

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: P252747

Luminaire Tested: **LD6B70D010TE EU6B60709035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252747
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: LD6B70D010TE EU6B60709035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE 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: 5732.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

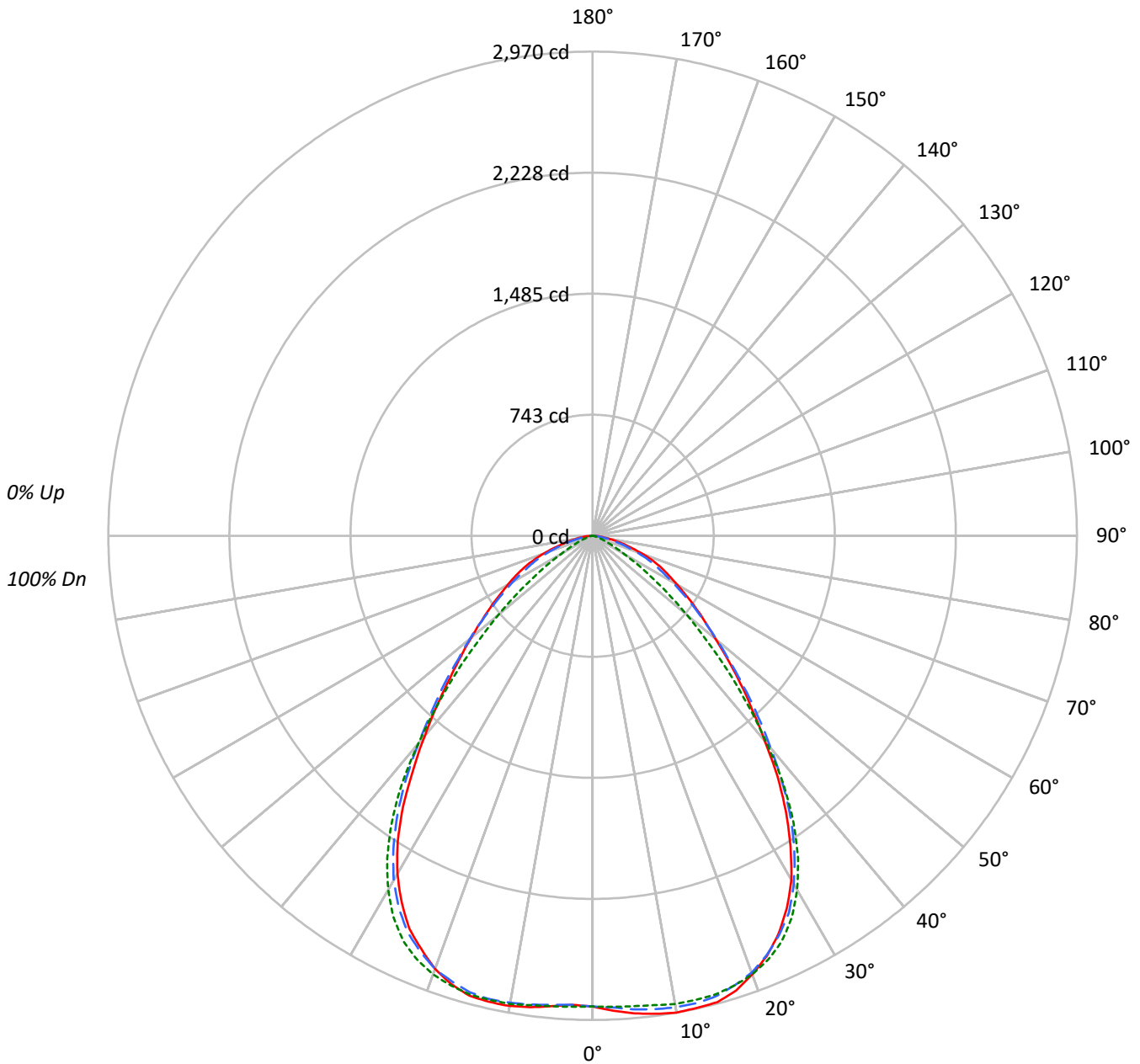
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	188408	188408	188408
5°	192606	189665	189665
10°	196727	193210	194024
15°	200019	196710	197263
20°	198799	198799	196244
25°	194065	197592	191423
30°	183708	188936	180326
35°	164616	171123	161359
40°	139850	141588	136367
45°	118338	108161	114195
50°	99913	76285	98675
55°	87810	49251	86877
60°	77819	29319	78354
65°	71891	17660	71891
70°	62337	10129	60773
75°	49431	6176	46331
80°	36819	4621	35279
85°	33610	3069	30541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.0	4.9
10°-20°	822.9	14.4
20°-30°	1237.6	21.6
30°-40°	1301.2	22.7
40°-50°	972.0	17.0
50°-60°	605.1	10.6
60°-70°	344.1	6.0
70°-80°	141.7	2.5
80°-90°	29.3	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°	2338.5	40.8
0°-40°	3639.7	63.5
0°-60°	5216.8	91.0
0°-90°	5732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5732.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2888	2888	2888	2888	2888	
5°	2941	2916	2896	2888	2896	281
15°	2961	2925	2912	2900	2921	833
25°	2696	2704	2745	2684	2659	1234
35°	2067	2120	2149	2087	2026	1283
45°	1283	1311	1172	1287	1238	994
55°	772	756	433	743	764	694
65°	466	417	114	417	466	459
75°	196	155	24	151	184	213
85°	45	29	4	24	41	50
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°	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9
2.5°	2916.5	2912.4	2916.5	2908.3	2904.2	2904.2	2908.3	2900.2	2896.1	2900.2	2896.1
5°	2941.0	2932.8	2936.9	2932.8	2924.7	2924.7	2928.8	2916.5	2916.5	2920.6	2916.5
7.5°	2957.3	2957.3	2957.3	2949.2	2945.1	2941.0	2949.2	2936.9	2932.8	2932.8	2928.8
10°	2969.6	2965.5	2969.6	2961.4	2953.3	2949.2	2957.3	2949.2	2941.0	2949.2	2936.9
12.5°	2965.5	2965.5	2965.5	2961.4	2953.3	2949.2	2957.3	2945.1	2941.0	2945.1	2936.9
15°	2961.4	2949.2	2953.3	2949.2	2936.9	2936.9	2941.0	2928.8	2920.6	2932.8	2924.7
17.5°	2924.7	2916.5	2920.6	2912.4	2904.2	2900.2	2904.2	2900.2	2892.0	2900.2	2892.0
20°	2863.4	2863.4	2867.5	2859.3	2851.1	2847.1	2855.2	2847.1	2838.9	2851.1	2851.1
22.5°	2789.9	2789.9	2789.9	2785.8	2781.7	2781.7	2781.7	2777.6	2773.5	2781.7	2785.8
25°	2695.9	2691.8	2695.9	2700.0	2695.9	2691.8	2695.9	2695.9	2687.8	2704.1	2704.1
27.5°	2577.5	2577.5	2585.6	2581.5	2581.5	2577.5	2585.6	2585.6	2581.5	2593.8	2606.1
30°	2438.6	2430.4	2438.6	2438.6	2442.7	2442.7	2446.8	2446.8	2446.8	2459.0	2467.2
32.5°	2258.9	2262.9	2275.2	2271.1	2267.0	2279.3	2279.3	2287.4	2291.5	2299.7	2303.8
35°	2066.9	2071.0	2071.0	2075.0	2083.2	2075.0	2095.5	2091.4	2095.5	2111.8	2120.0
37.5°	1862.6	1850.4	1870.8	1862.6	1866.7	1866.7	1874.9	1879.0	1891.2	1911.7	1911.7
40°	1642.1	1646.1	1654.3	1658.4	1662.5	1662.5	1662.5	1674.7	1678.8	1703.3	1699.2
42.5°	1450.1	1450.1	1458.2	1462.3	1462.3	1462.3	1462.3	1474.6	1482.8	1490.9	1499.1
45°	1282.6	1270.4	1278.5	1278.5	1286.7	1282.6	1290.8	1298.9	1303.0	1315.3	1311.2
47.5°	1123.3	1119.2	1123.3	1127.4	1123.3	1127.4	1131.5	1135.6	1139.6	1139.6	1139.6
50°	984.4	984.4	988.5	992.6	992.6	992.6	992.6	996.7	996.7	1004.8	996.7
52.5°	870.0	874.1	874.1	870.0	874.1	874.1	878.2	878.2	874.1	874.1	861.9
55°	772.0	767.9	772.0	767.9	772.0	772.0	767.9	767.9	763.8	759.8	755.7
57.5°	678.1	678.1	678.1	678.1	674.0	678.1	674.0	669.9	669.9	661.7	649.5
60°	596.4	596.4	596.4	596.4	596.4	592.3	596.4	592.3	584.1	575.9	559.6
62.5°	526.9	522.8	526.9	522.8	522.8	518.8	518.8	514.7	506.5	498.3	482.0
65°	465.7	469.7	465.7	465.7	461.6	457.5	457.5	453.4	441.2	433.0	416.6
67.5°	400.3	396.2	396.2	396.2	392.1	392.1	392.1	384.0	375.8	363.5	347.2
70°	326.8	326.8	326.8	322.7	322.7	318.6	318.6	314.5	306.4	298.2	277.8
72.5°	257.3	257.3	257.3	249.2	253.3	249.2	249.2	241.0	236.9	224.7	212.4
75°	196.1	196.1	192.0	192.0	187.9	183.8	183.8	179.7	175.6	167.5	155.2
77.5°	143.0	143.0	143.0	138.9	134.8	130.7	130.7	126.6	122.5	118.5	110.3
80°	98.0	98.0	98.0	98.0	93.9	89.9	89.9	85.8	85.8	81.7	73.5
82.5°	65.4	65.4	65.4	65.4	61.3	61.3	61.3	57.2	53.1	53.1	44.9
85°	44.9	44.9	40.8	40.8	40.8	40.8	36.8	36.8	32.7	28.6	28.6
87.5°	24.5	24.5	24.5	24.5	20.4	20.4	20.4	20.4	16.3	16.3	12.3
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°	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9
2.5°	2908.3	2908.3	2904.2	2892.0	2896.1	2892.0	2896.1	2892.0	2879.7	2892.0	2879.7
5°	2924.7	2928.8	2920.6	2904.2	2908.3	2904.2	2904.2	2900.2	2887.9	2896.1	2887.9
7.5°	2941.0	2936.9	2932.8	2916.5	2920.6	2916.5	2916.5	2908.3	2896.1	2904.2	2892.0
10°	2949.2	2949.2	2941.0	2924.7	2924.7	2920.6	2924.7	2920.6	2904.2	2916.5	2908.3
12.5°	2949.2	2945.1	2945.1	2924.7	2928.8	2924.7	2928.8	2920.6	2908.3	2916.5	2912.4
15°	2936.9	2936.9	2932.8	2912.4	2916.5	2916.5	2920.6	2912.4	2900.2	2912.4	2904.2
17.5°	2912.4	2912.4	2908.3	2892.0	2900.2	2900.2	2904.2	2896.1	2883.8	2892.0	2892.0
20°	2863.4	2867.5	2867.5	2855.2	2863.4	2863.4	2867.5	2863.4	2859.3	2863.4	2855.2
22.5°	2806.2	2814.4	2814.4	2802.1	2810.3	2810.3	2822.5	2818.5	2810.3	2814.4	2810.3
25°	2720.4	2728.6	2736.8	2728.6	2736.8	2736.8	2749.0	2744.9	2736.8	2744.9	2732.7
27.5°	2622.4	2626.5	2634.7	2626.5	2638.7	2634.7	2646.9	2642.8	2630.6	2642.8	2638.7
30°	2483.5	2499.9	2512.1	2499.9	2512.1	2512.1	2520.3	2516.2	2512.1	2508.0	2508.0
32.5°	2328.3	2344.6	2344.6	2340.6	2348.7	2348.7	2352.8	2344.6	2340.6	2344.6	2348.7
35°	2136.3	2144.5	2152.7	2148.6	2152.7	2156.7	2152.7	2156.7	2144.5	2148.6	2148.6
37.5°	1928.0	1936.2	1936.2	1923.9	1932.1	1932.1	1923.9	1923.9	1915.7	1923.9	1907.6
40°	1707.4	1699.2	1703.3	1695.2	1687.0	1687.0	1682.9	1666.6	1658.4	1662.5	1666.6
42.5°	1490.9	1490.9	1478.7	1458.2	1437.8	1437.8	1425.6	1417.4	1401.1	1409.2	1405.1
45°	1307.1	1286.7	1270.4	1237.7	1225.4	1217.2	1196.8	1176.4	1168.2	1172.3	1168.2
47.5°	1131.5	1115.1	1074.3	1029.4	1017.1	1004.8	980.3	955.8	947.7	939.5	939.5
50°	984.4	955.8	910.9	861.9	841.5	821.0	788.4	763.8	747.5	751.6	751.6
52.5°	849.6	816.9	763.8	702.6	678.1	653.6	625.0	596.4	584.1	580.0	580.0
55°	731.2	694.4	641.3	571.9	551.4	522.8	486.1	453.4	437.1	433.0	441.2
57.5°	625.0	592.3	531.0	461.6	437.1	408.5	371.7	343.1	322.7	318.6	322.7
60°	539.2	494.3	441.2	375.8	343.1	318.6	277.8	253.3	232.8	224.7	228.7
62.5°	453.4	412.6	359.5	294.1	269.6	245.1	208.3	179.7	163.4	159.3	163.4
65°	388.0	347.2	298.2	241.0	216.5	192.0	159.3	130.7	118.5	114.4	118.5
67.5°	322.7	285.9	245.1	192.0	171.6	151.1	118.5	98.0	81.7	77.6	81.7
70°	261.4	228.7	187.9	151.1	130.7	114.4	89.9	69.4	57.2	53.1	57.2
72.5°	196.1	171.6	143.0	110.3	98.0	85.8	65.4	49.0	40.8	36.8	40.8
75°	143.0	122.5	102.1	77.6	69.4	61.3	44.9	32.7	28.6	24.5	28.6
77.5°	98.0	85.8	69.4	53.1	44.9	40.8	28.6	24.5	20.4	16.3	16.3
80°	65.4	57.2	44.9	36.8	32.7	28.6	20.4	16.3	12.3	12.3	12.3
82.5°	40.8	32.7	28.6	20.4	16.3	16.3	12.3	8.2	8.2	8.2	8.2
85°	24.5	20.4	16.3	12.3	8.2	8.2	4.1	4.1	4.1	4.1	4.1
87.5°	12.3	8.2	8.2	4.1	4.1	4.1	4.1	4.1	0.0	0.0	4.1
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°	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9
2.5°	2887.9	2879.7	2879.7	2883.8	2887.9	2892.0	2883.8	2879.7	2879.7	2892.0	2883.8
5°	2887.9	2883.8	2883.8	2883.8	2892.0	2896.1	2887.9	2883.8	2887.9	2900.2	2896.1
7.5°	2900.2	2892.0	2896.1	2896.1	2900.2	2908.3	2900.2	2896.1	2900.2	2912.4	2904.2
10°	2908.3	2900.2	2904.2	2900.2	2912.4	2916.5	2908.3	2904.2	2908.3	2924.7	2920.6
12.5°	2912.4	2908.3	2908.3	2904.2	2916.5	2920.6	2912.4	2908.3	2912.4	2924.7	2920.6
15°	2904.2	2900.2	2900.2	2900.2	2908.3	2916.5	2904.2	2900.2	2900.2	2912.4	2908.3
17.5°	2887.9	2879.7	2879.7	2879.7	2883.8	2887.9	2875.6	2871.6	2867.5	2879.7	2875.6
20°	2859.3	2851.1	2843.0	2843.0	2847.1	2847.1	2838.9	2826.6	2826.6	2830.7	2822.5
22.5°	2806.2	2802.1	2794.0	2789.9	2798.0	2794.0	2777.6	2765.4	2761.3	2765.4	2757.2
25°	2732.7	2724.5	2720.4	2716.3	2720.4	2716.3	2700.0	2683.7	2683.7	2683.7	2671.4
27.5°	2630.6	2622.4	2618.3	2618.3	2622.4	2614.2	2597.9	2581.5	2573.4	2573.4	2561.1
30°	2499.9	2499.9	2495.8	2491.7	2487.6	2487.6	2463.1	2446.8	2438.6	2442.7	2434.5
32.5°	2340.6	2336.5	2332.4	2320.1	2324.2	2320.1	2299.7	2287.4	2275.2	2267.0	2262.9
35°	2136.3	2136.3	2132.2	2132.2	2132.2	2128.1	2107.7	2095.5	2087.3	2083.2	2071.0
37.5°	1911.7	1907.6	1903.5	1903.5	1903.5	1903.5	1891.2	1879.0	1879.0	1874.9	1866.7
40°	1658.4	1662.5	1666.6	1662.5	1674.7	1687.0	1670.7	1662.5	1658.4	1670.7	1654.3
42.5°	1413.3	1409.2	1429.7	1433.7	1433.7	1454.2	1458.2	1462.3	1458.2	1466.4	1466.4
45°	1176.4	1172.3	1192.7	1200.9	1221.3	1245.8	1258.1	1278.5	1286.7	1294.9	1286.7
47.5°	951.7	968.1	984.4	1004.8	1021.2	1062.0	1086.5	1107.0	1115.1	1127.4	1127.4
50°	763.8	780.2	808.8	825.1	845.5	894.6	935.4	964.0	980.3	992.6	988.5
52.5°	588.2	616.8	653.6	669.9	698.5	755.7	800.6	833.3	853.7	866.0	870.0
55°	453.4	477.9	514.7	539.2	567.8	629.0	686.2	723.0	743.4	759.8	767.9
57.5°	334.9	363.5	404.4	424.8	457.5	526.9	575.9	620.9	645.4	665.8	669.9
60°	245.1	273.7	310.4	334.9	367.6	437.1	494.3	535.1	563.7	580.0	588.2
62.5°	175.6	204.2	241.0	265.5	294.1	355.4	412.6	453.4	482.0	502.4	514.7
65°	126.6	155.2	192.0	212.4	236.9	294.1	347.2	388.0	416.6	441.2	449.3
67.5°	93.9	114.4	147.1	167.5	192.0	236.9	281.8	318.6	347.2	367.6	375.8
70°	69.4	85.8	114.4	126.6	143.0	183.8	220.6	253.3	277.8	294.1	302.3
72.5°	49.0	61.3	81.7	93.9	106.2	138.9	167.5	192.0	208.3	224.7	232.8
75°	32.7	40.8	57.2	65.4	73.5	98.0	118.5	138.9	151.1	163.4	167.5
77.5°	20.4	28.6	40.8	44.9	53.1	65.4	81.7	93.9	102.1	110.3	118.5
80°	12.3	16.3	24.5	28.6	32.7	44.9	53.1	61.3	69.4	77.6	81.7
82.5°	8.2	12.3	16.3	16.3	20.4	24.5	32.7	40.8	44.9	49.0	53.1
85°	4.1	4.1	8.2	8.2	12.3	12.3	16.3	20.4	24.5	28.6	32.7
87.5°	4.1	4.1	4.1	4.1	8.2	8.2	12.3	12.3	12.3	16.3	16.3
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: P252747

CATALOG NUMBER: LD6B70D010TE EU6B60709035 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9	2887.9
2.5°	2875.6	2887.9	2875.6	2883.8	2879.7	2879.7	2875.6	2879.7
5°	2887.9	2904.2	2887.9	2900.2	2892.0	2892.0	2892.0	2896.1
7.5°	2900.2	2916.5	2904.2	2916.5	2912.4	2908.3	2908.3	2916.5
10°	2912.4	2924.7	2916.5	2928.8	2924.7	2920.6	2920.6	2928.8
12.5°	2912.4	2928.8	2920.6	2932.8	2928.8	2924.7	2924.7	2928.8
15°	2900.2	2920.6	2908.3	2920.6	2916.5	2912.4	2912.4	2920.6
17.5°	2863.4	2879.7	2871.6	2879.7	2879.7	2875.6	2879.7	2883.8
20°	2814.4	2826.6	2818.5	2826.6	2826.6	2818.5	2822.5	2826.6
22.5°	2744.9	2757.2	2749.0	2757.2	2753.1	2749.0	2749.0	2744.9
25°	2659.2	2675.5	2663.2	2671.4	2663.2	2655.1	2655.1	2659.2
27.5°	2553.0	2565.2	2548.9	2557.0	2548.9	2540.7	2540.7	2536.6
30°	2414.1	2418.2	2405.9	2414.1	2405.9	2401.8	2393.7	2393.7
32.5°	2246.6	2250.7	2238.4	2238.4	2230.3	2230.3	2213.9	2226.2
35°	2050.5	2054.6	2050.5	2046.4	2034.2	2030.1	2026.0	2026.0
37.5°	1846.3	1846.3	1834.0	1830.0	1821.8	1813.6	1817.7	1805.5
40°	1638.0	1633.9	1621.6	1625.7	1621.6	1609.4	1605.3	1601.2
42.5°	1441.9	1441.9	1429.7	1433.7	1425.6	1421.5	1409.2	1413.3
45°	1270.4	1270.4	1258.1	1258.1	1254.0	1241.8	1245.8	1237.7
47.5°	1115.1	1115.1	1111.0	1111.0	1098.8	1094.7	1094.7	1094.7
50°	980.3	980.3	980.3	980.3	976.3	972.2	968.1	972.2
52.5°	866.0	874.1	870.0	870.0	866.0	861.9	857.8	857.8
55°	763.8	767.9	767.9	772.0	767.9	763.8	767.9	763.8
57.5°	674.0	682.1	682.1	682.1	682.1	682.1	678.1	674.0
60°	596.4	600.5	600.5	604.5	604.5	604.5	600.5	600.5
62.5°	518.8	526.9	531.0	531.0	535.1	531.0	531.0	531.0
65°	457.5	465.7	469.7	465.7	469.7	469.7	465.7	465.7
67.5°	384.0	392.1	392.1	392.1	392.1	396.2	392.1	392.1
70°	310.4	318.6	314.5	318.6	318.6	318.6	318.6	318.6
72.5°	236.9	241.0	245.1	245.1	249.2	245.1	245.1	245.1
75°	171.6	179.7	179.7	179.7	179.7	183.8	183.8	183.8
77.5°	122.5	126.6	126.6	130.7	130.7	130.7	130.7	134.8
80°	85.8	85.8	89.9	89.9	93.9	93.9	93.9	93.9
82.5°	57.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3
85°	32.7	36.8	36.8	36.8	36.8	40.8	40.8	40.8
87.5°	20.4	20.4	20.4	20.4	20.4	20.4	16.3	16.3
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)