

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: P252744

Luminaire Tested: **LD6B70D010TE EU6B60709024 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252744
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60709024 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4781.0 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

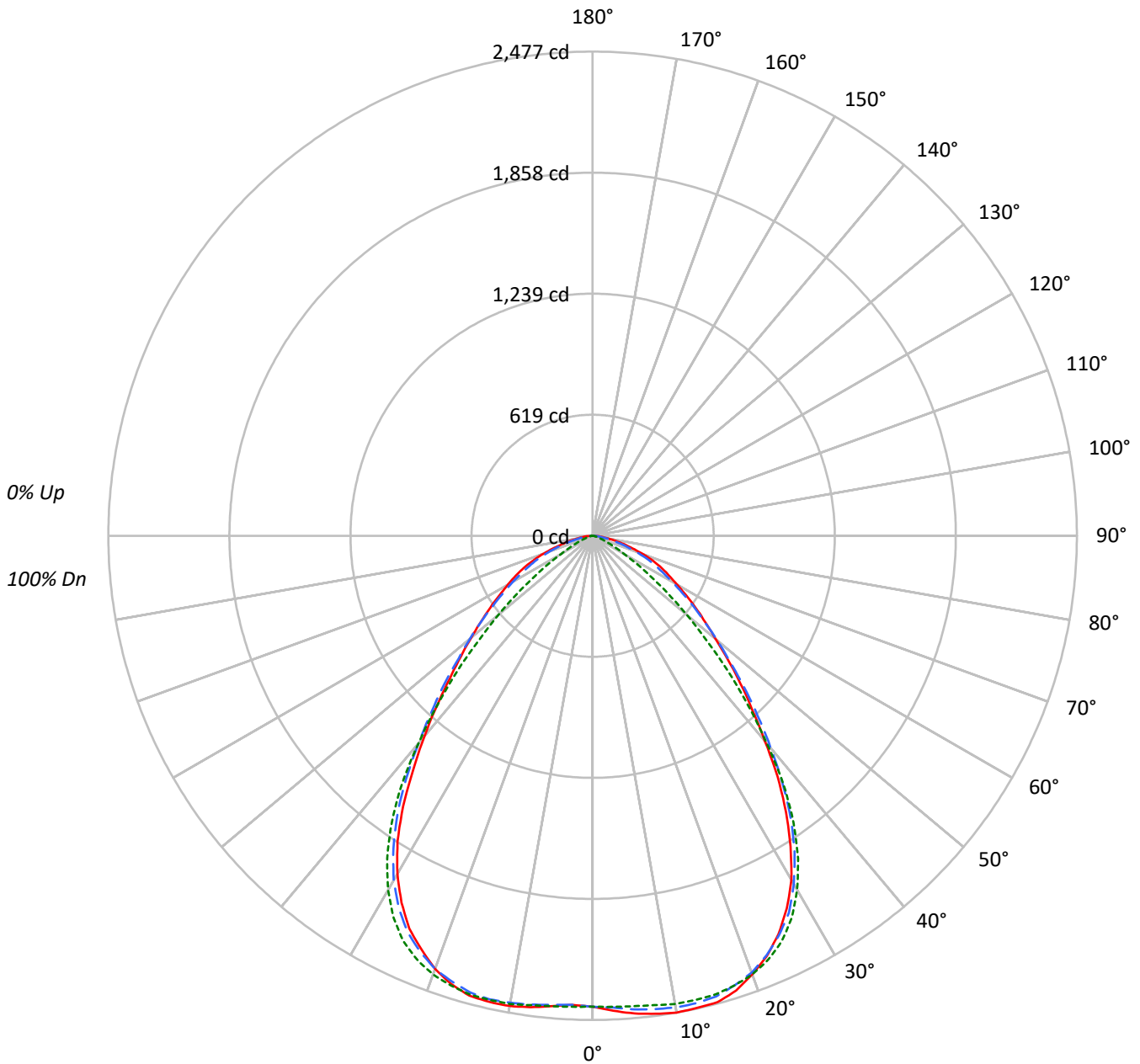
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	157152	157152	157152
5°	160653	158197	158197
10°	164087	161153	161828
15°	166836	164073	164532
20°	165814	165814	163690
25°	161866	164810	159663
30°	153228	157590	150403
35°	137306	142730	134591
40°	116643	118099	113747
45°	98704	90216	95244
50°	83339	63628	82303
55°	73239	41073	72466
60°	64901	24452	65345
65°	59958	14727	59958
70°	51999	8450	50682
75°	41214	5142	38642
80°	30733	3832	29455
85°	28071	2545	25526



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.9	4.9
10°-20°	686.3	14.4
20°-30°	1032.2	21.6
30°-40°	1085.3	22.7
40°-50°	810.8	17.0
50°-60°	504.7	10.6
60°-70°	287.1	6.0
70°-80°	118.2	2.5
80°-90°	24.4	0.5
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°	1950.5	40.8
0°-40°	3035.8	63.5
0°-60°	4351.3	91.0
0°-90°	4781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4781.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2409	2409	2409	2409	2409	
5°	2453	2433	2416	2409	2416	235
15°	2470	2439	2429	2419	2436	694
25°	2249	2256	2290	2238	2218	1029
35°	1724	1768	1792	1741	1690	1070
45°	1070	1094	978	1073	1032	829
55°	644	630	361	620	637	579
65°	388	348	95	348	388	382
75°	164	130	20	126	153	178
85°	38	24	3	20	34	42
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°	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8
2.5°	2432.6	2429.2	2432.6	2425.8	2422.4	2422.4	2425.8	2419.0	2415.6	2419.0	2415.6
5°	2453.1	2446.2	2449.7	2446.2	2439.4	2439.4	2442.8	2432.6	2432.6	2436.0	2432.6
7.5°	2466.7	2466.7	2466.7	2459.9	2456.5	2453.1	2459.9	2449.7	2446.2	2446.2	2442.8
10°	2476.9	2473.5	2476.9	2470.1	2463.3	2459.9	2466.7	2459.9	2453.1	2459.9	2449.7
12.5°	2473.5	2473.5	2473.5	2470.1	2463.3	2459.9	2466.7	2456.5	2453.1	2456.5	2449.7
15°	2470.1	2459.9	2463.3	2459.9	2449.7	2449.7	2453.1	2442.8	2436.0	2446.2	2439.4
17.5°	2439.4	2432.6	2436.0	2429.2	2422.4	2419.0	2422.4	2419.0	2412.2	2419.0	2412.2
20°	2388.3	2388.3	2391.7	2384.9	2378.1	2374.7	2381.5	2374.7	2367.9	2378.1	2378.1
22.5°	2327.0	2327.0	2327.0	2323.6	2320.2	2320.2	2320.2	2316.8	2313.4	2320.2	2323.6
25°	2248.6	2245.2	2248.6	2252.0	2248.6	2245.2	2248.6	2248.6	2241.8	2255.5	2255.5
27.5°	2149.8	2149.8	2156.6	2153.2	2153.2	2149.8	2156.6	2156.6	2153.2	2163.5	2173.7
30°	2034.0	2027.2	2034.0	2034.0	2037.4	2037.4	2040.8	2040.8	2040.8	2051.0	2057.8
32.5°	1884.1	1887.5	1897.7	1894.3	1890.9	1901.1	1901.1	1907.9	1911.3	1918.2	1921.6
35°	1724.0	1727.4	1727.4	1730.8	1737.6	1730.8	1747.8	1744.4	1747.8	1761.4	1768.2
37.5°	1553.6	1543.4	1560.4	1553.6	1557.0	1557.0	1563.8	1567.2	1577.5	1594.5	1594.5
40°	1369.6	1373.0	1379.8	1383.3	1386.7	1386.7	1386.7	1396.9	1400.3	1420.7	1417.3
42.5°	1209.5	1209.5	1216.3	1219.7	1219.7	1219.7	1219.7	1229.9	1236.8	1243.6	1250.4
45°	1069.8	1059.6	1066.4	1066.4	1073.2	1069.8	1076.6	1083.4	1086.8	1097.1	1093.7
47.5°	936.9	933.5	936.9	940.3	936.9	940.3	943.7	947.2	950.6	950.6	950.6
50°	821.1	821.1	824.5	827.9	827.9	827.9	827.9	831.3	831.3	838.1	831.3
52.5°	725.7	729.1	729.1	725.7	729.1	729.1	732.5	732.5	729.1	729.1	718.9
55°	643.9	640.5	643.9	640.5	643.9	643.9	640.5	640.5	637.1	633.7	630.3
57.5°	565.6	565.6	565.6	565.6	562.2	565.6	562.2	558.8	558.8	551.9	541.7
60°	497.4	497.4	497.4	497.4	497.4	494.0	497.4	494.0	487.2	480.4	466.8
62.5°	439.5	436.1	439.5	436.1	436.1	432.7	432.7	429.3	422.5	415.7	402.0
65°	388.4	391.8	388.4	388.4	385.0	381.6	381.6	378.2	368.0	361.1	347.5
67.5°	333.9	330.5	330.5	330.5	327.1	327.1	327.1	320.3	313.4	303.2	289.6
70°	272.6	272.6	272.6	269.2	269.2	265.7	265.7	262.3	255.5	248.7	231.7
72.5°	214.6	214.6	214.6	207.8	211.2	207.8	207.8	201.0	197.6	187.4	177.2
75°	163.5	163.5	160.1	160.1	156.7	153.3	153.3	149.9	146.5	139.7	129.5
77.5°	119.2	119.2	119.2	115.8	112.4	109.0	109.0	105.6	102.2	98.8	92.0
80°	81.8	81.8	81.8	81.8	78.4	75.0	75.0	71.5	71.5	68.1	61.3
82.5°	54.5	54.5	54.5	54.5	51.1	51.1	51.1	47.7	44.3	44.3	37.5
85°	37.5	37.5	34.1	34.1	34.1	34.1	30.7	30.7	27.3	23.8	23.8
87.5°	20.4	20.4	20.4	20.4	17.0	17.0	17.0	17.0	13.6	13.6	10.2
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°	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8
2.5°	2425.8	2425.8	2422.4	2412.2	2415.6	2412.2	2415.6	2412.2	2402.0	2412.2	2402.0
5°	2439.4	2442.8	2436.0	2422.4	2425.8	2422.4	2422.4	2419.0	2408.8	2415.6	2408.8
7.5°	2453.1	2449.7	2446.2	2432.6	2436.0	2432.6	2432.6	2425.8	2415.6	2422.4	2412.2
10°	2459.9	2459.9	2453.1	2439.4	2439.4	2436.0	2439.4	2436.0	2422.4	2432.6	2425.8
12.5°	2459.9	2456.5	2456.5	2439.4	2442.8	2439.4	2442.8	2436.0	2425.8	2432.6	2429.2
15°	2449.7	2449.7	2446.2	2429.2	2432.6	2432.6	2436.0	2429.2	2419.0	2429.2	2422.4
17.5°	2429.2	2429.2	2425.8	2412.2	2419.0	2419.0	2422.4	2415.6	2405.4	2412.2	2412.2
20°	2388.3	2391.7	2391.7	2381.5	2388.3	2388.3	2391.7	2388.3	2384.9	2388.3	2381.5
22.5°	2340.6	2347.4	2347.4	2337.2	2344.0	2344.0	2354.3	2350.9	2344.0	2347.4	2344.0
25°	2269.1	2275.9	2282.7	2275.9	2282.7	2282.7	2292.9	2289.5	2282.7	2289.5	2279.3
27.5°	2187.3	2190.7	2197.5	2190.7	2200.9	2197.5	2207.8	2204.3	2194.1	2204.3	2200.9
30°	2071.5	2085.1	2095.3	2085.1	2095.3	2095.3	2102.1	2098.7	2095.3	2091.9	2091.9
32.5°	1942.0	1955.6	1955.6	1952.2	1959.0	1959.0	1962.4	1955.6	1952.2	1955.6	1959.0
35°	1781.9	1788.7	1795.5	1792.1	1795.5	1798.9	1795.5	1798.9	1788.7	1792.1	1792.1
37.5°	1608.1	1614.9	1614.9	1604.7	1611.5	1611.5	1604.7	1604.7	1597.9	1604.7	1591.1
40°	1424.1	1417.3	1420.7	1413.9	1407.1	1407.1	1403.7	1390.1	1383.3	1386.7	1390.1
42.5°	1243.6	1243.6	1233.3	1216.3	1199.3	1199.3	1189.1	1182.2	1168.6	1175.4	1172.0
45°	1090.2	1073.2	1059.6	1032.3	1022.1	1015.3	998.3	981.2	974.4	977.8	974.4
47.5°	943.7	930.1	896.0	858.6	848.4	838.1	817.7	797.2	790.4	783.6	783.6
50°	821.1	797.2	759.8	718.9	701.8	684.8	657.6	637.1	623.5	626.9	626.9
52.5°	708.7	681.4	637.1	586.0	565.6	545.1	521.3	497.4	487.2	483.8	483.8
55°	609.9	579.2	534.9	477.0	459.9	436.1	405.4	378.2	364.6	361.1	368.0
57.5°	521.3	494.0	442.9	385.0	364.6	340.7	310.0	286.2	269.2	265.7	269.2
60°	449.7	412.3	368.0	313.4	286.2	265.7	231.7	211.2	194.2	187.4	190.8
62.5°	378.2	344.1	299.8	245.3	224.9	204.4	173.8	149.9	136.3	132.9	136.3
65°	323.7	289.6	248.7	201.0	180.6	160.1	132.9	109.0	98.8	95.4	98.8
67.5°	269.2	238.5	204.4	160.1	143.1	126.1	98.8	81.8	68.1	64.7	68.1
70°	218.0	190.8	156.7	126.1	109.0	95.4	75.0	57.9	47.7	44.3	47.7
72.5°	163.5	143.1	119.2	92.0	81.8	71.5	54.5	40.9	34.1	30.7	34.1
75°	119.2	102.2	85.2	64.7	57.9	51.1	37.5	27.3	23.8	20.4	23.8
77.5°	81.8	71.5	57.9	44.3	37.5	34.1	23.8	20.4	17.0	13.6	13.6
80°	54.5	47.7	37.5	30.7	27.3	23.8	17.0	13.6	10.2	10.2	10.2
82.5°	34.1	27.3	23.8	17.0	13.6	13.6	10.2	6.8	6.8	6.8	6.8
85°	20.4	17.0	13.6	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4
87.5°	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4	0.0	0.0	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°	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8
2.5°	2408.8	2402.0	2402.0	2405.4	2408.8	2412.2	2405.4	2402.0	2402.0	2412.2	2405.4
5°	2408.8	2405.4	2405.4	2405.4	2412.2	2415.6	2408.8	2405.4	2408.8	2419.0	2415.6
7.5°	2419.0	2412.2	2415.6	2415.6	2419.0	2425.8	2419.0	2415.6	2419.0	2429.2	2422.4
10°	2425.8	2419.0	2422.4	2419.0	2429.2	2432.6	2425.8	2422.4	2425.8	2439.4	2436.0
12.5°	2429.2	2425.8	2425.8	2422.4	2432.6	2436.0	2429.2	2425.8	2429.2	2439.4	2436.0
15°	2422.4	2419.0	2419.0	2419.0	2425.8	2432.6	2422.4	2419.0	2419.0	2429.2	2425.8
17.5°	2408.8	2402.0	2402.0	2402.0	2405.4	2408.8	2398.5	2395.1	2391.7	2402.0	2398.5
20°	2384.9	2378.1	2371.3	2371.3	2374.7	2374.7	2367.9	2357.7	2357.7	2361.1	2354.3
22.5°	2340.6	2337.2	2330.4	2327.0	2333.8	2330.4	2316.8	2306.6	2303.2	2306.6	2299.7
25°	2279.3	2272.5	2269.1	2265.7	2269.1	2265.7	2252.0	2238.4	2238.4	2238.4	2228.2
27.5°	2194.1	2187.3	2183.9	2183.9	2187.3	2180.5	2166.9	2153.2	2146.4	2146.4	2136.2
30°	2085.1	2085.1	2081.7	2078.3	2074.9	2074.9	2054.4	2040.8	2034.0	2037.4	2030.6
32.5°	1952.2	1948.8	1945.4	1935.2	1938.6	1935.2	1918.2	1907.9	1897.7	1890.9	1887.5
35°	1781.9	1781.9	1778.5	1778.5	1778.5	1775.1	1758.0	1747.8	1741.0	1737.6	1727.4
37.5°	1594.5	1591.1	1587.7	1587.7	1587.7	1587.7	1577.5	1567.2	1567.2	1563.8	1557.0
40°	1383.3	1386.7	1390.1	1386.7	1396.9	1407.1	1393.5	1386.7	1383.3	1393.5	1379.8
42.5°	1178.8	1175.4	1192.5	1195.9	1195.9	1212.9	1216.3	1219.7	1216.3	1223.1	1223.1
45°	981.2	977.8	994.9	1001.7	1018.7	1039.1	1049.4	1066.4	1073.2	1080.0	1073.2
47.5°	793.8	807.5	821.1	838.1	851.8	885.8	906.3	923.3	930.1	940.3	940.3
50°	637.1	650.7	674.6	688.2	705.3	746.1	780.2	804.1	817.7	827.9	824.5
52.5°	490.6	514.5	545.1	558.8	582.6	630.3	667.8	695.0	712.1	722.3	725.7
55°	378.2	398.6	429.3	449.7	473.6	524.7	572.4	603.0	620.1	633.7	640.5
57.5°	279.4	303.2	337.3	354.3	381.6	439.5	480.4	517.9	538.3	555.3	558.8
60°	204.4	228.3	258.9	279.4	306.6	364.6	412.3	446.3	470.2	483.8	490.6
62.5°	146.5	170.4	201.0	221.5	245.3	296.4	344.1	378.2	402.0	419.1	429.3
65°	105.6	129.5	160.1	177.2	197.6	245.3	289.6	323.7	347.5	368.0	374.8
67.5°	78.4	95.4	122.7	139.7	160.1	197.6	235.1	265.7	289.6	306.6	313.4
70°	57.9	71.5	95.4	105.6	119.2	153.3	184.0	211.2	231.7	245.3	252.1
72.5°	40.9	51.1	68.1	78.4	88.6	115.8	139.7	160.1	173.8	187.4	194.2
75°	27.3	34.1	47.7	54.5	61.3	81.8	98.8	115.8	126.1	136.3	139.7
77.5°	17.0	23.8	34.1	37.5	44.3	54.5	68.1	78.4	85.2	92.0	98.8
80°	10.2	13.6	20.4	23.8	27.3	37.5	44.3	51.1	57.9	64.7	68.1
82.5°	6.8	10.2	13.6	13.6	17.0	20.4	27.3	34.1	37.5	40.9	44.3
85°	3.4	3.4	6.8	6.8	10.2	10.2	13.6	17.0	20.4	23.8	27.3
87.5°	3.4	3.4	3.4	3.4	6.8	6.8	10.2	10.2	10.2	13.6	13.6
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: P252744

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8	2408.8
2.5°	2398.5	2408.8	2398.5	2405.4	2402.0	2402.0	2398.5	2402.0
5°	2408.8	2422.4	2408.8	2419.0	2412.2	2412.2	2412.2	2415.6
7.5°	2419.0	2432.6	2422.4	2432.6	2429.2	2425.8	2425.8	2432.6
10°	2429.2	2439.4	2432.6	2442.8	2439.4	2436.0	2436.0	2442.8
12.5°	2429.2	2442.8	2436.0	2446.2	2442.8	2439.4	2439.4	2442.8
15°	2419.0	2436.0	2425.8	2436.0	2432.6	2429.2	2429.2	2436.0
17.5°	2388.3	2402.0	2395.1	2402.0	2402.0	2398.5	2402.0	2405.4
20°	2347.4	2357.7	2350.9	2357.7	2357.7	2350.9	2354.3	2357.7
22.5°	2289.5	2299.7	2292.9	2299.7	2296.3	2292.9	2292.9	2289.5
25°	2218.0	2231.6	2221.4	2228.2	2221.4	2214.6	2214.6	2218.0
27.5°	2129.4	2139.6	2126.0	2132.8	2126.0	2119.2	2119.2	2115.8
30°	2013.6	2017.0	2006.7	2013.6	2006.7	2003.3	1996.5	1996.5
32.5°	1873.9	1877.3	1867.1	1867.1	1860.2	1860.2	1846.6	1856.8
35°	1710.3	1713.7	1710.3	1706.9	1696.7	1693.3	1689.9	1689.9
37.5°	1540.0	1540.0	1529.8	1526.3	1519.5	1512.7	1516.1	1505.9
40°	1366.2	1362.8	1352.6	1356.0	1352.6	1342.4	1339.0	1335.6
42.5°	1202.7	1202.7	1192.5	1195.9	1189.1	1185.6	1175.4	1178.8
45°	1059.6	1059.6	1049.4	1049.4	1046.0	1035.7	1039.1	1032.3
47.5°	930.1	930.1	926.7	926.7	916.5	913.1	913.1	913.1
50°	817.7	817.7	817.7	817.7	814.3	810.9	807.5	810.9
52.5°	722.3	729.1	725.7	725.7	722.3	718.9	715.5	715.5
55°	637.1	640.5	640.5	643.9	640.5	637.1	640.5	637.1
57.5°	562.2	569.0	569.0	569.0	569.0	569.0	565.6	562.2
60°	497.4	500.8	500.8	504.2	504.2	504.2	500.8	500.8
62.5°	432.7	439.5	442.9	442.9	446.3	442.9	442.9	442.9
65°	381.6	388.4	391.8	388.4	391.8	391.8	388.4	388.4
67.5°	320.3	327.1	327.1	327.1	327.1	330.5	327.1	327.1
70°	258.9	265.7	262.3	265.7	265.7	265.7	265.7	265.7
72.5°	197.6	201.0	204.4	204.4	207.8	204.4	204.4	204.4
75°	143.1	149.9	149.9	149.9	149.9	153.3	153.3	153.3
77.5°	102.2	105.6	105.6	109.0	109.0	109.0	109.0	112.4
80°	71.5	71.5	75.0	75.0	78.4	78.4	78.4	78.4
82.5°	47.7	51.1	51.1	51.1	51.1	51.1	51.1	51.1
85°	27.3	30.7	30.7	30.7	30.7	34.1	34.1	34.1
87.5°	17.0	17.0	17.0	17.0	17.0	17.0	13.6	13.6
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)