Prüfbericht-Nr.: *Test report No.:*	**50067189 001**	**Auftrags-Nr.:** *Order No.:*	164075918	Seite 1 von 26 *Page 1 of 26*
Kunden-Referenz-Nr.: *Client reference No.:*	N/A	**Auftragsdatum:** *Order date.:*	13.10.2016	
Auftraggeber: *Client:*	**Binatone Electronics International Ltd.** Floor 23A, 9 Des Voeux Road West, Sheung Wan, Hong Kong			
Prüfgegenstand: *Test item:*	2.8" Video Baby Monitor (Baby Unit)			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	Roomie30BU (Trade Mark: iNanny)			
Auftrags-Inhalt: *Order content:*	FCC and IC approval			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109 CFR47 FCC Part 2: Section 2.1091		RSS-247 Issue 1 May 2015 RSS-Gen Issue 4 November 2014 ICES-003 Issue 6 January 2016 RSS-102 Issue 5 March 2015	

Wareneingangsdatum: *Date of receipt:*	28.09.2016	Please refer to photo documents
Prüfmuster-Nr.: *Test sample No.:*	A000409587 010	
Prüfzeitraum: *Testing period:*	28.09.2016 - 09.12.2016	
Ort der Prüfung: *Place of testing:*	Audix Technology (Shenzhen) Co., Ltd.	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüfergebnis*: *Test result*:*	Pass	

geprüft von / *tested by:*

Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*
29.12.2016	Ryan Yang / Senior Project Engineer	

kontrolliert von / *reviewed by:*

Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*
29.12.2016	Winnie Hou / Technical Certifier	

Sonstiges / *Other:*

FCC ID: VLJ-RM30BU
IC: 4522A-RM30BU HVIN: Roomie30BU

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged:*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhalt
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = passed a.m. test specifications(s)		F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 99% BANDWIDTH
RESULT: Pass

5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH
RESULT: Pass

5.1.5 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.6 20DB BANDWIDTH
RESULT: Pass

5.1.7 CARRIER FREQUENCY SEPARATION
RESULT: Pass

5.1.8 NUMBER OF HOPPING FREQUENCY
RESULT: Pass

5.1.9 TIME OF OCCUPANCY
RESULT: Pass

5.1.10 CONDUCTED EMISSION ON AC MAINS
RESULT: Pass

5.1.11 RADIATED EMISSION
RESULT: Pass

6.1.1 ELECTROMAGNETIC FIELDS
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results of General 2.4GHz Wireless of Conducted Testing

Appendix C: Test Results of General 2.4GHz Wireless of Radiated Testing

2 Test Sites

2.1 Test Facilities

Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Road, Block 52, Shenzhen Science & Industry Park, Nantou, Shenzhen, Guangdong, 518057 China

FCC Registration No.: 90454

Test site Industry Canada No.: 5183A-1

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Audix Technology (Shenzhen) Co., Ltd.

Radio Spectrum Test				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
Spectrum	Agilent	N9030A	MY51380221	14.10.2017
Conducted Emission on AC Mains				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
Test Receiver	R&S	ESCI	100842	23.04.2017
L.I.S.N.#1	R&S	ESH2-Z5	100429	17.10.2017
L.I.S.N.#2	Kyoritsu	K NW-403D	8-1750-2	23.04.2017
Terminator	Hubersuhner	50Ω	No.1	04.05.2017
Terminator	Hubersuhner	50Ω	No.2	04.05.2017
RF Cable	MIYAZAKI	3D-2W	No.1	23.04.2017
Coaxial Switch	Anritsu	MP59B	6200766906	22.04.2017
Spurious Emission, Below 1GHz				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Spectrum	Agilent	E4407B	MY41440292	23.04.2017
Test Receiver	R&S	ESVS10	834468/011	23.04.2017
Amplifier	HP	8447D	2648A04738	23.04.2017
Loop Antenna	Chase	HLA6120	1062	24.09.2017
Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-710	19.07.2017
RF Cable	MIYAZAKI	CFD400NL-LW	No.3	25.09.2017
Coaxial Switch	Anritsu	MP59B	6201397222	22.04.2017
Attenuator	EMCI	EMCI-N-6-06	AT-N0639	25.09.2017
Spurious Emission, Above 1GHz				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
3#Chamber	AUDIX	N/A	N/A	20.05.2017
Spectrum Analyzer	Agilent	E4446A	US44300459	23.04.2017
Horn Antenna	ETS	3115	9510-4877	14.10.2017
Amplifier	Agilent	8449B	3008A02495	23.04.2017
RF Cable	Hubersuhner	SUCOFLEX106	505238/6	23.04.2017

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Item	Uncertainty	Remark
Radiated Emission test in 3m chamber	±2.8 dB	Below 1GHz
Radiated Emission test in 3m chamber	±5.8 dB	Above 1GHz
Conducted Spurious emission test	±2.0 dB	
Output power test	±0.8 dB	
Power density test	±2.0 dB	
Bandwidth	±83 KHz	
Temperature	±3%	
humidity	±0.6℃	

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B & C of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Audix Technology (Shenzhen) Co., Ltd. Test facility located at No. 6, Ke Feng Road, Block 52, Shenzhen Science & Industry Park, Nantou, Shenzhen, Guangdong, 518057 China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a 2.8" Video Baby Monitor (Baby Unit) device, it supports general 2.4GHz wireless technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	2.8" Video Baby Monitor (Baby Unit)
Type Designation	Roomie30BU
Trade Mark	iNanny
FCC ID	VLJ-RM30BU
IC	4522A-RM30BU
HVIN	Roomie30BU
Operating Temperature Range	5 °C ~ +45 °C
Operating Voltage	DC 5.0V 600mA input via AC/DC adapter DC 3.7V 1200mAh via rechargeable Li-ion battery
Testing Voltage	AC 120V, 60Hz
AC/DC Adapter	Model: BLJ06W050060P1-U Input: AC 100-240V~50/60Hz, 0.2A Output: DC 5.0V~600mA
Li-ion Battery	Model: 5C DC 3.7V 1200mAh Li-ion battery
Technical Specification of General 2.4GHz Wireless	
Operating Frequency	2415.375 - 2471.625 MHz
Type of Modulation	GFSK
Channel Number	21 physical channels
Antenna Type	Integral Antenna
Antenna Gain	0 dBi

Table 3: RF Channel and Frequency of General 2.4GHz Wireless

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
01	**2415.375**	08	2435.625	15	2454.750
02	2418.750	09	2437.875	16	2458.125
03	2423.250	10	2440.125	17	2460.375
04	2426.625	**11**	**2443.500**	18	2462.625
05	2428.875	12	2445.750	19	2466.000
06	2431.125	13	2449.125	20	2468.250
07	2433.375	14	2451.375	**21**	**2471.625**

3.3 Independent Operation Modes

The basic operation modes are:

A. On, General 2.4GHz wireless transmitting
    1. Low channel
    2. Middle channel
    3. High channel

B. On, General 2.4GHz wireless on hopping channel

C. On, Charging mode

D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Block Diagram
- FCC/IC Label and Location Info
- Operation Description
- Photo Document
- Schematics
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013 and ANSI C63.4: 2014.

According to clause 3.1, all tests were performed on model Roomie30BU in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	DELL	Laititude E6420	N/A	N/A
2.8” Video Baby Monitor (Parent Unit)	Alford Industries Ltd.	Roomie30PU	N/A	N/A

4.4 Countermeasures to Achieve EMC Compliance

Additional countermeasures to the submitted test sample(s) for Radiated Spurious Emission were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

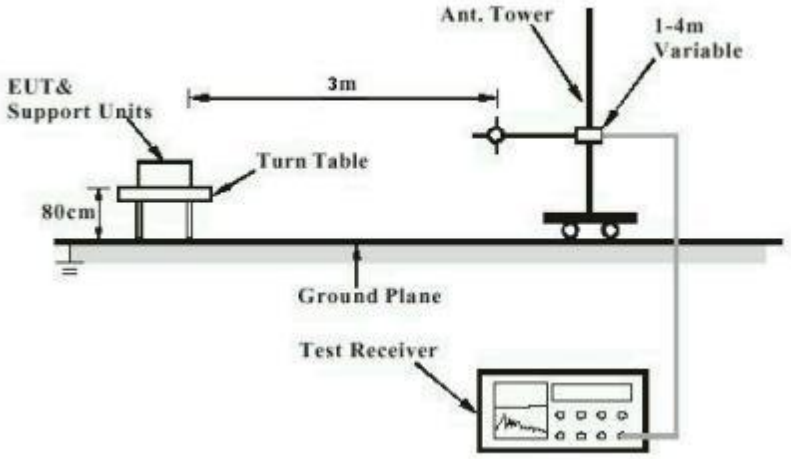


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

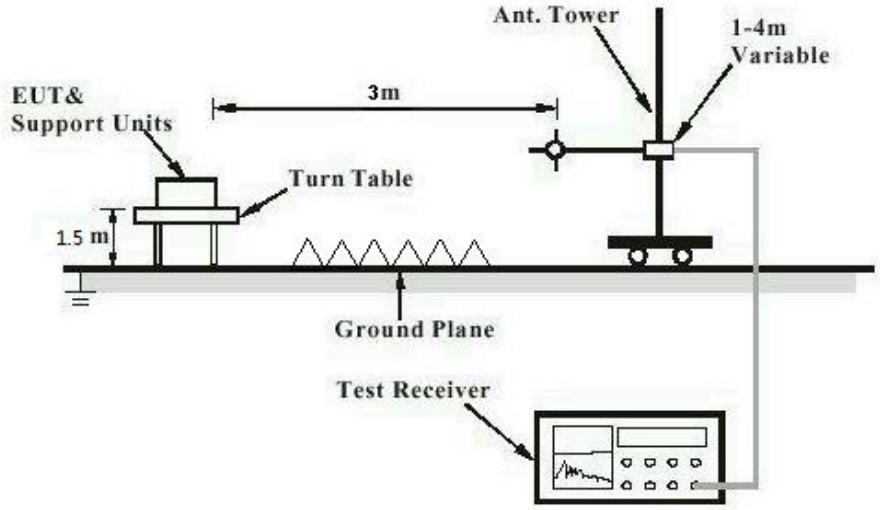


Diagram of Measurement Configuration for Mains Conduction Measurement

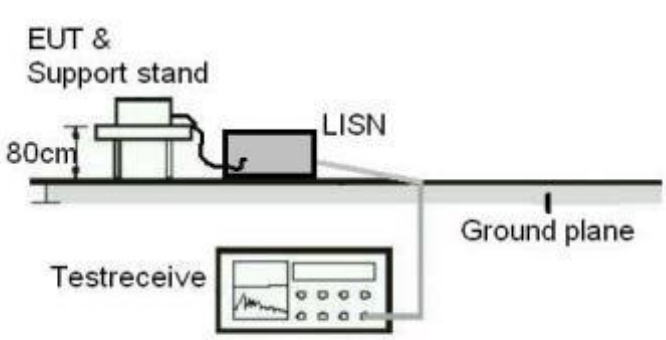
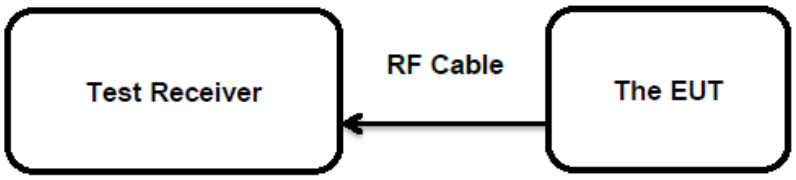


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(b)(1)
		RSS-247 Clause 5.4(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	0.125 Watts
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	18.11.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 5: Test Result of Maximum Peak Conducted Output Power

Test EUT	Frequency (MHz)	Measured Power		Limit (W)
		(dBm)	(W)	
Baby unit	2415.375	17.356	0.05440	< 0.125
	2443.500	16.319	0.04284	
	2471.625	15.410	0.03475	
Maximum Measured Value		17.356	0.05440	

Note: The cable loss is taken into account in results.

For the measurement records, refer to the appendix B.

5.1.3 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	RSS-Gen Clause 6.6
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	18.11.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 6: Test Result of 99% Bandwidth

Test EUT	Frequency (MHz)	99% Bandwidth (MHz)	Limit (kHz)
Baby unit	2415.375	1.678	/
	2443.500	1.692	
	2471.625	1.696	
Maximum Measured Value		1.696	

For the measurement records, refer to the appendix B.

5.1.4 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	18.11.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix B.

5.1.5 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205
		RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
		RSS-Gen Issue 4 Table 4
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	Refer to test result
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix C.

5.1.6 20dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(1)
		RSS-247 Clause 5.1(1)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	18.11.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 7: Test Result of 20dB Bandwidth

Test EUT	Frequency (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
Baby unit	2415.375	1677.00	1118.000	/
	2443.500	1664.00	1109.333	
	2471.625	1674.00	1116.000	
Maximum Measured Value		1677.00	1118.000	/

For the measurement records, refer to the appendix B.

5.1.7 Carrier Frequency Separation

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(1)
		RSS-247 Clause 5.1(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	≥ 25kHz or 2/3 of 20dB bandwidth, whichever is greater
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	09.12.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 8: Test Result of Carrier Frequency Separation

Test EUT	Test Channel	Frequency (MHz)	Measured Channel Separation (KHz)	Limit (kHz)
Baby unit	Low Channel	2415.375	3330.0	≥ 25kHz or 2/3 of 20dB bandwidth
	Adjacency Channel	2418.750		
	Middle Channel	2443.500	2240.0	
	Adjacency Channel	2445.750		
	High Channel	2471.625	2620.0	
	Adjacency Channel	2468.250		

Note: The limit is maximum 2/3 of the 20 dB bandwidth: 1118.000 KHz.

For the measurement records, refer to the appendix B.

5.1.8 Number of Hopping Frequency

RESULT: **Pass**

Test Specification

Test standard	:	FCC part 15.247(a)(1)(iii)
		RSS-247 Clause 5.1(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	≥ 15 non-overlapping channels
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	18.11.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 9: Test Result of Number of Hopping Frequency

Test EUT	Frequency Range	Measured Quantity of Hopping Channel	Limit
Baby unit	2415.375 - 2471.625 MHz	21	≥15

For the measurement records, refer to the appendix B.

5.1.9 Time of Occupancy

RESULT: **Pass**

Test Specification

Test standard	:	FCC part 15.247(a)(1)(iii)
		RSS-247 Clause 5.1(4)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 0.4s
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	23.11.2016
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 10: Test Result of Time of Occupancy

Test EUT	Frequency (MHz)	Pulse width (ms)	Number of Channels	Measured Dwell time (s)	Limit (s)
Baby unit	2415.375	2.435	138	0.336	0.4s
	2443.500	2.455	138	0.339	
	2471.625	2.450	138	0.338	

Note:

Dwell time = Pulse width x Number of channels in Period

Period = 0.4 (seconds/ channel) x 21 (channel) = 8.4 seconds

For the measurement records, refer to the appendix B.

5.1.10 Conducted Emission on AC Mains

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.207(a) & FCC Part 15.107(a)
		RSS-Gen Clause 8.8 & ICES-003
Basic standard	:	ANSI C63.10: 2013 & ANSI C63.4: 2014
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a) & FCC Part 15.107(a)
		RSS-Gen Table 3 & ICES-003 Table 2
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	Refer to test result
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, C
Earthing	:	Not connected
Ambient temperature	:	24 ℃
Relative humidity	:	53 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix C.

5.1.11 Radiated Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.109(a)
		ICES-003
Basic standard	:	ANSI C63.4: 2014
Frequency range	:	30 - 6000MHz
Classification	:	Class B
Limits	:	FCC Part 15.109(a)
		ICES-003 Table 5 & Table 7
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	Refer to test result
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Earthing	:	Not connected
Ambient temperature	:	24 ℃
Relative humidity	:	48 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix C.

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT: **Pass**

Test Specification

Test standard	:	CFR47 FCC Part 2: Section 2.1091
		CFR47 FCC Part 1: Section 1.1310
		FCC KDB Publication 447498 v06
		FCC KDB Publication 865664 D02 v01r02
		OET Bulletin 65 (Edition 97-01)
		RSS-102 Issue 5 March 2015

➢ **FCC requirements**

FCC requirement: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 20cm normally can be maintained between the user and the device.

MPE Calculation Method according to OET Bulletin 65

Power Density: $S_{(mW/cm^2)}= PG/4\pi R^2$ or $EIRP/4\pi R^2$

Where:

S = power density (mW/cm^2)

P = power input to the antenna (mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (cm)

The nominal maximum conducted output power specified:

2.4GHz FHSS: 18.00 dBm

From the peak RF output power, the minimum mobile separation distance, d=20 cm, as well as the antenna gain (Max. 0.0 dBi for 2.4GHz FHSS), the RF power density can be calculated as below:

For 2.4GHz FHSS: $\mathbf{S_{(mW/cm^2)}= PG/4\pi R^2 =}$ 0.020 mW/cm^2

Limits for Maximum Permissible Exposure (MPE) according to FCC Part 1.1310:

1.0 mW/cm^2

➢ **IC requirements:** The EUT shall comply with the requirement of RSS-102 section 2.5.2.

Exemption from Routine Evaluation Limits – RF Exposure Evaluation

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2}\ f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;

- RF exposure evaluation exempted power for 2.4GHz FHSS: 2.679 W

The nominal maximum conducted output power specified:

2.4GHz FHSS: 18.00 dBm

Antenna Gain: 0.0 dBi for 2.4GHz FHSS

The Max. e.i.r.p. for 2.4GHz FHSS = 20.00 dBm ≈ 0.100 W is less than the RF exposure evaluation exempted power. So RF exposure evaluation is not required.

"RF Radiation Exposure Statement Caution: This Transmitter must be installed to provide a separation distance of at least 20 cm from all persons."

7 Photographs of the Test Set-Up

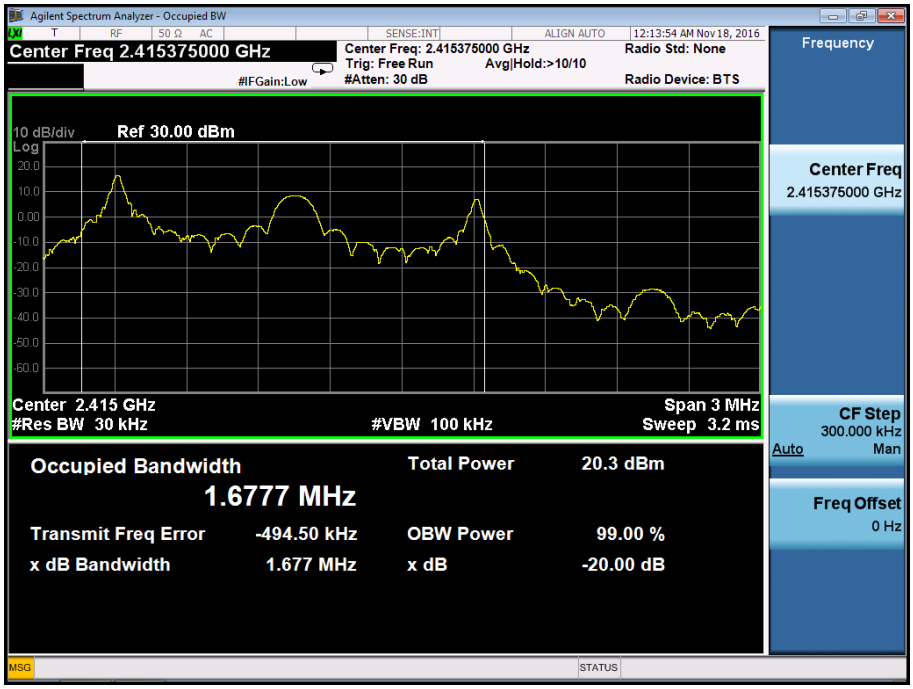
For photographs of the test set-up, refer to the appendix A.

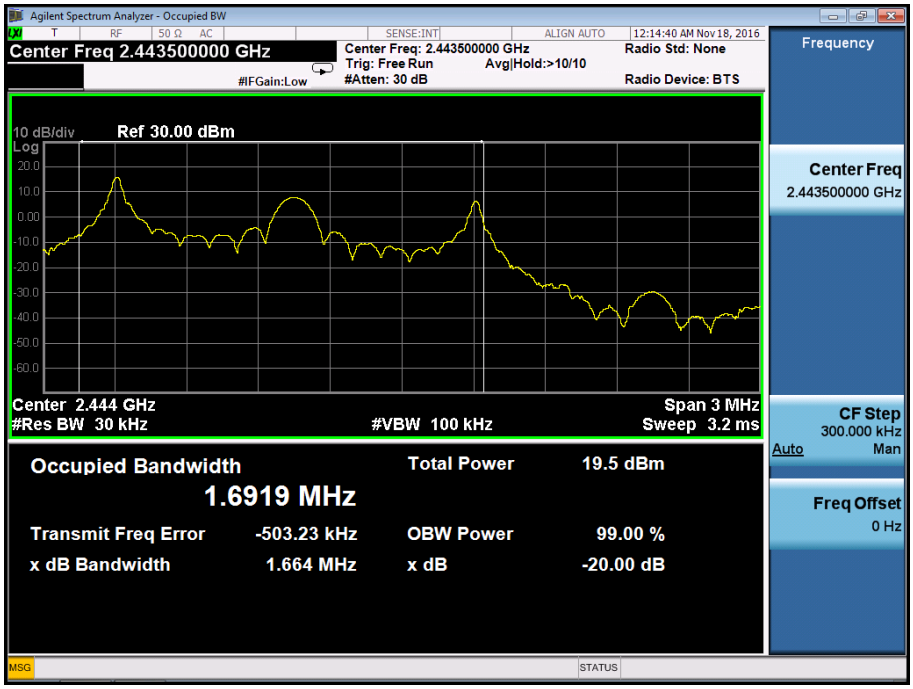
8 List of Tables

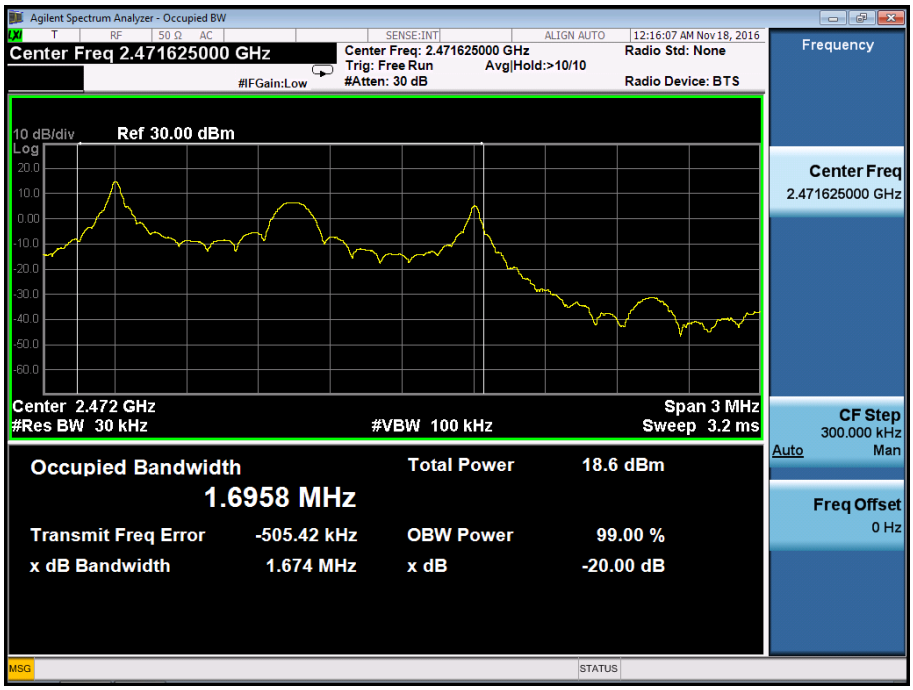
Appendix B: Test Results of Conducted Testing

Appendix B.1: Maximum Peak Conducted Output Power

Appendix B.2: 20dB Bandwidth & 99% Bandwidth

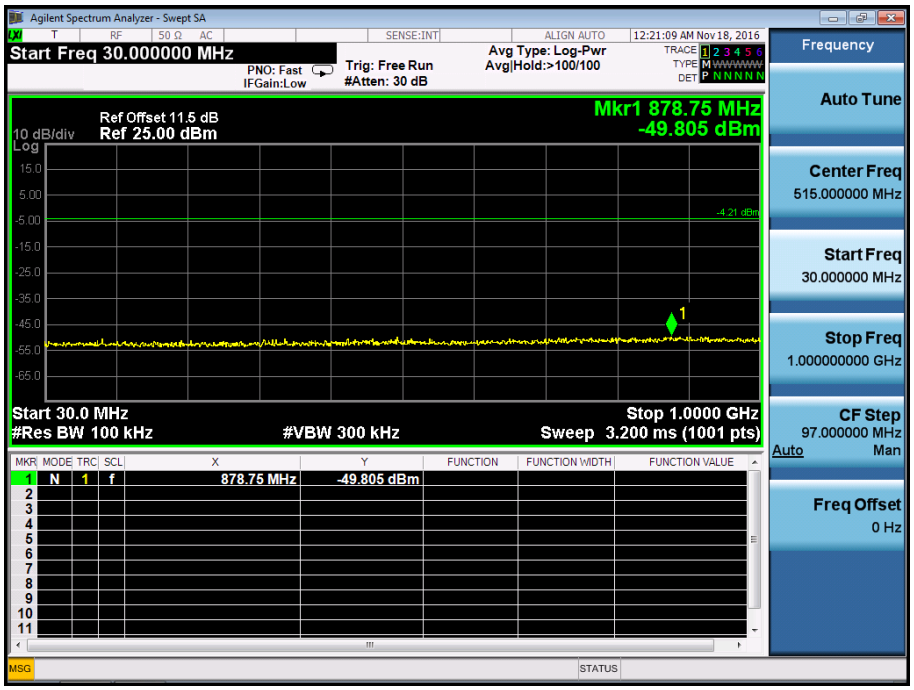


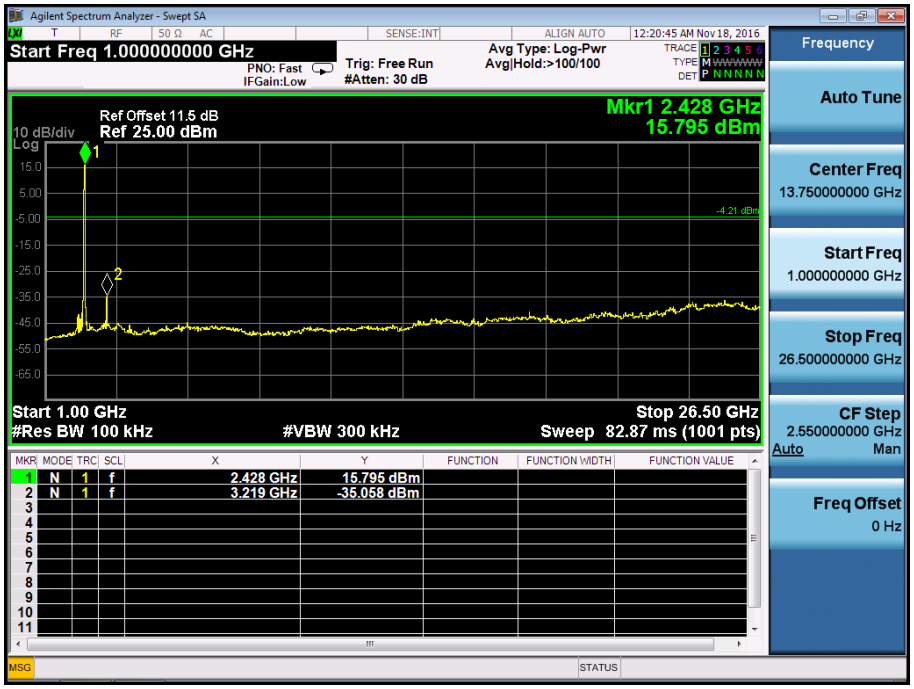

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.443500000 GHz
Center Freq: 2.443500000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
12:14:40 AM Nov 18, 2016
Frequency
10 dB/div
Log
Ref 30.00 dBm
Center 2.444 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3 MHz
Sweep 3.2 ms
Occupied Bandwidth
1.6919 MHz
Total Power
19.5 dBm
Transmit Freq Error
-503.23 kHz
OBW Power
99.00 %
x dB Bandwidth
1.664 MHz
x dB
-20.00 dB
Center Freq
2.443500000 GHz
CF Step
300.000 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.471625000 GHz
Center Freq: 2.471625000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
12:16:07 AM Nov 18, 2016
Frequency
10 dB/div
Log
Ref 30.00 dBm
Center 2.472 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3 MHz
Sweep 3.2 ms
Occupied Bandwidth
1.6958 MHz
Total Power
18.6 dBm
Transmit Freq Error
-505.42 kHz
OBW Power
99.00 %
x dB Bandwidth
1.674 MHz
x dB
-20.00 dB
Center Freq
2.471625000 GHz
CF Step
300.000 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

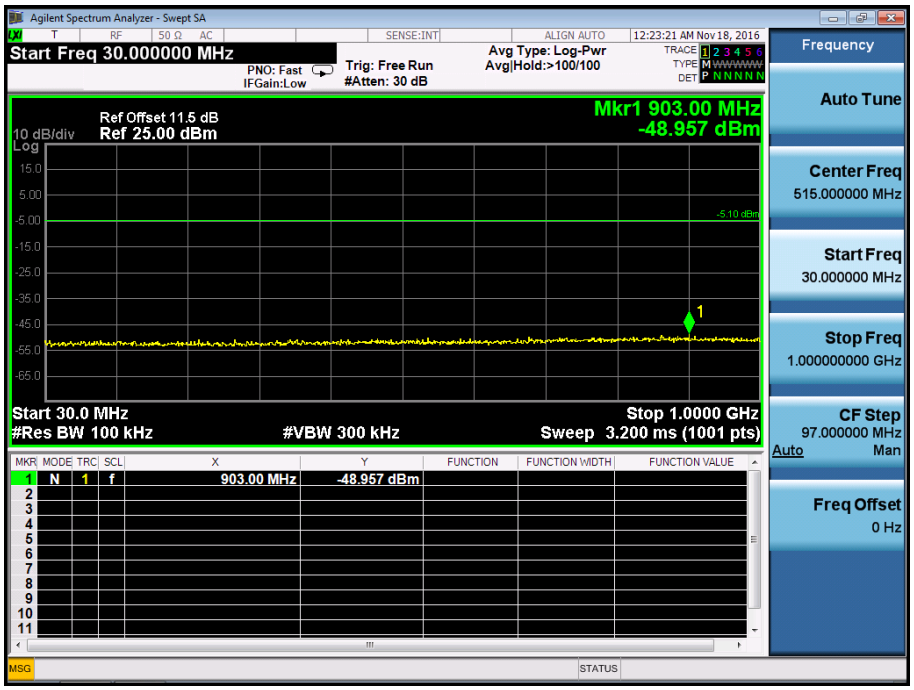
Appendix B.3: Conducted Spurious Emissions Measured in 100 kHz Bandwidth

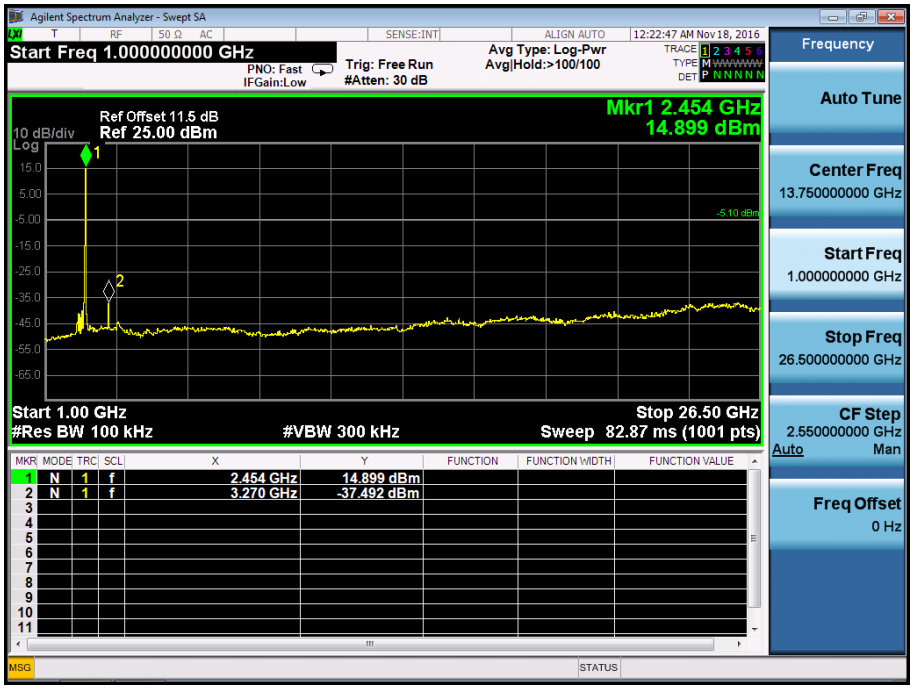
Low Channel



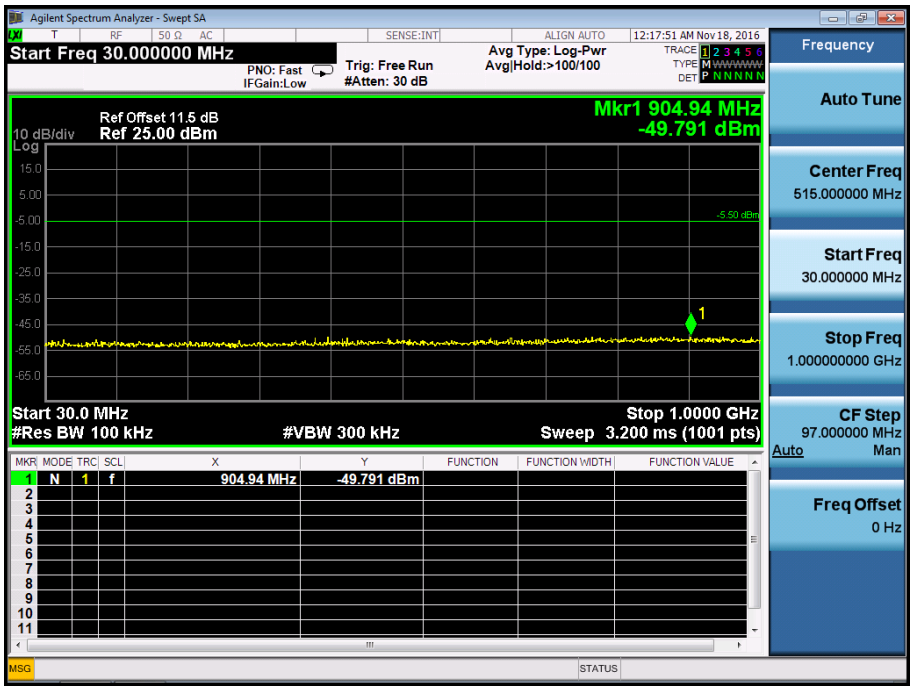


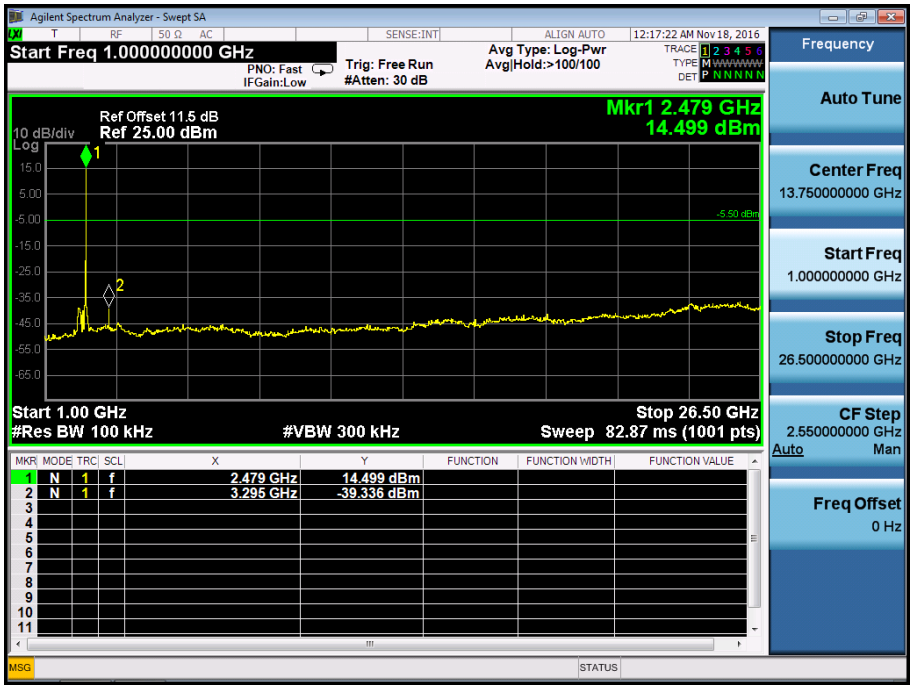
Middle Channel



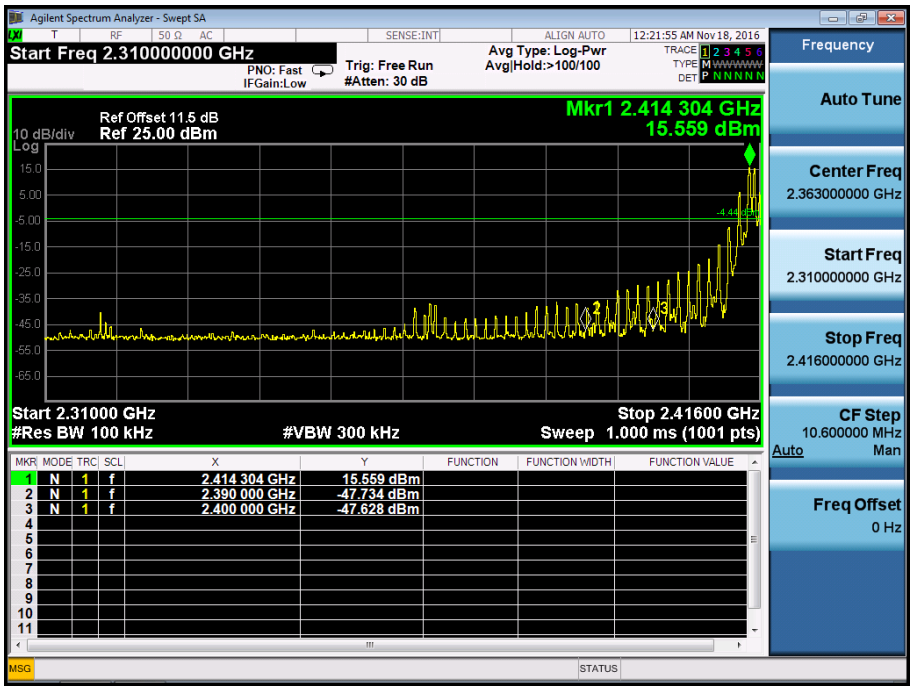


High Channel

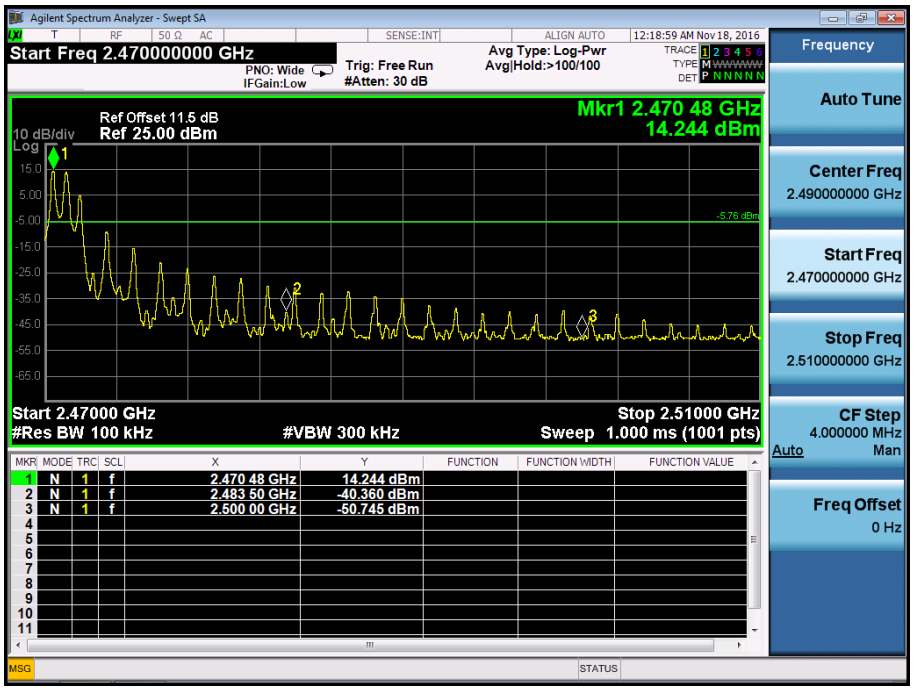




Bandedge: Low Channel



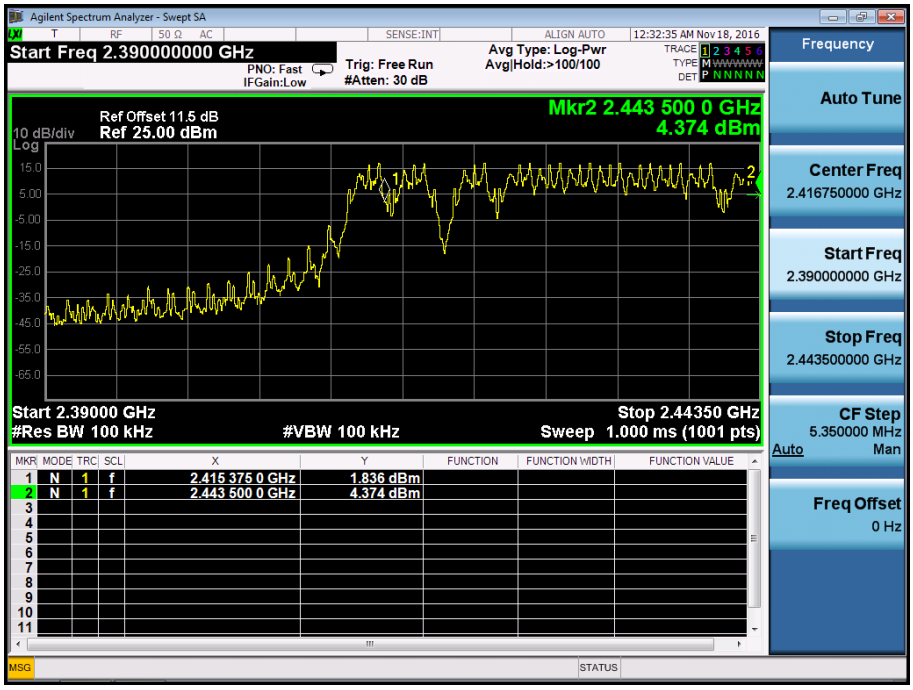
Bandedge: High Channel

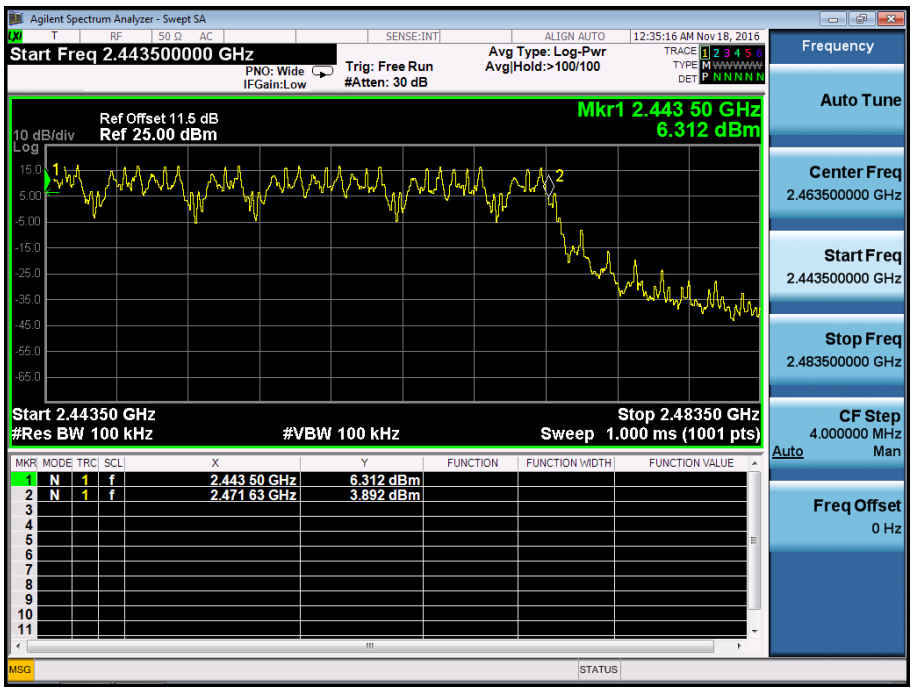


Appendix B.4: Carrier Frequency Separation

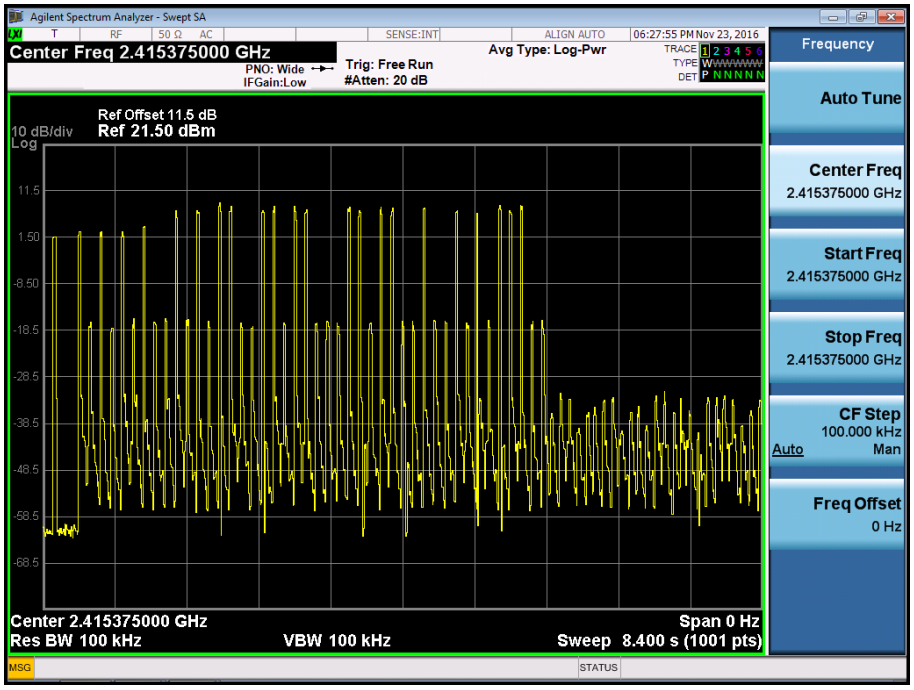

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.468250000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:16:23 PM Dec 09, 2016
Ref Offset 10.5 dB
10 dB/div
Ref 30.50 dBm
Mkr2 2.467 84 GHz
15.762 dBm
1Δ2
3Δ4
Center 2.468250 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10.00 MHz
Sweep 5.000 ms (1001 pts)
1 Δ2 1 f (Δ) -2.28 MHz (Δ) 1.230 dB
2 F 1 f 2.467 84 GHz 15.762 dBm
3 Δ4 1 f (Δ) 2.62 MHz (Δ) -1.844 dB
4 F 1 f 2.467 84 GHz 17.840 dBm
Frequency
Auto Tune
Center Freq
2.468250000 GHz
Start Freq
2.463250000 GHz
Stop Freq
2.473250000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

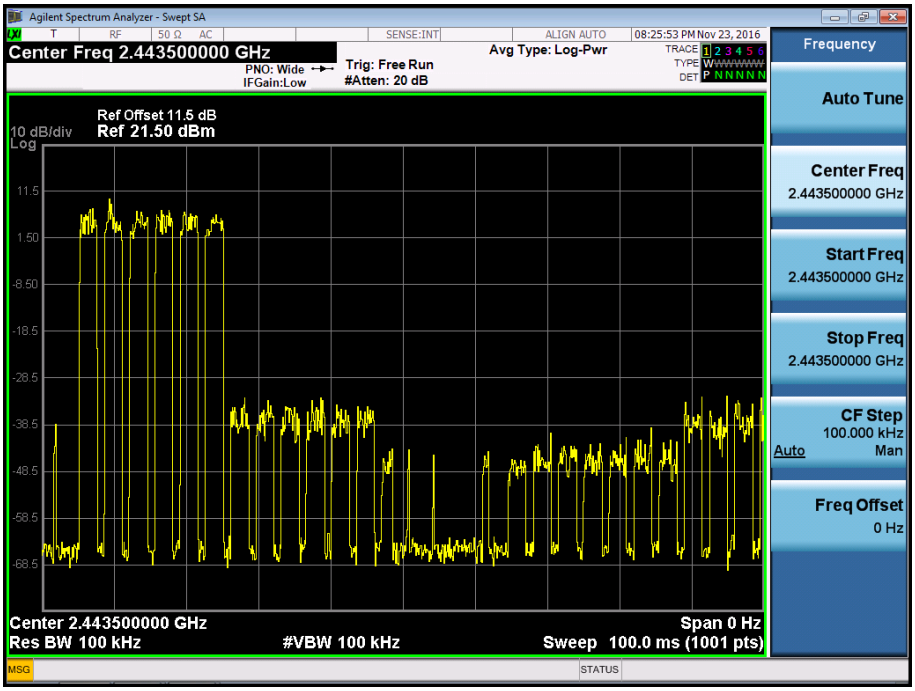
Appendix B.5: Number of Hopping Frequency



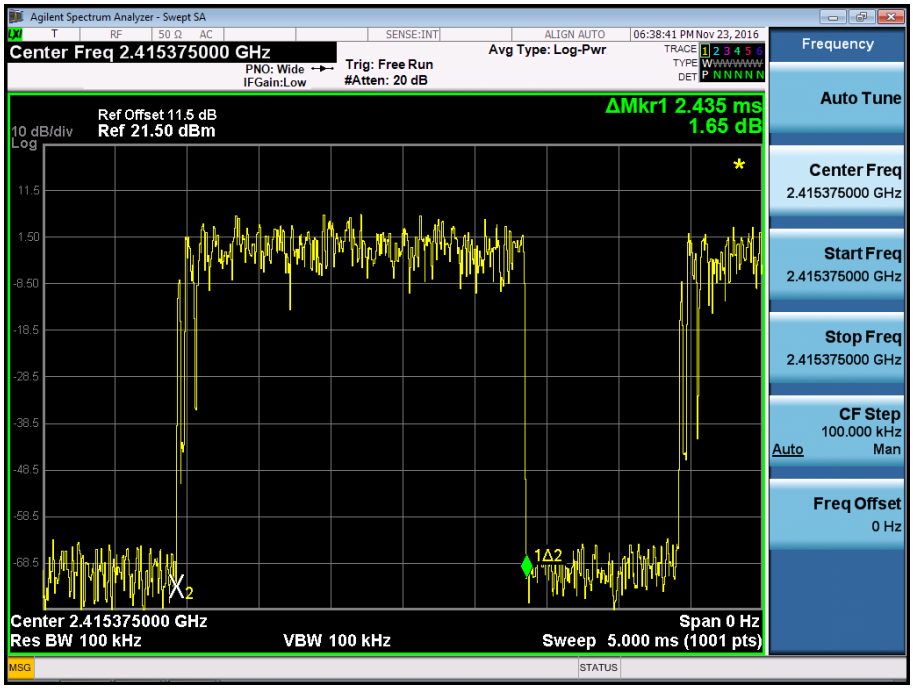


Appendix B.6: Time of Occupancy

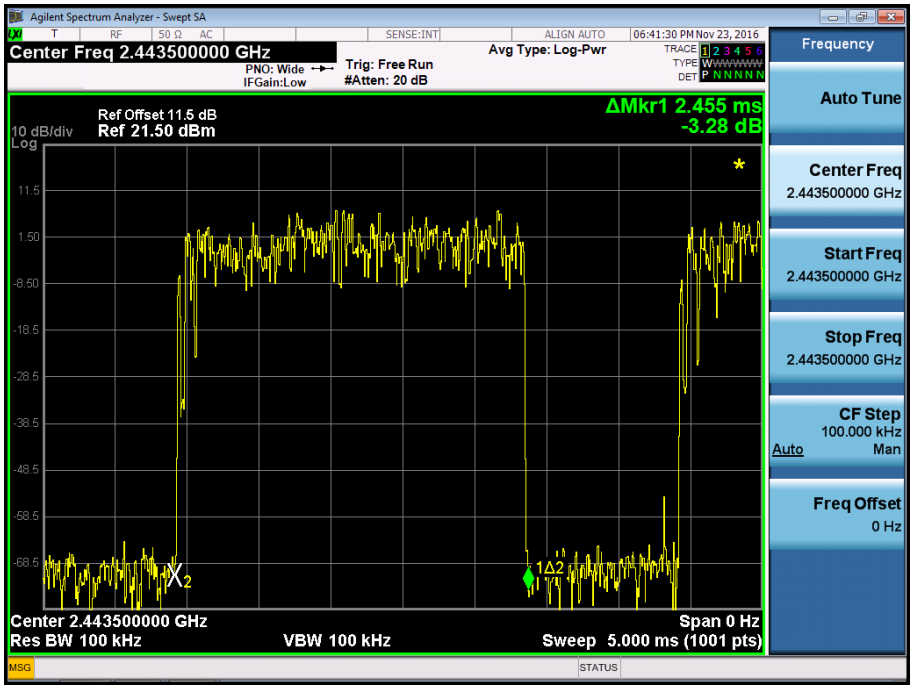




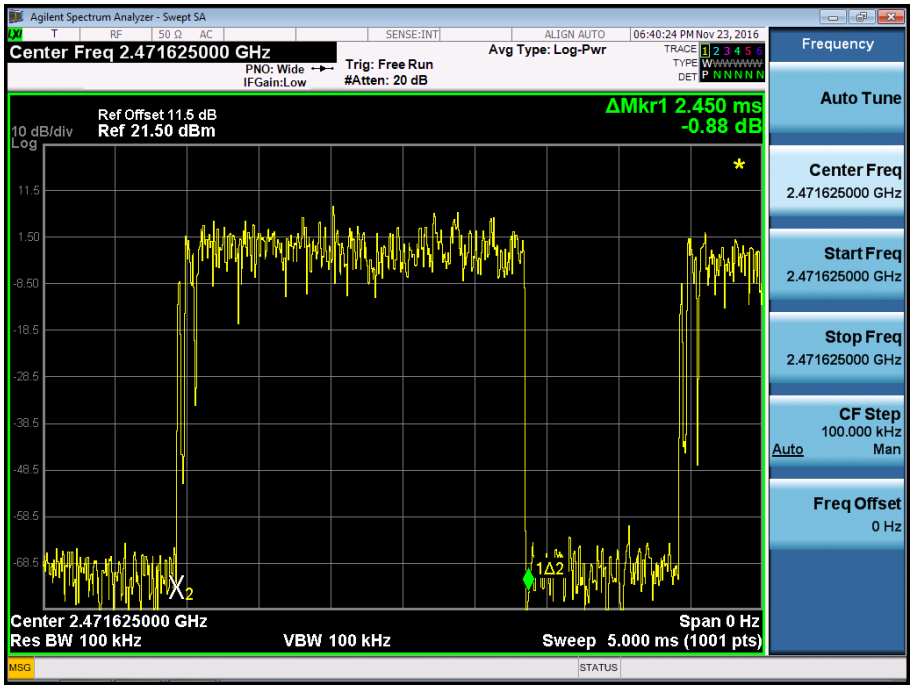
Low Channel



Middle Channel



High Channel



Appendix C: Test Results of Radiated Testing

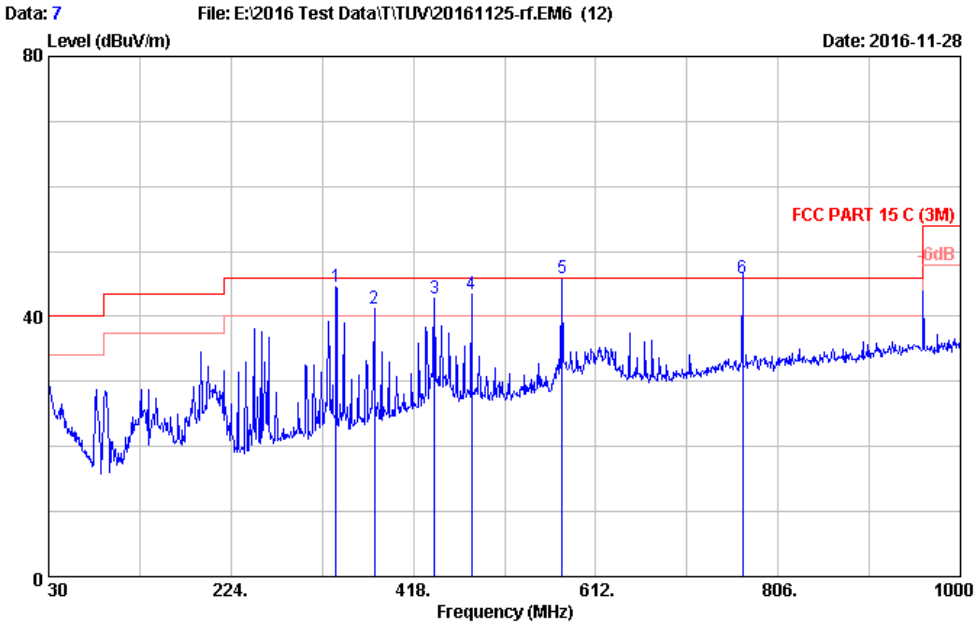
Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix C.1: Test Results of Radiated Spurious Emissions

30MHz - 1GHz, Low Channel

AUDIX®

No.6 Ke Feng Road,Science & Technology Park
Nanshan District, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 7
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX mode

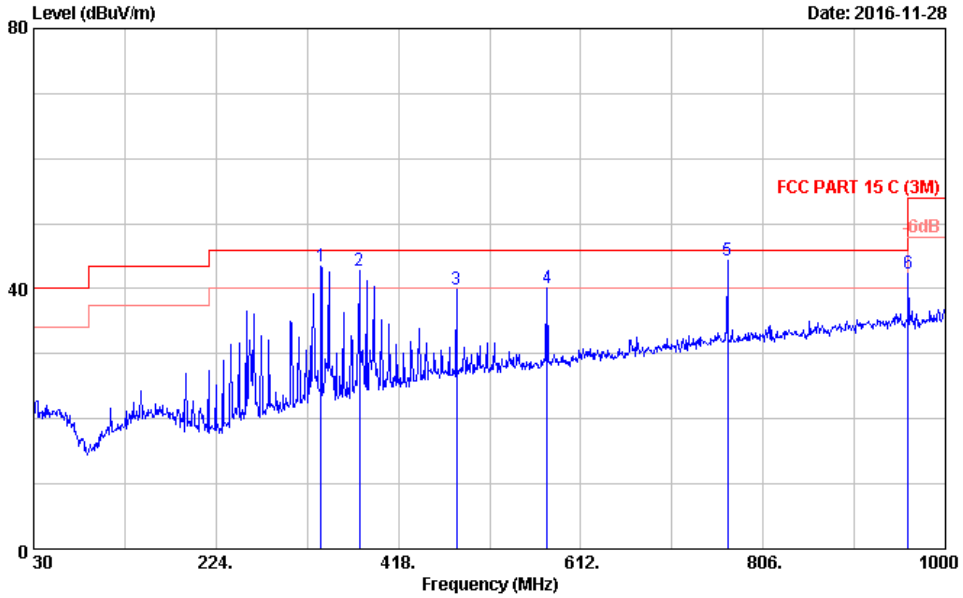
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	335.550	20.86	2.15	49.20	44.66	46.00	1.34	QP
2	376.290	21.62	2.34	45.07	41.31	46.00	4.69	QP
3	440.310	23.11	2.57	45.00	42.70	46.00	3.30	QP
4	480.080	23.67	2.69	45.28	43.50	46.00	2.50	QP
5	576.012	25.23	3.03	17.56	45.82	46.00	0.18	QP
6	768.170	28.16	3.84	42.27	45.94	46.00	0.06	QP

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

AUDIX®

No.6 Ke Feng Road,Science & Technology Park
Nanshan District, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 8 File: E:\2016 Test Data\T\TUV\20161125-rf.EM6 (12)



Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX mode

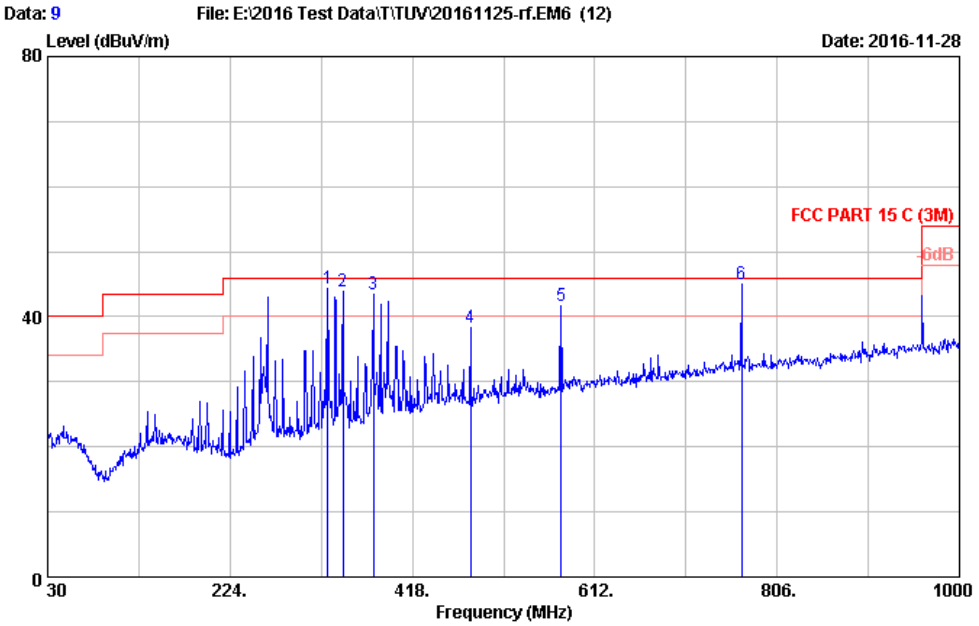
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	335.550	20.86	2.15	48.07	43.53	46.00	2.47	QP
2	376.290	21.62	2.34	46.63	42.87	46.00	3.13	QP
3	480.080	23.67	2.69	41.70	39.92	46.00	6.08	QP
4	576.110	25.23	3.03	40.31	40.04	46.00	5.96	QP
5	768.170	28.16	3.84	40.72	44.39	46.00	1.61	QP
6	960.230	30.01	4.49	35.51	42.32	54.00	11.68	QP

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

30MHz - 1GHz, Middle Channel

AUDIX®

No.6 Ke Feng Road,Science & Technology Park
Nanshan District, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : GFSK 2443.5MHz TX mode

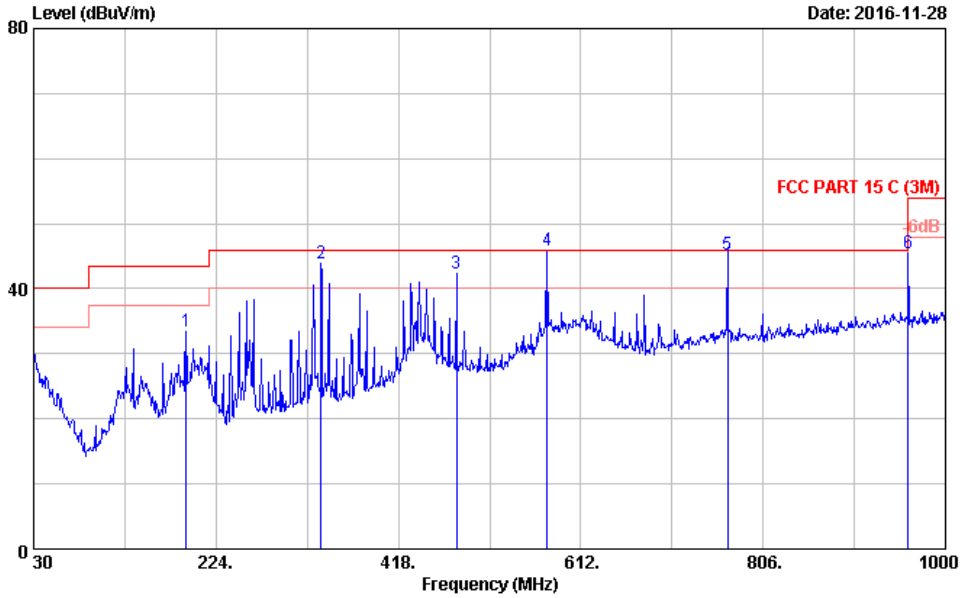
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	327.790	20.67	2.12	49.17	44.44	46.00	1.56	QP
2	344.280	20.89	2.19	48.45	43.94	46.00	2.06	QP
3	376.290	21.62	2.34	47.11	43.35	46.00	2.65	QP
4	480.080	23.67	2.69	40.14	38.36	46.00	7.64	QP
5	576.110	25.23	3.03	41.94	41.67	46.00	4.33	QP
6	768.170	28.16	3.84	41.45	45.12	46.00	0.88	QP

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

AUDIX®

No.6 Ke Feng Road,Science & Technology Park
Nanshan District, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 10 File: E:\2016 Test Data\T\TUV\20161125-rf.EM6 (12)



Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : GFSK 2443.5MHz TX mode

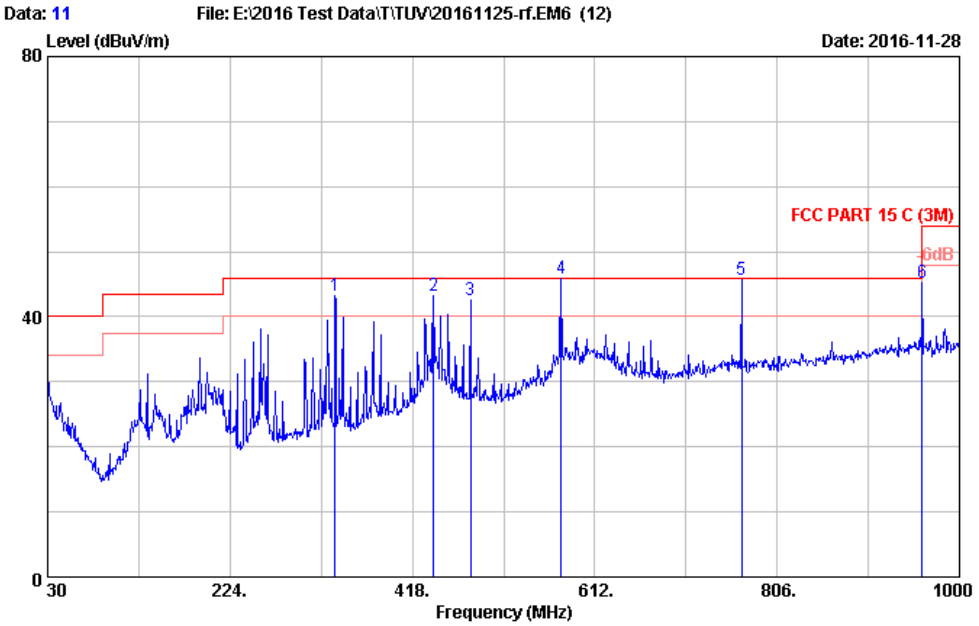
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	191.990	17.04	1.01	43.12	33.32	43.50	10.18	QP
2	335.550	20.86	2.15	48.38	43.84	46.00	2.16	QP
3	480.080	23.67	2.69	44.09	42.31	46.00	3.69	QP
4	576.110	25.23	3.03	46.25	45.98	46.00	0.02	QP
5	768.170	28.16	3.84	41.62	45.29	46.00	0.71	QP
6	960.230	30.01	4.49	38.69	45.50	54.00	8.50	QP

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

30MHz - 1GHz, High Channel

AUDIX®

No.6 Ke Feng Road,Science & Technology Park
Nanshan District, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 11
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX mode

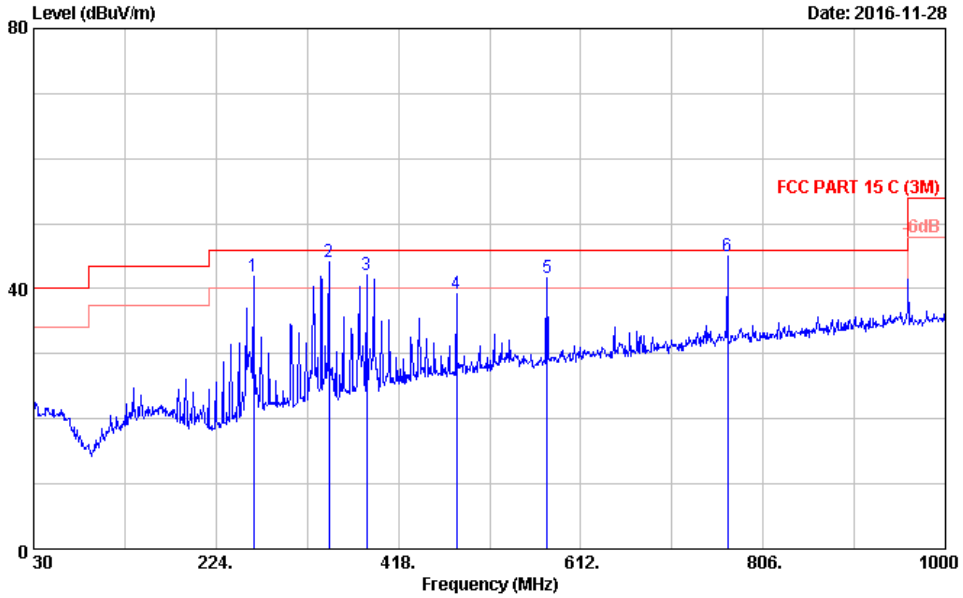
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	335.550	20.86	2.15	47.84	43.30	46.00	2.70	QP
2	440.310	23.11	2.57	45.46	43.16	46.00	2.84	QP
3	480.080	23.67	2.69	44.33	42.55	46.00	3.45	QP
4	576.110	25.23	3.03	46.17	45.90	46.00	0.10	QP
5	768.170	28.16	3.84	42.05	45.72	46.00	0.28	QP
6	960.230	30.01	4.49	38.40	45.21	54.00	8.79	QP

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

AUDIX®

No.6 Ke Feng Road,Science & Technology Park
Nanshan District, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 12 File: E:\2016 Test Data\T\TUV\20161125-rf.EM6 (12)



Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX mode

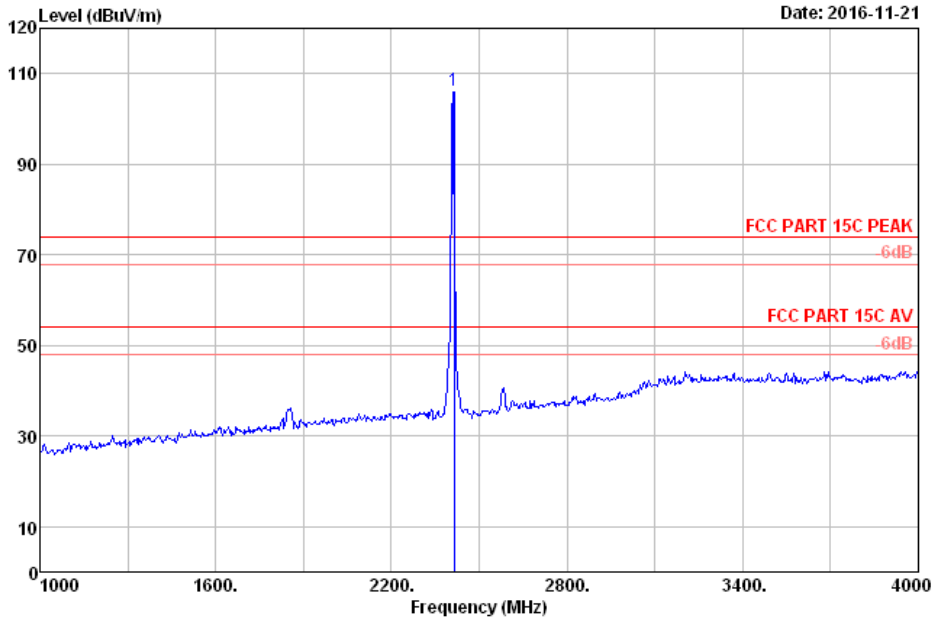
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	263.770	18.75	1.63	21.56	41.94	46.00	4.06	QP
2	344.280	20.89	2.19	21.04	44.12	46.00	1.88	QP
3	384.050	21.84	2.37	17.84	42.05	46.00	3.95	QP
4	480.080	23.67	2.69	12.87	39.23	46.00	6.77	QP
5	576.110	25.23	3.03	13.45	41.71	46.00	4.29	QP
6	768.170	28.16	3.84	12.91	44.91	46.00	1.09	QP

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

1GHz - 18GHz, Low Channel

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



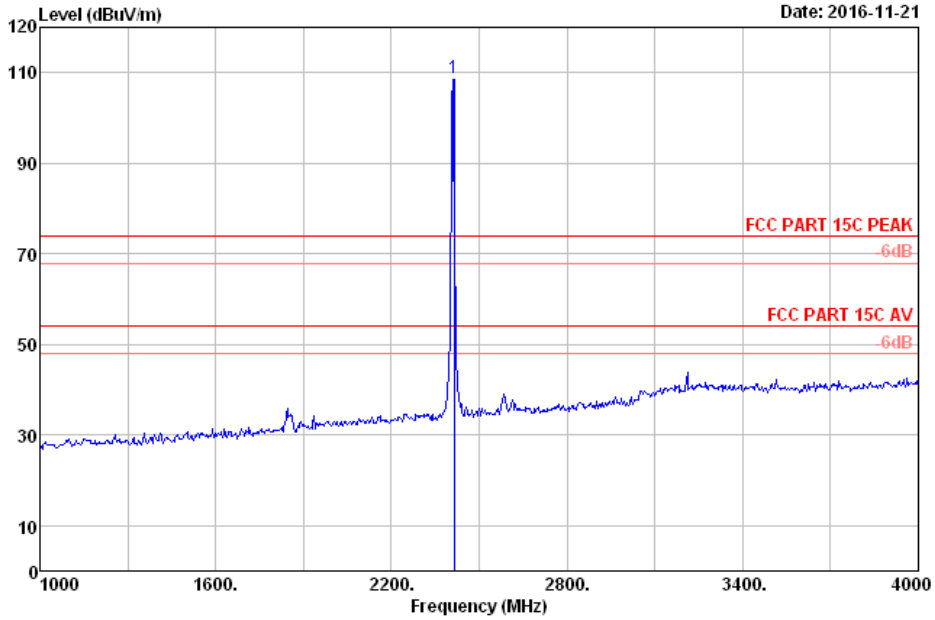
Site no. : 3m Chamber Data no. : 1
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2415.38	28.16	8.35	106.05	36.39	106.17	74.00	-32.17	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



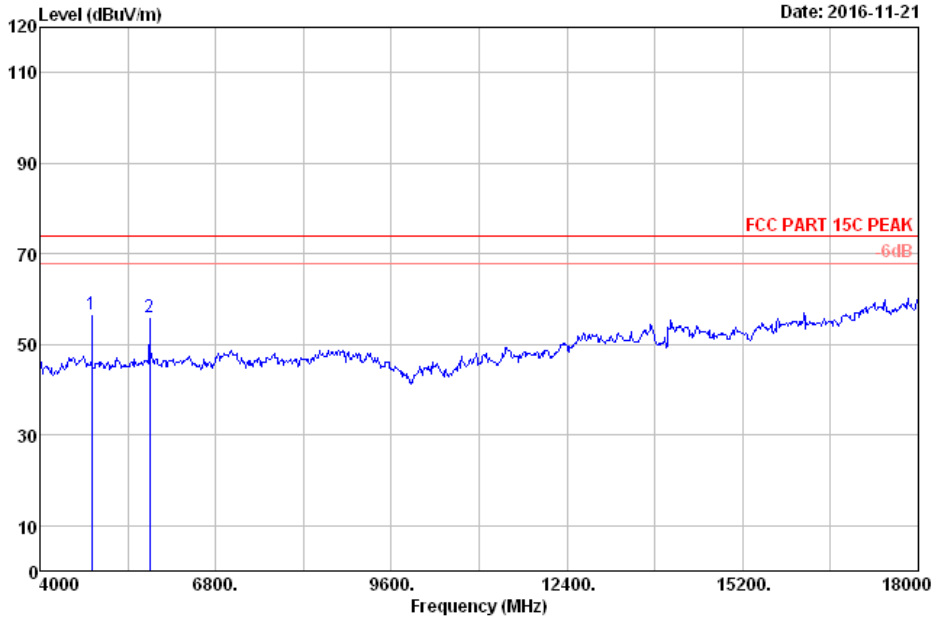
Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2415.38	28.16	8.35	108.73	36.39	108.85	74.00	-34.85	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



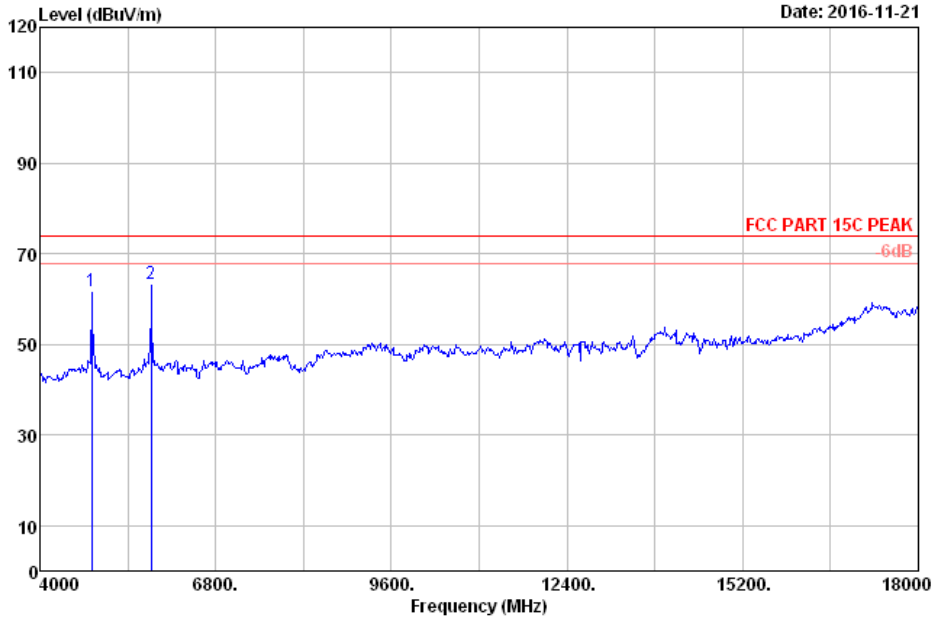
Site no. : 3m Chamber Data no. : 3
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4830.75	32.74	11.77	47.78	35.68	56.61	74.00	17.39	Peak
2	5750.00	32.95	11.97	46.40	35.45	55.87	74.00	18.13	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX

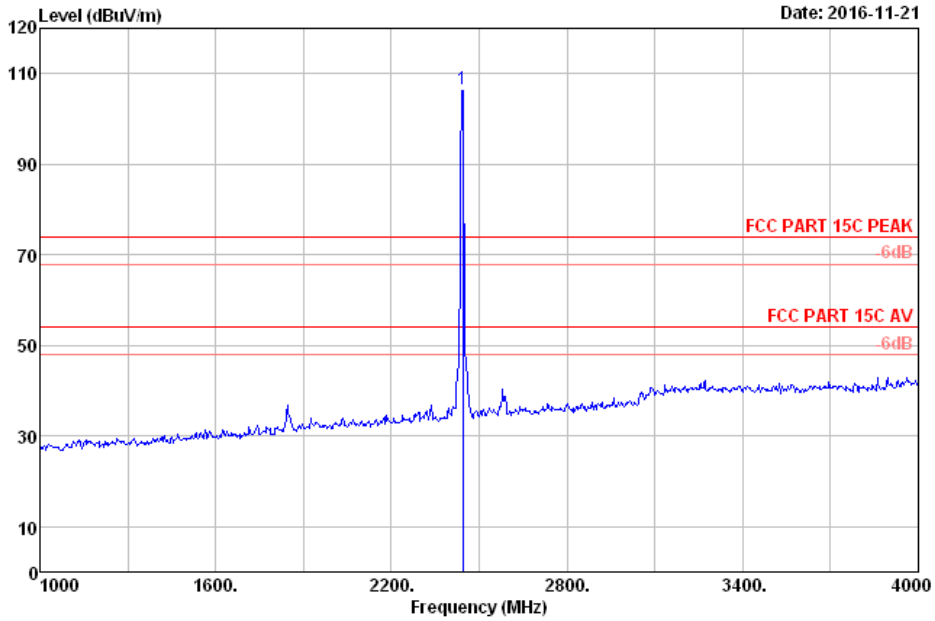
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4830.75	32.74	11.77	53.06	35.68	61.89	74.00	12.11	Peak
2	5772.00	33.00	11.97	53.91	35.45	63.43	74.00	10.57	Peak

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

1GHz - 18GHz, Middle Channel

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



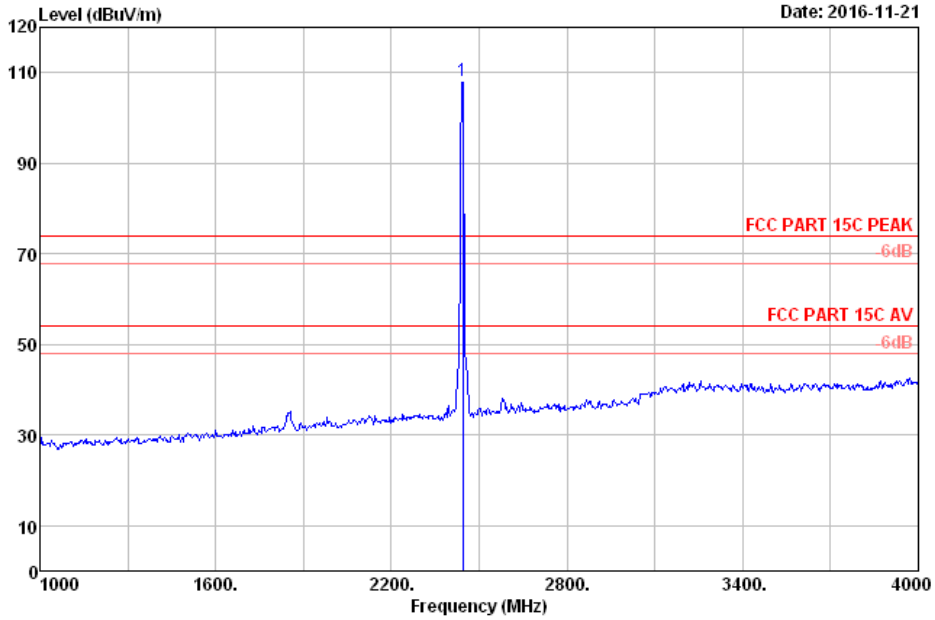
Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2443.5MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2443.50	28.21	8.38	106.42	36.38	106.63	74.00	-32.63	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



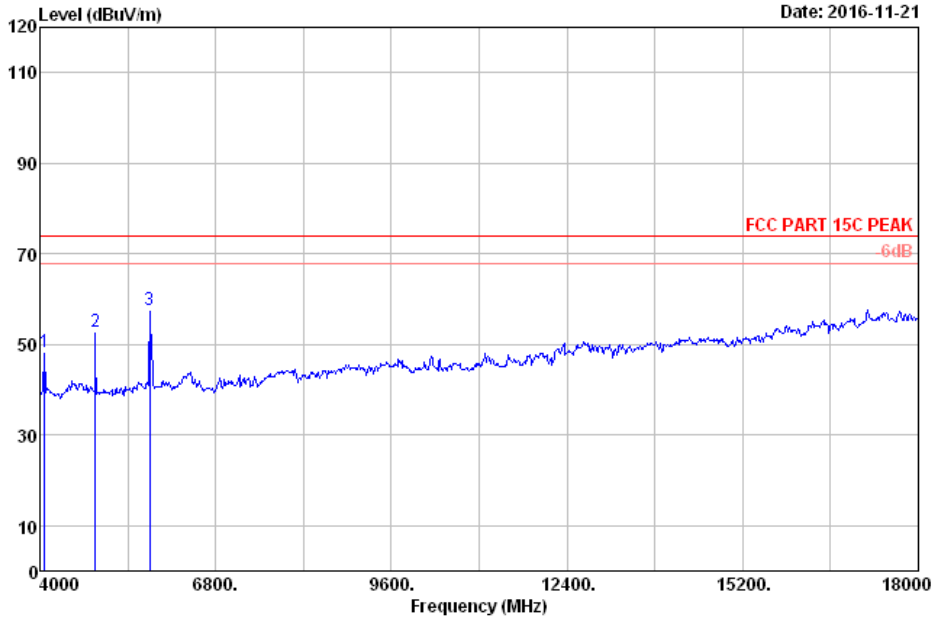
Site no. : 3m Chamber Data no. : 6
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2443.5MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2443.50	28.21	8.38	107.80	36.38	108.01	74.00	-34.01	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



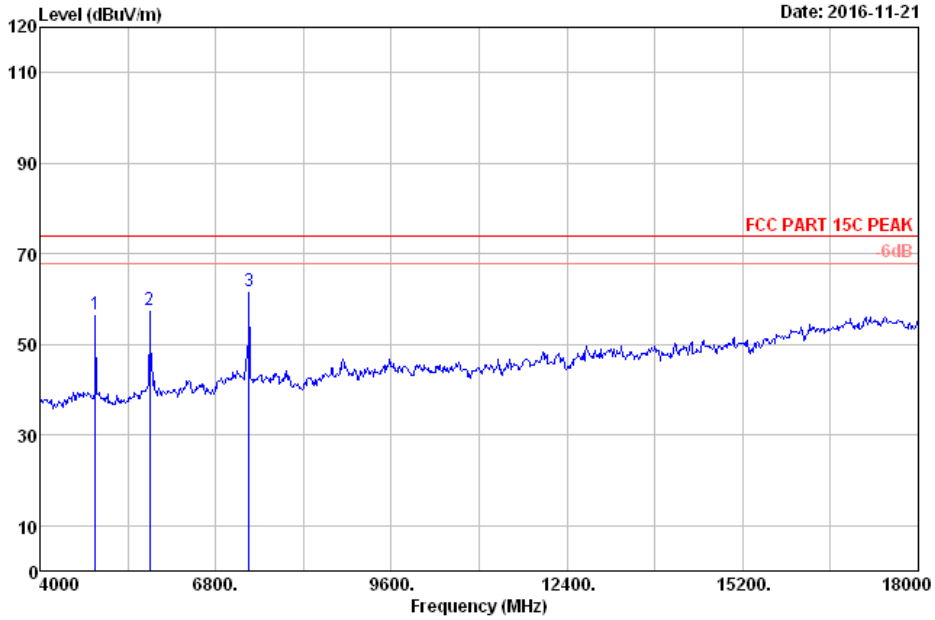
Site no. : 3m Chamber Data no. : 7
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2443.5MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4070.00	31.25	11.28	42.05	36.24	48.34	74.00	25.66	Peak
2	4887.00	32.63	11.81	44.07	35.69	52.82	74.00	21.18	Peak
3	5750.00	32.95	11.97	48.26	35.45	57.73	74.00	16.27	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2443.5MHz TX

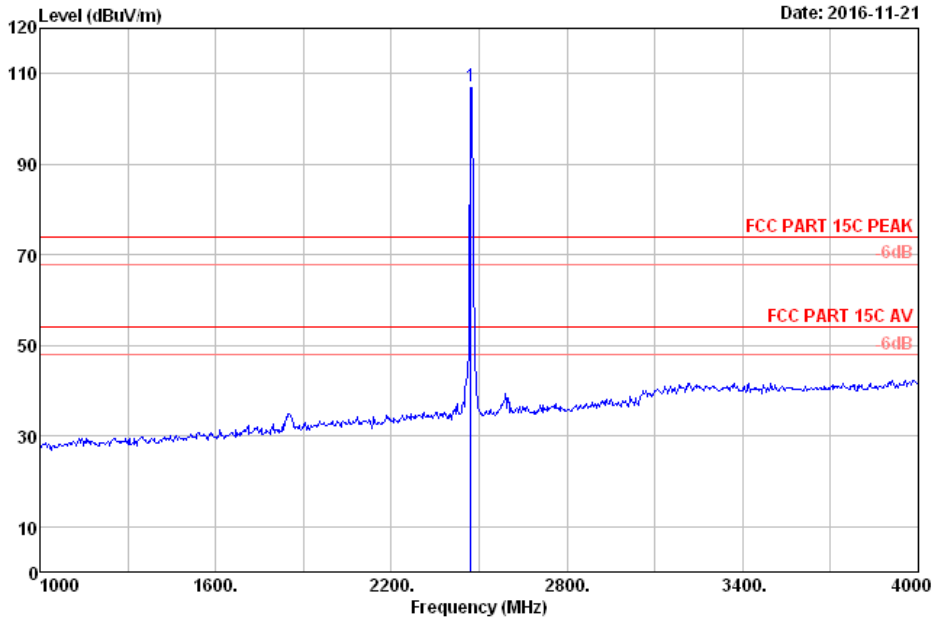
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4887.00	32.63	11.81	47.79	35.69	56.54	74.00	17.46	Peak
2	5750.00	32.95	11.97	48.25	35.45	57.72	74.00	16.28	Peak
3	7330.50	35.93	12.55	48.98	35.57	61.89	74.00	12.11	Peak

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

1GHz - 18GHz, High Channel

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



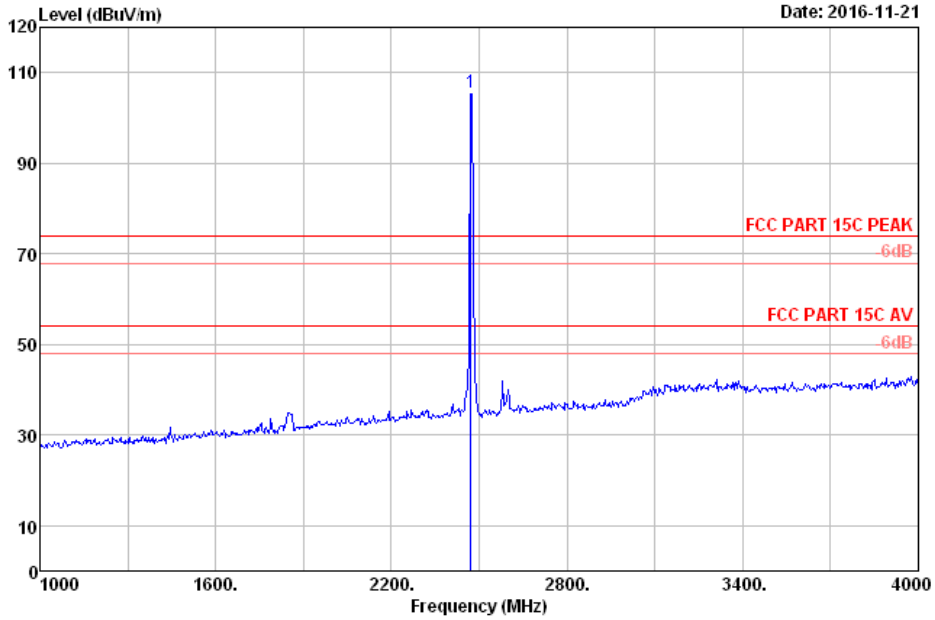
Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2471.63	28.25	8.41	107.01	36.38	107.29	74.00	-33.29	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



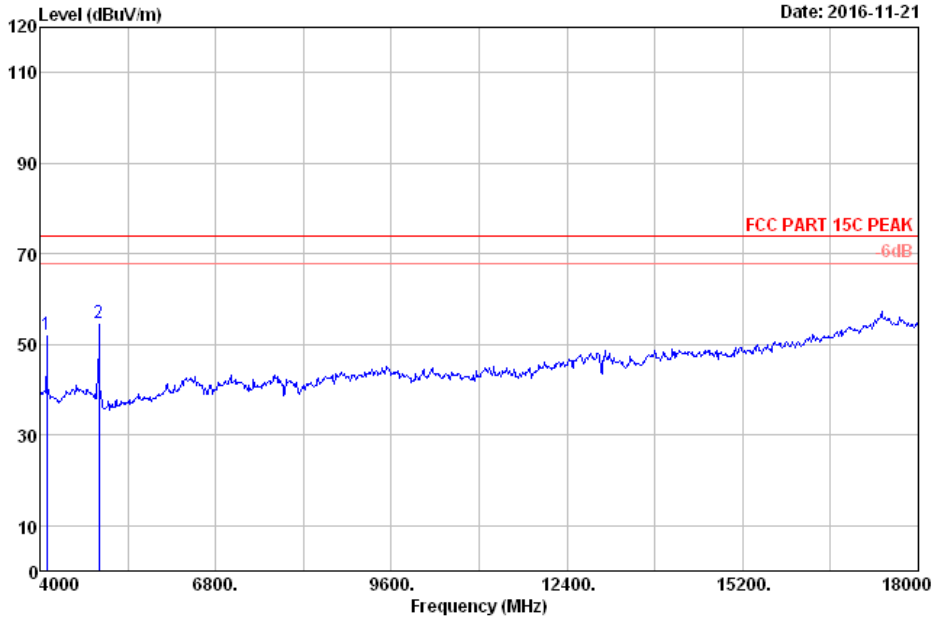
Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2471.63	28.25	8.41	105.26	36.38	105.54	74.00	-31.54	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



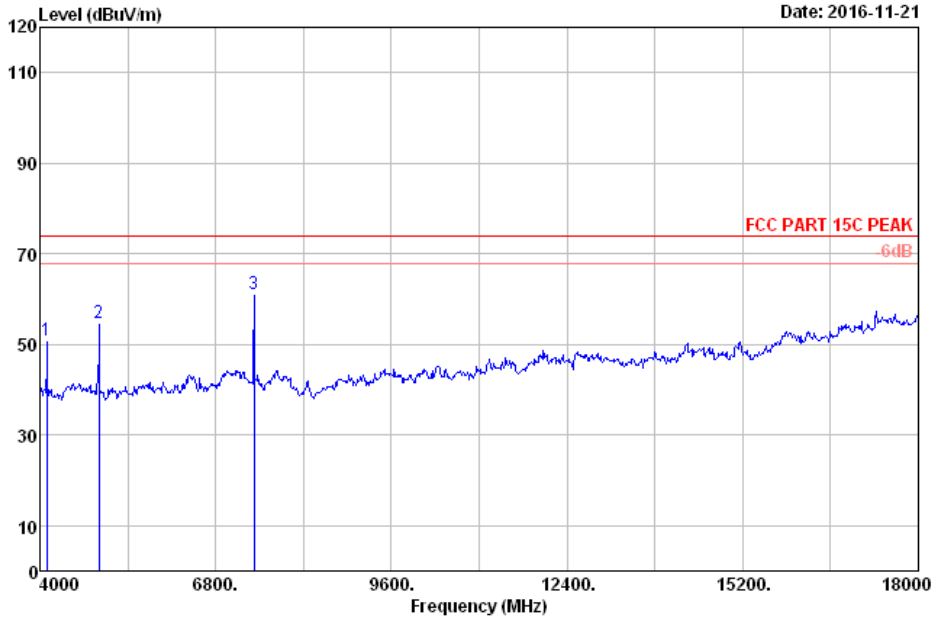
Site no. : 3m Chamber Data no. : 11
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4112.00	31.46	11.31	45.56	36.18	52.15	74.00	21.85	Peak
2	4943.25	32.51	11.84	45.96	35.71	54.60	74.00	19.40	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

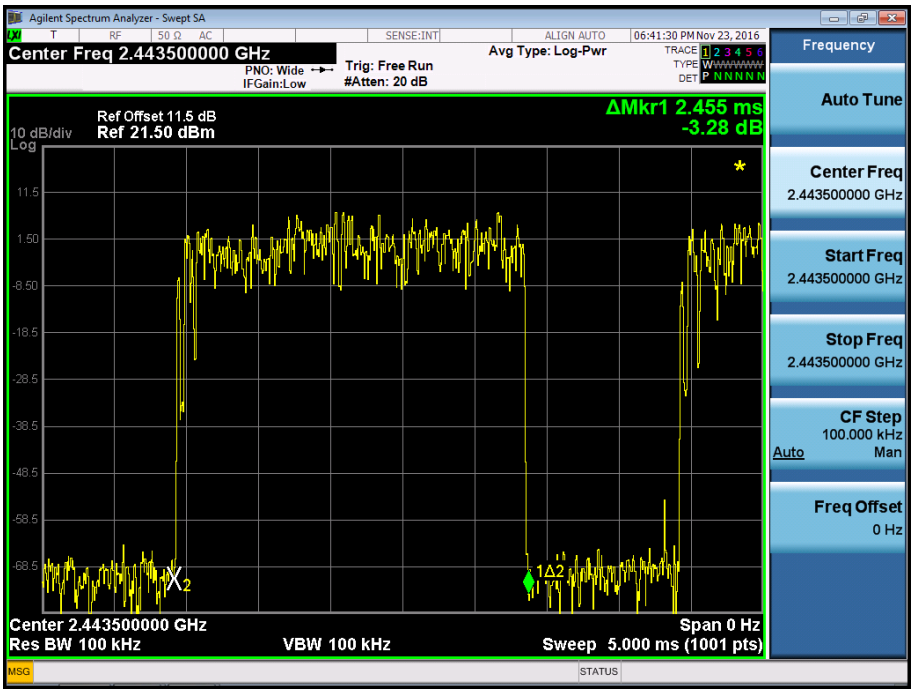


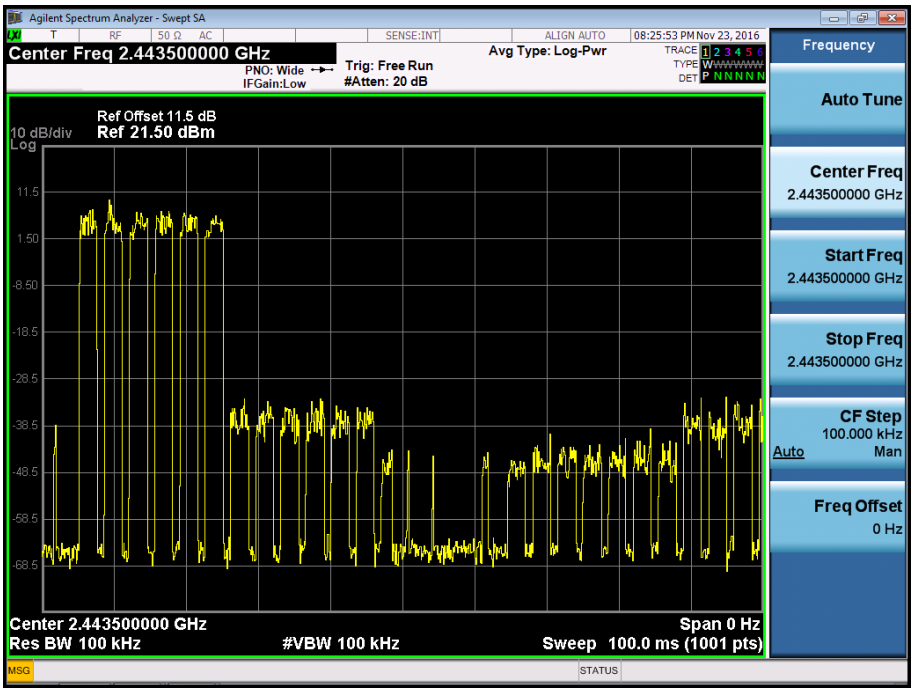
Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4112.00	31.46	11.31	44.35	36.18	50.94	74.00	23.06	Peak
2	4943.25	32.51	11.84	46.21	35.71	54.85	74.00	19.15	Peak
3	7414.88	35.97	12.62	48.22	35.59	61.22	74.00	12.78	Peak

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

Duty Cycle





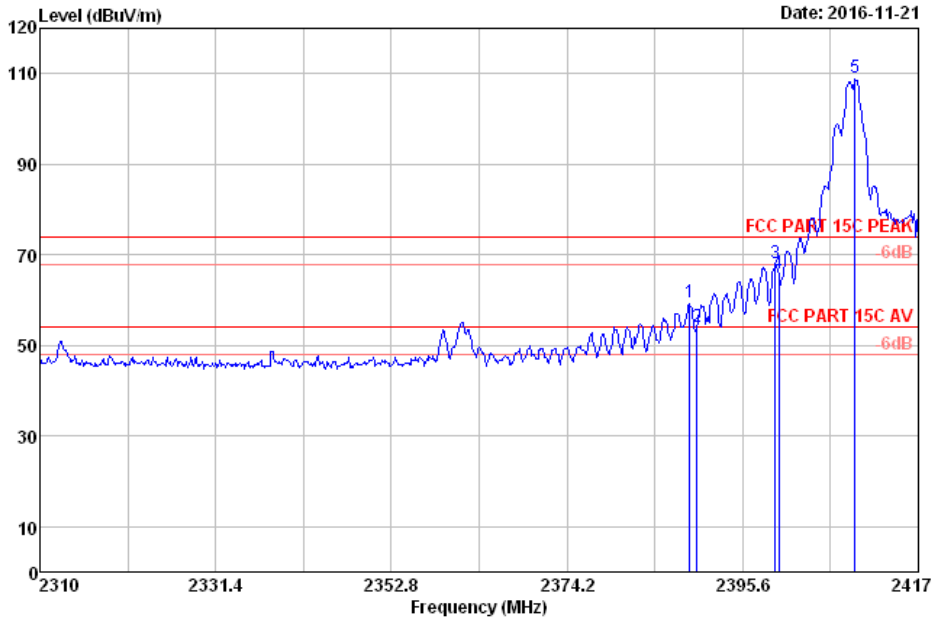
Duty Cycle Correction Factor = 20*log(dwell time/T_{on}) = 20*log (2.455ms*6/100ms)=--16.64 dB

Appendix C.2: Test Results of Radiated Emissions in Restricted Bands

Low channel

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



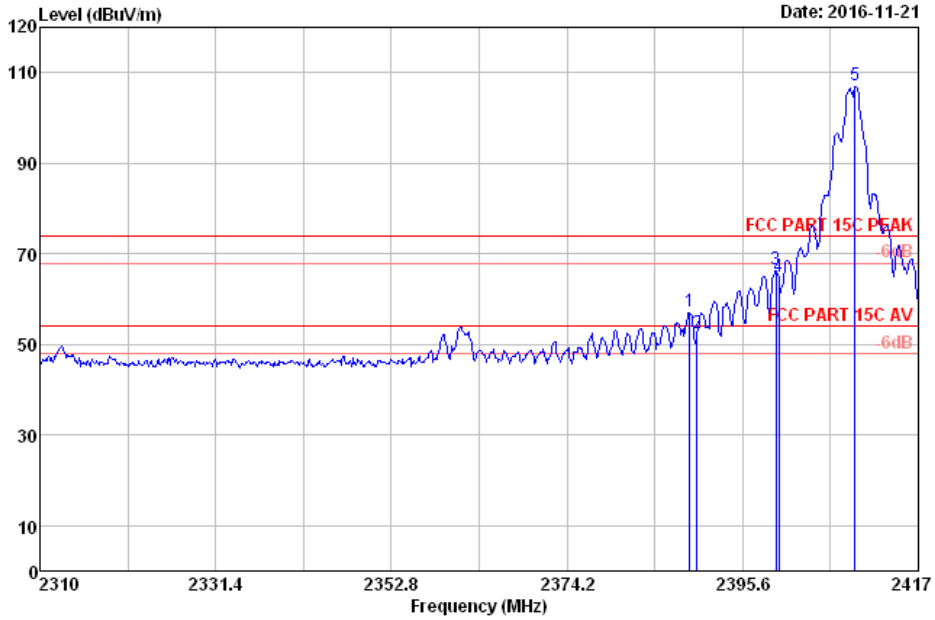
Site no. : 3m Chamber Data no. : 13
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.18	28.12	8.33	59.30	36.39	59.36	74.00	14.64	Peak
2	2390.00	28.12	8.33	54.00	36.39	54.06	74.00	19.94	Peak
3	2399.56	28.14	8.34	68.10	36.39	68.19	74.00	5.81	Peak
4	2400.00	28.14	8.34	65.98	36.39	66.07	74.00	7.93	Peak
5	2409.30	28.15	8.35	108.88	36.39	108.99	74.00	-34.99	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2415.375MHz TX

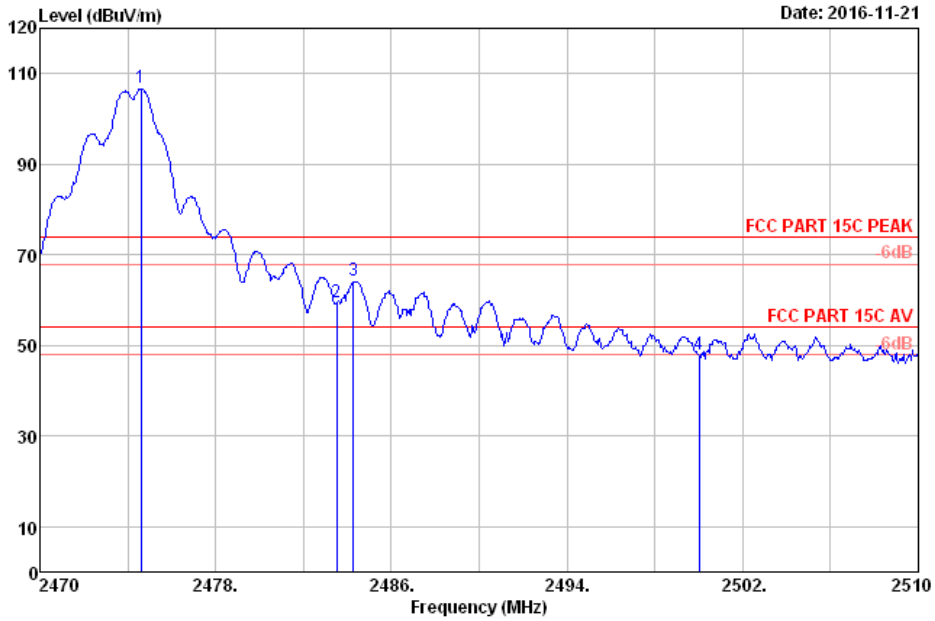
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.18	28.12	8.33	57.38	36.39	57.44	74.00	16.56	Peak
2	2390.00	28.12	8.33	52.35	36.39	52.41	74.00	21.59	Peak
3	2399.67	28.14	8.34	66.58	36.39	66.67	74.00	7.33	Peak
4	2400.00	28.14	8.34	64.85	36.39	64.94	74.00	9.06	Peak
5	2409.30	28.15	8.35	107.07	36.39	107.18	74.00	-33.18	Peak

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

High channel

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



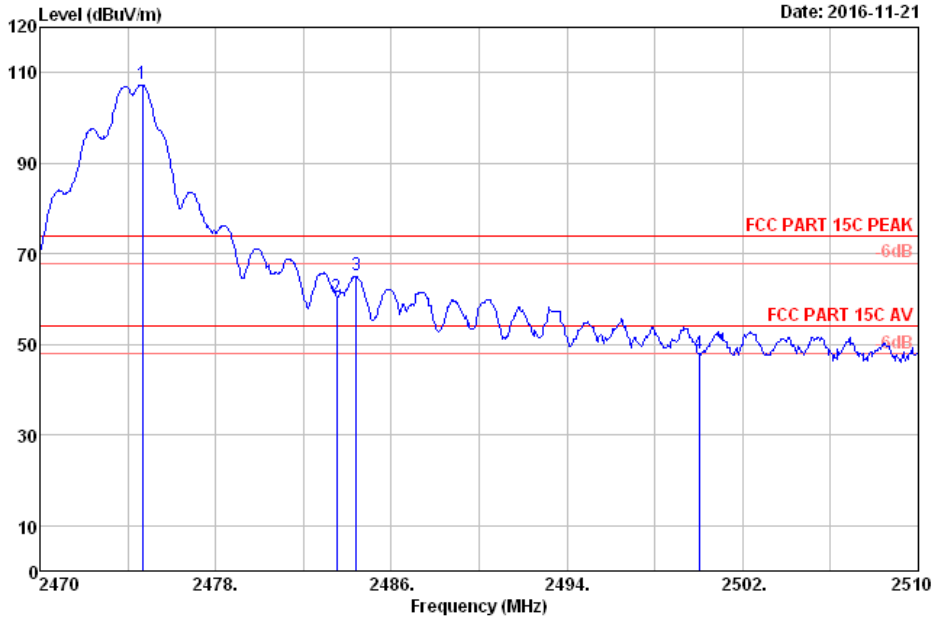
Site no. : 3m Chamber Data no. : 15
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.60	28.26	8.41	106.51	36.38	106.80	74.00	-32.80	Peak
2	2483.50	28.27	8.42	59.13	36.38	59.44	74.00	14.56	Peak
3	2484.28	28.27	8.42	64.01	36.38	64.32	74.00	9.68	Peak
4	2500.00	28.30	8.44	47.68	36.38	48.04	74.00	25.96	Peak

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

AUDIX

No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Nantou, ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK Pre : 101.2kPa
Env. / Ins. : 23.6*C/52.1% Engineer : Alice_yang
EUT : Baby Monitor M/N:BU without sensor
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : GFSK 2471.625MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.68	28.26	8.41	107.26	36.38	107.55	74.00	-33.55	Peak
2	2483.50	28.27	8.42	60.31	36.38	60.62	74.00	13.38	Peak
3	2484.40	28.28	8.42	65.06	36.38	65.38	74.00	8.62	Peak
4	2500.00	28.30	8.44	47.71	36.38	48.07	74.00	25.93	Peak

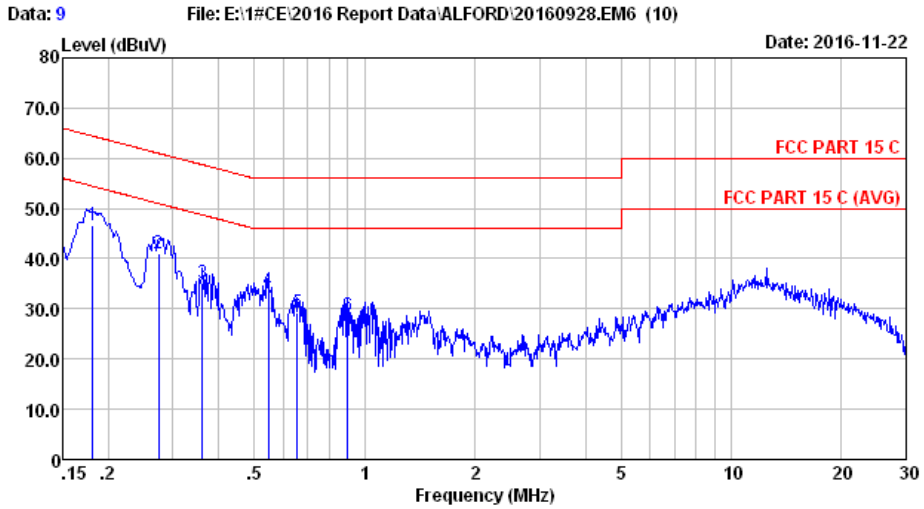
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Appendix C.3: Test Results of Conducted Emission on AC Mains

A mode

AUDIX

No.6 Ke Feng Road,Science & Technology Park
Nanshan District,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

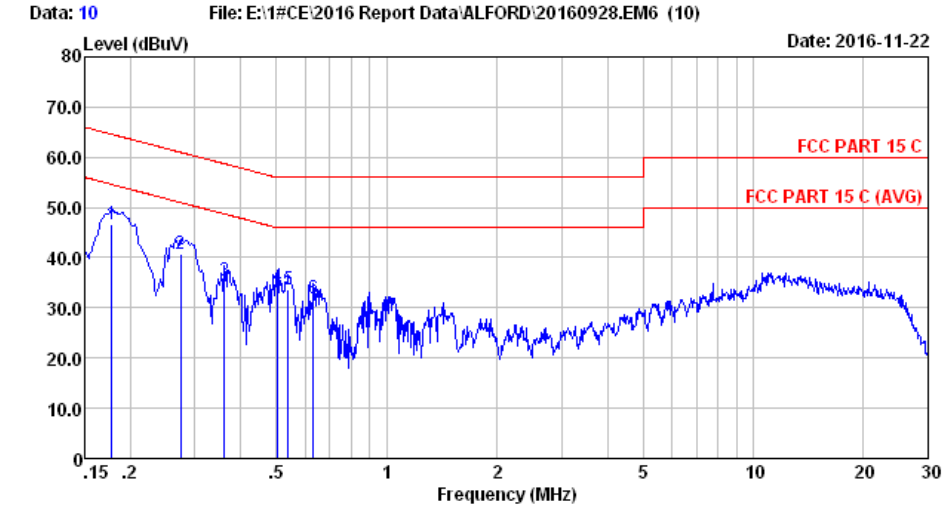


Site no :1# Conduction Data No :9
Dis./Lisn :2016 ESH2-Z5 LINE
Limit :FCC PART 15 C
Env./Ins. :23.2*C/52% Engineer :Alvis-Wu
EUT :Baby monitor M/N: BU without sensor
Power Rating :AC 120V/60Hz
Test Mode :

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.182	0.13	0.02	46.35	46.50	64.42	17.92	QP
2	0.274	0.13	0.02	40.96	41.11	60.98	19.87	QP
3	0.361	0.13	0.03	35.06	35.22	58.69	23.47	QP
4	0.546	0.12	0.03	33.37	33.52	56.00	22.48	QP
5	0.654	0.14	0.04	29.08	29.26	56.00	26.74	QP
6	0.899	0.17	0.06	28.53	28.76	56.00	27.24	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

No.6 Ke Feng Road,Science & Technology Park
Nanshan District,ShenZhen,GuangDong,China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no :1# Conduction Data No :10
Dis./Lisn :2016 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 C
Env./Ins. :23.2*C/52% Engineer :Alvis-Wu
EUT :Baby monitor M/N: BU without sensor
Power Rating :AC 120V/60Hz
Test Mode :

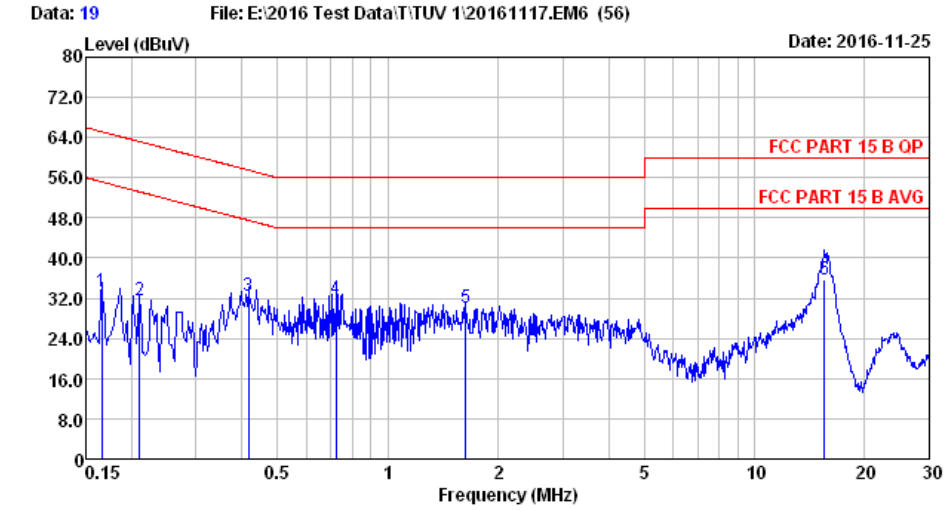
No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.178	0.13	0.02	46.59	46.74	64.59	17.85	QP
2	0.274	0.13	0.02	40.45	40.60	60.98	20.38	QP
3	0.361	0.15	0.03	35.29	35.47	58.69	23.22	QP
4	0.505	0.15	0.03	34.08	34.26	56.00	21.74	QP
5	0.538	0.15	0.03	33.41	33.59	56.00	22.41	QP
6	0.630	0.15	0.04	31.62	31.81	56.00	24.19	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

C mode

AUDIX

No.6 Kefeng Road, Science & Technology Park
Nanshan District, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



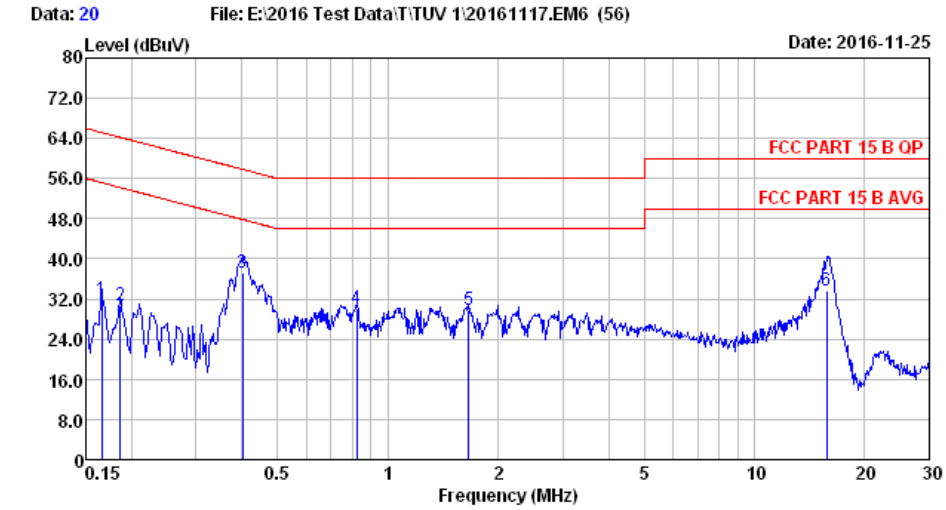
Site no :2# Conduction
Dis./Lisn :2016 ESH2-Z5 LINE
Limit :FCC PART 15 B QP
Env./Ins. :23.2*C/52%
EUT :BU
Power Rating :AC 120V/60Hz
Test Mode :Charging Mode

Data No :19
LISN phase:
Engineer :Alvis-Wu

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.166	0.13	0.02	33.11	33.26	65.16	31.90	QP
2	0.211	0.13	0.02	31.57	31.72	63.18	31.46	QP
3	0.417	0.13	0.03	32.22	32.38	57.51	25.13	QP
4	0.724	0.15	0.05	31.59	31.79	56.00	24.21	QP
5	1.628	0.19	0.07	29.87	30.13	56.00	25.87	QP
6	15.552	0.56	0.18	34.97	35.71	60.00	24.29	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

No.6 Kefeng Road, Science & Technology Park
Nanshan District, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no :2# Conduction
Dis./Lisn :2016 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 B QP
Env./Ins. :23.2*C/52%
EUT :BU
Power Rating :AC 120V/60Hz
Test Mode :Charging Mode

Data No :20
LISN phase:
Engineer :Alvis-Wu

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.166	0.13	0.02	31.66	31.81	65.16	33.35	QP
2	0.186	0.13	0.02	30.42	30.57	64.20	33.63	QP
3	0.402	0.15	0.03	37.15	37.33	57.81	20.48	QP
4	0.822	0.16	0.05	29.81	30.02	56.00	25.98	QP
5	1.662	0.19	0.07	29.44	29.70	56.00	26.30	QP
6	15.718	0.57	0.18	32.78	33.53	60.00	26.47	QP

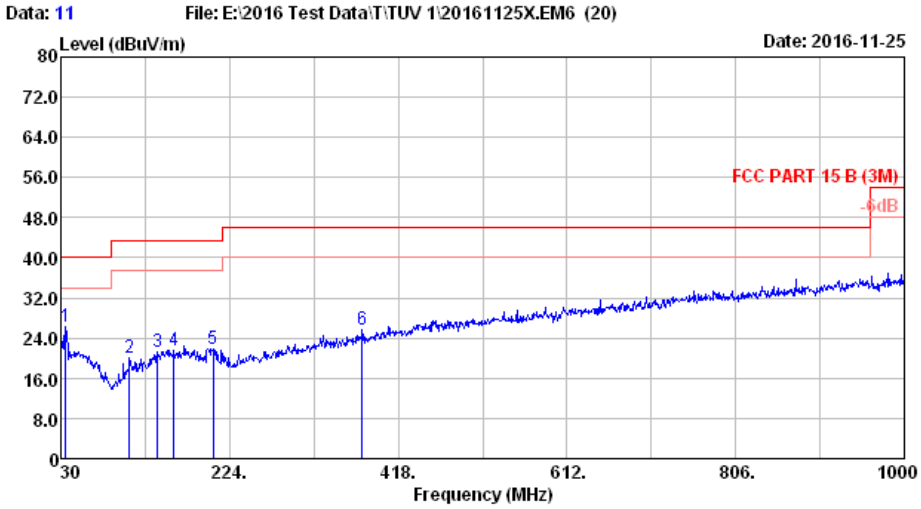
Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

Appendix C.4: Test Results of Radiated Emission

C mode, Below 1GHz

AUDIX

No.6 Kefeng Road, Science & Technology Park
Nanshan District, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



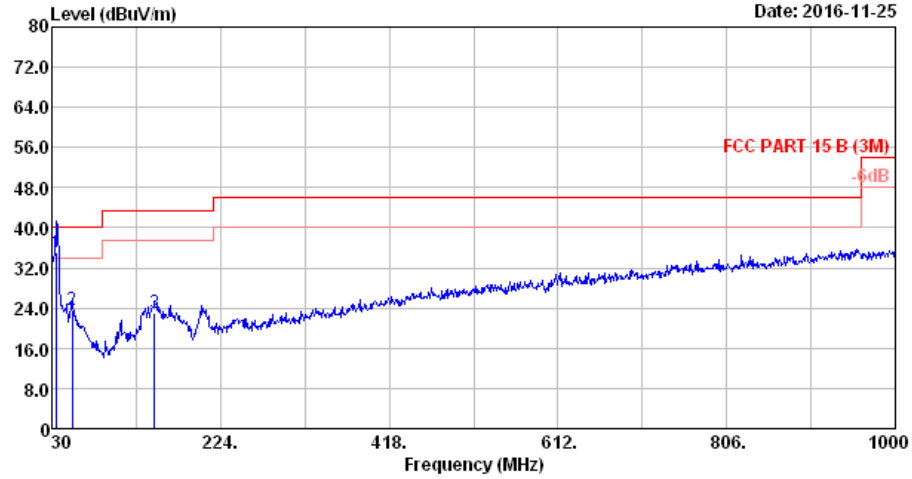
Site no. : 3m Chamber Data no. : 11
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : BU
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : Charging Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	35.820	19.57	0.65	6.06	26.28	40.00	13.72	QP
2	108.570	16.60	1.13	2.39	20.12	43.50	23.38	QP
3	141.550	19.43	1.08	0.66	21.17	43.50	22.33	QP
4	159.980	19.74	1.06	0.76	21.56	43.50	21.94	QP
5	205.570	16.85	1.06	4.07	21.98	43.50	21.52	QP
6	376.290	21.62	2.34	1.86	25.82	46.00	20.18	QP

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

No.6 Kefeng Road, Science & Technology Park
Nanshan District, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 12 File: E:\2016 Test Data\T\TUV 1\20161125X.EM6 (20)



Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 22.1*C/51.3% Engineer : Alvis-Wu
EUT : BU
Power rating : DC 5V From adapter Input AC 120V/60Hz
Test Mode : Charging Mode

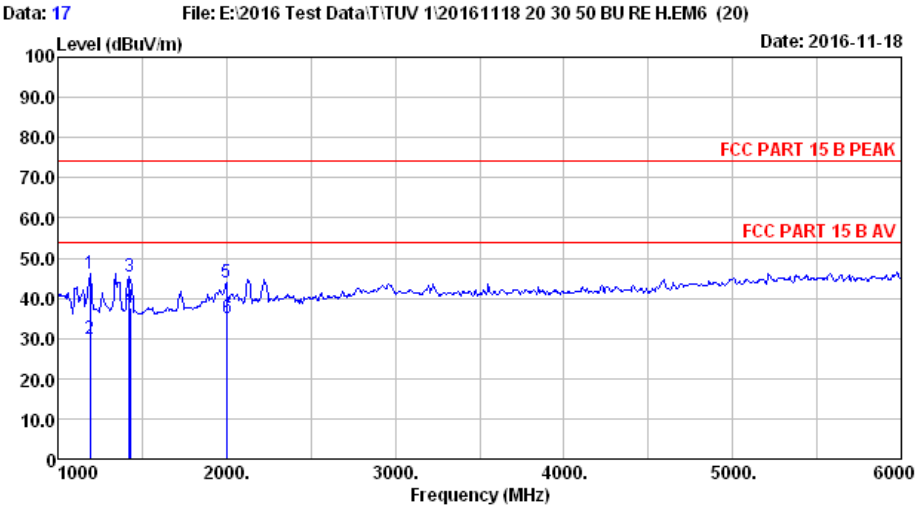
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	35.962	19.57	0.65	14.90	35.12	40.00	4.88	QP
2	53.280	20.38	0.86	2.33	23.57	40.00	16.43	QP
3	148.340	19.65	1.34	2.00	22.99	43.50	20.51	QP

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

C mode, Above 1GHz

AUDIX

No.6 Kefeng Road, Science & Technology Park
Nanshan District, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



Site no. : 3m Chamber
Dis. / Ant. : 3m 2016 MTD1209 3006
Limit : FCC PART 15 B PEAK
Env. / Ins. : 21.4*C/52%
EUT : BU
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : Charging

Data no. : 17
Ant. pol. : VERTICAL
Engineer : Alvis-Wu

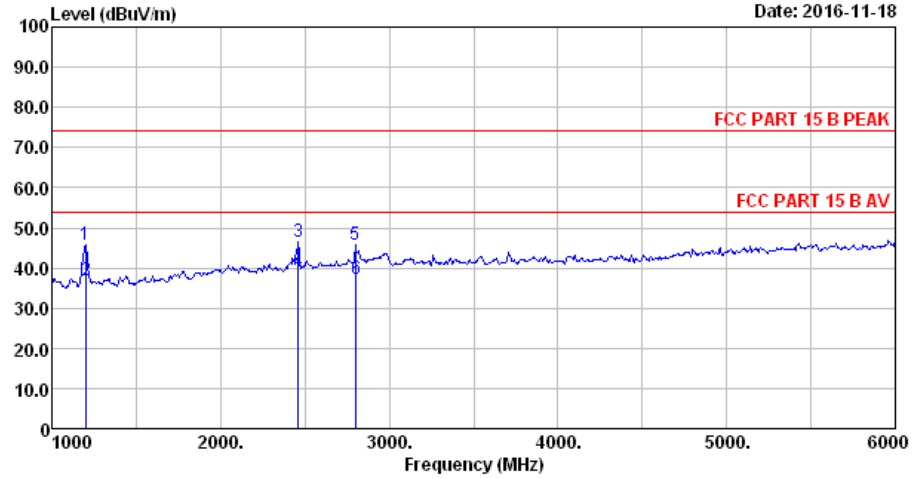
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1190.67	25.47	1.81	35.63	54.38	46.03	70.00	23.97	Peak
2	1192.16	25.47	1.81	35.63	38.27	29.92	50.00	20.08	Average
3	1425.34	25.80	2.00	35.34	52.95	45.41	70.00	24.59	Peak
4	1426.26	25.80	2.00	35.34	45.26	37.72	50.00	12.28	Average
5	2000.04	28.00	2.45	34.67	48.22	44.00	70.00	26.00	Peak
6	2002.16	28.00	2.45	34.67	39.27	35.05	50.00	14.95	Average

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

AUDIX

No.6 Kefeng Road, Science & Technology Park
Nanshan District, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 18 File: E:\2016 Test Data\T\TUV 1\20161118 20 30 50 BU RE H.EM6 (20)



Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 2016 MCTD1209 3006 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 21.4*C/52% Engineer : Alvis-Wu
EUT : BU
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : Charging

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1200.70	25.49	1.82	35.63	53.98	45.66	70.00	24.34	Peak
2	1203.24	25.49	1.82	35.63	45.26	36.94	50.00	13.06	Average
3	2460.34	28.28	2.79	34.50	50.10	46.67	70.00	23.33	Peak
4	2462.17	28.28	2.79	34.50	42.50	39.07	50.00	10.93	Average
5	2800.34	29.20	3.04	34.38	47.75	45.61	70.00	24.39	Peak
6	2802.16	29.20	3.04	34.38	39.27	37.13	50.00	12.87	Average

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