

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: P193123

Luminaire Tested: **GAN-AF-05-LED-U-T2-7030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193123
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-05-LED-U-T2-7030-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30973.9 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G4

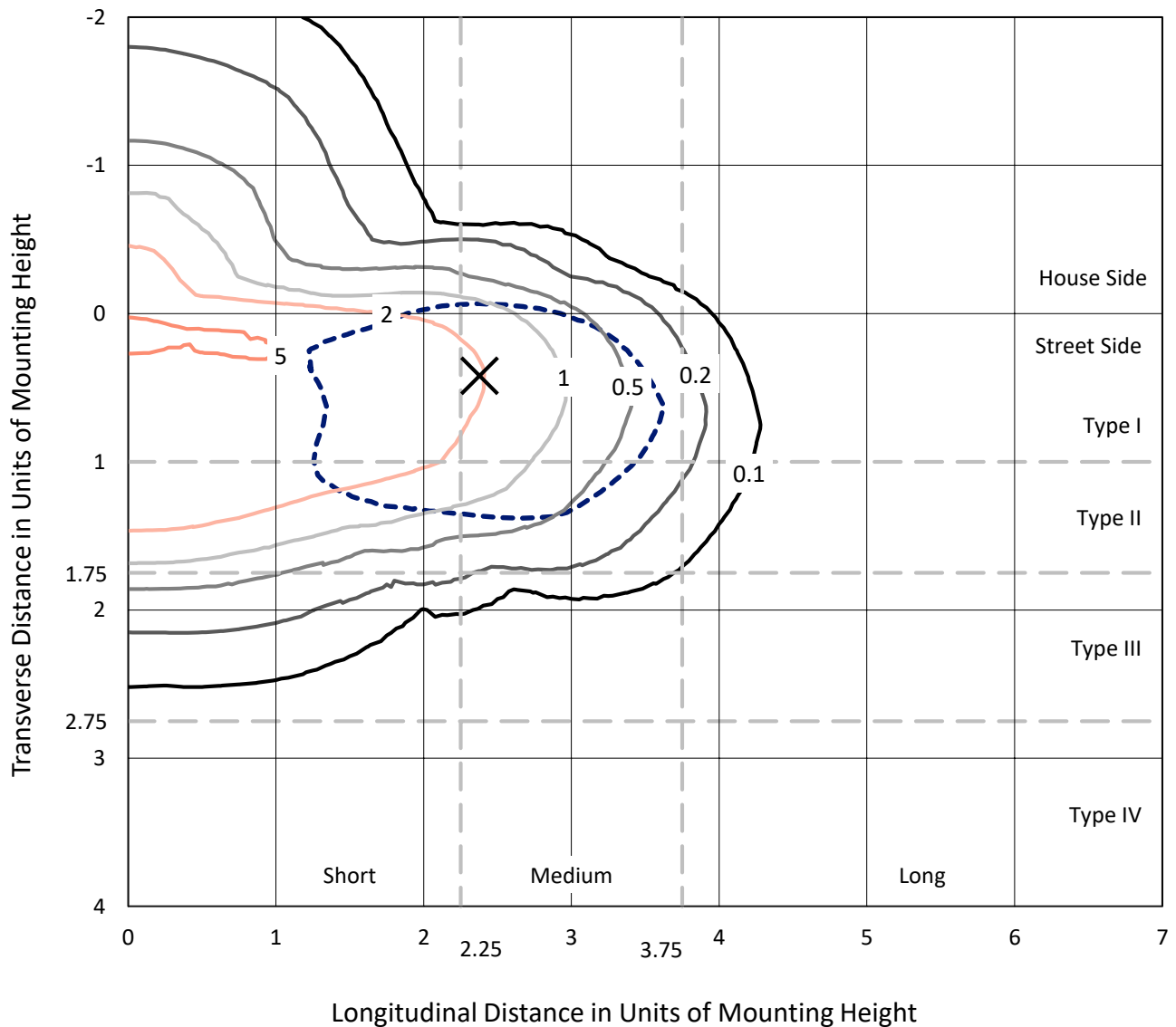
Input Watts (W): 320
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

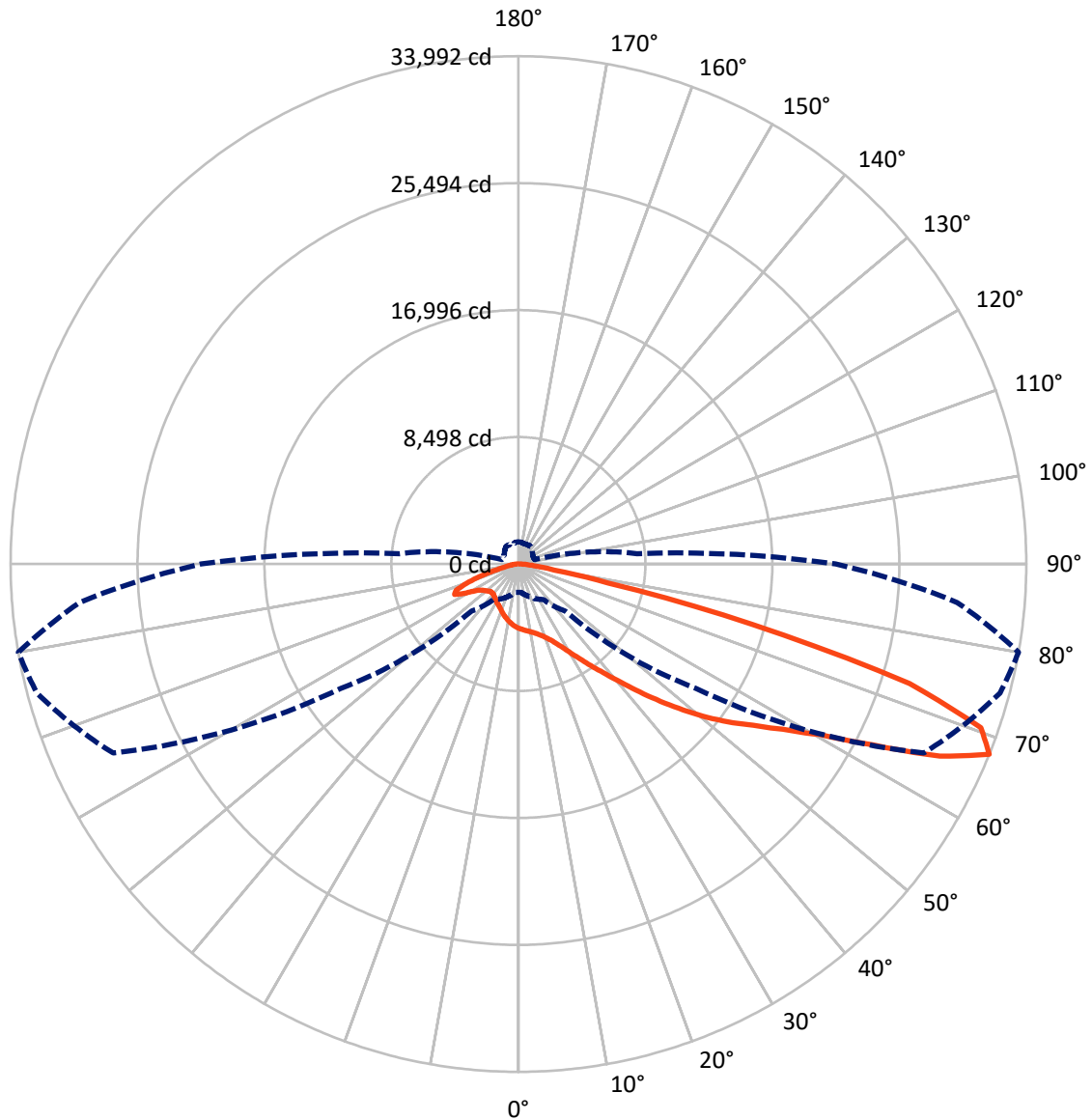
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5704.2 | 0.0 | 5704.2 |
| | % Fixture | 18.4 | 0.0 | 18.4 |
| Street Side | Lumens | 25269.7 | 0.0 | 25269.7 |
| | % Fixture | 81.6 | 0.0 | 81.6 |
| Total | Lumens | 30973.9 | 0.0 | 30973.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 396.9 | 1.3 |
| 10°-20° | 1143.5 | 3.7 |
| 20°-30° | 1892.7 | 6.1 |
| 30°-40° | 3096.0 | 10.0 |
| 40°-50° | 4998.8 | 16.1 |
| 50°-60° | 7216.9 | 23.3 |
| 60°-70° | 7964.2 | 25.7 |
| 70°-80° | 3671.0 | 11.9 |
| 80°-90° | 593.8 | 1.9 |
| 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° | 30973.9 | 100.0 |
| 0°-180° | 30973.9 | 100.0 |



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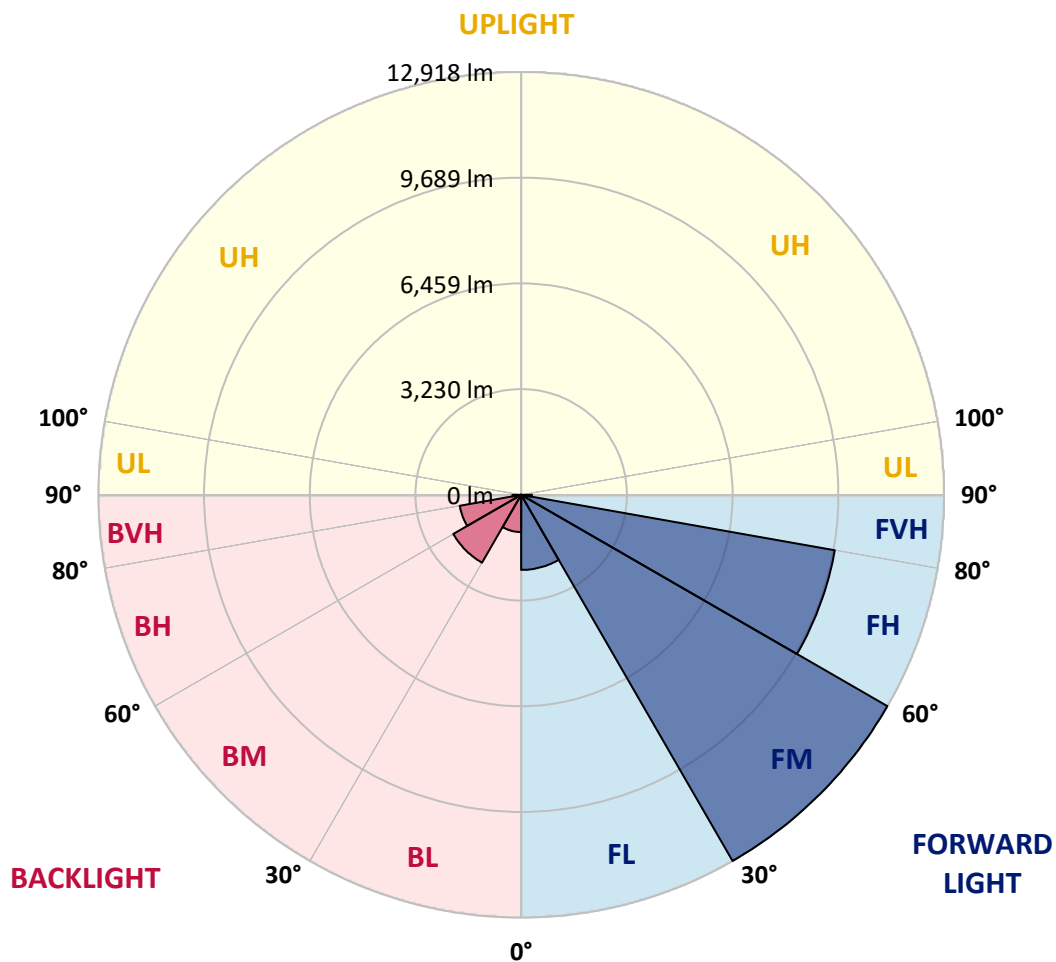
CATALOG NUMBER: GAN-AF-05-LED-U-T2-7030-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2295.1 | 7.4 | | | |
| FM (30°-60°) | 12918.4 | 41.7 | | | |
| FH (60°-80°) | 9729.7 | 31.4 | | | G4/12000 |
| FVH (80°-90°) | 326.5 | 1.1 | | | G3/500 |
| BL (0°-30°) | 1138.1 | 3.7 | B3/2500 | | |
| BM (30°-60°) | 2393.3 | 7.7 | B2/2500 | | |
| BH (60°-80°) | 1905.5 | 6.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 267.3 | 0.9 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 80° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 |
| 2.5° | 4707.2 | 4679.8 | 4684.4 | 4676.8 | 4653.9 | 4614.2 | 4571.5 | 4493.9 | 4413.0 | 4370.3 | 4336.7 |
| 5° | 5100.7 | 5093.0 | 5082.4 | 5057.9 | 5000.0 | 4917.6 | 4815.5 | 4678.3 | 4530.4 | 4452.7 | 4377.9 |
| 7.5° | 5395.0 | 5390.5 | 5376.6 | 5361.5 | 5305.0 | 5205.8 | 5051.9 | 4856.7 | 4641.7 | 4535.0 | 4419.1 |
| 10° | 5419.4 | 5427.0 | 5437.8 | 5478.8 | 5486.5 | 5433.1 | 5276.0 | 5039.7 | 4757.5 | 4620.3 | 4472.4 |
| 12.5° | 5212.0 | 5228.8 | 5269.9 | 5375.1 | 5486.5 | 5552.0 | 5471.2 | 5231.8 | 4893.2 | 4727.1 | 4539.5 |
| 15° | 4937.5 | 4946.7 | 4997.0 | 5141.8 | 5341.5 | 5544.5 | 5620.7 | 5443.8 | 5068.6 | 4864.3 | 4640.1 |
| 17.5° | 4820.1 | 4824.7 | 4859.8 | 4955.8 | 5141.8 | 5431.6 | 5704.5 | 5674.1 | 5283.7 | 5035.1 | 4763.7 |
| 20° | 4760.7 | 4771.4 | 4821.6 | 4916.1 | 5033.6 | 5286.7 | 5716.8 | 5922.6 | 5539.9 | 5248.6 | 4919.2 |
| 22.5° | 4929.9 | 4925.3 | 4943.7 | 4990.9 | 5090.1 | 5242.5 | 5707.6 | 6178.7 | 5866.1 | 5523.0 | 5122.1 |
| 25° | 5324.9 | 5341.5 | 5309.6 | 5256.3 | 5288.2 | 5395.0 | 5756.4 | 6456.2 | 6274.9 | 5875.3 | 5387.3 |
| 27.5° | 5887.6 | 5870.7 | 5823.5 | 5698.4 | 5632.9 | 5678.6 | 5918.0 | 6755.2 | 6782.6 | 6338.9 | 5738.1 |
| 30° | 6448.7 | 6435.0 | 6389.2 | 6236.7 | 6102.5 | 6064.4 | 6232.1 | 7098.2 | 7388.0 | 6895.5 | 6168.1 |
| 32.5° | 7031.2 | 7015.9 | 6973.3 | 6820.7 | 6659.2 | 6570.7 | 6678.9 | 7494.7 | 8101.6 | 7560.3 | 6674.3 |
| 35° | 7749.4 | 7720.4 | 7630.4 | 7418.4 | 7259.8 | 7191.2 | 7241.6 | 7993.4 | 8925.1 | 8347.1 | 7288.9 |
| 37.5° | 8424.9 | 8469.1 | 8377.7 | 8084.8 | 7879.0 | 7854.5 | 7911.0 | 8601.8 | 9812.6 | 9227.0 | 7994.8 |
| 40° | 9103.5 | 9111.1 | 9028.7 | 8789.4 | 8577.4 | 8537.7 | 8679.5 | 9339.8 | 10860.2 | 10279.1 | 8853.4 |
| 42.5° | 9804.9 | 9820.1 | 9681.4 | 9460.3 | 9304.7 | 9312.3 | 9474.0 | 10204.4 | 12061.6 | 11518.8 | 9841.5 |
| 45° | 10636.0 | 10658.8 | 10506.4 | 10216.7 | 10074.8 | 10360.0 | 10292.9 | 11174.3 | 13379.3 | 12927.8 | 10975.9 |
| 47.5° | 11505.1 | 11540.2 | 11424.2 | 11152.8 | 10975.9 | 11367.9 | 11111.6 | 12249.3 | 14797.3 | 14438.9 | 12221.8 |
| 50° | 11979.4 | 12029.7 | 12142.5 | 12122.8 | 12084.6 | 12018.9 | 12025.1 | 13402.1 | 16259.6 | 16012.6 | 13502.7 |
| 52.5° | 11724.7 | 11723.2 | 12134.9 | 12635.1 | 13168.8 | 13208.4 | 13138.2 | 14617.4 | 17625.9 | 17551.2 | 14708.9 |
| 55° | 10559.7 | 10639.0 | 11262.7 | 12230.9 | 13688.8 | 14599.1 | 14806.5 | 16009.5 | 18967.9 | 19054.7 | 15933.4 |
| 57.5° | 8620.1 | 8685.7 | 9527.4 | 10876.9 | 12987.3 | 15425.6 | 17179.2 | 18033.1 | 20468.3 | 20873.9 | 17563.4 |
| 60° | 5846.4 | 5925.6 | 6817.7 | 8438.6 | 11099.5 | 14965.0 | 19437.4 | 21643.9 | 22264.7 | 23187.1 | 19850.8 |
| 62.5° | 3435.5 | 3507.2 | 4234.6 | 5323.3 | 7815.0 | 12825.6 | 20428.6 | 26781.3 | 25117.6 | 26677.5 | 23339.6 |
| 65° | 2365.0 | 2413.9 | 2767.6 | 3313.5 | 4490.8 | 8638.4 | 19199.6 | 30328.0 | 29507.7 | 31002.1 | 27385.1 |
| 67.5° | 1903.1 | 1897.0 | 2177.5 | 2549.6 | 2891.1 | 4454.2 | 14518.3 | 29927.1 | 33368.7 | 33992.3 | 29484.8 |
| 70° | 1567.6 | 1561.5 | 1752.1 | 2060.1 | 2310.2 | 2508.4 | 7907.9 | 25254.8 | 32581.8 | 32835.0 | 27551.4 |
| 72.5° | 1311.4 | 1317.4 | 1439.5 | 1668.2 | 1895.4 | 1889.3 | 3475.2 | 17766.2 | 25631.4 | 27382.0 | 21962.6 |
| 75° | 1107.1 | 1110.1 | 1190.9 | 1352.5 | 1538.6 | 1521.9 | 1884.7 | 9624.9 | 14899.4 | 16117.8 | 12174.5 |
| 77.5° | 942.4 | 945.4 | 997.2 | 1087.2 | 1219.9 | 1213.8 | 1375.5 | 4158.3 | 6215.3 | 6139.2 | 4164.4 |
| 80° | 840.2 | 840.2 | 864.6 | 881.4 | 954.6 | 927.2 | 1020.2 | 1997.6 | 2627.3 | 2426.1 | 1662.1 |
| 82.5° | 658.8 | 661.8 | 811.2 | 805.1 | 751.8 | 716.7 | 716.7 | 1177.2 | 1392.2 | 1287.0 | 972.9 |
| 85° | 370.5 | 369.0 | 523.1 | 631.3 | 661.8 | 504.8 | 500.2 | 658.8 | 757.8 | 667.9 | 471.2 |
| 87.5° | 158.5 | 161.6 | 242.4 | 280.6 | 375.1 | 314.1 | 309.5 | 340.1 | 385.8 | 333.9 | 218.1 |
| 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° | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 | 4303.1 |
| 2.5° | 4304.7 | 4265.1 | 4178.2 | 4069.9 | 3972.2 | 3908.2 | 3850.3 | 3766.3 | 3771.0 | 3713.0 | 3670.3 |
| 5° | 4301.6 | 4219.3 | 4018.0 | 3778.6 | 3548.4 | 3382.1 | 3257.1 | 3144.3 | 3116.8 | 3063.4 | 3031.4 |
| 7.5° | 4304.7 | 4170.5 | 3831.9 | 3449.2 | 3164.1 | 2953.8 | 2847.0 | 2787.4 | 2773.8 | 2755.4 | 2756.9 |
| 10° | 4315.4 | 4126.2 | 3627.6 | 3141.2 | 2842.4 | 2703.6 | 2677.6 | 2696.0 | 2717.3 | 2723.4 | 2724.9 |
| 12.5° | 4339.8 | 4086.7 | 3403.5 | 2866.8 | 2641.2 | 2598.4 | 2642.6 | 2705.2 | 2746.3 | 2766.1 | 2764.6 |
| 15° | 4394.6 | 4056.1 | 3188.5 | 2651.7 | 2529.8 | 2552.7 | 2635.0 | 2723.4 | 2782.9 | 2810.3 | 2811.9 |
| 17.5° | 4454.2 | 4011.9 | 2967.4 | 2487.1 | 2447.4 | 2505.4 | 2607.5 | 2711.3 | 2784.4 | 2814.9 | 2821.0 |
| 20° | 4531.8 | 3957.1 | 2735.7 | 2363.5 | 2369.7 | 2435.2 | 2531.3 | 2635.0 | 2715.7 | 2741.8 | 2753.9 |
| 22.5° | 4634.1 | 3897.6 | 2532.8 | 2262.9 | 2281.3 | 2331.5 | 2406.2 | 2496.2 | 2566.4 | 2578.5 | 2589.2 |
| 25° | 4771.4 | 3833.5 | 2371.2 | 2171.4 | 2179.0 | 2208.0 | 2258.3 | 2311.7 | 2360.5 | 2346.8 | 2357.5 |
| 27.5° | 4955.8 | 3778.6 | 2250.7 | 2087.5 | 2073.8 | 2080.0 | 2105.9 | 2122.6 | 2148.6 | 2110.5 | 2115.0 |
| 30° | 5172.4 | 3719.1 | 2157.7 | 2014.3 | 1976.3 | 1965.6 | 1971.7 | 1980.8 | 2000.6 | 1948.7 | 1941.2 |
| 32.5° | 5423.9 | 3647.5 | 2070.8 | 1950.3 | 1897.0 | 1875.6 | 1878.6 | 1903.1 | 1979.2 | 1947.2 | 1930.5 |
| 35° | 5716.8 | 3566.7 | 1979.2 | 1880.2 | 1843.5 | 1813.0 | 1810.0 | 1886.3 | 2113.5 | 2093.6 | 2078.4 |
| 37.5° | 6059.8 | 3485.8 | 1887.8 | 1800.9 | 1803.9 | 1770.3 | 1759.7 | 1846.6 | 2139.4 | 2061.6 | 2050.9 |
| 40° | 6495.9 | 3443.2 | 1810.0 | 1717.0 | 1755.1 | 1750.6 | 1729.2 | 1773.4 | 1968.7 | 1826.9 | 1808.5 |
| 42.5° | 7035.7 | 3449.2 | 1752.1 | 1627.0 | 1697.2 | 1746.0 | 1712.4 | 1714.0 | 1784.1 | 1677.3 | 1660.6 |
| 45° | 7702.1 | 3520.9 | 1710.9 | 1555.5 | 1631.6 | 1741.4 | 1706.3 | 1681.9 | 1688.0 | 1631.6 | 1622.5 |
| 47.5° | 8479.8 | 3668.8 | 1681.9 | 1495.9 | 1569.1 | 1724.6 | 1704.8 | 1672.8 | 1659.1 | 1628.5 | 1621.0 |
| 50° | 9344.4 | 3883.8 | 1660.6 | 1439.5 | 1512.7 | 1697.2 | 1706.3 | 1663.6 | 1648.4 | 1636.1 | 1631.6 |
| 52.5° | 10193.8 | 4129.4 | 1628.5 | 1390.7 | 1468.5 | 1663.6 | 1710.9 | 1654.5 | 1637.7 | 1628.5 | 1624.0 |
| 55° | 11140.7 | 4435.8 | 1579.8 | 1349.5 | 1431.9 | 1621.0 | 1710.9 | 1640.7 | 1622.5 | 1624.0 | 1622.5 |
| 57.5° | 12420.0 | 4931.4 | 1521.9 | 1314.4 | 1387.6 | 1569.1 | 1681.9 | 1625.6 | 1602.7 | 1604.2 | 1605.7 |
| 60° | 14419.2 | 5805.2 | 1451.7 | 1279.3 | 1332.8 | 1508.1 | 1642.2 | 1591.9 | 1569.1 | 1575.2 | 1576.7 |
| 62.5° | 17359.1 | 7087.5 | 1360.2 | 1227.5 | 1274.8 | 1442.5 | 1587.4 | 1549.3 | 1526.4 | 1541.6 | 1541.6 |
| 65° | 20414.9 | 8219.0 | 1247.3 | 1162.0 | 1213.8 | 1370.8 | 1518.8 | 1495.9 | 1473.1 | 1508.1 | 1506.5 |
| 67.5° | 21236.8 | 7965.9 | 1134.5 | 1090.3 | 1152.8 | 1291.6 | 1436.4 | 1424.2 | 1412.0 | 1473.1 | 1470.0 |
| 70° | 18865.7 | 6395.3 | 1030.9 | 1017.1 | 1085.7 | 1206.2 | 1347.9 | 1347.9 | 1340.4 | 1386.1 | 1375.5 |
| 72.5° | 14373.4 | 4535.0 | 931.7 | 939.3 | 1009.4 | 1113.2 | 1251.9 | 1262.6 | 1250.4 | 1273.3 | 1264.1 |
| 75° | 7694.5 | 2595.4 | 832.5 | 854.0 | 914.9 | 1018.7 | 1145.1 | 1155.9 | 1148.2 | 1146.6 | 1151.3 |
| 77.5° | 2557.2 | 1268.7 | 728.9 | 762.4 | 815.8 | 921.0 | 1033.8 | 1050.6 | 1032.3 | 1029.3 | 1027.8 |
| 80° | 1139.0 | 797.5 | 614.5 | 658.8 | 706.1 | 809.7 | 916.4 | 930.2 | 910.3 | 937.8 | 902.7 |
| 82.5° | 731.9 | 524.6 | 492.5 | 541.4 | 587.0 | 698.3 | 799.0 | 802.1 | 783.8 | 910.3 | 776.2 |
| 85° | 355.3 | 324.8 | 370.5 | 414.7 | 454.4 | 548.9 | 661.8 | 663.3 | 617.6 | 562.6 | 542.8 |
| 87.5° | 176.9 | 189.1 | 247.0 | 286.7 | 306.5 | 376.6 | 481.9 | 472.6 | 452.9 | 411.7 | 379.6 |
| 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)