



TESTING

CERT #803.01, 803.02, 803.05, 803.06

**ZILLIONTV CORPORATION
ADDENDUM TEST REPORT TO FC09-036**

FOR THE

USB BASE STATION, ZA100

**FCC PART 15 SUBPART C SECTIONS 15.207 & 15.247
AND RSS-210 ISSUE 7**

TESTING

DATE OF ISSUE: APRIL 24, 2009

PREPARED FOR:

ZillionTV Corporation
1170 Kifer Road
Sunnyvale, CA 94086

PREPARED BY:

Joyce Walker
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

W.O. No.: 89169

Date of test: March 9-10, 2009

Report No.: FC09-036A

This report contains a total of 78 pages and may be reproduced in full only. Partial reproduction may only be done with the written consent of CKC Laboratories, Inc. The results in this report apply only to the items tested, as identified herein.

TABLE OF CONTENTS

Administrative Information	3
Approvals.....	3
Summary of Results.....	4
Conditions During Testing.....	4
FCC 15.31(m) Number Of Channels.....	4
FCC 15.33(a) Frequency Ranges Tested	4
EUT Operating Frequency.....	4
Equipment Under Test (EUT) Description	5
Equipment Under Test	5
Peripheral Devices	5
Measurement Uncertainties	6
Report of Emissions Measurements.....	6
Testing Parameters.....	6
FCC 15.31(e) Voltage Variation.....	8
FCC 15.207 AC Conducted Emissions.....	10
FCC Part 15.247(a)(2) 6dB Bandwidth	30
FCC Part 15.247(b)(3) RF Power Output	35
FCC 15.247(d) OATS Radiated Spurious Emissions	38
FCC 15.247(d) Bandedge	67
FCC 15.247(e) Peak Power Spectral Density	71
RSS-210 99% Bandwidth	74

ADMINISTRATIVE INFORMATION

DATE OF TEST: March 9-10, 2009

DATE OF RECEIPT: March 9, 2009

REPRESENTATIVE: Tom Woch

MANUFACTURER:

ZillionTV Corporation
1170 Kifer Road
Sunnyvale, CA 94086

TEST LOCATION:

CKC Laboratories, Inc.
110 Olinda Place
Brea, CA 92823

TEST METHOD: ANSI C63.4 (2003), RSS-210 Issue 7 and RSS GEN Issue 2

PURPOSE OF TEST:

Original: To perform the testing of the USB Base Station, ZA100 with the requirements for FCC Part 15 Subpart C Sections 15.207 & 15.247 and RSS-210 Issue 7 devices.

Addendum A: To correct the spec limits used in section 15.247(d) OATS Radiated Spurious Emissions. No new testing was performed.

APPROVALS


Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:



Steve Behm, Director of Engineering Services

TEST PERSONNEL:



Armando Del Angel, Test Engineer



Donald Jones, Senior EMC Engineer / Lab Manager

SUMMARY OF RESULTS

Test	Specification/Method	Results
Voltage Variation	FCC 15.31(e)	Pass
Conducted Emissions	FCC 15.207	Pass
6 dB Bandwidth	FCC 15.247(a)(2)	Pass
RF Output Power	FCC 15.247(b)(3)	Pass
OATS Spurious Emissions	FCC 15.247(d)	Pass
Bandedge	FCC 15.247(d)	Pass
Peak Power Spectral Density	FCC 15.247(e)	Pass
99% Bandwidth	RSS-210 Issue 7 and RSS GEN Issue 2	Pass
Site File No.	FCC 318736 IC 3082C-1	

CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.207 Conducted Emissions: 150 kHz – 30 MHz

15.247 Radiate Emissions: 9 kHz – 10 GHz.

EUT Operating Frequency

The EUT was operating at 903 MHz – 927 MHz

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

USB Base Station

Manuf: ZillionTV Corporation
Model: ZA100
Serial: 013

Laptop

Manuf: Lenovo
Model: T61
Serial: 10156

PERIPHERAL DEVICES

The EUT was not tested with peripheral devices.

MEASUREMENT UNCERTAINTIES

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k=2$. Compliance is deemed to occur provided measurements are below the specified limits.

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within $+15^{\circ}\text{C}$ and $+35^{\circ}\text{C}$.
The relative humidity was between 20% and 75%.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $\text{dB}\mu\text{V}/\text{m}$, the spectrum analyzer reading in $\text{dB}\mu\text{V}$ was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. The following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer/receiver readings recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

FCC 15.31(e) VOLTAGE VARIATIONS

Test Equipment

Asset #	Equipment	Serial #	Cal Date	Cal Due
ANP05361	Cable 6'	51	12/30/2008	12/30/2010
AN01994	Antenna	2453	12/22/2008	12/22/2010
ANP05366	Cable 30'	11	11/5/2008	11/5/2010
ANP05371	Cable 6'	49	11/10/2008	11/10/2010
ANP05360	Cable 20'	16	11/10/2008	11/10/2010
AN01517	HP 8447D Preamp	2944A08601	7/8/2008	7/8/2010
AN02872	Agilent E4440A	MY46186330	1/31/2008	1/31/2010

Test Conditions

The EUT is transmitting. Due to the lack of antenna connectors the test will be done through radiated measurements. EUT is located on the back edge of the test table over 10cm of Styrofoam. The EUT is connected to a laptop via USB. All the laptop ports are filled per ANSI C63.4 procedures. The fundamental's emission will be maximized per ANSI C63.4 procedures. The input voltage to the laptop will be varied from 100% of the nominal voltage to 85% and 115% to analyze any change in the power output of the transmitter due to the voltage variations. EMI test will be used with the solely purpose of accurate Field Strength data gathering. Same calculation from the RF power output test will be done in order to convert the field strength to power.

Test Setup Photos



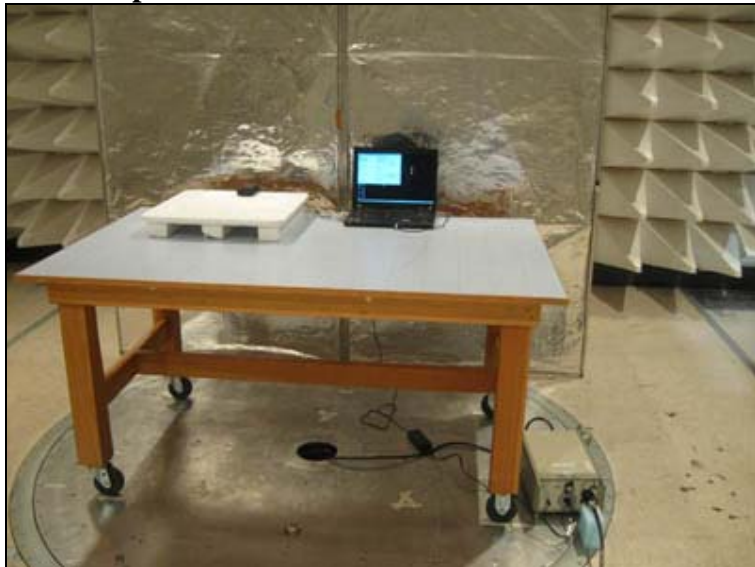


Test Data

	85%		100%		115%		Limit
	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	
LOW	-7.52dBm	-7.72dBm	-7.52dBm	-7.82dBm	-7.52dBm	-7.82dBm	30dBm
MID	-4.72dBm	-4.22dBm	-4.52dBm	-4.32dBm	-4.52dBm	-4.32dBm	30dBm
HIGH	-1.92dBm	-2.52dBm	-1.72dBm	-2.52dBm	-1.72dBm	-2.42dBm	30dBm

FCC 15.207 AC CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.207 - AVE**

Work Order #: **89169**

Date: 3/10/2009

Test Type: **Conducted Emissions**

Time: 18:32:16

Equipment: **USB Base Station**

Sequence#: 4

Manufacturer: ZillionTV Corporation

Tested By: Armando Del Angel

Model: ZA100

110V 60Hz

S/N: 013

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Attenuator	9912	03/21/2008	03/21/2010	ANP05503
Filter	G7752	07/21/2008	07/21/2010	AN02611
EMCO LISN	9606-1049	06/01/2007	06/01/2009	AN01492

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp 21°

Rel. Humidity 26%

Pressure 102.1kPa

Testing Conducted Emissions per FCC 15.207

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the

wooden table on styrofoam. The transmitter will be transmitting in the LOW channel.

Vertical Ground plane is located 40cm from the back of the table.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 150kHz - 30MHz.

Frequency: 150kHz-30MHz RBW= 9kHz, VBW = 9kHz

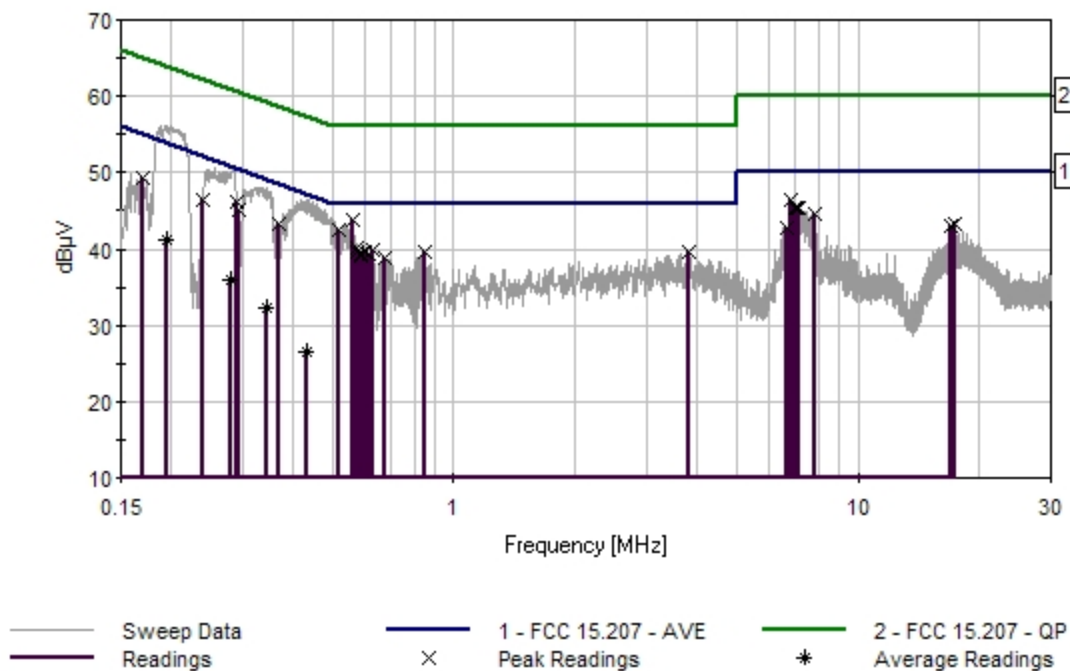
Transducer Legend:

T1=CAB-ANP05371	T2=FIL-AN02611-072108
T3=CAB-ANP05366	T4=ATT-ANP5503-032108
T5=CAB-ANP05360	T6=CDN-AN01492-060107 - Line

Measurement Data:		Reading listed by margin.					Test Lead: Line				
#	Freq	Rdng	T1 T5	T2 T6	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	559.417k	33.3	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	43.9	46.0	-2.1	Line
2	519.421k	31.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	42.5	46.0	-3.5	Line
3	521.602k	31.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	42.5	46.0	-3.5	Line
4	6.833M	35.3	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	46.3	50.0	-3.7	Line
5	291.078k	35.8	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	46.1	50.5	-4.4	Line
6	6.950M	34.4	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	45.4	50.0	-4.6	Line
7	7.085M	34.3	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	45.3	50.0	-4.7	Line
8	7.112M	34.3	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	45.3	50.0	-4.7	Line
9	293.260k	34.8	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	45.1	50.4	-5.3	Line
10	368.162k	32.7	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	43.2	48.5	-5.3	Line
11	7.824M	33.7	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.7	50.0	-5.3	Line
12	170.362k	38.6	+0.0 +0.0	+0.4 +0.1	+0.0	+10.1	+0.0	49.2	54.9	-5.7	Line
13	237.992k	36.0	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	46.4	52.2	-5.8	Line
14	578.324k	29.5	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	40.1	46.0	-5.9	Line
15	632.138k	29.2	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.8	46.0	-6.2	Line
16	576.143k	29.1	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.7	46.0	-6.3	Line
17	602.322k	29.0	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.6	46.0	-6.4	Line
18	845.209k	29.0	+0.0 +0.1	+0.2 +0.1	+0.1	+10.1	+0.0	39.6	46.0	-6.4	Line
19	3.799M	28.8	+0.1 +0.2	+0.1 +0.1	+0.2	+10.1	+0.0	39.6	46.0	-6.4	Line
20	588.505k	28.7	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.3	46.0	-6.7	Line
21	619.048k	28.7	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.3	46.0	-6.7	Line
22	17.418M	31.3	+0.2 +0.3	+0.2 +0.9	+0.3	+10.1	+0.0	43.3	50.0	-6.7	Line

23	585.596k	28.5	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.1	46.0	-6.9	Line
24	16.923M	31.0	+0.2 +0.3	+0.2 +0.9	+0.3	+10.1	+0.0	43.0	50.0	-7.0	Line
25	676.497k	28.3	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	38.9	46.0	-7.1	Line
26	6.679M	31.8	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	42.8	50.0	-7.2	Line
27	195.087k	30.9	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	41.3	53.8	-12.5	Line
^	195.087k	45.8	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	56.2	53.8	+2.4	Line
29	281.449k	25.6	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	35.9	50.8	-14.9	Line
^	281.449k	40.7	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	51.0	50.8	+0.2	Line
31	343.437k	21.7	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	32.2	49.1	-16.9	Line
^	343.437k	37.6	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	48.1	49.1	-1.0	Line
33	431.429k	15.8	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	26.4	47.2	-20.8	Line
^	431.429k	35.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	46.5	47.2	-0.7	Line

CKC Laboratories Date: 3/10/2009 Time: 18:32:16 Zillion TV Corporation. WO#: 89169
FCC 15.207 - AVE Test Lead: Line 110V 60Hz Sequence#: 4 Polarity: Line
Notes:



Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.207 - AVE**

Work Order #: **89169**

Test Type: **Conducted Emissions**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 17:36:34

Sequence#: 1

Tested By: Armando Del Angel

110V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Attenuator	9912	03/21/2008	03/21/2010	ANP05503
Filter	G7752	07/21/2008	07/21/2010	AN02611
EMCO LISN	9606-1049	06/01/2007	06/01/2009	AN01492

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp 21°

Rel. Humidity 26%

Pressure 102.1kPa

Testing Conducted Emissions per FCC 15.207

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the MID channel.

Vertical Ground plane is located 40cm from the back of the table.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 150kHz - 30MHz.

Frequency: 150kHz-30MHz RBW= 9kHz, VBW = 9kHz

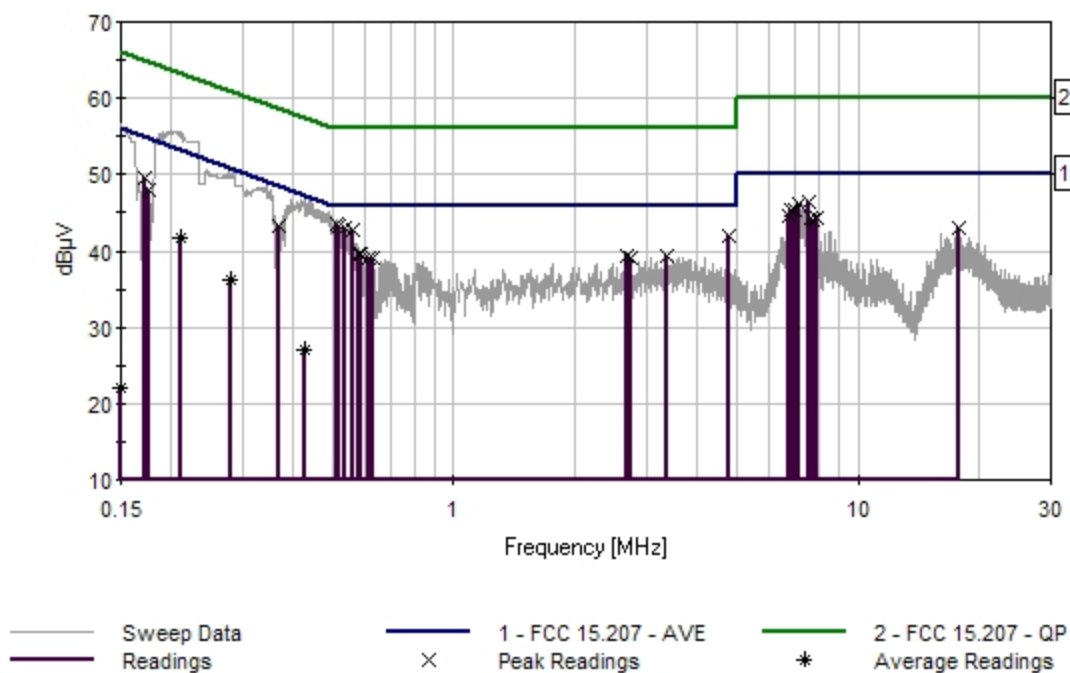
Transducer Legend:

T1=CAB-ANP05371	T2=FIL-AN02611-072108
T3=CAB-ANP05366	T4=ATT-ANP5503-032108
T5=CAB-ANP05360	T6=CDN-AN01492-060107 - Line

Measurement Data:		Reading listed by margin.					Test Lead: Line				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	T5 dB	T6 dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	515.057k	32.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	43.5	46.0	-2.5	Line
2	520.148k	32.7	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	43.3	46.0	-2.7	Line
3	539.782k	32.5	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	43.1	46.0	-2.9	Line
4	561.599k	32.2	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	42.8	46.0	-3.2	Line
5	7.535M	35.4	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	46.4	50.0	-3.6	Line
6	7.112M	35.2	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	46.2	50.0	-3.8	Line
7	4.790M	31.0	+0.1 +0.2	+0.1 +0.2	+0.2	+10.1	+0.0	41.9	46.0	-4.1	Line
8	6.959M	34.5	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	45.5	50.0	-4.5	Line
9	6.815M	34.3	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	45.3	50.0	-4.7	Line
10	172.543k	39.0	+0.0 +0.0	+0.4 +0.1	+0.0	+10.1	+0.0	49.6	54.8	-5.2	Line
11	368.889k	32.8	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	43.3	48.5	-5.2	Line
12	6.770M	33.6	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.6	50.0	-5.4	Line
13	6.752M	33.5	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.5	50.0	-5.5	Line
14	7.652M	33.4	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.4	50.0	-5.6	Line
15	7.896M	33.4	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.4	50.0	-5.6	Line
16	7.697M	33.0	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.0	50.0	-6.0	Line
17	582.688k	29.0	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.6	46.0	-6.4	Line
18	588.505k	28.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.5	46.0	-6.5	Line
19	3.382M	28.6	+0.1 +0.2	+0.1 +0.1	+0.2	+10.1	+0.0	39.4	46.0	-6.6	Line
20	176.907k	37.4	+0.0 +0.0	+0.3 +0.1	+0.0	+10.1	+0.0	47.9	54.6	-6.7	Line
21	2.676M	28.7	+0.1 +0.1	+0.1 +0.1	+0.1	+10.1	+0.0	39.3	46.0	-6.7	Line
22	2.748M	28.5	+0.1 +0.1	+0.1 +0.1	+0.1	+10.1	+0.0	39.1	46.0	-6.9	Line

23	613.230k	28.4	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.0	46.0	-7.0	Line
24	615.412k	28.4	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.0	46.0	-7.0	Line
25	633.592k	28.4	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.0	46.0	-7.0	Line
26	17.833M	31.0	+0.2 +0.3	+0.2 +0.9	+0.3	+10.1	+0.0	43.0	50.0	-7.0	Line
27	210.358k	31.2	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	41.6	53.2	-11.6	Line
^	210.358k	45.3	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	55.7	53.2	+2.5	Line
29	281.192k	25.9	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	36.2	50.8	-14.6	Line
^	281.192k	40.9	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	51.2	50.8	+0.4	Line
31	429.974k	16.4	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	27.0	47.3	-20.3	Line
^	429.974k	36.5	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	47.1	47.3	-0.2	Line
33	150.000k	8.9	+0.0 +0.0	+3.0 +0.1	+0.0	+10.1	+0.0	22.1	56.0	-33.9	Line
^	150.000k	39.7	+0.0 +0.0	+3.0 +0.1	+0.0	+10.1	+0.0	52.9	56.0	-3.1	Line

CKC Laboratories Date: 3/10/2009 Time: 17:36:34 Zillion TV Corporation. WO#: 89169
FCC 15.207 - AVE Test Lead: Line 110V 60Hz Sequence#: 1 Polarity: Line
Notes:



Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.207 - AVE**

Work Order #: **89169**

Test Type: **Conducted Emissions**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 18:37:57

Sequence#: 5

Tested By: Armando Del Angel

110V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Attenuator	9912	03/21/2008	03/21/2010	ANP05503
Filter	G7752	07/21/2008	07/21/2010	AN02611
EMCO LISN	9606-1049	06/01/2007	06/01/2009	AN01492

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp 21°

Rel. Humidity 26%

Pressure 102.1kPa

Testing Conducted Emissions per FCC 15.207

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the HIGH channel.

Vertical Ground plane is located 40cm from the back of the table.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 150kHz - 30MHz.

Frequency: 150kHz-30MHz RBW= 9kHz, VBW = 9kHz

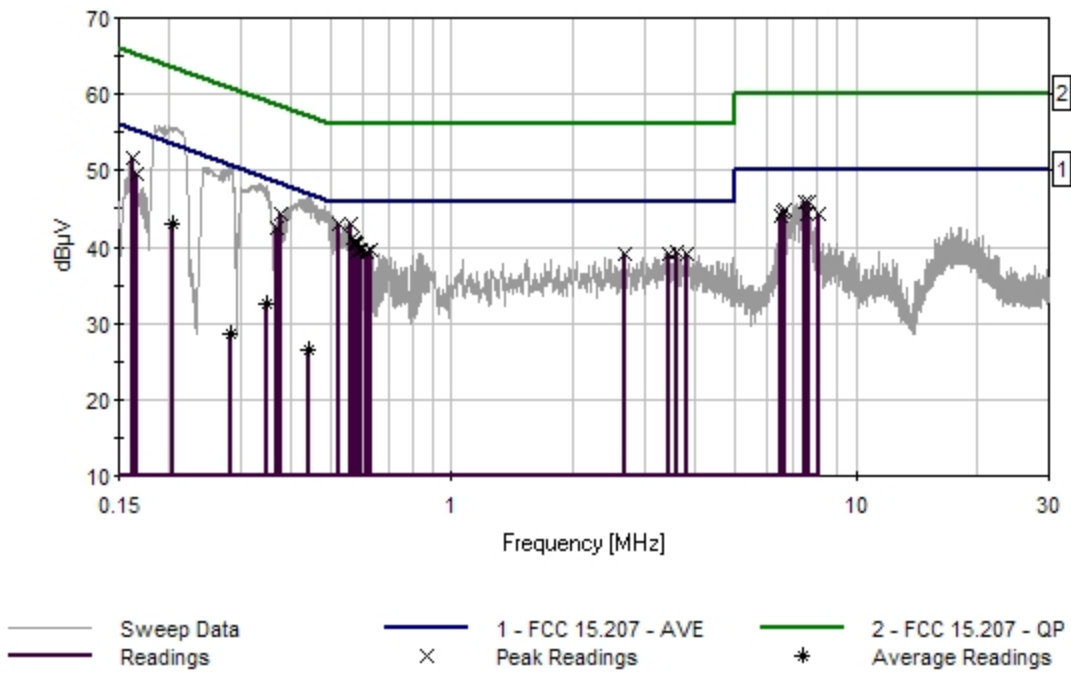
Transducer Legend:

T1=CAB-ANP05371	T2=FIL-AN02611-072108
T3=CAB-ANP05366	T4=ATT-ANP5503-032108
T5=CAB-ANP05360	T6=CDN-AN01492-060107 - Line

Measurement Data:		Reading listed by margin.					Test Lead: Line				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	T5 dB	T6 dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	528.146k	32.5	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	43.1	46.0	-2.9	Line
2	559.416k	32.5	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	43.1	46.0	-2.9	Line
3	162.362k	40.9	+0.0 +0.0	+0.6 +0.1	+0.0	+10.1	+0.0	51.7	55.3	-3.6	Line
4	7.472M	35.0	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	46.0	50.0	-4.0	Line
5	377.615k	33.7	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	44.2	48.3	-4.1	Line
6	7.607M	34.8	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	45.8	50.0	-4.2	Line
7	571.779k	30.6	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	41.2	46.0	-4.8	Line
8	6.697M	33.8	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.8	50.0	-5.2	Line
9	575.415k	30.1	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	40.7	46.0	-5.3	Line
10	6.607M	33.5	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.5	50.0	-5.5	Line
11	578.323k	29.8	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	40.4	46.0	-5.6	Line
12	7.535M	33.4	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.4	50.0	-5.6	Line
13	8.076M	33.4	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.4	50.0	-5.6	Line
14	165.270k	38.8	+0.0 +0.0	+0.5 +0.1	+0.0	+10.1	+0.0	49.5	55.2	-5.7	Line
15	582.687k	29.7	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	40.3	46.0	-5.7	Line
16	6.490M	33.1	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	44.1	50.0	-5.9	Line
17	367.434k	31.9	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	42.4	48.6	-6.2	Line
18	629.955k	29.0	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.6	46.0	-6.4	Line
19	589.231k	28.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.5	46.0	-6.5	Line
20	596.504k	28.9	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.5	46.0	-6.5	Line
21	3.586M	28.6	+0.1 +0.2	+0.1 +0.1	+0.2	+10.1	+0.0	39.4	46.0	-6.6	Line
22	581.232k	28.7	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.3	46.0	-6.7	Line

23	614.684k	28.7	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	39.3	46.0	-6.7	Line
24	2.680M	28.6	+0.1 +0.1	+0.1 +0.1	+0.1	+10.1	+0.0	39.2	46.0	-6.8	Line
25	3.807M	28.4	+0.1 +0.2	+0.1 +0.1	+0.2	+10.1	+0.0	39.2	46.0	-6.8	Line
26	3.454M	28.3	+0.1 +0.2	+0.1 +0.1	+0.2	+10.1	+0.0	39.1	46.0	-6.9	Line
27	204.539k	32.6	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	43.0	53.4	-10.4	Line
^	204.539k	45.3	+0.0 +0.0	+0.2 +0.1	+0.0	+10.1	+0.0	55.7	53.4	+2.3	Line
29	348.526k	22.0	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	32.5	49.0	-16.5	Line
^	348.526k	37.5	+0.1 +0.1	+0.1 +0.1	+0.0	+10.1	+0.0	48.0	49.0	-1.0	Line
31	440.881k	15.8	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	26.4	47.0	-20.6	Line
^	440.881k	35.8	+0.1 +0.1	+0.2 +0.1	+0.0	+10.1	+0.0	46.4	47.0	-0.6	Line
33	285.259k	18.4	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	28.7	50.7	-22.0	Line
^	285.259k	40.4	+0.0 +0.0	+0.1 +0.1	+0.0	+10.1	+0.0	50.7	50.7	+0.0	Line

CKC Laboratories Date: 3/10/2009 Time: 18:37:57 Zillion TV Corporation. WO#: 89169
FCC 15.207 - AVE Test Lead: Line 110V 60Hz Sequence#: 5 Polarity: Line
Notes:



Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.207 - AVE**

Work Order #: **89169**

Test Type: **Conducted Emissions**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 18:04:56

Sequence#: 3

Tested By: Armando Del Angel

110V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Attenuator	9912	03/21/2008	03/21/2010	ANP05503
Filter	G7752	07/21/2008	07/21/2010	AN02611
EMCO LISN	9606-1049	06/01/2007	06/01/2009	AN01492

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp 21°

Rel. Humidity 26%

Pressure 102.1kPa

Testing Conducted Emissions per FCC 15.207

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the LOW channel.

Vertical Ground plane is located 40cm from the back of the table.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 150kHz - 30MHz.

Frequency: 150kHz-30MHz RBW= 9kHz, VBW = 9kHz

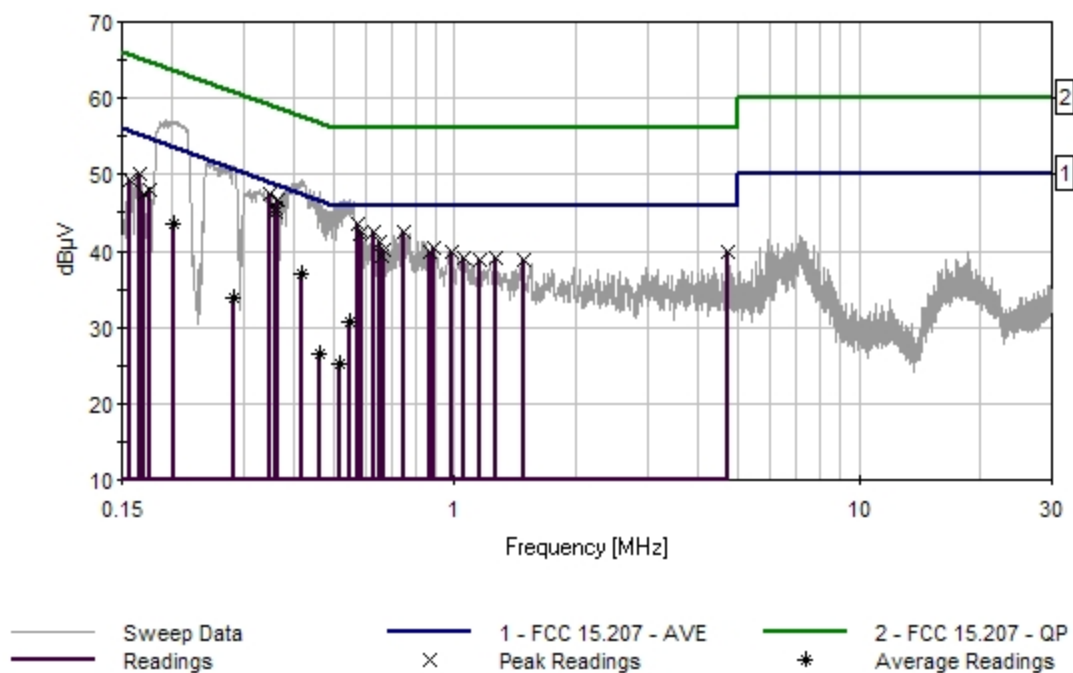
Transducer Legend:

T1=CAB-ANP05371	T2=FIL-AN02611-072108
T3=CAB-ANP05366	T4=ATT-ANP5503-032108
T5=CAB-ANP05360	T6=CDN-AN01492-060107 - Neutral

Measurement Data:		Reading listed by margin.					Test Lead: Neutral				
#	Freq	Rdng	T1 T5	T2 T6	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	347.072k	36.9	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	47.5	49.0	-1.5	Neutr
2	363.798k	36.1	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	46.7	48.6	-1.9	Neutr
3	572.506k	32.9	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	43.6	46.0	-2.4	Neutr
4	360.889k	35.1	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	45.7	48.7	-3.0	Neutr
5	745.581k	31.8	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	42.5	46.0	-3.5	Neutr
6	585.595k	31.7	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	42.4	46.0	-3.6	Neutr
7	632.864k	31.7	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	42.4	46.0	-3.6	Neutr
8	358.707k	34.5	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	45.1	48.8	-3.7	Neutr
9	579.778k	31.6	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	42.3	46.0	-3.7	Neutr
10	654.680k	30.4	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	41.1	46.0	-4.9	Neutr
11	165.998k	39.2	+0.0 +0.0	+0.5 +0.2	+0.0	+10.1	+0.0	50.0	55.2	-5.2	Neutr
12	889.963k	29.7	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	40.4	46.0	-5.6	Neutr
13	667.043k	29.4	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	40.1	46.0	-5.9	Neutr
14	987.776k	29.3	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	40.0	46.0	-6.0	Neutr
15	872.115k	29.2	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	39.9	46.0	-6.1	Neutr
16	4.722M	28.8	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	39.8	46.0	-6.2	Neutr
17	156.544k	37.6	+0.0 +0.0	+1.4 +0.2	+0.0	+10.1	+0.0	49.3	55.6	-6.3	Neutr
18	176.906k	37.4	+0.0 +0.0	+0.3 +0.2	+0.0	+10.1	+0.0	48.0	54.6	-6.6	Neutr
19	657.589k	28.7	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	39.4	46.0	-6.6	Neutr
20	1.056M	28.5	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	39.2	46.0	-6.8	Neutr
21	1.268M	28.5	+0.0 +0.1	+0.1 +0.2	+0.1	+10.1	+0.0	39.1	46.0	-6.9	Neutr
22	1.158M	28.2	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	38.9	46.0	-7.1	Neutr

23	1.477M	28.1	+0.1 +0.1	+0.1 +0.2	+0.1	+10.1	+0.0	38.8	46.0	-7.2	Neutr
24	170.361k	36.8	+0.0 +0.0	+0.4 +0.2	+0.0	+10.1	+0.0	47.5	54.9	-7.4	Neutr
25	201.631k	33.1	+0.0 +0.0	+0.2 +0.2	+0.0	+10.1	+0.0	43.6	53.5	-9.9	Neutr
^	201.631k	46.5	+0.0 +0.0	+0.2 +0.2	+0.0	+10.1	+0.0	57.0	53.5	+3.5	Neutr
27	419.065k	26.3	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	36.9	47.5	-10.6	Neutr
^	419.065k	38.6	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	49.2	47.5	+1.7	Neutr
29	549.235k	19.9	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	30.6	46.0	-15.4	Neutr
^	549.235k	36.1	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	46.8	46.0	+0.8	Neutr
31	283.078k	23.5	+0.0 +0.0	+0.1 +0.2	+0.0	+10.1	+0.0	33.9	50.7	-16.8	Neutr
^	283.078k	40.7	+0.0 +0.0	+0.1 +0.2	+0.0	+10.1	+0.0	51.1	50.7	+0.4	Neutr
33	464.879k	15.7	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	26.4	46.6	-20.2	Neutr
^	464.879k	36.9	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	47.6	46.6	+1.0	Neutr
35	518.692k	14.6	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	25.3	46.0	-20.7	Neutr
^	518.692k	35.7	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	46.4	46.0	+0.4	Neutr

CKC Laboratories Date: 3/10/2009 Time: 18:04:56 Zillion TV Corporation. WO#: 89169
FCC 15.207 - AVE Test Lead: Neutral 110V 60Hz Sequence#: 3 Polarity: Neutral
Notes:



Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.207 - AVE**

Work Order #: **89169**

Test Type: **Conducted Emissions**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 17:58:19

Sequence#: 2

Tested By: Armando Del Angel

110V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Attenuator	9912	03/21/2008	03/21/2010	ANP05503
Filter	G7752	07/21/2008	07/21/2010	AN02611
EMCO LISN	9606-1049	06/01/2007	06/01/2009	AN01492

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp 21°

Rel. Humidity 26%

Pressure 102.1kPa

Testing Conducted Emissions per FCC 15.207

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the MID channel.

Vertical Ground plane is located 40cm from the back of the table.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 150kHz - 30MHz.

Frequency: 150kHz-30MHz RBW= 9kHz, VBW = 9kHz

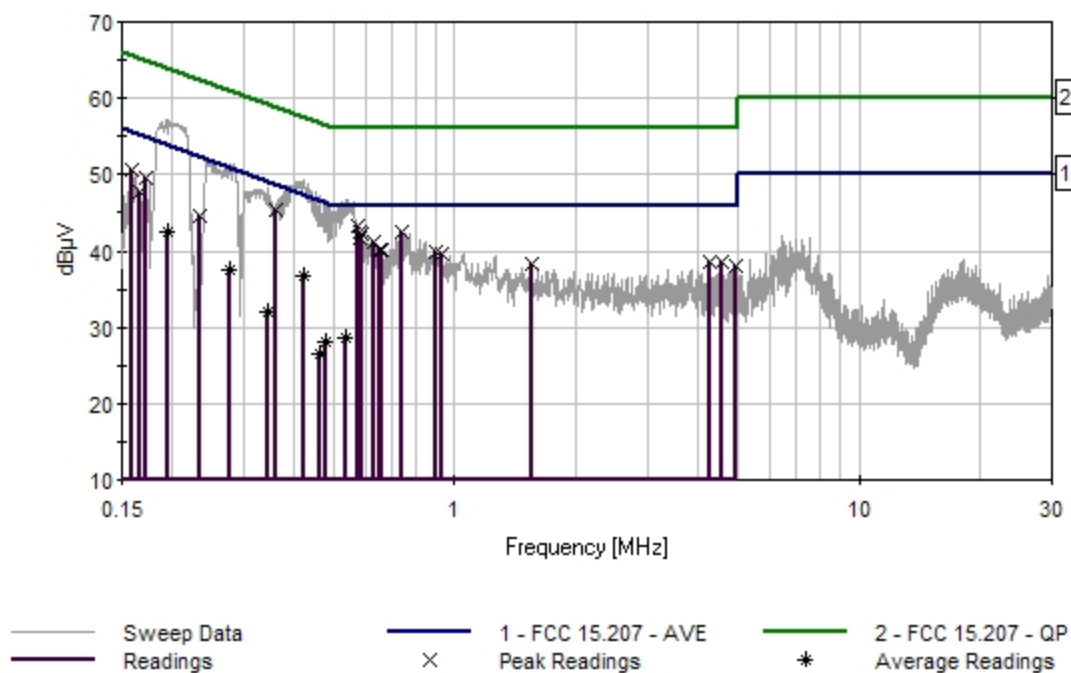
Transducer Legend:

T1=CAB-ANP05371	T2=FIL-AN02611-072108
T3=CAB-ANP05366	T4=ATT-ANP5503-032108
T5=CAB-ANP05360	T6=CDN-AN01492-060107 - Neutral

Measurement Data:		Reading listed by margin.					Test Lead: Neutral				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	T5	T6			Table	dBμV	dBμV	dB	Ant
1	576.870k	32.5	+0.1	+0.2	+0.0	+10.1	+0.0	43.2	46.0	-2.8	Neutr
			+0.1	+0.2							
2	359.435k	34.7	+0.1	+0.1	+0.0	+10.1	+0.0	45.3	48.7	-3.4	Neutr
			+0.1	+0.2							
3	579.779k	31.8	+0.1	+0.2	+0.0	+10.1	+0.0	42.5	46.0	-3.5	Neutr
			+0.1	+0.2							
4	736.128k	31.7	+0.0	+0.2	+0.1	+10.1	+0.0	42.4	46.0	-3.6	Neutr
			+0.1	+0.2							
5	589.232k	31.6	+0.1	+0.2	+0.0	+10.1	+0.0	42.3	46.0	-3.7	Neutr
			+0.1	+0.2							
6	582.688k	31.1	+0.1	+0.2	+0.0	+10.1	+0.0	41.8	46.0	-4.2	Neutr
			+0.1	+0.2							
7	632.865k	30.6	+0.1	+0.2	+0.0	+10.1	+0.0	41.3	46.0	-4.7	Neutr
			+0.1	+0.2							
8	158.727k	39.3	+0.0	+0.9	+0.0	+10.1	+0.0	50.5	55.5	-5.0	Neutr
			+0.0	+0.2							
9	171.816k	38.8	+0.0	+0.4	+0.0	+10.1	+0.0	49.5	54.9	-5.4	Neutr
			+0.0	+0.2							
10	653.954k	29.4	+0.1	+0.2	+0.0	+10.1	+0.0	40.1	46.0	-5.9	Neutr
			+0.1	+0.2							
11	660.499k	29.4	+0.1	+0.2	+0.0	+10.1	+0.0	40.1	46.0	-5.9	Neutr
			+0.1	+0.2							
12	898.469k	29.3	+0.0	+0.2	+0.1	+10.1	+0.0	40.0	46.0	-6.0	Neutr
			+0.1	+0.2							
13	932.490k	28.9	+0.0	+0.2	+0.1	+10.1	+0.0	39.6	46.0	-6.4	Neutr
			+0.1	+0.2							
14	166.726k	37.0	+0.0	+0.5	+0.0	+10.1	+0.0	47.8	55.1	-7.3	Neutr
			+0.0	+0.2							
15	4.296M	27.6	+0.1	+0.1	+0.2	+10.1	+0.0	38.5	46.0	-7.5	Neutr
			+0.2	+0.2							
16	4.577M	27.5	+0.1	+0.1	+0.2	+10.1	+0.0	38.5	46.0	-7.5	Neutr
			+0.2	+0.3							
17	235.083k	34.2	+0.0	+0.2	+0.0	+10.1	+0.0	44.7	52.3	-7.6	Neutr
			+0.0	+0.2							
18	1.549M	27.7	+0.1	+0.1	+0.1	+10.1	+0.0	38.4	46.0	-7.6	Neutr
			+0.1	+0.2							
19	4.930M	27.1	+0.1	+0.1	+0.2	+10.1	+0.0	38.1	46.0	-7.9	Neutr
			+0.2	+0.3							
20	421.975k	26.1	+0.1	+0.1	+0.0	+10.1	+0.0	36.7	47.4	-10.7	Neutr
	Ave		+0.1	+0.2							
^	421.975k	38.7	+0.1	+0.1	+0.0	+10.1	+0.0	49.3	47.4	+1.9	Neutr
			+0.1	+0.2							
22	195.087k	32.0	+0.0	+0.2	+0.0	+10.1	+0.0	42.5	53.8	-11.3	Neutr
	Ave		+0.0	+0.2							

^	195.087k	46.6	+0.0	+0.2	+0.0	+10.1	+0.0	57.1	53.8	+3.3	Neutr
			+0.0	+0.2							
24	279.015k	27.1	+0.0	+0.1	+0.0	+10.1	+0.0	37.5	50.8	-13.3	Neutr
	Ave		+0.0	+0.2							
^	279.015k	41.0	+0.0	+0.1	+0.0	+10.1	+0.0	51.4	50.8	+0.6	Neutr
			+0.0	+0.2							
26	344.891k	21.3	+0.1	+0.1	+0.0	+10.1	+0.0	31.9	49.1	-17.2	Neutr
	Ave		+0.1	+0.2							
^	344.891k	37.7	+0.1	+0.1	+0.0	+10.1	+0.0	48.3	49.1	-0.8	Neutr
			+0.1	+0.2							
28	536.146k	17.8	+0.1	+0.2	+0.0	+10.1	+0.0	28.5	46.0	-17.5	Neutr
	Ave		+0.1	+0.2							
29	478.697k	17.4	+0.1	+0.2	+0.0	+10.1	+0.0	28.1	46.4	-18.3	Neutr
	Ave		+0.1	+0.2							
30	464.153k	15.7	+0.1	+0.2	+0.0	+10.1	+0.0	26.4	46.6	-20.2	Neutr
	Ave		+0.1	+0.2							
^	464.153k	36.6	+0.1	+0.2	+0.0	+10.1	+0.0	47.3	46.6	+0.7	Neutr
			+0.1	+0.2							

CKC Laboratories Date: 3/10/2009 Time: 17:58:19 Zillion TV Corporation. WO#: 89169
FCC 15.207 - AVE Test Lead: Neutral 110V 60Hz Sequence#: 2 Polarity: Neutral
Notes:



Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.207 - AVE**

Work Order #: **89169**

Test Type: **Conducted Emissions**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 18:44:16

Sequence#: 6

Tested By: Armando Del Angel

110V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Attenuator	9912	03/21/2008	03/21/2010	ANP05503
Filter	G7752	07/21/2008	07/21/2010	AN02611
EMCO LISN	9606-1049	06/01/2007	06/01/2009	AN01492

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp 21°

Rel. Humidity 26%

Pressure 102.1kPa

Testing Conducted Emissions per FCC 15.207

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the HIGH channel.

Vertical Ground plane is located 40cm from the back of the table.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 150kHz - 30MHz.

Frequency: 150kHz-30MHz RBW= 9kHz, VBW = 9kHz

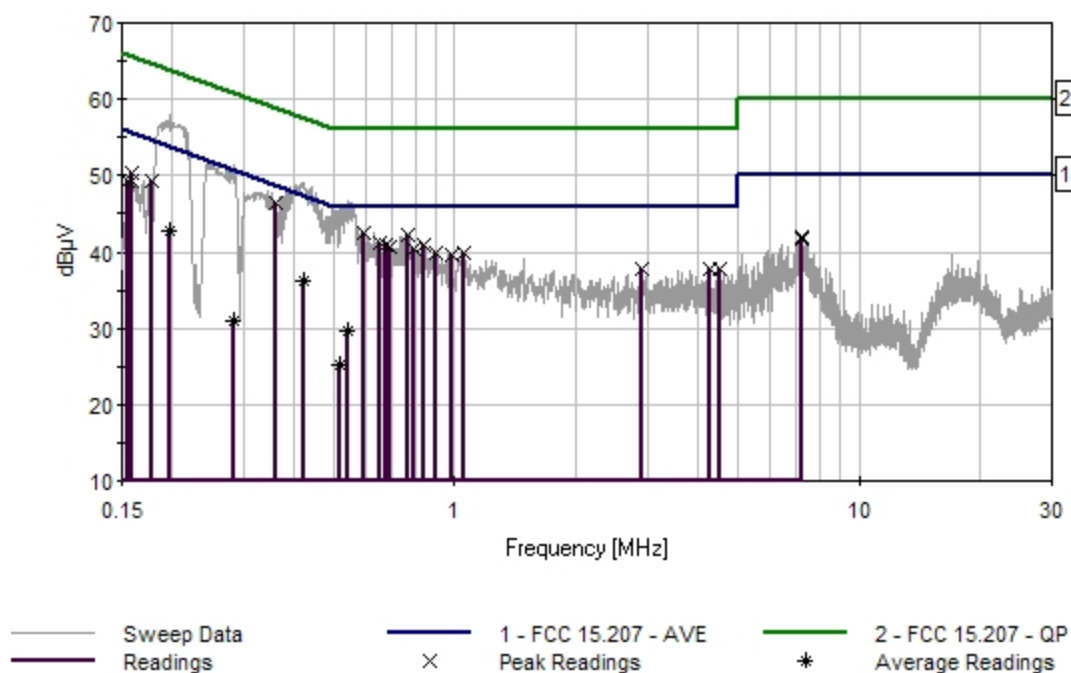
Transducer Legend:

T1=CAB-ANP05371	T2=FIL-AN02611-072108
T3=CAB-ANP05366	T4=ATT-ANP5503-032108
T5=CAB-ANP05360	T6=CDN-AN01492-060107 - Neutral

Measurement Data:		Reading listed by margin.					Test Lead: Neutral				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	T5 dB	T6 dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	360.163k	35.7	+0.1 +0.1	+0.1 +0.2	+0.0	+10.1	+0.0	46.3	48.7	-2.4	Neutr
2	596.505k	31.8	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	42.5	46.0	-3.5	Neutr
3	767.398k	31.6	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	42.3	46.0	-3.7	Neutr
4	653.954k	30.4	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	41.1	46.0	-4.9	Neutr
5	677.952k	30.3	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	41.0	46.0	-5.0	Neutr
6	842.300k	30.2	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	40.9	46.0	-5.1	Neutr
7	159.454k	39.3	+0.0 +0.0	+0.7 +0.2	+0.0	+10.1	+0.0	50.3	55.5	-5.2	Neutr
8	178.361k	38.7	+0.0 +0.0	+0.3 +0.2	+0.0	+10.1	+0.0	49.3	54.6	-5.3	Neutr
9	688.860k	29.9	+0.1 +0.1	+0.2 +0.2	+0.0	+10.1	+0.0	40.6	46.0	-5.4	Neutr
10	795.759k	29.6	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	40.3	46.0	-5.7	Neutr
11	894.216k	29.2	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	39.9	46.0	-6.1	Neutr
12	1.056M	29.2	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	39.9	46.0	-6.1	Neutr
13	157.999k	37.9	+0.0 +0.0	+1.1 +0.2	+0.0	+10.1	+0.0	49.3	55.6	-6.3	Neutr
14	155.090k	37.1	+0.0 +0.0	+1.8 +0.2	+0.0	+10.1	+0.0	49.2	55.7	-6.5	Neutr
15	983.523k	28.8	+0.0 +0.1	+0.2 +0.2	+0.1	+10.1	+0.0	39.5	46.0	-6.5	Neutr
16	7.184M	30.9	+0.1 +0.2	+0.1 +0.4	+0.2	+10.1	+0.0	42.0	50.0	-8.0	Neutr
17	4.292M	26.9	+0.1 +0.2	+0.1 +0.2	+0.2	+10.1	+0.0	37.8	46.0	-8.2	Neutr
18	7.256M	30.7	+0.1 +0.2	+0.1 +0.4	+0.2	+10.1	+0.0	41.8	50.0	-8.2	Neutr
19	2.889M	27.0	+0.1 +0.1	+0.1 +0.2	+0.1	+10.1	+0.0	37.7	46.0	-8.3	Neutr
20	4.501M	26.7	+0.1 +0.2	+0.1 +0.3	+0.2	+10.1	+0.0	37.7	46.0	-8.3	Neutr
21	196.541k	32.3	+0.0 +0.0	+0.2 +0.2	+0.0	+10.1	+0.0	42.8	53.8	-11.0	Neutr
Ave											
^	196.541k	47.4	+0.0 +0.0	+0.2 +0.2	+0.0	+10.1	+0.0	57.9	53.8	+4.1	Neutr

23	421.975k	25.7	+0.1	+0.1	+0.0	+10.1	+0.0	36.3	47.4	-11.1	Neutr
	Ave		+0.1	+0.2							
^	421.975k	38.5	+0.1	+0.1	+0.0	+10.1	+0.0	49.1	47.4	+1.7	Neutr
			+0.1	+0.2							
25	541.237k	18.9	+0.1	+0.2	+0.0	+10.1	+0.0	29.6	46.0	-16.4	Neutr
	Ave		+0.1	+0.2							
^	541.237k	38.1	+0.1	+0.2	+0.0	+10.1	+0.0	48.8	46.0	+2.8	Neutr
			+0.1	+0.2							
27	284.533k	20.6	+0.0	+0.1	+0.0	+10.1	+0.0	31.0	50.7	-19.7	Neutr
	Ave		+0.0	+0.2							
^	284.533k	40.9	+0.0	+0.1	+0.0	+10.1	+0.0	51.3	50.7	+0.6	Neutr
			+0.0	+0.2							
29	519.421k	14.4	+0.1	+0.2	+0.0	+10.1	+0.0	25.1	46.0	-20.9	Neutr
	Ave		+0.1	+0.2							
^	519.421k	35.5	+0.1	+0.2	+0.0	+10.1	+0.0	46.2	46.0	+0.2	Neutr
			+0.1	+0.2							

CKC Laboratories Date: 3/10/2009 Time: 18:44:16 Zillion TV Corporation. WO#: 89169
FCC 15.207 - AVE Test Lead: Neutral 110V 60Hz Sequence#: 6 Polarity: Neutral
Notes:



FCC Part 15.247(a)(2) 6dB BANDWIDTH

Test Equipment

Asset #	Equipment	Serial #	Cal Date	Cal Due
ANP05361	Cable 6'	51	12/30/2008	12/30/2010
AN01994	Antenna	2453	12/22/2008	12/22/2010
ANP05366	Cable 30'	11	11/5/2008	11/5/2010
ANP05371	Cable 6'	49	11/10/2008	11/10/2010
ANP05360	Cable 20'	16	11/10/2008	11/10/2010
AN01517	HP 8447D Preamp	2944A08601	7/8/2008	7/8/2010
AN02872	Agilent E4440A	MY46186330	1/31/2008	1/31/2010

Test Conditions

EUT is transmitting. Due to the lack of antenna connectors the test will be done through radiated measurements. EUT is located in the back edge of the test table over 10cm of Styrofoam. The EUT is connected to a laptop via USB. All the laptop ports are filled per ANSI C63.4 procedures. PSA is on max hold, marker-to-peak function is set on the peak of each channel (LOW, MID, HIGH), and then the marker will be positioned 6dB below the peak on one side and then on the other side. The separation between those two is the 6dB bandwidth.

RBW = 120 kHz

VBW = 120 kHz

Span = Wide enough to see all the signal

Test Setup Photos



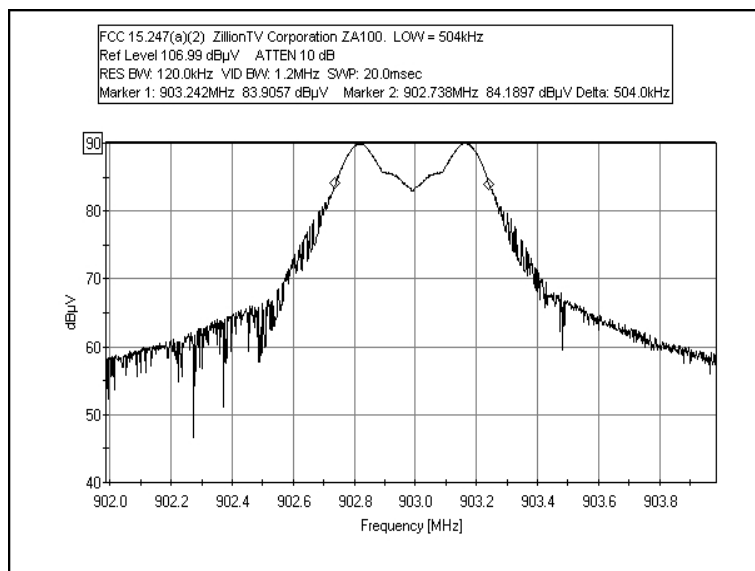


Test Data

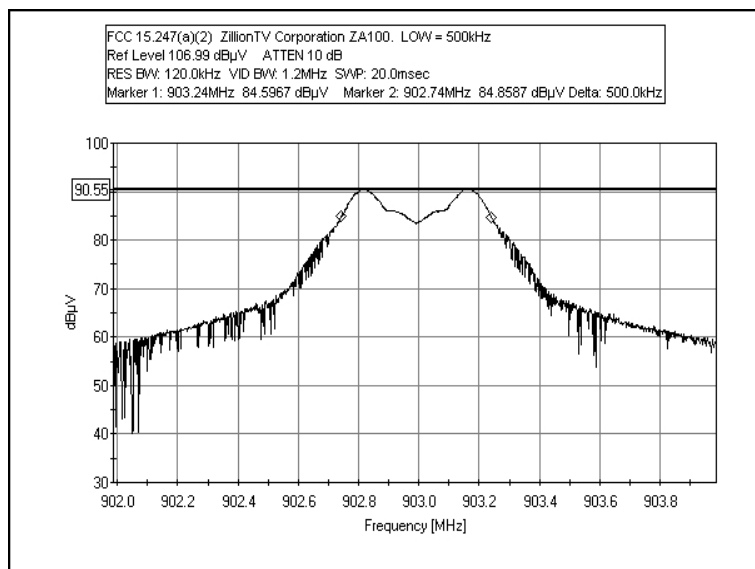
Channel	20dB Bandwidth		Limit
	Vertical	Horizontal	
LOW	500kHz	504kHz	500kHz
MID	508kHz	506kHz	500kHz
HIGH	504kHz	500kHz	500kHz

Test Plots

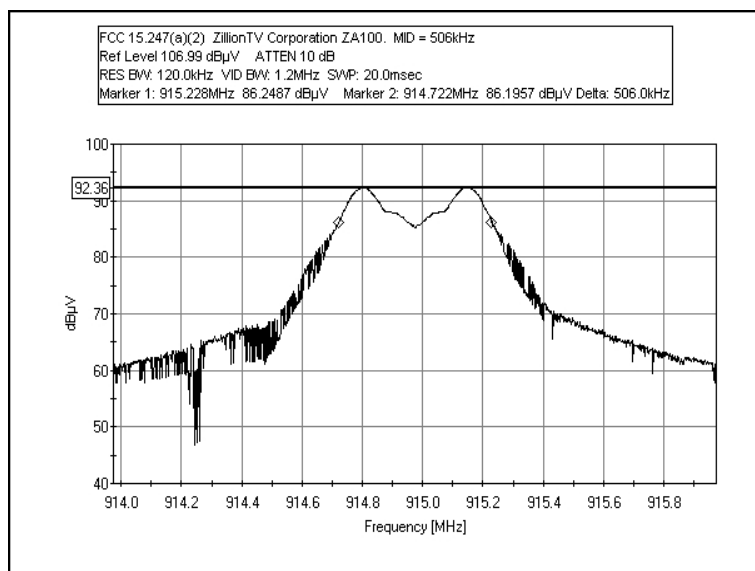
FCC 15.247(a)(2) 6dB BANDWIDTH – LOW CHANNEL HORIZONTAL



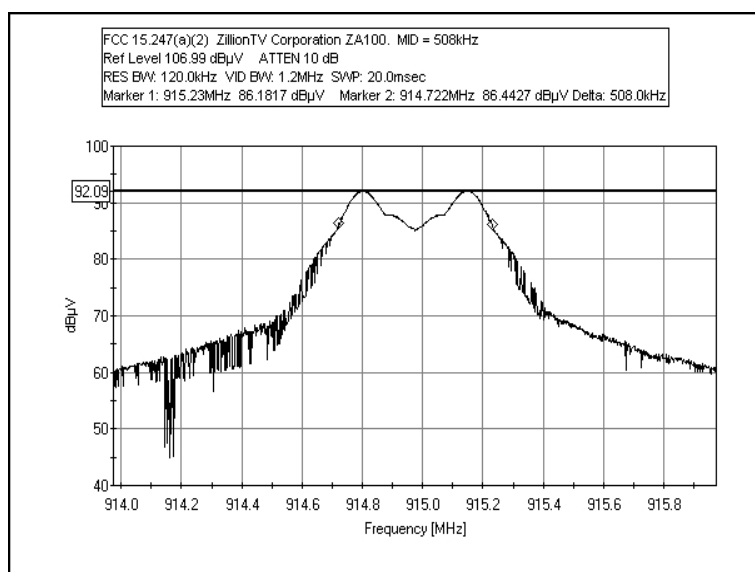
FCC 15.247(a)(2) 6dB BANDWIDTH – LOW CHANNEL VERTICAL



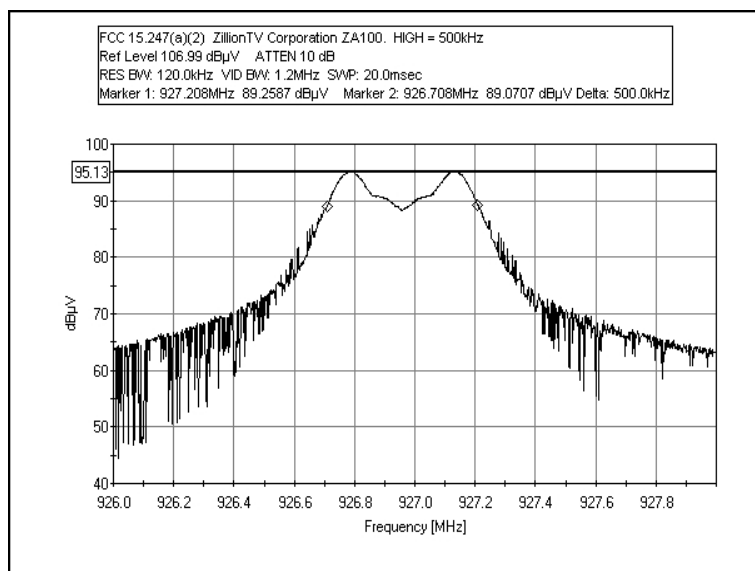
FCC 15.247(a)(2) 6dB BANDWIDTH – MID CHANNEL HORIZONTAL



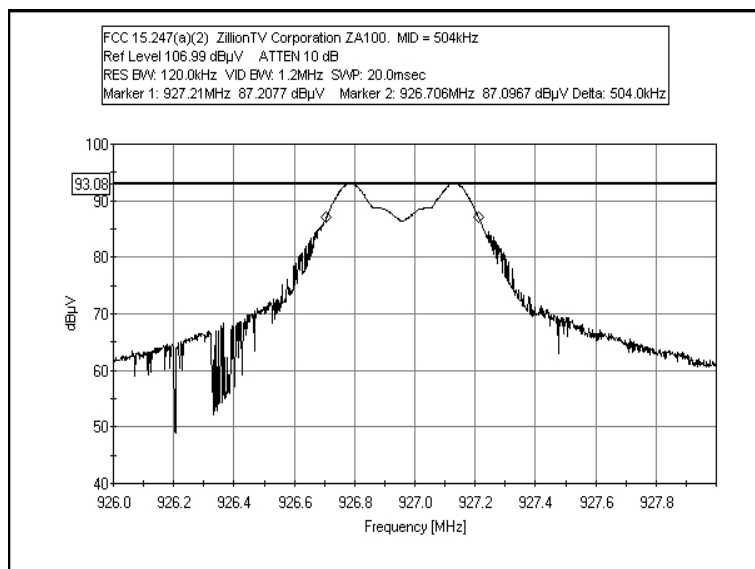
FCC 15.247(a)(2) 6dB BANDWIDTH – MID CHANNEL VERTICAL



FCC 15.247(a)(2) 6dB BANDWIDTH – HIGH CHANNEL HORIZONTAL



FCC 15.247(a)(2) 6dB BANDWIDTH – HIGH CHANNEL VERTICAL



FCC Part 15.247(b)(3) RF POWER OUTPUT

Test Equipment

Asset #	Equipment	Serial #	Cal Date	Cal Due
ANP05361	Cable 6'	51	12/30/2008	12/30/2010
AN01994	Antenna	2453	12/22/2008	12/22/2010
ANP05366	Cable 30'	11	11/5/2008	11/5/2010
ANP05371	Cable 6'	49	11/10/2008	11/10/2010
ANP05360	Cable 20'	16	11/10/2008	11/10/2010
AN01517	HP 8447D Preamp	2944A08601	7/8/2008	7/8/2010
AN02872	Agilent E4440A	MY46186330	1/31/2008	1/31/2010

Test Conditions

The EUT is transmitting. Due to the lack of antenna connectors the test will be done through radiated measurements. EUT is located in the back edge of the test table over 10cm of Styrofoam. The EUT is connected to a laptop via USB. All the laptop ports are filled per ANSI C63.4 procedures. The Fundamental's emission will be maximized per ANSI C63.4 procedures. EMI test will be used with the solely purpose of accurate Field Strength data gathering. The following calculation will be used per FCC procedures in order to obtain the transmitter peak power:

$$P = (E \cdot d)^2 / (30 \cdot G)$$

E: Is the field strength in V/m

G: Is the numeric gain of the transmitting antenna with reference to an isotropic radiator.

d: Is the distance at which the measurement is being executed.

RBW = 1 MHz

VBW = 1 MHz

Span = Wide enough to see all the signal

Test Setup Photos





Test Data

	Vertical		Horizontal		LIMIT
	F/S	Power	F/S	Power	
LOW	82.2dBuV	-7.52dBm	88.9dBuV	-7.82dBm	30dBm
MID	92.2dBuV	-4.52dBm	92.4dBuV	-4.32dBm	30dBm
HIGH	95.0dBuV	-1.72dBm	94.2dBuV	-2.52dBm	30dBm

FCC 15.247(d) OATS RADIATED SPURIOUS EMISSIONS

Test Setup Photos





Test Data Sheets

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**
 Specification: **FCC 15.247/15.209**
 Work Order #: **89169**
 Test Type: **Radiated Scan**
 Equipment: **USB Base Station**
 Manufacturer: **ZillionTV Corporation**
 Model: **ZA100**
 S/N: **013**

Date: 3/10/2009
 Time: 16:41:23
 Sequence#: 3
 Tested By: Armando Del Angel

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8447D Preamp	2944A08601	07/08/2008	07/08/2010	AN01517
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 6'	51	12/30/2008	12/30/2010	ANP05361
Antenna	2453	12/22/2008	12/22/2010	AN01994
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
High Pass Filter	2	05/01/2008	05/01/2010	02750
Heliac cable	N/A	07/22/2008	07/22/2010	AN05545
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03123
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03121
EMCO 3115 Horn	9606-4854	11/12/2007	11/12/2009	AN01412
HP 83017A Pre-amp	3123A00464	10/02/2007	10/02/2009	AN01271
Mag Loop	2156	06/04/2008	06/04/2010	AN00052

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp = 19°C
 Rel. Temp. = 26%
 Atm. Pressure. = 102.1kPa
 Testing Radiated Spurious Emissions per FCC 15.247(d)
 The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.
 All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the MID channel.
 Due to the lack of an antenna connector only Radiated Spurious emissions will be performed.
 Operating Frequency range = 903 - 927MHz
 Frequency range of measurement = 9kHz - 10GHz.
 Frequency: 9kHz - 150kHz RBW= 200Hz, VBW= 200Hz
 150kHz - 30MHz RBW= 9kHz, VBW = 9kHz
 30MHz - 1GHz RBW= 120kHz, VBW=120kHz
 1GHz - 10GHz RBW= 1 MHz, VBW=1 MHz.

Transducer Legend:

T1=ANT AN01994 25-1000MHz	T2=CAB-ANP05360
T3=CAB-ANP05361	T4=CAB-ANP05366
T5=CAB-ANP05371	T6=AMP-AN01517-070808
T7=AN01271 HP PreAmplifier	T8=ANT-AN01412-111207
T9=Filter 1GHz HP AN02750	T10=CAB-ANP03121-120208
T11=CAB-ANP03123-120208	T12=CAB-ANP05545-072208
T13=ANT- AN00052-06042008	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	179.983M	59.3	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 230	41.6	44.0	-2.4	Vert 99
^	179.983M	78.3	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 230	60.6	44.0	+16.6	Vert 99
3	372.084M	52.7	+15.5 +0.3	+1.2 -28.8	+0.3	+1.3	+0.0 352	42.5	46.0	-3.5	Vert 99
4	160.713M	56.4	+10.6 +0.2	+0.8 -28.9	+0.2	+0.9	+0.0	40.2	44.0	-3.8	Vert 101
5	910.000M	43.1	+23.2 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 109	41.8	46.0	-4.2	Vert 99
6	64.595M	58.3	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0	35.6	40.0	-4.4	Vert 101
7	3605.000M	44.7	+0.0 +0.0 +0.5	+0.0 +0.0 +1.6	+0.0 -32.7 +0.6	+0.0 +31.7 +3.0	+0.0 272	49.4	54.0	-4.6	Vert 178
8	168.016M	56.0	+9.9 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 276	39.2	44.0	-4.8	Vert 99
^	168.016M	77.0	+9.9 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 276	60.2	44.0	+16.2	Vert 99

10	155.977M QP	54.6	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 230	38.6	44.0	-5.4	Vert 101
^	155.977M	58.3	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 230	42.3	44.0	-1.7	Vert 101
12	663.638M QP	44.9	+20.4 +0.3	+1.6 -29.7	+0.4	+1.8	+0.0 360	39.7	46.0	-6.3	Vert 99
^	663.638M	53.3	+20.4 +0.3	+1.6 -29.7	+0.4	+1.8	+0.0 360	48.1	46.0	+2.1	Vert 99
14	191.942M	54.5	+9.1 +0.3	+0.9 -28.8	+0.2	+1.0	+0.0	37.2	44.0	-6.8	Vert 101
15	907.450M	39.7	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0	38.3	46.0	-7.7	Vert 99
16	288.033M	49.0	+13.2 +0.3	+1.0 -28.4	+0.3	+1.2	+0.0 360	36.6	46.0	-9.4	Vert 99
17	597.200M	41.0	+20.1 +0.5	+1.6 -29.6	+0.4	+1.9	+0.0 6	35.9	46.0	-10.1	Vert 99
18	252.092M	47.3	+12.7 +0.4	+1.0 -28.6	+0.2	+1.0	+0.0 360	34.0	46.0	-12.0	Vert 99
19	1082.500M	48.8	+0.0 +0.0 +1.1	+0.0 +0.0 +1.0	+0.0 -35.8 +0.6	+0.0 +24.5 +1.7	+0.0 360	41.9	54.0	-12.1	Vert 99
20	2632.500M	40.0	+0.0 +0.0 +0.6	+0.0 +0.0 +1.3	+0.0 -33.2 +0.5	+0.0 +29.5 +2.6	+0.0 223	41.3	54.0	-12.7	Vert 178
21	909.732M QP	34.4	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 180	33.0	46.0	-13.0	Vert 99
^	909.732M	44.6	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 180	43.2	46.0	-2.8	Vert 99

23	5488.755M Ave	29.9	+0.0 +0.0 +0.3	+0.0 +0.0 +2.0	+0.0 -33.3 +0.8	+0.0 +34.7 +3.9	+0.0 211	38.3	54.0	-15.7	Vert 108
^	5488.755M	52.3	+0.0 +0.0 +0.3	+0.0 +0.0 +2.0	+0.0 -33.3 +0.8	+0.0 +34.7 +3.9	+0.0 211	60.7	54.0	+6.7	Vert 108
25	7321.489M Ave	26.8	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.4 +4.7	+0.0 322	36.9	54.0	-17.1	Vert 108
^	7321.489M	48.6	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.4 +4.7	+0.0 322	58.7	54.0	+4.7	Vert 108
27	529.400k	45.5	+0.0 +0.1 +0.0 +9.9	+0.1 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	-40.0 242	15.6	33.1	-17.5	180de 150
28	779.330k	41.8	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.1 +0.0 +0.0 +0.0	-40.0 130	12.0	29.7	-17.7	180de 150
29	913.500M QP	47.0	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 50	45.8	72.7 20dBc limit applied	-26.9	Vert 168
^	913.500M	57.8	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 50	56.6	72.7 20dBc limit applied	-16.1	Vert 168
31	912.989M QP	44.3	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 50	43.1	72.7 20dBc limit applied	-29.6	Vert 168
^	912.989M	54.6	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 50	53.4	72.7 20dBc limit applied	-19.3	Vert 168
33	17.885M	22.7	+0.0 +0.2 +0.0 +8.5	+0.3 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.3 +0.0 +0.0 +0.0	-40.0 360	-8.0	29.5	-37.5	180de 150
34	356.360k	47.3	+0.0 +0.1 +0.0 +9.8	+0.1 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	-80.0 287	-22.7	16.6	-39.3	180de 150
35	213.340k	48.8	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	-80.0 69	-21.2	21.0	-42.2	180de 150

36	915.144M	93.9	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 50	92.7	137.0 Fundamental	-44.3	Vert 168
37	70.900k	55.7	+0.0 +0.0 +0.0 +10.1	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0	-14.2	30.6	-44.8	180de 150
38	141.800k	35.7	+0.0 +0.0 +0.0 +9.9	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0	-34.4	24.6	-59.0	180de 150
39	104.300k	35.3	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0	-34.7	27.2	-61.9	180de 150
40	37.290k	39.9	+0.0 +0.0 +0.0 +10.8	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0	-29.3	36.2	-65.5	180de 150
41	10.250k	45.1	+0.0 +0.0 +0.0 +16.5	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0	-18.4	47.4	-65.8	180de 150

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.247/15.209**

Work Order #: **89169**

Test Type: **Radiated Scan**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 17:07:12

Sequence#: 4

Tested By: Armando Del Angel

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8447D Preamp	2944A08601	07/08/2008	07/08/2010	AN01517
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 6'	51	12/30/2008	12/30/2010	ANP05361
Antenna	2453	12/22/2008	12/22/2010	AN01994
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
High Pass Filter	2	05/01/2008	05/01/2010	02750
Heliac cable	N/A	07/22/2008	07/22/2010	AN05545
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03123
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03121
EMCO 3115 Horn	9606-4854	11/12/2007	11/12/2009	AN01412
HP 83017A Pre-amp	3123A00464	10/02/2007	10/02/2009	AN01271
Mag Loop	2156	06/04/2008	06/04/2010	AN00052

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp = 19°C

Rel. Temp. = 26%

Atm. Pressure. = 102.1kPa

Testing Radiated Spurious Emissions per FCC 15.247(d)

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the MID channel.

Due to the lack of an antenna connector only Radiated Spurious emissions will be performed.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 9kHz - 10GHz.

Frequency: 9kHz - 150kHz RBW= 200Hz, VBW= 200Hz

150kHz - 30MHz RBW= 9kHz, VBW = 9kHz

30MHz - 1GHz RBW= 120kHz, VBW=120kHz

1GHz - 10GHz RBW= 1 MHz, VBW=1 MHz.

Transducer Legend:

T1=ANT AN01994 25-1000MHz	T2=CAB-ANP05360
T3=CAB-ANP05361	T4=CAB-ANP05366
T5=CAB-ANP05371	T6=AMP-AN01517-070808
T7=AN01271 HP PreAmplifier	T8=ANT-AN01412-111207
T9=Filter 1GHz HP AN02750	T10=CAB-ANP03121-120208
T11=CAB-ANP03123-120208	T12=CAB-ANP05545-072208
T13=ANT- AN00052-06042008	

Measurement Data:			Reading listed by margin.				Test Distance: 3 Meters				
#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	71.986M	57.8	+6.6 +0.2	+0.5 -29.2	+0.1	+0.5	+0.0 170	36.5	40.0	-3.5	Horiz 234
^	71.986M	72.0	+6.6 +0.2	+0.5 -29.2	+0.1	+0.5	+0.0 170	50.7	40.0	+10.7	Horiz 234
3	168.012M	56.9	+9.9 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 360	40.1	44.0	-3.9	Horiz 200
4	5490.000M	41.5	+0.0 +0.0 +0.3	+0.0 +0.0 +2.0	+0.0 -33.3 +0.8	+0.0 +34.7 +3.9	+0.0 360	49.9	54.0	-4.1	Horiz 99
5	180.009M	57.0	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 200	39.3	44.0	-4.7	Horiz 173
^	180.009M	75.2	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 200	57.5	44.0	+13.5	Horiz 173
7	155.982M	54.4	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 238	38.4	44.0	-5.6	Horiz 220
^	155.982M	74.8	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 238	58.8	44.0	+14.8	Horiz 220
9	909.200M	41.7	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 359	40.3	46.0	-5.7	Horiz 150

10	288.136M	52.6	+13.2 +0.3	+1.0 -28.4	+0.3	+1.2	+0.0 360	40.2	46.0	-5.8	Horiz 150
11	918.660M QP	38.9	+23.4 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 275	37.8	46.0	-8.2	Horiz 150
^	918.660M	47.9	+23.4 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 275	46.8	46.0	+0.8	Horiz 150
13	365.952M	48.1	+15.3 +0.3	+1.2 -28.7	+0.3	+1.3	+0.0 360	37.8	46.0	-8.2	Horiz 150
14	1832.000M	46.5	+0.0 +0.0 +0.4	+0.0 +0.0 +1.1	+0.0 -33.7 +0.5	+0.0 +26.6 +2.2	+0.0 360	43.6	54.0	-10.4	Horiz 175
15	763.600M	38.2	+21.8 +0.5	+1.7 -29.6	+0.5	+1.9	+0.0 360	35.0	46.0	-11.0	Horiz 150
16	666.000M	39.4	+20.4 +0.3	+1.6 -29.7	+0.4	+1.8	+0.0 360	34.2	46.0	-11.8	Horiz 150
17	300.064M	44.8	+13.3 +0.3	+1.1 -28.4	+0.3	+1.2	+0.0 360	32.6	46.0	-13.4	Horiz 150
18	7321.299M Ave	30.3	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.4 +4.7	+0.0 85	40.4	54.0	-13.6	Horiz 142
^	7321.299M	52.7	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.4 +4.7	+0.0 85	62.8	54.0	+8.8	Horiz 142
20	597.200M	36.6	+20.1 +0.5	+1.6 -29.6	+0.4	+1.9	+0.0 360	31.5	46.0	-14.5	Horiz 150
21	778.480k	41.5	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	-40.0	11.7	29.8	-18.1	90deg 150
22	969.150M	28.3	+24.0 +0.5	+1.8 -29.1	+0.5	+2.2	+0.0 360	28.2	54.0	-25.8	Horiz 150

23	64.697M QP	62.1	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0 176	39.4	70.7 20dBc limit applied	-31.3	Horiz 284
^	64.697M	66.2	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0 176	43.5	70.7 20dBc limit applied	-27.2	Horiz 284
25	24.095M	24.7	+0.0 +0.2 +0.0 +6.9	+0.3 +0.0 +0.0	+0.0 +0.0 +0.0	+0.3 +0.0 +0.0	-40.0 360	-7.6	29.5	-37.1	90deg 150
26	17.454M	20.5	+0.0 +0.2 +0.0 +8.5	+0.3 +0.0 +0.0	+0.0 +0.0 +0.0	+0.3 +0.0 +0.0	-40.0	-10.2	29.5	-39.7	90deg 150
27	70.900k	60.4	+0.0 +0.0 +0.0 +10.1	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 265	-9.5	30.6	-40.1	90deg 150
28	212.470k	50.5	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 105	-19.5	21.1	-40.6	90deg 150
29	915.140M	92.1	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 275	90.9	137.0 Fundamental	-46.1	Horiz 150
30	141.800k	35.5	+0.0 +0.0 +0.0 +9.9	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 360	-34.6	24.6	-59.2	90deg 150
31	14.600k	44.5	+0.0 +0.0 +0.0 +14.6	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0	-20.9	44.3	-65.2	90deg 150

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.247/15.209**

Work Order #: **89169**

Test Type: **Radiated Scan**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 16:47:38

Sequence#: 5

Tested By: Armando Del Angel

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8447D Preamp	2944A08601	07/08/2008	07/08/2010	AN01517
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 6'	51	12/30/2008	12/30/2010	ANP05361
Antenna	2453	12/22/2008	12/22/2010	AN01994
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Helix cable	N/A	07/22/2008	07/22/2010	AN05545
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03123
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03121
EMCO 3115 Horn	9606-4854	11/12/2007	11/12/2009	AN01412
HP 83017A Pre-amp	3123A00464	10/02/2007	10/02/2009	AN01271
High Pass Filter	2	05/01/2008	05/01/2010	02750
Mag Loop	2156	06/04/2008	06/04/2010	AN00052

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp = 19°C

Rel. Temp. = 26%

Atm. Pressure. = 102.1kPa

Testing Radiated Spurious Emissions per FCC 15.247(d)

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the HIGH channel.

Due to the lack of an antenna connector only Radiated Spurious emissions will be performed.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 9kHz - 10GHz.

Frequency: 9kHz - 150kHz RBW= 200Hz, VBW= 200Hz

150kHz - 30MHz RBW= 9kHz, VBW = 9kHz

30MHz - 1GHz RBW= 120kHz, VBW=120kHz

1GHz - 10GHz RBW= 1 MHz, VBW=1 MHz.

Transducer Legend:

T1=ANT AN01994 25-1000MHz	T2=CAB-ANP05360
T3=CAB-ANP05361	T4=CAB-ANP05366
T5=CAB-ANP05371	T6=AMP-AN01517-070808
T7=AN01271 HP PreAmplifier	T8=ANT-AN01412-111207
T9=Filter 1GHz HP AN02750	T10=CAB-ANP03121-120208
T11=CAB-ANP03123-120208	T12=CAB-ANP05545-072208
T13=ANT- AN00052-06042008	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	167.826M	57.3	+10.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0	40.6	44.0	-3.4	Vert 99
2	64.596M	58.9	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0	36.2	40.0	-3.8	Vert 99
3	143.832M	55.2	+11.5 +0.3	+0.7 -28.9	+0.2	+0.8	+0.0	39.8	44.0	-4.2	Vert 99
4	180.004M QP	57.0	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 300	39.3	44.0	-4.7	Vert 118
^	180.004M	60.5	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 300	42.8	44.0	-1.2	Vert 118
6	937.840M	40.5	+23.6 +0.5	+2.0 -29.2	+0.5	+2.0	+0.0	39.9	46.0	-6.1	Vert 155
7	160.572M	54.0	+10.6 +0.2	+0.8 -28.9	+0.2	+0.9	+0.0	37.8	44.0	-6.2	Vert 99
8	2416.000M	46.8	+0.0 +0.0 +0.4	+0.0 +0.0 +1.3	+0.0 -33.3 +0.5	+0.0 +28.9 +2.5	+0.0 360	47.1	54.0	-6.9	Vert 200
9	1019.500M	52.8	+0.0 +0.0 +2.0	+0.0 +0.0 +1.0	+0.0 -35.9 +0.6	+0.0 +24.4 +1.6	+0.0 347	46.5	54.0	-7.5	Vert 200

10	663.787M QP	42.9	+20.4 +0.3	+1.6 -29.7	+0.4	+1.8	+0.0	37.7	46.0	-8.3	Vert 99
^	663.787M	50.9	+20.4 +0.3	+1.6 -29.7	+0.4	+1.8	+0.0	45.7	46.0	-0.3	Vert 99
12	1555.000M	50.6	+0.0 +0.0 +0.5	+0.0 +0.0 +1.0	+0.0 -34.2 +0.5	+0.0 +25.1 +2.0	+0.0 360	45.5	54.0	-8.5	Vert 200
13	599.540M	40.4	+20.2 +0.5	+1.6 -29.6	+0.4	+1.9	+0.0 360	35.4	46.0	-10.6	Vert 99
14	288.136M	47.4	+13.2 +0.3	+1.0 -28.4	+0.3	+1.2	+0.0 360	35.0	46.0	-11.0	Vert 157
15	4180.000M	36.8	+0.0 +0.0 +0.2	+0.0 +0.0 +1.7	+0.0 -32.7 +0.8	+0.0 +32.7 +3.2	+0.0	42.7	54.0	-11.3	Vert 99
16	913.280M	35.4	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0 360	34.2	46.0	-11.8	Vert 99
17	2590.000M	40.3	+0.0 +0.0 +0.5	+0.0 +0.0 +1.3	+0.0 -33.2 +0.5	+0.0 +29.4 +2.6	+0.0 103	41.4	54.0	-12.6	Vert 99
18	5560.695M Ave	30.9	+0.0 +0.0 +0.3	+0.0 +0.0 +2.0	+0.0 -33.4 +0.7	+0.0 +34.7 +4.0	+0.0 218	39.2	54.0	-14.8	Vert 107
^	5560.695M	52.9	+0.0 +0.0 +0.3	+0.0 +0.0 +2.0	+0.0 -33.4 +0.7	+0.0 +34.7 +4.0	+0.0 218	61.2	54.0	+7.2	Vert 107
20	997.620M	38.7	+24.4 +0.2	+2.1 -29.0	+0.5	+2.1	+0.0	39.0	54.0	-15.0	Vert 155
21	7414.280M Ave	26.7	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.5 +1.1	+0.0 +36.5 +4.7	+0.0 111	37.1	54.0	-16.9	Vert 173
^	7414.280M	47.9	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.5 +1.1	+0.0 +36.5 +4.7	+0.0 111	58.3	54.0	+4.3	Vert 173

23	977.600M	35.9	+24.1 +0.4	+1.9 -29.1	+0.5	+2.2	+0.0	35.9	54.0	-18.1	Vert 155
24	781.030k	41.2	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0 +0.0	+0.0	+0.1	-40.0 25	11.4	29.7	-18.3	180de 150
25	532.840k	43.4	+0.0 +0.1 +0.0 +9.9	+0.1 +0.0 +0.0 +0.0	+0.0	+0.0	-40.0 36	13.5	33.1	-19.6	180de 150
26	930.155M QP	44.4	+23.5 +0.5	+2.0 -29.2	+0.5	+2.0	+0.0 46	43.7	75.2 20dBc limit applied	-31.5	Vert 155
^	930.155M	50.7	+23.5 +0.5	+2.0 -29.2	+0.5	+2.0	+0.0 46	50.0	75.2 20dBc limit applied	-25.2	Vert 155
28	156.108M QP	59.2	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 245	43.2	75.2 20dBc limit applied	-32.0	Vert 99
^	156.108M	81.1	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 245	65.1	75.2 20dBc limit applied	-10.1	Vert 99
30	214.220k	55.8	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0 +0.0	+0.0	+0.0	-80.0 107	-14.2	21.0	-35.2	180de 150
31	24.724M	26.0	+0.0 +0.2 +0.0 +6.7	+0.3 +0.0 +0.0 +0.0	+0.0	+0.3	-40.0 360	-6.5	29.5	-36.0	180de 150
32	17.682M	22.8	+0.0 +0.2 +0.0 +8.5	+0.3 +0.0 +0.0 +0.0	+0.0	+0.3	-40.0 234	-7.9	29.5	-37.4	180de 150
33	927.134M	95.9	+23.5 +0.5	+2.0 -29.2	+0.5	+2.0	+0.0 160	95.2	137.0 Fundamental	-41.8	Vert 118
34	70.900k	55.6	+0.0 +0.0 +0.0 +10.1	+0.0 +0.0 +0.0 +0.0	+0.0	+0.0	-80.0 132	-14.3	30.6	-44.9	180de 150
35	141.800k	44.2	+0.0 +0.0 +0.0 +9.9	+0.0 +0.0 +0.0 +0.0	+0.0	+0.0	-80.0 315	-25.9	24.6	-50.5	180de 150

36	26.510k	44.3	+0.0	+0.0	+0.0	+0.0	-80.0	-23.8	39.1	-62.9	180de
			+0.0	+0.0	+0.0	+0.0	113				150
			+0.0	+0.0	+0.0	+0.0					
			+11.9								
37	14.280k	44.5	+0.0	+0.0	+0.0	+0.0	-80.0	-20.8	44.5	-65.3	180de
			+0.0	+0.0	+0.0	+0.0	231				150
			+0.0	+0.0	+0.0	+0.0					
			+14.7								

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.247/15.209**

Work Order #: **89169**

Test Type: **Radiated Scan**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 17:13:06

Sequence#: 6

Tested By: Armando Del Angel

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8447D Preamp	2944A08601	07/08/2008	07/08/2010	AN01517
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 6'	51	12/30/2008	12/30/2010	ANP05361
Antenna	2453	12/22/2008	12/22/2010	AN01994
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
Helix cable	N/A	07/22/2008	07/22/2010	AN05545
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03123
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03121
EMCO 3115 Horn	9606-4854	11/12/2007	11/12/2009	AN01412
HP 83017A Pre-amp	3123A00464	10/02/2007	10/02/2009	AN01271
Filter	2	05/01/2008	05/01/2010	2750
Mag Loop	2156	06/04/2008	06/04/2010	AN00052

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp = 19°

Rel. Temp. = 26%

Atm. Pressure. = 102.1kPa

Testing Radiated Spurious Emissions per FCC 15.247(d)

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the HIGH channel.

Due to the lack of an antenna connector only Radiated Spurious emissions will be performed.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 9kHz - 10GHz.

Frequency: 9kHz - 150kHz RBW= 200Hz, VBW= 200Hz

150kHz - 30MHz RBW= 9kHz, VBW = 9kHz

30MHz - 1GHz RBW= 120kHz, VBW=120kHz

1GHz - 10GHz RBW= 1 MHz, VBW=1 MHz.

Transducer Legend:

T1=ANT AN01994 25-1000MHz	T2=CAB-ANP05360
T3=CAB-ANP05361	T4=CAB-ANP05366
T5=CAB-ANP05371	T6=AMP-AN01517-070808
T7=AN01271 HP PreAmplifier	T8=ANT-AN01412-111207
T9=Filter 1GHz HP AN02750	T10=CAB-ANP03121-120208
T11=CAB-ANP03123-120208	T12=CAB-ANP05545-072208
T13=ANT- AN00052-06042008	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	180.100M	58.5	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0	40.8	44.0	-3.2	Horiz 200
2	5565.000M	41.6	+0.0 +0.0 +0.3	+0.0 +0.0 +1.9	+0.0 -33.4 +0.8	+0.0 +34.7 +4.0	+0.0 327	49.9	54.0	-4.1	Horiz 201
3	366.236M	51.5	+15.3 +0.3	+1.2 -28.7	+0.3	+1.3	+0.0 360	41.2	46.0	-4.8	Horiz 150
4	920.000M	41.8	+23.4 +0.4	+2.0 -29.3	+0.5	+2.0	+0.0 240	40.8	46.0	-5.2	Horiz 200
5	71.850M	55.8	+6.6 +0.2	+0.5 -29.2	+0.1	+0.5	+0.0	34.5	40.0	-5.5	Horiz 200
6	168.200M	55.1	+9.9 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0	38.3	44.0	-5.7	Horiz 200
7	7060.000M	38.5	+0.0 +0.0 +0.2	+0.0 +0.0 +2.3	+0.0 -34.7 +1.2	+0.0 +36.1 +4.6	+0.0 200	48.2	54.0	-5.8	Horiz 201
8	155.998M QP	54.2	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 240	38.2	44.0	-5.8	Horiz 201
^	155.998M	57.2	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0 240	41.2	44.0	-2.8	Horiz 201

10	59.950M	57.2	+4.6 +0.1	+0.4 -29.1	+0.1	+0.4	+0.0	33.7	40.0	-6.3	Horiz 200
11	192.190M	53.2	+9.1 +0.3	+0.9 -28.8	+0.2	+1.0	+0.0	35.9	44.0	-8.1	Horiz 200
12	288.136M	49.0	+13.2 +0.3	+1.0 -28.4	+0.3	+1.2	+0.0 358	36.6	46.0	-9.4	Horiz 150
13	663.800M	40.6	+20.4 +0.3	+1.6 -29.7	+0.4	+1.8	+0.0 360	35.4	46.0	-10.6	Horiz 200
14	252.068M	48.1	+12.7 +0.4	+1.0 -28.6	+0.2	+1.0	+0.0 360	34.8	46.0	-11.2	Horiz 150
15	3082.500M	37.5	+0.0 +0.0 +0.7	+0.0 +0.0 +1.5	+0.0 -32.9 +0.6	+0.0 +30.7 +2.8	+0.0 360	40.9	54.0	-13.1	Horiz 150
16	7417.062M Ave	29.7	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.5 +1.1	+0.0 +36.5 +4.7	+0.0 336	40.1	54.0	-13.9	Horiz 201
^	7417.062M	48.6	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.5 +1.1	+0.0 +36.5 +4.7	+0.0 336	59.0	54.0	+5.0	Horiz 201
18	7414.318M Ave	29.0	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.5 +1.1	+0.0 +36.5 +4.7	+0.0 336	39.4	54.0	-14.6	Horiz 201
^	7414.318M	49.5	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.5 +1.1	+0.0 +36.5 +4.7	+0.0 336	59.9	54.0	+5.9	Horiz 201
20	1855.000M	39.5	+0.0 +0.0 +0.4	+0.0 +0.0 +1.1	+0.0 -33.7 +0.5	+0.0 +26.8 +2.2	+0.0 360	36.8	54.0	-17.2	Horiz 194
21	780.180k	40.6	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	-40.0	10.8	29.7	-18.9	90deg 150
22	1067.500M	38.1	+0.0 +0.0 +1.2	+0.0 +0.0 +1.0	+0.0 -35.8 +0.6	+0.0 +24.4 +1.7	+0.0 360	31.2	54.0	-22.8	Horiz 194

23	64.640M QP	60.9	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0 201	38.2	73.0 20dBc limit applied	-34.8	Horiz 258
^	64.640M	65.7	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0 201	43.0	73.0 20dBc limit applied	-30.0	Horiz 258
25	213.340k	51.2	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0 43	-18.8	21.0	-39.8	90deg 150
26	17.530M	19.3	+0.0 +0.2 +0.0 +8.5	+0.3 +0.0 +0.0	+0.0	+0.3	-40.0	-11.4	29.5	-40.9	90deg 150
27	927.128M	93.7	+23.5 +0.5	+2.0 -29.2	+0.5	+2.0	+0.0 275	93.0	137.0 Fundamental	-44.0	Horiz 150
28	70.800k	50.5	+0.0 +0.0 +0.0 +10.1	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0 101	-19.4	30.6	-50.0	90deg 150
29	141.800k	38.0	+0.0 +0.0 +0.0 +9.9	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0 278	-32.1	24.6	-56.7	90deg 150
30	12.550k	45.1	+0.0 +0.0 +0.0 +15.4	+0.0 +0.0 +0.0	+0.0	+0.0	-80.0	-19.5	45.6	-65.1	90deg 150

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.247/15.209**

Work Order #: **89169**

Test Type: **Radiated Scan**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 16:36:16

Sequence#: 1

Tested By: Armando Del Angel

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8447D Preamp	2944A08601	07/08/2008	07/08/2010	AN01517
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 6'	51	12/30/2008	12/30/2010	ANP05361
Antenna	2453	12/22/2008	12/22/2010	AN01994
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
High Pass Filter	2	05/01/2008	05/01/2010	02750
Heliac cable	N/A	07/22/2008	07/22/2010	AN05545
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03121
EMCO 3115 Horn	9606-4854	11/12/2007	11/12/2009	AN01412
HP 83017A Pre-amp	3123A00464	10/02/2007	10/02/2009	AN01271
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03123
Mag Loop	2156	06/04/2008	06/04/2010	AN00052

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp = 19°C

Rel. Temp. = 26%

Atm. Pressure. = 102.1kPa

Testing Radiated Spurious Emissions per FCC 15.247(d)

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the LOW channel.

Due to the lack of an antenna connector only Radiated Spurious emissions will be performed.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 9kHz - 10GHz.

Frequency: 9kHz - 150kHz RBW= 200Hz, VBW= 200Hz

150kHz - 30MHz RBW= 9kHz, VBW = 9kHz

30MHz - 1GHz RBW= 120kHz, VBW=120kHz

1GHz - 10GHz RBW= 1 MHz, VBW=1 MHz.

Transducer Legend:

T1=ANT AN01994 25-1000MHz	T2=CAB-ANP05360
T3=CAB-ANP05361	T4=CAB-ANP05366
T5=CAB-ANP05371	T6=AMP-AN01517-070808
T7=AN01271 HP PreAmplifier	T8=ANT-AN01412-111207
T9=Filter 1GHz HP AN02750	T10=CAB-ANP03121-120208
T11=CAB-ANP03123-120208	T12=CAB-ANP05545-072208
T13=ANT- AN00052-06042008	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	167.970M	57.7	+9.9 +0.2 +0.0	+0.8 -28.8 +0.0	+0.2 +0.0 +0.0	+0.9 +0.0 +0.0	+0.0	40.9	44.0	-3.1	Vert 100
2	64.290M	59.7	+5.4 +0.1 +0.0	+0.4 -29.2 +0.0	+0.1 +0.0 +0.0	+0.4 +0.0 +0.0	+0.0	36.9	40.0	-3.1	Vert 100
3	180.004M QP	57.7	+9.0 +0.2 +0.0	+0.8 -28.8 +0.0	+0.2 +0.0 +0.0	+0.9 +0.0 +0.0	+0.0 230	40.0	44.0	-4.0	Vert 100
^	180.004M	77.2	+9.0 +0.2 +0.0	+0.8 -28.8 +0.0	+0.2 +0.0 +0.0	+0.9 +0.0 +0.0	+0.0 230	59.5	44.0	+15.5	Vert 100
5	143.940M	55.4	+11.5 +0.3 +0.0	+0.7 -28.9 +0.0	+0.2 +0.0 +0.0	+0.8 +0.0 +0.0	+0.0	40.0	44.0	-4.0	Vert 100
6	372.200M	48.2	+15.5 +0.3 +0.0	+1.2 -28.8 +0.0	+0.3 +0.0 +0.0	+1.3 +0.0 +0.0	+0.0	38.0	46.0	-8.0	Vert 161
7	251.940M	49.1	+12.7 +0.4 +0.0	+1.0 -28.6 +0.0	+0.2 +0.0 +0.0	+1.0 +0.0 +0.0	+0.0	35.8	46.0	-10.2	Vert 100
8	1064.000M	50.3	+0.0 +0.0 +1.3	+0.0 +0.0 +1.0	+0.0 -35.8 +0.6	+0.0 +24.4 +1.7	+0.0 360	43.5	54.0	-10.5	Vert 175
9	365.000M	45.1	+15.3 +0.3 +0.0	+1.2 -28.7 +0.0	+0.3 +0.0 +0.0	+1.3 +0.0 +0.0	+0.0	34.8	46.0	-11.2	Vert 161

10	663.600M	39.9	+20.4 +0.3 +0.0	+1.6 -29.7 +0.0	+0.4 +0.0 +0.0	+1.8 +0.0 +0.0	+0.0 360 +0.0	34.7	46.0	-11.3	Vert 161
11	597.200M	38.2	+20.1 +0.5 +0.0	+1.6 -29.6 +0.0	+0.4 +0.0 +0.0	+1.9 +0.0 +0.0	+0.0 360 +0.0	33.1	46.0	-12.9	Vert 161
12	5419.015M Ave	29.6	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -33.1 +1.0	+0.0 +34.5 +3.9	+0.0 214 +0.0	38.5	54.0	-15.5	Vert 99
^	5419.015M	52.5	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -33.1 +1.0	+0.0 +34.5 +3.9	+0.0 214 +0.0	61.4	54.0	+7.4	Vert 99
14	999.710M	37.9	+24.4 +0.2 +0.0	+2.1 -29.0 +0.0	+0.5 +0.0 +0.0	+2.1 +0.0 +0.0	+0.0 364 +0.0	38.2	54.0	-15.8	Vert 157
15	7225.390M Ave	26.5	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.3 +4.7	+0.0 307 +0.0	36.5	54.0	-17.5	Vert 99
^	7225.390M	47.0	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.3 +4.7	+0.0 307 +0.0	57.0	54.0	+3.0	Vert 99
17	780.180k	41.7	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.1 +0.0 +0.0 +0.0	-40.0 +0.0 +0.0 +0.0	11.9	29.7	-17.8	180de 150
18	538.010k	43.1	+0.0 +0.1 +0.0 +9.9	+0.1 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	-40.0 20 +0.0 +0.0	13.2	33.0	-19.8	180de 150
19	1.076M	33.9	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.1 +0.0 +0.0 +0.0	-40.0 356 +0.0 +0.0	4.1	26.9	-22.8	180de 150
20	155.996M QP	59.7	+10.9 +0.2 +0.0	+0.8 -28.9 +0.0	+0.2 +0.0 +0.0	+0.8 +0.0 +0.0	+0.0 230 +0.0	43.7	70.0 20dBc limit applied	-26.3	Vert 100
^	155.996M	80.7	+10.9 +0.2 +0.0	+0.8 -28.9 +0.0	+0.2 +0.0 +0.0	+0.8 +0.0 +0.0	+0.0 230 +0.0	64.7	70.0 20dBc limit applied	-5.3	Vert 100
22	213.340k	55.7	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	-80.0 104 +0.0 +0.0	-14.3	21.0	-35.3	180de 150

23	17.663M	20.5	+0.0 +0.2 +0.0 +8.5	+0.3 +0.0 +0.0	+0.0 +0.0 +0.0	+0.3 +0.0 +0.0	-40.0 -10.2	29.5	-39.7	180de 150
24	3.964M	16.4	+0.0 +0.1 +0.0 +10.3	+0.2 +0.0 +0.0	+0.0 +0.0 +0.0	+0.2 +0.0 +0.0	-40.0 -12.8 360	29.5	-42.3	180de 150
25	70.900k	55.7	+0.0 +0.0 +0.0 +10.1	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 -14.2	30.6	-44.8	180de 157
26	903.163M	91.5	+23.1 +0.3 +0.0	+1.9 -29.3 +0.0	+0.5 +0.0 +0.0	+2.0 +0.0 +0.0	+0.0 90.0 53	137.0 Fundamental	-47.0	Vert 157
27	141.800k	36.3	+0.0 +0.0 +0.0 +9.9	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 -33.8	24.6	-58.4	180de 157
28	18.220k	46.1	+0.0 +0.0 +0.0 +13.4	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 -20.5 350	42.4	-62.9	180de 157

Test Location: CKC Laboratories • 22116 23rd Dr SE • Bothell, WA 98021-4413 • 425-402-1717

Customer: **ZillionTV Corporation.**

Specification: **FCC 15.247/15.209**

Work Order #: **89169**

Test Type: **Radiated Scan**

Equipment: **USB Base Station**

Manufacturer: ZillionTV Corporation

Model: ZA100

S/N: 013

Date: 3/10/2009

Time: 16:59:47

Sequence#: 1

Tested By: Armando Del Angel

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8447D Preamp	2944A08601	07/08/2008	07/08/2010	AN01517
Agilent E4440A	MY46186330	01/31/2008	01/31/2010	AN02872
Cable 6'	51	12/30/2008	12/30/2010	ANP05361
Antenna	2453	12/22/2008	12/22/2010	AN01994
Cable 30'	11	11/05/2008	11/05/2010	ANP05366
Cable 6'	49	11/10/2008	11/10/2010	ANP05371
Cable 20'	16	11/10/2008	11/10/2010	ANP05360
High Pass Filter	2	05/01/2008	05/01/2010	02750
Helix cable	N/A	07/22/2008	07/22/2010	AN05545
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03123
High freq. Cable	N/A	12/02/2008	12/02/2010	AN03121
EMCO 3115 Horn	9606-4854	11/12/2007	11/12/2009	AN01412
HP 83017A Pre-amp	3123A00464	10/02/2007	10/02/2009	AN01271
Mag Loop	2156	06/04/2008	06/04/2010	AN00052

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
USB Base Station*	ZillionTV Corporation	ZA100	013
Laptop	Lenovo	T61	10156

Support Devices:

Function	Manufacturer	Model #	S/N
----------	--------------	---------	-----

Test Conditions / Notes:

Temp = 19°

Rel. Temp. = 26%

Atm. Pressure. = 102.1kPa

Testing Radiated Spurious Emissions per FCC 15.247(d)

The unit is a USB transmitter. It is connected to a laptop and the ports of the laptop are filled.

All extra cable length is bundled in 40cm bundles. The Transmitter is located 10cm over the wooden table on styrofoam. The transmitter will be transmitting in the LOW channel.

Due to the lack of an antenna connector only Radiated Spurious emissions will be performed.

Operating Frequency range = 903 - 927MHz

Frequency range of measurement = 9kHz - 10GHz.

Frequency: 9kHz - 150kHz RBW= 200Hz, VBW= 200Hz

150kHz - 30MHz RBW= 9kHz, VBW = 9kHz

30MHz - 1GHz RBW= 120kHz, VBW=120kHz

1GHz - 10GHz RBW= 1 MHz, VBW=1 MHz.

Transducer Legend:

T1=ANT AN01994 25-1000MHz	T2=CAB-ANP05360
T3=CAB-ANP05361	T4=CAB-ANP05366
T5=CAB-ANP05371	T6=AMP-AN01517-070808
T7=AN01271 HP PreAmplifier	T8=ANT-AN01412-111207
T9=Filter 1GHz HP AN02750	T10=CAB-ANP03121-120208
T11=CAB-ANP03123-120208	T12=CAB-ANP05545-072208
T13=ANT- AN00052-06042008	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	168.005M	58.9	+9.9 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 241	42.1	44.0	-1.9	Horiz 201
^	168.005M	80.0	+9.9 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0 241	63.2	44.0	+19.2	Horiz 201
3	904.465M	44.9	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 154	43.5	46.0	-2.5	Horiz 151
^	904.465M	54.0	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 154	52.6	46.0	+6.6	Horiz 151
5	179.916M	59.2	+9.0 +0.2	+0.8 -28.8	+0.2	+0.9	+0.0	41.5	44.0	-2.5	Horiz 201
6	69.060M	59.1	+6.2 +0.2	+0.5 -29.2	+0.1	+0.5	+0.0	37.4	40.0	-2.6	Horiz 201
7	204.096M	57.4	+9.4 +0.3	+0.9 -28.8	+0.2	+1.0	+0.0	40.4	44.0	-3.6	Horiz 201
8	71.998M	57.5	+6.6 +0.2	+0.5 -29.2	+0.1	+0.5	+0.0 180	36.2	40.0	-3.8	Horiz 201
^	71.998M	72.2	+6.6 +0.2	+0.5 -29.2	+0.1	+0.5	+0.0 180	50.9	40.0	+10.9	Horiz 201

10	64.640M QP	58.6	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0 180	35.9	40.0	-4.1	Horiz 201
^	64.640M	63.7	+5.5 +0.1	+0.4 -29.2	+0.1	+0.4	+0.0 180	41.0	40.0	+1.0	Horiz 201
12	155.922M	55.6	+10.9 +0.2	+0.8 -28.9	+0.2	+0.8	+0.0	39.6	44.0	-4.4	Horiz 201
13	905.000M QP	42.7	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 275	41.3	46.0	-4.7	Horiz 151
^	905.000M	51.6	+23.2 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 275	50.2	46.0	+4.2	Horiz 151
15	911.270M	38.7	+23.3 +0.4	+1.9 -29.3	+0.5	+2.0	+0.0	37.5	46.0	-8.5	Horiz 151
16	192.006M	52.1	+9.1 +0.3	+0.9 -28.8	+0.2	+1.0	+0.0	34.8	44.0	-9.2	Horiz 201
17	901.698M QP	37.8	+23.1 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 198	36.3	46.0	-9.7	Horiz 151
^	901.698M	51.8	+23.1 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 198	50.3	46.0	+4.3	Horiz 151
19	276.150M	47.6	+13.0 +0.3	+1.0 -28.4	+0.3	+1.1	+0.0	34.9	46.0	-11.1	Horiz 150
20	107.934M	49.5	+10.8 +0.2	+0.6 -29.1	+0.1	+0.6	+0.0	32.7	44.0	-11.3	Horiz 201
21	599.700M	36.2	+20.2 +0.5	+1.6 -29.6	+0.4	+1.9	+0.0 360	31.2	46.0	-14.8	Horiz 125
22	1804.000M	42.1	+0.0 +0.0 +0.4	+0.0 +0.0 +1.1	+0.0 -33.8 +0.5	+0.0 +26.5 +2.2	+0.0 360	39.0	54.0	-15.0	Horiz 175

23	719.900M	34.6	+20.9 +0.4	+1.7 -29.6	+0.5	+1.9	+0.0 360	30.4	46.0	-15.6	Horiz 125
24	7225.408M Ave	27.3	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.3 +4.7	+0.0 335	37.3	54.0	-16.7	Horiz 136
^	7225.408M	49.2	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -34.7 +1.1	+0.0 +36.3 +4.7	+0.0 335	59.2	54.0	+5.2	Horiz 136
26	999.525M	35.4	+24.4 +0.2	+2.1 -29.0	+0.5	+2.1	+0.0	35.7	54.0	-18.3	Horiz 151
27	5418.875M Ave	26.5	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -33.1 +1.0	+0.0 +34.5 +3.9	+0.0 240	35.4	54.0	-18.6	Horiz 137
^	5418.875M	47.1	+0.0 +0.0 +0.3	+0.0 +0.0 +2.3	+0.0 -33.1 +1.0	+0.0 +34.5 +3.9	+0.0 240	56.0	54.0	+2.0	Horiz 137
29	777.620k	40.6	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	-40.0 22	10.8	29.8	-19.0	90deg 150
30	1.076M	32.1	+0.0 +0.0 +0.0 +10.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	-40.0 271	2.3	26.9	-24.6	90deg 150
31	24.370M	26.1	+0.0 +0.2 +0.0 +6.8	+0.3 +0.0 +0.0	+0.0 +0.0 +0.0	+0.3 +0.0 +0.0	-40.0 207	-6.3	29.5	-35.8	90deg 150
32	214.220k	50.5	+0.0 +0.0 +0.0 +10.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 124	-19.5	21.0	-40.5	90deg 150
33	17.663M	19.7	+0.0 +0.2 +0.0 +8.5	+0.3 +0.0 +0.0	+0.0 +0.0 +0.0	+0.3 +0.0 +0.0	-40.0 360	-11.0	29.5	-40.5	90deg 150
34	903.162M	90.0	+23.1 +0.3	+1.9 -29.3	+0.5	+2.0	+0.0 275	88.5	137.0 Fundamental	-48.5	Horiz 151
35	70.900k	51.5	+0.0 +0.0 +0.0 +10.1	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 214	-18.4	30.6	-49.0	90deg 150

36	141.800k	38.9	+0.0	+0.0	+0.0	+0.0	-80.0	-31.2	24.6	-55.8	90deg
			+0.0	+0.0	+0.0	+0.0	360				150
			+0.0	+0.0	+0.0	+0.0					
			+9.9								
37	11.480k	44.4	+0.0	+0.0	+0.0	+0.0	-80.0	-19.7	46.4	-66.1	90deg
			+0.0	+0.0	+0.0	+0.0	78				150
			+0.0	+0.0	+0.0	+0.0					
			+15.9								

FCC 15.247(d) BANDEDGE

Test Equipment

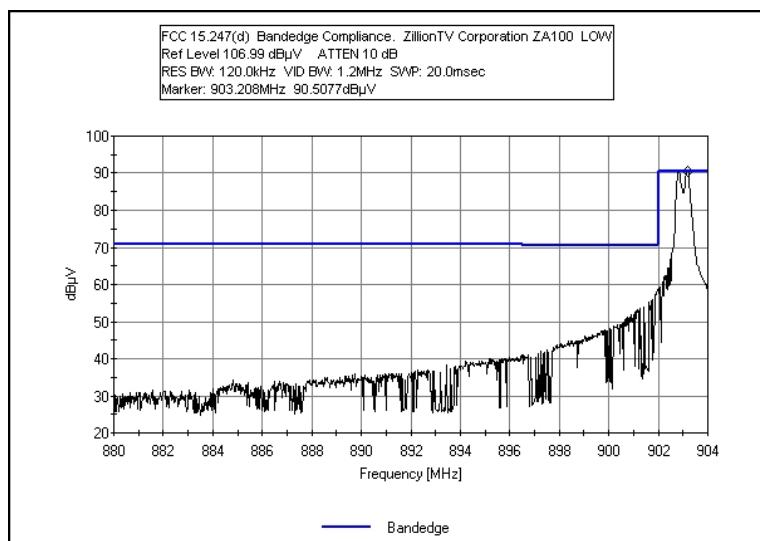
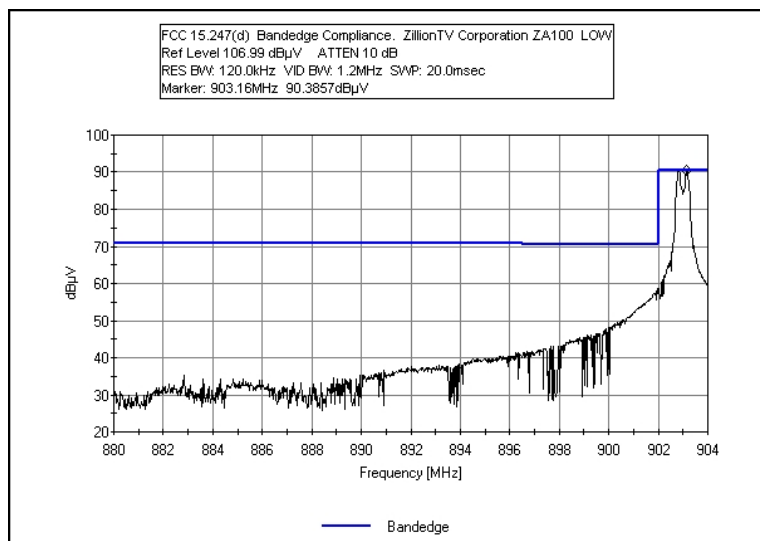
Asset #	Equipment	Serial #	Cal Date	Cal Due
ANP05361	Cable 6'	51	12/30/2008	12/30/2010
AN01994	Antenna	2453	12/22/2008	12/22/2010
ANP05366	Cable 30'	11	11/5/2008	11/5/2010
ANP05371	Cable 6'	49	11/10/2008	11/10/2010
ANP05360	Cable 20'	16	11/10/2008	11/10/2010
AN01517	HP 8447D Preamp	2944A08601	7/8/2008	7/8/2010
AN02872	Agilent E4440A	MY46186330	1/31/2008	1/31/2010

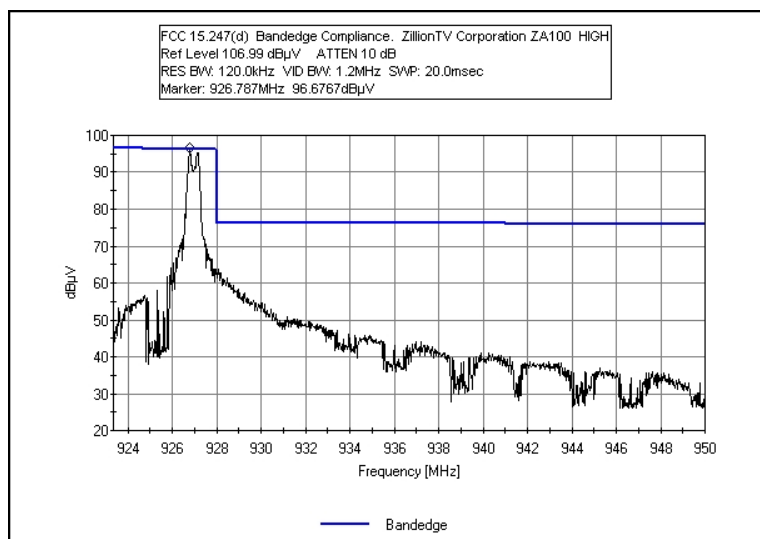
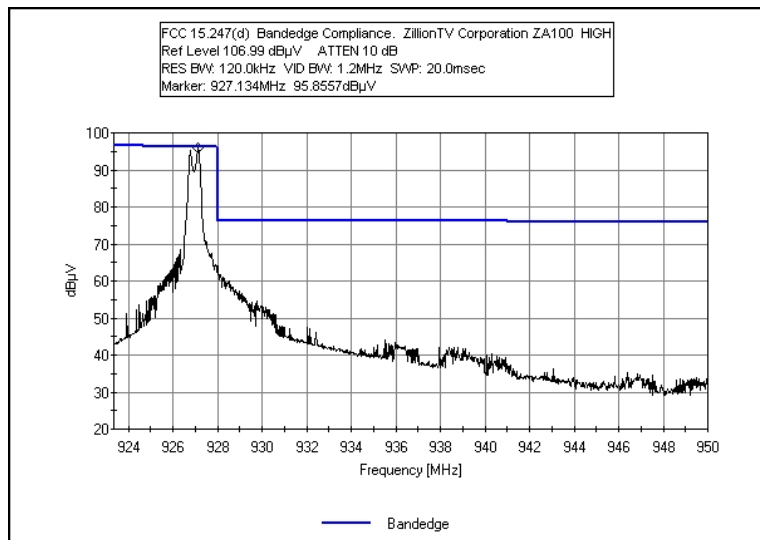
Test Setup Photos





Test Plots





FCC 15.247(e) PEAK POWER SPECTRAL DENSITY

Test Equipment

Asset #	Equipment	Serial #	Cal Date	Cal Due
ANP05361	Cable 6'	51	12/30/2008	12/30/2010
AN01994	Antenna	2453	12/22/2008	12/22/2010
ANP05366	Cable 30'	11	11/5/2008	11/5/2010
ANP05371	Cable 6'	49	11/10/2008	11/10/2010
ANP05360	Cable 20'	16	11/10/2008	11/10/2010
AN01517	HP 8447D Preamp	2944A08601	7/8/2008	7/8/2010
AN02872	Agilent E4440A	MY46186330	1/31/2008	1/31/2010

Test Conditions

The EUT is transmitting. Due to the lack of antenna connectors the test will be done through radiated measurements. EUT is located in the back edge of the test table over 10cm of Styrofoam. The EUT is connected to a laptop via USB. All the laptop ports are filled per ANSI C63.4 procedures. The Fundamental's emission will be maximized per ANSI C63.4 procedures. PSA is on max hold centered at the desired channel.

EMI test will be used with the solely purpose of accurate Field Strength data gathering.

Same calculation from the RF power output test will be done in order to convert the field strength to power.

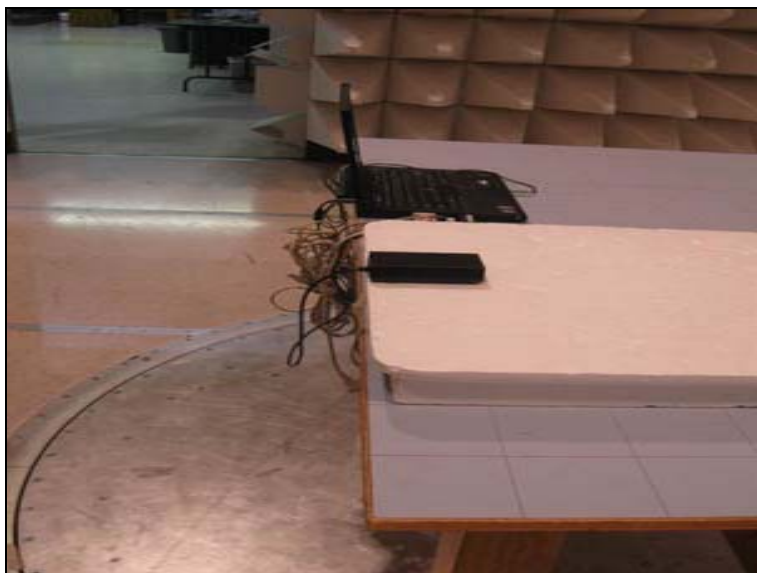
RBW = 3 kHz

VBW = 9 kHz

Span = 300 kHz

Sweep Time = 100s

Test Setup Photos





Test Data

	Vertical	Horizontal	Limit
LOW	-17.02dBm/3kHz	-16.82dBm/3kHz	8dBm/3kHz
MID	-13.62dBm/3kHz	-13.72dBm/3kHz	8dBm/3kHz
HIGH	-12.12dBm/3kHz	-11.62dBm/3kHz	8dBm/3kHz

RSS-210 99% BANDWIDTH

Test Equipment

Asset #	Equipment	Serial #	Cal Date	Cal Due
ANP05361	Cable 6'	51	12/30/2008	12/30/2010
AN01994	Antenna	2453	12/22/2008	12/22/2010
ANP05366	Cable 30'	11	11/5/2008	11/5/2010
ANP05371	Cable 6'	49	11/10/2008	11/10/2010
ANP05360	Cable 20'	16	11/10/2008	11/10/2010
AN01517	HP 8447D Preamp	2944A08601	7/8/2008	7/8/2010
AN02872	Agilent E4440A	MY46186330	1/31/2008	1/31/2010

Test Conditions

EUT is transmitting. Due to the lack of antenna connectors the test will be done through radiated measurements. EUT is located in the back edge of the test table over 10cm of Styrofoam. The EUT is connected to a laptop via USB. All the laptop ports are filled per ANSI C63.4 procedures. PSA is on max hold, Agilent procedure used for each channel LOW, MID, HIGH.

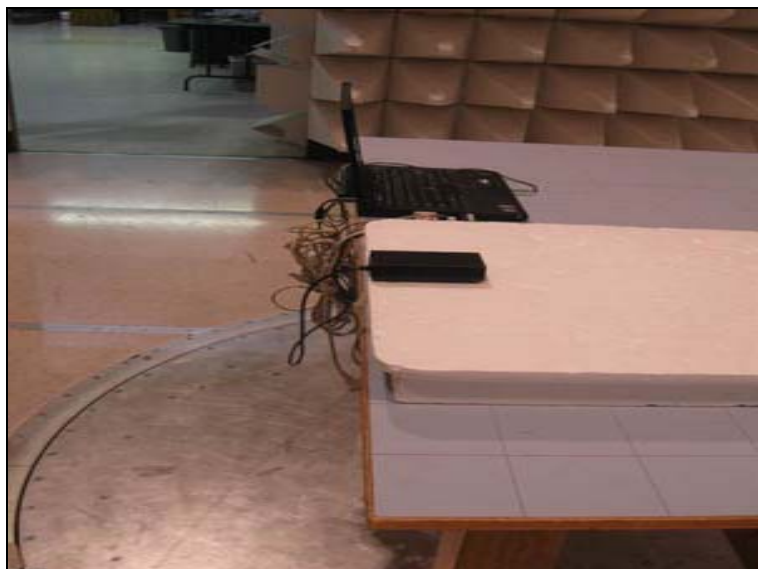
RBW = 10 kHz

VBW = 100 kHz

Span = 1 MHz

Test Setup Photos



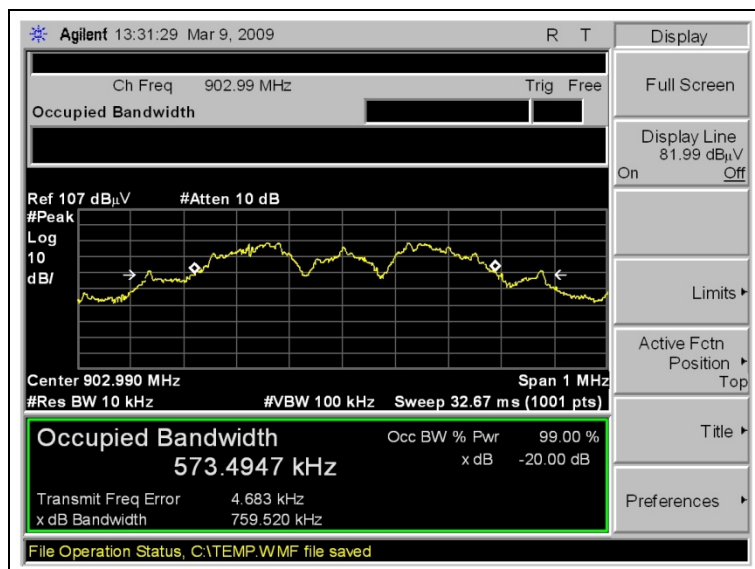


Test Data

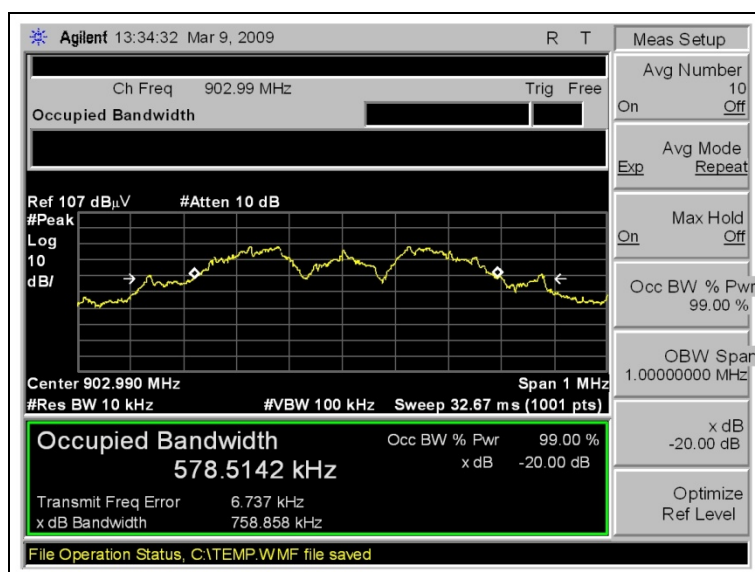
Channel	99% Bandwidth	
	Vertical	Horizontal
LOW	578.51kHz	573.49kHz
MID	568.70kHz	564.30kHz
HIGH	566.15kHz	567.90kHz

Test Plots

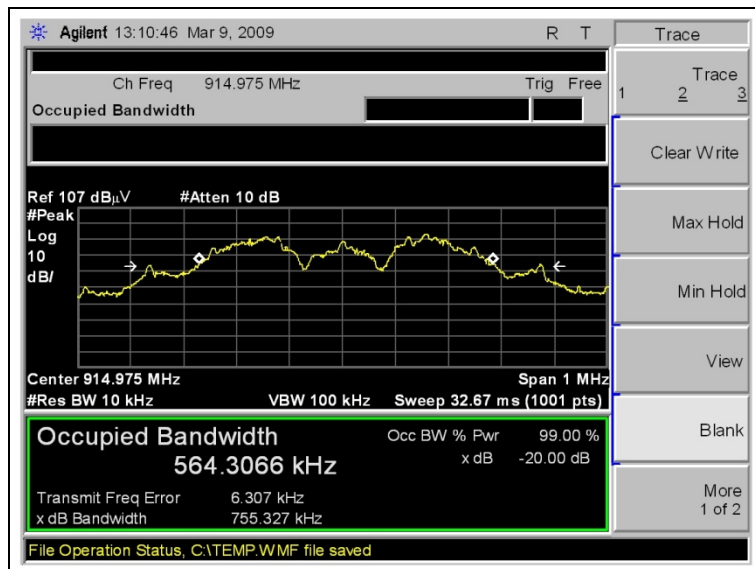
RSS-210 99% BANDWIDTH - LOW CHANNEL HORIZONTAL



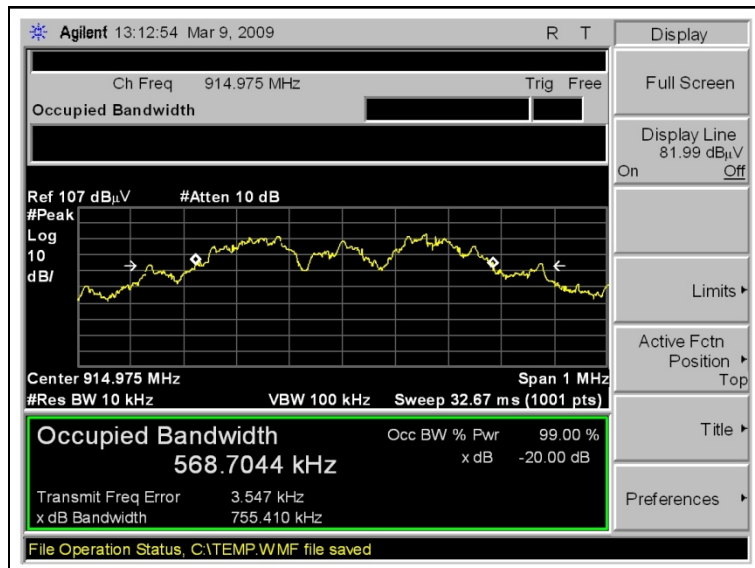
RSS-210 99% BANDWIDTH - LOW CHANNEL VERTICAL



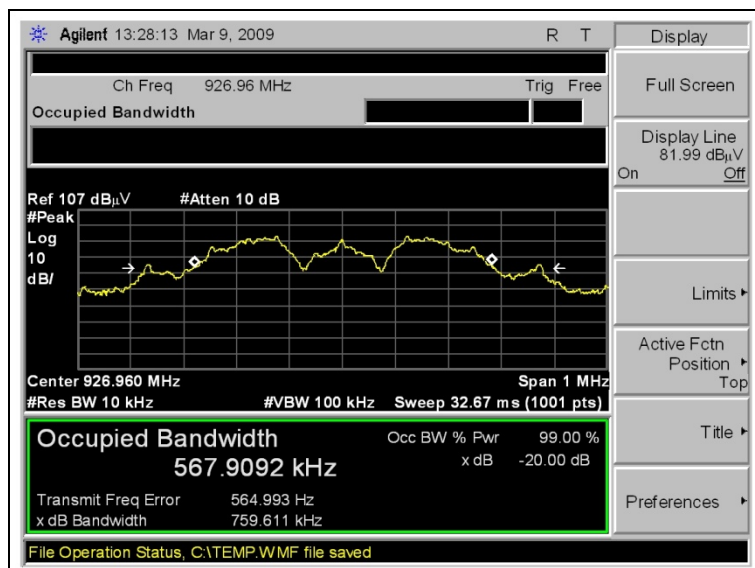
RSS-210 99% BANDWIDTH - MID CHANNEL HORIZONTAL



RSS-210 99% BANDWIDTH - MID CHANNEL VERTICAL



RSS-210 99% BANDWIDTH - HIGH CHANNEL HORIZONTAL



RSS-210 99% BANDWIDTH - HIGH CHANNEL VERTICAL

