



FCC COMPLIANCE TEST REPORT

Technical Statement of Conformity
in accordance with 47 CFR Part 15 Subpart C

The product

Equipment Under Test	: IRS PEN
Model Number	: EC30616
Product Series	: N/A
Report Number	: HA130239-FD
Issue Date	: 22-MAY-2013
Test Result	: Compliance

is produced by

Hebron Soft Limited

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SL2-IS-E-0023, SL2-R1-E-0023,
SL2-R2-E-0023, SL2-L1-E-0023

FCC Designation No.: TW1071

TAF Accreditation No.: 1163

VCCI Registration No.: R-2156, C-2329, T-219

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Test Result Certification

Applicant	: Hebron Soft Limited
Address of Applicant	: 12F, No. 32, Sec. 3, Bade Road, Songshan, Taipei, 105, Taiwan
Manufacturer	: E-COM TECHNOLOGY CORP.
Address of Manufacturer	: 9F., No.15-1, Sec.1, Han Chou South Rd., Taipei 10050, Taiwan
Trade Name	: LIVE PÈN IRS
Equipment Under Test	: IRS PEN
Model Number	: EC30616
Product Series	: N/A
FCC ID	: 2AACTEC30616
Filing Type	: Certification
Sample Received Date	: 10-APR-2013
Test Standard	:

☒ FCC Part 15 Subpart C §15.249

Deviations from standard test methods & any other specifications : NONE

Remark:

1. This report details the results of the test carried out on one sample.
2. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2009) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.203, 15.207, 15.209, 15.249.
3. This report applies to the above sample only and shall not be reproduced in part without written approval of HongAn Technology Co., Ltd..

Documented by:**Kay Wang/ ADM. Dept Staff****2013-05-15****Tested by:****Eason Hsieh/ ENG. Dept. Staff****2013-04-24****Approved by:****Peter Chin / Section Manager****Date: 2013-05-15**



Summary of Test Result

	Test Item	Applicable Standard	Test Result
1	Antenna Requirement	FCC part 15 subpart C §203	Compliance
2	Conducted limits	FCC part 15 subpart C §207	N/A
3	Radiated emission limits	FCC part 15 subpart C §209	Compliance
4	Field Strength	FCC part 15 subpart C §249(a)	Compliance
5	Band-edge measurement	FCC part 15 subpart C §249(d)	Compliance

1 General Description

1.1 Description of EUT

Equipment Under Test	:	IRS PEN
Model Number of EUT	:	EC30616
Product Series	:	N/A
Power Supply	:	DC : Input <u>1.5</u> Vdc 1 AAA sized battery
Frequency Range	:	2407~2475 MHz
Transmit Power	:	91.52 dBuV
Number of Channels	:	28 Channels
Carrier Frequency of Each Channel	:	2407 MHz, 2410 MHz, 2412 MHz, 2415 MHz, 2417 MHz, 2420 MHz, 2422 MHz, 2425 MHz, 2427 MHz, 2430 MHz, 2432 MHz, 2435 MHz, 2437 MHz, 2440 MHz, 2442 MHz, 2445 MHz, 2447 MHz, 2450 MHz, 2452 MHz, 2455 MHz, 2457 MHz, 2460 MHz, 2462 MHz, 2465 MHz, 2467 MHz, 2470 MHz, 2472 MHz, 2475 MHz
Antenna Specification	:	Printed Antenna/ Gain: 1.4 dBi
Modulation Technique	:	GFSK
Transmit Data Rate	:	1Mbps
Specification	:	<p>Dimensions : 13.5 cm (L) X 2.5 cm (W) X 2.5 cm (H)</p> <p>Weight : 35 g</p> <p>Function : The EUT is a wireless transmitter in the shape of a pen. When operator use its tip to point at the wanted answer on the answer card, signal will be transmitted to a dongle attached into a PC. From the PC, answers will be collected and stored.</p> <p>※For more detail specification, please refer to the User Manual.</p>

1.2 Test Instruments

1.2.1. Instruments Used for Measurement

HA1

Instrument Name	Manufacture Mode	Model Number	Serial Number	Last Cal. Date	Next Cal. Date
RF Amplifier	AR	15S1G3	306578	11-AUG-2012	11-AUG-2013
EMI Receiver	R&S	ESCI	100615	03-MAR-2013	03-MAR-2014
Spectrum Analyzer	R&S	FSL6	100323	11-JUN-2012	11-JUN-2013
Spectrum Analyzer	Advantest	R3172	101202158	24-JUN-2012	24-JUN-2013
Preamplifier	WIRELESS	FPA-6592G	060009	09-JUL-2012	09-JUL-2013
Preamplifier	HD	HD17187	004	04-AUG-2012	04-AUG-2013
Bilog Antenna	TESEQ	CBL6111D	25769	03-MAR-2013	03-MAR-2014
Bilog Antenna	Schaffner	CBL6112B	2860	12-AUG-2012	12-AUG-2013
Double-Ridged Waveguide Horn	EMCO	3115	9912-5992	04-MAY-2013	04-MAY-2014
Temp. & Humidity Chamber	Giant Force	GTH-150-20-SP-AR	MMA0907-012	22-JUL-2012	22-JUL-2013

※ The test equipments used are calibrated and can be traced to National ITRI and International Standards.

1.3 Auxiliary Equipments

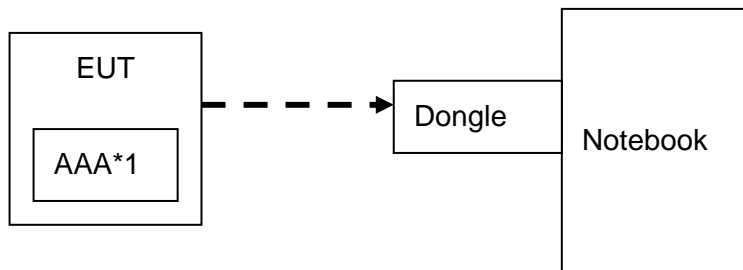
1.3.1. Provided by HongAn Technology Co., Ltd. for Emission Test.

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Description	
						Data Cable	Power Cable
01	Notebook	N61J	N61JV-021A520M	CE,FCC, C-TICK N13219, BSMI R31018	ASUS	Adapter to Notebook Unshielded*1.8 m	AC to Adapter Unshielded*1.8 m

1.3.2. Provided by the Manufacturer

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Description	
						Data Cable	Power Cable
01	USB Dongle	EC1020	N/A	N/A	希伯崙	N/A	N/A

1.4 EUT SETUP



Note: Main Test Sample: EC30616

1.5 Identifying the Final Test Mode

1. TX mode 1: Transmitter set at CH01 (2407MHz), and transmitting. EUT in Horizontal Position.
2. TX mode 2: Transmitter set at CH15 (2442MHz), and transmitting. EUT in Horizontal Position.
3. TX mode 3: Transmitter set at CH28 (2475MHz), and transmitting. EUT in Horizontal Position.
4. TX mode 4: Transmitter set at CH01 (2407MHz), and transmitting. EUT in Vertical Position.
5. TX mode 5: Transmitter set at CH15 (2442MHz), and transmitting. EUT in Vertical Position.
6. TX mode 6: Transmitter set at CH28 (2475MHz), and transmitting. EUT in Vertical Position.
7. TX mode 7: Transmitter set at CH01 (2407MHz), and transmitting. EUT in Transverse Position.
8. TX mode 8: Transmitter set at CH15 (2442MHz), and transmitting. EUT in Transverse Position.
9. TX mode 9: Transmitter set at CH28 (2475MHz), and transmitting. EUT in Transverse Position.
10. Stand by mode

Note:

1. After pre-test, we identified that the TX Transverse Position (the worst case) was most likely to cause maximum disturbance and most likely to be susceptible to disturbance. Therefore, the Final Assessment was performed for the worst case. All pre-test data show at appendix.
2. The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of



the measurements.

3. Channel Low (2407MHz), Mid (2442MHz) and High (2475MHz) with higher data rate were chosen for full testing.
4. According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.207, 15.209 and 15.249 under the FCC Rules Part 15 Subpart C.

1.6 Final Test Mode

TX Mode 7, 8, 9

1.7 Condition of Power Supply

DC 1.5 V

1.8 EUT Configuration

1. Setup the EUT as shown in Sec.1.4 Block Diagram.
2. Turn on the power of all equipments.
3. Activate the selected Final Test Mode.

1.9 Test Methodology

The tests documented in this report were performed in accordance with ANSI C63.4 (2009) and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.203, 15.207, 15.209 and 15.249.

1.10 General Test Procedures

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 (2009) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter(EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C 63.4 (2009).

1.11 Modification

N/A

1.12 FCC Part 15.205 restricted bands of operations

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37635-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

1.13 Qualification of Test Facility

BSMI Certificate No. : SL2-IS-E-0023, SL2-IN-E-0023, SL2-R1-E-0023, SL2-R2-E-0023, SL2-A1-E-0023, SL2-L1-E-0023.

FCC Designation No. : TW1071

TAF Accreditation No. : 1163

VCCI Certificate No. : R-2156, C-2329, T-219



2 Power line Conducted Emission Measurement

2.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

2.2 Test Arrangement and Procedure

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

2.3 Limit (§ 15.207)

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency (MHz)	Limits (dBuV)	
	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.0	56	46
5.0 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

2.4 Test Result

N/A.

The EUT applied a AAA battery, therefore, no conducted emission measurement is required.

**Power Line Conducted Emission Test Data**

Test Date	:	_____	Power Line	:	_____
Temperature	:	_____	Humidity	:	_____

N/A

Remark :

1. Measuring frequencies from 0.15 MHz to 30 MHz.
2. The emissions measured in frequency range from 0.15 MHz to 30 MHz were made with an instrument using quasi-peak detector and average detector.
3. The IF bandwidth of SPA between 0.15 MHz to 30 MHz was 10kHz; the IF bandwidth of Test Receiver between 0.15 MHz to 30 MHz was 9kHz.

**Power Line Conducted Emission Test Data**

Test Date : _____ Power Line : _____
Temperature : _____ Humidity : _____

N/A

Remark :

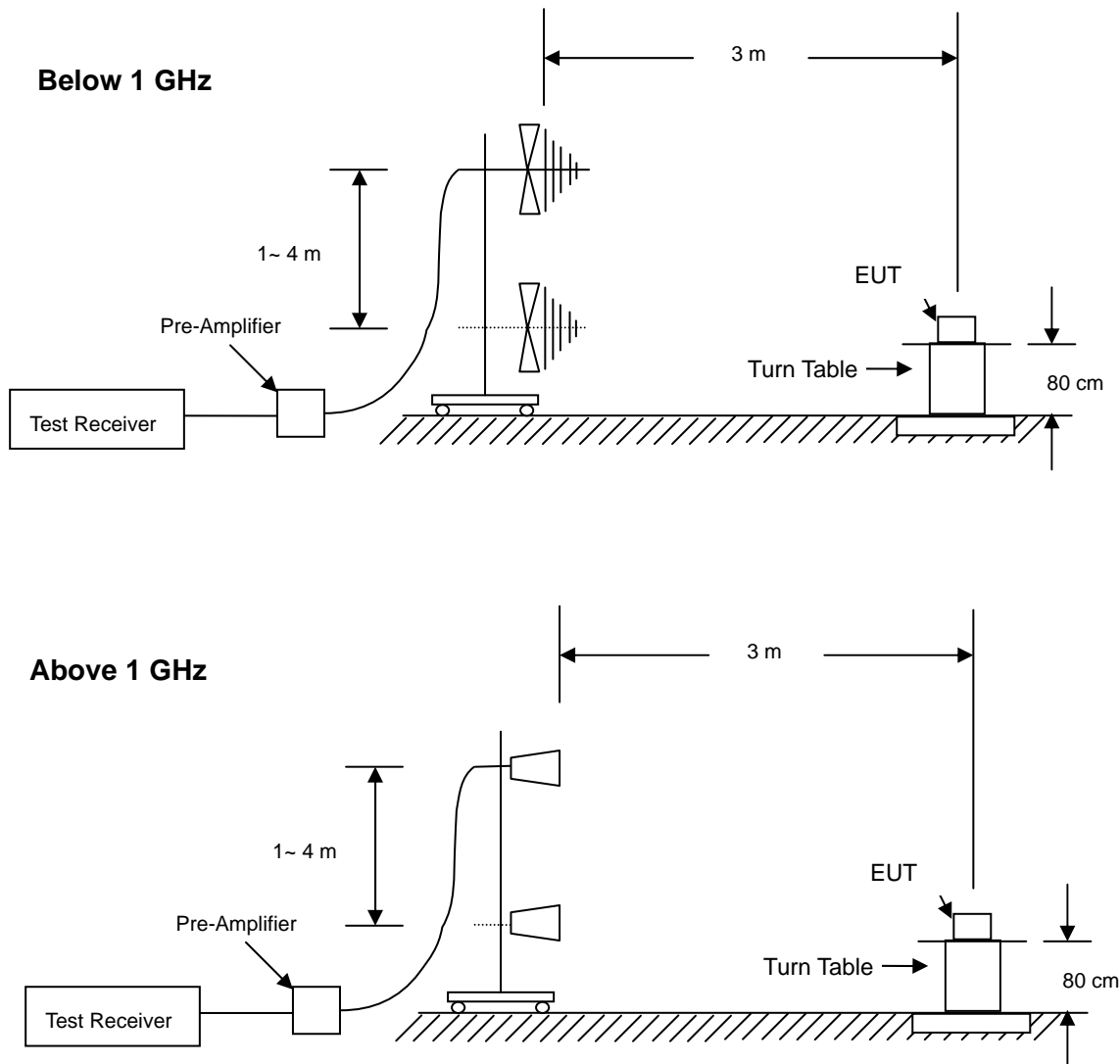
1. Measuring frequencies from 0.15 MHz to 30 MHz.
2. The emissions measured in frequency range from 0.15 MHz to 30 MHz were made with an instrument using quasi-peak detector and average detector.
3. The IF bandwidth of SPA between 0.15 MHz to 30 MHz was 10kHz; the IF bandwidth of Test Receiver between 0.15 MHz to 30 MHz was 9kHz.

3 Radiated Emission Test

3.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

3.2 Test Arrangement and Procedure



1. The EUT is placed on a turntable, which is 0.8 m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
4. Maxium procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:
 - (a) Below 1 GHz: RBW =100 kHz/ VBW = 1 MHz/ Sweep = AUTO.
 - (b) Above 1 GHz: Peak: RBW = VBW = 1MHz/ Sweep = AUTO; Average: RBW = 1MHz/ VBW =

10Hz/ Sweep = AUTO.

7. Repeat above procedures until the measurements for all frequencies are complete.

3.3 Limit of Field Strength of Fundamental (§ 15.249)

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency (MHz)	Field strength of fundamental (microvolts/ meter)	Field strength of harmonics (meters)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500

Note:

- Field strength limits are specified at a distance of 3 meters.
- For frequencies above 1000 MHz, the field strength limits in above table are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

3.4 Limit of Spurious Emission (§ 15.209)

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 lesser attenuation.

Frequency (MHz)	Field strength (microvolts/ meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

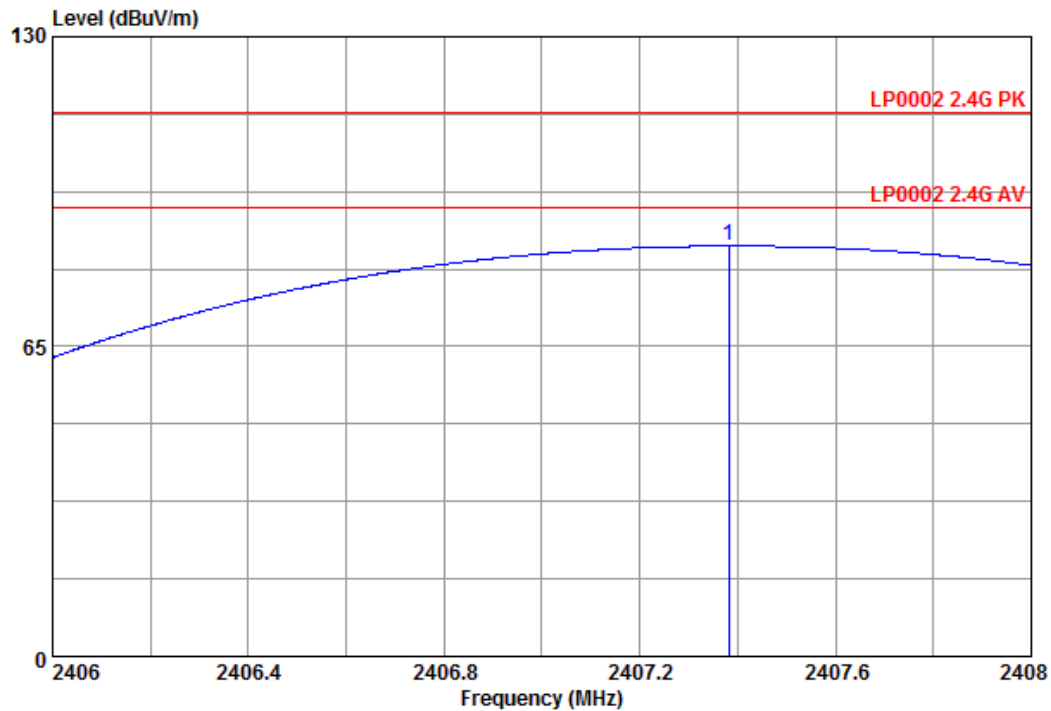
3.5 Test Result

Compliance

The final test data are shown on the following page(s).

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2407.382	93.66	-7.58	86.08	93.98	-7.90	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

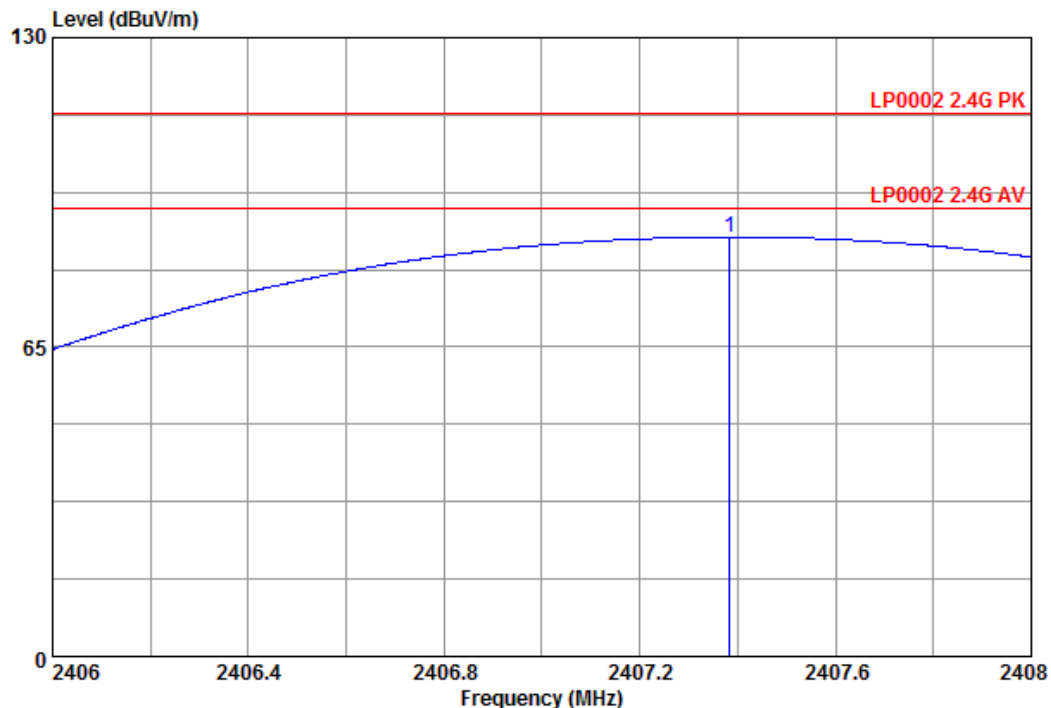
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2407.384	95.68	-7.58	88.10	93.98	-5.88	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

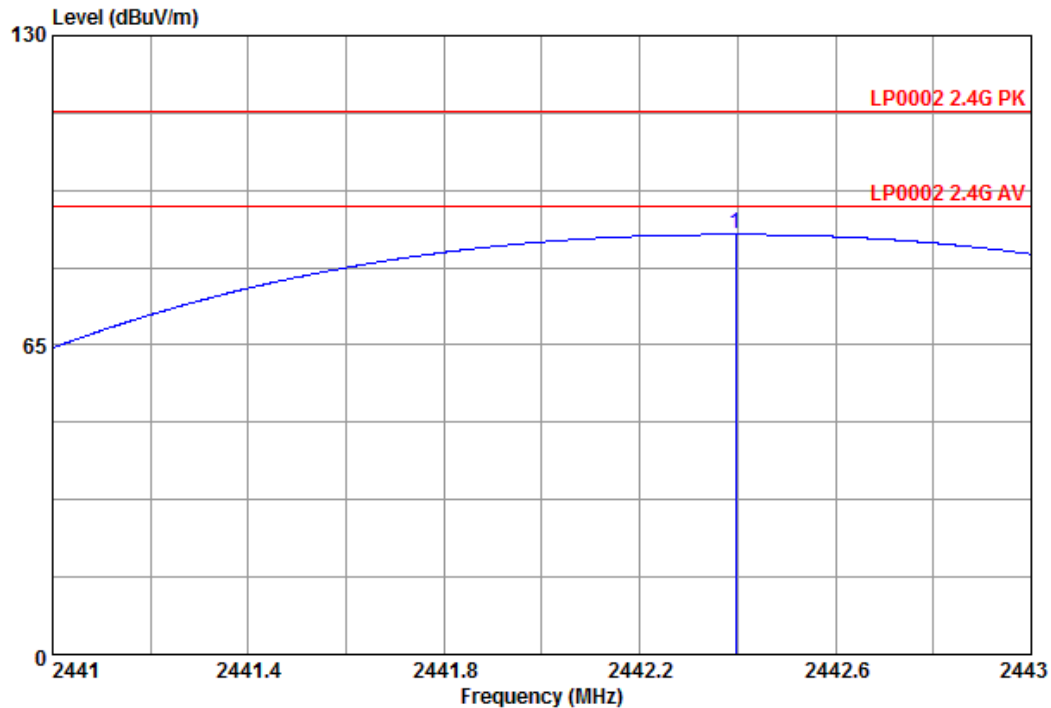
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2442.396	95.71	-7.49	88.22	93.98	-5.76	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

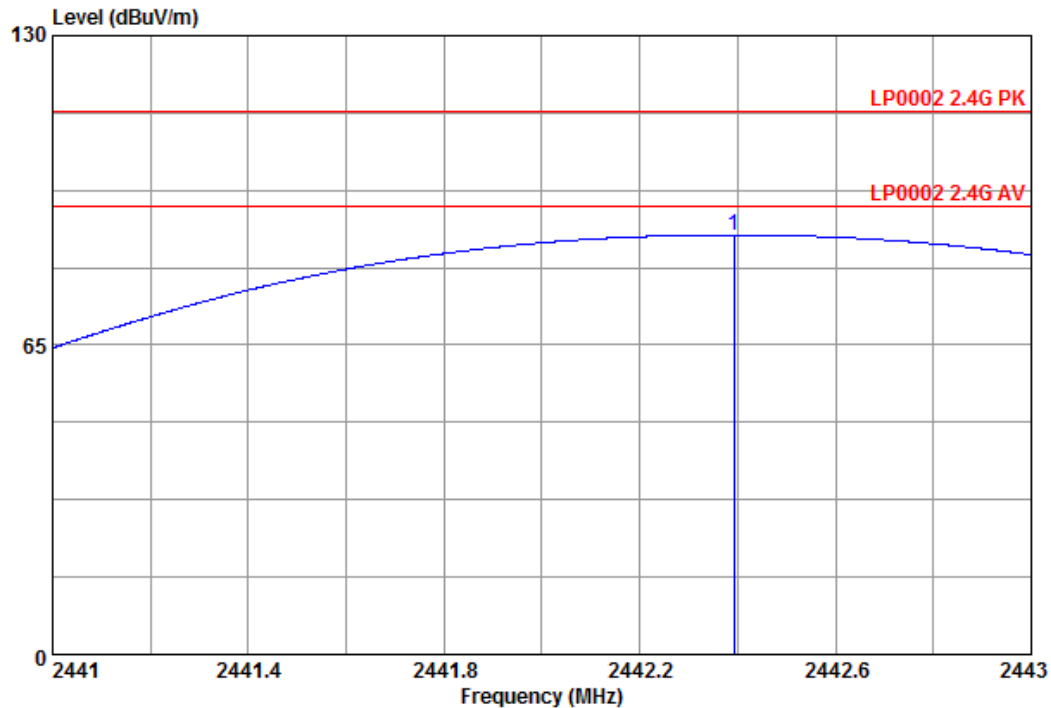
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, : RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2442.392	95.64	-7.49	88.15	93.98	-5.83	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

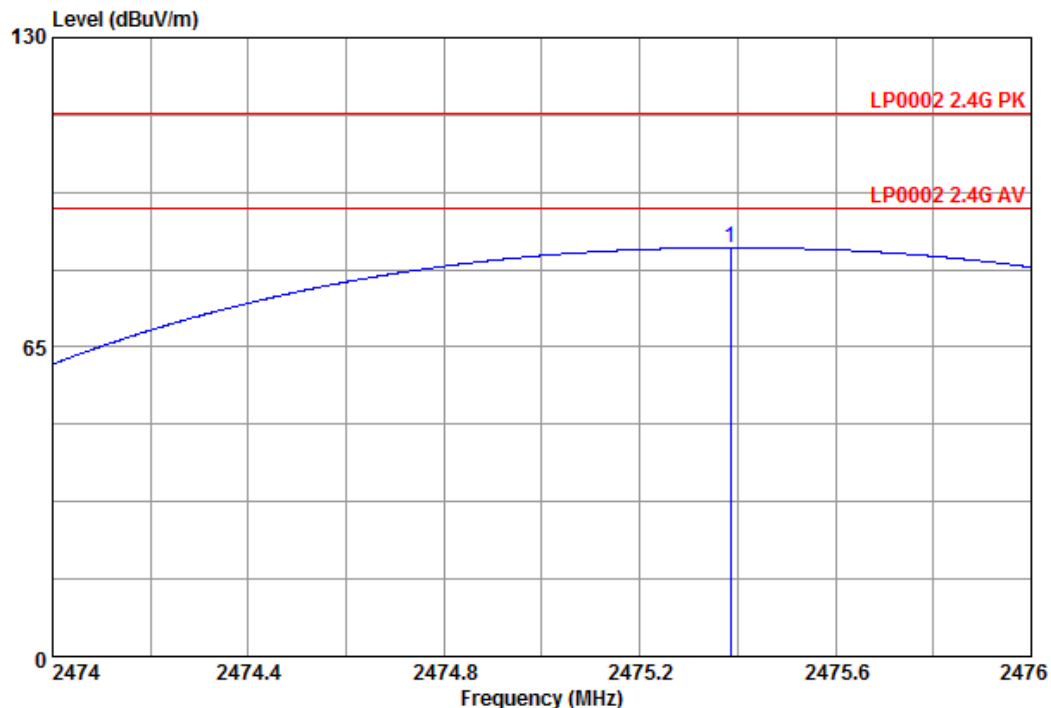
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.386	93.28	-7.39	85.89	93.98	-8.09	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

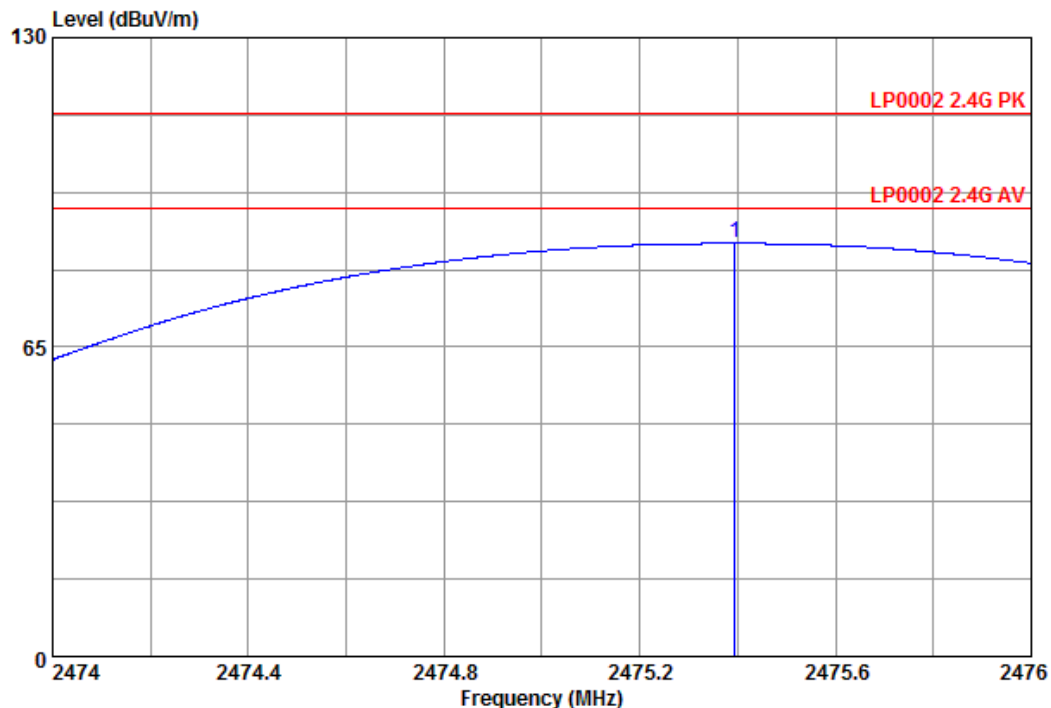
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.394	94.16	-7.39	86.77	93.98	-7.21	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

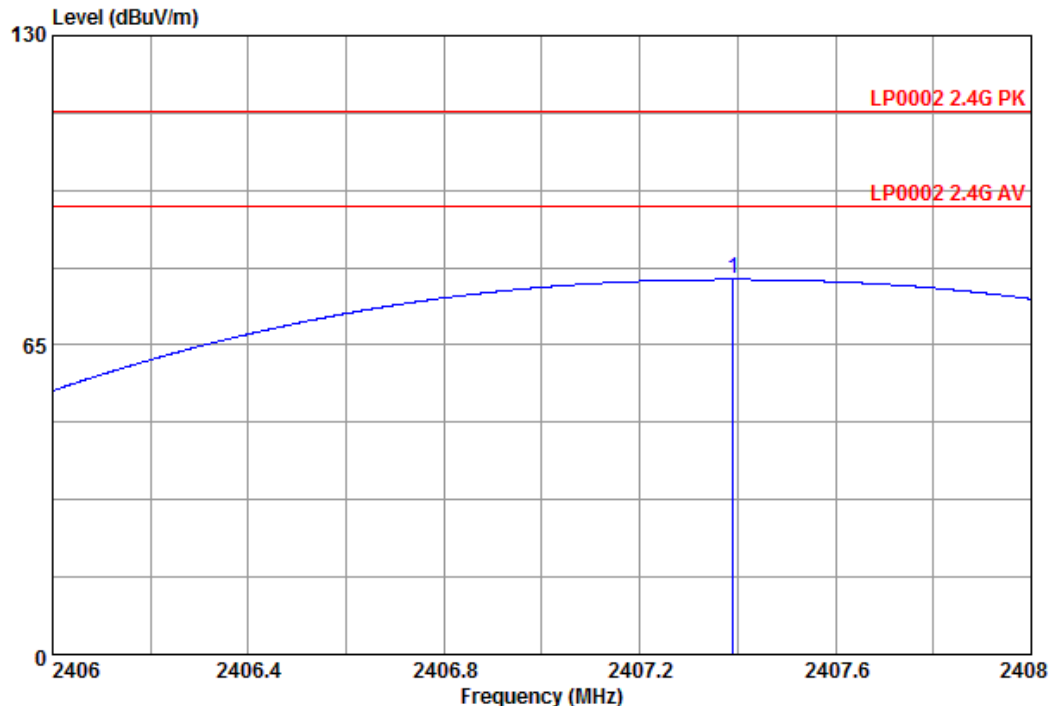
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, : RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2407.390	86.36	-7.58	78.78	93.98	-15.20	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

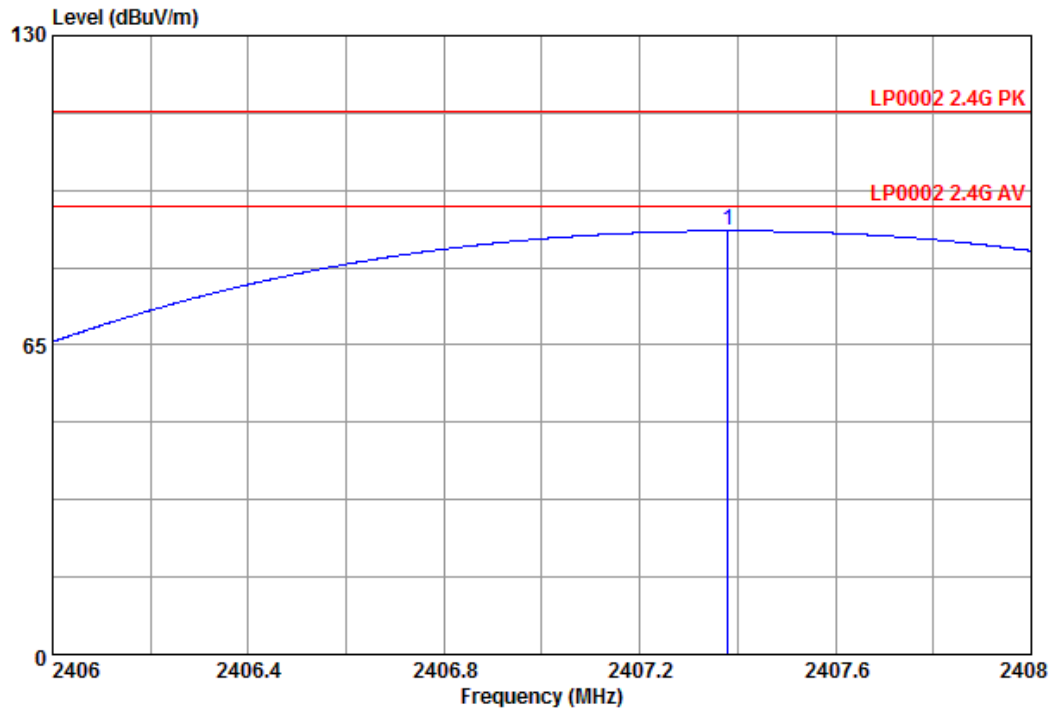
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,,: RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2407.380	96.56	-7.58	88.98	93.98	-5.00	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

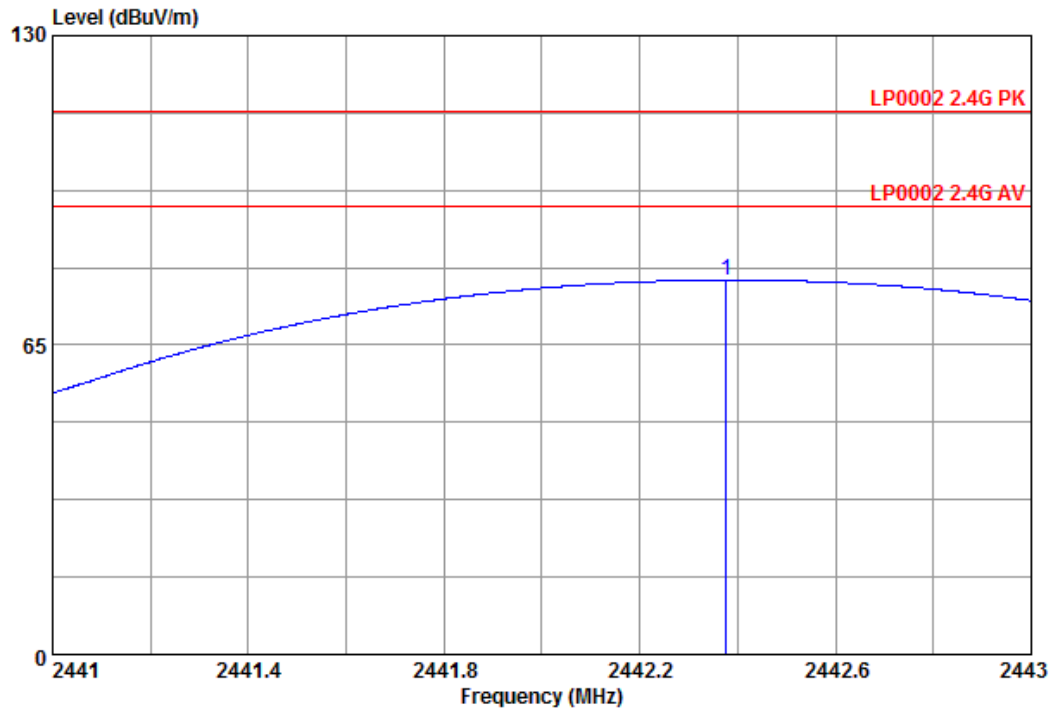
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2442.376	86.13	-7.49	78.64	93.98	-15.34	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

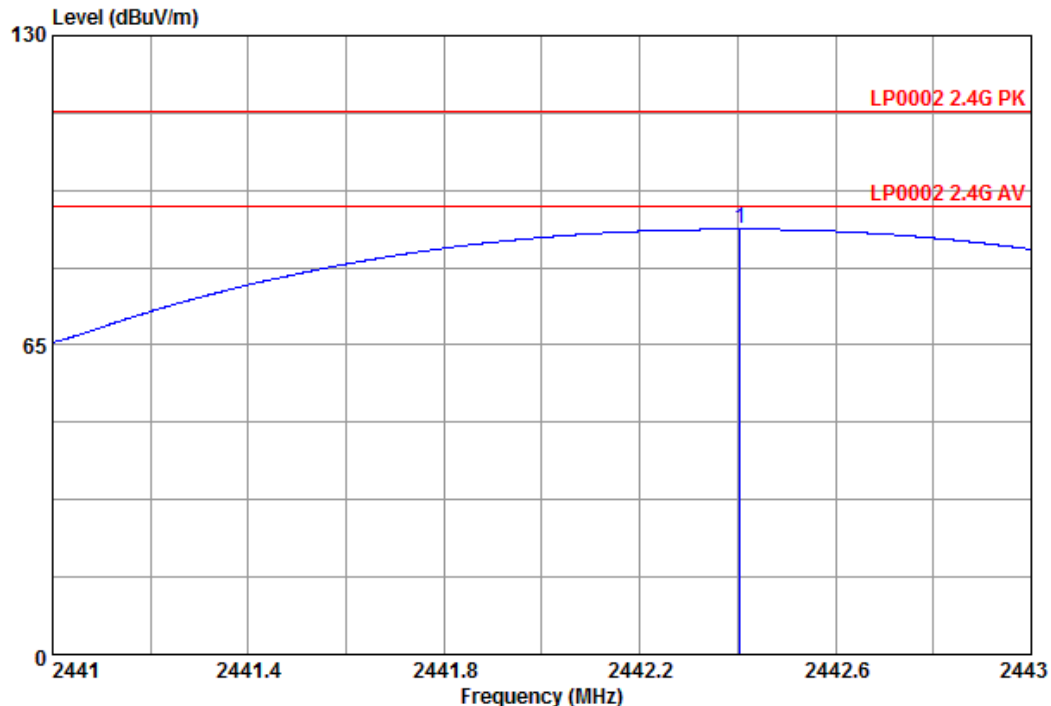
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2442.404	96.83	-7.49	89.34	93.98	-4.64	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

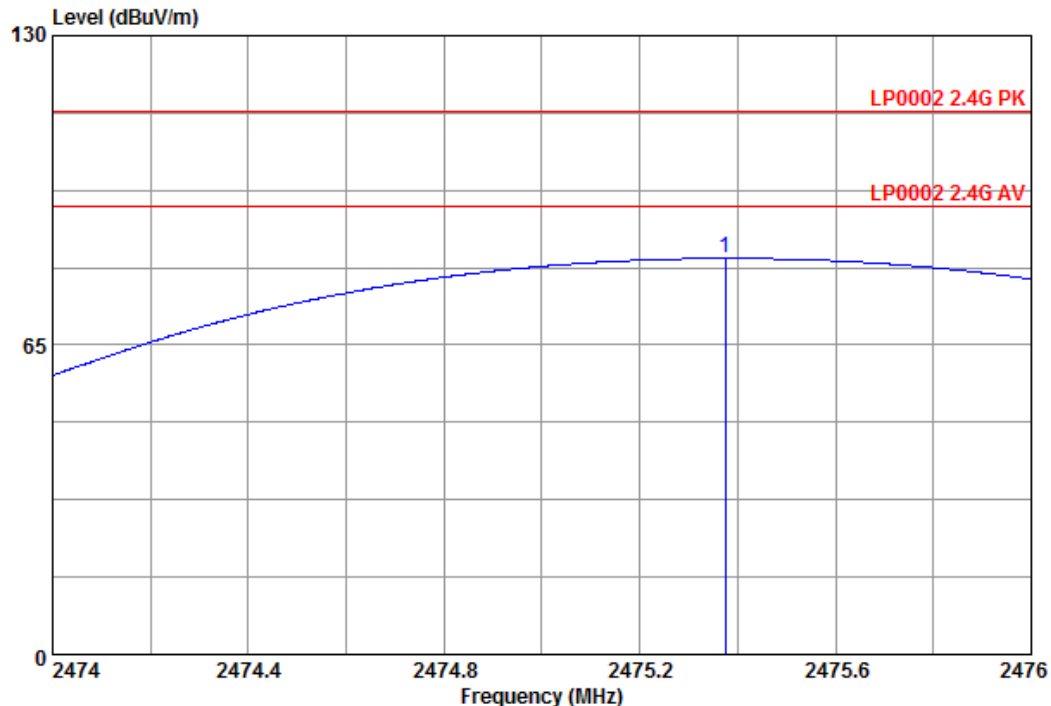
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.374	90.59	-7.39	83.20	93.98	-10.78	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

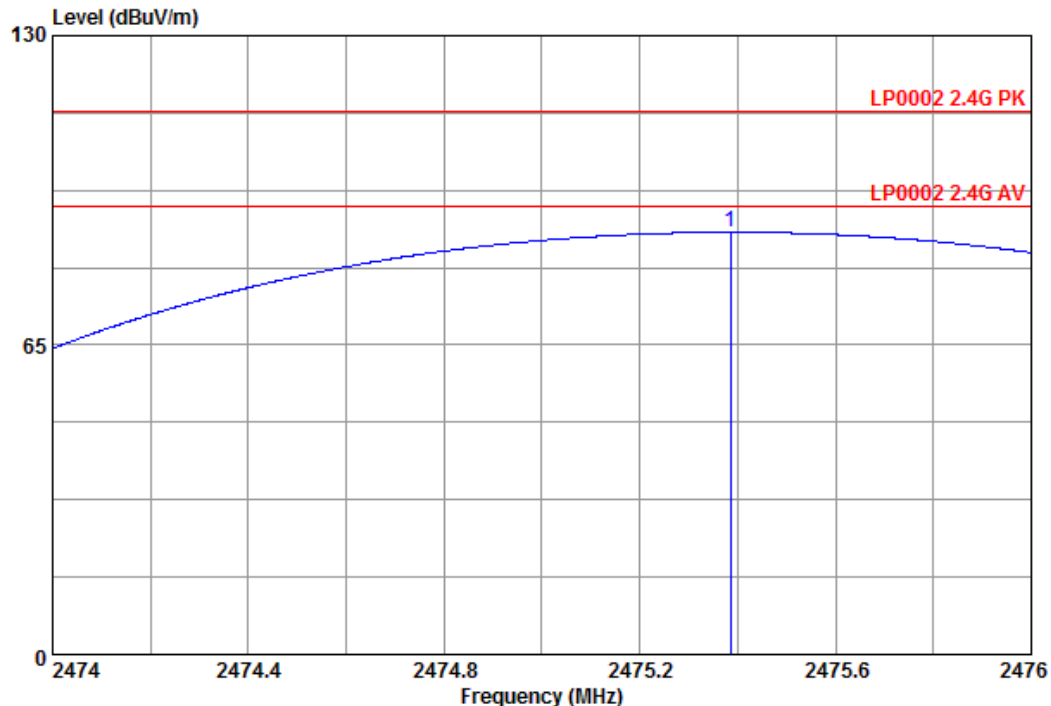
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.386	96.10	-7.39	88.71	93.98	-5.27	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

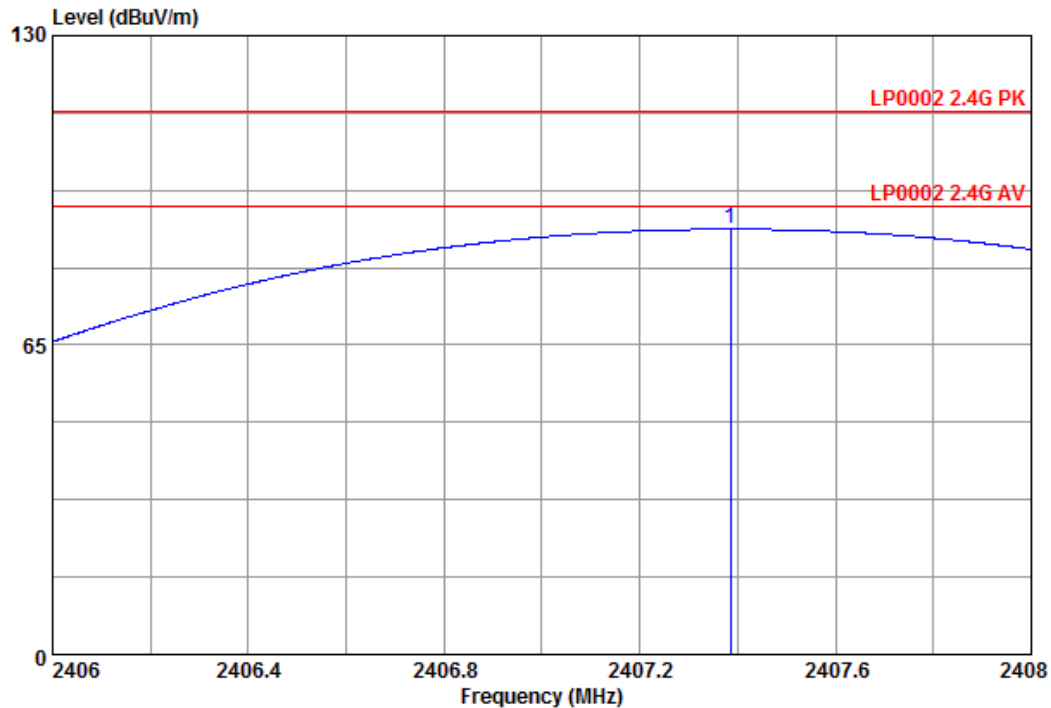
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2407.386	96.91	-7.58	89.33	93.98	-4.65	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

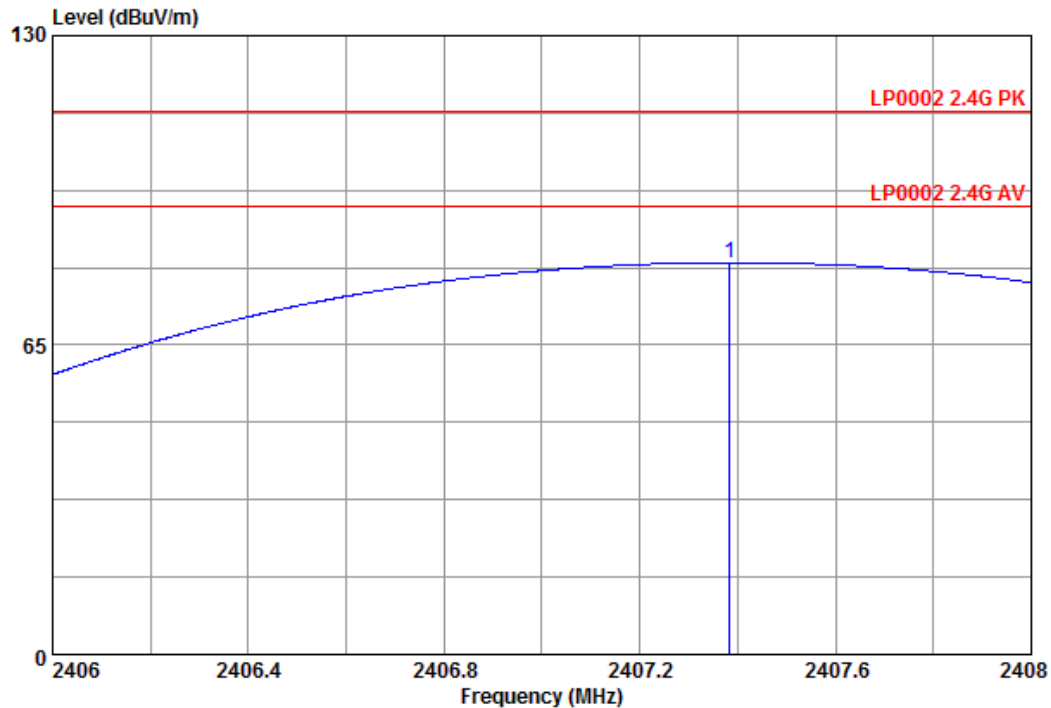
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2407.384	89.91	-7.58	82.33	93.98	-11.65	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

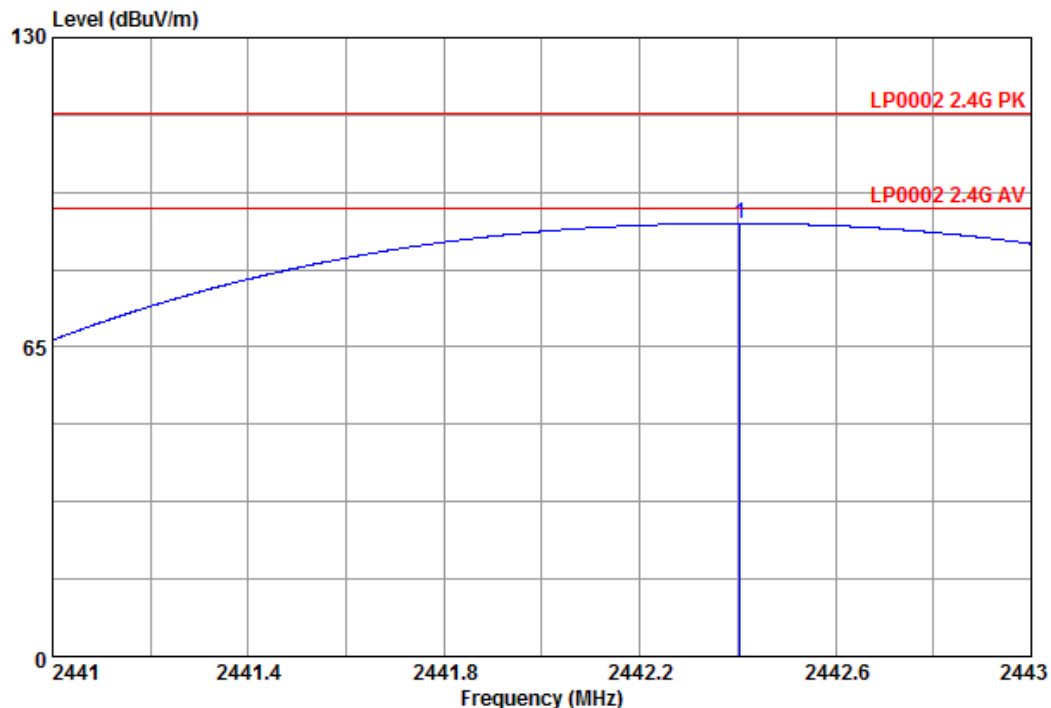
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2442.404	98.43	-7.49	90.94	93.98	-3.04	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

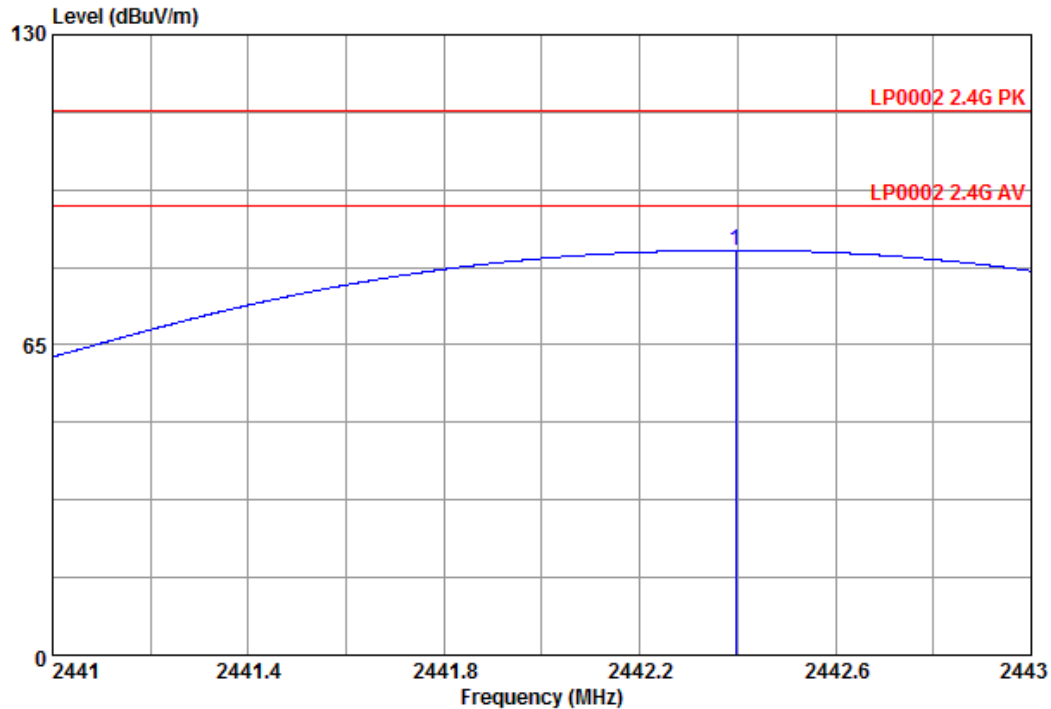
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2442.396	92.32	-7.49	84.83	93.98	-9.15	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

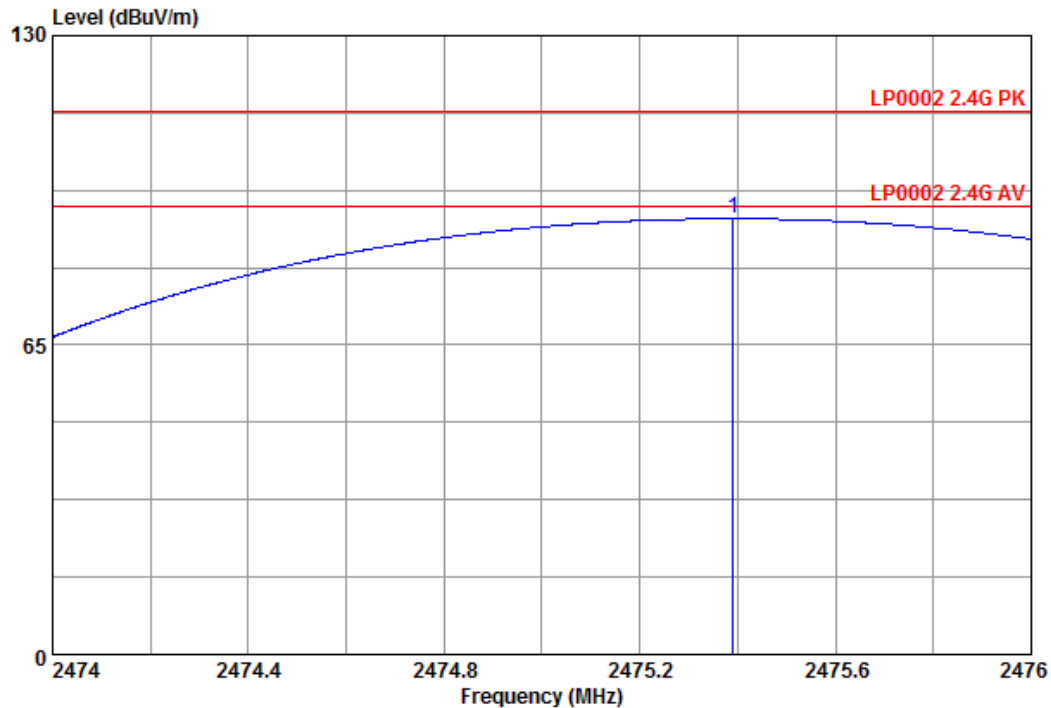
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Radiated Emission Test Data (Field Strength of Fundamental)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.390	98.91	-7.39	91.52	93.98	-2.46	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

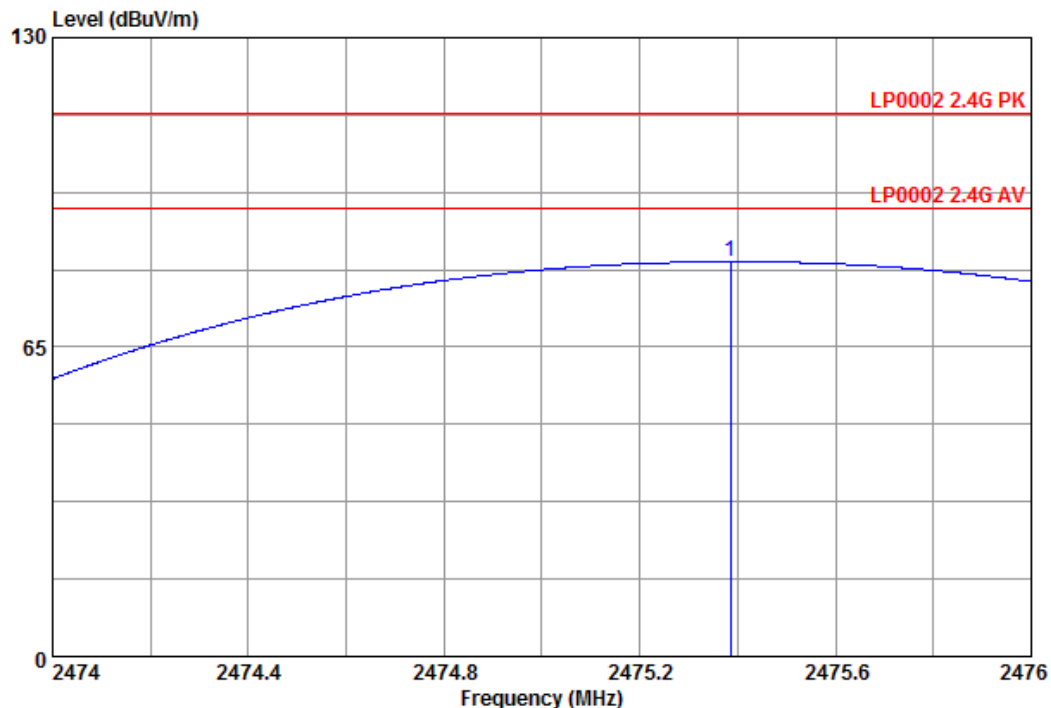
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Field Strength of Fundamental)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.386	90.31	-7.39	82.92	93.98	-11.06	---	---	Peak

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

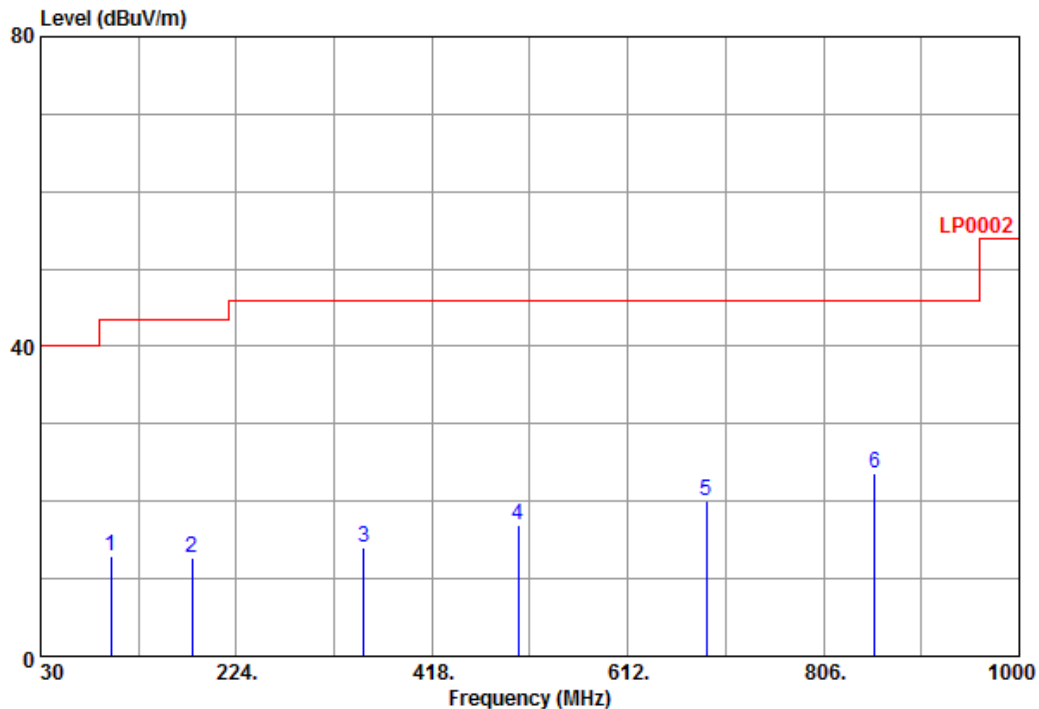
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	99.840	35.20	-22.28	12.92	43.50	-30.58	---	---	
2	180.350	30.17	-17.39	12.78	43.50	-30.72	---	---	
3	350.100	28.85	-14.85	14.00	46.00	-32.00	---	---	
4	503.360	28.22	-11.18	17.04	46.00	-28.96	---	---	
5	689.600	27.43	-7.28	20.15	46.00	-25.85	---	---	
6 @	856.440	28.40	-4.73	23.67	46.00	-22.33	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

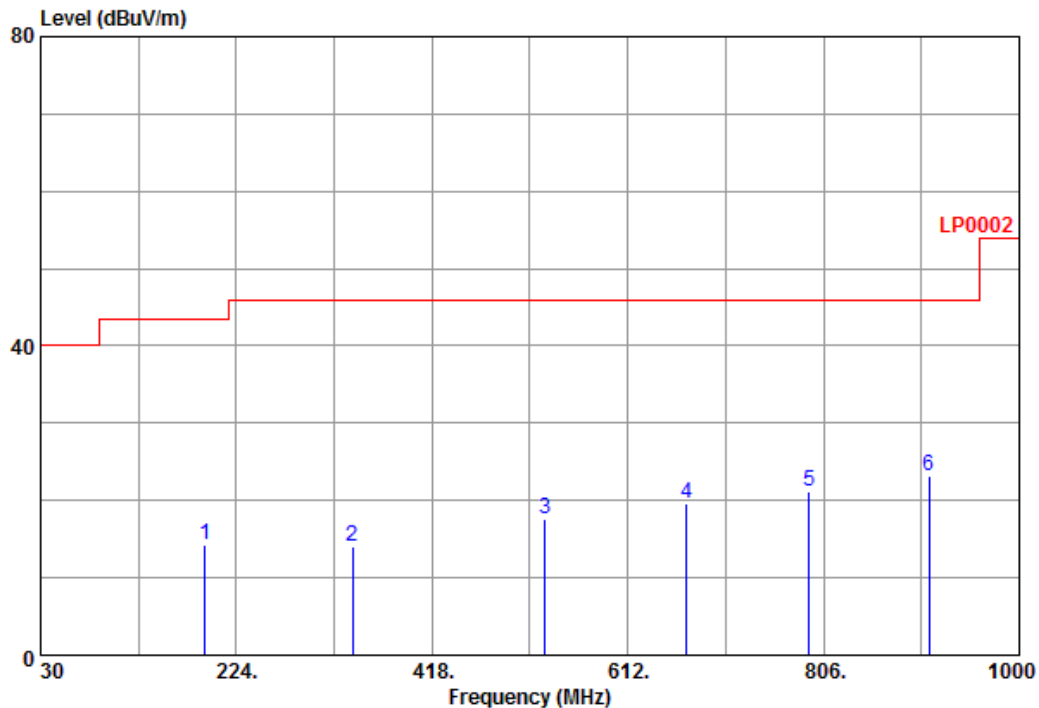
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	192.960	31.48	-17.32	14.16	43.50	-29.34	---	---	
2	339.430	28.91	-14.97	13.94	46.00	-32.06	---	---	
3	529.550	28.21	-10.61	17.60	46.00	-28.40	---	---	
4	670.200	27.25	-7.62	19.63	46.00	-26.37	---	---	
5	791.450	27.00	-5.73	21.27	46.00	-24.73	---	---	
6 @	910.760	27.20	-3.98	23.22	46.00	-22.78	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

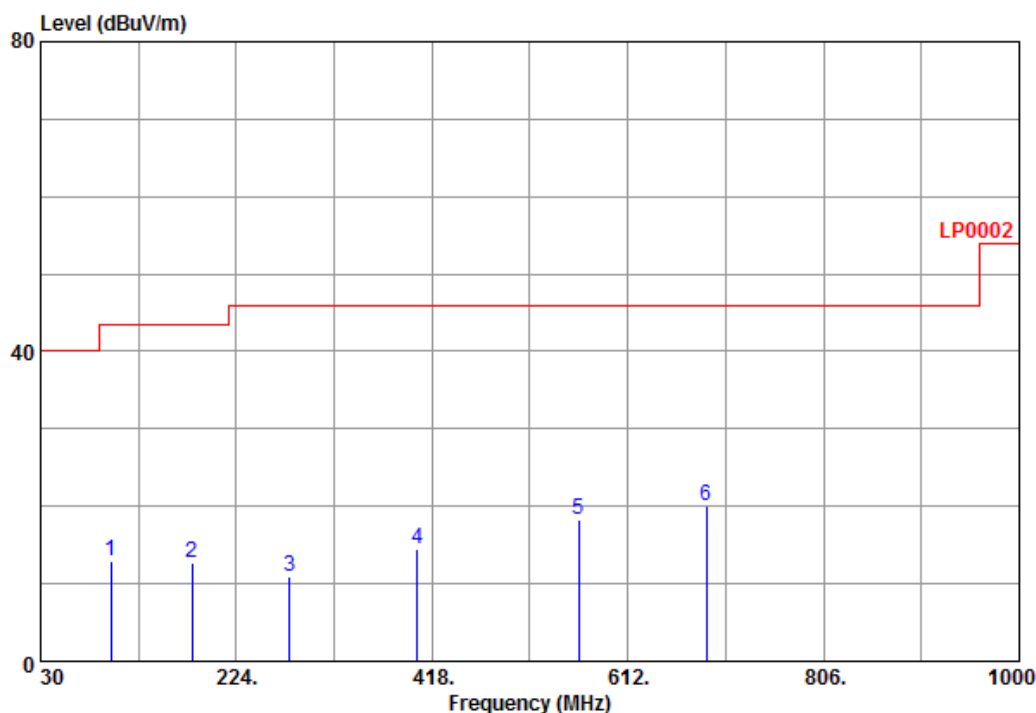
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	99.840	35.20	-22.28	12.92	43.50	-30.58	---	---	
2	180.350	30.17	-17.39	12.78	43.50	-30.72	---	---	
3	276.380	29.33	-18.50	10.83	46.00	-35.17	---	---	
4	403.450	28.68	-14.28	14.40	46.00	-31.60	---	---	
5	563.500	28.45	-10.28	18.17	46.00	-27.83	---	---	
6 @	689.600	27.43	-7.28	20.15	46.00	-25.85	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

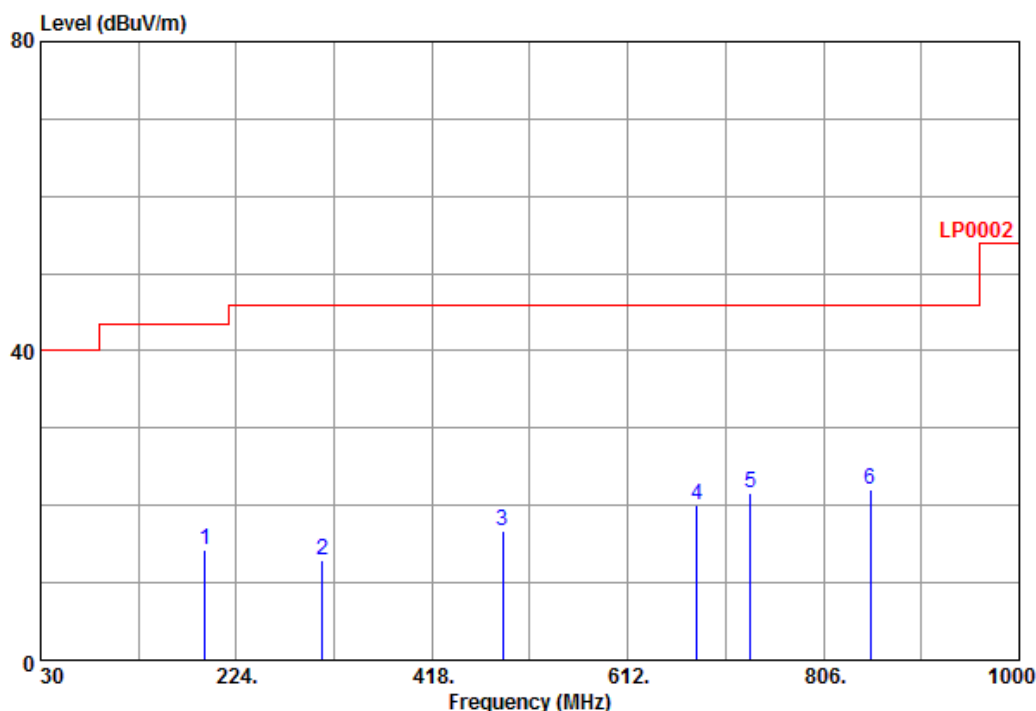
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	192.960	31.48	-17.32	14.16	43.50	-29.34	---	---	
2	309.360	29.73	-16.86	12.87	46.00	-33.13	---	---	
3	487.840	28.77	-11.98	16.79	46.00	-29.21	---	---	
4	680.870	27.41	-7.37	20.04	46.00	-25.96	---	---	
5	733.250	28.19	-6.53	21.66	46.00	-24.34	---	---	
6 @	852.560	26.96	-4.85	22.11	46.00	-23.89	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

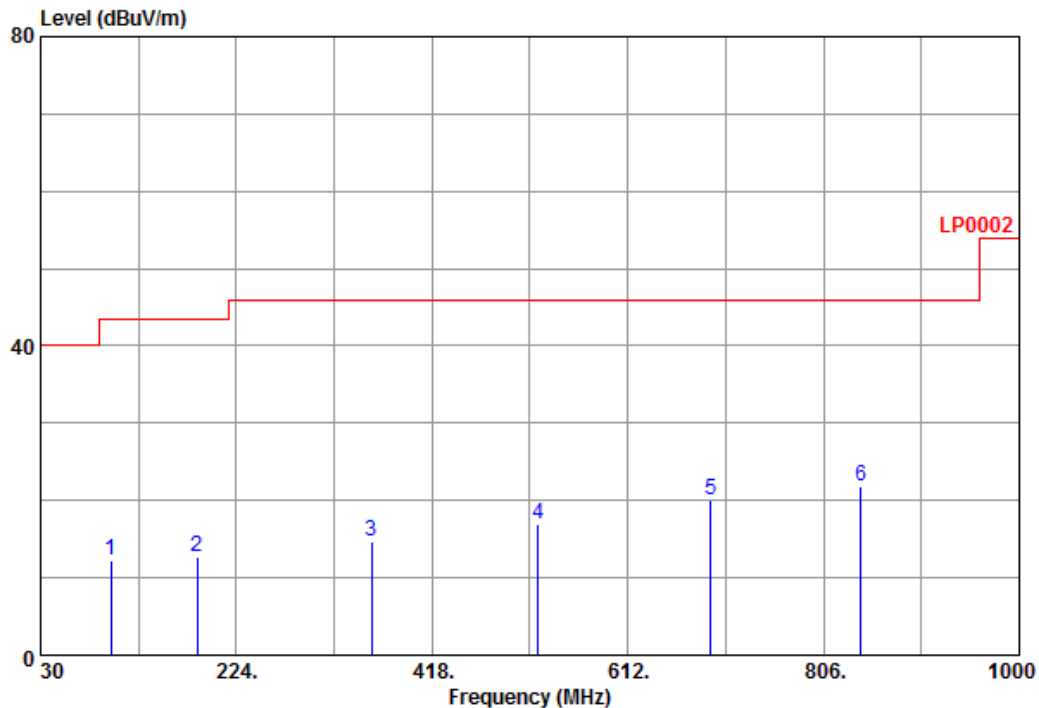
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	99.840	34.56	-22.28	12.28	43.50	-31.22	---	---	
2	185.200	30.16	-17.37	12.79	43.50	-30.71	---	---	
3	357.860	29.34	-14.72	14.62	46.00	-31.38	---	---	
4	522.760	27.61	-10.67	16.94	46.00	-29.06	---	---	
5	694.450	27.18	-7.23	19.95	46.00	-26.05	---	---	
6 @	842.860	26.90	-5.01	21.89	46.00	-24.11	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

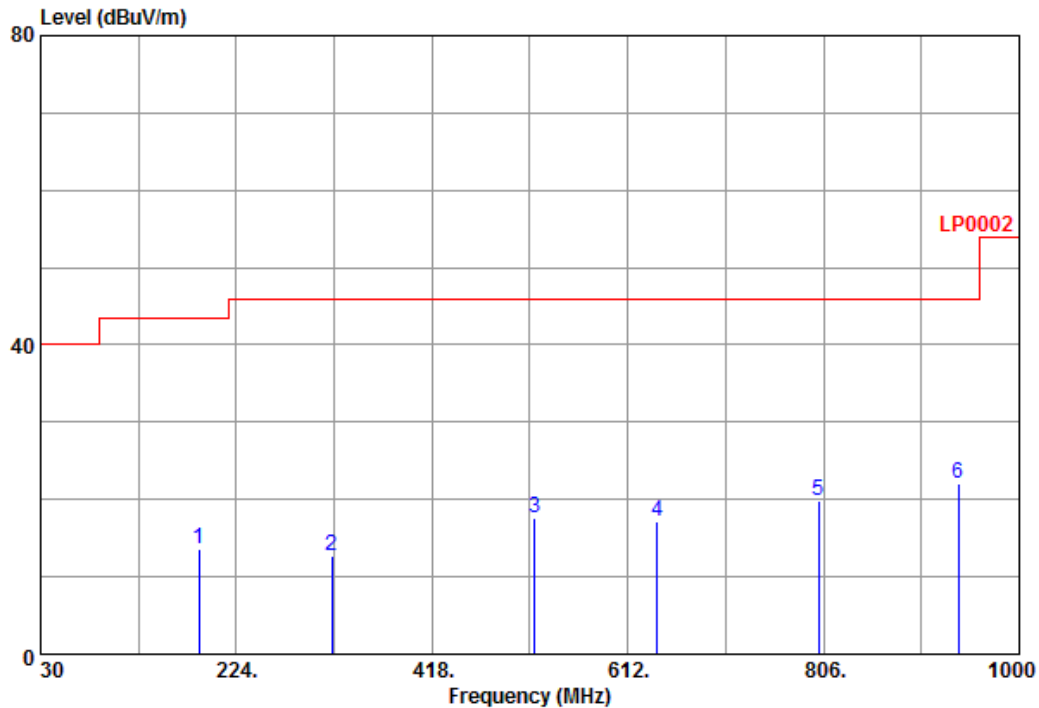
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	187.140	30.85	-17.36	13.49	43.50	-30.01	---	---	
2	319.060	29.14	-16.34	12.80	46.00	-33.20	---	---	
3	519.850	28.28	-10.74	17.54	46.00	-28.46	---	---	
4	641.100	25.82	-8.56	17.26	46.00	-28.74	---	---	
5	801.150	25.22	-5.50	19.72	46.00	-26.28	---	---	
6 @	939.860	25.83	-3.84	21.99	46.00	-24.01	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

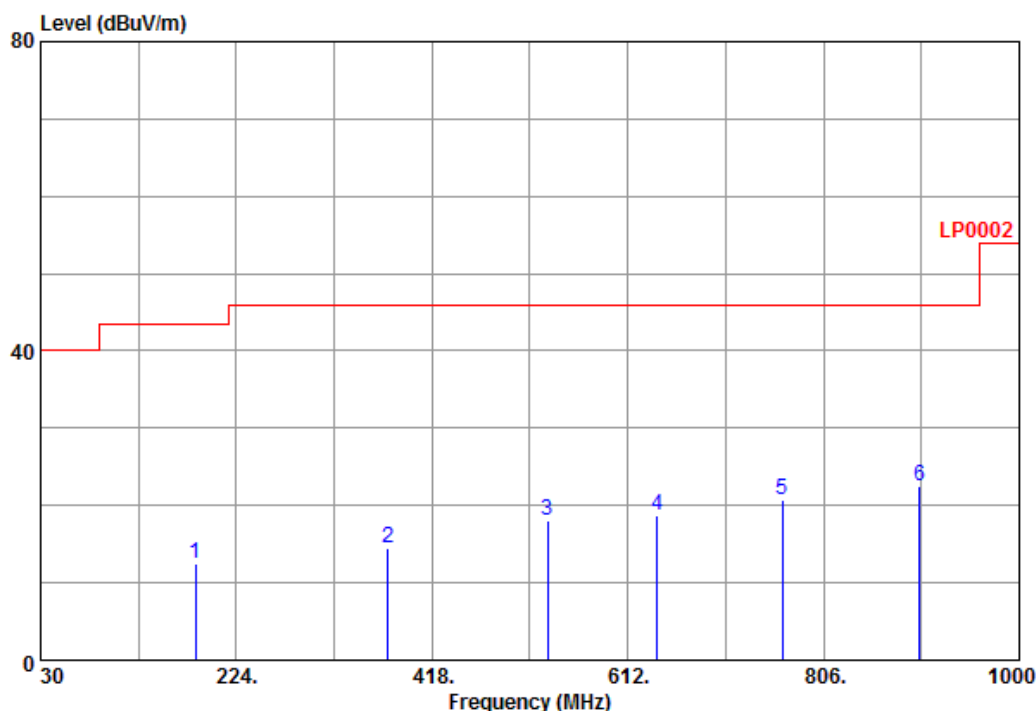
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 30 MHz to 1 GHz.
- Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
- Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
- The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	183.260	29.75	-17.38	12.37	43.50	-31.13	---	---	
2	374.350	28.81	-14.27	14.54	46.00	-31.46	---	---	
3	532.460	28.67	-10.60	18.07	46.00	-27.93	---	---	
4	641.100	27.23	-8.56	18.67	46.00	-27.33	---	---	
5	765.260	27.05	-6.26	20.79	46.00	-25.21	---	---	
6 @	901.060	26.61	-4.04	22.57	46.00	-23.43	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

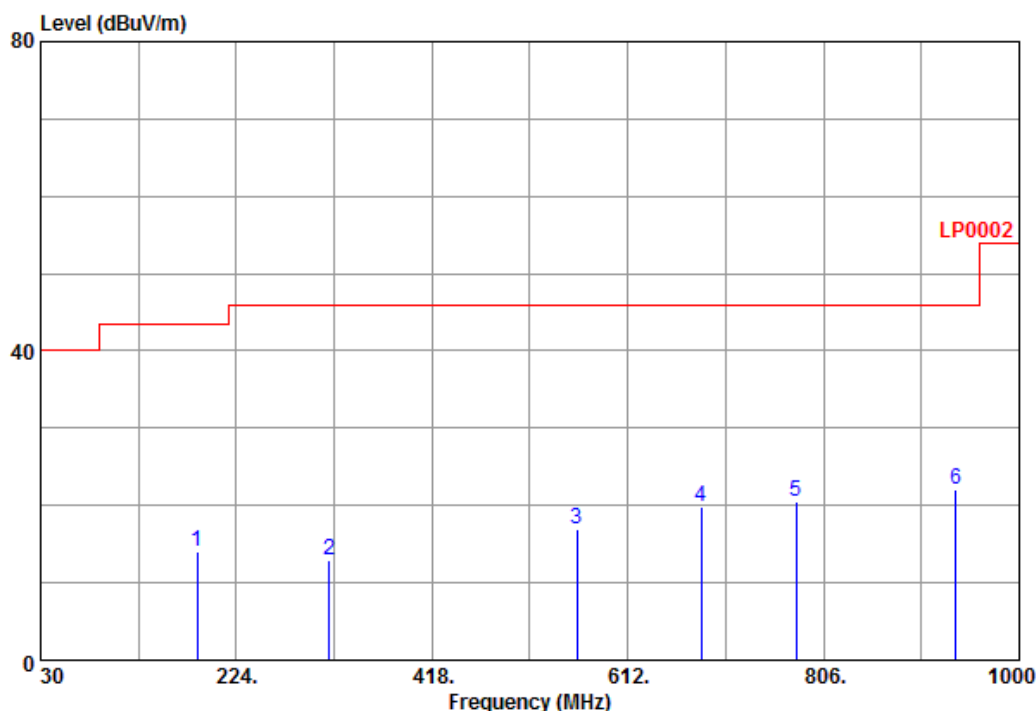
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	185.200	31.42	-17.37	14.05	43.50	-29.45	---	---	
2	316.150	29.40	-16.49	12.91	46.00	-33.09	---	---	
3	561.560	27.18	-10.32	16.86	46.00	-29.14	---	---	
4	684.750	27.17	-7.33	19.84	46.00	-26.16	---	---	
5	778.840	26.62	-6.06	20.56	46.00	-25.44	---	---	
6 @	936.950	25.98	-3.85	22.13	46.00	-23.87	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

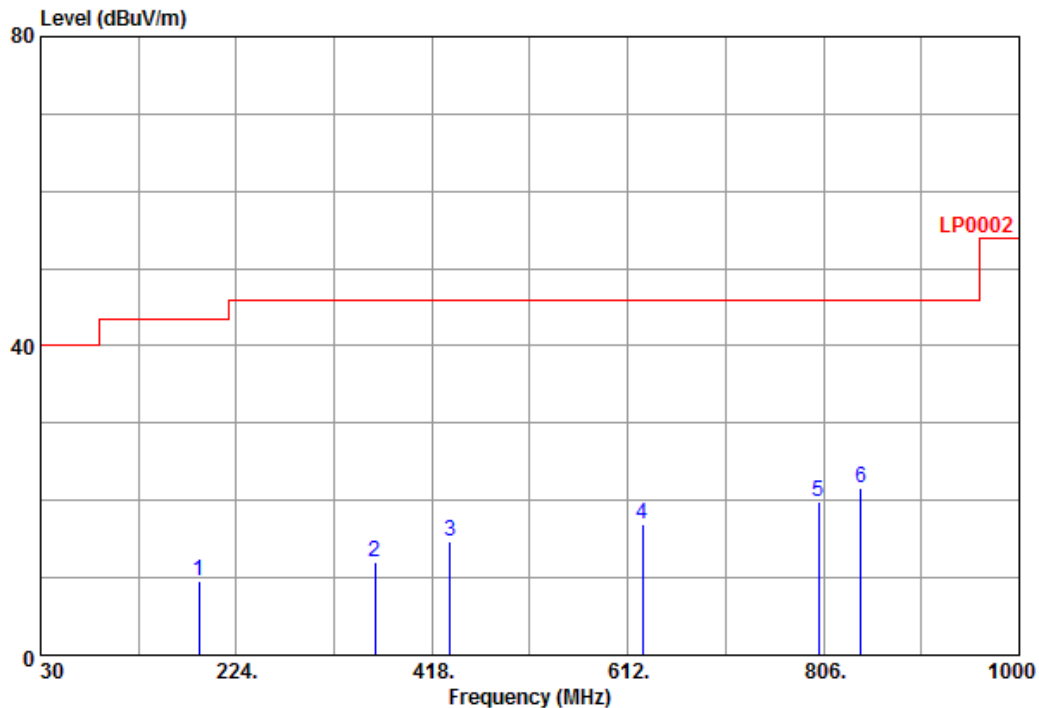
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	187.140	26.89	-17.36	9.53	43.50	-33.97	---	---	
2	361.740	26.68	-14.64	12.04	46.00	-33.96	---	---	
3	435.460	29.72	-15.00	14.72	46.00	-31.28	---	---	
4	626.550	25.66	-8.76	16.90	46.00	-29.10	---	---	
5	801.150	25.43	-5.50	19.93	46.00	-26.07	---	---	
6 @	842.860	26.74	-5.01	21.73	46.00	-24.27	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

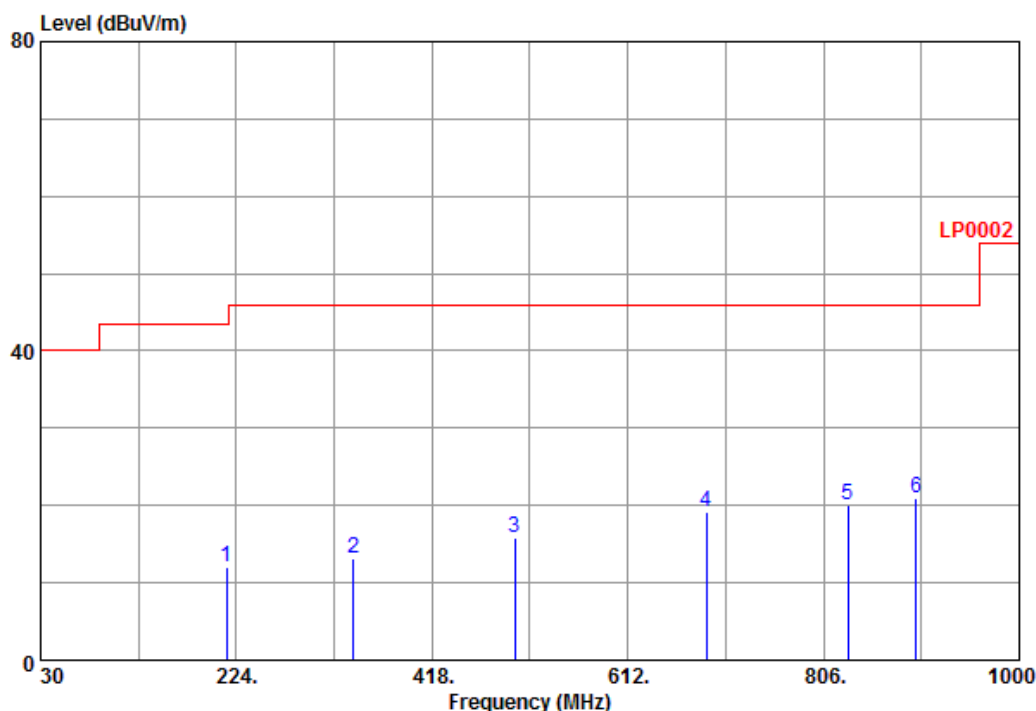
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	214.300	29.70	-17.73	11.97	43.50	-31.53	---	---	
2	340.400	27.94	-14.90	13.04	46.00	-32.96	---	---	
3	500.450	27.13	-11.25	15.88	46.00	-30.12	---	---	
4	689.600	26.35	-7.28	19.07	46.00	-26.93	---	---	
5	830.250	25.14	-5.15	19.99	46.00	-26.01	---	---	
6 @	898.150	25.03	-4.05	20.98	46.00	-25.02	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

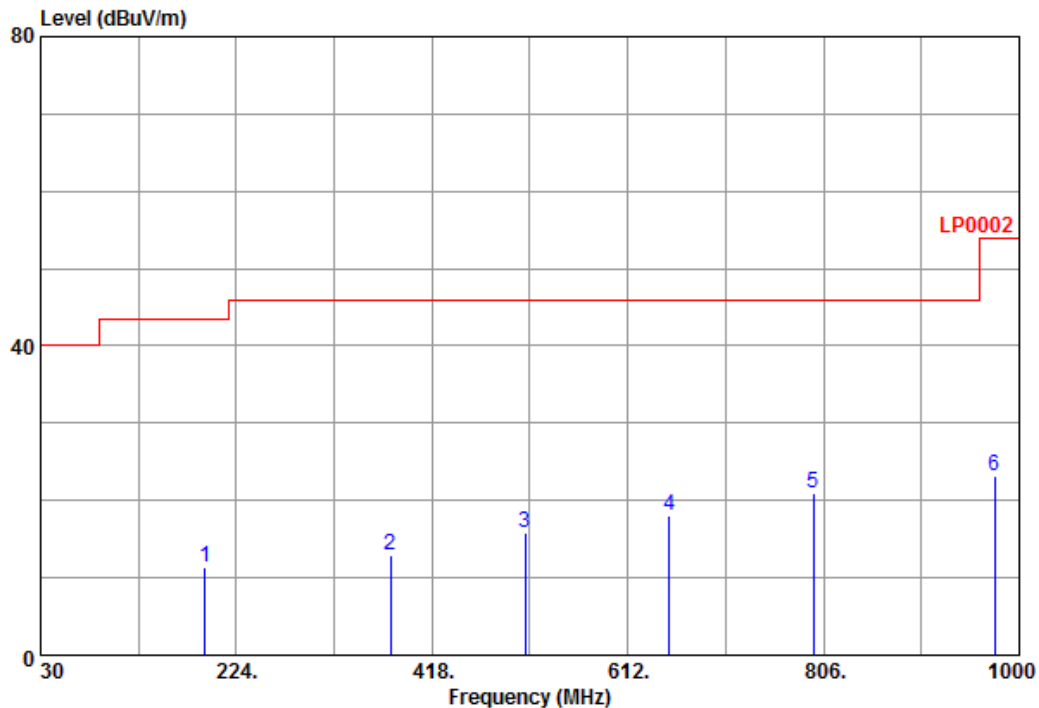
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	192.960	28.77	-17.32	11.45	43.50	-32.05	---	---	
2	377.260	27.12	-14.16	12.96	46.00	-33.04	---	---	
3	510.150	26.80	-11.00	15.80	46.00	-30.20	---	---	
4	652.740	26.27	-8.32	17.95	46.00	-28.05	---	---	
5 @	796.300	26.62	-5.61	21.01	46.00	-24.99	---	---	
6	975.750	26.71	-3.51	23.20	54.00	-30.80	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

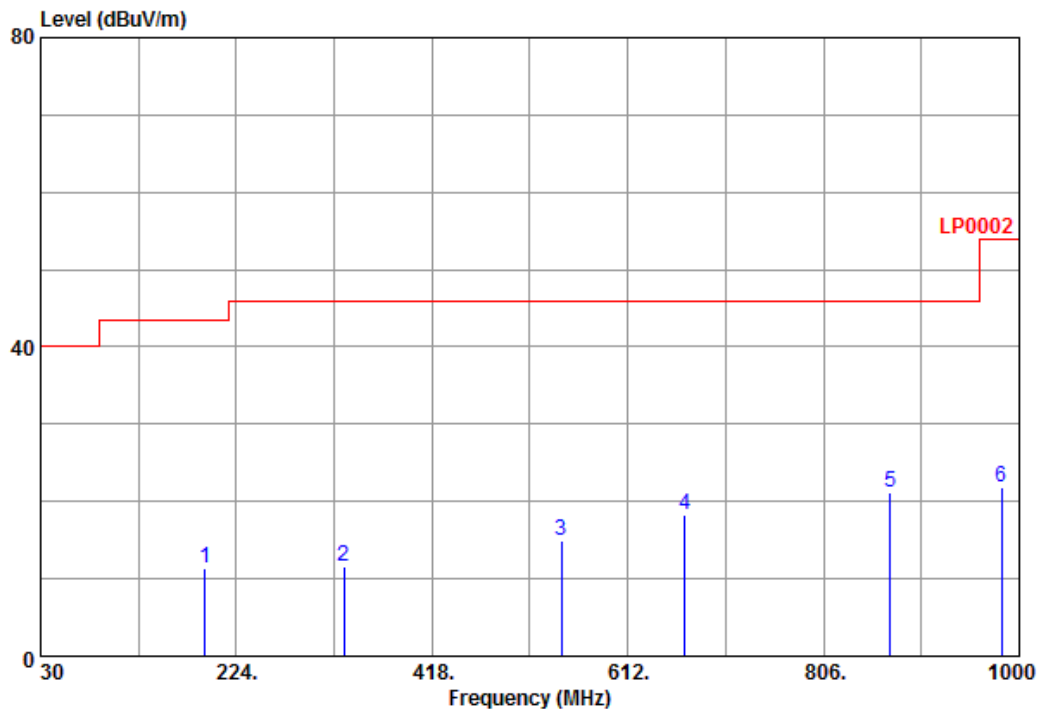
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	192.960	28.70	-17.32	11.38	43.50	-32.12	---	---	
2	330.700	27.16	-15.58	11.58	46.00	-34.42	---	---	
3	546.040	25.43	-10.55	14.88	46.00	-31.12	---	---	
4	668.260	25.99	-7.71	18.28	46.00	-27.72	---	---	
5 @	871.960	25.38	-4.29	21.09	46.00	-24.91	---	---	
6	982.540	25.25	-3.44	21.81	54.00	-32.19	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

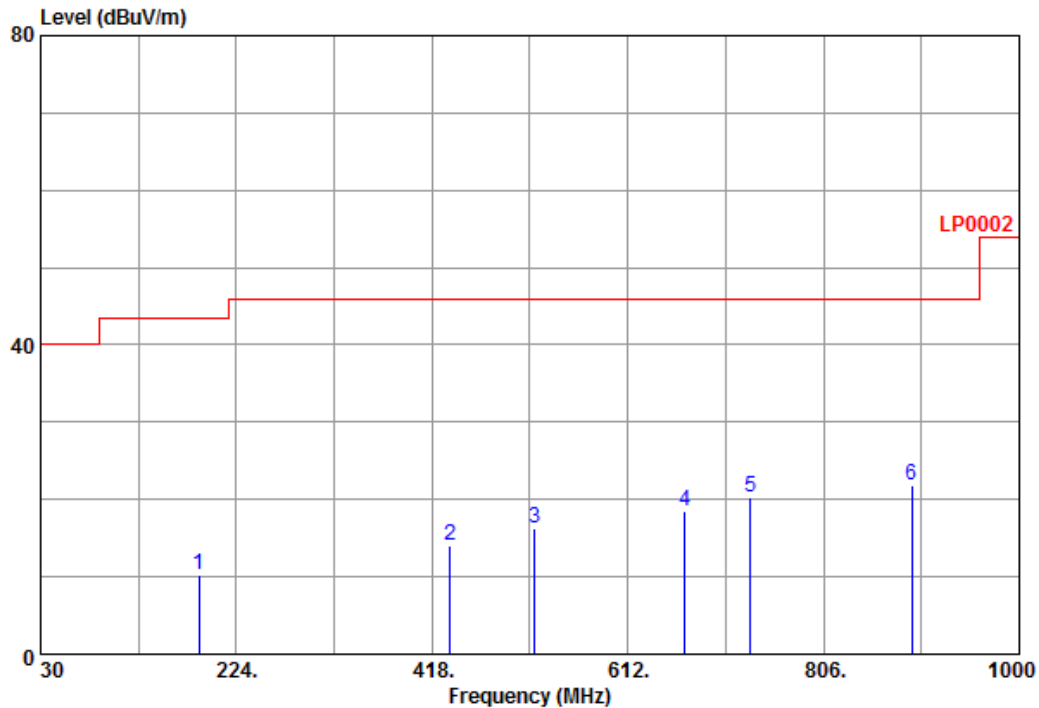
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	187.140	27.71	-17.36	10.35	43.50	-33.15	---	---	
2	435.460	29.06	-15.00	14.06	46.00	-31.94	---	---	
3	519.850	27.09	-10.74	16.35	46.00	-29.65	---	---	
4	668.260	26.15	-7.71	18.44	46.00	-27.56	---	---	
5	733.250	26.71	-6.53	20.18	46.00	-25.82	---	---	
6	@ 893.300	25.86	-4.09	21.77	46.00	-24.23	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

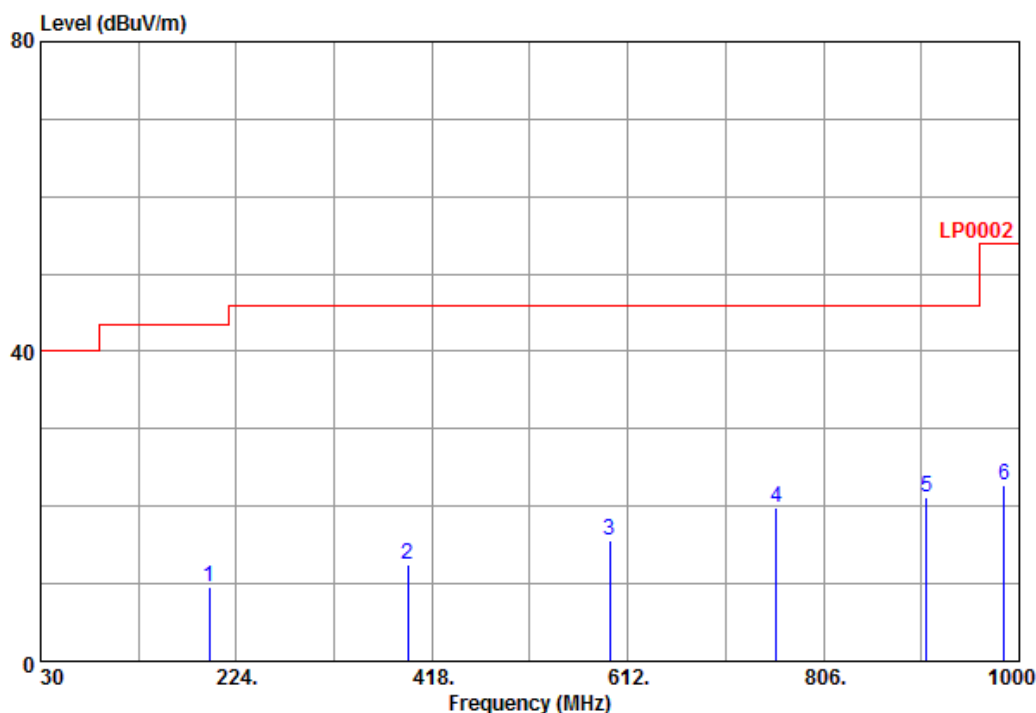
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 30 MHz to 1 GHz.
- Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
- Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
- The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	196.840	26.95	-17.28	9.67	43.50	-33.83	---	---	
2	393.750	26.29	-13.88	12.41	46.00	-33.59	---	---	
3	594.540	25.11	-9.48	15.63	46.00	-30.37	---	---	
4	759.440	26.25	-6.32	19.93	46.00	-26.07	---	---	
5 @	907.850	25.19	-4.00	21.19	46.00	-24.81	---	---	
6	985.450	26.07	-3.41	22.66	54.00	-31.34	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

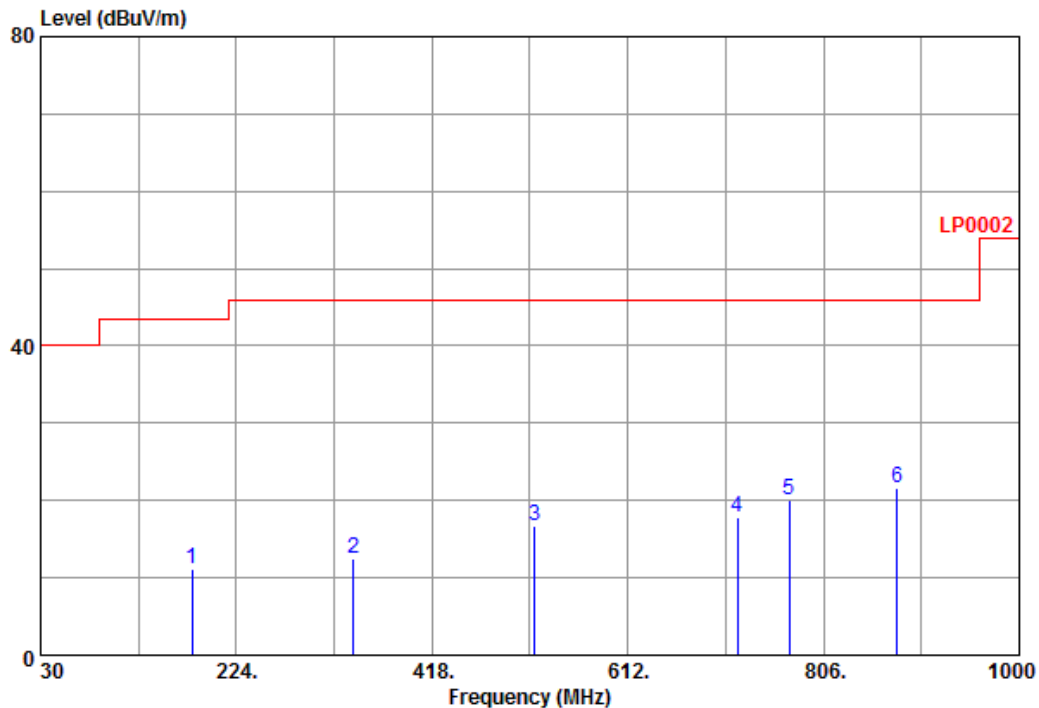
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	180.350	28.46	-17.39	11.07	43.50	-32.43	---	---	
2	340.400	27.43	-14.90	12.53	46.00	-33.47	---	---	
3	519.850	27.53	-10.74	16.79	46.00	-29.21	---	---	
4	720.640	24.46	-6.68	17.78	46.00	-28.22	---	---	
5	772.050	26.22	-6.19	20.03	46.00	-25.97	---	---	
6 @	878.750	25.71	-4.19	21.52	46.00	-24.48	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

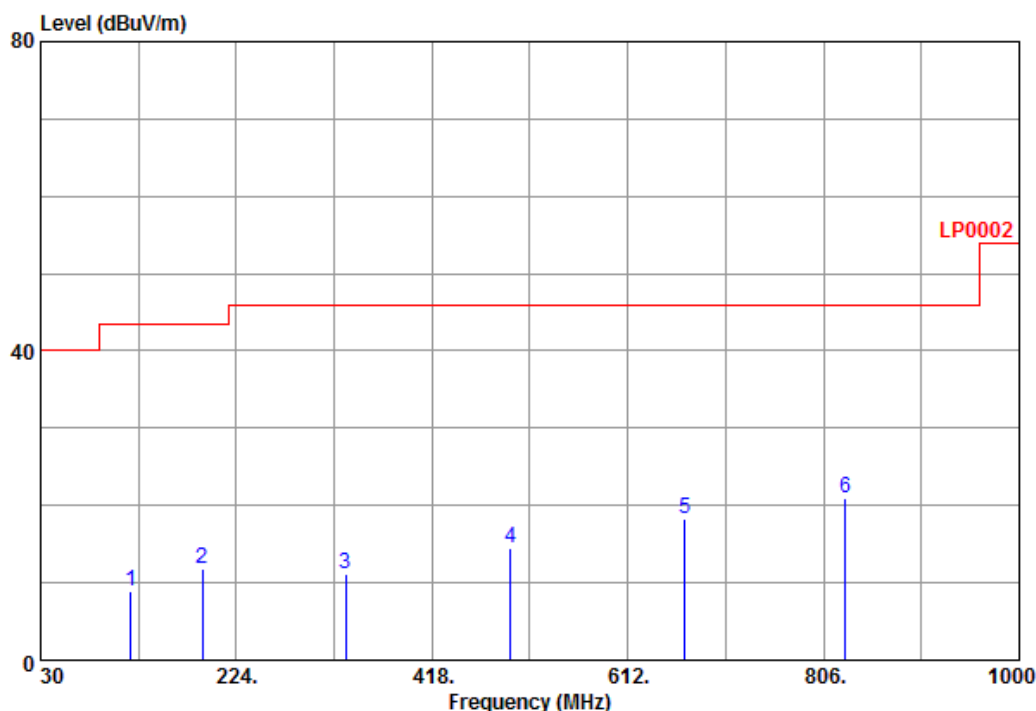
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	119.240	31.84	-22.84	9.00	43.50	-34.50	---	---	
2	190.050	29.12	-17.36	11.76	43.50	-31.74	---	---	
3	332.640	26.55	-15.44	11.11	46.00	-34.89	---	---	
4	495.600	26.11	-11.53	14.58	46.00	-31.42	---	---	
5	668.260	25.94	-7.71	18.23	46.00	-27.77	---	---	
6 @	827.340	26.05	-5.19	20.86	46.00	-25.14	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

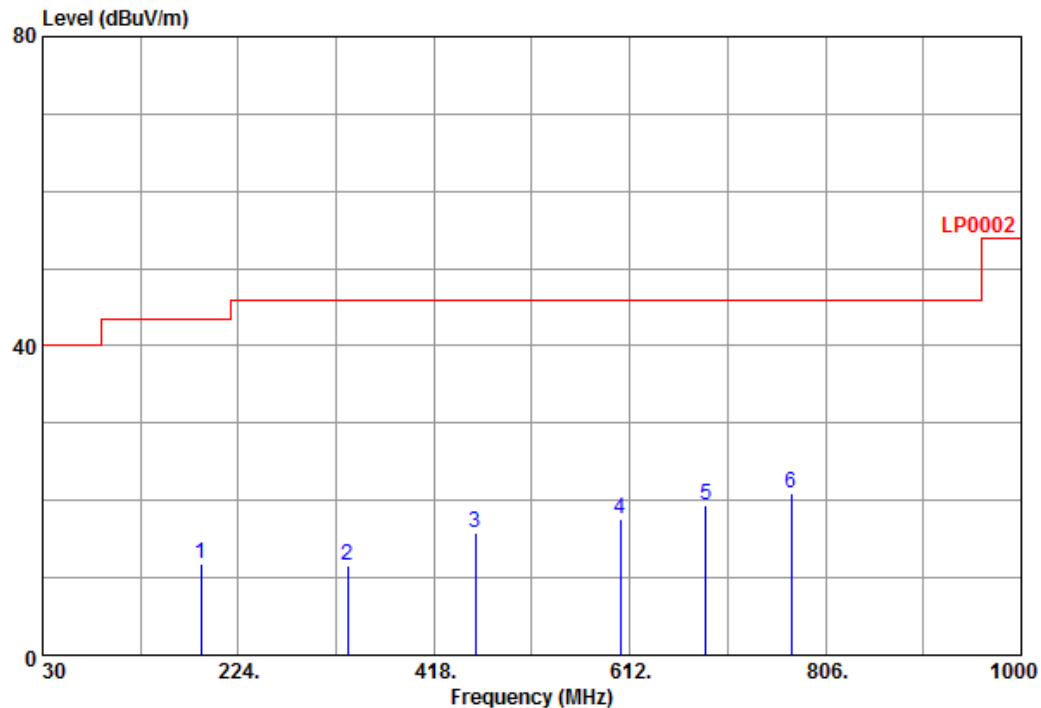
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	187.140	29.06	-17.36	11.70	43.50	-31.80	---	---	
2	332.640	27.11	-15.44	11.67	46.00	-34.33	---	---	
3	458.740	28.61	-12.80	15.81	46.00	-30.19	---	---	
4	602.300	26.94	-9.27	17.67	46.00	-28.33	---	---	
5	687.660	26.60	-7.31	19.29	46.00	-26.71	---	---	
6 @	772.050	27.03	-6.19	20.84	46.00	-25.16	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

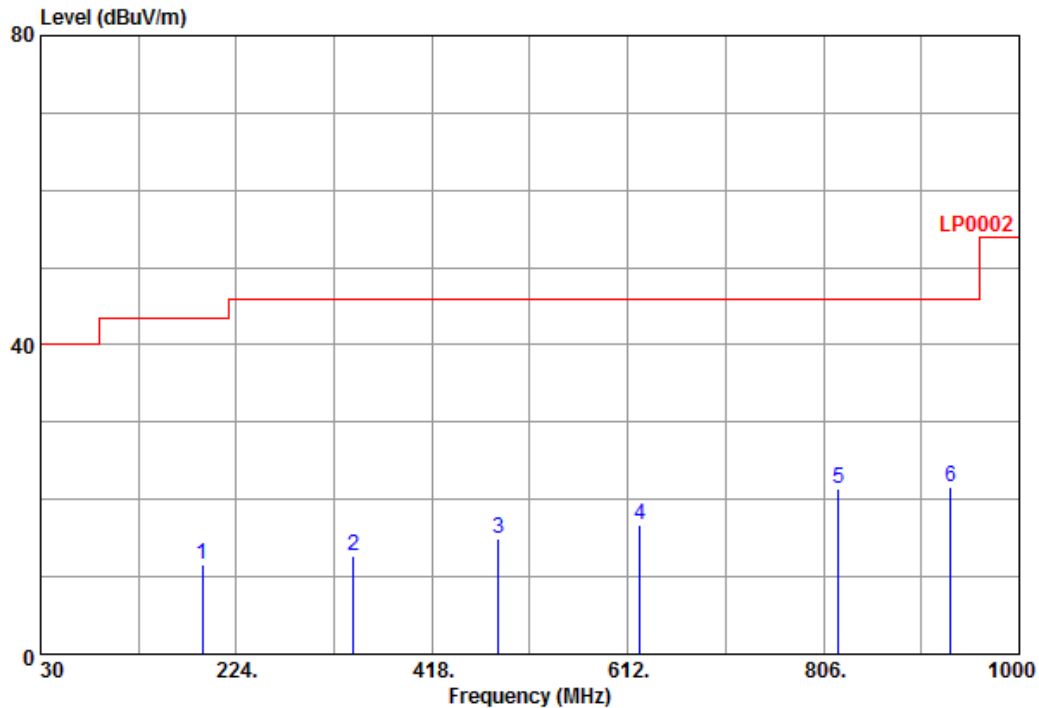
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	190.050	28.84	-17.36	11.48	43.50	-32.02	---	---	
2	340.400	27.57	-14.90	12.67	46.00	-33.33	---	---	
3	483.960	27.14	-12.21	14.93	46.00	-31.07	---	---	
4	623.640	25.59	-8.81	16.78	46.00	-29.22	---	---	
5	820.550	26.64	-5.26	21.38	46.00	-24.62	---	---	
6 @	932.100	25.54	-3.87	21.67	46.00	-24.33	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

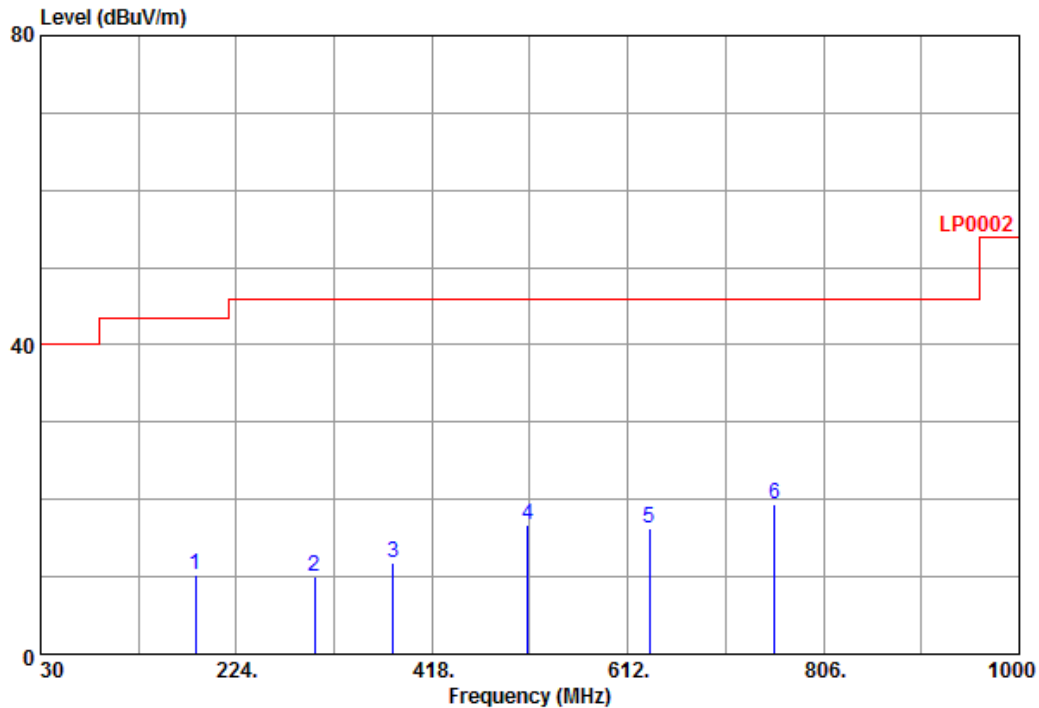
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Test Mode	: RX mode
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	183.260	27.64	-17.38	10.26	43.50	-33.24	---	---	
2	301.600	27.46	-17.32	10.14	46.00	-35.86	---	---	
3	379.200	26.00	-14.09	11.91	46.00	-34.09	---	---	
4	513.060	27.54	-10.92	16.62	46.00	-29.38	---	---	
5	633.340	24.98	-8.66	16.32	46.00	-29.68	---	---	
6 @	757.500	25.64	-6.35	19.29	46.00	-26.71	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

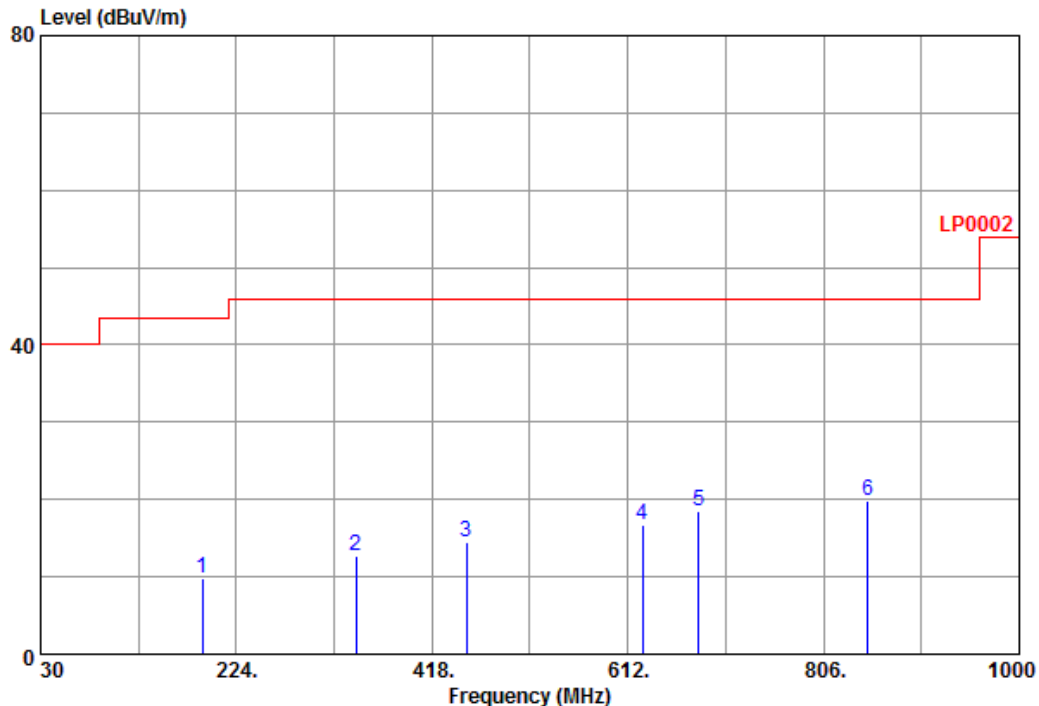
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Below 1 GHz)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Test Mode	: RX mode
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	190.050	27.18	-17.36	9.82	43.50	-33.68	---	---	
2	342.340	27.51	-14.90	12.61	46.00	-33.39	---	---	
3	451.950	27.37	-12.84	14.53	46.00	-31.47	---	---	
4	626.550	25.56	-8.76	16.80	46.00	-29.20	---	---	
5	681.840	25.91	-7.36	18.55	46.00	-27.45	---	---	
6 @	849.650	24.66	-4.93	19.73	46.00	-26.27	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

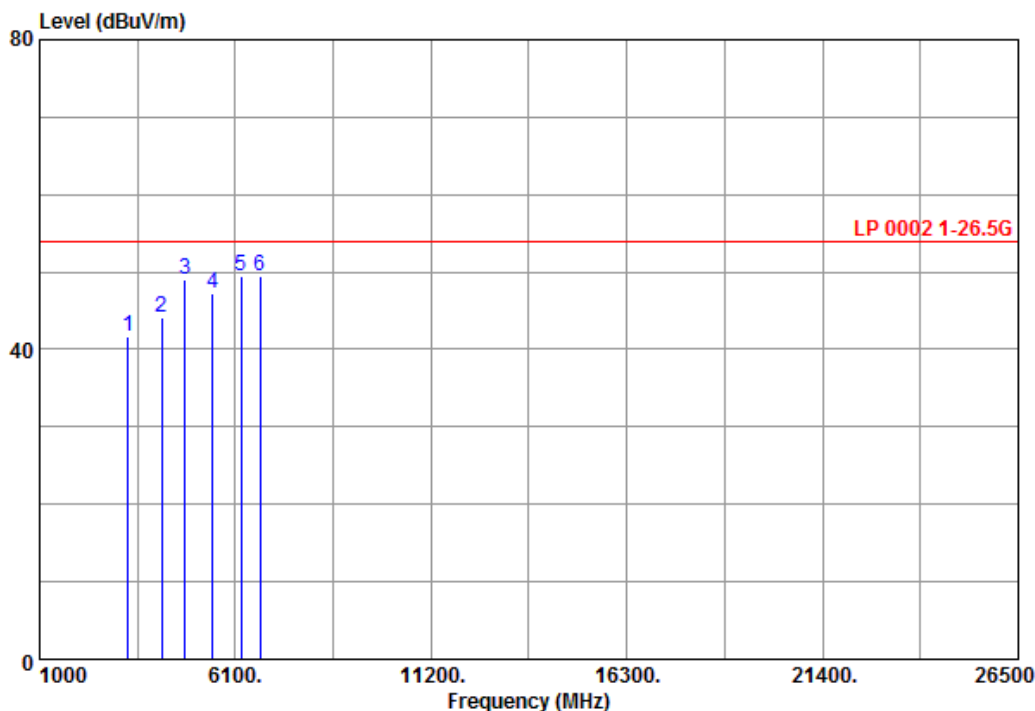
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 30 MHz to 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. All readings are Peak values. None of the peak value reading exceeds the Q.P. limit. Hence, Q.P. reading was not measured.
5. The IF bandwidth of SPA between 30 MHz to 1 GHz was 100 kHz.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3295.000	46.70	-5.01	41.69	54.00	-12.31	---	---	
2	4187.500	46.26	-2.12	44.14	54.00	-9.86	---	---	
3	4799.500	48.50	0.49	48.99	54.00	-5.01	---	---	
4	5513.500	44.64	2.65	47.29	54.00	-6.71	---	---	
5	@6253.000	44.89	4.64	49.53	54.00	-4.47	---	---	
6	6737.500	43.31	6.12	49.43	54.00	-4.57	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

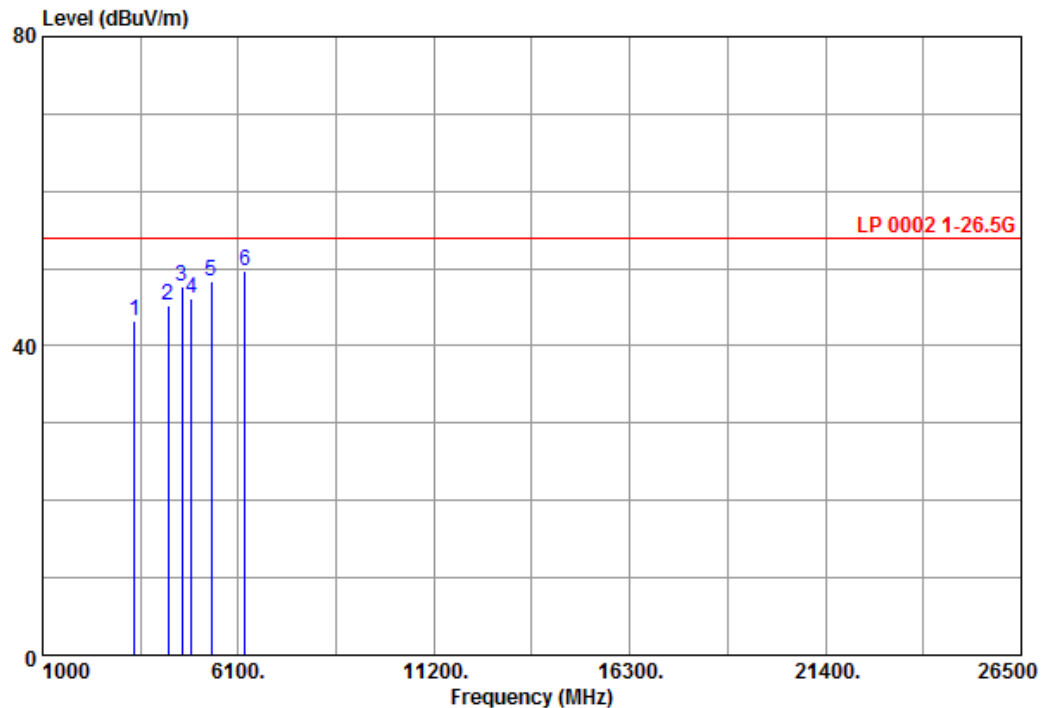
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3397.000	47.95	-4.70	43.25	54.00	-10.75	---	---	
2	4264.000	47.05	-1.83	45.22	54.00	-8.78	---	---	
3	4621.000	47.92	-0.30	47.62	54.00	-6.38	---	---	
4	4876.000	45.36	0.80	46.16	54.00	-7.84	---	---	
5	5386.000	46.08	2.30	48.38	54.00	-5.62	---	---	
6	6278.500	44.93	4.69	49.62	54.00	-4.38	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

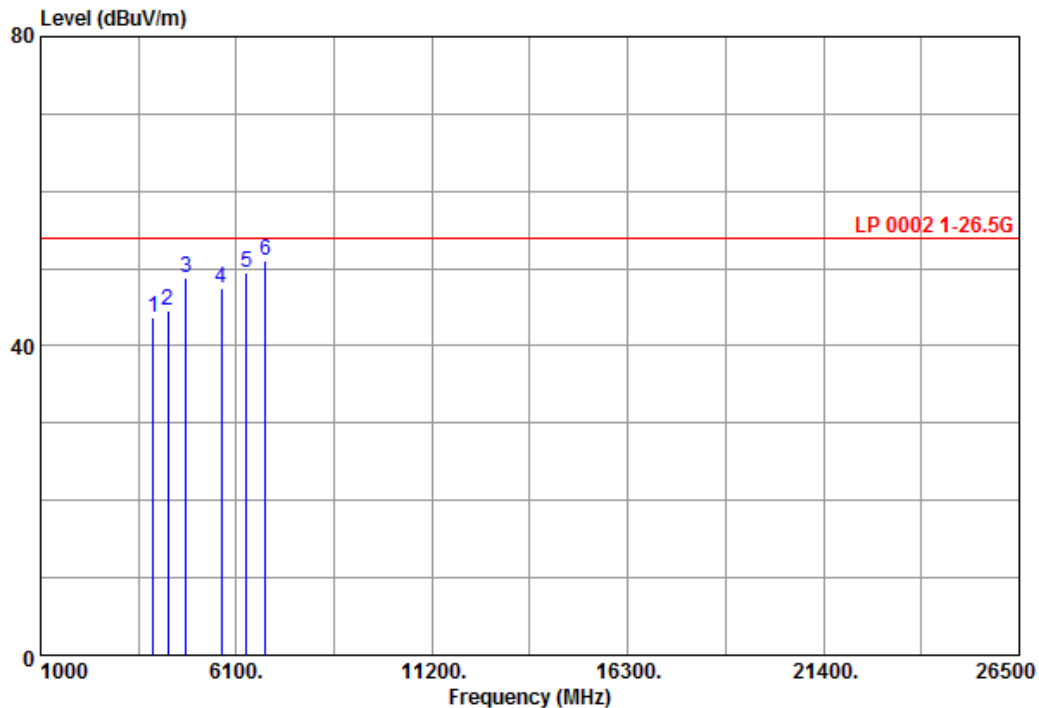
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3932.500	46.92	-3.19	43.73	54.00	-10.27	---	---	
2	4315.000	46.16	-1.61	44.55	54.00	-9.45	---	---	
3	4799.500	48.29	0.49	48.78	54.00	-5.22	---	---	
4	5717.500	44.38	3.17	47.55	54.00	-6.45	---	---	
5	6355.000	44.47	4.94	49.41	54.00	-4.59	---	---	
6	@6865.000	44.51	6.48	50.99	54.00	-3.01	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

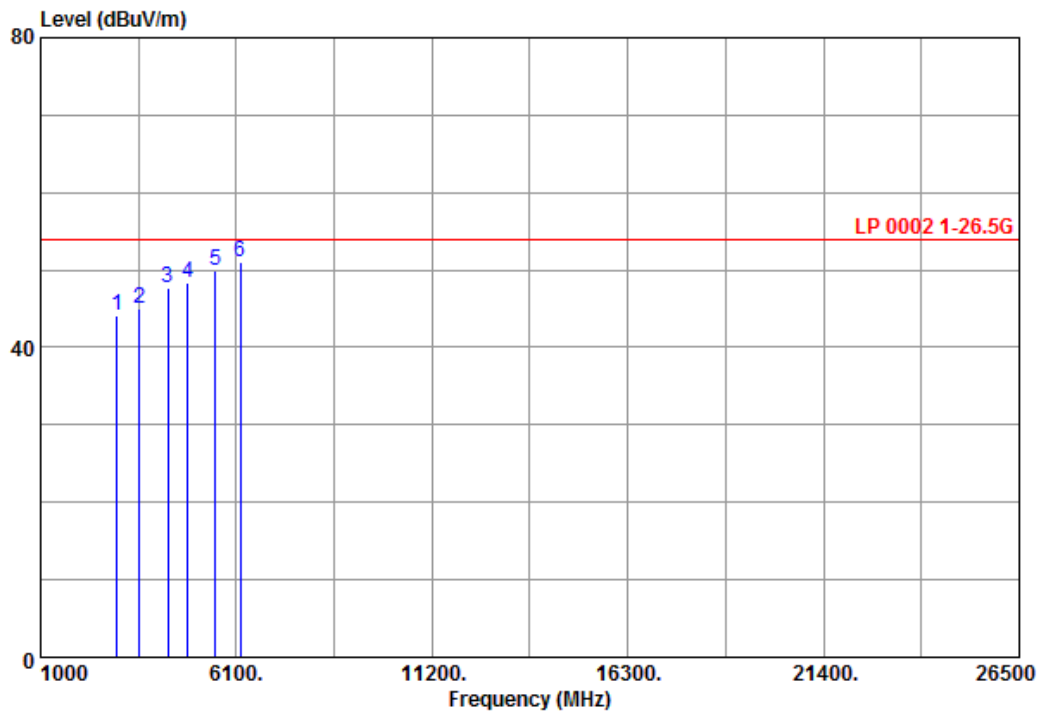
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2989.000	50.04	-5.88	44.16	54.00	-9.84	---	---	
2	3575.500	49.22	-4.17	45.05	54.00	-8.95	---	---	
3	4315.000	49.20	-1.61	47.59	54.00	-6.41	---	---	
4	4825.000	47.85	0.57	48.42	54.00	-5.58	---	---	
5	5564.500	47.16	2.73	49.89	54.00	-4.11	---	---	
6	@6202.000	46.50	4.48	50.98	54.00	-3.02	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

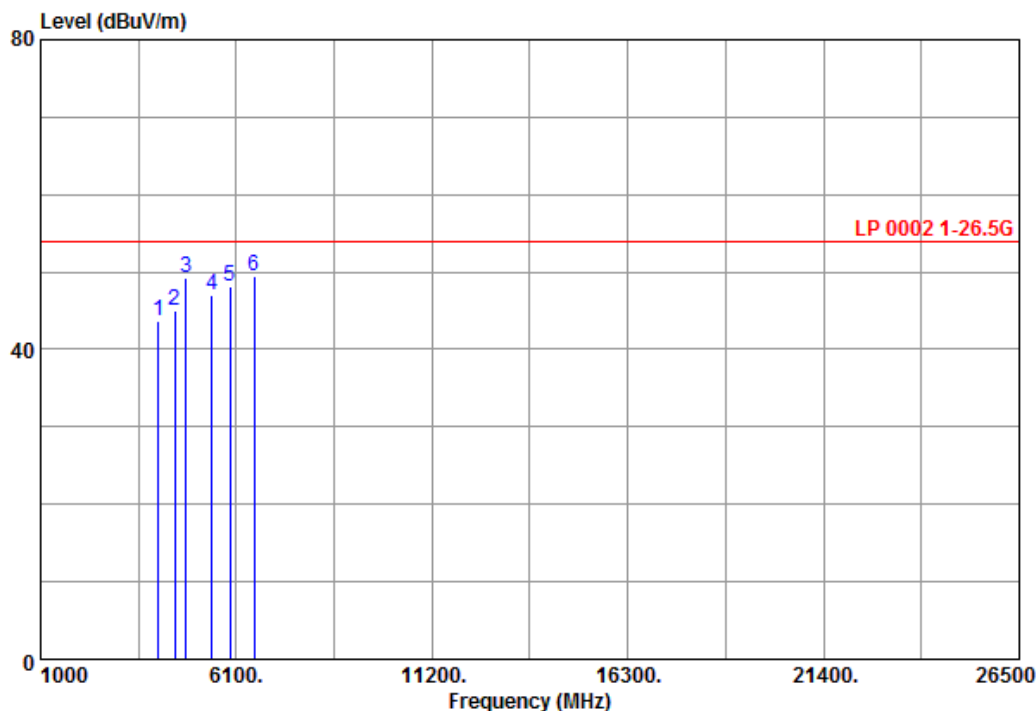
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	4060.000	46.35	-2.70	43.65	54.00	-10.35	---	---	
2	4493.500	45.82	-0.81	45.01	54.00	-8.99	---	---	
3	4799.500	48.74	0.49	49.23	54.00	-4.77	---	---	
4	5462.500	44.50	2.48	46.98	54.00	-7.02	---	---	
5	5947.000	44.36	3.73	48.09	54.00	-5.91	---	---	
6	@6559.000	43.82	5.56	49.38	54.00	-4.62	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

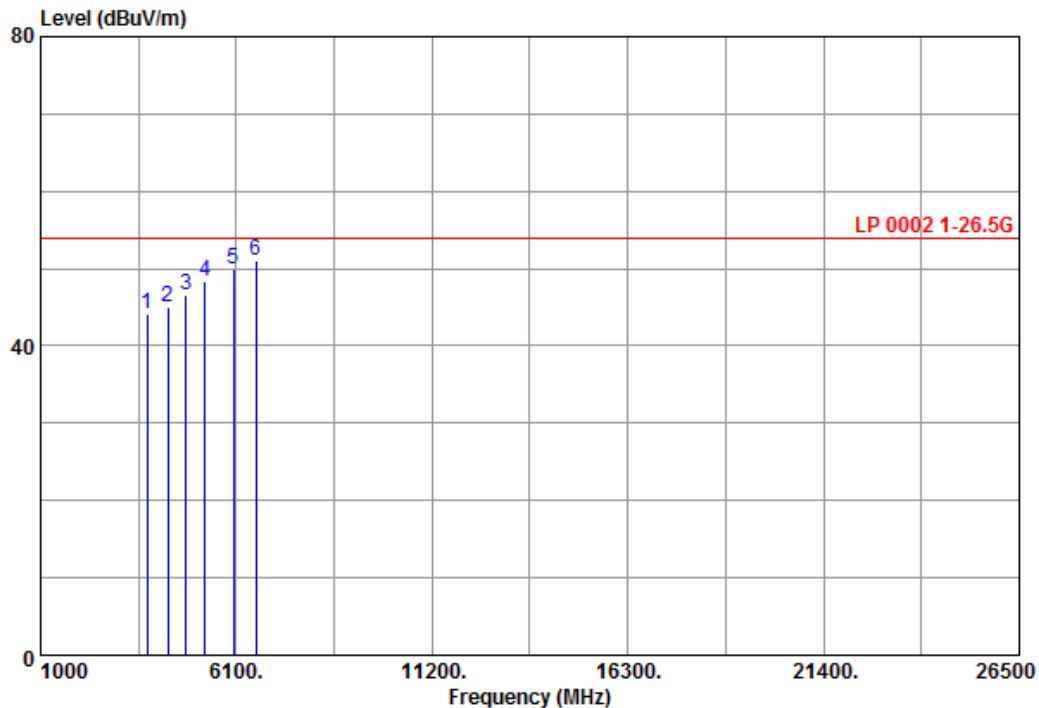
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3779.500	47.69	-3.58	44.11	54.00	-9.89	---	---	
2	4315.000	46.68	-1.61	45.07	54.00	-8.93	---	---	
3	4799.500	46.14	0.49	46.63	54.00	-7.37	---	---	
4	5284.000	46.29	2.03	48.32	54.00	-5.68	---	---	
5	6023.500	45.89	3.97	49.86	54.00	-4.14	---	---	
6	@6610.000	45.25	5.72	50.97	54.00	-3.03	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

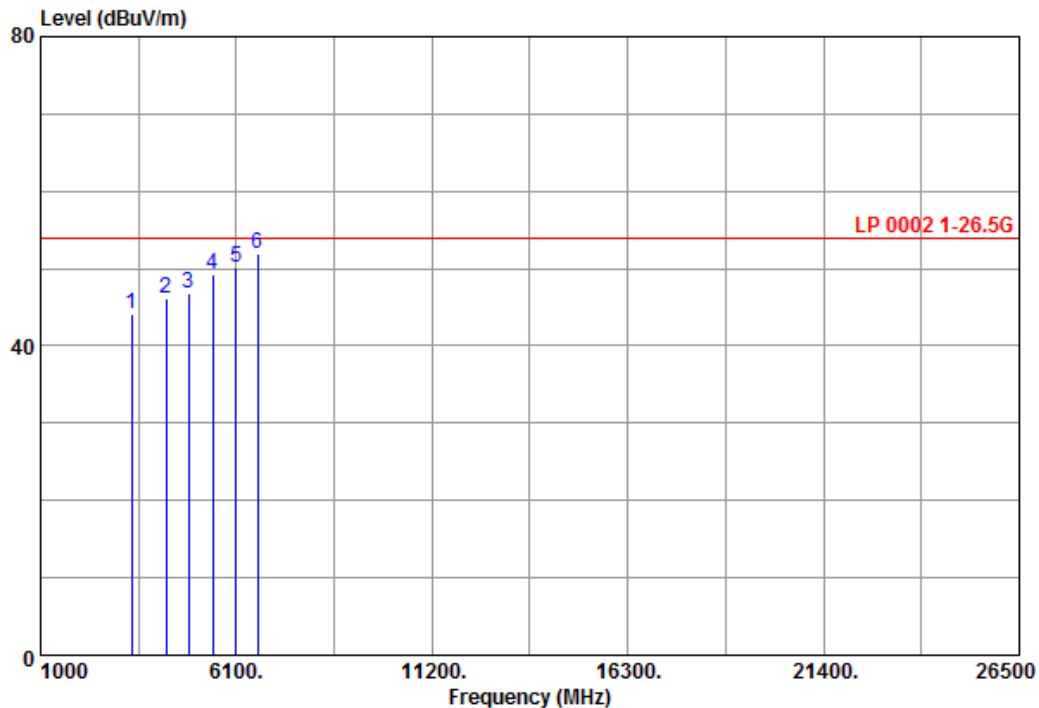
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3371.500	48.86	-4.76	44.10	54.00	-9.90	---	---	
2	4264.000	47.96	-1.83	46.13	54.00	-7.87	---	---	
3	4850.500	46.09	0.65	46.74	54.00	-7.26	---	---	
4	5488.000	46.62	2.56	49.18	54.00	-4.82	---	---	
5	6100.000	46.02	4.17	50.19	54.00	-3.81	---	---	
6	6661.000	46.02	5.87	51.89	54.00	-2.11	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

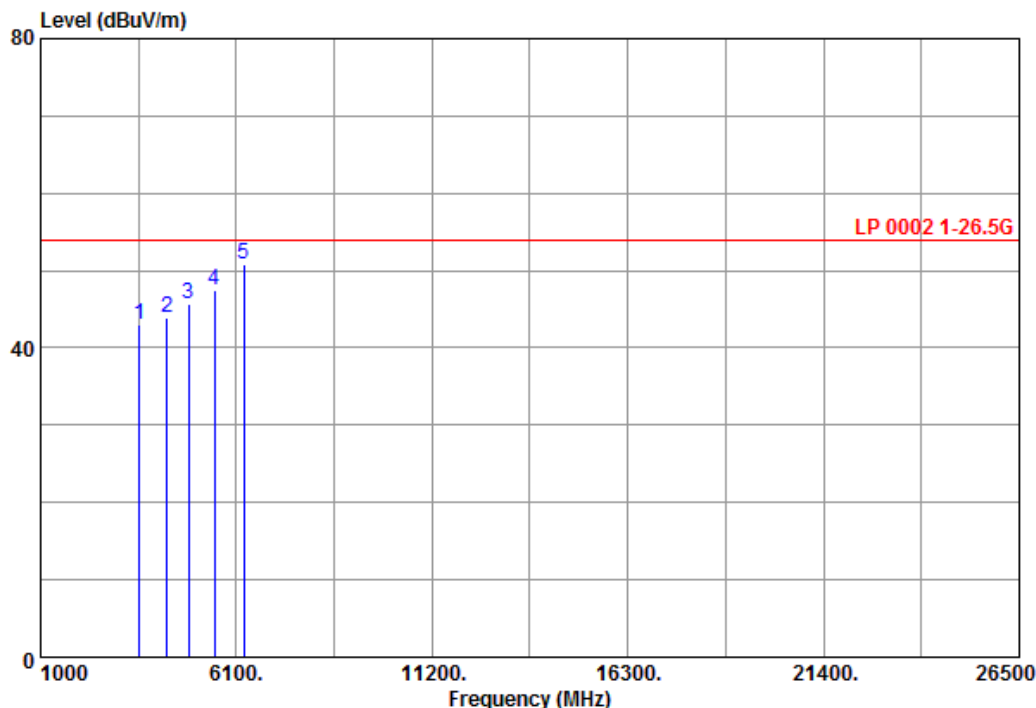
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3575.500	47.11	-4.17	42.94	54.00	-11.06	---	---	
2	4289.500	45.65	-1.68	43.97	54.00	-10.03	---	---	
3	4850.500	45.05	0.65	45.70	54.00	-8.30	---	---	
4	5539.000	44.71	2.69	47.40	54.00	-6.60	---	---	
5	@6304.000	46.05	4.78	50.83	54.00	-3.17	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

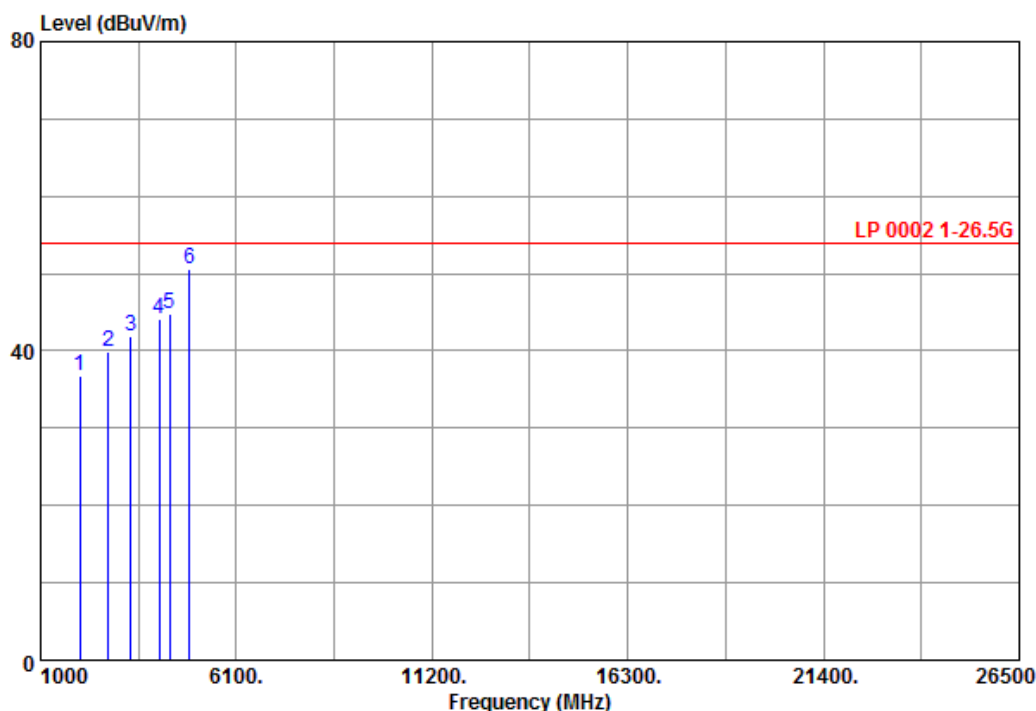
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBUV	dB	dBUV/m	dBUV/m	dB			
1	2020.000	45.56	-8.74	36.82	54.00	-17.18	---	---	
2	2759.500	46.46	-6.54	39.92	54.00	-14.08	---	---	
3	3346.000	46.65	-4.85	41.80	54.00	-12.20	---	---	
4	4085.500	46.68	-2.55	44.13	54.00	-9.87	---	---	
5	4366.000	46.16	-1.39	44.77	54.00	-9.23	---	---	
6	4876.000	49.76	0.80	50.56	54.00	-3.44	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

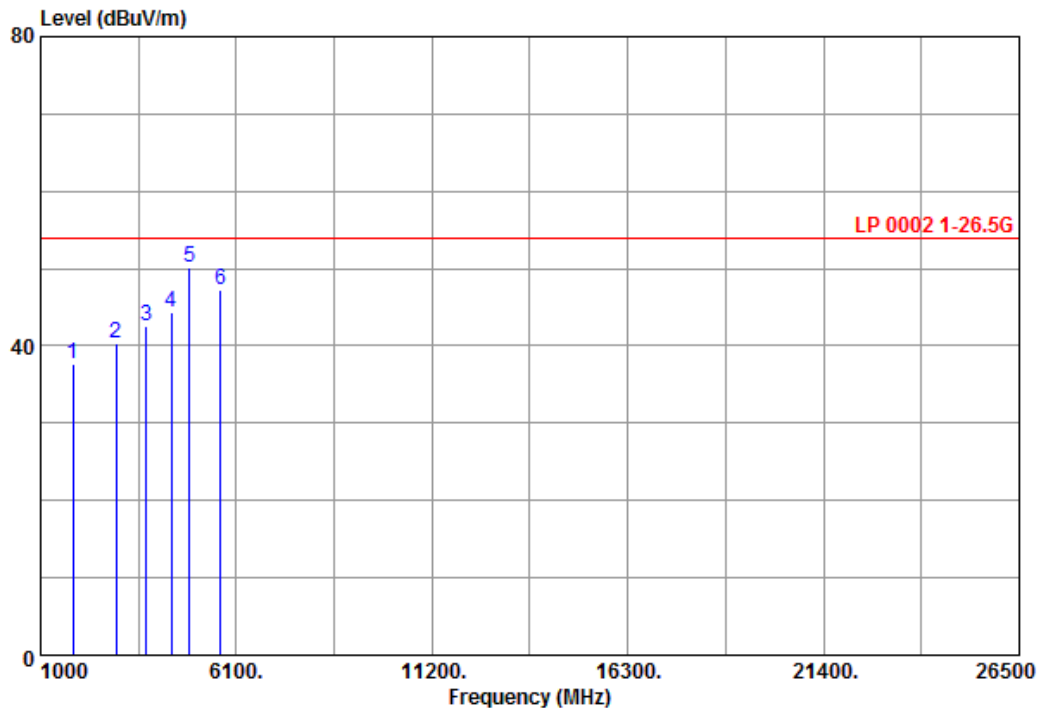
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBUV	dB	dBUV/m	dBUV/m	dB			
1	1841.500	47.24	-9.47	37.77	54.00	-16.23	---	---	
2	2963.500	46.34	-5.94	40.40	54.00	-13.60	---	---	
3	3754.000	46.18	-3.68	42.50	54.00	-11.50	---	---	
4	4417.000	45.62	-1.17	44.45	54.00	-9.55	---	---	
5	@4876.000	49.45	0.80	50.25	54.00	-3.75	---	---	
6	5692.000	44.06	3.08	47.14	54.00	-6.86	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

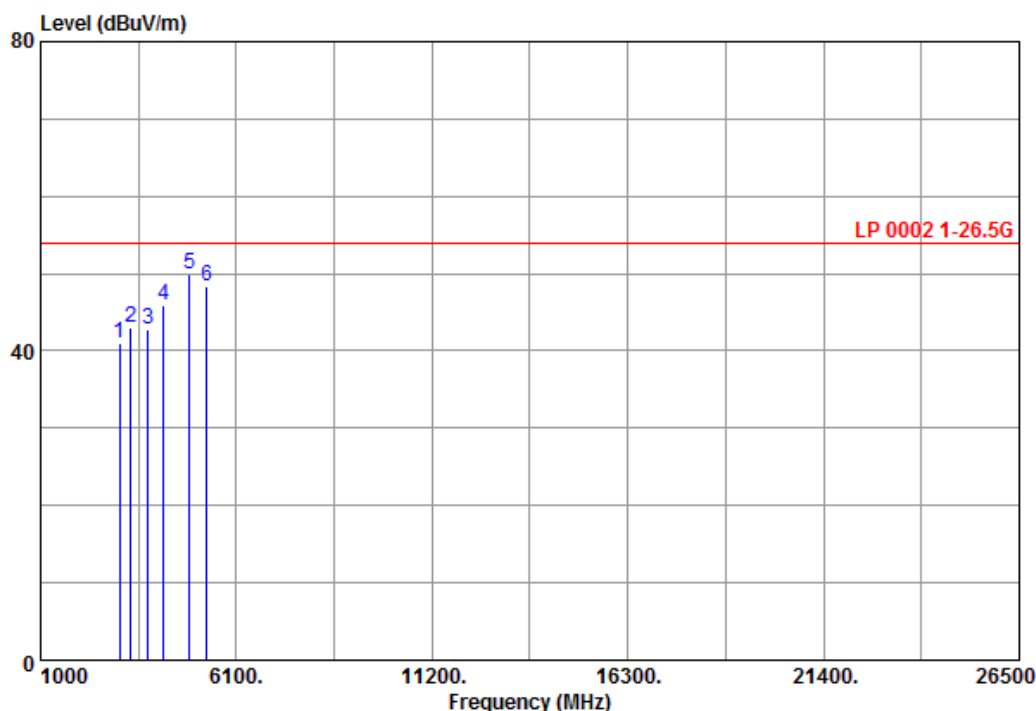
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	3065.500	46.66	-5.64	41.02	54.00	-12.98	---	---	
2	3346.000	47.92	-4.85	43.07	54.00	-10.93	---	---	
3	3805.000	46.26	-3.52	42.74	54.00	-11.26	---	---	
4	4213.000	47.98	-2.04	45.94	54.00	-8.06	---	---	
5	@4876.000	49.23	0.80	50.03	54.00	-3.97	---	---	
6	5335.000	46.13	2.17	48.30	54.00	-5.70	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

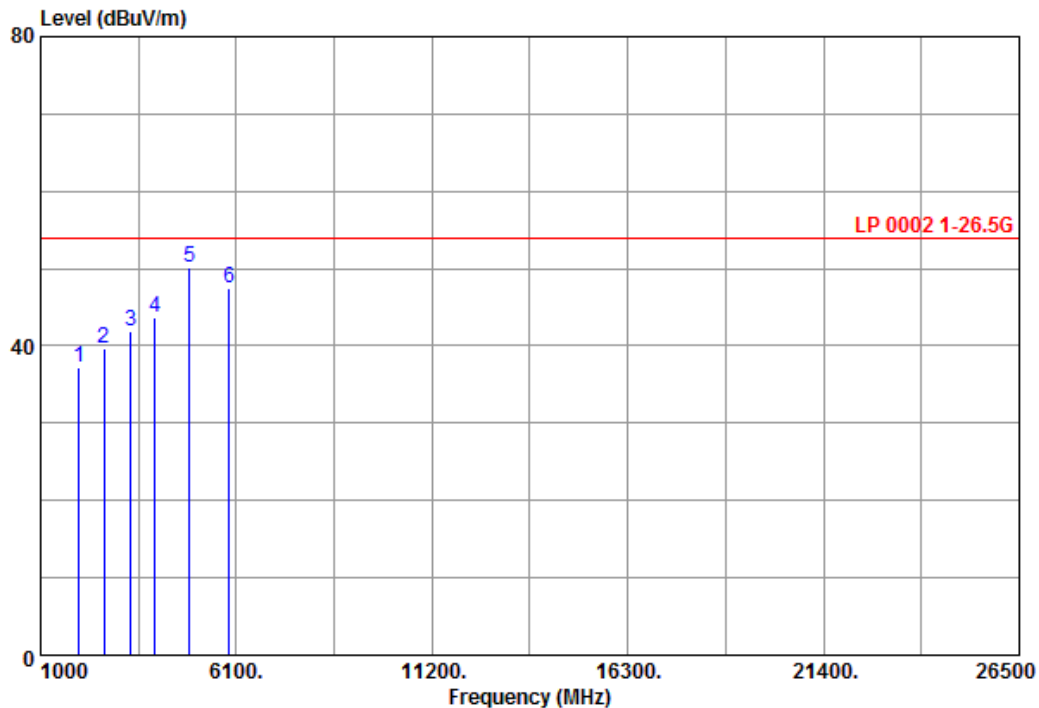
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1994.500	45.98	-8.85	37.13	54.00	-16.87	---	---	
2	2657.500	46.39	-6.83	39.56	54.00	-14.44	---	---	
3	3346.000	46.84	-4.85	41.99	54.00	-12.01	---	---	
4	3983.500	46.62	-2.99	43.63	54.00	-10.37	---	---	
5	@4876.000	49.23	0.80	50.03	54.00	-3.97	---	---	
6	5921.500	43.87	3.69	47.56	54.00	-6.44	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

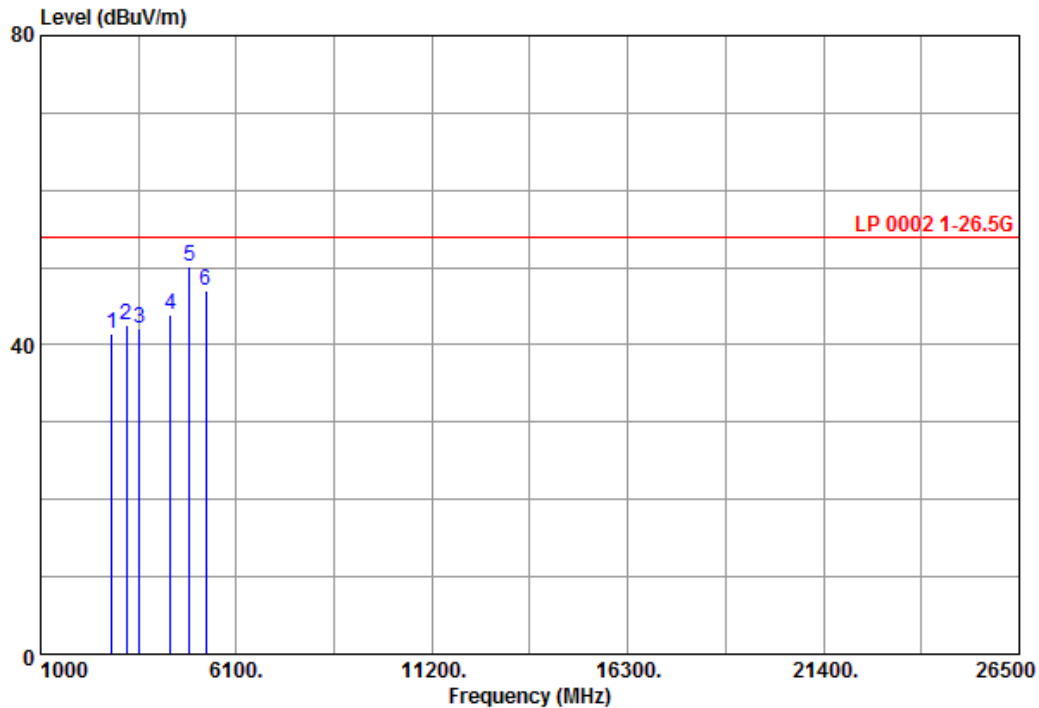
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2861.500	47.63	-6.25	41.38	54.00	-12.62	---	---	
2	3244.000	47.82	-5.15	42.67	54.00	-11.33	---	---	
3	3575.500	46.34	-4.17	42.17	54.00	-11.83	---	---	
4	4391.500	45.25	-1.24	44.01	54.00	-9.99	---	---	
5	@4876.000	49.23	0.80	50.03	54.00	-3.97	---	---	
6	5309.500	44.81	2.13	46.94	54.00	-7.06	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

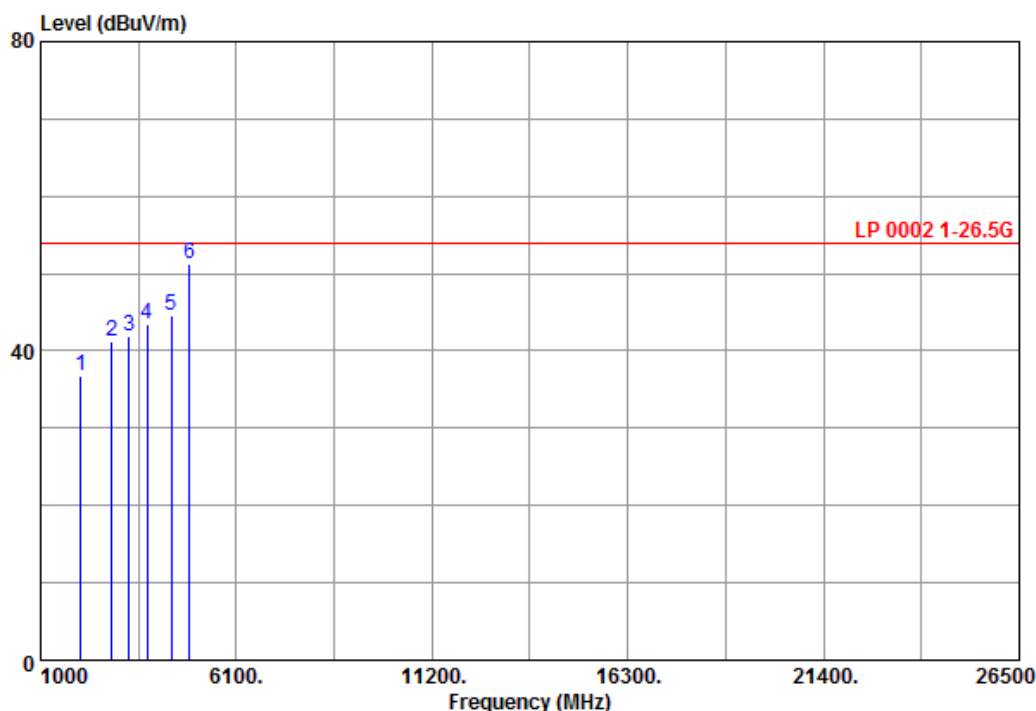
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2045.500	45.44	-8.64	36.80	54.00	-17.20	---	---	
2	2861.500	47.49	-6.25	41.24	54.00	-12.76	---	---	
3	3295.000	46.94	-5.01	41.93	54.00	-12.07	---	---	
4	3779.500	46.99	-3.58	43.41	54.00	-10.59	---	---	
5	4417.000	45.67	-1.17	44.50	54.00	-9.50	---	---	
6	@4876.000	50.48	0.80	51.28	54.00	-2.72	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

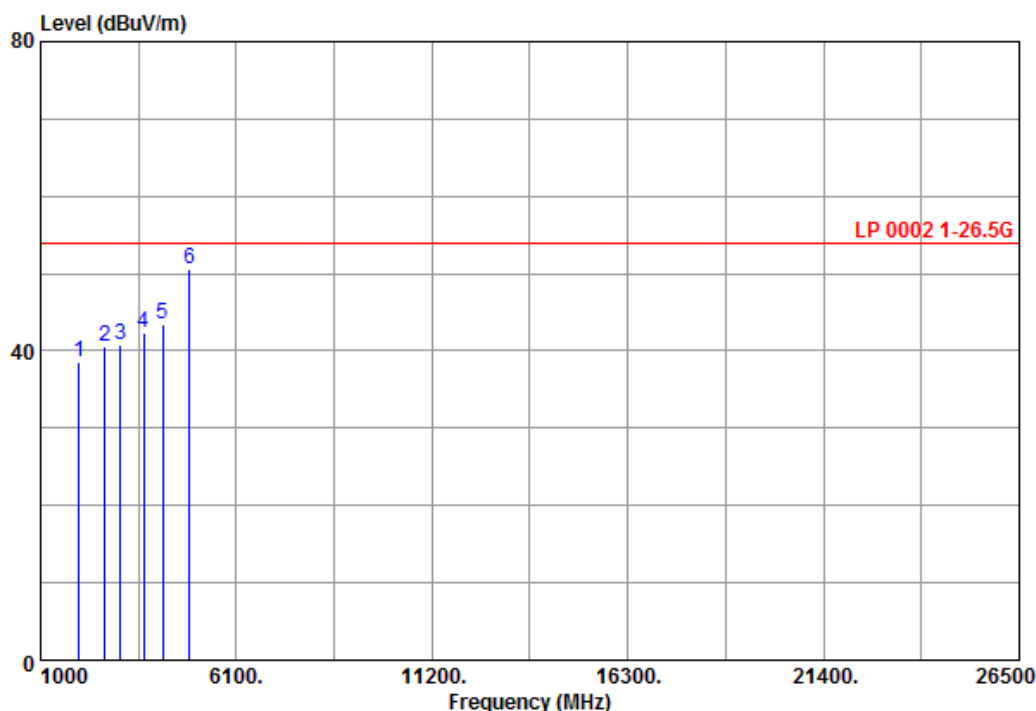
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH15 (2442MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1994.500	47.35	-8.85	38.50	54.00	-15.50	---	---	
2	2683.000	47.25	-6.78	40.47	54.00	-13.53	---	---	
3	3091.000	46.44	-5.59	40.85	54.00	-13.15	---	---	
4	3677.500	46.26	-3.87	42.39	54.00	-11.61	---	---	
5	4187.500	45.65	-2.12	43.53	54.00	-10.47	---	---	
6	@4876.000	49.70	0.80	50.50	54.00	-3.50	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

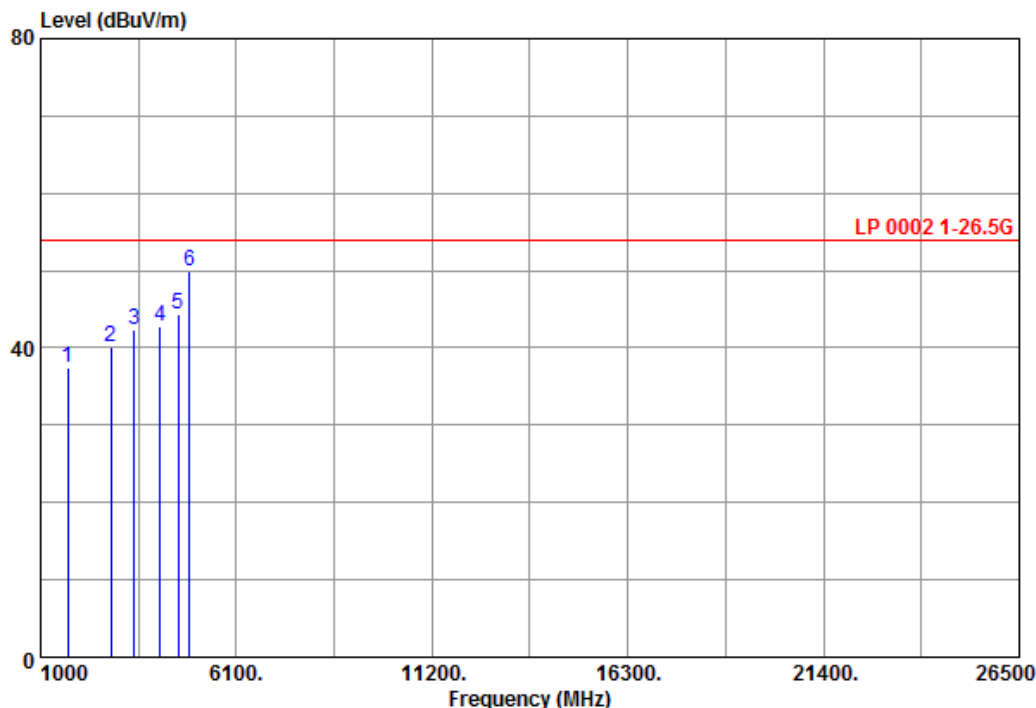
@ : Maximum Data x : Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH15 (2442MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBUV	dB	dBUV/m	dBUV/m	dB			
1	1714.000	47.46	-10.08	37.38	54.00	-16.62	---	---	
2	2836.000	46.55	-6.34	40.21	54.00	-13.79	---	---	
3	3448.000	46.98	-4.56	42.42	54.00	-11.58	---	---	
4	4111.000	45.31	-2.48	42.83	54.00	-11.17	---	---	
5	4595.500	44.64	-0.38	44.26	54.00	-9.74	---	---	
6	@4876.000	49.07	0.80	49.87	54.00	-4.13	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

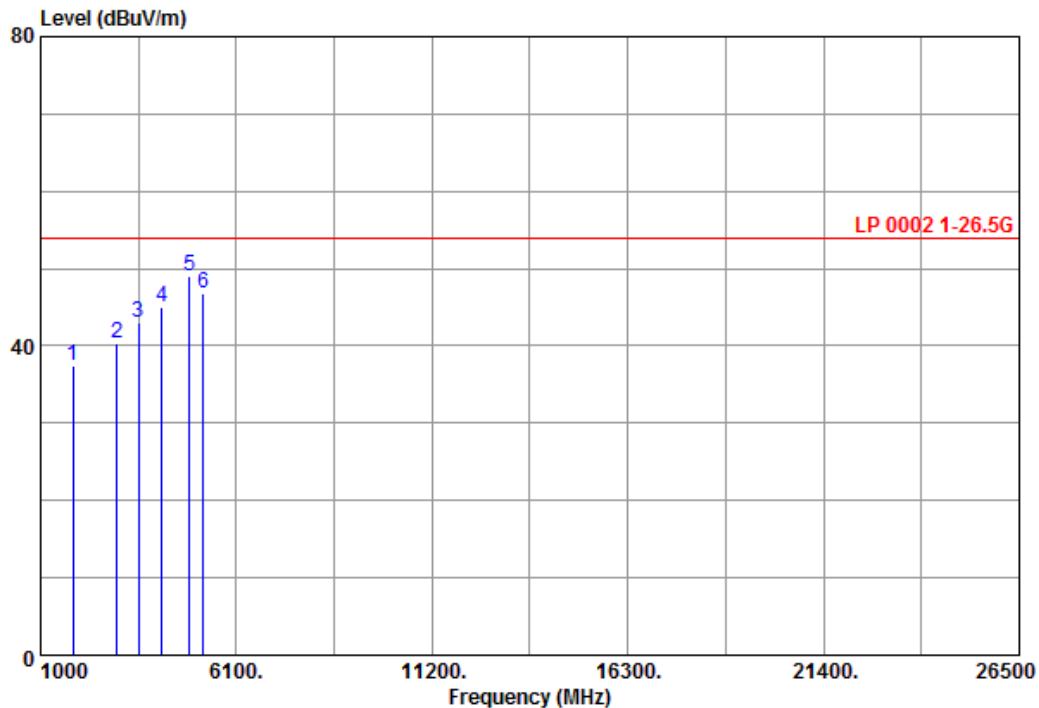
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	1841.500	46.83	-9.47	37.36	54.00	-16.64	---	---	
2	2989.000	46.16	-5.88	40.28	54.00	-13.72	---	---	
3	3550.000	47.19	-4.27	42.92	54.00	-11.08	---	---	
4	4162.000	47.18	-2.26	44.92	54.00	-9.08	---	---	
5	@4876.000	48.22	0.80	49.02	54.00	-4.98	---	---	
6	5233.000	44.86	1.91	46.77	54.00	-7.23	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

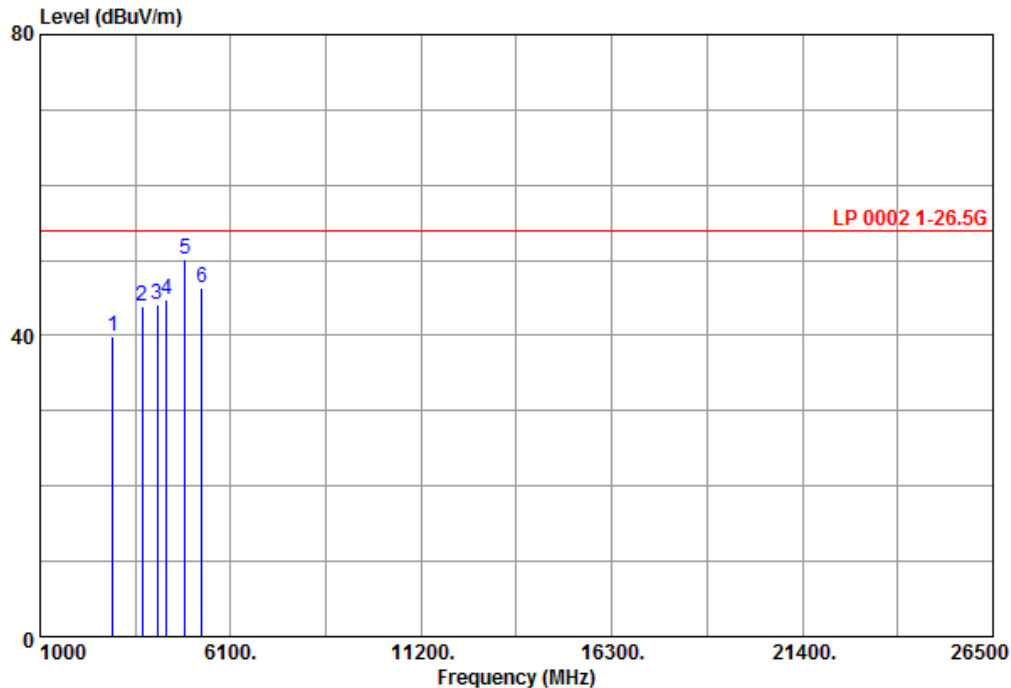
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2938.000	45.96	-6.04	39.92	54.00	-14.08	---	---	
2	3728.500	47.56	-3.77	43.79	54.00	-10.21	---	---	
3	4136.500	46.64	-2.41	44.23	54.00	-9.77	---	---	
4	4391.500	46.03	-1.24	44.79	54.00	-9.21	---	---	
5	4876.000	49.31	0.80	50.11	54.00	-3.89	---	---	
6	5335.000	44.21	2.17	46.38	54.00	-7.62	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

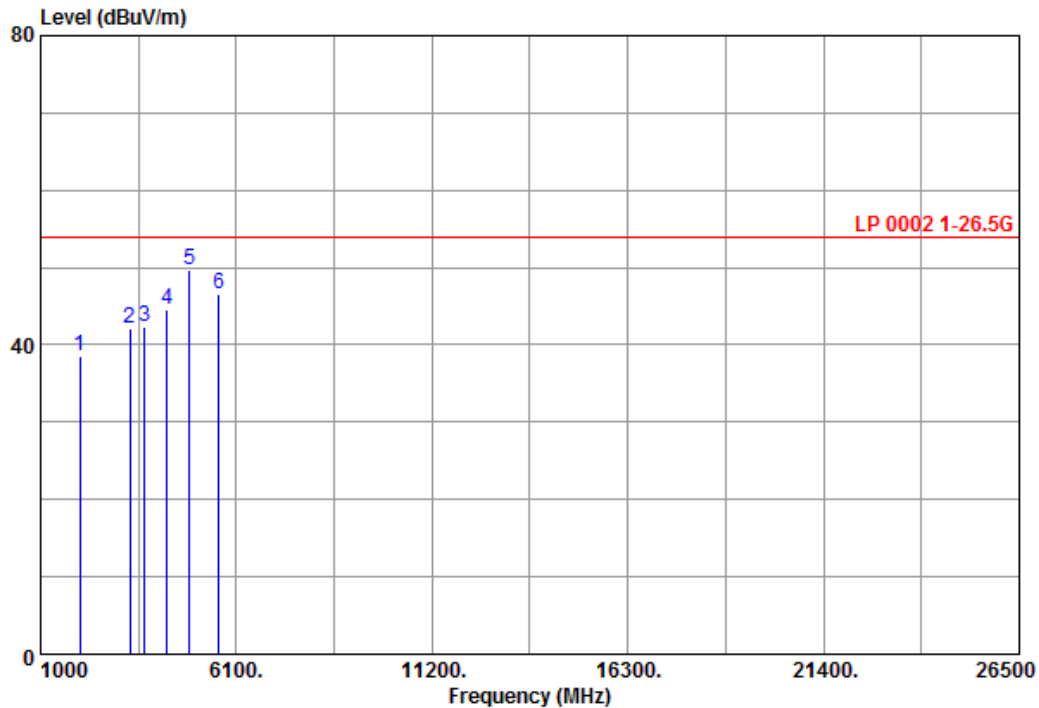
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Test Mode	: RX mode
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2020.000	47.30	-8.74	38.56	54.00	-15.44	---	---	
2	3320.500	47.14	-4.96	42.18	54.00	-11.82	---	---	
3	3703.000	46.21	-3.82	42.39	54.00	-11.61	---	---	
4	4289.500	46.26	-1.68	44.58	54.00	-9.42	---	---	
5	@4876.000	49.00	0.80	49.80	54.00	-4.20	---	---	
6	5641.000	43.66	2.96	46.62	54.00	-7.38	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

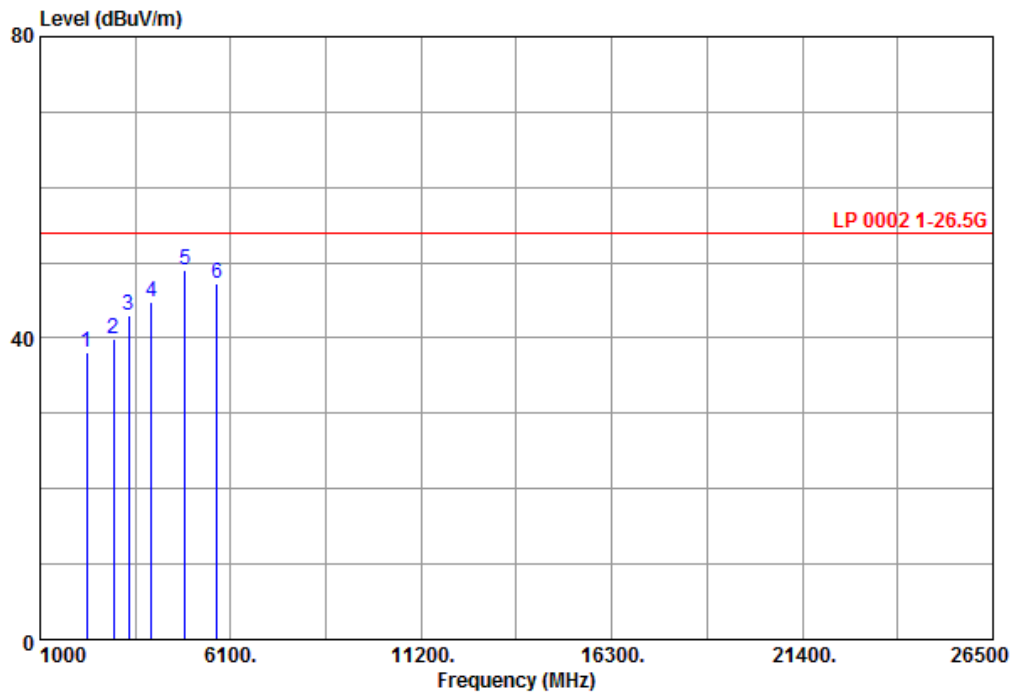
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Radiated Emission Test Data (Above and Field Strength to 10th Harmonic)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Test Mode	: RX mode
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2249.500	46.07	-8.03	38.04	54.00	-15.96	---	---	
2	2963.500	45.79	-5.94	39.85	54.00	-14.15	---	---	
3	3371.500	47.88	-4.76	43.12	54.00	-10.88	---	---	
4	3983.500	47.74	-2.99	44.75	54.00	-9.25	---	---	
5	4487.000	48.32	0.80	49.12	54.00	-4.88	---	---	
6	5743.000	44.06	3.21	47.27	54.00	-6.73	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.



4 Out of Band Emission Test

4.1 Test Instruments

Refer to Sec. 1.2 Test Instruments.

4.2 Test Arrangement and Procedure

Refer to Sec. 3.2.

4.3 Limit of Field Strength of Fundamental (§ 15.249(d))

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.

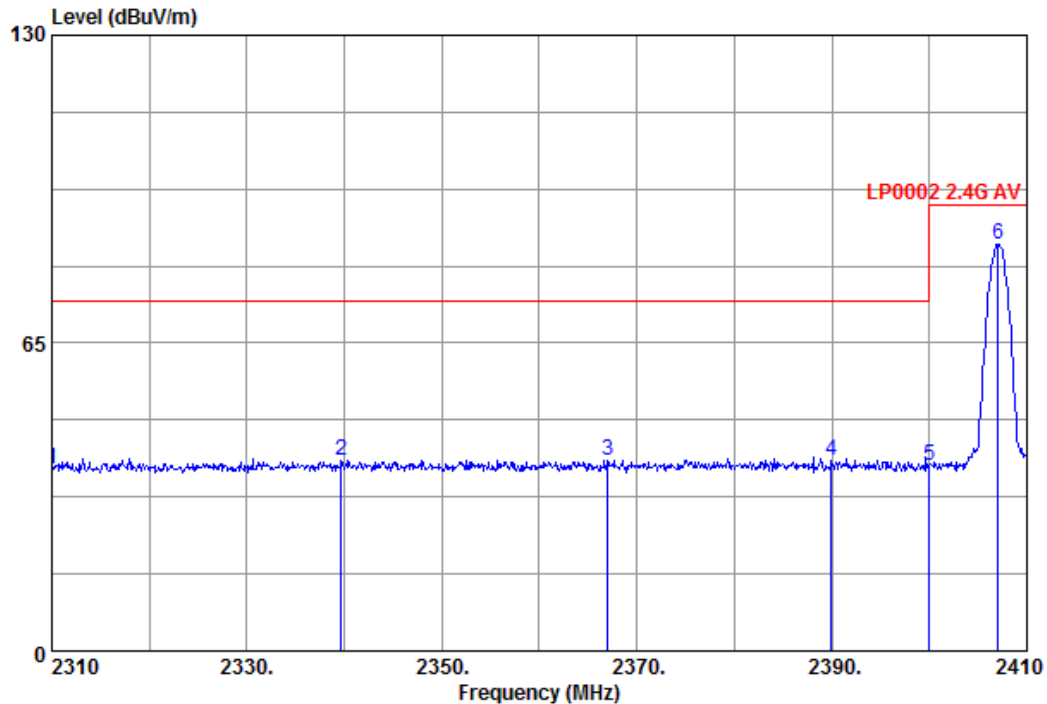
4.4 Test Result

Compliance

The final test data are shown on the following page(s).

Band-Edge Test Data (Lower Edge)

Temperature	: 26.1℃	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.000	46.20	-7.88	38.32	73.98	-35.66	---	---	
2	2339.700	48.07	-7.79	40.28	73.98	-33.70	---	---	
3	2366.980	47.96	-7.74	40.22	73.98	-33.76	---	---	
4	2389.970	48.00	-7.63	40.37	73.98	-33.61	---	---	
5	2400.000	46.88	-7.63	39.25	73.98	-34.73	---	---	
6	@2407.020	93.44	-7.58	85.86	93.98	-8.12	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

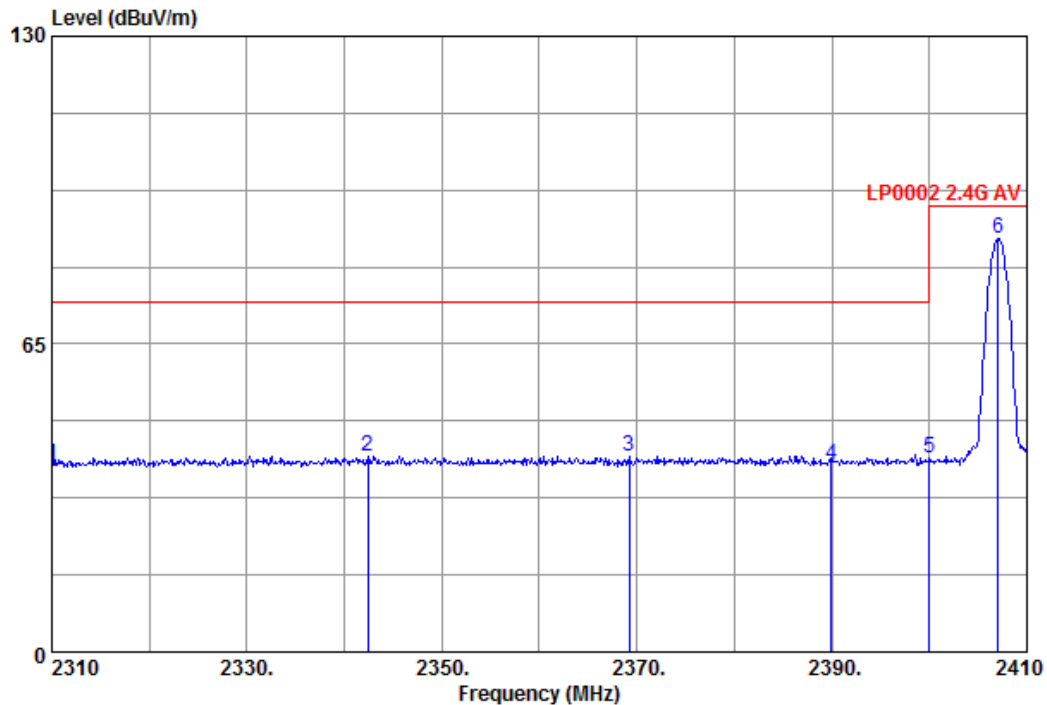
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental, RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Lower Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Horizontal		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.000	47.32	-7.88	39.44	73.98	-34.54	---	---	
2	2342.450	49.12	-7.79	41.33	73.98	-32.65	---	---	
3	2369.180	48.98	-7.69	41.29	73.98	-32.69	---	---	
4	2389.970	47.25	-7.63	39.62	73.98	-34.36	---	---	
5	2400.000	48.66	-7.63	41.03	73.98	-32.95	---	---	
6	@2407.020	94.74	-7.58	87.16	93.98	-6.82	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

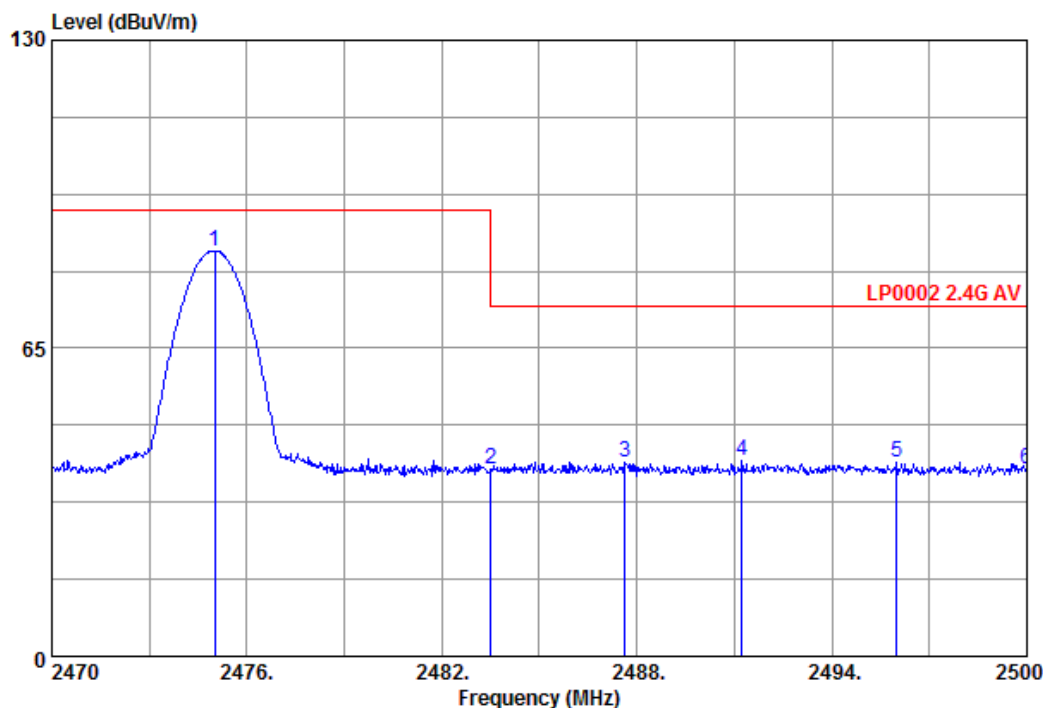
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Upper Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.010	93.00	-7.39	85.61	93.98	-8.37	---	---	
2 2483.500	46.72	-7.39	39.33	73.98	-34.65	---	---	
3 2487.640	48.10	-7.33	40.77	73.98	-33.21	---	---	
4 2491.240	48.57	-7.33	41.24	73.98	-32.74	---	---	
5 2495.980	48.20	-7.33	40.87	73.98	-33.11	---	---	
6 2500.000	46.66	-7.33	39.33	73.98	-34.65	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

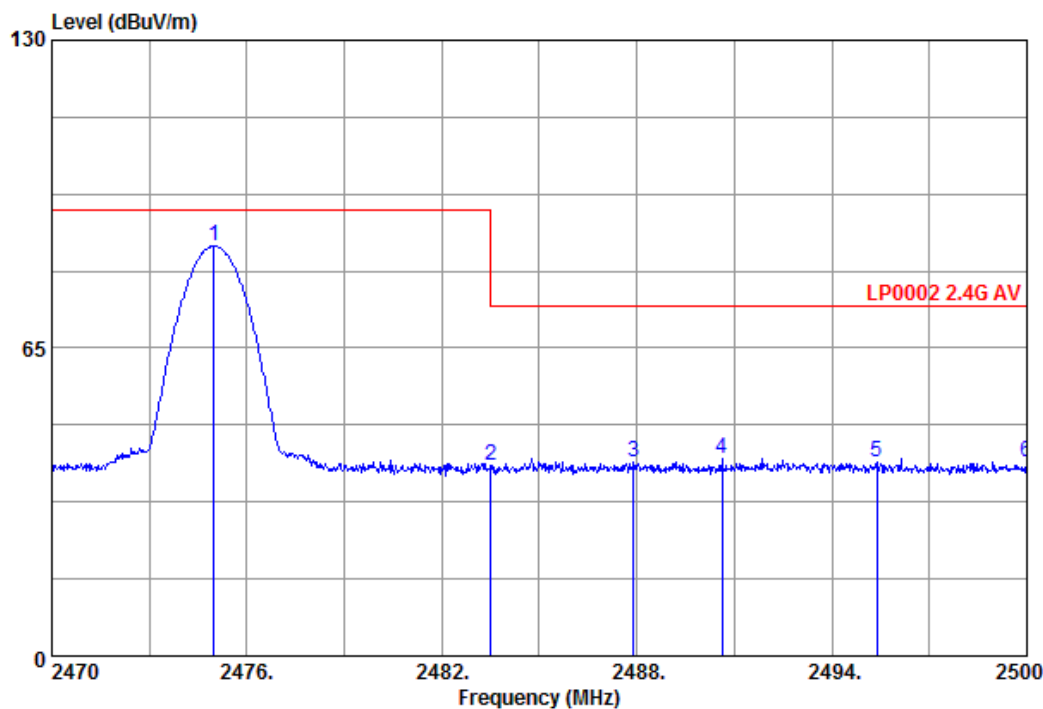
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Upper Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Horizontal		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2474.980	93.91	-7.39	86.52	93.98	-7.46	---	---	
2 2483.500	47.51	-7.39	40.12	73.98	-33.86	---	---	
3 2487.910	48.31	-7.33	40.98	73.98	-33.00	---	---	
4 2490.610	49.08	-7.33	41.75	73.98	-32.23	---	---	
5 2495.380	48.18	-7.33	40.85	73.98	-33.13	---	---	
6 2500.000	48.41	-7.33	41.08	73.98	-32.90	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

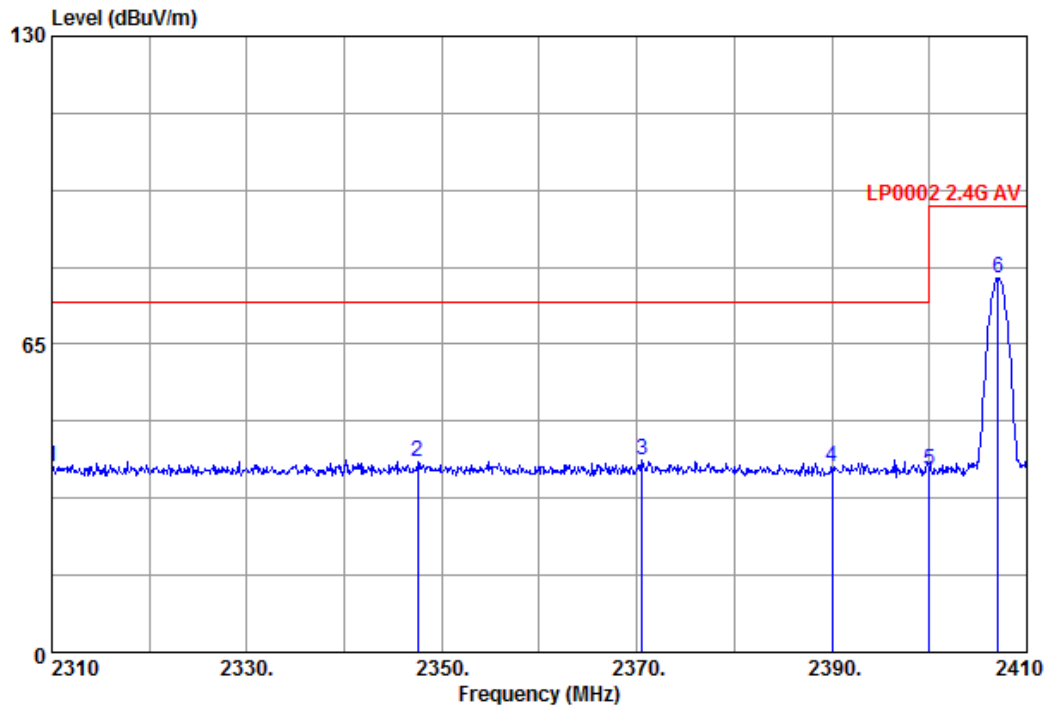
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Lower Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.000	47.13	-7.88	39.25	73.98	-34.73	---	---	
2	2347.510	48.07	-7.79	40.28	73.98	-33.70	---	---	
3	2370.500	48.12	-7.69	40.43	73.98	-33.55	---	---	
4	2390.000	46.74	-7.63	39.11	73.98	-34.87	---	---	
5	2400.000	46.06	-7.63	38.43	73.98	-35.55	---	---	
6	@2407.020	86.51	-7.58	78.93	93.98	-15.05	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

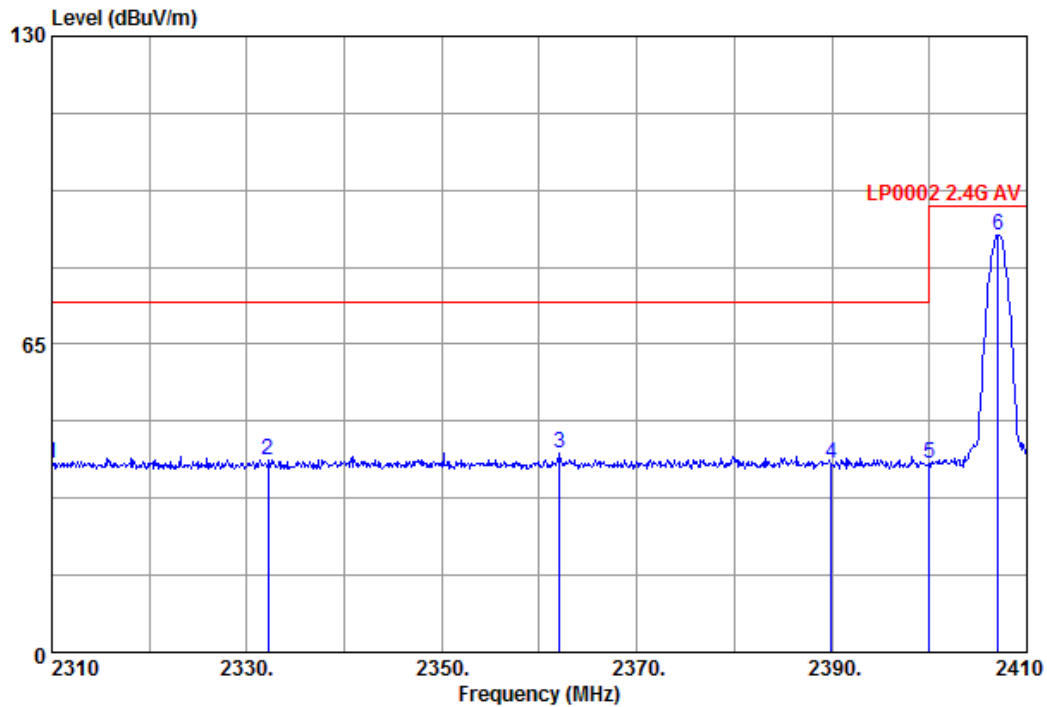
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Lower Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.000	47.61	-7.88	39.73	73.98	-34.25	---	---	
2	2332.220	48.47	-7.84	40.63	73.98	-33.35	---	---	
3	2362.030	49.73	-7.74	41.99	73.98	-31.99	---	---	
4	2389.970	47.31	-7.63	39.68	73.98	-34.30	---	---	
5	2400.000	47.33	-7.63	39.70	73.98	-34.28	---	---	
6	@2407.020	95.71	-7.58	88.13	93.98	-5.85	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

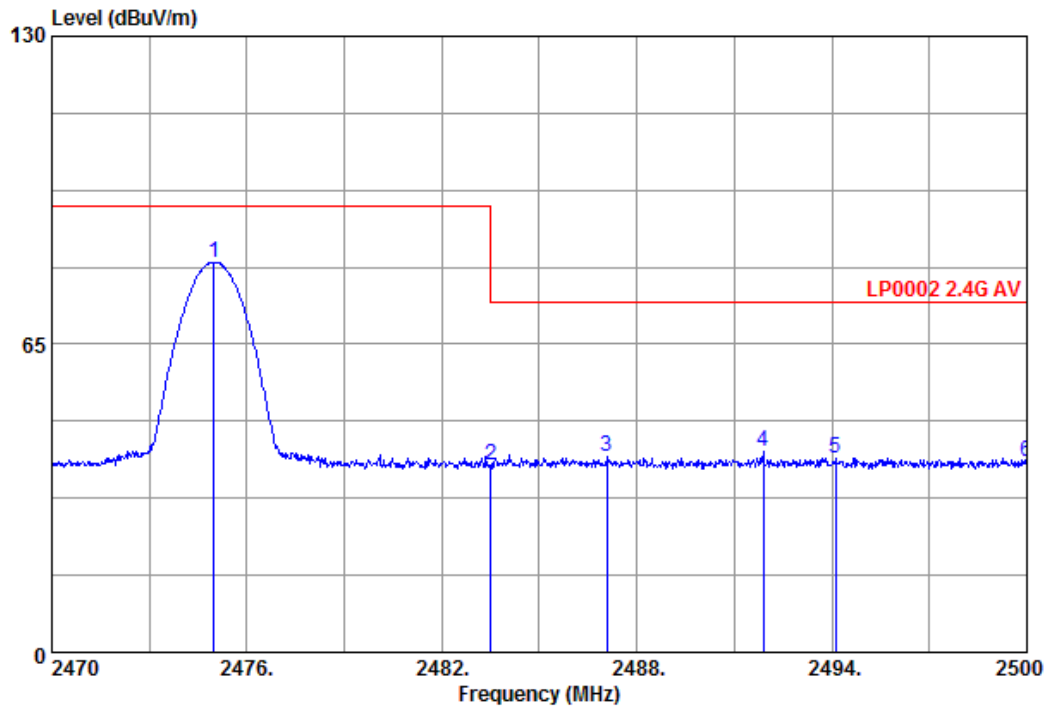
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Upper Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2474.980	89.75	-7.39	82.36	93.98	-11.62	---	---	
2 2483.500	46.99	-7.39	39.60	73.98	-34.38	---	---	
3 2487.070	48.64	-7.39	41.25	73.98	-32.73	---	---	
4 2491.900	49.78	-7.33	42.45	73.98	-31.53	---	---	
5 2494.120	48.27	-7.33	40.94	73.98	-33.04	---	---	
6 2500.000	47.37	-7.33	40.04	73.98	-33.94	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

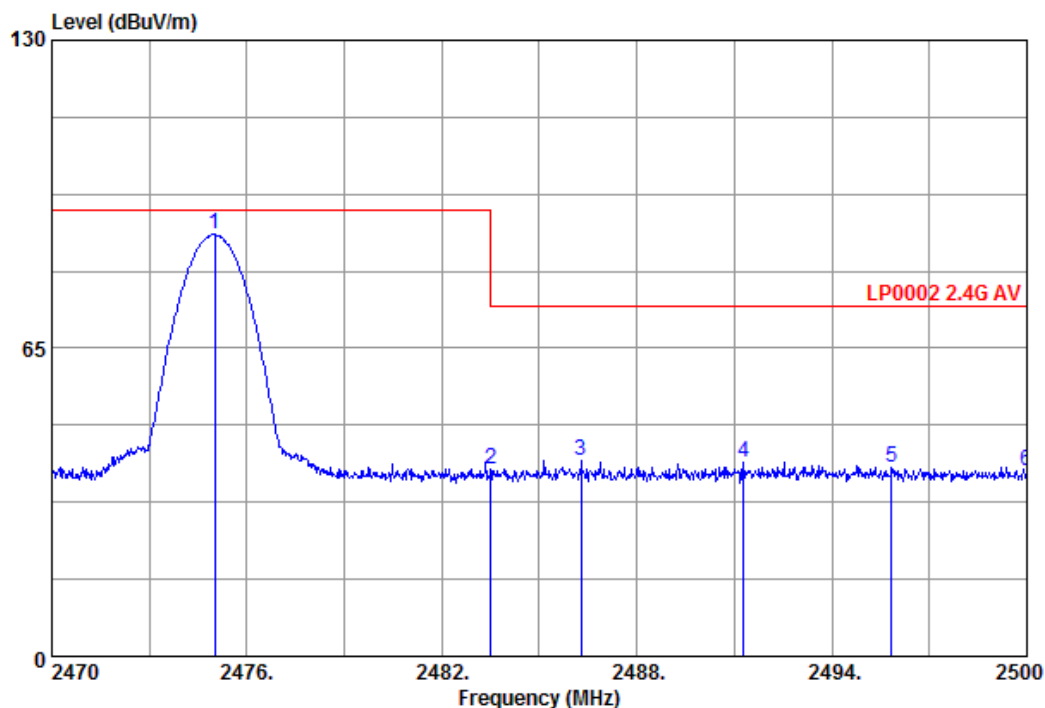
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Upper Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Vertical		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	@2475.010	96.33	-7.39	88.94	93.98	-5.04	---	---	
2	2483.500	46.81	-7.39	39.42	73.98	-34.56	---	---	
3	2486.290	48.81	-7.39	41.42	73.98	-32.56	---	---	
4	2491.270	48.19	-7.33	40.86	73.98	-33.12	---	---	
5	2495.830	47.32	-7.33	39.99	73.98	-33.99	---	---	
6	2500.000	46.61	-7.33	39.28	73.98	-34.70	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

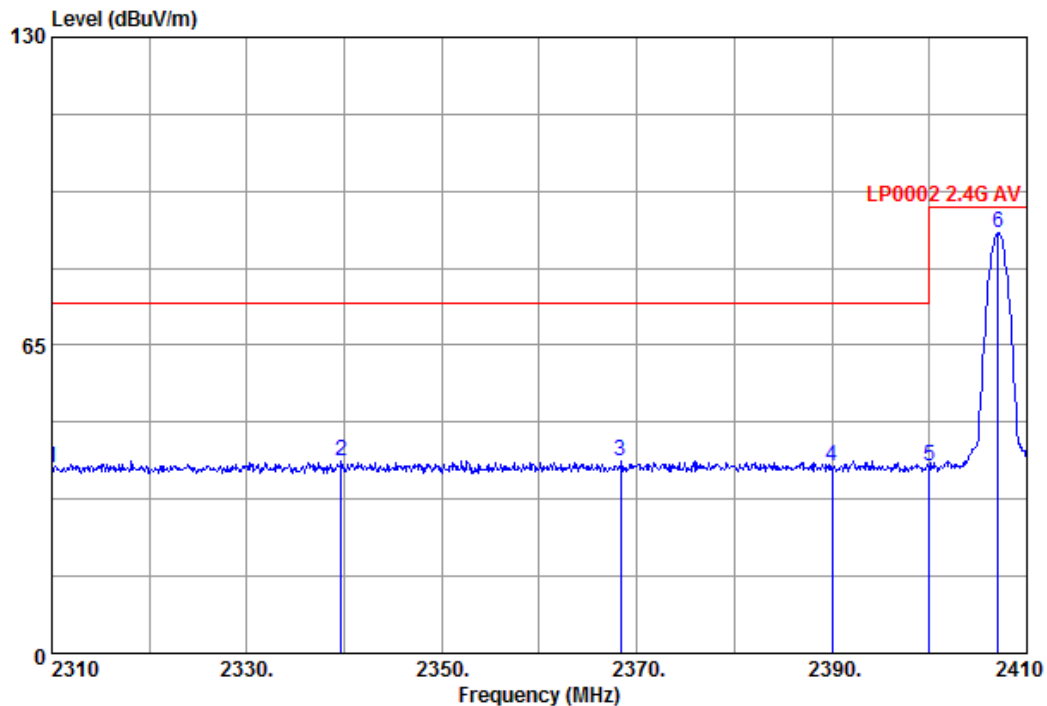
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

**Band-Edge Test Data (Lower Edge)**

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.000	47.00	-7.88	39.12	73.98	-34.86	---	---	
2	2339.700	48.41	-7.79	40.62	73.98	-33.36	---	---	
3	2368.300	48.15	-7.74	40.41	73.98	-33.57	---	---	
4	2390.000	47.23	-7.63	39.60	73.98	-34.38	---	---	
5	2400.000	47.19	-7.63	39.56	73.98	-34.42	---	---	
6	@2407.020	96.13	-7.58	88.55	93.98	-5.43	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

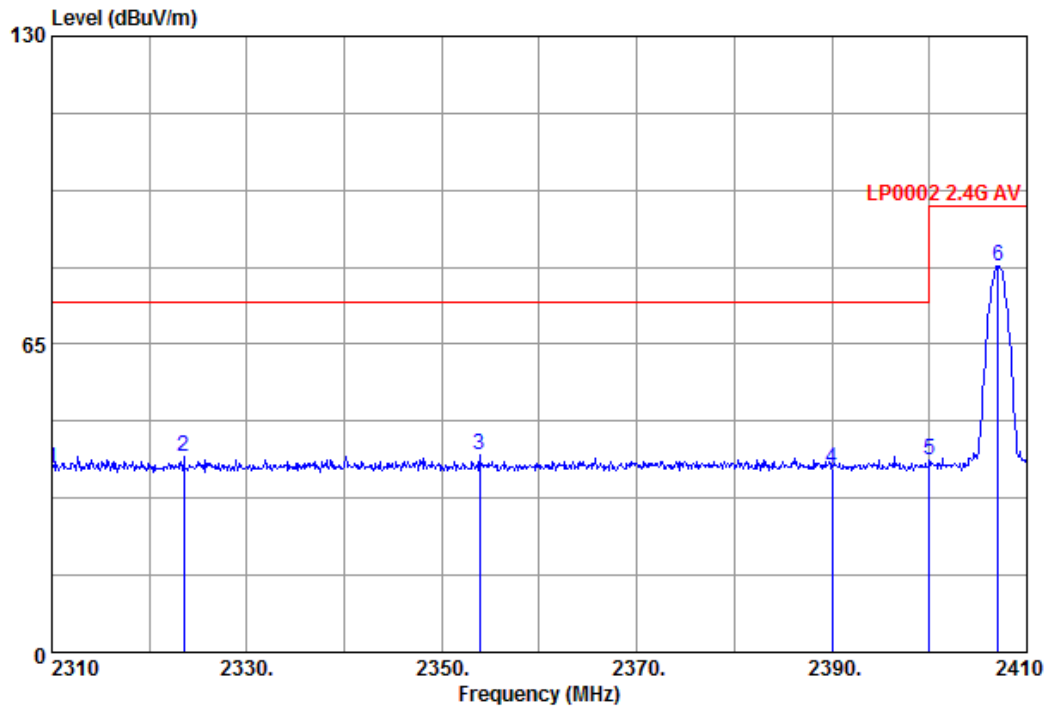
@ :Maximum Data x :Over Limit

Remark :

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
5. Spectrum setting:
 - (a) Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - (b) Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Lower Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH01 (2407MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	2310.000	46.52	-7.88	38.64	73.98	-35.34	---	---	
2	2323.530	49.11	-7.84	41.27	73.98	-32.71	---	---	
3	2353.890	49.25	-7.74	41.51	73.98	-32.47	---	---	
4	2390.000	46.24	-7.63	38.61	73.98	-35.37	---	---	
5	2400.000	48.17	-7.63	40.54	73.98	-33.44	---	---	
6	@2407.020	89.03	-7.58	81.45	93.98	-12.53	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

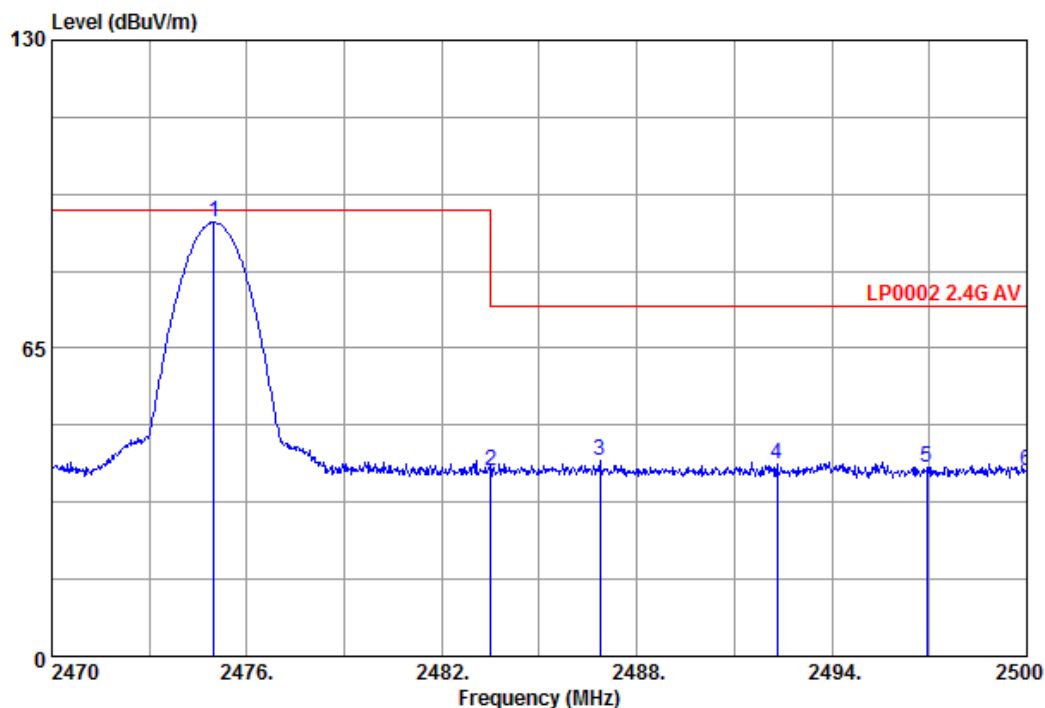
@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Upper Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Horizontal	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



	Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1	@2474.980	98.91	-7.39	91.52	93.98	-2.46	---	---	
2	2483.500	46.66	-7.39	39.27	73.98	-34.71	---	---	
3	2486.860	48.71	-7.39	41.32	73.98	-32.66	---	---	
4	2492.320	47.86	-7.33	40.53	73.98	-33.45	---	---	
5	2496.910	47.29	-7.33	39.96	73.98	-34.02	---	---	
6	2500.000	46.52	-7.33	39.19	73.98	-34.79	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
 Result = Reading + C.F ; Margin = Result - Limit

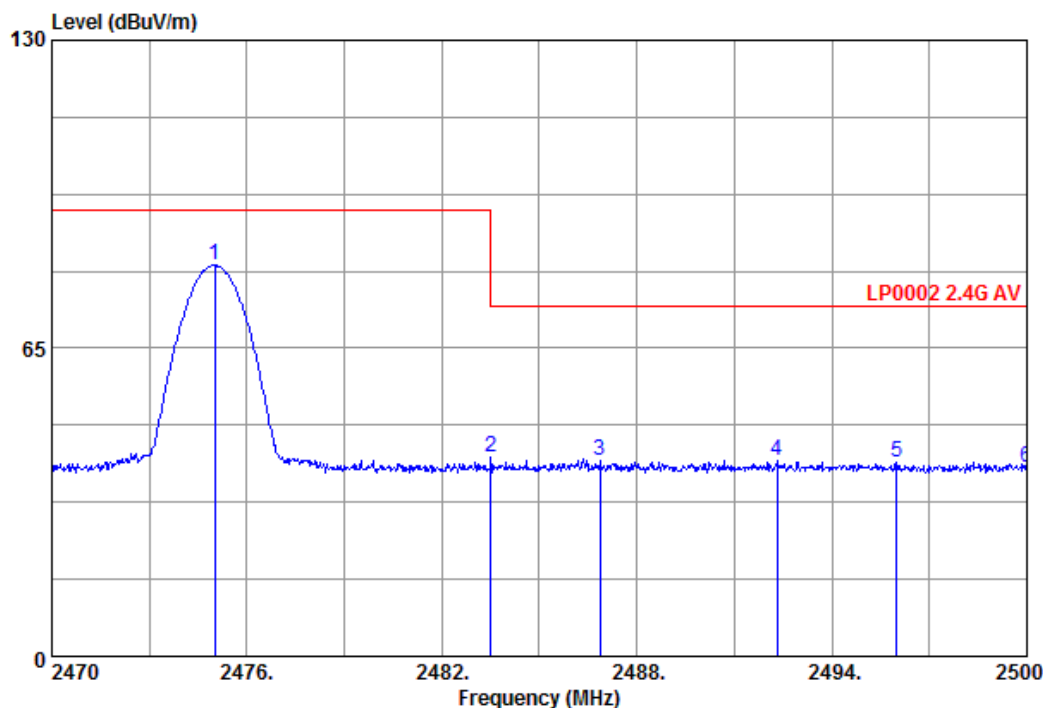
@ : Maximum Data x : Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.

Band-Edge Test Data (Upper Edge)

Temperature	: 26.1°C	Humidity	: 43%
Test Date	: 24-Apr-2013	Tested by	: Eason Hsieh
Polarization	: Vertical	Channel	: CH28 (2475MHz)
EUT Position	: Transverse		



Freq	Reading	C.F	Result	Limit	Margin	A/pos	T/pos	Remark
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1 @2475.010	89.88	-7.39	82.49	93.98	-11.49	---	---	
2 2483.500	49.56	-7.39	42.17	73.98	-31.81	---	---	
3 2486.860	48.59	-7.39	41.20	73.98	-32.78	---	---	
4 2492.320	48.58	-7.33	41.25	73.98	-32.73	---	---	
5 2495.980	48.39	-7.33	41.06	73.98	-32.92	---	---	
6 2500.000	47.05	-7.33	39.72	73.98	-34.26	---	---	

C.F = Antenna Factor + Cable Loss - Preamp gain
Result = Reading + C.F ; Margin = Result - Limit

@ :Maximum Data x :Over Limit

Remark :

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- All readings are Peak values. None of the peak value reading exceeds the A.V. limit. Hence, A.V. reading was not measured.
- Spectrum setting:
 - Peak Setting 1GHz to 10th harmonics of fundamental, RBW = VBW = 1MHz, Sweep = AUTO.
 - Average Setting 1GHz to 10th harmonics of fundamental,; RBW = 1MHz, VBW = 10Hz, Sweep = AUTO.



5 Antenna requirement

5.1 Limit (§ 15.203)

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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

5.2 Test Result

Compliance.

The EUT applies a fixed PCB antenna.

6 Photographs of the Tests

6.1 Radiated Disturbances Emission Test (Below 1G)



Front View



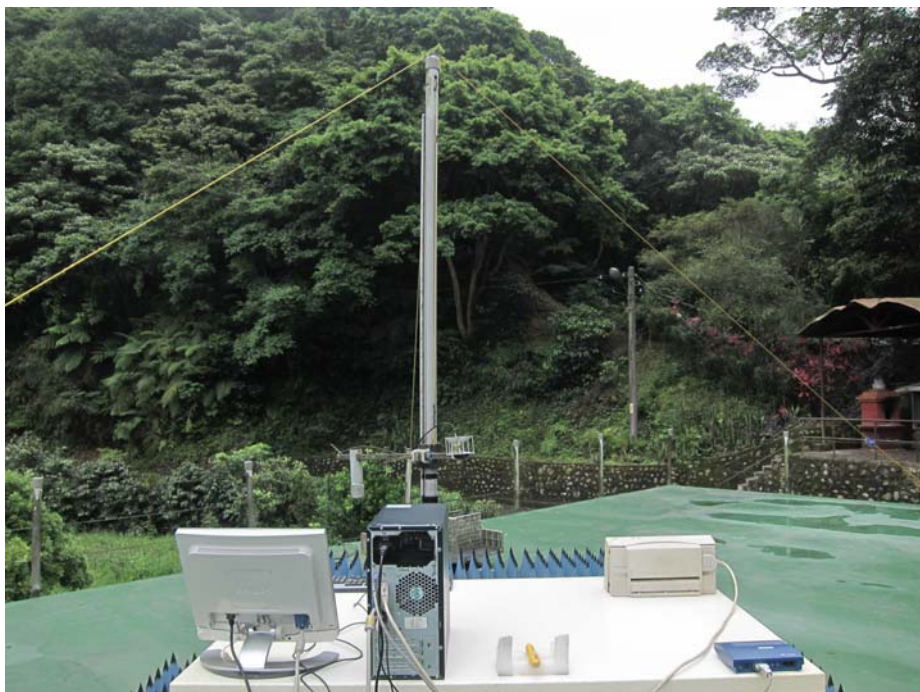
Rear View



6.2 Radiated Disturbances Emission Test (Above 1G)



Front View



Rear View



7 Photographs of the EUT



Front View of the EUT



Rear View of the EUT



Side View of the EUT -1



Side View of the EUT -2



Side View of the EUT -3



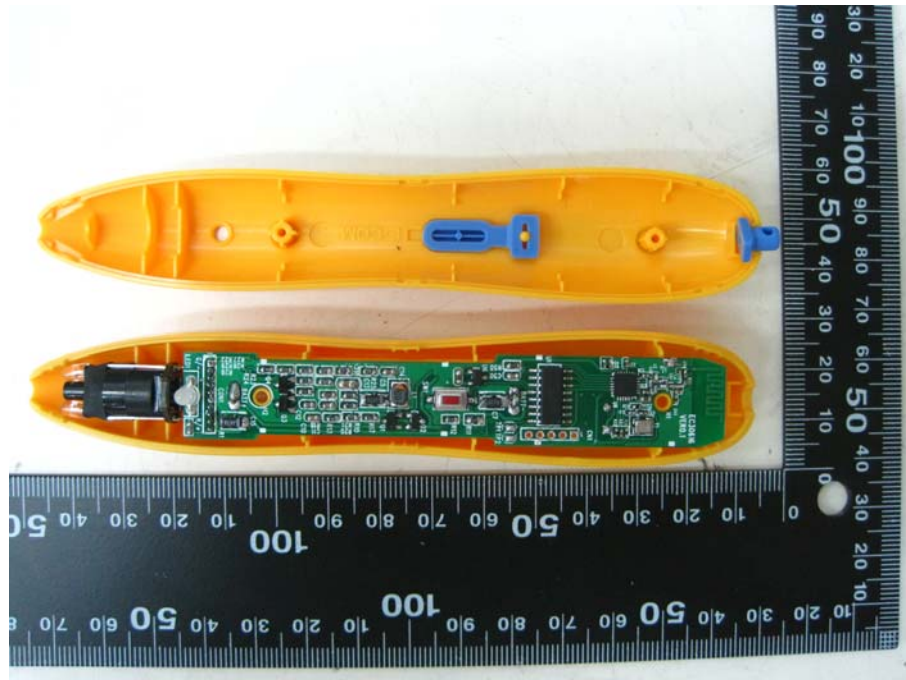
Side View of the EUT -4



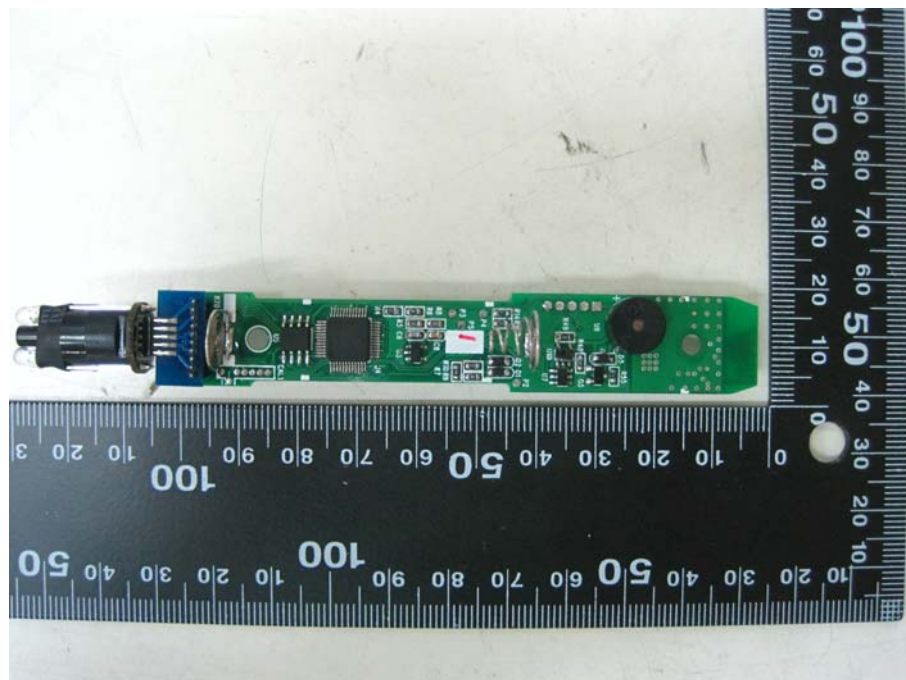
Side View of the EUT -5



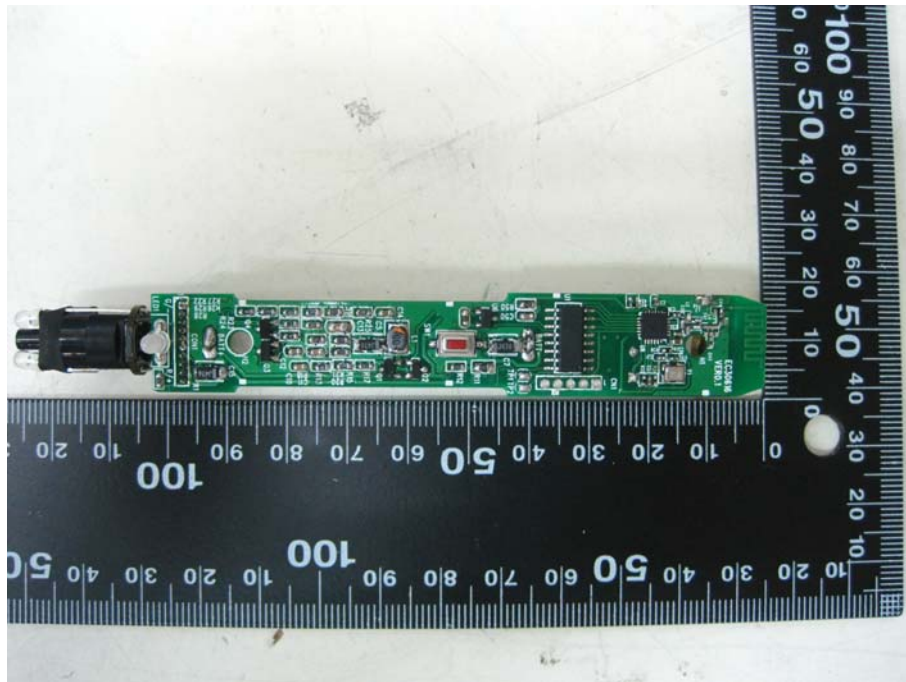
Side View of the EUT -6



Inside View of the EUT



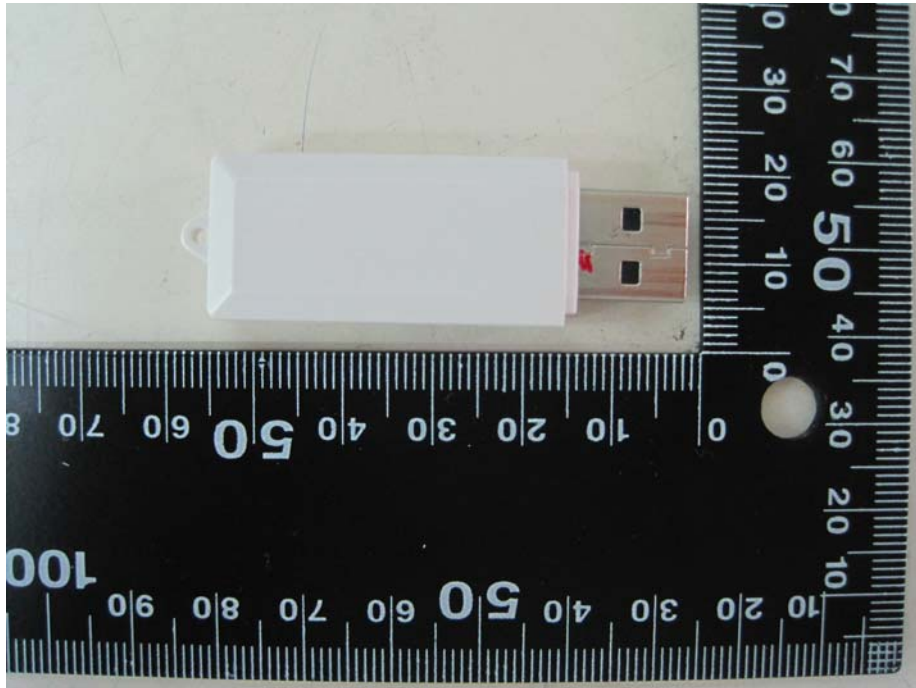
Front View of the EUT's PCB



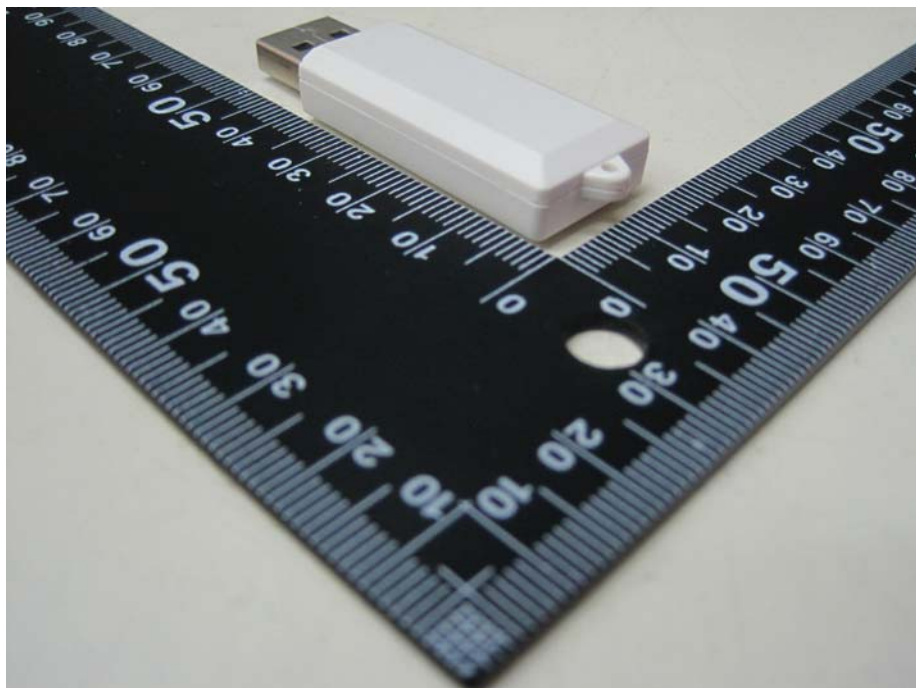
Rear View of the EUT's PCB



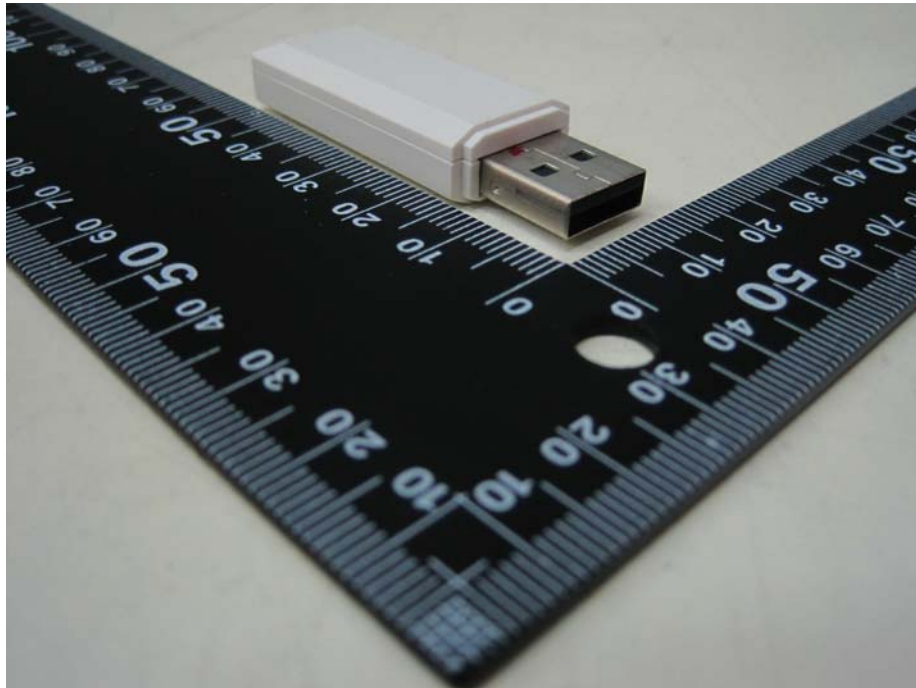
Front View of the EUT's Dongle



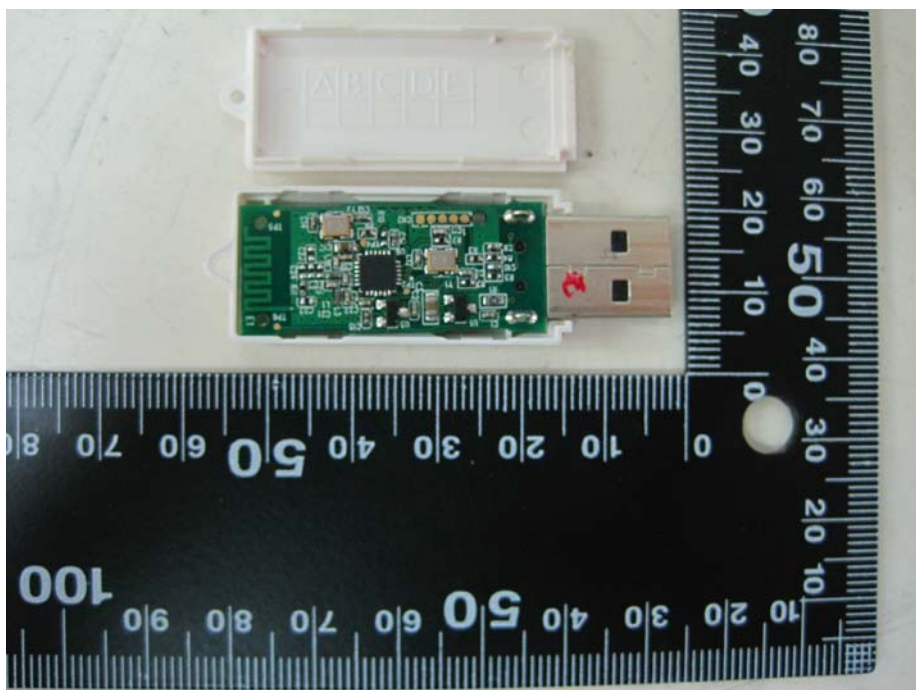
Rear View of the EUT's Dongle



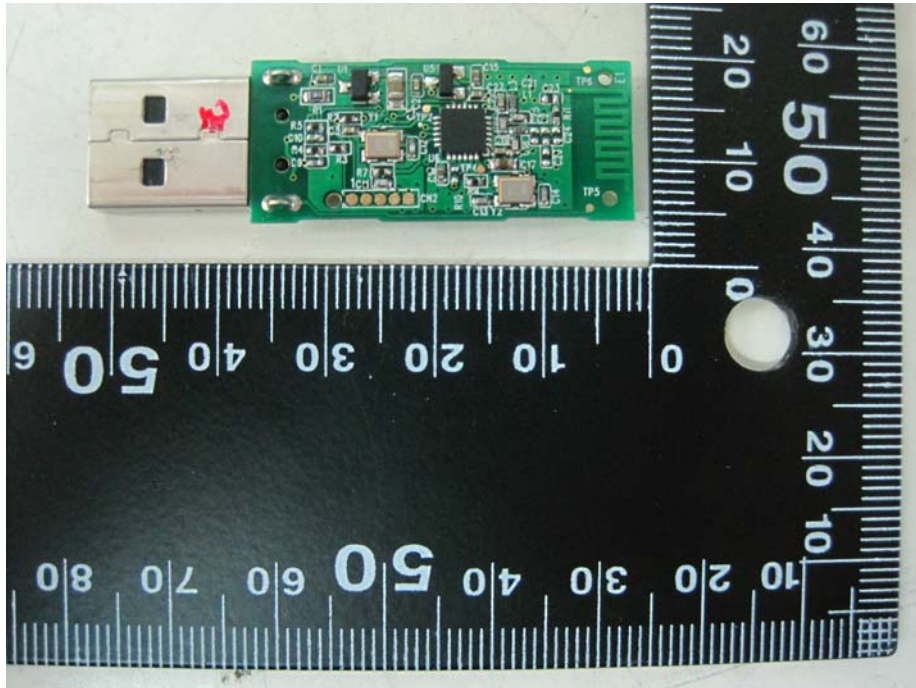
Side View of the EUT's Dongle



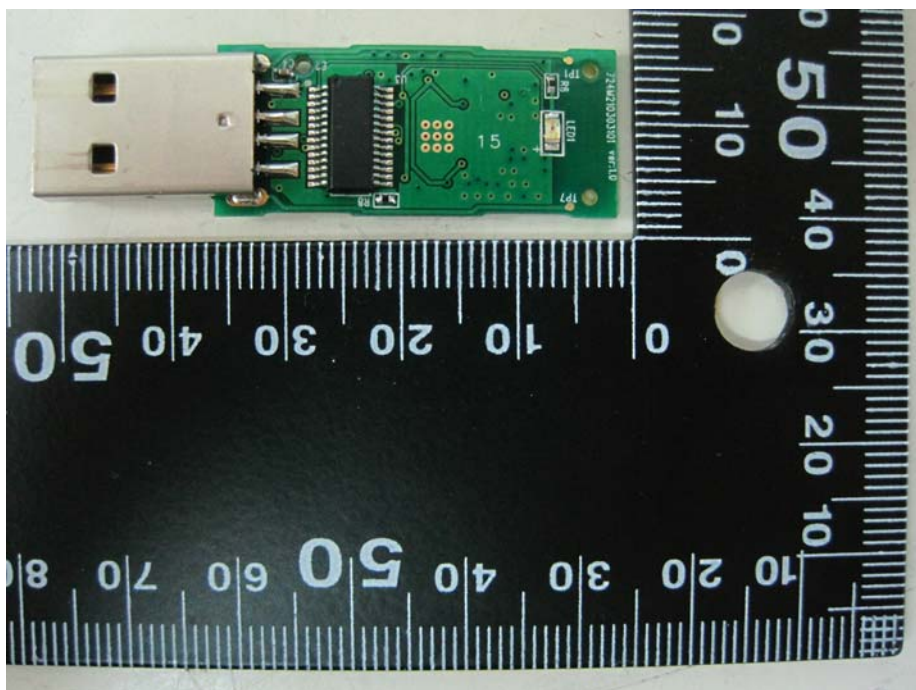
Side View of the EUT's Dongle



Inside View of the EUT's Dongle



Front View of the Dongle's PCB



Rear View of the Dongle's PCB