

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: P252627

Luminaire Tested: **LD6B60D010TE EU6B60709024 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252627
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: LD6B60D010TE EU6B60709024 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4302.0 lumens
Efficiency: N/A
Efficacy: 68.9 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

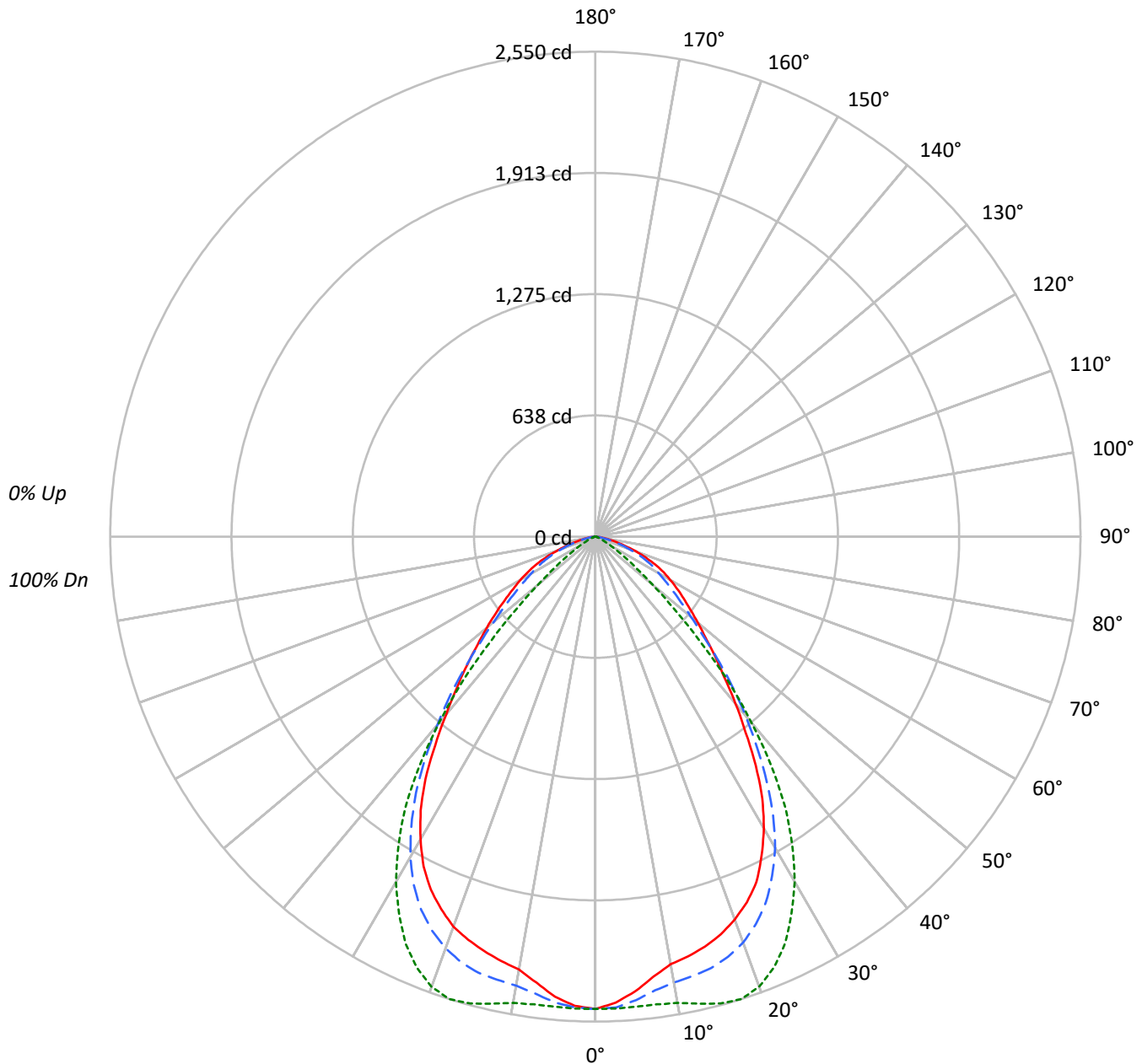
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	162045	162045	162045
5°	157208	162474	159088
10°	151229	164922	153130
15°	150693	171638	152436
20°	148721	174833	151512
25°	144272	169906	147375
30°	133468	157906	138440
35°	117093	138812	123950
40°	97574	108825	103928
45°	82124	71791	87688
50°	71108	39340	75483
55°	64345	20906	65971
60°	59199	10869	59199
65°	53629	5758	52301
70°	43262	3281	39981
75°	29669	2168	27501
80°	19424	1090	17245
85°	12875	2171	10779



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.6	5.4
10°-20°	669.7	15.6
20°-30°	989.5	23.0
30°-40°	999.5	23.2
40°-50°	688.9	16.0
50°-60°	395.7	9.2
60°-70°	230.3	5.4
70°-80°	84.0	2.0
80°-90°	12.8	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°	1890.8	44.0
0°-40°	2890.3	67.2
0°-60°	3974.9	92.4
0°-90°	4302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4302.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2484	2484	2484	2484	2484	
5°	2400	2446	2481	2458	2429	225
15°	2231	2349	2541	2375	2257	629
25°	2004	2122	2360	2165	2047	913
35°	1470	1571	1743	1642	1556	913
45°	890	902	778	959	950	692
55°	566	497	184	517	580	509
65°	347	293	37	290	339	340
75°	118	95	9	92	109	133
85°	17	9	3	12	14	22
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°	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8
2.5°	2452.2	2455.0	2457.9	2455.0	2457.9	2469.4	2460.8	2466.5	2466.5	2469.4	2478.0
5°	2400.5	2400.5	2406.2	2403.4	2412.0	2423.5	2414.8	2423.5	2426.3	2432.1	2446.4
7.5°	2334.4	2334.4	2337.3	2337.3	2348.8	2360.3	2354.5	2366.0	2377.5	2389.0	2406.2
10°	2282.8	2288.5	2288.5	2291.4	2302.9	2317.2	2314.3	2328.7	2340.2	2357.4	2380.4
12.5°	2259.8	2262.7	2262.7	2268.4	2279.9	2294.2	2291.4	2305.7	2323.0	2343.1	2366.0
15°	2231.1	2236.8	2233.9	2239.7	2251.2	2265.5	2262.7	2277.0	2297.1	2317.2	2348.8
17.5°	2193.7	2196.6	2199.5	2199.5	2211.0	2222.5	2222.5	2236.8	2259.8	2282.8	2317.2
20°	2142.1	2147.8	2147.8	2150.7	2159.3	2176.5	2173.6	2188.0	2211.0	2233.9	2271.3
22.5°	2081.8	2084.6	2084.6	2087.5	2101.9	2110.5	2113.3	2124.8	2144.9	2170.8	2205.2
25°	2004.2	2007.1	2004.2	2012.8	2018.6	2035.8	2030.1	2044.4	2067.4	2087.5	2122.0
27.5°	1892.3	1898.0	1898.0	1900.9	1915.2	1929.6	1929.6	1943.9	1964.0	1978.4	2012.8
30°	1771.7	1780.3	1771.7	1786.0	1791.8	1803.2	1811.9	1820.5	1837.7	1857.8	1889.4
32.5°	1633.8	1631.0	1633.8	1639.6	1656.8	1665.4	1671.2	1679.8	1697.0	1714.2	1740.1
35°	1470.2	1475.9	1478.8	1490.3	1490.3	1504.6	1507.5	1513.2	1539.1	1550.6	1570.7
37.5°	1297.9	1303.6	1306.5	1312.2	1323.7	1329.5	1338.1	1346.7	1363.9	1384.0	1395.5
40°	1145.7	1145.7	1148.6	1154.3	1162.9	1165.8	1174.4	1185.9	1197.4	1214.6	1226.1
42.5°	1002.1	1005.0	1002.1	1007.9	1016.5	1028.0	1025.1	1039.4	1042.3	1053.8	1062.4
45°	890.1	890.1	884.4	890.1	890.1	901.6	898.7	904.5	901.6	907.4	901.6
47.5°	783.9	786.8	783.9	786.8	786.8	786.8	789.6	783.9	786.8	778.1	760.9
50°	700.6	703.5	697.7	700.6	697.7	694.9	697.7	689.1	686.3	674.8	657.6
52.5°	628.8	626.0	623.1	623.1	623.1	620.2	617.4	608.7	600.1	588.6	568.5
55°	565.7	562.8	559.9	559.9	554.2	551.3	551.3	542.7	534.1	519.7	496.8
57.5°	508.2	505.4	502.5	502.5	499.6	493.9	493.9	485.3	473.8	456.6	436.5
60°	453.7	453.7	453.7	450.8	450.8	445.1	445.1	436.5	425.0	407.7	384.8
62.5°	404.9	402.0	402.0	402.0	402.0	399.1	396.3	390.5	379.0	361.8	341.7
65°	347.4	347.4	347.4	347.4	344.6	344.6	344.6	336.0	330.2	313.0	292.9
67.5°	284.3	284.3	284.3	284.3	281.4	284.3	284.3	278.5	272.8	255.6	238.3
70°	226.8	224.0	221.1	224.0	221.1	221.1	224.0	218.2	215.4	201.0	183.8
72.5°	166.5	169.4	166.5	166.5	166.5	163.7	166.5	163.7	157.9	146.4	135.0
75°	117.7	120.6	120.6	117.7	117.7	117.7	114.9	114.9	109.1	100.5	94.8
77.5°	80.4	80.4	80.4	80.4	77.5	77.5	77.5	74.7	71.8	66.0	60.3
80°	51.7	51.7	51.7	51.7	48.8	48.8	48.8	45.9	45.9	40.2	34.5
82.5°	31.6	31.6	31.6	31.6	31.6	31.6	28.7	28.7	25.8	23.0	20.1
85°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	14.4	14.4	11.5	8.6
87.5°	5.7	5.7	8.6	8.6	8.6	8.6	8.6	8.6	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8
2.5°	2472.3	2475.1	2475.1	2475.1	2483.8	2486.6	2478.0	2469.4	2486.6	2483.8	2489.5
5°	2443.6	2452.2	2457.9	2460.8	2469.4	2475.1	2466.5	2463.7	2478.0	2480.9	2483.8
7.5°	2409.1	2423.5	2437.8	2443.6	2455.0	2460.8	2457.9	2457.9	2475.1	2480.9	2480.9
10°	2386.1	2406.2	2423.5	2437.8	2452.2	2460.8	2460.8	2463.7	2483.8	2489.5	2495.2
12.5°	2380.4	2406.2	2429.2	2449.3	2460.8	2475.1	2478.0	2486.6	2506.7	2515.3	2515.3
15°	2366.0	2400.5	2429.2	2455.0	2472.3	2489.5	2495.2	2512.5	2535.4	2541.2	2546.9
17.5°	2340.2	2374.6	2409.1	2440.7	2463.7	2478.0	2495.2	2512.5	2541.2	2549.8	2552.7
20°	2294.2	2334.4	2368.9	2400.5	2423.5	2443.6	2460.8	2480.9	2506.7	2518.2	2521.1
22.5°	2225.3	2265.5	2300.0	2334.4	2357.4	2374.6	2391.9	2414.8	2440.7	2452.2	2452.2
25°	2142.1	2179.4	2216.7	2242.6	2265.5	2285.6	2294.2	2320.1	2345.9	2360.3	2360.3
27.5°	2035.8	2070.3	2104.7	2133.4	2147.8	2165.0	2179.4	2202.4	2222.5	2233.9	2245.4
30°	1900.9	1935.3	1966.9	1995.6	2012.8	2030.1	2044.4	2061.7	2081.8	2096.1	2099.0
32.5°	1754.4	1783.1	1814.7	1843.4	1860.7	1866.4	1880.8	1898.0	1915.2	1926.7	1929.6
35°	1593.6	1613.7	1633.8	1659.7	1676.9	1676.9	1691.3	1702.7	1717.1	1742.9	1737.2
37.5°	1404.1	1432.8	1447.2	1455.8	1467.3	1478.8	1481.6	1496.0	1513.2	1519.0	1527.6
40°	1226.1	1234.7	1243.3	1243.3	1254.8	1254.8	1254.8	1257.7	1274.9	1277.8	1289.3
42.5°	1048.1	1048.1	1039.4	1030.8	1033.7	1030.8	1016.5	1016.5	1025.1	1036.6	1036.6
45°	881.5	861.4	835.6	815.5	801.1	795.4	778.1	778.1	775.3	778.1	789.6
47.5°	740.8	706.4	663.3	623.1	608.7	597.3	571.4	559.9	554.2	557.1	562.8
50°	623.1	585.8	537.0	488.1	462.3	447.9	416.4	396.3	393.4	387.6	399.1
52.5°	537.0	491.0	439.3	381.9	356.1	333.1	298.6	281.4	269.9	269.9	272.8
55°	462.3	413.5	356.1	298.6	272.8	255.6	221.1	198.1	186.6	183.8	192.4
57.5°	399.1	353.2	295.8	238.3	212.5	192.4	157.9	137.8	129.2	123.5	126.3
60°	350.3	304.4	246.9	192.4	169.4	146.4	117.7	94.8	83.3	83.3	86.1
62.5°	304.4	261.3	209.6	157.9	137.8	117.7	86.1	66.0	57.4	54.6	57.4
65°	258.4	218.2	175.2	132.1	112.0	94.8	68.9	51.7	40.2	37.3	40.2
67.5°	209.6	178.0	140.7	106.2	89.0	74.7	51.7	37.3	28.7	25.8	28.7
70°	163.7	135.0	106.2	77.5	66.0	54.6	37.3	28.7	20.1	17.2	20.1
72.5°	117.7	97.6	74.7	54.6	45.9	37.3	25.8	20.1	14.4	11.5	14.4
75°	80.4	66.0	48.8	34.5	28.7	25.8	17.2	11.5	8.6	8.6	8.6
77.5°	51.7	40.2	31.6	23.0	17.2	14.4	8.6	5.7	5.7	5.7	5.7
80°	28.7	23.0	17.2	11.5	8.6	8.6	5.7	5.7	2.9	2.9	2.9
82.5°	17.2	11.5	8.6	5.7	5.7	2.9	2.9	2.9	2.9	2.9	2.9
85°	8.6	5.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	2.9	2.9	2.9	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°	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8
2.5°	2478.0	2480.9	2472.3	2483.8	2475.1	2486.6	2486.6	2475.1	2478.0	2472.3	2483.8
5°	2472.3	2472.3	2466.5	2475.1	2463.7	2475.1	2472.3	2452.2	2457.9	2446.4	2457.9
7.5°	2472.3	2466.5	2457.9	2466.5	2452.2	2460.8	2449.3	2429.2	2423.5	2409.1	2409.1
10°	2480.9	2472.3	2460.8	2463.7	2449.3	2452.2	2434.9	2406.2	2397.6	2380.4	2374.6
12.5°	2501.0	2492.4	2475.1	2480.9	2460.8	2460.8	2437.8	2403.4	2386.1	2363.2	2357.4
15°	2529.7	2515.3	2495.2	2498.1	2478.0	2466.5	2437.8	2397.6	2374.6	2343.1	2334.4
17.5°	2535.4	2521.1	2495.2	2495.2	2469.4	2455.0	2420.6	2374.6	2345.9	2314.3	2297.1
20°	2503.9	2489.5	2460.8	2457.9	2434.9	2414.8	2377.5	2331.6	2302.9	2268.4	2254.0
22.5°	2437.8	2420.6	2394.7	2391.9	2368.9	2357.4	2317.2	2271.3	2242.6	2208.1	2196.6
25°	2340.2	2331.6	2305.7	2302.9	2282.8	2268.4	2233.9	2190.9	2165.0	2130.6	2119.1
27.5°	2225.3	2216.7	2190.9	2190.9	2167.9	2159.3	2127.7	2087.5	2067.4	2035.8	2021.5
30°	2087.5	2076.0	2061.7	2058.8	2038.7	2030.1	2001.4	1964.0	1943.9	1918.1	1912.4
32.5°	1923.8	1915.2	1906.6	1903.7	1883.6	1875.0	1854.9	1817.6	1800.4	1777.4	1768.8
35°	1734.3	1728.6	1720.0	1717.1	1708.5	1699.9	1679.8	1651.1	1642.4	1625.2	1616.6
37.5°	1516.1	1521.8	1516.1	1516.1	1507.5	1510.4	1493.1	1475.9	1467.3	1455.8	1450.1
40°	1280.6	1292.1	1300.7	1300.7	1297.9	1309.4	1306.5	1292.1	1289.3	1283.5	1280.6
42.5°	1042.3	1048.1	1065.3	1076.8	1073.9	1102.6	1105.5	1117.0	1125.6	1119.8	1122.7
45°	792.5	809.7	832.7	844.2	858.5	895.9	916.0	938.9	959.0	970.5	967.7
47.5°	571.4	591.5	617.4	634.6	660.4	706.4	758.0	786.8	815.5	829.8	844.2
50°	413.5	433.6	465.2	491.0	508.2	571.4	626.0	663.3	694.9	715.0	729.3
52.5°	290.0	313.0	347.4	370.4	396.3	456.6	519.7	562.8	597.3	623.1	637.5
55°	201.0	226.8	258.4	281.4	310.1	373.3	433.6	479.5	516.9	539.8	557.1
57.5°	140.7	163.7	195.3	215.4	244.1	304.4	364.7	410.6	447.9	470.9	491.0
60°	94.8	117.7	149.3	169.4	192.4	252.7	307.2	356.1	390.5	413.5	433.6
62.5°	66.0	86.1	117.7	137.8	157.9	209.6	261.3	304.4	338.8	364.7	381.9
65°	51.7	68.9	94.8	112.0	132.1	175.2	218.2	255.6	290.0	315.9	327.3
67.5°	37.3	54.6	74.7	89.0	103.4	140.7	178.0	206.7	238.3	258.4	272.8
70°	25.8	37.3	54.6	66.0	77.5	106.2	135.0	160.8	183.8	198.1	209.6
72.5°	20.1	25.8	37.3	45.9	54.6	74.7	97.6	117.7	135.0	146.4	157.9
75°	11.5	17.2	25.8	31.6	37.3	51.7	66.0	80.4	91.9	100.5	106.2
77.5°	5.7	8.6	14.4	17.2	23.0	31.6	43.1	51.7	60.3	66.0	71.8
80°	5.7	5.7	8.6	8.6	11.5	17.2	23.0	28.7	34.5	40.2	43.1
82.5°	2.9	2.9	5.7	5.7	5.7	8.6	11.5	17.2	20.1	23.0	25.8
85°	2.9	2.9	2.9	2.9	2.9	5.7	5.7	8.6	11.5	14.4	14.4
87.5°	0.0	0.0	2.9	2.9	2.9	2.9	2.9	5.7	5.7	5.7	8.6
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: P252627

CATALOG NUMBER: LD6B60D010TE EU6B60709024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8	2483.8
2.5°	2475.1	2480.9	2478.0	2483.8	2475.1	2472.3	2478.0	2469.4
5°	2443.6	2446.4	2443.6	2443.6	2437.8	2432.1	2437.8	2429.2
7.5°	2394.7	2394.7	2386.1	2386.1	2374.6	2368.9	2368.9	2366.0
10°	2354.5	2345.9	2337.3	2340.2	2323.0	2317.2	2314.3	2311.5
12.5°	2334.4	2328.7	2314.3	2314.3	2297.1	2291.4	2288.5	2285.6
15°	2311.5	2300.0	2288.5	2285.6	2271.3	2265.5	2262.7	2256.9
17.5°	2271.3	2262.7	2248.3	2248.3	2233.9	2231.1	2225.3	2222.5
20°	2228.2	2216.7	2205.2	2205.2	2188.0	2188.0	2179.4	2182.3
22.5°	2167.9	2159.3	2147.8	2147.8	2133.4	2130.6	2122.0	2119.1
25°	2096.1	2084.6	2076.0	2073.1	2061.7	2055.9	2053.0	2047.3
27.5°	2001.4	1992.7	1984.1	1978.4	1964.0	1961.2	1952.6	1955.4
30°	1883.6	1877.9	1875.0	1869.3	1852.1	1846.3	1846.3	1837.7
32.5°	1754.4	1745.8	1740.1	1731.5	1717.1	1714.2	1705.6	1708.5
35°	1596.5	1585.0	1576.4	1579.3	1562.0	1559.2	1553.4	1556.3
37.5°	1432.8	1421.3	1409.9	1407.0	1392.6	1392.6	1384.0	1384.0
40°	1263.4	1251.9	1246.2	1246.2	1229.0	1231.8	1223.2	1220.3
42.5°	1111.2	1099.7	1096.9	1094.0	1085.4	1082.5	1073.9	1076.8
45°	967.7	964.8	964.8	959.0	950.4	947.6	950.4	950.4
47.5°	841.3	844.2	841.3	841.3	835.6	841.3	835.6	838.4
50°	735.1	740.8	740.8	740.8	737.9	740.8	740.8	743.7
52.5°	646.1	654.7	651.8	654.7	651.8	657.6	654.7	657.6
55°	568.5	574.3	577.2	580.0	580.0	580.0	580.0	580.0
57.5°	496.8	505.4	508.2	511.1	511.1	516.9	511.1	511.1
60°	439.3	447.9	450.8	453.7	453.7	456.6	450.8	453.7
62.5°	387.6	396.3	396.3	399.1	399.1	399.1	393.4	396.3
65°	336.0	338.8	341.7	341.7	338.8	338.8	336.0	338.8
67.5°	278.5	281.4	278.5	278.5	275.7	275.7	269.9	272.8
70°	215.4	215.4	218.2	215.4	212.5	215.4	212.5	209.6
72.5°	160.8	160.8	160.8	157.9	157.9	155.1	157.9	157.9
75°	109.1	109.1	112.0	112.0	112.0	112.0	109.1	109.1
77.5°	71.8	71.8	71.8	71.8	74.7	71.8	71.8	71.8
80°	45.9	45.9	48.8	48.8	45.9	45.9	45.9	45.9
82.5°	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
85°	17.2	17.2	17.2	17.2	14.4	14.4	14.4	14.4
87.5°	8.6	8.6	8.6	8.6	8.6	8.6	5.7	5.7
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)