V04



50287912 001 168124874 Seite 1 von 27 Prüfbericht-Nr.: Auftrags-Nr.: Test report No.: Order No.: Page 1 of 27 Kunden-Referenz-Nr.: N/A 23.07.2019 Auftragsdatum: Client reference No.: Order date.: Binatone Electronics International Ltd. Auftraggeber: Floor 23A, 9 Des Voeux Road West, Sheung Wan, Hong Kong Client: Prüfgegenstand: 2" Video Baby Monitor (Parent Unit) Test item: MBP481APU, MBP481NPU, MBP481PU Bezeichnung / Typ-Nr.: Identification / Type No.: (Trademark: motorola) Auftrags-Inhalt: FCC and IC approval Order content: CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 2 February 2017 Prüfgrundlage: CFR47 FCC Part 15: Subpart C Section 15.207 RSS-Gen Issue 5 April 2018 Test specification: CFR47 FCC Part 15: Subpart C Section 15,209 ICES-003 Issue 6 January 2016 CFR47 FCC Part 15: Subpart B Section 15.107 RSS-102 Issue 5 March 2015 CFR47 FCC Part 15: Subpart B Section 15.109 CFR47 FCC Part 2: Section 2.1091 Wareneingangsdatum: 23.07.2019 Date of receipt: A000956136-011 to 012 Prüfmuster-Nr.: Test sample No.: Prüfzeitraum: 23.07.2019 - 29.08.2019 Testing period: Please refer to photo documents Ort der Prüfung: TÜV Rheinland (Shenzhen) Place of testing: Co., Ltd. TÜV Rheinland (Shenzhen) Prüflaboratorium: Testing laboratory: Co., Ltd. Prüferaebnis*: Pass Test result*: geprüft von / tested by: kontrolliert von / reviewed by: Dire Hon Ryan Yang / Assistant Project Manager 29.08.2019 29.08.2019 Winnie Hou / Technical Certifier **Datum** Name/Stellung Unterschrift **Datum** Name/Stellung Unterschrift Name/Position Name/Position Date Signature Date Signature Sonstiges / Other: FCC ID: VLJ-MBP481APU IC: 4522A-MBP481APU HVIN: MBP481APU Prüfmuster vollständig und unbeschädigt Zustand des Prüfgegenstandes bei Anlieferung: Test item complete and undamaged: Condition of the test item at delivery: * Legende: 1 = sehr gut 2 = qut3 = 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 = good3 = satisfactory 4 = sufficient 5 = poorP(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicableN/T = not testedDieser 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



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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



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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	20.08.2020	
Signal Analyzer	R&S	FSV 40	101441	20.08.2020	
Vector Signal Generator	R&S	SMBV100A	263301	21.08.2020	
Signal Generator	R&S	SMB100A	115186	21.08.2020	
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	20.08.2020	
Wideband Radio Communication Tester	R&S	CMW500	165339	20.08.2020	
Signal Analyzer	R&S	FSV 40	101440	20.08.2020	
System Controller Interface	R&S	SCI-100	S10010036	N/A	
Filterbank	R&S	CDMA	100751	21.08.2020	
Filterbank	R&S	GSM	100811	21.08.2020	



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OSP	R&S	OSP 120	102041	N/A		
OSP	R&S	OSP 150	101385	N/A		
Pre-amplifier	R&S	SCU08F1	08320030	20.08.2020		
Amplifier	R&S	SCU-18F	180079	20.08.2020		
Amplifier	R&S	SCU40A	100450	20.08.2020		
Conducted Emission	n on AC Mains					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until		
EMI Test Receiver	R&S	ESR3	102428	19.08.2020		
Artificial Mains Network	R&S	ENV216	102333	19.08.2020		
Radiated Emission	Radiated Emission					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until		
EMI Test Receiver	R&S	ESR7	102022	19.08.2020		
Bilog Antenna	TESEQ	CBL6112D	51321	29.08.2020		

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.

Parameter	Uncertainty
Radio Frequency	±1 x 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 %



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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.



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3 General Product Information

3.1 Product Function and Intended Use

The EUT is a parent unit (monitor) of one of the 2" 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	Parer	Parent Unit		
(Model No.)	Supported	Tested	Supplier	
Adapter #1 (S003GU0600040)	\boxtimes	\boxtimes	Tenpao	
Battery #1 (GP80AAAHC3BMXZ)	\boxtimes	\boxtimes	GPI	
Battery #2 (JHAAA800P3H)	\boxtimes	\boxtimes	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" Video Baby Monitor (Parent Unit)
Type Designation	MBP481APU, MBP481NPU, MBP481PU
Trade Mark	motorola
FCC ID	VLJ-MBP481APU
IC	4522A-MBP481APU
HVIN	MBP481APU
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



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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

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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 MBP481NPU 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" Video Baby Monitor (Baby Unit)	Vtech	MBP481NBU	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.



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4.5 Test Setup Diagram

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

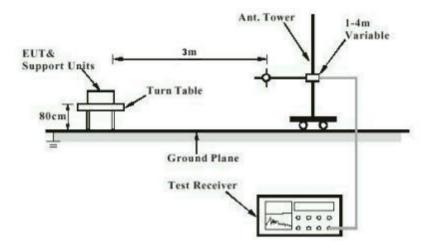
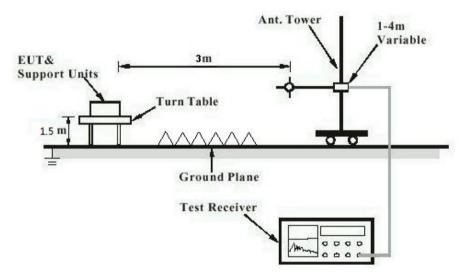


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)





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Diagram of Measurement Configuration for Mains Conduction Measurement

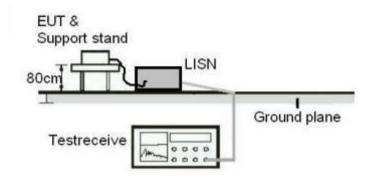
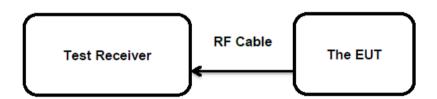


Diagram of Measurement Configuration for Conducted Transmitter Measurement





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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.



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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(b)

Basic standard : ANSI C63.10: 2013 Limits : FHSS < 0.125 Watts Kind of test site : Shielded Room

Test Setup

Date of testing : 12.08.2019

Input voltage : Fully charged battery

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : $25\,^{\circ}\text{C}$ Relative humidity : $56\,\%$ Atmospheric pressure : $101\,\text{kPa}$

For details refer to following test result.

Table 5: Test Result of Maximum Peak Conducted Output Power, 2.4GHz FHSS

Test Mode	Test Channel	Measured Po	Limit	
1621 MOGE	(MHz)	(dBm)	(W)	(W)
	2405.0	19.12	0.0817	
FHSS	2439.0	19.48	0.0887	< 0.125
	2475.0	18.75	0.0750	< 0.123
Maximum Measured Value		19.48	0.0887	

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G) of FHSS: 0 dBi,

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



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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 : 12.08.2019

Input voltage : Fully charged battery

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : $25 \, ^{\circ}\mathrm{C}$ Relative humidity : $56 \, \%$ Atmospheric pressure : $101 \, \mathrm{kPa}$

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
	2405.0	2.16	
FHSS	2439.0	2.15	1
	2475.0	2.15	/
Maximum Mea	asured Value	2.16	



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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 : 12.08.2019

Input voltage : Fully charged battery

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : $25 \,^{\circ}\text{C}$ Relative humidity : $56 \,^{\circ}\text{M}$ Atmospheric pressure : $101 \,^{\circ}\text{kPa}$

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



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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 : 12.08.2019

Input voltage : Fully charged battery

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : $22 \,^{\circ}\text{C}$ Relative humidity : $53 \,^{\circ}\text{M}$ Atmospheric pressure : $101 \,^{\circ}\text{kPa}$

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.



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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 : 12.08.2019

Input voltage : Fully charged battery

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : $25\,^{\circ}\text{C}$ Relative humidity : $56\,\%$ Atmospheric pressure : $101\,\text{kPa}$

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)
	2405.0	2110.00	1406.67	
FHSS	2439.0	2110.00	1406.67	1
	2475.0	2110.00	1406.67	,
Maximum Mea	sured Value	2110.00	1406.67	



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5.1.7 Carrier Frequency Separation

RESULT: Pass

Test Specification

Test standard : FCC Part 15.247(a)(1)

RSS-247 Clause 5.1(b)

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 : 28.08.2019

Input voltage : Fully charged battery

Operation mode : B

Test channel : Low / Middle / High

Ambient temperature : $25\,^{\circ}\text{C}$ Relative humidity : $56\,\%$ Atmospheric pressure : $101\,\text{kPa}$

For details refer to following test result.

Table 8: Test Result of Carrier Frequency Separation, 2.4GHz FHSS

Test Mode	Test Channel	Test Channel (MHz)	Measured Channel Separation (KHz)	Limit (kHz)
	Low Channel	2405.0		
	Adjacency Channel	2407.0	2005.8	≥ 25kHz or 2/3 of 20dB bandwidth
	Middle Channel	2439.0		
FHSS	Adjacency Channel	2441.0	2005.8	
	High Channel	2475.0		
	Adjacency Channel	2473.0	1996.4	

Note: The limit is maximum 2/3 of the 20 dB bandwidth: 1406.67 KHz.



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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 : 29.08.2019

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 $\ensuremath{\mathsf{B}}.$



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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 : 12.08.2019

Input voltage : Fully charged battery

Operation mode : B

Test channel : Low / Middle / High

Ambient temperature : $25\,^{\circ}\text{C}$ Relative humidity : $56\,\%$ Atmospheric pressure : $101\,\text{kPa}$

Note:

Dwell time = Pulse width x Number of channels in Period Period = 0.4 (seconds/ channel) x 16 (channel) = 6.4 seconds



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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 : 07.08.2019

Input voltage : Fully charged battery

Operation mode : C, D

Earthing : Not connected

Ambient temperature : $24 \,^{\circ}\text{C}$ Relative humidity : $53 \,^{\circ}\text{M}$ Atmospheric pressure : $101 \,^{\circ}\text{kPa}$



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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 : 09.08.2019

Input voltage : Fully charged battery

Operation mode : C, D

Earthing : Not connected



Products

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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 v06

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

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

1.0 mW/cm²



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> 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 x $10^{-2} f^{0.6834}$ 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."



Test Report No.

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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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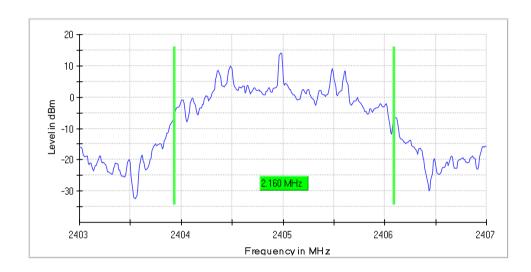
Appendix B.1: Test Results of 99% Bandwidth

Low Channel

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2405.000000	2.160000	-	-	2403.935000	2406.095000

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

DUT Frequency (MHz)	Result
2405.000000	PASS



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			
Stablev alue	0.30 dB	0.30 dB			
Run	11 / max. 150	max. 150			
Stable	3/3	3			
Max Stable Difference	0.00 dB	0.30 dB			



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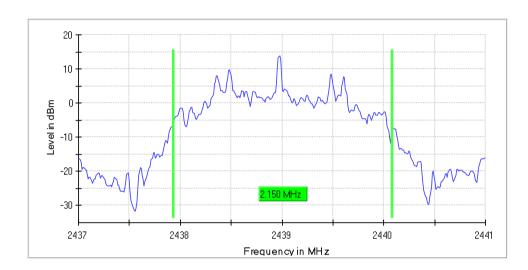
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Middle Channel

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2439.000000	2.150000			2437.935000	2440.085000

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

DUT Frequency (MHz)	Result
2439.000000	PASS



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
Preamp	off	off
Stablemode	Trace	Trace
Stablev alue	0.30 dB	0.30 dB
Run	16/max.150	max. 150
Stable	3/3	3
Max Stable Difference	0.00 dB	0.30 dB



Produkte

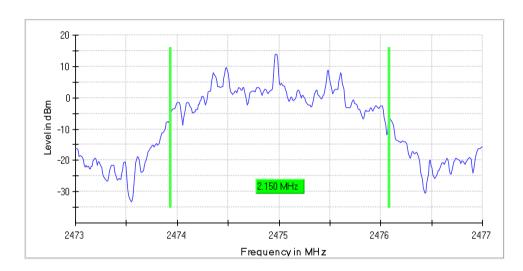
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High Channel

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2475.000000	2.150000	_	-	2473.935000	2476.085000

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

DUT Frequency	Result
(MHz)	
2475.000000	PASS



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
Stablev alue	0.30 dB	0.30 dB
Run	9 / max. 150	max. 150
Stable	3/3	3
Max Stable Difference	0.03 dB	0.30 dB

Produkte

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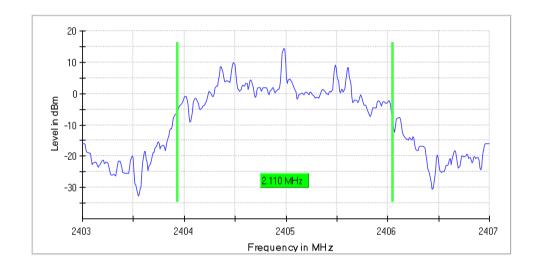
Appendix B.2: Test Results of 20dB Bandwidth

Low Channel

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2405.000000	2.110000	_	-	2403.935000	2406.045000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2405.000000	14.3	PASS



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
Stablev alue	0.50 dB	0.50 dB
Run	10/max.150	max. 150
Stable	5/5	5
Max Stable Difference	0.03 dB	0.50 dB



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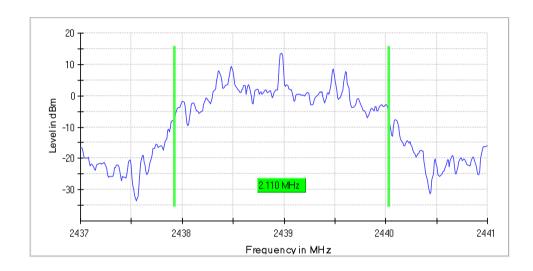
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Middle Channel

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2439.000000	2.110000			2437.925000	2440.035000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2439.000000	13.7	PASS



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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.34 dB	0.50 dB



Produkte

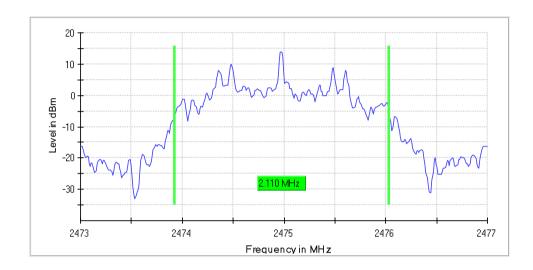
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High Channel

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2475.000000	2.110000	-		2473.925000	2476.035000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2475.000000	13.9	PASS



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
Stablev alue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	5/5	5
Max Stable Difference	0.00 dB	0.50 dB

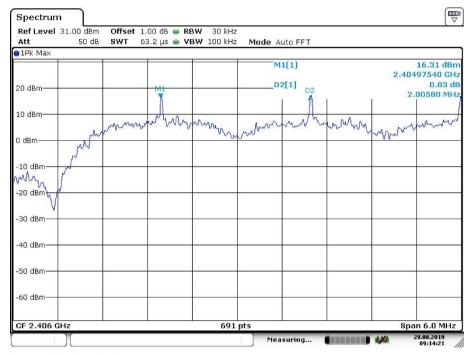




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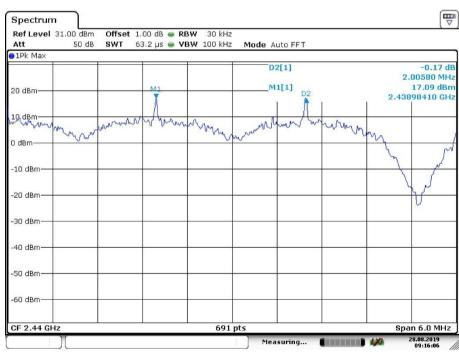
Appendix B.3: Test Results of Carrier Frequency Separation

Low Channel



Date: 28.AUG.2019 09:14:21

Middle Channel



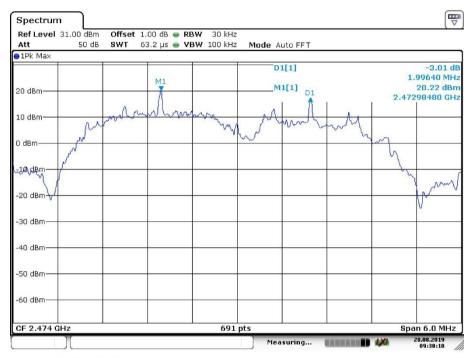
Date: 28.AUG.2019 09:16:06



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High Channel



Date: 28.AUG.2019 09:38:18

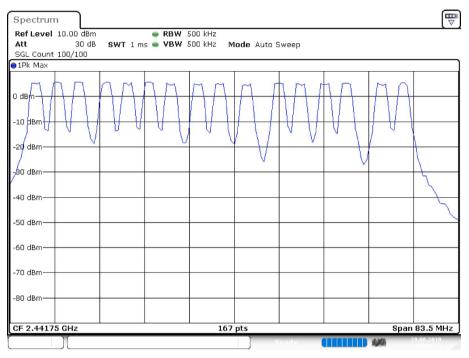


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Appendix B.4: Test Results of Number of Hopping Frequency

All hopping channels



Date: 29.AUG.2019 03:46:14

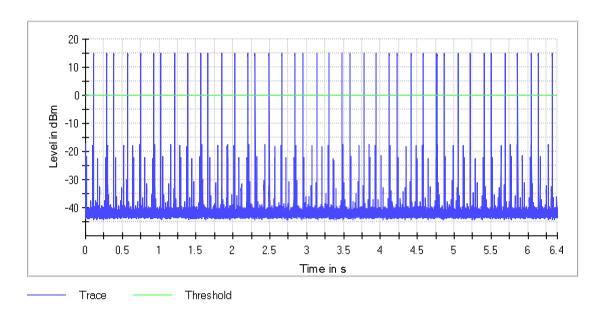


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Appendix B.5: Test Results of Time of Occupancy

DUT Frequency	Result	Time	Limit Max	Limit Min	Threshold
(MHz)		(ms)	(ms)	(ms)	(dBm)
2439.000000	PASS	34.414	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		
Sweeptime	6.400 s	6.400 s -20.000 dBm		
Reference Level	-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

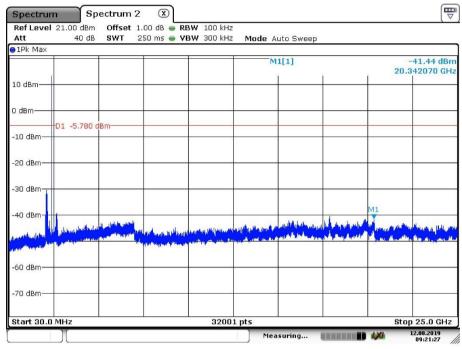


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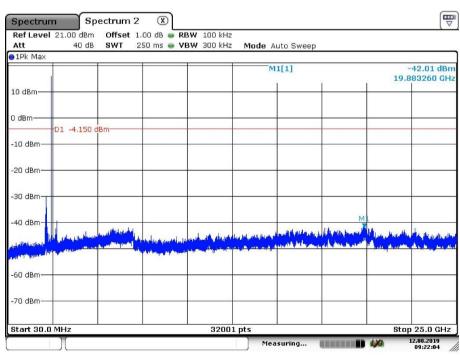
Appendix B.6: Test Results of Conducted Spurious Emissions Measured in 100 kHz **Bandwidth**

Low Channel



Date: 12.AUG.2019 09:21:27

Middle Channel



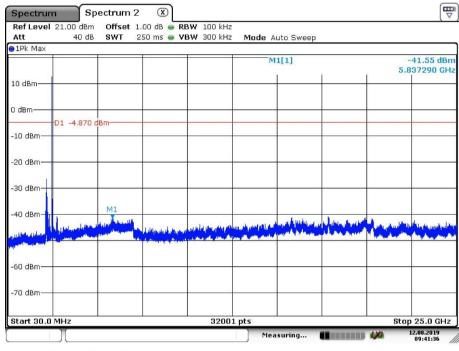
Date: 12.AUG.2019 09:22:04



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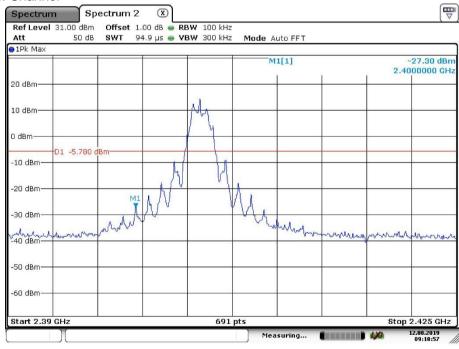
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High Channel



Date: 12.AUG.2019 09:41:36

Band Edge, Low Channel



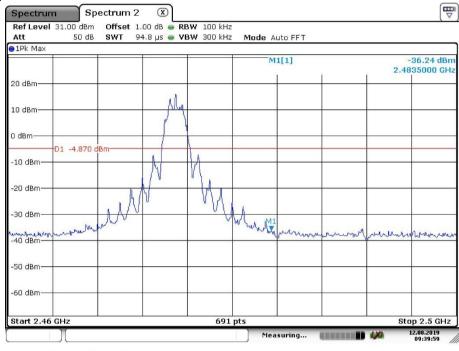
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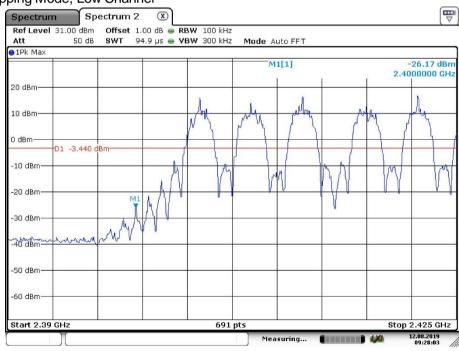
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Band Edge, High Channel



Date: 12.AUG.2019 09:39:59

Band Edge, Hopping Mode, Low Channel



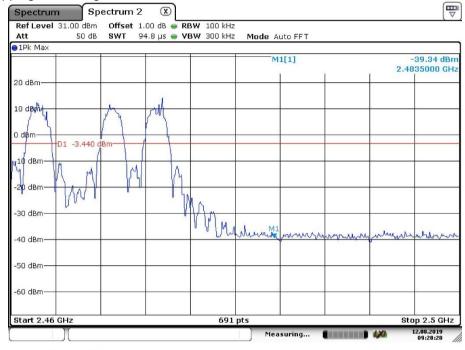
Date: 12.AUG.2019 09:28:03



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Band Edge, Hopping Mode, High Channle



Date: 12.AUG.2019 09:28:27



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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.

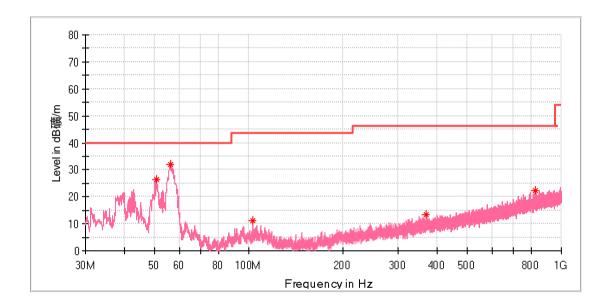
Appendix B.7: Test Results of Radiated Spurious Emissions

30MHz - 1GHz (Worst case)

EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX Low Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%

Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed by: Terry Yin



Ш	Frequency	MaxPeak	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
Ш	(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB/m)
	50.515500	26.41		40.00	13.59	100.0	٧	254.0	-18.6
Γ	56.190000	32.03	-	40.00	7.97	100.0	٧	6.0	-18.9
	103.089500	11.27		43.50	32.23	100.0	٧	293.0	-19.2
I	369.063500	13.33		46.00	32.67	100.0	٧	208.0	-14.8
I	828.261500	22.20		46.00	23.80	100.0	٧	227.0	-6.2

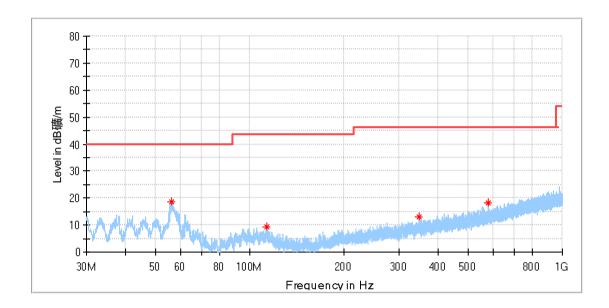


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EUT Name: Baby Monitor(Parent Unit)
Model: MBP481NPU

Model: MBP481NPU
Test Mode: TX Low Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%
Test Standard: FCC 15.247

Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed by: Terry Yin



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
56.384000	18.43	_	40.00	21.57	100.0	Н	157.0	-18.9
113.517000	9.18	-	43.50	34.32	100.0	Н	0.0	-19.9
348.063000	13.02		46.00	32.98	100.0	Н	85.0	-15.2
579.796000	18.21		46.00	27.79	100.0	Н	210.0	-10.6

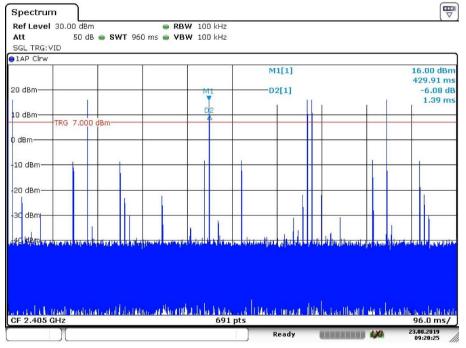


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1GHz - 18GHz

Average Correction factor = 20*log(X) = 20*log(2.78/100) = 31.12 dB, where x is the duty cycle:



Date: 23.AUG.2019 09:20:25



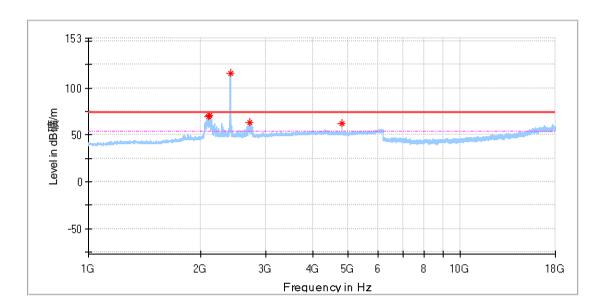
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Low Channel

EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX Low Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%

Test 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)
2100.500000	69.61		74.00	4.39	100.0	Н	22.0	6.0
2117.000000	70.44	_	74.00	3.56	100.0	Н	0.0	6.1
2405.500000	115.54		74.00	-41.54	100.0	Н	4.0	7.0
2709.000000	63.11		74.00	10.89	100.0	Н	0.0	7.6
4809.000000	61.83	_	74.00	12.17	100.0	Н	207.0	13.6

"		Councedit										
	Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)						
	2100.50	69.61	31.12	38.49	54.00	15.51						
	2117.00	70.44	31.12	39.32	54.00	14.68						
	2709.00	63.11	31.12	31.99	54.00	22.01						
	4809.00	61.83	31.12	30.71	54.00	23.29						

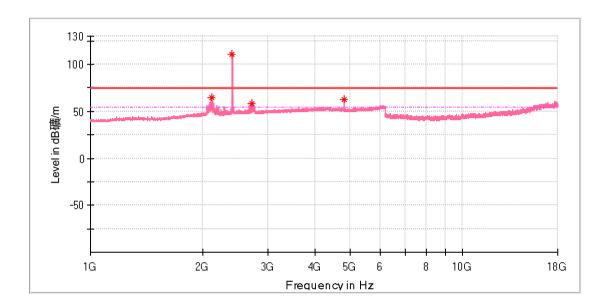


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EUT Name: Baby Monitor(Parent Unit)
Model: MBP481NPU

Model: MBP481NPU
Test Mode: TX Low Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%
Test Standard: FCC 15.247

Test 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	64.37		74.00	9.63	100.0	٧	119.0	6.1
2404.500000	110.69		74.00	-36.69	100.0	٧	147.0	7.0
2709.000000	58.68		74.00	15.32	100.0	٧	38.0	7.6
4809.000000	62.91		74.00	11.09	100.0	٧	22.0	13.6

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2116.50	64.37	31.12	33.25	54.00	20.75
2709.00	58.68	31.12	27.56	54.00	26.44
4809.00	62.91	31.12	31.79	54.00	22.21



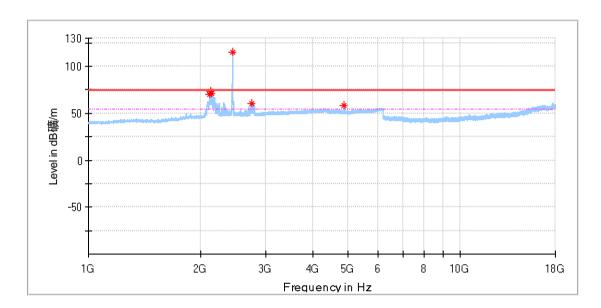
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Middle Channel

EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX Mid Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%

Test 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)
2119.500000	69.63		74.00	4.37	100.0	Н	33.0	6.1
2134.500000	71.72	-	74.00	2.28	100.0	Н	33.0	6.1
2150.500000	70.95		74.00	3.05	100.0	Н	26.0	6.2
2439.500000	114.52		74.00	-40.52	100.0	Н	19.0	7.4
2742.500000	60.90	-	74.00	13.10	100.0	Н	12.0	7.8
4876.500000	58.56		74.00	15.44	100.0	Н	60.0	13.4

Frequency MaxPeak (dBuV/m)		Correction Average (dBuV/m)		Average Limit (dBuV/m)	Margin (dB)	
2119.50	69.63	31.12	38.51	54.00	15.49	
2134.50	71.72	31.12	40.60	54.00	13.40	
2150.50	70.95	31.12	39.83	54.00	14.17	
2742.50	60.90	31.12	29.78	54.00	24.22	
4876.50	58.56	31.12	27.44	54.00	26.56	

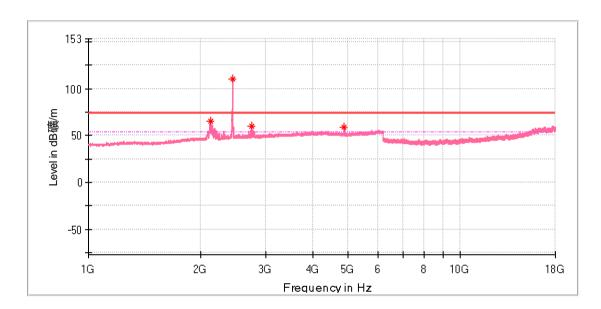


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EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX Mid Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%
Test Standard: FCC 15.247

Test 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)
ſ	2135.000000	65.65		74.00	8.35	100.0	٧	140.0	6.1
	2438.500000	110.04		74.00	-36.04	100.0	V	126.0	7.4
	2742.500000	59.41		74.00	14.59	100.0	٧	320.0	7.8
ſ	4876.500000	58.36	-	74.00	15.64	100.0	٧	10.0	13.4

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2135.00	60.00	31.12	28.88	54.00	25.12
2743.50	56.65	31.12	25.53	54.00	28.47
4876.50	55.35	31.12	24.23	54.00	29.77



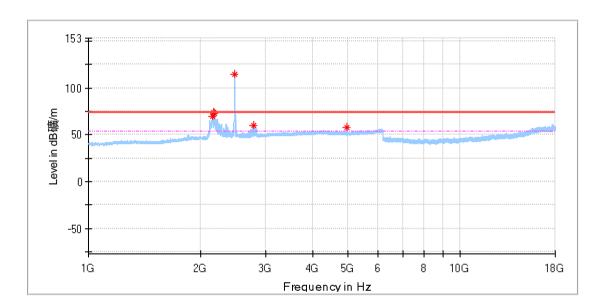
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High Channel

EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX High Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%

Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed by: Terry Yin



Critical_Freqs

Frequency	MaxPeak	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB/m)
2162.500000	69.51	-	74.00	4.49	100.0	Н	0.0	6.2
2171.000000	71.38	-	74.00	2.62	100.0	Н	24.0	6.2
2187.000000	72.47	-	74.00	1.53	100.0	H	11.0	6.3
2475.500000	114.28		74.00	-40.28	100.0	Н	24.0	7.4
2779.500000	59.76		74.00	14.24	100.0	Н	281.0	7.9
4949.000000	57.73		74.00	16.27	100.0	Н	36.0	13.2

Frequency (MHz)	MHz) (dBuV/m) Factor(dB) (dBuV/m)			Average Limit (dBuV/m)	Margin (dB)
2162.50	69.51	31.12	38.39	54.00	15.61
2171.00	72.38	31.12	41.26	54.00	12.74
2187.00	72.47	31.12	41.35	54.00	12.65
2779.50	59.76	31.12	28.64	54.00	25.36
4949.00	57.73	31.12	26.61	54.00	27.39

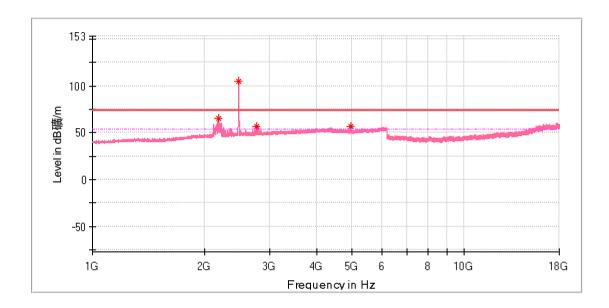


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EUT Name: Baby Monitor(Parent Unit)
Model: MBP481NPU

Model:MBP481NPUTest Mode:TX High ChannelTest Voltage:Fully charged batteryRemark:Temp:24; Humi:59%Test Standard:FCC 15.247

Test Standard: FCC 15.24
Tested By: Kei Zhang
Reviewed by: Terry Yin



Critical_Freqs

Frequency	MaxPeak	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB/m)
2187.000000	65.14		74.00	8.86	100.0	٧	50.0	6.3
2474.500000	104.69	-	74.00	-30.69	100.0	٧	305.0	7.4
2763.500000	56.36	-	74.00	17.64	100.0	٧	312.0	7.9
4951.000000	56.91		74.00	17.09	100.0	٧	0.0	13.2

Frequency (MHz)	MaxPeak Correction (dBuV/m) Factor(dB)		Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2187.00	65.14	31.12	34.02	54.00	19.98
2763.50	56.36	31.12	25.24	54.00	28.76
4951.00	56.91	31.12	25.79	54.00	28.21



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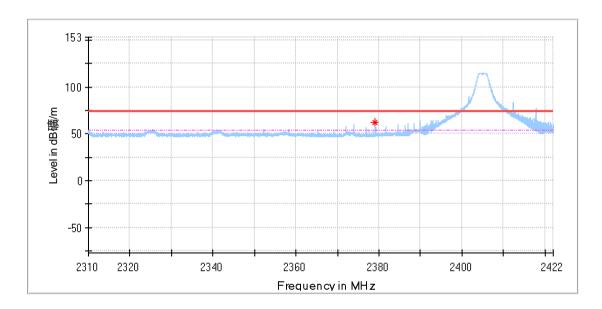
Appendix B.8: Test Results of Radiated Emissions in Restricted Bands

Low channel

EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX Low Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%

Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed by: Terry Yin



Critical_Freqs

Frequency	MaxPeak	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB/m)
2379.094118	62.23		74.00	11.77	100.0	H	78.0	7.0

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2379.09	62.23	31.12	31.11	54.00	22.89

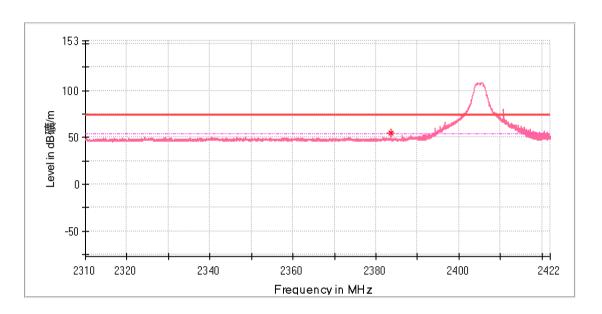


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EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX Low Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%
Test Standard: FCC 15.247

Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed by: Terry Yin



Critical_Freqs

	_								
	Frequency	MaxPeak	Average	Limit	Margin	Height	Pol	Azimuth	Corr.
	(MHz)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(cm)		(deg)	(dB/m)
ſ	2383.722353	54.13	-	74.00	19.87	100.0	٧	283.0	7.0

Frequency (MHz)	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2383.72	54.13	31.12	23.01	54.00	30.99



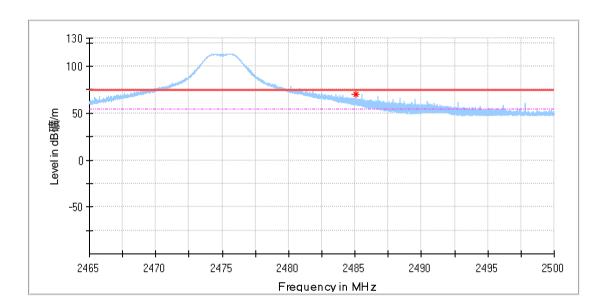
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High channel

EUT Name: Baby Monitor(Parent Unit)

Model: MBP481NPU
Test Mode: TX High Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%

Test 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)
2485.058088	70.08	_	74.00	3.92	100.0	Н	270.0	7.4

Frequency	MaxPeak	Correction	actor(dB) (dBuV/m)		Margin
(MHz)	(dBuV/m)	Factor(dB)			(dB)
2485.06	70.08	31.12	38.96	54.00	15.04

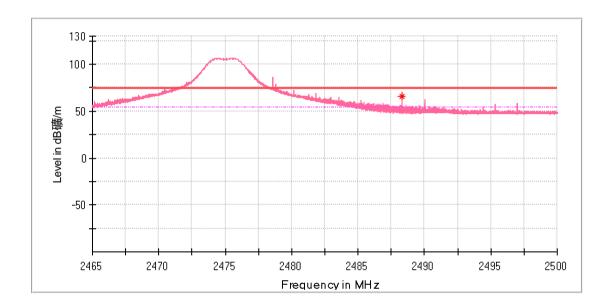


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EUT Name: Baby Monitor(Parent Unit)
Model: MBP481NPU

Model: MBP481NPU
Test Mode: TX High Channel
Test Voltage: Fully charged battery
Remark: Temp:24; Humi:59%
Test Standard: FCC 15.247

Test Standard: FCC 15.24
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)
2488.331618	66.12		74.00	7.88	100.0	٧	0.0	7.4

Frequence (MHz)	у	MaxPeak (dBuV/m)	Correction Factor(dB)	Average (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)
2488.33		66.12	31.12	35.00	54.00	19.00



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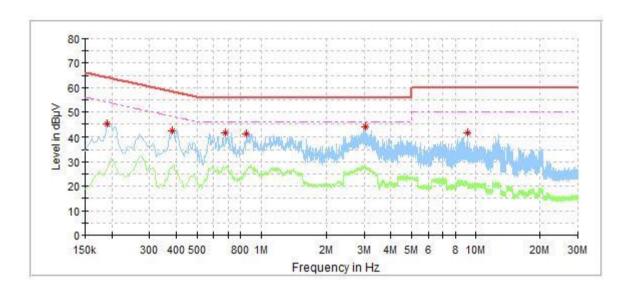
Appendix B.9: Test Results of Conducted Emission on AC Mains

Mode C with Battery #1(GPI)

EUT Name: Baby Monitor(Parent Unit)

EUT Model: MBP481NPU
Order No. 168124874 item 100
Test Mode: Wireless Connecting mode

Test Voltage:
AC 120V/60Hz
Test By:
Shower.Dai
Review By:
Gary Chen
Remark:
GPI Battery



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	45.01		64.04	19.02	1	-	L1	9.7
0.382000	42.41		58.24	15.83			L1	9.7
0.680000	41.56		56.00	14.44			L1	9.7
0.856000	40.95		56.00	15.05	-		L1	9.7
3.056000	43.89		56.00	12.11	-	-	L1	9.8
9.180000	41.53		60.00	18.47			L1	10.0



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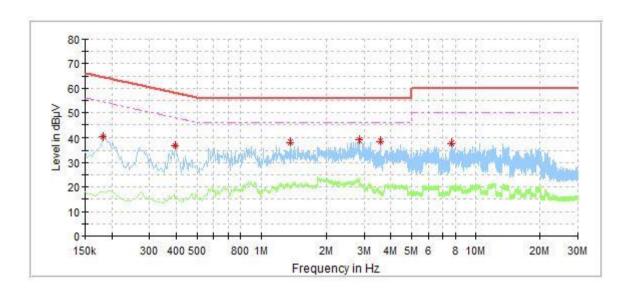
EUT Name: Baby Monitor(Parent Unit)

EUT Model: MBP481NPU

Order No. 168124874 item 100

Test Mode: Wireless Connecting mode

Test Voltage: AC 120V/60Hz
Test By: Shower.Dai
Review By: Gary Chen
Remark: GPI Battery



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.182000	40.26		64.39	24.14			N	9.7
0.398000	37.08	_	57.90	20.81	-	-	N	9.7
1.364000	38.24	-	56.00	17.76	-		N	9.8
2.840000	38.88		56.00	17.12			N	9.9
3.584000	38.39	-	56.00	17.61	-		N	9.9
7.676000	37.93		60.00	22.07	-		N	10.0



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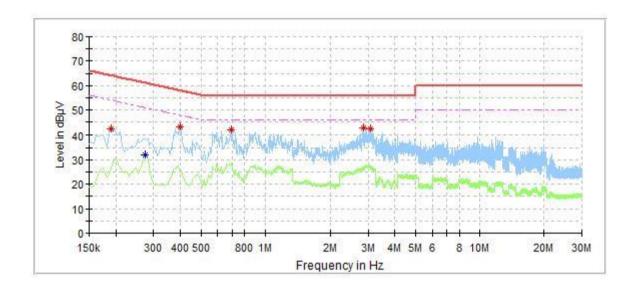
Mode C with Battery #2(Justhgih)

EUT Name: Baby Monitor(Parent Unit)

EUT Model: MBP481NPU Order No. 168124874 item 100

Test Mode: Wireless Connecting mode

Test Voltage: AC 120V/60Hz
Test By: Shower.Dai
Review By: Gary Chen
Remark: Justhigh Battery



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	42.34		64.04	21.70	-	1	L1	9.7
0.274000		32.08	51.00	18.91			L1	9.7
0.402000	42.98		57.81	14.83	-		L1	9.7
0.696000	41.77		56.00	14.23	-		L1	9.7
2.840000	42.50		56.00	13.50			L1	9.8
3.088000	42.35		56.00	13.66			L1	9.8



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EUT Name: Baby Monitor(Parent Unit)

EUT Model: MBP481NPU

Order No. 168124874 item 100

Test Mode: Wireless Connecting mode

Test Voltage:

Test By:

Review By:

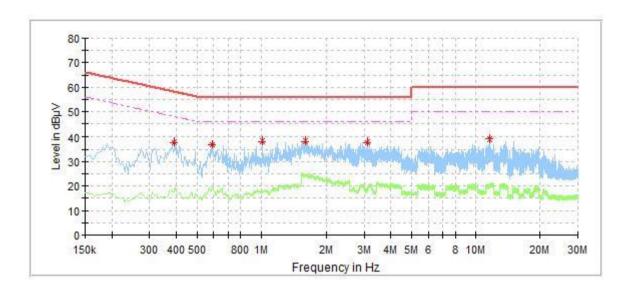
Remark:

AC 120V/60Hz

Shower.Dai

Gary Chen

Justhigh Battery



Frequency	MaxPeak	Average	Limit	Margin	Meas.	Bandw idth	Line	Corr.
(MHz)	(dBµV)	(dBµV)	(dBµV)	(dB)	Time	(kHz)		(dB)
					(ms)			
0.394000	37.83		57.98	20.15			N	9.7
0.588000	36.94	-	56.00	19.06	-	-	N	9.7
1.016000	37.96	-	56.00	18.04	-		N	9.7
1.596000	38.35		56.00	17.65			N	9.8
3.120000	37.55	-	56.00	18.45	-		N	9.9
11.652000	39.03	-	60.00	20.97	-	-	N	10.1