

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: P674470

Luminaire Tested: **CCP-SA-1B-835-U-AFL-HSS**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P674470  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-1B-835-U-AFL-HSS  
Description: INVUE CLEAR CURVE POLE MOUNT Light Square Luminaire @450mA w/ AFL distribution lens and House Side Shield  
Light Source: (16) 3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

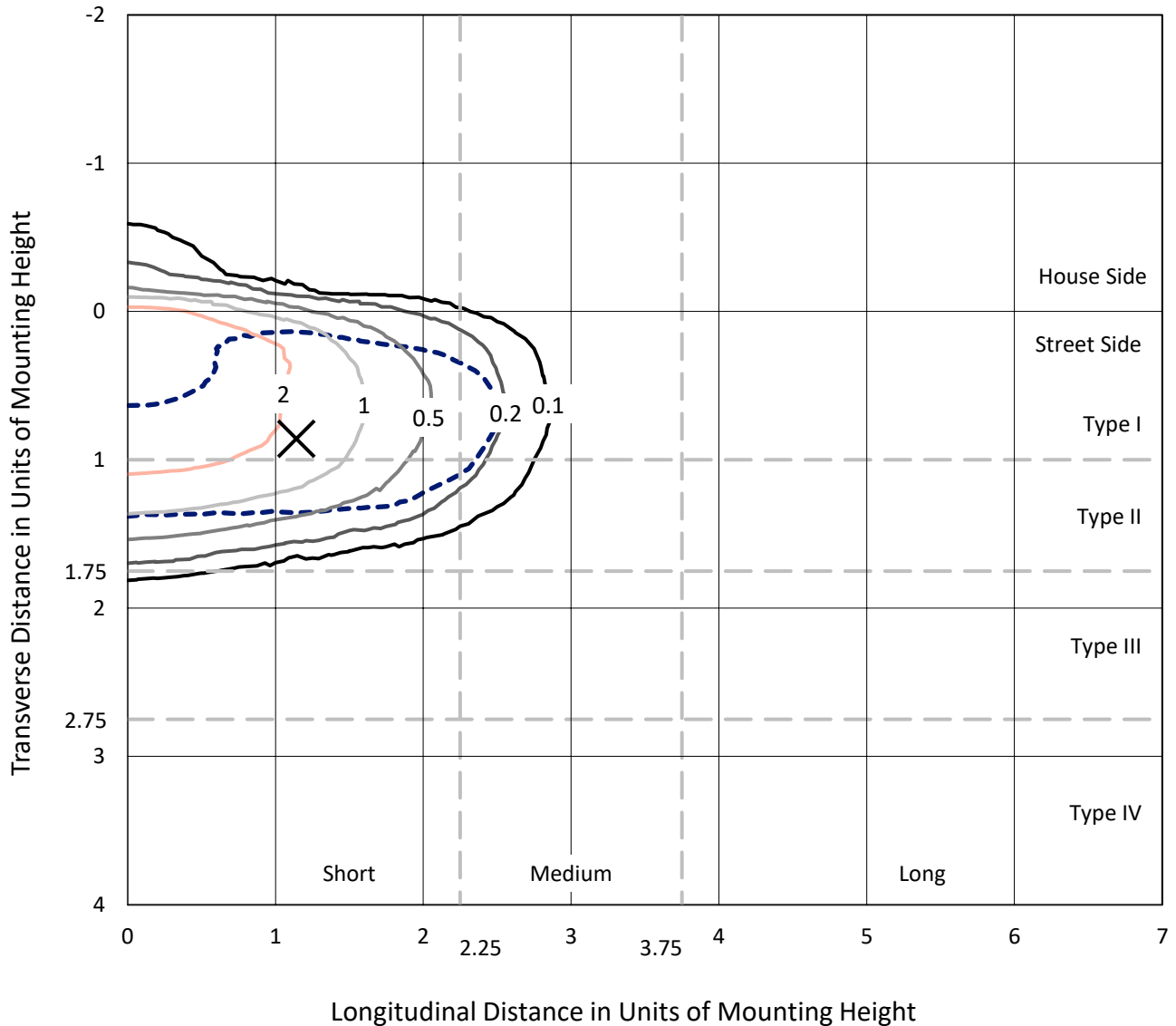
Lumens per Lamp: N/A  
Luminaire Lumens: 2359.9 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G0

Input Watts (W): 24  
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: P674470  
 CATALOG NUMBER: CCP-SA-1B-835-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

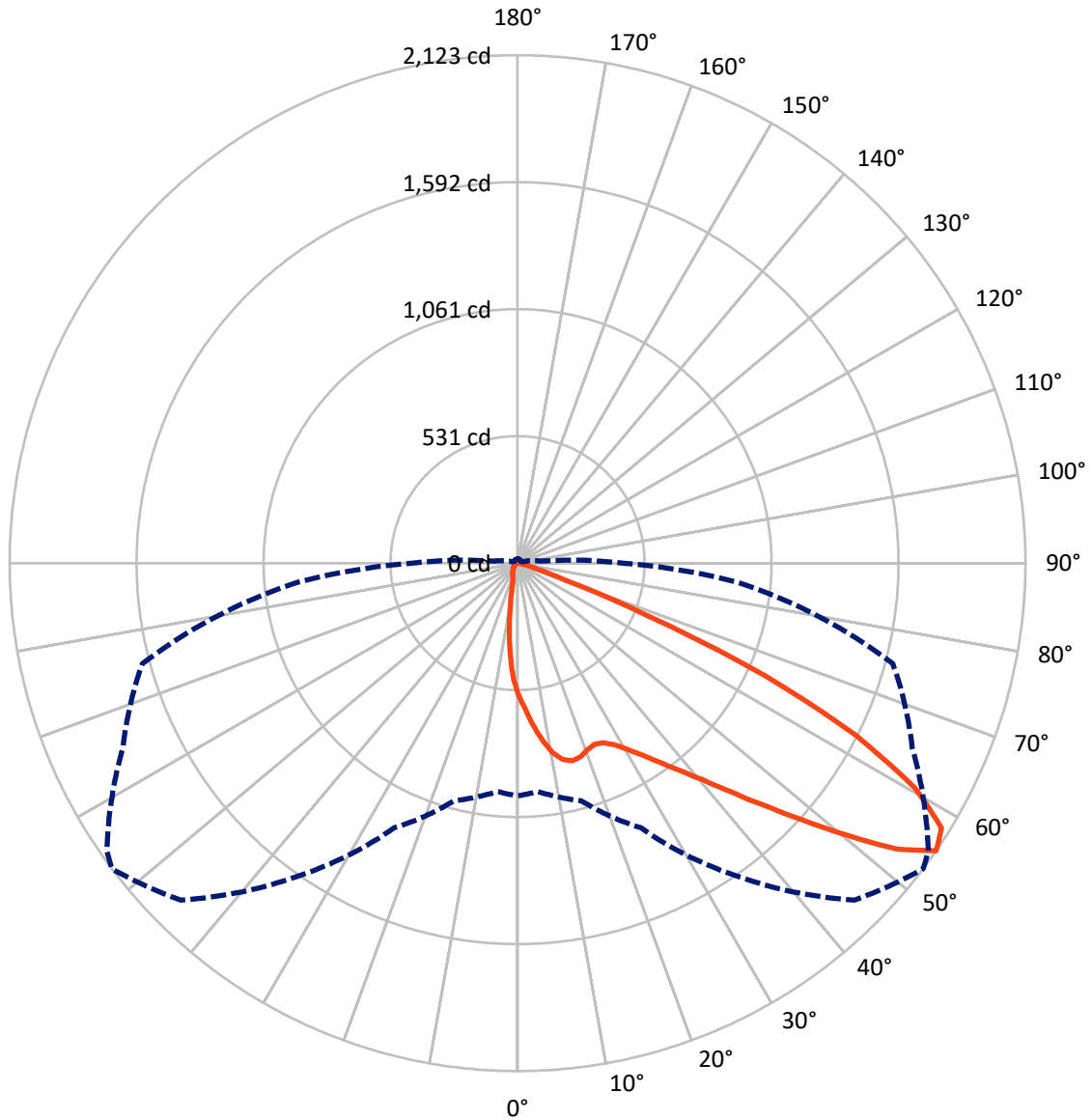
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.6 fc  
 Type II - Short - N/A

REPORT NUMBER: P674470  
CATALOG NUMBER: CCP-SA-1B-835-U-AFL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P674470  
 CATALOG NUMBER: CCP-SA-1B-835-U-AFL-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 127.6    | 0.0    | 127.6  |
|                    | % Fixture | 5.4      | 0.0    | 5.4    |
| <b>Street Side</b> | Lumens    | 2232.3   | 0.0    | 2232.3 |
|                    | % Fixture | 94.6     | 0.0    | 94.6   |
| <b>Total</b>       | Lumens    | 2359.9   | 0.0    | 2359.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 49.4   | 2.1       |
| 10°-20°   | 129.0  | 5.5       |
| 20°-30°   | 215.9  | 9.2       |
| 30°-40°   | 353.3  | 15.0      |
| 40°-50°   | 567.9  | 24.1      |
| 50°-60°   | 641.2  | 27.2      |
| 60°-70°   | 342.0  | 14.5      |
| 70°-80°   | 56.2   | 2.4       |
| 80°-90°   | 5.0    | 0.2       |
| 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°    | 2359.9 | 100.0     |
| 0°-180°   | 2359.9 | 100.0     |

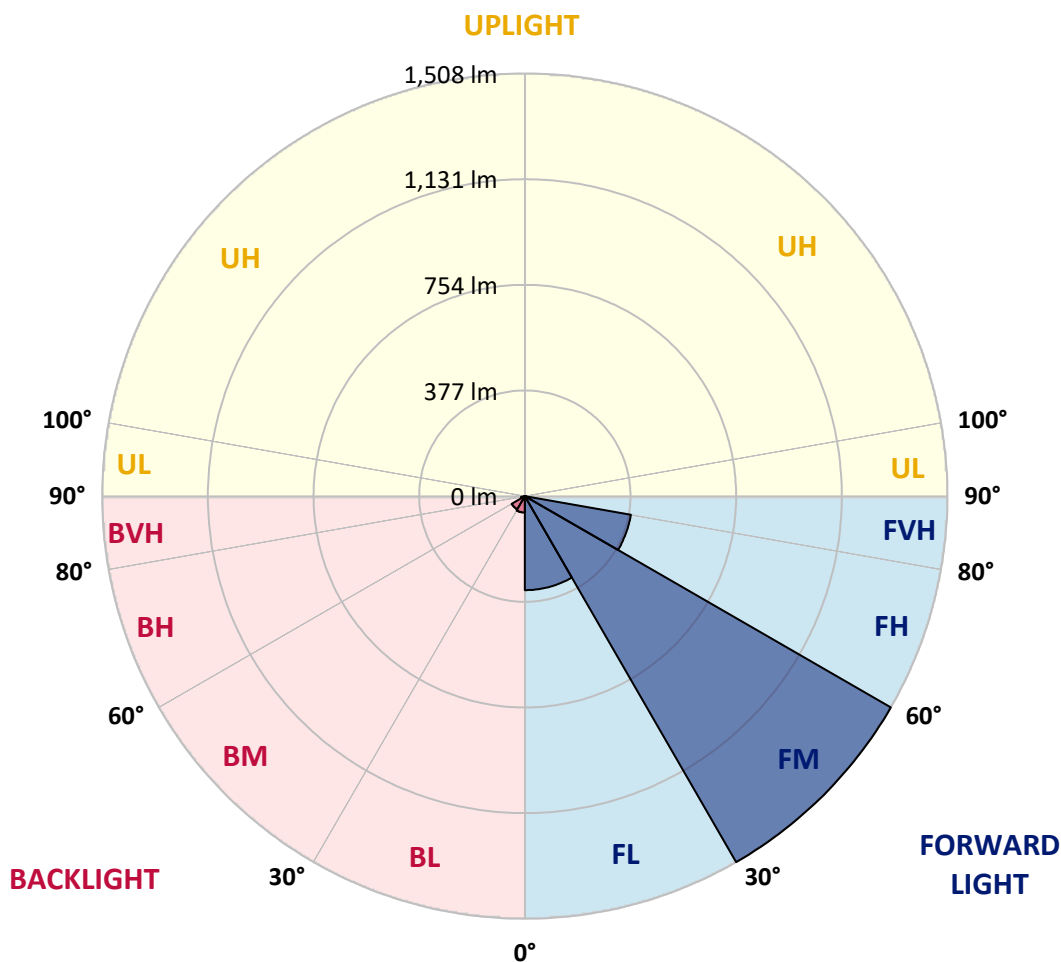


REPORT NUMBER: P674470  
 CATALOG NUMBER: CCP-SA-1B-835-U-AFL-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 335.5  | 14.2      |                         |      |        |
| FM (30°-60°)   | 1508.0 | 63.9      |                         |      |        |
| FH (60°-80°)   | 384.2  | 16.3      |                         |      | G0/660 |
| FVH (80°-90°)  | 4.6    | 0.2       |                         |      | G0/10  |
| BL (0°-30°)    | 58.9   | 2.5       | B0/110                  |      |        |
| BM (30°-60°)   | 54.3   | 2.3       | B0/220                  |      |        |
| BH (60°-80°)   | 13.9   | 0.6       | B0/110                  |      | G0/110 |
| BVH (80°-90°)  | 0.4    | 0.0       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B0-U0-G0**  
 Type II Short





REPORT NUMBER: P674470  
 CATALOG NUMBER: CCP-SA-1B-835-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 53°    | 55°    | 65°    | 75°    | 85°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 552.3  | 552.3  | 552.3  | 552.3  | 552.3  | 552.3  | 552.3  | 552.3  | 552.3  | 552.3  | 552.3 |
| 2.5°  | 662.3  | 658.3  | 660.6  | 654.6  | 643.7  | 630.0  | 609.5  | 610.6  | 594.4  | 580.4  | 561.0 |
| 5°    | 771.6  | 767.5  | 766.3  | 751.0  | 735.7  | 711.1  | 680.7  | 675.7  | 646.1  | 610.4  | 569.6 |
| 7.5°  | 829.3  | 825.8  | 828.5  | 822.9  | 807.8  | 785.5  | 747.0  | 743.3  | 697.6  | 643.4  | 583.5 |
| 10°   | 802.9  | 801.6  | 813.0  | 826.2  | 838.4  | 835.7  | 804.9  | 799.1  | 747.9  | 679.8  | 597.8 |
| 12.5° | 731.7  | 735.7  | 750.1  | 774.5  | 812.2  | 847.5  | 842.6  | 843.6  | 799.1  | 719.3  | 613.5 |
| 15°   | 690.0  | 694.7  | 703.0  | 715.6  | 761.9  | 824.8  | 856.8  | 867.2  | 848.4  | 763.4  | 632.1 |
| 17.5° | 686.5  | 690.4  | 691.6  | 696.4  | 723.5  | 788.2  | 851.0  | 870.7  | 892.2  | 804.9  | 653.0 |
| 20°   | 713.5  | 715.2  | 714.2  | 710.6  | 720.4  | 768.3  | 832.8  | 861.0  | 928.4  | 849.2  | 671.4 |
| 22.5° | 764.6  | 762.1  | 759.0  | 746.0  | 745.4  | 773.9  | 822.9  | 852.3  | 949.9  | 885.8  | 683.6 |
| 25°   | 827.9  | 822.7  | 818.4  | 800.0  | 791.3  | 803.1  | 831.8  | 855.4  | 969.3  | 921.3  | 692.2 |
| 27.5° | 896.9  | 898.6  | 887.8  | 863.0  | 849.4  | 846.9  | 859.3  | 876.9  | 988.1  | 953.2  | 697.0 |
| 30°   | 970.8  | 971.6  | 957.5  | 931.9  | 919.5  | 903.6  | 902.7  | 913.3  | 1008.4 | 989.8  | 701.5 |
| 32.5° | 1054.9 | 1057.2 | 1034.2 | 1007.6 | 985.8  | 965.2  | 955.0  | 963.9  | 1044.8 | 1037.5 | 710.9 |
| 35°   | 1176.5 | 1166.6 | 1135.5 | 1095.2 | 1064.4 | 1037.3 | 1021.8 | 1027.6 | 1093.2 | 1094.8 | 729.5 |
| 37.5° | 1301.8 | 1300.8 | 1266.4 | 1208.3 | 1157.9 | 1124.2 | 1097.7 | 1107.2 | 1161.2 | 1171.5 | 759.2 |
| 40°   | 1418.6 | 1421.3 | 1391.5 | 1340.9 | 1275.9 | 1218.0 | 1189.7 | 1196.1 | 1251.5 | 1264.6 | 795.4 |
| 42.5° | 1494.9 | 1493.5 | 1495.7 | 1481.3 | 1416.1 | 1347.9 | 1305.3 | 1308.8 | 1356.6 | 1363.4 | 840.7 |
| 45°   | 1530.1 | 1524.5 | 1543.9 | 1589.8 | 1564.0 | 1492.2 | 1443.6 | 1439.3 | 1465.5 | 1463.7 | 881.8 |
| 47.5° | 1499.7 | 1489.3 | 1534.0 | 1644.6 | 1694.6 | 1672.9 | 1603.5 | 1595.6 | 1573.3 | 1558.4 | 924.6 |
| 50°   | 1348.5 | 1344.0 | 1439.5 | 1618.5 | 1776.7 | 1840.0 | 1788.9 | 1759.8 | 1669.4 | 1628.3 | 947.2 |
| 52.5° | 1204.8 | 1192.2 | 1256.7 | 1485.6 | 1740.1 | 1974.4 | 1984.9 | 1933.0 | 1749.2 | 1648.3 | 939.5 |
| 55°   | 973.2  | 957.7  | 1028.0 | 1220.5 | 1595.2 | 1991.5 | 2122.6 | 2095.6 | 1819.1 | 1623.5 | 924.0 |
| 57.5° | 591.1  | 575.8  | 679.2  | 874.2  | 1275.7 | 1848.9 | 2088.7 | 2116.2 | 1872.9 | 1596.2 | 913.9 |
| 60°   | 248.5  | 238.8  | 279.3  | 417.2  | 814.6  | 1519.5 | 1908.8 | 1977.5 | 1883.0 | 1558.8 | 918.0 |
| 62.5° | 129.2  | 124.9  | 127.2  | 167.1  | 329.4  | 1000.5 | 1588.8 | 1708.3 | 1780.9 | 1542.3 | 922.2 |
| 65°   | 97.0   | 93.7   | 86.4   | 91.8   | 128.0  | 432.5  | 1141.7 | 1301.8 | 1559.4 | 1500.3 | 894.3 |
| 67.5° | 79.6   | 76.5   | 71.3   | 69.7   | 75.5   | 150.1  | 582.9  | 790.9  | 1222.0 | 1321.4 | 794.2 |
| 70°   | 63.5   | 62.4   | 60.8   | 57.7   | 56.7   | 72.8   | 209.0  | 322.3  | 808.0  | 931.9  | 575.6 |
| 72.5° | 52.9   | 53.1   | 51.3   | 48.6   | 44.9   | 46.9   | 83.3   | 110.2  | 391.0  | 446.8  | 241.1 |
| 75°   | 44.2   | 44.2   | 44.9   | 41.1   | 37.4   | 32.3   | 46.3   | 53.8   | 125.5  | 103.2  | 51.5  |
| 77.5° | 34.7   | 35.1   | 37.8   | 34.7   | 30.0   | 20.3   | 25.2   | 28.7   | 37.2   | 29.8   | 18.8  |
| 80°   | 27.7   | 27.3   | 26.3   | 31.2   | 26.9   | 14.3   | 12.0   | 13.2   | 17.4   | 14.3   | 9.3   |
| 82.5° | 19.4   | 19.2   | 18.4   | 21.1   | 20.9   | 10.5   | 7.9    | 8.1    | 10.5   | 9.1    | 5.8   |
| 85°   | 4.8    | 5.6    | 11.8   | 9.9    | 8.7    | 6.2    | 4.8    | 5.2    | 6.8    | 6.0    | 3.1   |
| 87.5° | 2.1    | 2.1    | 5.4    | 6.4    | 4.1    | 2.7    | 2.1    | 2.3    | 3.5    | 3.5    | 1.9   |
| 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: P674470  
 CATALOG NUMBER: CCP-SA-1B-835-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 |
| 2.5°  | 554.1 | 540.7 | 523.7 | 505.7 | 487.3 | 465.2 | 451.2 | 439.6 | 430.5 | 423.5 | 421.0 |
| 5°    | 556.2 | 530.3 | 491.9 | 444.1 | 395.5 | 350.1 | 314.9 | 288.8 | 267.3 | 255.6 | 250.4 |
| 7.5°  | 556.0 | 521.7 | 452.2 | 372.2 | 293.2 | 227.6 | 181.1 | 152.4 | 133.2 | 125.3 | 120.5 |
| 10°   | 555.8 | 510.3 | 406.9 | 292.4 | 196.0 | 131.9 | 97.2  | 81.1  | 74.0  | 71.3  | 70.9  |
| 12.5° | 561.8 | 497.3 | 356.3 | 215.2 | 123.0 | 82.1  | 67.6  | 63.9  | 62.2  | 61.4  | 61.2  |
| 15°   | 565.1 | 485.3 | 302.9 | 152.0 | 82.9  | 64.9  | 60.4  | 58.7  | 58.1  | 57.7  | 57.5  |
| 17.5° | 568.6 | 466.7 | 252.3 | 110.0 | 66.4  | 58.9  | 56.2  | 55.2  | 54.8  | 54.8  | 54.8  |
| 20°   | 569.2 | 446.6 | 202.0 | 81.1  | 58.9  | 55.0  | 52.3  | 51.3  | 50.7  | 50.2  | 50.2  |
| 22.5° | 564.7 | 422.8 | 158.8 | 65.8  | 54.6  | 51.3  | 48.4  | 46.7  | 45.7  | 45.5  | 45.5  |
| 25°   | 553.3 | 389.1 | 121.8 | 57.7  | 51.1  | 47.6  | 44.0  | 42.2  | 41.4  | 41.4  | 41.4  |
| 27.5° | 537.0 | 349.4 | 94.1  | 51.3  | 46.5  | 43.0  | 39.9  | 38.3  | 38.0  | 37.8  | 38.0  |
| 30°   | 518.4 | 311.2 | 72.0  | 45.5  | 41.1  | 38.3  | 35.8  | 34.9  | 35.4  | 35.4  | 35.6  |
| 32.5° | 499.7 | 272.9 | 56.2  | 40.9  | 36.4  | 33.9  | 32.7  | 32.7  | 33.3  | 33.3  | 33.3  |
| 35°   | 483.8 | 235.5 | 47.1  | 37.2  | 33.1  | 31.0  | 30.4  | 31.0  | 31.4  | 31.6  | 31.6  |
| 37.5° | 474.9 | 203.2 | 41.6  | 33.9  | 30.4  | 28.7  | 28.5  | 29.2  | 30.0  | 30.6  | 30.8  |
| 40°   | 471.6 | 178.4 | 38.3  | 31.4  | 27.9  | 26.9  | 26.7  | 27.5  | 28.9  | 30.0  | 30.2  |
| 42.5° | 471.8 | 156.5 | 35.4  | 28.9  | 26.3  | 24.8  | 24.8  | 26.1  | 27.5  | 28.5  | 28.5  |
| 45°   | 473.3 | 137.7 | 32.5  | 26.5  | 24.8  | 22.3  | 22.5  | 24.2  | 25.2  | 26.3  | 26.3  |
| 47.5° | 474.5 | 122.6 | 29.4  | 23.8  | 21.5  | 20.3  | 20.7  | 21.9  | 23.4  | 25.0  | 25.0  |
| 50°   | 467.3 | 111.9 | 26.3  | 20.9  | 18.8  | 18.4  | 19.2  | 20.3  | 22.3  | 24.0  | 24.2  |
| 52.5° | 449.9 | 102.1 | 23.6  | 18.6  | 17.0  | 17.2  | 18.2  | 18.8  | 20.5  | 20.7  | 20.9  |
| 55°   | 442.3 | 97.2  | 21.5  | 17.0  | 15.5  | 16.1  | 16.7  | 17.0  | 16.5  | 15.5  | 15.5  |
| 57.5° | 440.6 | 93.9  | 19.4  | 15.3  | 14.3  | 15.1  | 14.9  | 13.6  | 12.4  | 11.2  | 11.0  |
| 60°   | 442.3 | 89.3  | 17.8  | 13.2  | 13.0  | 13.2  | 12.6  | 10.3  | 8.7   | 7.9   | 7.4   |
| 62.5° | 432.8 | 82.7  | 16.3  | 11.4  | 11.4  | 11.2  | 9.5   | 7.0   | 5.6   | 5.0   | 4.8   |
| 65°   | 401.3 | 69.7  | 14.9  | 9.5   | 9.3   | 8.9   | 6.4   | 4.8   | 3.7   | 3.1   | 2.9   |
| 67.5° | 339.5 | 54.0  | 13.4  | 7.9   | 7.4   | 6.2   | 4.1   | 3.1   | 2.1   | 1.9   | 1.7   |
| 70°   | 231.6 | 33.5  | 11.4  | 6.2   | 5.6   | 3.9   | 2.5   | 1.9   | 1.2   | 1.0   | 0.8   |
| 72.5° | 83.9  | 19.4  | 9.5   | 4.8   | 3.7   | 2.5   | 1.4   | 0.8   | 0.6   | 0.6   | 0.4   |
| 75°   | 19.8  | 13.6  | 7.2   | 3.5   | 2.5   | 1.4   | 0.8   | 0.6   | 0.4   | 0.4   | 0.2   |
| 77.5° | 9.1   | 10.5  | 4.8   | 2.1   | 1.7   | 1.0   | 0.6   | 0.4   | 0.2   | 0.2   | 0.0   |
| 80°   | 5.2   | 7.4   | 2.3   | 1.4   | 1.2   | 0.8   | 0.4   | 0.2   | 0.2   | 0.0   | 0.0   |
| 82.5° | 2.7   | 4.1   | 1.7   | 1.2   | 1.0   | 0.6   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 1.9   | 2.1   | 1.2   | 1.0   | 0.8   | 0.6   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.4   | 1.4   | 1.2   | 1.0   | 0.8   | 0.6   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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)