

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: P675887

Luminaire Tested: **CCW-SA-1B-830-U-SLL**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P675887  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1B-830-U-SLL  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @450mA w/  
SLL distribution lens  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

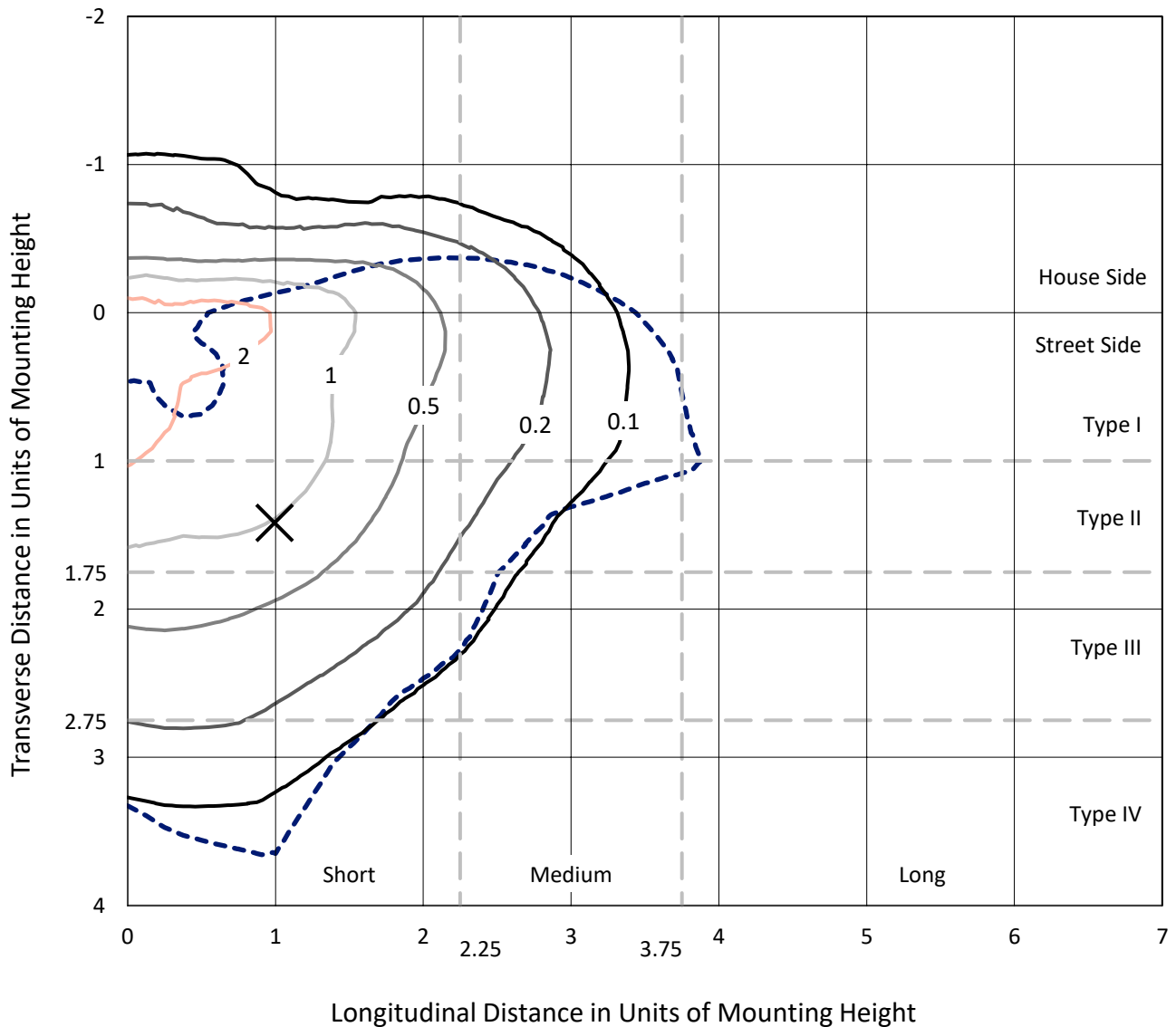
Lumens per Lamp: N/A  
Luminaire Lumens: 2277 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 24  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P675887  
 CATALOG NUMBER: CCW-SA-1B-830-U-SLL

### Iso-Footcandle Lines of Horizontal Illumination

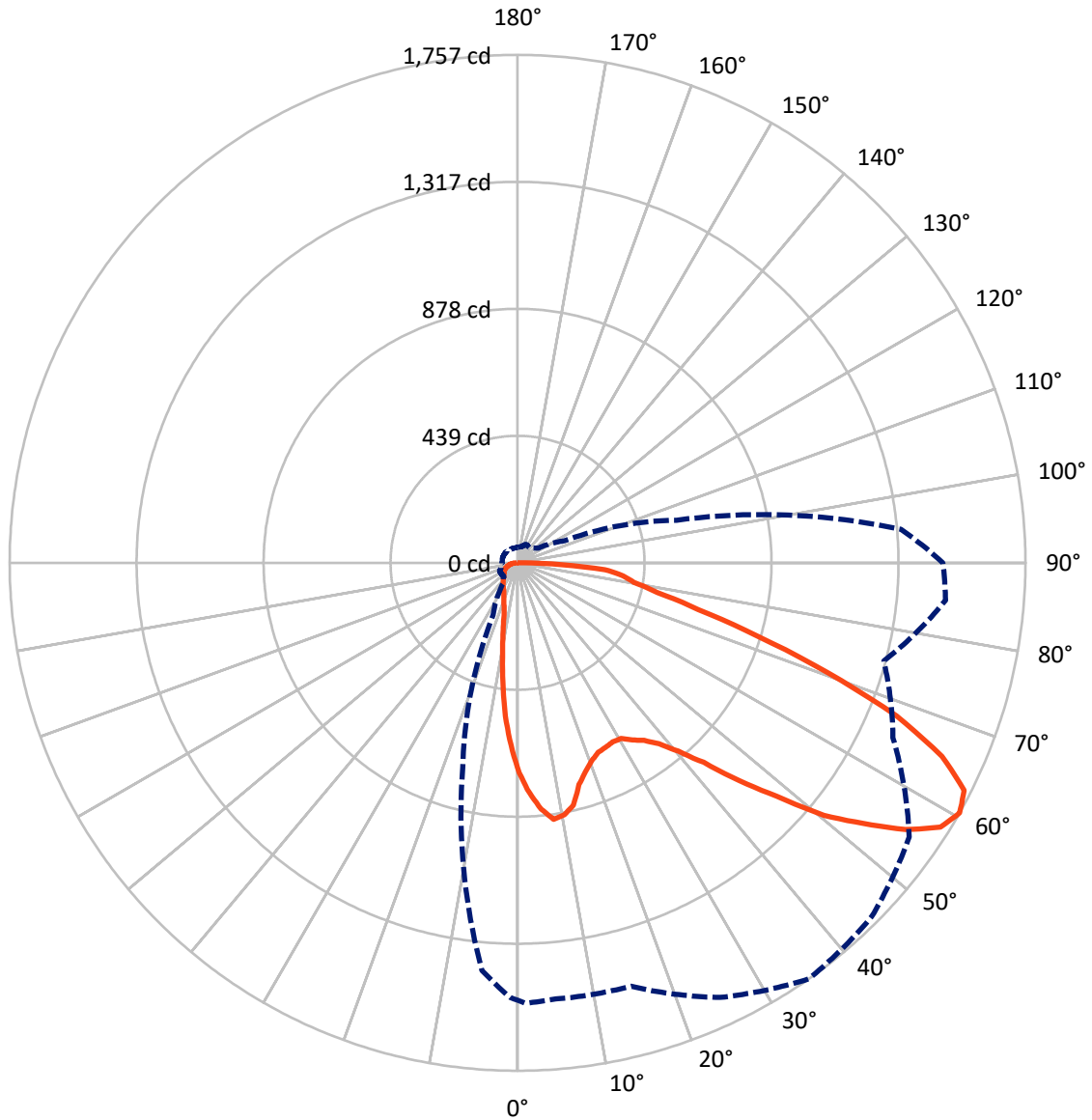
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P675887  
CATALOG NUMBER: CCW-SA-1B-830-U-SLL

### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P675887  
 CATALOG NUMBER: CCW-SA-1B-830-U-SLL

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	433.3	0.0	433.3
	% Fixture	19.0	0.0	19.0
<b>Street Side</b>	Lumens	1843.6	0.0	1843.6
	% Fixture	81.0	0.0	81.0
<b>Total</b>	Lumens	2277.0	0.0	2277.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.5	2.5
10°-20°	119.3	5.2
20°-30°	174.5	7.7
30°-40°	245.9	10.8
40°-50°	337.9	14.8
50°-60°	460.6	20.2
60°-70°	504.1	22.1
70°-80°	291.0	12.8
80°-90°	87.2	3.8
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°	2277.0	100.0
0°-180°	2277.0	100.0

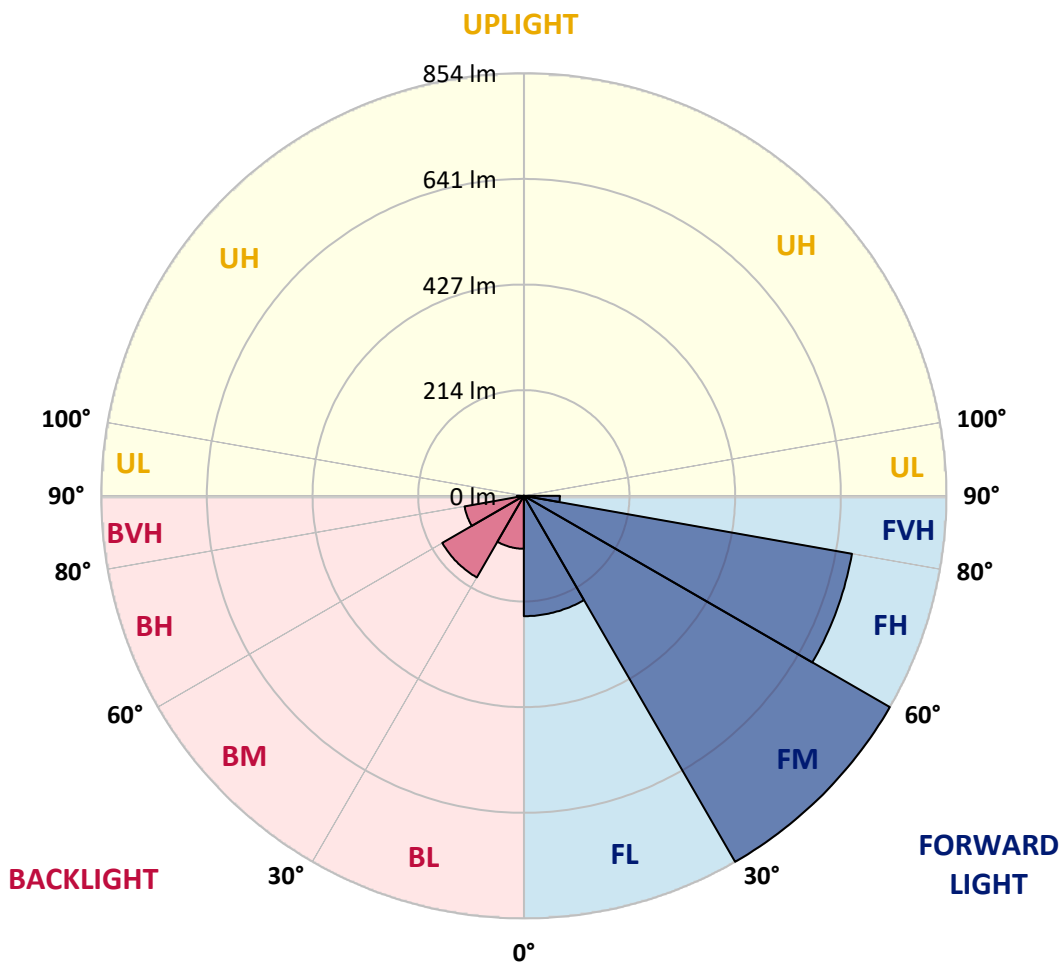


REPORT NUMBER: P675887  
 CATALOG NUMBER: CCW-SA-1B-830-U-SLL

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	243.2	10.7			
FM (30°-60°)	854.0	37.5			
FH (60°-80°)	673.4	29.6			G1/1800
FVH (80°-90°)	72.9	3.2			G1/100
BL (0°-30°)	107.1	4.7	B0/110		
BM (30°-60°)	190.4	8.4	B0/220		
BH (60°-80°)	121.7	5.3	B1/500		G1/500
BVH (80°-90°)	14.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type IV Short





REPORT NUMBER: P675887

CATALOG NUMBER: CCW-SA-1B-830-U-SLL

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2
2.5°	778.8	775.7	778.8	789.9	792.9	798.0	798.0	790.9	777.8	771.7	761.6
5°	795.9	790.9	816.1	839.4	857.5	855.5	838.4	824.2	798.0	758.6	721.2
7.5°	761.6	766.6	784.8	845.4	887.8	895.9	868.7	840.4	783.8	729.3	678.8
10°	696.9	704.0	743.4	806.0	872.7	885.8	868.7	834.3	766.6	699.0	640.4
12.5°	665.6	681.8	705.0	780.8	828.3	859.6	851.5	829.3	753.5	673.7	617.2
15°	665.6	669.7	704.0	767.7	794.9	795.9	799.0	803.0	757.6	684.8	609.1
17.5°	686.8	698.0	727.2	766.6	771.7	759.6	759.6	776.7	765.6	716.1	638.4
20°	738.4	734.3	772.7	788.9	761.6	731.3	728.3	757.6	774.7	749.5	691.9
22.5°	789.9	808.1	839.4	803.0	752.5	712.1	708.1	744.4	802.0	807.0	753.5
25°	867.6	885.8	902.0	857.5	751.5	707.0	710.1	738.4	835.3	888.9	856.5
27.5°	951.5	962.6	985.8	917.1	775.7	701.0	704.0	746.4	866.6	942.4	937.3
30°	999.0	1011.1	1006.0	928.3	791.9	705.0	696.9	757.6	849.5	942.4	989.9
32.5°	1045.4	1038.3	1035.3	946.4	812.1	730.3	710.1	780.8	859.6	957.5	1057.5
35°	1102.0	1091.9	1083.8	981.8	845.4	754.5	745.4	811.1	881.8	988.9	1112.1
37.5°	1164.6	1164.6	1125.2	1008.0	884.8	793.9	783.8	854.5	917.1	1008.0	1186.8
40°	1238.3	1241.4	1171.7	1043.4	929.3	856.5	853.5	911.1	951.5	1036.3	1258.5
42.5°	1292.9	1294.9	1212.1	1056.5	980.8	943.4	956.5	1002.0	990.9	1061.6	1263.6
45°	1330.3	1320.2	1240.4	1093.9	1037.3	1073.7	1077.7	1090.9	1042.4	1076.7	1283.8
47.5°	1348.4	1346.4	1252.5	1137.3	1156.5	1206.0	1229.3	1211.1	1089.9	1060.6	1283.8
50°	1366.6	1349.5	1263.6	1196.9	1272.7	1372.7	1367.6	1334.3	1155.5	1080.8	1264.6
52.5°	1378.7	1363.6	1285.8	1250.5	1383.8	1496.9	1517.1	1455.5	1232.3	1118.1	1273.7
55°	1422.2	1410.1	1352.5	1323.2	1512.1	1628.2	1631.3	1545.4	1313.1	1179.8	1333.3
57.5°	1474.7	1481.8	1444.4	1426.2	1610.0	1724.2	1713.1	1612.1	1381.8	1254.5	1402.0
60°	1512.1	1523.2	1514.1	1516.1	1658.5	1756.5	1731.3	1653.5	1432.3	1311.1	1485.8
62.5°	1491.9	1514.1	1551.5	1543.4	1660.6	1733.3	1697.9	1598.9	1438.3	1384.8	1549.4
65°	1436.3	1438.3	1511.1	1555.5	1569.6	1613.1	1566.6	1484.8	1375.7	1430.3	1540.4
67.5°	1293.9	1310.1	1375.7	1462.6	1403.0	1413.1	1409.0	1290.9	1280.8	1398.9	1470.7
70°	1142.4	1153.5	1225.2	1327.2	1184.8	1137.3	1146.4	1058.6	1100.0	1302.0	1330.3
72.5°	944.4	951.5	1033.3	1123.2	950.5	865.6	886.8	815.1	873.7	1139.4	1122.2
75°	713.1	726.2	789.9	895.9	700.0	645.4	666.6	637.4	691.9	938.4	870.7
77.5°	507.1	497.0	575.7	701.0	526.2	493.9	495.9	501.0	559.6	790.9	625.2
80°	345.4	348.5	419.2	514.1	413.1	408.1	403.0	443.4	469.7	626.2	454.5
82.5°	205.0	205.0	282.8	365.6	326.3	367.7	344.4	380.8	367.7	460.6	298.0
85°	96.0	96.0	145.4	263.6	252.5	303.0	257.6	287.9	271.7	321.2	134.3
87.5°	16.2	14.1	29.3	129.3	104.0	118.2	46.5	153.5	170.7	224.2	33.3
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: P675887  
 CATALOG NUMBER: CCW-SA-1B-830-U-SLL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2
2.5°	750.5	743.4	729.3	711.1	695.9	676.7	670.7	657.6	639.4	637.4	629.3
5°	707.0	682.8	652.5	615.1	589.9	563.6	541.4	528.3	513.1	511.1	507.1
7.5°	659.6	629.3	578.8	534.3	490.9	449.5	429.3	404.0	386.9	373.7	367.7
10°	615.1	586.8	524.2	463.6	425.2	398.0	373.7	347.5	326.3	310.1	304.0
12.5°	585.8	552.5	484.8	427.3	399.0	367.7	340.4	312.1	284.8	263.6	252.5
15°	572.7	541.4	472.7	409.1	367.7	324.2	292.9	264.6	231.3	216.2	211.1
17.5°	604.0	557.6	468.7	387.9	329.3	279.8	241.4	211.1	186.9	171.7	165.7
20°	644.4	586.8	475.7	362.6	292.9	237.4	194.9	162.6	146.5	135.3	134.3
22.5°	695.9	630.3	486.9	344.4	252.5	190.9	152.5	133.3	122.2	121.2	119.2
25°	787.9	709.1	505.0	320.2	220.2	157.6	130.3	119.2	114.1	111.1	113.1
27.5°	866.6	760.6	518.2	305.0	207.1	148.5	126.3	114.1	109.1	108.1	109.1
30°	913.1	808.1	514.1	276.8	180.8	141.4	134.3	130.3	120.2	112.1	112.1
32.5°	955.5	838.4	513.1	251.5	154.5	118.2	112.1	109.1	115.1	119.2	116.2
35°	1014.1	885.8	510.1	237.4	143.4	109.1	99.0	90.9	86.9	84.8	87.9
37.5°	1076.7	918.2	502.0	235.3	137.4	104.0	96.0	87.9	83.8	81.8	80.8
40°	1145.4	952.5	492.9	225.2	134.3	101.0	92.9	85.9	80.8	77.8	76.8
42.5°	1189.9	979.8	483.8	220.2	128.3	99.0	89.9	83.8	78.8	74.7	74.7
45°	1215.1	1012.1	474.7	215.1	121.2	100.0	89.9	81.8	75.8	73.7	71.7
47.5°	1226.2	1036.3	471.7	207.1	115.1	96.0	87.9	79.8	73.7	69.7	68.7
50°	1255.5	1087.8	482.8	201.0	108.1	91.9	92.9	78.8	72.7	67.7	66.7
52.5°	1272.7	1129.3	507.1	191.9	103.0	86.9	90.9	76.8	69.7	64.6	64.6
55°	1335.3	1197.9	533.3	184.8	97.0	79.8	83.8	72.7	64.6	61.6	61.6
57.5°	1415.1	1270.7	555.5	181.8	92.9	74.7	74.7	70.7	61.6	57.6	56.6
60°	1470.7	1330.3	568.7	179.8	88.9	69.7	66.7	70.7	58.6	54.5	53.5
62.5°	1476.7	1295.9	555.5	178.8	87.9	64.6	60.6	67.7	55.6	51.5	49.5
65°	1438.3	1226.2	519.2	174.7	86.9	59.6	56.6	58.6	51.5	48.5	46.5
67.5°	1361.6	1113.1	466.7	172.7	85.9	55.6	51.5	50.5	47.5	44.4	42.4
70°	1182.8	965.6	405.0	163.6	83.8	52.5	46.5	45.5	42.4	40.4	39.4
72.5°	992.9	789.9	334.3	151.5	79.8	47.5	42.4	40.4	39.4	36.4	35.4
75°	760.6	608.1	267.7	134.3	69.7	42.4	37.4	35.4	34.3	32.3	31.3
77.5°	534.3	452.5	198.0	109.1	58.6	38.4	33.3	31.3	30.3	27.3	27.3
80°	362.6	317.2	134.3	75.8	45.5	31.3	29.3	27.3	25.3	23.2	23.2
82.5°	225.2	222.2	97.0	49.5	33.3	25.3	23.2	23.2	20.2	18.2	18.2
85°	103.0	136.4	67.7	34.3	25.3	19.2	19.2	18.2	16.2	13.1	13.1
87.5°	32.3	45.5	35.4	15.2	14.1	11.1	11.1	10.1	10.1	8.1	8.1
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: P675887  
 CATALOG NUMBER: CCW-SA-1B-830-U-SLL

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2
2.5°	637.4	636.3	636.3	632.3	642.4	642.4	648.5	643.4	646.4	647.5	655.5
5°	506.0	514.1	520.2	532.3	539.4	542.4	542.4	550.5	547.5	553.5	565.6
7.5°	370.7	380.8	399.0	414.1	426.2	430.3	429.3	431.3	434.3	427.3	429.3
10°	300.0	292.9	299.0	313.1	324.2	337.4	327.3	326.3	329.3	326.3	332.3
12.5°	250.5	242.4	237.4	237.4	245.4	251.5	248.5	253.5	264.6	267.7	274.7
15°	203.0	196.0	191.9	186.9	194.9	197.0	200.0	207.1	215.1	219.2	227.3
17.5°	162.6	162.6	162.6	158.6	161.6	164.6	165.7	174.7	175.8	179.8	182.8
20°	133.3	136.4	141.4	143.4	146.5	146.5	144.4	149.5	145.4	148.5	150.5
22.5°	120.2	124.2	126.3	127.3	131.3	132.3	127.3	128.3	129.3	126.3	127.3
25°	113.1	115.1	113.1	114.1	115.1	113.1	114.1	116.2	115.1	117.2	116.2
27.5°	110.1	108.1	107.1	106.1	106.1	104.0	105.0	105.0	107.1	108.1	108.1
30°	110.1	107.1	103.0	100.0	100.0	97.0	99.0	101.0	102.0	104.0	104.0
32.5°	113.1	107.1	100.0	97.0	93.9	91.9	93.9	97.0	101.0	102.0	103.0
35°	89.9	92.9	91.9	87.9	86.9	86.9	85.9	85.9	82.8	82.8	81.8
37.5°	80.8	79.8	81.8	82.8	83.8	80.8	80.8	76.8	75.8	76.8	76.8
40°	75.8	75.8	75.8	78.8	79.8	77.8	74.7	72.7	72.7	72.7	73.7
42.5°	73.7	71.7	70.7	72.7	75.8	73.7	70.7	69.7	69.7	70.7	70.7
45°	70.7	69.7	68.7	67.7	71.7	68.7	67.7	66.7	66.7	66.7	67.7
47.5°	67.7	66.7	64.6	64.6	65.7	64.6	63.6	63.6	63.6	65.7	65.7
50°	65.7	64.6	62.6	62.6	62.6	62.6	61.6	61.6	61.6	62.6	63.6
52.5°	62.6	61.6	60.6	59.6	59.6	59.6	59.6	59.6	59.6	60.6	61.6
55°	59.6	58.6	57.6	57.6	58.6	58.6	57.6	58.6	57.6	58.6	59.6
57.5°	56.6	55.6	54.5	55.6	56.6	55.6	55.6	55.6	55.6	55.6	56.6
60°	52.5	52.5	52.5	52.5	54.5	54.5	54.5	54.5	52.5	53.5	54.5
62.5°	50.5	49.5	49.5	50.5	51.5	51.5	52.5	51.5	50.5	51.5	51.5
65°	46.5	46.5	46.5	47.5	47.5	48.5	48.5	48.5	47.5	48.5	48.5
67.5°	43.4	43.4	43.4	43.4	45.5	45.5	45.5	45.5	44.4	44.4	45.5
70°	38.4	39.4	38.4	40.4	42.4	41.4	42.4	42.4	41.4	40.4	42.4
72.5°	35.4	35.4	35.4	35.4	38.4	38.4	38.4	39.4	38.4	37.4	38.4
75°	31.3	31.3	31.3	32.3	34.3	34.3	34.3	34.3	34.3	33.3	33.3
77.5°	27.3	28.3	27.3	28.3	30.3	29.3	30.3	31.3	30.3	29.3	29.3
80°	23.2	23.2	23.2	24.2	25.3	25.3	25.3	26.3	25.3	24.2	24.2
82.5°	18.2	18.2	19.2	19.2	20.2	20.2	20.2	21.2	20.2	19.2	19.2
85°	14.1	14.1	14.1	15.2	15.2	16.2	16.2	17.2	17.2	16.2	16.2
87.5°	9.1	8.1	9.1	9.1	10.1	10.1	9.1	8.1	9.1	8.1	7.1
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: P675887  
 CATALOG NUMBER: CCW-SA-1B-830-U-SLL

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2
2.5°	663.6	681.8	694.9	704.0	717.1	742.4	752.5	770.7	775.7	778.8
5°	570.7	589.9	618.2	638.4	661.6	709.1	745.4	772.7	784.8	795.9
7.5°	447.5	472.7	502.0	528.3	566.6	625.2	672.7	729.3	750.5	761.6
10°	349.5	372.7	405.0	437.4	490.9	540.4	608.1	659.6	688.9	696.9
12.5°	294.9	322.2	360.6	400.0	433.3	489.9	558.6	633.3	660.6	665.6
15°	250.5	287.9	327.3	367.7	406.0	455.5	529.3	620.2	660.6	665.6
17.5°	207.1	240.4	286.9	330.3	374.7	442.4	534.3	631.3	671.7	686.8
20°	164.6	197.0	233.3	287.9	348.5	420.2	545.4	668.7	722.2	738.4
22.5°	136.4	150.5	185.9	238.4	310.1	405.0	556.5	727.2	783.8	789.9
25°	119.2	129.3	151.5	201.0	279.8	394.9	582.8	794.9	867.6	867.6
27.5°	111.1	115.1	130.3	174.7	258.6	385.8	609.1	869.7	937.3	951.5
30°	109.1	119.2	127.3	155.6	235.3	360.6	633.3	928.3	997.9	999.0
32.5°	107.1	105.0	111.1	135.3	207.1	334.3	653.5	987.8	1042.4	1045.4
35°	83.8	87.9	98.0	119.2	185.9	315.1	663.6	1020.2	1099.0	1102.0
37.5°	78.8	83.8	91.9	110.1	171.7	299.0	666.6	1082.8	1158.5	1164.6
40°	76.8	80.8	86.9	102.0	160.6	278.8	672.7	1147.4	1246.4	1238.3
42.5°	72.7	77.8	83.8	98.0	151.5	263.6	673.7	1182.8	1292.9	1292.9
45°	71.7	74.7	81.8	98.0	141.4	250.5	657.6	1218.1	1346.4	1330.3
47.5°	67.7	73.7	79.8	94.9	129.3	237.4	638.4	1236.3	1353.5	1348.4
50°	66.7	72.7	82.8	89.9	122.2	231.3	634.3	1281.8	1367.6	1366.6
52.5°	64.6	70.7	85.9	85.9	113.1	223.2	653.5	1302.0	1370.7	1378.7
55°	61.6	70.7	79.8	78.8	105.0	213.1	674.7	1354.5	1424.2	1422.2
57.5°	59.6	68.7	75.8	71.7	96.0	206.1	706.0	1405.0	1488.8	1474.7
60°	56.6	68.7	67.7	66.7	88.9	200.0	732.3	1415.1	1503.0	1512.1
62.5°	54.5	71.7	59.6	61.6	82.8	197.0	721.2	1339.4	1483.8	1491.9
65°	52.5	61.6	54.5	56.6	80.8	190.9	677.8	1248.4	1401.0	1436.3
67.5°	48.5	50.5	50.5	52.5	78.8	176.8	588.9	1084.8	1274.7	1293.9
70°	44.4	45.5	45.5	48.5	76.8	160.6	485.8	938.4	1106.0	1142.4
72.5°	40.4	40.4	40.4	44.4	70.7	147.5	400.0	721.2	919.2	944.4
75°	35.4	35.4	35.4	39.4	63.6	134.3	315.1	536.3	676.7	713.1
77.5°	31.3	31.3	30.3	35.4	55.6	109.1	227.3	378.8	476.8	507.1
80°	26.3	25.3	25.3	28.3	43.4	78.8	146.5	267.7	332.3	345.4
82.5°	21.2	20.2	19.2	21.2	31.3	49.5	90.9	186.9	213.1	205.0
85°	20.2	21.2	17.2	16.2	22.2	32.3	57.6	115.1	96.0	96.0
87.5°	8.1	7.1	7.1	6.1	11.1	12.1	25.3	21.2	16.2	16.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)