

FCC REPORT

Applicant: STARIAN TECHNOLOGY LIMITED

Address of Applicant: 3306, Block E, MT, Parkek Lodge, Quarry Bay Hong Kong

Equipment Under Test (EUT)

Product Name: Baby Monitor

Model No.: 1112, 1113, 1111, 1115, 1116

FCC ID: 2AA9G-1112

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249: 2011

Date of sample receipt: 09 Dec., 2013

Date of Test: 10 Dec., to 20 Dec., 2013

Date of report issued: 20 Dec., 2013

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

A blue circular stamp with the text "HONGKONG NANFANG TESTING CO., LTD." around the perimeter and "CCIS" in the center. A handwritten signature in black ink is written over the stamp.

Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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2 Version

Version No.	Date	Description
00	20 Dec., 2013	Original

Prepared By:



Project Engineer

Date:

20 Dec., 2013

Check By:



Reviewer

Date:

20 Dec., 2013

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
Conducted Emission	15.207	Pass
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Pass: The EUT comply with the essential requirements in the standard.

N/A: Not application for battery device.

5 General Information

5.1 Client Information

Applicant:	STARIAN TECHNOLOGY LIMITED
Address of Applicant:	3306,Block E,MT,Parkek Lodge,Quarry Bay Hong Kong
Manufacturer:	STARIAN TECHNOLOGY LIMITED
Address of Manufacturer:	3306,Block E,MT,Parkek Lodge,Quarry Bay Hong Kong
Factory:	ON REAL ELECTRONICS(SHEN ZHEN) LTD.
Address of Factory:	Xin Cheng,Industrial Zone B2-02,County of Xin Xing,Yun Fu,Guang Dong,China.

5.2 General Description of E.U.T.

Product Name:	Baby Monitor
Model No.:	1112,1113,1111,1115,1116
Operation Frequency:	2413MHz to 2468MHz
Channel numbers:	12
Modulation type:	DSSS
Antenna Type:	monopole antenna
Antenna gain:	0dBi
AC adapter:	Model:TGL 050P055 In put :100-240V 50/60Hz 100mA Out put :5V / 550mA
Remark:	The model No. 1112,1113,1111,1115,1116(TX)were identical inside,the electrical circuit design, appearance, layout, components used and internal wiring Exactly the same as, Olnty receive unit (RX) is slightly different.

5.3 Test mode

Transmitting mode:	Keep the EUT in transmitting mode with modulation.		
Pre-Test Mode: (lowest channel=2413MHz)			
CCIS has verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:			
Axis	X	Y	Z
Field Strength(dBuV/m)	104.25	102.02	102.21
Final Test Mode:			
According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”: Z axis (see the test setup photo)			

5.4 Test Facility

<p>The test facility is recognized, certified, or accredited by the following organizations:</p> <ul style="list-style-type: none"> ● FCC - Registration No.: 817957 Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012. ● IC - Registration No.: 10106A-1 The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1. ● CNAS - Registration No.: CNAS L6048 Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.
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5.5 Test Location

<p>Shenzhen Zhongjian Nanfang Testing Co., Ltd. Address: No.B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China Tel: 0755-23118282 Fax: 0755-23116366</p>
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5.6 Other Information Requested by the Customer

The EUT has been tested as an independent unit.

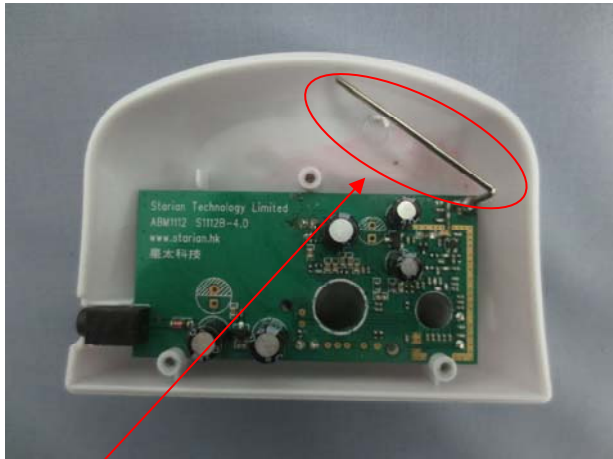
5.7 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	Aug. 09 2013	Aug. 09 2014
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	June 16 2013	June 16 2014
3	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	June 09 2013	June 09 2014
4	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	June 09 2013	June 09 2014
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
6	Coaxial Cable	CCIS	N/A	CCIS0016	Mar. 01 2013	Mar. 01 2014
7	Coaxial Cable	CCIS	N/A	CCIS0017	Mar. 01 2013	Mar. 01 2014
8	Coaxial cable	CCIS	N/A	CCIS0018	Mar. 01 2013	Mar. 01 2014
9	Coaxial Cable	CCIS	N/A	CCIS0019	Mar. 01 2013	Mar. 01 2014
10	Coaxial Cable	CCIS	N/A	CCIS0087	Mar. 01 2013	Mar. 01 2014
11	Amplifier(10KHz-1.3GHz)	HP	8447D	CCIS0003	Aug. 03 2013	Aug. 03 2014
12	Amplifier(1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	Aug. 05 2013	Aug. 05 2014
13	Spectrum analyzer	Rohde & Schwarz	FSP	CCIS0023	June 22 2013	June 22 2014
14	EMI Test Receiver	Rohde & Schwarz	ECSI	CCIS0002	June16 2013	June 16 2014
15	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A
16	Coaxial Cable	CCIS	N/A	CCIS0095	Mar. 01 2013	Mar. 01 2014
17	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Apr. 01 2013	Mar. 31 2014
18	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2013	Mar. 29 2014

Conducted Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	June 09 2013	June 09 2014
2	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	Apr 01 2013	Apr 01 2014
3	LISN	CHASE	MN2050D	CCIS0074	Apr 01 2013	Apr 01 2014
4	Coaxial Cable	CCIS	N/A	CCIS0086	Apr. 01 2013	Apr. 01 2014
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

6 Test results and Measurement Data

6.1 Antenna requirement:

Standard requirement:	FCC Part15 C Section 15.203
<p>15.203 requirement: <i>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i></p>	
E.U.T Antenna:	
<p>The antenna is monopole antenna which cannot detachable . The best case gain of the antenna is 0dBi.</p>	
	

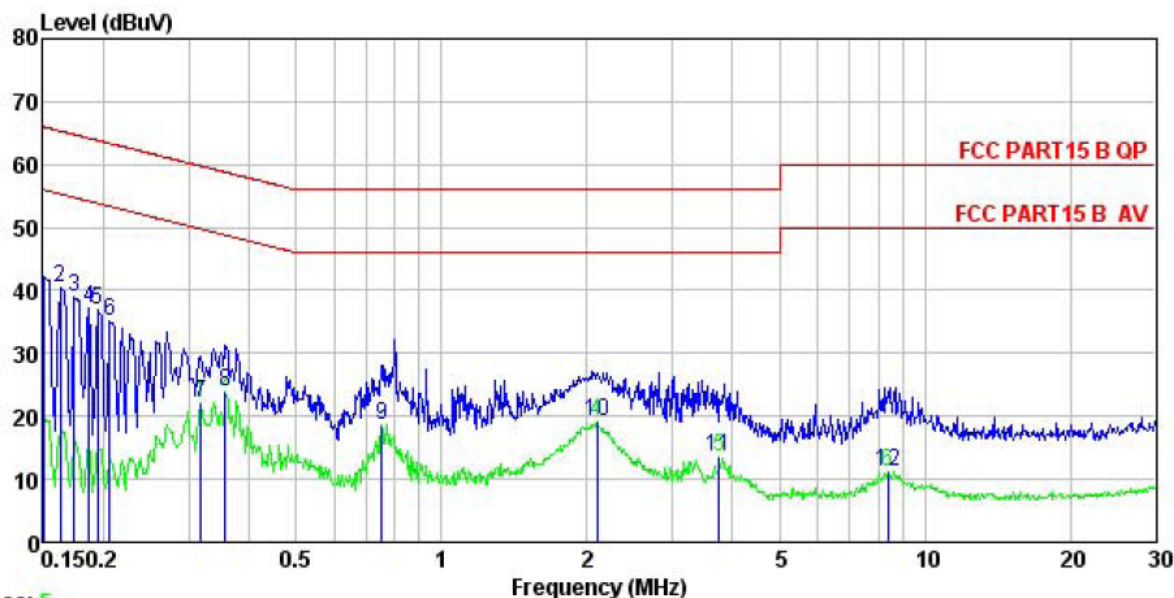
Antenna

6.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.249 and 15.209																
Test Method:	ANSI C63.4:2003																
Test Frequency Range:	150 kHz to 30 MHz																
Class / Severity:	Class B																
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto																
Limit:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBuV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table> <p>* Decreases with the logarithm of the frequency.</p>			Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)																
	Quasi-peak	Average															
0.15-0.5	66 to 56*	56 to 46*															
0.5-5	56	46															
5-30	60	50															
Test setup:	<div><p style="text-align: center;">Reference Plane</p><p><i>Remark:</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p></div>																
Test procedure:	<ol style="list-style-type: none">1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.																
Test Instruments:	Refer to section 5.7 for details																
Test mode:	Transmitting mode																
Test results:	Pass																

Measurement Data

Line:

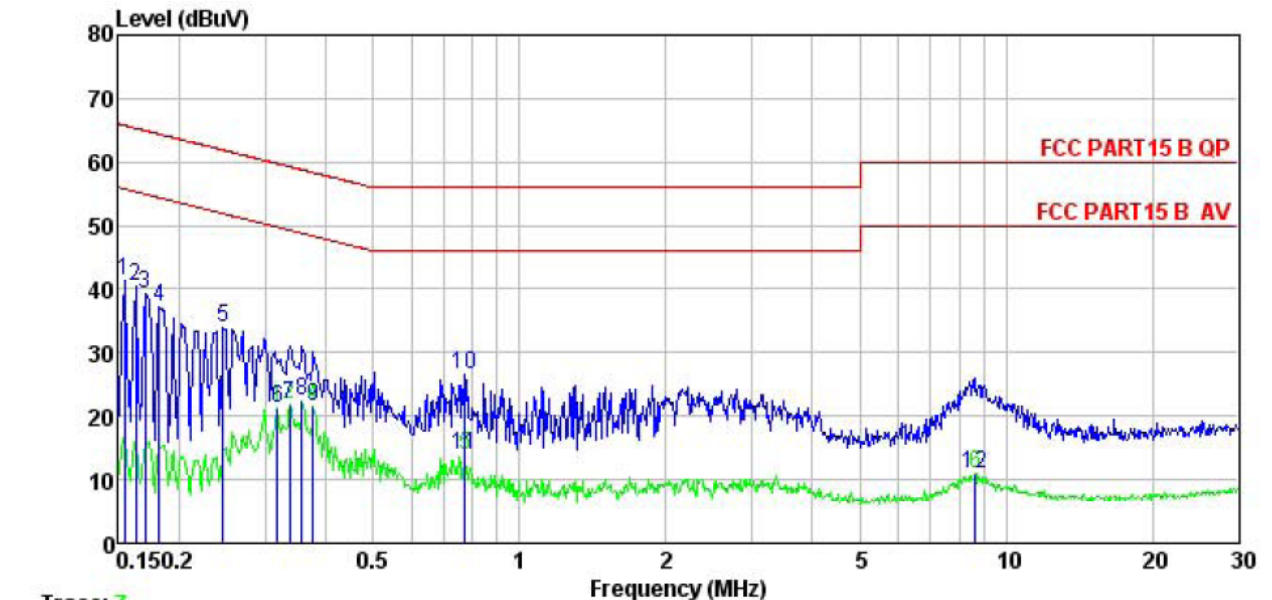


Trace: 5

Site : CCIS Conducted test Site
 Condition : FCC PART15 B QP LISN LINE
 Job No. : 550RF
 EUT : Baby Monitor
 Test Mode : Tx mode
 Power Rating : AC 120V/60Hz
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa
 Test Engineer: Joe

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.150	31.30	10.25	0.79	42.34	66.00	-23.66	QP
2	0.162	29.52	10.24	0.78	40.54	65.34	-24.80	QP
3	0.174	27.88	10.23	0.77	38.88	64.77	-25.89	QP
4	0.186	26.10	10.22	0.77	37.09	64.20	-27.11	QP
5	0.194	26.01	10.21	0.76	36.98	63.84	-26.86	QP
6	0.206	24.20	10.21	0.76	35.17	63.36	-28.19	QP
7	0.318	11.10	10.26	0.74	22.10	49.75	-27.65	Average
8	0.358	12.87	10.27	0.73	23.87	48.78	-24.91	Average
9	0.751	7.65	10.19	0.79	18.63	46.00	-27.37	Average
10	2.099	7.83	10.28	0.96	19.07	46.00	-26.93	Average
11	3.759	2.48	10.29	0.90	13.67	46.00	-32.33	Average
12	8.367	-0.01	10.26	0.87	11.12	50.00	-38.88	Average

Neutral:



Trace: 7
 Site : CCIS Conducted test Site
 Condition : FCC PART15 B QP LISN NEUTRAL
 Job No. : 550RF
 EUT : Baby Monitor
 Test Mode : Tx mode
 Power Rating : AC 120V/60Hz
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa
 Test Engineer: Joe

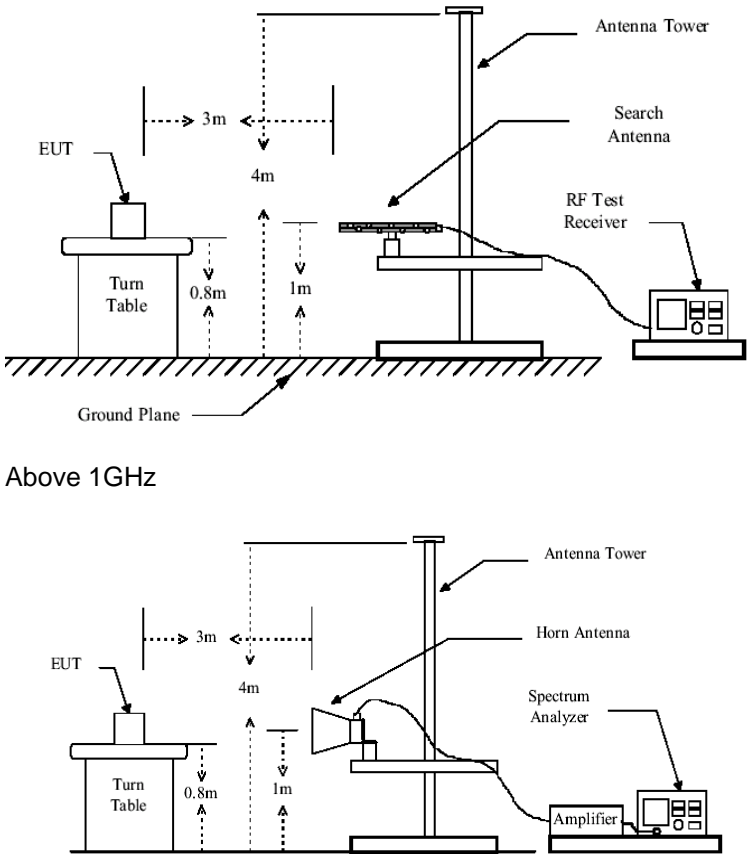
	Read	LISN	Cable	Level	Limit	Over	
Freq	Level	Factor	Loss	Line	Limit	Remark	
-----	-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.154	30.15	10.27	0.79	41.21	65.78	-24.57 QP
2	0.162	29.28	10.26	0.78	40.32	65.34	-25.02 QP
3	0.170	28.13	10.25	0.78	39.16	64.94	-25.78 QP
4	0.182	26.12	10.24	0.77	37.13	64.42	-27.29 QP
5	0.246	22.91	10.24	0.75	33.90	61.91	-28.01 QP
6	0.318	10.15	10.24	0.74	21.13	49.75	-28.62 Average
7	0.337	10.89	10.25	0.73	21.87	49.27	-27.40 Average
8	0.358	11.43	10.25	0.73	22.41	48.78	-26.37 Average
9	0.377	10.56	10.26	0.72	21.54	48.34	-26.80 Average
10	0.771	15.50	10.17	0.80	26.47	56.00	-29.53 QP
11	0.771	2.86	10.17	0.80	13.83	46.00	-32.17 Average
12	8.637	-0.09	10.24	0.88	11.03	50.00	-38.97 Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss

6.3 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.249 and 15.209				
Test Method:	ANSI C63.4:2003				
Test Frequency Range:	30MHz to 25000MHz				
Test site:	Measurement Distance: 3m				
Receiver setup:					
	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Peak		1MHz	10Hz	Average Value	
Limit: (Field strength of the fundamental signal)					
	Frequency		Limit (dBuV/m @3m)		Remark
	2400MHz-2483.5MHz		94.00		Average Value
			114.00		Peak Value
Limit: (Spurious Emissions)					
	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.00		Quasi-peak Value
	88MHz-216MHz		43.50		Quasi-peak Value
	216MHz-960MHz		46.00		Quasi-peak Value
	960MHz-1GHz		54.00		Quasi-peak Value
	Above 1GHz	54.00		Average Value	
74.00		Peak Value			
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.				
Test Procedure:	<div>1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</div> <div>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div> <div>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</div> <div>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</div> <div>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div> <div>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div>				
Test setup:	Below 1GHz				

	 <p>Above 1GHz</p>
Test Instruments:	Refer to section 5.7
Test mode:	Refer to section 5.3
Test results:	Passed

Measurement Data

6.3.1 Field Strength Of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2413.00	71.03	27.54	5.68	104.25	114.00	-9.75	Horizontal
2413.00	70.72	27.54	5.68	103.94	114.00	-10.06	Vertical
2438.00	70.43	27.46	5.69	103.58	114.00	-10.42	Horizontal
2438.00	69.66	27.46	5.69	102.81	114.00	-11.19	Vertical
2468.00	70.82	27.49	5.70	104.01	114.00	-9.99	Horizontal
2468.00	68.95	27.49	5.70	102.14	114.00	-11.86	Vertical

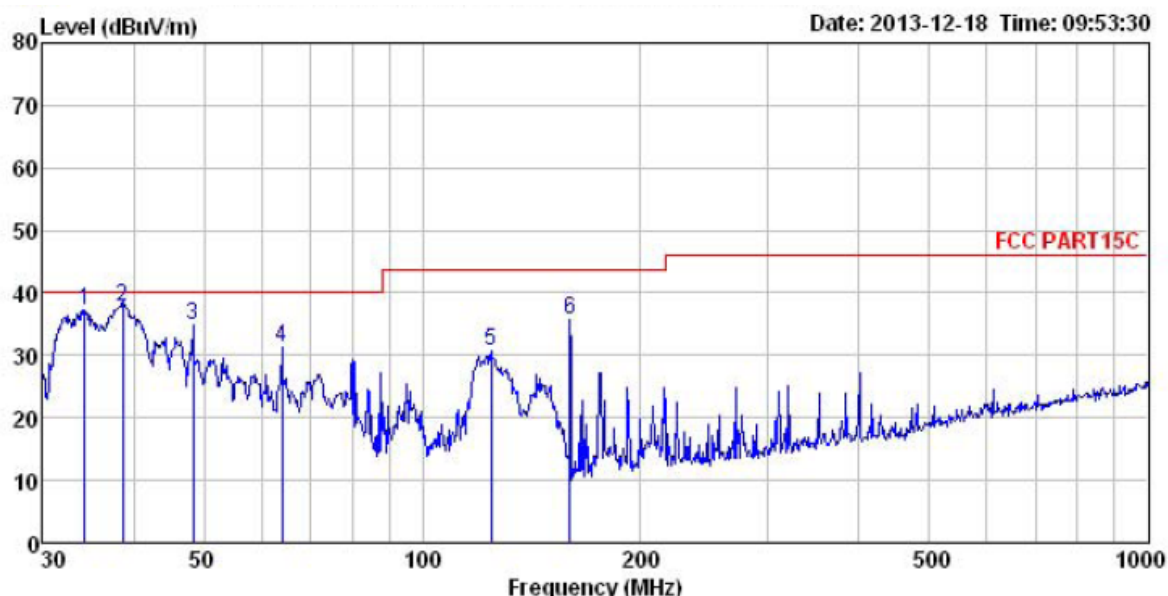
Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2413.00	59.26	27.54	5.68	92.48	94.00	-3.52	Horizontal
2413.00	58.32	27.54	5.68	91.54	94.00	-2.46	Vertical
2438.00	58.32	27.46	5.69	91.47	94.00	-2.53	Horizontal
2438.00	56.32	27.46	5.69	89.47	94.00	-4.53	Vertical
2468.00	56.32	27.49	5.70	89.51	94.00	-4.49	Horizontal
2468.00	53.26	27.49	5.70	86.45	94.00	-7.55	Vertical

6.3.2 Spurious Emissions

Below 1GHz

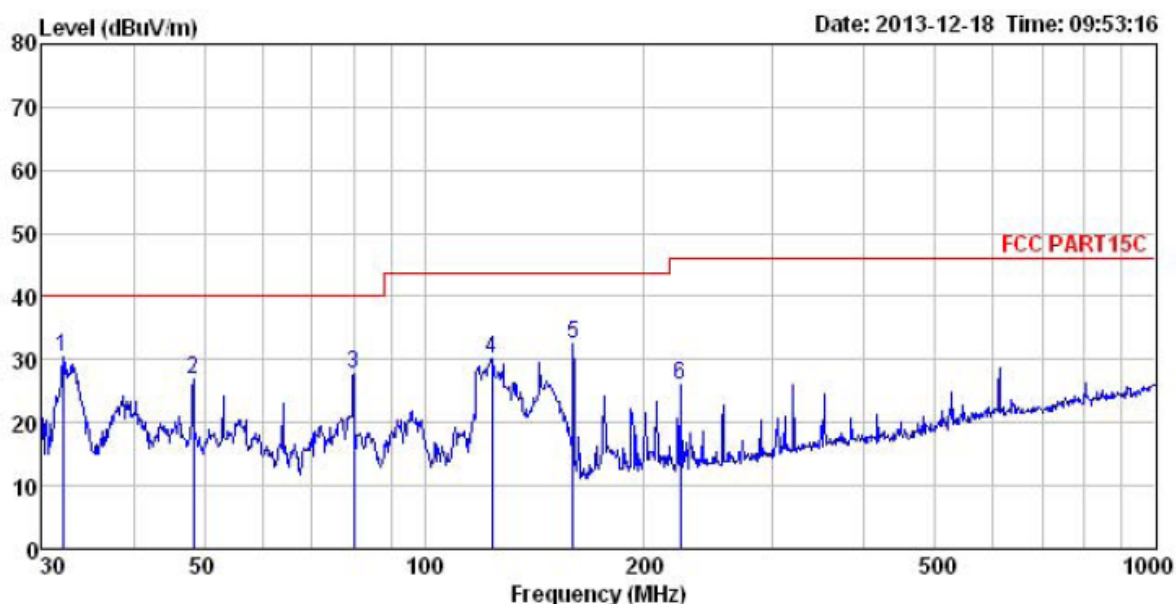
Vertical:



Site : 3m chamber
 Condition : FCC PART15C 3m VULB9163(30M1G) VERTICAL
 Job NO. : 550RF
 EUT : Baby Monitor
 Test mode : TX mode
 Power Rating : AC 120V / 60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Joe
 REMARK :

	Freq	Read	Antenna	Cable	Preamp	Level	Limit	Over	
	MHz	Level	Factor	Loss	Factor	dBuV/m	dBuV/m	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	34.276	50.62	12.30	1.04	26.73	37.23	40.00	-2.77	QP
2	38.616	50.56	13.25	1.18	27.13	37.86	40.00	-2.14	QP
3	48.332	48.24	13.35	1.27	28.14	34.72	40.00	-5.28	QP
4	63.983	48.37	11.11	1.38	29.59	31.27	40.00	-8.73	QP
5	124.569	48.26	9.80	2.22	29.62	30.66	43.60	-12.94	QP
6	159.784	54.39	8.64	2.59	29.91	35.71	43.60	-7.89	QP

Horizontal:



Site : 3m chamber
 Condition : FCC PART15C 3m VULB9163(30M1G) HORIZONTAL
 Job NO. : 550RF
 EUT : Baby Monitor
 Test mode : TX mode
 Power Rating : AC 120V / 60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Joe
 REMARK :

	Freq	Read	Antenna	Cable	Preamp	Level	Limit	Over	
	MHz	Level	Factor	Loss	Factor	dBuV/m	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	32.067	43.70	12.32	0.85	26.50	30.37	40.00	-9.63	QP
2	48.332	40.25	13.35	1.27	28.14	26.73	40.00	-13.27	QP
3	80.081	47.78	8.54	1.65	30.13	27.84	40.00	-12.16	QP
4	123.699	47.75	9.90	2.21	29.64	30.22	43.60	-13.38	QP
5	159.784	51.01	8.64	2.59	29.91	32.33	43.60	-11.27	QP
6	223.733	41.54	11.36	2.84	29.71	26.03	46.00	-19.97	QP

Above 1GHz

Test channel:	Lowest	Level:	Peak
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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4818.75	67.74	31.54	8.92	40.22	67.98	74.00	-6.02	Vertical
7239.25	57.61	36.50	10.62	41.22	63.51	74.00	-10.49	Vertical
9659.75	51.68	38.19	13.22	41.50	61.59	74.00	-12.41	Vertical
4830.50	66.41	31.55	8.92	40.22	66.66	74.00	-7.34	Horizontal
7239.25	55.87	36.50	10.62	41.22	61.77	74.00	-12.23	Horizontal
9659.75	54.17	38.19	13.22	41.50	64.08	74.00	-9.92	Horizontal

Test channel:	Lowest	Level:	Average
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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4818.75	52.32	31.54	8.92	40.22	52.56	54.00	-1.44	Vertical
7239.25	42.35	36.50	10.62	41.22	48.25	54.00	-5.75	Vertical
9659.75	38.27	38.19	13.22	41.50	48.18	54.00	-5.82	Vertical
4818.75	52.24	31.54	8.92	40.22	52.48	54.00	-1.52	Horizontal
7239.25	44.87	36.50	10.62	41.22	50.77	54.00	-3.23	Horizontal
9659.75	42.17	38.19	13.22	41.50	52.08	54.00	-1.92	Horizontal

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test channel:	Middle	Level:	Peak
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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4877.50	67.13	31.57	8.98	40.15	67.53	74.00	-6.47	Vertical
7309.75	59.01	36.48	10.68	41.16	65.01	74.00	-8.99	Vertical
9753.75	50.98	38.45	13.35	41.68	61.10	74.00	-12.90	Vertical
4877.50	62.55	31.57	8.98	40.15	62.95	74.00	-11.05	Horizontal
7309.75	56.02	36.48	10.68	41.16	62.02	74.00	-11.98	Horizontal
9753.75	54.53	38.45	13.35	41.68	64.65	74.00	-9.35	Horizontal

Test channel:	Middle	Level:	Average
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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4877.50	52.36	31.57	8.98	40.15	52.76	54.00	-1.24	Vertical
7309.75	46.24	36.48	10.68	41.16	52.24	54.00	-1.76	Vertical
9753.75	40.20	38.45	13.35	41.68	50.32	54.00	-3.68	Vertical
4877.50	51.24	31.57	8.98	40.15	51.64	54.00	-2.36	Horizontal
7309.75	46.32	36.48	10.68	41.16	52.32	54.00	-1.68	Horizontal
9753.75	41.23	38.45	13.35	41.68	51.35	54.00	-2.65	Horizontal

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test channel:	Highest	Level:	Peak
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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4936.25	67.81	31.64	9.06	40.05	68.46	74.00	-5.54	Vertical
7403.75	60.22	36.54	10.77	41.08	66.45	74.00	-7.55	Vertical
9871.25	52.06	38.69	13.49	41.90	62.34	74.00	-11.66	Vertical
4936.25	65.53	31.64	9.06	40.05	66.18	74.00	-7.82	Horizontal
7403.75	56.43	36.54	10.77	41.08	62.66	74.00	-11.34	Horizontal
9871.25	54.53	38.69	13.49	41.90	64.81	74.00	-9.19	Horizontal

Test channel:	Highest	Level:	Average
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Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4936.25	51.24	31.64	9.06	40.05	51.89	54.00	-2.11	Vertical
7403.75	46.25	36.54	10.77	41.08	52.48	54.00	-1.52	Vertical
9871.25	41.06	38.69	13.49	41.90	51.34	54.00	-2.66	Vertical
4936.25	51.24	31.64	9.06	40.05	51.89	54.00	-2.11	Horizontal
7403.75	44.25	36.54	10.77	41.08	50.48	54.00	-3.52	Horizontal
9871.25	41.29	38.69	13.49	41.90	51.57	54.00	-2.43	Horizontal

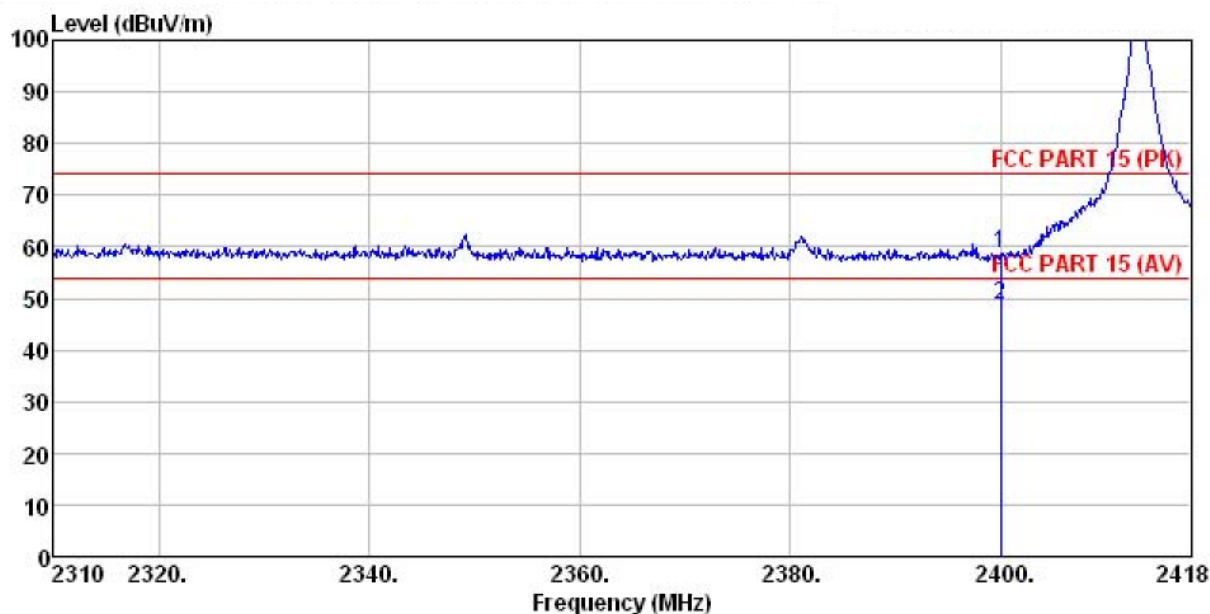
Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

6.3.3 Band edge (Radiated Emission)

Test channel: Lowest

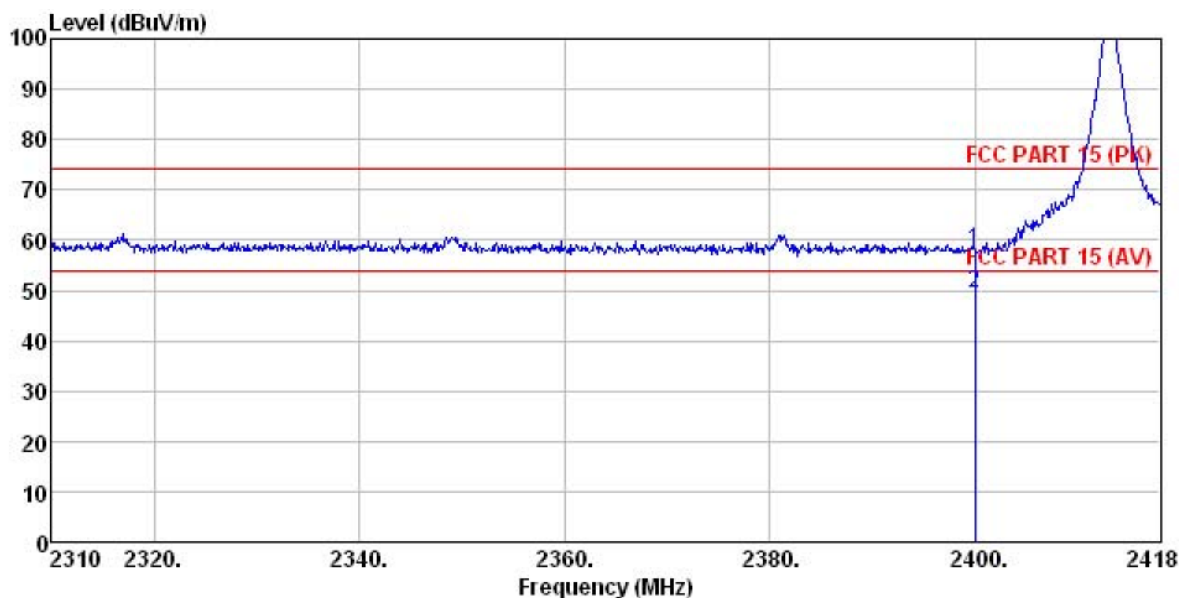
Horizontal:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 Job NO. : 550RF
 EUT : Baby Monitor
 Test mode : TX mode
 Power Rating : AC 120V / 60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Joe
 REMARK : L ch

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier	Level	Limit	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2400.000	25.24	27.58	5.67	0.00	58.49	74.00	-15.51	Peak
2	2400.000	15.53	27.58	5.67	0.00	48.78	54.00	-5.22	Average

Vertical:

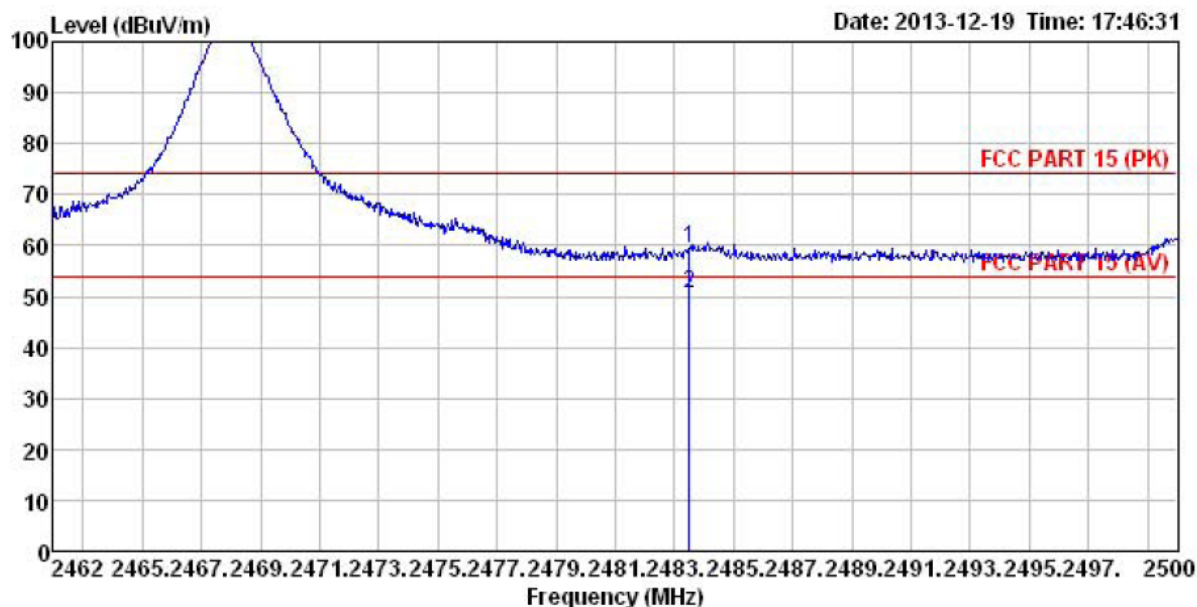


Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 Job NO. : 550RF
 EUT : Baby Monitor
 Test mode : TX mode
 Power Rating : AC 120V / 60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Joe
 REMARK : L ch

	Freq	Read	Antenna	Cable	Preamp	Limit	Over	
		Level	Factor	Loss	Factor	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2400.000	24.63	27.58	5.67	0.00	57.88	74.00	-16.12 Peak
2	2400.000	16.34	27.58	5.67	0.00	49.59	54.00	-4.41 Average

Test channel: Highest

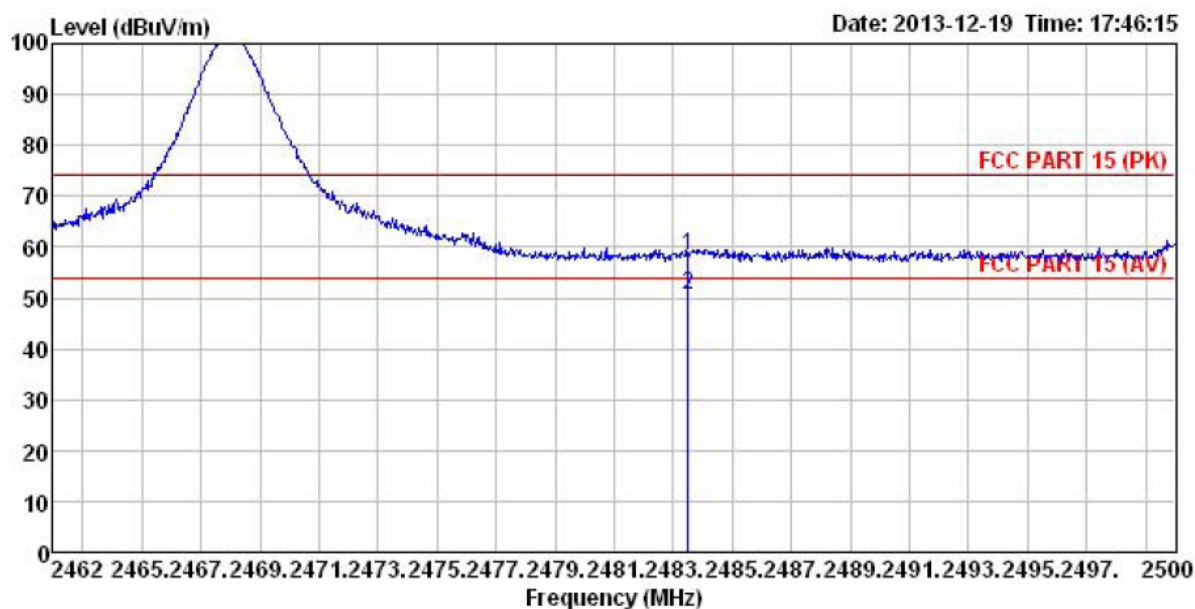
Horizontal:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
 Job NO. : 550RF
 EUT : Baby Monitor
 Test mode : TX mode
 Power Rating : AC 120V / 60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Joe
 REMARK : H ch

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	26.12	27.52	5.70	0.00	59.34	74.00	-14.66	Peak
2	2483.500	17.24	27.52	5.70	0.00	50.46	54.00	-3.54	Average

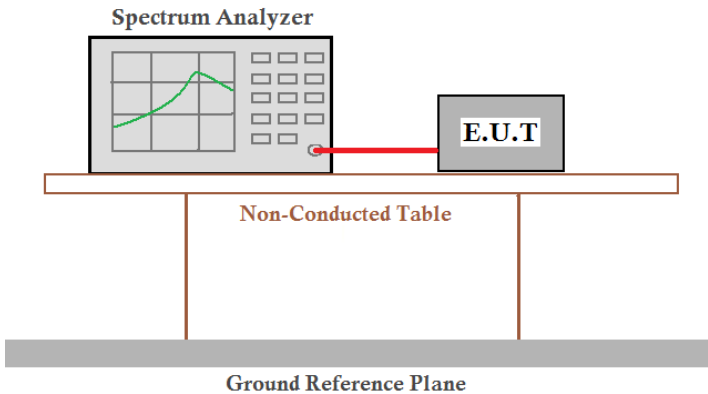
Vertical:



Site : 3m chamber
 Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
 Job NO. : 550RF
 EUT : Baby Monitor
 Test mode : TX mode
 Power Rating : AC 120V / 60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Joe
 REMARK : H ch

	Freq	Read	Antenna	Cable	Preamp	Limit	Over	
		Level	Factor	Loss	Factor	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	2483.500	25.21	27.52	5.70	0.00	58.43	74.00	-15.57 Peak
2	2483.500	17.24	27.52	5.70	0.00	50.46	54.00	-3.54 Average

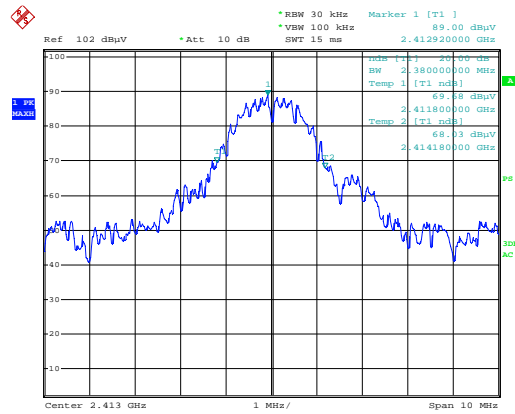
6.4 20dB Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Receiver setup:	RBW $\geq 1\%$ of the 20 dB bandwidth, VBW \geq VBW, detector: Peak
Limit:	Operation Frequency range 2400MHz-2483.5MHz
Test Procedure:	<ol style="list-style-type: none"> 1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set the EUT to proper test channel. 3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points. 4. Read 20dB bandwidth.
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instruments:	Refer to section 4.7 for details
Test mode:	Refer to section 4.3 for details
Test results:	Passed

Measurement Data

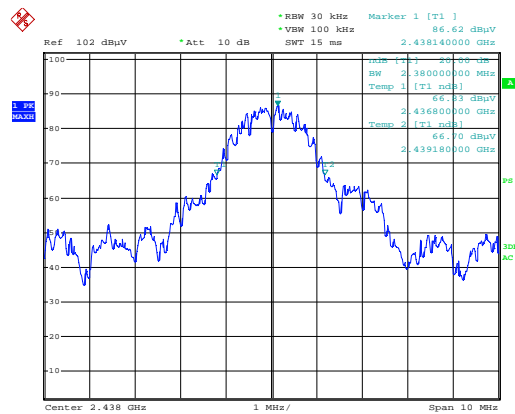
Test channel	20dB bandwidth (MHz)	Results
Lowest	2.38	Pass
Middle	2.38	Pass
Highest	2.52	Pass

Test plot as follows:



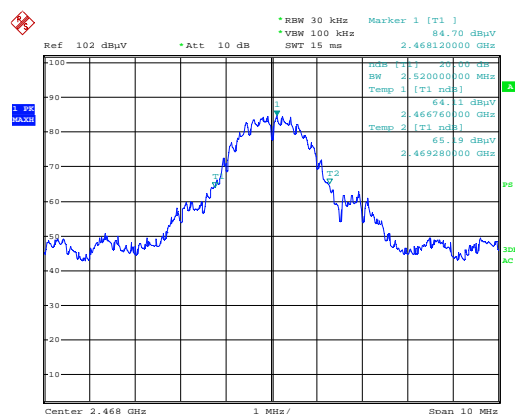
Date: 18.DEC.2013 09:28:49

Lowest channel



Date: 18.DEC.2013 09:26:23

Middle channel



Date: 18.DEC.2013 09:26:56

Highest channel