

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: P252196

Luminaire Tested: **LD6B50D010TE EU6B30508040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30508040 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE 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: 7048.0 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

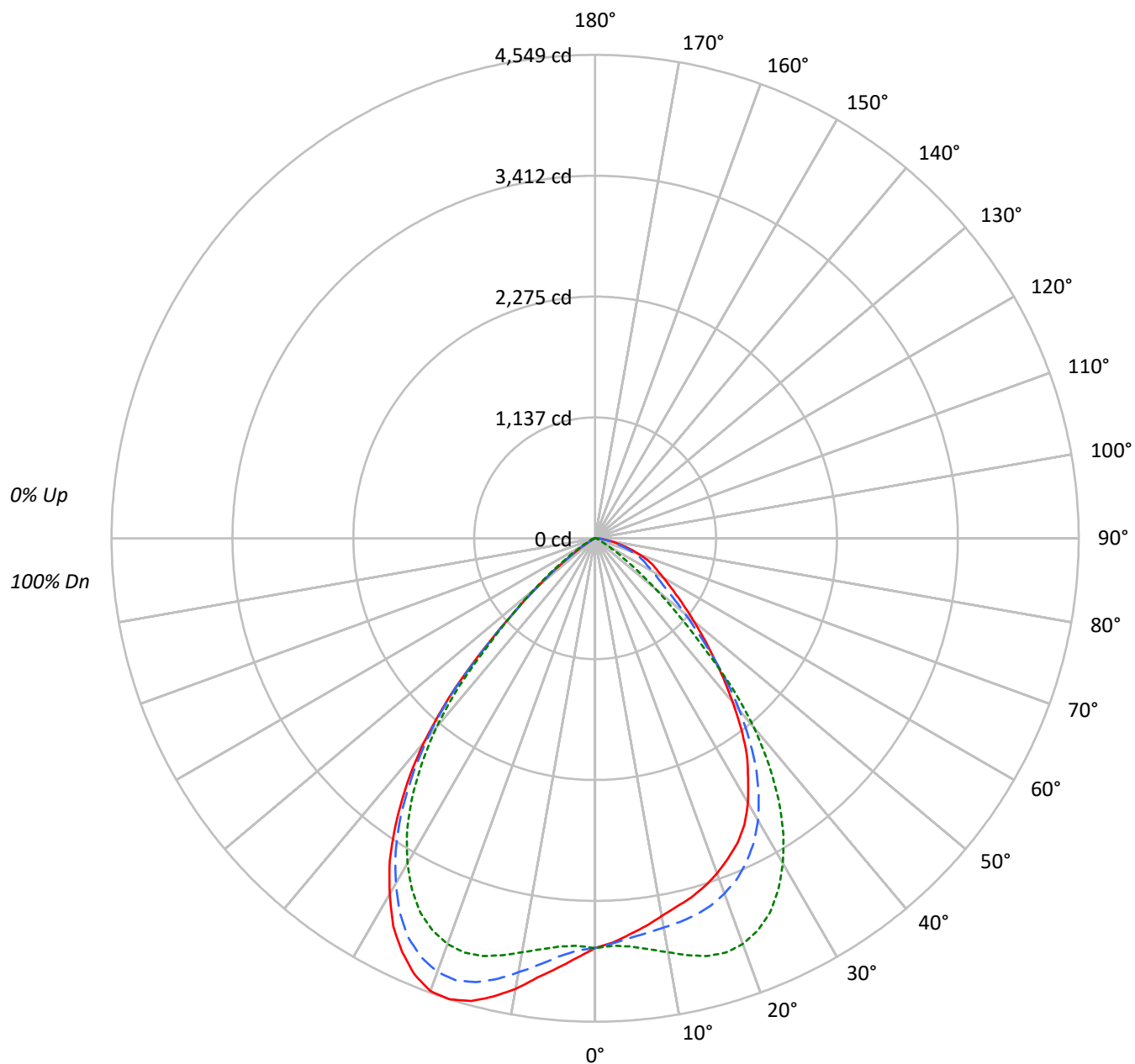
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	251555	251555	251555
5°	245030	252516	265797
10°	239072	262027	285227
15°	236276	274869	304500
20°	232895	282029	314792
25°	227941	279950	309140
30°	216606	266032	291028
35°	198170	239864	259823
40°	171413	198095	213169
45°	144550	129917	139448
50°	122719	75199	70713
55°	106498	36057	27253
60°	96191	16832	6733
65°	93318	9679	2269
70°	83682	7725	2117
75°	68765	5571	933
80°	51246	2780	0
85°	44165	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.4	5.3
10°-20°	1135.0	16.1
20°-30°	1734.3	24.6
30°-40°	1813.9	25.7
40°-50°	1176.7	16.7
50°-60°	467.2	6.6
60°-70°	221.6	3.1
70°-80°	105.4	1.5
80°-90°	21.5	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°	3241.7	46.0
0°-40°	5055.6	71.7
0°-60°	6699.5	95.1
0°-90°	7048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7048.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3856	3856	3856	3856	3856	
5°	3742	3775	3856	3952	4059	353
15°	3498	3668	4070	4324	4508	986
25°	3166	3366	3889	4151	4294	1450
35°	2488	2639	3012	3189	3262	1539
45°	1567	1552	1408	1493	1511	1219
55°	936	796	317	247	240	848
65°	604	501	63	15	15	590
75°	273	221	22	7	4	294
85°	59	37	0	0	0	69
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°	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8
2.5°	3807.9	3815.3	3774.7	3763.7	3793.1	3804.2	3807.9	3796.8	3800.5	3815.3	3815.3
5°	3741.5	3748.9	3712.0	3701.0	3730.5	3737.9	3748.9	3745.2	3756.3	3778.4	3774.7
7.5°	3678.9	3689.9	3649.4	3634.6	3671.5	3689.9	3697.3	3697.3	3712.0	3741.5	3745.2
10°	3608.8	3623.6	3586.7	3579.3	3619.9	3638.3	3642.0	3649.4	3671.5	3712.0	3719.4
12.5°	3549.9	3564.6	3538.8	3527.7	3572.0	3590.4	3597.8	3612.5	3638.3	3689.9	3697.3
15°	3498.2	3509.3	3479.8	3472.4	3516.7	3538.8	3542.5	3564.6	3597.8	3656.8	3667.8
17.5°	3431.9	3439.3	3417.1	3409.8	3454.0	3476.1	3479.8	3505.6	3546.2	3605.1	3623.6
20°	3354.5	3361.9	3339.7	3332.4	3376.6	3402.4	3406.1	3428.2	3476.1	3538.8	3557.2
22.5°	3262.3	3277.1	3251.3	3243.9	3288.1	3310.2	3321.3	3339.7	3387.7	3450.3	3476.1
25°	3166.5	3166.5	3148.1	3144.4	3184.9	3210.7	3207.0	3232.8	3280.8	3343.4	3365.5
27.5°	3041.2	3037.5	3019.0	3015.3	3059.6	3081.7	3074.3	3100.1	3144.4	3207.0	3229.2
30°	2875.3	2882.6	2856.8	2849.5	2886.3	2923.2	2919.5	2945.3	2989.5	3048.5	3063.3
32.5°	2676.2	2683.6	2679.9	2668.8	2702.0	2720.4	2731.5	2749.9	2786.8	2849.5	2864.2
35°	2488.2	2477.2	2462.4	2462.4	2495.6	2525.1	2514.0	2536.1	2573.0	2635.7	2639.4
37.5°	2256.0	2252.3	2244.9	2237.6	2274.4	2281.8	2285.5	2300.2	2333.4	2385.0	2377.6
40°	2012.7	2016.4	2012.7	1997.9	2020.1	2049.6	2045.9	2053.2	2082.7	2119.6	2108.5
42.5°	1784.1	1784.1	1784.1	1769.4	1795.2	1809.9	1817.3	1813.6	1821.0	1854.2	1839.4
45°	1566.7	1570.3	1566.7	1563.0	1566.7	1574.0	1566.7	1563.0	1563.0	1574.0	1551.9
47.5°	1378.7	1378.7	1367.6	1356.5	1367.6	1371.3	1360.2	1349.2	1345.5	1341.8	1304.9
50°	1209.1	1205.4	1201.7	1183.3	1194.3	1198.0	1183.3	1175.9	1161.2	1142.7	1098.5
52.5°	1061.6	1058.0	1054.3	1035.8	1043.2	1046.9	1032.1	1017.4	999.0	984.2	928.9
55°	936.3	932.6	932.6	921.6	914.2	921.6	906.8	895.8	870.0	851.5	796.2
57.5°	829.4	829.4	822.0	811.0	814.7	814.7	799.9	785.2	763.1	740.9	696.7
60°	737.2	737.2	737.2	726.2	726.2	726.2	718.8	704.1	685.6	663.5	619.3
62.5°	663.5	663.5	659.8	648.8	652.5	652.5	645.1	630.3	611.9	597.2	552.9
65°	604.5	604.5	604.5	593.5	593.5	597.2	589.8	575.1	560.3	541.9	501.3
67.5°	530.8	527.1	527.1	519.8	523.4	527.1	519.8	508.7	490.3	479.2	442.3
70°	438.7	442.3	446.0	435.0	438.7	438.7	435.0	423.9	412.9	401.8	368.6
72.5°	357.6	357.6	353.9	350.2	350.2	353.9	346.5	335.4	328.1	320.7	294.9
75°	272.8	269.1	272.8	265.4	265.4	265.4	258.0	254.4	250.7	239.6	221.2
77.5°	199.1	195.4	195.4	188.0	191.7	191.7	188.0	180.6	173.3	169.6	154.8
80°	136.4	136.4	136.4	132.7	132.7	129.0	129.0	125.3	118.0	114.3	106.9
82.5°	92.2	92.2	92.2	88.5	88.5	88.5	84.8	81.1	77.4	73.7	66.4
85°	59.0	59.0	59.0	55.3	55.3	55.3	51.6	51.6	47.9	44.2	36.9
87.5°	33.2	33.2	33.2	29.5	29.5	29.5	29.5	29.5	25.8	22.1	18.4
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°	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8
2.5°	3841.1	3789.5	3822.6	3822.6	3811.6	3841.1	3859.5	3874.2	3870.6	3837.4	3833.7
5°	3811.6	3767.3	3804.2	3807.9	3796.8	3837.4	3863.2	3881.6	3885.3	3855.8	3859.5
7.5°	3789.5	3752.6	3800.5	3815.3	3811.6	3848.4	3877.9	3907.4	3922.2	3900.0	3903.7
10°	3778.4	3748.9	3800.5	3822.6	3826.3	3866.9	3911.1	3951.7	3970.1	3955.3	3966.4
12.5°	3763.7	3745.2	3804.2	3837.4	3852.1	3892.7	3948.0	3995.9	4025.4	4018.0	4040.1
15°	3748.9	3734.2	3804.2	3852.1	3870.6	3907.4	3970.1	4040.1	4073.3	4069.6	4099.1
17.5°	3712.0	3708.4	3782.1	3833.7	3859.5	3903.7	3962.7	4047.5	4080.7	4088.0	4124.9
20°	3653.1	3653.1	3734.2	3789.5	3818.9	3859.5	3933.2	4014.3	4054.9	4062.2	4102.8
22.5°	3572.0	3579.3	3656.8	3712.0	3756.3	3785.8	3863.2	3948.0	3984.8	3995.9	4040.1
25°	3465.1	3472.4	3546.2	3601.5	3649.4	3682.6	3756.3	3833.7	3877.9	3889.0	3922.2
27.5°	3325.0	3339.7	3409.8	3465.1	3505.6	3527.7	3605.1	3686.2	3719.4	3730.5	3763.7
30°	3162.8	3166.5	3236.5	3284.4	3325.0	3343.4	3409.8	3494.6	3520.4	3531.4	3579.3
32.5°	2963.7	2960.1	3026.4	3070.6	3103.8	3125.9	3196.0	3251.3	3277.1	3295.5	3321.3
35°	2724.1	2720.4	2768.4	2820.0	2845.8	2853.2	2923.2	2982.2	2996.9	3011.7	3044.8
37.5°	2455.0	2455.0	2495.6	2521.4	2550.9	2561.9	2595.1	2661.5	2687.3	2683.6	2709.4
40°	2171.2	2156.5	2185.9	2211.7	2219.1	2222.8	2256.0	2307.6	2326.0	2326.0	2344.5
42.5°	1872.6	1850.5	1854.2	1868.9	1876.3	1850.5	1872.6	1905.8	1894.7	1909.5	1913.2
45°	1555.6	1522.4	1507.7	1474.5	1481.9	1456.1	1441.3	1448.7	1445.0	1408.1	1415.5
47.5°	1297.6	1238.6	1212.8	1164.9	1153.8	1124.3	1105.9	1072.7	1043.2	1043.2	1024.8
50°	1080.1	1021.1	969.5	914.2	895.8	870.0	829.4	785.2	763.1	740.9	722.5
52.5°	906.8	844.2	781.5	722.5	696.7	663.5	608.2	564.0	523.4	501.3	479.2
55°	766.7	696.7	630.3	567.7	534.5	501.3	446.0	394.4	346.5	317.0	298.6
57.5°	659.8	593.5	523.4	457.1	427.6	390.7	331.8	276.5	232.2	199.1	180.6
60°	582.4	516.1	453.4	383.4	353.9	317.0	254.4	202.7	158.5	129.0	106.9
62.5°	516.1	457.1	390.7	328.1	298.6	261.7	202.7	151.1	110.6	81.1	62.7
65°	468.2	409.2	353.9	291.2	265.4	228.5	173.3	125.3	88.5	62.7	44.2
67.5°	412.9	361.3	306.0	254.4	228.5	199.1	147.4	106.9	73.7	51.6	36.9
70°	346.5	306.0	258.0	210.1	191.7	165.9	121.6	88.5	59.0	40.5	29.5
72.5°	276.5	243.3	206.4	169.6	154.8	129.0	99.5	70.0	44.2	29.5	22.1
75°	210.1	184.3	154.8	129.0	114.3	99.5	73.7	51.6	33.2	22.1	14.7
77.5°	143.8	132.7	110.6	88.5	81.1	70.0	47.9	33.2	22.1	14.7	7.4
80°	99.5	88.5	73.7	59.0	51.6	44.2	29.5	22.1	11.1	7.4	3.7
82.5°	62.7	51.6	44.2	36.9	33.2	25.8	18.4	11.1	7.4	3.7	3.7
85°	33.2	29.5	25.8	18.4	18.4	14.7	11.1	7.4	3.7	0.0	0.0
87.5°	18.4	14.7	11.1	7.4	7.4	3.7	3.7	3.7	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°	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8
2.5°	3877.9	3877.9	3874.2	3918.5	3866.9	3918.5	3892.7	3918.5	3881.6	3877.9	3881.6
5°	3907.4	3918.5	3922.2	3962.7	3914.8	3977.5	3955.3	3977.5	3951.7	3959.0	3970.1
7.5°	3966.4	3984.8	3981.1	4032.8	3984.8	4054.9	4040.1	4073.3	4047.5	4054.9	4069.6
10°	4032.8	4054.9	4058.6	4110.2	4065.9	4150.7	4132.3	4169.1	4147.0	4158.1	4176.5
12.5°	4110.2	4136.0	4139.7	4198.6	4150.7	4239.2	4228.1	4265.0	4246.6	4257.6	4279.7
15°	4169.1	4206.0	4213.4	4272.4	4220.8	4312.9	4305.5	4353.5	4324.0	4342.4	4360.8
17.5°	4198.6	4231.8	4246.6	4301.8	4257.6	4349.8	4342.4	4382.9	4360.8	4379.3	4401.4
20°	4180.2	4220.8	4231.8	4287.1	4242.9	4335.0	4324.0	4364.5	4342.4	4357.1	4379.3
22.5°	4113.8	4154.4	4169.1	4220.8	4180.2	4265.0	4261.3	4298.2	4268.7	4287.1	4305.5
25°	3995.9	4040.1	4047.5	4095.4	4051.2	4139.7	4132.3	4172.8	4150.7	4161.8	4187.6
27.5°	3826.3	3877.9	3889.0	3929.5	3896.4	3970.1	3970.1	4003.3	3977.5	3977.5	4003.3
30°	3623.6	3675.2	3682.6	3715.7	3686.2	3752.6	3756.3	3789.5	3748.9	3771.0	3774.7
32.5°	3376.6	3409.8	3431.9	3461.4	3417.1	3501.9	3490.9	3516.7	3494.6	3494.6	3513.0
35°	3078.0	3118.6	3129.6	3166.5	3129.6	3196.0	3196.0	3210.7	3188.6	3188.6	3218.1
37.5°	2753.6	2783.1	2786.8	2823.7	2794.2	2849.5	2845.8	2856.8	2834.7	2849.5	2849.5
40°	2373.9	2396.1	2403.4	2421.9	2418.2	2458.7	2455.0	2462.4	2451.4	2455.0	2462.4
42.5°	1931.6	1961.1	1975.8	1990.6	1968.5	2023.7	2012.7	2023.7	2020.1	2023.7	2034.8
45°	1422.9	1445.0	1456.1	1459.8	1452.4	1485.6	1511.4	1489.2	1492.9	1485.6	1500.3
47.5°	1028.5	1032.1	1024.8	1046.9	1028.5	1043.2	1050.6	1054.3	1032.1	1028.5	1043.2
50°	704.1	722.5	696.7	707.8	704.1	718.8	711.4	715.1	693.0	704.1	696.7
52.5°	468.2	464.5	457.1	460.8	453.4	453.4	453.4	460.8	446.0	438.7	431.3
55°	283.8	276.5	261.7	258.0	258.0	261.7	254.4	247.0	247.0	243.3	243.3
57.5°	165.9	154.8	147.4	143.8	136.4	132.7	129.0	129.0	121.6	121.6	121.6
60°	92.2	81.1	73.7	66.4	66.4	62.7	59.0	55.3	55.3	55.3	51.6
62.5°	47.9	40.5	33.2	29.5	29.5	25.8	22.1	22.1	22.1	22.1	18.4
65°	33.2	25.8	22.1	18.4	18.4	14.7	14.7	14.7	14.7	14.7	14.7
67.5°	25.8	22.1	18.4	14.7	14.7	14.7	11.1	11.1	11.1	11.1	11.1
70°	22.1	14.7	14.7	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
72.5°	14.7	14.7	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
75°	11.1	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
77.5°	3.7	3.7	3.7	3.7	3.7	3.7	0.0	0.0	0.0	0.0	0.0
80°	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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



TEST NUMBER: P252196

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8	3855.8
2.5°	3914.8	3911.1	3914.8	3922.2	3907.4	3951.7	3929.5	3951.7
5°	3999.6	4003.3	4006.9	4018.0	3999.6	4054.9	4025.4	4058.6
7.5°	4110.2	4113.8	4117.5	4128.6	4117.5	4172.8	4139.7	4169.1
10°	4224.4	4231.8	4231.8	4250.2	4239.2	4290.8	4268.7	4305.5
12.5°	4331.3	4338.7	4346.1	4357.1	4349.8	4405.1	4386.6	4416.1
15°	4416.1	4430.9	4434.6	4449.3	4441.9	4500.9	4478.8	4508.3
17.5°	4456.7	4471.4	4471.4	4489.8	4482.5	4545.1	4515.6	4548.8
20°	4434.6	4445.6	4449.3	4467.7	4460.4	4523.0	4493.5	4534.1
22.5°	4364.5	4368.2	4371.9	4390.3	4386.6	4441.9	4416.1	4441.9
25°	4235.5	4246.6	4242.9	4257.6	4257.6	4301.8	4272.4	4294.5
27.5°	4051.2	4062.2	4062.2	4080.7	4065.9	4110.2	4080.7	4113.8
30°	3826.3	3837.4	3830.0	3844.8	3830.0	3874.2	3852.1	3863.2
32.5°	3557.2	3557.2	3560.9	3564.6	3557.2	3597.8	3575.7	3597.8
35°	3236.5	3243.9	3247.6	3251.3	3243.9	3273.4	3247.6	3262.3
37.5°	2875.3	2893.7	2890.0	2893.7	2882.6	2919.5	2897.4	2904.8
40°	2488.2	2488.2	2484.5	2491.9	2480.8	2510.3	2495.6	2503.0
42.5°	2038.5	2049.6	2034.8	2053.2	2023.7	2064.3	2049.6	2038.5
45°	1529.8	1515.0	1511.4	1515.0	1504.0	1507.7	1518.7	1511.4
47.5°	1043.2	1043.2	1035.8	1024.8	1039.5	1043.2	1028.5	1028.5
50°	700.4	700.4	693.0	689.3	696.7	693.0	685.6	696.7
52.5°	446.0	431.3	431.3	438.7	431.3	423.9	435.0	427.6
55°	243.3	235.9	235.9	243.3	235.9	235.9	232.2	239.6
57.5°	118.0	121.6	118.0	118.0	118.0	118.0	114.3	118.0
60°	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
62.5°	22.1	22.1	18.4	18.4	18.4	18.4	18.4	18.4
65°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
67.5°	11.1	11.1	11.1	11.1	11.1	14.7	11.1	11.1
70°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
72.5°	11.1	11.1	14.7	14.7	14.7	14.7	14.7	14.7
75°	7.4	7.4	7.4	3.7	3.7	3.7	3.7	3.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)