

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: P252303

Luminaire Tested: **LD6B50D010TE EU6B30509027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252303
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: LD6B50D010TE EU6B30509027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4058.0 lumens
Efficiency: N/A
Efficacy: 69.0 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

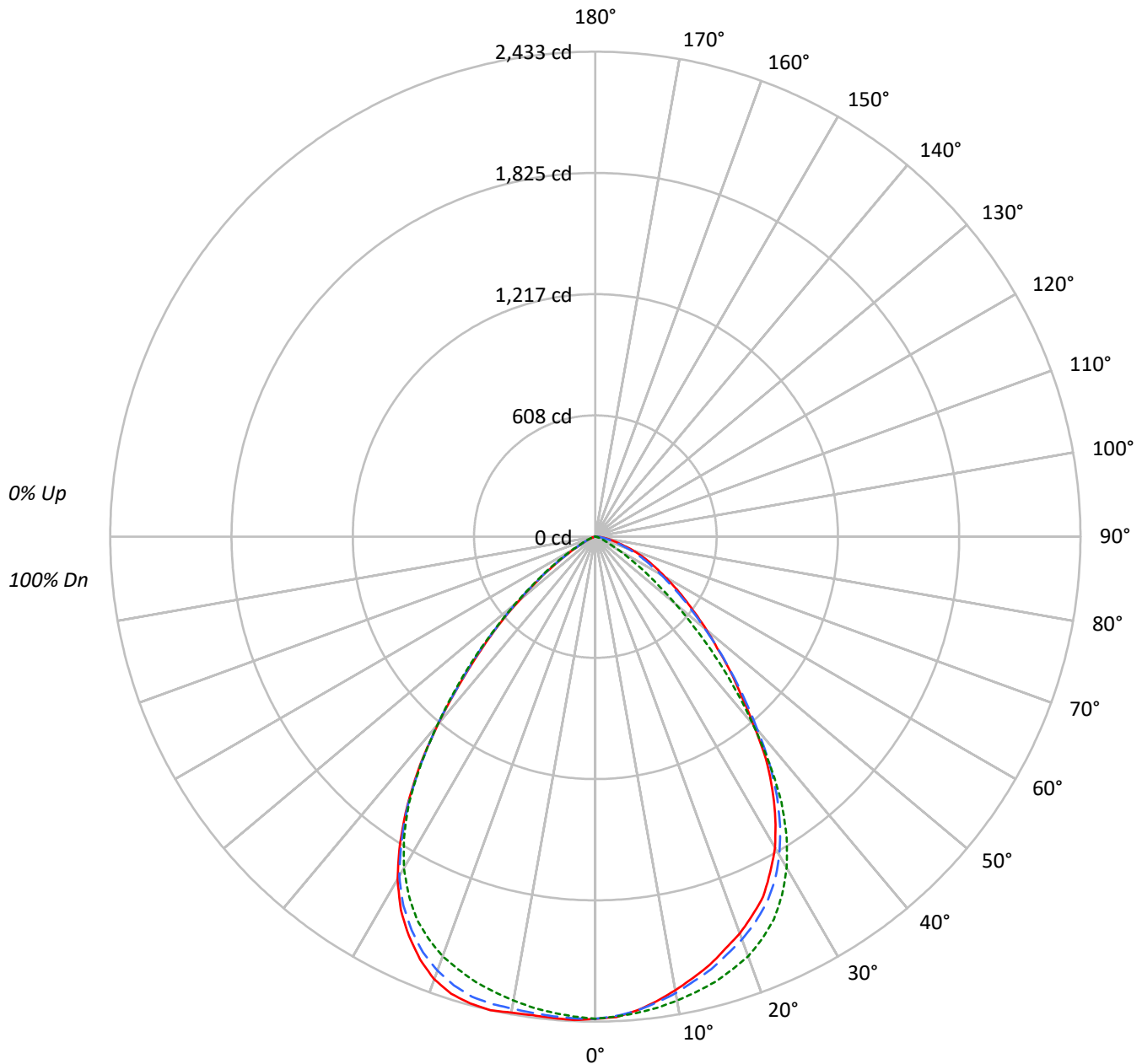
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
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°	157804	157804	157804
5°	156305	157071	158793
10°	153077	156562	160629
15°	150153	156272	163769
20°	147041	155560	164078
25°	143416	152457	159188
30°	135781	144587	149424
35°	123313	129597	130760
40°	105239	104745	104243
45°	88408	78434	76007
50°	73828	53072	50403
55°	62138	32565	29573
60°	52597	17158	14862
65°	45540	9015	7209
70°	37883	5570	3891
75°	27980	3680	2218
80°	21941	2179	1090
85°	17516	2171	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.0	5.6
10°-20°	652.7	16.1
20°-30°	963.8	23.8
30°-40°	993.3	24.5
40°-50°	686.1	16.9
50°-60°	338.2	8.3
60°-70°	137.0	3.4
70°-80°	48.8	1.2
80°-90°	10.1	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°	1844.5	45.5
0°-40°	2837.8	69.9
0°-60°	3862.0	95.2
0°-90°	4058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4058.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2419	2419	2419	2419	2419	
5°	2387	2387	2398	2416	2425	225
15°	2223	2246	2314	2390	2425	626
25°	1992	2030	2118	2179	2211	911
35°	1548	1586	1627	1636	1642	959
45°	958	964	850	838	824	741
55°	546	526	286	269	260	494
65°	295	266	58	47	47	293
75°	111	94	15	9	9	125
85°	23	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°	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8
2.5°	2413.0	2404.2	2410.1	2398.4	2413.0	2398.4	2401.3	2404.2	2401.3	2404.2	2407.1
5°	2386.7	2377.9	2386.7	2372.1	2386.7	2377.9	2377.9	2380.8	2380.8	2383.8	2386.7
7.5°	2351.6	2342.9	2351.6	2337.0	2354.5	2345.8	2345.8	2351.6	2348.7	2351.6	2357.5
10°	2310.7	2299.0	2307.8	2299.0	2316.6	2304.9	2310.7	2310.7	2310.7	2319.5	2325.3
12.5°	2266.9	2255.2	2266.9	2252.3	2269.8	2261.1	2264.0	2272.8	2275.7	2281.5	2284.4
15°	2223.1	2208.5	2214.3	2205.6	2223.1	2214.3	2217.2	2228.9	2228.9	2237.7	2246.5
17.5°	2167.6	2155.9	2167.6	2155.9	2170.5	2164.7	2170.5	2179.3	2179.3	2188.0	2196.8
20°	2117.9	2106.2	2115.0	2106.2	2123.8	2115.0	2117.9	2129.6	2132.5	2141.3	2150.1
22.5°	2056.6	2047.8	2053.7	2044.9	2062.4	2056.6	2059.5	2071.2	2074.1	2079.9	2094.6
25°	1992.3	1974.8	1983.5	1977.7	1995.2	1986.5	1992.3	2004.0	2009.8	2018.6	2030.3
27.5°	1898.8	1890.1	1895.9	1895.9	1910.5	1901.8	1904.7	1916.4	1925.1	1933.9	1948.5
30°	1802.4	1787.8	1793.7	1796.6	1808.3	1802.4	1808.3	1820.0	1822.9	1834.6	1846.2
32.5°	1679.7	1673.9	1685.6	1679.7	1685.6	1685.6	1688.5	1697.3	1703.1	1708.9	1723.6
35°	1548.3	1536.6	1548.3	1542.4	1557.0	1548.3	1557.0	1565.8	1565.8	1577.5	1586.3
37.5°	1405.1	1390.5	1396.4	1396.4	1402.2	1399.3	1399.3	1413.9	1416.8	1425.6	1434.3
40°	1235.7	1229.9	1241.5	1238.6	1241.5	1241.5	1244.5	1253.2	1259.1	1262.0	1264.9
42.5°	1083.8	1086.7	1089.6	1089.6	1089.6	1089.6	1089.6	1101.3	1098.4	1107.2	1110.1
45°	958.2	946.5	952.3	949.4	958.2	949.4	958.2	966.9	961.1	969.9	964.0
47.5°	829.6	829.6	829.6	826.7	832.6	829.6	835.5	838.4	838.4	838.4	835.5
50°	727.4	718.6	721.6	721.6	724.5	721.6	727.4	730.3	730.3	724.5	712.8
52.5°	628.1	625.2	625.2	631.0	631.0	628.1	628.1	628.1	628.1	619.3	613.5
55°	546.3	540.4	543.4	543.4	543.4	543.4	546.3	543.4	543.4	534.6	525.8
57.5°	473.2	467.4	467.4	467.4	470.3	467.4	467.4	467.4	464.5	455.7	444.0
60°	403.1	400.2	403.1	403.1	406.1	403.1	403.1	403.1	397.3	388.5	376.8
62.5°	344.7	344.7	344.7	347.6	347.6	344.7	344.7	341.8	338.9	327.2	315.5
65°	295.0	292.1	295.0	295.0	298.0	298.0	295.0	292.1	289.2	277.5	265.8
67.5°	245.4	242.5	245.4	245.4	248.3	245.4	245.4	245.4	236.6	230.8	219.1
70°	198.6	195.7	195.7	195.7	198.6	192.8	195.7	195.7	189.9	181.1	169.4
72.5°	151.9	151.9	151.9	151.9	151.9	151.9	149.0	149.0	143.1	134.4	128.5
75°	111.0	111.0	113.9	113.9	111.0	111.0	111.0	108.1	105.2	99.3	93.5
77.5°	81.8	81.8	81.8	81.8	78.9	78.9	78.9	76.0	73.0	70.1	64.3
80°	58.4	58.4	58.4	55.5	58.4	55.5	55.5	55.5	49.7	46.7	43.8
82.5°	40.9	38.0	38.0	38.0	38.0	38.0	38.0	35.1	35.1	32.1	29.2
85°	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	20.4	17.5	17.5
87.5°	11.7	14.6	14.6	14.6	14.6	14.6	14.6	11.7	11.7	11.7	8.8
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°	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8
2.5°	2407.1	2407.1	2413.0	2404.2	2418.8	2410.1	2407.1	2421.7	2413.0	2410.1	2415.9
5°	2386.7	2389.6	2392.5	2386.7	2401.3	2392.5	2392.5	2407.1	2401.3	2398.4	2407.1
7.5°	2360.4	2363.3	2369.2	2366.2	2377.9	2372.1	2375.0	2389.6	2383.8	2383.8	2392.5
10°	2328.3	2334.1	2339.9	2339.9	2354.5	2348.7	2348.7	2366.2	2360.4	2363.3	2375.0
12.5°	2290.3	2299.0	2307.8	2310.7	2325.3	2316.6	2319.5	2339.9	2337.0	2339.9	2351.6
15°	2249.4	2261.1	2269.8	2269.8	2287.4	2278.6	2287.4	2307.8	2302.0	2313.7	2328.3
17.5°	2202.6	2214.3	2226.0	2228.9	2246.5	2240.6	2252.3	2272.8	2272.8	2278.6	2296.1
20°	2158.8	2173.4	2179.3	2188.0	2205.6	2202.6	2208.5	2231.9	2231.9	2240.6	2258.1
22.5°	2100.4	2115.0	2126.7	2135.5	2150.1	2150.1	2158.8	2179.3	2179.3	2185.1	2202.6
25°	2036.1	2053.7	2062.4	2071.2	2085.8	2082.9	2091.6	2109.2	2112.1	2117.9	2135.5
27.5°	1954.3	1968.9	1980.6	1986.5	2006.9	1995.2	2004.0	2024.4	2021.5	2027.4	2042.0
30°	1852.1	1866.7	1878.4	1878.4	1895.9	1895.9	1904.7	1913.4	1913.4	1919.3	1931.0
32.5°	1732.3	1749.8	1749.8	1758.6	1770.3	1758.6	1770.3	1782.0	1776.1	1784.9	1793.7
35°	1595.0	1603.8	1606.7	1606.7	1615.5	1612.5	1609.6	1618.4	1612.5	1627.2	1635.9
37.5°	1428.5	1440.2	1434.3	1440.2	1437.3	1428.5	1428.5	1443.1	1431.4	1434.3	1443.1
40°	1267.8	1267.8	1264.9	1250.3	1253.2	1244.5	1241.5	1244.5	1232.8	1229.9	1241.5
42.5°	1101.3	1098.4	1089.6	1069.2	1072.1	1057.5	1045.8	1045.8	1040.0	1037.1	1040.0
45°	952.3	943.6	929.0	905.6	899.8	888.1	864.7	858.9	850.1	850.1	853.0
47.5°	815.0	803.4	780.0	753.7	739.1	724.5	701.1	692.3	677.7	671.9	677.7
50°	701.1	680.7	651.4	613.5	598.9	581.3	558.0	543.4	528.8	522.9	520.0
52.5°	595.9	566.7	537.5	490.8	479.1	461.6	429.4	414.8	400.2	388.5	388.5
55°	505.4	479.1	438.2	394.4	376.8	359.3	327.2	306.7	292.1	286.3	280.4
57.5°	423.6	394.4	356.4	309.7	292.1	274.6	242.5	222.0	207.4	198.6	192.8
60°	356.4	324.3	286.3	245.4	224.9	207.4	175.3	154.8	140.2	131.5	125.6
62.5°	292.1	265.8	227.9	189.9	172.4	154.8	128.5	108.1	93.5	87.6	78.9
65°	245.4	219.1	184.0	151.9	137.3	119.8	96.4	78.9	67.2	58.4	52.6
67.5°	198.6	178.2	149.0	119.8	105.2	93.5	73.0	58.4	46.7	40.9	38.0
70°	157.7	137.3	113.9	90.6	81.8	70.1	55.5	40.9	35.1	29.2	26.3
72.5°	116.9	102.2	84.7	67.2	58.4	52.6	38.0	32.1	23.4	20.4	17.5
75°	84.7	73.0	61.3	46.7	40.9	38.0	29.2	20.4	17.5	14.6	11.7
77.5°	58.4	52.6	40.9	32.1	29.2	26.3	20.4	14.6	11.7	8.8	8.8
80°	38.0	32.1	26.3	20.4	20.4	17.5	11.7	8.8	8.8	5.8	5.8
82.5°	23.4	20.4	17.5	14.6	11.7	11.7	8.8	5.8	5.8	2.9	2.9
85°	14.6	11.7	8.8	8.8	5.8	5.8	5.8	2.9	2.9	2.9	2.9
87.5°	5.8	5.8	5.8	2.9	2.9	2.9	2.9	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°	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8
2.5°	2415.9	2415.9	2421.7	2413.0	2418.8	2418.8	2424.7	2413.0	2418.8	2421.7	2427.6
5°	2404.2	2407.1	2413.0	2410.1	2413.0	2413.0	2418.8	2404.2	2415.9	2415.9	2424.7
7.5°	2392.5	2392.5	2398.4	2395.4	2401.3	2404.2	2410.1	2398.4	2410.1	2410.1	2418.8
10°	2377.9	2377.9	2386.7	2383.8	2392.5	2395.4	2404.2	2392.5	2404.2	2407.1	2415.9
12.5°	2357.5	2360.4	2369.2	2369.2	2377.9	2383.8	2392.5	2386.7	2401.3	2404.2	2415.9
15°	2334.1	2339.9	2351.6	2348.7	2357.5	2366.2	2377.9	2369.2	2389.6	2395.4	2407.1
17.5°	2304.9	2310.7	2319.5	2319.5	2328.3	2334.1	2348.7	2342.9	2360.4	2363.3	2377.9
20°	2261.1	2269.8	2281.5	2278.6	2287.4	2293.2	2304.9	2299.0	2316.6	2322.4	2337.0
22.5°	2208.5	2214.3	2223.1	2223.1	2231.9	2237.7	2249.4	2240.6	2258.1	2261.1	2272.8
25°	2138.4	2144.2	2150.1	2153.0	2161.7	2164.7	2170.5	2164.7	2179.3	2182.2	2196.8
27.5°	2047.8	2050.7	2059.5	2059.5	2065.3	2068.3	2077.0	2065.3	2085.8	2085.8	2094.6
30°	1939.7	1936.8	1948.5	1942.6	1948.5	1948.5	1957.3	1951.4	1966.0	1960.2	1968.9
32.5°	1796.6	1802.4	1802.4	1796.6	1808.3	1805.3	1805.3	1799.5	1808.3	1811.2	1817.0
35°	1630.1	1638.8	1638.8	1641.8	1644.7	1635.9	1638.8	1621.3	1635.9	1638.8	1641.8
37.5°	1449.0	1440.2	1446.0	1437.3	1451.9	1434.3	1434.3	1422.7	1434.3	1434.3	1437.3
40°	1241.5	1238.6	1244.5	1238.6	1235.7	1232.8	1226.9	1218.2	1229.9	1224.0	1232.8
42.5°	1045.8	1042.9	1042.9	1037.1	1034.1	1034.1	1028.3	1022.4	1019.5	1019.5	1034.1
45°	844.2	850.1	844.2	841.3	847.2	841.3	844.2	832.6	838.4	832.6	838.4
47.5°	674.8	677.7	671.9	666.1	674.8	666.1	666.1	657.3	669.0	669.0	663.1
50°	522.9	520.0	514.1	520.0	517.1	517.1	517.1	508.3	514.1	505.4	511.2
52.5°	385.6	382.7	382.7	379.8	382.7	379.8	379.8	376.8	376.8	373.9	376.8
55°	280.4	277.5	271.7	271.7	271.7	274.6	271.7	268.8	268.8	265.8	268.8
57.5°	189.9	184.0	184.0	184.0	184.0	181.1	181.1	178.2	181.1	178.2	181.1
60°	122.7	122.7	116.9	116.9	116.9	116.9	116.9	113.9	116.9	116.9	116.9
62.5°	76.0	76.0	73.0	70.1	73.0	70.1	70.1	70.1	73.0	70.1	73.0
65°	49.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
67.5°	35.1	32.1	32.1	32.1	32.1	32.1	32.1	29.2	32.1	32.1	32.1
70°	23.4	23.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
72.5°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
75°	11.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
77.5°	8.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
80°	5.8	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
85°	2.9	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	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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: P252303

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8	2418.8
2.5°	2418.8	2421.7	2415.9	2418.8	2413.0	2418.8	2421.7	2427.6
5°	2413.0	2415.9	2410.1	2415.9	2410.1	2415.9	2418.8	2424.7
7.5°	2407.1	2413.0	2407.1	2413.0	2407.1	2413.0	2415.9	2421.7
10°	2407.1	2415.9	2410.1	2418.8	2410.1	2415.9	2421.7	2424.7
12.5°	2407.1	2415.9	2413.0	2418.8	2415.9	2421.7	2427.6	2433.4
15°	2401.3	2410.1	2404.2	2413.0	2410.1	2413.0	2424.7	2424.7
17.5°	2369.2	2377.9	2377.9	2383.8	2383.8	2392.5	2398.4	2404.2
20°	2328.3	2337.0	2334.1	2342.9	2342.9	2351.6	2357.5	2363.3
22.5°	2266.9	2278.6	2275.7	2284.4	2281.5	2287.4	2299.0	2296.1
25°	2188.0	2202.6	2199.7	2205.6	2202.6	2202.6	2208.5	2211.4
27.5°	2091.6	2100.4	2097.5	2103.3	2097.5	2103.3	2109.2	2112.1
30°	1966.0	1971.9	1968.9	1971.9	1968.9	1974.8	1977.7	1983.5
32.5°	1814.1	1822.9	1814.1	1820.0	1817.0	1817.0	1828.7	1822.9
35°	1633.0	1635.9	1638.8	1638.8	1633.0	1635.9	1641.8	1641.8
37.5°	1431.4	1446.0	1428.5	1437.3	1434.3	1434.3	1434.3	1443.1
40°	1221.1	1224.0	1218.2	1218.2	1218.2	1215.3	1226.9	1224.0
42.5°	1022.4	1025.4	1022.4	1013.7	1016.6	1016.6	1025.4	1013.7
45°	829.6	835.5	832.6	832.6	826.7	826.7	829.6	823.8
47.5°	657.3	663.1	654.4	657.3	651.4	657.3	654.4	660.2
50°	499.5	505.4	502.5	505.4	505.4	499.5	508.3	496.6
52.5°	373.9	376.8	373.9	371.0	368.1	368.1	373.9	371.0
55°	265.8	262.9	262.9	262.9	265.8	265.8	262.9	260.0
57.5°	178.2	178.2	175.3	175.3	178.2	172.4	175.3	172.4
60°	113.9	113.9	113.9	113.9	111.0	113.9	113.9	113.9
62.5°	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
65°	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
67.5°	29.2	32.1	32.1	32.1	29.2	29.2	29.2	29.2
70°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
72.5°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
75°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
77.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	2.9	2.9	2.9	2.9	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)