

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: P459642

Luminaire Tested: **GAN-SA7A-AMB-U-SL2-HSS**

Issue Date: 1/6/2021

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08  
Report Number: P459642  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7A-AMB-U-SL2-HSS  
Description: GALLEON ROADWAY AND AREA LUMINAIRE  
(7) NARROW BAND AMBER, 500mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5571 lumens  
Efficiency: N/A  
Efficacy: 40.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

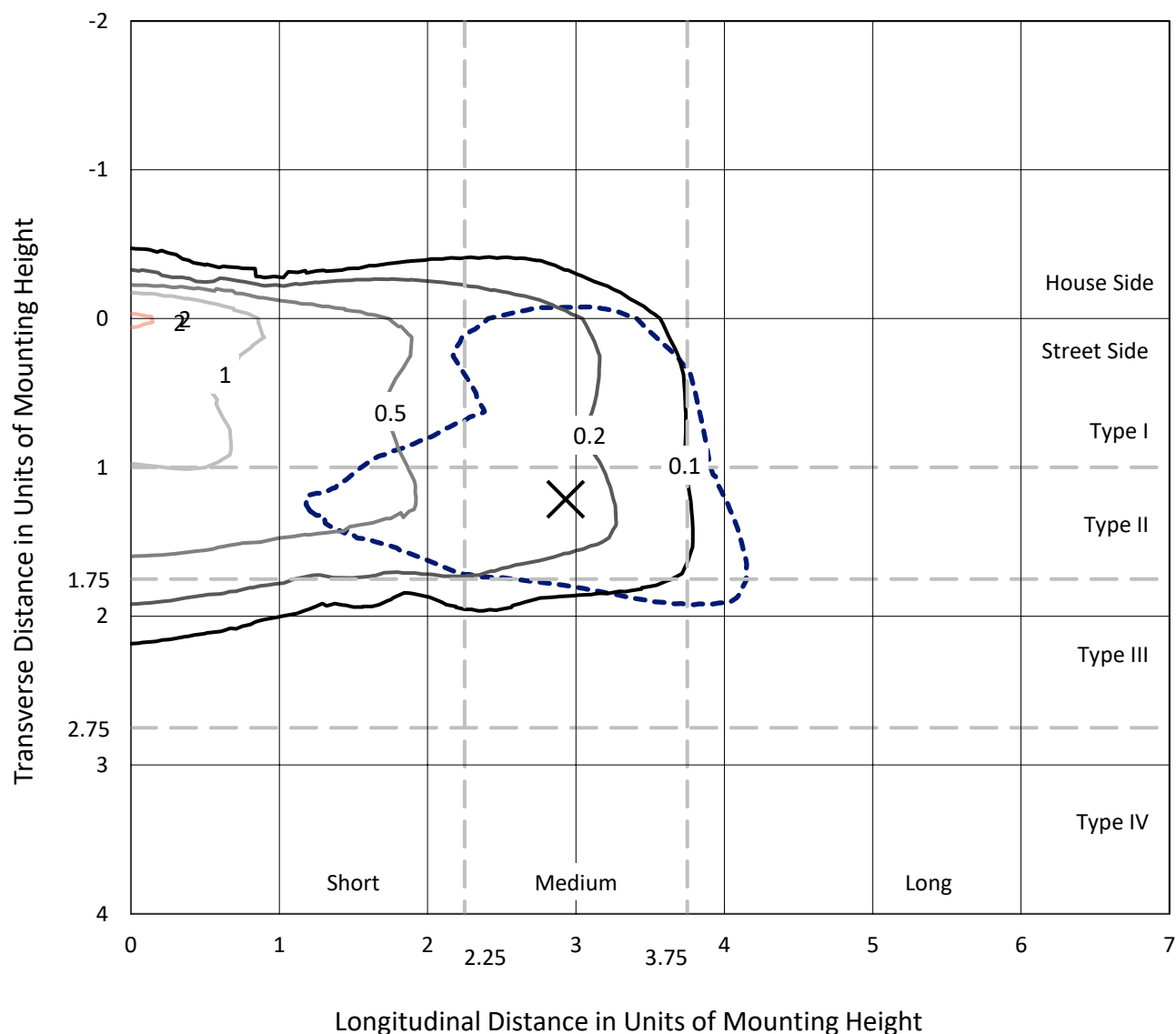
Input Watts (W): 138.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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## Iso-Footcandle Lines of Horizontal Illumination

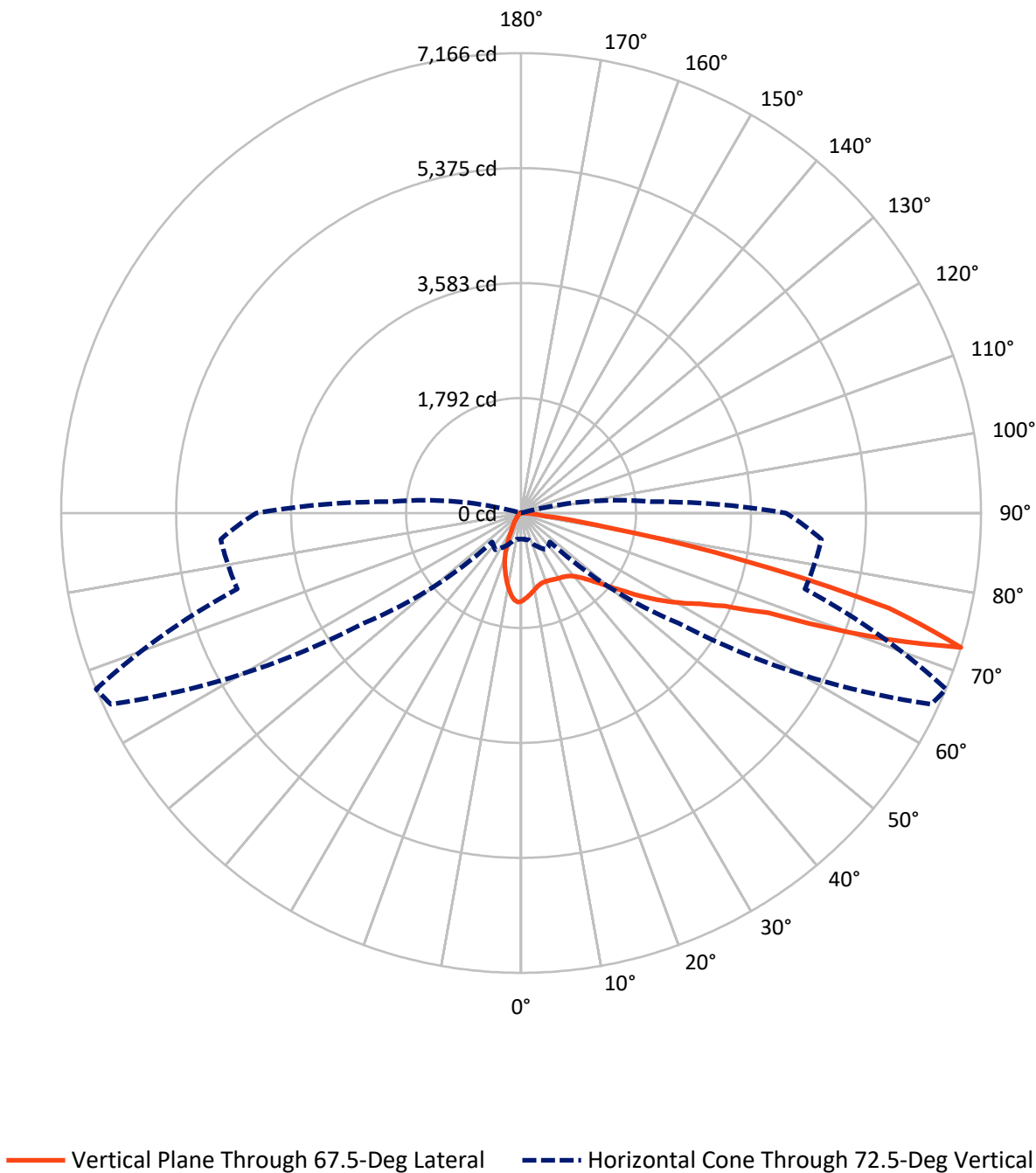
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type III - Medium - Non-Cutoff

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## Luminous Intensity Polar Plot



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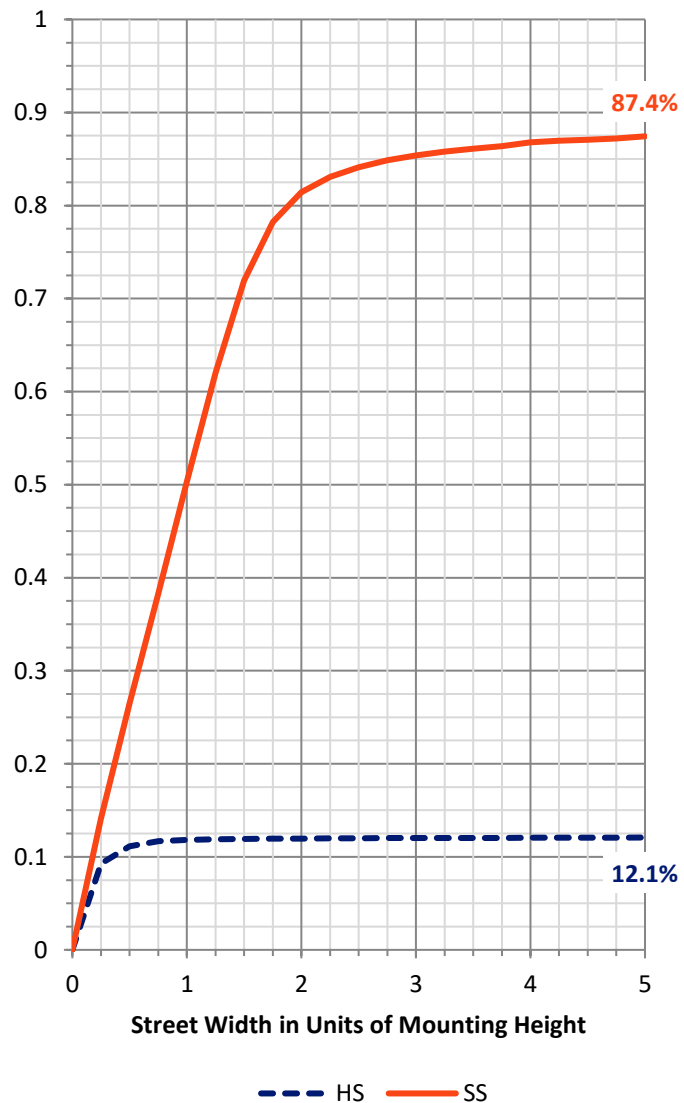
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 679.5    | 0.0    | 679.5  |
|                    | % Fixture | 12.2     | 0.0    | 12.2   |
| <b>Street Side</b> | Lumens    | 4891.5   | 0.0    | 4891.5 |
|                    | % Fixture | 87.8     | 0.0    | 87.8   |
| <b>Total</b>       | Lumens    | 5571.0   | 0.0    | 5571.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 113.6  | 2.0       |
| 10°-20°   | 239.5  | 4.3       |
| 20°-30°   | 338.3  | 6.1       |
| 30°-40°   | 484.6  | 8.7       |
| 40°-50°   | 731.2  | 13.1      |
| 50°-60°   | 1172.2 | 21.0      |
| 60°-70°   | 1385.7 | 24.9      |
| 70°-80°   | 1012.3 | 18.2      |
| 80°-90°   | 93.6   | 1.7       |
| 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°    | 5571.0 | 100.0     |
| 0°-180°   | 5571.0 | 100.0     |

**Coefficient of Utilization**



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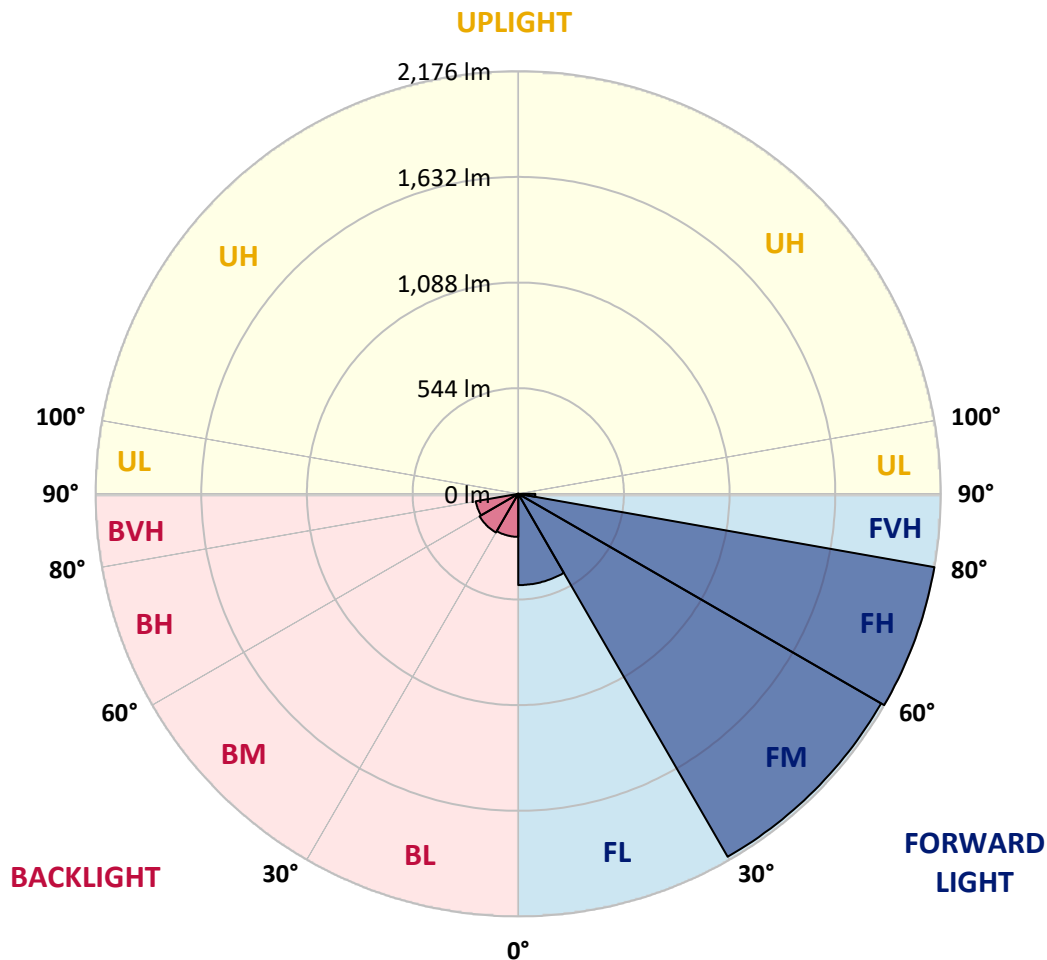
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 469.9  | 8.4       |                         |      |         |
| FM   | (30°-60°)   | 2157.9 | 38.7      |                         |      |         |
| FH   | (60°-80°)   | 2175.9 | 39.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 87.7   | 1.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 221.6  | 4.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 230.1  | 4.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 222.0  | 4.0       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 5.8    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 67.5°  | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 |
| 2.5°  | 1290.9 | 1297.0 | 1297.0 | 1306.2 | 1309.3 | 1312.4 | 1330.8 | 1336.9 | 1333.8 | 1352.2 | 1364.5 |
| 5°    | 1205.1 | 1205.1 | 1211.2 | 1226.5 | 1238.8 | 1248.0 | 1269.5 | 1287.8 | 1290.9 | 1312.4 | 1346.1 |
| 7.5°  | 1134.5 | 1140.7 | 1140.7 | 1149.9 | 1168.3 | 1183.6 | 1211.2 | 1241.9 | 1248.0 | 1275.6 | 1315.4 |
| 10°   | 1079.3 | 1076.3 | 1085.5 | 1094.7 | 1110.0 | 1125.3 | 1156.0 | 1189.7 | 1202.0 | 1232.7 | 1278.6 |
| 12.5° | 1027.2 | 1030.3 | 1033.3 | 1048.7 | 1067.1 | 1082.4 | 1113.1 | 1152.9 | 1165.2 | 1205.1 | 1260.3 |
| 15°   | 996.5  | 996.5  | 999.6  | 1008.8 | 1027.2 | 1048.7 | 1085.5 | 1128.4 | 1143.7 | 1189.7 | 1254.1 |
| 17.5° | 987.4  | 987.4  | 984.3  | 987.4  | 1002.7 | 1024.1 | 1067.1 | 1119.2 | 1134.5 | 1183.6 | 1263.3 |
| 20°   | 990.4  | 990.4  | 984.3  | 981.2  | 990.4  | 1011.9 | 1060.9 | 1116.1 | 1134.5 | 1192.8 | 1287.8 |
| 22.5° | 1008.8 | 1005.7 | 999.6  | 990.4  | 990.4  | 1011.9 | 1064.0 | 1122.3 | 1140.7 | 1205.1 | 1309.3 |
| 25°   | 1054.8 | 1042.5 | 1036.4 | 1018.0 | 1005.7 | 1014.9 | 1067.1 | 1131.5 | 1149.9 | 1214.3 | 1340.0 |
| 27.5° | 1097.7 | 1094.7 | 1094.7 | 1076.3 | 1036.4 | 1027.2 | 1079.3 | 1146.8 | 1162.1 | 1226.5 | 1379.8 |
| 30°   | 1171.3 | 1165.2 | 1165.2 | 1143.7 | 1094.7 | 1051.7 | 1091.6 | 1159.1 | 1177.5 | 1235.7 | 1419.7 |
| 32.5° | 1263.3 | 1266.4 | 1260.3 | 1232.7 | 1171.3 | 1097.7 | 1113.1 | 1174.4 | 1189.7 | 1241.9 | 1459.6 |
| 35°   | 1364.5 | 1367.6 | 1382.9 | 1352.2 | 1272.5 | 1168.3 | 1146.8 | 1202.0 | 1211.2 | 1254.1 | 1490.2 |
| 37.5° | 1447.3 | 1447.3 | 1487.2 | 1493.3 | 1395.2 | 1254.1 | 1202.0 | 1248.0 | 1244.9 | 1269.5 | 1520.9 |
| 40°   | 1539.3 | 1539.3 | 1585.3 | 1622.1 | 1551.6 | 1370.6 | 1272.5 | 1303.2 | 1297.0 | 1303.2 | 1563.8 |
| 42.5° | 1637.4 | 1643.5 | 1692.6 | 1757.0 | 1720.2 | 1520.9 | 1373.7 | 1389.0 | 1376.8 | 1358.4 | 1609.8 |
| 45°   | 1732.5 | 1747.8 | 1815.3 | 1901.1 | 1898.0 | 1698.7 | 1505.6 | 1508.6 | 1487.2 | 1450.4 | 1704.9 |
| 47.5° | 1842.8 | 1855.1 | 1950.2 | 2057.5 | 2085.1 | 1901.1 | 1674.2 | 1661.9 | 1634.3 | 1576.1 | 1833.7 |
| 50°   | 2029.9 | 2036.0 | 2103.5 | 2229.2 | 2281.3 | 2124.9 | 1864.3 | 1842.8 | 1812.2 | 1738.6 | 2008.4 |
| 52.5° | 2253.7 | 2250.7 | 2281.3 | 2413.2 | 2554.2 | 2385.6 | 2112.7 | 2082.0 | 2033.0 | 1937.9 | 2223.1 |
| 55°   | 2351.9 | 2361.1 | 2407.0 | 2566.5 | 2839.4 | 2765.8 | 2391.7 | 2348.8 | 2296.7 | 2174.0 | 2443.8 |
| 57.5° | 2180.1 | 2180.1 | 2272.1 | 2523.6 | 2998.8 | 3268.7 | 2704.5 | 2637.0 | 2572.6 | 2416.2 | 2695.3 |
| 60°   | 1744.7 | 1741.7 | 1852.0 | 2155.6 | 2879.3 | 3707.2 | 3139.9 | 2937.5 | 2839.4 | 2630.9 | 2946.7 |
| 62.5° | 1223.5 | 1198.9 | 1248.0 | 1502.5 | 2358.0 | 3713.3 | 3952.5 | 3250.3 | 3118.4 | 2851.7 | 3213.5 |
| 65°   | 877.0  | 861.6  | 870.8  | 941.4  | 1352.2 | 3357.6 | 4850.9 | 3725.6 | 3489.5 | 3084.7 | 3535.4 |
| 67.5° | 717.5  | 699.1  | 696.1  | 781.9  | 778.8  | 2223.1 | 5120.7 | 4663.8 | 4148.7 | 3425.1 | 3900.3 |
| 70°   | 573.4  | 564.2  | 561.1  | 683.8  | 720.6  | 723.6  | 4774.2 | 6669.2 | 5755.5 | 3931.0 | 4387.9 |
| 72.5° | 407.8  | 407.8  | 432.3  | 567.3  | 699.1  | 634.7  | 2986.6 | 7052.5 | 7166.0 | 4578.0 | 4697.6 |
| 75°   | 245.3  | 242.2  | 303.6  | 450.7  | 674.6  | 613.3  | 923.0  | 5819.8 | 5924.1 | 4286.7 | 3633.6 |
| 77.5° | 116.5  | 116.5  | 168.6  | 303.6  | 597.9  | 576.5  | 527.4  | 3480.3 | 3504.8 | 2603.3 | 1842.8 |
| 80°   | 46.0   | 46.0   | 73.6   | 187.0  | 453.8  | 570.3  | 490.6  | 1435.0 | 1382.9 | 717.5  | 254.5  |
| 82.5° | 18.4   | 18.4   | 30.7   | 104.3  | 282.1  | 469.1  | 435.4  | 475.3  | 355.7  | 82.8   | 67.5   |
| 85°   | 3.1    | 6.1    | 12.3   | 61.3   | 159.4  | 248.4  | 352.6  | 294.4  | 187.0  | 49.1   | 49.1   |
| 87.5° | 0.0    | 3.1    | 6.1    | 18.4   | 46.0   | 104.3  | 177.8  | 134.9  | 85.9   | 15.3   | 21.5   |
| 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°    | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 | 1376.8 |
| 2.5°  | 1367.6 | 1373.7 | 1386.0 | 1392.1 | 1395.2 | 1382.9 | 1382.9 | 1370.6 | 1367.6 | 1367.6 | 1367.6 |
| 5°    | 1352.2 | 1364.5 | 1373.7 | 1352.2 | 1318.5 | 1275.6 | 1226.5 | 1195.9 | 1165.2 | 1171.3 | 1159.1 |
| 7.5°  | 1333.8 | 1349.2 | 1336.9 | 1266.4 | 1180.5 | 1100.8 | 1014.9 | 965.9  | 907.6  | 901.5  | 886.2  |
| 10°   | 1306.2 | 1321.6 | 1275.6 | 1152.9 | 1021.1 | 904.6  | 778.8  | 702.2  | 640.9  | 591.8  | 579.5  |
| 12.5° | 1300.1 | 1309.3 | 1202.0 | 1033.3 | 861.6  | 696.1  | 533.5  | 389.4  | 303.6  | 260.6  | 260.6  |
| 15°   | 1303.2 | 1303.2 | 1134.5 | 913.8  | 689.9  | 459.9  | 257.6  | 187.0  | 156.4  | 153.3  | 150.2  |
| 17.5° | 1318.5 | 1300.1 | 1067.1 | 797.2  | 505.9  | 239.2  | 153.3  | 141.1  | 134.9  | 134.9  | 134.9  |
| 20°   | 1346.1 | 1300.1 | 1008.8 | 674.6  | 318.9  | 150.2  | 131.9  | 125.7  | 122.7  | 119.6  | 119.6  |
| 22.5° | 1373.7 | 1287.8 | 935.2  | 533.5  | 184.0  | 125.7  | 116.5  | 113.5  | 107.3  | 104.3  | 104.3  |
| 25°   | 1404.4 | 1275.6 | 864.7  | 383.3  | 128.8  | 110.4  | 101.2  | 95.1   | 88.9   | 85.9   | 85.9   |
| 27.5° | 1432.0 | 1263.3 | 781.9  | 242.2  | 113.5  | 98.1   | 88.9   | 79.7   | 70.5   | 67.5   | 67.5   |
| 30°   | 1450.4 | 1241.9 | 702.2  | 153.3  | 101.2  | 88.9   | 76.7   | 64.4   | 55.2   | 52.1   | 52.1   |
| 32.5° | 1453.4 | 1214.3 | 604.1  | 113.5  | 92.0   | 76.7   | 61.3   | 52.1   | 46.0   | 42.9   | 42.9   |
| 35°   | 1444.2 | 1180.5 | 496.7  | 101.2  | 82.8   | 67.5   | 52.1   | 42.9   | 36.8   | 36.8   | 36.8   |
| 37.5° | 1432.0 | 1146.8 | 386.4  | 92.0   | 73.6   | 58.3   | 42.9   | 36.8   | 33.7   | 30.7   | 30.7   |
| 40°   | 1428.9 | 1113.1 | 257.6  | 85.9   | 67.5   | 49.1   | 36.8   | 30.7   | 27.6   | 24.5   | 24.5   |
| 42.5° | 1438.1 | 1088.5 | 180.9  | 79.7   | 58.3   | 42.9   | 33.7   | 27.6   | 21.5   | 21.5   | 18.4   |
| 45°   | 1484.1 | 1082.4 | 131.9  | 73.6   | 52.1   | 36.8   | 27.6   | 21.5   | 18.4   | 15.3   | 15.3   |
| 47.5° | 1560.7 | 1094.7 | 107.3  | 67.5   | 46.0   | 30.7   | 24.5   | 18.4   | 15.3   | 12.3   | 12.3   |
| 50°   | 1671.1 | 1140.7 | 98.1   | 61.3   | 36.8   | 27.6   | 18.4   | 15.3   | 12.3   | 12.3   | 12.3   |
| 52.5° | 1842.8 | 1214.3 | 92.0   | 55.2   | 30.7   | 21.5   | 15.3   | 12.3   | 9.2    | 9.2    | 9.2    |
| 55°   | 2026.8 | 1300.1 | 88.9   | 49.1   | 27.6   | 18.4   | 12.3   | 9.2    | 9.2    | 6.1    | 6.1    |
| 57.5° | 2238.4 | 1413.6 | 82.8   | 42.9   | 24.5   | 18.4   | 12.3   | 9.2    | 6.1    | 6.1    | 6.1    |
| 60°   | 2505.2 | 1566.9 | 73.6   | 36.8   | 21.5   | 15.3   | 9.2    | 6.1    | 6.1    | 6.1    | 6.1    |
| 62.5° | 2781.1 | 1726.3 | 64.4   | 30.7   | 18.4   | 12.3   | 9.2    | 6.1    | 6.1    | 6.1    | 6.1    |
| 65°   | 3118.4 | 1910.3 | 55.2   | 24.5   | 15.3   | 12.3   | 9.2    | 6.1    | 6.1    | 3.1    | 3.1    |
| 67.5° | 3526.3 | 2097.4 | 42.9   | 21.5   | 15.3   | 9.2    | 9.2    | 6.1    | 6.1    | 3.1    | 3.1    |
| 70°   | 4047.5 | 2336.5 | 36.8   | 18.4   | 12.3   | 9.2    | 9.2    | 6.1    | 6.1    | 3.1    | 3.1    |
| 72.5° | 4127.2 | 2017.6 | 30.7   | 18.4   | 12.3   | 9.2    | 9.2    | 6.1    | 6.1    | 3.1    | 3.1    |
| 75°   | 2821.0 | 962.8  | 27.6   | 15.3   | 12.3   | 12.3   | 9.2    | 6.1    | 6.1    | 3.1    | 3.1    |
| 77.5° | 1229.6 | 226.9  | 24.5   | 15.3   | 12.3   | 12.3   | 12.3   | 9.2    | 6.1    | 3.1    | 3.1    |
| 80°   | 144.1  | 42.9   | 21.5   | 15.3   | 12.3   | 15.3   | 12.3   | 9.2    | 6.1    | 3.1    | 3.1    |
| 82.5° | 58.3   | 27.6   | 21.5   | 18.4   | 15.3   | 12.3   | 12.3   | 9.2    | 6.1    | 3.1    | 3.1    |
| 85°   | 42.9   | 21.5   | 21.5   | 21.5   | 15.3   | 9.2    | 9.2    | 6.1    | 6.1    | 3.1    | 3.1    |
| 87.5° | 21.5   | 9.2    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 3.1    | 3.1    | 3.1    | 3.1    |
| 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)