

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: P400765

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

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400765
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-HSS-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 WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 624 lumens
Efficiency: N/A
Efficacy: 48.0 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 - G0

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

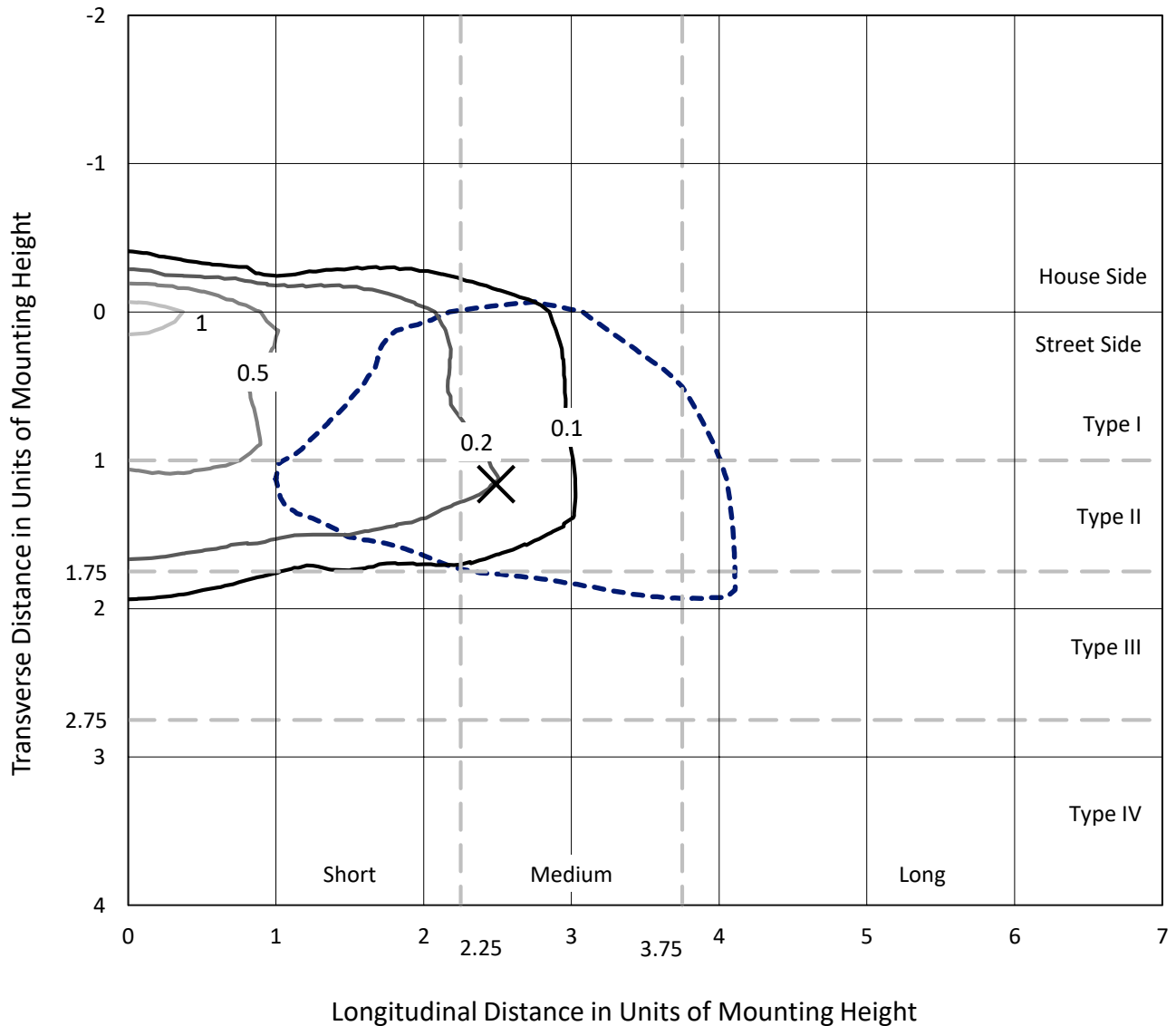


REPORT NUMBER: P400765

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

Iso-Footcandle Lines of Horizontal Illumination

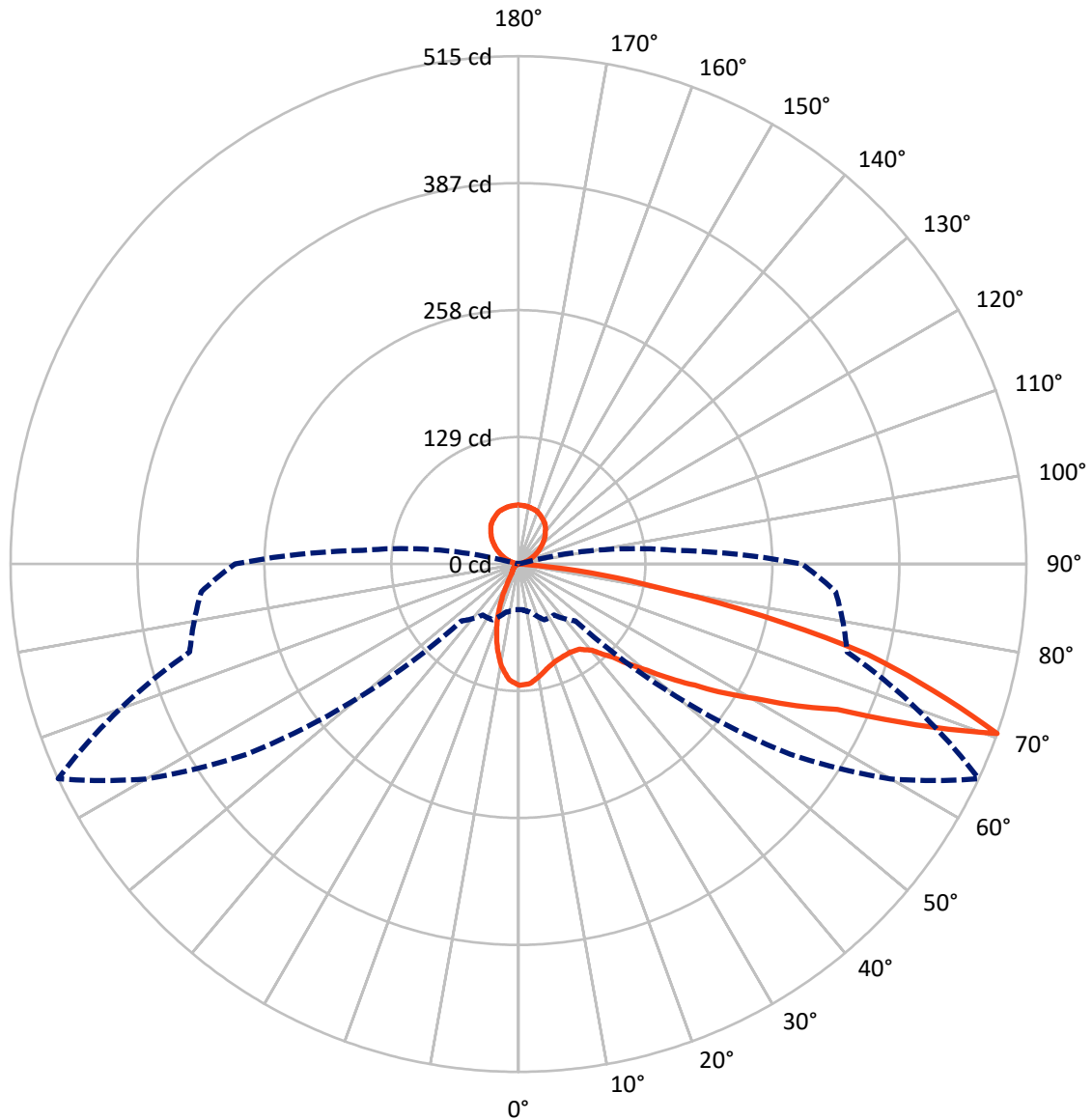
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400765
CATALOG NUMBER: ENV-SA1-740-U-SL2-HSS-ULG-XXB

Luminous Intensity Polar Plot



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

REPORT NUMBER: P400765

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

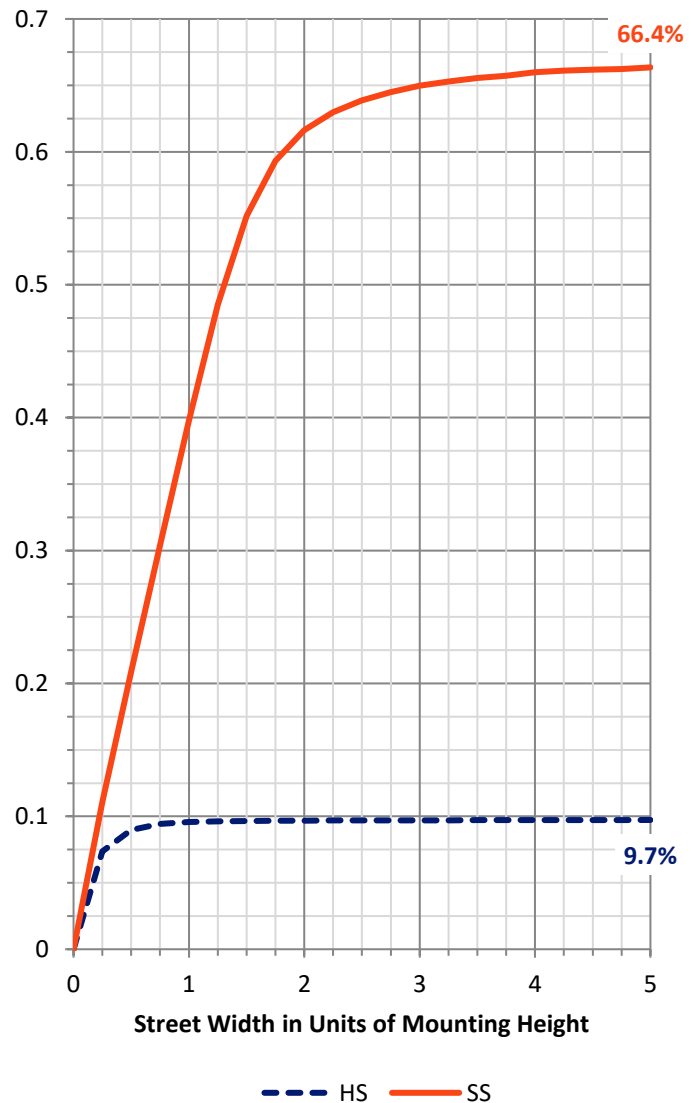
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	61.4	74.3	135.7
	% Fixture	9.8	11.9	21.8
Street Side	Lumens	414.0	74.3	488.3
	% Fixture	66.3	11.9	78.2
Total	Lumens	475.4	148.6	624.0
	% Fixture	76.2	23.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.4	1.7
10°-20°	23.2	3.7
20°-30°	31.8	5.1
30°-40°	43.8	7.0
40°-50°	65.3	10.5
50°-60°	102.1	16.4
60°-70°	116.1	18.6
70°-80°	75.4	12.1
80°-90°	7.3	1.2
90°-100°	0.7	0.1
100°-110°	5.0	0.8
110°-120°	14.3	2.3
120°-130°	23.4	3.7
130°-140°	28.8	4.6
140°-150°	29.5	4.7
150°-160°	24.8	4.0
160°-170°	16.4	2.6
170°-180°	5.7	0.9
0°-90°	475.4	76.2
0°-180°	624.0	100.0



REPORT NUMBER: P400765

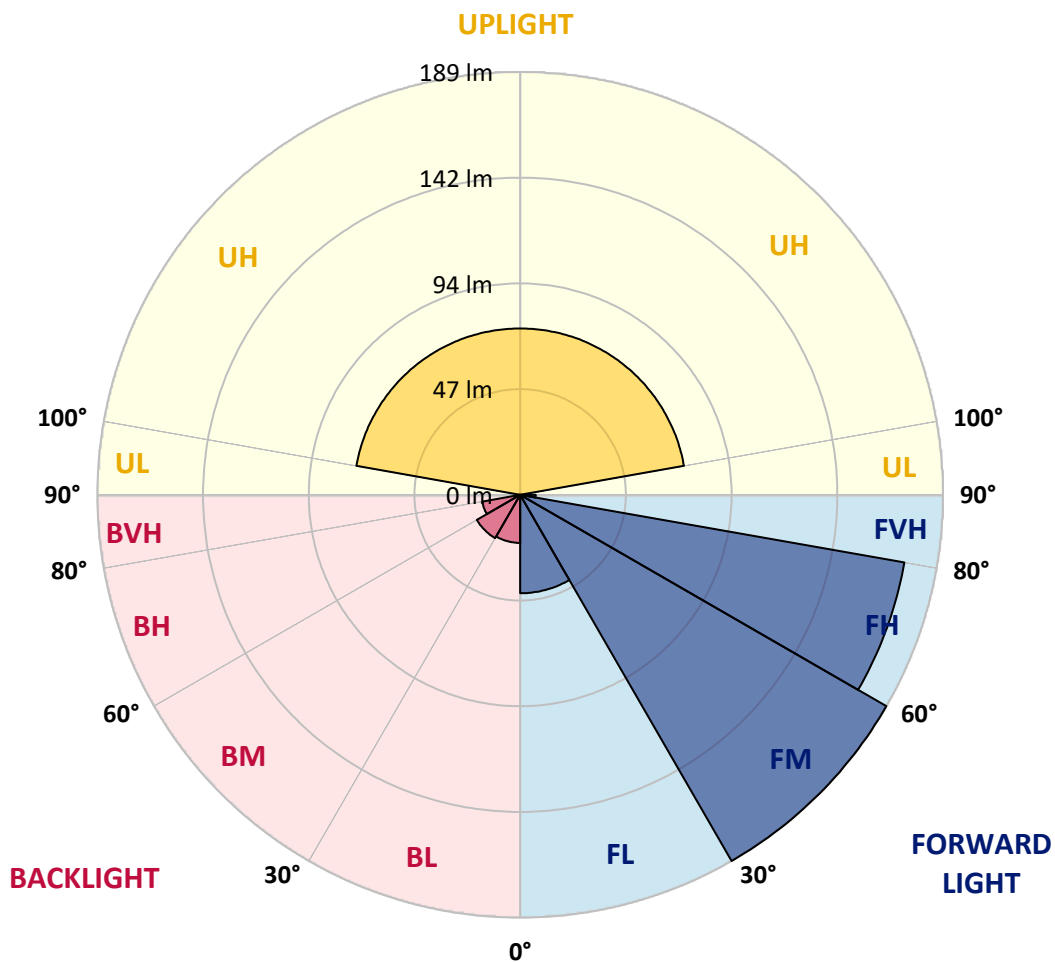
CATALOG NUMBER: ENV-SA1-740-U-SL2-HSS-ULG-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	44.0	7.0			
FM (30°-60°)	188.9	30.3			
FH (60°-80°)	174.3	27.9			G0/660
FVH (80°-90°)	6.9	1.1			G0/10
BL (0°-30°)	21.5	3.4	B0/110		
BM (30°-60°)	22.3	3.6	B0/220		
BH (60°-80°)	17.2	2.8	B0/110		G0/110
BVH (80°-90°)	0.4	0.1			G0/10
UL (90°-100°)	0.7	0.1		U1/10	
UH (100°-180°)	74.3	11.9		U3/500	

BUG Rating: B0-U3-G0

Type III Medium





REPORT NUMBER: P400765

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1
5°	111.8	111.8	112.0	112.3	113.0	113.7	114.4	115.2	116.2	117.1	118.2
10°	99.3	99.7	100.0	100.2	101.0	101.8	103.0	104.2	105.8	107.4	109.0
15°	92.3	92.2	92.6	93.0	93.9	94.7	95.8	96.9	98.5	100.1	101.9
20°	90.5	90.5	90.7	90.9	91.2	91.5	92.3	93.1	94.5	95.9	97.7
25°	95.5	95.1	95.2	95.4	94.8	94.3	93.9	93.4	93.9	94.3	95.9
30°	106.1	105.8	105.4	105.1	104.3	103.6	101.9	100.3	98.8	97.2	97.8
35°	118.5	118.6	119.5	120.5	120.5	120.6	117.8	114.9	111.3	107.7	105.7
40°	130.3	131.3	133.5	135.7	137.7	139.6	138.7	137.8	132.2	126.6	121.8
45°	146.6	147.5	151.1	154.7	158.2	161.8	162.5	163.3	158.7	154.0	146.9
50°	172.2	174.3	176.4	178.4	182.5	186.6	191.3	195.9	193.7	191.4	183.4
55°	188.2	189.3	189.9	190.6	195.7	200.8	215.8	230.9	239.5	248.0	237.0
60°	135.9	134.9	136.9	138.9	148.4	157.9	188.4	218.9	259.7	300.5	306.5
65°	73.5	73.0	74.4	75.8	77.0	78.3	91.0	103.6	180.5	257.3	329.0
70°	46.3	46.5	48.6	50.8	56.6	62.4	62.8	63.2	72.4	81.6	209.2
75°	13.5	14.2	16.4	18.5	27.4	36.2	49.8	63.3	62.1	60.8	91.6
80°	1.6	1.8	2.6	3.3	5.7	8.1	16.0	23.8	34.9	46.0	43.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	3.1
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	0.7	0.8	0.8	0.9	0.9	1.0	1.4	1.8	2.1
105°	1.8	1.9	2.1	2.3	2.7	3.1	3.6	4.1	4.8	5.4	5.8
110°	5.6	5.8	6.1	6.3	6.9	7.4	8.1	8.7	9.2	9.8	10.0
115°	12.0	11.9	12.2	12.6	13.1	13.6	14.0	14.4	14.6	14.9	15.1
120°	19.3	19.1	19.2	19.3	19.6	19.9	20.1	20.3	20.5	20.8	20.9
125°	25.5	25.2	25.2	25.3	25.5	25.6	25.8	26.1	26.3	26.5	26.7
130°	31.1	30.9	30.9	31.0	31.2	31.3	31.5	31.7	31.7	31.8	32.0
135°	36.7	36.5	36.5	36.5	36.7	37.0	37.1	37.2	37.3	37.4	37.7
140°	41.8	41.5	41.6	41.7	41.8	41.8	41.9	42.0	42.3	42.5	42.7
145°	47.1	46.7	46.6	46.6	46.7	46.8	46.9	47.1	47.1	47.1	47.4
150°	50.9	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.9
155°	53.8	53.5	53.5	53.5	53.6	53.7	53.8	53.9	53.8	53.7	53.7
160°	56.7	56.5	56.4	56.4	56.3	56.1	56.1	56.0	56.0	56.0	56.2
165°	58.3	58.0	57.9	57.8	57.8	57.8	57.7	57.6	57.6	57.6	57.5
170°	59.7	59.5	59.4	59.2	59.2	59.2	59.3	59.3	59.2	59.1	58.9
175°	59.9	59.7	59.7	59.6	59.6	59.5	59.3	59.1	59.1	59.0	59.0
180°	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9



REPORT NUMBER: P400765

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1
5°	119.3	120.5	121.9	122.7	123.5	123.4	123.4	123.1	122.6	121.7	120.7
10°	110.7	113.1	115.9	118.7	121.6	122.6	123.6	122.8	121.0	117.6	114.3
15°	103.7	106.6	109.8	113.8	117.8	120.5	123.2	121.4	117.7	110.6	103.6
20°	99.5	102.3	105.7	110.6	115.4	119.8	124.2	121.3	114.7	103.4	92.0
25°	97.5	100.6	104.2	109.6	115.1	120.5	126.0	121.6	111.3	95.4	79.5
30°	98.3	100.7	103.8	109.5	115.2	121.0	126.7	120.6	106.9	86.5	66.0
35°	103.7	104.7	106.1	111.0	115.9	121.3	126.7	118.4	101.7	76.0	50.2
40°	117.1	115.8	114.9	118.6	122.3	126.1	129.9	118.2	96.9	65.6	34.3
45°	139.8	137.1	135.1	137.7	140.2	141.8	143.5	125.8	96.5	58.5	20.4
50°	175.4	172.5	169.5	170.9	172.3	172.7	173.1	146.8	106.5	59.3	12.1
55°	225.9	222.1	217.1	216.5	215.8	217.4	218.9	186.9	132.5	70.9	9.4
60°	312.5	295.5	277.4	265.8	254.1	252.6	251.1	220.6	151.5	79.6	7.8
65°	400.6	386.0	355.8	318.0	280.2	277.5	274.9	248.0	160.3	82.8	5.3
70°	336.7	436.1	515.4	430.4	345.3	334.2	323.1	287.6	158.8	80.9	3.1
75°	122.5	253.2	366.1	342.1	318.1	277.2	236.2	194.2	80.3	41.1	1.9
80°	41.5	94.0	140.5	121.2	101.9	77.8	53.8	37.0	8.5	4.8	1.1
85°	6.0	8.1	8.0	5.0	1.9	2.6	3.2	2.7	0.8	0.6	0.4
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	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.5	2.4	2.2	2.1	2.0	1.8	1.6	1.6	1.6	1.8	2.0
105°	6.2	6.1	6.0	5.8	5.6	5.4	5.2	5.2	5.2	5.4	5.6
110°	10.3	10.3	10.4	10.3	10.2	10.1	9.9	10.0	9.9	10.1	10.2
115°	15.3	15.4	15.6	15.4	15.3	15.2	15.1	15.2	15.1	15.2	15.3
120°	21.0	21.2	21.4	21.2	21.0	20.9	20.8	20.8	20.8	20.9	21.0
125°	26.8	26.9	27.0	26.7	26.5	26.5	26.5	26.5	26.5	26.5	26.5
130°	32.3	32.4	32.6	32.6	32.6	32.5	32.4	32.5	32.4	32.5	32.6
135°	37.9	38.1	38.3	38.3	38.3	38.4	38.5	38.6	38.5	38.4	38.3
140°	42.8	42.9	43.0	43.0	43.1	43.3	43.6	43.7	43.6	43.4	43.1
145°	47.6	47.8	48.1	48.1	48.0	47.9	47.8	47.9	47.8	47.9	48.0
150°	51.1	51.2	51.3	51.5	51.6	51.7	51.9	52.2	51.9	51.7	51.6
155°	53.6	53.8	54.0	54.2	54.4	54.5	54.6	54.9	54.6	54.5	54.4
160°	56.3	56.6	56.8	56.7	56.6	56.5	56.5	57.0	56.5	56.5	56.6
165°	57.5	57.7	57.9	58.1	58.2	58.1	58.0	58.4	58.0	58.1	58.2
170°	58.7	58.8	59.0	59.2	59.4	59.5	59.6	60.0	59.6	59.5	59.4
175°	59.0	59.3	59.5	59.5	59.6	59.5	59.4	59.8	59.4	59.5	59.6
180°	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9



REPORT NUMBER: P400765

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1	123.1
5°	119.3	117.9	115.9	113.9	111.8	109.7	108.3	107.0	105.5	104.1	102.8
10°	109.5	104.7	98.9	93.1	88.0	82.9	78.3	73.7	69.9	66.2	63.6
15°	94.8	86.0	76.5	67.1	58.3	49.6	42.5	35.4	30.7	25.9	23.0
20°	78.7	65.3	51.7	38.0	29.3	20.6	18.0	15.5	15.0	14.6	14.4
25°	61.3	43.1	30.0	17.0	15.1	13.2	12.8	12.4	12.0	11.6	11.3
30°	44.4	22.8	17.3	11.8	11.2	10.5	10.0	9.4	8.7	8.1	7.7
35°	31.2	12.3	11.0	9.6	8.9	8.1	7.4	6.6	5.9	5.3	4.9
40°	21.9	9.5	8.6	7.7	6.8	5.9	5.1	4.4	4.0	3.6	3.3
45°	14.2	7.9	6.9	5.9	5.0	4.1	3.6	3.1	2.7	2.3	2.1
50°	9.4	6.6	5.4	4.2	3.5	2.8	2.5	2.1	1.8	1.4	1.3
55°	7.3	5.2	4.0	2.8	2.3	1.9	1.6	1.3	1.1	0.8	0.7
60°	5.8	3.8	2.9	2.0	1.7	1.3	1.1	0.8	0.7	0.5	0.4
65°	3.8	2.3	1.9	1.4	1.2	0.9	0.8	0.6	0.5	0.3	0.3
70°	2.3	1.5	1.2	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.3
75°	1.5	1.0	0.9	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.5
80°	0.9	0.7	0.6	0.6	0.6	0.7	0.7	0.8	0.6	0.5	0.4
85°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.1	2.2	2.4	2.5	2.1	1.8	1.4	1.0	0.9	0.9	0.8
105°	5.8	6.0	6.1	6.2	5.8	5.4	4.8	4.1	3.6	3.1	2.7
110°	10.3	10.4	10.3	10.3	10.0	9.8	9.2	8.7	8.1	7.4	6.9
115°	15.5	15.6	15.5	15.3	15.1	14.9	14.6	14.4	14.0	13.6	13.1
120°	21.2	21.4	21.2	21.0	20.9	20.8	20.5	20.3	20.1	19.9	19.6
125°	26.7	27.0	26.9	26.8	26.7	26.5	26.3	26.1	25.8	25.6	25.5
130°	32.6	32.6	32.4	32.3	32.0	31.8	31.7	31.7	31.5	31.3	31.2
135°	38.3	38.3	38.1	37.9	37.7	37.4	37.3	37.2	37.1	37.0	36.7
140°	43.0	43.0	42.9	42.8	42.7	42.5	42.3	42.0	41.9	41.8	41.8
145°	48.1	48.1	47.8	47.6	47.4	47.1	47.1	47.1	46.9	46.8	46.7
150°	51.5	51.3	51.2	51.1	50.9	50.7	50.7	50.7	50.7	50.7	50.7
155°	54.2	54.0	53.8	53.6	53.7	53.7	53.8	53.9	53.8	53.7	53.6
160°	56.7	56.8	56.6	56.3	56.2	56.0	56.0	56.0	56.1	56.1	56.3
165°	58.1	57.9	57.7	57.5	57.5	57.6	57.6	57.6	57.7	57.8	57.8
170°	59.2	59.0	58.8	58.7	58.9	59.1	59.2	59.3	59.3	59.2	59.2
175°	59.5	59.5	59.3	59.0	59.0	59.0	59.1	59.1	59.3	59.5	59.6
180°	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9



REPORT NUMBER: P400765

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	123.1	123.1	123.1	123.1
5°	101.6	100.8	100.0	100.1
10°	61.0	59.9	58.8	57.0
15°	20.1	19.4	18.7	18.9
20°	14.2	14.1	14.1	14.0
25°	11.0	10.9	10.7	10.7
30°	7.2	7.0	6.8	6.6
35°	4.5	4.4	4.2	4.1
40°	3.1	2.9	2.8	2.8
45°	1.8	1.7	1.6	1.6
50°	1.1	1.0	0.9	0.9
55°	0.6	0.5	0.5	0.4
60°	0.3	0.3	0.3	0.3
65°	0.3	0.3	0.3	0.3
70°	0.2	0.2	0.2	0.2
75°	0.4	0.4	0.3	0.3
80°	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	0.2
90°	0.0	0.0	0.0	0.0
95°	0.5	0.5	0.4	0.4
100°	0.8	0.7	0.7	0.7
105°	2.3	2.1	1.9	1.8
110°	6.3	6.1	5.8	5.6
115°	12.6	12.2	11.9	12.0
120°	19.3	19.2	19.1	19.3
125°	25.3	25.2	25.2	25.5
130°	31.0	30.9	30.9	31.1
135°	36.5	36.5	36.5	36.7
140°	41.7	41.6	41.5	41.8
145°	46.6	46.6	46.7	47.1
150°	50.7	50.7	50.7	50.9
155°	53.5	53.5	53.5	53.8
160°	56.4	56.4	56.5	56.7
165°	57.8	57.9	58.0	58.3
170°	59.2	59.4	59.5	59.7
175°	59.6	59.7	59.7	59.9
180°	59.9	59.9	59.9	59.9

(END OF REPORT)