

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: P252651

Luminaire Tested: **LD6B10D010 EU6B10208040 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252651  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B10D010 EU6B10208040 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1028.0 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

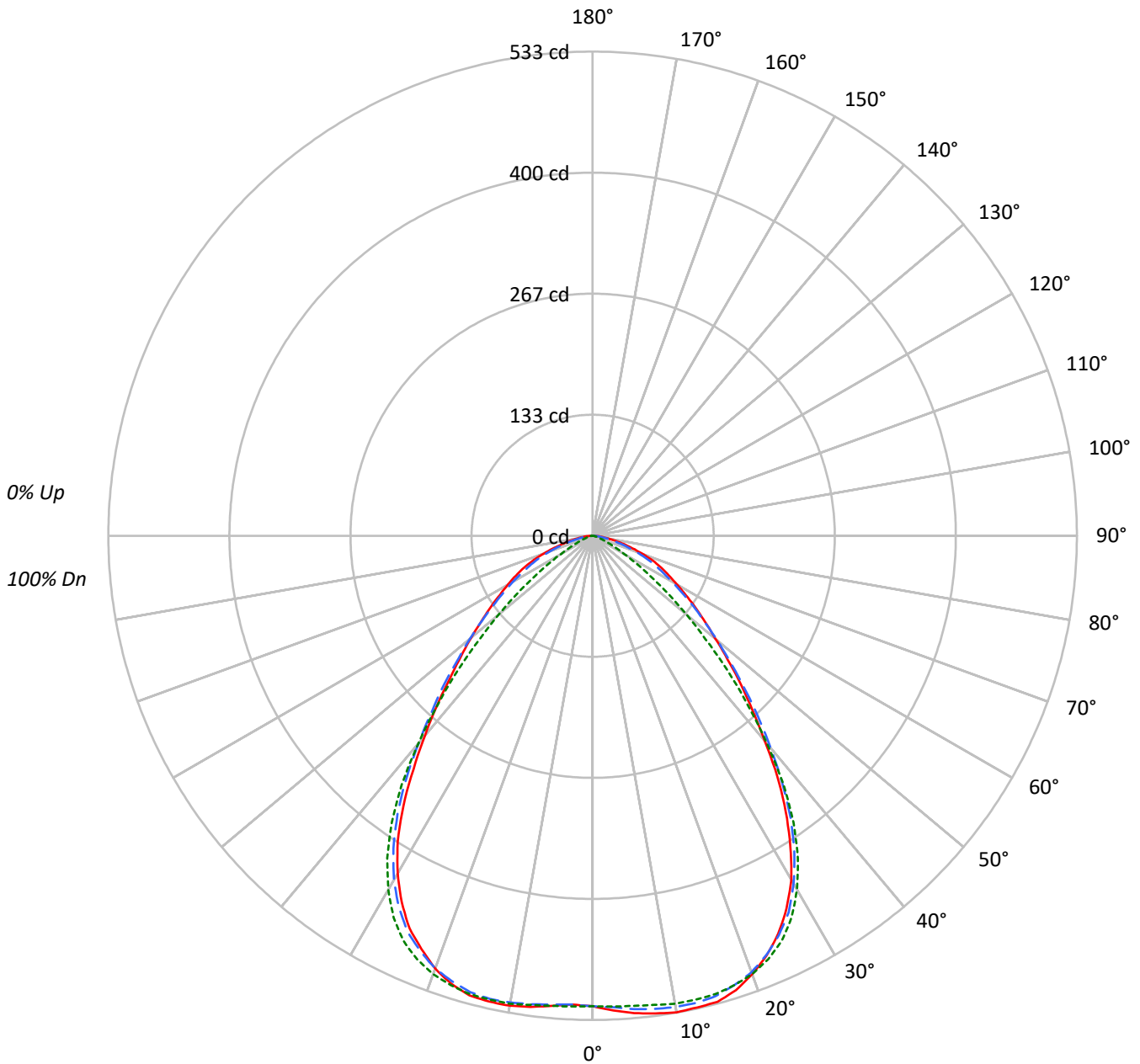
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252651

CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

### Luminous Intensity Polar Plot





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CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

**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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

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

	0°	90°	180°
0°	33788	33788	33788
5°	34546	34015	34015
10°	35283	34654	34800
15°	35872	35277	35379
20°	35651	35651	35193
25°	34805	35438	34330
30°	32943	33885	32341
35°	29524	30687	28943
40°	25081	25396	24460
45°	21221	19394	20483
50°	17914	13682	17701
55°	15753	8838	15583
60°	13961	5258	14053
65°	12890	3165	12890
70°	11178	1812	10892
75°	8873	1109	8318
80°	6612	827	6312
85°	6063	524	5464



TEST NUMBER: P252651

CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	4.9
10°-20°	147.6	14.4
20°-30°	222.0	21.6
30°-40°	233.4	22.7
40°-50°	174.3	17.0
50°-60°	108.5	10.6
60°-70°	61.7	6.0
70°-80°	25.4	2.5
80°-90°	5.3	0.5
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°	419.4	40.8
0°-40°	652.7	63.5
0°-60°	935.6	91.0
0°-90°	1028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1028.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	518	518	518	518	518	
5°	528	523	519	518	519	50
15°	531	524	522	520	524	149
25°	484	485	492	481	477	221
35°	371	380	385	374	363	230
45°	230	235	210	231	222	178
55°	138	136	78	133	137	125
65°	84	75	20	75	84	82
75°	35	28	4	27	33	38
85°	8	5	1	4	7	9
90°	0	0	0	0	0	



TEST NUMBER: P252651

CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9
2.5°	523.1	522.3	523.1	521.6	520.9	520.9	521.6	520.1	519.4	520.1	519.4
5°	527.5	526.0	526.7	526.0	524.5	524.5	525.3	523.1	523.1	523.8	523.1
7.5°	530.4	530.4	530.4	528.9	528.2	527.5	528.9	526.7	526.0	526.0	525.3
10°	532.6	531.8	532.6	531.1	529.6	528.9	530.4	528.9	527.5	528.9	526.7
12.5°	531.8	531.8	531.8	531.1	529.6	528.9	530.4	528.2	527.5	528.2	526.7
15°	531.1	528.9	529.6	528.9	526.7	526.7	527.5	525.3	523.8	526.0	524.5
17.5°	524.5	523.1	523.8	522.3	520.9	520.1	520.9	520.1	518.7	520.1	518.7
20°	513.5	513.5	514.3	512.8	511.3	510.6	512.1	510.6	509.1	511.3	511.3
22.5°	500.3	500.3	500.3	499.6	498.9	498.9	498.9	498.1	497.4	498.9	499.6
25°	483.5	482.8	483.5	484.2	483.5	482.8	483.5	483.5	482.0	485.0	485.0
27.5°	462.3	462.3	463.7	463.0	463.0	462.3	463.7	463.7	463.0	465.2	467.4
30°	437.3	435.9	437.3	437.3	438.1	438.1	438.8	438.8	438.8	441.0	442.5
32.5°	405.1	405.8	408.0	407.3	406.6	408.8	408.8	410.2	411.0	412.4	413.2
35°	370.7	371.4	371.4	372.1	373.6	372.1	375.8	375.1	375.8	378.7	380.2
37.5°	334.1	331.9	335.5	334.1	334.8	334.8	336.3	337.0	339.2	342.8	342.8
40°	294.5	295.2	296.7	297.4	298.2	298.2	298.2	300.4	301.1	305.5	304.7
42.5°	260.1	260.1	261.5	262.3	262.3	262.3	262.3	264.5	265.9	267.4	268.9
45°	230.0	227.8	229.3	229.3	230.8	230.0	231.5	233.0	233.7	235.9	235.2
47.5°	201.5	200.7	201.5	202.2	201.5	202.2	202.9	203.7	204.4	204.4	204.4
50°	176.5	176.5	177.3	178.0	178.0	178.0	178.0	178.7	178.7	180.2	178.7
52.5°	156.0	156.8	156.8	156.0	156.8	156.8	157.5	157.5	156.8	156.8	154.6
55°	138.5	137.7	138.5	137.7	138.5	138.5	137.7	137.7	137.0	136.3	135.5
57.5°	121.6	121.6	121.6	121.6	120.9	121.6	120.9	120.1	120.1	118.7	116.5
60°	107.0	107.0	107.0	107.0	107.0	106.2	107.0	106.2	104.8	103.3	100.4
62.5°	94.5	93.8	94.5	93.8	93.8	93.0	93.0	92.3	90.8	89.4	86.4
65°	83.5	84.2	83.5	83.5	82.8	82.0	82.0	81.3	79.1	77.7	74.7
67.5°	71.8	71.1	71.1	71.1	70.3	70.3	70.3	68.9	67.4	65.2	62.3
70°	58.6	58.6	58.6	57.9	57.9	57.1	57.1	56.4	54.9	53.5	49.8
72.5°	46.2	46.2	46.2	44.7	45.4	44.7	44.7	43.2	42.5	40.3	38.1
75°	35.2	35.2	34.4	34.4	33.7	33.0	33.0	32.2	31.5	30.0	27.8
77.5°	25.6	25.6	25.6	24.9	24.2	23.4	23.4	22.7	22.0	21.2	19.8
80°	17.6	17.6	17.6	17.6	16.8	16.1	16.1	15.4	15.4	14.7	13.2
82.5°	11.7	11.7	11.7	11.7	11.0	11.0	11.0	10.3	9.5	9.5	8.1
85°	8.1	8.1	7.3	7.3	7.3	7.3	6.6	6.6	5.9	5.1	5.1
87.5°	4.4	4.4	4.4	4.4	3.7	3.7	3.7	3.7	2.9	2.9	2.2
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: P252651

CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9
2.5°	521.6	521.6	520.9	518.7	519.4	518.7	519.4	518.7	516.5	518.7	516.5
5°	524.5	525.3	523.8	520.9	521.6	520.9	520.9	520.1	517.9	519.4	517.9
7.5°	527.5	526.7	526.0	523.1	523.8	523.1	523.1	521.6	519.4	520.9	518.7
10°	528.9	528.9	527.5	524.5	524.5	523.8	524.5	523.8	520.9	523.1	521.6
12.5°	528.9	528.2	528.2	524.5	525.3	524.5	525.3	523.8	521.6	523.1	522.3
15°	526.7	526.7	526.0	522.3	523.1	523.1	523.8	522.3	520.1	522.3	520.9
17.5°	522.3	522.3	521.6	518.7	520.1	520.1	520.9	519.4	517.2	518.7	518.7
20°	513.5	514.3	514.3	512.1	513.5	513.5	514.3	513.5	512.8	513.5	512.1
22.5°	503.3	504.7	504.7	502.5	504.0	504.0	506.2	505.5	504.0	504.7	504.0
25°	487.9	489.4	490.8	489.4	490.8	490.8	493.0	492.3	490.8	492.3	490.1
27.5°	470.3	471.0	472.5	471.0	473.2	472.5	474.7	474.0	471.8	474.0	473.2
30°	445.4	448.3	450.5	448.3	450.5	450.5	452.0	451.3	450.5	449.8	449.8
32.5°	417.6	420.5	420.5	419.8	421.2	421.2	422.0	420.5	419.8	420.5	421.2
35°	383.1	384.6	386.1	385.3	386.1	386.8	386.1	386.8	384.6	385.3	385.3
37.5°	345.8	347.2	347.2	345.0	346.5	346.5	345.0	345.0	343.6	345.0	342.1
40°	306.2	304.7	305.5	304.0	302.6	302.6	301.8	298.9	297.4	298.2	298.9
42.5°	267.4	267.4	265.2	261.5	257.9	257.9	255.7	254.2	251.3	252.7	252.0
45°	234.4	230.8	227.8	222.0	219.8	218.3	214.6	211.0	209.5	210.2	209.5
47.5°	202.9	200.0	192.7	184.6	182.4	180.2	175.8	171.4	170.0	168.5	168.5
50°	176.5	171.4	163.4	154.6	150.9	147.2	141.4	137.0	134.1	134.8	134.8
52.5°	152.4	146.5	137.0	126.0	121.6	117.2	112.1	107.0	104.8	104.0	104.0
55°	131.1	124.5	115.0	102.6	98.9	93.8	87.2	81.3	78.4	77.7	79.1
57.5°	112.1	106.2	95.2	82.8	78.4	73.3	66.7	61.5	57.9	57.1	57.9
60°	96.7	88.6	79.1	67.4	61.5	57.1	49.8	45.4	41.8	40.3	41.0
62.5°	81.3	74.0	64.5	52.7	48.3	44.0	37.4	32.2	29.3	28.6	29.3
65°	69.6	62.3	53.5	43.2	38.8	34.4	28.6	23.4	21.2	20.5	21.2
67.5°	57.9	51.3	44.0	34.4	30.8	27.1	21.2	17.6	14.7	13.9	14.7
70°	46.9	41.0	33.7	27.1	23.4	20.5	16.1	12.5	10.3	9.5	10.3
72.5°	35.2	30.8	25.6	19.8	17.6	15.4	11.7	8.8	7.3	6.6	7.3
75°	25.6	22.0	18.3	13.9	12.5	11.0	8.1	5.9	5.1	4.4	5.1
77.5°	17.6	15.4	12.5	9.5	8.1	7.3	5.1	4.4	3.7	2.9	2.9
80°	11.7	10.3	8.1	6.6	5.9	5.1	3.7	2.9	2.2	2.2	2.2
82.5°	7.3	5.9	5.1	3.7	2.9	2.9	2.2	1.5	1.5	1.5	1.5
85°	4.4	3.7	2.9	2.2	1.5	1.5	0.7	0.7	0.7	0.7	0.7
87.5°	2.2	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.7
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: P252651

CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9
2.5°	517.9	516.5	516.5	517.2	517.9	518.7	517.2	516.5	516.5	518.7	517.2
5°	517.9	517.2	517.2	517.2	518.7	519.4	517.9	517.2	517.9	520.1	519.4
7.5°	520.1	518.7	519.4	519.4	520.1	521.6	520.1	519.4	520.1	522.3	520.9
10°	521.6	520.1	520.9	520.1	522.3	523.1	521.6	520.9	521.6	524.5	523.8
12.5°	522.3	521.6	521.6	520.9	523.1	523.8	522.3	521.6	522.3	524.5	523.8
15°	520.9	520.1	520.1	520.1	521.6	523.1	520.9	520.1	520.1	522.3	521.6
17.5°	517.9	516.5	516.5	516.5	517.2	517.9	515.7	515.0	514.3	516.5	515.7
20°	512.8	511.3	509.9	509.9	510.6	510.6	509.1	506.9	506.9	507.7	506.2
22.5°	503.3	502.5	501.1	500.3	501.8	501.1	498.1	496.0	495.2	496.0	494.5
25°	490.1	488.6	487.9	487.2	487.9	487.2	484.2	481.3	481.3	481.3	479.1
27.5°	471.8	470.3	469.6	469.6	470.3	468.8	465.9	463.0	461.5	461.5	459.3
30°	448.3	448.3	447.6	446.9	446.1	446.1	441.7	438.8	437.3	438.1	436.6
32.5°	419.8	419.0	418.3	416.1	416.8	416.1	412.4	410.2	408.0	406.6	405.8
35°	383.1	383.1	382.4	382.4	382.4	381.7	378.0	375.8	374.3	373.6	371.4
37.5°	342.8	342.1	341.4	341.4	341.4	341.4	339.2	337.0	337.0	336.3	334.8
40°	297.4	298.2	298.9	298.2	300.4	302.6	299.6	298.2	297.4	299.6	296.7
42.5°	253.5	252.7	256.4	257.1	257.1	260.8	261.5	262.3	261.5	263.0	263.0
45°	211.0	210.2	213.9	215.4	219.0	223.4	225.6	229.3	230.8	232.2	230.8
47.5°	170.7	173.6	176.5	180.2	183.1	190.5	194.9	198.5	200.0	202.2	202.2
50°	137.0	139.9	145.0	148.0	151.6	160.4	167.8	172.9	175.8	178.0	177.3
52.5°	105.5	110.6	117.2	120.1	125.3	135.5	143.6	149.4	153.1	155.3	156.0
55°	81.3	85.7	92.3	96.7	101.8	112.8	123.1	129.7	133.3	136.3	137.7
57.5°	60.1	65.2	72.5	76.2	82.0	94.5	103.3	111.4	115.7	119.4	120.1
60°	44.0	49.1	55.7	60.1	65.9	78.4	88.6	96.0	101.1	104.0	105.5
62.5°	31.5	36.6	43.2	47.6	52.7	63.7	74.0	81.3	86.4	90.1	92.3
65°	22.7	27.8	34.4	38.1	42.5	52.7	62.3	69.6	74.7	79.1	80.6
67.5°	16.8	20.5	26.4	30.0	34.4	42.5	50.5	57.1	62.3	65.9	67.4
70°	12.5	15.4	20.5	22.7	25.6	33.0	39.6	45.4	49.8	52.7	54.2
72.5°	8.8	11.0	14.7	16.8	19.0	24.9	30.0	34.4	37.4	40.3	41.8
75°	5.9	7.3	10.3	11.7	13.2	17.6	21.2	24.9	27.1	29.3	30.0
77.5°	3.7	5.1	7.3	8.1	9.5	11.7	14.7	16.8	18.3	19.8	21.2
80°	2.2	2.9	4.4	5.1	5.9	8.1	9.5	11.0	12.5	13.9	14.7
82.5°	1.5	2.2	2.9	2.9	3.7	4.4	5.9	7.3	8.1	8.8	9.5
85°	0.7	0.7	1.5	1.5	2.2	2.2	2.9	3.7	4.4	5.1	5.9
87.5°	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.2	2.2	2.9	2.9
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: P252651

CATALOG NUMBER: LD6B10D010 EU6B10208040 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	517.9	517.9	517.9	517.9	517.9	517.9	517.9	517.9
2.5°	515.7	517.9	515.7	517.2	516.5	516.5	515.7	516.5
5°	517.9	520.9	517.9	520.1	518.7	518.7	518.7	519.4
7.5°	520.1	523.1	520.9	523.1	522.3	521.6	521.6	523.1
10°	522.3	524.5	523.1	525.3	524.5	523.8	523.8	525.3
12.5°	522.3	525.3	523.8	526.0	525.3	524.5	524.5	525.3
15°	520.1	523.8	521.6	523.8	523.1	522.3	522.3	523.8
17.5°	513.5	516.5	515.0	516.5	516.5	515.7	516.5	517.2
20°	504.7	506.9	505.5	506.9	506.9	505.5	506.2	506.9
22.5°	492.3	494.5	493.0	494.5	493.8	493.0	493.0	492.3
25°	476.9	479.8	477.6	479.1	477.6	476.2	476.2	476.9
27.5°	457.9	460.1	457.1	458.6	457.1	455.7	455.7	454.9
30°	433.0	433.7	431.5	433.0	431.5	430.8	429.3	429.3
32.5°	402.9	403.6	401.4	401.4	400.0	400.0	397.1	399.3
35°	367.8	368.5	367.8	367.0	364.8	364.1	363.4	363.4
37.5°	331.1	331.1	328.9	328.2	326.7	325.3	326.0	323.8
40°	293.8	293.0	290.8	291.6	290.8	288.6	287.9	287.2
42.5°	258.6	258.6	256.4	257.1	255.7	254.9	252.7	253.5
45°	227.8	227.8	225.6	225.6	224.9	222.7	223.4	222.0
47.5°	200.0	200.0	199.3	199.3	197.1	196.3	196.3	196.3
50°	175.8	175.8	175.8	175.8	175.1	174.4	173.6	174.4
52.5°	155.3	156.8	156.0	156.0	155.3	154.6	153.8	153.8
55°	137.0	137.7	137.7	138.5	137.7	137.0	137.7	137.0
57.5°	120.9	122.3	122.3	122.3	122.3	122.3	121.6	120.9
60°	107.0	107.7	107.7	108.4	108.4	108.4	107.7	107.7
62.5°	93.0	94.5	95.2	95.2	96.0	95.2	95.2	95.2
65°	82.0	83.5	84.2	83.5	84.2	84.2	83.5	83.5
67.5°	68.9	70.3	70.3	70.3	70.3	71.1	70.3	70.3
70°	55.7	57.1	56.4	57.1	57.1	57.1	57.1	57.1
72.5°	42.5	43.2	44.0	44.0	44.7	44.0	44.0	44.0
75°	30.8	32.2	32.2	32.2	32.2	33.0	33.0	33.0
77.5°	22.0	22.7	22.7	23.4	23.4	23.4	23.4	24.2
80°	15.4	15.4	16.1	16.1	16.8	16.8	16.8	16.8
82.5°	10.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0
85°	5.9	6.6	6.6	6.6	6.6	7.3	7.3	7.3
87.5°	3.7	3.7	3.7	3.7	3.7	3.7	2.9	2.9
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)