

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: P233249

Luminaire Tested: **2VRVT3-LD5-2-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233249
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-LD5-2-W-UNV-L850-CD1-U
Description: 2FT VRVT3 WIDE APPLICATION, 2000LM
Light Source: (196) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2445.0 lumens
Efficiency: N/A
Efficacy: 144.3 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

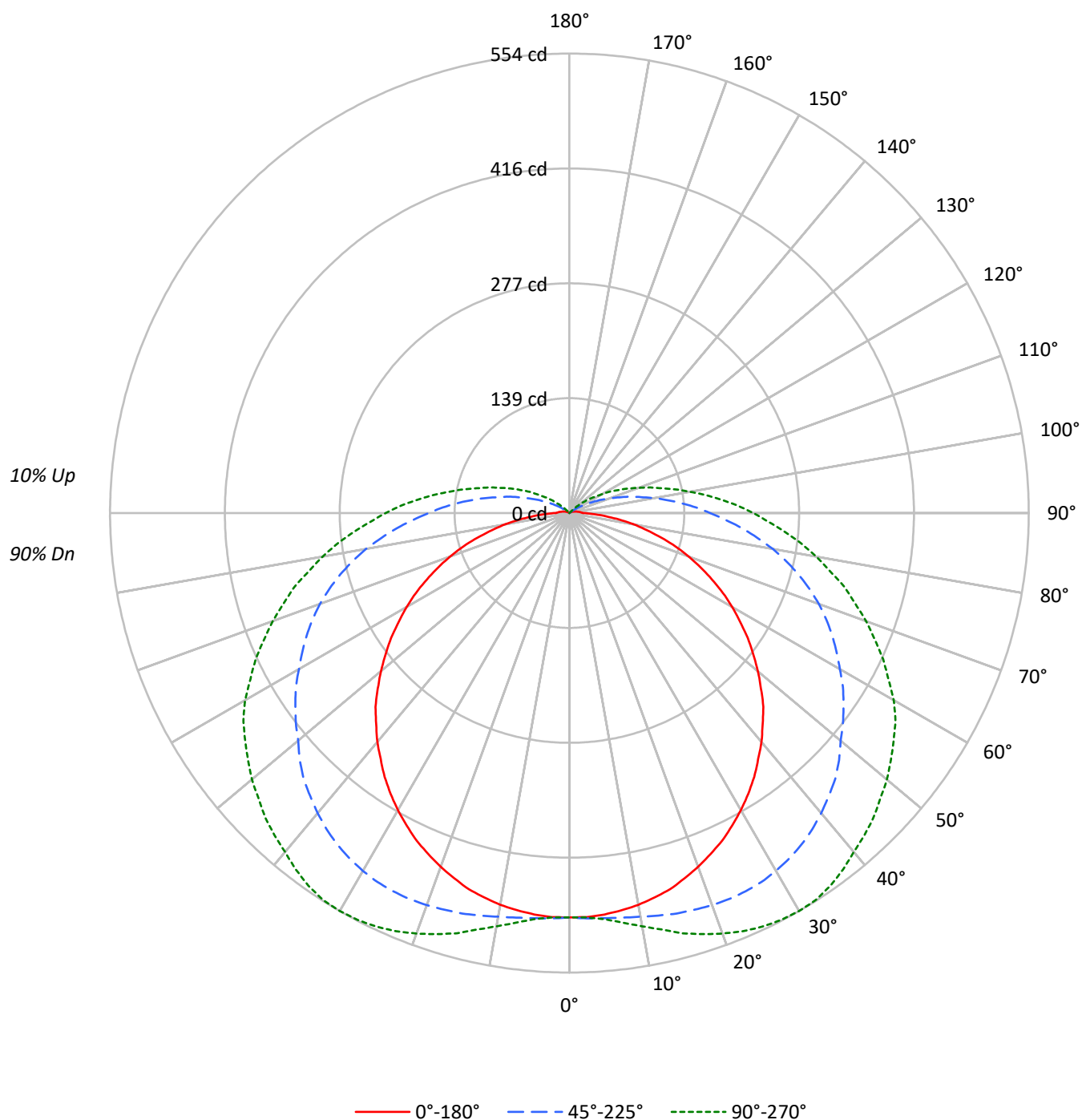
Input Watts (W): 16.94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

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	0		
RCR																				
0	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90		
1	103	96	91	86	99	93	88	83	87	83	79	81	78	75	76	73	71	68		
2	92	82	74	67	88	79	72	65	74	68	62	69	64	59	64	60	56	53		
3	83	71	61	54	79	68	60	53	64	56	50	60	53	48	56	50	46	43		
4	75	62	52	44	72	60	51	44	56	48	42	52	46	40	49	43	39	36		
5	69	55	45	38	66	53	44	37	50	42	35	46	40	34	44	38	33	30		
6	63	49	39	32	61	47	38	32	44	37	31	42	35	29	39	33	28	26		
7	59	44	35	28	56	43	34	28	40	32	27	38	31	26	36	30	25	23		
8	54	40	31	25	52	39	30	24	37	29	24	35	28	23	33	27	22	20		
9	51	36	28	22	49	35	27	22	34	26	21	32	25	20	30	24	20	18		
10	47	33	25	20	46	33	25	19	31	24	19	29	23	18	28	22	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6297	6297	6297
5°	6253	6173	6156
10°	6199	6113	6198
15°	6142	6123	6334
20°	6055	6150	6473
25°	5981	6185	6609
30°	5886	6205	6714
35°	5787	6209	6757
40°	5680	6190	6734
45°	5578	6171	6769
50°	5422	6097	6801
55°	5283	6106	6842
60°	5118	6113	6893
65°	4919	6169	6868
70°	4696	6235	6848
75°	4366	6273	6869
80°	3985	6306	6877
85°	3317	6307	6937



TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	1.9
10°-20°	141.1	5.8
20°-30°	230.0	9.4
30°-40°	299.4	12.2
40°-50°	338.2	13.8
50°-60°	346.5	14.2
60°-70°	323.9	13.2
70°-80°	272.7	11.2
80°-90°	200.9	8.2
90°-100°	129.0	5.3
100°-110°	71.3	2.9
110°-120°	33.0	1.3
120°-130°	10.9	0.4
130°-140°	1.2	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°	417.9	17.1
0°-40°	717.4	29.3
0°-60°	1402.1	57.3
0°-90°	2199.6	90.0
90°-120°	233.3	9.5
90°-150°	245.4	10.0
90°-180°	245.0	10.0
0°-180°	2445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	486	487	490	492	491	46
15°	470	478	500	519	524	132
25°	436	457	503	539	550	201
35°	388	421	488	536	548	243
45°	331	373	453	503	519	254
55°	262	313	404	461	477	234
65°	190	249	350	405	418	188
75°	115	186	286	331	343	122
85°	44	123	209	251	261	43
90°	16	91	170	210	222	10
95°	13	64	136	172	184	10
105°	7	21	76	108	115	8
115°	3	4	32	58	66	3
125°	1	1	7	24	30	1
135°	1	0	0	1	4	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



TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5
2.5°	487.5	486.9	486.9	486.9	487.5	488.0	488.0	488.6	488.6	489.2	489.2
5°	485.8	485.2	485.8	485.8	486.4	486.9	487.5	488.0	488.6	489.7	490.3
7.5°	483.0	483.0	483.0	484.1	484.7	485.2	486.4	487.5	489.2	490.8	491.9
10°	479.6	479.6	480.2	480.8	482.4	483.6	484.7	486.9	489.2	491.9	494.2
12.5°	474.6	474.6	475.2	476.8	479.1	480.8	482.4	485.8	489.7	493.1	497.0
15°	469.6	469.0	470.1	472.9	475.7	478.0	480.2	484.7	489.2	494.2	499.8
17.5°	461.7	462.3	464.0	467.3	471.2	474.0	476.8	482.4	489.2	494.7	501.5
20°	453.9	454.5	456.7	460.0	465.6	469.0	472.9	479.6	487.5	495.3	503.1
22.5°	444.9	445.5	448.3	453.3	460.0	463.4	467.9	476.3	485.2	494.2	503.7
25°	436.0	436.5	439.9	444.9	452.8	457.3	461.7	472.4	482.4	493.1	503.1
27.5°	424.8	426.5	430.4	436.5	444.9	449.4	455.6	466.8	478.0	489.7	501.5
30°	413.6	414.7	418.6	426.5	436.0	441.6	447.2	459.5	472.9	485.2	498.1
32.5°	401.3	403.0	408.0	415.3	427.0	432.6	438.2	452.2	466.2	480.2	493.6
35°	388.4	390.1	394.6	404.1	415.8	421.4	428.7	443.3	458.4	473.5	488.0
37.5°	373.9	376.1	382.3	391.8	403.5	410.8	418.6	433.7	450.0	465.6	480.8
40°	360.4	361.5	367.7	377.8	390.6	398.5	406.3	423.7	439.9	456.7	472.4
42.5°	344.8	347.6	354.3	364.9	378.3	385.6	394.0	411.9	429.8	446.1	462.8
45°	330.8	331.9	339.2	350.9	364.9	372.7	381.7	399.0	417.0	435.4	453.3
47.5°	313.4	315.1	322.9	335.2	350.4	358.7	367.1	386.7	405.2	424.2	441.0
50°	296.6	299.4	307.3	320.1	335.8	344.2	353.7	372.2	392.3	409.7	427.0
52.5°	279.3	282.6	291.0	303.9	320.1	329.6	338.6	358.2	377.2	396.8	415.8
55°	262.5	265.3	273.1	287.1	305.0	312.9	322.4	343.1	362.7	383.9	403.5
57.5°	244.0	247.9	257.4	271.4	288.8	297.7	307.8	327.4	349.8	371.6	391.2
60°	226.7	229.5	240.7	254.6	272.0	281.0	291.0	312.9	335.8	357.6	376.7
62.5°	208.8	212.1	222.7	237.3	255.2	265.3	275.4	297.7	321.8	343.1	363.2
65°	189.7	194.2	206.0	220.0	239.5	249.1	260.2	283.8	306.7	329.1	349.8
67.5°	171.3	175.2	188.0	203.2	221.1	233.4	244.6	269.2	293.3	315.7	335.2
70°	152.8	156.7	168.5	185.8	205.4	217.7	228.9	253.5	278.2	299.4	320.1
72.5°	134.3	138.2	151.1	167.9	189.7	200.9	213.8	239.0	262.5	284.9	303.3
75°	114.7	121.4	133.2	152.2	174.1	186.4	198.7	223.9	246.8	268.1	286.0
77.5°	95.7	103.0	116.4	136.0	158.4	171.8	184.1	208.2	231.1	250.2	267.5
80°	78.9	85.1	99.6	118.7	143.3	155.0	167.3	191.4	213.2	232.8	249.1
82.5°	60.4	67.7	82.3	103.5	127.0	139.4	151.7	173.5	194.8	212.7	228.3
85°	43.7	50.9	67.2	89.0	110.8	123.1	134.3	156.7	176.3	194.2	208.8
87.5°	28.5	35.8	52.6	74.4	95.7	106.9	117.0	137.7	157.3	174.6	188.6
90°	16.2	24.6	40.9	60.4	81.2	91.2	101.9	121.4	139.4	155.6	169.6
92.5°	14.6	17.3	30.8	49.3	67.7	78.4	87.3	105.8	123.7	138.8	152.8
95°	12.9	13.4	21.8	38.1	56.0	64.4	73.9	91.8	108.0	122.6	136.0
97.5°	11.2	11.2	15.1	27.4	43.7	52.6	61.0	77.2	93.5	107.5	119.2
100°	9.5	10.1	10.6	19.0	33.0	41.4	48.7	64.4	78.9	91.2	103.5
102.5°	8.4	8.4	9.0	12.9	23.5	30.8	37.5	52.0	64.9	77.2	88.4
105°	7.3	7.3	7.3	8.4	16.2	21.3	27.4	40.3	53.2	64.9	76.1
107.5°	6.2	6.2	6.2	6.7	10.6	15.1	19.6	30.2	42.0	53.2	63.2
110°	5.0	5.0	5.0	5.6	6.2	9.5	13.4	21.8	31.9	43.1	51.5



TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	3.9	3.9	3.9	4.5	4.5	5.0	8.4	15.7	23.5	33.0	42.0
115°	3.4	3.4	3.4	3.4	3.9	3.9	3.9	9.5	16.8	24.6	31.9
117.5°	2.8	2.8	2.8	2.8	2.8	2.8	3.4	5.6	11.2	17.9	24.1
120°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	6.2	11.8	17.3
122.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.2	6.7	11.8
125°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.7	6.7
127.5°	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1	1.7
130°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
132.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0
135°	0.6	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



TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5	487.5
2.5°	489.7	489.7	489.7	489.2	489.2	489.2	488.6	488.6	488.0	488.0
5°	490.8	491.4	491.9	491.9	491.9	491.9	491.9	491.9	491.4	491.4
7.5°	493.6	494.7	495.3	496.4	496.4	497.0	497.5	497.5	497.5	498.1
10°	496.4	498.7	500.3	502.6	503.1	503.7	504.8	504.8	505.4	505.9
12.5°	500.3	503.7	507.1	509.9	510.4	511.5	512.7	514.3	514.3	514.3
15°	504.3	509.3	513.2	516.0	518.8	519.4	521.1	523.3	523.3	524.4
17.5°	508.2	513.8	519.9	523.9	526.1	527.8	529.4	530.6	532.8	532.2
20°	511.0	517.7	523.9	529.4	531.1	532.8	536.2	538.4	539.5	539.5
22.5°	512.1	520.5	527.2	533.4	535.6	537.8	541.2	544.0	545.1	545.7
25°	512.7	521.6	529.4	536.2	539.0	541.2	545.7	547.9	549.6	550.2
27.5°	512.1	521.6	530.6	537.8	540.6	543.4	547.9	550.7	553.0	553.0
30°	509.9	520.5	530.0	537.8	541.2	544.0	548.5	551.8	553.5	554.1
32.5°	505.9	517.7	527.8	535.6	539.5	542.3	547.4	550.7	552.4	553.0
35°	501.5	513.2	523.9	531.7	535.6	538.4	543.4	546.2	547.9	548.5
37.5°	494.7	507.1	517.7	526.1	529.4	532.2	536.2	540.1	541.2	541.8
40°	486.9	499.2	509.3	517.7	520.5	523.9	527.2	531.1	532.8	533.4
42.5°	477.4	489.2	499.8	508.2	511.0	514.9	519.9	523.3	525.5	526.6
45°	466.2	479.1	489.7	499.2	503.1	505.4	511.5	515.5	517.7	518.8
47.5°	455.0	469.0	480.2	489.7	493.6	497.5	503.1	506.5	508.7	508.7
50°	444.4	457.8	469.6	479.6	483.6	488.0	493.1	497.0	499.2	499.8
52.5°	433.2	447.2	458.9	469.0	472.9	476.8	482.4	486.4	488.6	488.6
55°	420.3	435.4	447.2	456.7	461.2	464.5	471.2	474.6	477.4	477.4
57.5°	407.4	422.6	434.9	444.9	450.0	452.8	459.5	462.8	465.6	466.2
60°	394.6	409.1	422.0	432.6	436.0	440.5	444.9	448.9	451.1	451.7
62.5°	381.1	395.7	408.6	417.0	422.0	424.2	429.8	432.1	434.3	433.7
65°	368.3	381.1	393.4	401.8	404.6	408.6	411.9	415.8	417.5	417.5
67.5°	352.6	365.5	376.7	385.1	389.0	391.2	395.1	397.4	400.2	398.5
70°	335.8	348.1	358.2	366.6	369.4	372.2	376.7	378.9	380.6	380.6
72.5°	318.5	330.2	340.3	347.6	350.4	353.7	357.1	359.3	360.4	361.0
75°	300.0	311.7	320.7	328.0	331.3	335.2	338.0	341.4	342.0	343.1
77.5°	282.6	293.3	301.7	310.1	311.7	314.5	317.9	320.7	321.8	321.3
80°	261.9	274.8	281.5	288.8	291.6	293.8	297.7	299.4	302.2	302.2
82.5°	241.2	252.4	260.2	268.6	272.0	273.1	278.2	281.0	281.5	282.1
85°	222.2	232.3	240.7	247.4	250.7	251.9	256.3	260.8	261.4	260.8
87.5°	200.9	211.6	220.5	226.7	229.5	232.3	236.2	238.4	240.7	240.1
90°	181.9	192.0	200.9	207.6	209.9	212.7	216.0	219.4	220.0	221.6
92.5°	163.4	174.1	183.0	189.2	192.5	193.6	197.6	200.4	201.5	203.2
95°	146.6	155.6	164.0	171.8	172.4	175.2	179.1	181.3	184.1	183.6
97.5°	129.8	139.9	147.2	152.8	155.6	158.4	161.7	164.0	165.7	165.7
100°	113.6	123.1	129.8	135.4	138.8	139.9	143.3	146.1	147.2	147.2
102.5°	99.1	106.9	113.6	120.3	122.0	123.7	127.0	130.4	130.4	131.5
105°	84.5	92.9	99.6	105.2	108.0	108.6	111.9	114.2	115.9	115.3
107.5°	71.6	79.5	86.7	91.2	93.5	95.1	98.5	100.2	101.9	102.4
110°	60.4	67.2	73.9	78.9	80.6	82.8	86.2	87.9	89.5	89.0



TEST NUMBER: P233249

CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	49.3	56.5	62.1	67.2	69.4	71.1	74.4	75.6	77.2	77.2
115°	39.7	45.9	51.5	56.5	58.2	59.9	62.7	64.4	65.5	66.0
117.5°	30.2	36.9	42.5	47.0	48.1	50.4	53.2	54.3	55.4	56.5
120°	22.9	28.0	33.0	36.9	39.2	40.3	43.1	44.8	45.9	45.9
122.5°	16.8	21.3	25.7	29.1	30.8	31.9	34.7	36.4	36.9	36.9
125°	10.6	15.1	18.5	21.8	23.5	24.6	26.3	28.0	29.1	29.7
127.5°	6.2	9.5	12.9	15.7	16.8	17.9	20.1	21.3	22.4	22.4
130°	1.1	3.9	7.3	9.5	10.6	11.8	13.4	14.6	15.7	15.7
132.5°	0.0	0.0	2.2	4.5	5.0	6.2	7.8	9.0	9.5	9.5
135°	0.0	0.0	0.0	0.0	0.6	1.1	2.8	3.4	3.9	3.9
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)