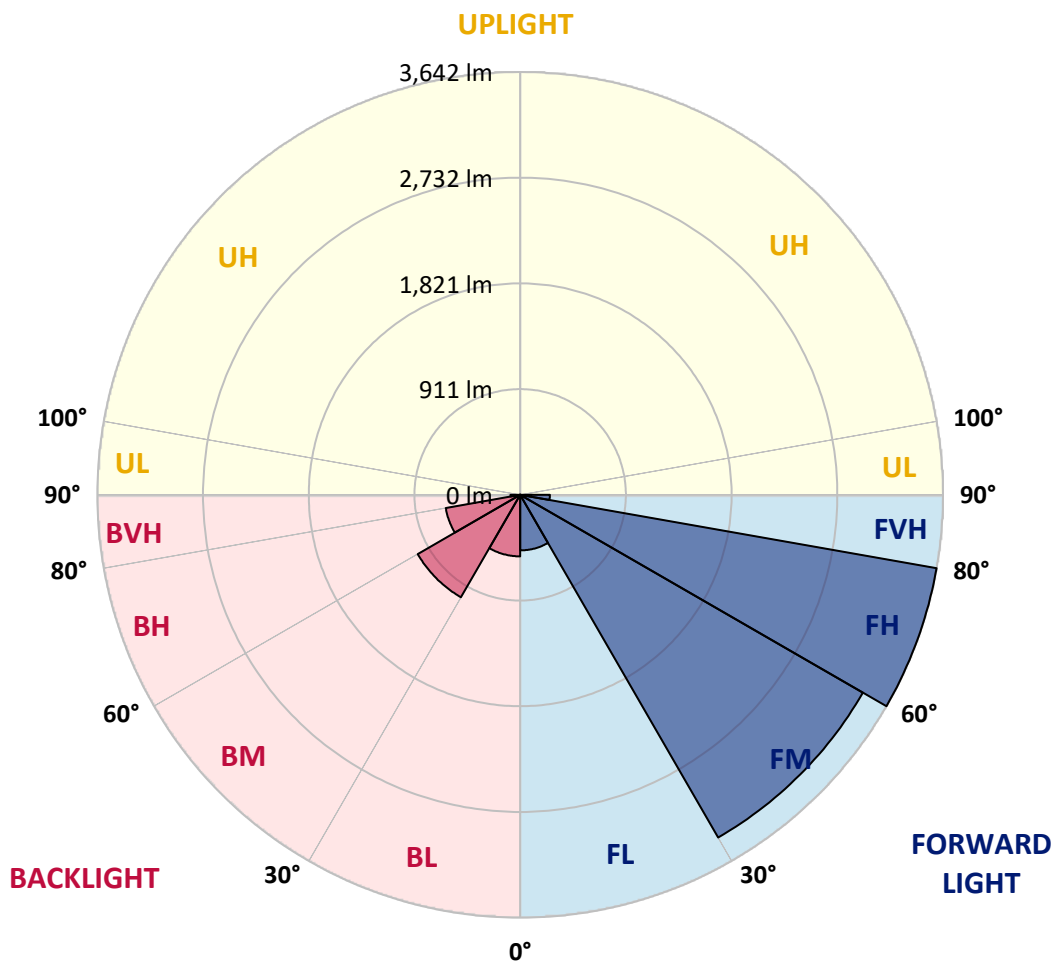
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 478.9 | 4.8 | | | |
| FM | (30°-60°) | 3409.0 | 33.9 | | | |
| FH | (60°-80°) | 3642.4 | 36.2 | | | G2/5000 |
| FVH | (80°-90°) | 256.0 | 2.5 | | | G3/500 |
| BL | (0°-30°) | 530.5 | 5.3 | B2/1000 | | |
| BM | (30°-60°) | 1019.0 | 10.1 | B2/2500 | | |
| BH | (60°-80°) | 650.9 | 6.5 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 83.4 | 0.8 | | | 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° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 |
| 2.5° | 1022.3 | 1017.0 | 1018.3 | 1018.3 | 1023.6 | 1026.3 | 1027.6 | 1031.6 | 1034.3 | 1040.9 | 1050.2 |
| 5° | 974.4 | 970.4 | 971.8 | 973.1 | 982.4 | 991.7 | 999.7 | 1005.0 | 1013.0 | 1023.6 | 1036.9 |
| 7.5° | 939.9 | 937.2 | 938.5 | 941.2 | 949.2 | 959.8 | 973.1 | 981.1 | 993.0 | 1013.0 | 1035.6 |
| 10° | 914.6 | 914.6 | 915.9 | 921.3 | 929.2 | 942.5 | 953.2 | 962.5 | 986.4 | 1022.3 | 1056.9 |
| 12.5° | 894.7 | 894.7 | 898.7 | 909.3 | 922.6 | 935.9 | 961.1 | 971.8 | 1003.7 | 1052.9 | 1094.1 |
| 15° | 893.3 | 894.7 | 896.0 | 905.3 | 919.9 | 949.2 | 986.4 | 1002.3 | 1040.9 | 1099.4 | 1147.3 |
| 17.5° | 914.6 | 915.9 | 910.6 | 913.3 | 930.6 | 971.8 | 1021.0 | 1039.6 | 1088.8 | 1152.6 | 1201.8 |
| 20° | 979.7 | 979.7 | 963.8 | 949.2 | 961.1 | 1006.3 | 1062.2 | 1080.8 | 1135.3 | 1205.7 | 1254.9 |
| 22.5° | 1112.7 | 1119.3 | 1082.1 | 1050.2 | 1031.6 | 1056.9 | 1107.4 | 1127.3 | 1188.5 | 1264.2 | 1313.4 |
| 25° | 1273.5 | 1280.2 | 1229.7 | 1184.5 | 1149.9 | 1145.9 | 1179.2 | 1200.4 | 1250.9 | 1329.4 | 1370.6 |
| 27.5° | 1429.1 | 1417.1 | 1370.6 | 1328.0 | 1284.2 | 1248.3 | 1273.5 | 1292.2 | 1350.6 | 1410.5 | 1435.7 |
| 30° | 1551.4 | 1542.1 | 1496.9 | 1466.3 | 1425.1 | 1378.6 | 1363.9 | 1383.9 | 1431.7 | 1487.6 | 1500.9 |
| 32.5° | 1687.0 | 1680.3 | 1635.1 | 1595.3 | 1560.7 | 1516.8 | 1484.9 | 1494.2 | 1520.8 | 1560.7 | 1568.7 |
| 35° | 1859.8 | 1874.4 | 1826.6 | 1745.5 | 1706.9 | 1664.4 | 1641.8 | 1644.4 | 1664.4 | 1689.6 | 1676.3 |
| 37.5° | 2041.9 | 2059.2 | 2061.9 | 1934.2 | 1882.4 | 1843.8 | 1819.9 | 1829.2 | 1853.1 | 1870.4 | 1829.2 |
| 40° | 2379.6 | 2362.3 | 2293.2 | 2198.8 | 2119.0 | 2081.8 | 2048.6 | 2047.2 | 2064.5 | 2095.1 | 2020.7 |
| 42.5° | 2827.6 | 2811.6 | 2672.0 | 2549.7 | 2423.5 | 2380.9 | 2315.8 | 2287.9 | 2295.8 | 2334.4 | 2230.7 |
| 45° | 3257.0 | 3250.3 | 3138.7 | 2996.4 | 2844.9 | 2762.4 | 2613.6 | 2545.8 | 2539.1 | 2569.7 | 2446.1 |
| 47.5° | 3638.5 | 3609.3 | 3528.2 | 3417.8 | 3401.9 | 3186.5 | 2912.7 | 2820.9 | 2789.0 | 2806.3 | 2668.1 |
| 50° | 4046.6 | 3946.9 | 3835.2 | 3767.4 | 3883.1 | 3682.4 | 3214.4 | 3118.7 | 3040.3 | 3052.2 | 2908.7 |
| 52.5° | 4263.3 | 4095.8 | 4022.7 | 4042.6 | 4198.2 | 4121.1 | 3542.8 | 3425.8 | 3299.5 | 3316.8 | 3148.0 |
| 55° | 4077.2 | 4075.9 | 4107.8 | 4231.4 | 4448.1 | 4359.0 | 3855.2 | 3723.6 | 3585.3 | 3589.3 | 3423.1 |
| 57.5° | 3822.0 | 3873.8 | 4038.6 | 4311.2 | 4757.8 | 4608.9 | 4162.3 | 4022.7 | 3896.4 | 3876.5 | 3735.5 |
| 60° | 3589.3 | 3646.5 | 3885.8 | 4297.9 | 4865.5 | 4837.6 | 4454.7 | 4332.4 | 4230.1 | 4171.6 | 4063.9 |
| 62.5° | 3235.7 | 3278.2 | 3617.2 | 4212.8 | 4775.1 | 5002.4 | 4751.2 | 4667.4 | 4590.3 | 4469.4 | 4417.5 |
| 65° | 2819.6 | 2834.2 | 3191.8 | 3932.3 | 4662.1 | 5066.2 | 5046.3 | 5009.1 | 4934.6 | 4756.5 | 4767.1 |
| 67.5° | 2368.9 | 2398.2 | 2711.9 | 3484.3 | 4414.9 | 5037.0 | 5275.0 | 5305.5 | 5217.8 | 4950.6 | 4990.5 |
| 70° | 1889.0 | 1924.9 | 2162.9 | 2864.8 | 3994.8 | 4910.7 | 5486.3 | 5535.5 | 5366.7 | 5014.4 | 5031.7 |
| 72.5° | 1168.5 | 1203.1 | 1362.6 | 1990.1 | 3166.6 | 4486.6 | 5551.5 | 5615.3 | 5370.7 | 4929.3 | 4763.2 |
| 75° | 404.1 | 408.1 | 533.1 | 954.5 | 1879.7 | 3387.2 | 5338.8 | 5489.0 | 5201.8 | 4619.6 | 4145.0 |
| 77.5° | 184.8 | 191.4 | 236.6 | 393.5 | 833.5 | 1827.9 | 4408.2 | 4784.4 | 4688.7 | 4135.7 | 3190.5 |
| 80° | 127.6 | 130.3 | 163.5 | 235.3 | 481.2 | 643.4 | 2782.4 | 3272.9 | 3440.4 | 3202.5 | 2044.6 |
| 82.5° | 95.7 | 98.4 | 126.3 | 159.5 | 347.0 | 312.4 | 1059.5 | 1520.8 | 1890.4 | 1855.8 | 854.8 |
| 85° | 91.7 | 90.4 | 98.4 | 106.4 | 231.3 | 186.1 | 343.0 | 470.6 | 737.8 | 631.5 | 215.4 |
| 87.5° | 39.9 | 43.9 | 101.0 | 59.8 | 121.0 | 86.4 | 148.9 | 174.1 | 224.7 | 195.4 | 77.1 |
| 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° | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 | 1062.2 |
| 2.5° | 1054.2 | 1056.9 | 1064.8 | 1076.8 | 1083.4 | 1096.7 | 1106.0 | 1111.4 | 1115.3 | 1116.7 | 1116.7 |
| 5° | 1044.9 | 1050.2 | 1067.5 | 1087.4 | 1106.0 | 1134.0 | 1159.2 | 1173.8 | 1184.5 | 1188.5 | 1189.8 |
| 7.5° | 1047.5 | 1060.8 | 1086.1 | 1115.3 | 1139.3 | 1175.2 | 1205.7 | 1235.0 | 1258.9 | 1268.2 | 1268.2 |
| 10° | 1072.8 | 1091.4 | 1126.0 | 1164.5 | 1195.1 | 1232.3 | 1264.2 | 1289.5 | 1317.4 | 1333.4 | 1336.0 |
| 12.5° | 1111.4 | 1134.0 | 1179.2 | 1221.7 | 1256.3 | 1285.5 | 1314.8 | 1333.4 | 1346.7 | 1358.6 | 1361.3 |
| 15° | 1165.9 | 1193.8 | 1239.0 | 1282.8 | 1313.4 | 1332.0 | 1340.0 | 1340.0 | 1338.7 | 1340.0 | 1342.7 |
| 17.5° | 1220.4 | 1247.0 | 1292.2 | 1336.0 | 1350.6 | 1340.0 | 1330.7 | 1328.0 | 1326.7 | 1324.1 | 1325.4 |
| 20° | 1273.5 | 1298.8 | 1337.4 | 1370.6 | 1358.6 | 1321.4 | 1309.4 | 1308.1 | 1304.1 | 1301.5 | 1298.8 |
| 22.5° | 1326.7 | 1345.3 | 1377.2 | 1389.2 | 1341.3 | 1288.2 | 1273.5 | 1265.6 | 1260.2 | 1253.6 | 1247.0 |
| 25° | 1387.9 | 1393.2 | 1417.1 | 1398.5 | 1298.8 | 1227.0 | 1205.7 | 1193.8 | 1188.5 | 1181.8 | 1176.5 |
| 27.5° | 1445.0 | 1445.0 | 1449.0 | 1383.9 | 1236.3 | 1145.9 | 1114.0 | 1092.7 | 1091.4 | 1090.1 | 1088.8 |
| 30° | 1496.9 | 1490.2 | 1476.9 | 1340.0 | 1155.2 | 1046.2 | 998.4 | 977.1 | 985.1 | 991.7 | 993.0 |
| 32.5° | 1558.0 | 1544.7 | 1507.5 | 1280.2 | 1058.2 | 934.6 | 876.1 | 866.8 | 876.1 | 884.0 | 878.7 |
| 35° | 1653.7 | 1629.8 | 1539.4 | 1211.1 | 965.1 | 832.2 | 776.4 | 763.1 | 760.4 | 759.1 | 748.4 |
| 37.5° | 1790.7 | 1749.5 | 1564.7 | 1136.6 | 873.4 | 741.8 | 700.6 | 672.7 | 647.4 | 620.8 | 616.8 |
| 40° | 1958.2 | 1887.7 | 1582.0 | 1051.5 | 776.4 | 666.0 | 622.1 | 586.3 | 543.7 | 497.2 | 491.9 |
| 42.5° | 2141.6 | 2036.6 | 1589.9 | 957.2 | 691.3 | 603.5 | 549.0 | 503.8 | 456.0 | 420.1 | 413.4 |
| 45° | 2339.7 | 2197.5 | 1583.3 | 866.8 | 622.1 | 550.4 | 489.2 | 440.0 | 401.5 | 376.2 | 370.9 |
| 47.5° | 2532.5 | 2382.2 | 1564.7 | 795.0 | 569.0 | 505.2 | 442.7 | 397.5 | 368.2 | 340.3 | 333.7 |
| 50° | 2779.7 | 2559.0 | 1542.1 | 739.1 | 510.5 | 460.0 | 413.4 | 365.6 | 332.3 | 319.1 | 316.4 |
| 52.5° | 3053.6 | 2735.9 | 1515.5 | 668.7 | 453.3 | 424.1 | 394.8 | 352.3 | 341.6 | 316.4 | 312.4 |
| 55° | 3350.0 | 2945.9 | 1510.2 | 579.6 | 402.8 | 398.8 | 376.2 | 364.2 | 366.9 | 316.4 | 309.7 |
| 57.5° | 3662.4 | 3170.6 | 1522.1 | 490.5 | 361.6 | 376.2 | 384.2 | 374.9 | 370.9 | 323.0 | 309.7 |
| 60° | 3988.1 | 3387.2 | 1486.2 | 408.1 | 329.7 | 357.6 | 393.5 | 369.6 | 340.3 | 320.4 | 311.1 |
| 62.5° | 4304.5 | 3569.4 | 1330.7 | 349.6 | 305.8 | 352.3 | 388.2 | 349.6 | 316.4 | 316.4 | 312.4 |
| 65° | 4534.5 | 3650.5 | 1040.9 | 307.1 | 289.8 | 345.6 | 378.9 | 336.3 | 309.7 | 319.1 | 313.7 |
| 67.5° | 4561.1 | 3566.7 | 699.3 | 273.9 | 276.5 | 333.7 | 357.6 | 324.4 | 303.1 | 327.0 | 319.1 |
| 70° | 4397.6 | 3348.7 | 428.1 | 248.6 | 259.2 | 312.4 | 339.0 | 312.4 | 293.8 | 320.4 | 308.4 |
| 72.5° | 3973.5 | 2941.9 | 301.8 | 227.3 | 240.6 | 292.5 | 321.7 | 301.8 | 280.5 | 289.8 | 277.8 |
| 75° | 3259.6 | 2279.9 | 239.3 | 207.4 | 222.0 | 273.9 | 307.1 | 285.8 | 264.5 | 260.6 | 252.6 |
| 77.5° | 2309.1 | 1461.0 | 192.8 | 191.4 | 202.1 | 251.3 | 287.1 | 267.2 | 245.9 | 238.0 | 232.6 |
| 80° | 1328.0 | 716.5 | 166.2 | 172.8 | 183.5 | 228.7 | 263.2 | 245.9 | 226.0 | 214.0 | 206.1 |
| 82.5° | 507.8 | 249.9 | 146.2 | 150.2 | 162.2 | 204.7 | 239.3 | 224.7 | 204.7 | 215.4 | 180.8 |
| 85° | 164.8 | 136.9 | 119.6 | 123.6 | 135.6 | 170.2 | 211.4 | 199.4 | 176.8 | 156.9 | 144.9 |
| 87.5° | 73.1 | 74.4 | 63.8 | 70.5 | 85.1 | 113.0 | 154.2 | 146.2 | 128.9 | 107.7 | 103.7 |
| 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)