

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: P300464

Luminaire Tested: **GAA-AF-09-LED-U-AFL-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-09-LED-U-AFL-7030-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34668.8 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 290
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

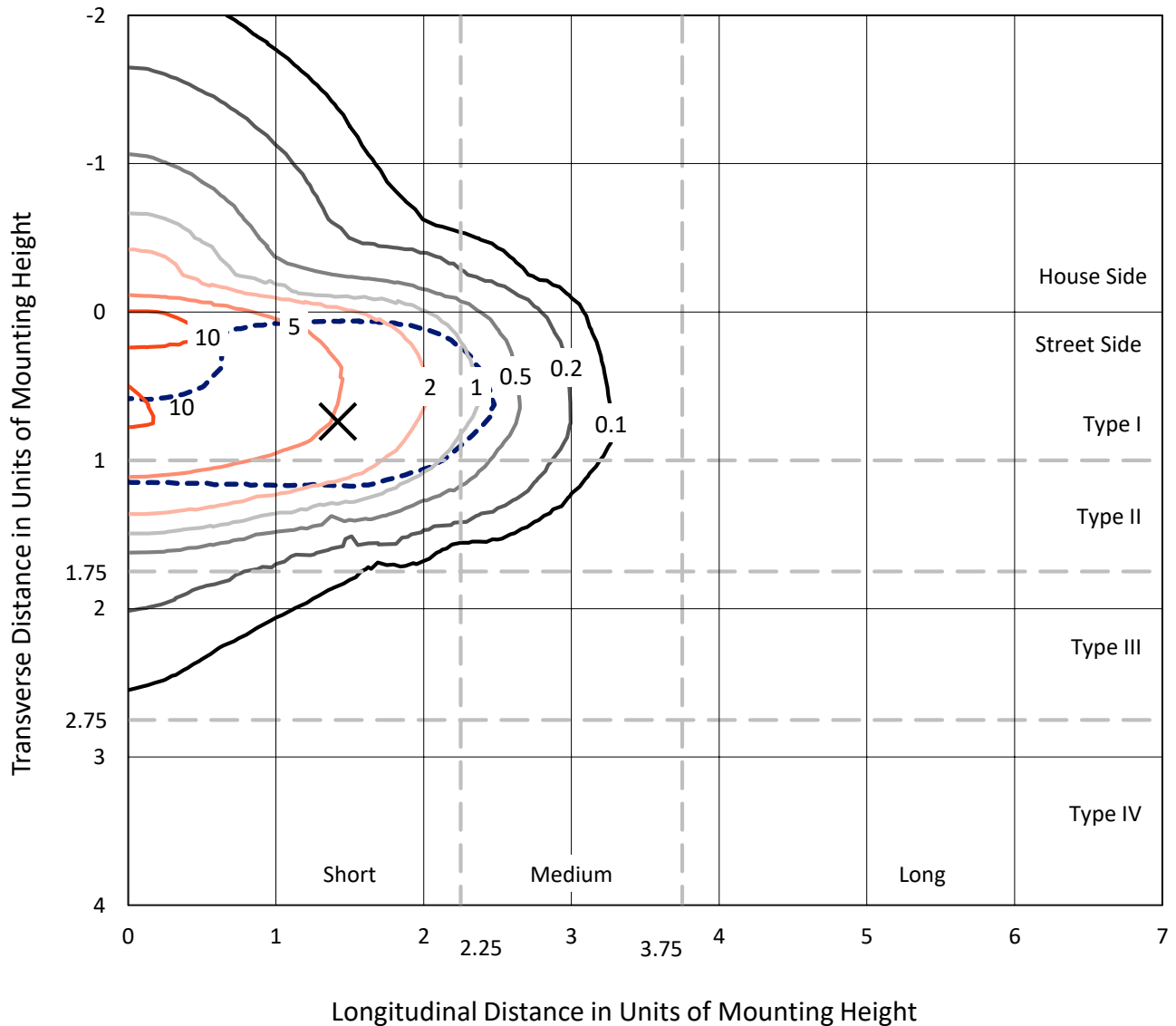


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Iso-Footcandle Lines of Horizontal Illumination

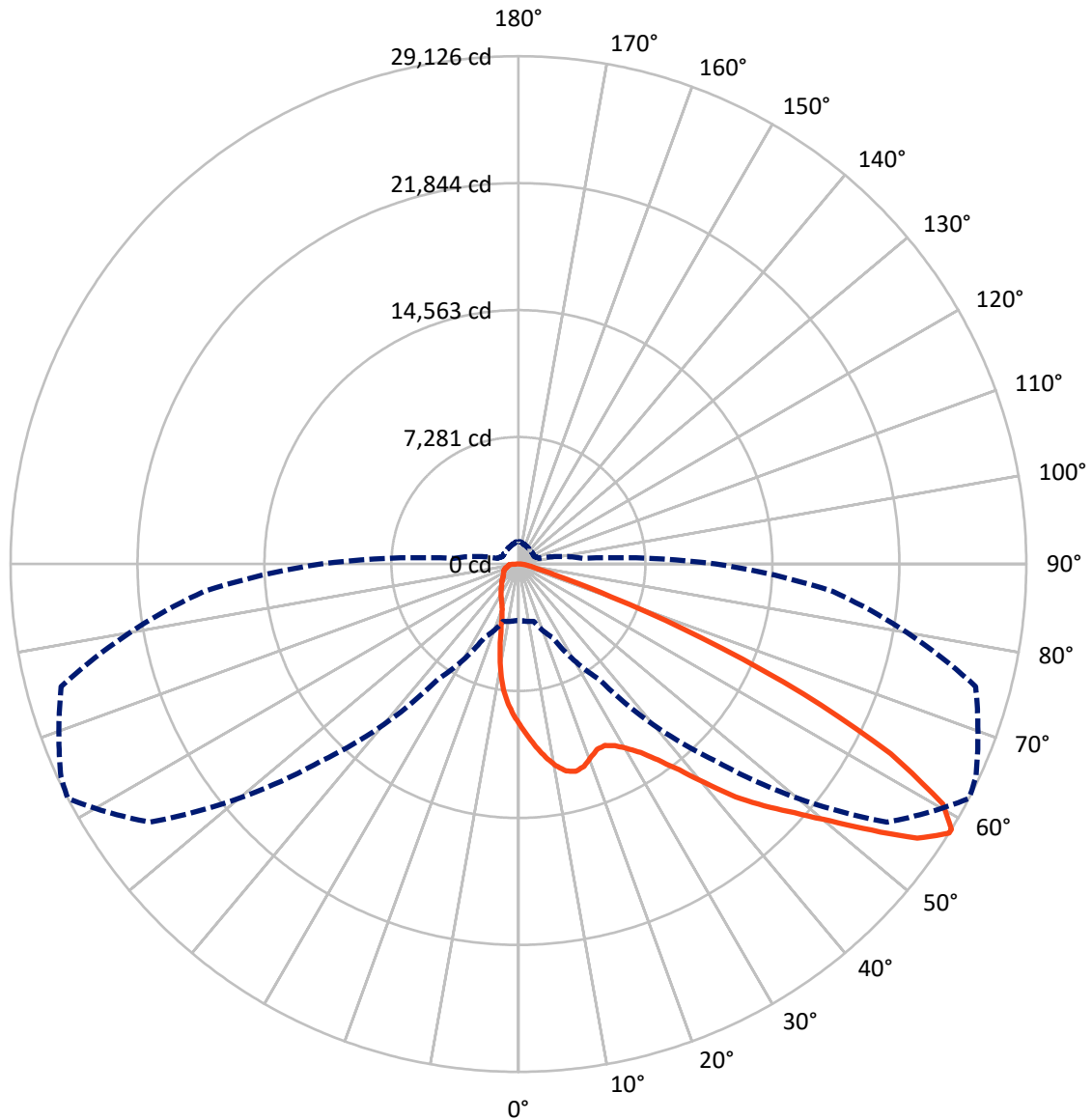
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.5 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5287.1 | 0.0 | 5287.1 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 29381.7 | 0.0 | 29381.7 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 34668.8 | 0.0 | 34668.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 823.6 | 2.4 |
| 10°-20° | 2105.3 | 6.1 |
| 20°-30° | 3403.3 | 9.8 |
| 30°-40° | 5402.7 | 15.6 |
| 40°-50° | 7905.2 | 22.8 |
| 50°-60° | 8268.2 | 23.8 |
| 60°-70° | 4884.9 | 14.1 |
| 70°-80° | 1376.1 | 4.0 |
| 80°-90° | 499.6 | 1.4 |
| 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° | 34668.8 | 100.0 |
| 0°-180° | 34668.8 | 100.0 |

Coefficient of Utilization



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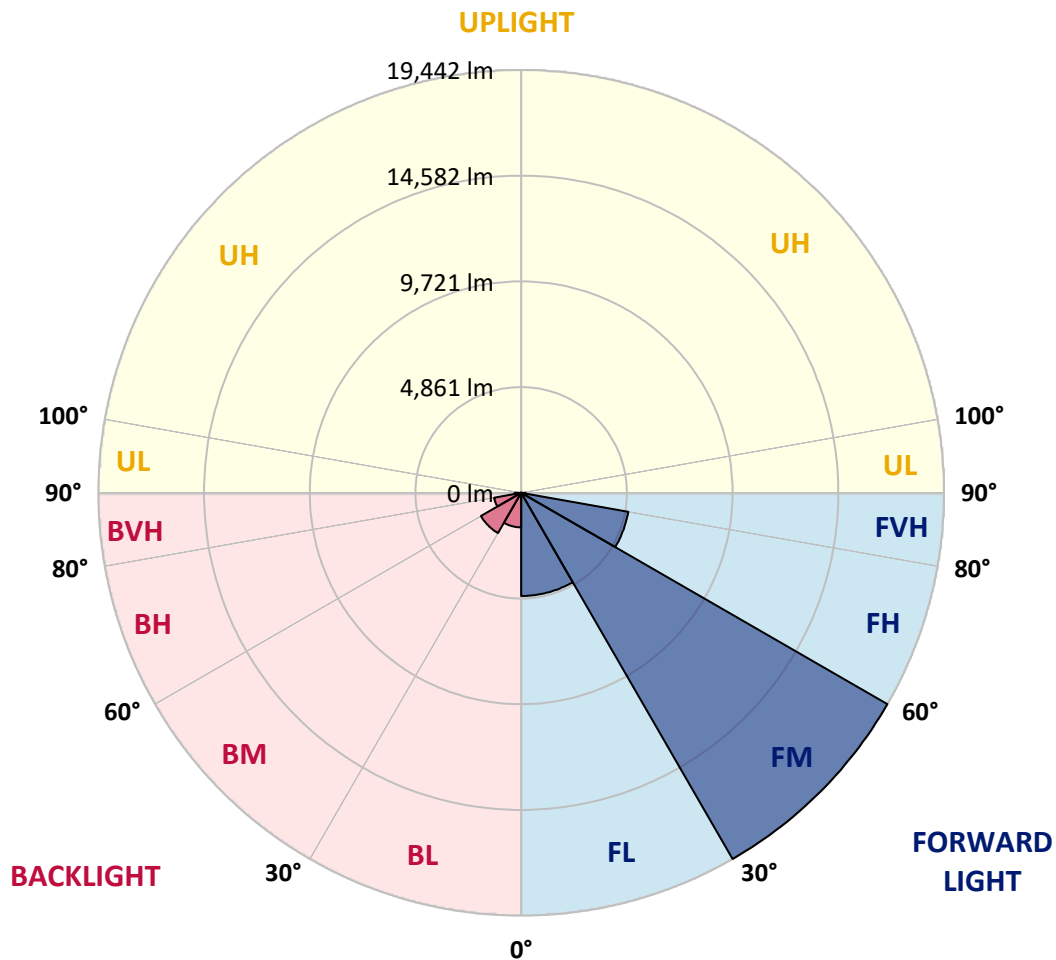
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 4743.1 | 13.7 | | | |
| FM | (30°-60°) | 19442.1 | 56.1 | | | |
| FH | (60°-80°) | 4999.4 | 14.4 | | | G2/5000 |
| FVH | (80°-90°) | 197.1 | 0.6 | | | G2/225 |
| BL | (0°-30°) | 1589.1 | 4.6 | B3/2500 | | |
| BM | (30°-60°) | 2134.0 | 6.2 | B2/2500 | | |
| BH | (60°-80°) | 1261.6 | 3.6 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 302.5 | 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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 |
| 2.5° | 10523.2 | 10438.4 | 10384.5 | 10337.1 | 10275.1 | 10142.9 | 9964.9 | 9852.3 | 9795.1 | 9600.9 | 9370.7 |
| 5° | 11555.0 | 11479.9 | 11424.4 | 11360.7 | 11249.7 | 11042.4 | 10755.1 | 10526.5 | 10413.9 | 10025.3 | 9565.0 |
| 7.5° | 11313.4 | 11344.4 | 11440.7 | 11608.9 | 11752.5 | 11724.8 | 11468.5 | 11177.9 | 11029.3 | 10489.0 | 9790.2 |
| 10° | 9857.2 | 9911.1 | 10077.6 | 10471.0 | 11107.7 | 11760.7 | 11959.9 | 11759.1 | 11608.9 | 10947.7 | 10022.1 |
| 12.5° | 9565.0 | 9563.3 | 9576.4 | 9680.9 | 10059.6 | 10978.7 | 11976.2 | 12178.6 | 12088.8 | 11385.2 | 10258.8 |
| 15° | 9684.1 | 9687.4 | 9677.6 | 9721.7 | 9839.2 | 10203.3 | 11476.6 | 12340.2 | 12403.9 | 11826.0 | 10503.7 |
| 17.5° | 9997.6 | 9989.4 | 9951.9 | 9951.9 | 9994.3 | 10136.3 | 10888.9 | 12190.1 | 12483.9 | 12216.2 | 10719.2 |
| 20° | 10523.2 | 10485.7 | 10386.1 | 10294.7 | 10249.0 | 10325.7 | 10647.3 | 11844.0 | 12345.1 | 12557.4 | 10897.1 |
| 22.5° | 11159.9 | 11130.5 | 10968.9 | 10773.0 | 10614.7 | 10613.0 | 10771.4 | 11541.9 | 12105.2 | 12879.0 | 11047.3 |
| 25° | 11982.7 | 11935.4 | 11695.4 | 11382.0 | 11104.4 | 10998.3 | 11042.4 | 11527.3 | 11974.6 | 13228.3 | 11181.2 |
| 27.5° | 12949.2 | 12862.7 | 12578.6 | 12126.4 | 11718.3 | 11504.4 | 11440.7 | 11793.4 | 12093.7 | 13661.0 | 11367.3 |
| 30° | 14121.3 | 14021.7 | 13657.7 | 13068.4 | 12492.1 | 12141.1 | 12005.6 | 12265.2 | 12488.8 | 14188.3 | 11666.0 |
| 32.5° | 15455.1 | 15311.4 | 14890.3 | 14240.5 | 13483.0 | 12947.5 | 12727.2 | 12888.8 | 13066.7 | 14823.3 | 12039.9 |
| 35° | 17298.2 | 17126.8 | 16517.9 | 15621.6 | 14766.2 | 14029.9 | 13677.3 | 13794.8 | 13967.9 | 15770.2 | 12580.2 |
| 37.5° | 18555.3 | 18478.5 | 18073.7 | 17231.3 | 16300.8 | 15453.5 | 14908.2 | 14976.8 | 15074.7 | 16953.8 | 13272.4 |
| 40° | 18543.8 | 18574.9 | 18583.0 | 18591.2 | 17957.8 | 17146.4 | 16560.3 | 16488.5 | 16468.9 | 18253.2 | 14059.3 |
| 42.5° | 17614.9 | 17742.3 | 18153.7 | 18987.9 | 19373.2 | 19000.9 | 18463.8 | 18256.5 | 18153.7 | 19784.6 | 14893.5 |
| 45° | 16193.0 | 16261.6 | 17032.1 | 18661.4 | 20098.0 | 20837.5 | 20431.0 | 19778.0 | 19591.9 | 21191.8 | 15585.7 |
| 47.5° | 15460.0 | 15535.1 | 16020.0 | 17796.1 | 20089.8 | 22321.5 | 22556.6 | 21312.6 | 20979.6 | 22416.2 | 16183.2 |
| 50° | 13714.8 | 13871.6 | 14482.1 | 16291.0 | 19356.8 | 23003.9 | 24778.4 | 23141.0 | 22452.1 | 23607.9 | 16782.3 |
| 52.5° | 10510.2 | 10751.8 | 11435.8 | 13816.0 | 17497.4 | 22666.0 | 26556.3 | 25358.0 | 24385.0 | 24842.1 | 17296.6 |
| 55° | 6629.7 | 6809.3 | 7383.9 | 9757.6 | 13997.3 | 20907.7 | 27230.5 | 27756.2 | 26890.9 | 26011.0 | 17742.3 |
| 57.5° | 3604.6 | 3684.6 | 3900.1 | 5387.3 | 9104.6 | 17020.7 | 26247.7 | 29121.0 | 28761.8 | 27003.6 | 18078.6 |
| 58° | 3225.9 | 3279.7 | 3413.6 | 4669.0 | 8074.5 | 15957.9 | 25811.8 | 29125.9 | 28946.3 | 27148.9 | 18104.7 |
| 60° | 2393.3 | 2365.5 | 2246.4 | 2664.3 | 4494.3 | 11024.4 | 23176.9 | 27960.2 | 28487.5 | 27326.8 | 17977.4 |
| 62.5° | 2102.7 | 2035.8 | 1792.5 | 1764.8 | 2185.9 | 5078.8 | 17734.1 | 23950.8 | 25196.4 | 26311.4 | 17203.5 |
| 65° | 1975.4 | 1903.5 | 1590.1 | 1488.9 | 1577.0 | 2148.4 | 10446.5 | 17962.7 | 19525.0 | 23232.4 | 15224.9 |
| 67.5° | 1880.7 | 1787.6 | 1461.1 | 1322.3 | 1328.9 | 1420.3 | 4187.4 | 11313.4 | 13071.6 | 17639.4 | 11842.3 |
| 70° | 1789.2 | 1688.0 | 1351.7 | 1191.7 | 1154.2 | 1123.2 | 1665.2 | 5663.2 | 7258.2 | 11142.0 | 7550.4 |
| 72.5° | 1691.3 | 1591.7 | 1255.4 | 1088.9 | 1015.4 | 912.6 | 1087.3 | 2316.6 | 3235.7 | 5271.4 | 3425.0 |
| 75° | 1549.3 | 1459.5 | 1159.1 | 997.5 | 893.0 | 755.9 | 821.2 | 1209.7 | 1451.3 | 2099.4 | 1650.5 |
| 77.5° | 1374.6 | 1301.1 | 1051.3 | 922.4 | 791.8 | 613.8 | 631.8 | 839.1 | 930.5 | 1201.5 | 981.1 |
| 80° | 987.7 | 1013.8 | 935.4 | 829.3 | 705.3 | 497.9 | 484.9 | 612.2 | 661.2 | 772.2 | 638.3 |
| 82.5° | 693.8 | 708.5 | 773.8 | 677.5 | 582.8 | 391.8 | 357.5 | 431.0 | 460.4 | 507.7 | 344.5 |
| 85° | 478.3 | 462.0 | 530.6 | 471.8 | 421.2 | 261.2 | 244.9 | 292.2 | 310.2 | 315.1 | 177.9 |
| 87.5° | 287.3 | 287.3 | 306.9 | 253.0 | 226.9 | 135.5 | 132.2 | 166.5 | 177.9 | 169.8 | 98.0 |
| 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° | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 | 9209.1 |
| 2.5° | 9233.6 | 9117.6 | 8871.1 | 8673.6 | 8423.8 | 8164.3 | 8019.0 | 7863.9 | 7757.8 | 7681.0 | 7803.5 |
| 5° | 9303.8 | 9067.0 | 8557.7 | 8074.5 | 7540.6 | 6985.6 | 6564.4 | 6172.6 | 5899.9 | 5730.2 | 5890.1 |
| 7.5° | 9414.8 | 9050.7 | 8239.3 | 7413.3 | 6455.0 | 5531.0 | 4704.9 | 4187.4 | 3885.4 | 3736.8 | 3829.9 |
| 10° | 9542.1 | 9024.6 | 7865.5 | 6517.0 | 5145.7 | 3981.7 | 3364.6 | 3155.7 | 3087.1 | 3059.3 | 3072.4 |
| 12.5° | 9648.2 | 8969.1 | 7406.8 | 5433.0 | 3864.2 | 3144.2 | 2966.3 | 2961.4 | 2976.1 | 2979.4 | 2984.3 |
| 15° | 9723.3 | 8887.5 | 6726.0 | 4303.3 | 3090.4 | 2865.1 | 2855.3 | 2884.7 | 2912.4 | 2923.9 | 2930.4 |
| 17.5° | 9773.9 | 8719.3 | 5957.1 | 3402.2 | 2768.8 | 2729.6 | 2752.4 | 2790.0 | 2819.4 | 2827.5 | 2834.1 |
| 20° | 9769.0 | 8472.8 | 5041.2 | 2837.3 | 2594.1 | 2594.1 | 2633.3 | 2662.6 | 2664.3 | 2654.5 | 2659.4 |
| 22.5° | 9718.4 | 8134.9 | 4153.1 | 2536.9 | 2439.0 | 2466.7 | 2505.9 | 2478.2 | 2363.9 | 2288.8 | 2293.7 |
| 25° | 9633.5 | 7731.6 | 3392.4 | 2345.9 | 2295.3 | 2344.3 | 2332.9 | 2123.9 | 1960.7 | 1887.2 | 1887.2 |
| 27.5° | 9558.4 | 7254.9 | 2807.9 | 2179.4 | 2151.7 | 2212.1 | 2009.6 | 1820.3 | 1751.7 | 1717.4 | 1706.0 |
| 30° | 9504.6 | 6740.7 | 2417.8 | 2019.4 | 2016.2 | 1972.1 | 1743.5 | 1691.3 | 1679.9 | 1652.1 | 1642.3 |
| 32.5° | 9517.6 | 6219.9 | 2168.0 | 1879.0 | 1890.5 | 1688.0 | 1616.2 | 1627.6 | 1617.8 | 1588.4 | 1575.4 |
| 35° | 9625.4 | 5725.3 | 2004.7 | 1751.7 | 1717.4 | 1524.8 | 1541.1 | 1562.3 | 1559.1 | 1518.2 | 1505.2 |
| 37.5° | 9818.0 | 5256.7 | 1897.0 | 1645.6 | 1498.7 | 1443.2 | 1469.3 | 1501.9 | 1493.8 | 1466.0 | 1456.2 |
| 40° | 10020.4 | 4815.9 | 1808.8 | 1562.3 | 1369.7 | 1387.6 | 1410.5 | 1428.5 | 1436.6 | 1444.8 | 1438.3 |
| 42.5° | 10218.0 | 4355.6 | 1701.1 | 1477.4 | 1315.8 | 1335.4 | 1345.2 | 1363.2 | 1407.2 | 1438.3 | 1436.6 |
| 45° | 10335.5 | 3923.0 | 1590.1 | 1356.6 | 1273.4 | 1284.8 | 1278.3 | 1314.2 | 1368.1 | 1418.7 | 1420.3 |
| 47.5° | 10466.1 | 3586.7 | 1501.9 | 1245.6 | 1232.6 | 1240.7 | 1221.1 | 1257.0 | 1306.0 | 1368.1 | 1374.6 |
| 50° | 10624.5 | 3385.9 | 1431.7 | 1157.5 | 1177.0 | 1177.0 | 1172.2 | 1204.8 | 1273.4 | 1345.2 | 1358.3 |
| 52.5° | 10804.0 | 3346.7 | 1373.0 | 1093.8 | 1121.5 | 1119.9 | 1124.8 | 1173.8 | 1248.9 | 1319.1 | 1330.5 |
| 55° | 11022.8 | 3452.8 | 1309.3 | 1046.4 | 1067.7 | 1074.2 | 1090.5 | 1146.0 | 1209.7 | 1289.7 | 1294.6 |
| 57.5° | 11277.5 | 3668.3 | 1258.7 | 1008.9 | 1018.7 | 1039.9 | 1066.0 | 1116.6 | 1185.2 | 1273.4 | 1278.3 |
| 58° | 11319.9 | 3714.0 | 1250.5 | 1005.6 | 1008.9 | 1033.4 | 1062.8 | 1111.7 | 1180.3 | 1276.6 | 1281.5 |
| 60° | 11321.6 | 3865.8 | 1232.6 | 990.9 | 971.4 | 1012.2 | 1044.8 | 1093.8 | 1172.2 | 1288.1 | 1299.5 |
| 62.5° | 10920.0 | 3864.2 | 1219.5 | 969.7 | 932.2 | 982.8 | 1020.3 | 1077.5 | 1164.0 | 1315.8 | 1338.7 |
| 65° | 9615.6 | 3511.6 | 1157.5 | 937.1 | 901.2 | 956.7 | 999.1 | 1066.0 | 1186.8 | 1436.6 | 1451.3 |
| 67.5° | 7521.0 | 2878.1 | 1041.6 | 891.4 | 860.3 | 930.5 | 986.0 | 1064.4 | 1211.3 | 1464.4 | 1474.2 |
| 70° | 4972.7 | 2153.3 | 914.2 | 839.1 | 817.9 | 899.5 | 992.6 | 1119.9 | 1183.6 | 1405.6 | 1379.5 |
| 72.5° | 2581.0 | 1511.7 | 811.4 | 773.8 | 768.9 | 871.8 | 1087.3 | 1113.4 | 1155.8 | 1322.3 | 1289.7 |
| 75° | 1355.0 | 1049.7 | 721.6 | 702.0 | 710.1 | 865.2 | 1283.2 | 1084.0 | 1119.9 | 1265.2 | 1327.2 |
| 77.5° | 829.3 | 847.3 | 644.8 | 636.7 | 653.0 | 845.6 | 1281.5 | 1046.4 | 1067.7 | 1164.0 | 1232.6 |
| 80° | 555.1 | 687.3 | 586.1 | 587.7 | 599.1 | 773.8 | 1150.9 | 987.7 | 1004.0 | 1100.3 | 1170.5 |
| 82.5° | 351.0 | 406.5 | 532.2 | 560.0 | 545.3 | 638.3 | 977.9 | 899.5 | 922.4 | 1258.7 | 1330.5 |
| 85° | 177.9 | 254.7 | 462.0 | 538.7 | 491.4 | 447.3 | 793.4 | 788.5 | 799.9 | 907.7 | 948.5 |
| 87.5° | 81.6 | 140.4 | 360.8 | 470.2 | 370.6 | 279.2 | 576.3 | 584.4 | 630.2 | 644.8 | 644.8 |
| 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)