

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: P252421

Luminaire Tested: **LD6B60D010TE EU6B60709030 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60709030 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4612.0 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

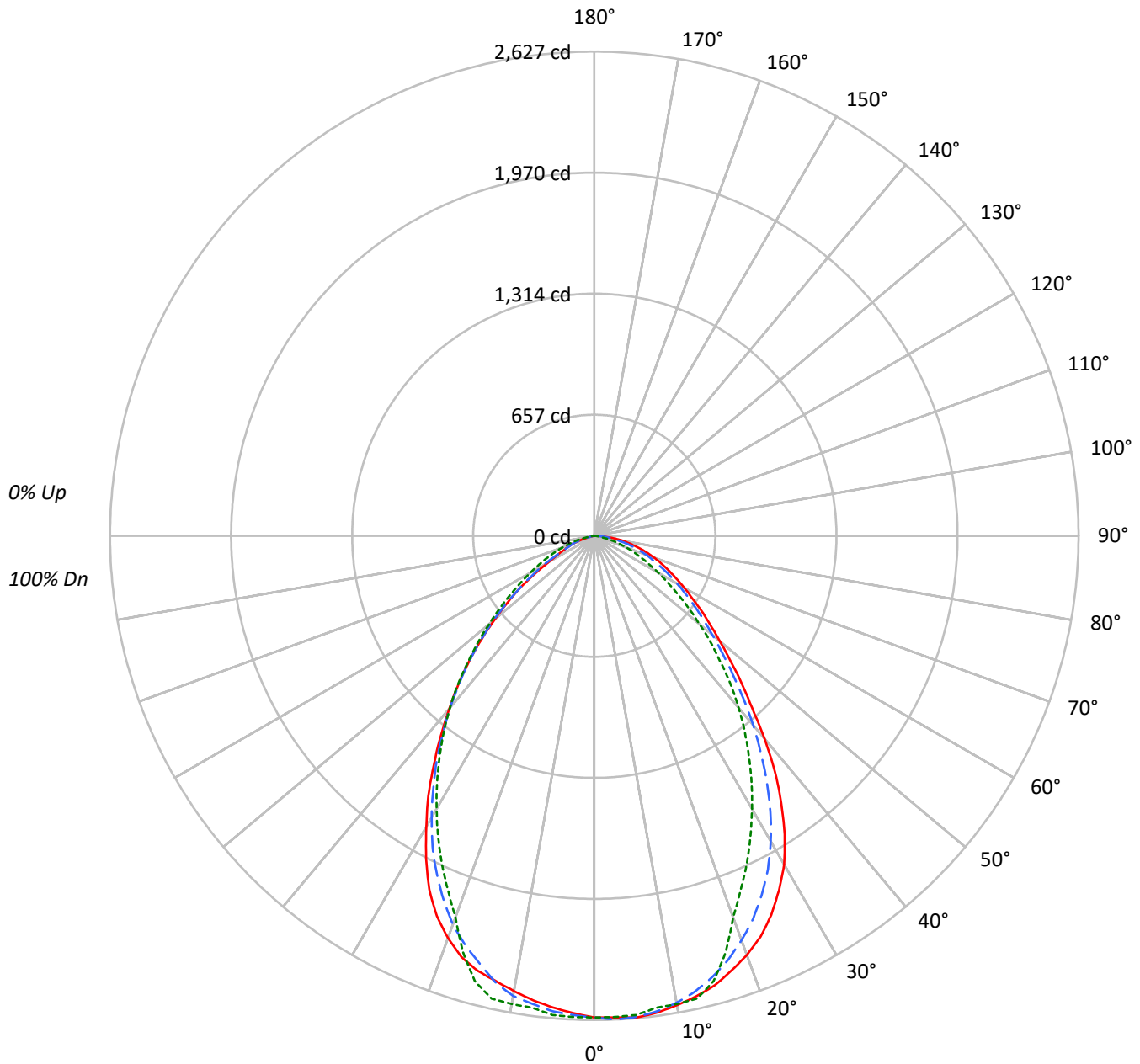
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60		
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54		
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48		
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44		
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40		
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36		
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	170487	170487	170487
5°	171806	170915	168250
10°	171315	170871	166148
15°	170544	168936	165039
20°	168001	152921	161162
25°	163435	140961	152443
30°	155187	128858	137295
35°	140827	116495	120820
40°	122264	103766	104055
45°	104268	89238	88297
50°	90251	75432	71301
55°	80678	62923	55200
60°	73513	52258	37200
65°	68634	42962	27772
70°	65389	34965	23310
75°	61606	24804	7688
80°	58648	12736	2555
85°	48282	7635	0



TEST NUMBER: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	5.4
10°-20°	690.2	15.0
20°-30°	952.7	20.7
30°-40°	969.5	21.0
40°-50°	779.1	16.9
50°-60°	518.1	11.2
60°-70°	295.2	6.4
70°-80°	132.6	2.9
80°-90°	27.9	0.6
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°	1889.6	41.0
0°-40°	2859.1	62.0
0°-60°	4156.3	90.1
0°-90°	4612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4612.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2613	2613	2613	2613	2613	
5°	2623	2620	2610	2589	2569	249
15°	2525	2477	2501	2403	2444	711
25°	2270	2148	1958	2023	2118	1040
35°	1768	1632	1463	1490	1517	1099
45°	1130	1062	967	957	957	876
55°	709	662	553	492	485	637
65°	445	397	278	180	180	443
75°	244	204	98	41	30	261
85°	64	44	10	3	0	77
90°	0	0	0	0	0	



TEST NUMBER: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2
2.5°	2616.6	2630.2	2626.8	2623.4	2626.8	2623.4	2616.6	2616.6	2609.8	2609.8	2626.8
5°	2623.4	2630.2	2626.8	2623.4	2623.4	2626.8	2613.2	2613.2	2606.4	2603.0	2620.0
7.5°	2609.8	2620.0	2613.2	2613.2	2609.8	2613.2	2599.6	2599.6	2589.4	2586.0	2603.0
10°	2586.0	2599.6	2592.8	2592.8	2592.8	2586.0	2579.3	2575.9	2565.7	2562.3	2572.5
12.5°	2558.9	2569.1	2565.7	2558.9	2558.9	2558.9	2545.3	2541.9	2528.4	2521.6	2531.7
15°	2525.0	2531.7	2528.4	2525.0	2518.2	2518.2	2504.6	2497.8	2484.2	2470.7	2477.4
17.5°	2474.1	2484.2	2477.4	2474.1	2463.9	2463.9	2450.3	2443.5	2423.1	2409.6	2413.0
20°	2419.8	2423.1	2419.8	2413.0	2402.8	2399.4	2385.8	2372.2	2355.3	2338.3	2334.9
22.5°	2355.3	2358.7	2348.5	2341.7	2331.5	2328.1	2311.2	2301.0	2273.8	2253.5	2250.1
25°	2270.4	2273.8	2273.8	2256.9	2250.1	2243.3	2226.3	2209.3	2185.6	2158.4	2148.3
27.5°	2168.6	2178.8	2172.0	2155.0	2141.5	2138.1	2121.1	2107.5	2077.0	2053.2	2039.7
30°	2060.0	2056.6	2053.2	2043.0	2022.7	2019.3	2002.3	1985.4	1961.6	1931.1	1914.1
32.5°	1920.9	1920.9	1917.5	1907.3	1886.9	1880.1	1866.6	1846.2	1819.1	1795.3	1778.3
35°	1768.2	1771.5	1768.2	1747.8	1734.2	1727.4	1720.6	1696.9	1673.1	1646.0	1632.4
37.5°	1608.6	1598.5	1601.9	1584.9	1567.9	1574.7	1554.3	1544.2	1517.0	1496.6	1483.1
40°	1435.6	1442.3	1428.8	1422.0	1411.8	1401.6	1401.6	1384.7	1371.1	1347.3	1340.5
42.5°	1265.9	1276.1	1272.7	1265.9	1252.3	1255.7	1238.7	1231.9	1215.0	1204.8	1194.6
45°	1130.1	1130.1	1130.1	1123.3	1119.9	1113.2	1103.0	1092.8	1082.6	1069.0	1062.2
47.5°	997.8	997.8	1001.2	994.4	987.6	984.2	977.4	977.4	960.4	946.9	940.1
50°	889.2	889.2	889.2	882.4	875.6	875.6	868.8	862.0	851.8	841.7	834.9
52.5°	790.7	790.7	790.7	784.0	780.6	777.2	773.8	770.4	756.8	750.0	743.2
55°	709.3	705.9	705.9	702.5	695.7	695.7	692.3	685.5	675.4	665.2	661.8
57.5°	627.8	631.2	627.8	627.8	621.1	621.1	614.3	610.9	600.7	593.9	587.1
60°	563.4	563.4	563.4	560.0	553.2	556.6	549.8	546.4	536.2	526.0	519.2
62.5°	498.9	502.3	502.3	498.9	492.1	492.1	488.7	485.3	475.1	464.9	454.8
65°	444.6	444.6	444.6	441.2	437.8	437.8	434.4	431.0	420.8	407.3	397.1
67.5°	393.7	390.3	390.3	390.3	386.9	383.5	380.1	376.7	366.5	356.3	342.8
70°	342.8	342.8	342.8	339.4	332.6	336.0	332.6	329.2	319.0	308.8	298.7
72.5°	295.3	295.3	291.9	288.5	288.5	285.1	285.1	281.7	271.5	257.9	247.7
75°	244.4	244.4	244.4	244.4	237.6	241.0	234.2	230.8	224.0	213.8	203.6
77.5°	200.2	200.2	200.2	196.8	193.4	193.4	190.1	186.7	176.5	169.7	156.1
80°	156.1	156.1	156.1	156.1	152.7	149.3	145.9	142.5	135.8	125.6	115.4
82.5°	115.4	115.4	112.0	112.0	112.0	108.6	105.2	101.8	95.0	88.2	81.5
85°	64.5	67.9	67.9	61.1	64.5	61.1	61.1	54.3	54.3	47.5	44.1
87.5°	23.8	20.4	20.4	20.4	20.4	20.4	20.4	17.0	17.0	17.0	13.6
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: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2
2.5°	2613.2	2609.8	2623.4	2623.4	2603.0	2613.2	2616.6	2609.8	2609.8	2613.2	2603.0
5°	2606.4	2599.6	2613.2	2616.6	2596.2	2606.4	2609.8	2603.0	2606.4	2609.8	2596.2
7.5°	2582.7	2582.7	2592.8	2596.2	2575.9	2586.0	2586.0	2579.3	2582.7	2582.7	2572.5
10°	2558.9	2548.7	2558.9	2558.9	2541.9	2545.3	2552.1	2548.7	2562.3	2579.3	2579.3
12.5°	2514.8	2504.6	2521.6	2521.6	2511.4	2525.0	2541.9	2552.1	2565.7	2572.5	2552.1
15°	2460.5	2463.9	2494.4	2518.2	2508.0	2528.4	2545.3	2538.5	2521.6	2501.2	2470.7
17.5°	2389.2	2379.0	2406.2	2419.8	2406.2	2413.0	2426.5	2413.0	2385.8	2368.8	2328.1
20°	2307.8	2280.6	2280.6	2273.8	2250.1	2250.1	2246.7	2222.9	2212.7	2202.6	2185.6
22.5°	2216.1	2185.6	2175.4	2155.0	2134.7	2131.3	2121.1	2097.3	2083.8	2077.0	2056.6
25°	2110.9	2083.8	2066.8	2046.4	2015.9	2009.1	1998.9	1975.2	1968.4	1958.2	1941.2
27.5°	2002.3	1968.4	1944.6	1924.3	1897.1	1893.7	1873.4	1856.4	1842.8	1836.0	1822.5
30°	1876.8	1839.4	1822.5	1795.3	1774.9	1768.2	1751.2	1727.4	1717.2	1710.5	1700.3
32.5°	1737.6	1707.1	1690.1	1666.3	1639.2	1642.6	1622.2	1601.9	1595.1	1588.3	1578.1
35°	1601.9	1571.3	1550.9	1530.6	1513.6	1506.8	1493.3	1476.3	1466.1	1462.7	1455.9
37.5°	1452.5	1428.8	1411.8	1391.4	1377.9	1371.1	1364.3	1347.3	1340.5	1340.5	1327.0
40°	1306.6	1286.2	1272.7	1262.5	1245.5	1242.1	1235.3	1225.1	1221.8	1218.4	1208.2
42.5°	1174.2	1147.1	1136.9	1130.1	1119.9	1113.2	1109.8	1103.0	1099.6	1096.2	1086.0
45°	1048.7	1024.9	1014.7	1007.9	997.8	994.4	991.0	980.8	974.0	967.2	963.8
47.5°	926.5	909.5	906.1	889.2	882.4	875.6	868.8	862.0	858.6	855.2	841.7
50°	821.3	811.1	794.1	784.0	777.2	773.8	760.2	750.0	746.6	743.2	733.1
52.5°	726.3	712.7	702.5	685.5	682.1	675.4	668.6	655.0	648.2	644.8	634.6
55°	641.4	631.2	617.7	604.1	593.9	590.5	580.3	566.8	560.0	553.2	546.4
57.5°	570.2	553.2	539.6	526.0	519.2	509.1	498.9	492.1	481.9	471.7	461.6
60°	502.3	488.7	471.7	458.2	451.4	444.6	431.0	420.8	410.6	400.5	390.3
62.5°	437.8	424.2	407.3	393.7	386.9	380.1	366.5	356.3	346.2	336.0	322.4
65°	380.1	366.5	353.0	339.4	332.6	325.8	312.2	298.7	288.5	278.3	264.7
67.5°	332.6	315.6	302.0	288.5	281.7	274.9	261.3	251.1	237.6	227.4	213.8
70°	281.7	268.1	257.9	244.4	237.6	230.8	217.2	203.6	193.4	183.3	169.7
72.5°	237.6	220.6	210.4	196.8	190.1	186.7	173.1	162.9	152.7	139.1	129.0
75°	190.1	176.5	162.9	152.7	145.9	142.5	129.0	118.8	108.6	98.4	88.2
77.5°	145.9	135.8	122.2	112.0	105.2	101.8	88.2	78.1	67.9	61.1	50.9
80°	108.6	95.0	88.2	78.1	74.7	67.9	61.1	50.9	44.1	33.9	27.2
82.5°	74.7	64.5	57.7	50.9	47.5	44.1	37.3	30.5	23.8	20.4	17.0
85°	40.7	33.9	30.5	27.2	23.8	23.8	20.4	17.0	13.6	10.2	6.8
87.5°	13.6	10.2	10.2	10.2	10.2	6.8	6.8	6.8	3.4	3.4	3.4
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: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2
2.5°	2609.8	2609.8	2609.8	2606.4	2606.4	2606.4	2603.0	2616.6	2603.0	2599.6	2609.8
5°	2606.4	2599.6	2599.6	2599.6	2599.6	2596.2	2592.8	2599.6	2589.4	2586.0	2586.0
7.5°	2586.0	2582.7	2582.7	2579.3	2575.9	2572.5	2569.1	2572.5	2562.3	2558.9	2558.9
10°	2589.4	2582.7	2582.7	2572.5	2565.7	2555.5	2545.3	2548.7	2535.1	2525.0	2525.0
12.5°	2548.7	2531.7	2521.6	2511.4	2504.6	2501.2	2487.6	2494.4	2480.8	2477.4	2477.4
15°	2457.1	2436.7	2419.8	2413.0	2413.0	2406.2	2396.0	2409.6	2402.8	2406.2	2423.1
17.5°	2314.5	2304.4	2294.2	2290.8	2294.2	2301.0	2307.8	2328.1	2328.1	2338.3	2355.3
20°	2189.0	2182.2	2189.0	2189.0	2192.4	2205.9	2219.5	2236.5	2243.3	2253.5	2277.2
22.5°	2066.8	2066.8	2073.6	2083.8	2080.4	2104.1	2107.5	2138.1	2138.1	2158.4	2178.8
25°	1948.0	1948.0	1954.8	1958.2	1965.0	1978.6	1992.1	2015.9	2022.7	2043.0	2060.0
27.5°	1832.6	1829.2	1829.2	1832.6	1839.4	1856.4	1863.2	1890.3	1900.5	1914.1	1931.1
30°	1703.7	1700.3	1707.1	1713.9	1710.5	1727.4	1737.6	1758.0	1764.8	1778.3	1791.9
32.5°	1581.5	1581.5	1581.5	1588.3	1588.3	1601.9	1601.9	1625.6	1625.6	1635.8	1649.4
35°	1455.9	1455.9	1459.3	1462.7	1466.1	1469.5	1472.9	1486.5	1489.9	1493.3	1500.0
37.5°	1337.1	1333.7	1337.1	1337.1	1330.4	1343.9	1343.9	1357.5	1347.3	1357.5	1360.9
40°	1215.0	1215.0	1211.6	1211.6	1211.6	1218.4	1211.6	1221.8	1215.0	1221.8	1218.4
42.5°	1089.4	1089.4	1082.6	1089.4	1086.0	1086.0	1086.0	1092.8	1082.6	1089.4	1092.8
45°	963.8	960.4	960.4	957.0	957.0	957.0	960.4	960.4	957.0	963.8	963.8
47.5°	841.7	838.3	838.3	838.3	838.3	841.7	831.5	838.3	831.5	831.5	831.5
50°	736.4	733.1	729.7	726.3	722.9	722.9	719.5	719.5	712.7	709.3	705.9
52.5°	634.6	631.2	624.5	624.5	621.1	617.7	607.5	607.5	597.3	593.9	593.9
55°	543.0	532.8	529.4	522.6	522.6	515.9	509.1	502.3	492.1	485.3	485.3
57.5°	458.2	448.0	441.2	437.8	434.4	427.6	414.0	410.6	397.1	393.7	390.3
60°	383.5	373.3	363.1	356.3	353.0	342.8	329.2	322.4	315.6	305.4	295.3
62.5°	312.2	302.0	288.5	285.1	278.3	268.1	257.9	247.7	241.0	230.8	224.0
65°	251.1	241.0	230.8	224.0	217.2	207.0	196.8	186.7	179.9	176.5	173.1
67.5°	203.6	190.1	179.9	176.5	169.7	162.9	152.7	149.3	142.5	142.5	142.5
70°	159.5	149.3	139.1	135.8	132.4	125.6	118.8	118.8	118.8	118.8	118.8
72.5°	118.8	112.0	101.8	98.4	95.0	91.6	84.8	88.2	84.8	84.8	84.8
75°	74.7	67.9	61.1	57.7	54.3	50.9	47.5	44.1	40.7	37.3	37.3
77.5°	40.7	33.9	30.5	27.2	27.2	23.8	20.4	20.4	17.0	17.0	17.0
80°	23.8	20.4	17.0	13.6	13.6	10.2	10.2	10.2	10.2	6.8	6.8
82.5°	13.6	10.2	6.8	6.8	6.8	6.8	3.4	3.4	3.4	3.4	3.4
85°	6.8	6.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: P252421

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2	2613.2
2.5°	2592.8	2603.0	2592.8	2603.0	2603.0	2603.0	2603.0	2592.8
5°	2575.9	2582.7	2572.5	2579.3	2582.7	2579.3	2579.3	2569.1
7.5°	2545.3	2552.1	2541.9	2552.1	2555.5	2552.1	2548.7	2541.9
10°	2514.8	2518.2	2508.0	2514.8	2521.6	2521.6	2518.2	2508.0
12.5°	2467.3	2477.4	2467.3	2474.1	2480.8	2484.2	2484.2	2474.1
15°	2413.0	2429.9	2423.1	2433.3	2443.5	2446.9	2446.9	2443.5
17.5°	2358.7	2375.6	2365.5	2382.4	2392.6	2399.4	2402.8	2396.0
20°	2280.6	2301.0	2294.2	2307.8	2321.3	2331.5	2331.5	2321.3
22.5°	2178.8	2205.9	2202.6	2212.7	2229.7	2233.1	2239.9	2233.1
25°	2066.8	2087.2	2083.8	2094.0	2114.3	2114.3	2117.7	2117.7
27.5°	1937.8	1958.2	1954.8	1961.6	1975.2	1978.6	1982.0	1975.2
30°	1798.7	1808.9	1808.9	1819.1	1829.2	1832.6	1832.6	1822.5
32.5°	1646.0	1659.6	1666.3	1662.9	1673.1	1679.9	1676.5	1676.5
35°	1506.8	1510.2	1513.6	1517.0	1520.4	1527.2	1520.4	1517.0
37.5°	1357.5	1367.7	1360.9	1367.7	1374.5	1371.1	1367.7	1367.7
40°	1221.8	1225.1	1218.4	1225.1	1228.5	1228.5	1228.5	1221.8
42.5°	1086.0	1092.8	1086.0	1092.8	1092.8	1092.8	1092.8	1089.4
45°	950.3	957.0	957.0	960.4	960.4	957.0	957.0	957.0
47.5°	824.7	831.5	824.7	831.5	834.9	828.1	828.1	828.1
50°	705.9	702.5	702.5	705.9	705.9	705.9	705.9	702.5
52.5°	583.7	587.1	587.1	587.1	590.5	587.1	590.5	590.5
55°	478.5	478.5	478.5	481.9	478.5	478.5	481.9	485.3
57.5°	383.5	380.1	376.7	376.7	380.1	376.7	376.7	376.7
60°	295.3	291.9	288.5	288.5	288.5	288.5	288.5	285.1
62.5°	220.6	220.6	220.6	224.0	224.0	224.0	224.0	227.4
65°	176.5	176.5	176.5	176.5	176.5	176.5	176.5	179.9
67.5°	142.5	142.5	142.5	145.9	145.9	145.9	145.9	145.9
70°	118.8	118.8	122.2	118.8	122.2	122.2	122.2	122.2
72.5°	81.5	81.5	81.5	81.5	81.5	78.1	81.5	78.1
75°	33.9	33.9	33.9	33.9	33.9	33.9	33.9	30.5
77.5°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
80°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)