

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: P160104

Luminaire Tested: **ENV-E01-LED-E1-GZW-7050-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160104
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P20107) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-E01-LED-E1-GZW-7050-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3173 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type I - Short - Semi-Cutoff
BUG Rating: B2 - U3 - G2

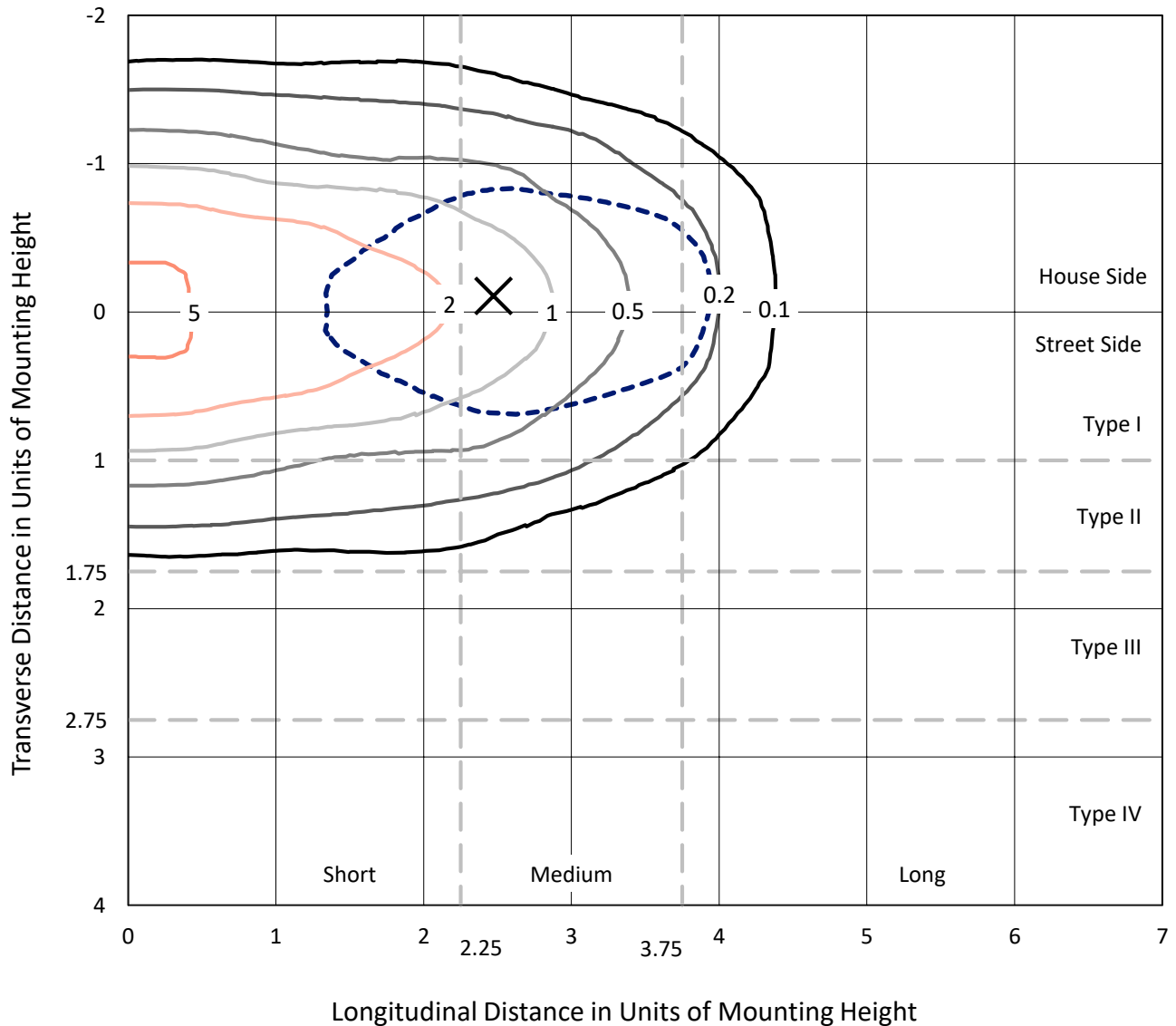
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

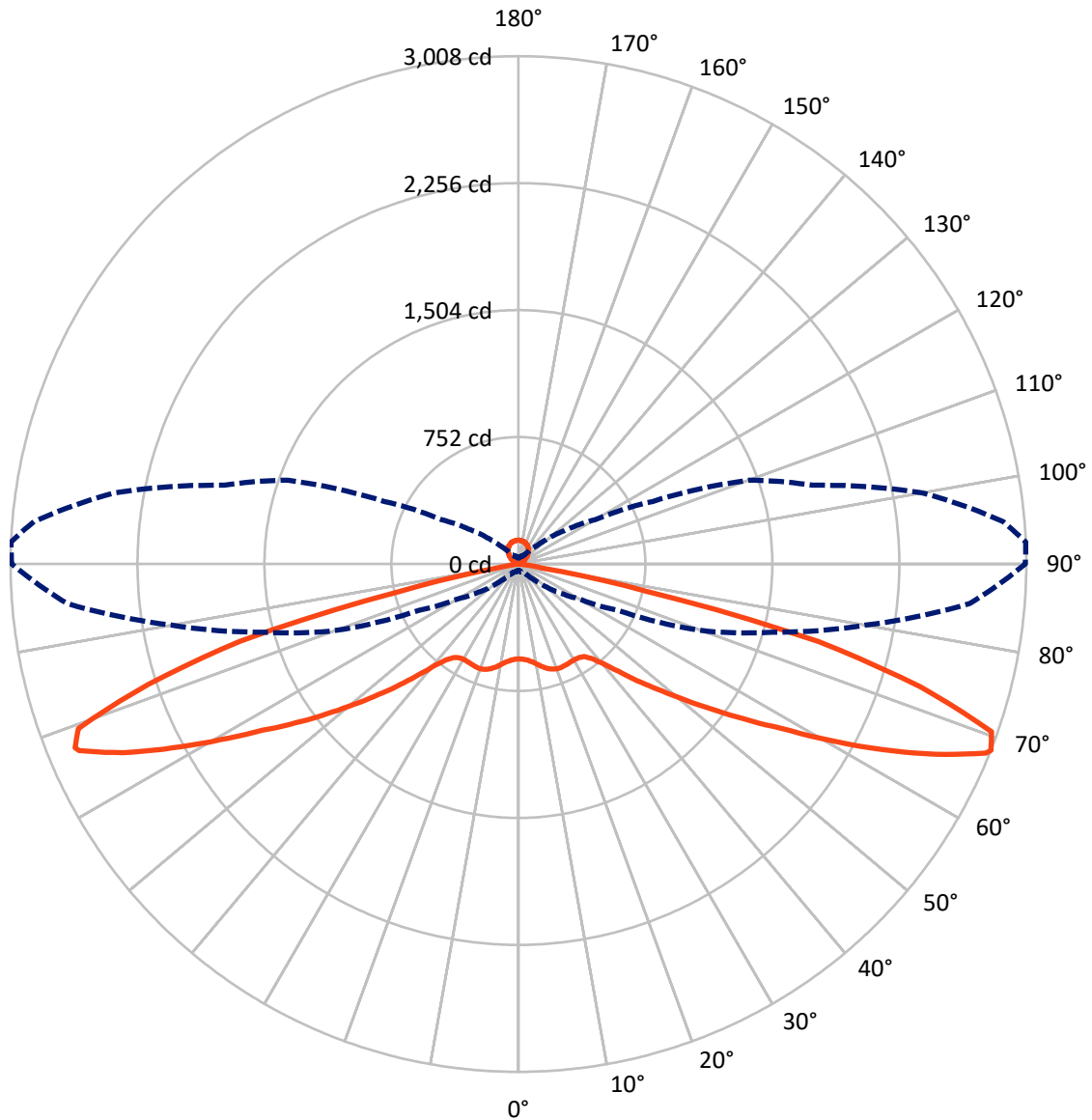
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type I - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92.5-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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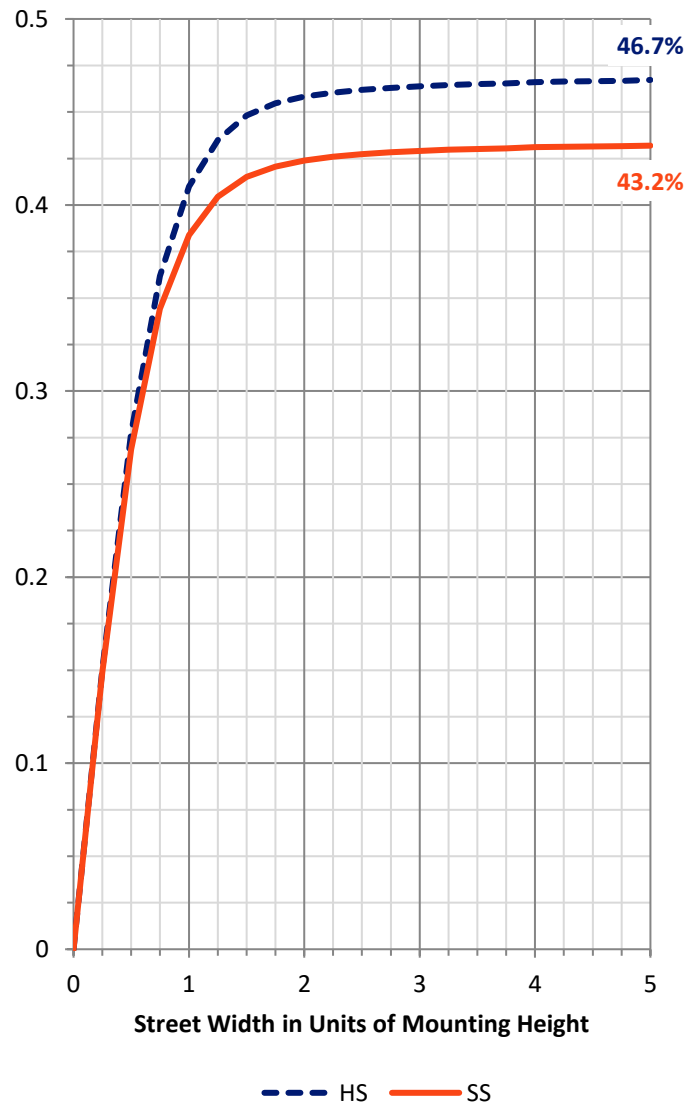
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1492.8	157.7	1650.5
	% Fixture	47.0	5.0	52.0
Street Side	Lumens	1364.8	157.7	1522.5
	% Fixture	43.0	5.0	48.0
Total	Lumens	2857.5	315.5	3173.0
	% Fixture	90.1	9.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	1.7
10°-20°	174.7	5.5
20°-30°	283.4	8.9
30°-40°	352.3	11.1
40°-50°	437.9	13.8
50°-60°	538.7	17.0
60°-70°	636.9	20.1
70°-80°	356.7	11.2
80°-90°	21.7	0.7
90°-100°	1.3	0.0
100°-110°	12.3	0.4
110°-120°	25.2	0.8
120°-130°	43.0	1.4
130°-140°	60.0	1.9
140°-150°	65.4	2.1
150°-160°	56.9	1.8
160°-170°	38.2	1.2
170°-180°	13.3	0.4
0°-90°	2857.5	90.1
0°-180°	3173.0	100.0



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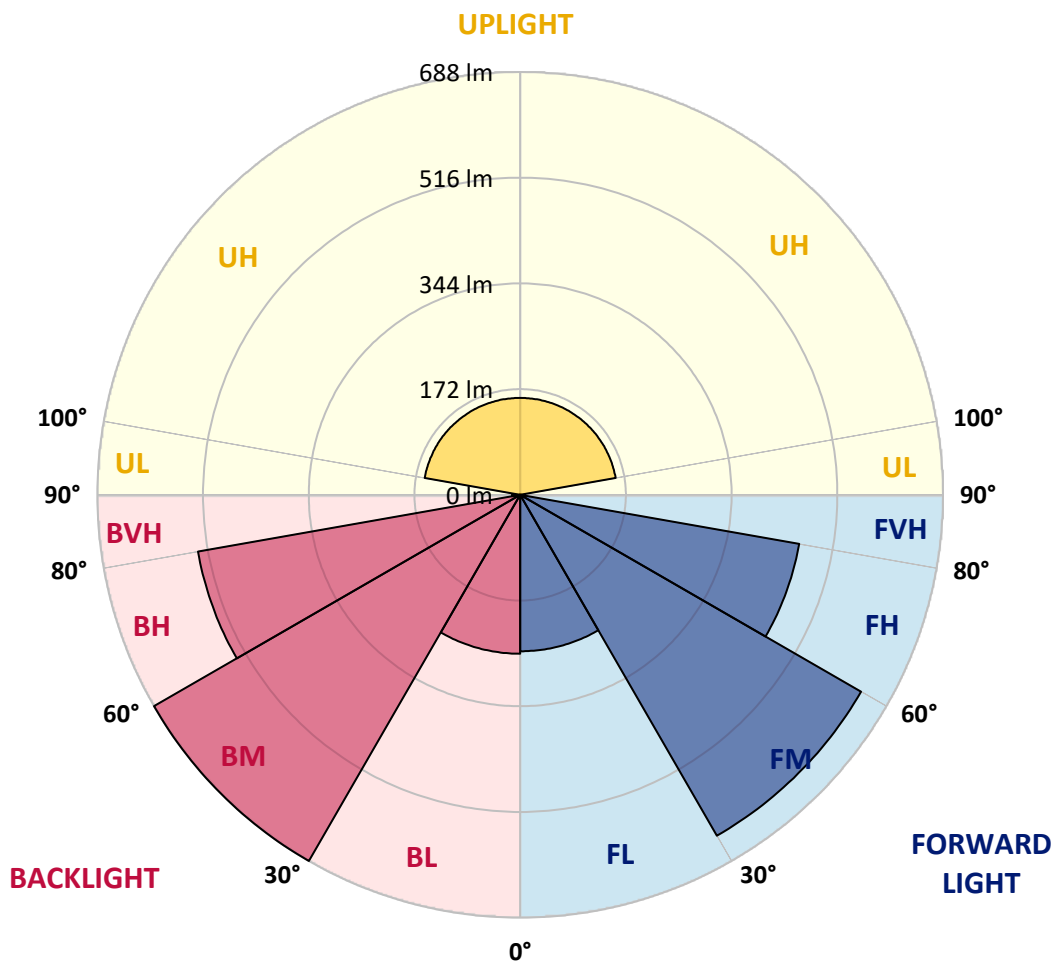
CATALOG NUMBER: ENV-E01-LED-E1-GZW-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	254.6	8.0			
FM	(30°-60°)	640.7	20.2			
FH	(60°-80°)	461.2	14.5			G0/660
FVH	(80°-90°)	8.2	0.3			G0/10
BL	(0°-30°)	258.6	8.2	B1/500		
BM	(30°-60°)	688.2	21.7	B1/1000		
BH	(60°-80°)	532.5	16.8	B2/1000		G2/1000
BVH	(80°-90°)	13.4	0.4			G1/100
UL	(90°-100°)	1.3	0.0		U1/10	
UH	(100°-180°)	157.7	5.0		U3/500	

BUG Rating: B2-U3-G2

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8
2.5°	564.4	564.4	564.4	564.9	565.4	566.4	565.9	566.9	565.4	567.4	567.4
5°	571.0	571.5	572.1	572.1	573.1	573.6	573.1	574.6	573.1	575.1	575.6
7.5°	577.2	577.2	577.7	578.2	579.2	580.3	580.8	582.3	581.8	583.9	585.9
10°	581.8	581.3	581.8	582.8	585.4	586.9	589.0	591.0	592.1	594.1	597.2
12.5°	583.9	583.3	584.9	587.4	590.0	593.1	596.2	600.8	603.9	606.9	611.6
15°	582.8	582.8	584.9	588.0	593.1	598.7	604.4	610.5	616.2	622.8	627.5
17.5°	573.1	574.1	577.2	582.3	590.0	598.7	608.0	618.2	627.5	636.7	642.9
20°	555.6	556.7	562.3	568.5	578.7	591.5	605.9	620.8	635.2	647.5	656.2
22.5°	534.1	533.1	538.2	546.4	560.3	575.6	594.1	616.2	635.7	653.1	665.4
25°	500.7	500.7	506.4	516.6	531.5	550.5	573.1	601.3	627.5	650.0	667.5
27.5°	465.3	465.9	473.0	481.8	498.7	516.6	542.8	575.6	607.5	637.2	662.9
30°	429.9	431.5	437.6	446.4	464.3	483.3	510.0	542.3	576.7	613.6	648.5
32.5°	393.5	395.6	400.7	411.0	430.5	451.5	478.7	507.4	540.2	580.8	625.9
35°	359.1	360.7	364.8	377.1	397.1	419.7	449.9	477.7	511.0	548.5	598.2
37.5°	326.8	328.4	333.0	345.8	365.8	388.4	418.1	449.4	483.8	520.7	570.0
40°	291.9	295.5	301.7	314.0	332.5	358.1	388.4	421.2	457.6	499.7	550.0
42.5°	260.1	263.2	268.8	279.6	298.1	325.3	357.1	390.9	430.5	478.2	535.1
45°	230.9	233.4	239.1	248.8	268.3	289.9	318.6	354.0	395.1	449.9	519.2
47.5°	202.7	205.2	211.4	223.2	239.1	260.1	285.8	317.1	355.0	411.0	488.9
50°	174.4	177.0	183.2	195.0	210.4	230.9	254.5	282.7	320.1	368.4	444.8
52.5°	143.7	146.2	152.4	164.2	179.1	198.6	222.7	251.9	286.8	332.5	395.6
55°	110.3	113.9	119.5	129.3	145.2	164.7	188.8	220.6	256.0	300.6	359.1
57.5°	79.5	82.1	88.8	96.5	109.8	130.3	151.9	184.7	224.2	269.9	327.8
60°	58.0	60.5	65.2	71.3	80.5	95.4	114.4	145.2	188.8	240.1	299.6
62.5°	48.2	50.3	54.9	61.1	66.2	73.4	84.7	108.3	150.8	207.8	270.4
65°	42.6	44.1	48.2	54.4	58.5	61.6	66.2	82.1	117.0	172.9	241.6
67.5°	38.0	39.5	42.6	47.7	52.3	53.9	56.4	67.2	91.8	140.6	211.4
68°	37.5	39.0	41.6	46.2	50.8	52.3	54.9	65.7	89.3	133.9	203.2
70°	34.9	35.9	38.5	42.1	45.7	46.7	49.8	60.5	83.6	117.0	164.7
72.5°	31.8	32.3	33.9	36.9	40.5	41.0	44.1	52.8	65.7	86.2	122.6
75°	26.7	27.2	29.2	31.8	33.9	34.9	35.9	40.0	44.6	53.4	72.3
77.5°	20.5	21.5	23.1	24.6	27.7	28.7	27.7	30.8	32.8	36.4	44.1
80°	12.3	12.3	13.9	15.4	16.9	19.5	18.5	21.5	23.1	25.1	29.8
82.5°	2.1	2.6	2.6	3.6	4.6	5.6	6.2	7.7	9.7	11.8	15.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7



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CATALOG NUMBER: ENV-E01-LED-E1-GZW-7050-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1
152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7
155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7
157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0
160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0
167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1
170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6
175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1
180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8



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CATALOG NUMBER: ENV-E01-LED-E1-GZW-7050-ULG

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
0°	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8
2.5°	564.4	565.9	565.9	565.4	565.4	565.4	563.8	564.4	564.9	566.4	564.4
5°	572.6	574.1	573.6	573.1	573.1	573.1	571.0	571.5	572.1	573.1	571.0
7.5°	583.3	584.9	585.4	585.4	585.4	586.4	583.3	583.3	584.4	585.4	582.3
10°	599.2	599.2	600.8	601.8	602.8	603.9	601.8	600.8	602.8	602.8	599.2
12.5°	614.1	615.2	617.7	619.8	620.3	622.3	622.3	621.8	623.4	622.8	618.7
15°	631.1	632.1	634.1	636.7	637.2	639.3	639.3	639.8	641.3	642.3	636.2
17.5°	647.0	648.5	648.5	649.0	650.0	651.6	652.6	653.1	654.7	655.7	649.5
20°	660.3	661.8	659.3	657.2	655.2	656.2	658.2	660.3	661.3	661.8	654.1
22.5°	670.6	671.1	667.0	661.3	655.7	655.2	657.7	661.3	662.4	661.8	651.1
25°	676.2	677.7	673.6	664.9	654.7	651.1	653.6	658.2	660.3	658.2	645.4
27.5°	676.2	681.8	679.8	670.6	656.7	647.0	648.5	655.7	657.2	654.7	639.8
30°	671.1	682.9	685.4	679.8	665.4	648.5	646.4	654.7	656.7	652.1	637.2
32.5°	660.8	682.4	692.6	693.1	681.8	660.8	650.6	658.8	660.3	654.7	642.3
35°	646.4	681.8	701.9	711.6	708.0	687.0	669.0	674.2	673.1	667.0	662.4
37.5°	630.5	681.8	715.2	737.8	746.0	735.2	711.6	709.0	711.6	702.4	699.8
40°	613.1	683.4	734.2	774.2	798.8	802.4	781.4	774.2	777.3	768.6	772.1
42.5°	602.8	685.4	759.3	816.8	864.5	900.9	891.7	870.1	868.6	869.6	877.3
45°	597.7	690.6	784.5	865.0	931.7	1012.8	1021.5	983.0	985.1	990.7	1002.5
47.5°	592.1	700.3	813.7	915.3	1005.1	1119.0	1161.6	1109.7	1105.6	1126.7	1130.3
50°	571.5	712.1	847.1	971.7	1082.0	1238.5	1305.7	1252.9	1253.9	1273.4	1266.2
52.5°	524.3	712.6	882.5	1028.2	1159.0	1356.5	1458.6	1423.7	1421.2	1440.1	1402.2
55°	459.2	680.3	911.2	1083.6	1231.8	1466.3	1616.6	1624.3	1619.2	1622.3	1540.2
57.5°	406.9	600.8	914.3	1130.3	1293.4	1570.5	1778.8	1834.2	1834.7	1821.3	1675.6
60°	373.0	511.5	874.2	1168.7	1365.2	1703.3	1990.1	2114.3	2121.5	2067.1	1856.7
62.5°	344.8	466.4	791.6	1208.2	1447.8	1837.8	2217.9	2422.1	2422.6	2331.8	2056.3
65°	322.7	441.7	700.8	1193.4	1511.5	1968.1	2459.1	2732.0	2718.7	2618.6	2245.6
67.5°	298.1	419.7	658.8	1170.3	1565.8	2088.6	2671.5	2984.9	2988.5	2865.4	2421.1
68°	293.0	411.5	648.0	1150.8	1559.7	2084.5	2682.8	3001.9	3008.0	2881.3	2428.8
70°	252.4	359.1	563.8	1005.1	1448.9	1973.2	2610.9	2954.2	2973.1	2831.5	2343.1
72.5°	168.3	248.3	376.6	710.1	1116.4	1567.9	2137.4	2474.5	2490.4	2394.9	1946.0
75°	106.7	150.8	200.1	409.4	750.1	1125.1	1611.5	1808.0	1834.2	1802.9	1457.1
77.5°	64.6	105.7	123.1	198.6	395.1	526.4	728.0	740.8	770.6	752.1	755.2
80°	42.6	73.4	89.8	134.9	137.0	113.4	128.8	129.8	137.5	146.2	152.4
82.5°	24.1	44.6	62.6	92.3	81.6	42.1	35.9	37.5	38.5	39.5	46.7
85°	3.6	8.2	17.4	28.7	29.2	13.9	12.8	11.8	12.3	13.3	16.9
87.5°	0.0	0.0	0.0	0.0	0.5	1.0	1.5	1.5	1.5	3.1	3.1
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7



REPORT NUMBER: P160104

CATALOG NUMBER: ENV-E01-LED-E1-GZW-7050-ULG

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1
152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7
155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7
157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0
160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5
165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0
167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1
170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6
175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1
180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8



REPORT NUMBER: P160104

CATALOG NUMBER: ENV-E01-LED-E1-GZW-7050-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8	561.8
2.5°	563.8	563.3	563.8	562.3	563.8	563.3	563.3	563.3	562.8	563.3	563.3
5°	570.0	570.0	570.0	569.0	570.0	570.0	570.0	570.0	569.5	570.0	570.5
7.5°	581.8	581.8	581.3	579.7	580.8	580.8	580.3	579.2	578.2	578.7	578.2
10°	597.7	598.7	595.7	595.7	594.1	592.1	590.5	589.0	588.5	587.4	585.4
12.5°	617.2	616.7	612.6	611.0	610.0	605.9	602.8	601.3	599.2	596.7	593.6
15°	634.6	632.6	629.5	628.0	626.4	621.8	617.7	614.1	611.6	608.0	603.4
17.5°	646.4	644.4	642.9	642.3	642.3	638.2	634.6	630.0	624.4	617.7	610.0
20°	649.0	649.0	649.5	652.6	655.7	654.1	650.0	644.4	636.2	625.4	613.6
22.5°	645.4	647.5	652.1	659.8	666.5	667.0	662.9	654.7	640.8	625.4	608.0
25°	639.3	644.9	654.7	665.4	674.7	674.7	667.5	655.7	636.7	614.6	591.5
27.5°	636.2	647.5	661.3	672.6	678.8	675.2	662.4	645.4	619.3	591.0	564.4
30°	639.8	657.2	672.1	679.8	680.8	669.0	647.0	621.8	591.0	557.2	530.0
32.5°	653.1	674.2	685.4	687.0	679.8	657.7	623.4	588.5	554.1	522.8	495.1
35°	680.3	698.3	702.4	696.2	678.3	641.3	592.1	551.0	520.2	490.5	461.7
37.5°	724.4	732.6	724.9	707.0	673.1	621.3	563.3	523.3	490.5	461.2	429.4
40°	787.0	777.8	755.7	720.3	667.5	599.2	540.8	500.7	464.3	432.0	400.2
42.5°	865.0	832.7	787.0	735.7	661.3	584.9	524.3	478.2	438.1	402.2	368.9
45°	952.2	892.2	830.1	753.2	659.3	576.2	504.8	450.5	403.8	367.9	335.0
47.5°	1041.0	955.3	873.7	772.1	661.8	560.8	475.1	414.0	365.3	330.4	299.6
50°	1130.8	1026.1	924.5	796.8	660.3	529.5	434.6	372.5	327.3	296.0	268.3
52.5°	1221.1	1101.5	976.9	818.8	639.8	480.2	389.9	337.1	293.5	263.2	236.0
55°	1309.8	1174.9	1028.2	825.5	580.3	428.4	352.5	301.7	258.6	227.8	198.0
57.5°	1394.0	1241.1	1064.1	786.5	506.9	387.9	319.1	269.4	223.7	188.3	159.0
60°	1498.6	1304.2	1074.3	692.1	448.4	354.0	288.8	231.9	180.6	143.1	116.5
62.5°	1613.0	1389.9	1058.4	601.8	414.0	324.2	251.4	187.8	138.0	101.6	81.6
65°	1697.2	1425.3	977.9	553.6	392.5	295.0	211.4	145.7	95.4	69.8	62.1
67.5°	1809.0	1460.1	894.8	530.0	368.9	257.0	163.2	105.2	73.9	58.0	53.4
68°	1801.3	1450.4	877.3	523.8	361.7	243.7	153.9	103.1	71.8	56.4	51.8
70°	1697.2	1330.9	761.9	464.3	299.6	189.8	132.4	93.9	66.2	51.3	47.2
72.5°	1392.4	1032.3	546.4	305.8	195.0	139.0	98.0	70.8	54.9	45.1	42.1
75°	985.6	645.4	274.0	176.0	122.6	80.5	55.4	45.7	40.5	35.9	35.9
77.5°	554.1	337.6	144.7	120.6	69.3	46.7	36.9	34.4	31.8	29.2	32.3
80°	180.6	176.0	106.7	82.6	48.2	34.4	28.7	27.2	25.7	23.1	28.7
82.5°	97.5	120.6	77.0	59.0	35.4	24.6	21.5	22.1	20.0	18.0	21.5
85°	43.6	57.5	51.3	41.0	22.1	13.9	11.3	13.3	11.8	10.8	10.3
87.5°	16.9	28.2	20.5	11.8	5.1	3.1	3.1	2.6	2.1	2.1	1.5
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7



REPORT NUMBER: P160104
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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	0°
112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	2.5°
115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	5°
117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	7.5°
120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	10°
122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	12.5°
125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	15°
127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	17.5°
130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	20°
132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	22.5°
135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	25°
137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	27.5°
140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	30°
142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	32.5°
145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	35°
147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	37.5°
150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	40°
152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	42.5°
155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	45°
157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	47.5°
160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	50°
162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	52.5°
165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	55°
167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	57.5°
170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	60°
172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	62.5°
175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	65°
177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	67.5°
180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	68°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

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REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
561.8	561.8	561.8	561.8	561.8
561.8	561.8	561.3	560.8	559.7
569.0	569.0	568.5	567.9	566.9
576.7	576.2	575.6	575.1	574.1
584.9	583.9	583.9	584.4	583.9
593.1	591.5	590.0	589.5	591.0
601.3	598.2	595.7	595.1	595.1
605.9	600.8	596.2	594.6	594.6
604.9	595.7	589.5	586.4	586.9
595.1	582.3	574.1	570.0	568.5
574.6	559.2	549.0	543.3	543.8
543.8	527.4	516.1	513.1	510.0
507.4	491.0	479.7	473.0	473.5
471.5	453.5	443.3	435.6	434.6
437.1	417.6	405.3	399.7	398.6
403.3	382.7	371.5	366.3	362.7
372.0	353.5	340.2	332.5	330.9
341.2	320.1	306.8	301.2	299.6
306.3	286.3	274.5	269.9	268.8
275.0	256.0	246.3	240.1	238.1
244.7	226.8	215.5	209.8	208.8
212.9	195.0	183.2	178.5	174.4
178.0	159.0	147.2	139.0	136.0
137.5	120.6	108.3	102.6	97.0
98.5	83.6	73.9	69.3	65.2
69.8	60.0	53.9	49.3	46.7
57.5	52.8	46.2	42.1	40.0
50.8	46.2	41.0	37.5	35.9
49.8	45.1	40.0	36.4	35.4
45.7	41.0	36.4	33.9	32.8
40.5	36.9	32.8	30.3	29.2
34.9	31.3	28.7	26.7	25.1
30.8	25.7	24.6	22.6	21.5
25.7	23.1	21.0	19.5	18.5
21.0	17.4	14.9	13.3	12.8
11.8	10.8	8.7	6.7	6.2
1.0	0.5	0.5	0.0	0.0
0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1
0.5	0.5	0.5	0.5	0.5
1.5	1.5	1.5	1.5	1.5
5.0	5.0	5.0	5.0	5.0
8.8	8.8	8.8	8.8	8.8
11.8	11.8	11.8	11.8	11.8
14.7	14.7	14.7	14.7	14.7

CANDELA DISTRIBUTION:

	160°
110°	17.8
112.5°	21.2
115°	25.0
117.5°	29.5
120°	34.8
122.5°	40.9
125°	47.8
127.5°	55.3
130°	63.0
132.5°	70.5
135°	77.9
137.5°	85.3
140°	92.5
142.5°	99.2
145°	104.9
147.5°	110.1
150°	115.1
152.5°	119.7
155°	123.7
157.5°	127.0
160°	130.3
162.5°	133.5
165°	136.0
167.5°	137.1
170°	137.4
172.5°	138.6
175°	140.5
177.5°	141.1
180°	140.8

'160104

ENV-E01-LED-E1-GZW-7050-ULG

TION (continued):

165°	170°	175°	180°
17.8	17.8	17.8	17.8
21.2	21.2	21.2	21.2
25.0	25.0	25.0	25.0
29.5	29.5	29.5	29.5
34.8	34.8	34.8	34.8
40.9	40.9	40.9	40.9
47.8	47.8	47.8	47.8
55.3	55.3	55.3	55.3
63.0	63.0	63.0	63.0
70.5	70.5	70.5	70.5
77.9	77.9	77.9	77.9
85.3	85.3	85.3	85.3
92.5	92.5	92.5	92.5
99.2	99.2	99.2	99.2
104.9	104.9	104.9	104.9
110.1	110.1	110.1	110.1
115.1	115.1	115.1	115.1
119.7	119.7	119.7	119.7
123.7	123.7	123.7	123.7
127.0	127.0	127.0	127.0
130.3	130.3	130.3	130.3
133.5	133.5	133.5	133.5
136.0	136.0	136.0	136.0
137.1	137.1	137.1	137.1
137.4	137.4	137.4	137.4
138.6	138.6	138.6	138.6
140.5	140.5	140.5	140.5
141.1	141.1	141.1	141.1
140.8	140.8	140.8	140.8

(END OF REPORT)