

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: P400767

Luminaire Tested: **ENV-SA1-740-U-SL2-ULG-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400767
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#####)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1-740-U-SL2-ULG-XXB
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 762 lumens
Efficiency: N/A
Efficacy: 58.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B0 - U3 - G1

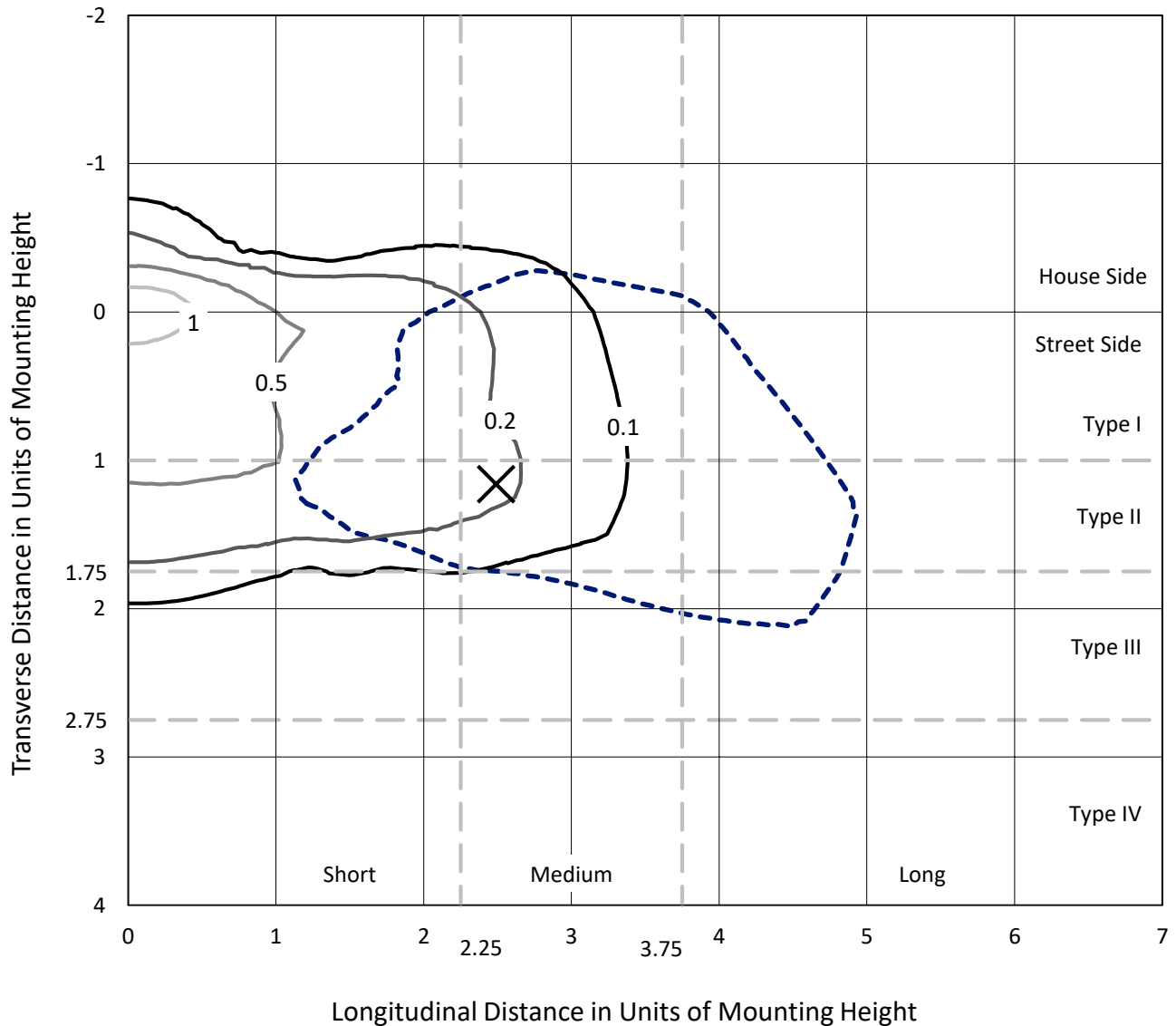
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P400767
 CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

Iso-Footcandle Lines of Horizontal Illumination

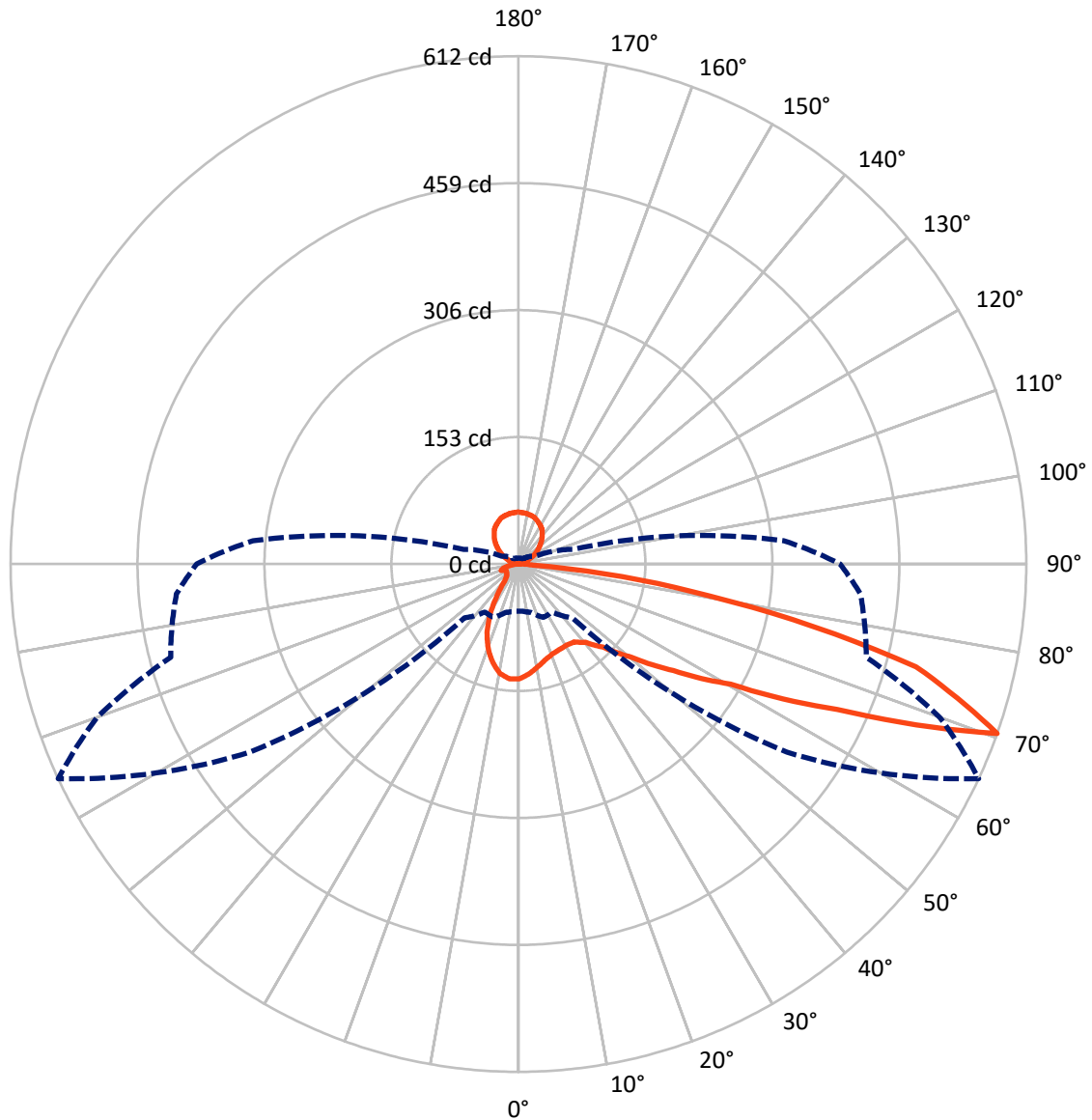
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400767
CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P400767

CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

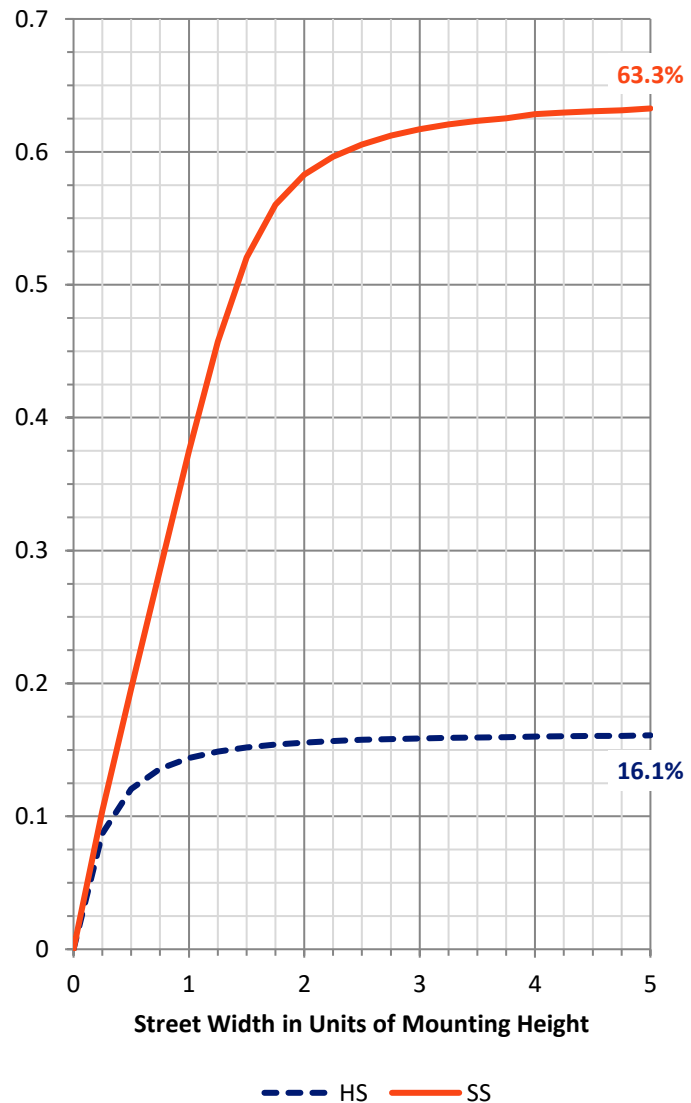
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	124.4	77.6	202.0
	% Fixture	16.3	10.2	26.5
Street Side	Lumens	482.4	77.6	560.0
	% Fixture	63.3	10.2	73.5
Total	Lumens	606.8	155.2	762.0
	% Fixture	79.6	20.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.3	1.6
10°-20°	30.3	4.0
20°-30°	40.8	5.4
30°-40°	53.7	7.1
40°-50°	76.6	10.1
50°-60°	116.2	15.2
60°-70°	145.2	19.0
70°-80°	114.9	15.1
80°-90°	16.9	2.2
90°-100°	0.7	0.1
100°-110°	5.2	0.7
110°-120°	14.9	2.0
120°-130°	24.4	3.2
130°-140°	30.1	4.0
140°-150°	30.8	4.0
150°-160°	26.0	3.4
160°-170°	17.1	2.2
170°-180°	5.9	0.8
0°-90°	606.8	79.6
0°-180°	762.0	100.0



REPORT NUMBER: P400767

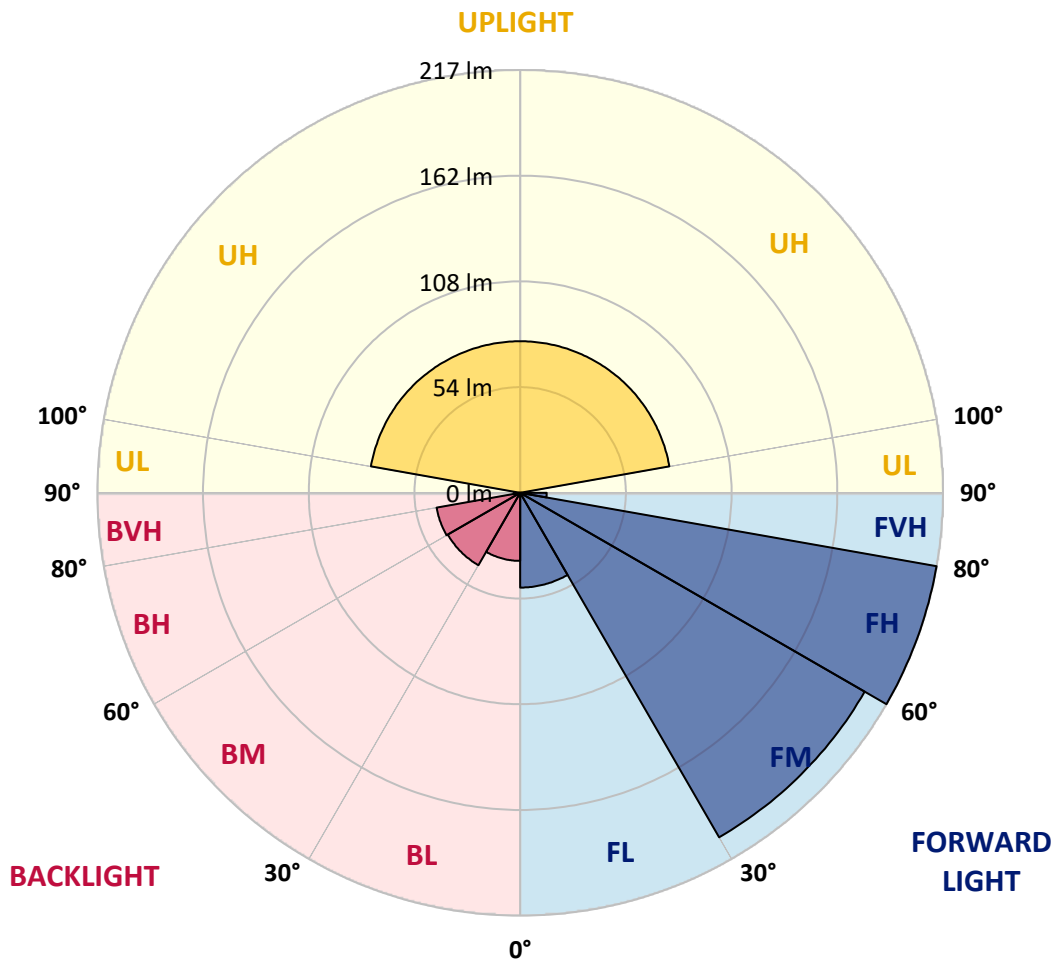
CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	48.5	6.4			
FM	(30°-60°)	203.7	26.7			
FH	(60°-80°)	216.5	28.4			G0/660
FVH	(80°-90°)	13.6	1.8			G1/100
BL	(0°-30°)	34.9	4.6	B0/110		
BM	(30°-60°)	42.8	5.6	B0/220		
BH	(60°-80°)	43.5	5.7	B0/110		G0/110
BVH	(80°-90°)	3.3	0.4			G0/10
UL	(90°-100°)	0.7	0.1		U1/10	
UH	(100°-180°)	77.6	10.2		U3/500	

BUG Rating: B0-U3-G1

Type III Medium





REPORT NUMBER: P400767

CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4
5°	122.1	122.2	122.4	122.7	123.2	123.7	124.6	125.4	126.7	127.9	128.9
10°	109.3	109.7	110.1	110.4	111.3	112.2	113.2	114.1	115.8	117.4	119.2
15°	102.5	102.6	102.9	103.3	104.1	104.9	106.0	107.2	108.8	110.4	112.3
20°	100.9	101.1	101.3	101.4	101.7	101.9	102.6	103.4	104.7	106.1	108.0
25°	106.2	106.2	106.2	106.1	105.4	104.7	104.1	103.5	103.9	104.3	106.0
30°	117.6	117.8	117.6	117.4	116.3	115.2	113.1	111.0	109.2	107.4	107.7
35°	131.0	131.3	132.4	133.4	133.2	133.1	130.3	127.5	122.9	118.3	115.9
40°	142.9	144.1	146.4	148.6	150.9	153.1	152.1	151.2	144.8	138.4	133.0
45°	158.1	159.4	163.3	167.3	171.2	175.0	176.9	178.8	173.7	168.5	160.5
50°	182.5	184.1	187.3	190.5	195.2	200.0	205.9	211.8	210.0	208.1	198.9
55°	198.3	199.5	200.5	201.5	207.7	214.0	230.9	247.8	256.9	266.0	254.7
60°	141.6	144.0	146.4	148.8	158.7	168.6	199.7	230.8	277.0	323.2	336.9
65°	82.5	84.1	84.8	85.5	85.4	85.4	96.9	108.4	198.1	287.7	377.2
70°	56.8	57.0	58.7	60.4	65.7	71.0	70.8	70.6	81.2	91.7	243.4
75°	23.0	22.8	24.2	25.7	34.8	43.9	58.2	72.4	72.3	72.1	103.6
80°	5.9	6.3	6.9	7.4	9.7	11.9	22.9	33.9	46.8	59.8	57.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	2.6	5.0	8.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.1	1.5	1.9	2.2
105°	1.9	2.0	2.2	2.4	2.8	3.2	3.8	4.3	5.0	5.6	6.0
110°	5.9	6.1	6.4	6.6	7.2	7.8	8.4	9.1	9.7	10.2	10.5
115°	12.5	12.4	12.8	13.1	13.7	14.2	14.6	15.0	15.3	15.6	15.8
120°	20.1	19.9	20.1	20.2	20.5	20.8	21.0	21.2	21.5	21.7	21.9
125°	26.6	26.3	26.4	26.5	26.6	26.7	27.0	27.3	27.5	27.7	27.8
130°	32.4	32.3	32.3	32.4	32.5	32.7	32.9	33.1	33.2	33.2	33.5
135°	38.3	38.1	38.1	38.1	38.3	38.6	38.8	38.9	39.0	39.1	39.3
140°	43.6	43.3	43.4	43.5	43.6	43.7	43.8	43.9	44.2	44.4	44.6
145°	49.2	48.8	48.7	48.6	48.8	48.9	49.0	49.2	49.2	49.2	49.5
150°	53.2	52.9	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.2
155°	56.2	55.9	55.9	55.9	56.0	56.0	56.2	56.3	56.2	56.1	56.0
160°	59.3	59.0	58.9	58.9	58.8	58.6	58.6	58.5	58.5	58.5	58.7
165°	60.9	60.6	60.5	60.4	60.4	60.4	60.3	60.1	60.1	60.1	60.1
170°	62.4	62.1	62.0	61.9	61.9	61.9	61.9	61.9	61.9	61.8	61.5
175°	62.6	62.4	62.3	62.3	62.2	62.1	61.9	61.8	61.7	61.7	61.7
180°	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6



REPORT NUMBER: P400767

CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4
5°	129.8	131.5	133.1	134.5	136.0	137.0	138.0	138.7	139.2	139.4	139.5
10°	121.0	123.6	126.2	129.0	132.2	135.0	137.8	139.2	139.5	138.8	138.1
15°	114.1	117.1	120.1	123.7	127.8	132.4	137.0	138.6	138.3	135.5	132.6
20°	109.8	112.9	115.9	120.3	125.3	131.5	137.7	138.8	136.7	130.8	124.9
25°	107.6	111.0	114.3	119.0	124.5	131.8	139.1	138.8	133.6	124.5	115.3
30°	108.0	110.8	113.7	118.6	124.3	131.9	139.5	137.0	128.6	116.0	103.5
35°	113.5	114.5	115.4	119.5	124.7	132.1	139.5	134.1	122.6	106.2	89.8
40°	127.7	125.8	124.0	126.5	130.9	136.8	142.8	133.6	118.2	96.5	74.9
45°	152.4	147.6	142.8	144.6	147.4	151.8	156.1	141.7	119.3	89.2	59.2
50°	189.7	183.2	176.7	176.9	178.2	182.9	187.6	164.0	132.1	88.7	45.3
55°	243.5	235.1	226.7	223.8	223.3	229.4	235.4	207.4	163.9	101.1	38.4
60°	350.5	322.2	293.8	284.6	276.3	282.7	289.1	260.5	210.4	129.8	49.2
65°	466.6	444.6	422.5	368.6	331.1	334.1	337.2	311.8	259.9	171.3	82.7
70°	395.1	503.7	612.2	540.6	434.0	423.9	413.8	387.7	321.2	194.7	68.2
75°	135.1	315.2	495.2	508.3	492.7	435.4	378.1	329.8	247.9	138.3	28.7
80°	55.4	144.8	234.2	245.5	247.7	199.4	151.1	124.2	86.4	51.5	16.5
85°	11.6	14.6	17.6	12.1	7.8	7.2	6.6	6.6	6.6	5.1	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.6	2.5	2.3	2.2	2.1	1.9	1.7	1.7	1.7	1.9	2.1
105°	6.4	6.3	6.3	6.0	5.8	5.6	5.5	5.5	5.5	5.6	5.8
110°	10.7	10.8	10.8	10.7	10.6	10.5	10.4	10.5	10.4	10.5	10.6
115°	16.0	16.1	16.3	16.1	16.0	15.9	15.8	15.9	15.8	15.9	16.0
120°	22.0	22.2	22.3	22.1	21.9	21.8	21.7	21.7	21.7	21.8	21.9
125°	28.0	28.1	28.2	27.9	27.7	27.7	27.7	27.7	27.7	27.7	27.7
130°	33.7	33.9	34.1	34.1	34.1	34.0	33.9	34.0	33.9	34.0	34.1
135°	39.6	39.8	40.0	40.0	40.0	40.1	40.2	40.3	40.2	40.1	40.0
140°	44.7	44.8	44.9	45.0	45.1	45.3	45.5	45.7	45.5	45.3	45.1
145°	49.7	50.0	50.2	50.2	50.1	50.0	49.9	50.1	49.9	50.0	50.1
150°	53.4	53.5	53.6	53.8	53.9	54.0	54.2	54.5	54.2	54.0	53.9
155°	56.0	56.2	56.4	56.6	56.8	56.9	57.0	57.3	57.0	56.9	56.8
160°	58.8	59.1	59.3	59.2	59.1	59.0	59.0	59.5	59.0	59.0	59.1
165°	60.1	60.3	60.5	60.6	60.8	60.7	60.6	61.0	60.6	60.7	60.8
170°	61.3	61.5	61.6	61.8	62.0	62.1	62.2	62.7	62.2	62.1	62.0
175°	61.7	61.9	62.1	62.2	62.2	62.1	62.0	62.5	62.0	62.1	62.2
180°	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6



REPORT NUMBER: P400767

CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4
5°	139.1	138.8	138.1	137.4	136.3	135.2	134.8	134.4	133.4	132.4	131.7
10°	136.0	133.9	131.0	128.1	124.7	121.4	118.6	115.8	113.4	111.1	108.7
15°	127.8	122.9	117.3	111.7	106.0	100.3	94.4	88.4	83.2	77.9	74.4
20°	116.8	108.7	99.3	89.9	79.8	69.7	61.2	52.7	47.8	43.0	41.5
25°	103.3	91.3	76.5	61.8	49.6	37.5	33.9	30.4	30.0	29.5	30.3
30°	86.2	68.9	51.4	34.0	29.6	25.2	24.6	23.9	24.1	24.2	24.7
35°	66.5	43.2	33.0	22.9	22.1	21.4	21.3	21.2	21.2	21.1	21.3
40°	50.0	25.2	22.6	20.1	19.8	19.6	19.3	19.0	18.8	18.5	18.3
45°	39.5	19.9	19.1	18.3	18.0	17.7	17.2	16.6	16.3	16.0	15.9
50°	31.8	18.3	17.6	17.0	16.4	15.9	15.3	14.8	14.4	14.1	13.9
55°	27.9	17.4	16.5	15.6	15.0	14.4	13.8	13.2	12.8	12.4	12.1
60°	33.0	16.9	15.4	14.0	13.3	12.7	12.1	11.5	11.1	10.7	10.4
65°	49.8	17.0	15.1	13.2	12.1	10.9	10.3	9.7	9.3	9.0	8.8
70°	45.3	22.4	18.9	15.4	12.5	9.6	8.7	7.9	7.7	7.5	7.4
75°	23.8	18.8	15.9	13.1	10.5	8.0	7.1	6.3	6.2	6.1	6.0
80°	14.0	11.5	9.5	7.4	6.3	5.2	5.0	4.7	4.7	4.6	4.6
85°	3.6	3.6	3.3	3.1	2.9	2.8	2.9	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.2	2.3	2.5	2.6	2.2	1.9	1.5	1.1	1.0	0.9	0.8
105°	6.0	6.3	6.4	6.4	6.0	5.6	5.0	4.3	3.8	3.2	2.8
110°	10.7	10.8	10.8	10.7	10.5	10.2	9.7	9.1	8.4	7.8	7.2
115°	16.1	16.3	16.1	16.0	15.8	15.6	15.3	15.0	14.6	14.2	13.7
120°	22.1	22.3	22.2	22.0	21.9	21.7	21.5	21.2	21.0	20.8	20.5
125°	27.9	28.2	28.1	28.0	27.8	27.7	27.5	27.3	27.0	26.7	26.6
130°	34.1	34.1	33.9	33.7	33.5	33.2	33.2	33.1	32.9	32.7	32.5
135°	40.0	40.0	39.8	39.6	39.3	39.1	39.0	38.9	38.8	38.6	38.3
140°	45.0	44.9	44.8	44.7	44.6	44.4	44.2	43.9	43.8	43.7	43.6
145°	50.2	50.2	50.0	49.7	49.5	49.2	49.2	49.2	49.0	48.9	48.8
150°	53.8	53.6	53.5	53.4	53.2	53.0	53.0	53.0	53.0	53.0	53.0
155°	56.6	56.4	56.2	56.0	56.0	56.1	56.2	56.3	56.2	56.0	56.0
160°	59.2	59.3	59.1	58.8	58.7	58.5	58.5	58.5	58.6	58.6	58.8
165°	60.6	60.5	60.3	60.1	60.1	60.1	60.1	60.1	60.3	60.4	60.4
170°	61.8	61.6	61.5	61.3	61.5	61.8	61.9	61.9	61.9	61.9	61.9
175°	62.2	62.1	61.9	61.7	61.7	61.7	61.7	61.8	61.9	62.1	62.2
180°	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6



REPORT NUMBER: P400767

CATALOG NUMBER: ENV-SA1-740-U-SL2-ULG-XXB

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	138.4	138.4	138.4	138.4
5°	131.1	130.7	130.4	130.0
10°	106.3	105.5	104.6	104.9
15°	70.8	68.4	66.0	65.4
20°	40.0	39.8	39.6	39.7
25°	31.1	31.7	32.3	32.7
30°	25.3	25.8	26.3	26.3
35°	21.4	21.5	21.6	21.6
40°	18.2	18.1	18.0	17.9
45°	15.7	15.8	15.8	15.8
50°	13.8	13.8	13.8	13.8
55°	11.9	11.8	11.7	11.8
60°	10.1	10.0	10.0	9.9
65°	8.7	8.5	8.4	8.4
70°	7.3	7.3	7.2	7.2
75°	5.9	5.9	5.9	5.9
80°	4.5	4.5	4.5	4.5
85°	3.0	2.9	2.8	2.8
90°	0.0	0.0	0.0	0.0
95°	0.5	0.5	0.4	0.4
100°	0.8	0.8	0.7	0.7
105°	2.4	2.2	2.0	1.9
110°	6.6	6.4	6.1	5.9
115°	13.1	12.8	12.4	12.5
120°	20.2	20.1	19.9	20.1
125°	26.5	26.4	26.3	26.6
130°	32.4	32.3	32.3	32.4
135°	38.1	38.1	38.1	38.3
140°	43.5	43.4	43.3	43.6
145°	48.6	48.7	48.8	49.2
150°	53.0	53.0	52.9	53.2
155°	55.9	55.9	55.9	56.2
160°	58.9	58.9	59.0	59.3
165°	60.4	60.5	60.6	60.9
170°	61.9	62.0	62.1	62.4
175°	62.3	62.3	62.4	62.6
180°	62.6	62.6	62.6	62.6

(END OF REPORT)