

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: P268322

Luminaire Tested: **GAN-AF-03-LED-U-5MQ-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P268322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-03-LED-U-5MQ-7027-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10927.8 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 96
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

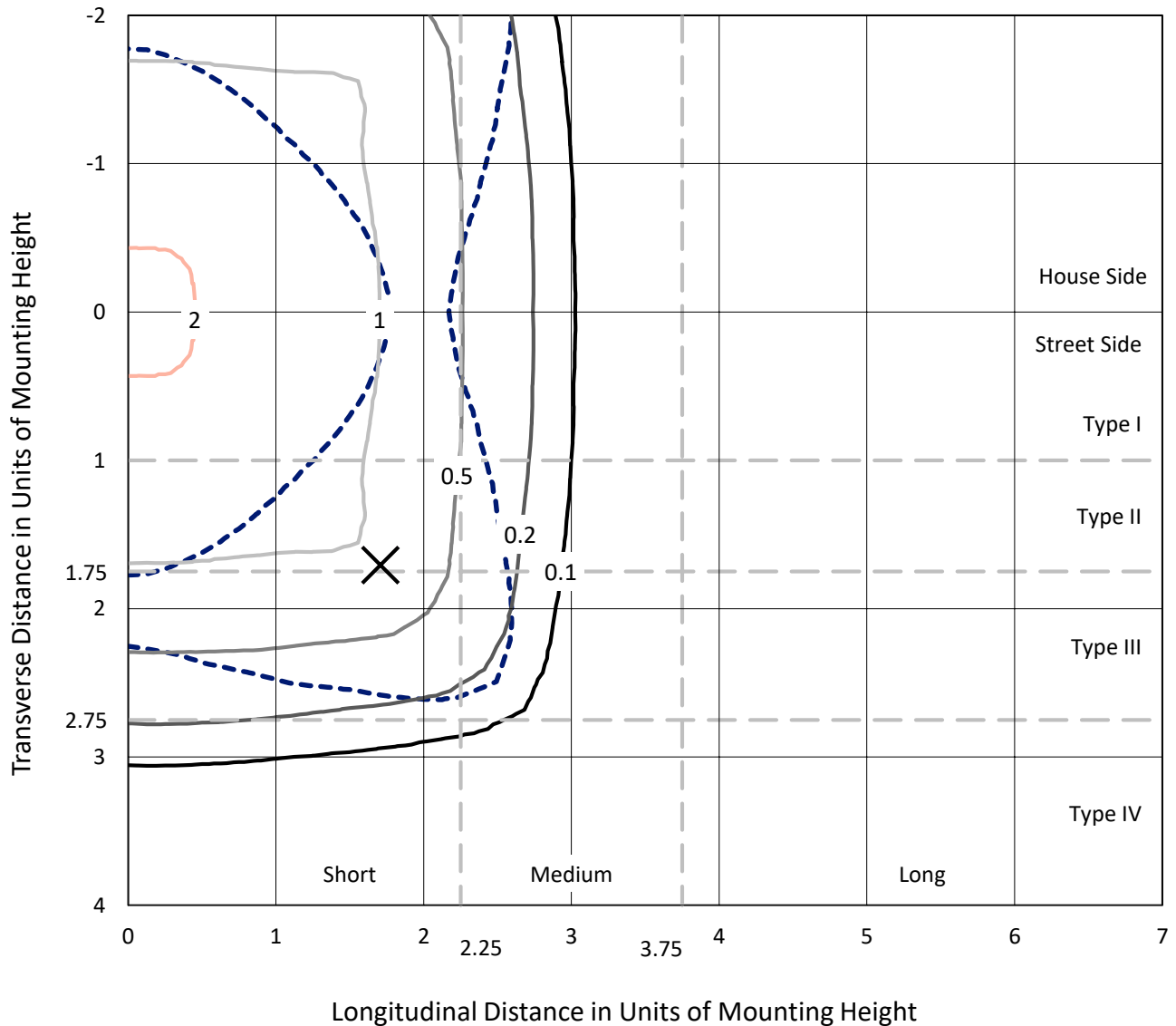


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

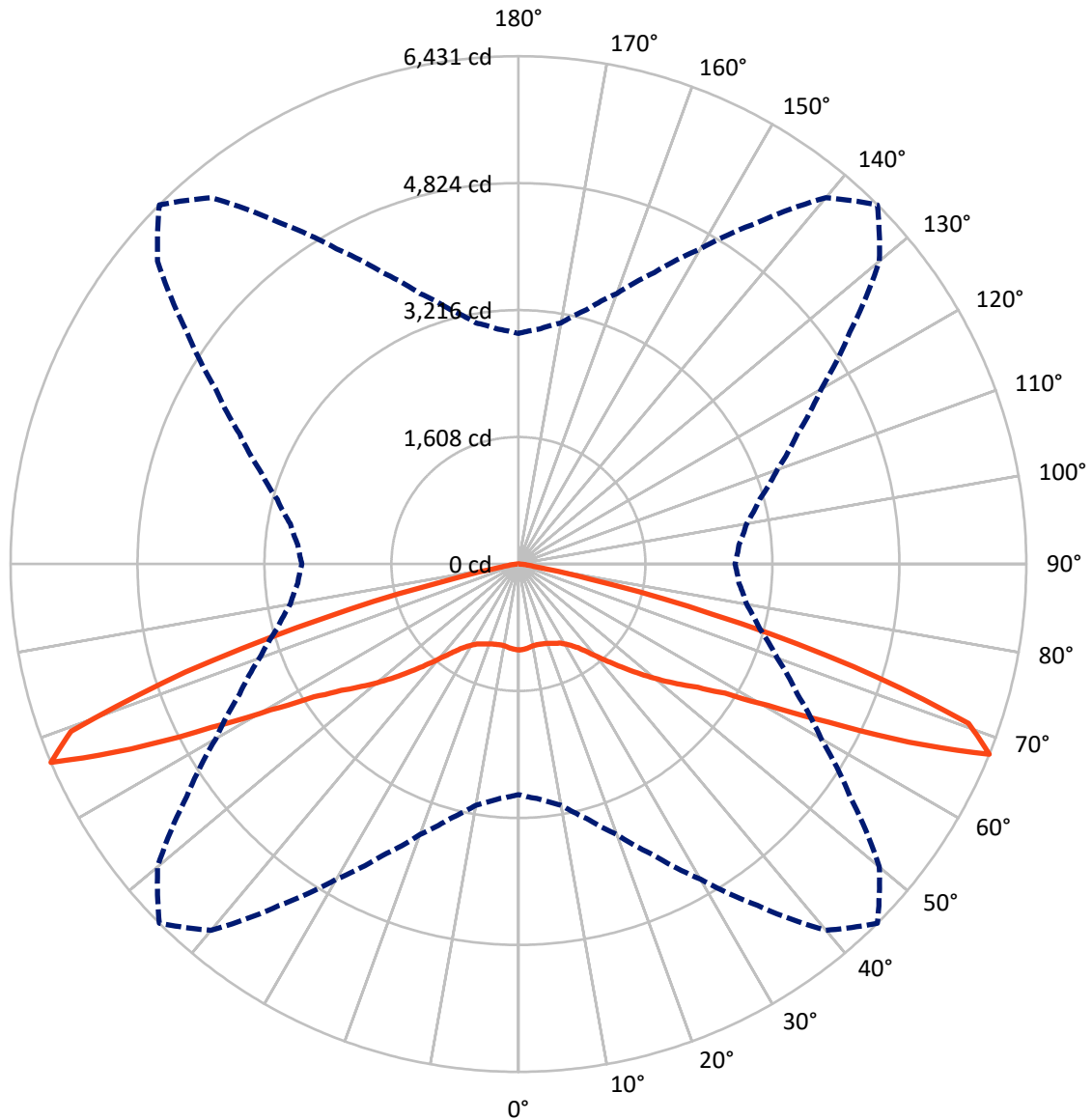


Based on 20 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5463.9 | 0.0 | 5463.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 5463.9 | 0.0 | 5463.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 10927.8 | 0.0 | 10927.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 101.9 | 0.9 |
| 10°-20° | 295.8 | 2.7 |
| 20°-30° | 502.8 | 4.6 |
| 30°-40° | 821.9 | 7.5 |
| 40°-50° | 1467.3 | 13.4 |
| 50°-60° | 2473.9 | 22.6 |
| 60°-70° | 3839.1 | 35.1 |
| 70°-80° | 1348.9 | 12.3 |
| 80°-90° | 76.2 | 0.7 |
| 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° | 10927.8 | 100.0 |
| 0°-180° | 10927.8 | 100.0 |

Coefficient of Utilization



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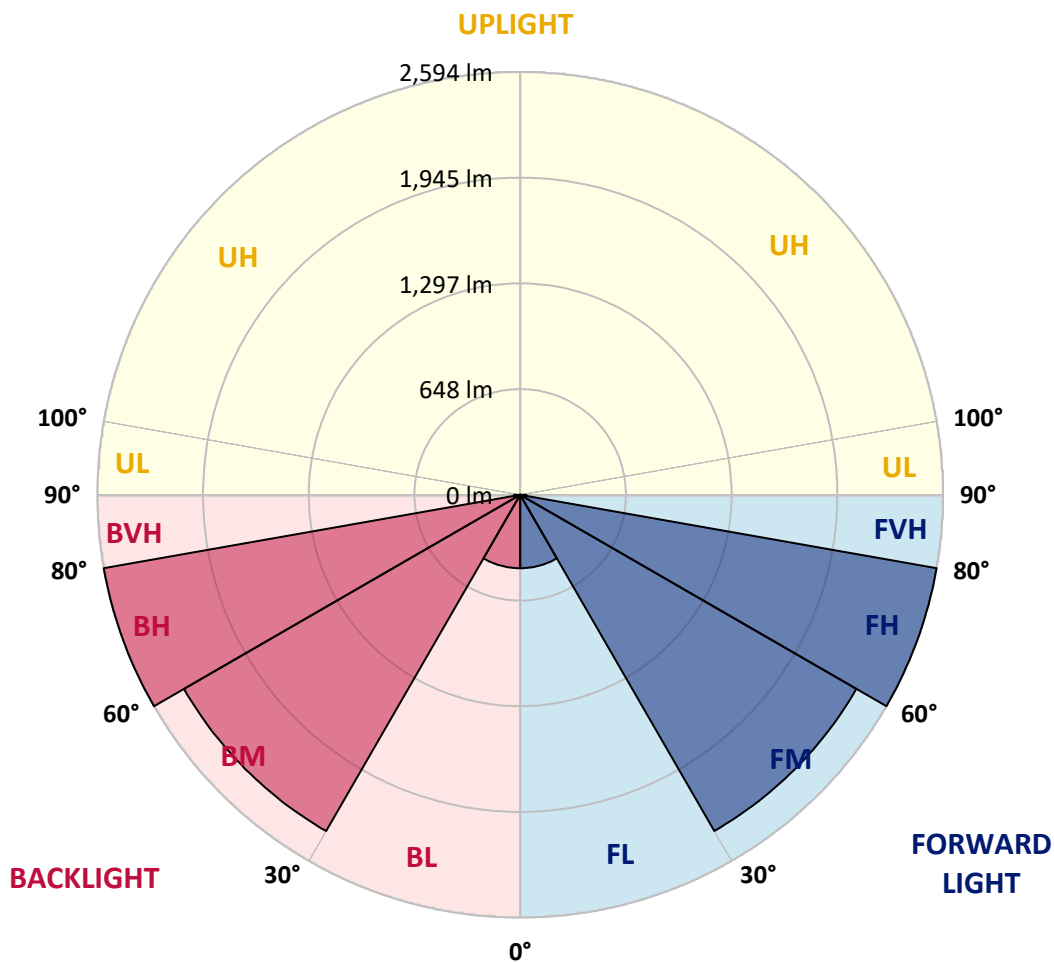
CATALOG NUMBER: GAN-AF-03-LED-U-5MQ-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 450.2 | 4.1 | | | |
| FM | (30°-60°) | 2381.6 | 21.8 | | | |
| FH | (60°-80°) | 2594.0 | 23.7 | | | G2/5000 |
| FVH | (80°-90°) | 38.1 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 450.2 | 4.1 | B1/500 | | |
| BM | (30°-60°) | 2381.6 | 21.8 | B2/2500 | | |
| BH | (60°-80°) | 2594.0 | 23.7 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 38.1 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 |
| 2.5° | 1085.1 | 1086.1 | 1086.1 | 1086.1 | 1085.5 | 1085.5 | 1084.4 | 1085.5 | 1085.1 | 1083.4 | 1084.0 |
| 5° | 1075.9 | 1077.0 | 1077.0 | 1076.3 | 1078.0 | 1077.4 | 1075.9 | 1077.0 | 1076.3 | 1075.5 | 1075.9 |
| 7.5° | 1062.9 | 1064.4 | 1064.4 | 1063.9 | 1065.4 | 1064.9 | 1063.9 | 1064.4 | 1064.4 | 1062.9 | 1062.9 |
| 10° | 1048.3 | 1049.3 | 1049.3 | 1048.9 | 1051.2 | 1051.2 | 1050.7 | 1052.4 | 1052.9 | 1051.2 | 1050.3 |
| 12.5° | 1034.8 | 1036.3 | 1036.3 | 1038.3 | 1040.7 | 1041.8 | 1044.3 | 1046.3 | 1048.3 | 1047.9 | 1045.7 |
| 15° | 1026.8 | 1027.8 | 1029.6 | 1032.2 | 1036.3 | 1039.8 | 1043.8 | 1048.3 | 1052.4 | 1053.4 | 1050.3 |
| 17.5° | 1021.6 | 1023.2 | 1026.1 | 1029.6 | 1035.2 | 1041.2 | 1047.3 | 1053.4 | 1058.8 | 1060.9 | 1057.3 |
| 20° | 1020.1 | 1021.2 | 1024.2 | 1030.1 | 1037.7 | 1046.7 | 1055.2 | 1062.3 | 1069.9 | 1072.4 | 1069.9 |
| 22.5° | 1023.2 | 1025.1 | 1028.6 | 1035.7 | 1045.7 | 1057.3 | 1067.4 | 1077.0 | 1086.5 | 1091.0 | 1087.5 |
| 25° | 1036.7 | 1038.7 | 1043.3 | 1052.4 | 1063.4 | 1075.5 | 1086.9 | 1098.1 | 1106.6 | 1111.2 | 1108.6 |
| 27.5° | 1061.8 | 1064.4 | 1069.9 | 1079.0 | 1091.0 | 1104.0 | 1116.7 | 1125.7 | 1132.8 | 1134.2 | 1131.2 |
| 30° | 1099.5 | 1105.0 | 1111.7 | 1121.7 | 1135.7 | 1146.7 | 1159.4 | 1167.3 | 1175.9 | 1175.9 | 1173.5 |
| 32.5° | 1158.4 | 1163.8 | 1170.9 | 1180.5 | 1191.5 | 1203.5 | 1214.7 | 1221.7 | 1230.7 | 1231.2 | 1225.2 |
| 35° | 1246.3 | 1248.9 | 1254.8 | 1261.0 | 1270.9 | 1281.5 | 1291.0 | 1295.5 | 1303.1 | 1303.6 | 1298.1 |
| 37.5° | 1362.4 | 1362.9 | 1367.0 | 1368.8 | 1378.0 | 1389.5 | 1398.7 | 1401.5 | 1408.6 | 1407.6 | 1402.1 |
| 40° | 1497.6 | 1500.1 | 1501.5 | 1504.7 | 1514.2 | 1525.2 | 1534.8 | 1536.2 | 1543.7 | 1542.3 | 1535.3 |
| 42.5° | 1653.9 | 1654.9 | 1663.4 | 1668.0 | 1677.0 | 1682.4 | 1694.6 | 1696.1 | 1705.2 | 1701.1 | 1693.0 |
| 45° | 1829.3 | 1838.3 | 1846.3 | 1855.4 | 1864.9 | 1871.4 | 1881.1 | 1879.0 | 1885.1 | 1879.0 | 1874.5 |
| 47.5° | 2013.7 | 2020.2 | 2038.3 | 2052.4 | 2068.0 | 2073.5 | 2087.0 | 2081.1 | 2087.0 | 2078.5 | 2077.1 |
| 50° | 2216.7 | 2228.2 | 2243.8 | 2260.0 | 2276.6 | 2285.6 | 2303.2 | 2295.6 | 2303.7 | 2295.6 | 2291.0 |
| 52.5° | 2416.7 | 2419.8 | 2453.9 | 2477.5 | 2500.6 | 2511.2 | 2521.7 | 2518.2 | 2518.8 | 2518.2 | 2513.6 |
| 55° | 2606.7 | 2613.7 | 2647.8 | 2680.1 | 2720.2 | 2749.9 | 2767.9 | 2766.1 | 2761.5 | 2756.9 | 2749.4 |
| 57.5° | 2820.8 | 2827.8 | 2867.0 | 2906.6 | 2952.4 | 2994.6 | 3031.3 | 3069.0 | 3083.6 | 3087.7 | 3071.0 |
| 60° | 3110.2 | 3109.8 | 3161.9 | 3210.3 | 3275.6 | 3338.5 | 3418.8 | 3500.7 | 3594.7 | 3638.3 | 3580.6 |
| 62.5° | 3404.7 | 3416.8 | 3492.2 | 3577.6 | 3712.2 | 3843.4 | 3991.7 | 4137.5 | 4286.2 | 4407.3 | 4278.5 |
| 65° | 3369.5 | 3415.7 | 3527.9 | 3721.3 | 3970.1 | 4265.5 | 4585.2 | 4923.4 | 5228.9 | 5439.0 | 5203.3 |
| 67.5° | 2920.3 | 2986.1 | 3100.2 | 3335.3 | 3646.4 | 4072.6 | 4609.4 | 5278.3 | 6055.7 | 6431.4 | 5965.6 |
| 70° | 2116.6 | 2191.1 | 2310.7 | 2540.3 | 2848.3 | 3253.4 | 3836.4 | 4639.4 | 5668.7 | 6047.6 | 5534.5 |
| 72.5° | 1053.4 | 1093.5 | 1167.3 | 1313.6 | 1546.8 | 1875.5 | 2404.1 | 3176.0 | 4086.7 | 4434.5 | 3965.6 |
| 75° | 357.9 | 376.4 | 389.0 | 436.7 | 510.5 | 639.8 | 902.5 | 1388.5 | 2118.3 | 2539.2 | 2088.0 |
| 77.5° | 206.5 | 207.1 | 215.7 | 224.1 | 236.8 | 250.7 | 285.9 | 375.4 | 649.3 | 922.2 | 671.9 |
| 80° | 133.7 | 133.2 | 140.2 | 146.8 | 155.2 | 162.4 | 164.3 | 173.9 | 200.5 | 237.7 | 212.5 |
| 82.5° | 69.3 | 78.0 | 93.5 | 102.0 | 118.0 | 121.1 | 117.0 | 113.5 | 120.2 | 124.7 | 127.6 |
| 85° | 38.2 | 33.1 | 49.8 | 64.3 | 71.3 | 72.4 | 72.4 | 68.4 | 70.8 | 69.3 | 75.4 |
| 87.5° | 17.5 | 16.1 | 19.7 | 31.7 | 33.6 | 28.7 | 30.2 | 26.6 | 19.1 | 18.5 | 21.1 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 | 1089.0 |
| 2.5° | 1084.0 | 1084.4 | 1084.4 | 1086.1 | 1086.5 | 1087.5 | 1088.4 | 1089.0 |
| 5° | 1075.5 | 1077.0 | 1075.9 | 1077.4 | 1077.4 | 1078.4 | 1078.4 | 1079.0 |
| 7.5° | 1062.9 | 1064.4 | 1064.4 | 1064.4 | 1063.9 | 1065.4 | 1065.4 | 1065.4 |
| 10° | 1049.8 | 1050.7 | 1050.3 | 1049.3 | 1048.3 | 1049.8 | 1049.3 | 1048.9 |
| 12.5° | 1045.7 | 1043.3 | 1041.2 | 1040.2 | 1038.3 | 1038.7 | 1037.3 | 1037.3 |
| 15° | 1048.3 | 1043.8 | 1040.2 | 1038.7 | 1036.7 | 1035.7 | 1034.8 | 1035.2 |
| 17.5° | 1054.8 | 1049.3 | 1044.8 | 1042.3 | 1039.8 | 1038.3 | 1036.3 | 1036.7 |
| 20° | 1066.4 | 1059.9 | 1053.4 | 1048.3 | 1043.8 | 1041.2 | 1039.8 | 1039.2 |
| 22.5° | 1083.4 | 1074.0 | 1064.4 | 1056.9 | 1050.7 | 1047.3 | 1045.7 | 1044.8 |
| 25° | 1103.1 | 1092.5 | 1081.5 | 1072.9 | 1066.8 | 1062.3 | 1059.3 | 1059.3 |
| 27.5° | 1127.7 | 1119.2 | 1109.0 | 1099.0 | 1093.5 | 1089.0 | 1086.9 | 1086.1 |
| 30° | 1169.0 | 1160.9 | 1152.9 | 1143.3 | 1136.3 | 1131.8 | 1128.2 | 1125.1 |
| 32.5° | 1221.7 | 1215.1 | 1208.6 | 1201.6 | 1195.0 | 1188.9 | 1183.4 | 1180.9 |
| 35° | 1296.1 | 1291.0 | 1286.6 | 1278.5 | 1276.0 | 1272.4 | 1269.5 | 1266.9 |
| 37.5° | 1398.7 | 1396.5 | 1396.5 | 1388.1 | 1386.1 | 1384.5 | 1381.5 | 1382.0 |
| 40° | 1533.2 | 1535.3 | 1532.8 | 1529.8 | 1528.2 | 1524.2 | 1524.2 | 1527.7 |
| 42.5° | 1692.5 | 1694.1 | 1699.7 | 1694.6 | 1700.1 | 1695.0 | 1692.0 | 1694.6 |
| 45° | 1877.5 | 1882.9 | 1894.0 | 1889.0 | 1892.5 | 1884.0 | 1873.4 | 1874.0 |
| 47.5° | 2085.1 | 2090.0 | 2094.6 | 2091.1 | 2091.6 | 2077.5 | 2063.4 | 2060.0 |
| 50° | 2300.6 | 2302.6 | 2305.1 | 2300.1 | 2301.1 | 2285.6 | 2269.5 | 2269.9 |
| 52.5° | 2513.6 | 2523.2 | 2533.3 | 2519.7 | 2516.7 | 2499.2 | 2476.4 | 2467.5 |
| 55° | 2757.4 | 2771.0 | 2759.5 | 2735.8 | 2712.3 | 2688.5 | 2659.0 | 2654.0 |
| 57.5° | 3057.9 | 3034.8 | 2998.6 | 2953.9 | 2921.3 | 2888.1 | 2858.0 | 2845.4 |
| 60° | 3476.1 | 3389.1 | 3323.8 | 3257.4 | 3215.8 | 3175.1 | 3135.4 | 3129.3 |
| 62.5° | 4067.0 | 3916.8 | 3786.6 | 3649.5 | 3537.3 | 3449.9 | 3380.1 | 3360.5 |
| 65° | 4807.8 | 4452.4 | 4144.4 | 3857.1 | 3607.2 | 3418.8 | 3300.2 | 3247.9 |
| 67.5° | 5126.4 | 4424.8 | 3896.7 | 3488.7 | 3161.9 | 2933.9 | 2805.6 | 2741.8 |
| 70° | 4504.8 | 3669.5 | 3095.1 | 2686.7 | 2389.0 | 2145.8 | 2029.8 | 1961.4 |
| 72.5° | 3099.2 | 2334.2 | 1845.8 | 1506.5 | 1268.9 | 1065.4 | 985.0 | 979.0 |
| 75° | 1391.6 | 921.7 | 635.2 | 489.4 | 412.1 | 358.3 | 341.7 | 329.1 |
| 77.5° | 389.4 | 287.9 | 256.7 | 240.1 | 224.1 | 205.5 | 198.4 | 200.1 |
| 80° | 189.5 | 178.9 | 171.8 | 161.3 | 146.8 | 131.2 | 124.1 | 127.1 |
| 82.5° | 125.7 | 124.1 | 128.6 | 121.1 | 100.0 | 84.9 | 71.3 | 65.3 |
| 85° | 76.4 | 77.4 | 79.0 | 79.4 | 67.4 | 47.3 | 32.2 | 36.2 |
| 87.5° | 30.2 | 34.7 | 37.6 | 39.2 | 36.7 | 22.5 | 18.1 | 18.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)