

APPLICATION FOR CERTIFICATION

On Behalf of

Futaba Corporation

Radio Control

Model No. : T6EX-2.4G

FCC ID : AZPTMSS1-24G

Brand : Futaba

Prepared for : Futaba Corporation  
1080 Yabutsuka Chosei-son Chosei-gun  
Chiba, 299-4395 Japan.

Prepared by : Audix Technology Corporation  
EMC Department  
No. 53-11, Tin-Fu Tsun, Lin-Kou,  
Taipei, Taiwan

Tel : (02) 2609-9301, 2609-2133

Fax: (02) 2609-9303

File Number : EM952718  
Report Number : EM-F960027  
Date of Test : Dec. 28, 2006 ~ Jan. 12, 2007  
Date of Report : Jan. 23, 2007

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**TEST REPORT CERTIFICATION**

Applicant : Futaba Corporation  
 Manufacturer : Futaba Corporation  
 EUT Description : Radio Control  
 FCC ID : AZPTMSS1-24G  
 (A) MODEL NO. : T6EX-2.4G  
 (B) SERIAL NO. : N/A  
 (C) BRAND : Futaba  
 (D) POWER SUPPLY : DC 9.6V  
 (E) TEST VOLTAGE : DC 9.6V (DC Power Supply)

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, FEBRUARY 2006  
AND ANSI C63.4/2003

(FCC CFR 47 Part 15C, §15.205, §15.207, §15.209 and §15.247)

The device described above was tested by Audix Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C limits.

The measurement results are contained in this test report and Audix Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology Corporation.

Date of Test: Dec. 28, 2006 ~ Jan. 12, 2007

Prepared by: Tina Huang Jan. 25, 2007  
(Tina Huang/Assistant)

Test Engineer: Ben Cheng Jan. 26, 2007  
(Ben Cheng/Section Manager)

Approved & Authorized Signer: Leon Liu Jan. 26 2007  
(Leon Liu/Senior Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

Description	:	Radio Control (Transmitter Unit)
Model Number	:	T6EX-2.4G
Serial Number	:	N/A
Brand	:	Futaba
FCC ID	:	AZPTMSS1-24G
Applicant	:	Futaba Corporation 1080 Yabutsuka Chosei-son Chosei-gun Chiba, 299-4395 Japan.
Manufacturer	:	Futaba Corporation 1080 Yabutsuka Chosei-son Chosei-gun Chiba, 299-4395 Japan.
Radio Technology	:	DSSS Modulation
Frequency Band	:	2405.376MHz ~ 2479.104MHz
Tested Frequency	:	2405.376MHz (Channel 02) 2442.240MHz (Channel 38) 2479.104MHz (Channel 74)
Frequency Channel	:	37 channels
Antenna (Pencil Antenna )	:	Hidaka Denki Work Antenna Gain: 1.64dBi
Battery	:	Futaba, M/N NT8F700B 9.6VDC, 700mAh
Receiver	:	Futaba, M/N R606FS FCC by DoC (Report Number: EM-F960026)
Date of Receipt of Sample	:	Dec. 21, 2006
Date of Test	:	Dec. 28, 2006 ~ Jan. 12, 2007

## 1.2. Tested Supporting System Details

### 1.2.1. PC SYSTEM

Model Number : VECTRA XE320  
 Serial Number : SG21101966  
 FCC ID : By DoC  
 BSMI ID : 3912A318  
 Brand : HP  
 Manufacturer : First International Computer  
 Power Cord : Non-Shielded, Detachable, 1.8m

### 1.2.2. 15" LCD MONITOR

Model Number : D5063M  
 Serial Number : CN206A6034  
 FCC ID : ARSLM562H  
 BSMI ID : R33037  
 Manufacturer : Top Victory Electronics (Fujian) Co., Ltd.  
 D-Sub Cable : Shielded, Detachable, 1.8m  
                   Bonded two ferrite cores  
 AC Adapter : Delta, M/N ADP-40TB  
                   BSMI ID 3892D142  
                   Cord: Shielded, Undetachable, 1.8m  
                   Bonded a ferrite core  
 Power Cord : Non-Shielded, Detachable, 1.8m

### 1.2.3. KEYBOARD

Model Number : SDM4700P  
 Serial Number : B69360HLPPD0R6  
 FCC ID : By DoC  
 BSMI ID : R33018  
 Manufacturer : SAMSUNG (Brand: HP)  
 Data Cable : Non-Shielded, Undetachable, 1.8m

### 1.2.4. MOUSE

Model Number : M-S69  
 Serial Number : F6AB70S5BOY1NWZ  
 FCC ID : JNZ211443  
 BSMI ID : R41126  
 Manufacturer : Logitech (Brand: HP)  
 Data Cable : Non-Shielded, Undetachable, 1.8m

### 1.2.5. DC POWER SUPPLY #1 (To EUT)

Model Number : 3303A  
 Serial Number : 721773  
 Manufacturer : TOP WARD  
 DC Power Cable : Non-Shielded, Detachable, 1.2m  
 AC Power Cord : Non-Shielded, Detachable, 1.8m

## 1.2.6. DC POWER SUPPLY #2 (To Conversion Board)

Model Number : 3303D  
 Serial Number : 718859  
 Manufacturer : TOP WARD  
 DC Power Cable : Non-Shielded, Detachable, 0.6m  
 AC Power Cord : Non-Shielded, Detachable, 1.8m

## 1.2.7. CONVERSION BOARD (RS-232 Level Conversion Circuit)

Part Number : 050200006  
 Serial Number : N/A  
 Manufacturer : FUTABA  
 RS-232 Cable : Shielded, Detachable, 1.5m (To PC System)  
 Data Cable : Non-Shielded, Detachable, 0.25m (To EUT)

## 1.3. Description of Test Facility

Name of Firm : **Audix Technology Corporation**  
**EMC Department**  
 No. 53-11, Tin-Fu Tsun, Lin-Kou,  
 Taipei, Taiwan

Test Location & Facility (AC) : **Semi-Anechoic Chamber**  
 No. 53-11, Tin-Fu Tsun, Lin-Kou,  
 Taipei, Taiwan.  
 May 15, 2006 File on  
 Federal Communication Commission  
 Registration Number: 90993

NVLAP Lab. Code : 200077-0  
 (NVLAP is a NATA accredited body under Mutual Recognition Agreement)

## 1.4. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB), (V/m)
Radiation Test (Distance: 3m)	30MHz~300MHz	± 2.91dB
	300MHz~1000MHz	± 2.74dB
	Above 1GHz	± 5.02dB

Remark : Uncertainty =  $ku_c(y)$

Test Item	Uncertainty
6dB Bandwidth	± 0.05kHz
Emission Limitations	± 0.13dB
Maximum peak output power	± 0.33dBm
Band edges	± 0.13dB
Power spectral density	± 0.13dB



## **2. CONDUCTED EMISSION MEASUREMENT**

**【The EUT only employs battery power for operation, no conductive emission limits are required according to FCC Part 15 Section §15.207】**

### 3. RADIATED EMISSION MEASUREMENT

#### 3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

##### 3.1.1. For Frequency Range 30MHz~1000MHz (at Semi-Anechoic Chamber)

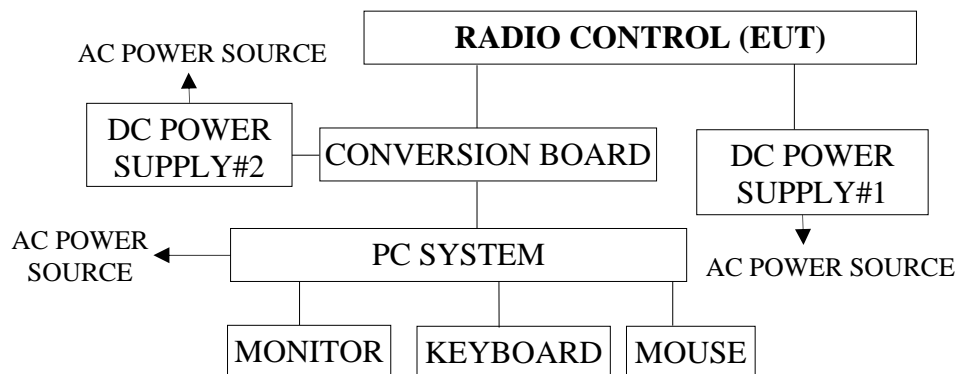
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Aug. 23, 06'	Aug. 23, 07'
2.	Test Receiver	R & S	ESCS30	100265	Sep. 19, 06'	Sep. 18, 07'
3.	Pre-Amplifier	HP	8447D	2944A06305	Mar. 09, 06'	Mar. 08, 07'
4.	Biconical Antenna	CHASE	VBA6106A	1264	Apr. 19, 06'	Apr. 18, 07'
5.	Log Periodic Antenna	Schwarzbeck	UHALP91 08-A	0139	Apr. 19, 06'	Apr. 18, 07'

##### 3.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

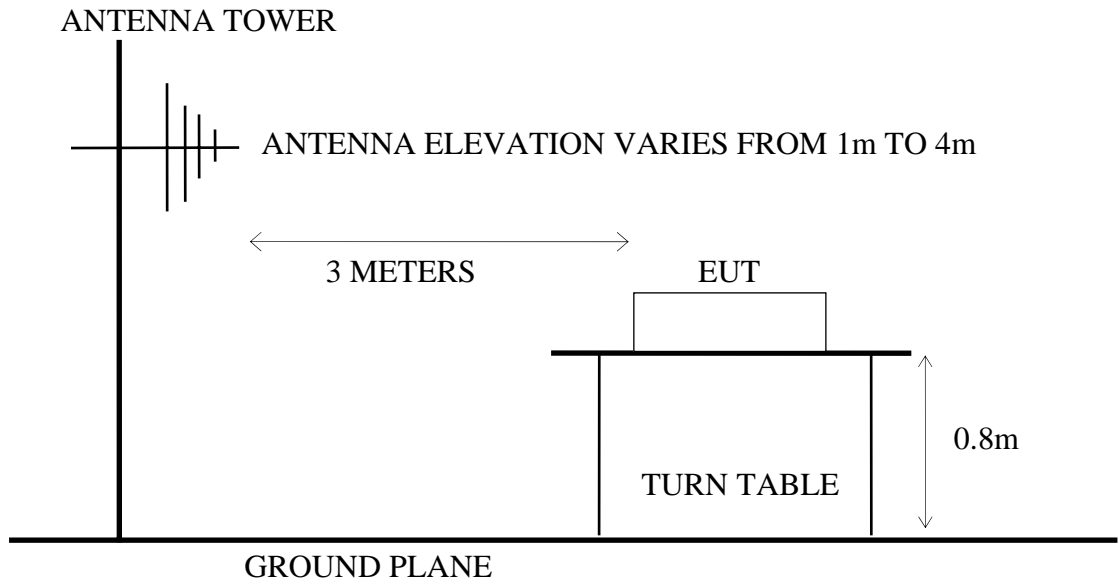
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Aug. 23, 06'	Aug. 23, 07'
2.	Pre-Amplifier	HP	8449B	3008A01284	Jun. 30, 06'	Jun. 29, 07'
3.	2.4GHz Notch Filter	EWT	EWT-14-0 070	G2	Dec. 08, 06'	Dec. 07, 07'
4.	Horn Antenna	EMCO	3115	9112-3775	Jun. 01, 06'	May 31, 07'
5.	Horn Antenna	EMCO	3116	2653	Oct. 04, 06'	Oct. 03, 07'

#### 3.2. Test Setup

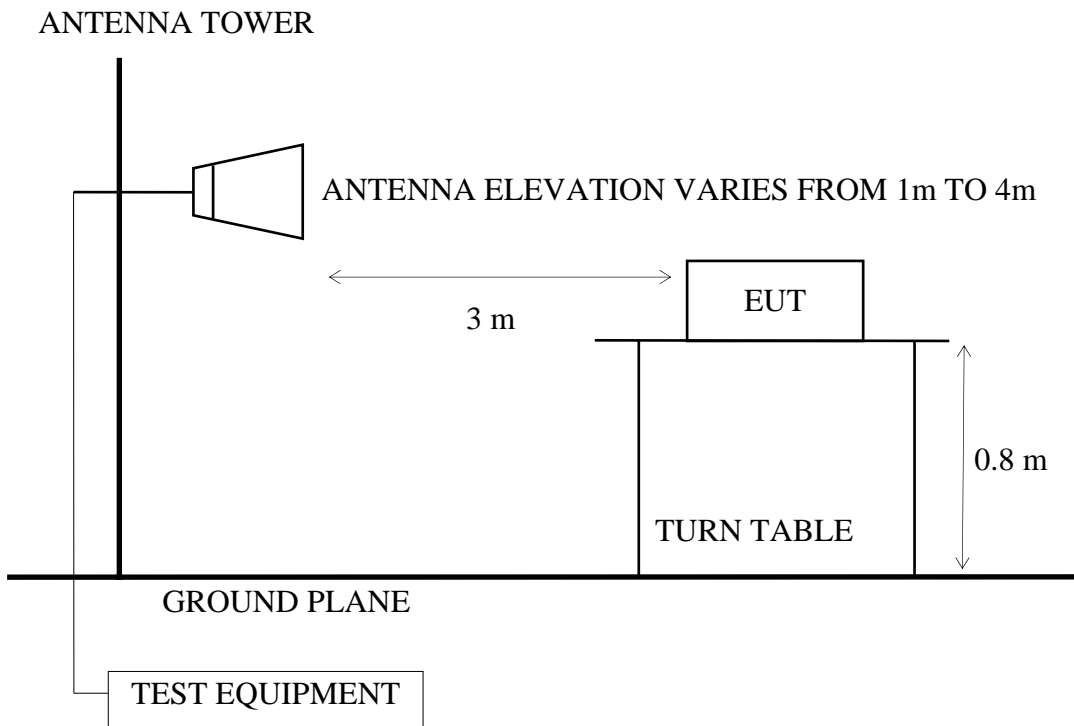
##### 3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Semi-Anechoic Chamber (3m) Setup Diagram for 30-1000MHz



3.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz



### 3.3. Radiated Emission Limits (§15.209)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMITS	
		$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 $\text{dB}\mu\text{V/m}$ (Peak) 54.0 $\text{dB}\mu\text{V/m}$ (Average)	

- Remark :
- (1) Emission level ( $\text{dB}\mu\text{V/m}$ ) = 20 log Emission level ( $\mu\text{V/m}$ )
  - (2) The tighter limit applies at the edge between two frequency bands.
  - (3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
  - (4) The limits in this table are based on CFR 47 Part 15.205(a)(b) and Part 15.209 (a).
  - (5) The over 1GHz limit, FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.205(b) & Part 15.209(e) and Part 15.207(c).

### 3.4. Operating Condition of EUT

- 3.4.1. Setup the EUT and simulator as shown on 3.2.
- 3.4.2. Turned on the power of all equipment.
- 3.4.3. The EUT was set the PC system using test program “Futaba Term”.
- 3.4.4. The EUT was set to continuously transmit signals at 2405.376MHz (stand, side and lie), 2442.240MHz (stand) and 2479.104MHz (stand) during testing.
- 3.4.5. The EUT was set to continuously receive signals at 2442.240MHz (stand) during testing.

### 3.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set 3 meters away from the receiving antenna which was mounted on a antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log-periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation.

The bandwidth of the R&S Test Receiver ESCS30 was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth and video bandwidth of test spectrum analyzer is 1MHz for peak detection (PK) at frequency above 1GHz.

The resolution bandwidth of test spectrum analyzer is 1MHz and the video bandwidth is 10Hz for average detection (AV) at frequency above 1GHz.

The frequency range from 30MHz to 25GHz (Up to 10<sup>th</sup> harmonics from fundamental frequency) was checked.

### 3.6. Test Results

#### **PASSED.**

(All emissions not reported below are too low against the prescribed limits.)

EUT : Radio Control      M/N : T6EX-2.4G

Test Date : Dec. 28, 2006      Temperature : 22      Humidity : 69%

Test Date : Dec. 29, 2006      Temperature : 20      Humidity : 58%

Test Date : Jan. 11, 2007      Temperature : 20      Humidity : 58%

Test Date : Jan. 12, 2007      Temperature : 22      Humidity : 69%

#### **For Frequency Range 30MHz~1000MHz:**

The EUT with following test modes were performed during this section testing and all the test results are listed in section 3.6.1.

Mode	Channel	Frequency	Test Mode	Position	Reference Test Data #	
					Horizontal	Vertical
1.	02	2405.376MHz	Transmit	Stand	# 10	# 9
2.				Side	# 10	# 9
3.				Lie	# 9	# 10
4.	38	2442.240MHz	Transmit	Stand	# 9	# 10
5.	74	2479.104MHz	Transmit	Stand	# 10	# 9
6.	38	2442.240MHz	Receive	Stand	# 10	# 9

\* Above all final readings were measured with Quasi-Peak detector.

#### **For Frequency above 1GHz:**

The EUT with following test modes were performed during this section testing and all the test results are listed in section 3.6.2.

Mode	Channel	Frequency	Test Mode	Position
1.	02	2405.376MHz	Transmit	Stand
2.				Side
3.				Lie
4.	38	2442.240MHz	Transmit	Stand
5.	74	2479.104MHz	Transmit	Stand
6.	38	2442.240MHz	Receive	Stand

\* Above all final readings were measured with Peak detector and Average detector.

**For Restricted Bands:**

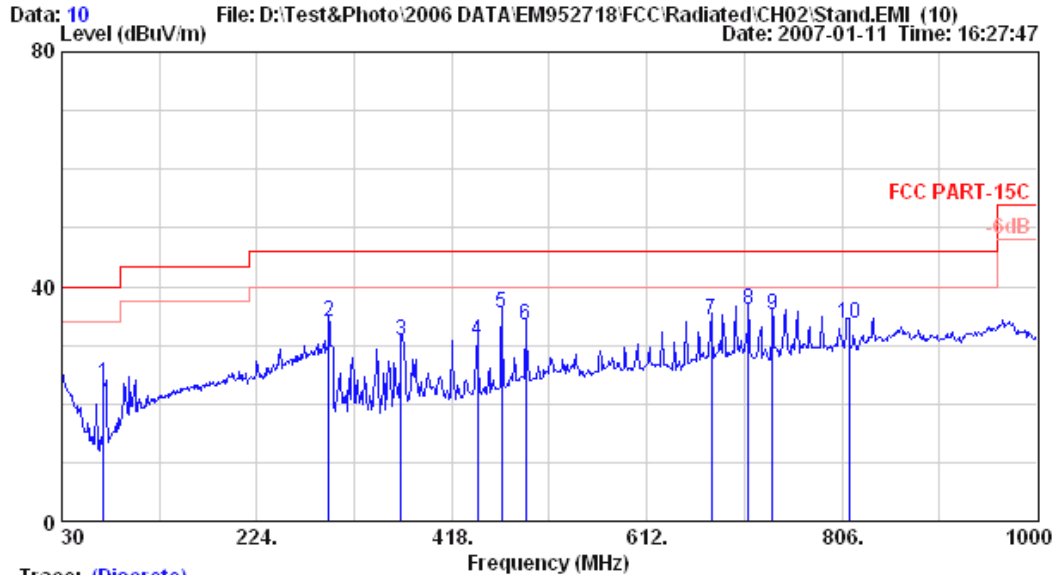
The EUT was tested in restricted bands and all the test results are listed in section 3.6.3. (The restricted bands defined in part 15.205(a))

Mode	Channel	Frequency	Test Mode
1.	02	2405.376MHz	Transmit
2.	74	2479.104MHz	Transmit

3.6.1. Frequency Range 30-1000MHz



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

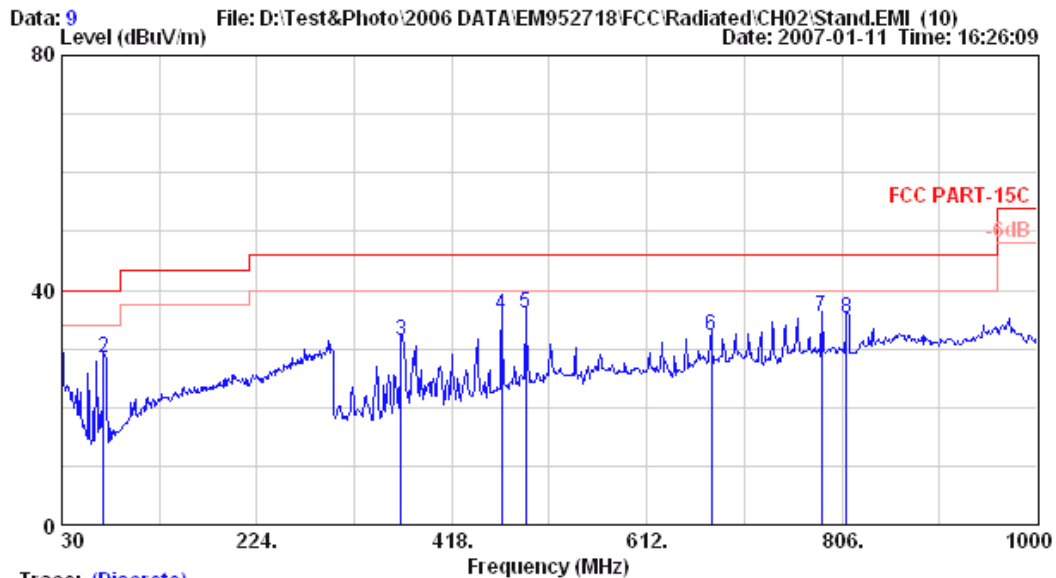
Site no.	: A/C Chamber	Data no.	: 10
Dis. / Ant.	: 3m VBA6106A/UHALP9108A	Ant. pol.	: HORIZONTAL
Limit	: FCC PART-15C		
Env. / Ins.	: 8593EM 20*C/58%	Engineer	: Alvin_Yang
EUT	: Radio Control M/N:T6EX-2.4G		
Power Rating	: DC9.6V		
Test Mode	: Stand(CH02)		

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)	
1	71.710	12.26	1.80	9.29	23.36	40.00	16.64
2	295.780	26.48	4.00	3.60	34.07	46.00	11.93
3	367.560	16.83	4.46	9.48	30.77	46.00	15.23
4	443.220	17.62	5.33	7.89	30.84	46.00	15.16
5	467.470	18.21	5.80	11.50	35.51	46.00	10.49
6	491.720	18.61	6.33	8.44	33.38	46.00	12.62
7	676.020	22.89	6.40	5.09	34.37	46.00	11.63
8	712.880	23.30	6.53	6.25	36.08	46.00	9.92
9	737.130	22.23	6.60	6.24	35.08	46.00	10.92
10	812.790	24.02	7.00	2.65	33.67	46.00	12.33

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

Site no.	: A/C Chamber	Data no.	: 9
Dis. / Ant.	: 3m VBA6106A/UHALP9108A	Ant. pol.	: VERTICAL
Limit	: FCC PART-15C		
Env. / Ins.	: 8593EM 20°C/58%	Engineer	: Alvin_Yang
EUT	: Radio Control M/N:T6EX-2.4G		
Power Rating	: DC9.6V		
Test Mode	: Stand(CH02)		

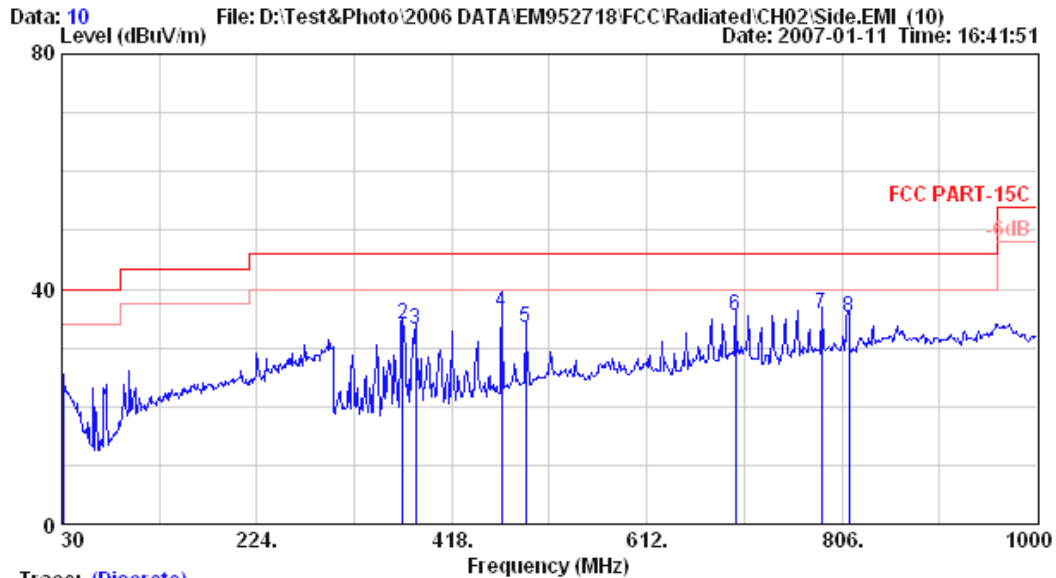
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	30.000	24.86	1.10	3.51	29.47	40.00	10.53	
2	71.710	12.26	1.80	14.24	28.31	40.00	11.69	
3	367.560	16.83	4.46	10.01	31.30	46.00	14.70	
4	467.470	18.21	5.80	11.73	35.74	46.00	10.26	
5	491.720	18.61	6.33	11.11	36.05	46.00	9.95	
6	676.020	22.89	6.40	2.81	32.09	46.00	13.91	
7	785.630	23.83	6.90	4.61	35.34	46.00	10.66	
8	810.850	24.09	7.00	4.04	35.13	46.00	10.87	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.





AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
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Trace: (Discrete)

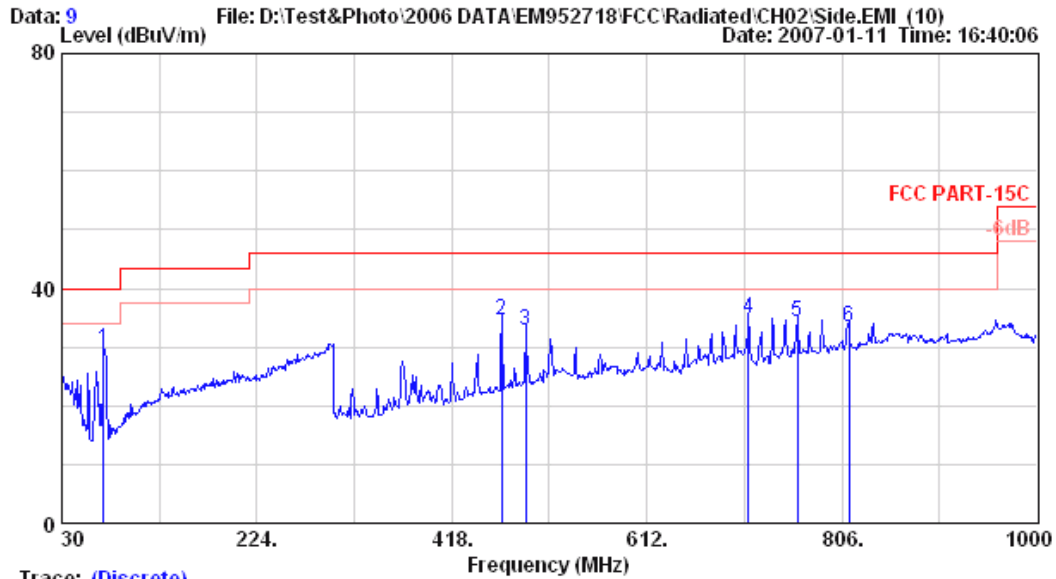
Site no. : A/C Chamber Data no. : 10  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 20\*C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Side(CH02)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	30.970	24.81	1.10	-1.48	24.43	40.00	15.57	
2	369.500	16.93	4.60	12.47	34.00	46.00	12.00	
3	382.110	17.29	4.60	11.17	33.06	46.00	12.94	
4	467.470	18.21	5.80	12.09	36.10	46.00	9.90	
5	491.720	18.61	6.33	8.48	33.42	46.00	12.58	
6	700.270	23.46	6.50	5.47	35.43	46.00	10.57	
7	785.630	23.83	6.90	5.11	35.84	46.00	10.16	
8	812.790	24.02	7.00	4.23	35.25	46.00	10.75	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
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Trace: (Discrete)

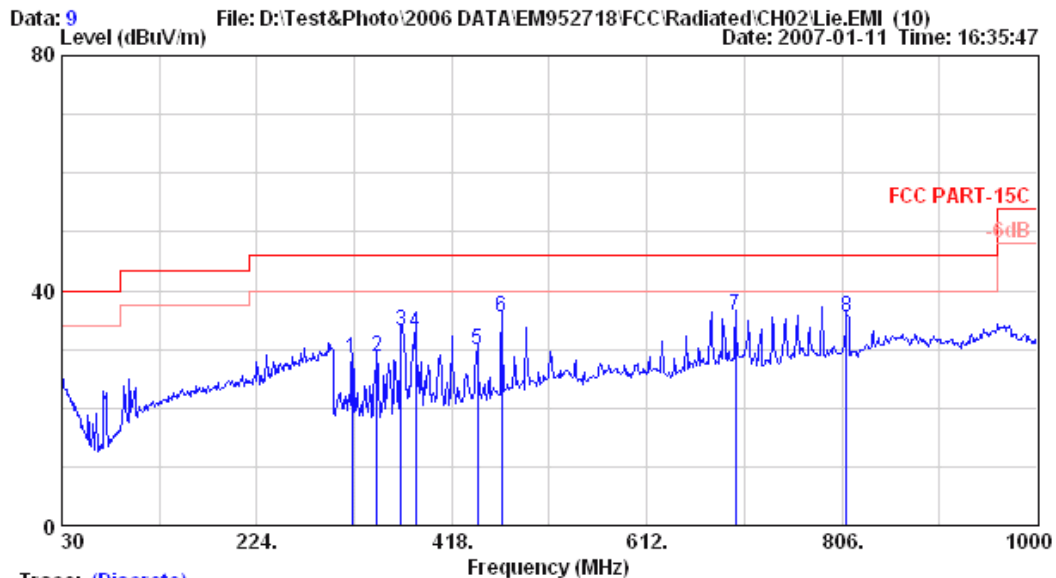
Site no. : A/C Chamber Data no. : 9  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 20°C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Side(CH02)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBµV)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Remark
1	71.710	12.26	1.80	15.39	29.46	40.00	10.54	
2	467.470	18.21	5.80	10.60	34.61	46.00	11.39	
3	491.720	18.61	6.33	7.95	32.89	46.00	13.11	
4	712.880	23.30	6.53	4.95	34.78	46.00	11.22	
5	761.380	23.68	6.70	3.77	34.15	46.00	11.85	
6	812.790	24.02	7.00	2.31	33.33	46.00	12.67	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

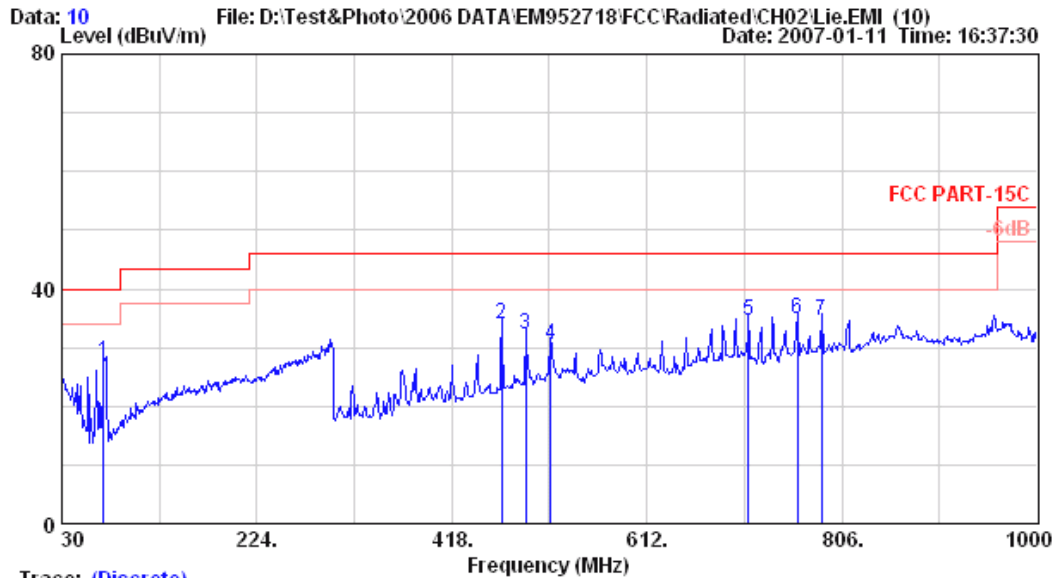
Site no. : A/C Chamber Data no. : 9  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 20+C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Lie(CH02)

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBμV)	Level (dBμV/m)	(dBμV/m)	(dB)	
1	319.060	14.93	4.10	9.36	28.39	46.00	17.61
2	343.310	15.05	4.34	9.21	28.59	46.00	17.41
3	367.560	16.83	4.46	11.81	33.10	46.00	12.90
4	382.110	17.29	4.60	11.05	32.94	46.00	13.06
5	443.220	17.62	5.33	6.99	29.94	46.00	16.06
6	467.470	18.21	5.80	11.50	35.51	46.00	10.49
7	700.270	23.46	6.50	5.74	35.70	46.00	10.30
8	810.850	24.09	7.00	4.39	35.48	46.00	10.52

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

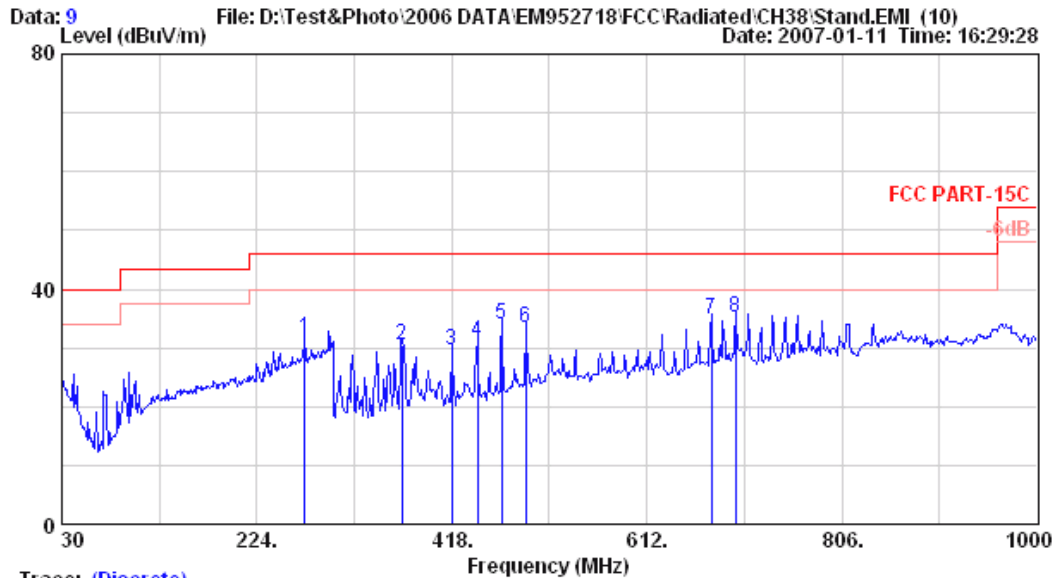
Site no. : A/C Chamber Data no. : 10  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 20\*C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Lie(CH02)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	71.710	12.26	1.80	13.60	27.67	40.00	12.33	
2	467.470	18.21	5.80	9.90	33.91	46.00	12.09	
3	491.720	18.61	6.33	7.40	32.34	46.00	13.66	
4	515.970	19.98	6.80	3.72	30.50	46.00	15.50	
5	712.880	23.30	6.53	4.72	34.55	46.00	11.45	
6	761.380	23.68	6.70	4.54	34.92	46.00	11.08	
7	785.630	23.83	6.90	3.92	34.65	46.00	11.35	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

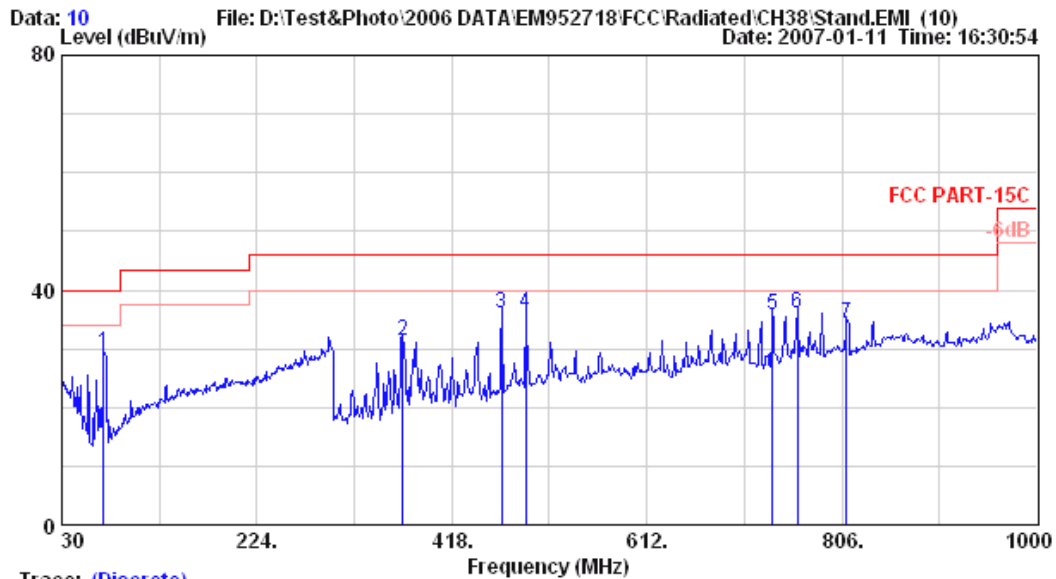
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 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 22\*C/69% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Stand(CH38)

	Ant. Cable		Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)	
1	25.06	3.70	2.87	31.63	46.00	14.37	
2	16.88	4.60	9.11	30.59	46.00	15.41	
3	16.93	5.04	7.71	29.68	46.00	16.32	
4	17.62	5.33	7.99	30.94	46.00	15.06	
5	18.21	5.80	10.09	34.10	46.00	11.90	
6	18.61	6.33	8.48	33.42	46.00	12.58	
7	22.89	6.40	5.57	34.85	46.00	11.15	
8	23.46	6.50	5.24	35.20	46.00	10.80	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:temc@ttemc.com.tw



Trace: (Discrete)

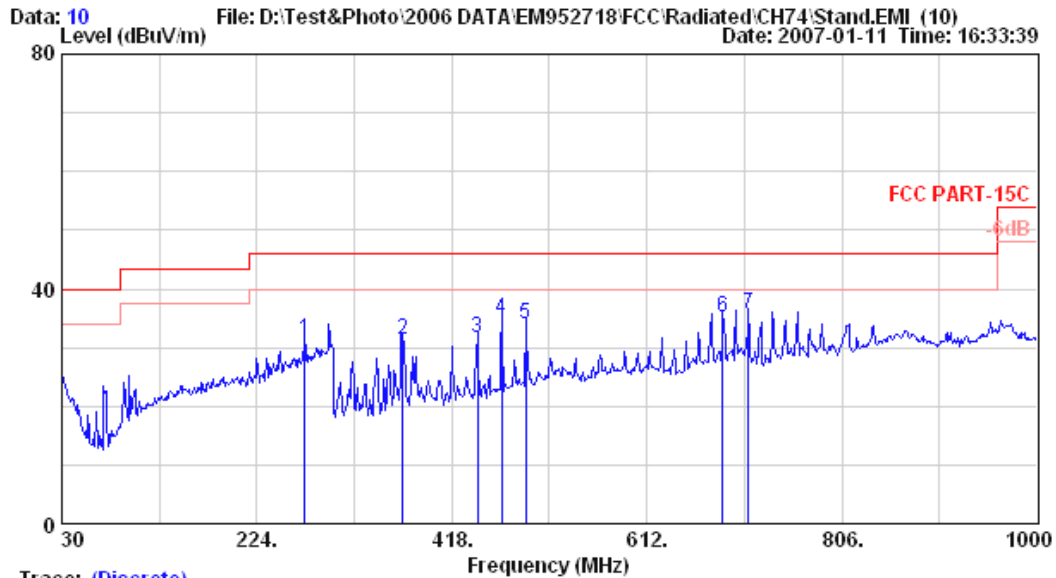
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 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 22°C/69% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Stand(CH38)

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	(dBµV/m)	(dB)	
1	71.710	12.26	1.80	15.19	29.26	40.00	10.74
2	369.500	16.93	4.60	9.76	31.29	46.00	14.71
3	467.470	18.21	5.80	12.03	36.04	46.00	9.96
4	491.720	18.61	6.33	11.18	36.12	46.00	9.88
5	737.130	22.23	6.60	7.02	35.86	46.00	10.14
6	761.380	23.68	6.70	5.58	35.96	46.00	10.04
7	810.850	24.09	7.00	3.30	34.39	46.00	11.61

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

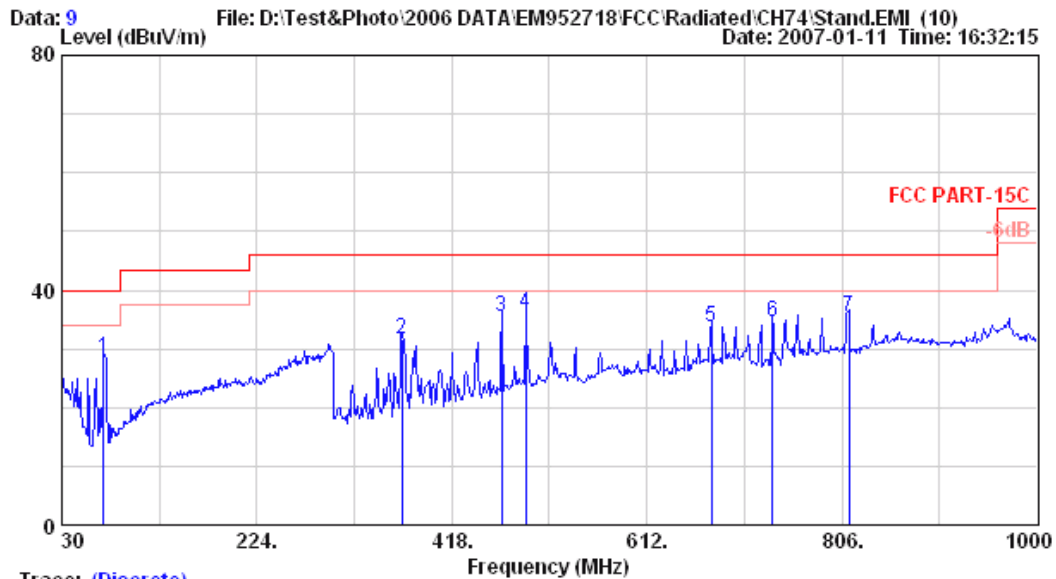
Site no. : A/C Chamber Data no. : 10  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 22\*C/69% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Stand(CH74)

	Freq.	Ant. Factor	Cable Loss	Reading	Emission Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	271.530	25.06	3.70	2.73	31.49	46.00	14.51	
2	369.500	16.93	4.60	9.86	31.39	46.00	14.61	
3	443.220	17.62	5.33	8.78	31.73	46.00	14.27	
4	467.470	18.21	5.80	10.72	34.73	46.00	11.27	
5	491.720	18.61	6.33	8.91	33.85	46.00	12.15	
6	687.660	23.26	6.50	5.47	35.23	46.00	10.77	
7	712.880	23.30	6.53	5.92	35.75	46.00	10.25	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttmc@ttmc.com.tw



Trace: (Discrete)

Site no. : A/C Chamber Data no. : 9  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8593EM 22\*C/69% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Stand(CH74)

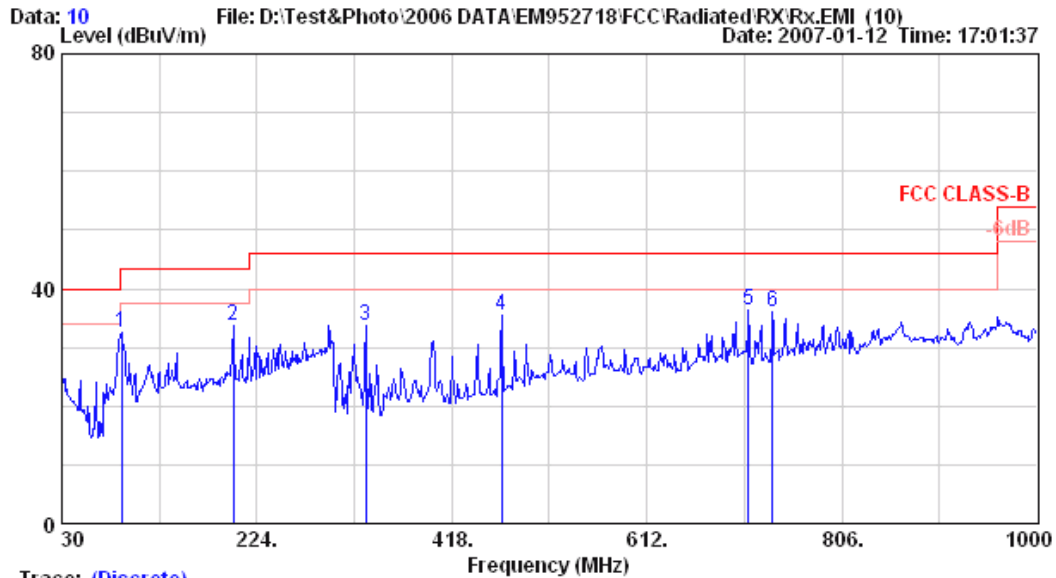
	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBμV)	Level (dBμV/m)	(dBμV/m)	(dB)	
1	71.710	12.26	1.80	14.29	28.36	40.00	11.64
2	368.530	16.88	4.60	10.25	31.74	46.00	14.26
3	467.470	18.21	5.80	11.41	35.42	46.00	10.58
4	491.720	18.61	6.33	11.13	36.07	46.00	9.93
5	676.020	22.89	6.40	4.49	33.77	46.00	12.23
6	737.130	22.23	6.60	5.78	34.62	46.00	11.38
7	812.790	24.02	7.00	4.55	35.57	46.00	10.43

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.





AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

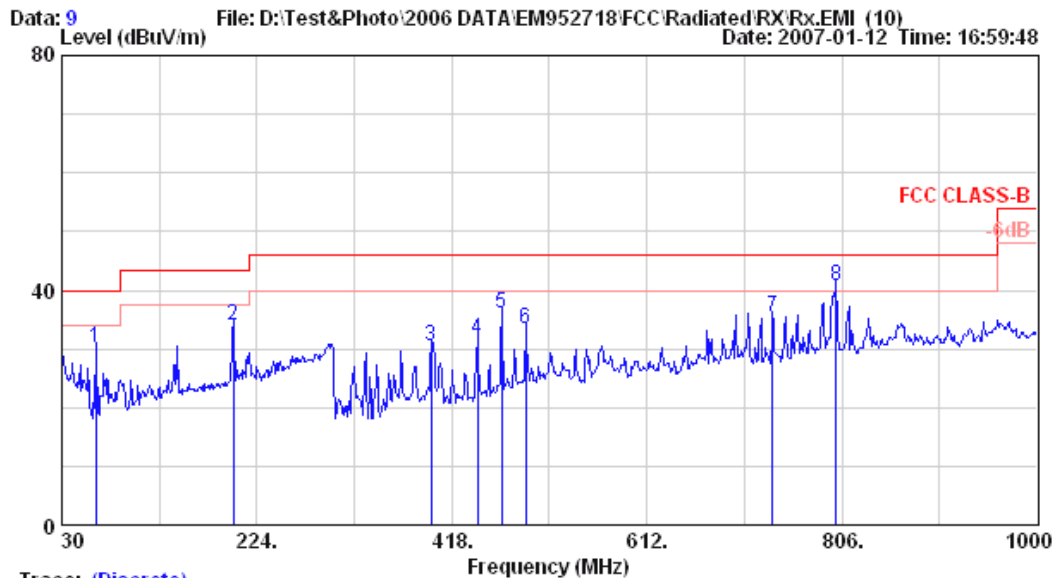
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 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC CLASS-B  
 Env. / Ins. : 8593EM 22\*C/69% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : Rx(CH38)

	Freq.	Ant. Factor	Cable Loss	Reading	Emission Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	89.170	15.57	2.00	14.94	32.51	43.50	10.99	
2	200.720	22.08	3.00	8.65	33.73	43.50	9.77	
3	332.640	15.21	4.20	14.37	33.78	46.00	12.22	
4	467.470	18.21	5.80	11.46	35.47	46.00	10.53	
5	712.880	23.30	6.53	6.53	36.36	46.00	9.64	
6	737.130	22.23	6.60	7.20	36.04	46.00	9.96	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttemc@ttemc.com.tw



Trace: (Discrete)

Site no.	: A/C Chamber	Data no.	: 9
Dis. / Ant.	: 3m VBA6106A/UHALP9108A	Ant. pol.	: VERTICAL
Limit	: FCC CLASS-B		
Env. / Ins.	: 8593EM 22°C/69%	Engineer	: Alvin_Yang
EUT	: Radio Control M/N:T6EX-2.4G		
Power Rating	: DC9.6V		
Test Mode	: Rx(CH38)		

	Ant.	Cable	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBµV)	Level (dBµV/m)	(dBµV/m)	(dB)	
1	63.950	11.90	1.67	16.56	30.13	40.00	9.87
2	200.720	22.08	3.00	8.87	33.95	43.50	9.55
3	397.630	17.64	4.80	8.09	30.53	46.00	15.47
4	443.220	17.62	5.33	8.71	31.66	46.00	14.34
5	467.470	18.21	5.80	11.99	36.00	46.00	10.00
6	491.720	18.61	6.33	8.58	33.52	46.00	12.48
7	737.130	22.23	6.60	6.53	35.37	46.00	10.63
8	800.180	24.14	6.90	9.60	40.63	46.00	5.37

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

3.6.2. Above 1GHz Frequency Range Measurement Results

Date of Test : Dec. 28, 2006 Temperature : 22

EUT : Radio Control Humidity : 69%

Test Mode : Transmit, Channel: 02 (Frequency: 2405.376MHz), Position: Stand

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak	1191.520	25.29	4.56	18.10	47.95	74.00	26.05
	1465.360	25.39	5.33	13.33	44.05	74.00	29.95
	1603.120	25.95	6.18	13.28	45.41	74.00	28.59
	1734.160	26.60	7.07	10.01	43.68	74.00	30.32
	2249.920	28.33	6.17	11.29	45.79	74.00	28.21
	2545.600	28.99	6.54	11.63	47.16	74.00	26.84
Average	1191.520	25.29	4.56	9.10	38.95	54.00	15.05
	1465.360	25.39	5.33	5.33	36.05	54.00	17.95
	1603.120	25.95	6.18	5.28	37.41	54.00	16.59
	1734.160	26.60	7.07	2.01	35.68	54.00	18.32
	2249.920	28.33	6.17	3.29	37.79	54.00	16.21
	2545.600	28.99	6.54	3.63	39.16	54.00	14.84

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak	1191.520	25.29	4.56	18.10	47.95	74.00	26.05
	1465.360	25.39	5.33	13.33	44.05	74.00	29.95
	1603.120	25.95	6.18	13.28	45.41	74.00	28.59
	1734.160	26.60	7.07	10.01	43.68	74.00	30.32
	2249.920	28.33	6.17	11.29	45.79	74.00	28.21
	2548.960	29.02	6.54	12.63	48.19	74.00	25.81
Average	1191.520	25.29	4.56	10.10	39.95	54.00	14.05
	1465.360	25.39	5.33	5.33	36.05	54.00	17.95
	1603.120	25.95	6.18	5.28	37.41	54.00	16.59
	1734.160	26.60	7.07	2.01	35.68	54.00	18.32
	2249.920	28.33	6.17	3.29	37.79	54.00	16.21
	2548.960	29.02	6.54	4.63	40.19	54.00	13.81

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Dec. 29, 2006 Temperature : 20

EUT : Radio Control Humidity : 58%

Test Mode : Transmit, Channel: 02 (Frequency: 2405.376MHz), Position: Side

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak	1191.520	25.29	4.56	16.88	46.73	74.00	27.27
	1603.120	25.95	6.18	14.98	47.11	74.00	26.89
	2224.720	28.28	6.14	10.65	45.07	74.00	28.93
	2569.120	29.09	6.58	11.19	46.86	74.00	27.14
Average	1191.520	25.29	4.56	8.88	38.73	54.00	15.27
	1603.120	25.95	6.18	6.98	39.11	54.00	14.89
	2224.720	28.28	6.14	2.65	37.07	54.00	16.93
	2569.120	29.09	6.58	3.19	38.86	54.00	15.14

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak	1191.520	25.29	4.56	17.10	46.95	74.00	27.05
	1460.320	25.39	5.31	12.64	43.34	74.00	30.66
	1729.120	26.58	7.04	9.49	43.11	74.00	30.89
Average	1191.520	25.29	4.56	8.10	37.95	54.00	16.05
	1460.320	25.39	5.31	4.64	35.34	54.00	18.66
	1729.120	26.58	7.04	1.49	35.11	54.00	18.89

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Dec. 29, 2006 Temperature : 20  
 EUT : Radio Control Humidity : 58%  
 Test Mode : Transmit, Channel: 02 (Frequency: 2405.376MHz), Position: Lie

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak	1191.520	25.29	4.56	17.57	47.42	74.00	26.58
	1603.120	25.95	6.18	9.45	41.58	74.00	32.42
	2249.920	28.33	6.17	10.25	44.75	74.00	29.25
	2569.120	29.09	6.58	11.79	47.46	74.00	26.54
Average	1191.520	25.29	4.56	9.57	39.42	54.00	14.58
	1603.120	25.95	6.18	1.45	33.58	54.00	20.42
	2249.920	28.33	6.17	2.25	36.75	54.00	17.25
	2569.120	29.09	6.58	3.79	39.46	54.00	14.54

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak	1191.520	25.29	4.56	16.93	46.78	74.00	27.22
	1381.360	25.36	5.08	16.09	46.53	74.00	27.47
	1603.120	25.95	6.18	15.61	47.74	74.00	26.26
	1734.160	26.60	7.07	10.31	43.98	74.00	30.02
Average	1191.520	25.29	4.56	8.93	38.78	54.00	15.22
	1381.360	25.36	5.08	8.09	38.53	54.00	15.47
	1603.120	25.95	6.18	7.61	39.74	54.00	14.26
	1734.160	26.60	7.07	2.31	35.98	54.00	18.02

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Dec. 29, 2006 Temperature : 22

EUT : Radio Control Humidity : 69%

Test Mode : Transmit, Channel: 38 (Frequency: 2442.240MHz), Position: Stand

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBµV	Emission Level Horizontal dBµV/m	Limits dBµV/m	Margin dB
Peak	1196.560	25.29	4.58	16.44	46.31	74.00	27.69
	1628.320	26.10	6.36	11.17	43.63	74.00	30.37
	1725.760	26.58	7.00	9.23	42.81	74.00	31.19
Average	1196.560	25.29	4.58	8.44	38.31	54.00	15.69
	1628.320	26.10	6.36	3.17	35.63	54.00	18.37
	1725.760	26.58	7.00	1.23	34.81	54.00	19.19

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBµV	Emission Level Vertical dBµV/m	Limits dBµV/m	Margin dB
Peak	1191.520	25.29	4.56	20.28	50.13	74.00	23.87
	1330.960	25.34	4.93	13.27	43.54	74.00	30.46
	1628.320	26.10	6.36	14.79	47.25	74.00	26.75
	2263.360	28.36	6.18	13.17	47.71	74.00	26.29
	2632.960	29.37	6.68	14.33	50.38	74.00	23.62
Average	1191.520	25.29	4.56	12.28	42.13	54.00	11.87
	1330.960	25.34	4.93	5.27	35.54	54.00	18.46
	1628.320	26.10	6.36	6.79	39.25	54.00	14.75
	2263.360	28.36	6.18	6.17	40.71	54.00	13.29
	2632.960	29.37	6.68	6.33	42.38	54.00	11.62

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Dec. 29, 2006 Temperature : 22

EUT : Radio Control Humidity : 69%

Test Mode : Transmit, Channel: 74 (Frequency: 2479.104MHz), Position: Stand

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak	1196.560	25.29	4.58	15.81	45.68	74.00	28.32
	1653.520	26.22	6.52	15.33	48.07	74.00	25.93
	1729.120	26.58	7.04	9.05	42.67	74.00	31.33
Average	1196.560	25.29	4.58	7.81	37.68	54.00	16.32
	1653.520	26.22	6.52	7.33	40.07	54.00	13.93
	1729.120	26.58	7.04	1.05	34.67	54.00	19.33

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak	1196.560	25.29	4.58	19.35	49.22	74.00	24.78
	1653.520	26.22	6.52	19.65	52.39	74.00	21.61
	1729.120	26.58	7.04	10.75	44.37	74.00	29.63
	2300.320	28.42	6.23	13.35	48.00	74.00	26.00
Average	1196.560	25.29	4.58	11.35	41.22	54.00	12.78
	1653.520	26.22	6.52	11.65	44.39	54.00	9.61
	1729.120	26.58	7.04	2.75	36.37	54.00	17.63
	2300.320	28.42	6.23	6.35	41.00	54.00	13.00

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.

Date of Test : Dec. 29, 2006 Temperature : 22

EUT : Radio Control Humidity : 69%

Test Mode : Receive, Channel: 38 (Frequency: 2442.240MHz), Position: Stand

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBµV	Emission Level Horizontal dBµV/m	Limits dBµV/m	Margin dB
Peak	1191.520	25.29	4.56	17.68	47.53	74.00	26.47
	1460.320	25.39	5.31	9.88	40.58	74.00	33.42
	2140.720	28.10	6.04	8.10	42.24	74.00	31.76
Average	1191.520	25.29	4.56	9.68	39.53	54.00	14.47
	1460.320	25.39	5.31	1.88	32.58	54.00	21.42
	2140.720	28.10	6.04	0.10	34.24	54.00	19.76

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBµV	Emission Level Vertical dBµV/m	Limits dBµV/m	Margin dB
Peak	1191.520	25.29	4.56	17.91	47.76	74.00	26.24
	1325.920	25.34	4.91	14.47	44.72	74.00	29.28
	1389.760	25.36	5.11	16.17	46.64	74.00	27.36
	1456.960	25.39	5.31	13.24	43.94	74.00	30.06
	1734.160	26.60	7.07	10.79	44.46	74.00	29.54
Average	1191.520	25.29	4.56	9.91	39.76	54.00	14.24
	1325.920	25.34	4.91	6.47	36.72	54.00	17.28
	1389.760	25.36	5.11	8.17	38.64	54.00	15.36
	1456.960	25.39	5.31	5.24	35.94	54.00	18.06
	1734.160	26.60	7.07	2.79	36.46	54.00	17.54

Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Measurement was up to 25GHz, but the emissions level were too low against the official limit and not report.



3.6.3. Restricted Bands Measurement Results

Date of Test : Dec. 29, 2006 Temperature : 20

EUT : Radio Control Humidity : 58%

Test Mode : Transmit, Channel: 02, Frequency: 2405.376MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2386.890	28.59	6.33	10.06	44.98	74.00	29.02
Average *	2386.890	28.59	6.33	-2.06	32.86	54.00	21.14

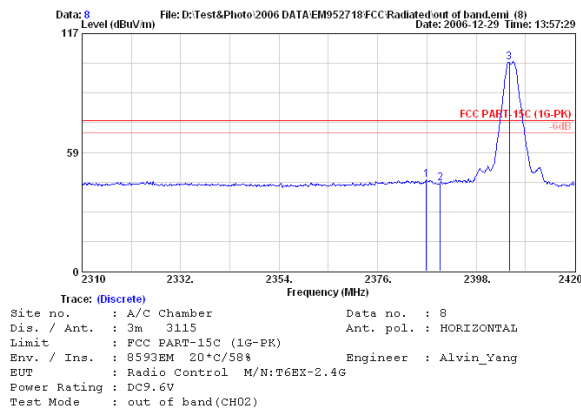
- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).  
 3. '\*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code 24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ittemc@ittemc.com.tw

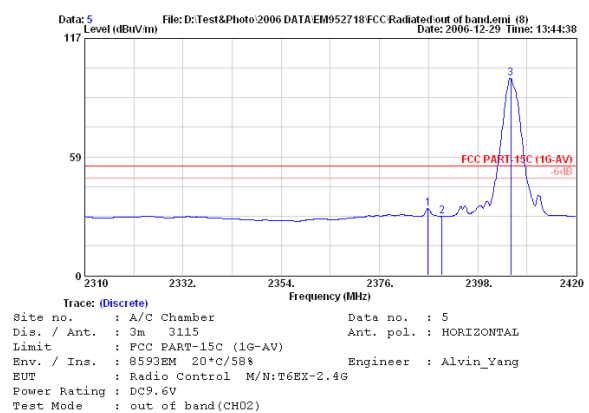


AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code 24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ittemc@ittemc.com.tw



Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2386.890	28.59	6.33	10.06	44.98	74.00	29.01	Peak
2 2390.000	28.59	6.34	8.16	43.10	74.00	30.90	Peak
3 2405.376	28.63	6.36	67.94	102.93	74.00	-28.93	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2386.890	28.59	6.33	-2.06	32.87	54.00	21.13	Average
2 2390.000	28.59	6.34	-5.97	28.97	54.00	25.03	Average
3 2405.376	28.63	6.36	62.33	97.32	54.00	-43.32	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

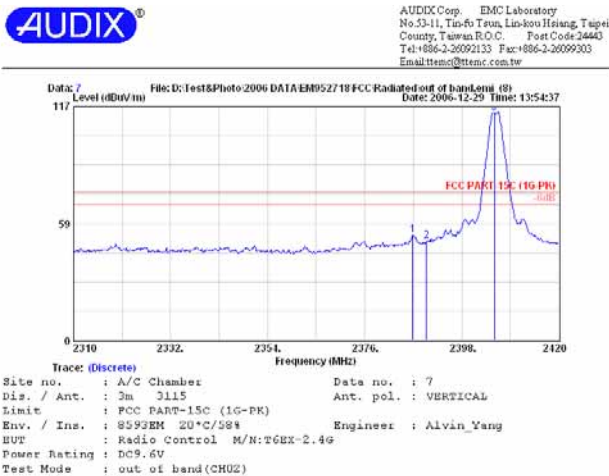
Date of Test : Dec. 29, 2006 Temperature : 20

EUT : Radio Control Humidity : 58%

Test Mode : Transmit, Channel: 02, Frequency: 2405.376MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2386.890	28.59	6.33	17.58	52.50	74.00	21.50
Average *	2386.890	28.59	6.33	4.94	39.86	54.00	14.14

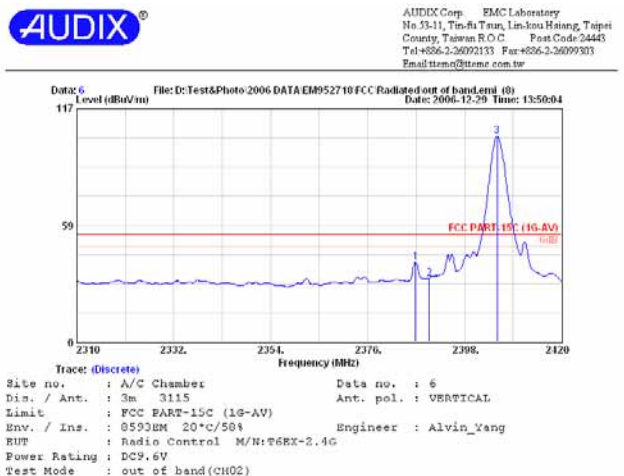
- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. Low frequency section (spurious in the restricted band 2310-2390MHz).  
 3. ‘\*’ The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



Trace: (Discrete)  
 Site no. : A/C Chamber Data no. : 7  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 0593EM 20°C/50% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : out of band(CH02)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2386.890	28.59	6.33	17.58	52.51	74.00	21.49	Peak
2 2390.000	28.59	6.34	14.66	49.60	74.00	24.40	Peak
3 2405.376	28.63	6.36	78.96	113.95	74.00	-39.95	Peak

- Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Trace: (Discrete)  
 Site no. : A/C Chamber Data no. : 6  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 0593EM 20°C/50% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : out of band(CH02)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2386.890	28.59	6.33	4.94	39.87	54.00	14.13	Average
2 2390.000	28.59	6.34	-3.05	31.89	54.00	22.11	Average
3 2405.376	28.63	6.36	68.39	103.38	54.00	-49.38	Average

- Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Date of Test : Dec. 29, 2006 Temperature : 20

EUT : Radio Control Humidity : 58%

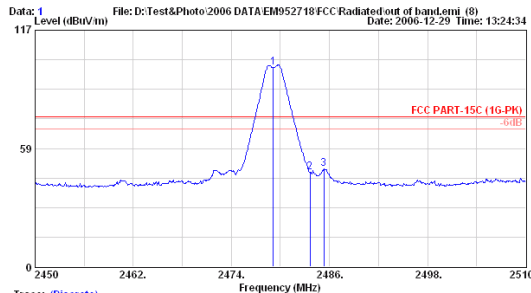
Test Mode : Transmit, Channel: 74, Frequency: 2479.104MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
Peak *	2485.340	28.77	6.45	13.11	48.33	74.00	25.67
Average *	2485.220	28.77	6.45	5.15	40.37	54.00	13.63

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).  
 3. '\*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-Fu Tsun, Lin-Kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttenc@ttenc.com.tw



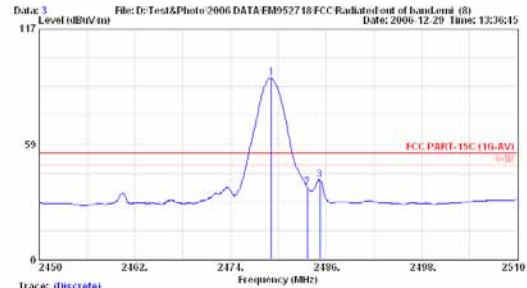
Trace: (Discrete)  
 Site no. : A/C Chamber Data no. : 1  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8593EM 20°C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4g  
 Power Rating : DC9.6V  
 Test Mode : out of band (CH74)

Trace	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2479.104	28.76	6.44	63.25	98.45	74.00	-24.45	Peak
2	2483.600	28.77	6.45	11.49	46.72	74.00	27.28	Peak
3	2485.340	28.77	6.45	13.11	48.34	74.00	25.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-Fu Tsun, Lin-Kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:ttenc@ttenc.com.tw



Trace: (Discrete)  
 Site no. : A/C Chamber Data no. : 3  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 0593EM 20°C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4g  
 Power Rating : DC9.6V  
 Test Mode : out of band (CH74)

Trace	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2479.104	28.76	6.44	56.75	91.96	54.00	-37.96	Average
2	2483.600	28.77	6.45	1.22	36.45	54.00	17.55	Average
3	2485.220	28.77	6.45	5.15	40.38	54.00	13.62	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Date of Test : Dec. 29, 2006 Temperature : 20

EUT : Radio Control Humidity : 58%

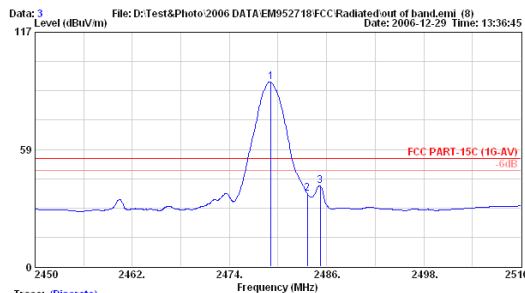
Test Mode : Transmit, Channel: 74, Frequency: 2479.104MHz

	Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
Peak *	2485.520	28.77	6.45	24.48	59.70	74.00	14.30
Average *	2485.220	28.77	6.45	15.93	51.15	54.00	2.85

- Remark : 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading.  
 2. High frequency section (spurious in the restricted band 2483.5-2500MHz).  
 3. '\*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-Fu Teun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code 24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:temc@temc.com.tw



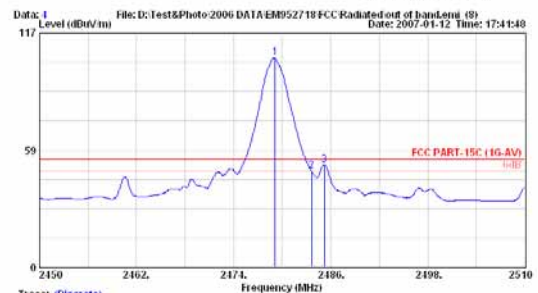
Trace: (Discrete)  
 Site no. : A/C Chamber Data no. : 3  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8593EM 20°C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : out of band(CH74)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2479.104	28.76	6.44	56.75	91.96	54.00	-37.96	Average
2 2483.600	28.77	6.45	1.22	36.45	54.00	17.55	Average
3 2485.220	28.77	6.45	5.15	40.38	54.00	13.62	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Corp. EMC Laboratory  
 No.53-11, Tin-Fu Teun, Lin-kou Hsiang, Taipei  
 County, Taiwan R.O.C. Post Code 24443  
 Tel:+886-2-26092133 Fax:+886-2-26099303  
 Email:temc@temc.com.tw



Trace: (Discrete)  
 Site no. : A/C Chamber Data no. : 4  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8593EM 20°C/58% Engineer : Alvin\_Yang  
 EUT : Radio Control M/N:T6EX-2.4G  
 Power Rating : DC9.6V  
 Test Mode : out of band(CH74)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1 2479.104	28.76	6.44	69.18	104.38	54.00	-50.38	Average
2 2483.600	28.77	6.45	12.79	48.01	54.00	5.99	Average
3 2485.220	28.77	6.45	15.93	51.16	54.00	2.84	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

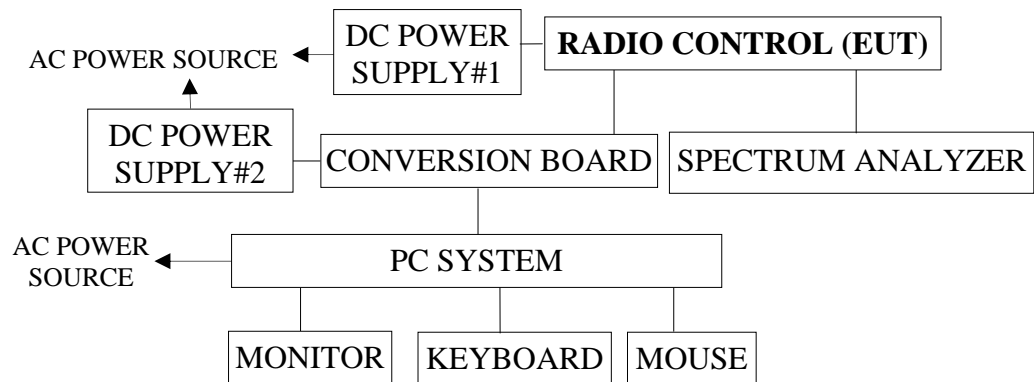
## 4. 6dB BANDWIDTH MEASUREMENT

### 4.1. Test Equipment

The following test equipment was used during the Emission Bandwidth measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10, 07'

### 4.2. Block Diagram of Test Setup



### 4.3. Specification Limits (§15.247(a)(2))

The minimum 6dB bandwidth shall be at least 500kHz.

### 4.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit data at different channel frequency individually.

### 4.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

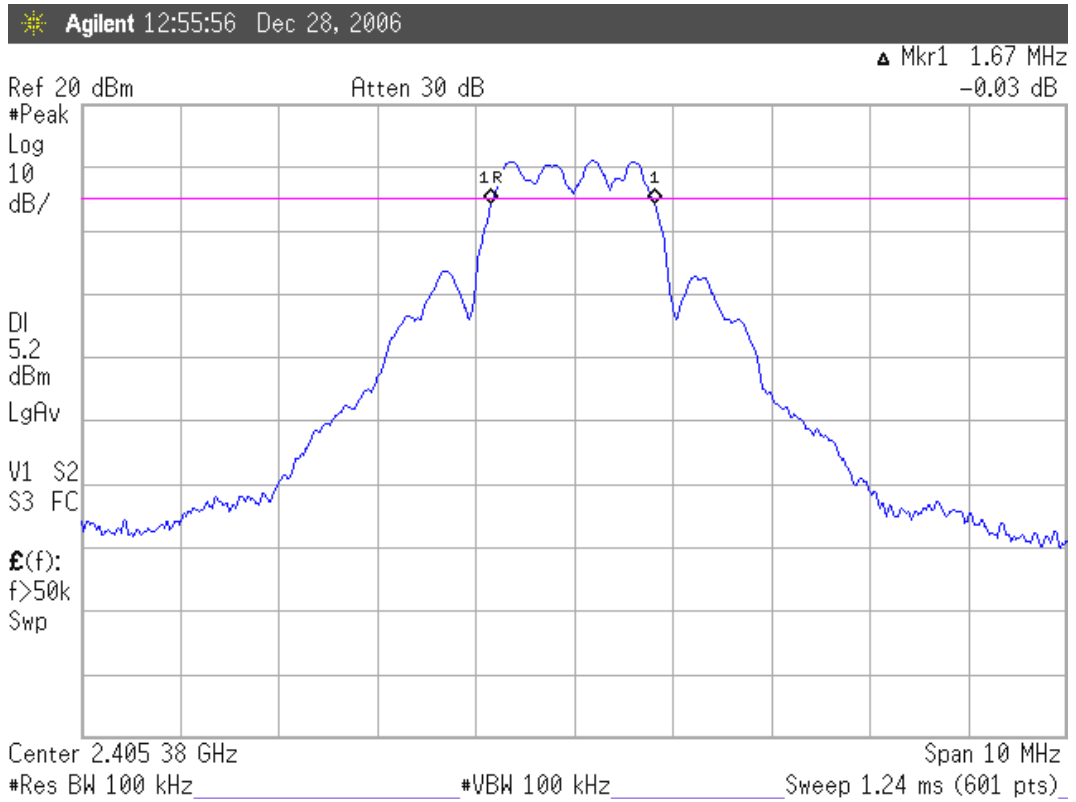
#### 4.6. Test Results

**PASSED.** All the test results are attached in next pages.

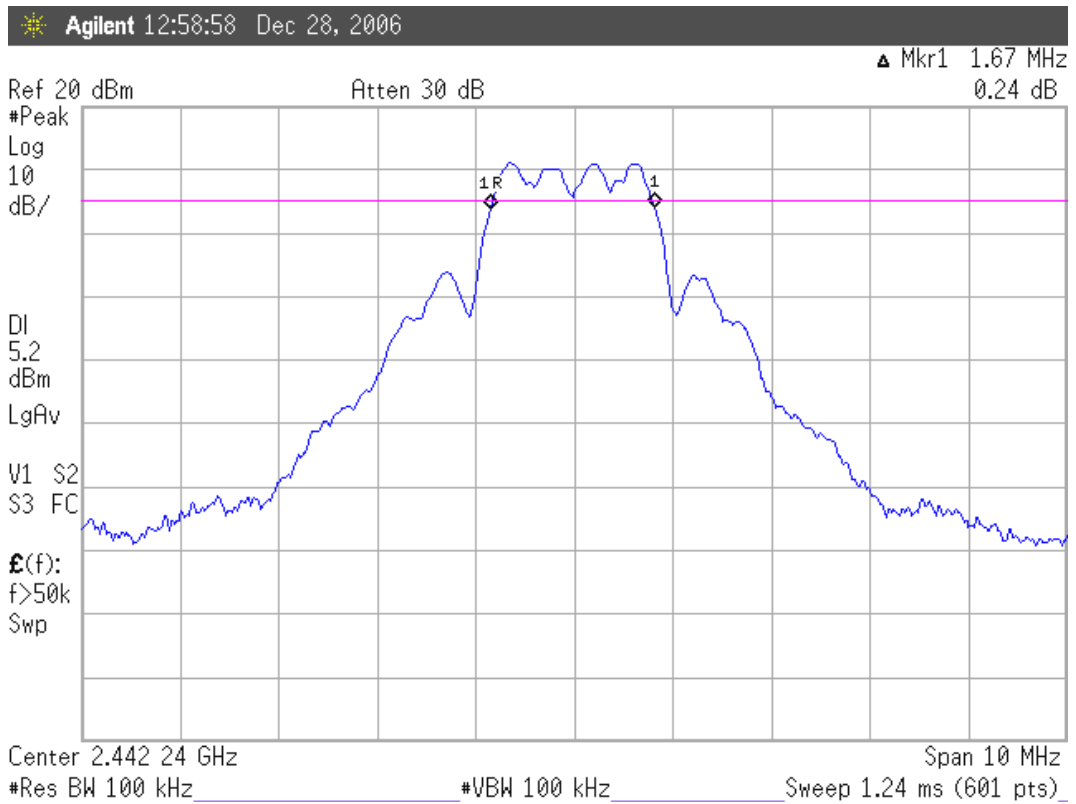
(Test Date : Dec. 28, 2006 Temperature : 25 Humidity : 63 %)

Channel	Frequency	6dB Bandwidth
0	2405.376MHz	<b>1.67MHz</b>
38	2442.240MHz	<b>1.67MHz</b>
74	2479.104MHz	<b>1.70MHz</b>

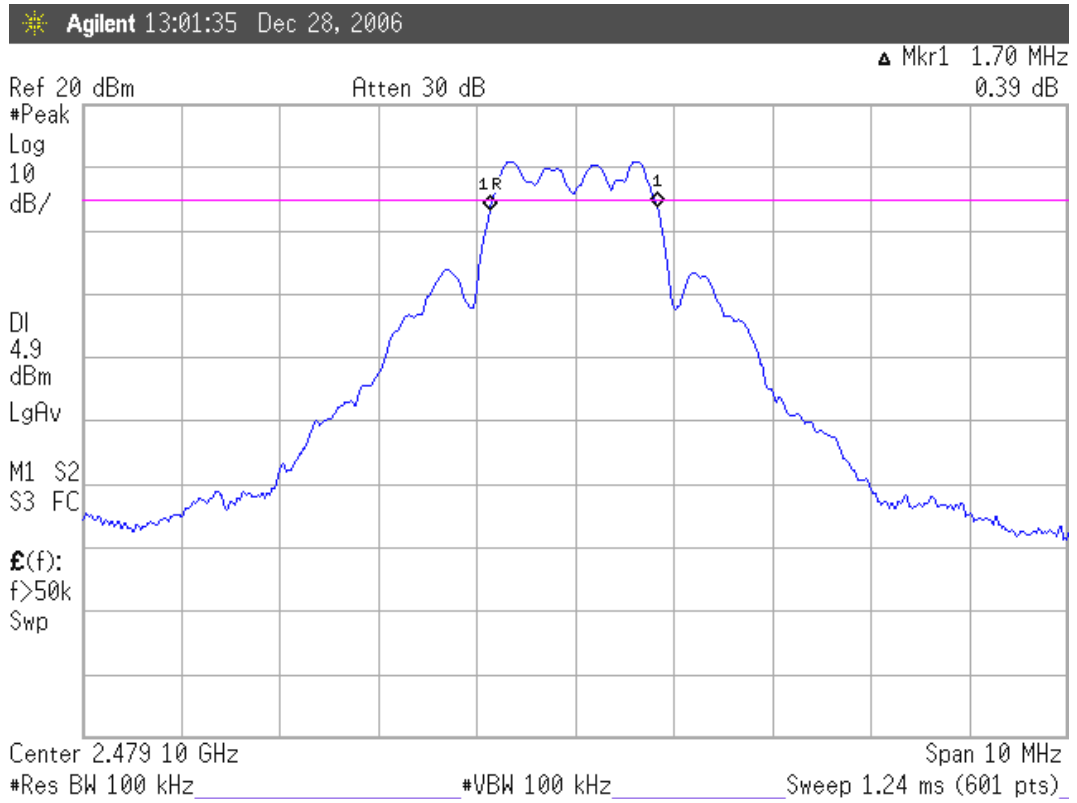
**Frequency: 2405.376MHz**



**Frequency: 2442.240MHz**



**Frequency: 2479.104MHz**





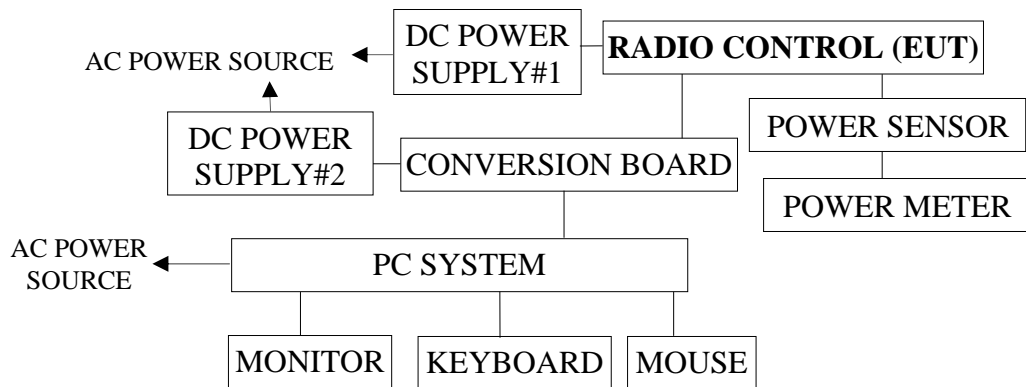
## 5. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

### 5.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Power Meter	Agilent	E4417A	GB41291797	Feb. 27, 06'	Feb. 26, 07'
2.	Power Sensor	Agilent	E9327A	US40441766	Feb. 27, 06'	Feb. 26, 07'

### 5.2. Block Diagram of Test Setup



### 5.3. Specification Limits (§15.247(b)-(3))

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is : 1Watt. (30dBm)

### 5.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit data at different channel frequency individually.

### 5.5. Test Procedure

The transmitter output was connected to the power meter that was designed to detect peak value automatically.

## 5.6. Test Results

**PASSED.** All the test results are listed below.

(Test Date : Dec. 29, 2006 Temperature : 25 Humidity : 63 %)

Channel	Frequency	Peak Output Power	Limit
02	2405.376MHz	<b>18.18dBm</b>	30dBm
38	2442.240MHz	<b>18.26dBm</b>	30dBm
74	2479.104MHz	<b>18.07dBm</b>	30dBm

## 6. EMISSION LIMITATIONS MEASUREMENT

### 6.1. Test Equipment

The following test equipment was used during the emission limitations test :

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10, 07'

### 6.2. Block Diagram of Test Setup

The same as section.4.2.

### 6.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)).( This test result attaching to §3.6.3)

### 6.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit data at different channel frequency individually.

### 6.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW.

## 6.6. Test Results

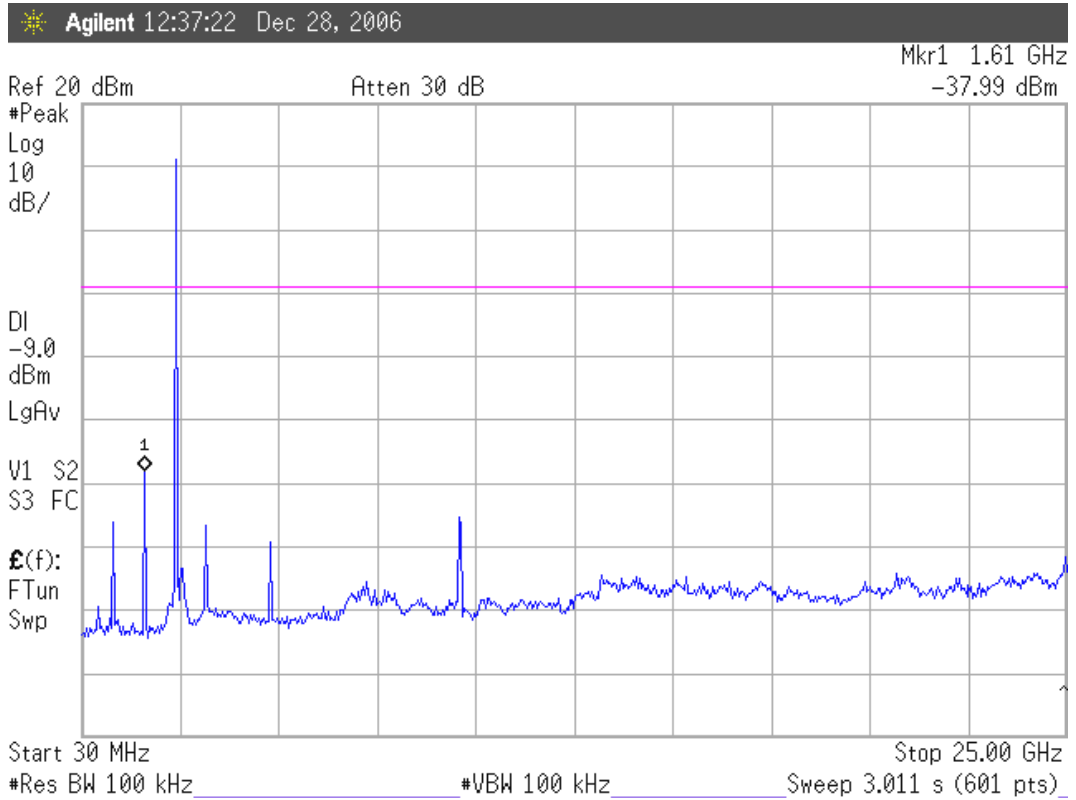
**PASSED.** The testing data was attached in the next pages.

(Test Date : Dec. 28, 2006 Temperature : 25 Humidity : 63 %)

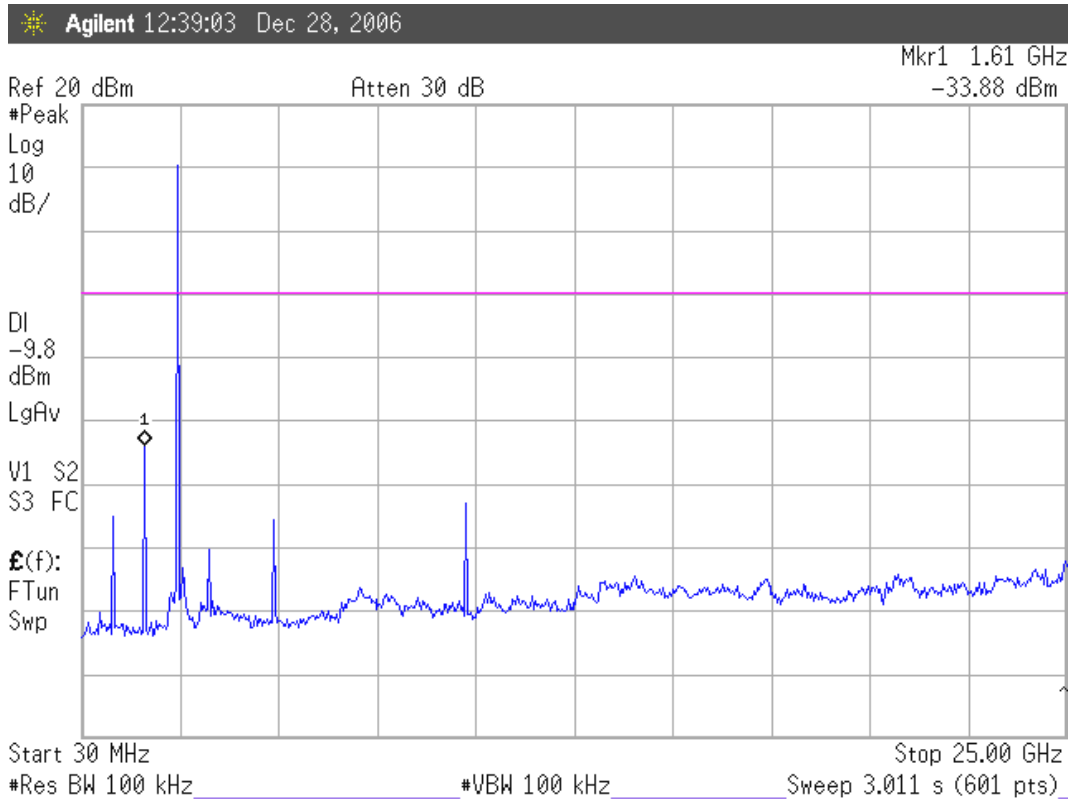
1. 2405.376MHz: During 30MHz~25GHz bandwidth. In the 1.61GHz, the  $-37.99\text{dBm}$  is max value that is lower than 20dB of primary channel.
2. 2442.240MHz: During 30MHz~25GHz bandwidth. In the 1.61GHz, the  $-33.88\text{dBm}$  is max value that is lower than 20dB of primary channel.
3. 2479.104MHz: During 30MHz~25GHz bandwidth. In the 1.65GHz, the  $-33.62\text{dBm}$  is max value that is lower than 20dB of primary channel.

Note: The peak above the limit line is the carrier frequency.

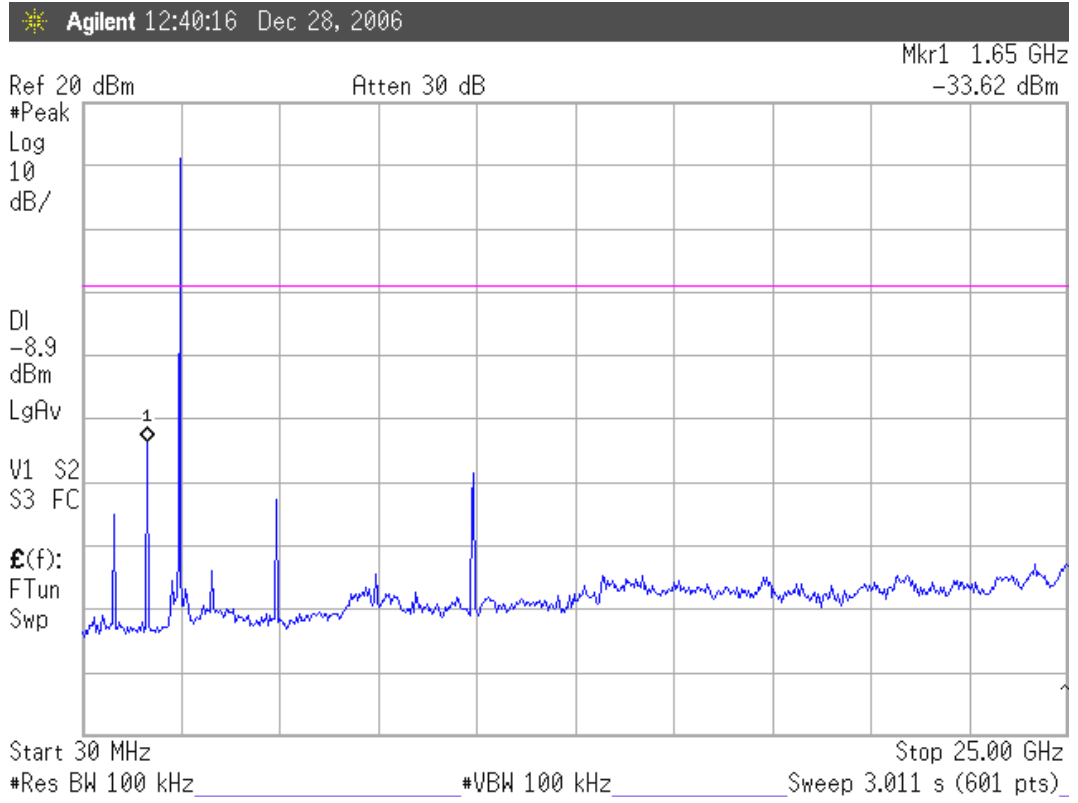
**Frequency: 2405.376MHz**



**Frequency: 2442.240MHz**



### Frequency: 2479.104MHz



## 7. BAND EDGES MEASUREMENT

### 7.1. Test Equipment

The following test equipment was used during the band edges measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10, 07'

### 7.2. Block Diagram of Test Setup

The same as section.4.2.

### 7.3. Specification Limits (§15.247(c))

The highest level should be at least 20 dB below that in the 100kHz bandwidth.

### 7.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit data at different channel frequency individually.

### 7.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

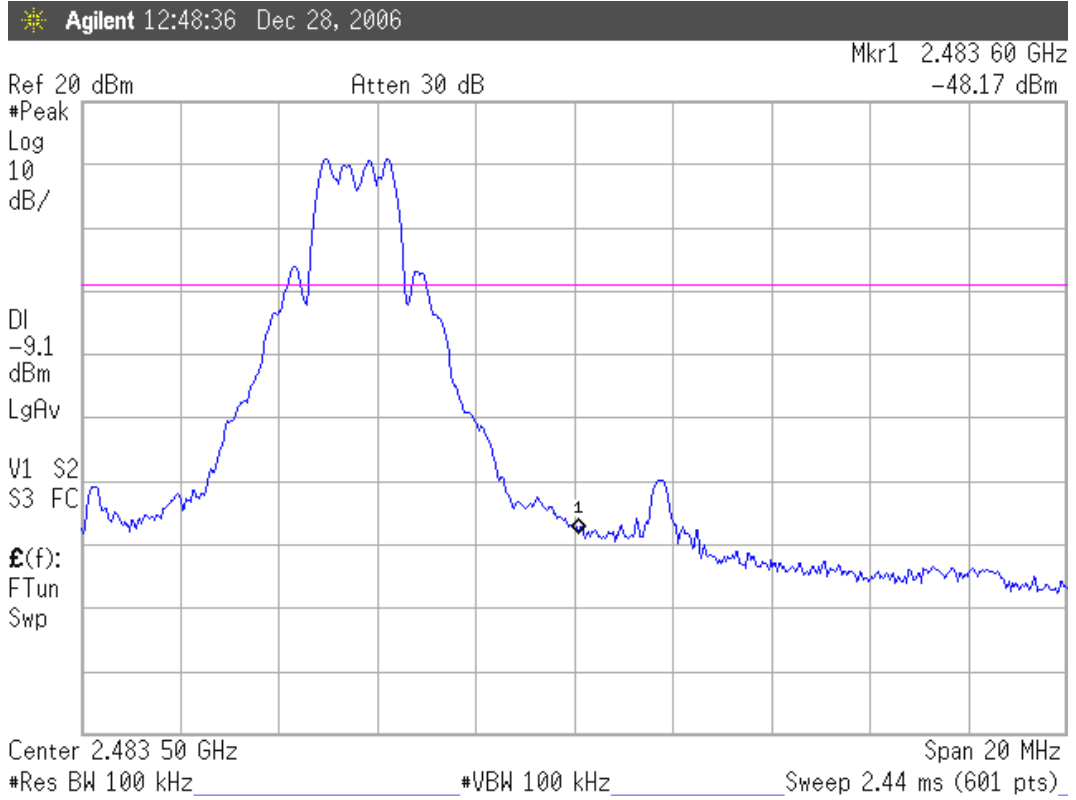
### 7.6. Test Results

**PASSED.** All the test results are attached in next pages.

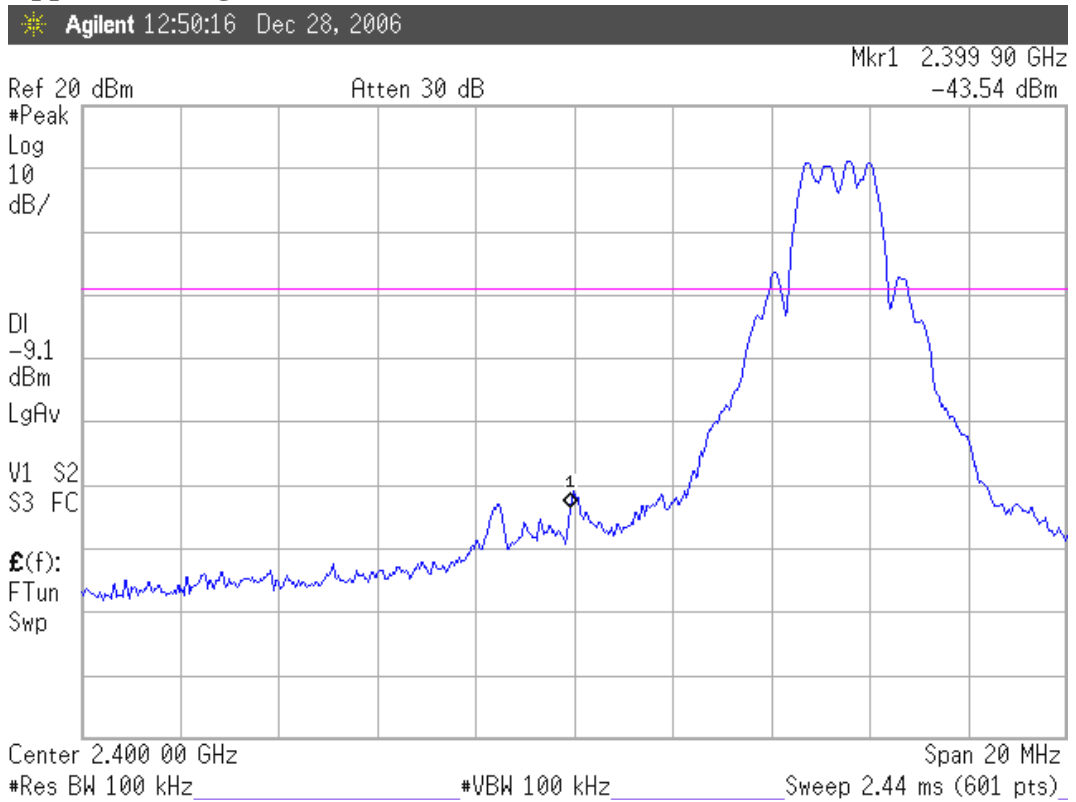
(Test Date : Dec. 28, 2006    Temperature : 25        Humidity : 63 %)

1. Below Band edge: The highest emission level is  $-48.17\text{dBm}$  on  $2.48360\text{GHz}$ .
2. Upper Band edge : The highest emission level is  $-43.54\text{dBm}$  on  $2.39990\text{GHz}$ .

### Below Band edge



### Upper Band edge





## 8. POWER SPECTRAL DENSITY MEASUREMENT

### 8.1. Test Equipment

The following test equipment was used during the power spectral density measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 11, 06'	Aug. 10, 07'

### 8.2. Block Diagram of Test Setup

The same as section.4.2.

### 8.3. Specification Limits (§15.247(d))

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

### 8.4. Operating Condition of EUT

The test program “Futaba Term” was used to enable the EUT to transmit data at different channel frequency individually.

### 8.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/300kHz.

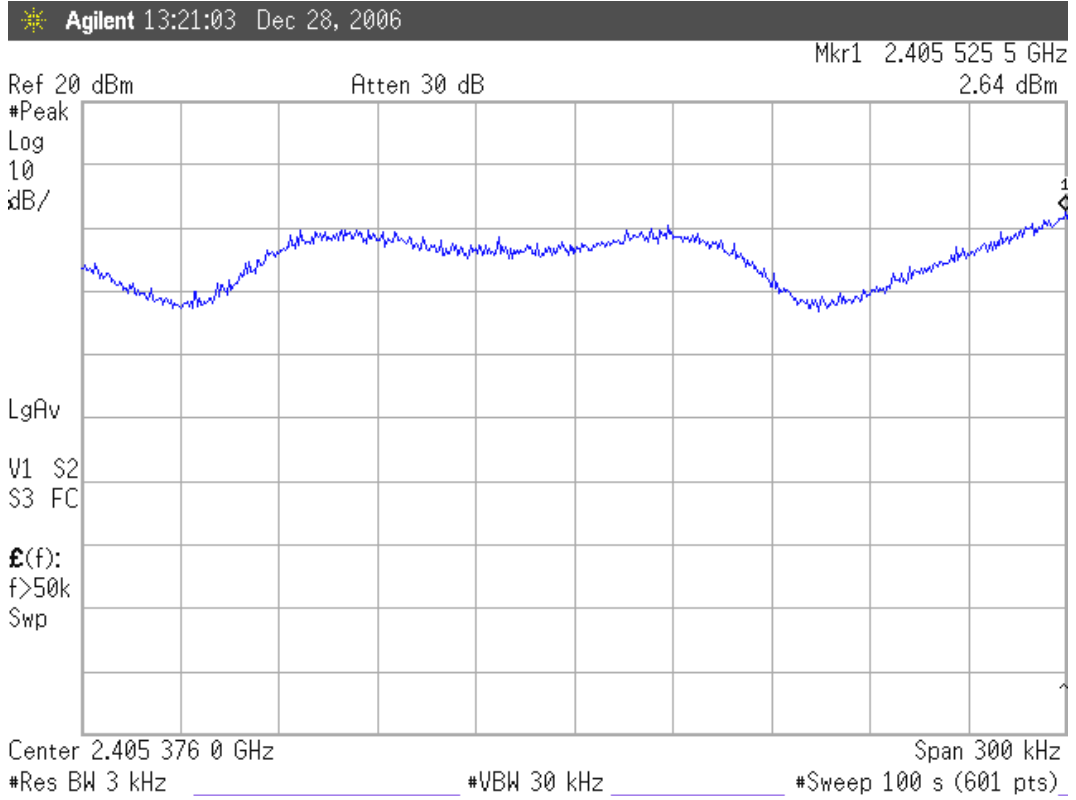
### 8.6. Test Results

**PASSED.** All the test results are attached in next pages.

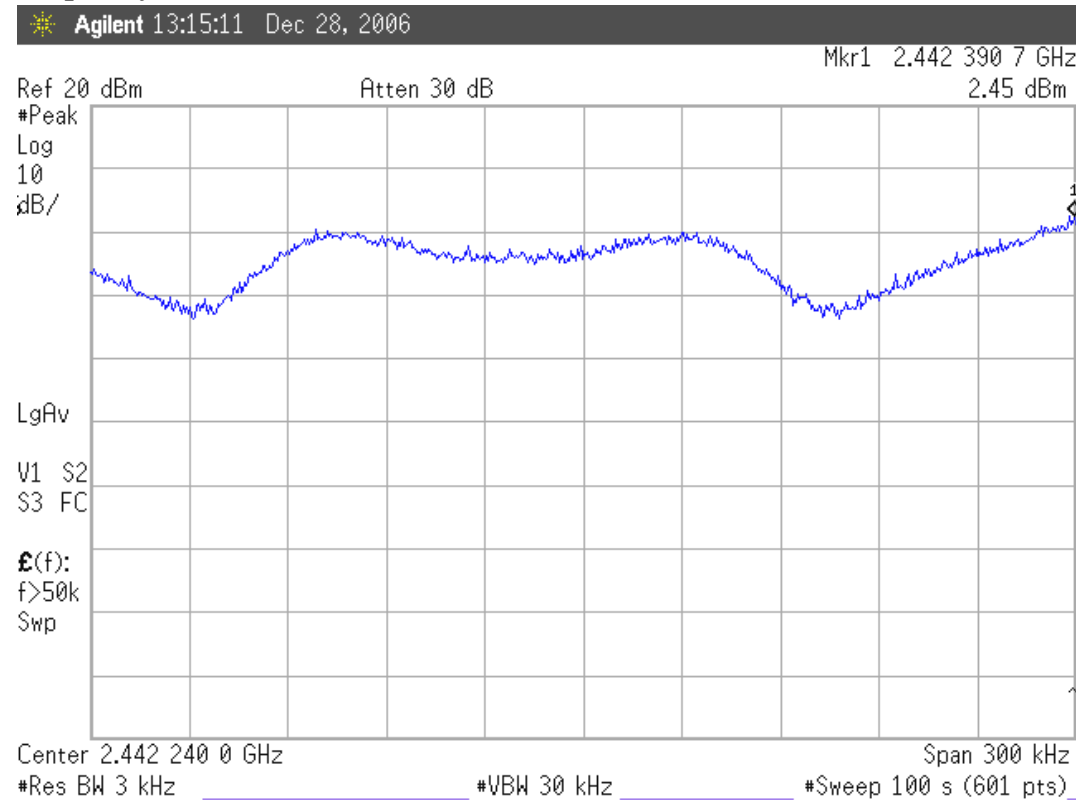
(Test Date : Dec. 28, 2006 Temperature : 25 Humidity : 63 %)

Channel	Frequency	Power Spectral Density	Limit
02	2405.376MHz	<b>2.64dBm</b>	8dBm
38	2442.240MHz	<b>2.45dBm</b>	8dBm
74	2479.104MHz	<b>0.82dBm</b>	8dBm

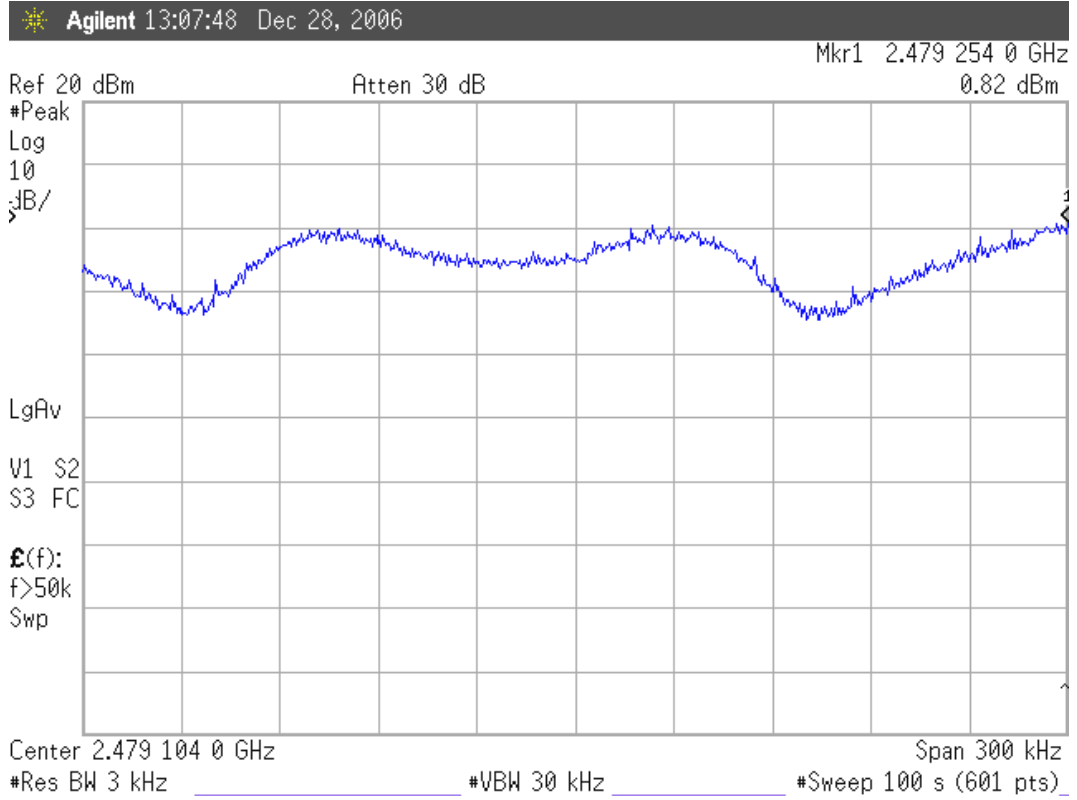
**Frequency: 2405.376MHz**



**Frequency: 2442.240MHz**



### Frequency: 2479.104MHz



## **9. DEVIATION TO TEST SPECIFICATIONS**

**【NONE】**