

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: P798919

Luminaire Tested: **ARCH1-40-750-U-T3**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798919
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-40-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5829 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

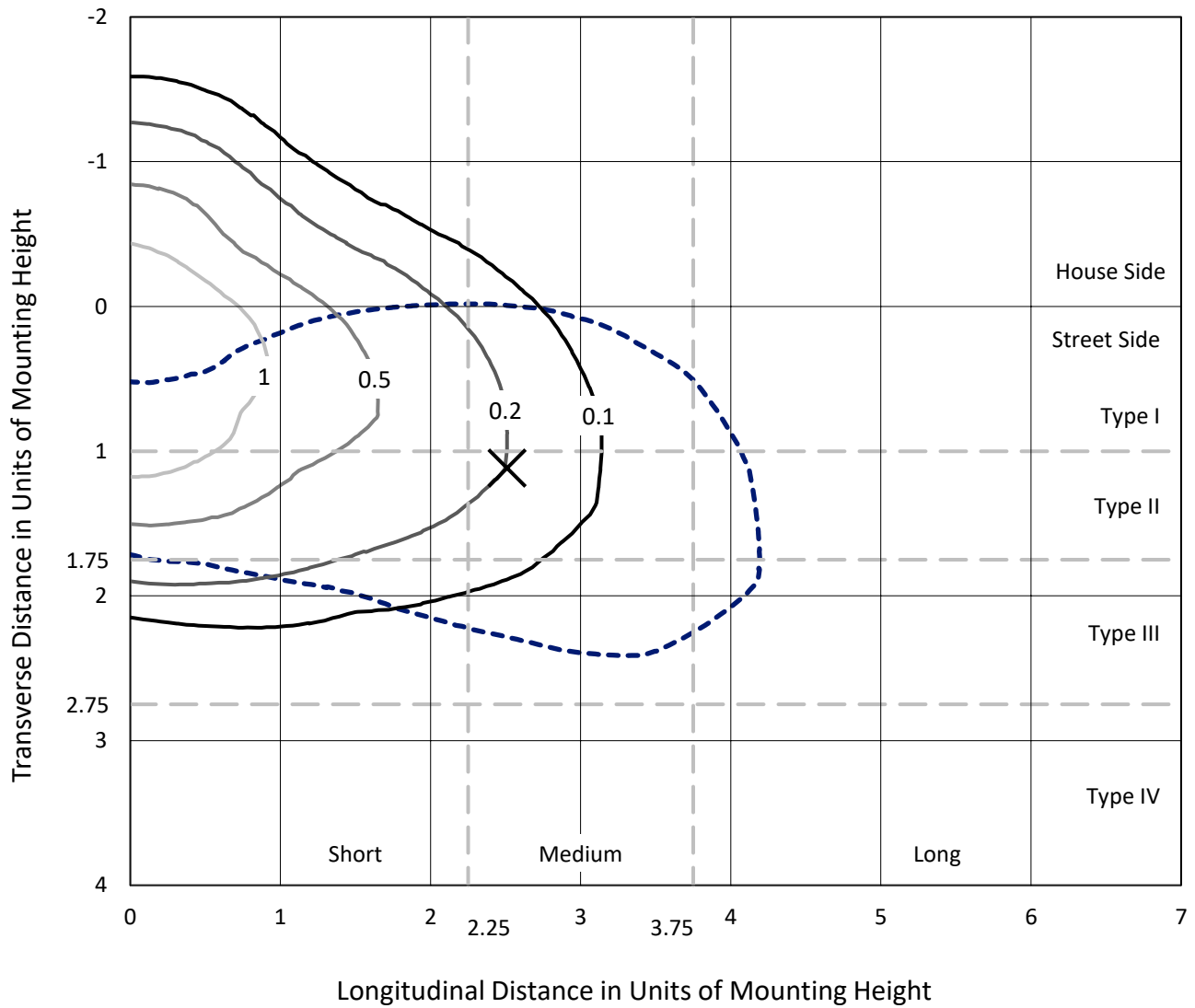
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

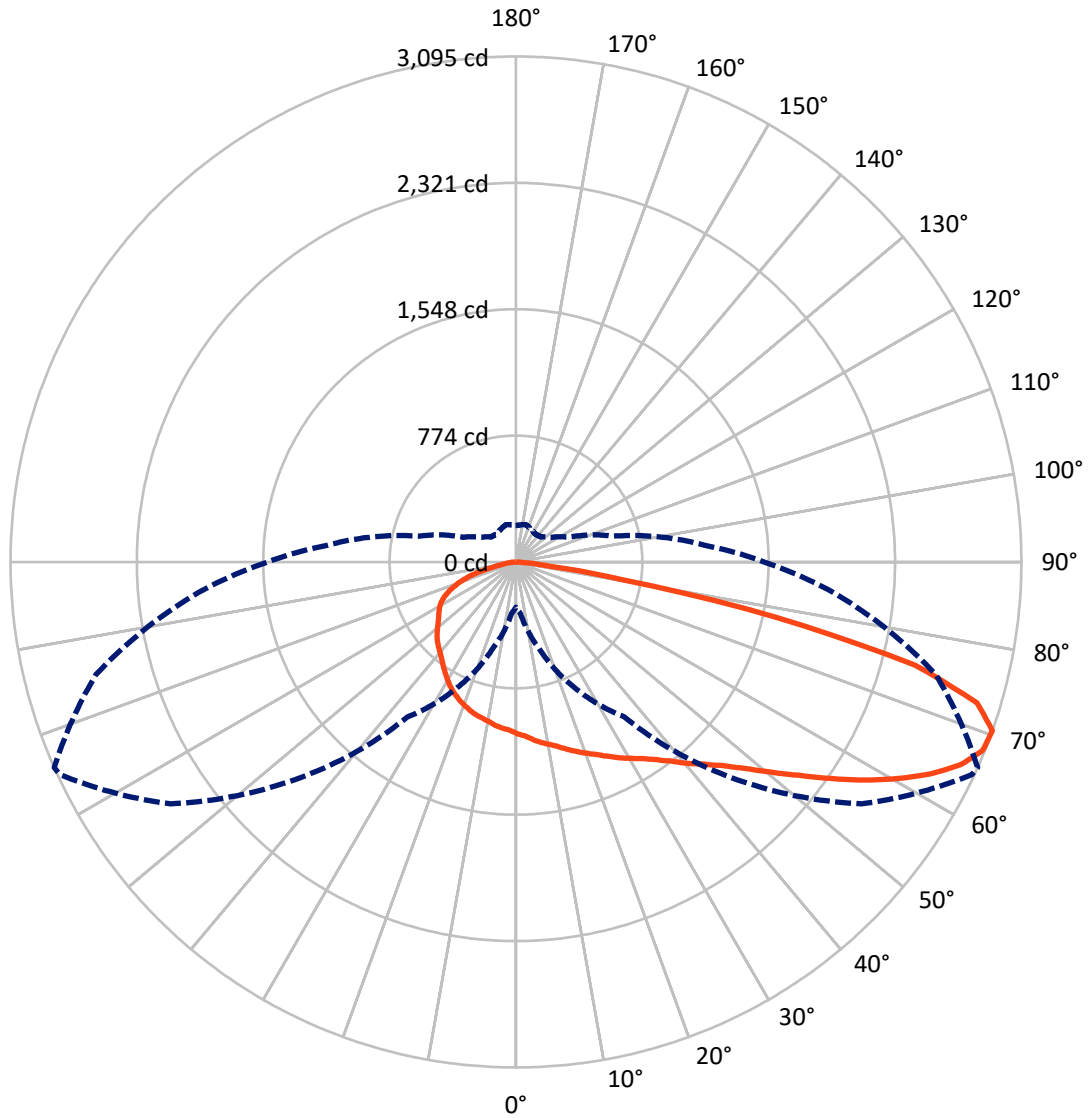
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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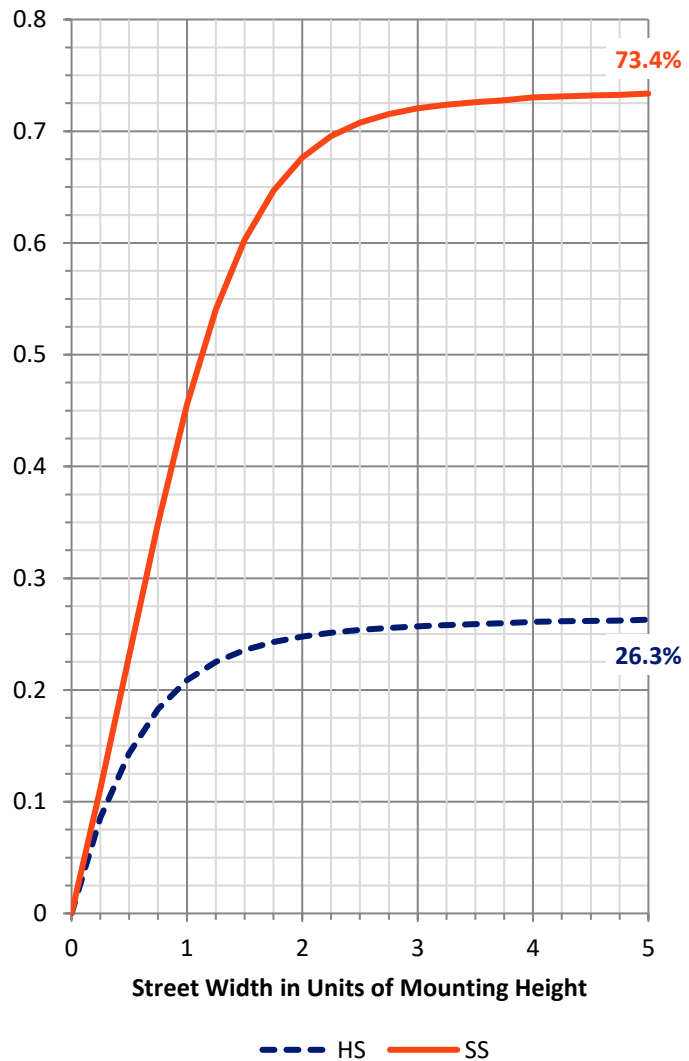
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1544.5 | 0.0 | 1544.5 |
| | % Fixture | 26.5 | 0.0 | 26.5 |
| Street Side | Lumens | 4284.4 | 0.0 | 4284.4 |
| | % Fixture | 73.5 | 0.0 | 73.5 |
| Total | Lumens | 5829.0 | 0.0 | 5829.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.1 | 1.7 |
| 10°-20° | 303.2 | 5.2 |
| 20°-30° | 508.3 | 8.7 |
| 30°-40° | 761.1 | 13.1 |
| 40°-50° | 1017.6 | 17.5 |
| 50°-60° | 1188.1 | 20.4 |
| 60°-70° | 1181.3 | 20.3 |
| 70°-80° | 699.4 | 12.0 |
| 80°-90° | 68.9 | 1.2 |
| 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° | 5829.0 | 100.0 |
| 0°-180° | 5829.0 | 100.0 |

Coefficient of Utilization

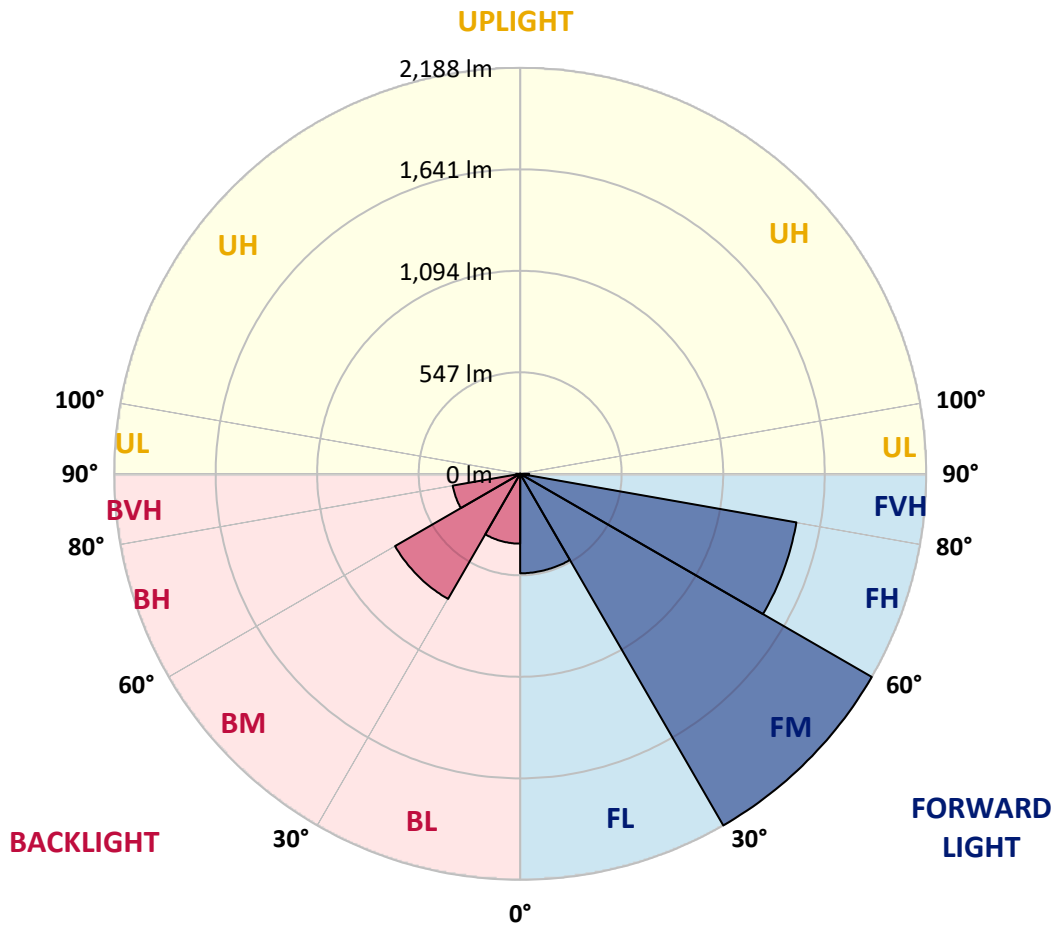


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 536.1 | 9.2 | | | |
| FM (30°-60°) | 2188.1 | 37.5 | | | |
| FH (60°-80°) | 1511.8 | 25.9 | | | G1/1800 |
| FVH (80°-90°) | 48.4 | 0.8 | | | G1/100 |
| BL (0°-30°) | 376.5 | 6.5 | B1/500 | | |
| BM (30°-60°) | 778.6 | 13.4 | B1/1000 | | |
| BH (60°-80°) | 369.0 | 6.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 20.5 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 |
| 2.5° | 1090.7 | 1089.0 | 1088.1 | 1084.7 | 1076.9 | 1080.4 | 1072.6 | 1067.5 | 1066.6 | 1054.6 | 1047.7 |
| 5° | 1135.4 | 1134.5 | 1132.8 | 1127.6 | 1115.6 | 1117.3 | 1104.4 | 1095.0 | 1092.4 | 1073.5 | 1058.9 |
| 7.5° | 1173.2 | 1171.5 | 1170.6 | 1163.7 | 1150.8 | 1150.0 | 1134.5 | 1120.8 | 1116.5 | 1090.7 | 1068.3 |
| 10° | 1202.4 | 1199.8 | 1201.6 | 1194.7 | 1180.9 | 1178.3 | 1158.6 | 1140.5 | 1136.2 | 1103.6 | 1072.6 |
| 12.5° | 1227.3 | 1225.6 | 1228.2 | 1222.2 | 1211.0 | 1208.4 | 1188.7 | 1165.5 | 1160.3 | 1122.5 | 1082.1 |
| 15° | 1254.8 | 1248.8 | 1254.0 | 1251.4 | 1243.7 | 1242.8 | 1224.8 | 1199.0 | 1192.1 | 1146.5 | 1096.7 |
| 17.5° | 1269.4 | 1266.0 | 1272.0 | 1272.9 | 1269.4 | 1275.5 | 1258.3 | 1227.3 | 1221.3 | 1168.9 | 1109.6 |
| 20° | 1279.8 | 1274.6 | 1281.5 | 1286.6 | 1289.2 | 1301.3 | 1287.5 | 1257.4 | 1250.5 | 1190.4 | 1121.6 |
| 22.5° | 1315.0 | 1303.8 | 1304.7 | 1308.1 | 1309.8 | 1327.0 | 1318.4 | 1289.2 | 1282.3 | 1217.0 | 1136.2 |
| 25° | 1403.5 | 1381.2 | 1366.6 | 1356.3 | 1344.2 | 1358.8 | 1353.7 | 1325.3 | 1319.3 | 1248.8 | 1154.3 |
| 27.5° | 1541.0 | 1512.7 | 1483.5 | 1453.4 | 1406.1 | 1400.1 | 1391.5 | 1365.7 | 1358.8 | 1280.6 | 1172.3 |
| 30° | 1697.5 | 1669.1 | 1634.7 | 1586.6 | 1498.1 | 1451.7 | 1431.9 | 1403.5 | 1395.8 | 1309.0 | 1189.5 |
| 32.5° | 1853.0 | 1828.1 | 1793.7 | 1735.3 | 1608.9 | 1514.4 | 1472.3 | 1443.1 | 1435.3 | 1339.9 | 1210.1 |
| 35° | 1974.2 | 1958.8 | 1936.4 | 1863.3 | 1719.0 | 1588.3 | 1530.7 | 1495.5 | 1486.9 | 1388.9 | 1248.0 |
| 37.5° | 2072.2 | 2061.0 | 2042.1 | 1965.6 | 1798.9 | 1662.2 | 1597.8 | 1557.4 | 1547.9 | 1442.2 | 1288.4 |
| 40° | 2216.6 | 2187.4 | 2171.9 | 2061.0 | 1868.5 | 1729.3 | 1673.4 | 1631.3 | 1621.0 | 1498.9 | 1321.0 |
| 42.5° | 2339.5 | 2318.0 | 2299.1 | 2146.1 | 1934.7 | 1786.9 | 1744.7 | 1706.1 | 1692.3 | 1554.8 | 1356.3 |
| 45° | 2360.1 | 2368.7 | 2359.3 | 2188.2 | 2039.5 | 1843.6 | 1816.9 | 1792.0 | 1779.1 | 1630.4 | 1409.5 |
| 47.5° | 2361.0 | 2361.0 | 2305.1 | 2212.3 | 2169.3 | 1907.2 | 1894.3 | 1902.9 | 1889.1 | 1726.7 | 1473.1 |
| 50° | 2299.1 | 2310.3 | 2281.1 | 2218.3 | 2203.7 | 1970.8 | 1988.8 | 2035.2 | 2021.5 | 1829.0 | 1541.9 |
| 52.5° | 2171.0 | 2208.0 | 2207.1 | 2208.9 | 2153.9 | 2024.9 | 2088.5 | 2194.2 | 2171.0 | 1944.1 | 1615.0 |
| 55° | 1945.0 | 2018.9 | 2085.1 | 2141.8 | 2110.9 | 2057.6 | 2210.6 | 2363.6 | 2339.5 | 2073.1 | 1688.9 |
| 57.5° | 1751.6 | 1798.9 | 1881.4 | 2042.1 | 2060.2 | 2086.0 | 2324.9 | 2540.6 | 2519.1 | 2215.7 | 1766.2 |
| 60° | 1530.7 | 1596.1 | 1678.6 | 1907.2 | 1998.3 | 2122.9 | 2450.4 | 2713.4 | 2692.7 | 2360.1 | 1841.0 |
| 62.5° | 1191.2 | 1275.5 | 1440.5 | 1700.0 | 1908.0 | 2146.1 | 2549.2 | 2865.5 | 2856.0 | 2496.8 | 1908.0 |
| 65° | 830.3 | 905.0 | 1136.2 | 1445.6 | 1764.5 | 2135.8 | 2628.3 | 3001.3 | 2992.7 | 2608.5 | 1955.3 |
| 67.5° | 484.7 | 571.6 | 832.8 | 1163.7 | 1511.0 | 2064.5 | 2654.1 | 3081.2 | 3081.2 | 2676.4 | 1968.2 |
| 70° | 276.8 | 317.1 | 549.2 | 848.3 | 1158.6 | 1867.6 | 2581.9 | 3080.4 | 3095.0 | 2660.9 | 1914.9 |
| 72.5° | 193.4 | 211.4 | 369.6 | 570.7 | 785.6 | 1511.0 | 2392.8 | 2931.7 | 2951.4 | 2514.8 | 1732.7 |
| 75° | 150.4 | 163.3 | 260.4 | 389.3 | 495.1 | 1026.2 | 1979.4 | 2471.9 | 2524.3 | 2143.5 | 1401.0 |
| 77.5° | 114.3 | 123.8 | 152.1 | 243.2 | 317.1 | 589.6 | 1306.4 | 1621.0 | 1624.4 | 1312.4 | 751.2 |
| 80° | 83.4 | 92.8 | 101.4 | 148.7 | 168.5 | 275.9 | 493.3 | 677.3 | 658.4 | 635.2 | 406.5 |
| 82.5° | 49.8 | 59.3 | 61.9 | 80.8 | 82.5 | 117.7 | 172.8 | 218.3 | 209.7 | 279.3 | 190.8 |
| 85° | 21.5 | 30.1 | 31.8 | 37.0 | 35.2 | 48.1 | 68.8 | 57.6 | 51.6 | 59.3 | 41.3 |
| 87.5° | 5.2 | 8.6 | 8.6 | 9.5 | 7.7 | 12.0 | 12.9 | 9.5 | 8.6 | 10.3 | 10.3 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 | 1052.0 |
| 2.5° | 1046.0 | 1043.4 | 1044.3 | 1029.7 | 1025.4 | 1021.1 | 1018.5 | 1016.8 | 1015.0 | 1017.6 | 1020.2 |
| 5° | 1053.7 | 1047.7 | 1040.8 | 1019.3 | 1010.7 | 1001.3 | 994.4 | 988.4 | 985.8 | 985.8 | 988.4 |
| 7.5° | 1059.7 | 1049.4 | 1034.8 | 1006.4 | 991.0 | 978.1 | 966.9 | 959.2 | 954.9 | 954.9 | 957.5 |
| 10° | 1060.6 | 1046.0 | 1022.8 | 988.4 | 967.8 | 948.9 | 936.0 | 927.4 | 921.4 | 921.4 | 923.1 |
| 12.5° | 1065.8 | 1046.0 | 1015.9 | 974.6 | 948.9 | 925.7 | 910.2 | 897.3 | 894.7 | 894.7 | 896.4 |
| 15° | 1074.3 | 1050.3 | 1011.6 | 962.6 | 931.7 | 905.0 | 887.8 | 874.1 | 868.9 | 872.4 | 873.2 |
| 17.5° | 1082.1 | 1052.9 | 1003.9 | 947.1 | 910.2 | 881.0 | 862.1 | 850.0 | 843.1 | 850.9 | 850.9 |
| 20° | 1087.2 | 1052.9 | 992.7 | 927.4 | 887.0 | 854.3 | 836.3 | 821.7 | 816.5 | 826.0 | 826.8 |
| 22.5° | 1095.0 | 1052.0 | 980.7 | 907.6 | 862.1 | 827.7 | 809.6 | 798.5 | 795.9 | 806.2 | 809.6 |
| 25° | 1103.6 | 1053.7 | 967.8 | 885.3 | 834.6 | 801.0 | 787.3 | 782.1 | 783.8 | 796.7 | 801.0 |
| 27.5° | 1113.0 | 1057.2 | 954.9 | 860.3 | 804.5 | 774.4 | 766.7 | 769.2 | 776.1 | 792.4 | 797.6 |
| 30° | 1121.6 | 1058.0 | 936.8 | 831.1 | 770.1 | 741.7 | 745.2 | 756.3 | 766.7 | 783.0 | 789.0 |
| 32.5° | 1132.8 | 1058.9 | 917.9 | 799.3 | 733.1 | 712.5 | 728.0 | 746.0 | 756.3 | 771.8 | 778.7 |
| 35° | 1160.3 | 1073.5 | 903.3 | 768.4 | 698.8 | 687.6 | 713.4 | 736.6 | 742.6 | 756.3 | 762.4 |
| 37.5° | 1192.1 | 1097.6 | 895.6 | 736.6 | 665.2 | 662.7 | 695.3 | 718.5 | 720.2 | 728.8 | 734.9 |
| 40° | 1211.9 | 1107.9 | 887.0 | 709.9 | 635.2 | 636.9 | 670.4 | 688.4 | 685.0 | 691.0 | 695.3 |
| 42.5° | 1231.6 | 1111.3 | 868.9 | 687.6 | 606.8 | 608.5 | 634.3 | 647.2 | 648.9 | 661.8 | 667.8 |
| 45° | 1265.2 | 1120.8 | 849.2 | 667.0 | 581.0 | 575.0 | 590.5 | 607.7 | 630.0 | 654.9 | 661.8 |
| 47.5° | 1309.8 | 1140.5 | 828.5 | 642.0 | 556.1 | 536.3 | 542.3 | 572.4 | 595.6 | 618.8 | 623.1 |
| 50° | 1355.4 | 1160.3 | 809.6 | 611.9 | 531.2 | 495.1 | 497.6 | 525.1 | 544.0 | 562.1 | 564.7 |
| 52.5° | 1400.1 | 1177.5 | 793.3 | 583.6 | 502.8 | 446.1 | 456.4 | 484.7 | 497.6 | 506.2 | 508.8 |
| 55° | 1444.8 | 1192.1 | 778.7 | 559.5 | 470.1 | 407.4 | 416.8 | 443.5 | 456.4 | 460.7 | 462.4 |
| 57.5° | 1491.2 | 1209.3 | 767.5 | 538.9 | 433.2 | 373.0 | 379.0 | 397.9 | 410.0 | 415.1 | 413.4 |
| 60° | 1529.9 | 1223.9 | 761.5 | 517.4 | 396.2 | 341.2 | 339.5 | 356.7 | 373.9 | 379.0 | 377.3 |
| 62.5° | 1560.0 | 1233.4 | 752.0 | 489.9 | 363.6 | 309.4 | 300.8 | 323.2 | 341.2 | 344.7 | 347.2 |
| 65° | 1576.3 | 1234.2 | 728.8 | 454.7 | 330.0 | 275.0 | 269.0 | 291.4 | 302.5 | 306.0 | 306.0 |
| 67.5° | 1573.7 | 1220.5 | 683.3 | 407.4 | 299.1 | 244.1 | 238.9 | 252.7 | 269.0 | 271.6 | 269.0 |
| 70° | 1520.4 | 1163.7 | 610.2 | 357.5 | 262.1 | 216.6 | 207.1 | 220.9 | 236.4 | 226.9 | 222.6 |
| 72.5° | 1369.1 | 1016.8 | 502.8 | 302.5 | 220.9 | 182.2 | 177.9 | 191.7 | 192.5 | 194.2 | 189.9 |
| 75° | 1080.4 | 757.2 | 376.5 | 235.5 | 178.8 | 153.0 | 152.1 | 149.5 | 153.0 | 159.9 | 154.7 |
| 77.5° | 567.3 | 378.2 | 203.7 | 144.4 | 129.8 | 122.9 | 116.9 | 116.0 | 126.3 | 130.6 | 125.5 |
| 80° | 307.7 | 212.3 | 116.9 | 86.8 | 79.1 | 79.9 | 87.7 | 85.9 | 97.1 | 99.7 | 95.4 |
| 82.5° | 134.1 | 100.6 | 57.6 | 52.4 | 52.4 | 51.6 | 54.1 | 60.2 | 72.2 | 72.2 | 57.6 |
| 85° | 29.2 | 24.9 | 22.3 | 25.8 | 29.2 | 29.2 | 29.2 | 29.2 | 20.6 | 11.2 | 7.7 |
| 87.5° | 9.5 | 9.5 | 9.5 | 10.3 | 11.2 | 11.2 | 9.5 | 6.9 | 4.3 | 0.9 | 0.0 |
| 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)