

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: P252140

Luminaire Tested: **LD6B10D010 EU6B10209730 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252140  
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: LD6B10D010 EU6B10209730 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1010.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 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

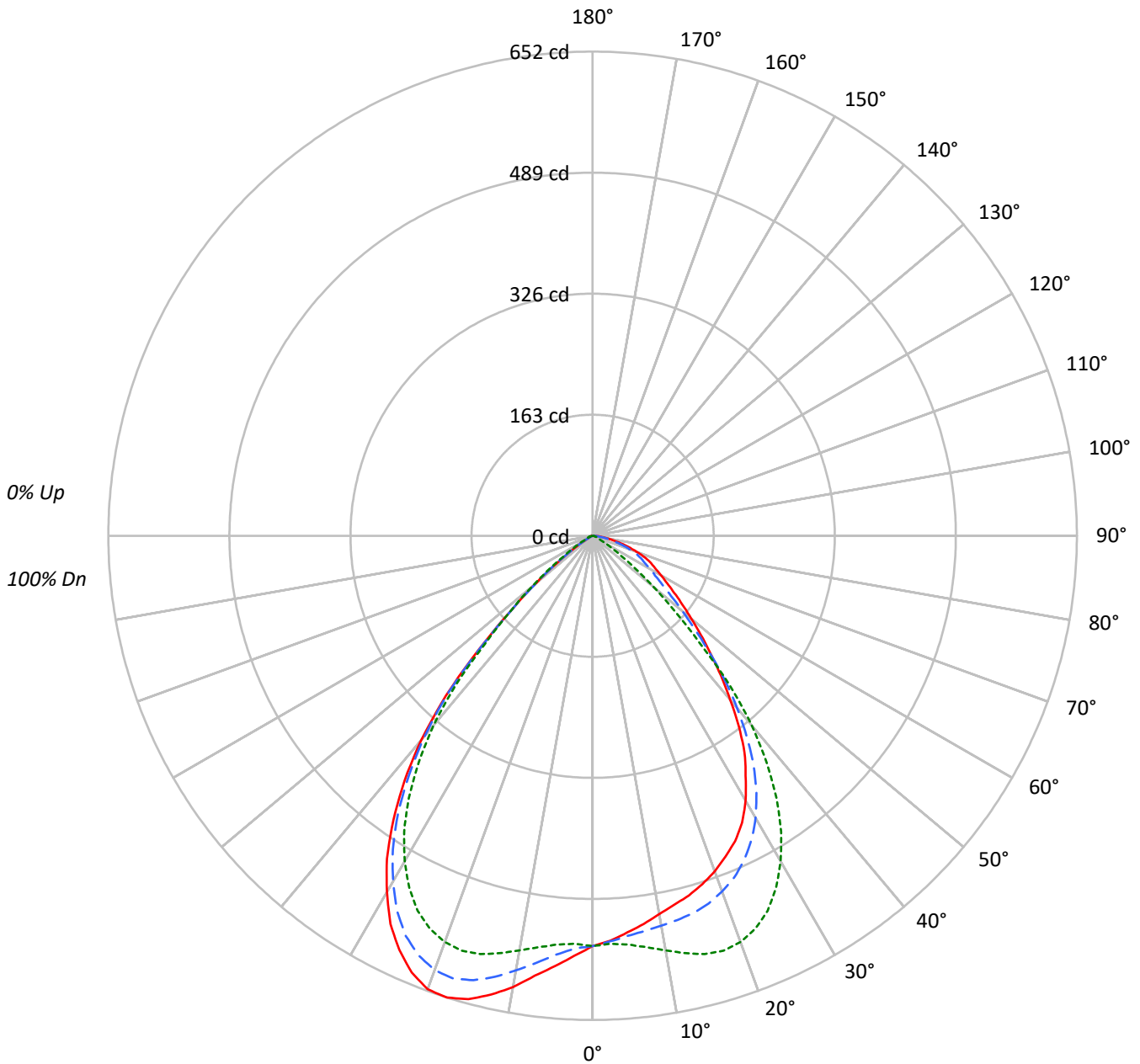
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90	90	90	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80	80	80	80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72	72	72	72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65	65	65	65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58	58	58	58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53	53	53	53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48	48	48	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44	44	44	44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40	40	40	40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37	37	37	37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	36045	36045	36045
5°	35116	36183	38089
10°	34263	37549	40874
15°	33859	39391	43632
20°	33374	40414	45107
25°	32667	40117	44300
30°	31037	38126	41705
35°	28401	34374	37234
40°	24562	28386	30549
45°	20713	18619	19984
50°	17589	10779	10129
55°	15264	5164	3901
60°	13792	2414	966
65°	13369	1389	324
70°	11998	1106	305
75°	9856	807	126
80°	7326	413	0
85°	6363	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.4	5.3
10°-20°	162.7	16.1
20°-30°	248.5	24.6
30°-40°	259.9	25.7
40°-50°	168.6	16.7
50°-60°	66.9	6.6
60°-70°	31.8	3.1
70°-80°	15.1	1.5
80°-90°	3.1	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°	464.5	46.0
0°-40°	724.5	71.7
0°-60°	960.1	95.1
0°-90°	1010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	552	552	552	552	552	
5°	536	541	552	566	582	51
15°	501	526	583	620	646	141
25°	454	482	557	595	615	208
35°	357	378	432	457	468	221
45°	224	222	202	214	217	175
55°	134	114	45	35	34	122
65°	87	72	9	2	2	85
75°	39	32	3	1	0	42
85°	8	5	0	0	0	10
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°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	545.7	546.7	540.9	539.3	543.6	545.2	545.7	544.1	544.6	546.7	546.7
5°	536.2	537.2	531.9	530.4	534.6	535.6	537.2	536.7	538.3	541.5	540.9
7.5°	527.2	528.8	523.0	520.9	526.1	528.8	529.8	529.8	531.9	536.2	536.7
10°	517.2	519.3	514.0	512.9	518.7	521.4	521.9	523.0	526.1	531.9	533.0
12.5°	508.7	510.8	507.1	505.5	511.9	514.5	515.6	517.7	521.4	528.8	529.8
15°	501.3	502.9	498.7	497.6	504.0	507.1	507.6	510.8	515.6	524.0	525.6
17.5°	491.8	492.9	489.7	488.6	495.0	498.1	498.7	502.4	508.2	516.6	519.3
20°	480.7	481.8	478.6	477.5	483.9	487.6	488.1	491.3	498.1	507.1	509.8
22.5°	467.5	469.6	465.9	464.9	471.2	474.4	476.0	478.6	485.5	494.4	498.1
25°	453.8	453.8	451.1	450.6	456.4	460.1	459.6	463.3	470.1	479.1	482.3
27.5°	435.8	435.3	432.6	432.1	438.4	441.6	440.6	444.3	450.6	459.6	462.7
30°	412.0	413.1	409.4	408.3	413.6	418.9	418.4	422.1	428.4	436.9	439.0
32.5°	383.5	384.6	384.0	382.5	387.2	389.8	391.4	394.1	399.4	408.3	410.5
35°	356.6	355.0	352.9	352.9	357.6	361.9	360.3	363.4	368.7	377.7	378.2
37.5°	323.3	322.8	321.7	320.6	325.9	327.0	327.5	329.6	334.4	341.8	340.7
40°	288.4	289.0	288.4	286.3	289.5	293.7	293.2	294.2	298.5	303.7	302.2
42.5°	255.7	255.7	255.7	253.6	257.3	259.4	260.4	259.9	261.0	265.7	263.6
45°	224.5	225.0	224.5	224.0	224.5	225.6	224.5	224.0	224.0	225.6	222.4
47.5°	197.6	197.6	196.0	194.4	196.0	196.5	194.9	193.3	192.8	192.3	187.0
50°	173.3	172.7	172.2	169.6	171.2	171.7	169.6	168.5	166.4	163.8	157.4
52.5°	152.1	151.6	151.1	148.4	149.5	150.0	147.9	145.8	143.2	141.0	133.1
55°	134.2	133.6	133.6	132.1	131.0	132.1	129.9	128.4	124.7	122.0	114.1
57.5°	118.9	118.9	117.8	116.2	116.7	116.7	114.6	112.5	109.3	106.2	99.8
60°	105.7	105.7	105.7	104.1	104.1	104.1	103.0	100.9	98.3	95.1	88.7
62.5°	95.1	95.1	94.6	93.0	93.5	93.5	92.4	90.3	87.7	85.6	79.2
65°	86.6	86.6	86.6	85.0	85.0	85.6	84.5	82.4	80.3	77.7	71.8
67.5°	76.1	75.5	75.5	74.5	75.0	75.5	74.5	72.9	70.3	68.7	63.4
70°	62.9	63.4	63.9	62.3	62.9	62.9	62.3	60.7	59.2	57.6	52.8
72.5°	51.2	51.2	50.7	50.2	50.2	50.7	49.7	48.1	47.0	46.0	42.3
75°	39.1	38.6	39.1	38.0	38.0	38.0	37.0	36.4	35.9	34.3	31.7
77.5°	28.5	28.0	28.0	26.9	27.5	27.5	26.9	25.9	24.8	24.3	22.2
80°	19.5	19.5	19.5	19.0	19.0	18.5	18.5	18.0	16.9	16.4	15.3
82.5°	13.2	13.2	13.2	12.7	12.7	12.7	12.1	11.6	11.1	10.6	9.5
85°	8.5	8.5	8.5	7.9	7.9	7.9	7.4	7.4	6.9	6.3	5.3
87.5°	4.8	4.8	4.8	4.2	4.2	4.2	4.2	4.2	3.7	3.2	2.6
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°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	550.4	543.0	547.8	547.8	546.2	550.4	553.1	555.2	554.7	549.9	549.4
5°	546.2	539.9	545.2	545.7	544.1	549.9	553.6	556.2	556.8	552.5	553.1
7.5°	543.0	537.8	544.6	546.7	546.2	551.5	555.7	559.9	562.1	558.9	559.4
10°	541.5	537.2	544.6	547.8	548.3	554.1	560.5	566.3	568.9	566.8	568.4
12.5°	539.3	536.7	545.2	549.9	552.0	557.8	565.8	572.6	576.8	575.8	579.0
15°	537.2	535.1	545.2	552.0	554.7	559.9	568.9	579.0	583.7	583.2	587.4
17.5°	531.9	531.4	542.0	549.4	553.1	559.4	567.9	580.0	584.8	585.8	591.1
20°	523.5	523.5	535.1	543.0	547.3	553.1	563.6	575.3	581.1	582.1	587.9
22.5°	511.9	512.9	524.0	531.9	538.3	542.5	553.6	565.8	571.0	572.6	579.0
25°	496.6	497.6	508.2	516.1	523.0	527.7	538.3	549.4	555.7	557.3	562.1
27.5°	476.5	478.6	488.6	496.6	502.4	505.5	516.6	528.3	533.0	534.6	539.3
30°	453.2	453.8	463.8	470.7	476.5	479.1	488.6	500.8	504.5	506.1	512.9
32.5°	424.7	424.2	433.7	440.0	444.8	448.0	458.0	465.9	469.6	472.3	476.0
35°	390.4	389.8	396.7	404.1	407.8	408.9	418.9	427.4	429.5	431.6	436.3
37.5°	351.8	351.8	357.6	361.3	365.5	367.1	371.9	381.4	385.1	384.6	388.3
40°	311.1	309.0	313.3	317.0	318.0	318.5	323.3	330.7	333.3	333.3	336.0
42.5°	268.4	265.2	265.7	267.8	268.9	265.2	268.4	273.1	271.5	273.6	274.2
45°	222.9	218.2	216.1	211.3	212.4	208.7	206.5	207.6	207.1	201.8	202.8
47.5°	185.9	177.5	173.8	166.9	165.3	161.1	158.5	153.7	149.5	149.5	146.9
50°	154.8	146.3	138.9	131.0	128.4	124.7	118.9	112.5	109.3	106.2	103.5
52.5°	129.9	121.0	112.0	103.5	99.8	95.1	87.2	80.8	75.0	71.8	68.7
55°	109.9	99.8	90.3	81.4	76.6	71.8	63.9	56.5	49.7	45.4	42.8
57.5°	94.6	85.0	75.0	65.5	61.3	56.0	47.5	39.6	33.3	28.5	25.9
60°	83.5	74.0	65.0	54.9	50.7	45.4	36.4	29.1	22.7	18.5	15.3
62.5°	74.0	65.5	56.0	47.0	42.8	37.5	29.1	21.7	15.8	11.6	9.0
65°	67.1	58.6	50.7	41.7	38.0	32.8	24.8	18.0	12.7	9.0	6.3
67.5°	59.2	51.8	43.8	36.4	32.8	28.5	21.1	15.3	10.6	7.4	5.3
70°	49.7	43.8	37.0	30.1	27.5	23.8	17.4	12.7	8.5	5.8	4.2
72.5°	39.6	34.9	29.6	24.3	22.2	18.5	14.3	10.0	6.3	4.2	3.2
75°	30.1	26.4	22.2	18.5	16.4	14.3	10.6	7.4	4.8	3.2	2.1
77.5°	20.6	19.0	15.8	12.7	11.6	10.0	6.9	4.8	3.2	2.1	1.1
80°	14.3	12.7	10.6	8.5	7.4	6.3	4.2	3.2	1.6	1.1	0.5
82.5°	9.0	7.4	6.3	5.3	4.8	3.7	2.6	1.6	1.1	0.5	0.5
85°	4.8	4.2	3.7	2.6	2.6	2.1	1.6	1.1	0.5	0.0	0.0
87.5°	2.6	2.1	1.6	1.1	1.1	0.5	0.5	0.5	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°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	555.7	555.7	555.2	561.5	554.1	561.5	557.8	561.5	556.2	555.7	556.2
5°	559.9	561.5	562.1	567.9	561.0	570.0	566.8	570.0	566.3	567.3	568.9
7.5°	568.4	571.0	570.5	577.9	571.0	581.1	579.0	583.7	580.0	581.1	583.2
10°	577.9	581.1	581.6	589.0	582.7	594.8	592.2	597.5	594.3	595.9	598.5
12.5°	589.0	592.7	593.2	601.7	594.8	607.5	605.9	611.2	608.5	610.1	613.3
15°	597.5	602.7	603.8	612.2	604.8	618.1	617.0	623.9	619.6	622.3	624.9
17.5°	601.7	606.4	608.5	616.5	610.1	623.3	622.3	628.1	624.9	627.6	630.7
20°	599.0	604.8	606.4	614.4	608.0	621.2	619.6	625.4	622.3	624.4	627.6
22.5°	589.5	595.3	597.5	604.8	599.0	611.2	610.7	615.9	611.7	614.4	617.0
25°	572.6	579.0	580.0	586.9	580.5	593.2	592.2	598.0	594.8	596.4	600.1
27.5°	548.3	555.7	557.3	563.1	558.4	568.9	568.9	573.7	570.0	570.0	573.7
30°	519.3	526.7	527.7	532.5	528.3	537.8	538.3	543.0	537.2	540.4	540.9
32.5°	483.9	488.6	491.8	496.0	489.7	501.8	500.3	504.0	500.8	500.8	503.4
35°	441.1	446.9	448.5	453.8	448.5	458.0	458.0	460.1	456.9	456.9	461.2
37.5°	394.6	398.8	399.4	404.6	400.4	408.3	407.8	409.4	406.2	408.3	408.3
40°	340.2	343.4	344.4	347.1	346.5	352.3	351.8	352.9	351.3	351.8	352.9
42.5°	276.8	281.0	283.1	285.3	282.1	290.0	288.4	290.0	289.5	290.0	291.6
45°	203.9	207.1	208.7	209.2	208.1	212.9	216.6	213.4	213.9	212.9	215.0
47.5°	147.4	147.9	146.9	150.0	147.4	149.5	150.6	151.1	147.9	147.4	149.5
50°	100.9	103.5	99.8	101.4	100.9	103.0	102.0	102.5	99.3	100.9	99.8
52.5°	67.1	66.6	65.5	66.0	65.0	65.0	65.0	66.0	63.9	62.9	61.8
55°	40.7	39.6	37.5	37.0	37.0	37.5	36.4	35.4	35.4	34.9	34.9
57.5°	23.8	22.2	21.1	20.6	19.5	19.0	18.5	18.5	17.4	17.4	17.4
60°	13.2	11.6	10.6	9.5	9.5	9.0	8.5	7.9	7.9	7.9	7.4
62.5°	6.9	5.8	4.8	4.2	4.2	3.7	3.2	3.2	3.2	3.2	2.6
65°	4.8	3.7	3.2	2.6	2.6	2.1	2.1	2.1	2.1	2.1	2.1
67.5°	3.7	3.2	2.6	2.1	2.1	2.1	1.6	1.6	1.6	1.6	1.6
70°	3.2	2.1	2.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	2.1	2.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75°	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
80°	0.5	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





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CATALOG NUMBER: LD6B10D010 EU6B10209730 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	561.0	560.5	561.0	562.1	559.9	566.3	563.1	566.3
5°	573.2	573.7	574.2	575.8	573.2	581.1	576.8	581.6
7.5°	589.0	589.5	590.1	591.6	590.1	598.0	593.2	597.5
10°	605.4	606.4	606.4	609.1	607.5	614.9	611.7	617.0
12.5°	620.7	621.8	622.8	624.4	623.3	631.3	628.6	632.8
15°	632.8	635.0	635.5	637.6	636.5	645.0	641.8	646.0
17.5°	638.7	640.8	640.8	643.4	642.4	651.3	647.1	651.9
20°	635.5	637.1	637.6	640.2	639.2	648.2	643.9	649.7
22.5°	625.4	626.0	626.5	629.1	628.6	636.5	632.8	636.5
25°	607.0	608.5	608.0	610.1	610.1	616.5	612.2	615.4
27.5°	580.5	582.1	582.1	584.8	582.7	589.0	584.8	589.5
30°	548.3	549.9	548.9	551.0	548.9	555.2	552.0	553.6
32.5°	509.8	509.8	510.3	510.8	509.8	515.6	512.4	515.6
35°	463.8	464.9	465.4	465.9	464.9	469.1	465.4	467.5
37.5°	412.0	414.7	414.1	414.7	413.1	418.4	415.2	416.3
40°	356.6	356.6	356.0	357.1	355.5	359.7	357.6	358.7
42.5°	292.1	293.7	291.6	294.2	290.0	295.8	293.7	292.1
45°	219.2	217.1	216.6	217.1	215.5	216.1	217.6	216.6
47.5°	149.5	149.5	148.4	146.9	149.0	149.5	147.4	147.4
50°	100.4	100.4	99.3	98.8	99.8	99.3	98.3	99.8
52.5°	63.9	61.8	61.8	62.9	61.8	60.7	62.3	61.3
55°	34.9	33.8	33.8	34.9	33.8	33.8	33.3	34.3
57.5°	16.9	17.4	16.9	16.9	16.9	16.9	16.4	16.9
60°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
62.5°	3.2	3.2	2.6	2.6	2.6	2.6	2.6	2.6
65°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
67.5°	1.6	1.6	1.6	1.6	1.6	2.1	1.6	1.6
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
75°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	0.5
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)