

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: P677501

Luminaire Tested: **CCW-SA-2D-840-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677501
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-840-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
SLR distribution lens and House Side Shield
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

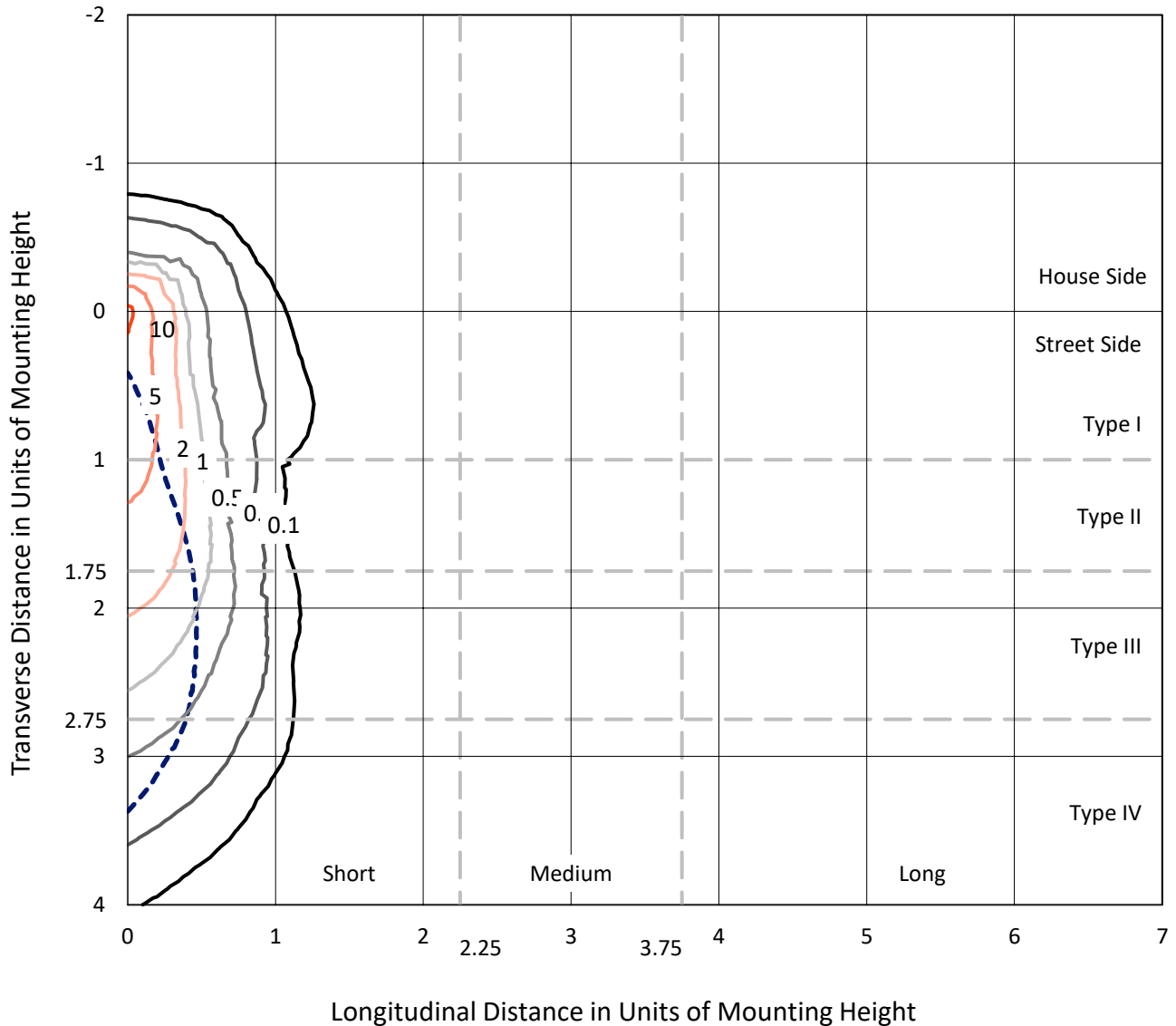
Lumens per Lamp: N/A
Luminaire Lumens: 6833.4 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

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: P677501
 CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

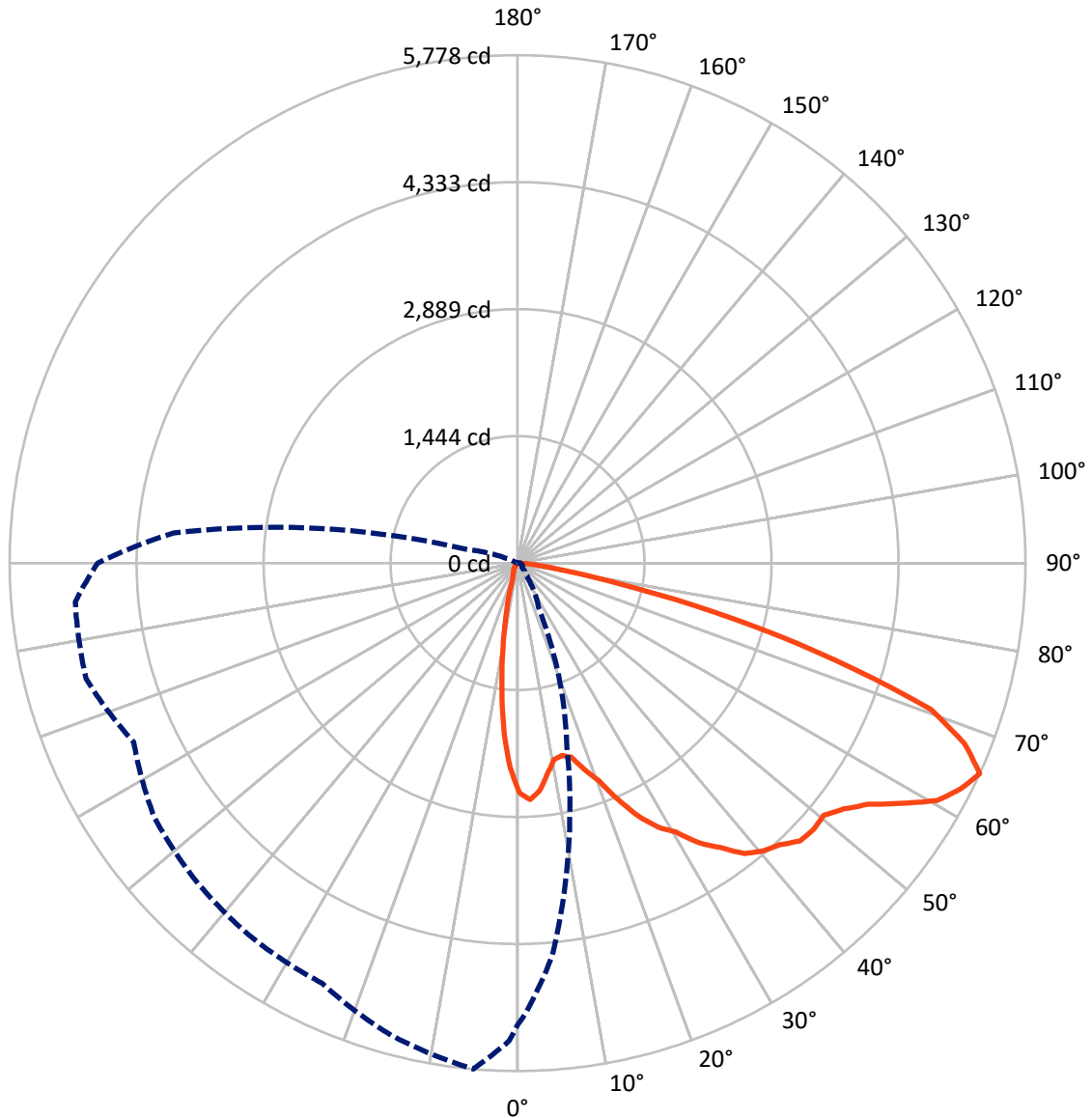
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 11.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P677501
CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P677501
 CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

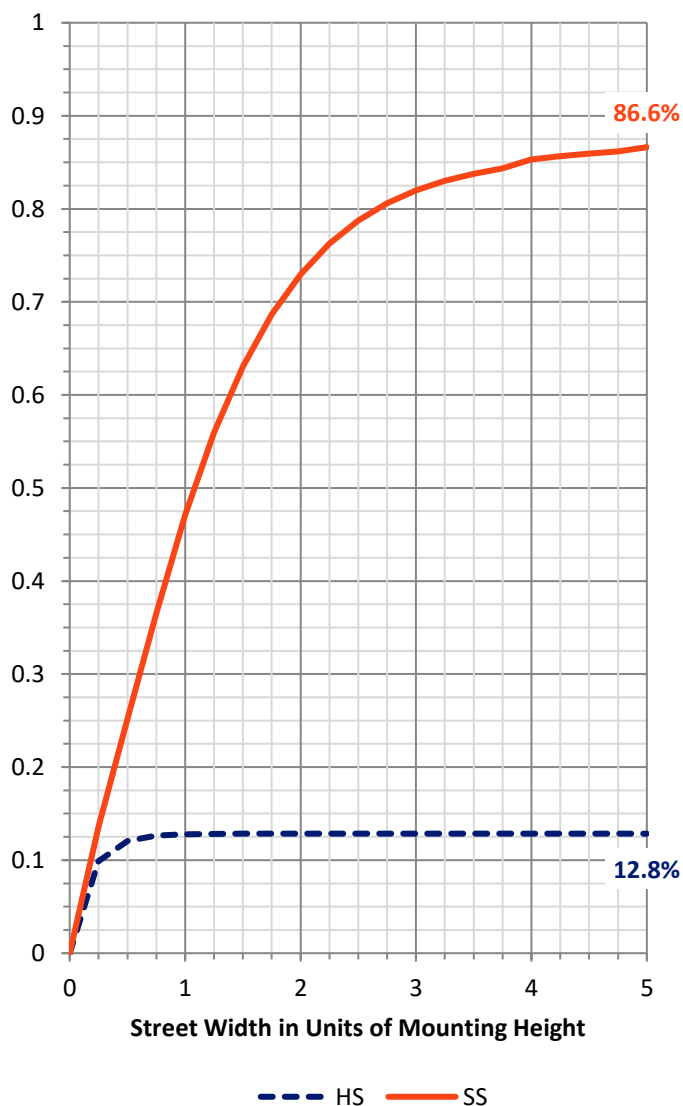
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	887.2	0.0	887.2
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	5946.2	0.0	5946.2
	% Fixture	87.0	0.0	87.0
Total	Lumens	6833.4	0.0	6833.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.9	2.9
10°-20°	383.2	5.6
20°-30°	533.7	7.8
30°-40°	758.3	11.1
40°-50°	1051.6	15.4
50°-60°	1432.8	21.0
60°-70°	1575.3	23.1
70°-80°	774.2	11.3
80°-90°	126.4	1.9
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°	6833.4	100.0
0°-180°	6833.4	100.0

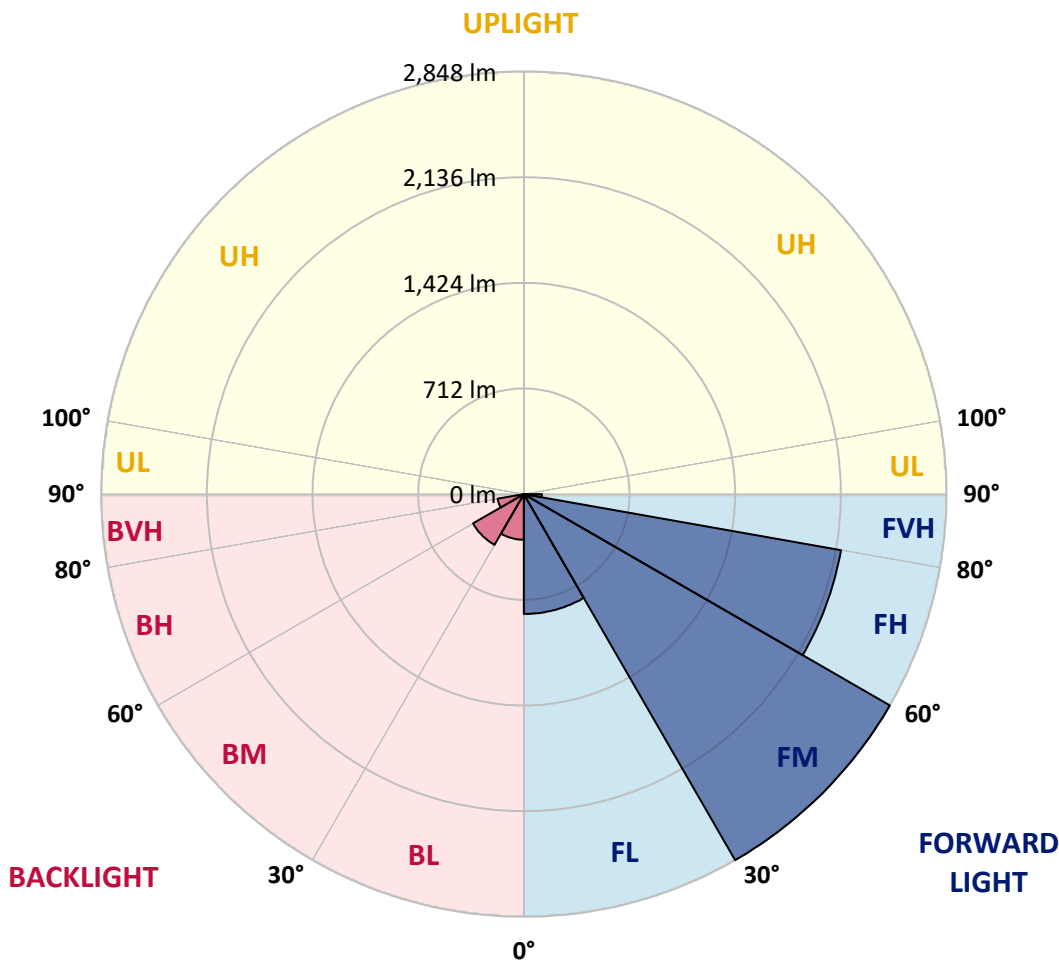


REPORT NUMBER: P677501
 CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	807.6	11.8			
FM (30°-60°)	2847.7	41.7			
FH (60°-80°)	2170.2	31.8			G2/5000
FVH (80°-90°)	120.7	1.8			G2/225
BL (0°-30°)	307.2	4.5	B1/500		
BM (30°-60°)	395.0	5.8	B1/1000		
BH (60°-80°)	179.3	2.6	B1/500		G1/500
BVH (80°-90°)	5.7	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 IV Short





REPORT NUMBER: P677501

CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4
2.5°	2665.8	2697.1	2667.7	2564.5	2546.1	2496.3	2420.8	2415.3	2336.0	2345.3	2302.9
5°	2505.5	2536.9	2474.2	2337.9	2210.8	2109.4	2048.6	1940.0	1916.0	1862.6	1862.6
7.5°	2341.6	2339.7	2232.9	2118.7	1928.9	1742.8	1658.1	1501.5	1409.4	1359.6	1311.7
10°	2205.2	2175.8	2109.4	1873.6	1667.3	1473.8	1368.8	1265.7	1169.9	1087.0	1004.1
12.5°	2109.4	2127.9	2022.9	1766.8	1499.6	1365.2	1252.8	1144.1	1029.9	935.9	843.8
15°	2159.2	2129.7	2006.3	1742.8	1472.0	1287.8	1138.5	1005.9	878.8	755.3	685.3
17.5°	2313.9	2238.4	2092.9	1742.8	1414.9	1169.9	989.3	832.7	696.4	585.9	499.3
20°	2522.1	2435.5	2278.9	1807.3	1372.5	1083.3	836.4	639.3	497.4	394.3	327.9
22.5°	2735.8	2667.7	2431.8	1833.1	1322.8	967.2	659.5	462.4	331.6	265.3	232.1
25°	2991.9	2896.1	2638.2	1936.3	1249.1	854.8	519.5	322.4	246.9	211.9	191.6
27.5°	3196.4	3179.8	2831.6	1998.9	1193.8	762.7	410.8	256.1	204.5	178.7	165.8
30°	3454.3	3364.1	3067.4	2124.2	1131.2	657.7	342.7	230.3	187.9	160.3	151.1
32.5°	3609.1	3566.7	3190.9	2194.2	1061.2	571.1	294.8	202.7	171.3	151.1	141.9
35°	3833.8	3749.1	3367.7	2238.4	1024.3	521.4	265.3	184.2	143.7	123.4	112.4
37.5°	4084.4	4053.1	3579.6	2236.6	970.9	491.9	245.0	171.3	136.3	114.2	101.3
40°	4340.5	4213.4	3708.6	2288.1	943.3	469.8	230.3	164.0	129.0	108.7	92.1
42.5°	4532.1	4386.5	3857.8	2269.7	910.1	431.1	224.8	152.9	123.4	99.5	84.7
45°	4583.7	4532.1	3992.3	2264.2	886.2	399.8	215.6	151.1	119.8	94.0	79.2
47.5°	4683.1	4648.1	4158.1	2273.4	867.7	375.8	193.4	154.8	114.2	88.4	75.5
50°	4727.4	4664.7	4292.6	2295.5	825.4	346.4	173.2	162.1	112.4	86.6	71.9
52.5°	4909.8	4854.5	4476.8	2358.2	790.4	307.7	152.9	154.8	116.1	81.1	68.2
55°	5088.5	5025.8	4760.5	2501.9	740.6	276.3	130.8	136.3	110.5	73.7	60.8
57.5°	5333.5	5230.3	4950.3	2560.8	696.4	234.0	116.1	112.4	103.2	66.3	53.4
60°	5370.3	5412.7	4922.6	2524.0	650.3	206.3	101.3	86.6	110.5	59.0	46.1
62.5°	5493.8	5316.9	4793.7	2439.2	617.2	189.8	90.3	71.9	95.8	51.6	38.7
65°	5256.1	5125.3	4491.5	2166.6	574.8	191.6	79.2	59.0	60.8	42.4	31.3
67.5°	4907.9	4804.7	3990.4	1869.9	532.4	187.9	70.0	51.6	46.1	36.8	27.6
70°	4307.3	4084.4	3389.8	1518.1	469.8	175.0	59.0	46.1	38.7	29.5	20.3
72.5°	3133.8	3043.5	2431.8	1173.6	421.9	158.4	55.3	38.7	33.2	22.1	16.6
75°	2109.4	1960.2	1534.6	770.1	339.0	138.2	46.1	35.0	25.8	16.6	12.9
77.5°	1114.6	1053.8	869.6	366.6	187.9	64.5	25.8	20.3	14.7	12.9	7.4
80°	482.7	429.3	375.8	149.2	66.3	29.5	16.6	11.1	9.2	7.4	3.7
82.5°	246.9	235.8	195.3	64.5	38.7	22.1	9.2	7.4	5.5	3.7	1.8
85°	121.6	125.3	103.2	20.3	22.1	12.9	1.8	1.8	0.0	0.0	0.0
87.5°	9.2	9.2	7.4	3.7	5.5	1.8	0.0	0.0	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: P677501
 CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4
2.5°	2286.3	2312.1	2267.9	2295.5	2282.6	2288.1	2293.7	2278.9	2282.6	2334.2	2336.0
5°	1831.3	1881.0	1862.6	1888.4	1932.6	1910.5	1930.7	1927.1	1930.7	1938.1	1971.3
7.5°	1306.2	1291.5	1326.5	1394.6	1473.8	1521.7	1497.8	1484.9	1477.5	1459.1	1481.2
10°	985.6	978.3	969.1	989.3	1040.9	1094.3	1123.8	1074.1	1046.4	1011.4	998.5
12.5°	818.0	771.9	746.1	714.8	729.6	777.5	779.3	731.4	687.2	668.8	689.0
15°	644.8	613.5	567.4	523.2	501.1	538.0	506.6	460.6	403.5	396.1	394.3
17.5°	460.6	442.2	409.0	390.6	364.8	355.6	322.4	252.4	211.9	200.8	204.5
20°	313.2	298.5	296.6	280.0	269.0	261.6	208.2	162.1	149.2	151.1	152.9
22.5°	232.1	224.8	215.6	213.7	204.5	195.3	152.9	136.3	127.1	127.1	132.6
25°	189.8	186.1	176.9	173.2	169.5	156.6	129.0	116.1	112.4	108.7	114.2
27.5°	162.1	160.3	154.8	149.2	145.5	132.6	112.4	101.3	97.6	97.6	97.6
30°	145.5	145.5	138.2	127.1	127.1	112.4	95.8	88.4	84.7	84.7	82.9
32.5°	136.3	132.6	123.4	116.1	110.5	95.8	84.7	77.4	71.9	71.9	73.7
35°	110.5	110.5	108.7	103.2	95.8	81.1	71.9	64.5	60.8	59.0	60.8
37.5°	97.6	92.1	84.7	86.6	82.9	70.0	60.8	55.3	49.7	49.7	49.7
40°	88.4	82.9	75.5	70.0	68.2	62.6	53.4	44.2	38.7	36.8	36.8
42.5°	79.2	75.5	64.5	55.3	53.4	53.4	40.5	33.2	27.6	27.6	27.6
45°	73.7	68.2	59.0	47.9	38.7	40.5	33.2	24.0	20.3	18.4	18.4
47.5°	70.0	64.5	51.6	40.5	29.5	29.5	24.0	16.6	12.9	11.1	11.1
50°	64.5	59.0	46.1	33.2	22.1	18.4	14.7	9.2	5.5	3.7	3.7
52.5°	60.8	55.3	40.5	27.6	18.4	12.9	9.2	1.8	0.0	0.0	0.0
55°	55.3	47.9	35.0	22.1	14.7	7.4	1.8	0.0	0.0	0.0	0.0
57.5°	47.9	42.4	27.6	16.6	9.2	1.8	0.0	0.0	0.0	0.0	0.0
60°	40.5	35.0	22.1	12.9	3.7	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	33.2	29.5	16.6	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	27.6	22.1	12.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	24.0	18.4	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	18.4	12.9	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	12.9	9.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	9.2	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P677501

CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4
2.5°	2343.4	2398.7	2450.3	2465.0	2505.5	2617.9	2617.9	2671.3	2767.1	2802.2	2809.5
5°	1976.8	2035.8	2046.8	2161.0	2214.5	2328.7	2404.2	2584.8	2693.5	2761.6	2804.0
7.5°	1503.3	1523.6	1566.0	1672.8	1777.8	1916.0	2059.7	2290.0	2481.6	2559.0	2702.7
10°	1033.5	1094.3	1186.4	1282.2	1446.2	1599.1	1785.2	2002.6	2238.4	2334.2	2457.6
12.5°	696.4	781.1	928.5	1064.9	1215.9	1370.7	1547.5	1838.6	2105.8	2238.4	2361.8
15°	407.2	510.3	637.4	858.5	1059.3	1232.5	1409.4	1704.1	2028.4	2199.7	2350.8
17.5°	206.3	237.7	342.7	534.3	799.6	1083.3	1346.7	1722.6	2087.3	2297.4	2422.6
20°	154.8	164.0	193.4	283.7	547.2	895.4	1287.8	1750.2	2251.3	2507.4	2575.5
22.5°	134.5	141.9	154.8	184.2	307.7	685.3	1204.9	1818.4	2474.2	2715.6	2859.3
25°	114.2	121.6	132.6	151.1	197.1	466.1	1103.5	1890.2	2673.2	2977.2	3111.7
27.5°	99.5	105.0	116.1	130.8	160.3	296.6	928.5	1986.0	2977.2	3294.0	3329.1
30°	84.7	90.3	99.5	116.1	136.3	210.0	681.7	1998.9	3144.8	3432.2	3529.9
32.5°	73.7	75.5	86.6	101.3	114.2	165.8	479.0	2011.8	3268.3	3610.9	3631.2
35°	60.8	64.5	75.5	84.7	99.5	130.8	362.9	1947.3	3428.5	3795.2	3789.6
37.5°	49.7	55.3	62.6	70.0	81.1	110.5	289.2	1827.6	3629.3	4080.7	3907.5
40°	38.7	44.2	51.6	60.8	68.2	99.5	217.4	1647.0	3839.4	4220.7	4036.5
42.5°	27.6	31.3	38.7	47.9	60.8	82.9	156.6	1433.3	3922.3	4384.7	4191.3
45°	20.3	24.0	29.5	40.5	62.6	66.3	108.7	1238.0	4010.7	4456.5	4156.2
47.5°	11.1	14.7	22.1	35.0	55.3	49.7	77.4	1063.0	4112.0	4521.0	4183.9
50°	3.7	5.5	12.9	36.8	44.2	38.7	60.8	969.1	4211.5	4533.9	4239.2
52.5°	0.0	0.0	7.4	38.7	33.2	29.5	53.4	932.2	4185.7	4574.5	4204.1
55°	0.0	0.0	1.8	16.6	18.4	22.1	44.2	930.4	4368.1	4587.3	4395.7
57.5°	0.0	0.0	0.0	5.5	11.1	18.4	38.7	871.4	4484.2	4907.9	4653.7
60°	0.0	0.0	0.0	1.8	7.4	12.9	29.5	819.8	4602.1	5051.6	4930.0
62.5°	0.0	0.0	0.0	0.0	1.8	5.5	20.3	740.6	4364.4	5040.6	5197.2
65°	0.0	0.0	0.0	0.0	0.0	0.0	12.9	585.9	3926.0	4777.1	5049.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	7.4	405.3	3437.7	4445.5	4778.9
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	245.0	2774.5	3898.3	4053.1
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.0	1980.5	3095.1	3325.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.4	1225.1	2262.4	2546.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6	794.0	1713.3	1932.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	423.7	1074.1	1249.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.2	652.2	751.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.0	396.1	451.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.8	81.1
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: P677501

CATALOG NUMBER: CCW-SA-2D-840-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4	2612.4
2.5°	2813.2	2866.6	2886.9	2855.6	2859.3	2794.8	2785.6	2695.3	2658.5	2665.8
5°	2942.2	3019.5	3061.9	3026.9	2947.7	2824.3	2711.9	2605.0	2538.7	2505.5
7.5°	2912.7	2999.3	3052.7	3085.9	2995.6	2796.6	2625.3	2424.5	2339.7	2341.6
10°	2750.6	2931.1	3039.8	2997.4	2955.1	2756.1	2490.8	2273.4	2197.9	2205.2
12.5°	2619.8	2820.6	2885.1	2918.2	2831.6	2673.2	2494.5	2245.8	2161.0	2109.4
15°	2538.7	2687.9	2691.6	2743.2	2708.2	2708.2	2533.2	2290.0	2216.3	2159.2
17.5°	2538.7	2571.9	2568.2	2586.6	2645.6	2715.6	2630.8	2468.7	2323.2	2313.9
20°	2595.8	2492.6	2468.7	2476.1	2525.8	2734.0	2846.4	2643.7	2551.6	2522.1
22.5°	2728.5	2501.9	2356.3	2330.5	2483.4	2732.1	2984.5	2920.1	2759.8	2735.8
25°	2910.8	2485.3	2326.8	2293.7	2409.7	2798.5	3174.3	3187.2	3041.7	2991.9
27.5°	3084.0	2559.0	2323.2	2315.8	2468.7	2783.7	3305.1	3400.9	3236.9	3196.4
30°	3143.0	2632.7	2391.3	2293.7	2490.8	2837.2	3301.4	3552.0	3445.1	3454.3
32.5°	3213.0	2706.4	2398.7	2360.0	2584.8	2923.7	3406.4	3795.2	3717.8	3609.1
35°	3316.2	2805.8	2468.7	2433.7	2651.1	3001.1	3428.5	3973.9	3961.0	3833.8
37.5°	3404.6	2903.5	2614.2	2619.8	2853.7	3126.4	3526.2	4193.1	4171.0	4084.4
40°	3467.2	3039.8	2840.8	2855.6	3030.6	3266.4	3699.4	4303.6	4467.6	4340.5
42.5°	3476.4	3161.4	3100.6	3218.5	3382.5	3483.8	3769.4	4379.2	4615.0	4532.1
45°	3511.4	3354.8	3524.3	3610.9	3745.4	3675.4	3765.7	4508.1	4626.0	4583.7
47.5°	3647.8	3706.7	3920.4	4183.9	4231.8	4001.5	3854.1	4528.4	4688.7	4683.1
50°	3789.6	4084.4	4384.7	4559.7	4620.5	4226.3	3937.0	4511.8	4771.6	4727.4
52.5°	3948.1	4412.3	4845.3	5060.8	5027.7	4475.0	4031.0	4646.3	4924.5	4909.8
55°	4047.6	4559.7	5141.9	5442.2	5416.4	4753.2	4329.4	4839.7	5125.3	5088.5
57.5°	4311.0	4799.2	5436.7	5576.7	5644.8	5117.9	4537.6	5156.6	5293.0	5333.5
60°	4528.4	4955.8	5514.0	5716.7	5740.6	5335.3	4902.4	5482.7	5506.7	5370.3
62.5°	4847.1	5016.6	5350.1	5532.5	5655.9	5458.8	5230.3	5657.7	5503.0	5493.8
65°	5081.1	4817.6	5044.2	5145.6	5224.8	5270.8	5560.1	5777.5	5434.8	5256.1
67.5°	4950.3	4441.8	4399.4	4405.0	4428.9	4707.1	5449.5	5484.6	5055.3	4907.9
70°	4357.1	3644.1	3587.0	3631.2	3511.4	3846.7	5001.9	4985.3	4460.2	4307.3
72.5°	3524.3	2656.6	2559.0	2619.8	2647.4	3003.0	4207.8	3780.4	3253.5	3133.8
75°	2800.3	1947.3	1643.3	1790.7	1884.7	2186.8	3286.7	2568.2	2271.6	2109.4
77.5°	2199.7	1473.8	1278.6	1219.6	1306.2	1589.9	2391.3	1348.6	1190.1	1114.6
80°	1394.6	1083.3	1175.4	1090.6	1127.5	1134.9	1245.4	613.5	488.2	482.7
82.5°	840.1	740.6	880.6	484.5	882.5	788.5	517.7	278.2	246.9	246.9
85°	595.1	458.7	304.0	197.1	392.4	432.9	200.8	143.7	125.3	121.6
87.5°	298.5	141.9	68.2	44.2	49.7	81.1	24.0	11.1	11.1	9.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)