

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: P252324

Luminaire Tested: **LD6B70D010TE EU6B60708030 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252324
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60708030 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6551.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

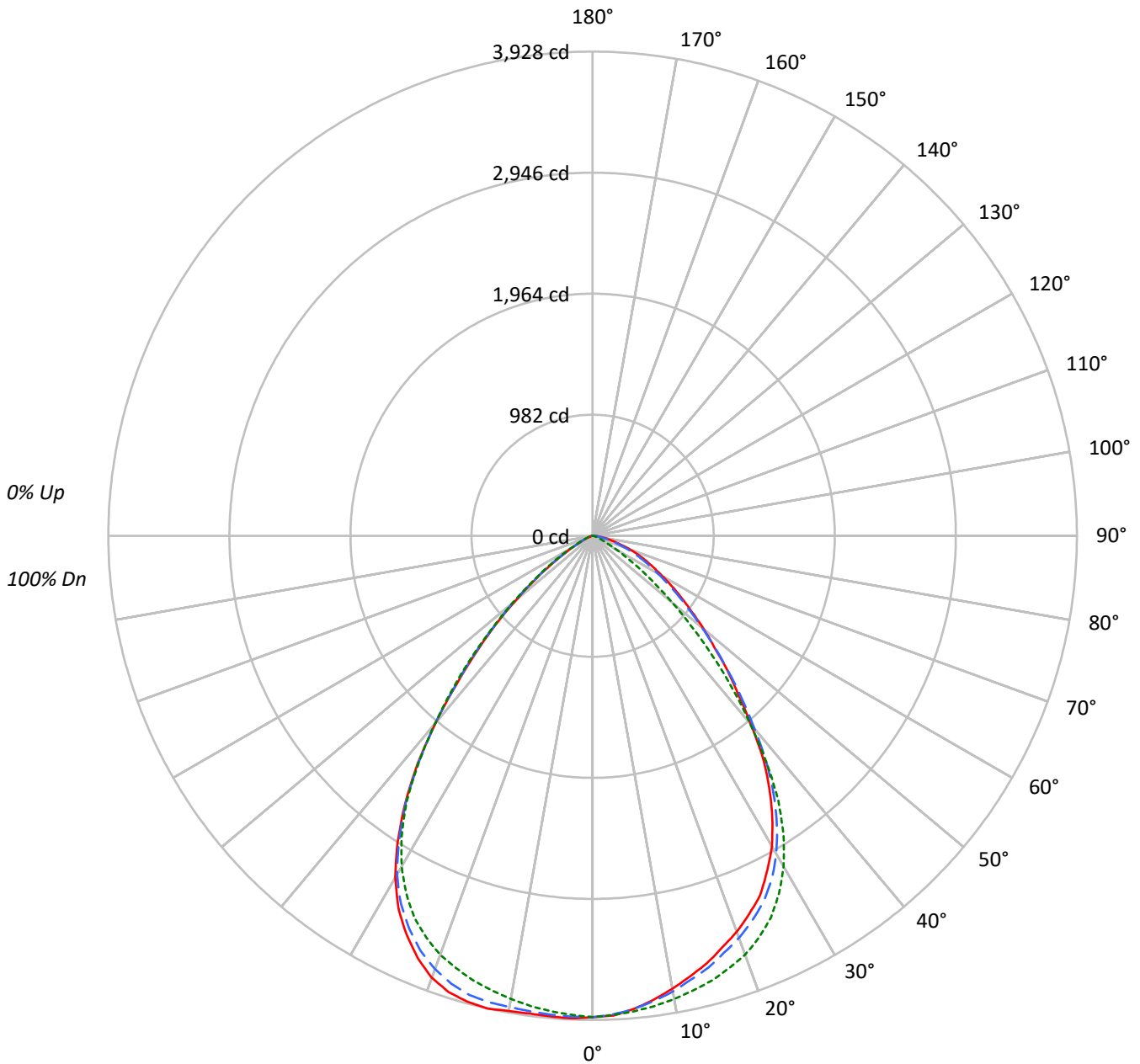
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252324

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBSW1H

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	254752	254752	254752
5°	252326	253564	256340
10°	247121	252746	259304
15°	242395	252270	264373
20°	237380	251127	264880
25°	231526	246124	256987
30°	219198	233413	241225
35°	199062	209209	211089
40°	169888	169088	168287
45°	142714	126614	122702
50°	119187	85683	81370
55°	100310	52572	47738
60°	84917	27688	23996
65°	73528	14557	11655
70°	61174	9003	6295
75°	45171	5949	3554
80°	35429	3532	1766
85°	28220	3518	0



TEST NUMBER: P252324

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.0	5.6
10°-20°	1053.7	16.1
20°-30°	1556.0	23.8
30°-40°	1603.5	24.5
40°-50°	1107.6	16.9
50°-60°	545.9	8.3
60°-70°	221.2	3.4
70°-80°	78.8	1.2
80°-90°	16.3	0.2
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°	2977.7	45.5
0°-40°	4581.2	69.9
0°-60°	6234.7	95.2
0°-90°	6551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6551.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3905	3905	3905	3905	3905	
5°	3853	3853	3872	3900	3914	364
15°	3589	3627	3735	3858	3914	1010
25°	3216	3278	3419	3518	3570	1470
35°	2499	2561	2627	2641	2650	1549
45°	1547	1556	1372	1354	1330	1196
55°	882	849	462	434	420	797
65°	476	429	94	76	76	473
75°	179	151	24	14	14	201
85°	38	28	5	0	0	46
90°	0	0	0	0	0	



TEST NUMBER: P252324

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8
2.5°	3895.4	3881.2	3890.7	3871.8	3895.4	3871.8	3876.5	3881.2	3876.5	3881.2	3885.9
5°	3852.9	3838.8	3852.9	3829.3	3852.9	3838.8	3838.8	3843.5	3843.5	3848.2	3852.9
7.5°	3796.3	3782.2	3796.3	3772.8	3801.0	3786.9	3786.9	3796.3	3791.6	3796.3	3805.8
10°	3730.3	3711.4	3725.6	3711.4	3739.7	3720.9	3730.3	3730.3	3730.3	3744.5	3753.9
12.5°	3659.6	3640.7	3659.6	3636.0	3664.3	3650.1	3654.9	3669.0	3673.7	3683.1	3687.9
15°	3588.8	3565.3	3574.7	3560.5	3588.8	3574.7	3579.4	3598.3	3598.3	3612.4	3626.6
17.5°	3499.2	3480.4	3499.2	3480.4	3503.9	3494.5	3503.9	3518.1	3518.1	3532.2	3546.4
20°	3419.1	3400.2	3414.3	3400.2	3428.5	3414.3	3419.1	3437.9	3442.6	3456.8	3470.9
22.5°	3320.0	3305.9	3315.3	3301.2	3329.5	3320.0	3324.7	3343.6	3348.3	3357.7	3381.3
25°	3216.3	3188.0	3202.1	3192.7	3221.0	3206.8	3216.3	3235.1	3244.6	3258.7	3277.6
27.5°	3065.4	3051.2	3060.6	3060.6	3084.2	3070.1	3074.8	3093.7	3107.8	3122.0	3145.5
30°	2909.7	2886.2	2895.6	2900.3	2919.2	2909.7	2919.2	2938.0	2942.7	2961.6	2980.5
32.5°	2711.7	2702.2	2721.1	2711.7	2721.1	2721.1	2725.8	2740.0	2749.4	2758.8	2782.4
35°	2499.4	2480.6	2499.4	2490.0	2513.6	2499.4	2513.6	2527.7	2527.7	2546.6	2560.8
37.5°	2268.4	2244.8	2254.2	2254.2	2263.7	2258.9	2258.9	2282.5	2287.2	2301.4	2315.5
40°	1994.8	1985.4	2004.3	1999.6	2004.3	2004.3	2009.0	2023.1	2032.6	2037.3	2042.0
42.5°	1749.6	1754.3	1759.0	1759.0	1759.0	1759.0	1759.0	1777.9	1773.2	1787.3	1792.1
45°	1546.8	1528.0	1537.4	1532.7	1546.8	1532.7	1546.8	1561.0	1551.5	1565.7	1556.3
47.5°	1339.3	1339.3	1339.3	1334.6	1344.0	1339.3	1348.8	1353.5	1353.5	1353.5	1348.8
50°	1174.3	1160.1	1164.8	1164.8	1169.6	1164.8	1174.3	1179.0	1179.0	1169.6	1150.7
52.5°	1013.9	1009.2	1009.2	1018.6	1018.6	1013.9	1013.9	1013.9	1013.9	999.8	990.3
55°	881.9	872.4	877.2	877.2	877.2	877.2	881.9	877.2	877.2	863.0	848.9
57.5°	764.0	754.6	754.6	754.6	759.3	754.6	754.6	754.6	749.8	735.7	716.8
60°	650.8	646.1	650.8	650.8	655.5	650.8	650.8	650.8	641.4	627.2	608.4
62.5°	556.5	556.5	556.5	561.2	561.2	556.5	556.5	551.8	547.0	528.2	509.3
65°	476.3	471.6	476.3	476.3	481.0	481.0	476.3	471.6	466.9	448.0	429.2
67.5°	396.1	391.4	396.1	396.1	400.9	396.1	396.1	396.1	382.0	372.6	353.7
70°	320.7	316.0	316.0	316.0	320.7	311.3	316.0	316.0	306.5	292.4	273.5
72.5°	245.2	245.2	245.2	245.2	245.2	245.2	240.5	240.5	231.1	216.9	207.5
75°	179.2	179.2	183.9	183.9	179.2	179.2	179.2	174.5	169.8	160.3	150.9
77.5°	132.0	132.0	132.0	132.0	127.3	127.3	127.3	122.6	117.9	113.2	103.8
80°	94.3	94.3	94.3	89.6	94.3	89.6	89.6	89.6	80.2	75.5	70.7
82.5°	66.0	61.3	61.3	61.3	61.3	61.3	61.3	56.6	56.6	51.9	47.2
85°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	33.0	28.3	28.3
87.5°	18.9	23.6	23.6	23.6	23.6	23.6	23.6	18.9	18.9	18.9	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



TEST NUMBER: P252324

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8
2.5°	3885.9	3885.9	3895.4	3881.2	3904.8	3890.7	3885.9	3909.5	3895.4	3890.7	3900.1
5°	3852.9	3857.6	3862.4	3852.9	3876.5	3862.4	3862.4	3885.9	3876.5	3871.8	3885.9
7.5°	3810.5	3815.2	3824.6	3819.9	3838.8	3829.3	3834.1	3857.6	3848.2	3848.2	3862.4
10°	3758.6	3768.0	3777.5	3777.5	3801.0	3791.6	3791.6	3819.9	3810.5	3815.2	3834.1
12.5°	3697.3	3711.4	3725.6	3730.3	3753.9	3739.7	3744.5	3777.5	3772.8	3777.5	3796.3
15°	3631.3	3650.1	3664.3	3664.3	3692.6	3678.4	3692.6	3725.6	3716.2	3735.0	3758.6
17.5°	3555.8	3574.7	3593.5	3598.3	3626.6	3617.1	3636.0	3669.0	3669.0	3678.4	3706.7
20°	3485.1	3508.7	3518.1	3532.2	3560.5	3555.8	3565.3	3603.0	3603.0	3617.1	3645.4
22.5°	3390.8	3414.3	3433.2	3447.4	3470.9	3470.9	3485.1	3518.1	3518.1	3527.5	3555.8
25°	3287.0	3315.3	3329.5	3343.6	3367.2	3362.5	3376.6	3404.9	3409.6	3419.1	3447.4
27.5°	3155.0	3178.5	3197.4	3206.8	3239.9	3221.0	3235.1	3268.1	3263.4	3272.9	3296.4
30°	2989.9	3013.5	3032.4	3032.4	3060.6	3060.6	3074.8	3088.9	3088.9	3098.4	3117.2
32.5°	2796.6	2824.8	2824.8	2839.0	2857.9	2839.0	2857.9	2876.7	2867.3	2881.4	2895.6
35°	2574.9	2589.1	2593.8	2593.8	2607.9	2603.2	2598.5	2612.6	2603.2	2626.8	2640.9
37.5°	2306.1	2325.0	2315.5	2325.0	2320.2	2306.1	2306.1	2329.7	2310.8	2315.5	2329.7
40°	2046.7	2046.7	2042.0	2018.4	2023.1	2009.0	2004.3	2009.0	1990.1	1985.4	2004.3
42.5°	1777.9	1773.2	1759.0	1726.0	1730.8	1707.2	1688.3	1688.3	1678.9	1674.2	1678.9
45°	1537.4	1523.2	1499.7	1461.9	1452.5	1433.6	1395.9	1386.5	1372.3	1372.3	1377.1
47.5°	1315.7	1296.9	1259.2	1216.7	1193.1	1169.6	1131.8	1117.7	1094.1	1084.7	1094.1
50°	1131.8	1098.8	1051.7	990.3	966.8	938.5	900.7	877.2	853.6	844.2	839.4
52.5°	962.1	914.9	867.7	792.3	773.4	745.1	693.2	669.7	646.1	627.2	627.2
55°	815.9	773.4	707.4	636.7	608.4	580.1	528.2	495.2	471.6	462.2	452.7
57.5°	683.8	636.7	575.3	499.9	471.6	443.3	391.4	358.4	334.8	320.7	311.3
60°	575.3	523.5	462.2	396.1	363.1	334.8	283.0	249.9	226.4	212.2	202.8
62.5°	471.6	429.2	367.8	306.5	278.2	249.9	207.5	174.5	150.9	141.5	127.3
65°	396.1	353.7	297.1	245.2	221.6	193.4	155.6	127.3	108.5	94.3	84.9
67.5°	320.7	287.7	240.5	193.4	169.8	150.9	117.9	94.3	75.5	66.0	61.3
70°	254.7	221.6	183.9	146.2	132.0	113.2	89.6	66.0	56.6	47.2	42.4
72.5°	188.6	165.1	136.8	108.5	94.3	84.9	61.3	51.9	37.7	33.0	28.3
75°	136.8	117.9	99.0	75.5	66.0	61.3	47.2	33.0	28.3	23.6	18.9
77.5°	94.3	84.9	66.0	51.9	47.2	42.4	33.0	23.6	18.9	14.1	14.1
80°	61.3	51.9	42.4	33.0	33.0	28.3	18.9	14.1	14.1	9.4	9.4
82.5°	37.7	33.0	28.3	23.6	18.9	18.9	14.1	9.4	9.4	4.7	4.7
85°	23.6	18.9	14.1	14.1	9.4	9.4	9.4	4.7	4.7	4.7	4.7
87.5°	9.4	9.4	9.4	4.7	4.7	4.7	4.7	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



TEST NUMBER: P252324

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8
2.5°	3900.1	3900.1	3909.5	3895.4	3904.8	3904.8	3914.2	3895.4	3904.8	3909.5	3918.9
5°	3881.2	3885.9	3895.4	3890.7	3895.4	3895.4	3904.8	3881.2	3900.1	3900.1	3914.2
7.5°	3862.4	3862.4	3871.8	3867.1	3876.5	3881.2	3890.7	3871.8	3890.7	3890.7	3904.8
10°	3838.8	3838.8	3852.9	3848.2	3862.4	3867.1	3881.2	3862.4	3881.2	3885.9	3900.1
12.5°	3805.8	3810.5	3824.6	3824.6	3838.8	3848.2	3862.4	3852.9	3876.5	3881.2	3900.1
15°	3768.0	3777.5	3796.3	3791.6	3805.8	3819.9	3838.8	3824.6	3857.6	3867.1	3885.9
17.5°	3720.9	3730.3	3744.5	3744.5	3758.6	3768.0	3791.6	3782.2	3810.5	3815.2	3838.8
20°	3650.1	3664.3	3683.1	3678.4	3692.6	3702.0	3720.9	3711.4	3739.7	3749.2	3772.8
22.5°	3565.3	3574.7	3588.8	3588.8	3603.0	3612.4	3631.3	3617.1	3645.4	3650.1	3669.0
25°	3452.1	3461.5	3470.9	3475.6	3489.8	3494.5	3503.9	3494.5	3518.1	3522.8	3546.4
27.5°	3305.9	3310.6	3324.7	3324.7	3334.2	3338.9	3353.0	3334.2	3367.2	3367.2	3381.3
30°	3131.4	3126.7	3145.5	3136.1	3145.5	3145.5	3159.7	3150.2	3173.8	3164.4	3178.5
32.5°	2900.3	2909.7	2909.7	2900.3	2919.2	2914.5	2914.5	2905.0	2919.2	2923.9	2933.3
35°	2631.5	2645.6	2645.6	2650.4	2655.1	2640.9	2645.6	2617.3	2640.9	2645.6	2650.4
37.5°	2339.1	2325.0	2334.4	2320.2	2343.8	2315.5	2315.5	2296.7	2315.5	2315.5	2320.2
40°	2004.3	1999.6	2009.0	1999.6	1994.8	1990.1	1980.7	1966.5	1985.4	1976.0	1990.1
42.5°	1688.3	1683.6	1683.6	1674.2	1669.4	1669.4	1660.0	1650.6	1645.9	1645.9	1669.4
45°	1362.9	1372.3	1362.9	1358.2	1367.6	1358.2	1362.9	1344.0	1353.5	1344.0	1353.5
47.5°	1089.4	1094.1	1084.7	1075.2	1089.4	1075.2	1075.2	1061.1	1080.0	1080.0	1070.5
50°	844.2	839.4	830.0	839.4	834.7	834.7	834.7	820.6	830.0	815.9	825.3
52.5°	622.5	617.8	617.8	613.1	617.8	613.1	613.1	608.4	608.4	603.6	608.4
55°	452.7	448.0	438.6	438.6	438.6	443.3	438.6	433.9	433.9	429.2	433.9
57.5°	306.5	297.1	297.1	297.1	297.1	292.4	292.4	287.7	292.4	287.7	292.4
60°	198.1	198.1	188.6	188.6	188.6	188.6	188.6	183.9	188.6	188.6	188.6
62.5°	122.6	122.6	117.9	113.2	117.9	113.2	113.2	113.2	117.9	113.2	117.9
65°	80.2	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
67.5°	56.6	51.9	51.9	51.9	51.9	51.9	51.9	47.2	51.9	51.9	51.9
70°	37.7	37.7	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
72.5°	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
75°	18.9	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
77.5°	14.1	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
80°	9.4	9.4	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
82.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
85°	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
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: P252324

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8	3904.8
2.5°	3904.8	3909.5	3900.1	3904.8	3895.4	3904.8	3909.5	3918.9
5°	3895.4	3900.1	3890.7	3900.1	3890.7	3900.1	3904.8	3914.2
7.5°	3885.9	3895.4	3885.9	3895.4	3885.9	3895.4	3900.1	3909.5
10°	3885.9	3900.1	3890.7	3904.8	3890.7	3900.1	3909.5	3914.2
12.5°	3885.9	3900.1	3895.4	3904.8	3900.1	3909.5	3918.9	3928.4
15°	3876.5	3890.7	3881.2	3895.4	3890.7	3895.4	3914.2	3914.2
17.5°	3824.6	3838.8	3838.8	3848.2	3848.2	3862.4	3871.8	3881.2
20°	3758.6	3772.8	3768.0	3782.2	3782.2	3796.3	3805.8	3815.2
22.5°	3659.6	3678.4	3673.7	3687.9	3683.1	3692.6	3711.4	3706.7
25°	3532.2	3555.8	3551.1	3560.5	3555.8	3555.8	3565.3	3570.0
27.5°	3376.6	3390.8	3386.0	3395.5	3386.0	3395.5	3404.9	3409.6
30°	3173.8	3183.3	3178.5	3183.3	3178.5	3188.0	3192.7	3202.1
32.5°	2928.6	2942.7	2928.6	2938.0	2933.3	2933.3	2952.2	2942.7
35°	2636.2	2640.9	2645.6	2645.6	2636.2	2640.9	2650.4	2650.4
37.5°	2310.8	2334.4	2306.1	2320.2	2315.5	2315.5	2315.5	2329.7
40°	1971.3	1976.0	1966.5	1966.5	1966.5	1961.8	1980.7	1976.0
42.5°	1650.6	1655.3	1650.6	1636.4	1641.1	1641.1	1655.3	1636.4
45°	1339.3	1348.8	1344.0	1344.0	1334.6	1334.6	1339.3	1329.9
47.5°	1061.1	1070.5	1056.4	1061.1	1051.7	1061.1	1056.4	1065.8
50°	806.4	815.9	811.1	815.9	815.9	806.4	820.6	801.7
52.5°	603.6	608.4	603.6	598.9	594.2	594.2	603.6	598.9
55°	429.2	424.4	424.4	424.4	429.2	429.2	424.4	419.7
57.5°	287.7	287.7	283.0	283.0	287.7	278.2	283.0	278.2
60°	183.9	183.9	183.9	183.9	179.2	183.9	183.9	183.9
62.5°	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2
65°	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
67.5°	47.2	51.9	51.9	51.9	47.2	47.2	47.2	47.2
70°	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
72.5°	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
75°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
77.5°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
80°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
82.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	4.7	4.7	4.7	4.7	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)