

# FCC Part 15C Measurement and Test Report

For

**XIAMEN COMFORT SCIENCE & TECHNOLOGY**

**GROUP CO., LTD**

**(5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA**

**FCC ID: YMX-EC806A**

<b>FCC Rule(s):</b>	<u>FCC Part 15.247</u>
<b>Product Description:</b>	<u>Massage Chair</u>
<b>Tested Model:</b>	<u>EC-806A</u>
<b>Report No.:</b>	<u>WTX19X04020841W</u>
<b>Sample Receipt Date:</b>	<u>2019-04-08</u>
<b>Tested Date:</b>	<u>2019-04-08 to 2019-04-17</u>
<b>Issued Date:</b>	<u>2019-04-17</u>
<b>Tested By:</b>	<u>Ray Yang / Engineer</u>
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<b>Prepared By:</b>	



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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 Shenzhen SEM Test Technology Co., Ltd.

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## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment Under Test (EUT)

#### Client Information

Applicant: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Address of applicant: (5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA

Manufacturer: XIAMEN HEALTHCARE ELECTRONIC CO.,LTD.

Address of manufacturer: 65-66#, 62-63# BUILDING, SIMING ZONE, TONGAN INDUSTRIAL DISTRICT, XIAMEN CITY, FUJIAN PROVINCE, P.R.CHINA

General Description of EUT	
Product Name:	Massage Chair
Brand Name:	/
Model No.:	EC-806A
Adding Model(s):	Osaki Pro Maestro
Rated Voltage:	AC 110-120V 60Hz
Power Adapter:	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Bluetooth Version:	V4.0 (BLE mode)
Frequency Range:	2402-2480MHz
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	40
Channel Separation:	2MHz
Type of Antenna:	Ceramic Antenna
Antenna Gain:	2dBi

### 1.2 Test Standards

The tests were performed according to following standards:

**FCC Rules Part 15.247:** Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

**558074 D01 15.247 Meas Guidance v05r02:** Guidance For Compliance Measurements On Digital Transmission System, Frequency Hopping Spread Spectrum System, And Hybrid System Devices Operating Under Section 15.247 Of The Fcc Rules

**ANSI C63.10-2013:** American National Standard for Testing Unlicensed Wireless Devices.

**Maintenance of compliance** is the responsibility of the manufacturer. Any modification of the product, which result 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 C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05r02.

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

### **1.4 Test Facility**

#### **FCC – Registration No.: 125990**

Shenzhen SEM Test Technology Co., Ltd. Laboratory has been recognized to perform compliance testing on equipment subject to the Commissions Declaration Of Conformity (DOC). The Designation Number is CN5010, and Test Firm Registration Number is 125990.

#### **Industry Canada (IC) Registration No.: 11464A**

The 3m Semi-anechoic chamber of Shenzhen SEM Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

## 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, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	Low	2402MHz
TM2	Middle	2440MHz
TM3	High	2480MHz

Test Conditions	
Temperature:	22~25 °C
Relative humidity	50~55 %.
ATM Pressure:	1019 mbar

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

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

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

## 1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	±0.42dB
Occupied Bandwidth	Conducted	±1.5%
Power Spectral Density	Conducted	±1.8dB
Conducted Spurious Emission	Conducted	±2.17dB
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB
Transmitter Spurious Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

## 1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2018-05-22	2019-05-21
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2018-05-22	2019-05-21
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2018-05-22	2019-05-21
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2018-05-22	2019-05-21
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2017-06-08	2020-06-07
SEMT-1042	Horn Antenna	ETS	3117	00086197	2017-06-08	2020-06-07
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2017-06-08	2020-06-07
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2017-06-08	2020-06-07
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2018-05-22	2019-05-21
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2018-05-22	2019-05-21
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2018-05-22	2019-05-21
SEMT-1168	Pre-amplifier	Direction Systems Inc.	PAP-0126	14141-12838	2018-05-22	2019-05-21
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2018-05-22	2019-05-21
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2018-05-22	2019-05-21
SEMT-1170	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2018-03-19	2021-03-18
SEMT-1166	Power Limiter	Agilent	N9356B	MY45450376	2018-05-22	2019-05-21
SEMT-1048	RF Limiter	ATTEN	AT-BSF-2400~2500	/	2018-05-22	2019-05-21
SEMT-1076	RF Switcher	Top Precision	RCS03-A2	/	2018-05-22	2019-05-21
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	2019-03-18	2020-03-17
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	2019-03-18	2020-03-17
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	2019-03-18	2020-03-17
SEMT-C004	Cable	Zheng DI	2M0RFC	/	2019-03-18	2020-03-17
SEMT-C005	Cable	Zheng DI	1M0RFC	/	2019-03-18	2020-03-17
SEMT-C006	Cable	Zheng DI	1M0RFC	/	2019-03-18	2020-03-17

## 2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 2.1093	RF Exposure	N/A
§ 15.203; § 15.247(b)(4)(i)	Antenna Requirement	Compliant
§15.205	Restricted Band of Operation	Compliant
§ 15.207(a)	Conducted Emission	Compliant
§ 15.247(e)	Power Spectral Density	N/A
§ 15.247(a)(2)	DTS Bandwidth	N/A
§ 15.247(b)(3)	RF Output Power	N/A
§ 15.209(a)	Radiated Emission	Compliant
§ 15.247(d)	Band Edge (Out of Band Emissions)	Compliant

N/A: not applicable

Note: Report is for C2PC only. The test data includes Antenna Requirement, Conducted Emission, Radiated Emission and Band Edge (Out of Band Emissions). Those not tested mark with N/A (not effected by the C2PC).

### **3. Antenna Requirement**

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#### **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 Evaluation Information**

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



## 4. Field Strength of Spurious Emissions

### 4.1 Standard Applicable

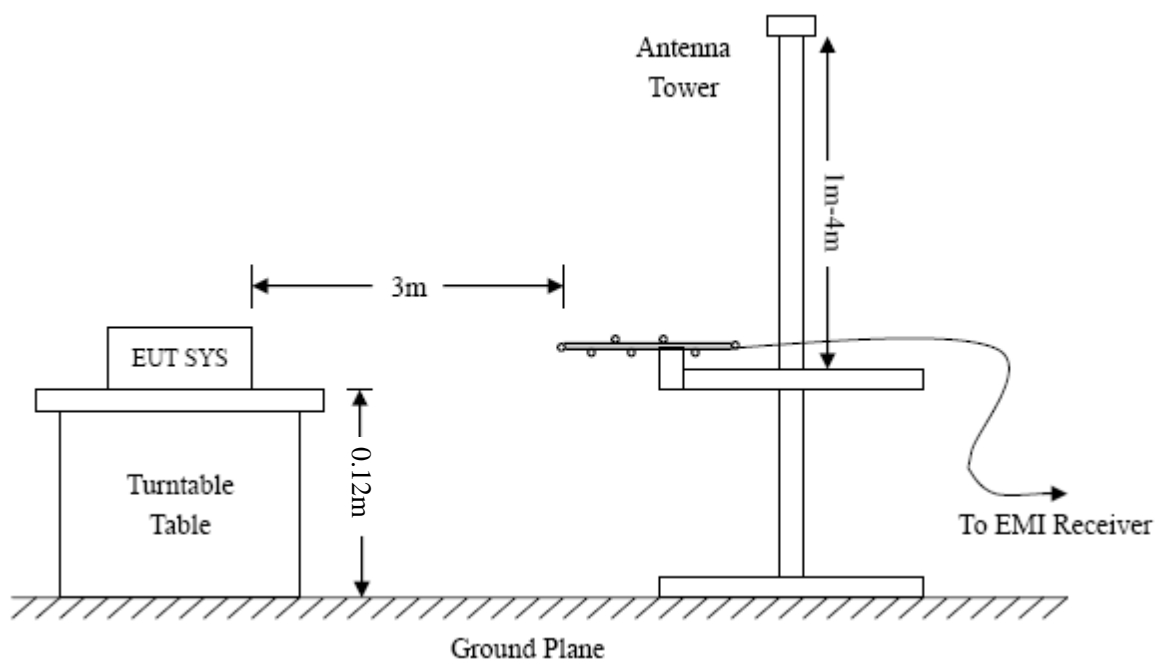
According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

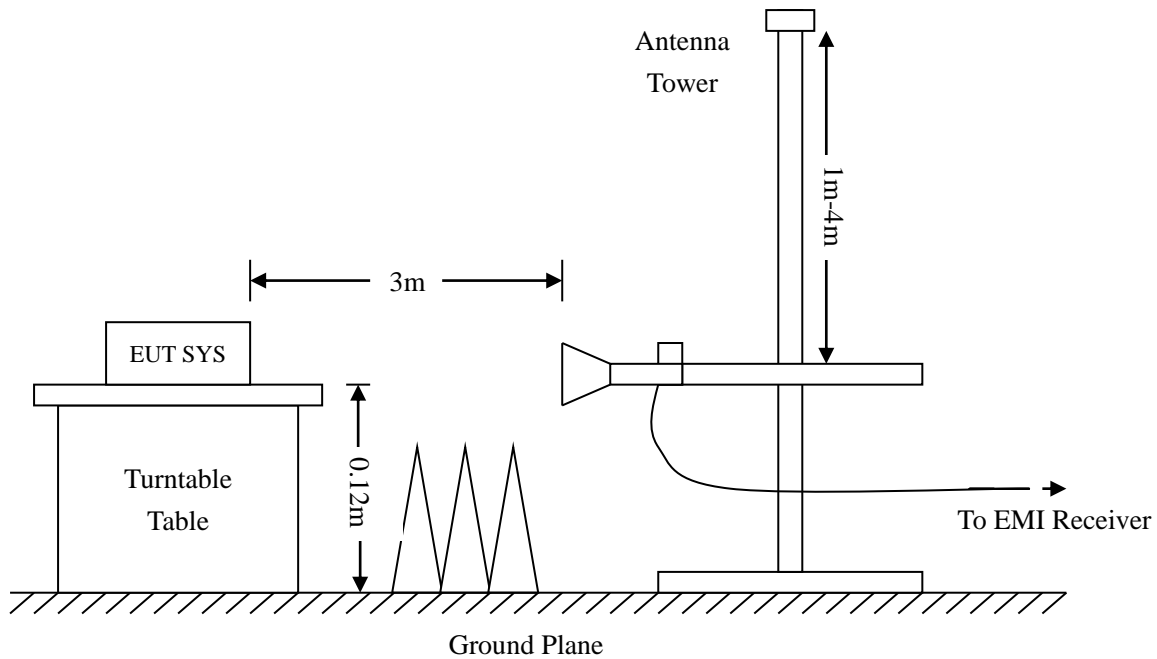
The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

### 4.2 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.247(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.





Frequency :9kHz-30MHz  
 RBW=10KHz,  
 VBW =30KHz  
 Sweep time= Auto  
 Trace = max hold  
 Detector function = peak

Frequency :30MHz-1GHz  
 RBW=120KHz,  
 VBW=300KHz  
 Sweep time= Auto  
 Trace = max hold  
 Detector function = peak, QP

Frequency :Above 1GHz  
 RBW=1MHz,  
 VBW=3MHz(Peak), 10Hz(AV)  
 Sweep time= Auto  
 Trace = max hold  
 Detector function = peak, AV

### 4.3 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:

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

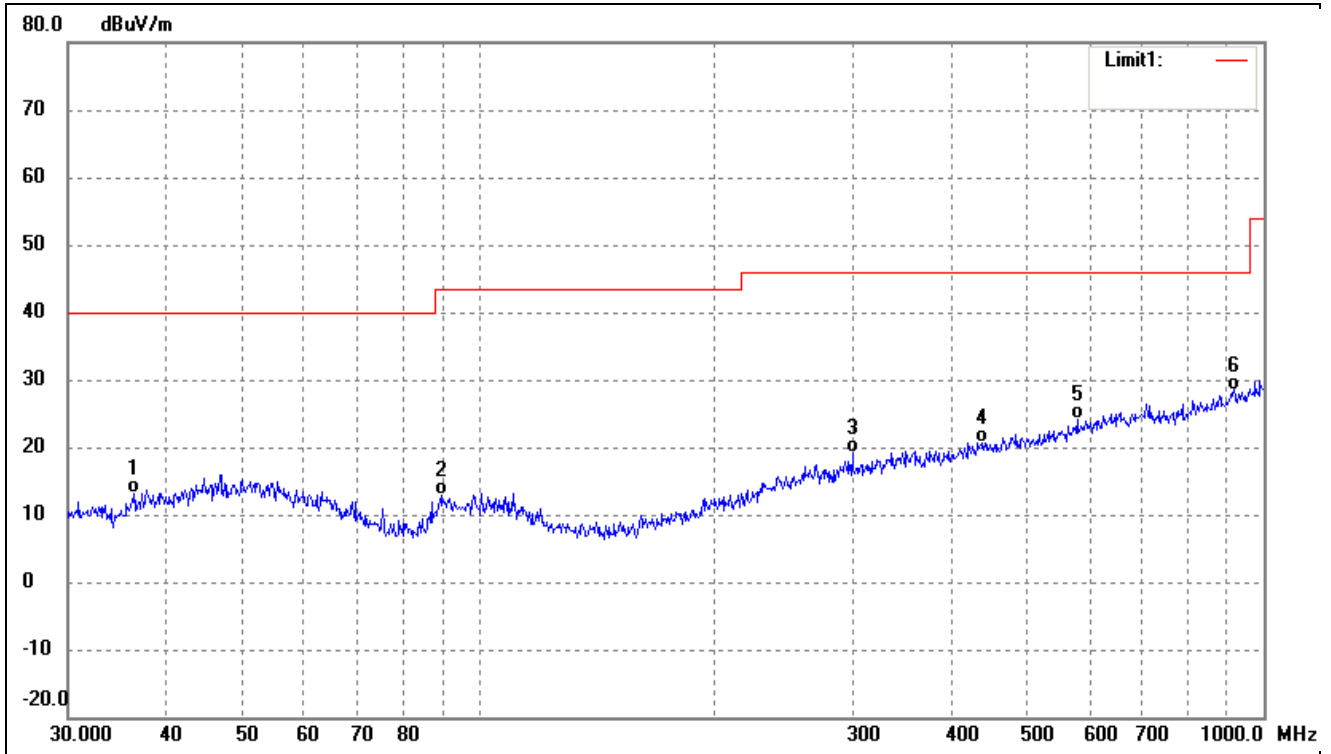
The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of  $-6\text{dB}\mu\text{V}$  means the emission is  $6\text{dB}\mu\text{V}$  below the maximum limit. The equation for margin calculation is as follows:

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

### 4.4 Summary of Test Results/Plots

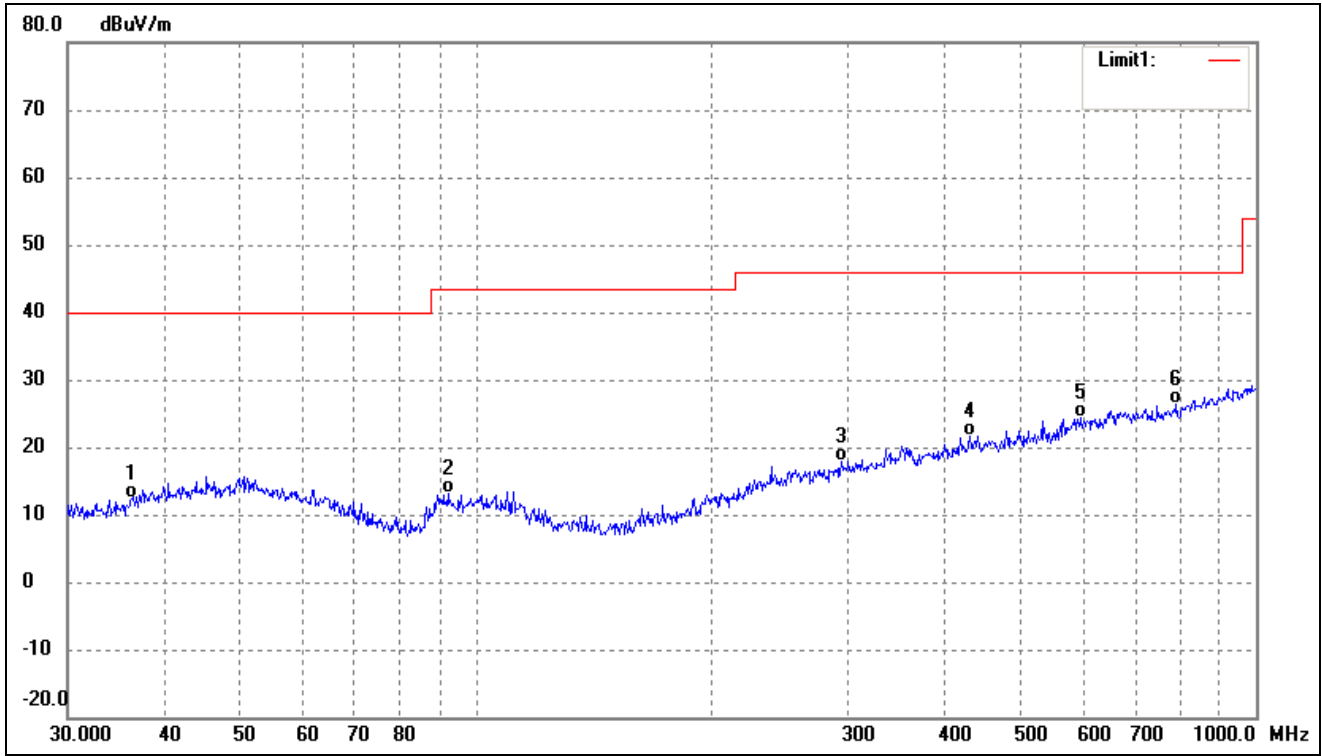
➤ Spurious Emissions Below 1GHz

Test Channel	Low	Polarity:	Horizontal
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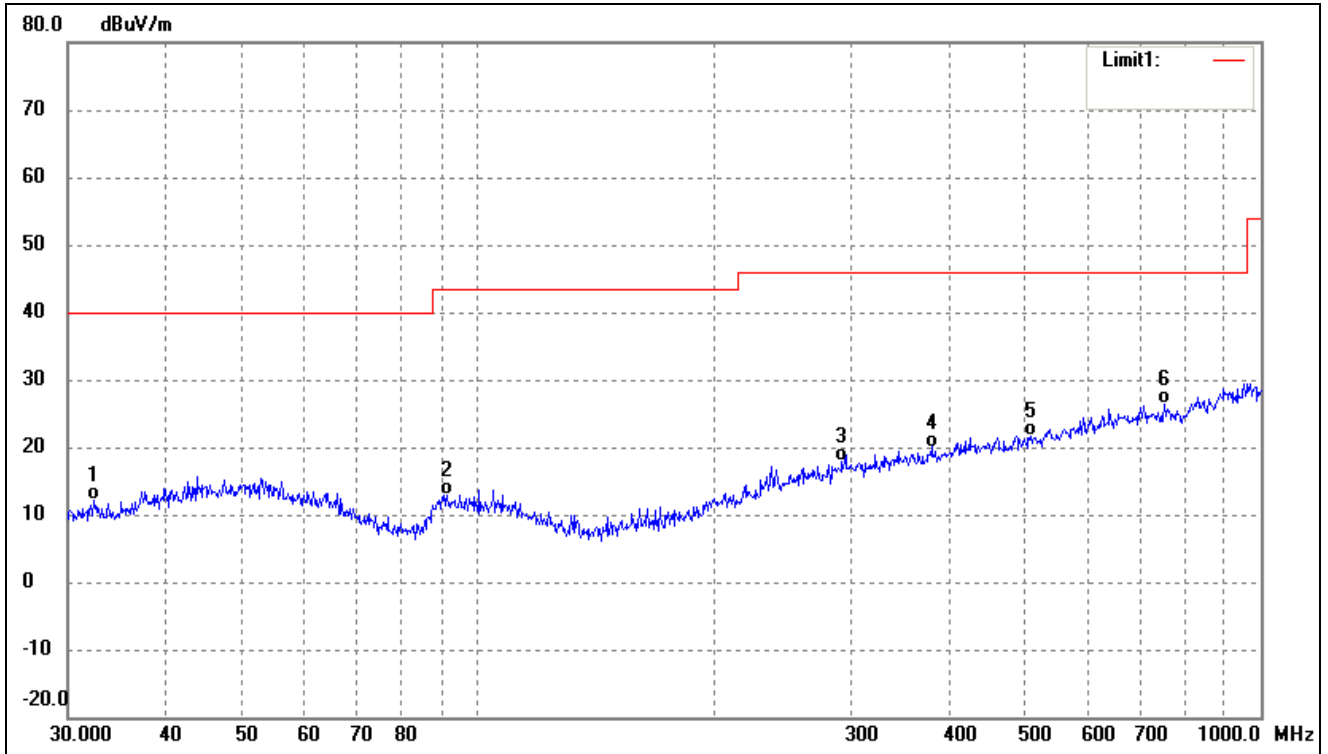
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	36.3814	27.07	-13.93	13.14	40.00	-26.86	327	100	QP
2	89.5900	26.61	-13.72	12.89	43.50	-30.61	92	100	QP
3	299.3158	27.24	-8.15	19.09	46.00	-26.91	160	100	QP
4	437.1199	26.79	-6.08	20.71	46.00	-25.29	97	100	QP
5	578.6699	27.81	-3.78	24.03	46.00	-21.97	243	100	QP
6	916.0687	27.13	1.37	28.50	46.00	-17.50	99	100	QP

Test Channel	Low	Polarity:	Vertical
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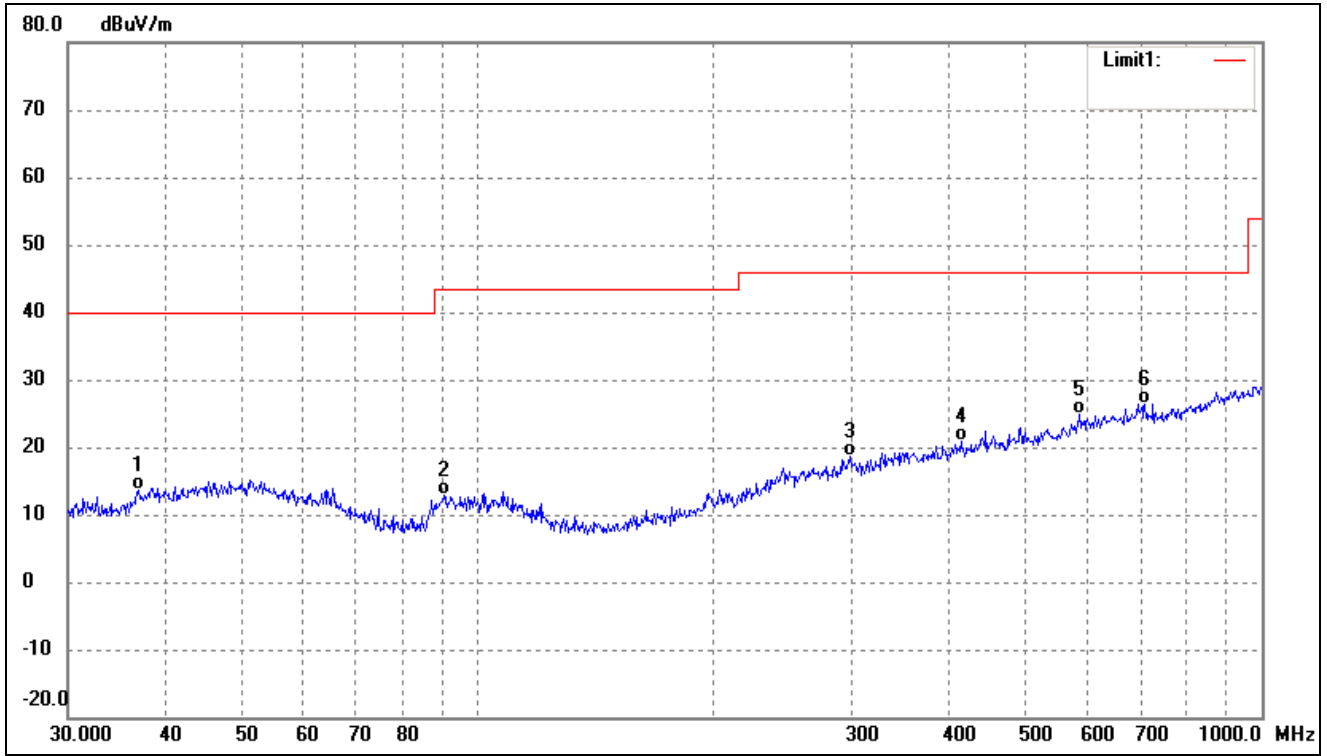
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	36.2541	26.29	-13.99	12.30	40.00	-27.70	245	100	QP
2	92.1388	26.87	-13.83	13.04	43.50	-30.46	92	100	QP
3	294.1137	26.21	-8.23	17.98	46.00	-28.02	329	100	QP
4	429.5228	27.66	-6.06	21.60	46.00	-24.40	112	100	QP
5	595.1329	27.66	-3.35	24.31	46.00	-21.69	358	100	QP
6	790.6188	28.00	-1.62	26.38	46.00	-19.62	90	100	QP

Test Channel	Middle	Polarity:	Horizontal
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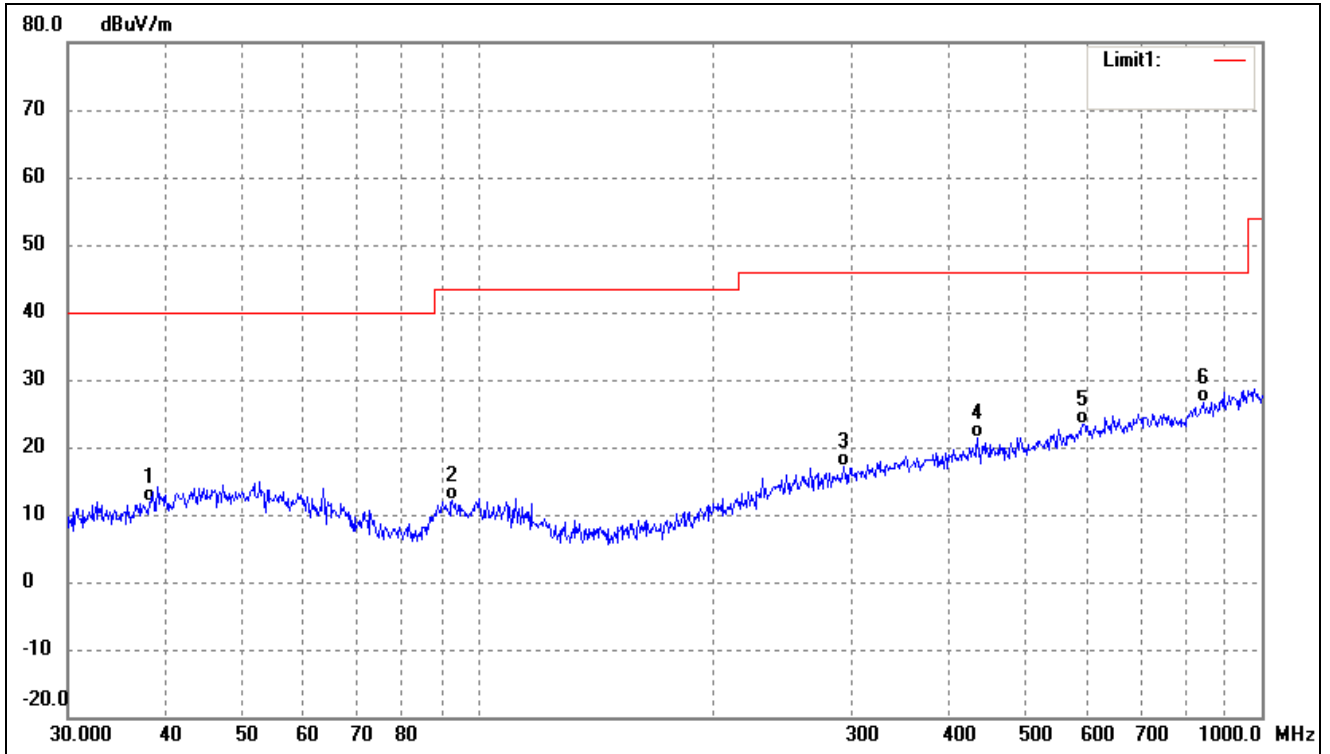
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	32.4059	26.95	-14.83	12.12	40.00	-27.88	232	100	QP
2	91.4949	26.64	-13.70	12.94	43.50	-30.56	287	100	QP
3	292.0583	26.21	-8.37	17.84	46.00	-28.16	72	100	QP
4	379.9141	26.91	-6.91	20.00	46.00	-26.00	250	100	QP
5	508.2582	27.13	-5.54	21.59	46.00	-24.41	310	100	QP
6	752.7432	28.13	-1.87	26.26	46.00	-19.74	265	100	QP

Test Channel	Middle	Polarity:	Vertical
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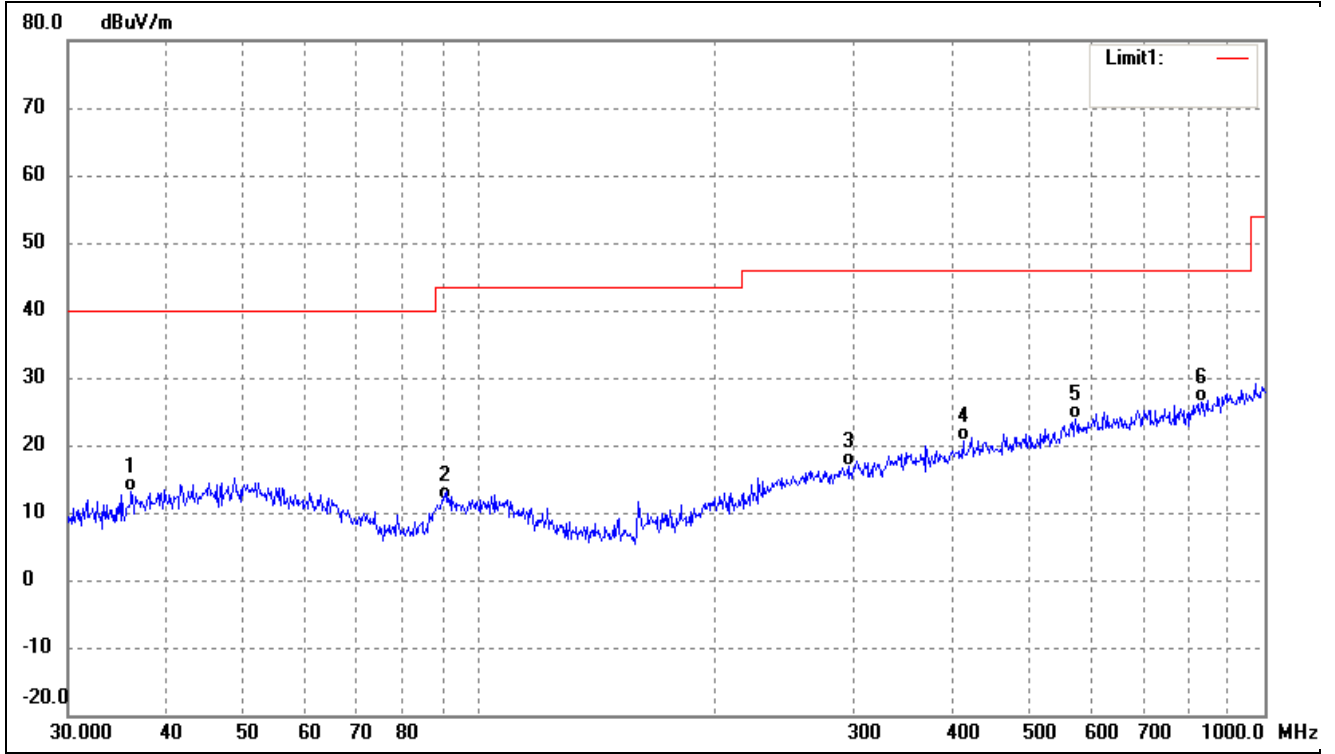
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	36.8952	27.39	-13.70	13.69	40.00	-26.31	357	100	QP
2	90.5374	26.28	-13.51	12.77	43.50	-30.73	173	100	QP
3	298.2681	26.72	-8.16	18.56	46.00	-27.44	66	100	QP
4	413.2706	27.26	-6.43	20.83	46.00	-25.17	328	100	QP
5	584.7894	28.52	-3.55	24.97	46.00	-21.03	151	100	QP
6	709.1823	28.29	-1.83	26.46	46.00	-19.54	243	100	QP

Test Channel	High	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	38.2120	25.08	-13.14	11.94	40.00	-28.06	123	100	QP
2	92.7872	26.10	-13.96	12.14	43.50	-31.36	172	100	QP
3	293.0842	25.50	-8.30	17.20	46.00	-28.80	68	100	QP
4	434.0651	27.41	-6.07	21.34	46.00	-24.66	90	100	QP
5	590.9737	26.74	-3.37	23.37	46.00	-22.63	260	100	QP
6	842.1296	26.94	-0.32	26.62	46.00	-19.38	233	100	QP

Test Channel	High	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	36.1272	27.18	-14.04	13.14	40.00	-26.86	84	100	QP
2	90.2205	25.26	-13.44	11.82	43.50	-31.68	192	100	QP
3	295.1469	25.08	-8.17	16.91	46.00	-29.09	150	100	QP
4	413.2706	27.14	-6.43	20.71	46.00	-25.29	96	100	QP
5	574.6258	27.91	-4.00	23.91	46.00	-22.09	212	100	QP
6	830.4002	26.56	-0.26	26.30	46.00	-19.70	321	100	QP



## ➤ Spurious Emissions Below 1GHz

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel-2402MHz							
4804.00	61.55	-3.87	57.68	74.00	-16.32	H	PK
4804.00	47.34	-3.87	43.47	54.00	-10.53	H	AV
7206.00	55.62	1.14	56.76	74.00	-17.24	H	PK
7206.00	40.98	1.19	42.17	54.00	-11.83	H	AV
4804.00	60.91	-3.86	57.05	74.00	-16.95	V	PK
4804.00	45.78	-3.86	41.92	54.00	-12.08	V	AV
7206.00	56.47	1.10	57.57	74.00	-16.43	V	PK
7206.00	42.38	1.10	43.48	54.00	-10.52	V	AV
Middle Channel-2440MHz							
4880.00	60.64	-3.74	56.90	74.00	-17.10	H	PK
4880.00	45.41	-3.74	41.67	54.00	-12.33	H	AV
7320.00	56.08	1.47	57.55	74.00	-16.45	H	PK
7320.00	42.21	1.47	43.68	54.00	-10.32	H	AV
4880.00	60.78	-3.74	57.04	74.00	-16.96	V	PK
4880.00	46.50	-3.74	42.76	54.00	-11.24	V	AV
7320.00	55.38	1.47	56.85	74.00	-17.15	V	PK
7320.00	40.47	1.47	41.94	54.00	-12.06	V	AV
High Channel-2480MHz							
4960.00	61.06	-3.59	57.47	74.00	-16.53	H	PK
4960.00	47.30	-3.59	43.71	54.00	-10.29	H	AV
7440.00	56.89	1.79	58.68	74.00	-15.32	H	PK
7440.00	39.56	1.79	41.35	54.00	-12.65	H	AV
4960.00	59.71	-3.59	56.12	74.00	-17.88	V	PK
4960.00	45.45	-3.59	41.86	54.00	-12.14	V	AV
7440.00	55.62	1.79	57.41	74.00	-16.59	V	PK
7440.00	39.98	1.79	41.77	54.00	-12.23	V	AV

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

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## 5. Out of Band Emissions

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### 5.1 Standard Applicable

According to §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

### 5.2 Test Procedure

According to the KDB 558074 D01 v05r02 Subclause 8.4 and ANSI C63.10-2013 Subclause 11.11, the Emissions in nonrestricted frequency bands test method as follows:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW  $\geq [3 \times \text{RBW}]$ .
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

According to the KDB 558074 D01 v05r02 Subclause 8.5 and ANSI C63.10-2013 Subclause 11.12, the Emissions in restricted frequency bands test method as follows:

#### A. Radiated emission measurements:

Set span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation (2310MHz to 2420MHz for low bandedge, 2460MHz to 2500MHz for the high bandedge)

RBW = 1MHz, VBW = 1MHz for peak value measured

RBW = 1MHz, VBW = 10Hz for average value measured

Sweep = auto; Detector function = peak/average; Trace = max hold

All the trace to stabilize, set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. Those emission must comply with the 15.209 limit for fall in the restricted bands listed in section 15.205. Note that the method of measurement KDB publication number: 913591 may be used for the radiated bandedge measurements.

## B. Antenna-port conducted measurements

Peak emission levels are measured by setting the instrument as follows:

- a) RBW = as specified in Table 9/
- b) VBW  $\geq [3 \times \text{RBW}]$ .
- c) Detector = peak.
- d) Sweep time = auto.
- e) Trace mode = max hold.
- f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be lengthened for low-duty-cycle applications.)

**Table 9—RBW as a function of frequency**

Frequency	RBW
9 kHz to 150 kHz	200 Hz to 300 Hz
0.15 MHz to 30 MHz	9 kHz to 10 kHz
30 MHz to 1000 MHz	100 kHz to 120 kHz
>1000 MHz	1 MHz

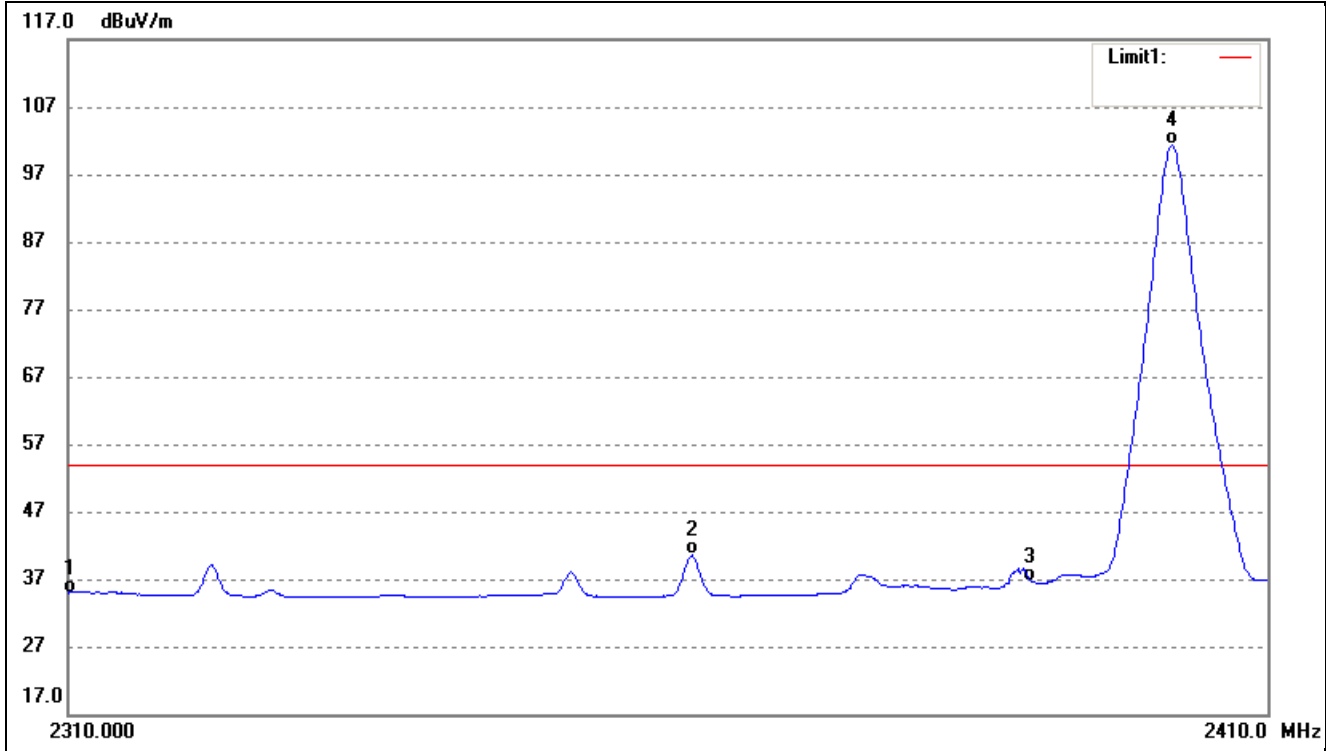
If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in section 8.1. Report the three highest emissions relative to the limit.

## 5.3 Summary of Test Results/Plots

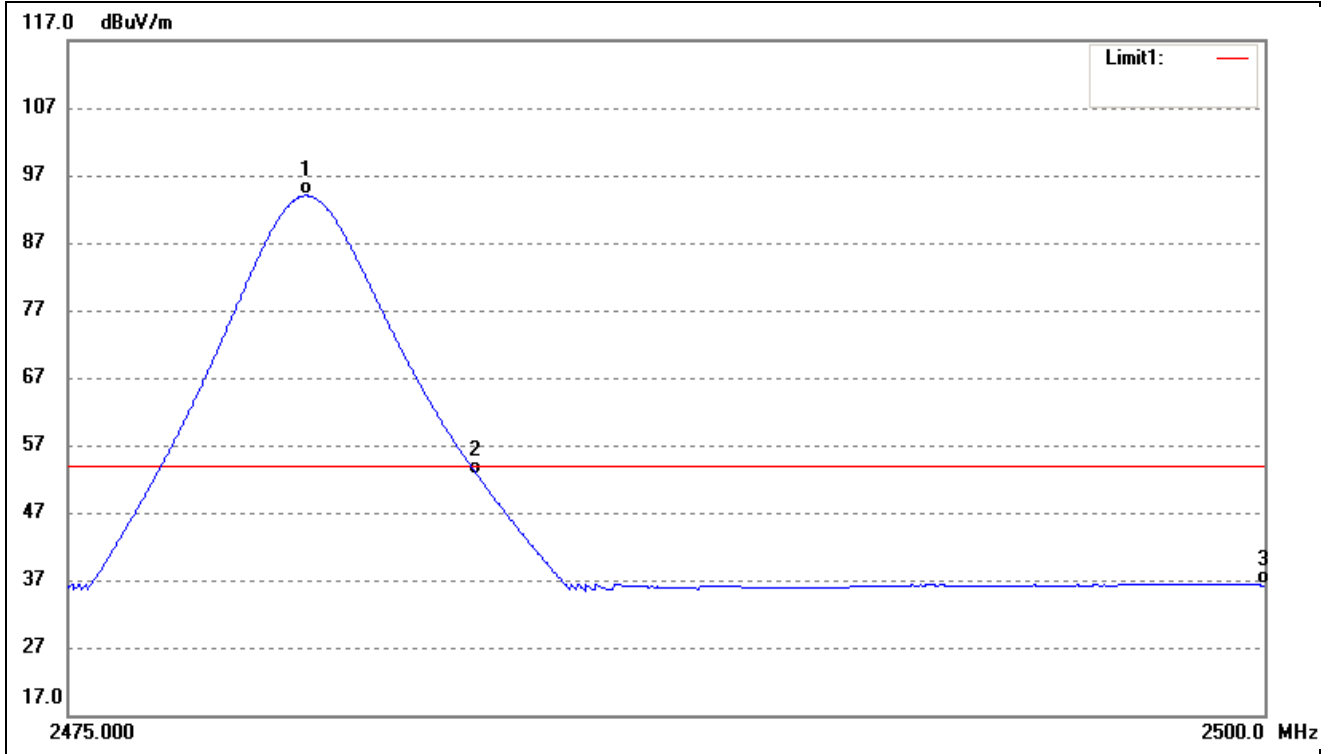
## ➤ Radiated test

Test Channel	Low	Polarity:	Vertical(worst case)
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	42.77	-7.78	34.99	54.00	-19.01	Average Detector
	2310.000	54.40	-7.78	46.62	74.00	-27.38	Peak Detector
2	2361.471	48.02	-7.48	40.54	54.00	-13.46	Average Detector
	2390.000	58.56	-7.32	51.24	74.00	-22.76	Peak Detector
3	2390.000	43.99	-7.32	36.67	54.00	-17.33	Average Detector
	2401.945	113.02	-7.25	105.77	/	/	Peak Detector
4	2401.843	108.61	-7.25	101.36	/	/	Average Detector

Test Channel	High	Polarity:	Vertical(worst case)
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2479.955	100.80	-6.79	94.01	/	/	Average Detector
	2480.005	110.72	-6.79	103.93	/	/	Peak Detector
2	2483.500	59.28	-6.77	52.51	54.00	-1.49	Average Detector
	2483.500	71.74	-6.77	64.97	74.00	-9.03	Peak Detector
3	2500.000	42.95	-6.67	36.28	54.00	-17.72	Average Detector
	2500.000	54.83	-6.67	48.16	74.00	-25.84	Peak Detector

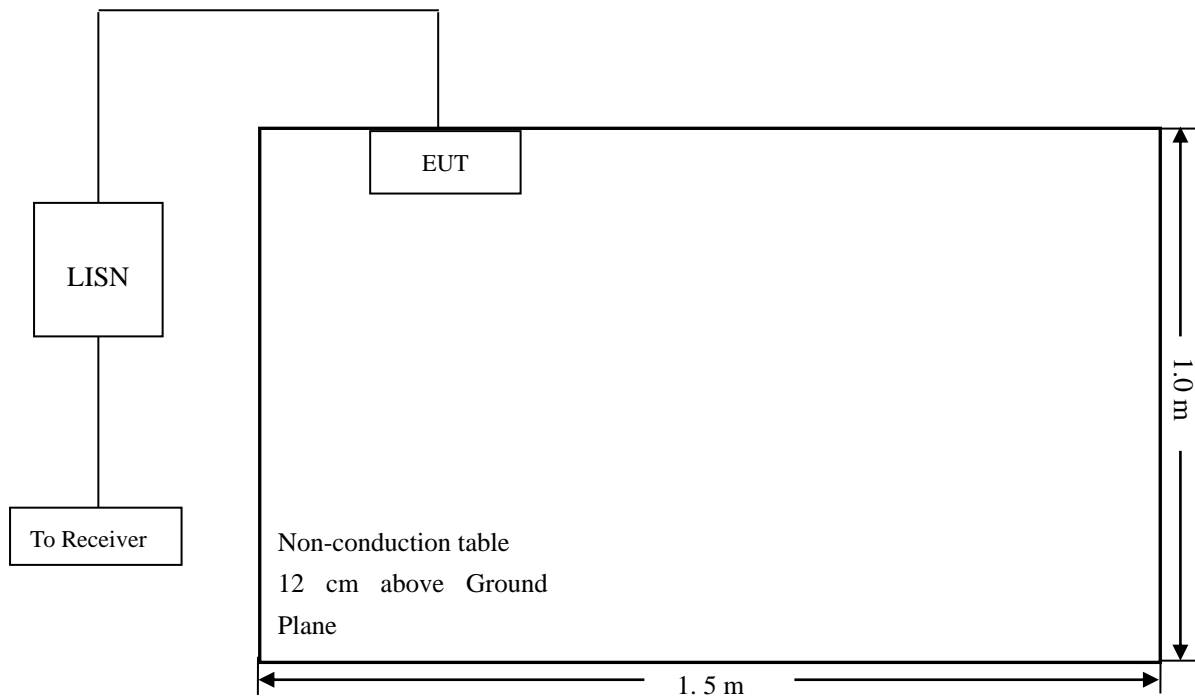
## 6. Conducted Emissions

### 6.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 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.

### 6.2 Basic Test Setup Block Diagram



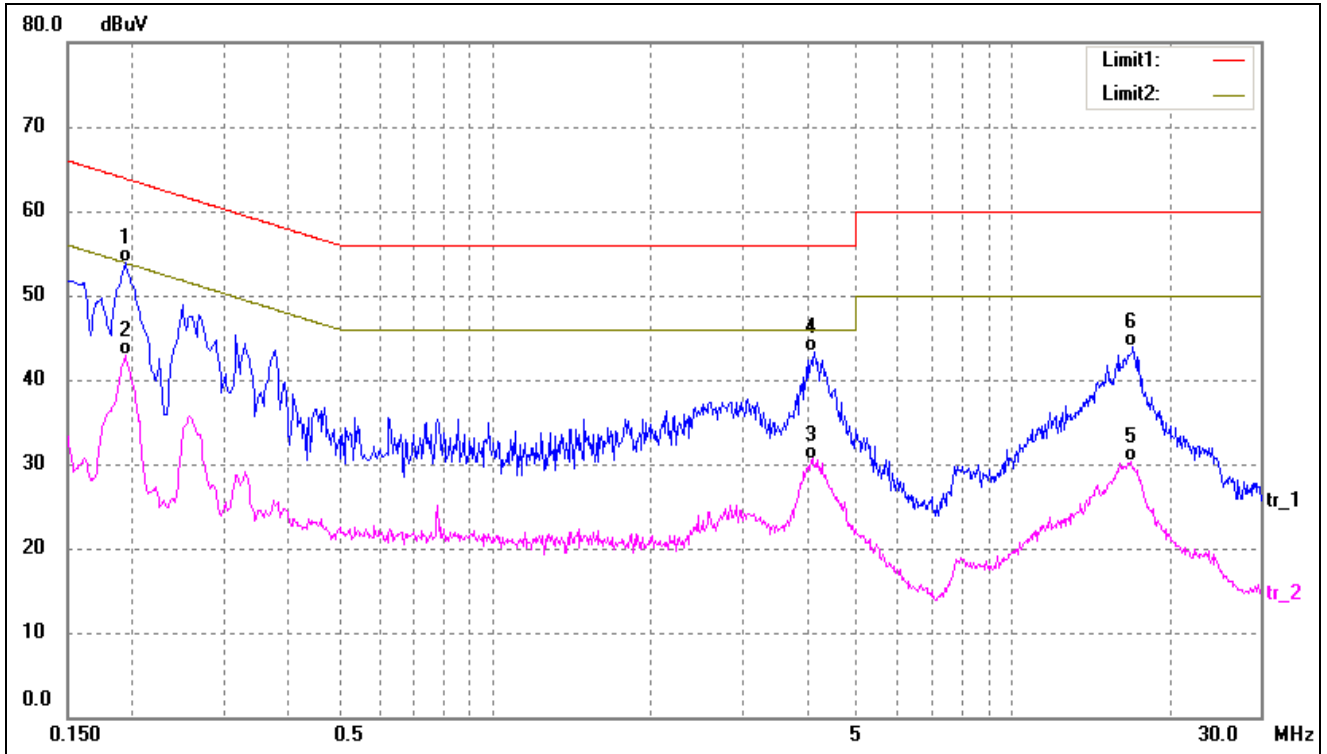
### 6.3 Test Receiver Setup

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

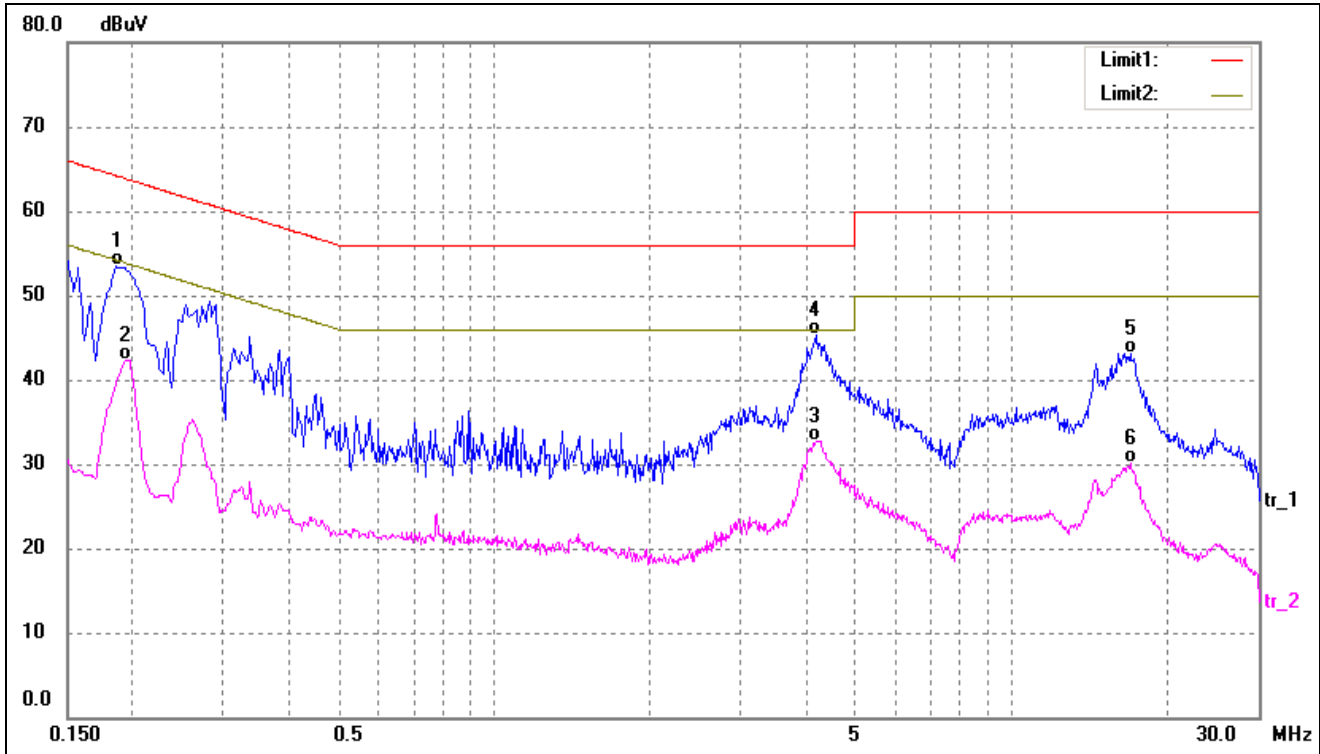
### 6.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1940	43.85	10.12	53.97	63.86	-9.89	QP
2	0.1940	32.70	10.12	42.82	53.86	-11.04	AVG
3	4.1020	19.88	10.72	30.60	46.00	-15.40	AVG
4	4.1540	32.50	10.72	43.22	56.00	-12.78	QP
5	16.9060	19.21	11.09	30.30	50.00	-19.70	AVG
6	17.0980	32.91	11.09	44.00	60.00	-16.00	QP

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1860	43.45	10.11	53.56	64.21	-10.65	QP
2	0.1940	32.27	10.12	42.39	53.86	-11.47	AVG
3	4.1860	22.03	10.72	32.75	46.00	-13.25	AVG
4	4.2140	34.61	10.72	45.33	56.00	-10.67	QP
5	16.9740	32.11	11.09	43.20	60.00	-16.80	QP
6	16.9740	18.98	11.09	30.07	50.00	-19.93	AVG

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