

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: P401260

Luminaire Tested: **ENC-SA1C-727-U-SLR**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401260
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-SA1C-727-U-SLR
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3336 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 33.3
Input Voltage (V): NR
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

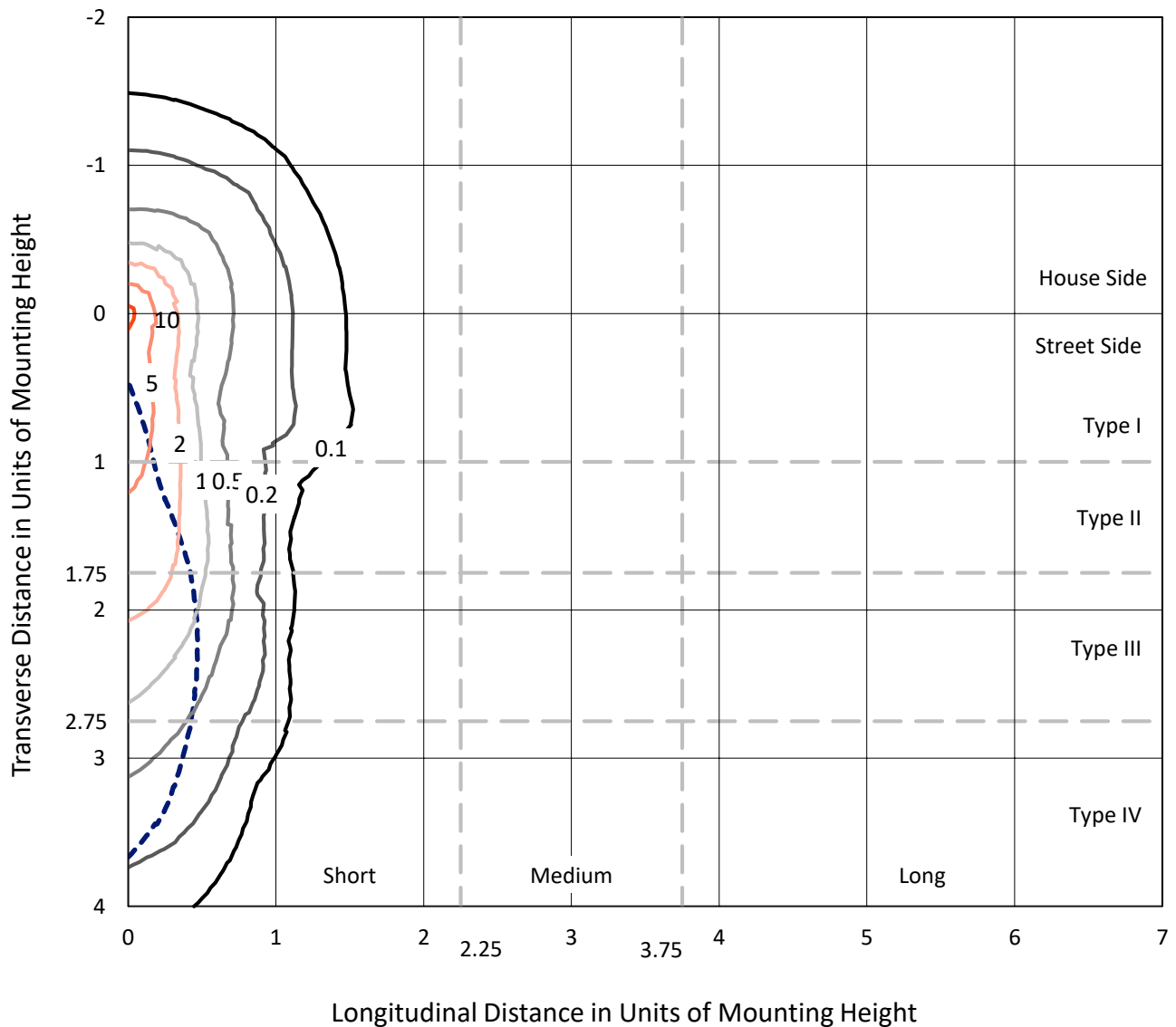


REPORT NUMBER: P401260

CATALOG NUMBER: ENC-SA1C-727-U-SLR

Iso-Footcandle Lines of Horizontal Illumination

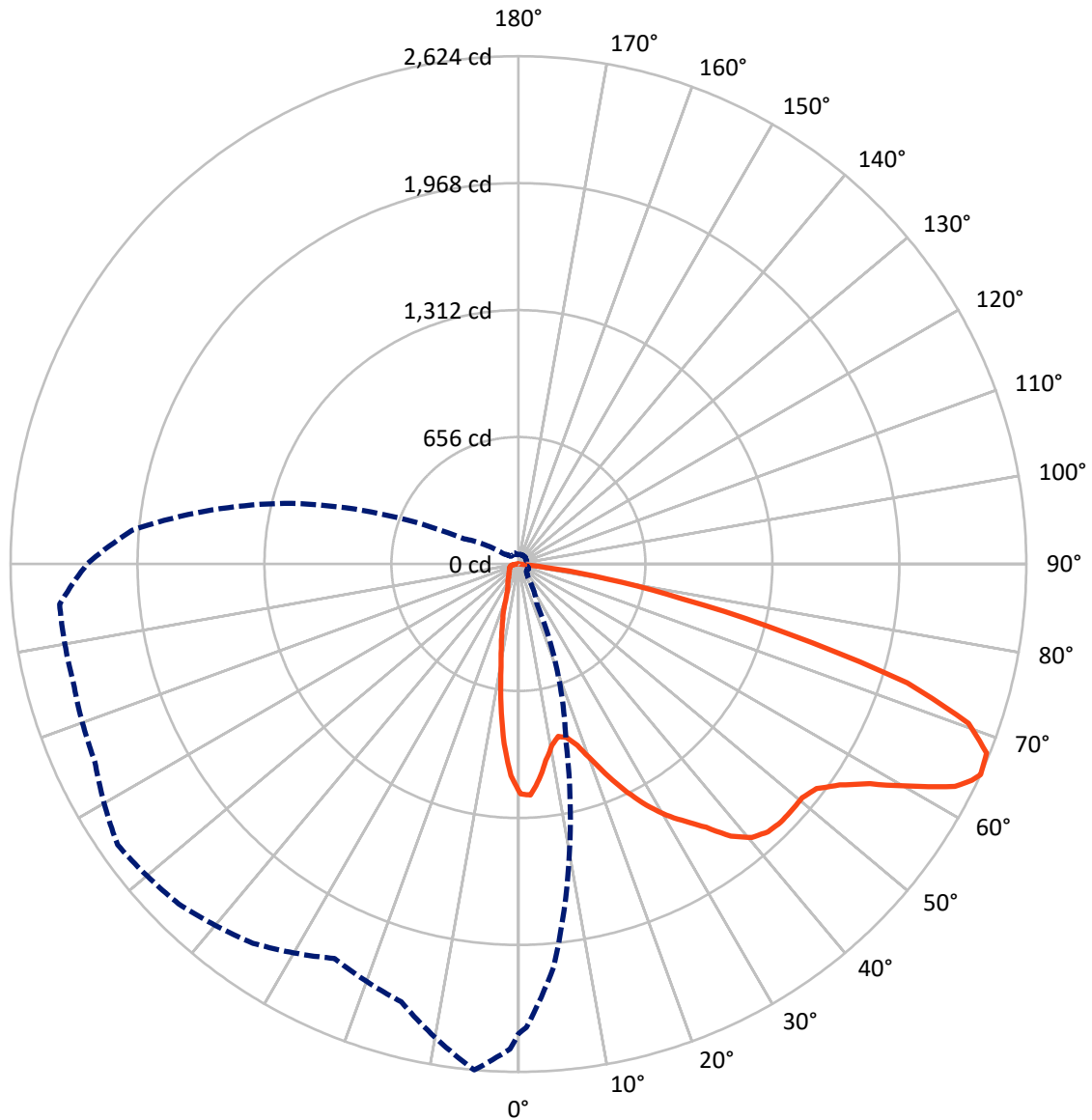
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.9 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401260
CATALOG NUMBER: ENC-SA1C-727-U-SLR

Luminous Intensity Polar Plot



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

REPORT NUMBER: P401260

CATALOG NUMBER: ENC-SA1C-727-U-SLR

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	684.5	0.0	684.5
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	2651.5	0.0	2651.5
	% Fixture	79.5	0.0	79.5
Total	Lumens	3336.0	0.0	3336.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	2.7
10°-20°	180.4	5.4
20°-30°	250.1	7.5
30°-40°	349.6	10.5
40°-50°	475.7	14.3
50°-60°	650.6	19.5
60°-70°	795.4	23.8
70°-80°	480.2	14.4
80°-90°	63.3	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°	3336.0	100.0
0°-180°	3336.0	100.0



REPORT NUMBER: P401260

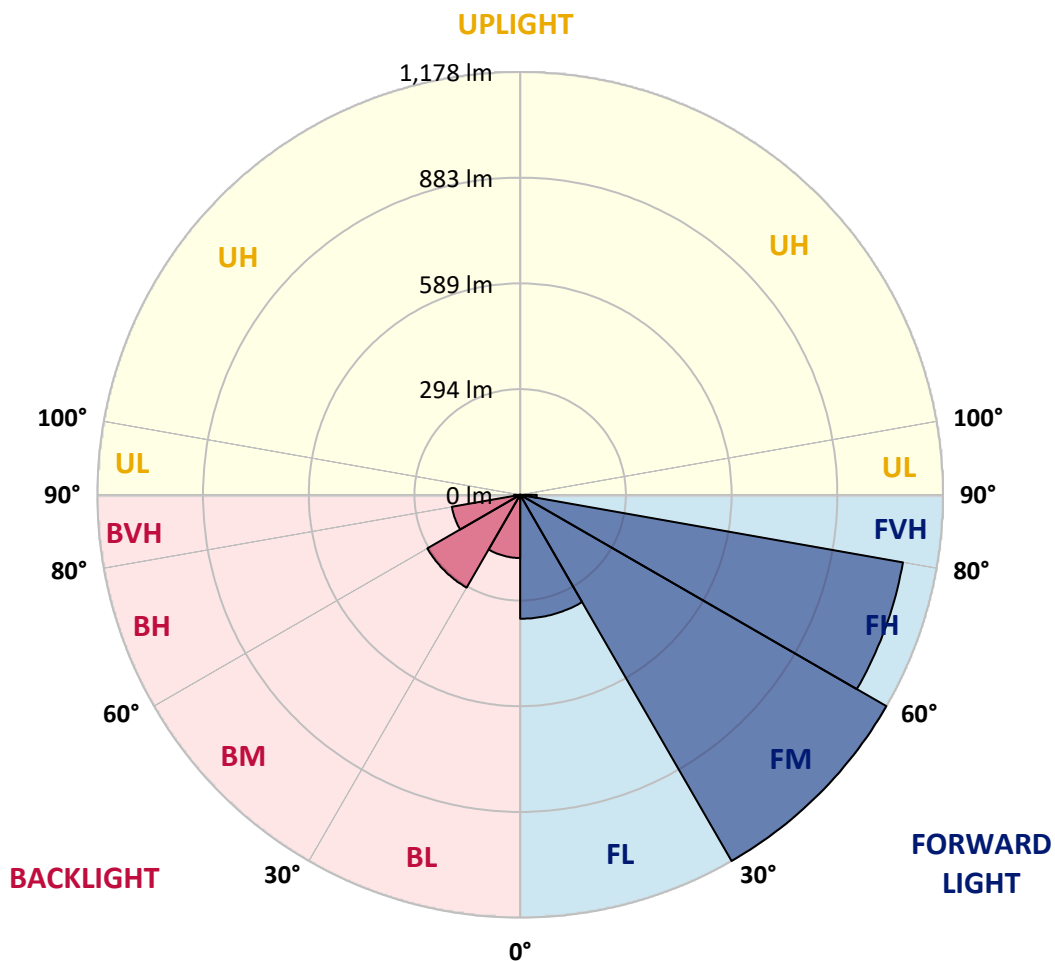
CATALOG NUMBER: ENC-SA1C-727-U-SLR

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	345.2	10.3			
FM	(30°-60°)	1177.6	35.3			
FH	(60°-80°)	1082.5	32.4			G1/1800
FVH	(80°-90°)	46.3	1.4			G1/100
BL	(0°-30°)	175.9	5.3	B1/500		
BM	(30°-60°)	298.4	8.9	B1/1000		
BH	(60°-80°)	193.2	5.8	B1/500		G1/500
BVH	(80°-90°)	17.0	0.5			G1/100
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: P401260

CATALOG NUMBER: ENC-SA1C-727-U-SLR

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1
2.5°	1184.3	1181.0	1172.6	1150.3	1126.3	1097.9	1092.8	1062.2	1065.5	1056.6	1058.8
5°	1081.7	1077.2	1054.4	1009.7	948.9	913.8	886.4	870.3	856.9	850.2	858.5
7.5°	981.8	975.7	948.4	869.7	802.2	746.4	701.8	674.5	647.7	626.5	616.4
10°	900.9	898.7	862.4	773.7	689.0	620.9	591.9	562.9	540.0	509.9	485.3
12.5°	860.2	853.5	810.6	707.4	624.8	583.0	555.6	518.8	487.6	450.7	419.0
15°	861.9	854.1	800.5	692.3	602.5	551.7	509.9	465.8	420.1	382.7	350.3
17.5°	909.9	904.3	839.0	706.2	583.5	513.2	448.0	391.1	340.9	294.0	265.0
20°	990.8	982.4	892.0	723.0	559.5	469.2	380.5	302.4	248.2	207.0	184.1
22.5°	1096.2	1080.6	967.3	743.6	535.5	419.0	307.4	220.4	172.4	151.7	145.6
25°	1208.9	1196.6	1058.3	769.8	509.9	364.3	227.6	160.1	143.4	135.0	130.5
27.5°	1312.6	1292.6	1155.9	798.9	475.9	309.6	172.9	137.8	126.6	122.7	119.9
30°	1386.8	1369.5	1223.4	832.3	446.3	252.7	147.8	125.0	116.0	109.9	108.8
32.5°	1457.7	1433.1	1272.5	847.9	421.7	222.0	136.7	116.0	107.7	101.5	99.3
35°	1541.4	1516.8	1328.8	850.2	403.3	209.2	126.1	109.3	100.4	94.8	92.0
37.5°	1640.1	1606.6	1392.4	851.8	384.9	204.2	117.2	103.8	94.8	88.7	86.5
40°	1733.8	1708.2	1457.7	849.1	372.6	196.9	111.6	97.6	89.3	83.7	80.9
42.5°	1804.7	1777.3	1513.5	840.7	365.4	184.7	113.8	93.2	85.4	79.2	75.9
45°	1840.9	1816.4	1564.2	832.9	361.5	174.1	111.6	91.5	82.6	75.3	72.0
47.5°	1868.3	1844.3	1616.1	829.5	354.8	166.2	102.6	97.6	79.8	71.4	68.1
50°	1912.3	1891.7	1686.4	848.5	344.2	161.2	94.3	104.3	78.7	68.1	64.2
52.5°	1991.6	1978.2	1802.4	892.6	333.0	152.9	85.9	99.9	79.8	65.8	61.4
55°	2139.4	2131.0	1962.0	950.6	322.4	142.3	77.0	90.4	79.2	61.9	58.6
57.5°	2298.9	2296.7	2155.6	1001.4	306.8	124.4	71.4	76.4	75.3	58.6	54.7
60°	2406.0	2398.8	2244.8	1029.8	286.7	102.6	66.9	64.7	77.0	55.2	50.8
62.5°	2442.9	2418.9	2218.0	1019.2	256.6	88.7	61.9	59.1	71.4	51.9	46.9
64°	2440.6	2405.5	2148.3	979.0	237.1	85.9	59.1	55.2	63.0	49.6	45.2
65°	2427.8	2394.3	2090.3	947.8	226.5	85.9	57.5	53.6	57.5	48.5	44.1
67.5°	2345.8	2301.7	1892.3	802.8	199.2	87.0	53.6	49.1	48.0	44.6	41.3
70°	2158.9	2101.5	1620.6	631.5	184.7	87.6	49.1	44.6	43.0	40.7	37.9
72.5°	1733.8	1656.8	1289.8	451.3	169.6	85.9	44.6	40.7	39.1	36.8	34.0
75°	1162.6	1078.3	950.6	297.3	138.9	77.0	38.5	35.1	34.6	32.4	30.1
77.5°	655.5	620.3	561.2	163.5	96.0	53.0	30.7	28.5	29.0	27.9	25.7
80°	342.5	326.3	300.1	79.2	46.3	25.7	19.5	19.5	22.3	22.3	21.2
82.5°	121.1	121.6	117.7	17.9	9.5	7.8	6.7	9.5	12.8	15.6	15.6
85°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	3.9
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: P401260

CATALOG NUMBER: ENC-SA1C-727-U-SLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1
2.5°	1039.8	1043.2	1052.1	1050.4	1059.4	1055.5	1067.2	1073.3	1076.7	1094.0	1102.3
5°	851.8	853.0	884.8	891.5	908.2	899.3	919.9	912.1	928.8	931.1	959.0
7.5°	625.9	628.1	643.8	680.6	716.8	731.9	738.0	747.5	739.7	736.9	740.8
10°	475.9	477.5	479.2	505.4	537.2	569.0	569.0	569.6	555.6	541.7	538.9
12.5°	406.7	396.1	379.3	379.9	402.2	417.3	429.0	416.7	414.5	421.2	428.4
15°	334.7	324.1	313.0	299.6	300.1	310.7	316.9	316.3	327.5	332.5	347.5
17.5°	260.0	244.9	245.5	237.6	227.0	233.7	235.4	245.5	260.0	266.7	269.4
20°	174.6	174.6	179.1	188.6	183.5	188.0	188.6	196.4	203.1	199.2	203.1
22.5°	144.5	143.9	145.6	151.7	156.8	160.7	161.8	161.2	154.5	151.7	157.3
25°	131.1	130.5	131.1	134.4	140.0	145.0	142.8	139.5	131.7	131.1	132.2
27.5°	119.9	120.5	121.6	123.8	127.2	133.3	131.1	124.4	120.5	119.4	119.4
30°	110.5	110.5	112.7	114.9	118.8	124.4	120.5	114.9	111.0	109.9	109.3
32.5°	101.0	102.6	104.3	106.6	109.9	115.5	112.1	107.1	103.2	101.0	99.3
35°	91.5	92.6	96.0	99.3	102.1	106.6	104.3	99.9	96.0	90.9	88.7
37.5°	85.9	85.9	87.6	92.6	94.8	98.2	97.1	93.2	87.0	83.1	82.6
40°	80.9	80.9	81.4	84.2	88.1	92.0	89.8	83.7	79.8	78.1	77.5
42.5°	75.9	75.9	76.4	76.4	81.4	88.1	82.6	76.4	74.8	73.6	73.1
45°	71.4	71.4	71.4	70.8	73.6	82.0	75.9	70.8	69.7	69.7	69.2
47.5°	68.1	67.5	66.9	65.8	67.5	74.2	69.2	66.4	65.8	66.4	65.8
50°	63.6	63.0	62.5	61.9	63.0	65.8	64.7	61.9	62.5	62.5	63.0
52.5°	59.7	59.1	58.6	58.0	59.1	61.4	61.4	59.1	59.1	59.7	60.2
55°	57.5	56.3	55.8	55.8	56.3	59.1	58.6	56.9	56.9	58.0	58.6
57.5°	54.1	53.0	53.0	52.4	53.6	56.9	56.3	54.7	54.7	55.2	56.3
60°	50.8	50.2	49.6	50.8	51.3	54.7	54.1	53.0	52.4	54.1	54.1
62.5°	46.9	46.9	46.9	48.0	48.5	52.4	51.9	51.3	51.3	51.9	51.3
64°	44.6	44.6	45.2	45.7	46.9	50.2	50.2	50.2	50.2	50.2	49.6
65°	43.5	43.5	44.6	45.2	45.7	49.6	49.1	49.6	50.2	49.6	48.5
67.5°	40.7	40.7	42.4	42.4	43.0	47.4	46.9	48.0	49.1	48.0	46.9
70°	37.4	37.9	39.6	39.1	40.2	45.2	43.5	45.7	48.0	46.3	45.2
72.5°	34.0	34.6	36.8	35.7	36.3	42.4	40.2	42.4	45.7	44.6	43.5
75°	30.7	31.2	32.9	32.4	33.5	39.1	36.8	39.1	42.4	42.4	41.8
77.5°	26.2	27.3	28.5	27.9	30.1	35.1	32.9	34.6	37.4	39.6	38.5
80°	21.2	22.9	23.4	24.0	26.2	30.1	28.5	29.0	31.8	33.5	34.0
82.5°	14.5	17.3	18.4	19.0	22.3	23.4	24.0	23.4	25.1	27.3	25.7
85°	4.5	5.6	10.6	13.4	16.7	16.7	19.5	18.4	19.5	17.3	14.5
87.5°	0.0	0.0	0.0	3.9	10.0	10.0	13.9	12.8	13.4	10.0	8.9
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: P401260

CATALOG NUMBER: ENC-SA1C-727-U-SLR

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1
2.5°	1104.0	1113.5	1134.7	1159.2	1172.6	1201.6	1219.5	1238.4	1257.4	1261.3	1267.5
5°	964.5	975.7	999.7	1032.6	1065.5	1104.0	1148.6	1196.0	1248.5	1270.8	1292.6
7.5°	751.4	753.7	787.7	847.4	876.4	931.1	994.7	1067.7	1148.6	1190.5	1235.1
10°	555.1	577.9	603.6	653.3	726.3	789.4	868.0	953.4	1037.6	1098.4	1144.7
12.5°	436.2	465.3	507.7	562.3	617.5	677.2	768.2	859.7	963.4	1018.1	1075.0
15°	359.3	396.1	451.3	508.8	560.1	613.1	694.0	806.1	938.9	994.7	1045.4
17.5°	284.5	325.2	384.4	444.6	506.0	570.7	664.4	803.3	965.1	1029.8	1082.2
20°	218.1	249.9	299.6	360.4	432.3	521.0	641.0	824.5	1042.6	1123.5	1158.1
22.5°	161.8	180.2	219.2	282.8	367.6	477.0	617.5	854.6	1138.6	1233.4	1259.6
25°	133.9	138.9	156.8	212.0	299.6	427.3	599.7	893.7	1234.5	1341.1	1360.1
27.5°	120.5	123.3	131.7	152.3	234.3	386.6	576.3	938.9	1335.5	1447.6	1446.0
30°	108.8	109.3	114.4	128.9	190.2	350.3	548.9	989.1	1425.3	1524.1	1519.0
32.5°	98.2	98.2	104.9	116.0	162.3	317.4	516.0	1025.3	1503.4	1586.5	1570.4
35°	88.7	90.4	96.5	107.7	143.9	280.6	485.3	1038.7	1570.4	1661.9	1616.1
37.5°	82.0	84.2	90.4	101.0	128.3	253.3	460.2	1054.4	1652.9	1752.8	1667.4
40°	77.5	79.2	84.8	93.7	116.0	230.4	432.9	1065.0	1734.9	1849.9	1721.5
42.5°	73.1	74.8	80.3	88.7	110.5	203.6	406.7	1071.1	1820.3	1934.1	1766.7
45°	69.2	71.4	77.0	84.8	111.0	179.6	384.9	1068.9	1871.6	1994.9	1801.9
47.5°	66.4	68.6	74.8	84.8	107.7	165.7	366.5	1061.0	1909.5	2034.5	1818.1
50°	63.6	65.8	73.1	93.7	102.1	161.8	352.6	1059.9	1949.2	2042.3	1818.1
52.5°	60.8	64.7	73.6	94.3	93.7	160.1	341.4	1089.5	2003.8	2055.7	1834.2
55°	59.1	62.5	75.9	87.0	82.0	154.5	334.7	1130.2	2095.9	2129.3	1915.7
57.5°	56.9	59.7	74.8	81.4	73.1	141.7	329.1	1169.3	2216.9	2266.0	2078.0
60°	54.1	57.5	72.5	69.7	66.4	120.5	325.8	1201.6	2262.1	2354.2	2252.6
62.5°	51.3	55.2	79.2	60.8	61.4	100.4	319.7	1232.9	2166.7	2333.0	2364.8
64°	49.6	53.6	73.6	56.9	58.6	91.5	313.5	1234.5	2082.5	2282.8	2386.0
65°	48.5	51.9	68.6	54.7	56.3	89.3	307.9	1211.1	2003.3	2229.2	2379.8
67.5°	46.9	49.1	53.0	50.8	52.4	85.4	270.0	1107.9	1834.8	2091.4	2284.4
70°	44.6	46.3	46.9	46.3	49.1	82.6	228.2	961.2	1650.7	1946.9	2136.0
72.5°	42.4	42.4	42.4	41.8	45.2	78.7	205.3	776.5	1426.4	1757.3	1951.4
75°	40.7	39.1	38.5	37.4	41.3	76.4	185.2	583.0	1102.3	1463.8	1635.1
77.5°	37.4	35.7	34.0	32.9	36.8	68.1	154.5	411.7	812.8	1065.0	1261.9
80°	32.4	31.2	29.0	27.3	30.7	53.6	117.2	254.4	594.7	719.1	827.9
82.5°	26.2	25.7	23.4	21.2	22.3	38.5	79.8	129.4	396.6	390.5	462.5
85°	16.2	20.1	17.3	13.9	15.1	22.3	32.4	41.3	121.6	73.1	113.2
87.5°	9.5	12.8	10.6	7.3	5.6	10.0	8.9	8.4	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: P401260

CATALOG NUMBER: ENC-SA1C-727-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1
2.5°	1282.0	1289.2	1293.1	1278.6	1263.0	1249.0	1222.3	1195.5	1181.5	1184.3
5°	1334.4	1346.7	1350.0	1328.8	1284.7	1239.6	1174.3	1117.9	1083.9	1081.7
7.5°	1314.3	1354.5	1361.2	1338.3	1275.3	1191.0	1102.3	1023.7	989.6	981.8
10°	1242.9	1304.3	1324.4	1316.5	1255.2	1158.7	1051.0	951.1	917.1	900.9
12.5°	1169.8	1234.0	1246.3	1254.1	1216.7	1135.2	1017.0	914.3	873.6	860.2
15°	1121.9	1165.9	1169.3	1176.5	1168.7	1124.1	1032.6	929.4	880.3	861.9
17.5°	1115.2	1099.5	1088.9	1104.0	1113.5	1124.6	1073.3	985.7	933.3	909.9
20°	1116.3	1067.7	1037.6	1036.5	1077.2	1139.1	1155.9	1080.6	1012.5	990.8
22.5°	1157.0	1051.0	1000.8	994.7	1044.3	1163.7	1240.1	1193.3	1125.2	1096.2
25°	1217.8	1041.0	974.6	976.3	1025.9	1179.9	1312.1	1305.9	1246.3	1208.9
27.5°	1276.4	1057.7	971.2	975.7	1032.0	1190.5	1371.8	1411.9	1345.0	1312.6
30°	1323.2	1095.1	981.3	985.2	1051.0	1205.0	1401.3	1506.2	1425.3	1386.8
32.5°	1364.0	1130.2	996.3	999.1	1081.1	1225.6	1429.2	1585.4	1503.4	1457.7
35°	1400.8	1160.3	1019.2	1028.7	1119.6	1255.2	1457.7	1671.3	1598.8	1541.4
37.5°	1433.1	1197.2	1064.4	1080.0	1176.0	1298.1	1494.5	1784.6	1705.4	1640.1
40°	1451.5	1230.1	1131.3	1154.8	1249.0	1353.9	1541.4	1858.2	1807.5	1733.8
42.5°	1465.5	1275.3	1239.0	1281.4	1362.3	1406.4	1563.7	1891.1	1867.7	1804.7
45°	1472.7	1364.5	1400.8	1440.4	1490.0	1463.8	1551.4	1902.3	1895.0	1840.9
47.5°	1505.7	1499.0	1588.2	1642.9	1640.1	1550.3	1528.0	1901.2	1912.9	1868.3
50°	1572.6	1655.7	1780.7	1834.2	1813.6	1631.2	1523.5	1899.5	1948.6	1912.3
52.5°	1652.4	1812.5	1988.8	2011.1	1967.6	1713.2	1557.0	1928.5	2015.5	1991.6
55°	1757.3	1959.8	2152.2	2159.5	2098.1	1793.0	1628.4	2013.9	2140.5	2139.4
57.5°	1903.4	2092.0	2289.4	2280.5	2194.1	1903.4	1743.3	2141.6	2279.4	2298.9
60°	2062.4	2231.4	2400.5	2395.4	2303.4	2030.6	1901.2	2330.7	2401.0	2406.0
62.5°	2214.7	2360.9	2507.6	2483.6	2379.8	2162.3	2119.9	2531.6	2480.2	2442.9
64°	2314.0	2404.4	2534.9	2497.0	2398.2	2225.3	2245.9	2596.8	2502.6	2440.6
65°	2379.8	2415.0	2528.8	2483.0	2392.1	2248.7	2341.3	2624.2	2506.5	2427.8
67.5°	2498.1	2354.2	2362.5	2326.3	2244.8	2227.0	2497.5	2609.1	2463.5	2345.8
70°	2465.2	2109.3	1994.3	1971.5	1873.8	1974.3	2478.0	2467.4	2302.3	2158.9
72.5°	2184.0	1693.7	1528.5	1507.9	1372.3	1496.2	2138.3	2101.5	1852.6	1733.8
75°	1799.6	1283.6	1091.7	1109.0	1005.8	1120.2	1700.9	1439.8	1233.4	1162.6
77.5°	1396.9	907.1	754.2	733.6	712.9	725.2	1169.3	864.7	720.8	655.5
80°	890.3	570.1	565.7	517.1	500.4	421.7	600.8	460.2	362.0	342.5
82.5°	473.1	328.6	373.2	299.0	240.4	172.9	203.6	136.7	115.5	121.1
85°	129.4	68.1	19.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)