

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: P252305

Luminaire Tested: **LD6B50D010TE EU6B30509035 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252305
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30509035 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4279.0 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

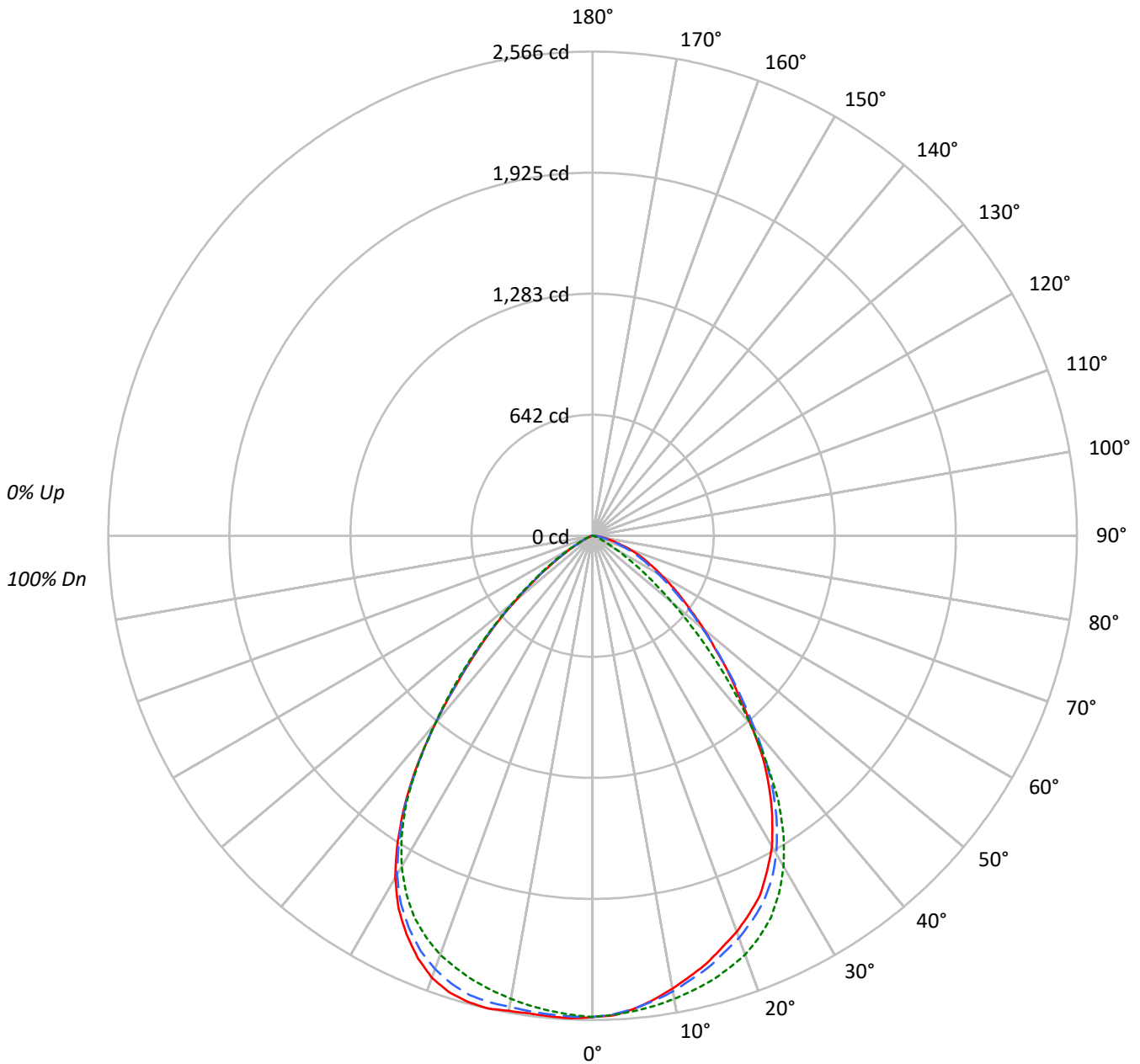
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	166396	166396	166396
5°	164818	165624	167438
10°	161418	165088	169374
15°	158332	164782	172685
20°	155053	164030	173014
25°	151226	160764	167855
30°	143179	152460	157567
35°	130027	136653	137880
40°	110971	110443	109923
45°	93224	82706	80150
50°	77848	55965	53154
55°	65516	34339	31188
60°	55468	18085	15671
65°	48025	9509	7611
70°	39962	5875	4120
75°	29517	3882	2319
80°	23143	2329	1165
85°	18414	2321	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.4	5.6
10°-20°	688.3	16.1
20°-30°	1016.3	23.8
30°-40°	1047.4	24.5
40°-50°	723.4	16.9
50°-60°	356.6	8.3
60°-70°	144.5	3.4
70°-80°	51.5	1.2
80°-90°	10.6	0.2
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°	1945.0	45.5
0°-40°	2992.4	69.9
0°-60°	4072.4	95.2
0°-90°	4279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4279.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2550	2550	2550	2550	2550	
5°	2517	2517	2529	2548	2557	238
15°	2344	2369	2440	2520	2557	660
25°	2101	2141	2233	2298	2332	960
35°	1633	1673	1716	1725	1731	1012
45°	1010	1016	896	884	869	781
55°	576	554	302	283	274	520
65°	311	280	62	49	49	309
75°	117	99	15	9	9	131
85°	25	18	3	0	0	30
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°	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5
2.5°	2544.4	2535.1	2541.3	2529.0	2544.4	2529.0	2532.1	2535.1	2532.1	2535.1	2538.2
5°	2516.7	2507.4	2516.7	2501.3	2516.7	2507.4	2507.4	2510.5	2510.5	2513.6	2516.7
7.5°	2479.7	2470.5	2479.7	2464.3	2482.8	2473.5	2473.5	2479.7	2476.6	2479.7	2485.9
10°	2436.6	2424.3	2433.5	2424.3	2442.7	2430.4	2436.6	2436.6	2436.6	2445.8	2452.0
12.5°	2390.4	2378.0	2390.4	2375.0	2393.4	2384.2	2387.3	2396.5	2399.6	2405.8	2408.9
15°	2344.2	2328.8	2334.9	2325.7	2344.2	2334.9	2338.0	2350.3	2350.3	2359.6	2368.8
17.5°	2285.6	2273.3	2285.6	2273.3	2288.7	2282.6	2288.7	2298.0	2298.0	2307.2	2316.4
20°	2233.3	2220.9	2230.2	2220.9	2239.4	2230.2	2233.3	2245.6	2248.7	2257.9	2267.2
22.5°	2168.6	2159.3	2165.5	2156.3	2174.7	2168.6	2171.7	2184.0	2187.1	2193.2	2208.6
25°	2100.8	2082.3	2091.6	2085.4	2103.9	2094.7	2100.8	2113.1	2119.3	2128.5	2140.9
27.5°	2002.2	1993.0	1999.2	1999.2	2014.6	2005.3	2008.4	2020.7	2030.0	2039.2	2054.6
30°	1900.6	1885.2	1891.3	1894.4	1906.7	1900.6	1906.7	1919.1	1922.2	1934.5	1946.8
32.5°	1771.2	1765.1	1777.4	1771.2	1777.4	1777.4	1780.5	1789.7	1795.9	1802.0	1817.4
35°	1632.6	1620.3	1632.6	1626.4	1641.8	1632.6	1641.8	1651.1	1651.1	1663.4	1672.6
37.5°	1481.7	1466.3	1472.4	1472.4	1478.6	1475.5	1475.5	1490.9	1494.0	1503.2	1512.5
40°	1303.0	1296.8	1309.2	1306.1	1309.2	1309.2	1312.2	1321.5	1327.6	1330.7	1333.8
42.5°	1142.8	1145.9	1149.0	1149.0	1149.0	1149.0	1149.0	1161.3	1158.2	1167.5	1170.5
45°	1010.4	998.0	1004.2	1001.1	1010.4	1001.1	1010.4	1019.6	1013.4	1022.7	1016.5
47.5°	874.8	874.8	874.8	871.7	877.9	874.8	881.0	884.1	884.1	884.1	881.0
50°	767.0	757.8	760.9	760.9	763.9	760.9	767.0	770.1	770.1	763.9	751.6
52.5°	662.3	659.2	659.2	665.4	665.4	662.3	662.3	662.3	662.3	653.0	646.9
55°	576.0	569.9	572.9	572.9	572.9	572.9	576.0	572.9	572.9	563.7	554.5
57.5°	499.0	492.9	492.9	492.9	495.9	492.9	492.9	492.9	489.8	480.5	468.2
60°	425.1	422.0	425.1	425.1	428.2	425.1	425.1	425.1	418.9	409.7	397.4
62.5°	363.5	363.5	363.5	366.6	366.6	363.5	363.5	360.4	357.3	345.0	332.7
65°	311.1	308.0	311.1	311.1	314.2	314.2	311.1	308.0	305.0	292.6	280.3
67.5°	258.8	255.7	258.8	258.8	261.8	258.8	258.8	258.8	249.5	243.3	231.0
70°	209.5	206.4	206.4	206.4	209.5	203.3	206.4	206.4	200.2	191.0	178.7
72.5°	160.2	160.2	160.2	160.2	160.2	160.2	157.1	157.1	150.9	141.7	135.5
75°	117.1	117.1	120.1	120.1	117.1	117.1	117.1	114.0	110.9	104.7	98.6
77.5°	86.3	86.3	86.3	86.3	83.2	83.2	83.2	80.1	77.0	73.9	67.8
80°	61.6	61.6	61.6	58.5	61.6	58.5	58.5	58.5	52.4	49.3	46.2
82.5°	43.1	40.0	40.0	40.0	40.0	40.0	40.0	37.0	37.0	33.9	30.8
85°	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	21.6	18.5	18.5
87.5°	12.3	15.4	15.4	15.4	15.4	15.4	15.4	12.3	12.3	12.3	9.2
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°	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5
2.5°	2538.2	2538.2	2544.4	2535.1	2550.5	2541.3	2538.2	2553.6	2544.4	2541.3	2547.5
5°	2516.7	2519.7	2522.8	2516.7	2532.1	2522.8	2522.8	2538.2	2532.1	2529.0	2538.2
7.5°	2488.9	2492.0	2498.2	2495.1	2507.4	2501.3	2504.3	2519.7	2513.6	2513.6	2522.8
10°	2455.1	2461.2	2467.4	2467.4	2482.8	2476.6	2476.6	2495.1	2488.9	2492.0	2504.3
12.5°	2415.0	2424.3	2433.5	2436.6	2452.0	2442.7	2445.8	2467.4	2464.3	2467.4	2479.7
15°	2371.9	2384.2	2393.4	2393.4	2411.9	2402.7	2411.9	2433.5	2427.3	2439.7	2455.1
17.5°	2322.6	2334.9	2347.2	2350.3	2368.8	2362.6	2375.0	2396.5	2396.5	2402.7	2421.2
20°	2276.4	2291.8	2298.0	2307.2	2325.7	2322.6	2328.8	2353.4	2353.4	2362.6	2381.1
22.5°	2214.8	2230.2	2242.5	2251.8	2267.2	2267.2	2276.4	2298.0	2298.0	2304.1	2322.6
25°	2147.0	2165.5	2174.7	2184.0	2199.4	2196.3	2205.5	2224.0	2227.1	2233.3	2251.8
27.5°	2060.8	2076.2	2088.5	2094.7	2116.2	2103.9	2113.1	2134.7	2131.6	2137.8	2153.2
30°	1953.0	1968.4	1980.7	1980.7	1999.2	1999.2	2008.4	2017.6	2017.6	2023.8	2036.1
32.5°	1826.7	1845.1	1845.1	1854.4	1866.7	1854.4	1866.7	1879.0	1872.9	1882.1	1891.3
35°	1681.9	1691.1	1694.2	1694.2	1703.4	1700.4	1697.3	1706.5	1700.4	1715.8	1725.0
37.5°	1506.3	1518.6	1512.5	1518.6	1515.5	1506.3	1506.3	1521.7	1509.4	1512.5	1521.7
40°	1336.9	1336.9	1333.8	1318.4	1321.5	1312.2	1309.2	1312.2	1299.9	1296.8	1309.2
42.5°	1161.3	1158.2	1149.0	1127.4	1130.5	1115.1	1102.8	1102.8	1096.6	1093.5	1096.6
45°	1004.2	995.0	979.6	954.9	948.8	936.4	911.8	905.6	896.4	896.4	899.5
47.5°	859.4	847.1	822.5	794.7	779.3	763.9	739.3	730.0	714.6	708.5	714.6
50°	739.3	717.7	686.9	646.9	631.5	613.0	588.4	572.9	557.5	551.4	548.3
52.5°	628.4	597.6	566.8	517.5	505.2	486.7	452.8	437.4	422.0	409.7	409.7
55°	532.9	505.2	462.1	415.9	397.4	378.9	345.0	323.4	308.0	301.9	295.7
57.5°	446.7	415.9	375.8	326.5	308.0	289.6	255.7	234.1	218.7	209.5	203.3
60°	375.8	341.9	301.9	258.8	237.2	218.7	184.8	163.3	147.9	138.6	132.5
62.5°	308.0	280.3	240.3	200.2	181.7	163.3	135.5	114.0	98.6	92.4	83.2
65°	258.8	231.0	194.1	160.2	144.8	126.3	101.7	83.2	70.8	61.6	55.4
67.5°	209.5	187.9	157.1	126.3	110.9	98.6	77.0	61.6	49.3	43.1	40.0
70°	166.3	144.8	120.1	95.5	86.3	73.9	58.5	43.1	37.0	30.8	27.7
72.5°	123.2	107.8	89.3	70.8	61.6	55.4	40.0	33.9	24.6	21.6	18.5
75°	89.3	77.0	64.7	49.3	43.1	40.0	30.8	21.6	18.5	15.4	12.3
77.5°	61.6	55.4	43.1	33.9	30.8	27.7	21.6	15.4	12.3	9.2	9.2
80°	40.0	33.9	27.7	21.6	21.6	18.5	12.3	9.2	9.2	6.2	6.2
82.5°	24.6	21.6	18.5	15.4	12.3	12.3	9.2	6.2	6.2	3.1	3.1
85°	15.4	12.3	9.2	9.2	6.2	6.2	6.2	3.1	3.1	3.1	3.1
87.5°	6.2	6.2	6.2	3.1	3.1	3.1	3.1	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°	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5
2.5°	2547.5	2547.5	2553.6	2544.4	2550.5	2550.5	2556.7	2544.4	2550.5	2553.6	2559.8
5°	2535.1	2538.2	2544.4	2541.3	2544.4	2544.4	2550.5	2535.1	2547.5	2547.5	2556.7
7.5°	2522.8	2522.8	2529.0	2525.9	2532.1	2535.1	2541.3	2529.0	2541.3	2541.3	2550.5
10°	2507.4	2507.4	2516.7	2513.6	2522.8	2525.9	2535.1	2522.8	2535.1	2538.2	2547.5
12.5°	2485.9	2488.9	2498.2	2498.2	2507.4	2513.6	2522.8	2516.7	2532.1	2535.1	2547.5
15°	2461.2	2467.4	2479.7	2476.6	2485.9	2495.1	2507.4	2498.2	2519.7	2525.9	2538.2
17.5°	2430.4	2436.6	2445.8	2445.8	2455.1	2461.2	2476.6	2470.5	2488.9	2492.0	2507.4
20°	2384.2	2393.4	2405.8	2402.7	2411.9	2418.1	2430.4	2424.3	2442.7	2448.9	2464.3
22.5°	2328.8	2334.9	2344.2	2344.2	2353.4	2359.6	2371.9	2362.6	2381.1	2384.2	2396.5
25°	2254.8	2261.0	2267.2	2270.2	2279.5	2282.6	2288.7	2282.6	2298.0	2301.0	2316.4
27.5°	2159.3	2162.4	2171.7	2171.7	2177.8	2180.9	2190.1	2177.8	2199.4	2199.4	2208.6
30°	2045.4	2042.3	2054.6	2048.4	2054.6	2054.6	2063.8	2057.7	2073.1	2066.9	2076.2
32.5°	1894.4	1900.6	1900.6	1894.4	1906.7	1903.7	1903.7	1897.5	1906.7	1909.8	1916.0
35°	1718.8	1728.1	1728.1	1731.2	1734.2	1725.0	1728.1	1709.6	1725.0	1728.1	1731.2
37.5°	1527.9	1518.6	1524.8	1515.5	1530.9	1512.5	1512.5	1500.1	1512.5	1512.5	1515.5
40°	1309.2	1306.1	1312.2	1306.1	1303.0	1299.9	1293.8	1284.5	1296.8	1290.7	1299.9
42.5°	1102.8	1099.7	1099.7	1093.5	1090.5	1090.5	1084.3	1078.1	1075.0	1075.0	1090.5
45°	890.2	896.4	890.2	887.1	893.3	887.1	890.2	877.9	884.1	877.9	884.1
47.5°	711.6	714.6	708.5	702.3	711.6	702.3	702.3	693.1	705.4	705.4	699.2
50°	551.4	548.3	542.1	548.3	545.2	545.2	545.2	536.0	542.1	532.9	539.1
52.5°	406.6	403.5	403.5	400.4	403.5	400.4	400.4	397.4	397.4	394.3	397.4
55°	295.7	292.6	286.5	286.5	286.5	289.6	286.5	283.4	283.4	280.3	283.4
57.5°	200.2	194.1	194.1	194.1	194.1	191.0	191.0	187.9	191.0	187.9	191.0
60°	129.4	129.4	123.2	123.2	123.2	123.2	123.2	120.1	123.2	123.2	123.2
62.5°	80.1	80.1	77.0	73.9	77.0	73.9	73.9	73.9	77.0	73.9	77.0
65°	52.4	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
67.5°	37.0	33.9	33.9	33.9	33.9	33.9	33.9	30.8	33.9	33.9	33.9
70°	24.6	24.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
72.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
75°	12.3	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
77.5°	9.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
80°	6.2	6.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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: P252305

CATALOG NUMBER: LD6B50D010TE EU6B30509035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5	2550.5
2.5°	2550.5	2553.6	2547.5	2550.5	2544.4	2550.5	2553.6	2559.8
5°	2544.4	2547.5	2541.3	2547.5	2541.3	2547.5	2550.5	2556.7
7.5°	2538.2	2544.4	2538.2	2544.4	2538.2	2544.4	2547.5	2553.6
10°	2538.2	2547.5	2541.3	2550.5	2541.3	2547.5	2553.6	2556.7
12.5°	2538.2	2547.5	2544.4	2550.5	2547.5	2553.6	2559.8	2565.9
15°	2532.1	2541.3	2535.1	2544.4	2541.3	2544.4	2556.7	2556.7
17.5°	2498.2	2507.4	2507.4	2513.6	2513.6	2522.8	2529.0	2535.1
20°	2455.1	2464.3	2461.2	2470.5	2470.5	2479.7	2485.9	2492.0
22.5°	2390.4	2402.7	2399.6	2408.9	2405.8	2411.9	2424.3	2421.2
25°	2307.2	2322.6	2319.5	2325.7	2322.6	2322.6	2328.8	2331.8
27.5°	2205.5	2214.8	2211.7	2217.9	2211.7	2217.9	2224.0	2227.1
30°	2073.1	2079.3	2076.2	2079.3	2076.2	2082.3	2085.4	2091.6
32.5°	1912.9	1922.2	1912.9	1919.1	1916.0	1916.0	1928.3	1922.2
35°	1721.9	1725.0	1728.1	1728.1	1721.9	1725.0	1731.2	1731.2
37.5°	1509.4	1524.8	1506.3	1515.5	1512.5	1512.5	1512.5	1521.7
40°	1287.6	1290.7	1284.5	1284.5	1284.5	1281.4	1293.8	1290.7
42.5°	1078.1	1081.2	1078.1	1068.9	1072.0	1072.0	1081.2	1068.9
45°	874.8	881.0	877.9	877.9	871.7	871.7	874.8	868.7
47.5°	693.1	699.2	690.0	693.1	686.9	693.1	690.0	696.2
50°	526.7	532.9	529.8	532.9	532.9	526.7	536.0	523.7
52.5°	394.3	397.4	394.3	391.2	388.1	388.1	394.3	391.2
55°	280.3	277.2	277.2	277.2	280.3	280.3	277.2	274.2
57.5°	187.9	187.9	184.8	184.8	187.9	181.7	184.8	181.7
60°	120.1	120.1	120.1	120.1	117.1	120.1	120.1	120.1
62.5°	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
65°	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
67.5°	30.8	33.9	33.9	33.9	30.8	30.8	30.8	30.8
70°	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
72.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
75°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
77.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
80°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	3.1	3.1	3.1	3.1	0.0	0.0	0.0
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)