

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: P160109

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160109
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-SLL-7050-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2813.6 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U3 - G1

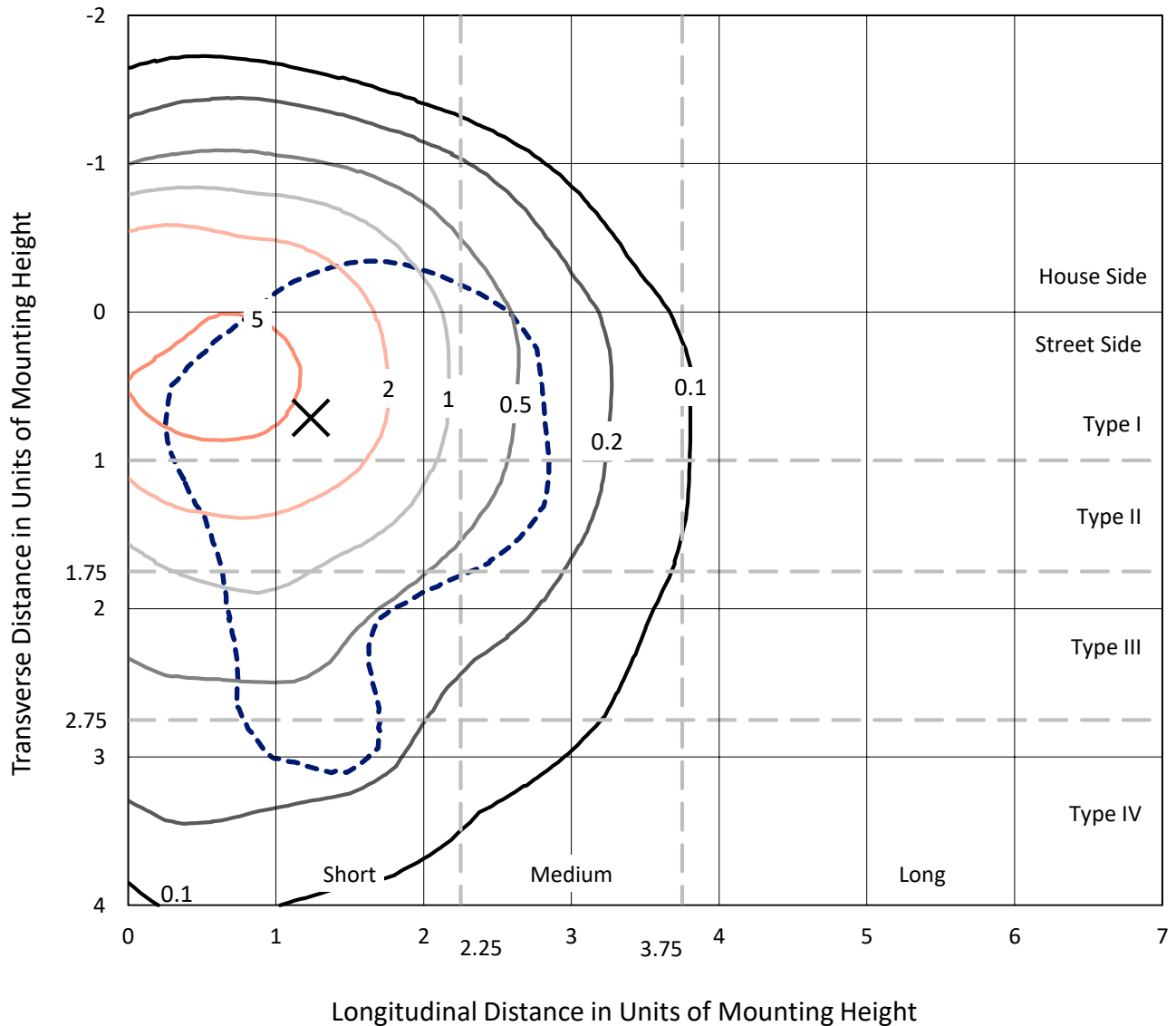
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

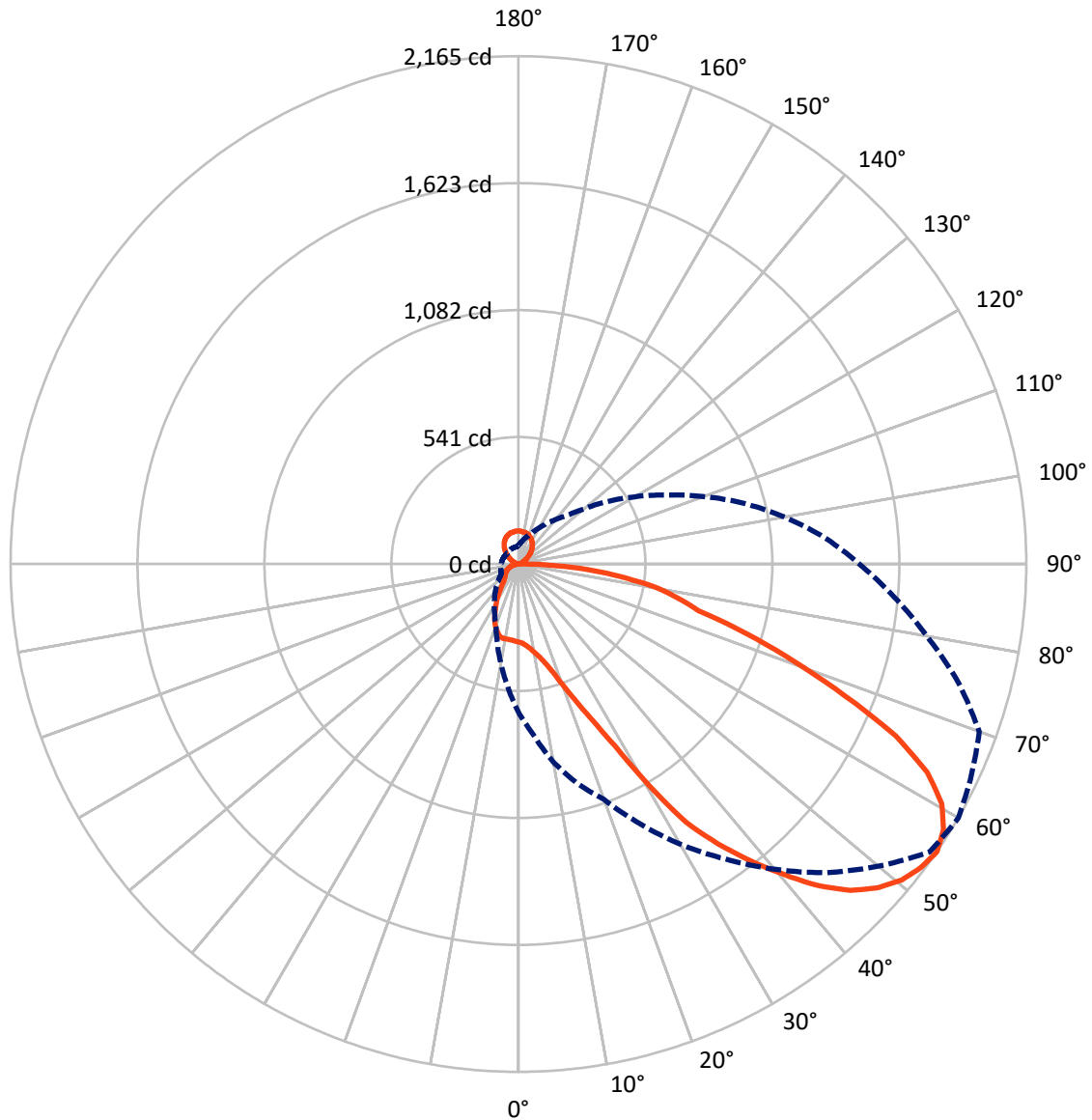
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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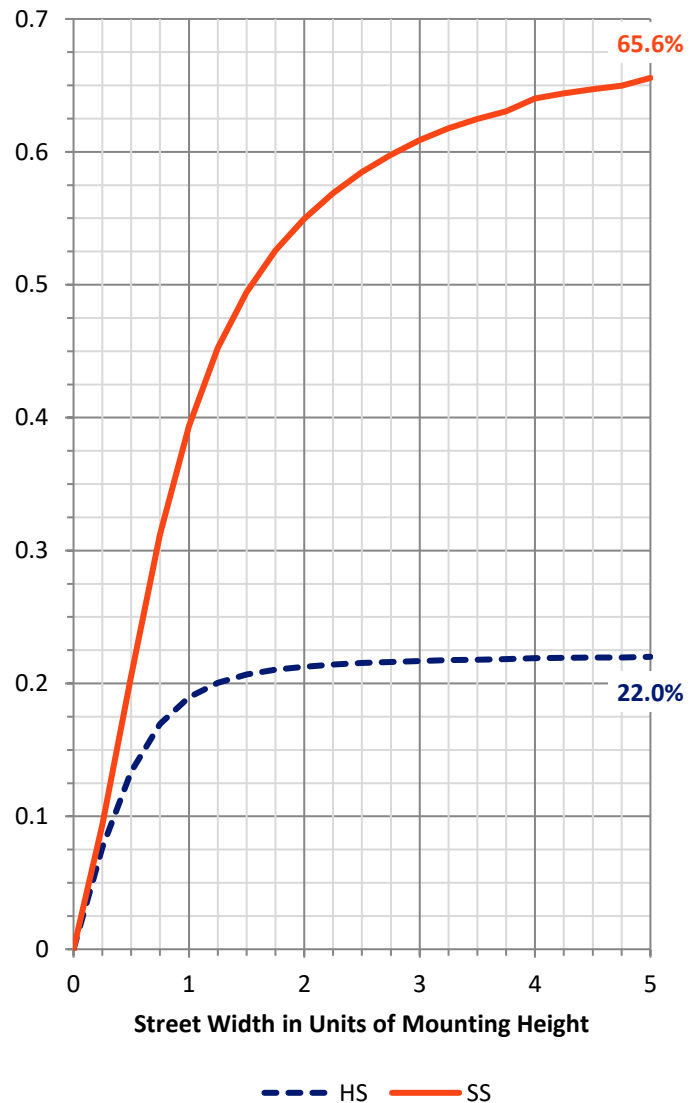
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	624.4	157.7	782.2
	% Fixture	22.2	5.6	27.8
Street Side	Lumens	1873.7	157.7	2031.5
	% Fixture	66.6	5.6	72.2
Total	Lumens	2498.2	315.5	2813.6
	% Fixture	88.8	11.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	1.2
10°-20°	107.8	3.8
20°-30°	209.2	7.4
30°-40°	328.8	11.7
40°-50°	439.5	15.6
50°-60°	515.6	18.3
60°-70°	489.2	17.4
70°-80°	295.3	10.5
80°-90°	80.0	2.8
90°-100°	1.3	0.0
100°-110°	12.3	0.4
110°-120°	25.2	0.9
120°-130°	43.0	1.5
130°-140°	60.0	2.1
140°-150°	65.4	2.3
150°-160°	56.9	2.0
160°-170°	38.2	1.4
170°-180°	13.3	0.5
0°-90°	2498.2	88.8
0°-180°	2813.6	100.0



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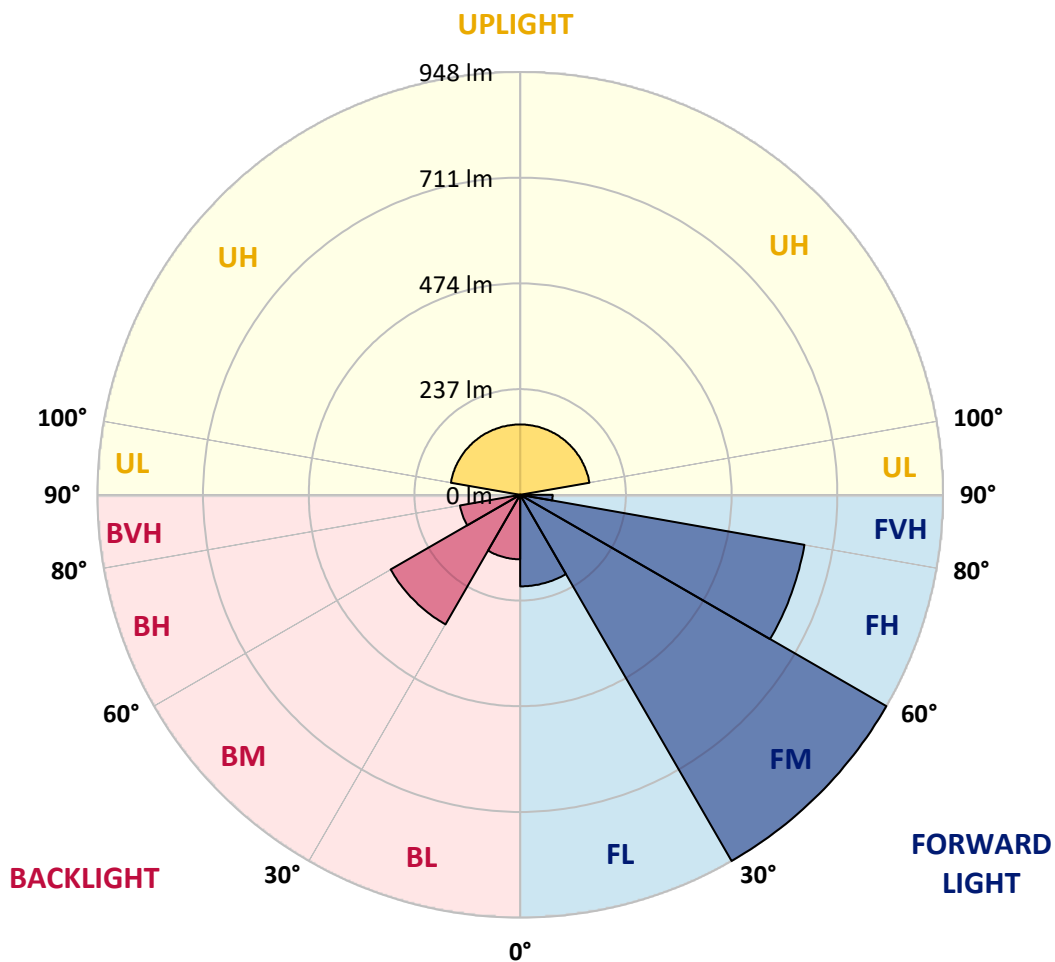
CATALOG NUMBER: ENV-E01-LED-E1-SLL-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	205.3	7.3			
FM	(30°-60°)	948.3	33.7			
FH	(60°-80°)	647.4	23.0			G0/660
FVH	(80°-90°)	72.7	2.6			G1/100
BL	(0°-30°)	144.5	5.1	B1/500		
BM	(30°-60°)	335.6	11.9	B1/1000		
BH	(60°-80°)	137.1	4.9	B1/500		G1/500
BVH	(80°-90°)	7.3	0.3			G0/10
UL	(90°-100°)	1.3	0.0		U1/10	
UH	(100°-180°)	157.7	5.6		U3/500	

BUG Rating: B1-U3-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0
2.5°	340.2	339.6	340.2	339.6	339.6	339.6	340.2	339.6	338.1	338.1	338.6
5°	348.4	348.4	348.4	348.9	348.9	349.4	350.4	349.4	348.9	351.4	349.4
7.5°	358.1	358.1	359.6	360.2	361.7	361.7	363.8	363.2	365.3	366.8	365.3
10°	373.0	371.5	375.0	375.0	379.1	379.7	381.7	382.2	385.8	388.9	386.3
12.5°	394.5	395.6	401.7	402.7	407.9	407.9	407.9	409.9	412.5	414.5	412.0
15°	433.0	435.1	443.3	443.8	452.5	448.9	453.0	453.5	453.0	454.6	451.0
17.5°	482.8	488.4	500.2	502.8	506.9	514.1	514.1	513.1	515.6	517.2	507.4
20°	543.8	553.6	566.9	572.1	583.3	595.7	595.1	593.1	593.6	589.5	578.7
22.5°	612.6	634.6	656.7	664.9	673.1	688.5	698.3	695.2	697.8	688.5	678.8
25°	691.1	727.0	760.3	772.7	802.4	829.6	833.7	831.7	820.4	811.6	801.9
27.5°	739.3	786.5	832.2	863.5	914.3	957.9	966.6	981.0	984.5	991.7	968.1
30°	749.6	808.6	865.5	913.2	974.3	1026.1	1083.6	1126.2	1154.9	1177.5	1162.1
32.5°	756.8	823.4	886.6	946.6	996.9	1072.3	1144.6	1207.7	1291.9	1322.6	1351.9
35°	758.8	835.2	906.6	974.3	1039.4	1114.4	1191.8	1261.1	1375.0	1466.3	1528.9
37.5°	755.7	844.0	927.6	1010.2	1087.7	1170.3	1251.8	1319.6	1430.4	1548.4	1632.5
40°	743.4	840.9	936.3	1029.2	1123.1	1225.2	1318.5	1391.9	1495.5	1635.1	1746.9
42.5°	727.5	828.1	933.2	1035.3	1141.0	1261.1	1374.0	1463.2	1577.6	1718.7	1846.0
45°	707.5	812.2	920.9	1028.7	1142.6	1276.0	1404.7	1519.1	1640.7	1797.7	1920.4
47.5°	682.9	789.6	904.5	1013.8	1132.3	1276.5	1419.1	1549.9	1683.3	1852.1	1984.5
50°	659.8	766.0	886.0	993.8	1112.8	1263.6	1417.6	1563.8	1709.5	1883.9	2023.0
52.5°	641.8	746.0	870.1	977.9	1090.2	1242.6	1402.2	1557.1	1713.6	1888.0	2030.1
55°	630.5	729.6	856.8	967.1	1067.7	1220.0	1378.6	1534.0	1698.2	1860.8	2003.5
57.5°	632.1	726.5	849.1	965.1	1051.2	1200.5	1351.9	1501.2	1650.5	1805.4	1952.7
60°	648.0	733.2	845.0	950.7	1061.5	1202.6	1340.1	1464.8	1584.3	1726.9	1864.4
62.5°	688.0	761.4	851.7	960.4	1082.5	1222.1	1332.4	1408.3	1479.6	1622.3	1762.3
65°	763.9	827.6	899.9	995.3	1114.9	1249.3	1301.1	1316.5	1362.2	1498.1	1637.2
67.5°	838.3	913.7	954.8	1015.8	1127.7	1257.0	1263.6	1197.5	1196.4	1328.8	1429.4
70°	910.2	1019.4	1035.9	1069.7	1146.2	1248.8	1224.7	1096.9	1038.9	1056.9	1115.4
72.5°	863.0	1026.6	1038.4	1048.7	1094.3	1189.8	1162.1	989.7	859.9	836.8	903.0
75°	658.8	866.5	894.3	876.3	901.4	974.3	969.2	834.2	790.1	805.5	831.1
77.5°	474.1	668.0	728.0	669.5	662.9	710.1	696.7	708.0	791.6	814.2	808.1
80°	275.0	424.3	510.0	454.1	434.0	463.8	516.1	595.1	686.5	735.2	744.4
82.5°	171.9	250.4	340.7	319.1	291.9	344.3	425.3	480.7	525.9	570.5	573.1
85°	74.4	107.2	166.2	174.4	216.0	262.7	327.3	343.2	392.5	426.9	397.1
87.5°	2.6	2.6	40.0	59.5	105.7	189.8	257.0	229.8	232.9	204.2	190.3
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
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8



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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0
2.5°	338.6	337.6	338.1	336.6	336.6	337.1	337.1	335.5	335.5	335.5	335.0
5°	350.4	349.4	348.9	347.8	346.3	347.3	345.8	344.8	343.2	342.7	341.2
7.5°	365.8	364.3	363.8	361.2	359.1	358.1	357.1	353.5	352.0	350.9	348.9
10°	383.8	383.8	382.7	377.6	376.1	372.5	368.9	364.8	361.7	357.1	354.5
12.5°	406.9	408.4	404.8	400.2	396.6	389.4	382.7	377.1	370.9	364.3	360.2
15°	441.2	442.3	435.1	431.0	425.3	417.1	406.9	397.6	388.4	379.1	371.5
17.5°	492.0	490.5	480.2	476.1	466.4	452.5	438.7	426.3	412.5	399.7	389.9
20°	565.4	559.2	532.5	531.0	518.7	499.2	479.2	461.2	442.8	426.3	409.9
22.5°	654.7	640.8	621.3	599.2	575.6	554.1	530.5	505.4	482.3	461.7	443.8
25°	771.1	740.3	722.4	692.6	672.1	634.1	601.3	581.3	550.0	526.4	503.3
27.5°	926.6	877.8	851.7	819.3	773.7	747.0	702.4	663.9	630.5	591.5	565.9
30°	1128.2	1092.3	1026.6	981.5	918.4	853.7	798.8	748.5	704.9	658.2	620.3
32.5°	1335.5	1312.9	1235.9	1151.8	1055.9	960.9	880.4	818.3	761.4	709.0	665.4
35°	1511.5	1464.8	1389.3	1301.1	1178.0	1068.2	966.1	887.1	816.3	751.1	696.2
37.5°	1624.8	1604.3	1527.9	1427.8	1292.9	1174.4	1068.7	975.3	887.1	801.9	731.1
40°	1751.0	1739.2	1675.1	1552.5	1427.8	1282.6	1162.1	1063.6	968.6	867.1	774.2
42.5°	1863.9	1874.7	1809.0	1701.3	1557.1	1393.5	1265.2	1155.9	1047.7	944.0	836.8
45°	1965.0	1984.5	1936.3	1836.2	1678.2	1499.1	1365.2	1246.2	1128.2	1014.8	895.3
47.5°	2040.9	2062.0	2021.4	1942.9	1778.2	1587.4	1453.0	1319.6	1195.9	1065.6	938.9
50°	2104.5	2116.9	2086.1	2017.3	1859.3	1673.1	1523.3	1383.2	1246.2	1105.6	967.1
52.5°	2141.5	2148.7	2118.4	2068.6	1920.9	1736.7	1578.2	1427.3	1281.6	1133.3	985.6
55°	2139.4	2164.6	2130.2	2090.2	1939.9	1767.0	1606.9	1452.5	1307.8	1151.3	996.3
57.5°	2099.4	2136.4	2120.4	2070.7	1923.9	1764.9	1611.0	1466.8	1324.7	1157.4	991.2
60°	2022.5	2073.2	2084.5	2013.7	1860.3	1708.5	1572.0	1450.4	1308.8	1130.3	959.9
62.5°	1913.7	1954.7	1984.0	1887.5	1735.7	1591.5	1484.8	1388.8	1244.7	1049.7	895.3
65°	1749.5	1768.5	1776.7	1687.4	1538.6	1442.7	1372.9	1290.3	1130.3	935.3	795.2
67.5°	1505.3	1502.7	1510.9	1469.4	1359.6	1309.3	1263.1	1173.4	986.6	804.5	664.9
70°	1197.0	1250.3	1295.5	1251.3	1183.1	1132.8	1094.3	988.1	788.0	621.3	505.4
72.5°	974.3	1017.9	1042.5	1004.0	937.9	901.9	851.2	745.5	554.6	441.7	346.8
75°	822.9	791.1	806.0	781.9	720.8	669.0	639.8	523.3	363.8	292.4	216.0
77.5°	743.4	692.6	660.3	608.5	538.7	479.7	449.9	325.3	229.3	172.4	124.7
80°	657.2	586.9	502.8	419.2	359.1	322.7	302.2	185.7	126.2	100.0	71.8
82.5°	499.7	433.5	352.0	291.4	239.6	208.8	185.2	106.2	71.3	52.8	41.0
85°	320.1	295.0	269.4	239.6	200.6	161.1	124.2	77.5	52.3	30.3	22.6
87.5°	154.4	128.3	127.2	117.5	111.8	88.2	52.3	18.0	11.3	9.7	6.2
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
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8



REPORT NUMBER: P160109

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
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: P160109

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0
2.5°	334.0	333.5	332.5	332.5	331.9	331.4	330.9	330.9	331.4	330.4	329.9
5°	339.6	339.1	337.6	337.1	336.6	335.5	335.5	335.0	335.0	334.0	333.5
7.5°	346.3	345.3	344.3	343.7	342.2	342.2	342.2	343.2	343.2	343.2	343.7
10°	353.0	350.4	349.4	349.4	348.9	349.4	350.9	352.0	353.5	354.5	355.5
12.5°	356.6	354.0	353.0	352.0	353.5	353.5	356.1	359.1	361.7	364.3	365.3
15°	365.8	361.2	359.1	356.6	356.6	356.6	359.1	361.7	364.8	367.9	368.4
17.5°	381.7	373.5	369.4	363.8	362.2	360.2	360.2	361.2	363.2	365.8	365.8
20°	397.6	389.4	382.7	376.6	372.5	366.8	362.7	359.1	357.6	358.6	358.6
22.5°	426.3	416.6	408.4	398.1	388.9	381.7	371.5	362.7	356.1	354.0	352.5
25°	478.2	464.3	450.5	435.1	424.8	411.5	397.1	382.7	369.4	360.2	352.0
27.5°	535.6	516.6	496.6	472.5	456.1	436.1	417.1	396.6	380.2	366.3	351.4
30°	590.5	555.1	526.4	496.1	469.4	442.3	418.7	394.5	376.6	360.2	342.2
32.5°	617.7	575.6	536.7	498.7	466.4	435.1	409.4	382.2	363.2	344.8	323.2
35°	636.7	586.4	539.7	495.6	459.2	424.8	395.6	367.3	344.8	323.7	299.1
37.5°	660.3	597.2	542.3	493.0	450.5	411.5	378.6	346.8	321.2	298.6	272.9
40°	691.1	613.6	545.4	485.9	437.1	393.0	359.1	324.8	297.6	273.5	249.9
42.5°	733.7	636.2	549.0	477.1	422.2	376.1	341.2	307.8	279.1	253.4	229.8
45°	775.7	662.4	558.2	474.6	412.5	365.3	328.4	293.0	262.7	235.5	208.3
47.5°	807.0	681.8	567.9	476.1	406.9	354.0	314.5	275.0	241.1	211.4	183.7
50°	827.0	694.2	576.7	480.2	401.7	339.1	292.4	252.4	217.5	188.3	160.6
52.5°	837.3	697.8	579.7	478.7	388.4	315.5	268.8	230.4	197.0	168.3	143.7
55°	840.4	694.2	573.1	464.3	365.3	291.9	247.3	210.9	178.5	151.4	129.3
57.5°	829.6	678.8	549.5	435.1	334.5	269.4	224.2	188.8	158.0	133.9	113.9
60°	794.7	643.4	507.9	389.4	300.1	239.1	193.9	159.0	133.9	112.9	99.0
62.5°	731.1	583.3	451.5	332.5	252.9	197.5	154.9	124.7	104.1	89.3	82.1
65°	651.6	501.3	366.8	264.2	193.4	147.2	111.3	91.3	77.0	68.2	64.6
67.5°	532.5	392.0	274.5	188.3	133.4	100.0	75.4	64.6	58.5	55.9	54.9
70°	383.3	271.9	181.6	122.1	86.7	68.2	54.9	50.3	47.7	47.7	48.2
72.5°	252.4	167.8	110.8	78.0	61.6	51.3	44.6	42.6	42.6	43.6	44.1
75°	147.8	97.5	68.2	56.9	48.7	43.1	39.5	38.0	38.0	38.5	38.5
77.5°	87.2	60.0	48.7	43.1	39.5	36.9	34.9	32.8	32.3	32.3	33.9
80°	53.9	42.6	38.0	34.4	31.8	29.8	27.7	27.7	27.7	27.2	28.2
82.5°	34.9	30.3	29.8	28.7	25.7	23.6	21.5	21.5	22.6	21.5	22.1
85°	21.0	20.0	19.5	19.5	18.5	17.4	15.9	15.9	17.4	16.9	14.9
87.5°	5.6	5.1	6.7	6.2	7.2	7.2	7.2	8.2	10.8	13.9	10.3
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
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8



REPORT NUMBER: P160109
 CATALOG NUMBER: ENV-E01-LED-E1-SLL-7050-ULG

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

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

NUMBER: P160109
 NUMBER: ENV-E01-LED-E1-SLL-7050-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°	165°	165°
333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	112.5°	21.2
329.4	329.9	328.9	328.4	328.9	329.4	327.8	327.3	326.8	326.3	326.8	115°	25.0
333.0	333.0	331.4	330.4	330.4	329.9	328.4	327.8	325.8	325.3	326.8	117.5°	29.5
343.2	342.7	341.2	339.6	339.1	339.1	335.5	334.0	333.0	329.9	330.4	120°	34.8
355.0	355.0	355.5	353.5	350.9	350.4	346.3	343.7	342.2	339.6	338.6	122.5°	40.9
364.3	362.7	362.2	359.1	356.6	355.5	352.0	349.9	347.8	345.3	344.8	125°	47.8
367.3	364.3	362.2	358.6	355.5	353.5	350.4	348.4	345.8	344.3	343.2	127.5°	55.3
364.3	361.2	358.1	354.0	349.9	347.3	343.7	340.7	339.6	337.6	334.5	130°	63.0
357.6	354.0	350.4	345.3	340.7	337.1	333.0	330.4	327.3	324.2	318.1	132.5°	70.5
349.4	345.3	341.7	335.0	330.4	326.3	321.7	317.6	314.0	307.8	298.6	135°	77.9
343.7	335.0	328.9	319.6	314.5	309.4	307.3	303.2	298.1	287.3	276.0	137.5°	85.3
335.5	319.6	308.3	299.1	291.9	285.8	282.2	277.6	272.4	262.2	250.4	140°	92.5
321.7	303.2	292.4	282.7	274.5	267.8	261.1	252.4	245.8	234.0	225.7	142.5°	99.2
300.6	285.3	275.5	266.3	255.5	246.8	238.6	228.3	218.6	206.8	199.6	145°	104.9
277.0	263.2	250.9	241.1	229.8	221.1	212.4	200.6	191.4	180.6	173.9	147.5°	110.1
252.4	237.5	223.2	211.9	201.6	191.9	184.2	172.9	163.2	152.9	149.3	150°	115.1
230.4	213.4	198.0	186.8	175.5	165.7	157.5	145.7	137.5	130.3	126.2	152.5°	119.7
208.8	190.9	176.5	164.7	153.4	143.1	132.4	123.1	115.9	112.9	107.2	155°	123.7
184.7	166.2	152.4	139.6	130.3	119.5	111.3	105.2	100.6	98.0	94.4	157.5°	127.0
160.1	144.7	130.3	118.5	107.2	98.0	92.9	89.8	88.2	86.2	84.7	160°	130.3
140.1	126.7	112.4	101.1	90.8	84.1	81.6	80.0	79.0	78.0	77.5	162.5°	133.5
126.2	111.8	99.0	88.2	80.5	77.0	75.9	74.9	73.9	73.4	72.9	165°	136.0
115.4	101.1	89.3	80.0	74.4	73.4	72.9	71.8	70.8	70.8	69.8	167.5°	137.1
102.6	90.3	80.0	73.4	70.3	69.8	69.3	68.7	68.2	68.2	67.7	170°	137.4
89.3	80.0	73.4	68.7	67.7	66.7	65.7	64.6	64.1	65.2	65.7	172.5°	138.6
75.9	70.3	66.2	64.6	63.6	62.1	61.1	60.0	60.0	61.1	62.6	175°	140.5
63.1	61.1	60.0	59.0	58.5	58.0	56.9	55.9	55.9	55.9	56.9	177.5°	141.1
54.4	53.4	53.4	52.8	52.3	52.3	51.3	50.3	50.3	50.3	50.3	180°	140.8
47.7	48.2	48.2	48.2	47.7	47.2	46.7	45.7	45.1	44.1	43.1		
44.1	43.6	43.1	42.6	42.1	41.6	41.0	40.5	39.5	38.5	37.5		
39.5	38.5	36.9	36.4	35.9	34.9	34.9	34.4	33.3	31.8	30.8		
34.4	33.3	31.8	30.8	30.8	30.3	29.2	28.7	27.2	25.7	24.6		
27.7	26.2	24.6	24.1	23.6	23.1	22.6	22.1	21.5	20.0	19.5		
20.5	19.0	17.4	16.9	16.4	15.4	14.9	14.9	14.9	13.3	12.3		
13.3	11.3	9.7	8.2	8.2	7.7	6.7	5.6	4.6	3.1	2.1		
6.7	3.6	2.1	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0		
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
0.1	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	0.5	0.5	0.5	0.5	0.5	0.5		
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		
8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8		
11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8		
14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7		
17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8		

'160109
 ENV-E01-LED-E1-SLL-7050-ULG

REPORT NUMBER: P160109
 CATALOG NUMBER: ENV-E01-I

TION (continued):

CANDELA DISTRIBUTION (con

170°	175°	180°	185°	190°	195°	200°	205°	210°	215°		220°	225°
21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	0°	333.0	333.0
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	326.8	326.3
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	326.8	323.7
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	328.4	325.8
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	335.0	330.9
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	340.7	336.0
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	340.2	333.5
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	329.4	321.7
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	311.4	301.2
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	288.3	278.6
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	265.8	254.5
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	240.6	230.9
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	215.0	206.2
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	190.3	182.1
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	165.7	157.5
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	142.1	134.4
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	120.1	114.4
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	104.1	99.0
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	91.3	87.2
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	82.1	79.0
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	75.4	72.9
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	71.3	69.3
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	68.2	66.7
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	66.2	64.1
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	63.6	62.1
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	61.1	59.0
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	56.4	53.9
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	49.8	47.7
										70°	42.1	41.6
										72.5°	35.4	34.9
										75°	29.8	29.8
										77.5°	24.6	24.1
										80°	19.0	18.0
										82.5°	10.8	10.3
										85°	1.5	1.0
										87.5°	0.0	0.0
										90°	0.1	0.1
										92.5°	0.1	0.1
										95°	0.5	0.5
										97.5°	1.5	1.5
										100°	5.0	5.0
										102.5°	8.8	8.8
										105°	11.8	11.8
										107.5°	14.7	14.7
										110°	17.8	17.8



REPORT NUMBER: P160109

CATALOG NUMBER: ENV-E01-LED-E1-SLI

LED-E1-SLL-7050-ULG

tinued):

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	333.0	112.5°	21.2	21.2	21.2
326.8	327.3	329.4	330.4	330.9	330.9	331.4	332.5	333.0	115°	25.0	25.0	25.0
323.7	324.8	325.8	327.3	327.8	327.8	328.4	329.9	331.4	117.5°	29.5	29.5	29.5
324.2	323.7	324.2	325.3	325.3	325.3	325.8	327.3	328.9	120°	34.8	34.8	34.8
328.4	325.3	323.2	322.7	322.2	322.2	323.2	325.3	326.8	122.5°	40.9	40.9	40.9
331.9	327.8	323.7	321.2	319.1	318.1	318.6	320.7	323.7	125°	47.8	47.8	47.8
328.9	322.7	318.1	314.5	311.4	310.4	310.9	312.4	316.0	127.5°	55.3	55.3	55.3
315.5	308.9	303.7	301.2	299.6	299.1	300.1	303.2	306.3	130°	63.0	63.0	63.0
296.5	293.0	288.3	286.8	283.7	283.7	283.2	283.2	284.7	132.5°	70.5	70.5	70.5
275.5	273.5	268.8	265.2	261.7	261.1	257.6	258.1	257.6	135°	77.9	77.9	77.9
251.4	248.8	243.2	238.1	234.0	231.4	227.3	226.8	225.2	137.5°	85.3	85.3	85.3
227.3	223.2	216.5	211.4	206.2	202.7	199.1	195.5	194.4	140°	92.5	92.5	92.5
202.7	199.1	191.4	186.8	179.6	174.4	171.4	166.2	163.7	142.5°	99.2	99.2	99.2
178.5	174.4	165.7	157.0	151.9	145.7	141.1	134.4	131.3	145°	104.9	104.9	104.9
151.9	149.3	140.6	131.3	126.7	118.5	112.9	107.2	106.2	147.5°	110.1	110.1	110.1
130.3	124.7	118.0	110.8	103.1	98.5	95.9	94.9	94.4	150°	115.1	115.1	115.1
110.3	106.7	100.6	95.4	91.8	90.8	90.8	90.8	91.3	152.5°	119.7	119.7	119.7
97.0	92.3	89.3	87.7	87.7	88.2	88.8	89.8	90.8	155°	123.7	123.7	123.7
85.7	84.1	84.1	83.6	84.7	85.7	87.2	88.8	89.8	157.5°	127.0	127.0	127.0
78.0	78.5	79.5	80.0	82.1	83.6	85.2	86.2	87.2	160°	130.3	130.3	130.3
71.8	72.3	73.4	74.9	76.4	78.5	80.0	81.1	81.6	162.5°	133.5	133.5	133.5
68.2	68.2	69.8	71.3	73.4	74.9	76.4	77.0	78.0	165°	136.0	136.0	136.0
65.2	65.7	67.2	68.2	69.3	70.3	71.3	71.8	73.9	167.5°	137.1	137.1	137.1
63.1	63.6	64.1	63.1	64.1	65.2	66.2	67.2	68.2	170°	137.4	137.4	137.4
60.5	59.5	58.5	58.5	59.0	60.0	62.1	63.6	65.2	172.5°	138.6	138.6	138.6
57.5	55.9	54.4	53.9	54.4	55.4	57.5	59.5	60.5	175°	140.5	140.5	140.5
52.3	51.8	51.3	50.8	51.3	52.3	54.4	55.9	57.5	177.5°	141.1	141.1	141.1
47.2	46.7	46.2	46.7	47.2	48.2	50.3	51.8	53.4	180°	140.8	140.8	140.8
41.0	41.0	41.0	41.6	42.1	44.1	45.7	47.7	48.2				
34.4	35.4	35.4	35.4	36.4	39.0	41.0	43.1	44.1				
29.2	28.7	29.8	29.8	30.8	32.8	34.4	35.9	36.4				
23.6	23.6	24.1	24.1	24.1	25.1	26.2	26.2	26.2				
17.4	16.9	16.4	15.4	15.4	15.9	15.9	15.9	16.9				
8.2	6.7	6.7	6.2	5.6	5.6	5.6	6.7	7.2				
0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0				
0.0	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.5				
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.5	0.5	0.5	0.5				
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5				
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8				
11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8				
14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7				
17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8				



REPORT NUMBER: P160109

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_-7050-ULG

CANDELA DISTRIBUTION (continued):

235°	240°	245°	250°	255°	260°	265°	270°		275°	280°	285°	290°
21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	0°	333.0	333.0	333.0	333.0
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	332.5	333.5	333.5	334.5
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	331.4	332.5	333.0	334.5
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	329.9	331.9	333.0	335.0
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	328.4	331.4	333.5	337.1
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	326.8	329.9	333.5	337.1
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	319.1	322.2	327.3	332.5
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	307.8	310.9	315.0	319.6
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	286.3	287.3	291.4	296.5
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	256.0	255.5	257.6	263.2
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	221.6	223.7	222.2	228.8
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	189.8	191.4	193.4	196.5
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	159.6	159.0	160.6	163.2
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	128.3	127.8	128.3	130.8
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	105.2	103.6	105.2	108.8
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	94.9	94.9	96.5	99.0
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	91.8	92.3	93.4	95.4
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	91.3	91.3	91.3	92.3
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	90.3	89.8	89.8	89.8
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	87.7	87.2	87.2	87.2
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	82.1	82.6	82.6	83.1
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	78.5	79.5	80.0	81.1
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	74.9	77.0	78.5	79.5
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	69.3	71.3	72.9	75.4
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	66.2	67.2	67.7	69.3
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	62.1	63.1	64.1	64.6
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	58.5	59.5	61.1	61.6
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	54.4	55.9	56.9	57.5
								70°	49.8	51.8	52.3	53.4
								72.5°	45.1	46.2	46.7	47.7
								75°	38.0	39.5	40.5	41.0
								77.5°	28.2	29.8	31.3	32.8
								80°	18.0	19.5	20.5	21.5
								82.5°	8.2	9.7	10.3	11.3
								85°	1.5	1.5	1.5	2.1
								87.5°	1.5	2.1	2.1	2.1
								90°	0.1	0.1	0.1	0.1
								92.5°	0.1	0.1	0.1	0.1
								95°	0.5	0.5	0.5	0.5
								97.5°	1.5	1.5	1.5	1.5
								100°	5.0	5.0	5.0	5.0
								102.5°	8.8	8.8	8.8	8.8
								105°	11.8	11.8	11.8	11.8
								107.5°	14.7	14.7	14.7	14.7
								110°	17.8	17.8	17.8	17.8



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CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°	325°		275°	280°	285°	290°	295°
333.0	333.0	333.0	333.0	333.0	333.0	333.0	112.5°	21.2	21.2	21.2	21.2	21.2
334.5	335.0	336.0	336.0	337.1	337.1	338.1	115°	25.0	25.0	25.0	25.0	25.0
335.5	336.6	338.1	338.6	340.7	341.7	342.7	117.5°	29.5	29.5	29.5	29.5	29.5
337.1	338.6	340.7	342.2	344.8	346.3	347.8	120°	34.8	34.8	34.8	34.8	34.8
339.6	342.2	345.8	347.3	349.4	353.0	355.5	122.5°	40.9	40.9	40.9	40.9	40.9
343.2	346.8	351.4	355.5	358.1	363.2	367.3	125°	47.8	47.8	47.8	47.8	47.8
338.1	345.8	351.4	359.1	365.8	374.5	381.7	127.5°	55.3	55.3	55.3	55.3	55.3
325.8	333.0	342.7	352.5	362.7	377.6	392.0	130°	63.0	63.0	63.0	63.0	63.0
303.2	311.4	322.7	335.0	349.9	369.4	389.9	132.5°	70.5	70.5	70.5	70.5	70.5
270.4	277.6	289.9	303.7	320.7	344.8	374.5	135°	77.9	77.9	77.9	77.9	77.9
235.5	245.2	257.0	271.9	290.9	319.6	351.4	137.5°	85.3	85.3	85.3	85.3	85.3
202.1	212.4	225.2	241.6	263.7	294.5	330.9	140°	92.5	92.5	92.5	92.5	92.5
167.8	179.6	191.4	211.9	234.0	266.3	306.8	142.5°	99.2	99.2	99.2	99.2	99.2
137.0	145.7	160.1	178.5	204.2	236.0	279.1	145°	104.9	104.9	104.9	104.9	104.9
112.4	119.5	133.4	151.4	174.4	205.7	243.2	147.5°	110.1	110.1	110.1	110.1	110.1
102.6	108.3	118.0	130.8	151.4	181.6	213.4	150°	115.1	115.1	115.1	115.1	115.1
99.0	104.1	111.3	122.6	138.5	161.6	188.8	152.5°	119.7	119.7	119.7	119.7	119.7
95.4	100.6	108.8	119.0	132.4	148.8	171.9	155°	123.7	123.7	123.7	123.7	123.7
92.3	98.0	106.7	118.0	130.3	144.7	162.6	157.5°	127.0	127.0	127.0	127.0	127.0
89.3	94.4	103.1	115.9	129.3	144.7	162.6	160°	130.3	130.3	130.3	130.3	130.3
84.7	89.8	99.0	112.4	127.2	144.2	164.7	162.5°	133.5	133.5	133.5	133.5	133.5
82.1	86.7	96.5	111.3	127.2	145.7	167.8	165°	136.0	136.0	136.0	136.0	136.0
80.5	84.7	95.9	112.9	131.3	152.9	177.0	167.5°	137.1	137.1	137.1	137.1	137.1
78.0	82.6	94.4	113.4	136.5	163.2	193.4	170°	137.4	137.4	137.4	137.4	137.4
70.8	76.4	89.3	109.8	134.9	167.8	207.8	172.5°	138.6	138.6	138.6	138.6	138.6
65.2	68.7	79.5	101.1	127.2	162.6	210.4	175°	140.5	140.5	140.5	140.5	140.5
62.6	64.6	71.8	89.3	114.9	152.9	202.7	177.5°	141.1	141.1	141.1	141.1	141.1
59.0	60.0	65.2	79.0	98.5	135.4	183.7	180°	140.8	140.8	140.8	140.8	140.8
54.4	54.9	59.0	67.7	82.1	107.7	153.4						
48.7	49.8	52.3	58.5	67.7	82.6	111.3						
42.1	42.6	43.6	47.7	53.4	63.6	79.0						
33.9	33.9	34.9	36.9	40.0	47.2	56.4						
22.1	23.6	24.6	28.2	29.2	34.4	40.0						
12.8	13.9	14.4	15.4	18.0	20.5	24.6						
2.1	3.1	3.1	4.1	5.1	5.6	6.7						
2.6	2.6	2.6	2.6	3.1	3.1	3.1						
0.1	0.1	0.1	0.1	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	0.5	0.5						
1.5	1.5	1.5	1.5	1.5	1.5	1.5						
5.0	5.0	5.0	5.0	5.0	5.0	5.0						
8.8	8.8	8.8	8.8	8.8	8.8	8.8						
11.8	11.8	11.8	11.8	11.8	11.8	11.8						
14.7	14.7	14.7	14.7	14.7	14.7	14.7						
17.8	17.8	17.8	17.8	17.8	17.8	17.8						



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

CANDELA DISTRIBUTION (continued):

300°	305°	310°	315°	320°	325°		330°	335°	340°	345°	350°	355°
21.2	21.2	21.2	21.2	21.2	21.2	0°	333.0	333.0	333.0	333.0	333.0	333.0
25.0	25.0	25.0	25.0	25.0	25.0	2.5°	338.6	338.1	339.1	340.2	339.6	342.7
29.5	29.5	29.5	29.5	29.5	29.5	5°	344.3	343.7	345.3	346.3	346.8	348.9
34.8	34.8	34.8	34.8	34.8	34.8	7.5°	349.9	350.4	353.0	353.5	355.0	357.6
40.9	40.9	40.9	40.9	40.9	40.9	10°	356.6	359.1	362.2	363.2	365.8	368.9
47.8	47.8	47.8	47.8	47.8	47.8	12.5°	369.9	373.5	377.6	380.7	385.8	392.0
55.3	55.3	55.3	55.3	55.3	55.3	15°	388.4	397.1	403.8	409.9	417.6	424.8
63.0	63.0	63.0	63.0	63.0	63.0	17.5°	404.8	421.7	436.1	448.9	461.2	472.5
70.5	70.5	70.5	70.5	70.5	70.5	20°	412.5	439.2	461.7	485.3	508.9	524.9
77.9	77.9	77.9	77.9	77.9	77.9	22.5°	405.3	442.8	477.7	515.6	551.5	583.9
85.3	85.3	85.3	85.3	85.3	85.3	25°	389.9	436.1	487.9	542.3	596.7	645.9
92.5	92.5	92.5	92.5	92.5	92.5	27.5°	375.6	432.0	492.0	554.1	618.7	677.7
99.2	99.2	99.2	99.2	99.2	99.2	30°	356.6	418.1	483.8	547.9	618.2	687.5
104.9	104.9	104.9	104.9	104.9	104.9	32.5°	328.4	390.9	460.2	530.0	608.0	684.9
110.1	110.1	110.1	110.1	110.1	110.1	35°	295.0	357.6	428.4	501.8	588.5	675.2
115.1	115.1	115.1	115.1	115.1	115.1	37.5°	258.6	320.1	394.0	472.5	562.3	659.3
119.7	119.7	119.7	119.7	119.7	119.7	40°	227.8	282.7	359.1	444.3	538.7	639.3
123.7	123.7	123.7	123.7	123.7	123.7	42.5°	203.2	252.9	325.3	411.5	512.5	616.2
127.0	127.0	127.0	127.0	127.0	127.0	45°	188.8	230.4	296.5	382.2	485.3	592.1
130.3	130.3	130.3	130.3	130.3	130.3	47.5°	185.7	219.1	277.0	360.2	459.2	566.4
133.5	133.5	133.5	133.5	133.5	133.5	50°	188.8	219.6	268.3	346.3	439.2	543.3
136.0	136.0	136.0	136.0	136.0	136.0	52.5°	195.0	224.7	269.4	341.2	431.0	529.5
137.1	137.1	137.1	137.1	137.1	137.1	55°	204.7	238.6	280.1	345.8	429.9	523.8
137.4	137.4	137.4	137.4	137.4	137.4	57.5°	224.2	262.7	304.8	364.8	442.3	530.0
138.6	138.6	138.6	138.6	138.6	138.6	60°	248.8	295.0	345.8	409.4	472.0	550.5
140.5	140.5	140.5	140.5	140.5	140.5	62.5°	263.7	326.8	396.6	470.5	534.6	598.7
141.1	141.1	141.1	141.1	141.1	141.1	65°	262.2	340.2	438.7	543.8	623.9	685.4
140.8	140.8	140.8	140.8	140.8	140.8	67.5°	245.2	330.4	428.4	547.9	668.5	755.2
						70°	204.7	284.2	398.6	542.8	691.1	802.4
						72.5°	163.2	233.4	342.7	478.7	624.9	738.8
						75°	108.8	164.7	252.9	367.3	473.5	572.6
						77.5°	73.9	104.1	158.0	241.1	328.9	409.9
						80°	49.3	65.2	90.3	132.9	184.2	236.0
						82.5°	28.7	35.9	46.2	65.7	97.5	137.5
						85°	7.7	9.7	12.8	16.9	30.3	53.4
						87.5°	3.1	2.6	2.6	2.6	2.6	2.6
						90°	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
						95°	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
						100°	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
						105°	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
						110°	17.8	17.8	17.8	17.8	17.8	17.8



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

CANDELA DISTRIBUTION (continued):

360°		330°	335°	340°	345°	350°	355°	360°
333.0	112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2
340.2	115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0
348.4	117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5
358.1	120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8
373.0	122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9
394.5	125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8
433.0	127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3
482.8	130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0
543.8	132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5
612.6	135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9
691.1	137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3
739.3	140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5
749.6	142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2
756.8	145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9
758.8	147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1
755.7	150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1
743.4	152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7
727.5	155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7
707.5	157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0
682.9	160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3
659.8	162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5
641.8	165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0
630.5	167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1
632.1	170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4
648.0	172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6
688.0	175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5
763.9	177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1
838.3	180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8
910.2								
863.0								
658.8								
474.1								
275.0								
171.9								
74.4								
2.6								
0.1								
0.1								
0.5								
1.5								
5.0								
8.8								
11.8								
14.7								
17.8								

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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(REPORT)