

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: P252638

Luminaire Tested: **LD6B70D010TE EU6B60708040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252638
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 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: 7318.0 lumens
Efficiency: N/A
Efficacy: 92.1 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

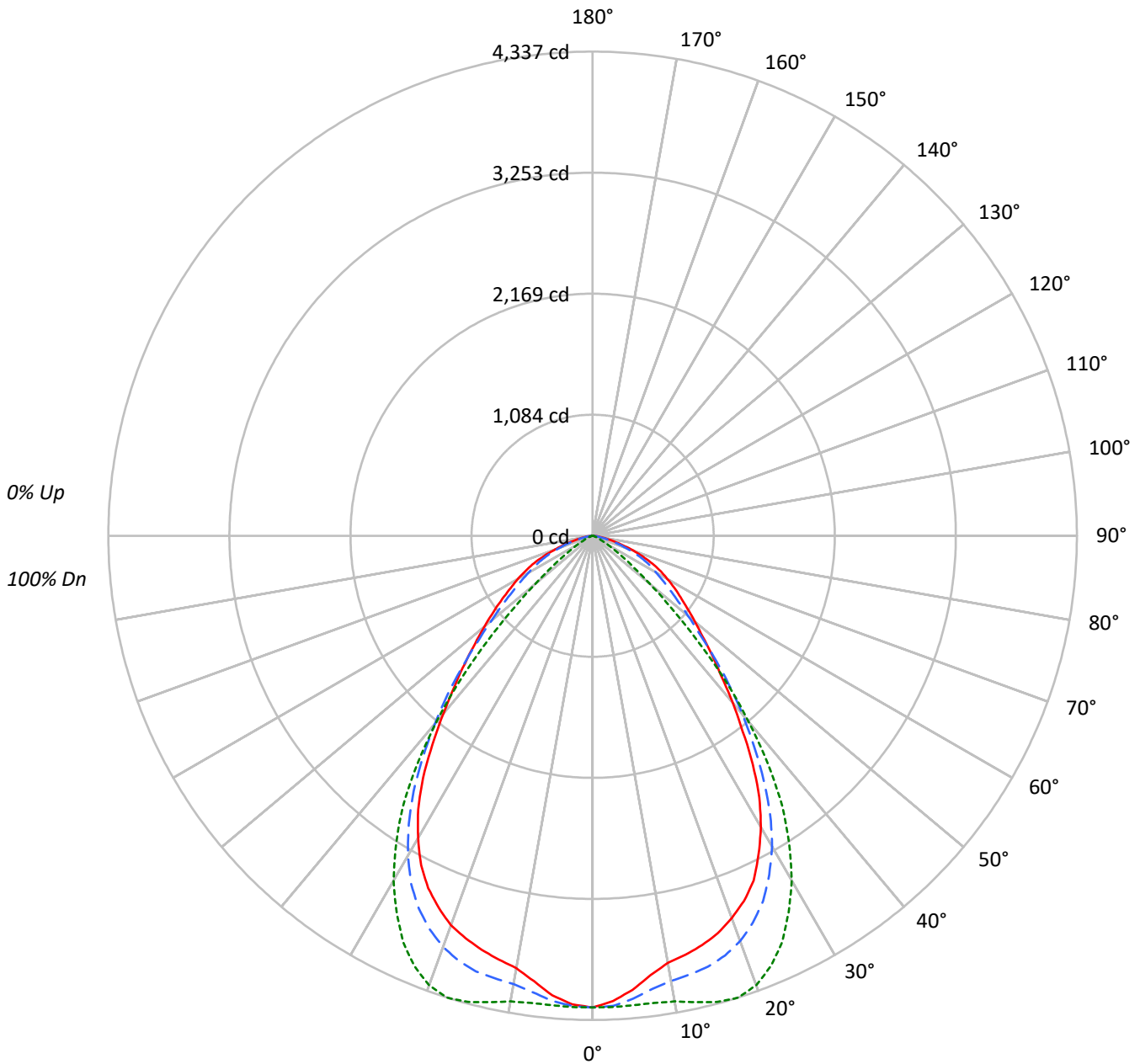
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79			79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56			56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50			50
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46			46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42			42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38			38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35			35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	275642	275642	275642
5°	267421	276380	270617
10°	257244	280543	260483
15°	256336	291964	259308
20°	252980	297407	257729
25°	245419	289020	250695
30°	227032	268609	235492
35°	199174	236137	210850
40°	165979	185116	176795
45°	139706	122130	149173
50°	120963	66927	128403
55°	109444	35556	112231
60°	100692	18476	100692
65°	91234	9803	88980
70°	73611	5589	68022
75°	50490	3705	46784
80°	33025	1841	29380
85°	21933	3668	18265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.0	5.4
10°-20°	1139.2	15.6
20°-30°	1683.2	23.0
30°-40°	1700.2	23.2
40°-50°	1171.9	16.0
50°-60°	673.0	9.2
60°-70°	391.7	5.4
70°-80°	142.9	2.0
80°-90°	21.9	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°	3216.4	44.0
0°-40°	4916.6	67.2
0°-60°	6761.5	92.4
0°-90°	7318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7318.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4225	4225	4225	4225	4225	
5°	4083	4162	4220	4181	4132	383
15°	3795	3996	4323	4039	3839	1069
25°	3409	3610	4015	3683	3483	1553
35°	2501	2672	2965	2794	2647	1552
45°	1514	1534	1324	1631	1617	1177
55°	962	845	313	879	987	866
65°	591	498	64	493	576	579
75°	200	161	15	156	186	226
85°	29	15	5	20	24	37
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°	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0
2.5°	4171.3	4176.2	4181.1	4176.2	4181.1	4200.6	4186.0	4195.7	4195.7	4200.6	4215.3
5°	4083.4	4083.4	4093.2	4088.3	4102.9	4122.5	4107.8	4122.5	4127.4	4137.1	4161.5
7.5°	3971.1	3971.1	3975.9	3975.9	3995.5	4015.0	4005.2	4024.8	4044.3	4063.9	4093.2
10°	3883.1	3892.9	3892.9	3897.8	3917.3	3941.7	3936.9	3961.3	3980.8	4010.1	4049.2
12.5°	3844.1	3848.9	3848.9	3858.7	3878.3	3902.7	3897.8	3922.2	3951.5	3985.7	4024.8
15°	3795.2	3805.0	3800.1	3809.9	3829.4	3853.8	3848.9	3873.4	3907.6	3941.7	3995.5
17.5°	3731.7	3736.6	3741.5	3741.5	3761.0	3780.6	3780.6	3805.0	3844.1	3883.1	3941.7
20°	3643.8	3653.6	3653.6	3658.5	3673.1	3702.4	3697.5	3721.9	3761.0	3800.1	3863.6
22.5°	3541.2	3546.1	3546.1	3551.0	3575.4	3590.1	3595.0	3614.5	3648.7	3692.6	3751.3
25°	3409.3	3414.2	3409.3	3424.0	3433.8	3463.1	3453.3	3477.7	3516.8	3551.0	3609.6
27.5°	3218.9	3228.6	3228.6	3233.5	3257.9	3282.3	3282.3	3306.8	3341.0	3365.4	3424.0
30°	3013.7	3028.4	3013.7	3038.1	3047.9	3067.4	3082.1	3096.7	3126.0	3160.2	3214.0
32.5°	2779.2	2774.4	2779.2	2789.0	2818.3	2833.0	2842.7	2857.4	2886.7	2916.0	2960.0
35°	2500.8	2510.6	2515.5	2535.0	2535.0	2559.4	2564.3	2574.1	2618.1	2637.6	2671.8
37.5°	2207.8	2217.5	2222.4	2232.2	2251.7	2261.5	2276.2	2290.8	2320.1	2354.3	2373.8
40°	1948.9	1948.9	1953.8	1963.5	1978.2	1983.1	1997.7	2017.3	2036.8	2066.1	2085.7
42.5°	1704.7	1709.6	1704.7	1714.4	1729.1	1748.6	1743.7	1768.2	1773.1	1792.6	1807.2
45°	1514.2	1514.2	1504.4	1514.2	1514.2	1533.7	1528.8	1538.6	1533.7	1543.5	1533.7
47.5°	1333.5	1338.3	1333.5	1338.3	1338.3	1338.3	1343.2	1333.5	1338.3	1323.7	1294.4
50°	1191.8	1196.7	1186.9	1191.8	1186.9	1182.0	1186.9	1172.3	1167.4	1147.8	1118.5
52.5°	1069.7	1064.8	1059.9	1059.9	1059.9	1055.0	1050.2	1035.5	1020.8	1001.3	967.1
55°	962.2	957.4	952.5	952.5	942.7	937.8	937.8	923.2	908.5	884.1	845.0
57.5°	864.5	859.7	854.8	854.8	849.9	840.1	840.1	825.5	805.9	776.6	742.4
60°	771.7	771.7	771.7	766.9	766.9	757.1	757.1	742.4	722.9	693.6	654.5
62.5°	688.7	683.8	683.8	683.8	683.8	678.9	674.1	664.3	644.7	615.4	581.2
65°	591.0	591.0	591.0	591.0	586.1	586.1	586.1	571.5	561.7	532.4	498.2
67.5°	483.6	483.6	483.6	483.6	478.7	483.6	483.6	473.8	464.0	434.7	405.4
70°	385.9	381.0	376.1	381.0	376.1	376.1	381.0	371.2	366.3	341.9	312.6
72.5°	283.3	288.2	283.3	283.3	283.3	278.4	283.3	278.4	268.6	249.1	229.6
75°	200.3	205.1	205.1	200.3	200.3	200.3	195.4	195.4	185.6	171.0	161.2
77.5°	136.8	136.8	136.8	136.8	131.9	131.9	131.9	127.0	122.1	112.3	102.6
80°	87.9	87.9	87.9	87.9	83.0	83.0	83.0	78.2	78.2	68.4	58.6
82.5°	53.7	53.7	53.7	53.7	53.7	53.7	48.8	48.8	44.0	39.1	34.2
85°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	24.4	24.4	19.5	14.7
87.5°	9.8	9.8	14.7	14.7	14.7	14.7	14.7	14.7	9.8	9.8	9.8
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°	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0
2.5°	4205.5	4210.4	4210.4	4210.4	4225.0	4229.9	4215.3	4200.6	4229.9	4225.0	4234.8
5°	4156.7	4171.3	4181.1	4186.0	4200.6	4210.4	4195.7	4190.9	4215.3	4220.2	4225.0
7.5°	4098.1	4122.5	4146.9	4156.7	4176.2	4186.0	4181.1	4181.1	4210.4	4220.2	4220.2
10°	4059.0	4093.2	4122.5	4146.9	4171.3	4186.0	4186.0	4190.9	4225.0	4234.8	4244.6
12.5°	4049.2	4093.2	4132.2	4166.4	4186.0	4210.4	4215.3	4229.9	4264.1	4278.8	4278.8
15°	4024.8	4083.4	4132.2	4176.2	4205.5	4234.8	4244.6	4273.9	4313.0	4322.7	4332.5
17.5°	3980.8	4039.4	4098.1	4151.8	4190.9	4215.3	4244.6	4273.9	4322.7	4337.4	4342.3
20°	3902.7	3971.1	4029.7	4083.4	4122.5	4156.7	4186.0	4220.2	4264.1	4283.7	4288.5
22.5°	3785.4	3853.8	3912.4	3971.1	4010.1	4039.4	4068.7	4107.8	4151.8	4171.3	4171.3
25°	3643.8	3707.3	3770.8	3814.8	3853.8	3888.0	3902.7	3946.6	3990.6	4015.0	4015.0
27.5°	3463.1	3521.7	3580.3	3629.1	3653.6	3682.9	3707.3	3746.4	3780.6	3800.1	3819.6
30°	3233.5	3292.1	3345.8	3394.7	3424.0	3453.3	3477.7	3507.0	3541.2	3565.6	3570.5
32.5°	2984.4	3033.2	3087.0	3135.8	3165.1	3174.9	3199.3	3228.6	3257.9	3277.5	3282.3
35°	2710.9	2745.1	2779.2	2823.2	2852.5	2852.5	2876.9	2896.5	2920.9	2964.9	2955.1
37.5°	2388.5	2437.3	2461.8	2476.4	2496.0	2515.5	2520.4	2544.8	2574.1	2583.9	2598.5
40°	2085.7	2100.3	2115.0	2115.0	2134.5	2134.5	2134.5	2139.4	2168.7	2173.6	2193.1
42.5°	1782.8	1782.8	1768.2	1753.5	1758.4	1753.5	1729.1	1729.1	1743.7	1763.3	1763.3
45°	1499.5	1465.3	1421.4	1387.2	1362.8	1353.0	1323.7	1323.7	1318.8	1323.7	1343.2
47.5°	1260.2	1201.6	1128.3	1059.9	1035.5	1016.0	972.0	952.5	942.7	947.6	957.4
50°	1059.9	996.4	913.4	830.4	786.4	762.0	708.2	674.1	669.2	659.4	678.9
52.5°	913.4	835.2	747.3	649.6	605.7	566.6	508.0	478.7	459.1	459.1	464.0
55°	786.4	703.4	605.7	508.0	464.0	434.7	376.1	337.0	317.5	312.6	327.3
57.5°	678.9	600.8	503.1	405.4	361.4	327.3	268.6	234.5	219.8	210.0	214.9
60°	595.9	517.8	420.1	327.3	288.2	249.1	200.3	161.2	141.6	141.6	146.5
62.5°	517.8	444.5	356.6	268.6	234.5	200.3	146.5	112.3	97.7	92.8	97.7
65°	439.6	371.2	298.0	224.7	190.5	161.2	117.2	87.9	68.4	63.5	68.4
67.5°	356.6	302.8	239.3	180.7	151.4	127.0	87.9	63.5	48.8	44.0	48.8
70°	278.4	229.6	180.7	131.9	112.3	92.8	63.5	48.8	34.2	29.3	34.2
72.5°	200.3	166.1	127.0	92.8	78.2	63.5	44.0	34.2	24.4	19.5	24.4
75°	136.8	112.3	83.0	58.6	48.8	44.0	29.3	19.5	14.7	14.7	14.7
77.5°	87.9	68.4	53.7	39.1	29.3	24.4	14.7	9.8	9.8	9.8	9.8
80°	48.8	39.1	29.3	19.5	14.7	14.7	9.8	9.8	4.9	4.9	4.9
82.5°	29.3	19.5	14.7	9.8	9.8	4.9	4.9	4.9	4.9	4.9	4.9
85°	14.7	9.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
87.5°	4.9	4.9	4.9	4.9	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°	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0
2.5°	4215.3	4220.2	4205.5	4225.0	4210.4	4229.9	4229.9	4210.4	4215.3	4205.5	4225.0
5°	4205.5	4205.5	4195.7	4210.4	4190.9	4210.4	4205.5	4171.3	4181.1	4161.5	4181.1
7.5°	4205.5	4195.7	4181.1	4195.7	4171.3	4186.0	4166.4	4132.2	4122.5	4098.1	4098.1
10°	4220.2	4205.5	4186.0	4190.9	4166.4	4171.3	4142.0	4093.2	4078.5	4049.2	4039.4
12.5°	4254.4	4239.7	4210.4	4220.2	4186.0	4186.0	4146.9	4088.3	4059.0	4019.9	4010.1
15°	4303.2	4278.8	4244.6	4249.5	4215.3	4195.7	4146.9	4078.5	4039.4	3985.7	3971.1
17.5°	4313.0	4288.5	4244.6	4244.6	4200.6	4176.2	4117.6	4039.4	3990.6	3936.9	3907.6
20°	4259.2	4234.8	4186.0	4181.1	4142.0	4107.8	4044.3	3966.2	3917.3	3858.7	3834.3
22.5°	4146.9	4117.6	4073.6	4068.7	4029.7	4010.1	3941.7	3863.6	3814.8	3756.1	3736.6
25°	3980.8	3966.2	3922.2	3917.3	3883.1	3858.7	3800.1	3726.8	3682.9	3624.3	3604.7
27.5°	3785.4	3770.8	3726.8	3726.8	3687.8	3673.1	3619.4	3551.0	3516.8	3463.1	3438.7
30°	3551.0	3531.5	3507.0	3502.1	3468.0	3453.3	3404.5	3341.0	3306.8	3262.8	3253.0
32.5°	3272.6	3257.9	3243.3	3238.4	3204.2	3189.5	3155.4	3091.9	3062.5	3023.5	3008.8
35°	2950.2	2940.4	2925.8	2920.9	2906.2	2891.6	2857.4	2808.6	2793.9	2764.6	2749.9
37.5°	2579.0	2588.8	2579.0	2579.0	2564.3	2569.2	2539.9	2510.6	2496.0	2476.4	2466.6
40°	2178.5	2198.0	2212.7	2212.7	2207.8	2227.3	2222.4	2198.0	2193.1	2183.3	2178.5
42.5°	1773.1	1782.8	1812.1	1831.7	1826.8	1875.6	1880.5	1900.0	1914.7	1904.9	1909.8
45°	1348.1	1377.4	1416.5	1436.0	1460.4	1523.9	1558.1	1597.2	1631.4	1650.9	1646.1
47.5°	972.0	1006.2	1050.2	1079.5	1123.4	1201.6	1289.5	1338.3	1387.2	1411.6	1436.0
50°	703.4	737.6	791.3	835.2	864.5	972.0	1064.8	1128.3	1182.0	1216.2	1240.6
52.5°	493.3	532.4	591.0	630.1	674.1	776.6	884.1	957.4	1016.0	1059.9	1084.3
55°	341.9	385.9	439.6	478.7	527.5	635.0	737.6	815.7	879.2	918.3	947.6
57.5°	239.3	278.4	332.1	366.3	415.2	517.8	620.3	698.5	762.0	801.0	835.2
60°	161.2	200.3	254.0	288.2	327.3	429.8	522.6	605.7	664.3	703.4	737.6
62.5°	112.3	146.5	200.3	234.5	268.6	356.6	444.5	517.8	576.4	620.3	649.6
65°	87.9	117.2	161.2	190.5	224.7	298.0	371.2	434.7	493.3	537.3	556.8
67.5°	63.5	92.8	127.0	151.4	175.8	239.3	302.8	351.7	405.4	439.6	464.0
70°	44.0	63.5	92.8	112.3	131.9	180.7	229.6	273.5	312.6	337.0	356.6
72.5°	34.2	44.0	63.5	78.2	92.8	127.0	166.1	200.3	229.6	249.1	268.6
75°	19.5	29.3	44.0	53.7	63.5	87.9	112.3	136.8	156.3	171.0	180.7
77.5°	9.8	14.7	24.4	29.3	39.1	53.7	73.3	87.9	102.6	112.3	122.1
80°	9.8	9.8	14.7	14.7	19.5	29.3	39.1	48.8	58.6	68.4	73.3
82.5°	4.9	4.9	9.8	9.8	9.8	14.7	19.5	29.3	34.2	39.1	44.0
85°	4.9	4.9	4.9	4.9	4.9	9.8	9.8	14.7	19.5	24.4	24.4
87.5°	0.0	0.0	4.9	4.9	4.9	4.9	4.9	9.8	9.8	9.8	14.7
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: P252638

CATALOG NUMBER: LD6B70D010TE EU6B60708040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0	4225.0
2.5°	4210.4	4220.2	4215.3	4225.0	4210.4	4205.5	4215.3	4200.6
5°	4156.7	4161.5	4156.7	4156.7	4146.9	4137.1	4146.9	4132.2
7.5°	4073.6	4073.6	4059.0	4059.0	4039.4	4029.7	4029.7	4024.8
10°	4005.2	3990.6	3975.9	3980.8	3951.5	3941.7	3936.9	3932.0
12.5°	3971.1	3961.3	3936.9	3936.9	3907.6	3897.8	3892.9	3888.0
15°	3932.0	3912.4	3892.9	3888.0	3863.6	3853.8	3848.9	3839.2
17.5°	3863.6	3848.9	3824.5	3824.5	3800.1	3795.2	3785.4	3780.6
20°	3790.3	3770.8	3751.3	3751.3	3721.9	3721.9	3707.3	3712.2
22.5°	3687.8	3673.1	3653.6	3653.6	3629.1	3624.3	3609.6	3604.7
25°	3565.6	3546.1	3531.5	3526.6	3507.0	3497.3	3492.4	3482.6
27.5°	3404.5	3389.8	3375.2	3365.4	3341.0	3336.1	3321.4	3326.3
30°	3204.2	3194.4	3189.5	3179.8	3150.5	3140.7	3140.7	3126.0
32.5°	2984.4	2969.7	2960.0	2945.3	2920.9	2916.0	2901.4	2906.2
35°	2715.8	2696.2	2681.6	2686.4	2657.1	2652.3	2642.5	2647.4
37.5°	2437.3	2417.8	2398.3	2393.4	2369.0	2369.0	2354.3	2354.3
40°	2149.2	2129.6	2119.8	2119.8	2090.5	2095.4	2080.8	2075.9
42.5°	1890.3	1870.7	1865.9	1861.0	1846.3	1841.4	1826.8	1831.7
45°	1646.1	1641.2	1641.2	1631.4	1616.8	1611.9	1616.8	1616.8
47.5°	1431.1	1436.0	1431.1	1431.1	1421.4	1431.1	1421.4	1426.3
50°	1250.4	1260.2	1260.2	1260.2	1255.3	1260.2	1260.2	1265.1
52.5°	1099.0	1113.7	1108.8	1113.7	1108.8	1118.5	1113.7	1118.5
55°	967.1	976.9	981.8	986.7	986.7	986.7	986.7	986.7
57.5°	845.0	859.7	864.5	869.4	869.4	879.2	869.4	869.4
60°	747.3	762.0	766.9	771.7	771.7	776.6	766.9	771.7
62.5°	659.4	674.1	674.1	678.9	678.9	678.9	669.2	674.1
65°	571.5	576.4	581.2	581.2	576.4	576.4	571.5	576.4
67.5°	473.8	478.7	473.8	473.8	468.9	468.9	459.1	464.0
70°	366.3	366.3	371.2	366.3	361.4	366.3	361.4	356.6
72.5°	273.5	273.5	273.5	268.6	268.6	263.8	268.6	268.6
75°	185.6	185.6	190.5	190.5	190.5	190.5	185.6	185.6
77.5°	122.1	122.1	122.1	122.1	127.0	122.1	122.1	122.1
80°	78.2	78.2	83.0	83.0	78.2	78.2	78.2	78.2
82.5°	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
85°	29.3	29.3	29.3	29.3	24.4	24.4	24.4	24.4
87.5°	14.7	14.7	14.7	14.7	14.7	14.7	9.8	9.8
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)