

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: P252723

Luminaire Tested: **LD6B50D010TE EU6B30509050 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252723
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: LD6B50D010TE EU6B30509050 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4349.0 lumens
Efficiency: N/A
Efficacy: 74.0 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

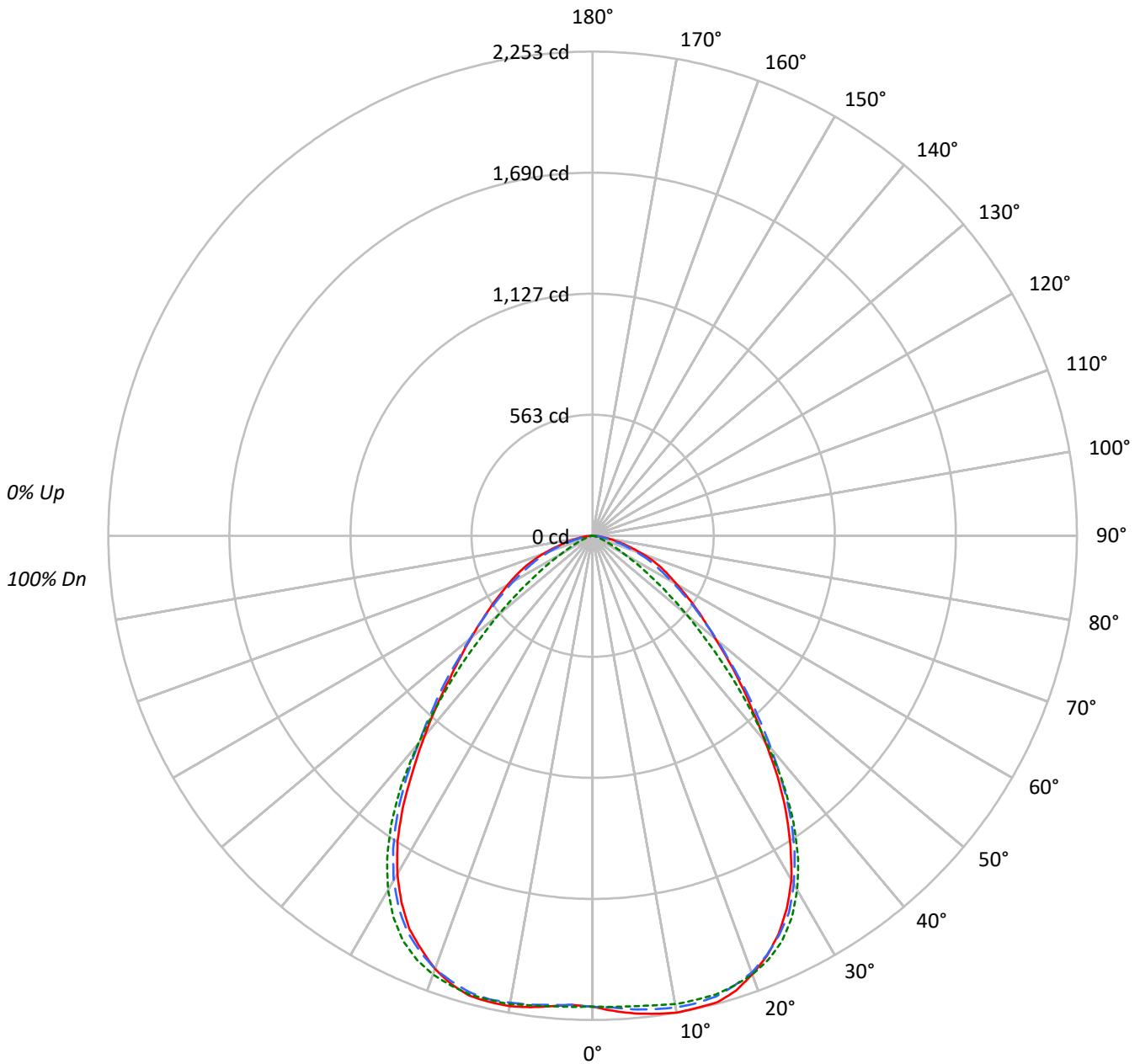
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	142949	142949	142949
5°	146134	143901	143901
10°	149261	146592	147208
15°	151760	149248	149666
20°	150832	150832	148894
25°	147245	149916	145237
30°	139382	143352	136813
35°	124898	129836	122429
40°	106108	107428	103468
45°	89782	82069	86645
50°	75808	57873	74864
55°	66620	37365	65914
60°	59043	22247	59447
65°	54540	13400	54540
70°	47287	7687	46104
75°	37508	4689	35164
80°	27953	3494	26788
85°	25526	2321	23205



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.9	4.9
10°-20°	624.3	14.4
20°-30°	939.0	21.6
30°-40°	987.2	22.7
40°-50°	737.5	17.0
50°-60°	459.1	10.6
60°-70°	261.1	6.0
70°-80°	107.6	2.5
80°-90°	22.2	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°	1774.3	40.8
0°-40°	2761.5	63.5
0°-60°	3958.1	91.0
0°-90°	4349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4349.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2191	2191	2191	2191	2191	
5°	2231	2213	2197	2191	2197	214
15°	2247	2219	2210	2200	2216	632
25°	2046	2052	2083	2036	2018	936
35°	1568	1608	1630	1584	1537	973
45°	973	995	890	976	939	754
55°	586	573	328	564	580	527
65°	353	316	87	316	353	348
75°	149	118	19	115	140	162
85°	34	22	3	19	31	38
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°	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1
2.5°	2212.8	2209.7	2212.8	2206.6	2203.5	2203.5	2206.6	2200.4	2197.3	2200.4	2197.3
5°	2231.4	2225.2	2228.3	2225.2	2219.0	2219.0	2222.1	2212.8	2212.8	2215.9	2212.8
7.5°	2243.8	2243.8	2243.8	2237.6	2234.5	2231.4	2237.6	2228.3	2225.2	2225.2	2222.1
10°	2253.1	2250.0	2253.1	2246.9	2240.7	2237.6	2243.8	2237.6	2231.4	2237.6	2228.3
12.5°	2250.0	2250.0	2250.0	2246.9	2240.7	2237.6	2243.8	2234.5	2231.4	2234.5	2228.3
15°	2246.9	2237.6	2240.7	2237.6	2228.3	2228.3	2231.4	2222.1	2215.9	2225.2	2219.0
17.5°	2219.0	2212.8	2215.9	2209.7	2203.5	2200.4	2203.5	2200.4	2194.2	2200.4	2194.2
20°	2172.5	2172.5	2175.6	2169.4	2163.2	2160.1	2166.3	2160.1	2153.9	2163.2	2163.2
22.5°	2116.7	2116.7	2116.7	2113.6	2110.5	2110.5	2110.5	2107.4	2104.3	2110.5	2113.6
25°	2045.5	2042.4	2045.5	2048.6	2045.5	2042.4	2045.5	2045.5	2039.3	2051.7	2051.7
27.5°	1955.6	1955.6	1961.8	1958.7	1958.7	1955.6	1961.8	1961.8	1958.7	1968.0	1977.3
30°	1850.2	1844.0	1850.2	1850.2	1853.3	1853.3	1856.4	1856.4	1856.4	1865.7	1871.9
32.5°	1713.8	1716.9	1726.2	1723.1	1720.0	1729.3	1729.3	1735.5	1738.6	1744.8	1747.9
35°	1568.2	1571.3	1571.3	1574.4	1580.6	1574.4	1589.9	1586.8	1589.9	1602.3	1608.5
37.5°	1413.2	1403.9	1419.4	1413.2	1416.3	1416.3	1422.5	1425.6	1434.9	1450.4	1450.4
40°	1245.9	1249.0	1255.2	1258.3	1261.4	1261.4	1261.4	1270.7	1273.8	1292.4	1289.3
42.5°	1100.2	1100.2	1106.4	1109.5	1109.5	1109.5	1109.5	1118.8	1125.0	1131.2	1137.4
45°	973.1	963.8	970.0	970.0	976.2	973.1	979.3	985.5	988.6	997.9	994.8
47.5°	852.3	849.2	852.3	855.4	852.3	855.4	858.5	861.6	864.7	864.7	864.7
50°	746.9	746.9	750.0	753.1	753.1	753.1	753.1	756.2	756.2	762.4	756.2
52.5°	660.1	663.2	663.2	660.1	663.2	663.2	666.3	666.3	663.2	663.2	653.9
55°	585.7	582.6	585.7	582.6	585.7	585.7	582.6	582.6	579.5	576.4	573.3
57.5°	514.5	514.5	514.5	514.5	511.4	514.5	511.4	508.3	508.3	502.1	492.8
60°	452.5	452.5	452.5	452.5	452.5	449.4	452.5	449.4	443.2	437.0	424.6
62.5°	399.8	396.7	399.8	396.7	396.7	393.6	393.6	390.5	384.3	378.1	365.7
65°	353.3	356.4	353.3	353.3	350.2	347.1	347.1	344.0	334.7	328.5	316.1
67.5°	303.7	300.6	300.6	300.6	297.5	297.5	297.5	291.3	285.1	275.8	263.4
70°	247.9	247.9	247.9	244.8	244.8	241.7	241.7	238.6	232.4	226.2	210.7
72.5°	195.2	195.2	195.2	189.0	192.1	189.0	189.0	182.9	179.8	170.5	161.2
75°	148.8	148.8	145.7	145.7	142.6	139.5	139.5	136.4	133.3	127.1	117.8
77.5°	108.5	108.5	108.5	105.4	102.3	99.2	99.2	96.1	93.0	89.9	83.7
80°	74.4	74.4	74.4	74.4	71.3	68.2	68.2	65.1	65.1	62.0	55.8
82.5°	49.6	49.6	49.6	49.6	46.5	46.5	46.5	43.4	40.3	40.3	34.1
85°	34.1	34.1	31.0	31.0	31.0	31.0	27.9	27.9	24.8	21.7	21.7
87.5°	18.6	18.6	18.6	18.6	15.5	15.5	15.5	15.5	12.4	12.4	9.3
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°	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1
2.5°	2206.6	2206.6	2203.5	2194.2	2197.3	2194.2	2197.3	2194.2	2184.9	2194.2	2184.9
5°	2219.0	2222.1	2215.9	2203.5	2206.6	2203.5	2203.5	2200.4	2191.1	2197.3	2191.1
7.5°	2231.4	2228.3	2225.2	2212.8	2215.9	2212.8	2212.8	2206.6	2197.3	2203.5	2194.2
10°	2237.6	2237.6	2231.4	2219.0	2219.0	2215.9	2219.0	2215.9	2203.5	2212.8	2206.6
12.5°	2237.6	2234.5	2234.5	2219.0	2222.1	2219.0	2222.1	2215.9	2206.6	2212.8	2209.7
15°	2228.3	2228.3	2225.2	2209.7	2212.8	2212.8	2215.9	2209.7	2200.4	2209.7	2203.5
17.5°	2209.7	2209.7	2206.6	2194.2	2200.4	2200.4	2203.5	2197.3	2188.0	2194.2	2194.2
20°	2172.5	2175.6	2175.6	2166.3	2172.5	2172.5	2175.6	2172.5	2169.4	2172.5	2166.3
22.5°	2129.1	2135.3	2135.3	2126.0	2132.2	2132.2	2141.5	2138.4	2132.2	2135.3	2132.2
25°	2064.1	2070.3	2076.4	2070.3	2076.4	2076.4	2085.7	2082.6	2076.4	2082.6	2073.4
27.5°	1989.7	1992.8	1999.0	1992.8	2002.1	1999.0	2008.3	2005.2	1995.9	2005.2	2002.1
30°	1884.3	1896.7	1906.0	1896.7	1906.0	1906.0	1912.2	1909.1	1906.0	1902.9	1902.9
32.5°	1766.5	1778.9	1778.9	1775.8	1782.0	1782.0	1785.1	1778.9	1775.8	1778.9	1782.0
35°	1620.9	1627.1	1633.3	1630.2	1633.3	1636.4	1633.3	1636.4	1627.1	1630.2	1630.2
37.5°	1462.8	1469.0	1469.0	1459.7	1465.9	1465.9	1459.7	1459.7	1453.5	1459.7	1447.3
40°	1295.5	1289.3	1292.4	1286.2	1280.0	1280.0	1276.9	1264.5	1258.3	1261.4	1264.5
42.5°	1131.2	1131.2	1121.9	1106.4	1090.9	1090.9	1081.6	1075.4	1063.0	1069.2	1066.1
45°	991.7	976.2	963.8	939.1	929.8	923.6	908.1	892.6	886.4	889.5	886.4
47.5°	858.5	846.1	815.1	781.0	771.7	762.4	743.8	725.2	719.0	712.8	712.8
50°	746.9	725.2	691.1	653.9	638.4	622.9	598.1	579.5	567.1	570.2	570.2
52.5°	644.6	619.8	579.5	533.1	514.5	495.9	474.2	452.5	443.2	440.1	440.1
55°	554.8	526.9	486.6	433.9	418.4	396.7	368.8	344.0	331.6	328.5	334.7
57.5°	474.2	449.4	402.9	350.2	331.6	309.9	282.0	260.3	244.8	241.7	244.8
60°	409.1	375.0	334.7	285.1	260.3	241.7	210.7	192.1	176.7	170.5	173.6
62.5°	344.0	313.0	272.7	223.1	204.5	186.0	158.1	136.4	124.0	120.9	124.0
65°	294.4	263.4	226.2	182.9	164.3	145.7	120.9	99.2	89.9	86.8	89.9
67.5°	244.8	216.9	186.0	145.7	130.2	114.7	89.9	74.4	62.0	58.9	62.0
70°	198.3	173.6	142.6	114.7	99.2	86.8	68.2	52.7	43.4	40.3	43.4
72.5°	148.8	130.2	108.5	83.7	74.4	65.1	49.6	37.2	31.0	27.9	31.0
75°	108.5	93.0	77.5	58.9	52.7	46.5	34.1	24.8	21.7	18.6	21.7
77.5°	74.4	65.1	52.7	40.3	34.1	31.0	21.7	18.6	15.5	12.4	12.4
80°	49.6	43.4	34.1	27.9	24.8	21.7	15.5	12.4	9.3	9.3	9.3
82.5°	31.0	24.8	21.7	15.5	12.4	12.4	9.3	6.2	6.2	6.2	6.2
85°	18.6	15.5	12.4	9.3	6.2	6.2	3.1	3.1	3.1	3.1	3.1
87.5°	9.3	6.2	6.2	3.1	3.1	3.1	3.1	3.1	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1
2.5°	2191.1	2184.9	2184.9	2188.0	2191.1	2194.2	2188.0	2184.9	2184.9	2194.2	2188.0
5°	2191.1	2188.0	2188.0	2188.0	2194.2	2197.3	2191.1	2188.0	2191.1	2200.4	2197.3
7.5°	2200.4	2194.2	2197.3	2197.3	2200.4	2206.6	2200.4	2197.3	2200.4	2209.7	2203.5
10°	2206.6	2200.4	2203.5	2200.4	2209.7	2212.8	2206.6	2203.5	2206.6	2219.0	2215.9
12.5°	2209.7	2206.6	2206.6	2203.5	2212.8	2215.9	2209.7	2206.6	2209.7	2219.0	2215.9
15°	2203.5	2200.4	2200.4	2200.4	2206.6	2212.8	2203.5	2200.4	2200.4	2209.7	2206.6
17.5°	2191.1	2184.9	2184.9	2184.9	2188.0	2191.1	2181.8	2178.7	2175.6	2184.9	2181.8
20°	2169.4	2163.2	2157.0	2157.0	2160.1	2160.1	2153.9	2144.6	2144.6	2147.7	2141.5
22.5°	2129.1	2126.0	2119.8	2116.7	2122.9	2119.8	2107.4	2098.1	2095.0	2098.1	2091.9
25°	2073.4	2067.2	2064.1	2061.0	2064.1	2061.0	2048.6	2036.2	2036.2	2036.2	2026.9
27.5°	1995.9	1989.7	1986.6	1986.6	1989.7	1983.5	1971.1	1958.7	1952.5	1952.5	1943.2
30°	1896.7	1896.7	1893.6	1890.5	1887.4	1887.4	1868.8	1856.4	1850.2	1853.3	1847.1
32.5°	1775.8	1772.7	1769.6	1760.3	1763.4	1760.3	1744.8	1735.5	1726.2	1720.0	1716.9
35°	1620.9	1620.9	1617.8	1617.8	1617.8	1614.7	1599.2	1589.9	1583.7	1580.6	1571.3
37.5°	1450.4	1447.3	1444.2	1444.2	1444.2	1444.2	1434.9	1425.6	1425.6	1422.5	1416.3
40°	1258.3	1261.4	1264.5	1261.4	1270.7	1280.0	1267.6	1261.4	1258.3	1267.6	1255.2
42.5°	1072.3	1069.2	1084.7	1087.8	1087.8	1103.3	1106.4	1109.5	1106.4	1112.6	1112.6
45°	892.6	889.5	905.0	911.2	926.7	945.2	954.5	970.0	976.2	982.4	976.2
47.5°	722.1	734.5	746.9	762.4	774.8	805.8	824.4	839.9	846.1	855.4	855.4
50°	579.5	591.9	613.6	626.0	641.5	678.7	709.7	731.4	743.8	753.1	750.0
52.5°	446.3	468.0	495.9	508.3	530.0	573.3	607.4	632.2	647.7	657.0	660.1
55°	344.0	362.6	390.5	409.1	430.8	477.3	520.7	548.6	564.1	576.4	582.6
57.5°	254.1	275.8	306.8	322.3	347.1	399.8	437.0	471.1	489.7	505.2	508.3
60°	186.0	207.6	235.5	254.1	278.9	331.6	375.0	406.0	427.7	440.1	446.3
62.5°	133.3	155.0	182.9	201.4	223.1	269.6	313.0	344.0	365.7	381.2	390.5
65°	96.1	117.8	145.7	161.2	179.8	223.1	263.4	294.4	316.1	334.7	340.9
67.5°	71.3	86.8	111.6	127.1	145.7	179.8	213.8	241.7	263.4	278.9	285.1
70°	52.7	65.1	86.8	96.1	108.5	139.5	167.4	192.1	210.7	223.1	229.3
72.5°	37.2	46.5	62.0	71.3	80.6	105.4	127.1	145.7	158.1	170.5	176.7
75°	24.8	31.0	43.4	49.6	55.8	74.4	89.9	105.4	114.7	124.0	127.1
77.5°	15.5	21.7	31.0	34.1	40.3	49.6	62.0	71.3	77.5	83.7	89.9
80°	9.3	12.4	18.6	21.7	24.8	34.1	40.3	46.5	52.7	58.9	62.0
82.5°	6.2	9.3	12.4	12.4	15.5	18.6	24.8	31.0	34.1	37.2	40.3
85°	3.1	3.1	6.2	6.2	9.3	9.3	12.4	15.5	18.6	21.7	24.8
87.5°	3.1	3.1	3.1	3.1	6.2	6.2	9.3	9.3	9.3	12.4	12.4
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: P252723

CATALOG NUMBER: LD6B50D010TE EU6B30509050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1	2191.1
2.5°	2181.8	2191.1	2181.8	2188.0	2184.9	2184.9	2181.8	2184.9
5°	2191.1	2203.5	2191.1	2200.4	2194.2	2194.2	2194.2	2197.3
7.5°	2200.4	2212.8	2203.5	2212.8	2209.7	2206.6	2206.6	2212.8
10°	2209.7	2219.0	2212.8	2222.1	2219.0	2215.9	2215.9	2222.1
12.5°	2209.7	2222.1	2215.9	2225.2	2222.1	2219.0	2219.0	2222.1
15°	2200.4	2215.9	2206.6	2215.9	2212.8	2209.7	2209.7	2215.9
17.5°	2172.5	2184.9	2178.7	2184.9	2184.9	2181.8	2184.9	2188.0
20°	2135.3	2144.6	2138.4	2144.6	2144.6	2138.4	2141.5	2144.6
22.5°	2082.6	2091.9	2085.7	2091.9	2088.8	2085.7	2085.7	2082.6
25°	2017.6	2030.0	2020.7	2026.9	2020.7	2014.5	2014.5	2017.6
27.5°	1937.0	1946.3	1933.9	1940.1	1933.9	1927.7	1927.7	1924.6
30°	1831.6	1834.7	1825.4	1831.6	1825.4	1822.3	1816.1	1816.1
32.5°	1704.5	1707.6	1698.3	1698.3	1692.2	1692.2	1679.8	1689.1
35°	1555.8	1558.9	1555.8	1552.7	1543.4	1540.3	1537.2	1537.2
37.5°	1400.8	1400.8	1391.5	1388.4	1382.2	1376.0	1379.1	1369.8
40°	1242.8	1239.7	1230.4	1233.5	1230.4	1221.1	1218.0	1214.9
42.5°	1094.0	1094.0	1084.7	1087.8	1081.6	1078.5	1069.2	1072.3
45°	963.8	963.8	954.5	954.5	951.4	942.2	945.2	939.1
47.5°	846.1	846.1	843.0	843.0	833.7	830.6	830.6	830.6
50°	743.8	743.8	743.8	743.8	740.7	737.6	734.5	737.6
52.5°	657.0	663.2	660.1	660.1	657.0	653.9	650.8	650.8
55°	579.5	582.6	582.6	585.7	582.6	579.5	582.6	579.5
57.5°	511.4	517.6	517.6	517.6	517.6	517.6	514.5	511.4
60°	452.5	455.6	455.6	458.7	458.7	458.7	455.6	455.6
62.5°	393.6	399.8	402.9	402.9	406.0	402.9	402.9	402.9
65°	347.1	353.3	356.4	353.3	356.4	356.4	353.3	353.3
67.5°	291.3	297.5	297.5	297.5	297.5	300.6	297.5	297.5
70°	235.5	241.7	238.6	241.7	241.7	241.7	241.7	241.7
72.5°	179.8	182.9	186.0	186.0	189.0	186.0	186.0	186.0
75°	130.2	136.4	136.4	136.4	136.4	139.5	139.5	139.5
77.5°	93.0	96.1	96.1	99.2	99.2	99.2	99.2	102.3
80°	65.1	65.1	68.2	68.2	71.3	71.3	71.3	71.3
82.5°	43.4	46.5	46.5	46.5	46.5	46.5	46.5	46.5
85°	24.8	27.9	27.9	27.9	27.9	31.0	31.0	31.0
87.5°	15.5	15.5	15.5	15.5	15.5	15.5	12.4	12.4
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)