

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: P212700

Luminaire Tested: **LD4B10D010 EU4B10209035 4LBSWLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P212700  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29201)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B10D010 EU4B10209035 4LBSWLI1  
Description: PORTFOLIO 4 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 844.7 lumens  
Efficiency: N/A  
Efficacy: 84.0 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.3 / 1.21  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

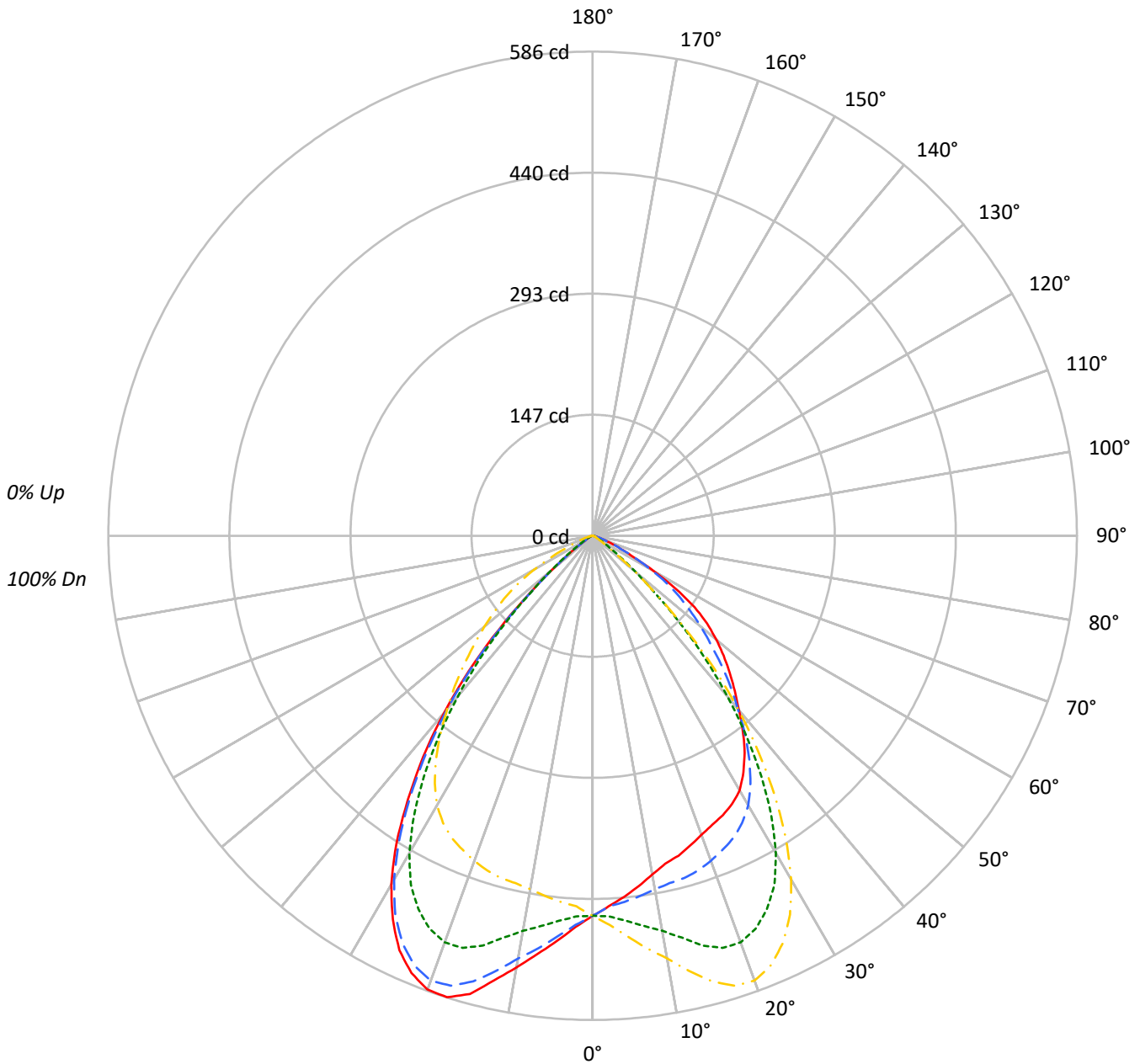
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWL11

### Luminous Intensity Polar Plot





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CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**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	112	109	106	103	110	107	104	102	103	100	99	99	97	96	95	94	93	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																			
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73																			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66																			
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60																			
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54																			
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	59	55	51	49																			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45																			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	52	46	43	41																			
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38																			

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

	0°	90°	180°	270°
0°	56727	56727	56727	56727
5°	54306	57921	60930	57921
10°	52116	60796	66419	60796
15°	51194	65547	73311	65547
20°	50549	68729	76709	68729
25°	50764	67871	75316	67871
30°	50704	63166	69391	63166
35°	48290	53605	58635	53605
40°	44312	40785	44988	40785
45°	40905	25956	27980	25956
50°	37419	12588	12243	12588
55°	32408	5484	3914	5484
60°	20969	2689	1801	2689
65°	11003	1780	1430	1780
70°	5914	1298	1082	1298
75°	3193	1144	858	1144
80°	2131	852	426	852
85°	1698	849	0	849



TEST NUMBER: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.8	5.3
10°-20°	140.2	16.6
20°-30°	218.0	25.8
30°-40°	220.2	26.1
40°-50°	139.4	16.5
50°-60°	58.5	6.9
60°-70°	18.6	2.2
70°-80°	4.2	0.5
80°-90°	0.6	0.1
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°	403.1	47.7
0°-40°	623.3	73.8
0°-60°	821.3	97.2
0°-90°	844.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	844.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	460	460	460	460	460	
5°	439	468	492	468	439	41
15°	401	513	574	513	401	113
25°	373	499	553	499	373	172
35°	321	356	389	356	321	199
45°	234	149	160	149	234	181
55°	151	26	18	26	151	130
65°	38	6	5	6	38	42
75°	7	2	2	2	7	8
85°	1	1	0	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P212700

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	448.9	444.7	448.3	449.5	449.5	448.9	450.1	448.9	447.1	454.4	448.9
5°	438.6	435.6	438.6	439.8	440.4	441.0	442.2	442.2	441.6	448.3	444.7
7.5°	427.7	425.8	428.3	430.1	432.5	431.9	433.7	434.3	435.6	443.5	439.8
10°	416.1	414.3	417.3	418.6	421.6	422.2	423.4	425.2	427.7	435.6	434.3
12.5°	406.4	405.8	407.6	410.0	413.1	413.7	414.9	417.9	421.6	430.1	430.7
15°	400.9	400.3	402.1	404.6	407.0	408.2	409.4	413.7	417.3	426.4	428.9
17.5°	393.0	393.0	394.9	397.3	400.3	401.5	403.4	407.6	412.5	421.6	424.6
20°	385.1	385.7	387.0	389.4	392.4	393.6	395.5	399.7	405.2	414.3	418.6
22.5°	378.5	380.3	380.9	382.7	385.7	387.6	388.2	393.0	397.9	405.8	411.3
25°	373.0	375.4	375.4	376.6	380.3	380.9	381.5	386.4	390.6	397.9	403.4
27.5°	365.7	368.1	368.1	370.0	372.4	373.6	373.6	377.9	382.1	387.6	391.8
30°	356.0	357.8	357.8	358.4	360.8	362.1	361.4	365.7	368.7	372.4	376.6
32.5°	339.6	342.6	341.4	343.2	344.4	345.7	344.4	348.1	350.5	354.2	355.4
35°	320.7	323.2	321.4	322.6	325.0	325.0	324.4	326.8	328.0	329.9	330.5
37.5°	298.9	300.7	299.5	300.1	301.3	301.9	300.7	303.1	303.1	303.7	302.5
40°	275.2	278.2	276.4	276.4	277.6	278.2	276.4	277.6	278.8	275.8	273.4
42.5°	254.5	257.6	255.7	255.7	255.7	256.4	253.9	254.5	254.5	250.3	246.6
45°	234.5	236.9	235.1	233.3	233.9	234.5	232.1	231.4	229.6	224.8	219.3
47.5°	215.0	217.5	215.0	213.8	213.8	213.8	210.8	209.0	206.5	199.9	193.2
50°	195.0	197.4	195.6	194.4	193.2	193.2	190.7	188.3	184.7	178.0	170.7
52.5°	174.3	176.2	174.3	173.1	171.9	171.9	168.9	167.1	162.8	156.1	148.2
55°	150.7	151.9	150.0	148.8	148.2	148.2	145.8	144.0	140.3	134.9	127.6
57.5°	119.1	121.5	118.5	119.7	119.7	119.1	117.2	116.6	115.4	110.6	105.1
60°	85.0	85.0	84.4	86.9	86.3	87.5	86.3	86.9	87.5	83.8	80.2
62.5°	55.9	57.7	56.5	57.7	58.9	58.9	58.3	59.5	60.7	58.9	57.1
65°	37.7	37.7	37.7	38.3	38.3	38.9	38.3	38.9	39.5	38.9	37.7
67.5°	24.9	25.5	24.9	25.5	24.9	25.5	25.5	25.5	26.1	25.5	24.9
70°	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	17.0	16.4	15.8
72.5°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
75°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
77.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4	3.0	2.4	2.4
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6	1.2	0.6	0.6
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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	452.0	450.1	459.3	451.4	455.6	455.0	455.6	459.3	459.3	461.1	460.5
5°	449.5	447.7	458.0	452.0	456.8	456.8	458.6	464.1	464.1	467.8	468.4
7.5°	445.9	446.5	457.4	453.8	459.3	459.9	462.9	469.6	471.4	476.3	478.7
10°	441.6	444.1	455.6	454.4	461.7	462.3	468.4	476.3	478.7	485.4	489.6
12.5°	439.8	444.1	457.4	458.6	465.9	469.0	475.7	486.0	490.2	498.1	504.2
15°	439.2	445.3	459.9	464.1	472.6	476.9	486.0	498.1	503.0	513.3	520.6
17.5°	436.2	444.1	459.9	466.5	475.7	479.9	491.4	505.4	511.5	523.0	531.5
20°	430.7	439.2	455.0	463.5	473.2	479.3	490.8	505.4	511.5	523.6	533.4
22.5°	423.4	431.9	447.1	456.8	465.3	472.0	484.2	498.1	503.6	515.1	524.9
25°	414.3	422.8	435.6	445.3	453.2	459.3	469.6	484.2	487.8	498.7	509.1
27.5°	401.5	409.4	419.2	428.3	435.6	440.4	449.5	462.3	465.3	476.3	484.8
30°	384.5	389.4	397.9	404.0	409.4	414.3	421.0	432.5	433.7	443.5	451.4
32.5°	361.4	363.9	370.0	373.0	377.9	379.7	385.1	394.9	393.6	402.8	409.4
35°	333.5	334.7	334.7	338.4	339.6	340.2	344.4	349.9	348.1	356.0	360.8
37.5°	303.1	302.5	298.9	298.9	299.5	297.7	299.5	301.9	299.5	305.6	309.8
40°	272.1	268.5	261.8	258.2	256.4	255.7	252.1	255.1	249.1	253.3	256.4
42.5°	242.4	236.3	226.0	218.7	215.7	212.6	206.5	206.5	198.6	201.7	202.3
45°	212.0	201.7	187.7	181.0	173.1	168.3	160.4	152.5	147.0	148.8	147.0
47.5°	184.1	171.9	155.5	144.0	134.9	128.2	117.2	108.1	102.7	100.2	97.8
50°	159.8	147.6	128.8	114.2	105.1	97.2	86.3	75.9	69.3	65.6	63.8
52.5°	137.9	125.1	106.9	91.7	82.0	74.7	62.6	52.2	45.0	40.7	38.3
55°	117.2	105.7	88.7	74.7	65.6	58.3	46.2	36.4	29.8	25.5	22.5
57.5°	96.6	86.3	72.3	58.9	51.0	44.3	34.0	25.5	20.0	16.4	14.0
60°	74.1	66.2	54.7	44.3	37.7	32.2	24.3	17.6	14.0	10.9	9.7
62.5°	52.2	47.4	38.9	31.6	27.3	23.1	17.0	12.8	9.7	7.9	7.3
65°	35.2	31.6	26.7	21.3	18.2	15.8	12.1	9.1	7.3	6.1	5.5
67.5°	23.1	21.3	17.6	14.6	12.8	10.9	8.5	6.7	5.5	4.9	4.3
70°	15.2	14.0	11.5	9.7	9.1	7.9	6.1	4.9	4.3	3.6	3.6
72.5°	9.7	8.5	7.9	6.7	6.1	5.5	4.3	3.6	3.0	3.0	3.0
75°	6.1	5.5	4.9	4.3	4.3	3.6	3.0	3.0	2.4	2.4	2.4
77.5°	3.6	3.6	3.0	3.0	2.4	2.4	2.4	1.8	1.8	1.8	1.8
80°	2.4	2.4	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	463.5	464.7	463.5	467.1	461.1	467.8	465.3	466.5	471.4	469.6	471.4
5°	472.6	475.0	475.0	479.3	473.8	481.7	479.3	481.7	486.6	486.6	489.0
7.5°	484.2	487.2	488.4	492.7	487.2	496.9	494.5	497.5	503.6	503.6	505.4
10°	496.3	500.0	502.4	507.2	501.2	512.1	509.7	513.9	519.4	520.0	523.0
12.5°	511.5	516.4	519.4	523.6	519.4	530.3	527.9	532.1	539.4	540.0	543.7
15°	528.5	534.6	538.2	543.1	538.2	550.4	547.9	552.8	558.3	560.7	564.3
17.5°	539.4	546.7	549.8	555.2	550.4	562.5	559.5	566.2	571.0	572.2	576.5
20°	541.3	547.9	552.2	556.4	552.2	564.3	561.3	566.8	572.8	574.1	577.1
22.5°	533.4	538.8	543.7	547.3	543.7	555.8	551.6	557.7	563.1	564.3	566.8
25°	515.1	521.8	526.7	529.7	526.1	537.6	534.0	539.4	544.3	546.7	547.3
27.5°	489.6	495.7	500.6	502.4	500.0	510.9	506.0	512.7	517.0	518.2	520.0
30°	455.0	460.5	465.3	466.5	464.7	472.6	470.2	476.3	480.5	481.7	482.9
32.5°	412.5	417.9	421.0	422.2	420.4	428.3	425.8	430.7	435.6	435.6	435.6
35°	364.5	369.3	371.2	374.8	370.6	378.5	376.0	380.3	384.5	384.5	385.1
37.5°	312.9	316.5	317.7	321.4	317.1	324.4	322.6	326.2	329.9	329.3	330.5
40°	257.6	261.2	262.4	265.5	261.8	267.9	266.7	270.3	273.4	273.4	273.4
42.5°	204.1	206.5	206.5	209.6	205.9	211.4	211.4	213.8	216.9	216.3	216.3
45°	148.2	147.6	148.8	148.2	148.2	153.1	153.1	154.3	156.7	155.5	156.1
47.5°	98.4	99.0	96.6	98.4	96.0	100.2	100.2	100.2	102.1	100.8	102.1
50°	62.6	60.7	59.5	59.5	58.9	62.0	60.7	61.4	62.6	61.4	62.6
52.5°	35.2	34.6	33.4	34.0	32.8	33.4	33.4	33.4	34.0	33.4	34.6
55°	20.7	18.8	18.2	18.2	17.6	18.2	17.6	17.6	17.6	17.0	17.6
57.5°	12.1	11.5	10.9	10.9	10.3	10.3	10.3	10.3	10.3	10.3	10.3
60°	8.5	7.9	7.9	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
62.5°	6.7	6.1	6.1	6.1	5.5	5.5	5.5	5.5	5.5	6.1	5.5
65°	4.9	4.9	4.9	4.9	4.9	4.9	4.3	4.9	4.9	4.9	4.9
67.5°	4.3	4.3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
70°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.0	0.6	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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	473.2	470.8	465.3	469.0	469.6	467.1	470.2	473.8	470.2	467.1	469.6
5°	490.8	489.0	484.2	487.2	487.8	487.2	489.0	492.1	489.0	487.2	487.8
7.5°	508.5	507.2	501.8	505.4	506.6	505.4	507.2	510.3	507.2	505.4	506.6
10°	525.5	524.9	519.4	524.3	524.9	523.6	525.5	530.3	525.5	523.6	524.9
12.5°	544.9	546.1	540.0	545.5	546.1	544.9	547.3	551.0	547.3	544.9	546.1
15°	567.4	566.8	561.9	566.2	567.4	566.2	569.2	574.1	569.2	566.2	567.4
17.5°	578.3	578.3	574.7	578.9	579.5	579.5	582.0	585.6	582.0	579.5	579.5
20°	578.9	579.5	575.3	580.1	580.1	580.1	582.6	584.4	582.6	580.1	580.1
22.5°	569.2	569.8	565.6	569.8	569.8	570.4	571.6	572.8	571.6	570.4	569.8
25°	550.4	551.0	547.3	551.0	550.4	550.4	551.6	553.4	551.6	550.4	550.4
27.5°	522.4	523.0	518.2	522.4	521.8	521.2	523.0	523.6	523.0	521.2	521.8
30°	485.4	486.0	481.7	485.4	484.8	484.2	486.6	487.2	486.6	484.2	484.8
32.5°	441.0	439.8	436.8	439.8	439.2	439.2	440.4	442.2	440.4	439.2	439.2
35°	387.6	387.6	385.7	388.2	386.4	388.8	388.8	389.4	388.8	388.8	386.4
37.5°	332.9	332.9	331.7	332.9	332.3	334.7	334.7	336.5	334.7	334.7	332.3
40°	275.8	275.8	274.6	275.8	277.6	277.6	277.0	279.4	277.0	277.6	277.6
42.5°	218.1	218.1	217.5	220.5	220.5	220.5	218.7	221.1	218.7	220.5	220.5
45°	158.6	157.3	156.7	156.7	157.3	159.8	157.3	160.4	157.3	159.8	157.3
47.5°	100.8	101.4	102.1	103.9	102.7	102.1	102.1	103.9	102.1	102.1	102.7
50°	62.0	62.6	62.6	63.8	62.0	63.2	62.6	63.8	62.6	63.2	62.0
52.5°	34.0	34.0	34.0	35.2	34.0	34.6	34.0	35.2	34.0	34.6	34.0
55°	17.6	17.6	17.6	18.2	17.6	17.6	17.6	18.2	17.6	17.6	17.6
57.5°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
60°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
62.5°	6.1	5.5	5.5	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
65°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
67.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
70°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	469.0	465.3	470.8	473.2	471.4	469.6	471.4	466.5	465.3	467.8	461.1
5°	487.2	484.2	489.0	490.8	489.0	486.6	486.6	481.7	479.3	481.7	473.8
7.5°	505.4	501.8	507.2	508.5	505.4	503.6	503.6	497.5	494.5	496.9	487.2
10°	524.3	519.4	524.9	525.5	523.0	520.0	519.4	513.9	509.7	512.1	501.2
12.5°	545.5	540.0	546.1	544.9	543.7	540.0	539.4	532.1	527.9	530.3	519.4
15°	566.2	561.9	566.8	567.4	564.3	560.7	558.3	552.8	547.9	550.4	538.2
17.5°	578.9	574.7	578.3	578.3	576.5	572.2	571.0	566.2	559.5	562.5	550.4
20°	580.1	575.3	579.5	578.9	577.1	574.1	572.8	566.8	561.3	564.3	552.2
22.5°	569.8	565.6	569.8	569.2	566.8	564.3	563.1	557.7	551.6	555.8	543.7
25°	551.0	547.3	551.0	550.4	547.3	546.7	544.3	539.4	534.0	537.6	526.1
27.5°	522.4	518.2	523.0	522.4	520.0	518.2	517.0	512.7	506.0	510.9	500.0
30°	485.4	481.7	486.0	485.4	482.9	481.7	480.5	476.3	470.2	472.6	464.7
32.5°	439.8	436.8	439.8	441.0	435.6	435.6	435.6	430.7	425.8	428.3	420.4
35°	388.2	385.7	387.6	387.6	385.1	384.5	384.5	380.3	376.0	378.5	370.6
37.5°	332.9	331.7	332.9	332.9	330.5	329.3	329.9	326.2	322.6	324.4	317.1
40°	275.8	274.6	275.8	275.8	273.4	273.4	273.4	270.3	266.7	267.9	261.8
42.5°	220.5	217.5	218.1	218.1	216.3	216.3	216.9	213.8	211.4	211.4	205.9
45°	156.7	156.7	157.3	158.6	156.1	155.5	156.7	154.3	153.1	153.1	148.2
47.5°	103.9	102.1	101.4	100.8	102.1	100.8	102.1	100.2	100.2	100.2	96.0
50°	63.8	62.6	62.6	62.0	62.6	61.4	62.6	61.4	60.7	62.0	58.9
52.5°	35.2	34.0	34.0	34.0	34.6	33.4	34.0	33.4	33.4	33.4	32.8
55°	18.2	17.6	17.6	17.6	17.6	17.0	17.6	17.6	17.6	18.2	17.6
57.5°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
60°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
62.5°	6.1	5.5	5.5	6.1	5.5	6.1	5.5	5.5	5.5	5.5	5.5
65°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.3	4.9	4.9
67.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
70°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	467.1	463.5	464.7	463.5	460.5	461.1	459.3	459.3	455.6	455.0	455.6
5°	479.3	475.0	475.0	472.6	468.4	467.8	464.1	464.1	458.6	456.8	456.8
7.5°	492.7	488.4	487.2	484.2	478.7	476.3	471.4	469.6	462.9	459.9	459.3
10°	507.2	502.4	500.0	496.3	489.6	485.4	478.7	476.3	468.4	462.3	461.7
12.5°	523.6	519.4	516.4	511.5	504.2	498.1	490.2	486.0	475.7	469.0	465.9
15°	543.1	538.2	534.6	528.5	520.6	513.3	503.0	498.1	486.0	476.9	472.6
17.5°	555.2	549.8	546.7	539.4	531.5	523.0	511.5	505.4	491.4	479.9	475.7
20°	556.4	552.2	547.9	541.3	533.4	523.6	511.5	505.4	490.8	479.3	473.2
22.5°	547.3	543.7	538.8	533.4	524.9	515.1	503.6	498.1	484.2	472.0	465.3
25°	529.7	526.7	521.8	515.1	509.1	498.7	487.8	484.2	469.6	459.3	453.2
27.5°	502.4	500.6	495.7	489.6	484.8	476.3	465.3	462.3	449.5	440.4	435.6
30°	466.5	465.3	460.5	455.0	451.4	443.5	433.7	432.5	421.0	414.3	409.4
32.5°	422.2	421.0	417.9	412.5	409.4	402.8	393.6	394.9	385.1	379.7	377.9
35°	374.8	371.2	369.3	364.5	360.8	356.0	348.1	349.9	344.4	340.2	339.6
37.5°	321.4	317.7	316.5	312.9	309.8	305.6	299.5	301.9	299.5	297.7	299.5
40°	265.5	262.4	261.2	257.6	256.4	253.3	249.1	255.1	252.1	255.7	256.4
42.5°	209.6	206.5	206.5	204.1	202.3	201.7	198.6	206.5	206.5	212.6	215.7
45°	148.2	148.8	147.6	148.2	147.0	148.8	147.0	152.5	160.4	168.3	173.1
47.5°	98.4	96.6	99.0	98.4	97.8	100.2	102.7	108.1	117.2	128.2	134.9
50°	59.5	59.5	60.7	62.6	63.8	65.6	69.3	75.9	86.3	97.2	105.1
52.5°	34.0	33.4	34.6	35.2	38.3	40.7	45.0	52.2	62.6	74.7	82.0
55°	18.2	18.2	18.8	20.7	22.5	25.5	29.8	36.4	46.2	58.3	65.6
57.5°	10.9	10.9	11.5	12.1	14.0	16.4	20.0	25.5	34.0	44.3	51.0
60°	7.3	7.9	7.9	8.5	9.7	10.9	14.0	17.6	24.3	32.2	37.7
62.5°	6.1	6.1	6.1	6.7	7.3	7.9	9.7	12.8	17.0	23.1	27.3
65°	4.9	4.9	4.9	4.9	5.5	6.1	7.3	9.1	12.1	15.8	18.2
67.5°	3.6	3.6	4.3	4.3	4.3	4.9	5.5	6.7	8.5	10.9	12.8
70°	3.0	3.0	3.0	3.0	3.6	3.6	4.3	4.9	6.1	7.9	9.1
72.5°	2.4	2.4	2.4	2.4	3.0	3.0	3.0	3.6	4.3	5.5	6.1
75°	1.8	1.8	1.8	1.8	2.4	2.4	2.4	3.0	3.0	3.6	4.3
77.5°	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.4	2.4	2.4
80°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2
85°	0.0	0.0	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
2.5°	451.4	459.3	450.1	452.0	448.9	454.4	447.1	448.9	450.1	448.9	449.5
5°	452.0	458.0	447.7	449.5	444.7	448.3	441.6	442.2	442.2	441.0	440.4
7.5°	453.8	457.4	446.5	445.9	439.8	443.5	435.6	434.3	433.7	431.9	432.5
10°	454.4	455.6	444.1	441.6	434.3	435.6	427.7	425.2	423.4	422.2	421.6
12.5°	458.6	457.4	444.1	439.8	430.7	430.1	421.6	417.9	414.9	413.7	413.1
15°	464.1	459.9	445.3	439.2	428.9	426.4	417.3	413.7	409.4	408.2	407.0
17.5°	466.5	459.9	444.1	436.2	424.6	421.6	412.5	407.6	403.4	401.5	400.3
20°	463.5	455.0	439.2	430.7	418.6	414.3	405.2	399.7	395.5	393.6	392.4
22.5°	456.8	447.1	431.9	423.4	411.3	405.8	397.9	393.0	388.2	387.6	385.7
25°	445.3	435.6	422.8	414.3	403.4	397.9	390.6	386.4	381.5	380.9	380.3
27.5°	428.3	419.2	409.4	401.5	391.8	387.6	382.1	377.9	373.6	373.6	372.4
30°	404.0	397.9	389.4	384.5	376.6	372.4	368.7	365.7	361.4	362.1	360.8
32.5°	373.0	370.0	363.9	361.4	355.4	354.2	350.5	348.1	344.4	345.7	344.4
35°	338.4	334.7	334.7	333.5	330.5	329.9	328.0	326.8	324.4	325.0	325.0
37.5°	298.9	298.9	302.5	303.1	302.5	303.7	303.1	303.1	300.7	301.9	301.3
40°	258.2	261.8	268.5	272.1	273.4	275.8	278.8	277.6	276.4	278.2	277.6
42.5°	218.7	226.0	236.3	242.4	246.6	250.3	254.5	254.5	253.9	256.4	255.7
45°	181.0	187.7	201.7	212.0	219.3	224.8	229.6	231.4	232.1	234.5	233.9
47.5°	144.0	155.5	171.9	184.1	193.2	199.9	206.5	209.0	210.8	213.8	213.8
50°	114.2	128.8	147.6	159.8	170.7	178.0	184.7	188.3	190.7	193.2	193.2
52.5°	91.7	106.9	125.1	137.9	148.2	156.1	162.8	167.1	168.9	171.9	171.9
55°	74.7	88.7	105.7	117.2	127.6	134.9	140.3	144.0	145.8	148.2	148.2
57.5°	58.9	72.3	86.3	96.6	105.1	110.6	115.4	116.6	117.2	119.1	119.7
60°	44.3	54.7	66.2	74.1	80.2	83.8	87.5	86.9	86.3	87.5	86.3
62.5°	31.6	38.9	47.4	52.2	57.1	58.9	60.7	59.5	58.3	58.9	58.9
65°	21.3	26.7	31.6	35.2	37.7	38.9	39.5	38.9	38.3	38.9	38.3
67.5°	14.6	17.6	21.3	23.1	24.9	25.5	26.1	25.5	25.5	25.5	24.9
70°	9.7	11.5	14.0	15.2	15.8	16.4	17.0	16.4	16.4	16.4	16.4
72.5°	6.7	7.9	8.5	9.7	10.3	10.3	10.3	10.3	10.3	10.3	10.3
75°	4.3	4.9	5.5	6.1	6.7	6.7	6.7	6.7	6.7	6.7	6.7
77.5°	3.0	3.0	3.6	3.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3
80°	1.8	1.8	2.4	2.4	2.4	2.4	3.0	2.4	3.0	3.0	3.0
82.5°	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	0.6	0.6	0.6	0.6	0.6	0.6	1.2	0.6	1.2	1.2	1.2
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: P212700

CATALOG NUMBER: LD4B10D010 EU4B10209035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	345°	350°	355°	360°
0°	459.9	459.9	459.9	459.9
2.5°	449.5	448.3	444.7	448.9
5°	439.8	438.6	435.6	438.6
7.5°	430.1	428.3	425.8	427.7
10°	418.6	417.3	414.3	416.1
12.5°	410.0	407.6	405.8	406.4
15°	404.6	402.1	400.3	400.9
17.5°	397.3	394.9	393.0	393.0
20°	389.4	387.0	385.7	385.1
22.5°	382.7	380.9	380.3	378.5
25°	376.6	375.4	375.4	373.0
27.5°	370.0	368.1	368.1	365.7
30°	358.4	357.8	357.8	356.0
32.5°	343.2	341.4	342.6	339.6
35°	322.6	321.4	323.2	320.7
37.5°	300.1	299.5	300.7	298.9
40°	276.4	276.4	278.2	275.2
42.5°	255.7	255.7	257.6	254.5
45°	233.3	235.1	236.9	234.5
47.5°	213.8	215.0	217.5	215.0
50°	194.4	195.6	197.4	195.0
52.5°	173.1	174.3	176.2	174.3
55°	148.8	150.0	151.9	150.7
57.5°	119.7	118.5	121.5	119.1
60°	86.9	84.4	85.0	85.0
62.5°	57.7	56.5	57.7	55.9
65°	38.3	37.7	37.7	37.7
67.5°	25.5	24.9	25.5	24.9
70°	16.4	16.4	16.4	16.4
72.5°	10.3	10.3	10.3	10.3
75°	6.7	6.7	6.7	6.7
77.5°	4.3	4.3	4.3	4.3
80°	3.0	3.0	3.0	3.0
82.5°	1.8	1.8	1.8	1.8
85°	1.2	1.2	1.2	1.2
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°

























(END OF REPORT)