

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: P675912

Luminaire Tested: **CCW-SA-1E-840-U-SLL**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P675912  
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-SLL  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/  
SLL distribution lens  
Light Source: (16) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

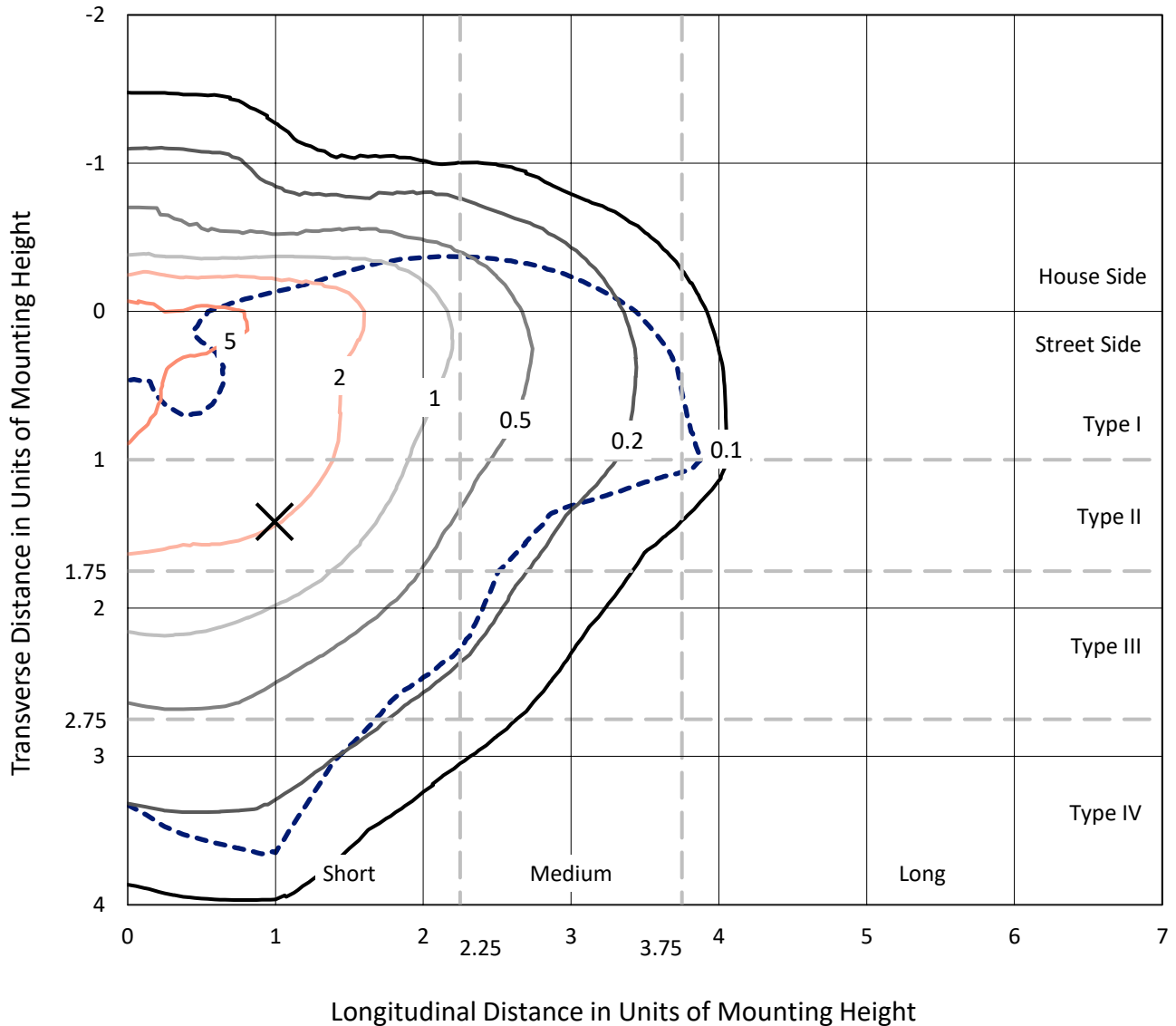
Lumens per Lamp: N/A  
Luminaire Lumens: 4836.7 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 56.1  
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: P675912  
 CATALOG NUMBER: CCW-SA-1E-840-U-SLL

### Iso-Footcandle Lines of Horizontal Illumination

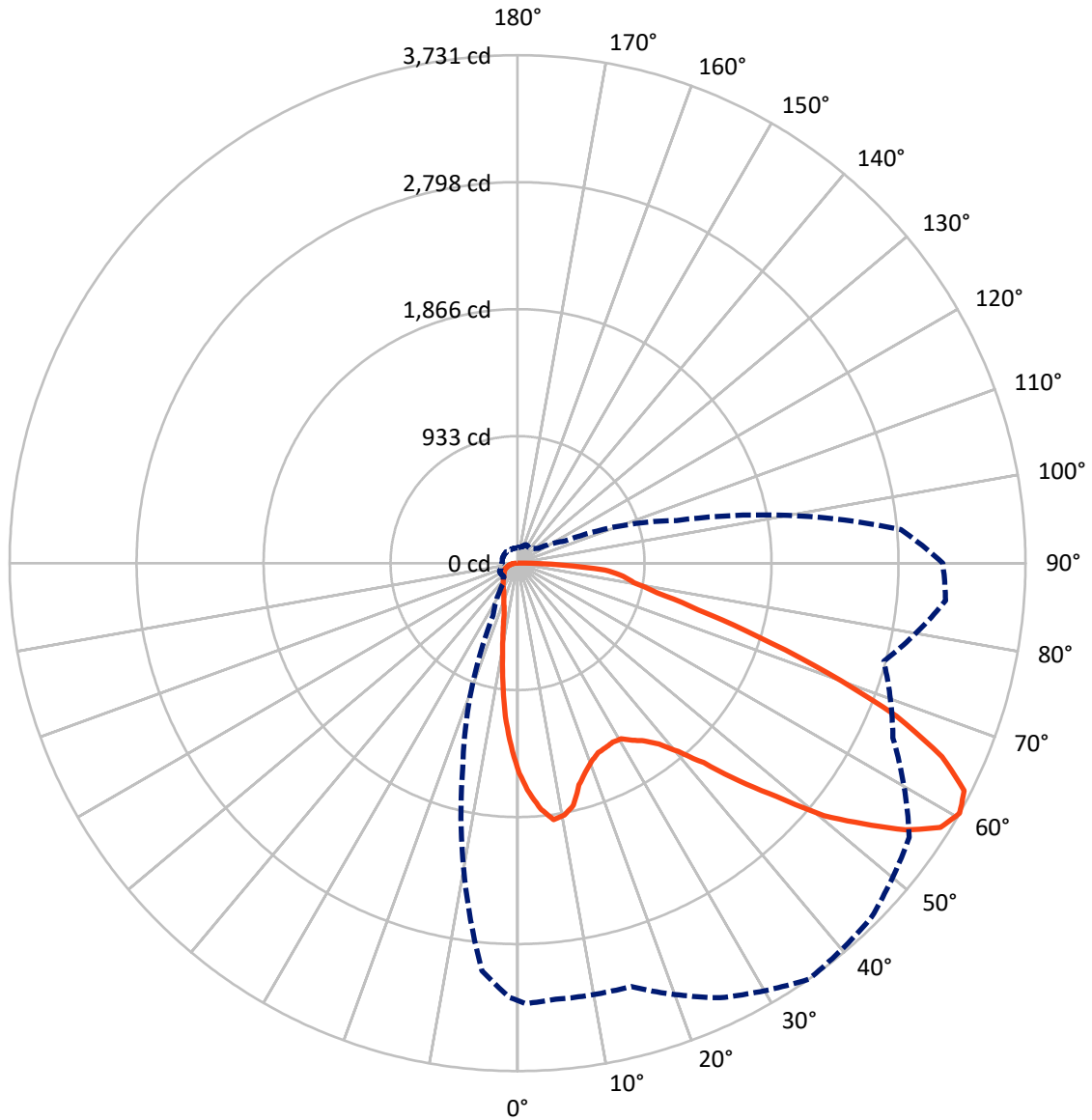
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P675912  
CATALOG NUMBER: CCW-SA-1E-840-U-SLL

### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P675912  
 CATALOG NUMBER: CCW-SA-1E-840-U-SLL

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	920.5	0.0	920.5
	% Fixture	19.0	0.0	19.0
<b>Street Side</b>	Lumens	3916.2	0.0	3916.2
	% Fixture	81.0	0.0	81.0
<b>Total</b>	Lumens	4836.7	0.0	4836.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.0	2.5
10°-20°	253.4	5.2
20°-30°	370.7	7.7
30°-40°	522.3	10.8
40°-50°	717.8	14.8
50°-60°	978.3	20.2
60°-70°	1070.8	22.1
70°-80°	618.2	12.8
80°-90°	185.1	3.8
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°	4836.7	100.0
0°-180°	4836.7	100.0



REPORT NUMBER: P675912

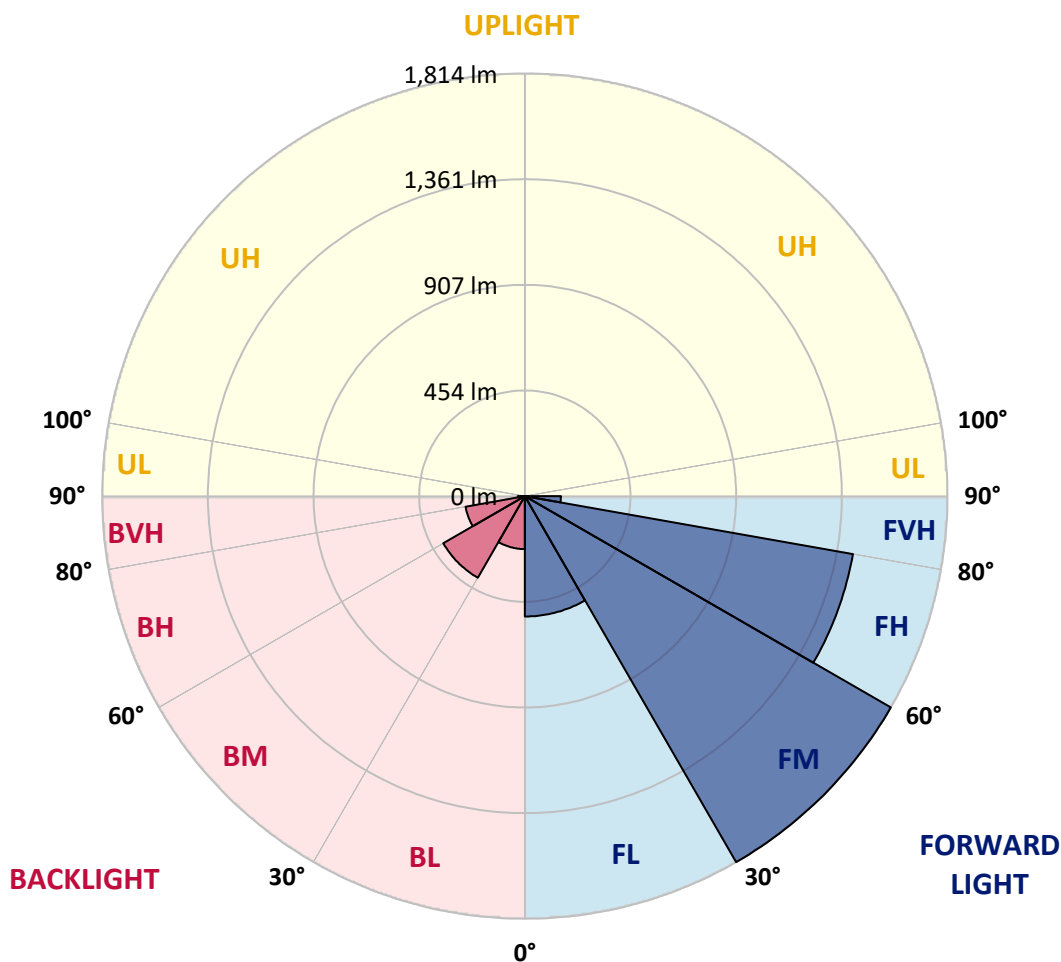
CATALOG NUMBER: CCW-SA-1E-840-U-SLL

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	516.7	10.7			
FM (30°-60°)	1814.2	37.5			
FH (60°-80°)	1430.4	29.6			G1/1800
FVH (80°-90°)	155.0	3.2			G2/225
BL (0°-30°)	227.4	4.7	B1/500		
BM (30°-60°)	404.4	8.4	B1/1000		
BH (60°-80°)	258.5	5.3	B1/500		G1/500
BVH (80°-90°)	30.2	0.6			G1/100
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: P675912

CATALOG NUMBER: CCW-SA-1E-840-U-SLL

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8
2.5°	1654.2	1647.8	1654.2	1677.8	1684.3	1695.0	1695.0	1680.0	1652.1	1639.2	1617.8
5°	1690.7	1680.0	1733.6	1783.0	1821.6	1817.3	1780.8	1750.8	1695.0	1611.3	1531.9
7.5°	1617.8	1628.5	1667.1	1795.8	1886.0	1903.1	1845.2	1785.1	1665.0	1549.1	1441.8
10°	1480.4	1495.5	1579.1	1712.2	1853.8	1881.7	1845.2	1772.2	1628.5	1484.7	1360.3
12.5°	1413.9	1448.3	1497.6	1658.5	1759.4	1825.9	1808.7	1761.5	1600.6	1431.1	1310.9
15°	1413.9	1422.5	1495.5	1630.6	1688.6	1690.7	1697.1	1705.7	1609.2	1454.7	1293.8
17.5°	1459.0	1482.6	1544.8	1628.5	1639.2	1613.5	1613.5	1649.9	1626.3	1521.2	1356.0
20°	1568.4	1559.8	1641.4	1675.7	1617.8	1553.4	1547.0	1609.2	1645.7	1592.0	1469.7
22.5°	1677.8	1716.5	1783.0	1705.7	1598.4	1512.6	1504.0	1581.3	1703.6	1714.3	1600.6
25°	1843.0	1881.7	1916.0	1821.6	1596.3	1501.9	1508.3	1568.4	1774.4	1888.1	1819.4
27.5°	2021.1	2044.7	2094.1	1948.2	1647.8	1489.0	1495.5	1585.6	1840.9	2001.8	1991.1
30°	2122.0	2147.7	2137.0	1971.8	1682.1	1497.6	1480.4	1609.2	1804.4	2001.8	2102.7
32.5°	2220.7	2205.6	2199.2	2010.4	1725.0	1551.2	1508.3	1658.5	1825.9	2034.0	2246.4
35°	2340.8	2319.4	2302.2	2085.5	1795.8	1602.7	1583.4	1722.9	1873.1	2100.5	2362.3
37.5°	2473.8	2473.8	2390.2	2141.3	1879.5	1686.4	1665.0	1815.2	1948.2	2141.3	2521.0
40°	2630.5	2636.9	2488.9	2216.4	1973.9	1819.4	1813.0	1935.3	2021.1	2201.4	2673.4
42.5°	2746.3	2750.6	2574.7	2244.3	2083.3	2004.0	2031.9	2128.4	2104.8	2255.0	2684.1
45°	2825.7	2804.3	2634.8	2323.7	2203.5	2280.7	2289.3	2317.2	2214.2	2287.2	2727.0
47.5°	2864.3	2860.0	2660.5	2415.9	2456.7	2561.8	2611.2	2572.5	2315.1	2252.8	2727.0
50°	2903.0	2866.5	2684.1	2542.5	2703.4	2915.8	2905.1	2834.3	2454.5	2295.8	2686.3
52.5°	2928.7	2896.5	2731.3	2656.2	2939.4	3179.7	3222.6	3091.8	2617.6	2375.1	2705.6
55°	3021.0	2995.2	2872.9	2810.7	3211.9	3458.7	3465.1	3282.7	2789.2	2506.0	2832.2
57.5°	3132.5	3147.5	3068.2	3029.5	3420.0	3662.5	3638.9	3424.3	2935.1	2664.8	2978.0
60°	3211.9	3235.5	3216.2	3220.5	3523.0	3731.1	3677.5	3512.3	3042.4	2784.9	3156.1
62.5°	3169.0	3216.2	3295.6	3278.4	3527.3	3681.8	3606.7	3396.4	3055.3	2941.6	3291.3
65°	3051.0	3055.3	3209.8	3304.2	3334.2	3426.5	3327.8	3154.0	2922.3	3038.1	3272.0
67.5°	2748.5	2782.8	2922.3	3106.8	2980.2	3001.7	2993.1	2742.0	2720.6	2971.6	3123.9
70°	2426.6	2450.2	2602.6	2819.3	2516.8	2415.9	2435.2	2248.6	2336.5	2765.6	2825.7
72.5°	2006.1	2021.1	2194.9	2385.9	2019.0	1838.8	1883.8	1731.5	1855.9	2420.2	2383.7
75°	1514.8	1542.7	1677.8	1903.1	1486.9	1371.0	1416.1	1353.9	1469.7	1993.2	1849.5
77.5°	1077.1	1055.6	1223.0	1489.0	1117.8	1049.2	1053.5	1064.2	1188.6	1680.0	1328.1
80°	733.8	740.2	890.4	1092.1	877.5	866.8	856.1	941.9	997.7	1330.3	965.5
82.5°	435.6	435.6	600.8	776.7	693.0	781.0	731.6	808.9	781.0	978.4	632.9
85°	203.8	203.8	309.0	560.0	536.4	643.7	547.1	611.5	577.2	682.3	285.4
87.5°	34.3	30.0	62.2	274.6	221.0	251.0	98.7	326.1	362.6	476.3	70.8
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: P675912  
 CATALOG NUMBER: CCW-SA-1E-840-U-SLL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8
2.5°	1594.2	1579.1	1549.1	1510.5	1478.3	1437.5	1424.7	1396.8	1358.1	1353.9	1336.7
5°	1501.9	1450.4	1386.0	1306.7	1253.0	1197.2	1150.0	1122.1	1089.9	1085.7	1077.1
7.5°	1401.1	1336.7	1229.4	1135.0	1042.7	954.8	911.9	858.2	821.8	793.9	781.0
10°	1306.7	1246.6	1113.6	984.8	903.3	845.4	793.9	738.1	693.0	658.7	645.8
12.5°	1244.4	1173.6	1029.9	907.6	847.5	781.0	723.1	663.0	605.1	560.0	536.4
15°	1216.5	1150.0	1004.1	869.0	781.0	688.7	622.2	562.1	491.3	459.2	448.4
17.5°	1283.1	1184.4	995.5	823.9	699.5	594.3	512.8	448.4	396.9	364.7	351.9
20°	1368.9	1246.6	1010.6	770.3	622.2	504.2	414.1	345.4	311.1	287.5	285.4
22.5°	1478.3	1338.8	1034.2	731.6	536.4	405.5	324.0	283.2	259.6	257.5	253.2
25°	1673.5	1506.2	1072.8	680.1	467.7	334.7	276.8	253.2	242.4	236.0	240.3
27.5°	1840.9	1615.6	1100.7	648.0	439.8	315.4	268.2	242.4	231.7	229.6	231.7
30°	1939.6	1716.5	1092.1	587.9	384.1	300.4	285.4	276.8	255.3	238.2	238.2
32.5°	2029.7	1780.8	1089.9	534.2	328.3	251.0	238.2	231.7	244.6	253.2	246.7
35°	2154.2	1881.7	1083.5	504.2	304.7	231.7	210.3	193.1	184.5	180.2	186.7
37.5°	2287.2	1950.3	1066.3	499.9	291.8	221.0	203.8	186.7	178.1	173.8	171.6
40°	2433.1	2023.3	1047.0	478.5	285.4	214.6	197.4	182.4	171.6	165.2	163.1
42.5°	2527.5	2081.2	1027.7	467.7	272.5	210.3	191.0	178.1	167.4	158.8	158.8
45°	2581.1	2149.9	1008.4	457.0	257.5	212.4	191.0	173.8	160.9	156.6	152.3
47.5°	2604.7	2201.4	1002.0	439.8	244.6	203.8	186.7	169.5	156.6	148.0	145.9
50°	2666.9	2310.8	1025.6	427.0	229.6	195.2	197.4	167.4	154.5	143.8	141.6
52.5°	2703.4	2398.7	1077.1	407.7	218.8	184.5	193.1	163.1	148.0	137.3	137.3
55°	2836.4	2544.6	1132.9	392.6	206.0	169.5	178.1	154.5	137.3	130.9	130.9
57.5°	3005.9	2699.1	1180.1	386.2	197.4	158.8	158.8	150.2	130.9	122.3	120.2
60°	3123.9	2825.7	1208.0	381.9	188.8	148.0	141.6	150.2	124.4	115.9	113.7
62.5°	3136.8	2752.8	1180.1	379.8	186.7	137.3	128.7	143.8	118.0	109.4	105.1
65°	3055.3	2604.7	1102.8	371.2	184.5	126.6	120.2	124.4	109.4	103.0	98.7
67.5°	2892.2	2364.4	991.3	366.9	182.4	118.0	109.4	107.3	100.8	94.4	90.1
70°	2512.5	2051.2	860.4	347.6	178.1	111.6	98.7	96.6	90.1	85.8	83.7
72.5°	2109.1	1677.8	710.2	321.8	169.5	100.8	90.1	85.8	83.7	77.2	75.1
75°	1615.6	1291.6	568.6	285.4	148.0	90.1	79.4	75.1	72.9	68.7	66.5
77.5°	1135.0	961.2	420.5	231.7	124.4	81.5	70.8	66.5	64.4	57.9	57.9
80°	770.3	673.7	285.4	160.9	96.6	66.5	62.2	57.9	53.6	49.3	49.3
82.5°	478.5	472.0	206.0	105.1	70.8	53.6	49.3	49.3	42.9	38.6	38.6
85°	218.8	289.7	143.8	72.9	53.6	40.8	40.8	38.6	34.3	27.9	27.9
87.5°	68.7	96.6	75.1	32.2	30.0	23.6	23.6	21.5	21.5	17.2	17.2
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: P675912  
 CATALOG NUMBER: CCW-SA-1E-840-U-SLL

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8
2.5°	1353.9	1351.7	1351.7	1343.1	1364.6	1364.6	1377.5	1366.7	1373.2	1375.3	1392.5
5°	1074.9	1092.1	1105.0	1130.7	1145.7	1152.2	1152.2	1169.3	1162.9	1175.8	1201.5
7.5°	787.4	808.9	847.5	879.7	905.4	914.0	911.9	916.2	922.6	907.6	911.9
10°	637.2	622.2	635.1	665.1	688.7	716.6	695.2	693.0	699.5	693.0	705.9
12.5°	532.1	514.9	504.2	504.2	521.4	534.2	527.8	538.5	562.1	568.6	583.6
15°	431.3	416.2	407.7	396.9	414.1	418.4	424.8	439.8	457.0	465.6	482.8
17.5°	345.4	345.4	345.4	336.9	343.3	349.7	351.9	371.2	373.3	381.9	388.3
20°	283.2	289.7	300.4	304.7	311.1	311.1	306.8	317.5	309.0	315.4	319.7
22.5°	255.3	263.9	268.2	270.3	278.9	281.1	270.3	272.5	274.6	268.2	270.3
25°	240.3	244.6	240.3	242.4	244.6	240.3	242.4	246.7	244.6	248.9	246.7
27.5°	233.9	229.6	227.4	225.3	225.3	221.0	223.1	223.1	227.4	229.6	229.6
30°	233.9	227.4	218.8	212.4	212.4	206.0	210.3	214.6	216.7	221.0	221.0
32.5°	240.3	227.4	212.4	206.0	199.5	195.2	199.5	206.0	214.6	216.7	218.8
35°	191.0	197.4	195.2	186.7	184.5	184.5	182.4	182.4	175.9	175.9	173.8
37.5°	171.6	169.5	173.8	175.9	178.1	171.6	171.6	163.1	160.9	163.1	163.1
40°	160.9	160.9	160.9	167.4	169.5	165.2	158.8	154.5	154.5	154.5	156.6
42.5°	156.6	152.3	150.2	154.5	160.9	156.6	150.2	148.0	148.0	150.2	150.2
45°	150.2	148.0	145.9	143.8	152.3	145.9	143.8	141.6	141.6	141.6	143.8
47.5°	143.8	141.6	137.3	137.3	139.5	137.3	135.2	135.2	135.2	139.5	139.5
50°	139.5	137.3	133.0	133.0	133.0	133.0	130.9	130.9	130.9	133.0	135.2
52.5°	133.0	130.9	128.7	126.6	126.6	126.6	126.6	126.6	126.6	128.7	130.9
55°	126.6	124.4	122.3	122.3	124.4	124.4	122.3	124.4	122.3	124.4	126.6
57.5°	120.2	118.0	115.9	118.0	120.2	118.0	118.0	118.0	118.0	118.0	120.2
60°	111.6	111.6	111.6	111.6	115.9	115.9	115.9	115.9	111.6	113.7	115.9
62.5°	107.3	105.1	105.1	107.3	109.4	109.4	111.6	109.4	107.3	109.4	109.4
65°	98.7	98.7	98.7	100.8	100.8	103.0	103.0	103.0	100.8	103.0	103.0
67.5°	92.3	92.3	92.3	92.3	96.6	96.6	96.6	96.6	94.4	94.4	96.6
70°	81.5	83.7	81.5	85.8	90.1	88.0	90.1	90.1	88.0	85.8	90.1
72.5°	75.1	75.1	75.1	75.1	81.5	81.5	81.5	83.7	81.5	79.4	81.5
75°	66.5	66.5	66.5	68.7	72.9	72.9	72.9	72.9	72.9	70.8	70.8
77.5°	57.9	60.1	57.9	60.1	64.4	62.2	64.4	66.5	64.4	62.2	62.2
80°	49.3	49.3	49.3	51.5	53.6	53.6	53.6	55.8	53.6	51.5	51.5
82.5°	38.6	38.6	40.8	40.8	42.9	42.9	42.9	45.1	42.9	40.8	40.8
85°	30.0	30.0	30.0	32.2	32.2	34.3	34.3	36.5	36.5	34.3	34.3
87.5°	19.3	17.2	19.3	19.3	21.5	21.5	19.3	17.2	19.3	17.2	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: P675912  
 CATALOG NUMBER: CCW-SA-1E-840-U-SLL

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8	1544.8
2.5°	1409.6	1448.3	1476.2	1495.5	1523.4	1577.0	1598.4	1637.1	1647.8	1654.2
5°	1212.2	1253.0	1313.1	1356.0	1405.3	1506.2	1583.4	1641.4	1667.1	1690.7
7.5°	950.5	1004.1	1066.3	1122.1	1203.7	1328.1	1428.9	1549.1	1594.2	1617.8
10°	742.4	791.7	860.4	929.0	1042.7	1147.9	1291.6	1401.1	1463.3	1480.4
12.5°	626.5	684.4	766.0	849.6	920.4	1040.6	1186.5	1345.3	1403.2	1413.9
15°	532.1	611.5	695.2	781.0	862.5	967.7	1124.3	1317.4	1403.2	1413.9
17.5°	439.8	510.6	609.3	701.6	796.0	939.8	1135.0	1341.0	1426.8	1459.0
20°	349.7	418.4	495.6	611.5	740.2	892.6	1158.6	1420.4	1534.1	1568.4
22.5°	289.7	319.7	394.8	506.4	658.7	860.4	1182.2	1544.8	1665.0	1677.8
25°	253.2	274.6	321.8	427.0	594.3	838.9	1238.0	1688.6	1843.0	1843.0
27.5°	236.0	244.6	276.8	371.2	549.3	819.6	1293.8	1847.3	1991.1	2021.1
30°	231.7	253.2	270.3	330.4	499.9	766.0	1345.3	1971.8	2119.8	2122.0
32.5°	227.4	223.1	236.0	287.5	439.8	710.2	1388.2	2098.4	2214.2	2220.7
35°	178.1	186.7	208.1	253.2	394.8	669.4	1409.6	2167.0	2334.4	2340.8
37.5°	167.4	178.1	195.2	233.9	364.7	635.1	1416.1	2300.1	2461.0	2473.8
40°	163.1	171.6	184.5	216.7	341.1	592.2	1428.9	2437.4	2647.6	2630.5
42.5°	154.5	165.2	178.1	208.1	321.8	560.0	1431.1	2512.5	2746.3	2746.3
45°	152.3	158.8	173.8	208.1	300.4	532.1	1396.8	2587.6	2860.0	2825.7
47.5°	143.8	156.6	169.5	201.7	274.6	504.2	1356.0	2626.2	2875.1	2864.3
50°	141.6	154.5	175.9	191.0	259.6	491.3	1347.4	2722.7	2905.1	2903.0
52.5°	137.3	150.2	182.4	182.4	240.3	474.2	1388.2	2765.6	2911.5	2928.7
55°	130.9	150.2	169.5	167.4	223.1	452.7	1433.2	2877.2	3025.3	3021.0
57.5°	126.6	145.9	160.9	152.3	203.8	437.7	1499.8	2984.5	3162.6	3132.5
60°	120.2	145.9	143.8	141.6	188.8	424.8	1555.5	3005.9	3192.6	3211.9
62.5°	115.9	152.3	126.6	130.9	175.9	418.4	1531.9	2845.0	3151.8	3169.0
65°	111.6	130.9	115.9	120.2	171.6	405.5	1439.7	2651.9	2975.9	3051.0
67.5°	103.0	107.3	107.3	111.6	167.4	375.5	1250.9	2304.3	2707.7	2748.5
70°	94.4	96.6	96.6	103.0	163.1	341.1	1032.0	1993.2	2349.4	2426.6
72.5°	85.8	85.8	85.8	94.4	150.2	313.3	849.6	1531.9	1952.5	2006.1
75°	75.1	75.1	75.1	83.7	135.2	285.4	669.4	1139.3	1437.5	1514.8
77.5°	66.5	66.5	64.4	75.1	118.0	231.7	482.8	804.6	1012.7	1077.1
80°	55.8	53.6	53.6	60.1	92.3	167.4	311.1	568.6	705.9	733.8
82.5°	45.1	42.9	40.8	45.1	66.5	105.1	193.1	396.9	452.7	435.6
85°	42.9	45.1	36.5	34.3	47.2	68.7	122.3	244.6	203.8	203.8
87.5°	17.2	15.0	15.0	12.9	23.6	25.7	53.6	45.1	34.3	34.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)