

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: P252745

Luminaire Tested: **LD6B70D010TE EU6B60709027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252745
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 EU6B60709027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5435.0 lumens
Efficiency: N/A
Efficacy: 68.4 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

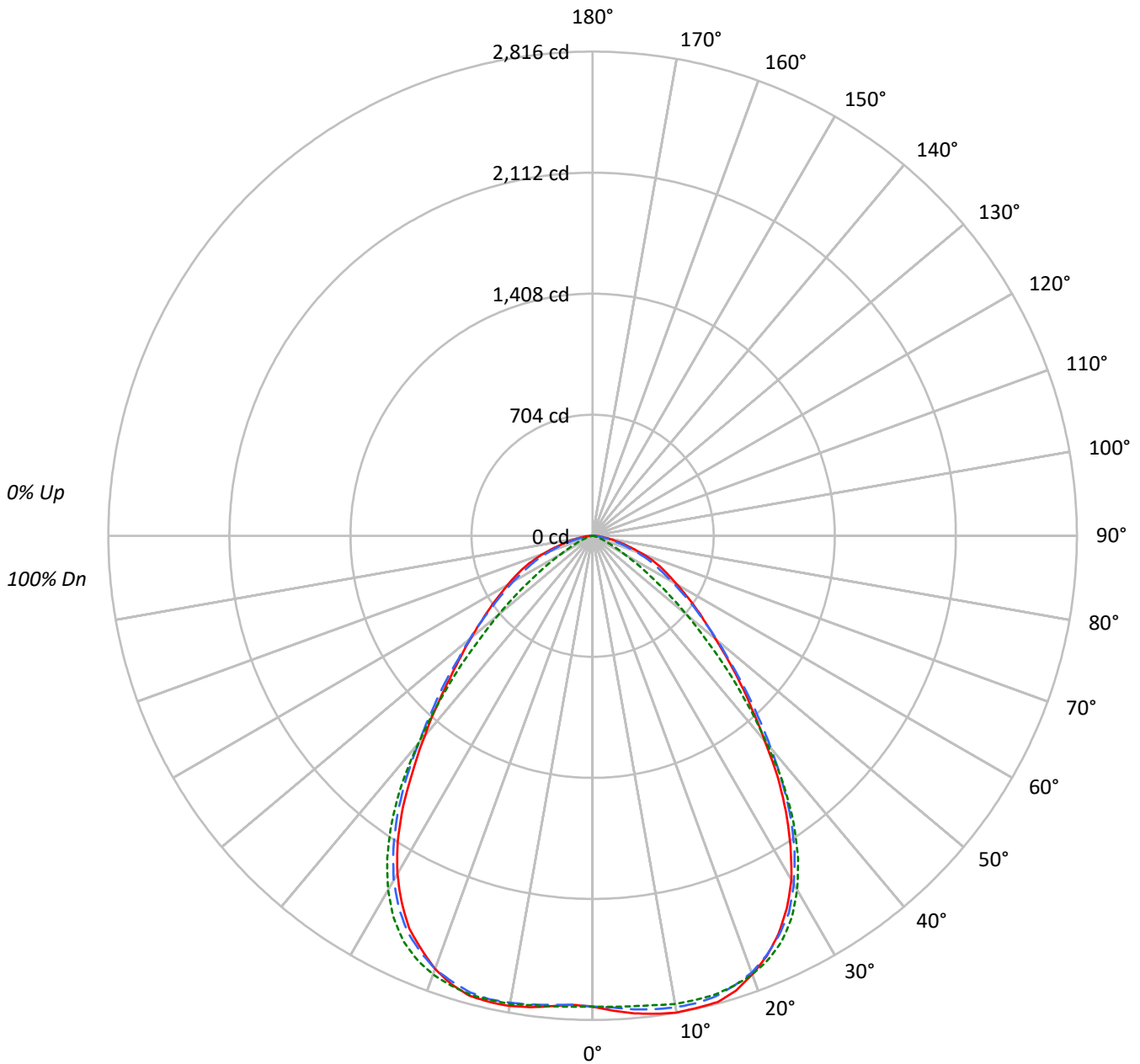
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	178648	178648	178648
5°	182625	179835	179835
10°	186532	183200	183968
15°	189658	186517	187044
20°	188496	188496	186080
25°	184008	187356	181503
30°	174186	179150	170977
35°	156087	162251	152996
40°	132603	134247	129298
45°	112202	102561	108272
50°	94737	72326	93559
55°	83260	46692	82384
60°	73787	27793	74283
65°	68155	16734	68155
70°	59095	9614	57626
75°	46860	5848	43936
80°	34941	4358	33475
85°	31888	2919	28969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.6	4.9
10°-20°	780.2	14.4
20°-30°	1173.4	21.6
30°-40°	1233.8	22.7
40°-50°	921.7	17.0
50°-60°	573.8	10.6
60°-70°	326.3	6.0
70°-80°	134.4	2.5
80°-90°	27.8	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°	2217.3	40.8
0°-40°	3451.1	63.5
0°-60°	4946.5	91.0
0°-90°	5435.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5435.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2738	2738	2738	2738	2738	
5°	2789	2765	2746	2738	2746	267
15°	2808	2773	2762	2750	2769	789
25°	2556	2564	2603	2545	2521	1170
35°	1960	2010	2037	1979	1921	1216
45°	1216	1243	1112	1220	1174	942
55°	732	716	410	705	724	658
65°	442	395	108	395	442	435
75°	186	147	23	143	174	202
85°	43	27	4	23	39	47
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°	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3
2.5°	2765.4	2761.5	2765.4	2757.6	2753.8	2753.8	2757.6	2749.9	2746.0	2749.9	2746.0
5°	2788.6	2780.9	2784.7	2780.9	2773.1	2773.1	2777.0	2765.4	2765.4	2769.3	2765.4
7.5°	2804.1	2804.1	2804.1	2796.4	2792.5	2788.6	2796.4	2784.7	2780.9	2780.9	2777.0
10°	2815.7	2811.9	2815.7	2808.0	2800.2	2796.4	2804.1	2796.4	2788.6	2796.4	2784.7
12.5°	2811.9	2811.9	2811.9	2808.0	2800.2	2796.4	2804.1	2792.5	2788.6	2792.5	2784.7
15°	2808.0	2796.4	2800.2	2796.4	2784.7	2784.7	2788.6	2777.0	2769.3	2780.9	2773.1
17.5°	2773.1	2765.4	2769.3	2761.5	2753.8	2749.9	2753.8	2749.9	2742.1	2749.9	2742.1
20°	2715.0	2715.0	2718.9	2711.2	2703.4	2699.5	2707.3	2699.5	2691.8	2703.4	2703.4
22.5°	2645.3	2645.3	2645.3	2641.4	2637.6	2637.6	2637.6	2633.7	2629.8	2637.6	2641.4
25°	2556.2	2552.4	2556.2	2560.1	2556.2	2552.4	2556.2	2556.2	2548.5	2564.0	2564.0
27.5°	2443.9	2443.9	2451.7	2447.8	2447.8	2443.9	2451.7	2451.7	2447.8	2459.4	2471.0
30°	2312.2	2304.5	2312.2	2312.2	2316.1	2316.1	2320.0	2320.0	2320.0	2331.6	2339.3
32.5°	2141.8	2145.7	2157.3	2153.4	2149.6	2161.2	2161.2	2168.9	2172.8	2180.5	2184.4
35°	1959.8	1963.7	1963.7	1967.5	1975.3	1967.5	1986.9	1983.0	1986.9	2002.4	2010.1
37.5°	1766.1	1754.5	1773.9	1766.1	1770.0	1770.0	1777.7	1781.6	1793.2	1812.6	1812.6
40°	1557.0	1560.9	1568.6	1572.5	1576.3	1576.3	1576.3	1588.0	1591.8	1615.1	1611.2
42.5°	1374.9	1374.9	1382.7	1386.6	1386.6	1386.6	1386.6	1398.2	1405.9	1413.7	1421.4
45°	1216.1	1204.5	1212.3	1212.3	1220.0	1216.1	1223.9	1231.6	1235.5	1247.1	1243.3
47.5°	1065.1	1061.2	1065.1	1069.0	1065.1	1069.0	1072.8	1076.7	1080.6	1080.6	1080.6
50°	933.4	933.4	937.3	941.2	941.2	941.2	941.2	945.0	945.0	952.8	945.0
52.5°	825.0	828.8	828.8	825.0	828.8	828.8	832.7	832.7	828.8	828.8	817.2
55°	732.0	728.1	732.0	728.1	732.0	732.0	728.1	728.1	724.3	720.4	716.5
57.5°	642.9	642.9	642.9	642.9	639.1	642.9	639.1	635.2	635.2	627.4	615.8
60°	565.5	565.5	565.5	565.5	565.5	561.6	565.5	561.6	553.9	546.1	530.6
62.5°	499.6	495.8	499.6	495.8	495.8	491.9	491.9	488.0	480.3	472.5	457.0
65°	441.5	445.4	441.5	441.5	437.7	433.8	433.8	429.9	418.3	410.5	395.1
67.5°	379.6	375.7	375.7	375.7	371.8	371.8	371.8	364.1	356.3	344.7	329.2
70°	309.8	309.8	309.8	306.0	306.0	302.1	302.1	298.2	290.5	282.7	263.4
72.5°	244.0	244.0	244.0	236.3	240.1	236.3	236.3	228.5	224.6	213.0	201.4
75°	185.9	185.9	182.0	182.0	178.2	174.3	174.3	170.4	166.5	158.8	147.2
77.5°	135.6	135.6	135.6	131.7	127.8	123.9	123.9	120.1	116.2	112.3	104.6
80°	93.0	93.0	93.0	93.0	89.1	85.2	85.2	81.3	81.3	77.5	69.7
82.5°	62.0	62.0	62.0	62.0	58.1	58.1	58.1	54.2	50.4	50.4	42.6
85°	42.6	42.6	38.7	38.7	38.7	38.7	34.9	34.9	31.0	27.1	27.1
87.5°	23.2	23.2	23.2	23.2	19.4	19.4	19.4	19.4	15.5	15.5	11.6
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°	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3
2.5°	2757.6	2757.6	2753.8	2742.1	2746.0	2742.1	2746.0	2742.1	2730.5	2742.1	2730.5
5°	2773.1	2777.0	2769.3	2753.8	2757.6	2753.8	2753.8	2749.9	2738.3	2746.0	2738.3
7.5°	2788.6	2784.7	2780.9	2765.4	2769.3	2765.4	2765.4	2757.6	2746.0	2753.8	2742.1
10°	2796.4	2796.4	2788.6	2773.1	2773.1	2769.3	2773.1	2769.3	2753.8	2765.4	2757.6
12.5°	2796.4	2792.5	2792.5	2773.1	2777.0	2773.1	2777.0	2769.3	2757.6	2765.4	2761.5
15°	2784.7	2784.7	2780.9	2761.5	2765.4	2765.4	2769.3	2761.5	2749.9	2761.5	2753.8
17.5°	2761.5	2761.5	2757.6	2742.1	2749.9	2749.9	2753.8	2746.0	2734.4	2742.1	2742.1
20°	2715.0	2718.9	2718.9	2707.3	2715.0	2715.0	2718.9	2715.0	2711.2	2715.0	2707.3
22.5°	2660.8	2668.6	2668.6	2656.9	2664.7	2664.7	2676.3	2672.4	2664.7	2668.6	2664.7
25°	2579.5	2587.2	2595.0	2587.2	2595.0	2595.0	2606.6	2602.7	2595.0	2602.7	2591.1
27.5°	2486.5	2490.4	2498.1	2490.4	2502.0	2498.1	2509.8	2505.9	2494.3	2505.9	2502.0
30°	2354.8	2370.3	2381.9	2370.3	2381.9	2381.9	2389.7	2385.8	2381.9	2378.1	2378.1
32.5°	2207.7	2223.1	2223.1	2219.3	2227.0	2227.0	2230.9	2223.1	2219.3	2223.1	2227.0
35°	2025.6	2033.4	2041.1	2037.2	2041.1	2045.0	2041.1	2045.0	2033.4	2037.2	2037.2
37.5°	1828.1	1835.8	1835.8	1824.2	1832.0	1832.0	1824.2	1824.2	1816.5	1824.2	1808.7
40°	1618.9	1611.2	1615.1	1607.3	1599.6	1599.6	1595.7	1580.2	1572.5	1576.3	1580.2
42.5°	1413.7	1413.7	1402.1	1382.7	1363.3	1363.3	1351.7	1344.0	1328.5	1336.2	1332.3
45°	1239.4	1220.0	1204.5	1173.5	1161.9	1154.2	1134.8	1115.4	1107.7	1111.6	1107.7
47.5°	1072.8	1057.4	1018.6	976.0	964.4	952.8	929.5	906.3	898.6	890.8	890.8
50°	933.4	906.3	863.7	817.2	797.9	778.5	747.5	724.3	708.8	712.6	712.6
52.5°	805.6	774.6	724.3	666.2	642.9	619.7	592.6	565.5	553.9	550.0	550.0
55°	693.3	658.4	608.1	542.2	522.9	495.8	460.9	429.9	414.4	410.5	418.3
57.5°	592.6	561.6	503.5	437.7	414.4	387.3	352.5	325.3	306.0	302.1	306.0
60°	511.2	468.6	418.3	356.3	325.3	302.1	263.4	240.1	220.8	213.0	216.9
62.5°	429.9	391.2	340.8	278.9	255.6	232.4	197.5	170.4	154.9	151.1	154.9
65°	367.9	329.2	282.7	228.5	205.3	182.0	151.1	123.9	112.3	108.4	112.3
67.5°	306.0	271.1	232.4	182.0	162.7	143.3	112.3	93.0	77.5	73.6	77.5
70°	247.9	216.9	178.2	143.3	123.9	108.4	85.2	65.8	54.2	50.4	54.2
72.5°	185.9	162.7	135.6	104.6	93.0	81.3	62.0	46.5	38.7	34.9	38.7
75°	135.6	116.2	96.8	73.6	65.8	58.1	42.6	31.0	27.1	23.2	27.1
77.5°	93.0	81.3	65.8	50.4	42.6	38.7	27.1	23.2	19.4	15.5	15.5
80°	62.0	54.2	42.6	34.9	31.0	27.1	19.4	15.5	11.6	11.6	11.6
82.5°	38.7	31.0	27.1	19.4	15.5	15.5	11.6	7.7	7.7	7.7	7.7
85°	23.2	19.4	15.5	11.6	7.7	7.7	3.9	3.9	3.9	3.9	3.9
87.5°	11.6	7.7	7.7	3.9	3.9	3.9	3.9	3.9	0.0	0.0	3.9
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°	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3
2.5°	2738.3	2730.5	2730.5	2734.4	2738.3	2742.1	2734.4	2730.5	2730.5	2742.1	2734.4
5°	2738.3	2734.4	2734.4	2734.4	2742.1	2746.0	2738.3	2734.4	2738.3	2749.9	2746.0
7.5°	2749.9	2742.1	2746.0	2746.0	2749.9	2757.6	2749.9	2746.0	2749.9	2761.5	2753.8
10°	2757.6	2749.9	2753.8	2749.9	2761.5	2765.4	2757.6	2753.8	2757.6	2773.1	2769.3
12.5°	2761.5	2757.6	2757.6	2753.8	2765.4	2769.3	2761.5	2757.6	2761.5	2773.1	2769.3
15°	2753.8	2749.9	2749.9	2749.9	2757.6	2765.4	2753.8	2749.9	2749.9	2761.5	2757.6
17.5°	2738.3	2730.5	2730.5	2730.5	2734.4	2738.3	2726.6	2722.8	2718.9	2730.5	2726.6
20°	2711.2	2703.4	2695.7	2695.7	2699.5	2699.5	2691.8	2680.2	2680.2	2684.0	2676.3
22.5°	2660.8	2656.9	2649.2	2645.3	2653.1	2649.2	2633.7	2622.1	2618.2	2622.1	2614.3
25°	2591.1	2583.3	2579.5	2575.6	2579.5	2575.6	2560.1	2544.6	2544.6	2544.6	2533.0
27.5°	2494.3	2486.5	2482.6	2482.6	2486.5	2478.8	2463.3	2447.8	2440.0	2440.0	2428.4
30°	2370.3	2370.3	2366.5	2362.6	2358.7	2358.7	2335.5	2320.0	2312.2	2316.1	2308.4
32.5°	2219.3	2215.4	2211.5	2199.9	2203.8	2199.9	2180.5	2168.9	2157.3	2149.6	2145.7
35°	2025.6	2025.6	2021.7	2021.7	2021.7	2017.9	1998.5	1986.9	1979.1	1975.3	1963.7
37.5°	1812.6	1808.7	1804.9	1804.9	1804.9	1804.9	1793.2	1781.6	1781.6	1777.7	1770.0
40°	1572.5	1576.3	1580.2	1576.3	1588.0	1599.6	1584.1	1576.3	1572.5	1584.1	1568.6
42.5°	1340.1	1336.2	1355.6	1359.5	1359.5	1378.8	1382.7	1386.6	1382.7	1390.4	1390.4
45°	1115.4	1111.6	1130.9	1138.7	1158.1	1181.3	1192.9	1212.3	1220.0	1227.8	1220.0
47.5°	902.4	917.9	933.4	952.8	968.3	1007.0	1030.2	1049.6	1057.4	1069.0	1069.0
50°	724.3	739.8	766.9	782.4	801.7	848.2	886.9	914.0	929.5	941.2	937.3
52.5°	557.7	584.8	619.7	635.2	662.3	716.5	759.1	790.1	809.5	821.1	825.0
55°	429.9	453.2	488.0	511.2	538.4	596.5	650.7	685.5	704.9	720.4	728.1
57.5°	317.6	344.7	383.4	402.8	433.8	499.6	546.1	588.7	611.9	631.3	635.2
60°	232.4	259.5	294.4	317.6	348.6	414.4	468.6	507.4	534.5	550.0	557.7
62.5°	166.5	193.7	228.5	251.8	278.9	337.0	391.2	429.9	457.0	476.4	488.0
65°	120.1	147.2	182.0	201.4	224.6	278.9	329.2	367.9	395.1	418.3	426.0
67.5°	89.1	108.4	139.4	158.8	182.0	224.6	267.2	302.1	329.2	348.6	356.3
70°	65.8	81.3	108.4	120.1	135.6	174.3	209.1	240.1	263.4	278.9	286.6
72.5°	46.5	58.1	77.5	89.1	100.7	131.7	158.8	182.0	197.5	213.0	220.8
75°	31.0	38.7	54.2	62.0	69.7	93.0	112.3	131.7	143.3	154.9	158.8
77.5°	19.4	27.1	38.7	42.6	50.4	62.0	77.5	89.1	96.8	104.6	112.3
80°	11.6	15.5	23.2	27.1	31.0	42.6	50.4	58.1	65.8	73.6	77.5
82.5°	7.7	11.6	15.5	15.5	19.4	23.2	31.0	38.7	42.6	46.5	50.4
85°	3.9	3.9	7.7	7.7	11.6	11.6	15.5	19.4	23.2	27.1	31.0
87.5°	3.9	3.9	3.9	3.9	7.7	7.7	11.6	11.6	11.6	15.5	15.5
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: P252745

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3	2738.3
2.5°	2726.6	2738.3	2726.6	2734.4	2730.5	2730.5	2726.6	2730.5
5°	2738.3	2753.8	2738.3	2749.9	2742.1	2742.1	2742.1	2746.0
7.5°	2749.9	2765.4	2753.8	2765.4	2761.5	2757.6	2757.6	2765.4
10°	2761.5	2773.1	2765.4	2777.0	2773.1	2769.3	2769.3	2777.0
12.5°	2761.5	2777.0	2769.3	2780.9	2777.0	2773.1	2773.1	2777.0
15°	2749.9	2769.3	2757.6	2769.3	2765.4	2761.5	2761.5	2769.3
17.5°	2715.0	2730.5	2722.8	2730.5	2730.5	2726.6	2730.5	2734.4
20°	2668.6	2680.2	2672.4	2680.2	2680.2	2672.4	2676.3	2680.2
22.5°	2602.7	2614.3	2606.6	2614.3	2610.5	2606.6	2606.6	2602.7
25°	2521.4	2536.9	2525.2	2533.0	2525.2	2517.5	2517.5	2521.4
27.5°	2420.7	2432.3	2416.8	2424.5	2416.8	2409.1	2409.1	2405.2
30°	2289.0	2292.9	2281.2	2289.0	2281.2	2277.4	2269.6	2269.6
32.5°	2130.2	2134.1	2122.4	2122.4	2114.7	2114.7	2099.2	2110.8
35°	1944.3	1948.2	1944.3	1940.4	1928.8	1924.9	1921.0	1921.0
37.5°	1750.6	1750.6	1739.0	1735.1	1727.4	1719.6	1723.5	1711.9
40°	1553.1	1549.2	1537.6	1541.5	1537.6	1526.0	1522.1	1518.2
42.5°	1367.2	1367.2	1355.6	1359.5	1351.7	1347.8	1336.2	1340.1
45°	1204.5	1204.5	1192.9	1192.9	1189.0	1177.4	1181.3	1173.5
47.5°	1057.4	1057.4	1053.5	1053.5	1041.9	1038.0	1038.0	1038.0
50°	929.5	929.5	929.5	929.5	925.7	921.8	917.9	921.8
52.5°	821.1	828.8	825.0	825.0	821.1	817.2	813.3	813.3
55°	724.3	728.1	728.1	732.0	728.1	724.3	728.1	724.3
57.5°	639.1	646.8	646.8	646.8	646.8	646.8	642.9	639.1
60°	565.5	569.3	569.3	573.2	573.2	573.2	569.3	569.3
62.5°	491.9	499.6	503.5	503.5	507.4	503.5	503.5	503.5
65°	433.8	441.5	445.4	441.5	445.4	445.4	441.5	441.5
67.5°	364.1	371.8	371.8	371.8	371.8	375.7	371.8	371.8
70°	294.4	302.1	298.2	302.1	302.1	302.1	302.1	302.1
72.5°	224.6	228.5	232.4	232.4	236.3	232.4	232.4	232.4
75°	162.7	170.4	170.4	170.4	170.4	174.3	174.3	174.3
77.5°	116.2	120.1	120.1	123.9	123.9	123.9	123.9	127.8
80°	81.3	81.3	85.2	85.2	89.1	89.1	89.1	89.1
82.5°	54.2	58.1	58.1	58.1	58.1	58.1	58.1	58.1
85°	31.0	34.9	34.9	34.9	34.9	38.7	38.7	38.7
87.5°	19.4	19.4	19.4	19.4	19.4	19.4	15.5	15.5
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)