

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: P299100

Luminaire Tested: **GAA-AF-01-LED-U-SL2-7060**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P299100  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-01-LED-U-SL2-7060  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 6084.3 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 59  
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



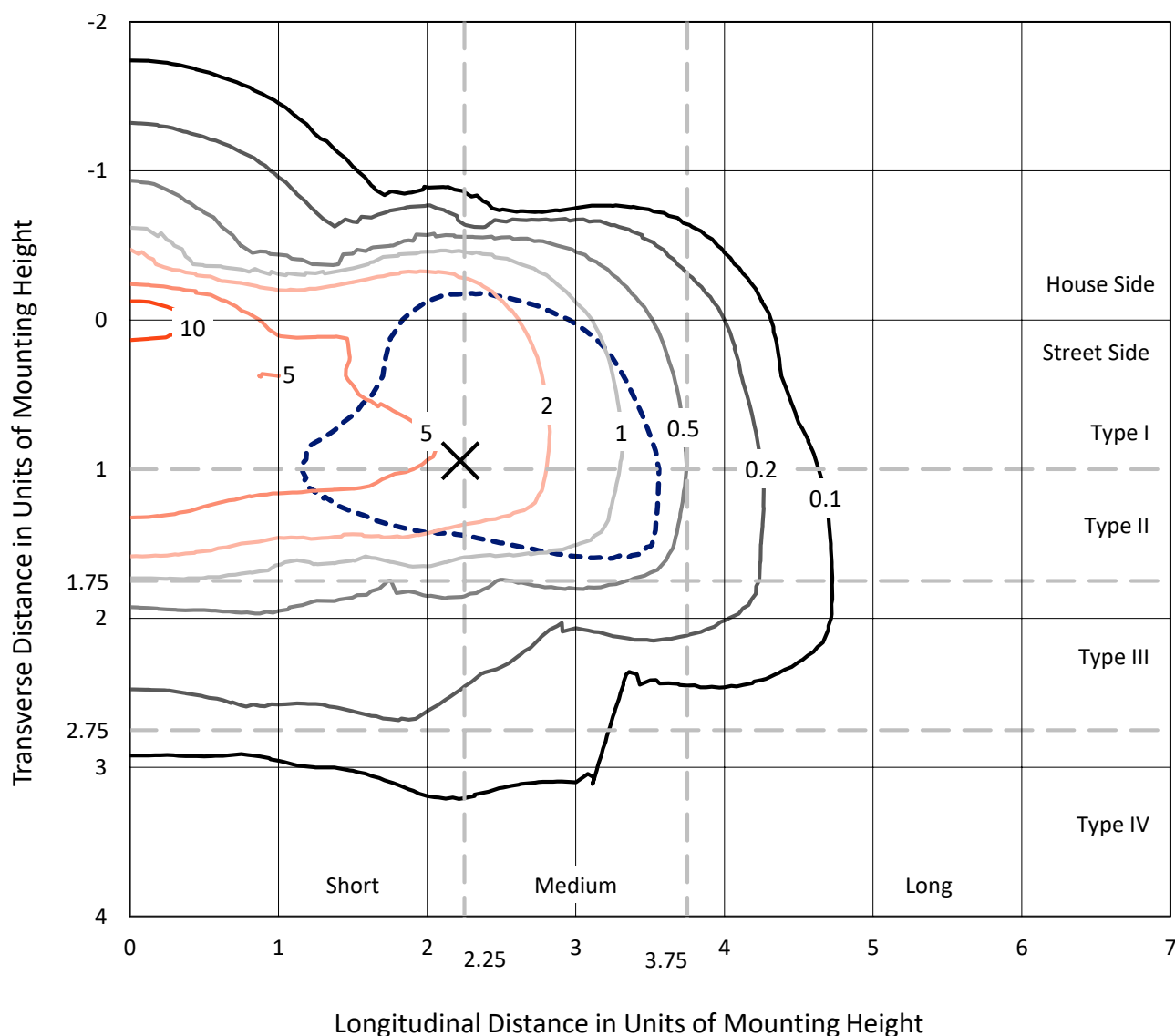
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

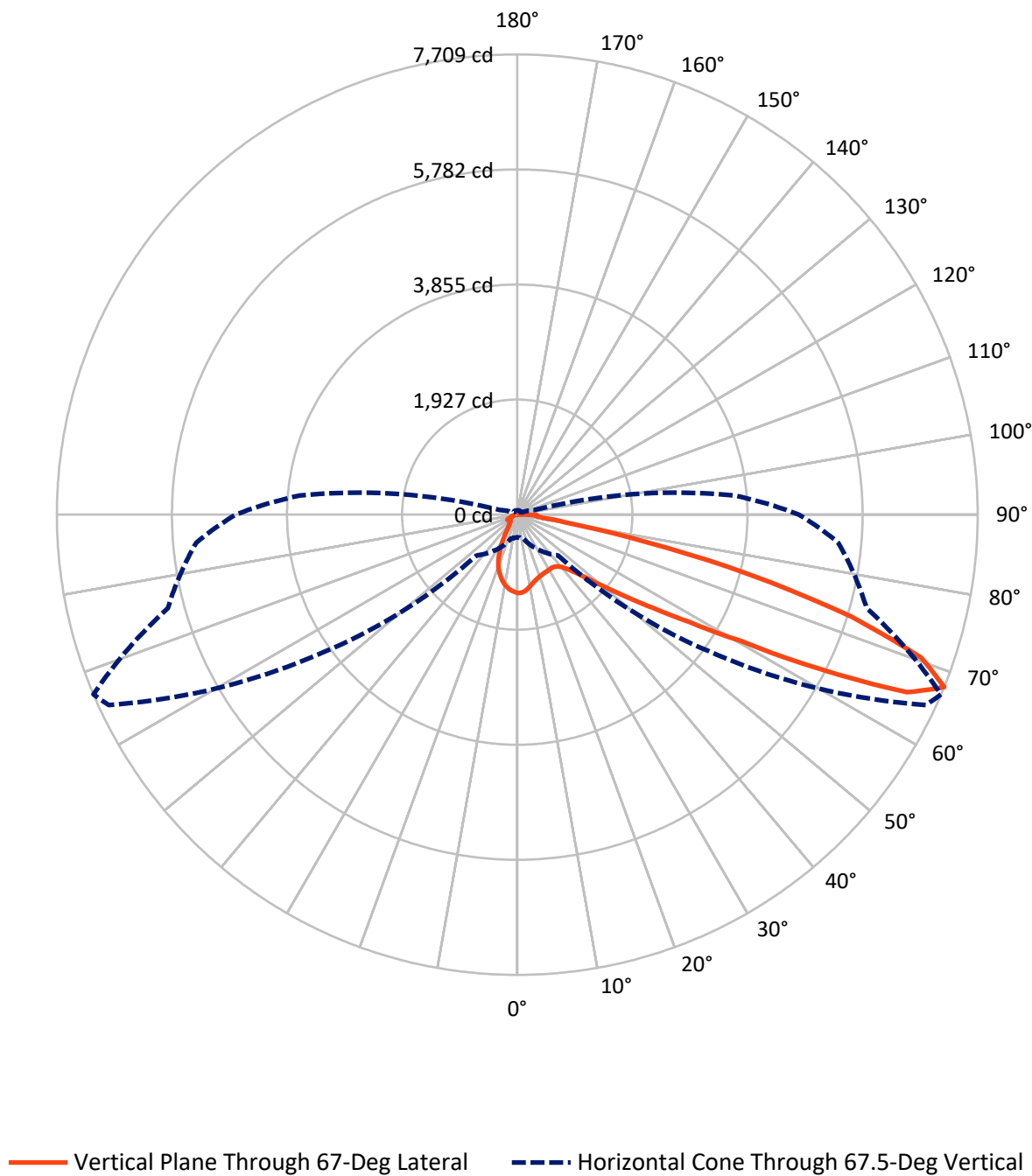


Based on 10 foot mounting height. Maximum calculated value = 13.1 fc  
 Type II - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1008.1   | 0.0    | 1008.1 |
|                    | % Fixture | 16.6     | 0.0    | 16.6   |
| <b>Street Side</b> | Lumens    | 5076.2   | 0.0    | 5076.2 |
|                    | % Fixture | 83.4     | 0.0    | 83.4   |
| <b>Total</b>       | Lumens    | 6084.3   | 0.0    | 6084.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 112.0  | 1.8       |
| 10°-20°   | 259.1  | 4.3       |
| 20°-30°   | 351.2  | 5.8       |
| 30°-40°   | 499.2  | 8.2       |
| 40°-50°   | 835.2  | 13.7      |
| 50°-60°   | 1321.3 | 21.7      |
| 60°-70°   | 1683.2 | 27.7      |
| 70°-80°   | 881.7  | 14.5      |
| 80°-90°   | 141.4  | 2.3       |
| 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°    | 6084.3 | 100.0     |
| 0°-180°   | 6084.3 | 100.0     |

**Coefficient of Utilization**



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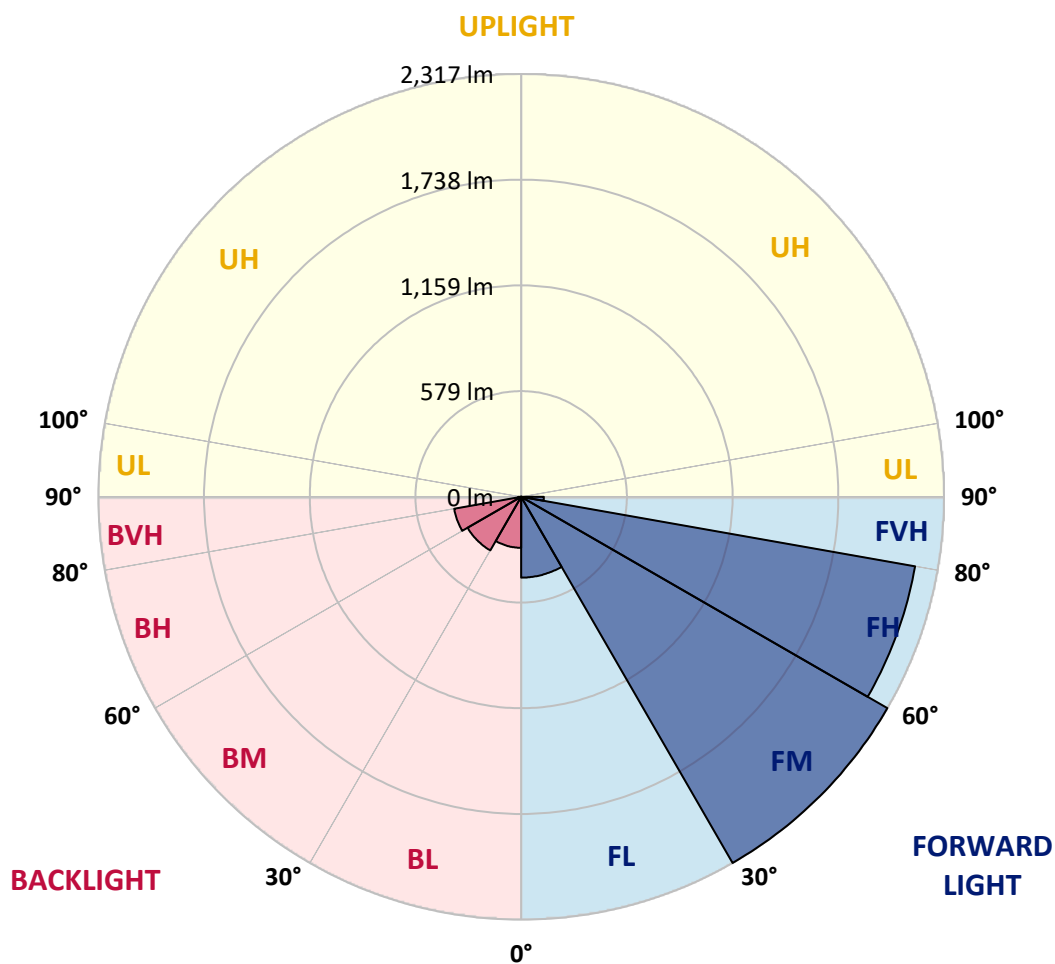
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 442.8  | 7.3       |                         |      |         |
| FM   | (30°-60°)   | 2317.0 | 38.1      |                         |      |         |
| FH   | (60°-80°)   | 2192.1 | 36.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 124.3  | 2.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 279.4  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 338.7  | 5.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 372.9  | 6.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 17.1   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 67°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 |
| 2.5°  | 1258.4 | 1260.5 | 1267.1 | 1271.3 | 1290.2 | 1298.3 | 1304.0 | 1309.7 | 1310.6 | 1313.3 | 1310.6 |
| 5°    | 1126.3 | 1130.8 | 1143.1 | 1157.0 | 1193.6 | 1222.4 | 1252.7 | 1284.2 | 1289.9 | 1310.3 | 1316.0 |
| 7.5°  | 1024.0 | 1022.8 | 1033.0 | 1049.5 | 1087.0 | 1126.9 | 1180.1 | 1242.8 | 1255.1 | 1301.0 | 1323.2 |
| 10°   | 949.3  | 948.4  | 959.2  | 976.3  | 1012.0 | 1049.8 | 1109.8 | 1195.7 | 1213.1 | 1286.3 | 1330.1 |
| 12.5° | 894.1  | 894.4  | 905.2  | 924.1  | 960.4  | 998.5  | 1059.4 | 1150.1 | 1172.3 | 1269.2 | 1337.3 |
| 15°   | 857.5  | 859.9  | 868.6  | 888.7  | 924.1  | 962.2  | 1021.9 | 1115.8 | 1140.7 | 1255.7 | 1345.4 |
| 17.5° | 845.2  | 849.1  | 852.1  | 866.8  | 897.1  | 935.2  | 993.7  | 1090.6 | 1117.0 | 1246.4 | 1352.6 |
| 20°   | 856.6  | 861.1  | 855.4  | 860.5  | 879.7  | 913.3  | 971.5  | 1070.8 | 1097.8 | 1235.9 | 1353.5 |
| 22.5° | 905.5  | 909.7  | 892.9  | 878.2  | 877.0  | 897.4  | 953.2  | 1055.2 | 1083.1 | 1228.1 | 1353.8 |
| 25°   | 991.6  | 994.3  | 966.1  | 931.9  | 898.6  | 891.7  | 940.3  | 1044.4 | 1074.1 | 1221.2 | 1348.1 |
| 27.5° | 1097.2 | 1099.3 | 1066.9 | 1016.5 | 949.6  | 905.2  | 935.8  | 1038.1 | 1069.0 | 1215.2 | 1338.5 |
| 30°   | 1225.7 | 1235.6 | 1192.1 | 1128.4 | 1030.9 | 945.1  | 944.8  | 1034.8 | 1063.3 | 1205.0 | 1319.6 |
| 32.5° | 1357.1 | 1361.3 | 1331.3 | 1266.8 | 1140.4 | 1015.3 | 970.0  | 1037.2 | 1061.8 | 1192.7 | 1295.6 |
| 35°   | 1490.3 | 1495.7 | 1476.2 | 1424.3 | 1290.2 | 1118.2 | 1019.2 | 1051.3 | 1071.1 | 1188.5 | 1278.8 |
| 37.5° | 1662.8 | 1670.0 | 1643.0 | 1583.0 | 1472.3 | 1257.8 | 1101.1 | 1086.7 | 1099.6 | 1200.5 | 1273.7 |
| 40°   | 1935.6 | 1932.3 | 1853.3 | 1763.9 | 1671.5 | 1436.3 | 1218.2 | 1146.8 | 1154.3 | 1239.2 | 1289.3 |
| 42.5° | 2253.0 | 2244.9 | 2109.0 | 1968.6 | 1890.5 | 1652.3 | 1373.0 | 1250.9 | 1249.4 | 1315.4 | 1344.2 |
| 45°   | 2506.2 | 2499.6 | 2377.2 | 2204.1 | 2141.7 | 1898.3 | 1573.1 | 1406.0 | 1394.9 | 1436.3 | 1445.6 |
| 47.5° | 2643.3 | 2643.6 | 2573.1 | 2431.8 | 2430.3 | 2211.0 | 1830.2 | 1630.4 | 1611.2 | 1630.7 | 1620.8 |
| 50°   | 2595.3 | 2601.6 | 2594.1 | 2549.1 | 2693.8 | 2620.8 | 2166.0 | 1943.4 | 1904.6 | 1923.9 | 1885.7 |
| 52.5° | 2363.1 | 2371.2 | 2415.6 | 2484.6 | 2804.5 | 3116.2 | 2659.2 | 2332.2 | 2287.2 | 2280.3 | 2238.0 |
| 55°   | 1951.5 | 1961.4 | 2052.0 | 2239.5 | 2712.4 | 3449.0 | 3437.6 | 2827.9 | 2756.2 | 2691.1 | 2673.1 |
| 57.5° | 1345.1 | 1361.6 | 1507.4 | 1785.8 | 2414.4 | 3549.5 | 4364.4 | 3534.5 | 3388.6 | 3161.2 | 3165.4 |
| 60°   | 758.2  | 777.4  | 949.3  | 1202.3 | 1813.1 | 3440.3 | 5069.5 | 4604.7 | 4296.9 | 3711.8 | 3743.0 |
| 62.5° | 482.2  | 502.9  | 633.4  | 835.3  | 1087.9 | 2852.2 | 5358.4 | 6092.6 | 5701.6 | 4390.5 | 4421.1 |
| 65°   | 390.4  | 399.4  | 460.9  | 689.5  | 790.0  | 1718.3 | 5139.1 | 7318.3 | 7172.4 | 5251.9 | 5109.1 |
| 67.5° | 381.0  | 384.1  | 415.9  | 578.8  | 757.6  | 965.8  | 4099.1 | 7547.5 | 7709.2 | 6056.3 | 5395.6 |
| 70°   | 376.5  | 387.1  | 468.7  | 552.4  | 725.5  | 814.6  | 2463.3 | 6919.2 | 7174.5 | 6266.6 | 5014.3 |
| 72.5° | 182.7  | 182.1  | 235.8  | 499.6  | 817.3  | 844.9  | 1265.6 | 5598.4 | 5854.7 | 5429.2 | 4120.4 |
| 75°   | 147.3  | 134.7  | 128.7  | 183.0  | 785.8  | 872.5  | 806.5  | 3852.2 | 4037.6 | 3640.1 | 2532.9 |
| 77.5° | 139.8  | 124.8  | 114.3  | 114.6  | 332.1  | 925.3  | 683.2  | 2132.1 | 2186.1 | 1644.2 | 694.0  |
| 80°   | 115.8  | 102.0  | 94.5   | 106.5  | 160.8  | 881.2  | 738.7  | 964.9  | 885.4  | 403.9  | 231.0  |
| 82.5° | 80.4   | 73.2   | 71.1   | 89.4   | 128.7  | 628.0  | 859.0  | 518.5  | 434.8  | 202.2  | 142.5  |
| 85°   | 51.3   | 43.8   | 48.6   | 65.1   | 100.2  | 289.8  | 884.8  | 404.2  | 321.3  | 128.4  | 80.4   |
| 87.5° | 23.7   | 19.2   | 24.0   | 36.0   | 65.4   | 99.9   | 841.9  | 454.0  | 330.9  | 67.8   | 50.7   |
| 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°    | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 | 1312.4 |
| 2.5°  | 1313.0 | 1307.3 | 1302.8 | 1294.4 | 1285.1 | 1276.1 | 1268.0 | 1257.8 | 1254.8 | 1252.1 | 1256.3 |
| 5°    | 1317.2 | 1311.5 | 1295.0 | 1269.2 | 1240.7 | 1214.0 | 1187.3 | 1164.5 | 1150.4 | 1142.5 | 1147.1 |
| 7.5°  | 1323.5 | 1315.4 | 1281.2 | 1233.8 | 1182.5 | 1135.6 | 1087.3 | 1048.6 | 1020.1 | 1006.6 | 1010.5 |
| 10°   | 1329.2 | 1313.6 | 1257.8 | 1186.7 | 1111.6 | 1042.0 | 965.8  | 902.8  | 856.0  | 831.4  | 837.4  |
| 12.5° | 1331.6 | 1306.7 | 1225.1 | 1127.8 | 1024.9 | 922.9  | 810.7  | 716.5  | 649.3  | 624.7  | 619.6  |
| 15°   | 1334.0 | 1298.9 | 1189.1 | 1060.9 | 920.2  | 775.9  | 618.7  | 505.9  | 450.1  | 437.8  | 435.1  |
| 17.5° | 1334.6 | 1285.4 | 1148.3 | 988.3  | 797.5  | 601.0  | 423.1  | 351.3  | 351.6  | 371.4  | 373.8  |
| 20°   | 1328.3 | 1265.3 | 1098.7 | 898.0  | 650.5  | 415.6  | 290.4  | 278.1  | 323.4  | 372.9  | 378.9  |
| 22.5° | 1313.9 | 1238.6 | 1042.6 | 792.7  | 482.2  | 273.6  | 224.7  | 238.2  | 296.7  | 357.3  | 364.2  |
| 25°   | 1295.6 | 1206.2 | 976.3  | 670.6  | 319.2  | 195.6  | 188.4  | 204.9  | 244.5  | 285.0  | 288.9  |
| 27.5° | 1270.7 | 1167.8 | 901.9  | 530.8  | 207.3  | 161.1  | 165.9  | 177.0  | 193.2  | 211.2  | 213.0  |
| 30°   | 1238.6 | 1121.8 | 822.4  | 387.1  | 156.6  | 144.9  | 151.8  | 157.8  | 164.7  | 174.9  | 175.8  |
| 32.5° | 1201.7 | 1077.7 | 740.8  | 267.3  | 138.9  | 136.5  | 141.9  | 144.9  | 150.3  | 156.6  | 157.2  |
| 35°   | 1170.8 | 1035.7 | 656.2  | 189.0  | 131.4  | 130.2  | 133.8  | 135.0  | 140.1  | 147.0  | 147.6  |
| 37.5° | 1153.1 | 1001.5 | 568.9  | 152.4  | 126.3  | 124.5  | 126.6  | 126.6  | 133.8  | 144.0  | 145.5  |
| 40°   | 1154.3 | 982.6  | 481.6  | 137.7  | 122.1  | 119.7  | 120.0  | 120.0  | 129.3  | 140.4  | 141.3  |
| 42.5° | 1187.0 | 987.4  | 404.2  | 132.0  | 118.8  | 116.1  | 114.6  | 115.5  | 123.3  | 130.5  | 131.1  |
| 45°   | 1263.8 | 1021.3 | 331.5  | 128.4  | 115.5  | 114.6  | 111.3  | 111.0  | 114.0  | 117.3  | 117.3  |
| 47.5° | 1389.8 | 1088.2 | 282.3  | 126.0  | 112.8  | 112.5  | 108.6  | 104.7  | 104.4  | 105.6  | 105.6  |
| 50°   | 1594.7 | 1203.5 | 249.3  | 123.3  | 111.0  | 108.6  | 104.1  | 98.1   | 96.0   | 96.9   | 96.9   |
| 52.5° | 1901.9 | 1409.0 | 236.7  | 119.7  | 107.1  | 103.2  | 98.1   | 92.1   | 90.3   | 90.6   | 90.6   |
| 55°   | 2304.9 | 1724.6 | 234.9  | 115.5  | 102.9  | 96.6   | 92.4   | 87.9   | 85.8   | 86.4   | 86.4   |
| 57.5° | 2797.3 | 2161.2 | 267.0  | 108.9  | 97.2   | 90.0   | 87.6   | 84.6   | 83.1   | 84.0   | 83.7   |
| 60°   | 3395.8 | 2732.5 | 396.1  | 102.0  | 91.5   | 84.0   | 84.0   | 81.6   | 80.4   | 81.3   | 81.0   |
| 62.5° | 4085.3 | 3388.6 | 556.9  | 96.9   | 85.5   | 79.2   | 80.4   | 79.2   | 78.0   | 78.6   | 78.3   |
| 65°   | 4696.8 | 3816.2 | 521.5  | 93.0   | 79.5   | 74.7   | 76.8   | 76.2   | 75.3   | 75.9   | 75.6   |
| 67.5° | 4714.5 | 3657.8 | 292.8  | 88.8   | 73.8   | 70.2   | 73.2   | 72.9   | 72.3   | 72.9   | 72.6   |
| 70°   | 4207.5 | 3088.6 | 165.0  | 81.0   | 67.8   | 64.8   | 69.0   | 68.7   | 68.1   | 69.3   | 69.0   |
| 72.5° | 3370.9 | 2241.3 | 120.6  | 71.4   | 61.8   | 59.1   | 63.9   | 63.6   | 63.6   | 65.4   | 64.5   |
| 75°   | 1939.8 | 1153.4 | 96.3   | 61.2   | 55.5   | 53.4   | 57.6   | 57.9   | 58.5   | 60.9   | 59.1   |
| 77.5° | 553.0  | 359.4  | 78.6   | 51.9   | 47.7   | 46.8   | 51.0   | 51.6   | 51.9   | 54.6   | 52.2   |
| 80°   | 205.5  | 165.6  | 64.8   | 43.5   | 39.0   | 39.3   | 43.2   | 44.1   | 44.4   | 47.1   | 44.1   |
| 82.5° | 131.1  | 109.2  | 52.5   | 33.6   | 30.6   | 30.3   | 35.1   | 36.3   | 36.3   | 36.6   | 34.8   |
| 85°   | 76.5   | 65.4   | 39.6   | 24.3   | 21.6   | 20.7   | 26.1   | 28.2   | 27.3   | 26.7   | 25.5   |
| 87.5° | 51.3   | 45.0   | 24.3   | 13.5   | 11.7   | 11.1   | 15.3   | 16.8   | 16.2   | 15.3   | 14.4   |
| 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)