

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: P252436

Luminaire Tested: **LD6B70D010TE EU6B60709040 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252436
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 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: 5562.0 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

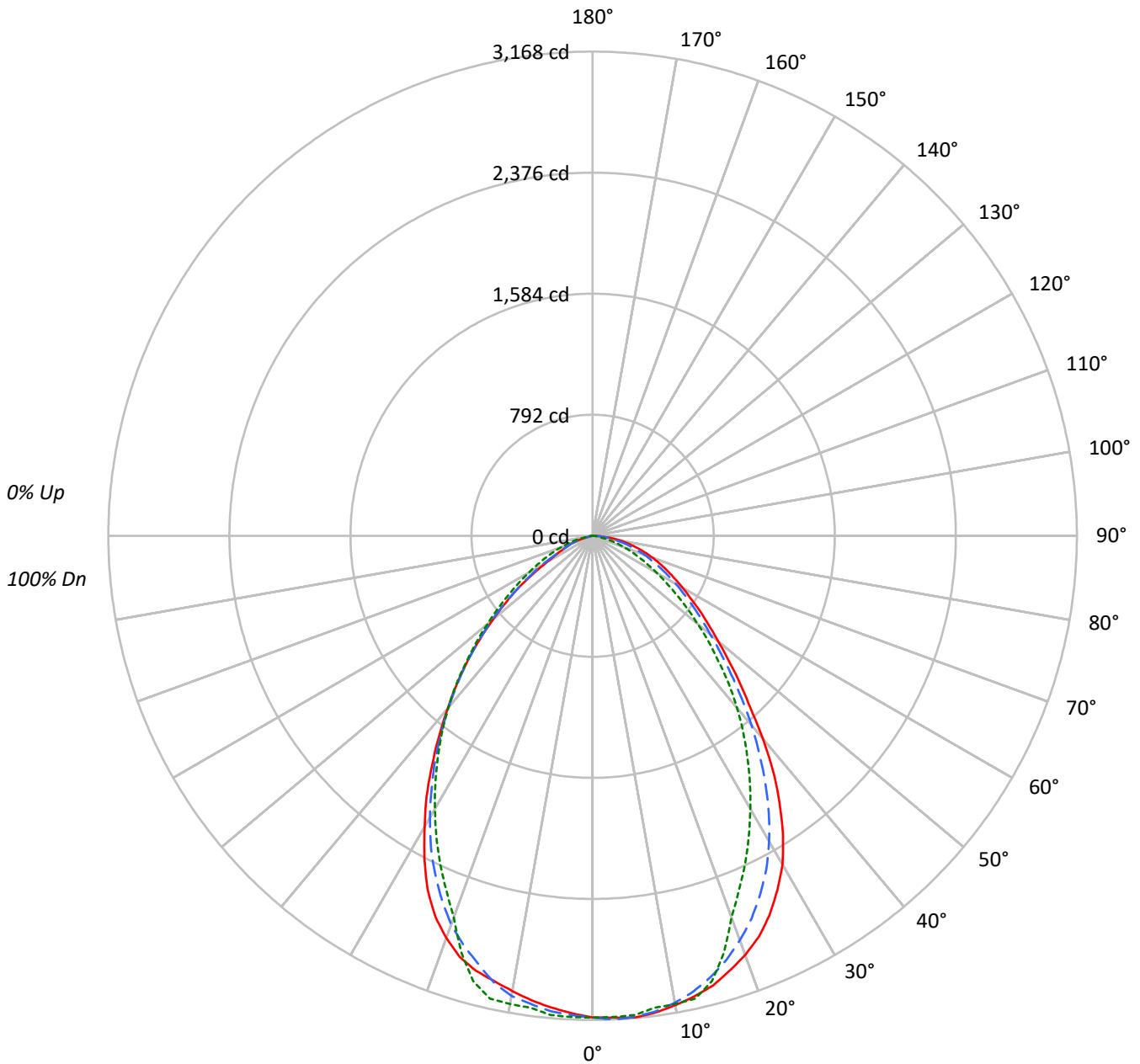
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	205606	205606	205606
5°	207197	206123	202907
10°	206605	206062	200371
15°	205672	203734	199033
20°	202604	184414	194363
25°	197102	170000	183843
30°	187151	155398	165568
35°	169833	140492	145709
40°	147447	125134	125483
45°	125747	107626	106491
50°	108835	90971	85988
55°	97296	75878	66574
60°	88649	63022	44859
65°	82775	51807	33483
70°	78856	42156	28098
75°	74285	29921	9276
80°	70745	15366	3081
85°	58237	9207	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.6	5.4
10°-20°	832.4	15.0
20°-30°	1148.9	20.7
30°-40°	1169.2	21.0
40°-50°	939.6	16.9
50°-60°	624.8	11.2
60°-70°	356.0	6.4
70°-80°	159.9	2.9
80°-90°	33.7	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°	2278.9	41.0
0°-40°	3448.0	62.0
0°-60°	5012.4	90.1
0°-90°	5562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5562.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3152	3152	3152	3152	3152	
5°	3164	3160	3147	3123	3098	300
15°	3045	2988	3016	2898	2947	857
25°	2738	2591	2362	2439	2554	1255
35°	2132	1969	1764	1797	1830	1325
45°	1363	1281	1166	1154	1154	1057
55°	855	798	667	594	585	769
65°	536	479	336	217	217	534
75°	295	246	119	49	37	315
85°	78	53	12	4	0	92
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°	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5
2.5°	3155.6	3171.9	3167.8	3163.8	3167.8	3163.8	3155.6	3155.6	3147.4	3147.4	3167.8
5°	3163.8	3171.9	3167.8	3163.8	3163.8	3167.8	3151.5	3151.5	3143.3	3139.2	3159.7
7.5°	3147.4	3159.7	3151.5	3151.5	3147.4	3151.5	3135.1	3135.1	3122.8	3118.7	3139.2
10°	3118.7	3135.1	3126.9	3126.9	3126.9	3118.7	3110.5	3106.5	3094.2	3090.1	3102.4
12.5°	3086.0	3098.3	3094.2	3086.0	3086.0	3086.0	3069.6	3065.5	3049.2	3041.0	3053.2
15°	3045.1	3053.2	3049.2	3045.1	3036.9	3036.9	3020.5	3012.3	2995.9	2979.6	2987.8
17.5°	2983.7	2995.9	2987.8	2983.7	2971.4	2971.4	2955.0	2946.8	2922.3	2905.9	2910.0
20°	2918.2	2922.3	2918.2	2910.0	2897.7	2893.6	2877.3	2860.9	2840.4	2820.0	2815.9
22.5°	2840.4	2844.5	2832.2	2824.0	2811.8	2807.7	2787.2	2774.9	2742.2	2717.6	2713.5
25°	2738.1	2742.2	2742.2	2721.7	2713.5	2705.4	2684.9	2664.4	2635.8	2603.0	2590.8
27.5°	2615.3	2627.6	2619.4	2598.9	2582.6	2578.5	2558.0	2541.6	2504.8	2476.2	2459.8
30°	2484.3	2480.3	2476.2	2463.9	2439.3	2435.2	2414.8	2394.3	2365.7	2328.8	2308.4
32.5°	2316.5	2316.5	2312.4	2300.2	2275.6	2267.4	2251.1	2226.5	2193.8	2165.1	2144.6
35°	2132.4	2136.5	2132.4	2107.8	2091.4	2083.2	2075.1	2046.4	2017.8	1985.0	1968.6
37.5°	1940.0	1927.7	1931.8	1911.3	1890.9	1899.1	1874.5	1862.2	1829.5	1804.9	1788.6
40°	1731.3	1739.5	1723.1	1714.9	1702.6	1690.3	1690.3	1669.9	1653.5	1624.9	1616.7
42.5°	1526.6	1538.9	1534.8	1526.6	1510.3	1514.3	1493.9	1485.7	1465.2	1453.0	1440.7
45°	1362.9	1362.9	1362.9	1354.7	1350.6	1342.4	1330.2	1317.9	1305.6	1289.2	1281.1
47.5°	1203.3	1203.3	1207.4	1199.2	1191.0	1186.9	1178.7	1178.7	1158.3	1141.9	1133.7
50°	1072.3	1072.3	1072.3	1064.1	1055.9	1055.9	1047.8	1039.6	1027.3	1015.0	1006.8
52.5°	953.6	953.6	953.6	945.4	941.3	937.3	933.2	929.1	912.7	904.5	896.3
55°	855.4	851.3	851.3	847.2	839.0	839.0	834.9	826.8	814.5	802.2	798.1
57.5°	757.2	761.3	757.2	757.2	749.0	749.0	740.8	736.7	724.4	716.2	708.1
60°	679.4	679.4	679.4	675.3	667.1	671.2	663.0	658.9	646.7	634.4	626.2
62.5°	601.6	605.7	605.7	601.6	593.5	593.5	589.4	585.3	573.0	560.7	548.4
65°	536.2	536.2	536.2	532.1	528.0	528.0	523.9	519.8	507.5	491.1	478.9
67.5°	474.8	470.7	470.7	470.7	466.6	462.5	458.4	454.3	442.0	429.7	413.4
70°	413.4	413.4	413.4	409.3	401.1	405.2	401.1	397.0	384.7	372.4	360.2
72.5°	356.1	356.1	352.0	347.9	347.9	343.8	343.8	339.7	327.4	311.1	298.8
75°	294.7	294.7	294.7	294.7	286.5	290.6	282.4	278.3	270.1	257.8	245.6
77.5°	241.5	241.5	241.5	237.4	233.3	233.3	229.2	225.1	212.8	204.6	188.3
80°	188.3	188.3	188.3	188.3	184.2	180.1	176.0	171.9	163.7	151.4	139.2
82.5°	139.2	139.2	135.1	135.1	135.1	131.0	126.9	122.8	114.6	106.4	98.2
85°	77.8	81.9	81.9	73.7	77.8	73.7	73.7	65.5	65.5	57.3	53.2
87.5°	28.6	24.6	24.6	24.6	24.6	24.6	24.6	20.5	20.5	20.5	16.4
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5
2.5°	3151.5	3147.4	3163.8	3163.8	3139.2	3151.5	3155.6	3147.4	3147.4	3151.5	3139.2
5°	3143.3	3135.1	3151.5	3155.6	3131.0	3143.3	3147.4	3139.2	3143.3	3147.4	3131.0
7.5°	3114.6	3114.6	3126.9	3131.0	3106.5	3118.7	3118.7	3110.5	3114.6	3114.6	3102.4
10°	3086.0	3073.7	3086.0	3086.0	3065.5	3069.6	3077.8	3073.7	3090.1	3110.5	3110.5
12.5°	3032.8	3020.5	3041.0	3041.0	3028.7	3045.1	3065.5	3077.8	3094.2	3102.4	3077.8
15°	2967.3	2971.4	3008.2	3036.9	3024.6	3049.2	3069.6	3061.4	3041.0	3016.4	2979.6
17.5°	2881.3	2869.1	2901.8	2918.2	2901.8	2910.0	2926.4	2910.0	2877.3	2856.8	2807.7
20°	2783.1	2750.4	2750.4	2742.2	2713.5	2713.5	2709.5	2680.8	2668.5	2656.2	2635.8
22.5°	2672.6	2635.8	2623.5	2598.9	2574.4	2570.3	2558.0	2529.4	2513.0	2504.8	2480.3
25°	2545.7	2513.0	2492.5	2468.0	2431.1	2423.0	2410.7	2382.0	2373.8	2361.6	2341.1
27.5°	2414.8	2373.8	2345.2	2320.6	2287.9	2283.8	2259.2	2238.8	2222.4	2214.2	2197.8
30°	2263.3	2218.3	2197.8	2165.1	2140.5	2132.4	2111.9	2083.2	2071.0	2062.8	2050.5
32.5°	2095.5	2058.7	2038.2	2009.6	1976.8	1980.9	1956.4	1931.8	1923.6	1915.4	1903.2
35°	1931.8	1895.0	1870.4	1845.9	1825.4	1817.2	1800.8	1780.4	1768.1	1764.0	1755.8
37.5°	1751.7	1723.1	1702.6	1678.1	1661.7	1653.5	1645.3	1624.9	1616.7	1616.7	1600.3
40°	1575.7	1551.2	1534.8	1522.5	1502.1	1498.0	1489.8	1477.5	1473.4	1469.3	1457.0
42.5°	1416.1	1383.4	1371.1	1362.9	1350.6	1342.4	1338.4	1330.2	1326.1	1322.0	1309.7
45°	1264.7	1236.0	1223.8	1215.6	1203.3	1199.2	1195.1	1182.8	1174.6	1166.5	1162.4
47.5°	1117.3	1096.9	1092.8	1072.3	1064.1	1055.9	1047.8	1039.6	1035.5	1031.4	1015.0
50°	990.5	978.2	957.7	945.4	937.3	933.2	916.8	904.5	900.4	896.3	884.1
52.5°	875.9	859.5	847.2	826.8	822.7	814.5	806.3	789.9	781.7	777.6	765.4
55°	773.5	761.3	744.9	728.5	716.2	712.2	699.9	683.5	675.3	667.1	658.9
57.5°	687.6	667.1	650.8	634.4	626.2	613.9	601.6	593.5	581.2	568.9	556.6
60°	605.7	589.4	568.9	552.5	544.3	536.2	519.8	507.5	495.2	483.0	470.7
62.5°	528.0	511.6	491.1	474.8	466.6	458.4	442.0	429.7	417.5	405.2	388.8
65°	458.4	442.0	425.7	409.3	401.1	392.9	376.5	360.2	347.9	335.6	319.2
67.5°	401.1	380.6	364.3	347.9	339.7	331.5	315.1	302.9	286.5	274.2	257.8
70°	339.7	323.3	311.1	294.7	286.5	278.3	261.9	245.6	233.3	221.0	204.6
72.5°	286.5	266.0	253.8	237.4	229.2	225.1	208.7	196.5	184.2	167.8	155.5
75°	229.2	212.8	196.5	184.2	176.0	171.9	155.5	143.2	131.0	118.7	106.4
77.5°	176.0	163.7	147.3	135.1	126.9	122.8	106.4	94.1	81.9	73.7	61.4
80°	131.0	114.6	106.4	94.1	90.0	81.9	73.7	61.4	53.2	40.9	32.7
82.5°	90.0	77.8	69.6	61.4	57.3	53.2	45.0	36.8	28.6	24.6	20.5
85°	49.1	40.9	36.8	32.7	28.6	28.6	24.6	20.5	16.4	12.3	8.2
87.5°	16.4	12.3	12.3	12.3	12.3	8.2	8.2	8.2	4.1	4.1	4.1
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5
2.5°	3147.4	3147.4	3147.4	3143.3	3143.3	3143.3	3139.2	3155.6	3139.2	3135.1	3147.4
5°	3143.3	3135.1	3135.1	3135.1	3135.1	3131.0	3126.9	3135.1	3122.8	3118.7	3118.7
7.5°	3118.7	3114.6	3114.6	3110.5	3106.5	3102.4	3098.3	3102.4	3090.1	3086.0	3086.0
10°	3122.8	3114.6	3114.6	3102.4	3094.2	3081.9	3069.6	3073.7	3057.3	3045.1	3045.1
12.5°	3073.7	3053.2	3041.0	3028.7	3020.5	3016.4	3000.0	3008.2	2991.9	2987.8	2987.8
15°	2963.2	2938.6	2918.2	2910.0	2910.0	2901.8	2889.5	2905.9	2897.7	2901.8	2922.3
17.5°	2791.3	2779.0	2766.8	2762.7	2766.8	2774.9	2783.1	2807.7	2807.7	2820.0	2840.4
20°	2639.9	2631.7	2639.9	2639.9	2644.0	2660.3	2676.7	2697.2	2705.4	2717.6	2746.3
22.5°	2492.5	2492.5	2500.7	2513.0	2508.9	2537.6	2541.6	2578.5	2578.5	2603.0	2627.6
25°	2349.3	2349.3	2357.5	2361.6	2369.7	2386.1	2402.5	2431.1	2439.3	2463.9	2484.3
27.5°	2210.1	2206.0	2206.0	2210.1	2218.3	2238.8	2247.0	2279.7	2292.0	2308.4	2328.8
30°	2054.6	2050.5	2058.7	2066.9	2062.8	2083.2	2095.5	2120.1	2128.3	2144.6	2161.0
32.5°	1907.3	1907.3	1907.3	1915.4	1915.4	1931.8	1931.8	1960.5	1960.5	1972.7	1989.1
35°	1755.8	1755.8	1759.9	1764.0	1768.1	1772.2	1776.3	1792.7	1796.8	1800.8	1809.0
37.5°	1612.6	1608.5	1612.6	1612.6	1604.4	1620.8	1620.8	1637.1	1624.9	1637.1	1641.2
40°	1465.2	1465.2	1461.1	1461.1	1461.1	1469.3	1461.1	1473.4	1465.2	1473.4	1469.3
42.5°	1313.8	1313.8	1305.6	1313.8	1309.7	1309.7	1309.7	1317.9	1305.6	1313.8	1317.9
45°	1162.4	1158.3	1158.3	1154.2	1154.2	1154.2	1158.3	1158.3	1154.2	1162.4	1162.4
47.5°	1015.0	1010.9	1010.9	1010.9	1010.9	1015.0	1002.7	1010.9	1002.7	1002.7	1002.7
50°	888.1	884.1	880.0	875.9	871.8	871.8	867.7	867.7	859.5	855.4	851.3
52.5°	765.4	761.3	753.1	753.1	749.0	744.9	732.6	732.6	720.3	716.2	716.2
55°	654.9	642.6	638.5	630.3	630.3	622.1	613.9	605.7	593.5	585.3	585.3
57.5°	552.5	540.3	532.1	528.0	523.9	515.7	499.3	495.2	478.9	474.8	470.7
60°	462.5	450.2	437.9	429.7	425.7	413.4	397.0	388.8	380.6	368.4	356.1
62.5°	376.5	364.3	347.9	343.8	335.6	323.3	311.1	298.8	290.6	278.3	270.1
65°	302.9	290.6	278.3	270.1	261.9	249.7	237.4	225.1	216.9	212.8	208.7
67.5°	245.6	229.2	216.9	212.8	204.6	196.5	184.2	180.1	171.9	171.9	171.9
70°	192.4	180.1	167.8	163.7	159.6	151.4	143.2	143.2	143.2	143.2	143.2
72.5°	143.2	135.1	122.8	118.7	114.6	110.5	102.3	106.4	102.3	102.3	102.3
75°	90.0	81.9	73.7	69.6	65.5	61.4	57.3	53.2	49.1	45.0	45.0
77.5°	49.1	40.9	36.8	32.7	32.7	28.6	24.6	24.6	20.5	20.5	20.5
80°	28.6	24.6	20.5	16.4	16.4	12.3	12.3	12.3	12.3	8.2	8.2
82.5°	16.4	12.3	8.2	8.2	8.2	8.2	4.1	4.1	4.1	4.1	4.1
85°	8.2	8.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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: P252436

CATALOG NUMBER: LD6B70D010TE EU6B60709040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5	3151.5
2.5°	3126.9	3139.2	3126.9	3139.2	3139.2	3139.2	3139.2	3126.9
5°	3106.5	3114.6	3102.4	3110.5	3114.6	3110.5	3110.5	3098.3
7.5°	3069.6	3077.8	3065.5	3077.8	3081.9	3077.8	3073.7	3065.5
10°	3032.8	3036.9	3024.6	3032.8	3041.0	3041.0	3036.9	3024.6
12.5°	2975.5	2987.8	2975.5	2983.7	2991.9	2995.9	2995.9	2983.7
15°	2910.0	2930.5	2922.3	2934.6	2946.8	2950.9	2950.9	2946.8
17.5°	2844.5	2865.0	2852.7	2873.2	2885.4	2893.6	2897.7	2889.5
20°	2750.4	2774.9	2766.8	2783.1	2799.5	2811.8	2811.8	2799.5
22.5°	2627.6	2660.3	2656.2	2668.5	2689.0	2693.1	2701.3	2693.1
25°	2492.5	2517.1	2513.0	2525.3	2549.8	2549.8	2553.9	2553.9
27.5°	2337.0	2361.6	2357.5	2365.7	2382.0	2386.1	2390.2	2382.0
30°	2169.2	2181.5	2181.5	2193.8	2206.0	2210.1	2210.1	2197.8
32.5°	1985.0	2001.4	2009.6	2005.5	2017.8	2025.9	2021.9	2021.9
35°	1817.2	1821.3	1825.4	1829.5	1833.6	1841.8	1833.6	1829.5
37.5°	1637.1	1649.4	1641.2	1649.4	1657.6	1653.5	1649.4	1649.4
40°	1473.4	1477.5	1469.3	1477.5	1481.6	1481.6	1481.6	1473.4
42.5°	1309.7	1317.9	1309.7	1317.9	1317.9	1317.9	1317.9	1313.8
45°	1146.0	1154.2	1154.2	1158.3	1158.3	1154.2	1154.2	1154.2
47.5°	994.6	1002.7	994.6	1002.7	1006.8	998.6	998.6	998.6
50°	851.3	847.2	847.2	851.3	851.3	851.3	851.3	847.2
52.5°	704.0	708.1	708.1	708.1	712.2	708.1	712.2	712.2
55°	577.1	577.1	577.1	581.2	577.1	577.1	581.2	585.3
57.5°	462.5	458.4	454.3	454.3	458.4	454.3	454.3	454.3
60°	356.1	352.0	347.9	347.9	347.9	347.9	347.9	343.8
62.5°	266.0	266.0	266.0	270.1	270.1	270.1	270.1	274.2
65°	212.8	212.8	212.8	212.8	212.8	212.8	212.8	216.9
67.5°	171.9	171.9	171.9	176.0	176.0	176.0	176.0	176.0
70°	143.2	143.2	147.3	143.2	147.3	147.3	147.3	147.3
72.5°	98.2	98.2	98.2	98.2	98.2	94.1	98.2	94.1
75°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	36.8
77.5°	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
80°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
82.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	4.1	4.1	4.1	4.1	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)