

## Global United Technology Services Co., Ltd.

Report No.: GTSE14090170801

# **FCC REPORT**

Applicant: GLOBE INTERNATIONAL AS

Address of Applicant: LJABRUVEIEN 39 P.O. BOX 90 NORDSTRAND,N-1112

OSLO, NORWAY

**Equipment Under Test (EUT)** 

Product Name: AUDIO BABY MONITOR

Model No.: SMN1

FCC ID: 2ADKQ-SMNT

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247:2013

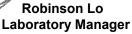
Date of sample receipt: September 25, 2014

Date of Test: November 09-11, 2014

Date of report issued: November 11, 2014

Test Result: PASS \*

### Authorized Signature:



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 GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



#### 2 **Version**

Version No.	Date	Description
00	November 11, 2014	Original

Prepared By:	Sam. 900	Date:	November 11, 2014		
	Project Engineer	_			
	1				

Check By: Date: November 11, 2014 Reviewer

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## 4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Output Power	15.247 (b)(3)	Pass
Channel Bandwidth	15.247 (a)(2)	Pass
Power Spectral Density	15.247 (e)	Pass
Band Edge	15.247(d)	Pass
Spurious Emission	15.205/15.209	Pass

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

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## **5** General Information

## 5.1 Client Information

Applicant:	GLOBE INTERNATIONAL AS	
Address of Applicant:	LJABRUVEIEN 39 P.O. BOX 90 NORDSTRAND,N-1112 OSLO, NORWAY	
Manufacturer/Factory:	SHENZHEN JINHONG FLYING DRAGON ELECTRONIC CO., LTD.	
Address of	5/F, Block B, XinBoSheng Technology Park, Zhenxing Road,	
Manufacturer/Factory:	Guangming New District, Shenzhen, PRC	

## 5.2 General Description of EUT

Product Name:	AUDIO BABY MONITOR	
Model No.:	SMN1	
Operation Frequency:	906.999MHz~909.838MHz	
Channel Numbers:	8	
Channel Separation:	0.405MHz	
Modulation Type:	FSK	
Antenna Type:	Integral Antenna	
Antenna Gain:	0dBi (declare by Applicant)	
Power Supply:	Adapter:	
	Model No.: SJB0500500PU	
	Input: 100-240V 50-60Hz 300mA	
	Output: 5V 500mA	
	Or DC 3.7V Li-ion Battery	
Remark:	The DUT emits low and non-pulsing radiation	

Shenzhen, China 518102

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Operation F	Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
1	906.999	3	907.811	5	908.622	7	909.433	
2	907.405	4	908.216	6	909.027	8	909.838	

## Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	906.999MHz
The middle channel	908.622MHz
The Highest channel	909.838MHz



## 5.3 Test mode

Transmitting mode Keep the EUT in continuously transmitting mode

## 5.4 Description of Support Units

None

## 5.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### CNAS —Registration No.: CNAS L5775

CNAS has accredited Global United Technology Services Co., Ltd. To ISO/IEC 17025 General Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

## • FCC —Registration No.: 600491

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, June 28, 2013.

## • Industry Canada (IC) —Registration No.: 9079A-2

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2, June 26, 2013.

#### 5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen,

China

Tel: 0755-27798480 Fax: 0755-27798960



## 6 Test Instruments list

Radi	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	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 29 2014	Mar. 28 2015		
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A		
3	Spectrum Analyzer	Agilent	E4440A	GTS533	Jul. 01 2014	Jun 30 2015		
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 01 2014	Jun 30 2015		
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Jul. 01 2014	Jun 30 2015		
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 27 2014	June 26 2015		
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 28 2014	Mar. 27 2015		
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
9	Coaxial Cable	GTS	N/A	GTS213	Mar. 29 2014	Mar. 28 2015		
10	Coaxial Cable	GTS	N/A	GTS211	Mar. 29 2014	Mar. 28 2015		
11	Coaxial cable	GTS	N/A	GTS210	Mar. 29 2014	Mar. 28 2015		
12	Coaxial Cable	GTS	N/A	GTS212	Mar. 29 2014	Mar. 28 2015		
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 01 2014	Jun. 30, 2015		
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 01 2014	Jun. 30, 2015		
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 27 2014	June 26 2015		
16	Band filter	Amindeon	82346	GTS219	Mar. 29 2014	Mar. 28 2015		
17	Power Meter	Anritsu	ML2495A	GTS540	July 01 2014	June 30 2015		
18	Power Sensor	Anritsu	MA2411B	GTS541	July 01 2014	June 30 2015		

Con	Conducted Emission:								
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)			
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS264	July 01 2014	June 30 2015			
2	<b>EMI Test Receiver</b>	Rohde & Schwarz	ESCS30	GTS223	July 01 2014	June 30 2015			
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	July 01 2014	June 30 2015			
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	July 01 2014	June 30 2015			
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	July 01 2014	June 30 2015			
6	Coaxial Cable	GTS	N/A	GTS227	July 01 2014	June 30 2015			
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A			

Gen	General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Barometer	ChangChun	DYM3	GTS257	July 08 2014	July 07 2015	



## 7 Test results and Measurement Data

## 7.1 Antenna requirement

**Standard requirement:** FCC Part15 C Section 15.203 /247(c)

#### 15.203 requirement:

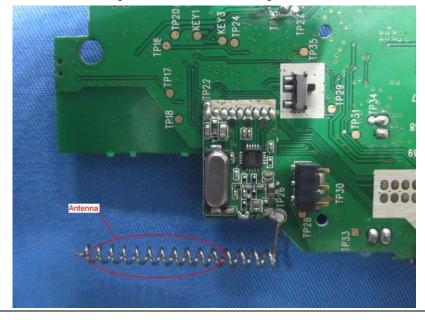
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### 15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

#### E.U.T Antenna:

The antenna is Integral Antenna, the best case gain of the antenna is 0dBi



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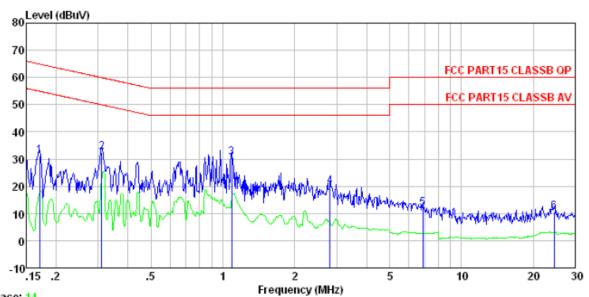
## 7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.4:2003					
Test Frequency Range:	150KHz to 30MHz					
Class / Severity:	Class B					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sv	weep time=auto				
Limit:	Limit (dRu\/)					
	Quasi-peak   Average					
	0.5-5 56 46					
	5-30	60	50			
	* Decreases with the logarithm	n of the frequency.				
Test setup:	Reference Plane					
	AUX Equipment E.U.T  Test table/Insulation plane  Remark E.U.T. Equipment Under Test LISN: Line impedence Stabilization Network Test table height=0.8m	Filter AC pow				
Test procedure:	<ol> <li>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 500hm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refer to the block diagram of the test setup and photographs).</li> </ol>					
	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 6.0 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Pass					



## Measurement data

Line:



Trace: 14

Condition : FCC PART15 CLASSB QP LISN-2013 LINE

Job No. : 1708RF

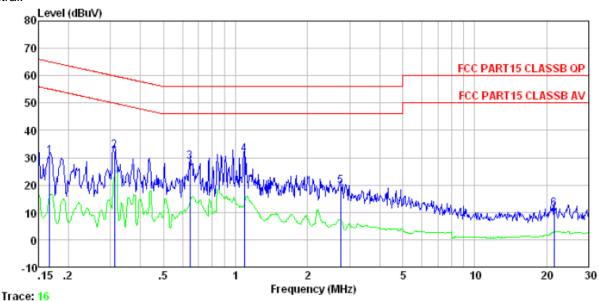
Test mode : Transmitter mode

Test Engineer: Mike

est	Engineer:		LISN	Cable		Limit	Over	
	Freq		Factor					Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.170	30.98	0.15		31.13			
2	0.310	32.36	0.11	0.00	32.47	59.97	-27.50	QP
3	1.088	30.36	0.13	0.00	30.49	56.00	-25.51	QP
4	2.809	19.71	0.14	0.00	19.85	56.00	-36.15	QP
5	6.878	11.67	0.24	0.00	11.91	60.00	-48.09	QP
6	24.529	9.59	1.11	0.00	10.70	60.00	-49.30	QP



#### Neutral:



Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

Job No. : 1708RF

Test mode : Transmitter mode

Test Engineer: Mike

CSI	DIRETHICCI.								
		Read	LISN	Cable		Limit	Over		
	Fred	Level	Factor	Logg	Level	Line	Limit	Remark	
	ricq	LCVCI	ractor	LUSS	LCVCI	LITT	LIMIC	ROBOLER	
	MHz	dBuV	d₿	d₿	dBuV	dBuV	d₿		
1	0.167	30.48	0.07	0.00	30.55	65.12	-34.57	ΩP	
ō									
2	0.312	32.50	0.06	0.00	32.56	59.93	-21.31	бЪ	
3	0.644	28.57	0.07	0.00	28.64	56.00	-27.36	QP	
4	1.088	30.99	0.08	0.00	31.07	56, 00	-24.93	ΩP	
5									
	2.750	19.50	0.10	0.00	19.00	56.00	-36.40	ØL.	
6	21.486	10.75	0.67	0.00	11.42	60.00	-48.58	QP	

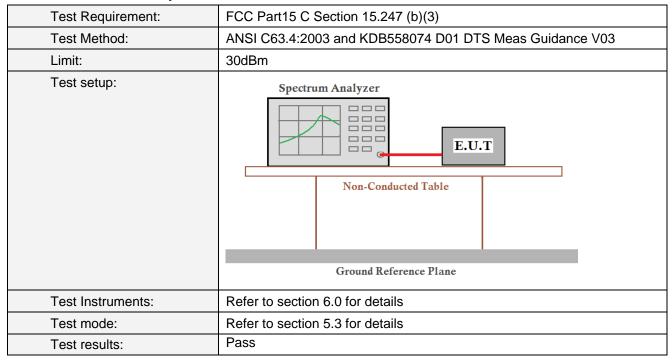
#### Notes:

- 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
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



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## 7.3 Conducted Output Power

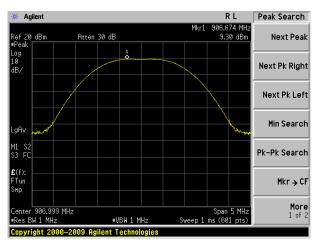


## **Measurement Data**

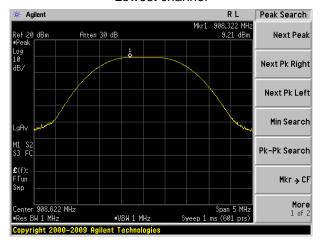
Test channel	Peak Output Power (dBm)	Limit(dBm)	Result
Lowest	9.30		
Middle	9.21	30.00	Pass
Highest	9.19		



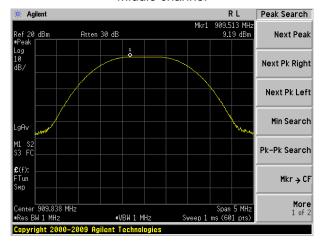
## Test plot as follows:



### Lowest channel



#### Middle channel

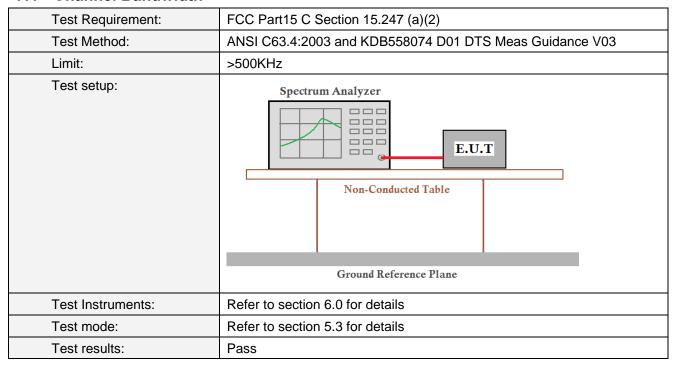


Highest channel

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#### 7.4 Channel Bandwidth



#### **Measurement Data**

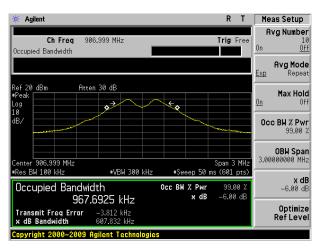
Test channel	Channel Bandwidth (KHz)	Limit(KHz)	Result	
Lowest	607.832			
Middle	606.626	>500	Pass	
Highest	619.363			

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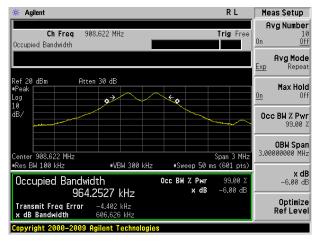


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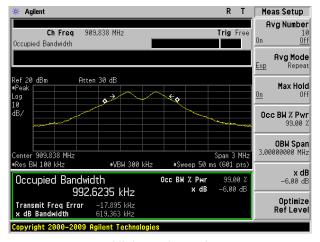
## Test plot as follows:



Lowest channel



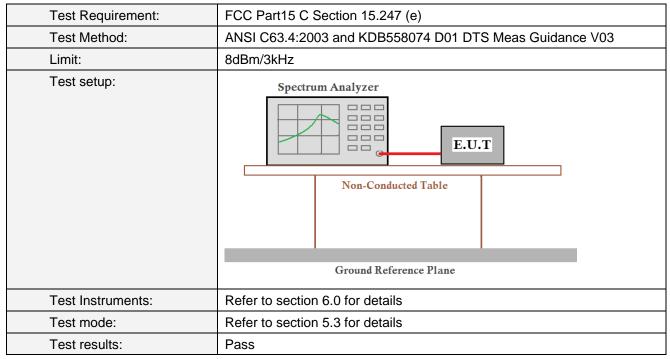
Middle channel



Highest channel



## 7.5 Power Spectral Density



#### **Measurement Data**

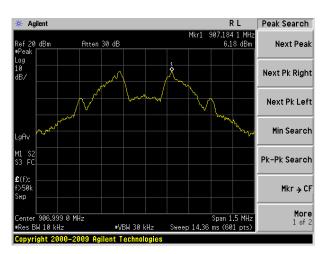
Test channel	Power Spectral Density (dBm)	Limit(dBm/3kHz)	Result	
Lowest	6.18		Pass	
Middle	5.83	8.00		
Highest	5.80			

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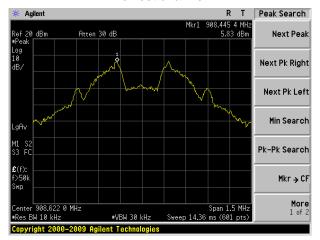
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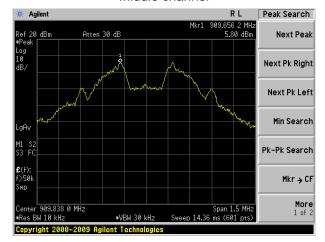
## Test plot as follows:



#### Lowest channel



#### Middle channel



Highest channel

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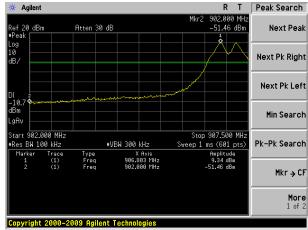


## 7.6 Band edges

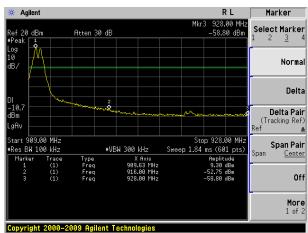
## 7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	ANSI C63.4:2003 and KDB558074 D01 DTS Meas Guidance V03					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Pass					

## Test plot as follows:







Highest channel



## 7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C S	Section 15.209	and 15.205				
Test Method:	ANSI C63.4: 2003						
Test Frequency Range:	All of the restrict bands were tested, only the worst band's data was						
, , ,	showed.						
Test site:	Measurement D	istance: 3m					
Receiver setup:	Frequency	Detector	RBW	VBW	Value		
	Above 4CH-	Peak	1MHz	3MHz	Peak		
	Above 1GHz	RMS	1MHz	3MHz	Average		
Limit:	Freque	ency	Limit (dBuV/	m @3m)	Value		
	Above 1	CH-	54.0	0	Average		
	Above	GHZ	74.0	0	Peak		
Test setup:	Antenna Tower  Horn Antenna  Spectrum Analyzer  Turn Table  Amplifier						
Test Procedure:	1 uti   0.8m   1m						
Test Instruments:	Refer to section 6.0 for details						
Test mode:	Refer to section	5.3 for details	S				
Test results:	Pass						



#### Measurement data:

Remark: The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.

#### Peak value:

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
902.00	44.82	23.12	4.87	31.18	41.63	46.00	-4.37	Vertical
928.00	34.73	23.28	4.96	31.20	31.77	46.00	-14.23	Vertical
902.00	36.97	23.12	4.87	31.18	33.78	46.00	-12.22	Horizontal
928.00	32.61	23.28	4.96	31.20	29.65	46.00	-16.35	Horizontal

#### Remark:

- 1. RBW=100KHz VBW=300KHz
- 2. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.

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## 7.7 Spurious Emission

## 7.7.1 Conducted Emission Method

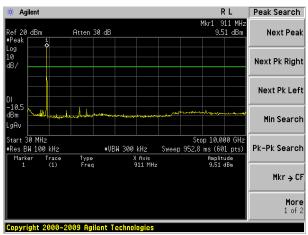
Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	ANSI C63.4:2003 and KDB558074 D01 DTS Meas Guidance V03					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Pass					

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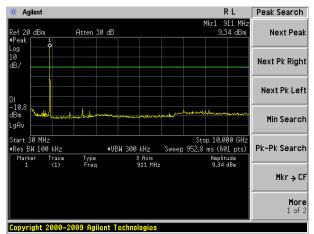
## Test plot as follows:

Lowest channel



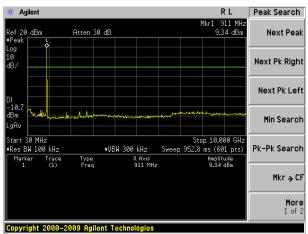
30MHz~10GHz

Middle channel



Highest channel

30MHz~10GHz



30MHz~10GHz

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## 7.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Se	FCC Part15 C Section 15.209							
Test Method:	ANSI C63.4: 200	ANSI C63.4: 2003							
Test Frequency Range:	30MHz to 25GHz	30MHz to 25GHz							
Test site:	Measurement Dis	Measurement Distance: 3m							
Receiver setup:	Frequency	Detector	RBW	VBW	Value				
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak				
	Above 1GHz	Peak	1MHz	3MHz	Peak				
	Above TOTIZ	RMS	1MHz	3MHz	Average				
Limit:	Frequen	су	Limit (dBuV	/m @3m)	Value				
	30MHz-88	MHz	40.0	0	Quasi-peak				
	88MHz-216	SMHz	43.5	0	Quasi-peak				
	216MHz-96	0MHz	46.0	0	Quasi-peak				
	960MHz-1	GHz	54.0	0	Quasi-peak				
	Above 10	`U-7	54.0	0	Average				
	Above 10	JI 12	74.0	0	Peak				
	Turn 0.8m Table 0.8m Turn 0.8m Table 0.8m	4m	Ho Spec	Antenna Tower  Search Antenna  RF Test Receiver  Intenna Tower  rn Antenna  ctrum llyzer					
Test Procedure:	1. The EUT was	placed on the		ating table 0	.8 meters above				

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	the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
	<ol><li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li></ol>
	<ol> <li>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.</li> </ol>
	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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
	<ol><li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li></ol>
	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.
	7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

#### Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the X-axis which it is worse case.

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## **Measurement Data**

## ■ Below 1GHz

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
60.07	41.39	14.69	0.86	31.94	25.00	40.00	-15.00	Vertical
156.10	41.41	10.51	1.61	32.00	21.53	43.50	-21.97	Vertical
569.32	40.67	19.93	3.60	31.19	33.01	46.00	-12.99	Vertical
817.64	41.51	22.24	4.52	31.29	36.98	46.00	-9.02	Vertical
473.29	36.59	17.89	3.20	31.64	26.04	46.00	-19.96	Vertical
650.80	40.69	20.64	3.92	31.12	34.13	46.00	-11.87	Vertical
227.88	45.14	13.51	2.01	32.15	28.51	46.00	-17.49	Horizontal
321.00	43.69	15.40	2.47	32.11	29.45	46.00	-16.55	Horizontal
561.56	37.99	19.77	3.57	31.24	30.09	46.00	-15.91	Horizontal
702.21	41.83	20.81	4.09	31.19	35.54	46.00	-10.46	Horizontal
855.47	38.30	22.64	4.68	31.24	34.38	46.00	-11.62	Horizontal
98.87	38.25	15.10	1.18	31.76	22.77	43.50	-20.73	Horizontal



## ■ Above 1GHz

Test channel	nel: Lowest							
Peak value:								
Frequency	Read	Antenna	Cable	Preamp	Level	Limit Line	Over	nolorization

Peak value.								
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
1814.00	59.38	25.34	4.87	34.14	55.45	74.00	-18.55	Vertical
2721.00	47.96	28.20	5.69	33.64	48.21	74.00	-25.79	Vertical
3628.00	41.31	29.17	7.21	32.60	45.09	74.00	-28.91	Vertical
4535.00	35.98	31.40	8.37	31.96	43.79	74.00	-30.21	Vertical
5441.99	38.58	31.89	9.42	32.40	47.49	74.00	-26.51	Vertical
6348.99	36.73	33.36	10.68	32.08	48.69	74.00	-25.31	Vertical
7255.99	36.90	36.24	11.69	31.96	52.87	74.00	-21.13	Vertical
8162.99	32.37	36.99	12.36	31.56	50.16	74.00	-23.84	Vertical
9069.99	28.96	37.23	13.71	32.23	47.67	74.00	-26.33	Vertical
1814.00	50.99	25.34	4.87	34.14	47.06	74.00	-26.94	Horizontal
2721.00	43.48	28.20	5.69	33.64	43.73	74.00	-30.27	Horizontal
3628.00	39.60	29.17	7.21	32.60	43.38	74.00	-30.62	Horizontal
4535.00	36.46	31.40	8.37	31.96	44.27	74.00	-29.73	Horizontal
5441.99	38.27	31.89	9.42	32.40	47.18	74.00	-26.82	Horizontal
6348.99	32.73	33.36	10.68	32.08	44.69	74.00	-29.31	Horizontal
7255.99	39.30	36.24	11.69	31.96	55.27	74.00	-18.73	Horizontal
8162.99	33.37	36.99	12.36	31.56	51.16	74.00	-22.84	Horizontal
9069.99	32.91	37.23	13.71	32.23	51.62	74.00	-22.38	Horizontal

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## Average value:

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
1814.00	44.12	25.34	4.87	34.14	40.19	54.00	-13.81	Vertical
2721.00	32.64	28.20	5.69	33.64	32.89	54.00	-21.11	Vertical
3628.00	26.54	29.17	7.21	32.60	30.32	54.00	-23.68	Vertical
4535.00	20.65	31.40	8.37	31.96	28.46	54.00	-25.54	Vertical
5441.99	23.79	31.89	9.42	32.40	32.70	54.00	-21.30	Vertical
6348.99	21.35	33.36	10.68	32.08	33.31	54.00	-20.69	Vertical
7255.99	21.65	36.24	11.69	31.96	37.62	54.00	-16.38	Vertical
8162.99	17.65	36.99	12.36	31.56	35.44	54.00	-18.56	Vertical
9069.99	16.54	37.23	13.71	32.23	35.25	54.00	-18.75	Vertical
1814.00	35.60	25.34	4.87	34.14	31.67	54.00	-22.33	Horizontal
2721.00	28.68	28.20	5.69	33.64	28.93	54.00	-25.07	Horizontal
3628.00	25.87	29.17	7.21	32.60	29.65	54.00	-24.35	Horizontal
4535.00	21.84	31.40	8.37	31.96	29.65	54.00	-24.35	Horizontal
5441.99	23.88	31.89	9.42	32.40	32.79	54.00	-21.21	Horizontal
6348.99	19.64	33.36	10.68	32.08	31.60	54.00	-22.40	Horizontal
7255.99	25.88	36.24	11.69	31.96	41.85	54.00	-12.15	Horizontal
8162.99	18.65	36.99	12.36	31.56	36.44	54.00	-17.56	Horizontal
9069.99	17.65	37.23	13.71	32.23	36.36	54.00	-17.64	Horizontal

### Remark:

Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor
 "\*", means this data is the too weak instrument of signal is unable to test.



Test channel: Middle									
Peak value:	Peak value:								
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	
1817.24	55.64	25.37	4.87	34.14	51.74	74.00	-22.26	Vertical	
2725.87	44.22	28.21	5.69	33.63	44.49	74.00	-29.51	Vertical	
3634.49	38.83	29.17	7.21	32.60	42.61	74.00	-31.39	Vertical	
4543.11	35.08	31.42	8.38	31.96	42.92	74.00	-31.08	Vertical	
5451.73	36.26	31.89	9.45	32.41	45.19	74.00	-28.81	Vertical	
6360.35	35.10	33.39	10.70	32.08	47.11	74.00	-26.89	Vertical	
7268.98	35.00	36.28	11.69	31.94	51.03	74.00	-22.97	Vertical	
8177.60	31.69	36.99	12.39	31.59	49.48	74.00	-24.52	Vertical	
9086.22	29.37	37.23	13.71	32.21	48.10	74.00	-25.90	Vertical	
1817.24	54.43	25.37	4.87	34.14	50.53	74.00	-23.47	Horizontal	
2725.87	47.86	28.21	5.69	33.63	48.13	74.00	-25.87	Horizontal	
3634.49	41.24	29.17	7.21	32.60	45.02	74.00	-28.98	Horizontal	
4543.11	34.34	31.42	8.38	31.96	42.18	74.00	-31.82	Horizontal	
5451.73	37.51	31.89	9.45	32.41	46.44	74.00	-27.56	Horizontal	
6360.35	32.61	33.39	10.70	32.08	44.62	74.00	-29.38	Horizontal	
7268.98	41.07	36.28	11.69	31.94	57.10	74.00	-16.90	Horizontal	
8177.60	33.23	36.99	12.39	31.59	51.02	74.00	-22.98	Horizontal	
9086.22	33.71	37.23	13.71	32.21	52.44	74.00	-21.56	Horizontal	



### Average value:

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
1817.24	40.54	25.37	4.87	34.14	36.64	54.00	-17.36	Vertical
2725.87	30.46	28.21	5.69	33.63	30.73	54.00	-23.27	Vertical
3634.49	23.64	29.17	7.21	32.60	27.42	54.00	-26.58	Vertical
4543.11	20.75	31.42	8.38	31.96	28.59	54.00	-25.41	Vertical
5451.73	21.84	31.89	9.45	32.41	30.77	54.00	-23.23	Vertical
6360.35	20.35	33.39	10.70	32.08	32.36	54.00	-21.64	Vertical
7268.98	20.70	36.28	11.69	31.94	36.73	54.00	-17.27	Vertical
8177.60	16.79	36.99	12.39	31.59	34.58	54.00	-19.42	Vertical
9086.22	14.87	37.23	13.71	32.21	33.60	54.00	-20.40	Vertical
1817.24	40.53	25.37	4.87	34.14	36.63	54.00	-17.37	Horizontal
2725.87	32.47	28.21	5.69	33.63	32.74	54.00	-21.26	Horizontal
3634.49	26.98	29.17	7.21	32.60	30.76	54.00	-23.24	Horizontal
4543.11	20.77	31.42	8.38	31.96	28.61	54.00	-25.39	Horizontal
5451.73	23.13	31.89	9.45	32.41	32.06	54.00	-21.94	Horizontal
6360.35	17.55	33.39	10.70	32.08	29.56	54.00	-24.44	Horizontal
7268.98	26.78	36.28	11.69	31.94	42.81	54.00	-11.19	Horizontal
8177.60	18.64	36.99	12.39	31.59	36.43	54.00	-17.57	Horizontal
9086.22	18.64	37.23	13.71	32.21	37.37	54.00	-16.63	Horizontal

## Remark:

Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor
 "\*", means this data is the too weak instrument of signal is unable to test.



Test channel: Highest									
Peak value:	Peak value:								
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	
1817.88	55.53	25.37	4.87	34.14	51.63	74.00	-22.37	Vertical	
2729.81	44.34	28.21	5.69	33.63	44.61	74.00	-29.39	Vertical	
3639.75	41.65	29.18	7.23	32.60	45.46	74.00	-28.54	Vertical	
4549.69	35.90	31.42	8.38	31.96	43.74	74.00	-30.26	Vertical	
5456.63	36.63	31.92	9.45	32.41	45.59	74.00	-28.41	Vertical	
6369.57	36.66	33.43	10.73	32.09	48.73	74.00	-25.27	Vertical	
7279.50	34.81	36.28	11.70	31.94	50.85	74.00	-23.15	Vertical	
8189.44	31.74	36.92	12.43	31.63	49.46	74.00	-24.54	Vertical	
9099.38	31.53	37.25	13.74	32.21	50.31	74.00	-23.69	Vertical	
1819.88	55.98	25.37	4.87	34.14	52.08	74.00	-21.92	Horizontal	
2729.81	47.58	28.21	5.69	33.63	47.85	74.00	-26.15	Horizontal	
3639.75	40.95	29.18	7.23	32.60	44.76	74.00	-29.24	Horizontal	
4549.69	34.82	31.42	8.38	31.96	42.66	74.00	-31.34	Horizontal	
5459.63	39.40	31.92	9.45	32.41	48.36	74.00	-25.64	Horizontal	
6369.57	33.81	33.43	10.73	32.09	45.88	74.00	-28.12	Horizontal	
7279.50	39.80	36.28	11.70	31.94	55.84	74.00	-18.16	Horizontal	
8189.44	35.30	36.92	12.43	31.63	53.02	74.00	-20.98	Horizontal	
9099.38	35.04	37.25	13.74	32.21	53.82	74.00	-20.18	Horizontal	

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## Average value:

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
1817.88	40.12	25.37	4.87	34.14	36.22	54.00	-17.78	Vertical
2729.81	30.61	28.21	5.69	33.63	30.88	54.00	-23.12	Vertical
3639.75	26.00	29.18	7.23	32.60	29.81	54.00	-24.19	Vertical
4549.69	20.04	31.42	8.38	31.96	27.88	54.00	-26.12	Vertical
5456.63	21.99	31.92	9.45	32.41	30.95	54.00	-23.05	Vertical
6369.57	21.63	33.43	10.73	32.09	33.70	54.00	-20.30	Vertical
7279.50	20.55	36.28	11.70	31.94	36.59	54.00	-17.41	Vertical
8189.44	16.88	36.92	12.43	31.63	34.60	54.00	-19.40	Vertical
9099.38	16.75	37.25	13.74	32.21	35.53	54.00	-18.47	Vertical
1819.88	40.46	25.37	4.87	34.14	36.56	54.00	-17.44	Horizontal
2729.81	32.65	28.21	5.69	33.63	32.92	54.00	-21.08	Horizontal
3639.75	25.65	29.18	7.23	32.60	29.46	54.00	-24.54	Horizontal
4549.69	18.45	31.42	8.38	31.96	26.29	54.00	-27.71	Horizontal
5459.63	24.25	31.92	9.45	32.41	33.21	54.00	-20.79	Horizontal
6369.57	18.45	33.43	10.73	32.09	30.52	54.00	-23.48	Horizontal
7279.50	24.46	36.28	11.70	31.94	40.50	54.00	-13.50	Horizontal
8189.44	20.45	36.92	12.43	31.63	38.17	54.00	-15.83	Horizontal
9099.38	20.19	37.25	13.74	32.21	38.97	54.00	-15.03	Horizontal

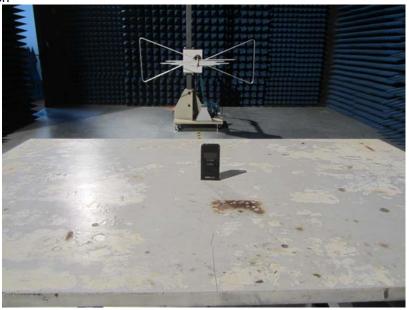
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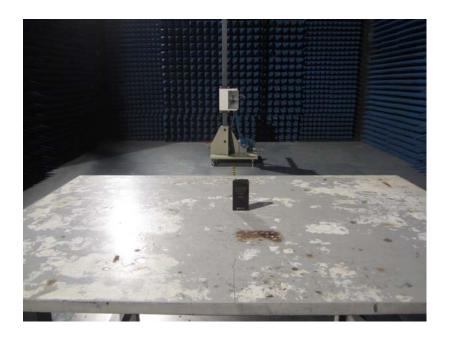
Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor
 "\*", means this data is the too weak instrument of signal is unable to test.



## 8 Test Setup Photo

Radiated Emission





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## Conducted Emissions



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## 9 EUT Constructional Details







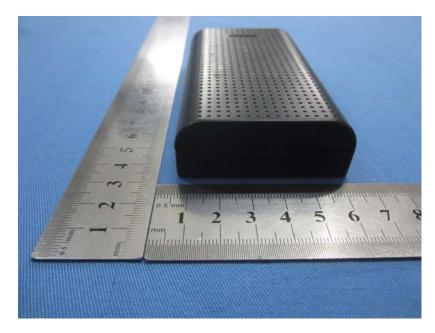




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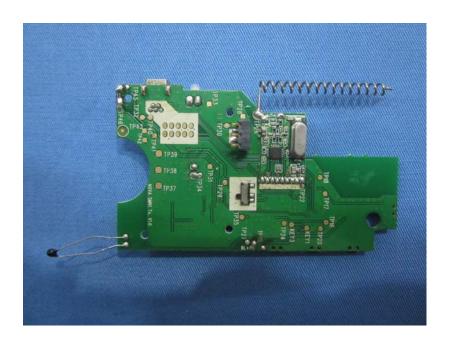
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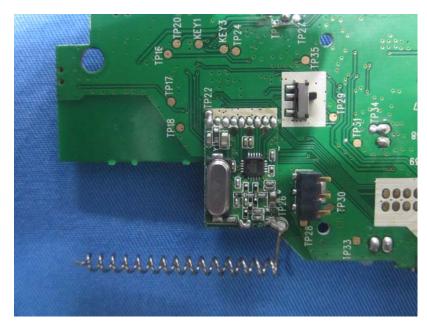






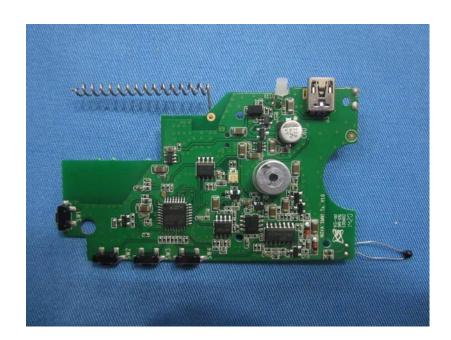






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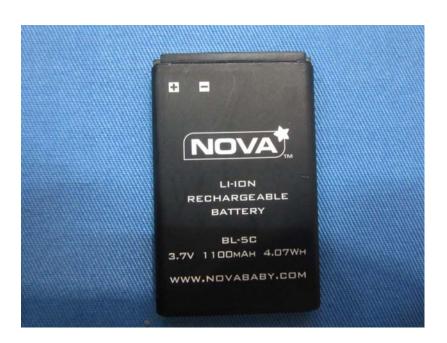






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-----End-----