

FCC PART 15.249 EMI MEASUREMENT AND TEST REPORT

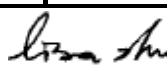
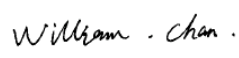
For

Summer Infant Inc.

582 Great Road North Smithfield, Rhode Island 02896 USA

FCC ID: PZK02160T

December 8, 2005

This Report Concerns: ☒ Original Report	Equipment Type: Transmitter, DUAL VIDEO MONITOR WITH SCAN
Test Engineer: Lisa Zhu  William Chan 	
Report No.: RSZ05112102	
Test Date: November 24-29, 2005	
Reviewed By: Chris Zeng 	
Prepared By: Bay Area Compliance Lab Corp. (ShenZhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China Tel: +86-755-33320018 Fax: +86-755-33320008	

Note: The test report is specially limited to the above company and this particular sample only. It may not be duplicated without prior written consent of Bay Area Compliance Lab Corp. (ShenZhen). This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the US Government.

TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
OBJECTIVE	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY	3
TEST FACILITY	3
SYSTEM TEST CONFIGURATION	5
JUSTIFICATION	5
EQUIPMENT MODIFICATIONS	5
CONFIGURATION OF TEST SETUP	6
BLOCK DIAGRAM OF TEST SETUP	6
SUMMARY OF TEST RESULTS	7
§15.203 - ANTENNA APPLICATION	8
STANDARD APPLICABLE	8
§15.207 - CONDUCTED EMISSION	9
MEASUREMENT UNCERTAINTY	9
EUT SETUP	9
EMI TEST RECEIVER SETUP	10
TEST EQUIPMENT LIST AND DETAILS.....	10
TEST PROCEDURE	10
TEST RESULTS SUMMARY	10
TEST DATA	11
PLOT(S) OF TEST DATA	11
§15.205 §15.209(A) §15.249(A) - RADIATED EMISSION	14
MEASUREMENT UNCERTAINTY	14
EUT SETUP.....	14
EMI TEST RECEIVER SETUP	15
TEST EQUIPMENT LIST AND DETAILS.....	15
TEST PROCEDURE	15
CORRECTED AMPLITUDE & MARGIN CALCULATION	15
TEST RESULTS SUMMARY	16
TEST DATA	16
§15.249(D) – OUT OF BAND EMISSION	21
STANDARD APPLICABLE	21
TEST PROCEDURE	21
TEST EQUIPMENT LIST AND DETAILS.....	21
TEST DATA	21

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The Summer Infant Inc. 's product, model number: 02160 or the "EUT" as referred to in this report is a transmitter of DUAL VIDEO MONITOR WITH SCAN. The EUT is measured approximately 12.5 cm L x 10.0 cm W x 4.5 cm H, rated input voltage: DC 9 V.

Adaptor Manufacturer: Shenzhen Wanjia Electrical Co., Ltd, model: WJ-AB-1F0045
Input: AC 100~240V-50/60Hz 0.6A, output: DC 9 V--500mA.

** The test data gathered are from production sample, serial number: 0000051212 provided by the manufacturer, we received EUT on 2005-11-21.*

Objective

This Type approval report is prepared on behalf of *Summer Infant Inc.* in accordance with Part 2, Subpart J, and Part 15, Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203,15.205,15.207,15.209 and 15.249 rules.

Related Submittal(s)/Grant(s)

No Related Submittals.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Lab Corp. (ShenZhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Lab Corp. (ShenZhen) to collect radiated and conducted emission measurement data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China.

Test site at Bay Area Compliance Lab Corp. (ShenZhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Lab Corp. (ShenZhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0). The current scope of accreditations can be found at <http://ts.nist.gov/ts/htdocs/210/214/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

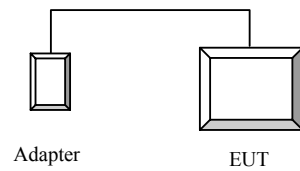
Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

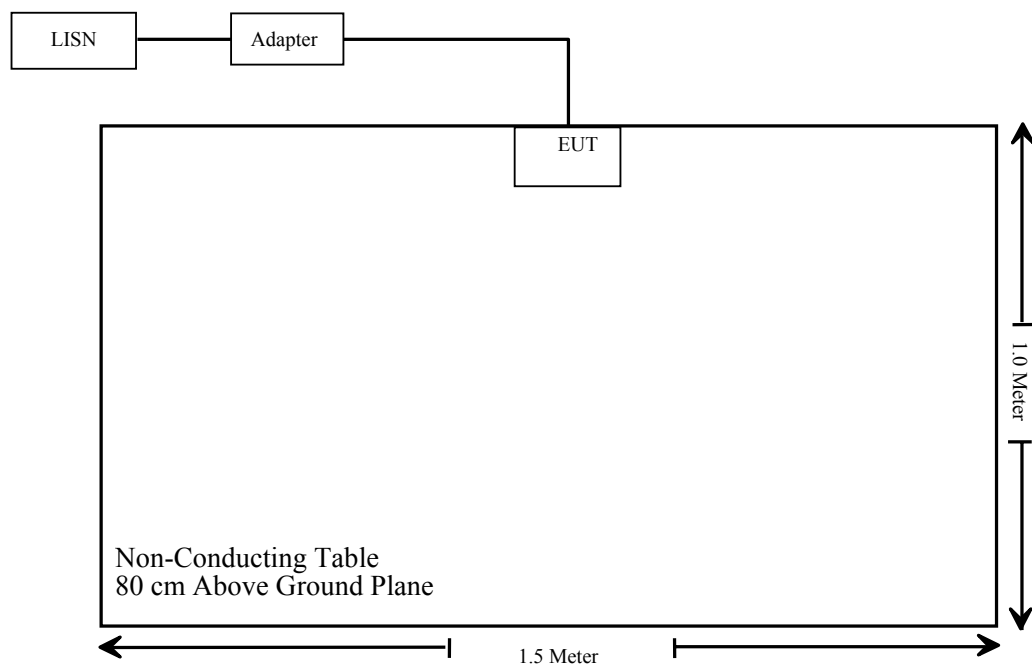
Equipment Modifications

Bay Area Compliance Lab Corp. (ShenZhen) has not done any modification on the EUT.

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.203	Antenna Requirement	Compliant
§15.205	Restricted Bands of Operation	Compliant
§15.207(a)	Conduction Emission	Compliant*
§15.209(a), §15.249(a), §15.249(c)	Radiated Emission	Compliant*
§15.249(d)	Out of band emission	Compliant

* Within measurement uncertainty

§15.203 - ANTENNA APPLICATION

Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

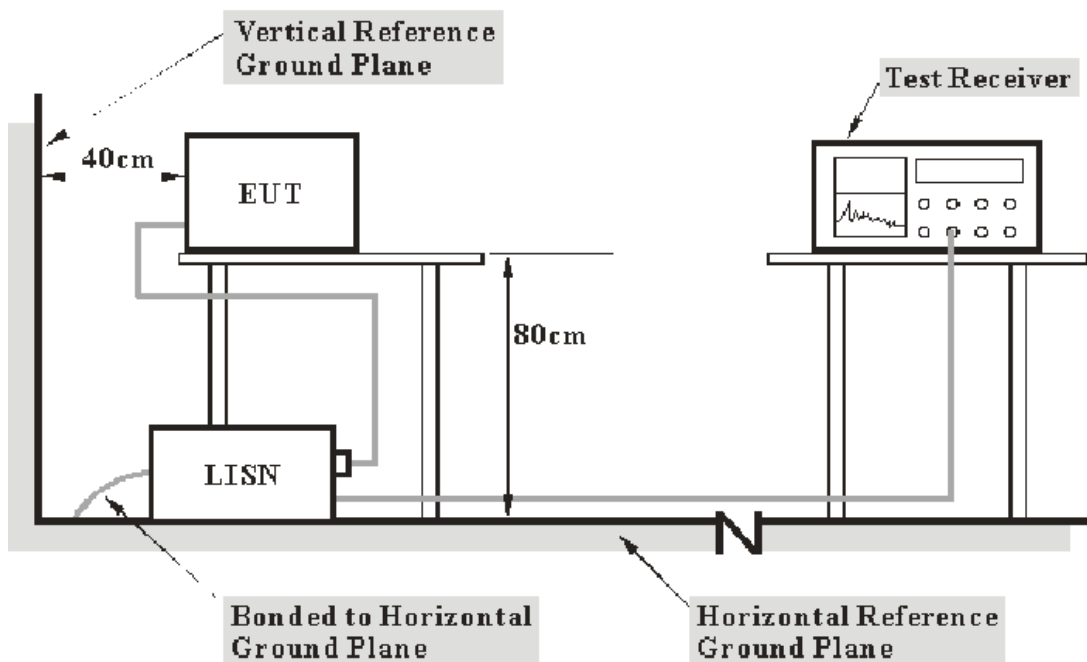
This product has a permanent antenna, fulfill the requirement of this section.

Test Result: Pass

Measurement Uncertainty

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ±2.4 dB.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15 .207 limits.

EMI Test Receiver Setup

The test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

<i>Frequency Range</i>	<i>IFBW</i>
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12008	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCS30	830245/006	2005-1-26	2006-1-26
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2005-2-28	2006-2-28

* Com-Power's LISN were used as the supporting equipment.

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

From the audio generator connect to the speaker, the distance between the EUT and the microphone was 10 cm.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, with the worst margin reading of:

-1.72 dB at 0.175 MHz in the Line conductor mode.

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	55%
ATM Pressure:	1002mbar

The testing was performed by Lisa Zhu on 2005-11-29.

Test mode: Transmitting

LINE CONDUCTED EMISSIONS				FCC PART 15 .207	
Frequency MHz	Amplitude dBμV	Detector QP/AV	Phase Line/Neutral	Limit dBμV	Margin dB
0.175	63.00	QP	Line	64.72	-1.72 *
0.175	60.40	QP	Neutral	64.72	-4.32
0.175	50.40	AV	Line	54.72	-4.32
0.350	44.60	AV	Line	48.96	-4.36
0.235	57.00	QP	Line	62.27	-5.27
0.410	42.20	AV	Line	47.65	-5.45
0.465	40.80	AV	Line	46.60	-5.80
0.175	48.90	AV	Neutral	54.72	-5.82
0.235	44.50	AV	Line	52.27	-7.77
0.290	52.10	QP	Line	60.52	-8.42
0.410	48.90	QP	Line	57.65	-8.75
0.230	43.40	AV	Neutral	52.45	-9.05
0.350	49.80	QP	Line	58.96	-9.16
0.230	52.80	QP	Neutral	62.45	-9.65
0.290	40.70	AV	Line	50.52	-9.82
0.465	46.00	QP	Line	56.60	-10.60
0.405	36.70	AV	Neutral	47.75	-11.05
0.290	38.70	AV	Neutral	50.52	-11.82
0.290	48.30	QP	Neutral	60.52	-12.22
0.350	35.60	AV	Neutral	48.96	-13.36
0.525	32.30	AV	Neutral	46.00	-13.70
0.405	43.80	QP	Neutral	57.75	-13.95
0.525	39.40	QP	Neutral	56.00	-16.60
0.350	41.90	QP	Neutral	58.96	-17.06

* Within measurement uncertainty

Plot(s) of Test Data

Plot(s) of Test Data is presented hereinafter as reference.

Conducted Emission test FCC Part 15

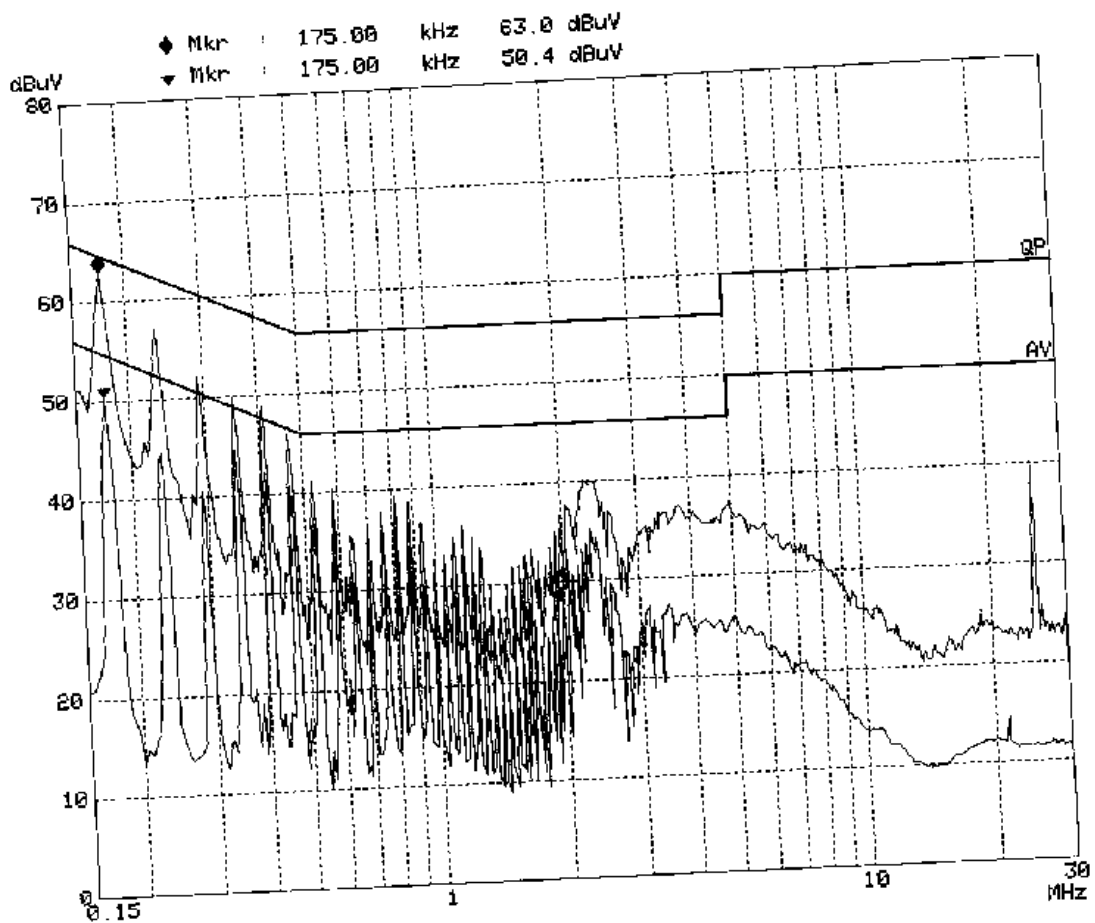
EUT: DUAL VIDEO MONITOR WITH SCAN M/N:02160
 Manuf: Wanjia
 Op Cond: Transmitting
 Operator: Lisa
 Test Spec: AC 120V/60Hz L
 Comment: Temp:25
 Humi:55%
 Date: 29. Nov 05 15:24

Scan Settings (1 Range)

Frequencies			Receiver Settings				
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp
150k	30M	5k	9k	PK+AV	20ms	AUTO	LN OFF

Transducer No.	Start	Stop	Name
1	9k	30M	FACTOR

Final Measurement: x QP / + AV
 Meas Time: 1 s
 Subranges: 25
 Acc Margin: 6dB



Conducted Emission test FCC Part 15

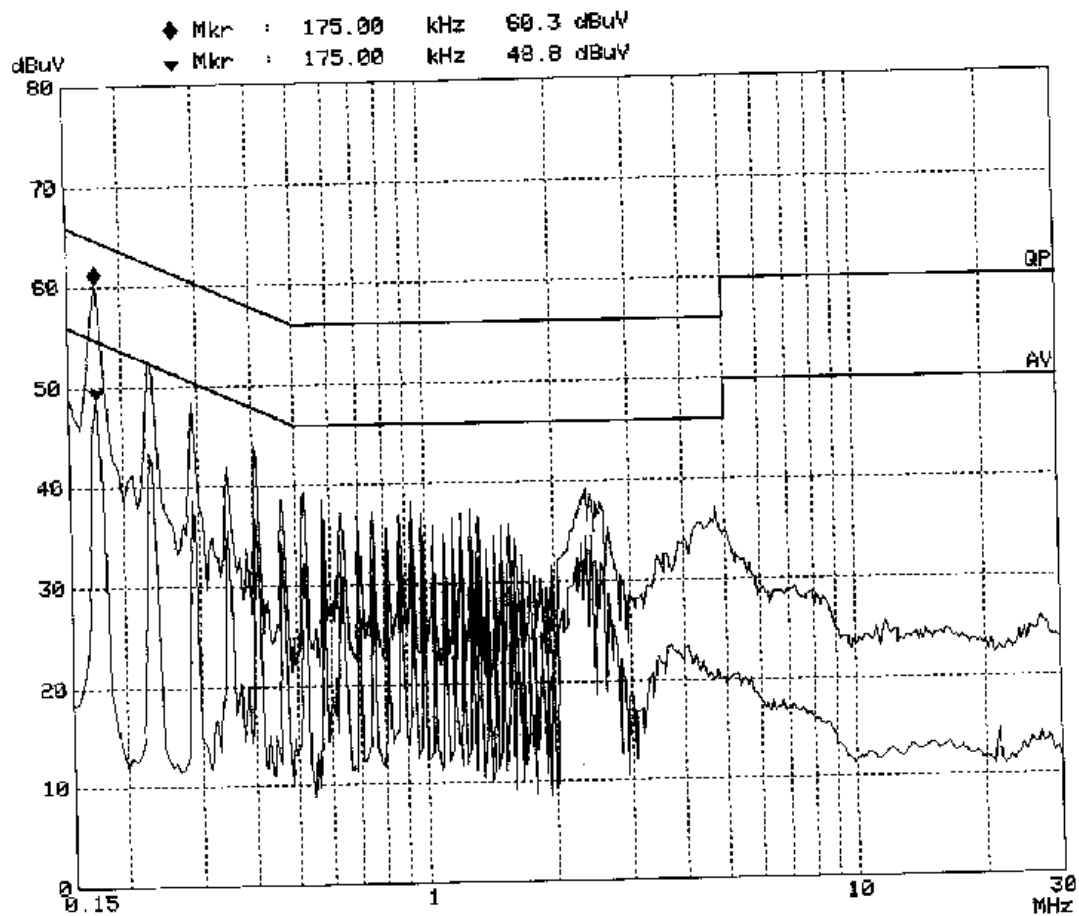
EUT: DUAL VIDEO MONITOR WITH SCAN M/N:02160
Manuf: Wanjia
Op Cond: Transmitting
Operator: Lisa
Test Spec: AC 120V/60Hz N
Comment: Temp:25
Humi:55%
Date: 29. Nov 05 15:40

Scan Settings (1 Range)

----- Frequencies -----			----- Receiver Settings -----			
Start	Stop	Step	IF BW	Detector	M-Time	Atten Preamp
150k	30M	5k	9k	PK+AV	20ms AUTO	LN OFF

Transducer No.	Start	Stop	Name
1	9k	30M	FACTOR

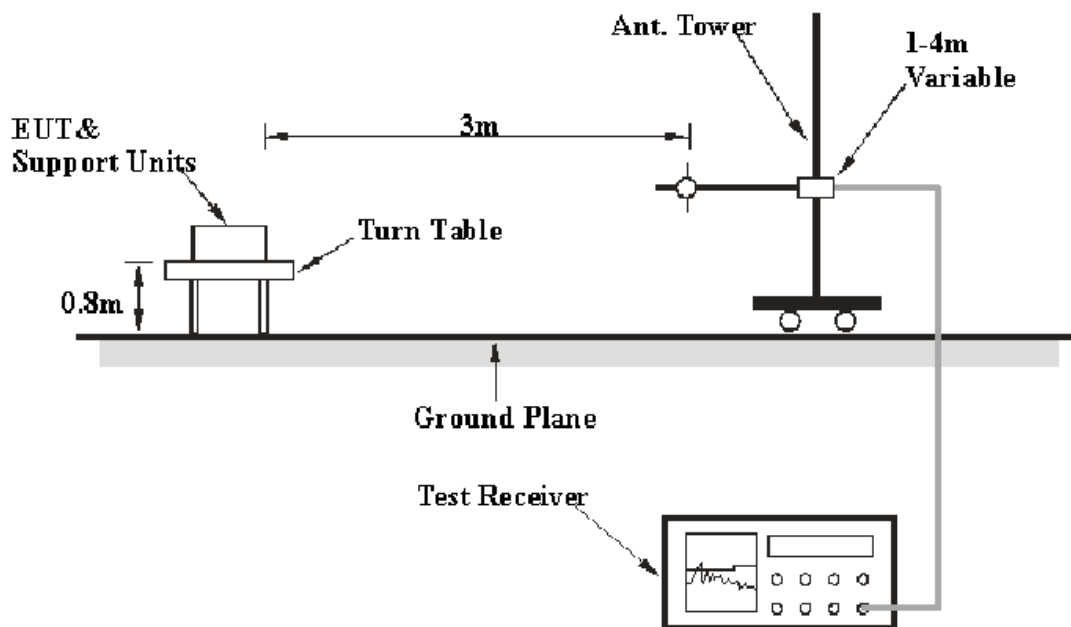
Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB



§15.205 §15.209(a) §15.249(a) - RADIATED EMISSION**Measurement Uncertainty**

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ± 4.0 dB.

EUT Setup

The radiated emission tests were performed in the 3-meter Chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209 and FCC 15.249 limits.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 25000 MHz.

During the radiated emission test, the test receiver was set with the following configurations:

<i>Frequency Range</i>	<i>RBW</i>	<i>Video B/W</i>
30 – 1000 MHz	100 kHz	300 kHz
1000 MHz – 25000 MHz	1MHz	3 MHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447D	2944A09795	2005-8-17	2006-8-17
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2005-8-17	2006-8-17
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2005-4-28	2006-4-28
HP	Spectrum analyzer	8593A	2919A00242	2005-2-28	2006-2-28
HP	Preamplifier	8449B	3008A00277	2005-8-17	2006-8-17
SUNOL SCIENCES	Horn Antenna	DRH-118	A052604	2005-7-20	2006-7-20

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

For the radiated emissions test, the adapter power cords were connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the Quasi-peak detection mode.

From the audio generator connect to the speaker, the distance between the EUT and the microphone was 10 cm.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Meter Reading} + \text{Antenna Loss} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Standard Limit}$$

Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15.249, with the worst margin reading of:

30-1000MHz: **-6.9 dB** at **30.00 MHz** in the **Vertical** polarization.
 1-25 GHz (Low channel): **-5.0 dB** at **4820 MHz** in the **Vertical** polarization.
 1-25 GHz (Middle channel): **-4.3 dB** at **4882 MHz** in the **Vertical** polarization.
 1-25 GHz (High channel): **-5.0 dB** at **4936 MHz** in the **Vertical** polarization.

Test Data

Environmental Conditions

Temperature:	27 ° C
Relative Humidity:	55%
ATM Pressure:	1000mbar

The testing was performed by William Chan on 2005-11-24.

Test mode: Transmitting

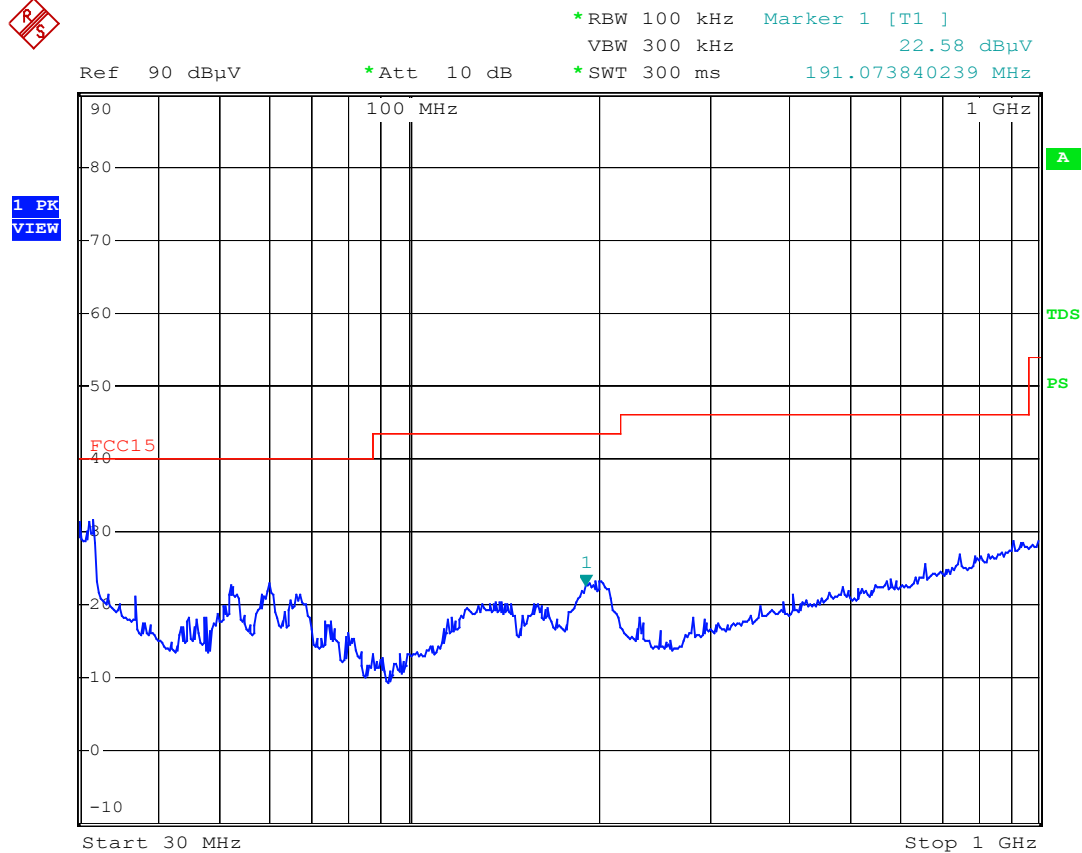
Frequency	Meter Reading	Detector	Direction	Height	Polar	Antenna Loss	Cable loss	Amplifier Gain	Corr. Ampl.	FCC Part 15.249	
MHz	dBuV/m	PK/QP/AV	Degree	Meter	H / V	dB	dB	dB	dBuV/m	Limit dBuV/m	Margin dB
30-1000MHz											
30.00	37.3	PK	45	1.2	V	24.1	0.6	28.8	33.1	40.0	-6.9
32.17	37.1	PK	60	1.0	V	24.1	0.6	28.8	33.0	40.0	-7.1
30.42	36.0	PK	180	1.0	V	24.1	0.6	28.8	31.9	40.0	-8.1
31.50	35.8	PK	180	1.0	H	24.1	0.6	28.8	31.6	40.0	-8.4
31.07	35.5	PK	45	1.0	H	24.1	0.6	28.8	31.3	40.0	-8.7
900.14	37.5	PK	180	1.0	V	22.9	3.5	27.9	36.0	46.0	-10.0
202.10	41.2	PK	120	1.0	V	12.6	1.3	28.0	27.1	43.5	-16.4
52.20	42.1	PK	270	1.2	H	8.5	0.7	28.7	22.6	40.0	-17.4
202.10	37.3	PK	270	1.0	H	12.6	1.3	28.0	23.2	43.5	-20.4
207.85	37.3	PK	45	1.2	H	11.9	1.3	27.9	22.6	43.5	-20.9
191.07	37.4	PK	360	1.2	H	11.8	1.3	28.0	22.5	43.5	-21.0
251.18	37.5	PK	60	1.0	V	12.3	1.3	27.6	23.5	46.0	-22.5

Frequency	Meter Reading	Detector	Direction	Height	Polar	Antenna Loss	Cable loss	Amplifier Gain	Corr. Ampl.	FCC Part 15.249		
MHz	dBuV/m	PK/QP/AV	Degree	Meter	H / V	dB	dB	dB	dBuV/m	Limit dBuV/m	Margin dB	Commend
1-25 GHz (Low Channel)												
4820	43.02	AV	60	1.0	V	33.8	5.2	33.00	49.0	54	-5.0	AV(harmonic)
4820	60.62	PK	45	1.0	V	33.8	5.2	33.00	66.6	74	-7.4	PK(harmonic)
7230	36.54	AV	180	1.2	V	36.8	6.1	33.50	45.9	54	-8.1	AV(harmonic)
9640	35.41	AV	60	1.0	V	38.0	7.1	34.72	45.8	54	-8.2	AV(harmonic)
4820	37.46	AV	60	1.0	H	33.8	5.2	33.00	43.5	54	-10.5	AV(harmonic)
2410	86.72	AV	180	1.2	V	28.1	3.7	35.16	83.4	94	-10.6	AV(fund)
2410	106.70	PK	45	1.0	V	28.1	3.7	35.16	103.4	114	-10.7	PK(fund)
7230	33.71	AV	180	1.2	H	36.8	6.1	33.50	43.1	54	-10.9	AV(harmonic)
4820	55.52	PK	45	1.0	H	33.8	5.2	33.00	61.5	74	-12.5	PK(harmonic)
9640	30.52	AV	60	1.0	H	38.0	7.1	34.72	40.9	54	-13.1	AV(harmonic)
7230	51.43	PK	45	1.2	V	36.8	6.1	33.50	60.8	74	-13.2	PK(harmonic)
9640	50.12	PK	45	1.2	V	38.0	7.1	34.72	60.5	74	-13.5	PK(harmonic)
7230	49.60	PK	45	1.2	H	36.8	6.1	33.50	59.0	74	-15.0	PK(harmonic)
9640	45.59	PK	45	1.2	H	38.0	7.1	34.72	56.0	74	-18.0	PK(harmonic)
2410	96.02	PK	45	1.0	H	28.1	3.7	35.16	92.7	114	-21.3	PK(fund)
2410	75.71	AV	180	1.2	H	28.1	3.7	35.16	72.4	94	-21.7	AV(fund)

Frequency	Meter Reading	Detector	Direction	Height	Polar	Antenna Loss	Cable loss	Amplifier Gain	Corr. Ampl.	FCC Part 15.249		
MHz	dBuV/m	PK/QP/AV	Degree	Meter	H / V	dB	dB	dB	dBuV/m	Limit dBuV/m	Margin dB	Commend
1-25 GHz (Middle Channel)												
4882	43.71	AV	60	1.0	V	33.8	5.2	33.00	49.7	54	-4.3	AV(harmonic)
4882	61.94	PK	45	1.0	V	33.8	5.2	33.00	67.9	74	-6.1	PK(harmonic)
9764	35.41	AV	60	1.0	H	38.0	7.1	34.72	45.8	54	-8.2	AV(harmonic)
9764	35.41	AV	60	1.0	V	38.0	7.1	34.72	45.8	54	-8.2	AV(harmonic)
4882	39.05	AV	60	1.0	H	33.8	5.2	33.00	45.1	54	-9.0	AV(harmonic)
7323	35.41	AV	180	1.2	H	36.8	6.1	33.50	44.8	54	-9.2	AV(harmonic)
7323	35.41	AV	180	1.2	V	36.8	6.1	33.50	44.8	54	-9.2	AV(harmonic)
4882	56.55	PK	45	1.0	H	33.8	5.2	33.00	62.6	74	-11.5	PK(harmonic)
7323	51.54	PK	45	1.2	H	36.8	6.1	33.50	60.9	74	-13.1	PK(harmonic)
9764	50.38	PK	45	1.2	V	38.0	7.1	34.72	60.8	74	-13.2	PK(harmonic)
9764	50.06	PK	45	1.2	H	38.0	7.1	34.72	60.4	74	-13.6	PK(harmonic)
2441	103.80	PK	45	1.0	V	28.1	3.7	35.16	100.4	114	-13.6	PK(fund)
7323	50.06	PK	45	1.2	V	36.8	6.1	33.50	59.5	74	-14.5	PK(harmonic)
2441	81.99	AV	180	1.2	V	28.1	3.7	35.16	78.6	94	-15.4	AV(fund)
2441	93.12	PK	45	1.0	H	28.1	3.7	35.16	89.8	114	-24.2	PK(fund)
2441	72.06	AV	180	1.2	H	28.1	3.7	35.16	68.7	94	-25.3	AV(fund)

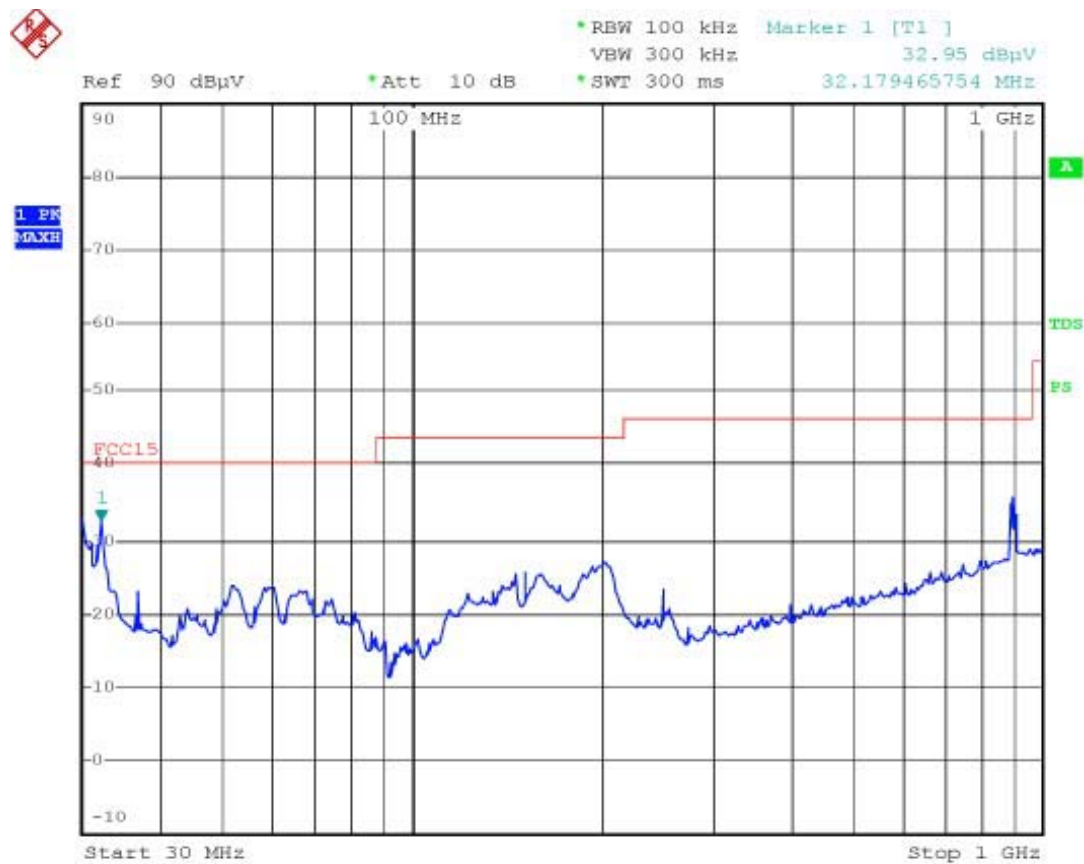
Frequency	Meter Reading	Detector	Direction	Height	Polar	Antenna Loss	Cable loss	Amplifier Gain	Corr. Ampl.	FCC Part 15.249		
MHz	dBuV/m	PK/QP/AV	Degree	Meter	H / V	dB	dB	dB	dBuV/m	Limit dBuV/m	Margin dB	Commend
1-25 GHz (High Channel)												
4936	43.02	AV	60	1.0	V	33.8	5.2	33.00	49.0	54	-5.0	AV(harmonic)
4936	60.71	PK	45	1.0	V	33.8	5.2	33.00	66.7	74	-7.3	PK(harmonic)
4936	40.52	AV	60	1.0	H	33.8	5.2	33.00	46.5	54	-7.5	AV(harmonic)
9872	35.41	AV	60	1.0	H	37.6	7.3	34.50	45.8	54	-8.2	AV(harmonic)
9872	34.51	AV	60	1.0	V	37.6	7.3	34.50	44.9	54	-9.1	AV(harmonic)
4936	57.00	PK	45	1.0	H	33.8	5.2	33.00	63.0	74	-11.0	PK(harmonic)
7404	34.51	AV	180	1.2	H	35.8	6.1	34.11	42.3	54	-11.7	AV(harmonic)
7404	33.48	AV	180	1.2	V	35.8	6.1	34.11	41.3	54	-12.7	AV(harmonic)
2468	84.57	AV	180	1.2	V	28.1	3.7	35.16	81.2	94	-12.8	AV(fund)
9872	50.06	PK	45	1.2	V	37.6	7.3	34.50	60.5	74	-13.5	PK(harmonic)
9872	48.67	PK	45	1.2	H	37.6	7.3	34.50	59.1	74	-14.9	PK(harmonic)
2468	102.40	PK	45	1.0	V	28.1	3.7	35.16	99.1	114	-15.0	PK(fund)
7404	50.06	PK	45	1.2	V	35.8	6.1	34.11	57.9	74	-16.2	PK(harmonic)
7404	49.39	PK	45	1.2	H	35.8	6.1	34.11	57.2	74	-16.8	PK(harmonic)
2468	75.80	AV	180	1.2	H	28.1	3.7	35.16	72.4	94	-21.6	AV(fund)
2468	93.30	PK	45	1.0	H	28.1	3.7	35.16	89.9	114	-24.1	PK(fund)

* Within measurement uncertainty



Wanjia Dual video monitor with scan 02160- Transmitting - Horizontal

Date: 24.NOV.2005 17:34:49



Wanjia Dual video monitor with scan 02160- Transmitting - Vertical

Date: 24.NOV.2005 17:16:16

§15.249(d) – OUT OF BAND EMISSION

Standard Applicable

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

Test Procedure

With the EUT's antenna attached, the EUT's radiated emission power was received by the test antenna which was connected to the spectrum analyzer with the START and STOP frequencies set to the EUT's operation band.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2005-8-17	2006-8-17
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2005-8-17	2006-8-17
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2005-4-28	2006-4-28
HP	Amplifier	8447D	2994A09795	2005-8-17	2006-8-17
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2005-8-17	2006-8-17
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2005-4-28	2006-4-28

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) Corp. attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	55%
ATM Pressure:	1016mbar

The testing was performed by Lisa Zhu on 2005-11-24.

The result has been complied with the 15.249(d), see the following plot:

Frequency MHz	Emission dBμV/m	Limit dBμV/m
2483.5	20.98	54
2400.0	23.48	54

Test Result: Pass



Ref Lvl
107 dB μ V

Marker 1 [T2]

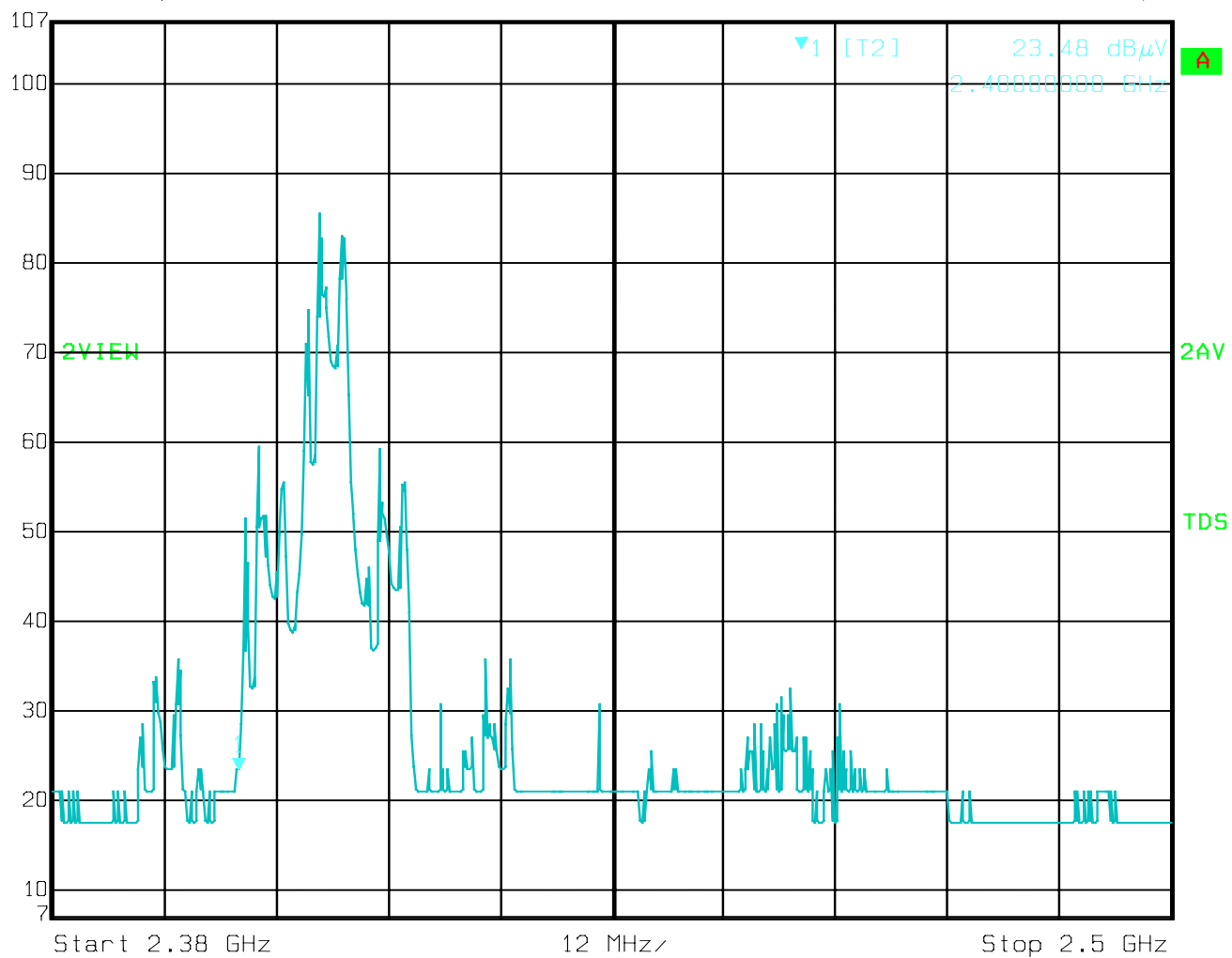
23.48 dB μ V
2.40000000 GHz

RBW 100 kHz RF Att 10 dB

VBW 300 kHz

SWT 500 ms

Unit dB μ V



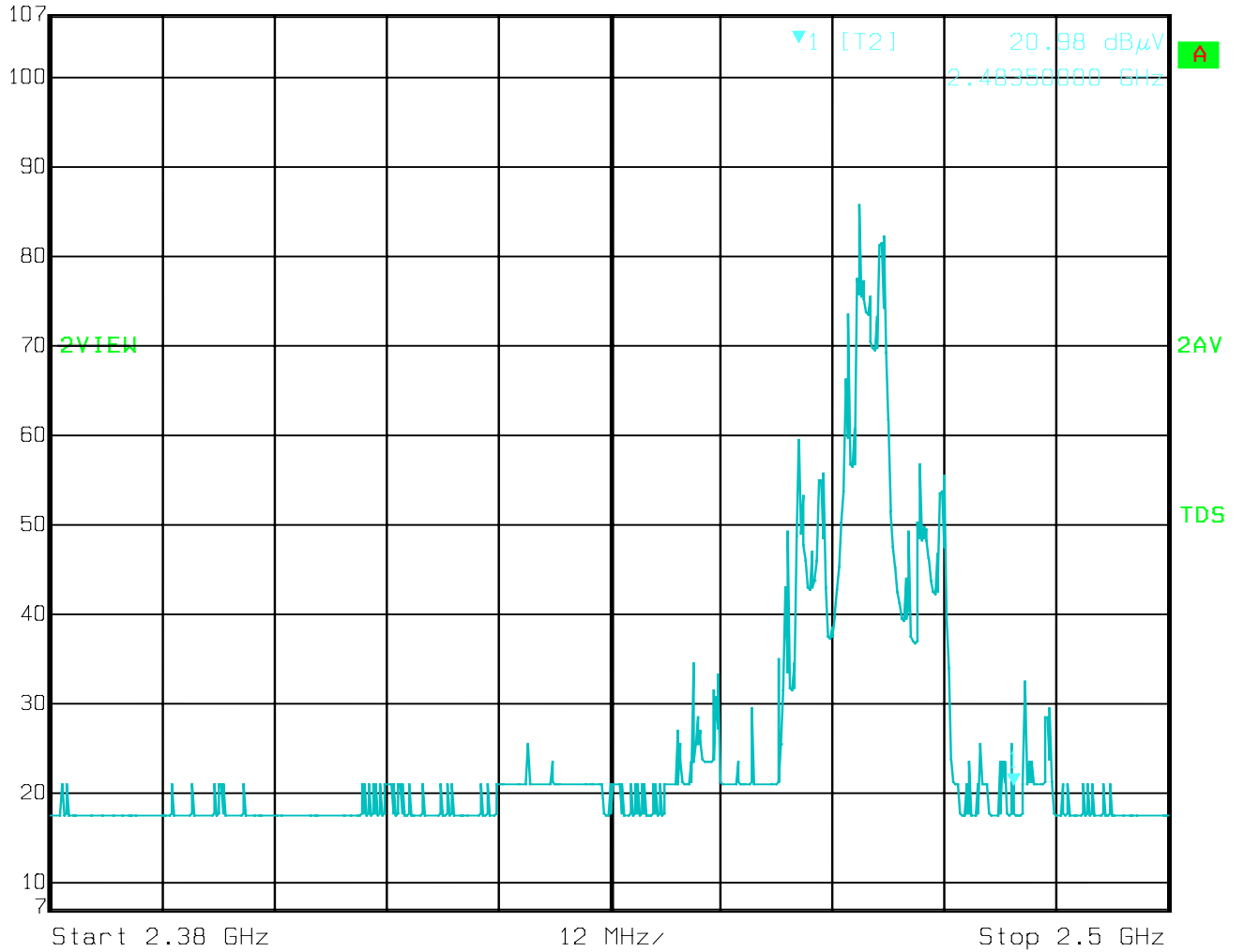
Date: 24.NOV.2005 16:37:21



Ref Lvl
107 dB μ V

Marker 1 [T2]
20.98 dB μ V
2.48350000 GHz

RBW 100 kHz RF Att 10 dB
VBW 300 kHz
SWT 500 ms Unit dB μ V



Date: 24.NOV.2005 16:41:37