

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: P252636

Luminaire Tested: **LD6B70D010TE EU6B60708030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252636
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: LD6B70D010TE EU6B60708030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7065.0 lumens
Efficiency: N/A
Efficacy: 88.9 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

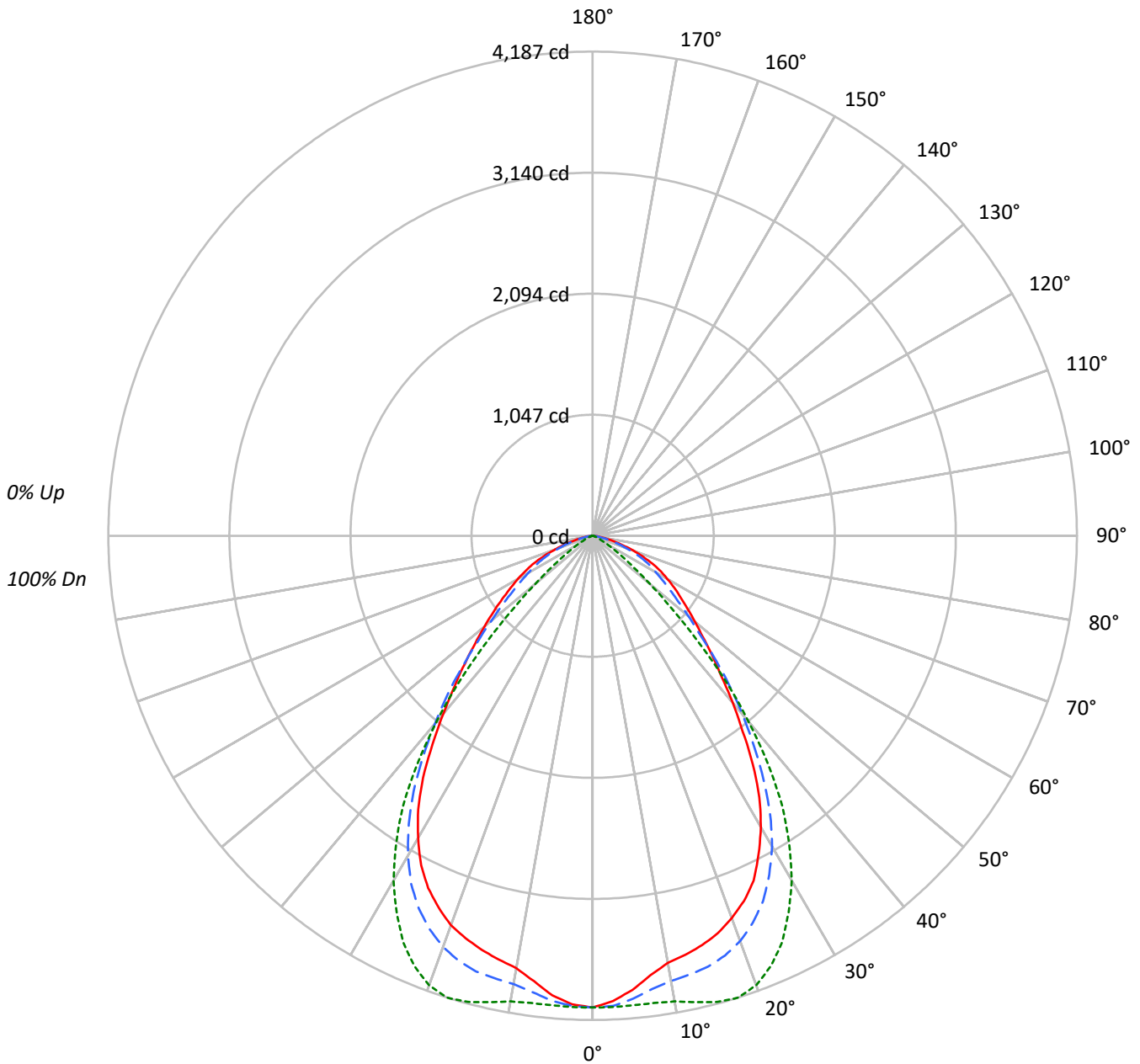
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	266117	266117	266117
5°	258174	266825	261265
10°	248354	270845	251474
15°	247474	281873	250338
20°	244232	287125	248815
25°	236939	279029	242028
30°	219182	259328	227356
35°	192293	227973	203554
40°	160239	178711	170680
45°	134872	117904	144015
50°	116782	64613	123958
55°	105668	34328	108341
60°	97222	17850	97222
65°	88085	9463	85893
70°	71055	5398	65656
75°	48725	3554	45171
80°	31897	1766	28328
85°	21184	3518	17666



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.4	5.4
10°-20°	1099.8	15.6
20°-30°	1625.0	23.0
30°-40°	1641.4	23.2
40°-50°	1131.3	16.0
50°-60°	649.8	9.2
60°-70°	378.2	5.4
70°-80°	138.0	2.0
80°-90°	21.1	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°	3105.2	44.0
0°-40°	4746.6	67.2
0°-60°	6527.8	92.4
0°-90°	7065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7065.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4079	4079	4079	4079	4079	
5°	3942	4018	4074	4036	3989	370
15°	3664	3857	4173	3900	3706	1032
25°	3292	3485	3876	3556	3362	1500
35°	2414	2579	2862	2697	2556	1499
45°	1462	1481	1278	1575	1561	1137
55°	929	816	302	849	952	836
65°	571	481	61	476	556	559
75°	193	156	14	151	179	218
85°	28	14	5	19	24	36
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°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4027.1	4031.8	4036.5	4031.8	4036.5	4055.4	4041.3	4050.7	4050.7	4055.4	4069.5
5°	3942.2	3942.2	3951.7	3946.9	3961.1	3979.9	3965.8	3979.9	3984.7	3994.1	4017.7
7.5°	3833.8	3833.8	3838.5	3838.5	3857.3	3876.2	3866.8	3885.6	3904.5	3923.4	3951.7
10°	3748.9	3758.3	3758.3	3763.0	3781.9	3805.5	3800.8	3824.3	3843.2	3871.5	3909.2
12.5°	3711.2	3715.9	3715.9	3725.3	3744.2	3767.7	3763.0	3786.6	3814.9	3847.9	3885.6
15°	3664.0	3673.4	3668.7	3678.2	3697.0	3720.6	3715.9	3739.5	3772.5	3805.5	3857.3
17.5°	3602.7	3607.4	3612.1	3612.1	3631.0	3649.9	3649.9	3673.4	3711.2	3748.9	3805.5
20°	3517.8	3527.3	3527.3	3532.0	3546.1	3574.4	3569.7	3593.3	3631.0	3668.7	3730.0
22.5°	3418.8	3423.5	3423.5	3428.2	3451.8	3466.0	3470.7	3489.5	3522.5	3565.0	3621.6
25°	3291.5	3296.2	3291.5	3305.6	3315.1	3343.3	3333.9	3357.5	3395.2	3428.2	3484.8
27.5°	3107.6	3117.0	3117.0	3121.7	3145.3	3168.9	3168.9	3192.4	3225.5	3249.0	3305.6
30°	2909.5	2923.7	2909.5	2933.1	2942.5	2961.4	2975.5	2989.7	3018.0	3051.0	3102.9
32.5°	2683.2	2678.4	2683.2	2692.6	2720.9	2735.0	2744.5	2758.6	2786.9	2815.2	2857.6
35°	2414.4	2423.8	2428.5	2447.4	2447.4	2471.0	2475.7	2485.1	2527.6	2546.4	2579.4
37.5°	2131.4	2140.9	2145.6	2155.0	2173.9	2183.3	2197.5	2211.6	2239.9	2272.9	2291.8
40°	1881.5	1881.5	1886.2	1895.7	1909.8	1914.5	1928.7	1947.5	1966.4	1994.7	2013.6
42.5°	1645.7	1650.5	1645.7	1655.2	1669.3	1688.2	1683.5	1707.0	1711.8	1730.6	1744.8
45°	1461.8	1461.8	1452.4	1461.8	1461.8	1480.7	1476.0	1485.4	1480.7	1490.1	1480.7
47.5°	1287.4	1292.1	1287.4	1292.1	1292.1	1292.1	1296.8	1287.4	1292.1	1277.9	1249.6
50°	1150.6	1155.3	1145.9	1150.6	1145.9	1141.2	1145.9	1131.7	1127.0	1108.2	1079.9
52.5°	1032.7	1028.0	1023.3	1023.3	1023.3	1018.6	1013.8	999.7	985.6	966.7	933.7
55°	929.0	924.3	919.5	919.5	910.1	905.4	905.4	891.2	877.1	853.5	815.8
57.5°	834.7	829.9	825.2	825.2	820.5	811.1	811.1	796.9	778.1	749.8	716.8
60°	745.1	745.1	745.1	740.3	740.3	730.9	730.9	716.8	697.9	669.6	631.9
62.5°	664.9	660.2	660.2	660.2	660.2	655.5	650.8	641.3	622.5	594.2	561.2
65°	570.6	570.6	570.6	570.6	565.9	565.9	565.9	551.7	542.3	514.0	481.0
67.5°	466.8	466.8	466.8	466.8	462.1	466.8	466.8	457.4	448.0	419.7	391.4
70°	372.5	367.8	363.1	367.8	363.1	363.1	367.8	358.4	353.7	330.1	301.8
72.5°	273.5	278.2	273.5	273.5	273.5	268.8	273.5	268.8	259.4	240.5	221.6
75°	193.3	198.1	198.1	193.3	193.3	193.3	188.6	188.6	179.2	165.0	155.6
77.5°	132.0	132.0	132.0	132.0	127.3	127.3	127.3	122.6	117.9	108.5	99.0
80°	84.9	84.9	84.9	84.9	80.2	80.2	80.2	75.4	75.4	66.0	56.6
82.5°	51.9	51.9	51.9	51.9	51.9	51.9	47.2	47.2	42.4	37.7	33.0
85°	28.3	28.3	28.3	28.3	28.3	28.3	28.3	23.6	23.6	18.9	14.1
87.5°	9.4	9.4	14.1	14.1	14.1	14.1	14.1	14.1	9.4	9.4	9.4
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°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4060.1	4064.8	4064.8	4064.8	4079.0	4083.7	4069.5	4055.4	4083.7	4079.0	4088.4
5°	4013.0	4027.1	4036.5	4041.3	4055.4	4064.8	4050.7	4046.0	4069.5	4074.3	4079.0
7.5°	3956.4	3979.9	4003.5	4013.0	4031.8	4041.3	4036.5	4036.5	4064.8	4074.3	4074.3
10°	3918.6	3951.7	3979.9	4003.5	4027.1	4041.3	4041.3	4046.0	4079.0	4088.4	4097.8
12.5°	3909.2	3951.7	3989.4	4022.4	4041.3	4064.8	4069.5	4083.7	4116.7	4130.8	4130.8
15°	3885.6	3942.2	3989.4	4031.8	4060.1	4088.4	4097.8	4126.1	4163.9	4173.3	4182.7
17.5°	3843.2	3899.8	3956.4	4008.2	4046.0	4069.5	4097.8	4126.1	4173.3	4187.4	4192.2
20°	3767.7	3833.8	3890.4	3942.2	3979.9	4013.0	4041.3	4074.3	4116.7	4135.6	4140.3
22.5°	3654.6	3720.6	3777.2	3833.8	3871.5	3899.8	3928.1	3965.8	4008.2	4027.1	4027.1
25°	3517.8	3579.1	3640.4	3682.9	3720.6	3753.6	3767.7	3810.2	3852.6	3876.2	3876.2
27.5°	3343.3	3399.9	3456.5	3503.7	3527.3	3555.5	3579.1	3616.8	3649.9	3668.7	3687.6
30°	3121.7	3178.3	3230.2	3277.3	3305.6	3333.9	3357.5	3385.8	3418.8	3442.4	3447.1
32.5°	2881.2	2928.4	2980.2	3027.4	3055.7	3065.1	3088.7	3117.0	3145.3	3164.2	3168.9
35°	2617.1	2650.2	2683.2	2725.6	2753.9	2753.9	2777.5	2796.3	2819.9	2862.4	2852.9
37.5°	2305.9	2353.1	2376.7	2390.8	2409.7	2428.5	2433.2	2456.8	2485.1	2494.5	2508.7
40°	2013.6	2027.7	2041.8	2041.8	2060.7	2060.7	2060.7	2065.4	2093.7	2098.4	2117.3
42.5°	1721.2	1721.2	1707.0	1692.9	1697.6	1692.9	1669.3	1669.3	1683.5	1702.3	1702.3
45°	1447.7	1414.7	1372.2	1339.2	1315.6	1306.2	1277.9	1277.9	1273.2	1277.9	1296.8
47.5°	1216.6	1160.0	1089.3	1023.3	999.7	980.8	938.4	919.5	910.1	914.8	924.3
50°	1023.3	962.0	881.8	801.6	759.2	735.6	683.8	650.8	646.0	636.6	655.5
52.5°	881.8	806.4	721.5	627.2	584.7	547.0	490.4	462.1	443.3	443.3	448.0
55°	759.2	679.0	584.7	490.4	448.0	419.7	363.1	325.4	306.5	301.8	315.9
57.5°	655.5	580.0	485.7	391.4	349.0	315.9	259.4	226.3	212.2	202.8	207.5
60°	575.3	499.9	405.5	315.9	278.2	240.5	193.3	155.6	136.8	136.8	141.5
62.5°	499.9	429.1	344.2	259.4	226.3	193.3	141.5	108.5	94.3	89.6	94.3
65°	424.4	358.4	287.7	216.9	183.9	155.6	113.2	84.9	66.0	61.3	66.0
67.5°	344.2	292.4	231.1	174.5	146.2	122.6	84.9	61.3	47.2	42.4	47.2
70°	268.8	221.6	174.5	127.3	108.5	89.6	61.3	47.2	33.0	28.3	33.0
72.5°	193.3	160.3	122.6	89.6	75.4	61.3	42.4	33.0	23.6	18.9	23.6
75°	132.0	108.5	80.2	56.6	47.2	42.4	28.3	18.9	14.1	14.1	14.1
77.5°	84.9	66.0	51.9	37.7	28.3	23.6	14.1	9.4	9.4	9.4	9.4
80°	47.2	37.7	28.3	18.9	14.1	14.1	9.4	9.4	4.7	4.7	4.7
82.5°	28.3	18.9	14.1	9.4	9.4	4.7	4.7	4.7	4.7	4.7	4.7
85°	14.1	9.4	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
87.5°	4.7	4.7	4.7	4.7	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°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4069.5	4074.3	4060.1	4079.0	4064.8	4083.7	4083.7	4064.8	4069.5	4060.1	4079.0
5°	4060.1	4060.1	4050.7	4064.8	4046.0	4064.8	4060.1	4027.1	4036.5	4017.7	4036.5
7.5°	4060.1	4050.7	4036.5	4050.7	4027.1	4041.3	4022.4	3989.4	3979.9	3956.4	3956.4
10°	4074.3	4060.1	4041.3	4046.0	4022.4	4027.1	3998.8	3951.7	3937.5	3909.2	3899.8
12.5°	4107.3	4093.1	4064.8	4074.3	4041.3	4041.3	4003.5	3946.9	3918.6	3880.9	3871.5
15°	4154.4	4130.8	4097.8	4102.6	4069.5	4050.7	4003.5	3937.5	3899.8	3847.9	3833.8
17.5°	4163.9	4140.3	4097.8	4097.8	4055.4	4031.8	3975.2	3899.8	3852.6	3800.8	3772.5
20°	4112.0	4088.4	4041.3	4036.5	3998.8	3965.8	3904.5	3829.1	3781.9	3725.3	3701.7
22.5°	4003.5	3975.2	3932.8	3928.1	3890.4	3871.5	3805.5	3730.0	3682.9	3626.3	3607.4
25°	3843.2	3829.1	3786.6	3781.9	3748.9	3725.3	3668.7	3598.0	3555.5	3499.0	3480.1
27.5°	3654.6	3640.4	3598.0	3598.0	3560.3	3546.1	3494.2	3428.2	3395.2	3343.3	3319.8
30°	3428.2	3409.4	3385.8	3381.1	3348.1	3333.9	3286.8	3225.5	3192.4	3150.0	3140.6
32.5°	3159.4	3145.3	3131.1	3126.4	3093.4	3079.3	3046.3	2985.0	2956.7	2918.9	2904.8
35°	2848.2	2838.8	2824.6	2819.9	2805.8	2791.6	2758.6	2711.5	2697.3	2669.0	2654.9
37.5°	2489.8	2499.3	2489.8	2489.8	2475.7	2480.4	2452.1	2423.8	2409.7	2390.8	2381.4
40°	2103.1	2122.0	2136.2	2136.2	2131.4	2150.3	2145.6	2122.0	2117.3	2107.9	2103.1
42.5°	1711.8	1721.2	1749.5	1768.3	1763.6	1810.8	1815.5	1834.4	1848.5	1839.1	1843.8
45°	1301.5	1329.8	1367.5	1386.4	1410.0	1471.3	1504.3	1542.0	1575.0	1593.9	1589.2
47.5°	938.4	971.4	1013.8	1042.1	1084.6	1160.0	1244.9	1292.1	1339.2	1362.8	1386.4
50°	679.0	712.1	763.9	806.4	834.7	938.4	1028.0	1089.3	1141.2	1174.2	1197.8
52.5°	476.3	514.0	570.6	608.3	650.8	749.8	853.5	924.3	980.8	1023.3	1046.9
55°	330.1	372.5	424.4	462.1	509.3	613.0	712.1	787.5	848.8	886.5	914.8
57.5°	231.1	268.8	320.7	353.7	400.8	499.9	598.9	674.3	735.6	773.4	806.4
60°	155.6	193.3	245.2	278.2	315.9	415.0	504.6	584.7	641.3	679.0	712.1
62.5°	108.5	141.5	193.3	226.3	259.4	344.2	429.1	499.9	556.4	598.9	627.2
65°	84.9	113.2	155.6	183.9	216.9	287.7	358.4	419.7	476.3	518.7	537.6
67.5°	61.3	89.6	122.6	146.2	169.8	231.1	292.4	339.5	391.4	424.4	448.0
70°	42.4	61.3	89.6	108.5	127.3	174.5	221.6	264.1	301.8	325.4	344.2
72.5°	33.0	42.4	61.3	75.4	89.6	122.6	160.3	193.3	221.6	240.5	259.4
75°	18.9	28.3	42.4	51.9	61.3	84.9	108.5	132.0	150.9	165.0	174.5
77.5°	9.4	14.1	23.6	28.3	37.7	51.9	70.7	84.9	99.0	108.5	117.9
80°	9.4	9.4	14.1	14.1	18.9	28.3	37.7	47.2	56.6	66.0	70.7
82.5°	4.7	4.7	9.4	9.4	9.4	14.1	18.9	28.3	33.0	37.7	42.4
85°	4.7	4.7	4.7	4.7	4.7	9.4	9.4	14.1	18.9	23.6	23.6
87.5°	0.0	0.0	4.7	4.7	4.7	4.7	4.7	9.4	9.4	9.4	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: P252636

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0	4079.0
2.5°	4064.8	4074.3	4069.5	4079.0	4064.8	4060.1	4069.5	4055.4
5°	4013.0	4017.7	4013.0	4013.0	4003.5	3994.1	4003.5	3989.4
7.5°	3932.8	3932.8	3918.6	3918.6	3899.8	3890.4	3890.4	3885.6
10°	3866.8	3852.6	3838.5	3843.2	3814.9	3805.5	3800.8	3796.0
12.5°	3833.8	3824.3	3800.8	3800.8	3772.5	3763.0	3758.3	3753.6
15°	3796.0	3777.2	3758.3	3753.6	3730.0	3720.6	3715.9	3706.4
17.5°	3730.0	3715.9	3692.3	3692.3	3668.7	3664.0	3654.6	3649.9
20°	3659.3	3640.4	3621.6	3621.6	3593.3	3593.3	3579.1	3583.8
22.5°	3560.3	3546.1	3527.3	3527.3	3503.7	3499.0	3484.8	3480.1
25°	3442.4	3423.5	3409.4	3404.6	3385.8	3376.4	3371.6	3362.2
27.5°	3286.8	3272.6	3258.5	3249.0	3225.5	3220.7	3206.6	3211.3
30°	3093.4	3084.0	3079.3	3069.8	3041.5	3032.1	3032.1	3018.0
32.5°	2881.2	2867.1	2857.6	2843.5	2819.9	2815.2	2801.1	2805.8
35°	2621.9	2603.0	2588.9	2593.6	2565.3	2560.6	2551.1	2555.8
37.5°	2353.1	2334.2	2315.3	2310.6	2287.1	2287.1	2272.9	2272.9
40°	2074.9	2056.0	2046.6	2046.6	2018.3	2023.0	2008.8	2004.1
42.5°	1824.9	1806.1	1801.4	1796.6	1782.5	1777.8	1763.6	1768.3
45°	1589.2	1584.4	1584.4	1575.0	1560.9	1556.1	1560.9	1560.9
47.5°	1381.7	1386.4	1381.7	1381.7	1372.2	1381.7	1372.2	1376.9
50°	1207.2	1216.6	1216.6	1216.6	1211.9	1216.6	1216.6	1221.3
52.5°	1061.0	1075.2	1070.4	1075.2	1070.4	1079.9	1075.2	1079.9
55°	933.7	943.1	947.8	952.5	952.5	952.5	952.5	952.5
57.5°	815.8	829.9	834.7	839.4	839.4	848.8	839.4	839.4
60°	721.5	735.6	740.3	745.1	745.1	749.8	740.3	745.1
62.5°	636.6	650.8	650.8	655.5	655.5	655.5	646.0	650.8
65°	551.7	556.4	561.2	561.2	556.4	556.4	551.7	556.4
67.5°	457.4	462.1	457.4	457.4	452.7	452.7	443.3	448.0
70°	353.7	353.7	358.4	353.7	349.0	353.7	349.0	344.2
72.5°	264.1	264.1	264.1	259.4	259.4	254.6	259.4	259.4
75°	179.2	179.2	183.9	183.9	183.9	183.9	179.2	179.2
77.5°	117.9	117.9	117.9	117.9	122.6	117.9	117.9	117.9
80°	75.4	75.4	80.2	80.2	75.4	75.4	75.4	75.4
82.5°	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
85°	28.3	28.3	28.3	28.3	23.6	23.6	23.6	23.6
87.5°	14.1	14.1	14.1	14.1	14.1	14.1	9.4	9.4
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)