

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: P233255

Luminaire Tested: **2VRVT3-LD5-4-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233255
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-LD5-4-W-UNV-L850-CD1-U
Description: 2FT VRVT3 WIDE APPLICATION, 4000LM
Light Source: (196) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4700.0 lumens
Efficiency: N/A
Efficacy: 138.6 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

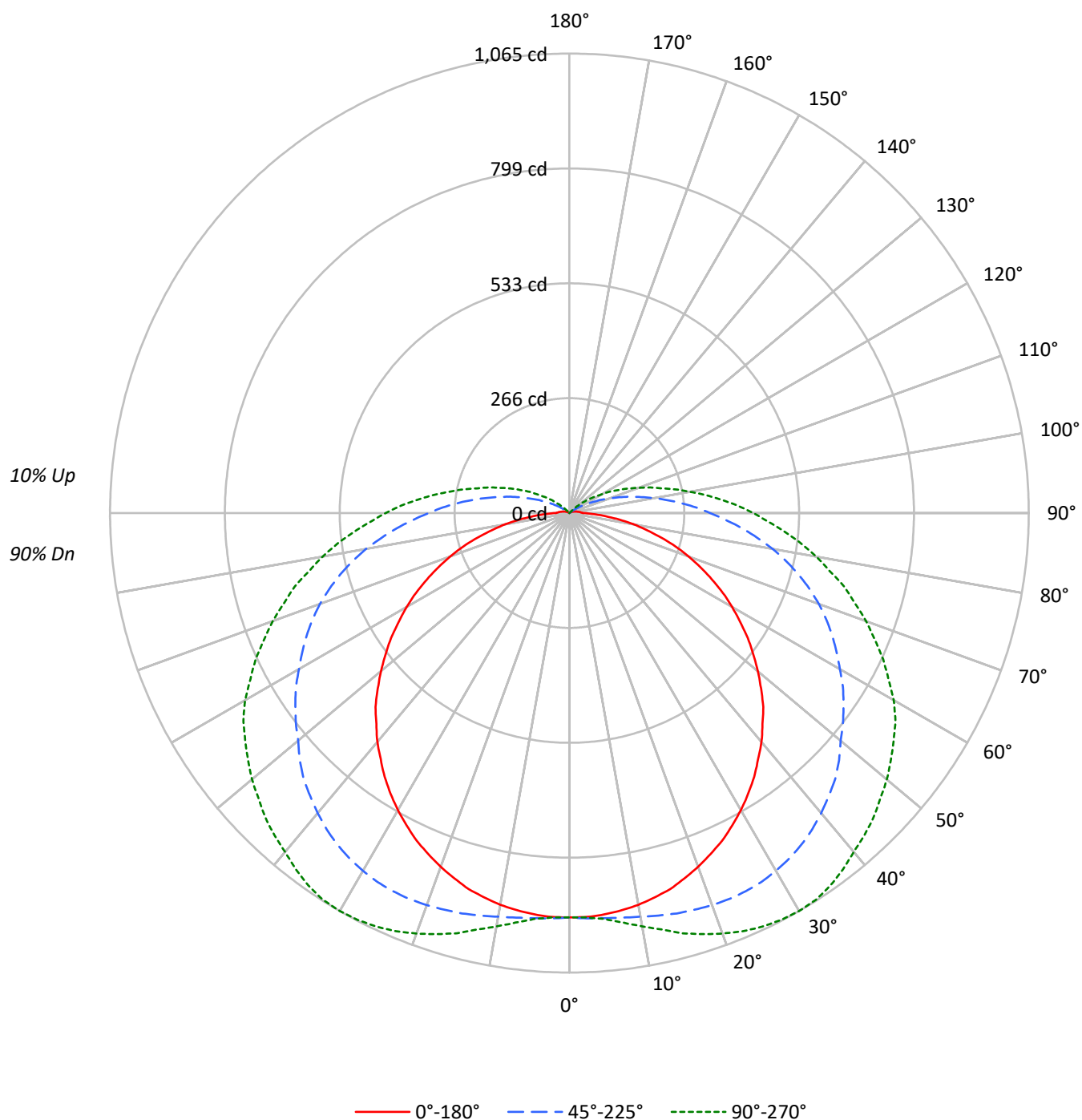
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	12104	12104	12104
5°	12020	11864	11834
10°	11918	11752	11916
15°	11806	11769	12176
20°	11640	11824	12444
25°	11498	11890	12703
30°	11314	11927	12905
35°	11124	11936	12987
40°	10918	11898	12944
45°	10721	11863	13013
50°	10423	11722	13073
55°	10155	11739	13153
60°	9836	11749	13249
65°	9457	11859	13204
70°	9025	11986	13163
75°	8394	12058	13203
80°	7663	12121	13222
85°	6368	12122	13333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.9
10°-20°	271.3	5.8
20°-30°	442.1	9.4
30°-40°	575.6	12.2
40°-50°	650.2	13.8
50°-60°	666.0	14.2
60°-70°	622.7	13.2
70°-80°	524.2	11.2
80°-90°	386.3	8.2
90°-100°	248.0	5.3
100°-110°	137.2	2.9
110°-120°	63.4	1.3
120°-130°	21.0	0.4
130°-140°	2.3	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°	803.4	17.1
0°-40°	1379.0	29.3
0°-60°	2695.2	57.3
0°-90°	4228.3	90.0
90°-120°	448.5	9.5
90°-150°	471.7	10.0
90°-180°	472.0	10.0
0°-180°	4700.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	937	937	937	937	937	
5°	934	936	942	946	945	89
15°	903	919	961	997	1008	254
25°	838	879	967	1036	1058	386
35°	747	810	938	1030	1054	467
45°	636	716	871	967	997	489
55°	505	601	776	886	918	450
65°	365	479	672	778	803	361
75°	220	358	550	637	660	234
85°	84	237	401	482	501	83
90°	31	175	326	403	426	20
95°	25	124	261	331	353	19
105°	14	41	146	208	222	15
115°	6	8	61	112	127	7
125°	2	2	13	45	57	2
135°	1	0	0	1	8	1
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: P233255

CATALOG NUMBER: 2VRVT3-LD5-4-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1
2.5°	937.1	936.0	936.0	936.0	937.1	938.1	938.1	939.2	939.2	940.3	940.3
5°	933.8	932.8	933.8	933.8	934.9	936.0	937.1	938.1	939.2	941.4	942.4
7.5°	928.5	928.5	928.5	930.6	931.7	932.8	934.9	937.1	940.3	943.5	945.7
10°	922.0	922.0	923.1	924.2	927.4	929.5	931.7	936.0	940.3	945.7	950.0
12.5°	912.3	912.3	913.4	916.6	920.9	924.2	927.4	933.8	941.4	947.8	955.4
15°	902.6	901.6	903.7	909.1	914.5	918.8	923.1	931.7	940.3	950.0	960.7
17.5°	887.6	888.7	891.9	898.3	905.9	911.2	916.6	927.4	940.3	951.0	964.0
20°	872.5	873.6	877.9	884.3	895.1	901.6	909.1	922.0	937.1	952.1	967.2
22.5°	855.3	856.4	861.8	871.4	884.3	890.8	899.4	915.5	932.8	950.0	968.3
25°	838.1	839.2	845.6	855.3	870.4	879.0	887.6	908.0	927.4	947.8	967.2
27.5°	816.6	819.8	827.3	839.2	855.3	863.9	875.7	897.3	918.8	941.4	964.0
30°	795.1	797.2	804.7	819.8	838.1	848.8	859.6	883.3	909.1	932.8	957.5
32.5°	771.4	774.6	784.3	798.3	820.9	831.6	842.4	869.3	896.2	923.1	948.9
35°	746.6	749.9	758.5	776.8	799.4	810.1	824.1	852.1	881.1	910.2	938.1
37.5°	718.7	723.0	734.8	753.1	775.7	789.7	804.7	833.8	865.0	895.1	924.2
40°	692.8	695.0	706.8	726.2	750.9	766.0	781.1	814.4	845.6	877.9	908.0
42.5°	662.7	668.1	681.0	701.5	727.3	741.3	757.4	791.8	826.3	857.5	889.7
45°	635.8	638.0	652.0	674.6	701.5	716.5	733.7	767.1	801.5	837.0	871.4
47.5°	602.5	605.7	620.8	644.4	673.5	689.6	705.8	743.4	778.9	815.5	847.8
50°	570.2	575.6	590.6	615.4	645.5	661.6	679.9	715.4	754.2	787.5	820.9
52.5°	536.8	543.3	559.4	584.2	615.4	633.7	650.9	688.5	725.1	762.8	799.4
55°	504.6	510.0	525.0	551.9	586.3	601.4	619.7	659.5	697.1	738.0	775.7
57.5°	469.1	476.6	494.9	521.8	555.1	572.4	591.7	629.4	672.4	714.4	752.0
60°	435.7	441.1	462.6	489.5	522.9	540.1	559.4	601.4	645.5	687.5	724.0
62.5°	401.3	407.7	428.2	456.2	490.6	510.0	529.3	572.4	618.6	659.5	698.2
65°	364.7	373.3	395.9	422.8	460.5	478.8	500.3	545.5	589.6	632.6	672.4
67.5°	329.2	336.7	361.5	390.5	425.0	448.6	470.1	517.5	563.7	606.8	644.4
70°	293.7	301.2	323.8	357.2	394.8	418.5	440.0	487.4	534.7	575.6	615.4
72.5°	258.2	265.7	290.5	322.8	364.7	386.2	411.0	459.4	504.6	547.6	583.1
75°	220.5	233.5	256.1	292.6	334.6	358.3	381.9	430.3	474.4	515.3	549.8
77.5°	184.0	198.0	223.8	261.4	304.5	330.3	354.0	400.2	444.3	480.9	514.3
80°	151.7	163.5	191.5	228.1	275.4	298.0	321.7	367.9	409.9	447.6	478.8
82.5°	116.2	130.2	158.1	199.0	244.2	267.9	291.6	333.5	374.4	408.8	438.9
85°	83.9	97.9	129.1	171.1	213.0	236.7	258.2	301.2	338.9	373.3	401.3
87.5°	54.9	68.9	101.1	143.1	184.0	205.5	224.9	264.7	302.3	335.7	362.6
90°	31.2	47.3	78.5	116.2	156.0	175.4	195.8	233.5	267.9	299.1	326.0
92.5°	28.0	33.4	59.2	94.7	130.2	150.6	167.8	203.3	237.8	266.8	293.7
95°	24.7	25.8	42.0	73.2	107.6	123.7	142.0	176.4	207.6	235.6	261.4
97.5°	21.5	21.5	29.0	52.7	83.9	101.1	117.3	148.5	179.7	206.6	229.2
100°	18.3	19.4	20.4	36.6	63.5	79.6	93.6	123.7	151.7	175.4	199.0
102.5°	16.1	16.1	17.2	24.7	45.2	59.2	72.1	100.1	124.8	148.5	170.0
105°	14.0	14.0	14.0	16.1	31.2	40.9	52.7	77.5	102.2	124.8	146.3
107.5°	11.8	11.8	11.8	12.9	20.4	29.0	37.7	58.1	80.7	102.2	121.6
110°	9.7	9.7	9.7	10.8	11.8	18.3	25.8	42.0	61.3	82.8	99.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	7.5	7.5	7.5	8.6	8.6	9.7	16.1	30.1	45.2	63.5	80.7
115°	6.5	6.5	6.5	6.5	7.5	7.5	7.5	18.3	32.3	47.3	61.3
117.5°	5.4	5.4	5.4	5.4	5.4	5.4	6.5	10.8	21.5	34.4	46.3
120°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	11.8	22.6	33.4
122.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.3	12.9	22.6
125°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.2	12.9
127.5°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	2.2	2.2	3.2
130°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
132.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0
135°	1.1	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°	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1	937.1
2.5°	941.4	941.4	941.4	940.3	940.3	940.3	939.2	939.2	938.1	938.1
5°	943.5	944.6	945.7	945.7	945.7	945.7	945.7	945.7	944.6	944.6
7.5°	948.9	951.0	952.1	954.3	954.3	955.4	956.4	956.4	956.4	957.5
10°	954.3	958.6	961.8	966.1	967.2	968.3	970.4	970.4	971.5	972.6
12.5°	961.8	968.3	974.7	980.1	981.2	983.3	985.5	988.7	988.7	988.7
15°	969.3	979.0	986.6	991.9	997.3	998.4	1001.6	1005.9	1005.9	1008.1
17.5°	976.9	987.6	999.5	1007.0	1011.3	1014.5	1017.8	1019.9	1024.2	1023.1
20°	982.2	995.2	1007.0	1017.8	1021.0	1024.2	1030.7	1035.0	1037.1	1037.1
22.5°	984.4	1000.5	1013.4	1025.3	1029.6	1033.9	1040.3	1045.7	1047.9	1049.0
25°	985.5	1002.7	1017.8	1030.7	1036.0	1040.3	1049.0	1053.3	1056.5	1057.6
27.5°	984.4	1002.7	1019.9	1033.9	1039.3	1044.6	1053.3	1058.6	1062.9	1062.9
30°	980.1	1000.5	1018.8	1033.9	1040.3	1045.7	1054.3	1060.8	1064.0	1065.1
32.5°	972.6	995.2	1014.5	1029.6	1037.1	1042.5	1052.2	1058.6	1061.9	1062.9
35°	964.0	986.6	1007.0	1022.1	1029.6	1035.0	1044.6	1050.0	1053.3	1054.3
37.5°	951.0	974.7	995.2	1011.3	1017.8	1023.1	1030.7	1038.2	1040.3	1041.4
40°	936.0	959.7	979.0	995.2	1000.5	1007.0	1013.4	1021.0	1024.2	1025.3
42.5°	917.7	940.3	960.7	976.9	982.2	989.8	999.5	1005.9	1010.2	1012.4
45°	896.2	920.9	941.4	959.7	967.2	971.5	983.3	990.9	995.2	997.3
47.5°	874.7	901.6	923.1	941.4	948.9	956.4	967.2	973.6	977.9	977.9
50°	854.2	880.0	902.6	922.0	929.5	938.1	947.8	955.4	959.7	960.7
52.5°	832.7	859.6	882.2	901.6	909.1	916.6	927.4	934.9	939.2	939.2
55°	808.0	837.0	859.6	877.9	886.5	893.0	905.9	912.3	917.7	917.7
57.5°	783.2	812.3	835.9	855.3	865.0	870.4	883.3	889.7	895.1	896.2
60°	758.5	786.4	811.2	831.6	838.1	846.7	855.3	862.8	867.1	868.2
62.5°	732.7	760.6	785.4	801.5	811.2	815.5	826.3	830.6	834.9	833.8
65°	707.9	732.7	756.3	772.5	777.8	785.4	791.8	799.4	802.6	802.6
67.5°	677.8	702.5	724.0	740.2	747.7	752.0	759.5	763.9	769.2	766.0
70°	645.5	669.2	688.5	704.7	710.1	715.4	724.0	728.3	731.6	731.6
72.5°	612.2	634.8	654.1	668.1	673.5	679.9	686.4	690.7	692.8	693.9
75°	576.7	599.2	616.5	630.4	636.9	644.4	649.8	656.3	657.3	659.5
77.5°	543.3	563.7	579.9	596.0	599.2	604.6	611.1	616.5	618.6	617.5
80°	503.5	528.2	541.2	555.1	560.5	564.8	572.4	575.6	581.0	581.0
82.5°	463.7	485.2	500.3	516.4	522.9	525.0	534.7	540.1	541.2	542.2
85°	427.1	446.5	462.6	475.5	482.0	484.1	492.7	501.3	502.4	501.3
87.5°	386.2	406.7	423.9	435.7	441.1	446.5	454.0	458.3	462.6	461.5
90°	349.7	369.0	386.2	399.1	403.4	408.8	415.3	421.7	422.8	426.0
92.5°	314.1	334.6	351.8	363.6	370.1	372.2	379.8	385.2	387.3	390.5
95°	281.9	299.1	315.2	330.3	331.4	336.7	344.3	348.6	354.0	352.9
97.5°	249.6	269.0	282.9	293.7	299.1	304.5	310.9	315.2	318.5	318.5
100°	218.4	236.7	249.6	260.4	266.8	269.0	275.4	280.8	282.9	282.9
102.5°	190.4	205.5	218.4	231.3	234.5	237.8	244.2	250.7	250.7	252.8
105°	162.5	178.6	191.5	202.3	207.6	208.7	215.2	219.5	222.7	221.6
107.5°	137.7	152.8	166.8	175.4	179.7	182.9	189.3	192.6	195.8	196.9
110°	116.2	129.1	142.0	151.7	154.9	159.2	165.7	168.9	172.1	171.1



TEST NUMBER: P233255

CATALOG NUMBER: 2VRVT3-LD5-4-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	94.7	108.7	119.4	129.1	133.4	136.6	143.1	145.2	148.5	148.5
115°	76.4	88.2	99.0	108.7	111.9	115.1	120.5	123.7	125.9	127.0
117.5°	58.1	71.0	81.8	90.4	92.5	96.8	102.2	104.4	106.5	108.7
120°	44.1	53.8	63.5	71.0	75.3	77.5	82.8	86.1	88.2	88.2
122.5°	32.3	40.9	49.5	55.9	59.2	61.3	66.7	69.9	71.0	71.0
125°	20.4	29.0	35.5	42.0	45.2	47.3	50.6	53.8	55.9	57.0
127.5°	11.8	18.3	24.7	30.1	32.3	34.4	38.7	40.9	43.0	43.0
130°	2.2	7.5	14.0	18.3	20.4	22.6	25.8	28.0	30.1	30.1
132.5°	0.0	0.0	4.3	8.6	9.7	11.8	15.1	17.2	18.3	18.3
135°	0.0	0.0	0.0	0.0	1.1	2.2	5.4	6.5	7.5	7.5
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)