

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: P191757

Luminaire Tested: **GAN-AF-09-LED-U-AFL-7050-600-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191757
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: GAN-AF-09-LED-U-AFL-7050-600-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35969 lumens
Efficiency: N/A
Efficacy: 124.0 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

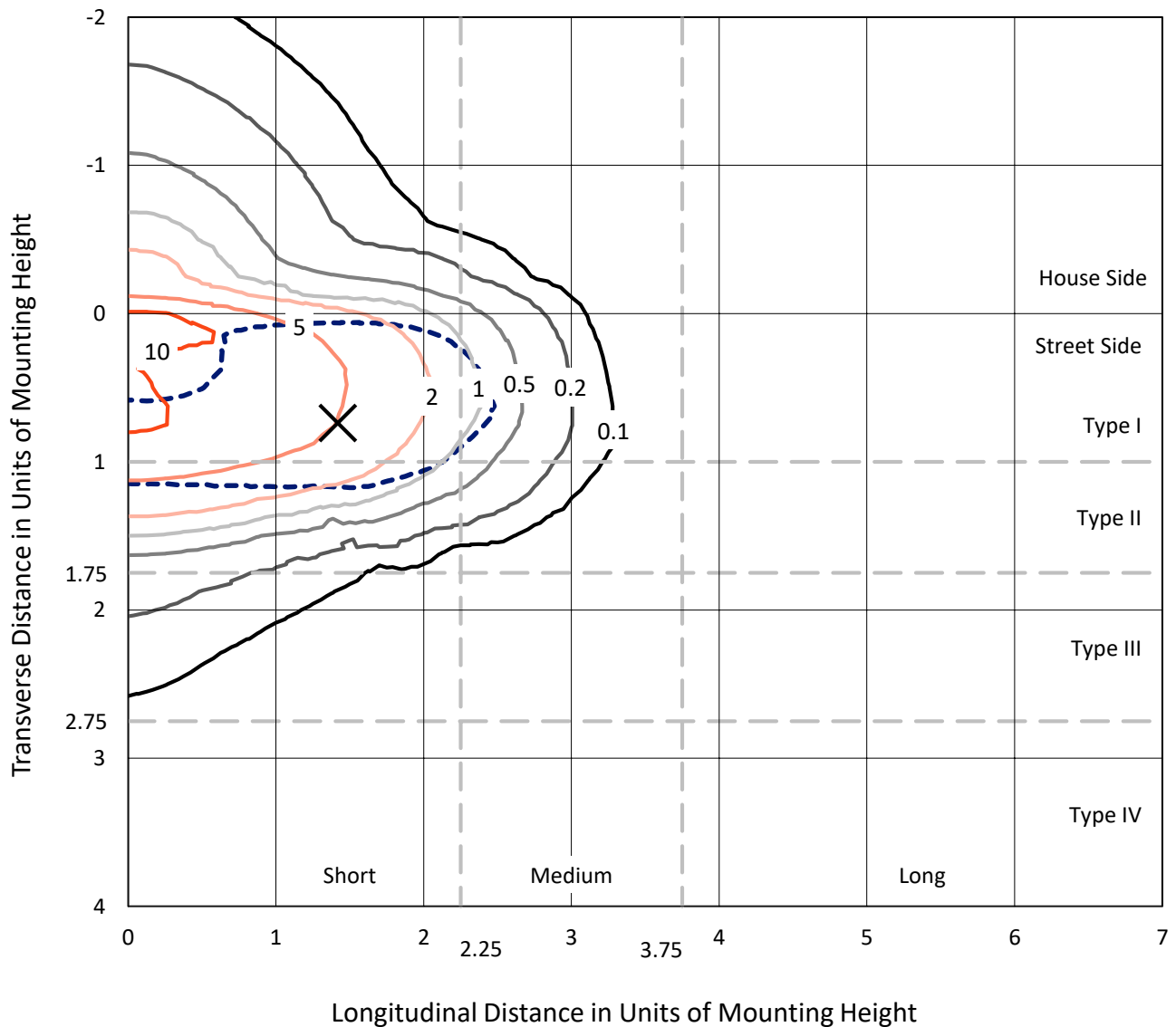


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

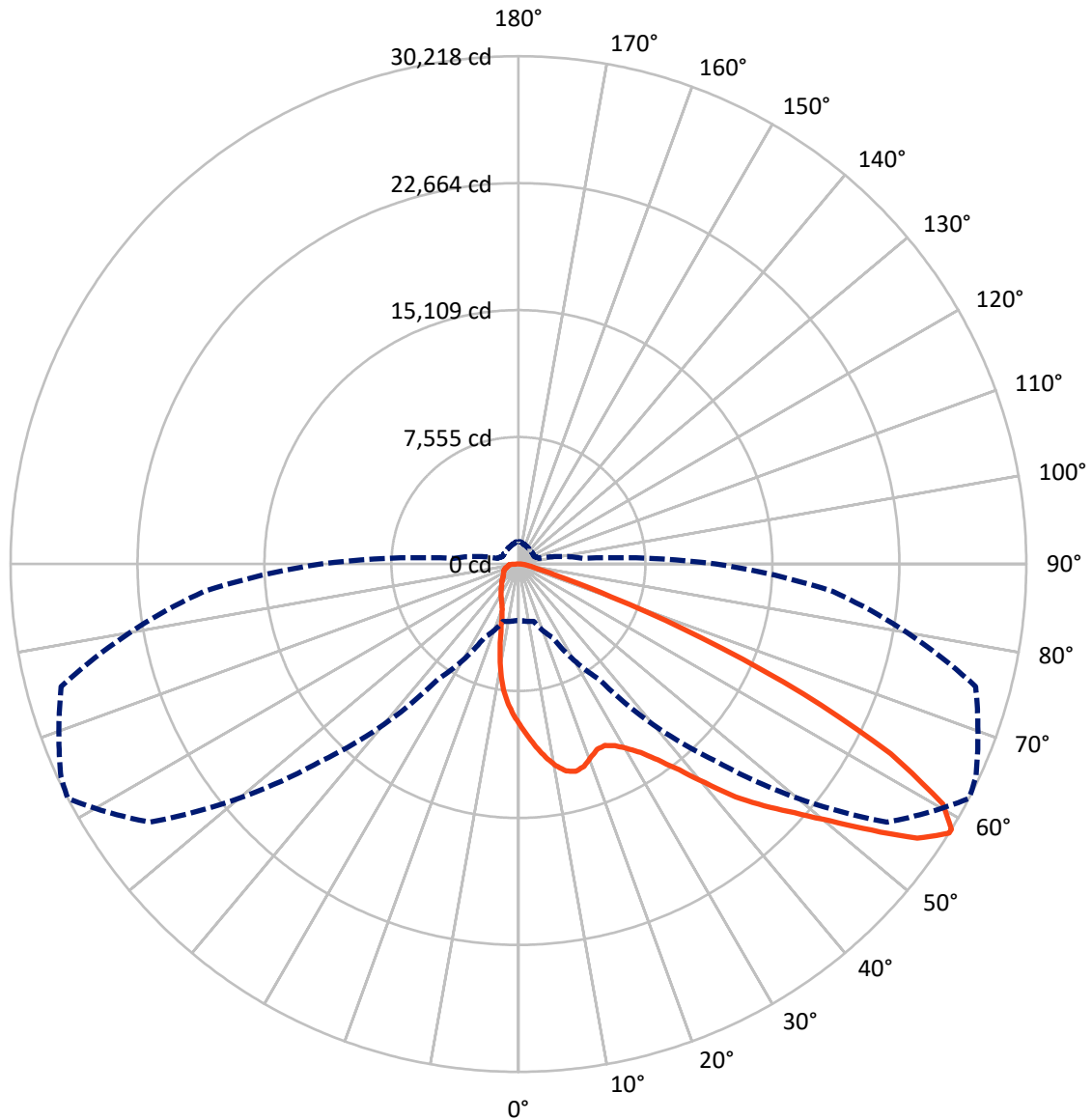


Based on 30 foot mounting height. Maximum calculated value = 12.9 fc
 Type II - Short - Full Cutoff

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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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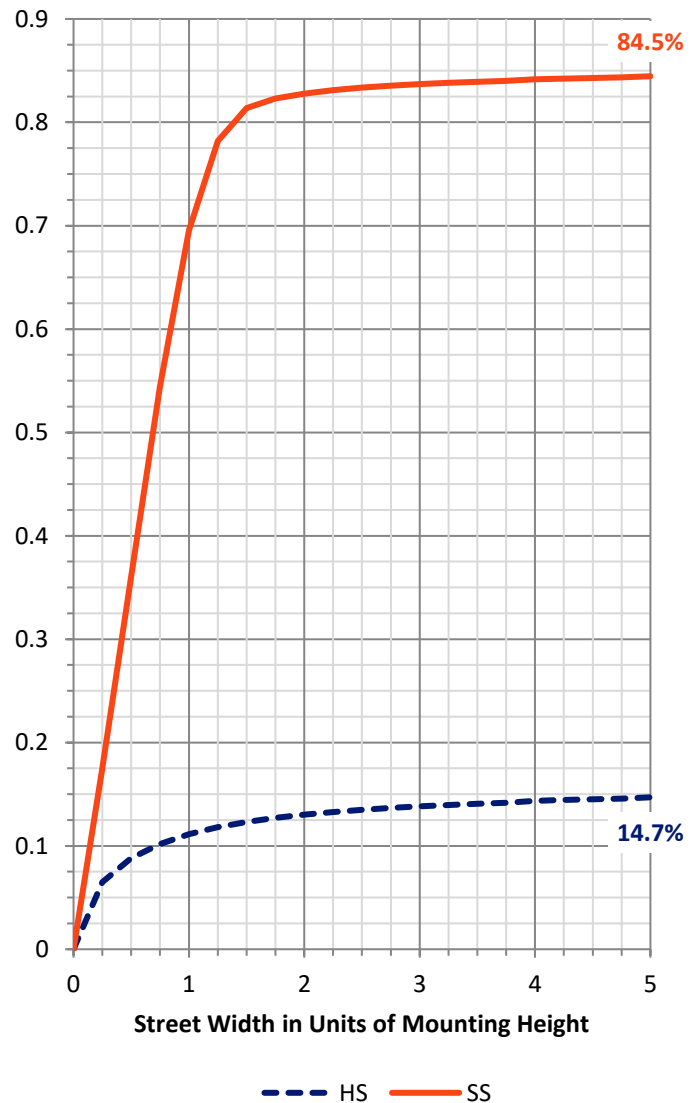
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5485.4 | 0.0 | 5485.4 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 30483.6 | 0.0 | 30483.6 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 35969.0 | 0.0 | 35969.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 854.5 | 2.4 |
| 10°-20° | 2184.2 | 6.1 |
| 20°-30° | 3530.9 | 9.8 |
| 30°-40° | 5605.3 | 15.6 |
| 40°-50° | 8201.7 | 22.8 |
| 50°-60° | 8578.3 | 23.8 |
| 60°-70° | 5068.1 | 14.1 |
| 70°-80° | 1427.7 | 4.0 |
| 80°-90° | 518.3 | 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° | 35969.0 | 100.0 |
| 0°-180° | 35969.0 | 100.0 |

Coefficient of Utilization



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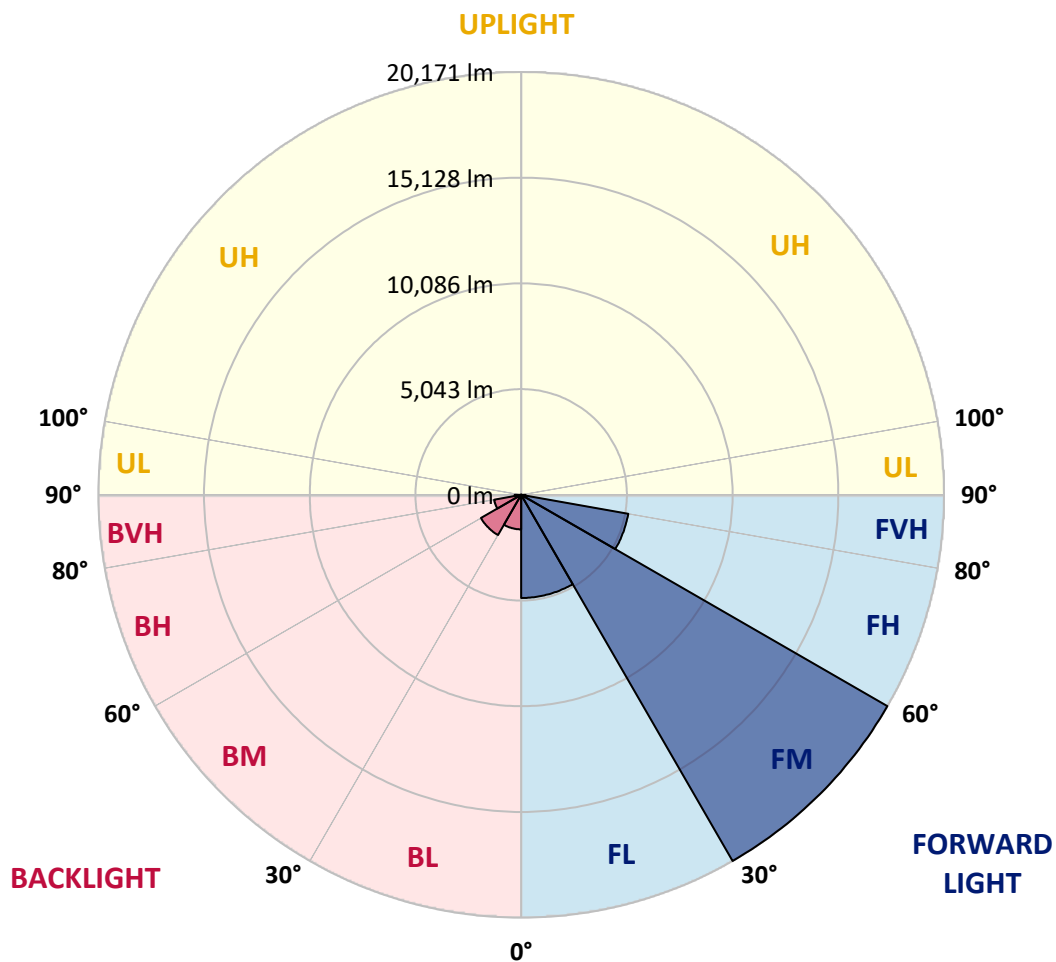
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 4921.0 | 13.7 | | | |
| FM | (30°-60°) | 20171.2 | 56.1 | | | |
| FH | (60°-80°) | 5186.9 | 14.4 | | | G3/7500 |
| FVH | (80°-90°) | 204.5 | 0.6 | | | G2/225 |
| BL | (0°-30°) | 1648.6 | 4.6 | B3/2500 | | |
| BM | (30°-60°) | 2214.0 | 6.2 | B2/2500 | | |
| BH | (60°-80°) | 1308.9 | 3.6 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 313.8 | 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° | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 |
| 2.5° | 10917.9 | 10829.8 | 10773.9 | 10724.8 | 10660.4 | 10523.3 | 10338.6 | 10221.8 | 10162.5 | 9960.9 | 9722.1 |
| 5° | 11988.3 | 11910.4 | 11852.8 | 11786.8 | 11671.6 | 11456.5 | 11158.4 | 10921.3 | 10804.4 | 10401.3 | 9923.7 |
| 7.5° | 11737.7 | 11769.9 | 11869.8 | 12044.2 | 12193.3 | 12164.5 | 11898.6 | 11597.1 | 11443.0 | 10882.3 | 10157.4 |
| 10° | 10226.9 | 10282.7 | 10455.5 | 10863.7 | 11524.3 | 12201.8 | 12408.4 | 12200.1 | 12044.2 | 11358.3 | 10397.9 |
| 12.5° | 9923.7 | 9922.0 | 9935.5 | 10043.9 | 10436.9 | 11390.5 | 12425.3 | 12635.4 | 12542.2 | 11812.2 | 10643.5 |
| 15° | 10047.3 | 10050.7 | 10040.5 | 10086.3 | 10208.2 | 10585.9 | 11907.0 | 12803.0 | 12869.1 | 12269.5 | 10897.6 |
| 17.5° | 10372.5 | 10364.0 | 10325.1 | 10325.1 | 10369.1 | 10516.5 | 11297.3 | 12647.2 | 12952.1 | 12674.3 | 11121.1 |
| 20° | 10917.9 | 10878.9 | 10775.6 | 10680.8 | 10633.3 | 10713.0 | 11046.6 | 12288.1 | 12808.1 | 13028.3 | 11305.8 |
| 22.5° | 11578.5 | 11548.0 | 11380.3 | 11177.0 | 11012.7 | 11011.1 | 11175.3 | 11974.8 | 12559.1 | 13362.0 | 11461.6 |
| 25° | 12432.1 | 12383.0 | 12134.0 | 11808.8 | 11520.9 | 11410.8 | 11456.5 | 11959.6 | 12423.6 | 13724.4 | 11600.5 |
| 27.5° | 13434.8 | 13345.0 | 13050.3 | 12581.2 | 12157.7 | 11935.8 | 11869.8 | 12235.6 | 12547.3 | 14173.3 | 11793.6 |
| 30° | 14650.9 | 14547.6 | 14169.9 | 13558.5 | 12960.6 | 12596.4 | 12455.8 | 12725.1 | 12957.2 | 14720.4 | 12103.5 |
| 32.5° | 16034.7 | 15885.7 | 15448.7 | 14774.6 | 13988.7 | 13433.1 | 13204.5 | 13372.1 | 13556.8 | 15379.2 | 12491.4 |
| 35° | 17947.0 | 17769.1 | 17137.3 | 16207.5 | 15320.0 | 14556.1 | 14190.2 | 14312.2 | 14491.7 | 16361.6 | 13052.0 |
| 37.5° | 19251.1 | 19171.5 | 18751.5 | 17877.5 | 16912.1 | 16033.0 | 15467.3 | 15538.4 | 15640.1 | 17589.6 | 13770.2 |
| 40° | 19239.3 | 19271.5 | 19279.9 | 19288.4 | 18631.2 | 17789.4 | 17181.4 | 17106.9 | 17086.5 | 18937.8 | 14586.6 |
| 42.5° | 18275.5 | 18407.7 | 18834.5 | 19700.0 | 20099.7 | 19713.5 | 19156.3 | 18941.2 | 18834.5 | 20526.5 | 15452.1 |
| 45° | 16800.3 | 16871.4 | 17670.9 | 19361.2 | 20851.7 | 21619.0 | 21197.3 | 20519.8 | 20326.7 | 21986.5 | 16170.2 |
| 47.5° | 16039.8 | 16117.7 | 16620.7 | 18463.5 | 20843.3 | 23158.6 | 23402.5 | 22111.9 | 21766.4 | 23256.9 | 16790.1 |
| 50° | 14229.2 | 14391.8 | 15025.2 | 16901.9 | 20082.8 | 23866.6 | 25707.7 | 24008.9 | 23294.1 | 24493.3 | 17411.7 |
| 52.5° | 10904.3 | 11155.0 | 11864.7 | 14334.2 | 18153.6 | 23516.0 | 27552.2 | 26309.0 | 25299.5 | 25773.8 | 17945.3 |
| 55° | 6878.3 | 7064.6 | 7660.8 | 10123.5 | 14522.2 | 21691.8 | 28251.7 | 28797.1 | 27899.4 | 26986.5 | 18407.7 |
| 57.5° | 3739.8 | 3822.8 | 4046.4 | 5589.4 | 9446.0 | 17659.0 | 27232.1 | 30213.1 | 29840.5 | 28016.3 | 18756.6 |
| 58° | 3346.8 | 3402.7 | 3541.6 | 4844.1 | 8377.3 | 16556.4 | 26779.8 | 30218.2 | 30031.8 | 28167.0 | 18783.7 |
| 60° | 2483.0 | 2454.2 | 2330.6 | 2764.2 | 4662.9 | 11437.9 | 24046.1 | 29008.8 | 29555.9 | 28351.6 | 18651.6 |
| 62.5° | 2181.5 | 2112.1 | 1859.7 | 1830.9 | 2267.9 | 5269.2 | 18399.2 | 24849.0 | 26141.3 | 27298.1 | 17848.7 |
| 65° | 2049.4 | 1974.9 | 1649.7 | 1544.7 | 1636.2 | 2229.0 | 10838.3 | 18636.3 | 20257.2 | 24103.7 | 15795.9 |
| 67.5° | 1951.2 | 1854.7 | 1515.9 | 1371.9 | 1378.7 | 1473.6 | 4344.5 | 11737.7 | 13561.8 | 18300.9 | 12286.4 |
| 70° | 1856.3 | 1751.3 | 1402.4 | 1236.4 | 1197.5 | 1165.3 | 1727.6 | 5875.6 | 7530.4 | 11559.8 | 7833.6 |
| 72.5° | 1754.7 | 1651.4 | 1302.5 | 1129.7 | 1053.5 | 946.8 | 1128.0 | 2403.4 | 3357.0 | 5469.1 | 3553.5 |
| 75° | 1607.4 | 1514.2 | 1202.6 | 1034.9 | 926.5 | 784.2 | 852.0 | 1255.1 | 1505.7 | 2178.2 | 1712.4 |
| 77.5° | 1426.1 | 1349.9 | 1090.8 | 957.0 | 821.5 | 636.8 | 655.5 | 870.6 | 965.4 | 1246.6 | 1017.9 |
| 80° | 1024.7 | 1051.8 | 970.5 | 860.4 | 731.7 | 516.6 | 503.0 | 635.2 | 686.0 | 801.1 | 662.3 |
| 82.5° | 719.8 | 735.1 | 802.8 | 702.9 | 604.7 | 406.5 | 370.9 | 447.1 | 477.6 | 526.8 | 357.4 |
| 85° | 496.3 | 479.3 | 550.5 | 489.5 | 437.0 | 271.0 | 254.1 | 303.2 | 321.8 | 326.9 | 184.6 |
| 87.5° | 298.1 | 298.1 | 318.4 | 262.5 | 235.4 | 140.6 | 137.2 | 172.8 | 184.6 | 176.1 | 101.6 |
| 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° | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 | 9554.4 |
| 2.5° | 9579.8 | 9459.6 | 9203.8 | 8998.9 | 8739.7 | 8470.4 | 8319.7 | 8158.8 | 8048.7 | 7969.1 | 8096.1 |
| 5° | 9652.7 | 9407.1 | 8878.6 | 8377.3 | 7823.4 | 7247.5 | 6810.6 | 6404.1 | 6121.2 | 5945.1 | 6111.0 |
| 7.5° | 9767.8 | 9390.1 | 8548.3 | 7691.3 | 6697.1 | 5738.4 | 4881.4 | 4344.5 | 4031.1 | 3877.0 | 3973.5 |
| 10° | 9900.0 | 9363.0 | 8160.5 | 6761.4 | 5338.7 | 4131.1 | 3490.8 | 3274.0 | 3202.9 | 3174.1 | 3187.6 |
| 12.5° | 10010.1 | 9305.5 | 7684.5 | 5636.8 | 4009.1 | 3262.2 | 3077.5 | 3072.5 | 3087.7 | 3091.1 | 3096.2 |
| 15° | 10088.0 | 9220.8 | 6978.2 | 4464.7 | 3206.3 | 2972.5 | 2962.4 | 2992.9 | 3021.6 | 3033.5 | 3040.3 |
| 17.5° | 10140.5 | 9046.3 | 6180.5 | 3529.8 | 2872.6 | 2831.9 | 2855.7 | 2894.6 | 2925.1 | 2933.6 | 2940.3 |
| 20° | 10135.4 | 8790.6 | 5230.3 | 2943.7 | 2691.4 | 2691.4 | 2732.0 | 2762.5 | 2764.2 | 2754.0 | 2759.1 |
| 22.5° | 10082.9 | 8439.9 | 4308.9 | 2632.1 | 2530.5 | 2559.3 | 2599.9 | 2571.1 | 2452.5 | 2374.6 | 2379.7 |
| 25° | 9994.8 | 8021.6 | 3519.6 | 2433.9 | 2381.4 | 2432.2 | 2420.4 | 2203.6 | 2034.2 | 1958.0 | 1958.0 |
| 27.5° | 9916.9 | 7527.0 | 2913.2 | 2261.2 | 2232.4 | 2295.0 | 2085.0 | 1888.5 | 1817.4 | 1781.8 | 1770.0 |
| 30° | 9861.0 | 6993.5 | 2508.4 | 2095.2 | 2091.8 | 2046.0 | 1808.9 | 1754.7 | 1742.9 | 1714.1 | 1703.9 |
| 32.5° | 9874.6 | 6453.2 | 2249.3 | 1949.5 | 1961.4 | 1751.3 | 1676.8 | 1688.7 | 1678.5 | 1648.0 | 1634.5 |
| 35° | 9986.3 | 5940.0 | 2079.9 | 1817.4 | 1781.8 | 1582.0 | 1598.9 | 1620.9 | 1617.5 | 1575.2 | 1561.6 |
| 37.5° | 10186.2 | 5453.9 | 1968.1 | 1707.3 | 1554.9 | 1497.3 | 1524.4 | 1558.2 | 1549.8 | 1521.0 | 1510.8 |
| 40° | 10396.2 | 4996.6 | 1876.7 | 1620.9 | 1421.1 | 1439.7 | 1463.4 | 1482.0 | 1490.5 | 1499.0 | 1492.2 |
| 42.5° | 10601.2 | 4518.9 | 1764.9 | 1532.8 | 1365.2 | 1385.5 | 1395.6 | 1414.3 | 1460.0 | 1492.2 | 1490.5 |
| 45° | 10723.1 | 4070.1 | 1649.7 | 1407.5 | 1321.1 | 1333.0 | 1326.2 | 1363.5 | 1419.4 | 1471.9 | 1473.6 |
| 47.5° | 10858.6 | 3721.2 | 1558.2 | 1292.3 | 1278.8 | 1287.2 | 1266.9 | 1304.2 | 1355.0 | 1419.4 | 1426.1 |
| 50° | 11022.9 | 3512.8 | 1485.4 | 1200.9 | 1221.2 | 1221.2 | 1216.1 | 1250.0 | 1321.1 | 1395.6 | 1409.2 |
| 52.5° | 11209.2 | 3472.2 | 1424.4 | 1134.8 | 1163.6 | 1161.9 | 1167.0 | 1217.8 | 1295.7 | 1368.5 | 1380.4 |
| 55° | 11436.2 | 3582.3 | 1358.4 | 1085.7 | 1107.7 | 1114.5 | 1131.4 | 1189.0 | 1255.1 | 1338.1 | 1343.1 |
| 57.5° | 11700.4 | 3805.9 | 1305.9 | 1046.7 | 1056.9 | 1078.9 | 1106.0 | 1158.5 | 1229.7 | 1321.1 | 1326.2 |
| 58° | 11744.4 | 3853.3 | 1297.4 | 1043.3 | 1046.7 | 1072.1 | 1102.6 | 1153.4 | 1224.6 | 1324.5 | 1329.6 |
| 60° | 11746.1 | 4010.8 | 1278.8 | 1028.1 | 1007.8 | 1050.1 | 1084.0 | 1134.8 | 1216.1 | 1336.4 | 1348.2 |
| 62.5° | 11329.5 | 4009.1 | 1265.2 | 1006.1 | 967.1 | 1019.6 | 1058.6 | 1117.9 | 1207.6 | 1365.2 | 1388.9 |
| 65° | 9976.2 | 3643.3 | 1200.9 | 972.2 | 934.9 | 992.5 | 1036.6 | 1106.0 | 1231.4 | 1490.5 | 1505.7 |
| 67.5° | 7803.1 | 2986.1 | 1080.6 | 924.8 | 892.6 | 965.4 | 1023.0 | 1104.3 | 1256.8 | 1519.3 | 1529.5 |
| 70° | 5159.2 | 2234.1 | 948.5 | 870.6 | 848.6 | 933.3 | 1029.8 | 1161.9 | 1228.0 | 1458.3 | 1431.2 |
| 72.5° | 2677.8 | 1568.4 | 841.8 | 802.8 | 797.8 | 904.5 | 1128.0 | 1155.1 | 1199.2 | 1371.9 | 1338.1 |
| 75° | 1405.8 | 1089.1 | 748.6 | 728.3 | 736.8 | 897.7 | 1331.3 | 1124.6 | 1161.9 | 1312.7 | 1377.0 |
| 77.5° | 860.4 | 879.1 | 669.0 | 660.6 | 677.5 | 877.4 | 1329.6 | 1085.7 | 1107.7 | 1207.6 | 1278.8 |
| 80° | 575.9 | 713.1 | 608.1 | 609.7 | 621.6 | 802.8 | 1194.1 | 1024.7 | 1041.7 | 1141.6 | 1214.4 |
| 82.5° | 364.2 | 421.7 | 552.2 | 581.0 | 565.7 | 662.3 | 1014.6 | 933.3 | 957.0 | 1305.9 | 1380.4 |
| 85° | 184.6 | 264.2 | 479.3 | 558.9 | 509.8 | 464.1 | 823.2 | 818.1 | 829.9 | 941.7 | 984.1 |
| 87.5° | 84.7 | 145.7 | 374.3 | 487.8 | 384.5 | 289.6 | 597.9 | 606.4 | 653.8 | 669.0 | 669.0 |
| 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)