

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: P677340

Luminaire Tested: **CCW-SA-1D-835-U-SLL-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677340  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1D-835-U-SLL-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/  
SLL distribution lens and House Side Shield  
Light Source: (16) 3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

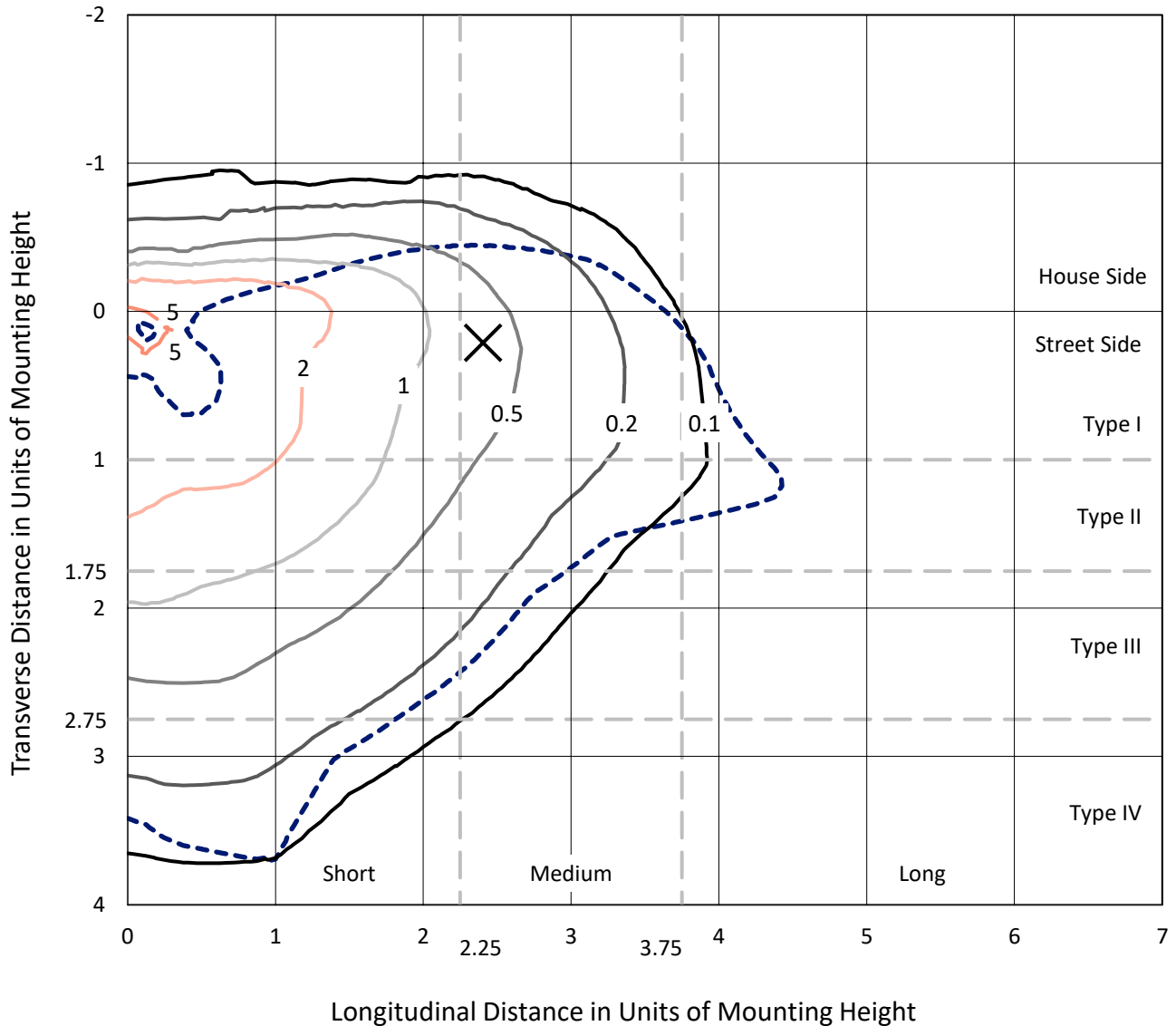
Lumens per Lamp: N/A  
Luminaire Lumens: 3334.1 lumens  
Efficiency: N/A  
Efficacy: 75.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
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: P677340  
 CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

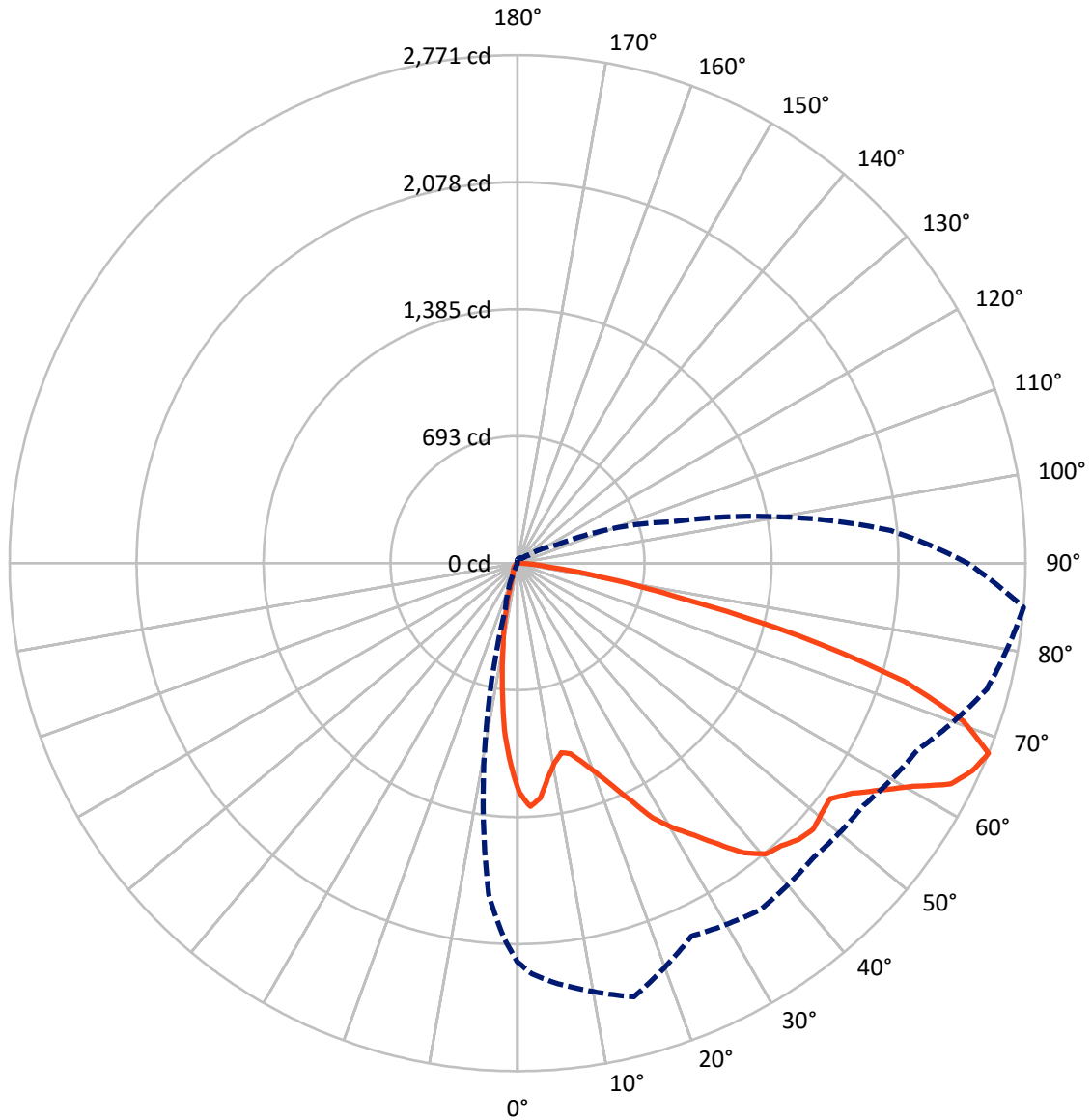
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.3 fc  
 Type III - Medium - N/A

REPORT NUMBER: P677340  
CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P677340  
 CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	578.9	0.0	578.9
	% Fixture	17.4	0.0	17.4
<b>Street Side</b>	Lumens	2755.2	0.0	2755.2
	% Fixture	82.6	0.0	82.6
<b>Total</b>	Lumens	3334.1	0.0	3334.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.2	2.9
10°-20°	186.8	5.6
20°-30°	258.4	7.8
30°-40°	365.2	11.0
40°-50°	497.3	14.9
50°-60°	658.6	19.8
60°-70°	764.7	22.9
70°-80°	433.1	13.0
80°-90°	74.8	2.2
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°	3334.1	100.0
0°-180°	3334.1	100.0

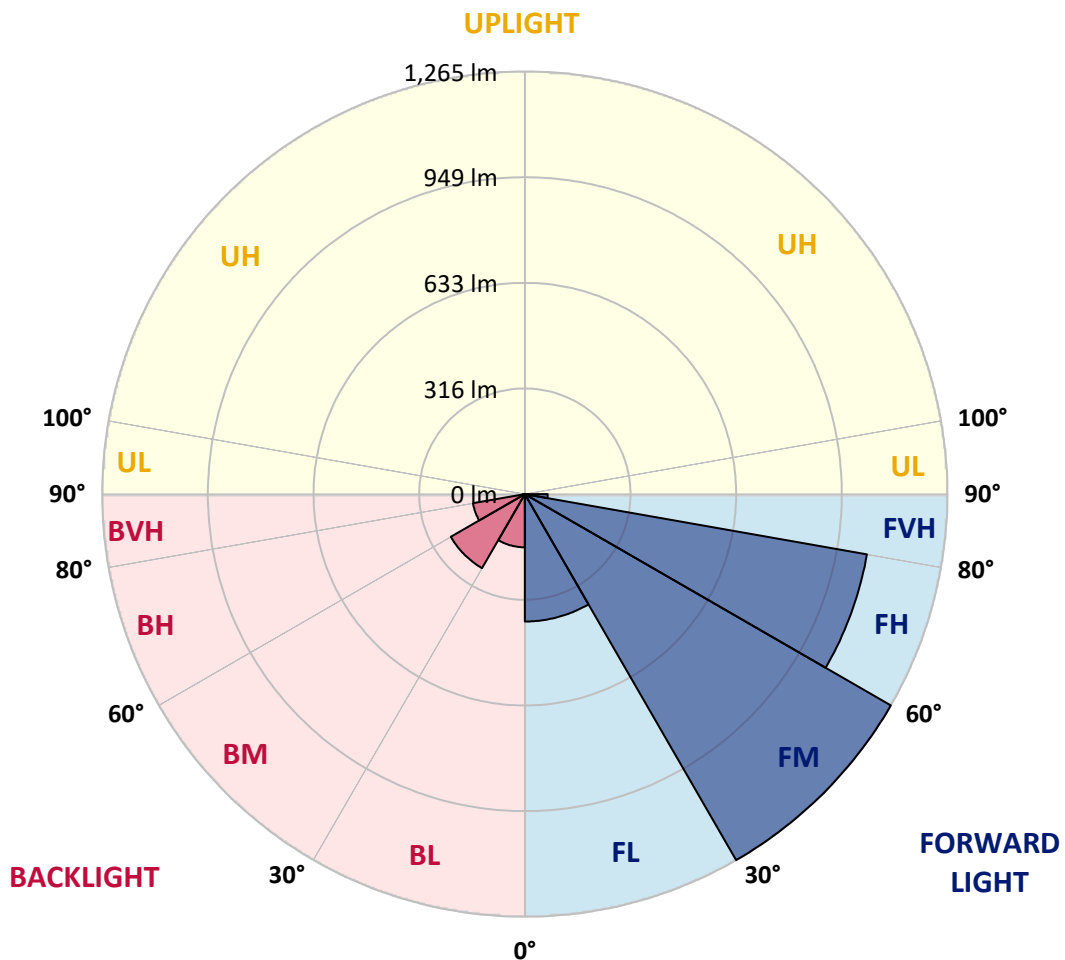


REPORT NUMBER: P677340  
 CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	381.3	11.4			
FM (30°-60°)	1265.3	38.0			
FH (60°-80°)	1040.1	31.2			G1/1800
FVH (80°-90°)	68.5	2.1			G1/100
BL (0°-30°)	159.2	4.8	B1/500		
BM (30°-60°)	255.8	7.7	B1/1000		
BH (60°-80°)	157.7	4.7	B1/500		G1/500
BVH (80°-90°)	6.3	0.2			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 III Medium





REPORT NUMBER: P677340

CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6
2.5°	1302.6	1330.2	1331.1	1343.5	1356.0	1356.0	1385.4	1378.3	1352.4	1348.0	1329.3
5°	1312.4	1322.2	1329.3	1392.5	1445.9	1440.6	1456.6	1445.9	1396.1	1332.0	1288.3
7.5°	1227.8	1238.5	1267.0	1374.7	1446.8	1470.8	1501.1	1434.3	1381.8	1266.1	1182.4
10°	1115.6	1136.1	1188.6	1311.5	1400.5	1477.1	1477.1	1423.7	1322.2	1209.1	1106.7
12.5°	1053.3	1094.2	1122.7	1247.4	1363.1	1415.6	1413.9	1385.4	1319.5	1177.0	1061.3
15°	1064.0	1075.5	1136.1	1233.1	1309.7	1307.0	1339.1	1330.2	1283.9	1205.5	1078.2
17.5°	1112.9	1130.7	1183.3	1233.1	1269.6	1258.9	1258.1	1300.8	1303.5	1253.6	1141.4
20°	1193.1	1245.6	1270.5	1285.7	1241.1	1195.7	1190.4	1250.0	1296.3	1315.0	1217.1
22.5°	1321.3	1356.0	1406.7	1329.3	1213.5	1156.6	1145.9	1211.8	1305.2	1388.0	1315.0
25°	1446.8	1473.5	1522.5	1422.8	1244.7	1148.5	1129.8	1186.8	1339.1	1489.5	1433.5
27.5°	1579.5	1602.6	1608.0	1491.3	1261.6	1132.5	1110.3	1186.8	1367.6	1543.0	1575.0
30°	1660.5	1688.1	1693.4	1551.9	1289.2	1145.9	1135.2	1192.2	1387.2	1588.4	1676.5
32.5°	1751.3	1758.4	1754.0	1562.6	1319.5	1185.0	1140.5	1227.8	1409.4	1642.7	1769.1
35°	1859.9	1872.4	1827.0	1611.5	1387.2	1210.0	1194.0	1271.4	1447.7	1667.6	1881.3
37.5°	1942.7	1981.9	1879.5	1630.2	1400.5	1262.5	1265.2	1362.2	1474.4	1697.9	2005.1
40°	2098.5	2032.7	1968.6	1694.3	1451.3	1351.5	1337.3	1455.7	1564.3	1717.5	2086.1
42.5°	2184.0	2149.3	2003.3	1700.6	1529.6	1474.4	1478.0	1561.7	1611.5	1772.7	2108.3
45°	2205.4	2168.9	2050.5	1705.0	1607.1	1619.5	1681.0	1697.0	1681.0	1809.2	2150.2
47.5°	2259.7	2180.5	2045.1	1764.7	1732.6	1780.7	1859.0	1893.8	1775.3	1795.8	2169.8
50°	2249.0	2203.6	2033.5	1789.6	1885.7	2013.1	2065.6	2051.4	1880.4	1768.2	2148.4
52.5°	2204.5	2155.5	2069.2	1857.3	2029.1	2183.1	2256.1	2220.5	1973.9	1830.5	2134.2
55°	2269.5	2232.1	2115.5	1949.0	2136.8	2332.7	2384.3	2357.6	2088.7	1888.4	2215.2
57.5°	2339.8	2331.8	2241.0	2056.7	2264.1	2486.7	2486.7	2453.8	2188.5	1972.1	2335.4
60°	2441.3	2459.1	2333.6	2127.9	2307.8	2477.8	2606.9	2568.6	2289.1	2119.0	2471.6
62.5°	2408.4	2465.4	2452.9	2281.1	2357.6	2521.5	2591.8	2620.3	2413.7	2298.0	2653.2
65°	2302.4	2363.0	2452.0	2381.7	2320.2	2415.5	2451.1	2537.5	2476.0	2466.3	2728.0
67.5°	2176.0	2241.9	2297.1	2449.3	2244.6	2307.8	2276.6	2304.2	2408.4	2650.6	2770.7
70°	1900.0	1963.2	2050.5	2298.9	2044.2	1987.2	1979.2	1965.9	2127.9	2584.7	2576.7
72.5°	1562.6	1591.9	1736.2	1868.8	1512.7	1502.0	1514.5	1499.3	1687.2	2339.8	2207.2
75°	1169.9	1199.3	1281.2	1435.2	1030.1	968.7	1039.9	1110.3	1288.3	1816.3	1585.7
77.5°	879.7	917.1	968.7	1073.8	755.9	659.7	669.5	736.3	931.3	1454.8	888.6
80°	570.7	566.3	666.0	739.0	568.9	586.7	561.8	610.8	674.9	778.2	454.1
82.5°	329.4	333.9	375.7	423.8	396.2	453.2	326.8	545.8	481.7	317.0	169.2
85°	185.2	193.2	231.5	293.8	248.4	166.5	136.2	270.7	302.7	130.0	81.9
87.5°	18.7	16.0	31.2	111.3	67.7	27.6	41.0	65.0	73.0	49.0	24.0
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: P677340

CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6
2.5°	1302.6	1302.6	1280.3	1242.9	1227.8	1201.1	1164.6	1176.1	1163.7	1118.3	1106.7
5°	1249.2	1206.4	1160.1	1103.1	1070.2	1002.5	981.2	942.9	949.1	910.8	912.6
7.5°	1137.9	1104.0	1025.7	950.9	885.9	827.1	744.3	713.2	682.9	667.8	685.6
10°	1072.9	1009.6	902.8	804.9	718.5	666.0	610.8	568.0	528.9	499.5	493.3
12.5°	1025.7	969.6	840.5	721.2	653.5	610.8	560.0	501.3	463.0	412.2	397.1
15°	1011.4	942.9	806.7	688.2	622.4	552.0	494.1	436.3	386.4	333.0	314.3
17.5°	1060.4	981.2	805.8	661.5	568.9	493.3	413.1	348.1	297.4	248.4	236.8
20°	1143.2	1022.1	831.6	645.5	518.2	416.7	325.9	260.9	203.9	171.8	163.8
22.5°	1237.6	1091.6	834.3	602.8	467.4	340.1	237.7	171.8	139.8	124.6	120.2
25°	1353.3	1202.9	866.3	568.0	407.8	258.2	169.2	131.8	113.1	104.2	102.4
27.5°	1448.6	1280.3	901.0	531.5	349.0	191.4	132.7	107.7	97.9	89.0	88.1
30°	1547.4	1369.3	910.8	509.3	298.3	157.6	114.0	95.3	84.6	80.1	79.2
32.5°	1633.8	1466.4	942.0	472.8	250.2	138.9	103.3	85.5	78.4	71.2	70.3
35°	1745.1	1522.5	957.1	453.2	232.4	125.5	94.4	78.4	67.7	63.2	61.4
37.5°	1864.4	1576.8	966.9	438.0	217.2	117.5	89.0	73.9	64.1	57.9	56.1
40°	1975.7	1653.4	952.7	419.4	205.7	107.7	85.5	68.6	59.7	53.4	50.7
42.5°	2061.1	1728.2	948.2	401.5	193.2	104.2	81.0	65.9	56.1	49.0	48.1
45°	2109.2	1778.9	917.1	387.3	183.4	106.0	79.2	62.3	53.4	47.2	43.6
47.5°	2097.7	1818.1	925.1	382.8	170.1	98.8	78.4	59.7	49.0	43.6	41.0
50°	2161.8	1897.3	911.7	368.6	160.3	89.0	85.5	59.7	48.1	41.8	39.2
52.5°	2172.4	1969.4	940.2	342.8	145.1	81.9	84.6	58.8	46.3	40.1	36.5
55°	2261.5	2053.1	995.4	328.5	132.7	71.2	77.5	57.0	41.8	36.5	34.7
57.5°	2382.6	2226.7	1031.0	315.2	115.7	62.3	65.0	56.1	38.3	33.8	31.2
60°	2499.2	2296.2	1033.7	291.1	99.7	56.1	50.7	56.1	35.6	30.3	27.6
62.5°	2586.4	2296.2	1015.9	270.7	87.3	49.9	44.5	53.4	32.1	26.7	24.9
65°	2539.3	2234.8	969.6	253.7	79.2	43.6	38.3	41.0	28.5	23.1	21.4
67.5°	2454.7	2043.3	867.2	233.3	78.4	38.3	32.9	30.3	24.9	20.5	18.7
70°	2319.3	1785.1	722.1	210.1	76.6	34.7	29.4	25.8	22.3	17.8	16.0
72.5°	1868.8	1474.4	593.0	196.8	74.8	30.3	24.9	22.3	18.7	15.1	13.4
75°	1294.6	942.0	456.7	168.3	73.0	27.6	23.1	19.6	16.0	12.5	11.6
77.5°	776.4	629.5	294.7	126.4	48.1	22.3	19.6	15.1	13.4	10.7	9.8
80°	363.3	297.4	119.3	49.0	23.1	16.0	13.4	11.6	10.7	8.9	8.0
82.5°	142.5	125.5	57.9	28.5	18.7	12.5	10.7	9.8	8.9	7.1	6.2
85°	76.6	67.7	27.6	19.6	13.4	8.9	8.9	8.0	7.1	6.2	5.3
87.5°	16.9	12.5	11.6	11.6	9.8	7.1	7.1	6.2	5.3	4.5	3.6
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: P677340  
 CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6
2.5°	1100.5	1113.8	1092.5	1105.8	1087.1	1101.4	1103.1	1089.8	1093.3	1111.1	1119.2
5°	937.5	928.6	909.0	902.8	903.7	892.1	896.6	902.8	912.6	917.9	934.0
7.5°	675.8	696.2	695.4	710.5	711.4	709.6	697.1	670.4	679.3	672.2	681.1
10°	483.5	492.4	509.3	519.1	536.9	527.1	498.6	487.9	482.6	481.7	490.6
12.5°	386.4	365.0	363.3	366.8	375.7	364.2	349.9	337.4	343.7	356.1	365.9
15°	299.2	281.3	258.2	254.6	256.4	251.1	235.9	219.9	224.4	236.8	244.0
17.5°	229.7	209.2	193.2	182.5	179.0	160.3	138.0	124.6	121.1	120.2	126.4
20°	154.9	151.4	148.7	135.3	135.3	108.6	89.9	80.1	80.1	81.9	82.8
22.5°	115.7	111.3	112.2	109.5	102.4	81.0	71.2	68.6	68.6	70.3	70.3
25°	100.6	94.4	92.6	91.7	84.6	69.4	62.3	59.7	59.7	61.4	61.4
27.5°	85.5	83.7	81.0	77.5	71.2	59.7	55.2	52.5	53.4	54.3	53.4
30°	78.4	73.9	70.3	70.3	63.2	53.4	49.9	48.1	46.3	48.1	49.0
32.5°	69.4	66.8	65.0	62.3	54.3	47.2	43.6	41.8	41.0	41.0	41.8
35°	59.7	59.7	57.9	54.3	47.2	42.7	38.3	36.5	35.6	36.5	36.5
37.5°	53.4	50.7	51.6	48.1	41.8	37.4	32.9	31.2	31.2	30.3	31.2
40°	49.9	45.4	42.7	41.0	37.4	32.1	28.5	26.7	25.8	25.8	25.8
42.5°	44.5	41.0	35.6	34.7	33.8	27.6	23.1	22.3	21.4	20.5	20.5
45°	41.8	36.5	32.1	27.6	27.6	23.1	19.6	17.8	16.9	16.0	16.9
47.5°	38.3	32.9	27.6	23.1	22.3	18.7	15.1	13.4	12.5	12.5	12.5
50°	36.5	29.4	24.0	19.6	16.9	15.1	11.6	9.8	8.9	8.9	8.9
52.5°	33.8	27.6	21.4	16.9	13.4	11.6	8.9	7.1	6.2	6.2	6.2
55°	30.3	24.9	18.7	14.2	11.6	8.9	6.2	4.5	3.6	3.6	3.6
57.5°	28.5	22.3	16.0	12.5	8.9	6.2	3.6	2.7	2.7	1.8	2.7
60°	25.8	19.6	13.4	9.8	7.1	4.5	2.7	0.9	0.9	0.9	0.9
62.5°	22.3	16.9	11.6	8.0	5.3	2.7	0.9	0.0	0.0	0.0	0.0
65°	18.7	13.4	8.9	6.2	3.6	0.9	0.0	0.0	0.0	0.0	0.0
67.5°	16.0	11.6	7.1	4.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	14.2	9.8	5.3	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	11.6	8.0	4.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	9.8	6.2	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	8.0	4.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	6.2	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	0.9	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: P677340  
 CATALOG NUMBER: CCW-SA-1D-835-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6	1253.6
2.5°	1130.7	1125.4	1152.1	1195.7	1218.0	1261.6	1272.3	1299.9	1292.8	1302.6
5°	935.8	946.4	985.6	1049.7	1072.9	1136.1	1195.7	1255.4	1293.7	1312.4
7.5°	694.5	730.1	778.2	836.9	896.6	979.4	1080.9	1150.3	1187.7	1227.8
10°	517.3	555.6	610.8	668.6	765.7	858.3	959.8	1046.2	1078.2	1115.6
12.5°	406.9	466.5	530.6	593.0	650.8	739.0	864.5	990.1	1024.8	1053.3
15°	283.1	356.1	447.8	528.9	609.9	686.5	816.4	968.7	1015.9	1064.0
17.5°	156.7	214.6	319.6	433.6	552.9	670.4	832.5	1007.9	1079.1	1112.9
20°	90.8	114.0	188.8	324.1	481.7	635.7	840.5	1081.8	1176.1	1193.1
22.5°	74.8	82.8	106.8	203.0	394.4	613.4	881.4	1185.0	1281.2	1321.3
25°	64.1	70.3	82.8	122.0	298.3	566.3	907.3	1314.1	1403.2	1446.8
27.5°	57.0	63.2	73.0	89.9	203.0	501.3	950.0	1430.8	1519.8	1579.5
30°	49.9	55.2	65.0	76.6	140.7	428.3	986.5	1516.3	1641.8	1660.5
32.5°	44.5	49.0	56.1	65.9	104.2	325.0	1015.9	1604.4	1710.4	1751.3
35°	38.3	43.6	48.1	56.1	79.2	244.8	998.1	1673.0	1811.0	1859.9
37.5°	33.8	37.4	41.8	47.2	66.8	191.4	961.6	1754.9	1897.3	1942.7
40°	28.5	31.2	36.5	41.8	60.5	147.8	919.7	1853.7	2018.4	2098.5
42.5°	24.0	26.7	30.3	39.2	49.9	109.5	835.1	1930.3	2116.3	2184.0
45°	18.7	22.3	27.6	39.2	40.1	81.0	747.9	1987.2	2171.5	2205.4
47.5°	14.2	17.8	26.7	33.8	32.1	56.1	644.6	2052.2	2228.5	2259.7
50°	10.7	14.2	30.3	29.4	26.7	42.7	579.6	2097.7	2232.1	2249.0
52.5°	7.1	10.7	24.9	22.3	22.3	37.4	561.8	2095.9	2241.0	2204.5
55°	5.3	8.0	14.2	16.0	19.6	32.9	545.8	2162.6	2243.7	2269.5
57.5°	3.6	6.2	9.8	12.5	16.9	28.5	512.8	2242.8	2326.5	2339.8
60°	1.8	4.5	7.1	9.8	14.2	24.9	466.5	2301.5	2427.1	2441.3
62.5°	0.9	2.7	5.3	8.0	11.6	19.6	418.5	2208.1	2383.5	2408.4
65°	0.0	1.8	3.6	5.3	7.1	14.2	340.1	1993.5	2210.7	2302.4
67.5°	0.0	0.0	1.8	3.6	4.5	10.7	256.4	1813.6	2051.4	2176.0
70°	0.0	0.0	0.9	0.9	2.7	8.0	163.8	1502.0	1831.4	1900.0
72.5°	0.0	0.0	0.0	0.0	0.9	5.3	95.3	1115.6	1435.2	1562.6
75°	0.0	0.0	0.0	0.0	0.0	4.5	48.1	717.6	999.0	1169.9
77.5°	0.0	0.0	0.0	0.0	0.0	3.6	25.8	463.0	736.3	879.7
80°	0.0	0.0	0.0	0.0	0.0	0.9	15.1	268.9	471.0	570.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	6.2	131.8	281.3	329.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	70.3	140.7	185.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.8	18.7
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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