

FCC TEST REPORT

FCC ID : YVV-AEED5100001
Applicant : Shenzhen AEE Technology Co. Ltd
Address : AEE Hi-Tech Park, Sun Industrial Area, Xili, Nanshan District, Shenzhen. P.R.C
518108
Manufacturer : Shenzhen AEE Technology Co. Ltd
Address : AEE Hi-Tech Park, Sun Industrial Area, Xili, Nanshan District, Shenzhen. P.R.C
518108

Equipment Under Test (EUT) :

Product Name : 2.4G wireless audio and video transmitter module
Model No. : D51
Rules : FCC CFR47 Part 15 Section 15.249: 2010,
Date of Test : Nov. 17~18, 2012
Date of Issue : Nov. 30, 2012

Test Result	: PASS*
Remark: * The sample described above has been tested to be in compliance with the requirements of the rules listed above. The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.	

PERPARED BY:

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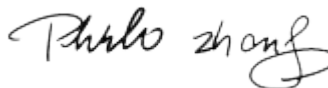
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Compiled by:



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Approved by:



Philo Zhong / Manager

2 Test Summary

Test Items	Test Requirement	Result
Restricted Band	15.205	PASS
Occupied Bandwidth	15:249(d)	PASS
Conducted Emissions	15.207	PASS
Radiated Emission	15.205(a) 15.209 15.249(a)	PASS
Antenna Requirement	15.203	PASS

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4 General Information

4.1 General Description of E.U.T.

Product Name	: 2.4G wireless audio and video transmitter module
Model No.	: D51
Model Description	: N/A
Type of Modulation	: FM
Note	: N/A
Frequency Range	: 2414MHz~ 2468MHz
Oscillator	: 8MHz
Antenna installation	: Integrated Antenna

4.2 Details of E.U.T.

Technical Data	: DC 3.3V POWER From Action Camcorder Output: 7~10mW
Adapter manufacturer	: N/A
M/N	: N/A

4.3 Test Facility

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

- **FCC – Registration No.: 880581**

Waltek Services(Shenzhen) 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 our files. Registration 880581, May 26, 2011.

- **IC – Registration No.:7760A**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, July 12, 2012.

4.4 Test Location

All Emissions tests were performed at:-
1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen
518105, Guangdong, China.

4.5 General condition

Ambient Condition: 25.5 °C 58 %RH

4.5.1 Environmental condition of test site

For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

The follow condition is not applicable

Test Voltage	Input voltage
Rated voltage-15%	
normal	
Rated voltage+15%	

The follow condition is applicable.

Test voltage	Test Voltage From Action Camcorder
Rated voltage	New Battery DC 3.3V

4.5.2 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Test mode	Lower channel	Middle channel	Upper channel
Transmitting	2414MHz	2432MHz	2468MHz
Receiving	N/AMHz	N/AMHz	N/AMHz

5 Equipment Used during Test

5.1 Equipments List

3m Semi-anechoic Chamber for Radiation Emissions and Spurious Emission						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMC Analyzer	Agilent	E7405A	MY45114943	Aug. 13,2012	Aug. 13,2013
2.	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Aug. 13,2012	Aug. 13,2013
3.	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Aug. 13,2012	Aug. 13,2013
4.	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Aug. 13,2012	Aug. 13,2013
5.	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	399	Aug. 13,2012	Aug. 13,2013
6.	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Feb .23,2012	Feb .23,2013
7.	Broadband Preamplifier	SCHWARZBECK	BBV 9718	9718-148	Aug. 13,2012	Aug. 13,2013
8.	10m Coaxial Cable with N- plug	SCHWARZBECK	AK 9515 H	-	Aug. 13,2012	Aug. 13,2013
9.	10m 50 Ohm Coaxial Cable with N-plug	SCHWARZBECK	AK 9513	-	Aug. 13,2012	Aug. 13,2013
10.	Positioning Controller	C&C LAB	CC-C-IF	-	Aug. 13,2012	Aug. 13,2013
11.	Color Monitor	SUNSP0	SP-14C	-	Aug. 13,2012	Aug. 13,2013
Associated Equipment						
1	Action Camcorde	AEE	SD20	-	-	-

5.2 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-6}$
RF Power	± 1.0 dB
RF Power Density	± 2.2 dB
Radiated Spurious Emissions test	± 5.03 dB (Bilog antenna 30M~1000MHz)
	± 4.74 dB (Horn antenna 1000M~25000MHz)

5.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

6 Conducted Emission Test

Test Requirement:	FCC Part15 Paragraph 15.207
Test Method:	ANSI C63.4
Frequency Range:	150kHz to 30MHz
Class:	Class B
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth) Quasi-Peak & Average if maximised peak within 6dB of Average Test
Result:	N/A
Remark:	The EUT powered from PCB, this item do not be required.

7 Radiation Emission Test

Test Requirement: FCC Part15 Paragraph 15.249
 Test Method: ANSI 63.4
 Frequency Range: 8MHz to 25GHz
 Measurement Distance: 3m
 Detector: Peak for pre-scan (120kHz resolution bandwidth)
 Quasi-Peak if maximised peak within 6dB of limit
 Test Result: PASS

15.247(a)Limit:

Fundamental frequency	Field strength of fundamental		Field strength of harmonics	
	mV/m	dBuV/m	uV/m	dBuV/m
902-928 MHz	50	94	500	54
2400-2483.5 MHz	50	94	500	54
5725-5875 MHz	50	94	500	54
24.0-24.25 GHz	250	108	2500	68

15.209 Limit:

Frequency(MHZ)	Distance(m)	Field strength	
		uV/m	dBuV/m
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

Note: RF Voltage(dBuV)=20 log₁₀ RF Voltage(uV)

7.1 EUT Operation:

Operating Environment:

Temperature: 25.5 °C
 Humidity: 51 % RH
 Atmospheric Pressure: 1012 mbar

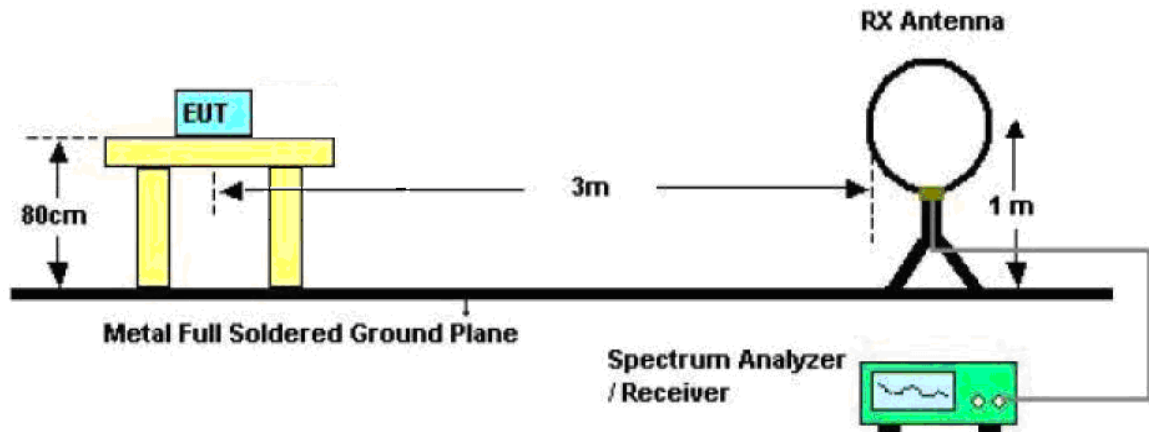
Operation Mode:

The EUT was tested in Normal working mode. The worst data were shown as follow.

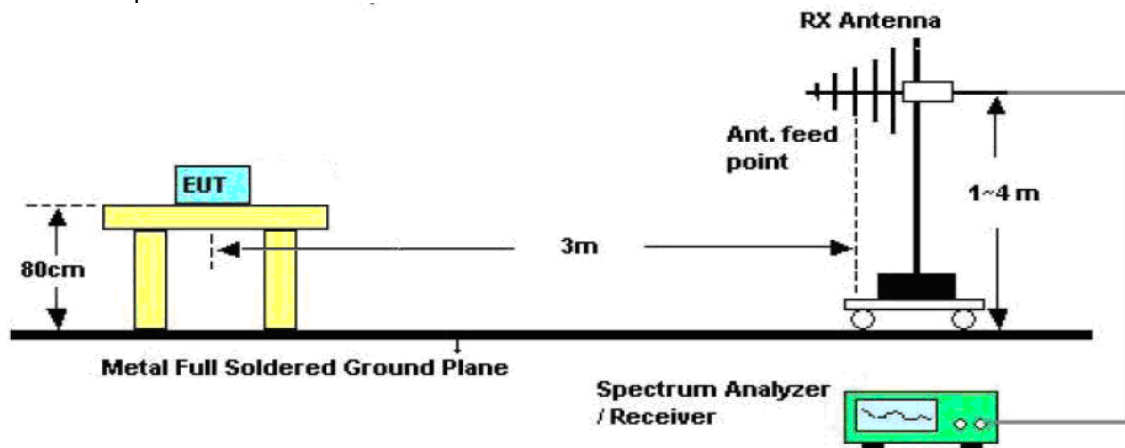
7.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2003.

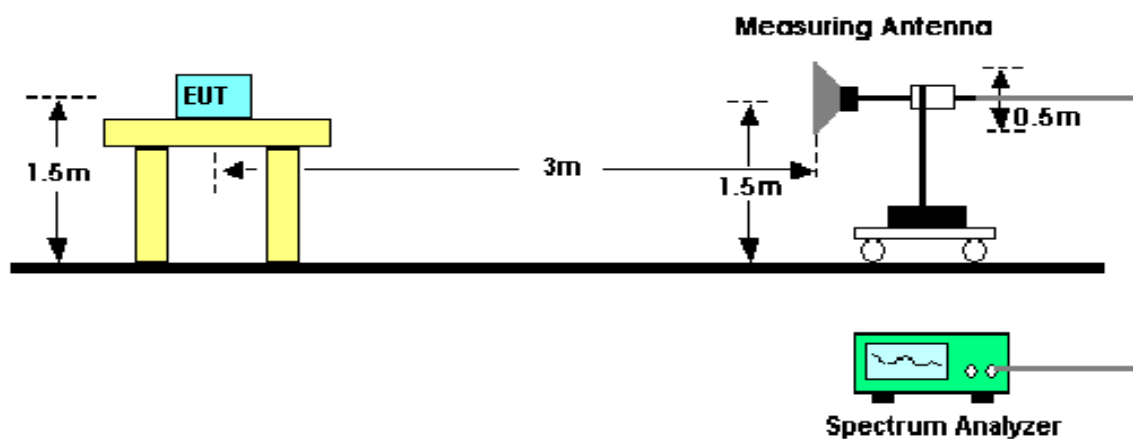
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz.



7.3 Spectrum Analyzer Setup

According to FCC Part15 Rules, the system was tested from 8MHz to 25GHz.

Below 30MHz

Sweep Speed	Auto
IF Bandwidth	10KHz
Video Bandwidth	10KHz
Resolution Bandwidth	10KHz

30MHz ~ 1GHz

Sweep Speed	Auto
IF Bandwidth	120 KHz
Video Bandwidth	100KHz
Quasi-Peak Adapter Bandwidth	120 KHz
Quasi-Peak Adapter Mode	Normal
Resolution Bandwidth	100KHz

Above 1GHz

Sweep Speed	Auto
IF Bandwidth	120 KHz
Video Bandwidth	3MHz
Quasi-Peak Adapter Bandwidth	120 KHz
Quasi-Peak Adapter Mode	Normal
Resolution Bandwidth	1MHz

7.4 Test Procedure

1. The new battery was used with SD 20 under test for radiated emissions test.
2. This is a handheld device, The radiation emission should be tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
3. Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combinations.
4. All data was recorded in the peak and average detection mode.
5. The EUT was under working mode during the final qualification test and the configuration was used to represent the worst case results.

7.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB μ V means the emission is 7dB μ V below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Class B Limit}$$

7.6 Radiated Emissions Test Result

Formula of conversion factors: the field strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB μ V/m) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the preselector was accounted for in the spectrum analyser meter reading.

Example:

Freq(MHz) Meter Reading + ACF = FS

33 20dB μ V + 10.36dB = 30.36dB μ V/m @3m

7.7 Radiated Emission Data

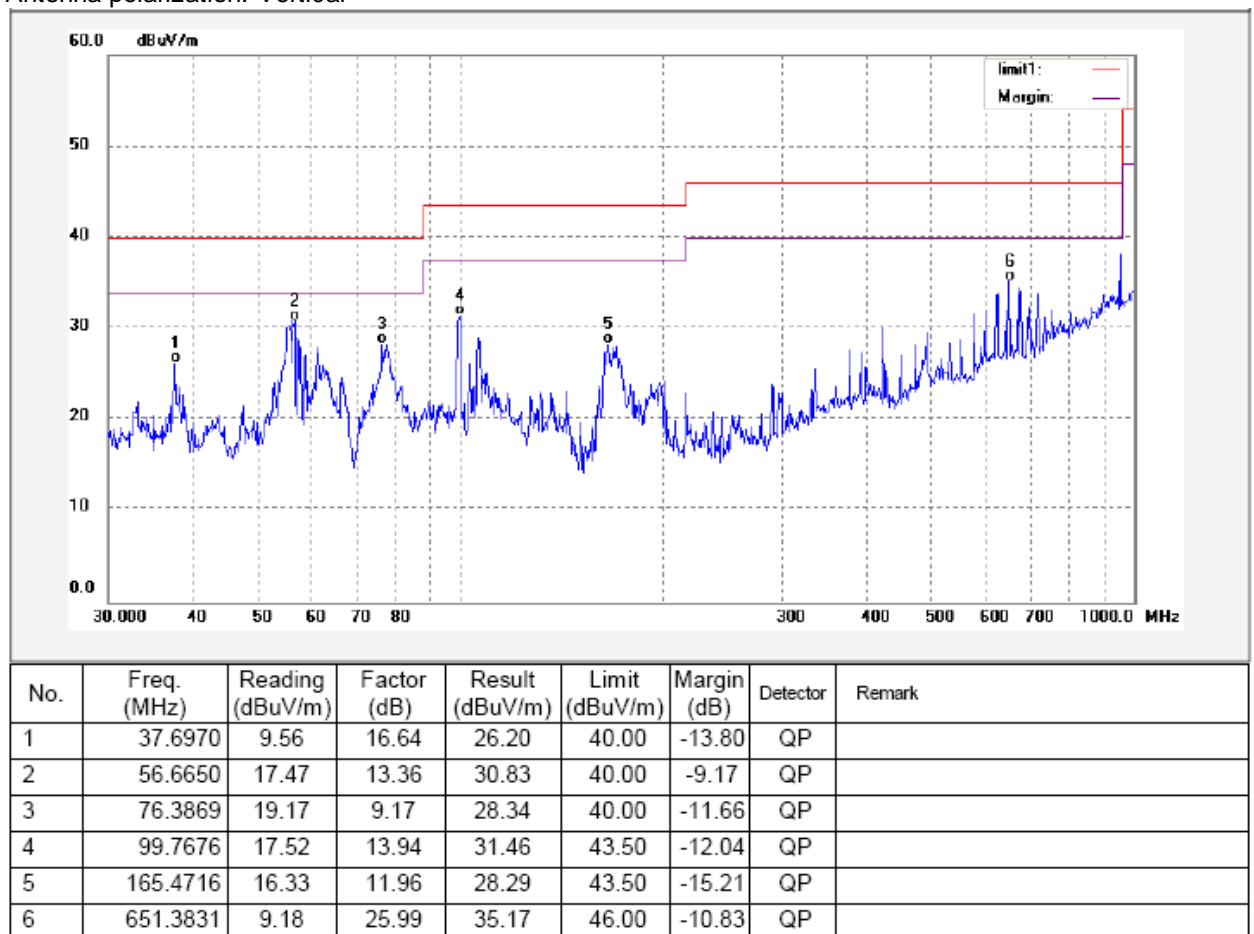
Test Frequency: below 30MHz

Remarks: Because the emissions below 30MHz are more than 20dB below the limit, the data is not shown in the report.

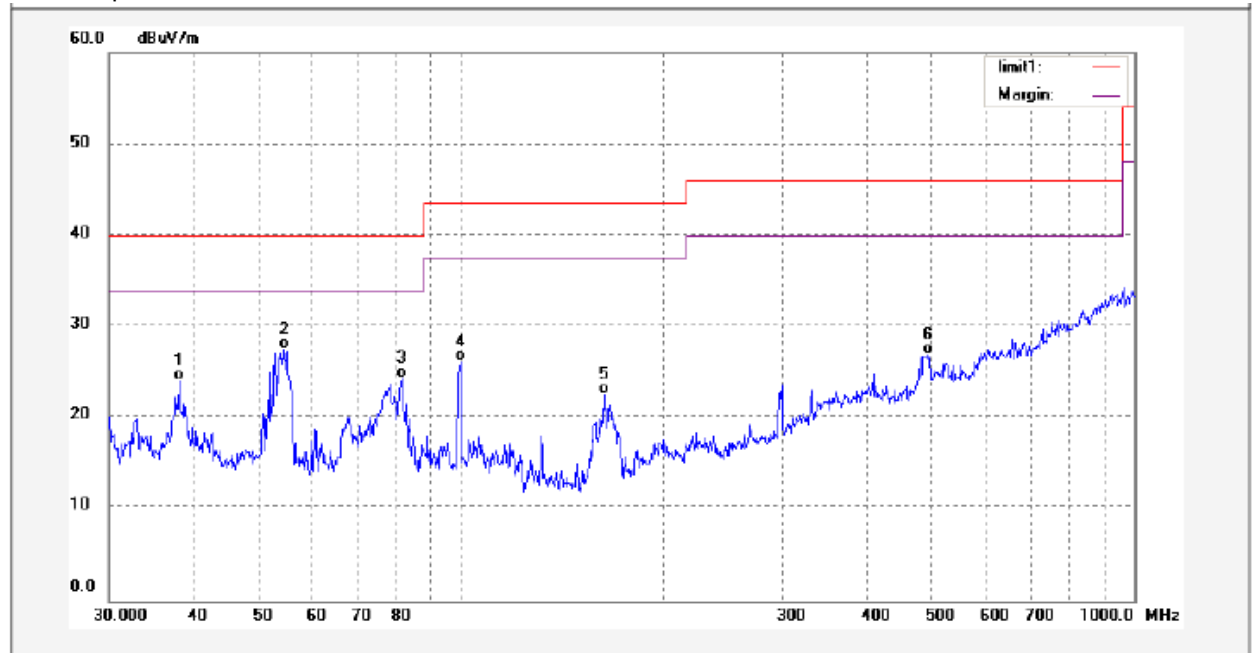
Test Frequency: 30MHz ~ 1000MHz

Test Mode: Normal working mode

Antenna polarization: Vertical



Antenna polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	38.0965	7.41	16.68	24.09	40.00	-15.91	QP	
2	54.5167	13.56	13.90	27.46	40.00	-12.54	QP	
3	81.6604	14.96	9.44	24.40	40.00	-15.60	QP	
4	99.7676	12.29	13.94	26.23	43.50	-17.27	QP	
5	163.1623	10.91	11.71	22.62	43.50	-20.88	QP	
6	495.2379	2.60	24.38	26.98	46.00	-19.02	QP	

And the below is the Fundamental and Harmonic .

Test Mode:Continuous transmitting

$$AV = \text{Peak} + 20\text{Log}_{10}(\text{duty cycle}) = PK + (-18.19) = PK - 18.19$$

See section 8 for duty cycle factor.

Frequency (MHz)	Detector	Antenna Polarization	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Turntable Angle (°)
Low frequency							
2414	AV	Vertical	82.37	94	-11.63	1.6	10
4828	AV	Vertical	45.32	54	-8.68	1.8	70
7242	AV	Vertical	47.24	54	-6.76	1.9	145
9656	AV	Vertical	42.21	54	-11.79	2.4	110
12070	AV	Vertical	37.95	54	-16.05	2	165
14484	AV	Vertical	40.68	54	-13.32	2	135
16898	AV	Vertical	39.24	54	-14.76	2.3	125
19312	AV	Vertical	-	54	< -20dB	-	-
21726	AV	Vertical	-	54	< -20dB	-	-
24140	AV	Vertical	-	54	< -20dB	-	-
2414	AV	Horizontal	83.52	94	-10.48	1.8	45
4828	AV	Horizontal	42.01	54	-11.99	2	170
7242	AV	Horizontal	39.11	54	-14.89	2	110
9656	AV	Horizontal	39.54	54	-14.46	1.9	140
12070	AV	Horizontal	43.15	54	-10.85	2	115
14484	AV	Horizontal	38.15	54	-15.85	1.9	160
16898	AV	Horizontal	44.56	54	-9.44	2	150
19312	AV	Horizontal	-	54	< -20dB	-	-
21726	AV	Horizontal	-	54	< -20dB	-	-
24140	AV	Horizontal	-	54	< -20dB	-	-
2414	PK	Vertical	100.56	114	-13.44	1.7	35
4828	PK	Vertical	63.51	74	-10.49	2.5	105
7242	PK	Vertical	65.43	74	-8.57	2.1	135
9656	PK	Vertical	60.40	74	-13.60	2.1	215
12070	PK	Vertical	56.14	74	-17.86	1.6	115
14484	PK	Vertical	58.87	74	-15.13	1.8	95
16898	PK	Vertical	57.43	74	-16.57	1.8	180
19312	PK	Vertical	-	74	< -20dB	-	-
21726	PK	Vertical	-	74	< -20dB	-	-
24140	PK	Vertical	-	74	< -20dB	-	-
2414	PK	Horizontal	101.71	114	-12.29	2.4	-
4828	PK	Horizontal	60.20	74	-13.80	3	145
7242	PK	Horizontal	57.30	74	-16.70	2.4	115

9656	PK	Horizontal	57.73	74	-16.27	2	45
12070	PK	Horizontal	61.34	74	-12.66	1.8	195
14484	PK	Horizontal	56.34	74	-17.66	2.3	45
16898	PK	Horizontal	62.75	74	-11.25	2.4	225
19312	PK	Horizontal	-	74	< -20dB	-	-
21726	PK	Horizontal	-	74	< -20dB	-	-
24140	PK	Horizontal	-	74	< -20dB	-	-

Frequency (MHz)	Detector	Antenna Polarization	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Turntable Angle (°)
Middle frequency							
2432	AV	Vertical	82.13	94	-11.87	1.8	40
4864	AV	Vertical	46.23	54	-7.77	1.7	115
7296	AV	Horizontal	42.11	54	-11.89	1.9	325
9728	AV	Vertical	42.02	54	-11.98	1.7	70
12160	AV	Vertical	41.23	54	-12.77	1.5	30
14592	AV	Vertical	39.56	54	-14.44	1.7	165
17024	AV	Vertical	41.17	54	-12.83	2	25
19456	AV	Vertical	-	54	< -20dB	-	-
21888	AV	Vertical	-	54	< -20dB	-	-
24320	AV	Vertical	-	54	< -20dB	-	-
2432	AV	Horizontal	83.66	94	-10.34	2	185
4864	AV	Horizontal	42.25	54	-11.75	1.7	150
7296	AV	Horizontal	43.15	54	-10.85	1.9	325
9728	AV	Horizontal	41.28	54	-12.72	1.8	160
12160	AV	Horizontal	41.66	54	-12.34	1.6	200
14592	AV	Horizontal	39.79	54	-14.21	2	260
17024	AV	Horizontal	35.66	54	-18.34	2.1	205
19456	AV	Horizontal	-	54	< -20dB	-	-
21888	AV	Horizontal	-	54	< -20dB	-	-
24320	AV	Horizontal	-	54	< -20dB	-	-
2432	PK	Vertical	100.32	114	-13.68	1.8	50
4864	PK	Vertical	64.42	74	-9.58	1.7	125
7296	PK	Vertical	60.3	74	-13.70	1.8	145
9728	PK	Vertical	60.21	74	-13.79	1.8	195
12160	PK	Vertical	59.42	74	-14.58	2	250
14592	PK	Vertical	57.75	74	-16.25	1.7	45
17024	PK	Vertical	59.36	74	-14.64	1.7	55
19456	PK	Vertical	-	74	< -20dB	-	-
21888	PK	Vertical	-	74	< -20dB	-	-

24320	PK	Vertical	-	74	< -20dB	-	-
2432	PK	Horizontal	101.85	114	-12.15	2	55
4864	PK	Horizontal	60.44	74	-13.56	2.5	130
7296	PK	Horizontal	61.34	74	-12.66	2.1	165
9728	PK	Horizontal	59.47	74	-14.53	2.2	115
12160	PK	Horizontal	59.85	74	-14.15	1.9	215
14592	PK	Horizontal	57.98	74	-16.02	1.9	215
17024	PK	Horizontal	53.85	74	-20.15	1.6	170
19456	PK	Horizontal	-	74	< -20dB	-	-
21888	PK	Horizontal	-	74	< -20dB	-	-
24320	PK	Horizontal	-	74	< -20dB	-	-

Frequency (MHz)	Detector	Antenna Polarization	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Turntable Angle (°)
Upper Frequency							
2468	AV	Vertical	83.29	94	-10.71	1.9	190
4936	AV	Vertical	46.32	54	-7.68	1.8	25
7404	AV	Vertical	43.15	54	-10.85	1.8	155
9872	AV	Vertical	44.32	54	-9.68	1.8	130
12340	AV	Vertical	40.21	54	-13.79	1.6	120
14808	AV	Vertical	47.28	54	-6.72	1.8	135
17276	AV	Vertical	40.25	54	-13.75	2.3	125
19744	AV	Vertical	-	54	< -20dB	-	-
22212	AV	Vertical	-	54	< -20dB	-	-
24680	AV	Vertical	-	54	< -20dB	-	-
2468	AV	Horizontal	84.58	94	-9.42	2.3	185
4936	AV	Horizontal	40.98	54	-13.02	2	210
7404	AV	Horizontal	41.56	54	-12.44	2.1	175
9872	AV	Horizontal	42.81	54	-11.19	2	220
12340	AV	Horizontal	40.85	54	-13.15	1.8	185
14808	AV	Horizontal	34.73	54	-19.27	2.2	200
17276	AV	Horizontal	38.81	54	-15.19	2.3	250
19744	AV	Horizontal	-	54	< -20dB	-	-
22212	AV	Horizontal	-	54	< -20dB	-	-
24680	AV	Horizontal	-	54	< -20dB	-	-
2468	PK	Vertical	101.48	114	-12.52	2	230
4936	PK	Vertical	64.51	74	-9.49	1.9	65
7404	PK	Vertical	61.34	74	-12.66	2	155
9872	PK	Vertical	62.51	74	-11.49	2	175

12340	PK	Vertical	58.40	74	-15.60	2.1	160
14808	PK	Vertical	65.47	74	-8.53	1.8	105
17276	PK	Vertical	58.44	74	-15.56	1.8	145
19744	PK	Vertical	-	74	< -20dB	-	-
22212	PK	Vertical	-	74	< -20dB	-	-
24680	PK	Vertical	-	74	< -20dB	-	-
2468	PK	Horizontal	102.77	114	-11.23	2.3	235
4936	PK	Horizontal	59.17	74	-14.83	2.8	145
7404	PK	Horizontal	59.75	74	-14.25	2.4	195
9872	PK	Horizontal	61.00	74	-13.00	2.5	235
12340	PK	Horizontal	59.04	74	-14.96	2.2	155
14808	PK	Horizontal	52.92	74	-21.08	2.2	155
17276	PK	Horizontal	57.00	74	-17.00	1.9	200
19744	PK	Horizontal	-	74	< -20dB	-	-
22212	PK	Horizontal	-	74	< -20dB	-	-
24680	PK	Horizontal	-	74	< -20dB	-	-

8 Duty Cycle

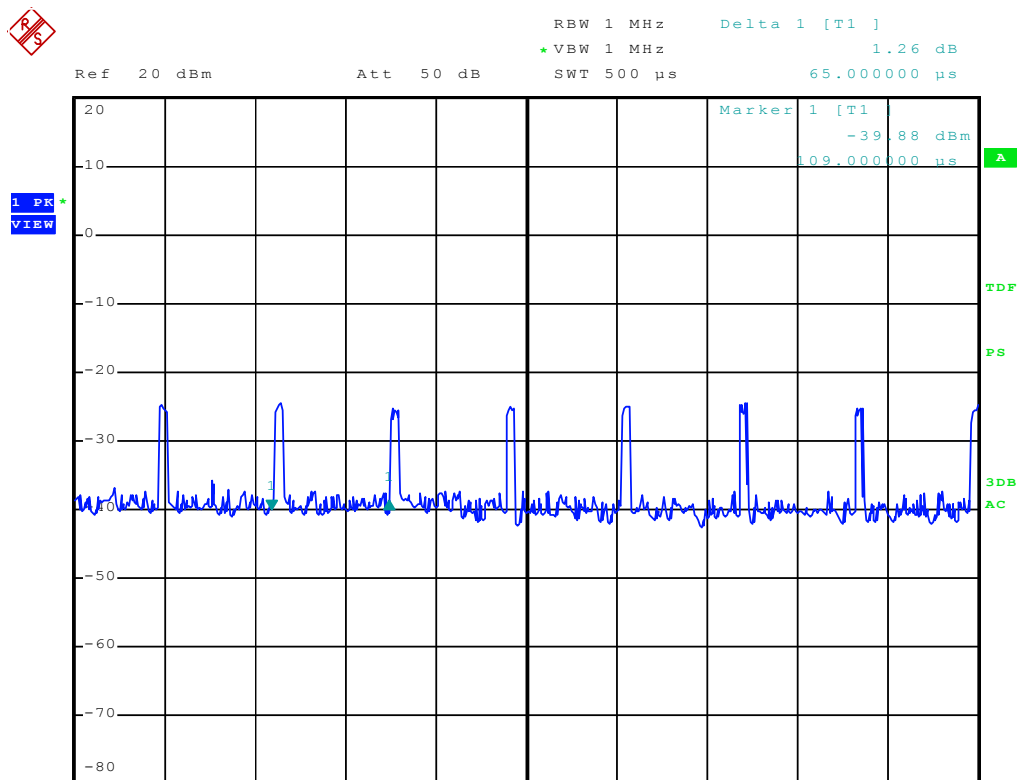
Test Requirement: FCC Part 15.35
Test Method: ANSI C63.4:2003
Test Status: Normal working mode.

8.1 Test Procedure

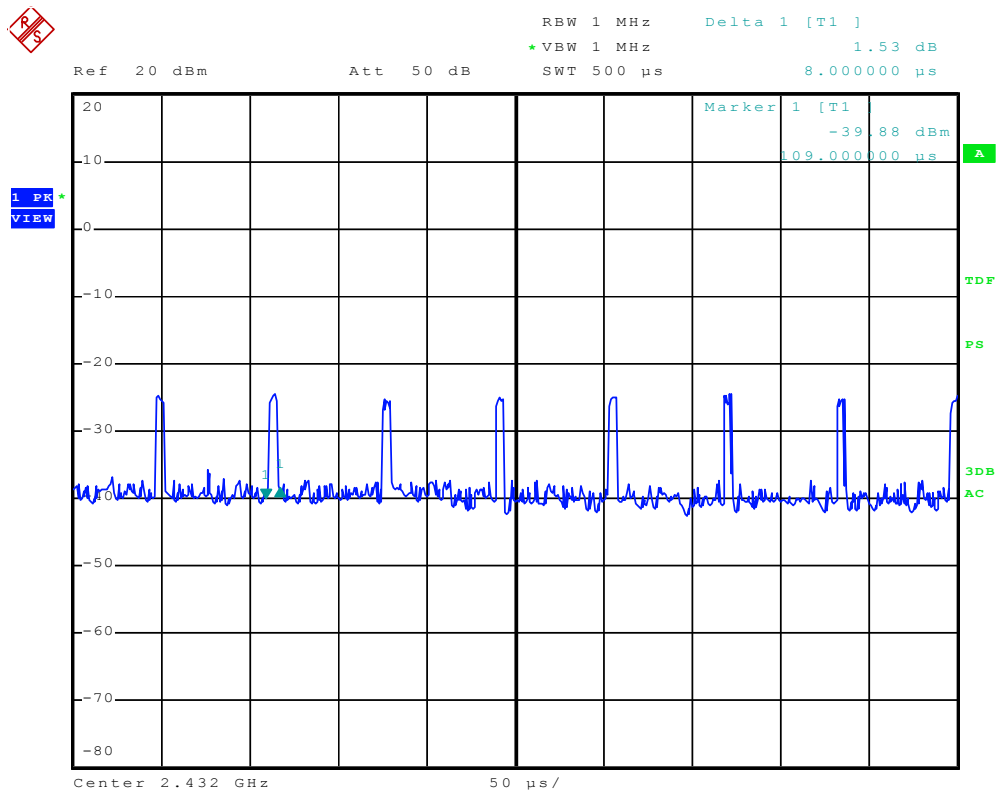
1. The EUT was placed on a turntable which is 0.8m above ground plane
2. Set EUT as normal working mode
3. Set SPA center frequency = fundamental frequency, RBW = 1MHz, VBW = 1MHz, Span = 0 Hz, Adjacent sweep time.

8.2 Test Result

(a) transmission period is 0.065ms



(b) Single pulse time is 0.008ms



The EUT is auto. operation for transmitter, it is declared by the manufacturer as a duty cycle ratio of less than 100%.

The EUT's work time : T_{on} =pulse time=0.008 ms

The EUT's work period : $T=T_{ON}+T_{OFF}$ = transmission period =0.065 ms

The EUT's duty cycle : $D = T_{on} / T = 0.008 / 0.065 * 100\% = 12.31\%$

Duty Cycle Correction Factor(dB)= $20 * \log_{10}(\text{Duty Cycle})=20 * \log_{10}(12.31\%)$

= -18.19dB

9 Occupied Bandwidth

Test Requirement: FCC Part15.249(d)

Test Method: ANSI C63.4

Test mode: Transmitting

Test Result: PASS

15.249(d)

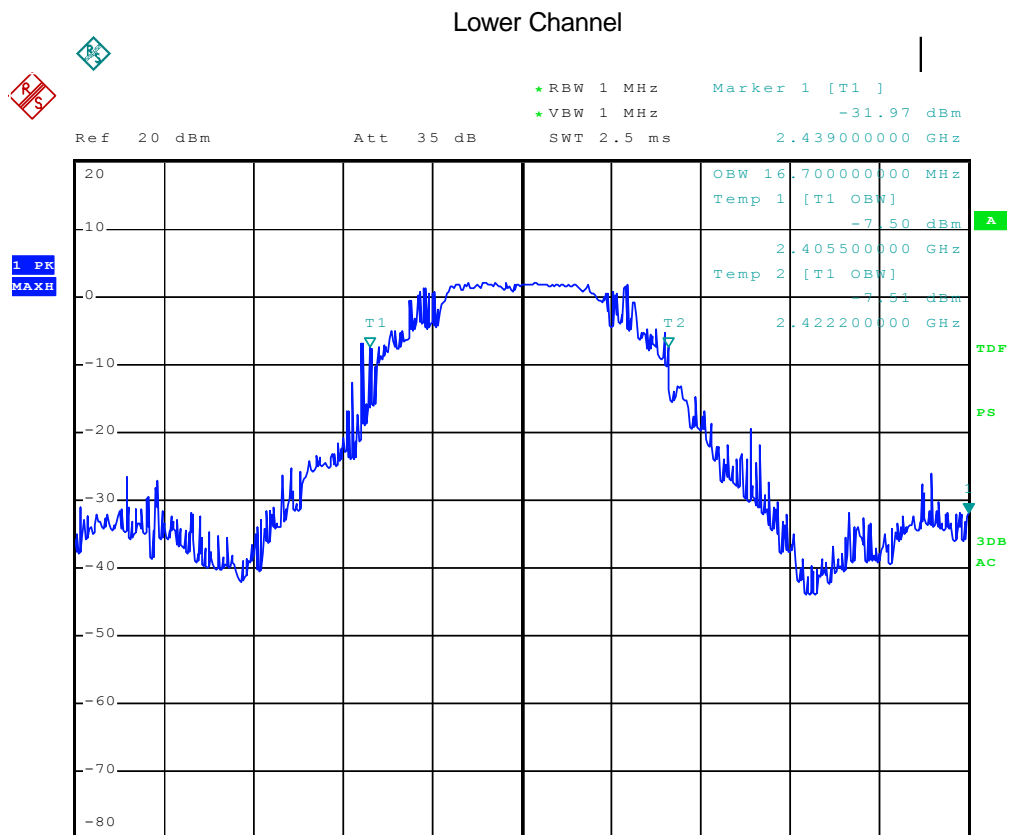
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

9.1 Test Procedure

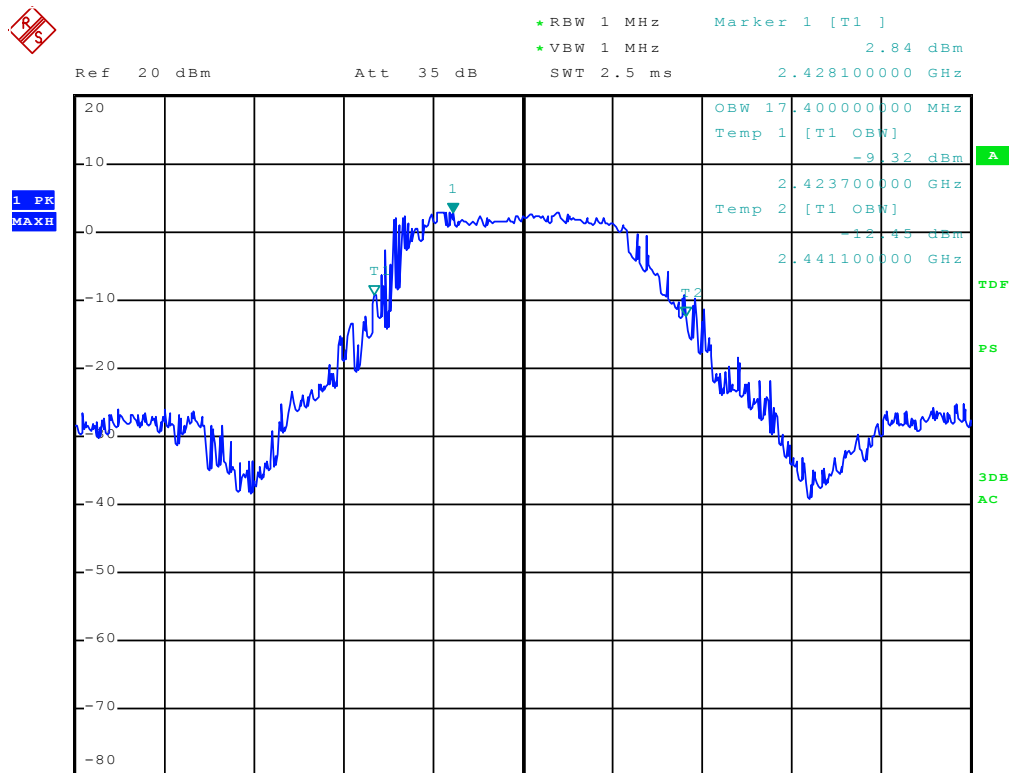
1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. The bandwidth of the fundamental frequency was measure by spectrum analyser with 1MHz RBW and 1MHz VBW.

9.2 Test Result

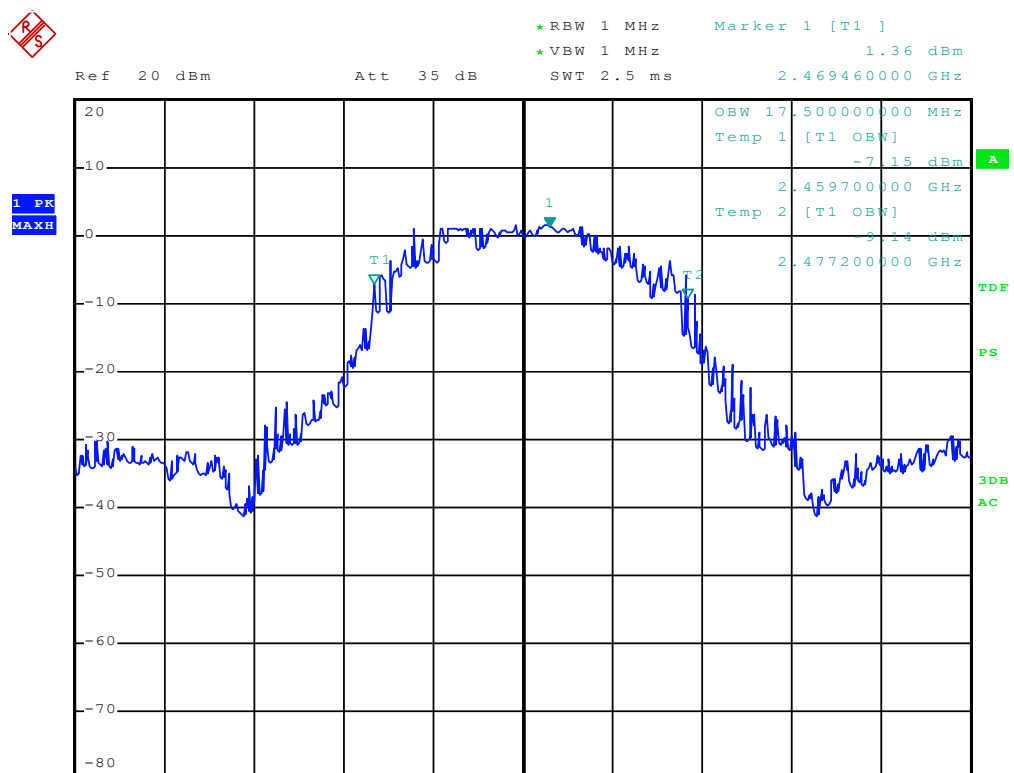
Please refer the graph as below:



Middle Channel



Upper Channel



10 Restricted band

Test Requirement:	Section 15.247(d) In addition, radiated emissions which fall in the restricted bands. as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) and 15.205(c).
Test Method:	KDB Publication No. 558074
Measurement Distance:	3m
Detector:	For Peak value: RBW = 1MHz VBW = 3MHz; Sweep = auto Detector function = peak Trace = max hold For Average value: RBW = 1MHz VBW = 10Hz; Sweep = auto Detector function = Average Trace = max hold

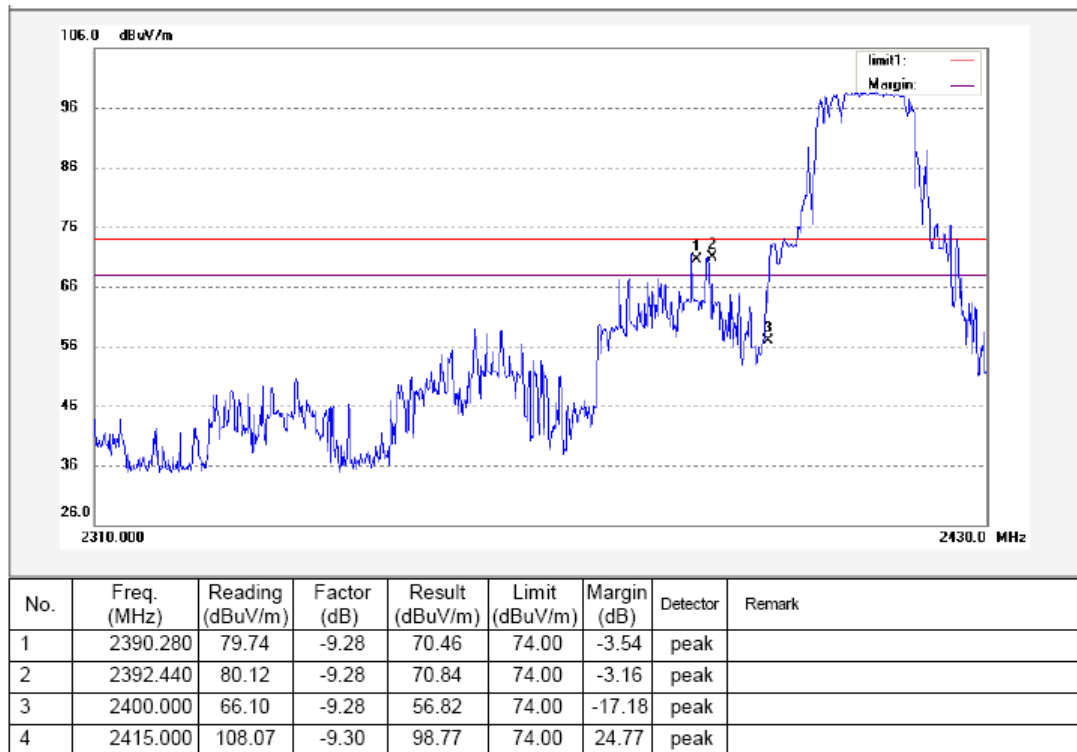
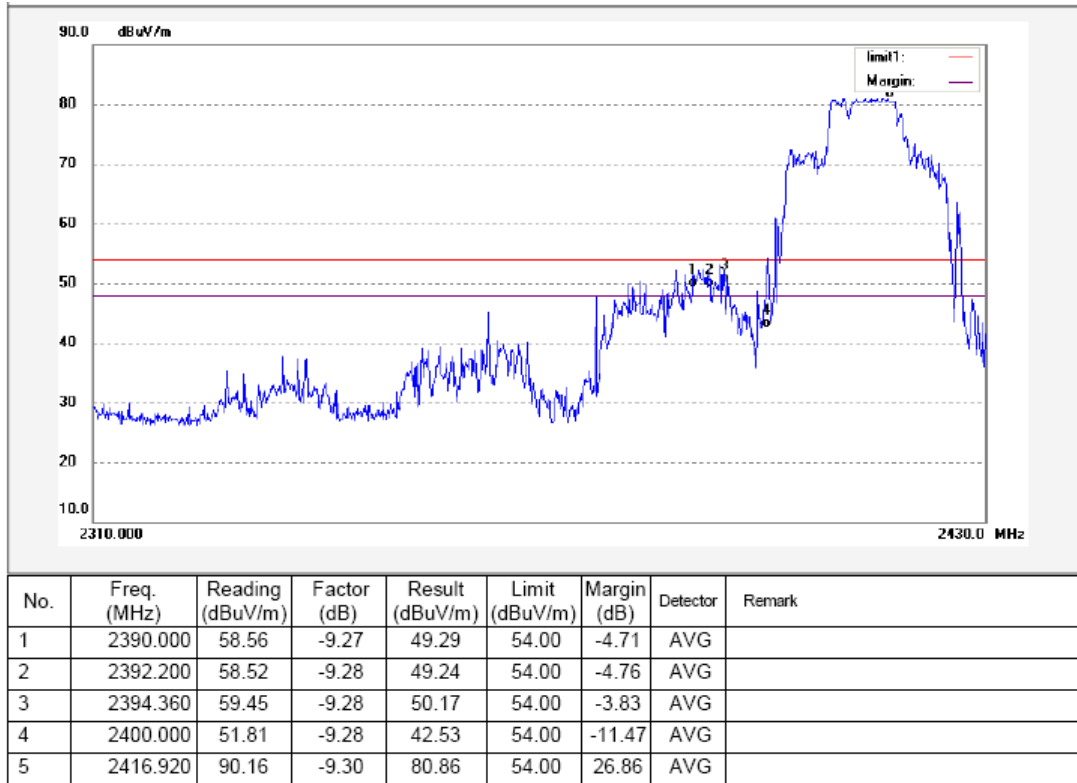
10.1 Test Produce

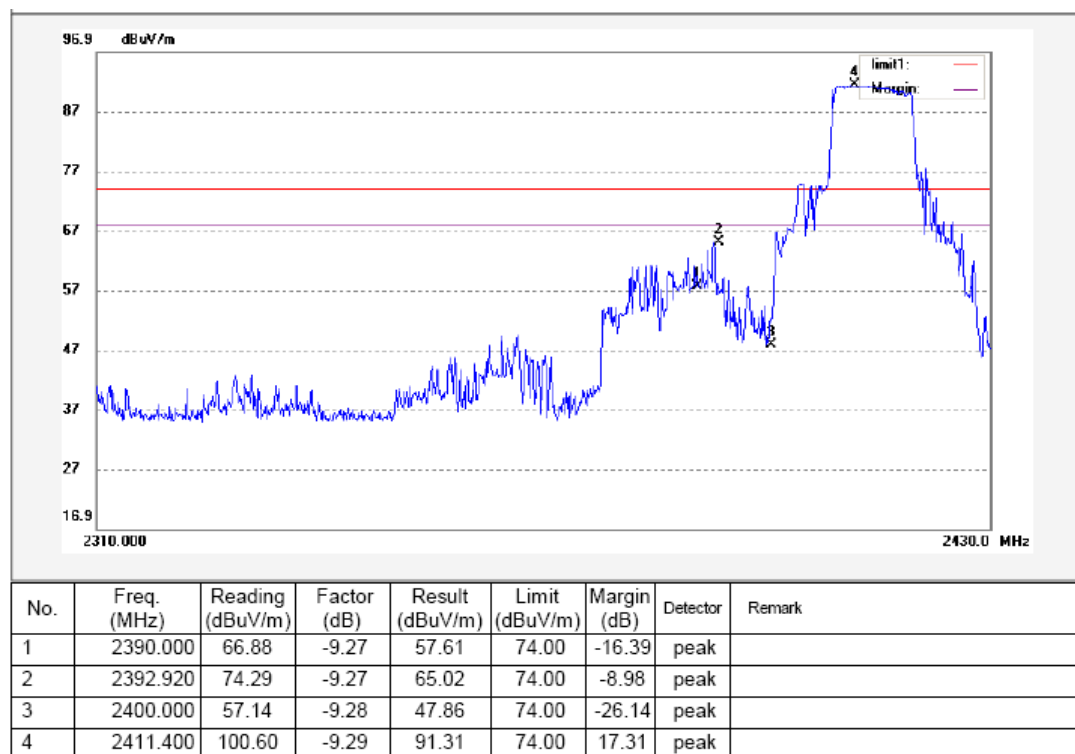
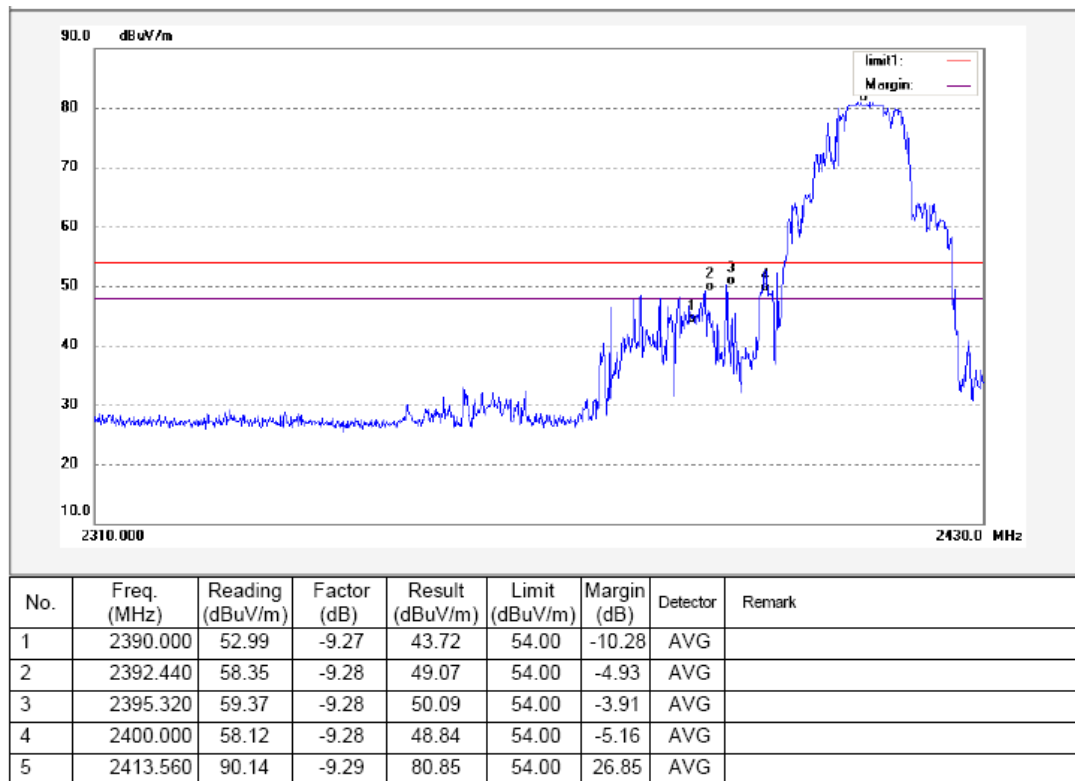
1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

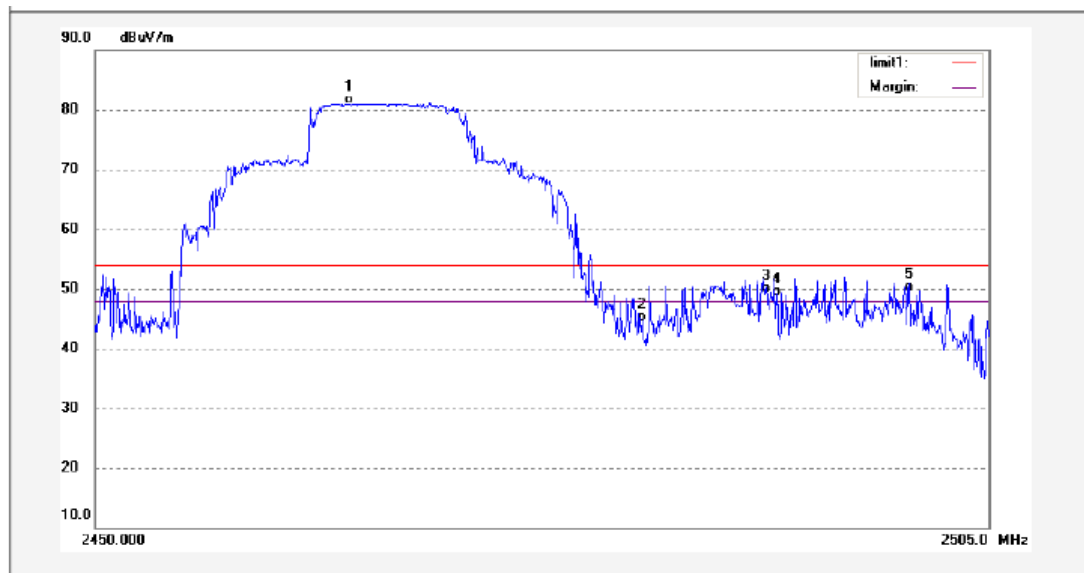
10.2 Test Result

Mode: TX Lower channel

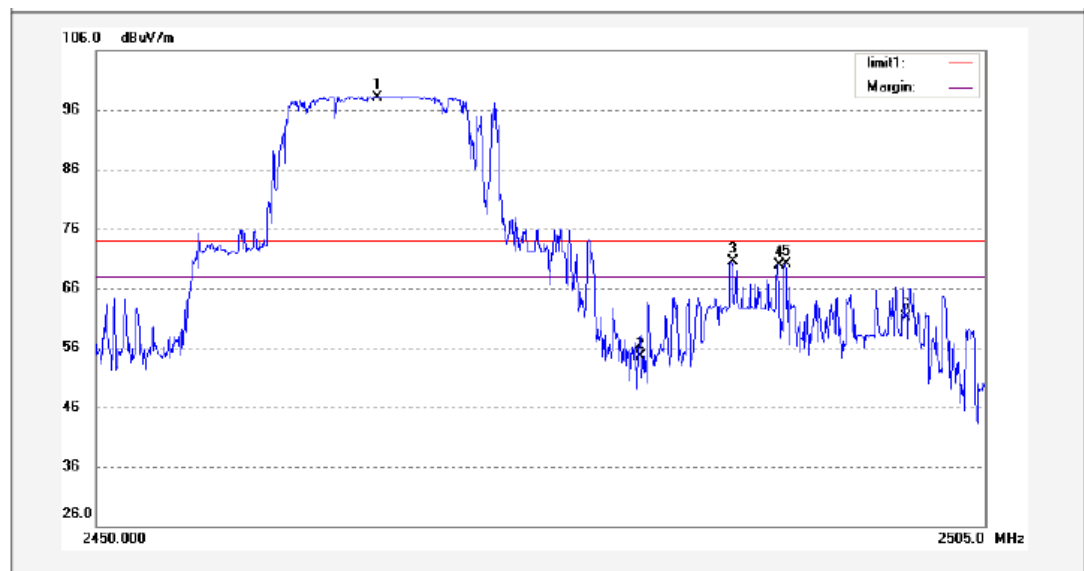
Antenna Polarization:Horizontal



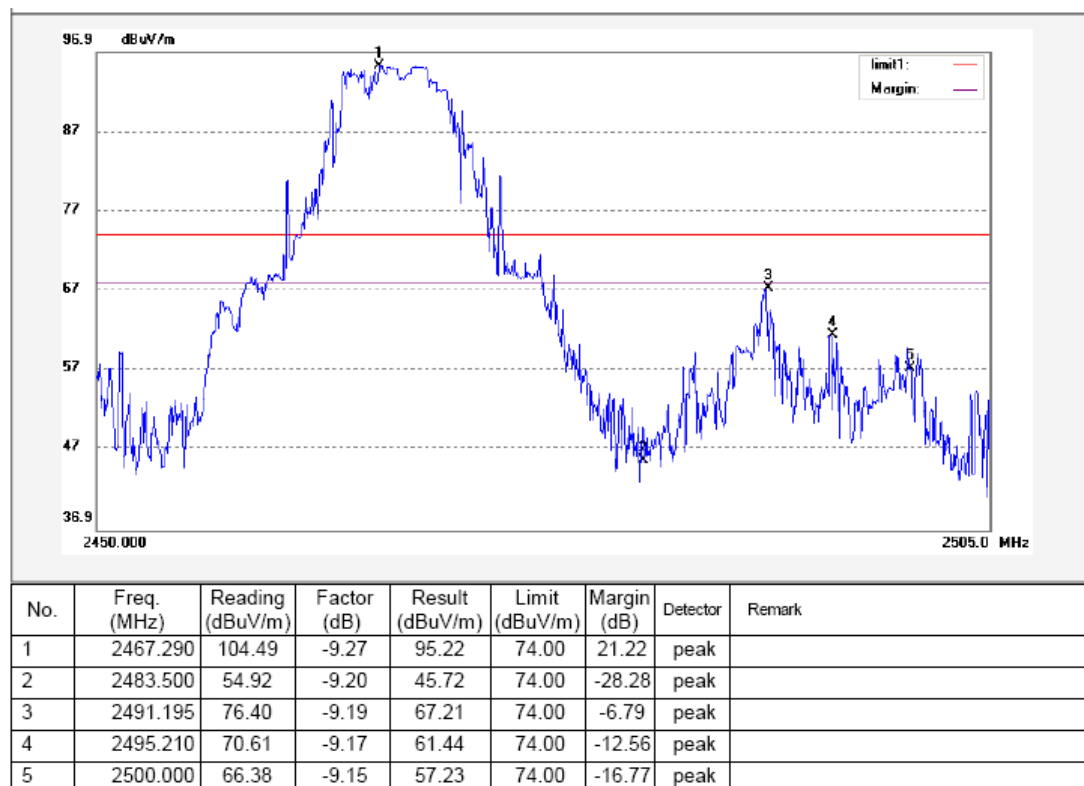
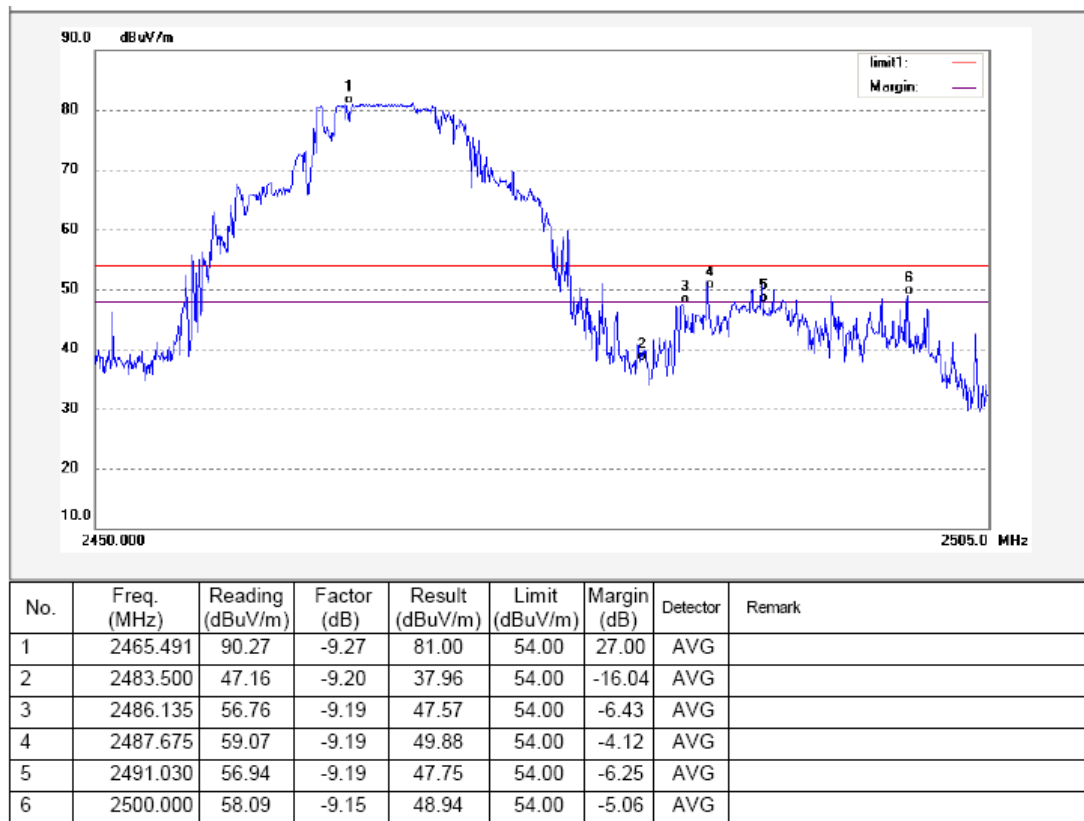
Mode: TX Lower channel**Antenna Polarization: Vertical**

Mode: TX Upper channel**Antenna Polarization:Horizontal**

No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2465.491	90.27	-9.27	81.00	54.00	27.00	AVG	
2	2483.500	53.67	-9.20	44.47	54.00	-9.53	AVG	
3	2491.140	58.46	-9.19	49.27	54.00	-4.73	AVG	
4	2491.800	57.92	-9.18	48.74	54.00	-5.26	AVG	
5	2500.000	58.56	-9.15	49.41	54.00	-4.59	AVG	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2467.290	107.38	-9.27	98.11	74.00	24.11	peak	
2	2483.500	63.70	-9.20	54.50	74.00	-19.50	peak	
3	2489.270	79.75	-9.19	70.56	74.00	-3.44	peak	
4	2492.185	79.14	-9.18	69.96	74.00	-4.04	peak	
5	2492.625	79.23	-9.17	70.06	74.00	-3.94	peak	
6	2500.000	70.32	-9.15	61.17	74.00	-12.83	peak	

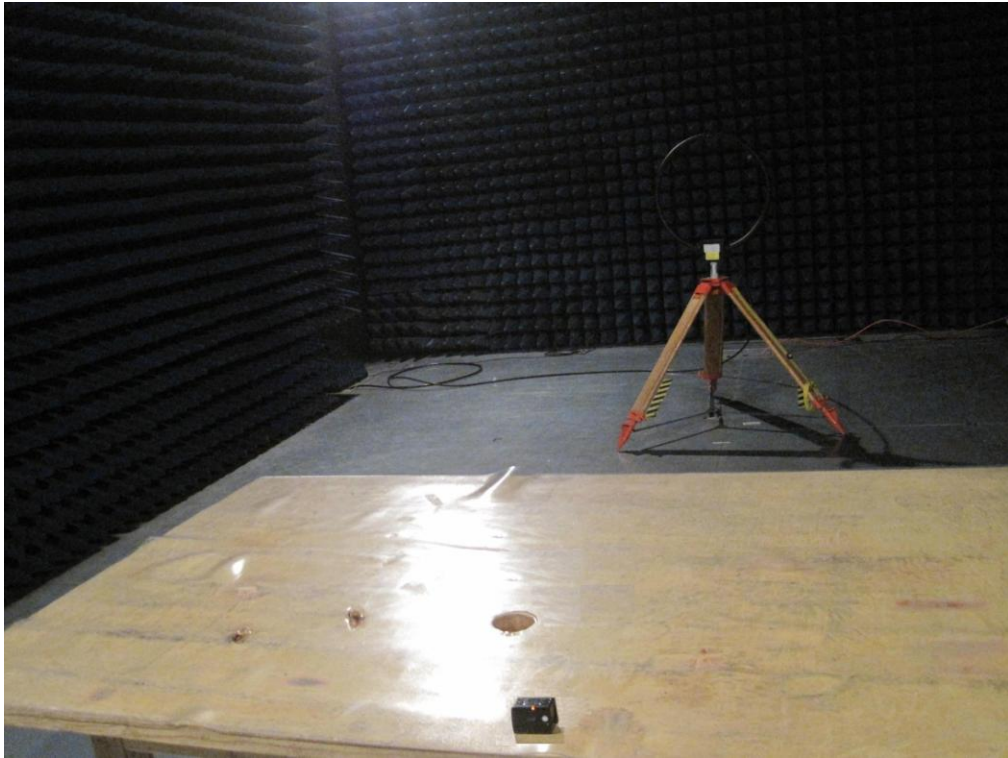
Mode: TX Upper channel**Antenna Polarization: Vertical**

11 Antenna Requirement

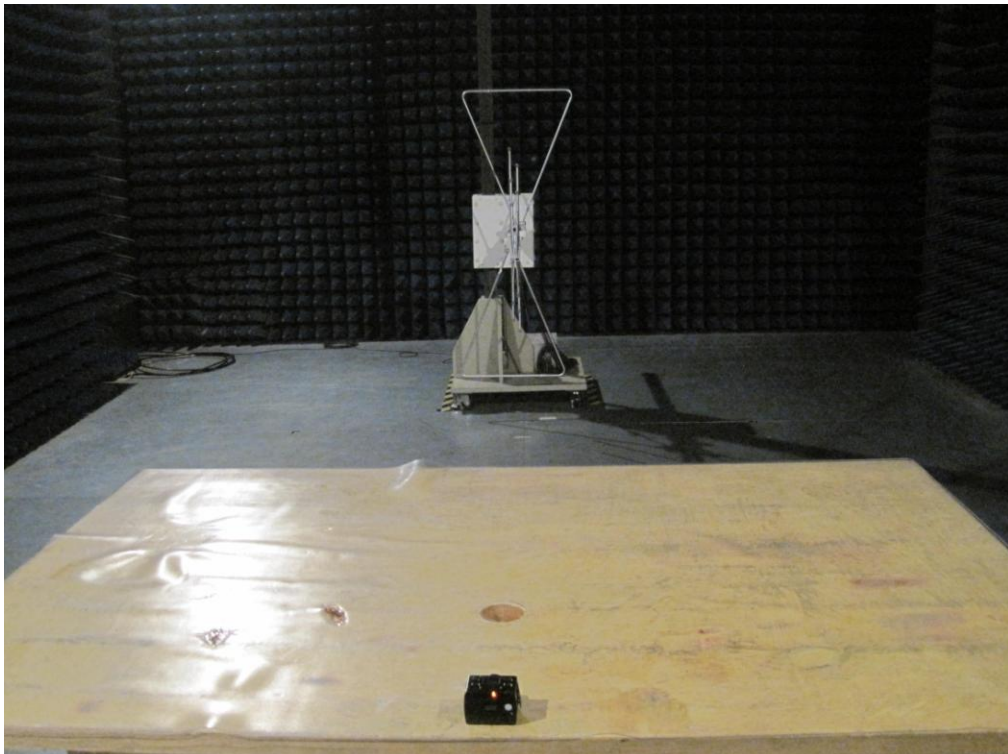
According to the FCC Part 15 Paragraph 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. This product has a integrated antenna, fulfil the requirement of this section.

12 Photographs of Testing

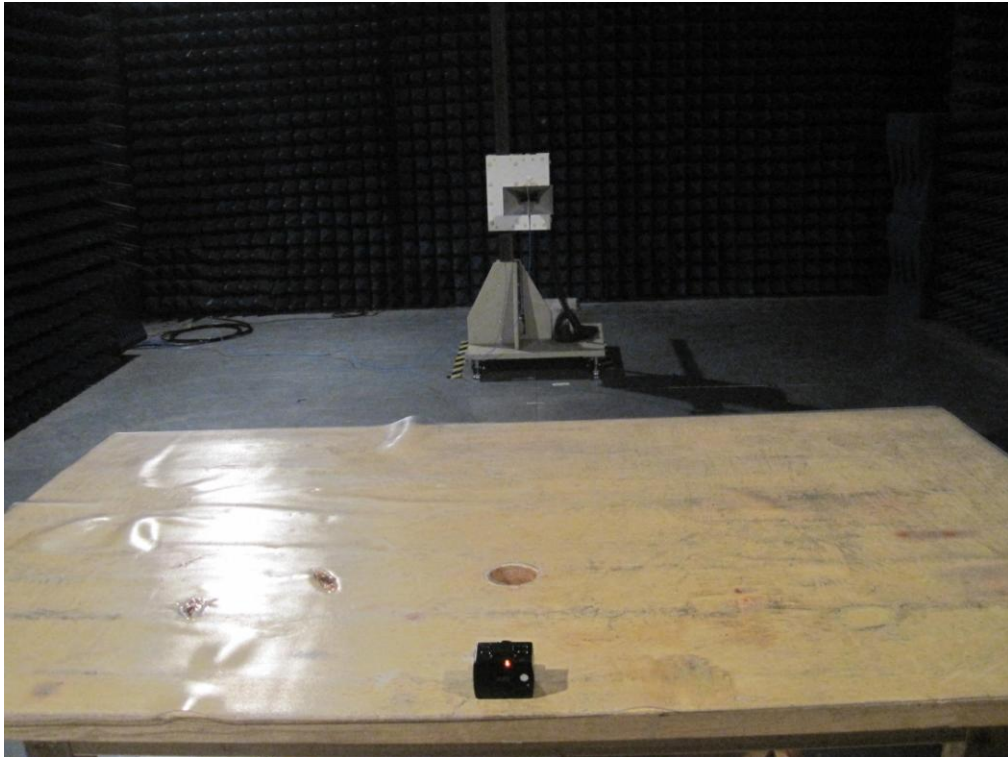
12.1 Radiation Emission From Below 30MHz



12.2 Radiation Emission From 30MHz-1GHz

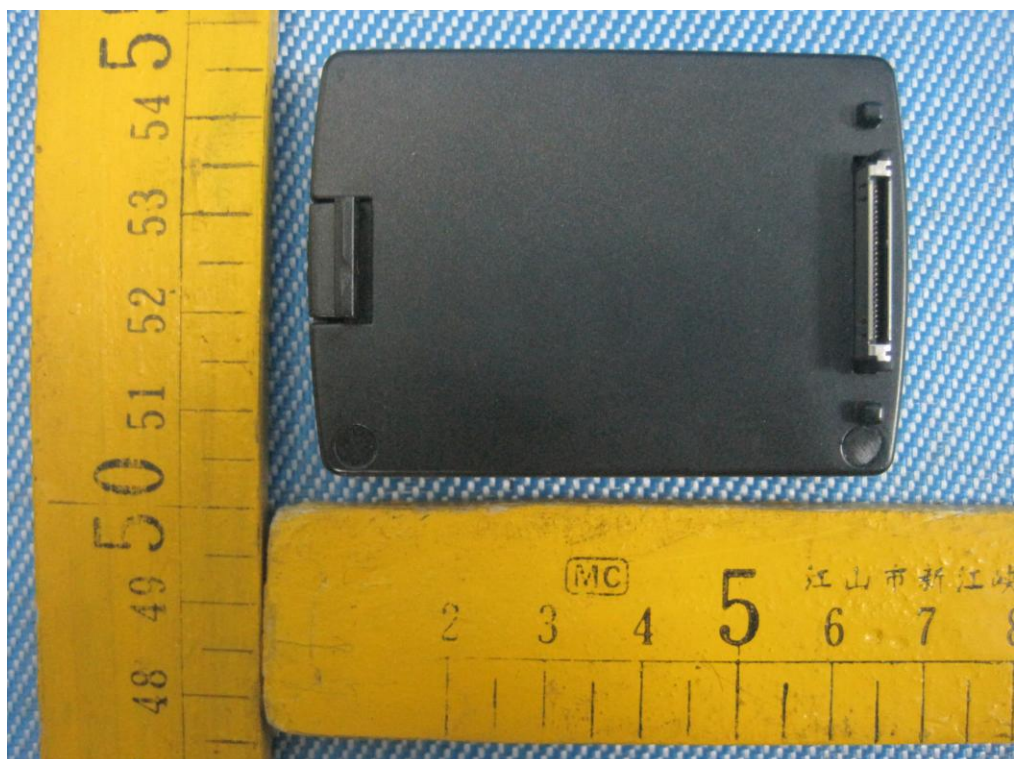


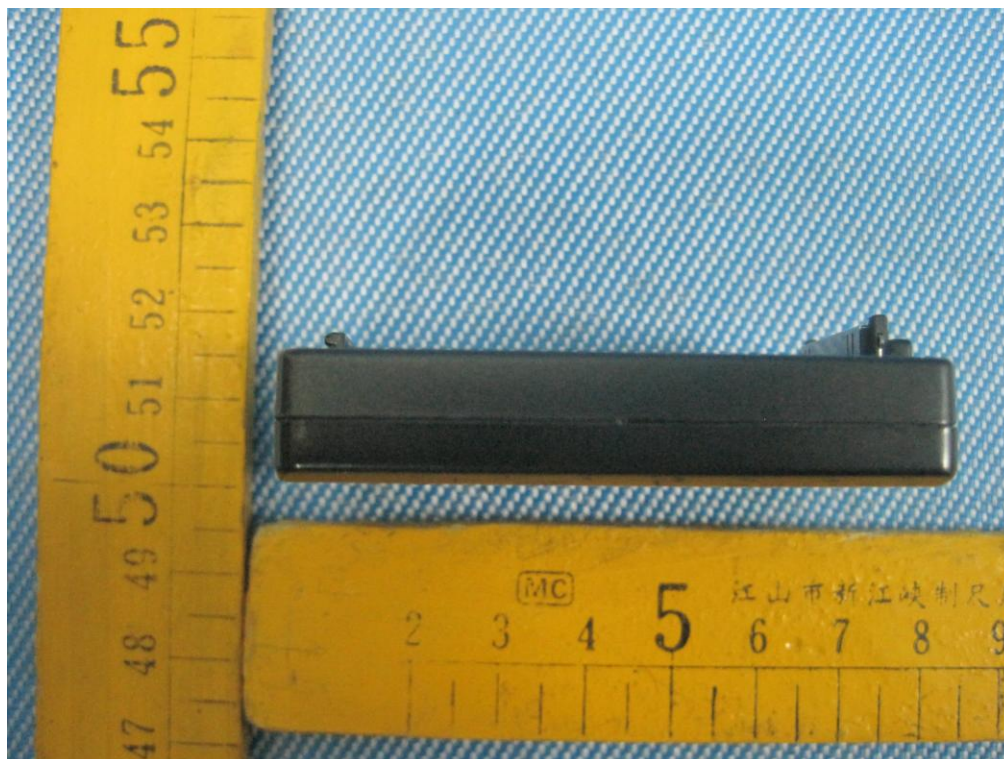
12.3 Radiation Emission From Above 1GHz



13 Photographs - Constructional Details

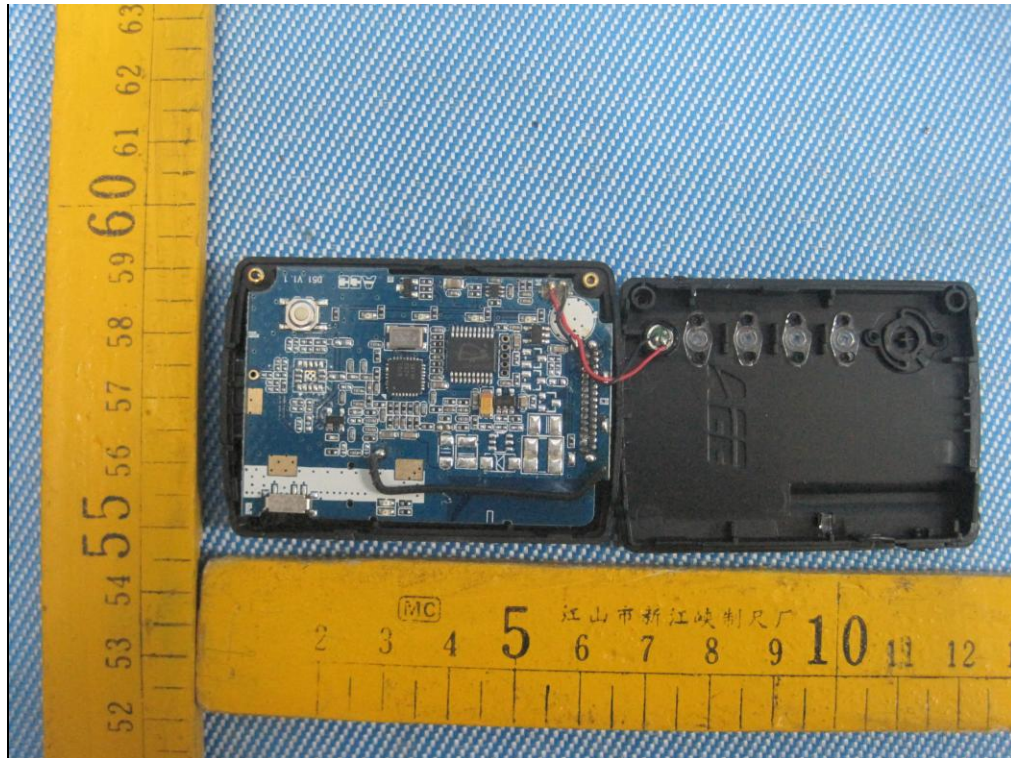
13.1 EUT - Appearance View



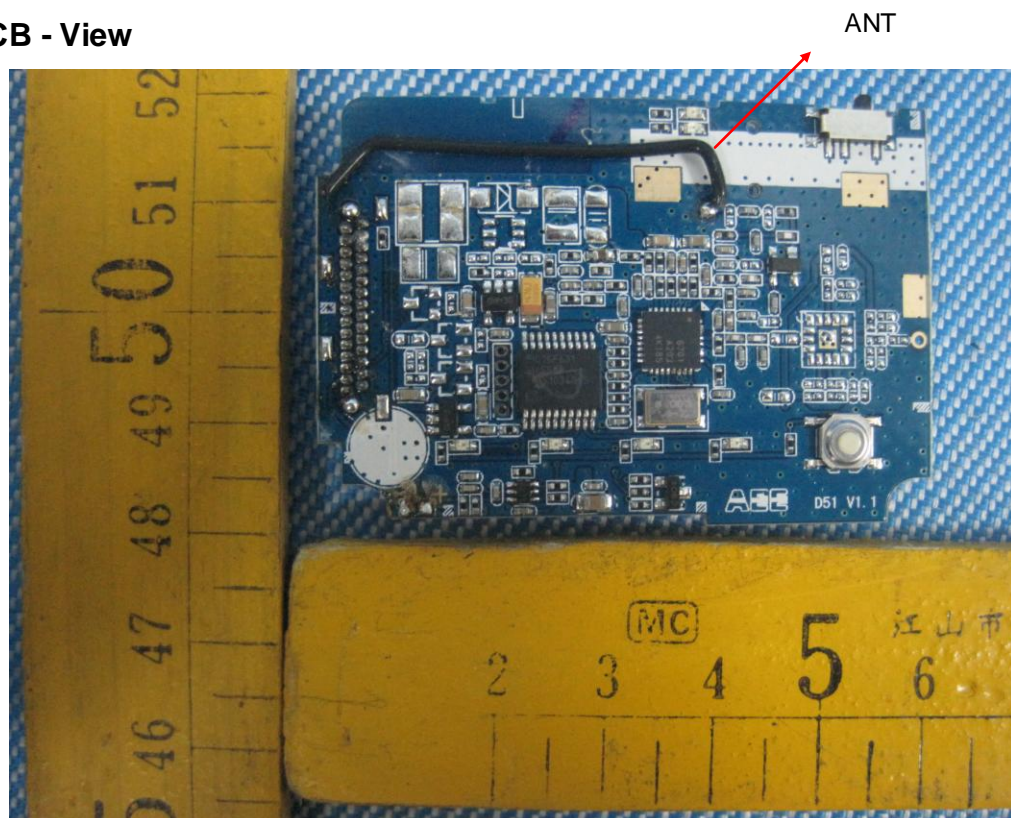


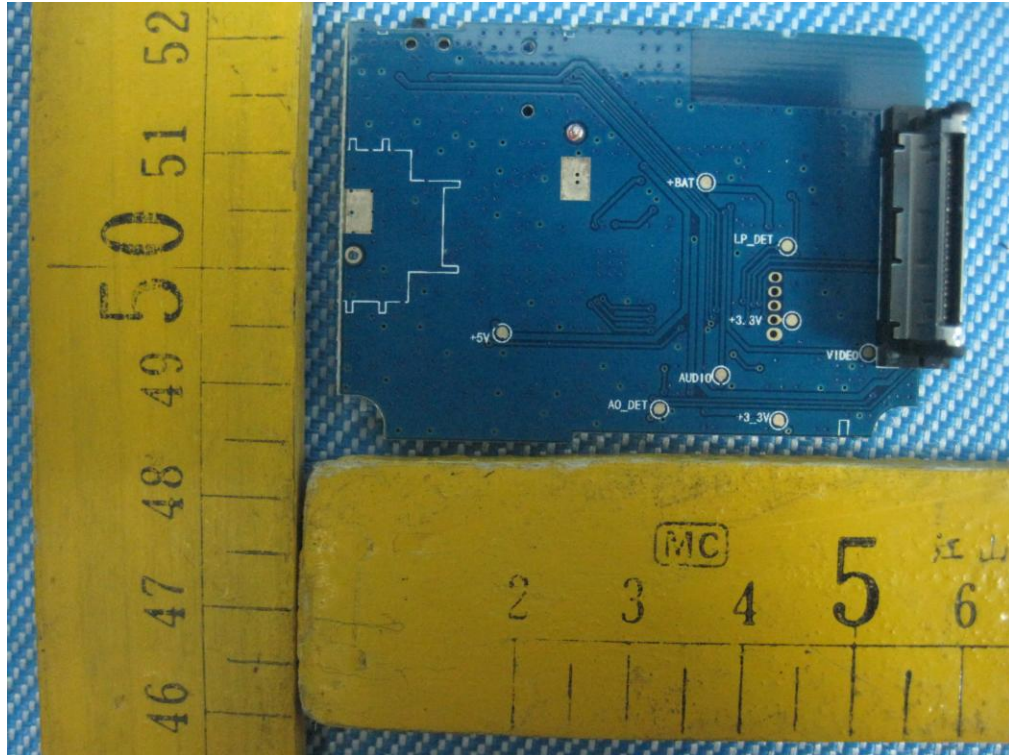


13.2 EUT - Open View



13.3 PCB - View





14 FCC ID Label

14.1 Label sample

Label sample for model: D51

FCC ID: YVV-AEED5100001

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

14.2 Label Location

The Label must not be a stick-on paper. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.



==END==