

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: P252322

Luminaire Tested: **LD6B60D010TE EU6B60709730 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252322
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: LD6B60D010TE EU6B60709730 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4120.0 lumens
Efficiency: N/A
Efficacy: 65.9 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

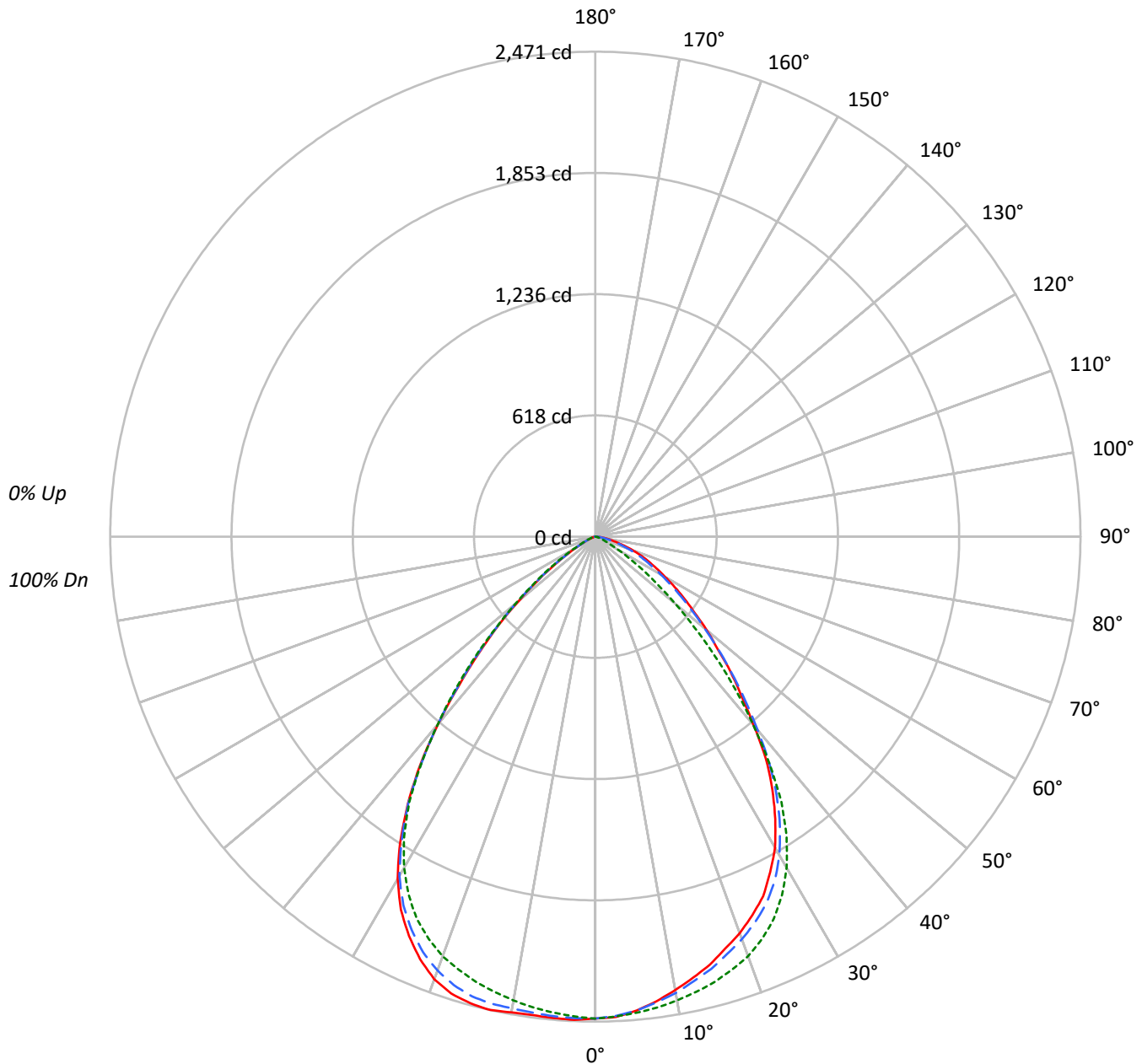
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102		109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89		102	96	92	88		93	89	86		90	87	84		87	85	82
3	97	89	83	78		95	88	82	77		85	80	76		82	78	75		80	77	74
4	91	81	74	69		89	80	74	69		78	72	68		76	71	67		74	69	66
5	85	74	67	62		83	73	66	61		71	65	61		70	64	60		68	63	60
6	79	68	61	55		78	67	60	55		66	59	55		64	59	54		63	58	54
7	74	63	55	50		73	62	55	50		61	54	50		59	54	49		58	53	49
8	70	58	51	46		68	57	50	46		56	50	45		55	49	45		54	49	45
9	65	54	47	42		64	53	46	42		52	46	42		51	46	41		50	45	41
10	62	50	43	39		61	50	43	38		49	43	38		48	42	38		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	160218	160218	160218
5°	158688	159468	161216
10°	155416	158953	163080
15°	152449	158656	166268
20°	149290	157941	166585
25°	145611	154789	161621
30°	137860	146795	151714
35°	125193	131572	132751
40°	106849	106338	105835
45°	89755	79633	77170
50°	74955	53884	51174
55°	63082	33065	30028
60°	53406	17419	15097
65°	46250	9154	7333
70°	38474	5665	3968
75°	28408	3731	2243
80°	22279	2217	1127
85°	17741	2246	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	5.6
10°-20°	662.7	16.1
20°-30°	978.6	23.8
30°-40°	1008.5	24.5
40°-50°	696.6	16.9
50°-60°	343.3	8.3
60°-70°	139.1	3.4
70°-80°	49.6	1.2
80°-90°	10.2	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°	1872.7	45.5
0°-40°	2881.2	69.9
0°-60°	3921.1	95.2
0°-90°	4120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4120.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2456	2456	2456	2456	2456	
5°	2423	2423	2435	2453	2462	229
15°	2257	2281	2349	2426	2462	635
25°	2023	2061	2150	2213	2245	925
35°	1572	1610	1652	1661	1667	974
45°	973	979	863	851	836	752
55°	555	534	291	273	264	501
65°	300	270	59	48	48	298
75°	113	95	15	9	9	127
85°	24	18	3	0	0	29
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°	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8
2.5°	2449.8	2440.9	2446.9	2435.0	2449.8	2435.0	2438.0	2440.9	2438.0	2440.9	2443.9
5°	2423.1	2414.3	2423.1	2408.3	2423.1	2414.3	2414.3	2417.2	2417.2	2420.2	2423.1
7.5°	2387.6	2378.7	2387.6	2372.7	2390.5	2381.6	2381.6	2387.6	2384.6	2387.6	2393.5
10°	2346.0	2334.2	2343.1	2334.2	2352.0	2340.1	2346.0	2346.0	2346.0	2354.9	2360.9
12.5°	2301.5	2289.7	2301.5	2286.7	2304.5	2295.6	2298.6	2307.5	2310.4	2316.4	2319.3
15°	2257.1	2242.2	2248.2	2239.3	2257.1	2248.2	2251.1	2263.0	2263.0	2271.9	2280.8
17.5°	2200.7	2188.8	2200.7	2188.8	2203.7	2197.7	2203.7	2212.6	2212.6	2221.5	2230.4
20°	2150.3	2138.4	2147.3	2138.4	2156.2	2147.3	2150.3	2162.1	2165.1	2174.0	2182.9
22.5°	2088.0	2079.1	2085.0	2076.1	2093.9	2088.0	2091.0	2102.8	2105.8	2111.7	2126.6
25°	2022.8	2005.0	2013.9	2007.9	2025.7	2016.8	2022.8	2034.6	2040.5	2049.4	2061.3
27.5°	1927.8	1918.9	1924.9	1924.9	1939.7	1930.8	1933.8	1945.6	1954.5	1963.4	1978.3
30°	1830.0	1815.1	1821.1	1824.0	1835.9	1830.0	1835.9	1847.8	1850.7	1862.6	1874.5
32.5°	1705.4	1699.5	1711.3	1705.4	1711.3	1711.3	1714.3	1723.2	1729.1	1735.1	1749.9
35°	1571.9	1560.1	1571.9	1566.0	1580.8	1571.9	1580.8	1589.7	1589.7	1601.6	1610.5
37.5°	1426.6	1411.8	1417.7	1417.7	1423.6	1420.7	1420.7	1435.5	1438.5	1447.4	1456.3
40°	1254.6	1248.6	1260.5	1257.5	1260.5	1260.5	1263.5	1272.4	1278.3	1281.3	1284.2
42.5°	1100.4	1103.3	1106.3	1106.3	1106.3	1106.3	1106.3	1118.1	1115.2	1124.1	1127.0
45°	972.8	961.0	966.9	963.9	972.8	963.9	972.8	981.7	975.8	984.7	978.8
47.5°	842.3	842.3	842.3	839.4	845.3	842.3	848.3	851.2	851.2	851.2	848.3
50°	738.5	729.6	732.6	732.6	735.5	732.6	738.5	741.5	741.5	735.5	723.7
52.5°	637.7	634.7	634.7	640.6	640.6	637.7	637.7	637.7	637.7	628.8	622.8
55°	554.6	548.7	551.7	551.7	551.7	551.7	554.6	551.7	551.7	542.8	533.9
57.5°	480.5	474.5	474.5	474.5	477.5	474.5	474.5	474.5	471.6	462.7	450.8
60°	409.3	406.3	409.3	409.3	412.3	409.3	409.3	409.3	403.4	394.5	382.6
62.5°	350.0	350.0	350.0	352.9	352.9	350.0	350.0	347.0	344.0	332.2	320.3
65°	299.6	296.6	299.6	299.6	302.5	302.5	299.6	296.6	293.6	281.8	269.9
67.5°	249.1	246.2	249.1	249.1	252.1	249.1	249.1	249.1	240.2	234.3	222.4
70°	201.7	198.7	198.7	198.7	201.7	195.8	198.7	198.7	192.8	183.9	172.0
72.5°	154.2	154.2	154.2	154.2	154.2	154.2	151.3	151.3	145.3	136.4	130.5
75°	112.7	112.7	115.7	115.7	112.7	112.7	112.7	109.7	106.8	100.8	94.9
77.5°	83.0	83.0	83.0	83.0	80.1	80.1	80.1	77.1	74.1	71.2	65.3
80°	59.3	59.3	59.3	56.4	59.3	56.4	56.4	56.4	50.4	47.5	44.5
82.5°	41.5	38.6	38.6	38.6	38.6	38.6	38.6	35.6	35.6	32.6	29.7
85°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	20.8	17.8	17.8
87.5°	11.9	14.8	14.8	14.8	14.8	14.8	14.8	11.9	11.9	11.9	8.9
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°	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8
2.5°	2443.9	2443.9	2449.8	2440.9	2455.8	2446.9	2443.9	2458.7	2449.8	2446.9	2452.8
5°	2423.1	2426.1	2429.1	2423.1	2438.0	2429.1	2429.1	2443.9	2438.0	2435.0	2443.9
7.5°	2396.5	2399.4	2405.4	2402.4	2414.3	2408.3	2411.3	2426.1	2420.2	2420.2	2429.1
10°	2363.8	2369.8	2375.7	2375.7	2390.5	2384.6	2384.6	2402.4	2396.5	2399.4	2411.3
12.5°	2325.3	2334.2	2343.1	2346.0	2360.9	2352.0	2354.9	2375.7	2372.7	2375.7	2387.6
15°	2283.8	2295.6	2304.5	2304.5	2322.3	2313.4	2322.3	2343.1	2337.1	2349.0	2363.8
17.5°	2236.3	2248.2	2260.0	2263.0	2280.8	2274.9	2286.7	2307.5	2307.5	2313.4	2331.2
20°	2191.8	2206.6	2212.6	2221.5	2239.3	2236.3	2242.2	2266.0	2266.0	2274.9	2292.6
22.5°	2132.5	2147.3	2159.2	2168.1	2182.9	2182.9	2191.8	2212.6	2212.6	2218.5	2236.3
25°	2067.2	2085.0	2093.9	2102.8	2117.7	2114.7	2123.6	2141.4	2144.4	2150.3	2168.1
27.5°	1984.2	1999.0	2010.9	2016.8	2037.6	2025.7	2034.6	2055.4	2052.4	2058.3	2073.2
30°	1880.4	1895.2	1907.1	1907.1	1924.9	1924.9	1933.8	1942.7	1942.7	1948.6	1960.5
32.5°	1758.8	1776.6	1776.6	1785.5	1797.3	1785.5	1797.3	1809.2	1803.3	1812.2	1821.1
35°	1619.4	1628.3	1631.3	1631.3	1640.1	1637.2	1634.2	1643.1	1637.2	1652.0	1660.9
37.5°	1450.3	1462.2	1456.3	1462.2	1459.2	1450.3	1450.3	1465.2	1453.3	1456.3	1465.2
40°	1287.2	1287.2	1284.2	1269.4	1272.4	1263.5	1260.5	1263.5	1251.6	1248.6	1260.5
42.5°	1118.1	1115.2	1106.3	1085.5	1088.5	1073.7	1061.8	1061.8	1055.9	1052.9	1055.9
45°	966.9	958.0	943.2	919.4	913.5	901.6	877.9	872.0	863.1	863.1	866.0
47.5°	827.5	815.6	791.9	765.2	750.4	735.5	711.8	702.9	688.1	682.2	688.1
50°	711.8	691.1	661.4	622.8	608.0	590.2	566.5	551.7	536.8	530.9	527.9
52.5°	605.0	575.4	545.7	498.3	486.4	468.6	436.0	421.2	406.3	394.5	394.5
55°	513.1	486.4	444.9	400.4	382.6	364.8	332.2	311.4	296.6	290.7	284.7
57.5°	430.1	400.4	361.8	314.4	296.6	278.8	246.2	225.4	210.6	201.7	195.8
60°	361.8	329.2	290.7	249.1	228.4	210.6	178.0	157.2	142.4	133.5	127.5
62.5°	296.6	269.9	231.3	192.8	175.0	157.2	130.5	109.7	94.9	89.0	80.1
65°	249.1	222.4	186.9	154.2	139.4	121.6	97.9	80.1	68.2	59.3	53.4
67.5°	201.7	180.9	151.3	121.6	106.8	94.9	74.1	59.3	47.5	41.5	38.6
70°	160.2	139.4	115.7	91.9	83.0	71.2	56.4	41.5	35.6	29.7	26.7
72.5°	118.6	103.8	86.0	68.2	59.3	53.4	38.6	32.6	23.7	20.8	17.8
75°	86.0	74.1	62.3	47.5	41.5	38.6	29.7	20.8	17.8	14.8	11.9
77.5°	59.3	53.4	41.5	32.6	29.7	26.7	20.8	14.8	11.9	8.9	8.9
80°	38.6	32.6	26.7	20.8	20.8	17.8	11.9	8.9	8.9	5.9	5.9
82.5°	23.7	20.8	17.8	14.8	11.9	11.9	8.9	5.9	5.9	3.0	3.0
85°	14.8	11.9	8.9	8.9	5.9	5.9	5.9	3.0	3.0	3.0	3.0
87.5°	5.9	5.9	5.9	3.0	3.0	3.0	3.0	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°	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8
2.5°	2452.8	2452.8	2458.7	2449.8	2455.8	2455.8	2461.7	2449.8	2455.8	2458.7	2464.7
5°	2440.9	2443.9	2449.8	2446.9	2449.8	2449.8	2455.8	2440.9	2452.8	2452.8	2461.7
7.5°	2429.1	2429.1	2435.0	2432.0	2438.0	2440.9	2446.9	2435.0	2446.9	2446.9	2455.8
10°	2414.3	2414.3	2423.1	2420.2	2429.1	2432.0	2440.9	2429.1	2440.9	2443.9	2452.8
12.5°	2393.5	2396.5	2405.4	2405.4	2414.3	2420.2	2429.1	2423.1	2438.0	2440.9	2452.8
15°	2369.8	2375.7	2387.6	2384.6	2393.5	2402.4	2414.3	2405.4	2426.1	2432.0	2443.9
17.5°	2340.1	2346.0	2354.9	2354.9	2363.8	2369.8	2384.6	2378.7	2396.5	2399.4	2414.3
20°	2295.6	2304.5	2316.4	2313.4	2322.3	2328.2	2340.1	2334.2	2352.0	2357.9	2372.7
22.5°	2242.2	2248.2	2257.1	2257.1	2266.0	2271.9	2283.8	2274.9	2292.6	2295.6	2307.5
25°	2171.0	2177.0	2182.9	2185.9	2194.8	2197.7	2203.7	2197.7	2212.6	2215.5	2230.4
27.5°	2079.1	2082.1	2091.0	2091.0	2096.9	2099.9	2108.8	2096.9	2117.7	2117.7	2126.6
30°	1969.4	1966.4	1978.3	1972.3	1978.3	1978.3	1987.2	1981.2	1996.1	1990.1	1999.0
32.5°	1824.0	1830.0	1830.0	1824.0	1835.9	1832.9	1832.9	1827.0	1835.9	1838.9	1844.8
35°	1655.0	1663.9	1663.9	1666.8	1669.8	1660.9	1663.9	1646.1	1660.9	1663.9	1666.8
37.5°	1471.1	1462.2	1468.1	1459.2	1474.1	1456.3	1456.3	1444.4	1456.3	1456.3	1459.2
40°	1260.5	1257.5	1263.5	1257.5	1254.6	1251.6	1245.7	1236.8	1248.6	1242.7	1251.6
42.5°	1061.8	1058.8	1058.8	1052.9	1049.9	1049.9	1044.0	1038.1	1035.1	1035.1	1049.9
45°	857.1	863.1	857.1	854.2	860.1	854.2	857.1	845.3	851.2	845.3	851.2
47.5°	685.1	688.1	682.2	676.2	685.1	676.2	676.2	667.3	679.2	679.2	673.3
50°	530.9	527.9	522.0	527.9	525.0	525.0	525.0	516.1	522.0	513.1	519.0
52.5°	391.5	388.5	388.5	385.6	388.5	385.6	385.6	382.6	382.6	379.6	382.6
55°	284.7	281.8	275.8	275.8	275.8	278.8	275.8	272.9	272.9	269.9	272.9
57.5°	192.8	186.9	186.9	186.9	186.9	183.9	183.9	180.9	183.9	180.9	183.9
60°	124.6	124.6	118.6	118.6	118.6	118.6	118.6	115.7	118.6	118.6	118.6
62.5°	77.1	77.1	74.1	71.2	74.1	71.2	71.2	71.2	74.1	71.2	74.1
65°	50.4	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
67.5°	35.6	32.6	32.6	32.6	32.6	32.6	32.6	29.7	32.6	32.6	32.6
70°	23.7	23.7	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
72.5°	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
75°	11.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
77.5°	8.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
80°	5.9	5.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	3.0	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	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P252322

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8	2455.8
2.5°	2455.8	2458.7	2452.8	2455.8	2449.8	2455.8	2458.7	2464.7
5°	2449.8	2452.8	2446.9	2452.8	2446.9	2452.8	2455.8	2461.7
7.5°	2443.9	2449.8	2443.9	2449.8	2443.9	2449.8	2452.8	2458.7
10°	2443.9	2452.8	2446.9	2455.8	2446.9	2452.8	2458.7	2461.7
12.5°	2443.9	2452.8	2449.8	2455.8	2452.8	2458.7	2464.7	2470.6
15°	2438.0	2446.9	2440.9	2449.8	2446.9	2449.8	2461.7	2461.7
17.5°	2405.4	2414.3	2414.3	2420.2	2420.2	2429.1	2435.0	2440.9
20°	2363.8	2372.7	2369.8	2378.7	2378.7	2387.6	2393.5	2399.4
22.5°	2301.5	2313.4	2310.4	2319.3	2316.4	2322.3	2334.2	2331.2
25°	2221.5	2236.3	2233.3	2239.3	2236.3	2236.3	2242.2	2245.2
27.5°	2123.6	2132.5	2129.5	2135.5	2129.5	2135.5	2141.4	2144.4
30°	1996.1	2002.0	1999.0	2002.0	1999.0	2005.0	2007.9	2013.9
32.5°	1841.8	1850.7	1841.8	1847.8	1844.8	1844.8	1856.7	1850.7
35°	1657.9	1660.9	1663.9	1663.9	1657.9	1660.9	1666.8	1666.8
37.5°	1453.3	1468.1	1450.3	1459.2	1456.3	1456.3	1456.3	1465.2
40°	1239.8	1242.7	1236.8	1236.8	1236.8	1233.8	1245.7	1242.7
42.5°	1038.1	1041.0	1038.1	1029.2	1032.1	1032.1	1041.0	1029.2
45°	842.3	848.3	845.3	845.3	839.4	839.4	842.3	836.4
47.5°	667.3	673.3	664.4	667.3	661.4	667.3	664.4	670.3
50°	507.2	513.1	510.1	513.1	513.1	507.2	516.1	504.2
52.5°	379.6	382.6	379.6	376.7	373.7	373.7	379.6	376.7
55°	269.9	266.9	266.9	266.9	269.9	269.9	266.9	264.0
57.5°	180.9	180.9	178.0	178.0	180.9	175.0	178.0	175.0
60°	115.7	115.7	115.7	115.7	112.7	115.7	115.7	115.7
62.5°	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2
65°	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
67.5°	29.7	32.6	32.6	32.6	29.7	29.7	29.7	29.7
70°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
72.5°	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
75°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
77.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	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)