

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: P400951

Luminaire Tested: **ENV-SA1A-740-U-SL3-ULG**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400951
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-SA1A-740-U-SL3-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4460 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U4 - G1

Input Watts (W): 36.8
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

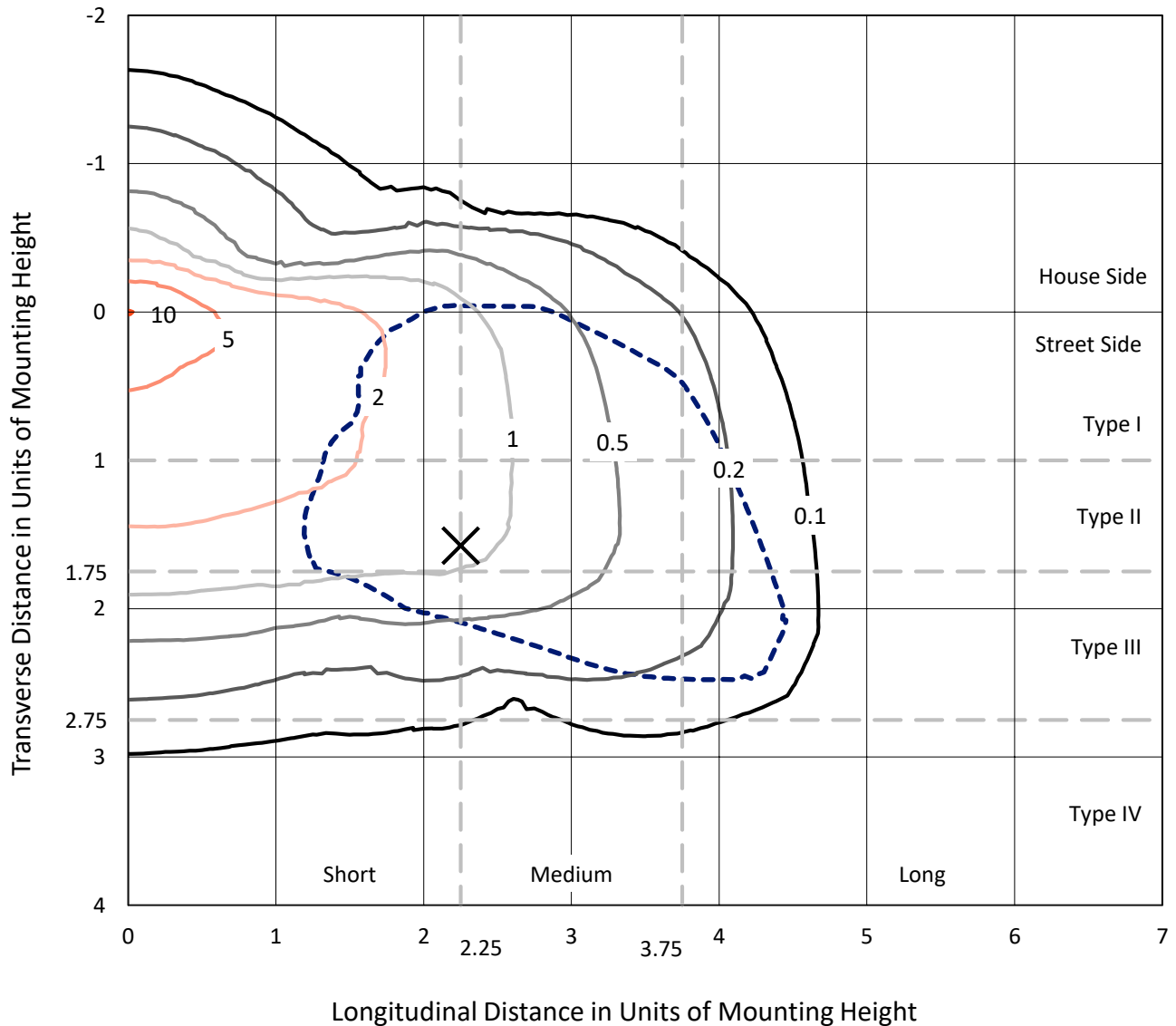


REPORT NUMBER: P400951

CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

Iso-Footcandle Lines of Horizontal Illumination

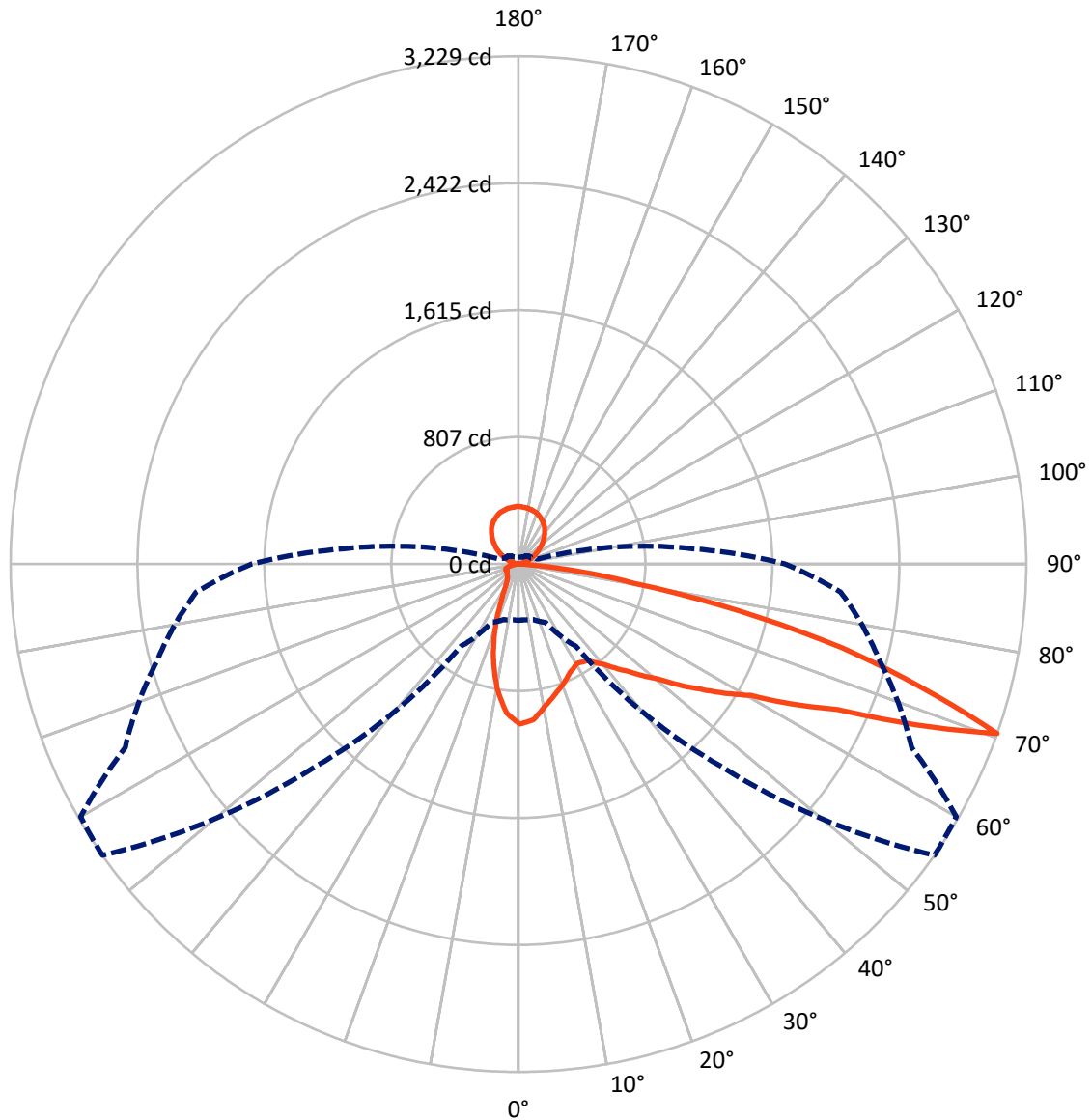
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400951
CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P400951

CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

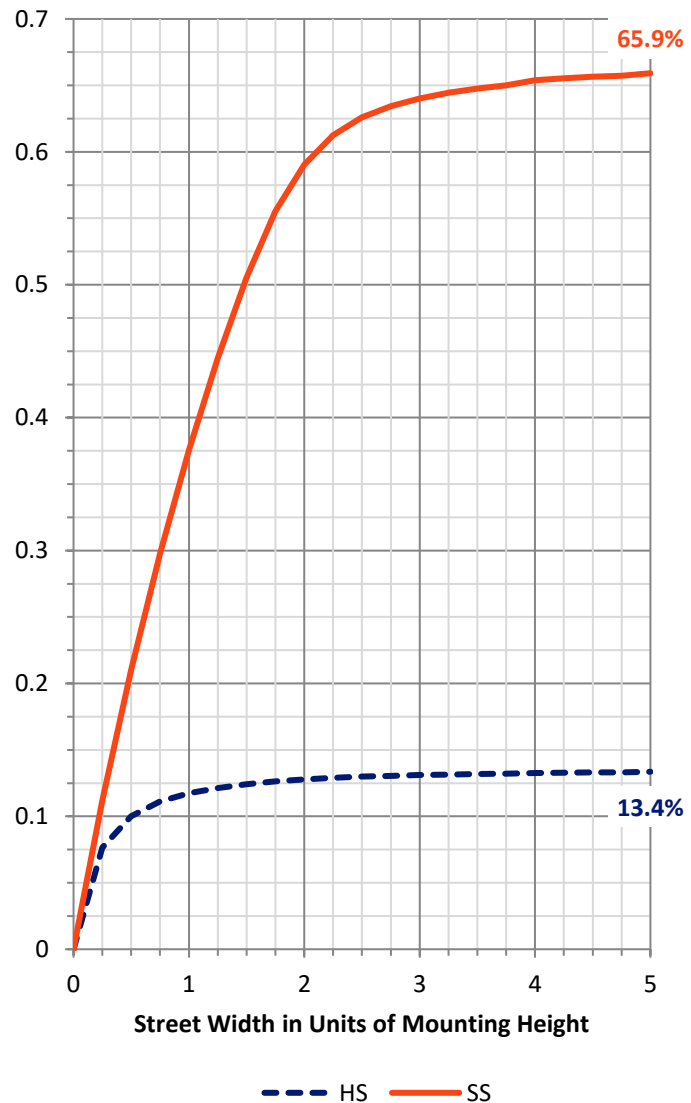
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	605.3	456.3	1061.6
	% Fixture	13.6	10.2	23.8
Street Side	Lumens	2942.1	456.3	3398.4
	% Fixture	66.0	10.2	76.2
Total	Lumens	3547.4	912.6	4460.0
	% Fixture	79.5	20.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	2.0
10°-20°	198.9	4.5
20°-30°	252.1	5.7
30°-40°	321.8	7.2
40°-50°	446.4	10.0
50°-60°	659.8	14.8
60°-70°	884.9	19.8
70°-80°	624.7	14.0
80°-90°	70.6	1.6
90°-100°	4.4	0.1
100°-110°	30.8	0.7
110°-120°	87.7	2.0
120°-130°	143.6	3.2
130°-140°	177.0	4.0
140°-150°	181.0	4.1
150°-160°	152.6	3.4
160°-170°	100.5	2.3
170°-180°	34.8	0.8
0°-90°	3547.4	79.5
0°-180°	4460.0	100.0



REPORT NUMBER: P400951

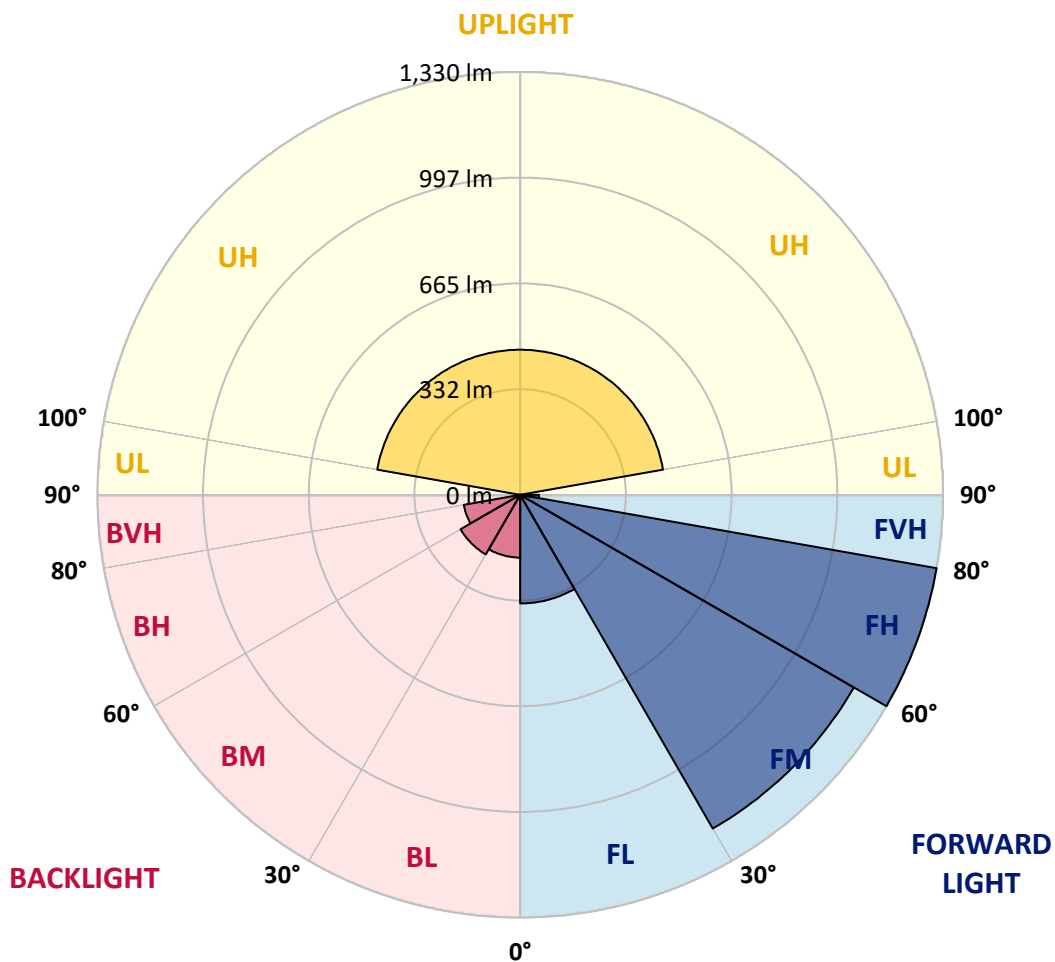
CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	341.7	7.7			
FM	(30°-60°)	1211.8	27.2			
FH	(60°-80°)	1329.7	29.8			G1/1800
FVH	(80°-90°)	58.9	1.3			G1/100
BL	(0°-30°)	197.4	4.4	B1/500		
BM	(30°-60°)	216.2	4.8	B0/220		
BH	(60°-80°)	179.9	4.0	B1/500		G1/500
BVH	(80°-90°)	11.7	0.3			G1/100
UL	(90°-100°)	4.4	0.1		U1/10	
UH	(100°-180°)	456.3	10.2		U3/500	

BUG Rating: B1-U4-G1

Type III Medium





REPORT NUMBER: P400951

CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4
5°	964.0	965.5	967.8	970.1	972.7	975.3	977.8	980.4	985.8	991.2	992.7
10°	851.9	855.0	856.6	858.1	864.0	869.9	878.4	886.9	897.2	907.4	914.1
15°	761.0	761.0	763.3	765.6	774.3	783.1	792.3	801.6	818.0	834.5	848.6
20°	706.5	705.5	706.5	707.5	710.4	713.2	723.5	733.8	752.0	770.2	791.8
25°	705.0	705.0	702.7	700.4	696.0	691.6	694.7	697.8	708.3	718.9	741.2
30°	737.9	737.4	734.0	730.7	725.8	720.9	717.1	713.2	711.7	710.1	721.7
35°	785.1	783.6	784.4	785.1	783.3	781.5	777.2	772.8	765.6	758.4	755.9
40°	826.8	827.8	834.7	841.7	849.1	856.6	858.1	859.6	851.4	843.2	840.9
45°	868.4	875.1	889.2	903.3	920.5	937.7	950.9	964.0	964.0	964.0	968.3
50°	951.1	958.8	974.5	990.2	1011.7	1033.3	1058.8	1084.2	1102.4	1120.7	1134.5
55°	1081.1	1090.9	1102.9	1115.0	1131.2	1147.4	1182.8	1218.3	1264.0	1309.8	1357.6
60°	1175.1	1187.5	1218.6	1249.6	1276.9	1304.1	1356.5	1408.9	1482.9	1556.9	1626.5
65°	776.9	776.4	829.6	882.8	992.7	1102.7	1319.5	1536.4	1840.3	2144.2	2186.1
70°	358.7	355.6	360.7	365.8	387.9	410.0	524.1	638.2	1226.3	1814.3	2521.9
75°	189.1	191.7	210.2	228.7	255.1	281.6	329.6	377.7	442.4	507.2	1315.4
80°	56.0	58.6	67.3	76.0	103.0	130.0	187.8	245.6	267.5	289.3	518.5
85°	0.0	0.0	0.0	0.0	0.3	0.5	0.8	1.0	13.6	26.2	48.0
90°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.6	2.6	2.9	3.1	3.4	3.7	3.7	3.7	3.7	3.7	3.7
100°	4.2	4.2	4.5	4.7	5.0	5.2	5.8	6.3	8.7	11.0	13.2
105°	11.0	11.6	12.9	14.2	16.5	18.9	22.1	25.2	29.2	33.1	35.5
110°	34.7	35.8	37.4	38.9	42.3	45.7	49.7	53.6	56.8	59.9	61.5
115°	73.6	73.1	75.2	77.3	80.4	83.5	86.0	88.3	89.9	91.5	92.8
120°	118.3	117.2	118.0	118.8	120.6	122.4	123.5	124.6	126.1	127.7	128.5
125°	156.6	154.5	155.1	155.6	156.4	157.2	158.8	160.3	161.7	162.9	163.8
130°	190.8	189.8	190.0	190.3	191.4	192.4	193.5	194.5	195.0	195.5	196.8
135°	225.5	223.9	223.9	223.9	225.5	227.1	227.9	228.7	229.2	229.7	231.3
140°	256.5	254.9	255.5	256.0	256.5	257.0	257.6	258.1	259.7	261.2	262.1
145°	289.1	287.0	286.5	285.9	286.8	287.5	288.3	289.1	289.3	289.6	290.9
150°	312.8	311.2	311.4	311.7	311.7	311.7	311.7	311.7	311.7	311.7	312.8
155°	330.6	328.5	328.5	328.5	329.1	329.6	330.4	331.2	330.7	330.1	329.6
160°	348.5	346.9	346.6	346.4	345.6	344.8	344.6	344.3	344.3	344.3	345.1
165°	357.9	356.4	355.9	355.3	355.3	355.3	354.5	353.7	353.7	353.7	353.5
170°	366.9	365.3	364.6	363.7	363.7	363.7	364.0	364.3	363.7	363.2	361.9
175°	368.0	366.9	366.6	366.4	365.8	365.3	364.3	363.2	363.0	362.7	362.7
180°	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9



REPORT NUMBER: P400951

CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4
5°	994.3	997.1	1000.9	1001.5	1002.0	999.2	996.3	991.7	988.6	984.8	980.9
10°	920.8	932.9	944.4	947.8	951.1	947.3	943.4	935.7	924.9	909.0	893.0
15°	862.7	878.0	895.1	904.6	914.1	910.3	906.4	886.9	860.7	826.5	792.3
20°	813.4	836.2	862.7	879.7	896.6	888.4	880.2	846.3	803.1	745.8	688.5
25°	763.6	794.3	832.4	861.4	890.5	874.0	857.6	804.7	734.8	655.4	576.0
30°	733.2	764.8	809.8	854.2	898.7	871.7	844.7	770.8	677.7	568.6	459.4
35°	753.3	777.3	818.0	875.3	932.6	893.3	854.0	755.3	635.1	490.7	346.3
40°	838.6	853.0	881.2	945.7	1010.2	957.3	904.3	775.4	618.1	425.2	232.3
45°	972.7	981.4	994.3	1067.7	1141.2	1080.3	1019.4	857.1	645.4	400.3	155.2
50°	1148.4	1153.3	1157.2	1230.4	1303.6	1249.1	1194.7	1005.1	726.0	426.2	126.4
55°	1405.3	1397.0	1373.5	1429.0	1484.5	1444.4	1404.3	1197.2	857.1	492.8	128.5
60°	1696.2	1688.8	1618.6	1653.8	1689.0	1651.5	1614.0	1400.7	1029.2	609.7	190.1
65°	2228.0	2128.7	1956.2	1954.6	1953.1	1923.0	1893.0	1703.4	1300.5	788.0	275.4
70°	3229.4	3215.2	2758.3	2568.4	2378.5	2217.7	2056.9	1695.7	1112.5	619.7	126.9
75°	2123.7	2702.1	2750.0	2452.5	2155.0	1834.1	1513.2	1151.5	686.0	390.5	95.1
80°	747.6	1162.4	1124.8	834.7	544.7	366.4	188.1	145.4	103.8	78.6	53.4
85°	69.9	80.4	48.3	35.2	22.1	20.3	18.5	18.5	20.0	18.8	17.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.7	4.0	4.2	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7
100°	15.3	14.4	13.7	12.9	12.1	11.0	10.0	10.0	10.0	11.0	12.1
105°	37.9	37.3	36.8	35.5	34.2	33.1	32.1	32.1	32.1	33.1	34.2
110°	63.1	63.4	63.6	63.1	62.5	61.8	61.0	61.5	61.0	61.8	62.5
115°	94.1	94.9	95.7	94.9	94.1	93.6	93.1	93.6	93.1	93.6	94.1
120°	129.3	130.4	131.4	130.1	128.8	128.3	127.7	127.7	127.7	128.3	128.8
125°	164.5	165.0	165.6	164.3	162.9	162.9	162.9	162.9	162.9	162.9	162.9
130°	198.2	199.2	200.2	200.2	200.2	199.7	199.2	199.7	199.2	199.7	200.2
135°	232.9	234.2	235.5	235.2	235.0	235.7	236.5	237.1	236.5	235.7	235.0
140°	262.8	263.3	263.9	264.4	264.9	266.2	267.6	268.6	267.6	266.3	264.9
145°	292.3	293.8	295.4	295.1	294.9	294.1	293.3	294.4	293.3	294.1	294.9
150°	313.8	314.6	315.4	316.2	316.9	317.8	318.5	320.6	318.5	317.8	316.9
155°	329.1	330.3	331.7	333.0	334.3	334.8	335.3	336.9	335.3	334.8	334.3
160°	345.9	347.5	349.0	348.2	347.5	347.2	346.9	350.1	346.9	347.2	347.5
165°	353.2	354.5	355.8	356.7	357.4	356.9	356.4	358.5	356.4	356.9	357.4
170°	360.6	361.4	362.2	363.5	364.8	365.3	365.8	368.5	365.8	365.3	364.8
175°	362.7	364.0	365.3	365.6	365.8	365.3	364.8	367.4	364.8	365.3	365.8
180°	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9



REPORT NUMBER: P400951

CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4	1017.4
5°	973.7	966.5	958.6	950.6	940.1	929.5	928.0	926.4	918.0	909.5	904.6
10°	870.9	848.9	828.0	807.2	785.9	764.6	744.8	725.0	712.2	699.3	682.4
15°	752.5	712.7	672.4	632.0	593.0	553.9	517.7	481.5	445.2	409.0	386.1
20°	626.1	563.7	504.8	446.0	388.7	331.4	288.3	245.1	228.9	212.7	205.5
25°	495.6	415.2	340.7	266.2	229.2	192.2	180.9	169.6	166.7	163.9	164.4
30°	357.9	256.4	210.4	164.4	153.9	143.4	141.3	139.2	140.0	140.8	142.8
35°	253.6	160.8	142.8	124.9	122.0	119.2	119.0	118.7	119.5	120.2	121.3
40°	176.2	120.2	114.6	108.9	107.6	106.4	105.6	104.8	104.1	103.3	102.8
45°	130.0	104.8	102.5	100.2	97.9	95.6	93.8	92.0	90.9	89.9	89.2
50°	112.0	97.6	95.3	93.0	89.2	85.3	83.2	81.2	80.4	79.6	79.9
55°	112.5	96.6	92.2	87.9	83.2	78.6	76.6	74.5	73.5	72.5	73.2
60°	143.9	97.6	90.7	83.8	79.1	74.5	71.7	68.9	66.5	64.2	64.5
65°	187.0	98.7	93.0	87.4	79.4	71.4	65.5	59.6	57.0	54.5	54.2
70°	107.4	87.9	87.1	86.3	79.6	73.0	64.0	55.0	51.4	47.8	46.8
75°	85.6	76.0	72.5	68.9	63.2	57.5	52.9	48.3	45.0	41.6	40.3
80°	52.7	51.9	47.0	42.1	38.8	35.5	34.7	33.9	33.4	32.9	32.4
85°	18.5	19.5	19.0	18.5	17.7	17.0	18.2	19.5	20.3	21.1	21.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.0	4.2	4.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.4
100°	12.9	13.7	14.5	15.3	13.2	11.0	8.7	6.3	5.8	5.2	5.0
105°	35.5	36.8	37.4	37.9	35.5	33.1	29.2	25.2	22.1	18.9	16.5
110°	63.1	63.6	63.4	63.1	61.5	59.9	56.8	53.6	49.7	45.7	42.3
115°	94.9	95.7	94.9	94.1	92.8	91.5	89.9	88.3	86.0	83.5	80.4
120°	130.1	131.4	130.4	129.3	128.5	127.7	126.1	124.6	123.5	122.4	120.6
125°	164.3	165.6	165.0	164.5	163.8	162.9	161.7	160.3	158.8	157.2	156.4
130°	200.2	200.2	199.2	198.2	196.8	195.5	195.0	194.5	193.5	192.4	191.4
135°	235.2	235.5	234.2	232.9	231.3	229.7	229.2	228.7	227.9	227.1	225.5
140°	264.4	263.9	263.3	262.8	262.1	261.2	259.7	258.1	257.6	257.0	256.5
145°	295.1	295.4	293.9	292.3	290.9	289.6	289.3	289.1	288.3	287.5	286.8
150°	316.2	315.4	314.6	313.8	312.8	311.7	311.7	311.7	311.7	311.7	311.7
155°	333.0	331.7	330.4	329.1	329.6	330.1	330.7	331.2	330.4	329.6	329.1
160°	348.2	349.0	347.5	345.9	345.1	344.3	344.3	344.3	344.6	344.8	345.6
165°	356.7	355.8	354.5	353.2	353.5	353.7	353.7	353.7	354.5	355.3	355.3
170°	363.5	362.2	361.4	360.6	361.9	363.2	363.7	364.3	364.0	363.7	363.7
175°	365.6	365.3	364.0	362.7	362.7	362.7	363.0	363.2	364.3	365.3	365.8
180°	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9



REPORT NUMBER: P400951

CATALOG NUMBER: ENV-SA1A-740-U-SL3-ULG

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1017.4	1017.4	1017.4	1017.4
5°	899.7	898.2	896.6	900.2
10°	665.4	660.3	655.1	652.1
15°	363.3	353.5	343.8	329.9
20°	198.3	196.8	195.3	193.7
25°	164.9	166.0	167.0	167.5
30°	144.9	147.0	149.0	150.6
35°	122.3	122.5	122.8	122.3
40°	102.3	102.3	102.3	101.7
45°	88.4	88.6	88.9	88.4
50°	80.2	81.7	83.2	83.8
55°	74.0	75.5	77.1	77.6
60°	64.7	65.5	66.3	66.8
65°	54.0	54.2	54.5	54.5
70°	45.7	45.0	44.2	43.7
75°	39.1	38.0	37.0	36.5
80°	31.9	30.8	29.8	29.8
85°	22.1	21.1	20.0	18.5
90°	0.0	0.0	0.0	0.0
95°	3.1	2.9	2.6	2.6
100°	4.7	4.5	4.2	4.2
105°	14.2	12.9	11.6	11.0
110°	38.9	37.4	35.8	34.7
115°	77.3	75.2	73.1	73.6
120°	118.8	118.0	117.2	118.3
125°	155.6	155.1	154.5	156.6
130°	190.3	190.0	189.8	190.8
135°	223.9	223.9	223.9	225.5
140°	256.0	255.5	254.9	256.5
145°	285.9	286.5	287.0	289.1
150°	311.7	311.4	311.2	312.8
155°	328.5	328.5	328.5	330.6
160°	346.4	346.6	346.9	348.5
165°	355.3	355.9	356.4	357.9
170°	363.7	364.6	365.3	366.9
175°	366.4	366.6	366.9	368.0
180°	367.9	367.9	367.9	367.9

(END OF REPORT)