

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: METALUX

Report Number: P237727

Luminaire Tested: **2VT2-LD5-2-FR50-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237727  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-8)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2VT2-LD5-2-FR50-UNV-L850-CD1-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
FROSTED LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
2FT FIXTURE  
Light Source: (56) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2314.0 lumens  
Efficiency: N/A  
Efficacy: 133.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
CIE Type: Direct

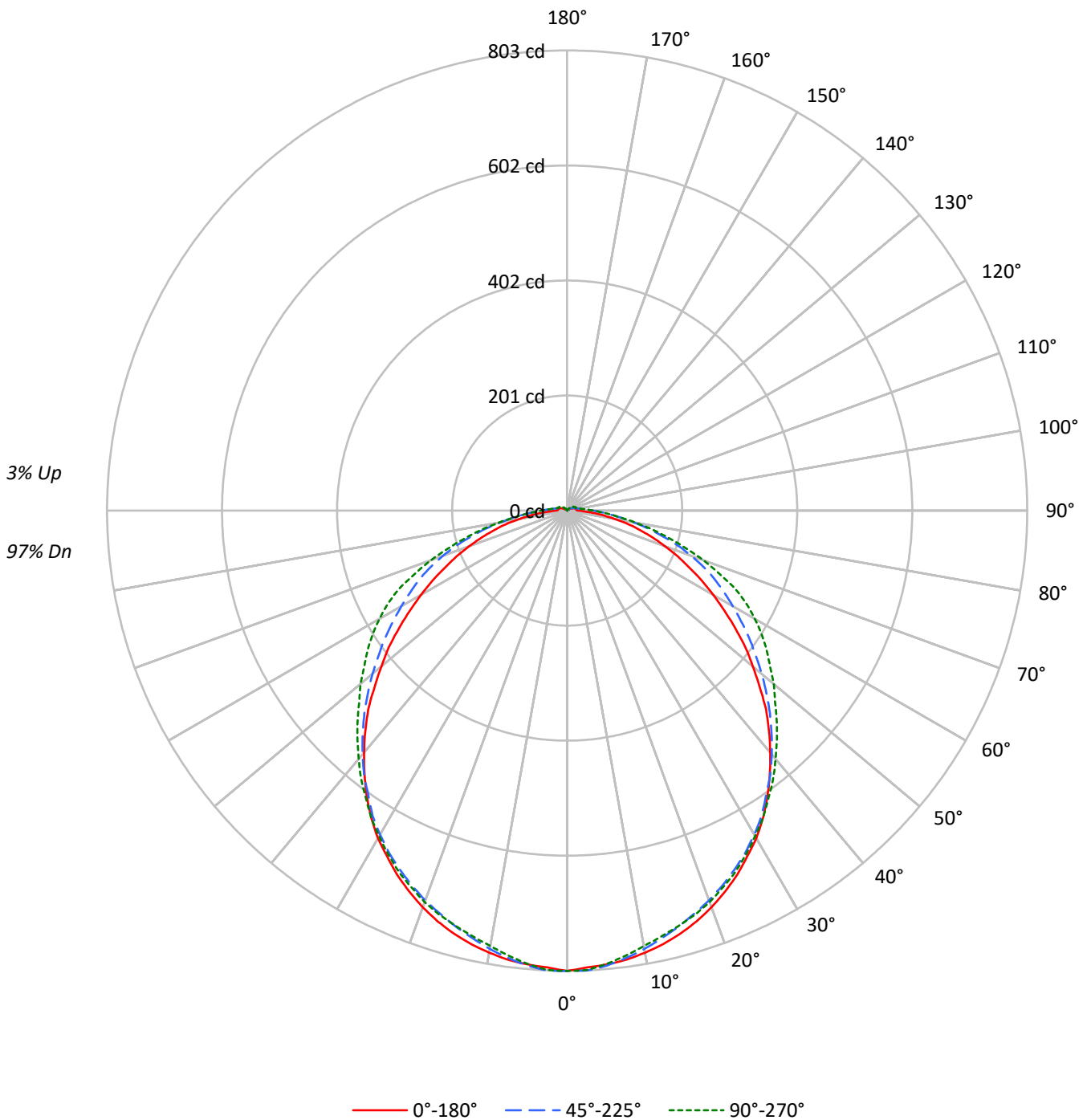
Input Watts (W): 17.38  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	107	102	98	94	104	100	96	92	95	92	88	91	88	85	86	84	82	80
2	97	89	82	76	95	87	80	75	83	77	73	79	74	70	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	53	46	72	60	52	45	58	50	45	56	49	44	53	48	43	41
6	69	56	46	40	67	54	46	40	52	45	39	50	44	39	48	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	35	31	41	35	30	28
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	38	32	27	25
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8302	8302	8302
5°	8189	8062	8002
10°	8105	7752	7647
15°	8004	7456	7369
20°	7872	7195	7130
25°	7713	6935	6861
30°	7531	6666	6565
35°	7281	6337	6266
40°	6968	6016	5966
45°	6641	5658	5670
50°	6207	5283	5414
55°	5793	4930	5187
60°	5349	4581	4958
65°	4911	4270	4624
70°	4491	3854	3979
75°	4040	3279	3243
80°	3426	2636	2487
85°	2756	2027	1829



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	3.3
10°-20°	213.0	9.2
20°-30°	319.5	13.8
30°-40°	379.6	16.4
40°-50°	385.8	16.7
50°-60°	347.3	15.0
60°-70°	277.2	12.0
70°-80°	174.6	7.5
80°-90°	76.4	3.3
90°-100°	29.1	1.3
100°-110°	16.1	0.7
110°-120°	10.6	0.5
120°-130°	6.1	0.3
130°-140°	2.7	0.1
140°-150°	0.7	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	607.9	26.3
0°-40°	987.5	42.7
0°-60°	1720.5	74.4
0°-90°	2248.8	97.2
90°-120°	55.8	2.4
90°-150°	65.3	2.8
90°-180°	65.0	2.8
0°-180°	2314.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	803	803	803	803	803	
5°	795	797	797	795	794	76
15°	764	758	752	753	750	216
25°	702	689	691	696	695	323
35°	610	598	605	614	613	381
45°	491	483	500	513	517	377
55°	358	358	388	414	425	321
65°	235	243	284	318	324	234
75°	131	144	172	184	182	140
85°	44	59	74	76	74	45
90°	19	33	46	47	46	11
95°	16	19	29	31	30	13
105°	15	11	16	18	17	15
115°	8	6	11	14	15	9
125°	4	3	6	10	12	4
135°	2	1	2	5	6	1
145°	1	1	0	2	2	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P237727

CATALOG NUMBER: 2VT2-LD5-2-FR50-UNV-L850-CD1-WL-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4
2.5°	798.1	798.1	799.2	799.2	800.3	801.3	801.3	801.3	802.4	802.4	803.4
5°	795.0	796.0	796.0	796.0	797.1	797.1	797.1	797.1	797.1	797.1	797.1
7.5°	790.7	790.7	790.7	790.7	790.7	790.7	790.7	789.7	788.6	788.6	787.5
10°	783.3	784.4	783.3	783.3	782.2	781.2	781.2	779.1	779.1	776.9	776.9
12.5°	774.8	774.8	774.8	772.7	771.6	770.6	769.5	767.4	766.3	764.2	764.2
15°	764.2	764.2	764.2	761.0	758.9	757.9	756.8	754.7	753.6	752.6	751.5
17.5°	751.5	751.5	750.4	747.3	744.1	743.0	742.0	739.8	738.8	737.7	737.7
20°	736.7	736.7	734.5	731.4	729.2	726.1	725.0	723.9	722.9	722.9	723.9
22.5°	719.7	719.7	717.6	713.3	711.2	708.0	707.0	707.0	705.9	707.0	708.0
25°	701.7	701.7	697.4	694.3	692.1	689.0	687.9	687.9	687.9	690.0	691.1
27.5°	680.5	679.4	677.3	673.1	669.9	668.8	667.8	667.8	669.9	670.9	673.1
30°	660.3	658.2	655.1	650.8	647.6	647.6	646.6	647.6	649.8	650.8	652.9
32.5°	636.0	633.9	629.6	626.4	623.3	623.3	624.3	624.3	626.4	627.5	631.7
35°	609.5	608.4	604.2	599.9	598.9	597.8	597.8	599.9	603.1	605.2	605.2
37.5°	580.9	580.9	575.6	573.4	571.3	571.3	572.4	574.5	575.6	579.8	581.9
40°	551.2	550.1	546.9	543.8	542.7	542.7	542.7	545.9	549.1	552.2	555.4
42.5°	521.5	518.3	516.2	514.1	513.0	514.1	514.1	518.3	520.4	524.7	527.9
45°	490.8	486.5	484.4	482.3	482.3	483.3	484.4	488.6	492.9	496.1	500.3
47.5°	455.8	454.7	451.5	450.5	451.5	452.6	454.7	457.9	462.1	468.5	471.7
50°	422.9	420.8	419.7	417.6	418.7	419.7	421.9	427.2	432.5	438.8	443.1
52.5°	392.2	389.0	386.9	386.9	389.0	390.1	392.2	397.5	403.8	410.2	414.4
55°	358.3	357.2	354.0	354.0	357.2	358.3	361.4	366.7	374.2	380.5	387.9
57.5°	325.4	323.3	323.3	323.3	325.4	327.5	330.7	336.0	345.5	353.0	360.4
60°	294.7	292.5	291.5	291.5	294.7	298.9	301.0	307.4	315.9	325.4	333.9
62.5°	265.0	263.9	262.9	263.9	267.1	269.2	273.5	280.9	289.4	298.9	308.4
65°	235.3	235.3	233.2	235.3	239.5	242.7	247.0	254.4	263.9	273.5	284.1
67.5°	208.8	207.8	208.8	210.9	214.1	216.2	220.5	228.9	238.5	247.0	258.6
70°	181.3	181.3	182.3	184.4	188.7	190.8	195.0	203.5	213.1	222.6	230.0
72.5°	155.8	155.8	156.9	159.0	164.3	167.5	171.7	179.1	186.6	196.1	202.5
75°	131.4	131.4	132.5	135.7	141.0	144.2	147.3	153.7	161.1	168.5	171.7
77.5°	109.2	107.1	109.2	112.4	117.7	120.8	124.0	129.3	135.7	141.0	145.2
80°	83.7	84.8	86.9	90.1	95.4	97.5	100.7	106.0	110.2	114.5	117.7
82.5°	63.6	63.6	65.7	70.0	75.3	76.3	80.6	84.8	88.0	92.2	94.3
85°	44.5	45.6	47.7	51.9	57.2	59.4	61.5	65.7	68.9	72.1	74.2
87.5°	28.6	30.7	32.9	38.2	42.4	44.5	46.6	49.8	54.1	55.1	58.3
90°	19.1	20.1	23.3	26.5	30.7	32.9	35.0	38.2	41.3	43.5	45.6
92.5°	17.0	17.0	18.0	20.1	23.3	24.4	26.5	29.7	31.8	33.9	36.0
95°	15.9	15.9	15.9	17.0	19.1	19.1	21.2	23.3	25.4	27.6	28.6
97.5°	15.9	15.9	14.8	14.8	15.9	15.9	17.0	19.1	21.2	22.3	24.4
100°	15.9	14.8	13.8	12.7	13.8	13.8	14.8	15.9	18.0	19.1	20.1
102.5°	14.8	14.8	12.7	11.7	11.7	12.7	12.7	13.8	14.8	17.0	18.0
105°	14.8	13.8	11.7	10.6	10.6	10.6	11.7	12.7	13.8	14.8	15.9
107.5°	12.7	12.7	10.6	9.5	9.5	9.5	10.6	10.6	11.7	12.7	13.8
110°	11.7	11.7	9.5	8.5	8.5	8.5	8.5	9.5	10.6	11.7	12.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	10.6	9.5	8.5	7.4	7.4	7.4	7.4	8.5	9.5	10.6	11.7
115°	8.5	8.5	7.4	6.4	6.4	6.4	6.4	7.4	8.5	9.5	10.6
117.5°	7.4	7.4	6.4	5.3	5.3	5.3	5.3	6.4	7.4	8.5	9.5
120°	6.4	6.4	5.3	4.2	4.2	4.2	5.3	5.3	6.4	7.4	8.5
122.5°	5.3	5.3	4.2	4.2	3.2	3.2	4.2	4.2	5.3	6.4	7.4
125°	4.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2	4.2	5.3	6.4
127.5°	3.2	3.2	3.2	3.2	2.1	2.1	2.1	3.2	4.2	4.2	5.3
130°	3.2	3.2	3.2	2.1	2.1	2.1	2.1	2.1	3.2	3.2	4.2
132.5°	2.1	2.1	2.1	2.1	2.1	2.1	1.1	1.1	2.1	3.2	3.2
135°	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1
137.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1
140°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
142.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0
145°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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°
0°	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4	803.4
2.5°	803.4	803.4	803.4	803.4	803.4	803.4	802.4	803.4	802.4	802.4
5°	796.0	796.0	796.0	796.0	795.0	795.0	795.0	793.9	793.9	793.9
7.5°	786.5	786.5	785.4	785.4	784.4	784.4	783.3	783.3	782.2	783.3
10°	775.9	774.8	774.8	773.8	773.8	773.8	772.7	772.7	771.6	771.6
12.5°	764.2	763.2	763.2	763.2	762.1	762.1	762.1	761.0	761.0	761.0
15°	751.5	752.6	752.6	752.6	752.6	752.6	751.5	751.5	751.5	750.4
17.5°	738.8	739.8	739.8	740.9	740.9	740.9	739.8	739.8	738.8	739.8
20°	725.0	726.1	726.1	727.1	727.1	727.1	726.1	727.1	726.1	727.1
22.5°	709.1	711.2	711.2	712.3	712.3	712.3	711.2	712.3	712.3	711.2
25°	693.2	694.3	694.3	696.4	696.4	696.4	694.3	695.3	695.3	695.3
27.5°	674.1	674.1	677.3	676.2	676.2	676.2	677.3	676.2	676.2	676.2
30°	654.0	655.1	656.1	657.2	657.2	657.2	656.1	657.2	657.2	656.1
32.5°	632.8	633.9	634.9	636.0	636.0	636.0	636.0	636.0	636.0	636.0
35°	607.4	609.5	611.6	612.7	613.7	612.7	613.7	613.7	613.7	612.7
37.5°	583.0	586.2	587.2	588.3	589.3	589.3	589.3	589.3	590.4	590.4
40°	556.5	560.7	560.7	563.9	563.9	565.0	566.0	565.0	566.0	566.0
42.5°	531.0	534.2	536.3	538.5	538.5	539.5	540.6	541.6	542.7	541.6
45°	503.5	507.7	510.9	512.0	513.0	514.1	515.1	516.2	518.3	517.3
47.5°	475.9	480.2	483.3	486.5	487.6	488.6	490.8	491.8	495.0	491.8
50°	448.4	453.7	459.0	461.1	462.1	463.2	467.4	468.5	469.6	470.6
52.5°	420.8	426.1	431.4	435.6	437.8	439.9	443.1	445.2	446.2	446.2
55°	394.3	399.6	406.0	412.3	414.4	415.5	419.7	421.9	424.0	425.0
57.5°	368.9	376.3	382.6	389.0	391.1	394.3	397.5	400.7	401.7	402.8
60°	343.4	350.8	358.3	365.7	368.9	371.0	375.2	377.3	379.5	378.4
62.5°	319.0	326.5	336.0	341.3	344.5	346.6	348.7	351.9	353.0	353.0
65°	293.6	303.1	310.6	315.9	318.0	318.0	321.2	322.2	323.3	324.3
67.5°	268.2	275.6	280.9	285.1	287.2	286.2	288.3	290.4	289.4	287.2
70°	237.4	243.8	249.1	252.3	253.3	252.3	255.4	252.3	253.3	252.3
72.5°	208.8	214.1	216.2	218.4	218.4	218.4	218.4	218.4	217.3	216.2
75°	177.0	180.2	183.4	183.4	184.4	184.4	184.4	184.4	183.4	182.3
77.5°	148.4	150.5	152.6	151.6	152.6	152.6	151.6	151.6	151.6	151.6
80°	120.8	121.9	124.0	124.0	123.0	123.0	123.0	121.9	121.9	120.8
82.5°	96.5	97.5	97.5	97.5	98.6	96.5	97.5	95.4	96.5	94.3
85°	76.3	77.4	77.4	76.3	76.3	75.3	74.2	75.3	74.2	74.2
87.5°	59.4	59.4	60.4	60.4	59.4	59.4	58.3	58.3	57.2	57.2
90°	46.6	47.7	46.6	47.7	46.6	46.6	45.6	45.6	45.6	45.6
92.5°	37.1	38.2	37.1	37.1	37.1	37.1	37.1	36.0	36.0	36.0
95°	29.7	29.7	30.7	29.7	30.7	29.7	29.7	29.7	29.7	29.7
97.5°	24.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	24.4	24.4
100°	21.2	21.2	22.3	22.3	22.3	22.3	22.3	21.2	21.2	21.2
102.5°	18.0	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
105°	17.0	17.0	17.0	18.0	18.0	18.0	18.0	18.0	17.0	17.0
107.5°	14.8	15.9	15.9	15.9	17.0	17.0	15.9	15.9	15.9	15.9
110°	13.8	14.8	14.8	15.9	15.9	15.9	15.9	15.9	15.9	15.9





TEST NUMBER: P237727

CATALOG NUMBER: 2VT2-LD5-2-FR50-UNV-L850-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	12.7	13.8	13.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
115°	11.7	12.7	12.7	13.8	13.8	13.8	14.8	14.8	14.8	14.8
117.5°	10.6	11.7	12.7	12.7	12.7	12.7	13.8	13.8	13.8	13.8
120°	9.5	10.6	10.6	11.7	11.7	12.7	12.7	12.7	12.7	12.7
122.5°	8.5	9.5	10.6	10.6	10.6	11.7	11.7	11.7	12.7	12.7
125°	7.4	8.5	9.5	9.5	9.5	10.6	10.6	10.6	10.6	11.7
127.5°	6.4	7.4	7.4	8.5	8.5	9.5	9.5	9.5	9.5	9.5
130°	5.3	6.4	6.4	7.4	7.4	7.4	8.5	8.5	8.5	8.5
132.5°	4.2	5.3	5.3	6.4	6.4	6.4	7.4	7.4	7.4	7.4
135°	3.2	4.2	4.2	5.3	5.3	5.3	6.4	6.4	6.4	6.4
137.5°	2.1	3.2	4.2	4.2	4.2	4.2	5.3	5.3	5.3	5.3
140°	2.1	2.1	3.2	3.2	3.2	4.2	4.2	4.2	4.2	4.2
142.5°	1.1	1.1	2.1	2.1	2.1	3.2	3.2	3.2	3.2	3.2
145°	0.0	1.1	1.1	1.1	2.1	2.1	2.1	2.1	2.1	2.1
147.5°	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)