

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: P676212

Luminaire Tested: **CCW-SA-1F-850-U-T1**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676212  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1F-850-U-T1  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1200mA w/  
T1 distribution lens  
Light Source: (16) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

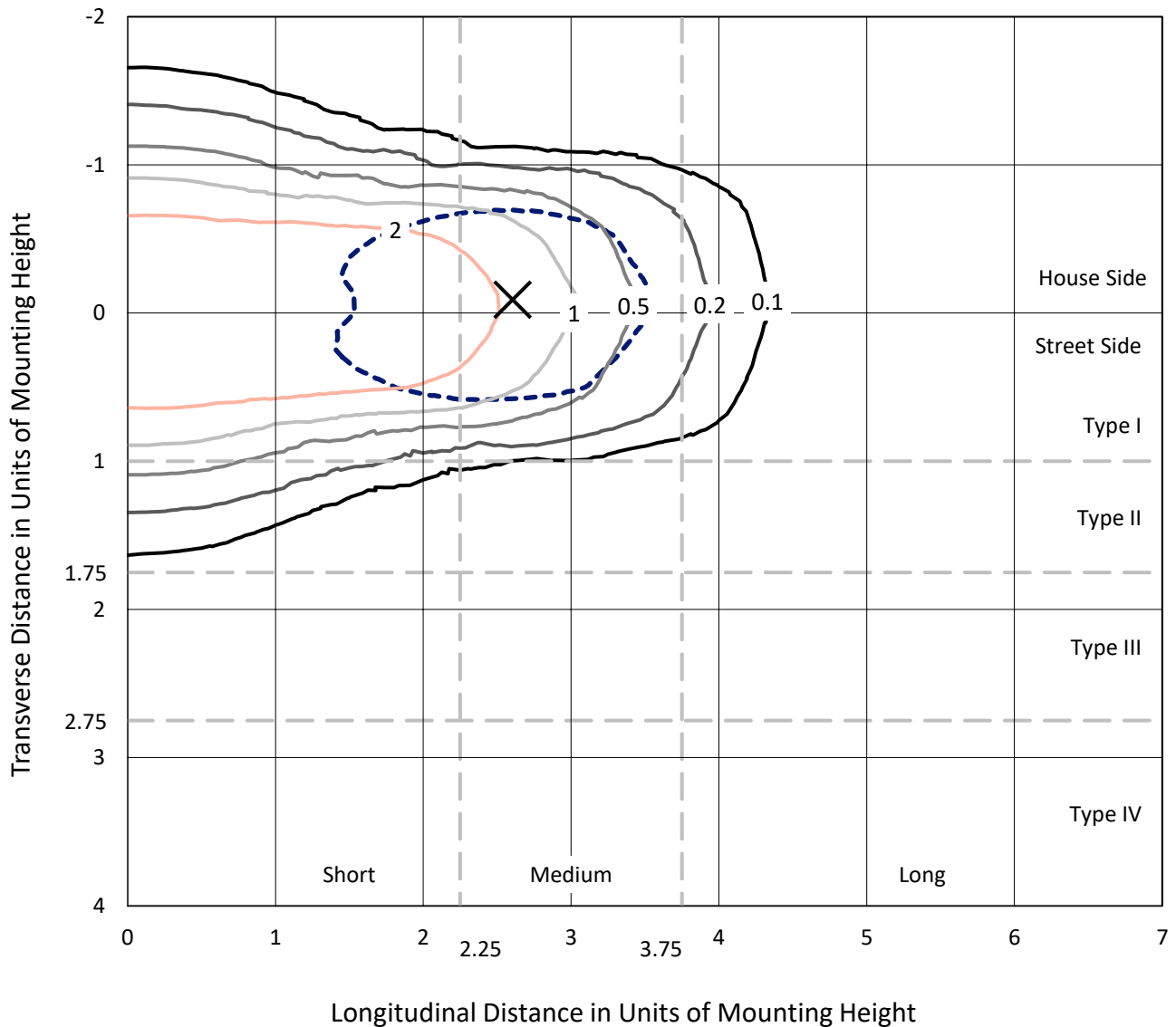
Lumens per Lamp: N/A  
Luminaire Lumens: 6370.9 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 67  
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

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### Iso-Footcandle Lines of Horizontal Illumination

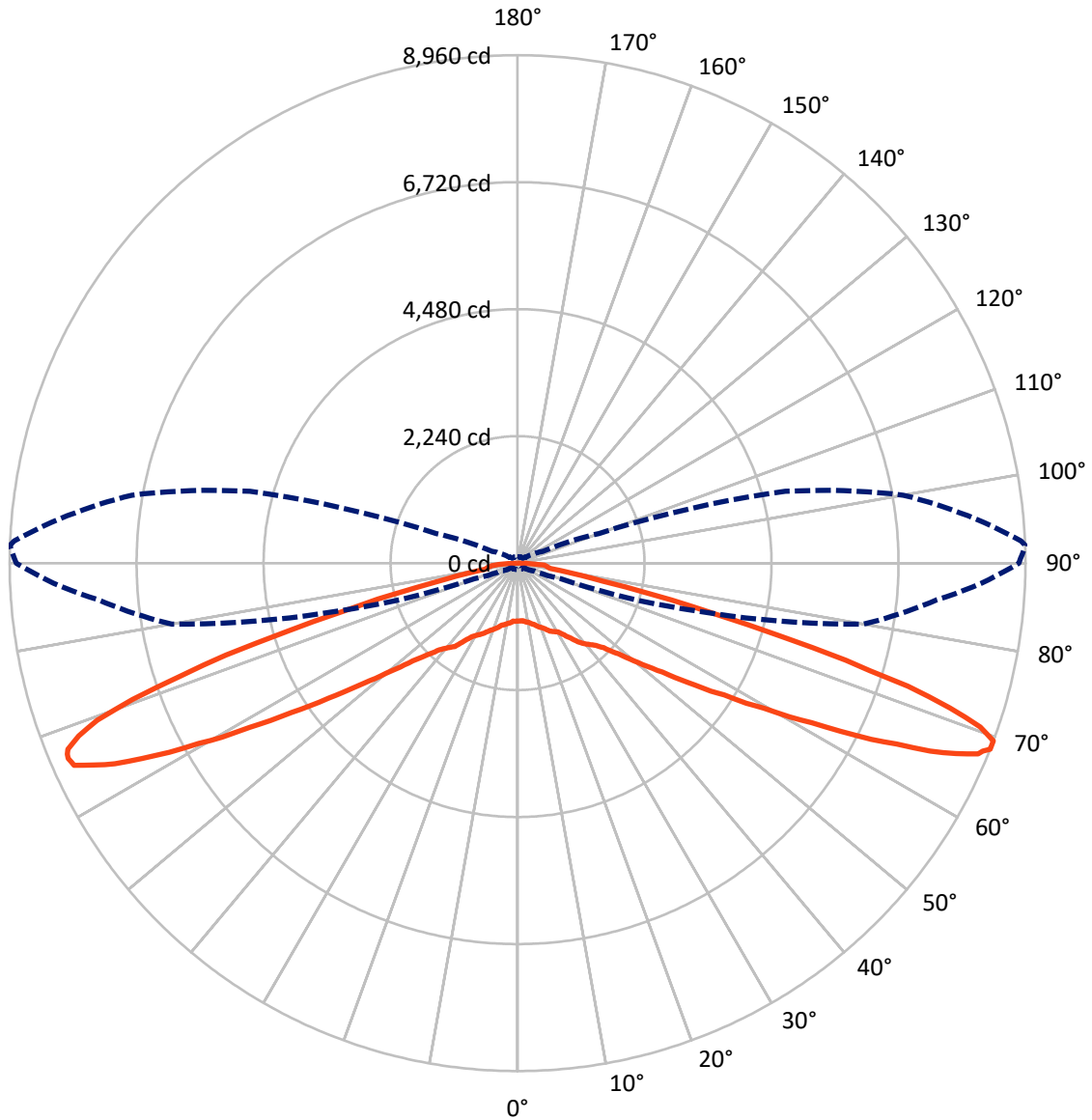
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.9 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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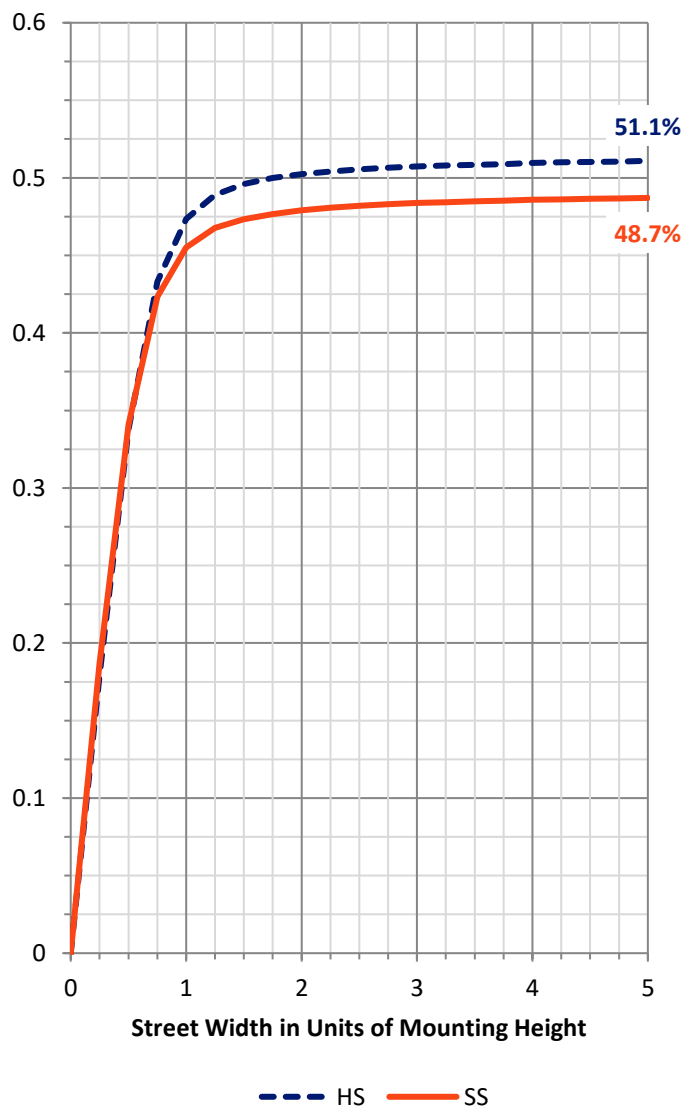
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3280.9	0.0	3280.9
	% Fixture	51.5	0.0	51.5
<b>Street Side</b>	Lumens	3090.0	0.0	3090.0
	% Fixture	48.5	0.0	48.5
<b>Total</b>	Lumens	6370.9	0.0	6370.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.0	1.6
10°-20°	330.5	5.2
20°-30°	564.0	8.9
30°-40°	787.5	12.4
40°-50°	1001.8	15.7
50°-60°	1266.6	19.9
60°-70°	1562.1	24.5
70°-80°	682.4	10.7
80°-90°	74.0	1.2
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°	6370.9	100.0
0°-180°	6370.9	100.0



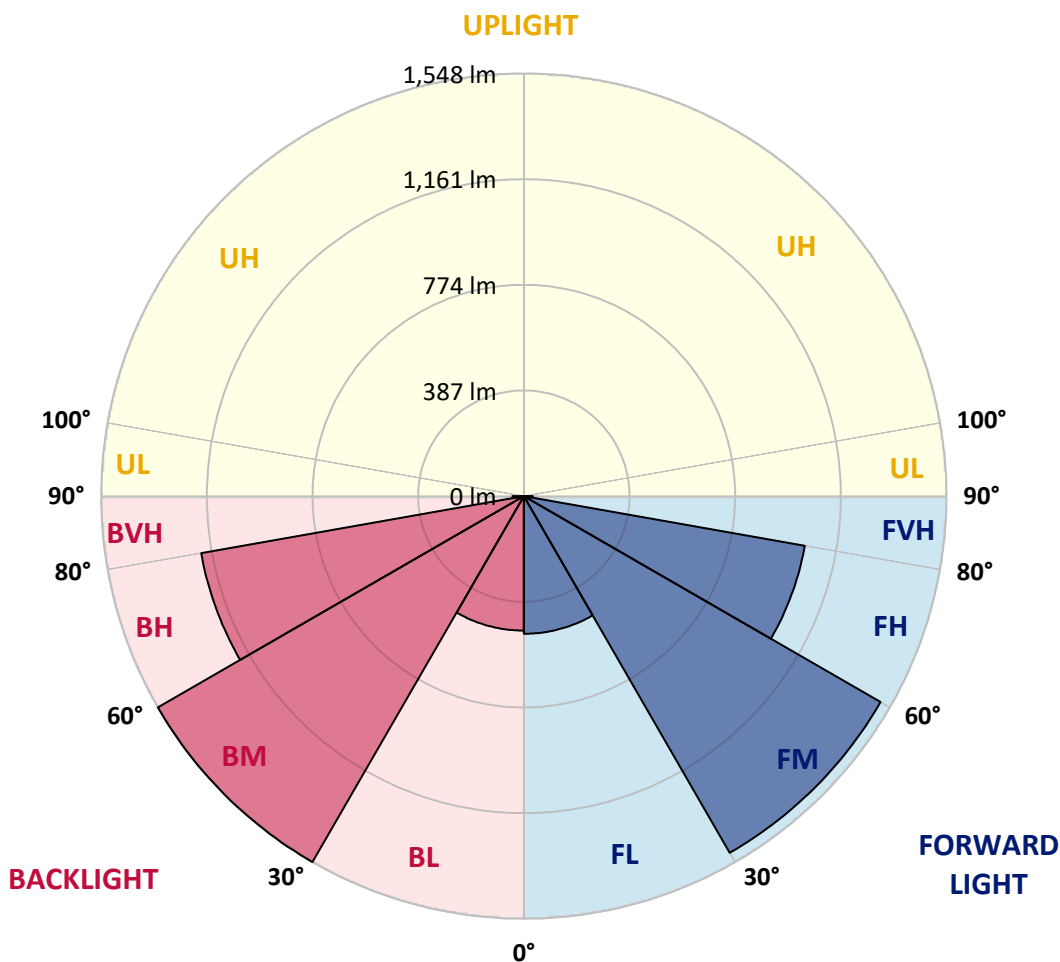
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	504.2	7.9			
FM (30°-60°)	1508.3	23.7			
FH (60°-80°)	1044.7	16.4			G1/1800
FVH (80°-90°)	32.8	0.5			G1/100
BL (0°-30°)	492.4	7.7	B1/500		
BM (30°-60°)	1547.6	24.3	B2/2500		
BH (60°-80°)	1199.7	18.8	B3/2500		G3/2500
BVH (80°-90°)	41.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8
2.5°	1040.3	1039.1	1042.7	1045.1	1034.3	1037.9	1035.5	1033.1	1024.7	1021.2	1014.0
5°	1069.0	1072.6	1084.5	1073.8	1078.5	1072.6	1053.4	1059.4	1048.7	1046.3	1039.1
7.5°	1119.2	1112.0	1128.8	1116.8	1120.4	1108.4	1100.1	1089.3	1086.9	1070.2	1071.4
10°	1130.0	1144.3	1151.5	1149.1	1151.5	1157.5	1141.9	1125.2	1102.5	1097.7	1080.9
12.5°	1122.8	1135.9	1155.1	1170.6	1181.4	1183.8	1177.8	1174.2	1164.6	1137.1	1135.9
15°	1115.6	1106.1	1118.0	1171.8	1207.7	1231.6	1240.0	1219.6	1222.0	1186.2	1171.8
17.5°	1067.8	1053.4	1100.1	1152.7	1196.9	1249.5	1290.2	1284.2	1284.2	1255.5	1235.2
20°	1004.4	1028.3	1052.2	1119.2	1200.5	1279.4	1357.2	1353.6	1339.2	1330.8	1286.6
22.5°	950.6	961.4	1005.6	1076.2	1177.8	1287.8	1379.9	1445.6	1412.2	1378.7	1352.4
25°	913.5	904.0	960.2	1033.1	1156.3	1273.5	1422.9	1491.1	1509.0	1483.9	1433.7
27.5°	860.9	860.9	905.2	974.5	1086.9	1266.3	1464.8	1568.8	1595.1	1558.0	1485.1
30°	801.1	808.3	846.6	925.5	1035.5	1213.7	1481.5	1658.5	1680.0	1647.7	1572.4
32.5°	754.5	754.5	797.6	881.3	999.6	1189.8	1470.7	1747.0	1787.6	1763.7	1686.0
35°	704.3	700.7	731.8	823.9	942.2	1143.1	1467.2	1817.5	1908.4	1909.6	1828.3
37.5°	632.5	646.9	686.3	759.3	896.8	1097.7	1456.4	1902.4	2065.0	2092.5	2036.3
40°	584.7	590.7	626.6	706.7	826.2	1043.9	1440.9	1971.8	2169.1	2263.5	2185.8
42.5°	515.4	523.7	551.2	650.5	758.1	967.3	1372.7	2020.8	2317.3	2424.9	2359.2
45°	442.4	447.2	487.9	569.2	685.2	876.5	1299.8	2099.7	2460.8	2680.8	2642.6
47.5°	355.1	357.5	392.2	477.1	597.9	785.6	1187.4	2096.1	2576.8	2936.7	3044.3
50°	277.4	283.4	309.7	379.0	492.6	674.4	1057.0	2067.4	2722.7	3228.5	3440.1
52.5°	221.2	222.4	239.1	294.1	380.2	563.2	917.1	1976.5	2860.2	3514.3	3925.6
55°	182.9	182.9	192.5	226.0	291.8	428.1	753.3	1825.9	2876.9	3829.9	4455.3
56°	175.8	173.4	181.8	210.4	263.1	386.2	676.8	1724.2	2900.8	3975.8	4720.7
57°	166.2	167.4	172.2	192.5	236.8	342.0	591.9	1625.0	2884.1	4095.4	4916.8
58°	161.4	159.0	168.6	181.8	209.3	303.7	533.3	1507.8	2857.8	4193.4	5202.6
59°	154.2	153.1	159.0	171.0	194.9	270.2	461.6	1381.1	2806.4	4320.2	5415.5
60°	151.9	150.7	153.1	162.6	179.4	236.8	406.5	1232.8	2668.9	4450.5	5679.7
61°	144.7	145.9	150.7	156.6	169.8	212.8	365.9	1080.9	2579.2	4560.5	5971.5
62°	145.9	143.5	145.9	150.7	160.2	196.1	320.5	931.5	2419.0	4684.9	6190.3
63°	138.7	137.5	141.1	147.1	151.9	177.0	279.8	804.7	2237.2	4713.6	6375.6
64°	136.3	135.1	136.3	144.7	145.9	166.2	247.5	687.5	1974.2	4762.6	6613.6
65°	130.3	130.3	132.7	136.3	141.1	156.6	221.2	596.7	1712.3	4633.5	6686.5
66°	125.6	126.7	126.7	132.7	136.3	145.9	203.3	507.0	1461.2	4427.8	6757.1
67°	122.0	122.0	123.2	127.9	131.5	137.5	182.9	438.8	1232.8	4182.7	6648.3
67.5°	119.6	120.8	120.8	125.6	129.1	137.5	174.6	416.1	1102.5	3913.6	6567.0
68°	116.0	117.2	117.2	122.0	125.6	132.7	168.6	380.2	1016.4	3739.0	6416.3
69°	113.6	112.4	112.4	117.2	122.0	126.7	156.6	332.4	808.3	3251.2	6196.3
70°	106.4	106.4	108.8	112.4	116.0	120.8	144.7	293.0	684.0	2691.6	5629.5
71°	102.8	101.6	102.8	106.4	110.0	116.0	132.7	259.5	559.6	2234.8	5072.3
72°	95.7	98.0	98.0	101.6	105.2	108.8	124.4	226.0	469.9	1786.4	4458.9
72.5°	94.5	94.5	95.7	99.2	101.6	107.6	119.6	216.4	429.3	1574.8	4201.8
73°	90.9	90.9	92.1	95.7	98.0	104.0	116.0	194.9	391.0	1401.4	3721.1
74°	87.3	86.1	86.1	90.9	92.1	98.0	108.8	172.2	327.6	1055.8	2986.9
75°	81.3	81.3	82.5	84.9	86.1	90.9	100.4	153.1	276.2	819.1	2336.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	67.0	68.2	69.4	71.7	71.7	75.3	82.5	106.4	168.6	414.9	1072.6
80°	49.0	51.4	55.0	58.6	57.4	57.4	64.6	76.5	100.4	186.5	411.3
82.5°	39.5	41.9	38.3	43.0	43.0	40.7	46.6	56.2	68.2	92.1	147.1
85°	26.3	27.5	22.7	26.3	25.1	25.1	31.1	33.5	41.9	51.4	72.9
87.5°	12.0	12.0	9.6	10.8	10.8	10.8	15.5	12.0	17.9	25.1	43.0
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):**

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8
2.5°	1021.2	1025.9	1025.9	1021.2	1017.6	1021.2	1018.8	1012.8	1018.8	1021.2	1022.3
5°	1035.5	1025.9	1030.7	1020.0	1027.1	1025.9	1023.5	1029.5	1030.7	1030.7	1039.1
7.5°	1051.0	1063.0	1047.5	1048.7	1052.2	1037.9	1042.7	1045.1	1040.3	1049.9	1057.0
10°	1078.5	1083.3	1078.5	1060.6	1072.6	1063.0	1059.4	1070.2	1067.8	1070.2	1080.9
12.5°	1103.7	1112.0	1098.9	1097.7	1091.7	1083.3	1088.1	1086.9	1103.7	1106.1	1119.2
15°	1155.1	1133.6	1128.8	1127.6	1125.2	1121.6	1124.0	1125.2	1146.7	1150.3	1181.4
17.5°	1199.3	1195.7	1169.4	1179.0	1179.0	1164.6	1158.7	1179.0	1195.7	1213.7	1235.2
20°	1244.8	1241.2	1212.5	1213.7	1202.9	1216.1	1208.9	1228.0	1256.7	1262.7	1281.8
22.5°	1298.6	1283.0	1262.7	1265.1	1268.7	1259.1	1254.3	1280.6	1309.3	1326.1	1327.3
25°	1383.5	1344.0	1327.3	1329.7	1324.9	1317.7	1321.3	1354.8	1369.1	1405.0	1397.8
27.5°	1428.9	1406.2	1394.2	1366.7	1367.9	1357.2	1371.5	1421.7	1450.4	1477.9	1422.9
30°	1483.9	1469.6	1416.9	1407.4	1406.2	1401.4	1427.7	1492.3	1535.3	1550.9	1471.9
32.5°	1591.5	1534.1	1521.0	1512.6	1493.5	1499.4	1512.6	1597.5	1665.7	1662.1	1517.4
35°	1714.7	1675.2	1638.2	1631.0	1628.6	1611.8	1634.6	1733.8	1786.4	1770.9	1534.1
37.5°	1912.0	1852.2	1802.0	1774.5	1769.7	1757.7	1811.5	1890.5	1958.6	1897.6	1547.3
40°	2008.8	1941.9	1895.2	1878.5	1882.1	1898.8	1951.4	2072.2	2102.1	1989.7	1558.0
42.5°	2147.5	2074.6	1982.5	1974.2	1963.4	1971.8	2073.4	2236.0	2261.1	2114.1	1517.4
45°	2393.9	2283.8	2177.4	2129.6	2132.0	2154.7	2312.5	2490.7	2444.1	2200.1	1452.8
47.5°	2704.7	2543.3	2457.2	2392.7	2423.7	2398.6	2649.7	2792.0	2633.0	2309.0	1373.9
50°	3172.3	2946.3	2829.1	2751.4	2764.5	2786.1	3040.7	3161.5	2842.3	2361.6	1253.1
52.5°	3761.8	3471.2	3299.0	3195.0	3204.6	3251.2	3580.0	3542.9	3081.4	2405.8	1091.7
55°	4467.2	4168.3	3834.7	3791.7	3780.9	3892.1	4254.4	3942.3	3296.6	2335.3	924.3
56°	4840.3	4522.3	4175.5	4087.0	4060.7	4138.4	4564.1	4142.0	3370.8	2256.3	844.2
57°	5157.2	4853.5	4473.2	4322.6	4356.0	4501.9	4871.4	4329.7	3438.9	2175.0	768.9
58°	5592.4	5245.7	4843.9	4729.1	4699.2	4815.2	5202.6	4518.7	3461.6	2091.3	699.5
59°	6026.5	5610.4	5248.1	5038.8	5047.2	5258.8	5529.1	4743.5	3496.3	1984.9	611.0
60°	6356.5	6147.3	5663.0	5506.3	5484.8	5790.9	5854.3	4894.1	3533.4	1841.4	548.8
61°	6824.0	6551.4	6100.6	5898.5	5957.1	6202.3	6205.8	5083.1	3478.4	1659.7	472.3
62°	7160.0	7088.3	6614.8	6422.3	6404.3	6729.6	6571.7	5249.3	3430.6	1487.5	417.3
63°	7553.4	7553.4	7121.8	6971.1	6979.5	7236.6	6730.8	5415.5	3375.5	1297.4	367.1
64°	7757.9	8015.0	7616.8	7405.2	7460.2	7682.6	7014.2	5524.3	3205.8	1104.9	322.8
65°	7934.9	8321.1	8099.9	8001.8	7918.1	8049.7	7259.3	5625.9	2946.3	939.8	287.0
66°	8084.3	8609.3	8536.3	8431.1	8422.7	8392.8	7307.1	5622.3	2678.4	794.0	251.1
67°	8009.0	8615.2	8748.0	8792.2	8779.1	8463.4	7223.4	5494.4	2335.3	670.8	223.6
67.5°	7940.8	8566.2	8874.7	8849.6	8904.6	8523.2	7237.8	5337.7	2091.3	607.4	210.4
68°	7881.1	8500.4	8926.1	8958.4	8930.9	8530.3	7158.8	5213.4	1925.1	570.4	198.5
69°	7427.9	8188.4	8843.6	8959.6	8889.1	8256.5	6907.7	4889.3	1529.3	486.7	182.9
70°	6973.5	7784.2	8443.1	8655.9	8568.6	7726.8	6590.9	4374.0	1261.5	416.1	165.0
71°	6344.5	7033.3	7909.8	8037.7	7932.5	7124.2	5935.6	3829.9	981.7	352.7	147.1
72°	5490.8	6075.5	6912.5	7222.2	7066.8	6257.3	5273.2	3165.1	795.2	296.5	133.9
72.5°	5067.5	5666.6	6473.7	6498.8	6528.7	5880.6	4992.2	2780.1	693.5	275.0	130.3
73°	4665.7	5252.8	5951.2	6039.6	5912.9	5245.7	4572.5	2485.9	633.7	251.1	125.6
74°	3780.9	4115.7	4694.4	4780.5	4669.3	4277.1	3736.7	1906.0	504.6	216.4	114.8
75°	2975.0	3159.1	3682.9	3630.2	3464.0	3326.5	2897.3	1456.4	408.9	190.1	106.4



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**CANDELA DISTRIBUTION (continued):**

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	1336.8	1448.0	1535.3	1535.3	1544.9	1474.3	1335.6	668.4	252.3	137.5	87.3
80°	509.4	570.4	589.5	590.7	599.1	620.6	577.5	328.8	149.5	98.0	70.5
82.5°	369.5	516.6	556.0	527.3	529.7	478.3	221.2	145.9	94.5	68.2	51.4
85°	334.8	449.6	475.9	472.3	473.5	442.4	130.3	71.7	55.0	43.0	35.9
87.5°	162.6	159.0	168.6	190.1	185.3	240.3	110.0	35.9	23.9	17.9	17.9
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):**

	135°	145°	155°	165°	175°	180°
0°	1018.8	1018.8	1018.8	1018.8	1018.8	1018.8
2.5°	1012.8	1011.6	1028.3	1011.6	1021.2	1014.0
5°	1024.7	1029.5	1033.1	1040.3	1023.5	1040.3
7.5°	1060.6	1065.4	1066.6	1072.6	1065.4	1064.2
10°	1088.1	1100.1	1107.2	1083.3	1097.7	1096.5
12.5°	1141.9	1130.0	1128.8	1124.0	1110.8	1106.1
15°	1180.2	1162.3	1151.5	1132.4	1116.8	1110.8
17.5°	1234.0	1199.3	1155.1	1115.6	1088.1	1066.6
20°	1267.5	1205.3	1116.8	1070.2	1028.3	1037.9
22.5°	1289.0	1199.3	1082.1	1022.3	980.5	992.5
25°	1296.2	1169.4	1058.2	984.1	943.4	935.1
27.5°	1275.8	1134.7	1011.6	927.9	892.0	899.2
30°	1266.3	1084.5	968.5	886.0	838.2	845.4
32.5°	1241.2	1033.1	911.1	827.4	792.8	780.8
35°	1205.3	990.1	856.1	777.2	735.4	725.8
37.5°	1161.1	936.3	808.3	712.7	675.6	668.4
40°	1095.3	871.7	739.0	656.5	613.4	612.2
42.5°	1037.9	809.5	674.4	589.5	546.4	548.8
45°	965.0	725.8	600.3	527.3	484.3	486.7
47.5°	871.7	648.1	529.7	448.4	412.5	410.1
50°	761.7	559.6	443.6	374.3	344.4	338.4
52.5°	656.5	469.9	363.5	301.3	276.2	273.8
55°	523.7	365.9	283.4	236.8	217.6	218.8
56°	475.9	337.2	258.3	216.4	202.1	202.1
57°	430.5	298.9	234.4	199.7	186.5	186.5
58°	380.2	263.1	212.8	180.6	174.6	169.8
59°	345.6	239.1	192.5	171.0	161.4	160.2
60°	304.9	215.2	179.4	160.2	153.1	151.9
61°	270.2	193.7	165.0	149.5	147.1	147.1
62°	241.5	179.4	153.1	144.7	143.5	139.9
63°	216.4	165.0	147.1	137.5	133.9	137.5
64°	193.7	151.9	142.3	135.1	130.3	132.7
65°	175.8	145.9	136.3	131.5	126.7	127.9
66°	163.8	136.3	131.5	125.6	123.2	124.4
67°	148.3	131.5	126.7	120.8	119.6	120.8
67.5°	143.5	127.9	124.4	118.4	117.2	118.4
68°	139.9	125.6	123.2	117.2	116.0	114.8
69°	130.3	120.8	117.2	114.8	112.4	111.2
70°	122.0	116.0	113.6	110.0	107.6	106.4
71°	117.2	110.0	108.8	105.2	102.8	101.6
72°	111.2	106.4	104.0	99.2	98.0	99.2
72.5°	110.0	104.0	102.8	98.0	96.9	96.9
73°	106.4	99.2	100.4	95.7	93.3	95.7
74°	99.2	96.9	94.5	90.9	89.7	89.7
75°	93.3	90.9	88.5	86.1	86.1	86.1



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CATALOG NUMBER: CCW-SA-1F-850-U-T1

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	135°	145°	155°	165°	175°	180°
77.5°	78.9	77.7	78.9	74.1	72.9	71.7
80°	63.4	63.4	64.6	61.0	58.6	57.4
82.5°	47.8	49.0	51.4	47.8	45.4	43.0
85°	31.1	32.3	32.3	28.7	33.5	31.1
87.5°	15.5	16.7	15.5	14.3	16.7	16.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)