

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: P400967

Luminaire Tested: **ENV-SA1A-740-U-T2-ULG**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400967  
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-T2-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4499 lumens  
Efficiency: N/A  
Efficacy: 122.3 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

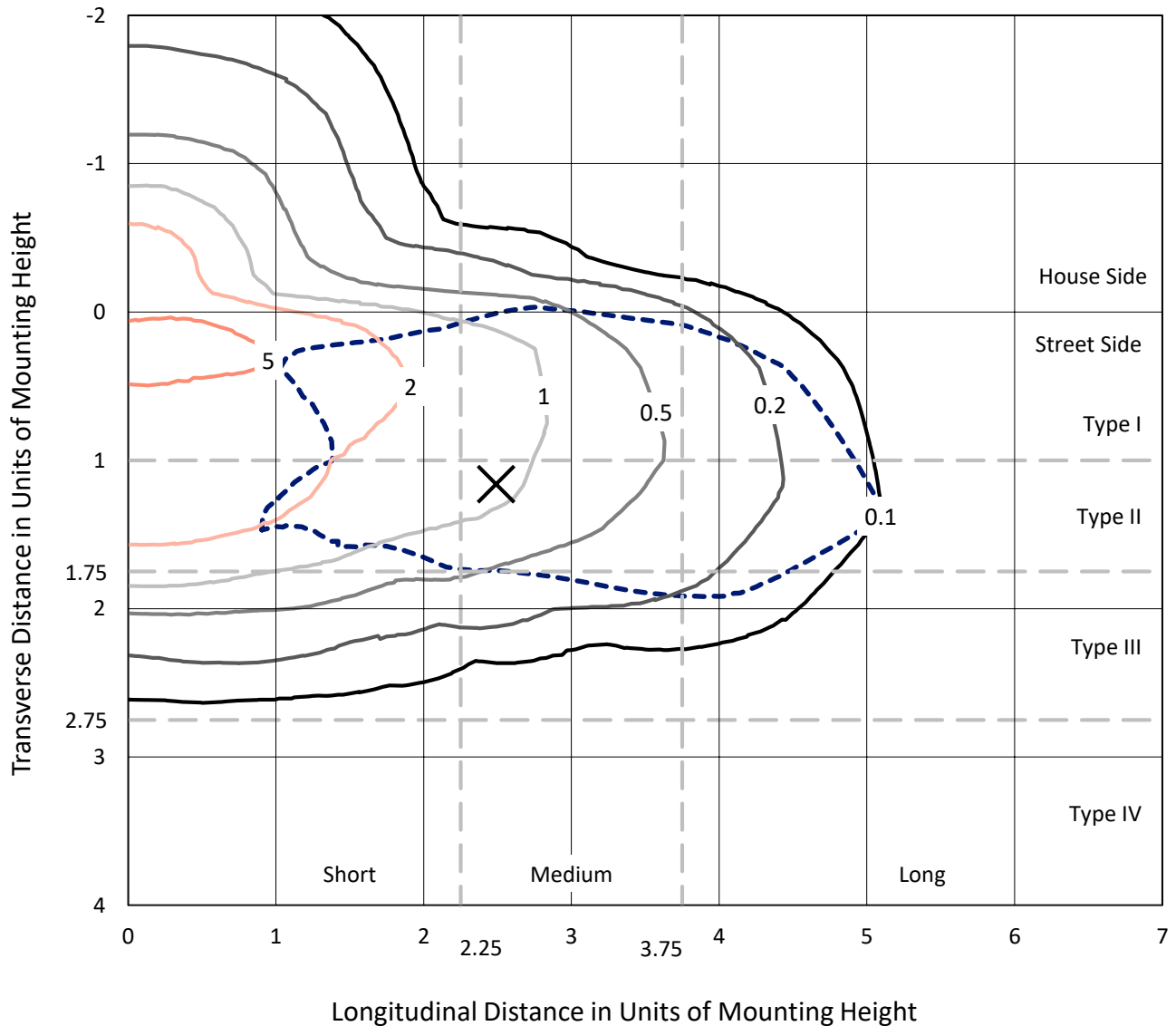


REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

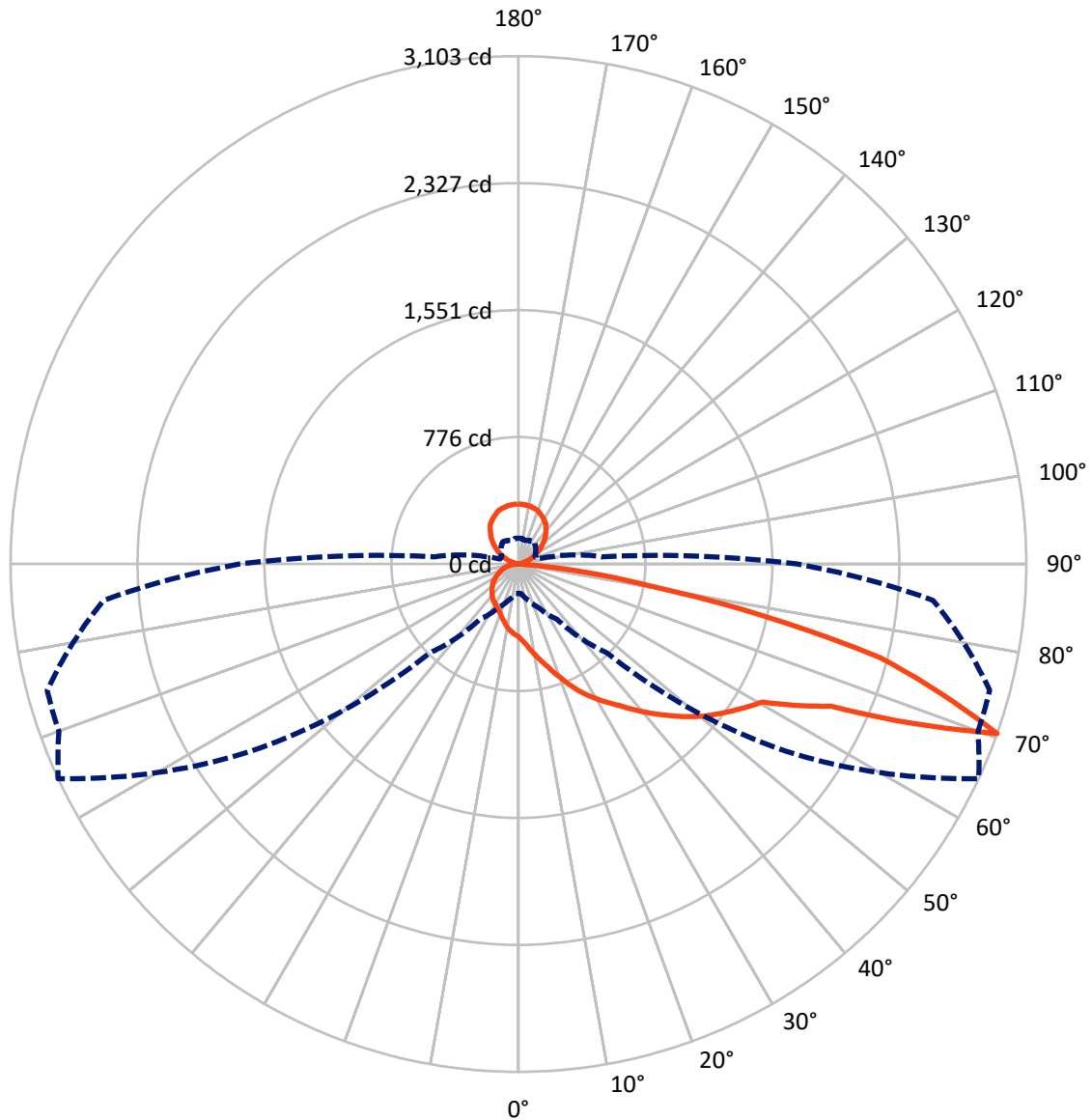


Based on 10 foot mounting height. Maximum calculated value = 6.2 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

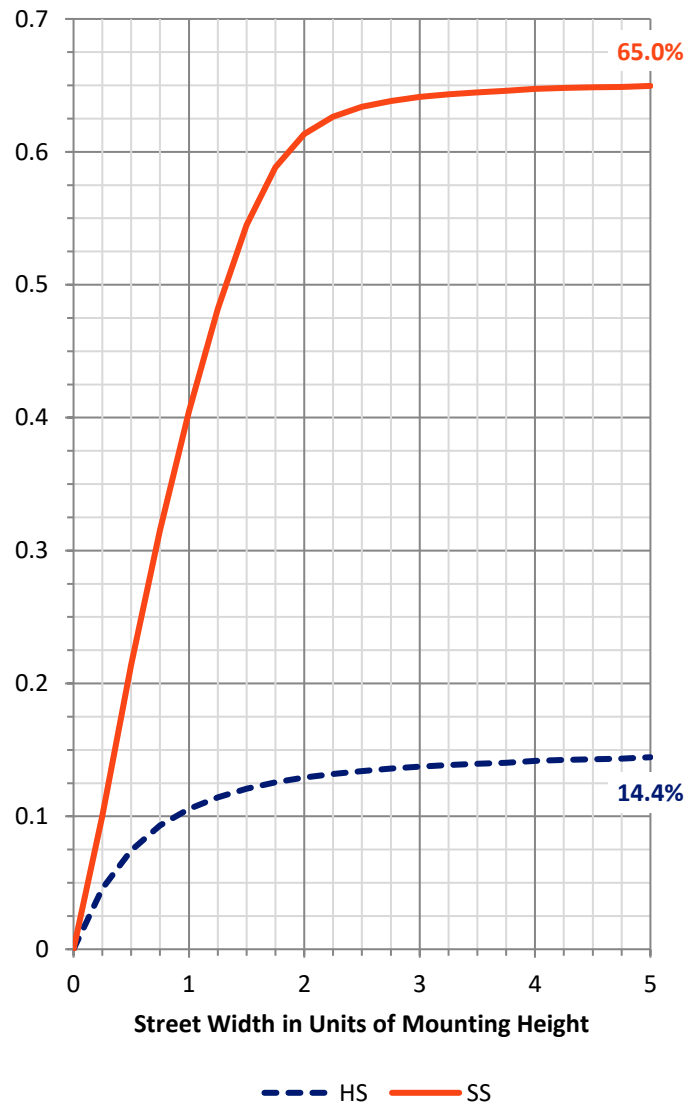
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	666.0	455.6	1121.7
	% Fixture	14.8	10.1	24.9
<b>Street Side</b>	Lumens	2921.7	455.6	3377.3
	% Fixture	64.9	10.1	75.1
<b>Total</b>	Lumens	3587.7	911.3	4499.0
	% Fixture	79.7	20.3	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	1.0
10°-20°	143.3	3.2
20°-30°	254.0	5.6
30°-40°	378.2	8.4
40°-50°	547.8	12.2
50°-60°	746.7	16.6
60°-70°	817.9	18.2
70°-80°	572.4	12.7
80°-90°	82.9	1.8
90°-100°	4.4	0.1
100°-110°	30.8	0.7
110°-120°	87.6	1.9
120°-130°	143.4	3.2
130°-140°	176.8	3.9
140°-150°	180.7	4.0
150°-160°	152.4	3.4
160°-170°	100.3	2.2
170°-180°	34.8	0.8
0°-90°	3587.7	79.7
0°-180°	4499.0	100.0



REPORT NUMBER: P400967

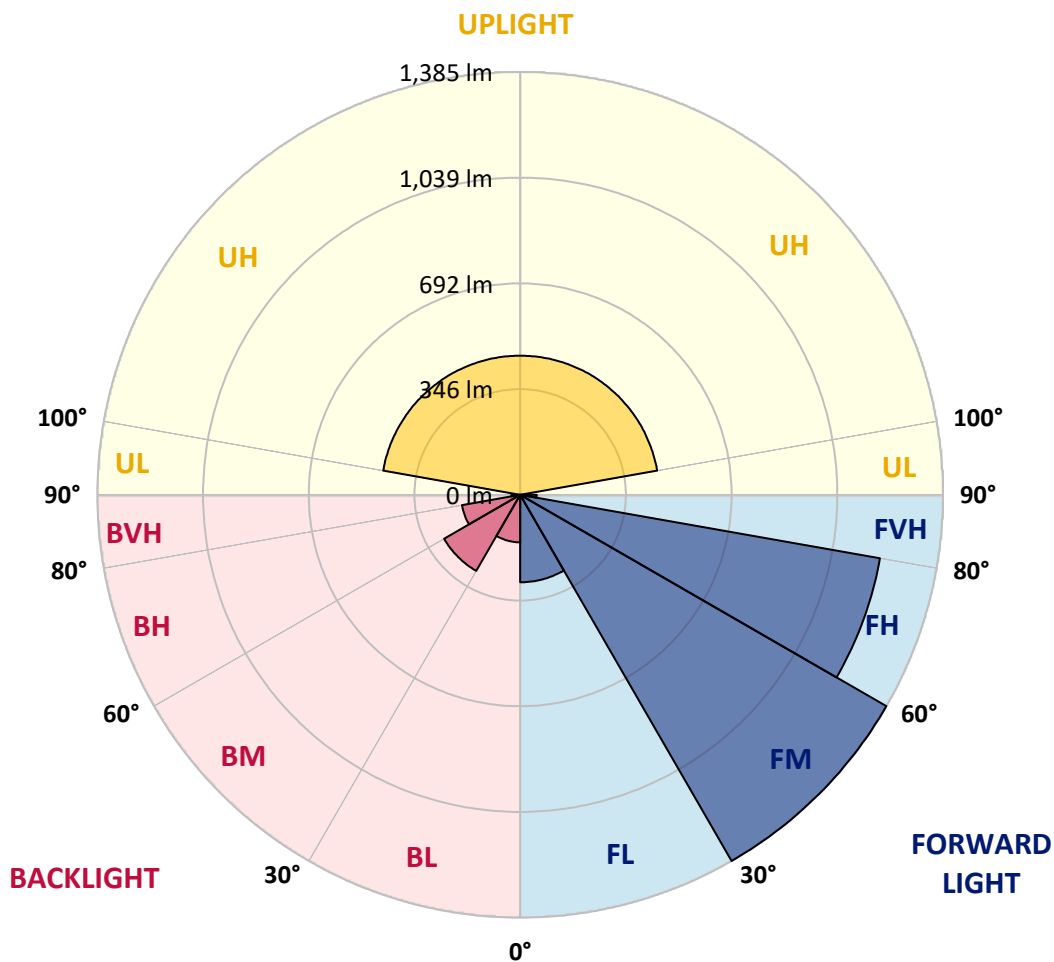
CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	286.4	6.4			
FM (30°-60°)	1384.9	30.8			
FH (60°-80°)	1196.5	26.6			G1/1800
FVH (80°-90°)	53.8	1.2			G1/100
BL (0°-30°)	155.5	3.5	B1/500		
BM (30°-60°)	287.7	6.4	B1/1000		
BH (60°-80°)	193.7	4.3	B1/500		G1/500
BVH (80°-90°)	29.0	0.6			G1/100
UL (90°-100°)	4.4	0.1		U1/10	
UH (100°-180°)	455.6	10.1		U3/500	

**BUG Rating: B1-U4-G1**

Type III Medium





REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8
5°	542.8	542.8	543.9	544.9	543.1	541.3	536.4	531.6	526.4	521.3	515.4
10°	603.4	605.9	607.0	608.0	608.8	609.5	609.0	608.5	605.2	601.8	593.1
15°	624.9	624.9	626.7	628.5	633.4	638.3	644.2	650.1	657.0	663.9	663.2
20°	628.0	629.5	636.2	642.9	652.9	662.9	673.4	683.9	698.8	713.7	728.6
25°	665.5	664.4	668.3	672.1	676.0	679.8	692.1	704.5	728.3	752.2	784.0
30°	758.3	759.4	758.8	758.3	758.1	757.8	757.1	756.3	772.4	788.6	829.9
35°	894.8	898.9	891.2	883.5	876.1	868.6	860.9	853.3	857.4	861.5	890.2
40°	1034.9	1040.5	1042.1	1043.6	1025.4	1007.2	992.3	977.4	976.9	976.4	994.6
45°	1123.6	1127.8	1130.6	1133.4	1127.2	1121.1	1113.9	1106.7	1125.2	1143.7	1148.0
50°	1227.3	1228.8	1230.4	1231.9	1229.6	1227.3	1228.1	1228.8	1256.8	1284.8	1288.3
55°	1394.6	1401.7	1417.9	1434.1	1426.9	1419.7	1410.5	1401.2	1379.4	1357.6	1371.2
60°	1158.0	1182.1	1240.6	1299.1	1369.7	1440.2	1524.1	1608.0	1629.0	1650.1	1593.4
65°	384.8	410.0	476.7	543.4	662.1	780.9	987.2	1193.4	1442.5	1691.6	1916.9
70°	179.1	182.1	204.7	227.3	260.9	294.5	353.3	412.0	590.8	769.6	1382.2
75°	90.8	93.9	101.3	108.8	133.4	158.0	190.4	222.7	225.8	228.8	469.5
80°	38.0	39.0	41.3	43.6	48.2	52.8	74.9	97.0	94.4	91.8	108.0
85°	0.0	0.0	0.3	0.5	0.5	0.5	0.8	1.0	2.8	4.6	5.9
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	13.1
105°	11.0	11.5	12.9	14.2	16.5	18.9	22.1	25.2	29.1	33.0	35.5
110°	34.6	35.7	37.3	38.8	42.3	45.7	49.6	53.5	56.7	59.8	61.4
115°	73.5	73.0	75.1	77.2	80.3	83.4	85.8	88.2	89.8	91.3	92.7
120°	118.1	117.0	117.9	118.6	120.5	122.3	123.3	124.4	126.0	127.6	128.3
125°	156.4	154.3	154.8	155.4	156.2	157.0	158.5	160.1	161.4	162.7	163.5
130°	190.5	189.5	189.7	190.0	191.1	192.1	193.2	194.2	194.7	195.2	196.6
135°	225.1	223.6	223.6	223.6	225.2	226.7	227.6	228.3	228.8	229.3	230.9
140°	256.1	254.5	255.1	255.6	256.1	256.6	257.2	257.7	259.3	260.9	261.7
145°	288.7	286.6	286.0	285.5	286.4	287.1	287.9	288.7	288.9	289.2	290.5
150°	312.3	310.7	311.0	311.2	311.2	311.2	311.2	311.2	311.2	311.2	312.3
155°	330.1	328.0	328.0	328.0	328.6	329.1	329.9	330.7	330.2	329.6	329.1
160°	348.0	346.4	346.1	345.9	345.1	344.3	344.1	343.8	343.8	343.8	344.6
165°	357.4	355.9	355.4	354.8	354.8	354.8	354.0	353.2	353.2	353.2	352.9
170°	366.3	364.8	364.0	363.2	363.2	363.2	363.5	363.7	363.2	362.7	361.4
175°	367.4	366.3	366.1	365.8	365.3	364.8	363.8	362.7	362.4	362.1	362.1
180°	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4



REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8
5°	509.5	501.5	493.6	486.9	477.7	469.0	460.2	453.6	446.9	440.7	434.6
10°	584.4	574.4	564.4	549.5	532.1	513.9	495.6	475.6	458.2	441.0	423.8
15°	662.4	653.2	643.9	628.0	601.8	572.1	542.3	504.9	465.9	430.2	394.6
20°	743.5	743.5	743.5	724.0	692.1	647.0	601.8	536.7	465.4	410.5	355.6
25°	815.8	837.6	859.4	844.0	805.5	739.6	673.7	572.1	453.1	383.8	314.5
30°	871.2	915.3	959.5	952.8	907.1	818.4	729.6	582.9	411.0	345.0	279.1
35°	918.9	990.5	1062.1	1082.6	1021.0	904.3	787.6	577.7	355.1	305.5	256.0
40°	1012.8	1100.8	1188.8	1251.9	1190.9	1038.5	886.1	591.6	308.9	274.0	239.1
45°	1152.4	1238.3	1324.3	1453.0	1420.7	1224.7	1028.7	639.3	289.4	257.1	224.7
50°	1291.9	1376.6	1461.3	1635.2	1672.1	1426.9	1181.6	713.2	302.2	258.8	215.5
55°	1384.8	1484.6	1584.4	1756.3	1878.4	1600.3	1322.2	807.1	337.6	271.9	206.3
60°	1536.7	1623.9	1711.1	1877.4	2053.3	1774.5	1495.6	931.8	368.9	279.1	189.3
65°	2142.1	2118.3	2094.4	2112.9	2260.6	2022.8	1785.0	1181.6	460.7	306.3	151.9
70°	1994.9	2548.7	3102.6	2987.7	2980.5	2761.4	2542.3	1702.4	512.1	314.5	117.0
75°	710.1	1495.9	2281.7	2704.4	3006.1	2622.9	2239.6	1300.7	287.3	188.8	90.3
80°	124.2	469.2	814.3	1018.5	1306.8	1052.8	798.9	504.9	134.9	98.8	62.6
85°	7.2	20.0	32.8	49.8	59.5	50.5	41.6	27.2	21.0	23.6	26.2
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°	15.2	14.4	13.6	12.9	12.1	11.0	10.0	10.0	10.0	11.0	12.1
105°	37.8	37.2	36.7	35.4	34.1	33.0	32.0	32.0	32.0	33.1	34.1
110°	63.0	63.3	63.5	63.0	62.4	61.7	60.9	61.4	60.9	61.7	62.4
115°	93.9	94.7	95.5	94.7	93.9	93.4	92.9	93.4	92.9	93.4	93.9
120°	129.1	130.2	131.2	129.9	128.6	128.1	127.6	127.6	127.6	128.1	128.6
125°	164.3	164.8	165.3	164.0	162.7	162.7	162.7	162.7	162.7	162.7	162.7
130°	197.9	198.9	199.9	199.9	199.9	199.4	198.9	199.4	198.9	199.4	199.9
135°	232.5	233.8	235.1	234.9	234.6	235.4	236.2	236.7	236.2	235.4	234.6
140°	262.4	263.0	263.5	264.0	264.5	265.8	267.2	268.2	267.2	265.9	264.5
145°	291.8	293.4	295.0	294.7	294.5	293.6	292.9	293.9	292.9	293.7	294.5
150°	313.3	314.1	314.9	315.7	316.5	317.3	318.1	320.2	318.1	317.3	316.5
155°	328.6	329.9	331.2	332.5	333.8	334.3	334.8	336.4	334.8	334.3	333.8
160°	345.4	346.9	348.5	347.7	346.9	346.7	346.4	349.6	346.4	346.7	346.9
165°	352.7	354.0	355.3	356.1	356.9	356.4	355.9	358.0	355.9	356.4	356.9
170°	360.0	360.8	361.6	363.0	364.2	364.8	365.3	367.9	365.3	364.8	364.2
175°	362.1	363.5	364.8	365.1	365.3	364.8	364.2	366.9	364.2	364.8	365.3
180°	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4





REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8
5°	428.9	423.3	419.2	415.1	410.2	405.3	403.0	400.7	397.9	395.1	393.3
10°	409.4	395.1	385.3	375.6	371.0	366.3	364.5	362.7	362.5	362.2	362.5
15°	376.1	357.6	353.0	348.4	350.2	352.0	355.6	359.2	363.5	367.9	371.2
20°	340.9	326.3	327.1	327.9	335.6	343.3	352.2	361.2	370.7	380.2	387.4
25°	306.8	299.1	306.1	313.0	324.0	335.0	345.0	355.1	364.5	374.0	381.5
30°	280.9	282.7	293.0	303.2	311.7	320.2	324.3	328.4	329.4	330.4	329.7
35°	263.2	270.4	277.3	284.2	288.4	292.5	290.7	288.9	284.0	279.1	270.4
40°	245.0	250.9	253.2	255.5	256.8	258.1	255.0	251.9	246.3	240.6	237.6
45°	226.8	228.8	229.9	230.9	232.9	235.0	233.2	231.4	228.1	224.7	227.8
50°	212.4	209.3	213.2	217.0	221.9	226.8	224.2	221.7	215.2	208.8	202.7
55°	197.3	188.3	193.2	198.0	209.1	220.1	219.6	219.1	210.1	201.1	192.7
60°	175.0	160.6	168.5	176.5	191.6	206.8	206.3	205.7	198.0	190.4	183.9
65°	143.4	134.9	143.7	152.4	164.4	176.5	181.6	186.8	180.9	175.0	169.8
70°	114.9	112.9	120.3	127.8	138.5	149.3	157.5	165.7	161.9	158.0	153.9
75°	89.8	89.3	95.4	101.6	112.1	122.6	131.3	140.1	138.5	137.0	132.4
80°	63.4	64.1	68.5	72.9	83.1	93.4	101.1	108.8	107.7	106.7	102.6
85°	28.5	30.8	36.7	42.6	53.1	63.6	74.4	85.2	84.1	83.1	78.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	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	13.6	14.5	15.2	13.1	11.0	8.7	6.3	5.8	5.2	5.0
105°	35.5	36.7	37.3	37.8	35.5	33.0	29.1	25.2	22.1	18.9	16.5
110°	63.0	63.5	63.3	63.0	61.4	59.8	56.7	53.5	49.6	45.7	42.3
115°	94.8	95.5	94.8	93.9	92.7	91.3	89.8	88.2	85.8	83.4	80.3
120°	129.9	131.2	130.2	129.1	128.3	127.6	126.0	124.4	123.3	122.3	120.5
125°	164.0	165.3	164.8	164.3	163.5	162.7	161.4	160.1	158.5	157.0	156.2
130°	199.9	199.9	198.9	197.9	196.6	195.2	194.7	194.2	193.2	192.1	191.1
135°	234.9	235.1	233.9	232.5	230.9	229.3	228.8	228.3	227.6	226.7	225.2
140°	264.0	263.5	263.0	262.4	261.7	260.9	259.3	257.7	257.2	256.6	256.1
145°	294.7	295.0	293.4	291.8	290.5	289.2	288.9	288.7	287.9	287.1	286.4
150°	315.7	314.9	314.2	313.3	312.3	311.2	311.2	311.2	311.2	311.2	311.2
155°	332.5	331.2	329.9	328.6	329.1	329.6	330.2	330.7	329.9	329.1	328.6
160°	347.7	348.5	346.9	345.4	344.6	343.8	343.8	343.8	344.1	344.3	345.1
165°	356.1	355.3	354.0	352.7	352.9	353.2	353.2	353.2	354.0	354.8	354.8
170°	363.0	361.6	360.8	360.0	361.4	362.7	363.2	363.7	363.5	363.2	363.2
175°	365.1	364.8	363.5	362.1	362.1	362.1	362.4	362.7	363.8	364.8	365.3
180°	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4	367.4



REPORT NUMBER: P400967

CATALOG NUMBER: ENV-SA1A-740-U-T2-ULG

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	444.8	444.8	444.8	444.8
5°	391.5	390.5	389.4	389.9
10°	362.7	363.0	363.3	363.8
15°	374.5	376.6	378.7	379.7
20°	394.6	398.9	403.3	404.3
25°	388.9	393.8	398.7	401.2
30°	328.9	329.9	330.9	328.4
35°	261.7	254.0	246.3	245.3
40°	234.5	229.6	224.7	223.2
45°	230.9	225.0	219.1	217.0
50°	196.5	191.1	185.7	183.7
55°	184.2	182.4	180.6	179.6
60°	177.5	176.2	175.0	173.9
65°	164.7	166.0	167.3	167.3
70°	149.8	154.2	158.5	157.5
75°	127.8	129.8	131.9	128.8
80°	98.5	98.0	97.5	95.9
85°	73.9	70.5	67.2	62.1
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	11.5	11.0
110°	38.8	37.3	35.7	34.6
115°	77.2	75.1	73.0	73.5
120°	118.6	117.9	117.0	118.1
125°	155.4	154.8	154.3	156.4
130°	190.0	189.7	189.5	190.5
135°	223.6	223.6	223.6	225.1
140°	255.6	255.1	254.5	256.1
145°	285.5	286.0	286.6	288.7
150°	311.2	311.0	310.7	312.3
155°	328.0	328.0	328.0	330.1
160°	345.9	346.1	346.4	348.0
165°	354.8	355.4	355.9	357.4
170°	363.2	364.0	364.8	366.3
175°	365.8	366.1	366.3	367.4
180°	367.4	367.4	367.4	367.4

(END OF REPORT)