

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: P300422

Luminaire Tested: **GAA-AF-02-LED-U-T4FT-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-02-LED-U-T4FT-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6988.6 lumens
Efficiency: N/A
Efficacy: 105.9 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): 66
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

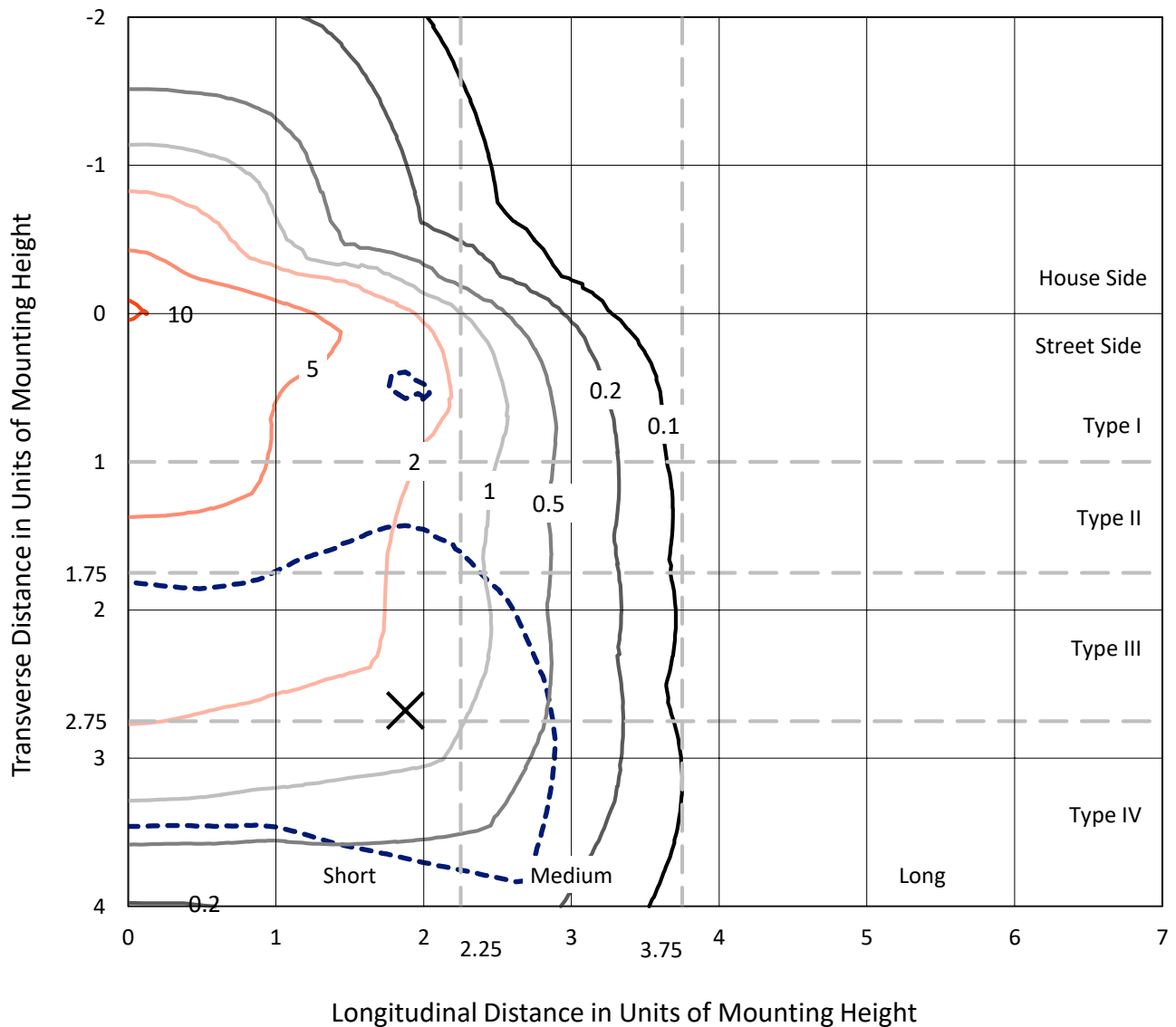


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

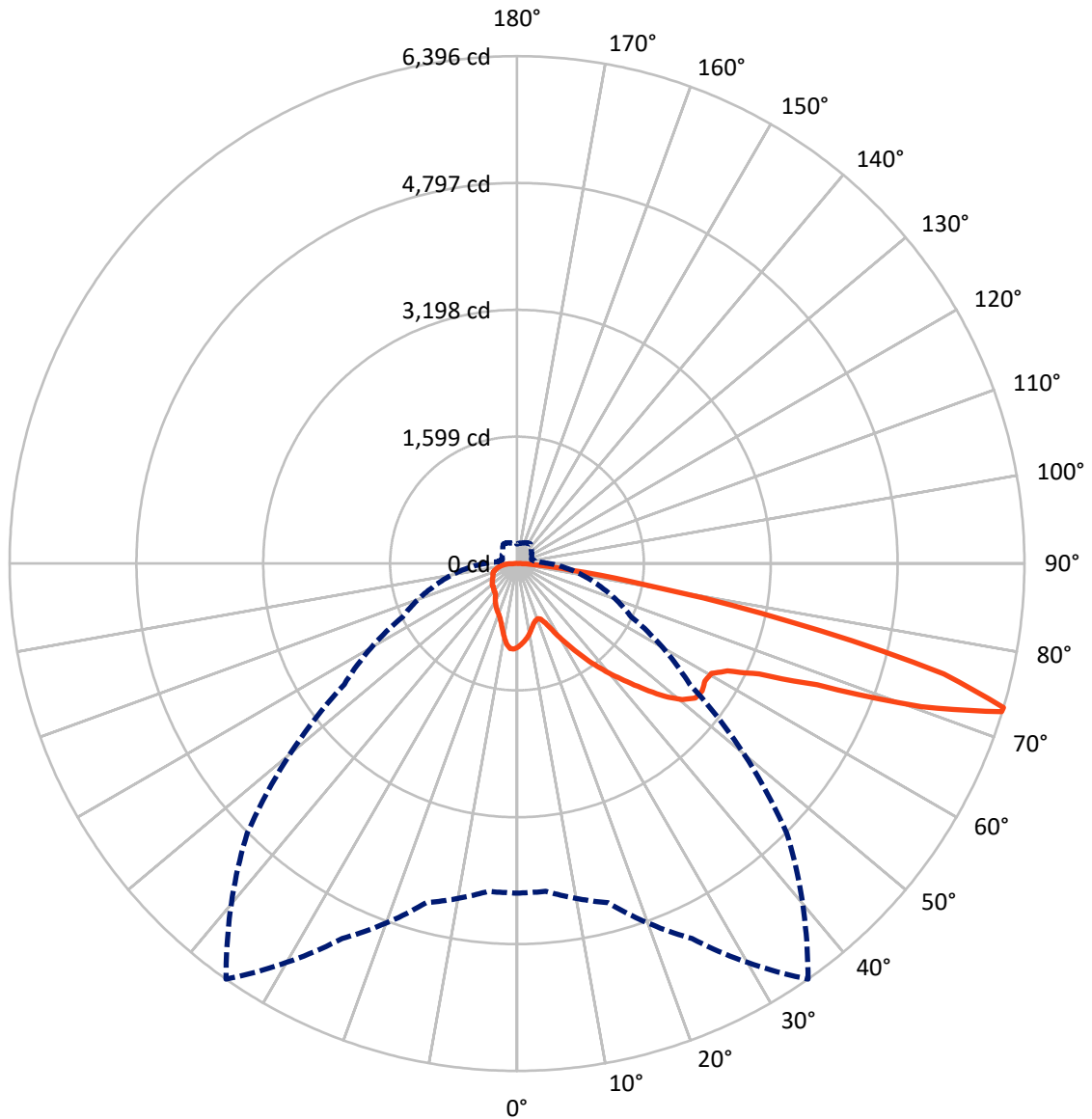


Based on 10 foot mounting height. Maximum calculated value = 10.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1332.9 | 0.0 | 1332.9 |
| | % Fixture | 19.1 | 0.0 | 19.1 |
| Street Side | Lumens | 5655.7 | 0.0 | 5655.7 |
| | % Fixture | 80.9 | 0.0 | 80.9 |
| Total | Lumens | 6988.6 | 0.0 | 6988.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 95.5 | 1.4 |
| 10°-20° | 238.3 | 3.4 |
| 20°-30° | 385.3 | 5.5 |
| 30°-40° | 646.1 | 9.2 |
| 40°-50° | 995.9 | 14.3 |
| 50°-60° | 1336.1 | 19.1 |
| 60°-70° | 1780.0 | 25.5 |
| 70°-80° | 1357.6 | 19.4 |
| 80°-90° | 153.9 | 2.2 |
| 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° | 6988.6 | 100.0 |
| 0°-180° | 6988.6 | 100.0 |

Coefficient of Utilization



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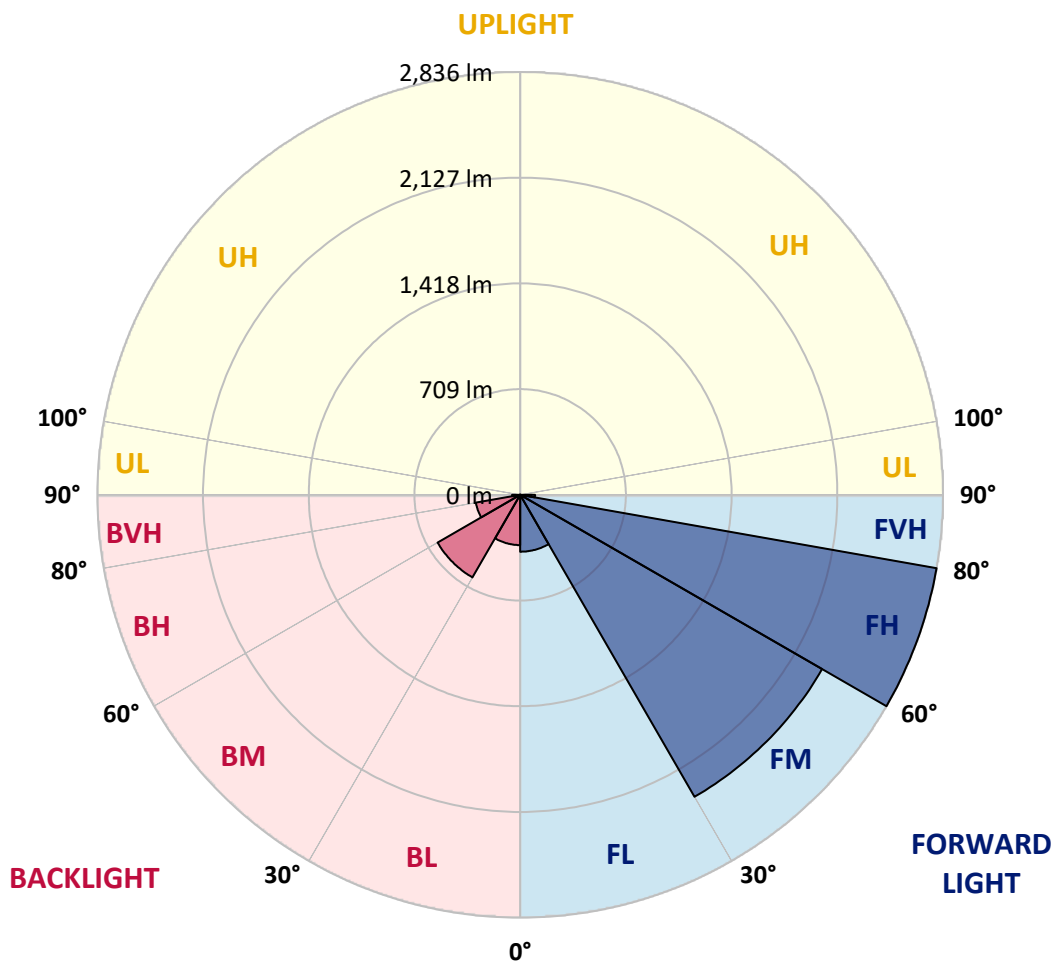
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 381.8 | 5.5 | | | |
| FM | (30°-60°) | 2338.4 | 33.5 | | | |
| FH | (60°-80°) | 2836.0 | 40.6 | | | G2/5000 |
| FVH | (80°-90°) | 99.5 | 1.4 | | | G1/100 |
| BL | (0°-30°) | 337.3 | 4.8 | B1/500 | | |
| BM | (30°-60°) | 639.6 | 9.2 | B1/1000 | | |
| BH | (60°-80°) | 301.6 | 4.3 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 54.4 | 0.8 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 |
| 2.5° | 1013.2 | 1015.2 | 1012.8 | 1015.9 | 1020.9 | 1026.3 | 1030.0 | 1035.3 | 1041.4 | 1049.8 | 1051.8 |
| 5° | 965.5 | 968.5 | 968.5 | 973.9 | 983.6 | 992.4 | 1000.4 | 1009.2 | 1021.9 | 1036.3 | 1042.0 |
| 7.5° | 913.2 | 914.8 | 917.9 | 925.9 | 940.0 | 952.4 | 963.8 | 977.9 | 995.4 | 1014.5 | 1024.6 |
| 10° | 850.1 | 852.4 | 857.1 | 868.5 | 887.7 | 904.8 | 921.2 | 940.7 | 962.8 | 986.7 | 999.4 |
| 12.5° | 805.4 | 804.8 | 806.8 | 815.2 | 832.0 | 852.8 | 876.6 | 901.4 | 928.6 | 956.5 | 971.9 |
| 15° | 790.3 | 786.6 | 778.9 | 776.9 | 786.0 | 806.8 | 834.3 | 864.8 | 897.4 | 931.0 | 950.1 |
| 17.5° | 799.7 | 793.4 | 772.2 | 756.8 | 755.4 | 771.2 | 800.4 | 834.6 | 872.2 | 913.2 | 937.0 |
| 20° | 858.8 | 843.7 | 791.7 | 755.8 | 743.4 | 751.1 | 776.6 | 812.8 | 857.1 | 911.5 | 942.0 |
| 22.5° | 1000.1 | 977.9 | 867.5 | 800.7 | 758.8 | 749.4 | 768.5 | 807.1 | 858.8 | 932.3 | 971.2 |
| 25° | 1205.8 | 1174.3 | 997.7 | 912.8 | 826.3 | 776.2 | 780.6 | 820.2 | 882.6 | 980.6 | 1027.6 |
| 27.5° | 1368.2 | 1347.8 | 1167.9 | 1070.9 | 949.1 | 848.7 | 819.9 | 853.1 | 931.3 | 1059.8 | 1107.8 |
| 30° | 1464.9 | 1452.5 | 1349.8 | 1250.1 | 1105.8 | 964.2 | 895.0 | 914.8 | 1007.5 | 1169.6 | 1209.2 |
| 32.5° | 1577.0 | 1569.6 | 1519.3 | 1427.6 | 1274.9 | 1115.9 | 1014.2 | 1007.1 | 1109.5 | 1301.5 | 1319.6 |
| 35° | 1693.1 | 1690.8 | 1661.2 | 1595.4 | 1456.5 | 1315.9 | 1172.3 | 1124.6 | 1220.6 | 1438.4 | 1427.0 |
| 37.5° | 1801.2 | 1797.1 | 1780.0 | 1741.8 | 1646.5 | 1530.7 | 1333.3 | 1245.1 | 1340.4 | 1569.3 | 1518.6 |
| 40° | 2000.2 | 1968.6 | 1909.9 | 1881.0 | 1838.4 | 1711.6 | 1461.2 | 1357.5 | 1464.6 | 1694.1 | 1597.8 |
| 42.5° | 2242.8 | 2191.5 | 2082.1 | 2042.5 | 2036.4 | 1854.2 | 1548.5 | 1466.6 | 1589.7 | 1818.0 | 1675.7 |
| 45° | 2433.8 | 2385.5 | 2291.2 | 2241.1 | 2263.3 | 1983.4 | 1636.1 | 1583.0 | 1718.6 | 1947.8 | 1755.9 |
| 47.5° | 2637.5 | 2561.6 | 2436.8 | 2451.9 | 2500.2 | 2105.6 | 1725.3 | 1708.2 | 1859.9 | 2093.1 | 1855.5 |
| 50° | 2644.9 | 2586.8 | 2532.1 | 2622.4 | 2697.6 | 2218.0 | 1837.1 | 1839.4 | 2032.7 | 2276.0 | 1988.1 |
| 52.5° | 2491.5 | 2479.1 | 2566.0 | 2708.0 | 2816.4 | 2306.9 | 1964.3 | 1975.0 | 2253.9 | 2486.1 | 2133.8 |
| 55° | 2437.8 | 2423.7 | 2524.1 | 2678.1 | 2832.5 | 2380.4 | 2102.2 | 2121.7 | 2521.4 | 2707.6 | 2275.7 |
| 57.5° | 2568.7 | 2537.5 | 2544.2 | 2664.0 | 2793.2 | 2461.0 | 2252.6 | 2291.8 | 2812.0 | 2901.3 | 2367.0 |
| 60° | 2934.5 | 2867.7 | 2740.9 | 2737.8 | 2814.4 | 2581.8 | 2426.4 | 2474.4 | 3114.0 | 2993.9 | 2331.4 |
| 62.5° | 3447.6 | 3380.8 | 3143.2 | 2988.5 | 2977.1 | 2781.1 | 2639.8 | 2652.6 | 3288.6 | 2868.4 | 2114.3 |
| 65° | 4003.1 | 3943.3 | 3677.9 | 3459.4 | 3354.0 | 3111.4 | 2887.8 | 2732.1 | 3231.5 | 2523.1 | 1734.4 |
| 67.5° | 4677.3 | 4613.2 | 4385.0 | 4183.3 | 4081.9 | 3644.3 | 3062.0 | 2655.9 | 2869.4 | 1954.5 | 1246.8 |
| 70° | 5148.8 | 5083.4 | 4993.4 | 5156.8 | 5404.9 | 4413.2 | 3084.5 | 2346.2 | 2143.1 | 1299.1 | 750.4 |
| 72.5° | 4533.6 | 4503.1 | 4667.2 | 5355.5 | 6388.5 | 4879.6 | 2788.2 | 1708.2 | 1244.7 | 689.7 | 434.3 |
| 73° | 4153.7 | 4147.0 | 4426.9 | 5216.3 | 6395.6 | 4807.8 | 2658.3 | 1587.7 | 1067.5 | 610.1 | 397.0 |
| 75° | 1875.7 | 1929.7 | 2543.2 | 3984.3 | 5556.6 | 3961.8 | 1871.0 | 910.8 | 603.1 | 421.5 | 299.7 |
| 77.5° | 450.7 | 469.5 | 795.7 | 1892.1 | 3509.0 | 2361.0 | 847.7 | 450.4 | 385.6 | 297.7 | 218.8 |
| 80° | 192.0 | 198.3 | 306.4 | 699.1 | 1652.2 | 950.8 | 390.6 | 301.7 | 266.8 | 207.7 | 153.4 |
| 82.5° | 106.7 | 113.4 | 173.8 | 317.1 | 666.8 | 324.2 | 238.3 | 210.1 | 175.5 | 125.2 | 99.7 |
| 85° | 60.4 | 64.1 | 101.7 | 177.2 | 282.6 | 130.2 | 142.6 | 139.6 | 99.0 | 64.4 | 49.0 |
| 87.5° | 28.5 | 30.9 | 49.0 | 82.2 | 110.7 | 51.0 | 72.5 | 79.9 | 62.1 | 39.3 | 25.5 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 | 1054.8 |
| 2.5° | 1054.1 | 1060.2 | 1067.2 | 1070.9 | 1074.3 | 1078.3 | 1082.3 | 1082.3 | 1083.0 | 1083.3 |
| 5° | 1046.7 | 1059.2 | 1070.2 | 1074.9 | 1075.9 | 1075.9 | 1074.9 | 1069.6 | 1064.9 | 1066.9 |
| 7.5° | 1031.3 | 1049.4 | 1058.8 | 1057.1 | 1044.4 | 1029.6 | 1017.2 | 1002.1 | 994.4 | 993.0 |
| 10° | 1009.2 | 1030.0 | 1031.6 | 1014.9 | 983.3 | 951.8 | 925.6 | 900.1 | 888.0 | 885.0 |
| 12.5° | 984.7 | 1003.8 | 993.0 | 958.5 | 907.8 | 861.8 | 828.6 | 802.8 | 791.3 | 788.3 |
| 15° | 964.9 | 977.9 | 950.8 | 896.4 | 832.6 | 784.0 | 756.4 | 737.3 | 729.3 | 726.9 |
| 17.5° | 954.5 | 957.1 | 907.5 | 834.0 | 766.2 | 725.6 | 708.5 | 699.4 | 696.4 | 694.7 |
| 20° | 959.5 | 940.7 | 866.2 | 775.9 | 711.8 | 683.3 | 679.3 | 676.9 | 676.2 | 675.2 |
| 22.5° | 984.7 | 935.7 | 828.3 | 720.9 | 664.2 | 651.7 | 655.1 | 654.8 | 654.1 | 653.4 |
| 25° | 1029.6 | 940.0 | 791.3 | 668.5 | 624.2 | 621.5 | 627.6 | 627.6 | 624.9 | 624.9 |
| 27.5° | 1089.0 | 949.1 | 750.1 | 618.8 | 588.0 | 588.3 | 593.0 | 591.7 | 588.6 | 586.6 |
| 30° | 1161.5 | 954.8 | 701.7 | 574.2 | 554.1 | 552.7 | 554.1 | 548.4 | 539.3 | 538.6 |
| 32.5° | 1235.7 | 947.7 | 645.7 | 534.6 | 518.2 | 515.1 | 514.1 | 506.1 | 495.7 | 492.7 |
| 35° | 1302.8 | 921.9 | 588.6 | 503.1 | 483.9 | 477.2 | 481.9 | 479.2 | 469.8 | 467.5 |
| 37.5° | 1351.8 | 873.9 | 537.3 | 475.2 | 459.4 | 457.8 | 460.8 | 461.8 | 450.7 | 448.4 |
| 40° | 1384.7 | 808.8 | 493.3 | 451.7 | 454.7 | 448.4 | 438.3 | 431.2 | 427.9 | 426.9 |
| 42.5° | 1411.2 | 741.0 | 456.4 | 440.6 | 455.7 | 437.3 | 415.5 | 404.1 | 410.1 | 412.8 |
| 45° | 1441.7 | 674.9 | 425.5 | 426.9 | 450.7 | 424.5 | 399.7 | 388.6 | 391.0 | 391.6 |
| 47.5° | 1483.7 | 594.3 | 392.3 | 404.7 | 433.9 | 415.8 | 390.0 | 374.2 | 363.1 | 358.1 |
| 50° | 1541.8 | 499.0 | 357.8 | 379.9 | 417.5 | 409.4 | 374.9 | 358.1 | 337.6 | 332.9 |
| 52.5° | 1582.0 | 410.1 | 329.2 | 359.1 | 402.7 | 396.7 | 362.8 | 341.0 | 319.5 | 315.5 |
| 55° | 1560.2 | 340.6 | 304.4 | 335.9 | 383.3 | 380.9 | 352.7 | 323.5 | 306.7 | 303.4 |
| 57.5° | 1451.1 | 296.7 | 285.3 | 314.1 | 359.4 | 367.5 | 339.3 | 308.8 | 296.7 | 294.3 |
| 60° | 1243.1 | 269.2 | 273.2 | 299.4 | 340.0 | 354.1 | 325.9 | 300.7 | 292.6 | 291.0 |
| 62.5° | 964.5 | 250.7 | 264.1 | 288.6 | 324.9 | 344.7 | 318.5 | 299.7 | 296.7 | 294.7 |
| 65° | 691.0 | 235.9 | 254.4 | 277.9 | 311.1 | 335.9 | 315.8 | 298.3 | 299.0 | 297.3 |
| 67.5° | 469.5 | 222.8 | 242.6 | 265.8 | 297.7 | 328.2 | 312.1 | 293.7 | 302.0 | 300.0 |
| 70° | 328.6 | 210.1 | 228.9 | 250.4 | 280.9 | 317.5 | 305.4 | 286.6 | 285.9 | 277.9 |
| 72.5° | 256.4 | 193.3 | 210.1 | 228.9 | 259.4 | 302.4 | 292.0 | 270.8 | 259.8 | 251.4 |
| 73° | 244.7 | 189.3 | 205.4 | 224.2 | 254.7 | 298.7 | 288.3 | 266.5 | 254.1 | 246.3 |
| 75° | 202.4 | 171.8 | 186.6 | 203.4 | 234.6 | 281.2 | 270.2 | 246.7 | 230.9 | 226.2 |
| 77.5° | 159.1 | 147.0 | 161.1 | 176.2 | 206.7 | 255.7 | 243.3 | 220.8 | 212.1 | 208.1 |
| 80° | 117.8 | 121.8 | 134.2 | 147.7 | 179.2 | 228.5 | 217.5 | 195.0 | 233.9 | 224.2 |
| 82.5° | 82.9 | 92.3 | 103.7 | 115.8 | 150.3 | 202.0 | 188.6 | 165.5 | 171.2 | 142.3 |
| 85° | 49.0 | 60.4 | 71.1 | 81.6 | 108.4 | 167.5 | 155.7 | 131.9 | 108.1 | 103.0 |
| 87.5° | 28.5 | 33.6 | 36.6 | 47.3 | 74.5 | 126.2 | 109.7 | 97.7 | 56.0 | 37.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)