

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: P677476

Luminaire Tested: **CCW-SA-2A-830-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677476
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2A-830-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/
SLR distribution lens and House Side Shield
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

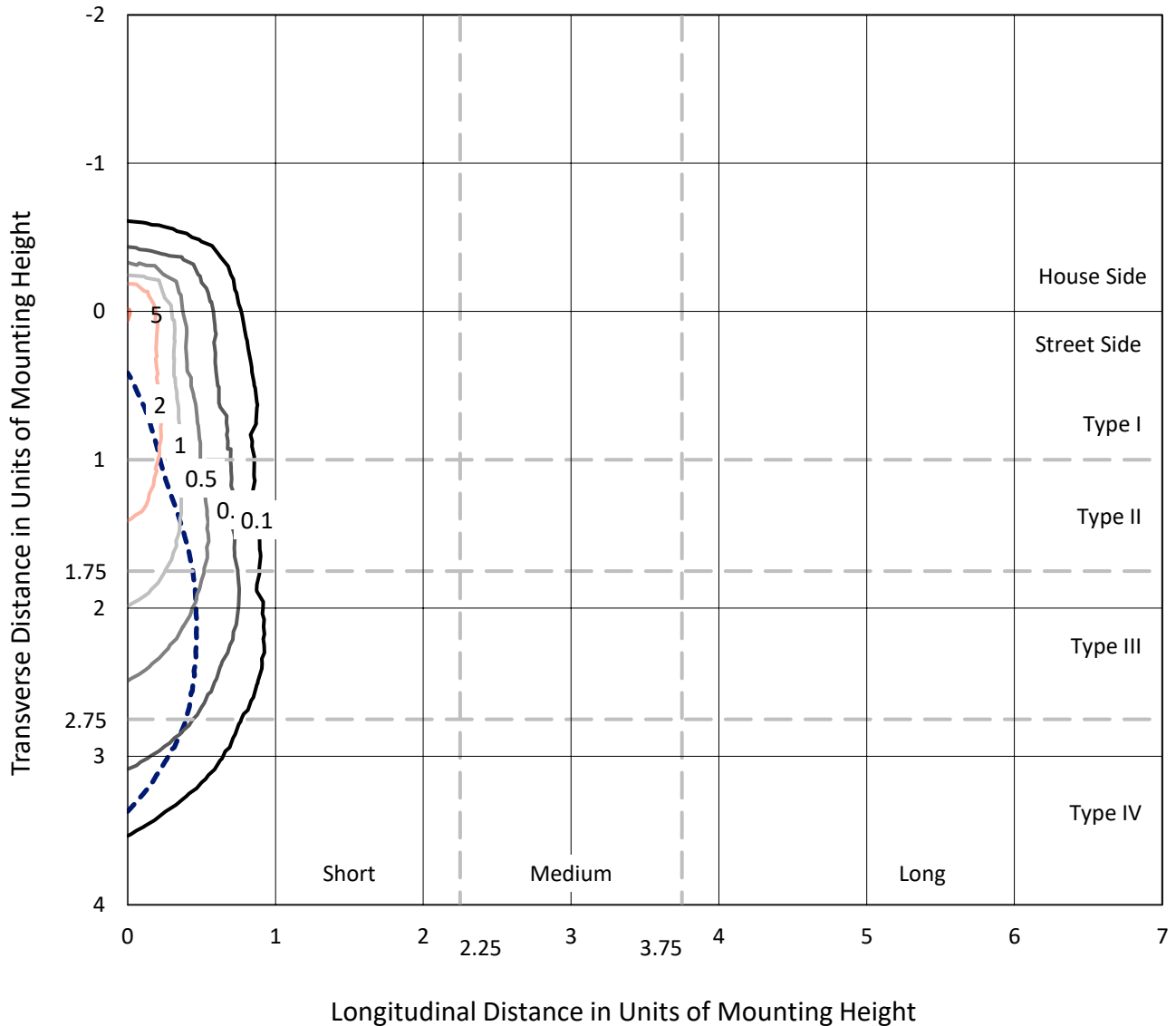
Lumens per Lamp: N/A
Luminaire Lumens: 3124.4 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 36.2
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: P677476
 CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

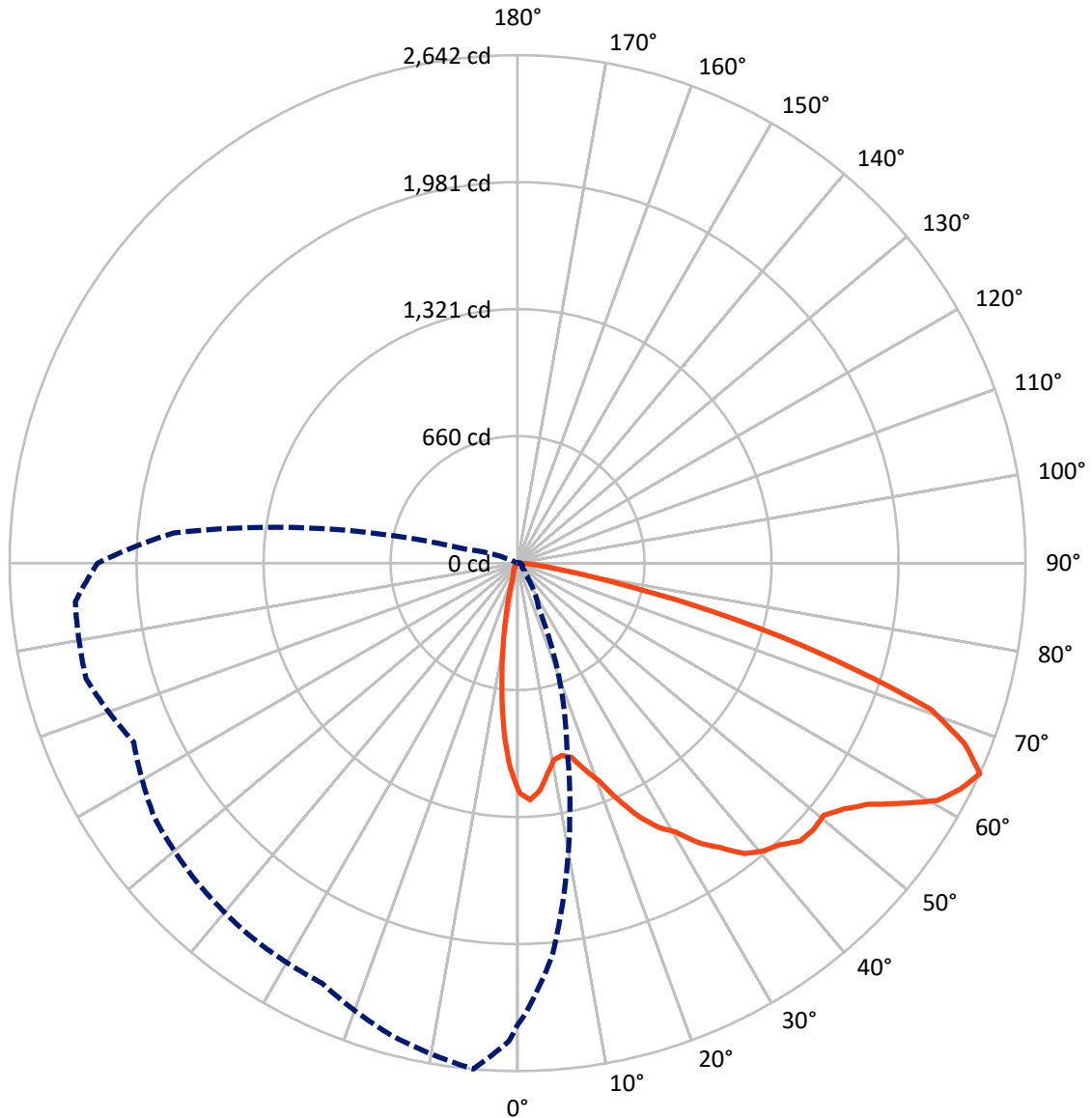
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P677476
CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P677476
 CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

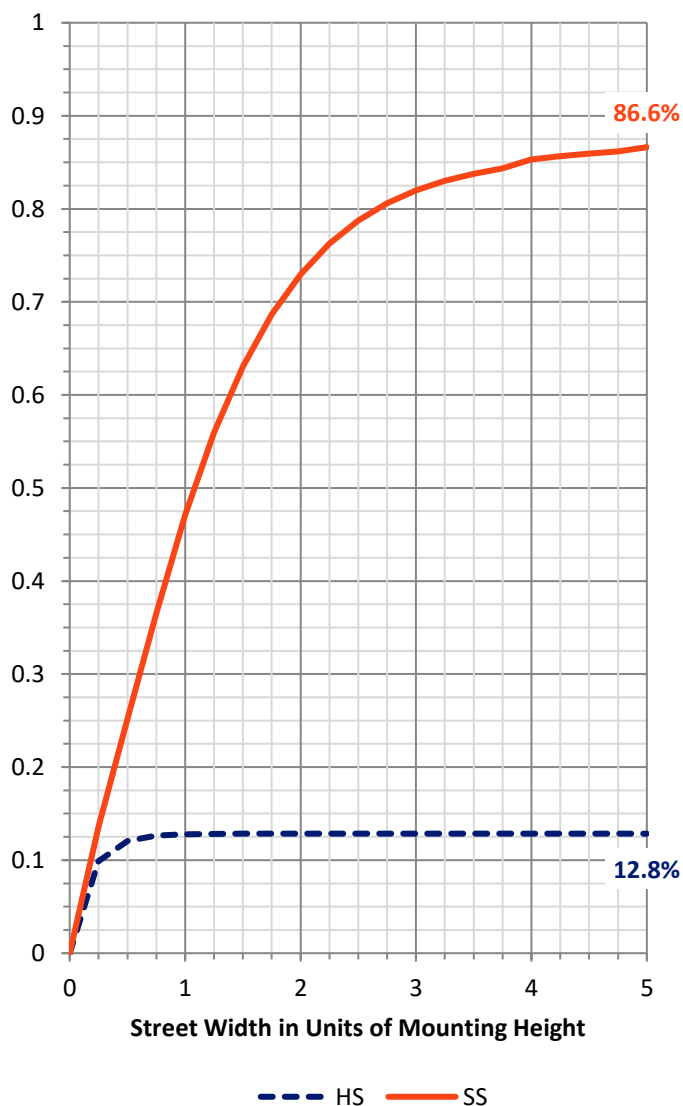
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	405.7	0.0	405.7
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	2718.8	0.0	2718.8
	% Fixture	87.0	0.0	87.0
Total	Lumens	3124.4	0.0	3124.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	2.9
10°-20°	175.2	5.6
20°-30°	244.0	7.8
30°-40°	346.7	11.1
40°-50°	480.8	15.4
50°-60°	655.1	21.0
60°-70°	720.3	23.1
70°-80°	354.0	11.3
80°-90°	57.8	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°	3124.4	100.0
0°-180°	3124.4	100.0



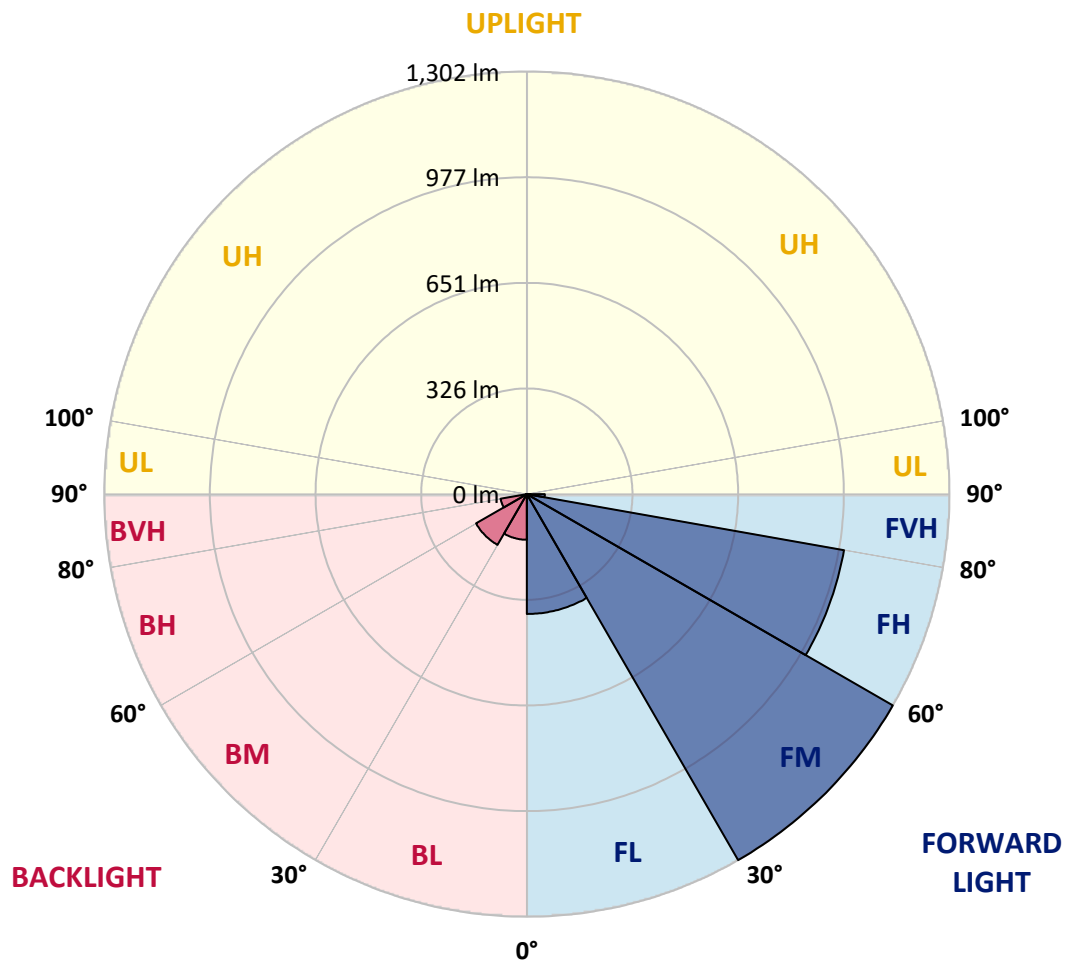
REPORT NUMBER: P677476
 CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	369.2	11.8			
FM (30°-60°)	1302.0	41.7			
FH (60°-80°)	992.3	31.8			G1/1800
FVH (80°-90°)	55.2	1.8			G1/100
BL (0°-30°)	140.5	4.5	B1/500		
BM (30°-60°)	180.6	5.8	B0/220		
BH (60°-80°)	82.0	2.6	B0/110		G0/110
BVH (80°-90°)	2.6	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 IV Short





REPORT NUMBER: P677476

CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1218.9	1233.2	1219.7	1172.6	1164.1	1141.4	1106.9	1104.3	1068.1	1072.3	1053.0
5°	1145.6	1159.9	1131.3	1069.0	1010.8	964.5	936.7	887.0	876.1	851.6	851.6
7.5°	1070.6	1069.8	1020.9	968.7	882.0	796.9	758.1	686.5	644.4	621.7	599.8
10°	1008.3	994.8	964.5	856.7	762.3	673.9	625.9	578.7	534.9	497.0	459.1
12.5°	964.5	972.9	924.9	807.8	685.7	624.2	572.8	523.1	470.9	427.9	385.8
15°	987.2	973.8	917.3	796.9	673.0	588.8	520.6	459.9	401.8	345.4	313.4
17.5°	1058.0	1023.5	956.9	796.9	646.9	534.9	452.3	380.7	318.4	267.9	228.3
20°	1153.2	1113.6	1042.0	826.4	627.6	495.3	382.4	292.3	227.4	180.3	149.9
22.5°	1250.9	1219.7	1111.9	838.2	604.8	442.2	301.6	211.4	151.6	121.3	106.1
25°	1368.0	1324.2	1206.3	885.3	571.1	390.9	237.5	147.4	112.9	96.9	87.6
27.5°	1461.5	1453.9	1294.7	914.0	545.9	348.7	187.8	117.1	93.5	81.7	75.8
30°	1579.4	1538.2	1402.5	971.2	517.2	300.7	156.7	105.3	85.9	73.3	69.1
32.5°	1650.2	1630.8	1459.0	1003.3	485.2	261.1	134.8	92.7	78.3	69.1	64.9
35°	1753.0	1714.2	1539.8	1023.5	468.4	238.4	121.3	84.2	65.7	56.4	51.4
37.5°	1867.5	1853.2	1636.7	1022.6	443.9	224.9	112.0	78.3	62.3	52.2	46.3
40°	1984.6	1926.5	1695.7	1046.2	431.3	214.8	105.3	75.0	59.0	49.7	42.1
42.5°	2072.2	2005.7	1763.9	1037.8	416.1	197.1	102.8	69.9	56.4	45.5	38.7
45°	2095.8	2072.2	1825.4	1035.3	405.2	182.8	98.6	69.1	54.8	43.0	36.2
47.5°	2141.3	2125.3	1901.2	1039.5	396.8	171.8	88.4	70.8	52.2	40.4	34.5
50°	2161.5	2132.9	1962.7	1049.6	377.4	158.4	79.2	74.1	51.4	39.6	32.9
52.5°	2244.9	2219.6	2046.9	1078.2	361.4	140.7	69.9	70.8	53.1	37.1	31.2
55°	2326.6	2298.0	2176.7	1143.9	338.6	126.4	59.8	62.3	50.5	33.7	27.8
57.5°	2438.6	2391.5	2263.4	1170.9	318.4	107.0	53.1	51.4	47.2	30.3	24.4
60°	2455.5	2474.9	2250.8	1154.0	297.4	94.3	46.3	39.6	50.5	27.0	21.1
62.5°	2511.9	2431.1	2191.8	1115.3	282.2	86.8	41.3	32.9	43.8	23.6	17.7
65°	2403.3	2343.5	2053.7	990.6	262.8	87.6	36.2	27.0	27.8	19.4	14.3
67.5°	2244.1	2196.9	1824.6	855.0	243.4	85.9	32.0	23.6	21.1	16.8	12.6
70°	1969.4	1867.5	1549.9	694.1	214.8	80.0	27.0	21.1	17.7	13.5	9.3
72.5°	1432.9	1391.6	1111.9	536.6	192.9	72.4	25.3	17.7	15.2	10.1	7.6
75°	964.5	896.3	701.7	352.1	155.0	63.2	21.1	16.0	11.8	7.6	5.9
77.5°	509.6	481.8	397.6	167.6	85.9	29.5	11.8	9.3	6.7	5.9	3.4
80°	220.7	196.3	171.8	68.2	30.3	13.5	7.6	5.1	4.2	3.4	1.7
82.5°	112.9	107.8	89.3	29.5	17.7	10.1	4.2	3.4	2.5	1.7	0.8
85°	55.6	57.3	47.2	9.3	10.1	5.9	0.8	0.8	0.0	0.0	0.0
87.5°	4.2	4.2	3.4	1.7	2.5	0.8	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: P677476
 CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1045.4	1057.2	1036.9	1049.6	1043.7	1046.2	1048.7	1042.0	1043.7	1067.3	1068.1
5°	837.3	860.1	851.6	863.4	883.6	873.5	882.8	881.1	882.8	886.2	901.3
7.5°	597.2	590.5	606.5	637.7	673.9	695.8	684.8	678.9	675.6	667.2	677.3
10°	450.7	447.3	443.1	452.3	475.9	500.4	513.8	491.1	478.5	462.5	456.6
12.5°	374.0	352.9	341.2	326.8	333.6	355.5	356.3	334.4	314.2	305.8	315.0
15°	294.8	280.5	259.4	239.2	229.1	246.0	231.6	210.6	184.5	181.1	180.3
17.5°	210.6	202.2	187.0	178.6	166.8	162.6	147.4	115.4	96.9	91.8	93.5
20°	143.2	136.5	135.6	128.0	123.0	119.6	95.2	74.1	68.2	69.1	69.9
22.5°	106.1	102.8	98.6	97.7	93.5	89.3	69.9	62.3	58.1	58.1	60.7
25°	86.8	85.1	80.9	79.2	77.5	71.6	59.0	53.1	51.4	49.7	52.2
27.5°	74.1	73.3	70.8	68.2	66.5	60.7	51.4	46.3	44.6	44.6	44.6
30°	66.5	66.5	63.2	58.1	58.1	51.4	43.8	40.4	38.7	38.7	37.9
32.5°	62.3	60.7	56.4	53.1	50.5	43.8	38.7	35.4	32.9	32.9	33.7
35°	50.5	50.5	49.7	47.2	43.8	37.1	32.9	29.5	27.8	27.0	27.8
37.5°	44.6	42.1	38.7	39.6	37.9	32.0	27.8	25.3	22.7	22.7	22.7
40°	40.4	37.9	34.5	32.0	31.2	28.6	24.4	20.2	17.7	16.8	16.8
42.5°	36.2	34.5	29.5	25.3	24.4	24.4	18.5	15.2	12.6	12.6	12.6
45°	33.7	31.2	27.0	21.9	17.7	18.5	15.2	11.0	9.3	8.4	8.4
47.5°	32.0	29.5	23.6	18.5	13.5	13.5	11.0	7.6	5.9	5.1	5.1
50°	29.5	27.0	21.1	15.2	10.1	8.4	6.7	4.2	2.5	1.7	1.7
52.5°	27.8	25.3	18.5	12.6	8.4	5.9	4.2	0.8	0.0	0.0	0.0
55°	25.3	21.9	16.0	10.1	6.7	3.4	0.8	0.0	0.0	0.0	0.0
57.5°	21.9	19.4	12.6	7.6	4.2	0.8	0.0	0.0	0.0	0.0	0.0
60°	18.5	16.0	10.1	5.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	15.2	13.5	7.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	12.6	10.1	5.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	11.0	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	8.4	5.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	5.9	4.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	4.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.8	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: P677476
 CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1071.5	1096.8	1120.3	1127.1	1145.6	1197.0	1197.0	1221.4	1265.2	1281.2	1284.6
5°	903.9	930.8	935.9	988.1	1012.5	1064.7	1099.3	1181.8	1231.5	1262.7	1282.1
7.5°	687.4	696.6	716.0	764.9	812.9	876.1	941.8	1047.1	1134.7	1170.0	1235.7
10°	472.6	500.4	542.5	586.3	661.3	731.2	816.2	915.6	1023.5	1067.3	1123.7
12.5°	318.4	357.2	424.6	486.9	556.0	626.7	707.6	840.7	962.8	1023.5	1079.9
15°	186.2	233.3	291.5	392.5	484.4	563.5	644.4	779.2	927.4	1005.8	1074.9
17.5°	94.3	108.7	156.7	244.3	365.6	495.3	615.8	787.6	954.4	1050.4	1107.7
20°	70.8	75.0	88.4	129.7	250.2	409.4	588.8	800.2	1029.4	1146.5	1177.6
22.5°	61.5	64.9	70.8	84.2	140.7	313.4	550.9	831.4	1131.3	1241.6	1307.3
25°	52.2	55.6	60.7	69.1	90.1	213.1	504.6	864.3	1222.3	1361.3	1422.8
27.5°	45.5	48.0	53.1	59.8	73.3	135.6	424.6	908.1	1361.3	1506.1	1522.1
30°	38.7	41.3	45.5	53.1	62.3	96.0	311.7	914.0	1437.9	1569.3	1614.0
32.5°	33.7	34.5	39.6	46.3	52.2	75.8	219.0	919.9	1494.4	1651.0	1660.3
35°	27.8	29.5	34.5	38.7	45.5	59.8	165.9	890.4	1567.6	1735.3	1732.7
37.5°	22.7	25.3	28.6	32.0	37.1	50.5	132.3	835.6	1659.5	1865.8	1786.7
40°	17.7	20.2	23.6	27.8	31.2	45.5	99.4	753.1	1755.5	1929.9	1845.6
42.5°	12.6	14.3	17.7	21.9	27.8	37.9	71.6	655.4	1793.4	2004.8	1916.4
45°	9.3	11.0	13.5	18.5	28.6	30.3	49.7	566.1	1833.8	2037.7	1900.4
47.5°	5.1	6.7	10.1	16.0	25.3	22.7	35.4	486.0	1880.2	2067.2	1913.0
50°	1.7	2.5	5.9	16.8	20.2	17.7	27.8	443.1	1925.6	2073.1	1938.3
52.5°	0.0	0.0	3.4	17.7	15.2	13.5	24.4	426.2	1913.8	2091.6	1922.3
55°	0.0	0.0	0.8	7.6	8.4	10.1	20.2	425.4	1997.2	2097.5	2009.9
57.5°	0.0	0.0	0.0	2.5	5.1	8.4	17.7	398.4	2050.3	2244.1	2127.8
60°	0.0	0.0	0.0	0.8	3.4	5.9	13.5	374.9	2104.2	2309.8	2254.2
62.5°	0.0	0.0	0.0	0.0	0.8	2.5	9.3	338.6	1995.6	2304.7	2376.3
65°	0.0	0.0	0.0	0.0	0.0	0.0	5.9	267.9	1795.1	2184.2	2308.9
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	185.3	1571.8	2032.6	2185.1
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	112.0	1268.6	1782.4	1853.2
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	905.5	1415.2	1520.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	560.2	1034.4	1164.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	363.1	783.4	883.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	193.7	491.1	571.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.2	298.2	343.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	181.1	206.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	37.1
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: P677476

CATALOG NUMBER: CCW-SA-2A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1286.3	1310.7	1320.0	1305.7	1307.3	1277.9	1273.7	1232.4	1215.5	1218.9
5°	1345.3	1380.6	1400.0	1384.0	1347.8	1291.3	1240.0	1191.1	1160.8	1145.6
7.5°	1331.8	1371.4	1395.8	1411.0	1369.7	1278.7	1200.4	1108.5	1069.8	1070.6
10°	1257.6	1340.2	1389.9	1370.5	1351.1	1260.2	1138.9	1039.5	1004.9	1008.3
12.5°	1197.8	1289.7	1319.1	1334.3	1294.7	1222.3	1140.6	1026.8	988.1	964.5
15°	1160.8	1229.0	1230.7	1254.3	1238.3	1238.3	1158.2	1047.1	1013.4	987.2
17.5°	1160.8	1175.9	1174.3	1182.7	1209.6	1241.6	1202.9	1128.8	1062.2	1058.0
20°	1186.9	1139.7	1128.8	1132.1	1154.9	1250.1	1301.4	1208.8	1166.7	1153.2
22.5°	1247.5	1143.9	1077.4	1065.6	1135.5	1249.2	1364.6	1335.1	1261.9	1250.9
25°	1330.9	1136.3	1063.9	1048.7	1101.8	1279.5	1451.4	1457.3	1390.7	1368.0
27.5°	1410.1	1170.0	1062.2	1058.8	1128.8	1272.8	1511.2	1555.0	1480.0	1461.5
30°	1437.1	1203.7	1093.4	1048.7	1138.9	1297.2	1509.5	1624.1	1575.2	1579.4
32.5°	1469.1	1237.4	1096.8	1079.1	1181.8	1336.8	1557.5	1735.3	1699.9	1650.2
35°	1516.3	1282.9	1128.8	1112.8	1212.2	1372.2	1567.6	1817.0	1811.1	1753.0
37.5°	1556.7	1327.6	1195.3	1197.8	1304.8	1429.5	1612.3	1917.2	1907.1	1867.5
40°	1585.3	1389.9	1298.9	1305.7	1385.7	1493.5	1691.5	1967.8	2042.7	1984.6
42.5°	1589.5	1445.5	1417.7	1471.6	1546.6	1592.9	1723.5	2002.3	2110.1	2072.2
45°	1605.5	1533.9	1611.4	1651.0	1712.5	1680.5	1721.8	2061.3	2115.2	2095.8
47.5°	1667.9	1694.8	1792.5	1913.0	1934.9	1829.6	1762.2	2070.5	2143.8	2141.3
50°	1732.7	1867.5	2004.8	2084.8	2112.6	1932.4	1800.1	2062.9	2181.7	2161.5
52.5°	1805.2	2017.5	2215.4	2314.0	2298.8	2046.1	1843.1	2124.4	2251.6	2244.9
55°	1850.7	2084.8	2351.0	2488.3	2476.5	2173.3	1979.6	2212.9	2343.5	2326.6
57.5°	1971.1	2194.4	2485.8	2549.8	2581.0	2340.1	2074.7	2357.8	2420.1	2438.6
60°	2070.5	2266.0	2521.2	2613.9	2624.8	2439.5	2241.5	2506.9	2517.8	2455.5
62.5°	2216.3	2293.8	2446.2	2529.6	2586.1	2495.9	2391.5	2586.9	2516.1	2511.9
65°	2323.2	2202.8	2306.4	2352.7	2388.9	2410.0	2542.2	2641.6	2485.0	2403.3
67.5°	2263.4	2030.9	2011.6	2014.1	2025.0	2152.2	2491.7	2507.7	2311.4	2244.1
70°	1992.2	1666.2	1640.1	1660.3	1605.5	1758.9	2287.0	2279.4	2039.4	1969.4
72.5°	1611.4	1214.7	1170.0	1197.8	1210.5	1373.1	1924.0	1728.5	1487.6	1432.9
75°	1280.4	890.4	751.4	818.8	861.7	999.9	1502.8	1174.3	1038.6	964.5
77.5°	1005.8	673.9	584.6	557.6	597.2	727.0	1093.4	616.6	544.2	509.6
80°	637.7	495.3	537.4	498.7	515.5	518.9	569.4	280.5	223.2	220.7
82.5°	384.1	338.6	402.6	221.5	403.5	360.5	236.7	127.2	112.9	112.9
85°	272.1	209.7	139.0	90.1	179.4	198.0	91.8	65.7	57.3	55.6
87.5°	136.5	64.9	31.2	20.2	22.7	37.1	11.0	5.1	5.1	4.2
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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