

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: P252715

Luminaire Tested: **LD6B50D010TE EU6B30508035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252715
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 EU6B30508035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5118.0 lumens
Efficiency: N/A
Efficacy: 87.1 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

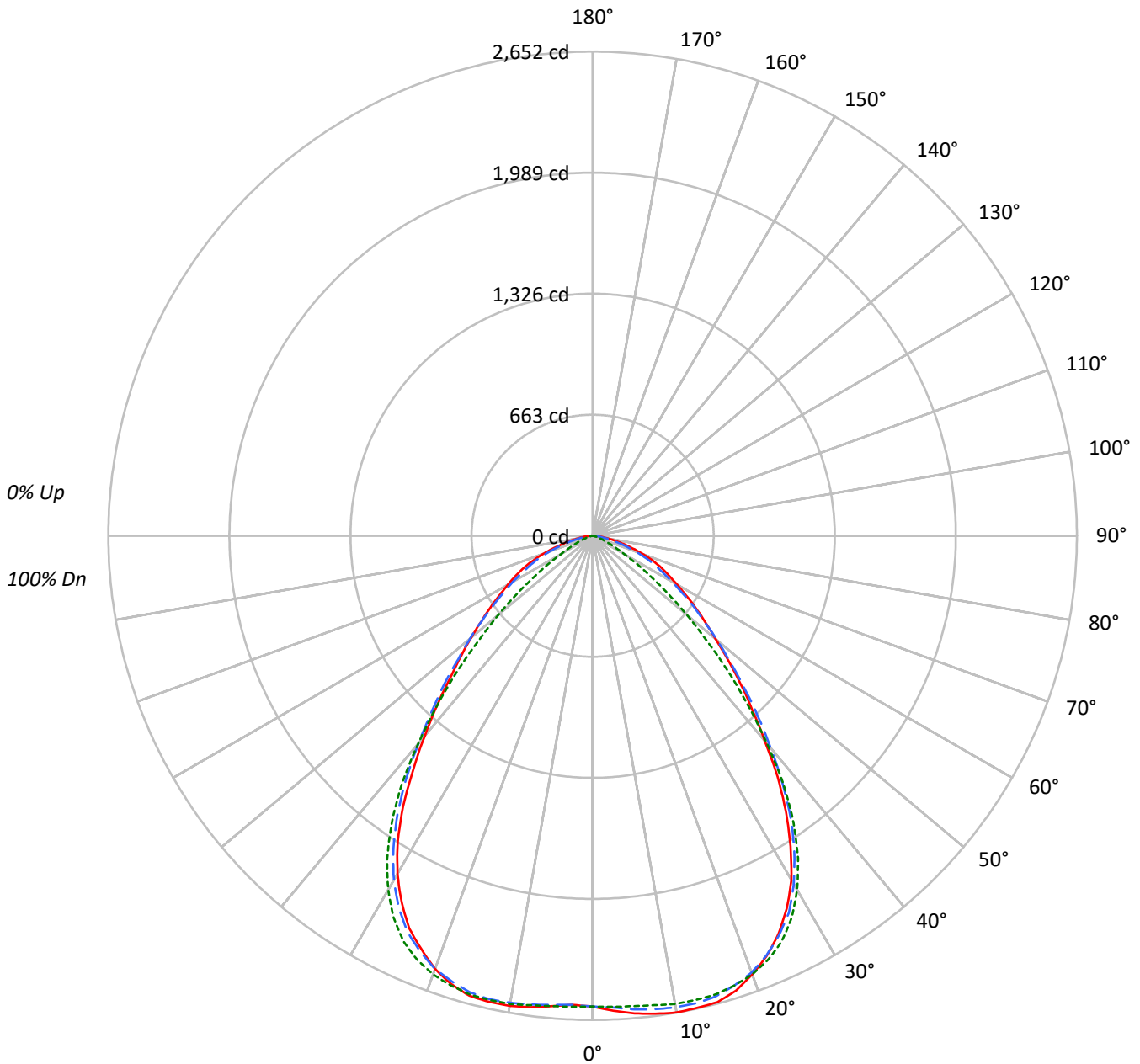
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	168229	168229	168229
5°	171976	169350	169350
10°	175654	172514	173236
15°	178595	175636	176129
20°	177506	177506	175228
25°	173275	176428	170914
30°	164031	168702	161003
35°	146983	152789	144076
40°	124870	126420	121761
45°	105661	96573	101961
50°	89215	68114	88099
55°	78403	43973	77573
60°	69481	26175	69951
65°	64188	15761	64188
70°	55661	9042	54269
75°	44138	5520	41365
80°	32874	4095	31522
85°	30017	2695	27322



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.3	4.9
10°-20°	734.7	14.4
20°-30°	1105.0	21.6
30°-40°	1161.8	22.7
40°-50°	867.9	17.0
50°-60°	540.3	10.6
60°-70°	307.3	6.0
70°-80°	126.6	2.5
80°-90°	26.2	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°	2088.0	40.8
0°-40°	3249.8	63.5
0°-60°	4658.0	91.0
0°-90°	5118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5118.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2579	2579	2579	2579	2579	
5°	2626	2604	2586	2579	2586	251
15°	2644	2611	2600	2590	2608	743
25°	2407	2414	2451	2396	2374	1102
35°	1846	1893	1918	1864	1809	1145
45°	1145	1171	1047	1149	1105	887
55°	689	675	387	664	682	620
65°	416	372	102	372	416	409
75°	175	139	22	135	164	190
85°	40	26	4	22	36	45
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°	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6
2.5°	2604.1	2600.4	2604.1	2596.8	2593.1	2593.1	2596.8	2589.5	2585.9	2589.5	2585.9
5°	2626.0	2618.7	2622.3	2618.7	2611.4	2611.4	2615.0	2604.1	2604.1	2607.7	2604.1
7.5°	2640.6	2640.6	2640.6	2633.3	2629.6	2626.0	2633.3	2622.3	2618.7	2618.7	2615.0
10°	2651.5	2647.9	2651.5	2644.2	2636.9	2633.3	2640.6	2633.3	2626.0	2633.3	2622.3
12.5°	2647.9	2647.9	2647.9	2644.2	2636.9	2633.3	2640.6	2629.6	2626.0	2629.6	2622.3
15°	2644.2	2633.3	2636.9	2633.3	2622.3	2622.3	2626.0	2615.0	2607.7	2618.7	2611.4
17.5°	2611.4	2604.1	2607.7	2600.4	2593.1	2589.5	2593.1	2589.5	2582.2	2589.5	2582.2
20°	2556.7	2556.7	2560.3	2553.0	2545.7	2542.1	2549.4	2542.1	2534.8	2545.7	2545.7
22.5°	2491.0	2491.0	2491.0	2487.4	2483.7	2483.7	2483.7	2480.1	2476.4	2483.7	2487.4
25°	2407.1	2403.5	2407.1	2410.8	2407.1	2403.5	2407.1	2407.1	2399.8	2414.4	2414.4
27.5°	2301.4	2301.4	2308.7	2305.0	2305.0	2301.4	2308.7	2308.7	2305.0	2316.0	2326.9
30°	2177.4	2170.1	2177.4	2177.4	2181.0	2181.0	2184.7	2184.7	2184.7	2195.6	2202.9
32.5°	2016.9	2020.5	2031.5	2027.8	2024.2	2035.1	2035.1	2042.4	2046.1	2053.4	2057.0
35°	1845.5	1849.1	1849.1	1852.8	1860.1	1852.8	1871.0	1867.4	1871.0	1885.6	1892.9
37.5°	1663.1	1652.2	1670.4	1663.1	1666.8	1666.8	1674.1	1677.7	1688.6	1706.9	1706.9
40°	1466.2	1469.8	1477.1	1480.8	1484.4	1484.4	1484.4	1495.3	1499.0	1520.9	1517.2
42.5°	1294.7	1294.7	1302.0	1305.7	1305.7	1305.7	1305.7	1316.6	1323.9	1331.2	1338.5
45°	1145.2	1134.3	1141.6	1141.6	1148.9	1145.2	1152.5	1159.8	1163.5	1174.4	1170.7
47.5°	1003.0	999.3	1003.0	1006.6	1003.0	1006.6	1010.3	1013.9	1017.6	1017.6	1017.6
50°	879.0	879.0	882.6	886.3	886.3	886.3	886.3	889.9	889.9	897.2	889.9
52.5°	776.8	780.5	780.5	776.8	780.5	780.5	784.1	784.1	780.5	780.5	769.6
55°	689.3	685.7	689.3	685.7	689.3	689.3	685.7	685.7	682.0	678.4	674.7
57.5°	605.4	605.4	605.4	605.4	601.8	605.4	601.8	598.1	598.1	590.8	579.9
60°	532.5	532.5	532.5	532.5	532.5	528.8	532.5	528.8	521.5	514.3	499.7
62.5°	470.5	466.8	470.5	466.8	466.8	463.2	463.2	459.5	452.3	445.0	430.4
65°	415.8	419.4	415.8	415.8	412.1	408.5	408.5	404.8	393.9	386.6	372.0
67.5°	357.4	353.8	353.8	353.8	350.1	350.1	350.1	342.8	335.5	324.6	310.0
70°	291.8	291.8	291.8	288.1	288.1	284.5	284.5	280.8	273.5	266.2	248.0
72.5°	229.8	229.8	229.8	222.5	226.1	222.5	222.5	215.2	211.5	200.6	189.7
75°	175.1	175.1	171.4	171.4	167.8	164.1	164.1	160.5	156.8	149.5	138.6
77.5°	127.7	127.7	127.7	124.0	120.4	116.7	116.7	113.1	109.4	105.8	98.5
80°	87.5	87.5	87.5	87.5	83.9	80.2	80.2	76.6	76.6	72.9	65.6
82.5°	58.4	58.4	58.4	58.4	54.7	54.7	54.7	51.1	47.4	47.4	40.1
85°	40.1	40.1	36.5	36.5	36.5	36.5	32.8	32.8	29.2	25.5	25.5
87.5°	21.9	21.9	21.9	21.9	18.2	18.2	18.2	18.2	14.6	14.6	10.9
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°	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6
2.5°	2596.8	2596.8	2593.1	2582.2	2585.9	2582.2	2585.9	2582.2	2571.3	2582.2	2571.3
5°	2611.4	2615.0	2607.7	2593.1	2596.8	2593.1	2593.1	2589.5	2578.6	2585.9	2578.6
7.5°	2626.0	2622.3	2618.7	2604.1	2607.7	2604.1	2604.1	2596.8	2585.9	2593.1	2582.2
10°	2633.3	2633.3	2626.0	2611.4	2611.4	2607.7	2611.4	2607.7	2593.1	2604.1	2596.8
12.5°	2633.3	2629.6	2629.6	2611.4	2615.0	2611.4	2615.0	2607.7	2596.8	2604.1	2600.4
15°	2622.3	2622.3	2618.7	2600.4	2604.1	2604.1	2607.7	2600.4	2589.5	2600.4	2593.1
17.5°	2600.4	2600.4	2596.8	2582.2	2589.5	2589.5	2593.1	2585.9	2574.9	2582.2	2582.2
20°	2556.7	2560.3	2560.3	2549.4	2556.7	2556.7	2560.3	2556.7	2553.0	2556.7	2549.4
22.5°	2505.6	2512.9	2512.9	2502.0	2509.3	2509.3	2520.2	2516.6	2509.3	2512.9	2509.3
25°	2429.0	2436.3	2443.6	2436.3	2443.6	2443.6	2454.6	2450.9	2443.6	2450.9	2440.0
27.5°	2341.5	2345.1	2352.4	2345.1	2356.1	2352.4	2363.4	2359.7	2348.8	2359.7	2356.1
30°	2217.5	2232.1	2243.0	2232.1	2243.0	2243.0	2250.3	2246.7	2243.0	2239.4	2239.4
32.5°	2078.9	2093.5	2093.5	2089.8	2097.1	2097.1	2100.8	2093.5	2089.8	2093.5	2097.1
35°	1907.5	1914.8	1922.1	1918.4	1922.1	1925.7	1922.1	1925.7	1914.8	1918.4	1918.4
37.5°	1721.5	1728.8	1728.8	1717.8	1725.1	1725.1	1717.8	1717.8	1710.5	1717.8	1703.2
40°	1524.5	1517.2	1520.9	1513.6	1506.3	1506.3	1502.6	1488.1	1480.8	1484.4	1488.1
42.5°	1331.2	1331.2	1320.3	1302.0	1283.8	1283.8	1272.9	1265.6	1251.0	1258.3	1254.6
45°	1167.1	1148.9	1134.3	1105.1	1094.2	1086.9	1068.6	1050.4	1043.1	1046.7	1043.1
47.5°	1010.3	995.7	959.2	919.1	908.1	897.2	875.3	853.4	846.1	838.9	838.9
50°	879.0	853.4	813.3	769.6	751.3	733.1	703.9	682.0	667.4	671.1	671.1
52.5°	758.6	729.4	682.0	627.3	605.4	583.5	558.0	532.5	521.5	517.9	517.9
55°	652.8	620.0	572.6	510.6	492.4	466.8	434.0	404.8	390.2	386.6	393.9
57.5°	558.0	528.8	474.1	412.1	390.2	364.7	331.9	306.4	288.1	284.5	288.1
60°	481.4	441.3	393.9	335.5	306.4	284.5	248.0	226.1	207.9	200.6	204.2
62.5°	404.8	368.4	321.0	262.6	240.7	218.8	186.0	160.5	145.9	142.2	145.9
65°	346.5	310.0	266.2	215.2	193.3	171.4	142.2	116.7	105.8	102.1	105.8
67.5°	288.1	255.3	218.8	171.4	153.2	134.9	105.8	87.5	72.9	69.3	72.9
70°	233.4	204.2	167.8	134.9	116.7	102.1	80.2	62.0	51.1	47.4	51.1
72.5°	175.1	153.2	127.7	98.5	87.5	76.6	58.4	43.8	36.5	32.8	36.5
75°	127.7	109.4	91.2	69.3	62.0	54.7	40.1	29.2	25.5	21.9	25.5
77.5°	87.5	76.6	62.0	47.4	40.1	36.5	25.5	21.9	18.2	14.6	14.6
80°	58.4	51.1	40.1	32.8	29.2	25.5	18.2	14.6	10.9	10.9	10.9
82.5°	36.5	29.2	25.5	18.2	14.6	14.6	10.9	7.3	7.3	7.3	7.3
85°	21.9	18.2	14.6	10.9	7.3	7.3	3.6	3.6	3.6	3.6	3.6
87.5°	10.9	7.3	7.3	3.6	3.6	3.6	3.6	3.6	0.0	0.0	3.6
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°	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6
2.5°	2578.6	2571.3	2571.3	2574.9	2578.6	2582.2	2574.9	2571.3	2571.3	2582.2	2574.9
5°	2578.6	2574.9	2574.9	2574.9	2582.2	2585.9	2578.6	2574.9	2578.6	2589.5	2585.9
7.5°	2589.5	2582.2	2585.9	2585.9	2589.5	2596.8	2589.5	2585.9	2589.5	2600.4	2593.1
10°	2596.8	2589.5	2593.1	2589.5	2600.4	2604.1	2596.8	2593.1	2596.8	2611.4	2607.7
12.5°	2600.4	2596.8	2596.8	2593.1	2604.1	2607.7	2600.4	2596.8	2600.4	2611.4	2607.7
15°	2593.1	2589.5	2589.5	2589.5	2596.8	2604.1	2593.1	2589.5	2589.5	2600.4	2596.8
17.5°	2578.6	2571.3	2571.3	2571.3	2574.9	2578.6	2567.6	2564.0	2560.3	2571.3	2567.6
20°	2553.0	2545.7	2538.4	2538.4	2542.1	2542.1	2534.8	2523.9	2523.9	2527.5	2520.2
22.5°	2505.6	2502.0	2494.7	2491.0	2498.3	2494.7	2480.1	2469.1	2465.5	2469.1	2461.8
25°	2440.0	2432.7	2429.0	2425.4	2429.0	2425.4	2410.8	2396.2	2396.2	2396.2	2385.3
27.5°	2348.8	2341.5	2337.8	2337.8	2341.5	2334.2	2319.6	2305.0	2297.7	2297.7	2286.8
30°	2232.1	2232.1	2228.4	2224.8	2221.1	2221.1	2199.3	2184.7	2177.4	2181.0	2173.7
32.5°	2089.8	2086.2	2082.5	2071.6	2075.2	2071.6	2053.4	2042.4	2031.5	2024.2	2020.5
35°	1907.5	1907.5	1903.8	1903.8	1903.8	1900.2	1881.9	1871.0	1863.7	1860.1	1849.1
37.5°	1706.9	1703.2	1699.6	1699.6	1699.6	1699.6	1688.6	1677.7	1677.7	1674.1	1666.8
40°	1480.8	1484.4	1488.1	1484.4	1495.3	1506.3	1491.7	1484.4	1480.8	1491.7	1477.1
42.5°	1261.9	1258.3	1276.5	1280.2	1280.2	1298.4	1302.0	1305.7	1302.0	1309.3	1309.3
45°	1050.4	1046.7	1065.0	1072.3	1090.5	1112.4	1123.3	1141.6	1148.9	1156.2	1148.9
47.5°	849.8	864.4	879.0	897.2	911.8	948.3	970.2	988.4	995.7	1006.6	1006.6
50°	682.0	696.6	722.1	736.7	755.0	798.7	835.2	860.7	875.3	886.3	882.6
52.5°	525.2	550.7	583.5	598.1	623.7	674.7	714.8	744.0	762.3	773.2	776.8
55°	404.8	426.7	459.5	481.4	507.0	561.7	612.7	645.6	663.8	678.4	685.7
57.5°	299.1	324.6	361.1	379.3	408.5	470.5	514.3	554.4	576.3	594.5	598.1
60°	218.8	244.4	277.2	299.1	328.2	390.2	441.3	477.8	503.3	517.9	525.2
62.5°	156.8	182.4	215.2	237.1	262.6	317.3	368.4	404.8	430.4	448.6	459.5
65°	113.1	138.6	171.4	189.7	211.5	262.6	310.0	346.5	372.0	393.9	401.2
67.5°	83.9	102.1	131.3	149.5	171.4	211.5	251.7	284.5	310.0	328.2	335.5
70°	62.0	76.6	102.1	113.1	127.7	164.1	196.9	226.1	248.0	262.6	269.9
72.5°	43.8	54.7	72.9	83.9	94.8	124.0	149.5	171.4	186.0	200.6	207.9
75°	29.2	36.5	51.1	58.4	65.6	87.5	105.8	124.0	134.9	145.9	149.5
77.5°	18.2	25.5	36.5	40.1	47.4	58.4	72.9	83.9	91.2	98.5	105.8
80°	10.9	14.6	21.9	25.5	29.2	40.1	47.4	54.7	62.0	69.3	72.9
82.5°	7.3	10.9	14.6	14.6	18.2	21.9	29.2	36.5	40.1	43.8	47.4
85°	3.6	3.6	7.3	7.3	10.9	10.9	14.6	18.2	21.9	25.5	29.2
87.5°	3.6	3.6	3.6	3.6	7.3	7.3	10.9	10.9	10.9	14.6	14.6
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: P252715

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6	2578.6
2.5°	2567.6	2578.6	2567.6	2574.9	2571.3	2571.3	2567.6	2571.3
5°	2578.6	2593.1	2578.6	2589.5	2582.2	2582.2	2582.2	2585.9
7.5°	2589.5	2604.1	2593.1	2604.1	2600.4	2596.8	2596.8	2604.1
10°	2600.4	2611.4	2604.1	2615.0	2611.4	2607.7	2607.7	2615.0
12.5°	2600.4	2615.0	2607.7	2618.7	2615.0	2611.4	2611.4	2615.0
15°	2589.5	2607.7	2596.8	2607.7	2604.1	2600.4	2600.4	2607.7
17.5°	2556.7	2571.3	2564.0	2571.3	2571.3	2567.6	2571.3	2574.9
20°	2512.9	2523.9	2516.6	2523.9	2523.9	2516.6	2520.2	2523.9
22.5°	2450.9	2461.8	2454.6	2461.8	2458.2	2454.6	2454.6	2450.9
25°	2374.3	2388.9	2378.0	2385.3	2378.0	2370.7	2370.7	2374.3
27.5°	2279.5	2290.4	2275.8	2283.1	2275.8	2268.5	2268.5	2264.9
30°	2155.5	2159.1	2148.2	2155.5	2148.2	2144.5	2137.2	2137.2
32.5°	2006.0	2009.6	1998.7	1998.7	1991.4	1991.4	1976.8	1987.7
35°	1830.9	1834.5	1830.9	1827.2	1816.3	1812.6	1809.0	1809.0
37.5°	1648.5	1648.5	1637.6	1633.9	1626.6	1619.3	1623.0	1612.1
40°	1462.5	1458.9	1447.9	1451.6	1447.9	1437.0	1433.3	1429.7
42.5°	1287.5	1287.5	1276.5	1280.2	1272.9	1269.2	1258.3	1261.9
45°	1134.3	1134.3	1123.3	1123.3	1119.7	1108.7	1112.4	1105.1
47.5°	995.7	995.7	992.0	992.0	981.1	977.4	977.4	977.4
50°	875.3	875.3	875.3	875.3	871.7	868.0	864.4	868.0
52.5°	773.2	780.5	776.8	776.8	773.2	769.6	765.9	765.9
55°	682.0	685.7	685.7	689.3	685.7	682.0	685.7	682.0
57.5°	601.8	609.1	609.1	609.1	609.1	609.1	605.4	601.8
60°	532.5	536.1	536.1	539.8	539.8	539.8	536.1	536.1
62.5°	463.2	470.5	474.1	474.1	477.8	474.1	474.1	474.1
65°	408.5	415.8	419.4	415.8	419.4	419.4	415.8	415.8
67.5°	342.8	350.1	350.1	350.1	350.1	353.8	350.1	350.1
70°	277.2	284.5	280.8	284.5	284.5	284.5	284.5	284.5
72.5°	211.5	215.2	218.8	218.8	222.5	218.8	218.8	218.8
75°	153.2	160.5	160.5	160.5	160.5	164.1	164.1	164.1
77.5°	109.4	113.1	113.1	116.7	116.7	116.7	116.7	120.4
80°	76.6	76.6	80.2	80.2	83.9	83.9	83.9	83.9
82.5°	51.1	54.7	54.7	54.7	54.7	54.7	54.7	54.7
85°	29.2	32.8	32.8	32.8	32.8	36.5	36.5	36.5
87.5°	18.2	18.2	18.2	18.2	18.2	18.2	14.6	14.6
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)