

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: P237765

Luminaire Tested: **2VRVT2-LD5-4-DR-W-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-4)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2VRVT2-LD5-4-DR-W-UNV-L840-CD1-WL-U
Description: METALUX VRVT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/15% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION
2FT FIXTURE
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3603.0 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.59 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')
CIE Type: Direct

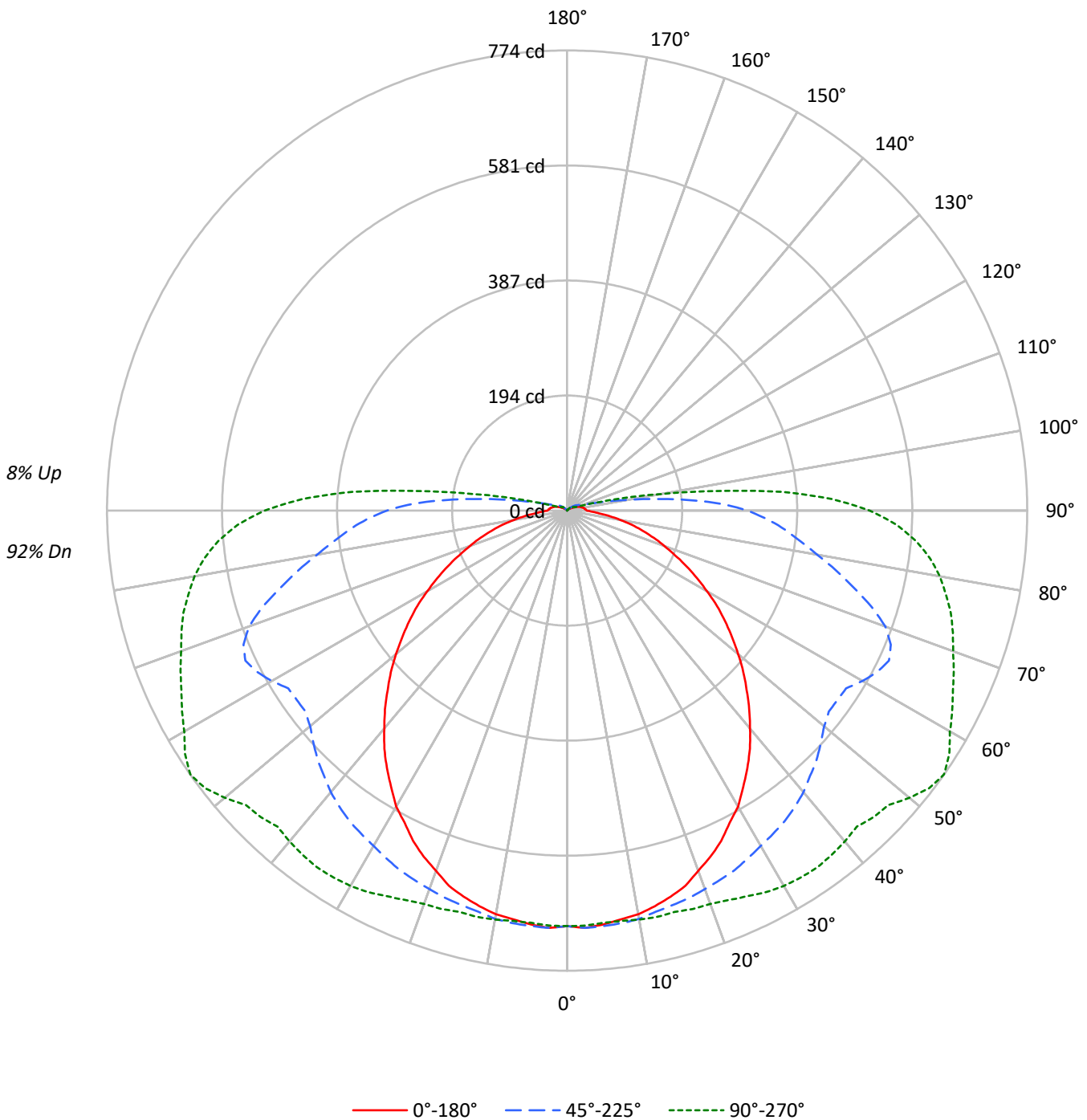
Input Watts (W): 28.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	92
1	102	95	89	83	98	92	86	81	86	81	77	80	76	73	75	72	69	66
2	90	80	71	64	87	77	69	62	72	65	59	67	62	57	63	58	54	51
3	81	68	59	51	78	66	57	50	62	54	48	58	51	46	54	48	44	41
4	74	60	49	42	71	58	48	41	54	46	39	50	43	38	47	41	36	33
5	67	53	42	35	64	51	41	34	48	39	33	45	38	32	42	36	31	28
6	62	47	37	30	59	46	36	29	43	35	28	40	33	27	38	31	27	24
7	57	42	33	26	55	41	32	26	39	31	25	36	29	24	34	28	23	21
8	53	38	29	23	51	37	29	23	35	27	22	33	26	21	31	25	21	18
9	50	35	26	20	48	34	26	20	32	25	19	31	24	19	29	23	18	16
10	46	32	24	18	45	31	23	18	30	23	18	28	22	17	27	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7220	7220	7220
5°	7197	7093	7015
10°	7134	6959	6924
15°	7041	6814	6862
20°	6888	6735	6904
25°	6738	6693	7063
30°	6556	6648	7295
35°	6314	6681	7497
40°	6049	6698	7657
45°	5779	6708	7990
50°	5514	6727	8645
55°	5243	7054	9444
60°	4930	7868	9741
65°	4623	8976	10206
70°	4310	9543	10894
75°	4052	9515	11892
80°	3725	9564	13108
85°	3344	10046	14526



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	1.8
10°-20°	194.3	5.4
20°-30°	307.2	8.5
30°-40°	397.1	11.0
40°-50°	453.0	12.6
50°-60°	497.0	13.8
60°-70°	512.0	14.2
70°-80°	481.0	13.3
80°-90°	390.0	10.8
90°-100°	220.0	6.1
100°-110°	54.3	1.5
110°-120°	17.7	0.5
120°-130°	9.2	0.3
130°-140°	3.4	0.1
140°-150°	0.3	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	568.2	15.8
0°-40°	965.3	26.8
0°-60°	1915.2	53.2
0°-90°	3298.2	91.5
90°-120°	292.0	8.1
90°-150°	304.8	8.5
90°-180°	305.0	8.5
0°-180°	3603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	699	701	701	699	696	66
15°	672	675	687	697	699	189
25°	613	626	667	701	716	282
35°	529	559	638	709	733	330
45°	427	478	593	687	729	330
55°	324	392	555	730	774	290
65°	222	315	597	690	716	220
75°	132	311	498	618	668	140
85°	54	215	368	527	589	52
90°	33	157	303	450	509	19
95°	30	104	204	316	362	24
105°	24	34	50	55	54	25
115°	13	17	22	17	13	13
125°	7	7	13	12	10	6
135°	3	1	5	7	7	2
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: P237765

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7
2.5°	702.6	702.6	701.3	702.6	702.6	701.3	702.6	702.6	702.6	702.6	702.6
5°	698.7	700.0	700.0	700.0	700.0	701.3	701.3	701.3	701.3	701.3	701.3
7.5°	693.4	694.7	696.0	696.0	697.4	697.4	697.4	697.4	698.7	700.0	700.0
10°	689.5	689.5	690.8	692.1	690.8	692.1	693.4	693.4	694.7	696.0	697.4
12.5°	681.5	681.5	682.9	684.2	684.2	684.2	685.5	686.8	688.1	689.5	690.8
15°	672.3	672.3	673.6	673.6	675.0	675.0	675.0	677.6	680.2	684.2	686.8
17.5°	661.8	660.5	661.8	663.1	664.4	665.7	665.7	669.7	676.3	680.2	682.9
20°	644.6	647.3	648.6	651.2	652.5	652.5	655.2	661.8	667.0	671.0	677.6
22.5°	630.1	631.4	631.4	635.4	639.4	639.4	642.0	648.6	656.5	663.1	672.3
25°	613.0	613.0	615.6	618.3	623.5	626.2	628.8	638.0	645.9	656.5	667.0
27.5°	591.9	594.5	597.2	599.8	607.7	611.7	616.9	626.2	636.7	648.6	659.1
30°	574.8	574.8	577.4	581.4	590.6	595.9	601.1	613.0	624.9	638.0	651.2
32.5°	551.0	552.4	556.3	561.6	572.1	578.7	584.0	598.5	611.7	626.2	644.6
35°	528.6	529.9	535.2	541.8	553.7	558.9	566.9	582.7	598.5	616.9	638.0
37.5°	504.9	506.2	510.2	520.7	533.9	540.5	548.4	564.2	584.0	606.4	628.8
40°	478.5	482.5	486.4	499.6	511.5	520.7	528.6	548.4	570.8	595.9	618.3
42.5°	453.5	456.1	462.7	475.9	489.1	500.9	508.9	529.9	556.3	581.4	605.1
45°	427.1	429.8	439.0	452.2	469.3	478.5	489.1	512.8	541.8	566.9	593.2
47.5°	402.1	406.0	413.9	428.4	445.6	457.4	469.3	495.7	523.4	551.0	578.7
50°	375.7	379.7	388.9	404.7	421.8	435.0	448.2	477.2	506.2	535.2	564.2
52.5°	349.3	353.3	363.8	379.7	399.4	413.9	427.1	457.4	489.1	519.4	555.0
55°	324.3	326.9	338.8	355.9	378.3	391.5	404.7	437.7	470.6	507.5	555.0
57.5°	299.2	299.2	313.7	332.2	355.9	369.1	384.9	417.9	457.4	506.2	556.3
60°	271.6	275.5	288.7	307.2	334.8	349.3	365.2	402.1	452.2	508.9	573.4
62.5°	246.5	250.5	263.7	283.4	313.7	330.9	349.3	395.5	454.8	523.4	587.9
65°	221.5	225.4	238.6	263.7	296.6	315.1	338.8	396.8	468.0	540.5	597.2
67.5°	196.4	201.7	218.8	243.9	283.4	307.2	334.8	406.0	483.8	547.1	589.3
70°	174.0	179.3	199.1	229.4	274.2	304.5	338.8	417.9	487.8	536.5	569.5
72.5°	152.9	159.5	181.9	217.5	271.6	307.2	345.4	420.5	477.2	512.8	536.5
75°	131.8	139.7	167.4	210.9	272.9	311.1	346.7	408.7	452.2	477.2	498.3
77.5°	112.1	121.3	155.6	204.3	271.6	304.5	333.5	381.0	411.3	436.3	462.7
80°	91.0	105.5	143.7	197.7	257.1	282.1	303.2	338.8	370.4	395.5	427.1
82.5°	72.5	89.6	130.5	181.9	229.4	250.5	267.6	300.6	329.6	361.2	395.5
85°	54.0	73.8	114.7	158.2	197.7	214.9	232.0	262.3	292.7	328.2	367.8
87.5°	40.9	59.3	96.2	133.1	168.7	183.2	199.1	230.7	261.0	296.6	337.5
90°	33.0	48.8	79.1	112.1	142.4	156.9	171.4	199.1	232.0	263.7	303.2
92.5°	31.6	40.9	65.9	92.3	118.6	131.8	143.7	168.7	197.7	226.7	259.7
95°	30.3	34.3	51.4	72.5	93.6	104.1	113.4	133.1	155.6	178.0	204.3
97.5°	29.0	30.3	40.9	55.4	71.2	79.1	87.0	101.5	116.0	131.8	147.6
100°	27.7	27.7	33.0	43.5	54.0	59.3	63.3	75.1	84.4	93.6	104.1
102.5°	25.0	25.0	27.7	33.0	40.9	44.8	47.5	54.0	60.6	67.2	72.5
105°	23.7	22.4	23.7	27.7	31.6	34.3	36.9	40.9	43.5	47.5	50.1
107.5°	21.1	21.1	21.1	23.7	26.4	27.7	29.0	31.6	34.3	35.6	36.9
110°	18.5	18.5	17.1	19.8	22.4	23.7	25.0	26.4	27.7	29.0	29.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	15.8	15.8	15.8	15.8	18.5	19.8	21.1	22.4	25.0	25.0	25.0
115°	13.2	13.2	13.2	13.2	15.8	17.1	18.5	19.8	21.1	22.4	22.4
117.5°	10.5	10.5	10.5	10.5	13.2	13.2	14.5	17.1	18.5	19.8	19.8
120°	9.2	9.2	9.2	7.9	10.5	11.9	11.9	14.5	15.8	17.1	18.5
122.5°	7.9	6.6	6.6	6.6	7.9	7.9	9.2	11.9	13.2	14.5	15.8
125°	6.6	5.3	5.3	5.3	5.3	6.6	7.9	9.2	11.9	13.2	13.2
127.5°	5.3	4.0	4.0	4.0	4.0	4.0	5.3	6.6	9.2	10.5	10.5
130°	4.0	4.0	4.0	2.6	2.6	2.6	2.6	5.3	6.6	7.9	9.2
132.5°	2.6	2.6	2.6	2.6	1.3	1.3	1.3	2.6	4.0	5.3	6.6
135°	2.6	2.6	2.6	1.3	1.3	1.3	1.3	1.3	2.6	4.0	5.3
137.5°	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0	1.3	2.6	2.6
140°	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3
142.5°	1.3	1.3	1.3	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°	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7	698.7
2.5°	702.6	702.6	701.3	701.3	701.3	700.0	700.0	698.7	698.7	698.7
5°	701.3	701.3	700.0	700.0	698.7	698.7	697.4	697.4	697.4	696.0
7.5°	698.7	698.7	698.7	697.4	697.4	697.4	696.0	696.0	696.0	696.0
10°	696.0	696.0	696.0	697.4	697.4	697.4	697.4	698.7	698.7	698.7
12.5°	692.1	693.4	696.0	696.0	697.4	697.4	697.4	698.7	700.0	700.0
15°	688.1	692.1	694.7	697.4	697.4	698.7	698.7	700.0	700.0	698.7
17.5°	686.8	690.8	694.7	697.4	698.7	700.0	701.3	702.6	704.0	702.6
20°	682.9	689.5	694.7	698.7	700.0	700.0	704.0	705.3	705.3	704.0
22.5°	678.9	686.8	692.1	697.4	700.0	701.3	705.3	706.6	707.9	709.2
25°	675.0	681.5	690.8	698.7	701.3	705.3	709.2	713.2	714.5	715.8
27.5°	671.0	680.2	692.1	701.3	705.3	709.2	715.8	721.1	721.1	723.7
30°	664.4	680.2	692.1	704.0	707.9	713.2	722.4	727.7	729.0	729.0
32.5°	661.8	678.9	693.4	705.3	710.5	714.5	723.7	729.0	731.6	731.6
35°	656.5	675.0	690.8	702.6	709.2	713.2	722.4	730.3	731.6	733.0
37.5°	648.6	668.4	685.5	698.7	704.0	710.5	719.8	725.0	729.0	730.3
40°	640.7	659.1	677.6	692.1	698.7	704.0	714.5	722.4	725.0	726.4
42.5°	627.5	649.9	668.4	685.5	692.1	697.4	709.2	715.8	721.1	721.1
45°	616.9	638.0	660.5	677.6	686.8	694.7	710.5	722.4	729.0	729.0
47.5°	605.1	628.8	655.2	682.9	693.4	702.6	717.1	725.0	731.6	733.0
50°	594.5	628.8	660.5	685.5	696.0	707.9	727.7	742.2	750.1	751.4
52.5°	593.2	631.4	665.7	700.0	713.2	727.7	746.1	758.0	764.6	767.2
55°	595.9	643.3	685.5	715.8	730.3	740.9	756.7	767.2	771.2	773.8
57.5°	611.7	660.5	698.7	725.0	735.6	743.5	754.0	758.0	762.0	762.0
60°	627.5	672.3	700.0	718.5	726.4	733.0	739.5	743.5	746.1	743.5
62.5°	638.0	669.7	690.8	702.6	707.9	711.9	719.8	726.4	726.4	730.3
65°	632.8	655.2	672.3	684.2	689.5	694.7	705.3	710.5	717.1	715.8
67.5°	615.6	636.7	649.9	665.7	672.3	677.6	690.8	697.4	704.0	704.0
70°	589.3	607.7	624.9	642.0	648.6	656.5	671.0	681.5	686.8	690.8
72.5°	555.0	574.8	597.2	622.2	634.1	642.0	659.1	671.0	678.9	680.2
75°	522.0	548.4	580.0	607.7	618.3	628.8	647.3	659.1	664.4	668.4
77.5°	491.7	523.4	557.6	587.9	599.8	611.7	630.1	643.3	651.2	652.5
80°	462.7	499.6	533.9	566.9	580.0	590.6	610.4	624.9	632.8	636.7
82.5°	433.7	474.6	510.2	544.4	557.6	570.8	590.6	605.1	614.3	615.6
85°	407.3	445.6	482.5	515.4	527.3	543.1	564.2	578.7	586.6	589.3
87.5°	375.7	412.6	448.2	479.8	493.0	507.5	528.6	544.4	551.0	555.0
90°	337.5	374.4	406.0	436.3	449.5	461.4	479.8	497.0	504.9	508.9
92.5°	291.3	324.3	355.9	381.0	392.8	402.1	423.2	436.3	441.6	445.6
95°	232.0	255.7	283.4	305.8	316.4	324.3	338.8	352.0	359.9	362.5
97.5°	164.8	183.2	196.4	213.6	217.5	226.7	238.6	246.5	251.8	250.5
100°	113.4	125.2	133.1	139.7	142.4	147.6	154.2	155.6	160.8	159.5
102.5°	76.5	80.4	84.4	88.3	89.6	91.0	94.9	93.6	96.2	97.6
105°	51.4	52.7	54.0	55.4	55.4	55.4	55.4	55.4	55.4	54.0
107.5°	36.9	35.6	35.6	35.6	34.3	34.3	33.0	33.0	33.0	31.6
110°	29.0	27.7	26.4	25.0	23.7	23.7	22.4	22.4	21.1	21.1



TEST NUMBER: P237765

CATALOG NUMBER: 2VRVT2-LD5-4-DR-W-UNV-L840-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	23.7	22.4	21.1	19.8	19.8	18.5	18.5	17.1	15.8	15.8
115°	21.1	19.8	19.8	18.5	17.1	17.1	15.8	14.5	14.5	13.2
117.5°	19.8	18.5	17.1	15.8	15.8	15.8	14.5	13.2	13.2	13.2
120°	17.1	17.1	15.8	15.8	14.5	14.5	13.2	13.2	11.9	11.9
122.5°	15.8	15.8	14.5	14.5	13.2	13.2	11.9	11.9	11.9	10.5
125°	13.2	13.2	13.2	13.2	11.9	11.9	11.9	10.5	10.5	10.5
127.5°	11.9	11.9	11.9	11.9	10.5	10.5	10.5	10.5	9.2	9.2
130°	9.2	10.5	10.5	10.5	10.5	9.2	9.2	9.2	9.2	9.2
132.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
135°	5.3	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
137.5°	4.0	4.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
140°	1.3	2.6	2.6	2.6	4.0	4.0	4.0	4.0	2.6	2.6
142.5°	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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)