

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: P160169

Luminaire Tested: **ENV-F01-LED-E1-SLL-7050-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160169
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-F01-LED-E1-SLL-7050-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (7) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2377.8 lumens
Efficiency: N/A
Efficacy: 70.1 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

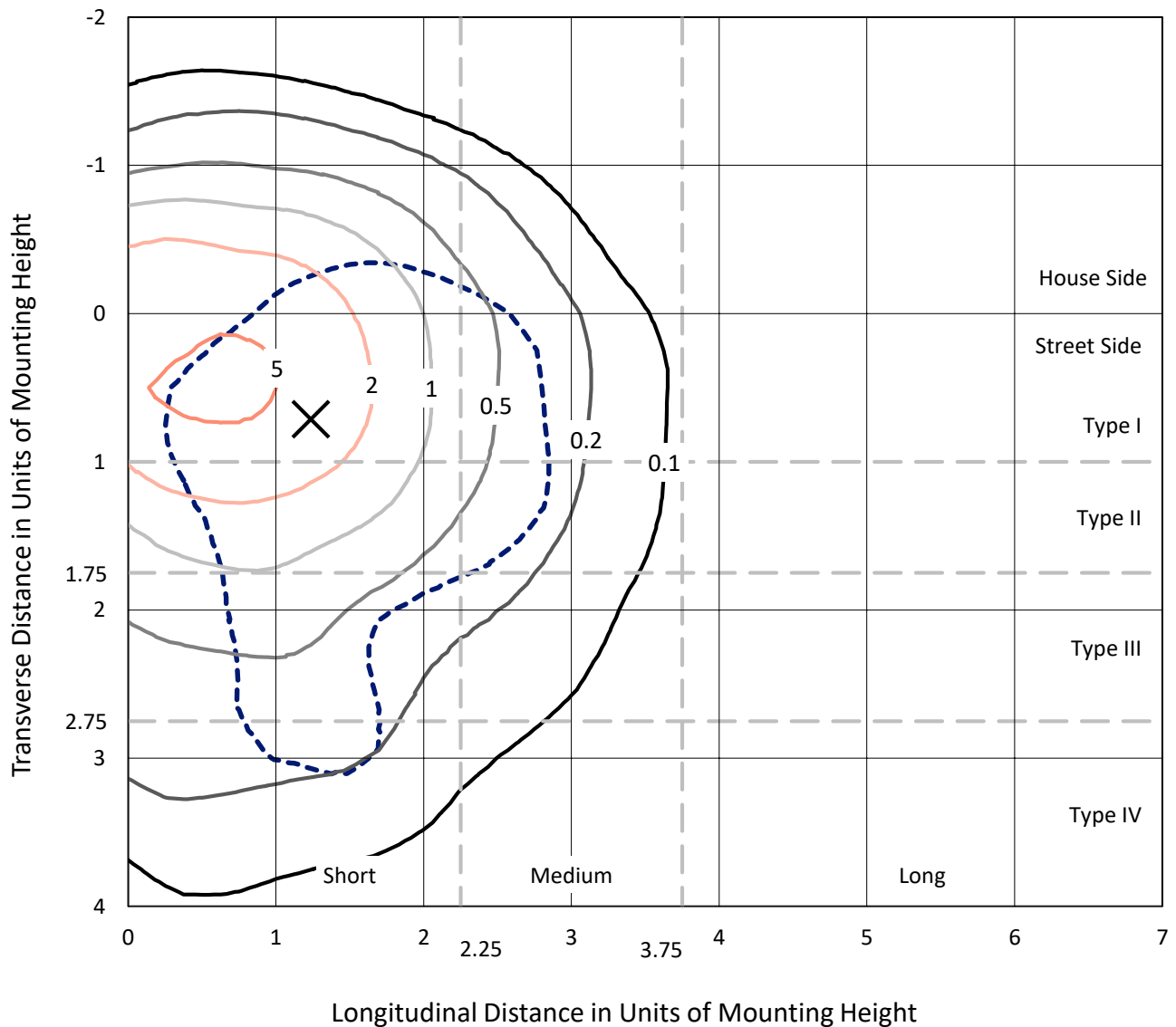
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

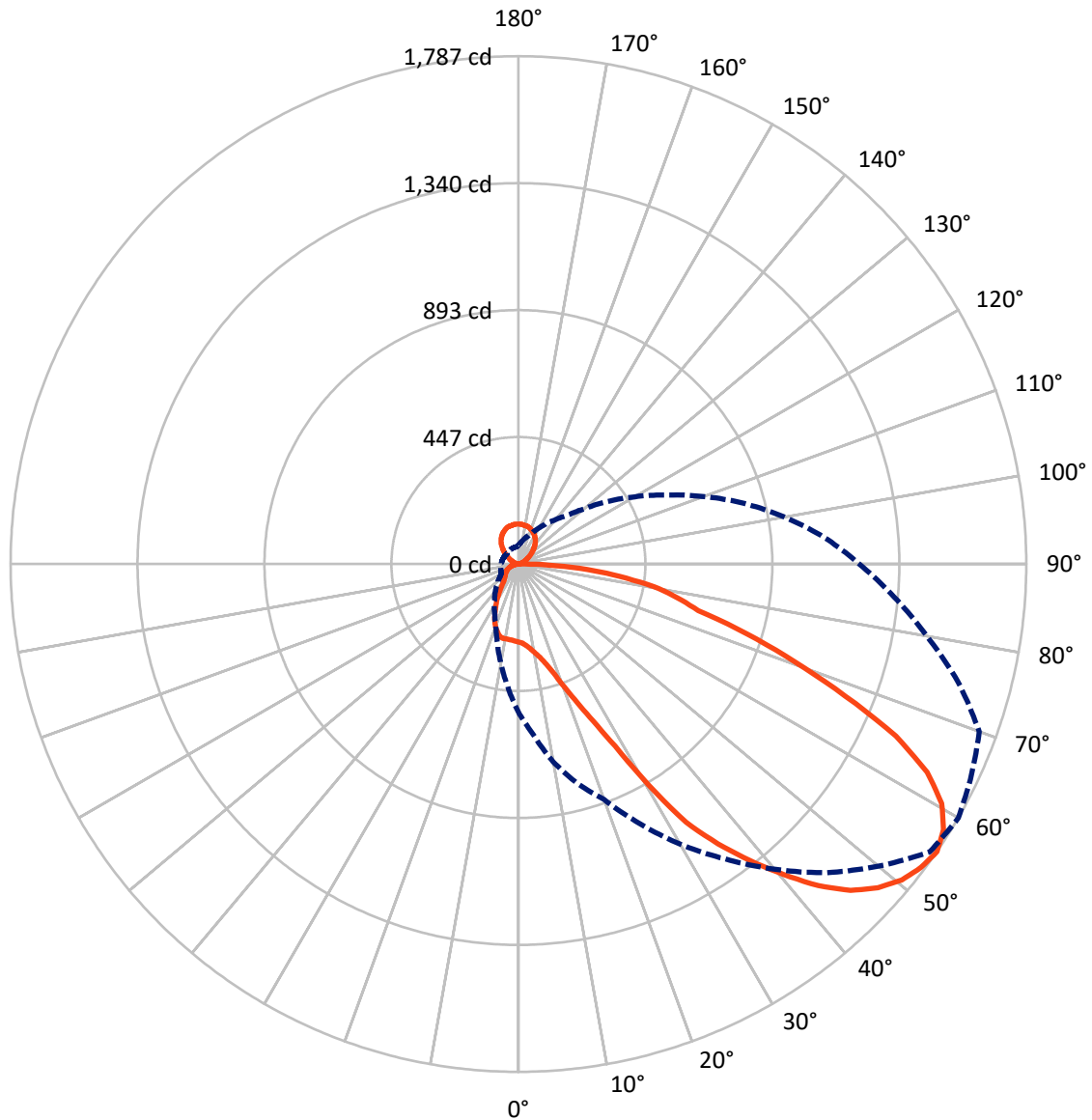
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.7 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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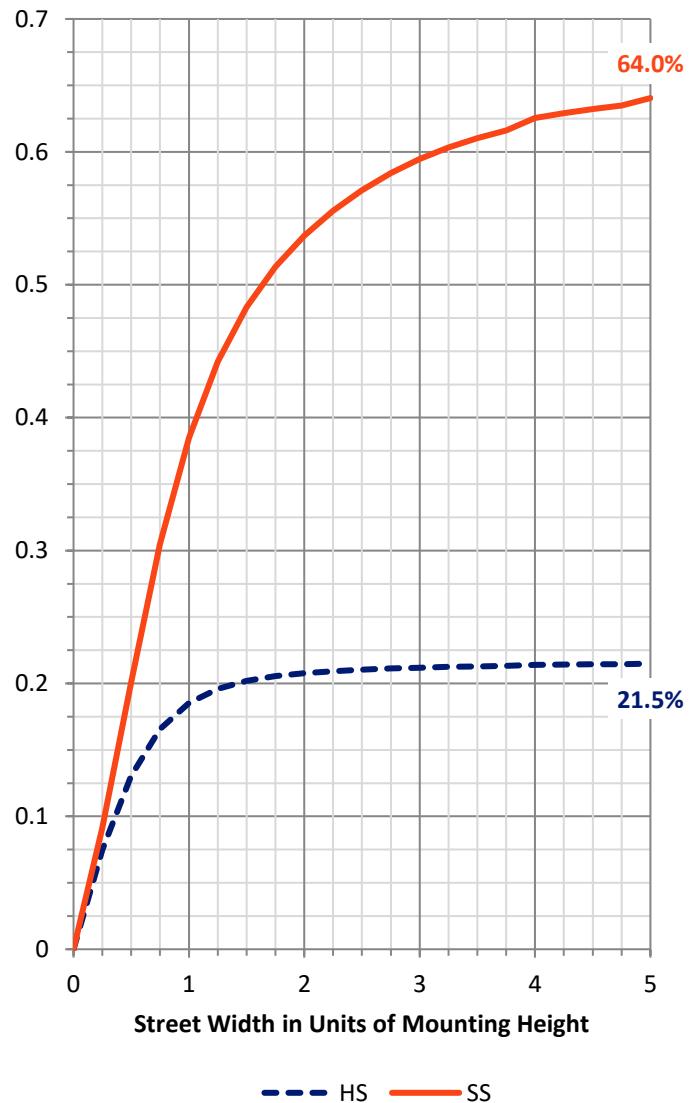
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	515.5	157.7	673.2
	% Fixture	21.7	6.6	28.3
Street Side	Lumens	1546.8	157.7	1704.6
	% Fixture	65.1	6.6	71.7
Total	Lumens	2062.3	315.5	2377.8
	% Fixture	86.7	13.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.1	1.1
10°-20°	89.0	3.7
20°-30°	172.7	7.3
30°-40°	271.4	11.4
40°-50°	362.8	15.3
50°-60°	425.7	17.9
60°-70°	403.8	17.0
70°-80°	243.8	10.3
80°-90°	66.0	2.8
90°-100°	1.3	0.1
100°-110°	12.3	0.5
110°-120°	25.2	1.1
120°-130°	43.0	1.8
130°-140°	60.0	2.5
140°-150°	65.4	2.7
150°-160°	56.9	2.4
160°-170°	38.2	1.6
170°-180°	13.3	0.6
0°-90°	2062.3	86.7
0°-180°	2377.8	100.0



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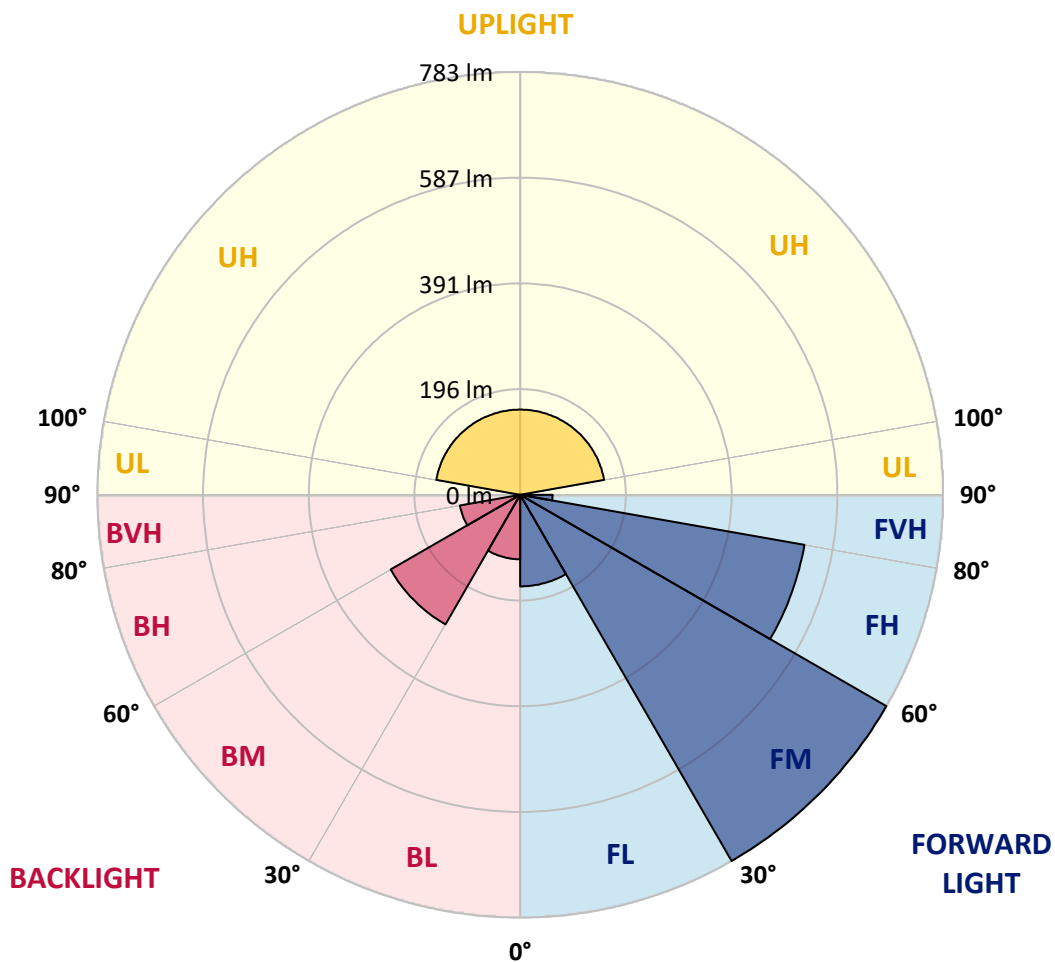
CATALOG NUMBER: ENV-F01-LED-E1-SLL-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	169.5	7.1			
FM	(30°-60°)	782.9	32.9			
FH	(60°-80°)	534.4	22.5			G0/660
FVH	(80°-90°)	60.1	2.5			G1/100
BL	(0°-30°)	119.3	5.0	B1/500		
BM	(30°-60°)	277.0	11.6	B1/1000		
BH	(60°-80°)	113.2	4.8	B1/500		G1/500
BVH	(80°-90°)	6.0	0.3			G0/10
UL	(90°-100°)	1.3	0.1		U1/10	
UH	(100°-180°)	157.7	6.6		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°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	280.8	280.4	280.8	280.4	280.4	280.4	280.8	280.4	279.1	279.1	279.5
5°	287.6	287.6	287.6	288.0	288.0	288.4	289.3	288.4	288.0	290.1	288.4
7.5°	295.6	295.6	296.9	297.3	298.6	298.6	300.3	299.9	301.6	302.8	301.6
10°	307.9	306.6	309.6	309.6	313.0	313.4	315.1	315.5	318.5	321.0	318.9
12.5°	325.7	326.5	331.6	332.5	336.7	336.7	336.7	338.4	340.5	342.2	340.1
15°	357.5	359.2	365.9	366.4	373.6	370.6	374.0	374.4	374.0	375.3	372.3
17.5°	398.5	403.2	412.9	415.1	418.5	424.4	424.4	423.5	425.7	426.9	418.9
20°	449.0	457.0	468.0	472.2	481.6	491.7	491.3	489.6	490.0	486.6	477.8
22.5°	505.7	523.9	542.1	548.9	555.7	568.4	576.4	573.9	576.0	568.4	560.3
25°	570.5	600.2	627.7	637.8	662.4	684.9	688.2	686.6	677.2	670.0	662.0
27.5°	610.3	649.3	687.0	712.8	754.7	790.7	797.9	809.8	812.8	818.7	799.2
30°	618.8	667.5	714.5	753.9	804.3	847.1	894.5	929.7	953.4	972.0	959.3
32.5°	624.7	679.8	731.9	781.4	822.9	885.2	944.9	997.0	1066.5	1091.9	1116.0
35°	626.4	689.5	748.4	804.3	858.1	919.9	983.9	1041.1	1135.1	1210.5	1262.1
37.5°	623.9	696.7	765.8	833.9	897.9	966.1	1033.4	1089.3	1180.8	1278.2	1347.7
40°	613.7	694.2	773.0	849.6	927.1	1011.4	1088.5	1149.1	1234.6	1349.8	1442.1
42.5°	600.6	683.6	770.4	854.7	941.9	1041.1	1134.2	1207.9	1302.4	1418.9	1523.9
45°	584.1	670.5	760.3	849.2	943.2	1053.3	1159.6	1254.1	1354.5	1484.1	1585.3
47.5°	563.7	651.8	746.7	836.9	934.7	1053.8	1171.5	1279.5	1389.6	1529.0	1638.2
50°	544.7	632.3	731.4	820.4	918.7	1043.2	1170.2	1290.9	1411.2	1555.2	1670.0
52.5°	529.8	615.8	718.3	807.3	900.0	1025.8	1157.5	1285.4	1414.6	1558.6	1675.9
55°	520.5	602.3	707.3	798.4	881.4	1007.2	1138.0	1266.4	1401.9	1536.2	1653.9
57.5°	521.8	599.7	701.0	796.7	867.8	991.1	1116.0	1239.3	1362.5	1490.4	1612.0
60°	534.9	605.2	697.6	784.8	876.3	992.8	1106.3	1209.2	1307.9	1425.6	1539.1
62.5°	568.0	628.5	703.1	792.9	893.7	1008.9	1099.9	1162.6	1221.5	1339.2	1454.9
65°	630.6	683.2	742.9	821.7	920.3	1031.3	1074.1	1086.8	1124.5	1236.7	1351.5
67.5°	692.1	754.3	788.2	838.6	930.9	1037.7	1043.2	988.5	987.7	1097.0	1180.0
70°	751.4	841.6	855.1	883.1	946.2	1030.9	1011.0	905.5	857.7	872.5	920.8
72.5°	712.4	847.5	857.2	865.7	903.4	982.2	959.3	817.0	709.8	690.8	745.4
75°	543.8	715.4	738.2	723.4	744.2	804.3	800.1	688.7	652.2	665.0	686.1
77.5°	391.3	551.4	601.0	552.7	547.2	586.2	575.2	584.5	653.5	672.2	667.1
80°	227.0	350.3	421.0	374.8	358.3	382.9	426.1	491.3	566.7	606.9	614.6
82.5°	141.9	206.7	281.2	263.4	241.0	284.2	351.1	396.9	434.1	471.0	473.1
85°	61.4	88.5	137.2	144.0	178.3	216.9	270.2	283.3	324.0	352.4	327.8
87.5°	2.1	2.1	33.0	49.1	87.2	156.7	212.2	189.7	192.3	168.6	157.1
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
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-F01-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°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	279.5	278.7	279.1	277.8	277.8	278.3	278.3	277.0	277.0	277.0	276.6
5°	289.3	288.4	288.0	287.2	285.9	286.7	285.5	284.6	283.3	282.9	281.7
7.5°	302.0	300.7	300.3	298.2	296.5	295.6	294.8	291.8	290.5	289.7	288.0
10°	316.8	316.8	316.0	311.7	310.5	307.5	304.5	301.1	298.6	294.8	292.7
12.5°	335.9	337.1	334.2	330.4	327.4	321.5	316.0	311.3	306.2	300.7	297.3
15°	364.2	365.1	359.2	355.8	351.1	344.3	335.9	328.2	320.6	313.0	306.6
17.5°	406.2	404.9	396.4	393.0	385.0	373.6	362.1	352.0	340.5	329.9	321.9
20°	466.7	461.7	439.6	438.4	428.2	412.1	395.6	380.8	365.5	352.0	338.4
22.5°	540.4	529.0	512.9	494.7	475.2	457.4	437.9	417.2	398.1	381.2	366.4
25°	636.6	611.2	596.3	571.8	554.8	523.5	496.4	479.9	454.0	434.5	415.5
27.5°	764.9	724.7	703.1	676.4	638.7	616.7	579.8	548.1	520.5	488.3	467.2
30°	931.4	901.7	847.5	810.2	758.1	704.8	659.4	617.9	581.9	543.4	512.1
32.5°	1102.5	1083.8	1020.3	950.8	871.6	793.3	726.8	675.5	628.5	585.3	549.3
35°	1247.7	1209.2	1146.9	1074.1	972.4	881.8	797.5	732.3	673.8	620.1	574.7
37.5°	1341.3	1324.4	1261.3	1178.7	1067.3	969.5	882.2	805.1	732.3	662.0	603.5
40°	1445.5	1435.8	1382.9	1281.6	1178.7	1058.8	959.3	878.0	799.6	715.8	639.1
42.5°	1538.7	1547.6	1493.4	1404.5	1285.4	1150.3	1044.4	954.2	864.9	779.3	690.8
45°	1622.1	1638.2	1598.4	1515.8	1385.4	1237.6	1127.0	1028.8	931.4	837.8	739.1
47.5°	1684.8	1702.2	1668.7	1603.9	1468.0	1310.4	1199.5	1089.3	987.3	879.7	775.1
50°	1737.4	1747.5	1722.1	1665.4	1534.9	1381.2	1257.5	1141.9	1028.8	912.7	798.4
52.5°	1767.8	1773.8	1748.8	1707.7	1585.7	1433.7	1302.8	1178.3	1058.0	935.6	813.6
55°	1766.2	1786.9	1758.5	1725.5	1601.4	1458.7	1326.5	1199.0	1079.6	950.4	822.5
57.5°	1733.1	1763.6	1750.5	1709.4	1588.3	1457.0	1329.9	1210.9	1093.6	955.5	818.3
60°	1669.6	1711.5	1720.8	1662.4	1535.7	1410.4	1297.7	1197.3	1080.4	933.1	792.4
62.5°	1579.8	1613.7	1637.8	1558.2	1432.8	1313.8	1225.7	1146.5	1027.5	866.6	739.1
65°	1444.3	1459.9	1466.7	1393.0	1270.2	1191.0	1133.4	1065.2	933.1	772.1	656.5
67.5°	1242.7	1240.5	1247.3	1213.0	1122.4	1080.9	1042.8	968.6	814.5	664.1	548.9
70°	988.1	1032.2	1069.4	1033.0	976.7	935.2	903.4	815.7	650.6	512.9	417.2
72.5°	804.3	840.3	860.6	828.9	774.2	744.6	702.6	615.4	457.8	364.7	286.3
75°	679.4	653.1	665.4	645.5	595.1	552.3	528.2	432.0	300.3	241.4	178.3
77.5°	613.7	571.8	545.1	502.3	444.7	396.0	371.4	268.5	189.3	142.3	102.9
80°	542.6	484.5	415.1	346.0	296.5	266.4	249.5	153.3	104.2	82.6	59.3
82.5°	412.5	357.9	290.5	240.6	197.8	172.4	152.9	87.7	58.9	43.6	33.9
85°	264.3	243.5	222.4	197.8	165.6	133.0	102.5	64.0	43.2	25.0	18.6
87.5°	127.5	105.9	105.0	97.0	92.3	72.8	43.2	14.8	9.3	8.0	5.1
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
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-F01-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: P160169

CATALOG NUMBER: ENV-F01-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	275.7	275.3	274.5	274.5	274.0	273.6	273.2	273.2	273.6	272.8	272.3
5°	280.4	280.0	278.7	278.3	277.8	277.0	277.0	276.6	276.6	275.7	275.3
7.5°	285.9	285.0	284.2	283.8	282.5	282.5	282.5	283.3	283.3	283.3	283.8
10°	291.4	289.3	288.4	288.4	288.0	288.4	289.7	290.5	291.8	292.7	293.5
12.5°	294.4	292.2	291.4	290.5	291.8	291.8	293.9	296.5	298.6	300.7	301.6
15°	302.0	298.2	296.5	294.4	294.4	294.4	296.5	298.6	301.1	303.7	304.1
17.5°	315.1	308.3	304.9	300.3	299.0	297.3	297.3	298.2	299.9	302.0	302.0
20°	328.2	321.5	316.0	310.9	307.5	302.8	299.4	296.5	295.2	296.1	296.1
22.5°	352.0	343.9	337.1	328.7	321.0	315.1	306.6	299.4	293.9	292.2	291.0
25°	394.7	383.3	371.9	359.2	350.7	339.7	327.8	316.0	304.9	297.3	290.5
27.5°	442.2	426.5	410.0	390.1	376.5	360.0	344.3	327.4	313.8	302.4	290.1
30°	487.5	458.3	434.5	409.6	387.5	365.1	345.6	325.7	310.9	297.3	282.5
32.5°	509.9	475.2	443.0	411.7	385.0	359.2	338.0	315.5	299.9	284.6	266.8
35°	525.6	484.1	445.6	409.1	379.1	350.7	326.5	303.3	284.6	267.3	246.9
37.5°	545.1	493.0	447.7	407.0	371.9	339.7	312.6	286.3	265.1	246.5	225.3
40°	570.5	506.6	450.2	401.1	360.9	324.4	296.5	268.1	245.7	225.7	206.3
42.5°	605.7	525.2	453.2	393.9	348.6	310.5	281.7	254.1	230.4	209.2	189.7
45°	640.4	546.8	460.8	391.8	340.5	301.6	271.1	241.8	216.9	194.4	172.0
47.5°	666.2	562.9	468.9	393.0	335.9	292.2	259.6	227.0	199.1	174.5	151.6
50°	682.7	573.0	476.1	396.4	331.6	280.0	241.4	208.4	179.6	155.4	132.6
52.5°	691.2	576.0	478.6	395.2	320.6	260.5	221.9	190.2	162.6	138.9	118.6
55°	693.8	573.0	473.1	383.3	301.6	241.0	204.1	174.1	147.4	124.9	106.7
57.5°	684.9	560.3	453.6	359.2	276.1	222.4	185.1	155.9	130.4	110.5	94.0
60°	656.1	531.1	419.3	321.5	247.8	197.4	160.1	131.3	110.5	93.2	81.7
62.5°	603.5	481.6	372.7	274.5	208.8	163.1	127.9	102.9	86.0	73.7	67.8
65°	537.9	413.8	302.8	218.1	159.7	121.6	91.9	75.4	63.5	56.3	53.4
67.5°	439.6	323.6	226.6	155.4	110.1	82.6	62.3	53.4	48.3	46.2	45.3
70°	316.4	224.5	149.9	100.8	71.6	56.3	45.3	41.5	39.4	39.4	39.8
72.5°	208.4	138.5	91.5	64.4	50.8	42.4	36.8	35.2	35.2	36.0	36.4
75°	122.0	80.5	56.3	47.0	40.2	35.6	32.6	31.3	31.3	31.8	31.8
77.5°	72.0	49.6	40.2	35.6	32.6	30.5	28.8	27.1	26.7	26.7	28.0
80°	44.5	35.2	31.3	28.4	26.3	24.6	22.9	22.9	22.9	22.4	23.3
82.5°	28.8	25.0	24.6	23.7	21.2	19.5	17.8	17.8	18.6	17.8	18.2
85°	17.4	16.5	16.1	16.1	15.2	14.4	13.1	13.1	14.4	14.0	12.3
87.5°	4.7	4.2	5.5	5.1	5.9	5.9	5.9	6.8	8.9	11.4	8.5
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
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: P160169
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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: P160169
 NUMBER: ENV-F01-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°	
274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	112.5°	21.2
271.9	272.3	271.5	271.1	271.5	271.9	270.6	270.2	269.8	269.4	269.8	115°	25.0
274.9	274.9	273.6	272.8	272.8	272.3	271.1	270.6	268.9	268.5	269.8	117.5°	29.5
283.3	282.9	281.7	280.4	280.0	280.0	277.0	275.7	274.9	272.3	272.8	120°	34.8
293.1	293.1	293.5	291.8	289.7	289.3	285.9	283.8	282.5	280.4	279.5	122.5°	40.9
300.7	299.4	299.0	296.5	294.4	293.5	290.5	288.9	287.2	285.0	284.6	125°	47.8
303.3	300.7	299.0	296.1	293.5	291.8	289.3	287.6	285.5	284.2	283.3	127.5°	55.3
300.7	298.2	295.6	292.2	288.9	286.7	283.8	281.2	280.4	278.7	276.1	130°	63.0
295.2	292.2	289.3	285.0	281.2	278.3	274.9	272.8	270.2	267.7	262.6	132.5°	70.5
288.4	285.0	282.1	276.6	272.8	269.4	265.6	262.2	259.2	254.1	246.5	135°	77.9
283.8	276.6	271.5	263.9	259.6	255.4	253.7	250.3	246.1	237.2	227.9	137.5°	85.3
277.0	263.9	254.5	246.9	241.0	235.9	232.9	229.1	224.9	216.4	206.7	140°	92.5
265.6	250.3	241.4	233.4	226.6	221.1	215.6	208.4	202.9	193.1	186.4	142.5°	99.2
248.2	235.5	227.4	219.8	210.9	203.7	196.9	188.5	180.4	170.7	164.8	145°	104.9
228.7	217.3	207.1	199.1	189.7	182.5	175.3	165.6	158.0	149.1	143.6	147.5°	110.1
208.4	196.1	184.2	174.9	166.5	158.4	152.1	142.7	134.7	126.2	123.2	150°	115.1
190.2	176.2	163.5	154.2	144.8	136.8	130.0	120.3	113.5	107.6	104.2	152.5°	119.7
172.4	157.6	145.7	136.0	126.6	118.2	109.3	101.6	95.7	93.2	88.5	155°	123.7
152.5	137.2	125.8	115.2	107.6	98.7	91.9	86.8	83.0	80.9	77.9	157.5°	127.0
132.1	119.4	107.6	97.8	88.5	80.9	76.7	74.1	72.8	71.2	69.9	160°	130.3
115.6	104.6	92.8	83.4	75.0	69.5	67.3	66.1	65.2	64.4	64.0	162.5°	133.5
104.2	92.3	81.7	72.8	66.5	63.5	62.7	61.8	61.0	60.6	60.1	165°	136.0
95.3	83.4	73.7	66.1	61.4	60.6	60.1	59.3	58.4	58.4	57.6	167.5°	137.1
84.7	74.5	66.1	60.6	58.0	57.6	57.2	56.8	56.3	56.3	55.9	170°	137.4
73.7	66.1	60.6	56.8	55.9	55.1	54.2	53.4	52.9	53.8	54.2	172.5°	138.6
62.7	58.0	54.6	53.4	52.5	51.2	50.4	49.6	49.6	50.4	51.7	175°	140.5
52.1	50.4	49.6	48.7	48.3	47.9	47.0	46.2	46.2	46.2	47.0	177.5°	141.1
44.9	44.0	44.0	43.6	43.2	43.2	42.4	41.5	41.5	41.5	41.5	180°	140.8
39.4	39.8	39.8	39.8	39.4	39.0	38.5	37.7	37.3	36.4	35.6		
36.4	36.0	35.6	35.2	34.7	34.3	33.9	33.5	32.6	31.8	30.9		
32.6	31.8	30.5	30.1	29.6	28.8	28.8	28.4	27.5	26.3	25.4		
28.4	27.5	26.3	25.4	25.4	25.0	24.1	23.7	22.4	21.2	20.3		
22.9	21.6	20.3	19.9	19.5	19.1	18.6	18.2	17.8	16.5	16.1		
16.9	15.7	14.4	14.0	13.6	12.7	12.3	12.3	12.3	11.0	10.2		
11.0	9.3	8.0	6.8	6.8	6.4	5.5	4.7	3.8	2.5	1.7		
5.5	3.0	1.7	0.4	0.4	0.4	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		

'160169
 ENV-F01-LED-E1-SLL-7050-ULG

REPORT NUMBER: P160169
 CATALOG NUMBER: ENV-F01-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°	274.9	274.9
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	269.8	269.4
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	269.8	267.3
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	271.1	268.9
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	276.6	273.2
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	281.2	277.4
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	280.8	275.3
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	271.9	265.6
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	257.1	248.6
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	238.0	230.0
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	219.4	210.1
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	198.6	190.6
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	177.5	170.3
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	157.1	150.4
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	136.8	130.0
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	117.3	111.0
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	99.1	94.4
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	86.0	81.7
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	75.4	72.0
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	67.8	65.2
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	62.3	60.1
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	58.9	57.2
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	56.3	55.1
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	54.6	52.9
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	52.5	51.2
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	50.4	48.7
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	46.6	44.5
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	41.1	39.4
										70°	34.7	34.3
										72.5°	29.2	28.8
										75°	24.6	24.6
										77.5°	20.3	19.9
										80°	15.7	14.8
										82.5°	8.9	8.5
										85°	1.3	0.8
										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

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CATALOG NUMBER: ENV-F01-LED-E1-SLL

LED-E1-SLL-7050-ULG

tinued):

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	112.5°	21.2	21.2	21.2
269.8	270.2	271.9	272.8	273.2	273.2	273.6	274.5	274.9	115°	25.0	25.0	25.0
267.3	268.1	268.9	270.2	270.6	270.6	271.1	272.3	273.6	117.5°	29.5	29.5	29.5
267.7	267.3	267.7	268.5	268.5	268.5	268.9	270.2	271.5	120°	34.8	34.8	34.8
271.1	268.5	266.8	266.4	266.0	266.0	266.8	268.5	269.8	122.5°	40.9	40.9	40.9
274.0	270.6	267.3	265.1	263.4	262.6	263.0	264.7	267.3	125°	47.8	47.8	47.8
271.5	266.4	262.6	259.6	257.1	256.2	256.7	257.9	260.9	127.5°	55.3	55.3	55.3
260.5	255.0	250.7	248.6	247.3	246.9	247.8	250.3	252.9	130°	63.0	63.0	63.0
244.8	241.8	238.0	236.8	234.2	234.2	233.8	233.8	235.1	132.5°	70.5	70.5	70.5
227.4	225.7	221.9	219.0	216.0	215.6	212.6	213.0	212.6	135°	77.9	77.9	77.9
207.5	205.4	200.8	196.5	193.1	191.0	187.6	187.2	185.9	137.5°	85.3	85.3	85.3
187.6	184.2	178.7	174.5	170.3	167.3	164.3	161.4	160.5	140°	92.5	92.5	92.5
167.3	164.3	158.0	154.2	148.2	144.0	141.5	137.2	135.1	142.5°	99.2	99.2	99.2
147.4	144.0	136.8	129.6	125.4	120.3	116.5	111.0	108.4	145°	104.9	104.9	104.9
125.4	123.2	116.0	108.4	104.6	97.8	93.2	88.5	87.7	147.5°	110.1	110.1	110.1
107.6	102.9	97.4	91.5	85.1	81.3	79.2	78.4	77.9	150°	115.1	115.1	115.1
91.1	88.1	83.0	78.8	75.8	75.0	75.0	75.0	75.4	152.5°	119.7	119.7	119.7
80.0	76.2	73.7	72.4	72.4	72.8	73.3	74.1	75.0	155°	123.7	123.7	123.7
70.7	69.5	69.5	69.0	69.9	70.7	72.0	73.3	74.1	157.5°	127.0	127.0	127.0
64.4	64.8	65.6	66.1	67.8	69.0	70.3	71.2	72.0	160°	130.3	130.3	130.3
59.3	59.7	60.6	61.8	63.1	64.8	66.1	66.9	67.3	162.5°	133.5	133.5	133.5
56.3	56.3	57.6	58.9	60.6	61.8	63.1	63.5	64.4	165°	136.0	136.0	136.0
53.8	54.2	55.5	56.3	57.2	58.0	58.9	59.3	61.0	167.5°	137.1	137.1	137.1
52.1	52.5	52.9	52.1	52.9	53.8	54.6	55.5	56.3	170°	137.4	137.4	137.4
50.0	49.1	48.3	48.3	48.7	49.6	51.2	52.5	53.8	172.5°	138.6	138.6	138.6
47.4	46.2	44.9	44.5	44.9	45.7	47.4	49.1	50.0	175°	140.5	140.5	140.5
43.2	42.8	42.4	41.9	42.4	43.2	44.9	46.2	47.4	177.5°	141.1	141.1	141.1
39.0	38.5	38.1	38.5	39.0	39.8	41.5	42.8	44.0	180°	140.8	140.8	140.8
33.9	33.9	33.9	34.3	34.7	36.4	37.7	39.4	39.8				
28.4	29.2	29.2	29.2	30.1	32.2	33.9	35.6	36.4				
24.1	23.7	24.6	24.6	25.4	27.1	28.4	29.6	30.1				
19.5	19.5	19.9	19.9	19.9	20.8	21.6	21.6	21.6				
14.4	14.0	13.6	12.7	12.7	13.1	13.1	13.1	14.0				
6.8	5.5	5.5	5.1	4.7	4.7	4.7	5.5	5.9				
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8				
0.0	0.4	0.4	0.4	0.8	0.8	0.8	1.3	1.3				
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				



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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°	274.9	274.9	274.9	274.9
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	274.5	275.3	275.3	276.1
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	273.6	274.5	274.9	276.1
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	272.3	274.0	274.9	276.6
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	271.1	273.6	275.3	278.3
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	269.8	272.3	275.3	278.3
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	263.4	266.0	270.2	274.5
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	254.1	256.7	260.1	263.9
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	236.3	237.2	240.6	244.8
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	211.3	210.9	212.6	217.3
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	183.0	184.7	183.4	188.9
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	156.7	158.0	159.7	162.2
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	131.7	131.3	132.6	134.7
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	105.9	105.5	105.9	108.0
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	86.8	85.6	86.8	89.8
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	78.4	78.4	79.6	81.7
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	75.8	76.2	77.1	78.8
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	75.4	75.4	75.4	76.2
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	74.5	74.1	74.1	74.1
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	72.4	72.0	72.0	72.0
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	67.8	68.2	68.2	68.6
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	64.8	65.6	66.1	66.9
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	61.8	63.5	64.8	65.6
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	57.2	58.9	60.1	62.3
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	54.6	55.5	55.9	57.2
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	51.2	52.1	52.9	53.4
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	48.3	49.1	50.4	50.8
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	44.9	46.2	47.0	47.4
								70°	41.1	42.8	43.2	44.0
								72.5°	37.3	38.1	38.5	39.4
								75°	31.3	32.6	33.5	33.9
								77.5°	23.3	24.6	25.8	27.1
								80°	14.8	16.1	16.9	17.8
								82.5°	6.8	8.0	8.5	9.3
								85°	1.3	1.3	1.3	1.7
								87.5°	1.3	1.7	1.7	1.7
								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°
274.9	274.9	274.9	274.9	274.9	274.9	274.9	112.5°	21.2	21.2	21.2	21.2	21.2
276.1	276.6	277.4	277.4	278.3	278.3	279.1	115°	25.0	25.0	25.0	25.0	25.0
277.0	277.8	279.1	279.5	281.2	282.1	282.9	117.5°	29.5	29.5	29.5	29.5	29.5
278.3	279.5	281.2	282.5	284.6	285.9	287.2	120°	34.8	34.8	34.8	34.8	34.8
280.4	282.5	285.5	286.7	288.4	291.4	293.5	122.5°	40.9	40.9	40.9	40.9	40.9
283.3	286.3	290.1	293.5	295.6	299.9	303.3	125°	47.8	47.8	47.8	47.8	47.8
279.1	285.5	290.1	296.5	302.0	309.2	315.1	127.5°	55.3	55.3	55.3	55.3	55.3
268.9	274.9	282.9	291.0	299.4	311.7	323.6	130°	63.0	63.0	63.0	63.0	63.0
250.3	257.1	266.4	276.6	288.9	304.9	321.9	132.5°	70.5	70.5	70.5	70.5	70.5
223.2	229.1	239.3	250.7	264.7	284.6	309.2	135°	77.9	77.9	77.9	77.9	77.9
194.4	202.5	212.2	224.5	240.1	263.9	290.1	137.5°	85.3	85.3	85.3	85.3	85.3
166.9	175.3	185.9	199.5	217.7	243.1	273.2	140°	92.5	92.5	92.5	92.5	92.5
138.5	148.2	158.0	174.9	193.1	219.8	253.3	142.5°	99.2	99.2	99.2	99.2	99.2
113.1	120.3	132.1	147.4	168.6	194.8	230.4	145°	104.9	104.9	104.9	104.9	104.9
92.8	98.7	110.1	124.9	144.0	169.8	200.8	147.5°	110.1	110.1	110.1	110.1	110.1
84.7	89.4	97.4	108.0	124.9	149.9	176.2	150°	115.1	115.1	115.1	115.1	115.1
81.7	86.0	91.9	101.2	114.4	133.4	155.9	152.5°	119.7	119.7	119.7	119.7	119.7
78.8	83.0	89.8	98.3	109.3	122.8	141.9	155°	123.7	123.7	123.7	123.7	123.7
76.2	80.9	88.1	97.4	107.6	119.4	134.3	157.5°	127.0	127.0	127.0	127.0	127.0
73.7	77.9	85.1	95.7	106.7	119.4	134.3	160°	130.3	130.3	130.3	130.3	130.3
69.9	74.1	81.7	92.8	105.0	119.0	136.0	162.5°	133.5	133.5	133.5	133.5	133.5
67.8	71.6	79.6	91.9	105.0	120.3	138.5	165°	136.0	136.0	136.0	136.0	136.0
66.5	69.9	79.2	93.2	108.4	126.2	146.1	167.5°	137.1	137.1	137.1	137.1	137.1
64.4	68.2	77.9	93.6	112.7	134.7	159.7	170°	137.4	137.4	137.4	137.4	137.4
58.4	63.1	73.7	90.6	111.4	138.5	171.5	172.5°	138.6	138.6	138.6	138.6	138.6
53.8	56.8	65.6	83.4	105.0	134.3	173.7	175°	140.5	140.5	140.5	140.5	140.5
51.7	53.4	59.3	73.7	94.9	126.2	167.3	177.5°	141.1	141.1	141.1	141.1	141.1
48.7	49.6	53.8	65.2	81.3	111.8	151.6	180°	140.8	140.8	140.8	140.8	140.8
44.9	45.3	48.7	55.9	67.8	88.9	126.6						
40.2	41.1	43.2	48.3	55.9	68.2	91.9						
34.7	35.2	36.0	39.4	44.0	52.5	65.2						
28.0	28.0	28.8	30.5	33.0	39.0	46.6						
18.2	19.5	20.3	23.3	24.1	28.4	33.0						
10.6	11.4	11.9	12.7	14.8	16.9	20.3						
1.7	2.5	2.5	3.4	4.2	4.7	5.5						
2.1	2.1	2.1	2.1	2.5	2.5	2.5						
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						
0.5	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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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°	274.9	274.9	274.9	274.9	274.9	274.9
25.0	25.0	25.0	25.0	25.0	25.0	2.5°	279.5	279.1	280.0	280.8	280.4	282.9
29.5	29.5	29.5	29.5	29.5	29.5	5°	284.2	283.8	285.0	285.9	286.3	288.0
34.8	34.8	34.8	34.8	34.8	34.8	7.5°	288.9	289.3	291.4	291.8	293.1	295.2
40.9	40.9	40.9	40.9	40.9	40.9	10°	294.4	296.5	299.0	299.9	302.0	304.5
47.8	47.8	47.8	47.8	47.8	47.8	12.5°	305.4	308.3	311.7	314.3	318.5	323.6
55.3	55.3	55.3	55.3	55.3	55.3	15°	320.6	327.8	333.3	338.4	344.8	350.7
63.0	63.0	63.0	63.0	63.0	63.0	17.5°	334.2	348.1	360.0	370.6	380.8	390.1
70.5	70.5	70.5	70.5	70.5	70.5	20°	340.5	362.5	381.2	400.7	420.1	433.3
77.9	77.9	77.9	77.9	77.9	77.9	22.5°	334.6	365.5	394.3	425.7	455.3	482.0
85.3	85.3	85.3	85.3	85.3	85.3	25°	321.9	360.0	402.8	447.7	492.6	533.2
92.5	92.5	92.5	92.5	92.5	92.5	27.5°	310.0	356.6	406.2	457.4	510.8	559.5
99.2	99.2	99.2	99.2	99.2	99.2	30°	294.4	345.2	399.4	452.3	510.4	567.5
104.9	104.9	104.9	104.9	104.9	104.9	32.5°	271.1	322.7	379.9	437.5	501.9	565.4
110.1	110.1	110.1	110.1	110.1	110.1	35°	243.5	295.2	353.7	414.2	485.8	557.4
115.1	115.1	115.1	115.1	115.1	115.1	37.5°	213.5	264.3	325.3	390.1	464.2	544.2
119.7	119.7	119.7	119.7	119.7	119.7	40°	188.1	233.4	296.5	366.8	444.7	527.7
123.7	123.7	123.7	123.7	123.7	123.7	42.5°	167.7	208.8	268.5	339.7	423.1	508.7
127.0	127.0	127.0	127.0	127.0	127.0	45°	155.9	190.2	244.8	315.5	400.7	488.8
130.3	130.3	130.3	130.3	130.3	130.3	47.5°	153.3	180.9	228.7	297.3	379.1	467.6
133.5	133.5	133.5	133.5	133.5	133.5	50°	155.9	181.3	221.5	285.9	362.5	448.5
136.0	136.0	136.0	136.0	136.0	136.0	52.5°	160.9	185.5	222.4	281.7	355.8	437.1
137.1	137.1	137.1	137.1	137.1	137.1	55°	169.0	196.9	231.3	285.5	354.9	432.4
137.4	137.4	137.4	137.4	137.4	137.4	57.5°	185.1	216.9	251.6	301.1	365.1	437.5
138.6	138.6	138.6	138.6	138.6	138.6	60°	205.4	243.5	285.5	338.0	389.7	454.5
140.5	140.5	140.5	140.5	140.5	140.5	62.5°	217.7	269.8	327.4	388.4	441.3	494.3
141.1	141.1	141.1	141.1	141.1	141.1	65°	216.4	280.8	362.1	449.0	515.0	565.8
140.8	140.8	140.8	140.8	140.8	140.8	67.5°	202.5	272.8	353.7	452.3	551.9	623.4
						70°	169.0	234.6	329.1	448.1	570.5	662.4
						72.5°	134.7	192.7	282.9	395.2	515.9	609.9
						75°	89.8	136.0	208.8	303.3	390.9	472.7
						77.5°	61.0	86.0	130.4	199.1	271.5	338.4
						80°	40.7	53.8	74.5	109.7	152.1	194.8
						82.5°	23.7	29.6	38.1	54.2	80.5	113.5
						85°	6.4	8.0	10.6	14.0	25.0	44.0
						87.5°	2.5	2.1	2.1	2.1	2.1	2.1
						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



REPORT NUMBER: P160169

CATALOG NUMBER: ENV-F01-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

360°	330°	335°	340°	345°	350°	355°	360°
274.9	112.5°	21.2	21.2	21.2	21.2	21.2	21.2
280.8	115°	25.0	25.0	25.0	25.0	25.0	25.0
287.6	117.5°	29.5	29.5	29.5	29.5	29.5	29.5
295.6	120°	34.8	34.8	34.8	34.8	34.8	34.8
307.9	122.5°	40.9	40.9	40.9	40.9	40.9	40.9
325.7	125°	47.8	47.8	47.8	47.8	47.8	47.8
357.5	127.5°	55.3	55.3	55.3	55.3	55.3	55.3
398.5	130°	63.0	63.0	63.0	63.0	63.0	63.0
449.0	132.5°	70.5	70.5	70.5	70.5	70.5	70.5
505.7	135°	77.9	77.9	77.9	77.9	77.9	77.9
570.5	137.5°	85.3	85.3	85.3	85.3	85.3	85.3
610.3	140°	92.5	92.5	92.5	92.5	92.5	92.5
618.8	142.5°	99.2	99.2	99.2	99.2	99.2	99.2
624.7	145°	104.9	104.9	104.9	104.9	104.9	104.9
626.4	147.5°	110.1	110.1	110.1	110.1	110.1	110.1
623.9	150°	115.1	115.1	115.1	115.1	115.1	115.1
613.7	152.5°	119.7	119.7	119.7	119.7	119.7	119.7
600.6	155°	123.7	123.7	123.7	123.7	123.7	123.7
584.1	157.5°	127.0	127.0	127.0	127.0	127.0	127.0
563.7	160°	130.3	130.3	130.3	130.3	130.3	130.3
544.7	162.5°	133.5	133.5	133.5	133.5	133.5	133.5
529.8	165°	136.0	136.0	136.0	136.0	136.0	136.0
520.5	167.5°	137.1	137.1	137.1	137.1	137.1	137.1
521.8	170°	137.4	137.4	137.4	137.4	137.4	137.4
534.9	172.5°	138.6	138.6	138.6	138.6	138.6	138.6
568.0	175°	140.5	140.5	140.5	140.5	140.5	140.5
630.6	177.5°	141.1	141.1	141.1	141.1	141.1	141.1
692.1	180°	140.8	140.8	140.8	140.8	140.8	140.8
751.4							
712.4							
543.8							
391.3							
227.0							
141.9							
61.4							
2.1							
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)