

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: P252619

Luminaire Tested: **LD6B50D010TE EU6B30509050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252619
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30509050 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4643.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

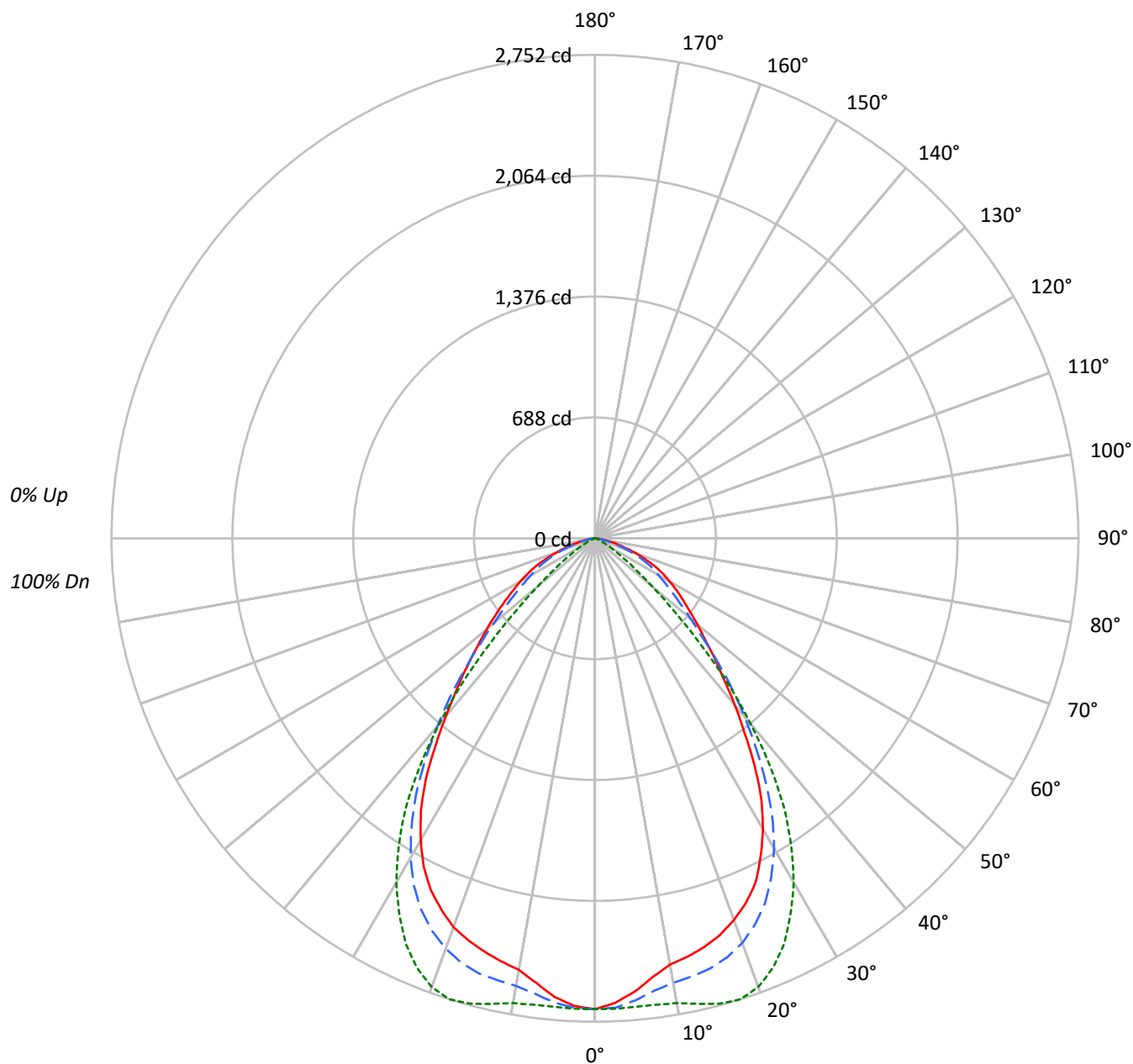
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89		
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79		
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70		
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62		
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56		
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50		
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46		
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42		
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38		
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	174884	174884	174884
5°	169671	175349	171701
10°	163213	177993	165267
15°	162635	185241	164519
20°	160510	188690	163516
25°	155711	183375	159058
30°	144045	170427	149416
35°	126371	149819	133778
40°	105307	117452	112172
45°	88638	77483	94645
50°	76752	42466	81461
55°	69440	22555	71203
60°	63884	11730	63884
65°	57890	6221	56454
70°	46696	3548	43148
75°	32038	2344	29694
80°	20964	1165	18635
85°	13923	2321	11603



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.0	5.4
10°-20°	722.8	15.6
20°-30°	1067.9	23.0
30°-40°	1078.7	23.2
40°-50°	743.5	16.0
50°-60°	427.0	9.2
60°-70°	248.5	5.4
70°-80°	90.7	2.0
80°-90°	13.9	0.3
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°	2040.7	44.0
0°-40°	3119.4	67.2
0°-60°	4289.9	92.4
0°-90°	4643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4643.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2681	2681	2681	2681	2681	
5°	2591	2640	2678	2653	2622	243
15°	2408	2535	2743	2563	2436	678
25°	2163	2290	2547	2337	2210	986
35°	1587	1695	1881	1773	1680	985
45°	961	973	840	1035	1026	747
55°	610	536	198	558	626	550
65°	375	316	40	313	366	367
75°	127	102	9	99	118	143
85°	19	9	3	12	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6
2.5°	2646.5	2649.6	2652.7	2649.6	2652.7	2665.1	2655.8	2662.0	2662.0	2665.1	2674.4
5°	2590.8	2590.8	2597.0	2593.9	2603.2	2615.6	2606.3	2615.6	2618.7	2624.9	2640.3
7.5°	2519.5	2519.5	2522.6	2522.6	2535.0	2547.4	2541.2	2553.6	2566.0	2578.4	2597.0
10°	2463.7	2469.9	2469.9	2473.0	2485.4	2500.9	2497.8	2513.3	2525.7	2544.3	2569.1
12.5°	2438.9	2442.0	2442.0	2448.2	2460.6	2476.1	2473.0	2488.5	2507.1	2528.8	2553.6
15°	2407.9	2414.1	2411.0	2417.2	2429.6	2445.1	2442.0	2457.5	2479.2	2500.9	2535.0
17.5°	2367.6	2370.7	2373.8	2373.8	2386.2	2398.6	2398.6	2414.1	2438.9	2463.7	2500.9
20°	2311.9	2318.1	2318.1	2321.2	2330.4	2349.0	2345.9	2361.4	2386.2	2411.0	2451.3
22.5°	2246.8	2249.9	2249.9	2253.0	2268.5	2277.8	2280.9	2293.3	2315.0	2342.8	2380.0
25°	2163.1	2166.2	2163.1	2172.4	2178.6	2197.2	2191.0	2206.5	2231.3	2253.0	2290.2
27.5°	2042.2	2048.4	2048.4	2051.5	2067.0	2082.5	2082.5	2098.0	2119.7	2135.2	2172.4
30°	1912.1	1921.4	1912.1	1927.6	1933.8	1946.2	1955.5	1964.8	1983.4	2005.1	2039.1
32.5°	1763.3	1760.2	1763.3	1769.5	1788.1	1797.4	1803.6	1812.9	1831.5	1850.1	1878.0
35°	1586.7	1592.9	1596.0	1608.4	1608.4	1623.9	1627.0	1633.2	1661.1	1673.5	1695.2
37.5°	1400.7	1406.9	1410.0	1416.2	1428.6	1434.8	1444.1	1453.4	1472.0	1493.7	1506.1
40°	1236.5	1236.5	1239.6	1245.8	1255.1	1258.2	1267.5	1279.9	1292.3	1310.9	1323.3
42.5°	1081.6	1084.7	1081.6	1087.7	1097.0	1109.4	1106.3	1121.8	1124.9	1137.3	1146.6
45°	960.7	960.7	954.5	960.7	960.7	973.1	970.0	976.2	973.1	979.3	973.1
47.5°	846.0	849.1	846.0	849.1	849.1	849.1	852.2	846.0	849.1	839.8	821.2
50°	756.2	759.3	753.1	756.2	753.1	750.0	753.1	743.8	740.7	728.3	709.7
52.5°	678.7	675.6	672.5	672.5	672.5	669.4	666.3	657.0	647.7	635.3	613.6
55°	610.5	607.4	604.3	604.3	598.1	595.0	595.0	585.7	576.4	560.9	536.1
57.5°	548.5	545.4	542.3	542.3	539.2	533.0	533.0	523.7	511.3	492.7	471.0
60°	489.6	489.6	489.6	486.5	486.5	480.3	480.3	471.0	458.7	440.1	415.3
62.5°	437.0	433.9	433.9	433.9	433.9	430.8	427.7	421.5	409.1	390.5	368.8
65°	375.0	375.0	375.0	375.0	371.9	371.9	371.9	362.6	356.4	337.8	316.1
67.5°	306.8	306.8	306.8	306.8	303.7	306.8	306.8	300.6	294.4	275.8	257.2
70°	244.8	241.7	238.6	241.7	238.6	238.6	241.7	235.5	232.4	216.9	198.3
72.5°	179.7	182.8	179.7	179.7	179.7	176.6	179.7	176.6	170.4	158.0	145.7
75°	127.1	130.2	130.2	127.1	127.1	127.1	124.0	124.0	117.8	108.5	102.3
77.5°	86.8	86.8	86.8	86.8	83.7	83.7	83.7	80.6	77.5	71.3	65.1
80°	55.8	55.8	55.8	55.8	52.7	52.7	52.7	49.6	49.6	43.4	37.2
82.5°	34.1	34.1	34.1	34.1	34.1	34.1	31.0	31.0	27.9	24.8	21.7
85°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	15.5	15.5	12.4	9.3
87.5°	6.2	6.2	9.3	9.3	9.3	9.3	9.3	9.3	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6
2.5°	2668.2	2671.3	2671.3	2671.3	2680.6	2683.7	2674.4	2665.1	2683.7	2680.6	2686.8
5°	2637.2	2646.5	2652.7	2655.8	2665.1	2671.3	2662.0	2658.9	2674.4	2677.5	2680.6
7.5°	2600.1	2615.6	2631.1	2637.2	2649.6	2655.8	2652.7	2652.7	2671.3	2677.5	2677.5
10°	2575.3	2597.0	2615.6	2631.1	2646.5	2655.8	2655.8	2658.9	2680.6	2686.8	2693.0
12.5°	2569.1	2597.0	2621.8	2643.4	2655.8	2671.3	2674.4	2683.7	2705.4	2714.7	2714.7
15°	2553.6	2590.8	2621.8	2649.6	2668.2	2686.8	2693.0	2711.6	2736.4	2742.6	2748.8
17.5°	2525.7	2562.9	2600.1	2634.2	2658.9	2674.4	2693.0	2711.6	2742.6	2751.9	2755.0
20°	2476.1	2519.5	2556.7	2590.8	2615.6	2637.2	2655.8	2677.5	2705.4	2717.8	2720.9
22.5°	2401.7	2445.1	2482.3	2519.5	2544.3	2562.9	2581.5	2606.3	2634.2	2646.5	2646.5
25°	2311.9	2352.1	2392.4	2420.3	2445.1	2466.8	2476.1	2504.0	2531.9	2547.4	2547.4
27.5°	2197.2	2234.4	2271.6	2302.6	2318.1	2336.6	2352.1	2376.9	2398.6	2411.0	2423.4
30°	2051.5	2088.7	2122.8	2153.8	2172.4	2191.0	2206.5	2225.1	2246.8	2262.3	2265.4
32.5°	1893.5	1924.5	1958.6	1989.6	2008.2	2014.4	2029.8	2048.4	2067.0	2079.4	2082.5
35°	1719.9	1741.6	1763.3	1791.2	1809.8	1809.8	1825.3	1837.7	1853.2	1881.1	1874.9
37.5°	1515.4	1546.4	1561.9	1571.2	1583.6	1596.0	1599.1	1614.6	1633.2	1639.4	1648.7
40°	1323.3	1332.6	1341.9	1341.9	1354.3	1354.3	1354.3	1357.4	1376.0	1379.1	1391.5
42.5°	1131.1	1131.1	1121.8	1112.5	1115.6	1112.5	1097.0	1097.0	1106.3	1118.7	1118.7
45°	951.4	929.7	901.8	880.1	864.6	858.4	839.8	839.8	836.7	839.8	852.2
47.5°	799.5	762.4	715.9	672.5	657.0	644.6	616.7	604.3	598.1	601.2	607.4
50°	672.5	632.2	579.5	526.8	498.9	483.4	449.4	427.7	424.6	418.4	430.8
52.5°	579.5	529.9	474.1	412.2	384.3	359.5	322.3	303.7	291.3	291.3	294.4
55°	498.9	446.3	384.3	322.3	294.4	275.8	238.6	213.8	201.4	198.3	207.6
57.5°	430.8	381.2	319.2	257.2	229.3	207.6	170.4	148.8	139.5	133.3	136.4
60°	378.1	328.5	266.5	207.6	182.8	158.0	127.1	102.3	89.9	89.9	93.0
62.5°	328.5	282.0	226.2	170.4	148.8	127.1	93.0	71.3	62.0	58.9	62.0
65°	278.9	235.5	189.0	142.6	120.9	102.3	74.4	55.8	43.4	40.3	43.4
67.5°	226.2	192.1	151.9	114.7	96.1	80.6	55.8	40.3	31.0	27.9	31.0
70°	176.6	145.7	114.7	83.7	71.3	58.9	40.3	31.0	21.7	18.6	21.7
72.5°	127.1	105.4	80.6	58.9	49.6	40.3	27.9	21.7	15.5	12.4	15.5
75°	86.8	71.3	52.7	37.2	31.0	27.9	18.6	12.4	9.3	9.3	9.3
77.5°	55.8	43.4	34.1	24.8	18.6	15.5	9.3	6.2	6.2	6.2	6.2
80°	31.0	24.8	18.6	12.4	9.3	9.3	6.2	6.2	3.1	3.1	3.1
82.5°	18.6	12.4	9.3	6.2	6.2	3.1	3.1	3.1	3.1	3.1	3.1
85°	9.3	6.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	3.1	3.1	3.1	3.1	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6
2.5°	2674.4	2677.5	2668.2	2680.6	2671.3	2683.7	2683.7	2671.3	2674.4	2668.2	2680.6
5°	2668.2	2668.2	2662.0	2671.3	2658.9	2671.3	2668.2	2646.5	2652.7	2640.3	2652.7
7.5°	2668.2	2662.0	2652.7	2662.0	2646.5	2655.8	2643.4	2621.8	2615.6	2600.1	2600.1
10°	2677.5	2668.2	2655.8	2658.9	2643.4	2646.5	2628.0	2597.0	2587.7	2569.1	2562.9
12.5°	2699.2	2689.9	2671.3	2677.5	2655.8	2655.8	2631.1	2593.9	2575.3	2550.5	2544.3
15°	2730.2	2714.7	2693.0	2696.1	2674.4	2662.0	2631.1	2587.7	2562.9	2528.8	2519.5
17.5°	2736.4	2720.9	2693.0	2693.0	2665.1	2649.6	2612.5	2562.9	2531.9	2497.8	2479.2
20°	2702.3	2686.8	2655.8	2652.7	2628.0	2606.3	2566.0	2516.4	2485.4	2448.2	2432.7
22.5°	2631.1	2612.5	2584.6	2581.5	2556.7	2544.3	2500.9	2451.3	2420.3	2383.1	2370.7
25°	2525.7	2516.4	2488.5	2485.4	2463.7	2448.2	2411.0	2364.5	2336.6	2299.5	2287.1
27.5°	2401.7	2392.4	2364.5	2364.5	2339.7	2330.4	2296.4	2253.0	2231.3	2197.2	2181.7
30°	2253.0	2240.6	2225.1	2222.0	2200.3	2191.0	2160.0	2119.7	2098.0	2070.1	2063.9
32.5°	2076.3	2067.0	2057.7	2054.6	2032.9	2023.6	2002.0	1961.7	1943.1	1918.3	1909.0
35°	1871.8	1865.6	1856.3	1853.2	1843.9	1834.6	1812.9	1781.9	1772.6	1754.0	1744.7
37.5°	1636.3	1642.5	1636.3	1636.3	1627.0	1630.1	1611.5	1592.9	1583.6	1571.2	1565.0
40°	1382.2	1394.6	1403.8	1403.8	1400.7	1413.1	1410.0	1394.6	1391.5	1385.3	1382.2
42.5°	1124.9	1131.1	1149.7	1162.1	1159.0	1190.0	1193.1	1205.5	1214.8	1208.6	1211.7
45°	855.3	873.9	898.7	911.1	926.6	966.9	988.6	1013.4	1035.1	1047.5	1044.4
47.5°	616.7	638.4	666.3	684.9	712.8	762.4	818.1	849.1	880.1	895.6	911.1
50°	446.3	467.9	502.0	529.9	548.5	616.7	675.6	715.9	750.0	771.7	787.1
52.5°	313.0	337.8	375.0	399.8	427.7	492.7	560.9	607.4	644.6	672.5	688.0
55°	216.9	244.8	278.9	303.7	334.7	402.9	467.9	517.5	557.8	582.6	601.2
57.5°	151.9	176.6	210.7	232.4	263.4	328.5	393.6	443.2	483.4	508.2	529.9
60°	102.3	127.1	161.1	182.8	207.6	272.7	331.6	384.3	421.5	446.3	467.9
62.5°	71.3	93.0	127.1	148.8	170.4	226.2	282.0	328.5	365.7	393.6	412.2
65°	55.8	74.4	102.3	120.9	142.6	189.0	235.5	275.8	313.0	340.9	353.3
67.5°	40.3	58.9	80.6	96.1	111.6	151.9	192.1	223.1	257.2	278.9	294.4
70°	27.9	40.3	58.9	71.3	83.7	114.7	145.7	173.5	198.3	213.8	226.2
72.5°	21.7	27.9	40.3	49.6	58.9	80.6	105.4	127.1	145.7	158.0	170.4
75°	12.4	18.6	27.9	34.1	40.3	55.8	71.3	86.8	99.2	108.5	114.7
77.5°	6.2	9.3	15.5	18.6	24.8	34.1	46.5	55.8	65.1	71.3	77.5
80°	6.2	6.2	9.3	9.3	12.4	18.6	24.8	31.0	37.2	43.4	46.5
82.5°	3.1	3.1	6.2	6.2	6.2	9.3	12.4	18.6	21.7	24.8	27.9
85°	3.1	3.1	3.1	3.1	3.1	6.2	6.2	9.3	12.4	15.5	15.5
87.5°	0.0	0.0	3.1	3.1	3.1	3.1	3.1	6.2	6.2	6.2	9.3
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: P252619

CATALOG NUMBER: LD6B50D010TE EU6B30509050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6	2680.6
2.5°	2671.3	2677.5	2674.4	2680.6	2671.3	2668.2	2674.4	2665.1
5°	2637.2	2640.3	2637.2	2637.2	2631.1	2624.9	2631.1	2621.8
7.5°	2584.6	2584.6	2575.3	2575.3	2562.9	2556.7	2556.7	2553.6
10°	2541.2	2531.9	2522.6	2525.7	2507.1	2500.9	2497.8	2494.7
12.5°	2519.5	2513.3	2497.8	2497.8	2479.2	2473.0	2469.9	2466.8
15°	2494.7	2482.3	2469.9	2466.8	2451.3	2445.1	2442.0	2435.8
17.5°	2451.3	2442.0	2426.5	2426.5	2411.0	2407.9	2401.7	2398.6
20°	2404.8	2392.4	2380.0	2380.0	2361.4	2361.4	2352.1	2355.2
22.5°	2339.7	2330.4	2318.1	2318.1	2302.6	2299.5	2290.2	2287.1
25°	2262.3	2249.9	2240.6	2237.5	2225.1	2218.9	2215.8	2209.6
27.5°	2160.0	2150.7	2141.4	2135.2	2119.7	2116.6	2107.3	2110.4
30°	2032.9	2026.7	2023.6	2017.4	1998.9	1992.7	1992.7	1983.4
32.5°	1893.5	1884.2	1878.0	1868.7	1853.2	1850.1	1840.8	1843.9
35°	1723.0	1710.6	1701.4	1704.5	1685.9	1682.8	1676.6	1679.7
37.5°	1546.4	1534.0	1521.6	1518.5	1503.0	1503.0	1493.7	1493.7
40°	1363.6	1351.2	1345.0	1345.0	1326.4	1329.5	1320.2	1317.1
42.5°	1199.3	1186.9	1183.8	1180.7	1171.4	1168.3	1159.0	1162.1
45°	1044.4	1041.3	1041.3	1035.1	1025.8	1022.7	1025.8	1025.8
47.5°	908.0	911.1	908.0	908.0	901.8	908.0	901.8	904.9
50°	793.3	799.5	799.5	799.5	796.4	799.5	799.5	802.6
52.5°	697.3	706.6	703.5	706.6	703.5	709.7	706.6	709.7
55°	613.6	619.8	622.9	626.0	626.0	626.0	626.0	626.0
57.5°	536.1	545.4	548.5	551.6	551.6	557.8	551.6	551.6
60°	474.1	483.4	486.5	489.6	489.6	492.7	486.5	489.6
62.5°	418.4	427.7	427.7	430.8	430.8	430.8	424.6	427.7
65°	362.6	365.7	368.8	368.8	365.7	365.7	362.6	365.7
67.5°	300.6	303.7	300.6	300.6	297.5	297.5	291.3	294.4
70°	232.4	232.4	235.5	232.4	229.3	232.4	229.3	226.2
72.5°	173.5	173.5	173.5	170.4	170.4	167.3	170.4	170.4
75°	117.8	117.8	120.9	120.9	120.9	120.9	117.8	117.8
77.5°	77.5	77.5	77.5	77.5	80.6	77.5	77.5	77.5
80°	49.6	49.6	52.7	52.7	49.6	49.6	49.6	49.6
82.5°	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
85°	18.6	18.6	18.6	18.6	15.5	15.5	15.5	15.5
87.5°	9.3	9.3	9.3	9.3	9.3	9.3	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)