

FCC Part 15C Measurement and Test Report

For

Penclic AB

Vendev. 90, 7tr

182 32, Danderyd, Sweden

FCC ID: ZRQ-K2

FCC Rules:	<u>FCC Part 15.249</u>
Product Description:	<u>Penclic wireless keyboard</u>
Tested Model:	<u>K2</u>
Report No.:	<u>STR12068005I</u>
Tested Date:	<u>2012-06-04 to 2012-06-11</u>
Issued Date:	<u>2012-06-26</u>
Tested By:	<u>Susan Su / Engineer</u> <i>Susan Su</i>
Reviewed By:	<u>Lahm Peng / EMC Manager</u> <i>Lahm peng</i>
Approved & Authorized By:	<u>Jandy so / PSQ Manager</u> <i>Jandyso</i>
Prepared By:	

SEM.Test Compliance Service Co., Ltd
3/F, Jinbao Commerce Building, Xin'an Fanshen Road,
Bao'an District, Shenzhen, P.R.C. (518101)
Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by SEM.Test Compliance Service Co., Ltd

TABLE OF CONTENTS

1. GENERAL INFORMATION.....3

 1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....3

 1.2 TEST STANDARDS.....4

 1.3 TEST METHODOLOGY.....4

 1.4 TEST FACILITY.....4

 1.5 EUT SETUP AND TEST MODE.....5

2. SUMMARY OF TEST RESULTS6

3. ANTENNA REQUIREMENTS.....7

 3.1 STANDARD APPLICABLE.....7

 3.2 TEST RESULT.....7

4. CONDUCTED EMISSIONS8

 4.1 MEASUREMENT UNCERTAINTY8

 4.2 TEST EQUIPMENT LIST AND DETAILS8

 4.3 TEST PROCEDURE.....8

 4.4 BASIC TEST SETUP BLOCK DIAGRAM.....8

 4.5 ENVIRONMENTAL CONDITIONS9

 4.6 TEST RECEIVER SETUP9

 4.7 SUMMARY OF TEST RESULTS/PLOTS9

 4.8 CONDUCTED EMISSIONS TEST DATA.....9

5. RADIATED EMISSIONS.....12

 5.1 MEASUREMENT UNCERTAINTY12

 5.2 STANDARD APPLICABLE.....12

 5.3 TEST EQUIPMENT LIST AND DETAILS12

 5.4 TEST PROCEDURE.....13

 5.5 CORRECTED AMPLITUDE & MARGIN CALCULATION.....13

 5.6 ENVIRONMENTAL CONDITIONS13

 5.7 SUMMARY OF TEST RESULTS/PLOTS14

6. OUT OF BAND EMISSIONS.....24

 6.1 STANDARD APPLICABLE.....24

 6.2 TEST EQUIPMENT LIST AND DETAILS24

 6.3 TEST PROCEDURE.....24

 6.4 ENVIRONMENTAL CONDITIONS24

 6.5 SUMMARY OF TEST RESULTS/PLOTS24

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Penclic AB
 Address of applicant: Vendev. 90, 7tr
 182 32, Danderyd, Sweden
 Manufacturer: SUNSONNY INTERNATIONAL GROUP LIMITED
 Address of manufacturer: NO.68, Meihua Road, Eastern Area, Baishixia industrial
 Park, Fuyong Town, Bao'an District, Shenzhen, China

General Description of EUT	
Product Name:	Penclic wireless keyboard
Trade Name:	Penclic
Model No.:	K2
Rated Voltage:	DC 3V
Power Adapter Model:	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Frequency Range:	2405-2476MHz
Max. Field Strength:	88.24 dBuV/m (at 3m distance)
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	64
Channel Separation:	1MHz
Antenna Type:	PCB Antenna
Antenna Gain:	3.25 dBi
Lowest Internal Frequency of EUT:	8MHz
Device Category:	Portable Device

1.2 Test Standards

The following report is prepared on behalf of the Penlic AB in accordance with FCC Part 15, Subpart B, Subpart C, and section 15.107, 15.203, 15.205, 15.207, 15.209 and 15.249 of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.107,15.203, 15.205, 15.207, 15.209 and 15.249 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

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

1.4 Test Facility

- **FCC – Registration No.: 994117**

SEM.Test Compliance Services Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 994117.

- **Industry Canada (IC) Registration No.: 7673A**

The 3m Semi-anechoic chamber of SEM.Test Compliance Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 7673A.

- **CNAS Registration No.: L4062**

Shenzhen SEM.Test Electronics Service Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C (518101)

1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	Low Channel	2405MHz
TM2	Middle Channel	2439MHz
TM3	High Channel	2476MHz

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	SUMSUNG	R2	/

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.203	Antenna Requirement	Compliant
§15.205	Restricted Band of Operation	Compliant
§ 15.207(a)	Conducted Emission	Compliant
§ 15.209(a)(f)	Radiated Spurious Emissions	Compliant
§15.249(a)	Field Strength of Emissions	Compliant
§15.249(d)	Out of Band Emission	Compliant

3. Antenna Requirements

3.1 Standard Applicable

According to FCC Part 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.

3.2 Test Result

This product has an integral antenna, fulfill the requirement of this section.

4. Conducted Emissions

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

4.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2012-03-28	2013-03-27
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2012-03-28	2013-03-27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2012-03-28	2013-03-27

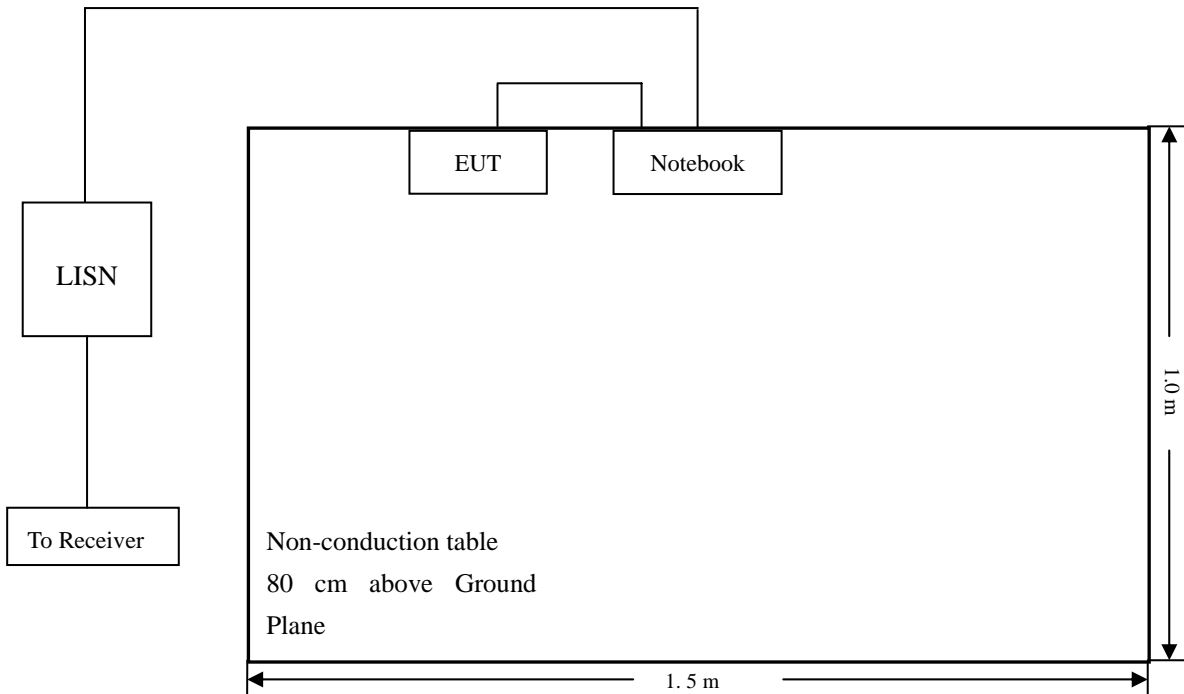
4.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.207 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

4.4 Basic Test Setup Block Diagram



4.5 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

4.6 Test Receiver Setup

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

Start Frequency 150 kHz
 Stop Frequency..... 30 MHz
 Sweep Speed Auto
 IF Bandwidth..... 10 kHz
 Quasi-Peak Adapter Bandwidth 9 kHz
 Quasi-Peak Adapter Mode Normal

4.7 Summary of Test Results/Plots

According to the data in section 3.8, the EUT complied with the FCC Part 15.207 Conducted margin for a Class B device, with the *worst* margin reading of:

-8.16 dBμV at 4.814 MHz in the Line mode, peak detector, 0.15-30MHz

4.8 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

EUT: Penclic wireless keyboard
Tested Model: K2
Operating Condition: Charging
Comment: Connected to PC

Test Specification: Neutral

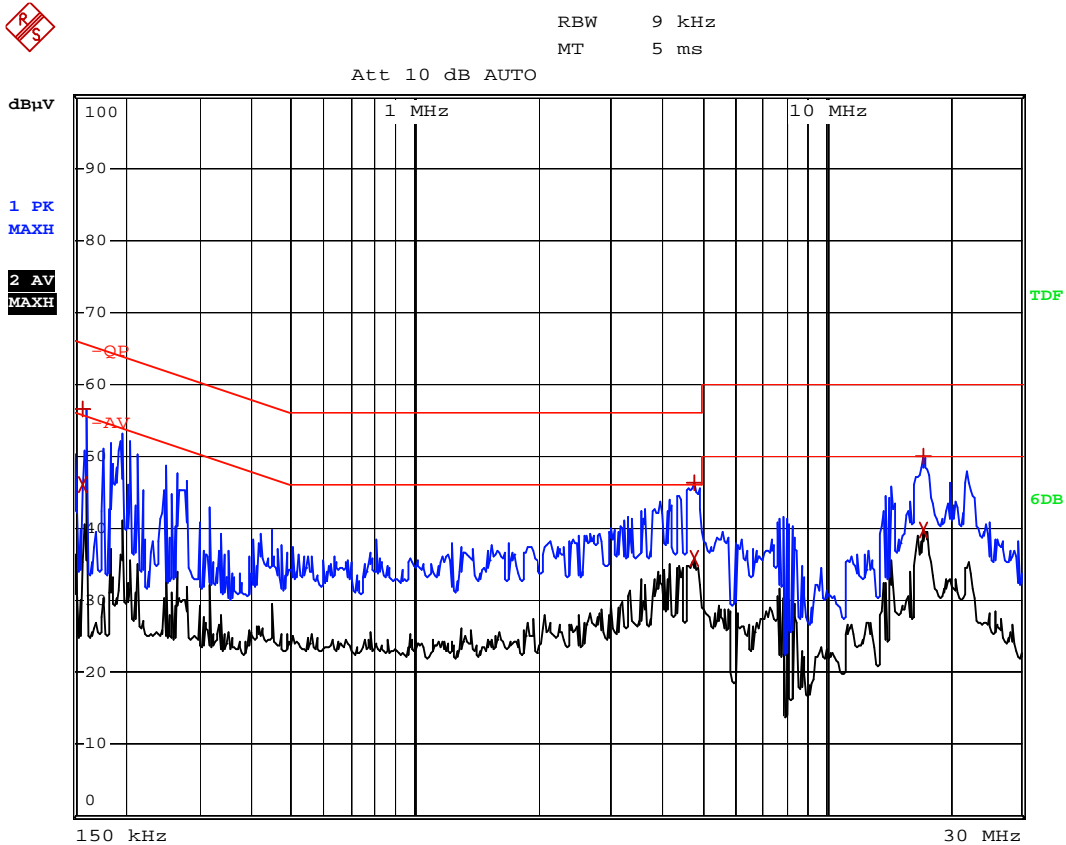


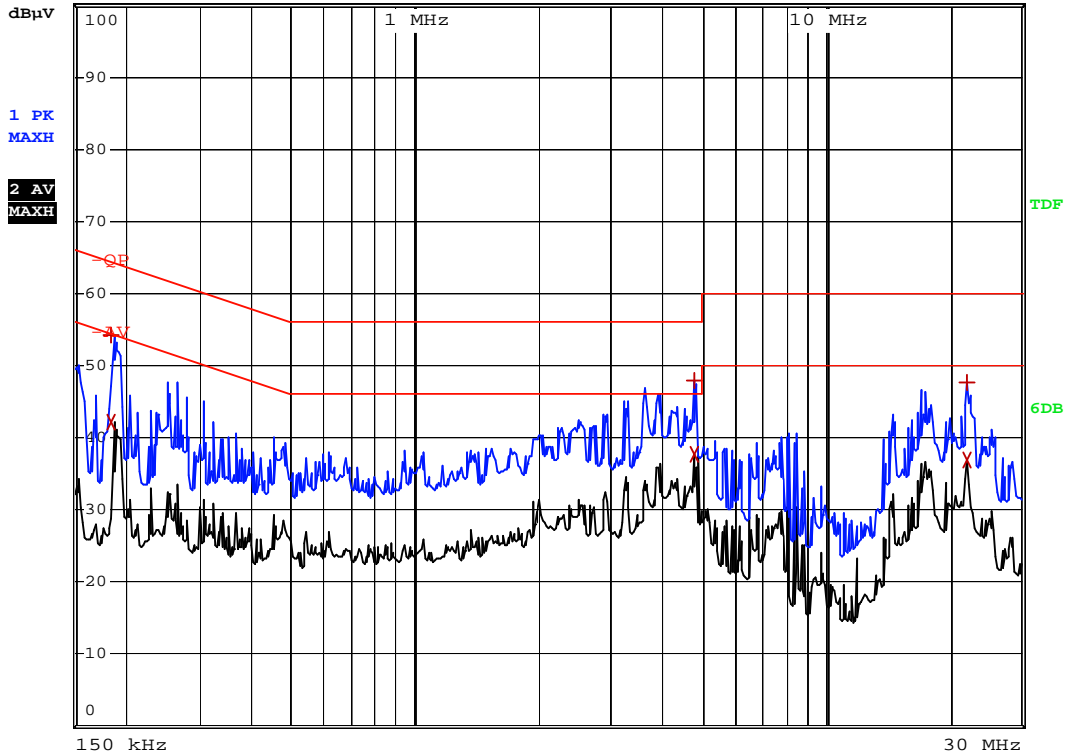
Table with 4 columns: TRACE, FREQUENCY, LEVEL dBµV, DELTA LIMIT dB. Contains peak list data for three traces, including a highlighted peak at 158 kHz.

Test Specification: Line



RBW 9 kHz
MT 5 ms

Att 10 dB AUTO



EDIT PEAK LIST (Prescan Results)			
Trace1:	-QP		
Trace2:	-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
1 Max Peak	186 kHz	54.22	-9.98
2 Average	186 kHz	42.21	-12.00
1 Max Peak	4.814 MHz	47.83	-8.16
2 Average	4.814 MHz	37.61	-8.38
1 Max Peak	22.106 MHz	47.69	-12.30
2 Average	22.15 MHz	36.79	-13.20

5. Radiated Emissions

5.1 Measurement Uncertainty

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement is ± 5.10 dB.

5.2 Standard Applicable

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field strength of fundamental (milli-volts/meter)	Field strength of fundamental (micro-volts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

(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.

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

5.3 Test Equipment List and Details

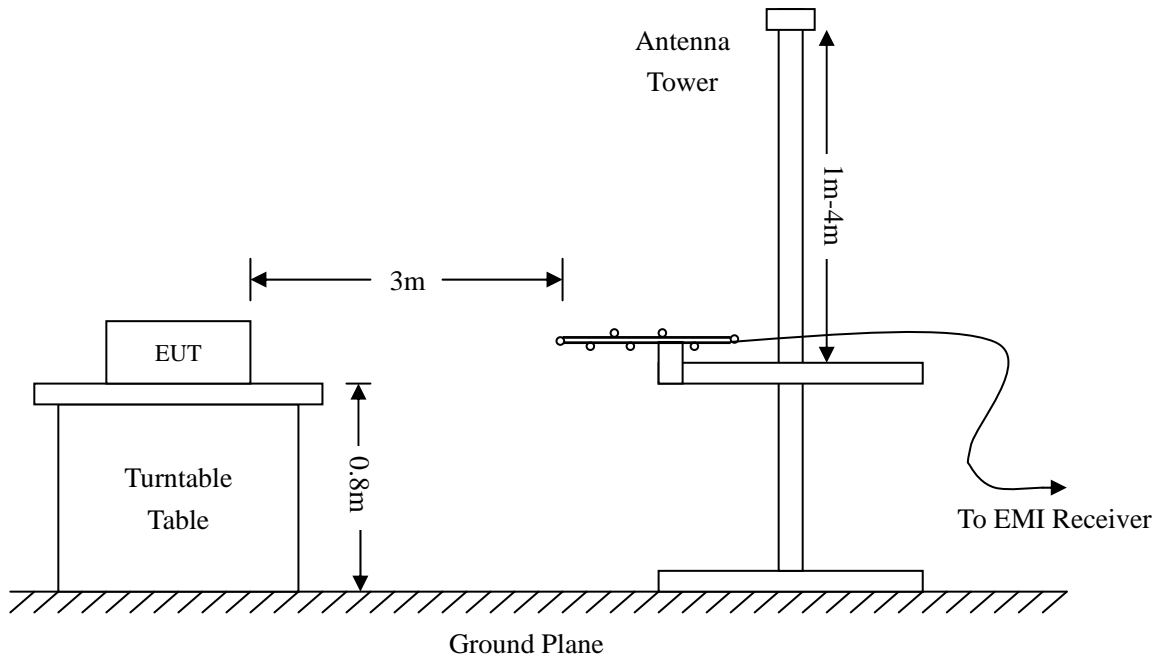
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2012-03-28	2013-03-27
EMI Test Receiver	R&S	ESVB	825471/005	2012-03-28	2013-03-27
Pre-amplifier	Agilent	8447F	3113A06717	2012-03-28	2013-03-27
Pre-amplifier	Compliance Direction	PAP-0118	24002	2012-03-28	2013-03-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-02-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-02-25	2013-02-24
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2012-02-25	2013-02-24

5.4 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.205 15.249(a) and FCC Part 15.209 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.



5.5 Corrected Amplitude & Margin Calculation

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

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15C Limit}$$

5.6 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	60 %
ATM Pressure:	1012 mbar

5.7 Summary of Test Results/Plots

According to the data below, the FCC Part 15.205, 15.209 and 15.249 standards, and had the worst margin of:

-5.46 dB μ V at 925.7563 MHz in the Vertical polarization, Charging, 9 kHz to 30MHz, 3Meters

-8.33 dB μ V at 893.8567 MHz in the Vertical polarization, Low Channel, 9 kHz to 25 GHz, 3Meters

Plot of Radiated Emissions Test Data (30MHz to 1GHz)

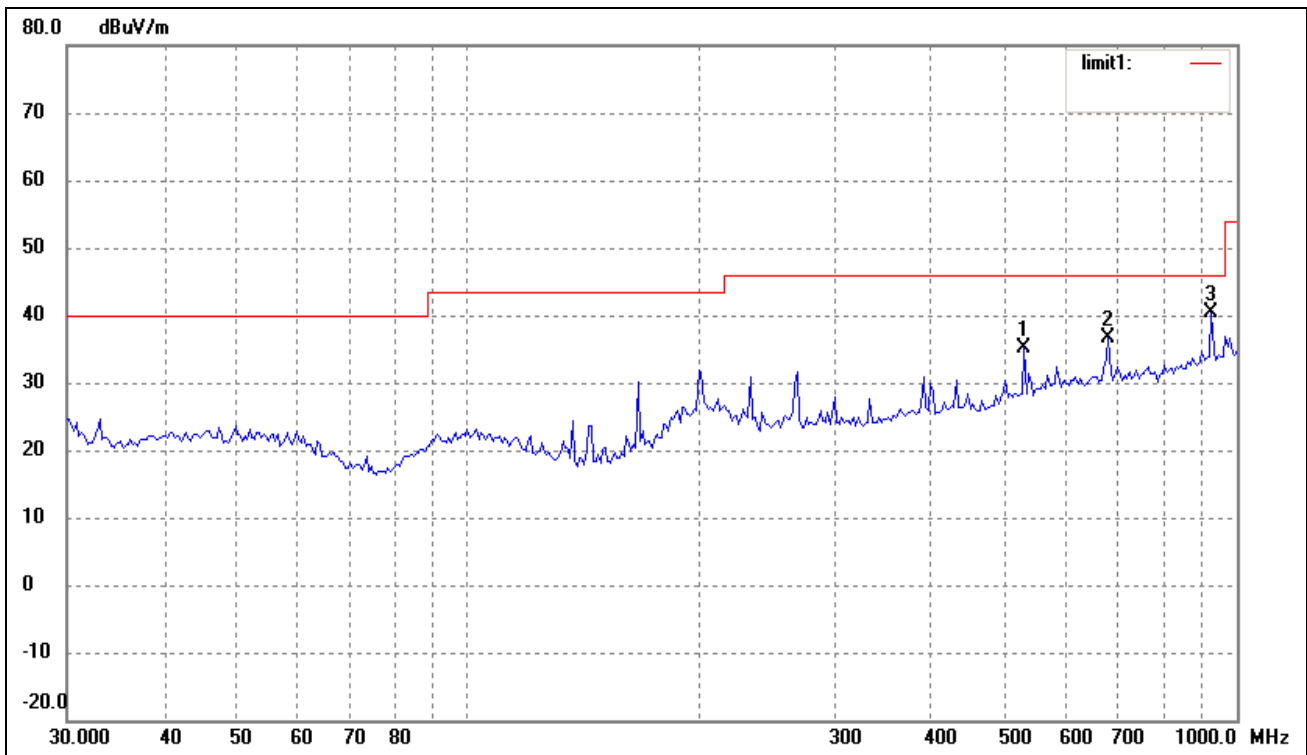
EUT: *Pencil wireless keyboard*

Tested Model: *K2*

Operating Condition: *Charging*

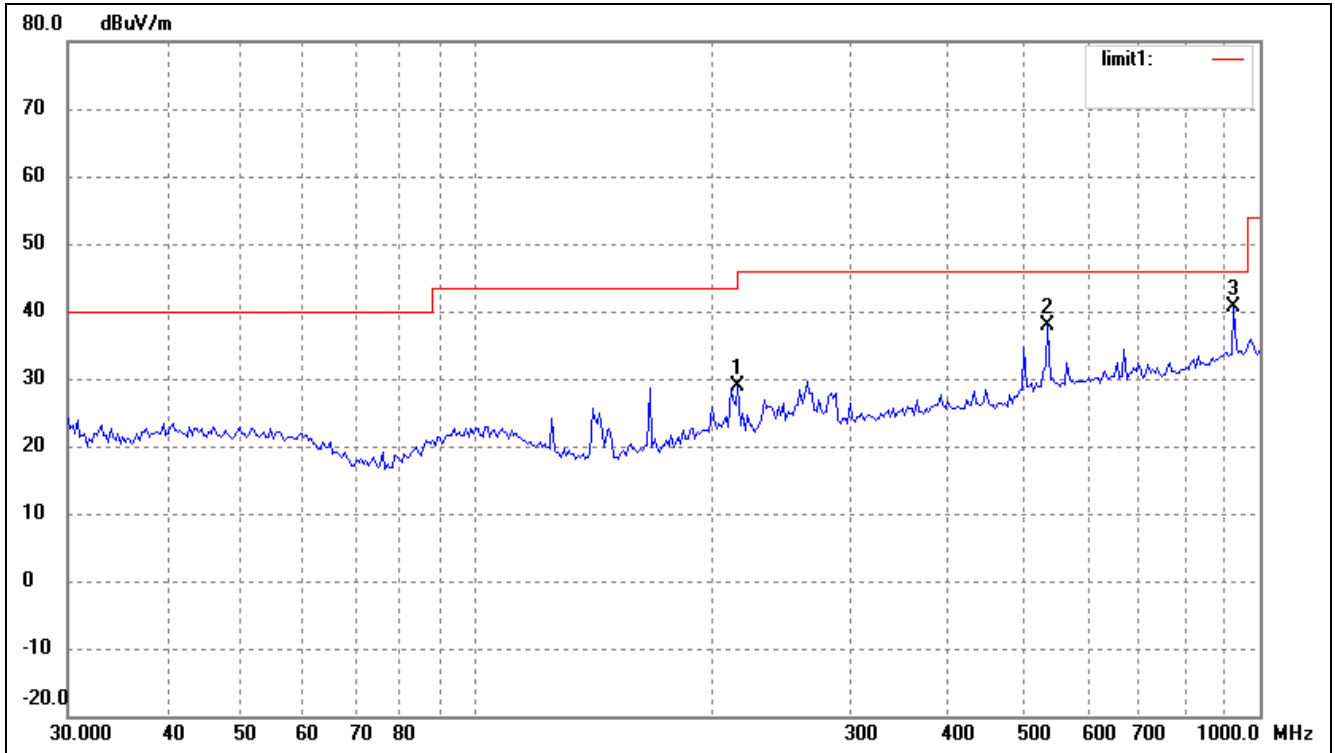
Comment: *Connected to PC*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	528.2458	22.23	12.91	35.14	46.00	-10.86	214	100	peak
2	679.9600	22.27	14.43	36.70	46.00	-9.30	53	100	peak
3	925.7563	23.13	17.24	40.37	46.00	-5.63	54	100	peak

Test Specification: Vertical

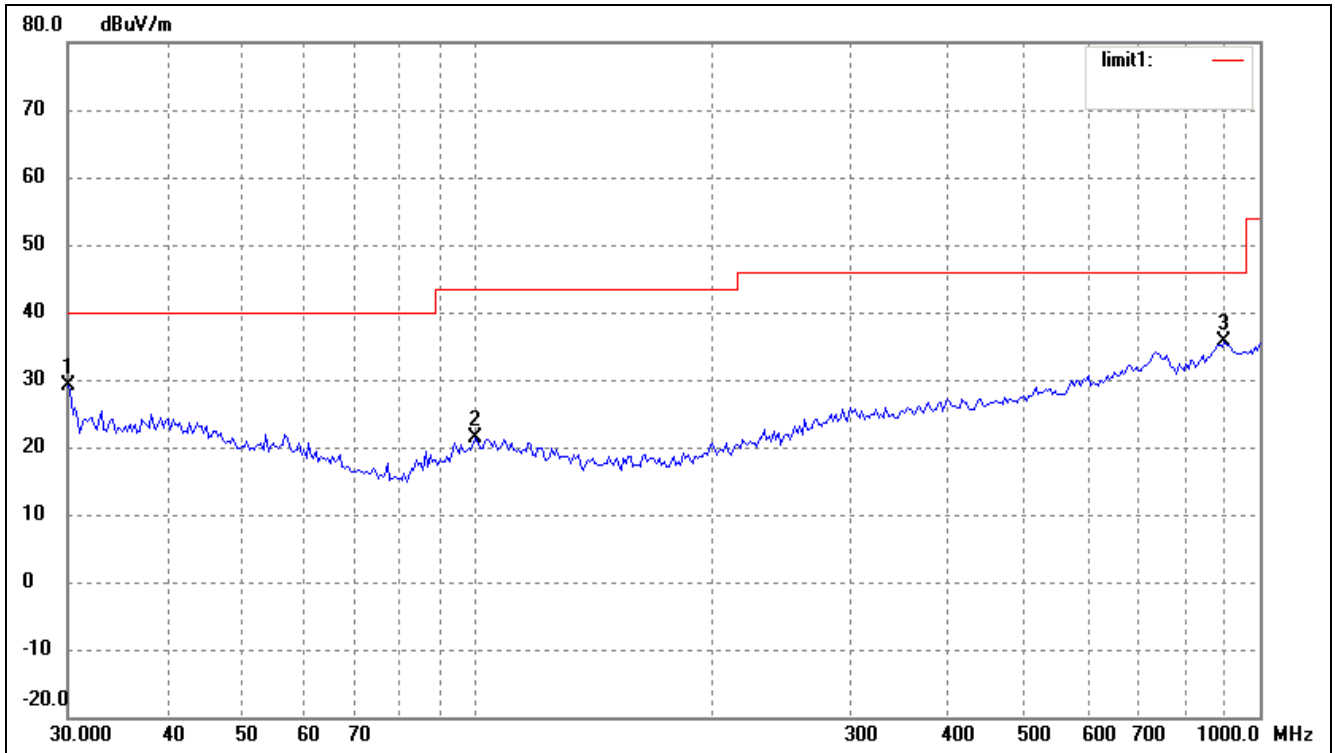


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	215.2678	22.81	6.18	28.99	43.50	-14.51	305	100	peak
2	535.7073	24.57	13.37	37.94	46.00	-8.06	64	100	peak
3	925.7563	23.30	17.24	40.54	46.00	-5.46	12	100	peak

Plot of Radiated Emissions Test Data (30MHz to 1GHz)

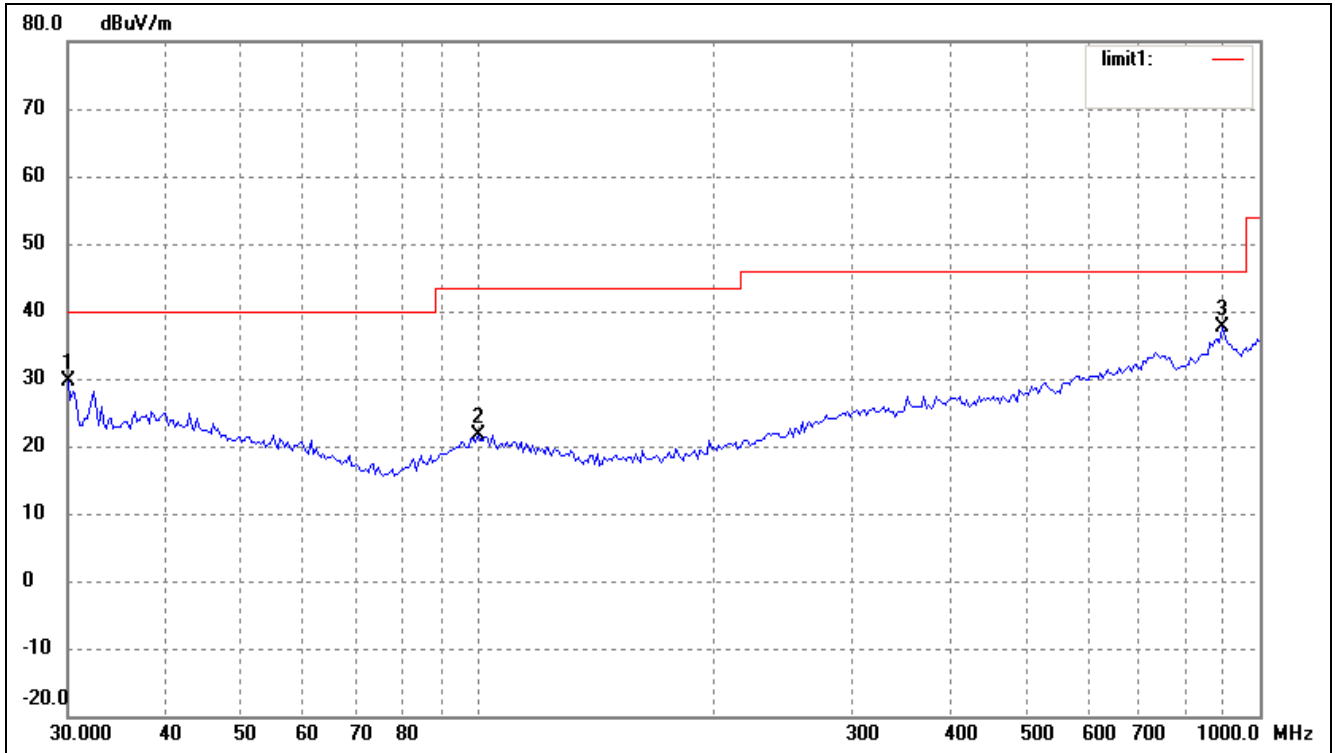
EUT: *Penclic wireless keyboard*
 Tested Model: *K2*
 Operating Condition: *Transmitting Low Channel (2405MHz)*
 Comment: *DC 3V*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	30.0000	21.15	8.04	29.19	40.00	-10.81	306	100	peak
2	99.5281	14.78	6.72	21.50	43.50	-22.00	54	100	peak
3	900.1474	16.19	19.38	35.57	46.00	-10.43	77	100	peak

Test Specification: Vertical

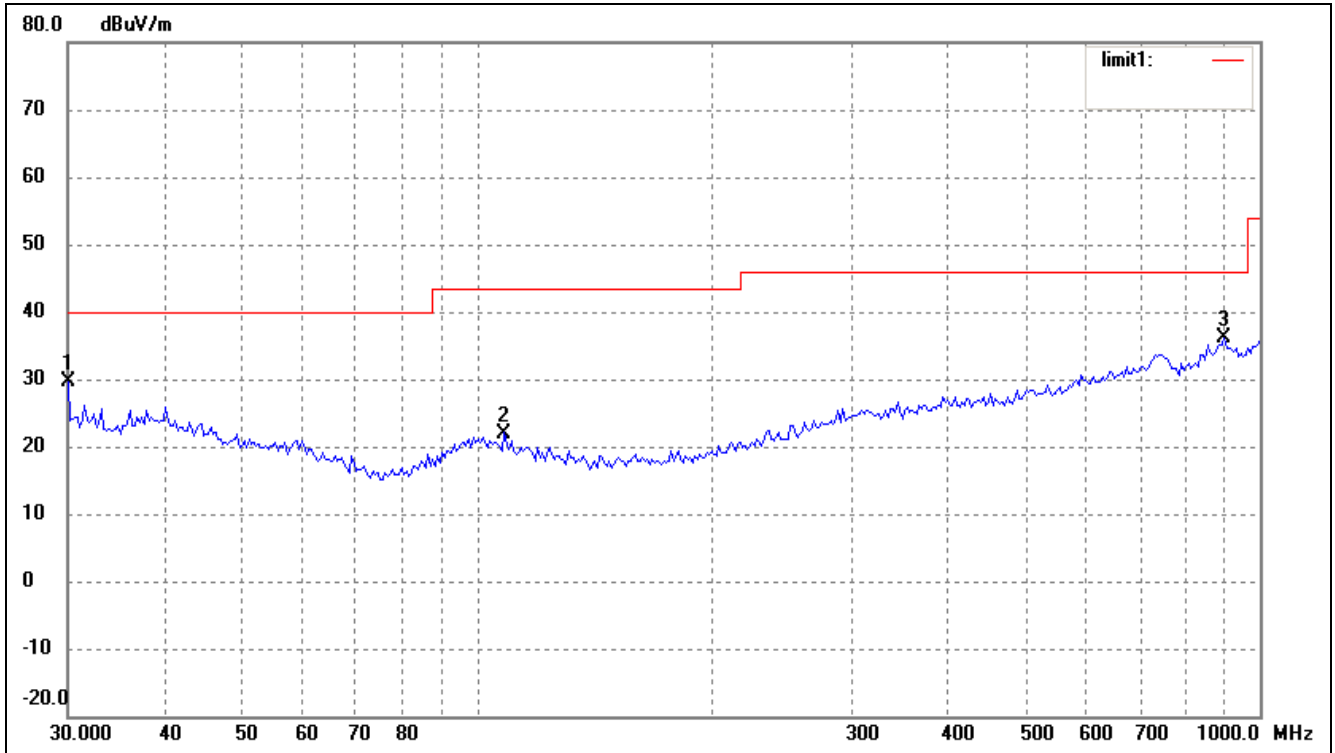


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	30.0000	21.52	8.04	29.56	40.00	-10.44	205	100	peak
2	100.2286	14.92	6.81	21.73	43.50	-21.77	54	100	peak
3	893.8567	18.40	19.27	37.67	46.00	-8.33	77	100	peak

Operating Condition: *Transmitting Middle Channel (2439MHz)*

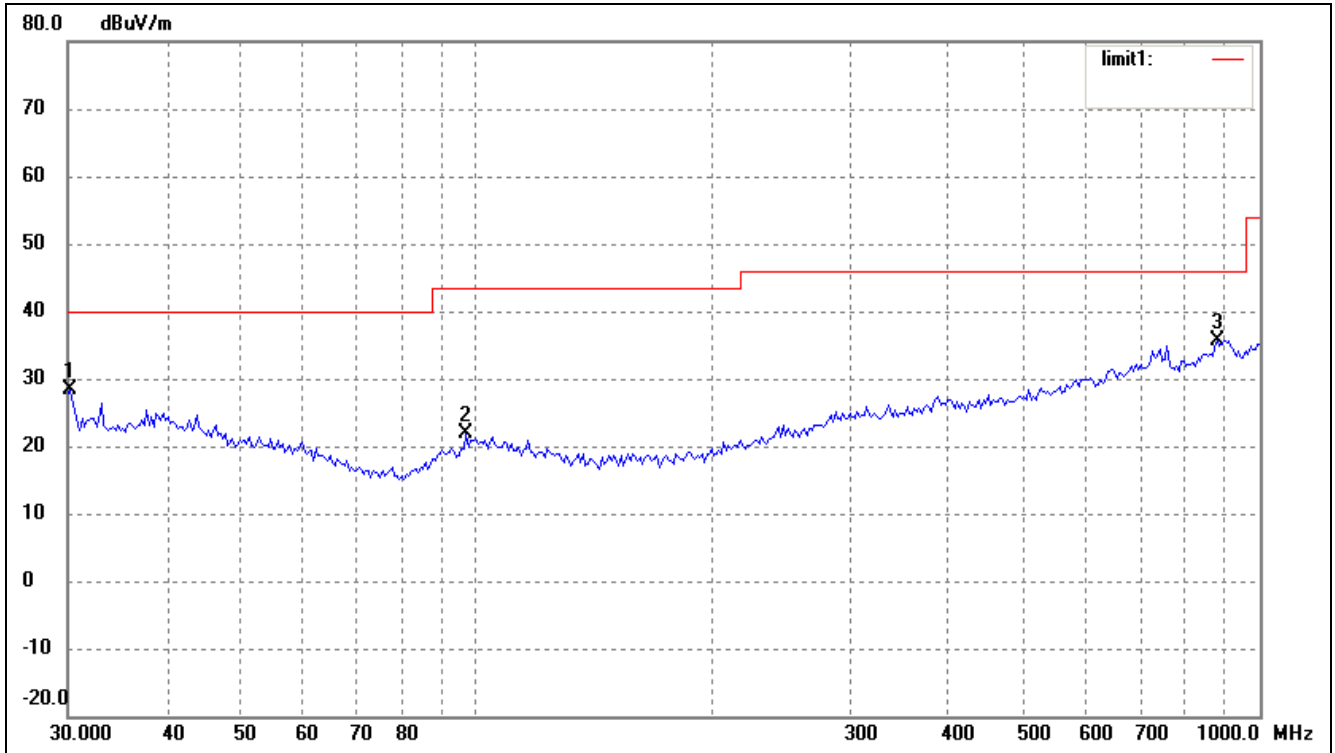
Comment: *DC 3V*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	30.0000	21.63	8.04	29.67	40.00	-10.33	251	100	peak
2	108.2667	15.98	6.02	22.00	43.50	-21.50	24	100	peak
3	900.1474	16.82	19.38	36.20	46.00	-9.80	200	100	peak

Test Specification: Vertical

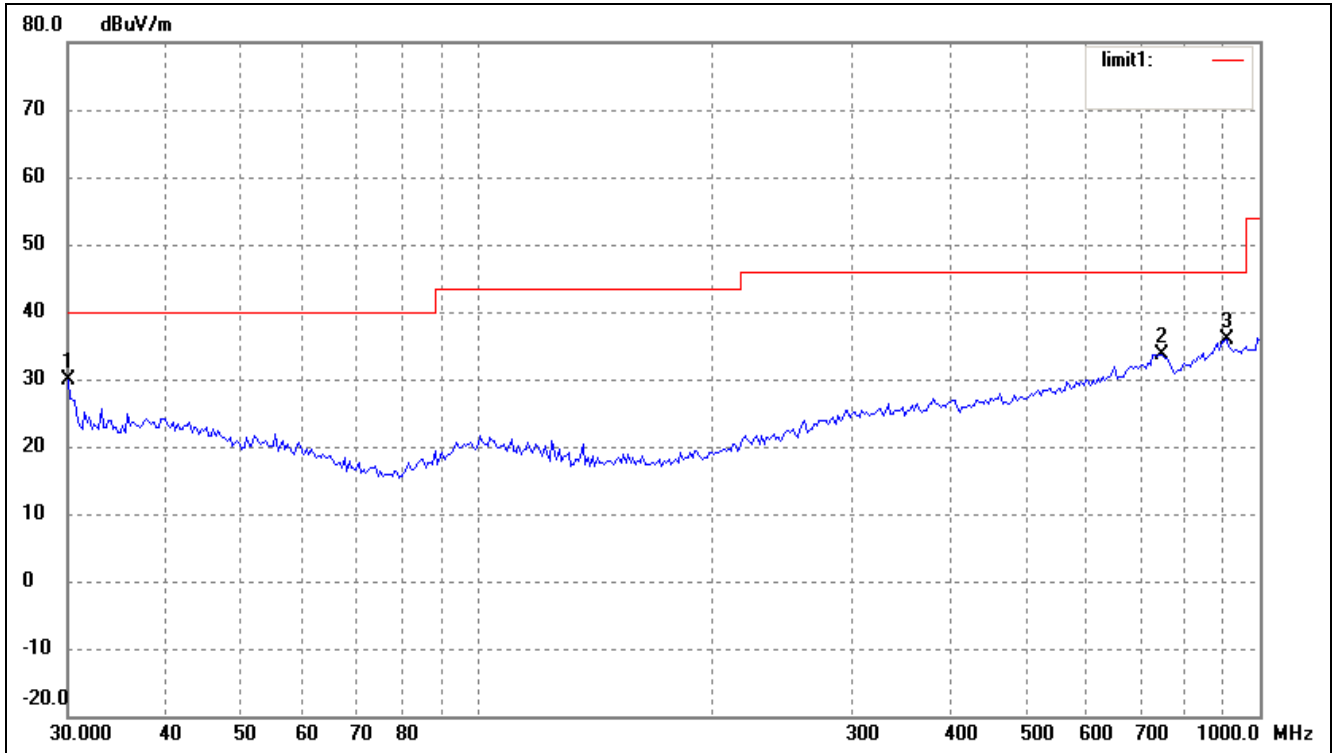


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	30.2111	20.32	8.07	28.39	40.00	-11.61	360	100	peak
2	96.7749	15.78	6.04	21.82	43.50	-21.68	360	100	peak
3	881.4067	16.57	19.03	35.60	46.00	-10.40	14	100	peak

Operating Condition: Transmitting High Channel (2476MHz)

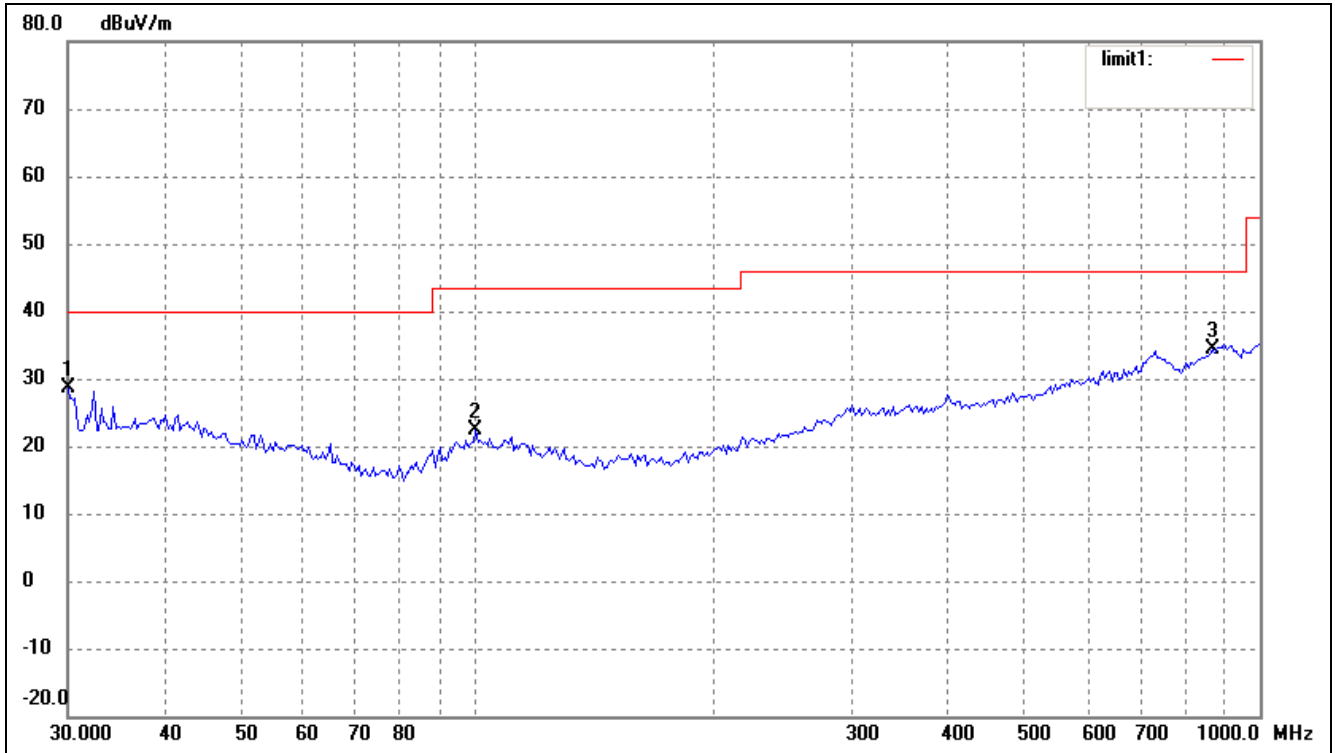
Comment: DC 3V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	30.0000	21.78	8.04	29.82	40.00	-10.18	253	100	peak
2	750.1083	15.93	17.78	33.71	46.00	-12.29	14	100	peak
3	906.4824	16.69	19.15	35.84	46.00	-10.16	24	100	peak

Test Specification: Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	30.0000	20.70	8.04	28.74	40.00	-11.26	301	100	peak
2	99.5281	15.62	6.72	22.34	43.50	-21.16	14	100	peak
3	869.1302	15.74	18.54	34.28	46.00	-11.72	44	100	peak

Spurious Emissions Above 1GHz

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2405MHz							
2405	84.18	-11.75	73.43	114	-40.57	H	PK
2405	62.13	-11.75	70.38	94	-23.62	H	AV
4810	47.61	-3.57	44.04	74.00	-29.96	H	PK
4810	34.80	-4.26	30.54	54.00	-23.46	H	AV
7215	46.68	2.20	48.88	74.00	-25.12	H	PK
7215	34.77	2.20	36.97	54.00	-17.03	H	AV
2405	83.51	-11.75	75.76	114	-38.24	V	PK
2405	61.47	-11.75	70.72	94	-23.28	V	AV
4810	46.84	-3.65	43.19	74.00	-30.81	V	PK
4810	34.37	-3.71	30.66	54.00	-23.34	V	AV
7215	47.67	2.20	49.87	74.00	-24.13	V	PK
7215	34.72	2.20	36.92	54.00	-17.08	V	AV
Middle Channel-2439MHz							
2439	84.12	-11.76	75.36	114	-38.64	H	PK
2439	67.54	-11.76	71.78	94	-22.22	H	AV
4878	47.26	-4.13	43.13	74.00	-30.87	H	PK
4878	34.84	-3.43	31.41	54.00	-22.59	H	AV
7317	47.28	2.15	49.43	74.00	-24.57	H	PK
7317	34.70	2.20	36.90	54.00	-17.10	H	AV
2439	81.97	-11.76	78.21	114	-35.79	V	PK
2439	65.37	-11.76	72.61	94	-21.39	V	AV
4878	47.24	-3.57	43.67	74.00	-30.33	V	PK
4878	34.51	-3.65	30.86	54.00	-23.14	V	AV
7317	47.59	2.26	49.85	74.00	-24.15	V	PK
7317	34.76	2.20	36.96	54.00	-17.04	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2476MHz							
2476	85.58	-11.78	76.80	114	-37.20	H	PK
2476	68.84	-11.78	72.06	94	-21.94	H	AV
4952	47.56	-4.20	43.36	74.00	-30.64	H	PK
4952	34.87	-3.71	31.16	54.00	-22.84	H	AV
7428	47.28	2.26	49.54	74.00	-24.46	H	PK
7428	35.00	2.26	37.26	54.00	-16.74	H	AV
2476	87.19	-11.78	88.24	114	-25.76	V	PK
2476	70.47	-11.78	72.69	94	-21.31	V	AV
4952	47.67	-4.66	43.01	74.00	-30.99	V	PK
4952	35.13	-3.57	31.56	54.00	-22.44	V	AV
7428	47.86	1.74	49.60	74.00	-24.40	V	PK
7428	35.11	2.20	37.31	54.00	-16.69	V	AV

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 5th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

The measurements greater than 20dB below the limit from 9kHz to 30MHz..

6. Out of Band Emissions

6.1 Standard Applicable

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

6.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2012-03-28	2013-03-27
EMI Test Receiver	R&S	ESVB	825471/005	2012-03-28	2013-03-27
Pre-amplifier	Agilent	8447F	3113A06717	2012-03-28	2013-03-27
Pre-amplifier	Compliance Direction	PAP-0118	24002	2012-03-28	2013-03-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-02-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-02-25	2013-02-24

6.3 Test Procedure

As the radiation test, set the Lowest and Highest Transmitting Channel, observed the outside band of 2400MHz to 2483.5MHz, than mark the higher-level emission for comparing with the FCC rules.

6.4 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	60 %
ATM Pressure:	1012 mbar

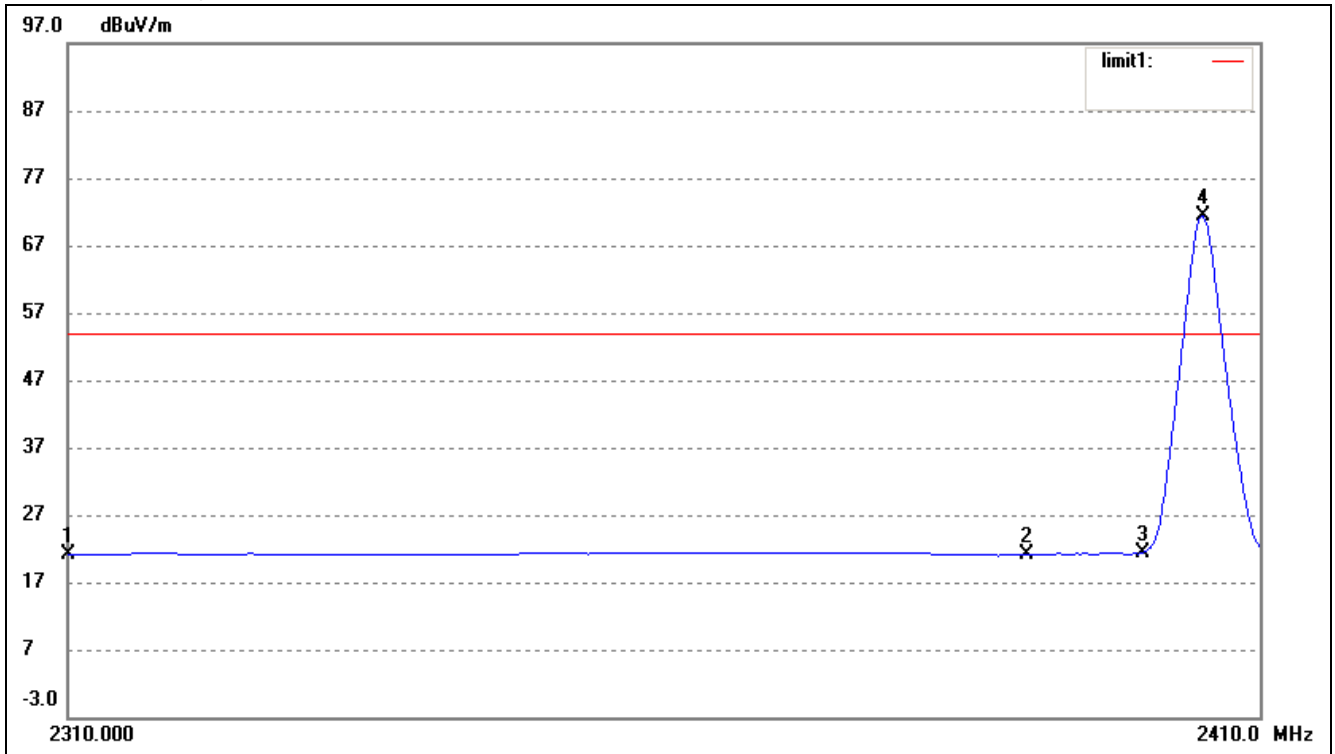
6.5 Summary of Test Results/Plots

Test mode	Frequency	Limit	Result
	MHz	dBuV / dBc	
Lowest	2310.00	<54 dBuV	Pass
	2390.00	<54 dBuV	Pass
	2400.00	>20 dBc	Pass
Highest	2483.50	<54 dBuV	Pass
	2500.00	<54 dBuV	Pass

The edge emissions are below the FCC 15.209 Limits or complies with the 15.247(d) requirements.

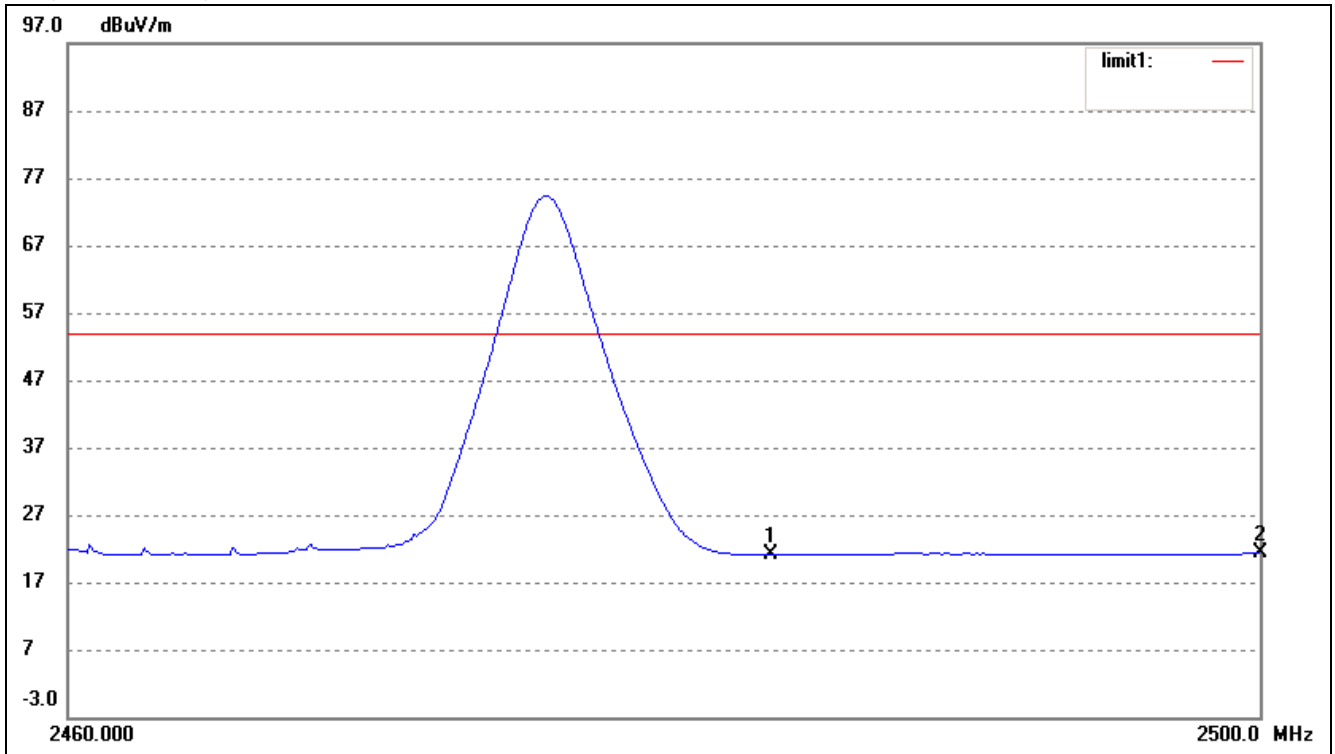
Please refer to the test plots as below.

Lowest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	32.93	-11.72	21.21	54.00	-32.79	Ave Detector
	2310.000	45.50	-11.72	33.78	74.00	-40.22	Peak Detector
2	2390.000	32.93	-11.75	21.18	54.00	-32.82	Ave Detector
	2390.000	45.68	-11.75	33.93	74.00	-40.07	Peak Detector
3	2400.000	33.15	-11.75	21.40	/	/	Ave Detector
4	2405.103	83.02	-11.75	71.67	/	/	Ave Detector

Highest Bandedge



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	32.88	-11.78	21.10	54.00	-32.90	Ave Detector
	2483.500	46.45	-11.78	34.67	74.00	-39.33	Peak Detector
2	2500.000	33.05	-11.78	21.27	54.00	-32.73	Ave Detector
	2500.000	46.70	-11.78	34.92	74.00	-39.08	Peak Detector

***** END OF REPORT *****