

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: P148509

Luminaire Tested: **TMU-E04-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P148509  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33676)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: TMU-E04-LED-E-U-5XQ-7030  
Description: TALON MEDIUM LED AREA LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (84) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11619.2 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G3

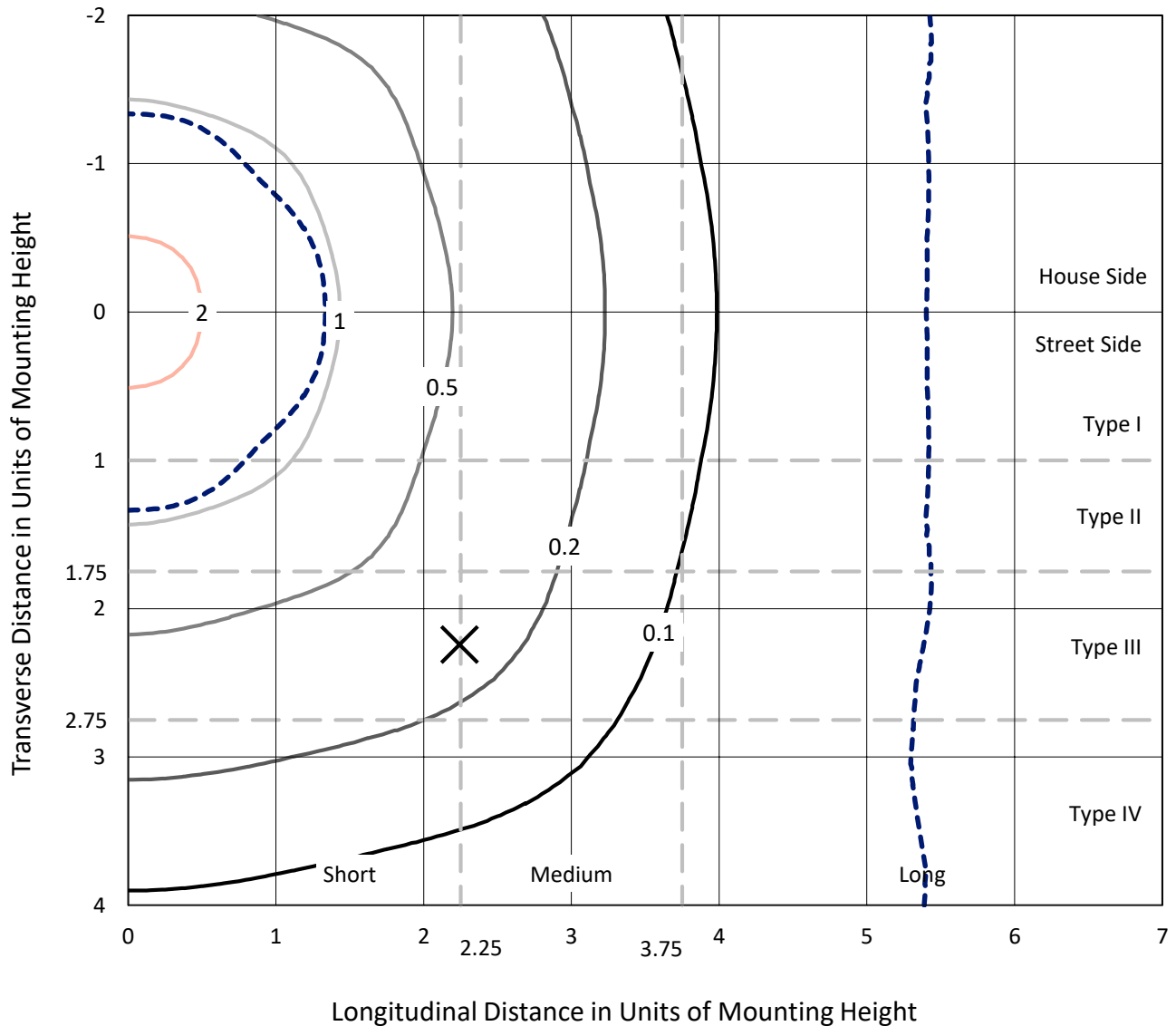
Input Watts (W): 97.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

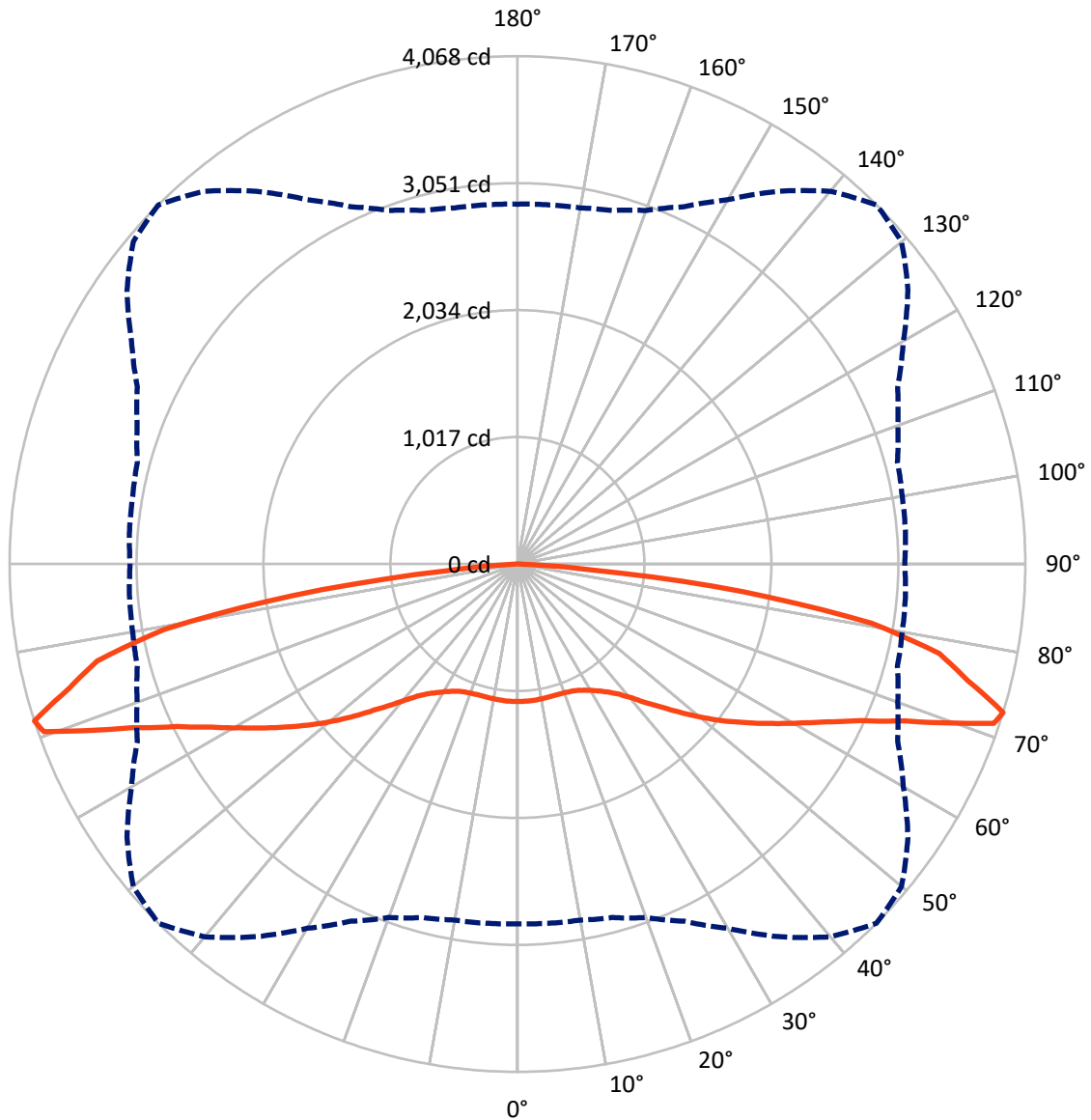
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5809.6   | 0.0    | 5809.6  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5809.6   | 0.0    | 5809.6  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 11619.2  | 0.0    | 11619.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 104.9   | 0.9       |
| 10°-20°   | 310.4   | 2.7       |
| 20°-30°   | 519.7   | 4.5       |
| 30°-40°   | 792.3   | 6.8       |
| 40°-50°   | 1265.1  | 10.9      |
| 50°-60°   | 1945.2  | 16.7      |
| 60°-70°   | 2832.3  | 24.4      |
| 70°-80°   | 3190.6  | 27.5      |
| 80°-90°   | 658.6   | 5.7       |
| 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°    | 11619.2 | 100.0     |
| 0°-180°   | 11619.2 | 100.0     |



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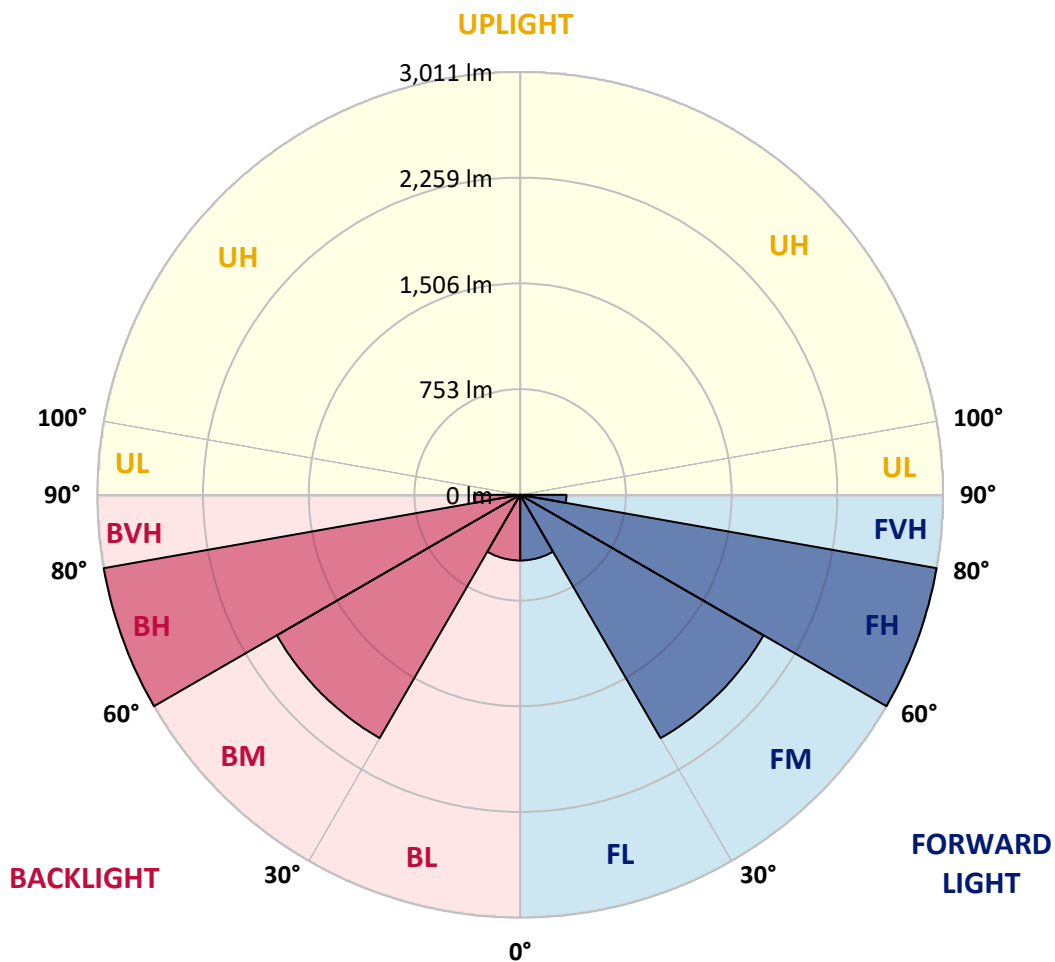
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 467.5  | 4.0       |                         |      |         |
| FM   | (30°-60°)   | 2001.3 | 17.2      |                         |      |         |
| FH   | (60°-80°)   | 3011.4 | 25.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 329.3  | 2.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 467.5  | 4.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2001.3 | 17.2      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 3011.4 | 25.9      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 329.3  | 2.8       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 |
| 2.5°  | 1102.7 | 1103.3 | 1103.0 | 1102.4 | 1102.7 | 1102.4 | 1101.8 | 1101.5 | 1099.4 | 1100.6 | 1102.4 |
| 5°    | 1102.7 | 1102.1 | 1101.8 | 1101.5 | 1101.5 | 1102.4 | 1101.5 | 1100.6 | 1100.3 | 1100.9 | 1100.0 |
| 7.5°  | 1102.1 | 1100.9 | 1100.3 | 1100.0 | 1100.3 | 1100.6 | 1099.7 | 1098.4 | 1099.4 | 1098.4 | 1097.2 |
| 10°   | 1100.2 | 1099.4 | 1099.7 | 1098.5 | 1098.8 | 1098.4 | 1097.2 | 1096.4 | 1096.9 | 1096.0 | 1094.5 |
| 12.5° | 1100.8 | 1099.4 | 1099.1 | 1098.4 | 1098.2 | 1097.8 | 1096.3 | 1094.8 | 1095.1 | 1094.5 | 1093.0 |
| 15°   | 1100.8 | 1100.0 | 1099.7 | 1098.4 | 1098.2 | 1097.6 | 1095.7 | 1095.1 | 1095.1 | 1094.2 | 1092.4 |
| 17.5° | 1101.5 | 1100.9 | 1100.9 | 1099.4 | 1098.8 | 1098.5 | 1096.4 | 1095.4 | 1096.3 | 1094.5 | 1093.3 |
| 20°   | 1103.4 | 1102.7 | 1103.0 | 1102.1 | 1100.9 | 1100.9 | 1099.4 | 1098.8 | 1099.1 | 1098.8 | 1095.4 |
| 22.5° | 1107.0 | 1107.0 | 1107.6 | 1107.3 | 1107.0 | 1107.3 | 1106.1 | 1106.0 | 1106.4 | 1106.4 | 1103.6 |
| 25°   | 1117.3 | 1117.0 | 1117.6 | 1117.6 | 1117.9 | 1120.0 | 1119.2 | 1118.8 | 1120.4 | 1120.4 | 1117.6 |
| 27.5° | 1136.8 | 1136.2 | 1136.8 | 1137.4 | 1138.9 | 1141.7 | 1141.1 | 1142.0 | 1144.4 | 1143.8 | 1141.4 |
| 30°   | 1159.4 | 1158.8 | 1160.2 | 1162.1 | 1163.3 | 1167.6 | 1165.8 | 1170.3 | 1172.4 | 1174.3 | 1172.4 |
| 32.5° | 1192.2 | 1192.2 | 1195.0 | 1196.2 | 1198.9 | 1203.2 | 1203.8 | 1207.4 | 1210.2 | 1213.2 | 1211.1 |
| 35°   | 1236.1 | 1235.5 | 1237.6 | 1239.7 | 1243.0 | 1247.0 | 1248.6 | 1253.4 | 1257.7 | 1259.8 | 1255.8 |
| 37.5° | 1303.1 | 1299.7 | 1303.6 | 1304.9 | 1307.6 | 1308.6 | 1312.8 | 1318.9 | 1323.4 | 1322.8 | 1320.1 |
| 40°   | 1393.8 | 1393.2 | 1391.6 | 1389.8 | 1394.1 | 1395.6 | 1395.6 | 1403.8 | 1411.1 | 1409.9 | 1409.6 |
| 42.5° | 1499.8 | 1497.0 | 1495.1 | 1495.2 | 1497.6 | 1498.2 | 1507.6 | 1513.7 | 1518.9 | 1520.1 | 1518.9 |
| 45°   | 1613.6 | 1610.8 | 1611.4 | 1610.2 | 1611.1 | 1615.1 | 1620.6 | 1631.9 | 1641.6 | 1641.9 | 1636.7 |
| 47.5° | 1736.0 | 1727.4 | 1734.2 | 1724.7 | 1730.5 | 1733.5 | 1747.2 | 1763.7 | 1780.7 | 1783.8 | 1779.2 |
| 50°   | 1860.2 | 1859.3 | 1858.7 | 1856.8 | 1859.6 | 1866.3 | 1883.0 | 1908.9 | 1925.4 | 1936.3 | 1929.0 |
| 52.5° | 1996.0 | 1991.4 | 1989.2 | 1986.2 | 1989.0 | 2002.0 | 2025.5 | 2048.0 | 2077.6 | 2090.0 | 2080.0 |
| 55°   | 2128.1 | 2126.6 | 2118.7 | 2118.4 | 2124.1 | 2144.5 | 2170.1 | 2197.8 | 2229.8 | 2243.8 | 2240.2 |
| 57.5° | 2263.9 | 2255.0 | 2252.6 | 2249.0 | 2260.5 | 2279.7 | 2311.1 | 2361.0 | 2394.2 | 2410.0 | 2400.9 |
| 60°   | 2396.6 | 2389.9 | 2384.8 | 2383.6 | 2391.4 | 2418.2 | 2463.3 | 2523.2 | 2564.4 | 2585.1 | 2570.5 |
| 62.5° | 2539.1 | 2534.8 | 2528.8 | 2521.8 | 2538.5 | 2572.9 | 2628.9 | 2695.3 | 2755.9 | 2781.4 | 2759.2 |
| 65°   | 2716.3 | 2707.5 | 2700.8 | 2692.0 | 2705.6 | 2748.9 | 2819.2 | 2912.6 | 2994.0 | 3023.8 | 3008.0 |
| 67.5° | 2903.2 | 2895.0 | 2895.6 | 2890.2 | 2914.5 | 2974.5 | 3065.2 | 3192.2 | 3301.2 | 3352.0 | 3322.1 |
| 70°   | 3066.4 | 3071.0 | 3072.2 | 3094.4 | 3136.4 | 3227.8 | 3378.8 | 3577.6 | 3742.9 | 3820.6 | 3788.6 |
| 71°   | 3018.3 | 3028.4 | 3043.9 | 3067.0 | 3139.5 | 3247.6 | 3453.7 | 3694.5 | 3891.8 | 4023.3 | 3979.2 |
| 72.5° | 2881.9 | 2888.0 | 2896.0 | 2931.2 | 3013.1 | 3156.2 | 3368.4 | 3643.6 | 3897.3 | 4067.5 | 4016.3 |
| 75°   | 2684.6 | 2690.4 | 2693.2 | 2717.8 | 2792.4 | 2917.2 | 3111.4 | 3355.6 | 3579.4 | 3724.3 | 3710.0 |
| 77.5° | 2386.9 | 2387.8 | 2409.1 | 2447.2 | 2530.9 | 2673.7 | 2878.3 | 3131.6 | 3342.0 | 3454.6 | 3383.1 |
| 80°   | 1714.0 | 1702.5 | 1724.4 | 1773.4 | 1876.9 | 2040.8 | 2250.2 | 2539.4 | 2772.9 | 2878.3 | 2767.4 |
| 82.5° | 652.2  | 687.4  | 743.2  | 824.2  | 859.2  | 1041.2 | 1236.7 | 1406.6 | 1603.2 | 1823.0 | 1767.9 |
| 85°   | 70.0   | 78.8   | 98.9   | 122.7  | 155.0  | 214.3  | 296.2  | 404.3  | 498.4  | 585.8  | 520.0  |
| 87.5° | 26.2   | 26.8   | 29.8   | 34.4   | 35.0   | 36.5   | 39.0   | 45.4   | 42.3   | 36.5   | 29.5   |
| 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 | 1100.9 |
| 2.5°  | 1100.9 | 1101.2 | 1100.9 | 1101.2 | 1101.2 | 1099.9 | 1100.2 | 1099.6 |
| 5°    | 1100.6 | 1099.7 | 1100.0 | 1100.3 | 1100.0 | 1100.6 | 1099.6 | 1100.2 |
| 7.5°  | 1099.0 | 1097.2 | 1097.8 | 1097.8 | 1097.2 | 1098.1 | 1097.6 | 1097.2 |
| 10°   | 1096.0 | 1093.6 | 1094.8 | 1094.2 | 1093.9 | 1094.2 | 1094.2 | 1094.2 |
| 12.5° | 1093.3 | 1091.8 | 1092.1 | 1091.8 | 1091.4 | 1092.4 | 1092.1 | 1092.4 |
| 15°   | 1092.6 | 1090.2 | 1089.9 | 1089.3 | 1089.6 | 1090.2 | 1090.2 | 1091.1 |
| 17.5° | 1092.1 | 1089.0 | 1088.7 | 1088.1 | 1088.4 | 1089.6 | 1089.9 | 1089.3 |
| 20°   | 1093.9 | 1091.4 | 1090.8 | 1090.2 | 1089.9 | 1091.5 | 1091.1 | 1091.1 |
| 22.5° | 1102.4 | 1099.4 | 1099.1 | 1096.6 | 1095.7 | 1096.6 | 1096.0 | 1096.0 |
| 25°   | 1116.1 | 1112.5 | 1111.2 | 1107.9 | 1105.5 | 1105.5 | 1104.6 | 1103.9 |
| 27.5° | 1140.8 | 1135.3 | 1134.1 | 1131.3 | 1128.0 | 1128.6 | 1126.8 | 1126.4 |
| 30°   | 1169.4 | 1164.5 | 1160.2 | 1156.3 | 1152.4 | 1150.8 | 1148.7 | 1148.4 |
| 32.5° | 1206.9 | 1201.4 | 1196.2 | 1191.3 | 1185.8 | 1183.7 | 1180.1 | 1178.2 |
| 35°   | 1252.8 | 1245.5 | 1239.4 | 1236.1 | 1230.6 | 1227.8 | 1225.4 | 1228.2 |
| 37.5° | 1317.0 | 1308.2 | 1305.2 | 1301.2 | 1297.6 | 1293.3 | 1294.2 | 1293.3 |
| 40°   | 1405.9 | 1398.0 | 1395.0 | 1388.0 | 1387.1 | 1382.2 | 1385.3 | 1382.2 |
| 42.5° | 1515.9 | 1501.2 | 1499.1 | 1493.6 | 1491.8 | 1489.1 | 1490.3 | 1488.2 |
| 45°   | 1635.5 | 1622.4 | 1620.0 | 1611.2 | 1611.4 | 1605.0 | 1607.5 | 1607.5 |
| 47.5° | 1770.0 | 1756.4 | 1745.1 | 1738.7 | 1736.3 | 1732.4 | 1734.4 | 1734.1 |
| 50°   | 1908.9 | 1890.4 | 1877.9 | 1865.4 | 1859.9 | 1861.4 | 1857.2 | 1864.5 |
| 52.5° | 2058.1 | 2030.4 | 2012.7 | 2000.9 | 1990.5 | 1992.6 | 1993.2 | 1995.4 |
| 55°   | 2212.4 | 2177.1 | 2151.6 | 2136.0 | 2126.6 | 2127.2 | 2129.9 | 2132.4 |
| 57.5° | 2367.7 | 2323.6 | 2288.9 | 2265.7 | 2259.6 | 2262.4 | 2262.4 | 2262.0 |
| 60°   | 2528.8 | 2475.8 | 2431.0 | 2404.9 | 2399.4 | 2397.8 | 2409.7 | 2405.8 |
| 62.5° | 2701.7 | 2638.1 | 2591.8 | 2558.3 | 2550.4 | 2555.8 | 2566.6 | 2564.0 |
| 65°   | 2930.9 | 2842.9 | 2783.3 | 2750.1 | 2736.7 | 2742.2 | 2756.5 | 2755.9 |
| 67.5° | 3226.6 | 3103.6 | 3024.7 | 2982.1 | 2972.4 | 2979.0 | 2987.0 | 2994.6 |
| 70°   | 3668.6 | 3493.0 | 3380.3 | 3288.0 | 3248.5 | 3240.9 | 3248.8 | 3249.1 |
| 71°   | 3824.2 | 3622.3 | 3443.0 | 3330.4 | 3265.6 | 3238.2 | 3240.2 | 3226.5 |
| 72.5° | 3817.8 | 3569.1 | 3359.3 | 3241.5 | 3151.4 | 3129.4 | 3118.8 | 3102.4 |
| 75°   | 3560.6 | 3336.5 | 3154.4 | 3026.0 | 2939.2 | 2913.3 | 2894.4 | 2893.4 |
| 77.5° | 3229.0 | 3063.7 | 2863.0 | 2726.9 | 2621.3 | 2578.4 | 2559.2 | 2558.6 |
| 80°   | 2595.8 | 2348.2 | 2201.5 | 2119.6 | 1992.0 | 1955.2 | 1916.2 | 1901.6 |
| 82.5° | 1569.7 | 1226.6 | 997.4  | 886.2  | 824.8  | 679.2  | 609.5  | 576.7  |
| 85°   | 365.6  | 259.7  | 179.0  | 117.5  | 84.6   | 67.3   | 51.8   | 45.6   |
| 87.5° | 24.6   | 19.5   | 17.4   | 14.0   | 10.6   | 10.4   | 6.4    | 5.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)