

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: P252621

Luminaire Tested: **LD6B50D010TE EU6B30509730 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252621
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: LD6B50D010TE EU6B30509730 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3977.0 lumens
Efficiency: N/A
Efficacy: 67.7 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

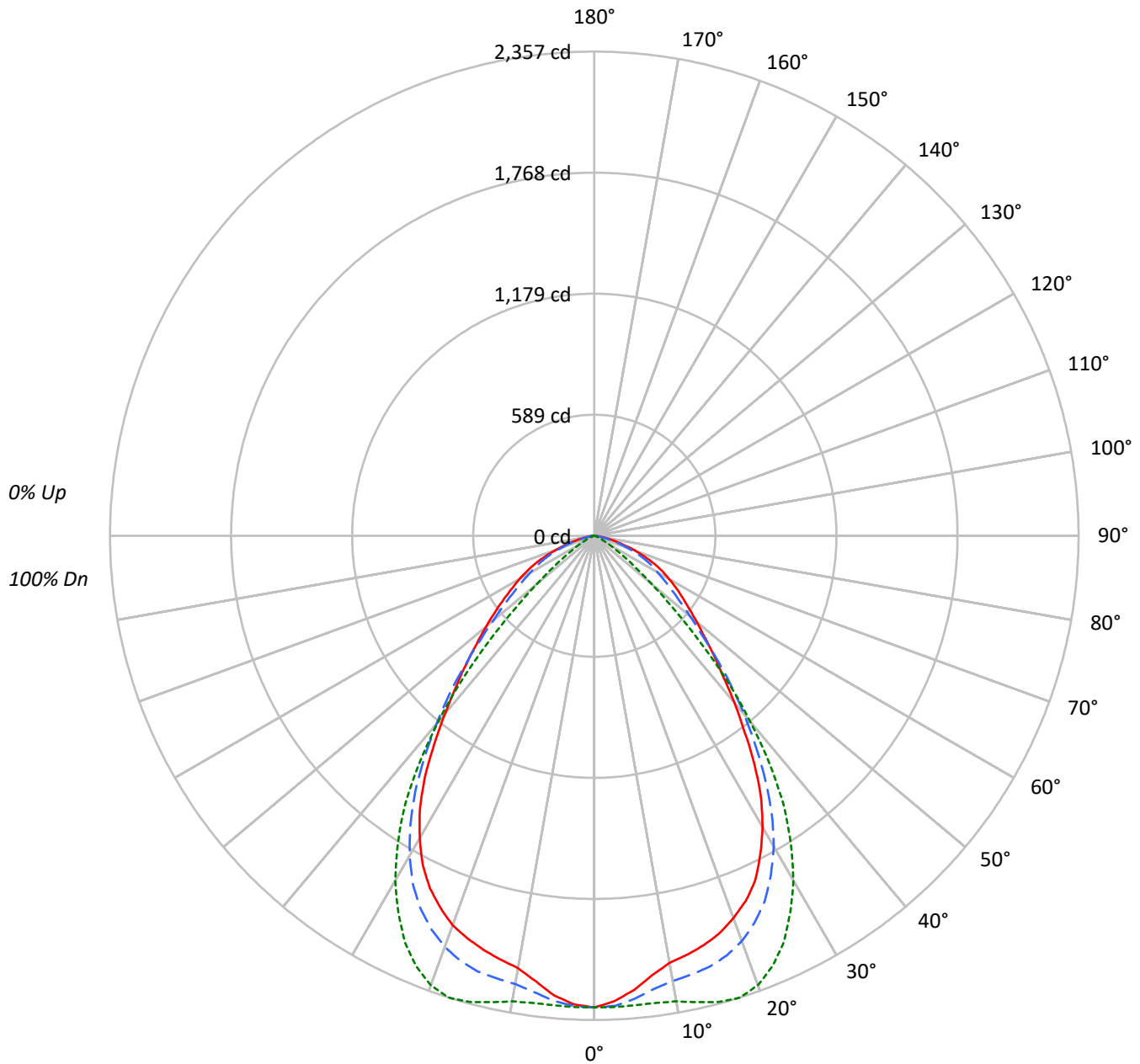
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	111	108	105	102		109	106	103	100		102	99	97		98	96	94		94	93	91
2	104	97	92	87		101	95	91	86		92	88	84		89	86	83		86	83	81
3	96	88	81	76		94	86	80	76		84	79	74		81	77	73		79	75	72
4	90	80	73	67		88	79	72	67		76	70	66		74	69	65		72	68	64
5	84	73	65	60		82	72	65	59		70	64	59		68	63	58		66	62	58
6	78	67	59	54		76	66	59	53		64	58	53		63	57	53		61	56	52
7	73	61	54	49		72	61	53	48		59	53	48		58	52	48		57	51	48
8	69	57	49	44		67	56	49	44		55	48	44		54	48	44		53	47	43
9	64	53	45	40		63	52	45	40		51	45	40		50	44	40		49	44	40
10	61	49	42	37		60	48	42	37		48	41	37		47	41	37		46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	149799	149799	149799
5°	145328	150201	147071
10°	139801	152461	141563
15°	139306	158670	140920
20°	137481	161628	140063
25°	133374	157071	136239
30°	123381	145981	127984
35°	108244	128331	114584
40°	90199	100598	96084
45°	75924	66375	81063
50°	65739	36376	69779
55°	59477	19325	60989
60°	54724	10047	54724
65°	49584	5326	48349
70°	40000	3033	36968
75°	27425	2017	25434
80°	17959	1014	15967
85°	11902	2021	9956



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.1	5.4
10°-20°	619.1	15.6
20°-30°	914.8	23.0
30°-40°	924.0	23.2
40°-50°	636.9	16.0
50°-60°	365.8	9.2
60°-70°	212.9	5.4
70°-80°	77.7	2.0
80°-90°	11.9	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°	1748.0	44.0
0°-40°	2672.0	67.2
0°-60°	3674.6	92.4
0°-90°	3977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3977.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2296	2296	2296	2296	2296	
5°	2219	2262	2294	2272	2246	208
15°	2062	2171	2349	2195	2086	581
25°	1853	1962	2182	2002	1893	844
35°	1359	1452	1611	1518	1439	844
45°	823	834	719	887	879	640
55°	523	459	170	478	536	471
65°	321	271	34	268	313	315
75°	109	88	8	85	101	123
85°	16	8	3	11	13	20
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°	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1
2.5°	2266.9	2269.6	2272.2	2269.6	2272.2	2282.8	2274.9	2280.2	2280.2	2282.8	2290.8
5°	2219.1	2219.1	2224.4	2221.8	2229.8	2240.4	2232.4	2240.4	2243.0	2248.3	2261.6
7.5°	2158.1	2158.1	2160.7	2160.7	2171.4	2182.0	2176.7	2187.3	2197.9	2208.5	2224.4
10°	2110.3	2115.6	2115.6	2118.3	2128.9	2142.2	2139.5	2152.8	2163.4	2179.3	2200.6
12.5°	2089.1	2091.7	2091.7	2097.0	2107.7	2120.9	2118.3	2131.5	2147.5	2166.1	2187.3
15°	2062.5	2067.8	2065.2	2070.5	2081.1	2094.4	2091.7	2105.0	2123.6	2142.2	2171.4
17.5°	2028.0	2030.7	2033.3	2033.3	2043.9	2054.6	2054.6	2067.8	2089.1	2110.3	2142.2
20°	1980.2	1985.5	1985.5	1988.2	1996.2	2012.1	2009.4	2022.7	2043.9	2065.2	2099.7
22.5°	1924.5	1927.1	1927.1	1929.8	1943.1	1951.0	1953.7	1964.3	1982.9	2006.8	2038.6
25°	1852.8	1855.5	1852.8	1860.8	1866.1	1882.0	1876.7	1890.0	1911.2	1929.8	1961.7
27.5°	1749.3	1754.6	1754.6	1757.3	1770.5	1783.8	1783.8	1797.1	1815.7	1828.9	1860.8
30°	1637.8	1645.8	1637.8	1651.1	1656.4	1667.0	1675.0	1682.9	1698.9	1717.4	1746.6
32.5°	1510.4	1507.7	1510.4	1515.7	1531.6	1539.6	1544.9	1552.9	1568.8	1584.7	1608.6
35°	1359.1	1364.4	1367.1	1377.7	1377.7	1390.9	1393.6	1398.9	1422.8	1433.4	1452.0
37.5°	1199.8	1205.1	1207.8	1213.1	1223.7	1229.0	1237.0	1244.9	1260.9	1279.5	1290.1
40°	1059.1	1059.1	1061.8	1067.1	1075.1	1077.7	1085.7	1096.3	1106.9	1122.8	1133.5
42.5°	926.4	929.1	926.4	931.7	939.7	950.3	947.6	960.9	963.6	974.2	982.2
45°	822.9	822.9	817.6	822.9	822.9	833.5	830.9	836.2	833.5	838.8	833.5
47.5°	724.7	727.3	724.7	727.3	727.3	727.3	730.0	724.7	727.3	719.4	703.4
50°	647.7	650.3	645.0	647.7	645.0	642.4	645.0	637.1	634.4	623.8	607.9
52.5°	581.3	578.7	576.0	576.0	576.0	573.4	570.7	562.7	554.8	544.2	525.6
55°	522.9	520.3	517.6	517.6	512.3	509.7	509.7	501.7	493.7	480.5	459.2
57.5°	469.8	467.2	464.5	464.5	461.9	456.6	456.6	448.6	438.0	422.1	403.5
60°	419.4	419.4	419.4	416.8	416.8	411.4	411.4	403.5	392.9	376.9	355.7
62.5°	374.3	371.6	371.6	371.6	371.6	369.0	366.3	361.0	350.4	334.5	315.9
65°	321.2	321.2	321.2	321.2	318.5	318.5	318.5	310.6	305.3	289.3	270.8
67.5°	262.8	262.8	262.8	262.8	260.1	262.8	262.8	257.5	252.2	236.2	220.3
70°	209.7	207.0	204.4	207.0	204.4	204.4	207.0	201.7	199.1	185.8	169.9
72.5°	154.0	156.6	154.0	154.0	154.0	151.3	154.0	151.3	146.0	135.4	124.8
75°	108.8	111.5	111.5	108.8	108.8	108.8	106.2	106.2	100.9	92.9	87.6
77.5°	74.3	74.3	74.3	74.3	71.7	71.7	71.7	69.0	66.4	61.1	55.7
80°	47.8	47.8	47.8	47.8	45.1	45.1	45.1	42.5	42.5	37.2	31.9
82.5°	29.2	29.2	29.2	29.2	29.2	29.2	26.5	26.5	23.9	21.2	18.6
85°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	13.3	13.3	10.6	8.0
87.5°	5.3	5.3	8.0	8.0	8.0	8.0	8.0	8.0	5.3	5.3	5.3
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°	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1
2.5°	2285.5	2288.2	2288.2	2288.2	2296.1	2298.8	2290.8	2282.8	2298.8	2296.1	2301.4
5°	2259.0	2266.9	2272.2	2274.9	2282.8	2288.2	2280.2	2277.5	2290.8	2293.5	2296.1
7.5°	2227.1	2240.4	2253.6	2259.0	2269.6	2274.9	2272.2	2272.2	2288.2	2293.5	2293.5
10°	2205.9	2224.4	2240.4	2253.6	2266.9	2274.9	2274.9	2277.5	2296.1	2301.4	2306.7
12.5°	2200.6	2224.4	2245.7	2264.3	2274.9	2288.2	2290.8	2298.8	2317.4	2325.3	2325.3
15°	2187.3	2219.1	2245.7	2269.6	2285.5	2301.4	2306.7	2322.7	2343.9	2349.2	2354.5
17.5°	2163.4	2195.3	2227.1	2256.3	2277.5	2290.8	2306.7	2322.7	2349.2	2357.2	2359.8
20°	2120.9	2158.1	2189.9	2219.1	2240.4	2259.0	2274.9	2293.5	2317.4	2328.0	2330.6
22.5°	2057.2	2094.4	2126.2	2158.1	2179.3	2195.3	2211.2	2232.4	2256.3	2266.9	2266.9
25°	1980.2	2014.7	2049.3	2073.1	2094.4	2113.0	2120.9	2144.8	2168.7	2182.0	2182.0
27.5°	1882.0	1913.9	1945.7	1972.3	1985.5	2001.5	2014.7	2036.0	2054.6	2065.2	2075.8
30°	1757.3	1789.1	1818.3	1844.9	1860.8	1876.7	1890.0	1905.9	1924.5	1937.8	1940.4
32.5°	1621.9	1648.4	1677.6	1704.2	1720.1	1725.4	1738.7	1754.6	1770.5	1781.2	1783.8
35°	1473.2	1491.8	1510.4	1534.3	1550.2	1550.2	1563.5	1574.1	1587.4	1611.3	1606.0
37.5°	1298.0	1324.6	1337.9	1345.8	1356.4	1367.1	1369.7	1383.0	1398.9	1404.2	1412.2
40°	1133.5	1141.4	1149.4	1149.4	1160.0	1160.0	1160.0	1162.7	1178.6	1181.2	1191.9
42.5°	968.9	968.9	960.9	953.0	955.6	953.0	939.7	939.7	947.6	958.3	958.3
45°	814.9	796.3	772.5	753.9	740.6	735.3	719.4	719.4	716.7	719.4	730.0
47.5°	684.9	653.0	613.2	576.0	562.7	552.1	528.2	517.6	512.3	515.0	520.3
50°	576.0	541.5	496.4	451.3	427.4	414.1	384.9	366.3	363.7	358.4	369.0
52.5°	496.4	453.9	406.1	353.0	329.2	307.9	276.1	260.1	249.5	249.5	252.2
55°	427.4	382.2	329.2	276.1	252.2	236.2	204.4	183.2	172.5	169.9	177.8
57.5°	369.0	326.5	273.4	220.3	196.4	177.8	146.0	127.4	119.5	114.1	116.8
60°	323.8	281.4	228.3	177.8	156.6	135.4	108.8	87.6	77.0	77.0	79.6
62.5°	281.4	241.6	193.8	146.0	127.4	108.8	79.6	61.1	53.1	50.4	53.1
65°	238.9	201.7	161.9	122.1	103.5	87.6	63.7	47.8	37.2	34.5	37.2
67.5°	193.8	164.6	130.1	98.2	82.3	69.0	47.8	34.5	26.5	23.9	26.5
70°	151.3	124.8	98.2	71.7	61.1	50.4	34.5	26.5	18.6	15.9	18.6
72.5°	108.8	90.3	69.0	50.4	42.5	34.5	23.9	18.6	13.3	10.6	13.3
75°	74.3	61.1	45.1	31.9	26.5	23.9	15.9	10.6	8.0	8.0	8.0
77.5°	47.8	37.2	29.2	21.2	15.9	13.3	8.0	5.3	5.3	5.3	5.3
80°	26.5	21.2	15.9	10.6	8.0	8.0	5.3	5.3	2.7	2.7	2.7
82.5°	15.9	10.6	8.0	5.3	5.3	2.7	2.7	2.7	2.7	2.7	2.7
85°	8.0	5.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
87.5°	2.7	2.7	2.7	2.7	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1
2.5°	2290.8	2293.5	2285.5	2296.1	2288.2	2298.8	2298.8	2288.2	2290.8	2285.5	2296.1
5°	2285.5	2285.5	2280.2	2288.2	2277.5	2288.2	2285.5	2266.9	2272.2	2261.6	2272.2
7.5°	2285.5	2280.2	2272.2	2280.2	2266.9	2274.9	2264.3	2245.7	2240.4	2227.1	2227.1
10°	2293.5	2285.5	2274.9	2277.5	2264.3	2266.9	2251.0	2224.4	2216.5	2200.6	2195.3
12.5°	2312.0	2304.1	2288.2	2293.5	2274.9	2274.9	2253.6	2221.8	2205.9	2184.6	2179.3
15°	2338.6	2325.3	2306.7	2309.4	2290.8	2280.2	2253.6	2216.5	2195.3	2166.1	2158.1
17.5°	2343.9	2330.6	2306.7	2306.7	2282.8	2269.6	2237.7	2195.3	2168.7	2139.5	2123.6
20°	2314.7	2301.4	2274.9	2272.2	2251.0	2232.4	2197.9	2155.4	2128.9	2097.0	2083.8
22.5°	2253.6	2237.7	2213.8	2211.2	2189.9	2179.3	2142.2	2099.7	2073.1	2041.3	2030.7
25°	2163.4	2155.4	2131.5	2128.9	2110.3	2097.0	2065.2	2025.4	2001.5	1969.6	1959.0
27.5°	2057.2	2049.3	2025.4	2025.4	2004.1	1996.2	1967.0	1929.8	1911.2	1882.0	1868.7
30°	1929.8	1919.2	1905.9	1903.3	1884.7	1876.7	1850.2	1815.7	1797.1	1773.2	1767.9
32.5°	1778.5	1770.5	1762.6	1759.9	1741.3	1733.4	1714.8	1680.3	1664.4	1643.1	1635.2
35°	1603.3	1598.0	1590.0	1587.4	1579.4	1571.4	1552.9	1526.3	1518.4	1502.4	1494.5
37.5°	1401.6	1406.9	1401.6	1401.6	1393.6	1396.3	1380.3	1364.4	1356.4	1345.8	1340.5
40°	1183.9	1194.5	1202.5	1202.5	1199.8	1210.4	1207.8	1194.5	1191.9	1186.6	1183.9
42.5°	963.6	968.9	984.8	995.4	992.8	1019.3	1022.0	1032.6	1040.6	1035.2	1037.9
45°	732.6	748.6	769.8	780.4	793.7	828.2	846.8	868.0	886.6	897.2	894.6
47.5°	528.2	546.8	570.7	586.6	610.5	653.0	700.8	727.3	753.9	767.1	780.4
50°	382.2	400.8	430.0	453.9	469.8	528.2	578.7	613.2	642.4	661.0	674.2
52.5°	268.1	289.3	321.2	342.4	366.3	422.1	480.5	520.3	552.1	576.0	589.3
55°	185.8	209.7	238.9	260.1	286.7	345.1	400.8	443.3	477.8	499.0	515.0
57.5°	130.1	151.3	180.5	199.1	225.6	281.4	337.1	379.6	414.1	435.3	453.9
60°	87.6	108.8	138.0	156.6	177.8	233.6	284.0	329.2	361.0	382.2	400.8
62.5°	61.1	79.6	108.8	127.4	146.0	193.8	241.6	281.4	313.2	337.1	353.0
65°	47.8	63.7	87.6	103.5	122.1	161.9	201.7	236.2	268.1	292.0	302.6
67.5°	34.5	50.4	69.0	82.3	95.6	130.1	164.6	191.1	220.3	238.9	252.2
70°	23.9	34.5	50.4	61.1	71.7	98.2	124.8	148.7	169.9	183.2	193.8
72.5°	18.6	23.9	34.5	42.5	50.4	69.0	90.3	108.8	124.8	135.4	146.0
75°	10.6	15.9	23.9	29.2	34.5	47.8	61.1	74.3	84.9	92.9	98.2
77.5°	5.3	8.0	13.3	15.9	21.2	29.2	39.8	47.8	55.7	61.1	66.4
80°	5.3	5.3	8.0	8.0	10.6	15.9	21.2	26.5	31.9	37.2	39.8
82.5°	2.7	2.7	5.3	5.3	5.3	8.0	10.6	15.9	18.6	21.2	23.9
85°	2.7	2.7	2.7	2.7	2.7	5.3	5.3	8.0	10.6	13.3	13.3
87.5°	0.0	0.0	2.7	2.7	2.7	2.7	2.7	5.3	5.3	5.3	8.0
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: P252621

CATALOG NUMBER: LD6B50D010TE EU6B30509730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1	2296.1
2.5°	2288.2	2293.5	2290.8	2296.1	2288.2	2285.5	2290.8	2282.8
5°	2259.0	2261.6	2259.0	2259.0	2253.6	2248.3	2253.6	2245.7
7.5°	2213.8	2213.8	2205.9	2205.9	2195.3	2189.9	2189.9	2187.3
10°	2176.7	2168.7	2160.7	2163.4	2147.5	2142.2	2139.5	2136.9
12.5°	2158.1	2152.8	2139.5	2139.5	2123.6	2118.3	2115.6	2113.0
15°	2136.9	2126.2	2115.6	2113.0	2099.7	2094.4	2091.7	2086.4
17.5°	2099.7	2091.7	2078.5	2078.5	2065.2	2062.5	2057.2	2054.6
20°	2059.9	2049.3	2038.6	2038.6	2022.7	2022.7	2014.7	2017.4
22.5°	2004.1	1996.2	1985.5	1985.5	1972.3	1969.6	1961.7	1959.0
25°	1937.8	1927.1	1919.2	1916.5	1905.9	1900.6	1897.9	1892.6
27.5°	1850.2	1842.2	1834.2	1828.9	1815.7	1813.0	1805.0	1807.7
30°	1741.3	1736.0	1733.4	1728.1	1712.1	1706.8	1706.8	1698.9
32.5°	1621.9	1613.9	1608.6	1600.6	1587.4	1584.7	1576.8	1579.4
35°	1475.9	1465.3	1457.3	1460.0	1444.0	1441.4	1436.1	1438.7
37.5°	1324.6	1314.0	1303.3	1300.7	1287.4	1287.4	1279.5	1279.5
40°	1168.0	1157.4	1152.0	1152.0	1136.1	1138.8	1130.8	1128.2
42.5°	1027.3	1016.7	1014.0	1011.4	1003.4	1000.7	992.8	995.4
45°	894.6	891.9	891.9	886.6	878.6	876.0	878.6	878.6
47.5°	777.8	780.4	777.8	777.8	772.5	777.8	772.5	775.1
50°	679.5	684.9	684.9	684.9	682.2	684.9	684.9	687.5
52.5°	597.3	605.2	602.6	605.2	602.6	607.9	605.2	607.9
55°	525.6	530.9	533.5	536.2	536.2	536.2	536.2	536.2
57.5°	459.2	467.2	469.8	472.5	472.5	477.8	472.5	472.5
60°	406.1	414.1	416.8	419.4	419.4	422.1	416.8	419.4
62.5°	358.4	366.3	366.3	369.0	369.0	369.0	363.7	366.3
65°	310.6	313.2	315.9	315.9	313.2	313.2	310.6	313.2
67.5°	257.5	260.1	257.5	257.5	254.8	254.8	249.5	252.2
70°	199.1	199.1	201.7	199.1	196.4	199.1	196.4	193.8
72.5°	148.7	148.7	148.7	146.0	146.0	143.3	146.0	146.0
75°	100.9	100.9	103.5	103.5	103.5	103.5	100.9	100.9
77.5°	66.4	66.4	66.4	66.4	69.0	66.4	66.4	66.4
80°	42.5	42.5	45.1	45.1	42.5	42.5	42.5	42.5
82.5°	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
85°	15.9	15.9	15.9	15.9	13.3	13.3	13.3	13.3
87.5°	8.0	8.0	8.0	8.0	8.0	8.0	5.3	5.3
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)