

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P135848

Luminaire Tested: **LD6A30D010TE ERM6A30827 6LM121LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P135848  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23357-R2)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A30D010TE ERM6A30827 6LM121LI  
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE  
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER  
Light Source: (1) HIGH LUMEN LED 2700K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

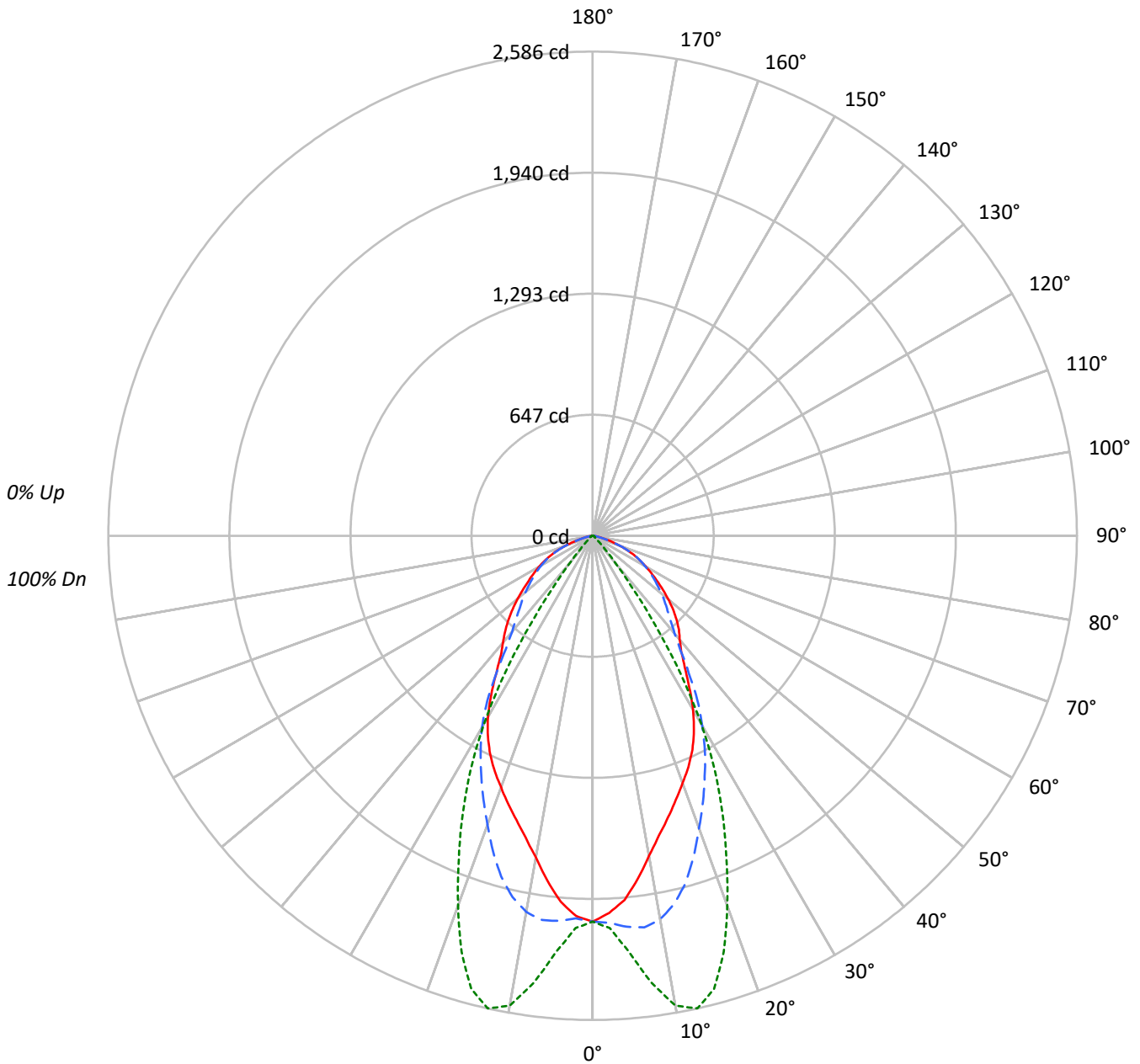
Lumens per Lamp: N/A  
Luminaire Lumens: 2735.0 lumens  
Efficiency: N/A  
Efficacy: 60.2 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.02 / 0.97  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

### Luminous Intensity Polar Plot





TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	91	87	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45					45			
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	134461	134461	134461
5°	127856	146016	128471
10°	114939	168804	115555
15°	105163	169193	106176
20°	97560	145951	99254
25°	90766	118286	93062
30°	80735	87507	84268
35°	68191	46257	71481
40°	61592	15475	63346
45°	58431	5361	58606
50°	53438	2284	52869
55°	47738	1706	47306
60°	42537	1709	43033
65°	37605	1729	37883
70°	28956	1431	28594
75°	17947	933	17015
80°	9167	714	8453
85°	4192	0	4192



TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.0	7.3
10°-20°	545.8	20.0
20°-30°	657.0	24.0
30°-40°	510.6	18.7
40°-50°	341.7	12.5
50°-60°	257.1	9.4
60°-70°	165.0	6.0
70°-80°	52.8	1.9
80°-90°	5.0	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1402.8	51.3
0°-40°	1913.4	70.0
0°-60°	2512.2	91.9
0°-90°	2735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2735.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2061	2061	2061	2061	2061	
5°	1952	2097	2230	2065	1962	179
15°	1557	1919	2505	1885	1572	438
25°	1261	1416	1643	1409	1293	575
35°	856	896	581	896	898	544
45°	633	566	58	553	635	486
55°	420	397	15	388	416	377
65°	244	245	11	240	245	239
75°	71	68	4	64	68	82
85°	6	6	0	6	6	8
90°	0	0	0	0	0	



TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0
2.5°	2016.0	2032.9	2027.3	2053.5	2034.8	2032.9	2046.0	2053.5	2055.4	2068.5	2068.5
5°	1952.3	1971.1	1965.4	1999.2	1991.7	1999.2	2027.3	2047.9	2066.6	2096.6	2115.3
7.5°	1847.4	1869.9	1873.6	1907.3	1911.1	1931.7	1976.7	2017.9	2057.2	2109.7	2154.7
10°	1735.0	1757.5	1763.1	1800.6	1811.8	1839.9	1898.0	1950.4	2006.7	2079.7	2147.2
12.5°	1637.5	1660.0	1667.5	1705.0	1718.1	1750.0	1811.8	1869.9	1933.6	2014.1	2094.7
15°	1557.0	1577.6	1585.1	1618.8	1631.9	1661.9	1720.0	1776.2	1838.0	1918.6	1997.3
17.5°	1478.3	1498.9	1504.5	1534.5	1543.9	1570.1	1622.6	1671.3	1723.7	1794.9	1866.1
20°	1405.2	1424.0	1427.7	1453.9	1459.6	1480.2	1523.3	1562.6	1605.7	1661.9	1720.0
22.5°	1335.9	1354.6	1356.5	1379.0	1380.9	1397.7	1433.3	1463.3	1493.3	1538.2	1579.5
25°	1260.9	1279.7	1281.6	1300.3	1302.2	1313.4	1341.5	1364.0	1384.6	1416.5	1444.6
27.5°	1171.0	1189.8	1195.4	1208.5	1210.4	1217.9	1242.2	1257.2	1277.8	1298.4	1309.7
30°	1071.7	1088.6	1096.1	1107.3	1109.2	1120.4	1142.9	1154.2	1167.3	1171.0	1174.8
32.5°	961.2	979.9	987.4	996.8	1002.4	1013.6	1034.2	1039.9	1043.6	1041.7	1021.1
35°	856.2	873.1	880.6	891.8	895.6	903.1	919.9	918.1	912.5	895.6	858.1
37.5°	777.6	790.7	798.2	805.7	807.5	811.3	820.6	813.2	798.2	770.1	721.3
40°	723.2	736.3	738.2	745.7	743.8	743.8	745.7	732.6	713.9	680.1	623.9
42.5°	682.0	693.2	693.2	700.7	695.1	691.4	691.4	676.4	652.0	616.4	560.2
45°	633.3	642.7	644.5	648.3	642.7	638.9	638.9	623.9	601.4	565.8	509.6
47.5°	582.7	592.1	592.1	597.7	592.1	588.3	588.3	575.2	554.6	522.7	470.3
50°	526.5	535.9	537.7	541.5	537.7	535.9	537.7	524.6	507.8	479.6	432.8
52.5°	472.2	481.5	481.5	485.3	481.5	481.5	483.4	474.0	459.0	436.6	395.3
55°	419.7	427.2	430.9	434.7	429.1	429.1	430.9	425.3	414.1	397.2	361.6
57.5°	371.0	378.5	380.3	384.1	380.3	382.2	384.1	378.5	372.9	359.7	331.6
60°	326.0	333.5	335.4	337.3	335.4	335.4	337.3	335.4	331.6	322.3	297.9
62.5°	284.8	290.4	292.3	296.0	292.3	290.4	294.2	292.3	290.4	284.8	267.9
65°	243.6	247.3	249.2	251.1	247.3	243.6	247.3	247.3	249.2	245.4	232.3
67.5°	198.6	202.4	202.4	202.4	196.7	194.9	198.6	198.6	202.4	200.5	191.1
70°	151.8	153.6	153.6	153.6	146.1	146.1	148.0	148.0	151.8	151.8	146.1
72.5°	108.7	106.8	106.8	104.9	103.0	99.3	99.3	101.2	104.9	104.9	101.2
75°	71.2	69.3	67.5	67.5	65.6	61.8	61.8	63.7	65.6	67.5	65.6
77.5°	43.1	41.2	41.2	39.3	39.3	37.5	37.5	37.5	39.3	39.3	39.3
80°	24.4	22.5	22.5	22.5	20.6	20.6	20.6	20.6	20.6	22.5	20.6
82.5°	13.1	11.2	11.2	11.2	11.2	11.2	9.4	11.2	11.2	11.2	11.2
85°	5.6	5.6	5.6	5.6	3.7	3.7	3.7	3.7	3.7	5.6	5.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0
2.5°	2062.9	2081.6	2068.5	2109.7	2081.6	2096.6	2117.2	2096.6	2102.2	2115.3	2089.1
5°	2126.6	2160.3	2164.0	2220.2	2197.8	2224.0	2252.1	2229.6	2233.4	2242.7	2209.0
7.5°	2192.1	2252.1	2280.2	2358.9	2353.3	2396.4	2430.1	2407.6	2407.6	2409.5	2358.9
10°	2210.9	2298.9	2351.4	2448.8	2463.8	2525.6	2563.1	2548.1	2544.4	2538.8	2469.4
12.5°	2169.7	2278.3	2345.8	2454.4	2484.4	2557.5	2591.2	2585.6	2580.0	2568.7	2488.2
15°	2074.1	2186.5	2257.7	2364.5	2402.0	2476.9	2505.0	2505.0	2499.4	2488.2	2402.0
17.5°	1933.6	2038.5	2104.1	2197.8	2235.2	2304.6	2323.3	2328.9	2323.3	2312.1	2233.4
20°	1774.3	1862.4	1914.8	1991.7	2021.6	2081.6	2092.8	2102.2	2098.5	2089.1	2019.8
22.5°	1618.8	1688.1	1727.5	1794.9	1806.2	1856.8	1860.5	1868.0	1866.1	1862.4	1806.2
25°	1476.4	1523.3	1545.7	1596.3	1600.1	1637.5	1635.7	1643.2	1641.3	1641.3	1598.2
27.5°	1326.5	1354.6	1360.3	1392.1	1384.6	1412.7	1416.5	1412.7	1414.6	1416.5	1384.6
30°	1176.6	1182.3	1165.4	1169.1	1148.5	1165.4	1148.5	1161.6	1161.6	1167.3	1148.5
32.5°	1006.1	989.3	944.3	921.8	886.2	886.2	876.9	876.9	876.9	886.2	882.5
35°	824.4	783.2	713.9	665.1	614.5	601.4	599.6	580.8	584.6	597.7	607.1
37.5°	668.9	607.1	515.2	445.9	386.0	359.7	350.4	335.4	341.0	356.0	378.5
40°	558.3	483.4	376.6	296.0	236.1	206.1	191.1	181.7	187.4	206.1	234.2
42.5°	489.0	406.6	292.3	208.0	151.8	123.7	108.7	101.2	106.8	123.7	157.4
45°	438.4	352.2	236.1	153.6	103.0	76.8	63.7	58.1	61.8	76.8	104.9
47.5°	399.1	311.0	196.7	118.0	73.1	50.6	39.3	33.7	37.5	50.6	73.1
50°	363.5	277.3	166.8	93.7	56.2	37.5	26.2	22.5	26.2	35.6	54.3
52.5°	331.6	247.3	142.4	76.8	43.1	30.0	20.6	16.9	18.7	28.1	43.1
55°	303.5	224.8	125.5	65.6	37.5	26.2	18.7	15.0	18.7	24.4	37.5
57.5°	277.3	202.4	110.5	56.2	31.9	22.5	16.9	15.0	16.9	22.5	31.9
60°	251.1	179.9	97.4	48.7	28.1	20.6	15.0	13.1	15.0	18.7	28.1
62.5°	224.8	159.3	84.3	41.2	24.4	16.9	13.1	11.2	13.1	16.9	24.4
65°	194.9	134.9	71.2	35.6	20.6	15.0	11.2	11.2	11.2	15.0	20.6
67.5°	161.1	110.5	56.2	28.1	16.9	13.1	9.4	9.4	9.4	13.1	16.9
70°	123.7	82.4	43.1	22.5	13.1	9.4	7.5	7.5	7.5	9.4	13.1
72.5°	86.2	58.1	30.0	16.9	9.4	7.5	5.6	5.6	5.6	7.5	9.4
75°	54.3	37.5	20.6	11.2	7.5	5.6	3.7	3.7	3.7	5.6	7.5
77.5°	31.9	22.5	13.1	7.5	3.7	3.7	1.9	1.9	1.9	3.7	3.7
80°	16.9	13.1	7.5	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	9.4	5.6	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	3.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0	2061.0
2.5°	2081.6	2089.1	2087.2	2047.9	2044.1	2046.0	2019.8	2029.1	2038.5	2029.1	2031.0
5°	2182.8	2180.9	2158.4	2102.2	2079.7	2064.7	2021.6	2014.1	2008.5	1987.9	1980.4
7.5°	2315.8	2289.6	2242.7	2158.4	2111.6	2070.4	2006.7	1974.8	1952.3	1916.7	1896.1
10°	2407.6	2355.1	2285.8	2175.3	2104.1	2040.4	1957.9	1909.2	1871.8	1824.9	1794.9
12.5°	2420.7	2347.7	2267.1	2137.8	2055.4	1976.7	1886.7	1832.4	1789.3	1738.7	1710.6
15°	2336.4	2261.5	2177.2	2047.9	1965.4	1884.9	1798.7	1744.3	1701.3	1652.5	1628.2
17.5°	2177.2	2107.8	2032.9	1913.0	1841.8	1768.7	1691.9	1645.0	1607.6	1570.1	1545.7
20°	1974.8	1920.5	1858.6	1757.5	1701.3	1641.3	1581.3	1543.9	1515.8	1483.9	1465.2
22.5°	1774.3	1733.1	1688.1	1607.6	1566.3	1523.3	1476.4	1450.2	1429.6	1405.2	1392.1
25°	1581.3	1553.2	1525.1	1463.3	1438.9	1409.0	1375.2	1356.5	1343.4	1326.5	1317.2
27.5°	1380.9	1371.5	1364.0	1324.7	1315.3	1294.7	1272.2	1260.9	1251.6	1240.3	1232.8
30°	1163.5	1169.1	1199.1	1178.5	1187.9	1182.3	1172.9	1165.4	1161.6	1152.3	1142.9
32.5°	918.1	957.4	1000.5	1006.1	1034.2	1047.4	1045.5	1047.4	1049.2	1041.7	1034.2
35°	657.6	721.3	788.8	818.8	865.6	895.6	906.8	918.1	925.6	923.7	918.1
37.5°	438.4	524.6	605.2	657.6	719.5	760.7	785.0	803.8	815.0	818.8	818.8
40°	292.3	374.7	481.5	549.0	618.3	668.9	697.0	721.3	738.2	745.7	749.4
42.5°	206.1	294.2	402.8	479.6	550.8	605.2	637.0	663.3	680.1	689.5	693.2
45°	151.8	236.1	348.5	427.2	500.3	552.7	584.6	608.9	625.8	635.2	640.8
47.5°	116.2	198.6	307.3	387.8	460.9	509.6	539.6	562.1	577.1	584.6	588.3
50°	91.8	166.8	273.5	354.1	421.6	466.5	492.8	511.5	524.6	530.2	534.0
52.5°	74.9	144.3	245.4	322.3	386.0	425.3	445.9	460.9	472.2	475.9	479.6
55°	63.7	125.5	221.1	296.0	354.1	387.8	402.8	415.9	421.6	425.3	427.2
57.5°	56.2	110.5	200.5	271.7	324.1	352.2	363.5	372.9	374.7	378.5	380.3
60°	48.7	95.6	178.0	245.4	292.3	316.6	322.3	329.8	329.8	331.6	333.5
62.5°	41.2	82.4	155.5	219.2	260.4	281.0	284.8	286.7	286.7	286.7	288.5
65°	33.7	69.3	131.2	189.2	226.7	239.8	241.7	243.6	239.8	239.8	241.7
67.5°	28.1	54.3	104.9	155.5	185.5	196.7	194.9	194.9	189.2	189.2	191.1
70°	20.6	41.2	78.7	118.0	140.5	148.0	144.3	144.3	138.6	138.6	140.5
72.5°	15.0	30.0	54.3	80.6	97.4	101.2	97.4	97.4	93.7	93.7	95.6
75°	11.2	18.7	35.6	52.5	61.8	63.7	61.8	60.0	58.1	58.1	60.0
77.5°	7.5	13.1	20.6	30.0	35.6	37.5	35.6	35.6	33.7	35.6	35.6
80°	3.7	7.5	11.2	16.9	18.7	20.6	20.6	20.6	18.7	18.7	20.6
82.5°	1.9	3.7	5.6	7.5	9.4	11.2	9.4	9.4	9.4	9.4	9.4
85°	0.0	1.9	1.9	3.7	3.7	5.6	3.7	3.7	3.7	3.7	3.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P135848

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2061.0	2061.0	2061.0	2061.0
2.5°	2027.3	2017.9	2004.8	2032.9
5°	1969.2	1950.4	1935.5	1961.7
7.5°	1877.4	1851.1	1830.5	1856.8
10°	1772.4	1742.5	1720.0	1744.3
12.5°	1680.6	1650.7	1631.9	1650.7
15°	1600.1	1572.0	1555.1	1572.0
17.5°	1521.4	1497.0	1482.0	1500.8
20°	1446.4	1425.8	1412.7	1429.6
22.5°	1377.1	1358.4	1347.1	1364.0
25°	1304.0	1290.9	1277.8	1292.8
27.5°	1223.5	1208.5	1201.0	1210.4
30°	1131.7	1116.7	1111.1	1118.6
32.5°	1023.0	1008.0	1002.4	1008.0
35°	910.6	897.5	890.0	897.5
37.5°	815.0	803.8	798.2	803.8
40°	747.6	742.0	736.3	743.8
42.5°	695.1	689.5	685.7	691.4
45°	640.8	633.3	629.5	635.2
47.5°	586.4	578.9	575.2	578.9
50°	530.2	520.9	519.0	520.9
52.5°	474.0	466.5	462.8	464.7
55°	423.4	417.8	414.1	415.9
57.5°	378.5	371.0	369.1	371.0
60°	333.5	329.8	327.9	329.8
62.5°	288.5	286.7	288.5	288.5
65°	243.6	243.6	245.4	245.4
67.5°	194.9	198.6	200.5	200.5
70°	144.3	148.0	149.9	149.9
72.5°	97.4	101.2	103.0	104.9
75°	61.8	65.6	67.5	67.5
77.5°	37.5	39.3	39.3	41.2
80°	20.6	22.5	22.5	22.5
82.5°	11.2	11.2	11.2	13.1
85°	5.6	5.6	5.6	5.6
87.5°	0.0	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)