

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: P191382

Luminaire Tested: **GAN-AF-04-LED-U-T2-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191382  
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-04-LED-U-T2-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26441.2 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G4

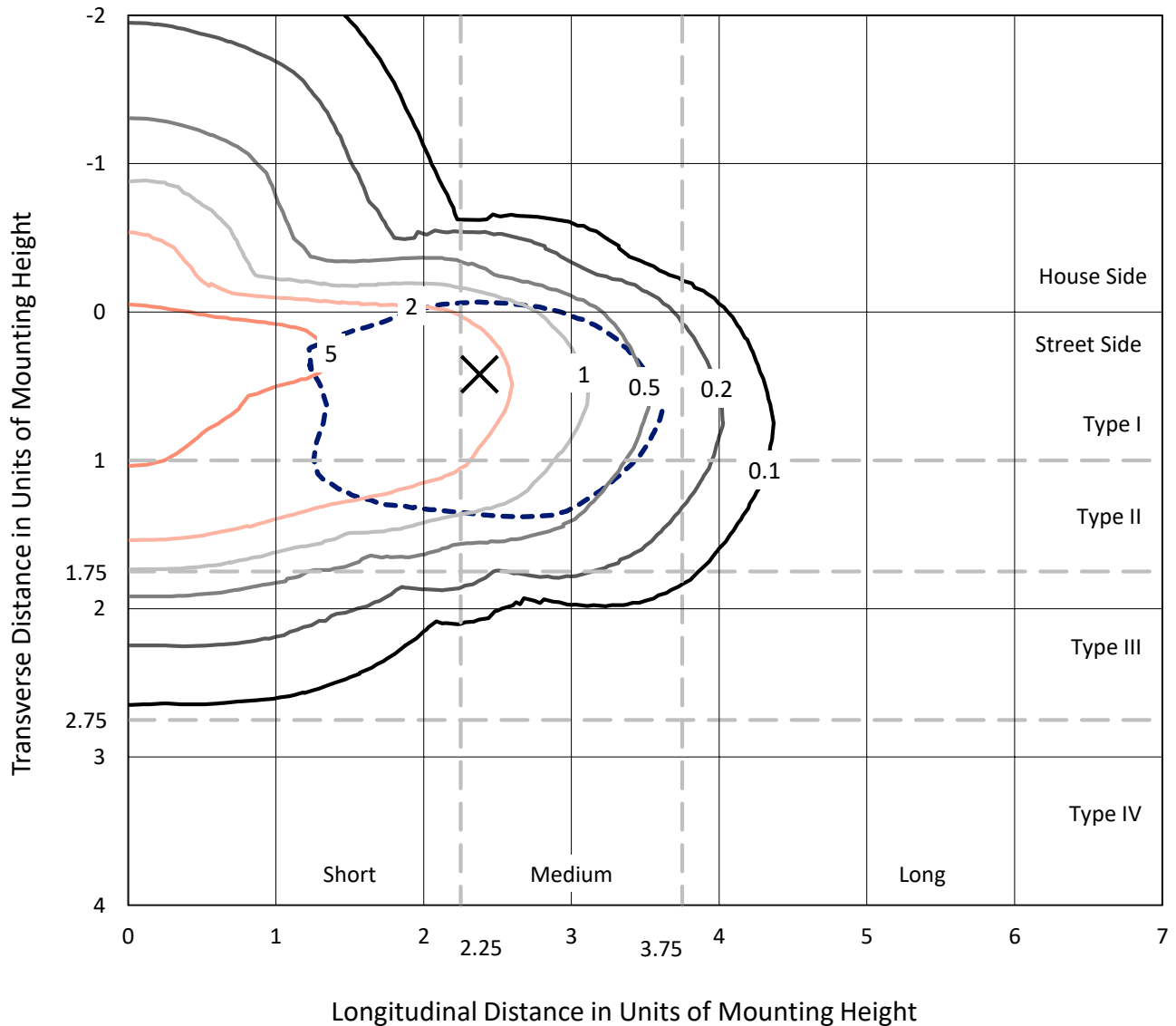
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

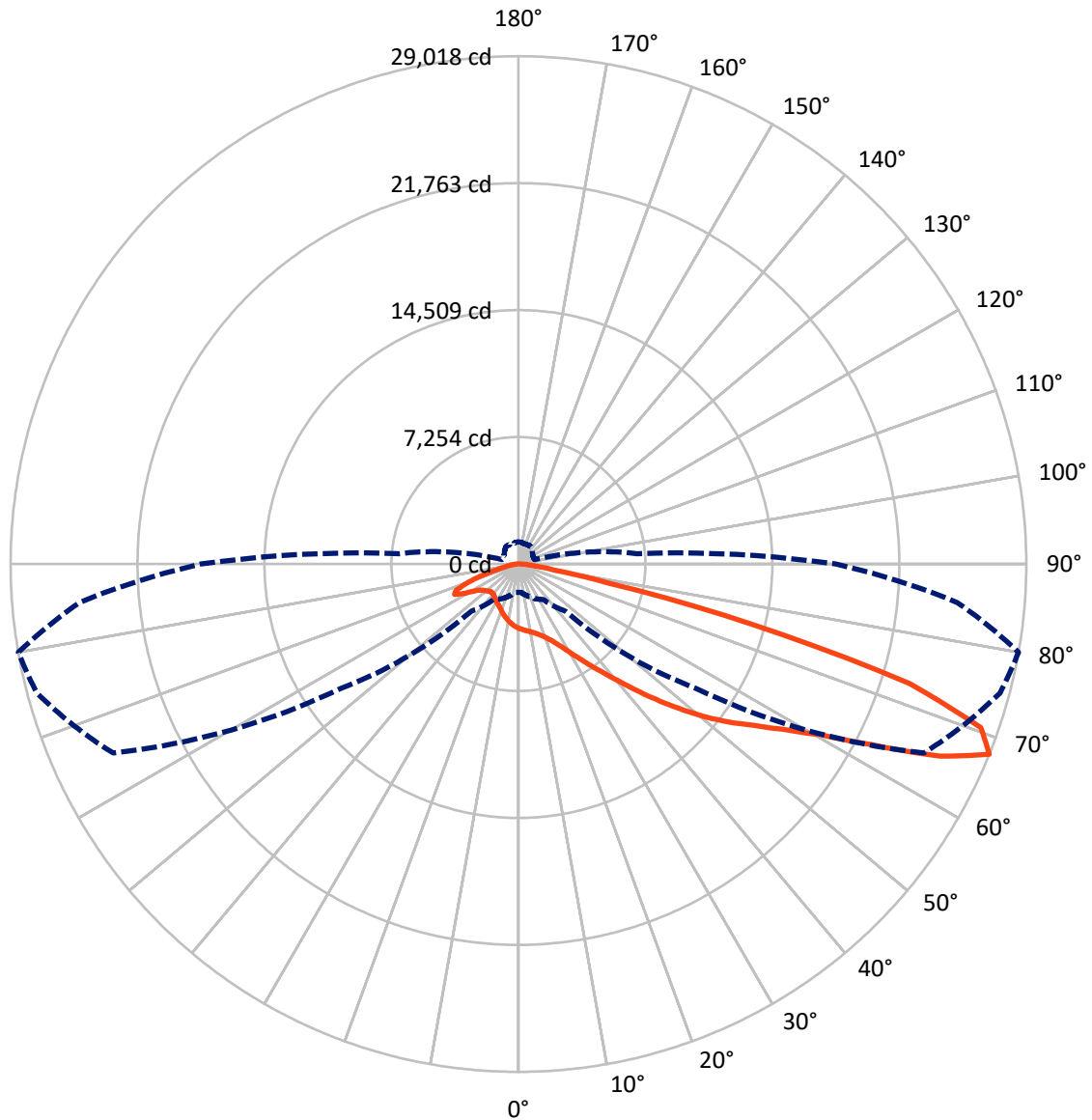
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4869.5   | 0.0    | 4869.5  |
|                    | % Fixture | 18.4     | 0.0    | 18.4    |
| <b>Street Side</b> | Lumens    | 21571.8  | 0.0    | 21571.8 |
|                    | % Fixture | 81.6     | 0.0    | 81.6    |
| <b>Total</b>       | Lumens    | 26441.2  | 0.0    | 26441.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 338.9   | 1.3       |
| 10°-20°   | 976.2   | 3.7       |
| 20°-30°   | 1615.8  | 6.1       |
| 30°-40°   | 2642.9  | 10.0      |
| 40°-50°   | 4267.3  | 16.1      |
| 50°-60°   | 6160.8  | 23.3      |
| 60°-70°   | 6798.8  | 25.7      |
| 70°-80°   | 3133.8  | 11.9      |
| 80°-90°   | 506.9   | 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°    | 26441.2 | 100.0     |
| 0°-180°   | 26441.2 | 100.0     |



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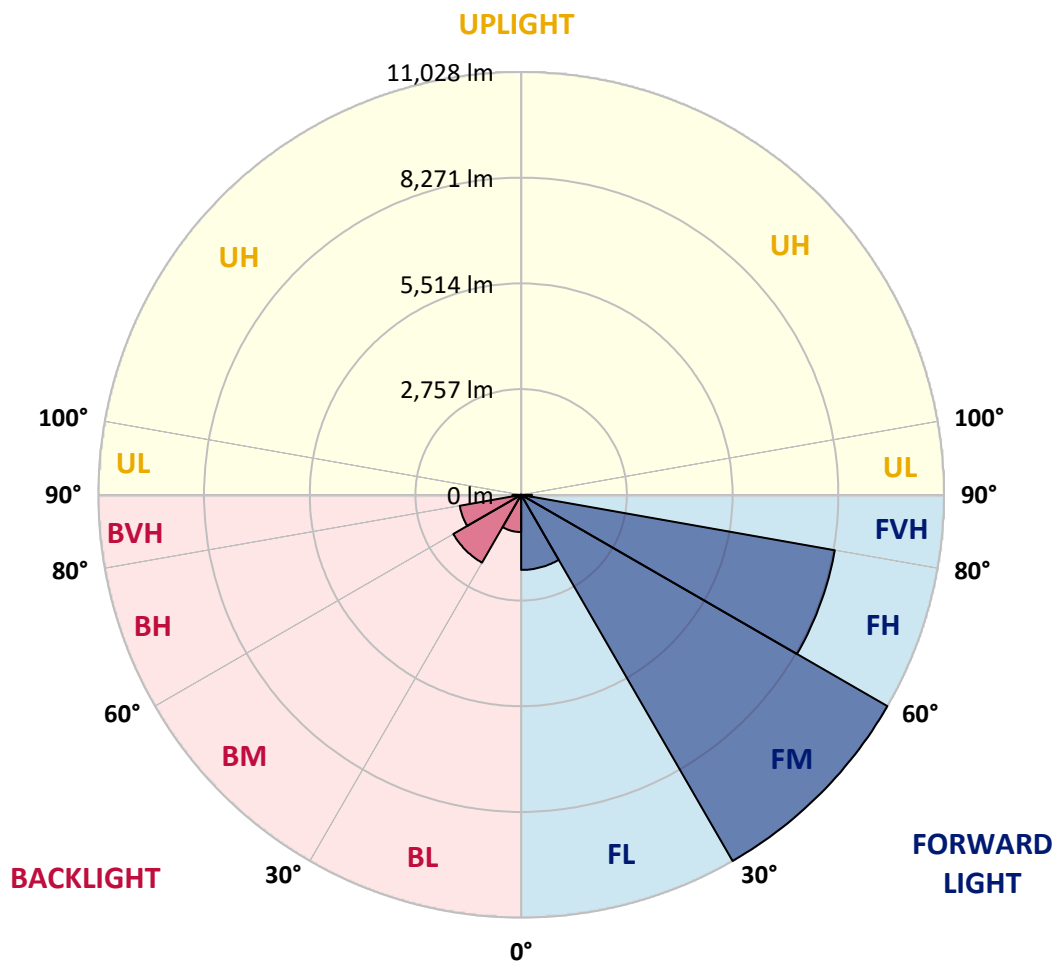
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1959.2  | 7.4       |                         |      |          |
| FM (30°-60°)   | 11028.0 | 41.7      |                         |      |          |
| FH (60°-80°)   | 8305.9  | 31.4      |                         |      | G4/12000 |
| FVH (80°-90°)  | 278.7   | 1.1       |                         |      | G3/500   |
| BL (0°-30°)    | 971.5   | 3.7       | B2/1000                 |      |          |
| BM (30°-60°)   | 2043.1  | 7.7       | B2/2500                 |      |          |
| BH (60°-80°)   | 1626.7  | 6.2       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 228.2   | 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°    | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  | 3673.4  |
| 2.5°  | 4018.5  | 3995.0  | 3998.9  | 3992.4  | 3972.8  | 3939.0  | 3902.6  | 3836.2  | 3767.2  | 3730.7  | 3702.1  |
| 5°    | 4354.3  | 4347.7  | 4338.6  | 4317.8  | 4268.4  | 4198.1  | 4110.8  | 3993.7  | 3867.4  | 3801.0  | 3737.2  |
| 7.5°  | 4605.5  | 4601.5  | 4589.9  | 4576.9  | 4528.7  | 4444.1  | 4312.6  | 4146.0  | 3962.4  | 3871.4  | 3772.4  |
| 10°   | 4626.3  | 4632.8  | 4641.9  | 4677.0  | 4683.6  | 4638.1  | 4504.0  | 4302.2  | 4061.3  | 3944.2  | 3818.0  |
| 12.5° | 4449.3  | 4463.6  | 4498.7  | 4588.5  | 4683.6  | 4739.5  | 4670.6  | 4466.2  | 4177.2  | 4035.3  | 3875.2  |
| 15°   | 4215.0  | 4222.7  | 4265.7  | 4389.4  | 4559.9  | 4733.1  | 4798.2  | 4647.2  | 4326.9  | 4152.5  | 3961.2  |
| 17.5° | 4114.7  | 4118.6  | 4148.6  | 4230.6  | 4389.4  | 4636.7  | 4869.8  | 4843.7  | 4510.5  | 4298.2  | 4066.5  |
| 20°   | 4064.0  | 4073.1  | 4116.0  | 4196.8  | 4297.0  | 4513.1  | 4880.2  | 5055.9  | 4729.1  | 4480.5  | 4199.3  |
| 22.5° | 4208.4  | 4204.5  | 4220.2  | 4260.5  | 4345.2  | 4475.3  | 4872.3  | 5274.5  | 5007.8  | 4714.9  | 4372.5  |
| 25°   | 4545.6  | 4559.9  | 4532.6  | 4487.1  | 4514.4  | 4605.5  | 4913.9  | 5511.5  | 5356.6  | 5015.5  | 4599.0  |
| 27.5° | 5026.0  | 5011.6  | 4971.2  | 4864.5  | 4808.6  | 4847.6  | 5051.9  | 5766.6  | 5790.0  | 5411.2  | 4898.4  |
| 30°   | 5505.0  | 5493.2  | 5454.2  | 5324.0  | 5209.5  | 5176.9  | 5320.2  | 6059.6  | 6306.8  | 5886.4  | 5265.4  |
| 32.5° | 6002.3  | 5989.2  | 5952.8  | 5822.6  | 5684.6  | 5609.1  | 5701.5  | 6397.9  | 6916.1  | 6453.9  | 5697.6  |
| 35°   | 6615.3  | 6590.6  | 6513.8  | 6332.9  | 6197.4  | 6138.9  | 6181.9  | 6823.6  | 7618.9  | 7125.7  | 6222.2  |
| 37.5° | 7192.0  | 7229.8  | 7151.7  | 6901.7  | 6726.0  | 6705.1  | 6753.3  | 7343.0  | 8376.5  | 7876.7  | 6824.9  |
| 40°   | 7771.3  | 7777.8  | 7707.5  | 7503.1  | 7322.2  | 7288.3  | 7409.4  | 7973.1  | 9270.9  | 8774.9  | 7557.8  |
| 42.5° | 8370.1  | 8383.1  | 8264.6  | 8075.9  | 7943.1  | 7949.7  | 8087.6  | 8711.1  | 10296.6 | 9833.2  | 8401.3  |
| 45°   | 9079.5  | 9099.0  | 8968.8  | 8721.6  | 8600.5  | 8843.9  | 8786.6  | 9539.0  | 11421.3 | 11036.0 | 9369.8  |
| 47.5° | 9821.5  | 9851.4  | 9752.5  | 9520.8  | 9369.8  | 9704.3  | 9485.6  | 10456.7 | 12631.9 | 12326.0 | 10433.3 |
| 50°   | 10226.3 | 10269.3 | 10365.6 | 10348.7 | 10316.2 | 10260.2 | 10265.4 | 11440.8 | 13880.2 | 13669.4 | 11526.7 |
| 52.5° | 10009.0 | 10007.6 | 10359.1 | 10786.1 | 11241.6 | 11275.5 | 11215.6 | 12478.3 | 15046.6 | 14982.9 | 12556.4 |
| 55°   | 9014.4  | 9082.1  | 9614.5  | 10441.1 | 11685.6 | 12462.7 | 12639.7 | 13666.7 | 16192.1 | 16266.4 | 13601.7 |
| 57.5° | 7358.6  | 7414.6  | 8133.2  | 9285.2  | 11086.7 | 13168.2 | 14665.2 | 15394.2 | 17473.0 | 17819.3 | 14993.2 |
| 60°   | 4990.8  | 5058.5  | 5820.0  | 7203.7  | 9475.2  | 12775.1 | 16593.1 | 18476.6 | 19006.4 | 19794.0 | 16945.8 |
| 62.5° | 2932.8  | 2994.0  | 3614.9  | 4544.4  | 6671.3  | 10948.7 | 17439.2 | 22862.1 | 21442.0 | 22773.6 | 19924.1 |
| 65°   | 2019.0  | 2060.6  | 2362.6  | 2828.7  | 3833.6  | 7374.2  | 16389.9 | 25890.0 | 25189.6 | 26465.3 | 23377.6 |
| 67.5° | 1624.5  | 1619.3  | 1858.9  | 2176.4  | 2468.1  | 3802.3  | 12393.7 | 25547.6 | 28485.6 | 29017.9 | 25170.1 |
| 70°   | 1338.1  | 1333.0  | 1495.7  | 1758.7  | 1972.1  | 2141.3  | 6750.8  | 21559.1 | 27813.8 | 28030.0 | 23519.5 |
| 72.5° | 1119.5  | 1124.7  | 1228.9  | 1424.0  | 1618.0  | 1612.8  | 2966.7  | 15166.4 | 21880.6 | 23375.0 | 18748.6 |
| 75°   | 945.0   | 947.7   | 1016.6  | 1154.6  | 1313.5  | 1299.1  | 1608.9  | 8216.4  | 12719.1 | 13759.2 | 10393.0 |
| 77.5° | 804.4   | 807.1   | 851.3   | 928.1   | 1041.4  | 1036.1  | 1174.1  | 3549.7  | 5305.8  | 5240.7  | 3555.0  |
| 80°   | 717.3   | 717.3   | 738.1   | 752.4   | 814.9   | 791.5   | 870.8   | 1705.3  | 2242.8  | 2071.1  | 1418.8  |
| 82.5° | 562.3   | 565.0   | 692.5   | 687.3   | 641.8   | 611.8   | 611.8   | 1004.9  | 1188.5  | 1098.6  | 830.5   |
| 85°   | 316.3   | 315.0   | 446.5   | 538.9   | 565.0   | 430.9   | 427.0   | 562.3   | 646.9   | 570.2   | 402.2   |
| 87.5° | 135.3   | 138.0   | 206.9   | 239.5   | 320.2   | 268.1   | 264.2   | 290.3   | 329.3   | 285.1   | 186.2   |
| 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°    | 3673.4  | 3673.4 | 3673.4 | 3673.4 | 3673.4 | 3673.4 | 3673.4 | 3673.4 | 3673.4 | 3673.4 | 3673.4 |
| 2.5°  | 3674.7  | 3640.9 | 3566.7 | 3474.2 | 3391.0 | 3336.4 | 3286.8 | 3215.2 | 3219.1 | 3169.7 | 3133.2 |
| 5°    | 3672.2  | 3601.9 | 3430.1 | 3225.7 | 3029.1 | 2887.2 | 2780.5 | 2684.1 | 2660.7 | 2615.2 | 2587.9 |
| 7.5°  | 3674.7  | 3560.2 | 3271.2 | 2944.5 | 2701.1 | 2521.5 | 2430.3 | 2379.6 | 2367.8 | 2352.2 | 2353.5 |
| 10°   | 3683.9  | 3522.4 | 3096.8 | 2681.6 | 2426.4 | 2308.0 | 2285.8 | 2301.4 | 2319.6 | 2324.9 | 2326.2 |
| 12.5° | 3704.7  | 3488.6 | 2905.5 | 2447.2 | 2254.6 | 2218.2 | 2255.9 | 2309.2 | 2344.4 | 2361.3 | 2360.0 |
| 15°   | 3751.6  | 3462.6 | 2721.9 | 2263.7 | 2159.6 | 2179.1 | 2249.4 | 2324.9 | 2375.6 | 2399.0 | 2400.4 |
| 17.5° | 3802.3  | 3424.8 | 2533.1 | 2123.1 | 2089.3 | 2138.7 | 2225.9 | 2314.4 | 2376.9 | 2403.0 | 2408.2 |
| 20°   | 3868.7  | 3378.0 | 2335.3 | 2017.7 | 2022.9 | 2078.8 | 2160.9 | 2249.4 | 2318.4 | 2340.5 | 2350.9 |
| 22.5° | 3956.0  | 3327.1 | 2162.1 | 1931.7 | 1947.4 | 1990.4 | 2054.1 | 2130.9 | 2190.8 | 2201.2 | 2210.3 |
| 25°   | 4073.1  | 3272.5 | 2024.2 | 1853.7 | 1860.1 | 1884.9 | 1927.9 | 1973.4 | 2015.1 | 2003.3 | 2012.5 |
| 27.5° | 4230.6  | 3225.7 | 1921.3 | 1782.1 | 1770.3 | 1775.5 | 1797.6 | 1812.0 | 1834.2 | 1801.6 | 1805.5 |
| 30°   | 4415.5  | 3174.9 | 1841.9 | 1719.6 | 1687.1 | 1677.9 | 1683.2 | 1690.9 | 1707.8 | 1663.6 | 1657.1 |
| 32.5° | 4630.2  | 3113.8 | 1767.8 | 1664.9 | 1619.3 | 1601.1 | 1603.7 | 1624.5 | 1689.6 | 1662.3 | 1648.0 |
| 35°   | 4880.2  | 3044.7 | 1689.6 | 1605.0 | 1573.8 | 1547.7 | 1545.2 | 1610.2 | 1804.2 | 1787.3 | 1774.2 |
| 37.5° | 5173.1  | 2975.8 | 1611.6 | 1537.3 | 1540.0 | 1511.3 | 1502.2 | 1576.4 | 1826.3 | 1759.9 | 1750.8 |
| 40°   | 5545.3  | 2939.2 | 1545.2 | 1465.8 | 1498.3 | 1494.3 | 1476.1 | 1513.9 | 1680.5 | 1559.5 | 1543.8 |
| 42.5° | 6006.2  | 2944.5 | 1495.7 | 1389.0 | 1448.8 | 1490.4 | 1461.8 | 1463.1 | 1523.0 | 1431.9 | 1417.6 |
| 45°   | 6575.0  | 3005.6 | 1460.6 | 1327.8 | 1392.8 | 1486.6 | 1456.6 | 1435.8 | 1441.0 | 1392.8 | 1385.1 |
| 47.5° | 7238.9  | 3132.0 | 1435.8 | 1276.9 | 1339.5 | 1472.2 | 1455.4 | 1427.9 | 1416.3 | 1390.2 | 1383.7 |
| 50°   | 7977.0  | 3315.5 | 1417.6 | 1228.9 | 1291.3 | 1448.8 | 1456.6 | 1420.2 | 1407.2 | 1396.7 | 1392.8 |
| 52.5° | 8702.0  | 3525.1 | 1390.2 | 1187.1 | 1253.5 | 1420.2 | 1460.6 | 1412.4 | 1398.1 | 1390.2 | 1386.3 |
| 55°   | 9510.4  | 3786.7 | 1348.6 | 1152.0 | 1222.3 | 1383.7 | 1460.6 | 1400.6 | 1385.1 | 1386.3 | 1385.1 |
| 57.5° | 10602.5 | 4209.7 | 1299.1 | 1122.1 | 1184.6 | 1339.5 | 1435.8 | 1387.6 | 1368.1 | 1369.4 | 1370.8 |
| 60°   | 12309.1 | 4955.7 | 1239.2 | 1092.1 | 1137.7 | 1287.4 | 1402.0 | 1359.0 | 1339.5 | 1344.7 | 1346.0 |
| 62.5° | 14818.8 | 6050.4 | 1161.2 | 1047.9 | 1088.2 | 1231.4 | 1355.1 | 1322.6 | 1303.0 | 1316.0 | 1316.0 |
| 65°   | 17427.4 | 7016.3 | 1064.8 | 992.0  | 1036.1 | 1170.3 | 1296.5 | 1276.9 | 1257.5 | 1287.4 | 1286.1 |
| 67.5° | 18129.0 | 6800.2 | 968.5  | 930.7  | 984.1  | 1102.5 | 1226.2 | 1215.8 | 1205.3 | 1257.5 | 1254.9 |
| 70°   | 16104.9 | 5459.4 | 879.9  | 868.3  | 926.8  | 1029.7 | 1150.7 | 1150.7 | 1144.2 | 1183.2 | 1174.1 |
| 72.5° | 12270.0 | 3871.4 | 795.3  | 801.9  | 861.7  | 950.2  | 1068.7 | 1077.8 | 1067.4 | 1087.0 | 1079.1 |
| 75°   | 6568.5  | 2215.5 | 710.7  | 729.0  | 781.0  | 869.5  | 977.6  | 986.7  | 980.2  | 978.9  | 982.7  |
| 77.5° | 2183.0  | 1083.0 | 622.3  | 650.9  | 696.4  | 786.2  | 882.6  | 896.9  | 881.3  | 878.6  | 877.4  |
| 80°   | 972.4   | 680.8  | 524.6  | 562.3  | 602.7  | 691.2  | 782.4  | 794.0  | 777.1  | 800.6  | 770.6  |
| 82.5° | 624.8   | 447.7  | 420.4  | 462.1  | 501.1  | 596.2  | 682.1  | 684.7  | 669.1  | 777.1  | 662.6  |
| 85°   | 303.3   | 277.2  | 316.3  | 354.0  | 387.9  | 468.6  | 565.0  | 566.2  | 527.2  | 480.4  | 463.4  |
| 87.5° | 151.0   | 161.4  | 210.8  | 244.7  | 261.7  | 321.5  | 411.3  | 403.6  | 386.6  | 351.5  | 324.2  |
| 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)