

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: P252633

Luminaire Tested: **LD6B60D010TE EU6B60709727 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60709727 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4252.0 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

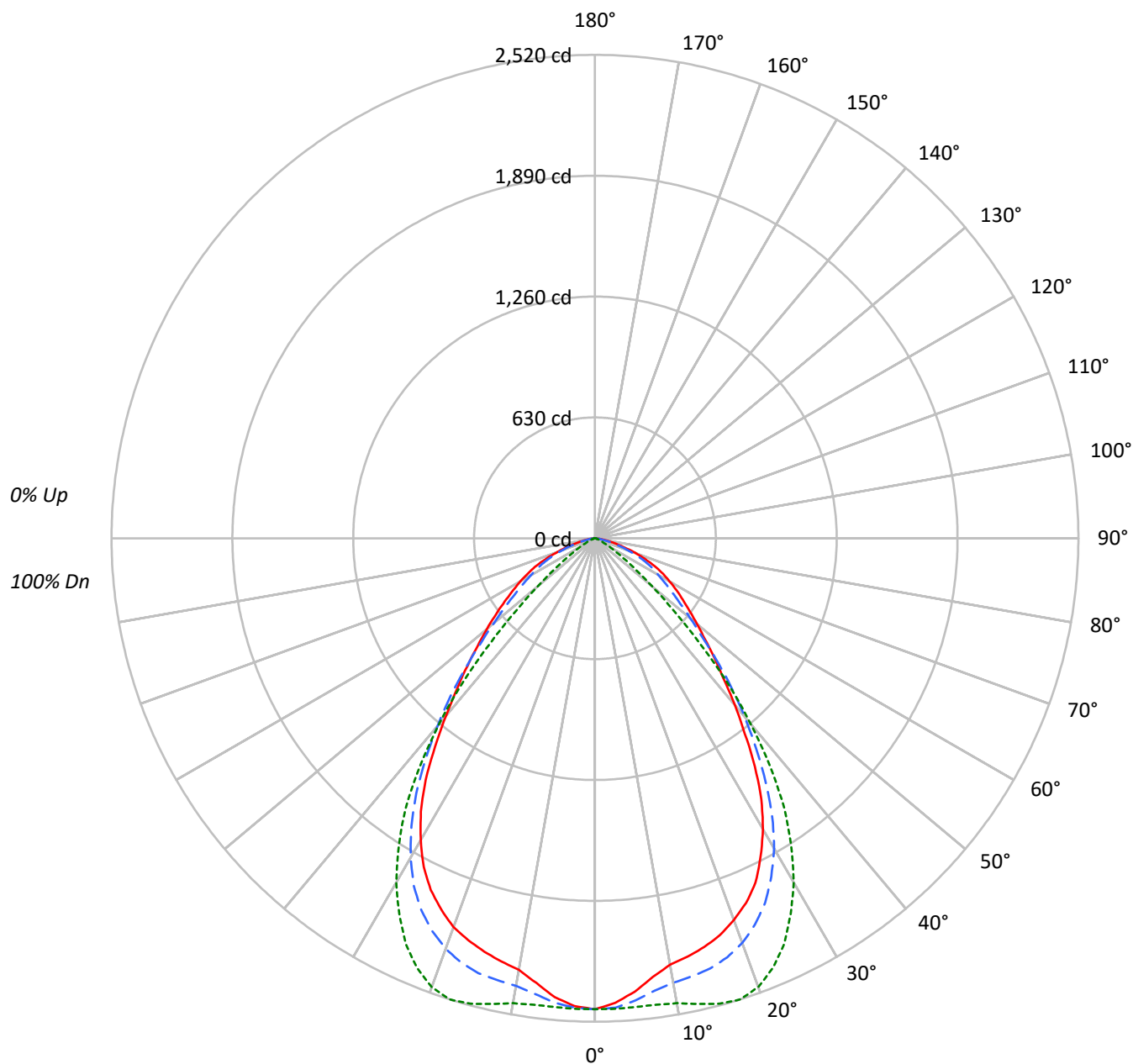
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	108	105	102	109	106	103	100	102	99	97		98	96	94		94
2	104	97	92	87	101	95	91	86	92	88	84		89	86	83		86
3	96	88	81	76	94	86	80	76	84	79	74		81	77	73		79
4	90	80	73	67	88	79	72	67	76	70	66		74	69	65		72
5	84	73	65	60	82	72	65	59	70	64	59		68	63	58		66
6	78	67	59	54	76	66	59	53	64	58	53		63	57	53		61
7	73	61	54	49	72	61	53	48	59	53	48		58	52	48		57
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		53
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	160159	160159	160159
5°	155381	160588	157241
10°	149467	163008	151348
15°	148937	169645	150666
20°	146992	172798	149748
25°	142595	167934	145662
30°	131916	156076	136828
35°	115731	137203	122509
40°	96442	107556	102727
45°	81174	70960	86673
50°	70286	38883	74600
55°	63594	20656	65209
60°	58508	10739	58508
65°	53012	5696	51699
70°	42766	3243	39524
75°	29341	2143	27173
80°	19199	1052	17057
85°	12725	2096	10629



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.9	5.4
10°-20°	661.9	15.6
20°-30°	978.0	23.0
30°-40°	987.9	23.2
40°-50°	680.9	16.0
50°-60°	391.1	9.2
60°-70°	227.6	5.4
70°-80°	83.0	2.0
80°-90°	12.7	0.3
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°	1868.9	44.0
0°-40°	2856.7	67.2
0°-60°	3928.7	92.4
0°-90°	4252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4252.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2455	2455	2455	2455	2455	
5°	2373	2418	2452	2429	2401	223
15°	2205	2322	2512	2347	2231	621
25°	1981	2097	2333	2140	2024	903
35°	1453	1552	1723	1623	1538	902
45°	880	891	769	948	939	684
55°	559	491	182	511	573	503
65°	343	290	37	287	335	336
75°	116	94	8	91	108	131
85°	17	8	3	11	14	22
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°	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9
2.5°	2423.7	2426.5	2429.3	2426.5	2429.3	2440.7	2432.2	2437.9	2437.9	2440.7	2449.2
5°	2372.6	2372.6	2378.3	2375.4	2383.9	2395.3	2386.8	2395.3	2398.1	2403.8	2418.0
7.5°	2307.3	2307.3	2310.2	2310.2	2321.5	2332.9	2327.2	2338.5	2349.9	2361.2	2378.3
10°	2256.2	2261.9	2261.9	2264.7	2276.1	2290.3	2287.4	2301.6	2313.0	2330.0	2352.7
12.5°	2233.5	2236.4	2236.4	2242.0	2253.4	2267.6	2264.7	2278.9	2296.0	2315.8	2338.5
15°	2205.1	2210.8	2208.0	2213.7	2225.0	2239.2	2236.4	2250.6	2270.4	2290.3	2321.5
17.5°	2168.3	2171.1	2173.9	2173.9	2185.3	2196.6	2196.6	2210.8	2233.5	2256.2	2290.3
20°	2117.2	2122.8	2122.8	2125.7	2134.2	2151.2	2148.4	2162.6	2185.3	2208.0	2244.9
22.5°	2057.6	2060.4	2060.4	2063.2	2077.4	2085.9	2088.8	2100.1	2120.0	2145.5	2179.6
25°	1980.9	1983.8	1980.9	1989.5	1995.1	2012.2	2006.5	2020.7	2043.4	2063.2	2097.3
27.5°	1870.3	1875.9	1875.9	1878.8	1893.0	1907.2	1907.2	1921.3	1941.2	1955.4	1989.5
30°	1751.1	1759.6	1751.1	1765.3	1770.9	1782.3	1790.8	1799.3	1816.3	1836.2	1867.4
32.5°	1614.8	1612.0	1614.8	1620.5	1637.5	1646.1	1651.7	1660.2	1677.3	1694.3	1719.8
35°	1453.1	1458.7	1461.6	1472.9	1472.9	1487.1	1490.0	1495.6	1521.2	1532.5	1552.4
37.5°	1282.8	1288.5	1291.3	1297.0	1308.3	1314.0	1322.5	1331.0	1348.1	1367.9	1379.3
40°	1132.4	1132.4	1135.2	1140.9	1149.4	1152.2	1160.8	1172.1	1183.5	1200.5	1211.8
42.5°	990.5	993.3	990.5	996.1	1004.7	1016.0	1013.2	1027.4	1030.2	1041.6	1050.1
45°	879.8	879.8	874.1	879.8	879.8	891.1	888.3	894.0	891.1	896.8	891.1
47.5°	774.8	777.6	774.8	777.6	777.6	777.6	780.5	774.8	777.6	769.1	752.1
50°	692.5	695.3	689.6	692.5	689.6	686.8	689.6	681.1	678.3	666.9	649.9
52.5°	621.5	618.7	615.9	615.9	615.9	613.0	610.2	601.7	593.1	581.8	561.9
55°	559.1	556.3	553.4	553.4	547.7	544.9	544.9	536.4	527.9	513.7	491.0
57.5°	502.3	499.5	496.7	496.7	493.8	488.1	488.1	479.6	468.3	451.2	431.4
60°	448.4	448.4	448.4	445.6	445.6	439.9	439.9	431.4	420.0	403.0	380.3
62.5°	400.2	397.3	397.3	397.3	397.3	394.5	391.6	386.0	374.6	357.6	337.7
65°	343.4	343.4	343.4	343.4	340.6	340.6	340.6	332.0	326.4	309.3	289.5
67.5°	281.0	281.0	281.0	281.0	278.1	281.0	281.0	275.3	269.6	252.6	235.6
70°	224.2	221.4	218.5	221.4	218.5	218.5	221.4	215.7	212.9	198.7	181.6
72.5°	164.6	167.4	164.6	164.6	164.6	161.8	164.6	161.8	156.1	144.7	133.4
75°	116.4	119.2	119.2	116.4	116.4	116.4	113.5	113.5	107.8	99.3	93.7
77.5°	79.5	79.5	79.5	79.5	76.6	76.6	76.6	73.8	71.0	65.3	59.6
80°	51.1	51.1	51.1	51.1	48.2	48.2	48.2	45.4	45.4	39.7	34.1
82.5°	31.2	31.2	31.2	31.2	31.2	31.2	28.4	28.4	25.5	22.7	19.9
85°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	14.2	14.2	11.4	8.5
87.5°	5.7	5.7	8.5	8.5	8.5	8.5	8.5	8.5	5.7	5.7	5.7
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°	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9
2.5°	2443.5	2446.4	2446.4	2446.4	2454.9	2457.7	2449.2	2440.7	2457.7	2454.9	2460.6
5°	2415.2	2423.7	2429.3	2432.2	2440.7	2446.4	2437.9	2435.0	2449.2	2452.1	2454.9
7.5°	2381.1	2395.3	2409.5	2415.2	2426.5	2432.2	2429.3	2429.3	2446.4	2452.1	2452.1
10°	2358.4	2378.3	2395.3	2409.5	2423.7	2432.2	2432.2	2435.0	2454.9	2460.6	2466.2
12.5°	2352.7	2378.3	2401.0	2420.8	2432.2	2446.4	2449.2	2457.7	2477.6	2486.1	2486.1
15°	2338.5	2372.6	2401.0	2426.5	2443.5	2460.6	2466.2	2483.3	2506.0	2511.7	2517.3
17.5°	2313.0	2347.0	2381.1	2412.3	2435.0	2449.2	2466.2	2483.3	2511.7	2520.2	2523.0
20°	2267.6	2307.3	2341.4	2372.6	2395.3	2415.2	2432.2	2452.1	2477.6	2488.9	2491.8
22.5°	2199.5	2239.2	2273.3	2307.3	2330.0	2347.0	2364.1	2386.8	2412.3	2423.7	2423.7
25°	2117.2	2154.1	2191.0	2216.5	2239.2	2259.1	2267.6	2293.1	2318.7	2332.9	2332.9
27.5°	2012.2	2046.2	2080.3	2108.7	2122.8	2139.9	2154.1	2176.8	2196.6	2208.0	2219.3
30°	1878.8	1912.8	1944.0	1972.4	1989.5	2006.5	2020.7	2037.7	2057.6	2071.8	2074.6
32.5°	1734.0	1762.4	1793.6	1822.0	1839.0	1844.7	1858.9	1875.9	1893.0	1904.3	1907.2
35°	1575.1	1595.0	1614.8	1640.4	1657.4	1657.4	1671.6	1682.9	1697.1	1722.7	1717.0
37.5°	1387.8	1416.2	1430.4	1438.9	1450.2	1461.6	1464.4	1478.6	1495.6	1501.3	1509.8
40°	1211.8	1220.4	1228.9	1228.9	1240.2	1240.2	1240.2	1243.1	1260.1	1262.9	1274.3
42.5°	1035.9	1035.9	1027.4	1018.9	1021.7	1018.9	1004.7	1004.7	1013.2	1024.5	1024.5
45°	871.3	851.4	825.9	806.0	791.8	786.1	769.1	769.1	766.3	769.1	780.5
47.5°	732.2	698.2	655.6	615.9	601.7	590.3	564.8	553.4	547.7	550.6	556.3
50°	615.9	579.0	530.7	482.5	456.9	442.7	411.5	391.6	388.8	383.1	394.5
52.5°	530.7	485.3	434.2	377.5	351.9	329.2	295.2	278.1	266.8	266.8	269.6
55°	456.9	408.7	351.9	295.2	269.6	252.6	218.5	195.8	184.5	181.6	190.1
57.5°	394.5	349.1	292.3	235.6	210.0	190.1	156.1	136.2	127.7	122.0	124.9
60°	346.2	300.8	244.1	190.1	167.4	144.7	116.4	93.7	82.3	82.3	85.1
62.5°	300.8	258.3	207.2	156.1	136.2	116.4	85.1	65.3	56.8	53.9	56.8
65°	255.4	215.7	173.1	130.5	110.7	93.7	68.1	51.1	39.7	36.9	39.7
67.5°	207.2	176.0	139.1	105.0	88.0	73.8	51.1	36.9	28.4	25.5	28.4
70°	161.8	133.4	105.0	76.6	65.3	53.9	36.9	28.4	19.9	17.0	19.9
72.5°	116.4	96.5	73.8	53.9	45.4	36.9	25.5	19.9	14.2	11.4	14.2
75°	79.5	65.3	48.2	34.1	28.4	25.5	17.0	11.4	8.5	8.5	8.5
77.5°	51.1	39.7	31.2	22.7	17.0	14.2	8.5	5.7	5.7	5.7	5.7
80°	28.4	22.7	17.0	11.4	8.5	8.5	5.7	5.7	2.8	2.8	2.8
82.5°	17.0	11.4	8.5	5.7	5.7	2.8	2.8	2.8	2.8	2.8	2.8
85°	8.5	5.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
87.5°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	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°	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9
2.5°	2449.2	2452.1	2443.5	2454.9	2446.4	2457.7	2457.7	2446.4	2449.2	2443.5	2454.9
5°	2443.5	2443.5	2437.9	2446.4	2435.0	2446.4	2443.5	2423.7	2429.3	2418.0	2429.3
7.5°	2443.5	2437.9	2429.3	2437.9	2423.7	2432.2	2420.8	2401.0	2395.3	2381.1	2381.1
10°	2452.1	2443.5	2432.2	2435.0	2420.8	2423.7	2406.6	2378.3	2369.8	2352.7	2347.0
12.5°	2471.9	2463.4	2446.4	2452.1	2432.2	2432.2	2409.5	2375.4	2358.4	2335.7	2330.0
15°	2500.3	2486.1	2466.2	2469.1	2449.2	2437.9	2409.5	2369.8	2347.0	2315.8	2307.3
17.5°	2506.0	2491.8	2466.2	2466.2	2440.7	2426.5	2392.5	2347.0	2318.7	2287.4	2270.4
20°	2474.8	2460.6	2432.2	2429.3	2406.6	2386.8	2349.9	2304.5	2276.1	2242.0	2227.8
22.5°	2409.5	2392.5	2366.9	2364.1	2341.4	2330.0	2290.3	2244.9	2216.5	2182.4	2171.1
25°	2313.0	2304.5	2278.9	2276.1	2256.2	2242.0	2208.0	2165.4	2139.9	2105.8	2094.5
27.5°	2199.5	2191.0	2165.4	2165.4	2142.7	2134.2	2103.0	2063.2	2043.4	2012.2	1998.0
30°	2063.2	2051.9	2037.7	2034.9	2015.0	2006.5	1978.1	1941.2	1921.3	1895.8	1890.1
32.5°	1901.5	1893.0	1884.4	1881.6	1861.7	1853.2	1833.4	1796.5	1779.4	1756.7	1748.2
35°	1714.2	1708.5	1700.0	1697.1	1688.6	1680.1	1660.2	1631.9	1623.4	1606.3	1597.8
37.5°	1498.5	1504.2	1498.5	1498.5	1490.0	1492.8	1475.8	1458.7	1450.2	1438.9	1433.2
40°	1265.8	1277.1	1285.6	1285.6	1282.8	1294.1	1291.3	1277.1	1274.3	1268.6	1265.8
42.5°	1030.2	1035.9	1052.9	1064.3	1061.4	1089.8	1092.6	1104.0	1112.5	1106.8	1109.7
45°	783.3	800.3	823.0	834.4	848.6	885.5	905.3	928.0	947.9	959.3	956.4
47.5°	564.8	584.6	610.2	627.2	652.7	698.2	749.2	777.6	806.0	820.2	834.4
50°	408.7	428.5	459.8	485.3	502.3	564.8	618.7	655.6	686.8	706.7	720.9
52.5°	286.6	309.3	343.4	366.1	391.6	451.2	513.7	556.3	590.3	615.9	630.0
55°	198.7	224.2	255.4	278.1	306.5	368.9	428.5	474.0	510.8	533.5	550.6
57.5°	139.1	161.8	193.0	212.9	241.2	300.8	360.4	405.8	442.7	465.4	485.3
60°	93.7	116.4	147.6	167.4	190.1	249.7	303.7	351.9	386.0	408.7	428.5
62.5°	65.3	85.1	116.4	136.2	156.1	207.2	258.3	300.8	334.9	360.4	377.5
65°	51.1	68.1	93.7	110.7	130.5	173.1	215.7	252.6	286.6	312.2	323.5
67.5°	36.9	53.9	73.8	88.0	102.2	139.1	176.0	204.3	235.6	255.4	269.6
70°	25.5	36.9	53.9	65.3	76.6	105.0	133.4	158.9	181.6	195.8	207.2
72.5°	19.9	25.5	36.9	45.4	53.9	73.8	96.5	116.4	133.4	144.7	156.1
75°	11.4	17.0	25.5	31.2	36.9	51.1	65.3	79.5	90.8	99.3	105.0
77.5°	5.7	8.5	14.2	17.0	22.7	31.2	42.6	51.1	59.6	65.3	71.0
80°	5.7	5.7	8.5	8.5	11.4	17.0	22.7	28.4	34.1	39.7	42.6
82.5°	2.8	2.8	5.7	5.7	5.7	8.5	11.4	17.0	19.9	22.7	25.5
85°	2.8	2.8	2.8	2.8	2.8	5.7	5.7	8.5	11.4	14.2	14.2
87.5°	0.0	0.0	2.8	2.8	2.8	2.8	2.8	5.7	5.7	5.7	8.5
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: P252633

CATALOG NUMBER: LD6B60D010TE EU6B60709727 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9	2454.9
2.5°	2446.4	2452.1	2449.2	2454.9	2446.4	2443.5	2449.2	2440.7
5°	2415.2	2418.0	2415.2	2415.2	2409.5	2403.8	2409.5	2401.0
7.5°	2366.9	2366.9	2358.4	2358.4	2347.0	2341.4	2341.4	2338.5
10°	2327.2	2318.7	2310.2	2313.0	2296.0	2290.3	2287.4	2284.6
12.5°	2307.3	2301.6	2287.4	2287.4	2270.4	2264.7	2261.9	2259.1
15°	2284.6	2273.3	2261.9	2259.1	2244.9	2239.2	2236.4	2230.7
17.5°	2244.9	2236.4	2222.2	2222.2	2208.0	2205.1	2199.5	2196.6
20°	2202.3	2191.0	2179.6	2179.6	2162.6	2162.6	2154.1	2156.9
22.5°	2142.7	2134.2	2122.8	2122.8	2108.7	2105.8	2097.3	2094.5
25°	2071.8	2060.4	2051.9	2049.1	2037.7	2032.0	2029.2	2023.5
27.5°	1978.1	1969.6	1961.1	1955.4	1941.2	1938.4	1929.9	1932.7
30°	1861.7	1856.1	1853.2	1847.6	1830.5	1824.8	1824.8	1816.3
32.5°	1734.0	1725.5	1719.8	1711.3	1697.1	1694.3	1685.8	1688.6
35°	1577.9	1566.6	1558.1	1560.9	1543.9	1541.0	1535.4	1538.2
37.5°	1416.2	1404.8	1393.5	1390.6	1376.4	1376.4	1367.9	1367.9
40°	1248.7	1237.4	1231.7	1231.7	1214.7	1217.5	1209.0	1206.2
42.5°	1098.3	1087.0	1084.1	1081.3	1072.8	1069.9	1061.4	1064.3
45°	956.4	953.6	953.6	947.9	939.4	936.5	939.4	939.4
47.5°	831.5	834.4	831.5	831.5	825.9	831.5	825.9	828.7
50°	726.5	732.2	732.2	732.2	729.4	732.2	732.2	735.0
52.5°	638.6	647.1	644.2	647.1	644.2	649.9	647.1	649.9
55°	561.9	567.6	570.4	573.3	573.3	573.3	573.3	573.3
57.5°	491.0	499.5	502.3	505.2	505.2	510.8	505.2	505.2
60°	434.2	442.7	445.6	448.4	448.4	451.2	445.6	448.4
62.5°	383.1	391.6	391.6	394.5	394.5	394.5	388.8	391.6
65°	332.0	334.9	337.7	337.7	334.9	334.9	332.0	334.9
67.5°	275.3	278.1	275.3	275.3	272.5	272.5	266.8	269.6
70°	212.9	212.9	215.7	212.9	210.0	212.9	210.0	207.2
72.5°	158.9	158.9	158.9	156.1	156.1	153.3	156.1	156.1
75°	107.8	107.8	110.7	110.7	110.7	110.7	107.8	107.8
77.5°	71.0	71.0	71.0	71.0	73.8	71.0	71.0	71.0
80°	45.4	45.4	48.2	48.2	45.4	45.4	45.4	45.4
82.5°	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
85°	17.0	17.0	17.0	17.0	14.2	14.2	14.2	14.2
87.5°	8.5	8.5	8.5	8.5	8.5	8.5	5.7	5.7
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)