

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: P252423

Luminaire Tested: **LD6B60D010TE EU6B60709040 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252423
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60709040 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4686.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

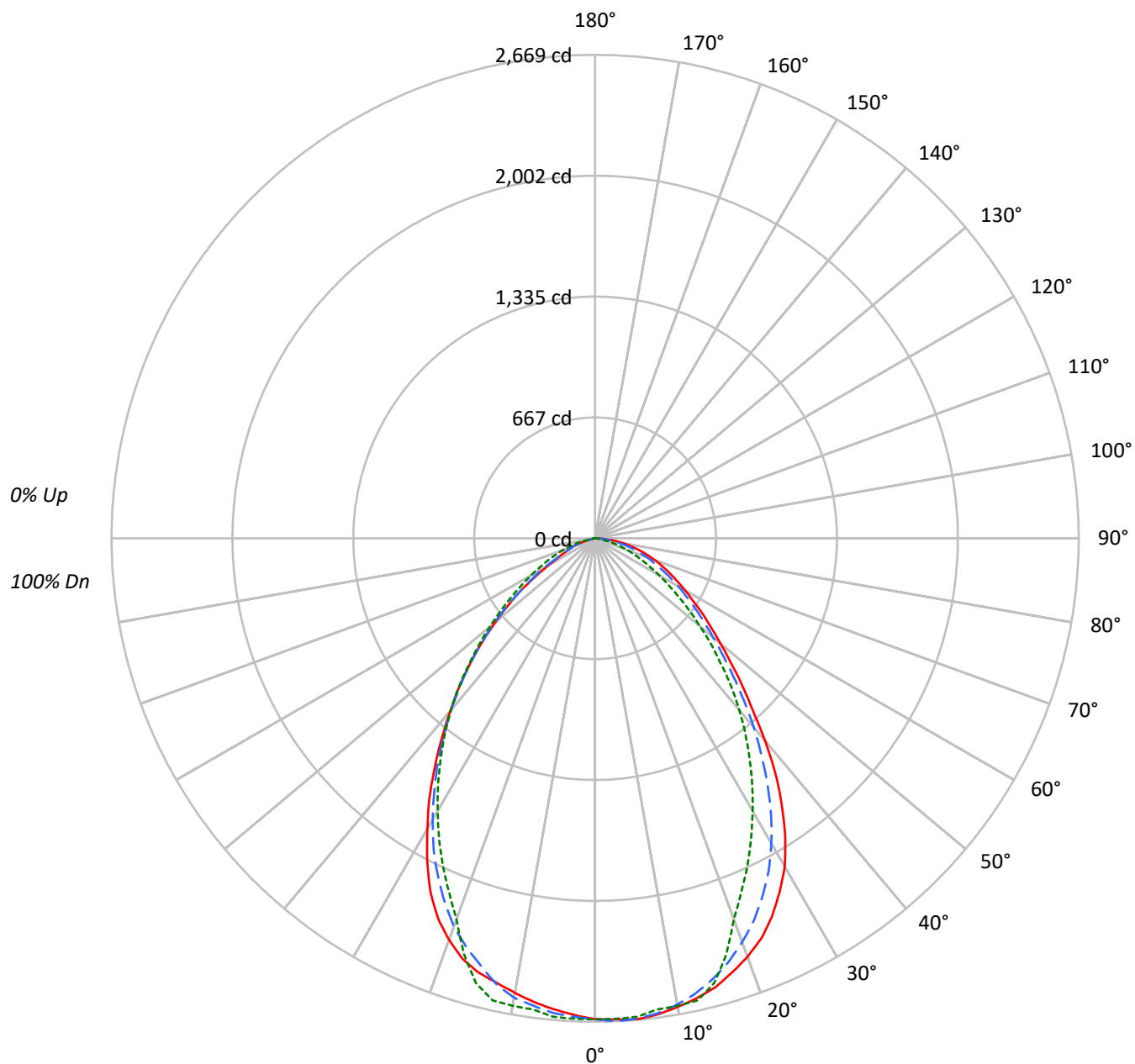
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77			
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60			
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	173220	173220	173220
5°	174563	173659	170948
10°	174064	173607	168811
15°	173279	171645	167687
20°	170695	155372	163752
25°	166062	143221	154890
30°	157680	130922	139495
35°	143081	118367	122763
40°	124223	105426	105725
45°	105947	90668	89718
50°	91692	76650	72448
55°	81975	63935	56087
60°	74687	53093	37800
65°	69730	43657	28219
70°	66439	35518	23672
75°	62589	25207	7814
80°	59587	12962	2592
85°	49030	7710	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.7	5.4
10°-20°	701.3	15.0
20°-30°	968.0	20.7
30°-40°	985.0	21.0
40°-50°	791.6	16.9
50°-60°	526.4	11.2
60°-70°	299.9	6.4
70°-80°	134.7	2.9
80°-90°	28.4	0.6
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°	1920.0	41.0
0°-40°	2905.0	62.0
0°-60°	4223.0	90.1
0°-90°	4686.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4686.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2655	2655	2655	2655	2655	
5°	2666	2662	2652	2631	2610	253
15°	2566	2517	2541	2441	2483	722
25°	2307	2183	1990	2055	2152	1057
35°	1796	1659	1486	1514	1541	1116
45°	1148	1079	983	972	972	890
55°	721	672	562	500	493	648
65°	452	403	283	183	183	450
75°	248	207	100	41	31	265
85°	66	45	10	3	0	78
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°	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1
2.5°	2658.6	2672.4	2668.9	2665.5	2668.9	2665.5	2658.6	2658.6	2651.7	2651.7	2668.9
5°	2665.5	2672.4	2668.9	2665.5	2665.5	2668.9	2655.1	2655.1	2648.2	2644.8	2662.0
7.5°	2651.7	2662.0	2655.1	2655.1	2651.7	2655.1	2641.3	2641.3	2631.0	2627.5	2644.8
10°	2627.5	2641.3	2634.4	2634.4	2634.4	2627.5	2620.6	2617.2	2606.9	2603.4	2613.7
12.5°	2600.0	2610.3	2606.9	2600.0	2600.0	2600.0	2586.2	2582.7	2568.9	2562.0	2572.4
15°	2565.5	2572.4	2568.9	2565.5	2558.6	2558.6	2544.8	2537.9	2524.1	2510.3	2517.2
17.5°	2513.7	2524.1	2517.2	2513.7	2503.4	2503.4	2489.6	2482.7	2462.0	2448.2	2451.7
20°	2458.6	2462.0	2458.6	2451.7	2441.3	2437.9	2424.1	2410.3	2393.1	2375.8	2372.4
22.5°	2393.1	2396.5	2386.2	2379.3	2368.9	2365.5	2348.2	2337.9	2310.3	2289.6	2286.2
25°	2306.9	2310.3	2310.3	2293.1	2286.2	2279.3	2262.0	2244.8	2220.7	2193.1	2182.7
27.5°	2203.4	2213.8	2206.9	2189.6	2175.8	2172.4	2155.1	2141.3	2110.3	2086.2	2072.4
30°	2093.1	2089.6	2086.2	2075.8	2055.1	2051.7	2034.4	2017.2	1993.1	1962.0	1944.8
32.5°	1951.7	1951.7	1948.2	1937.9	1917.2	1910.3	1896.5	1875.8	1848.2	1824.1	1806.9
35°	1796.5	1800.0	1796.5	1775.8	1762.0	1755.1	1748.2	1724.1	1700.0	1672.4	1658.6
37.5°	1634.5	1624.1	1627.6	1610.3	1593.1	1600.0	1579.3	1568.9	1541.4	1520.7	1506.9
40°	1458.6	1465.5	1451.7	1444.8	1434.5	1424.1	1424.1	1406.9	1393.1	1368.9	1362.0
42.5°	1286.2	1296.5	1293.1	1286.2	1272.4	1275.8	1258.6	1251.7	1234.5	1224.1	1213.8
45°	1148.3	1148.3	1148.3	1141.4	1137.9	1131.0	1120.7	1110.3	1100.0	1086.2	1079.3
47.5°	1013.8	1013.8	1017.2	1010.3	1003.4	1000.0	993.1	993.1	975.8	962.1	955.2
50°	903.4	903.4	903.4	896.5	889.6	889.6	882.7	875.8	865.5	855.2	848.3
52.5°	803.4	803.4	803.4	796.5	793.1	789.6	786.2	782.7	769.0	762.1	755.2
55°	720.7	717.2	717.2	713.8	706.9	706.9	703.4	696.5	686.2	675.9	672.4
57.5°	637.9	641.4	637.9	637.9	631.0	631.0	624.1	620.7	610.3	603.4	596.5
60°	572.4	572.4	572.4	569.0	562.1	565.5	558.6	555.2	544.8	534.5	527.6
62.5°	506.9	510.3	510.3	506.9	500.0	500.0	496.5	493.1	482.8	472.4	462.1
65°	451.7	451.7	451.7	448.3	444.8	444.8	441.4	437.9	427.6	413.8	403.4
67.5°	400.0	396.5	396.5	396.5	393.1	389.6	386.2	382.8	372.4	362.1	348.3
70°	348.3	348.3	348.3	344.8	337.9	341.4	337.9	334.5	324.1	313.8	303.4
72.5°	300.0	300.0	296.5	293.1	293.1	289.7	289.7	286.2	275.9	262.1	251.7
75°	248.3	248.3	248.3	248.3	241.4	244.8	237.9	234.5	227.6	217.2	206.9
77.5°	203.4	203.4	203.4	200.0	196.5	196.5	193.1	189.7	179.3	172.4	158.6
80°	158.6	158.6	158.6	158.6	155.2	151.7	148.3	144.8	137.9	127.6	117.2
82.5°	117.2	117.2	113.8	113.8	113.8	110.3	106.9	103.4	96.6	89.7	82.8
85°	65.5	69.0	69.0	62.1	65.5	62.1	62.1	55.2	55.2	48.3	44.8
87.5°	24.1	20.7	20.7	20.7	20.7	20.7	20.7	17.2	17.2	17.2	13.8
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°	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1
2.5°	2655.1	2651.7	2665.5	2665.5	2644.8	2655.1	2658.6	2651.7	2651.7	2655.1	2644.8
5°	2648.2	2641.3	2655.1	2658.6	2637.9	2648.2	2651.7	2644.8	2648.2	2651.7	2637.9
7.5°	2624.1	2624.1	2634.4	2637.9	2617.2	2627.5	2627.5	2620.6	2624.1	2624.1	2613.7
10°	2600.0	2589.6	2600.0	2600.0	2582.7	2586.2	2593.1	2589.6	2603.4	2620.6	2620.6
12.5°	2555.1	2544.8	2562.0	2562.0	2551.7	2565.5	2582.7	2593.1	2606.9	2613.7	2593.1
15°	2500.0	2503.4	2534.4	2558.6	2548.2	2568.9	2586.2	2579.3	2562.0	2541.3	2510.3
17.5°	2427.5	2417.2	2444.8	2458.6	2444.8	2451.7	2465.5	2451.7	2424.1	2406.9	2365.5
20°	2344.8	2317.2	2317.2	2310.3	2286.2	2286.2	2282.7	2258.6	2248.2	2237.9	2220.7
22.5°	2251.7	2220.7	2210.3	2189.6	2168.9	2165.5	2155.1	2131.0	2117.2	2110.3	2089.6
25°	2144.8	2117.2	2100.0	2079.3	2048.2	2041.3	2031.0	2006.9	2000.0	1989.6	1972.4
27.5°	2034.4	2000.0	1975.8	1955.1	1927.6	1924.1	1903.4	1886.2	1872.4	1865.5	1851.7
30°	1906.9	1868.9	1851.7	1824.1	1803.4	1796.5	1779.3	1755.1	1744.8	1737.9	1727.6
32.5°	1765.5	1734.5	1717.2	1693.1	1665.5	1668.9	1648.2	1627.6	1620.7	1613.8	1603.4
35°	1627.6	1596.5	1575.8	1555.1	1537.9	1531.0	1517.2	1500.0	1489.6	1486.2	1479.3
37.5°	1475.8	1451.7	1434.5	1413.8	1400.0	1393.1	1386.2	1368.9	1362.0	1362.0	1348.3
40°	1327.6	1306.9	1293.1	1282.7	1265.5	1262.0	1255.2	1244.8	1241.4	1237.9	1227.6
42.5°	1193.1	1165.5	1155.2	1148.3	1137.9	1131.0	1127.6	1120.7	1117.2	1113.8	1103.4
45°	1065.5	1041.4	1031.0	1024.1	1013.8	1010.3	1006.9	996.5	989.6	982.7	979.3
47.5°	941.4	924.1	920.7	903.4	896.5	889.6	882.7	875.8	872.4	869.0	855.2
50°	834.5	824.1	806.9	796.5	789.6	786.2	772.4	762.1	758.6	755.2	744.8
52.5°	737.9	724.1	713.8	696.5	693.1	686.2	679.3	665.5	658.6	655.2	644.8
55°	651.7	641.4	627.6	613.8	603.4	600.0	589.6	575.9	569.0	562.1	555.2
57.5°	579.3	562.1	548.3	534.5	527.6	517.2	506.9	500.0	489.6	479.3	469.0
60°	510.3	496.5	479.3	465.5	458.6	451.7	437.9	427.6	417.2	406.9	396.5
62.5°	444.8	431.0	413.8	400.0	393.1	386.2	372.4	362.1	351.7	341.4	327.6
65°	386.2	372.4	358.6	344.8	337.9	331.0	317.2	303.4	293.1	282.8	269.0
67.5°	337.9	320.7	306.9	293.1	286.2	279.3	265.5	255.2	241.4	231.0	217.2
70°	286.2	272.4	262.1	248.3	241.4	234.5	220.7	206.9	196.5	186.2	172.4
72.5°	241.4	224.1	213.8	200.0	193.1	189.7	175.9	165.5	155.2	141.4	131.0
75°	193.1	179.3	165.5	155.2	148.3	144.8	131.0	120.7	110.3	100.0	89.7
77.5°	148.3	137.9	124.1	113.8	106.9	103.4	89.7	79.3	69.0	62.1	51.7
80°	110.3	96.6	89.7	79.3	75.9	69.0	62.1	51.7	44.8	34.5	27.6
82.5°	75.9	65.5	58.6	51.7	48.3	44.8	37.9	31.0	24.1	20.7	17.2
85°	41.4	34.5	31.0	27.6	24.1	24.1	20.7	17.2	13.8	10.3	6.9
87.5°	13.8	10.3	10.3	10.3	10.3	6.9	6.9	6.9	3.4	3.4	3.4
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°	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1
2.5°	2651.7	2651.7	2651.7	2648.2	2648.2	2648.2	2644.8	2658.6	2644.8	2641.3	2651.7
5°	2648.2	2641.3	2641.3	2641.3	2641.3	2637.9	2634.4	2641.3	2631.0	2627.5	2627.5
7.5°	2627.5	2624.1	2624.1	2620.6	2617.2	2613.7	2610.3	2613.7	2603.4	2600.0	2600.0
10°	2631.0	2624.1	2624.1	2613.7	2606.9	2596.5	2586.2	2589.6	2575.8	2565.5	2565.5
12.5°	2589.6	2572.4	2562.0	2551.7	2544.8	2541.3	2527.5	2534.4	2520.6	2517.2	2517.2
15°	2496.5	2475.8	2458.6	2451.7	2451.7	2444.8	2434.4	2448.2	2441.3	2444.8	2462.0
17.5°	2351.7	2341.3	2331.0	2327.5	2331.0	2337.9	2344.8	2365.5	2365.5	2375.8	2393.1
20°	2224.1	2217.2	2224.1	2224.1	2227.5	2241.3	2255.1	2272.4	2279.3	2289.6	2313.8
22.5°	2100.0	2100.0	2106.9	2117.2	2113.8	2137.9	2141.3	2172.4	2172.4	2193.1	2213.8
25°	1979.3	1979.3	1986.2	1989.6	1996.5	2010.3	2024.1	2048.2	2055.1	2075.8	2093.1
27.5°	1862.0	1858.6	1858.6	1862.0	1868.9	1886.2	1893.1	1920.7	1931.0	1944.8	1962.0
30°	1731.0	1727.6	1734.5	1741.3	1737.9	1755.1	1765.5	1786.2	1793.1	1806.9	1820.7
32.5°	1606.9	1606.9	1606.9	1613.8	1613.8	1627.6	1627.6	1651.7	1651.7	1662.0	1675.8
35°	1479.3	1479.3	1482.7	1486.2	1489.6	1493.1	1496.5	1510.3	1513.8	1517.2	1524.1
37.5°	1358.6	1355.1	1358.6	1358.6	1351.7	1365.5	1365.5	1379.3	1368.9	1379.3	1382.7
40°	1234.5	1234.5	1231.0	1231.0	1231.0	1237.9	1231.0	1241.4	1234.5	1241.4	1237.9
42.5°	1106.9	1106.9	1100.0	1106.9	1103.4	1103.4	1103.4	1110.3	1100.0	1106.9	1110.3
45°	979.3	975.8	975.8	972.4	972.4	972.4	975.8	975.8	972.4	979.3	979.3
47.5°	855.2	851.7	851.7	851.7	851.7	855.2	844.8	851.7	844.8	844.8	844.8
50°	748.3	744.8	741.4	737.9	734.5	734.5	731.0	731.0	724.1	720.7	717.2
52.5°	644.8	641.4	634.5	634.5	631.0	627.6	617.2	617.2	606.9	603.4	603.4
55°	551.7	541.4	537.9	531.0	531.0	524.1	517.2	510.3	500.0	493.1	493.1
57.5°	465.5	455.2	448.3	444.8	441.4	434.5	420.7	417.2	403.4	400.0	396.5
60°	389.6	379.3	369.0	362.1	358.6	348.3	334.5	327.6	320.7	310.3	300.0
62.5°	317.2	306.9	293.1	289.7	282.8	272.4	262.1	251.7	244.8	234.5	227.6
65°	255.2	244.8	234.5	227.6	220.7	210.3	200.0	189.7	182.8	179.3	175.9
67.5°	206.9	193.1	182.8	179.3	172.4	165.5	155.2	151.7	144.8	144.8	144.8
70°	162.1	151.7	141.4	137.9	134.5	127.6	120.7	120.7	120.7	120.7	120.7
72.5°	120.7	113.8	103.4	100.0	96.6	93.1	86.2	89.7	86.2	86.2	86.2
75°	75.9	69.0	62.1	58.6	55.2	51.7	48.3	44.8	41.4	37.9	37.9
77.5°	41.4	34.5	31.0	27.6	27.6	24.1	20.7	20.7	17.2	17.2	17.2
80°	24.1	20.7	17.2	13.8	13.8	10.3	10.3	10.3	10.3	6.9	6.9
82.5°	13.8	10.3	6.9	6.9	6.9	6.9	3.4	3.4	3.4	3.4	3.4
85°	6.9	6.9	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: P252423

CATALOG NUMBER: LD6B60D010TE EU6B60709040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1	2655.1
2.5°	2634.4	2644.8	2634.4	2644.8	2644.8	2644.8	2644.8	2634.4
5°	2617.2	2624.1	2613.7	2620.6	2624.1	2620.6	2620.6	2610.3
7.5°	2586.2	2593.1	2582.7	2593.1	2596.5	2593.1	2589.6	2582.7
10°	2555.1	2558.6	2548.2	2555.1	2562.0	2562.0	2558.6	2548.2
12.5°	2506.9	2517.2	2506.9	2513.7	2520.6	2524.1	2524.1	2513.7
15°	2451.7	2468.9	2462.0	2472.4	2482.7	2486.2	2486.2	2482.7
17.5°	2396.5	2413.8	2403.4	2420.6	2431.0	2437.9	2441.3	2434.4
20°	2317.2	2337.9	2331.0	2344.8	2358.6	2368.9	2368.9	2358.6
22.5°	2213.8	2241.3	2237.9	2248.2	2265.5	2268.9	2275.8	2268.9
25°	2100.0	2120.7	2117.2	2127.5	2148.2	2148.2	2151.7	2151.7
27.5°	1968.9	1989.6	1986.2	1993.1	2006.9	2010.3	2013.8	2006.9
30°	1827.6	1837.9	1837.9	1848.2	1858.6	1862.0	1862.0	1851.7
32.5°	1672.4	1686.2	1693.1	1689.6	1700.0	1706.9	1703.4	1703.4
35°	1531.0	1534.5	1537.9	1541.4	1544.8	1551.7	1544.8	1541.4
37.5°	1379.3	1389.6	1382.7	1389.6	1396.5	1393.1	1389.6	1389.6
40°	1241.4	1244.8	1237.9	1244.8	1248.3	1248.3	1248.3	1241.4
42.5°	1103.4	1110.3	1103.4	1110.3	1110.3	1110.3	1110.3	1106.9
45°	965.5	972.4	972.4	975.8	975.8	972.4	972.4	972.4
47.5°	837.9	844.8	837.9	844.8	848.3	841.4	841.4	841.4
50°	717.2	713.8	713.8	717.2	717.2	717.2	717.2	713.8
52.5°	593.1	596.5	596.5	596.5	600.0	596.5	600.0	600.0
55°	486.2	486.2	486.2	489.6	486.2	486.2	489.6	493.1
57.5°	389.6	386.2	382.8	382.8	386.2	382.8	382.8	382.8
60°	300.0	296.5	293.1	293.1	293.1	293.1	293.1	289.7
62.5°	224.1	224.1	224.1	227.6	227.6	227.6	227.6	231.0
65°	179.3	179.3	179.3	179.3	179.3	179.3	179.3	182.8
67.5°	144.8	144.8	144.8	148.3	148.3	148.3	148.3	148.3
70°	120.7	120.7	124.1	120.7	124.1	124.1	124.1	124.1
72.5°	82.8	82.8	82.8	82.8	82.8	79.3	82.8	79.3
75°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	31.0
77.5°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
80°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	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)