

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: P252625

Luminaire Tested: **LD6B60D010TE EU6B60708040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60708040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6166.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

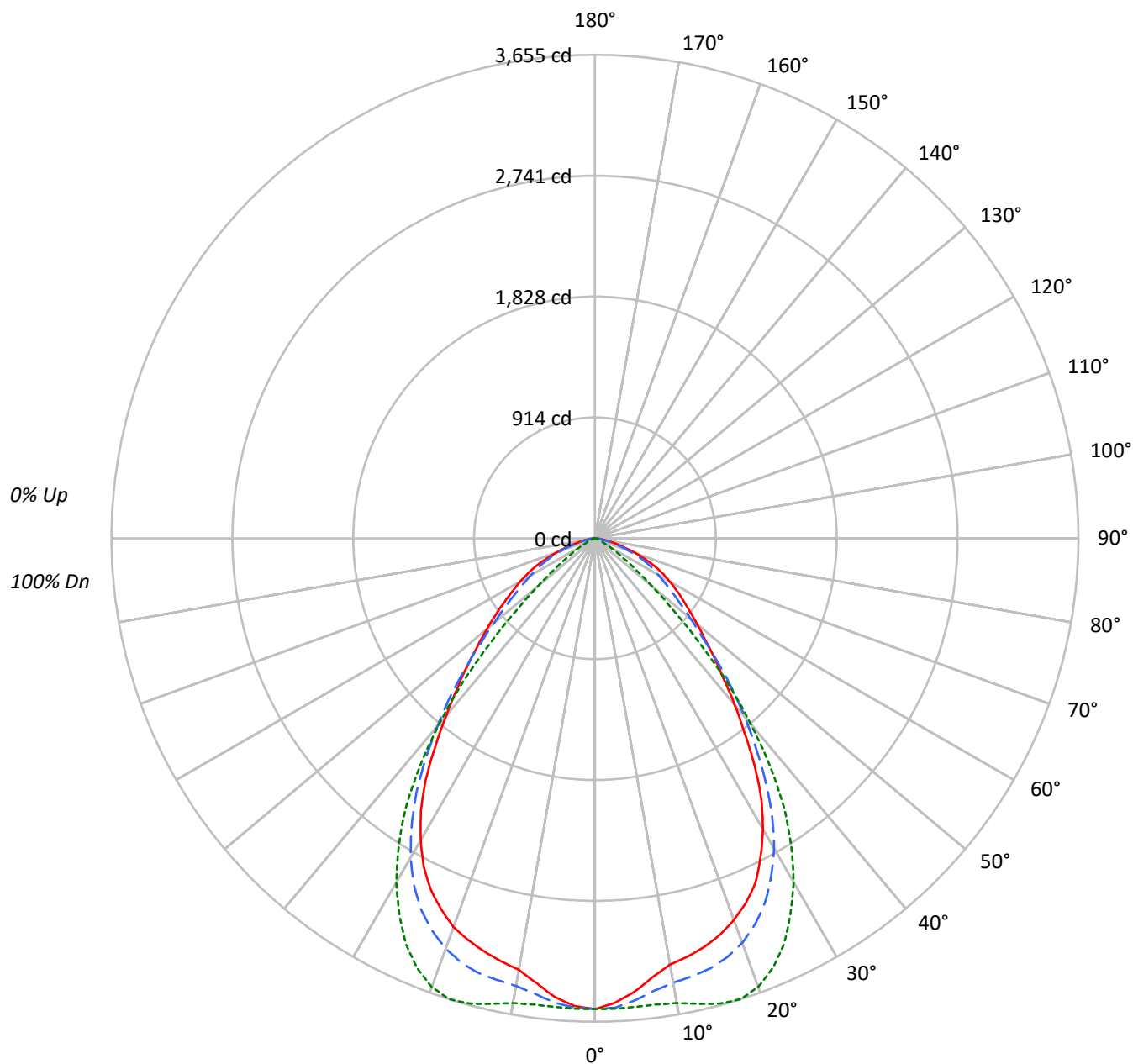
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	108	105	102		109	106	103	100		102	99	97		98	96	94		94	93	91
2	104	97	92	87		101	95	91	86		92	88	84		89	86	83		86	83	81
3	96	88	81	76		94	86	80	76		84	79	74		81	77	73		79	75	72
4	90	80	73	67		88	79	72	67		76	70	66		74	69	65		72	68	64
5	84	73	65	60		82	72	65	59		70	64	59		68	63	58		66	62	58
6	78	67	59	54		76	66	59	53		64	58	53		63	57	53		61	56	52
7	73	61	54	49		72	61	53	48		59	53	48		58	52	48		57	51	48
8	69	57	49	44		67	56	49	44		55	48	44		54	48	44		53	47	43
9	64	53	45	40		63	52	45	40		51	45	40		50	44	40		49	44	40
10	61	49	42	37		60	48	42	37		48	41	37		47	41	37		46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	232250	232250	232250
5°	225324	232869	228016
10°	216754	236383	219477
15°	215986	246002	218485
20°	213157	250585	217156
25°	206784	243525	211233
30°	191294	226324	198421
35°	167826	198959	177654
40°	139850	155972	148963
45°	117711	102902	125682
50°	101923	56391	108185
55°	92223	29960	94555
60°	84852	15579	84852
65°	76877	8259	74963
70°	62013	4712	57302
75°	42524	3100	39424
80°	27840	1540	24721
85°	18489	3069	15420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.0	5.4
10°-20°	959.9	15.6
20°-30°	1418.2	23.0
30°-40°	1432.5	23.2
40°-50°	987.4	16.0
50°-60°	567.1	9.2
60°-70°	330.1	5.4
70°-80°	120.4	2.0
80°-90°	18.4	0.3
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°	2710.1	44.0
0°-40°	4142.6	67.2
0°-60°	5697.1	92.4
0°-90°	6166.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6166.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3560	3560	3560	3560	3560	
5°	3441	3506	3556	3523	3482	323
15°	3198	3366	3642	3404	3235	901
25°	2873	3041	3383	3103	2934	1309
35°	2107	2251	2498	2354	2231	1308
45°	1276	1292	1115	1375	1362	992
55°	811	712	263	741	831	730
65°	498	420	54	416	486	488
75°	169	136	12	132	156	190
85°	25	12	4	16	21	31
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°	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9
2.5°	3514.7	3518.8	3522.9	3518.8	3522.9	3539.4	3527.0	3535.2	3535.2	3539.4	3551.7
5°	3440.6	3440.6	3448.8	3444.7	3457.1	3473.5	3461.2	3473.5	3477.6	3485.9	3506.4
7.5°	3345.9	3345.9	3350.0	3350.0	3366.5	3383.0	3374.7	3391.2	3407.7	3424.1	3448.8
10°	3271.9	3280.1	3280.1	3284.2	3300.7	3321.2	3317.1	3337.7	3354.2	3378.9	3411.8
12.5°	3238.9	3243.0	3243.0	3251.3	3267.7	3288.3	3284.2	3304.8	3329.5	3358.3	3391.2
15°	3197.8	3206.0	3201.9	3210.1	3226.6	3247.2	3243.0	3263.6	3292.4	3321.2	3366.5
17.5°	3144.3	3148.4	3152.5	3152.5	3169.0	3185.4	3185.4	3206.0	3238.9	3271.9	3321.2
20°	3070.2	3078.4	3078.4	3082.5	3094.9	3119.6	3115.5	3136.0	3169.0	3201.9	3255.4
22.5°	2983.8	2987.9	2987.9	2992.0	3012.6	3024.9	3029.0	3045.5	3074.3	3111.3	3160.7
25°	2872.6	2876.8	2872.6	2885.0	2893.2	2917.9	2909.7	2930.3	2963.2	2992.0	3041.4
27.5°	2712.1	2720.4	2720.4	2724.5	2745.1	2765.6	2765.6	2786.2	2815.0	2835.6	2885.0
30°	2539.3	2551.6	2539.3	2559.9	2568.1	2584.6	2596.9	2609.3	2633.9	2662.8	2708.0
32.5°	2341.7	2337.6	2341.7	2350.0	2374.7	2387.0	2395.2	2407.6	2432.3	2457.0	2494.0
35°	2107.2	2115.4	2119.5	2136.0	2136.0	2156.5	2160.7	2168.9	2205.9	2222.4	2251.2
37.5°	1860.2	1868.5	1872.6	1880.8	1897.3	1905.5	1917.8	1930.2	1954.9	1983.7	2000.2
40°	1642.1	1642.1	1646.2	1654.4	1666.8	1670.9	1683.3	1699.7	1716.2	1740.9	1757.3
42.5°	1436.3	1440.4	1436.3	1444.6	1456.9	1473.4	1469.2	1489.8	1493.9	1510.4	1522.7
45°	1275.8	1275.8	1267.6	1275.8	1275.8	1292.3	1288.2	1296.4	1292.3	1300.5	1292.3
47.5°	1123.5	1127.7	1123.5	1127.7	1127.7	1127.7	1131.8	1123.5	1127.7	1115.3	1090.6
50°	1004.2	1008.3	1000.1	1004.2	1000.1	996.0	1000.1	987.7	983.6	967.2	942.5
52.5°	901.3	897.2	893.1	893.1	893.1	889.0	884.8	872.5	860.1	843.7	814.9
55°	810.8	806.6	802.5	802.5	794.3	790.2	790.2	777.8	765.5	744.9	712.0
57.5°	728.4	724.3	720.2	720.2	716.1	707.9	707.9	695.5	679.1	654.4	625.6
60°	650.3	650.3	650.3	646.1	646.1	637.9	637.9	625.6	609.1	584.4	551.5
62.5°	580.3	576.2	576.2	576.2	576.2	572.1	567.9	559.7	543.3	518.6	489.7
65°	498.0	498.0	498.0	498.0	493.9	493.9	493.9	481.5	473.3	448.6	419.8
67.5°	407.4	407.4	407.4	407.4	403.3	407.4	407.4	399.2	391.0	366.3	341.6
70°	325.1	321.0	316.9	321.0	316.9	316.9	321.0	312.8	308.7	288.1	263.4
72.5°	238.7	242.8	238.7	238.7	238.7	234.6	238.7	234.6	226.4	209.9	193.4
75°	168.7	172.9	172.9	168.7	168.7	168.7	164.6	164.6	156.4	144.0	135.8
77.5°	115.2	115.2	115.2	115.2	111.1	111.1	111.1	107.0	102.9	94.7	86.4
80°	74.1	74.1	74.1	74.1	70.0	70.0	70.0	65.8	65.8	57.6	49.4
82.5°	45.3	45.3	45.3	45.3	45.3	45.3	41.2	41.2	37.0	32.9	28.8
85°	24.7	24.7	24.7	24.7	24.7	24.7	24.7	20.6	20.6	16.5	12.3
87.5°	8.2	8.2	12.3	12.3	12.3	12.3	12.3	12.3	8.2	8.2	8.2
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°	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9
2.5°	3543.5	3547.6	3547.6	3547.6	3559.9	3564.1	3551.7	3539.4	3564.1	3559.9	3568.2
5°	3502.3	3514.7	3522.9	3527.0	3539.4	3547.6	3535.2	3531.1	3551.7	3555.8	3559.9
7.5°	3452.9	3473.5	3494.1	3502.3	3518.8	3527.0	3522.9	3522.9	3547.6	3555.8	3555.8
10°	3420.0	3448.8	3473.5	3494.1	3514.7	3527.0	3527.0	3531.1	3559.9	3568.2	3576.4
12.5°	3411.8	3448.8	3481.7	3510.6	3527.0	3547.6	3551.7	3564.1	3592.9	3605.2	3605.2
15°	3391.2	3440.6	3481.7	3518.8	3543.5	3568.2	3576.4	3601.1	3634.0	3642.2	3650.5
17.5°	3354.2	3403.5	3452.9	3498.2	3531.1	3551.7	3576.4	3601.1	3642.2	3654.6	3658.7
20°	3288.3	3345.9	3395.3	3440.6	3473.5	3502.3	3527.0	3555.8	3592.9	3609.3	3613.4
22.5°	3189.5	3247.2	3296.5	3345.9	3378.9	3403.5	3428.2	3461.2	3498.2	3514.7	3514.7
25°	3070.2	3123.7	3177.2	3214.2	3247.2	3276.0	3288.3	3325.4	3362.4	3383.0	3383.0
27.5°	2917.9	2967.3	3016.7	3057.8	3078.4	3103.1	3123.7	3156.6	3185.4	3201.9	3218.3
30°	2724.5	2773.9	2819.1	2860.3	2885.0	2909.7	2930.3	2955.0	2983.8	3004.3	3008.5
32.5°	2514.6	2555.7	2601.0	2642.2	2666.9	2675.1	2695.7	2720.4	2745.1	2761.5	2765.6
35°	2284.1	2312.9	2341.7	2378.8	2403.5	2403.5	2424.1	2440.5	2461.1	2498.1	2489.9
37.5°	2012.5	2053.7	2074.2	2086.6	2103.0	2119.5	2123.6	2144.2	2168.9	2177.1	2189.5
40°	1757.3	1769.7	1782.0	1782.0	1798.5	1798.5	1798.5	1802.6	1827.3	1831.4	1847.9
42.5°	1502.2	1502.2	1489.8	1477.5	1481.6	1477.5	1456.9	1456.9	1469.2	1485.7	1485.7
45°	1263.5	1234.7	1197.6	1168.8	1148.2	1140.0	1115.3	1115.3	1111.2	1115.3	1131.8
47.5°	1061.8	1012.4	950.7	893.1	872.5	856.0	819.0	802.5	794.3	798.4	806.6
50°	893.1	839.6	769.6	699.6	662.6	642.0	596.8	567.9	563.8	555.6	572.1
52.5°	769.6	703.8	629.7	547.4	510.3	477.4	428.0	403.3	386.9	386.9	391.0
55°	662.6	592.6	510.3	428.0	391.0	366.3	316.9	284.0	267.5	263.4	275.7
57.5°	572.1	506.2	423.9	341.6	304.5	275.7	226.4	197.5	185.2	177.0	181.1
60°	502.1	436.2	353.9	275.7	242.8	209.9	168.7	135.8	119.4	119.4	123.5
62.5°	436.2	374.5	300.4	226.4	197.5	168.7	123.5	94.7	82.3	78.2	82.3
65°	370.4	312.8	251.0	189.3	160.5	135.8	98.8	74.1	57.6	53.5	57.6
67.5°	300.4	255.2	201.7	152.3	127.6	107.0	74.1	53.5	41.2	37.0	41.2
70°	234.6	193.4	152.3	111.1	94.7	78.2	53.5	41.2	28.8	24.7	28.8
72.5°	168.7	139.9	107.0	78.2	65.8	53.5	37.0	28.8	20.6	16.5	20.6
75°	115.2	94.7	70.0	49.4	41.2	37.0	24.7	16.5	12.3	12.3	12.3
77.5°	74.1	57.6	45.3	32.9	24.7	20.6	12.3	8.2	8.2	8.2	8.2
80°	41.2	32.9	24.7	16.5	12.3	12.3	8.2	8.2	4.1	4.1	4.1
82.5°	24.7	16.5	12.3	8.2	8.2	4.1	4.1	4.1	4.1	4.1	4.1
85°	12.3	8.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
87.5°	4.1	4.1	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9
2.5°	3551.7	3555.8	3543.5	3559.9	3547.6	3564.1	3564.1	3547.6	3551.7	3543.5	3559.9
5°	3543.5	3543.5	3535.2	3547.6	3531.1	3547.6	3543.5	3514.7	3522.9	3506.4	3522.9
7.5°	3543.5	3535.2	3522.9	3535.2	3514.7	3527.0	3510.6	3481.7	3473.5	3452.9	3452.9
10°	3555.8	3543.5	3527.0	3531.1	3510.6	3514.7	3490.0	3448.8	3436.5	3411.8	3403.5
12.5°	3584.6	3572.3	3547.6	3555.8	3527.0	3527.0	3494.1	3444.7	3420.0	3387.1	3378.9
15°	3625.8	3605.2	3576.4	3580.5	3551.7	3535.2	3494.1	3436.5	3403.5	3358.3	3345.9
17.5°	3634.0	3613.4	3576.4	3576.4	3539.4	3518.8	3469.4	3403.5	3362.4	3317.1	3292.4
20°	3588.7	3568.2	3527.0	3522.9	3490.0	3461.2	3407.7	3341.8	3300.7	3251.3	3230.7
22.5°	3494.1	3469.4	3432.4	3428.2	3395.3	3378.9	3321.2	3255.4	3214.2	3164.8	3148.4
25°	3354.2	3341.8	3304.8	3300.7	3271.9	3251.3	3201.9	3140.2	3103.1	3053.7	3037.3
27.5°	3189.5	3177.2	3140.2	3140.2	3107.2	3094.9	3049.6	2992.0	2963.2	2917.9	2897.3
30°	2992.0	2975.5	2955.0	2950.8	2922.0	2909.7	2868.5	2815.0	2786.2	2749.2	2740.9
32.5°	2757.4	2745.1	2732.7	2728.6	2699.8	2687.4	2658.6	2605.1	2580.4	2547.5	2535.2
35°	2485.8	2477.6	2465.2	2461.1	2448.7	2436.4	2407.6	2366.4	2354.1	2329.4	2317.0
37.5°	2173.0	2181.2	2173.0	2173.0	2160.7	2164.8	2140.1	2115.4	2103.0	2086.6	2078.3
40°	1835.5	1852.0	1864.3	1864.3	1860.2	1876.7	1872.6	1852.0	1847.9	1839.6	1835.5
42.5°	1493.9	1502.2	1526.9	1543.3	1539.2	1580.4	1584.5	1600.9	1613.3	1605.1	1609.2
45°	1135.9	1160.6	1193.5	1210.0	1230.5	1284.0	1312.9	1345.8	1374.6	1391.1	1386.9
47.5°	819.0	847.8	884.8	909.5	946.6	1012.4	1086.5	1127.7	1168.8	1189.4	1210.0
50°	592.6	621.4	666.7	703.8	728.4	819.0	897.2	950.7	996.0	1024.8	1045.3
52.5°	415.7	448.6	498.0	530.9	567.9	654.4	744.9	806.6	856.0	893.1	913.6
55°	288.1	325.1	370.4	403.3	444.5	535.0	621.4	687.3	740.8	773.7	798.4
57.5°	201.7	234.6	279.9	308.7	349.8	436.2	522.7	588.5	642.0	674.9	703.8
60°	135.8	168.7	214.0	242.8	275.7	362.2	440.4	510.3	559.7	592.6	621.4
62.5°	94.7	123.5	168.7	197.5	226.4	300.4	374.5	436.2	485.6	522.7	547.4
65°	74.1	98.8	135.8	160.5	189.3	251.0	312.8	366.3	415.7	452.7	469.2
67.5°	53.5	78.2	107.0	127.6	148.2	201.7	255.2	296.3	341.6	370.4	391.0
70°	37.0	53.5	78.2	94.7	111.1	152.3	193.4	230.5	263.4	284.0	300.4
72.5°	28.8	37.0	53.5	65.8	78.2	107.0	139.9	168.7	193.4	209.9	226.4
75°	16.5	24.7	37.0	45.3	53.5	74.1	94.7	115.2	131.7	144.0	152.3
77.5°	8.2	12.3	20.6	24.7	32.9	45.3	61.7	74.1	86.4	94.7	102.9
80°	8.2	8.2	12.3	12.3	16.5	24.7	32.9	41.2	49.4	57.6	61.7
82.5°	4.1	4.1	8.2	8.2	8.2	12.3	16.5	24.7	28.8	32.9	37.0
85°	4.1	4.1	4.1	4.1	4.1	8.2	8.2	12.3	16.5	20.6	20.6
87.5°	0.0	0.0	4.1	4.1	4.1	4.1	4.1	8.2	8.2	8.2	12.3
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: P252625

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9	3559.9
2.5°	3547.6	3555.8	3551.7	3559.9	3547.6	3543.5	3551.7	3539.4
5°	3502.3	3506.4	3502.3	3502.3	3494.1	3485.9	3494.1	3481.7
7.5°	3432.4	3432.4	3420.0	3420.0	3403.5	3395.3	3395.3	3391.2
10°	3374.7	3362.4	3350.0	3354.2	3329.5	3321.2	3317.1	3313.0
12.5°	3345.9	3337.7	3317.1	3317.1	3292.4	3284.2	3280.1	3276.0
15°	3313.0	3296.5	3280.1	3276.0	3255.4	3247.2	3243.0	3234.8
17.5°	3255.4	3243.0	3222.5	3222.5	3201.9	3197.8	3189.5	3185.4
20°	3193.7	3177.2	3160.7	3160.7	3136.0	3136.0	3123.7	3127.8
22.5°	3107.2	3094.9	3078.4	3078.4	3057.8	3053.7	3041.4	3037.3
25°	3004.3	2987.9	2975.5	2971.4	2955.0	2946.7	2942.6	2934.4
27.5°	2868.5	2856.2	2843.8	2835.6	2815.0	2810.9	2798.6	2802.7
30°	2699.8	2691.6	2687.4	2679.2	2654.5	2646.3	2646.3	2633.9
32.5°	2514.6	2502.2	2494.0	2481.7	2461.1	2457.0	2444.6	2448.7
35°	2288.2	2271.8	2259.4	2263.5	2238.9	2234.7	2226.5	2230.6
37.5°	2053.7	2037.2	2020.7	2016.6	1996.0	1996.0	1983.7	1983.7
40°	1810.8	1794.4	1786.1	1786.1	1761.4	1765.6	1753.2	1749.1
42.5°	1592.7	1576.3	1572.1	1568.0	1555.7	1551.6	1539.2	1543.3
45°	1386.9	1382.8	1382.8	1374.6	1362.2	1358.1	1362.2	1362.2
47.5°	1205.9	1210.0	1205.9	1205.9	1197.6	1205.9	1197.6	1201.7
50°	1053.6	1061.8	1061.8	1061.8	1057.7	1061.8	1061.8	1065.9
52.5°	926.0	938.3	934.2	938.3	934.2	942.5	938.3	942.5
55°	814.9	823.1	827.2	831.3	831.3	831.3	831.3	831.3
57.5°	712.0	724.3	728.4	732.6	732.6	740.8	732.6	732.6
60°	629.7	642.0	646.1	650.3	650.3	654.4	646.1	650.3
62.5°	555.6	567.9	567.9	572.1	572.1	572.1	563.8	567.9
65°	481.5	485.6	489.7	489.7	485.6	485.6	481.5	485.6
67.5°	399.2	403.3	399.2	399.2	395.1	395.1	386.9	391.0
70°	308.7	308.7	312.8	308.7	304.5	308.7	304.5	300.4
72.5°	230.5	230.5	230.5	226.4	226.4	222.2	226.4	226.4
75°	156.4	156.4	160.5	160.5	160.5	160.5	156.4	156.4
77.5°	102.9	102.9	102.9	102.9	107.0	102.9	102.9	102.9
80°	65.8	65.8	70.0	70.0	65.8	65.8	65.8	65.8
82.5°	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2
85°	24.7	24.7	24.7	24.7	20.6	20.6	20.6	20.6
87.5°	12.3	12.3	12.3	12.3	12.3	12.3	8.2	8.2
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)