

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: P676360

Luminaire Tested: **CCW-SA-2D-850-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676360
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-850-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
T2 distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

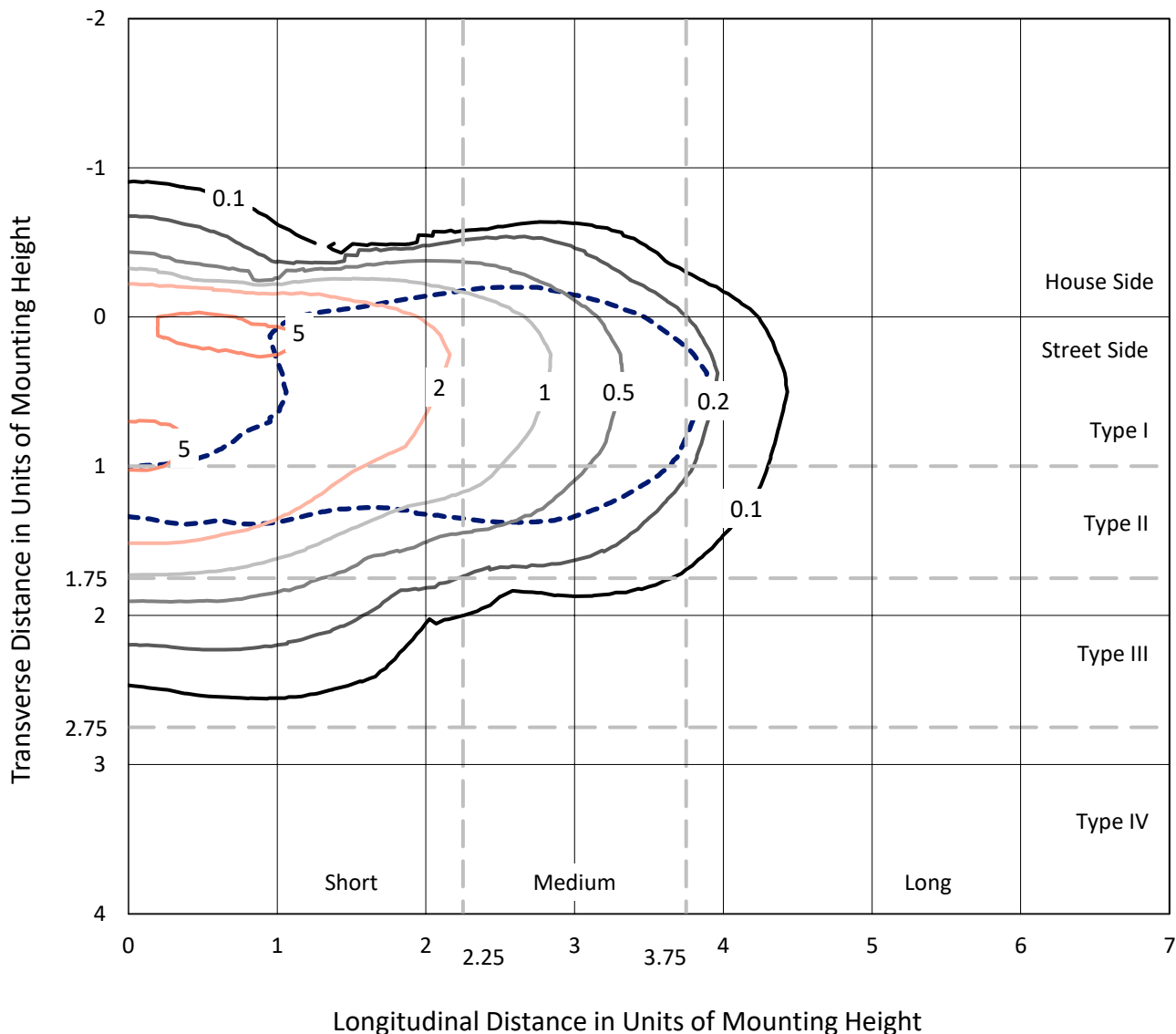
Lumens per Lamp: N/A
Luminaire Lumens: 7513.4 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
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: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

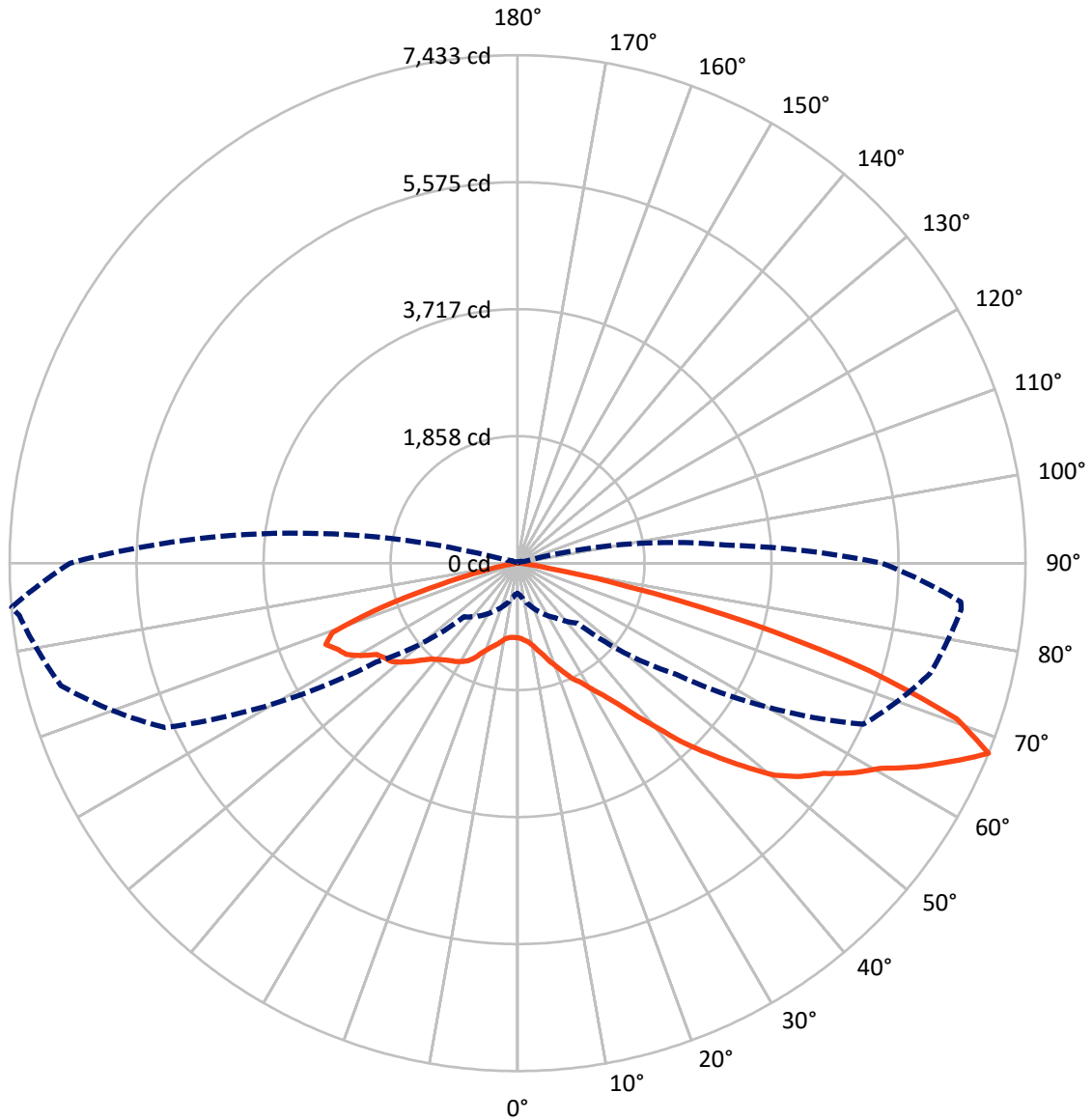
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - N/A

REPORT NUMBER: P676360
CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

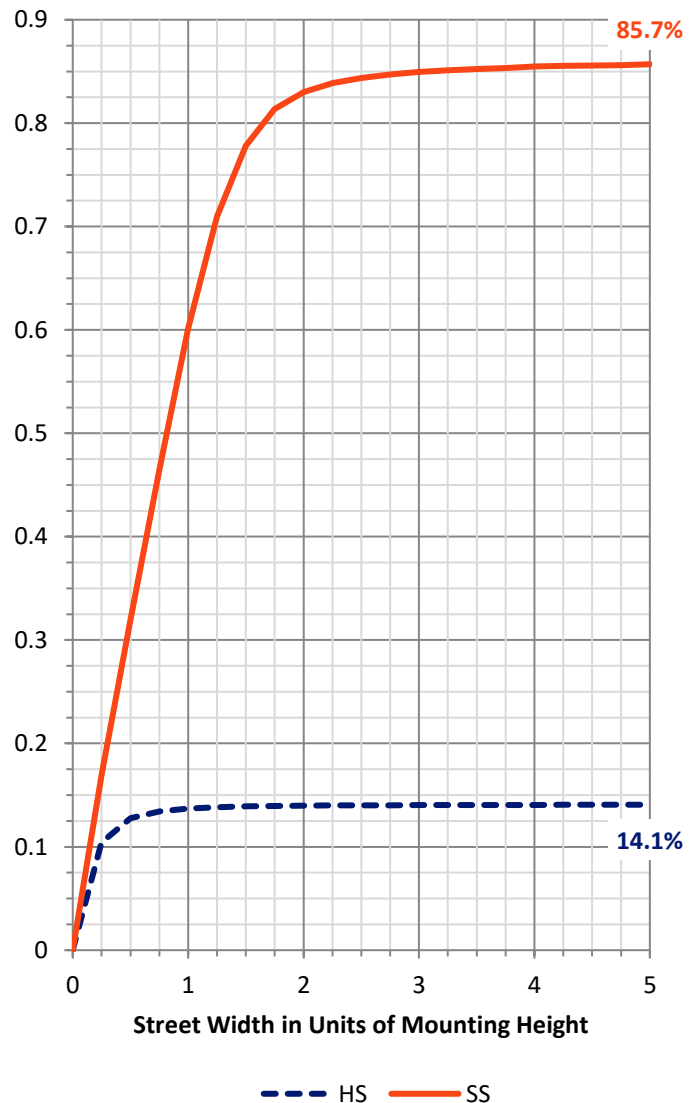
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1067.4	0.0	1067.4
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	6446.0	0.0	6446.0
	% Fixture	85.8	0.0	85.8
Total	Lumens	7513.4	0.0	7513.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	1.3
10°-20°	267.9	3.6
20°-30°	444.9	5.9
30°-40°	765.4	10.2
40°-50°	1375.5	18.3
50°-60°	1958.1	26.1
60°-70°	1785.2	23.8
70°-80°	760.2	10.1
80°-90°	56.6	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°	7513.4	100.0
0°-180°	7513.4	100.0



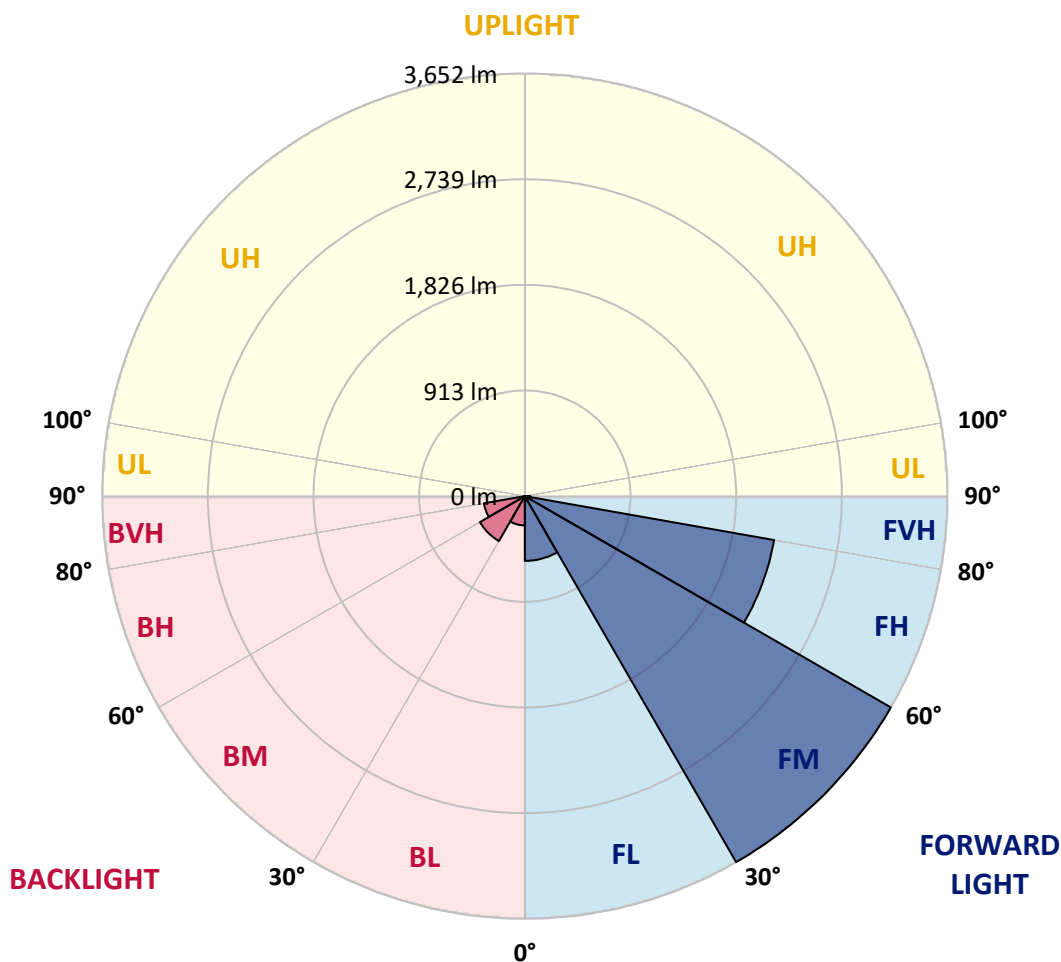
REPORT NUMBER: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	559.7	7.4			
FM (30°-60°)	3651.5	48.6			
FH (60°-80°)	2186.7	29.1			G2/5000
FVH (80°-90°)	48.1	0.6			G1/100
BL (0°-30°)	252.7	3.4	B1/500		
BM (30°-60°)	447.5	6.0	B1/1000		
BH (60°-80°)	358.7	4.8	B1/500		G1/500
BVH (80°-90°)	8.5	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-G2

Type II Short





REPORT NUMBER: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6
2.5°	1132.0	1142.7	1142.7	1139.1	1128.4	1121.2	1117.6	1110.5	1103.3	1103.3	1106.9
5°	1142.7	1132.0	1146.3	1128.4	1128.4	1128.4	1142.7	1135.5	1132.0	1114.1	1114.1
7.5°	1142.7	1132.0	1132.0	1142.7	1132.0	1139.1	1157.0	1149.9	1164.2	1132.0	1139.1
10°	1110.5	1106.9	1114.1	1128.4	1132.0	1146.3	1164.2	1200.0	1203.6	1182.1	1178.5
12.5°	1046.0	1042.4	1067.5	1074.6	1117.6	1153.5	1207.2	1235.8	1268.1	1257.3	1235.8
15°	999.4	1006.6	1024.5	1053.2	1092.6	1157.0	1217.9	1282.4	1339.7	1325.4	1318.2
17.5°	1017.3	1013.8	1017.3	1035.2	1085.4	1149.9	1253.8	1329.0	1411.4	1411.4	1418.5
20°	1071.1	1081.8	1078.2	1067.5	1092.6	1146.3	1253.8	1386.3	1522.4	1511.7	1511.7
22.5°	1164.2	1167.8	1146.3	1139.1	1135.5	1167.8	1275.3	1457.9	1615.6	1637.0	1629.9
25°	1260.9	1264.5	1257.3	1235.8	1207.2	1214.4	1314.7	1515.3	1744.5	1780.3	1773.2
27.5°	1422.1	1418.5	1400.6	1375.6	1332.6	1300.3	1375.6	1558.2	1844.8	1905.7	1887.8
30°	1583.3	1572.6	1547.5	1515.3	1475.9	1415.0	1450.8	1640.6	1970.2	2027.5	1988.1
32.5°	1780.3	1758.8	1766.0	1715.9	1633.5	1536.7	1529.6	1715.9	2070.5	2152.9	2120.6
35°	2031.1	2006.0	1970.2	1923.6	1844.8	1715.9	1676.5	1837.7	2238.9	2299.7	2299.7
37.5°	2360.6	2385.7	2342.7	2149.3	2063.3	1941.5	1859.1	1963.0	2385.7	2532.6	2496.8
40°	2697.4	2718.9	2640.1	2496.8	2310.5	2160.0	2109.9	2167.2	2607.8	2783.3	2715.3
42.5°	2969.6	2998.3	2969.6	2783.3	2636.5	2443.0	2353.5	2407.2	2894.4	3105.7	3016.2
45°	3256.2	3284.8	3252.6	3130.8	2987.5	2876.5	2650.8	2718.9	3195.3	3510.5	3410.2
47.5°	3471.1	3506.9	3449.6	3424.5	3309.9	3292.0	2908.7	2983.9	3510.5	3918.9	3793.5
50°	3521.3	3560.7	3610.8	3639.5	3600.1	3643.1	3256.2	3320.7	3840.1	4295.0	4173.2
52.5°	3403.1	3442.5	3553.5	3686.0	3868.7	3997.7	3607.2	3661.0	4184.0	4606.7	4542.2
55°	3055.6	3091.4	3317.1	3496.2	3933.2	4144.6	3944.0	4169.6	4431.1	4932.6	4775.0
57.5°	2471.7	2514.7	2812.0	3087.8	3718.3	4062.2	4144.6	4592.3	4839.5	5172.6	4990.0
60°	1755.3	1780.3	2038.3	2525.4	3123.6	3650.2	4105.2	4907.6	5161.9	5495.0	5398.3
62.5°	1010.2	1031.7	1300.3	1758.8	2357.1	3048.4	3929.6	5204.9	5509.4	5849.7	5795.9
65°	669.9	677.0	859.7	1110.5	1533.2	2246.0	3485.4	5470.0	5853.3	6132.7	6071.8
67.5°	440.6	480.0	623.3	795.2	981.5	1243.0	2840.7	5581.0	6247.3	6526.7	6512.4
70°	315.2	329.6	447.8	612.6	737.9	698.5	1662.1	4796.5	6229.4	6634.2	6516.0
72.5°	186.3	200.6	297.3	458.5	580.3	444.2	777.3	3392.3	5161.9	5294.4	5262.2
75°	136.1	136.1	182.7	329.6	422.7	318.8	365.4	2145.7	3428.1	3721.9	3718.3
77.5°	96.7	100.3	125.4	197.0	326.0	232.8	200.6	1192.9	1873.5	2049.0	1952.3
80°	57.3	60.9	86.0	118.2	236.4	168.4	132.5	544.5	720.0	727.2	691.4
82.5°	43.0	43.0	57.3	82.4	164.8	114.6	82.4	207.8	232.8	211.3	179.1
85°	25.1	21.5	43.0	60.9	96.7	64.5	57.3	96.7	107.5	78.8	71.6
87.5°	7.2	7.2	17.9	21.5	43.0	35.8	25.1	35.8	50.2	28.7	21.5
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: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6
2.5°	1099.7	1089.0	1071.1	1063.9	1038.8	1028.1	1020.9	1003.0	1006.6	995.8	995.8
5°	1089.0	1089.0	1053.2	1013.8	974.3	949.3	920.6	884.8	884.8	870.5	874.0
7.5°	1128.4	1099.7	1053.2	981.5	917.0	859.7	834.6	798.8	777.3	766.6	766.6
10°	1153.5	1124.8	1046.0	960.0	877.6	806.0	752.3	702.1	673.4	673.4	669.9
12.5°	1221.5	1178.5	1074.6	956.4	834.6	727.2	644.8	587.5	548.1	519.4	526.6
15°	1278.8	1232.3	1089.0	927.8	759.4	609.0	508.7	401.2	347.5	318.8	308.1
17.5°	1368.4	1282.4	1121.2	877.6	644.8	476.4	329.6	240.0	218.5	214.9	214.9
20°	1443.6	1343.3	1124.8	780.9	530.2	304.5	211.3	197.0	186.3	182.7	179.1
22.5°	1547.5	1422.1	1110.5	669.9	379.7	204.2	179.1	164.8	157.6	146.9	146.9
25°	1655.0	1526.0	1081.8	566.0	232.8	175.5	157.6	143.3	129.0	121.8	125.4
27.5°	1769.6	1604.8	999.4	440.6	179.1	154.0	129.0	118.2	111.0	107.5	107.5
30°	1862.7	1655.0	877.6	293.7	161.2	136.1	114.6	103.9	96.7	93.1	93.1
32.5°	1930.8	1697.9	741.5	197.0	146.9	121.8	103.9	93.1	86.0	82.4	82.4
35°	2045.4	1730.2	616.1	168.4	132.5	107.5	89.6	82.4	75.2	75.2	75.2
37.5°	2220.9	1773.2	490.8	154.0	121.8	96.7	86.0	75.2	71.6	68.1	68.1
40°	2375.0	1826.9	351.1	139.7	111.0	89.6	75.2	68.1	64.5	60.9	60.9
42.5°	2597.1	1887.8	229.3	125.4	100.3	82.4	68.1	60.9	57.3	53.7	53.7
45°	2880.1	1988.1	179.1	111.0	89.6	75.2	64.5	57.3	50.2	50.2	46.6
47.5°	3181.0	2109.9	161.2	103.9	82.4	68.1	57.3	50.2	46.6	43.0	43.0
50°	3460.4	2228.1	150.5	96.7	75.2	64.5	53.7	46.6	39.4	35.8	35.8
52.5°	3711.1	2339.2	143.3	89.6	71.6	57.3	46.6	39.4	35.8	32.2	32.2
55°	3843.7	2389.3	139.7	86.0	64.5	53.7	43.0	35.8	32.2	28.7	28.7
57.5°	4051.4	2453.8	136.1	82.4	60.9	46.6	39.4	32.2	28.7	25.1	25.1
60°	4388.2	2665.1	132.5	78.8	57.3	46.6	35.8	28.7	21.5	17.9	17.9
62.5°	4667.6	2840.7	118.2	68.1	50.2	39.4	28.7	21.5	14.3	10.7	10.7
65°	4986.4	2923.0	103.9	60.9	43.0	32.2	21.5	14.3	10.7	3.6	3.6
67.5°	5333.8	3048.4	86.0	53.7	39.4	25.1	17.9	10.7	3.6	0.0	0.0
70°	5151.2	2890.8	71.6	46.6	35.8	21.5	14.3	7.2	0.0	0.0	0.0
72.5°	4037.1	2070.5	57.3	43.0	32.2	21.5	14.3	3.6	0.0	0.0	0.0
75°	2697.4	1171.4	50.2	35.8	25.1	17.9	10.7	3.6	0.0	0.0	0.0
77.5°	1465.1	526.6	43.0	32.2	21.5	14.3	10.7	3.6	0.0	0.0	0.0
80°	476.4	207.8	35.8	28.7	21.5	14.3	10.7	3.6	0.0	0.0	0.0
82.5°	129.0	64.5	35.8	28.7	21.5	14.3	10.7	3.6	0.0	0.0	0.0
85°	53.7	43.0	35.8	28.7	21.5	14.3	10.7	3.6	0.0	0.0	0.0
87.5°	21.5	14.3	14.3	17.9	14.3	10.7	7.2	3.6	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: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6
2.5°	999.4	1006.6	1010.2	1010.2	1028.1	1046.0	1067.5	1085.4	1085.4	1096.1	1106.9
5°	877.6	884.8	895.5	927.8	963.6	1003.0	1042.4	1071.1	1110.5	1128.4	1139.1
7.5°	777.3	784.5	813.2	845.4	895.5	963.6	1031.7	1096.1	1135.5	1153.5	1167.8
10°	673.4	684.2	716.4	773.7	838.2	920.6	999.4	1110.5	1174.9	1210.8	1225.1
12.5°	523.0	551.7	594.6	655.5	737.9	863.3	1010.2	1124.8	1235.8	1278.8	1307.5
15°	329.6	354.6	422.7	519.4	630.5	777.3	981.5	1146.3	1300.3	1343.3	1389.9
17.5°	211.3	214.9	236.4	340.3	483.6	669.9	938.5	1178.5	1372.0	1432.9	1504.5
20°	179.1	186.3	189.9	204.2	322.4	551.7	849.0	1217.9	1457.9	1540.3	1608.4
22.5°	150.5	154.0	161.2	171.9	193.4	401.2	727.2	1217.9	1533.2	1655.0	1733.8
25°	121.8	129.0	136.1	146.9	168.4	250.8	601.8	1196.4	1622.7	1773.2	1873.5
27.5°	107.5	107.5	114.6	125.4	143.3	175.5	476.4	1132.0	1690.8	1844.8	1977.4
30°	93.1	96.7	100.3	111.0	129.0	154.0	329.6	1028.1	1762.4	1984.5	2135.0
32.5°	82.4	82.4	89.6	96.7	114.6	139.7	211.3	870.5	1855.6	2092.0	2303.3
35°	75.2	75.2	78.8	86.0	103.9	125.4	164.8	737.9	1966.6	2296.2	2529.0
37.5°	68.1	68.1	71.6	78.8	93.1	111.0	150.5	634.0	2081.2	2500.4	2840.7
40°	60.9	60.9	64.5	71.6	82.4	100.3	136.1	512.2	2224.5	2801.3	3181.0
42.5°	53.7	53.7	57.3	64.5	75.2	89.6	118.2	383.3	2414.4	3127.2	3621.6
45°	46.6	46.6	50.2	57.3	64.5	82.4	107.5	293.7	2622.1	3489.0	4008.4
47.5°	39.4	43.0	46.6	53.7	60.9	75.2	96.7	257.9	2826.3	3872.3	4438.3
50°	35.8	35.8	39.4	46.6	57.3	68.1	89.6	254.3	3034.1	4166.1	4878.9
52.5°	32.2	32.2	35.8	43.0	53.7	64.5	86.0	261.5	3206.0	4438.3	5187.0
55°	28.7	28.7	32.2	35.8	46.6	60.9	78.8	268.7	3327.8	4714.1	5434.1
57.5°	25.1	25.1	28.7	35.8	43.0	53.7	71.6	275.8	3524.8	4986.4	5792.4
60°	17.9	17.9	25.1	32.2	39.4	46.6	68.1	283.0	3840.1	5362.5	6096.8
62.5°	10.7	10.7	14.3	25.1	32.2	43.0	60.9	268.7	4133.8	5846.1	6562.5
65°	3.6	7.2	10.7	14.3	25.1	35.8	50.2	243.6	4381.0	6329.7	6992.4
67.5°	0.0	0.0	3.6	10.7	21.5	28.7	43.0	179.1	4420.4	6548.2	7433.0
70°	0.0	0.0	3.6	10.7	17.9	28.7	39.4	100.3	3764.9	5849.7	6813.3
72.5°	0.0	0.0	0.0	7.2	17.9	25.1	35.8	75.2	2776.2	4409.6	5384.0
75°	0.0	0.0	0.0	3.6	14.3	21.5	32.2	57.3	1687.2	2941.0	3514.1
77.5°	0.0	0.0	0.0	3.6	10.7	21.5	32.2	50.2	594.6	1400.6	1651.4
80°	0.0	0.0	0.0	7.2	14.3	21.5	28.7	43.0	143.3	351.1	472.8
82.5°	0.0	0.0	0.0	3.6	10.7	17.9	25.1	35.8	57.3	103.9	164.8
85°	0.0	0.0	0.0	3.6	7.2	17.9	25.1	32.2	39.4	50.2	71.6
87.5°	0.0	0.0	0.0	0.0	3.6	7.2	10.7	14.3	14.3	14.3	25.1
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: P676360
 CATALOG NUMBER: CCW-SA-2D-850-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6	1092.6
2.5°	1103.3	1117.6	1124.8	1139.1	1146.3	1142.7	1139.1	1149.9	1142.7	1132.0
5°	1142.7	1142.7	1153.5	1157.0	1157.0	1146.3	1153.5	1149.9	1142.7	1142.7
7.5°	1185.7	1203.6	1203.6	1182.1	1178.5	1171.4	1171.4	1142.7	1132.0	1142.7
10°	1228.7	1243.0	1246.6	1221.5	1189.3	1174.9	1157.0	1121.2	1103.3	1110.5
12.5°	1318.2	1318.2	1278.8	1250.2	1207.2	1157.0	1114.1	1063.9	1038.8	1046.0
15°	1382.7	1397.0	1343.3	1278.8	1203.6	1110.5	1063.9	1024.5	1010.2	999.4
17.5°	1508.1	1479.4	1393.5	1300.3	1192.9	1096.1	1063.9	1028.1	1017.3	1017.3
20°	1615.6	1601.2	1472.3	1303.9	1189.3	1124.8	1103.3	1085.4	1081.8	1071.1
22.5°	1762.4	1697.9	1533.2	1343.3	1228.7	1171.4	1164.2	1182.1	1171.4	1164.2
25°	1873.5	1819.7	1579.7	1400.6	1289.6	1271.7	1282.4	1300.3	1271.7	1260.9
27.5°	2023.9	1923.6	1669.3	1475.9	1372.0	1389.9	1425.7	1429.3	1411.4	1422.1
30°	2163.6	2056.2	1737.3	1561.8	1511.7	1529.6	1583.3	1622.7	1597.6	1583.3
32.5°	2364.2	2199.4	1873.5	1705.1	1687.2	1733.8	1794.7	1819.7	1787.5	1780.3
35°	2575.6	2364.2	2013.2	1866.3	1898.5	1963.0	2016.8	2059.7	2009.6	2031.1
37.5°	2905.1	2629.3	2249.6	2120.6	2135.0	2160.0	2260.3	2378.6	2403.6	2360.6
40°	3249.0	2915.9	2468.1	2367.8	2400.1	2468.1	2586.3	2697.4	2754.7	2697.4
42.5°	3646.6	3191.7	2804.8	2686.6	2718.9	2815.6	2973.2	3062.8	3055.6	2969.6
45°	4137.4	3575.0	3120.1	2973.2	3091.4	3177.4	3335.0	3345.7	3277.7	3256.2
47.5°	4513.5	3897.4	3460.4	3367.2	3528.4	3532.0	3567.8	3571.4	3496.2	3471.1
50°	4929.1	4269.9	3840.1	3704.0	3976.2	3850.8	3754.1	3689.6	3575.0	3521.3
52.5°	5337.4	4535.0	4191.1	4051.4	4334.4	4001.3	3825.8	3628.7	3460.4	3403.1
55°	5555.9	4972.0	4703.4	4377.4	4413.2	4044.3	3603.7	3356.5	3069.9	3055.6
57.5°	5813.9	5265.8	5136.8	4599.5	4280.7	3743.4	3141.6	2815.6	2507.5	2471.7
60°	6118.3	5731.5	5595.3	4563.7	3811.4	3145.1	2489.6	2070.5	1780.3	1755.3
62.5°	6458.6	6283.1	5878.3	4212.6	3026.9	2213.8	1644.2	1293.2	1024.5	1010.2
65°	6996.0	6745.2	6028.8	3546.3	2002.4	1418.5	1092.6	838.2	677.0	669.9
67.5°	7332.7	6920.7	5692.1	2529.0	1110.5	938.5	766.6	609.0	469.3	440.6
70°	6856.3	6351.2	4502.8	1447.2	644.8	712.9	591.1	408.4	322.4	315.2
72.5°	5477.1	4714.1	3030.5	680.6	401.2	558.8	429.9	275.8	193.4	186.3
75°	3736.2	2966.0	1902.1	315.2	283.0	408.4	315.2	161.2	136.1	136.1
77.5°	1669.3	1511.7	974.3	193.4	211.3	311.6	182.7	111.0	100.3	96.7
80°	508.7	533.7	397.6	132.5	157.6	236.4	111.0	75.2	60.9	57.3
82.5°	171.9	200.6	179.1	78.8	107.5	168.4	75.2	50.2	43.0	43.0
85°	82.4	100.3	89.6	50.2	57.3	82.4	60.9	39.4	25.1	25.1
87.5°	32.2	46.6	32.2	21.5	32.2	43.0	25.1	17.9	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)