

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: P252439

Luminaire Tested: **LD6B70D010TE EU6B60709730 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252439  
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: LD6B70D010TE EU6B60709730 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

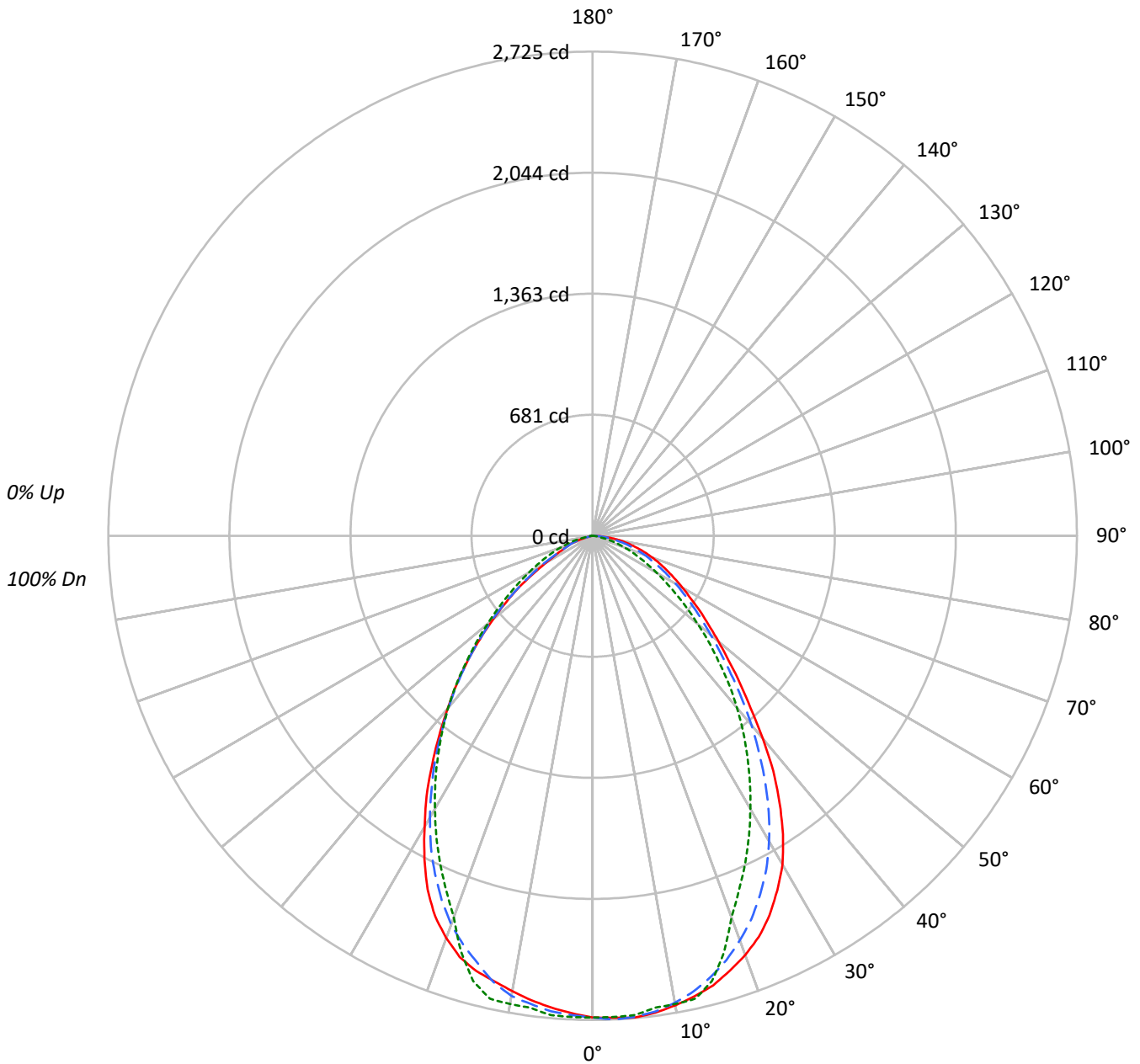
Lumens per Lamp: N/A  
Luminaire Lumens: 4785.0 lumens  
Efficiency: N/A  
Efficacy: 60.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 79.45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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	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°	176880	176880	176880
5°	178250	177327	174557
10°	177748	177277	172381
15°	176940	175272	171233
20°	174298	158656	167209
25°	169568	146252	158158
30°	161010	133687	142440
35°	146107	120868	125352
40°	126846	107658	107956
45°	108180	92587	91609
50°	93630	78264	73981
55°	83704	65277	57270
60°	76266	54215	38596
65°	71212	44567	28806
70°	67831	36262	24187
75°	63900	25736	7991
80°	60864	13225	2630
85°	50078	7935	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.0	5.4
10°-20°	716.1	15.0
20°-30°	988.4	20.7
30°-40°	1005.8	21.0
40°-50°	808.3	16.9
50°-60°	537.5	11.2
60°-70°	306.3	6.4
70°-80°	137.6	2.9
80°-90°	29.0	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°	1960.5	41.0
0°-40°	2966.3	62.0
0°-60°	4312.2	90.1
0°-90°	4785.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4785.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2711	2711	2711	2711	2711	
5°	2722	2718	2708	2687	2665	258
15°	2620	2570	2595	2493	2535	737
25°	2356	2229	2032	2099	2197	1079
35°	1834	1694	1518	1546	1574	1140
45°	1172	1102	1004	993	993	909
55°	736	687	574	511	504	661
65°	461	412	289	187	187	459
75°	254	211	102	42	32	271
85°	67	46	11	4	0	79
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°	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2
2.5°	2714.7	2728.8	2725.3	2721.8	2725.3	2721.8	2714.7	2714.7	2707.7	2707.7	2725.3
5°	2721.8	2728.8	2725.3	2721.8	2721.8	2725.3	2711.2	2711.2	2704.2	2700.7	2718.3
7.5°	2707.7	2718.3	2711.2	2711.2	2707.7	2711.2	2697.1	2697.1	2686.6	2683.1	2700.7
10°	2683.1	2697.1	2690.1	2690.1	2690.1	2683.1	2676.0	2672.5	2661.9	2658.4	2669.0
12.5°	2654.9	2665.4	2661.9	2654.9	2654.9	2654.9	2640.8	2637.3	2623.2	2616.2	2626.7
15°	2619.7	2626.7	2623.2	2619.7	2612.6	2612.6	2598.5	2591.5	2577.4	2563.3	2570.4
17.5°	2566.9	2577.4	2570.4	2566.9	2556.3	2556.3	2542.2	2535.2	2514.0	2500.0	2503.5
20°	2510.5	2514.0	2510.5	2503.5	2492.9	2489.4	2475.3	2461.2	2443.6	2426.0	2422.5
22.5°	2443.6	2447.1	2436.6	2429.5	2419.0	2415.5	2397.8	2387.3	2359.1	2338.0	2334.5
25°	2355.6	2359.1	2359.1	2341.5	2334.5	2327.4	2309.8	2292.2	2267.6	2239.4	2228.8
27.5°	2250.0	2260.5	2253.5	2235.9	2221.8	2218.3	2200.7	2186.6	2154.9	2130.2	2116.2
30°	2137.3	2133.8	2130.2	2119.7	2098.6	2095.0	2077.4	2059.8	2035.2	2003.5	1985.9
32.5°	1992.9	1992.9	1989.4	1978.8	1957.7	1950.7	1936.6	1915.5	1887.3	1862.6	1845.0
35°	1834.5	1838.0	1834.5	1813.3	1799.3	1792.2	1785.2	1760.5	1735.9	1707.7	1693.6
37.5°	1669.0	1658.4	1661.9	1644.3	1626.7	1633.8	1612.6	1602.1	1573.9	1552.8	1538.7
40°	1489.4	1496.5	1482.4	1475.3	1464.8	1454.2	1454.2	1436.6	1422.5	1397.9	1390.8
42.5°	1313.4	1323.9	1320.4	1313.4	1299.3	1302.8	1285.2	1278.1	1260.5	1250.0	1239.4
45°	1172.5	1172.5	1172.5	1165.5	1162.0	1154.9	1144.3	1133.8	1123.2	1109.1	1102.1
47.5°	1035.2	1035.2	1038.7	1031.7	1024.6	1021.1	1014.1	1014.1	996.5	982.4	975.3
50°	922.5	922.5	922.5	915.5	908.4	908.4	901.4	894.4	883.8	873.2	866.2
52.5°	820.4	820.4	820.4	813.4	809.8	806.3	802.8	799.3	785.2	778.2	771.1
55°	735.9	732.4	732.4	728.9	721.8	721.8	718.3	711.3	700.7	690.1	686.6
57.5°	651.4	654.9	651.4	651.4	644.4	644.4	637.3	633.8	623.2	616.2	609.1
60°	584.5	584.5	584.5	581.0	573.9	577.5	570.4	566.9	556.3	545.8	538.7
62.5°	517.6	521.1	521.1	517.6	510.6	510.6	507.0	503.5	492.9	482.4	471.8
65°	461.3	461.3	461.3	457.7	454.2	454.2	450.7	447.2	436.6	422.5	412.0
67.5°	408.4	404.9	404.9	404.9	401.4	397.9	394.4	390.8	380.3	369.7	355.6
70°	355.6	355.6	355.6	352.1	345.1	348.6	345.1	341.5	331.0	320.4	309.9
72.5°	306.3	306.3	302.8	299.3	299.3	295.8	295.8	292.2	281.7	267.6	257.0
75°	253.5	253.5	253.5	253.5	246.5	250.0	243.0	239.4	232.4	221.8	211.3
77.5°	207.7	207.7	207.7	204.2	200.7	200.7	197.2	193.7	183.1	176.1	162.0
80°	162.0	162.0	162.0	162.0	158.4	154.9	151.4	147.9	140.8	130.3	119.7
82.5°	119.7	119.7	116.2	116.2	116.2	112.7	109.2	105.6	98.6	91.5	84.5
85°	66.9	70.4	70.4	63.4	66.9	63.4	63.4	56.3	56.3	49.3	45.8
87.5°	24.6	21.1	21.1	21.1	21.1	21.1	21.1	17.6	17.6	17.6	14.1
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°	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2
2.5°	2711.2	2707.7	2721.8	2721.8	2700.7	2711.2	2714.7	2707.7	2707.7	2711.2	2700.7
5°	2704.2	2697.1	2711.2	2714.7	2693.6	2704.2	2707.7	2700.7	2704.2	2707.7	2693.6
7.5°	2679.5	2679.5	2690.1	2693.6	2672.5	2683.1	2683.1	2676.0	2679.5	2679.5	2669.0
10°	2654.9	2644.3	2654.9	2654.9	2637.3	2640.8	2647.8	2644.3	2658.4	2676.0	2676.0
12.5°	2609.1	2598.5	2616.2	2616.2	2605.6	2619.7	2637.3	2647.8	2661.9	2669.0	2647.8
15°	2552.8	2556.3	2588.0	2612.6	2602.1	2623.2	2640.8	2633.8	2616.2	2595.0	2563.3
17.5°	2478.8	2468.3	2496.4	2510.5	2496.4	2503.5	2517.6	2503.5	2475.3	2457.7	2415.5
20°	2394.3	2366.2	2366.2	2359.1	2334.5	2334.5	2330.9	2306.3	2295.7	2285.2	2267.6
22.5°	2299.3	2267.6	2257.0	2235.9	2214.8	2211.2	2200.7	2176.0	2161.9	2154.9	2133.8
25°	2190.1	2161.9	2144.3	2123.2	2091.5	2084.5	2073.9	2049.3	2042.2	2031.7	2014.0
27.5°	2077.4	2042.2	2017.6	1996.4	1968.3	1964.8	1943.6	1926.0	1911.9	1904.9	1890.8
30°	1947.1	1908.4	1890.8	1862.6	1841.5	1834.5	1816.9	1792.2	1781.7	1774.6	1764.1
32.5°	1802.8	1771.1	1753.5	1728.8	1700.7	1704.2	1683.1	1661.9	1654.9	1647.9	1637.3
35°	1661.9	1630.3	1609.1	1588.0	1570.4	1563.4	1549.3	1531.7	1521.1	1517.6	1510.5
37.5°	1507.0	1482.4	1464.8	1443.6	1429.6	1422.5	1415.5	1397.9	1390.8	1390.8	1376.7
40°	1355.6	1334.5	1320.4	1309.8	1292.2	1288.7	1281.7	1271.1	1267.6	1264.1	1253.5
42.5°	1218.3	1190.1	1179.6	1172.5	1162.0	1154.9	1151.4	1144.3	1140.8	1137.3	1126.7
45°	1088.0	1063.4	1052.8	1045.8	1035.2	1031.7	1028.2	1017.6	1010.5	1003.5	1000.0
47.5°	961.3	943.6	940.1	922.5	915.5	908.4	901.4	894.4	890.8	887.3	873.2
50°	852.1	841.5	823.9	813.4	806.3	802.8	788.7	778.2	774.6	771.1	760.6
52.5°	753.5	739.4	728.9	711.3	707.7	700.7	693.7	679.6	672.5	669.0	658.4
55°	665.5	654.9	640.8	626.7	616.2	612.7	602.1	588.0	581.0	573.9	566.9
57.5°	591.5	573.9	559.8	545.8	538.7	528.2	517.6	510.6	500.0	489.4	478.9
60°	521.1	507.0	489.4	475.3	468.3	461.3	447.2	436.6	426.0	415.5	404.9
62.5°	454.2	440.1	422.5	408.4	401.4	394.4	380.3	369.7	359.1	348.6	334.5
65°	394.4	380.3	366.2	352.1	345.1	338.0	323.9	309.9	299.3	288.7	274.6
67.5°	345.1	327.5	313.4	299.3	292.2	285.2	271.1	260.6	246.5	235.9	221.8
70°	292.2	278.2	267.6	253.5	246.5	239.4	225.3	211.3	200.7	190.1	176.1
72.5°	246.5	228.9	218.3	204.2	197.2	193.7	179.6	169.0	158.4	144.4	133.8
75°	197.2	183.1	169.0	158.4	151.4	147.9	133.8	123.2	112.7	102.1	91.5
77.5°	151.4	140.8	126.8	116.2	109.2	105.6	91.5	81.0	70.4	63.4	52.8
80°	112.7	98.6	91.5	81.0	77.5	70.4	63.4	52.8	45.8	35.2	28.2
82.5°	77.5	66.9	59.9	52.8	49.3	45.8	38.7	31.7	24.6	21.1	17.6
85°	42.3	35.2	31.7	28.2	24.6	24.6	21.1	17.6	14.1	10.6	7.0
87.5°	14.1	10.6	10.6	10.6	10.6	7.0	7.0	7.0	3.5	3.5	3.5
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°	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2
2.5°	2707.7	2707.7	2707.7	2704.2	2704.2	2704.2	2700.7	2714.7	2700.7	2697.1	2707.7
5°	2704.2	2697.1	2697.1	2697.1	2697.1	2693.6	2690.1	2697.1	2686.6	2683.1	2683.1
7.5°	2683.1	2679.5	2679.5	2676.0	2672.5	2669.0	2665.4	2669.0	2658.4	2654.9	2654.9
10°	2686.6	2679.5	2679.5	2669.0	2661.9	2651.4	2640.8	2644.3	2630.2	2619.7	2619.7
12.5°	2644.3	2626.7	2616.2	2605.6	2598.5	2595.0	2580.9	2588.0	2573.9	2570.4	2570.4
15°	2549.3	2528.1	2510.5	2503.5	2503.5	2496.4	2485.9	2500.0	2492.9	2496.4	2514.0
17.5°	2401.4	2390.8	2380.2	2376.7	2380.2	2387.3	2394.3	2415.5	2415.5	2426.0	2443.6
20°	2271.1	2264.0	2271.1	2271.1	2274.6	2288.7	2302.8	2320.4	2327.4	2338.0	2362.6
22.5°	2144.3	2144.3	2151.4	2161.9	2158.4	2183.1	2186.6	2218.3	2218.3	2239.4	2260.5
25°	2021.1	2021.1	2028.1	2031.7	2038.7	2052.8	2066.9	2091.5	2098.6	2119.7	2137.3
27.5°	1901.4	1897.9	1897.9	1901.4	1908.4	1926.0	1933.1	1961.2	1971.8	1985.9	2003.5
30°	1767.6	1764.1	1771.1	1778.1	1774.6	1792.2	1802.8	1823.9	1831.0	1845.0	1859.1
32.5°	1640.8	1640.8	1640.8	1647.9	1647.9	1661.9	1661.9	1686.6	1686.6	1697.2	1711.2
35°	1510.5	1510.5	1514.1	1517.6	1521.1	1524.6	1528.1	1542.2	1545.7	1549.3	1556.3
37.5°	1387.3	1383.8	1387.3	1387.3	1380.3	1394.3	1394.3	1408.4	1397.9	1408.4	1411.9
40°	1260.5	1260.5	1257.0	1257.0	1257.0	1264.1	1257.0	1267.6	1260.5	1267.6	1264.1
42.5°	1130.3	1130.3	1123.2	1130.3	1126.7	1126.7	1126.7	1133.8	1123.2	1130.3	1133.8
45°	1000.0	996.5	996.5	992.9	992.9	992.9	996.5	996.5	992.9	1000.0	1000.0
47.5°	873.2	869.7	869.7	869.7	869.7	873.2	862.7	869.7	862.7	862.7	862.7
50°	764.1	760.6	757.0	753.5	750.0	750.0	746.5	746.5	739.4	735.9	732.4
52.5°	658.4	654.9	647.9	647.9	644.4	640.8	630.3	630.3	619.7	616.2	616.2
55°	563.4	552.8	549.3	542.2	542.2	535.2	528.2	521.1	510.6	503.5	503.5
57.5°	475.3	464.8	457.7	454.2	450.7	443.7	429.6	426.0	412.0	408.4	404.9
60°	397.9	387.3	376.8	369.7	366.2	355.6	341.5	334.5	327.5	316.9	306.3
62.5°	323.9	313.4	299.3	295.8	288.7	278.2	267.6	257.0	250.0	239.4	232.4
65°	260.6	250.0	239.4	232.4	225.3	214.8	204.2	193.7	186.6	183.1	179.6
67.5°	211.3	197.2	186.6	183.1	176.1	169.0	158.4	154.9	147.9	147.9	147.9
70°	165.5	154.9	144.4	140.8	137.3	130.3	123.2	123.2	123.2	123.2	123.2
72.5°	123.2	116.2	105.6	102.1	98.6	95.1	88.0	91.5	88.0	88.0	88.0
75°	77.5	70.4	63.4	59.9	56.3	52.8	49.3	45.8	42.3	38.7	38.7
77.5°	42.3	35.2	31.7	28.2	28.2	24.6	21.1	21.1	17.6	17.6	17.6
80°	24.6	21.1	17.6	14.1	14.1	10.6	10.6	10.6	10.6	7.0	7.0
82.5°	14.1	10.6	7.0	7.0	7.0	7.0	3.5	3.5	3.5	3.5	3.5
85°	7.0	7.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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: P252439

CATALOG NUMBER: LD6B70D010TE EU6B60709730 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2	2711.2
2.5°	2690.1	2700.7	2690.1	2700.7	2700.7	2700.7	2700.7	2690.1
5°	2672.5	2679.5	2669.0	2676.0	2679.5	2676.0	2676.0	2665.4
7.5°	2640.8	2647.8	2637.3	2647.8	2651.4	2647.8	2644.3	2637.3
10°	2609.1	2612.6	2602.1	2609.1	2616.2	2616.2	2612.6	2602.1
12.5°	2559.8	2570.4	2559.8	2566.9	2573.9	2577.4	2577.4	2566.9
15°	2503.5	2521.1	2514.0	2524.6	2535.2	2538.7	2538.7	2535.2
17.5°	2447.1	2464.7	2454.2	2471.8	2482.4	2489.4	2492.9	2485.9
20°	2366.2	2387.3	2380.2	2394.3	2408.4	2419.0	2419.0	2408.4
22.5°	2260.5	2288.7	2285.2	2295.7	2313.3	2316.9	2323.9	2316.9
25°	2144.3	2165.5	2161.9	2172.5	2193.6	2193.6	2197.1	2197.1
27.5°	2010.5	2031.7	2028.1	2035.2	2049.3	2052.8	2056.3	2049.3
30°	1866.2	1876.7	1876.7	1887.3	1897.9	1901.4	1901.4	1890.8
32.5°	1707.7	1721.8	1728.8	1725.3	1735.9	1742.9	1739.4	1739.4
35°	1563.4	1566.9	1570.4	1573.9	1577.4	1584.5	1577.4	1573.9
37.5°	1408.4	1419.0	1411.9	1419.0	1426.0	1422.5	1419.0	1419.0
40°	1267.6	1271.1	1264.1	1271.1	1274.6	1274.6	1274.6	1267.6
42.5°	1126.7	1133.8	1126.7	1133.8	1133.8	1133.8	1133.8	1130.3
45°	985.9	992.9	992.9	996.5	996.5	992.9	992.9	992.9
47.5°	855.6	862.7	855.6	862.7	866.2	859.1	859.1	859.1
50°	732.4	728.9	728.9	732.4	732.4	732.4	732.4	728.9
52.5°	605.6	609.1	609.1	609.1	612.7	609.1	612.7	612.7
55°	496.5	496.5	496.5	500.0	496.5	496.5	500.0	503.5
57.5°	397.9	394.4	390.8	390.8	394.4	390.8	390.8	390.8
60°	306.3	302.8	299.3	299.3	299.3	299.3	299.3	295.8
62.5°	228.9	228.9	228.9	232.4	232.4	232.4	232.4	235.9
65°	183.1	183.1	183.1	183.1	183.1	183.1	183.1	186.6
67.5°	147.9	147.9	147.9	151.4	151.4	151.4	151.4	151.4
70°	123.2	123.2	126.8	123.2	126.8	126.8	126.8	126.8
72.5°	84.5	84.5	84.5	84.5	84.5	81.0	84.5	81.0
75°	35.2	35.2	35.2	35.2	35.2	35.2	35.2	31.7
77.5°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
80°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
82.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	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)