

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: P233254

Luminaire Tested: **2VRVT3-LD5-4-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233254
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-L840-CD1-U
Description: 2FT VRVT3 WIDE APPLICATION, 4000LM
Light Source: (196) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4369.0 lumens
Efficiency: N/A
Efficacy: 128.9 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

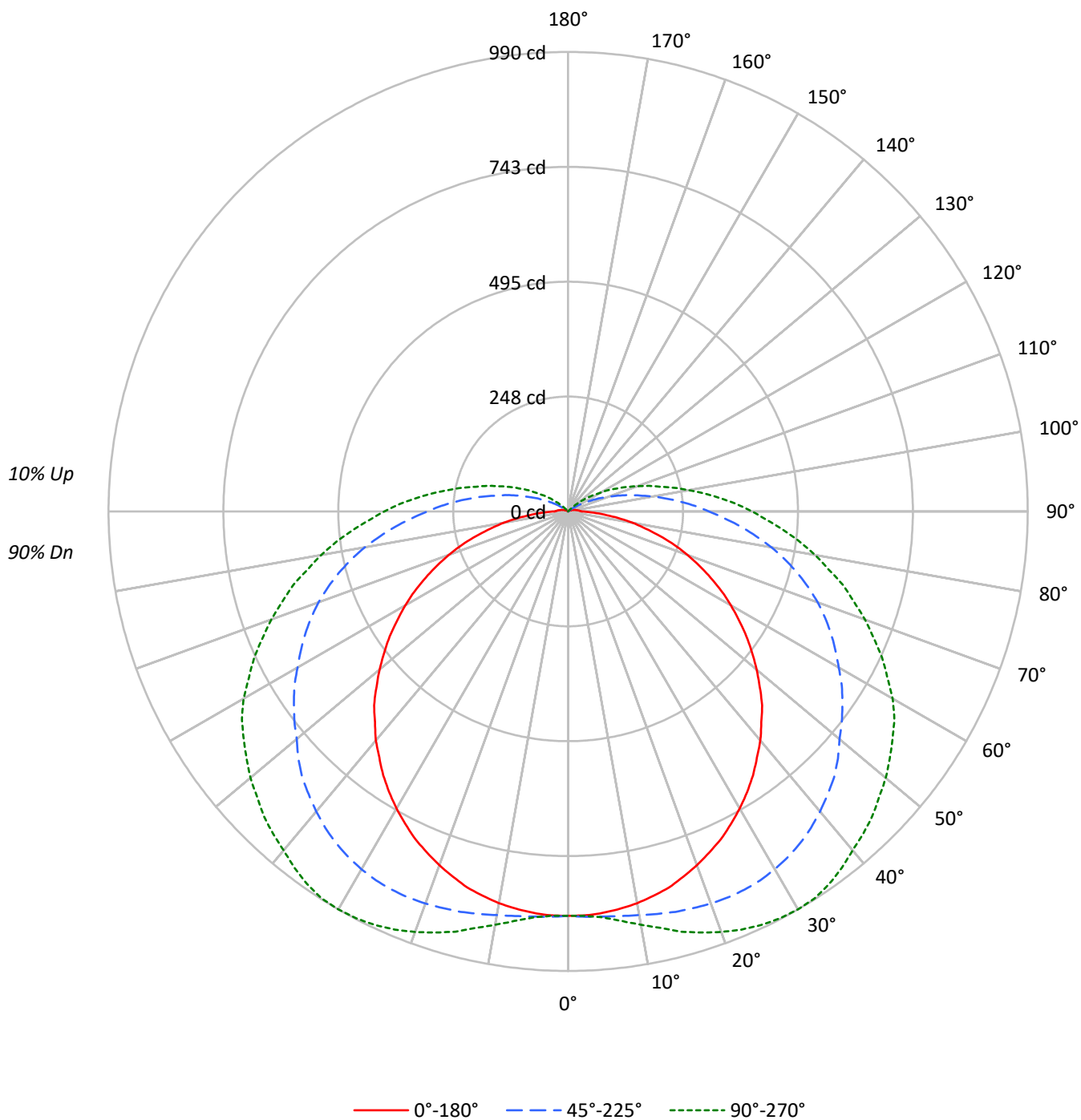
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11252	11252	11252
5°	11174	11030	11001
10°	11079	10924	11077
15°	10976	10941	11318
20°	10821	10991	11568
25°	10688	11053	11809
30°	10518	11088	11997
35°	10341	11096	12073
40°	10151	11061	12032
45°	9965	11029	12097
50°	9688	10896	12153
55°	9438	10913	12227
60°	9143	10923	12317
65°	8790	11025	12274
70°	8389	11141	12237
75°	7804	11207	12272
80°	7122	11265	12289
85°	5920	11267	12394



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.7	1.9
10°-20°	252.2	5.8
20°-30°	410.9	9.4
30°-40°	535.1	12.2
40°-50°	604.4	13.8
50°-60°	619.1	14.2
60°-70°	578.8	13.2
70°-80°	487.2	11.2
80°-90°	359.0	8.2
90°-100°	230.5	5.3
100°-110°	127.5	2.9
110°-120°	58.9	1.3
120°-130°	19.5	0.4
130°-140°	2.1	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°	746.8	17.1
0°-40°	1281.9	29.3
0°-60°	2505.4	57.3
0°-90°	3930.5	90.0
90°-120°	416.9	9.5
90°-150°	438.5	10.0
90°-180°	438.0	10.0
0°-180°	4369.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	868	870	876	879	878	83
15°	839	854	893	927	937	236
25°	779	817	899	963	983	359
35°	694	753	872	957	980	434
45°	591	666	810	899	927	455
55°	469	559	721	824	853	419
65°	339	445	625	723	746	336
75°	205	333	511	592	613	217
85°	78	220	373	448	466	77
90°	29	163	303	375	396	18
95°	23	115	243	308	328	18
105°	13	38	136	193	206	14
115°	6	7	57	104	118	6
125°	2	2	12	42	53	2
135°	1	0	0	1	7	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: P233254

CATALOG NUMBER: 2VRVT3-LD5-4-W-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1
2.5°	871.1	870.1	870.1	870.1	871.1	872.1	872.1	873.1	873.1	874.1	874.1
5°	868.1	867.1	868.1	868.1	869.1	870.1	871.1	872.1	873.1	875.1	876.1
7.5°	863.1	863.1	863.1	865.1	866.1	867.1	869.1	871.1	874.1	877.1	879.1
10°	857.1	857.1	858.1	859.1	862.1	864.1	866.1	870.1	874.1	879.1	883.1
12.5°	848.1	848.1	849.1	852.1	856.1	859.1	862.1	868.1	875.1	881.1	888.1
15°	839.1	838.1	840.1	845.1	850.1	854.1	858.1	866.1	874.1	883.1	893.1
17.5°	825.1	826.1	829.1	835.1	842.1	847.1	852.1	862.1	874.1	884.1	896.1
20°	811.1	812.1	816.1	822.1	832.1	838.1	845.1	857.1	871.1	885.1	899.1
22.5°	795.1	796.1	801.1	810.1	822.1	828.1	836.1	851.1	867.1	883.1	900.1
25°	779.1	780.1	786.1	795.1	809.1	817.1	825.1	844.1	862.1	881.1	899.1
27.5°	759.1	762.1	769.1	780.1	795.1	803.1	814.1	834.1	854.1	875.1	896.1
30°	739.1	741.1	748.1	762.1	779.1	789.1	799.1	821.1	845.1	867.1	890.1
32.5°	717.1	720.1	729.1	742.1	763.1	773.1	783.1	808.1	833.1	858.1	882.1
35°	694.1	697.1	705.1	722.1	743.1	753.1	766.1	792.1	819.1	846.1	872.1
37.5°	668.1	672.1	683.1	700.1	721.1	734.1	748.1	775.1	804.1	832.1	859.1
40°	644.1	646.1	657.1	675.1	698.1	712.1	726.1	757.1	786.1	816.1	844.1
42.5°	616.0	621.1	633.1	652.1	676.1	689.1	704.1	736.1	768.1	797.1	827.1
45°	591.0	593.0	606.0	627.1	652.1	666.1	682.1	713.1	745.1	778.1	810.1
47.5°	560.0	563.0	577.0	599.0	626.1	641.1	656.1	691.1	724.1	758.1	788.1
50°	530.0	535.0	549.0	572.0	600.0	615.0	632.1	665.1	701.1	732.1	763.1
52.5°	499.0	505.0	520.0	543.0	572.0	589.0	605.0	640.1	674.1	709.1	743.1
55°	469.0	474.0	488.0	513.0	545.0	559.0	576.0	613.0	648.1	686.1	721.1
57.5°	436.0	443.0	460.0	485.0	516.0	532.0	550.0	585.0	625.1	664.1	699.1
60°	405.0	410.0	430.0	455.0	486.0	502.0	520.0	559.0	600.0	639.1	673.1
62.5°	373.0	379.0	398.0	424.0	456.0	474.0	492.0	532.0	575.0	613.0	649.1
65°	339.0	347.0	368.0	393.0	428.0	445.0	465.0	507.0	548.0	588.0	625.1
67.5°	306.0	313.0	336.0	363.0	395.0	417.0	437.0	481.0	524.0	564.0	599.0
70°	273.0	280.0	301.0	332.0	367.0	389.0	409.0	453.0	497.0	535.0	572.0
72.5°	240.0	247.0	270.0	300.0	339.0	359.0	382.0	427.0	469.0	509.0	542.0
75°	205.0	217.0	238.0	272.0	311.0	333.0	355.0	400.0	441.0	479.0	511.0
77.5°	171.0	184.0	208.0	243.0	283.0	307.0	329.0	372.0	413.0	447.0	478.0
80°	141.0	152.0	178.0	212.0	256.0	277.0	299.0	342.0	381.0	416.0	445.0
82.5°	108.0	121.0	147.0	185.0	227.0	249.0	271.0	310.0	348.0	380.0	408.0
85°	78.0	91.0	120.0	159.0	198.0	220.0	240.0	280.0	315.0	347.0	373.0
87.5°	51.0	64.0	94.0	133.0	171.0	191.0	209.0	246.0	281.0	312.0	337.0
90°	29.0	44.0	73.0	108.0	145.0	163.0	182.0	217.0	249.0	278.0	303.0
92.5°	26.0	31.0	55.0	88.0	121.0	140.0	156.0	189.0	221.0	248.0	273.0
95°	23.0	24.0	39.0	68.0	100.0	115.0	132.0	164.0	193.0	219.0	243.0
97.5°	20.0	20.0	27.0	49.0	78.0	94.0	109.0	138.0	167.0	192.0	213.0
100°	17.0	18.0	19.0	34.0	59.0	74.0	87.0	115.0	141.0	163.0	185.0
102.5°	15.0	15.0	16.0	23.0	42.0	55.0	67.0	93.0	116.0	138.0	158.0
105°	13.0	13.0	13.0	15.0	29.0	38.0	49.0	72.0	95.0	116.0	136.0
107.5°	11.0	11.0	11.0	12.0	19.0	27.0	35.0	54.0	75.0	95.0	113.0
110°	9.0	9.0	9.0	10.0	11.0	17.0	24.0	39.0	57.0	77.0	92.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	7.0	7.0	7.0	8.0	8.0	9.0	15.0	28.0	42.0	59.0	75.0
115°	6.0	6.0	6.0	6.0	7.0	7.0	7.0	17.0	30.0	44.0	57.0
117.5°	5.0	5.0	5.0	5.0	5.0	5.0	6.0	10.0	20.0	32.0	43.0
120°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	11.0	21.0	31.0
122.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	12.0	21.0
125°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	12.0
127.5°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	3.0
130°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
132.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
135°	1.0	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°	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1	871.1
2.5°	875.1	875.1	875.1	874.1	874.1	874.1	873.1	873.1	872.1	872.1
5°	877.1	878.1	879.1	879.1	879.1	879.1	879.1	879.1	878.1	878.1
7.5°	882.1	884.1	885.1	887.1	887.1	888.1	889.1	889.1	889.1	890.1
10°	887.1	891.1	894.1	898.1	899.1	900.1	902.1	902.1	903.1	904.1
12.5°	894.1	900.1	906.1	911.1	912.1	914.1	916.1	919.1	919.1	919.1
15°	901.1	910.1	917.1	922.1	927.1	928.1	931.1	935.1	935.1	937.1
17.5°	908.1	918.1	929.1	936.1	940.1	943.1	946.1	948.1	952.1	951.1
20°	913.1	925.1	936.1	946.1	949.1	952.1	958.1	962.1	964.1	964.1
22.5°	915.1	930.1	942.1	953.1	957.1	961.1	967.1	972.1	974.1	975.1
25°	916.1	932.1	946.1	958.1	963.1	967.1	975.1	979.1	982.1	983.1
27.5°	915.1	932.1	948.1	961.1	966.1	971.1	979.1	984.1	988.1	988.1
30°	911.1	930.1	947.1	961.1	967.1	972.1	980.1	986.1	989.1	990.1
32.5°	904.1	925.1	943.1	957.1	964.1	969.1	978.1	984.1	987.1	988.1
35°	896.1	917.1	936.1	950.1	957.1	962.1	971.1	976.1	979.1	980.1
37.5°	884.1	906.1	925.1	940.1	946.1	951.1	958.1	965.1	967.1	968.1
40°	870.1	892.1	910.1	925.1	930.1	936.1	942.1	949.1	952.1	953.1
42.5°	853.1	874.1	893.1	908.1	913.1	920.1	929.1	935.1	939.1	941.1
45°	833.1	856.1	875.1	892.1	899.1	903.1	914.1	921.1	925.1	927.1
47.5°	813.1	838.1	858.1	875.1	882.1	889.1	899.1	905.1	909.1	909.1
50°	794.1	818.1	839.1	857.1	864.1	872.1	881.1	888.1	892.1	893.1
52.5°	774.1	799.1	820.1	838.1	845.1	852.1	862.1	869.1	873.1	873.1
55°	751.1	778.1	799.1	816.1	824.1	830.1	842.1	848.1	853.1	853.1
57.5°	728.1	755.1	777.1	795.1	804.1	809.1	821.1	827.1	832.1	833.1
60°	705.1	731.1	754.1	773.1	779.1	787.1	795.1	802.1	806.1	807.1
62.5°	681.1	707.1	730.1	745.1	754.1	758.1	768.1	772.1	776.1	775.1
65°	658.1	681.1	703.1	718.1	723.1	730.1	736.1	743.1	746.1	746.1
67.5°	630.1	653.1	673.1	688.1	695.1	699.1	706.1	710.1	715.1	712.1
70°	600.0	622.1	640.1	655.1	660.1	665.1	673.1	677.1	680.1	680.1
72.5°	569.0	590.0	608.0	621.1	626.1	632.1	638.1	642.1	644.1	645.1
75°	536.0	557.0	573.0	586.0	592.0	599.0	604.0	610.0	611.0	613.0
77.5°	505.0	524.0	539.0	554.0	557.0	562.0	568.0	573.0	575.0	574.0
80°	468.0	491.0	503.0	516.0	521.0	525.0	532.0	535.0	540.0	540.0
82.5°	431.0	451.0	465.0	480.0	486.0	488.0	497.0	502.0	503.0	504.0
85°	397.0	415.0	430.0	442.0	448.0	450.0	458.0	466.0	467.0	466.0
87.5°	359.0	378.0	394.0	405.0	410.0	415.0	422.0	426.0	430.0	429.0
90°	325.0	343.0	359.0	371.0	375.0	380.0	386.0	392.0	393.0	396.0
92.5°	292.0	311.0	327.0	338.0	344.0	346.0	353.0	358.0	360.0	363.0
95°	262.0	278.0	293.0	307.0	308.0	313.0	320.0	324.0	329.0	328.0
97.5°	232.0	250.0	263.0	273.0	278.0	283.0	289.0	293.0	296.0	296.0
100°	203.0	220.0	232.0	242.0	248.0	250.0	256.0	261.0	263.0	263.0
102.5°	177.0	191.0	203.0	215.0	218.0	221.0	227.0	233.0	233.0	235.0
105°	151.0	166.0	178.0	188.0	193.0	194.0	200.0	204.0	207.0	206.0
107.5°	128.0	142.0	155.0	163.0	167.0	170.0	176.0	179.0	182.0	183.0
110°	108.0	120.0	132.0	141.0	144.0	148.0	154.0	157.0	160.0	159.0



TEST NUMBER: P233254

CATALOG NUMBER: 2VRVT3-LD5-4-W-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	88.0	101.0	111.0	120.0	124.0	127.0	133.0	135.0	138.0	138.0
115°	71.0	82.0	92.0	101.0	104.0	107.0	112.0	115.0	117.0	118.0
117.5°	54.0	66.0	76.0	84.0	86.0	90.0	95.0	97.0	99.0	101.0
120°	41.0	50.0	59.0	66.0	70.0	72.0	77.0	80.0	82.0	82.0
122.5°	30.0	38.0	46.0	52.0	55.0	57.0	62.0	65.0	66.0	66.0
125°	19.0	27.0	33.0	39.0	42.0	44.0	47.0	50.0	52.0	53.0
127.5°	11.0	17.0	23.0	28.0	30.0	32.0	36.0	38.0	40.0	40.0
130°	2.0	7.0	13.0	17.0	19.0	21.0	24.0	26.0	28.0	28.0
132.5°	0.0	0.0	4.0	8.0	9.0	11.0	14.0	16.0	17.0	17.0
135°	0.0	0.0	0.0	0.0	1.0	2.0	5.0	6.0	7.0	7.0
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)