

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: P212701

Luminaire Tested: **LD4B10D010 EU4B10209040 4LBSWLI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P212701
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 EU4B10209040 4LBSWLI1
Description: PORTFOLIO 4 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 845.4 lumens
Efficiency: N/A
Efficacy: 84.1 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

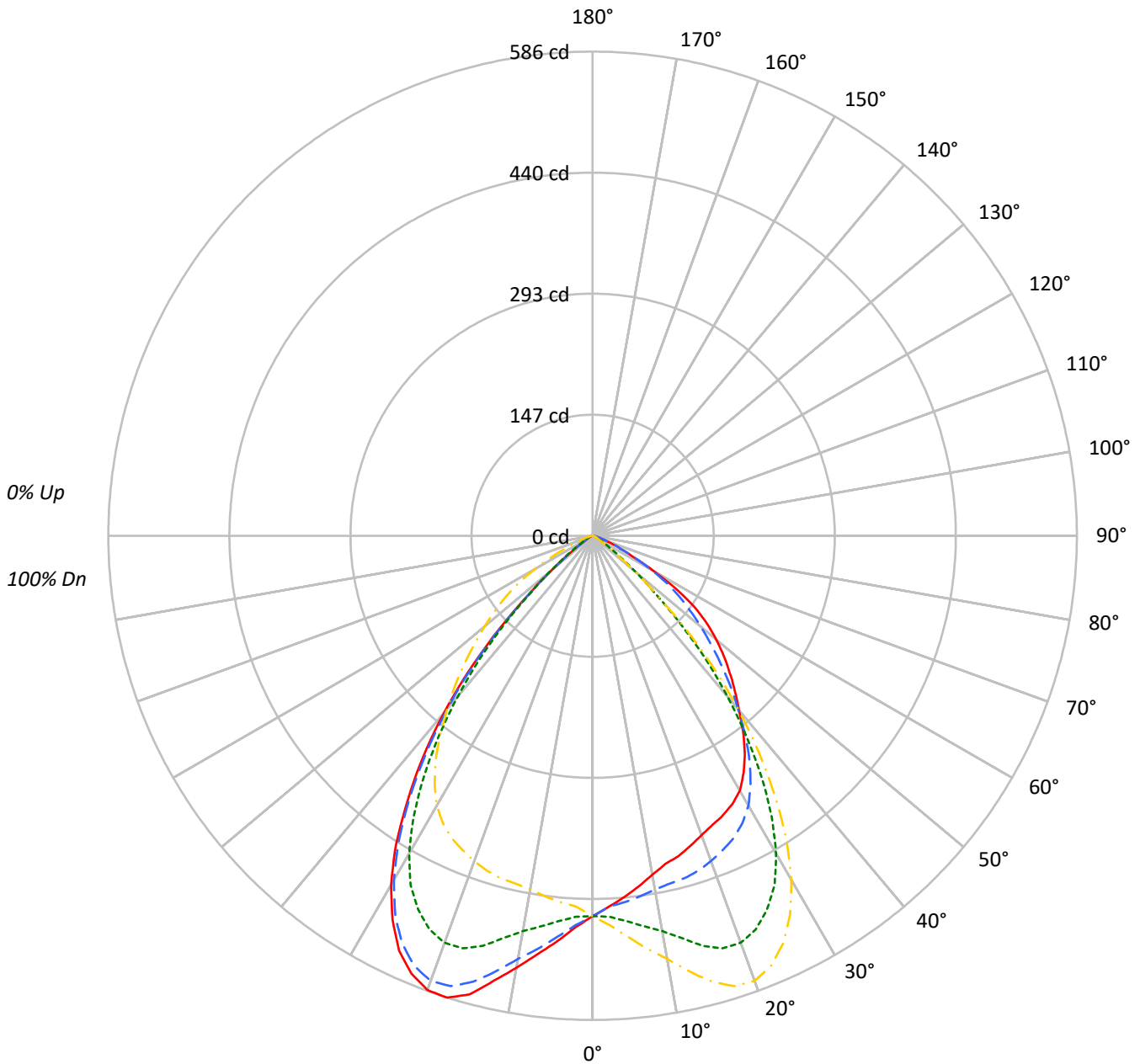
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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°	56776	56776	56776	56776
5°	54356	57971	60980	57971
10°	52166	60846	66482	60846
15°	51245	65611	73375	65611
20°	50601	68794	76775	68794
25°	50805	67940	75384	67940
30°	50747	63209	69448	63209
35°	48335	53651	58680	53651
40°	44344	40818	45036	40818
45°	40940	25991	27997	25991
50°	37457	12607	12243	12607
55°	32429	5484	3914	5484
60°	20993	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	5.3
10°-20°	140.4	16.6
20°-30°	218.2	25.8
30°-40°	220.4	26.1
40°-50°	139.6	16.5
50°-60°	58.6	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°	403.5	47.7
0°-40°	623.9	73.8
0°-60°	822.0	97.2
0°-90°	845.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	845.4	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	514	575	514	401	113
25°	373	499	554	499	373	172
35°	321	356	390	356	321	199
45°	235	149	160	149	235	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	449.3	445.1	448.7	449.9	449.9	449.3	450.5	449.3	447.5	454.8	449.3
5°	439.0	435.9	439.0	440.2	440.8	441.4	442.6	442.6	442.0	448.7	445.1
7.5°	428.0	426.2	428.6	430.5	432.9	432.3	434.1	434.7	435.9	443.8	440.2
10°	416.5	414.7	417.7	418.9	422.0	422.6	423.8	425.6	428.0	435.9	434.7
12.5°	406.8	406.1	408.0	410.4	413.4	414.0	415.3	418.3	422.0	430.5	431.1
15°	401.3	400.7	402.5	404.9	407.4	408.6	409.8	414.0	417.7	426.8	429.2
17.5°	393.4	393.4	395.2	397.6	400.7	401.9	403.7	408.0	412.8	422.0	425.0
20°	385.5	386.1	387.3	389.7	392.8	394.0	395.8	400.1	405.5	414.7	418.9
22.5°	378.8	380.6	381.2	383.0	386.1	387.9	388.5	393.4	398.2	406.1	411.6
25°	373.3	375.7	375.7	377.0	380.6	381.2	381.8	386.7	390.9	398.2	403.7
27.5°	366.0	368.4	368.4	370.3	372.7	373.9	373.9	378.2	382.4	387.9	392.2
30°	356.3	358.1	358.1	358.7	361.2	362.4	361.8	366.0	369.1	372.7	377.0
32.5°	339.9	342.9	341.7	343.5	344.7	346.0	344.7	348.4	350.8	354.5	355.7
35°	321.0	323.5	321.6	322.8	325.3	325.3	324.7	327.1	328.3	330.1	330.8
37.5°	299.1	301.0	299.7	300.4	301.6	302.2	301.0	303.4	303.4	304.0	302.8
40°	275.4	278.5	276.6	276.6	277.9	278.5	276.6	277.9	279.1	276.0	273.6
42.5°	254.8	257.8	256.0	256.0	256.0	256.6	254.1	254.8	254.8	250.5	246.8
45°	234.7	237.1	235.3	233.5	234.1	234.7	232.3	231.6	229.8	225.0	219.5
47.5°	215.2	217.7	215.2	214.0	214.0	214.0	211.0	209.2	206.7	200.0	193.3
50°	195.2	197.6	195.8	194.6	193.3	193.3	190.9	188.5	184.8	178.1	170.8
52.5°	174.5	176.3	174.5	173.3	172.1	172.1	169.0	167.2	162.9	156.3	148.4
55°	150.8	152.0	150.2	149.0	148.4	148.4	145.9	144.1	140.4	135.0	127.7
57.5°	119.2	121.6	118.6	119.8	119.8	119.2	117.3	116.7	115.5	110.7	105.2
60°	85.1	85.1	84.5	86.9	86.3	87.6	86.3	86.9	87.6	83.9	80.3
62.5°	55.9	57.8	56.5	57.8	59.0	59.0	58.4	59.6	60.8	59.0	57.2
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	452.4	450.5	459.6	451.7	456.0	455.4	456.0	459.6	459.6	461.5	460.9
5°	449.9	448.1	458.4	452.4	457.2	457.2	459.0	464.5	464.5	468.2	468.8
7.5°	446.3	446.9	457.8	454.2	459.6	460.3	463.3	470.0	471.8	476.7	479.1
10°	442.0	444.4	456.0	454.8	462.1	462.7	468.8	476.7	479.1	485.8	490.0
12.5°	440.2	444.4	457.8	459.0	466.3	469.4	476.1	486.4	490.7	498.6	504.6
15°	439.6	445.7	460.3	464.5	473.0	477.3	486.4	498.6	503.4	513.8	521.1
17.5°	436.5	444.4	460.3	466.9	476.1	480.3	491.9	505.9	511.9	523.5	532.0
20°	431.1	439.6	455.4	463.9	473.6	479.7	491.3	505.9	511.9	524.1	533.8
22.5°	423.8	432.3	447.5	457.2	465.7	472.4	484.6	498.6	504.0	515.6	525.3
25°	414.7	423.2	435.9	445.7	453.6	459.6	470.0	484.6	488.2	499.2	509.5
27.5°	401.9	409.8	419.5	428.6	435.9	440.8	449.9	462.7	465.7	476.7	485.2
30°	384.9	389.7	398.2	404.3	409.8	414.7	421.3	432.9	434.1	443.8	451.7
32.5°	361.8	364.2	370.3	373.3	378.2	380.0	385.5	395.2	394.0	403.1	409.8
35°	333.8	335.0	335.0	338.7	339.9	340.5	344.7	350.2	348.4	356.3	361.2
37.5°	303.4	302.8	299.1	299.1	299.7	297.9	299.7	302.2	299.7	305.8	310.1
40°	272.4	268.7	262.0	258.4	256.6	256.0	252.3	255.4	249.3	253.5	256.6
42.5°	242.6	236.5	226.2	218.9	215.8	212.8	206.7	206.7	198.8	201.9	202.5
45°	212.2	201.9	187.9	181.2	173.3	168.4	160.5	152.6	147.1	149.0	147.1
47.5°	184.2	172.1	155.6	144.1	135.0	128.3	117.3	108.2	102.8	100.3	97.9
50°	159.9	147.7	128.9	114.3	105.2	97.3	86.3	76.0	69.3	65.7	63.8
52.5°	138.0	125.2	107.0	91.8	82.1	74.8	62.6	52.3	45.0	40.7	38.3
55°	117.3	105.8	88.8	74.8	65.7	58.4	46.2	36.5	29.8	25.5	22.5
57.5°	96.7	86.3	72.4	59.0	51.1	44.4	34.0	25.5	20.1	16.4	14.0
60°	74.2	66.3	54.7	44.4	37.7	32.2	24.3	17.6	14.0	10.9	9.7
62.5°	52.3	47.4	38.9	31.6	27.4	23.1	17.0	12.8	9.7	7.9	7.3
65°	35.3	31.6	26.8	21.3	18.2	15.8	12.2	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	11.6	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	463.9	465.1	463.9	467.6	461.5	468.2	465.7	466.9	471.8	470.0	471.8
5°	473.0	475.5	475.5	479.7	474.2	482.1	479.7	482.1	487.0	487.0	489.4
7.5°	484.6	487.6	488.8	493.1	487.6	497.3	494.9	498.0	504.0	504.0	505.9
10°	496.7	500.4	502.8	507.7	501.6	512.5	510.1	514.4	519.8	520.4	523.5
12.5°	511.9	516.8	519.8	524.1	519.8	530.8	528.4	532.6	539.9	540.5	544.2
15°	529.0	535.0	538.7	543.6	538.7	550.8	548.4	553.3	558.8	561.2	564.8
17.5°	539.9	547.2	550.2	555.7	550.8	563.0	560.0	566.7	571.5	572.7	577.0
20°	541.7	548.4	552.7	556.9	552.7	564.8	561.8	567.3	573.3	574.6	577.6
22.5°	533.8	539.3	544.2	547.8	544.2	556.3	552.1	558.1	563.6	564.8	567.3
25°	515.6	522.3	527.1	530.2	526.5	538.1	534.4	539.9	544.8	547.2	547.8
27.5°	490.0	496.1	501.0	502.8	500.4	511.3	506.5	513.2	517.4	518.6	520.4
30°	455.4	460.9	465.7	466.9	465.1	473.0	470.6	476.7	480.9	482.1	483.4
32.5°	412.8	418.3	421.3	422.6	420.7	428.6	426.2	431.1	435.9	435.9	435.9
35°	364.8	369.7	371.5	375.1	370.9	378.8	376.4	380.6	384.9	384.9	385.5
37.5°	313.1	316.8	318.0	321.6	317.4	324.7	322.8	326.5	330.1	329.5	330.8
40°	257.8	261.4	262.7	265.7	262.0	268.1	266.9	270.6	273.6	273.6	273.6
42.5°	204.3	206.7	206.7	209.8	206.1	211.6	211.6	214.0	217.1	216.4	216.4
45°	148.4	147.7	149.0	148.4	148.4	153.2	153.2	154.4	156.9	155.6	156.3
47.5°	98.5	99.1	96.7	98.5	96.1	100.3	100.3	100.3	102.1	100.9	102.1
50°	62.6	60.8	59.6	59.6	59.0	62.0	60.8	61.4	62.6	61.4	62.6
52.5°	35.3	34.7	33.4	34.0	32.8	33.4	33.4	33.4	34.0	33.4	34.7
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°	12.2	11.6	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



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	473.6	471.2	465.7	469.4	470.0	467.6	470.6	474.2	470.6	467.6	470.0
5°	491.3	489.4	484.6	487.6	488.2	487.6	489.4	492.5	489.4	487.6	488.2
7.5°	508.9	507.7	502.2	505.9	507.1	505.9	507.7	510.7	507.7	505.9	507.1
10°	525.9	525.3	519.8	524.7	525.3	524.1	525.9	530.8	525.9	524.1	525.3
12.5°	545.4	546.6	540.5	546.0	546.6	545.4	547.8	551.5	547.8	545.4	546.6
15°	567.9	567.3	562.4	566.7	567.9	566.7	569.7	574.6	569.7	566.7	567.9
17.5°	578.8	578.8	575.2	579.4	580.0	580.0	582.5	586.1	582.5	580.0	580.0
20°	579.4	580.0	575.8	580.6	580.6	580.6	583.1	584.9	583.1	580.6	580.6
22.5°	569.7	570.3	566.0	570.3	570.3	570.9	572.1	573.3	572.1	570.9	570.3
25°	550.8	551.5	547.8	551.5	550.8	550.8	552.1	553.9	552.1	550.8	550.8
27.5°	522.9	523.5	518.6	522.9	522.3	521.7	523.5	524.1	523.5	521.7	522.3
30°	485.8	486.4	482.1	485.8	485.2	484.6	487.0	487.6	487.0	484.6	485.2
32.5°	441.4	440.2	437.2	440.2	439.6	439.6	440.8	442.6	440.8	439.6	439.6
35°	387.9	387.9	386.1	388.5	386.7	389.1	389.1	389.7	389.1	389.1	386.7
37.5°	333.2	333.2	332.0	333.2	332.6	335.0	335.0	336.8	335.0	335.0	332.6
40°	276.0	276.0	274.8	276.0	277.9	277.9	277.2	279.7	277.2	277.9	277.9
42.5°	218.3	218.3	217.7	220.7	220.7	220.7	218.9	221.3	218.9	220.7	220.7
45°	158.7	157.5	156.9	156.9	157.5	159.9	157.5	160.5	157.5	159.9	157.5
47.5°	100.9	101.5	102.1	104.0	102.8	102.1	102.1	104.0	102.1	102.1	102.8
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	35.3	34.0	34.7	34.0	35.3	34.0	34.7	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: P212701

CATALOG NUMBER: LD4B10D010 EU4B10209040 4LBSWLI1

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	469.4	465.7	471.2	473.6	471.8	470.0	471.8	466.9	465.7	468.2	461.5
5°	487.6	484.6	489.4	491.3	489.4	487.0	487.0	482.1	479.7	482.1	474.2
7.5°	505.9	502.2	507.7	508.9	505.9	504.0	504.0	498.0	494.9	497.3	487.6
10°	524.7	519.8	525.3	525.9	523.5	520.4	519.8	514.4	510.1	512.5	501.6
12.5°	546.0	540.5	546.6	545.4	544.2	540.5	539.9	532.6	528.4	530.8	519.8
15°	566.7	562.4	567.3	567.9	564.8	561.2	558.8	553.3	548.4	550.8	538.7
17.5°	579.4	575.2	578.8	578.8	577.0	572.7	571.5	566.7	560.0	563.0	550.8
20°	580.6	575.8	580.0	579.4	577.6	574.6	573.3	567.3	561.8	564.8	552.7
22.5°	570.3	566.0	570.3	569.7	567.3	564.8	563.6	558.1	552.1	556.3	544.2
25°	551.5	547.8	551.5	550.8	547.8	547.2	544.8	539.9	534.4	538.1	526.5
27.5°	522.9	518.6	523.5	522.9	520.4	518.6	517.4	513.2	506.5	511.3	500.4
30°	485.8	482.1	486.4	485.8	483.4	482.1	480.9	476.7	470.6	473.0	465.1
32.5°	440.2	437.2	440.2	441.4	435.9	435.9	435.9	431.1	426.2	428.6	420.7
35°	388.5	386.1	387.9	387.9	385.5	384.9	384.9	380.6	376.4	378.8	370.9
37.5°	333.2	332.0	333.2	333.2	330.8	329.5	330.1	326.5	322.8	324.7	317.4
40°	276.0	274.8	276.0	276.0	273.6	273.6	273.6	270.6	266.9	268.1	262.0
42.5°	220.7	217.7	218.3	218.3	216.4	216.4	217.1	214.0	211.6	211.6	206.1
45°	156.9	156.9	157.5	158.7	156.3	155.6	156.9	154.4	153.2	153.2	148.4
47.5°	104.0	102.1	101.5	100.9	102.1	100.9	102.1	100.3	100.3	100.3	96.1
50°	63.8	62.6	62.6	62.0	62.6	61.4	62.6	61.4	60.8	62.0	59.0
52.5°	35.3	34.0	34.0	34.0	34.7	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: P212701

CATALOG NUMBER: LD4B10D010 EU4B10209040 4LBSWLI1

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	467.6	463.9	465.1	463.9	460.9	461.5	459.6	459.6	456.0	455.4	456.0
5°	479.7	475.5	475.5	473.0	468.8	468.2	464.5	464.5	459.0	457.2	457.2
7.5°	493.1	488.8	487.6	484.6	479.1	476.7	471.8	470.0	463.3	460.3	459.6
10°	507.7	502.8	500.4	496.7	490.0	485.8	479.1	476.7	468.8	462.7	462.1
12.5°	524.1	519.8	516.8	511.9	504.6	498.6	490.7	486.4	476.1	469.4	466.3
15°	543.6	538.7	535.0	529.0	521.1	513.8	503.4	498.6	486.4	477.3	473.0
17.5°	555.7	550.2	547.2	539.9	532.0	523.5	511.9	505.9	491.9	480.3	476.1
20°	556.9	552.7	548.4	541.7	533.8	524.1	511.9	505.9	491.3	479.7	473.6
22.5°	547.8	544.2	539.3	533.8	525.3	515.6	504.0	498.6	484.6	472.4	465.7
25°	530.2	527.1	522.3	515.6	509.5	499.2	488.2	484.6	470.0	459.6	453.6
27.5°	502.8	501.0	496.1	490.0	485.2	476.7	465.7	462.7	449.9	440.8	435.9
30°	466.9	465.7	460.9	455.4	451.7	443.8	434.1	432.9	421.3	414.7	409.8
32.5°	422.6	421.3	418.3	412.8	409.8	403.1	394.0	395.2	385.5	380.0	378.2
35°	375.1	371.5	369.7	364.8	361.2	356.3	348.4	350.2	344.7	340.5	339.9
37.5°	321.6	318.0	316.8	313.1	310.1	305.8	299.7	302.2	299.7	297.9	299.7
40°	265.7	262.7	261.4	257.8	256.6	253.5	249.3	255.4	252.3	256.0	256.6
42.5°	209.8	206.7	206.7	204.3	202.5	201.9	198.8	206.7	206.7	212.8	215.8
45°	148.4	149.0	147.7	148.4	147.1	149.0	147.1	152.6	160.5	168.4	173.3
47.5°	98.5	96.7	99.1	98.5	97.9	100.3	102.8	108.2	117.3	128.3	135.0
50°	59.6	59.6	60.8	62.6	63.8	65.7	69.3	76.0	86.3	97.3	105.2
52.5°	34.0	33.4	34.7	35.3	38.3	40.7	45.0	52.3	62.6	74.8	82.1
55°	18.2	18.2	18.8	20.7	22.5	25.5	29.8	36.5	46.2	58.4	65.7
57.5°	10.9	10.9	11.6	12.2	14.0	16.4	20.1	25.5	34.0	44.4	51.1
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	27.4
65°	4.9	4.9	4.9	4.9	5.5	6.1	7.3	9.1	12.2	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: P212701

CATALOG NUMBER: LD4B10D010 EU4B10209040 4LBSWLI1

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3	460.3
2.5°	451.7	459.6	450.5	452.4	449.3	454.8	447.5	449.3	450.5	449.3	449.9
5°	452.4	458.4	448.1	449.9	445.1	448.7	442.0	442.6	442.6	441.4	440.8
7.5°	454.2	457.8	446.9	446.3	440.2	443.8	435.9	434.7	434.1	432.3	432.9
10°	454.8	456.0	444.4	442.0	434.7	435.9	428.0	425.6	423.8	422.6	422.0
12.5°	459.0	457.8	444.4	440.2	431.1	430.5	422.0	418.3	415.3	414.0	413.4
15°	464.5	460.3	445.7	439.6	429.2	426.8	417.7	414.0	409.8	408.6	407.4
17.5°	466.9	460.3	444.4	436.5	425.0	422.0	412.8	408.0	403.7	401.9	400.7
20°	463.9	455.4	439.6	431.1	418.9	414.7	405.5	400.1	395.8	394.0	392.8
22.5°	457.2	447.5	432.3	423.8	411.6	406.1	398.2	393.4	388.5	387.9	386.1
25°	445.7	435.9	423.2	414.7	403.7	398.2	390.9	386.7	381.8	381.2	380.6
27.5°	428.6	419.5	409.8	401.9	392.2	387.9	382.4	378.2	373.9	373.9	372.7
30°	404.3	398.2	389.7	384.9	377.0	372.7	369.1	366.0	361.8	362.4	361.2
32.5°	373.3	370.3	364.2	361.8	355.7	354.5	350.8	348.4	344.7	346.0	344.7
35°	338.7	335.0	335.0	333.8	330.8	330.1	328.3	327.1	324.7	325.3	325.3
37.5°	299.1	299.1	302.8	303.4	302.8	304.0	303.4	303.4	301.0	302.2	301.6
40°	258.4	262.0	268.7	272.4	273.6	276.0	279.1	277.9	276.6	278.5	277.9
42.5°	218.9	226.2	236.5	242.6	246.8	250.5	254.8	254.8	254.1	256.6	256.0
45°	181.2	187.9	201.9	212.2	219.5	225.0	229.8	231.6	232.3	234.7	234.1
47.5°	144.1	155.6	172.1	184.2	193.3	200.0	206.7	209.2	211.0	214.0	214.0
50°	114.3	128.9	147.7	159.9	170.8	178.1	184.8	188.5	190.9	193.3	193.3
52.5°	91.8	107.0	125.2	138.0	148.4	156.3	162.9	167.2	169.0	172.1	172.1
55°	74.8	88.8	105.8	117.3	127.7	135.0	140.4	144.1	145.9	148.4	148.4
57.5°	59.0	72.4	86.3	96.7	105.2	110.7	115.5	116.7	117.3	119.2	119.8
60°	44.4	54.7	66.3	74.2	80.3	83.9	87.6	86.9	86.3	87.6	86.3
62.5°	31.6	38.9	47.4	52.3	57.2	59.0	60.8	59.6	58.4	59.0	59.0
65°	21.3	26.8	31.6	35.3	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	11.6	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: P212701

CATALOG NUMBER: LD4B10D010 EU4B10209040 4LBSWLI1

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	460.3	460.3	460.3	460.3
2.5°	449.9	448.7	445.1	449.3
5°	440.2	439.0	435.9	439.0
7.5°	430.5	428.6	426.2	428.0
10°	418.9	417.7	414.7	416.5
12.5°	410.4	408.0	406.1	406.8
15°	404.9	402.5	400.7	401.3
17.5°	397.6	395.2	393.4	393.4
20°	389.7	387.3	386.1	385.5
22.5°	383.0	381.2	380.6	378.8
25°	377.0	375.7	375.7	373.3
27.5°	370.3	368.4	368.4	366.0
30°	358.7	358.1	358.1	356.3
32.5°	343.5	341.7	342.9	339.9
35°	322.8	321.6	323.5	321.0
37.5°	300.4	299.7	301.0	299.1
40°	276.6	276.6	278.5	275.4
42.5°	256.0	256.0	257.8	254.8
45°	233.5	235.3	237.1	234.7
47.5°	214.0	215.2	217.7	215.2
50°	194.6	195.8	197.6	195.2
52.5°	173.3	174.5	176.3	174.5
55°	149.0	150.2	152.0	150.8
57.5°	119.8	118.6	121.6	119.2
60°	86.9	84.5	85.1	85.1
62.5°	57.8	56.5	57.8	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)