

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: P160141

Luminaire Tested: **ENV-E02-LED-E1-SLL-8030-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160141
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P20107) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-E02-LED-E1-SLL-8030-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(2) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4425 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U3 - G2

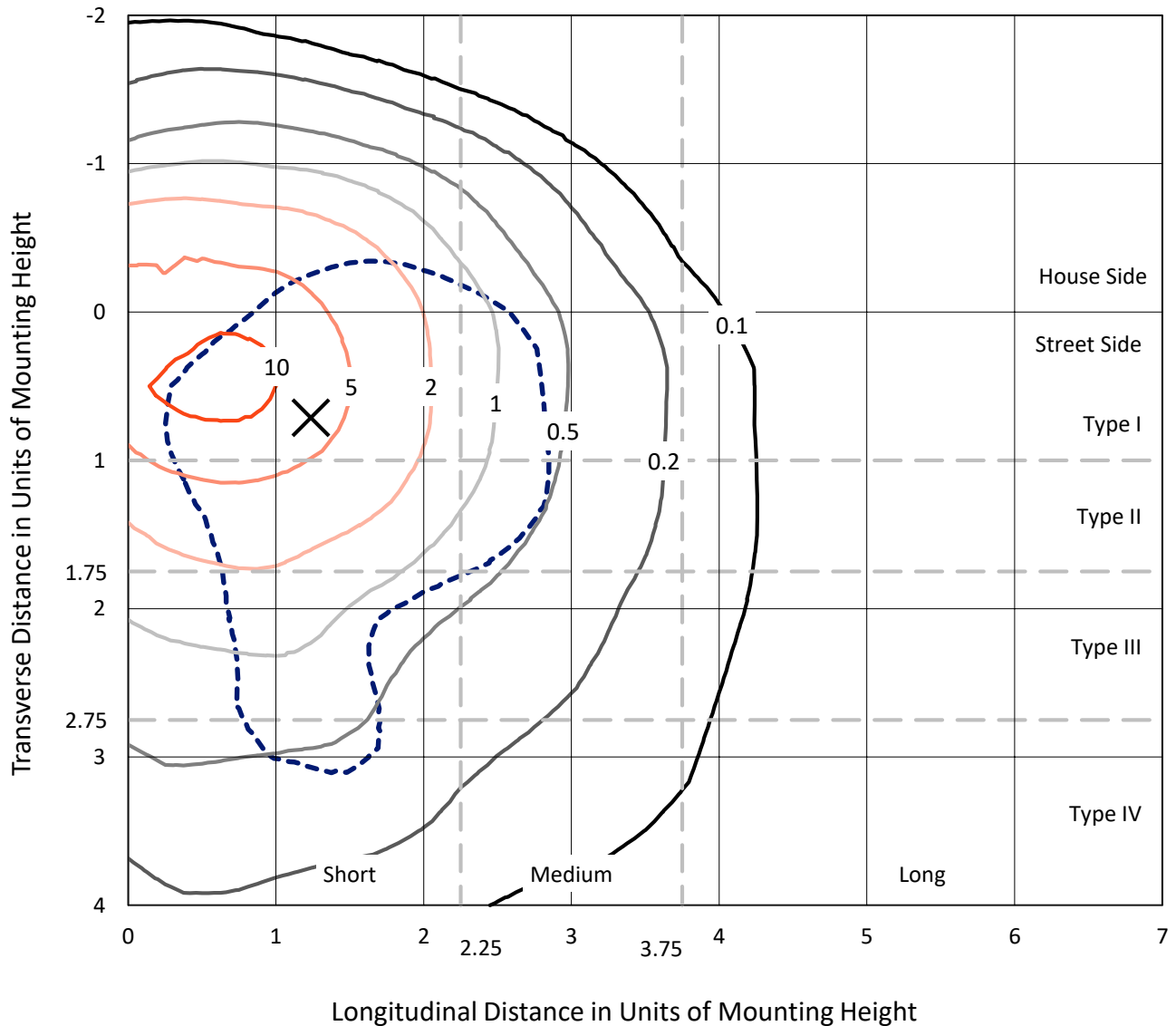
Input Watts (W): 54.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

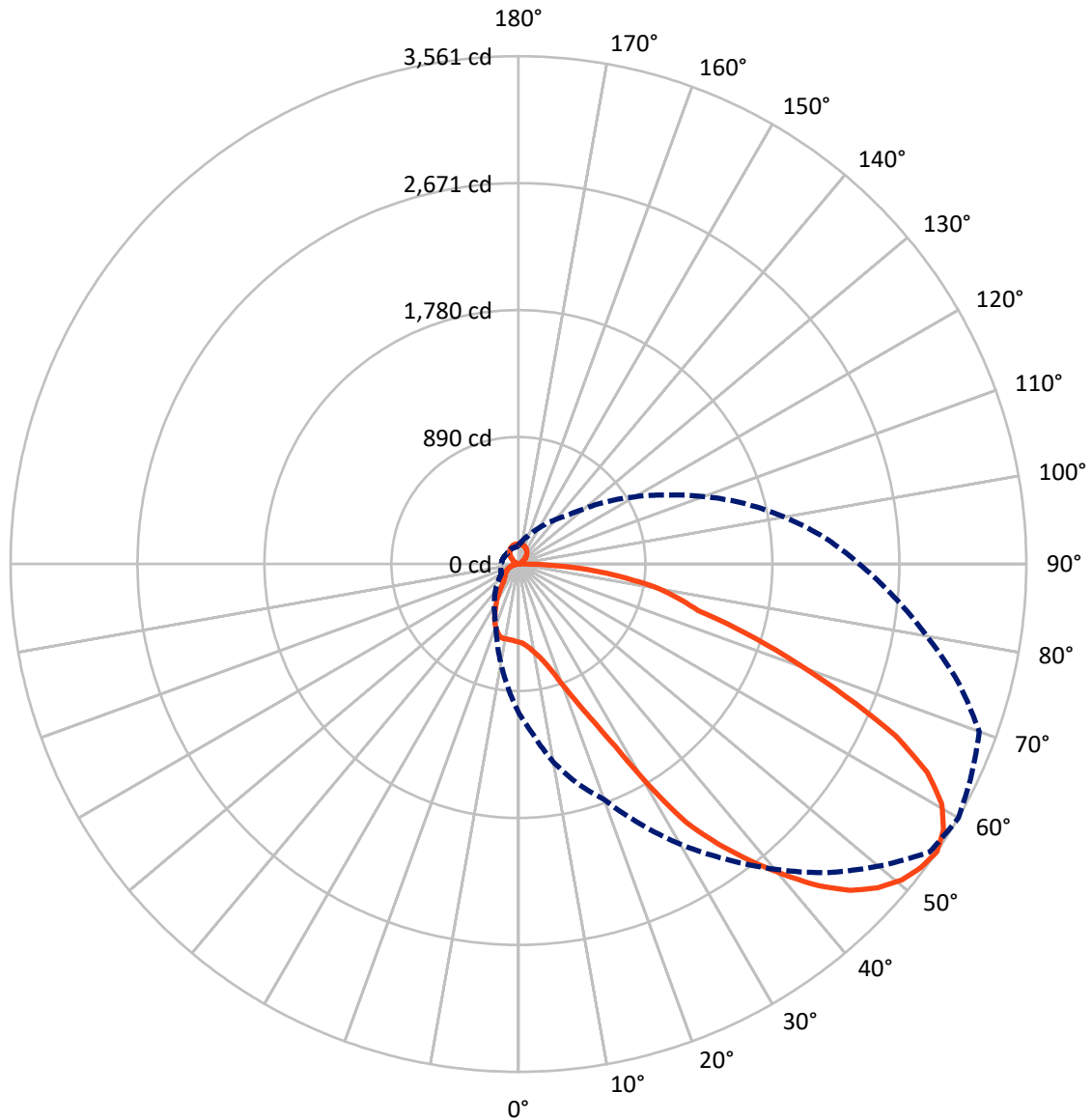
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.3 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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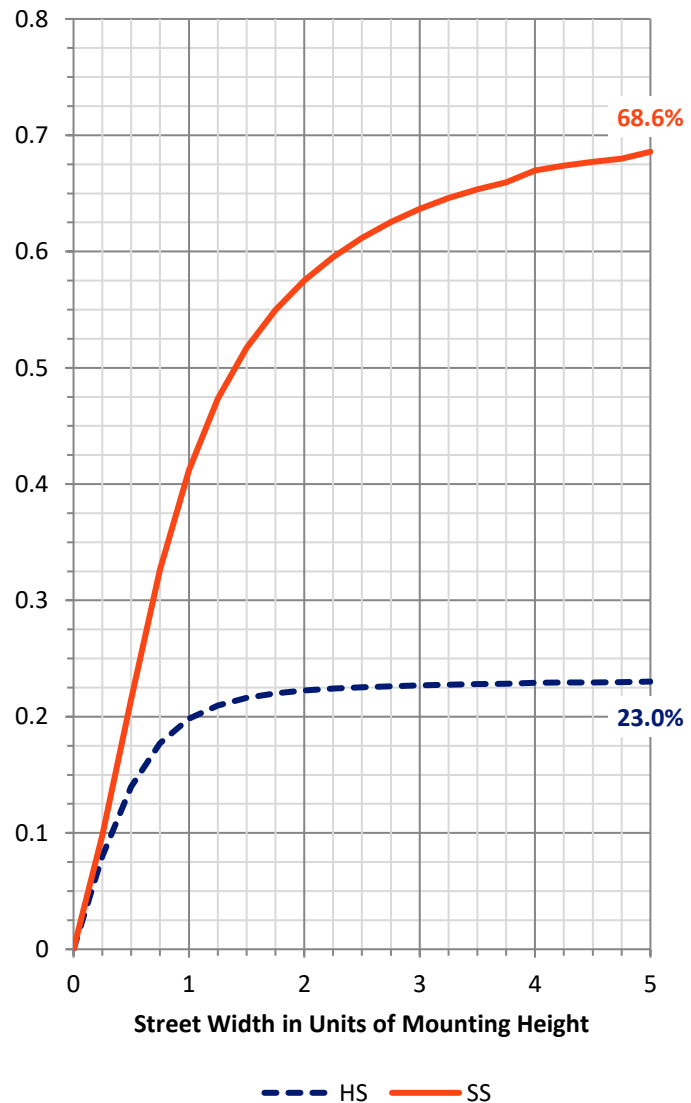
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1027.2	157.7	1184.9
	% Fixture	23.2	3.6	26.8
Street Side	Lumens	3082.4	157.7	3240.1
	% Fixture	69.7	3.6	73.2
Total	Lumens	4109.6	315.5	4425.0
	% Fixture	92.9	7.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	1.2
10°-20°	177.4	4.0
20°-30°	344.1	7.8
30°-40°	540.8	12.2
40°-50°	723.0	16.3
50°-60°	848.2	19.2
60°-70°	804.7	18.2
70°-80°	485.7	11.0
80°-90°	131.6	3.0
90°-100°	1.3	0.0
100°-110°	12.3	0.3
110°-120°	25.2	0.6
120°-130°	43.0	1.0
130°-140°	60.0	1.4
140°-150°	65.4	1.5
150°-160°	56.9	1.3
160°-170°	38.2	0.9
170°-180°	13.3	0.3
0°-90°	4109.6	92.9
0°-180°	4425.0	100.0



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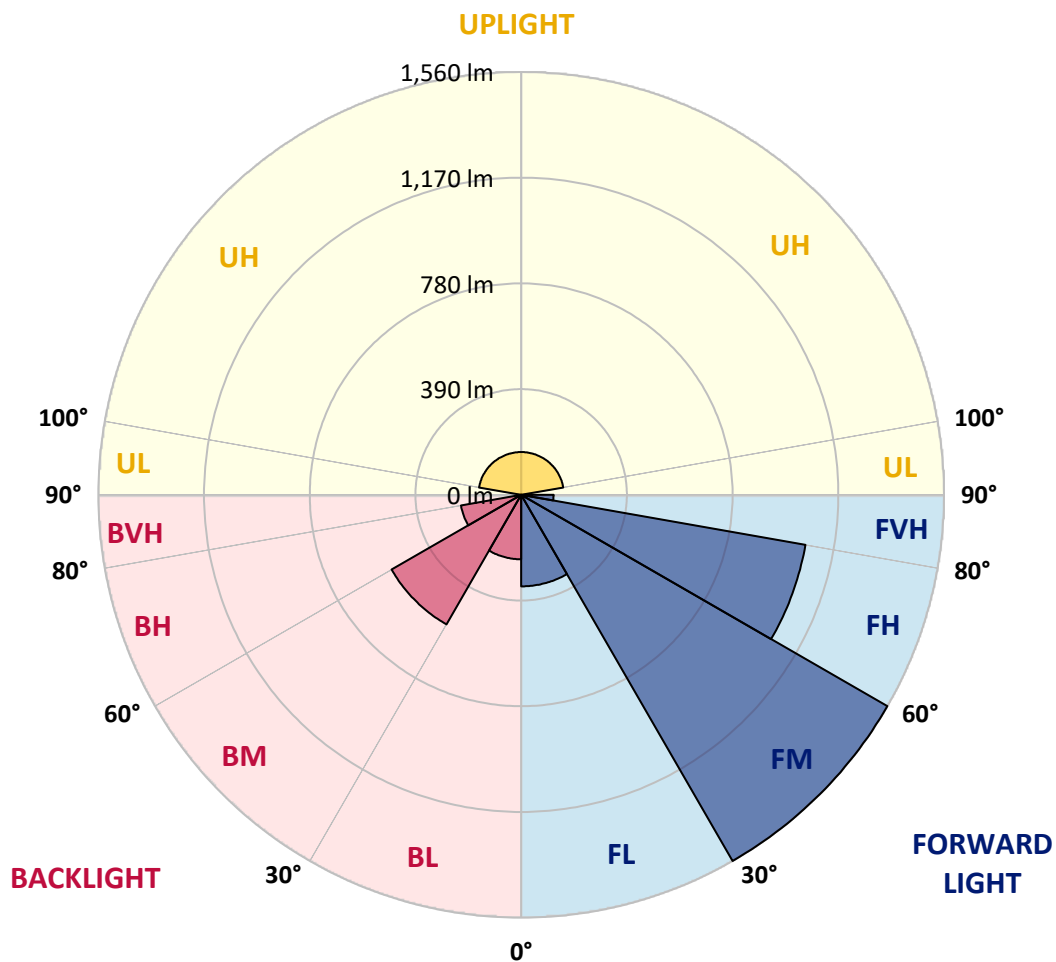
CATALOG NUMBER: ENV-E02-LED-E1-SLL-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	337.7	7.6			
FM	(30°-60°)	1560.1	35.3			
FH	(60°-80°)	1064.9	24.1			G1/1800
FVH	(80°-90°)	119.7	2.7			G2/225
BL	(0°-30°)	237.7	5.4	B1/500		
BM	(30°-60°)	552.0	12.5	B1/1000		
BH	(60°-80°)	225.5	5.1	B1/500		G1/500
BVH	(80°-90°)	11.9	0.3			G1/100
UL	(90°-100°)	1.3	0.0		U1/10	
UH	(100°-180°)	157.7	3.6		U3/500	

BUG Rating: B1-U3-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8
2.5°	559.6	558.7	559.6	558.7	558.7	558.7	559.6	558.7	556.2	556.2	557.0
5°	573.1	573.1	573.1	573.9	573.9	574.8	576.4	574.8	573.9	578.1	574.8
7.5°	589.1	589.1	591.6	592.5	595.0	595.0	598.4	597.5	600.9	603.5	600.9
10°	613.6	611.0	617.0	617.0	623.7	624.6	627.9	628.8	634.7	639.7	635.5
12.5°	649.0	650.7	660.8	662.5	671.0	671.0	671.0	674.3	678.6	681.9	677.7
15°	712.3	715.7	729.2	730.1	744.4	738.5	745.2	746.1	745.2	747.8	741.9
17.5°	794.2	803.5	822.9	827.1	833.9	845.7	845.7	844.0	848.2	850.7	834.7
20°	894.6	910.7	932.6	941.0	959.6	979.9	979.0	975.7	976.5	969.7	952.0
22.5°	1007.7	1044.0	1080.3	1093.8	1107.3	1132.6	1148.7	1143.6	1147.8	1132.6	1116.6
25°	1136.9	1195.9	1250.8	1271.1	1320.0	1364.7	1371.5	1368.1	1349.5	1335.2	1319.2
27.5°	1216.2	1293.8	1369.0	1420.4	1504.0	1575.7	1590.1	1613.7	1619.6	1631.4	1592.6
30°	1233.1	1330.1	1423.8	1502.3	1602.7	1688.0	1782.5	1852.6	1899.8	1937.0	1911.6
32.5°	1244.9	1354.6	1458.4	1557.2	1639.9	1763.9	1882.9	1986.8	2125.2	2175.8	2223.9
35°	1248.3	1374.0	1491.3	1602.7	1709.9	1833.1	1960.6	2074.5	2261.9	2412.1	2515.1
37.5°	1243.2	1388.4	1525.9	1661.8	1789.3	1925.1	2059.3	2170.7	2353.0	2547.2	2685.6
40°	1222.9	1383.3	1540.3	1693.0	1847.5	2015.5	2169.1	2289.7	2460.2	2689.8	2873.8
42.5°	1196.8	1362.2	1535.2	1703.2	1877.0	2074.5	2260.2	2407.1	2595.3	2827.4	3036.7
45°	1163.9	1336.0	1515.0	1692.2	1879.6	2099.0	2310.8	2499.1	2699.1	2957.3	3159.1
47.5°	1123.4	1298.9	1488.0	1667.7	1862.7	2099.8	2334.5	2549.7	2769.1	3046.8	3264.6
50°	1085.4	1260.1	1457.6	1634.8	1830.6	2078.7	2331.9	2572.5	2812.2	3099.1	3327.9
52.5°	1055.8	1227.2	1431.4	1608.6	1793.5	2044.1	2306.6	2561.5	2818.9	3105.9	3339.7
55°	1037.3	1200.2	1409.5	1590.9	1756.3	2007.0	2267.8	2523.5	2793.6	3061.2	3295.8
57.5°	1039.8	1195.1	1396.8	1587.5	1729.3	1974.9	2223.9	2469.5	2715.1	2970.0	3212.2
60°	1066.0	1206.1	1390.1	1563.9	1746.2	1978.3	2204.5	2409.6	2606.2	2840.9	3067.1
62.5°	1131.8	1252.5	1401.0	1580.0	1780.8	2010.4	2191.8	2316.8	2434.1	2668.7	2899.1
65°	1256.7	1361.4	1480.4	1637.3	1834.0	2055.1	2140.4	2165.7	2240.8	2464.5	2693.2
67.5°	1379.1	1503.1	1570.7	1671.1	1855.1	2067.8	2078.7	1969.9	1968.2	2185.9	2351.4
70°	1497.2	1677.0	1704.0	1759.7	1885.5	2054.3	2014.6	1804.5	1709.1	1738.6	1834.8
72.5°	1419.6	1688.8	1708.2	1725.1	1800.2	1957.2	1911.6	1628.1	1414.5	1376.5	1485.4
75°	1083.7	1425.5	1471.1	1441.5	1482.9	1602.7	1594.3	1372.3	1299.7	1325.1	1367.3
77.5°	779.8	1098.9	1197.6	1101.4	1090.4	1168.1	1146.1	1164.7	1302.3	1339.4	1329.3
80°	452.4	698.0	838.9	746.9	714.0	763.0	849.1	979.0	1129.3	1209.4	1224.6
82.5°	282.7	411.9	560.4	525.0	480.2	566.3	699.7	790.8	865.1	938.5	942.7
85°	122.4	176.4	273.5	287.0	355.3	432.1	538.5	564.6	645.7	702.2	653.2
87.5°	4.2	4.2	65.8	97.9	173.9	312.3	422.8	378.1	383.2	335.9	313.1
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-E02-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°	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8
2.5°	557.0	555.3	556.2	553.7	553.7	554.5	554.5	552.0	552.0	552.0	551.1
5°	576.4	574.8	573.9	572.2	569.7	571.4	568.8	567.2	564.6	563.8	561.3
7.5°	601.8	599.2	598.4	594.2	590.8	589.1	587.4	581.5	579.0	577.3	573.9
10°	631.3	631.3	629.6	621.2	618.6	612.7	606.8	600.1	595.0	587.4	583.2
12.5°	669.3	671.8	665.9	658.3	652.4	640.6	629.6	620.3	610.2	599.2	592.5
15°	725.8	727.5	715.7	709.0	699.7	686.2	669.3	654.1	638.9	623.7	611.0
17.5°	809.4	806.9	790.0	783.2	767.2	744.4	721.6	701.4	678.6	657.5	641.4
20°	930.1	920.0	876.1	873.5	853.3	821.2	788.3	758.7	728.4	701.4	674.3
22.5°	1076.9	1054.1	1022.1	985.8	947.0	911.5	872.7	831.3	793.4	759.6	730.1
25°	1268.5	1217.9	1188.3	1139.4	1105.6	1043.2	989.2	956.2	904.8	865.9	828.0
27.5°	1524.2	1444.1	1401.0	1347.9	1272.7	1228.9	1155.4	1092.1	1037.3	973.1	930.9
30°	1855.9	1796.9	1688.8	1614.6	1510.7	1404.4	1314.1	1231.4	1159.6	1082.8	1020.4
32.5°	2196.9	2159.8	2033.2	1894.8	1736.9	1580.8	1448.3	1346.2	1252.5	1166.4	1094.7
35°	2486.4	2409.6	2285.5	2140.4	1937.8	1757.2	1589.2	1459.3	1342.8	1235.6	1145.3
37.5°	2672.9	2639.2	2513.4	2348.8	2126.9	1931.9	1758.0	1604.4	1459.3	1319.2	1202.7
40°	2880.5	2861.1	2755.6	2553.9	2348.8	2110.0	1911.6	1749.6	1593.5	1426.3	1273.6
42.5°	3066.2	3083.9	2975.9	2798.7	2561.5	2292.3	2081.3	1901.5	1723.4	1552.9	1376.5
45°	3232.5	3264.6	3185.2	3020.6	2760.7	2466.1	2245.9	2050.1	1855.9	1669.4	1472.8
47.5°	3357.4	3392.0	3325.3	3196.2	2925.3	2611.3	2390.2	2170.7	1967.3	1753.0	1544.5
50°	3462.1	3482.3	3431.7	3318.6	3058.6	2752.3	2505.8	2275.4	2050.1	1818.8	1590.9
52.5°	3522.8	3534.6	3484.8	3403.0	3159.9	2856.9	2596.1	2348.0	2108.3	1864.4	1621.3
55°	3519.4	3560.8	3504.3	3438.4	3191.1	2906.7	2643.4	2389.3	2151.3	1893.9	1639.0
57.5°	3453.6	3514.4	3488.2	3406.3	3165.0	2903.3	2650.1	2413.0	2179.2	1904.0	1630.6
60°	3327.0	3410.6	3429.1	3312.7	3060.3	2810.5	2586.0	2386.0	2153.0	1859.3	1579.1
62.5°	3148.1	3215.6	3263.7	3105.0	2855.2	2618.1	2442.5	2284.7	2047.5	1726.8	1472.8
65°	2878.0	2909.2	2922.7	2775.9	2531.1	2373.3	2258.5	2122.6	1859.3	1538.6	1308.2
67.5°	2476.3	2472.0	2485.6	2417.2	2236.6	2153.9	2077.9	1930.2	1623.0	1323.4	1093.8
70°	1969.0	2056.8	2131.1	2058.5	1946.2	1863.5	1800.2	1625.5	1296.4	1022.1	831.3
72.5°	1602.7	1674.5	1715.0	1651.7	1542.8	1483.7	1400.2	1226.3	912.4	726.7	570.5
75°	1353.8	1301.4	1325.9	1286.2	1185.8	1100.6	1052.5	860.9	598.4	481.1	355.3
77.5°	1222.9	1139.4	1086.2	1001.0	886.2	789.1	740.2	535.1	377.3	283.6	205.1
80°	1081.2	965.5	827.1	689.5	590.8	530.9	497.1	305.5	207.6	164.6	118.2
82.5°	822.0	713.2	579.0	479.4	394.1	343.5	304.7	174.7	117.3	86.9	67.5
85°	526.7	485.3	443.1	394.1	330.0	265.0	204.2	127.4	86.1	49.8	37.1
87.5°	254.0	211.0	209.3	193.3	184.0	145.2	86.1	29.5	18.6	16.0	10.1
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



REPORT NUMBER: P160141

CATALOG NUMBER: ENV-E02-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



REPORT NUMBER: P160141

CATALOG NUMBER: ENV-E02-LED-E1-SLL-8030-ULG

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8
2.5°	549.4	548.6	546.9	546.9	546.1	545.2	544.4	544.4	545.2	543.5	542.7
5°	558.7	557.9	555.3	554.5	553.7	552.0	552.0	551.1	551.1	549.4	548.6
7.5°	569.7	568.0	566.3	565.5	562.9	562.9	562.9	564.6	564.6	564.6	565.5
10°	580.7	576.4	574.8	574.8	573.9	574.8	577.3	579.0	581.5	583.2	584.9
12.5°	586.6	582.4	580.7	579.0	581.5	581.5	585.7	590.8	595.0	599.2	600.9
15°	601.8	594.2	590.8	586.6	586.6	586.6	590.8	595.0	600.1	605.1	606.0
17.5°	627.9	614.4	607.7	598.4	595.9	592.5	592.5	594.2	597.5	601.8	601.8
20°	654.1	640.6	629.6	619.5	612.7	603.5	596.7	590.8	588.3	589.9	589.9
22.5°	701.4	685.3	671.8	654.9	639.7	627.9	611.0	596.7	585.7	582.4	579.8
25°	786.6	763.8	741.0	715.7	698.8	676.9	653.2	629.6	607.7	592.5	579.0
27.5°	881.1	849.9	817.0	777.3	750.3	717.4	686.2	652.4	625.4	602.6	578.1
30°	971.4	913.2	865.9	816.1	772.3	727.5	688.7	649.0	619.5	592.5	562.9
32.5°	1016.2	947.0	882.8	820.4	767.2	715.7	673.5	628.8	597.5	567.2	531.7
35°	1047.4	964.7	887.9	815.3	755.4	698.8	650.7	604.3	567.2	532.6	492.0
37.5°	1086.2	982.4	892.1	811.1	741.0	676.9	622.9	570.5	528.3	491.2	449.0
40°	1136.9	1009.4	897.2	799.3	719.1	646.5	590.8	534.2	489.5	449.8	411.0
42.5°	1206.9	1046.5	903.1	784.9	694.6	618.6	561.3	506.4	459.1	416.9	378.1
45°	1276.1	1089.6	918.3	780.7	678.6	600.9	540.2	481.9	432.1	387.4	342.7
47.5°	1327.6	1121.7	934.3	783.2	669.3	582.4	517.4	452.4	396.7	347.7	302.1
50°	1360.5	1141.9	948.6	790.0	660.8	557.9	481.1	415.2	357.9	309.7	264.2
52.5°	1377.4	1147.8	953.7	787.4	638.9	519.1	442.3	379.0	324.1	276.8	236.3
55°	1382.5	1141.9	942.7	763.8	600.9	480.2	406.8	346.9	293.7	249.0	212.7
57.5°	1364.7	1116.6	903.9	715.7	550.3	443.1	368.8	310.6	259.9	220.3	187.4
60°	1307.3	1058.4	835.6	640.6	493.7	393.3	319.0	261.6	220.3	185.7	162.9
62.5°	1202.7	959.6	742.7	546.9	416.1	324.9	254.9	205.1	171.3	146.9	135.0
65°	1071.9	824.6	603.5	434.7	318.2	242.2	183.1	150.2	126.6	112.3	106.3
67.5°	876.1	644.8	451.5	309.7	219.4	164.6	124.1	106.3	96.2	92.0	90.3
70°	630.5	447.3	298.8	200.9	142.6	112.3	90.3	82.7	78.5	78.5	79.3
72.5°	415.2	276.0	182.3	128.3	101.3	84.4	73.4	70.1	70.1	71.7	72.6
75°	243.1	160.4	112.3	93.7	80.2	70.9	65.0	62.5	62.5	63.3	63.3
77.5°	143.5	98.7	80.2	70.9	65.0	60.8	57.4	54.0	53.2	53.2	55.7
80°	88.6	70.1	62.5	56.5	52.3	49.0	45.6	45.6	45.6	44.7	46.4
82.5°	57.4	49.8	49.0	47.3	42.2	38.8	35.4	35.4	37.1	35.4	36.3
85°	34.6	32.9	32.1	32.1	30.4	28.7	26.2	26.2	28.7	27.9	24.5
87.5°	9.3	8.4	11.0	10.1	11.8	11.8	11.8	13.5	17.7	22.8	16.9
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°	
547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	112.5°	21.2
541.8	542.7	541.0	540.2	541.0	541.8	539.3	538.5	537.6	536.8	537.6	115°	25.0
547.8	547.8	545.2	543.5	543.5	542.7	540.2	539.3	535.9	535.1	537.6	117.5°	29.5
564.6	563.8	561.3	558.7	557.9	557.9	552.0	549.4	547.8	542.7	543.5	120°	34.8
584.0	584.0	584.9	581.5	577.3	576.4	569.7	565.5	562.9	558.7	557.0	122.5°	40.9
599.2	596.7	595.9	590.8	586.6	584.9	579.0	575.6	572.2	568.0	567.2	125°	47.8
604.3	599.2	595.9	589.9	584.9	581.5	576.4	573.1	568.8	566.3	564.6	127.5°	55.3
599.2	594.2	589.1	582.4	575.6	571.4	565.5	560.4	558.7	555.3	550.3	130°	63.0
588.3	582.4	576.4	568.0	560.4	554.5	547.8	543.5	538.5	533.4	523.3	132.5°	70.5
574.8	568.0	562.1	551.1	543.5	536.8	529.2	522.4	516.5	506.4	491.2	135°	77.9
565.5	551.1	541.0	525.8	517.4	508.9	505.6	498.8	490.4	472.6	454.1	137.5°	85.3
552.0	525.8	507.2	492.0	480.2	470.1	464.2	456.6	448.2	431.3	411.9	140°	92.5
529.2	498.8	481.1	465.0	451.5	440.6	429.6	415.2	404.3	384.9	371.4	142.5°	99.2
494.6	469.3	453.2	438.0	420.3	406.0	392.5	375.6	359.5	340.1	328.3	145°	104.9
455.8	433.0	412.7	396.7	378.1	363.8	349.4	330.0	314.8	297.1	286.1	147.5°	110.1
415.2	390.8	367.1	348.6	331.7	315.7	303.0	284.4	268.4	251.5	245.6	150°	115.1
379.0	351.1	325.8	307.2	288.6	272.6	259.1	239.7	226.2	214.4	207.6	152.5°	119.7
343.5	314.0	290.3	270.9	252.4	235.5	217.7	202.6	190.7	185.7	176.4	155°	123.7
303.8	273.5	250.7	229.6	214.4	196.6	183.1	173.0	165.4	161.2	155.3	157.5°	127.0
263.3	238.0	214.4	195.0	176.4	161.2	152.8	147.7	145.2	141.8	139.3	160°	130.3
230.4	208.5	184.8	166.3	149.4	138.4	134.2	131.7	130.0	128.3	127.4	162.5°	133.5
207.6	184.0	162.9	145.2	132.5	126.6	124.9	123.2	121.5	120.7	119.8	165°	136.0
189.9	166.3	146.9	131.7	122.4	120.7	119.8	118.2	116.5	116.5	114.8	167.5°	137.1
168.8	148.5	131.7	120.7	115.6	114.8	113.9	113.1	112.3	112.3	111.4	170°	137.4
146.9	131.7	120.7	113.1	111.4	109.7	108.0	106.3	105.5	107.2	108.0	172.5°	138.6
124.9	115.6	108.9	106.3	104.7	102.1	100.4	98.7	98.7	100.4	103.0	175°	140.5
103.8	100.4	98.7	97.1	96.2	95.4	93.7	92.0	92.0	92.0	93.7	177.5°	141.1
89.5	87.8	87.8	86.9	86.1	86.1	84.4	82.7	82.7	82.7	82.7	180°	140.8
78.5	79.3	79.3	79.3	78.5	77.6	76.8	75.1	74.3	72.6	70.9		
72.6	71.7	70.9	70.1	69.2	68.4	67.5	66.7	65.0	63.3	61.6		
65.0	63.3	60.8	59.9	59.1	57.4	57.4	56.5	54.9	52.3	50.6		
56.5	54.9	52.3	50.6	50.6	49.8	48.1	47.3	44.7	42.2	40.5		
45.6	43.0	40.5	39.7	38.8	38.0	37.1	36.3	35.4	32.9	32.1		
33.8	31.2	28.7	27.9	27.0	25.3	24.5	24.5	24.5	21.9	20.3		
21.9	18.6	16.0	13.5	13.5	12.7	11.0	9.3	7.6	5.1	3.4		
11.0	5.9	3.4	0.8	0.8	0.8	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		

'160141
 ENV-E02-LED-E1-SLL-8030-ULG

REPORT NUMBER: P160141
 CATALOG NUMBER: ENV-E02-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°	547.8	547.8
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	537.6	536.8
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	537.6	532.6
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	540.2	535.9
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	551.1	544.4
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	560.4	552.8
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	559.6	548.6
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	541.8	529.2
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	512.3	495.4
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	474.3	458.3
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	437.2	418.6
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	395.8	379.8
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	353.6	339.3
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	313.1	299.6
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	272.6	259.1
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	233.8	221.1
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	197.5	188.2
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	171.3	162.9
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	150.2	143.5
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	135.0	130.0
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	124.1	119.8
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	117.3	113.9
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	112.3	109.7
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	108.9	105.5
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	104.7	102.1
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	100.4	97.1
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	92.8	88.6
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	81.9	78.5
										70°	69.2	68.4
										72.5°	58.2	57.4
										75°	49.0	49.0
										77.5°	40.5	39.7
										80°	31.2	29.5
										82.5°	17.7	16.9
										85°	2.5	1.7
										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



REPORT NUMBER: P160141

CATALOG NUMBER: ENV-E02-LED-E1-SLI

LED-E1-SLL-8030-ULG

<u>tinued):</u>										<u>CANDELA DISTRIBUTION (continued):</u>		
230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	112.5°	21.2	21.2	21.2
537.6	538.5	541.8	543.5	544.4	544.4	545.2	546.9	547.8	115°	25.0	25.0	25.0
532.6	534.2	535.9	538.5	539.3	539.3	540.2	542.7	545.2	117.5°	29.5	29.5	29.5
533.4	532.6	533.4	535.1	535.1	535.1	535.9	538.5	541.0	120°	34.8	34.8	34.8
540.2	535.1	531.7	530.9	530.0	530.0	531.7	535.1	537.6	122.5°	40.9	40.9	40.9
546.1	539.3	532.6	528.3	525.0	523.3	524.1	527.5	532.6	125°	47.8	47.8	47.8
541.0	530.9	523.3	517.4	512.3	510.6	511.5	514.0	519.9	127.5°	55.3	55.3	55.3
519.1	508.1	499.6	495.4	492.9	492.0	493.7	498.8	503.9	130°	63.0	63.0	63.0
487.8	481.9	474.3	471.8	466.7	466.7	465.9	465.9	468.4	132.5°	70.5	70.5	70.5
453.2	449.8	442.3	436.3	430.4	429.6	423.7	424.5	423.7	135°	77.9	77.9	77.9
413.6	409.3	400.1	391.6	384.9	380.6	373.9	373.0	370.5	137.5°	85.3	85.3	85.3
373.9	367.1	356.2	347.7	339.3	333.4	327.5	321.6	319.9	140°	92.5	92.5	92.5
333.4	327.5	314.8	307.2	295.4	287.0	281.9	273.5	269.2	142.5°	99.2	99.2	99.2
293.7	287.0	272.6	258.3	249.8	239.7	232.1	221.1	216.1	145°	104.9	104.9	104.9
249.8	245.6	231.3	216.1	208.5	195.0	185.7	176.4	174.7	147.5°	110.1	110.1	110.1
214.4	205.1	194.1	182.3	169.6	162.0	157.8	156.1	155.3	150°	115.1	115.1	115.1
181.5	175.6	165.4	157.0	151.1	149.4	149.4	149.4	150.2	152.5°	119.7	119.7	119.7
159.5	151.9	146.9	144.3	144.3	145.2	146.0	147.7	149.4	155°	123.7	123.7	123.7
140.9	138.4	138.4	137.6	139.3	140.9	143.5	146.0	147.7	157.5°	127.0	127.0	127.0
128.3	129.1	130.8	131.7	135.0	137.6	140.1	141.8	143.5	160°	130.3	130.3	130.3
118.2	119.0	120.7	123.2	125.8	129.1	131.7	133.4	134.2	162.5°	133.5	133.5	133.5
112.3	112.3	114.8	117.3	120.7	123.2	125.8	126.6	128.3	165°	136.0	136.0	136.0
107.2	108.0	110.6	112.3	113.9	115.6	117.3	118.2	121.5	167.5°	137.1	137.1	137.1
103.8	104.7	105.5	103.8	105.5	107.2	108.9	110.6	112.3	170°	137.4	137.4	137.4
99.6	97.9	96.2	96.2	97.1	98.7	102.1	104.7	107.2	172.5°	138.6	138.6	138.6
94.5	92.0	89.5	88.6	89.5	91.2	94.5	97.9	99.6	175°	140.5	140.5	140.5
86.1	85.2	84.4	83.6	84.4	86.1	89.5	92.0	94.5	177.5°	141.1	141.1	141.1
77.6	76.8	76.0	76.8	77.6	79.3	82.7	85.2	87.8	180°	140.8	140.8	140.8
67.5	67.5	67.5	68.4	69.2	72.6	75.1	78.5	79.3				
56.5	58.2	58.2	58.2	59.9	64.1	67.5	70.9	72.6				
48.1	47.3	49.0	49.0	50.6	54.0	56.5	59.1	59.9				
38.8	38.8	39.7	39.7	39.7	41.4	43.0	43.0	43.0				
28.7	27.9	27.0	25.3	25.3	26.2	26.2	26.2	27.9				
13.5	11.0	11.0	10.1	9.3	9.3	9.3	11.0	11.8				
0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7	1.7				
0.0	0.8	0.8	0.8	1.7	1.7	1.7	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	0.1	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: P160141

CATALOG NUMBER: ENV-E02-LED-E1-SLL-8030-ULC

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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°	547.8	547.8	547.8	547.8
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	546.9	548.6	548.6	550.3
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	545.2	546.9	547.8	550.3
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	542.7	546.1	547.8	551.1
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	540.2	545.2	548.6	554.5
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	537.6	542.7	548.6	554.5
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	525.0	530.0	538.5	546.9
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	506.4	511.5	518.2	525.8
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	470.9	472.6	479.4	487.8
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	421.2	420.3	423.7	433.0
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	364.6	368.0	365.4	376.4
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	312.3	314.8	318.2	323.2
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	262.5	261.6	264.2	268.4
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	211.0	210.2	211.0	215.2
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	173.0	170.5	173.0	178.9
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	156.1	156.1	158.7	162.9
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	151.1	151.9	153.6	157.0
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	150.2	150.2	150.2	151.9
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	148.5	147.7	147.7	147.7
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	144.3	143.5	143.5	143.5
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	135.0	135.9	135.9	136.7
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	129.1	130.8	131.7	133.4
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	123.2	126.6	129.1	130.8
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	113.9	117.3	119.8	124.1
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	108.9	110.6	111.4	113.9
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	102.1	103.8	105.5	106.3
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	96.2	97.9	100.4	101.3
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	89.5	92.0	93.7	94.5
								70°	81.9	85.2	86.1	87.8
								72.5°	74.3	76.0	76.8	78.5
								75°	62.5	65.0	66.7	67.5
								77.5°	46.4	49.0	51.5	54.0
								80°	29.5	32.1	33.8	35.4
								82.5°	13.5	16.0	16.9	18.6
								85°	2.5	2.5	2.5	3.4
								87.5°	2.5	3.4	3.4	3.4
								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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CATALOG NUMBER: ENV-E02-LED-E1-SLL-8030-ULG

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CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°	325°		275°	280°	285°	290°	295°
547.8	547.8	547.8	547.8	547.8	547.8	547.8	112.5°	21.2	21.2	21.2	21.2	21.2
550.3	551.1	552.8	552.8	554.5	554.5	556.2	115°	25.0	25.0	25.0	25.0	25.0
552.0	553.7	556.2	557.0	560.4	562.1	563.8	117.5°	29.5	29.5	29.5	29.5	29.5
554.5	557.0	560.4	562.9	567.2	569.7	572.2	120°	34.8	34.8	34.8	34.8	34.8
558.7	562.9	568.8	571.4	574.8	580.7	584.9	122.5°	40.9	40.9	40.9	40.9	40.9
564.6	570.5	578.1	584.9	589.1	597.5	604.3	125°	47.8	47.8	47.8	47.8	47.8
556.2	568.8	578.1	590.8	601.8	616.1	627.9	127.5°	55.3	55.3	55.3	55.3	55.3
535.9	547.8	563.8	579.8	596.7	621.2	644.8	130°	63.0	63.0	63.0	63.0	63.0
498.8	512.3	530.9	551.1	575.6	607.7	641.4	132.5°	70.5	70.5	70.5	70.5	70.5
444.8	456.6	476.9	499.6	527.5	567.2	616.1	135°	77.9	77.9	77.9	77.9	77.9
387.4	403.4	422.8	447.3	478.5	525.8	578.1	137.5°	85.3	85.3	85.3	85.3	85.3
332.5	349.4	370.5	397.5	433.8	484.5	544.4	140°	92.5	92.5	92.5	92.5	92.5
276.0	295.4	314.8	348.6	384.9	438.0	504.7	142.5°	99.2	99.2	99.2	99.2	99.2
225.3	239.7	263.3	293.7	335.9	388.2	459.1	145°	104.9	104.9	104.9	104.9	104.9
184.8	196.6	219.4	249.0	287.0	338.4	400.1	147.5°	110.1	110.1	110.1	110.1	110.1
168.8	178.1	194.1	215.2	249.0	298.8	351.1	150°	115.1	115.1	115.1	115.1	115.1
162.9	171.3	183.1	201.7	227.9	265.9	310.6	152.5°	119.7	119.7	119.7	119.7	119.7
157.0	165.4	178.9	195.8	217.7	244.8	282.7	155°	123.7	123.7	123.7	123.7	123.7
151.9	161.2	175.6	194.1	214.4	238.0	267.5	157.5°	127.0	127.0	127.0	127.0	127.0
146.9	155.3	169.6	190.7	212.7	238.0	267.5	160°	130.3	130.3	130.3	130.3	130.3
139.3	147.7	162.9	184.8	209.3	237.2	270.9	162.5°	133.5	133.5	133.5	133.5	133.5
135.0	142.6	158.7	183.1	209.3	239.7	276.0	165°	136.0	136.0	136.0	136.0	136.0
132.5	139.3	157.8	185.7	216.1	251.5	291.2	167.5°	137.1	137.1	137.1	137.1	137.1
128.3	135.9	155.3	186.5	224.5	268.4	318.2	170°	137.4	137.4	137.4	137.4	137.4
116.5	125.8	146.9	180.6	222.0	276.0	341.8	172.5°	138.6	138.6	138.6	138.6	138.6
107.2	113.1	130.8	166.3	209.3	267.5	346.0	175°	140.5	140.5	140.5	140.5	140.5
103.0	106.3	118.2	146.9	189.1	251.5	333.4	177.5°	141.1	141.1	141.1	141.1	141.1
97.1	98.7	107.2	130.0	162.0	222.8	302.1	180°	140.8	140.8	140.8	140.8	140.8
89.5	90.3	97.1	111.4	135.0	177.2	252.4						
80.2	81.9	86.1	96.2	111.4	135.9	183.1						
69.2	70.1	71.7	78.5	87.8	104.7	130.0						
55.7	55.7	57.4	60.8	65.8	77.6	92.8						
36.3	38.8	40.5	46.4	48.1	56.5	65.8						
21.1	22.8	23.6	25.3	29.5	33.8	40.5						
3.4	5.1	5.1	6.8	8.4	9.3	11.0						
4.2	4.2	4.2	4.2	5.1	5.1	5.1						
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: P160141

CATALOG NUMBER: ENV-E02-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°	547.8	547.8	547.8	547.8	547.8	547.8
25.0	25.0	25.0	25.0	25.0	25.0	2.5°	557.0	556.2	557.9	559.6	558.7	563.8
29.5	29.5	29.5	29.5	29.5	29.5	5°	566.3	565.5	568.0	569.7	570.5	573.9
34.8	34.8	34.8	34.8	34.8	34.8	7.5°	575.6	576.4	580.7	581.5	584.0	588.3
40.9	40.9	40.9	40.9	40.9	40.9	10°	586.6	590.8	595.9	597.5	601.8	606.8
47.8	47.8	47.8	47.8	47.8	47.8	12.5°	608.5	614.4	621.2	626.2	634.7	644.8
55.3	55.3	55.3	55.3	55.3	55.3	15°	638.9	653.2	664.2	674.3	687.0	698.8
63.0	63.0	63.0	63.0	63.0	63.0	17.5°	665.9	693.8	717.4	738.5	758.7	777.3
70.5	70.5	70.5	70.5	70.5	70.5	20°	678.6	722.5	759.6	798.4	837.2	863.4
77.9	77.9	77.9	77.9	77.9	77.9	22.5°	666.8	728.4	785.8	848.2	907.3	960.5
85.3	85.3	85.3	85.3	85.3	85.3	25°	641.4	717.4	802.6	892.1	981.6	1062.6
92.5	92.5	92.5	92.5	92.5	92.5	27.5°	617.8	710.6	809.4	911.5	1017.9	1114.9
99.2	99.2	99.2	99.2	99.2	99.2	30°	586.6	687.9	795.9	901.4	1017.0	1130.9
104.9	104.9	104.9	104.9	104.9	104.9	32.5°	540.2	643.1	757.1	871.8	1000.1	1126.7
110.1	110.1	110.1	110.1	110.1	110.1	35°	485.3	588.3	704.7	825.4	968.1	1110.7
115.1	115.1	115.1	115.1	115.1	115.1	37.5°	425.4	526.7	648.2	777.3	925.0	1084.5
119.7	119.7	119.7	119.7	119.7	119.7	40°	374.7	465.0	590.8	730.9	886.2	1051.6
123.7	123.7	123.7	123.7	123.7	123.7	42.5°	334.2	416.1	535.1	676.9	843.1	1013.6
127.0	127.0	127.0	127.0	127.0	127.0	45°	310.6	379.0	487.8	628.8	798.4	974.0
130.3	130.3	130.3	130.3	130.3	130.3	47.5°	305.5	360.4	455.8	592.5	755.4	931.8
133.5	133.5	133.5	133.5	133.5	133.5	50°	310.6	361.2	441.4	569.7	722.5	893.8
136.0	136.0	136.0	136.0	136.0	136.0	52.5°	320.7	369.7	443.1	561.3	709.0	871.0
137.1	137.1	137.1	137.1	137.1	137.1	55°	336.8	392.5	460.8	568.8	707.3	861.7
137.4	137.4	137.4	137.4	137.4	137.4	57.5°	368.8	432.1	501.3	600.1	727.5	871.8
138.6	138.6	138.6	138.6	138.6	138.6	60°	409.3	485.3	568.8	673.5	776.5	905.6
140.5	140.5	140.5	140.5	140.5	140.5	62.5°	433.8	537.6	652.4	773.9	879.4	984.9
141.1	141.1	141.1	141.1	141.1	141.1	65°	431.3	559.6	721.6	894.6	1026.3	1127.6
140.8	140.8	140.8	140.8	140.8	140.8	67.5°	403.4	543.5	704.7	901.4	1099.7	1242.4
						70°	336.8	467.6	655.8	892.9	1136.9	1320.0
						72.5°	268.4	384.0	563.8	787.4	1028.0	1215.3
						75°	178.9	270.9	416.1	604.3	779.0	941.9
						77.5°	121.5	171.3	259.9	396.7	541.0	674.3
						80°	81.0	107.2	148.5	218.6	303.0	388.2
						82.5°	47.3	59.1	76.0	108.0	160.4	226.2
						85°	12.7	16.0	21.1	27.9	49.8	87.8
						87.5°	5.1	4.2	4.2	4.2	4.2	4.2
						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: P160141

CATALOG NUMBER: ENV-E02-LED-E1-SLL-8030-ULG

CANDELA DISTRIBUTION (continued):

360°		330°	335°	340°	345°	350°	355°	360°
547.8	112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2
559.6	115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0
573.1	117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5
589.1	120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8
613.6	122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9
649.0	125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8
712.3	127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3
794.2	130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0
894.6	132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5
1007.7	135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9
1136.9	137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3
1216.2	140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5
1233.1	142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2
1244.9	145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9
1248.3	147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1
1243.2	150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1
1222.9	152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7
1196.8	155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7
1163.9	157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0
1123.4	160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3
1085.4	162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5
1055.8	165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0
1037.3	167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1
1039.8	170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4
1066.0	172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6
1131.8	175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5
1256.7	177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1
1379.1	180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8
1497.2								
1419.6								
1083.7								
779.8								
452.4								
282.7								
122.4								
4.2								
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



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