

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: P676344

Luminaire Tested: **CCW-SA-1E-840-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676344
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1E-840-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
T2 distribution lens and House Side Shield
Light Source: (16) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

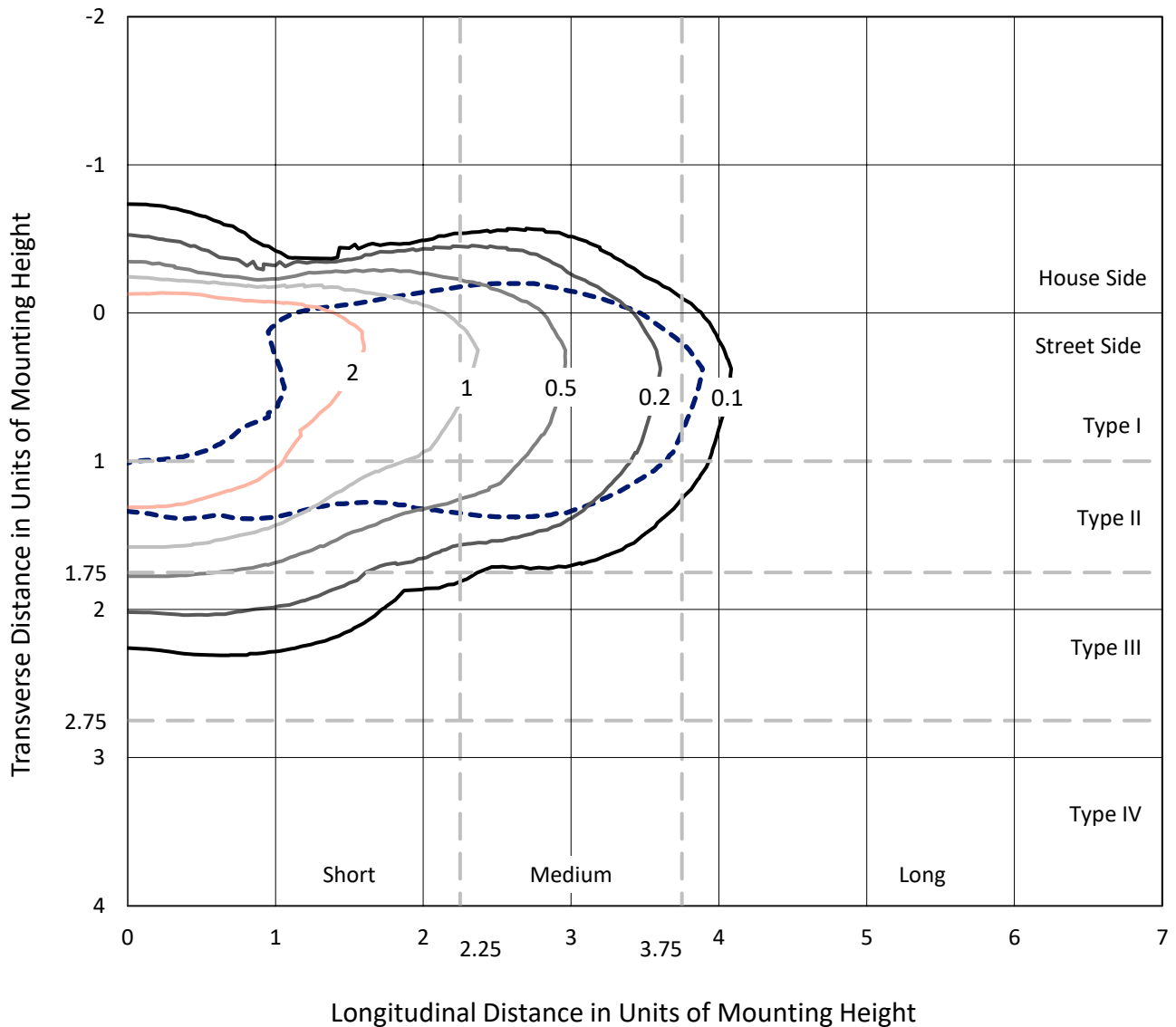
Lumens per Lamp: N/A
Luminaire Lumens: 4500.4 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 56.1
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

REPORT NUMBER: P676344
 CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

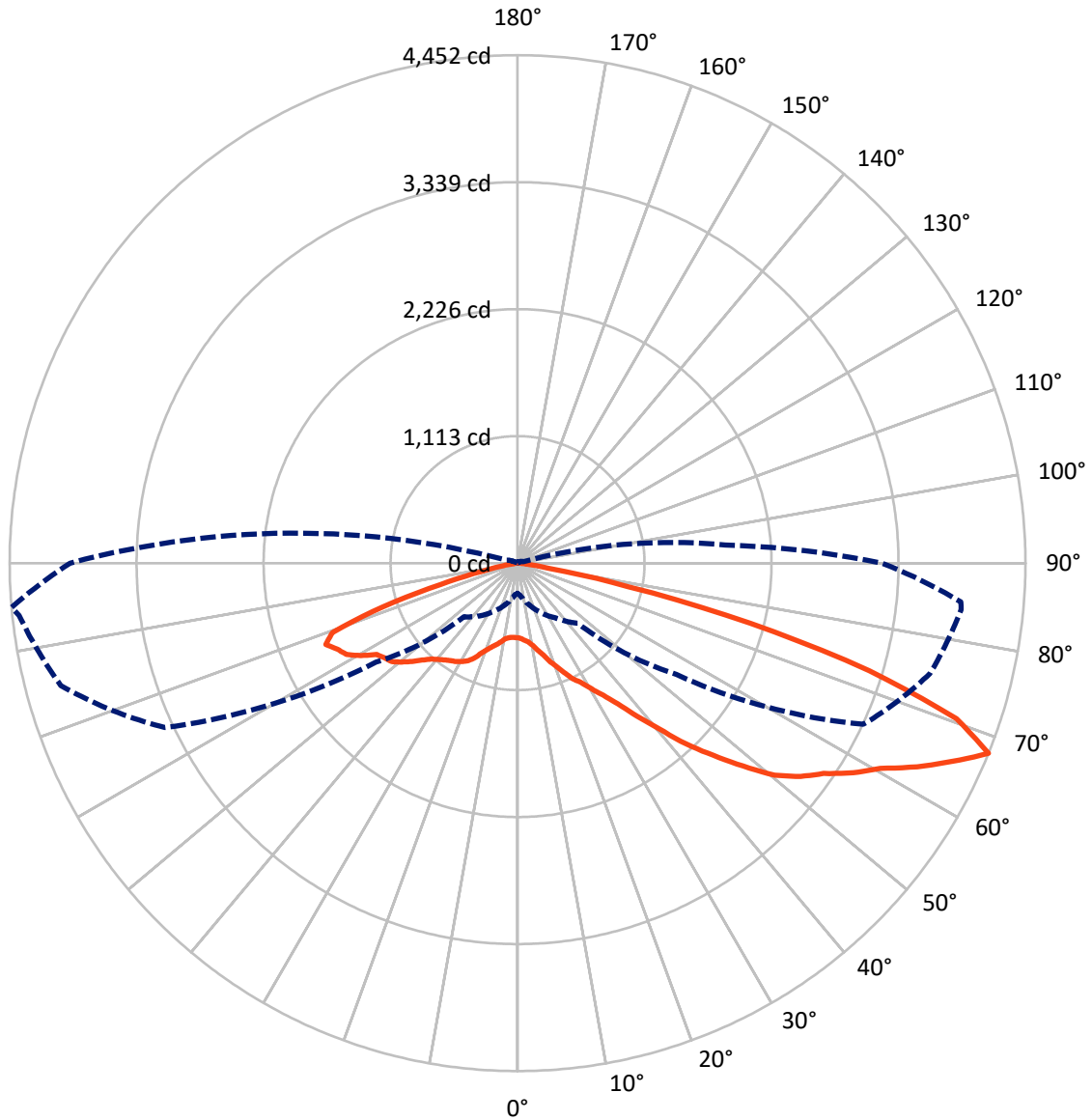
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Short - N/A

REPORT NUMBER: P676344
CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P676344

CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

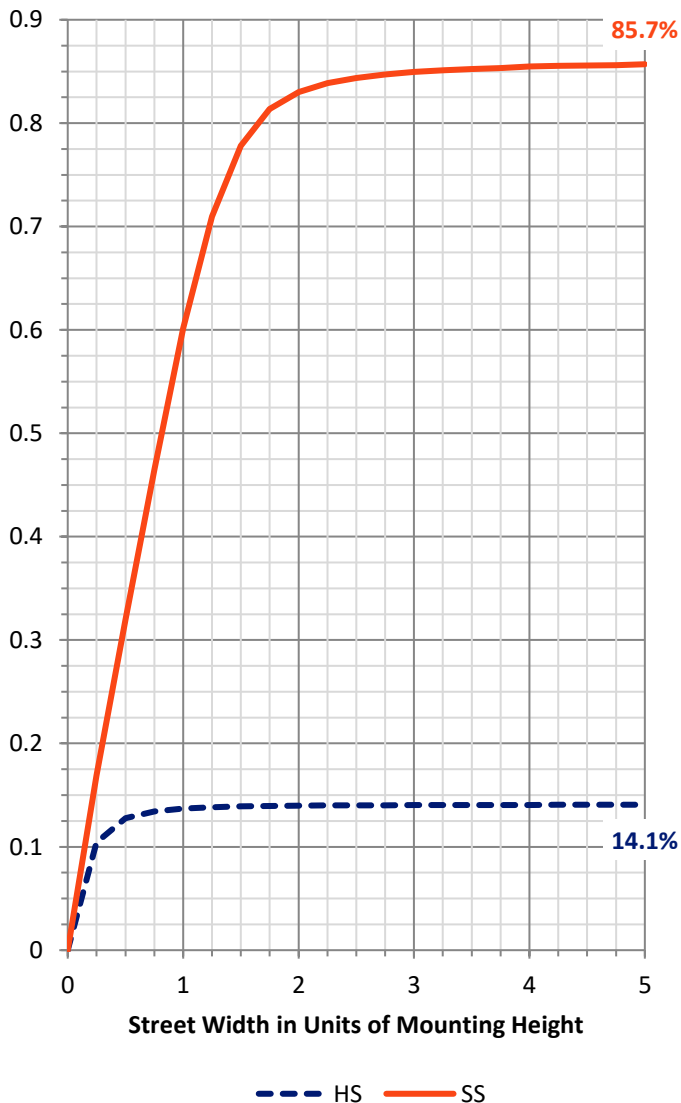
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	639.3	0.0	639.3
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	3861.1	0.0	3861.1
	% Fixture	85.8	0.0	85.8
Total	Lumens	4500.4	0.0	4500.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.3
10°-20°	160.5	3.6
20°-30°	266.5	5.9
30°-40°	458.5	10.2
40°-50°	823.9	18.3
50°-60°	1172.9	26.1
60°-70°	1069.3	23.8
70°-80°	455.3	10.1
80°-90°	33.9	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°	4500.4	100.0
0°-180°	4500.4	100.0



REPORT NUMBER: P676344

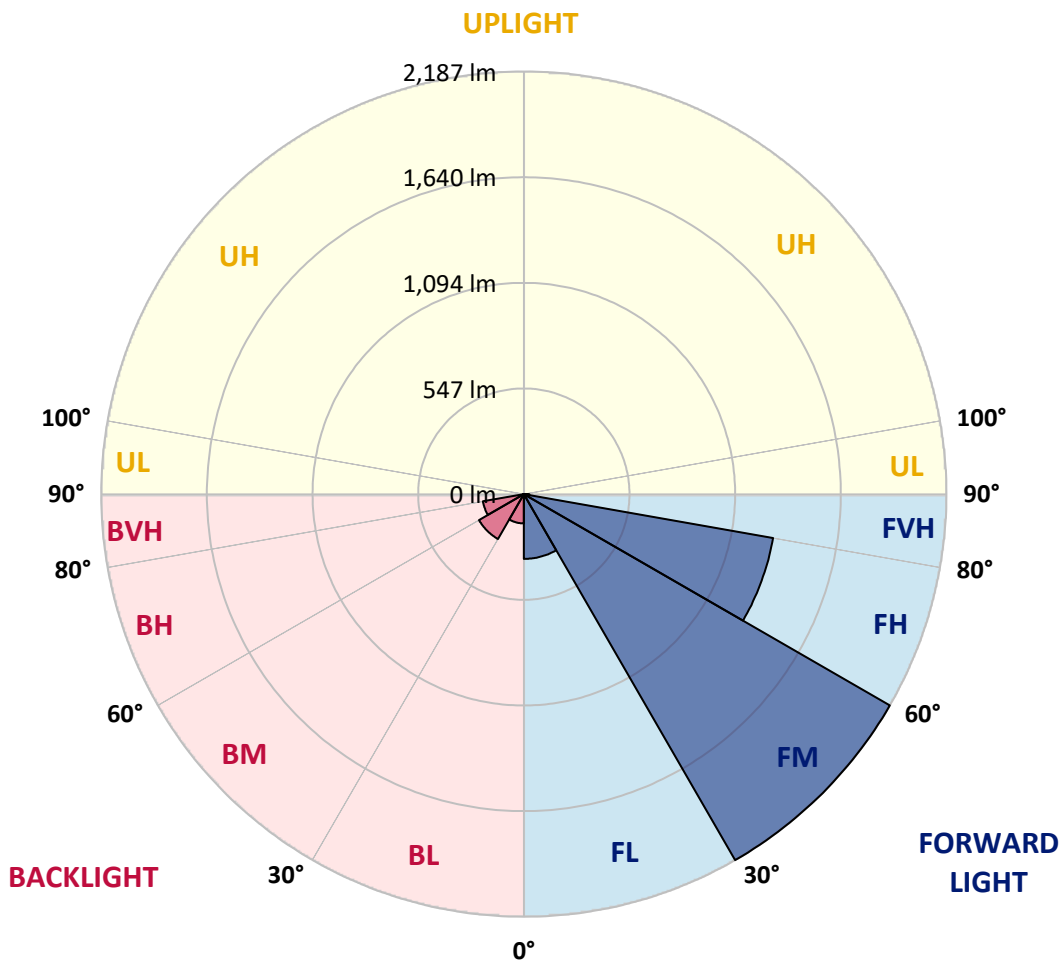
CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	335.3	7.4			
FM (30°-60°)	2187.2	48.6			
FH (60°-80°)	1309.8	29.1			G1/1800
FVH (80°-90°)	28.8	0.6			G1/100
BL (0°-30°)	151.4	3.4	B1/500		
BM (30°-60°)	268.1	6.0	B1/1000		
BH (60°-80°)	214.8	4.8	B1/500		G1/500
BVH (80°-90°)	5.1	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: P676344
 CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4
2.5°	678.0	684.5	684.5	682.3	675.9	671.6	669.4	665.2	660.9	660.9	663.0
5°	684.5	678.0	686.6	675.9	675.9	675.9	684.5	680.2	678.0	667.3	667.3
7.5°	684.5	678.0	678.0	684.5	678.0	682.3	693.0	688.8	697.3	678.0	682.3
10°	665.2	663.0	667.3	675.9	678.0	686.6	697.3	718.8	720.9	708.1	705.9
12.5°	626.5	624.4	639.4	643.7	669.4	690.9	723.1	740.3	759.6	753.1	740.3
15°	598.6	602.9	613.7	630.8	654.4	693.0	729.5	768.1	802.5	793.9	789.6
17.5°	609.4	607.2	609.4	620.1	650.1	688.8	751.0	796.0	845.4	845.4	849.7
20°	641.6	648.0	645.8	639.4	654.4	686.6	751.0	830.4	911.9	905.5	905.5
22.5°	697.3	699.5	686.6	682.3	680.2	699.5	763.9	873.3	967.7	980.6	976.3
25°	755.3	757.4	753.1	740.3	723.1	727.4	787.5	907.6	1044.9	1066.4	1062.1
27.5°	851.8	849.7	839.0	823.9	798.2	778.9	823.9	933.4	1105.0	1141.5	1130.8
30°	948.4	941.9	926.9	907.6	884.0	847.5	869.0	982.7	1180.1	1214.4	1190.8
32.5°	1066.4	1053.5	1057.8	1027.8	978.4	920.5	916.2	1027.8	1240.2	1289.5	1270.2
35°	1216.6	1201.6	1180.1	1152.2	1105.0	1027.8	1004.2	1100.7	1341.0	1377.5	1377.5
37.5°	1414.0	1429.0	1403.3	1287.4	1235.9	1162.9	1113.6	1175.8	1429.0	1517.0	1495.5
40°	1615.7	1628.6	1581.3	1495.5	1383.9	1293.8	1263.8	1298.1	1562.0	1667.2	1626.4
42.5°	1778.7	1795.9	1778.7	1667.2	1579.2	1463.3	1409.7	1441.9	1733.7	1860.3	1806.6
45°	1950.4	1967.6	1948.3	1875.3	1789.5	1723.0	1587.8	1628.6	1913.9	2102.7	2042.7
47.5°	2079.1	2100.6	2066.3	2051.2	1982.6	1971.9	1742.3	1787.3	2102.7	2347.3	2272.2
50°	2109.2	2132.8	2162.8	2180.0	2156.4	2182.1	1950.4	1989.0	2300.1	2572.6	2499.7
52.5°	2038.4	2062.0	2128.5	2207.9	2317.3	2394.6	2160.7	2192.9	2506.1	2759.3	2720.7
55°	1830.2	1851.7	1986.9	2094.2	2355.9	2482.5	2362.4	2497.5	2654.2	2954.6	2860.2
57.5°	1480.5	1506.3	1684.3	1849.6	2227.2	2433.2	2482.5	2750.7	2898.8	3098.3	2988.9
60°	1051.4	1066.4	1220.9	1512.7	1871.0	2186.4	2458.9	2939.5	3091.9	3291.4	3233.5
62.5°	605.1	617.9	778.9	1053.5	1411.8	1826.0	2353.8	3117.6	3300.0	3503.9	3471.7
65°	401.2	405.5	515.0	665.2	918.3	1345.3	2087.7	3276.4	3506.0	3673.4	3636.9
67.5°	263.9	287.5	373.3	476.3	587.9	744.5	1701.5	3342.9	3742.0	3909.4	3900.8
70°	188.8	197.4	268.2	366.9	442.0	418.4	995.6	2873.0	3731.3	3973.8	3902.9
72.5°	111.6	120.2	178.1	274.6	347.6	266.1	465.6	2031.9	3091.9	3171.3	3152.0
75°	81.5	81.5	109.4	197.4	253.2	191.0	218.9	1285.2	2053.4	2229.3	2227.2
77.5°	57.9	60.1	75.1	118.0	195.3	139.5	120.2	714.5	1122.2	1227.3	1169.4
80°	34.3	36.5	51.5	70.8	141.6	100.8	79.4	326.1	431.3	435.6	414.1
82.5°	25.7	25.7	34.3	49.4	98.7	68.7	49.4	124.4	139.5	126.6	107.3
85°	15.0	12.9	25.7	36.5	57.9	38.6	34.3	57.9	64.4	47.2	42.9
87.5°	4.3	4.3	10.7	12.9	25.7	21.5	15.0	21.5	30.0	17.2	12.9
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: P676344
 CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4
2.5°	658.7	652.3	641.6	637.3	622.2	615.8	611.5	600.8	602.9	596.5	596.5
5°	652.3	652.3	630.8	607.2	583.6	568.6	551.4	530.0	530.0	521.4	523.5
7.5°	675.9	658.7	630.8	587.9	549.3	515.0	499.9	478.5	465.6	459.2	459.2
10°	690.9	673.7	626.5	575.0	525.7	482.8	450.6	420.5	403.4	403.4	401.2
12.5°	731.7	705.9	643.7	572.9	499.9	435.6	386.2	351.9	328.3	311.1	315.4
15°	766.0	738.1	652.3	555.7	454.9	364.8	304.7	240.3	208.1	191.0	184.5
17.5°	819.6	768.1	671.6	525.7	386.2	285.4	197.4	143.8	130.9	128.7	128.7
20°	864.7	804.6	673.7	467.8	317.6	182.4	126.6	118.0	111.6	109.4	107.3
22.5°	926.9	851.8	665.2	401.2	227.4	122.3	107.3	98.7	94.4	88.0	88.0
25°	991.3	914.0	648.0	339.0	139.5	105.1	94.4	85.8	77.2	73.0	75.1
27.5°	1060.0	961.3	598.6	263.9	107.3	92.3	77.2	70.8	66.5	64.4	64.4
30°	1115.7	991.3	525.7	175.9	96.6	81.5	68.7	62.2	57.9	55.8	55.8
32.5°	1156.5	1017.0	444.2	118.0	88.0	73.0	62.2	55.8	51.5	49.4	49.4
35°	1225.2	1036.4	369.1	100.8	79.4	64.4	53.6	49.4	45.1	45.1	45.1
37.5°	1330.3	1062.1	294.0	92.3	73.0	57.9	51.5	45.1	42.9	40.8	40.8
40°	1422.6	1094.3	210.3	83.7	66.5	53.6	45.1	40.8	38.6	36.5	36.5
42.5°	1555.6	1130.8	137.3	75.1	60.1	49.4	40.8	36.5	34.3	32.2	32.2
45°	1725.1	1190.8	107.3	66.5	53.6	45.1	38.6	34.3	30.0	30.0	27.9
47.5°	1905.3	1263.8	96.6	62.2	49.4	40.8	34.3	30.0	27.9	25.7	25.7
50°	2072.7	1334.6	90.1	57.9	45.1	38.6	32.2	27.9	23.6	21.5	21.5
52.5°	2222.9	1401.1	85.8	53.6	42.9	34.3	27.9	23.6	21.5	19.3	19.3
55°	2302.3	1431.2	83.7	51.5	38.6	32.2	25.7	21.5	19.3	17.2	17.2
57.5°	2426.7	1469.8	81.5	49.4	36.5	27.9	23.6	19.3	17.2	15.0	15.0
60°	2628.4	1596.4	79.4	47.2	34.3	27.9	21.5	17.2	12.9	10.7	10.7
62.5°	2795.8	1701.5	70.8	40.8	30.0	23.6	17.2	12.9	8.6	6.4	6.4
65°	2986.8	1750.9	62.2	36.5	25.7	19.3	12.9	8.6	6.4	2.1	2.1
67.5°	3194.9	1826.0	51.5	32.2	23.6	15.0	10.7	6.4	2.1	0.0	0.0
70°	3085.5	1731.5	42.9	27.9	21.5	12.9	8.6	4.3	0.0	0.0	0.0
72.5°	2418.2	1240.2	34.3	25.7	19.3	12.9	8.6	2.1	0.0	0.0	0.0
75°	1615.7	701.6	30.0	21.5	15.0	10.7	6.4	2.1	0.0	0.0	0.0
77.5°	877.6	315.4	25.7	19.3	12.9	8.6	6.4	2.1	0.0	0.0	0.0
80°	285.4	124.4	21.5	17.2	12.9	8.6	6.4	2.1	0.0	0.0	0.0
82.5°	77.2	38.6	21.5	17.2	12.9	8.6	6.4	2.1	0.0	0.0	0.0
85°	32.2	25.7	21.5	17.2	12.9	8.6	6.4	2.1	0.0	0.0	0.0
87.5°	12.9	8.6	8.6	10.7	8.6	6.4	4.3	2.1	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: P676344
 CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4
2.5°	598.6	602.9	605.1	605.1	615.8	626.5	639.4	650.1	650.1	656.6	663.0
5°	525.7	530.0	536.4	555.7	577.2	600.8	624.4	641.6	665.2	675.9	682.3
7.5°	465.6	469.9	487.1	506.4	536.4	577.2	617.9	656.6	680.2	690.9	699.5
10°	403.4	409.8	429.1	463.5	502.1	551.4	598.6	665.2	703.8	725.2	733.8
12.5°	313.3	330.4	356.2	392.7	442.0	517.1	605.1	673.7	740.3	766.0	783.2
15°	197.4	212.4	253.2	311.1	377.6	465.6	587.9	686.6	778.9	804.6	832.5
17.5°	126.6	128.7	141.6	203.8	289.7	401.2	562.2	705.9	821.8	858.3	901.2
20°	107.3	111.6	113.7	122.3	193.1	330.4	508.5	729.5	873.3	922.6	963.4
22.5°	90.1	92.3	96.6	103.0	115.9	240.3	435.6	729.5	918.3	991.3	1038.5
25°	73.0	77.2	81.5	88.0	100.8	150.2	360.5	716.6	972.0	1062.1	1122.2
27.5°	64.4	64.4	68.7	75.1	85.8	105.1	285.4	678.0	1012.7	1105.0	1184.4
30°	55.8	57.9	60.1	66.5	77.2	92.3	197.4	615.8	1055.7	1188.7	1278.8
32.5°	49.4	49.4	53.6	57.9	68.7	83.7	126.6	521.4	1111.4	1253.1	1379.7
35°	45.1	45.1	47.2	51.5	62.2	75.1	98.7	442.0	1178.0	1375.4	1514.8
37.5°	40.8	40.8	42.9	47.2	55.8	66.5	90.1	379.8	1246.6	1497.7	1701.5
40°	36.5	36.5	38.6	42.9	49.4	60.1	81.5	306.8	1332.5	1677.9	1905.3
42.5°	32.2	32.2	34.3	38.6	45.1	53.6	70.8	229.6	1446.2	1873.2	2169.3
45°	27.9	27.9	30.0	34.3	38.6	49.4	64.4	175.9	1570.6	2089.9	2401.0
47.5°	23.6	25.7	27.9	32.2	36.5	45.1	57.9	154.5	1692.9	2319.5	2658.5
50°	21.5	21.5	23.6	27.9	34.3	40.8	53.6	152.3	1817.4	2495.4	2922.4
52.5°	19.3	19.3	21.5	25.7	32.2	38.6	51.5	156.6	1920.4	2658.5	3106.9
55°	17.2	17.2	19.3	21.5	27.9	36.5	47.2	160.9	1993.3	2823.7	3255.0
57.5°	15.0	15.0	17.2	21.5	25.7	32.2	42.9	165.2	2111.3	2986.8	3469.5
60°	10.7	10.7	15.0	19.3	23.6	27.9	40.8	169.5	2300.1	3212.0	3651.9
62.5°	6.4	6.4	8.6	15.0	19.3	25.7	36.5	160.9	2476.1	3501.7	3930.8
65°	2.1	4.3	6.4	8.6	15.0	21.5	30.0	145.9	2624.1	3791.4	4188.3
67.5°	0.0	0.0	2.1	6.4	12.9	17.2	25.7	107.3	2647.7	3922.3	4452.2
70°	0.0	0.0	2.1	6.4	10.7	17.2	23.6	60.1	2255.1	3503.9	4081.0
72.5°	0.0	0.0	0.0	4.3	10.7	15.0	21.5	45.1	1662.9	2641.3	3224.9
75°	0.0	0.0	0.0	2.1	8.6	12.9	19.3	34.3	1010.6	1761.6	2104.9
77.5°	0.0	0.0	0.0	2.1	6.4	12.9	19.3	30.0	356.2	839.0	989.1
80°	0.0	0.0	0.0	4.3	8.6	12.9	17.2	25.7	85.8	210.3	283.2
82.5°	0.0	0.0	0.0	2.1	6.4	10.7	15.0	21.5	34.3	62.2	98.7
85°	0.0	0.0	0.0	2.1	4.3	10.7	15.0	19.3	23.6	30.0	42.9
87.5°	0.0	0.0	0.0	0.0	2.1	4.3	6.4	8.6	8.6	8.6	15.0
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: P676344
 CATALOG NUMBER: CCW-SA-1E-840-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4	654.4
2.5°	660.9	669.4	673.7	682.3	686.6	684.5	682.3	688.8	684.5	678.0
5°	684.5	684.5	690.9	693.0	693.0	686.6	690.9	688.8	684.5	684.5
7.5°	710.2	720.9	720.9	708.1	705.9	701.6	701.6	684.5	678.0	684.5
10°	736.0	744.5	746.7	731.7	712.4	703.8	693.0	671.6	660.9	665.2
12.5°	789.6	789.6	766.0	748.8	723.1	693.0	667.3	637.3	622.2	626.5
15°	828.2	836.8	804.6	766.0	720.9	665.2	637.3	613.7	605.1	598.6
17.5°	903.3	886.2	834.7	778.9	714.5	656.6	637.3	615.8	609.4	609.4
20°	967.7	959.1	881.9	781.0	712.4	673.7	660.9	650.1	648.0	641.6
22.5°	1055.7	1017.0	918.3	804.6	736.0	701.6	697.3	708.1	701.6	697.3
25°	1122.2	1090.0	946.2	839.0	772.4	761.7	768.1	778.9	761.7	755.3
27.5°	1212.3	1152.2	999.9	884.0	821.8	832.5	854.0	856.1	845.4	851.8
30°	1296.0	1231.6	1040.6	935.5	905.5	916.2	948.4	972.0	957.0	948.4
32.5°	1416.1	1317.4	1122.2	1021.3	1010.6	1038.5	1075.0	1090.0	1070.7	1066.4
35°	1542.7	1416.1	1205.9	1117.9	1137.2	1175.8	1208.0	1233.8	1203.7	1216.6
37.5°	1740.1	1574.9	1347.5	1270.2	1278.8	1293.8	1353.9	1424.7	1439.7	1414.0
40°	1946.1	1746.6	1478.4	1418.3	1437.6	1478.4	1549.2	1615.7	1650.0	1615.7
42.5°	2184.3	1911.8	1680.0	1609.2	1628.6	1686.5	1780.9	1834.5	1830.2	1778.7
45°	2478.2	2141.4	1868.9	1780.9	1851.7	1903.2	1997.6	2004.0	1963.3	1950.4
47.5°	2703.5	2334.5	2072.7	2016.9	2113.5	2115.6	2137.1	2139.2	2094.2	2079.1
50°	2952.4	2557.6	2300.1	2218.6	2381.7	2306.6	2248.6	2210.0	2141.4	2109.2
52.5°	3197.0	2716.4	2510.4	2426.7	2596.2	2396.7	2291.6	2173.5	2072.7	2038.4
55°	3327.9	2978.2	2817.2	2622.0	2643.4	2422.4	2158.5	2010.5	1838.8	1830.2
57.5°	3482.4	3154.1	3076.9	2755.0	2564.1	2242.2	1881.7	1686.5	1502.0	1480.5
60°	3664.8	3433.0	3351.5	2733.6	2283.0	1883.9	1491.2	1240.2	1066.4	1051.4
62.5°	3868.6	3763.5	3521.0	2523.3	1813.1	1326.0	984.9	774.6	613.7	605.1
65°	4190.5	4040.3	3611.1	2124.2	1199.4	849.7	654.4	502.1	405.5	401.2
67.5°	4392.2	4145.4	3409.4	1514.8	665.2	562.2	459.2	364.8	281.1	263.9
70°	4106.8	3804.2	2697.1	866.8	386.2	427.0	354.0	244.6	193.1	188.8
72.5°	3280.7	2823.7	1815.2	407.7	240.3	334.7	257.5	165.2	115.9	111.6
75°	2237.9	1776.6	1139.3	188.8	169.5	244.6	188.8	96.6	81.5	81.5
77.5°	999.9	905.5	583.6	115.9	126.6	186.7	109.4	66.5	60.1	57.9
80°	304.7	319.7	238.2	79.4	94.4	141.6	66.5	45.1	36.5	34.3
82.5°	103.0	120.2	107.3	47.2	64.4	100.8	45.1	30.0	25.7	25.7
85°	49.4	60.1	53.6	30.0	34.3	49.4	36.5	23.6	15.0	15.0
87.5°	19.3	27.9	19.3	12.9	19.3	25.7	15.0	10.7	4.3	4.3
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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