

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: P299192

Luminaire Tested: **GAA-AF-07-LED-U-T3-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299192
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-07-LED-U-T3-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32794.9 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

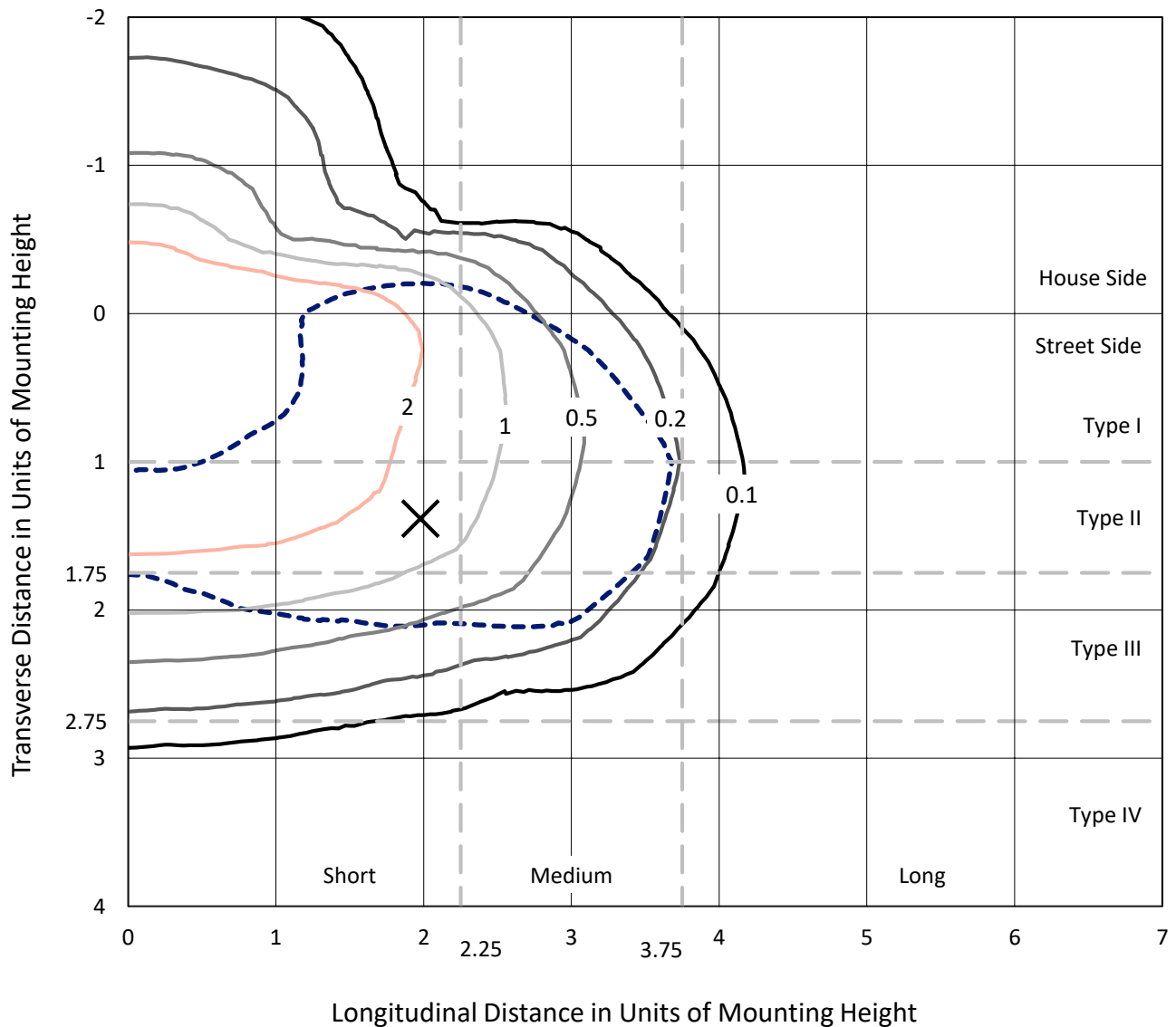
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

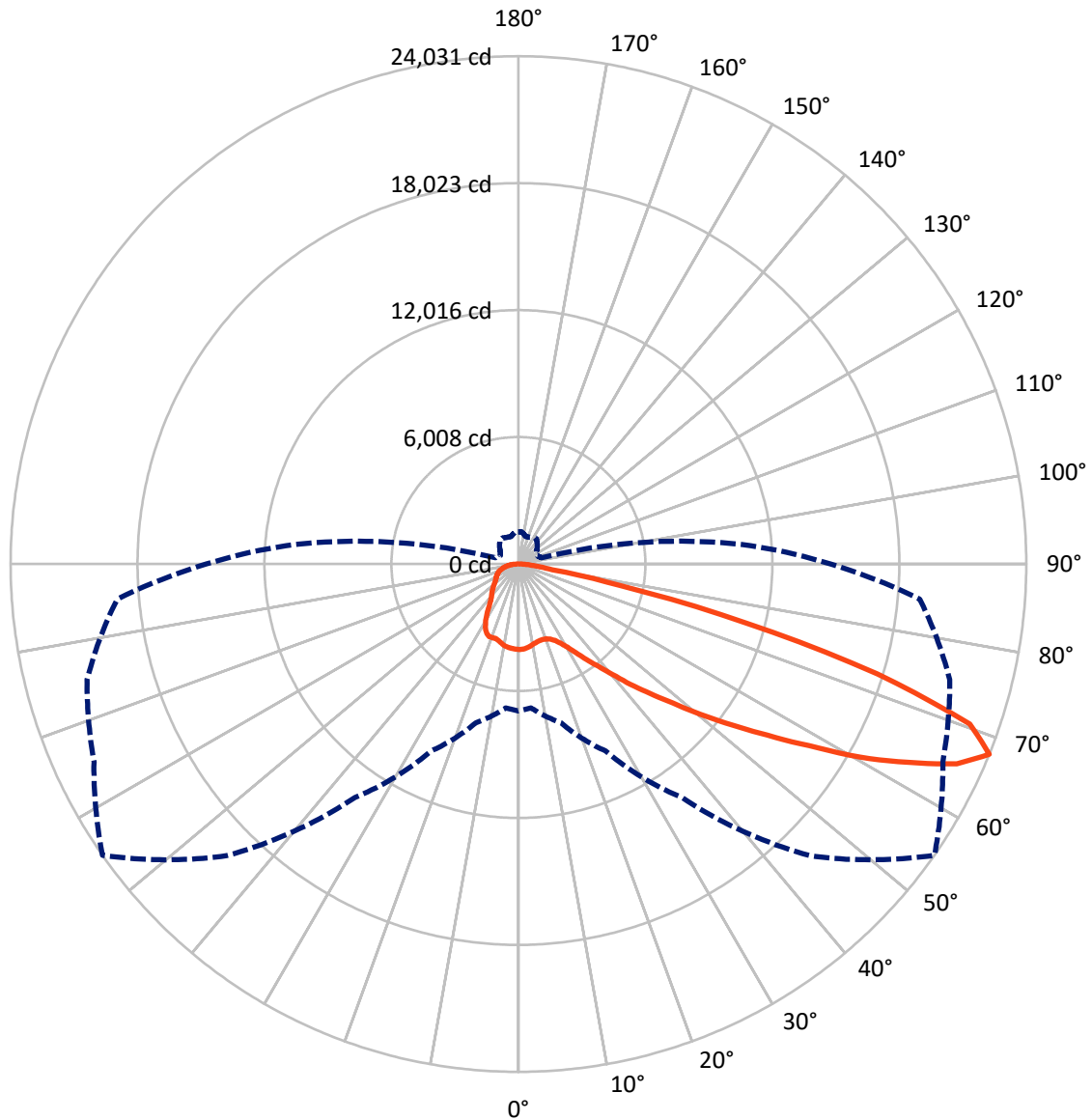
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7084.4 | 0.0 | 7084.4 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 25710.5 | 0.0 | 25710.5 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 32794.9 | 0.0 | 32794.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 377.5 | 1.2 |
| 10°-20° | 1069.0 | 3.3 |
| 20°-30° | 1790.8 | 5.5 |
| 30°-40° | 2944.8 | 9.0 |
| 40°-50° | 4957.0 | 15.1 |
| 50°-60° | 7801.9 | 23.8 |
| 60°-70° | 9310.7 | 28.4 |
| 70°-80° | 3998.2 | 12.2 |
| 80°-90° | 545.1 | 1.7 |
| 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° | 32794.9 | 100.0 |
| 0°-180° | 32794.9 | 100.0 |



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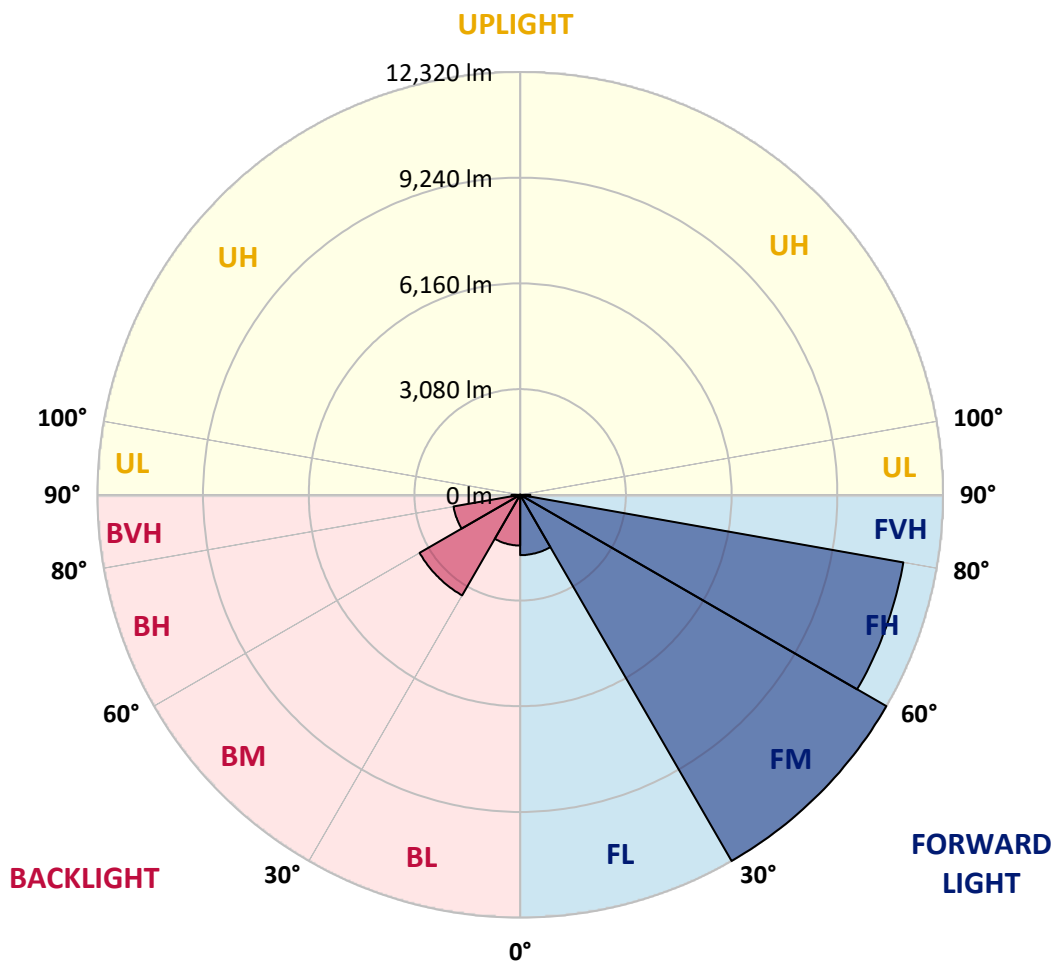
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1757.9 | 5.4 | | | |
| FM | (30°-60°) | 12320.2 | 37.6 | | | |
| FH | (60°-80°) | 11337.4 | 34.6 | | | G4/12000 |
| FVH | (80°-90°) | 295.1 | 0.9 | | | G3/500 |
| BL | (0°-30°) | 1479.4 | 4.5 | B3/2500 | | |
| BM | (30°-60°) | 3383.4 | 10.3 | B3/5000 | | |
| BH | (60°-80°) | 1971.6 | 6.0 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 250.0 | 0.8 | | | 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 III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 |
| 2.5° | 4009.1 | 4010.7 | 4013.9 | 4026.5 | 4037.6 | 4034.5 | 4036.0 | 4029.7 | 4028.1 | 4018.6 | 4028.1 |
| 5° | 3958.4 | 3963.2 | 3964.8 | 3985.4 | 3998.0 | 4001.2 | 3996.4 | 3988.5 | 3979.0 | 3969.5 | 3974.3 |
| 7.5° | 3842.8 | 3855.5 | 3857.1 | 3885.6 | 3906.2 | 3933.1 | 3934.7 | 3936.3 | 3931.5 | 3925.2 | 3934.7 |
| 10° | 3769.9 | 3773.1 | 3771.5 | 3792.1 | 3808.0 | 3838.0 | 3855.5 | 3885.6 | 3898.2 | 3901.4 | 3907.7 |
| 12.5° | 3765.2 | 3762.0 | 3757.3 | 3757.3 | 3752.5 | 3765.2 | 3796.9 | 3839.6 | 3869.7 | 3879.2 | 3887.2 |
| 15° | 3815.9 | 3814.3 | 3798.4 | 3774.7 | 3744.6 | 3735.1 | 3762.0 | 3809.5 | 3849.1 | 3869.7 | 3877.6 |
| 17.5° | 3929.9 | 3920.4 | 3895.1 | 3841.2 | 3776.3 | 3750.9 | 3754.1 | 3793.7 | 3839.6 | 3866.6 | 3874.5 |
| 20° | 4139.0 | 4139.0 | 4085.2 | 3983.8 | 3868.1 | 3808.0 | 3779.4 | 3803.2 | 3847.6 | 3884.0 | 3895.1 |
| 22.5° | 4500.2 | 4503.3 | 4413.0 | 4246.7 | 4051.9 | 3923.6 | 3852.3 | 3847.6 | 3899.8 | 3941.0 | 3953.7 |
| 25° | 5011.8 | 4999.1 | 4872.4 | 4634.8 | 4338.6 | 4126.3 | 4002.8 | 3974.3 | 4018.6 | 4064.6 | 4080.4 |
| 27.5° | 5607.4 | 5561.4 | 5411.0 | 5124.3 | 4740.9 | 4430.5 | 4240.4 | 4194.4 | 4237.2 | 4289.5 | 4305.3 |
| 30° | 6196.6 | 6149.1 | 5970.1 | 5656.5 | 5230.4 | 4837.6 | 4565.1 | 4490.7 | 4550.8 | 4625.3 | 4634.8 |
| 32.5° | 6785.9 | 6785.9 | 6586.3 | 6220.4 | 5756.3 | 5323.8 | 4997.5 | 4908.8 | 5008.6 | 5098.9 | 5119.5 |
| 35° | 7490.8 | 7493.9 | 7300.7 | 6860.3 | 6361.4 | 5903.6 | 5544.0 | 5479.1 | 5629.6 | 5692.9 | 5742.0 |
| 37.5° | 8357.2 | 8374.6 | 8126.0 | 7593.7 | 7047.2 | 6565.7 | 6138.0 | 6049.3 | 6199.8 | 6372.5 | 6530.9 |
| 40° | 9293.4 | 9315.5 | 9041.5 | 8385.7 | 7839.2 | 7335.5 | 6873.0 | 6713.0 | 6963.3 | 7292.8 | 7497.1 |
| 42.5° | 10186.7 | 10300.8 | 10036.3 | 9361.5 | 8773.8 | 8252.7 | 7783.8 | 7551.0 | 7864.6 | 8362.0 | 8539.4 |
| 45° | 11477.7 | 11560.1 | 11099.1 | 10487.7 | 9934.9 | 9352.0 | 8731.0 | 8485.5 | 8924.3 | 9551.6 | 9588.0 |
| 47.5° | 12337.8 | 12276.0 | 12041.6 | 11661.5 | 11311.4 | 10766.5 | 9831.9 | 9562.6 | 10145.6 | 10883.7 | 10679.4 |
| 50° | 12795.6 | 12814.6 | 12782.9 | 12805.1 | 12817.8 | 12475.6 | 11181.5 | 10812.4 | 11507.8 | 12399.6 | 11929.1 |
| 52.5° | 13223.3 | 13096.6 | 13201.1 | 13720.7 | 14347.9 | 14221.2 | 12649.9 | 12265.0 | 12968.3 | 14081.8 | 13250.2 |
| 55° | 13213.8 | 13020.5 | 13361.1 | 14278.2 | 15638.9 | 15784.6 | 14298.8 | 13855.3 | 14512.7 | 15886.0 | 14650.5 |
| 57.5° | 12746.5 | 12756.0 | 13280.3 | 14481.0 | 16538.6 | 17254.6 | 16212.3 | 15547.0 | 16150.5 | 17713.9 | 15928.8 |
| 60° | 12103.4 | 12190.5 | 12946.1 | 14447.7 | 17259.3 | 18460.0 | 18559.8 | 17370.2 | 17755.1 | 19375.6 | 16986.9 |
| 62.5° | 11065.9 | 11157.7 | 12200.0 | 14102.4 | 17150.0 | 19621.1 | 20682.4 | 19438.9 | 19432.6 | 20383.0 | 17297.3 |
| 65° | 9429.6 | 9402.7 | 10497.2 | 12811.4 | 16232.9 | 20479.6 | 22790.7 | 21227.3 | 20696.6 | 20398.8 | 16673.2 |
| 67.5° | 6953.8 | 6833.4 | 7772.7 | 9757.5 | 13492.6 | 19518.1 | 24031.0 | 22158.7 | 21127.5 | 19057.2 | 14766.1 |
| 70° | 3608.4 | 3488.0 | 4248.3 | 5697.7 | 8873.6 | 15233.4 | 22657.6 | 21677.1 | 20175.5 | 15974.7 | 11568.0 |
| 72.5° | 1542.8 | 1522.2 | 1831.1 | 2499.6 | 4292.7 | 8786.5 | 17766.2 | 18762.6 | 17311.6 | 11902.2 | 7953.3 |
| 75° | 1037.5 | 1031.2 | 1146.8 | 1362.2 | 1930.9 | 3565.6 | 11118.1 | 13318.3 | 12665.7 | 7379.9 | 4473.2 |
| 77.5° | 814.2 | 806.3 | 874.4 | 978.9 | 1251.4 | 1406.6 | 4934.2 | 7150.2 | 6618.0 | 3212.4 | 1957.8 |
| 80° | 636.8 | 630.4 | 673.2 | 730.2 | 899.7 | 887.0 | 1623.6 | 2844.9 | 2201.8 | 1230.8 | 952.0 |
| 82.5° | 502.1 | 502.1 | 537.0 | 538.6 | 638.4 | 605.1 | 847.4 | 1252.9 | 1099.3 | 717.6 | 582.9 |
| 85° | 459.4 | 459.4 | 495.8 | 402.3 | 416.6 | 381.7 | 525.9 | 742.9 | 697.0 | 294.6 | 253.4 |
| 87.5° | 231.3 | 224.9 | 416.6 | 356.4 | 226.5 | 202.8 | 256.6 | 359.6 | 386.5 | 163.2 | 126.7 |
| 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° | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 | 4044.0 |
| 2.5° | 4025.0 | 4023.4 | 4026.5 | 4028.1 | 4040.8 | 4058.2 | 4066.1 | 4077.2 | 4083.6 | 4080.4 |
| 5° | 3977.4 | 3980.6 | 3993.3 | 4002.8 | 4025.0 | 4053.5 | 4069.3 | 4082.0 | 4093.1 | 4088.3 |
| 7.5° | 3937.8 | 3945.8 | 3964.8 | 3972.7 | 3985.4 | 3993.3 | 3991.7 | 3996.4 | 4006.0 | 3994.9 |
| 10° | 3915.7 | 3925.2 | 3939.4 | 3928.3 | 3898.2 | 3855.5 | 3815.9 | 3795.3 | 3801.6 | 3793.7 |
| 12.5° | 3893.5 | 3906.2 | 3895.1 | 3842.8 | 3758.8 | 3703.4 | 3673.3 | 3676.5 | 3690.7 | 3693.9 |
| 15° | 3880.8 | 3885.6 | 3838.0 | 3739.8 | 3654.3 | 3646.4 | 3662.2 | 3659.1 | 3660.6 | 3660.6 |
| 17.5° | 3880.8 | 3868.1 | 3779.4 | 3681.2 | 3644.8 | 3630.5 | 3581.4 | 3519.7 | 3492.7 | 3483.2 |
| 20° | 3901.4 | 3868.1 | 3760.4 | 3695.5 | 3616.3 | 3494.3 | 3364.4 | 3250.4 | 3199.7 | 3185.4 |
| 22.5° | 3963.2 | 3906.2 | 3814.3 | 3701.8 | 3476.9 | 3272.6 | 3066.6 | 2930.4 | 2838.5 | 2822.7 |
| 25° | 4088.3 | 4025.0 | 3920.4 | 3617.9 | 3255.1 | 2963.7 | 2729.2 | 2577.2 | 2485.3 | 2472.6 |
| 27.5° | 4306.9 | 4265.7 | 3977.4 | 3432.5 | 2960.5 | 2648.5 | 2431.4 | 2314.2 | 2246.1 | 2241.4 |
| 30° | 4636.4 | 4615.8 | 3948.9 | 3158.5 | 2597.8 | 2342.7 | 2238.2 | 2170.1 | 2119.4 | 2117.8 |
| 32.5° | 5162.3 | 4996.0 | 3855.5 | 2824.3 | 2266.7 | 2125.7 | 2083.0 | 2041.8 | 2002.2 | 2002.2 |
| 35° | 5838.6 | 5303.3 | 3678.1 | 2466.3 | 2065.5 | 2005.4 | 1951.5 | 1886.6 | 1834.3 | 1831.1 |
| 37.5° | 6633.8 | 5493.3 | 3359.7 | 2178.0 | 1970.5 | 1924.6 | 1845.4 | 1748.7 | 1656.9 | 1641.0 |
| 40° | 7436.9 | 5550.4 | 2911.4 | 2000.6 | 1910.3 | 1843.8 | 1747.2 | 1633.1 | 1544.4 | 1539.7 |
| 42.5° | 8173.5 | 5441.1 | 2436.2 | 1878.6 | 1850.1 | 1761.4 | 1660.0 | 1558.7 | 1489.0 | 1487.4 |
| 45° | 8791.2 | 5157.5 | 2037.0 | 1763.0 | 1786.8 | 1687.0 | 1596.7 | 1514.3 | 1460.5 | 1449.4 |
| 47.5° | 9372.6 | 4756.8 | 1756.7 | 1641.0 | 1723.4 | 1645.8 | 1569.8 | 1492.1 | 1439.9 | 1431.9 |
| 50° | 10047.4 | 4324.3 | 1560.2 | 1522.2 | 1668.0 | 1631.5 | 1591.9 | 1511.1 | 1424.0 | 1414.5 |
| 52.5° | 10864.7 | 3950.5 | 1406.6 | 1417.7 | 1625.2 | 1650.5 | 1649.0 | 1565.0 | 1412.9 | 1400.3 |
| 55° | 11777.1 | 3535.5 | 1291.0 | 1332.1 | 1607.8 | 1685.4 | 1663.2 | 1615.7 | 1422.4 | 1403.4 |
| 57.5° | 12675.2 | 3050.8 | 1210.2 | 1267.2 | 1582.4 | 1682.2 | 1595.1 | 1527.0 | 1444.6 | 1417.7 |
| 60° | 13348.4 | 2399.8 | 1148.4 | 1210.2 | 1527.0 | 1629.9 | 1520.6 | 1430.4 | 1439.9 | 1419.3 |
| 62.5° | 13392.8 | 1854.9 | 1074.0 | 1161.1 | 1443.0 | 1577.7 | 1471.5 | 1387.6 | 1460.5 | 1441.4 |
| 65° | 12605.5 | 1401.8 | 1002.7 | 1102.5 | 1352.7 | 1544.4 | 1424.0 | 1363.8 | 1503.2 | 1482.6 |
| 67.5° | 10612.8 | 1127.8 | 942.5 | 1042.3 | 1262.5 | 1474.7 | 1381.3 | 1341.7 | 1541.2 | 1504.8 |
| 70° | 7661.8 | 961.5 | 883.9 | 969.4 | 1181.7 | 1395.5 | 1343.2 | 1302.1 | 1438.3 | 1381.3 |
| 72.5° | 4717.2 | 833.2 | 817.3 | 872.8 | 1119.9 | 1313.1 | 1286.2 | 1227.6 | 1295.7 | 1249.8 |
| 75° | 2355.4 | 722.3 | 742.9 | 777.7 | 1032.8 | 1219.7 | 1191.2 | 1132.6 | 1142.1 | 1132.6 |
| 77.5° | 1127.8 | 617.8 | 655.8 | 682.7 | 920.3 | 1113.6 | 1083.5 | 1023.3 | 1012.2 | 1013.8 |
| 80° | 714.4 | 516.4 | 552.8 | 571.8 | 822.1 | 990.0 | 959.9 | 899.7 | 1026.4 | 952.0 |
| 82.5° | 446.7 | 419.8 | 429.3 | 464.1 | 716.0 | 861.7 | 822.1 | 768.2 | 925.1 | 731.8 |
| 85° | 247.1 | 293.0 | 305.7 | 335.8 | 551.2 | 720.7 | 681.1 | 613.0 | 549.7 | 540.1 |
| 87.5° | 147.3 | 174.2 | 179.0 | 201.2 | 370.7 | 521.1 | 460.9 | 437.2 | 362.7 | 361.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)