

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: P252735

Luminaire Tested: **LD6B60D010TE EU6B60709040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252735
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: LD6B60D010TE EU6B60709040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4838.0 lumens
Efficiency: N/A
Efficacy: 77.4 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

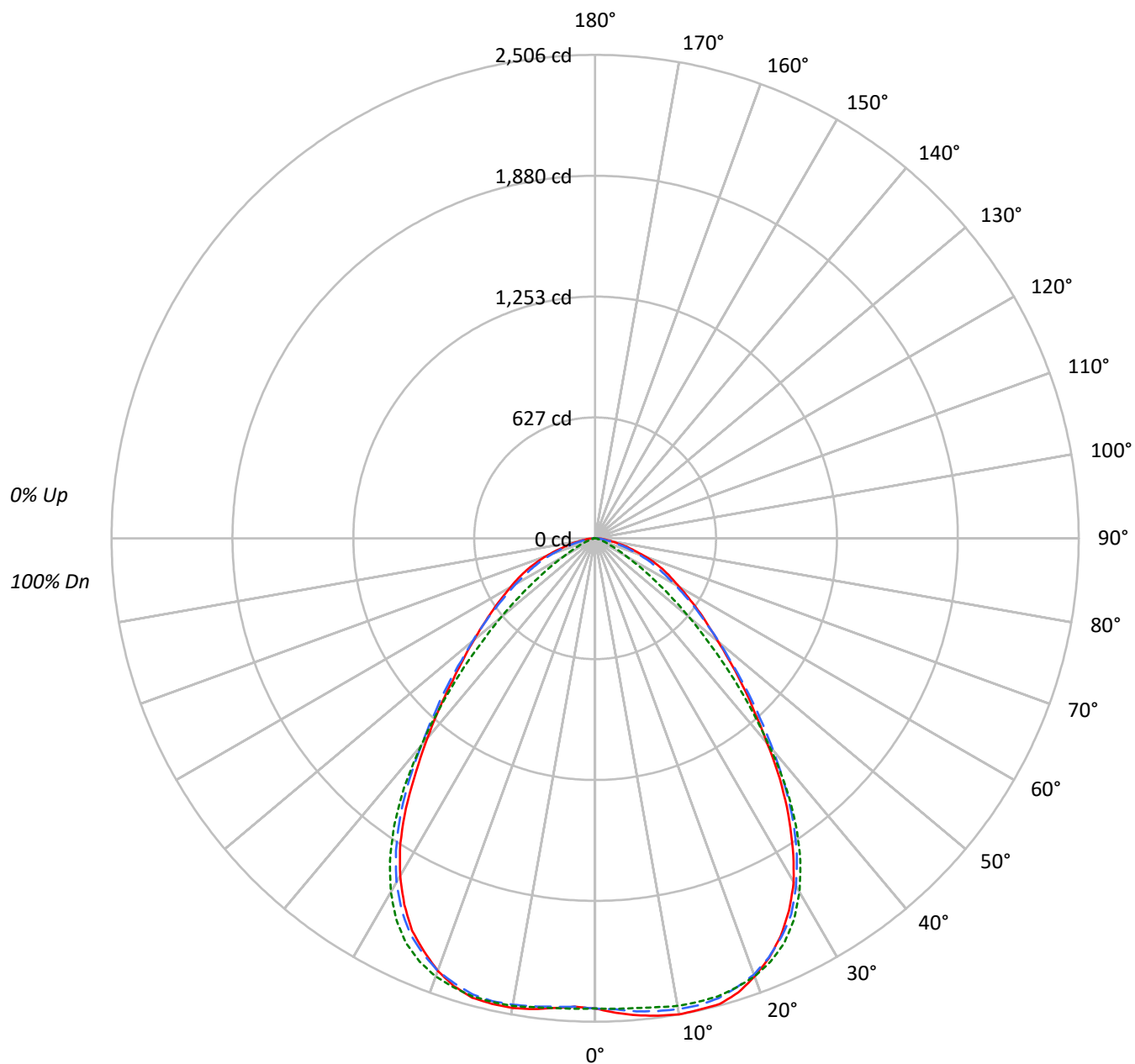
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	159024	159024	159024
5°	162565	160083	160083
10°	166042	163074	163763
15°	168821	166032	166498
20°	167793	167793	165640
25°	163795	166775	161563
30°	155051	159473	152196
35°	138939	144435	136191
40°	118040	119504	115101
45°	99885	91295	96379
50°	84333	64389	83278
55°	74115	41573	73330
60°	65684	24739	66128
65°	60668	14897	60668
70°	52609	8546	51293
75°	41718	5218	39096
80°	31071	3870	29793
85°	28370	2545	25825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.7	4.9
10°-20°	694.5	14.4
20°-30°	1044.6	21.6
30°-40°	1098.2	22.7
40°-50°	820.4	17.0
50°-60°	510.8	10.6
60°-70°	290.5	6.0
70°-80°	119.6	2.5
80°-90°	24.7	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°	1973.8	40.8
0°-40°	3072.0	63.5
0°-60°	4403.2	91.0
0°-90°	4838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4838.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2438	2438	2438	2438	2438	
5°	2482	2462	2444	2438	2444	238
15°	2500	2468	2458	2448	2465	703
25°	2275	2282	2317	2265	2244	1042
35°	1744	1789	1814	1762	1710	1083
45°	1083	1107	990	1086	1045	839
55°	652	638	366	628	645	586
65°	393	352	96	352	393	387
75°	166	131	21	128	155	180
85°	38	24	3	21	34	42
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°	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5
2.5°	2461.6	2458.2	2461.6	2454.7	2451.3	2451.3	2454.7	2447.8	2444.4	2447.8	2444.4
5°	2482.3	2475.4	2478.9	2475.4	2468.5	2468.5	2472.0	2461.6	2461.6	2465.1	2461.6
7.5°	2496.1	2496.1	2496.1	2489.2	2485.8	2482.3	2489.2	2478.9	2475.4	2475.4	2472.0
10°	2506.4	2503.0	2506.4	2499.5	2492.7	2489.2	2496.1	2489.2	2482.3	2489.2	2478.9
12.5°	2503.0	2503.0	2503.0	2499.5	2492.7	2489.2	2496.1	2485.8	2482.3	2485.8	2478.9
15°	2499.5	2489.2	2492.7	2489.2	2478.9	2478.9	2482.3	2472.0	2465.1	2475.4	2468.5
17.5°	2468.5	2461.6	2465.1	2458.2	2451.3	2447.8	2451.3	2447.8	2440.9	2447.8	2440.9
20°	2416.8	2416.8	2420.2	2413.4	2406.5	2403.0	2409.9	2403.0	2396.1	2406.5	2406.5
22.5°	2354.7	2354.7	2354.7	2351.3	2347.8	2347.8	2347.8	2344.4	2341.0	2347.8	2351.3
25°	2275.4	2272.0	2275.4	2278.9	2275.4	2272.0	2275.4	2275.4	2268.6	2282.3	2282.3
27.5°	2175.5	2175.5	2182.4	2178.9	2178.9	2175.5	2182.4	2182.4	2178.9	2189.3	2199.6
30°	2058.2	2051.4	2058.2	2058.2	2061.7	2061.7	2065.1	2065.1	2065.1	2075.5	2082.4
32.5°	1906.5	1910.0	1920.3	1916.9	1913.4	1923.8	1923.8	1930.7	1934.1	1941.0	1944.5
35°	1744.5	1748.0	1748.0	1751.4	1758.3	1751.4	1768.6	1765.2	1768.6	1782.4	1789.3
37.5°	1572.1	1561.8	1579.0	1572.1	1575.6	1575.6	1582.5	1585.9	1596.3	1613.5	1613.5
40°	1386.0	1389.4	1396.3	1399.7	1403.2	1403.2	1403.2	1413.5	1417.0	1437.7	1434.2
42.5°	1223.9	1223.9	1230.8	1234.3	1234.3	1234.3	1234.3	1244.6	1251.5	1258.4	1265.3
45°	1082.6	1072.2	1079.1	1079.1	1086.0	1082.6	1089.5	1096.4	1099.8	1110.1	1106.7
47.5°	948.1	944.7	948.1	951.6	948.1	951.6	955.0	958.4	961.9	961.9	961.9
50°	830.9	830.9	834.3	837.8	837.8	837.8	837.8	841.2	841.2	848.1	841.2
52.5°	734.3	737.8	737.8	734.3	737.8	737.8	741.2	741.2	737.8	737.8	727.5
55°	651.6	648.2	651.6	648.2	651.6	651.6	648.2	648.2	644.7	641.3	637.8
57.5°	572.3	572.3	572.3	572.3	568.9	572.3	568.9	565.4	565.4	558.5	548.2
60°	503.4	503.4	503.4	503.4	503.4	499.9	503.4	499.9	493.0	486.1	472.3
62.5°	444.7	441.3	444.7	441.3	441.3	437.9	437.9	434.4	427.5	420.6	406.8
65°	393.0	396.5	393.0	393.0	389.6	386.1	386.1	382.7	372.3	365.5	351.7
67.5°	337.9	334.4	334.4	334.4	331.0	331.0	331.0	324.1	317.2	306.8	293.1
70°	275.8	275.8	275.8	272.4	272.4	268.9	268.9	265.5	258.6	251.7	234.4
72.5°	217.2	217.2	217.2	210.3	213.8	210.3	210.3	203.4	200.0	189.6	179.3
75°	165.5	165.5	162.0	162.0	158.6	155.1	155.1	151.7	148.2	141.4	131.0
77.5°	120.7	120.7	120.7	117.2	113.8	110.3	110.3	106.9	103.4	100.0	93.1
80°	82.7	82.7	82.7	82.7	79.3	75.8	75.8	72.4	72.4	69.0	62.1
82.5°	55.2	55.2	55.2	55.2	51.7	51.7	51.7	48.3	44.8	44.8	37.9
85°	37.9	37.9	34.5	34.5	34.5	34.5	31.0	31.0	27.6	24.1	24.1
87.5°	20.7	20.7	20.7	20.7	17.2	17.2	17.2	17.2	13.8	13.8	10.3
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°	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5
2.5°	2454.7	2454.7	2451.3	2440.9	2444.4	2440.9	2444.4	2440.9	2430.6	2440.9	2430.6
5°	2468.5	2472.0	2465.1	2451.3	2454.7	2451.3	2451.3	2447.8	2437.5	2444.4	2437.5
7.5°	2482.3	2478.9	2475.4	2461.6	2465.1	2461.6	2461.6	2454.7	2444.4	2451.3	2440.9
10°	2489.2	2489.2	2482.3	2468.5	2468.5	2465.1	2468.5	2465.1	2451.3	2461.6	2454.7
12.5°	2489.2	2485.8	2485.8	2468.5	2472.0	2468.5	2472.0	2465.1	2454.7	2461.6	2458.2
15°	2478.9	2478.9	2475.4	2458.2	2461.6	2461.6	2465.1	2458.2	2447.8	2458.2	2451.3
17.5°	2458.2	2458.2	2454.7	2440.9	2447.8	2447.8	2451.3	2444.4	2434.0	2440.9	2440.9
20°	2416.8	2420.2	2420.2	2409.9	2416.8	2416.8	2420.2	2416.8	2413.4	2416.8	2409.9
22.5°	2368.5	2375.4	2375.4	2365.1	2372.0	2372.0	2382.3	2378.9	2372.0	2375.4	2372.0
25°	2296.1	2303.0	2309.9	2303.0	2309.9	2309.9	2320.3	2316.8	2309.9	2316.8	2306.5
27.5°	2213.4	2216.8	2223.7	2216.8	2227.2	2223.7	2234.1	2230.6	2220.3	2230.6	2227.2
30°	2096.2	2110.0	2120.3	2110.0	2120.3	2120.3	2127.2	2123.8	2120.3	2116.9	2116.9
32.5°	1965.2	1979.0	1979.0	1975.5	1982.4	1982.4	1985.8	1979.0	1975.5	1979.0	1982.4
35°	1803.1	1810.0	1816.9	1813.5	1816.9	1820.4	1816.9	1820.4	1810.0	1813.5	1813.5
37.5°	1627.3	1634.2	1634.2	1623.8	1630.7	1630.7	1623.8	1623.8	1616.9	1623.8	1610.1
40°	1441.1	1434.2	1437.7	1430.8	1423.9	1423.9	1420.4	1406.6	1399.7	1403.2	1406.6
42.5°	1258.4	1258.4	1248.0	1230.8	1213.6	1213.6	1203.2	1196.3	1182.5	1189.4	1186.0
45°	1103.2	1086.0	1072.2	1044.6	1034.3	1027.4	1010.2	992.9	986.0	989.5	986.0
47.5°	955.0	941.2	906.7	868.8	858.5	848.1	827.4	806.7	799.9	793.0	793.0
50°	830.9	806.7	768.8	727.5	710.2	693.0	665.4	644.7	630.9	634.4	634.4
52.5°	717.1	689.5	644.7	593.0	572.3	551.6	527.5	503.4	493.0	489.6	489.6
55°	617.1	586.1	541.3	482.7	465.4	441.3	410.3	382.7	368.9	365.5	372.3
57.5°	527.5	499.9	448.2	389.6	368.9	344.8	313.7	289.6	272.4	268.9	272.4
60°	455.1	417.2	372.3	317.2	289.6	268.9	234.4	213.8	196.5	189.6	193.1
62.5°	382.7	348.2	303.4	248.2	227.5	206.9	175.8	151.7	137.9	134.5	137.9
65°	327.5	293.1	251.7	203.4	182.7	162.0	134.5	110.3	100.0	96.5	100.0
67.5°	272.4	241.3	206.9	162.0	144.8	127.6	100.0	82.7	69.0	65.5	69.0
70°	220.6	193.1	158.6	127.6	110.3	96.5	75.8	58.6	48.3	44.8	48.3
72.5°	165.5	144.8	120.7	93.1	82.7	72.4	55.2	41.4	34.5	31.0	34.5
75°	120.7	103.4	86.2	65.5	58.6	51.7	37.9	27.6	24.1	20.7	24.1
77.5°	82.7	72.4	58.6	44.8	37.9	34.5	24.1	20.7	17.2	13.8	13.8
80°	55.2	48.3	37.9	31.0	27.6	24.1	17.2	13.8	10.3	10.3	10.3
82.5°	34.5	27.6	24.1	17.2	13.8	13.8	10.3	6.9	6.9	6.9	6.9
85°	20.7	17.2	13.8	10.3	6.9	6.9	3.4	3.4	3.4	3.4	3.4
87.5°	10.3	6.9	6.9	3.4	3.4	3.4	3.4	3.4	0.0	0.0	3.4
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°	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5
2.5°	2437.5	2430.6	2430.6	2434.0	2437.5	2440.9	2434.0	2430.6	2430.6	2440.9	2434.0
5°	2437.5	2434.0	2434.0	2434.0	2440.9	2444.4	2437.5	2434.0	2437.5	2447.8	2444.4
7.5°	2447.8	2440.9	2444.4	2444.4	2447.8	2454.7	2447.8	2444.4	2447.8	2458.2	2451.3
10°	2454.7	2447.8	2451.3	2447.8	2458.2	2461.6	2454.7	2451.3	2454.7	2468.5	2465.1
12.5°	2458.2	2454.7	2454.7	2451.3	2461.6	2465.1	2458.2	2454.7	2458.2	2468.5	2465.1
15°	2451.3	2447.8	2447.8	2447.8	2454.7	2461.6	2451.3	2447.8	2447.8	2458.2	2454.7
17.5°	2437.5	2430.6	2430.6	2430.6	2434.0	2437.5	2427.1	2423.7	2420.2	2430.6	2427.1
20°	2413.4	2406.5	2399.6	2399.6	2403.0	2403.0	2396.1	2385.8	2385.8	2389.2	2382.3
22.5°	2368.5	2365.1	2358.2	2354.7	2361.6	2358.2	2344.4	2334.1	2330.6	2334.1	2327.2
25°	2306.5	2299.6	2296.1	2292.7	2296.1	2292.7	2278.9	2265.1	2265.1	2265.1	2254.8
27.5°	2220.3	2213.4	2209.9	2209.9	2213.4	2206.5	2192.7	2178.9	2172.0	2172.0	2161.7
30°	2110.0	2110.0	2106.5	2103.1	2099.6	2099.6	2078.9	2065.1	2058.2	2061.7	2054.8
32.5°	1975.5	1972.1	1968.6	1958.3	1961.7	1958.3	1941.0	1930.7	1920.3	1913.4	1910.0
35°	1803.1	1803.1	1799.7	1799.7	1799.7	1796.2	1779.0	1768.6	1761.7	1758.3	1748.0
37.5°	1613.5	1610.1	1606.6	1606.6	1606.6	1606.6	1596.3	1585.9	1585.9	1582.5	1575.6
40°	1399.7	1403.2	1406.6	1403.2	1413.5	1423.9	1410.1	1403.2	1399.7	1410.1	1396.3
42.5°	1192.9	1189.4	1206.7	1210.1	1210.1	1227.4	1230.8	1234.3	1230.8	1237.7	1237.7
45°	992.9	989.5	1006.7	1013.6	1030.8	1051.5	1061.9	1079.1	1086.0	1092.9	1086.0
47.5°	803.3	817.1	830.9	848.1	861.9	896.4	917.1	934.3	941.2	951.6	951.6
50°	644.7	658.5	682.6	696.4	713.7	755.0	789.5	813.6	827.4	837.8	834.3
52.5°	496.5	520.6	551.6	565.4	589.5	637.8	675.7	703.3	720.6	730.9	734.3
55°	382.7	403.4	434.4	455.1	479.2	530.9	579.2	610.2	627.5	641.3	648.2
57.5°	282.7	306.8	341.3	358.6	386.1	444.7	486.1	524.0	544.7	562.0	565.4
60°	206.9	231.0	262.0	282.7	310.3	368.9	417.2	451.6	475.8	489.6	496.5
62.5°	148.2	172.4	203.4	224.1	248.2	299.9	348.2	382.7	406.8	424.1	434.4
65°	106.9	131.0	162.0	179.3	200.0	248.2	293.1	327.5	351.7	372.3	379.2
67.5°	79.3	96.5	124.1	141.4	162.0	200.0	237.9	268.9	293.1	310.3	317.2
70°	58.6	72.4	96.5	106.9	120.7	155.1	186.2	213.8	234.4	248.2	255.1
72.5°	41.4	51.7	69.0	79.3	89.6	117.2	141.4	162.0	175.8	189.6	196.5
75°	27.6	34.5	48.3	55.2	62.1	82.7	100.0	117.2	127.6	137.9	141.4
77.5°	17.2	24.1	34.5	37.9	44.8	55.2	69.0	79.3	86.2	93.1	100.0
80°	10.3	13.8	20.7	24.1	27.6	37.9	44.8	51.7	58.6	65.5	69.0
82.5°	6.9	10.3	13.8	13.8	17.2	20.7	27.6	34.5	37.9	41.4	44.8
85°	3.4	3.4	6.9	6.9	10.3	10.3	13.8	17.2	20.7	24.1	27.6
87.5°	3.4	3.4	3.4	3.4	6.9	6.9	10.3	10.3	10.3	13.8	13.8
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: P252735

CATALOG NUMBER: LD6B60D010TE EU6B60709040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5	2437.5
2.5°	2427.1	2437.5	2427.1	2434.0	2430.6	2430.6	2427.1	2430.6
5°	2437.5	2451.3	2437.5	2447.8	2440.9	2440.9	2440.9	2444.4
7.5°	2447.8	2461.6	2451.3	2461.6	2458.2	2454.7	2454.7	2461.6
10°	2458.2	2468.5	2461.6	2472.0	2468.5	2465.1	2465.1	2472.0
12.5°	2458.2	2472.0	2465.1	2475.4	2472.0	2468.5	2468.5	2472.0
15°	2447.8	2465.1	2454.7	2465.1	2461.6	2458.2	2458.2	2465.1
17.5°	2416.8	2430.6	2423.7	2430.6	2430.6	2427.1	2430.6	2434.0
20°	2375.4	2385.8	2378.9	2385.8	2385.8	2378.9	2382.3	2385.8
22.5°	2316.8	2327.2	2320.3	2327.2	2323.7	2320.3	2320.3	2316.8
25°	2244.4	2258.2	2247.9	2254.8	2247.9	2241.0	2241.0	2244.4
27.5°	2154.8	2165.1	2151.3	2158.2	2151.3	2144.4	2144.4	2141.0
30°	2037.6	2041.0	2030.7	2037.6	2030.7	2027.2	2020.3	2020.3
32.5°	1896.2	1899.7	1889.3	1889.3	1882.4	1882.4	1868.6	1879.0
35°	1730.7	1734.2	1730.7	1727.3	1716.9	1713.5	1710.0	1710.0
37.5°	1558.3	1558.3	1548.0	1544.5	1537.7	1530.8	1534.2	1523.9
40°	1382.5	1379.1	1368.7	1372.2	1368.7	1358.4	1354.9	1351.5
42.5°	1217.0	1217.0	1206.7	1210.1	1203.2	1199.8	1189.4	1192.9
45°	1072.2	1072.2	1061.9	1061.9	1058.4	1048.1	1051.5	1044.6
47.5°	941.2	941.2	937.8	937.8	927.4	924.0	924.0	924.0
50°	827.4	827.4	827.4	827.4	824.0	820.5	817.1	820.5
52.5°	730.9	737.8	734.3	734.3	730.9	727.5	724.0	724.0
55°	644.7	648.2	648.2	651.6	648.2	644.7	648.2	644.7
57.5°	568.9	575.8	575.8	575.8	575.8	575.8	572.3	568.9
60°	503.4	506.8	506.8	510.3	510.3	510.3	506.8	506.8
62.5°	437.9	444.7	448.2	448.2	451.6	448.2	448.2	448.2
65°	386.1	393.0	396.5	393.0	396.5	396.5	393.0	393.0
67.5°	324.1	331.0	331.0	331.0	331.0	334.4	331.0	331.0
70°	262.0	268.9	265.5	268.9	268.9	268.9	268.9	268.9
72.5°	200.0	203.4	206.9	206.9	210.3	206.9	206.9	206.9
75°	144.8	151.7	151.7	151.7	151.7	155.1	155.1	155.1
77.5°	103.4	106.9	106.9	110.3	110.3	110.3	110.3	113.8
80°	72.4	72.4	75.8	75.8	79.3	79.3	79.3	79.3
82.5°	48.3	51.7	51.7	51.7	51.7	51.7	51.7	51.7
85°	27.6	31.0	31.0	31.0	31.0	34.5	34.5	34.5
87.5°	17.2	17.2	17.2	17.2	17.2	17.2	13.8	13.8
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)