

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: P198629

Luminaire Tested: **XNV2-AF-02-LED-U-T4FT-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24256)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-T4FT-7030-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8693 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 85
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

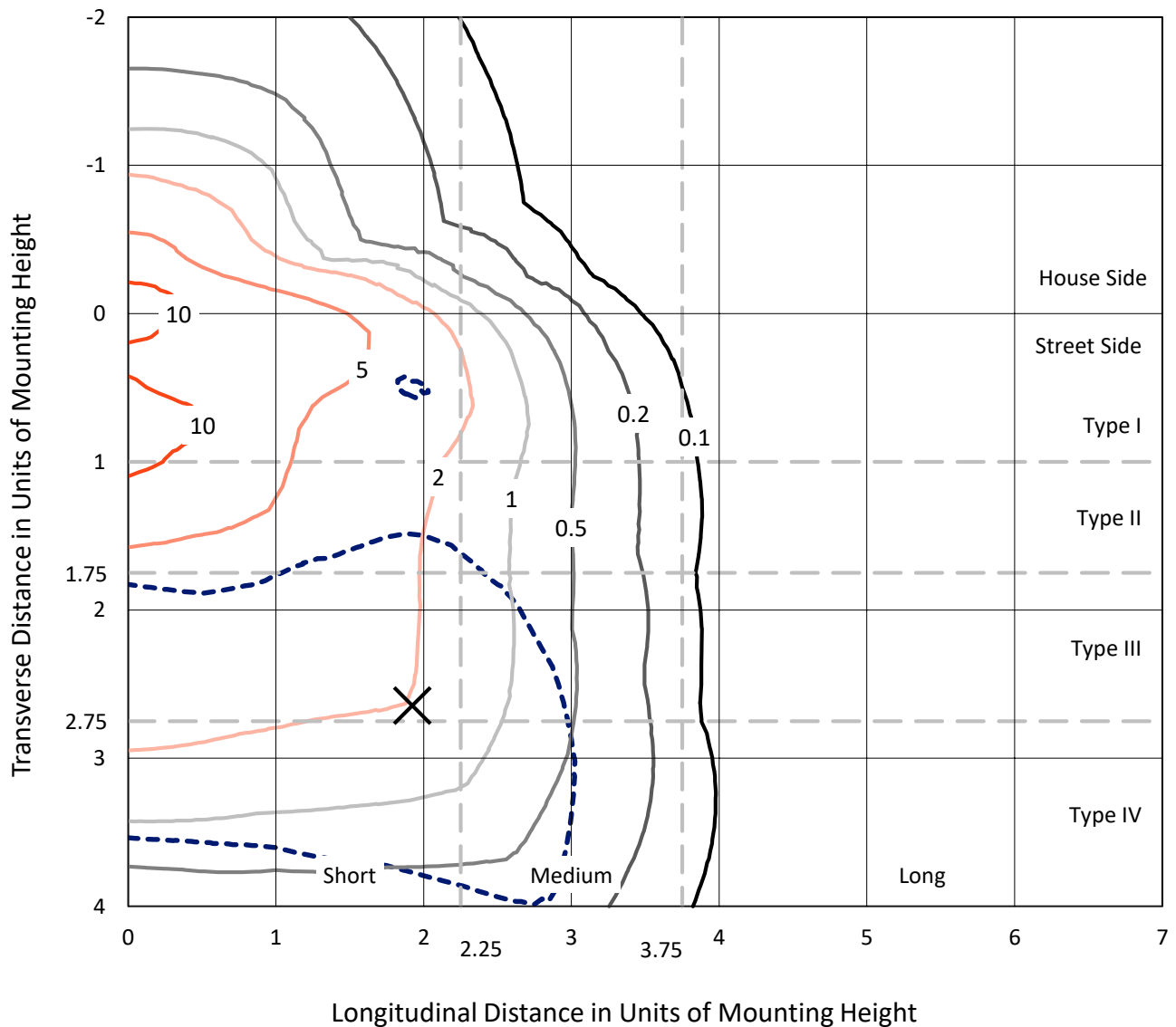




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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

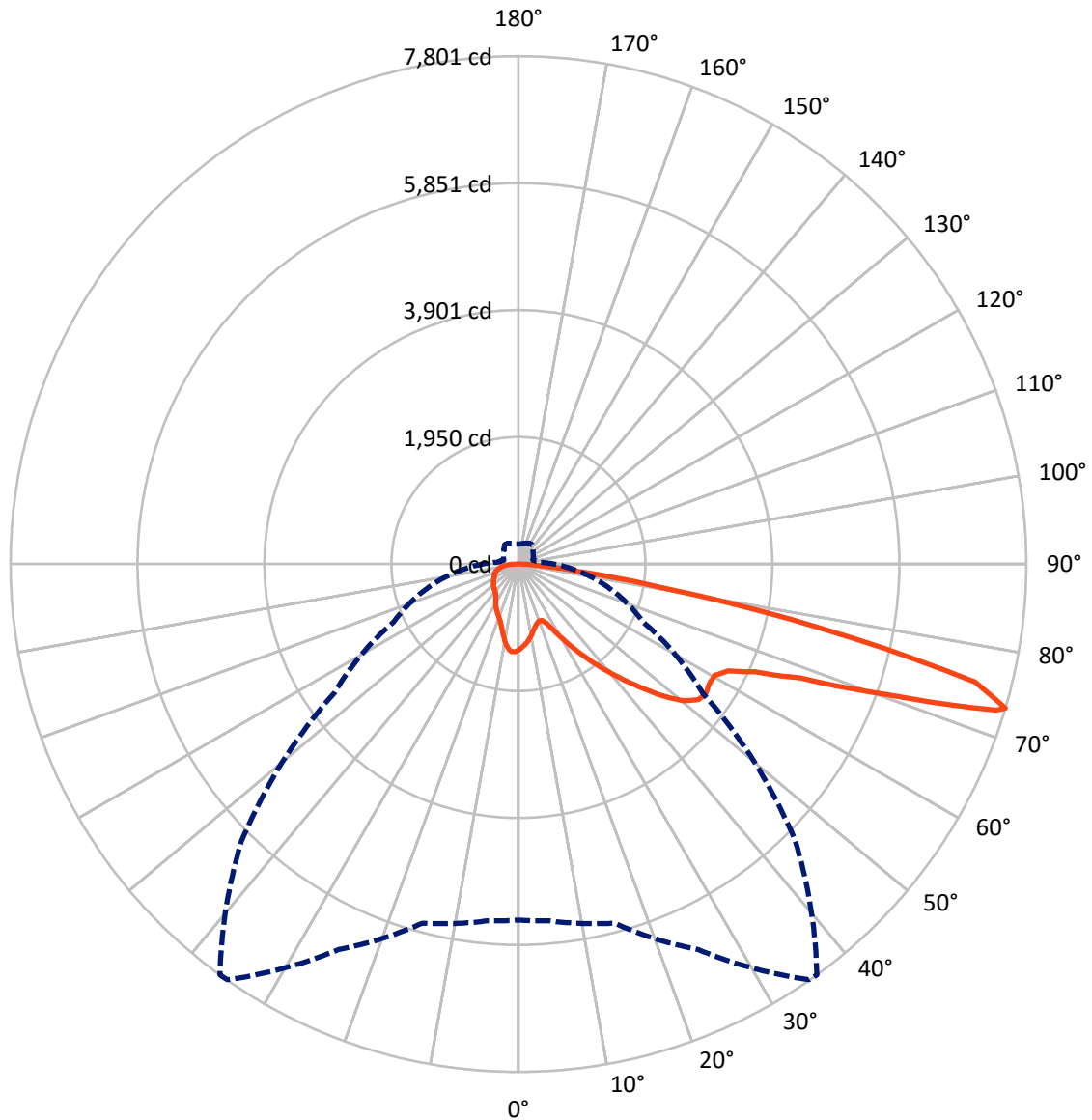


Based on 10 foot mounting height. Maximum calculated value = 13.2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198629

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1676.3 | 0.0 | 1676.3 |
| | % Fixture | 19.3 | 0.0 | 19.3 |
| Street Side | Lumens | 7016.7 | 0.0 | 7016.7 |
| | % Fixture | 80.7 | 0.0 | 80.7 |
| Total | Lumens | 8693.0 | 0.0 | 8693.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 119.6 | 1.4 |
| 10°-20° | 300.4 | 3.5 |
| 20°-30° | 481.6 | 5.5 |
| 30°-40° | 796.6 | 9.2 |
| 40°-50° | 1232.6 | 14.2 |
| 50°-60° | 1650.1 | 19.0 |
| 60°-70° | 2155.5 | 24.8 |
| 70°-80° | 1760.7 | 20.3 |
| 80°-90° | 196.0 | 2.3 |
| 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° | 8693.0 | 100.0 |
| 0°-180° | 8693.0 | 100.0 |



REPORT NUMBER: P198629

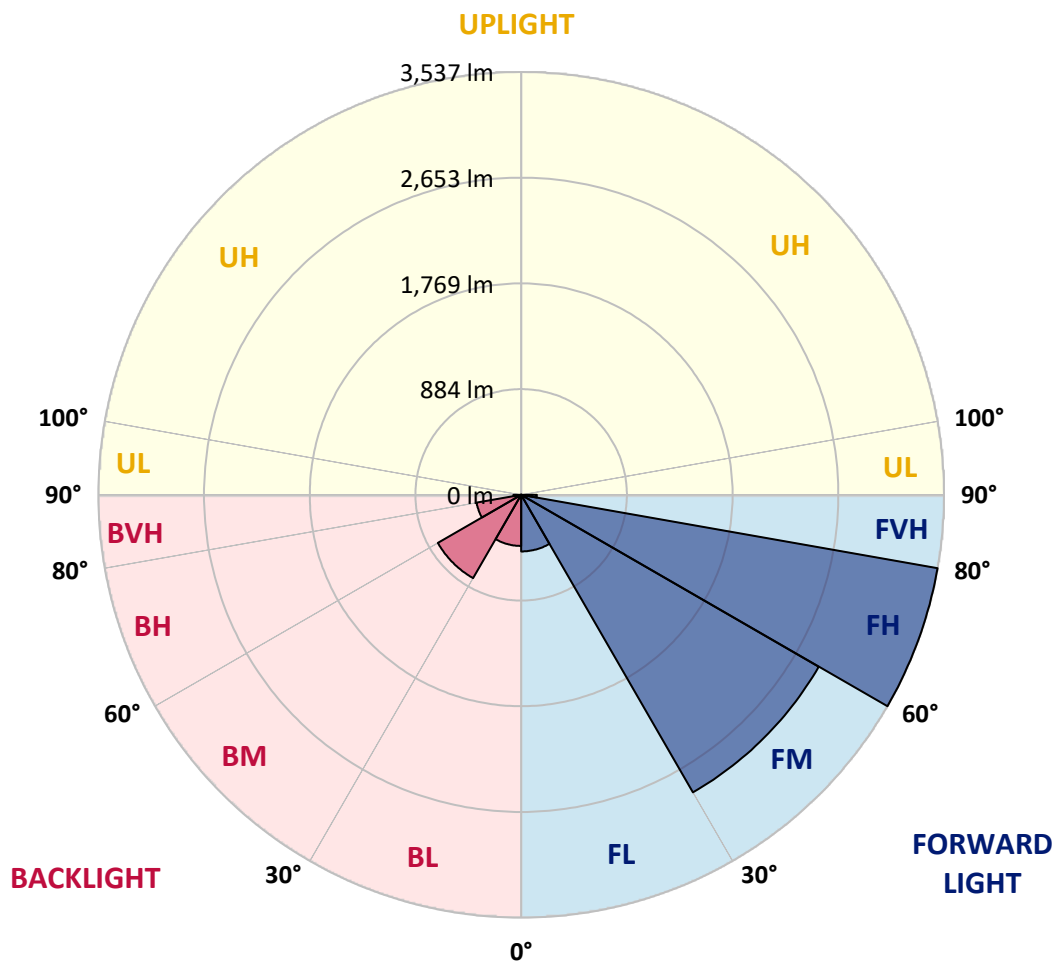
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 473.7 | 5.4 | | | |
| FM (30°-60°) | 2874.2 | 33.1 | | | |
| FH (60°-80°) | 3537.4 | 40.7 | | | G2/5000 |
| FVH (80°-90°) | 131.4 | 1.5 | | | G2/225 |
| BL (0°-30°) | 427.9 | 4.9 | B1/500 | | |
| BM (30°-60°) | 805.0 | 9.3 | B1/1000 | | |
| BH (60°-80°) | 378.8 | 4.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 64.5 | 0.7 | | | 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 IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 |
| 2.5° | 1266.5 | 1269.8 | 1270.3 | 1274.2 | 1274.2 | 1273.7 | 1275.3 | 1281.9 | 1285.3 | 1293.0 | 1299.6 |
| 5° | 1204.1 | 1207.9 | 1209.6 | 1216.2 | 1224.5 | 1225.1 | 1231.1 | 1243.8 | 1256.0 | 1273.1 | 1287.5 |
| 7.5° | 1133.9 | 1138.3 | 1142.8 | 1156.6 | 1168.7 | 1169.8 | 1181.4 | 1201.9 | 1217.9 | 1238.9 | 1264.8 |
| 10° | 1066.0 | 1067.1 | 1071.5 | 1089.2 | 1105.2 | 1106.9 | 1123.4 | 1146.6 | 1168.2 | 1197.4 | 1226.7 |
| 12.5° | 1010.2 | 1013.5 | 1012.4 | 1025.7 | 1039.5 | 1040.6 | 1062.7 | 1091.9 | 1123.4 | 1156.6 | 1191.4 |
| 15° | 990.9 | 990.3 | 978.7 | 978.2 | 984.2 | 985.3 | 1006.9 | 1041.1 | 1076.5 | 1117.3 | 1162.1 |
| 17.5° | 1004.1 | 999.7 | 969.3 | 950.5 | 946.7 | 947.8 | 963.8 | 1001.4 | 1038.9 | 1085.9 | 1139.4 |
| 20° | 1077.0 | 1059.9 | 988.7 | 943.4 | 930.7 | 930.7 | 940.1 | 970.4 | 1011.9 | 1066.5 | 1133.9 |
| 22.5° | 1249.9 | 1223.4 | 1071.5 | 990.9 | 946.1 | 941.7 | 934.5 | 957.7 | 1003.6 | 1069.3 | 1156.6 |
| 25° | 1467.5 | 1454.8 | 1223.4 | 1117.3 | 1025.1 | 1010.8 | 963.3 | 971.5 | 1020.7 | 1099.1 | 1218.4 |
| 27.5° | 1669.1 | 1647.0 | 1422.8 | 1301.3 | 1170.9 | 1148.8 | 1048.3 | 1014.6 | 1061.6 | 1154.4 | 1307.9 |
| 30° | 1786.8 | 1771.9 | 1627.7 | 1511.7 | 1356.5 | 1328.3 | 1184.2 | 1099.7 | 1134.5 | 1245.5 | 1434.9 |
| 32.5° | 1914.9 | 1906.1 | 1833.2 | 1727.7 | 1557.5 | 1525.0 | 1359.8 | 1238.3 | 1246.0 | 1366.4 | 1587.9 |
| 35° | 2039.2 | 2050.8 | 2009.3 | 1932.0 | 1774.1 | 1743.7 | 1595.7 | 1419.5 | 1383.6 | 1502.3 | 1751.4 |
| 37.5° | 2188.3 | 2191.1 | 2165.1 | 2114.8 | 2001.6 | 1976.8 | 1854.7 | 1612.8 | 1533.2 | 1647.0 | 1909.4 |
| 40° | 2486.0 | 2442.4 | 2340.7 | 2301.0 | 2233.6 | 2218.1 | 2078.9 | 1790.1 | 1672.4 | 1795.6 | 2058.5 |
| 42.5° | 2808.0 | 2740.1 | 2581.0 | 2515.8 | 2488.8 | 2474.4 | 2265.6 | 1908.3 | 1802.8 | 1944.2 | 2204.9 |
| 45° | 3067.6 | 3012.4 | 2856.6 | 2776.0 | 2779.3 | 2756.1 | 2428.6 | 2013.8 | 1944.2 | 2093.3 | 2368.4 |
| 47.5° | 3323.3 | 3231.1 | 3056.6 | 3045.0 | 3083.6 | 3049.4 | 2584.3 | 2119.3 | 2091.6 | 2255.7 | 2531.8 |
| 50° | 3339.9 | 3255.9 | 3185.2 | 3278.0 | 3344.3 | 3301.8 | 2725.7 | 2257.3 | 2244.6 | 2452.3 | 2742.8 |
| 52.5° | 3138.3 | 3126.1 | 3233.8 | 3390.2 | 3500.1 | 3462.0 | 2841.1 | 2399.3 | 2400.9 | 2698.1 | 2999.7 |
| 55° | 3064.8 | 3049.4 | 3178.6 | 3370.8 | 3519.4 | 3496.8 | 2927.3 | 2559.5 | 2574.4 | 2996.3 | 3275.3 |
| 57.5° | 3188.6 | 3149.9 | 3175.3 | 3334.4 | 3474.1 | 3460.9 | 3016.8 | 2737.3 | 2764.4 | 3339.9 | 3529.9 |
| 60° | 3572.4 | 3493.4 | 3358.7 | 3388.5 | 3475.8 | 3468.0 | 3144.9 | 2935.6 | 2980.9 | 3697.8 | 3691.2 |
| 62.5° | 4147.4 | 4057.9 | 3783.4 | 3650.9 | 3631.5 | 3616.6 | 3356.5 | 3179.2 | 3201.8 | 3956.3 | 3597.3 |
| 65° | 4778.1 | 4682.0 | 4355.6 | 4138.6 | 4024.8 | 3992.7 | 3697.8 | 3473.0 | 3331.1 | 3955.7 | 3231.6 |
| 67.5° | 5486.2 | 5384.6 | 5059.3 | 4852.2 | 4729.0 | 4674.3 | 4251.8 | 3710.5 | 3289.1 | 3621.0 | 2586.0 |
| 70° | 6211.4 | 6114.8 | 5965.6 | 6038.0 | 6092.1 | 6008.7 | 5124.4 | 3789.5 | 2987.5 | 2838.9 | 1736.5 |
| 72.5° | 5826.4 | 5818.7 | 5931.9 | 6617.9 | 7661.3 | 7677.8 | 5996.0 | 3566.3 | 2308.2 | 1687.3 | 925.7 |
| 73° | 5469.1 | 5501.7 | 5711.6 | 6532.3 | 7795.5 | 7801.0 | 6013.1 | 3450.9 | 2119.3 | 1453.7 | 813.0 |
| 75° | 2833.4 | 3054.3 | 3833.1 | 5296.8 | 7218.3 | 7244.3 | 5300.6 | 2612.5 | 1263.2 | 807.5 | 547.9 |
| 77.5° | 758.9 | 748.9 | 1235.0 | 2580.5 | 4812.4 | 4778.1 | 3349.3 | 1264.8 | 605.3 | 506.5 | 384.4 |
| 80° | 260.1 | 263.5 | 420.3 | 943.9 | 2246.3 | 2326.4 | 1453.7 | 551.8 | 398.2 | 352.9 | 272.3 |
| 82.5° | 132.6 | 137.0 | 219.8 | 401.5 | 939.5 | 919.6 | 467.8 | 324.8 | 266.8 | 214.3 | 152.4 |
| 85° | 70.7 | 72.9 | 121.0 | 208.2 | 344.6 | 348.5 | 164.6 | 173.4 | 169.6 | 121.5 | 75.1 |
| 87.5° | 34.8 | 35.9 | 58.0 | 91.7 | 127.6 | 123.2 | 57.4 | 75.1 | 83.4 | 68.5 | 41.4 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 | 1316.7 |
| 2.5° | 1307.9 | 1307.9 | 1315.1 | 1327.2 | 1336.1 | 1344.4 | 1349.9 | 1358.7 | 1363.7 | 1363.1 | 1362.6 |
| 5° | 1299.1 | 1304.6 | 1318.9 | 1333.9 | 1343.8 | 1350.4 | 1350.4 | 1354.3 | 1354.3 | 1352.6 | 1350.4 |
| 7.5° | 1278.6 | 1288.0 | 1309.0 | 1322.3 | 1325.0 | 1317.8 | 1303.5 | 1292.4 | 1278.6 | 1271.4 | 1268.7 |
| 10° | 1246.0 | 1258.2 | 1284.7 | 1290.8 | 1276.4 | 1251.0 | 1216.2 | 1186.4 | 1159.9 | 1147.7 | 1143.9 |
| 12.5° | 1214.0 | 1230.0 | 1254.9 | 1245.5 | 1211.2 | 1161.5 | 1108.0 | 1067.1 | 1037.3 | 1025.7 | 1021.8 |
| 15° | 1187.5 | 1206.8 | 1226.2 | 1196.9 | 1137.2 | 1068.2 | 1009.1 | 971.0 | 948.3 | 939.5 | 937.3 |
| 17.5° | 1169.8 | 1192.5 | 1199.1 | 1144.4 | 1061.6 | 984.2 | 931.8 | 906.9 | 897.0 | 893.1 | 892.0 |
| 20° | 1170.9 | 1196.3 | 1180.3 | 1093.6 | 988.7 | 910.8 | 876.0 | 868.8 | 868.8 | 868.8 | 868.3 |
| 22.5° | 1201.3 | 1223.4 | 1172.6 | 1046.1 | 918.5 | 848.9 | 834.0 | 840.1 | 844.5 | 844.5 | 843.9 |
| 25° | 1264.3 | 1276.4 | 1178.1 | 1000.3 | 852.8 | 795.3 | 795.9 | 807.5 | 811.4 | 811.4 | 810.3 |
| 27.5° | 1360.4 | 1350.4 | 1188.0 | 949.4 | 788.2 | 746.7 | 754.5 | 765.0 | 767.7 | 766.1 | 765.5 |
| 30° | 1480.8 | 1441.0 | 1196.3 | 889.8 | 727.4 | 701.4 | 708.1 | 714.2 | 711.9 | 708.1 | 707.5 |
| 32.5° | 1615.5 | 1533.2 | 1191.4 | 823.0 | 673.8 | 654.5 | 658.4 | 661.7 | 658.4 | 649.0 | 649.0 |
| 35° | 1749.2 | 1616.6 | 1164.3 | 750.1 | 631.3 | 609.2 | 608.7 | 619.2 | 618.6 | 607.6 | 608.1 |
| 37.5° | 1866.3 | 1682.4 | 1111.8 | 683.2 | 594.9 | 576.1 | 578.3 | 584.9 | 588.2 | 573.3 | 571.7 |
| 40° | 1968.5 | 1727.7 | 1037.8 | 626.3 | 565.6 | 566.7 | 560.6 | 550.1 | 546.2 | 539.6 | 538.5 |
| 42.5° | 2064.6 | 1759.1 | 959.4 | 578.8 | 550.7 | 563.4 | 542.9 | 518.1 | 507.6 | 513.7 | 517.5 |
| 45° | 2159.0 | 1794.5 | 883.7 | 539.6 | 531.9 | 553.4 | 525.3 | 497.6 | 485.5 | 488.3 | 492.1 |
| 47.5° | 2274.5 | 1843.7 | 792.6 | 497.6 | 503.2 | 535.2 | 514.2 | 484.4 | 466.2 | 455.1 | 451.8 |
| 50° | 2426.4 | 1914.9 | 674.4 | 452.4 | 472.8 | 515.3 | 504.8 | 465.1 | 445.2 | 423.1 | 417.6 |
| 52.5° | 2616.4 | 1982.3 | 555.1 | 415.9 | 447.9 | 498.2 | 489.4 | 448.5 | 424.2 | 397.7 | 393.3 |
| 55° | 2805.8 | 1991.7 | 452.4 | 384.4 | 419.8 | 475.0 | 470.6 | 435.2 | 401.0 | 379.4 | 375.0 |
| 57.5° | 2938.4 | 1902.8 | 383.3 | 357.9 | 392.7 | 446.3 | 453.5 | 419.2 | 381.7 | 365.1 | 362.3 |
| 60° | 2940.6 | 1690.1 | 341.3 | 340.2 | 372.3 | 421.4 | 435.8 | 400.4 | 369.5 | 358.5 | 356.2 |
| 62.5° | 2706.9 | 1362.0 | 314.3 | 327.0 | 357.4 | 401.0 | 422.5 | 389.9 | 366.7 | 362.3 | 360.1 |
| 65° | 2268.9 | 1006.3 | 292.7 | 314.8 | 343.5 | 383.9 | 411.5 | 386.6 | 365.6 | 364.0 | 362.3 |
| 67.5° | 1675.2 | 689.9 | 274.5 | 299.4 | 328.1 | 366.2 | 401.0 | 381.7 | 359.0 | 365.6 | 363.4 |
| 70° | 1053.8 | 460.6 | 257.4 | 281.7 | 307.6 | 345.8 | 387.2 | 372.8 | 350.7 | 346.9 | 339.7 |
| 72.5° | 594.9 | 333.1 | 236.9 | 259.0 | 281.1 | 318.7 | 368.4 | 357.9 | 331.9 | 316.5 | 309.3 |
| 73° | 537.4 | 315.4 | 232.0 | 253.5 | 275.1 | 313.2 | 364.0 | 353.5 | 326.4 | 309.3 | 302.7 |
| 75° | 393.3 | 257.9 | 209.3 | 230.9 | 249.6 | 287.8 | 343.0 | 331.4 | 302.1 | 281.7 | 277.3 |
| 77.5° | 285.0 | 198.8 | 180.1 | 199.4 | 216.0 | 252.4 | 311.5 | 298.3 | 269.5 | 258.5 | 254.1 |
| 80° | 205.5 | 150.8 | 149.1 | 167.9 | 182.3 | 219.3 | 277.8 | 264.0 | 236.4 | 269.0 | 261.8 |
| 82.5° | 122.6 | 96.7 | 109.4 | 130.3 | 145.3 | 183.9 | 241.4 | 225.3 | 198.8 | 201.0 | 171.2 |
| 85° | 58.5 | 54.7 | 67.9 | 85.6 | 96.1 | 125.9 | 201.0 | 188.3 | 159.1 | 130.3 | 127.6 |
| 87.5° | 26.0 | 24.9 | 32.6 | 38.1 | 51.4 | 75.7 | 137.5 | 122.1 | 115.4 | 69.0 | 54.1 |
| 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)