

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: P677351

Luminaire Tested: **CCW-SA-1D-840-U-SLL-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677351
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1D-840-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) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

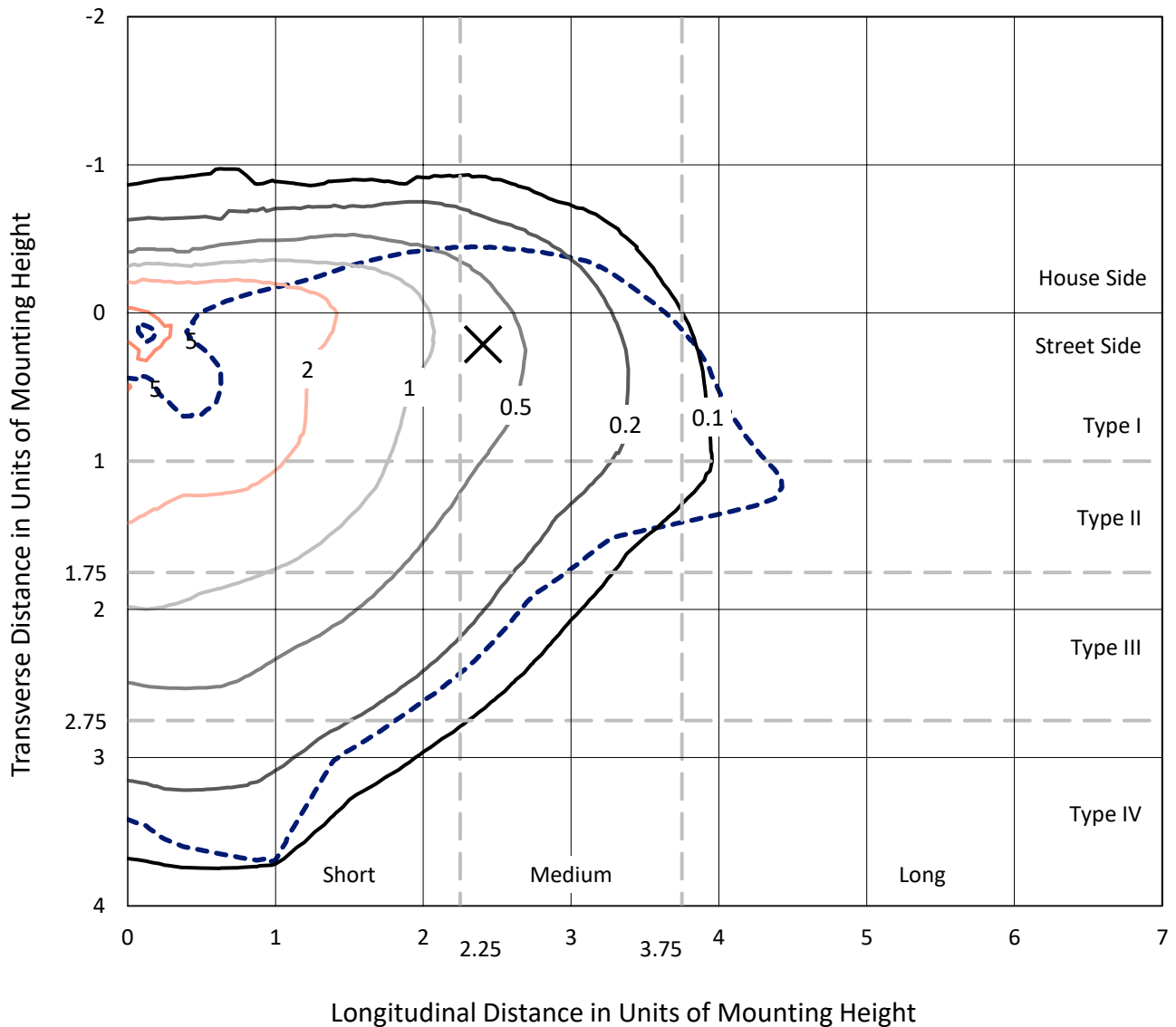
Lumens per Lamp: N/A
Luminaire Lumens: 3449.8 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

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: P677351
 CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

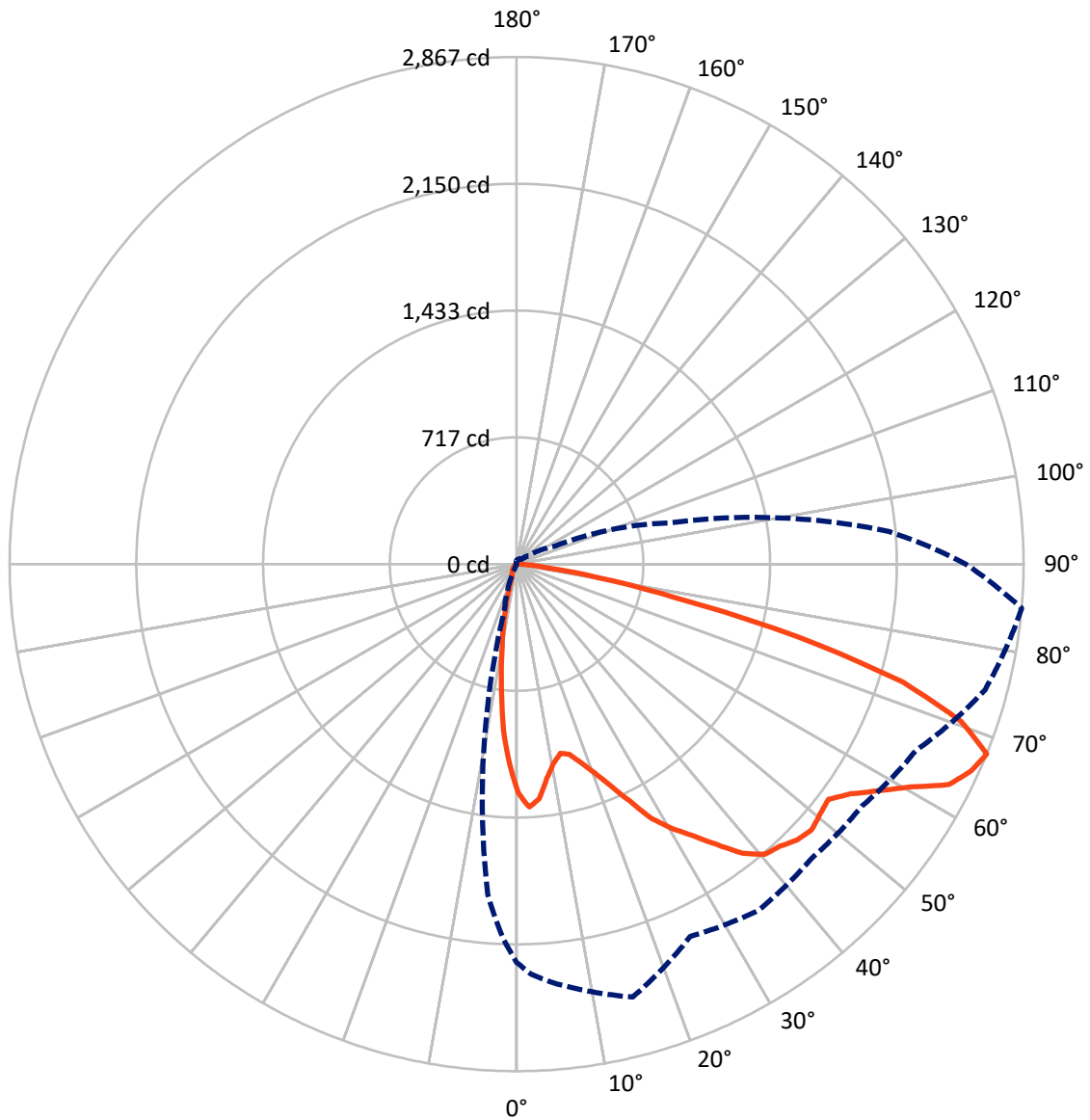
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 6.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P677351
CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P677351
 CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

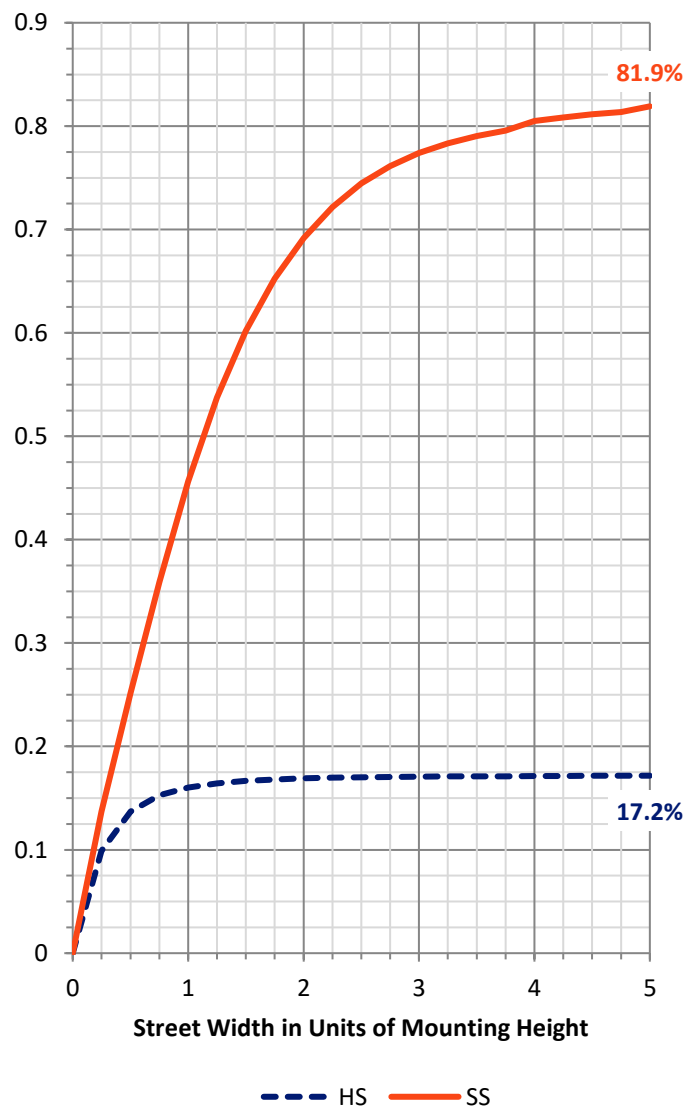
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	599.0	0.0	599.0
	% Fixture	17.4	0.0	17.4
Street Side	Lumens	2850.8	0.0	2850.8
	% Fixture	82.6	0.0	82.6
Total	Lumens	3449.8	0.0	3449.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	2.9
10°-20°	193.2	5.6
20°-30°	267.4	7.8
30°-40°	377.9	11.0
40°-50°	514.5	14.9
50°-60°	681.5	19.8
60°-70°	791.2	22.9
70°-80°	448.1	13.0
80°-90°	77.4	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°	3449.8	100.0
0°-180°	3449.8	100.0



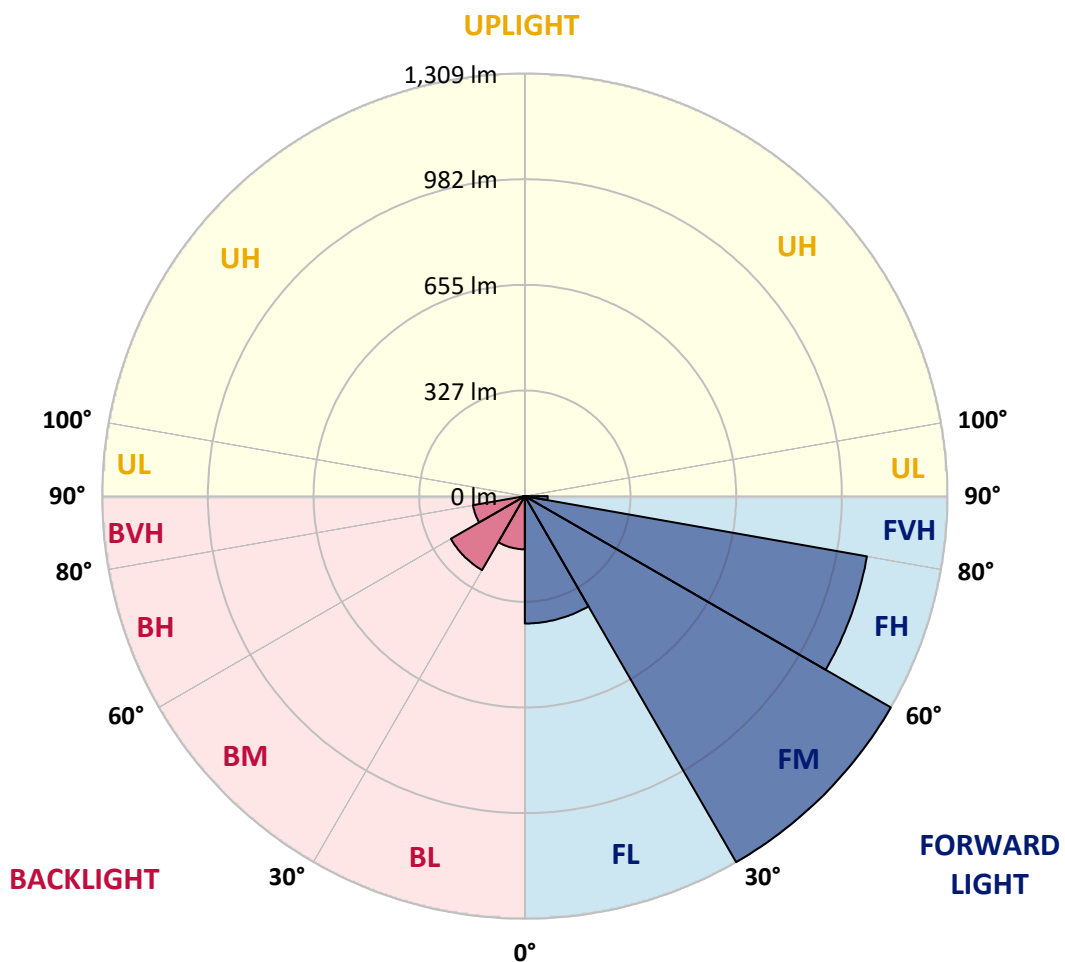
REPORT NUMBER: P677351
 CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	394.5	11.4			
FM (30°-60°)	1309.2	38.0			
FH (60°-80°)	1076.2	31.2			G1/1800
FVH (80°-90°)	70.9	2.1			G1/100
BL (0°-30°)	164.7	4.8	B1/500		
BM (30°-60°)	264.7	7.7	B1/1000		
BH (60°-80°)	163.1	4.7	B1/500		G1/500
BVH (80°-90°)	6.5	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: P677351

CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1
2.5°	1347.8	1376.3	1377.3	1390.2	1403.1	1403.1	1433.5	1426.1	1399.4	1394.8	1375.4
5°	1357.9	1368.1	1375.4	1440.8	1496.1	1490.6	1507.2	1496.1	1444.5	1378.2	1333.0
7.5°	1270.4	1281.5	1310.9	1422.4	1497.0	1521.9	1553.2	1484.1	1429.8	1310.0	1223.4
10°	1154.3	1175.5	1229.9	1357.0	1449.1	1528.3	1528.3	1473.1	1368.1	1251.1	1145.1
12.5°	1089.8	1132.2	1161.7	1290.7	1410.4	1464.8	1462.9	1433.5	1365.3	1217.9	1098.1
15°	1100.9	1112.9	1175.5	1275.9	1355.2	1352.4	1385.6	1376.3	1328.4	1247.4	1115.6
17.5°	1151.6	1170.0	1224.3	1275.9	1313.7	1302.6	1301.7	1345.9	1348.7	1297.1	1181.0
20°	1234.5	1288.8	1314.6	1330.3	1284.2	1237.2	1231.7	1293.4	1341.3	1360.7	1259.3
22.5°	1367.1	1403.1	1455.6	1375.4	1255.7	1196.7	1185.6	1253.8	1350.5	1436.2	1360.7
25°	1497.0	1524.7	1575.3	1472.2	1287.9	1188.4	1169.1	1228.0	1385.6	1541.2	1483.2
27.5°	1634.3	1658.2	1663.8	1543.1	1305.4	1171.8	1148.8	1228.0	1415.0	1596.5	1629.7
30°	1718.1	1746.7	1752.2	1605.7	1334.0	1185.6	1174.6	1233.5	1435.3	1643.5	1734.7
32.5°	1812.1	1819.5	1814.9	1616.8	1365.3	1226.2	1180.1	1270.4	1458.3	1699.7	1830.5
35°	1924.5	1937.4	1890.4	1667.5	1435.3	1252.0	1235.4	1315.5	1497.9	1725.5	1946.6
37.5°	2010.2	2050.7	1944.8	1686.8	1449.1	1306.3	1309.1	1409.5	1525.6	1756.8	2074.6
40°	2171.4	2103.2	2036.9	1753.1	1501.6	1398.5	1383.7	1506.2	1618.6	1777.1	2158.5
42.5°	2259.8	2223.9	2072.8	1759.6	1582.7	1525.6	1529.3	1615.9	1667.5	1834.2	2181.5
45°	2281.9	2244.2	2121.6	1764.2	1662.8	1675.7	1739.3	1755.9	1739.3	1872.0	2224.8
47.5°	2338.1	2256.1	2116.1	1825.9	1792.7	1842.5	1923.6	1959.5	1837.0	1858.2	2245.1
50°	2327.1	2280.1	2104.1	1851.7	1951.2	2082.9	2137.3	2122.6	1945.7	1829.6	2223.0
52.5°	2281.0	2230.3	2141.0	1921.7	2099.5	2258.9	2334.4	2297.6	2042.4	1894.1	2208.2
55°	2348.3	2309.6	2188.9	2016.6	2211.0	2413.7	2467.1	2439.5	2161.2	1954.0	2292.1
57.5°	2421.0	2412.7	2318.8	2128.1	2342.7	2573.0	2573.0	2539.0	2264.4	2040.6	2416.4
60°	2526.1	2544.5	2414.6	2201.8	2387.9	2563.8	2697.4	2657.8	2368.5	2192.6	2557.4
62.5°	2492.0	2550.9	2538.0	2360.2	2439.5	2609.0	2681.7	2711.2	2497.5	2377.7	2745.3
65°	2382.3	2445.0	2537.1	2464.3	2400.8	2499.3	2536.2	2625.6	2562.0	2551.9	2822.7
67.5°	2251.5	2319.7	2376.8	2534.3	2322.5	2387.9	2355.6	2384.2	2492.0	2742.6	2866.9
70°	1965.9	2031.3	2121.6	2378.7	2115.2	2056.2	2047.9	2034.1	2201.8	2674.4	2666.1
72.5°	1616.8	1647.2	1796.4	1933.7	1565.2	1554.1	1567.0	1551.4	1745.8	2421.0	2283.8
75°	1210.5	1240.9	1325.7	1485.0	1065.9	1002.3	1076.0	1148.8	1333.0	1879.3	1640.7
77.5°	910.2	948.9	1002.3	1111.0	782.1	682.6	692.8	761.9	963.6	1505.3	919.4
80°	590.5	585.9	689.1	764.6	588.7	607.1	581.3	632.0	698.3	805.2	469.8
82.5°	340.9	345.5	388.8	438.5	410.0	468.9	338.1	564.7	498.4	328.0	175.0
85°	191.6	199.9	239.5	304.0	257.0	172.3	141.0	280.1	313.2	134.5	84.8
87.5°	19.3	16.6	32.2	115.2	70.0	28.6	42.4	67.3	75.5	50.7	24.9
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: P677351

CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1
2.5°	1347.8	1347.8	1324.8	1286.1	1270.4	1242.8	1205.0	1217.0	1204.1	1157.1	1145.1
5°	1292.5	1248.3	1200.4	1141.4	1107.3	1037.3	1015.2	975.6	982.0	942.4	944.3
7.5°	1177.4	1142.3	1061.3	983.9	916.6	855.8	770.2	737.9	706.6	690.9	709.4
10°	1110.1	1044.7	934.1	832.8	743.4	689.1	632.0	587.8	547.2	516.8	510.4
12.5°	1061.3	1003.2	869.7	746.2	676.2	632.0	579.5	518.7	479.0	426.5	410.9
15°	1046.5	975.6	834.6	712.1	644.0	571.2	511.3	451.4	399.8	344.5	325.2
17.5°	1097.2	1015.2	833.7	684.5	588.7	510.4	427.5	360.2	307.7	257.0	245.1
20°	1182.9	1057.6	860.4	667.9	536.2	431.1	337.2	269.9	211.0	177.8	169.5
22.5°	1280.5	1129.4	863.2	623.7	483.7	351.9	246.0	177.8	144.6	129.0	124.4
25°	1400.3	1244.6	896.4	587.8	421.9	267.2	175.0	136.3	117.0	107.8	105.9
27.5°	1498.9	1324.8	932.3	550.0	361.1	198.1	137.3	111.5	101.3	92.1	91.2
30°	1601.1	1416.9	942.4	527.0	308.6	163.1	117.9	98.6	87.5	82.9	82.0
32.5°	1690.5	1517.3	974.7	489.2	258.9	143.7	106.9	88.4	81.1	73.7	72.8
35°	1805.6	1575.3	990.3	468.9	240.4	129.9	97.7	81.1	70.0	65.4	63.6
37.5°	1929.1	1631.5	1000.5	453.3	224.8	121.6	92.1	76.5	66.3	59.9	58.0
40°	2044.2	1710.8	985.7	433.9	212.8	111.5	88.4	70.9	61.7	55.3	52.5
42.5°	2132.7	1788.1	981.1	415.5	199.9	107.8	83.8	68.2	58.0	50.7	49.7
45°	2182.4	1840.7	948.9	400.7	189.8	109.6	82.0	64.5	55.3	48.8	45.1
47.5°	2170.5	1881.2	957.2	396.1	176.0	102.3	81.1	61.7	50.7	45.1	42.4
50°	2236.8	1963.2	943.4	381.4	165.8	92.1	88.4	61.7	49.7	43.3	40.5
52.5°	2247.8	2037.8	972.8	354.7	150.2	84.8	87.5	60.8	47.9	41.5	37.8
55°	2340.0	2124.4	1030.0	339.9	137.3	73.7	80.1	59.0	43.3	37.8	35.9
57.5°	2465.3	2304.0	1066.8	326.1	119.8	64.5	67.3	58.0	39.6	35.0	32.2
60°	2585.9	2375.9	1069.6	301.2	103.2	58.0	52.5	58.0	36.8	31.3	28.6
62.5°	2676.2	2375.9	1051.1	280.1	90.3	51.6	46.1	55.3	33.2	27.6	25.8
65°	2627.4	2312.3	1003.2	262.6	82.0	45.1	39.6	42.4	29.5	24.0	22.1
67.5°	2539.9	2114.3	897.3	241.4	81.1	39.6	34.1	31.3	25.8	21.2	19.3
70°	2399.8	1847.1	747.1	217.4	79.2	35.9	30.4	26.7	23.0	18.4	16.6
72.5°	1933.7	1525.6	613.6	203.6	77.4	31.3	25.8	23.0	19.3	15.7	13.8
75°	1339.5	974.7	472.6	174.1	75.5	28.6	24.0	20.3	16.6	12.9	12.0
77.5°	803.3	651.3	304.9	130.8	49.7	23.0	20.3	15.7	13.8	11.1	10.1
80°	375.9	307.7	123.4	50.7	24.0	16.6	13.8	12.0	11.1	9.2	8.3
82.5°	147.4	129.9	59.9	29.5	19.3	12.9	11.1	10.1	9.2	7.4	6.4
85°	79.2	70.0	28.6	20.3	13.8	9.2	9.2	8.3	7.4	6.4	5.5
87.5°	17.5	12.9	12.0	12.0	10.1	7.4	7.4	6.4	5.5	4.6	3.7
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: P677351
 CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1
2.5°	1138.7	1152.5	1130.4	1144.2	1124.8	1139.6	1141.4	1127.6	1131.3	1149.7	1158.0
5°	970.1	960.9	940.6	934.1	935.1	923.1	927.7	934.1	944.3	949.8	966.4
7.5°	699.2	720.4	719.5	735.2	736.1	734.2	721.3	693.7	702.9	695.5	704.8
10°	500.2	509.4	527.0	537.1	555.5	545.4	515.9	504.8	499.3	498.4	507.6
12.5°	399.8	377.7	375.9	379.6	388.8	376.8	362.0	349.2	355.6	368.5	378.6
15°	309.5	291.1	267.2	263.5	265.3	259.8	244.1	227.5	232.2	245.1	252.4
17.5°	237.7	216.5	199.9	188.9	185.2	165.8	142.8	129.0	125.3	124.4	130.8
20°	160.3	156.6	153.8	140.0	140.0	112.4	93.0	82.9	82.9	84.8	85.7
22.5°	119.8	115.2	116.1	113.3	105.9	83.8	73.7	70.9	70.9	72.8	72.8
25°	104.1	97.7	95.8	94.9	87.5	71.9	64.5	61.7	61.7	63.6	63.6
27.5°	88.4	86.6	83.8	80.1	73.7	61.7	57.1	54.4	55.3	56.2	55.3
30°	81.1	76.5	72.8	72.8	65.4	55.3	51.6	49.7	47.9	49.7	50.7
32.5°	71.9	69.1	67.3	64.5	56.2	48.8	45.1	43.3	42.4	42.4	43.3
35°	61.7	61.7	59.9	56.2	48.8	44.2	39.6	37.8	36.8	37.8	37.8
37.5°	55.3	52.5	53.4	49.7	43.3	38.7	34.1	32.2	32.2	31.3	32.2
40°	51.6	47.0	44.2	42.4	38.7	33.2	29.5	27.6	26.7	26.7	26.7
42.5°	46.1	42.4	36.8	35.9	35.0	28.6	24.0	23.0	22.1	21.2	21.2
45°	43.3	37.8	33.2	28.6	28.6	24.0	20.3	18.4	17.5	16.6	17.5
47.5°	39.6	34.1	28.6	24.0	23.0	19.3	15.7	13.8	12.9	12.9	12.9
50°	37.8	30.4	24.9	20.3	17.5	15.7	12.0	10.1	9.2	9.2	9.2
52.5°	35.0	28.6	22.1	17.5	13.8	12.0	9.2	7.4	6.4	6.4	6.4
55°	31.3	25.8	19.3	14.7	12.0	9.2	6.4	4.6	3.7	3.7	3.7
57.5°	29.5	23.0	16.6	12.9	9.2	6.4	3.7	2.8	2.8	1.8	2.8
60°	26.7	20.3	13.8	10.1	7.4	4.6	2.8	0.9	0.9	0.9	0.9
62.5°	23.0	17.5	12.0	8.3	5.5	2.8	0.9	0.0	0.0	0.0	0.0
65°	19.3	13.8	9.2	6.4	3.7	0.9	0.0	0.0	0.0	0.0	0.0
67.5°	16.6	12.0	7.4	4.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	14.7	10.1	5.5	3.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	12.0	8.3	4.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	10.1	6.4	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	8.3	4.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	6.4	3.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	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: P677351
 CATALOG NUMBER: CCW-SA-1D-840-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1	1297.1
2.5°	1170.0	1164.5	1192.1	1237.2	1260.3	1305.4	1316.5	1345.0	1337.6	1347.8
5°	968.2	979.3	1019.8	1086.1	1110.1	1175.5	1237.2	1299.0	1338.6	1357.9
7.5°	718.6	755.4	805.2	866.0	927.7	1013.4	1118.4	1190.3	1228.9	1270.4
10°	535.2	574.9	632.0	691.9	792.3	888.1	993.1	1082.5	1115.6	1154.3
12.5°	421.0	482.7	549.1	613.6	673.4	764.6	894.5	1024.4	1060.4	1089.8
15°	293.0	368.5	463.4	547.2	631.1	710.3	844.8	1002.3	1051.1	1100.9
17.5°	162.1	222.0	330.7	448.6	572.1	693.7	861.4	1042.9	1116.6	1151.6
20°	94.0	117.9	195.3	335.3	498.4	657.8	869.7	1119.3	1217.0	1234.5
22.5°	77.4	85.7	110.5	210.0	408.1	634.7	912.0	1226.2	1325.7	1367.1
25°	66.3	72.8	85.7	126.2	308.6	585.9	938.8	1359.8	1451.9	1497.0
27.5°	59.0	65.4	75.5	93.0	210.0	518.7	983.0	1480.4	1572.6	1634.3
30°	51.6	57.1	67.3	79.2	145.6	443.1	1020.7	1568.9	1698.8	1718.1
32.5°	46.1	50.7	58.0	68.2	107.8	336.3	1051.1	1660.1	1769.7	1812.1
35°	39.6	45.1	49.7	58.0	82.0	253.3	1032.7	1731.0	1873.8	1924.5
37.5°	35.0	38.7	43.3	48.8	69.1	198.1	994.9	1815.8	1963.2	2010.2
40°	29.5	32.2	37.8	43.3	62.6	152.9	951.6	1918.0	2088.5	2171.4
42.5°	24.9	27.6	31.3	40.5	51.6	113.3	864.1	1997.3	2189.8	2259.8
45°	19.3	23.0	28.6	40.5	41.5	83.8	773.8	2056.2	2246.9	2281.9
47.5°	14.7	18.4	27.6	35.0	33.2	58.0	667.0	2123.5	2305.9	2338.1
50°	11.1	14.7	31.3	30.4	27.6	44.2	599.7	2170.5	2309.6	2327.1
52.5°	7.4	11.1	25.8	23.0	23.0	38.7	581.3	2168.6	2318.8	2281.0
55°	5.5	8.3	14.7	16.6	20.3	34.1	564.7	2237.7	2321.5	2348.3
57.5°	3.7	6.4	10.1	12.9	17.5	29.5	530.6	2320.6	2407.2	2421.0
60°	1.8	4.6	7.4	10.1	14.7	25.8	482.7	2381.4	2511.3	2526.1
62.5°	0.9	2.8	5.5	8.3	12.0	20.3	433.0	2284.7	2466.2	2492.0
65°	0.0	1.8	3.7	5.5	7.4	14.7	351.9	2062.7	2287.5	2382.3
67.5°	0.0	0.0	1.8	3.7	4.6	11.1	265.3	1876.6	2122.6	2251.5
70°	0.0	0.0	0.9	0.9	2.8	8.3	169.5	1554.1	1895.0	1965.9
72.5°	0.0	0.0	0.0	0.0	0.9	5.5	98.6	1154.3	1485.0	1616.8
75°	0.0	0.0	0.0	0.0	0.0	4.6	49.7	742.5	1033.6	1210.5
77.5°	0.0	0.0	0.0	0.0	0.0	3.7	26.7	479.0	761.9	910.2
80°	0.0	0.0	0.0	0.0	0.0	0.9	15.7	278.2	487.3	590.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	6.4	136.3	291.1	340.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	72.8	145.6	191.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	10.1	19.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)