

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: P160139

Luminaire Tested: **ENV-E02-LED-E1-SLL-7050-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P160139
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-7050-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(2) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5311.8 lumens
Efficiency: N/A
Efficacy: 96.8 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

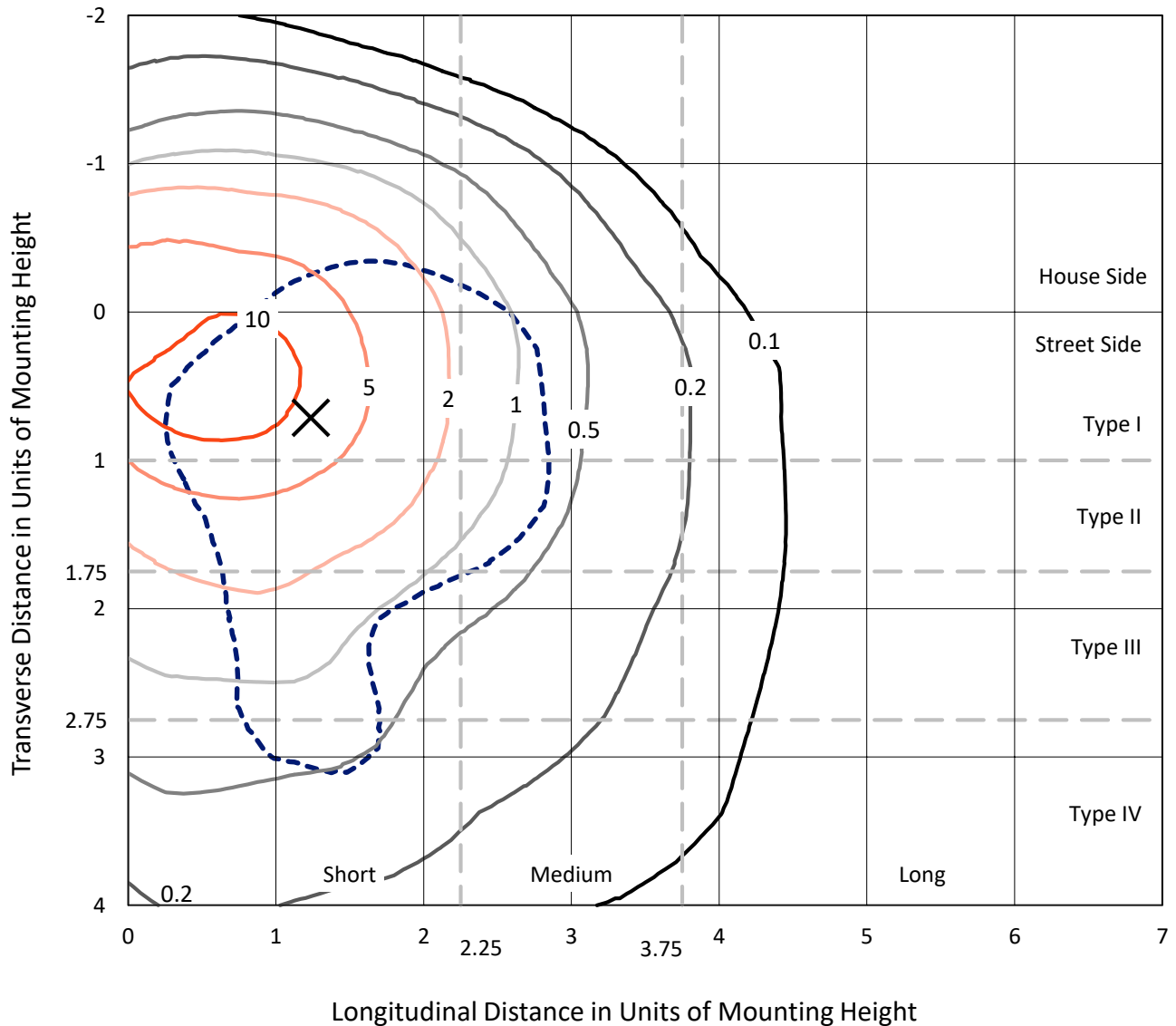
Input Watts (W): 54.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P160139
 CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

Iso-Footcandle Lines of Horizontal Illumination

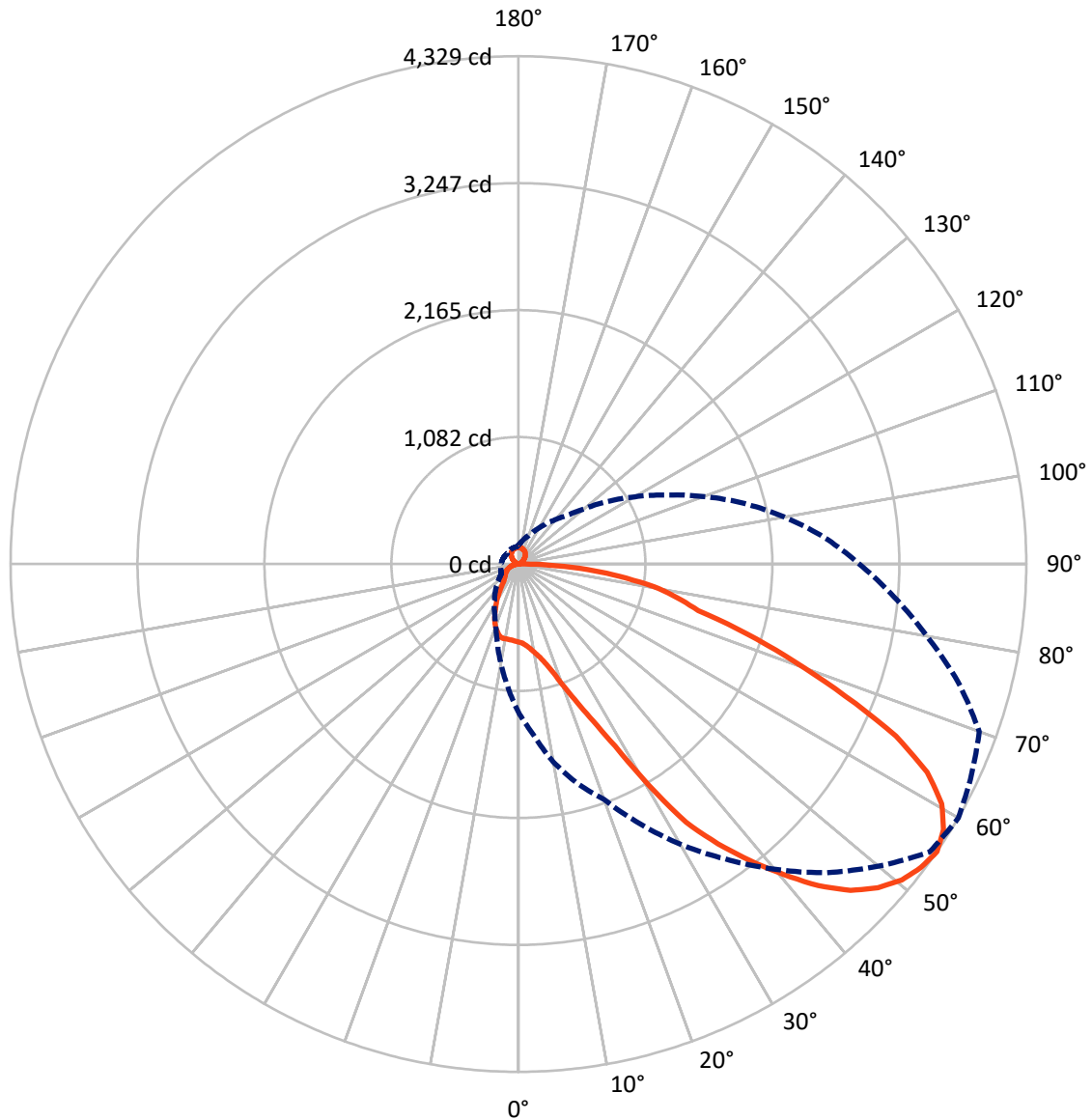
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P160139
CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

Luminous Intensity Polar Plot



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

REPORT NUMBER: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

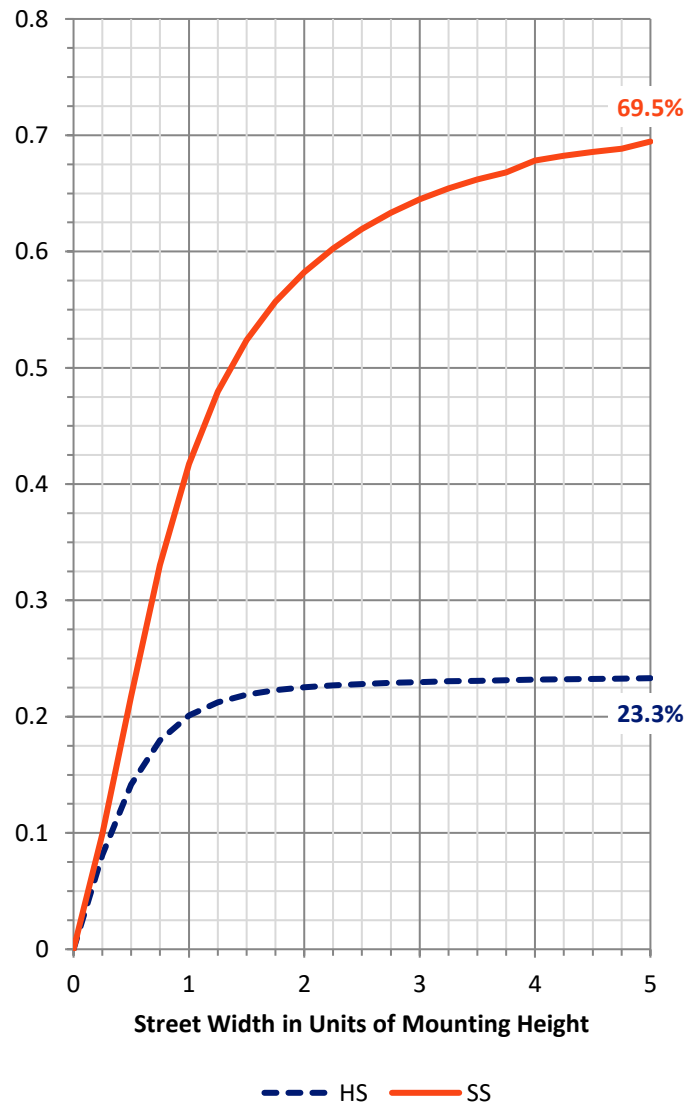
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1248.8	157.7	1406.6
	% Fixture	23.5	3.0	26.5
Street Side	Lumens	3747.5	157.7	3905.2
	% Fixture	70.6	3.0	73.5
Total	Lumens	4996.3	315.5	5311.8
	% Fixture	94.1	5.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	1.2
10°-20°	215.6	4.1
20°-30°	418.4	7.9
30°-40°	657.5	12.4
40°-50°	879.0	16.5
50°-60°	1031.3	19.4
60°-70°	978.4	18.4
70°-80°	590.5	11.1
80°-90°	160.0	3.0
90°-100°	1.3	0.0
100°-110°	12.3	0.2
110°-120°	25.2	0.5
120°-130°	43.0	0.8
130°-140°	60.0	1.1
140°-150°	65.4	1.2
150°-160°	56.9	1.1
160°-170°	38.2	0.7
170°-180°	13.3	0.3
0°-90°	4996.3	94.1
0°-180°	5311.8	100.0



REPORT NUMBER: P160139

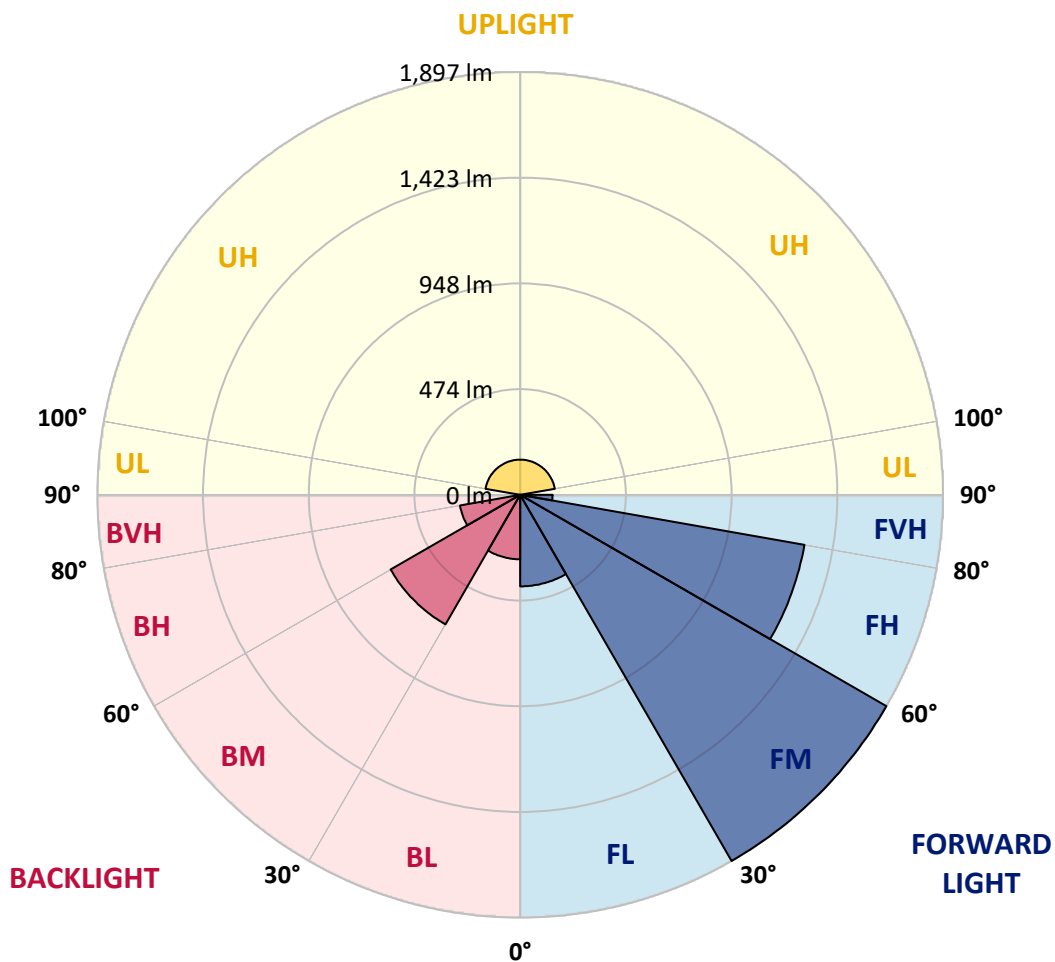
CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	410.6	7.7			
FM	(30°-60°)	1896.7	35.7			
FH	(60°-80°)	1294.7	24.4			G1/1800
FVH	(80°-90°)	145.5	2.7			G2/225
BL	(0°-30°)	289.0	5.4	B1/500		
BM	(30°-60°)	671.1	12.6	B1/1000		
BH	(60°-80°)	274.2	5.2	B1/500		G1/500
BVH	(80°-90°)	14.5	0.3			G1/100
UL	(90°-100°)	1.3	0.0		U1/10	
UH	(100°-180°)	157.7	3.0		U3/500	

BUG Rating: B1-U3-G2

Type IV Short





REPORT NUMBER: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9
2.5°	680.3	679.3	680.3	679.3	679.3	679.3	680.3	679.3	676.2	676.2	677.2
5°	696.7	696.7	696.7	697.8	697.8	698.8	700.8	698.8	697.8	702.9	698.8
7.5°	716.2	716.2	719.3	720.3	723.4	723.4	727.5	726.5	730.6	733.7	730.6
10°	746.0	742.9	750.1	750.1	758.3	759.3	763.4	764.4	771.6	777.8	772.7
12.5°	789.1	791.1	803.4	805.5	815.8	815.8	815.8	819.9	825.0	829.1	824.0
15°	866.0	870.1	886.6	887.6	905.0	897.8	906.1	907.1	906.1	909.1	901.9
17.5°	965.6	976.9	1000.5	1005.6	1013.8	1028.2	1028.2	1026.1	1031.2	1034.3	1014.8
20°	1087.7	1107.2	1133.8	1144.1	1166.7	1191.3	1190.3	1186.2	1187.2	1179.0	1157.4
22.5°	1225.2	1269.3	1313.4	1329.8	1346.3	1377.0	1396.5	1390.4	1395.5	1377.0	1357.5
25°	1382.2	1454.0	1520.7	1545.3	1604.8	1659.2	1667.4	1663.3	1640.7	1623.3	1603.8
27.5°	1478.6	1573.0	1664.3	1726.9	1828.5	1915.7	1933.2	1961.9	1969.1	1983.5	1936.3
30°	1499.1	1617.1	1731.0	1826.5	1948.6	2052.2	2167.1	2252.3	2309.8	2354.9	2324.1
32.5°	1513.5	1646.9	1773.1	1893.2	1993.7	2144.6	2289.2	2415.5	2583.7	2645.3	2703.8
35°	1517.6	1670.5	1813.1	1948.6	2078.9	2228.7	2383.6	2522.2	2750.0	2932.6	3057.8
37.5°	1511.5	1687.9	1855.2	2020.4	2175.3	2340.5	2503.7	2639.1	2860.8	3096.8	3265.1
40°	1486.8	1681.8	1872.6	2058.4	2246.1	2450.3	2637.1	2783.8	2991.1	3270.2	3493.9
42.5°	1455.0	1656.1	1866.5	2070.7	2282.1	2522.2	2747.9	2926.5	3155.3	3437.5	3691.9
45°	1415.0	1624.3	1841.9	2057.3	2285.1	2551.9	2809.5	3038.3	3281.5	3595.5	3840.7
47.5°	1365.7	1579.2	1809.0	2027.6	2264.6	2553.0	2838.2	3099.9	3366.7	3704.2	3969.0
50°	1319.6	1532.0	1772.1	1987.6	2225.6	2527.3	2835.1	3127.6	3419.0	3767.9	4045.9
52.5°	1283.7	1492.0	1740.3	1955.8	2180.5	2485.2	2804.3	3114.2	3427.2	3776.1	4060.3
55°	1261.1	1459.1	1713.6	1934.2	2135.3	2440.1	2757.1	3068.1	3396.4	3721.7	4006.9
57.5°	1264.2	1453.0	1698.2	1930.1	2102.5	2401.1	2703.8	3002.4	3301.0	3610.9	3905.4
60°	1296.0	1466.3	1690.0	1901.4	2123.0	2405.2	2680.2	2929.5	3168.6	3453.9	3728.9
62.5°	1376.0	1522.7	1703.3	1920.9	2165.1	2444.2	2664.8	2816.7	2959.3	3244.5	3524.7
65°	1527.9	1655.1	1799.8	1990.6	2229.7	2498.6	2602.2	2633.0	2724.3	2996.2	3274.3
67.5°	1676.7	1827.5	1909.6	2031.7	2255.4	2514.0	2527.3	2394.9	2392.9	2657.6	2858.7
70°	1820.3	2038.9	2071.7	2139.4	2292.3	2497.5	2449.3	2193.8	2077.9	2113.8	2230.8
72.5°	1725.9	2053.2	2076.8	2097.4	2188.7	2379.5	2324.1	1979.4	1719.8	1673.6	1805.9
75°	1317.5	1733.1	1788.5	1752.6	1802.9	1948.6	1938.3	1668.4	1580.2	1611.0	1662.3
77.5°	948.1	1336.0	1456.0	1339.1	1325.7	1420.1	1393.5	1416.0	1583.3	1628.4	1616.1
80°	550.0	848.6	1019.9	908.1	868.1	927.6	1032.3	1190.3	1372.9	1470.4	1488.9
82.5°	343.7	500.7	681.3	638.2	583.9	688.5	850.6	961.5	1051.8	1141.0	1146.2
85°	148.8	214.5	332.5	348.9	432.0	525.4	654.7	686.5	785.0	853.7	794.2
87.5°	5.1	5.1	80.0	119.0	211.4	379.7	514.1	459.7	465.9	408.4	380.7
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: P160139

CATALOG NUMBER: ENV-E02-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



REPORT NUMBER: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9
2.5°	677.2	675.2	676.2	673.1	673.1	674.2	674.2	671.1	671.1	671.1	670.0
5°	700.8	698.8	697.8	695.7	692.6	694.7	691.6	689.5	686.5	685.4	682.4
7.5°	731.6	728.5	727.5	722.4	718.3	716.2	714.2	707.0	703.9	701.9	697.8
10°	767.5	767.5	765.5	755.2	752.1	745.0	737.8	729.6	723.4	714.2	709.0
12.5°	813.7	816.8	809.6	800.4	793.2	778.8	765.5	754.2	741.9	728.5	720.3
15°	882.5	884.5	870.1	861.9	850.6	834.2	813.7	795.2	776.8	758.3	742.9
17.5°	984.0	981.0	960.4	952.2	932.7	905.0	877.3	852.7	825.0	799.3	779.8
20°	1130.8	1118.5	1065.1	1062.0	1037.4	998.4	958.4	922.5	885.5	852.7	819.9
22.5°	1309.3	1281.6	1242.6	1198.5	1151.3	1108.2	1061.0	1010.7	964.5	923.5	887.6
25°	1542.2	1480.7	1444.8	1385.2	1344.2	1268.3	1202.6	1162.6	1100.0	1052.8	1006.6
27.5°	1853.1	1755.7	1703.3	1638.7	1547.4	1494.0	1404.7	1327.8	1261.1	1183.1	1131.8
30°	2256.4	2184.6	2053.2	1962.9	1836.7	1707.4	1597.6	1497.1	1409.9	1316.5	1240.6
32.5°	2671.0	2625.8	2471.9	2303.6	2111.7	1921.9	1760.8	1636.6	1522.7	1418.1	1330.9
35°	3022.9	2929.5	2778.7	2602.2	2355.9	2136.4	1932.2	1774.1	1632.5	1502.2	1392.4
37.5°	3249.7	3208.6	3055.7	2855.7	2585.8	2348.8	2137.4	1950.6	1774.1	1603.8	1462.2
40°	3502.1	3478.5	3350.2	3105.0	2855.7	2565.3	2324.1	2127.1	1937.3	1734.1	1548.4
42.5°	3727.8	3749.4	3618.0	3402.6	3114.2	2786.9	2530.4	2311.8	2095.3	1888.0	1673.6
45°	3930.0	3969.0	3872.5	3672.4	3356.4	2998.3	2730.5	2492.4	2256.4	2029.6	1790.6
47.5°	4081.8	4123.9	4042.9	3885.9	3556.5	3174.8	2905.9	2639.1	2391.9	2131.2	1877.8
50°	4209.1	4233.7	4172.1	4034.6	3718.6	3346.1	3046.5	2766.4	2492.4	2211.3	1934.2
52.5°	4283.0	4297.3	4236.8	4137.3	3841.7	3473.4	3156.3	2854.6	2563.2	2266.7	1971.1
55°	4278.9	4329.1	4260.4	4180.4	3879.7	3533.9	3213.8	2904.9	2615.5	2302.6	1992.7
57.5°	4198.8	4272.7	4240.9	4141.4	3847.9	3529.8	3222.0	2933.6	2649.4	2314.9	1982.4
60°	4044.9	4146.5	4169.1	4027.5	3720.7	3416.9	3144.0	2900.8	2617.6	2260.5	1919.8
62.5°	3827.4	3909.5	3967.9	3775.0	3471.3	3183.0	2969.5	2777.7	2489.3	2099.4	1790.6
65°	3499.0	3537.0	3553.4	3374.9	3077.3	2885.4	2745.9	2580.7	2260.5	1870.6	1590.5
67.5°	3010.6	3005.5	3021.9	2938.8	2719.2	2618.6	2526.3	2346.7	1973.2	1608.9	1329.8
70°	2393.9	2500.6	2590.9	2502.7	2366.2	2265.6	2188.7	1976.3	1576.1	1242.6	1010.7
72.5°	1948.6	2035.8	2085.0	2008.1	1875.7	1803.9	1702.3	1490.9	1109.2	883.5	693.6
75°	1645.9	1582.3	1612.0	1563.8	1441.7	1338.0	1279.6	1046.6	727.5	584.9	432.0
77.5°	1486.8	1385.2	1320.6	1217.0	1077.4	959.4	899.9	650.6	458.7	344.8	249.3
80°	1314.4	1173.9	1005.6	838.3	718.3	645.4	604.4	371.5	252.4	200.1	143.7
82.5°	999.4	867.1	703.9	582.8	479.2	417.6	370.4	212.4	142.6	105.7	82.1
85°	640.3	590.0	538.7	479.2	401.2	322.2	248.3	154.9	104.7	60.5	45.1
87.5°	308.9	256.5	254.5	235.0	223.7	176.5	104.7	35.9	22.6	19.5	12.3
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
102.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
105°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
107.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
110°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8



REPORT NUMBER: P160139

CATALOG NUMBER: ENV-E02-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: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9
2.5°	668.0	667.0	664.9	664.9	663.9	662.9	661.8	661.8	662.9	660.8	659.8
5°	679.3	678.3	675.2	674.2	673.1	671.1	671.1	670.0	670.0	668.0	667.0
7.5°	692.6	690.6	688.5	687.5	684.4	684.4	684.4	686.5	686.5	686.5	687.5
10°	706.0	700.8	698.8	698.8	697.8	698.8	701.9	703.9	707.0	709.0	711.1
12.5°	713.1	708.0	706.0	703.9	707.0	707.0	712.1	718.3	723.4	728.5	730.6
15°	731.6	722.4	718.3	713.1	713.1	713.1	718.3	723.4	729.6	735.7	736.7
17.5°	763.4	747.0	738.8	727.5	724.4	720.3	720.3	722.4	726.5	731.6	731.6
20°	795.2	778.8	765.5	753.2	745.0	733.7	725.5	718.3	715.2	717.2	717.2
22.5°	852.7	833.2	816.8	796.3	777.8	763.4	742.9	725.5	712.1	708.0	704.9
25°	956.3	928.6	900.9	870.1	849.6	822.9	794.2	765.5	738.8	720.3	703.9
27.5°	1071.3	1033.3	993.3	945.0	912.2	872.2	834.2	793.2	760.3	732.6	702.9
30°	1181.0	1110.2	1052.8	992.2	938.9	884.5	837.3	789.1	753.2	720.3	684.4
32.5°	1235.4	1151.3	1073.3	997.4	932.7	870.1	818.8	764.4	726.5	689.5	646.4
35°	1273.4	1172.8	1079.5	991.2	918.4	849.6	791.1	734.7	689.5	647.5	598.2
37.5°	1320.6	1194.4	1084.6	986.1	900.9	822.9	757.3	693.6	642.3	597.2	545.9
40°	1382.2	1227.2	1090.8	971.7	874.2	786.0	718.3	649.5	595.1	546.9	499.7
42.5°	1467.3	1272.4	1097.9	954.3	844.5	752.1	682.4	615.7	558.2	506.9	459.7
45°	1551.5	1324.7	1116.4	949.1	825.0	730.6	656.7	585.9	525.4	471.0	416.6
47.5°	1614.1	1363.7	1135.9	952.2	813.7	708.0	629.0	550.0	482.3	422.8	367.3
50°	1654.1	1388.3	1153.3	960.4	803.4	678.3	584.9	504.8	435.1	376.6	321.2
52.5°	1674.6	1395.5	1159.5	957.4	776.8	631.1	537.7	460.7	394.0	336.6	287.3
55°	1680.8	1388.3	1146.2	928.6	730.6	583.9	494.6	421.7	357.1	302.7	258.6
57.5°	1659.2	1357.5	1099.0	870.1	669.0	538.7	448.4	377.6	316.0	267.8	227.8
60°	1589.4	1286.7	1015.8	778.8	600.3	478.2	387.9	318.1	267.8	225.7	198.0
62.5°	1462.2	1166.7	903.0	664.9	505.9	395.1	309.9	249.3	208.3	178.5	164.2
65°	1303.2	1002.5	733.7	528.4	386.8	294.5	222.7	182.6	153.9	136.5	129.3
67.5°	1065.1	783.9	549.0	376.6	266.8	200.1	150.8	129.3	117.0	111.8	109.8
70°	766.5	543.8	363.2	244.2	173.4	136.5	109.8	100.6	95.4	95.4	96.5
72.5°	504.8	335.5	221.6	156.0	123.1	102.6	89.3	85.2	85.2	87.2	88.2
75°	295.5	195.0	136.5	113.9	97.5	86.2	79.0	75.9	75.9	77.0	77.0
77.5°	174.4	120.1	97.5	86.2	79.0	73.9	69.8	65.7	64.6	64.6	67.7
80°	107.7	85.2	75.9	68.7	63.6	59.5	55.4	55.4	55.4	54.4	56.4
82.5°	69.8	60.5	59.5	57.5	51.3	47.2	43.1	43.1	45.1	43.1	44.1
85°	42.1	40.0	39.0	39.0	36.9	34.9	31.8	31.8	34.9	33.9	29.8
87.5°	11.3	10.3	13.3	12.3	14.4	14.4	14.4	16.4	21.5	27.7	20.5
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: P160139
 CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

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

NUMBER: P160139
 NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°	165°	165°
665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	112.5°	21.2
658.8	659.8	657.7	656.7	657.7	658.8	655.7	654.7	653.6	652.6	653.6	115°	25.0
665.9	665.9	662.9	660.8	660.8	659.8	656.7	655.7	651.6	650.6	653.6	117.5°	29.5
686.5	685.4	682.4	679.3	678.3	678.3	671.1	668.0	665.9	659.8	660.8	120°	34.8
710.1	710.1	711.1	707.0	701.9	700.8	692.6	687.5	684.4	679.3	677.2	122.5°	40.9
728.5	725.5	724.4	718.3	713.1	711.1	703.9	699.8	695.7	690.6	689.5	125°	47.8
734.7	728.5	724.4	717.2	711.1	707.0	700.8	696.7	691.6	688.5	686.5	127.5°	55.3
728.5	722.4	716.2	708.0	699.8	694.7	687.5	681.3	679.3	675.2	669.0	130°	63.0
715.2	708.0	700.8	690.6	681.3	674.2	665.9	660.8	654.7	648.5	636.2	132.5°	70.5
698.8	690.6	683.4	670.0	660.8	652.6	643.4	635.2	628.0	615.7	597.2	135°	77.9
687.5	670.0	657.7	639.3	629.0	618.7	614.6	606.4	596.2	574.6	552.0	137.5°	85.3
671.1	639.3	616.7	598.2	583.9	571.5	564.4	555.1	544.9	524.3	500.7	140°	92.5
643.4	606.4	584.9	565.4	549.0	535.6	522.3	504.8	491.5	467.9	451.5	142.5°	99.2
601.3	570.5	551.0	532.5	511.0	493.6	477.1	456.6	437.1	413.5	399.2	145°	104.9
554.1	526.4	501.8	482.3	459.7	442.3	424.8	401.2	382.7	361.2	347.8	147.5°	110.1
504.8	475.1	446.4	423.8	403.3	383.8	368.4	345.8	326.3	305.8	298.6	150°	115.1
460.7	426.9	396.1	373.5	350.9	331.4	315.0	291.4	275.0	260.6	252.4	152.5°	119.7
417.6	381.7	353.0	329.4	306.8	286.3	264.7	246.3	231.9	225.7	214.5	155°	123.7
369.4	332.5	304.8	279.1	260.6	239.1	222.7	210.4	201.1	196.0	188.8	157.5°	127.0
320.1	289.4	260.6	237.0	214.5	196.0	185.7	179.6	176.5	172.4	169.3	160°	130.3
280.1	253.4	224.7	202.1	181.6	168.3	163.2	160.1	158.0	156.0	154.9	162.5°	133.5
252.4	223.7	198.0	176.5	161.1	153.9	151.9	149.8	147.8	146.7	145.7	165°	136.0
230.9	202.1	178.5	160.1	148.8	146.7	145.7	143.7	141.6	141.6	139.6	167.5°	137.1
205.2	180.6	160.1	146.7	140.6	139.6	138.5	137.5	136.5	136.5	135.4	170°	137.4
178.5	160.1	146.7	137.5	135.4	133.4	131.3	129.3	128.3	130.3	131.3	172.5°	138.6
151.9	140.6	132.4	129.3	127.2	124.2	122.1	120.1	120.1	122.1	125.2	175°	140.5
126.2	122.1	120.1	118.0	117.0	115.9	113.9	111.8	111.8	111.8	113.9	177.5°	141.1
108.8	106.7	106.7	105.7	104.7	104.7	102.6	100.6	100.6	100.6	100.6	180°	140.8
95.4	96.5	96.5	96.5	95.4	94.4	93.4	91.3	90.3	88.2	86.2		
88.2	87.2	86.2	85.2	84.1	83.1	82.1	81.1	79.0	77.0	74.9		
79.0	77.0	73.9	72.9	71.8	69.8	69.8	68.7	66.7	63.6	61.6		
68.7	66.7	63.6	61.6	61.6	60.5	58.5	57.5	54.4	51.3	49.3		
55.4	52.3	49.3	48.2	47.2	46.2	45.1	44.1	43.1	40.0	39.0		
41.0	38.0	34.9	33.9	32.8	30.8	29.8	29.8	29.8	26.7	24.6		
26.7	22.6	19.5	16.4	16.4	15.4	13.3	11.3	9.2	6.2	4.1		
13.3	7.2	4.1	1.0	1.0	1.0	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		

'160139
 ENV-E02-LED-E1-SLL-7050-ULG

REPORT NUMBER: P160139
 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°	665.9	665.9
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	653.6	652.6
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	653.6	647.5
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	656.7	651.6
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	670.0	661.8
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	681.3	672.1
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	680.3	667.0
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	658.8	643.4
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	622.8	602.3
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	576.7	557.2
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	531.5	508.9
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	481.2	461.7
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	429.9	412.5
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	380.7	364.3
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	331.4	315.0
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	284.2	268.8
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	240.1	228.8
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	208.3	198.0
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	182.6	174.4
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	164.2	158.0
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	150.8	145.7
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	142.6	138.5
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	136.5	133.4
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	132.4	128.3
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	127.2	124.2
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	122.1	118.0
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	112.9	107.7
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	99.5	95.4
										70°	84.1	83.1
										72.5°	70.8	69.8
										75°	59.5	59.5
										77.5°	49.3	48.2
										80°	38.0	35.9
										82.5°	21.5	20.5
										85°	3.1	2.1
										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: P160139

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

LED-E1-SLL-7050-ULG

tinued):

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	665.9	112.5°	21.2	21.2	21.2
653.6	654.7	658.8	660.8	661.8	661.8	662.9	664.9	665.9	115°	25.0	25.0	25.0
647.5	649.5	651.6	654.7	655.7	655.7	656.7	659.8	662.9	117.5°	29.5	29.5	29.5
648.5	647.5	648.5	650.6	650.6	650.6	651.6	654.7	657.7	120°	34.8	34.8	34.8
656.7	650.6	646.4	645.4	644.4	644.4	646.4	650.6	653.6	122.5°	40.9	40.9	40.9
663.9	655.7	647.5	642.3	638.2	636.2	637.2	641.3	647.5	125°	47.8	47.8	47.8
657.7	645.4	636.2	629.0	622.8	620.8	621.8	624.9	632.1	127.5°	55.3	55.3	55.3
631.1	617.7	607.5	602.3	599.2	598.2	600.3	606.4	612.6	130°	63.0	63.0	63.0
593.1	585.9	576.7	573.6	567.4	567.4	566.4	566.4	569.5	132.5°	70.5	70.5	70.5
551.0	546.9	537.7	530.5	523.3	522.3	515.1	516.1	515.1	135°	77.9	77.9	77.9
502.8	497.7	486.4	476.1	467.9	462.8	454.6	453.5	450.5	137.5°	85.3	85.3	85.3
454.6	446.4	433.0	422.8	412.5	405.3	398.1	390.9	388.9	140°	92.5	92.5	92.5
405.3	398.1	382.7	373.5	359.1	348.9	342.7	332.5	327.3	142.5°	99.2	99.2	99.2
357.1	348.9	331.4	314.0	303.7	291.4	282.2	268.8	262.7	145°	104.9	104.9	104.9
303.7	298.6	281.2	262.7	253.4	237.0	225.7	214.5	212.4	147.5°	110.1	110.1	110.1
260.6	249.3	236.0	221.6	206.2	197.0	191.9	189.8	188.8	150°	115.1	115.1	115.1
220.6	213.4	201.1	190.9	183.7	181.6	181.6	181.6	182.6	152.5°	119.7	119.7	119.7
193.9	184.7	178.5	175.5	175.5	176.5	177.5	179.6	181.6	155°	123.7	123.7	123.7
171.4	168.3	168.3	167.3	169.3	171.4	174.4	177.5	179.6	157.5°	127.0	127.0	127.0
156.0	157.0	159.0	160.1	164.2	167.3	170.3	172.4	174.4	160°	130.3	130.3	130.3
143.7	144.7	146.7	149.8	152.9	157.0	160.1	162.1	163.2	162.5°	133.5	133.5	133.5
136.5	136.5	139.6	142.6	146.7	149.8	152.9	153.9	156.0	165°	136.0	136.0	136.0
130.3	131.3	134.4	136.5	138.5	140.6	142.6	143.7	147.8	167.5°	137.1	137.1	137.1
126.2	127.2	128.3	126.2	128.3	130.3	132.4	134.4	136.5	170°	137.4	137.4	137.4
121.1	119.0	117.0	117.0	118.0	120.1	124.2	127.2	130.3	172.5°	138.6	138.6	138.6
114.9	111.8	108.8	107.7	108.8	110.8	114.9	119.0	121.1	175°	140.5	140.5	140.5
104.7	103.6	102.6	101.6	102.6	104.7	108.8	111.8	114.9	177.5°	141.1	141.1	141.1
94.4	93.4	92.3	93.4	94.4	96.5	100.6	103.6	106.7	180°	140.8	140.8	140.8
82.1	82.1	82.1	83.1	84.1	88.2	91.3	95.4	96.5				
68.7	70.8	70.8	70.8	72.9	78.0	82.1	86.2	88.2				
58.5	57.5	59.5	59.5	61.6	65.7	68.7	71.8	72.9				
47.2	47.2	48.2	48.2	48.2	50.3	52.3	52.3	52.3				
34.9	33.9	32.8	30.8	30.8	31.8	31.8	31.8	33.9				
16.4	13.3	13.3	12.3	11.3	11.3	11.3	13.3	14.4				
1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	2.1				
0.0	1.0	1.0	1.0	2.1	2.1	2.1	3.1	3.1				
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1				
0.1	0.1	0.1	0.1	0.1	0.1	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: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULC

_-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°	665.9	665.9	665.9	665.9
25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	2.5°	664.9	667.0	667.0	669.0
29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	5°	662.9	664.9	665.9	669.0
34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	7.5°	659.8	663.9	665.9	670.0
40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	10°	656.7	662.9	667.0	674.2
47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	12.5°	653.6	659.8	667.0	674.2
55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	15°	638.2	644.4	654.7	664.9
63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	17.5°	615.7	621.8	630.0	639.3
70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	20°	572.6	574.6	582.8	593.1
77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	22.5°	512.0	511.0	515.1	526.4
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	25°	443.3	447.4	444.3	457.6
92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	27.5°	379.7	382.7	386.8	393.0
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	30°	319.1	318.1	321.2	326.3
104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	32.5°	256.5	255.5	256.5	261.7
110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	35°	210.4	207.3	210.4	217.5
115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	37.5°	189.8	189.8	192.9	198.0
119.7	119.7	119.7	119.7	119.7	119.7	119.7	119.7	40°	183.7	184.7	186.8	190.9
123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	42.5°	182.6	182.6	182.6	184.7
127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	45°	180.6	179.6	179.6	179.6
130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	47.5°	175.5	174.4	174.4	174.4
133.5	133.5	133.5	133.5	133.5	133.5	133.5	133.5	50°	164.2	165.2	165.2	166.2
136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	52.5°	157.0	159.0	160.1	162.1
137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.1	55°	149.8	153.9	157.0	159.0
137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	57.5°	138.5	142.6	145.7	150.8
138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	60°	132.4	134.4	135.4	138.5
140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	62.5°	124.2	126.2	128.3	129.3
141.1	141.1	141.1	141.1	141.1	141.1	141.1	141.1	65°	117.0	119.0	122.1	123.1
140.8	140.8	140.8	140.8	140.8	140.8	140.8	140.8	67.5°	108.8	111.8	113.9	114.9
								70°	99.5	103.6	104.7	106.7
								72.5°	90.3	92.3	93.4	95.4
								75°	75.9	79.0	81.1	82.1
								77.5°	56.4	59.5	62.6	65.7
								80°	35.9	39.0	41.0	43.1
								82.5°	16.4	19.5	20.5	22.6
								85°	3.1	3.1	3.1	4.1
								87.5°	3.1	4.1	4.1	4.1
								90°	0.1	0.1	0.1	0.1
								92.5°	0.1	0.1	0.1	0.1
								95°	0.5	0.5	0.5	0.5
								97.5°	1.5	1.5	1.5	1.5
								100°	5.0	5.0	5.0	5.0
								102.5°	8.8	8.8	8.8	8.8
								105°	11.8	11.8	11.8	11.8
								107.5°	14.7	14.7	14.7	14.7
								110°	17.8	17.8	17.8	17.8



REPORT NUMBER: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

5

CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°	325°		275°	280°	285°	290°	295°
665.9	665.9	665.9	665.9	665.9	665.9	665.9	112.5°	21.2	21.2	21.2	21.2	21.2
669.0	670.0	672.1	672.1	674.2	674.2	676.2	115°	25.0	25.0	25.0	25.0	25.0
671.1	673.1	676.2	677.2	681.3	683.4	685.4	117.5°	29.5	29.5	29.5	29.5	29.5
674.2	677.2	681.3	684.4	689.5	692.6	695.7	120°	34.8	34.8	34.8	34.8	34.8
679.3	684.4	691.6	694.7	698.8	706.0	711.1	122.5°	40.9	40.9	40.9	40.9	40.9
686.5	693.6	702.9	711.1	716.2	726.5	734.7	125°	47.8	47.8	47.8	47.8	47.8
676.2	691.6	702.9	718.3	731.6	749.1	763.4	127.5°	55.3	55.3	55.3	55.3	55.3
651.6	665.9	685.4	704.9	725.5	755.2	783.9	130°	63.0	63.0	63.0	63.0	63.0
606.4	622.8	645.4	670.0	699.8	738.8	779.8	132.5°	70.5	70.5	70.5	70.5	70.5
540.8	555.1	579.7	607.5	641.3	689.5	749.1	135°	77.9	77.9	77.9	77.9	77.9
471.0	490.5	514.1	543.8	581.8	639.3	702.9	137.5°	85.3	85.3	85.3	85.3	85.3
404.3	424.8	450.5	483.3	527.4	589.0	661.8	140°	92.5	92.5	92.5	92.5	92.5
335.5	359.1	382.7	423.8	467.9	532.5	613.6	142.5°	99.2	99.2	99.2	99.2	99.2
274.0	291.4	320.1	357.1	408.4	472.0	558.2	145°	104.9	104.9	104.9	104.9	104.9
224.7	239.1	266.8	302.7	348.9	411.5	486.4	147.5°	110.1	110.1	110.1	110.1	110.1
205.2	216.5	236.0	261.7	302.7	363.2	426.9	150°	115.1	115.1	115.1	115.1	115.1
198.0	208.3	222.7	245.2	277.0	323.2	377.6	152.5°	119.7	119.7	119.7	119.7	119.7
190.9	201.1	217.5	238.1	264.7	297.6	343.7	155°	123.7	123.7	123.7	123.7	123.7
184.7	196.0	213.4	236.0	260.6	289.4	325.3	157.5°	127.0	127.0	127.0	127.0	127.0
178.5	188.8	206.2	231.9	258.6	289.4	325.3	160°	130.3	130.3	130.3	130.3	130.3
169.3	179.6	198.0	224.7	254.5	288.3	329.4	162.5°	133.5	133.5	133.5	133.5	133.5
164.2	173.4	192.9	222.7	254.5	291.4	335.5	165°	136.0	136.0	136.0	136.0	136.0
161.1	169.3	191.9	225.7	262.7	305.8	354.0	167.5°	137.1	137.1	137.1	137.1	137.1
156.0	165.2	188.8	226.8	272.9	326.3	386.8	170°	137.4	137.4	137.4	137.4	137.4
141.6	152.9	178.5	219.6	269.9	335.5	415.6	172.5°	138.6	138.6	138.6	138.6	138.6
130.3	137.5	159.0	202.1	254.5	325.3	420.7	175°	140.5	140.5	140.5	140.5	140.5
125.2	129.3	143.7	178.5	229.8	305.8	405.3	177.5°	141.1	141.1	141.1	141.1	141.1
118.0	120.1	130.3	158.0	197.0	270.9	367.3	180°	140.8	140.8	140.8	140.8	140.8
108.8	109.8	118.0	135.4	164.2	215.5	306.8						
97.5	99.5	104.7	117.0	135.4	165.2	222.7						
84.1	85.2	87.2	95.4	106.7	127.2	158.0						
67.7	67.7	69.8	73.9	80.0	94.4	112.9						
44.1	47.2	49.3	56.4	58.5	68.7	80.0						
25.7	27.7	28.7	30.8	35.9	41.0	49.3						
4.1	6.2	6.2	8.2	10.3	11.3	13.3						
5.1	5.1	5.1	5.1	6.2	6.2	6.2						
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: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

300°	305°	310°	315°	320°	325°		330°	335°	340°	345°	350°	355°
21.2	21.2	21.2	21.2	21.2	21.2	0°	665.9	665.9	665.9	665.9	665.9	665.9
25.0	25.0	25.0	25.0	25.0	25.0	2.5°	677.2	676.2	678.3	680.3	679.3	685.4
29.5	29.5	29.5	29.5	29.5	29.5	5°	688.5	687.5	690.6	692.6	693.6	697.8
34.8	34.8	34.8	34.8	34.8	34.8	7.5°	699.8	700.8	706.0	707.0	710.1	715.2
40.9	40.9	40.9	40.9	40.9	40.9	10°	713.1	718.3	724.4	726.5	731.6	737.8
47.8	47.8	47.8	47.8	47.8	47.8	12.5°	739.8	747.0	755.2	761.4	771.6	783.9
55.3	55.3	55.3	55.3	55.3	55.3	15°	776.8	794.2	807.5	819.9	835.2	849.6
63.0	63.0	63.0	63.0	63.0	63.0	17.5°	809.6	843.5	872.2	897.8	922.5	945.0
70.5	70.5	70.5	70.5	70.5	70.5	20°	825.0	878.3	923.5	970.7	1017.9	1049.7
77.9	77.9	77.9	77.9	77.9	77.9	22.5°	810.6	885.5	955.3	1031.2	1103.1	1167.7
85.3	85.3	85.3	85.3	85.3	85.3	25°	779.8	872.2	975.8	1084.6	1193.4	1291.9
92.5	92.5	92.5	92.5	92.5	92.5	27.5°	751.1	864.0	984.0	1108.2	1237.5	1355.5
99.2	99.2	99.2	99.2	99.2	99.2	30°	713.1	836.3	967.6	1095.9	1236.5	1375.0
104.9	104.9	104.9	104.9	104.9	104.9	32.5°	656.7	781.9	920.4	1060.0	1215.9	1369.9
110.1	110.1	110.1	110.1	110.1	110.1	35°	590.0	715.2	856.8	1003.5	1176.9	1350.4
115.1	115.1	115.1	115.1	115.1	115.1	37.5°	517.2	640.3	788.0	945.0	1124.6	1318.5
119.7	119.7	119.7	119.7	119.7	119.7	40°	455.6	565.4	718.3	888.6	1077.4	1278.5
123.7	123.7	123.7	123.7	123.7	123.7	42.5°	406.3	505.9	650.6	822.9	1025.1	1232.4
127.0	127.0	127.0	127.0	127.0	127.0	45°	377.6	460.7	593.1	764.4	970.7	1184.1
130.3	130.3	130.3	130.3	130.3	130.3	47.5°	371.5	438.1	554.1	720.3	918.4	1132.8
133.5	133.5	133.5	133.5	133.5	133.5	50°	377.6	439.2	536.7	692.6	878.3	1086.6
136.0	136.0	136.0	136.0	136.0	136.0	52.5°	389.9	449.4	538.7	682.4	861.9	1058.9
137.1	137.1	137.1	137.1	137.1	137.1	55°	409.4	477.1	560.3	691.6	859.9	1047.7
137.4	137.4	137.4	137.4	137.4	137.4	57.5°	448.4	525.4	609.5	729.6	884.5	1060.0
138.6	138.6	138.6	138.6	138.6	138.6	60°	497.7	590.0	691.6	818.8	944.0	1101.0
140.5	140.5	140.5	140.5	140.5	140.5	62.5°	527.4	653.6	793.2	940.9	1069.2	1197.5
141.1	141.1	141.1	141.1	141.1	141.1	65°	524.3	680.3	877.3	1087.7	1247.7	1370.9
140.8	140.8	140.8	140.8	140.8	140.8	67.5°	490.5	660.8	856.8	1095.9	1337.0	1510.4
						70°	409.4	568.5	797.3	1085.6	1382.2	1604.8
						72.5°	326.3	466.9	685.4	957.4	1249.8	1477.6
						75°	217.5	329.4	505.9	734.7	947.1	1145.1
						77.5°	147.8	208.3	316.0	482.3	657.7	819.9
						80°	98.5	130.3	180.6	265.8	368.4	472.0
						82.5°	57.5	71.8	92.3	131.3	195.0	275.0
						85°	15.4	19.5	25.7	33.9	60.5	106.7
						87.5°	6.2	5.1	5.1	5.1	5.1	5.1
						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: P160139

CATALOG NUMBER: ENV-E02-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

360°		330°	335°	340°	345°	350°	355°	360°
665.9	112.5°	21.2	21.2	21.2	21.2	21.2	21.2	21.2
680.3	115°	25.0	25.0	25.0	25.0	25.0	25.0	25.0
696.7	117.5°	29.5	29.5	29.5	29.5	29.5	29.5	29.5
716.2	120°	34.8	34.8	34.8	34.8	34.8	34.8	34.8
746.0	122.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9
789.1	125°	47.8	47.8	47.8	47.8	47.8	47.8	47.8
866.0	127.5°	55.3	55.3	55.3	55.3	55.3	55.3	55.3
965.6	130°	63.0	63.0	63.0	63.0	63.0	63.0	63.0
1087.7	132.5°	70.5	70.5	70.5	70.5	70.5	70.5	70.5
1225.2	135°	77.9	77.9	77.9	77.9	77.9	77.9	77.9
1382.2	137.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3
1478.6	140°	92.5	92.5	92.5	92.5	92.5	92.5	92.5
1499.1	142.5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2
1513.5	145°	104.9	104.9	104.9	104.9	104.9	104.9	104.9
1517.6	147.5°	110.1	110.1	110.1	110.1	110.1	110.1	110.1
1511.5	150°	115.1	115.1	115.1	115.1	115.1	115.1	115.1
1486.8	152.5°	119.7	119.7	119.7	119.7	119.7	119.7	119.7
1455.0	155°	123.7	123.7	123.7	123.7	123.7	123.7	123.7
1415.0	157.5°	127.0	127.0	127.0	127.0	127.0	127.0	127.0
1365.7	160°	130.3	130.3	130.3	130.3	130.3	130.3	130.3
1319.6	162.5°	133.5	133.5	133.5	133.5	133.5	133.5	133.5
1283.7	165°	136.0	136.0	136.0	136.0	136.0	136.0	136.0
1261.1	167.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1
1264.2	170°	137.4	137.4	137.4	137.4	137.4	137.4	137.4
1296.0	172.5°	138.6	138.6	138.6	138.6	138.6	138.6	138.6
1376.0	175°	140.5	140.5	140.5	140.5	140.5	140.5	140.5
1527.9	177.5°	141.1	141.1	141.1	141.1	141.1	141.1	141.1
1676.7	180°	140.8	140.8	140.8	140.8	140.8	140.8	140.8
1820.3								
1725.9								
1317.5								
948.1								
550.0								
343.7								
148.8								
5.1								
0.1								
0.1								
0.5								
1.5								
5.0								
8.8								
11.8								
14.7								
17.8								

(END OF F

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

Scaled Data Report



(REPORT)