

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: P199910

Luminaire Tested: **GAP-AF-02-LED-U-5NQ-7030-800**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P199910  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAP-AF-02-LED-U-5NQ-7030-800  
Description: GALLEON PEDESTRIAN LUMINAIRE  
(2) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 10012.5 lumens  
Efficiency: N/A  
Efficacy: 116.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 86  
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

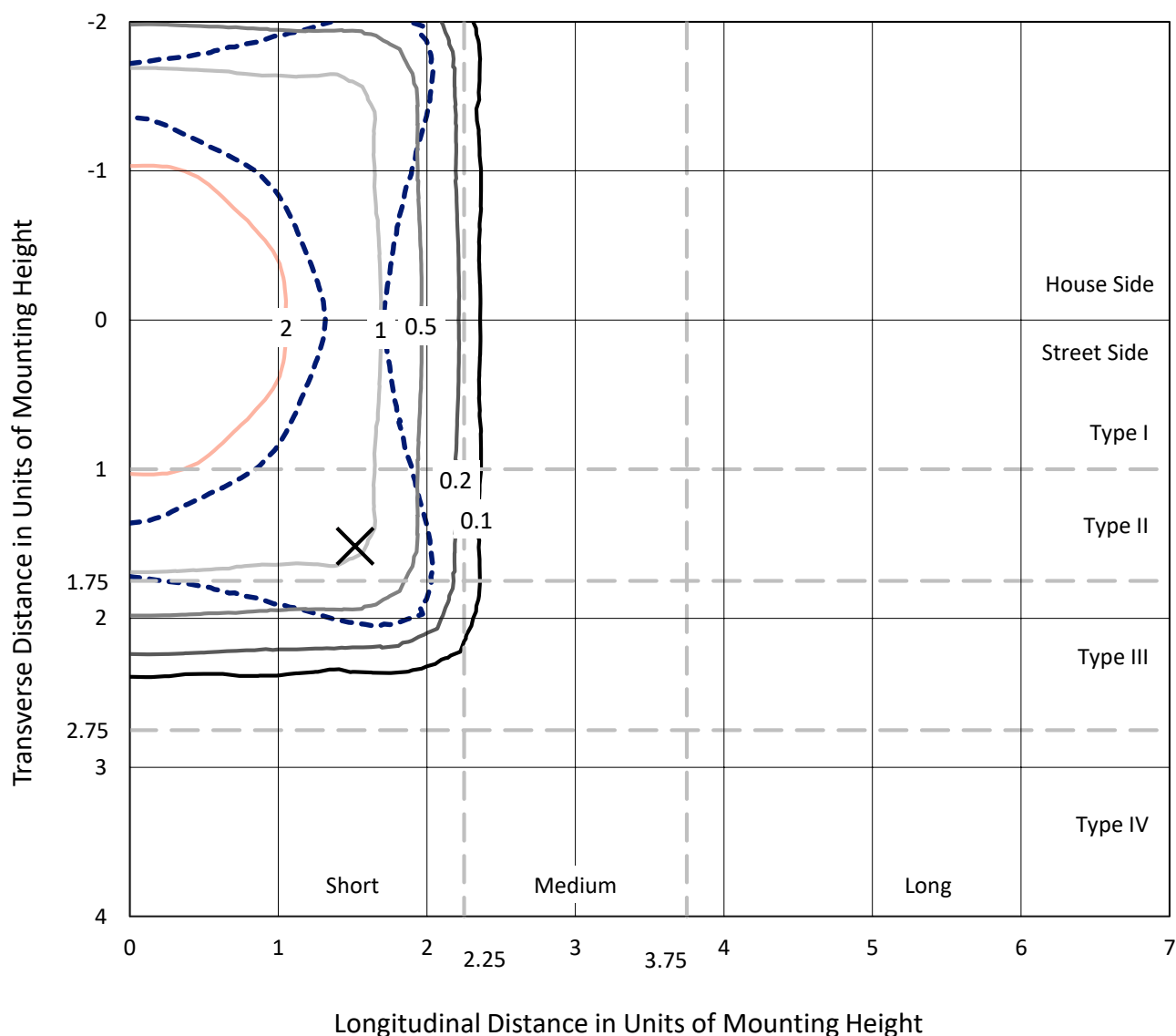


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

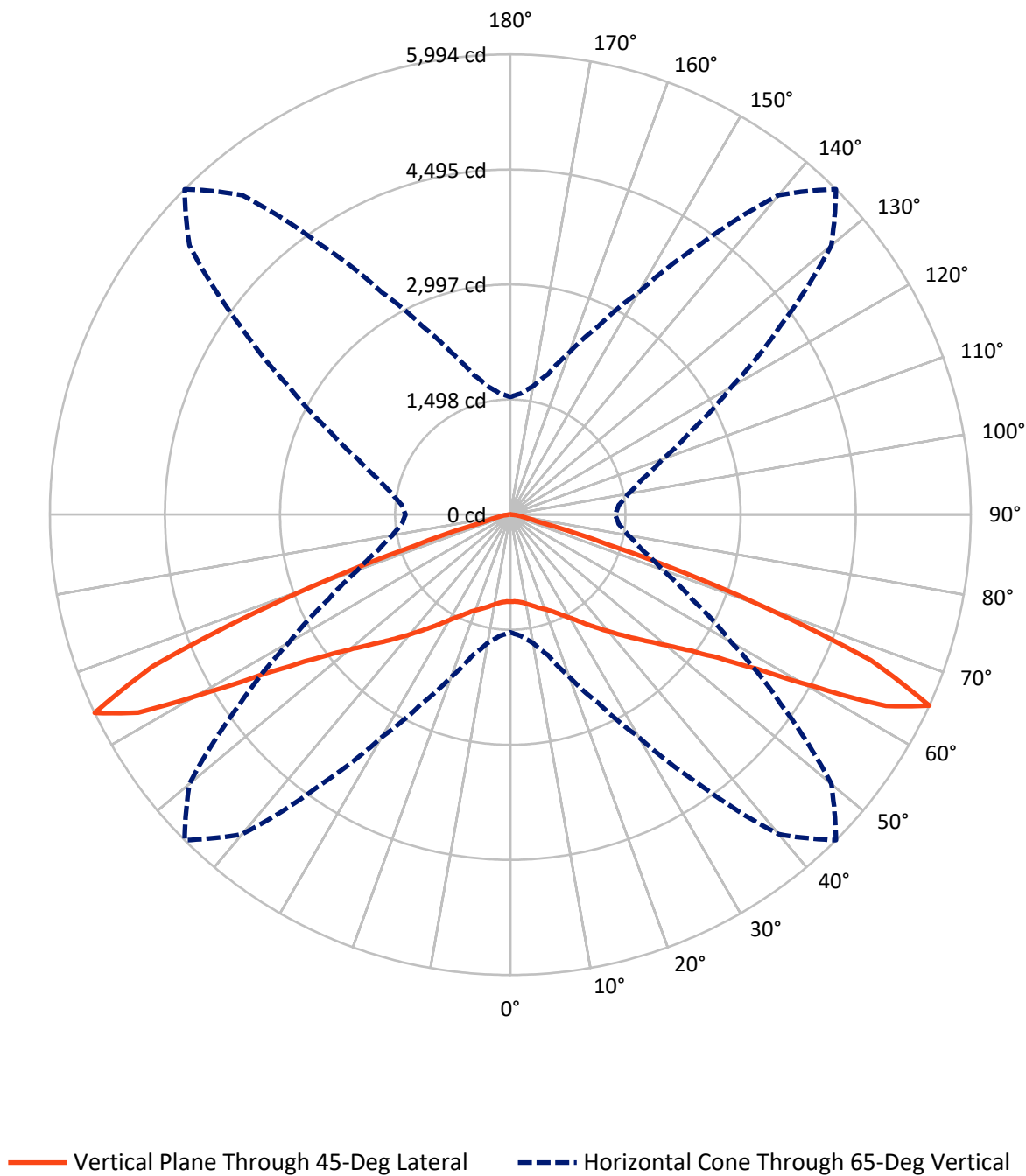


Based on 20 foot mounting height. Maximum calculated value = 2.8 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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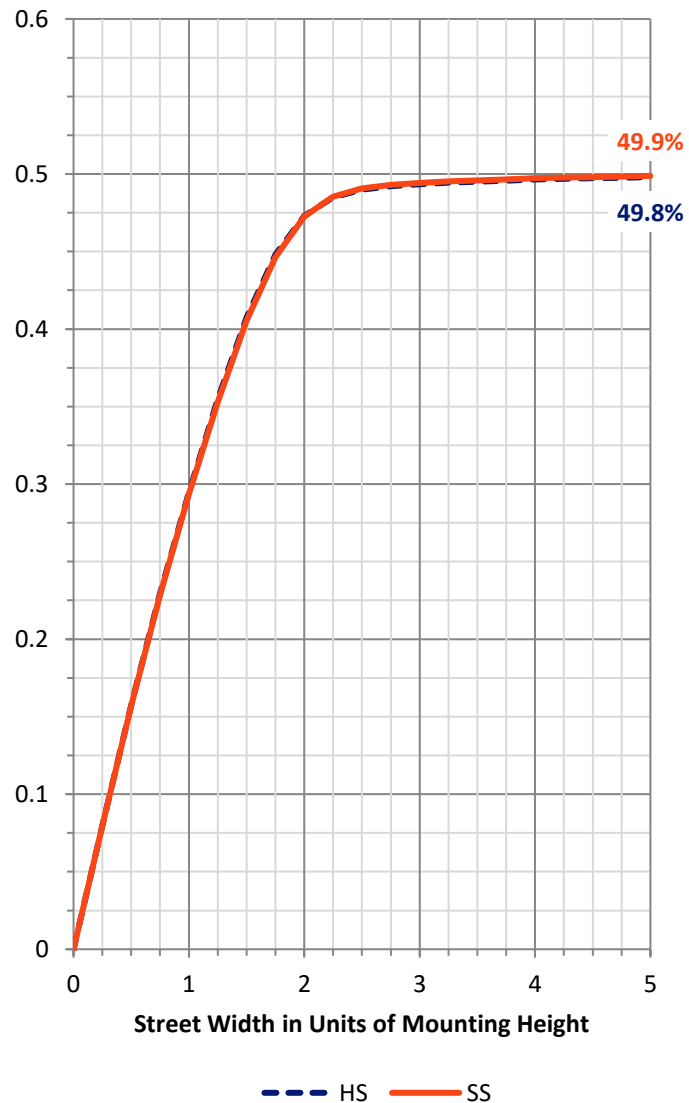
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5006.3   | 0.0    | 5006.3  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5006.3   | 0.0    | 5006.3  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 10012.5  | 0.0    | 10012.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 110.4   | 1.1       |
| 10°-20°   | 354.1   | 3.5       |
| 20°-30°   | 662.2   | 6.6       |
| 30°-40°   | 1119.9  | 11.2      |
| 40°-50°   | 1831.2  | 18.3      |
| 50°-60°   | 2911.9  | 29.1      |
| 60°-70°   | 2632.2  | 26.3      |
| 70°-80°   | 333.1   | 3.3       |
| 80°-90°   | 57.3    | 0.6       |
| 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°    | 10012.5 | 100.0     |
| 0°-180°   | 10012.5 | 100.0     |

**Coefficient of Utilization**



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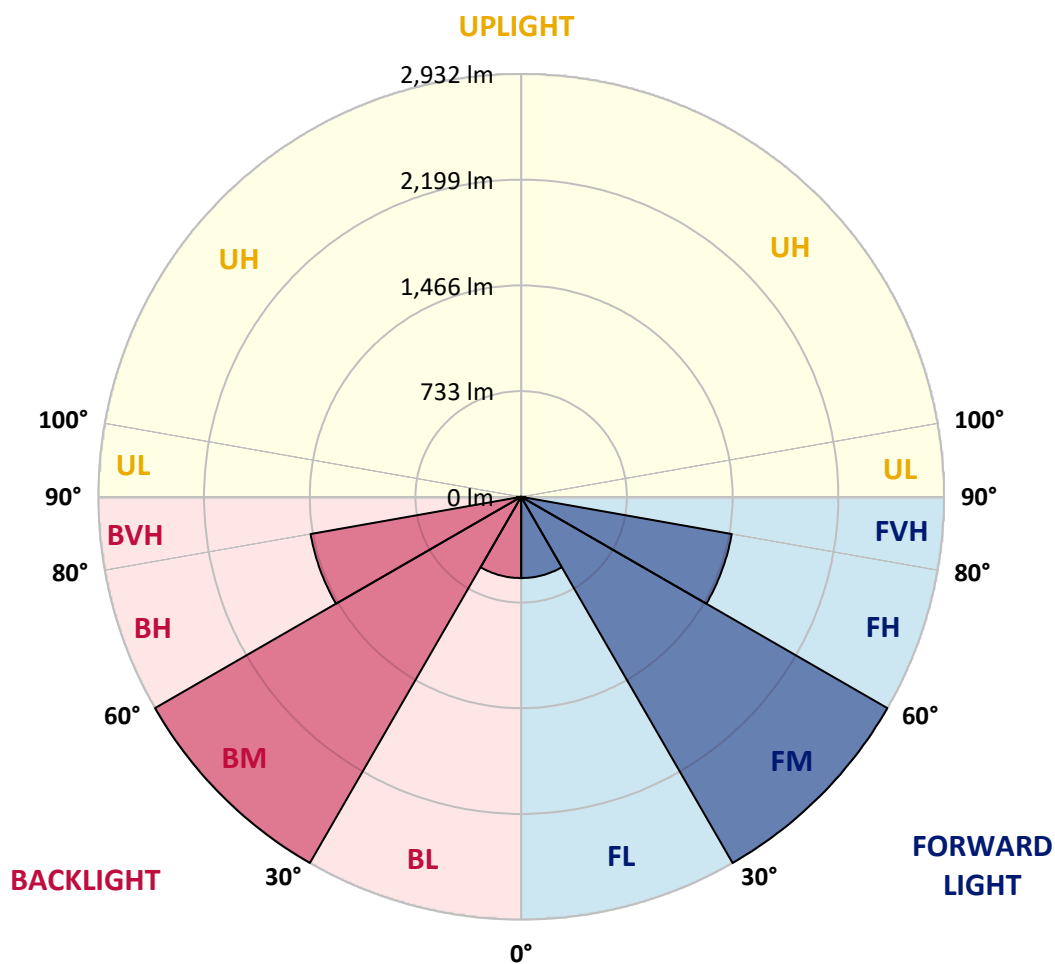
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 563.4  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 2931.6 | 29.3      |                         |      |         |
| FH   | (60°-80°)   | 1482.7 | 14.8      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 28.7   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 563.4  | 5.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2931.6 | 29.3      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1482.7 | 14.8      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 28.7   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 |
| 2.5°  | 1133.9 | 1134.7 | 1135.8 | 1134.7 | 1135.8 | 1134.3 | 1133.3 | 1134.7 | 1133.3 | 1132.0 | 1132.9 |
| 5°    | 1143.7 | 1144.2 | 1144.2 | 1142.8 | 1144.2 | 1143.3 | 1141.9 | 1143.7 | 1142.3 | 1140.8 | 1141.9 |
| 7.5°  | 1160.2 | 1162.0 | 1160.6 | 1159.1 | 1160.2 | 1159.1 | 1158.2 | 1158.7 | 1158.2 | 1156.8 | 1157.3 |
| 10°   | 1182.1 | 1183.6 | 1182.6 | 1182.1 | 1183.1 | 1182.6 | 1181.6 | 1181.2 | 1181.6 | 1180.3 | 1180.3 |
| 12.5° | 1208.9 | 1208.4 | 1208.0 | 1208.4 | 1209.8 | 1209.8 | 1209.4 | 1209.8 | 1210.8 | 1211.2 | 1210.3 |
| 15°   | 1235.1 | 1236.0 | 1236.0 | 1236.0 | 1238.9 | 1241.3 | 1242.6 | 1243.6 | 1245.4 | 1245.9 | 1244.0 |
| 17.5° | 1268.0 | 1268.0 | 1267.5 | 1268.0 | 1270.8 | 1274.5 | 1275.9 | 1277.8 | 1279.7 | 1281.1 | 1278.8 |
| 20°   | 1304.5 | 1305.5 | 1305.5 | 1306.4 | 1310.1 | 1314.4 | 1314.4 | 1315.4 | 1314.4 | 1315.4 | 1314.0 |
| 22.5° | 1349.2 | 1351.9 | 1351.9 | 1352.4 | 1356.1 | 1361.3 | 1359.8 | 1361.3 | 1358.9 | 1360.9 | 1358.9 |
| 25°   | 1407.3 | 1411.4 | 1410.5 | 1410.5 | 1413.4 | 1416.6 | 1417.1 | 1420.0 | 1419.4 | 1421.8 | 1420.4 |
| 27.5° | 1473.0 | 1479.5 | 1481.3 | 1480.9 | 1482.7 | 1486.0 | 1486.9 | 1490.3 | 1488.3 | 1490.3 | 1489.3 |
| 30°   | 1551.7 | 1554.4 | 1558.2 | 1559.6 | 1562.0 | 1565.2 | 1565.2 | 1565.6 | 1563.4 | 1566.2 | 1567.7 |
| 32.5° | 1633.3 | 1638.5 | 1642.1 | 1650.6 | 1654.8 | 1657.1 | 1656.7 | 1657.7 | 1655.3 | 1659.1 | 1661.9 |
| 35°   | 1741.1 | 1744.9 | 1751.0 | 1757.6 | 1763.1 | 1762.7 | 1761.3 | 1761.7 | 1761.7 | 1765.1 | 1767.9 |
| 37.5° | 1870.9 | 1871.9 | 1880.0 | 1889.3 | 1892.2 | 1889.3 | 1880.9 | 1878.9 | 1874.8 | 1878.9 | 1883.6 |
| 40°   | 2008.4 | 2011.7 | 2027.7 | 2033.8 | 2035.2 | 2029.9 | 2017.8 | 2010.7 | 2001.4 | 2006.5 | 2013.1 |
| 42.5° | 2152.4 | 2159.0 | 2173.5 | 2184.2 | 2188.9 | 2185.6 | 2168.8 | 2158.0 | 2145.9 | 2148.6 | 2155.1 |
| 45°   | 2311.8 | 2319.8 | 2340.5 | 2350.7 | 2359.7 | 2354.4 | 2338.0 | 2321.6 | 2302.4 | 2303.8 | 2314.1 |
| 47.5° | 2490.0 | 2498.0 | 2524.7 | 2542.0 | 2546.8 | 2545.7 | 2527.5 | 2505.0 | 2478.8 | 2477.8 | 2486.7 |
| 50°   | 2689.8 | 2697.7 | 2731.1 | 2757.7 | 2771.4 | 2769.9 | 2748.4 | 2716.5 | 2684.6 | 2685.0 | 2696.3 |
| 52.5° | 2884.8 | 2894.8 | 2929.3 | 2975.3 | 3002.0 | 3021.2 | 3008.1 | 2978.2 | 2939.2 | 2940.1 | 2950.4 |
| 55°   | 3067.7 | 3084.2 | 3123.9 | 3186.3 | 3236.0 | 3290.1 | 3305.4 | 3304.5 | 3281.0 | 3287.6 | 3298.0 |
| 57.5° | 3156.3 | 3180.7 | 3242.2 | 3340.6 | 3441.8 | 3551.6 | 3644.5 | 3713.8 | 3743.4 | 3788.0 | 3777.6 |
| 60°   | 2988.5 | 3027.3 | 3117.9 | 3262.8 | 3463.0 | 3691.9 | 3937.0 | 4176.8 | 4381.2 | 4535.5 | 4446.9 |
| 62.5° | 2446.9 | 2497.4 | 2607.3 | 2792.8 | 3095.9 | 3462.1 | 3931.4 | 4497.8 | 5115.1 | 5487.3 | 5221.5 |
| 65°   | 1531.0 | 1583.6 | 1695.1 | 1894.0 | 2248.4 | 2703.8 | 3340.6 | 4279.3 | 5432.5 | 5993.8 | 5452.7 |
| 67.5° | 597.0  | 625.5  | 686.0  | 813.1  | 1079.5 | 1484.7 | 2123.8 | 3189.2 | 4568.2 | 5060.2 | 4483.4 |
| 70°   | 299.2  | 302.0  | 313.2  | 336.7  | 393.9  | 511.6  | 778.4  | 1478.5 | 2619.9 | 3164.2 | 2525.6 |
| 72.5° | 216.3  | 216.7  | 222.3  | 232.6  | 250.9  | 277.1  | 327.8  | 452.6  | 852.0  | 1302.2 | 798.5  |
| 75°   | 165.5  | 167.3  | 170.7  | 176.4  | 186.2  | 199.3  | 217.5  | 260.7  | 323.1  | 374.6  | 315.1  |
| 77.5° | 127.5  | 131.3  | 133.7  | 138.8  | 144.9  | 153.8  | 159.0  | 175.4  | 204.0  | 214.8  | 211.5  |
| 80°   | 97.0   | 100.3  | 105.6  | 109.7  | 113.9  | 118.2  | 116.3  | 123.8  | 138.8  | 147.7  | 143.0  |
| 82.5° | 62.0   | 65.7   | 80.7   | 84.4   | 86.4   | 89.0   | 85.8   | 86.4   | 92.9   | 98.5   | 92.9   |
| 85°   | 39.9   | 42.2   | 51.2   | 55.8   | 56.3   | 58.1   | 56.7   | 53.4   | 53.4   | 48.7   | 54.8   |
| 87.5° | 18.2   | 18.8   | 23.0   | 27.2   | 28.2   | 25.3   | 24.8   | 23.9   | 19.2   | 18.2   | 19.6   |
| 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1132.9 |
| 2.5°  | 1132.5 | 1133.3 | 1133.9 | 1135.3 | 1135.8 | 1135.8 | 1136.2 | 1137.2 |
| 5°    | 1141.3 | 1142.8 | 1143.3 | 1145.1 | 1145.6 | 1145.1 | 1146.0 | 1146.5 |
| 7.5°  | 1157.3 | 1159.7 | 1160.6 | 1162.5 | 1161.1 | 1162.9 | 1163.4 | 1163.4 |
| 10°   | 1180.8 | 1183.1 | 1183.6 | 1185.5 | 1184.5 | 1185.5 | 1185.5 | 1184.5 |
| 12.5° | 1211.6 | 1212.1 | 1210.8 | 1212.1 | 1210.3 | 1211.2 | 1209.8 | 1208.9 |
| 15°   | 1245.9 | 1244.6 | 1241.3 | 1241.3 | 1238.5 | 1238.9 | 1238.5 | 1237.9 |
| 17.5° | 1279.2 | 1276.3 | 1274.1 | 1273.1 | 1270.8 | 1270.3 | 1268.9 | 1268.9 |
| 20°   | 1315.8 | 1314.4 | 1313.0 | 1311.1 | 1308.8 | 1306.4 | 1305.9 | 1306.8 |
| 22.5° | 1359.8 | 1359.4 | 1359.4 | 1358.4 | 1355.2 | 1352.8 | 1351.4 | 1351.4 |
| 25°   | 1419.0 | 1414.8 | 1414.8 | 1414.3 | 1412.8 | 1411.4 | 1408.7 | 1410.1 |
| 27.5° | 1485.6 | 1483.2 | 1485.1 | 1484.7 | 1483.2 | 1483.2 | 1481.3 | 1481.3 |
| 30°   | 1567.7 | 1566.7 | 1569.5 | 1567.1 | 1562.4 | 1562.0 | 1560.1 | 1557.8 |
| 32.5° | 1662.4 | 1661.4 | 1665.6 | 1662.8 | 1655.3 | 1651.1 | 1647.3 | 1645.5 |
| 35°   | 1767.9 | 1768.4 | 1773.5 | 1771.6 | 1763.1 | 1760.3 | 1753.8 | 1752.8 |
| 37.5° | 1883.2 | 1890.7 | 1899.6 | 1901.4 | 1894.4 | 1892.6 | 1885.6 | 1881.8 |
| 40°   | 2018.7 | 2028.6 | 2042.2 | 2045.5 | 2037.9 | 2036.6 | 2026.6 | 2021.6 |
| 42.5° | 2163.2 | 2180.0 | 2196.8 | 2199.7 | 2192.2 | 2184.7 | 2175.4 | 2171.6 |
| 45°   | 2324.5 | 2344.6 | 2366.7 | 2372.2 | 2361.0 | 2352.2 | 2339.9 | 2339.9 |
| 47.5° | 2505.5 | 2530.8 | 2555.7 | 2571.1 | 2560.8 | 2551.4 | 2536.9 | 2527.5 |
| 50°   | 2719.3 | 2754.0 | 2786.3 | 2802.3 | 2785.9 | 2768.1 | 2742.7 | 2734.3 |
| 52.5° | 2987.4 | 3025.1 | 3053.1 | 3044.7 | 3019.4 | 2994.6 | 2966.9 | 2955.7 |
| 55°   | 3329.7 | 3342.5 | 3342.5 | 3310.5 | 3260.0 | 3218.2 | 3174.6 | 3160.1 |
| 57.5° | 3758.0 | 3709.3 | 3634.2 | 3539.0 | 3419.4 | 3315.3 | 3245.0 | 3211.6 |
| 60°   | 4261.1 | 4026.6 | 3761.7 | 3501.4 | 3287.6 | 3111.2 | 3006.7 | 2959.0 |
| 62.5° | 4596.4 | 3983.0 | 3452.3 | 3034.4 | 2726.8 | 2514.4 | 2370.0 | 2313.7 |
| 65°   | 4295.8 | 3321.8 | 2611.0 | 2111.1 | 1775.8 | 1559.6 | 1416.6 | 1364.1 |
| 67.5° | 3146.4 | 2081.6 | 1390.4 | 996.5  | 730.1  | 582.4  | 523.8  | 499.5  |
| 70°   | 1412.4 | 732.9  | 449.3  | 350.7  | 302.4  | 277.6  | 266.8  | 263.1  |
| 72.5° | 425.8  | 308.1  | 259.8  | 234.5  | 215.2  | 203.0  | 194.2  | 193.2  |
| 75°   | 257.0  | 213.8  | 189.9  | 175.0  | 162.7  | 152.9  | 148.1  | 146.7  |
| 77.5° | 179.6  | 157.2  | 145.9  | 135.1  | 125.6  | 118.2  | 113.9  | 110.7  |
| 80°   | 126.2  | 115.4  | 110.3  | 104.2  | 98.0   | 91.0   | 84.9   | 82.1   |
| 82.5° | 84.4   | 82.1   | 82.1   | 78.3   | 73.2   | 66.5   | 54.4   | 51.6   |
| 85°   | 54.4   | 54.0   | 54.8   | 53.4   | 49.7   | 42.7   | 35.2   | 33.4   |
| 87.5° | 25.3   | 25.7   | 28.6   | 28.2   | 27.2   | 22.5   | 17.8   | 16.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)