

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: P677078

Luminaire Tested: **CCW-SA-2B-850-U-SL3-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677078
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2B-850-U-SL3-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
SL3 distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

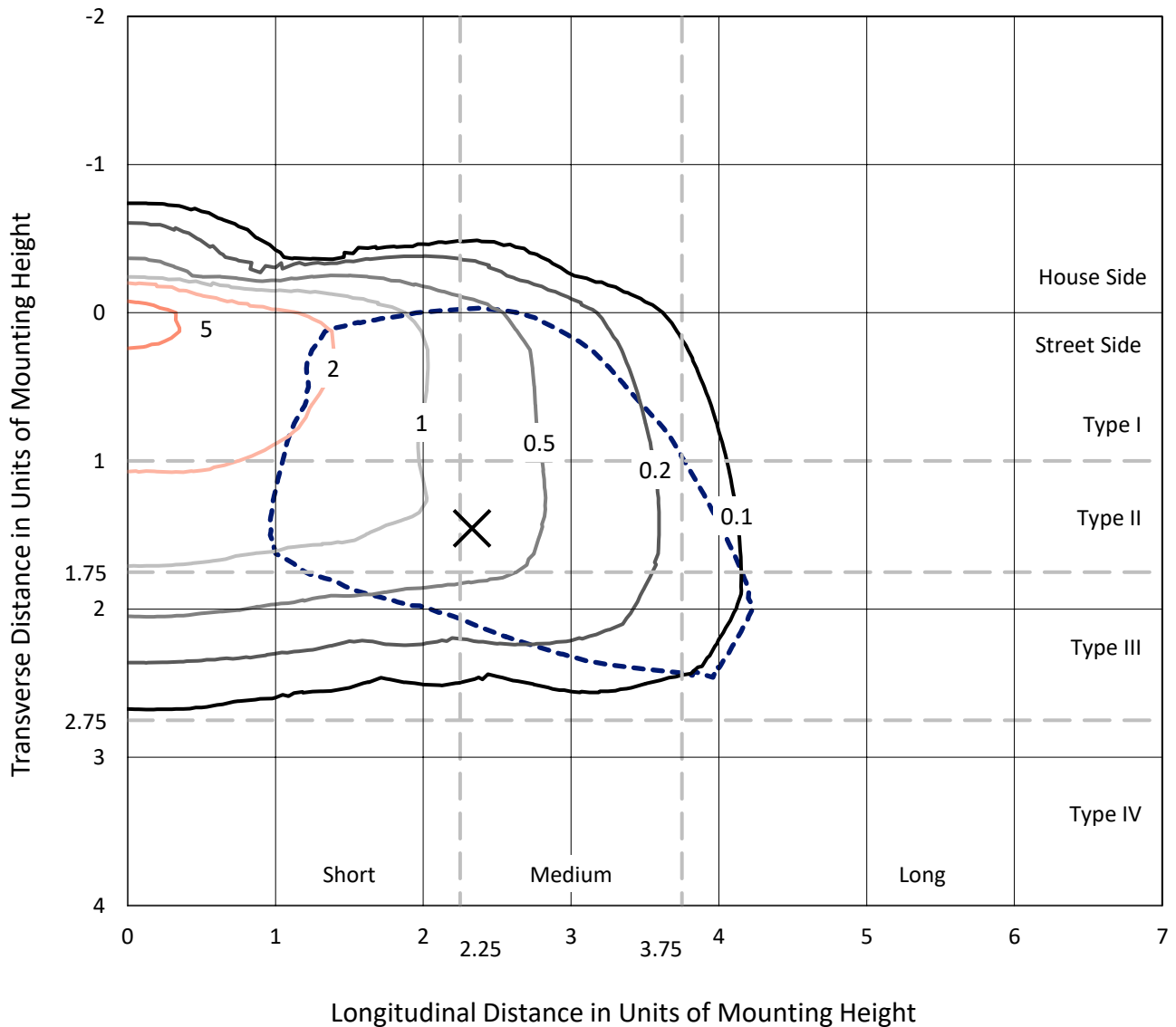
Lumens per Lamp: N/A
Luminaire Lumens: 4979.9 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 46
Input Voltage (V): 120
Input Current (A_{in}): 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

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Iso-Footcandle Lines of Horizontal Illumination

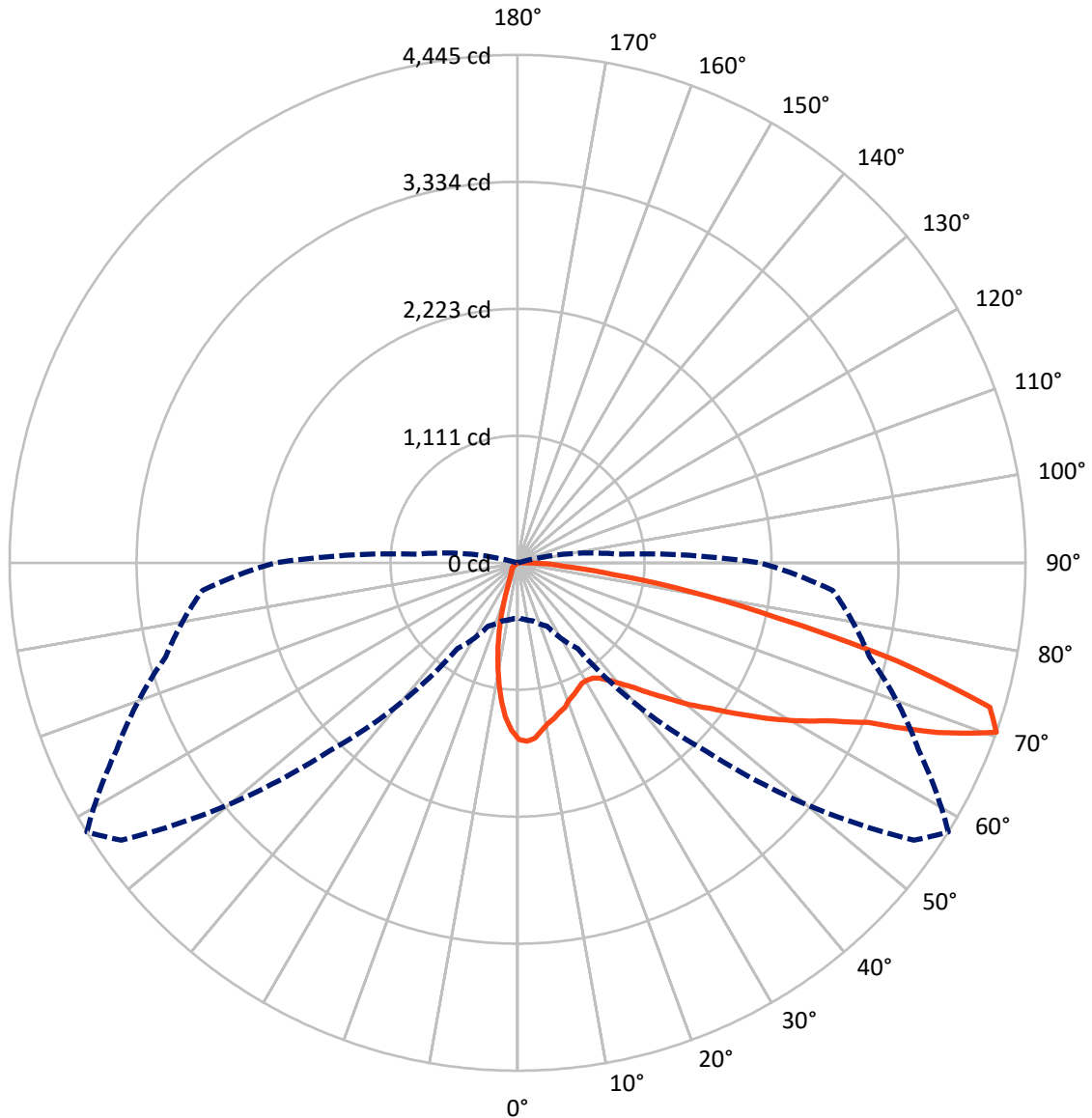
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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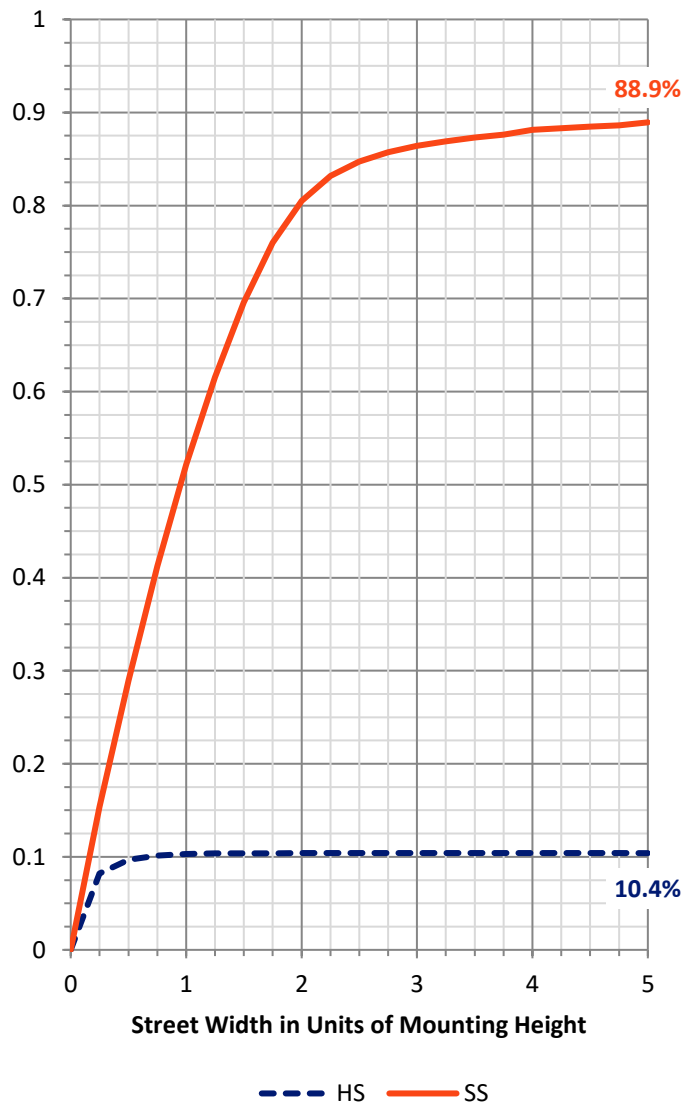
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 521.5 | 0.0 | 521.5 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 4458.4 | 0.0 | 4458.4 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 4979.9 | 0.0 | 4979.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 126.1 | 2.5 |
| 10°-20° | 262.6 | 5.3 |
| 20°-30° | 351.6 | 7.1 |
| 30°-40° | 475.3 | 9.5 |
| 40°-50° | 682.2 | 13.7 |
| 50°-60° | 1005.3 | 20.2 |
| 60°-70° | 1226.2 | 24.6 |
| 70°-80° | 748.8 | 15.0 |
| 80°-90° | 101.7 | 2.0 |
| 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° | 4979.9 | 100.0 |
| 0°-180° | 4979.9 | 100.0 |

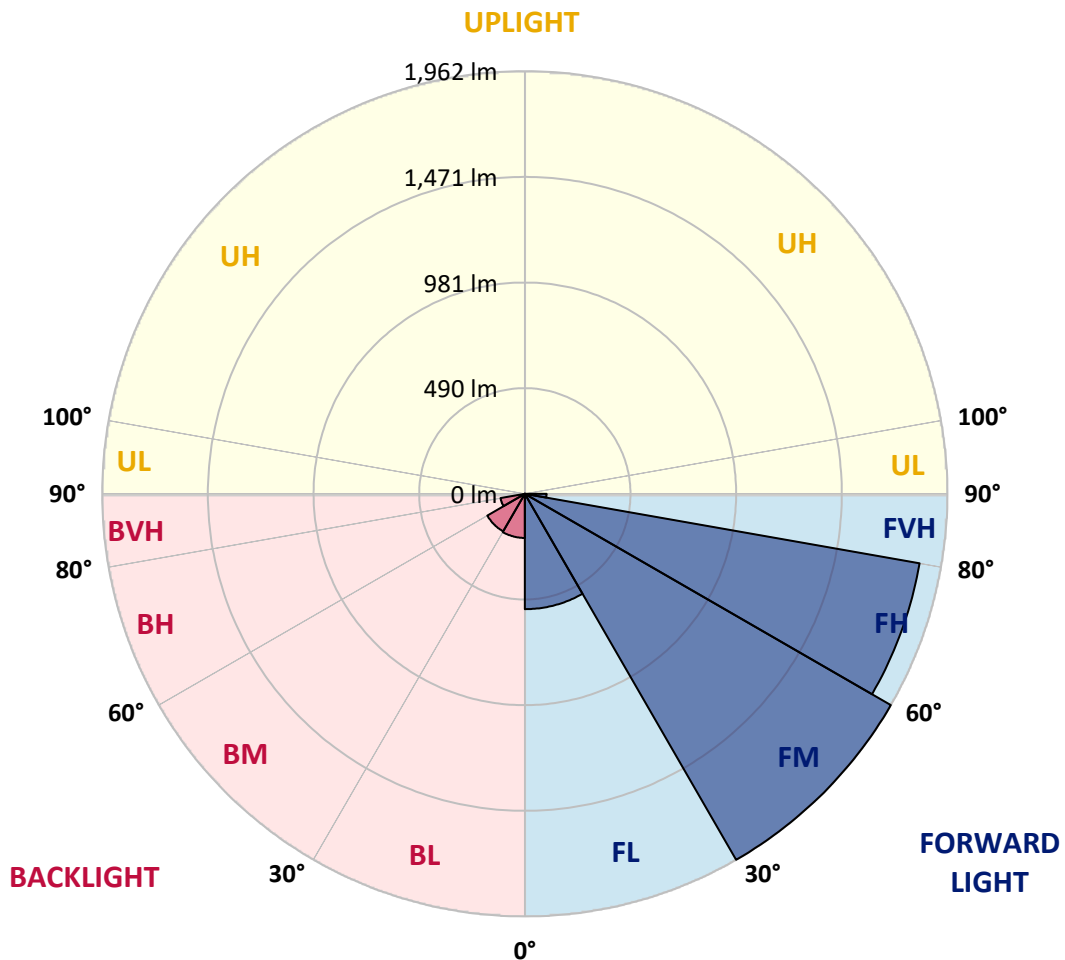


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 535.4 | 10.8 | | | |
| FM (30°-60°) | 1961.5 | 39.4 | | | |
| FH (60°-80°) | 1860.7 | 37.4 | | | G2/5000 |
| FVH (80°-90°) | 100.7 | 2.0 | | | G2/225 |
| BL (0°-30°) | 204.9 | 4.1 | B1/500 | | |
| BM (30°-60°) | 201.3 | 4.0 | B0/220 | | |
| BH (60°-80°) | 114.3 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.0 | 0.0 | | | G0/10 |
| 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





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 |
| 2.5° | 1573.9 | 1579.8 | 1565.7 | 1582.1 | 1566.9 | 1573.9 | 1565.7 | 1563.4 | 1564.6 | 1565.7 | 1556.4 |
| 5° | 1500.4 | 1514.4 | 1520.2 | 1510.9 | 1533.1 | 1529.6 | 1543.6 | 1544.7 | 1538.9 | 1533.1 | 1534.2 |
| 7.5° | 1403.4 | 1417.5 | 1423.3 | 1429.1 | 1451.3 | 1480.5 | 1499.2 | 1487.5 | 1496.9 | 1517.9 | 1486.3 |
| 10° | 1333.4 | 1329.9 | 1328.7 | 1340.4 | 1382.4 | 1407.0 | 1438.5 | 1435.0 | 1458.3 | 1478.2 | 1452.5 |
| 12.5° | 1247.0 | 1240.0 | 1261.0 | 1270.3 | 1307.7 | 1350.9 | 1375.4 | 1401.1 | 1424.5 | 1445.5 | 1416.3 |
| 15° | 1182.8 | 1188.6 | 1196.8 | 1216.6 | 1243.5 | 1300.7 | 1336.9 | 1361.4 | 1403.4 | 1414.0 | 1402.3 |
| 17.5° | 1131.4 | 1136.1 | 1147.7 | 1158.3 | 1192.1 | 1247.0 | 1304.2 | 1333.4 | 1377.8 | 1405.8 | 1369.6 |
| 20° | 1132.6 | 1118.6 | 1118.6 | 1129.1 | 1147.7 | 1213.1 | 1273.8 | 1283.2 | 1343.9 | 1391.8 | 1367.3 |
| 22.5° | 1133.7 | 1129.1 | 1118.6 | 1117.4 | 1125.6 | 1172.3 | 1234.1 | 1255.2 | 1320.6 | 1376.6 | 1347.4 |
| 25° | 1150.1 | 1132.6 | 1133.7 | 1117.4 | 1120.9 | 1144.2 | 1193.3 | 1224.8 | 1299.5 | 1384.8 | 1336.9 |
| 27.5° | 1164.1 | 1172.3 | 1155.9 | 1148.9 | 1129.1 | 1127.9 | 1168.8 | 1195.6 | 1289.0 | 1403.4 | 1343.9 |
| 30° | 1195.6 | 1201.5 | 1201.5 | 1196.8 | 1178.1 | 1151.2 | 1160.6 | 1194.5 | 1268.0 | 1399.9 | 1332.2 |
| 32.5° | 1248.2 | 1237.7 | 1251.7 | 1244.7 | 1220.1 | 1178.1 | 1186.3 | 1203.8 | 1280.9 | 1444.3 | 1350.9 |
| 35° | 1265.7 | 1273.8 | 1292.5 | 1277.3 | 1269.2 | 1244.7 | 1228.3 | 1241.2 | 1299.5 | 1488.7 | 1378.9 |
| 37.5° | 1319.4 | 1307.7 | 1320.6 | 1354.4 | 1362.6 | 1318.2 | 1286.7 | 1305.4 | 1369.6 | 1541.2 | 1404.6 |
| 40° | 1324.1 | 1333.4 | 1356.7 | 1423.3 | 1431.5 | 1412.8 | 1387.1 | 1391.8 | 1439.6 | 1608.9 | 1468.8 |
| 42.5° | 1347.4 | 1357.9 | 1405.8 | 1461.8 | 1506.2 | 1509.7 | 1491.0 | 1491.0 | 1531.9 | 1717.5 | 1540.1 |
| 45° | 1392.9 | 1375.4 | 1437.3 | 1531.9 | 1596.1 | 1608.9 | 1633.5 | 1627.6 | 1660.3 | 1832.0 | 1673.2 |
| 47.5° | 1410.5 | 1416.3 | 1484.0 | 1598.4 | 1672.0 | 1731.5 | 1772.4 | 1773.6 | 1789.9 | 1977.9 | 1846.0 |
| 50° | 1467.7 | 1466.5 | 1548.2 | 1654.5 | 1763.1 | 1871.7 | 1951.1 | 1951.1 | 1949.9 | 2120.4 | 1994.3 |
| 52.5° | 1543.6 | 1541.2 | 1604.3 | 1730.4 | 1871.7 | 2008.3 | 2113.3 | 2116.9 | 2143.7 | 2295.5 | 2164.7 |
| 55° | 1667.3 | 1656.8 | 1717.5 | 1810.9 | 1980.2 | 2146.0 | 2328.2 | 2329.4 | 2308.3 | 2420.4 | 2287.3 |
| 57.5° | 1771.2 | 1770.1 | 1820.3 | 1910.2 | 2101.7 | 2323.5 | 2534.9 | 2566.4 | 2499.8 | 2548.9 | 2385.4 |
| 60° | 1744.4 | 1759.6 | 1863.5 | 1996.6 | 2230.1 | 2545.4 | 2757.9 | 2806.9 | 2700.6 | 2636.4 | 2459.0 |
| 62.5° | 1577.4 | 1612.4 | 1725.7 | 1938.2 | 2338.7 | 2867.6 | 3064.9 | 3042.8 | 2805.7 | 2711.2 | 2548.9 |
| 65° | 1134.9 | 1169.9 | 1310.0 | 1628.8 | 2212.6 | 3095.3 | 3468.9 | 3368.5 | 2992.5 | 2822.1 | 2669.1 |
| 67.5° | 667.9 | 681.9 | 769.4 | 1039.2 | 1654.5 | 2971.5 | 3959.3 | 3967.5 | 3360.3 | 2992.5 | 2877.0 |
| 70° | 482.2 | 492.7 | 526.6 | 613.0 | 916.6 | 2329.4 | 4232.5 | 4445.0 | 3870.6 | 3188.7 | 2767.2 |
| 72.5° | 370.1 | 370.1 | 427.3 | 510.2 | 583.8 | 1395.3 | 3895.1 | 4321.3 | 3981.5 | 3000.7 | 2230.1 |
| 75° | 266.2 | 273.2 | 335.1 | 439.0 | 538.3 | 700.6 | 2869.9 | 3429.2 | 3374.4 | 2432.1 | 1557.6 |
| 77.5° | 153.0 | 156.5 | 235.9 | 367.8 | 505.6 | 481.0 | 1773.6 | 2324.7 | 2390.1 | 1522.5 | 674.9 |
| 80° | 78.2 | 80.6 | 131.9 | 290.7 | 457.7 | 419.2 | 1057.8 | 1530.7 | 1298.4 | 442.5 | 156.5 |
| 82.5° | 38.5 | 38.5 | 59.5 | 185.6 | 388.8 | 371.3 | 622.3 | 845.3 | 460.0 | 101.6 | 65.4 |
| 85° | 12.8 | 14.0 | 26.9 | 105.1 | 281.4 | 224.2 | 380.6 | 401.7 | 154.1 | 38.5 | 36.2 |
| 87.5° | 3.5 | 4.7 | 7.0 | 38.5 | 122.6 | 147.1 | 226.5 | 256.9 | 63.1 | 15.2 | 17.5 |
| 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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CATALOG NUMBER: CCW-SA-2B-850-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 | 1545.9 |
| 2.5° | 1521.4 | 1513.2 | 1503.9 | 1480.5 | 1461.8 | 1437.3 | 1421.0 | 1408.1 | 1383.6 | 1388.3 | 1377.8 |
| 5° | 1506.2 | 1491.0 | 1437.3 | 1385.9 | 1339.2 | 1268.0 | 1219.0 | 1187.4 | 1161.8 | 1136.1 | 1154.8 |
| 7.5° | 1479.3 | 1443.1 | 1359.1 | 1263.3 | 1164.1 | 1070.7 | 977.3 | 921.2 | 880.4 | 843.0 | 841.8 |
| 10° | 1433.8 | 1375.4 | 1243.5 | 1118.6 | 965.6 | 843.0 | 723.9 | 630.5 | 569.8 | 525.4 | 524.3 |
| 12.5° | 1382.4 | 1321.7 | 1155.9 | 952.8 | 776.5 | 603.6 | 461.2 | 362.0 | 304.7 | 269.7 | 265.0 |
| 15° | 1349.7 | 1261.0 | 1046.2 | 805.6 | 587.3 | 393.5 | 255.7 | 193.8 | 171.6 | 163.5 | 163.5 |
| 17.5° | 1307.7 | 1206.1 | 937.6 | 652.7 | 407.5 | 227.7 | 165.8 | 149.5 | 148.3 | 145.9 | 143.6 |
| 20° | 1290.2 | 1164.1 | 840.7 | 520.7 | 258.0 | 161.1 | 142.4 | 138.9 | 138.9 | 136.6 | 134.3 |
| 22.5° | 1243.5 | 1103.4 | 737.9 | 381.8 | 171.6 | 141.3 | 134.3 | 129.6 | 127.3 | 124.9 | 127.3 |
| 25° | 1222.5 | 1060.2 | 641.0 | 263.9 | 140.1 | 126.1 | 122.6 | 117.9 | 114.4 | 113.3 | 113.3 |
| 27.5° | 1208.5 | 1017.0 | 546.4 | 183.3 | 123.8 | 115.6 | 108.6 | 105.1 | 100.4 | 95.7 | 95.7 |
| 30° | 1198.0 | 983.1 | 455.4 | 135.4 | 110.9 | 102.7 | 96.9 | 88.7 | 82.9 | 78.2 | 78.2 |
| 32.5° | 1183.9 | 943.4 | 364.3 | 115.6 | 100.4 | 92.2 | 81.7 | 74.7 | 66.6 | 63.1 | 63.1 |
| 35° | 1188.6 | 916.6 | 286.1 | 102.7 | 89.9 | 79.4 | 70.1 | 60.7 | 52.5 | 49.0 | 47.9 |
| 37.5° | 1198.0 | 896.7 | 217.2 | 92.2 | 80.6 | 68.9 | 58.4 | 47.9 | 43.2 | 38.5 | 38.5 |
| 40° | 1237.7 | 890.9 | 160.0 | 85.2 | 73.6 | 60.7 | 49.0 | 39.7 | 35.0 | 31.5 | 30.4 |
| 42.5° | 1304.2 | 899.0 | 123.8 | 77.1 | 66.6 | 51.4 | 40.9 | 32.7 | 28.0 | 24.5 | 23.4 |
| 45° | 1389.4 | 930.6 | 101.6 | 72.4 | 58.4 | 43.2 | 32.7 | 26.9 | 21.0 | 18.7 | 18.7 |
| 47.5° | 1513.2 | 979.6 | 88.7 | 66.6 | 51.4 | 36.2 | 28.0 | 21.0 | 16.3 | 14.0 | 14.0 |
| 50° | 1653.3 | 1035.7 | 78.2 | 59.5 | 44.4 | 30.4 | 22.2 | 16.3 | 11.7 | 10.5 | 10.5 |
| 52.5° | 1793.4 | 1106.9 | 72.4 | 54.9 | 38.5 | 24.5 | 17.5 | 11.7 | 8.2 | 7.0 | 7.0 |
| 55° | 1940.5 | 1169.9 | 65.4 | 51.4 | 31.5 | 19.8 | 12.8 | 7.0 | 4.7 | 3.5 | 3.5 |
| 57.5° | 2043.3 | 1194.5 | 57.2 | 44.4 | 24.5 | 15.2 | 9.3 | 4.7 | 2.3 | 1.2 | 1.2 |
| 60° | 2116.9 | 1198.0 | 49.0 | 36.2 | 18.7 | 11.7 | 5.8 | 2.3 | 1.2 | 0.0 | 0.0 |
| 62.5° | 2178.7 | 1205.0 | 42.0 | 28.0 | 14.0 | 8.2 | 3.5 | 1.2 | 0.0 | 0.0 | 0.0 |
| 65° | 2301.3 | 1199.1 | 33.9 | 22.2 | 9.3 | 4.7 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 2398.2 | 1140.7 | 26.9 | 15.2 | 5.8 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 2121.5 | 869.9 | 21.0 | 10.5 | 3.5 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1666.2 | 580.3 | 14.0 | 5.8 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1092.9 | 288.4 | 10.5 | 3.5 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 425.0 | 75.9 | 7.0 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 102.7 | 25.7 | 3.5 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 44.4 | 9.3 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 26.9 | 4.7 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 14.0 | 2.3 | 1.2 | 1.2 | 0.0 | 0.0 | 0.0 | 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)