

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: P252209

Luminaire Tested: **LD6B60D010TE EU6B60708040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252209
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: LD6B60D010TE EU6B60708040 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: 7874.0 lumens
Efficiency: N/A
Efficacy: 126.0 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

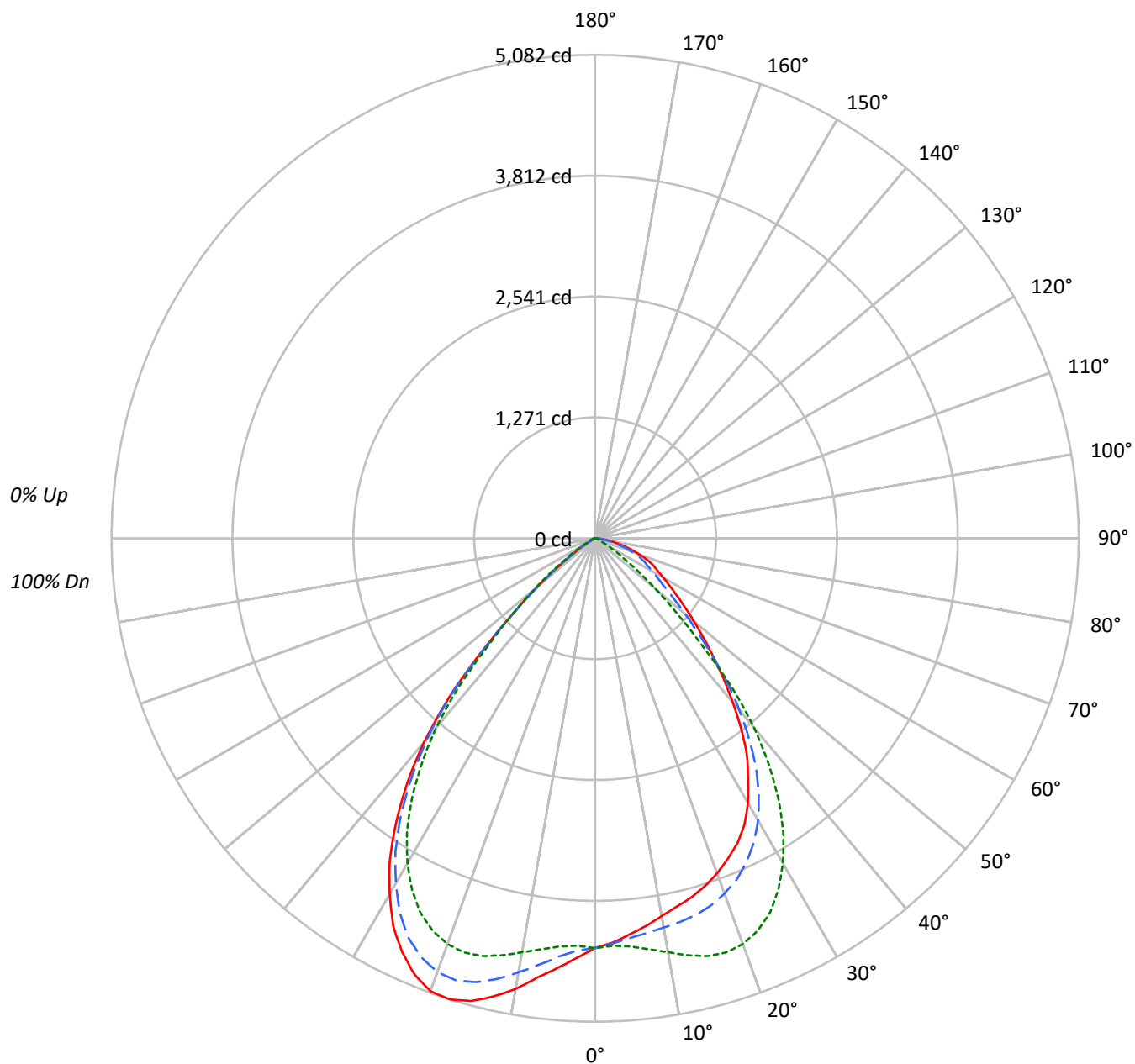
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252209

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBSW1LI

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°	281037	281037	281037
5°	273748	282111	296944
10°	267095	292739	318655
15°	263968	307087	340182
20°	260187	315083	351686
25°	254654	312761	345370
30°	241986	297213	325131
35°	221395	267971	290279
40°	191503	221311	238149
45°	161490	145150	155788
50°	137101	84019	79005
55°	118976	40288	30449
60°	107477	18802	7529
65°	104263	10806	2547
70°	93487	8641	2365
75°	76831	6226	1033
80°	57258	3081	0
85°	49330	0	0



TEST NUMBER: P252209

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBSW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	416.1	5.3
10°-20°	1268.1	16.1
20°-30°	1937.5	24.6
30°-40°	2026.4	25.7
40°-50°	1314.6	16.7
50°-60°	522.0	6.6
60°-70°	247.6	3.1
70°-80°	117.8	1.5
80°-90°	24.0	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°	3621.7	46.0
0°-40°	5648.1	71.7
0°-60°	7484.6	95.1
0°-90°	7874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7874.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4308	4308	4308	4308	4308	
5°	4180	4217	4308	4415	4534	395
15°	3908	4098	4547	4831	5037	1101
25°	3538	3760	4345	4637	4798	1620
35°	2780	2949	3365	3562	3645	1719
45°	1750	1734	1573	1668	1688	1362
55°	1046	890	354	276	268	948
65°	675	560	70	16	16	660
75°	305	247	25	8	4	329
85°	66	41	0	0	0	77
90°	0	0	0	0	0	



TEST NUMBER: P252209

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBSW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7
2.5°	4254.2	4262.4	4217.1	4204.7	4237.7	4250.0	4254.2	4241.8	4245.9	4262.4	4262.4
5°	4180.0	4188.3	4147.1	4134.7	4167.7	4175.9	4188.3	4184.2	4196.5	4221.2	4217.1
7.5°	4110.0	4122.4	4077.1	4060.6	4101.8	4122.4	4130.6	4130.6	4147.1	4180.0	4184.2
10°	4031.8	4048.2	4007.1	3998.8	4044.1	4064.7	4068.8	4077.1	4101.8	4147.1	4155.3
12.5°	3965.9	3982.4	3953.5	3941.2	3990.6	4011.2	4019.4	4035.9	4064.7	4122.4	4130.6
15°	3908.2	3920.6	3887.6	3879.4	3928.8	3953.5	3957.6	3982.4	4019.4	4085.3	4097.7
17.5°	3834.1	3842.3	3817.6	3809.4	3858.8	3883.5	3887.6	3916.5	3961.8	4027.7	4048.2
20°	3747.6	3755.9	3731.1	3722.9	3772.3	3801.2	3805.3	3830.0	3883.5	3953.5	3974.1
22.5°	3644.7	3661.1	3632.3	3624.1	3673.5	3698.2	3710.6	3731.1	3784.7	3854.7	3883.5
25°	3537.6	3537.6	3517.0	3512.9	3558.2	3587.0	3582.9	3611.7	3665.3	3735.3	3760.0
27.5°	3397.6	3393.4	3372.9	3368.7	3418.2	3442.9	3434.6	3463.5	3512.9	3582.9	3607.6
30°	3212.2	3220.5	3191.7	3183.4	3224.6	3265.8	3261.7	3290.5	3339.9	3405.8	3422.3
32.5°	2989.9	2998.1	2994.0	2981.6	3018.7	3039.3	3051.6	3072.2	3113.4	3183.4	3199.9
35°	2779.8	2767.5	2751.0	2751.0	2788.1	2821.0	2808.7	2833.4	2874.5	2944.6	2948.7
37.5°	2520.4	2516.3	2508.0	2499.8	2541.0	2549.2	2553.3	2569.8	2606.9	2664.5	2656.3
40°	2248.6	2252.7	2248.6	2232.1	2256.8	2289.8	2285.6	2293.9	2326.8	2368.0	2355.6
42.5°	1993.2	1993.2	1993.2	1976.8	2005.6	2022.1	2030.3	2026.2	2034.4	2071.5	2055.0
45°	1750.3	1754.4	1750.3	1746.1	1750.3	1758.5	1750.3	1746.1	1746.1	1758.5	1733.8
47.5°	1540.2	1540.2	1527.9	1515.5	1527.9	1532.0	1519.6	1507.3	1503.2	1499.0	1457.9
50°	1350.8	1346.7	1342.6	1322.0	1334.3	1338.4	1322.0	1313.7	1297.3	1276.7	1227.2
52.5°	1186.1	1181.9	1177.8	1157.2	1165.5	1169.6	1153.1	1136.6	1116.0	1099.6	1037.8
55°	1046.0	1041.9	1041.9	1029.6	1021.3	1029.6	1013.1	1000.7	971.9	951.3	889.5
57.5°	926.6	926.6	918.4	906.0	910.1	910.1	893.7	877.2	852.5	827.8	778.4
60°	823.7	823.7	823.7	811.3	811.3	811.3	803.1	786.6	766.0	741.3	691.9
62.5°	741.3	741.3	737.2	724.8	728.9	728.9	720.7	704.2	683.6	667.2	617.7
65°	675.4	675.4	675.4	663.0	663.0	667.2	658.9	642.4	626.0	605.4	560.1
67.5°	593.0	588.9	588.9	580.7	584.8	588.9	580.7	568.3	547.7	535.4	494.2
70°	490.1	494.2	498.3	486.0	490.1	490.1	486.0	473.6	461.2	448.9	411.8
72.5°	399.5	399.5	395.4	391.2	391.2	395.4	387.1	374.8	366.5	358.3	329.5
75°	304.8	300.6	304.8	296.5	296.5	296.5	288.3	284.2	280.0	267.7	247.1
77.5°	222.4	218.3	218.3	210.0	214.1	214.1	210.0	201.8	193.6	189.4	173.0
80°	152.4	152.4	152.4	148.3	148.3	144.1	144.1	140.0	131.8	127.7	119.4
82.5°	103.0	103.0	103.0	98.8	98.8	98.8	94.7	90.6	86.5	82.4	74.1
85°	65.9	65.9	65.9	61.8	61.8	61.8	57.7	57.7	53.5	49.4	41.2
87.5°	37.1	37.1	37.1	32.9	32.9	32.9	32.9	32.9	28.8	24.7	20.6
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: P252209

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7
2.5°	4291.2	4233.6	4270.6	4270.6	4258.3	4291.2	4311.8	4328.3	4324.2	4287.1	4283.0
5°	4258.3	4208.9	4250.0	4254.2	4241.8	4287.1	4315.9	4336.5	4340.6	4307.7	4311.8
7.5°	4233.6	4192.4	4245.9	4262.4	4258.3	4299.5	4332.4	4365.4	4381.8	4357.1	4361.2
10°	4221.2	4188.3	4245.9	4270.6	4274.8	4320.1	4369.5	4414.8	4435.4	4418.9	4431.2
12.5°	4204.7	4184.2	4250.0	4287.1	4303.6	4348.9	4410.7	4464.2	4497.1	4488.9	4513.6
15°	4188.3	4171.8	4250.0	4303.6	4324.2	4365.4	4435.4	4513.6	4550.7	4546.6	4579.5
17.5°	4147.1	4143.0	4225.3	4283.0	4311.8	4361.2	4427.1	4521.8	4558.9	4567.1	4608.3
20°	4081.2	4081.2	4171.8	4233.6	4266.5	4311.8	4394.2	4484.8	4530.1	4538.3	4583.6
22.5°	3990.6	3998.8	4085.3	4147.1	4196.5	4229.5	4315.9	4410.7	4451.8	4464.2	4513.6
25°	3871.2	3879.4	3961.8	4023.5	4077.1	4114.1	4196.5	4283.0	4332.4	4344.8	4381.8
27.5°	3714.7	3731.1	3809.4	3871.2	3916.5	3941.2	4027.7	4118.3	4155.3	4167.7	4204.7
30°	3533.5	3537.6	3615.8	3669.4	3714.7	3735.3	3809.4	3904.1	3932.9	3945.3	3998.8
32.5°	3311.1	3307.0	3381.1	3430.5	3467.6	3492.3	3570.5	3632.3	3661.1	3681.7	3710.6
35°	3043.4	3039.3	3092.8	3150.5	3179.3	3187.5	3265.8	3331.7	3348.1	3364.6	3401.7
37.5°	2742.8	2742.8	2788.1	2816.9	2849.8	2862.2	2899.3	2973.4	3002.2	2998.1	3026.9
40°	2425.7	2409.2	2442.1	2471.0	2479.2	2483.3	2520.4	2578.0	2598.6	2598.6	2619.2
42.5°	2092.1	2067.4	2071.5	2088.0	2096.2	2067.4	2092.1	2129.1	2116.8	2133.3	2137.4
45°	1737.9	1700.8	1684.4	1647.3	1655.5	1626.7	1610.2	1618.5	1614.4	1573.2	1581.4
47.5°	1449.6	1383.7	1354.9	1301.4	1289.0	1256.1	1235.5	1198.4	1165.5	1165.5	1144.9
50°	1206.7	1140.8	1083.1	1021.3	1000.7	971.9	926.6	877.2	852.5	827.8	807.2
52.5°	1013.1	943.1	873.1	807.2	778.4	741.3	679.5	630.1	584.8	560.1	535.4
55°	856.6	778.4	704.2	634.2	597.1	560.1	498.3	440.7	387.1	354.2	333.6
57.5°	737.2	663.0	584.8	510.7	477.7	436.5	370.6	308.9	259.5	222.4	201.8
60°	650.7	576.6	506.5	428.3	395.4	354.2	284.2	226.5	177.1	144.1	119.4
62.5°	576.6	510.7	436.5	366.5	333.6	292.4	226.5	168.8	123.5	90.6	70.0
65°	523.0	457.1	395.4	325.3	296.5	255.3	193.6	140.0	98.8	70.0	49.4
67.5°	461.2	403.6	341.8	284.2	255.3	222.4	164.7	119.4	82.4	57.7	41.2
70°	387.1	341.8	288.3	234.7	214.1	185.3	135.9	98.8	65.9	45.3	32.9
72.5°	308.9	271.8	230.6	189.4	173.0	144.1	111.2	78.2	49.4	32.9	24.7
75°	234.7	205.9	173.0	144.1	127.7	111.2	82.4	57.7	37.1	24.7	16.5
77.5°	160.6	148.3	123.5	98.8	90.6	78.2	53.5	37.1	24.7	16.5	8.2
80°	111.2	98.8	82.4	65.9	57.7	49.4	32.9	24.7	12.4	8.2	4.1
82.5°	70.0	57.7	49.4	41.2	37.1	28.8	20.6	12.4	8.2	4.1	4.1
85°	37.1	32.9	28.8	20.6	20.6	16.5	12.4	8.2	4.1	0.0	0.0
87.5°	20.6	16.5	12.4	8.2	8.2	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	0.0	0.0	0.0



TEST NUMBER: P252209

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7
2.5°	4332.4	4332.4	4328.3	4377.7	4320.1	4377.7	4348.9	4377.7	4336.5	4332.4	4336.5
5°	4365.4	4377.7	4381.8	4427.1	4373.6	4443.6	4418.9	4443.6	4414.8	4423.0	4435.4
7.5°	4431.2	4451.8	4447.7	4505.4	4451.8	4530.1	4513.6	4550.7	4521.8	4530.1	4546.6
10°	4505.4	4530.1	4534.2	4591.9	4542.4	4637.2	4616.6	4657.8	4633.0	4645.4	4666.0
12.5°	4591.9	4620.7	4624.8	4690.7	4637.2	4736.0	4723.6	4764.8	4744.2	4756.6	4781.3
15°	4657.8	4698.9	4707.2	4773.1	4715.4	4818.4	4810.1	4863.7	4830.7	4851.3	4871.9
17.5°	4690.7	4727.8	4744.2	4806.0	4756.6	4859.5	4851.3	4896.6	4871.9	4892.5	4917.2
20°	4670.1	4715.4	4727.8	4789.5	4740.1	4843.1	4830.7	4876.0	4851.3	4867.8	4892.5
22.5°	4596.0	4641.3	4657.8	4715.4	4670.1	4764.8	4760.7	4801.9	4768.9	4789.5	4810.1
25°	4464.2	4513.6	4521.8	4575.4	4526.0	4624.8	4616.6	4661.9	4637.2	4649.5	4678.3
27.5°	4274.8	4332.4	4344.8	4390.1	4353.0	4435.4	4435.4	4472.4	4443.6	4443.6	4472.4
30°	4048.2	4105.9	4114.1	4151.2	4118.3	4192.4	4196.5	4233.6	4188.3	4213.0	4217.1
32.5°	3772.3	3809.4	3834.1	3867.0	3817.6	3912.3	3900.0	3928.8	3904.1	3904.1	3924.7
35°	3438.7	3484.0	3496.4	3537.6	3496.4	3570.5	3570.5	3587.0	3562.3	3562.3	3595.2
37.5°	3076.3	3109.3	3113.4	3154.6	3121.6	3183.4	3179.3	3191.7	3166.9	3183.4	3183.4
40°	2652.2	2676.9	2685.1	2705.7	2701.6	2746.9	2742.8	2751.0	2738.6	2742.8	2751.0
42.5°	2158.0	2190.9	2207.4	2223.9	2199.2	2260.9	2248.6	2260.9	2256.8	2260.9	2273.3
45°	1589.6	1614.4	1626.7	1630.8	1622.6	1659.7	1688.5	1663.8	1667.9	1659.7	1676.1
47.5°	1149.0	1153.1	1144.9	1169.6	1149.0	1165.5	1173.7	1177.8	1153.1	1149.0	1165.5
50°	786.6	807.2	778.4	790.7	786.6	803.1	794.8	798.9	774.2	786.6	778.4
52.5°	523.0	518.9	510.7	514.8	506.5	506.5	506.5	514.8	498.3	490.1	481.8
55°	317.1	308.9	292.4	288.3	288.3	292.4	284.2	275.9	275.9	271.8	271.8
57.5°	185.3	173.0	164.7	160.6	152.4	148.3	144.1	144.1	135.9	135.9	135.9
60°	103.0	90.6	82.4	74.1	74.1	70.0	65.9	61.8	61.8	61.8	57.7
62.5°	53.5	45.3	37.1	32.9	32.9	28.8	24.7	24.7	24.7	24.7	20.6
65°	37.1	28.8	24.7	20.6	20.6	16.5	16.5	16.5	16.5	16.5	16.5
67.5°	28.8	24.7	20.6	16.5	16.5	16.5	12.4	12.4	12.4	12.4	12.4
70°	24.7	16.5	16.5	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
72.5°	16.5	16.5	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
75°	12.4	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	0.0	0.0	0.0	0.0	0.0
80°	4.1	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: P252209

CATALOG NUMBER: LD6B60D010TE EU6B60708040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7	4307.7
2.5°	4373.6	4369.5	4373.6	4381.8	4365.4	4414.8	4390.1	4414.8
5°	4468.3	4472.4	4476.5	4488.9	4468.3	4530.1	4497.1	4534.2
7.5°	4591.9	4596.0	4600.1	4612.5	4600.1	4661.9	4624.8	4657.8
10°	4719.5	4727.8	4727.8	4748.4	4736.0	4793.7	4768.9	4810.1
12.5°	4839.0	4847.2	4855.4	4867.8	4859.5	4921.3	4900.7	4933.7
15°	4933.7	4950.1	4954.3	4970.7	4962.5	5028.4	5003.7	5036.6
17.5°	4979.0	4995.4	4995.4	5016.0	5007.8	5077.8	5044.9	5081.9
20°	4954.3	4966.6	4970.7	4991.3	4983.1	5053.1	5020.2	5065.5
22.5°	4876.0	4880.1	4884.3	4904.8	4900.7	4962.5	4933.7	4962.5
25°	4731.9	4744.2	4740.1	4756.6	4756.6	4806.0	4773.1	4797.8
27.5°	4526.0	4538.3	4538.3	4558.9	4542.4	4591.9	4558.9	4596.0
30°	4274.8	4287.1	4278.9	4295.3	4278.9	4328.3	4303.6	4315.9
32.5°	3974.1	3974.1	3978.2	3982.4	3974.1	4019.4	3994.7	4019.4
35°	3615.8	3624.1	3628.2	3632.3	3624.1	3657.0	3628.2	3644.7
37.5°	3212.2	3232.8	3228.7	3232.8	3220.5	3261.7	3237.0	3245.2
40°	2779.8	2779.8	2775.7	2783.9	2771.6	2804.5	2788.1	2796.3
42.5°	2277.4	2289.8	2273.3	2293.9	2260.9	2306.2	2289.8	2277.4
45°	1709.1	1692.6	1688.5	1692.6	1680.2	1684.4	1696.7	1688.5
47.5°	1165.5	1165.5	1157.2	1144.9	1161.3	1165.5	1149.0	1149.0
50°	782.5	782.5	774.2	770.1	778.4	774.2	766.0	778.4
52.5°	498.3	481.8	481.8	490.1	481.8	473.6	486.0	477.7
55°	271.8	263.6	263.6	271.8	263.6	263.6	259.5	267.7
57.5°	131.8	135.9	131.8	131.8	131.8	131.8	127.7	131.8
60°	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
62.5°	24.7	24.7	20.6	20.6	20.6	20.6	20.6	20.6
65°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
67.5°	12.4	12.4	12.4	12.4	12.4	16.5	12.4	12.4
70°	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
72.5°	12.4	12.4	16.5	16.5	16.5	16.5	16.5	16.5
75°	8.2	8.2	8.2	4.1	4.1	4.1	4.1	4.1
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)