

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: P879373

Luminaire Tested: **LD4C15D010 EU4159035 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: P879373
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 EU4159035 4LBDWWLI
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

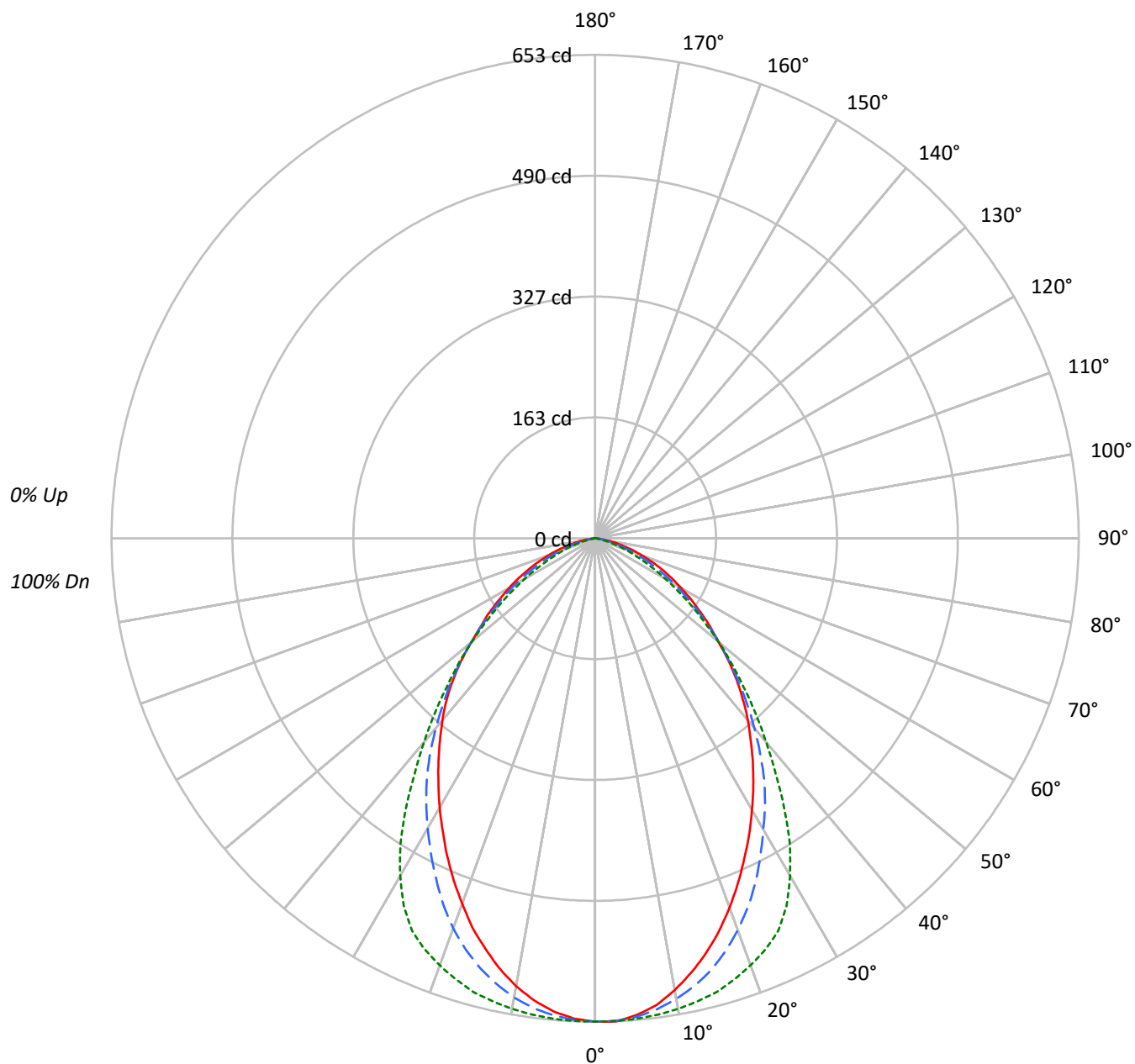
Lumens per Lamp: N/A
Luminaire Lumens: 1199.0 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 4LBLDWWLI

Luminous Intensity Polar Plot





TEST NUMBER: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 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°	80199	80199	80199
5°	79728	80332	79124
10°	77294	80525	76633
15°	73743	80700	72942
20°	69396	80247	68624
25°	64632	79299	64103
30°	60063	74675	59567
35°	55686	66784	55296
40°	51496	57590	51448
45°	46910	49169	47292
50°	41436	41570	41665
55°	37119	33992	37290
60°	32802	27003	32876
65°	28895	20581	28604
70°	23959	14727	23959
75°	18655	8449	17943
80°	12098	2052	11603
85°	4511	705	3383



TEST NUMBER: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 4LBLDWWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	5.1
10°-20°	169.6	14.1
20°-30°	237.0	19.8
30°-40°	250.0	20.9
40°-50°	212.7	17.7
50°-60°	150.1	12.5
60°-70°	85.1	7.1
70°-80°	30.4	2.5
80°-90°	2.9	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°	467.9	39.0
0°-40°	717.9	59.9
0°-60°	1080.7	90.1
0°-90°	1199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1199.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	653	653	653	653	653	
5°	646	649	651	647	642	61
15°	580	604	634	601	574	163
25°	477	512	585	508	473	219
35°	371	398	445	396	369	232
45°	270	274	283	275	272	208
55°	173	168	159	168	174	156
65°	99	85	71	86	98	98
75°	39	27	18	26	38	43
85°	3	1	0	1	2	6
90°	0	0	0	0	0	



TEST NUMBER: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 4LBLDWWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8
2.5°	653.3	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.4	652.4
5°	646.5	646.0	645.8	645.8	645.8	645.8	646.0	647.0	647.5	648.2	648.7
7.5°	635.8	634.8	635.3	635.3	635.8	636.2	637.0	638.0	639.4	640.4	641.6
10°	619.6	618.7	619.9	620.4	621.8	622.6	623.8	625.3	628.2	629.7	631.6
12.5°	600.8	600.4	600.8	602.8	604.3	605.2	606.7	609.9	612.8	616.0	619.4
15°	579.8	578.6	579.4	581.8	584.2	586.0	587.2	591.3	595.2	600.1	604.3
17.5°	556.4	554.7	556.7	558.6	561.8	563.2	565.0	569.6	575.0	580.3	585.0
20°	530.8	530.3	531.5	534.2	537.4	539.3	540.8	545.9	550.6	557.9	563.2
22.5°	504.2	504.7	505.6	508.6	510.8	513.4	515.6	520.3	525.6	532.5	539.3
25°	476.8	477.6	479.3	481.2	484.9	486.3	489.0	493.9	498.5	504.9	512.5
27.5°	450.5	450.7	452.6	453.6	457.0	460.2	461.4	466.6	471.9	476.8	483.4
30°	423.4	424.1	425.3	428.0	431.4	432.6	434.1	438.7	442.9	449.0	454.1
32.5°	397.5	397.0	398.4	399.9	403.8	406.0	406.7	412.1	415.8	421.9	426.8
35°	371.3	370.1	372.3	373.8	377.2	379.2	380.1	384.3	387.7	392.8	398.2
37.5°	345.2	346.2	347.2	348.4	350.1	350.6	353.5	354.5	358.9	362.8	365.7
40°	321.1	320.6	320.1	321.3	323.5	324.5	324.7	327.4	328.4	332.3	334.5
42.5°	295.2	295.4	295.2	295.4	296.6	296.6	297.4	299.1	299.8	301.0	303.7
45°	270.0	270.0	269.3	269.5	269.8	269.5	269.8	270.5	272.0	272.0	273.9
47.5°	243.9	243.4	244.4	243.7	243.2	242.9	243.7	242.9	244.4	244.4	244.9
50°	216.8	216.8	218.0	217.8	218.3	217.3	217.5	217.5	217.8	217.5	218.5
52.5°	195.8	195.3	194.8	193.6	194.1	193.1	193.1	193.4	192.6	192.4	191.2
55°	173.3	173.8	173.1	172.6	172.6	171.6	171.4	169.9	168.9	168.2	167.5
57.5°	153.1	153.6	153.3	152.1	150.6	150.9	150.4	148.9	146.7	145.3	144.0
60°	133.5	134.0	133.5	132.3	131.8	130.9	130.6	128.7	127.0	125.0	123.5
62.5°	116.0	116.0	115.7	114.0	112.8	113.0	111.8	110.4	108.2	105.5	103.3
65°	99.4	99.1	97.9	97.2	96.2	95.0	94.2	92.0	90.3	88.1	85.2
67.5°	82.8	82.0	81.5	80.8	78.6	78.4	77.4	75.4	73.0	71.3	68.8
70°	66.7	66.4	65.4	65.4	63.7	63.0	61.5	59.8	57.6	55.2	53.2
72.5°	52.7	52.2	51.3	50.3	48.8	48.3	47.1	45.4	43.5	41.0	38.6
75°	39.3	38.8	38.6	37.4	36.1	34.9	34.4	32.7	30.8	29.1	26.9
77.5°	27.6	27.1	26.4	25.6	24.9	24.2	23.4	22.0	20.3	18.8	16.8
80°	17.1	16.6	16.1	15.9	15.1	14.9	13.9	13.2	11.7	10.7	9.5
82.5°	8.8	8.8	8.3	8.1	7.6	7.3	7.1	6.3	5.6	4.9	4.2
85°	3.2	3.2	2.9	2.7	2.7	2.4	2.4	2.2	1.7	1.7	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: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8
2.5°	652.6	652.4	652.6	652.6	652.8	652.8	652.8	652.6	652.8	652.6	652.6
5°	648.7	649.4	649.9	650.4	650.7	650.9	650.9	651.1	651.4	651.4	651.1
7.5°	642.6	644.1	645.5	646.5	647.0	647.5	648.2	648.7	649.2	648.9	648.7
10°	634.5	637.0	638.9	640.9	641.9	642.6	643.8	644.8	645.3	645.5	644.8
12.5°	623.1	626.5	629.7	632.8	634.3	635.3	637.7	639.4	640.4	640.4	639.7
15°	608.7	613.5	618.2	622.3	624.8	626.2	629.9	632.3	633.8	634.5	633.3
17.5°	591.3	596.9	602.6	607.9	610.4	612.6	617.7	621.1	624.3	624.8	623.3
20°	569.1	576.2	582.5	589.1	591.8	595.2	601.1	606.7	611.6	613.8	609.6
22.5°	544.2	552.0	557.9	565.9	569.6	573.3	580.8	587.9	596.5	601.1	593.8
25°	518.3	524.9	532.0	539.8	544.9	548.8	557.6	566.7	578.1	585.0	574.7
27.5°	490.5	496.4	504.9	513.4	517.3	522.2	532.7	542.5	553.5	559.6	552.0
30°	461.7	469.0	477.1	484.9	490.5	495.1	503.7	512.0	521.3	526.4	520.8
32.5°	433.1	440.2	447.0	455.6	458.8	462.9	470.5	477.6	484.6	489.3	482.7
35°	403.1	409.4	415.8	421.6	423.1	428.0	434.1	438.2	441.7	445.3	440.9
37.5°	370.4	375.3	378.4	384.8	387.2	387.9	392.8	395.8	399.4	400.2	399.9
40°	337.2	341.6	344.2	348.2	350.1	350.1	353.5	356.2	358.9	359.1	358.9
42.5°	306.2	308.4	310.6	313.0	312.5	315.4	316.9	318.1	320.1	320.1	320.6
45°	274.9	276.6	278.6	279.1	281.0	281.0	282.2	282.7	283.7	283.0	282.0
47.5°	245.9	246.6	246.8	249.0	249.5	247.8	249.3	249.5	249.3	249.3	248.8
50°	218.3	218.8	218.5	217.8	218.0	218.8	218.0	217.0	217.5	217.5	218.0
52.5°	191.4	190.4	189.9	189.9	189.0	189.0	187.7	187.3	187.0	186.0	187.3
55°	166.8	165.3	163.1	162.6	161.9	161.6	160.2	158.9	158.5	158.7	158.5
57.5°	143.1	140.9	139.4	138.9	138.2	136.7	135.0	133.8	133.5	133.1	133.1
60°	121.6	119.1	116.9	114.7	115.0	114.0	112.3	111.6	110.8	109.9	110.6
62.5°	102.1	99.4	96.9	94.7	93.3	92.5	91.3	90.1	89.4	88.6	89.6
65°	82.8	80.6	77.9	75.7	75.0	74.2	73.0	71.0	70.8	70.8	71.3
67.5°	65.4	63.0	60.5	59.1	58.1	57.1	56.6	55.7	54.9	54.4	54.7
70°	50.3	47.9	45.9	44.4	43.7	43.5	41.7	41.5	41.3	41.0	40.8
72.5°	36.6	34.7	33.0	32.0	31.0	30.3	29.8	29.1	28.8	28.8	28.8
75°	25.1	23.7	21.7	20.5	20.0	19.3	18.6	18.1	17.6	17.8	17.8
77.5°	15.1	13.7	12.5	11.5	11.2	10.5	9.8	9.3	8.5	8.5	8.8
80°	8.3	7.1	6.1	5.4	4.9	4.6	3.9	3.7	3.2	2.9	2.9
82.5°	3.7	2.9	2.4	2.2	2.0	1.7	1.5	1.2	1.2	1.0	1.2
85°	1.2	1.0	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: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8
2.5°	652.4	652.4	652.1	652.1	652.1	651.6	651.6	651.4	651.1	650.9	650.4
5°	650.7	650.4	649.9	649.7	649.4	648.7	648.0	647.5	646.7	645.8	645.3
7.5°	648.2	647.5	646.5	646.0	645.3	643.6	642.4	641.1	639.9	638.2	636.2
10°	644.1	642.6	641.1	640.2	638.9	636.7	634.3	632.3	629.7	627.2	624.5
12.5°	638.2	636.5	633.6	632.1	630.6	627.5	624.3	620.1	616.5	613.1	609.9
15°	630.9	627.7	624.3	622.3	620.1	615.0	610.1	605.7	600.8	596.7	591.6
17.5°	620.1	615.5	610.6	608.4	605.5	599.6	593.8	587.7	582.0	576.9	570.6
20°	604.0	598.9	592.5	589.1	586.7	578.9	573.3	566.4	560.6	554.2	547.1
22.5°	585.2	578.1	571.1	566.2	563.5	555.7	548.1	542.0	535.7	528.3	523.2
25°	564.0	555.2	546.6	541.8	537.6	529.3	522.0	515.6	507.8	501.5	496.4
27.5°	540.1	530.0	520.0	515.1	511.2	502.2	494.4	487.8	480.2	474.6	469.3
30°	511.5	502.5	492.9	489.0	484.4	475.1	466.1	460.2	451.9	446.1	440.2
32.5°	475.8	470.0	462.4	457.0	454.6	446.1	438.5	431.4	424.3	419.7	413.8
35°	436.8	431.7	425.3	422.4	419.2	413.8	407.7	401.6	396.0	391.6	386.2
37.5°	397.2	392.1	388.2	385.0	383.1	378.2	374.5	369.9	366.0	361.8	358.9
40°	356.2	354.7	350.6	349.1	348.6	343.3	340.1	336.4	334.0	331.6	329.8
42.5°	319.8	317.4	314.2	314.5	313.0	310.1	307.9	305.4	303.7	302.5	300.8
45°	283.9	282.0	280.5	281.7	279.3	278.3	276.6	276.4	275.2	273.0	272.2
47.5°	249.8	249.5	249.8	249.0	248.5	248.1	248.3	247.1	245.9	245.1	244.1
50°	218.5	218.8	219.2	220.0	218.3	219.0	218.8	218.5	218.5	217.8	218.3
52.5°	188.2	188.5	189.0	189.7	189.9	189.9	190.7	191.2	192.1	193.4	193.4
55°	159.7	161.4	162.4	163.6	162.8	164.3	165.0	167.2	168.0	168.0	168.9
57.5°	134.3	136.0	136.7	138.2	138.7	139.9	141.8	143.1	144.8	146.2	147.7
60°	111.1	111.8	113.8	116.0	115.5	118.4	119.9	121.8	124.0	125.0	127.0
62.5°	90.3	91.3	92.8	93.5	95.2	96.7	100.1	102.1	104.0	106.4	108.4
65°	71.8	72.8	74.2	75.7	76.4	78.6	80.3	83.7	85.5	88.1	90.3
67.5°	54.9	56.4	57.6	58.6	59.1	61.3	64.0	65.4	68.6	71.3	73.0
70°	41.0	42.2	43.7	43.5	44.4	46.1	48.1	50.3	52.7	55.2	57.1
72.5°	28.6	29.8	30.8	31.0	32.0	33.2	34.7	36.4	38.3	40.8	43.5
75°	18.1	18.3	19.3	19.8	20.3	21.7	22.9	24.7	26.4	28.3	30.0
77.5°	9.0	9.8	10.3	10.7	11.0	12.2	13.4	14.9	16.4	18.3	20.0
80°	3.4	3.7	4.4	4.6	5.1	5.9	6.8	7.6	8.8	10.3	11.2
82.5°	1.2	1.5	1.7	1.7	2.0	2.4	2.7	3.4	4.2	4.6	5.1
85°	0.5	0.5	0.5	0.5	0.5	0.7	0.7	1.0	1.2	1.5	1.5
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: P879373

CATALOG NUMBER: LD4C15D010 EU4159035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	652.8	652.8	652.8	652.8	652.8	652.8	652.8	652.8
2.5°	650.2	650.2	649.9	649.7	649.7	649.7	649.4	649.4
5°	644.3	643.6	643.3	642.8	642.6	642.4	641.6	641.6
7.5°	634.8	633.8	633.1	632.3	631.4	630.6	630.6	629.7
10°	622.1	620.1	619.2	618.2	617.0	615.5	615.0	614.3
12.5°	606.7	602.8	601.8	600.1	598.2	597.2	595.5	595.5
15°	587.7	583.5	581.3	580.3	577.9	576.2	575.5	573.5
17.5°	565.4	562.3	558.9	557.4	554.7	552.5	551.5	551.3
20°	543.0	537.9	535.7	533.5	530.3	528.3	526.9	524.9
22.5°	517.1	512.5	509.3	507.8	505.1	501.7	499.3	499.3
25°	489.8	485.6	483.9	480.7	477.6	476.3	473.4	472.9
27.5°	463.6	459.5	456.1	454.4	450.7	449.0	446.5	445.6
30°	436.5	431.7	429.2	429.0	424.6	422.9	420.9	419.9
32.5°	409.4	405.3	402.8	401.4	399.4	396.5	394.8	393.8
35°	382.6	379.9	377.7	376.0	372.8	371.3	369.9	368.7
37.5°	354.5	352.1	351.1	349.6	348.2	345.5	345.0	344.0
40°	327.4	324.2	324.2	323.3	321.8	321.5	320.8	320.8
42.5°	299.1	297.6	297.4	297.6	296.6	296.1	295.4	297.1
45°	271.0	271.7	270.5	270.8	270.3	271.2	271.2	272.2
47.5°	245.1	244.1	244.6	245.1	245.9	245.9	245.6	245.4
50°	217.5	218.5	219.5	218.3	218.8	219.0	217.8	218.0
52.5°	193.9	194.1	194.8	194.1	194.8	194.6	195.1	194.1
55°	170.9	170.9	171.9	172.1	172.4	173.1	173.3	174.1
57.5°	148.7	149.9	151.1	150.9	151.9	152.8	152.1	152.8
60°	129.4	130.4	131.6	132.1	132.8	133.3	133.3	133.8
62.5°	109.9	111.8	112.8	113.8	113.8	114.7	115.7	116.0
65°	92.3	94.5	95.2	95.9	96.4	97.4	98.6	98.4
67.5°	75.7	77.2	78.1	78.6	80.1	80.6	81.5	82.5
70°	59.3	61.3	62.0	63.0	64.2	65.2	66.2	66.7
72.5°	45.4	46.9	47.4	48.3	49.6	50.5	51.0	51.8
75°	31.7	34.2	34.4	35.2	36.1	37.4	38.1	37.8
77.5°	21.0	22.7	22.9	23.9	24.9	25.9	26.1	26.4
80°	12.5	13.4	13.7	14.2	14.9	15.4	15.9	16.4
82.5°	5.9	6.3	6.8	6.8	7.3	7.8	7.8	8.1
85°	2.0	2.0	2.2	2.2	2.4	2.4	2.7	2.4
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)