

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: P252332

Luminaire Tested: **LD6B70D010TE EU6B60709040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252332
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 EU6B60709040 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5684.0 lumens
Efficiency: N/A
Efficacy: 71.5 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

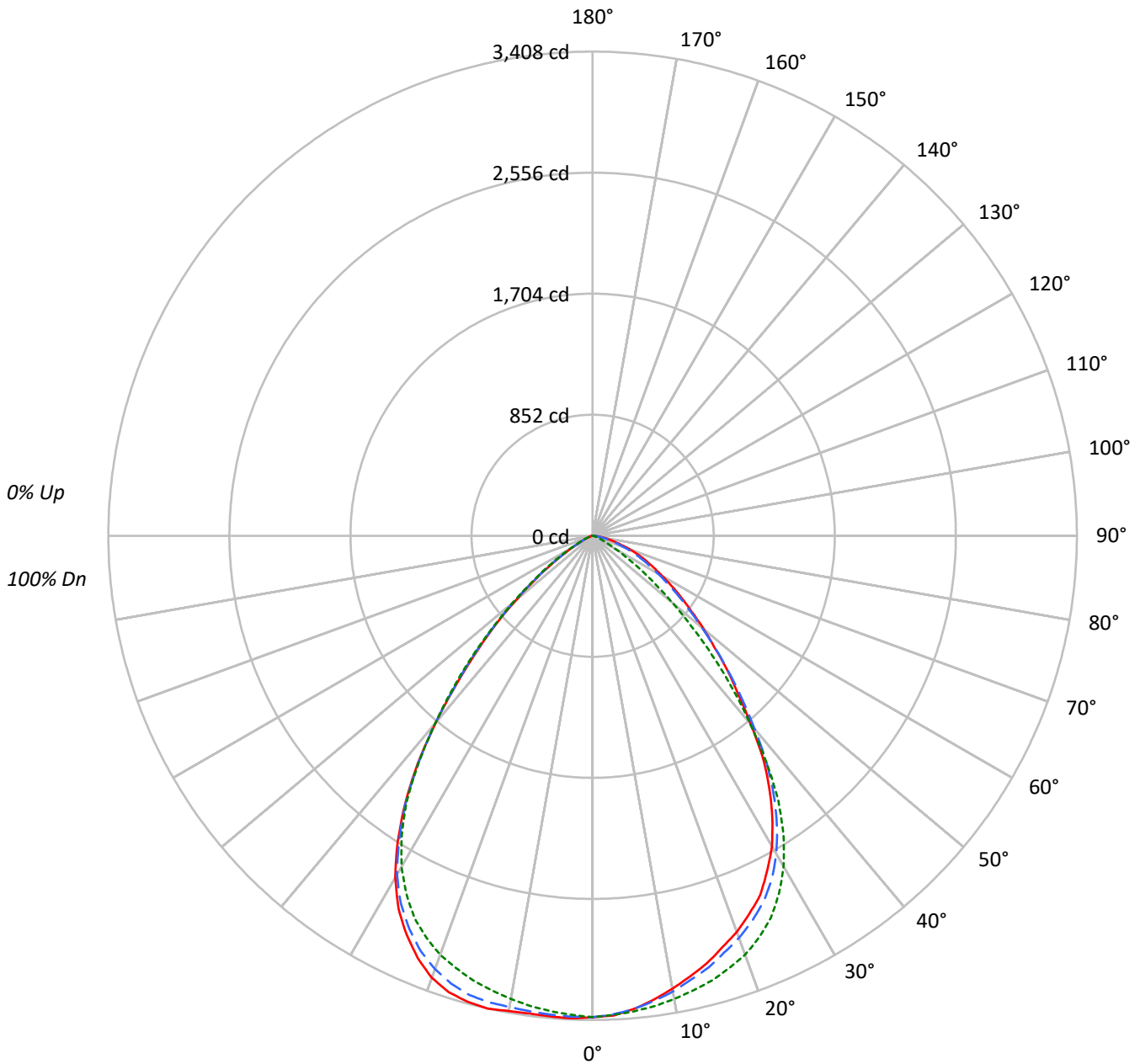
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90	90	90	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80	80	80	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72	72	72	72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64	64	64	64
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58	58	58	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52	52	52	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47	47	47	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43	43	43	43
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40	40	40	40
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37	37	37	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	221035	221035	221035
5°	218933	220007	222417
10°	214415	219298	224988
15°	210319	218884	229386
20°	205964	217892	229826
25°	200882	213551	222974
30°	190187	202519	209299
35°	172724	181517	183150
40°	147405	146706	146016
45°	123828	109859	106464
50°	103415	74336	70601
55°	87037	45611	41425
60°	73683	24022	20825
65°	63802	12628	10111
70°	53067	7802	5455
75°	39197	5167	3100
80°	30733	3081	1540
85°	24478	3069	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.3	5.6
10°-20°	914.2	16.1
20°-30°	1350.0	23.8
30°-40°	1391.3	24.5
40°-50°	961.0	16.9
50°-60°	473.7	8.3
60°-70°	191.9	3.4
70°-80°	68.4	1.2
80°-90°	14.1	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°	2583.6	45.5
0°-40°	3974.9	69.9
0°-60°	5409.5	95.2
0°-90°	5684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5684.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3388	3388	3388	3388	3388	
5°	3343	3343	3359	3384	3396	316
15°	3114	3147	3241	3347	3396	877
25°	2791	2844	2967	3052	3098	1276
35°	2169	2222	2279	2291	2300	1344
45°	1342	1350	1191	1174	1154	1037
55°	765	736	401	376	364	691
65°	413	372	82	66	66	410
75°	156	131	20	12	12	175
85°	33	25	4	0	0	40
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°	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0
2.5°	3379.8	3367.6	3375.7	3359.4	3379.8	3359.4	3363.5	3367.6	3363.5	3367.6	3371.6
5°	3343.0	3330.7	3343.0	3322.5	3343.0	3330.7	3330.7	3334.8	3334.8	3338.9	3343.0
7.5°	3293.9	3281.6	3293.9	3273.4	3298.0	3285.7	3285.7	3293.9	3289.8	3293.9	3302.1
10°	3236.6	3220.2	3232.5	3220.2	3244.8	3228.4	3236.6	3236.6	3236.6	3248.9	3257.1
12.5°	3175.2	3158.9	3175.2	3154.8	3179.3	3167.1	3171.1	3183.4	3187.5	3195.7	3199.8
15°	3113.9	3093.4	3101.6	3089.3	3113.9	3101.6	3105.7	3122.0	3122.0	3134.3	3146.6
17.5°	3036.1	3019.8	3036.1	3019.8	3040.2	3032.0	3040.2	3052.5	3052.5	3064.8	3077.0
20°	2966.6	2950.2	2962.5	2950.2	2974.7	2962.5	2966.6	2982.9	2987.0	2999.3	3011.6
22.5°	2880.6	2868.4	2876.5	2864.3	2888.8	2880.6	2884.7	2901.1	2905.2	2913.4	2933.8
25°	2790.6	2766.1	2778.3	2770.2	2794.7	2782.4	2790.6	2807.0	2815.2	2827.4	2843.8
27.5°	2659.7	2647.4	2655.6	2655.6	2676.0	2663.8	2667.9	2684.2	2696.5	2708.8	2729.2
30°	2524.6	2504.2	2512.4	2516.5	2532.8	2524.6	2532.8	2549.2	2553.3	2569.7	2586.0
32.5°	2352.8	2344.6	2361.0	2352.8	2361.0	2361.0	2365.1	2377.3	2385.5	2393.7	2414.2
35°	2168.7	2152.3	2168.7	2160.5	2180.9	2168.7	2180.9	2193.2	2193.2	2209.6	2221.8
37.5°	1968.2	1947.7	1955.9	1955.9	1964.1	1960.0	1960.0	1980.4	1984.5	1996.8	2009.1
40°	1730.8	1722.6	1739.0	1734.9	1739.0	1739.0	1743.1	1755.4	1763.6	1767.7	1771.8
42.5°	1518.1	1522.2	1526.2	1526.2	1526.2	1526.2	1526.2	1542.6	1538.5	1550.8	1554.9
45°	1342.1	1325.7	1333.9	1329.8	1342.1	1329.8	1342.1	1354.4	1346.2	1358.5	1350.3
47.5°	1162.1	1162.1	1162.1	1158.0	1166.2	1162.1	1170.3	1174.3	1174.3	1174.3	1170.3
50°	1018.9	1006.6	1010.7	1010.7	1014.8	1010.7	1018.9	1023.0	1023.0	1014.8	998.4
52.5°	879.7	875.6	875.6	883.8	883.8	879.7	879.7	879.7	879.7	867.5	859.3
55°	765.2	757.0	761.1	761.1	761.1	761.1	765.2	761.1	761.1	748.8	736.5
57.5°	662.9	654.7	654.7	654.7	658.8	654.7	654.7	654.7	650.6	638.3	622.0
60°	564.7	560.6	564.7	564.7	568.8	564.7	564.7	564.7	556.5	544.2	527.8
62.5°	482.8	482.8	482.8	486.9	486.9	482.8	482.8	478.7	474.6	458.3	441.9
65°	413.3	409.2	413.3	413.3	417.4	417.4	413.3	409.2	405.1	388.7	372.4
67.5°	343.7	339.6	343.7	343.7	347.8	343.7	343.7	343.7	331.4	323.3	306.9
70°	278.2	274.2	274.2	274.2	278.2	270.1	274.2	274.2	266.0	253.7	237.3
72.5°	212.8	212.8	212.8	212.8	212.8	212.8	208.7	208.7	200.5	188.2	180.0
75°	155.5	155.5	159.6	159.6	155.5	155.5	155.5	151.4	147.3	139.1	130.9
77.5°	114.6	114.6	114.6	114.6	110.5	110.5	110.5	106.4	102.3	98.2	90.0
80°	81.8	81.8	81.8	77.7	81.8	77.7	77.7	77.7	69.6	65.5	61.4
82.5°	57.3	53.2	53.2	53.2	53.2	53.2	53.2	49.1	49.1	45.0	40.9
85°	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	28.6	24.6	24.6
87.5°	16.4	20.5	20.5	20.5	20.5	20.5	20.5	16.4	16.4	16.4	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0
2.5°	3371.6	3371.6	3379.8	3367.6	3388.0	3375.7	3371.6	3392.1	3379.8	3375.7	3383.9
5°	3343.0	3347.1	3351.2	3343.0	3363.5	3351.2	3351.2	3371.6	3363.5	3359.4	3371.6
7.5°	3306.2	3310.3	3318.5	3314.4	3330.7	3322.5	3326.6	3347.1	3338.9	3338.9	3351.2
10°	3261.2	3269.4	3277.5	3277.5	3298.0	3289.8	3289.8	3314.4	3306.2	3310.3	3326.6
12.5°	3208.0	3220.2	3232.5	3236.6	3257.1	3244.8	3248.9	3277.5	3273.4	3277.5	3293.9
15°	3150.7	3167.1	3179.3	3179.3	3203.9	3191.6	3203.9	3232.5	3224.3	3240.7	3261.2
17.5°	3085.2	3101.6	3118.0	3122.0	3146.6	3138.4	3154.8	3183.4	3183.4	3191.6	3216.2
20°	3023.8	3044.3	3052.5	3064.8	3089.3	3085.2	3093.4	3126.1	3126.1	3138.4	3163.0
22.5°	2942.0	2962.5	2978.8	2991.1	3011.6	3011.6	3023.8	3052.5	3052.5	3060.7	3085.2
25°	2852.0	2876.5	2888.8	2901.1	2921.5	2917.5	2929.7	2954.3	2958.4	2966.6	2991.1
27.5°	2737.4	2757.9	2774.2	2782.4	2811.1	2794.7	2807.0	2835.6	2831.5	2839.7	2860.2
30°	2594.2	2614.7	2631.0	2631.0	2655.6	2655.6	2667.9	2680.1	2680.1	2688.3	2704.7
32.5°	2426.4	2451.0	2451.0	2463.3	2479.6	2463.3	2479.6	2496.0	2487.8	2500.1	2512.4
35°	2234.1	2246.4	2250.5	2250.5	2262.8	2258.7	2254.6	2266.9	2258.7	2279.1	2291.4
37.5°	2000.9	2017.3	2009.1	2017.3	2013.2	2000.9	2000.9	2021.4	2005.0	2009.1	2021.4
40°	1775.8	1775.8	1771.8	1751.3	1755.4	1743.1	1739.0	1743.1	1726.7	1722.6	1739.0
42.5°	1542.6	1538.5	1526.2	1497.6	1501.7	1481.2	1464.9	1464.9	1456.7	1452.6	1456.7
45°	1333.9	1321.7	1301.2	1268.5	1260.3	1243.9	1211.2	1203.0	1190.7	1190.7	1194.8
47.5°	1141.6	1125.2	1092.5	1055.7	1035.2	1014.8	982.0	969.8	949.3	941.1	949.3
50°	982.0	953.4	912.5	859.3	838.8	814.3	781.5	761.1	740.6	732.4	728.3
52.5°	834.7	793.8	752.9	687.4	671.1	646.5	601.5	581.0	560.6	544.2	544.2
55°	707.9	671.1	613.8	552.4	527.8	503.3	458.3	429.6	409.2	401.0	392.8
57.5°	593.3	552.4	499.2	433.7	409.2	384.6	339.6	311.0	290.5	278.2	270.1
60°	499.2	454.2	401.0	343.7	315.1	290.5	245.5	216.9	196.4	184.1	175.9
62.5°	409.2	372.4	319.2	266.0	241.4	216.9	180.0	151.4	130.9	122.8	110.5
65°	343.7	306.9	257.8	212.8	192.3	167.8	135.0	110.5	94.1	81.8	73.7
67.5°	278.2	249.6	208.7	167.8	147.3	130.9	102.3	81.8	65.5	57.3	53.2
70°	221.0	192.3	159.6	126.8	114.6	98.2	77.7	57.3	49.1	40.9	36.8
72.5°	163.7	143.2	118.7	94.1	81.8	73.7	53.2	45.0	32.7	28.6	24.6
75°	118.7	102.3	85.9	65.5	57.3	53.2	40.9	28.6	24.6	20.5	16.4
77.5°	81.8	73.7	57.3	45.0	40.9	36.8	28.6	20.5	16.4	12.3	12.3
80°	53.2	45.0	36.8	28.6	28.6	24.6	16.4	12.3	12.3	8.2	8.2
82.5°	32.7	28.6	24.6	20.5	16.4	16.4	12.3	8.2	8.2	4.1	4.1
85°	20.5	16.4	12.3	12.3	8.2	8.2	8.2	4.1	4.1	4.1	4.1
87.5°	8.2	8.2	8.2	4.1	4.1	4.1	4.1	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°	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0
2.5°	3383.9	3383.9	3392.1	3379.8	3388.0	3388.0	3396.2	3379.8	3388.0	3392.1	3400.3
5°	3367.6	3371.6	3379.8	3375.7	3379.8	3379.8	3388.0	3367.6	3383.9	3383.9	3396.2
7.5°	3351.2	3351.2	3359.4	3355.3	3363.5	3367.6	3375.7	3359.4	3375.7	3375.7	3388.0
10°	3330.7	3330.7	3343.0	3338.9	3351.2	3355.3	3367.6	3351.2	3367.6	3371.6	3383.9
12.5°	3302.1	3306.2	3318.5	3318.5	3330.7	3338.9	3351.2	3343.0	3363.5	3367.6	3383.9
15°	3269.4	3277.5	3293.9	3289.8	3302.1	3314.4	3330.7	3318.5	3347.1	3355.3	3371.6
17.5°	3228.4	3236.6	3248.9	3248.9	3261.2	3269.4	3289.8	3281.6	3306.2	3310.3	3330.7
20°	3167.1	3179.3	3195.7	3191.6	3203.9	3212.1	3228.4	3220.2	3244.8	3253.0	3273.4
22.5°	3093.4	3101.6	3113.9	3113.9	3126.1	3134.3	3150.7	3138.4	3163.0	3167.1	3183.4
25°	2995.2	3003.4	3011.6	3015.7	3027.9	3032.0	3040.2	3032.0	3052.5	3056.6	3077.0
27.5°	2868.4	2872.4	2884.7	2884.7	2892.9	2897.0	2909.3	2892.9	2921.5	2921.5	2933.8
30°	2717.0	2712.9	2729.2	2721.0	2729.2	2729.2	2741.5	2733.3	2753.8	2745.6	2757.9
32.5°	2516.5	2524.6	2524.6	2516.5	2532.8	2528.7	2528.7	2520.6	2532.8	2536.9	2545.1
35°	2283.2	2295.5	2295.5	2299.6	2303.7	2291.4	2295.5	2271.0	2291.4	2295.5	2299.6
37.5°	2029.5	2017.3	2025.4	2013.2	2033.6	2009.1	2009.1	1992.7	2009.1	2009.1	2013.2
40°	1739.0	1734.9	1743.1	1734.9	1730.8	1726.7	1718.6	1706.3	1722.6	1714.5	1726.7
42.5°	1464.9	1460.8	1460.8	1452.6	1448.5	1448.5	1440.3	1432.1	1428.0	1428.0	1448.5
45°	1182.5	1190.7	1182.5	1178.4	1186.6	1178.4	1182.5	1166.2	1174.3	1166.2	1174.3
47.5°	945.2	949.3	941.1	932.9	945.2	932.9	932.9	920.7	937.0	937.0	928.8
50°	732.4	728.3	720.2	728.3	724.2	724.2	724.2	712.0	720.2	707.9	716.1
52.5°	540.1	536.0	536.0	531.9	536.0	531.9	531.9	527.8	527.8	523.8	527.8
55°	392.8	388.7	380.5	380.5	380.5	384.6	380.5	376.4	376.4	372.4	376.4
57.5°	266.0	257.8	257.8	257.8	257.8	253.7	253.7	249.6	253.7	249.6	253.7
60°	171.9	171.9	163.7	163.7	163.7	163.7	163.7	159.6	163.7	163.7	163.7
62.5°	106.4	106.4	102.3	98.2	102.3	98.2	98.2	98.2	102.3	98.2	102.3
65°	69.6	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
67.5°	49.1	45.0	45.0	45.0	45.0	45.0	45.0	40.9	45.0	45.0	45.0
70°	32.7	32.7	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6
72.5°	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
75°	16.4	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
77.5°	12.3	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
80°	8.2	8.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
82.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	4.1	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	4.1	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: P252332

CATALOG NUMBER: LD6B70D010TE EU6B60709040 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0	3388.0
2.5°	3388.0	3392.1	3383.9	3388.0	3379.8	3388.0	3392.1	3400.3
5°	3379.8	3383.9	3375.7	3383.9	3375.7	3383.9	3388.0	3396.2
7.5°	3371.6	3379.8	3371.6	3379.8	3371.6	3379.8	3383.9	3392.1
10°	3371.6	3383.9	3375.7	3388.0	3375.7	3383.9	3392.1	3396.2
12.5°	3371.6	3383.9	3379.8	3388.0	3383.9	3392.1	3400.3	3408.5
15°	3363.5	3375.7	3367.6	3379.8	3375.7	3379.8	3396.2	3396.2
17.5°	3318.5	3330.7	3330.7	3338.9	3338.9	3351.2	3359.4	3367.6
20°	3261.2	3273.4	3269.4	3281.6	3281.6	3293.9	3302.1	3310.3
22.5°	3175.2	3191.6	3187.5	3199.8	3195.7	3203.9	3220.2	3216.2
25°	3064.8	3085.2	3081.1	3089.3	3085.2	3085.2	3093.4	3097.5
27.5°	2929.7	2942.0	2937.9	2946.1	2937.9	2946.1	2954.3	2958.4
30°	2753.8	2762.0	2757.9	2762.0	2757.9	2766.1	2770.2	2778.3
32.5°	2541.0	2553.3	2541.0	2549.2	2545.1	2545.1	2561.5	2553.3
35°	2287.3	2291.4	2295.5	2295.5	2287.3	2291.4	2299.6	2299.6
37.5°	2005.0	2025.4	2000.9	2013.2	2009.1	2009.1	2009.1	2021.4
40°	1710.4	1714.5	1706.3	1706.3	1706.3	1702.2	1718.6	1714.5
42.5°	1432.1	1436.2	1432.1	1419.9	1423.9	1423.9	1436.2	1419.9
45°	1162.1	1170.3	1166.2	1166.2	1158.0	1158.0	1162.1	1153.9
47.5°	920.7	928.8	916.6	920.7	912.5	920.7	916.6	924.7
50°	699.7	707.9	703.8	707.9	707.9	699.7	712.0	695.6
52.5°	523.8	527.8	523.8	519.7	515.6	515.6	523.8	519.7
55°	372.4	368.3	368.3	368.3	372.4	372.4	368.3	364.2
57.5°	249.6	249.6	245.5	245.5	249.6	241.4	245.5	241.4
60°	159.6	159.6	159.6	159.6	155.5	159.6	159.6	159.6
62.5°	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
65°	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
67.5°	40.9	45.0	45.0	45.0	40.9	40.9	40.9	40.9
70°	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6
72.5°	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
75°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
77.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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)