

Prüfbericht-Nr.: <i>Test report No.:</i>	50285175 001	Auftrags-Nr.: <i>Order No.:</i>	168124991	Seite 1 von 27 <i>Page 1 of 27</i>
Kunden-Referenz-Nr.: <i>Client reference No.:</i>	N/A	Auftragsdatum: <i>Order date.:</i>	06.08.2019	
Auftraggeber: <i>Client:</i>	Binatone Electronics International Ltd. Floor 23A, 9 Des Voeux Road West, Sheung Wan, Hong Kong			
Prüfgegenstand: <i>Test item:</i>	2.4" Digital Video Baby Monitor (Parent Unit)			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	MBP482APU, MBP482NPU, MBP482PU (Trademark: motorola)			
Auftrags-Inhalt: <i>Order content:</i>	FCC and IC approval			
Prüfgrundlage: <i>Test specification:</i>	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 2 February 2017 RSS-Gen Issue 5 April 2018 ICES-003 Issue 6 January 2016 RSS-102 Issue 5 March 2015			
Wareneingangsdatum: <i>Date of receipt:</i>	06.08.2019	Please refer to photo documents		
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000956136-014 to 015			
Prüfzeitraum: <i>Testing period:</i>	06.08.2019 - 12.08.2019			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
27.08.2019 Ryan Yang / Assistant Project Manager		27.08.2019 Winnie Hou / Technical Certifier		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>
				Unterschrift <i>Signature</i>
Sonstiges / Other: FCC ID: VLJ-MBP482APU IC: 4522A-MBP482APU HVIN: MBP482APU				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft 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. <i>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.</i>				

v04

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

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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 2.4GHz FHSS

Appendix C: Test Results of Part 15B and ICES 003

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

1F East & 2-4F, Cybio Technology Building No. 1, No. 16 Kejibei 2nd Road, High-Tech Industrial Park
North Nanshan District, Shenzhen, 518057

FCC accredited testing laboratory: CN1260

ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

TÜV Rheinland (Shenzhen) Co., Ltd.

Radio Spectrum Testing				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wireless Connectivity Tester	R&S	CMW270	101375	30.08.2019
Signal Analyzer	R&S	FSV 40	101441	30.08.2019
Vector Signal Generator	R&S	SMBV100A	263301	30.08.2019
Signal Generator	R&S	SMB100A	115186	30.08.2019
OSP	R&S	OSP 150	101017	20.12.2019
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	R&S	WMS32 (V10.40.10)	N/A	N/A
Power Meter	R&S	NRP2	107105	20.12.2019
Wideband Power Sensor	R&S	NRP-Z81	105350	20.12.2019
Spurious Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Signal Generator	R&S	SMB100A	180840	30.08.2019
Wideband Radio Communication Tester	R&S	CMW500	165339	30.08.2019
Signal Analyzer	R&S	FSV 40	101440	30.08.2019
System Controller Interface	R&S	SCI-100	S10010036	N/A
Filterbank	R&S	CDMA	100751	30.08.2019
Filterbank	R&S	GSM	100811	30.08.2019

OSP	R&S	OSP 120	102041	N/A
OSP	R&S	OSP 150	101385	N/A
Pre-amplifier	R&S	SCU08F1	08320030	30.08.2019
Amplifier	R&S	SCU-18F	180079	30.08.2019
Amplifier	R&S	SCU40A	100450	30.08.2019
Conducted Emission on AC Mains				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102428	19.08.2019
Artificial Mains Network	R&S	ENV216	102333	19.08.2019
Radiated Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR7	102022	19.08.2019
Bilog Antenna	TESEQ	CBL6112D	51321	29.08.2019

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 basis 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.

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-7}$
RF Power (conducted)	± 2.5 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	± 6 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	± 6 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB
Radiated Emission (3m SAC), 30MHz to 1000MHz	± 4.52 dB
Radiated Emission (3m SAC), above 1000MHz	± 4.37 dB
Temperature	± 1 °C
Humidity	± 5 %
Voltage (DC)	± 1 %
Voltage (AC, <10kHz)	± 2 %

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) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 1F East & 2-4F, Cybio Technology Building No. 1, No. 16 Kejibei 2nd Road, High-Tech Industrial Park North Nanshan District, Shenzhen, 518057 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 parent unit (monitor) of one of the 2.4" Digital Video Baby Monitor, which supports 2.4GHz FHSS wireless technology.

According to the declaration of the applicant, the electrical circuit design, PCB layout and components used are identical for all models, only the model number is different. The parent unit is supplied by external adapter and battery, see below table for details:

Test EUT (Model No.)	Parent Unit		Supplier
	Supported	Tested	
Adapter #1 (S003GU0600040)	☒	☒	Tenpao
Battery #1 (GP80AAAHC3BMXZ)	☒	☒	GPI
Battery #2 (JHAAA800P3H)	☒	☒	JUSTHIGH

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	2.4" Digital Video Baby Monitor (Parent Unit)
Type Designation	MBP482APU, MBP482NPU, MBP482PU
Trade Mark	motorola
FCC ID	VLJ-MBP482APU
IC	4522A-MBP482APU
HVIN	MBP482APU
Operating Voltage	DC 6.0V@400mA input via power adapter DC 3.6V@800mAh input via internal battery
Testing Voltage	Fully charged battery for Part 15C AC 120V@60Hz for Part 15B
Power Adapter #1	Model: S003GU0600040 (Tenpao) Input: AC 100-240V~50/60Hz 150mA Output: DC 6.0V@400mA
Battery #1	Model: GP80AAAHC3BMXZ(GPI) DC 3.6V@800mAh Ni-MH battery
Battery #2	Model: JHAAA800P3H(JUSTHIGH) DC 3.6V@800mAh Ni-MH battery

Technical Specification of 2.4GHz FHSS	
Operating Frequency	2405.0 - 2475.0 MHz
Type of Modulation	FSK
Channel Number	32 channels (16 active channels)
Channel Separation	2.0MHz, 2.5MHz, 3.0MHz, 4.5 MHz
Antenna Type	Integral Antenna
Antenna Gain	0 dBi

Table 3: RF Channel and Frequency of 2.4GHz FHSS

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
01	2405.00	09	2422.00	17	2439.00	25	2458.50
02	2407.00	10	2424.00	18	2441.00	26	2460.50
03	2409.00	11	2426.00	19	2444.00	27	2462.50
04	2411.00	12	2428.00	20	2446.00	28	2467.00
05	2413.00	13	2430.00	21	2450.00	29	2469.00
06	2415.00	14	2433.00	22	2452.00	30	2471.00
07	2418.00	15	2435.00	23	2454.00	31	2473.00
08	2420.00	16	2437.00	24	2456.00	32	2475.00

Test frequencies are lowest channel: 2405 MHz, middle channel: 2439 MHz and highest channel: 2475 MHz.

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, 2.4GHz FHSS wireless transmitting mode (Low/Middle/High Channel)
- B. On, Transmitting on hopping channel
- C. On, Normal operation with 2.4GHz FHSS mode
- D. On, Charging mode

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Block Diagram
- Schematics
- FCC/IC Label and Location Info
- 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 tests 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 MBP482NPU 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	Lenovo	T480	PF-16A6N8	N/A
2.4" Video Baby Monitor (Baby Unit)	Vtech	MBP482BU	N/A	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

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

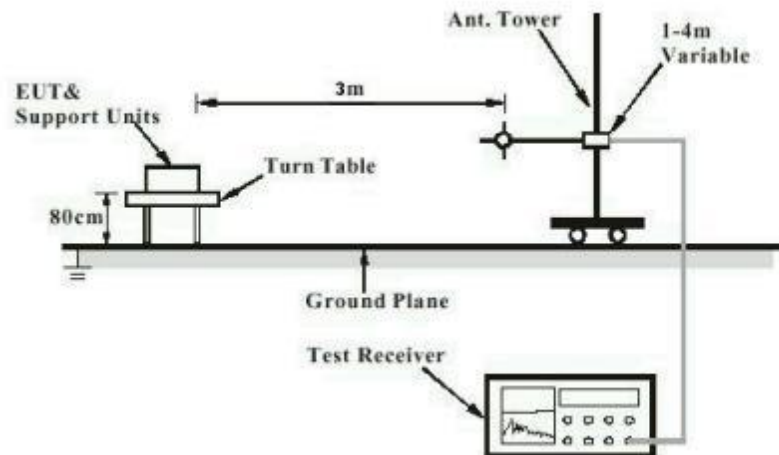


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

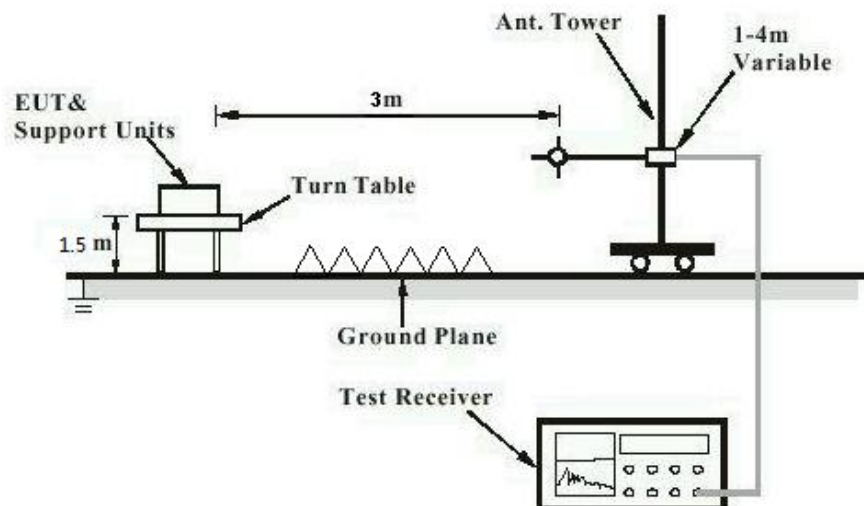


Diagram of Measurement Configuration for Mains Conduction Measurement

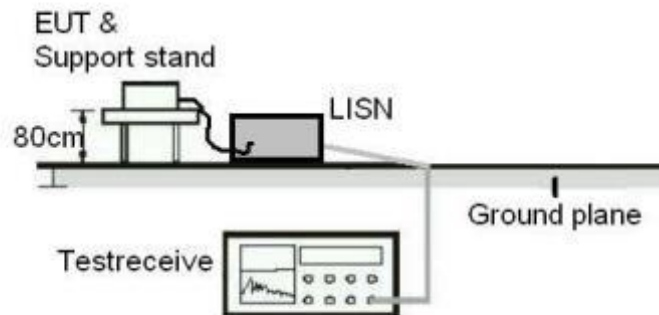
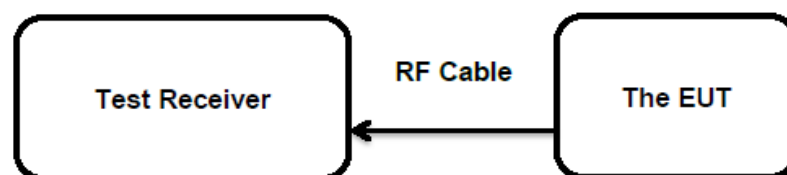


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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.

The Maximum peak conducted output power (e.i.r.p.) = $P_{(\text{Peak power})} + G$, which is far below the 4 W

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 : 08.08.2019
 Input voltage : Fully charged battery
 Operation mode : A
 Test channel : Low / Middle / High
 Ambient temperature : 25 °C
 Relative humidity : 56 %
 Atmospheric pressure : 101 kPa

For details refer to following test result.

Table 6: Test Result of 99% Bandwidth, 2.4GHz FHSS

Test Mode	Test Channel (MHz)	99% Bandwidth (MHz)	Limit
FHSS	2405.0	2.16	/
	2439.0	2.16	
	2475.0	2.15	
Maximum Measured Value		2.16	

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	: 08.08.2019
Input voltage	: Fully charged battery
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
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 Table 4
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: Refer to test result
Input voltage	: Fully charged battery
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 22 °C
Relative humidity	: 53 %
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 B.

5.1.6 20dB Bandwidth

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(a)(1)
RSS-247 Clause 5.1(a)

Basic standard : ANSI C63.10: 2013

Kind of test site : Shielded Room

Test Setup

Date of testing : 23.07.2019

Input voltage : Fully charged battery

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : 25 °C

Relative humidity : 56 %

Atmospheric pressure : 101 kPa

For details refer to following test result.

Table 7: Test Result of 20dB Bandwidth, 2.4GHz FHSS

Test Mode	Test Channel (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
FHSS	2405.0	2100.00	1400.00	/
	2439.0	2110.00	1406.67	
	2475.0	2110.00	1406.67	
Maximum Measured Value		2110.00	1406.67	

For the measurement records, refer to the appendix B.

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(d)

Basic standard : ANSI C63.10: 2013

Limits : ≥ 15 non-overlapping channels

Kind of test site : Shielded Room

Test Setup

Date of testing : 08.08.2019

Input voltage : Fully charged battery

Operation mode : B

Ambient temperature : 25 °C

Relative humidity : 56 %

Atmospheric pressure : 101 kPa

For details refer to following test result.

Table 9: Test Result of Number of Hopping Frequency, 2.4GHz FHSS

Test Mode	Frequency Range	Measured Quantity of Hopping Channel	Limit
FHSS	2405.0 - 2475.0 MHz	16	≥ 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(d)
Basic standard	: ANSI C63.10: 2013
Limits	: < 0.4s
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 08.08.2019
Input voltage	: Fully charged battery
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Note:

Dwell time = Pulse width x Number of channels in Period

Period = 0.4 (seconds/ channel) x 16 (channel) = 6.4 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 15.201(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 15.201(a) RSS-Gen Clause 8.8 & ICES-003 Table 2
Kind of test site	: Shielded Room

Test Setup

Date of testing	: Refer to test result
Input voltage	: Fully charged battery
Operation mode	: C, D
Earthing	: Not connected
Ambient temperature	: 24 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B, 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	: Fully charged battery
Operation mode	: C, D
Earthing	: Not connected
Ambient temperature	: 24 °C
Relative humidity	: 53 %
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 D01 v01r04
FCC KDB Publication 865664 D02 v01r02
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 KDB 447498 v06Power Density: $S_{(\text{mW}/\text{cm}^2)} = \text{PG}/4\pi R^2$ or $\text{EIRP}/4\pi R^2$

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: 20.00 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: $S_{(\text{mW}/\text{cm}^2)} = \text{PG}/4\pi R^2 = 0.020 \text{ mW}/\text{cm}^2$ **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: 2.670 W

The nominal maximum conducted output power specified:

2.4GHz FHSS: 20.00 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

The e.i.r.p. for 2.4GHz FHSS 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.

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Appendix B: Test Results of 2.4GHz FHSS

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Appendix B.1: Test Results of 99% Bandwidth

Low Channel

FCC Part 47 §15.247 2400-2483.5 MHz 2017

Occupied Channel Bandwidth 99% (2405 MHz; 20.000 dBm; 2 MHz; Test Mode)

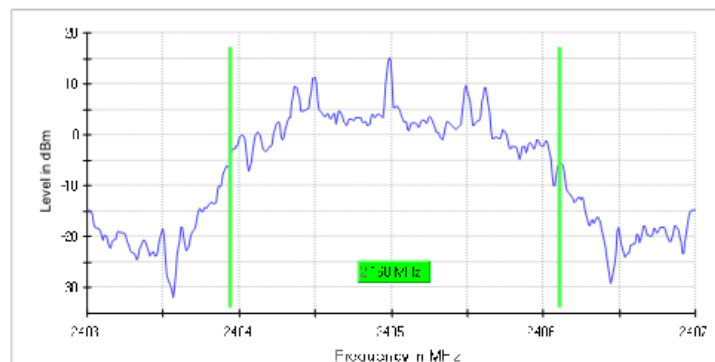
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2405.000000	2.160000	---	---	2403.945000	2406.105000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2405.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40300 GHz	2.40300 GHz
Stop Frequency	2.40700 GHz	2.40700 GHz
Span	4.000 MHz	4.000 MHz
RBW	30.000 kHz	>= 30.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	400	~ 400
SweepTime	94.824 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.11 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

Occupied Channel Bandwidth 99% (2439 MHz; 20.000 dBm; 2 MHz; Test Mode)

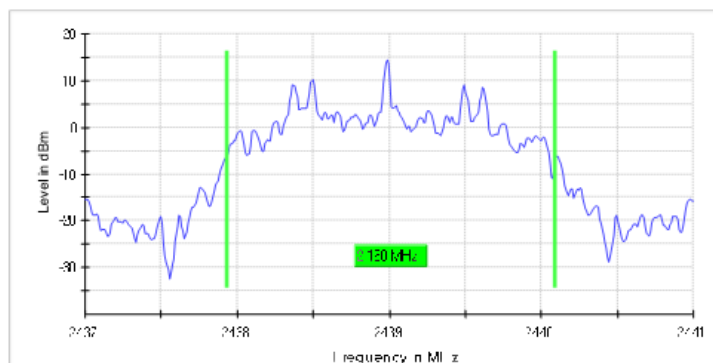
Test according to FCC title 47 part 15 § 15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2439.000000	2.160000	---	---	2437.935000	2440.095000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2439.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43700 GHz	2.43700 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	4.000 MHz	4.000 MHz
RBW	30.000 kHz	>= 30.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	400	~ 400
SweepTime	94.824 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.02 dB	0.30 dB

High Channel

FCC Part 47 §15.247 2400-2483.5 MHz 2017

Occupied Channel Bandwidth 99% (2475 MHz; 20.000 dBm; 2 MHz; Test Mode)

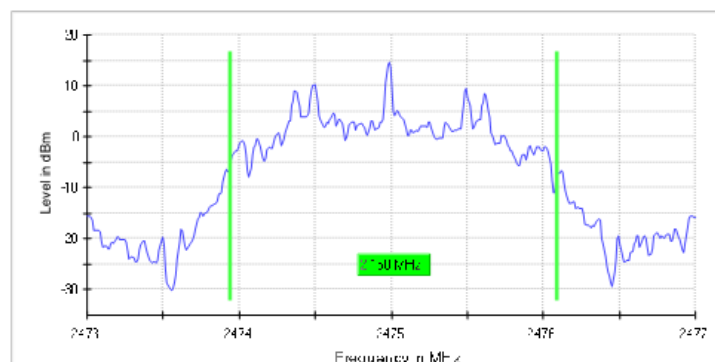
Test according to FCC title 47 part 15 § 15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2475.000000	2.150000	---	---	2473.945000	2476.095000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2475.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47300 GHz	2.47300 GHz
Stop Frequency	2.47700 GHz	2.47700 GHz
Span	4.000 MHz	4.000 MHz
RBW	30.000 kHz	>= 30.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	400	~ 400
SweepTime	94.824 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	12 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.14 dB	0.30 dB

Appendix B.2: Test Results of 20dB Bandwidth

Low Channel

FCC Part 47 §15.247 2400-2483.5 MHz 2017

Emission Bandwidth 20 dB (2405 MHz; 20.000 dBm; 2 MHz; Test Mode)

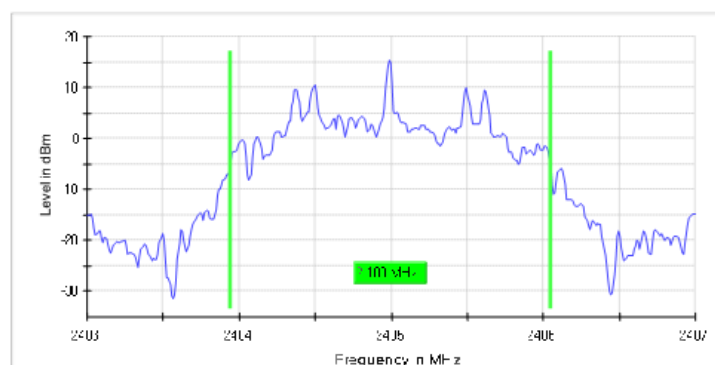
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2405.000000	2.100000	---	---	2403.945000	2406.045000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2405.000000	15.3	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40300 GHz	2.40300 GHz
Stop Frequency	2.40700 GHz	2.40700 GHz
Span	4.000 MHz	4.000 MHz
RBW	30.000 kHz	>= 30.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	400	~ 400
SweepTime	94.824 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.38 dB	0.50 dB

Middle Channel

FCC Part 47 §15.247 2400-2483.5 MHz 2017

Emission Bandwidth 20 dB (2439 MHz; 20.000 dBm; 2 MHz; Test Mode)

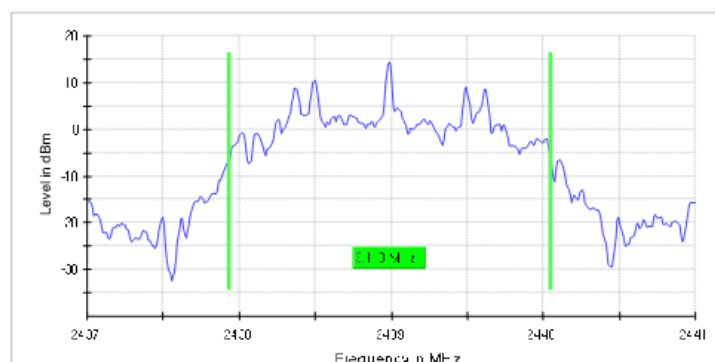
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2439.000000	2.110000	---	---	2437.935000	2440.045000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2439.000000	14.4	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43700 GHz	2.43700 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	4.000 MHz	4.000 MHz
RBW	30.000 kHz	>= 30.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	400	~ 400
SweepTime	94.824 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	14 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.33 dB	0.50 dB

High Channel

FCC Part 47 §15.247 2400-2483.5 MHz 2017

Emission Bandwidth 20 dB (2475 MHz; 20.000 dBm; 2 MHz; Test Mode)

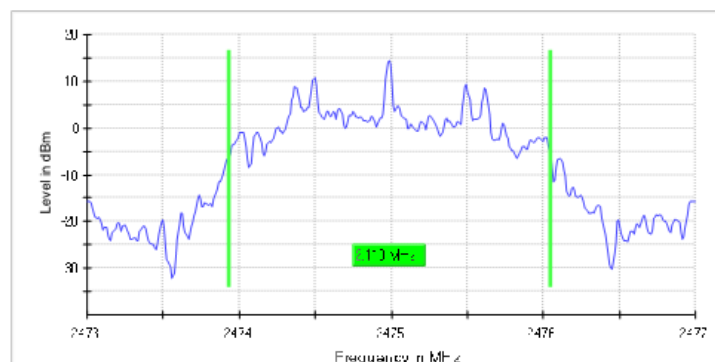
Test according to FCC title 47 part 15 § 15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2475.000000	2.110000	---	---	2473.935000	2476.045000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2475.000000	14.6	PASS

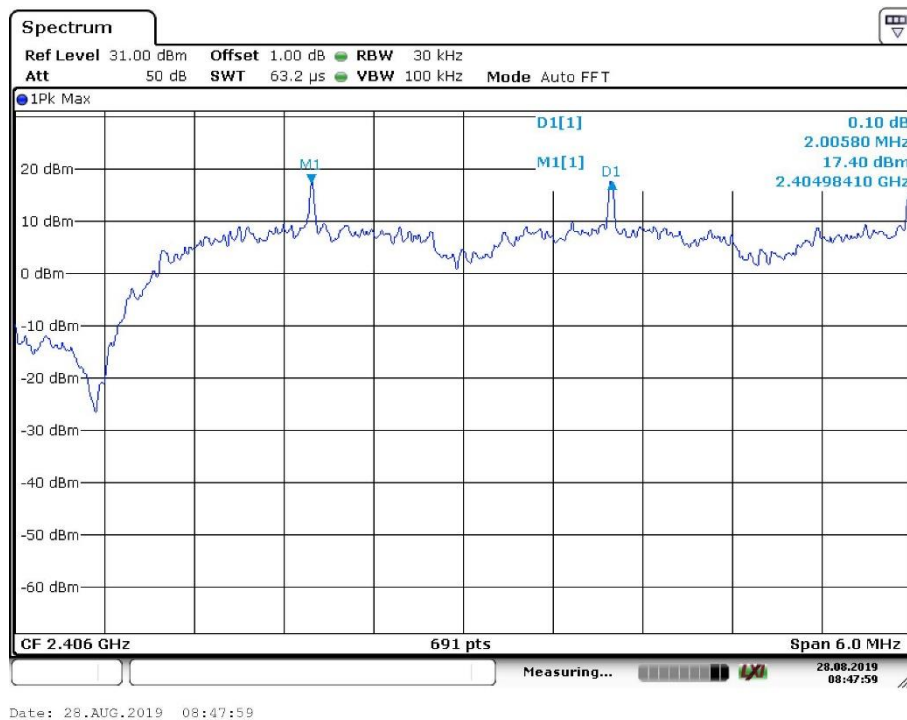


Measurement

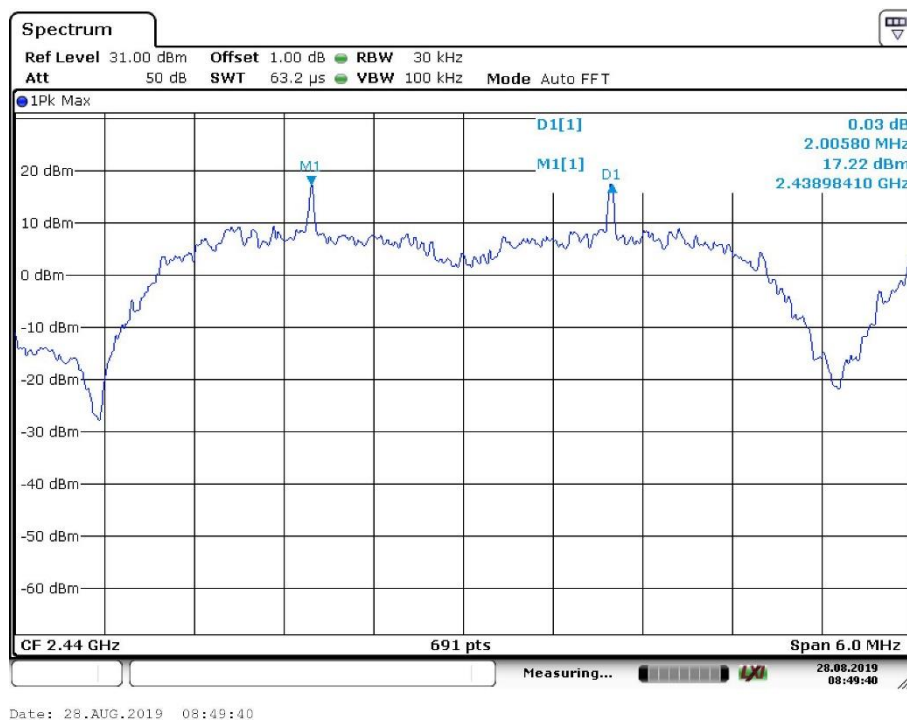
Setting	Instrument Value	Target Value
Start Frequency	2.47300 GHz	2.47300 GHz
Stop Frequency	2.47700 GHz	2.47700 GHz
Span	4.000 MHz	4.000 MHz
RBW	30.000 kHz	>= 30.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	400	~ 400
SweepTime	94.824 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.00 dB	0.50 dB

Appendix B.3: Test Results of Carrier Frequency Separation

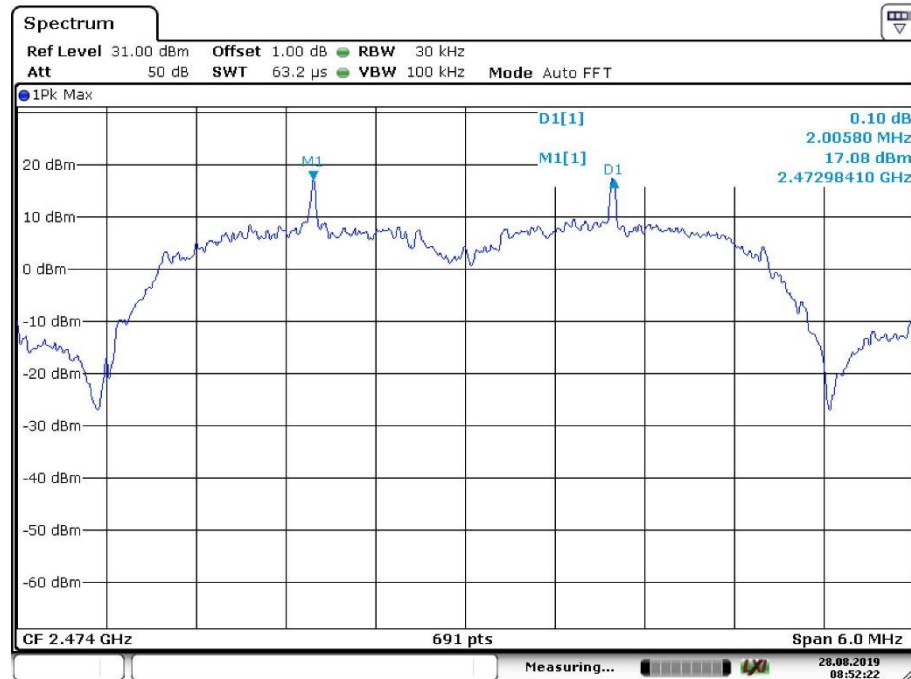
Low Channel



Middle Channel



High Channel



Date: 28.AUG.2019 08:52:22

Appendix B.4: Test Results of Number of Hopping Frequency

All hopping channels

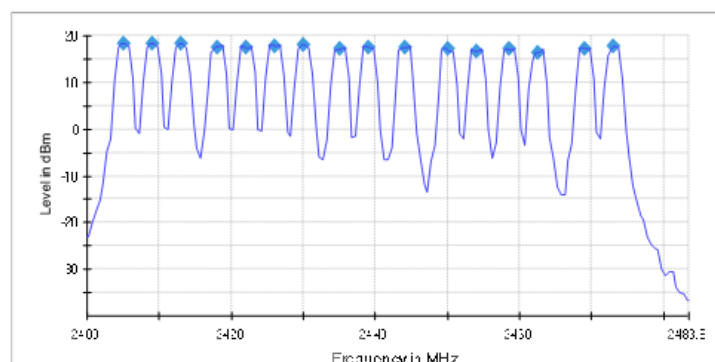
FCC Part 47 §15.247 2400-2483.5 MHz 2017

Hopping Frequencies (frequency independent; 20.000 dBm; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a),(g), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Channels

Channels	Limit Min	Limit Max	Result
16	15	---	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	500.000 kHz	<= 598.000 kHz
VBW	500.000 kHz	>= 500.000 kHz
SweepPoints	167	~ 167
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

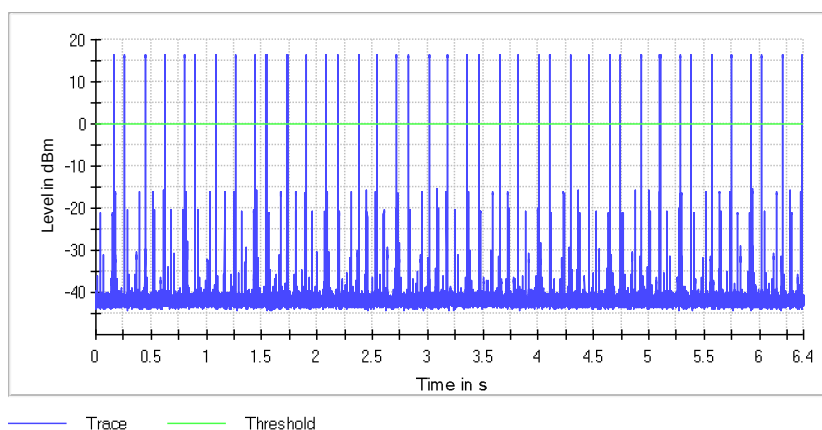
Appendix B.5: Test Results of Time of Occupancy

Time of Channel Occupancy (2439 MHz; 20.000 dBm; 2 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Time (ms)	Limit Max (ms)	Limit Min (ms)	Threshold (dBm)
2439.000000	PASS	34.460	400.000	---	0.0



Measurement

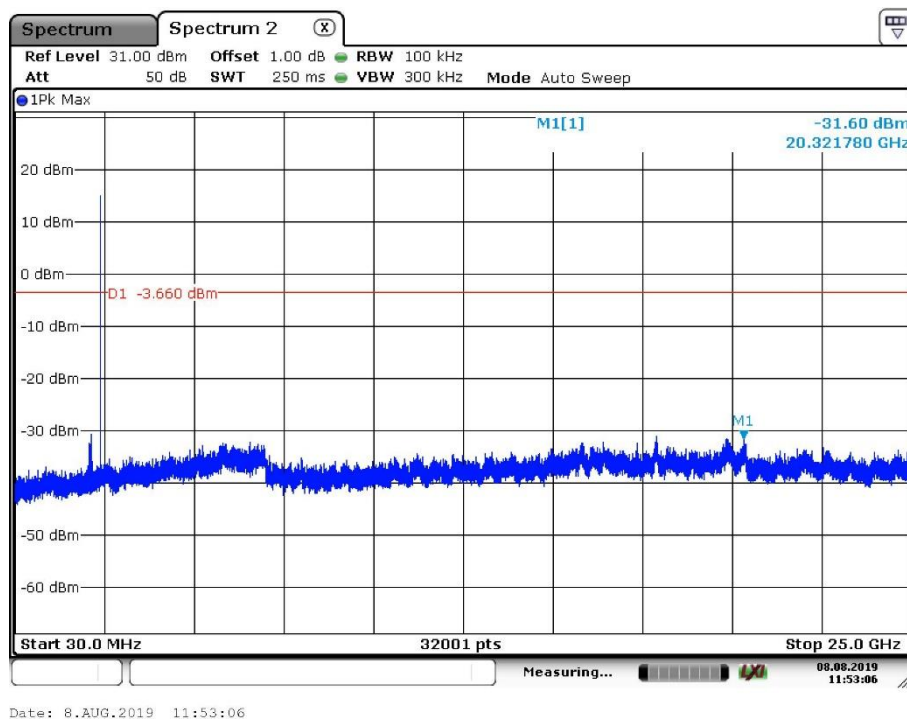
Setting	Instrument Value	Target Value
Center Frequency	2.43900 GHz	2.43900 GHz
Span	ZeroSpan	ZeroSpan
RBW	1.000 MHz	~ 1.000 MHz
VBW	1.000 MHz	>= 1.000 MHz
SweepPoints	30001	~ 30001
Sweptime	6.400 s	6.400 s
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	1	1
Filter	3 dB	3 dB
Trace Mode	Clear Write	Clear Write
SweepType	Sweep	AUTO
Preamp	off	off
Trigger	External	External
Trigger Offset	0.000 s	0.000 s

OSP

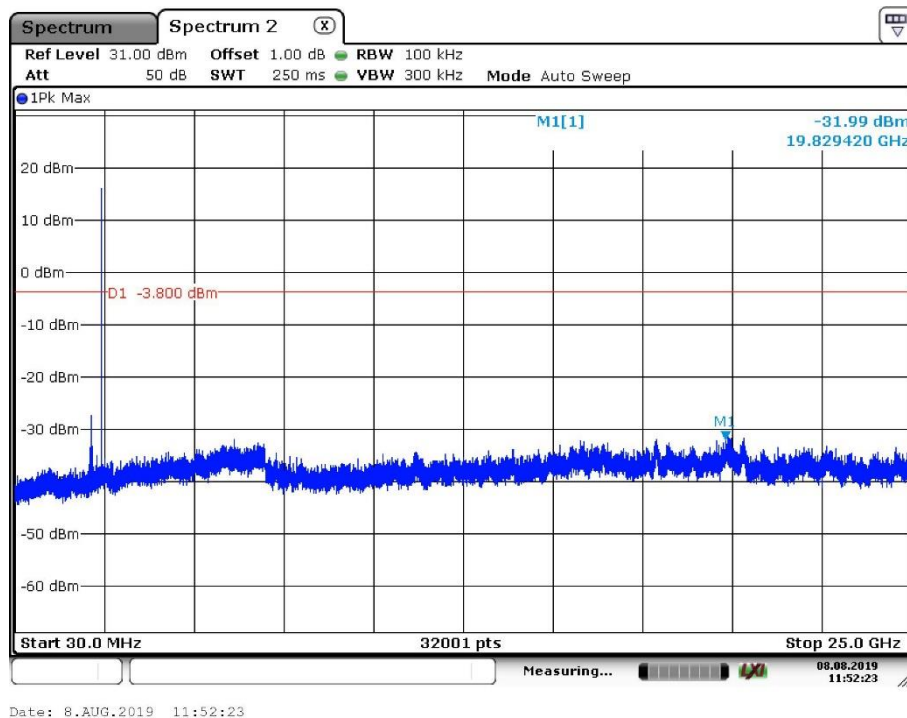
Setting	Instrument Value	Target Value
Measurement Time	6.400 s	6.400 s
Tracepoints	6400000	6400000
Time resolution	1.000 µs	1.000 µs
Detector	RMS	RMS

Appendix B.6: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

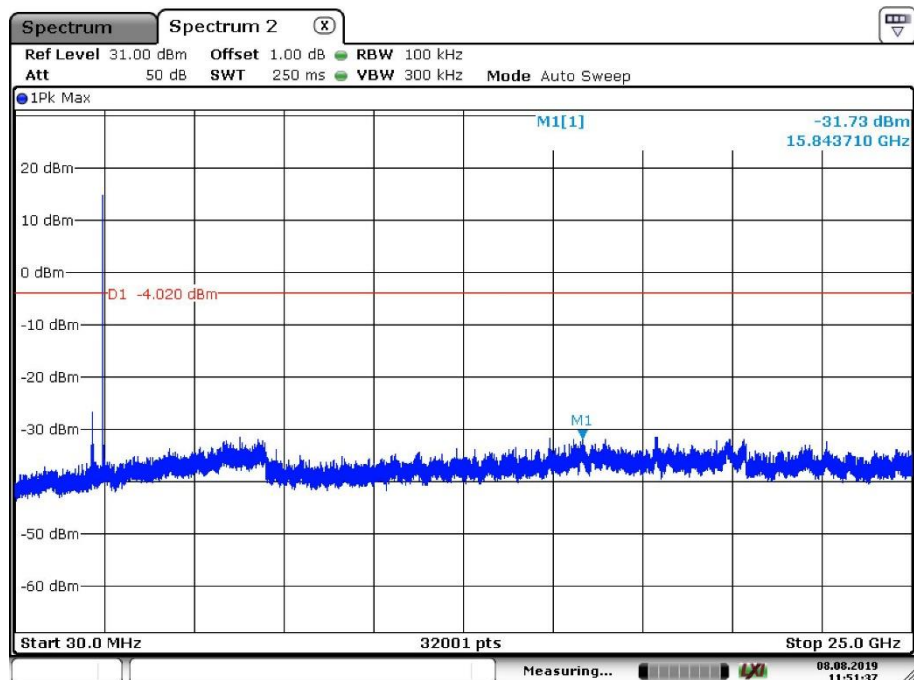
Low Channel



Middle Channel

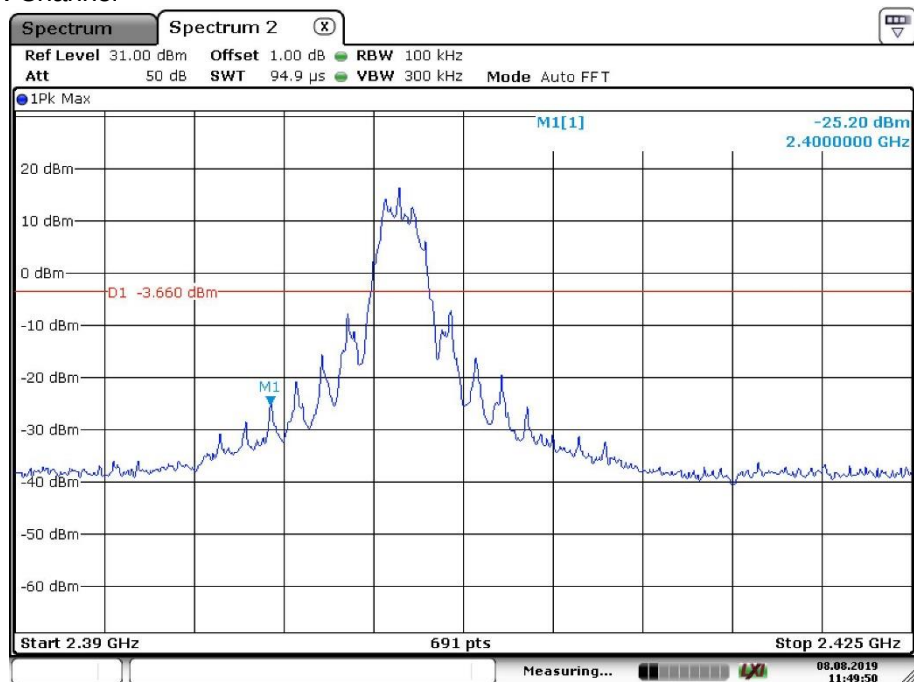


High Channel



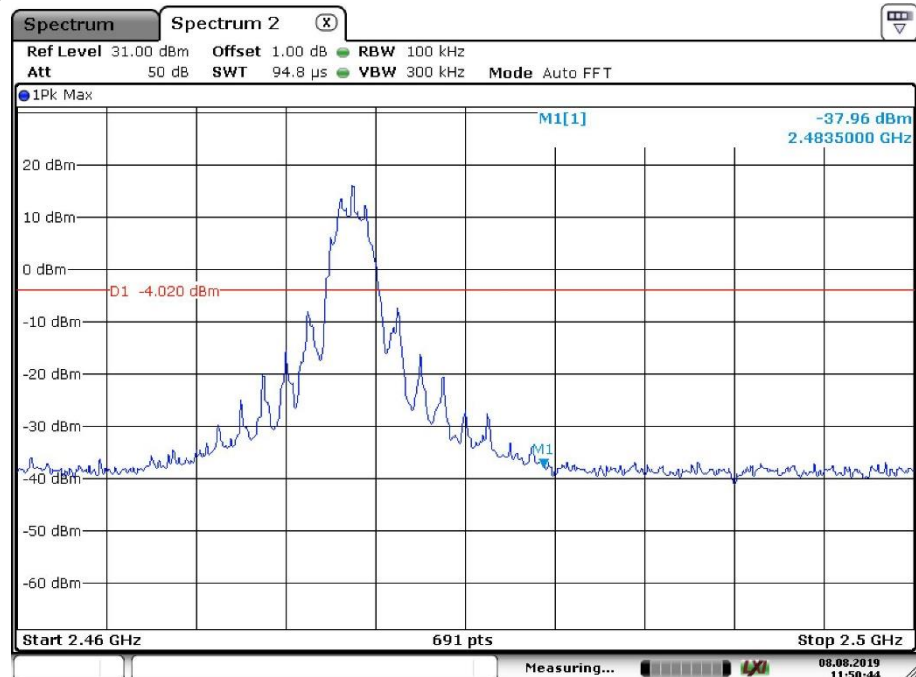
Date: 8.AUG.2019 11:51:37

Band Edge, Low Channel



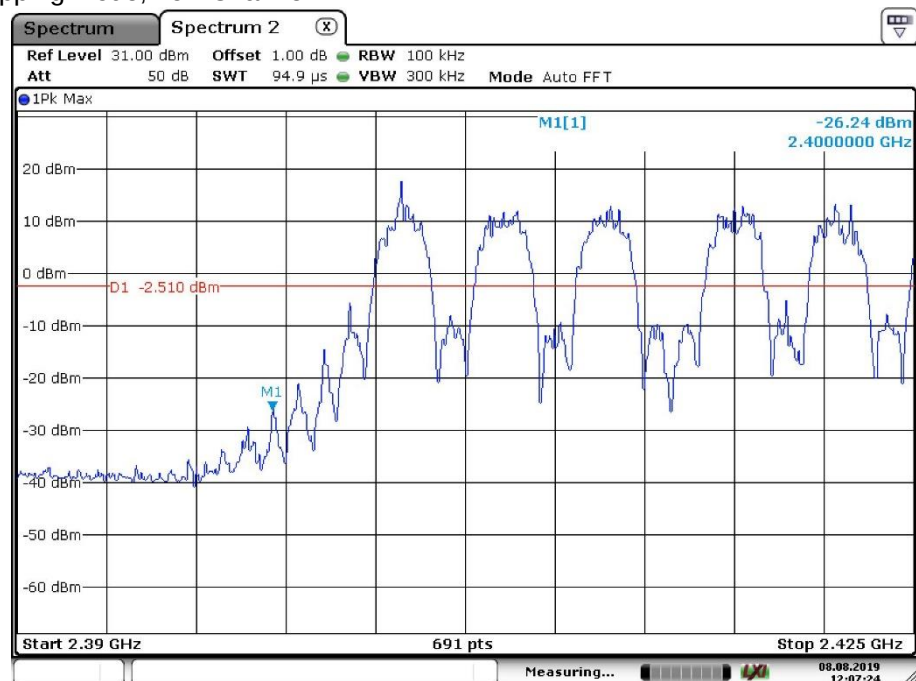
Date: 8.AUG.2019 11:49:50

Band Edge, High Channel



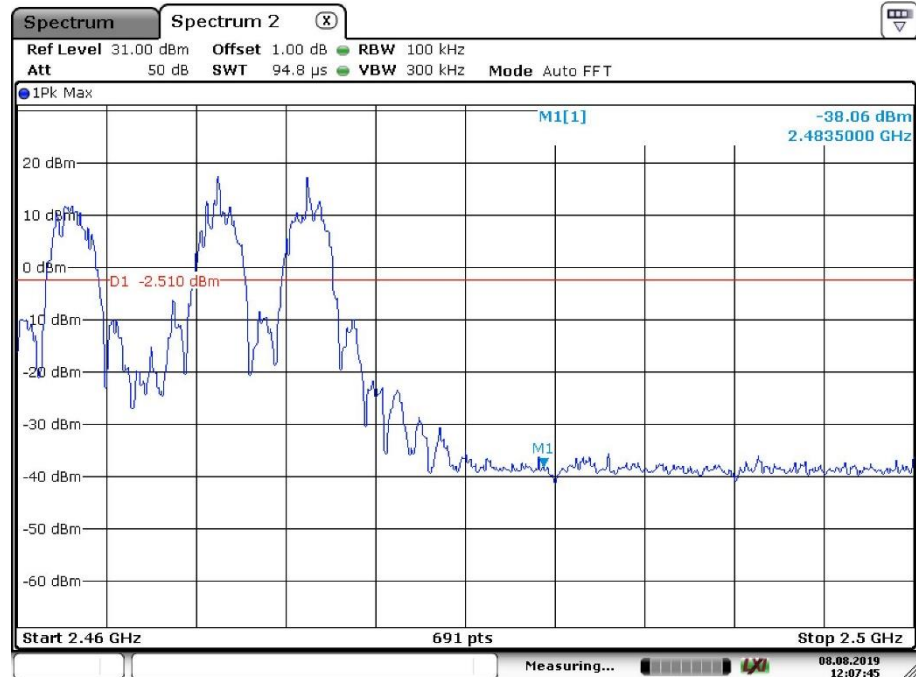
Date: 8.AUG.2019 11:50:44

Band Edge, Hopping Mode, Low Channel



Date: 8.AUG.2019 12:07:24

Band Edge, Hopping Mode, High Channle



Date: 8.AUG.2019 12:07:45

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix B.7: Test Results of Radiated Spurious Emissions 30MHz - 1GHz (Worst case)

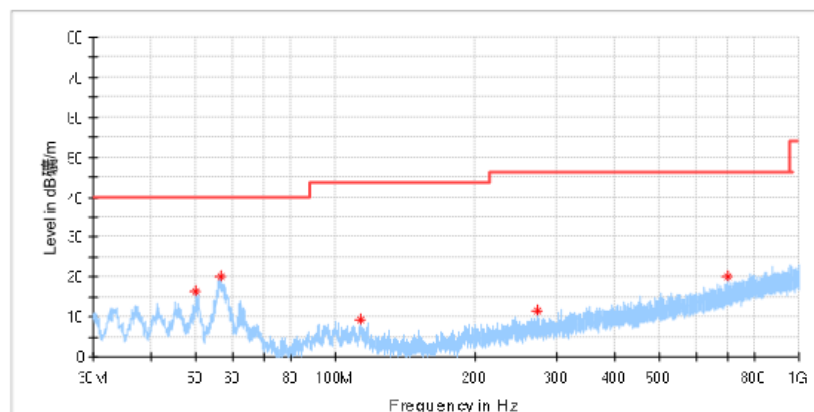
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX High Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.030500	16.44	---	40.00	23.56	100.0	H	116.0	-18.6
56.481000	20.07	---	40.00	19.93	100.0	H	109.0	-18.9
113.468500	9.29	---	43.50	34.21	100.0	H	83.0	-19.8
271.869500	11.55	---	46.00	34.45	100.0	H	41.0	-17.2
703.762000	20.05	---	46.00	25.95	100.0	H	339.0	-8.3

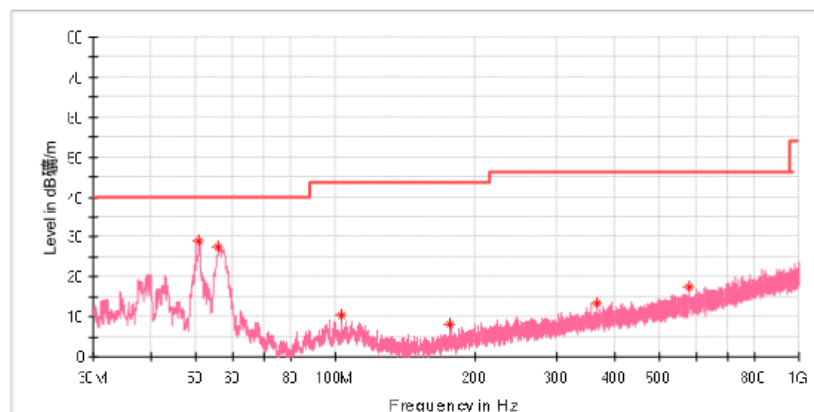
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX High Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.855000	29.11	—	40.00	10.89	100.0	V	1.0	-18.6
55.802000	27.71	—	40.00	12.29	100.0	V	5.0	-18.8
103.138000	10.26	—	43.50	33.24	100.0	V	220.0	-19.2
177.052000	8.02	—	43.50	35.48	100.0	V	0.0	-21.1
365.329000	13.52	—	46.00	32.48	100.0	V	142.0	-14.8
577.468000	17.35	—	46.00	28.65	100.0	V	122.0	-10.6

12/8/2019

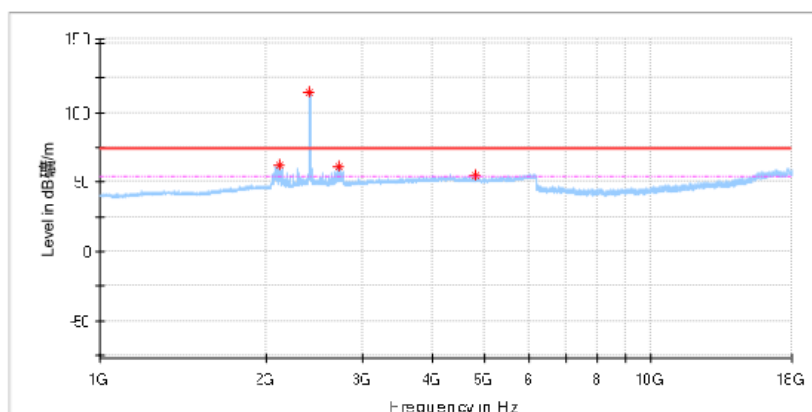
4:22:08 PM

1GHz - 18GHz
Low Channel

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX Low Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2116.500000	62.05	—	74.00	11.95	100.0	H	345.0	6.1
2404.500000	114.85	—	74.00	-40.85	100.0	H	338.0	7.0
2708.500000	60.90	—	74.00	13.10	100.0	H	242.0	7.6
4809.000000	54.27	—	74.00	19.73	100.0	H	46.0	13.6

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2116.50	62.05	13.06	48.99	54.00	5.01
2708.50	60.90	13.06	47.84	54.00	6.16
4809.00	54.27	13.06	41.21	54.00	12.79

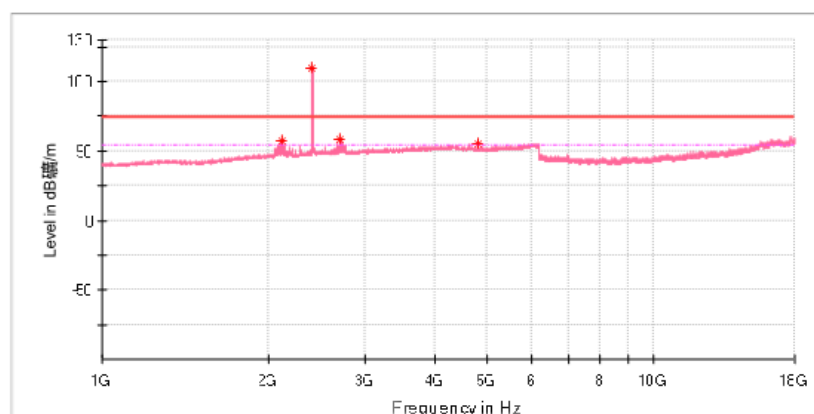
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX Low Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2116.500000	57.78	—	74.00	16.22	100.0	V	89.0	6.1
2404.500000	109.85	—	74.00	-35.85	100.0	V	150.0	7.0
2694.000000	58.10	—	74.00	15.90	100.0	V	238.0	7.5
4810.500000	54.70	—	74.00	19.30	100.0	V	60.0	13.6

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2116.50	57.78	13.06	44.72	54.00	9.28
2694.00	58.10	13.06	45.04	54.00	8.96
4810.50	54.70	13.06	41.64	54.00	12.36

Middle Channel

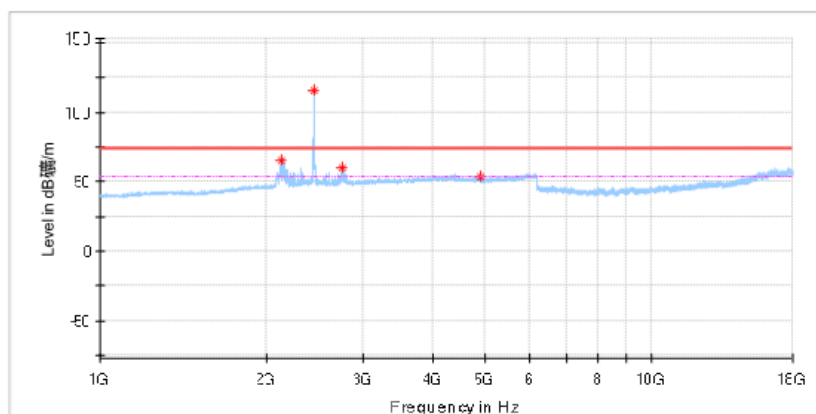
Test

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Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX Mid Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2135.000000	64.39	---	74.00	9.61	100.0	H	324.0	6.1
2439.500000	115.03	---	74.00	-41.03	100.0	H	317.0	7.4
2742.500000	59.89	---	74.00	14.11	100.0	H	310.0	7.8
4879.000000	53.26	---	74.00	20.74	100.0	H	155.0	13.4

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2135.00	64.39	13.06	51.33	54.00	2.67
2742.50	59.89	13.06	46.83	54.00	7.17
4879.00	53.26	13.06	40.20	54.00	13.80

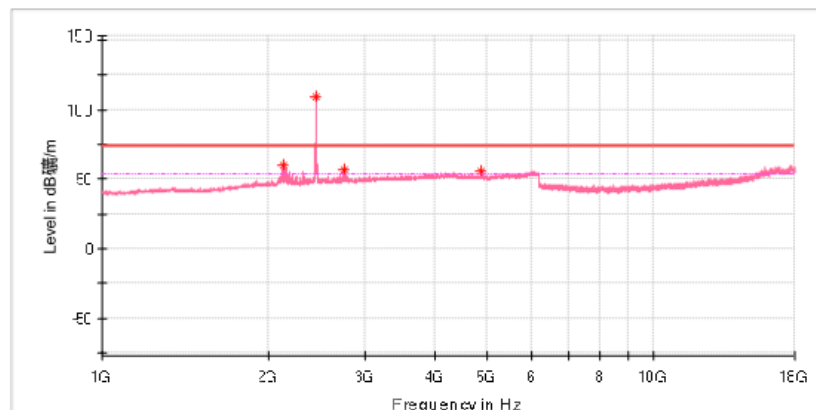
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX Mid Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2135.500000	60.00	—	74.00	14.00	100.0	V	220.0	6.1
2439.500000	109.13	—	74.00	-35.13	100.0	V	282.0	7.4
2743.500000	56.65	—	74.00	17.35	100.0	V	167.0	7.8
4876.500000	55.35	—	74.00	18.65	100.0	V	265.0	13.4

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2135.00	60.00	13.06	46.94	54.00	7.06
2743.50	56.65	13.06	43.59	54.00	10.41
4876.50	55.35	13.06	42.29	54.00	11.71

High Channel

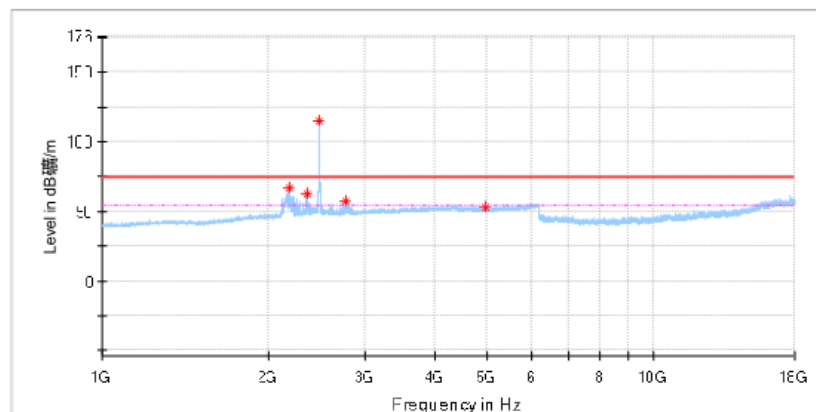
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX High Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2187.000000	64.81	—	74.00	9.19	100.0	H	0.0	6.3
2347.500000	62.41	—	74.00	11.59	100.0	H	0.0	6.9
2475.500000	114.98	—	74.00	-40.98	100.0	H	316.0	7.4
2762.500000	57.57	—	74.00	16.43	100.0	H	310.0	7.9
4951.000000	52.93	—	74.00	21.07	100.0	H	303.0	13.2

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2187.00	64.81	13.06	51.75	54.00	2.25
2347.50	62.41	13.06	49.35	54.00	4.65
4762.50	57.57	13.06	44.51	54.00	9.49
4951.00	52.93	13.06	39.87	54.00	14.13

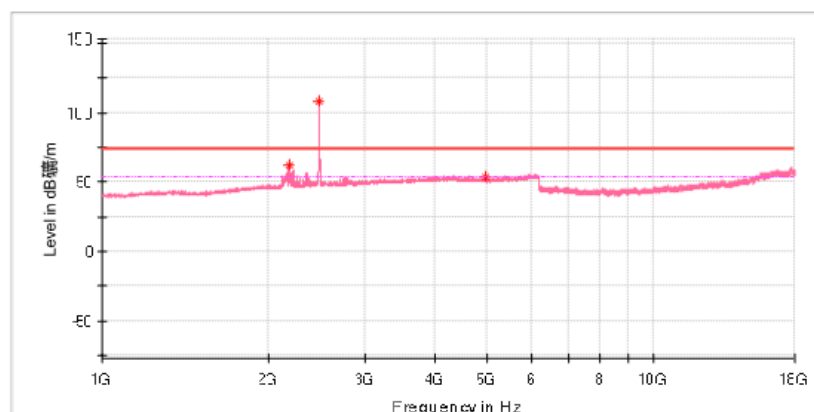
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX High Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2187.000000	62.54	—	74.00	11.46	100.0	V	136.0	6.3
2475.500000	108.39	—	74.00	-34.39	100.0	V	233.0	7.4
4949.000000	53.70	—	74.00	20.30	100.0	V	242.0	13.2

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2187.00	62.54	13.06	49.48	54.00	4.52
4949.00	53.70	13.06	40.64	54.00	13.36

Appendix B.8: Test Results of Radiated Emissions in Restricted Bands

Low channel

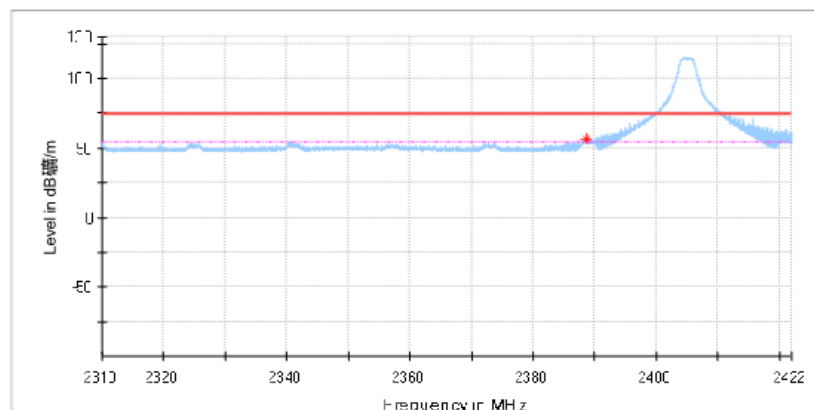
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX Low Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.745882	56.39	—	74.00	17.61	100.0	H	282.0	7.0

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2388.75	56.39	13.06	43.33	54.00	10.67

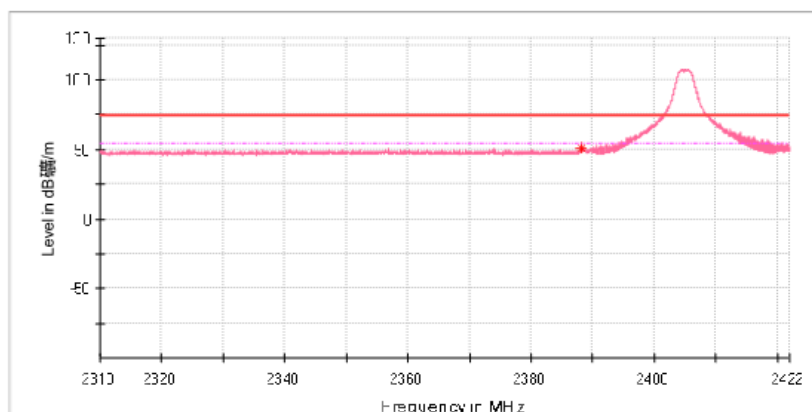
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX Low Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.284706	51.15	—	74.00	22.85	100.0	V	188.0	7.0

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2388.28	51.15	13.06	40.49	54.00	13.51

High channel

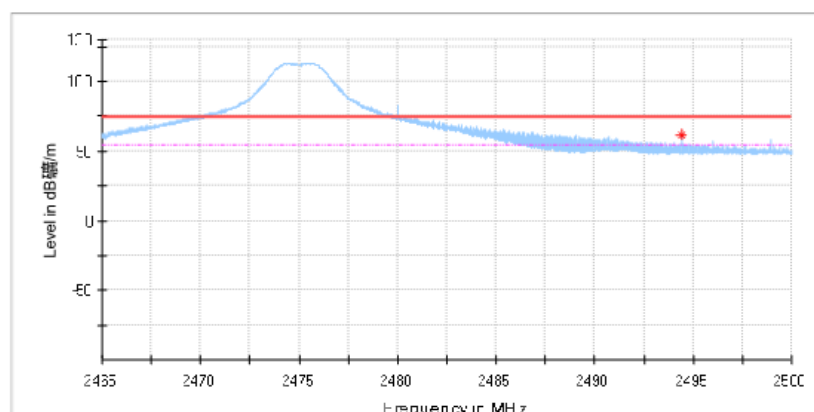
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX High Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2494.425735	61.55	—	74.00	12.45	100.0	H	62.0	7.4

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2494.43	61.55	13.06	50.89	54.00	3.11

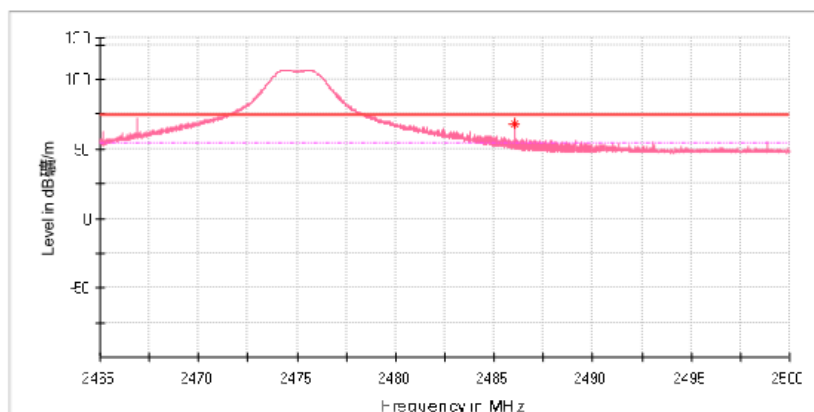
Test

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
Model:	MBP482NPU
Test Mode:	TX High Channel
Test Voltage:	Fully charged battery
Remark:	Temp:24; Humi:53%
Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.025735	64.99	—	74.00	9.01	100.0	V	356.0	7.4

Correction factor = $20 \cdot \log(X) = 20 \cdot \log(22.24/100) = 13.06$ dB, where x is the duty cycle:

Average Test Result:

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2486.03	64.99	13.06	51.93	54.00	2.07

Appendix B.9: Test Results of Conducted Emission on AC Mains Mode C with Battery #1(GPI)

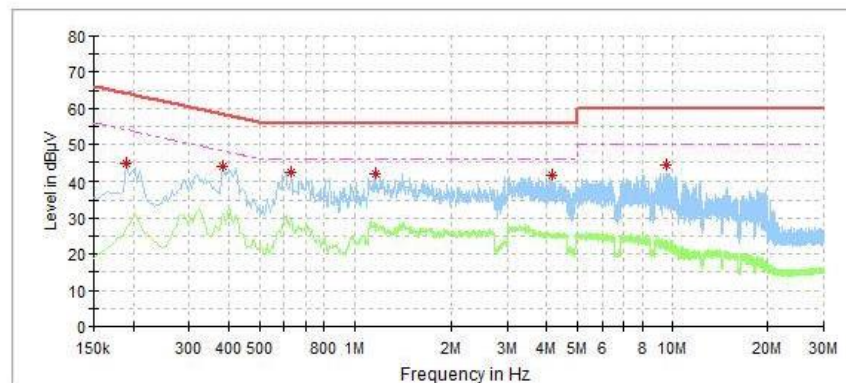
Charging+Connecting-GPI-L

1 / 1

Test Report

EUT Information

EUT Name: Baby Monitor(Parent Unit)
EUT Model: MBP482NPU
Order No. 168124991 item 100
Test Mode: Charging+Connecting
Test Voltage: AC 120V/60Hz
Tested By: Shower.Dai
Reviewed By: Gary Chen
Remark: GPI Battery



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	44.60	---	64.04	19.44	---	---	L1	9.7
0.382000	43.85	---	58.24	14.39	---	---	L1	9.7
0.632000	42.09	---	56.00	13.91	---	---	L1	9.7
1.164000	41.83	---	56.00	14.17	---	---	L1	9.8
4.184000	41.54	---	56.00	14.46	---	---	L1	9.9
9.556000	44.39	---	60.00	15.61	---	---	L1	10.0

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
---	---	---	---	---	---	---	---	---

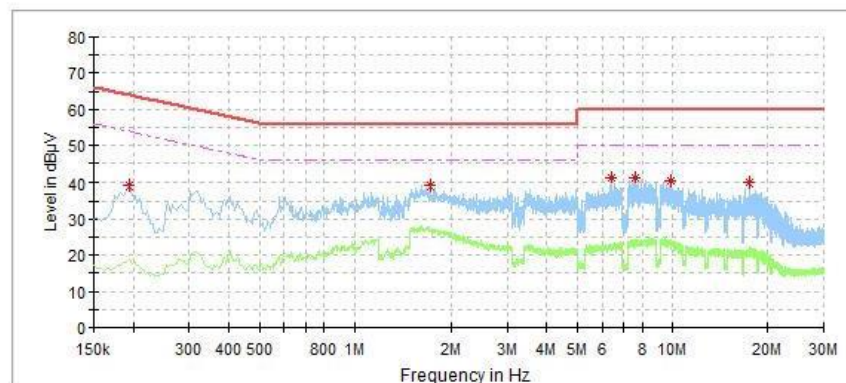
Charging+Connecting-GPI-N

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
EUT Model:	MBP482NPU
Order No.	168124991 item 100
Test Mode:	Charging+Connecting
Test Voltage:	AC 120V/60Hz
Tested By:	Shower.Dai
Reviewed By:	Gary Chen
Remark:	GPI Battery



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.194000	39.00	---	63.86	24.87	---	---	N	9.8
1.724000	38.98	---	56.00	17.02	---	---	N	9.8
6.408000	40.84	---	60.00	19.16	---	---	N	10.0
7.608000	41.05	---	60.00	18.95	---	---	N	10.0
9.900000	40.23	---	60.00	19.77	---	---	N	10.1
17.544000	39.75	---	60.00	20.25	---	---	N	10.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
---	---	---	---	---	---	---	---	---

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Mode C with Battery #2(Justhghih)

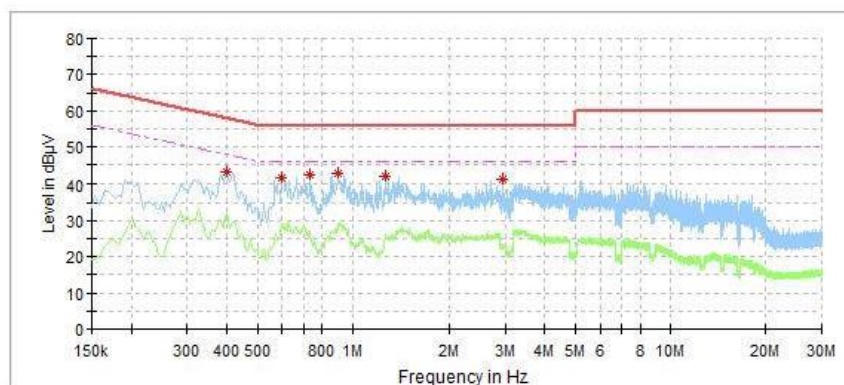
Charging+Connecting-Justhigh-L

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
EUT Model:	MBP482NPU
Order No.	168124991 item 100
Test Mode:	Charging+Connecting
Test Voltage:	AC 120V/60Hz
Tested By:	Shower.Dai
Reviewed By:	Gary Chen
Remark:	Justhigh Battery



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.402000	42.98	---	57.81	14.84	---	---	L1	9.7
0.596000	41.60	---	56.00	14.40	---	---	L1	9.7
0.736000	42.33	---	56.00	13.67	---	---	L1	9.7
0.900000	42.48	---	56.00	13.52	---	---	L1	9.7
1.272000	41.67	---	56.00	14.33	---	---	L1	9.8
2.948000	40.91	---	56.00	15.09	---	---	L1	9.8

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
---	---	---	---	---	---	---	---	---

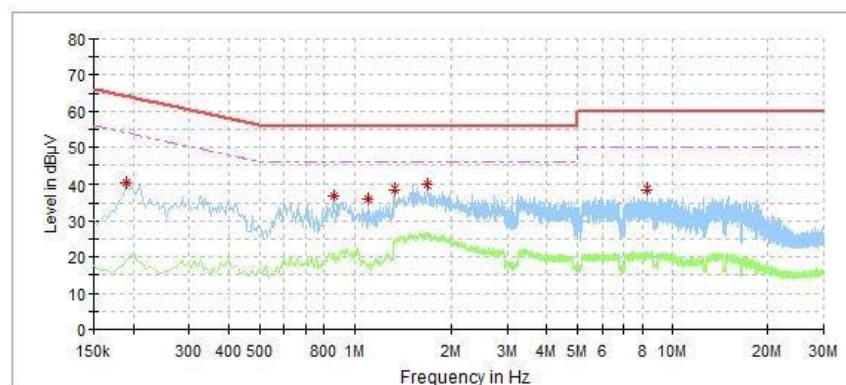
Charging+Connecting-Justhigh-N

1 / 1

Test Report

EUT Information

EUT Name:	Baby Monitor(Parent Unit)
EUT Model:	MBP482NPU
Order No.	168124991 item 100
Test Mode:	Charging+Connecting
Test Voltage:	AC 120V/60Hz
Tested By:	Shower.Dai
Reviewed By:	Gary Chen
Remark:	Justhigh Battery



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	40.07	---	64.04	23.97	---	---	N	9.8
0.860000	36.82	---	56.00	19.18	---	---	N	9.7
1.108000	36.21	---	56.00	19.79	---	---	N	9.8
1.336000	38.62	---	56.00	17.38	---	---	N	9.8
1.688000	39.80	---	56.00	16.20	---	---	N	9.8
8.304000	38.57	---	60.00	21.43	---	---	N	10.0

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
---	---	---	---	---	---	---	---	---

8/7/2019

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