

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: P193217

Luminaire Tested: **GAN-AF-09-LED-U-T3R-7030-600-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-T3R-7030-600-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34671.2 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G5

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

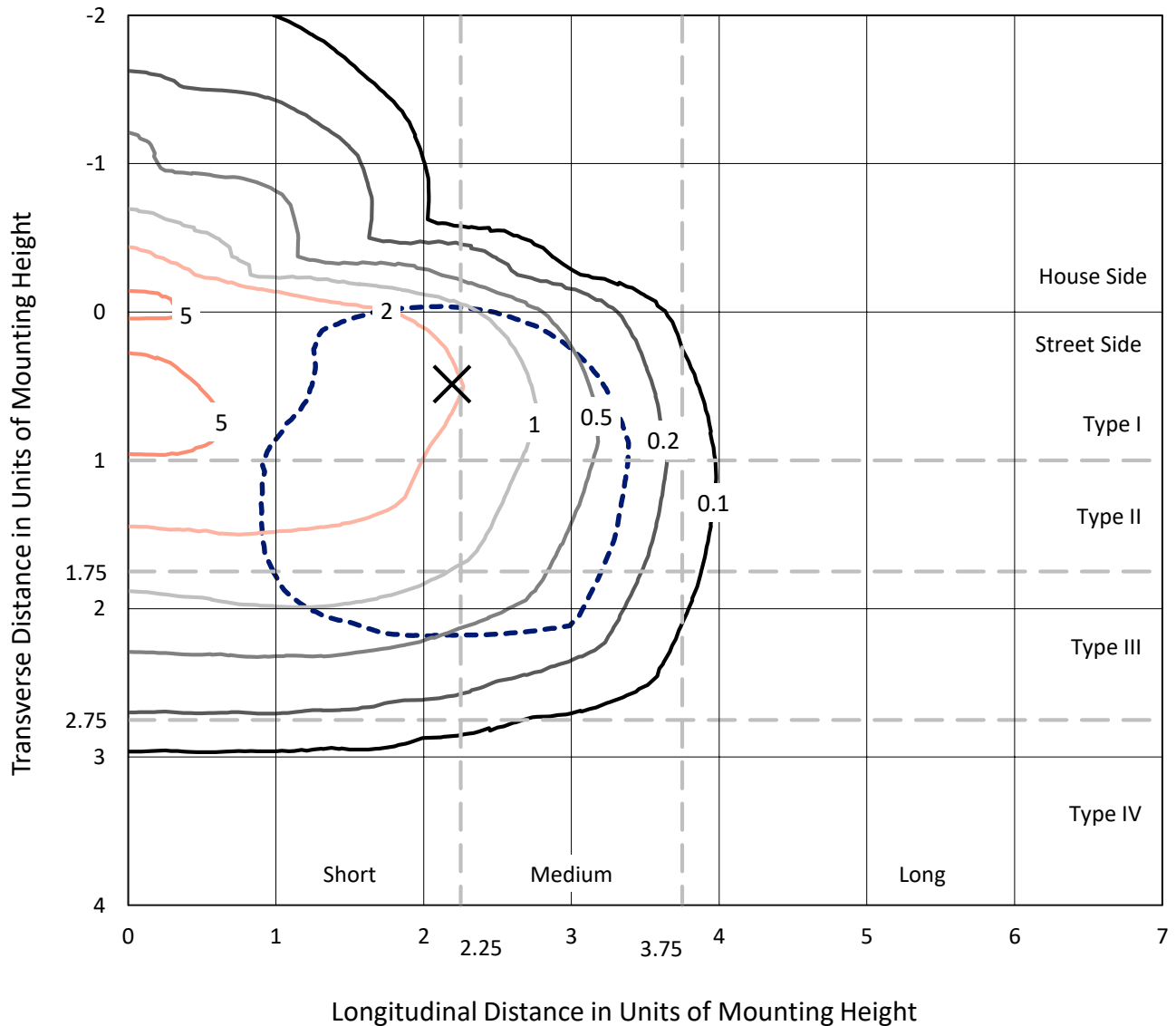


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

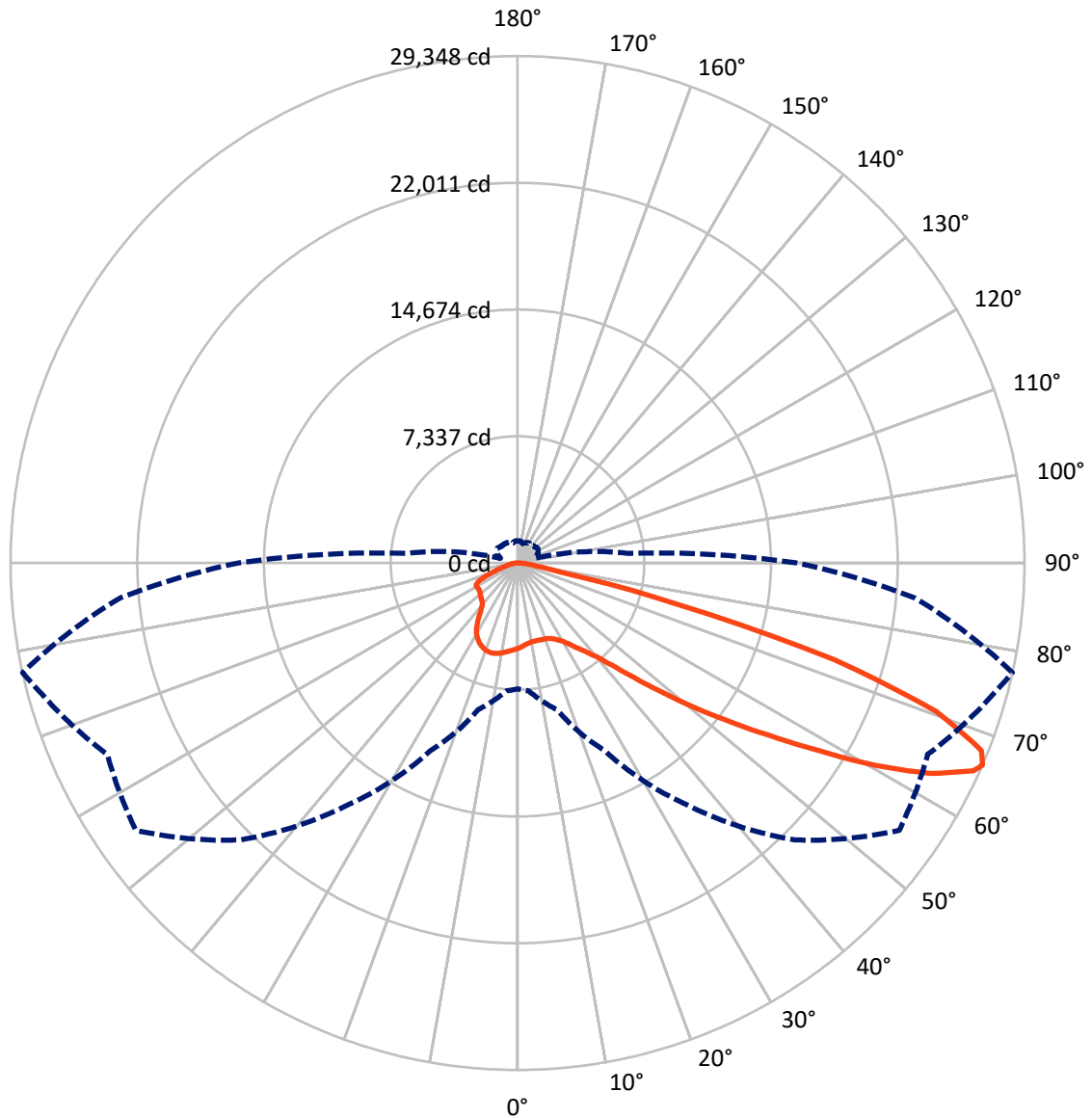


Based on 30 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5923.4 | 0.0 | 5923.4 |
| | % Fixture | 17.1 | 0.0 | 17.1 |
| Street Side | Lumens | 28747.9 | 0.0 | 28747.9 |
| | % Fixture | 82.9 | 0.0 | 82.9 |
| Total | Lumens | 34671.2 | 0.0 | 34671.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 441.4 | 1.3 |
| 10°-20° | 1245.3 | 3.6 |
| 20°-30° | 2125.3 | 6.1 |
| 30°-40° | 3402.3 | 9.8 |
| 40°-50° | 5256.2 | 15.2 |
| 50°-60° | 7455.1 | 21.5 |
| 60°-70° | 9972.9 | 28.8 |
| 70°-80° | 4331.0 | 12.5 |
| 80°-90° | 441.6 | 1.3 |
| 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° | 34671.2 | 100.0 |
| 0°-180° | 34671.2 | 100.0 |

Coefficient of Utilization



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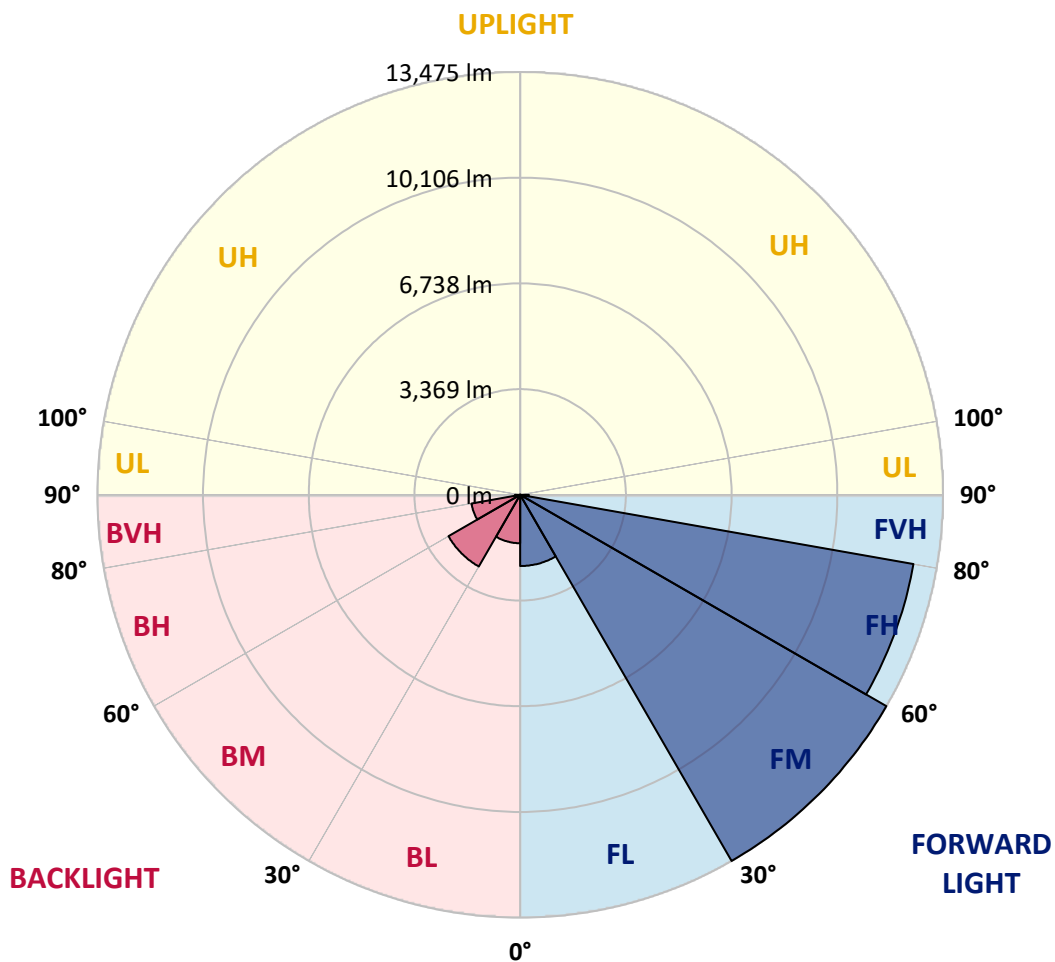
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2269.4 | 6.5 | | | |
| FM (30°-60°) | 13475.1 | 38.9 | | | |
| FH (60°-80°) | 12726.5 | 36.7 | | | G5 |
| FVH (80°-90°) | 277.0 | 0.8 | | | G3/500 |
| BL (0°-30°) | 1542.7 | 4.4 | B3/2500 | | |
| BM (30°-60°) | 2638.5 | 7.6 | B3/5000 | | |
| BH (60°-80°) | 1577.5 | 4.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 164.7 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77.5° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 |
| 2.5° | 4370.7 | 4400.2 | 4424.8 | 4447.7 | 4493.7 | 4568.9 | 4655.7 | 4726.2 | 4827.7 | 4847.4 | 4901.5 |
| 5° | 3969.4 | 3969.4 | 3989.0 | 4023.5 | 4085.6 | 4198.8 | 4316.7 | 4473.9 | 4695.1 | 4747.6 | 4891.6 |
| 7.5° | 3774.5 | 3776.1 | 3787.5 | 3817.0 | 3871.0 | 3974.3 | 4103.7 | 4288.9 | 4588.6 | 4675.4 | 4921.1 |
| 10° | 3846.5 | 3830.1 | 3805.5 | 3790.7 | 3799.0 | 3859.6 | 3982.5 | 4188.9 | 4523.2 | 4634.4 | 4986.7 |
| 12.5° | 4249.5 | 4218.4 | 4133.2 | 4020.2 | 3912.0 | 3867.8 | 3939.9 | 4141.4 | 4495.3 | 4624.6 | 5073.6 |
| 15° | 4908.0 | 4895.0 | 4736.1 | 4501.8 | 4239.7 | 4020.2 | 3971.0 | 4123.3 | 4498.5 | 4636.1 | 5176.7 |
| 17.5° | 5733.7 | 5715.7 | 5506.0 | 5165.2 | 4737.7 | 4310.1 | 4080.8 | 4138.0 | 4510.0 | 4655.7 | 5276.6 |
| 20° | 6567.6 | 6511.9 | 6285.8 | 5879.5 | 5330.8 | 4704.9 | 4262.6 | 4175.8 | 4524.8 | 4677.1 | 5381.4 |
| 22.5° | 7190.1 | 7144.3 | 6941.0 | 6546.3 | 5913.8 | 5162.0 | 4506.7 | 4241.3 | 4572.2 | 4739.3 | 5510.9 |
| 25° | 7737.2 | 7740.5 | 7539.0 | 7157.3 | 6503.6 | 5646.8 | 4821.2 | 4416.6 | 4693.4 | 4867.1 | 5687.8 |
| 27.5° | 8413.8 | 8374.5 | 8186.1 | 7807.6 | 7086.9 | 6136.6 | 5201.3 | 4657.4 | 4873.6 | 5049.0 | 5920.4 |
| 30° | 9223.1 | 9195.3 | 8977.4 | 8548.1 | 7733.9 | 6662.5 | 5635.4 | 4937.5 | 5106.2 | 5288.1 | 6225.1 |
| 32.5° | 10174.9 | 10161.7 | 9935.7 | 9383.6 | 8480.9 | 7281.8 | 6144.8 | 5307.9 | 5453.5 | 5641.9 | 6662.5 |
| 35° | 11292.2 | 11293.8 | 11026.8 | 10363.2 | 9298.4 | 8002.5 | 6723.2 | 5784.5 | 5876.2 | 6072.8 | 7183.5 |
| 37.5° | 11980.2 | 12063.8 | 11963.8 | 11287.2 | 10224.1 | 8808.6 | 7473.5 | 6416.8 | 6357.9 | 6556.1 | 7742.1 |
| 40° | 12127.6 | 12229.2 | 12545.3 | 12201.3 | 11259.3 | 9696.5 | 8138.6 | 7024.6 | 6950.8 | 7193.3 | 8461.4 |
| 42.5° | 11921.2 | 12062.1 | 12730.5 | 12972.9 | 12358.7 | 10790.9 | 9033.0 | 7927.3 | 7833.9 | 8159.9 | 9355.8 |
| 45° | 11798.4 | 11903.1 | 12676.4 | 13374.3 | 13312.0 | 12027.7 | 10171.6 | 9060.9 | 9026.5 | 9454.1 | 10387.9 |
| 47.5° | 11585.5 | 11680.4 | 12424.1 | 13467.7 | 13872.3 | 13161.3 | 11539.5 | 10446.9 | 10514.0 | 11074.2 | 11552.6 |
| 50° | 11700.0 | 11739.4 | 12142.3 | 13230.1 | 14034.5 | 13991.8 | 13068.0 | 12052.3 | 12281.7 | 12981.1 | 12871.4 |
| 52.5° | 11683.6 | 11785.2 | 12109.6 | 12840.2 | 14055.7 | 14504.6 | 14573.4 | 13842.8 | 14326.1 | 15128.8 | 14334.3 |
| 55° | 9445.9 | 9632.7 | 11724.6 | 12742.0 | 14131.1 | 15007.6 | 15913.5 | 15730.0 | 16631.0 | 17566.4 | 15985.6 |
| 57.5° | 9019.9 | 9137.9 | 10297.6 | 12948.4 | 14530.8 | 15967.5 | 17404.2 | 17807.3 | 19314.5 | 20400.6 | 17997.3 |
| 60° | 8936.5 | 9082.1 | 10283.1 | 13200.6 | 15341.7 | 17532.1 | 19614.2 | 20321.9 | 22579.3 | 23768.7 | 20330.1 |
| 62.5° | 8675.9 | 8833.2 | 10186.4 | 13167.8 | 16493.4 | 19696.0 | 22443.4 | 22995.5 | 25675.5 | 26832.1 | 22281.1 |
| 65° | 7850.3 | 7997.7 | 9398.4 | 12638.7 | 17269.9 | 22006.0 | 25791.8 | 25446.2 | 28119.7 | 28989.6 | 23254.3 |
| 66° | 7285.1 | 7429.2 | 8777.5 | 12016.3 | 17089.7 | 22661.3 | 26977.9 | 26204.6 | 28666.9 | 29348.3 | 23064.2 |
| 67.5° | 6251.4 | 6364.5 | 7571.7 | 10622.0 | 16131.4 | 22844.7 | 27975.7 | 26774.7 | 28724.3 | 28965.0 | 21978.1 |
| 70° | 3949.7 | 3982.5 | 4921.1 | 7332.6 | 12211.2 | 19812.4 | 26456.9 | 25359.4 | 26355.4 | 25703.4 | 18424.8 |
| 72.5° | 1713.5 | 1702.0 | 2362.3 | 3730.2 | 6913.2 | 13294.0 | 21401.4 | 20924.8 | 20674.1 | 19186.6 | 12897.5 |
| 75° | 953.4 | 966.5 | 1227.0 | 1731.5 | 2809.5 | 6529.9 | 14000.1 | 13397.3 | 11311.8 | 9652.3 | 5848.4 |
| 77.5° | 765.1 | 783.1 | 1017.3 | 1228.6 | 1261.4 | 2277.1 | 6551.1 | 5330.8 | 3209.3 | 2575.2 | 1625.1 |
| 80° | 604.5 | 637.3 | 888.0 | 956.7 | 850.2 | 938.6 | 2116.6 | 1692.3 | 1269.6 | 1164.8 | 842.1 |
| 82.5° | 478.3 | 501.3 | 761.7 | 724.1 | 594.7 | 632.4 | 1014.0 | 987.8 | 825.7 | 751.9 | 486.5 |
| 85° | 344.0 | 386.7 | 625.8 | 545.5 | 389.9 | 425.9 | 673.2 | 645.5 | 473.4 | 386.7 | 214.5 |
| 87.5° | 140.8 | 183.4 | 442.3 | 362.0 | 217.9 | 198.2 | 335.9 | 316.2 | 224.4 | 163.8 | 106.5 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 | 4940.8 |
| 2.5° | 4935.9 | 4975.2 | 5026.0 | 5057.2 | 5073.6 | 5084.9 | 5103.0 | 5101.4 | 5106.2 | 5107.9 | 5114.4 |
| 5° | 4968.7 | 5034.2 | 5107.9 | 5127.5 | 5127.5 | 5109.5 | 5091.5 | 5062.1 | 5050.6 | 5047.3 | 5050.6 |
| 7.5° | 5053.9 | 5125.9 | 5189.9 | 5166.9 | 5117.7 | 5045.7 | 4952.2 | 4870.3 | 4826.1 | 4811.4 | 4808.2 |
| 10° | 5162.0 | 5248.9 | 5275.0 | 5188.1 | 5044.1 | 4870.3 | 4685.2 | 4550.9 | 4473.9 | 4452.7 | 4446.1 |
| 12.5° | 5293.1 | 5374.9 | 5339.0 | 5155.4 | 4888.4 | 4608.2 | 4352.7 | 4138.0 | 3977.6 | 3926.8 | 3923.5 |
| 15° | 5437.2 | 5501.1 | 5374.9 | 5053.9 | 4655.7 | 4243.0 | 3787.5 | 3417.3 | 3217.4 | 3153.5 | 3148.7 |
| 17.5° | 5571.5 | 5604.2 | 5353.6 | 4876.9 | 4313.3 | 3645.0 | 3040.4 | 2755.4 | 2686.6 | 2703.1 | 2706.4 |
| 20° | 5686.2 | 5686.2 | 5281.6 | 4623.0 | 3774.5 | 2857.0 | 2475.3 | 2470.5 | 2519.5 | 2568.6 | 2578.5 |
| 22.5° | 5812.4 | 5736.9 | 5155.4 | 4264.3 | 3010.9 | 2337.7 | 2282.0 | 2327.9 | 2383.6 | 2437.7 | 2445.9 |
| 25° | 5968.0 | 5777.9 | 4980.1 | 3720.4 | 2367.2 | 2123.1 | 2144.4 | 2182.1 | 2210.0 | 2244.3 | 2249.2 |
| 27.5° | 6141.6 | 5830.4 | 4749.2 | 2971.8 | 2054.3 | 1988.7 | 2005.1 | 2018.2 | 2015.0 | 2028.1 | 2031.3 |
| 30° | 6349.7 | 5890.9 | 4432.9 | 2323.0 | 1924.9 | 1874.2 | 1844.7 | 1833.2 | 1833.2 | 1854.4 | 1862.7 |
| 32.5° | 6628.2 | 5981.1 | 3979.2 | 1990.3 | 1862.7 | 1792.2 | 1697.2 | 1654.6 | 1671.0 | 1743.0 | 1759.4 |
| 35° | 6934.4 | 6077.8 | 3364.8 | 1877.4 | 1849.5 | 1754.4 | 1607.1 | 1528.4 | 1530.0 | 1597.3 | 1618.5 |
| 37.5° | 7268.7 | 6200.6 | 2691.6 | 1856.1 | 1879.0 | 1756.2 | 1559.5 | 1451.4 | 1407.3 | 1407.3 | 1415.5 |
| 40° | 7696.2 | 6326.7 | 2178.8 | 1870.8 | 1941.3 | 1775.8 | 1535.0 | 1390.9 | 1266.4 | 1269.6 | 1276.1 |
| 42.5° | 8253.2 | 6434.9 | 1903.7 | 1901.9 | 2016.6 | 1802.0 | 1533.4 | 1310.6 | 1202.4 | 1276.1 | 1343.4 |
| 45° | 8872.5 | 6488.9 | 1782.3 | 1929.8 | 2077.2 | 1818.4 | 1507.1 | 1297.5 | 1210.6 | 1430.2 | 1557.9 |
| 47.5° | 9585.1 | 6457.8 | 1715.2 | 1939.7 | 2092.0 | 1818.4 | 1477.6 | 1328.6 | 1268.0 | 1656.3 | 1805.3 |
| 50° | 10366.5 | 6367.7 | 1649.7 | 1920.0 | 2087.1 | 1815.2 | 1505.5 | 1359.7 | 1289.3 | 1695.4 | 1798.7 |
| 52.5° | 11285.6 | 6292.3 | 1580.9 | 1877.4 | 2052.7 | 1797.1 | 1538.3 | 1346.6 | 1222.1 | 1541.5 | 1613.6 |
| 55° | 12334.1 | 6313.6 | 1503.9 | 1816.8 | 1998.6 | 1762.7 | 1526.8 | 1294.1 | 1151.7 | 1358.1 | 1402.4 |
| 57.5° | 13674.2 | 6567.6 | 1412.1 | 1739.7 | 1924.9 | 1705.3 | 1485.8 | 1269.6 | 1130.4 | 1231.9 | 1258.1 |
| 60° | 15169.8 | 7009.8 | 1297.5 | 1662.8 | 1833.2 | 1613.6 | 1454.7 | 1281.1 | 1140.2 | 1222.1 | 1235.1 |
| 62.5° | 16267.4 | 7267.1 | 1199.1 | 1549.8 | 1708.6 | 1512.0 | 1415.5 | 1295.9 | 1166.5 | 1256.5 | 1253.2 |
| 65° | 16565.5 | 6844.4 | 1076.3 | 1384.4 | 1539.9 | 1405.6 | 1366.3 | 1312.2 | 1177.9 | 1284.4 | 1269.6 |
| 66° | 16147.8 | 6388.9 | 1022.2 | 1307.3 | 1454.7 | 1353.1 | 1341.7 | 1310.6 | 1172.9 | 1287.6 | 1263.0 |
| 67.5° | 15133.7 | 5455.2 | 928.8 | 1194.2 | 1318.8 | 1274.5 | 1302.4 | 1295.9 | 1159.9 | 1284.4 | 1249.9 |
| 70° | 12342.3 | 3722.0 | 794.6 | 994.4 | 1097.6 | 1122.2 | 1227.0 | 1243.4 | 1117.2 | 1227.0 | 1151.7 |
| 72.5° | 8623.5 | 2267.2 | 702.7 | 771.6 | 888.0 | 956.7 | 1123.8 | 1171.4 | 1060.0 | 1071.4 | 999.2 |
| 75° | 4167.5 | 1204.0 | 637.3 | 597.9 | 689.7 | 799.4 | 999.2 | 1073.0 | 969.7 | 896.2 | 869.9 |
| 77.5° | 1299.1 | 735.6 | 540.7 | 481.7 | 540.7 | 645.5 | 835.5 | 940.2 | 863.3 | 750.3 | 740.4 |
| 80° | 697.8 | 540.7 | 416.1 | 386.7 | 427.5 | 506.2 | 656.8 | 784.7 | 742.1 | 673.2 | 601.3 |
| 82.5° | 460.3 | 350.6 | 308.0 | 299.8 | 326.0 | 386.7 | 488.2 | 650.4 | 650.4 | 576.7 | 419.3 |
| 85° | 237.5 | 214.5 | 211.3 | 211.3 | 227.7 | 257.2 | 332.5 | 501.3 | 534.1 | 304.8 | 252.3 |
| 87.5° | 118.0 | 122.9 | 114.7 | 119.6 | 127.9 | 126.2 | 158.9 | 252.3 | 301.4 | 185.0 | 153.9 |
| 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)