

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: P671576

Luminaire Tested: **CCP-SA-2D-827-U-SL4**

Issue Date: 04/16/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P671576  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2D-827-U-SL4  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @800mA w/ SL4  
distribution lens  
Light Source: (32) 2700K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8033.8 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

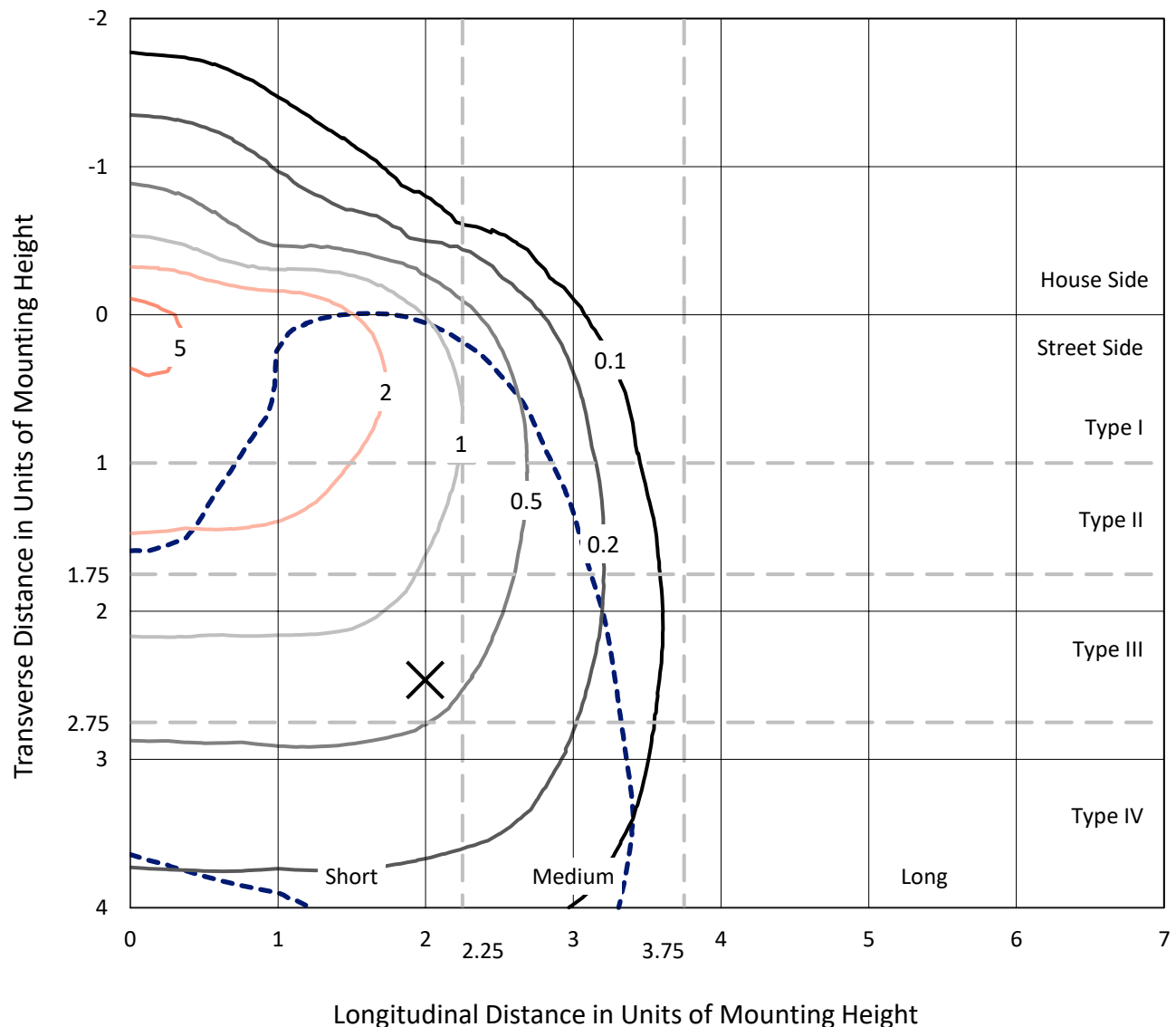
Input Watts (W): 80.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

REPORT NUMBER: P671576

CATALOG NUMBER: CCP-SA-2D-827-U-SL4

## Iso-Footcandle Lines of Horizontal Illumination

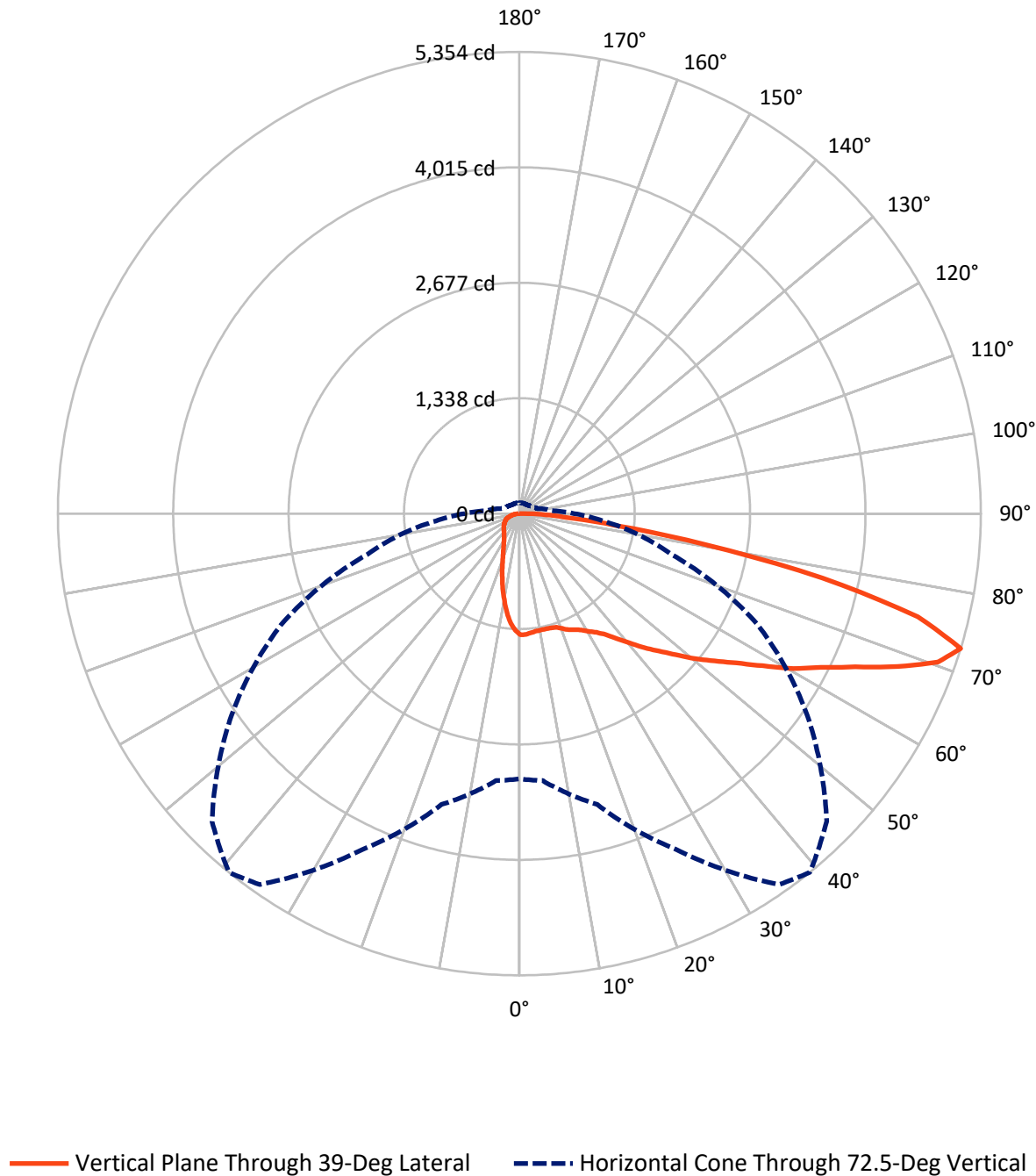
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P671576  
CATALOG NUMBER: CCP-SA-2D-827-U-SL4

## Luminous Intensity Polar Plot



REPORT NUMBER: P671576

CATALOG NUMBER: CCP-SA-2D-827-U-SL4

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1194.0   | 0.0    | 1194.0 |
|                    | % Fixture | 14.9     | 0.0    | 14.9   |
| <b>Street Side</b> | Lumens    | 6839.8   | 0.0    | 6839.8 |
|                    | % Fixture | 85.1     | 0.0    | 85.1   |
| <b>Total</b>       | Lumens    | 8033.8   | 0.0    | 8033.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 124.2  | 1.5       |
| 10°-20°   | 317.2  | 3.9       |
| 20°-30°   | 483.2  | 6.0       |
| 30°-40°   | 706.8  | 8.8       |
| 40°-50°   | 1082.1 | 13.5      |
| 50°-60°   | 1587.1 | 19.8      |
| 60°-70°   | 2024.1 | 25.2      |
| 70°-80°   | 1462.4 | 18.2      |
| 80°-90°   | 246.7  | 3.1       |
| 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°    | 8033.8 | 100.0     |
| 0°-180°   | 8033.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P671576

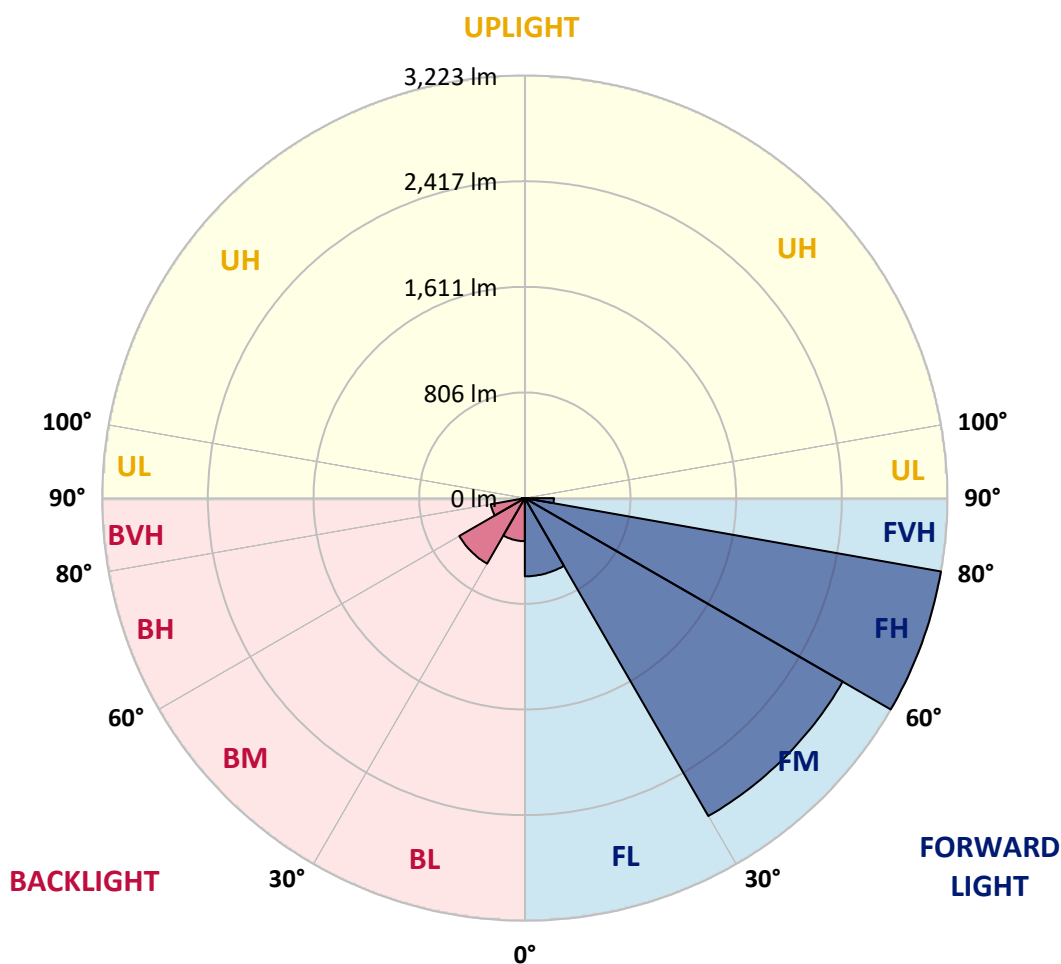
CATALOG NUMBER: CCP-SA-2D-827-U-SL4

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 596.2  | 7.4       |                         |      |         |
| FM   | (30°-60°)   | 2799.2 | 34.8      |                         |      |         |
| FH   | (60°-80°)   | 3222.7 | 40.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 221.7  | 2.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 328.4  | 4.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 576.8  | 7.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 263.8  | 3.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 25.0   | 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 IV Short





REPORT NUMBER: P671576

CATALOG NUMBER: CCP-SA-2D-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 39°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 |
| 2.5°  | 1427.4 | 1430.4 | 1424.4 | 1418.3 | 1415.3 | 1403.3 | 1415.3 | 1409.3 | 1403.3 | 1403.3 | 1403.3 |
| 5°    | 1409.3 | 1412.3 | 1412.3 | 1406.3 | 1409.3 | 1388.2 | 1385.1 | 1388.2 | 1379.1 | 1373.1 | 1370.1 |
| 7.5°  | 1382.1 | 1388.2 | 1400.2 | 1397.2 | 1385.1 | 1376.1 | 1379.1 | 1376.1 | 1361.0 | 1351.9 | 1327.8 |
| 10°   | 1361.0 | 1367.0 | 1373.1 | 1379.1 | 1376.1 | 1373.1 | 1370.1 | 1358.0 | 1355.0 | 1333.8 | 1309.7 |
| 12.5° | 1339.9 | 1339.9 | 1342.9 | 1367.0 | 1370.1 | 1370.1 | 1351.9 | 1351.9 | 1342.9 | 1339.9 | 1303.7 |
| 15°   | 1318.8 | 1327.8 | 1351.9 | 1358.0 | 1370.1 | 1376.1 | 1367.0 | 1367.0 | 1351.9 | 1330.8 | 1303.7 |
| 17.5° | 1324.8 | 1339.9 | 1364.0 | 1379.1 | 1385.1 | 1385.1 | 1397.2 | 1388.2 | 1367.0 | 1355.0 | 1327.8 |
| 20°   | 1355.0 | 1358.0 | 1388.2 | 1415.3 | 1421.4 | 1421.4 | 1409.3 | 1400.2 | 1385.1 | 1364.0 | 1327.8 |
| 22.5° | 1373.1 | 1394.2 | 1430.4 | 1445.5 | 1463.6 | 1463.6 | 1448.5 | 1427.4 | 1406.3 | 1385.1 | 1345.9 |
| 25°   | 1451.5 | 1454.6 | 1469.6 | 1493.8 | 1502.8 | 1490.8 | 1475.7 | 1451.5 | 1424.4 | 1403.3 | 1367.0 |
| 27.5° | 1505.9 | 1520.9 | 1539.0 | 1551.1 | 1536.0 | 1527.0 | 1514.9 | 1487.7 | 1466.6 | 1448.5 | 1397.2 |
| 30°   | 1605.4 | 1587.3 | 1599.4 | 1605.4 | 1578.3 | 1584.3 | 1551.1 | 1527.0 | 1502.8 | 1502.8 | 1445.5 |
| 32.5° | 1665.8 | 1680.9 | 1668.8 | 1665.8 | 1644.7 | 1641.7 | 1620.5 | 1593.4 | 1578.3 | 1596.4 | 1517.9 |
| 35°   | 1771.4 | 1762.4 | 1762.4 | 1759.3 | 1735.2 | 1720.1 | 1720.1 | 1671.8 | 1686.9 | 1726.2 | 1629.6 |
| 37.5° | 1825.7 | 1822.7 | 1840.8 | 1855.9 | 1831.8 | 1840.8 | 1831.8 | 1810.6 | 1816.7 | 1886.1 | 1768.4 |
| 40°   | 1880.1 | 1901.2 | 1937.4 | 1943.4 | 1958.5 | 1970.6 | 1964.6 | 1961.5 | 1985.7 | 2097.3 | 1955.5 |
| 42.5° | 1931.4 | 1949.5 | 2003.8 | 2052.1 | 2088.3 | 2127.5 | 2130.5 | 2130.5 | 2209.0 | 2368.9 | 2181.8 |
| 45°   | 1997.7 | 2012.8 | 2088.3 | 2184.8 | 2245.2 | 2272.4 | 2296.5 | 2323.7 | 2429.3 | 2619.4 | 2423.2 |
| 47.5° | 2088.3 | 2100.4 | 2190.9 | 2311.6 | 2429.3 | 2444.4 | 2492.7 | 2522.8 | 2682.8 | 2875.9 | 2670.7 |
| 50°   | 2218.0 | 2209.0 | 2281.4 | 2456.4 | 2571.1 | 2643.5 | 2713.0 | 2767.3 | 2924.2 | 3135.4 | 2863.8 |
| 52.5° | 2323.7 | 2323.7 | 2378.0 | 2610.3 | 2767.3 | 2836.7 | 2909.1 | 2984.5 | 3165.6 | 3395.0 | 3020.8 |
| 55°   | 2504.7 | 2486.6 | 2519.8 | 2761.2 | 2987.6 | 3054.0 | 3192.8 | 3256.1 | 3431.2 | 3588.1 | 3153.5 |
| 57.5° | 2628.5 | 2637.5 | 2676.7 | 2960.4 | 3247.1 | 3328.6 | 3467.4 | 3512.7 | 3666.6 | 3790.3 | 3250.1 |
| 60°   | 2791.4 | 2761.2 | 2845.7 | 3180.7 | 3533.8 | 3648.5 | 3763.1 | 3790.3 | 3905.0 | 3920.1 | 3295.4 |
| 62.5° | 2948.3 | 2942.3 | 3014.7 | 3401.0 | 3841.6 | 3923.1 | 4040.8 | 4070.9 | 4119.2 | 4022.7 | 3232.0 |
| 65°   | 3044.9 | 3084.1 | 3219.9 | 3642.4 | 4191.6 | 4282.2 | 4399.9 | 4339.5 | 4285.2 | 3932.1 | 2921.2 |
| 67.5° | 3177.7 | 3195.8 | 3404.0 | 3905.0 | 4596.0 | 4731.8 | 4834.4 | 4596.0 | 4191.6 | 3560.9 | 2459.5 |
| 70°   | 3207.9 | 3256.1 | 3527.7 | 4179.6 | 5012.5 | 5151.3 | 5157.3 | 4508.5 | 3850.6 | 2897.0 | 1783.5 |
| 72.5° | 3075.1 | 3108.3 | 3491.5 | 4294.3 | 5250.9 | 5353.5 | 5042.7 | 4077.0 | 3050.9 | 1825.7 | 971.7  |
| 75°   | 2586.2 | 2679.8 | 3038.9 | 3941.2 | 4813.3 | 4774.1 | 4273.1 | 3111.3 | 1831.8 | 808.8  | 410.4  |
| 77.5° | 1801.6 | 1804.6 | 2178.8 | 2866.9 | 3603.2 | 3594.1 | 3047.9 | 1804.6 | 784.6  | 325.9  | 241.4  |
| 80°   | 799.7  | 857.0  | 1083.4 | 1545.1 | 2187.9 | 2187.9 | 1777.5 | 896.3  | 392.3  | 211.2  | 166.0  |
| 82.5° | 470.8  | 488.9  | 579.4  | 721.2  | 1065.3 | 1122.6 | 851.0  | 597.5  | 268.6  | 132.8  | 102.6  |
| 85°   | 347.0  | 377.2  | 431.5  | 434.6  | 504.0  | 513.0  | 470.8  | 519.1  | 184.1  | 72.4   | 84.5   |
| 87.5° | 259.5  | 277.6  | 344.0  | 286.7  | 268.6  | 253.5  | 289.7  | 531.1  | 69.4   | 36.2   | 27.2   |
| 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: P671576

CATALOG NUMBER: CCP-SA-2D-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 |
| 2.5°  | 1391.2 | 1391.2 | 1385.1 | 1373.1 | 1373.1 | 1348.9 | 1355.0 | 1361.0 | 1345.9 | 1345.9 | 1348.9 |
| 5°    | 1370.1 | 1358.0 | 1342.9 | 1324.8 | 1312.7 | 1279.5 | 1273.5 | 1252.4 | 1249.3 | 1243.3 | 1234.3 |
| 7.5°  | 1327.8 | 1309.7 | 1282.5 | 1255.4 | 1216.2 | 1186.0 | 1149.8 | 1119.6 | 1107.5 | 1098.5 | 1095.4 |
| 10°   | 1288.6 | 1285.6 | 1240.3 | 1186.0 | 1125.6 | 1068.3 | 1014.0 | 974.7  | 950.6  | 935.5  | 932.5  |
| 12.5° | 1288.6 | 1264.4 | 1201.1 | 1125.6 | 1038.1 | 953.6  | 884.2  | 829.9  | 796.7  | 772.5  | 763.5  |
| 15°   | 1282.5 | 1258.4 | 1173.9 | 1059.2 | 959.6  | 845.0  | 748.4  | 691.1  | 642.8  | 618.6  | 621.7  |
| 17.5° | 1288.6 | 1252.4 | 1134.7 | 1010.9 | 872.1  | 748.4  | 633.7  | 564.3  | 516.0  | 497.9  | 494.9  |
| 20°   | 1291.6 | 1246.3 | 1104.5 | 944.6  | 781.6  | 642.8  | 534.1  | 467.8  | 431.5  | 419.5  | 419.5  |
| 22.5° | 1285.6 | 1228.2 | 1059.2 | 866.1  | 703.1  | 555.3  | 464.7  | 407.4  | 383.3  | 368.2  | 374.2  |
| 25°   | 1312.7 | 1225.2 | 1017.0 | 799.7  | 612.6  | 482.8  | 413.4  | 371.2  | 356.1  | 347.0  | 350.1  |
| 27.5° | 1318.8 | 1225.2 | 983.8  | 724.3  | 534.1  | 428.5  | 374.2  | 347.0  | 335.0  | 328.9  | 325.9  |
| 30°   | 1342.9 | 1231.2 | 944.6  | 648.8  | 470.8  | 386.3  | 344.0  | 328.9  | 319.9  | 316.9  | 316.9  |
| 32.5° | 1409.3 | 1249.3 | 902.3  | 585.4  | 416.4  | 350.1  | 322.9  | 310.8  | 304.8  | 301.8  | 304.8  |
| 35°   | 1487.7 | 1297.6 | 857.0  | 519.1  | 377.2  | 325.9  | 304.8  | 295.7  | 292.7  | 292.7  | 292.7  |
| 37.5° | 1608.5 | 1370.1 | 817.8  | 464.7  | 344.0  | 301.8  | 286.7  | 283.7  | 280.7  | 283.7  | 283.7  |
| 40°   | 1747.3 | 1448.5 | 781.6  | 422.5  | 319.9  | 286.7  | 271.6  | 271.6  | 268.6  | 271.6  | 274.6  |
| 42.5° | 1907.2 | 1545.1 | 745.4  | 380.2  | 298.8  | 274.6  | 262.5  | 259.5  | 256.5  | 262.5  | 265.6  |
| 45°   | 2127.5 | 1677.9 | 721.2  | 356.1  | 283.7  | 262.5  | 250.5  | 250.5  | 247.5  | 247.5  | 253.5  |
| 47.5° | 2311.6 | 1804.6 | 721.2  | 332.0  | 274.6  | 253.5  | 241.4  | 241.4  | 235.4  | 238.4  | 238.4  |
| 50°   | 2465.5 | 1913.3 | 736.3  | 325.9  | 262.5  | 244.4  | 235.4  | 229.3  | 226.3  | 226.3  | 226.3  |
| 52.5° | 2568.1 | 1979.6 | 748.4  | 319.9  | 256.5  | 232.4  | 226.3  | 223.3  | 217.3  | 214.3  | 217.3  |
| 55°   | 2670.7 | 2024.9 | 751.4  | 319.9  | 247.5  | 220.3  | 214.3  | 214.3  | 208.2  | 205.2  | 205.2  |
| 57.5° | 2709.9 | 2006.8 | 709.2  | 313.8  | 241.4  | 211.2  | 205.2  | 202.2  | 199.2  | 196.2  | 196.2  |
| 60°   | 2691.8 | 1940.4 | 615.6  | 298.8  | 235.4  | 205.2  | 193.1  | 193.1  | 193.1  | 187.1  | 190.1  |
| 62.5° | 2568.1 | 1714.1 | 494.9  | 274.6  | 226.3  | 193.1  | 181.1  | 187.1  | 187.1  | 184.1  | 184.1  |
| 65°   | 2242.2 | 1415.3 | 401.4  | 253.5  | 214.3  | 184.1  | 172.0  | 181.1  | 184.1  | 181.1  | 178.0  |
| 67.5° | 1792.5 | 1089.4 | 332.0  | 229.3  | 199.2  | 169.0  | 159.9  | 169.0  | 172.0  | 169.0  | 169.0  |
| 70°   | 1231.2 | 703.1  | 268.6  | 205.2  | 178.0  | 153.9  | 144.9  | 150.9  | 150.9  | 153.9  | 153.9  |
| 72.5° | 636.7  | 380.2  | 220.3  | 175.0  | 153.9  | 138.8  | 129.8  | 129.8  | 126.7  | 126.7  | 126.7  |
| 75°   | 316.9  | 259.5  | 184.1  | 147.9  | 129.8  | 117.7  | 111.7  | 105.6  | 105.6  | 105.6  | 105.6  |
| 77.5° | 220.3  | 199.2  | 150.9  | 117.7  | 105.6  | 96.6   | 96.6   | 87.5   | 87.5   | 87.5   | 87.5   |
| 80°   | 166.0  | 156.9  | 114.7  | 90.5   | 81.5   | 75.4   | 75.4   | 72.4   | 72.4   | 69.4   | 69.4   |
| 82.5° | 117.7  | 126.7  | 87.5   | 66.4   | 60.4   | 57.3   | 57.3   | 54.3   | 54.3   | 48.3   | 48.3   |
| 85°   | 93.6   | 105.6  | 66.4   | 48.3   | 45.3   | 39.2   | 39.2   | 36.2   | 36.2   | 33.2   | 30.2   |
| 87.5° | 27.2   | 57.3   | 27.2   | 18.1   | 18.1   | 18.1   | 18.1   | 15.1   | 15.1   | 12.1   | 12.1   |
| 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)