

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: P237766

Luminaire Tested: **2VRVT2-LD5-4-DR-W-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237766
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-L850-CD1-WL-U
Description: METALUX VRVT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/15% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION
2FT FIXTURE
Light Source: (112) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3819.1 lumens
Efficiency: N/A
Efficacy: 132.1 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

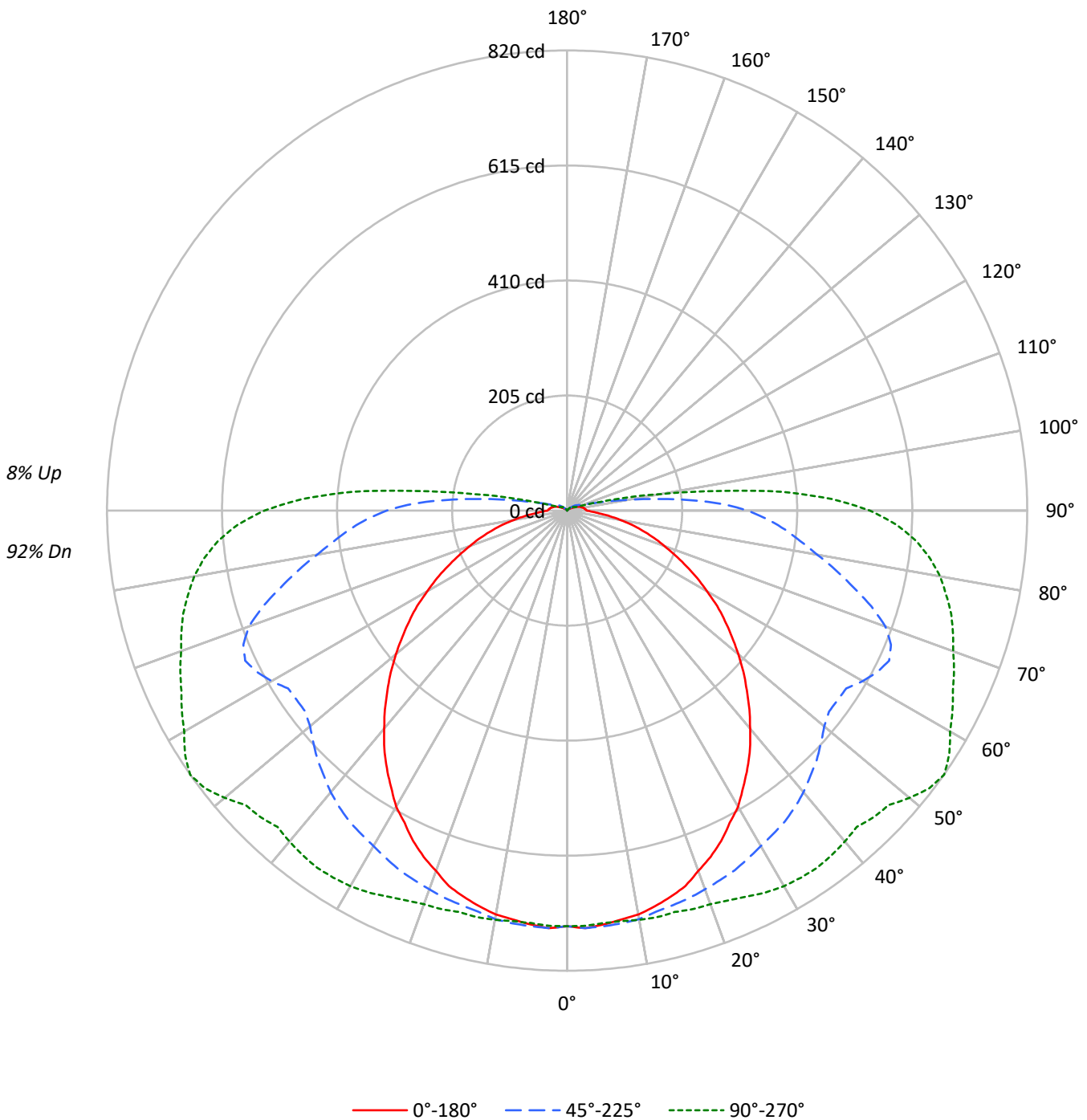
Input Watts (W): 28.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7653	7653	7653
5°	7629	7519	7436
10°	7561	7376	7340
15°	7463	7222	7273
20°	7301	7138	7318
25°	7141	7094	7487
30°	6948	7047	7732
35°	6693	7082	7946
40°	6411	7099	8115
45°	6126	7111	8469
50°	5844	7130	9164
55°	5557	7477	10011
60°	5224	8340	10326
65°	4898	9514	10818
70°	4567	10114	11547
75°	4295	10086	12604
80°	3946	10137	13895
85°	3549	10647	15396



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	1.8
10°-20°	206.0	5.4
20°-30°	325.7	8.5
30°-40°	420.9	11.0
40°-50°	480.2	12.6
50°-60°	526.8	13.8
60°-70°	542.7	14.2
70°-80°	509.8	13.3
80°-90°	413.4	10.8
90°-100°	233.2	6.1
100°-110°	57.5	1.5
110°-120°	18.8	0.5
120°-130°	9.7	0.3
130°-140°	3.6	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°	602.3	15.8
0°-40°	1023.1	26.8
0°-60°	2030.1	53.2
0°-90°	3495.9	91.5
90°-120°	309.5	8.1
90°-150°	323.1	8.5
90°-180°	323.0	8.5
0°-180°	3819.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	741	741	741	741	741	
5°	741	743	743	741	738	70
15°	713	715	728	739	741	201
25°	650	664	707	743	759	299
35°	560	592	676	752	777	350
45°	453	507	629	728	773	350
55°	344	415	588	774	820	307
65°	235	334	633	731	759	233
75°	140	330	528	655	708	148
85°	57	228	390	559	625	56
90°	35	166	321	476	539	20
95°	32	110	217	335	384	26
105°	25	36	53	59	57	26
115°	14	18	24	18	14	14
125°	7	7	14	13	11	6
135°	3	1	6	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6
2.5°	744.8	744.8	743.4	744.8	744.8	743.4	744.8	744.8	744.8	744.8	744.8
5°	740.6	742.0	742.0	742.0	742.0	743.4	743.4	743.4	743.4	743.4	743.4
7.5°	735.0	736.4	737.8	737.8	739.2	739.2	739.2	739.2	740.6	742.0	742.0
10°	730.8	730.8	732.2	733.6	732.2	733.6	735.0	735.0	736.4	737.8	739.2
12.5°	722.4	722.4	723.8	725.2	725.2	725.2	726.6	728.0	729.4	730.8	732.2
15°	712.6	712.6	714.0	714.0	715.4	715.4	715.4	718.2	721.0	725.2	728.0
17.5°	701.4	700.0	701.4	702.8	704.2	705.6	705.6	709.8	716.8	721.0	723.8
20°	683.3	686.1	687.5	690.3	691.7	691.7	694.5	701.4	707.0	711.2	718.2
22.5°	667.9	669.3	669.3	673.5	677.7	677.7	680.5	687.5	695.9	702.8	712.6
25°	649.7	649.7	652.5	655.3	660.9	663.7	666.5	676.3	684.7	695.9	707.0
27.5°	627.4	630.2	633.0	635.8	644.2	648.3	653.9	663.7	674.9	687.5	698.6
30°	609.2	609.2	612.0	616.2	626.0	631.6	637.2	649.7	662.3	676.3	690.3
32.5°	584.1	585.5	589.7	595.2	606.4	613.4	619.0	634.4	648.3	663.7	683.3
35°	560.3	561.7	567.3	574.3	586.9	592.5	600.8	617.6	634.4	653.9	676.3
37.5°	535.2	536.6	540.8	551.9	565.9	572.9	581.3	598.0	619.0	642.8	666.5
40°	507.2	511.4	515.6	529.6	542.2	551.9	560.3	581.3	605.0	631.6	655.3
42.5°	480.7	483.5	490.5	504.4	518.4	531.0	539.4	561.7	589.7	616.2	641.4
45°	452.7	455.5	465.3	479.3	497.4	507.2	518.4	543.5	574.3	600.8	628.8
47.5°	426.2	430.4	438.8	454.1	472.3	484.9	497.4	525.4	554.7	584.1	613.4
50°	398.2	402.4	412.2	429.0	447.1	461.1	475.1	505.8	536.6	567.3	598.0
52.5°	370.3	374.5	385.7	402.4	423.4	438.8	452.7	484.9	518.4	550.5	588.3
55°	343.7	346.5	359.1	377.3	401.0	415.0	429.0	463.9	498.8	538.0	588.3
57.5°	317.2	317.2	332.6	352.1	377.3	391.2	408.0	442.9	484.9	536.6	589.7
60°	287.8	292.0	306.0	325.6	354.9	370.3	387.1	426.2	479.3	539.4	607.8
62.5°	261.3	265.5	279.5	300.4	332.6	350.7	370.3	419.2	482.1	554.7	623.2
65°	234.7	238.9	252.9	279.5	314.4	334.0	359.1	420.6	496.0	572.9	633.0
67.5°	208.2	213.8	232.0	258.5	300.4	325.6	354.9	430.4	512.8	579.9	624.6
70°	184.4	190.0	211.0	243.1	290.6	322.8	359.1	442.9	517.0	568.7	603.6
72.5°	162.1	169.1	192.8	230.6	287.8	325.6	366.1	445.7	505.8	543.5	568.7
75°	139.7	148.1	177.5	223.6	289.2	329.8	367.5	433.2	479.3	505.8	528.2
77.5°	118.8	128.6	164.9	216.6	287.8	322.8	353.5	403.8	436.0	462.5	490.5
80°	96.4	111.8	152.3	209.6	272.5	299.0	321.4	359.1	392.6	419.2	452.7
82.5°	76.9	95.0	138.3	192.8	243.1	265.5	283.7	318.6	349.3	382.9	419.2
85°	57.3	78.2	121.6	167.7	209.6	227.8	245.9	278.1	310.2	347.9	389.8
87.5°	43.3	62.9	102.0	141.1	178.9	194.2	211.0	244.5	276.7	314.4	357.7
90°	34.9	51.7	83.8	118.8	150.9	166.3	181.6	211.0	245.9	279.5	321.4
92.5°	33.5	43.3	69.9	97.8	125.8	139.7	152.3	178.9	209.6	240.3	275.3
95°	32.1	36.3	54.5	76.9	99.2	110.4	120.2	141.1	164.9	188.6	216.6
97.5°	30.7	32.1	43.3	58.7	75.5	83.8	92.2	107.6	123.0	139.7	156.5
100°	29.3	29.3	34.9	46.1	57.3	62.9	67.1	79.6	89.4	99.2	110.4
102.5°	26.5	26.5	29.3	34.9	43.3	47.5	50.3	57.3	64.3	71.3	76.9
105°	25.2	23.8	25.2	29.3	33.5	36.3	39.1	43.3	46.1	50.3	53.1
107.5°	22.4	22.4	22.4	25.2	27.9	29.3	30.7	33.5	36.3	37.7	39.1
110°	19.6	19.6	18.2	21.0	23.8	25.2	26.5	27.9	29.3	30.7	30.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	16.8	16.8	16.8	16.8	19.6	21.0	22.4	23.8	26.5	26.5	26.5
115°	14.0	14.0	14.0	14.0	16.8	18.2	19.6	21.0	22.4	23.8	23.8
117.5°	11.2	11.2	11.2	11.2	14.0	14.0	15.4	18.2	19.6	21.0	21.0
120°	9.8	9.8	9.8	8.4	11.2	12.6	12.6	15.4	16.8	18.2	19.6
122.5°	8.4	7.0	7.0	7.0	8.4	8.4	9.8	12.6	14.0	15.4	16.8
125°	7.0	5.6	5.6	5.6	5.6	7.0	8.4	9.8	12.6	14.0	14.0
127.5°	5.6	4.2	4.2	4.2	4.2	4.2	5.6	7.0	9.8	11.2	11.2
130°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	5.6	7.0	8.4	9.8
132.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	2.8	4.2	5.6	7.0
135°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	2.8	4.2	5.6
137.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	1.4	2.8	2.8
140°	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4
142.5°	1.4	1.4	1.4	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°	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6	740.6
2.5°	744.8	744.8	743.4	743.4	743.4	742.0	742.0	740.6	740.6	740.6
5°	743.4	743.4	742.0	742.0	740.6	740.6	739.2	739.2	739.2	737.8
7.5°	740.6	740.6	740.6	739.2	739.2	739.2	737.8	737.8	737.8	737.8
10°	737.8	737.8	737.8	739.2	739.2	739.2	739.2	740.6	740.6	740.6
12.5°	733.6	735.0	737.8	737.8	739.2	739.2	739.2	740.6	742.0	742.0
15°	729.4	733.6	736.4	739.2	739.2	740.6	740.6	742.0	742.0	740.6
17.5°	728.0	732.2	736.4	739.2	740.6	742.0	743.4	744.8	746.2	744.8
20°	723.8	730.8	736.4	740.6	742.0	742.0	746.2	747.6	747.6	746.2
22.5°	719.6	728.0	733.6	739.2	742.0	743.4	747.6	749.0	750.3	751.7
25°	715.4	722.4	732.2	740.6	743.4	747.6	751.7	755.9	757.3	758.7
27.5°	711.2	721.0	733.6	743.4	747.6	751.7	758.7	764.3	764.3	767.1
30°	704.2	721.0	733.6	746.2	750.3	755.9	765.7	771.3	772.7	772.7
32.5°	701.4	719.6	735.0	747.6	753.1	757.3	767.1	772.7	775.5	775.5
35°	695.9	715.4	732.2	744.8	751.7	755.9	765.7	774.1	775.5	776.9
37.5°	687.5	708.4	726.6	740.6	746.2	753.1	762.9	768.5	772.7	774.1
40°	679.1	698.6	718.2	733.6	740.6	746.2	757.3	765.7	768.5	769.9
42.5°	665.1	688.9	708.4	726.6	733.6	739.2	751.7	758.7	764.3	764.3
45°	653.9	676.3	700.0	718.2	728.0	736.4	753.1	765.7	772.7	772.7
47.5°	641.4	666.5	694.5	723.8	735.0	744.8	760.1	768.5	775.5	776.9
50°	630.2	666.5	700.0	726.6	737.8	750.3	771.3	786.7	795.1	796.5
52.5°	628.8	669.3	705.6	742.0	755.9	771.3	790.9	803.4	810.4	813.2
55°	631.6	681.9	726.6	758.7	774.1	785.3	802.0	813.2	817.4	820.2
57.5°	648.3	700.0	740.6	768.5	779.7	788.1	799.3	803.4	807.6	807.6
60°	665.1	712.6	742.0	761.5	769.9	776.9	783.9	788.1	790.9	788.1
62.5°	676.3	709.8	732.2	744.8	750.3	754.5	762.9	769.9	769.9	774.1
65°	670.7	694.5	712.6	725.2	730.8	736.4	747.6	753.1	760.1	758.7
67.5°	652.5	674.9	688.9	705.6	712.6	718.2	732.2	739.2	746.2	746.2
70°	624.6	644.2	662.3	680.5	687.5	695.9	711.2	722.4	728.0	732.2
72.5°	588.3	609.2	633.0	659.5	672.1	680.5	698.6	711.2	719.6	721.0
75°	553.3	581.3	614.8	644.2	655.3	666.5	686.1	698.6	704.2	708.4
77.5°	521.2	554.7	591.1	623.2	635.8	648.3	667.9	681.9	690.3	691.7
80°	490.5	529.6	565.9	600.8	614.8	626.0	646.9	662.3	670.7	674.9
82.5°	459.7	503.0	540.8	577.1	591.1	605.0	626.0	641.4	651.1	652.5
85°	431.8	472.3	511.4	546.3	558.9	575.7	598.0	613.4	621.8	624.6
87.5°	398.2	437.4	475.1	508.6	522.6	538.0	560.3	577.1	584.1	588.3
90°	357.7	396.8	430.4	462.5	476.5	489.1	508.6	526.8	535.2	539.4
92.5°	308.8	343.7	377.3	403.8	416.4	426.2	448.5	462.5	468.1	472.3
95°	245.9	271.1	300.4	324.2	335.4	343.7	359.1	373.1	381.5	384.3
97.5°	174.7	194.2	208.2	226.4	230.6	240.3	252.9	261.3	266.9	265.5
100°	120.2	132.7	141.1	148.1	150.9	156.5	163.5	164.9	170.5	169.1
102.5°	81.0	85.2	89.4	93.6	95.0	96.4	100.6	99.2	102.0	103.4
105°	54.5	55.9	57.3	58.7	58.7	58.7	58.7	58.7	58.7	57.3
107.5°	39.1	37.7	37.7	37.7	36.3	36.3	34.9	34.9	34.9	33.5
110°	30.7	29.3	27.9	26.5	25.2	25.2	23.8	23.8	22.4	22.4



TEST NUMBER: P237766

CATALOG NUMBER: 2VRVT2-LD5-4-DR-W-UNV-L850-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	25.2	23.8	22.4	21.0	21.0	19.6	19.6	18.2	16.8	16.8
115°	22.4	21.0	21.0	19.6	18.2	18.2	16.8	15.4	15.4	14.0
117.5°	21.0	19.6	18.2	16.8	16.8	16.8	15.4	14.0	14.0	14.0
120°	18.2	18.2	16.8	16.8	15.4	15.4	14.0	14.0	12.6	12.6
122.5°	16.8	16.8	15.4	15.4	14.0	14.0	12.6	12.6	12.6	11.2
125°	14.0	14.0	14.0	14.0	12.6	12.6	12.6	11.2	11.2	11.2
127.5°	12.6	12.6	12.6	12.6	11.2	11.2	11.2	11.2	9.8	9.8
130°	9.8	11.2	11.2	11.2	11.2	9.8	9.8	9.8	9.8	9.8
132.5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
135°	5.6	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
137.5°	4.2	4.2	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
140°	1.4	2.8	2.8	2.8	4.2	4.2	4.2	4.2	2.8	2.8
142.5°	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)