

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: P160171

Luminaire Tested: **ENV-F01-LED-E1-SLL-8030-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160171
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-8030-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2011.8 lumens
Efficiency: N/A
Efficacy: 59.3 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

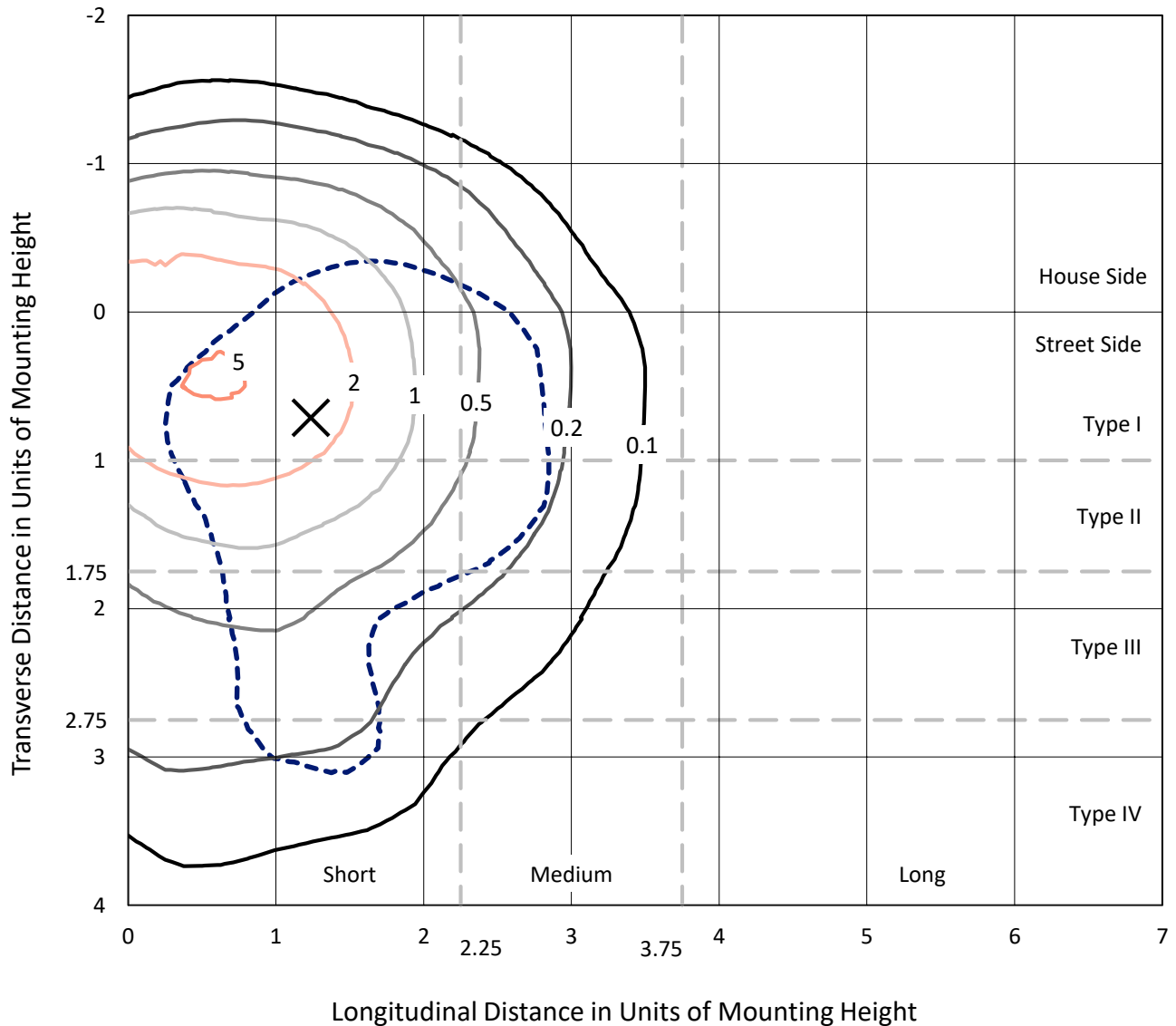
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

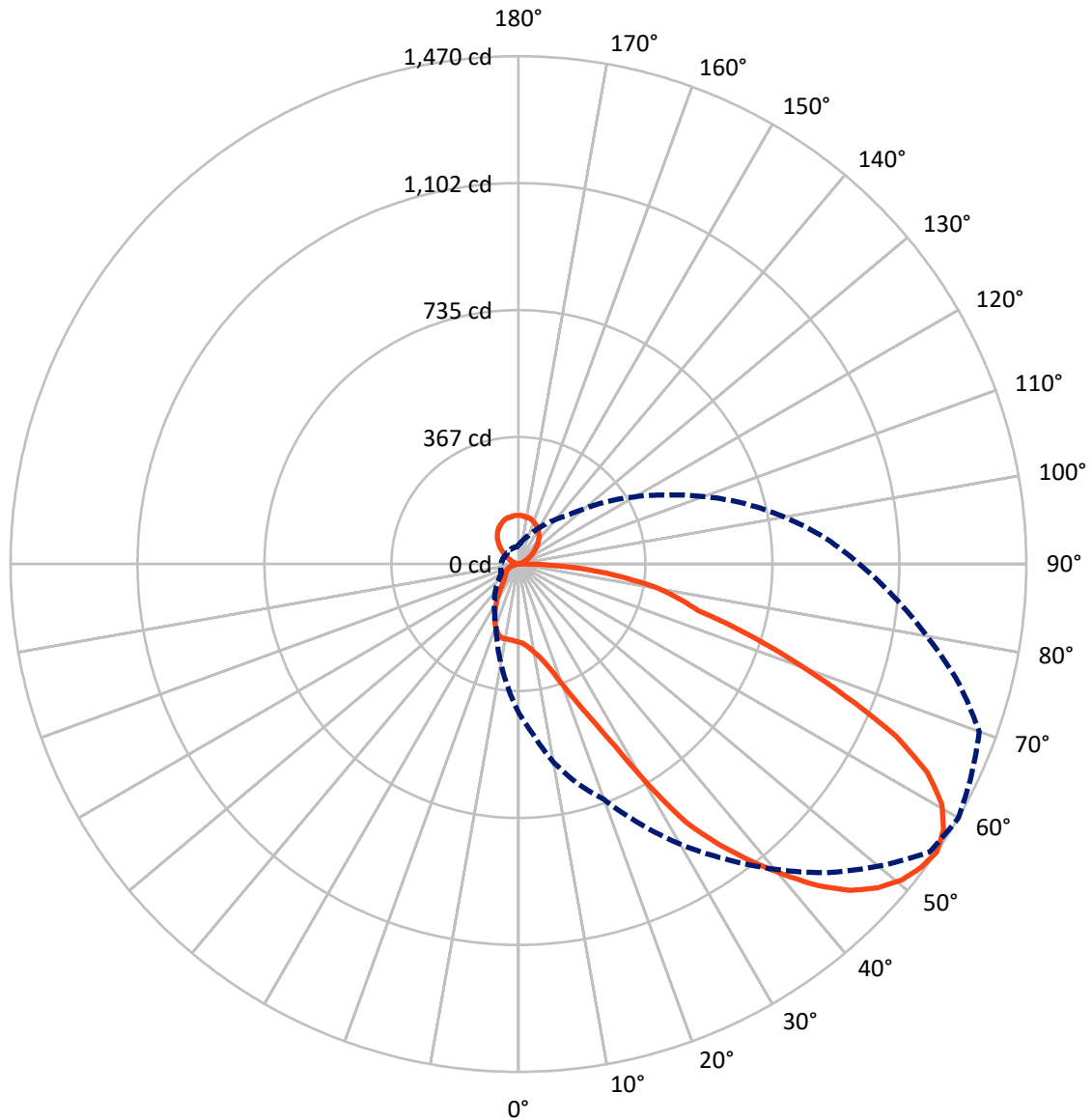
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 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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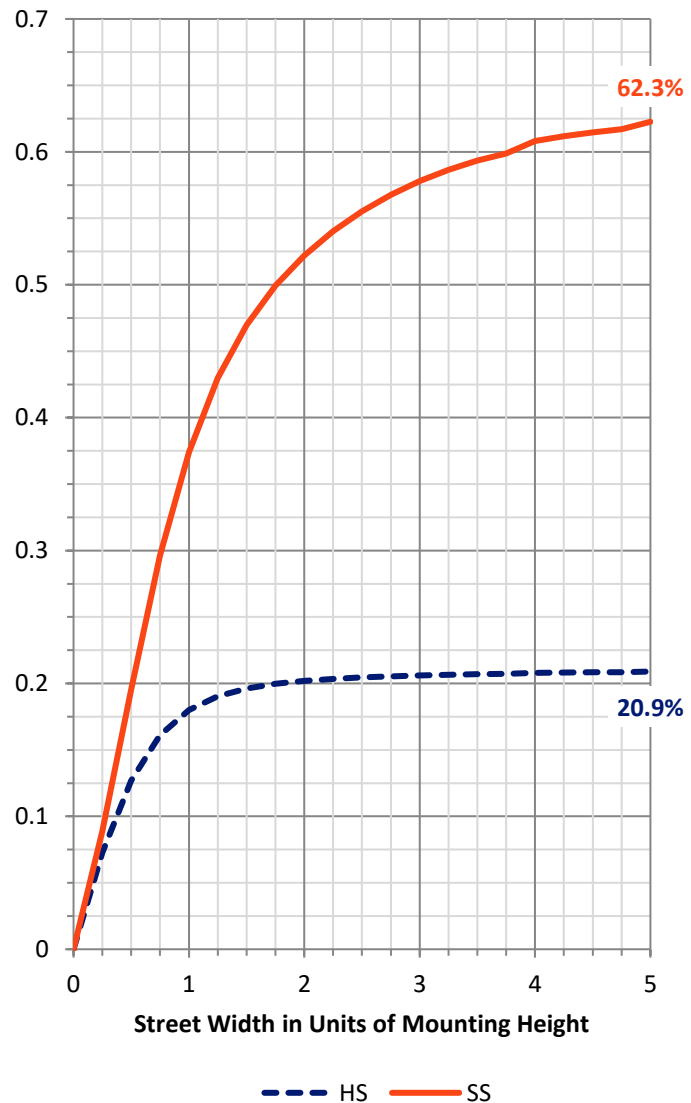
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	424.0	157.7	581.7
	% Fixture	21.1	7.8	28.9
Street Side	Lumens	1272.3	157.7	1430.0
	% Fixture	63.2	7.8	71.1
Total	Lumens	1696.3	315.5	2011.8
	% Fixture	84.3	15.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.3	1.1
10°-20°	73.2	3.6
20°-30°	142.1	7.1
30°-40°	223.2	11.1
40°-50°	298.4	14.8
50°-60°	350.1	17.4
60°-70°	332.2	16.5
70°-80°	200.5	10.0
80°-90°	54.3	2.7
90°-100°	1.3	0.1
100°-110°	12.3	0.6
110°-120°	25.2	1.3
120°-130°	43.0	2.1
130°-140°	60.0	3.0
140°-150°	65.4	3.2
150°-160°	56.9	2.8
160°-170°	38.2	1.9
170°-180°	13.3	0.7
0°-90°	1696.3	84.3
0°-180°	2011.8	100.0



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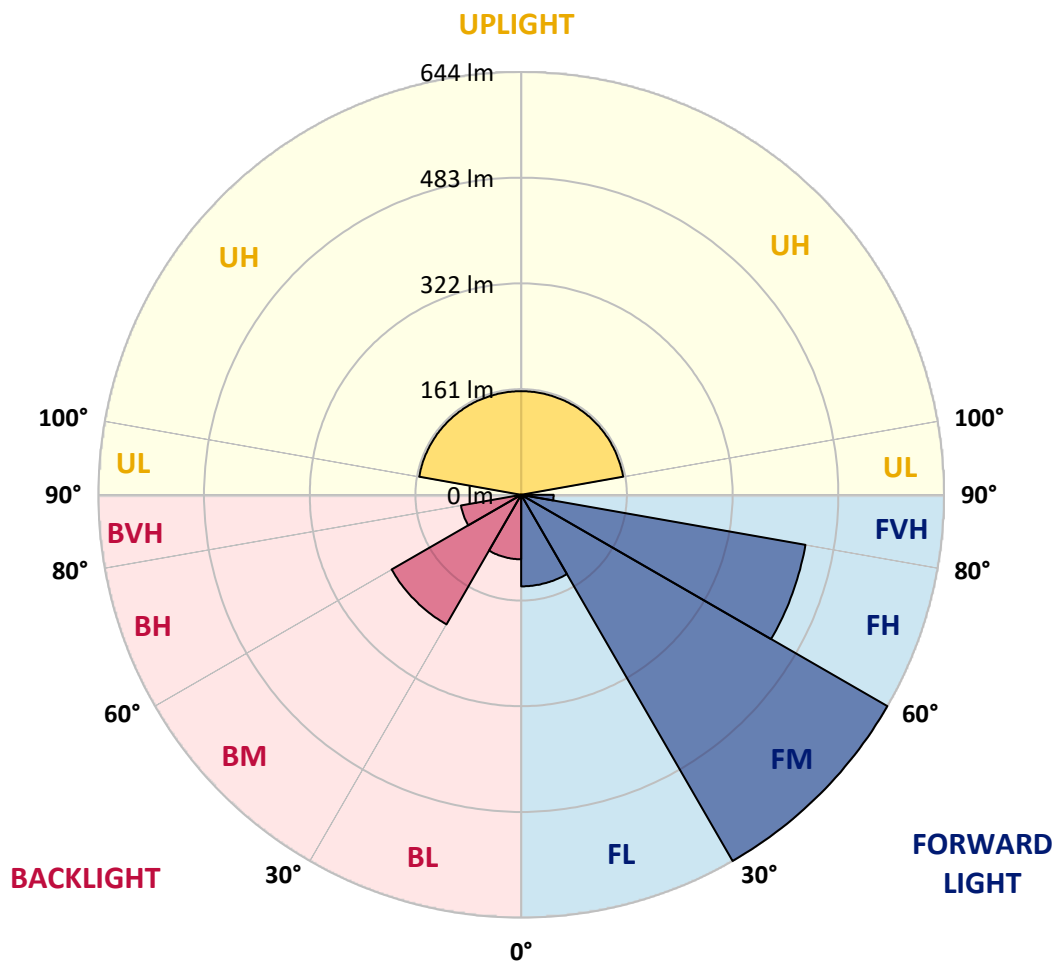
CATALOG NUMBER: ENV-F01-LED-E1-SLL-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	139.4	6.9			
FM	(30°-60°)	643.9	32.0			
FH	(60°-80°)	439.6	21.8			G0/660
FVH	(80°-90°)	49.4	2.5			G1/100
BL	(0°-30°)	98.1	4.9	B0/110		
BM	(30°-60°)	227.8	11.3	B1/1000		
BH	(60°-80°)	93.1	4.6	B0/110		G0/110
BVH	(80°-90°)	4.9	0.2			G0/10
UL	(90°-100°)	1.3	0.1		U1/10	
UH	(100°-180°)	157.7	7.8		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°	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1
2.5°	231.0	230.6	231.0	230.6	230.6	230.6	231.0	230.6	229.6	229.6	229.9
5°	236.5	236.5	236.5	236.9	236.9	237.2	237.9	237.2	236.9	238.6	237.2
7.5°	243.2	243.2	244.2	244.6	245.6	245.6	247.0	246.6	248.0	249.1	248.0
10°	253.3	252.2	254.7	254.7	257.4	257.8	259.2	259.5	262.0	264.1	262.3
12.5°	267.9	268.6	272.8	273.5	277.0	277.0	277.0	278.3	280.1	281.5	279.7
15°	294.0	295.4	301.0	301.3	307.3	304.8	307.6	308.0	307.6	308.7	306.2
17.5°	327.8	331.6	339.7	341.4	344.2	349.1	349.1	348.4	350.1	351.2	344.5
20°	369.3	375.9	384.9	388.4	396.1	404.5	404.1	402.7	403.1	400.3	393.0
22.5°	416.0	430.9	445.9	451.5	457.1	467.5	474.1	472.0	473.8	467.5	460.9
25°	469.3	493.6	516.3	524.6	544.8	563.3	566.1	564.7	557.0	551.1	544.5
27.5°	502.0	534.0	565.1	586.3	620.8	650.4	656.3	666.1	668.5	673.4	657.4
30°	509.0	549.0	587.7	620.1	661.6	696.7	735.8	764.7	784.2	799.5	789.1
32.5°	513.8	559.1	602.0	642.7	676.9	728.1	777.2	820.1	877.2	898.1	917.9
35°	515.2	567.1	615.6	661.6	705.8	756.7	809.3	856.3	933.6	995.6	1038.1
37.5°	513.1	573.1	629.8	685.9	738.5	794.6	850.0	896.0	971.2	1051.4	1108.5
40°	504.8	571.0	635.8	698.8	762.6	831.9	895.3	945.1	1015.5	1110.2	1186.2
42.5°	494.0	562.3	633.7	703.0	774.8	856.3	932.9	993.5	1071.2	1167.0	1253.4
45°	480.4	551.5	625.3	698.5	775.8	866.4	953.8	1031.5	1114.1	1220.7	1303.9
47.5°	463.7	536.1	614.2	688.4	768.8	866.7	963.6	1052.4	1143.0	1257.6	1347.5
50°	448.0	520.1	601.6	674.8	755.6	858.0	962.5	1061.8	1160.8	1279.2	1373.6
52.5°	435.8	506.5	590.8	664.0	740.3	843.7	952.1	1057.3	1163.5	1282.0	1378.5
55°	428.1	495.4	581.8	656.7	725.0	828.4	936.1	1041.6	1153.1	1263.5	1360.4
57.5°	429.2	493.3	576.5	655.3	713.8	815.2	917.9	1019.3	1120.7	1225.9	1325.9
60°	440.0	497.8	573.8	645.5	720.8	816.6	909.9	994.6	1075.8	1172.6	1266.0
62.5°	467.2	517.0	578.3	652.1	735.1	829.8	904.7	956.3	1004.7	1101.5	1196.6
65°	518.7	561.9	611.0	675.8	757.0	848.3	883.5	893.9	924.9	1017.2	1111.6
67.5°	569.2	620.4	648.3	689.8	765.7	853.5	858.0	813.1	812.4	902.3	970.6
70°	618.0	692.2	703.4	726.3	778.3	847.9	831.6	744.8	705.4	717.6	757.4
72.5°	586.0	697.1	705.1	712.1	743.1	807.9	789.1	672.0	583.9	568.2	613.1
75°	447.3	588.4	607.2	595.0	612.1	661.6	658.1	566.4	536.5	546.9	564.4
77.5°	321.9	453.6	494.3	454.6	450.1	482.1	473.1	480.7	537.5	552.9	548.7
80°	186.7	288.1	346.3	308.3	294.7	314.9	350.5	404.1	466.1	499.2	505.5
82.5°	116.7	170.0	231.3	216.7	198.2	233.8	288.8	326.4	357.1	387.4	389.1
85°	50.5	72.8	112.9	118.4	146.7	178.4	222.3	233.1	266.5	289.8	269.6
87.5°	1.7	1.7	27.2	40.4	71.8	128.9	174.5	156.1	158.2	138.7	129.2
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



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CATALOG NUMBER: ENV-F01-LED-E1-SLL-8030-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°	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1
2.5°	229.9	229.2	229.6	228.5	228.5	228.9	228.9	227.8	227.8	227.8	227.5
5°	237.9	237.2	236.9	236.2	235.1	235.8	234.8	234.1	233.1	232.7	231.7
7.5°	248.4	247.3	247.0	245.3	243.9	243.2	242.5	240.0	239.0	238.3	236.9
10°	260.6	260.6	259.9	256.4	255.4	252.9	250.5	247.7	245.6	242.5	240.7
12.5°	276.3	277.3	274.9	271.7	269.3	264.4	259.9	256.1	251.9	247.3	244.6
15°	299.6	300.3	295.4	292.6	288.8	283.2	276.3	270.0	263.7	257.4	252.2
17.5°	334.1	333.0	326.1	323.3	316.7	307.3	297.9	289.5	280.1	271.4	264.8
20°	383.9	379.7	361.6	360.6	352.2	339.0	325.4	313.2	300.6	289.5	278.3
22.5°	444.5	435.1	421.9	406.9	390.9	376.2	360.2	343.1	327.5	313.5	301.3
25°	523.6	502.7	490.5	470.3	456.4	430.6	408.3	394.7	373.5	357.4	341.7
27.5°	629.2	596.1	578.3	556.3	525.3	507.2	476.9	450.8	428.1	401.7	384.2
30°	766.1	741.7	697.1	666.4	623.6	579.7	542.4	508.3	478.7	447.0	421.2
32.5°	906.8	891.5	839.2	782.1	716.9	652.5	597.8	555.6	517.0	481.4	451.8
35°	1026.3	994.6	943.4	883.5	799.9	725.3	656.0	602.3	554.3	510.0	472.7
37.5°	1103.3	1089.3	1037.4	969.5	877.9	797.4	725.7	662.2	602.3	544.5	496.4
40°	1189.0	1181.0	1137.4	1054.2	969.5	870.9	789.1	722.2	657.7	588.7	525.7
42.5°	1265.6	1272.9	1228.3	1155.2	1057.3	946.2	859.1	784.9	711.4	641.0	568.2
45°	1334.2	1347.5	1314.7	1246.8	1139.5	1017.9	927.0	846.2	766.1	689.1	607.9
47.5°	1385.8	1400.1	1372.6	1319.3	1207.4	1077.8	986.6	896.0	812.0	723.6	637.5
50°	1429.0	1437.4	1416.5	1369.8	1262.5	1136.0	1034.3	939.2	846.2	750.7	656.7
52.5°	1454.1	1459.0	1438.4	1404.6	1304.3	1179.2	1071.6	969.2	870.2	769.5	669.2
55°	1452.7	1469.8	1446.4	1419.3	1317.2	1199.8	1091.1	986.2	888.0	781.7	676.5
57.5°	1425.5	1450.6	1439.8	1406.0	1306.4	1198.4	1093.9	996.0	899.5	785.9	673.0
60°	1373.3	1407.8	1415.4	1367.3	1263.2	1160.1	1067.4	984.8	888.7	767.5	651.8
62.5°	1299.4	1327.3	1347.1	1281.6	1178.5	1080.6	1008.2	943.0	845.1	712.8	607.9
65°	1187.9	1200.8	1206.4	1145.8	1044.8	979.6	932.2	876.1	767.5	635.1	540.0
67.5°	1022.1	1020.4	1025.9	997.7	923.2	889.0	857.7	796.7	669.9	546.2	451.5
70°	812.7	849.0	879.6	849.7	803.3	769.2	743.1	671.0	535.1	421.9	343.1
72.5°	661.6	691.2	707.9	681.8	636.8	612.4	577.9	506.2	376.6	299.9	235.5
75°	558.8	537.2	547.3	530.9	489.5	454.3	434.4	355.3	247.0	198.6	146.7
77.5°	504.8	470.3	448.3	413.2	365.8	325.7	305.5	220.9	155.7	117.1	84.7
80°	446.3	398.5	341.4	284.6	243.9	219.1	205.2	126.1	85.7	67.9	48.8
82.5°	339.3	294.4	239.0	197.9	162.7	141.8	125.8	72.1	48.4	35.9	27.9
85°	217.4	200.3	182.9	162.7	136.2	109.4	84.3	52.6	35.5	20.6	15.3
87.5°	104.9	87.1	86.4	79.8	75.9	59.9	35.5	12.2	7.7	6.6	4.2
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: P160171

CATALOG NUMBER: ENV-F01-LED-E1-SLL-8030-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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1
2.5°	226.8	226.4	225.7	225.7	225.4	225.0	224.7	224.7	225.0	224.3	224.0
5°	230.6	230.3	229.2	228.9	228.5	227.8	227.8	227.5	227.5	226.8	226.4
7.5°	235.1	234.5	233.8	233.4	232.4	232.4	232.4	233.1	233.1	233.1	233.4
10°	239.7	237.9	237.2	237.2	236.9	237.2	238.3	239.0	240.0	240.7	241.4
12.5°	242.1	240.4	239.7	239.0	240.0	240.0	241.8	243.9	245.6	247.3	248.0
15°	248.4	245.3	243.9	242.1	242.1	242.1	243.9	245.6	247.7	249.8	250.1
17.5°	259.2	253.6	250.8	247.0	245.9	244.6	244.6	245.3	246.6	248.4	248.4
20°	270.0	264.4	259.9	255.7	252.9	249.1	246.3	243.9	242.8	243.5	243.5
22.5°	289.5	282.9	277.3	270.3	264.1	259.2	252.2	246.3	241.8	240.4	239.3
25°	324.7	315.3	305.9	295.4	288.4	279.4	269.6	259.9	250.8	244.6	239.0
27.5°	363.7	350.8	337.2	320.8	309.7	296.1	283.2	269.3	258.1	248.7	238.6
30°	401.0	376.9	357.4	336.9	318.8	300.3	284.3	267.9	255.7	244.6	232.4
32.5°	419.4	390.9	364.4	338.6	316.7	295.4	278.0	259.5	246.6	234.1	219.5
35°	432.3	398.2	366.5	336.5	311.8	288.4	268.6	249.4	234.1	219.8	203.1
37.5°	448.3	405.5	368.2	334.8	305.9	279.4	257.1	235.5	218.1	202.8	185.3
40°	469.3	416.6	370.3	329.9	296.8	266.8	243.9	220.5	202.1	185.7	169.7
42.5°	498.2	432.0	372.8	324.0	286.7	255.4	231.7	209.0	189.5	172.1	156.1
45°	526.7	449.7	379.0	322.2	280.1	248.0	223.0	198.9	178.4	159.9	141.4
47.5°	548.0	463.0	385.6	323.3	276.3	240.4	213.5	186.7	163.7	143.5	124.7
50°	561.6	471.3	391.6	326.1	272.8	230.3	198.6	171.4	147.7	127.9	109.0
52.5°	568.5	473.8	393.7	325.0	263.7	214.2	182.5	156.4	133.8	114.3	97.5
55°	570.6	471.3	389.1	315.3	248.0	198.2	167.9	143.2	121.2	102.8	87.8
57.5°	563.3	460.9	373.1	295.4	227.1	182.9	152.2	128.2	107.3	90.9	77.3
60°	539.6	436.9	344.9	264.4	203.8	162.3	131.7	108.0	90.9	76.6	67.2
62.5°	496.4	396.1	306.6	225.7	171.7	134.1	105.2	84.7	70.7	60.6	55.7
65°	442.4	340.4	249.1	179.4	131.3	100.0	75.6	62.0	52.3	46.3	43.9
67.5°	361.6	266.2	186.4	127.9	90.6	67.9	51.2	43.9	39.7	38.0	37.3
70°	260.2	184.6	123.3	82.9	58.9	46.3	37.3	34.1	32.4	32.4	32.7
72.5°	171.4	113.9	75.2	53.0	41.8	34.8	30.3	28.9	28.9	29.6	30.0
75°	100.3	66.2	46.3	38.7	33.1	29.3	26.8	25.8	25.8	26.1	26.1
77.5°	59.2	40.8	33.1	29.3	26.8	25.1	23.7	22.3	21.9	21.9	23.0
80°	36.6	28.9	25.8	23.3	21.6	20.2	18.8	18.8	18.8	18.5	19.2
82.5°	23.7	20.6	20.2	19.5	17.4	16.0	14.6	14.6	15.3	14.6	15.0
85°	14.3	13.6	13.2	13.2	12.5	11.8	10.8	10.8	11.8	11.5	10.1
87.5°	3.8	3.5	4.5	4.2	4.9	4.9	4.9	5.6	7.3	9.4	7.0
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
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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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°

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REPORT NUMBER: P
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DISTRIBUTION (continued):

CANDELA DISTRIBUTION

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°	165°	165°
226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	112.5°	21.2
223.7	224.0	223.3	223.0	223.3	223.7	222.6	222.3	221.9	221.6	221.9	115°	25.0
226.1	226.1	225.0	224.3	224.3	224.0	223.0	222.6	221.2	220.9	221.9	117.5°	29.5
233.1	232.7	231.7	230.6	230.3	230.3	227.8	226.8	226.1	224.0	224.3	120°	34.8
241.1	241.1	241.4	240.0	238.3	237.9	235.1	233.4	232.4	230.6	229.9	122.5°	40.9
247.3	246.3	245.9	243.9	242.1	241.4	239.0	237.6	236.2	234.5	234.1	125°	47.8
249.4	247.3	245.9	243.5	241.4	240.0	237.9	236.5	234.8	233.8	233.1	127.5°	55.3
247.3	245.3	243.2	240.4	237.6	235.8	233.4	231.3	230.6	229.2	227.1	130°	63.0
242.8	240.4	237.9	234.5	231.3	228.9	226.1	224.3	222.3	220.2	216.0	132.5°	70.5
237.2	234.5	232.0	227.5	224.3	221.6	218.4	215.6	213.2	209.0	202.8	135°	77.9
233.4	227.5	223.3	217.0	213.5	210.1	208.7	205.9	202.4	195.1	187.4	137.5°	85.3
227.8	217.0	209.4	203.1	198.2	194.0	191.6	188.5	185.0	178.0	170.0	140°	92.5
218.4	205.9	198.6	192.0	186.4	181.8	177.3	171.4	166.9	158.9	153.3	142.5°	99.2
204.1	193.7	187.1	180.8	173.5	167.6	162.0	155.0	148.4	140.4	135.5	145°	104.9
188.1	178.7	170.4	163.7	156.1	150.1	144.2	136.2	129.9	122.6	118.1	147.5°	110.1
171.4	161.3	151.5	143.9	136.9	130.3	125.1	117.4	110.8	103.8	101.4	150°	115.1
156.4	144.9	134.5	126.8	119.1	112.5	106.9	98.9	93.4	88.5	85.7	152.5°	119.7
141.8	129.6	119.8	111.8	104.2	97.2	89.9	83.6	78.7	76.6	72.8	155°	123.7
125.4	112.9	103.5	94.8	88.5	81.2	75.6	71.4	68.3	66.5	64.1	157.5°	127.0
108.7	98.2	88.5	80.5	72.8	66.5	63.1	61.0	59.9	58.5	57.5	160°	130.3
95.1	86.0	76.3	68.6	61.7	57.1	55.4	54.3	53.6	53.0	52.6	162.5°	133.5
85.7	75.9	67.2	59.9	54.7	52.3	51.6	50.9	50.2	49.8	49.5	165°	136.0
78.4	68.6	60.6	54.3	50.5	49.8	49.5	48.8	48.1	48.1	47.4	167.5°	137.1
69.7	61.3	54.3	49.8	47.7	47.4	47.0	46.7	46.3	46.3	46.0	170°	137.4
60.6	54.3	49.8	46.7	46.0	45.3	44.6	43.9	43.5	44.2	44.6	172.5°	138.6
51.6	47.7	44.9	43.9	43.2	42.2	41.5	40.8	40.8	41.5	42.5	175°	140.5
42.8	41.5	40.8	40.1	39.7	39.4	38.7	38.0	38.0	38.0	38.7	177.5°	141.1
36.9	36.2	36.2	35.9	35.5	35.5	34.8	34.1	34.1	34.1	34.1	180°	140.8
32.4	32.7	32.7	32.7	32.4	32.0	31.7	31.0	30.7	30.0	29.3		
30.0	29.6	29.3	28.9	28.6	28.2	27.9	27.5	26.8	26.1	25.4		
26.8	26.1	25.1	24.7	24.4	23.7	23.7	23.3	22.6	21.6	20.9		
23.3	22.6	21.6	20.9	20.9	20.6	19.9	19.5	18.5	17.4	16.7		
18.8	17.8	16.7	16.4	16.0	15.7	15.3	15.0	14.6	13.6	13.2		
13.9	12.9	11.8	11.5	11.1	10.5	10.1	10.1	10.1	9.1	8.4		
9.1	7.7	6.6	5.6	5.6	5.2	4.5	3.8	3.1	2.1	1.4		
4.5	2.4	1.4	0.3	0.3	0.3	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		

'160171
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 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°	226.1	226.1
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	221.9	221.6
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	221.9	219.8
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	223.0	221.2
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	227.5	224.7
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	231.3	228.2
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	231.0	226.4
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	223.7	218.4
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	211.5	204.5
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	195.8	189.2
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	180.5	172.8
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	163.4	156.8
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	146.0	140.0
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	129.2	123.7
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	112.5	106.9
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	96.5	91.3
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	81.5	77.7
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	70.7	67.2
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	62.0	59.2
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	55.7	53.6
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	51.2	49.5
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	48.4	47.0
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	46.3	45.3
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	44.9	43.5
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	43.2	42.2
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	41.5	40.1
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	38.3	36.6
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	33.8	32.4
										70°	28.6	28.2
										72.5°	24.0	23.7
										75°	20.2	20.2
										77.5°	16.7	16.4
										80°	12.9	12.2
										82.5°	7.3	7.0
										85°	1.0	0.7
										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-8030-ULG

tinued):

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	112.5°	21.2	21.2	21.2
221.9	222.3	223.7	224.3	224.7	224.7	225.0	225.7	226.1	115°	25.0	25.0	25.0
219.8	220.5	221.2	222.3	222.6	222.6	223.0	224.0	225.0	117.5°	29.5	29.5	29.5
220.2	219.8	220.2	220.9	220.9	220.9	221.2	222.3	223.3	120°	34.8	34.8	34.8
223.0	220.9	219.5	219.1	218.8	218.8	219.5	220.9	221.9	122.5°	40.9	40.9	40.9
225.4	222.6	219.8	218.1	216.7	216.0	216.3	217.7	219.8	125°	47.8	47.8	47.8
223.3	219.1	216.0	213.5	211.5	210.8	211.1	212.2	214.6	127.5°	55.3	55.3	55.3
214.2	209.7	206.2	204.5	203.4	203.1	203.8	205.9	208.0	130°	63.0	63.0	63.0
201.4	198.9	195.8	194.7	192.6	192.6	192.3	192.3	193.3	132.5°	70.5	70.5	70.5
187.1	185.7	182.5	180.1	177.7	177.3	174.9	175.2	174.9	135°	77.9	77.9	77.9
170.7	169.0	165.1	161.6	158.9	157.1	154.3	154.0	152.9	137.5°	85.3	85.3	85.3
154.3	151.5	147.0	143.5	140.0	137.6	135.2	132.7	132.0	140°	92.5	92.5	92.5
137.6	135.2	129.9	126.8	121.9	118.4	116.4	112.9	111.1	142.5°	99.2	99.2	99.2
121.2	118.4	112.5	106.6	103.1	98.9	95.8	91.3	89.2	145°	104.9	104.9	104.9
103.1	101.4	95.5	89.2	86.0	80.5	76.6	72.8	72.1	147.5°	110.1	110.1	110.1
88.5	84.7	80.1	75.2	70.0	66.9	65.1	64.4	64.1	150°	115.1	115.1	115.1
74.9	72.5	68.3	64.8	62.4	61.7	61.7	61.7	62.0	152.5°	119.7	119.7	119.7
65.8	62.7	60.6	59.6	59.6	59.9	60.3	61.0	61.7	155°	123.7	123.7	123.7
58.2	57.1	57.1	56.8	57.5	58.2	59.2	60.3	61.0	157.5°	127.0	127.0	127.0
53.0	53.3	54.0	54.3	55.7	56.8	57.8	58.5	59.2	160°	130.3	130.3	130.3
48.8	49.1	49.8	50.9	51.9	53.3	54.3	55.0	55.4	162.5°	133.5	133.5	133.5
46.3	46.3	47.4	48.4	49.8	50.9	51.9	52.3	53.0	165°	136.0	136.0	136.0
44.2	44.6	45.6	46.3	47.0	47.7	48.4	48.8	50.2	167.5°	137.1	137.1	137.1
42.8	43.2	43.5	42.8	43.5	44.2	44.9	45.6	46.3	170°	137.4	137.4	137.4
41.1	40.4	39.7	39.7	40.1	40.8	42.2	43.2	44.2	172.5°	138.6	138.6	138.6
39.0	38.0	36.9	36.6	36.9	37.6	39.0	40.4	41.1	175°	140.5	140.5	140.5
35.5	35.2	34.8	34.5	34.8	35.5	36.9	38.0	39.0	177.5°	141.1	141.1	141.1
32.0	31.7	31.4	31.7	32.0	32.7	34.1	35.2	36.2	180°	140.8	140.8	140.8
27.9	27.9	27.9	28.2	28.6	30.0	31.0	32.4	32.7				
23.3	24.0	24.0	24.0	24.7	26.5	27.9	29.3	30.0				
19.9	19.5	20.2	20.2	20.9	22.3	23.3	24.4	24.7				
16.0	16.0	16.4	16.4	16.4	17.1	17.8	17.8	17.8				
11.8	11.5	11.1	10.5	10.5	10.8	10.8	10.8	11.5				
5.6	4.5	4.5	4.2	3.8	3.8	3.8	4.5	4.9				
0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7				
0.0	0.3	0.3	0.3	0.7	0.7	0.7	1.0	1.0				
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				
0.5	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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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°	226.1	226.1	226.1	226.1
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	225.7	226.4	226.4	227.1
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	225.0	225.7	226.1	227.1
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	224.0	225.4	226.1	227.5
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	223.0	225.0	226.4	228.9
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	221.9	224.0	226.4	228.9
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	216.7	218.8	222.3	225.7
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	209.0	211.1	213.9	217.0
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	194.4	195.1	197.9	201.4
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	173.8	173.5	174.9	178.7
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	150.5	151.9	150.8	155.4
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	128.9	129.9	131.3	133.4
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	108.3	108.0	109.0	110.8
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	87.1	86.7	87.1	88.8
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	71.4	70.4	71.4	73.9
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	64.4	64.4	65.5	67.2
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	62.4	62.7	63.4	64.8
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	62.0	62.0	62.0	62.7
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	61.3	61.0	61.0	61.0
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	59.6	59.2	59.2	59.2
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	55.7	56.1	56.1	56.4
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	53.3	54.0	54.3	55.0
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	50.9	52.3	53.3	54.0
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	47.0	48.4	49.5	51.2
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	44.9	45.6	46.0	47.0
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	42.2	42.8	43.5	43.9
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	39.7	40.4	41.5	41.8
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	36.9	38.0	38.7	39.0
								70°	33.8	35.2	35.5	36.2
								72.5°	30.7	31.4	31.7	32.4
								75°	25.8	26.8	27.5	27.9
								77.5°	19.2	20.2	21.3	22.3
								80°	12.2	13.2	13.9	14.6
								82.5°	5.6	6.6	7.0	7.7
								85°	1.0	1.0	1.0	1.4
								87.5°	1.0	1.4	1.4	1.4
								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°
226.1	226.1	226.1	226.1	226.1	226.1	226.1	112.5°	21.2	21.2	21.2	21.2	21.2
227.1	227.5	228.2	228.2	228.9	228.9	229.6	115°	25.0	25.0	25.0	25.0	25.0
227.8	228.5	229.6	229.9	231.3	232.0	232.7	117.5°	29.5	29.5	29.5	29.5	29.5
228.9	229.9	231.3	232.4	234.1	235.1	236.2	120°	34.8	34.8	34.8	34.8	34.8
230.6	232.4	234.8	235.8	237.2	239.7	241.4	122.5°	40.9	40.9	40.9	40.9	40.9
233.1	235.5	238.6	241.4	243.2	246.6	249.4	125°	47.8	47.8	47.8	47.8	47.8
229.6	234.8	238.6	243.9	248.4	254.3	259.2	127.5°	55.3	55.3	55.3	55.3	55.3
221.2	226.1	232.7	239.3	246.3	256.4	266.2	130°	63.0	63.0	63.0	63.0	63.0
205.9	211.5	219.1	227.5	237.6	250.8	264.8	132.5°	70.5	70.5	70.5	70.5	70.5
183.6	188.5	196.8	206.2	217.7	234.1	254.3	135°	77.9	77.9	77.9	77.9	77.9
159.9	166.5	174.5	184.6	197.5	217.0	238.6	137.5°	85.3	85.3	85.3	85.3	85.3
137.3	144.2	152.9	164.1	179.1	200.0	224.7	140°	92.5	92.5	92.5	92.5	92.5
113.9	121.9	129.9	143.9	158.9	180.8	208.3	142.5°	99.2	99.2	99.2	99.2	99.2
93.0	98.9	108.7	121.2	138.7	160.2	189.5	145°	104.9	104.9	104.9	104.9	104.9
76.3	81.2	90.6	102.8	118.4	139.7	165.1	147.5°	110.1	110.1	110.1	110.1	110.1
69.7	73.5	80.1	88.8	102.8	123.3	144.9	150°	115.1	115.1	115.1	115.1	115.1
67.2	70.7	75.6	83.3	94.1	109.7	128.2	152.5°	119.7	119.7	119.7	119.7	119.7
64.8	68.3	73.9	80.8	89.9	101.0	116.7	155°	123.7	123.7	123.7	123.7	123.7
62.7	66.5	72.5	80.1	88.5	98.2	110.4	157.5°	127.0	127.0	127.0	127.0	127.0
60.6	64.1	70.0	78.7	87.8	98.2	110.4	160°	130.3	130.3	130.3	130.3	130.3
57.5	61.0	67.2	76.3	86.4	97.9	111.8	162.5°	133.5	133.5	133.5	133.5	133.5
55.7	58.9	65.5	75.6	86.4	98.9	113.9	165°	136.0	136.0	136.0	136.0	136.0
54.7	57.5	65.1	76.6	89.2	103.8	120.2	167.5°	137.1	137.1	137.1	137.1	137.1
53.0	56.1	64.1	77.0	92.7	110.8	131.3	170°	137.4	137.4	137.4	137.4	137.4
48.1	51.9	60.6	74.6	91.6	113.9	141.1	172.5°	138.6	138.6	138.6	138.6	138.6
44.2	46.7	54.0	68.6	86.4	110.4	142.8	175°	140.5	140.5	140.5	140.5	140.5
42.5	43.9	48.8	60.6	78.0	103.8	137.6	177.5°	141.1	141.1	141.1	141.1	141.1
40.1	40.8	44.2	53.6	66.9	92.0	124.7	180°	140.8	140.8	140.8	140.8	140.8
36.9	37.3	40.1	46.0	55.7	73.2	104.2						
33.1	33.8	35.5	39.7	46.0	56.1	75.6						
28.6	28.9	29.6	32.4	36.2	43.2	53.6						
23.0	23.0	23.7	25.1	27.2	32.0	38.3						
15.0	16.0	16.7	19.2	19.9	23.3	27.2						
8.7	9.4	9.8	10.5	12.2	13.9	16.7						
1.4	2.1	2.1	2.8	3.5	3.8	4.5						
1.7	1.7	1.7	1.7	2.1	2.1	2.1						
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						



REPORT NUMBER: P160171

CATALOG NUMBER: ENV-F01-LED-E1-SLL-8030-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°	226.1	226.1	226.1	226.1	226.1	226.1
25.0	25.0	25.0	25.0	25.0	25.0	2.5°	229.9	229.6	230.3	231.0	230.6	232.7
29.5	29.5	29.5	29.5	29.5	29.5	5°	233.8	233.4	234.5	235.1	235.5	236.9
34.8	34.8	34.8	34.8	34.8	34.8	7.5°	237.6	237.9	239.7	240.0	241.1	242.8
40.9	40.9	40.9	40.9	40.9	40.9	10°	242.1	243.9	245.9	246.6	248.4	250.5
47.8	47.8	47.8	47.8	47.8	47.8	12.5°	251.2	253.6	256.4	258.5	262.0	266.2
55.3	55.3	55.3	55.3	55.3	55.3	15°	263.7	269.6	274.2	278.3	283.6	288.4
63.0	63.0	63.0	63.0	63.0	63.0	17.5°	274.9	286.4	296.1	304.8	313.2	320.8
70.5	70.5	70.5	70.5	70.5	70.5	20°	280.1	298.2	313.5	329.6	345.6	356.4
77.9	77.9	77.9	77.9	77.9	77.9	22.5°	275.2	300.6	324.3	350.1	374.5	396.4
85.3	85.3	85.3	85.3	85.3	85.3	25°	264.8	296.1	331.3	368.2	405.2	438.6
92.5	92.5	92.5	92.5	92.5	92.5	27.5°	255.0	293.3	334.1	376.2	420.1	460.2
99.2	99.2	99.2	99.2	99.2	99.2	30°	242.1	283.9	328.5	372.1	419.8	466.8
104.9	104.9	104.9	104.9	104.9	104.9	32.5°	223.0	265.5	312.5	359.9	412.8	465.1
110.1	110.1	110.1	110.1	110.1	110.1	35°	200.3	242.8	290.9	340.7	399.6	458.5
115.1	115.1	115.1	115.1	115.1	115.1	37.5°	175.6	217.4	267.5	320.8	381.8	447.7
119.7	119.7	119.7	119.7	119.7	119.7	40°	154.7	192.0	243.9	301.7	365.8	434.1
123.7	123.7	123.7	123.7	123.7	123.7	42.5°	138.0	171.7	220.9	279.4	348.0	418.4
127.0	127.0	127.0	127.0	127.0	127.0	45°	128.2	156.4	201.4	259.5	329.6	402.0
130.3	130.3	130.3	130.3	130.3	130.3	47.5°	126.1	148.8	188.1	244.6	311.8	384.6
133.5	133.5	133.5	133.5	133.5	133.5	50°	128.2	149.1	182.2	235.1	298.2	368.9
136.0	136.0	136.0	136.0	136.0	136.0	52.5°	132.4	152.6	182.9	231.7	292.6	359.5
137.1	137.1	137.1	137.1	137.1	137.1	55°	139.0	162.0	190.2	234.8	291.9	355.7
137.4	137.4	137.4	137.4	137.4	137.4	57.5°	152.2	178.4	206.9	247.7	300.3	359.9
138.6	138.6	138.6	138.6	138.6	138.6	60°	169.0	200.3	234.8	278.0	320.5	373.8
140.5	140.5	140.5	140.5	140.5	140.5	62.5°	179.1	221.9	269.3	319.5	363.0	406.5
141.1	141.1	141.1	141.1	141.1	141.1	65°	178.0	231.0	297.9	369.3	423.6	465.4
140.8	140.8	140.8	140.8	140.8	140.8	67.5°	166.5	224.3	290.9	372.1	453.9	512.8
						70°	139.0	193.0	270.7	368.6	469.3	544.8
						72.5°	110.8	158.5	232.7	325.0	424.3	501.6
						75°	73.9	111.8	171.7	249.4	321.5	388.8
						77.5°	50.2	70.7	107.3	163.7	223.3	278.3
						80°	33.4	44.2	61.3	90.2	125.1	160.2
						82.5°	19.5	24.4	31.4	44.6	66.2	93.4
						85°	5.2	6.6	8.7	11.5	20.6	36.2
						87.5°	2.1	1.7	1.7	1.7	1.7	1.7
						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: P160171

CATALOG NUMBER: ENV-F01-LED-E1-SLL-8030-ULG

CANDELA DISTRIBUTION (continued):

360°	330°	335°	340°	345°	350°	355°	360°
226.1	112.5°	21.2	21.2	21.2	21.2	21.2	21.2
231.0	115°	25.0	25.0	25.0	25.0	25.0	25.0
236.5	117.5°	29.5	29.5	29.5	29.5	29.5	29.5
243.2	120°	34.8	34.8	34.8	34.8	34.8	34.8
253.3	122.5°	40.9	40.9	40.9	40.9	40.9	40.9
267.9	125°	47.8	47.8	47.8	47.8	47.8	47.8
294.0	127.5°	55.3	55.3	55.3	55.3	55.3	55.3
327.8	130°	63.0	63.0	63.0	63.0	63.0	63.0
369.3	132.5°	70.5	70.5	70.5	70.5	70.5	70.5
416.0	135°	77.9	77.9	77.9	77.9	77.9	77.9
469.3	137.5°	85.3	85.3	85.3	85.3	85.3	85.3
502.0	140°	92.5	92.5	92.5	92.5	92.5	92.5
509.0	142.5°	99.2	99.2	99.2	99.2	99.2	99.2
513.8	145°	104.9	104.9	104.9	104.9	104.9	104.9
515.2	147.5°	110.1	110.1	110.1	110.1	110.1	110.1
513.1	150°	115.1	115.1	115.1	115.1	115.1	115.1
504.8	152.5°	119.7	119.7	119.7	119.7	119.7	119.7
494.0	155°	123.7	123.7	123.7	123.7	123.7	123.7
480.4	157.5°	127.0	127.0	127.0	127.0	127.0	127.0
463.7	160°	130.3	130.3	130.3	130.3	130.3	130.3
448.0	162.5°	133.5	133.5	133.5	133.5	133.5	133.5
435.8	165°	136.0	136.0	136.0	136.0	136.0	136.0
428.1	167.5°	137.1	137.1	137.1	137.1	137.1	137.1
429.2	170°	137.4	137.4	137.4	137.4	137.4	137.4
440.0	172.5°	138.6	138.6	138.6	138.6	138.6	138.6
467.2	175°	140.5	140.5	140.5	140.5	140.5	140.5
518.7	177.5°	141.1	141.1	141.1	141.1	141.1	141.1
569.2	180°	140.8	140.8	140.8	140.8	140.8	140.8
618.0							
586.0							
447.3							
321.9							
186.7							
116.7							
50.5							
1.7							
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)