

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: P233251

Luminaire Tested: **2VRVT3-LD5-3-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233251
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2VRVT3-LD5-3-W-UNV-L840-CD1-U
Description: 2FT VRVT3 WIDE APPLICATION, 3000LM
Light Source: (196) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3297.0 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.66 / 1.64
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.17')
CIE Type: Semi-Direct

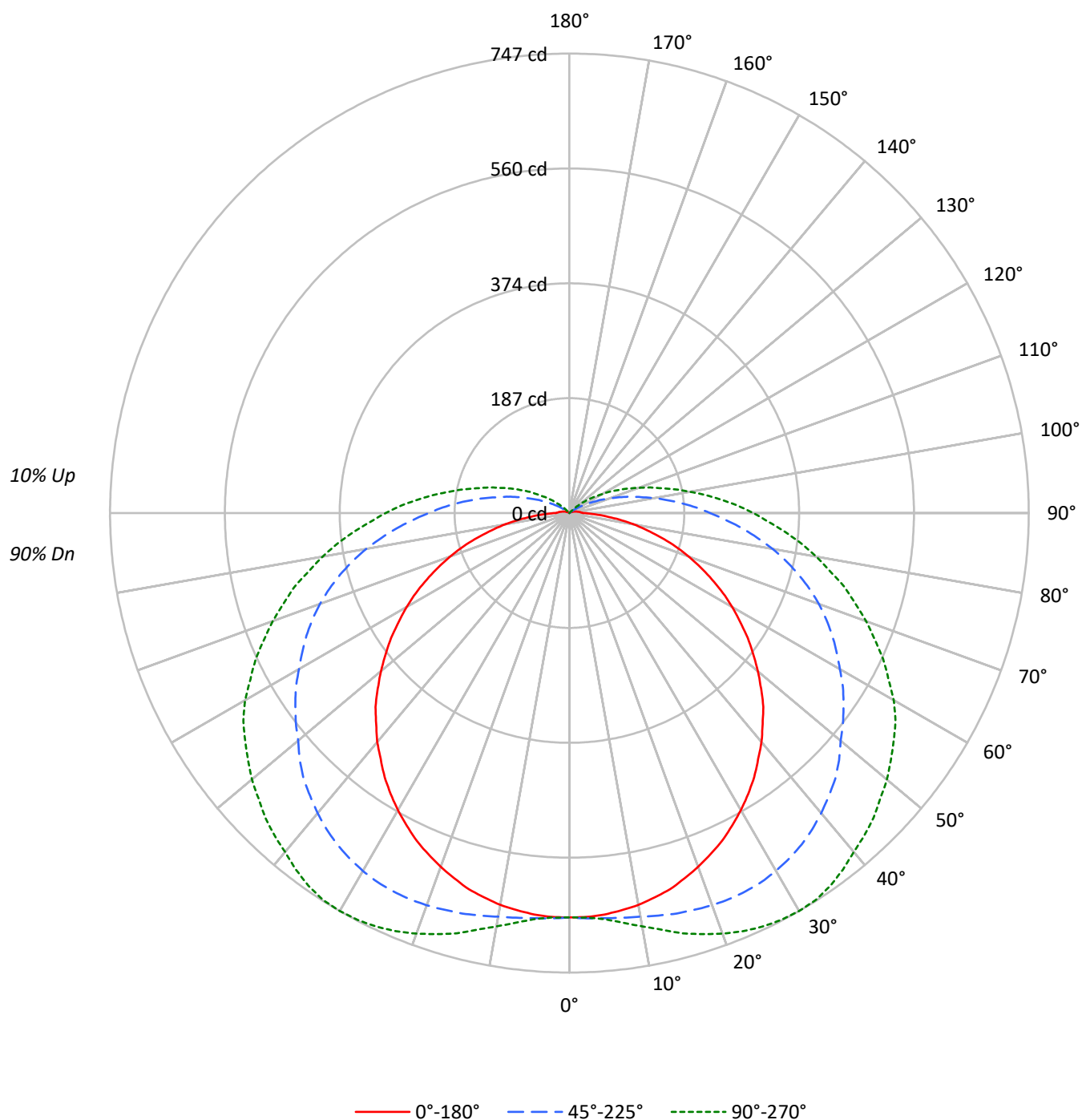
Input Watts (W): 24.84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	117	117	117	117	113	113	113	113	106	106	106		99	99	99		90
1	103	96	91	86	99	93	88	83	87	83	79		81	78	75		68
2	92	82	74	67	88	79	72	65	74	68	62		69	64	59		53
3	83	71	61	54	79	68	60	53	64	56	50		60	53	48		43
4	75	62	52	44	72	60	51	44	56	48	42		52	46	40		36
5	69	55	45	38	66	53	44	37	50	42	35		46	40	34		30
6	63	49	39	32	61	47	38	32	44	37	31		42	35	29		26
7	59	44	35	28	56	43	34	28	40	32	27		38	31	26		23
8	54	40	31	25	52	39	30	24	37	29	24		35	28	23		20
9	51	36	28	22	49	35	27	22	34	26	21		32	25	20		18
10	47	33	25	20	46	33	25	19	31	24	19		29	23	18		16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8490	8490	8490
5°	8433	8323	8301
10°	8361	8244	8358
15°	8282	8256	8541
20°	8166	8295	8729
25°	8065	8341	8911
30°	7936	8367	9052
35°	7804	8373	9111
40°	7659	8347	9079
45°	7520	8322	9128
50°	7312	8222	9170
55°	7124	8234	9227
60°	6901	8242	9294
65°	6633	8319	9262
70°	6330	8408	9234
75°	5889	8457	9261
80°	5374	8501	9274
85°	4471	8503	9354



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	1.9
10°-20°	190.3	5.8
20°-30°	310.1	9.4
30°-40°	403.8	12.2
40°-50°	456.1	13.8
50°-60°	467.2	14.2
60°-70°	436.8	13.2
70°-80°	367.7	11.2
80°-90°	271.0	8.2
90°-100°	173.9	5.3
100°-110°	96.2	2.9
110°-120°	44.5	1.3
120°-130°	14.7	0.4
130°-140°	1.6	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°	563.6	17.1
0°-40°	967.3	29.3
0°-60°	1890.6	57.3
0°-90°	2966.1	90.0
90°-120°	314.6	9.5
90°-150°	330.9	10.0
90°-180°	331.0	10.0
0°-180°	3297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	657	657	657	657	657	
5°	655	657	661	663	663	62
15°	633	644	674	700	707	178
25°	588	617	678	727	742	271
35°	524	568	658	722	740	327
45°	446	503	611	678	700	343
55°	354	422	544	622	644	316
65°	256	336	472	546	563	253
75°	155	251	386	447	463	164
85°	59	166	282	338	352	58
90°	22	123	229	283	299	14
95°	17	87	183	232	248	13
105°	10	29	103	146	156	10
115°	4	5	43	78	89	5
125°	2	2	9	32	40	1
135°	1	0	0	1	5	0
145°	0	0	0	0	0	0
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3
2.5°	657.3	656.6	656.6	656.6	657.3	658.1	658.1	658.8	658.8	659.6	659.6
5°	655.1	654.3	655.1	655.1	655.8	656.6	657.3	658.1	658.8	660.4	661.1
7.5°	651.3	651.3	651.3	652.8	653.6	654.3	655.8	657.3	659.6	661.9	663.4
10°	646.8	646.8	647.5	648.3	650.5	652.1	653.6	656.6	659.6	663.4	666.4
12.5°	640.0	640.0	640.7	643.0	646.0	648.3	650.5	655.1	660.4	664.9	670.2
15°	633.2	632.4	633.9	637.7	641.5	644.5	647.5	653.6	659.6	666.4	673.9
17.5°	622.6	623.4	625.6	630.2	635.5	639.2	643.0	650.5	659.6	667.2	676.2
20°	612.1	612.8	615.8	620.4	627.9	632.4	637.7	646.8	657.3	667.9	678.5
22.5°	600.0	600.7	604.5	611.3	620.4	624.9	630.9	642.2	654.3	666.4	679.2
25°	587.9	588.7	593.2	600.0	610.5	616.6	622.6	637.0	650.5	664.9	678.5
27.5°	572.8	575.1	580.4	588.7	600.0	606.0	614.3	629.4	644.5	660.4	676.2
30°	557.7	559.2	564.5	575.1	587.9	595.5	603.0	619.6	637.7	654.3	671.7
32.5°	541.1	543.4	550.2	560.0	575.8	583.4	590.9	609.8	628.7	647.5	665.6
35°	523.8	526.0	532.1	544.9	560.7	568.3	578.1	597.7	618.1	638.5	658.1
37.5°	504.1	507.2	515.5	528.3	544.1	553.9	564.5	584.9	606.8	627.9	648.3
40°	486.0	487.5	495.8	509.4	526.8	537.3	547.9	571.3	593.2	615.8	637.0
42.5°	464.9	468.7	477.7	492.1	510.2	520.0	531.3	555.5	579.6	601.5	624.1
45°	446.0	447.5	457.3	473.2	492.1	502.6	514.7	538.1	562.2	587.2	611.3
47.5°	422.6	424.9	435.5	452.1	472.4	483.8	495.1	521.5	546.4	572.1	594.7
50°	400.0	403.8	414.3	431.7	452.8	464.1	477.0	501.9	529.0	552.4	575.8
52.5°	376.6	381.1	392.4	409.8	431.7	444.5	456.6	483.0	508.7	535.1	560.7
55°	354.0	357.7	368.3	387.2	411.3	421.9	434.7	462.6	489.0	517.7	544.1
57.5°	329.0	334.3	347.2	366.0	389.4	401.5	415.1	441.5	471.7	501.1	527.5
60°	305.7	309.4	324.5	343.4	366.8	378.9	392.4	421.9	452.8	482.3	507.9
62.5°	281.5	286.0	300.4	320.0	344.1	357.7	371.3	401.5	434.0	462.6	489.8
65°	255.8	261.9	277.7	296.6	323.0	335.8	350.9	382.6	413.6	443.8	471.7
67.5°	230.9	236.2	253.6	274.0	298.1	314.7	329.8	363.0	395.5	425.6	452.1
70°	206.0	211.3	227.2	250.6	277.0	293.6	308.7	341.9	375.1	403.8	431.7
72.5°	181.1	186.4	203.8	226.4	255.8	270.9	288.3	322.3	354.0	384.1	409.0
75°	154.7	163.8	179.6	205.3	234.7	251.3	267.9	301.9	332.8	361.5	385.6
77.5°	129.1	138.9	157.0	183.4	213.6	231.7	248.3	280.7	311.7	337.3	360.7
80°	106.4	114.7	134.3	160.0	193.2	209.1	225.7	258.1	287.5	314.0	335.8
82.5°	81.5	91.3	110.9	139.6	171.3	187.9	204.5	234.0	262.6	286.8	307.9
85°	58.9	68.7	90.6	120.0	149.4	166.0	181.1	211.3	237.7	261.9	281.5
87.5°	38.5	48.3	70.9	100.4	129.1	144.1	157.7	185.7	212.1	235.5	254.3
90°	21.9	33.2	55.1	81.5	109.4	123.0	137.4	163.8	187.9	209.8	228.7
92.5°	19.6	23.4	41.5	66.4	91.3	105.7	117.7	142.6	166.8	187.2	206.0
95°	17.4	18.1	29.4	51.3	75.5	86.8	99.6	123.8	145.7	165.3	183.4
97.5°	15.1	15.1	20.4	37.0	58.9	70.9	82.3	104.1	126.0	144.9	160.8
100°	12.8	13.6	14.3	25.7	44.5	55.8	65.7	86.8	106.4	123.0	139.6
102.5°	11.3	11.3	12.1	17.4	31.7	41.5	50.6	70.2	87.5	104.1	119.2
105°	9.8	9.8	9.8	11.3	21.9	28.7	37.0	54.3	71.7	87.5	102.6
107.5°	8.3	8.3	8.3	9.1	14.3	20.4	26.4	40.8	56.6	71.7	85.3
110°	6.8	6.8	6.8	7.5	8.3	12.8	18.1	29.4	43.0	58.1	69.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	5.3	5.3	5.3	6.0	6.0	6.8	11.3	21.1	31.7	44.5	56.6
115°	4.5	4.5	4.5	4.5	5.3	5.3	5.3	12.8	22.6	33.2	43.0
117.5°	3.8	3.8	3.8	3.8	3.8	3.8	4.5	7.5	15.1	24.2	32.5
120°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	8.3	15.8	23.4
122.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0	9.1	15.8
125°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	9.1
127.5°	0.8	0.8	0.8	0.8	0.8	1.5	1.5	1.5	1.5	1.5	2.3
130°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
132.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
135°	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	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°	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3
2.5°	660.4	660.4	660.4	659.6	659.6	659.6	658.8	658.8	658.1	658.1
5°	661.9	662.6	663.4	663.4	663.4	663.4	663.4	663.4	662.6	662.6
7.5°	665.6	667.2	667.9	669.4	669.4	670.2	670.9	670.9	670.9	671.7
10°	669.4	672.4	674.7	677.7	678.5	679.2	680.7	680.7	681.5	682.2
12.5°	674.7	679.2	683.8	687.5	688.3	689.8	691.3	693.6	693.6	693.6
15°	680.0	686.8	692.1	695.8	699.6	700.4	702.6	705.6	705.6	707.2
17.5°	685.3	692.8	701.1	706.4	709.4	711.7	713.9	715.5	718.5	717.7
20°	689.0	698.1	706.4	713.9	716.2	718.5	723.0	726.0	727.5	727.5
22.5°	690.5	701.9	710.9	719.2	722.2	725.3	729.8	733.6	735.1	735.8
25°	691.3	703.4	713.9	723.0	726.8	729.8	735.8	738.8	741.1	741.9
27.5°	690.5	703.4	715.5	725.3	729.0	732.8	738.8	742.6	745.6	745.6
30°	687.5	701.9	714.7	725.3	729.8	733.6	739.6	744.1	746.4	747.1
32.5°	682.2	698.1	711.7	722.2	727.5	731.3	738.1	742.6	744.9	745.6
35°	676.2	692.1	706.4	717.0	722.2	726.0	732.8	736.6	738.8	739.6
37.5°	667.2	683.8	698.1	709.4	713.9	717.7	723.0	728.3	729.8	730.5
40°	656.6	673.2	686.8	698.1	701.9	706.4	710.9	716.2	718.5	719.2
42.5°	643.8	659.6	673.9	685.3	689.0	694.3	701.1	705.6	708.7	710.2
45°	628.7	646.0	660.4	673.2	678.5	681.5	689.8	695.1	698.1	699.6
47.5°	613.6	632.4	647.5	660.4	665.6	670.9	678.5	683.0	686.0	686.0
50°	599.2	617.3	633.2	646.8	652.1	658.1	664.9	670.2	673.2	673.9
52.5°	584.1	603.0	618.9	632.4	637.7	643.0	650.5	655.8	658.8	658.8
55°	566.8	587.2	603.0	615.8	621.9	626.4	635.5	640.0	643.8	643.8
57.5°	549.4	569.8	586.4	600.0	606.8	610.5	619.6	624.1	627.9	628.7
60°	532.1	551.7	569.0	583.4	587.9	593.9	600.0	605.3	608.3	609.0
62.5°	513.9	533.6	550.9	562.2	569.0	572.1	579.6	582.6	585.6	584.9
65°	496.6	513.9	530.6	541.9	545.6	550.9	555.5	560.7	563.0	563.0
67.5°	475.5	492.8	507.9	519.2	524.5	527.5	532.8	535.8	539.6	537.3
70°	452.8	469.4	483.0	494.3	498.1	501.9	507.9	510.9	513.2	513.2
72.5°	429.4	445.3	458.9	468.7	472.4	477.0	481.5	484.5	486.0	486.8
75°	404.5	420.4	432.4	442.3	446.8	452.1	455.8	460.4	461.1	462.6
77.5°	381.1	395.5	406.8	418.1	420.4	424.1	428.7	432.4	434.0	433.2
80°	353.2	370.6	379.6	389.4	393.2	396.2	401.5	403.8	407.5	407.5
82.5°	325.3	340.4	350.9	362.3	366.8	368.3	375.1	378.9	379.6	380.4
85°	299.6	313.2	324.5	333.6	338.1	339.6	345.7	351.7	352.4	351.7
87.5°	270.9	285.3	297.4	305.7	309.4	313.2	318.5	321.5	324.5	323.8
90°	245.3	258.9	270.9	280.0	283.0	286.8	291.3	295.8	296.6	298.9
92.5°	220.4	234.7	246.8	255.1	259.6	261.1	266.4	270.2	271.7	274.0
95°	197.7	209.8	221.1	231.7	232.4	236.2	241.5	244.5	248.3	247.5
97.5°	175.1	188.7	198.5	206.0	209.8	213.6	218.1	221.1	223.4	223.4
100°	153.2	166.0	175.1	182.6	187.2	188.7	193.2	197.0	198.5	198.5
102.5°	133.6	144.1	153.2	162.3	164.5	166.8	171.3	175.8	175.8	177.4
105°	114.0	125.3	134.3	141.9	145.7	146.4	150.9	154.0	156.2	155.5
107.5°	96.6	107.2	117.0	123.0	126.0	128.3	132.8	135.1	137.4	138.1
110°	81.5	90.6	99.6	106.4	108.7	111.7	116.2	118.5	120.8	120.0



TEST NUMBER: P233251

CATALOG NUMBER: 2VRVT3-LD5-3-W-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	66.4	76.2	83.8	90.6	93.6	95.8	100.4	101.9	104.1	104.1
115°	53.6	61.9	69.4	76.2	78.5	80.8	84.5	86.8	88.3	89.1
117.5°	40.8	49.8	57.4	63.4	64.9	67.9	71.7	73.2	74.7	76.2
120°	30.9	37.7	44.5	49.8	52.8	54.3	58.1	60.4	61.9	61.9
122.5°	22.6	28.7	34.7	39.2	41.5	43.0	46.8	49.1	49.8	49.8
125°	14.3	20.4	24.9	29.4	31.7	33.2	35.5	37.7	39.2	40.0
127.5°	8.3	12.8	17.4	21.1	22.6	24.2	27.2	28.7	30.2	30.2
130°	1.5	5.3	9.8	12.8	14.3	15.8	18.1	19.6	21.1	21.1
132.5°	0.0	0.0	3.0	6.0	6.8	8.3	10.6	12.1	12.8	12.8
135°	0.0	0.0	0.0	0.0	0.8	1.5	3.8	4.5	5.3	5.3
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	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
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)