

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: P252716

Luminaire Tested: **LD6B50D010TE EU6B30508040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30508040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5169.0 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

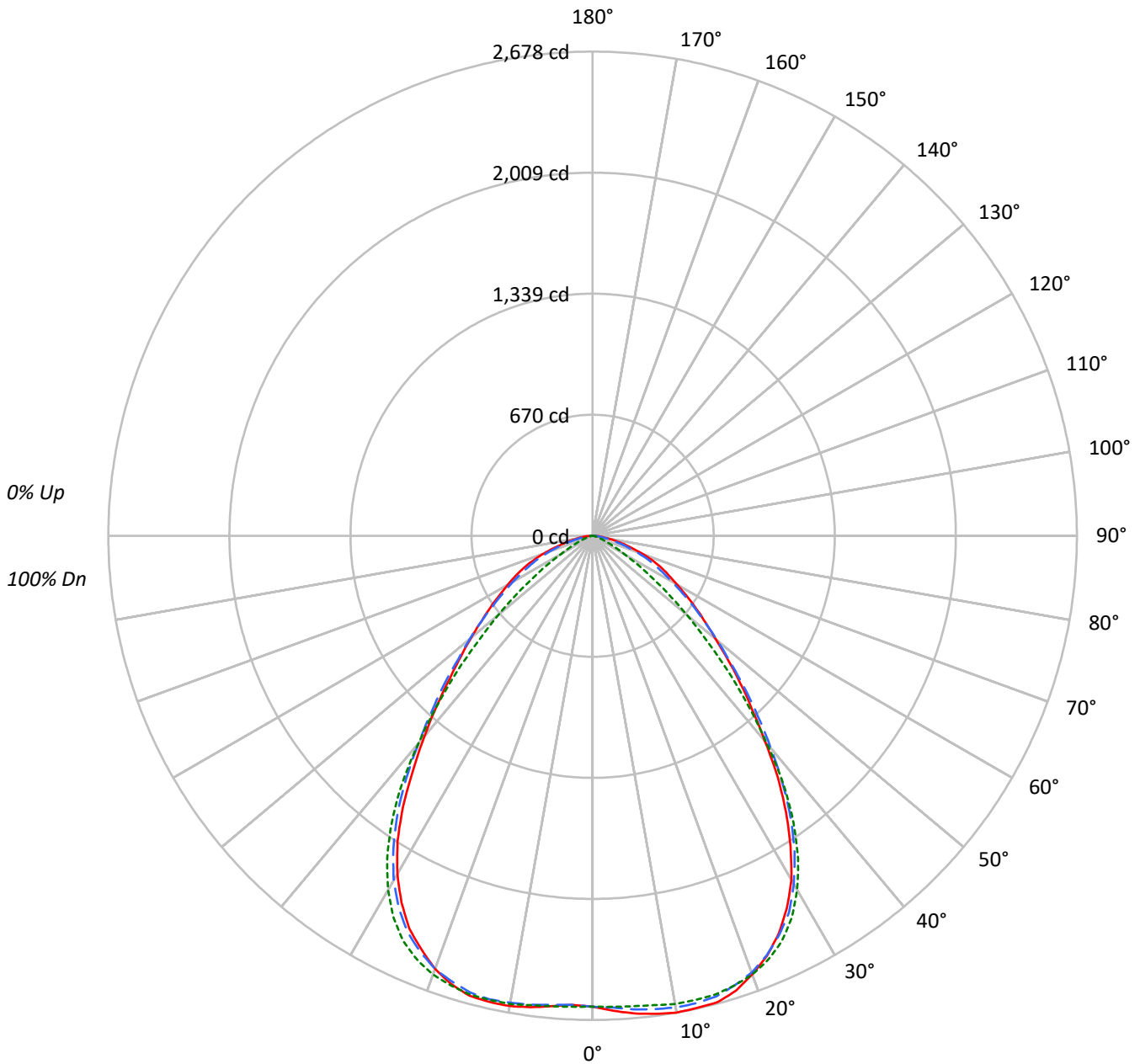
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252716

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1H

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
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	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	169906	169906	169906
5°	173686	171033	171033
10°	177403	174230	174965
15°	180378	177392	177886
20°	179276	179276	176971
25°	175003	178185	172620
30°	165666	170382	162607
35°	148449	154310	145510
40°	126113	127680	122971
45°	106713	97542	102976
50°	90098	68794	88982
55°	79188	44417	78347
60°	70173	26436	70656
65°	64821	15916	64821
70°	56214	9137	54803
75°	44566	5571	41793
80°	33212	4170	31822
85°	30316	2770	27547



TEST NUMBER: P252716

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.7	4.9
10°-20°	742.1	14.4
20°-30°	1116.0	21.6
30°-40°	1173.4	22.7
40°-50°	876.6	17.0
50°-60°	545.7	10.6
60°-70°	310.3	6.0
70°-80°	127.8	2.5
80°-90°	26.4	0.5
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°	2108.8	40.8
0°-40°	3282.2	63.5
0°-60°	4704.4	91.0
0°-90°	5169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5169.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2604	2604	2604	2604	2604	
5°	2652	2630	2612	2604	2612	254
15°	2671	2637	2626	2615	2634	751
25°	2431	2438	2475	2420	2398	1113
35°	1864	1912	1938	1882	1827	1157
45°	1157	1182	1057	1160	1116	896
55°	696	682	390	670	689	626
65°	420	376	103	376	420	414
75°	177	140	22	136	166	192
85°	40	26	4	22	37	45
90°	0	0	0	0	0	



TEST NUMBER: P252716

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3
2.5°	2630.0	2626.4	2630.0	2622.7	2619.0	2619.0	2622.7	2615.3	2611.6	2615.3	2611.6
5°	2652.1	2644.8	2648.5	2644.8	2637.4	2637.4	2641.1	2630.0	2630.0	2633.7	2630.0
7.5°	2666.9	2666.9	2666.9	2659.5	2655.8	2652.1	2659.5	2648.5	2644.8	2644.8	2641.1
10°	2677.9	2674.2	2677.9	2670.6	2663.2	2659.5	2666.9	2659.5	2652.1	2659.5	2648.5
12.5°	2674.2	2674.2	2674.2	2670.6	2663.2	2659.5	2666.9	2655.8	2652.1	2655.8	2648.5
15°	2670.6	2659.5	2663.2	2659.5	2648.5	2648.5	2652.1	2641.1	2633.7	2644.8	2637.4
17.5°	2637.4	2630.0	2633.7	2626.4	2619.0	2615.3	2619.0	2615.3	2607.9	2615.3	2607.9
20°	2582.2	2582.2	2585.8	2578.5	2571.1	2567.4	2574.8	2567.4	2560.1	2571.1	2571.1
22.5°	2515.8	2515.8	2515.8	2512.2	2508.5	2508.5	2508.5	2504.8	2501.1	2508.5	2512.2
25°	2431.1	2427.4	2431.1	2434.8	2431.1	2427.4	2431.1	2431.1	2423.8	2438.5	2438.5
27.5°	2324.3	2324.3	2331.7	2328.0	2328.0	2324.3	2331.7	2331.7	2328.0	2339.0	2350.1
30°	2199.1	2191.7	2199.1	2199.1	2202.7	2202.7	2206.4	2206.4	2206.4	2217.5	2224.8
32.5°	2037.0	2040.7	2051.7	2048.0	2044.4	2055.4	2055.4	2062.8	2066.5	2073.8	2077.5
35°	1863.9	1867.5	1867.5	1871.2	1878.6	1871.2	1889.6	1886.0	1889.6	1904.4	1911.7
37.5°	1679.7	1668.6	1687.1	1679.7	1683.4	1683.4	1690.7	1694.4	1705.5	1723.9	1723.9
40°	1480.8	1484.5	1491.8	1495.5	1499.2	1499.2	1499.2	1510.2	1513.9	1536.0	1532.3
42.5°	1307.7	1307.7	1315.0	1318.7	1318.7	1318.7	1318.7	1329.8	1337.1	1344.5	1351.9
45°	1156.6	1145.6	1152.9	1152.9	1160.3	1156.6	1164.0	1171.4	1175.0	1186.1	1182.4
47.5°	1013.0	1009.3	1013.0	1016.7	1013.0	1016.7	1020.3	1024.0	1027.7	1027.7	1027.7
50°	887.7	887.7	891.4	895.1	895.1	895.1	895.1	898.8	898.8	906.1	898.8
52.5°	784.6	788.3	788.3	784.6	788.3	788.3	792.0	792.0	788.3	788.3	777.2
55°	696.2	692.5	696.2	692.5	696.2	696.2	692.5	692.5	688.8	685.1	681.5
57.5°	611.5	611.5	611.5	611.5	607.8	611.5	607.8	604.1	604.1	596.7	585.7
60°	537.8	537.8	537.8	537.8	537.8	534.1	537.8	534.1	526.7	519.4	504.6
62.5°	475.2	471.5	475.2	471.5	471.5	467.8	467.8	464.1	456.8	449.4	434.7
65°	419.9	423.6	419.9	419.9	416.2	412.6	412.6	408.9	397.8	390.5	375.7
67.5°	361.0	357.3	357.3	357.3	353.6	353.6	353.6	346.3	338.9	327.8	313.1
70°	294.7	294.7	294.7	291.0	291.0	287.3	287.3	283.6	276.3	268.9	250.5
72.5°	232.1	232.1	232.1	224.7	228.4	224.7	224.7	217.3	213.6	202.6	191.5
75°	176.8	176.8	173.1	173.1	169.4	165.8	165.8	162.1	158.4	151.0	140.0
77.5°	128.9	128.9	128.9	125.2	121.6	117.9	117.9	114.2	110.5	106.8	99.5
80°	88.4	88.4	88.4	88.4	84.7	81.0	81.0	77.4	77.4	73.7	66.3
82.5°	58.9	58.9	58.9	58.9	55.3	55.3	55.3	51.6	47.9	47.9	40.5
85°	40.5	40.5	36.8	36.8	36.8	36.8	33.2	33.2	29.5	25.8	25.8
87.5°	22.1	22.1	22.1	22.1	18.4	18.4	18.4	18.4	14.7	14.7	11.1
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: P252716

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3
2.5°	2622.7	2622.7	2619.0	2607.9	2611.6	2607.9	2611.6	2607.9	2596.9	2607.9	2596.9
5°	2637.4	2641.1	2633.7	2619.0	2622.7	2619.0	2619.0	2615.3	2604.3	2611.6	2604.3
7.5°	2652.1	2648.5	2644.8	2630.0	2633.7	2630.0	2630.0	2622.7	2611.6	2619.0	2607.9
10°	2659.5	2659.5	2652.1	2637.4	2637.4	2633.7	2637.4	2633.7	2619.0	2630.0	2622.7
12.5°	2659.5	2655.8	2655.8	2637.4	2641.1	2637.4	2641.1	2633.7	2622.7	2630.0	2626.4
15°	2648.5	2648.5	2644.8	2626.4	2630.0	2630.0	2633.7	2626.4	2615.3	2626.4	2619.0
17.5°	2626.4	2626.4	2622.7	2607.9	2615.3	2615.3	2619.0	2611.6	2600.6	2607.9	2607.9
20°	2582.2	2585.8	2585.8	2574.8	2582.2	2582.2	2585.8	2582.2	2578.5	2582.2	2574.8
22.5°	2530.6	2537.9	2537.9	2526.9	2534.3	2534.3	2545.3	2541.6	2534.3	2537.9	2534.3
25°	2453.2	2460.6	2468.0	2460.6	2468.0	2468.0	2479.0	2475.3	2468.0	2475.3	2464.3
27.5°	2364.8	2368.5	2375.9	2368.5	2379.6	2375.9	2386.9	2383.2	2372.2	2383.2	2379.6
30°	2239.6	2254.3	2265.4	2254.3	2265.4	2265.4	2272.7	2269.1	2265.4	2261.7	2261.7
32.5°	2099.6	2114.3	2114.3	2110.7	2118.0	2118.0	2121.7	2114.3	2110.7	2114.3	2118.0
35°	1926.5	1933.9	1941.2	1937.5	1941.2	1944.9	1941.2	1944.9	1933.9	1937.5	1937.5
37.5°	1738.6	1746.0	1746.0	1734.9	1742.3	1742.3	1734.9	1734.9	1727.6	1734.9	1720.2
40°	1539.7	1532.3	1536.0	1528.7	1521.3	1521.3	1517.6	1502.9	1495.5	1499.2	1502.9
42.5°	1344.5	1344.5	1333.4	1315.0	1296.6	1296.6	1285.6	1278.2	1263.4	1270.8	1267.1
45°	1178.7	1160.3	1145.6	1116.1	1105.1	1097.7	1079.3	1060.9	1053.5	1057.2	1053.5
47.5°	1020.3	1005.6	968.8	928.2	917.2	906.1	884.0	861.9	854.6	847.2	847.2
50°	887.7	861.9	821.4	777.2	758.8	740.4	710.9	688.8	674.1	677.8	677.8
52.5°	766.2	736.7	688.8	633.6	611.5	589.4	563.6	537.8	526.7	523.1	523.1
55°	659.4	626.2	578.3	515.7	497.3	471.5	438.3	408.9	394.1	390.5	397.8
57.5°	563.6	534.1	478.9	416.2	394.1	368.4	335.2	309.4	291.0	287.3	291.0
60°	486.2	445.7	397.8	338.9	309.4	287.3	250.5	228.4	210.0	202.6	206.3
62.5°	408.9	372.0	324.2	265.2	243.1	221.0	187.9	162.1	147.3	143.7	147.3
65°	349.9	313.1	268.9	217.3	195.2	173.1	143.7	117.9	106.8	103.1	106.8
67.5°	291.0	257.8	221.0	173.1	154.7	136.3	106.8	88.4	73.7	70.0	73.7
70°	235.7	206.3	169.4	136.3	117.9	103.1	81.0	62.6	51.6	47.9	51.6
72.5°	176.8	154.7	128.9	99.5	88.4	77.4	58.9	44.2	36.8	33.2	36.8
75°	128.9	110.5	92.1	70.0	62.6	55.3	40.5	29.5	25.8	22.1	25.8
77.5°	88.4	77.4	62.6	47.9	40.5	36.8	25.8	22.1	18.4	14.7	14.7
80°	58.9	51.6	40.5	33.2	29.5	25.8	18.4	14.7	11.1	11.1	11.1
82.5°	36.8	29.5	25.8	18.4	14.7	14.7	11.1	7.4	7.4	7.4	7.4
85°	22.1	18.4	14.7	11.1	7.4	7.4	3.7	3.7	3.7	3.7	3.7
87.5°	11.1	7.4	7.4	3.7	3.7	3.7	3.7	3.7	0.0	0.0	3.7
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: P252716

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3
2.5°	2604.3	2596.9	2596.9	2600.6	2604.3	2607.9	2600.6	2596.9	2596.9	2607.9	2600.6
5°	2604.3	2600.6	2600.6	2600.6	2607.9	2611.6	2604.3	2600.6	2604.3	2615.3	2611.6
7.5°	2615.3	2607.9	2611.6	2611.6	2615.3	2622.7	2615.3	2611.6	2615.3	2626.4	2619.0
10°	2622.7	2615.3	2619.0	2615.3	2626.4	2630.0	2622.7	2619.0	2622.7	2637.4	2633.7
12.5°	2626.4	2622.7	2622.7	2619.0	2630.0	2633.7	2626.4	2622.7	2626.4	2637.4	2633.7
15°	2619.0	2615.3	2615.3	2615.3	2622.7	2630.0	2619.0	2615.3	2615.3	2626.4	2622.7
17.5°	2604.3	2596.9	2596.9	2596.9	2600.6	2604.3	2593.2	2589.5	2585.8	2596.9	2593.2
20°	2578.5	2571.1	2563.7	2563.7	2567.4	2567.4	2560.1	2549.0	2549.0	2552.7	2545.3
22.5°	2530.6	2526.9	2519.5	2515.8	2523.2	2519.5	2504.8	2493.7	2490.1	2493.7	2486.4
25°	2464.3	2456.9	2453.2	2449.5	2453.2	2449.5	2434.8	2420.1	2420.1	2420.1	2409.0
27.5°	2372.2	2364.8	2361.1	2361.1	2364.8	2357.5	2342.7	2328.0	2320.6	2320.6	2309.6
30°	2254.3	2254.3	2250.6	2247.0	2243.3	2243.3	2221.2	2206.4	2199.1	2202.7	2195.4
32.5°	2110.7	2107.0	2103.3	2092.2	2095.9	2092.2	2073.8	2062.8	2051.7	2044.4	2040.7
35°	1926.5	1926.5	1922.8	1922.8	1922.8	1919.1	1900.7	1889.6	1882.3	1878.6	1867.5
37.5°	1723.9	1720.2	1716.5	1716.5	1716.5	1716.5	1705.5	1694.4	1694.4	1690.7	1683.4
40°	1495.5	1499.2	1502.9	1499.2	1510.2	1521.3	1506.6	1499.2	1495.5	1506.6	1491.8
42.5°	1274.5	1270.8	1289.2	1292.9	1292.9	1311.3	1315.0	1318.7	1315.0	1322.4	1322.4
45°	1060.9	1057.2	1075.6	1083.0	1101.4	1123.5	1134.5	1152.9	1160.3	1167.7	1160.3
47.5°	858.3	873.0	887.7	906.1	920.9	957.7	979.8	998.2	1005.6	1016.7	1016.7
50°	688.8	703.6	729.3	744.1	762.5	806.7	843.5	869.3	884.0	895.1	891.4
52.5°	530.4	556.2	589.4	604.1	629.9	681.5	722.0	751.4	769.9	780.9	784.6
55°	408.9	431.0	464.1	486.2	512.0	567.3	618.8	652.0	670.4	685.1	692.5
57.5°	302.0	327.8	364.7	383.1	412.6	475.2	519.4	559.9	582.0	600.4	604.1
60°	221.0	246.8	279.9	302.0	331.5	394.1	445.7	482.5	508.3	523.1	530.4
62.5°	158.4	184.2	217.3	239.4	265.2	320.5	372.0	408.9	434.7	453.1	464.1
65°	114.2	140.0	173.1	191.5	213.6	265.2	313.1	349.9	375.7	397.8	405.2
67.5°	84.7	103.1	132.6	151.0	173.1	213.6	254.2	287.3	313.1	331.5	338.9
70°	62.6	77.4	103.1	114.2	128.9	165.8	198.9	228.4	250.5	265.2	272.6
72.5°	44.2	55.3	73.7	84.7	95.8	125.2	151.0	173.1	187.9	202.6	210.0
75°	29.5	36.8	51.6	58.9	66.3	88.4	106.8	125.2	136.3	147.3	151.0
77.5°	18.4	25.8	36.8	40.5	47.9	58.9	73.7	84.7	92.1	99.5	106.8
80°	11.1	14.7	22.1	25.8	29.5	40.5	47.9	55.3	62.6	70.0	73.7
82.5°	7.4	11.1	14.7	14.7	18.4	22.1	29.5	36.8	40.5	44.2	47.9
85°	3.7	3.7	7.4	7.4	11.1	11.1	14.7	18.4	22.1	25.8	29.5
87.5°	3.7	3.7	3.7	3.7	7.4	7.4	11.1	11.1	11.1	14.7	14.7
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: P252716

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3	2604.3
2.5°	2593.2	2604.3	2593.2	2600.6	2596.9	2596.9	2593.2	2596.9
5°	2604.3	2619.0	2604.3	2615.3	2607.9	2607.9	2607.9	2611.6
7.5°	2615.3	2630.0	2619.0	2630.0	2626.4	2622.7	2622.7	2630.0
10°	2626.4	2637.4	2630.0	2641.1	2637.4	2633.7	2633.7	2641.1
12.5°	2626.4	2641.1	2633.7	2644.8	2641.1	2637.4	2637.4	2641.1
15°	2615.3	2633.7	2622.7	2633.7	2630.0	2626.4	2626.4	2633.7
17.5°	2582.2	2596.9	2589.5	2596.9	2596.9	2593.2	2596.9	2600.6
20°	2537.9	2549.0	2541.6	2549.0	2549.0	2541.6	2545.3	2549.0
22.5°	2475.3	2486.4	2479.0	2486.4	2482.7	2479.0	2479.0	2475.3
25°	2398.0	2412.7	2401.7	2409.0	2401.7	2394.3	2394.3	2398.0
27.5°	2302.2	2313.3	2298.5	2305.9	2298.5	2291.2	2291.2	2287.5
30°	2177.0	2180.6	2169.6	2177.0	2169.6	2165.9	2158.5	2158.5
32.5°	2025.9	2029.6	2018.6	2018.6	2011.2	2011.2	1996.5	2007.5
35°	1849.1	1852.8	1849.1	1845.4	1834.4	1830.7	1827.0	1827.0
37.5°	1665.0	1665.0	1653.9	1650.2	1642.9	1635.5	1639.2	1628.1
40°	1477.1	1473.4	1462.4	1466.0	1462.4	1451.3	1447.6	1443.9
42.5°	1300.3	1300.3	1289.2	1292.9	1285.6	1281.9	1270.8	1274.5
45°	1145.6	1145.6	1134.5	1134.5	1130.8	1119.8	1123.5	1116.1
47.5°	1005.6	1005.6	1001.9	1001.9	990.9	987.2	987.2	987.2
50°	884.0	884.0	884.0	884.0	880.4	876.7	873.0	876.7
52.5°	780.9	788.3	784.6	784.6	780.9	777.2	773.5	773.5
55°	688.8	692.5	692.5	696.2	692.5	688.8	692.5	688.8
57.5°	607.8	615.1	615.1	615.1	615.1	615.1	611.5	607.8
60°	537.8	541.5	541.5	545.2	545.2	545.2	541.5	541.5
62.5°	467.8	475.2	478.9	478.9	482.5	478.9	478.9	478.9
65°	412.6	419.9	423.6	419.9	423.6	423.6	419.9	419.9
67.5°	346.3	353.6	353.6	353.6	353.6	357.3	353.6	353.6
70°	279.9	287.3	283.6	287.3	287.3	287.3	287.3	287.3
72.5°	213.6	217.3	221.0	221.0	224.7	221.0	221.0	221.0
75°	154.7	162.1	162.1	162.1	162.1	165.8	165.8	165.8
77.5°	110.5	114.2	114.2	117.9	117.9	117.9	117.9	121.6
80°	77.4	77.4	81.0	81.0	84.7	84.7	84.7	84.7
82.5°	51.6	55.3	55.3	55.3	55.3	55.3	55.3	55.3
85°	29.5	33.2	33.2	33.2	33.2	36.8	36.8	36.8
87.5°	18.4	18.4	18.4	18.4	18.4	18.4	14.7	14.7
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)