

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: P252286

Luminaire Tested: **LD6B40D010 EU6B30508035 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252286  
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: LD6B40D010 EU6B30508035 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3957.0 lumens  
Efficiency: N/A  
Efficacy: 92.0 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

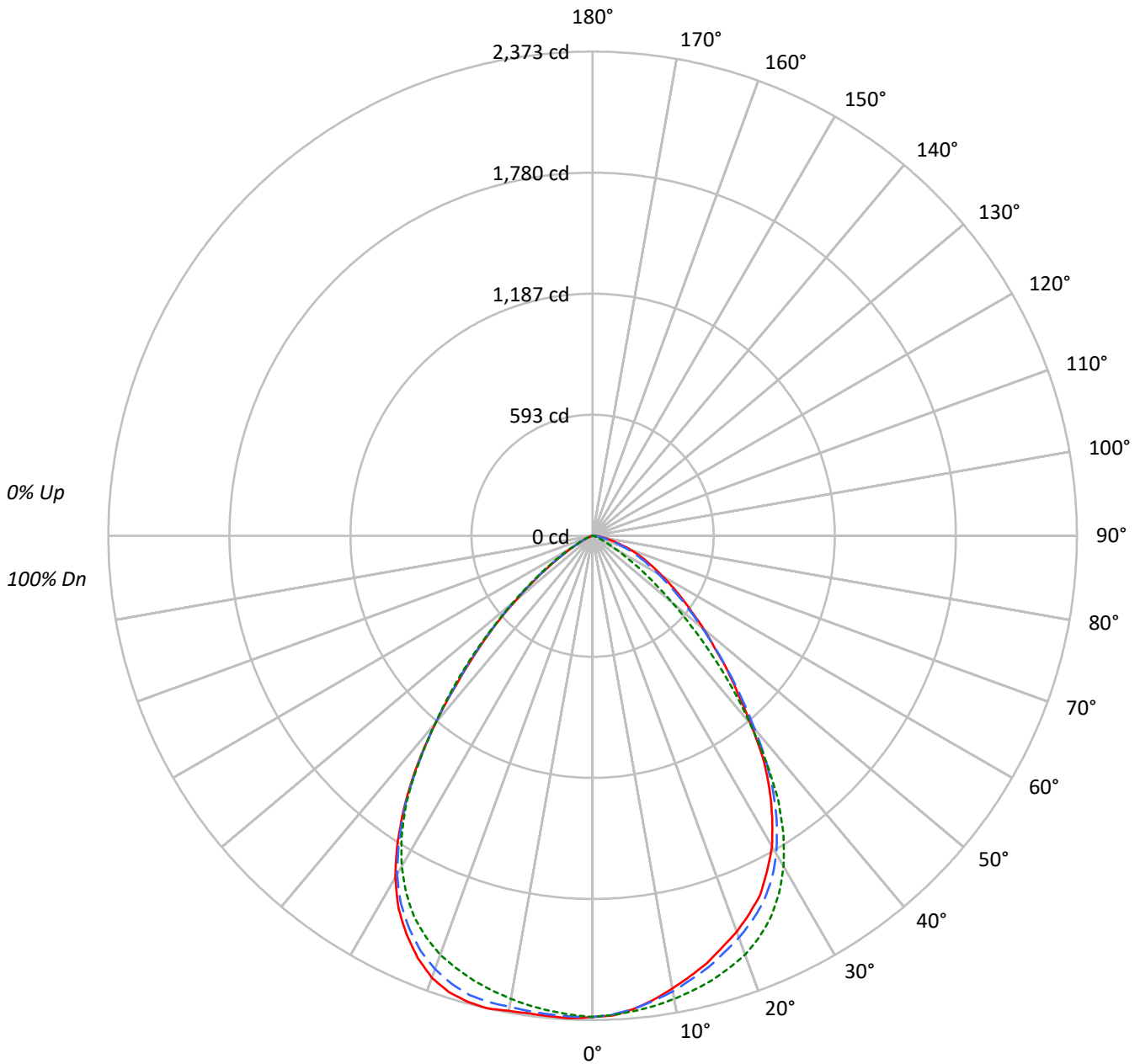
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	153877	153877	153877
5°	152414	153161	154838
10°	149268	152666	156628
15°	146418	152382	159690
20°	143382	151692	159996
25°	139845	148664	155229
30°	132406	140986	145710
35°	120239	126371	127502
40°	102616	102131	101654
45°	86202	76478	74116
50°	71991	51753	49155
55°	60591	31757	28834
60°	51292	16728	14496
65°	44413	8799	7039
70°	36948	5436	3796
75°	27274	3579	2143
80°	21415	2142	1052
85°	17067	2096	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.3	5.6
10°-20°	636.5	16.1
20°-30°	939.8	23.8
30°-40°	968.6	24.5
40°-50°	669.0	16.9
50°-60°	329.7	8.3
60°-70°	133.6	3.4
70°-80°	47.6	1.2
80°-90°	9.8	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°	1798.6	45.5
0°-40°	2767.2	69.9
0°-60°	3765.9	95.2
0°-90°	3957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3957.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2359	2359	2359	2359	2359	
5°	2327	2327	2339	2356	2364	220
15°	2168	2190	2256	2330	2364	610
25°	1943	1980	2065	2125	2156	888
35°	1510	1547	1587	1595	1601	935
45°	934	940	829	818	803	722
55°	533	513	279	262	254	481
65°	288	259	57	46	46	286
75°	108	91	14	8	8	122
85°	23	17	3	0	0	28
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°	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6
2.5°	2352.9	2344.4	2350.1	2338.7	2352.9	2338.7	2341.5	2344.4	2341.5	2344.4	2347.2
5°	2327.3	2318.7	2327.3	2313.0	2327.3	2318.7	2318.7	2321.6	2321.6	2324.4	2327.3
7.5°	2293.1	2284.6	2293.1	2278.9	2295.9	2287.4	2287.4	2293.1	2290.2	2293.1	2298.8
10°	2253.2	2241.8	2250.4	2241.8	2258.9	2247.5	2253.2	2253.2	2253.2	2261.8	2267.5
12.5°	2210.5	2199.1	2210.5	2196.2	2213.3	2204.8	2207.6	2216.2	2219.0	2224.7	2227.6
15°	2167.8	2153.5	2159.2	2150.7	2167.8	2159.2	2162.1	2173.5	2173.5	2182.0	2190.5
17.5°	2113.6	2102.2	2113.6	2102.2	2116.5	2110.8	2116.5	2125.0	2125.0	2133.6	2142.1
20°	2065.2	2053.8	2062.4	2053.8	2070.9	2062.4	2065.2	2076.6	2079.5	2088.0	2096.5
22.5°	2005.4	1996.8	2002.5	1994.0	2011.1	2005.4	2008.2	2019.6	2022.5	2028.2	2042.4
25°	1942.7	1925.6	1934.2	1928.5	1945.6	1937.0	1942.7	1954.1	1959.8	1968.4	1979.8
27.5°	1851.6	1843.0	1848.7	1848.7	1863.0	1854.4	1857.3	1868.7	1877.2	1885.8	1900.0
30°	1757.6	1743.3	1749.0	1751.9	1763.3	1757.6	1763.3	1774.7	1777.5	1788.9	1800.3
32.5°	1637.9	1632.2	1643.6	1637.9	1643.6	1643.6	1646.5	1655.0	1660.7	1666.4	1680.7
35°	1509.7	1498.3	1509.7	1504.0	1518.3	1509.7	1518.3	1526.8	1526.8	1538.2	1546.8
37.5°	1370.2	1355.9	1361.6	1361.6	1367.3	1364.5	1364.5	1378.7	1381.6	1390.1	1398.6
40°	1204.9	1199.2	1210.6	1207.8	1210.6	1210.6	1213.5	1222.0	1227.7	1230.6	1233.4
42.5°	1056.8	1059.7	1062.5	1062.5	1062.5	1062.5	1062.5	1073.9	1071.1	1079.6	1082.5
45°	934.3	922.9	928.6	925.8	934.3	925.8	934.3	942.9	937.2	945.7	940.0
47.5°	809.0	809.0	809.0	806.1	811.8	809.0	814.7	817.5	817.5	817.5	814.7
50°	709.3	700.7	703.6	703.6	706.4	703.6	709.3	712.1	712.1	706.4	695.1
52.5°	612.4	609.6	609.6	615.3	615.3	612.4	612.4	612.4	612.4	603.9	598.2
55°	532.7	527.0	529.8	529.8	529.8	529.8	532.7	529.8	529.8	521.3	512.7
57.5°	461.5	455.8	455.8	455.8	458.6	455.8	455.8	455.8	452.9	444.4	433.0
60°	393.1	390.3	393.1	393.1	396.0	393.1	393.1	393.1	387.4	378.9	367.5
62.5°	336.1	336.1	336.1	339.0	339.0	336.1	336.1	333.3	330.4	319.0	307.6
65°	287.7	284.9	287.7	287.7	290.6	290.6	287.7	284.9	282.0	270.6	259.2
67.5°	239.3	236.4	239.3	239.3	242.1	239.3	239.3	239.3	230.7	225.0	213.6
70°	193.7	190.9	190.9	190.9	193.7	188.0	190.9	190.9	185.2	176.6	165.2
72.5°	148.1	148.1	148.1	148.1	148.1	148.1	145.3	145.3	139.6	131.0	125.3
75°	108.2	108.2	111.1	111.1	108.2	108.2	108.2	105.4	102.5	96.9	91.2
77.5°	79.8	79.8	79.8	79.8	76.9	76.9	76.9	74.1	71.2	68.4	62.7
80°	57.0	57.0	57.0	54.1	57.0	54.1	54.1	54.1	48.4	45.6	42.7
82.5°	39.9	37.0	37.0	37.0	37.0	37.0	37.0	34.2	34.2	31.3	28.5
85°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	19.9	17.1	17.1
87.5°	11.4	14.2	14.2	14.2	14.2	14.2	14.2	11.4	11.4	11.4	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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6
2.5°	2347.2	2347.2	2352.9	2344.4	2358.6	2350.1	2347.2	2361.5	2352.9	2350.1	2355.8
5°	2327.3	2330.1	2333.0	2327.3	2341.5	2333.0	2333.0	2347.2	2341.5	2338.7	2347.2
7.5°	2301.6	2304.5	2310.2	2307.3	2318.7	2313.0	2315.9	2330.1	2324.4	2324.4	2333.0
10°	2270.3	2276.0	2281.7	2281.7	2295.9	2290.2	2290.2	2307.3	2301.6	2304.5	2315.9
12.5°	2233.3	2241.8	2250.4	2253.2	2267.5	2258.9	2261.8	2281.7	2278.9	2281.7	2293.1
15°	2193.4	2204.8	2213.3	2213.3	2230.4	2221.9	2230.4	2250.4	2244.7	2256.1	2270.3
17.5°	2147.8	2159.2	2170.6	2173.5	2190.5	2184.9	2196.2	2216.2	2216.2	2221.9	2239.0
20°	2105.1	2119.3	2125.0	2133.6	2150.7	2147.8	2153.5	2176.3	2176.3	2184.9	2201.9
22.5°	2048.1	2062.4	2073.8	2082.3	2096.5	2096.5	2105.1	2125.0	2125.0	2130.7	2147.8
25°	1985.5	2002.5	2011.1	2019.6	2033.9	2031.0	2039.6	2056.7	2059.5	2065.2	2082.3
27.5°	1905.7	1919.9	1931.3	1937.0	1957.0	1945.6	1954.1	1974.1	1971.2	1976.9	1991.2
30°	1806.0	1820.2	1831.6	1831.6	1848.7	1848.7	1857.3	1865.8	1865.8	1871.5	1882.9
32.5°	1689.2	1706.3	1706.3	1714.8	1726.2	1714.8	1726.2	1737.6	1731.9	1740.5	1749.0
35°	1555.3	1563.9	1566.7	1566.7	1575.3	1572.4	1569.6	1578.1	1572.4	1586.7	1595.2
37.5°	1393.0	1404.3	1398.6	1404.3	1401.5	1393.0	1393.0	1407.2	1395.8	1398.6	1407.2
40°	1236.3	1236.3	1233.4	1219.2	1222.0	1213.5	1210.6	1213.5	1202.1	1199.2	1210.6
42.5°	1073.9	1071.1	1062.5	1042.6	1045.4	1031.2	1019.8	1019.8	1014.1	1011.2	1014.1
45°	928.6	920.1	905.8	883.1	877.4	866.0	843.2	837.5	828.9	828.9	831.8
47.5°	794.8	783.4	760.6	734.9	720.7	706.4	683.7	675.1	660.9	655.2	660.9
50°	683.7	663.7	635.2	598.2	584.0	566.9	544.1	529.8	515.6	509.9	507.0
52.5°	581.1	552.6	524.1	478.6	467.2	450.1	418.7	404.5	390.3	378.9	378.9
55°	492.8	467.2	427.3	384.6	367.5	350.4	319.0	299.1	284.9	279.2	273.5
57.5°	413.0	384.6	347.5	301.9	284.9	267.8	236.4	216.5	202.2	193.7	188.0
60°	347.5	316.2	279.2	239.3	219.3	202.2	170.9	151.0	136.7	128.2	122.5
62.5°	284.9	259.2	222.2	185.2	168.1	151.0	125.3	105.4	91.2	85.5	76.9
65°	239.3	213.6	179.5	148.1	133.9	116.8	94.0	76.9	65.5	57.0	51.3
67.5°	193.7	173.8	145.3	116.8	102.5	91.2	71.2	57.0	45.6	39.9	37.0
70°	153.8	133.9	111.1	88.3	79.8	68.4	54.1	39.9	34.2	28.5	25.6
72.5°	113.9	99.7	82.6	65.5	57.0	51.3	37.0	31.3	22.8	19.9	17.1
75°	82.6	71.2	59.8	45.6	39.9	37.0	28.5	19.9	17.1	14.2	11.4
77.5°	57.0	51.3	39.9	31.3	28.5	25.6	19.9	14.2	11.4	8.5	8.5
80°	37.0	31.3	25.6	19.9	19.9	17.1	11.4	8.5	8.5	5.7	5.7
82.5°	22.8	19.9	17.1	14.2	11.4	11.4	8.5	5.7	5.7	2.8	2.8
85°	14.2	11.4	8.5	8.5	5.7	5.7	5.7	2.8	2.8	2.8	2.8
87.5°	5.7	5.7	5.7	2.8	2.8	2.8	2.8	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°	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6
2.5°	2355.8	2355.8	2361.5	2352.9	2358.6	2358.6	2364.3	2352.9	2358.6	2361.5	2367.2
5°	2344.4	2347.2	2352.9	2350.1	2352.9	2352.9	2358.6	2344.4	2355.8	2355.8	2364.3
7.5°	2333.0	2333.0	2338.7	2335.8	2341.5	2344.4	2350.1	2338.7	2350.1	2350.1	2358.6
10°	2318.7	2318.7	2327.3	2324.4	2333.0	2335.8	2344.4	2333.0	2344.4	2347.2	2355.8
12.5°	2298.8	2301.6	2310.2	2310.2	2318.7	2324.4	2333.0	2327.3	2341.5	2344.4	2355.8
15°	2276.0	2281.7	2293.1	2290.2	2298.8	2307.3	2318.7	2310.2	2330.1	2335.8	2347.2
17.5°	2247.5	2253.2	2261.8	2261.8	2270.3	2276.0	2290.2	2284.6	2301.6	2304.5	2318.7
20°	2204.8	2213.3	2224.7	2221.9	2230.4	2236.1	2247.5	2241.8	2258.9	2264.6	2278.9
22.5°	2153.5	2159.2	2167.8	2167.8	2176.3	2182.0	2193.4	2184.9	2201.9	2204.8	2216.2
25°	2085.2	2090.8	2096.5	2099.4	2107.9	2110.8	2116.5	2110.8	2125.0	2127.9	2142.1
27.5°	1996.8	1999.7	2008.2	2008.2	2013.9	2016.8	2025.3	2013.9	2033.9	2033.9	2042.4
30°	1891.5	1888.6	1900.0	1894.3	1900.0	1900.0	1908.5	1902.8	1917.1	1911.4	1919.9
32.5°	1751.9	1757.6	1757.6	1751.9	1763.3	1760.4	1760.4	1754.7	1763.3	1766.1	1771.8
35°	1589.5	1598.0	1598.0	1600.9	1603.7	1595.2	1598.0	1581.0	1595.2	1598.0	1600.9
37.5°	1412.9	1404.3	1410.0	1401.5	1415.7	1398.6	1398.6	1387.3	1398.6	1398.6	1401.5
40°	1210.6	1207.8	1213.5	1207.8	1204.9	1202.1	1196.4	1187.9	1199.2	1193.6	1202.1
42.5°	1019.8	1016.9	1016.9	1011.2	1008.4	1008.4	1002.7	997.0	994.2	994.2	1008.4
45°	823.2	828.9	823.2	820.4	826.1	820.4	823.2	811.8	817.5	811.8	817.5
47.5°	658.0	660.9	655.2	649.5	658.0	649.5	649.5	640.9	652.3	652.3	646.6
50°	509.9	507.0	501.3	507.0	504.2	504.2	504.2	495.7	501.3	492.8	498.5
52.5°	376.0	373.2	373.2	370.3	373.2	370.3	370.3	367.5	367.5	364.6	367.5
55°	273.5	270.6	264.9	264.9	264.9	267.8	264.9	262.1	262.1	259.2	262.1
57.5°	185.2	179.5	179.5	179.5	179.5	176.6	176.6	173.8	176.6	173.8	176.6
60°	119.6	119.6	113.9	113.9	113.9	113.9	113.9	111.1	113.9	113.9	113.9
62.5°	74.1	74.1	71.2	68.4	71.2	68.4	68.4	68.4	71.2	68.4	71.2
65°	48.4	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
67.5°	34.2	31.3	31.3	31.3	31.3	31.3	31.3	28.5	31.3	31.3	31.3
70°	22.8	22.8	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
72.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
75°	11.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
77.5°	8.5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
80°	5.7	5.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	2.8	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	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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: P252286

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6	2358.6
2.5°	2358.6	2361.5	2355.8	2358.6	2352.9	2358.6	2361.5	2367.2
5°	2352.9	2355.8	2350.1	2355.8	2350.1	2355.8	2358.6	2364.3
7.5°	2347.2	2352.9	2347.2	2352.9	2347.2	2352.9	2355.8	2361.5
10°	2347.2	2355.8	2350.1	2358.6	2350.1	2355.8	2361.5	2364.3
12.5°	2347.2	2355.8	2352.9	2358.6	2355.8	2361.5	2367.2	2372.9
15°	2341.5	2350.1	2344.4	2352.9	2350.1	2352.9	2364.3	2364.3
17.5°	2310.2	2318.7	2318.7	2324.4	2324.4	2333.0	2338.7	2344.4
20°	2270.3	2278.9	2276.0	2284.6	2284.6	2293.1	2298.8	2304.5
22.5°	2210.5	2221.9	2219.0	2227.6	2224.7	2230.4	2241.8	2239.0
25°	2133.6	2147.8	2145.0	2150.7	2147.8	2147.8	2153.5	2156.4
27.5°	2039.6	2048.1	2045.3	2051.0	2045.3	2051.0	2056.7	2059.5
30°	1917.1	1922.8	1919.9	1922.8	1919.9	1925.6	1928.5	1934.2
32.5°	1769.0	1777.5	1769.0	1774.7	1771.8	1771.8	1783.2	1777.5
35°	1592.4	1595.2	1598.0	1598.0	1592.4	1595.2	1600.9	1600.9
37.5°	1395.8	1410.0	1393.0	1401.5	1398.6	1398.6	1398.6	1407.2
40°	1190.7	1193.6	1187.9	1187.9	1187.9	1185.0	1196.4	1193.6
42.5°	997.0	999.8	997.0	988.5	991.3	991.3	999.8	988.5
45°	809.0	814.7	811.8	811.8	806.1	806.1	809.0	803.3
47.5°	640.9	646.6	638.1	640.9	635.2	640.9	638.1	643.8
50°	487.1	492.8	490.0	492.8	492.8	487.1	495.7	484.3
52.5°	364.6	367.5	364.6	361.8	358.9	358.9	364.6	361.8
55°	259.2	256.4	256.4	256.4	259.2	259.2	256.4	253.5
57.5°	173.8	173.8	170.9	170.9	173.8	168.1	170.9	168.1
60°	111.1	111.1	111.1	111.1	108.2	111.1	111.1	111.1
62.5°	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
65°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
67.5°	28.5	31.3	31.3	31.3	28.5	28.5	28.5	28.5
70°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
72.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
75°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	2.8	2.8	2.8	2.8	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)