

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: P676352

Luminaire Tested: **CCW-SA-1B-850-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676352
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1B-850-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
T2 distribution lens and House Side Shield
Light Source: (16) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

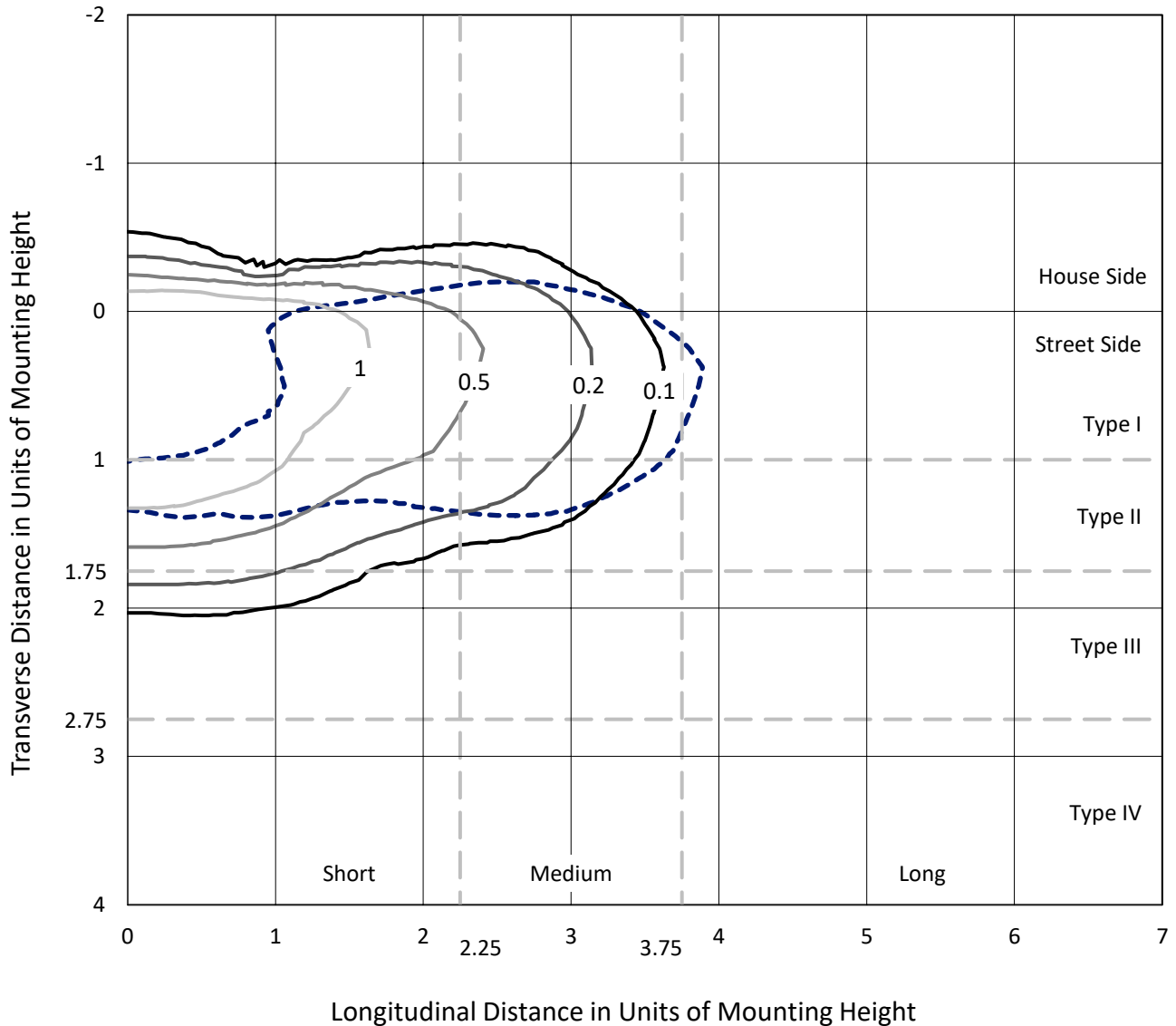
Lumens per Lamp: N/A
Luminaire Lumens: 2326.6 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

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: P676352
 CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

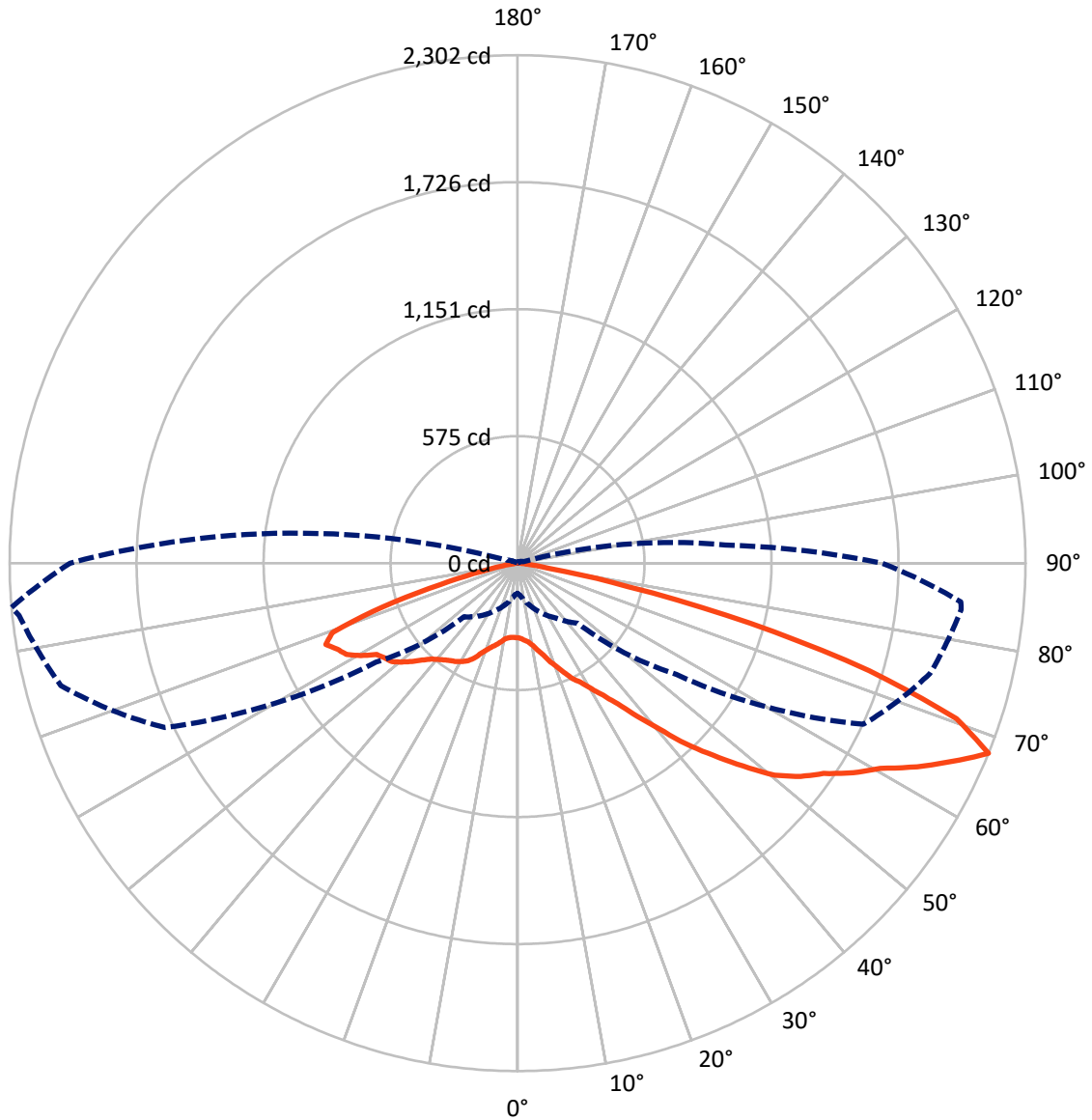
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.8 fc
 Type II - Short - N/A

REPORT NUMBER: P676352
CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 275-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P676352
 CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	330.5	0.0	330.5
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	1996.1	0.0	1996.1
	% Fixture	85.8	0.0	85.8
Total	Lumens	2326.6	0.0	2326.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.8	1.3
10°-20°	83.0	3.6
20°-30°	137.8	5.9
30°-40°	237.0	10.2
40°-50°	425.9	18.3
50°-60°	606.4	26.1
60°-70°	552.8	23.8
70°-80°	235.4	10.1
80°-90°	17.5	0.8
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°	2326.6	100.0
0°-180°	2326.6	100.0

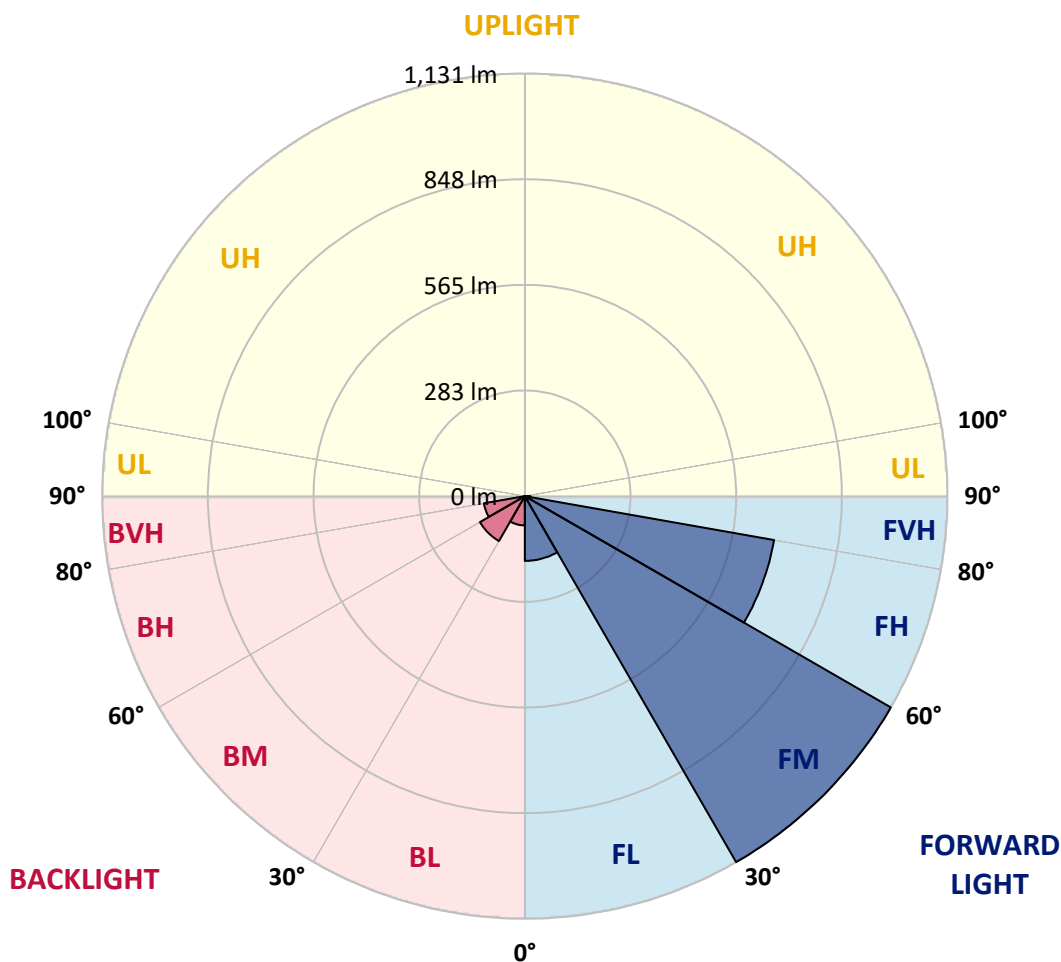


REPORT NUMBER: P676352
 CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	173.3	7.4			
FM (30°-60°)	1130.7	48.6			
FH (60°-80°)	677.1	29.1			G1/1800
FVH (80°-90°)	14.9	0.6			G1/100
BL (0°-30°)	78.2	3.4	B0/110		
BM (30°-60°)	138.6	6.0	B0/220		
BH (60°-80°)	111.1	4.8	B1/500		G1/500
BVH (80°-90°)	2.6	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type II Short





REPORT NUMBER: P676352
 CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3
2.5°	350.5	353.9	353.9	352.7	349.4	347.2	346.1	343.9	341.7	341.7	342.8
5°	353.9	350.5	355.0	349.4	349.4	349.4	353.9	351.6	350.5	345.0	345.0
7.5°	353.9	350.5	350.5	353.9	350.5	352.7	358.3	356.1	360.5	350.5	352.7
10°	343.9	342.8	345.0	349.4	350.5	355.0	360.5	371.6	372.7	366.1	364.9
12.5°	323.9	322.8	330.6	332.8	346.1	357.2	373.8	382.7	392.7	389.4	382.7
15°	309.5	311.7	317.2	326.1	338.3	358.3	377.1	397.1	414.9	410.4	408.2
17.5°	315.0	313.9	315.0	320.6	336.1	356.1	388.2	411.5	437.0	437.0	439.3
20°	331.7	335.0	333.9	330.6	338.3	355.0	388.2	429.3	471.4	468.1	468.1
22.5°	360.5	361.6	355.0	352.7	351.6	361.6	394.9	451.5	500.3	506.9	504.7
25°	390.5	391.6	389.4	382.7	373.8	376.0	407.1	469.2	540.2	551.3	549.1
27.5°	440.4	439.3	433.7	426.0	412.6	402.7	426.0	482.5	571.3	590.1	584.6
30°	490.3	487.0	479.2	469.2	457.0	438.2	449.3	508.0	610.1	627.8	615.6
32.5°	551.3	544.6	546.9	531.3	505.8	475.9	473.7	531.3	641.2	666.7	656.7
35°	629.0	621.2	610.1	595.7	571.3	531.3	519.1	569.1	693.3	712.1	712.1
37.5°	731.0	738.8	725.5	665.6	638.9	601.2	575.7	607.9	738.8	784.2	773.2
40°	835.3	841.9	817.5	773.2	715.5	668.9	653.4	671.1	807.5	861.9	840.8
42.5°	919.6	928.5	919.6	861.9	816.4	756.5	728.8	745.4	896.3	961.7	934.0
45°	1008.3	1017.2	1007.2	969.5	925.1	890.7	820.9	841.9	989.5	1087.1	1056.0
47.5°	1074.9	1086.0	1068.2	1060.5	1025.0	1019.4	900.7	924.0	1087.1	1213.5	1174.7
50°	1090.4	1102.6	1118.1	1127.0	1114.8	1128.1	1008.3	1028.3	1189.1	1330.0	1292.3
52.5°	1053.8	1066.0	1100.4	1141.4	1198.0	1237.9	1117.0	1133.7	1295.6	1426.5	1406.5
55°	946.2	957.3	1027.2	1082.6	1218.0	1283.4	1221.3	1291.2	1372.2	1527.5	1478.6
57.5°	765.4	778.7	870.8	956.2	1151.4	1257.9	1283.4	1422.1	1498.6	1601.8	1545.2
60°	543.5	551.3	631.2	782.0	967.3	1130.3	1271.2	1519.7	1598.4	1701.6	1671.7
62.5°	312.8	319.5	402.7	544.6	729.9	944.0	1216.9	1611.8	1706.0	1811.4	1794.8
65°	207.4	209.7	266.2	343.9	474.8	695.5	1079.3	1693.8	1812.5	1899.1	1880.2
67.5°	136.4	148.6	193.0	246.3	303.9	384.9	879.6	1728.2	1934.6	2021.1	2016.6
70°	97.6	102.1	138.7	189.7	228.5	216.3	514.7	1485.3	1929.0	2054.4	2017.8
72.5°	57.7	62.1	92.1	142.0	179.7	137.5	240.7	1050.5	1598.4	1639.5	1629.5
75°	42.2	42.2	56.6	102.1	130.9	98.7	113.1	664.4	1061.6	1152.5	1151.4
77.5°	30.0	31.1	38.8	61.0	100.9	72.1	62.1	369.4	580.1	634.5	604.5
80°	17.7	18.9	26.6	36.6	73.2	52.1	41.0	168.6	223.0	225.2	214.1
82.5°	13.3	13.3	17.7	25.5	51.0	35.5	25.5	64.3	72.1	65.4	55.5
85°	7.8	6.7	13.3	18.9	30.0	20.0	17.7	30.0	33.3	24.4	22.2
87.5°	2.2	2.2	5.5	6.7	13.3	11.1	7.8	11.1	15.5	8.9	6.7
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: P676352
 CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3
2.5°	340.5	337.2	331.7	329.5	321.7	318.4	316.1	310.6	311.7	308.4	308.4
5°	337.2	337.2	326.1	313.9	301.7	294.0	285.1	274.0	274.0	269.6	270.7
7.5°	349.4	340.5	326.1	303.9	284.0	266.2	258.5	247.4	240.7	237.4	237.4
10°	357.2	348.3	323.9	297.3	271.8	249.6	232.9	217.4	208.5	208.5	207.4
12.5°	378.3	364.9	332.8	296.2	258.5	225.2	199.7	181.9	169.7	160.8	163.1
15°	396.0	381.6	337.2	287.3	235.2	188.6	157.5	124.2	107.6	98.7	95.4
17.5°	423.7	397.1	347.2	271.8	199.7	147.5	102.1	74.3	67.7	66.6	66.6
20°	447.0	416.0	348.3	241.8	164.2	94.3	65.4	61.0	57.7	56.6	55.5
22.5°	479.2	440.4	343.9	207.4	117.6	63.2	55.5	51.0	48.8	45.5	45.5
25°	512.5	472.5	335.0	175.3	72.1	54.4	48.8	44.4	39.9	37.7	38.8
27.5°	548.0	497.0	309.5	136.4	55.5	47.7	39.9	36.6	34.4	33.3	33.3
30°	576.8	512.5	271.8	91.0	49.9	42.2	35.5	32.2	30.0	28.8	28.8
32.5°	597.9	525.8	229.6	61.0	45.5	37.7	32.2	28.8	26.6	25.5	25.5
35°	633.4	535.8	190.8	52.1	41.0	33.3	27.7	25.5	23.3	23.3	23.3
37.5°	687.7	549.1	152.0	47.7	37.7	30.0	26.6	23.3	22.2	21.1	21.1
40°	735.4	565.7	108.7	43.3	34.4	27.7	23.3	21.1	20.0	18.9	18.9
42.5°	804.2	584.6	71.0	38.8	31.1	25.5	21.1	18.9	17.7	16.6	16.6
45°	891.8	615.6	55.5	34.4	27.7	23.3	20.0	17.7	15.5	15.5	14.4
47.5°	985.0	653.4	49.9	32.2	25.5	21.1	17.7	15.5	14.4	13.3	13.3
50°	1071.5	690.0	46.6	30.0	23.3	20.0	16.6	14.4	12.2	11.1	11.1
52.5°	1149.2	724.3	44.4	27.7	22.2	17.7	14.4	12.2	11.1	10.0	10.0
55°	1190.2	739.9	43.3	26.6	20.0	16.6	13.3	11.1	10.0	8.9	8.9
57.5°	1254.6	759.8	42.2	25.5	18.9	14.4	12.2	10.0	8.9	7.8	7.8
60°	1358.8	825.3	41.0	24.4	17.7	14.4	11.1	8.9	6.7	5.5	5.5
62.5°	1445.4	879.6	36.6	21.1	15.5	12.2	8.9	6.7	4.4	3.3	3.3
65°	1544.1	905.2	32.2	18.9	13.3	10.0	6.7	4.4	3.3	1.1	1.1
67.5°	1651.7	944.0	26.6	16.6	12.2	7.8	5.5	3.3	1.1	0.0	0.0
70°	1595.1	895.2	22.2	14.4	11.1	6.7	4.4	2.2	0.0	0.0	0.0
72.5°	1250.1	641.2	17.7	13.3	10.0	6.7	4.4	1.1	0.0	0.0	0.0
75°	835.3	362.7	15.5	11.1	7.8	5.5	3.3	1.1	0.0	0.0	0.0
77.5°	453.7	163.1	13.3	10.0	6.7	4.4	3.3	1.1	0.0	0.0	0.0
80°	147.5	64.3	11.1	8.9	6.7	4.4	3.3	1.1	0.0	0.0	0.0
82.5°	39.9	20.0	11.1	8.9	6.7	4.4	3.3	1.1	0.0	0.0	0.0
85°	16.6	13.3	11.1	8.9	6.7	4.4	3.3	1.1	0.0	0.0	0.0
87.5°	6.7	4.4	4.4	5.5	4.4	3.3	2.2	1.1	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



REPORT NUMBER: P676352
 CATALOG NUMBER: CCW-SA-1B-850-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3
2.5°	309.5	311.7	312.8	312.8	318.4	323.9	330.6	336.1	336.1	339.4	342.8
5°	271.8	274.0	277.3	287.3	298.4	310.6	322.8	331.7	343.9	349.4	352.7
7.5°	240.7	242.9	251.8	261.8	277.3	298.4	319.5	339.4	351.6	357.2	361.6
10°	208.5	211.9	221.9	239.6	259.6	285.1	309.5	343.9	363.8	374.9	379.4
12.5°	162.0	170.8	184.1	203.0	228.5	267.3	312.8	348.3	382.7	396.0	404.9
15°	102.1	109.8	130.9	160.8	195.2	240.7	303.9	355.0	402.7	416.0	430.4
17.5°	65.4	66.6	73.2	105.4	149.8	207.4	290.6	364.9	424.8	443.7	465.9
20°	55.5	57.7	58.8	63.2	99.8	170.8	262.9	377.1	451.5	477.0	498.1
22.5°	46.6	47.7	49.9	53.2	59.9	124.2	225.2	377.1	474.8	512.5	536.9
25°	37.7	39.9	42.2	45.5	52.1	77.6	186.4	370.5	502.5	549.1	580.1
27.5°	33.3	33.3	35.5	38.8	44.4	54.4	147.5	350.5	523.6	571.3	612.3
30°	28.8	30.0	31.1	34.4	39.9	47.7	102.1	318.4	545.8	614.5	661.1
32.5°	25.5	25.5	27.7	30.0	35.5	43.3	65.4	269.6	574.6	647.8	713.3
35°	23.3	23.3	24.4	26.6	32.2	38.8	51.0	228.5	609.0	711.0	783.1
37.5°	21.1	21.1	22.2	24.4	28.8	34.4	46.6	196.3	644.5	774.3	879.6
40°	18.9	18.9	20.0	22.2	25.5	31.1	42.2	158.6	688.9	867.4	985.0
42.5°	16.6	16.6	17.7	20.0	23.3	27.7	36.6	118.7	747.6	968.4	1121.5
45°	14.4	14.4	15.5	17.7	20.0	25.5	33.3	91.0	812.0	1080.4	1241.3
47.5°	12.2	13.3	14.4	16.6	18.9	23.3	30.0	79.9	875.2	1199.1	1374.4
50°	11.1	11.1	12.2	14.4	17.7	21.1	27.7	78.8	939.5	1290.1	1510.8
52.5°	10.0	10.0	11.1	13.3	16.6	20.0	26.6	81.0	992.8	1374.4	1606.2
55°	8.9	8.9	10.0	11.1	14.4	18.9	24.4	83.2	1030.5	1459.8	1682.8
57.5°	7.8	7.8	8.9	11.1	13.3	16.6	22.2	85.4	1091.5	1544.1	1793.7
60°	5.5	5.5	7.8	10.0	12.2	14.4	21.1	87.6	1189.1	1660.6	1888.0
62.5°	3.3	3.3	4.4	7.8	10.0	13.3	18.9	83.2	1280.1	1810.3	2032.2
65°	1.1	2.2	3.3	4.4	7.8	11.1	15.5	75.4	1356.6	1960.1	2165.3
67.5°	0.0	0.0	1.1	3.3	6.7	8.9	13.3	55.5	1368.8	2027.7	2301.7
70°	0.0	0.0	1.1	3.3	5.5	8.9	12.2	31.1	1165.8	1811.4	2109.8
72.5°	0.0	0.0	0.0	2.2	5.5	7.8	11.1	23.3	859.7	1365.5	1667.2
75°	0.0	0.0	0.0	1.1	4.4	6.7	10.0	17.7	522.5	910.7	1088.2
77.5°	0.0	0.0	0.0	1.1	3.3	6.7	10.0	15.5	184.1	433.7	511.4
80°	0.0	0.0	0.0	2.2	4.4	6.7	8.9	13.3	44.4	108.7	146.4
82.5°	0.0	0.0	0.0	1.1	3.3	5.5	7.8	11.1	17.7	32.2	51.0
85°	0.0	0.0	0.0	1.1	2.2	5.5	7.8	10.0	12.2	15.5	22.2
87.5°	0.0	0.0	0.0	0.0	1.1	2.2	3.3	4.4	4.4	4.4	7.8
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: P676352
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CANDELA DISTRIBUTION (continued):

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3	338.3
2.5°	341.7	346.1	348.3	352.7	355.0	353.9	352.7	356.1	353.9	350.5
5°	353.9	353.9	357.2	358.3	358.3	355.0	357.2	356.1	353.9	353.9
7.5°	367.2	372.7	372.7	366.1	364.9	362.7	362.7	353.9	350.5	353.9
10°	380.5	384.9	386.0	378.3	368.3	363.8	358.3	347.2	341.7	343.9
12.5°	408.2	408.2	396.0	387.1	373.8	358.3	345.0	329.5	321.7	323.9
15°	428.2	432.6	416.0	396.0	372.7	343.9	329.5	317.2	312.8	309.5
17.5°	467.0	458.1	431.5	402.7	369.4	339.4	329.5	318.4	315.0	315.0
20°	500.3	495.8	455.9	403.8	368.3	348.3	341.7	336.1	335.0	331.7
22.5°	545.8	525.8	474.8	416.0	380.5	362.7	360.5	366.1	362.7	360.5
25°	580.1	563.5	489.2	433.7	399.3	393.8	397.1	402.7	393.8	390.5
27.5°	626.7	595.7	516.9	457.0	424.8	430.4	441.5	442.6	437.0	440.4
30°	670.0	636.7	538.0	483.6	468.1	473.7	490.3	502.5	494.7	490.3
32.5°	732.1	681.1	580.1	528.0	522.5	536.9	555.7	563.5	553.5	551.3
35°	797.6	732.1	623.4	577.9	587.9	607.9	624.5	637.8	622.3	629.0
37.5°	899.6	814.2	696.6	656.7	661.1	668.9	699.9	736.6	744.3	731.0
40°	1006.1	902.9	764.3	733.2	743.2	764.3	800.9	835.3	853.0	835.3
42.5°	1129.2	988.4	868.6	831.9	841.9	871.9	920.7	948.4	946.2	919.6
45°	1281.2	1107.0	966.2	920.7	957.3	983.9	1032.7	1036.1	1015.0	1008.3
47.5°	1397.7	1206.9	1071.5	1042.7	1092.6	1093.7	1104.8	1105.9	1082.6	1074.9
50°	1526.3	1322.2	1189.1	1147.0	1231.3	1192.5	1162.5	1142.5	1107.0	1090.4
52.5°	1652.8	1404.3	1297.8	1254.6	1342.2	1239.0	1184.7	1123.7	1071.5	1053.8
55°	1720.5	1539.7	1456.5	1355.5	1366.6	1252.4	1115.9	1039.4	950.6	946.2
57.5°	1800.3	1630.6	1590.7	1424.3	1325.6	1159.2	972.8	871.9	776.5	765.4
60°	1894.6	1774.8	1732.7	1413.2	1180.3	973.9	770.9	641.2	551.3	543.5
62.5°	2000.0	1945.6	1820.3	1304.5	937.3	685.5	509.2	400.4	317.2	312.8
65°	2166.4	2088.7	1866.9	1098.2	620.1	439.3	338.3	259.6	209.7	207.4
67.5°	2270.7	2143.1	1762.6	783.1	343.9	290.6	237.4	188.6	145.3	136.4
70°	2123.1	1966.7	1394.3	448.1	199.7	220.7	183.0	126.5	99.8	97.6
72.5°	1696.1	1459.8	938.4	210.8	124.2	173.0	133.1	85.4	59.9	57.7
75°	1157.0	918.5	589.0	97.6	87.6	126.5	97.6	49.9	42.2	42.2
77.5°	516.9	468.1	301.7	59.9	65.4	96.5	56.6	34.4	31.1	30.0
80°	157.5	165.3	123.1	41.0	48.8	73.2	34.4	23.3	18.9	17.7
82.5°	53.2	62.1	55.5	24.4	33.3	52.1	23.3	15.5	13.3	13.3
85°	25.5	31.1	27.7	15.5	17.7	25.5	18.9	12.2	7.8	7.8
87.5°	10.0	14.4	10.0	6.7	10.0	13.3	7.8	5.5	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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