

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: P401131

Luminaire Tested: **ENV-SA1B-740-U-SL3-ULG**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401131  
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-SA1B-740-U-SL3-ULG  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K, 450mA 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: 5141 lumens  
Efficiency: N/A  
Efficacy: 122.1 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 - U5 - G1

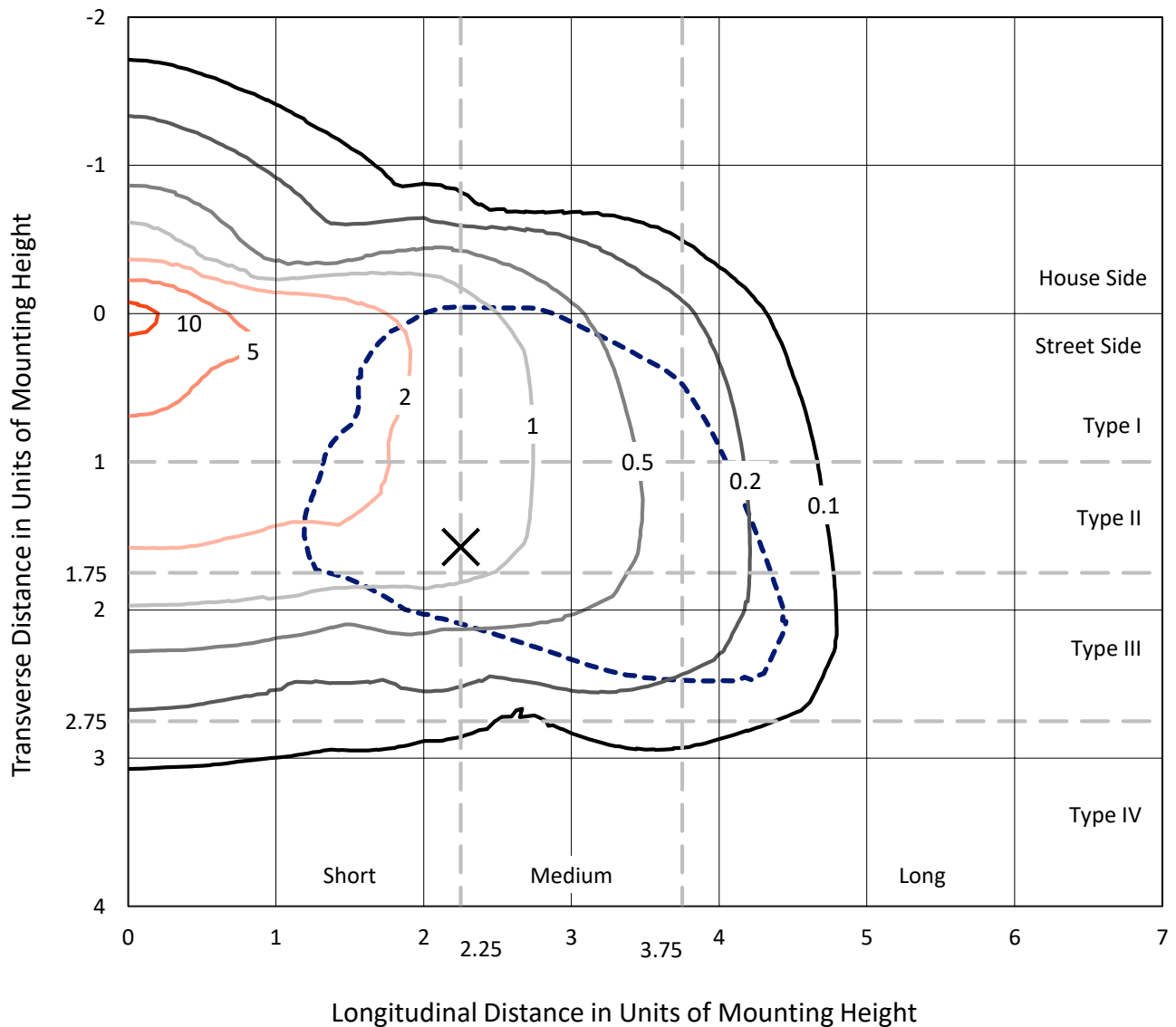
Input Watts (W): 42.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401131  
 CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

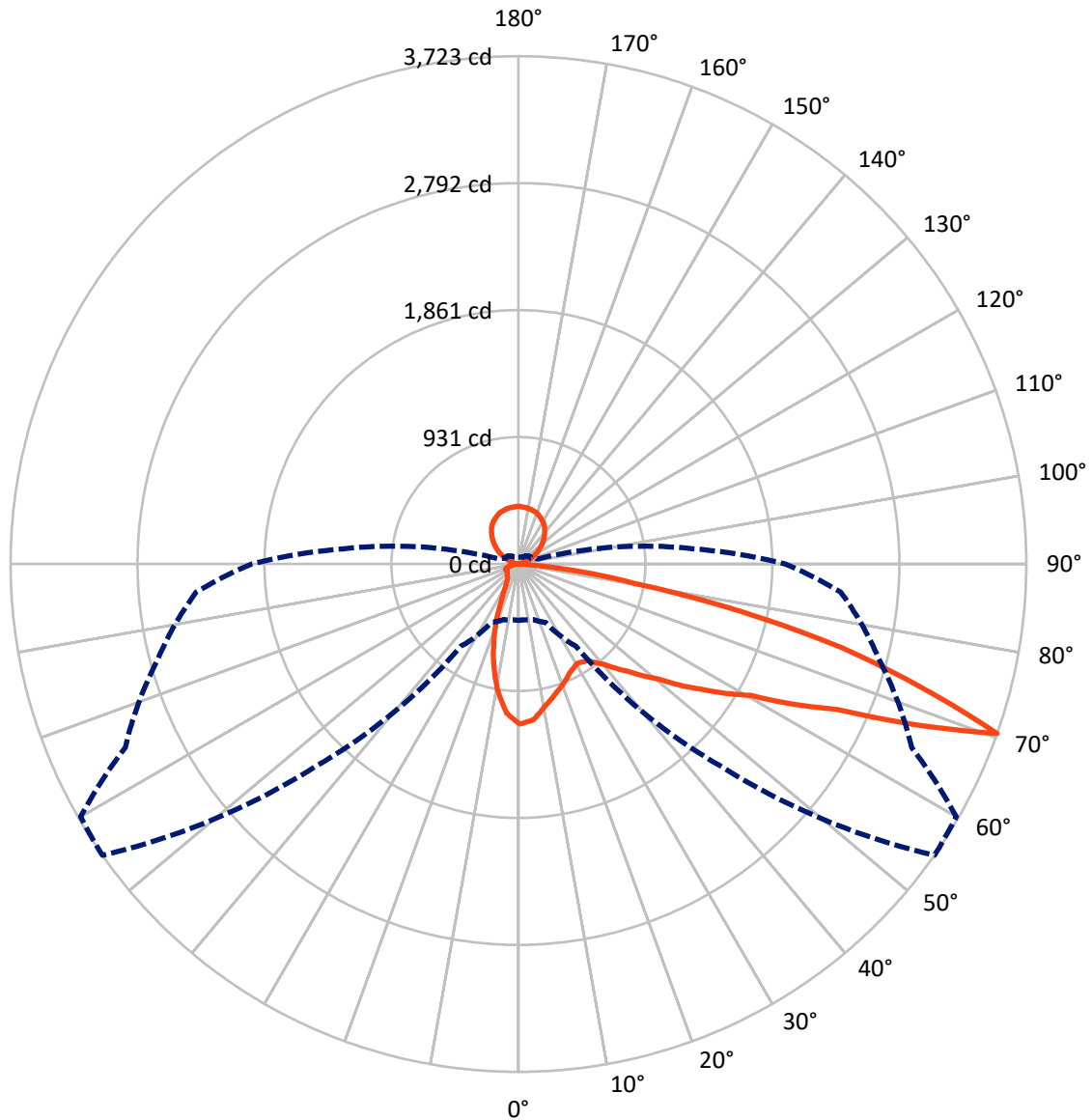


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401131

CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P401131

CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

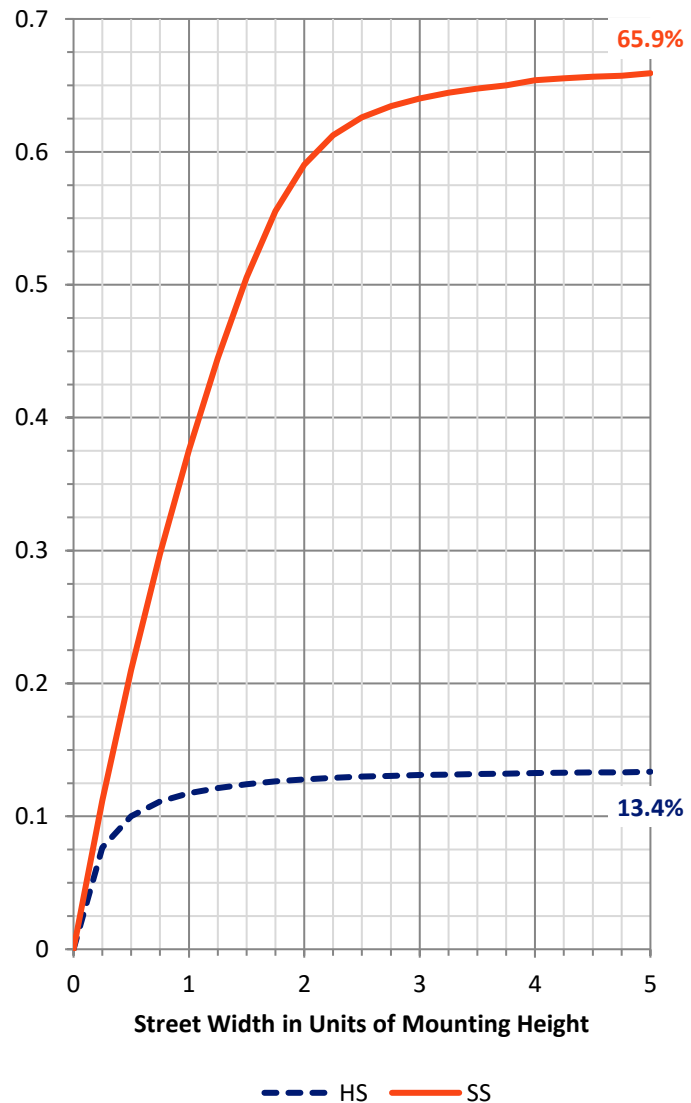
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	697.7	526.0	1223.7
	% Fixture	13.6	10.2	23.8
<b>Street Side</b>	Lumens	3391.3	526.0	3917.3
	% Fixture	66.0	10.2	76.2
<b>Total</b>	Lumens	4089.0	1052.0	5141.0
	% Fixture	79.5	20.5	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	2.0
10°-20°	229.3	4.5
20°-30°	290.6	5.7
30°-40°	370.9	7.2
40°-50°	514.5	10.0
50°-60°	760.6	14.8
60°-70°	1020.0	19.8
70°-80°	720.1	14.0
80°-90°	81.4	1.6
90°-100°	5.1	0.1
100°-110°	35.5	0.7
110°-120°	101.1	2.0
120°-130°	165.6	3.2
130°-140°	204.1	4.0
140°-150°	208.6	4.1
150°-160°	175.9	3.4
160°-170°	115.8	2.3
170°-180°	40.1	0.8
0°-90°	4089.0	79.5
0°-180°	5141.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P401131

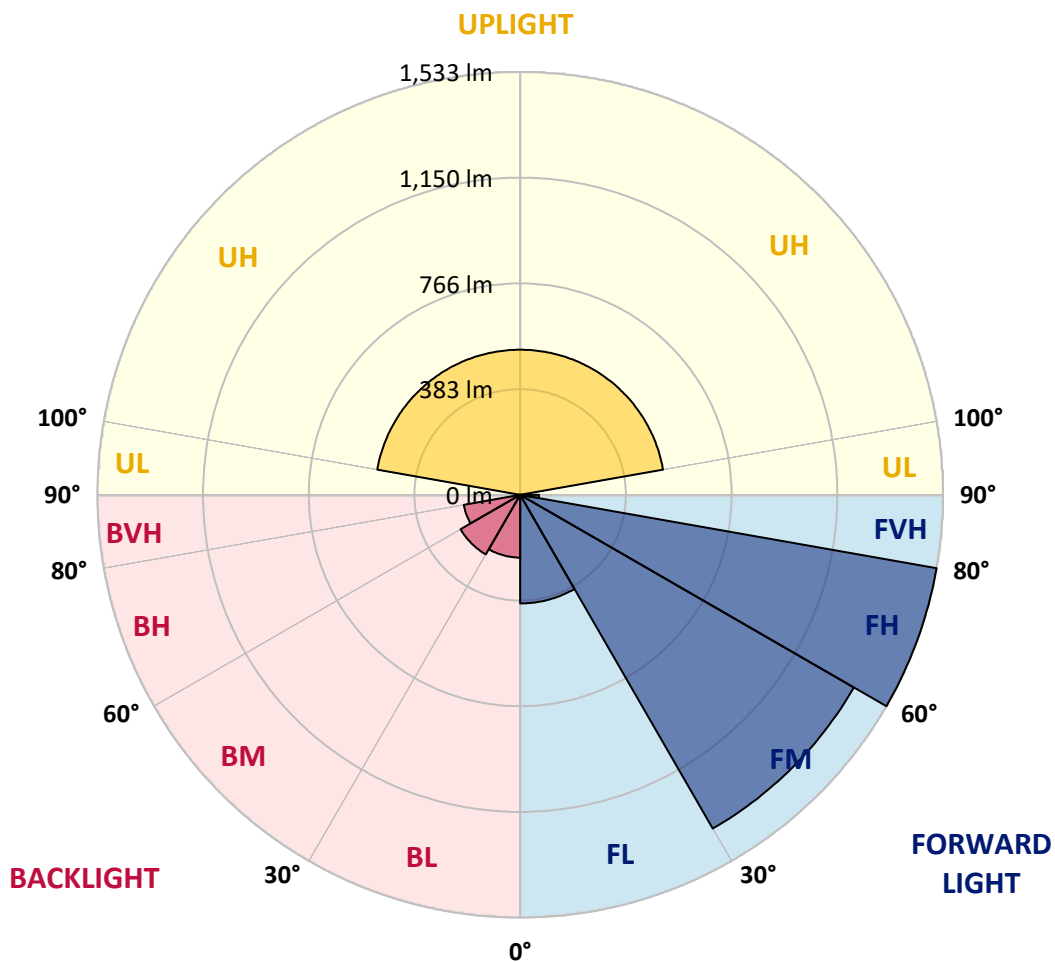
CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	393.9	7.7			
FM	(30°-60°)	1396.8	27.2			
FH	(60°-80°)	1532.7	29.8			G1/1800
FVH	(80°-90°)	67.9	1.3			G1/100
BL	(0°-30°)	227.6	4.4	B1/500		
BM	(30°-60°)	249.2	4.8	B1/1000		
BH	(60°-80°)	207.4	4.0	B1/500		G1/500
BVH	(80°-90°)	13.5	0.3			G1/100
UL	(90°-100°)	5.1	0.1		U1/10	
UH	(100°-180°)	526.0	10.2		U4/1000	

**BUG Rating: B1-U5-G1**

Type III Medium





REPORT NUMBER: P401131

CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7
5°	1111.1	1112.9	1115.6	1118.2	1121.2	1124.2	1127.1	1130.1	1136.3	1142.5	1144.3
10°	982.0	985.6	987.4	989.1	995.9	1002.8	1012.5	1022.3	1034.1	1046.0	1053.7
15°	877.2	877.2	879.8	882.5	892.6	902.7	913.3	924.0	942.9	961.9	978.2
20°	814.4	813.2	814.4	815.6	818.8	822.1	833.9	845.8	866.8	887.8	912.7
25°	812.6	812.6	810.0	807.3	802.3	797.2	800.8	804.3	816.5	828.6	854.4
30°	850.5	849.9	846.1	842.2	836.6	831.0	826.5	822.1	820.3	818.5	831.9
35°	905.0	903.2	904.1	905.0	902.9	900.9	895.8	890.8	882.5	874.2	871.3
40°	953.0	954.2	962.2	970.2	978.8	987.4	989.1	990.9	981.4	972.0	969.3
45°	1001.0	1008.7	1025.0	1041.2	1061.1	1080.9	1096.0	1111.1	1111.1	1111.1	1116.2
50°	1096.3	1105.2	1123.3	1141.3	1166.2	1191.1	1220.4	1249.7	1270.8	1291.8	1307.8
55°	1246.2	1257.4	1271.4	1285.3	1303.9	1322.6	1363.5	1404.3	1457.0	1509.8	1564.8
60°	1354.6	1368.8	1404.6	1440.5	1471.8	1503.2	1563.7	1624.1	1709.4	1794.6	1874.9
65°	895.5	895.0	956.3	1017.6	1144.3	1271.1	1521.0	1771.0	2121.3	2471.6	2519.9
70°	413.4	409.9	415.8	421.7	447.2	472.6	604.1	735.6	1413.5	2091.4	2907.0
75°	218.0	220.9	242.2	263.6	294.1	324.6	380.0	435.3	510.0	584.6	1516.3
80°	64.6	67.5	77.6	87.7	118.8	149.8	216.5	283.1	308.3	333.5	597.6
85°	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.2	15.7	30.2	55.4
90°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.0	3.0	3.3	3.6	4.0	4.3	4.3	4.3	4.3	4.3	4.3
100°	4.9	4.9	5.2	5.4	5.7	6.0	6.7	7.3	10.0	12.7	15.2
105°	12.7	13.3	14.9	16.3	19.1	21.8	25.5	29.1	33.6	38.1	40.9
110°	40.0	41.2	43.1	44.8	48.8	52.7	57.3	61.8	65.4	69.1	70.9
115°	84.8	84.2	86.7	89.1	92.7	96.3	99.1	101.8	103.7	105.4	107.0
120°	136.3	135.1	136.0	136.9	139.1	141.1	142.4	143.6	145.4	147.2	148.1
125°	180.5	178.1	178.8	179.3	180.3	181.2	183.0	184.8	186.3	187.8	188.8
130°	219.9	218.7	219.0	219.3	220.6	221.8	223.0	224.2	224.8	225.4	226.9
135°	259.9	258.1	258.1	258.1	260.0	261.7	262.7	263.6	264.2	264.8	266.6
140°	295.7	293.8	294.5	295.1	295.7	296.3	296.9	297.5	299.3	301.1	302.1
145°	333.2	330.8	330.2	329.6	330.6	331.4	332.3	333.2	333.5	333.8	335.4
150°	360.5	358.7	359.0	359.3	359.3	359.3	359.3	359.3	359.3	359.3	360.5
155°	381.1	378.7	378.7	378.7	379.3	379.9	380.8	381.7	381.1	380.5	379.9
160°	401.7	399.9	399.6	399.3	398.4	397.5	397.2	396.8	396.8	396.8	397.8
165°	412.6	410.8	410.2	409.6	409.6	409.6	408.7	407.7	407.7	407.7	407.4
170°	422.9	421.1	420.2	419.3	419.3	419.3	419.6	419.9	419.3	418.7	417.2
175°	424.1	422.9	422.6	422.3	421.7	421.1	419.9	418.7	418.4	418.0	418.0
180°	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1



REPORT NUMBER: P401131

CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7
5°	1146.1	1149.3	1153.8	1154.4	1155.0	1151.7	1148.5	1143.1	1139.6	1135.1	1130.7
10°	1061.4	1075.3	1088.6	1092.5	1096.3	1091.9	1087.4	1078.6	1066.1	1047.8	1029.4
15°	994.5	1012.0	1031.8	1042.7	1053.7	1049.2	1044.8	1022.3	992.1	952.7	913.3
20°	937.6	963.8	994.5	1014.0	1033.5	1024.1	1014.6	975.5	925.8	859.7	793.7
25°	880.1	915.6	959.5	993.0	1026.4	1007.5	988.5	927.5	847.0	755.5	664.0
30°	845.2	881.6	933.5	984.7	1035.9	1004.8	973.7	888.4	781.2	655.4	529.5
35°	868.3	896.0	942.9	1009.0	1075.0	1029.7	984.4	870.7	732.1	565.6	399.2
40°	966.6	983.2	1015.8	1090.1	1164.4	1103.4	1042.4	893.8	712.5	490.1	267.7
45°	1121.2	1131.3	1146.1	1230.8	1315.5	1245.3	1175.1	987.9	743.9	461.4	178.9
50°	1323.8	1329.4	1333.8	1418.2	1502.6	1439.9	1377.1	1158.5	836.9	491.3	145.7
55°	1619.9	1610.3	1583.2	1647.2	1711.1	1664.9	1618.7	1380.0	987.9	568.0	148.1
60°	1955.2	1946.7	1865.7	1906.3	1946.9	1903.6	1860.4	1614.6	1186.4	702.8	219.1
65°	2568.2	2453.7	2254.9	2253.1	2251.3	2216.7	2182.0	1963.4	1499.1	908.3	317.5
70°	3722.6	3706.1	3179.4	2960.6	2741.7	2556.3	2370.9	1954.6	1282.3	714.3	146.3
75°	2447.9	3114.7	3169.9	2827.0	2484.1	2114.2	1744.3	1327.3	790.7	450.1	109.6
80°	861.8	1339.9	1296.5	962.2	627.8	422.3	216.8	167.6	119.6	90.6	61.6
85°	80.6	92.7	55.7	40.6	25.5	23.4	21.3	21.3	23.1	21.6	20.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.3	4.6	4.9	4.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3
100°	17.6	16.6	15.8	14.9	13.9	12.7	11.5	11.5	11.5	12.7	13.9
105°	43.7	43.0	42.4	40.9	39.4	38.1	37.0	37.0	37.0	38.2	39.4
110°	72.7	73.0	73.3	72.7	72.1	71.2	70.3	70.9	70.3	71.2	72.1
115°	108.4	109.3	110.3	109.3	108.4	107.9	107.3	107.9	107.3	107.9	108.4
120°	149.0	150.3	151.4	150.0	148.4	147.8	147.2	147.2	147.2	147.8	148.4
125°	189.7	190.2	190.8	189.4	187.8	187.8	187.8	187.8	187.8	187.8	187.8
130°	228.4	229.6	230.8	230.8	230.8	230.2	229.6	230.2	229.6	230.2	230.8
135°	268.4	269.9	271.4	271.2	270.9	271.7	272.6	273.3	272.6	271.7	270.9
140°	303.0	303.5	304.1	304.7	305.4	306.9	308.4	309.6	308.4	306.9	305.4
145°	336.9	338.7	340.5	340.2	339.9	339.0	338.1	339.3	338.1	339.0	339.9
150°	361.7	362.6	363.5	364.4	365.3	366.3	367.2	369.6	367.2	366.3	365.3
155°	379.3	380.8	382.3	383.8	385.3	385.9	386.5	388.4	386.5	385.9	385.3
160°	398.7	400.5	402.3	401.4	400.5	400.2	399.9	403.5	399.9	400.2	400.5
165°	407.1	408.7	410.2	411.1	412.0	411.4	410.8	413.2	410.8	411.4	412.0
170°	415.6	416.6	417.4	419.0	420.5	421.1	421.7	424.7	421.7	421.1	420.5
175°	418.0	419.6	421.1	421.4	421.7	421.1	420.5	423.5	420.5	421.1	421.7
180°	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1





REPORT NUMBER: P401131

CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7	1172.7
5°	1122.4	1114.1	1104.9	1095.7	1083.6	1071.5	1069.7	1067.9	1058.1	1048.4	1042.7
10°	1003.9	978.5	954.5	930.5	905.9	881.3	858.5	835.7	820.9	806.1	786.6
15°	867.4	821.5	775.0	728.5	683.5	638.5	596.7	555.0	513.2	471.5	445.1
20°	721.7	649.7	581.9	514.1	448.1	382.0	332.3	282.5	263.9	245.2	236.9
25°	571.3	478.6	392.7	306.8	264.2	221.5	208.5	195.5	192.2	188.9	189.5
30°	412.5	295.6	242.5	189.5	177.4	165.2	162.9	160.5	161.4	162.3	164.7
35°	292.3	185.4	164.7	143.9	140.7	137.4	137.1	136.8	137.7	138.6	139.8
40°	203.2	138.6	132.1	125.6	124.1	122.6	121.7	120.8	119.9	119.1	118.5
45°	149.8	120.8	118.2	115.5	112.8	110.2	108.1	106.0	104.8	103.7	102.8
50°	129.1	112.5	109.9	107.2	102.8	98.3	96.0	93.6	92.7	91.8	92.1
55°	129.7	111.4	106.3	101.3	96.0	90.6	88.3	85.9	84.7	83.5	84.4
60°	165.8	112.5	104.5	96.5	91.2	85.9	82.6	79.4	76.7	74.0	74.3
65°	215.6	113.7	107.2	100.7	91.5	82.3	75.5	68.7	65.7	62.8	62.5
70°	123.8	101.3	100.4	99.5	91.8	84.1	73.7	63.4	59.2	55.1	53.9
75°	98.6	87.7	83.5	79.4	72.9	66.3	61.0	55.7	51.8	48.0	46.5
80°	60.7	59.8	54.2	48.6	44.7	40.9	40.0	39.1	38.5	37.9	37.3
85°	21.3	22.5	21.9	21.3	20.4	19.5	21.0	22.5	23.4	24.3	24.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	4.6	4.9	4.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.0
100°	14.9	15.8	16.7	17.6	15.2	12.7	10.0	7.3	6.7	6.0	5.7
105°	40.9	42.4	43.1	43.7	40.9	38.1	33.6	29.1	25.5	21.8	19.1
110°	72.7	73.3	73.0	72.7	70.9	69.1	65.4	61.8	57.3	52.7	48.8
115°	109.4	110.3	109.4	108.4	107.0	105.4	103.7	101.8	99.1	96.3	92.7
120°	150.0	151.4	150.3	149.0	148.1	147.2	145.4	143.6	142.4	141.1	139.1
125°	189.4	190.8	190.2	189.7	188.8	187.8	186.3	184.8	183.0	181.2	180.3
130°	230.8	230.8	229.6	228.4	226.9	225.4	224.8	224.2	223.0	221.8	220.6
135°	271.2	271.4	270.0	268.4	266.6	264.8	264.2	263.6	262.7	261.7	260.0
140°	304.8	304.1	303.5	303.0	302.1	301.1	299.3	297.5	296.9	296.3	295.7
145°	340.2	340.5	338.7	336.9	335.4	333.8	333.5	333.2	332.3	331.4	330.6
150°	364.4	363.5	362.7	361.7	360.5	359.3	359.3	359.3	359.3	359.3	359.3
155°	383.9	382.3	380.8	379.3	379.9	380.5	381.1	381.7	380.8	379.9	379.3
160°	401.4	402.3	400.5	398.7	397.8	396.8	396.8	396.8	397.2	397.5	398.4
165°	411.1	410.2	408.7	407.1	407.4	407.7	407.7	407.7	408.7	409.6	409.6
170°	419.0	417.4	416.6	415.6	417.2	418.7	419.3	419.9	419.6	419.3	419.3
175°	421.4	421.1	419.6	418.0	418.0	418.0	418.4	418.7	419.9	421.1	421.7
180°	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1	424.1



REPORT NUMBER: P401131

CATALOG NUMBER: ENV-SA1B-740-U-SL3-ULG

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1172.7	1172.7	1172.7	1172.7
5°	1037.1	1035.3	1033.5	1037.7
10°	767.0	761.1	755.2	751.6
15°	418.8	407.5	396.2	380.3
20°	228.6	226.8	225.1	223.3
25°	190.1	191.3	192.5	193.1
30°	167.0	169.4	171.8	173.5
35°	141.0	141.3	141.6	141.0
40°	117.9	117.9	117.9	117.3
45°	101.9	102.2	102.5	101.9
50°	92.4	94.2	96.0	96.5
55°	85.3	87.1	88.8	89.4
60°	74.6	75.5	76.4	77.0
65°	62.2	62.5	62.8	62.8
70°	52.7	51.8	50.9	50.3
75°	45.0	43.8	42.6	42.1
80°	36.7	35.5	34.4	34.4
85°	25.5	24.3	23.1	21.3
90°	0.0	0.0	0.0	0.0
95°	3.6	3.3	3.0	3.0
100°	5.4	5.2	4.9	4.9
105°	16.3	14.9	13.3	12.7
110°	44.8	43.1	41.2	40.0
115°	89.1	86.7	84.2	84.8
120°	136.9	136.0	135.1	136.3
125°	179.3	178.8	178.1	180.5
130°	219.3	219.0	218.7	219.9
135°	258.1	258.1	258.1	259.9
140°	295.1	294.5	293.8	295.7
145°	329.6	330.2	330.8	333.2
150°	359.3	359.0	358.7	360.5
155°	378.7	378.7	378.7	381.1
160°	399.3	399.6	399.9	401.7
165°	409.6	410.2	410.8	412.6
170°	419.3	420.2	421.1	422.9
175°	422.3	422.6	422.9	424.1
180°	424.1	424.1	424.1	424.1

(END OF REPORT)