

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: P676214

Luminaire Tested: **CCW-SA-2B-850-U-T1**

Issue Date: 04/25/2023

Test Information

Test Method: LM-79-08
Report Number: P676214
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-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @450mA w/
T1 distribution lens
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

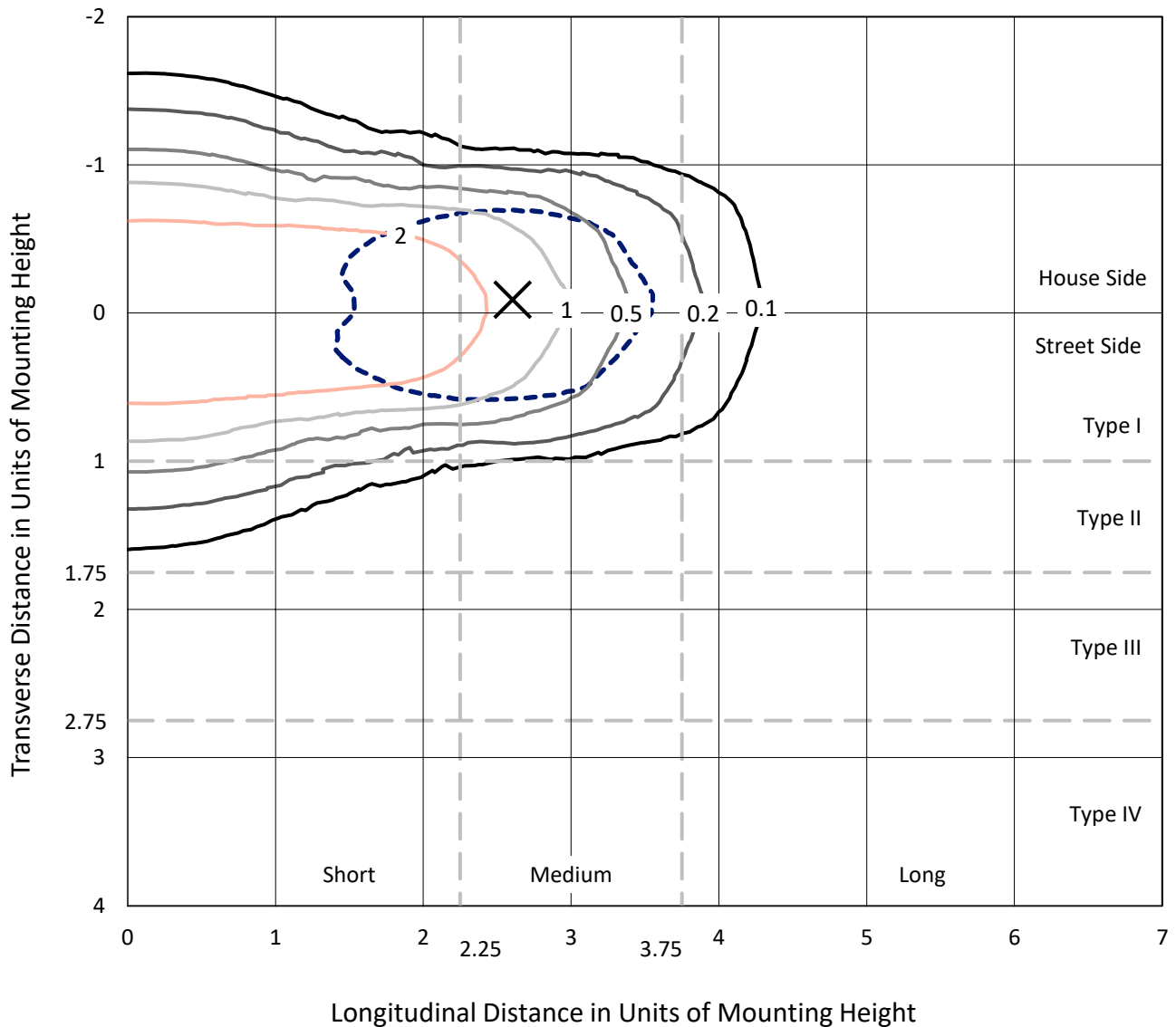
Lumens per Lamp: N/A
Luminaire Lumens: 5868.3 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

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

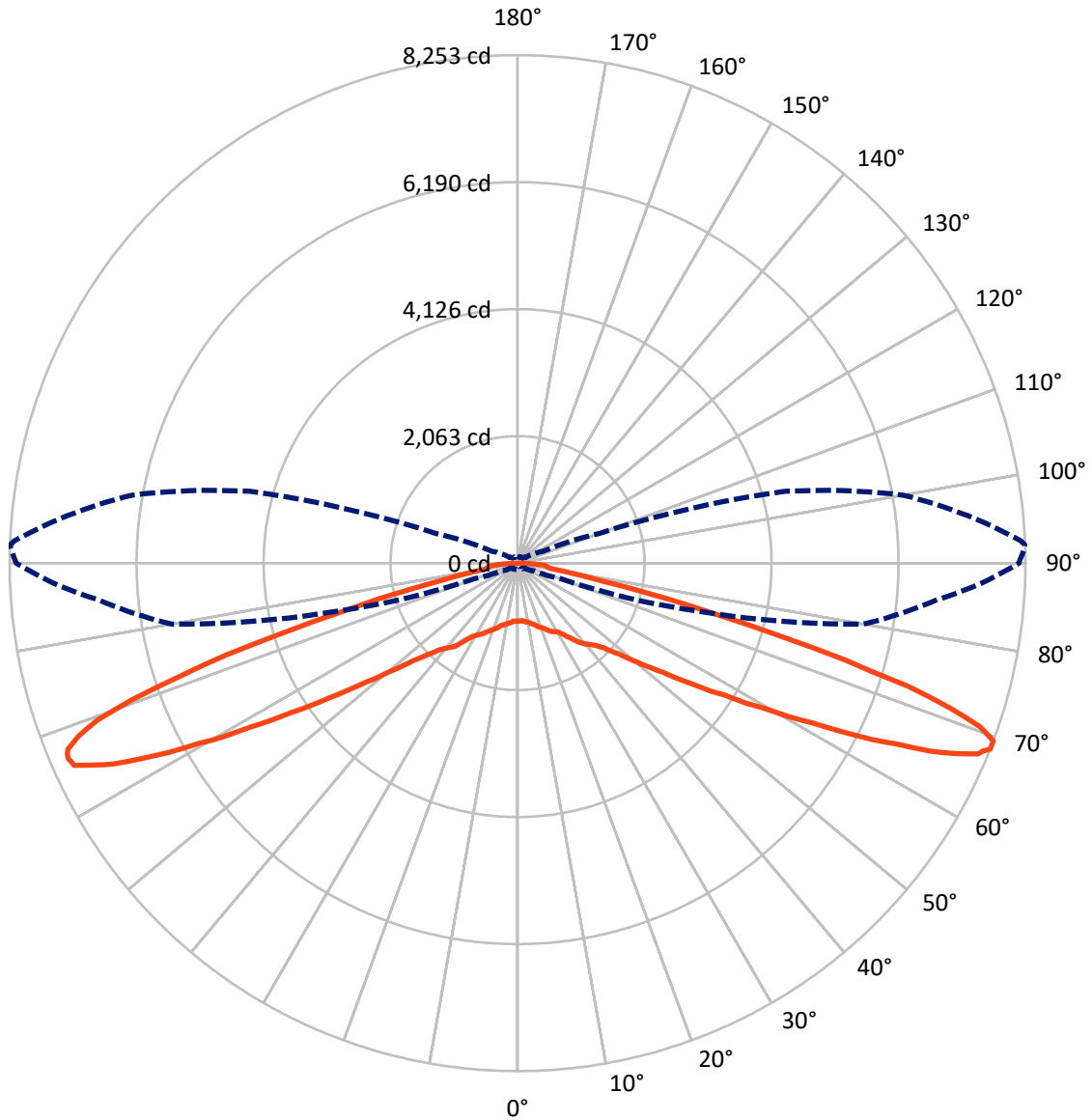
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.5 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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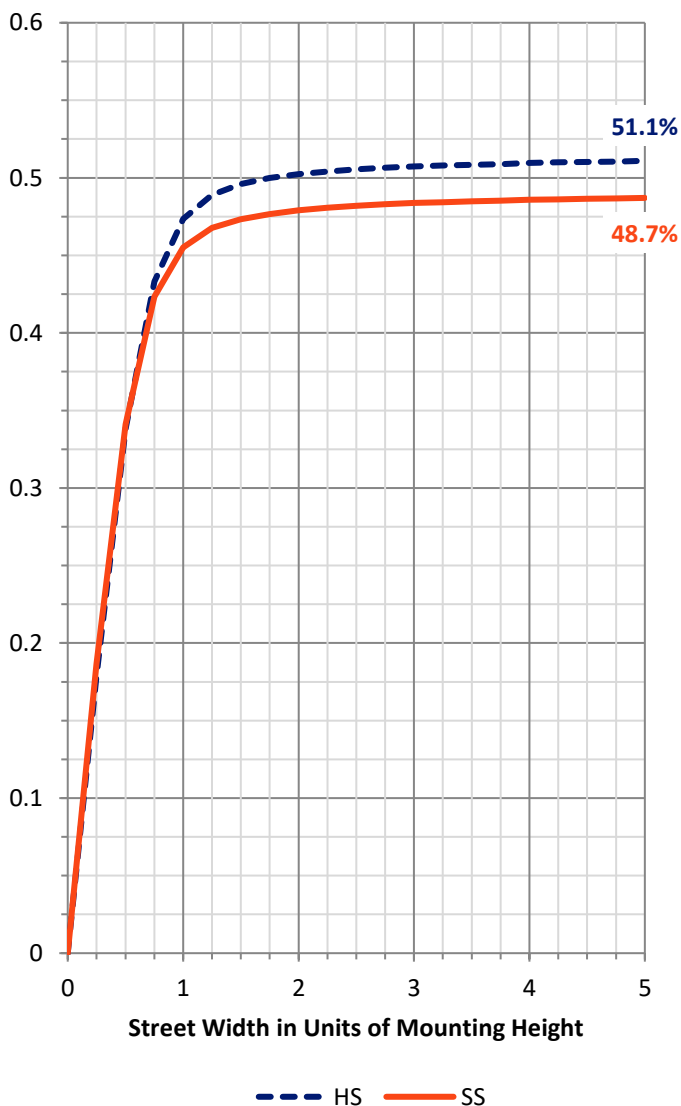
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3022.1	0.0	3022.1
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	2846.2	0.0	2846.2
	% Fixture	48.5	0.0	48.5
Total	Lumens	5868.3	0.0	5868.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	1.6
10°-20°	304.4	5.2
20°-30°	519.5	8.9
30°-40°	725.4	12.4
40°-50°	922.7	15.7
50°-60°	1166.7	19.9
60°-70°	1438.9	24.5
70°-80°	628.5	10.7
80°-90°	68.2	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°	5868.3	100.0
0°-180°	5868.3	100.0



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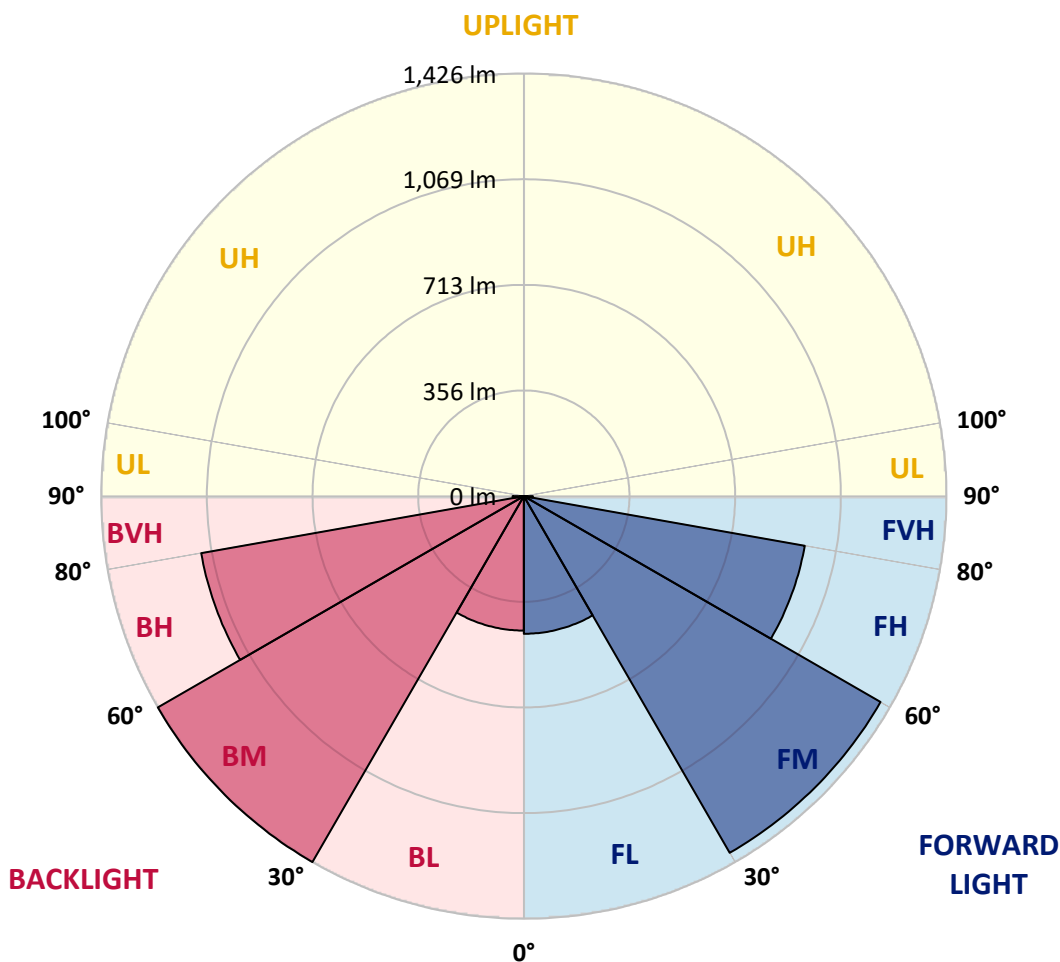
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	464.4	7.9			
FM (30°-60°)	1389.3	23.7			
FH (60°-80°)	962.3	16.4			G1/1800
FVH (80°-90°)	30.2	0.5			G1/100
BL (0°-30°)	453.5	7.7	B1/500		
BM (30°-60°)	1425.5	24.3	B2/2500		
BH (60°-80°)	1105.1	18.8	B3/2500		G3/2500
BVH (80°-90°)	37.9	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°	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4
2.5°	958.2	957.1	960.4	962.6	952.7	956.0	953.8	951.6	943.9	940.6	934.0
5°	984.7	988.0	999.0	989.1	993.5	988.0	970.3	975.8	965.9	963.7	957.1
7.5°	1030.9	1024.3	1039.7	1028.7	1032.0	1021.0	1013.3	1003.4	1001.2	985.8	986.9
10°	1040.8	1054.0	1060.7	1058.4	1060.7	1066.2	1051.8	1036.4	1015.5	1011.1	995.7
12.5°	1034.2	1046.3	1064.0	1078.3	1088.2	1090.4	1084.9	1081.6	1072.8	1047.4	1046.3
15°	1027.6	1018.8	1029.8	1079.4	1112.4	1134.4	1142.2	1123.4	1125.6	1092.6	1079.4
17.5°	983.6	970.3	1013.3	1061.8	1102.5	1151.0	1188.4	1182.9	1182.9	1156.5	1137.7
20°	925.2	947.2	969.2	1030.9	1105.8	1178.5	1250.1	1246.8	1233.6	1225.9	1185.1
22.5°	875.6	885.5	926.3	991.3	1084.9	1186.2	1271.0	1331.6	1300.8	1269.9	1245.7
25°	841.5	832.7	884.4	951.6	1065.1	1173.0	1310.7	1373.4	1390.0	1366.8	1320.6
27.5°	793.0	793.0	833.8	897.6	1001.2	1166.4	1349.2	1445.0	1469.3	1435.1	1367.9
30°	737.9	744.5	779.8	852.5	953.8	1117.9	1364.6	1527.6	1547.5	1517.7	1448.3
32.5°	695.0	695.0	734.6	811.7	920.8	1095.9	1354.7	1609.1	1646.6	1624.6	1553.0
35°	648.7	645.4	674.1	758.9	867.9	1052.9	1351.4	1674.1	1757.8	1758.9	1684.0
37.5°	582.6	595.9	632.2	699.4	826.1	1011.1	1341.5	1752.3	1902.1	1927.5	1875.7
40°	538.6	544.1	577.1	650.9	761.1	961.5	1327.2	1816.2	1997.9	2085.0	2013.4
42.5°	474.7	482.4	507.7	599.2	698.3	891.0	1264.4	1861.4	2134.5	2233.6	2173.1
45°	407.5	411.9	449.4	524.3	631.1	807.3	1197.2	1934.1	2266.7	2469.3	2434.1
47.5°	327.1	329.3	361.3	439.5	550.7	723.6	1093.7	1930.8	2373.5	2705.0	2804.2
50°	255.5	261.0	285.3	349.1	453.8	621.2	973.6	1904.3	2507.9	2973.8	3168.7
52.5°	203.8	204.9	220.3	270.9	350.2	518.8	844.8	1820.6	2634.6	3237.0	3615.9
55°	168.5	168.5	177.3	208.2	268.7	394.3	693.9	1681.8	2650.0	3527.8	4103.8
56°	161.9	159.7	167.4	193.8	242.3	355.8	623.4	1588.2	2672.0	3662.2	4348.3
57°	153.1	154.2	158.6	177.3	218.1	315.0	545.2	1496.8	2656.6	3772.3	4529.0
58°	148.7	146.5	155.3	167.4	192.7	279.8	491.2	1388.9	2632.4	3862.6	4792.2
59°	142.1	141.0	146.5	157.5	179.5	248.9	425.1	1272.1	2585.0	3979.4	4988.3
60°	139.9	138.8	141.0	149.8	165.2	218.1	374.5	1135.5	2458.3	4099.4	5231.7
61°	133.3	134.4	138.8	144.3	156.4	196.0	337.0	995.7	2375.7	4200.7	5500.4
62°	134.4	132.2	134.4	138.8	147.6	180.6	295.2	858.0	2228.1	4315.3	5702.0
63°	127.8	126.7	130.0	135.5	139.9	163.0	257.7	741.2	2060.7	4341.7	5872.7
64°	125.6	124.5	125.6	133.3	134.4	153.1	228.0	633.3	1818.4	4386.9	6091.9
65°	120.1	120.1	122.3	125.6	130.0	144.3	203.8	549.6	1577.2	4267.9	6159.0
66°	115.6	116.7	116.7	122.3	125.6	134.4	187.2	467.0	1345.9	4078.5	6224.0
67°	112.3	112.3	113.4	117.9	121.2	126.7	168.5	404.2	1135.5	3852.7	6123.8
67.5°	110.1	111.2	111.2	115.6	119.0	126.7	160.8	383.3	1015.5	3604.9	6048.9
68°	106.8	107.9	107.9	112.3	115.6	122.3	155.3	350.2	936.2	3444.1	5910.1
69°	104.6	103.5	103.5	107.9	112.3	116.7	144.3	306.2	744.5	2994.7	5707.5
70°	98.0	98.0	100.2	103.5	106.8	111.2	133.3	269.8	630.0	2479.3	5185.4
71°	94.7	93.6	94.7	98.0	101.3	106.8	122.3	239.0	515.5	2058.5	4672.1
72°	88.1	90.3	90.3	93.6	96.9	100.2	114.5	208.2	432.9	1645.5	4107.1
72.5°	87.0	87.0	88.1	91.4	93.6	99.1	110.1	199.4	395.4	1450.5	3870.3
73°	83.7	83.7	84.8	88.1	90.3	95.8	106.8	179.5	360.2	1290.8	3427.6
74°	80.4	79.3	79.3	83.7	84.8	90.3	100.2	158.6	301.8	972.5	2751.3
75°	74.9	74.9	76.0	78.2	79.3	83.7	92.5	141.0	254.4	754.5	2152.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	61.7	62.8	63.9	66.1	66.1	69.4	76.0	98.0	155.3	382.2	988.0
80°	45.2	47.4	50.7	54.0	52.9	52.9	59.5	70.5	92.5	171.8	378.9
82.5°	36.3	38.5	35.2	39.7	39.7	37.4	43.0	51.8	62.8	84.8	135.5
85°	24.2	25.3	20.9	24.2	23.1	23.1	28.6	30.8	38.5	47.4	67.2
87.5°	11.0	11.0	8.8	9.9	9.9	9.9	14.3	11.0	16.5	23.1	39.7
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°	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4	938.4
2.5°	940.6	945.0	945.0	940.6	937.3	940.6	938.4	932.9	938.4	940.6	941.7
5°	953.8	945.0	949.4	939.5	946.1	945.0	942.8	948.3	949.4	949.4	957.1
7.5°	968.1	979.1	964.8	965.9	969.2	956.0	960.4	962.6	958.2	967.0	973.6
10°	993.5	997.9	993.5	976.9	988.0	979.1	975.8	985.8	983.6	985.8	995.7
12.5°	1016.6	1024.3	1012.2	1011.1	1005.6	997.9	1002.3	1001.2	1016.6	1018.8	1030.9
15°	1064.0	1044.1	1039.7	1038.6	1036.4	1033.1	1035.3	1036.4	1056.2	1059.5	1088.2
17.5°	1104.7	1101.4	1077.2	1086.0	1086.0	1072.8	1067.3	1086.0	1101.4	1117.9	1137.7
20°	1146.6	1143.3	1116.8	1117.9	1108.0	1120.1	1113.5	1131.1	1157.6	1163.1	1180.7
22.5°	1196.1	1181.8	1163.1	1165.3	1168.6	1159.8	1155.4	1179.6	1206.0	1221.5	1222.6
25°	1274.3	1238.0	1222.6	1224.8	1220.4	1213.7	1217.0	1247.9	1261.1	1294.1	1287.5
27.5°	1316.2	1295.2	1284.2	1258.9	1260.0	1250.1	1263.3	1309.6	1336.0	1361.3	1310.7
30°	1366.8	1353.6	1305.2	1296.4	1295.2	1290.8	1315.1	1374.6	1414.2	1428.5	1355.8
32.5°	1466.0	1413.1	1401.0	1393.3	1375.7	1381.2	1393.3	1471.5	1534.3	1530.9	1397.7
35°	1579.4	1543.1	1508.9	1502.3	1500.1	1484.7	1505.6	1597.0	1645.5	1631.2	1413.1
37.5°	1761.1	1706.1	1659.8	1634.5	1630.1	1619.1	1668.6	1741.3	1804.1	1747.9	1425.2
40°	1850.4	1788.7	1745.7	1730.3	1733.6	1749.0	1797.5	1908.7	1936.3	1832.7	1435.1
42.5°	1978.1	1910.9	1826.1	1818.4	1808.5	1816.2	1909.8	2059.6	2082.8	1947.3	1397.7
45°	2205.0	2103.7	2005.7	1961.6	1963.8	1984.7	2130.1	2294.2	2251.3	2026.6	1338.2
47.5°	2491.4	2342.7	2263.4	2203.9	2232.5	2209.4	2440.7	2571.8	2425.3	2126.8	1265.5
50°	2922.0	2713.9	2605.9	2534.3	2546.4	2566.3	2800.9	2912.1	2618.0	2175.3	1154.3
52.5°	3465.0	3197.4	3038.8	2942.9	2951.8	2994.7	3297.6	3263.5	2838.3	2216.0	1005.6
55°	4114.8	3839.5	3532.2	3492.5	3482.6	3585.1	3918.8	3631.3	3036.6	2151.0	851.4
56°	4458.5	4165.5	3846.1	3764.6	3740.4	3812.0	4204.1	3815.3	3104.9	2078.3	777.6
57°	4750.3	4470.6	4120.3	3981.6	4012.4	4146.8	4487.1	3988.2	3167.6	2003.5	708.2
58°	5151.3	4831.9	4461.8	4356.0	4328.5	4435.3	4792.2	4162.2	3188.6	1926.4	644.3
59°	5551.1	5167.8	4834.1	4641.3	4649.0	4844.0	5092.9	4369.3	3220.5	1828.3	562.8
60°	5855.1	5662.3	5216.2	5072.0	5052.1	5334.1	5392.5	4508.0	3254.6	1696.2	505.5
61°	6285.7	6034.6	5619.4	5433.2	5487.2	5713.0	5716.3	4682.1	3204.0	1528.7	435.1
62°	6595.2	6529.1	6093.0	5915.6	5899.1	6198.7	6053.3	4835.2	3159.9	1370.1	384.4
63°	6957.6	6957.6	6560.0	6421.2	6428.9	6665.7	6199.8	4988.3	3109.3	1195.0	338.1
64°	7145.9	7382.7	7015.9	6821.0	6871.6	7076.5	6460.8	5088.5	2952.9	1017.7	297.4
65°	7308.9	7664.7	7460.9	7370.6	7293.5	7414.6	6686.6	5182.1	2713.9	865.7	264.3
66°	7446.6	7930.1	7862.9	7766.0	7758.3	7730.7	6730.7	5178.8	2467.1	731.3	231.3
67°	7377.2	7935.6	8057.9	8098.6	8086.5	7795.7	6653.6	5060.9	2151.0	617.9	206.0
67.5°	7314.4	7890.4	8174.6	8151.5	8202.1	7850.8	6666.8	4916.7	1926.4	559.5	193.8
68°	7259.3	7829.9	8222.0	8251.7	8226.4	7857.4	6594.1	4802.1	1773.3	525.4	182.8
69°	6841.9	7542.4	8146.0	8252.8	8187.8	7605.2	6362.8	4503.6	1408.7	448.3	168.5
70°	6423.4	7170.1	7777.0	7973.1	7892.6	7117.3	6070.9	4028.9	1162.0	383.3	152.0
71°	5844.0	6478.4	7285.8	7403.6	7306.7	6562.2	5467.4	3527.8	904.3	324.9	135.5
72°	5057.6	5596.2	6367.2	6652.5	6509.3	5763.6	4857.2	2915.4	732.4	273.1	123.4
72.5°	4667.7	5219.5	5963.0	5986.1	6013.7	5416.7	4598.4	2560.8	638.8	253.3	120.1
73°	4297.7	4838.5	5481.7	5563.2	5446.4	4831.9	4211.8	2289.8	583.7	231.3	115.6
74°	3482.6	3791.0	4324.1	4403.4	4301.0	3939.7	3441.9	1755.6	464.8	199.4	105.7
75°	2740.3	2909.9	3392.3	3343.9	3190.8	3064.1	2668.7	1341.5	376.7	175.1	98.0



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	1231.4	1333.8	1414.2	1414.2	1423.0	1358.0	1230.3	615.7	232.4	126.7	80.4
80°	469.2	525.4	543.0	544.1	551.8	571.6	532.0	302.9	137.7	90.3	65.0
82.5°	340.3	475.8	512.2	485.7	487.9	440.6	203.8	134.4	87.0	62.8	47.4
85°	308.4	414.1	438.4	435.1	436.2	407.5	120.1	66.1	50.7	39.7	33.0
87.5°	149.8	146.5	155.3	175.1	170.7	221.4	101.3	33.0	22.0	16.5	16.5
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: P676214

CATALOG NUMBER: CCW-SA-2B-850-U-T1

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	938.4	938.4	938.4	938.4	938.4	938.4
2.5°	932.9	931.8	947.2	931.8	940.6	934.0
5°	943.9	948.3	951.6	958.2	942.8	958.2
7.5°	976.9	981.3	982.5	988.0	981.3	980.2
10°	1002.3	1013.3	1019.9	997.9	1011.1	1010.0
12.5°	1051.8	1040.8	1039.7	1035.3	1023.2	1018.8
15°	1087.1	1070.6	1060.7	1043.0	1028.7	1023.2
17.5°	1136.6	1104.7	1064.0	1027.6	1002.3	982.5
20°	1167.5	1110.2	1028.7	985.8	947.2	956.0
22.5°	1187.3	1104.7	996.8	941.7	903.1	914.2
25°	1193.9	1077.2	974.7	906.5	869.0	861.3
27.5°	1175.2	1045.2	931.8	854.7	821.6	828.3
30°	1166.4	999.0	892.1	816.1	772.1	778.7
32.5°	1143.3	951.6	839.3	762.2	730.2	719.2
35°	1110.2	912.0	788.6	715.9	677.4	668.6
37.5°	1069.5	862.4	744.5	656.4	622.3	615.7
40°	1008.9	802.9	680.7	604.7	565.0	563.9
42.5°	956.0	745.6	621.2	543.0	503.3	505.5
45°	888.8	668.6	552.9	485.7	446.1	448.3
47.5°	802.9	597.0	487.9	413.0	380.0	377.8
50°	701.6	515.5	408.6	344.7	317.2	311.7
52.5°	604.7	432.9	334.8	277.6	254.4	252.2
55°	482.4	337.0	261.0	218.1	200.5	201.6
56°	438.4	310.6	237.9	199.4	186.1	186.1
57°	396.5	275.4	215.9	183.9	171.8	171.8
58°	350.2	242.3	196.0	166.3	160.8	156.4
59°	318.3	220.3	177.3	157.5	148.7	147.6
60°	280.9	198.3	165.2	147.6	141.0	139.9
61°	248.9	178.4	152.0	137.7	135.5	135.5
62°	222.5	165.2	141.0	133.3	132.2	128.9
63°	199.4	152.0	135.5	126.7	123.4	126.7
64°	178.4	139.9	131.1	124.5	120.1	122.3
65°	161.9	134.4	125.6	121.2	116.7	117.9
66°	150.9	125.6	121.2	115.6	113.4	114.5
67°	136.6	121.2	116.7	111.2	110.1	111.2
67.5°	132.2	117.9	114.5	109.0	107.9	109.0
68°	128.9	115.6	113.4	107.9	106.8	105.7
69°	120.1	111.2	107.9	105.7	103.5	102.4
70°	112.3	106.8	104.6	101.3	99.1	98.0
71°	107.9	101.3	100.2	96.9	94.7	93.6
72°	102.4	98.0	95.8	91.4	90.3	91.4
72.5°	101.3	95.8	94.7	90.3	89.2	89.2
73°	98.0	91.4	92.5	88.1	85.9	88.1
74°	91.4	89.2	87.0	83.7	82.6	82.6
75°	85.9	83.7	81.5	79.3	79.3	79.3



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	135°	145°	155°	165°	175°	180°
77.5°	72.7	71.6	72.7	68.3	67.2	66.1
80°	58.4	58.4	59.5	56.2	54.0	52.9
82.5°	44.1	45.2	47.4	44.1	41.9	39.7
85°	28.6	29.7	29.7	26.4	30.8	28.6
87.5°	14.3	15.4	14.3	13.2	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)