

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: INVUE

Report Number: P675491

Luminaire Tested: **CCW-SA-1E-850-U-SL2**

Issue Date: 04/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P675491  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-850-U-SL2  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/  
SL2 distribution lens  
Light Source: (16) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

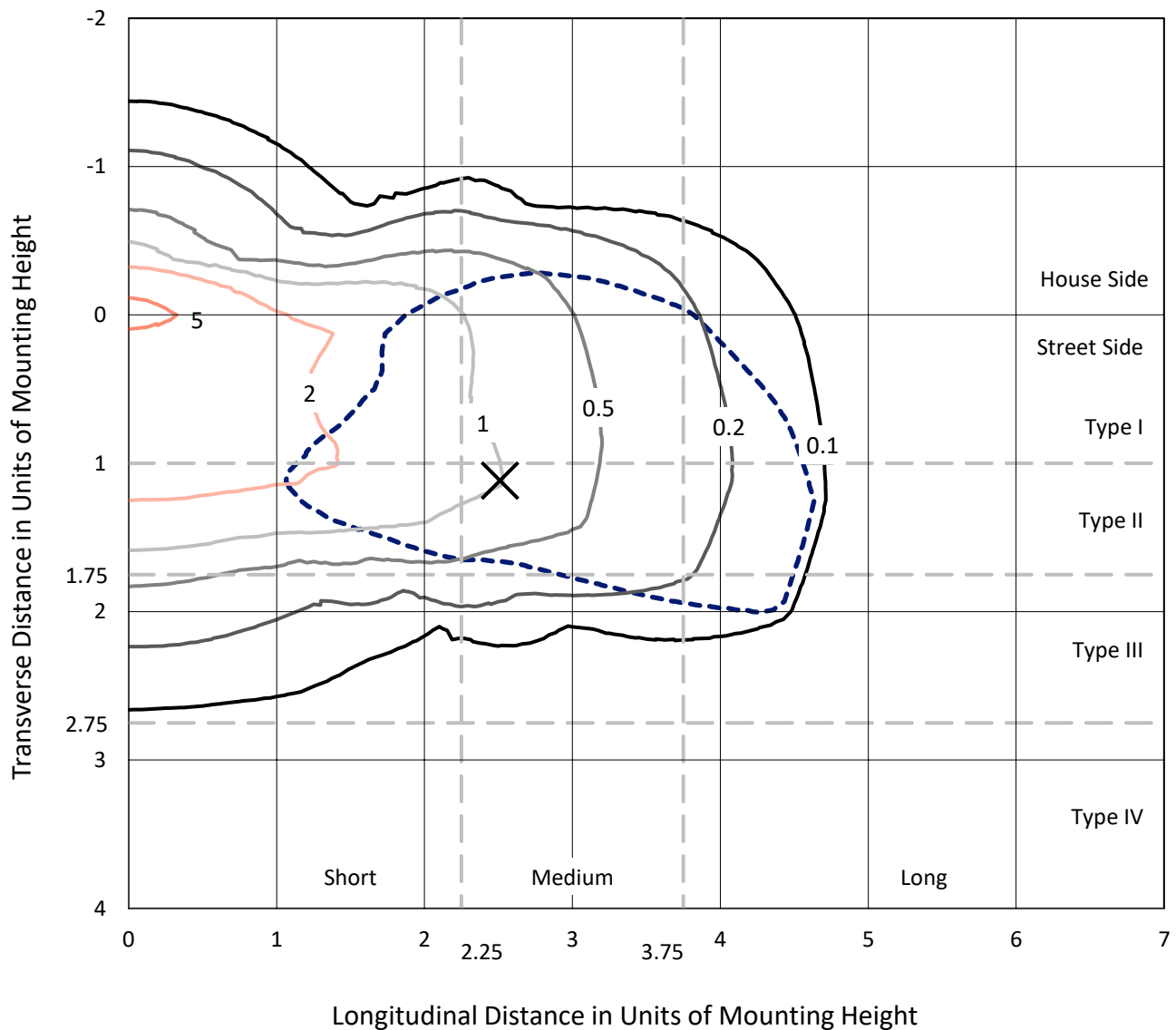
Lumens per Lamp: N/A  
Luminaire Lumens: 5904.5 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 56.1  
Input Voltage (V): 120  
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: 25 FT

REPORT NUMBER: P675491  
 CATALOG NUMBER: CCW-SA-1E-850-U-SL2

## Iso-Footcandle Lines of Horizontal Illumination

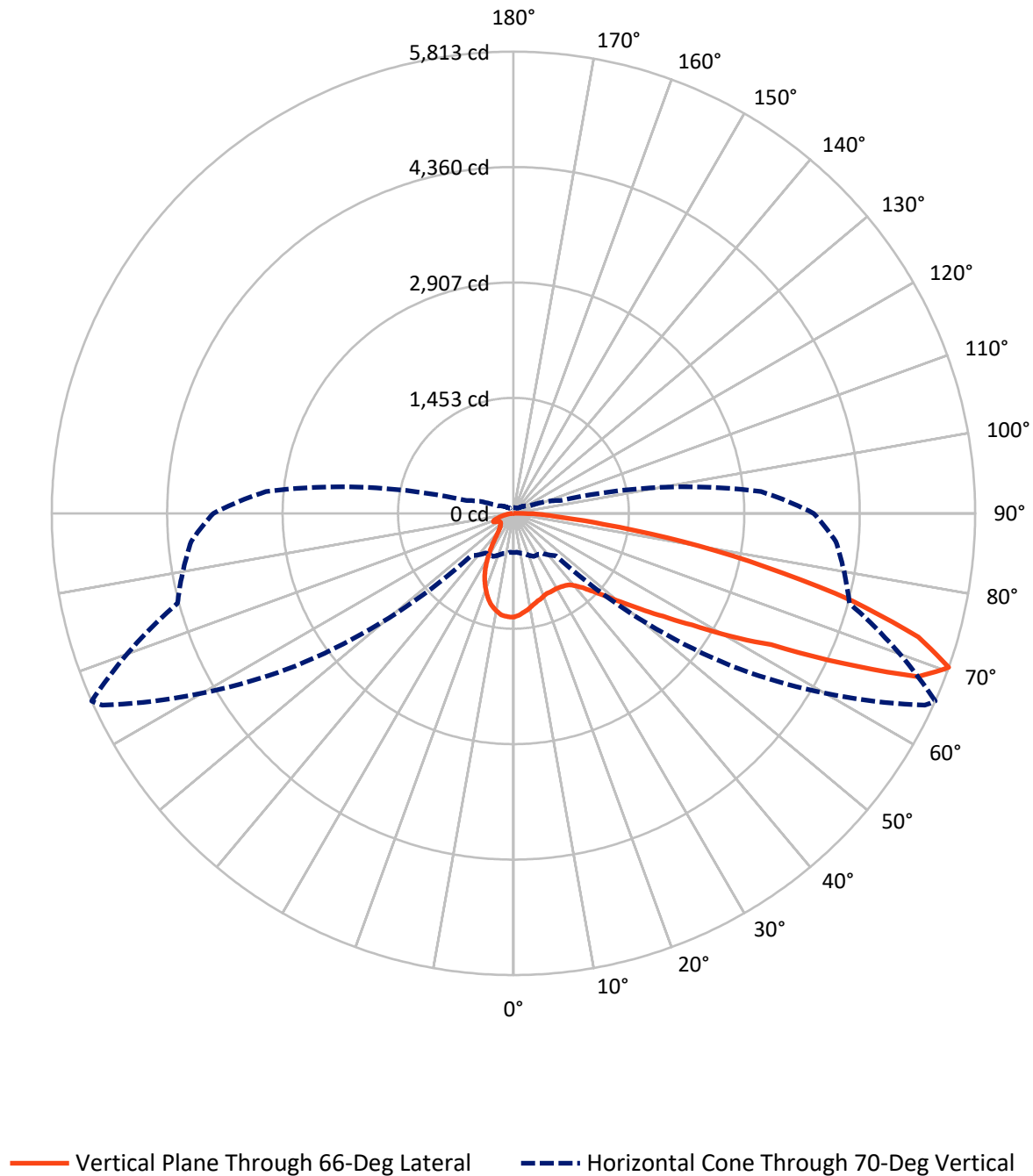
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P675491  
CATALOG NUMBER: CCW-SA-1E-850-U-SL2

## Luminous Intensity Polar Plot



REPORT NUMBER: P675491

CATALOG NUMBER: CCW-SA-1E-850-U-SL2

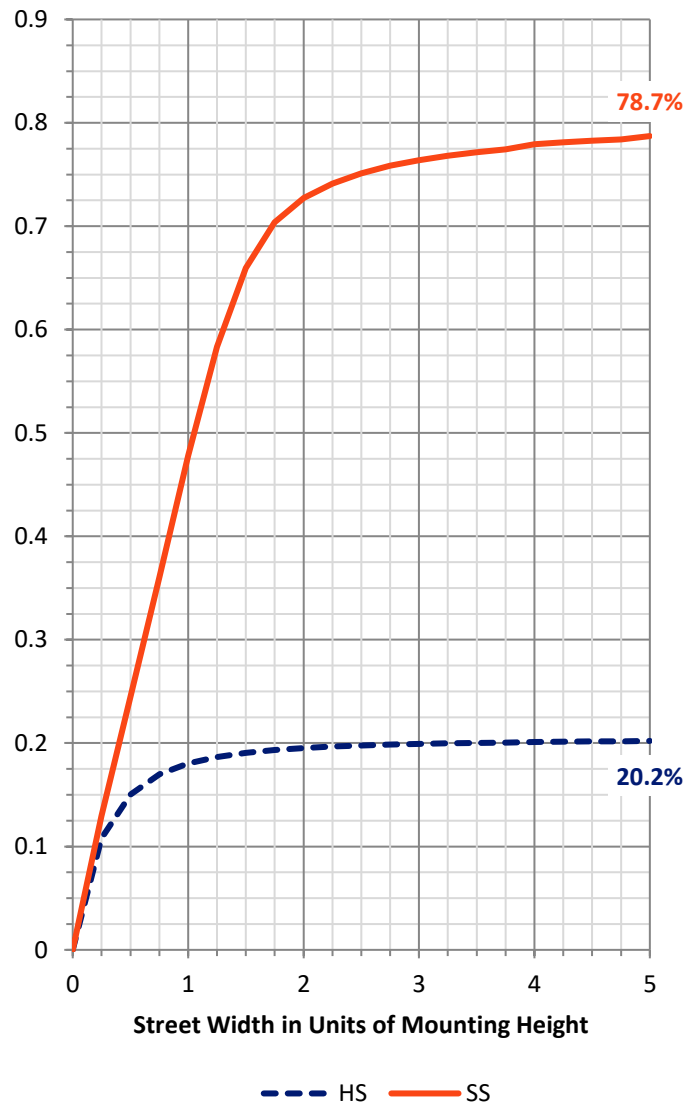
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1208.6   | 0.0    | 1208.6 |
|                    | % Fixture | 20.5     | 0.0    | 20.5   |
| <b>Street Side</b> | Lumens    | 4695.9   | 0.0    | 4695.9 |
|                    | % Fixture | 79.5     | 0.0    | 79.5   |
| <b>Total</b>       | Lumens    | 5904.5   | 0.0    | 5904.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 115.3  | 2.0       |
| 10°-20°   | 283.9  | 4.8       |
| 20°-30°   | 390.0  | 6.6       |
| 30°-40°   | 522.8  | 8.9       |
| 40°-50°   | 758.6  | 12.8      |
| 50°-60°   | 1153.1 | 19.5      |
| 60°-70°   | 1424.1 | 24.1      |
| 70°-80°   | 1059.0 | 17.9      |
| 80°-90°   | 197.5  | 3.3       |
| 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°    | 5904.5 | 100.0     |
| 0°-180°   | 5904.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P675491

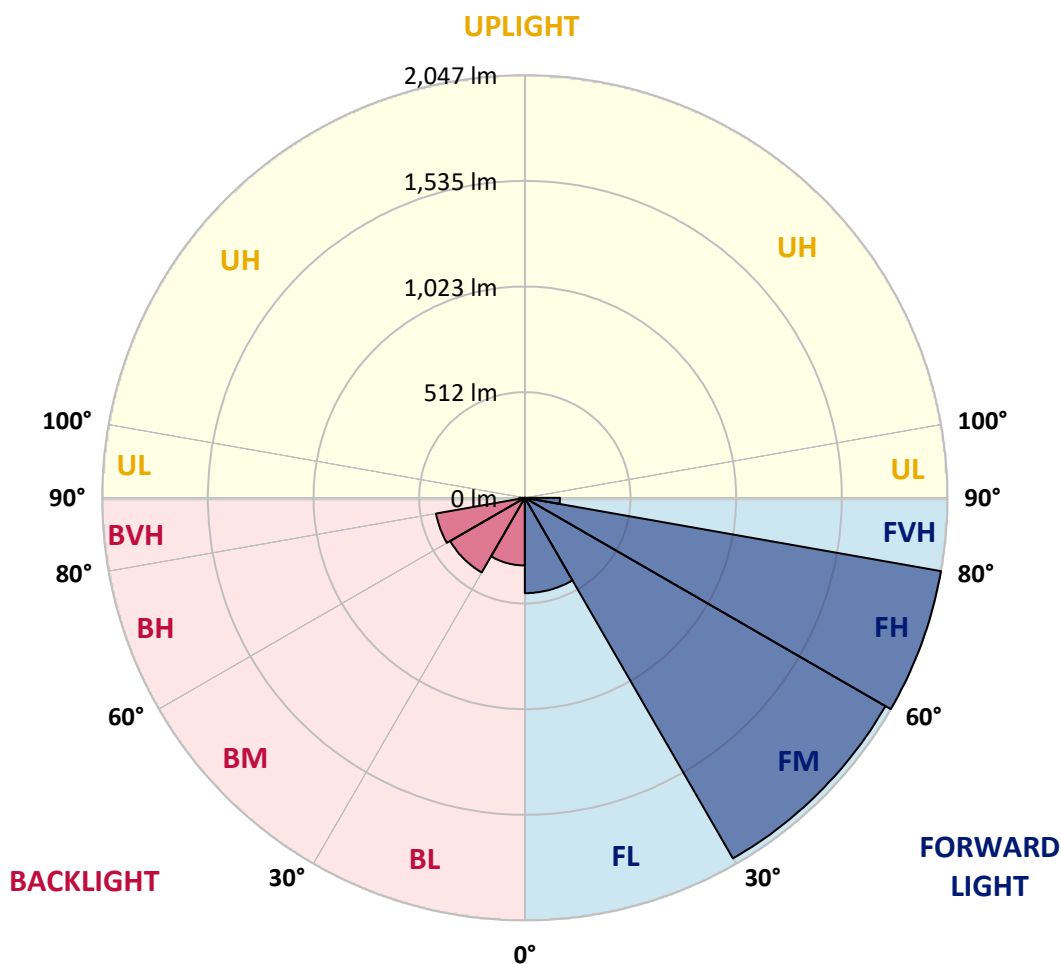
CATALOG NUMBER: CCW-SA-1E-850-U-SL2

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 461.7  | 7.8       |                         |      |         |
| FM   | (30°-60°)   | 2017.1 | 34.2      |                         |      |         |
| FH   | (60°-80°)   | 2046.9 | 34.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 170.3  | 2.9       |                         |      | G2/225  |
| BL   | (0°-30°)    | 327.6  | 5.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 417.5  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 436.3  | 7.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 27.3   | 0.5       |                         |      | 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 III Medium



REPORT NUMBER: P675491

CATALOG NUMBER: CCW-SA-1E-850-U-SL2

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 |
| 2.5°  | 1240.8 | 1247.4 | 1249.6 | 1254.0 | 1265.0 | 1273.7 | 1286.9 | 1293.5 | 1286.9 | 1295.7 | 1295.7 |
| 5°    | 1155.1 | 1146.4 | 1168.3 | 1177.1 | 1190.3 | 1207.9 | 1238.6 | 1262.8 | 1256.2 | 1282.5 | 1304.5 |
| 7.5°  | 1082.7 | 1082.7 | 1089.3 | 1109.0 | 1124.4 | 1150.8 | 1183.7 | 1221.0 | 1232.0 | 1267.1 | 1300.1 |
| 10°   | 1016.8 | 1025.6 | 1025.6 | 1056.3 | 1065.1 | 1095.9 | 1150.8 | 1196.9 | 1199.1 | 1258.4 | 1304.5 |
| 12.5° | 981.7  | 977.3  | 999.2  | 1008.0 | 1034.4 | 1065.1 | 1109.0 | 1166.1 | 1168.3 | 1232.0 | 1295.7 |
| 15°   | 953.1  | 957.5  | 968.5  | 990.4  | 1014.6 | 1038.8 | 1080.5 | 1133.2 | 1144.2 | 1218.8 | 1291.3 |
| 17.5° | 955.3  | 957.5  | 957.5  | 972.9  | 992.6  | 1021.2 | 1060.7 | 1122.2 | 1128.8 | 1201.3 | 1284.7 |
| 20°   | 968.5  | 959.7  | 966.3  | 972.9  | 986.0  | 1012.4 | 1045.3 | 1098.0 | 1104.6 | 1199.1 | 1300.1 |
| 22.5° | 997.0  | 990.4  | 988.2  | 986.0  | 983.9  | 999.2  | 1041.0 | 1084.9 | 1091.5 | 1188.1 | 1306.7 |
| 25°   | 1043.1 | 1041.0 | 1025.6 | 1010.2 | 999.2  | 999.2  | 1032.2 | 1095.9 | 1093.7 | 1188.1 | 1311.1 |
| 27.5° | 1098.0 | 1098.0 | 1095.9 | 1067.3 | 1034.4 | 1016.8 | 1038.8 | 1091.5 | 1089.3 | 1188.1 | 1322.1 |
| 30°   | 1172.7 | 1172.7 | 1166.1 | 1139.8 | 1080.5 | 1030.0 | 1043.1 | 1087.1 | 1093.7 | 1179.3 | 1313.3 |
| 32.5° | 1254.0 | 1251.8 | 1258.4 | 1234.2 | 1172.7 | 1091.5 | 1069.5 | 1095.9 | 1102.4 | 1188.1 | 1315.5 |
| 35°   | 1313.3 | 1326.4 | 1348.4 | 1326.4 | 1265.0 | 1155.1 | 1106.8 | 1113.4 | 1117.8 | 1190.3 | 1324.2 |
| 37.5° | 1381.3 | 1396.7 | 1427.5 | 1445.0 | 1379.1 | 1251.8 | 1166.1 | 1142.0 | 1142.0 | 1218.8 | 1326.4 |
| 40°   | 1480.2 | 1464.8 | 1517.5 | 1548.2 | 1521.9 | 1370.4 | 1258.4 | 1194.7 | 1196.9 | 1256.2 | 1355.0 |
| 42.5° | 1552.6 | 1568.0 | 1622.9 | 1677.8 | 1644.9 | 1515.3 | 1359.4 | 1280.3 | 1280.3 | 1311.1 | 1398.9 |
| 45°   | 1633.9 | 1651.5 | 1728.3 | 1794.2 | 1818.4 | 1688.8 | 1497.7 | 1403.3 | 1398.9 | 1418.7 | 1478.0 |
| 47.5° | 1723.9 | 1748.1 | 1835.9 | 1912.8 | 1976.5 | 1868.9 | 1675.6 | 1552.6 | 1550.4 | 1565.8 | 1609.7 |
| 50°   | 1827.2 | 1835.9 | 1908.4 | 2049.0 | 2176.3 | 2108.3 | 1893.0 | 1763.5 | 1752.5 | 1759.1 | 1818.4 |
| 52.5° | 1857.9 | 1851.3 | 1934.8 | 2086.3 | 2319.1 | 2400.3 | 2189.5 | 2002.8 | 1998.4 | 1983.1 | 2059.9 |
| 55°   | 1745.9 | 1767.9 | 1849.1 | 2042.4 | 2435.5 | 2745.1 | 2514.5 | 2330.1 | 2290.5 | 2248.8 | 2341.0 |
| 57.5° | 1521.9 | 1524.1 | 1616.3 | 1844.7 | 2345.4 | 3030.6 | 3065.8 | 2650.7 | 2652.9 | 2540.9 | 2646.3 |
| 60°   | 1183.7 | 1177.1 | 1249.6 | 1456.0 | 2088.5 | 3118.5 | 3667.5 | 3162.4 | 3140.4 | 2833.0 | 2929.6 |
| 62.5° | 854.3  | 841.1  | 856.5  | 977.3  | 1561.4 | 2984.5 | 4258.2 | 3735.6 | 3643.3 | 3131.6 | 3206.3 |
| 65°   | 702.8  | 709.3  | 715.9  | 722.5  | 876.2  | 2461.8 | 4440.5 | 4671.1 | 4548.1 | 3480.8 | 3511.6 |
| 67.5° | 582.0  | 586.4  | 614.9  | 654.4  | 650.0  | 1453.8 | 4229.7 | 5536.4 | 5490.2 | 3913.4 | 3775.1 |
| 70°   | 494.1  | 491.9  | 524.9  | 597.3  | 608.3  | 755.5  | 3349.0 | 5714.2 | 5813.1 | 4379.0 | 4073.8 |
| 72.5° | 395.3  | 399.7  | 428.2  | 524.9  | 597.3  | 636.9  | 1928.2 | 5332.1 | 5329.9 | 4737.0 | 3913.4 |
| 75°   | 283.3  | 283.3  | 322.8  | 434.8  | 577.6  | 630.3  | 1067.3 | 4328.5 | 4409.8 | 4451.5 | 3395.2 |
| 77.5° | 186.7  | 195.5  | 226.2  | 325.0  | 542.4  | 617.1  | 676.4  | 3147.0 | 3248.0 | 3329.3 | 2598.0 |
| 80°   | 127.4  | 131.8  | 151.5  | 226.2  | 459.0  | 621.5  | 553.4  | 2117.0 | 2156.6 | 1838.1 | 1054.1 |
| 82.5° | 76.9   | 79.1   | 101.0  | 158.1  | 329.4  | 590.8  | 520.5  | 1168.3 | 1144.2 | 555.6  | 303.1  |
| 85°   | 41.7   | 43.9   | 63.7   | 105.4  | 217.4  | 516.1  | 511.7  | 573.2  | 533.7  | 204.2  | 127.4  |
| 87.5° | 15.4   | 15.4   | 28.5   | 52.7   | 125.2  | 353.6  | 445.8  | 340.4  | 318.4  | 103.2  | 59.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P675491

CATALOG NUMBER: CCW-SA-1E-850-U-SL2

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 | 1304.5 |
| 2.5°  | 1306.7 | 1306.7 | 1306.7 | 1306.7 | 1304.5 | 1295.7 | 1302.3 | 1300.1 | 1286.9 | 1289.1 | 1280.3 |
| 5°    | 1302.3 | 1313.3 | 1306.7 | 1297.9 | 1286.9 | 1260.6 | 1251.8 | 1245.2 | 1227.6 | 1221.0 | 1227.6 |
| 7.5°  | 1313.3 | 1304.5 | 1300.1 | 1284.7 | 1240.8 | 1216.6 | 1185.9 | 1148.6 | 1122.2 | 1115.6 | 1122.2 |
| 10°   | 1311.1 | 1311.1 | 1291.3 | 1247.4 | 1205.7 | 1135.4 | 1095.9 | 1030.0 | 992.6  | 981.7  | 983.9  |
| 12.5° | 1302.3 | 1308.9 | 1278.1 | 1207.9 | 1128.8 | 1043.1 | 970.7  | 900.4  | 834.5  | 808.2  | 803.8  |
| 15°   | 1311.1 | 1304.5 | 1249.6 | 1159.5 | 1049.7 | 931.1  | 825.7  | 722.5  | 661.0  | 621.5  | 612.7  |
| 17.5° | 1297.9 | 1291.3 | 1212.2 | 1093.7 | 946.5  | 795.0  | 663.2  | 551.2  | 489.7  | 474.4  | 474.4  |
| 20°   | 1313.3 | 1271.5 | 1168.3 | 1014.6 | 838.9  | 645.7  | 496.3  | 412.9  | 397.5  | 397.5  | 401.9  |
| 22.5° | 1311.1 | 1267.1 | 1131.0 | 937.7  | 709.3  | 487.5  | 368.9  | 344.8  | 347.0  | 364.6  | 362.4  |
| 25°   | 1297.9 | 1258.4 | 1078.3 | 852.1  | 573.2  | 366.7  | 305.3  | 298.7  | 314.0  | 333.8  | 331.6  |
| 27.5° | 1295.7 | 1234.2 | 1030.0 | 751.1  | 437.0  | 289.9  | 265.7  | 265.7  | 281.1  | 298.7  | 296.5  |
| 30°   | 1282.5 | 1214.4 | 970.7  | 636.9  | 329.4  | 252.6  | 243.8  | 243.8  | 250.4  | 259.1  | 259.1  |
| 32.5° | 1280.3 | 1188.1 | 904.8  | 518.3  | 263.5  | 228.4  | 224.0  | 226.2  | 226.2  | 230.6  | 228.4  |
| 35°   | 1262.8 | 1153.0 | 836.7  | 401.9  | 228.4  | 215.2  | 210.8  | 208.6  | 208.6  | 206.4  | 206.4  |
| 37.5° | 1256.2 | 1131.0 | 766.4  | 311.8  | 213.0  | 204.2  | 199.8  | 193.3  | 191.1  | 191.1  | 188.9  |
| 40°   | 1262.8 | 1109.0 | 698.4  | 252.6  | 199.8  | 195.5  | 188.9  | 180.1  | 177.9  | 177.9  | 177.9  |
| 42.5° | 1286.9 | 1106.8 | 628.1  | 219.6  | 193.3  | 186.7  | 177.9  | 169.1  | 166.9  | 169.1  | 166.9  |
| 45°   | 1341.8 | 1124.4 | 560.0  | 204.2  | 184.5  | 177.9  | 166.9  | 160.3  | 158.1  | 160.3  | 160.3  |
| 47.5° | 1431.9 | 1172.7 | 498.5  | 195.5  | 177.9  | 169.1  | 158.1  | 151.5  | 151.5  | 151.5  | 151.5  |
| 50°   | 1581.2 | 1265.0 | 439.2  | 188.9  | 173.5  | 162.5  | 151.5  | 142.7  | 140.6  | 140.6  | 142.7  |
| 52.5° | 1805.2 | 1423.1 | 390.9  | 184.5  | 166.9  | 153.7  | 142.7  | 136.2  | 131.8  | 129.6  | 131.8  |
| 55°   | 2075.3 | 1653.7 | 375.5  | 180.1  | 158.1  | 147.1  | 136.2  | 127.4  | 123.0  | 123.0  | 120.8  |
| 57.5° | 2365.2 | 1908.4 | 401.9  | 175.7  | 151.5  | 138.4  | 127.4  | 118.6  | 114.2  | 112.0  | 112.0  |
| 60°   | 2679.2 | 2209.3 | 498.5  | 173.5  | 144.9  | 129.6  | 118.6  | 112.0  | 105.4  | 103.2  | 103.2  |
| 62.5° | 2964.7 | 2481.6 | 672.0  | 171.3  | 140.6  | 120.8  | 109.8  | 101.0  | 96.6   | 94.4   | 94.4   |
| 65°   | 3289.8 | 2784.7 | 841.1  | 180.1  | 138.4  | 114.2  | 101.0  | 92.2   | 87.8   | 85.6   | 85.6   |
| 67.5° | 3573.1 | 3048.2 | 939.9  | 202.0  | 144.9  | 105.4  | 90.0   | 83.5   | 81.3   | 79.1   | 79.1   |
| 70°   | 3779.5 | 3129.4 | 630.3  | 221.8  | 155.9  | 98.8   | 81.3   | 76.9   | 72.5   | 72.5   | 72.5   |
| 72.5° | 3502.8 | 2793.4 | 373.3  | 208.6  | 147.1  | 92.2   | 72.5   | 68.1   | 65.9   | 65.9   | 63.7   |
| 75°   | 2995.5 | 2378.4 | 287.7  | 169.1  | 118.6  | 79.1   | 63.7   | 59.3   | 57.1   | 57.1   | 54.9   |
| 77.5° | 2211.5 | 1704.2 | 213.0  | 134.0  | 92.2   | 63.7   | 54.9   | 52.7   | 50.5   | 48.3   | 48.3   |
| 80°   | 865.3  | 746.7  | 144.9  | 98.8   | 68.1   | 50.5   | 46.1   | 43.9   | 41.7   | 39.5   | 39.5   |
| 82.5° | 267.9  | 226.2  | 83.5   | 65.9   | 48.3   | 39.5   | 37.3   | 35.1   | 32.9   | 30.7   | 30.7   |
| 85°   | 116.4  | 112.0  | 54.9   | 41.7   | 32.9   | 26.4   | 26.4   | 24.2   | 22.0   | 19.8   | 19.8   |
| 87.5° | 57.1   | 54.9   | 30.7   | 19.8   | 17.6   | 13.2   | 13.2   | 11.0   | 8.8    | 8.8    | 8.8    |
| 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)