

FCC PART 15, SUBPART B and C TEST REPORT

for

WIRELESS TRANSMITTER
MODEL: LT-9

Prepared for

NEW WORLD INDUSTRIES, INC. 220 CAPITAL DRIVE N.E., SUITE 300 BUFFALO, MINNESOTA 55313

Prepared by:

Fairmoto

**KYLE FUJIMOTO** 

Approved by:\_

JAMES ROSS

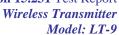
COMPATIBLE ELECTRONICS INC. 114 OLINDA DRIVE BREA, CALIFORNIA 92823 (714) 579-0500

**DATE: AUGUST 21, 2007** 

	REPORT	APPENDICES			TOTAL		
	BODY	A	В	С	D	E	
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FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wireless Transmitter
Model: LT-9

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### GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested: Wireless Transmitter

Model: LT-9 S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was not modified during the testing.

Manufacturer: New World Industries, Inc.

220 Capital Drive N.E., Suite 300

Buffalo, Minnesota 55313

Test Date: July 11, 2007

Test Specifications: EMI requirements

CFR Title 47, Part 15 Subpart B; and Subpart C, Sections 15.205, 15.209, and 15.231

Test Procedure: ANSI C63.4: 2003

Test Deviations: The test procedure was not deviated from during the testing.

#### SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz	This test was not performed because the EUT operates on batteries only and cannot be plugged into the AC public mains.
2	Radiated RF Emissions, 10 kHz - 4200 MHz	Complies with the <b>Class B</b> limits of CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.
3	-20 dB Bandwidth of the Fundamental	Complies with the limits of Subpart C, sections 15.231 [c].





## 1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Wireless Transmitter, Model: LT-9. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2003. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.



#### ADMINISTRATIVE DATA

## 2.1 Location of Testing

2.

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

### 2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

## 2.3 Cognizant Personnel

New World Industries, Inc.

Greg P. Anderson President

Compatible Electronics, Inc.

Kyle Fujimoto Test Engineer James Ross Test Engineer

## 2.4 Date Test Sample was Received

The test sample was received on July 11, 2007.

### 2.5 Disposition of the Test Sample

The test sample was has not been returned to New World Industries, Inc. as of August 21, 2007.

#### 2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF Radio Frequency

EMI Electromagnetic Interference

EUT Equipment Under Test

P/N Part Number S/N Serial Number HP Hewlett Packard

ITE Information Technology Equipment

CML Corrected Meter Limit

LISN Line Impedance Stabilization Network

PCB Printed Circuit Board

TX Transmit RX Receive





## 3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4: 2003	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz



Model: LT-9



## DESCRIPTION OF TEST CONFIGURATION

## 4.1 Description of Test Configuration - EMI

Setup and operation of the equipment under test.

Specifics of the EUT and Peripherals Tested

The Wireless Transmitter, Model: LT-9 (EUT) was tested as a stand alone unit and tested in three orthogonal axis. The EUT was continuously transmitting.

The antenna is connected to the PCB of the EUT via a screw.

After the transmitter is activated by pressing the button, the transmission will cease operation within 5 seconds once the button is released.

The final radiated data was taken in the mode described above. Please see Appendix E for the data sheets.





## 4.1.1 Cable Construction and Termination

There were no external cables connected to the EUT.







## 5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

## 5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
WIRELESS	NEW WORLD	LT-9	N/A	VJ7-LT-9
TRANSMITTER (EUT)	INDUSTRIES, INC.			





## 5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU- FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE	
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS						
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	June 4, 2007	June 4, 2008	
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22279	June 4, 2007	June 4, 2008	
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	June 4, 2007	June 4, 2008	
Computer	Hewlett Packard	4530	US91912319	N/A	N/A	
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A	
	RF RAD	IATED EMISSI	ONS TEST EQU	IPMENT		
Radiated Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A	
Preamplifier	Com-Power	PA-103	1582	January 16, 2007	Jan. 19, 2008	
Biconical Antenna	Com-Power	AB-900	15251	March 8, 2007	March 8, 2008	
Log Periodic Antenna	Com-Power	AL-100	16241	July 17, 2006	July 17, 2007	
Loop Antenna	Com Power	AL-130	17089	September 21, 2005	Sept. 21, 2007	
Horn Antenna	Com Power	AH-118	10073	July 17, 2006	July 17, 2008	
Microwave Preamplifier	Com Power	PA-122	181921	February 27, 2007	Feb. 27, 2008	
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A	



Model: LT-9

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wireless Transmitter

### 6. TEST SITE DESCRIPTION

## **6.1** Test Facility Description

Please refer to section 2.1 and 7.1 of this report for EMI test location.

## 6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.





## 7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

## 7.1 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer was used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-103 was used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies above 1 GHz. The spectrum analyzer was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer records the highest measured reading over all the sweeps.

The average readings were obtained by a "duty cycle correction factor", derived from 20 log (time on / time off of one pulse train).

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 4.20 GHz	1 MHz	Horn Antenna

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.



Wireless Transmitter Model: LT-9



#### 7.2 **Radiated Emissions (Spurious and Harmonics) Test (continued)**

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance to obtain final test data. The final qualification data sheets are located in Appendix E.

#### **Test Results:**

The EUT complies with the limits of CFR Title 47, Part 15, Subpart B; and Subpart C, section 15.205, 15.209 and 15.231 for radiated emissions.



FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wireless Transmitter
Model: LT-9

## 7.3 Bandwidth of the Fundamental

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. Data sheets of the -20 dB bandwidth are located in Appendix E.

### **Test Results:**

The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231 [c].



FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wireless Transmitter
Model: LT-9

## 8. CONCLUSIONS

The Wireless Transmitter, Model: LT-9 meets all of the Class B specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.







Wireless Transmitter Model: LT-9

## **APPENDIX A**

# LABORATORY RECOGNITIONS





## LABORATORY RECOGNITIONS

#### Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

**Industry Canada** 

Radio-Frequency Technologies (Competent Body)



Model: LT-9



## APPENDIX B

# **MODIFICATIONS TO THE EUT**





# MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 or FCC Class B specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.







## **APPENDIX C**

# ADDITIONAL MODELS COVERED UNDER THIS REPORT





# ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Wireless Transmitter Model: LT-9 S/N: N/A

There were no additional models covered under this report.





Model: LT-9



APPENDIX D

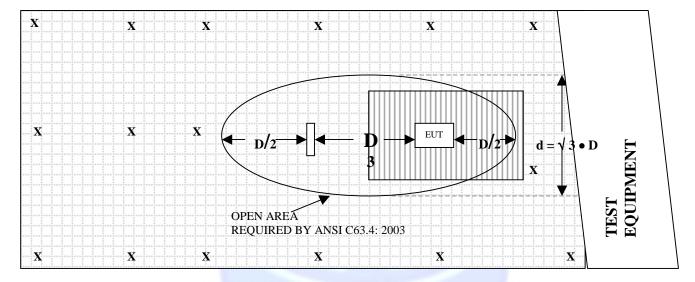
DIAGRAMS, CHARTS, AND PHOTOS





## FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED TEST SITE

### **OPEN LAND > 15 METERS**



## **OPEN LAND > 15 METERS**

X = GROUND RODS = GROUND SCREEN

D = TEST DISTANCE (meters) = WOOD COVER





## **COM-POWER AB-900**

# **BICONICAL ANTENNA**

S/N: 15251

CALIBRATION DATE: MARCH 8, 2007

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	11.9	100	10.6
35	12.1	120	12.5
40	10.7	140	11.4
45	10.9	160	12.5
50	13.4	180	15.1
60	11.6	200	16.1
70	9.5	250	14.3
80	6.9	275	18.2
90	6.6	300	20.5





# COM-POWER AL-100

# LOG PERIODIC ANTENNA

S/N: 16241

CALIBRATION DATE: JULY 17, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.38	700	20.13
400	14.55	800	19.71
500	15.75	900	21.88
600	17.30	1000	22.43



Wireless Transmitter

Model: LT-9

# **COM-POWER PA-103**

## **PREAMPLIFIER**

S/N: 1582

CALIBRATION DATE: JANUARY 16, 2007

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
30	33.0	300	33.0
40	33.0	350	32.7
50	33.0	400	32.7
60	33.0	450	32.5
70	33.1	500	32.5
80	33.1	550	32.4
90	33.1	600	32.4
100	33.1	650	32.4
125	33.2	700	32.3
150	32.9	750	32.1
175	33.1	800	32.1
200	32.9	850	32.3
225	32.9	900	32.1
250	32.9	950	32.2
275	32.9	1000	32.1



Model: LT-9



# **COM-POWER PA-122**

## **PREAMPLIFIER**

S/N: 181921

# CALIBRATION DATE: FEBRUARY 27, 2007

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
` ,	, ,	` ,	, ,
1.0	36.2	10.0	35.1
1.5	35.4	10.5	34.8
2.0	34.7	11.0	33.5
2.5	34.8	11.5	33.9
3.0	34.8	12.0	34.0
3.5	34.6	12.5	34.4
4.0	34.2	13.0	34.4
4.5	34.1	13.5	34.7
5.0	34.1	14.0	36.0
5.5	34.7	14.5	35.7
6.0	35.6	15.0	36.1
6.5	36.8	15.5	35.6
7.0	36.7	16.0	35.4
7.5	34.9	16.5	35.3
8.0	33.3	17.0	34.9
8.5	33.6	17.5	33.7
9.0	34.6	18.0	33.3
9.5	35.9		





Wireless Transmitter

Model: LT-9

# **COM POWER AH-118**

# HORN ANTENNA

S/N: 10073

CALIBRATION DATE: JULY 17, 2006

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
1.0	25.331	10.0	42.391
1.5	27.507	10.5	39.194
2.0	31.581	11.0	38.504
2.5	30.906	11.5	40.724
3.0	30.276	12.0	41.079
3.5	30.396	12.5	41.014
4.0	30.881	13.0	41.201
4.5	32.77	13.5	42.335
5.0	34.067	14.0	43.248
5.5	33.914	14.5	45.639
6.0	34.028	15.0	43.197
6.5	35.779	15.5	41.751
7.0	38.347	16.0	42.462
7.5	39.096	16.5	41.908
8.0	39.377	17.0	40.277
8.5	38.646	17.5	48.117
9.0	37.438	18.0	54.113
9.5	38.403		





# COM-POWER AL-130

## **LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: SEPTEMBER 21, 2005

FREQUENCY	MAGNETIC	ELECTRIC
(MHz)	(dB/m)	(dB/m)
0.009	-42.84	8.66
0.01	-41.93	9.57
0.02	-41.29	10.21
0.05	-42.37	9.13
0.07	-41.8	9.7
0.1	-41.83	9.67
0.2	-44.13	7.37
0.3	-41.73	9.77
0.5	-41.8	9.7
0.7	-41.53	9.97
1	-41.46	10.04
2	-41.14	10.36
3	-41.26	10.24
4	-41.46	10.04
5	-41.10	10.40
10	-40.83	10.67
15	-41.47	10.03
20	-35.44	16.06
25	-42.37	9.13
30	-42.94	8.56





### **FRONT VIEW**

NEW WORLD INDUSTRIES, INC.
WIRELESS TRANSMITTER
MODEL: LT-9
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHZ





### **REAR VIEW**

NEW WORLD INDUSTRIES, INC.
WIRELESS TRANSMITTER
MODEL: LT-9
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHZ



### **FRONT VIEW**

NEW WORLD INDUSTRIES, INC.
WIRELESS TRANSMITTER
MODEL: LT-9
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHZ



### **REAR VIEW**

NEW WORLD INDUSTRIES, INC.
WIRELESS TRANSMITTER
MODEL: LT-9
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHZ

Page E1

Wireless Transmitter
Model: LT-9

**APPENDIX E** 

**DATA SHEETS** 



Model: LT-9



RADIATED EMISSIONS

DATA SHEETS



FCC 15.231

New World Industries, Inc. Date: 7/11/07 Wireless Transmiter Lab: A

Model: LT-9 Tested By: Kyle Fujimoto

Fundamental Frequency Duty Cycle: 48.28%

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
418	73.39	V	100.28	-26.89	Peak	2	90	X-Axis
418	67.07	V	80.28	-13.21	Avg	2	90	Vertical Polarization
418	86.29	V	100.28	-13.99	Peak	1.5	100	Y-Axis
418	79.97	V	80.28	-0.31	Avg	1.5	100	Vertical Polarization
418	78.09	V	100.28	-22.19	Peak	1	125	Z-Axis
418	71.77	V	80.28	-8.51	Avg	1	125	Vertical Polarization
418	86.19	Н	100.28	-14.09	Peak	1	90	X-Axis
418	79.87	Н	80.28	-0.41	Avg	1	90	Horizontal Polarization
						_		
418	73.28	H	100.28	-27	Peak	1	135	Y-Axis
418	66.96	Н	80.28	-13.32	Avg	1	135	Horizontal Polarization
440	00.00		400.00	4.4.40	D 1		00	
418	86.09	H	100.28	-14.19	Peak	1	90	Z-Axis
418	79.77	Н	80.28	-0.51	Avg	1	90	Horizontal Polarization



Customer : New World Industries, Inc. **Date:** 7/11/2007 Manufacturer : New World Industries, Inc. **Time:** 9:29:31

Eut name : Wireless Transmitter

Lab : A Model Test Distance : 3 Meters : LT9

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : 2nd Harmonic

Vertical and Horizontal Polarization

FCC 15.231

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
	X-Axis, Ho	orizontal Po	olarizati	on				
1H	836.086	57.20	2.90	20.52	32.25	48.38	60.28	-1.19
	Y-Axis, Ho	orizontal Po	olarizati	on				
2H	836.086		2.90	20.52	32.25	29.88	60.28	-30.40
	Z-Axis, Ho	orizontal Po	olarizati	on				
3H	836.063	53.40	2.90	20.52	32.25	44.58	60.28	-15.70
	Z-Axis, Ve	ertical Pola	arization					
4V	836.063	41.90	2.90	20.52	32.25	33.08	60.28	-27.20
	Y-Axis, Ve	ertical Pola	arization					
5V	836.069	55.10	2.90	20.52	32.25	46.28	60.28	-14.00
	X-Axis, Ve	ertical Pola	arization					
6V	836.123	40.60	2.90	20.52	32.25	31.78	60.28	-28.50



Customer : New World Industries, Inc. **Date:** 7/11/2007 **Time :** 14:36:43 Manufacturer : New World Industries, Inc. Lab : A

Eut name : Wireless Transmitter

Model Test Distance : 3 Meters : LT9

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : X-Axis, Vertical Polarization

Harmonics above 1 GHz

FCC 15.231

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dВ
1V	1254.230	42.40	3.46	26.55	35.75	36.65	54.00	-17.35
2V	1672.230	43.50	3.75	29.05	35.14	41.16	54.00	-12.84
3V	2090.230	45.60	4.40	31.45	34.72	46.73	60.28	-13.55
4V	2508.230	43.00	5.02	30.89	34.80	44.12	60.28	-16.16
5V	2926.230	41.30	6.20	30.36	34.80	43.06	60.28	-17.22
6V	3344.230	39.00	7.22	30.36	34.66	41.92	60.28	-18.36
7V	3762.230	37.90	6.71	30.66	34.38	40.88	54.00	-13.12
8V	4180.230	39.80	7.77	31.59	34.16	45.00	54.00	-9.00



Customer : New World Industries, Inc. **Date:** 7/11/2007 Time : 14:01:20 Manufacturer : New World Industries, Inc.

Lab : A Eut name : Wireless Transmitter

Model Test Distance : 3 Meters : LT9

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : X-Axis, Horizontal Polarization

Harmonics Above 1 GHz

No Emissions Above 2507.95 MHz Found

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1H	1253.950	42.90	3.45	26.55	35.75	37.15	54.00	-16.85
2H	1671.950	43.00	3.75	29.04	35.14	40.65	54.00	-13.35
3H	2089.950	44.10	4.40	31.45	34.72	45.23	60.28	-15.05
4H	2507.950	39.90	5.02	30.90	34.80	41.02	60.28	-19.26



Customer: New World Industries, Inc.Date: 7/11/2007Manufacturer: New World Industries, Inc.Time: 14:46:05

Lab : A

Eut name : Wireless Transmitter

Model : LT9 Test Distance : 3 Meters

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : Y-Axis, Vertical Polarization

Harmonics Above 1 GHz FCC 15.231

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1V	1254.230	42.70	3.46	26.55	35.75	36.95	54.00	-17.05
2V	1672.230	42.80	3.75	29.05	35.14	40.46	54.00	-13.54
3V	2090.450	42.90	4.40	31.45	34.72	44.03	60.28	-16.25
4V	2508.450	40.50	5.02	30.89	34.80	41.62	60.28	-18.66
5V	2926.450	39.20	6.20	30.36	34.80	40.96	60.28	-19.32
6V	3344.450	40.80	7.22	30.36	34.66	43.72	60.28	-16.56
7V	3762.450	41.70	6.71	30.66	34.38	44.69	54.00	-9.31
8V	4180.450	39.60	7.77	31.59	34.16	44.80	54.00	-9.20



Customer: New World Industries, Inc.Date: 7/11/2007Manufacturer: New World Industries, Inc.Time: 14:06:58

Eut name : Wireless Transmitter Lab : A

Model : LT9 Test Distance : 3 Meters

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : Y-Axis, Horizontal Polarization Harmonics Above 1 GHz

FCC 15.231

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dВ	dВ	dBuV	dBuV/m	dВ
1H	1253.950	42.10	3.45	26.55	35.75	36.35	54.00	-17.65
2H	1672.170	42.10	3.75	29.05	35.14	39.76	54.00	-14.24
3Н	2090.170	44.60	4.40	31.45	34.72	45.73	60.28	-14.55
4H	2508.170	37.10	5.02	30.89	34.80	38.22	60.28	-22.06
5H	2926.170	42.90	6.20	30.36	34.80	44.66	60.28	-15.62
6Н	3344.170	42.50	7.22	30.36	34.66	45.42	60.28	-14.86
7н	3762.170	41.00	6.71	30.66	34.38	43.98	54.00	-10.02
8H	4180.170	42.50	7.77	31.59	34.16	47.70	54.00	-6.30



Customer : New World Industries, Inc. **Date:** 7/11/2007 Manufacturer : New World Industries, Inc. **Time :** 14:23:10 Lab : A

Eut name : Wireless Transmitter

Model Test Distance : 3 Meters : LT9

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : Z-Axis, Vertical Polarization

Harmonics Above 1 GHz FCC 15.231

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1V	1253.940	42.10	3.45	26.55	35.75	36.35	54.00	-17.65
2V	1671.940	44.50	3.75	29.04	35.14	42.15	54.00	-11.85
3V	2090.230	44.90	4.40	31.45	34.72	46.03	60.28	-14.25
4V	2508.230	39.70	5.02	30.89	34.80	40.82	60.28	-19.46
5V	2926.230	38.90	6.20	30.36	34.80	40.66	60.28	-19.62
6V	3344.230	41.20	7.22	30.36	34.66	44.12	60.28	-16.16
7V	3762.390	40.10	6.71	30.66	34.38	43.09	54.00	-10.91
8V	4180.390	38.20	7.77	31.59	34.16	43.40	54.00	-10.60



Customer: New World Industries, Inc.Date: 7/11/2007Manufacturer: New World Industries, Inc.Time: 14:17:14

Eut name : Wireless Transmitter Lab : A

Model : LT9 Test Distance : 3 Meters

Serial # : N/A

**Specification**: FCC 15.231

Distance correction factor (20 \* log(test/spec) : 0.00

Test Mode : Z-Axis, Horizontal Polarization Harmonics Above 1 GHz

FCC 15.231

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dВ
1H	1254.170	39.50	3.46	26.55	35.75	33.75	54.00	-20.25
2H	1672.170	42.00	3.75	29.05	35.14	39.66	54.00	-14.34
3H	2090.170	40.90	4.40	31.45	34.72	42.03	60.28	-18.25
4H	2508.170	40.90	5.02	30.89	34.80	42.02	60.28	-18.26
5Н	2926.170	43.60	6.20	30.36	34.80	45.36	60.28	-14.92
6Н	3344.170	40.40	7.22	30.36	34.66	43.32	60.28	-16.96
7H	3762.170	38.50	6.71	30.66	34.38	41.48	54.00	-12.52
8Н	4180.170	37.90	7.77	31.59	34.16	43.10	54.00	-10.90

### FCC 15.231 and FCC Class B

New World Industries, Inc.

Date: 7/11/07

Wireless Transmiter

Lab: A

Model: LT-9 Tested By: Kyle Fujimoto

## **Digital Portion and Non-Harmonic Emissions**

Freq.	Level				Peak / QP /	Ant. Height	Table Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
								No Emissions found
								from the Digital Portion
								from 10 kHz to 4200 MHz
								for both the Vertical and
								Horizontal Polarizations
								No Emissions fround
								from the Non-Harmonic
								Emissions from 10 kHz
								to 4200 MHz for both the
								Vertical and Horizontal
								Polarizations
	,	-			-		-	

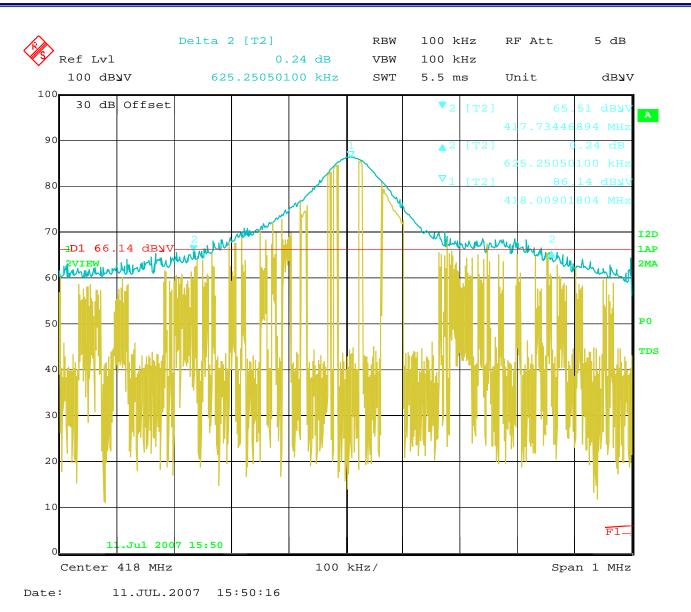


-20 dB BANDWIDTH

DATA SHEET



Wireless Transmitter Model: LT-9



-20 dB Bandwidth of the Fundamental

