

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: P401386

Luminaire Tested: **ENC-SA1C-827-U-SLR**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401386
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-827-U-SLR
Description: ENTRI LED LUMINAIRE
(1) 80 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: 2932 lumens
Efficiency: N/A
Efficacy: 88.0 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

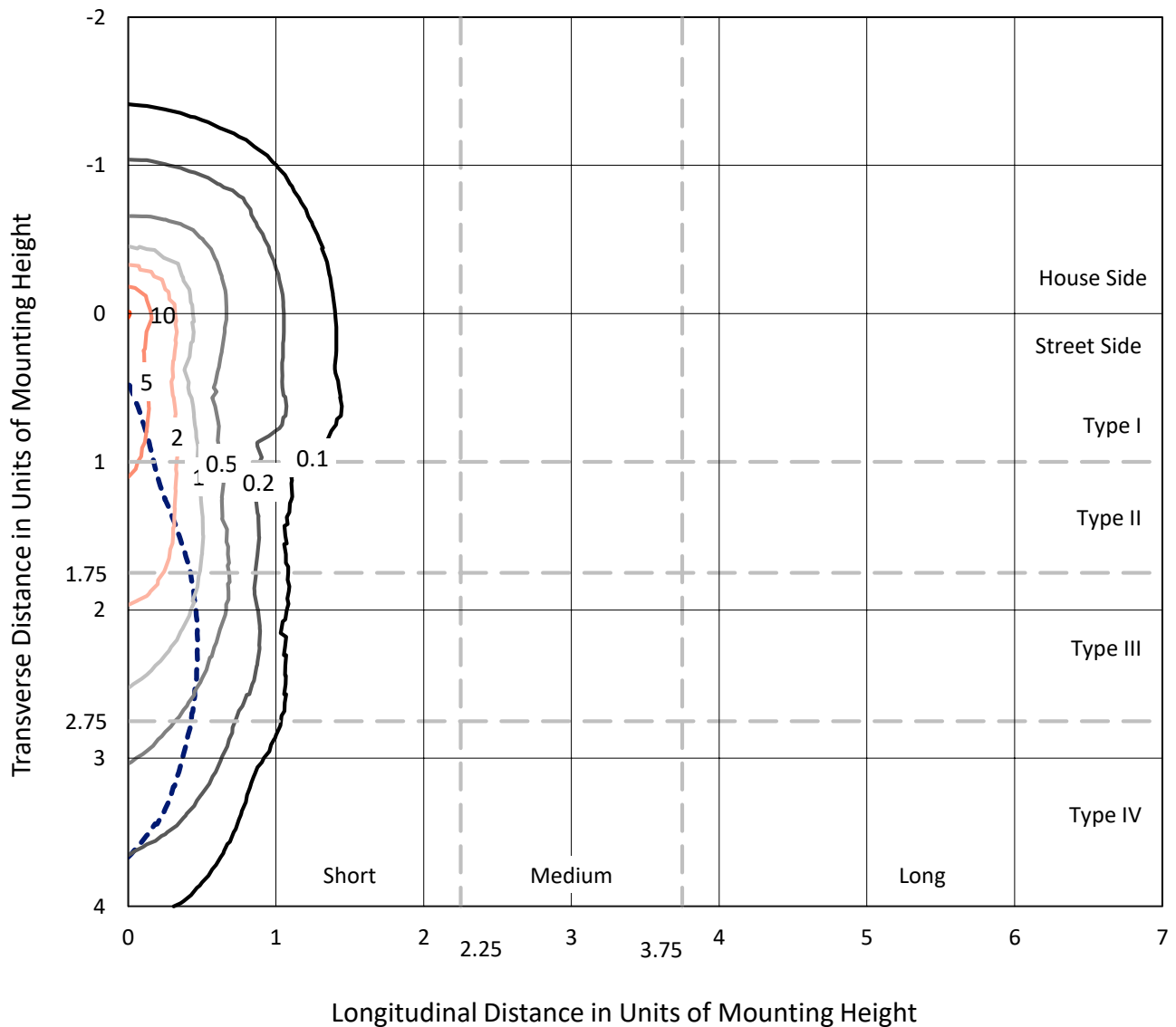


REPORT NUMBER: P401386

CATALOG NUMBER: ENC-SA1C-827-U-SLR

Iso-Footcandle Lines of Horizontal Illumination

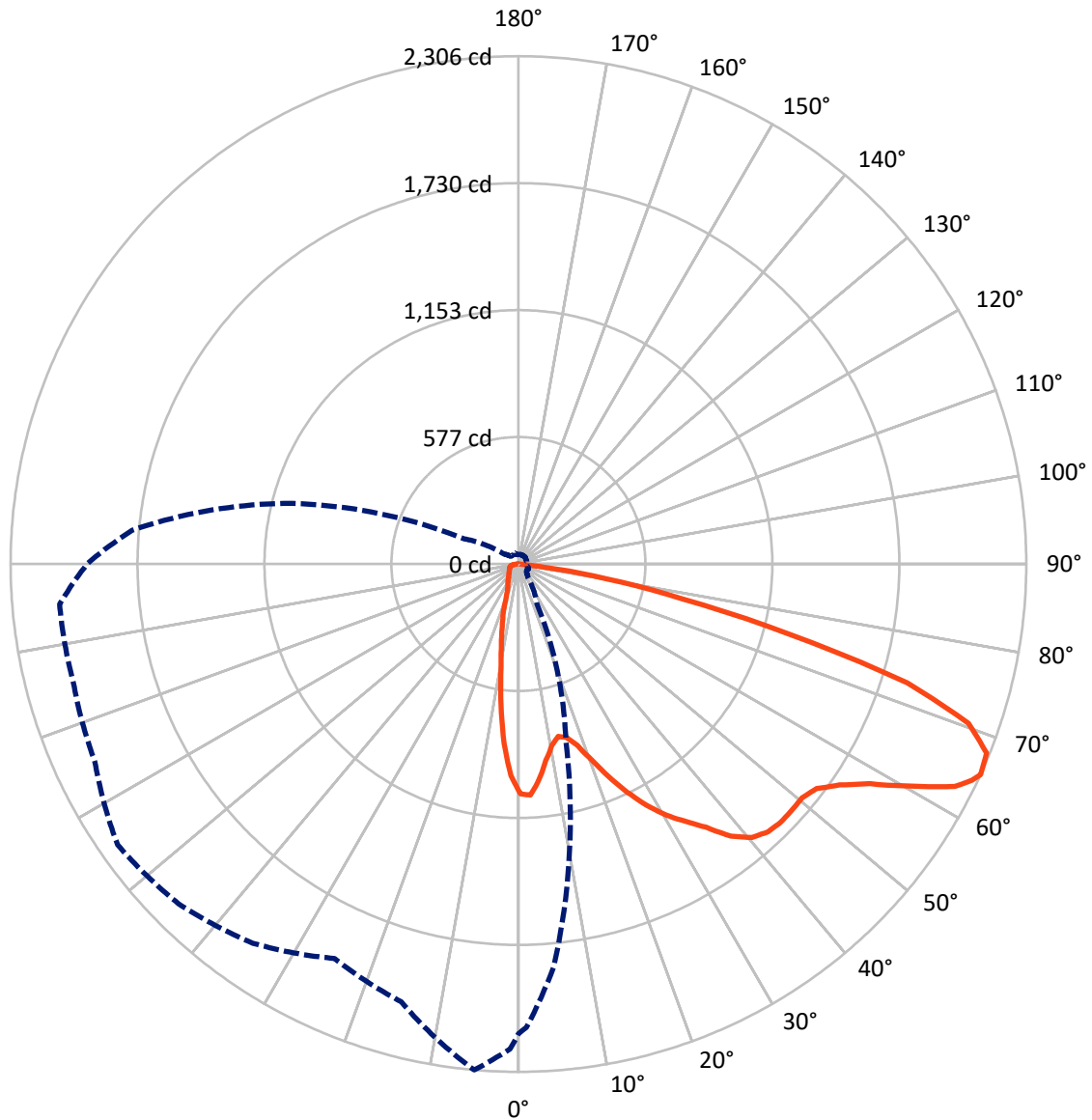
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401386
CATALOG NUMBER: ENC-SA1C-827-U-SLR

Luminous Intensity Polar Plot



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

REPORT NUMBER: P401386

CATALOG NUMBER: ENC-SA1C-827-U-SLR

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	601.6	0.0	601.6
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	2330.4	0.0	2330.4
	% Fixture	79.5	0.0	79.5
Total	Lumens	2932.0	0.0	2932.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	2.7
10°-20°	158.5	5.4
20°-30°	219.8	7.5
30°-40°	307.3	10.5
40°-50°	418.1	14.3
50°-60°	571.8	19.5
60°-70°	699.1	23.8
70°-80°	422.1	14.4
80°-90°	55.7	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°	2932.0	100.0
0°-180°	2932.0	100.0



REPORT NUMBER: P401386

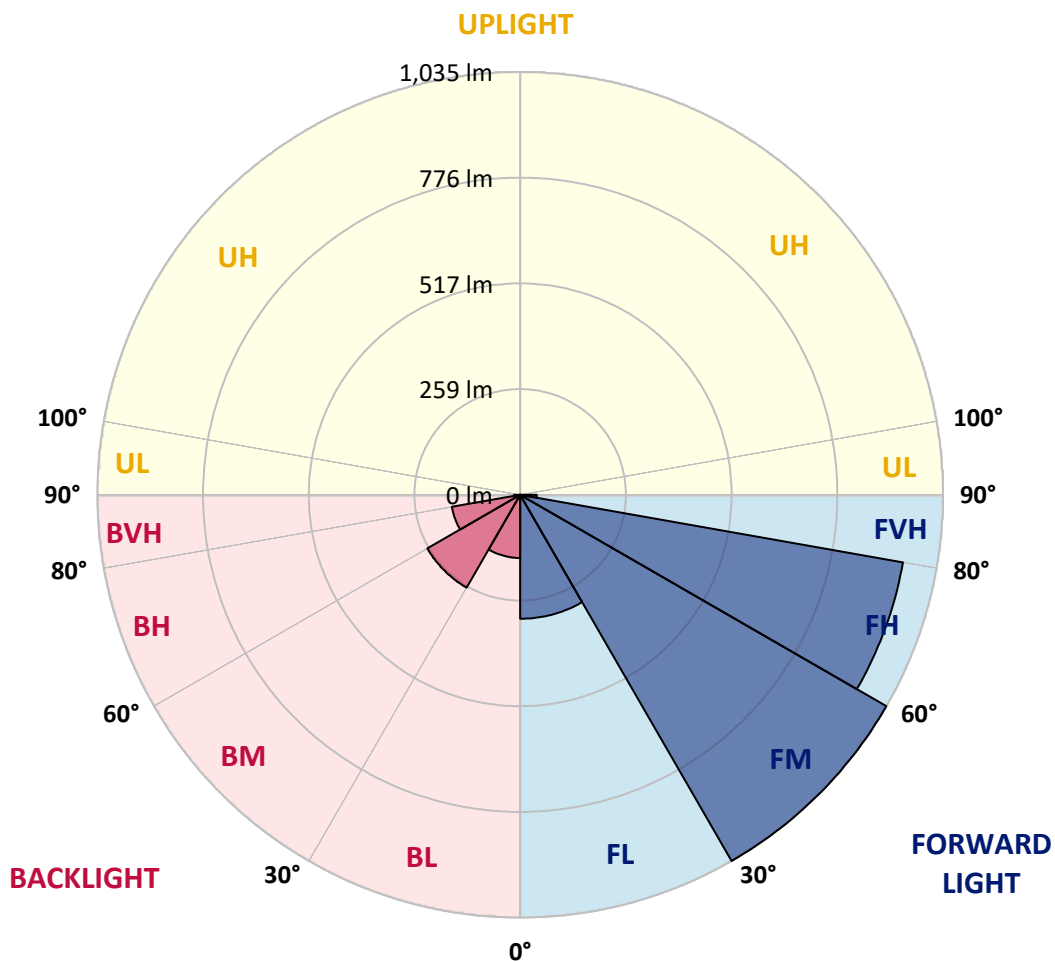
CATALOG NUMBER: ENC-SA1C-827-U-SLR

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	303.4	10.3			
FM	(30°-60°)	1034.9	35.3			
FH	(60°-80°)	951.4	32.4			G1/1800
FVH	(80°-90°)	40.7	1.4			G1/100
BL	(0°-30°)	154.6	5.3	B1/500		
BM	(30°-60°)	262.2	8.9	B1/1000		
BH	(60°-80°)	169.8	5.8	B1/500		G1/500
BVH	(80°-90°)	15.0	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: P401386

CATALOG NUMBER: ENC-SA1C-827-U-SLR

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4
2.5°	1040.9	1038.0	1030.6	1011.0	989.9	964.9	960.5	933.5	936.5	928.6	930.6
5°	950.7	946.8	926.7	887.4	834.0	803.1	779.1	764.9	753.1	747.2	754.6
7.5°	862.9	857.5	833.5	764.4	705.1	656.0	616.8	592.8	569.2	550.6	541.8
10°	791.8	789.9	758.0	680.0	605.5	545.7	520.2	494.7	474.6	448.1	426.6
12.5°	756.0	750.2	712.4	621.7	549.1	512.4	488.3	456.0	428.5	396.2	368.2
15°	757.5	750.6	703.6	608.5	529.5	484.9	448.1	409.4	369.2	336.3	307.9
17.5°	799.7	794.8	737.4	620.7	512.9	451.1	393.7	343.7	299.6	258.4	232.9
20°	870.8	863.4	784.0	635.4	491.8	412.3	334.4	265.7	218.2	181.9	161.8
22.5°	963.4	949.7	850.2	653.6	470.7	368.2	270.2	193.7	151.5	133.4	128.0
25°	1062.5	1051.7	930.1	676.6	448.1	320.2	200.0	140.7	126.0	118.7	114.7
27.5°	1153.7	1136.0	1015.9	702.1	418.2	272.1	152.0	121.1	111.3	107.9	105.4
30°	1218.9	1203.7	1075.2	731.5	392.2	222.1	129.9	109.8	102.0	96.6	95.6
32.5°	1281.2	1259.6	1118.4	745.3	370.7	195.1	120.1	102.0	94.6	89.2	87.3
35°	1354.7	1333.1	1167.9	747.2	354.5	183.9	110.8	96.1	88.3	83.4	80.9
37.5°	1441.5	1412.1	1223.8	748.7	338.3	179.4	103.0	91.2	83.4	78.0	76.0
40°	1523.9	1501.3	1281.2	746.2	327.5	173.1	98.1	85.8	78.4	73.5	71.1
42.5°	1586.1	1562.1	1330.2	738.9	321.1	162.3	100.0	81.9	75.0	69.6	66.7
45°	1618.0	1596.4	1374.8	732.0	317.7	153.0	98.1	80.4	72.6	66.2	63.2
47.5°	1642.0	1620.9	1420.4	729.1	311.8	146.1	90.2	85.8	70.1	62.8	59.8
50°	1680.7	1662.6	1482.2	745.7	302.5	141.7	82.9	91.7	69.1	59.8	56.4
52.5°	1750.4	1738.6	1584.2	784.5	292.7	134.3	75.5	87.8	70.1	57.9	53.9
55°	1880.3	1872.9	1724.4	835.5	283.4	125.0	67.7	79.4	69.6	54.4	51.5
57.5°	2020.5	2018.6	1894.5	880.1	269.7	109.3	62.8	67.2	66.2	51.5	48.0
60°	2114.7	2108.3	1973.0	905.1	252.0	90.2	58.8	56.9	67.7	48.5	44.6
62.5°	2147.0	2125.9	1949.4	895.8	225.5	78.0	54.4	52.0	62.8	45.6	41.2
64°	2145.1	2114.2	1888.1	860.5	208.4	75.5	52.0	48.5	55.4	43.6	39.7
65°	2133.8	2104.4	1837.2	833.0	199.1	75.5	50.5	47.1	50.5	42.7	38.7
67.5°	2061.7	2023.0	1663.1	705.5	175.0	76.5	47.1	43.1	42.2	39.2	36.3
70°	1897.5	1847.0	1424.3	555.0	162.3	77.0	43.1	39.2	37.8	35.8	33.3
72.5°	1523.9	1456.2	1133.6	396.7	149.1	75.5	39.2	35.8	34.3	32.4	29.9
75°	1021.8	947.7	835.5	261.3	122.1	67.7	33.8	30.9	30.4	28.4	26.5
77.5°	576.1	545.2	493.2	143.7	84.3	46.6	27.0	25.0	25.5	24.5	22.6
80°	301.0	286.8	263.8	69.6	40.7	22.6	17.2	17.2	19.6	19.6	18.6
82.5°	106.4	106.9	103.5	15.7	8.3	6.9	5.9	8.3	11.3	13.7	13.7
85°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.4
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: P401386

CATALOG NUMBER: ENC-SA1C-827-U-SLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4
2.5°	913.9	916.9	924.7	923.2	931.1	927.6	937.9	943.3	946.3	961.5	968.8
5°	748.7	749.7	777.6	783.5	798.2	790.4	808.5	801.6	816.3	818.3	842.8
7.5°	550.1	552.1	565.8	598.2	630.0	643.3	648.7	657.0	650.1	647.7	651.1
10°	418.2	419.7	421.2	444.2	472.2	500.1	500.1	500.6	488.3	476.1	473.6
12.5°	357.4	348.1	333.4	333.9	353.5	366.7	377.0	366.3	364.3	370.2	376.6
15°	294.2	284.9	275.1	263.3	263.8	273.1	278.5	278.0	287.8	292.2	305.5
17.5°	228.5	215.2	215.7	208.9	199.6	205.4	206.9	215.7	228.5	234.4	236.8
20°	153.5	153.5	157.4	165.7	161.3	165.2	165.7	172.6	178.5	175.0	178.5
22.5°	127.0	126.5	128.0	133.4	137.8	141.2	142.2	141.7	135.8	133.4	138.3
25°	115.2	114.7	115.2	118.2	123.1	127.5	125.5	122.6	115.7	115.2	116.2
27.5°	105.4	105.9	106.9	108.8	111.8	117.2	115.2	109.3	105.9	104.9	104.9
30°	97.1	97.1	99.0	101.0	104.4	109.3	105.9	101.0	97.6	96.6	96.1
32.5°	88.7	90.2	91.7	93.6	96.6	101.5	98.6	94.1	90.7	88.7	87.3
35°	80.4	81.4	84.3	87.3	89.7	93.6	91.7	87.8	84.3	79.9	78.0
37.5°	75.5	75.5	77.0	81.4	83.4	86.3	85.3	81.9	76.5	73.1	72.6
40°	71.1	71.1	71.6	74.0	77.5	80.9	78.9	73.5	70.1	68.6	68.2
42.5°	66.7	66.7	67.2	67.2	71.6	77.5	72.6	67.2	65.7	64.7	64.2
45°	62.8	62.8	62.8	62.3	64.7	72.1	66.7	62.3	61.3	61.3	60.8
47.5°	59.8	59.3	58.8	57.9	59.3	65.2	60.8	58.3	57.9	58.3	57.9
50°	55.9	55.4	54.9	54.4	55.4	57.9	56.9	54.4	54.9	54.9	55.4
52.5°	52.5	52.0	51.5	51.0	52.0	53.9	53.9	52.0	52.0	52.5	53.0
55°	50.5	49.5	49.0	49.0	49.5	52.0	51.5	50.0	50.0	51.0	51.5
57.5°	47.6	46.6	46.6	46.1	47.1	50.0	49.5	48.0	48.0	48.5	49.5
60°	44.6	44.1	43.6	44.6	45.1	48.0	47.6	46.6	46.1	47.6	47.6
62.5°	41.2	41.2	41.2	42.2	42.7	46.1	45.6	45.1	45.1	45.6	45.1
64°	39.2	39.2	39.7	40.2	41.2	44.1	44.1	44.1	44.1	44.1	43.6
65°	38.2	38.2	39.2	39.7	40.2	43.6	43.1	43.6	44.1	43.6	42.7
67.5°	35.8	35.8	37.3	37.3	37.8	41.7	41.2	42.2	43.1	42.2	41.2
70°	32.9	33.3	34.8	34.3	35.3	39.7	38.2	40.2	42.2	40.7	39.7
72.5°	29.9	30.4	32.4	31.4	31.9	37.3	35.3	37.3	40.2	39.2	38.2
75°	27.0	27.5	28.9	28.4	29.4	34.3	32.4	34.3	37.3	37.3	36.8
77.5°	23.0	24.0	25.0	24.5	26.5	30.9	28.9	30.4	32.9	34.8	33.8
80°	18.6	20.1	20.6	21.1	23.0	26.5	25.0	25.5	27.9	29.4	29.9
82.5°	12.7	15.2	16.2	16.7	19.6	20.6	21.1	20.6	22.1	24.0	22.6
85°	3.9	4.9	9.3	11.8	14.7	14.7	17.2	16.2	17.2	15.2	12.7
87.5°	0.0	0.0	0.0	3.4	8.8	8.8	12.3	11.3	11.8	8.8	7.8
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: P401386

CATALOG NUMBER: ENC-SA1C-827-U-SLR

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4
2.5°	970.3	978.6	997.3	1018.8	1030.6	1056.1	1071.8	1088.5	1105.1	1108.6	1114.0
5°	847.7	857.5	878.6	907.5	936.5	970.3	1009.5	1051.2	1097.3	1116.9	1136.0
7.5°	660.4	662.4	692.3	744.8	770.3	818.3	874.2	938.4	1009.5	1046.3	1085.5
10°	487.8	508.0	530.5	574.1	638.4	693.8	762.9	837.9	912.0	965.4	1006.1
12.5°	383.4	408.9	446.2	494.2	542.8	595.2	675.1	755.6	846.7	894.8	944.8
15°	315.8	348.1	396.7	447.2	492.3	538.8	609.9	708.5	825.2	874.2	918.8
17.5°	250.1	285.8	337.8	390.8	444.7	501.6	583.9	706.0	848.2	905.1	951.2
20°	191.7	219.7	263.3	316.7	380.0	457.9	563.4	724.7	916.4	987.5	1017.9
22.5°	142.2	158.4	192.7	248.6	323.1	419.2	542.8	751.1	1000.7	1084.1	1107.1
25°	117.7	122.1	137.8	186.3	263.3	375.6	527.1	785.5	1085.0	1178.7	1195.4
27.5°	105.9	108.4	115.7	133.9	205.9	339.8	506.5	825.2	1173.8	1272.3	1270.9
30°	95.6	96.1	100.5	113.3	167.2	307.9	482.5	869.3	1252.7	1339.5	1335.1
32.5°	86.3	86.3	92.2	102.0	142.7	279.0	453.5	901.2	1321.4	1394.4	1380.2
35°	78.0	79.4	84.8	94.6	126.5	246.6	426.6	912.9	1380.2	1460.6	1420.4
37.5°	72.1	74.0	79.4	88.7	112.8	222.6	404.5	926.7	1452.8	1540.5	1465.5
40°	68.2	69.6	74.5	82.4	102.0	202.5	380.5	936.0	1524.8	1625.8	1513.1
42.5°	64.2	65.7	70.6	78.0	97.1	179.0	357.4	941.4	1599.8	1699.9	1552.8
45°	60.8	62.8	67.7	74.5	97.6	157.9	338.3	939.4	1645.0	1753.3	1583.7
47.5°	58.3	60.3	65.7	74.5	94.6	145.6	322.1	932.5	1678.3	1788.1	1597.9
50°	55.9	57.9	64.2	82.4	89.7	142.2	309.9	931.6	1713.1	1795.0	1597.9
52.5°	53.4	56.9	64.7	82.9	82.4	140.7	300.1	957.6	1761.2	1806.8	1612.1
55°	52.0	54.9	66.7	76.5	72.1	135.8	294.2	993.3	1842.1	1871.5	1683.7
57.5°	50.0	52.5	65.7	71.6	64.2	124.5	289.3	1027.7	1948.5	1991.6	1826.4
60°	47.6	50.5	63.7	61.3	58.3	105.9	286.3	1056.1	1988.2	2069.1	1979.8
62.5°	45.1	48.5	69.6	53.4	53.9	88.3	280.9	1083.6	1904.3	2050.4	2078.4
64°	43.6	47.1	64.7	50.0	51.5	80.4	275.5	1085.0	1830.3	2006.3	2097.0
65°	42.7	45.6	60.3	48.0	49.5	78.4	270.6	1064.4	1760.7	1959.2	2091.6
67.5°	41.2	43.1	46.6	44.6	46.1	75.0	237.3	973.7	1612.6	1838.1	2007.8
70°	39.2	40.7	41.2	40.7	43.1	72.6	200.5	844.8	1450.8	1711.1	1877.4
72.5°	37.3	37.3	37.3	36.8	39.7	69.1	180.4	682.5	1253.7	1544.4	1715.1
75°	35.8	34.3	33.8	32.9	36.3	67.2	162.8	512.4	968.8	1286.5	1437.1
77.5°	32.9	31.4	29.9	28.9	32.4	59.8	135.8	361.8	714.4	936.0	1109.1
80°	28.4	27.5	25.5	24.0	27.0	47.1	103.0	223.6	522.7	632.0	727.6
82.5°	23.0	22.6	20.6	18.6	19.6	33.8	70.1	113.7	348.6	343.2	406.5
85°	14.2	17.7	15.2	12.3	13.2	19.6	28.4	36.3	106.9	64.2	99.5
87.5°	8.3	11.3	9.3	6.4	4.9	8.8	7.8	7.4	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: P401386

CATALOG NUMBER: ENC-SA1C-827-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4	1043.4
2.5°	1126.7	1133.1	1136.5	1123.8	1110.0	1097.8	1074.2	1050.7	1038.5	1040.9
5°	1172.8	1183.6	1186.5	1167.9	1129.2	1089.4	1032.1	982.6	952.7	950.7
7.5°	1155.1	1190.4	1196.3	1176.2	1120.8	1046.8	968.8	899.7	869.8	862.9
10°	1092.4	1146.3	1164.0	1157.1	1103.2	1018.4	923.7	836.0	806.1	791.8
12.5°	1028.2	1084.5	1095.3	1102.2	1069.3	997.8	893.8	803.6	767.8	756.0
15°	986.0	1024.7	1027.7	1034.0	1027.2	988.0	907.5	816.8	773.7	757.5
17.5°	980.1	966.4	957.1	970.3	978.6	988.4	943.3	866.4	820.3	799.7
20°	981.1	938.4	912.0	911.0	946.8	1001.2	1015.9	949.7	889.9	870.8
22.5°	1016.9	923.7	879.6	874.2	917.8	1022.8	1089.9	1048.8	988.9	963.4
25°	1070.3	914.9	856.6	858.0	901.7	1037.0	1153.2	1147.8	1095.3	1062.5
27.5°	1121.8	929.6	853.6	857.5	907.1	1046.3	1205.6	1240.9	1182.1	1153.7
30°	1163.0	962.5	862.4	865.9	923.7	1059.0	1231.6	1323.8	1252.7	1218.9
32.5°	1198.8	993.3	875.7	878.1	950.2	1077.2	1256.1	1393.4	1321.4	1281.2
35°	1231.1	1019.8	895.8	904.1	984.0	1103.2	1281.2	1468.9	1405.2	1354.7
37.5°	1259.6	1052.2	935.5	949.2	1033.6	1140.9	1313.5	1568.5	1498.8	1441.5
40°	1275.8	1081.1	994.3	1014.9	1097.8	1190.0	1354.7	1633.2	1588.6	1523.9
42.5°	1288.0	1120.8	1089.0	1126.2	1197.3	1236.0	1374.3	1662.1	1641.5	1586.1
45°	1294.4	1199.3	1231.1	1266.0	1309.6	1286.5	1363.5	1671.9	1665.5	1618.0
47.5°	1323.3	1317.4	1395.9	1443.9	1441.5	1362.5	1342.9	1670.9	1681.2	1642.0
50°	1382.2	1455.2	1565.0	1612.1	1594.0	1433.6	1339.0	1669.5	1712.6	1680.7
52.5°	1452.3	1593.0	1747.9	1767.5	1729.3	1505.7	1368.4	1695.0	1771.5	1750.4
55°	1544.4	1722.4	1891.6	1897.9	1844.0	1575.8	1431.2	1770.0	1881.3	1880.3
57.5°	1672.9	1838.6	2012.2	2004.3	1928.3	1672.9	1532.2	1882.3	2003.4	2020.5
60°	1812.6	1961.2	2109.8	2105.3	2024.4	1784.7	1670.9	2048.5	2110.2	2114.7
62.5°	1946.5	2074.9	2203.9	2182.8	2091.6	1900.4	1863.1	2225.0	2179.9	2147.0
64°	2033.8	2113.2	2227.9	2194.6	2107.8	1955.8	1973.9	2282.3	2199.5	2145.1
65°	2091.6	2122.5	2222.5	2182.3	2102.4	1976.4	2057.8	2306.4	2202.9	2133.8
67.5°	2195.6	2069.1	2076.4	2044.5	1973.0	1957.3	2195.1	2293.1	2165.2	2061.7
70°	2166.6	1853.8	1752.8	1732.7	1646.9	1735.2	2177.9	2168.6	2023.5	1897.5
72.5°	1919.5	1488.5	1343.4	1325.3	1206.1	1315.0	1879.3	1847.0	1628.3	1523.9
75°	1581.7	1128.2	959.5	974.7	884.0	984.5	1494.9	1265.5	1084.1	1021.8
77.5°	1227.7	797.2	662.9	644.7	626.6	637.4	1027.7	760.0	633.5	576.1
80°	782.5	501.1	497.2	454.5	439.8	370.7	528.1	404.5	318.2	301.0
82.5°	415.8	288.8	328.0	262.8	211.3	152.0	179.0	120.1	101.5	106.4
85°	113.7	59.8	16.7	0.0	0.0	0.0	0.0	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	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)