

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: P252598

Luminaire Tested: **LD6B40D010 EU6B30508035 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252598
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: LD6B40D010 EU6B30508035 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4267.0 lumens
Efficiency: N/A
Efficacy: 99.2 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

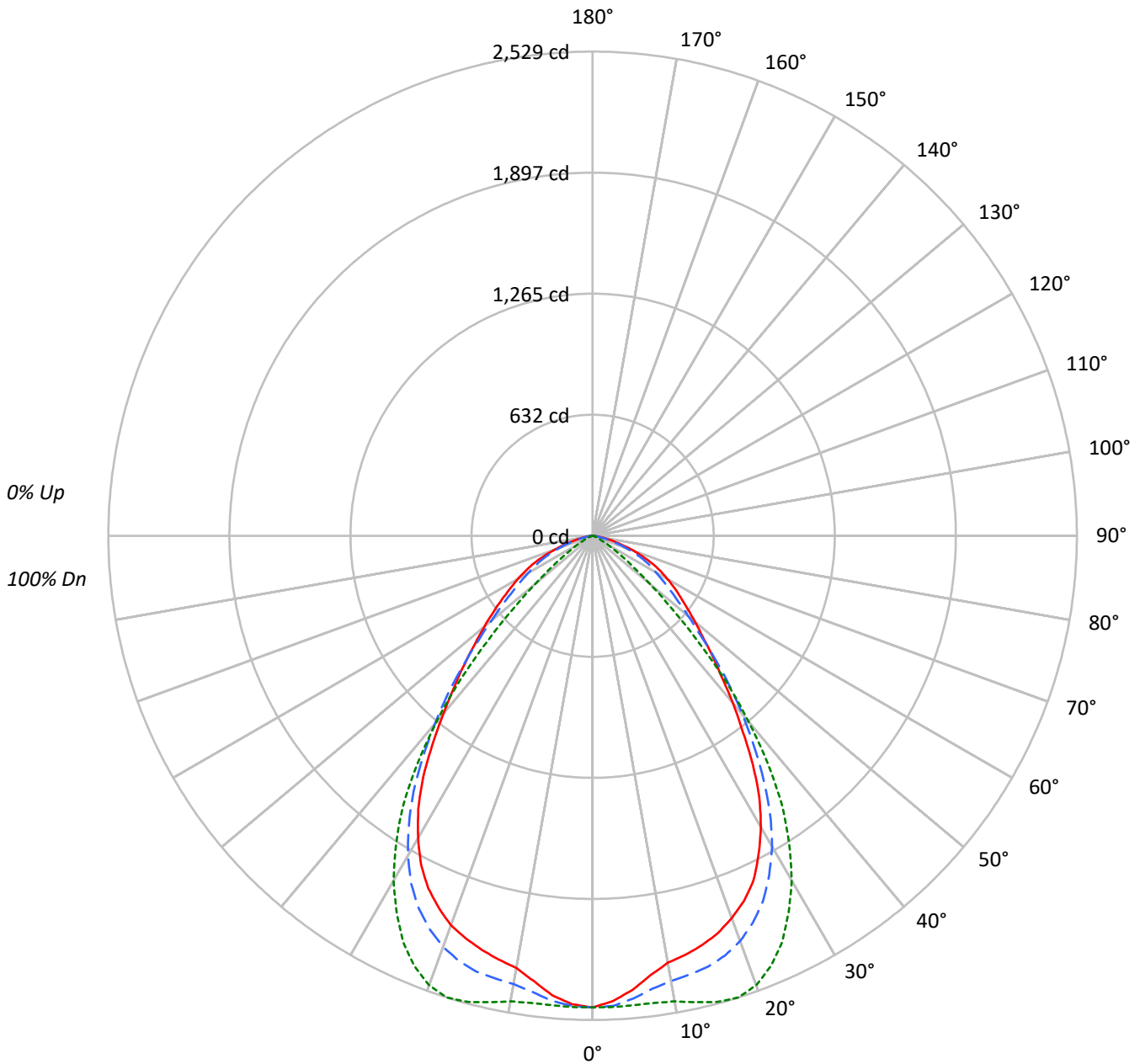
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79								
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70								
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50								
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46								
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42								
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38								
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	160727	160727	160727
5°	155931	161151	157791
10°	149997	163577	151885
15°	149464	170240	151200
20°	147506	173409	150276
25°	143099	168524	146180
30°	132376	156626	137310
35°	116137	137689	122939
40°	96782	107939	103084
45°	81460	71209	86977
50°	70530	39025	74864
55°	63822	20735	65437
60°	58717	10778	58717
65°	53197	5712	51885
70°	42919	3262	39657
75°	29442	2143	27274
80°	19274	1052	17132
85°	12800	2096	10629



TEST NUMBER: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.7	5.4
10°-20°	664.3	15.6
20°-30°	981.5	23.0
30°-40°	991.3	23.2
40°-50°	683.3	16.0
50°-60°	392.4	9.2
60°-70°	228.4	5.4
70°-80°	83.3	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°	1875.5	44.0
0°-40°	2866.8	67.2
0°-60°	3942.5	92.4
0°-90°	4267.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4267.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2464	2464	2464	2464	2464	
5°	2381	2426	2461	2438	2409	223
15°	2213	2330	2520	2355	2239	623
25°	1988	2105	2341	2147	2031	906
35°	1458	1558	1729	1629	1544	905
45°	883	894	772	951	943	687
55°	561	493	182	513	575	505
65°	345	290	37	288	336	337
75°	117	94	8	91	108	132
85°	17	8	3	11	14	22
90°	0	0	0	0	0	



TEST NUMBER: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6
2.5°	2432.2	2435.1	2437.9	2435.1	2437.9	2449.3	2440.8	2446.5	2446.5	2449.3	2457.9
5°	2381.0	2381.0	2386.7	2383.8	2392.4	2403.7	2395.2	2403.7	2406.6	2412.3	2426.5
7.5°	2315.5	2315.5	2318.3	2318.3	2329.7	2341.1	2335.4	2346.8	2358.2	2369.6	2386.7
10°	2264.2	2269.9	2269.9	2272.7	2284.1	2298.4	2295.5	2309.8	2321.1	2338.2	2361.0
12.5°	2241.4	2244.3	2244.3	2249.9	2261.3	2275.6	2272.7	2287.0	2304.1	2324.0	2346.8
15°	2212.9	2218.6	2215.8	2221.5	2232.9	2247.1	2244.3	2258.5	2278.4	2298.4	2329.7
17.5°	2175.9	2178.7	2181.6	2181.6	2193.0	2204.4	2204.4	2218.6	2241.4	2264.2	2298.4
20°	2124.6	2130.3	2130.3	2133.2	2141.7	2158.8	2156.0	2170.2	2193.0	2215.8	2252.8
22.5°	2064.8	2067.7	2067.7	2070.5	2084.8	2093.3	2096.2	2107.5	2127.5	2153.1	2187.3
25°	1987.9	1990.8	1987.9	1996.5	2002.2	2019.3	2013.6	2027.8	2050.6	2070.5	2104.7
27.5°	1876.9	1882.6	1882.6	1885.4	1899.6	1913.9	1913.9	1928.1	1948.1	1962.3	1996.5
30°	1757.2	1765.8	1757.2	1771.5	1777.2	1788.6	1797.1	1805.7	1822.7	1842.7	1874.0
32.5°	1620.5	1617.7	1620.5	1626.2	1643.3	1651.9	1657.6	1666.1	1683.2	1700.3	1725.9
35°	1458.2	1463.9	1466.7	1478.1	1478.1	1492.4	1495.2	1500.9	1526.5	1537.9	1557.9
37.5°	1287.3	1293.0	1295.9	1301.6	1312.9	1318.6	1327.2	1335.7	1352.8	1372.8	1384.1
40°	1136.4	1136.4	1139.2	1144.9	1153.5	1156.3	1164.8	1176.2	1187.6	1204.7	1216.1
42.5°	994.0	996.8	994.0	999.7	1008.2	1019.6	1016.7	1031.0	1033.8	1045.2	1053.8
45°	882.9	882.9	877.2	882.9	882.9	894.3	891.4	897.1	894.3	900.0	894.3
47.5°	777.5	780.4	777.5	780.4	780.4	780.4	783.2	777.5	780.4	771.8	754.7
50°	694.9	697.8	692.1	694.9	692.1	689.2	692.1	683.5	680.7	669.3	652.2
52.5°	623.7	620.9	618.0	618.0	618.0	615.2	612.3	603.8	595.2	583.8	563.9
55°	561.1	558.2	555.4	555.4	549.7	546.8	546.8	538.3	529.7	515.5	492.7
57.5°	504.1	501.3	498.4	498.4	495.6	489.9	489.9	481.3	469.9	452.8	432.9
60°	450.0	450.0	450.0	447.1	447.1	441.4	441.4	432.9	421.5	404.4	381.6
62.5°	401.6	398.7	398.7	398.7	398.7	395.9	393.0	387.3	375.9	358.9	338.9
65°	344.6	344.6	344.6	344.6	341.8	341.8	341.8	333.2	327.5	310.4	290.5
67.5°	282.0	282.0	282.0	282.0	279.1	282.0	282.0	276.3	270.6	253.5	236.4
70°	225.0	222.1	219.3	222.1	219.3	219.3	222.1	216.5	213.6	199.4	182.3
72.5°	165.2	168.0	165.2	165.2	165.2	162.3	165.2	162.3	156.6	145.2	133.9
75°	116.8	119.6	119.6	116.8	116.8	116.8	113.9	113.9	108.2	99.7	94.0
77.5°	79.7	79.7	79.7	79.7	76.9	76.9	76.9	74.0	71.2	65.5	59.8
80°	51.3	51.3	51.3	51.3	48.4	48.4	48.4	45.6	45.6	39.9	34.2
82.5°	31.3	31.3	31.3	31.3	31.3	31.3	28.5	28.5	25.6	22.8	19.9
85°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	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



TEST NUMBER: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6
2.5°	2452.2	2455.0	2455.0	2455.0	2463.6	2466.4	2457.9	2449.3	2466.4	2463.6	2469.2
5°	2423.7	2432.2	2437.9	2440.8	2449.3	2455.0	2446.5	2443.6	2457.9	2460.7	2463.6
7.5°	2389.5	2403.7	2418.0	2423.7	2435.1	2440.8	2437.9	2437.9	2455.0	2460.7	2460.7
10°	2366.7	2386.7	2403.7	2418.0	2432.2	2440.8	2440.8	2443.6	2463.6	2469.2	2474.9
12.5°	2361.0	2386.7	2409.4	2429.4	2440.8	2455.0	2457.9	2466.4	2486.3	2494.9	2494.9
15°	2346.8	2381.0	2409.4	2435.1	2452.2	2469.2	2474.9	2492.0	2514.8	2520.5	2526.2
17.5°	2321.1	2355.3	2389.5	2420.8	2443.6	2457.9	2474.9	2492.0	2520.5	2529.1	2531.9
20°	2275.6	2315.5	2349.6	2381.0	2403.7	2423.7	2440.8	2460.7	2486.3	2497.7	2500.6
22.5°	2207.2	2247.1	2281.3	2315.5	2338.2	2355.3	2372.4	2395.2	2420.8	2432.2	2432.2
25°	2124.6	2161.7	2198.7	2224.3	2247.1	2267.0	2275.6	2301.2	2326.8	2341.1	2341.1
27.5°	2019.3	2053.4	2087.6	2116.1	2130.3	2147.4	2161.7	2184.4	2204.4	2215.8	2227.2
30°	1885.4	1919.6	1950.9	1979.4	1996.5	2013.6	2027.8	2044.9	2064.8	2079.1	2081.9
32.5°	1740.2	1768.6	1800.0	1828.4	1845.5	1851.2	1865.5	1882.6	1899.6	1911.0	1913.9
35°	1580.7	1600.6	1620.5	1646.2	1663.3	1663.3	1677.5	1688.9	1703.1	1728.8	1723.1
37.5°	1392.7	1421.2	1435.4	1444.0	1455.3	1466.7	1469.6	1483.8	1500.9	1506.6	1515.2
40°	1216.1	1224.7	1233.2	1233.2	1244.6	1244.6	1244.6	1247.4	1264.5	1267.4	1278.8
42.5°	1039.5	1039.5	1031.0	1022.4	1025.3	1022.4	1008.2	1008.2	1016.7	1028.1	1028.1
45°	874.3	854.4	828.8	808.8	794.6	788.9	771.8	771.8	769.0	771.8	783.2
47.5°	734.8	700.6	657.9	618.0	603.8	592.4	566.8	555.4	549.7	552.5	558.2
50°	618.0	581.0	532.6	484.2	458.5	444.3	413.0	393.0	390.2	384.5	395.9
52.5°	532.6	487.0	435.7	378.8	353.2	330.4	296.2	279.1	267.7	267.7	270.6
55°	458.5	410.1	353.2	296.2	270.6	253.5	219.3	196.5	185.1	182.3	190.8
57.5°	395.9	350.3	293.3	236.4	210.8	190.8	156.6	136.7	128.2	122.5	125.3
60°	347.5	301.9	244.9	190.8	168.0	145.2	116.8	94.0	82.6	82.6	85.4
62.5°	301.9	259.2	207.9	156.6	136.7	116.8	85.4	65.5	57.0	54.1	57.0
65°	256.3	216.5	173.7	131.0	111.1	94.0	68.4	51.3	39.9	37.0	39.9
67.5°	207.9	176.6	139.6	105.4	88.3	74.0	51.3	37.0	28.5	25.6	28.5
70°	162.3	133.9	105.4	76.9	65.5	54.1	37.0	28.5	19.9	17.1	19.9
72.5°	116.8	96.8	74.0	54.1	45.6	37.0	25.6	19.9	14.2	11.4	14.2
75°	79.7	65.5	48.4	34.2	28.5	25.6	17.1	11.4	8.5	8.5	8.5
77.5°	51.3	39.9	31.3	22.8	17.1	14.2	8.5	5.7	5.7	5.7	5.7
80°	28.5	22.8	17.1	11.4	8.5	8.5	5.7	5.7	2.8	2.8	2.8
82.5°	17.1	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



TEST NUMBER: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6
2.5°	2457.9	2460.7	2452.2	2463.6	2455.0	2466.4	2466.4	2455.0	2457.9	2452.2	2463.6
5°	2452.2	2452.2	2446.5	2455.0	2443.6	2455.0	2452.2	2432.2	2437.9	2426.5	2437.9
7.5°	2452.2	2446.5	2437.9	2446.5	2432.2	2440.8	2429.4	2409.4	2403.7	2389.5	2389.5
10°	2460.7	2452.2	2440.8	2443.6	2429.4	2432.2	2415.1	2386.7	2378.1	2361.0	2355.3
12.5°	2480.6	2472.1	2455.0	2460.7	2440.8	2440.8	2418.0	2383.8	2366.7	2343.9	2338.2
15°	2509.1	2494.9	2474.9	2477.8	2457.9	2446.5	2418.0	2378.1	2355.3	2324.0	2315.5
17.5°	2514.8	2500.6	2474.9	2474.9	2449.3	2435.1	2400.9	2355.3	2326.8	2295.5	2278.4
20°	2483.5	2469.2	2440.8	2437.9	2415.1	2395.2	2358.2	2312.6	2284.1	2249.9	2235.7
22.5°	2418.0	2400.9	2375.3	2372.4	2349.6	2338.2	2298.4	2252.8	2224.3	2190.1	2178.7
25°	2321.1	2312.6	2287.0	2284.1	2264.2	2249.9	2215.8	2173.1	2147.4	2113.2	2101.9
27.5°	2207.2	2198.7	2173.1	2173.1	2150.3	2141.7	2110.4	2070.5	2050.6	2019.3	2005.0
30°	2070.5	2059.1	2044.9	2042.0	2022.1	2013.6	1985.1	1948.1	1928.1	1902.5	1896.8
32.5°	1908.2	1899.6	1891.1	1888.2	1868.3	1859.8	1839.8	1802.8	1785.7	1762.9	1754.4
35°	1720.2	1714.5	1706.0	1703.1	1694.6	1686.0	1666.1	1637.6	1629.1	1612.0	1603.4
37.5°	1503.8	1509.5	1503.8	1503.8	1495.2	1498.1	1481.0	1463.9	1455.3	1444.0	1438.3
40°	1270.2	1281.6	1290.2	1290.2	1287.3	1298.7	1295.9	1281.6	1278.8	1273.1	1270.2
42.5°	1033.8	1039.5	1056.6	1068.0	1065.2	1093.6	1096.5	1107.9	1116.4	1110.7	1113.6
45°	786.1	803.1	825.9	837.3	851.6	888.6	908.5	931.3	951.2	962.6	959.8
47.5°	566.8	586.7	612.3	629.4	655.0	700.6	751.9	780.4	808.8	823.1	837.3
50°	410.1	430.1	461.4	487.0	504.1	566.8	620.9	657.9	689.2	709.2	723.4
52.5°	287.7	310.4	344.6	367.4	393.0	452.8	515.5	558.2	592.4	618.0	632.3
55°	199.4	225.0	256.3	279.1	307.6	370.2	430.1	475.6	512.6	535.4	552.5
57.5°	139.6	162.3	193.7	213.6	242.1	301.9	361.7	407.3	444.3	467.1	487.0
60°	94.0	116.8	148.1	168.0	190.8	250.6	304.7	353.2	387.3	410.1	430.1
62.5°	65.5	85.4	116.8	136.7	156.6	207.9	259.2	301.9	336.1	361.7	378.8
65°	51.3	68.4	94.0	111.1	131.0	173.7	216.5	253.5	287.7	313.3	324.7
67.5°	37.0	54.1	74.0	88.3	102.5	139.6	176.6	205.1	236.4	256.3	270.6
70°	25.6	37.0	54.1	65.5	76.9	105.4	133.9	159.5	182.3	196.5	207.9
72.5°	19.9	25.6	37.0	45.6	54.1	74.0	96.8	116.8	133.9	145.2	156.6
75°	11.4	17.1	25.6	31.3	37.0	51.3	65.5	79.7	91.1	99.7	105.4
77.5°	5.7	8.5	14.2	17.1	22.8	31.3	42.7	51.3	59.8	65.5	71.2
80°	5.7	5.7	8.5	8.5	11.4	17.1	22.8	28.5	34.2	39.9	42.7
82.5°	2.8	2.8	5.7	5.7	5.7	8.5	11.4	17.1	19.9	22.8	25.6
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: P252598

CATALOG NUMBER: LD6B40D010 EU6B30508035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6	2463.6
2.5°	2455.0	2460.7	2457.9	2463.6	2455.0	2452.2	2457.9	2449.3
5°	2423.7	2426.5	2423.7	2423.7	2418.0	2412.3	2418.0	2409.4
7.5°	2375.3	2375.3	2366.7	2366.7	2355.3	2349.6	2349.6	2346.8
10°	2335.4	2326.8	2318.3	2321.1	2304.1	2298.4	2295.5	2292.7
12.5°	2315.5	2309.8	2295.5	2295.5	2278.4	2272.7	2269.9	2267.0
15°	2292.7	2281.3	2269.9	2267.0	2252.8	2247.1	2244.3	2238.6
17.5°	2252.8	2244.3	2230.0	2230.0	2215.8	2212.9	2207.2	2204.4
20°	2210.1	2198.7	2187.3	2187.3	2170.2	2170.2	2161.7	2164.5
22.5°	2150.3	2141.7	2130.3	2130.3	2116.1	2113.2	2104.7	2101.9
25°	2079.1	2067.7	2059.1	2056.3	2044.9	2039.2	2036.3	2030.7
27.5°	1985.1	1976.5	1968.0	1962.3	1948.1	1945.2	1936.7	1939.5
30°	1868.3	1862.6	1859.8	1854.1	1837.0	1831.3	1831.3	1822.7
32.5°	1740.2	1731.6	1725.9	1717.4	1703.1	1700.3	1691.7	1694.6
35°	1583.5	1572.1	1563.6	1566.4	1549.3	1546.5	1540.8	1543.6
37.5°	1421.2	1409.8	1398.4	1395.5	1381.3	1381.3	1372.8	1372.8
40°	1253.1	1241.7	1236.0	1236.0	1219.0	1221.8	1213.3	1210.4
42.5°	1102.2	1090.8	1088.0	1085.1	1076.6	1073.7	1065.2	1068.0
45°	959.8	956.9	956.9	951.2	942.7	939.9	942.7	942.7
47.5°	834.5	837.3	834.5	834.5	828.8	834.5	828.8	831.6
50°	729.1	734.8	734.8	734.8	731.9	734.8	734.8	737.6
52.5°	640.8	649.4	646.5	649.4	646.5	652.2	649.4	652.2
55°	563.9	569.6	572.5	575.3	575.3	575.3	575.3	575.3
57.5°	492.7	501.3	504.1	507.0	507.0	512.6	507.0	507.0
60°	435.7	444.3	447.1	450.0	450.0	452.8	447.1	450.0
62.5°	384.5	393.0	393.0	395.9	395.9	395.9	390.2	393.0
65°	333.2	336.1	338.9	338.9	336.1	336.1	333.2	336.1
67.5°	276.3	279.1	276.3	276.3	273.4	273.4	267.7	270.6
70°	213.6	213.6	216.5	213.6	210.8	213.6	210.8	207.9
72.5°	159.5	159.5	159.5	156.6	156.6	153.8	156.6	156.6
75°	108.2	108.2	111.1	111.1	111.1	111.1	108.2	108.2
77.5°	71.2	71.2	71.2	71.2	74.0	71.2	71.2	71.2
80°	45.6	45.6	48.4	48.4	45.6	45.6	45.6	45.6
82.5°	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
85°	17.1	17.1	17.1	17.1	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)