

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P879369

Luminaire Tested: **LD4C15D010 EU4159027 4LBDWWLI**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C15D010 EU4159027 4LBDWWLI
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

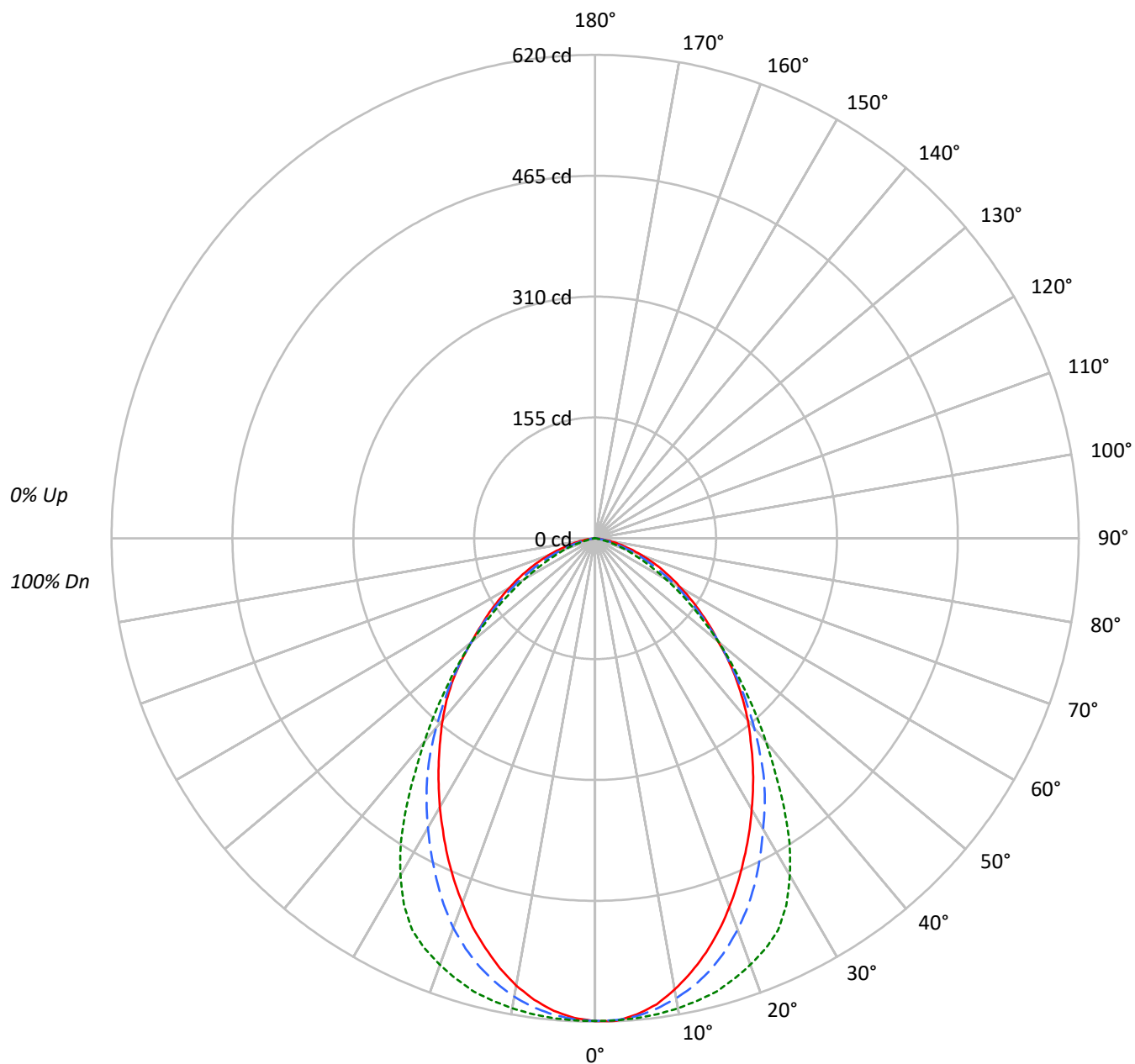
Lumens per Lamp: N/A
Luminaire Lumens: 1137.0 lumens
Efficiency: N/A
Efficacy: 72.0 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 15.8
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: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

Luminous Intensity Polar Plot





TEST NUMBER: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77		
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67		
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59		
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38		
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35		
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	76059	76059	76059
5°	75609	76176	75030
10°	73302	76359	72666
15°	69940	76529	69164
20°	65800	76089	65081
25°	61297	75192	60796
30°	56956	70816	56488
35°	52807	63335	52432
40°	48834	54623	48786
45°	44495	46615	44843
50°	39296	39429	39506
55°	35213	32235	35363
60°	31106	25603	31180
65°	27384	19506	27122
70°	22701	13973	22701
75°	17705	8022	17041
80°	11461	1981	10966
85°	4229	705	3242



TEST NUMBER: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	5.1
10°-20°	160.8	14.1
20°-30°	224.8	19.8
30°-40°	237.1	20.9
40°-50°	201.7	17.7
50°-60°	142.3	12.5
60°-70°	80.7	7.1
70°-80°	28.8	2.5
80°-90°	2.8	0.2
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°	443.7	39.0
0°-40°	680.8	59.9
0°-60°	1024.8	90.1
0°-90°	1137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1137.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	619	619	619	619	619	
5°	613	615	618	613	608	58
15°	550	573	602	570	544	154
25°	452	486	555	482	448	208
35°	352	378	422	376	350	220
45°	256	260	268	261	258	197
55°	164	159	150	159	165	148
65°	94	81	67	81	93	93
75°	37	26	17	25	36	40
85°	3	1	0	1	2	5
90°	0	0	0	0	0	



TEST NUMBER: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1
2.5°	619.6	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.6	618.6
5°	613.1	612.6	612.4	612.4	612.4	612.4	612.6	613.5	614.0	614.7	615.2
7.5°	602.9	602.0	602.4	602.4	602.9	603.3	604.0	605.0	606.4	607.3	608.4
10°	587.6	586.7	587.8	588.3	589.7	590.4	591.5	592.9	595.7	597.1	598.9
12.5°	569.8	569.3	569.8	571.6	573.0	573.9	575.3	578.3	581.1	584.1	587.4
15°	549.9	548.7	549.4	551.7	554.0	555.7	556.8	560.7	564.5	569.1	573.0
17.5°	527.6	526.0	527.9	529.7	532.7	534.1	535.7	540.1	545.2	550.3	554.7
20°	503.3	502.9	504.0	506.6	509.6	511.4	512.8	517.7	522.1	529.0	534.1
22.5°	478.1	478.6	479.5	482.3	484.3	486.9	489.0	493.4	498.5	504.9	511.4
25°	452.2	452.9	454.5	456.3	459.8	461.2	463.7	468.4	472.8	478.8	486.0
27.5°	427.2	427.4	429.2	430.2	433.4	436.4	437.6	442.4	447.5	452.2	458.4
30°	401.5	402.2	403.3	405.9	409.1	410.3	411.6	416.0	420.0	425.8	430.6
32.5°	376.9	376.5	377.8	379.2	382.9	385.0	385.7	390.8	394.3	400.1	404.7
35°	352.1	351.0	353.1	354.5	357.7	359.6	360.5	364.4	367.7	372.5	377.6
37.5°	327.4	328.3	329.2	330.4	332.0	332.5	335.2	336.2	340.3	344.0	346.8
40°	304.5	304.0	303.5	304.7	306.8	307.7	307.9	310.5	311.4	315.1	317.2
42.5°	279.9	280.1	279.9	280.1	281.3	281.3	282.0	283.6	284.3	285.5	288.0
45°	256.1	256.1	255.4	255.6	255.8	255.6	255.8	256.5	257.9	257.9	259.8
47.5°	231.3	230.8	231.8	231.1	230.6	230.4	231.1	230.4	231.8	231.8	232.2
50°	205.6	205.6	206.7	206.5	207.0	206.1	206.3	206.3	206.5	206.3	207.2
52.5°	185.7	185.2	184.8	183.6	184.1	183.1	183.1	183.4	182.7	182.4	181.3
55°	164.4	164.8	164.1	163.7	163.7	162.8	162.5	161.1	160.2	159.5	158.8
57.5°	145.2	145.6	145.4	144.2	142.8	143.1	142.6	141.2	139.1	137.8	136.6
60°	126.6	127.1	126.6	125.5	125.0	124.1	123.9	122.0	120.4	118.5	117.2
62.5°	110.0	110.0	109.7	108.1	107.0	107.2	106.0	104.6	102.6	100.0	97.9
65°	94.2	94.0	92.8	92.1	91.2	90.1	89.4	87.3	85.7	83.6	80.8
67.5°	78.5	77.8	77.3	76.6	74.6	74.3	73.4	71.5	69.2	67.6	65.3
70°	63.2	63.0	62.0	62.0	60.4	59.7	58.3	56.7	54.6	52.3	50.5
72.5°	50.0	49.5	48.6	47.7	46.3	45.8	44.7	43.1	41.2	38.9	36.6
75°	37.3	36.8	36.6	35.4	34.3	33.1	32.6	31.0	29.2	27.6	25.5
77.5°	26.2	25.7	25.0	24.3	23.6	22.9	22.2	20.8	19.2	17.8	16.0
80°	16.2	15.7	15.3	15.0	14.4	14.1	13.2	12.5	11.1	10.2	9.0
82.5°	8.3	8.3	7.9	7.6	7.2	6.9	6.7	6.0	5.3	4.6	3.9
85°	3.0	3.0	2.8	2.5	2.5	2.3	2.3	2.1	1.6	1.6	1.2
87.5°	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1
2.5°	618.9	618.6	618.9	618.9	619.1	619.1	619.1	618.9	619.1	618.9	618.9
5°	615.2	615.8	616.3	616.8	617.0	617.2	617.2	617.5	617.7	617.7	617.5
7.5°	609.4	610.8	612.1	613.1	613.5	614.0	614.7	615.2	615.6	615.4	615.2
10°	601.7	604.0	605.9	607.7	608.7	609.4	610.5	611.4	611.9	612.1	611.4
12.5°	590.8	594.1	597.1	600.1	601.5	602.4	604.7	606.4	607.3	607.3	606.6
15°	577.2	581.8	586.2	590.1	592.5	593.9	597.3	599.6	601.0	601.7	600.6
17.5°	560.7	566.1	571.4	576.5	578.8	580.9	585.8	589.0	592.0	592.5	591.1
20°	539.7	546.4	552.4	558.7	561.2	564.5	570.0	575.3	580.0	582.0	578.1
22.5°	516.1	523.5	529.0	536.7	540.1	543.6	550.8	557.5	565.6	570.0	563.1
25°	491.5	497.8	504.5	511.9	516.8	520.5	528.8	537.4	548.2	554.7	545.0
27.5°	465.1	470.7	478.8	486.9	490.6	495.2	505.2	514.4	524.9	530.6	523.5
30°	437.8	444.8	452.4	459.8	465.1	469.5	477.6	485.5	494.3	499.2	493.8
32.5°	410.7	417.4	423.9	432.0	435.0	439.0	446.1	452.9	459.6	464.0	457.7
35°	382.2	388.3	394.3	399.8	401.2	405.9	411.6	415.6	418.8	422.3	418.1
37.5°	351.2	355.8	358.9	364.9	367.2	367.9	372.5	375.3	378.8	379.5	379.2
40°	319.7	323.9	326.4	330.2	332.0	332.0	335.2	337.8	340.3	340.6	340.3
42.5°	290.3	292.4	294.5	296.8	296.3	299.1	300.5	301.7	303.5	303.5	304.0
45°	260.7	262.3	264.2	264.6	266.5	266.5	267.6	268.1	269.0	268.3	267.4
47.5°	233.1	233.8	234.1	236.2	236.6	235.0	236.4	236.6	236.4	236.4	235.9
50°	207.0	207.4	207.2	206.5	206.7	207.4	206.7	205.8	206.3	206.3	206.7
52.5°	181.5	180.6	180.1	180.1	179.2	179.2	178.0	177.6	177.3	176.4	177.6
55°	158.1	156.7	154.7	154.2	153.5	153.3	151.9	150.7	150.3	150.5	150.3
57.5°	135.7	133.6	132.2	131.7	131.0	129.7	128.0	126.9	126.6	126.2	126.2
60°	115.3	113.0	110.9	108.8	109.0	108.1	106.5	105.8	105.1	104.2	104.9
62.5°	96.8	94.2	91.9	89.8	88.4	87.7	86.6	85.4	84.7	84.0	85.0
65°	78.5	76.4	73.9	71.8	71.1	70.4	69.2	67.4	67.1	67.1	67.6
67.5°	62.0	59.7	57.4	56.0	55.1	54.2	53.7	52.8	52.1	51.6	51.9
70°	47.7	45.4	43.5	42.1	41.4	41.2	39.6	39.4	39.1	38.9	38.7
72.5°	34.7	32.9	31.3	30.3	29.4	28.7	28.2	27.6	27.3	27.3	27.3
75°	23.8	22.5	20.6	19.4	19.0	18.3	17.6	17.1	16.7	16.9	16.9
77.5°	14.4	13.0	11.8	10.9	10.7	10.0	9.3	8.8	8.1	8.1	8.3
80°	7.9	6.7	5.8	5.1	4.6	4.4	3.7	3.5	3.0	2.8	2.8
82.5°	3.5	2.8	2.3	2.1	1.9	1.6	1.4	1.2	1.2	0.9	1.2
85°	1.2	0.9	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.2	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: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1
2.5°	618.6	618.6	618.4	618.4	618.4	617.9	617.9	617.7	617.5	617.2	616.8
5°	617.0	616.8	616.3	616.1	615.8	615.2	614.5	614.0	613.3	612.4	611.9
7.5°	614.7	614.0	613.1	612.6	611.9	610.3	609.1	608.0	606.8	605.2	603.3
10°	610.8	609.4	608.0	607.1	605.9	603.8	601.5	599.6	597.1	594.8	592.2
12.5°	605.2	603.6	600.8	599.4	598.0	595.0	592.0	588.1	584.6	581.4	578.3
15°	598.3	595.2	592.0	590.1	588.1	583.2	578.6	574.4	569.8	565.8	561.0
17.5°	588.1	583.7	579.0	577.0	574.2	568.6	563.1	557.3	551.9	547.1	541.1
20°	572.8	567.9	561.9	558.7	556.3	548.9	543.6	537.1	531.6	525.6	518.8
22.5°	555.0	548.2	541.5	536.9	534.4	526.9	519.8	514.0	508.0	501.0	496.2
25°	534.8	526.5	518.4	513.7	509.8	501.9	495.0	489.0	481.6	475.5	470.7
27.5°	512.1	502.6	493.1	488.5	484.8	476.2	468.8	462.6	455.4	450.1	445.0
30°	485.0	476.5	467.4	463.7	459.3	450.5	442.0	436.4	428.5	423.0	417.4
32.5°	451.2	445.7	438.5	433.4	431.1	423.0	415.8	409.1	402.4	398.0	392.4
35°	414.2	409.3	403.3	400.5	397.5	392.4	386.6	380.9	375.5	371.4	366.3
37.5°	376.7	371.8	368.1	365.1	363.3	358.6	355.2	350.8	347.1	343.1	340.3
40°	337.8	336.4	332.5	331.1	330.6	325.5	322.5	319.0	316.7	314.4	312.8
42.5°	303.3	301.0	298.0	298.2	296.8	294.0	291.9	289.6	288.0	286.9	285.2
45°	269.3	267.4	266.0	267.2	264.9	263.9	262.3	262.1	260.9	258.8	258.1
47.5°	236.8	236.6	236.8	236.2	235.7	235.2	235.5	234.3	233.1	232.4	231.5
50°	207.2	207.4	207.9	208.6	207.0	207.7	207.4	207.2	207.2	206.5	207.0
52.5°	178.5	178.7	179.2	179.9	180.1	180.1	180.8	181.3	182.2	183.4	183.4
55°	151.4	153.0	154.0	155.1	154.4	155.8	156.5	158.6	159.3	159.3	160.2
57.5°	127.3	129.0	129.7	131.0	131.5	132.7	134.5	135.7	137.3	138.7	140.1
60°	105.3	106.0	107.9	110.0	109.5	112.3	113.7	115.5	117.6	118.5	120.4
62.5°	85.7	86.6	88.0	88.7	90.3	91.7	94.9	96.8	98.6	100.9	102.8
65°	68.1	69.0	70.4	71.8	72.5	74.6	76.2	79.4	81.0	83.6	85.7
67.5°	52.1	53.5	54.6	55.6	56.0	58.1	60.7	62.0	65.1	67.6	69.2
70°	38.9	40.1	41.4	41.2	42.1	43.8	45.6	47.7	50.0	52.3	54.2
72.5°	27.1	28.2	29.2	29.4	30.3	31.5	32.9	34.5	36.3	38.7	41.2
75°	17.1	17.4	18.3	18.8	19.2	20.6	21.8	23.4	25.0	26.9	28.5
77.5°	8.6	9.3	9.7	10.2	10.4	11.6	12.7	14.1	15.5	17.4	19.0
80°	3.2	3.5	4.2	4.4	4.9	5.6	6.5	7.2	8.3	9.7	10.7
82.5°	1.2	1.4	1.6	1.6	1.9	2.3	2.5	3.2	3.9	4.4	4.9
85°	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.9	1.2	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: P879369

CATALOG NUMBER: LD4C15D010 EU4159027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	619.1	619.1	619.1	619.1	619.1	619.1	619.1	619.1
2.5°	616.5	616.5	616.3	616.1	616.1	616.1	615.8	615.8
5°	611.0	610.3	610.1	609.6	609.4	609.1	608.4	608.4
7.5°	602.0	601.0	600.3	599.6	598.7	598.0	598.0	597.1
10°	589.9	588.1	587.1	586.2	585.1	583.7	583.2	582.5
12.5°	575.3	571.6	570.7	569.1	567.2	566.3	564.7	564.7
15°	557.3	553.3	551.3	550.3	548.0	546.4	545.7	543.8
17.5°	536.2	533.2	530.0	528.6	526.0	523.9	523.0	522.8
20°	514.9	510.0	508.0	505.9	502.9	501.0	499.6	497.8
22.5°	490.4	486.0	483.0	481.6	479.0	475.8	473.5	473.5
25°	464.4	460.5	458.9	455.9	452.9	451.7	448.9	448.5
27.5°	439.7	435.7	432.5	430.9	427.4	425.8	423.5	422.5
30°	414.0	409.3	407.0	406.8	402.6	401.0	399.1	398.2
32.5°	388.3	384.3	382.0	380.6	378.8	376.0	374.4	373.4
35°	362.8	360.2	358.2	356.5	353.5	352.1	350.8	349.6
37.5°	336.2	333.9	332.9	331.5	330.2	327.6	327.1	326.2
40°	310.5	307.5	307.5	306.5	305.1	304.9	304.2	304.2
42.5°	283.6	282.2	282.0	282.2	281.3	280.8	280.1	281.8
45°	257.0	257.7	256.5	256.8	256.3	257.2	257.2	258.1
47.5°	232.4	231.5	232.0	232.4	233.1	233.1	232.9	232.7
50°	206.3	207.2	208.1	207.0	207.4	207.7	206.5	206.7
52.5°	183.8	184.1	184.8	184.1	184.8	184.5	185.0	184.1
55°	162.1	162.1	163.0	163.2	163.5	164.1	164.4	165.1
57.5°	141.0	142.2	143.3	143.1	144.0	144.9	144.2	144.9
60°	122.7	123.6	124.8	125.3	125.9	126.4	126.4	126.9
62.5°	104.2	106.0	107.0	107.9	107.9	108.8	109.7	110.0
65°	87.5	89.6	90.3	91.0	91.5	92.4	93.5	93.3
67.5°	71.8	73.2	74.1	74.6	75.9	76.4	77.3	78.3
70°	56.3	58.1	58.8	59.7	60.9	61.8	62.7	63.2
72.5°	43.1	44.5	44.9	45.8	47.0	47.9	48.4	49.1
75°	30.1	32.4	32.6	33.3	34.3	35.4	36.1	35.9
77.5°	19.9	21.5	21.8	22.7	23.6	24.5	24.8	25.0
80°	11.8	12.7	13.0	13.4	14.1	14.6	15.0	15.5
82.5°	5.6	6.0	6.5	6.5	6.9	7.4	7.4	7.6
85°	1.9	1.9	2.1	2.1	2.3	2.3	2.5	2.3
87.5°	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)