

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: P212703

Luminaire Tested: **LD4B10D010 EU4B10209727 4LBSWLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P212703  
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 EU4B10209727 4LBSWLI1  
Description: PORTFOLIO 4 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 695.9 lumens  
Efficiency: N/A  
Efficacy: 69.2 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

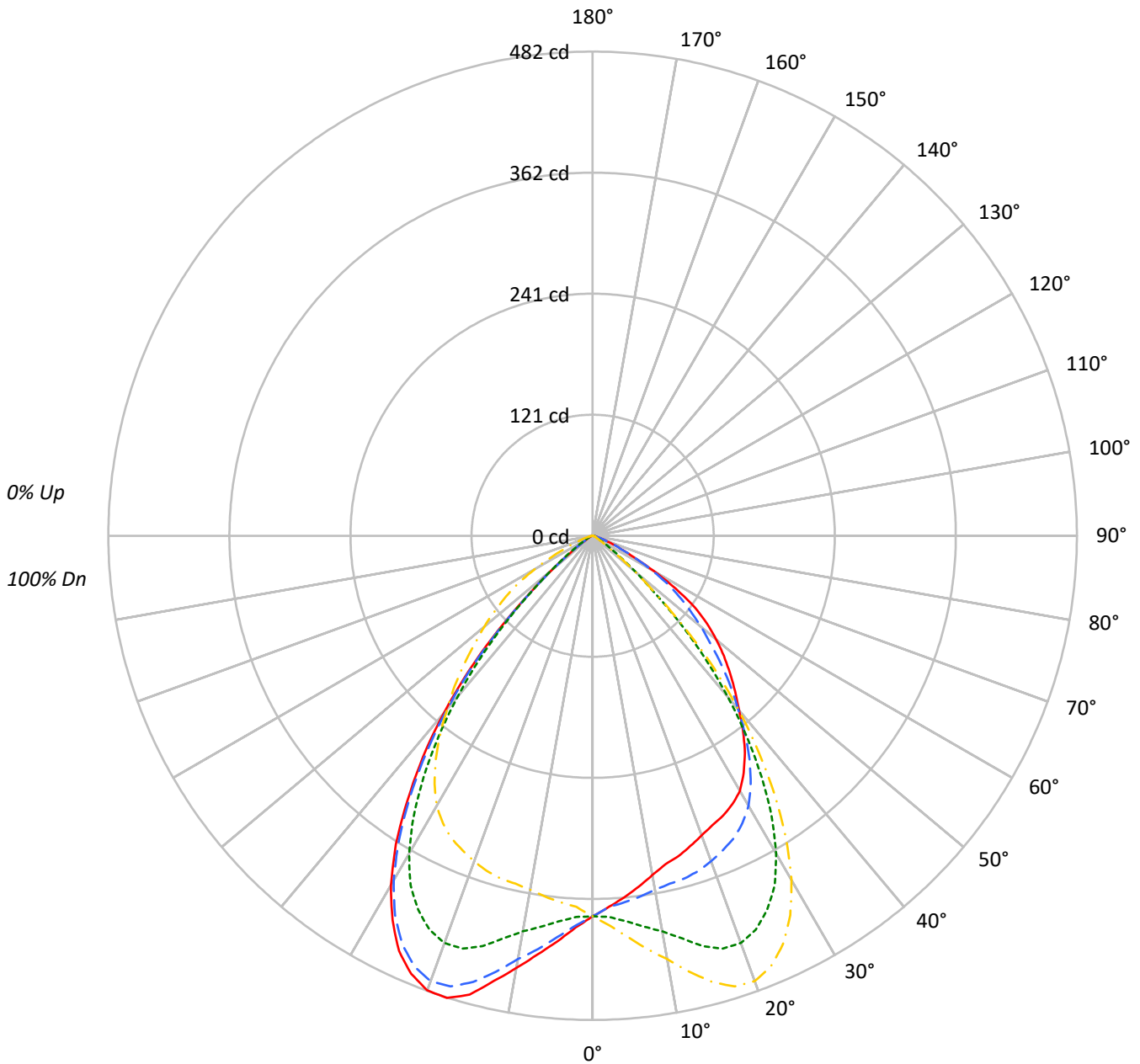
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	46723	46723	46723	46723
5°	44735	47719	50195	47719
10°	42935	50087	54721	50087
15°	42178	54003	60388	54003
20°	41649	56626	63189	56626
25°	41823	55922	62047	55922
30°	41774	52029	57170	52029
35°	39782	44164	48305	44164
40°	36502	33604	37066	33604
45°	33701	21386	23043	21386
50°	30818	10362	10074	10362
55°	26687	4516	3226	4516
60°	17293	2220	1480	2220
65°	9048	1459	1167	1459
70°	4869	1082	902	1082
75°	2621	953	715	953
80°	1776	710	355	710
85°	1415	708	0	708



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.9	5.3
10°-20°	115.5	16.6
20°-30°	179.6	25.8
30°-40°	181.4	26.1
40°-50°	114.9	16.5
50°-60°	48.2	6.9
60°-70°	15.3	2.2
70°-80°	3.5	0.5
80°-90°	0.5	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°	332.1	47.7
0°-40°	513.5	73.8
0°-60°	676.6	97.2
0°-90°	695.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	695.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	379	379	379	379	379	
5°	361	385	405	385	361	34
15°	330	423	473	423	330	93
25°	307	411	456	411	307	142
35°	264	293	321	293	264	164
45°	193	123	132	123	193	149
55°	124	21	15	21	124	107
65°	31	5	4	5	31	34
75°	6	2	2	2	6	7
85°	1	0	0	0	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°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	369.8	366.3	369.3	370.3	370.3	369.8	370.8	369.8	368.3	374.3	369.8
5°	361.3	358.8	361.3	362.3	362.8	363.3	364.3	364.3	363.8	369.3	366.3
7.5°	352.3	350.8	352.8	354.3	356.3	355.8	357.3	357.8	358.8	365.3	362.3
10°	342.8	341.3	343.8	344.8	347.3	347.8	348.8	350.3	352.3	358.8	357.8
12.5°	334.8	334.3	335.8	337.8	340.3	340.8	341.8	344.3	347.3	354.3	354.8
15°	330.3	329.8	331.3	333.3	335.3	336.3	337.3	340.8	343.8	351.3	353.3
17.5°	323.8	323.8	325.3	327.3	329.8	330.8	332.3	335.8	339.8	347.3	349.8
20°	317.3	317.8	318.8	320.8	323.3	324.3	325.8	329.3	333.8	341.3	344.8
22.5°	311.8	313.3	313.8	315.3	317.8	319.3	319.8	323.8	327.8	334.3	338.8
25°	307.3	309.3	309.3	310.3	313.3	313.8	314.3	318.3	321.8	327.8	332.3
27.5°	301.3	303.3	303.3	304.8	306.8	307.8	307.8	311.3	314.8	319.3	322.8
30°	293.3	294.8	294.8	295.3	297.3	298.3	297.8	301.3	303.8	306.8	310.3
32.5°	279.8	282.3	281.3	282.8	283.8	284.8	283.8	286.8	288.8	291.8	292.8
35°	264.2	266.2	264.7	265.7	267.7	267.7	267.2	269.2	270.2	271.7	272.2
37.5°	246.2	247.7	246.7	247.2	248.2	248.7	247.7	249.7	249.7	250.2	249.2
40°	226.7	229.2	227.7	227.7	228.7	229.2	227.7	228.7	229.7	227.2	225.2
42.5°	209.7	212.2	210.7	210.7	210.7	211.2	209.2	209.7	209.7	206.2	203.2
45°	193.2	195.2	193.7	192.2	192.7	193.2	191.2	190.7	189.2	185.2	180.7
47.5°	177.2	179.2	177.2	176.2	176.2	176.2	173.7	172.2	170.2	164.7	159.1
50°	160.6	162.6	161.1	160.1	159.1	159.1	157.1	155.1	152.1	146.6	140.6
52.5°	143.6	145.1	143.6	142.6	141.6	141.6	139.1	137.6	134.1	128.6	122.1
55°	124.1	125.1	123.6	122.6	122.1	122.1	120.1	118.6	115.6	111.1	105.1
57.5°	98.1	100.1	97.6	98.6	98.6	98.1	96.6	96.1	95.1	91.1	86.6
60°	70.1	70.1	69.6	71.6	71.1	72.1	71.1	71.6	72.1	69.1	66.1
62.5°	46.0	47.5	46.5	47.5	48.5	48.5	48.0	49.0	50.0	48.5	47.0
65°	31.0	31.0	31.0	31.5	31.5	32.0	31.5	32.0	32.5	32.0	31.0
67.5°	20.5	21.0	20.5	21.0	20.5	21.0	21.0	21.0	21.5	21.0	20.5
70°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	14.0	13.5	13.0
72.5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
75°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.0	2.5	2.0	2.0
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	0.5
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°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	372.3	370.8	378.3	371.8	375.3	374.8	375.3	378.3	378.3	379.8	379.3
5°	370.3	368.8	377.3	372.3	376.3	376.3	377.8	382.4	382.4	385.4	385.9
7.5°	367.3	367.8	376.8	373.8	378.3	378.8	381.4	386.9	388.4	392.4	394.4
10°	363.8	365.8	375.3	374.3	380.3	380.8	385.9	392.4	394.4	399.9	403.4
12.5°	362.3	365.8	376.8	377.8	383.9	386.4	391.9	400.4	403.9	410.4	415.4
15°	361.8	366.8	378.8	382.4	389.4	392.9	400.4	410.4	414.4	422.9	428.9
17.5°	359.3	365.8	378.8	384.4	391.9	395.4	404.9	416.4	421.4	430.9	437.9
20°	354.8	361.8	374.8	381.9	389.9	394.9	404.4	416.4	421.4	431.4	439.4
22.5°	348.8	355.8	368.3	376.3	383.4	388.9	398.9	410.4	414.9	424.4	432.4
25°	341.3	348.3	358.8	366.8	373.3	378.3	386.9	398.9	401.9	410.9	419.4
27.5°	330.8	337.3	345.3	352.8	358.8	362.8	370.3	380.8	383.4	392.4	399.4
30°	316.8	320.8	327.8	332.8	337.3	341.3	346.8	356.3	357.3	365.3	371.8
32.5°	297.8	299.8	304.8	307.3	311.3	312.8	317.3	325.3	324.3	331.8	337.3
35°	274.8	275.8	275.8	278.8	279.8	280.3	283.8	288.3	286.8	293.3	297.3
37.5°	249.7	249.2	246.2	246.2	246.7	245.2	246.7	248.7	246.7	251.7	255.2
40°	224.2	221.2	215.7	212.7	211.2	210.7	207.7	210.2	205.2	208.7	211.2
42.5°	199.7	194.7	186.2	180.2	177.7	175.2	170.2	170.2	163.7	166.2	166.7
45°	174.7	166.2	154.6	149.1	142.6	138.6	132.1	125.6	121.1	122.6	121.1
47.5°	151.6	141.6	128.1	118.6	111.1	105.6	96.6	89.1	84.6	82.6	80.6
50°	131.6	121.6	106.1	94.1	86.6	80.1	71.1	62.6	57.1	54.0	52.5
52.5°	113.6	103.1	88.1	75.6	67.6	61.6	51.5	43.0	37.0	33.5	31.5
55°	96.6	87.1	73.1	61.6	54.0	48.0	38.0	30.0	24.5	21.0	18.5
57.5°	79.6	71.1	59.6	48.5	42.0	36.5	28.0	21.0	16.5	13.5	11.5
60°	61.1	54.6	45.0	36.5	31.0	26.5	20.0	14.5	11.5	9.0	8.0
62.5°	43.0	39.0	32.0	26.0	22.5	19.0	14.0	10.5	8.0	6.5	6.0
65°	29.0	26.0	22.0	17.5	15.0	13.0	10.0	7.5	6.0	5.0	4.5
67.5°	19.0	17.5	14.5	12.0	10.5	9.0	7.0	5.5	4.5	4.0	3.5
70°	12.5	11.5	9.5	8.0	7.5	6.5	5.0	4.0	3.5	3.0	3.0
72.5°	8.0	7.0	6.5	5.5	5.0	4.5	3.5	3.0	2.5	2.5	2.5
75°	5.0	4.5	4.0	3.5	3.5	3.0	2.5	2.5	2.0	2.0	2.0
77.5°	3.0	3.0	2.5	2.5	2.0	2.0	2.0	1.5	1.5	1.5	1.5
80°	2.0	2.0	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	381.9	382.9	381.9	384.9	379.8	385.4	383.4	384.4	388.4	386.9	388.4
5°	389.4	391.4	391.4	394.9	390.4	396.9	394.9	396.9	400.9	400.9	402.9
7.5°	398.9	401.4	402.4	405.9	401.4	409.4	407.4	409.9	414.9	414.9	416.4
10°	408.9	411.9	413.9	417.9	412.9	421.9	419.9	423.4	427.9	428.4	430.9
12.5°	421.4	425.4	427.9	431.4	427.9	436.9	434.9	438.4	444.4	444.9	447.9
15°	435.4	440.4	443.4	447.4	443.4	453.4	451.4	455.4	459.9	461.9	464.9
17.5°	444.4	450.4	452.9	457.4	453.4	463.4	460.9	466.4	470.4	471.4	474.9
20°	445.9	451.4	454.9	458.4	454.9	464.9	462.4	466.9	471.9	472.9	475.4
22.5°	439.4	443.9	447.9	450.9	447.9	457.9	454.4	459.4	463.9	464.9	466.9
25°	424.4	429.9	433.9	436.4	433.4	442.9	439.9	444.4	448.4	450.4	450.9
27.5°	403.4	408.4	412.4	413.9	411.9	420.9	416.9	422.4	425.9	426.9	428.4
30°	374.8	379.3	383.4	384.4	382.9	389.4	387.4	392.4	395.9	396.9	397.9
32.5°	339.8	344.3	346.8	347.8	346.3	352.8	350.8	354.8	358.8	358.8	358.8
35°	300.3	304.3	305.8	308.8	305.3	311.8	309.8	313.3	316.8	316.8	317.3
37.5°	257.7	260.7	261.7	264.7	261.2	267.2	265.7	268.7	271.7	271.2	272.2
40°	212.2	215.2	216.2	218.7	215.7	220.7	219.7	222.7	225.2	225.2	225.2
42.5°	168.2	170.2	170.2	172.7	169.7	174.2	174.2	176.2	178.7	178.2	178.2
45°	122.1	121.6	122.6	122.1	122.1	126.1	126.1	127.1	129.1	128.1	128.6
47.5°	81.1	81.6	79.6	81.1	79.1	82.6	82.6	82.6	84.1	83.1	84.1
50°	51.5	50.0	49.0	49.0	48.5	51.0	50.0	50.5	51.5	50.5	51.5
52.5°	29.0	28.5	27.5	28.0	27.0	27.5	27.5	27.5	28.0	27.5	28.5
55°	17.0	15.5	15.0	15.0	14.5	15.0	14.5	14.5	14.5	14.0	14.5
57.5°	10.0	9.5	9.0	9.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60°	7.0	6.5	6.5	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
62.5°	5.5	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	5.0	4.5
65°	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0
67.5°	3.5	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.0	0.5	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 EU4B10209727 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	389.9	387.9	383.4	386.4	386.9	384.9	387.4	390.4	387.4	384.9	386.9
5°	404.4	402.9	398.9	401.4	401.9	401.4	402.9	405.4	402.9	401.4	401.9
7.5°	418.9	417.9	413.4	416.4	417.4	416.4	417.9	420.4	417.9	416.4	417.4
10°	432.9	432.4	427.9	431.9	432.4	431.4	432.9	436.9	432.9	431.4	432.4
12.5°	448.9	449.9	444.9	449.4	449.9	448.9	450.9	453.9	450.9	448.9	449.9
15°	467.4	466.9	462.9	466.4	467.4	466.4	468.9	472.9	468.9	466.4	467.4
17.5°	476.4	476.4	473.4	476.9	477.4	477.4	479.4	482.4	479.4	477.4	477.4
20°	476.9	477.4	473.9	477.9	477.9	477.9	479.9	481.4	479.9	477.9	477.9
22.5°	468.9	469.4	465.9	469.4	469.4	469.9	470.9	471.9	470.9	469.9	469.4
25°	453.4	453.9	450.9	453.9	453.4	453.4	454.4	455.9	454.4	453.4	453.4
27.5°	430.4	430.9	426.9	430.4	429.9	429.4	430.9	431.4	430.9	429.4	429.9
30°	399.9	400.4	396.9	399.9	399.4	398.9	400.9	401.4	400.9	398.9	399.4
32.5°	363.3	362.3	359.8	362.3	361.8	361.8	362.8	364.3	362.8	361.8	361.8
35°	319.3	319.3	317.8	319.8	318.3	320.3	320.3	320.8	320.3	320.3	318.3
37.5°	274.3	274.3	273.3	274.3	273.8	275.8	275.8	277.3	275.8	275.8	273.8
40°	227.2	227.2	226.2	227.2	228.7	228.7	228.2	230.2	228.2	228.7	228.7
42.5°	179.7	179.7	179.2	181.7	181.7	181.7	180.2	182.2	180.2	181.7	181.7
45°	130.6	129.6	129.1	129.1	129.6	131.6	129.6	132.1	129.6	131.6	129.6
47.5°	83.1	83.6	84.1	85.6	84.6	84.1	84.1	85.6	84.1	84.1	84.6
50°	51.0	51.5	51.5	52.5	51.0	52.0	51.5	52.5	51.5	52.0	51.0
52.5°	28.0	28.0	28.0	29.0	28.0	28.5	28.0	29.0	28.0	28.5	28.0
55°	14.5	14.5	14.5	15.0	14.5	14.5	14.5	15.0	14.5	14.5	14.5
57.5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
62.5°	5.0	4.5	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
65°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
67.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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: P212703

CATALOG NUMBER: LD4B10D010 EU4B10209727 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	386.4	383.4	387.9	389.9	388.4	386.9	388.4	384.4	383.4	385.4	379.8
5°	401.4	398.9	402.9	404.4	402.9	400.9	400.9	396.9	394.9	396.9	390.4
7.5°	416.4	413.4	417.9	418.9	416.4	414.9	414.9	409.9	407.4	409.4	401.4
10°	431.9	427.9	432.4	432.9	430.9	428.4	427.9	423.4	419.9	421.9	412.9
12.5°	449.4	444.9	449.9	448.9	447.9	444.9	444.4	438.4	434.9	436.9	427.9
15°	466.4	462.9	466.9	467.4	464.9	461.9	459.9	455.4	451.4	453.4	443.4
17.5°	476.9	473.4	476.4	476.4	474.9	471.4	470.4	466.4	460.9	463.4	453.4
20°	477.9	473.9	477.4	476.9	475.4	472.9	471.9	466.9	462.4	464.9	454.9
22.5°	469.4	465.9	469.4	468.9	466.9	464.9	463.9	459.4	454.4	457.9	447.9
25°	453.9	450.9	453.9	453.4	450.9	450.4	448.4	444.4	439.9	442.9	433.4
27.5°	430.4	426.9	430.9	430.4	428.4	426.9	425.9	422.4	416.9	420.9	411.9
30°	399.9	396.9	400.4	399.9	397.9	396.9	395.9	392.4	387.4	389.4	382.9
32.5°	362.3	359.8	362.3	363.3	358.8	358.8	358.8	354.8	350.8	352.8	346.3
35°	319.8	317.8	319.3	319.3	317.3	316.8	316.8	313.3	309.8	311.8	305.3
37.5°	274.3	273.3	274.3	274.3	272.2	271.2	271.7	268.7	265.7	267.2	261.2
40°	227.2	226.2	227.2	227.2	225.2	225.2	225.2	222.7	219.7	220.7	215.7
42.5°	181.7	179.2	179.7	179.7	178.2	178.2	178.7	176.2	174.2	174.2	169.7
45°	129.1	129.1	129.6	130.6	128.6	128.1	129.1	127.1	126.1	126.1	122.1
47.5°	85.6	84.1	83.6	83.1	84.1	83.1	84.1	82.6	82.6	82.6	79.1
50°	52.5	51.5	51.5	51.0	51.5	50.5	51.5	50.5	50.0	51.0	48.5
52.5°	29.0	28.0	28.0	28.0	28.5	27.5	28.0	27.5	27.5	27.5	27.0
55°	15.0	14.5	14.5	14.5	14.5	14.0	14.5	14.5	14.5	15.0	14.5
57.5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
60°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
62.5°	5.0	4.5	4.5	5.0	4.5	5.0	4.5	4.5	4.5	4.5	4.5
65°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
67.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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: P212703

CATALOG NUMBER: LD4B10D010 EU4B10209727 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	384.9	381.9	382.9	381.9	379.3	379.8	378.3	378.3	375.3	374.8	375.3
5°	394.9	391.4	391.4	389.4	385.9	385.4	382.4	382.4	377.8	376.3	376.3
7.5°	405.9	402.4	401.4	398.9	394.4	392.4	388.4	386.9	381.4	378.8	378.3
10°	417.9	413.9	411.9	408.9	403.4	399.9	394.4	392.4	385.9	380.8	380.3
12.5°	431.4	427.9	425.4	421.4	415.4	410.4	403.9	400.4	391.9	386.4	383.9
15°	447.4	443.4	440.4	435.4	428.9	422.9	414.4	410.4	400.4	392.9	389.4
17.5°	457.4	452.9	450.4	444.4	437.9	430.9	421.4	416.4	404.9	395.4	391.9
20°	458.4	454.9	451.4	445.9	439.4	431.4	421.4	416.4	404.4	394.9	389.9
22.5°	450.9	447.9	443.9	439.4	432.4	424.4	414.9	410.4	398.9	388.9	383.4
25°	436.4	433.9	429.9	424.4	419.4	410.9	401.9	398.9	386.9	378.3	373.3
27.5°	413.9	412.4	408.4	403.4	399.4	392.4	383.4	380.8	370.3	362.8	358.8
30°	384.4	383.4	379.3	374.8	371.8	365.3	357.3	356.3	346.8	341.3	337.3
32.5°	347.8	346.8	344.3	339.8	337.3	331.8	324.3	325.3	317.3	312.8	311.3
35°	308.8	305.8	304.3	300.3	297.3	293.3	286.8	288.3	283.8	280.3	279.8
37.5°	264.7	261.7	260.7	257.7	255.2	251.7	246.7	248.7	246.7	245.2	246.7
40°	218.7	216.2	215.2	212.2	211.2	208.7	205.2	210.2	207.7	210.7	211.2
42.5°	172.7	170.2	170.2	168.2	166.7	166.2	163.7	170.2	170.2	175.2	177.7
45°	122.1	122.6	121.6	122.1	121.1	122.6	121.1	125.6	132.1	138.6	142.6
47.5°	81.1	79.6	81.6	81.1	80.6	82.6	84.6	89.1	96.6	105.6	111.1
50°	49.0	49.0	50.0	51.5	52.5	54.0	57.1	62.6	71.1	80.1	86.6
52.5°	28.0	27.5	28.5	29.0	31.5	33.5	37.0	43.0	51.5	61.6	67.6
55°	15.0	15.0	15.5	17.0	18.5	21.0	24.5	30.0	38.0	48.0	54.0
57.5°	9.0	9.0	9.5	10.0	11.5	13.5	16.5	21.0	28.0	36.5	42.0
60°	6.0	6.5	6.5	7.0	8.0	9.0	11.5	14.5	20.0	26.5	31.0
62.5°	5.0	5.0	5.0	5.5	6.0	6.5	8.0	10.5	14.0	19.0	22.5
65°	4.0	4.0	4.0	4.0	4.5	5.0	6.0	7.5	10.0	13.0	15.0
67.5°	3.0	3.0	3.5	3.5	3.5	4.0	4.5	5.5	7.0	9.0	10.5
70°	2.5	2.5	2.5	2.5	3.0	3.0	3.5	4.0	5.0	6.5	7.5
72.5°	2.0	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.5	4.5	5.0
75°	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5	3.0	3.5
77.5°	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0
80°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
85°	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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: P212703

CATALOG NUMBER: LD4B10D010 EU4B10209727 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	371.8	378.3	370.8	372.3	369.8	374.3	368.3	369.8	370.8	369.8	370.3
5°	372.3	377.3	368.8	370.3	366.3	369.3	363.8	364.3	364.3	363.3	362.8
7.5°	373.8	376.8	367.8	367.3	362.3	365.3	358.8	357.8	357.3	355.8	356.3
10°	374.3	375.3	365.8	363.8	357.8	358.8	352.3	350.3	348.8	347.8	347.3
12.5°	377.8	376.8	365.8	362.3	354.8	354.3	347.3	344.3	341.8	340.8	340.3
15°	382.4	378.8	366.8	361.8	353.3	351.3	343.8	340.8	337.3	336.3	335.3
17.5°	384.4	378.8	365.8	359.3	349.8	347.3	339.8	335.8	332.3	330.8	329.8
20°	381.9	374.8	361.8	354.8	344.8	341.3	333.8	329.3	325.8	324.3	323.3
22.5°	376.3	368.3	355.8	348.8	338.8	334.3	327.8	323.8	319.8	319.3	317.8
25°	366.8	358.8	348.3	341.3	332.3	327.8	321.8	318.3	314.3	313.8	313.3
27.5°	352.8	345.3	337.3	330.8	322.8	319.3	314.8	311.3	307.8	307.8	306.8
30°	332.8	327.8	320.8	316.8	310.3	306.8	303.8	301.3	297.8	298.3	297.3
32.5°	307.3	304.8	299.8	297.8	292.8	291.8	288.8	286.8	283.8	284.8	283.8
35°	278.8	275.8	275.8	274.8	272.2	271.7	270.2	269.2	267.2	267.7	267.7
37.5°	246.2	246.2	249.2	249.7	249.2	250.2	249.7	249.7	247.7	248.7	248.2
40°	212.7	215.7	221.2	224.2	225.2	227.2	229.7	228.7	227.7	229.2	228.7
42.5°	180.2	186.2	194.7	199.7	203.2	206.2	209.7	209.7	209.2	211.2	210.7
45°	149.1	154.6	166.2	174.7	180.7	185.2	189.2	190.7	191.2	193.2	192.7
47.5°	118.6	128.1	141.6	151.6	159.1	164.7	170.2	172.2	173.7	176.2	176.2
50°	94.1	106.1	121.6	131.6	140.6	146.6	152.1	155.1	157.1	159.1	159.1
52.5°	75.6	88.1	103.1	113.6	122.1	128.6	134.1	137.6	139.1	141.6	141.6
55°	61.6	73.1	87.1	96.6	105.1	111.1	115.6	118.6	120.1	122.1	122.1
57.5°	48.5	59.6	71.1	79.6	86.6	91.1	95.1	96.1	96.6	98.1	98.6
60°	36.5	45.0	54.6	61.1	66.1	69.1	72.1	71.6	71.1	72.1	71.1
62.5°	26.0	32.0	39.0	43.0	47.0	48.5	50.0	49.0	48.0	48.5	48.5
65°	17.5	22.0	26.0	29.0	31.0	32.0	32.5	32.0	31.5	32.0	31.5
67.5°	12.0	14.5	17.5	19.0	20.5	21.0	21.5	21.0	21.0	21.0	20.5
70°	8.0	9.5	11.5	12.5	13.0	13.5	14.0	13.5	13.5	13.5	13.5
72.5°	5.5	6.5	7.0	8.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5
75°	3.5	4.0	4.5	5.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5
77.5°	2.5	2.5	3.0	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.0	2.5	2.5	2.5
82.5°	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
85°	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	1.0	1.0	1.0
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: P212703

CATALOG NUMBER: LD4B10D010 EU4B10209727 4LBSWLI1

**CANDELA DISTRIBUTION (continued):**

	345°	350°	355°	360°
0°	378.8	378.8	378.8	378.8
2.5°	370.3	369.3	366.3	369.8
5°	362.3	361.3	358.8	361.3
7.5°	354.3	352.8	350.8	352.3
10°	344.8	343.8	341.3	342.8
12.5°	337.8	335.8	334.3	334.8
15°	333.3	331.3	329.8	330.3
17.5°	327.3	325.3	323.8	323.8
20°	320.8	318.8	317.8	317.3
22.5°	315.3	313.8	313.3	311.8
25°	310.3	309.3	309.3	307.3
27.5°	304.8	303.3	303.3	301.3
30°	295.3	294.8	294.8	293.3
32.5°	282.8	281.3	282.3	279.8
35°	265.7	264.7	266.2	264.2
37.5°	247.2	246.7	247.7	246.2
40°	227.7	227.7	229.2	226.7
42.5°	210.7	210.7	212.2	209.7
45°	192.2	193.7	195.2	193.2
47.5°	176.2	177.2	179.2	177.2
50°	160.1	161.1	162.6	160.6
52.5°	142.6	143.6	145.1	143.6
55°	122.6	123.6	125.1	124.1
57.5°	98.6	97.6	100.1	98.1
60°	71.6	69.6	70.1	70.1
62.5°	47.5	46.5	47.5	46.0
65°	31.5	31.0	31.0	31.0
67.5°	21.0	20.5	21.0	20.5
70°	13.5	13.5	13.5	13.5
72.5°	8.5	8.5	8.5	8.5
75°	5.5	5.5	5.5	5.5
77.5°	3.5	3.5	3.5	3.5
80°	2.5	2.5	2.5	2.5
82.5°	1.5	1.5	1.5	1.5
85°	1.0	1.0	1.0	1.0
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)