

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: P252618

Luminaire Tested: **LD6B50D010TE EU6B30509040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252618
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 EU6B30509040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4623.0 lumens
Efficiency: N/A
Efficacy: 78.7 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

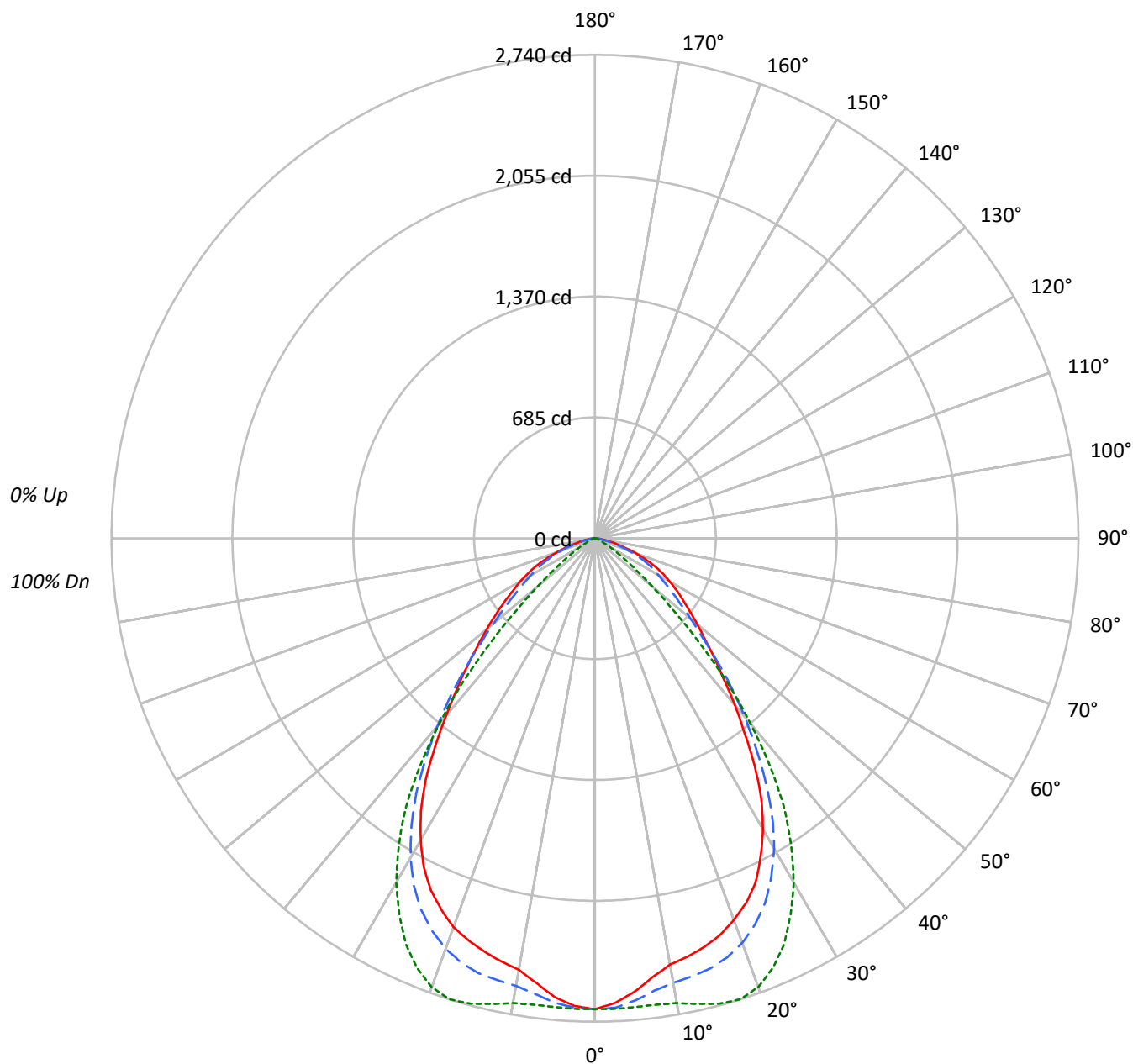
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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°	174134	174134	174134
5°	168938	174596	170961
10°	162511	177231	164551
15°	161939	184444	163810
20°	159815	187878	162815
25°	155041	182583	158374
30°	143420	169688	148768
35°	125830	149173	133197
40°	104856	116941	111686
45°	88260	77151	94239
50°	76417	42283	81116
55°	69145	22464	70896
60°	63610	11678	63610
65°	57643	6190	56207
70°	46505	3529	42976
75°	31887	2344	29568
80°	20852	1165	18560
85°	13848	2321	11528



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.9	5.4
10°-20°	719.7	15.6
20°-30°	1063.3	23.0
30°-40°	1074.1	23.2
40°-50°	740.3	16.0
50°-60°	425.2	9.2
60°-70°	247.5	5.4
70°-80°	90.3	2.0
80°-90°	13.8	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°	2031.9	44.0
0°-40°	3106.0	67.2
0°-60°	4271.4	92.4
0°-90°	4623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4623.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2669	2669	2669	2669	2669	
5°	2580	2629	2666	2641	2610	242
15°	2398	2524	2731	2552	2425	675
25°	2154	2280	2536	2327	2200	981
35°	1580	1688	1873	1765	1672	981
45°	957	969	836	1031	1021	744
55°	608	534	198	555	623	547
65°	373	315	40	312	364	366
75°	126	102	9	99	117	142
85°	18	9	3	12	15	23
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°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2635.1	2638.2	2641.3	2638.2	2641.3	2653.7	2644.4	2650.6	2650.6	2653.7	2662.9
5°	2579.6	2579.6	2585.8	2582.7	2591.9	2604.3	2595.0	2604.3	2607.4	2613.5	2629.0
7.5°	2508.6	2508.6	2511.7	2511.7	2524.1	2536.4	2530.2	2542.6	2554.9	2567.3	2585.8
10°	2453.1	2459.3	2459.3	2462.3	2474.7	2490.1	2487.0	2502.5	2514.8	2533.3	2558.0
12.5°	2428.4	2431.5	2431.5	2437.7	2450.0	2465.4	2462.3	2477.8	2496.3	2517.9	2542.6
15°	2397.6	2403.7	2400.6	2406.8	2419.2	2434.6	2431.5	2446.9	2468.5	2490.1	2524.1
17.5°	2357.4	2360.5	2363.6	2363.6	2376.0	2388.3	2388.3	2403.7	2428.4	2453.1	2490.1
20°	2301.9	2308.1	2308.1	2311.2	2320.4	2338.9	2335.8	2351.3	2376.0	2400.6	2440.8
22.5°	2237.1	2240.2	2240.2	2243.3	2258.7	2268.0	2271.0	2283.4	2305.0	2332.8	2369.8
25°	2153.8	2156.9	2153.8	2163.0	2169.2	2187.7	2181.6	2197.0	2221.7	2243.3	2280.3
27.5°	2033.4	2039.6	2039.6	2042.7	2058.1	2073.6	2073.6	2089.0	2110.6	2126.0	2163.0
30°	1903.8	1913.1	1903.8	1919.3	1925.4	1937.8	1947.0	1956.3	1974.8	1996.4	2030.4
32.5°	1755.7	1752.6	1755.7	1761.9	1780.4	1789.7	1795.8	1805.1	1823.6	1842.1	1869.9
35°	1579.9	1586.0	1589.1	1601.5	1601.5	1616.9	1620.0	1626.1	1653.9	1666.3	1687.9
37.5°	1394.7	1400.9	1404.0	1410.1	1422.5	1428.7	1437.9	1447.2	1465.7	1487.3	1499.6
40°	1231.2	1231.2	1234.3	1240.4	1249.7	1252.8	1262.0	1274.4	1286.7	1305.2	1317.6
42.5°	1076.9	1080.0	1076.9	1083.1	1092.3	1104.7	1101.6	1117.0	1120.1	1132.4	1141.7
45°	956.6	956.6	950.4	956.6	956.6	968.9	965.8	972.0	968.9	975.1	968.9
47.5°	842.4	845.5	842.4	845.5	845.5	845.5	848.6	842.4	845.5	836.2	817.7
50°	752.9	756.0	749.8	752.9	749.8	746.7	749.8	740.6	737.5	725.1	706.6
52.5°	675.8	672.7	669.6	669.6	669.6	666.5	663.4	654.2	644.9	632.6	611.0
55°	607.9	604.8	601.7	601.7	595.5	592.4	592.4	583.2	573.9	558.5	533.8
57.5°	546.2	543.1	540.0	540.0	536.9	530.7	530.7	521.5	509.1	490.6	469.0
60°	487.5	487.5	487.5	484.4	484.4	478.3	478.3	469.0	456.7	438.2	413.5
62.5°	435.1	432.0	432.0	432.0	432.0	428.9	425.8	419.6	407.3	388.8	367.2
65°	373.4	373.4	373.4	373.4	370.3	370.3	370.3	361.0	354.8	336.3	314.7
67.5°	305.5	305.5	305.5	305.5	302.4	305.5	305.5	299.3	293.1	274.6	256.1
70°	243.8	240.7	237.6	240.7	237.6	237.6	240.7	234.5	231.4	216.0	197.5
72.5°	179.0	182.1	179.0	179.0	179.0	175.9	179.0	175.9	169.7	157.4	145.0
75°	126.5	129.6	129.6	126.5	126.5	126.5	123.4	123.4	117.3	108.0	101.8
77.5°	86.4	86.4	86.4	86.4	83.3	83.3	83.3	80.2	77.1	71.0	64.8
80°	55.5	55.5	55.5	55.5	52.5	52.5	52.5	49.4	49.4	43.2	37.0
82.5°	33.9	33.9	33.9	33.9	33.9	33.9	30.9	30.9	27.8	24.7	21.6
85°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	15.4	15.4	12.3	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°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2656.7	2659.8	2659.8	2659.8	2669.1	2672.2	2662.9	2653.7	2672.2	2669.1	2675.3
5°	2625.9	2635.1	2641.3	2644.4	2653.7	2659.8	2650.6	2647.5	2662.9	2666.0	2669.1
7.5°	2588.9	2604.3	2619.7	2625.9	2638.2	2644.4	2641.3	2641.3	2659.8	2666.0	2666.0
10°	2564.2	2585.8	2604.3	2619.7	2635.1	2644.4	2644.4	2647.5	2669.1	2675.3	2681.4
12.5°	2558.0	2585.8	2610.5	2632.1	2644.4	2659.8	2662.9	2672.2	2693.8	2703.0	2703.0
15°	2542.6	2579.6	2610.5	2638.2	2656.7	2675.3	2681.4	2699.9	2724.6	2730.8	2737.0
17.5°	2514.8	2551.8	2588.9	2622.8	2647.5	2662.9	2681.4	2699.9	2730.8	2740.1	2743.1
20°	2465.4	2508.6	2545.7	2579.6	2604.3	2625.9	2644.4	2666.0	2693.8	2706.1	2709.2
22.5°	2391.4	2434.6	2471.6	2508.6	2533.3	2551.8	2570.3	2595.0	2622.8	2635.1	2635.1
25°	2301.9	2342.0	2382.1	2409.9	2434.6	2456.2	2465.4	2493.2	2521.0	2536.4	2536.4
27.5°	2187.7	2224.8	2261.8	2292.6	2308.1	2326.6	2342.0	2366.7	2388.3	2400.6	2413.0
30°	2042.7	2079.7	2113.7	2144.5	2163.0	2181.6	2197.0	2215.5	2237.1	2252.5	2255.6
32.5°	1885.3	1916.2	1950.1	1981.0	1999.5	2005.7	2021.1	2039.6	2058.1	2070.5	2073.6
35°	1712.5	1734.1	1755.7	1783.5	1802.0	1802.0	1817.4	1829.8	1845.2	1873.0	1866.8
37.5°	1508.9	1539.7	1555.2	1564.4	1576.8	1589.1	1592.2	1607.6	1626.1	1632.3	1641.6
40°	1317.6	1326.8	1336.1	1336.1	1348.4	1348.4	1348.4	1351.5	1370.0	1373.1	1385.5
42.5°	1126.3	1126.3	1117.0	1107.7	1110.8	1107.7	1092.3	1092.3	1101.6	1113.9	1113.9
45°	947.3	925.7	897.9	876.3	860.9	854.7	836.2	836.2	833.1	836.2	848.6
47.5°	796.1	759.1	712.8	669.6	654.2	641.8	614.0	601.7	595.5	598.6	604.8
50°	669.6	629.5	577.0	524.6	496.8	481.4	447.4	425.8	422.7	416.6	428.9
52.5°	577.0	527.6	472.1	410.4	382.6	357.9	320.9	302.4	290.1	290.1	293.1
55°	496.8	444.3	382.6	320.9	293.1	274.6	237.6	212.9	200.6	197.5	206.7
57.5°	428.9	379.5	317.8	256.1	228.3	206.7	169.7	148.1	138.9	132.7	135.8
60°	376.4	327.1	265.4	206.7	182.1	157.4	126.5	101.8	89.5	89.5	92.6
62.5°	327.1	280.8	225.3	169.7	148.1	126.5	92.6	71.0	61.7	58.6	61.7
65°	277.7	234.5	188.2	141.9	120.3	101.8	74.1	55.5	43.2	40.1	43.2
67.5°	225.3	191.3	151.2	114.2	95.7	80.2	55.5	40.1	30.9	27.8	30.9
70°	175.9	145.0	114.2	83.3	71.0	58.6	40.1	30.9	21.6	18.5	21.6
72.5°	126.5	104.9	80.2	58.6	49.4	40.1	27.8	21.6	15.4	12.3	15.4
75°	86.4	71.0	52.5	37.0	30.9	27.8	18.5	12.3	9.3	9.3	9.3
77.5°	55.5	43.2	33.9	24.7	18.5	15.4	9.3	6.2	6.2	6.2	6.2
80°	30.9	24.7	18.5	12.3	9.3	9.3	6.2	6.2	3.1	3.1	3.1
82.5°	18.5	12.3	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°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2662.9	2666.0	2656.7	2669.1	2659.8	2672.2	2672.2	2659.8	2662.9	2656.7	2669.1
5°	2656.7	2656.7	2650.6	2659.8	2647.5	2659.8	2656.7	2635.1	2641.3	2629.0	2641.3
7.5°	2656.7	2650.6	2641.3	2650.6	2635.1	2644.4	2632.1	2610.5	2604.3	2588.9	2588.9
10°	2666.0	2656.7	2644.4	2647.5	2632.1	2635.1	2616.6	2585.8	2576.5	2558.0	2551.8
12.5°	2687.6	2678.3	2659.8	2666.0	2644.4	2644.4	2619.7	2582.7	2564.2	2539.5	2533.3
15°	2718.5	2703.0	2681.4	2684.5	2662.9	2650.6	2619.7	2576.5	2551.8	2517.9	2508.6
17.5°	2724.6	2709.2	2681.4	2681.4	2653.7	2638.2	2601.2	2551.8	2521.0	2487.0	2468.5
20°	2690.7	2675.3	2644.4	2641.3	2616.6	2595.0	2554.9	2505.5	2474.7	2437.7	2422.2
22.5°	2619.7	2601.2	2573.4	2570.3	2545.7	2533.3	2490.1	2440.8	2409.9	2372.9	2360.5
25°	2514.8	2505.5	2477.8	2474.7	2453.1	2437.7	2400.6	2354.4	2326.6	2289.6	2277.2
27.5°	2391.4	2382.1	2354.4	2354.4	2329.7	2320.4	2286.5	2243.3	2221.7	2187.7	2172.3
30°	2243.3	2230.9	2215.5	2212.4	2190.8	2181.6	2150.7	2110.6	2089.0	2061.2	2055.0
32.5°	2067.4	2058.1	2048.9	2045.8	2024.2	2014.9	1993.3	1953.2	1934.7	1910.0	1900.8
35°	1863.7	1857.6	1848.3	1845.2	1836.0	1826.7	1805.1	1774.2	1765.0	1746.5	1737.2
37.5°	1629.2	1635.4	1629.2	1629.2	1620.0	1623.1	1604.5	1586.0	1576.8	1564.4	1558.3
40°	1376.2	1388.5	1397.8	1397.8	1394.7	1407.1	1404.0	1388.5	1385.5	1379.3	1376.2
42.5°	1120.1	1126.3	1144.8	1157.1	1154.0	1184.9	1188.0	1200.3	1209.6	1203.4	1206.5
45°	851.6	870.2	894.8	907.2	922.6	962.7	984.3	1009.0	1030.6	1043.0	1039.9
47.5°	614.0	635.6	663.4	681.9	709.7	759.1	814.6	845.5	876.3	891.8	907.2
50°	444.3	465.9	499.9	527.6	546.2	614.0	672.7	712.8	746.7	768.3	783.8
52.5°	311.7	336.3	373.4	398.0	425.8	490.6	558.5	604.8	641.8	669.6	685.0
55°	216.0	243.8	277.7	302.4	333.3	401.1	465.9	515.3	555.4	580.1	598.6
57.5°	151.2	175.9	209.8	231.4	262.3	327.1	391.9	441.2	481.4	506.0	527.6
60°	101.8	126.5	160.5	182.1	206.7	271.5	330.2	382.6	419.6	444.3	465.9
62.5°	71.0	92.6	126.5	148.1	169.7	225.3	280.8	327.1	364.1	391.9	410.4
65°	55.5	74.1	101.8	120.3	141.9	188.2	234.5	274.6	311.7	339.4	351.8
67.5°	40.1	58.6	80.2	95.7	111.1	151.2	191.3	222.2	256.1	277.7	293.1
70°	27.8	40.1	58.6	71.0	83.3	114.2	145.0	172.8	197.5	212.9	225.3
72.5°	21.6	27.8	40.1	49.4	58.6	80.2	104.9	126.5	145.0	157.4	169.7
75°	12.3	18.5	27.8	33.9	40.1	55.5	71.0	86.4	98.7	108.0	114.2
77.5°	6.2	9.3	15.4	18.5	24.7	33.9	46.3	55.5	64.8	71.0	77.1
80°	6.2	6.2	9.3	9.3	12.3	18.5	24.7	30.9	37.0	43.2	46.3
82.5°	3.1	3.1	6.2	6.2	6.2	9.3	12.3	18.5	21.6	24.7	27.8
85°	3.1	3.1	3.1	3.1	3.1	6.2	6.2	9.3	12.3	15.4	15.4
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: P252618

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2659.8	2666.0	2662.9	2669.1	2659.8	2656.7	2662.9	2653.7
5°	2625.9	2629.0	2625.9	2625.9	2619.7	2613.5	2619.7	2610.5
7.5°	2573.4	2573.4	2564.2	2564.2	2551.8	2545.7	2545.7	2542.6
10°	2530.2	2521.0	2511.7	2514.8	2496.3	2490.1	2487.0	2483.9
12.5°	2508.6	2502.5	2487.0	2487.0	2468.5	2462.3	2459.3	2456.2
15°	2483.9	2471.6	2459.3	2456.2	2440.8	2434.6	2431.5	2425.3
17.5°	2440.8	2431.5	2416.1	2416.1	2400.6	2397.6	2391.4	2388.3
20°	2394.5	2382.1	2369.8	2369.8	2351.3	2351.3	2342.0	2345.1
22.5°	2329.7	2320.4	2308.1	2308.1	2292.6	2289.6	2280.3	2277.2
25°	2252.5	2240.2	2230.9	2227.8	2215.5	2209.3	2206.2	2200.1
27.5°	2150.7	2141.4	2132.2	2126.0	2110.6	2107.5	2098.2	2101.3
30°	2024.2	2018.0	2014.9	2008.8	1990.2	1984.1	1984.1	1974.8
32.5°	1885.3	1876.1	1869.9	1860.6	1845.2	1842.1	1832.9	1836.0
35°	1715.6	1703.3	1694.0	1697.1	1678.6	1675.5	1669.3	1672.4
37.5°	1539.7	1527.4	1515.1	1512.0	1496.5	1496.5	1487.3	1487.3
40°	1357.7	1345.3	1339.2	1339.2	1320.7	1323.7	1314.5	1311.4
42.5°	1194.1	1181.8	1178.7	1175.6	1166.4	1163.3	1154.0	1157.1
45°	1039.9	1036.8	1036.8	1030.6	1021.4	1018.3	1021.4	1021.4
47.5°	904.1	907.2	904.1	904.1	897.9	904.1	897.9	901.0
50°	789.9	796.1	796.1	796.1	793.0	796.1	796.1	799.2
52.5°	694.3	703.5	700.4	703.5	700.4	706.6	703.5	706.6
55°	611.0	617.1	620.2	623.3	623.3	623.3	623.3	623.3
57.5°	533.8	543.1	546.2	549.2	549.2	555.4	549.2	549.2
60°	472.1	481.4	484.4	487.5	487.5	490.6	484.4	487.5
62.5°	416.6	425.8	425.8	428.9	428.9	428.9	422.7	425.8
65°	361.0	364.1	367.2	367.2	364.1	364.1	361.0	364.1
67.5°	299.3	302.4	299.3	299.3	296.2	296.2	290.1	293.1
70°	231.4	231.4	234.5	231.4	228.3	231.4	228.3	225.3
72.5°	172.8	172.8	172.8	169.7	169.7	166.6	169.7	169.7
75°	117.3	117.3	120.3	120.3	120.3	120.3	117.3	117.3
77.5°	77.1	77.1	77.1	77.1	80.2	77.1	77.1	77.1
80°	49.4	49.4	52.5	52.5	49.4	49.4	49.4	49.4
82.5°	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9
85°	18.5	18.5	18.5	18.5	15.4	15.4	15.4	15.4
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)