

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: P212694

Luminaire Tested: **LD4B10D010 EU4B10208035 4LBSWLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P212694  
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 EU4B10208035 4LBSWLI1  
Description: PORTFOLIO 4 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 998.6 lumens  
Efficiency: N/A  
Efficacy: 99.4 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

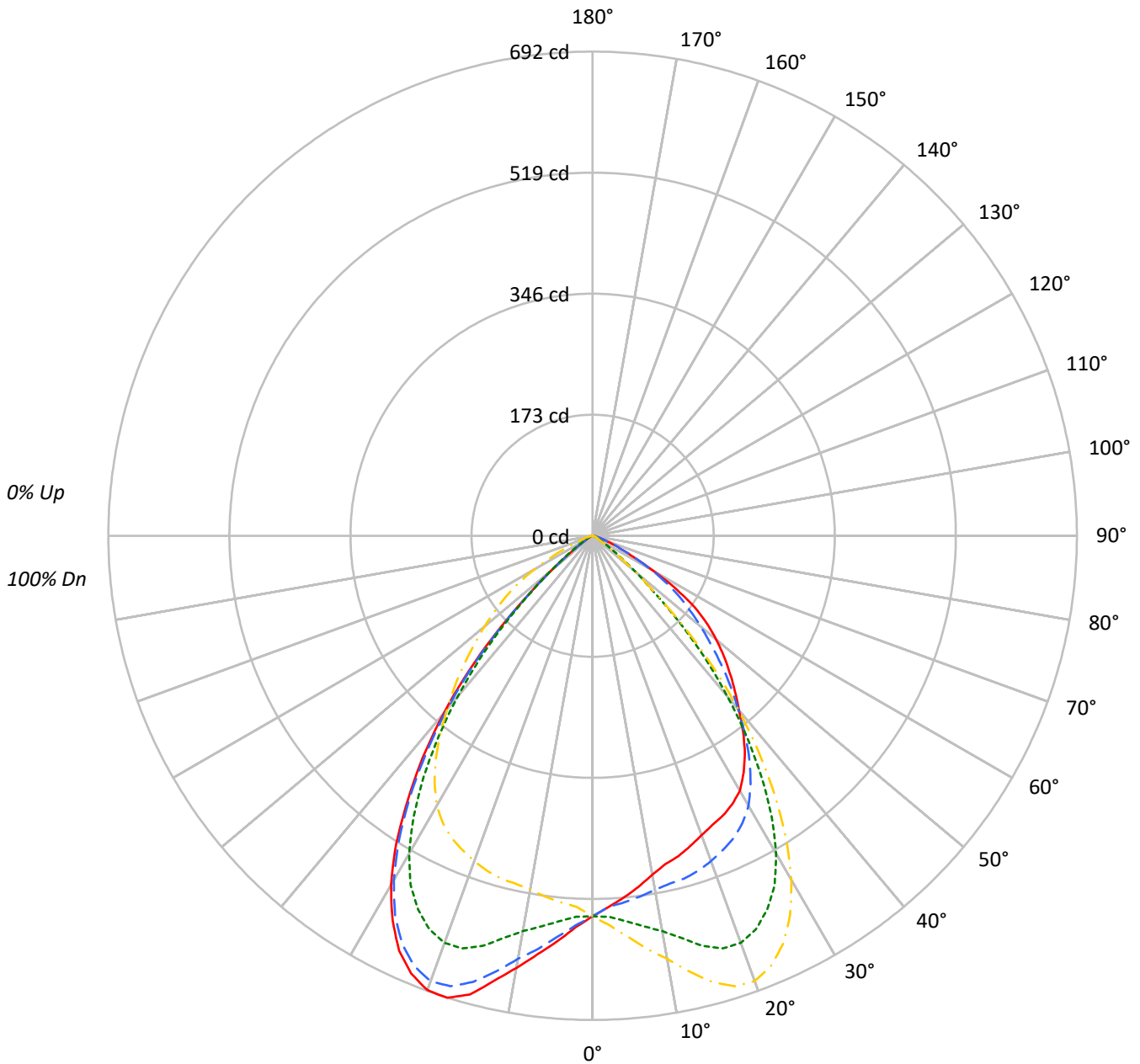
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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°	67063	67063	67063	67063
5°	64199	68471	72024	68471
10°	61610	71868	78531	71868
15°	60528	77486	86668	77486
20°	59763	81264	90689	81264
25°	60019	80243	89035	80243
30°	59933	74675	82038	74675
35°	57099	63363	69311	63363
40°	52379	48224	53200	48224
45°	48354	30701	33073	30701
50°	44231	14891	14469	14891
55°	38300	6494	4624	6494
60°	24792	3182	2122	3182
65°	12988	2101	1664	2101
70°	6996	1551	1298	1551
75°	3765	1382	1048	1382
80°	2557	994	497	994
85°	1981	991	0	991



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.0	5.3
10°-20°	165.8	16.6
20°-30°	257.8	25.8
30°-40°	260.4	26.1
40°-50°	164.9	16.5
50°-60°	69.2	6.9
60°-70°	21.9	2.2
70°-80°	5.0	0.5
80°-90°	0.7	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°	476.6	47.7
0°-40°	736.9	73.8
0°-60°	971.0	97.2
0°-90°	998.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	998.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	544	544	544	544	544	
5°	518	553	582	553	518	49
15°	474	607	679	607	474	134
25°	441	590	654	590	441	203
35°	379	421	460	421	379	236
45°	277	176	190	176	277	214
55°	178	30	22	30	178	154
65°	44	7	6	7	44	49
75°	8	3	2	3	8	10
85°	1	1	0	1	1	1
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°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	530.7	525.7	530.0	531.4	531.4	530.7	532.2	530.7	528.6	537.2	530.7
5°	518.5	514.9	518.5	520.0	520.7	521.4	522.8	522.8	522.1	530.0	525.7
7.5°	505.6	503.4	506.3	508.5	511.3	510.6	512.8	513.5	514.9	524.3	520.0
10°	491.9	489.8	493.4	494.8	498.4	499.1	500.6	502.7	505.6	514.9	513.5
12.5°	480.5	479.7	481.9	484.8	488.4	489.1	490.5	494.1	498.4	508.5	509.2
15°	474.0	473.3	475.4	478.3	481.2	482.6	484.0	489.1	493.4	504.2	507.0
17.5°	464.7	464.7	466.8	469.7	473.3	474.7	476.9	481.9	487.6	498.4	502.0
20°	455.3	456.0	457.5	460.3	463.9	465.4	467.5	472.6	479.0	489.8	494.8
22.5°	447.4	449.6	450.3	452.4	456.0	458.2	458.9	464.7	470.4	479.7	486.2
25°	441.0	443.8	443.8	445.3	449.6	450.3	451.0	456.8	461.8	470.4	476.9
27.5°	432.3	435.2	435.2	437.4	440.2	441.7	441.7	446.7	451.7	458.2	463.2
30°	420.8	423.0	423.0	423.7	426.6	428.0	427.3	432.3	435.9	440.2	445.3
32.5°	401.5	405.0	403.6	405.8	407.2	408.6	407.2	411.5	414.4	418.7	420.1
35°	379.2	382.1	379.9	381.3	384.2	384.2	383.5	386.4	387.8	390.0	390.7
37.5°	353.3	355.5	354.1	354.8	356.2	356.9	355.5	358.4	358.4	359.1	357.6
40°	325.3	328.9	326.8	326.8	328.2	328.9	326.8	328.2	329.6	326.0	323.2
42.5°	300.9	304.5	302.3	302.3	302.3	303.1	300.2	300.9	300.9	295.9	291.6
45°	277.2	280.1	277.9	275.8	276.5	277.2	274.3	273.6	271.5	265.7	259.3
47.5°	254.2	257.1	254.2	252.8	252.8	252.8	249.2	247.0	244.2	236.3	228.4
50°	230.5	233.4	231.2	229.8	228.4	228.4	225.5	222.6	218.3	210.4	201.8
52.5°	206.1	208.3	206.1	204.7	203.2	203.2	199.6	197.5	192.5	184.6	175.2
55°	178.1	179.5	177.4	176.0	175.2	175.2	172.4	170.2	165.9	159.4	150.8
57.5°	140.8	143.6	140.0	141.5	141.5	140.8	138.6	137.9	136.5	130.7	124.2
60°	100.5	100.5	99.8	102.7	102.0	103.4	102.0	102.7	103.4	99.1	94.8
62.5°	66.1	68.2	66.8	68.2	69.7	69.7	68.9	70.4	71.8	69.7	67.5
65°	44.5	44.5	44.5	45.2	45.2	46.0	45.2	46.0	46.7	46.0	44.5
67.5°	29.4	30.2	29.4	30.2	29.4	30.2	30.2	30.2	30.9	30.2	29.4
70°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	20.1	19.4	18.7
72.5°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
75°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
77.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	2.9	3.6	2.9	2.9
82.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	1.4	0.7	0.7
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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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	534.3	532.2	542.9	533.6	538.6	537.9	538.6	542.9	542.9	545.1	544.4
5°	531.4	529.3	541.5	534.3	540.1	540.1	542.2	548.7	548.7	553.0	553.7
7.5°	527.1	527.9	540.8	536.5	542.9	543.7	547.2	555.1	557.3	563.0	565.9
10°	522.1	525.0	538.6	537.2	545.8	546.5	553.7	563.0	565.9	573.8	578.8
12.5°	520.0	525.0	540.8	542.2	550.8	554.4	562.3	574.5	579.6	588.9	596.1
15°	519.2	526.4	543.7	548.7	558.7	563.8	574.5	588.9	594.6	606.8	615.5
17.5°	515.6	525.0	543.7	551.6	562.3	567.4	581.0	597.5	604.7	618.3	628.4
20°	509.2	519.2	537.9	548.0	559.5	566.6	580.3	597.5	604.7	619.1	630.5
22.5°	500.6	510.6	528.6	540.1	550.1	558.0	572.4	588.9	595.4	609.0	620.5
25°	489.8	499.8	514.9	526.4	535.8	542.9	555.1	572.4	576.7	589.6	601.8
27.5°	474.7	484.0	495.5	506.3	514.9	520.7	531.4	546.5	550.1	563.0	573.1
30°	454.6	460.3	470.4	477.6	484.0	489.8	497.7	511.3	512.8	524.3	533.6
32.5°	427.3	430.2	437.4	441.0	446.7	448.9	455.3	466.8	465.4	476.1	484.0
35°	394.3	395.7	395.7	400.0	401.5	402.2	407.2	413.7	411.5	420.8	426.6
37.5°	358.4	357.6	353.3	353.3	354.1	351.9	354.1	356.9	354.1	361.2	366.3
40°	321.7	317.4	309.5	305.2	303.1	302.3	298.0	301.6	294.4	299.5	303.1
42.5°	286.5	279.4	267.2	258.5	254.9	251.4	244.2	244.2	234.8	238.4	239.1
45°	250.6	238.4	221.9	214.0	204.7	198.9	189.6	180.3	173.8	176.0	173.8
47.5°	217.6	203.2	183.9	170.2	159.4	151.5	138.6	127.8	121.4	118.5	115.6
50°	188.9	174.5	152.3	135.0	124.2	114.9	102.0	89.8	81.9	77.6	75.4
52.5°	163.0	147.9	126.4	108.4	97.0	88.3	74.0	61.8	53.1	48.1	45.2
55°	138.6	125.0	104.9	88.3	77.6	68.9	54.6	43.1	35.2	30.2	26.6
57.5°	114.2	102.0	85.5	69.7	60.3	52.4	40.2	30.2	23.7	19.4	16.5
60°	87.6	78.3	64.6	52.4	44.5	38.1	28.7	20.8	16.5	12.9	11.5
62.5°	61.8	56.0	46.0	37.3	32.3	27.3	20.1	15.1	11.5	9.3	8.6
65°	41.7	37.3	31.6	25.1	21.5	18.7	14.4	10.8	8.6	7.2	6.5
67.5°	27.3	25.1	20.8	17.2	15.1	12.9	10.1	7.9	6.5	5.7	5.0
70°	18.0	16.5	13.6	11.5	10.8	9.3	7.2	5.7	5.0	4.3	4.3
72.5°	11.5	10.1	9.3	7.9	7.2	6.5	5.0	4.3	3.6	3.6	3.6
75°	7.2	6.5	5.7	5.0	5.0	4.3	3.6	3.6	2.9	2.9	2.9
77.5°	4.3	4.3	3.6	3.6	2.9	2.9	2.9	2.2	2.2	2.2	2.2
80°	2.9	2.9	2.2	2.2	2.2	2.2	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	548.0	549.4	548.0	552.3	545.1	553.0	550.1	551.6	557.3	555.1	557.3
5°	558.7	561.6	561.6	566.6	560.2	569.5	566.6	569.5	575.2	575.2	578.1
7.5°	572.4	576.0	577.4	582.4	576.0	587.5	584.6	588.2	595.4	595.4	597.5
10°	586.7	591.0	593.9	599.7	592.5	605.4	602.5	607.6	614.0	614.7	618.3
12.5°	604.7	610.4	614.0	619.1	614.0	627.0	624.1	629.1	637.7	638.4	642.8
15°	624.8	632.0	636.3	642.0	636.3	650.7	647.8	653.5	660.0	662.9	667.2
17.5°	637.7	646.3	649.9	656.4	650.7	665.0	661.4	669.3	675.1	676.5	681.5
20°	639.9	647.8	652.8	657.8	652.8	667.2	663.6	670.0	677.2	678.7	682.3
22.5°	630.5	637.0	642.8	647.1	642.8	657.1	652.1	659.3	665.7	667.2	670.0
25°	609.0	616.9	622.6	626.2	621.9	635.6	631.3	637.7	643.5	646.3	647.1
27.5°	578.8	586.0	591.8	593.9	591.0	604.0	598.2	606.1	611.2	612.6	614.7
30°	537.9	544.4	550.1	551.6	549.4	558.7	555.9	563.0	568.1	569.5	570.9
32.5°	487.6	494.1	497.7	499.1	497.0	506.3	503.4	509.2	514.9	514.9	514.9
35°	430.9	436.6	438.8	443.1	438.1	447.4	444.5	449.6	454.6	454.6	455.3
37.5°	369.9	374.2	375.6	379.9	374.9	383.5	381.3	385.7	390.0	389.2	390.7
40°	304.5	308.8	310.2	313.8	309.5	316.7	315.3	319.6	323.2	323.2	323.2
42.5°	241.3	244.2	244.2	247.8	243.5	249.9	249.9	252.8	256.4	255.7	255.7
45°	175.2	174.5	176.0	175.2	175.2	181.0	181.0	182.4	185.3	183.9	184.6
47.5°	116.3	117.1	114.2	116.3	113.5	118.5	118.5	118.5	120.7	119.2	120.7
50°	74.0	71.8	70.4	70.4	69.7	73.3	71.8	72.5	74.0	72.5	74.0
52.5°	41.7	40.9	39.5	40.2	38.8	39.5	39.5	39.5	40.2	39.5	40.9
55°	24.4	22.3	21.5	21.5	20.8	21.5	20.8	20.8	20.8	20.1	20.8
57.5°	14.4	13.6	12.9	12.9	12.2	12.2	12.2	12.2	12.2	12.2	12.2
60°	10.1	9.3	9.3	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
62.5°	7.9	7.2	7.2	7.2	6.5	6.5	6.5	6.5	6.5	7.2	6.5
65°	5.7	5.7	5.7	5.7	5.7	5.7	5.0	5.7	5.7	5.7	5.7
67.5°	5.0	5.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
70°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.0	0.7	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: LD4B10D010 EU4B10208035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	559.5	556.6	550.1	554.4	555.1	552.3	555.9	560.2	555.9	552.3	555.1
5°	580.3	578.1	572.4	576.0	576.7	576.0	578.1	581.7	578.1	576.0	576.7
7.5°	601.1	599.7	593.2	597.5	598.9	597.5	599.7	603.3	599.7	597.5	598.9
10°	621.2	620.5	614.0	619.8	620.5	619.1	621.2	627.0	621.2	619.1	620.5
12.5°	644.2	645.6	638.4	644.9	645.6	644.2	647.1	651.4	647.1	644.2	645.6
15°	670.8	670.0	664.3	669.3	670.8	669.3	672.9	678.7	672.9	669.3	670.8
17.5°	683.7	683.7	679.4	684.4	685.1	685.1	688.0	692.3	688.0	685.1	685.1
20°	684.4	685.1	680.1	685.8	685.8	685.8	688.7	690.9	688.7	685.8	685.8
22.5°	672.9	673.6	668.6	673.6	673.6	674.4	675.8	677.2	675.8	674.4	673.6
25°	650.7	651.4	647.1	651.4	650.7	650.7	652.1	654.2	652.1	650.7	650.7
27.5°	617.6	618.3	612.6	617.6	616.9	616.2	618.3	619.1	618.3	616.2	616.9
30°	573.8	574.5	569.5	573.8	573.1	572.4	575.2	576.0	575.2	572.4	573.1
32.5°	521.4	520.0	516.4	520.0	519.2	519.2	520.7	522.8	520.7	519.2	519.2
35°	458.2	458.2	456.0	458.9	456.8	459.6	459.6	460.3	459.6	459.6	456.8
37.5°	393.6	393.6	392.1	393.6	392.8	395.7	395.7	397.9	395.7	395.7	392.8
40°	326.0	326.0	324.6	326.0	328.2	328.2	327.5	330.4	327.5	328.2	328.2
42.5°	257.8	257.8	257.1	260.7	260.7	260.7	258.5	261.4	258.5	260.7	260.7
45°	187.4	186.0	185.3	185.3	186.0	188.9	186.0	189.6	186.0	188.9	186.0
47.5°	119.2	119.9	120.7	122.8	121.4	120.7	120.7	122.8	120.7	120.7	121.4
50°	73.3	74.0	74.0	75.4	73.3	74.7	74.0	75.4	74.0	74.7	73.3
52.5°	40.2	40.2	40.2	41.7	40.2	40.9	40.2	41.7	40.2	40.9	40.2
55°	20.8	20.8	20.8	21.5	20.8	20.8	20.8	21.5	20.8	20.8	20.8
57.5°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
60°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
62.5°	7.2	6.5	6.5	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
65°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
67.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
70°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: P212694

CATALOG NUMBER: LD4B10D010 EU4B10208035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	554.4	550.1	556.6	559.5	557.3	555.1	557.3	551.6	550.1	553.0	545.1
5°	576.0	572.4	578.1	580.3	578.1	575.2	575.2	569.5	566.6	569.5	560.2
7.5°	597.5	593.2	599.7	601.1	597.5	595.4	595.4	588.2	584.6	587.5	576.0
10°	619.8	614.0	620.5	621.2	618.3	614.7	614.0	607.6	602.5	605.4	592.5
12.5°	644.9	638.4	645.6	644.2	642.8	638.4	637.7	629.1	624.1	627.0	614.0
15°	669.3	664.3	670.0	670.8	667.2	662.9	660.0	653.5	647.8	650.7	636.3
17.5°	684.4	679.4	683.7	683.7	681.5	676.5	675.1	669.3	661.4	665.0	650.7
20°	685.8	680.1	685.1	684.4	682.3	678.7	677.2	670.0	663.6	667.2	652.8
22.5°	673.6	668.6	673.6	672.9	670.0	667.2	665.7	659.3	652.1	657.1	642.8
25°	651.4	647.1	651.4	650.7	647.1	646.3	643.5	637.7	631.3	635.6	621.9
27.5°	617.6	612.6	618.3	617.6	614.7	612.6	611.2	606.1	598.2	604.0	591.0
30°	573.8	569.5	574.5	573.8	570.9	569.5	568.1	563.0	555.9	558.7	549.4
32.5°	520.0	516.4	520.0	521.4	514.9	514.9	514.9	509.2	503.4	506.3	497.0
35°	458.9	456.0	458.2	458.2	455.3	454.6	454.6	449.6	444.5	447.4	438.1
37.5°	393.6	392.1	393.6	393.6	390.7	389.2	390.0	385.7	381.3	383.5	374.9
40°	326.0	324.6	326.0	326.0	323.2	323.2	323.2	319.6	315.3	316.7	309.5
42.5°	260.7	257.1	257.8	257.8	255.7	255.7	256.4	252.8	249.9	249.9	243.5
45°	185.3	185.3	186.0	187.4	184.6	183.9	185.3	182.4	181.0	181.0	175.2
47.5°	122.8	120.7	119.9	119.2	120.7	119.2	120.7	118.5	118.5	118.5	113.5
50°	75.4	74.0	74.0	73.3	74.0	72.5	74.0	72.5	71.8	73.3	69.7
52.5°	41.7	40.2	40.2	40.2	40.9	39.5	40.2	39.5	39.5	39.5	38.8
55°	21.5	20.8	20.8	20.8	20.8	20.1	20.8	20.8	20.8	21.5	20.8
57.5°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
60°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
62.5°	7.2	6.5	6.5	7.2	6.5	7.2	6.5	6.5	6.5	6.5	6.5
65°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.0	5.7	5.7
67.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
70°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: P212694

CATALOG NUMBER: LD4B10D010 EU4B10208035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	552.3	548.0	549.4	548.0	544.4	545.1	542.9	542.9	538.6	537.9	538.6
5°	566.6	561.6	561.6	558.7	553.7	553.0	548.7	548.7	542.2	540.1	540.1
7.5°	582.4	577.4	576.0	572.4	565.9	563.0	557.3	555.1	547.2	543.7	542.9
10°	599.7	593.9	591.0	586.7	578.8	573.8	565.9	563.0	553.7	546.5	545.8
12.5°	619.1	614.0	610.4	604.7	596.1	588.9	579.6	574.5	562.3	554.4	550.8
15°	642.0	636.3	632.0	624.8	615.5	606.8	594.6	588.9	574.5	563.8	558.7
17.5°	656.4	649.9	646.3	637.7	628.4	618.3	604.7	597.5	581.0	567.4	562.3
20°	657.8	652.8	647.8	639.9	630.5	619.1	604.7	597.5	580.3	566.6	559.5
22.5°	647.1	642.8	637.0	630.5	620.5	609.0	595.4	588.9	572.4	558.0	550.1
25°	626.2	622.6	616.9	609.0	601.8	589.6	576.7	572.4	555.1	542.9	535.8
27.5°	593.9	591.8	586.0	578.8	573.1	563.0	550.1	546.5	531.4	520.7	514.9
30°	551.6	550.1	544.4	537.9	533.6	524.3	512.8	511.3	497.7	489.8	484.0
32.5°	499.1	497.7	494.1	487.6	484.0	476.1	465.4	466.8	455.3	448.9	446.7
35°	443.1	438.8	436.6	430.9	426.6	420.8	411.5	413.7	407.2	402.2	401.5
37.5°	379.9	375.6	374.2	369.9	366.3	361.2	354.1	356.9	354.1	351.9	354.1
40°	313.8	310.2	308.8	304.5	303.1	299.5	294.4	301.6	298.0	302.3	303.1
42.5°	247.8	244.2	244.2	241.3	239.1	238.4	234.8	244.2	244.2	251.4	254.9
45°	175.2	176.0	174.5	175.2	173.8	176.0	173.8	180.3	189.6	198.9	204.7
47.5°	116.3	114.2	117.1	116.3	115.6	118.5	121.4	127.8	138.6	151.5	159.4
50°	70.4	70.4	71.8	74.0	75.4	77.6	81.9	89.8	102.0	114.9	124.2
52.5°	40.2	39.5	40.9	41.7	45.2	48.1	53.1	61.8	74.0	88.3	97.0
55°	21.5	21.5	22.3	24.4	26.6	30.2	35.2	43.1	54.6	68.9	77.6
57.5°	12.9	12.9	13.6	14.4	16.5	19.4	23.7	30.2	40.2	52.4	60.3
60°	8.6	9.3	9.3	10.1	11.5	12.9	16.5	20.8	28.7	38.1	44.5
62.5°	7.2	7.2	7.2	7.9	8.6	9.3	11.5	15.1	20.1	27.3	32.3
65°	5.7	5.7	5.7	5.7	6.5	7.2	8.6	10.8	14.4	18.7	21.5
67.5°	4.3	4.3	5.0	5.0	5.0	5.7	6.5	7.9	10.1	12.9	15.1
70°	3.6	3.6	3.6	3.6	4.3	4.3	5.0	5.7	7.2	9.3	10.8
72.5°	2.9	2.9	2.9	2.9	3.6	3.6	3.6	4.3	5.0	6.5	7.2
75°	2.2	2.2	2.2	2.2	2.9	2.9	2.9	3.6	3.6	4.3	5.0
77.5°	1.4	1.4	1.4	1.4	2.2	2.2	2.2	2.2	2.9	2.9	2.9
80°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4	1.4	2.2	2.2
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4	1.4
85°	0.0	0.0	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: P212694

CATALOG NUMBER: LD4B10D010 EU4B10208035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
2.5°	533.6	542.9	532.2	534.3	530.7	537.2	528.6	530.7	532.2	530.7	531.4
5°	534.3	541.5	529.3	531.4	525.7	530.0	522.1	522.8	522.8	521.4	520.7
7.5°	536.5	540.8	527.9	527.1	520.0	524.3	514.9	513.5	512.8	510.6	511.3
10°	537.2	538.6	525.0	522.1	513.5	514.9	505.6	502.7	500.6	499.1	498.4
12.5°	542.2	540.8	525.0	520.0	509.2	508.5	498.4	494.1	490.5	489.1	488.4
15°	548.7	543.7	526.4	519.2	507.0	504.2	493.4	489.1	484.0	482.6	481.2
17.5°	551.6	543.7	525.0	515.6	502.0	498.4	487.6	481.9	476.9	474.7	473.3
20°	548.0	537.9	519.2	509.2	494.8	489.8	479.0	472.6	467.5	465.4	463.9
22.5°	540.1	528.6	510.6	500.6	486.2	479.7	470.4	464.7	458.9	458.2	456.0
25°	526.4	514.9	499.8	489.8	476.9	470.4	461.8	456.8	451.0	450.3	449.6
27.5°	506.3	495.5	484.0	474.7	463.2	458.2	451.7	446.7	441.7	441.7	440.2
30°	477.6	470.4	460.3	454.6	445.3	440.2	435.9	432.3	427.3	428.0	426.6
32.5°	441.0	437.4	430.2	427.3	420.1	418.7	414.4	411.5	407.2	408.6	407.2
35°	400.0	395.7	395.7	394.3	390.7	390.0	387.8	386.4	383.5	384.2	384.2
37.5°	353.3	353.3	357.6	358.4	357.6	359.1	358.4	358.4	355.5	356.9	356.2
40°	305.2	309.5	317.4	321.7	323.2	326.0	329.6	328.2	326.8	328.9	328.2
42.5°	258.5	267.2	279.4	286.5	291.6	295.9	300.9	300.9	300.2	303.1	302.3
45°	214.0	221.9	238.4	250.6	259.3	265.7	271.5	273.6	274.3	277.2	276.5
47.5°	170.2	183.9	203.2	217.6	228.4	236.3	244.2	247.0	249.2	252.8	252.8
50°	135.0	152.3	174.5	188.9	201.8	210.4	218.3	222.6	225.5	228.4	228.4
52.5°	108.4	126.4	147.9	163.0	175.2	184.6	192.5	197.5	199.6	203.2	203.2
55°	88.3	104.9	125.0	138.6	150.8	159.4	165.9	170.2	172.4	175.2	175.2
57.5°	69.7	85.5	102.0	114.2	124.2	130.7	136.5	137.9	138.6	140.8	141.5
60°	52.4	64.6	78.3	87.6	94.8	99.1	103.4	102.7	102.0	103.4	102.0
62.5°	37.3	46.0	56.0	61.8	67.5	69.7	71.8	70.4	68.9	69.7	69.7
65°	25.1	31.6	37.3	41.7	44.5	46.0	46.7	46.0	45.2	46.0	45.2
67.5°	17.2	20.8	25.1	27.3	29.4	30.2	30.9	30.2	30.2	30.2	29.4
70°	11.5	13.6	16.5	18.0	18.7	19.4	20.1	19.4	19.4	19.4	19.4
72.5°	7.9	9.3	10.1	11.5	12.2	12.2	12.2	12.2	12.2	12.2	12.2
75°	5.0	5.7	6.5	7.2	7.9	7.9	7.9	7.9	7.9	7.9	7.9
77.5°	3.6	3.6	4.3	4.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0
80°	2.2	2.2	2.9	2.9	2.9	2.9	3.6	2.9	3.6	3.6	3.6
82.5°	1.4	1.4	1.4	1.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	0.7	0.7	0.7	0.7	0.7	0.7	1.4	0.7	1.4	1.4	1.4
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: P212694

CATALOG NUMBER: LD4B10D010 EU4B10208035 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	345°	350°	355°	360°
0°	543.7	543.7	543.7	543.7
2.5°	531.4	530.0	525.7	530.7
5°	520.0	518.5	514.9	518.5
7.5°	508.5	506.3	503.4	505.6
10°	494.8	493.4	489.8	491.9
12.5°	484.8	481.9	479.7	480.5
15°	478.3	475.4	473.3	474.0
17.5°	469.7	466.8	464.7	464.7
20°	460.3	457.5	456.0	455.3
22.5°	452.4	450.3	449.6	447.4
25°	445.3	443.8	443.8	441.0
27.5°	437.4	435.2	435.2	432.3
30°	423.7	423.0	423.0	420.8
32.5°	405.8	403.6	405.0	401.5
35°	381.3	379.9	382.1	379.2
37.5°	354.8	354.1	355.5	353.3
40°	326.8	326.8	328.9	325.3
42.5°	302.3	302.3	304.5	300.9
45°	275.8	277.9	280.1	277.2
47.5°	252.8	254.2	257.1	254.2
50°	229.8	231.2	233.4	230.5
52.5°	204.7	206.1	208.3	206.1
55°	176.0	177.4	179.5	178.1
57.5°	141.5	140.0	143.6	140.8
60°	102.7	99.8	100.5	100.5
62.5°	68.2	66.8	68.2	66.1
65°	45.2	44.5	44.5	44.5
67.5°	30.2	29.4	30.2	29.4
70°	19.4	19.4	19.4	19.4
72.5°	12.2	12.2	12.2	12.2
75°	7.9	7.9	7.9	7.9
77.5°	5.0	5.0	5.0	5.0
80°	3.6	3.6	3.6	3.6
82.5°	2.2	2.2	2.2	2.2
85°	1.4	1.4	1.4	1.4
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)