



# TEST REPORT

No. I21N01062-WLAN

for

**Rootcloud technology CO.,LTD**

**T-AMS PRO**

**Model Name: LI1520-DC-T-GL PRO**

**with**

**Hardware Version: V1.0**

**Software Version: V1.0**

**FCC ID: 2AO7J-LI1520**

**IC: 27468-LI1520**

**Issued Date: 2021-07-08**

**Designation Number: CN1210**

**ISED Assigned Code: 23289**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

**Test Laboratory:**

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No. I21N01062-WLAN

## **1. Summary of Test Report**

### **1.1. Test Items**

Description	T-AMS PRO
Model Name	LI1520-DC-T-GL PRO
Applicant's name	Rootcloud technology CO.,LTD
Manufacturer's Name	Rootcloud technology CO.,LTD

### **1.2. Test Standards**

FCC Part15-2019; ANSI C63.10-2013; RSS-247 Issue 2; RSS-Gen Issue 5 A2

### **1.3. Test Result**

**Pass**

Please refer to "5.2. Test Results"

### **1.4. Testing Location**

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

### **1.5. Project data**

Testing Start Date:	2021-04-07
Testing End Date:	2021-07-03

### **1.6. Signature**

Lin Zechuang

(Prepared this test report)

Tang Weisheng

(Reviewed this test report)

Zhang Bojun

(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: Rootcloud technology CO.,LTD  
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### **2.2. Manufacturer Information**

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Contact Person Joyce Wu  
E-Mail Huiyan.wu@rootcloud.com  
Telephone: +86 18306678502  
Fax: /



### **3. Equipment Under Test (EUT) and Ancillary Equipment (AE)**

#### **3.1. About EUT**

Description	T-AMS PRO
Model Name	LI1520-DC-T-GL PRO
RF Protocol	IEEE 802.11 b/g/n-HT20/n-HT40
Operating Frequency	2412MHz~2462MHz
Number of Channels	11
Antenna Type	Integrated
Antenna Gain	1.5dBi
Power Supply	12V DC by external power source
FCC ID	2AO7J-LI1520
IC	27468-LI1520
Condition of EUT as received	No abnormality in appearance

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of Shenzhen Academy of Information and Communications Technology.

#### **3.2. Internal Identification of EUT**

EUT ID*	IMEI	HW Version	SW Version	Receive Date
UT02aa	/	V1.0	V1.0	2021-04-02
UT01aa	/	V1.0	V1.0	2021-04-08

\*EUT ID: is used to identify the test sample in the lab internally.

UT02aa is used for conduction test, UT01aa is used for radiation test.

#### **3.3. Internal Identification of AE**

AE ID*	Description	SN
AE1	GPS/4G Antenna	/

AE1

Model	DAMGA2Y1G1X-SG-J5M
Manufacturer	GLEAD Electronics

\*AE ID: is used to identify the test sample in the lab internally. AE2: just for testing.

#### **3.4. General Description**

The Equipment under Test (EUT) is a model of T-AMS PRO with external antenna. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the client.



## 4. Reference Documents

### 4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

### 4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz	2019
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
RSS-247	Spectrum Management and Telecommunications Radio Standards Specification Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices	Issue 2 February, 2017
RSS-Gen	Spectrum Management and Telecommunications Radio Standards Specification General Requirements for Compliance of Radio Apparatus	Issue 5 February,2021 Amendment 2

## 5. Test Results

### 5.1. Testing Environment

Normal Temperature: 15~35°C

Relative Humidity: 20~75%

### 5.2. Test Results

No	Test cases	Sub-clause of Part 15C	Sub-clause of IC	Verdict
0	Antenna Requirement	15.203	/	P
1	Maximum Output Power	15.247 (b)	RSS-247 section 5.4	P
2	Radiated Emission	15.247, 15.205, 15.209	RSS-247 section 5.5/ RSS-Gen section 6.13	P

See **ANNEX A** for details.

See **ANNEX B** for the spot check of RF Output Power between the DUT and the RF module of DUT, it can be concluded that the measured RF output power data is close to and less than the module reported power data. And the conduction test data can refer to the module report.

### 5.3. Statements

SAICT has evaluated the test cases requested by the applicant/manufacturer as listed in section 5.2 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.



## 6. Test Equipments Utilized

### Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Power Sensor	U2021XA	MY55430013	Agilent	2022-01-13	1 year
2	Data Acquisiton	U2531A	TW55443507	Agilent	/	/

### Radiated test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Loop Antenna	HLA6120	35779	TESEQ	2022-04-25	3 years
2	BiLog Antenna	3142E	00224831	ETS-Lindgren	2022-05-24	3 years
3	Horn Antenna	3117	00066577	ETS-Lindgren	2022-04-02	3 years
4	Horn Antenna	QSH-SL-18-26-S-20	17013	Q-par	2023-01-06	3 years
5	Horn Antenna	QSH-SL-8-26-40-K-20	17014	Q-par	2023-01-06	3 years
6	Test Receiver	ESR7	101676	Rohde & Schwarz	2021-11-25	1 year
7	Spectrum Analyser	FSV40	101192	Rohde & Schwarz	2022-01-13	1 year
8	Chamber	FACT3-2.0	1285	ETS-Lindgren	2021-07-19	2 years

### Test software

No.	Equipment	Manufacturer	Version
1	RF Test System	Tonscend	JS1120-3
2	EMC32	Rohde & Schwarz	10.50.40

EUT is engineering software provided by the customer to control the transmitting signal. The EUT was programmed to be in continuously transmitting mode.

### Anechoic Chamber

Fully anechoic Chamber by ETS-Lindgren.

## 7. Laboratory Environment

### Semi-anechoic chamber

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz > 60 dB; 1MHz-18000MHz > 90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ±4 dB, 3 m distance, from 30 to 1000 MHz

### Shielded room

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz > 60 dB; 1MHz-1000MHz > 90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω

### Fully-anechoic chamber

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz > 60 dB; 1MHz-18000MHz > 90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

## **8. Measurement Uncertainty**

<b>Test Name</b>	<b>Uncertainty (<i>k</i>=2)</b>	
1. Maximum Peak Output Power	1.32dB	
2. Transmitter Spurious Emission - Radiated	9kHz≤f<30MHz	1.74dB
	30MHz≤f<1GHz	4.66dB
	1GHz≤f<18GHz	4.68dB
	18GHz≤f≤40GHz	3.76dB

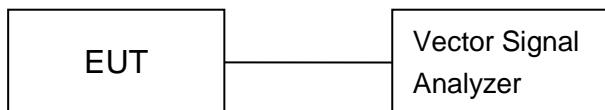
## **ANNEX A: Detailed Test Results**

### **Test Configuration**

The measurement is made according to ANSI C63.10.

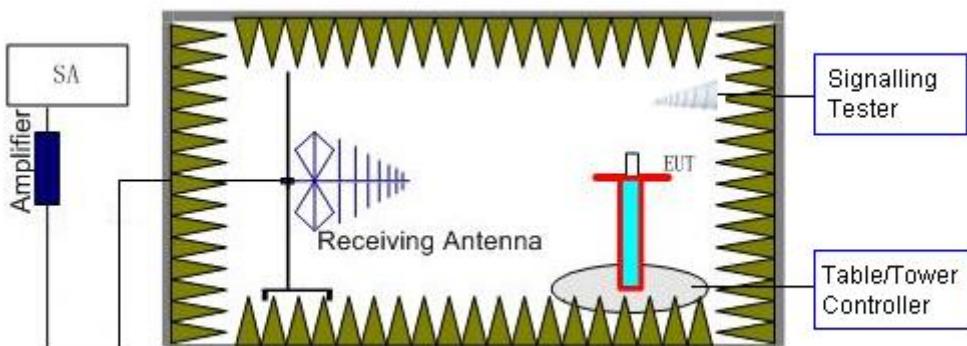
#### **1) Conducted Measurements**

1. Connect the EUT to the test system correctly.
2. Set the EUT to the required work mode.
3. Set the EUT to the required channel.
4. Set the spectrum analyzer to start measurement.
5. Record the values.



#### **2) Radiated Measurements**

**Test setup:** EUT was placed on a 1.5 meter high non-conductive table at a 3 meter test distance from the receive antenna. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT and adjusting the receiving antenna polarization.





## A.0 Antenna requirement

### Measurement Limit:

Standard	Requirement
FCC CRF Part 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. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

**Conclusion: The Directional gains of antenna used for transmitting: 1.5dBi.**

**The RF transmitter uses an integrate antenna without connector.**

## A.1 Maximum Output Power

**Measurement of method: See ANSI C63.10-2013-Clause 11.9.2.3.2**

Method AVGPM-G is a measurement using a gated RF average power meter.

Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

### Measurement Limit:

Standard	Limit (dBm)	E.I.R.P Limit (dBm)
FCC CRF Part 15.247(b) & RSS-247 Section 5.4	< 30	< 36

### Measurement Results:

Mode	Channel	Frequency (MHz)	Average Conducted Power (dBm)	E.I.R.P (dBm)	Conclusion
802.11b	CH 1	2412	15.62	17.12	P
	CH 6	2437	15.28	16.78	P
	CH 11	2462	15.59	17.09	P
802.11g	CH 1	2412	13.04	14.54	P
	CH 6	2437	13.24	14.74	P
	CH 11	2462	13.31	14.81	P
802.11n- HT20	CH 1	2412	13.31	14.81	P
	CH 6	2437	13.15	14.65	P
	CH 11	2462	13.26	14.76	P
802.11n- HT40	CH 3	2422	12.69	14.19	P
	CH 6	2437	12.37	13.87	P
	CH 9	2452	12.65	14.15	P

### Note:

The data rate 1Mbps (11b mode), 6Mbps (11g mode) and MCS0 (11n mode) are selected as the Worst-Case. The following cases and test graphs are performed with this condition.

The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

**Conclusion: PASS**

## A.2 Radiated Emission

### Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209 & RSS-247 section 5.5/RSS-Gen section 6.13	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

### Limit in restricted band:

Frequency of emission (MHz)	Field strength(µV/m)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

### Test Condition:

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

### Note:

According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band below 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic.

The measurement results include the horizontal polarization and vertical polarization measurements.

**Measurement Results:**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	CH 1	1 GHz ~3 GHz	Fig.1	P
		3 GHz ~18 GHz	Fig.2	P
	CH 6	1 GHz ~3 GHz	Fig.3	P
		3 GHz ~18 GHz	Fig.4	P
	CH 11	1 GHz ~3 GHz	Fig.5	P
		3 GHz ~18 GHz	Fig.6	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.7	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.8	P
802.11g	CH 1	1 GHz ~3 GHz	Fig.9	P
		3 GHz ~18 GHz	Fig.10	P
	CH 6	1 GHz ~3 GHz	Fig.11	P
		3 GHz ~18 GHz	Fig.12	P
	CH 11	1 GHz ~3 GHz	Fig.13	P
		3 GHz ~18 GHz	Fig.14	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.15	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.16	P
802.11n -HT20	CH 1	1 GHz ~3 GHz	Fig.17	P
		3 GHz ~18 GHz	Fig.18	P
	CH 6	1 GHz ~3 GHz	Fig.19	P
		3 GHz ~18 GHz	Fig.20	P
	CH 11	1 GHz ~3 GHz	Fig.21	P
		3 GHz ~18 GHz	Fig.22	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.23	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.24	P
802.11n -HT40	CH 3	1 GHz ~3 GHz	Fig.25	P
		3 GHz ~18 GHz	Fig.26	P
	CH 6	1 GHz ~3 GHz	Fig.27	P
		3 GHz ~18 GHz	Fig.28	P
	CH 9	1 GHz ~3 GHz	Fig.29	P
		3 GHz ~18 GHz	Fig.30	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.31	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.32	P
/	All Channels	9 kHz ~30 MHz	Fig.33	P
		30 MHz ~1 GHz	Fig.34	P
		18 GHz ~26.5 GHz	Fig.35	P

**Worst-Case Result:****802.11b CH1 (1-18GHz)**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4823.500000	55.25	74.00	18.75	V	-0.2
12042.500000	48.07	74.00	25.93	V	8.2
13156.500000	48.02	74.00	25.98	V	9.7
14793.500000	48.99	74.00	25.01	V	11.1
16853.000000	51.66	74.00	22.34	H	16.0
17945.500000	51.74	74.00	22.26	V	17.3
4823.500000	55.25	74.00	18.75	V	-0.2

Frequency (MHz)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4824.000000	52.59	54.00	1.41	V	-0.3
11491.500000	34.58	54.00	19.42	V	7.0
13121.500000	36.37	54.00	17.63	H	9.7
14460.000000	37.22	54.00	16.78	V	11.8
16782.500000	39.90	54.00	14.10	V	15.9
17909.500000	40.61	54.00	13.39	H	17.4
4824.000000	52.59	54.00	1.41	V	-0.3

**802.11g CH11 (1GHz-18GHz)**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4824.000000	53.35	74.00	20.65	V	-0.3
11193.000000	46.53	74.00	27.47	V	6.2
12722.000000	47.54	74.00	26.46	V	8.8
14261.500000	48.42	74.00	25.58	H	11.5
16690.000000	50.99	74.00	23.01	V	15.3
17957.500000	52.29	74.00	21.71	V	17.0

Frequency (MHz)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4822.000000	40.60	54.00	13.40	V	-0.2
11431.000000	34.26	54.00	19.74	V	6.8
13094.500000	35.66	54.00	18.34	V	9.7
14492.000000	36.93	54.00	17.07	H	11.7
16945.000000	39.28	54.00	14.72	H	15.8
17874.500000	40.08	54.00	13.92	V	17.1

**802.11n-HT20 CH1 (1GHz-18GHz)**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4824.000000	49.96	74.00	24.04	V	-0.3
11440.000000	45.49	74.00	28.51	H	6.7
13040.000000	47.40	74.00	26.60	H	9.2
14420.500000	48.40	74.00	25.60	V	11.3
16690.000000	51.33	74.00	22.67	H	15.3
17910.000000	51.35	74.00	22.65	H	17.4

Frequency (MHz)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4821.500000	39.51	54.00	14.49	V	-0.2
11579.500000	34.24	54.00	19.76	H	7.2
13098.000000	35.70	54.00	18.30	V	9.8
14483.500000	36.66	54.00	17.34	V	11.7
16695.000000	39.08	54.00	14.92	H	15.4
17909.500000	40.05	54.00	13.95	H	17.4

**802.11n-HT40 CH3 (1GHz-18GHz)**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4853.000000	45.74	74.00	28.26	V	-0.1
10623.500000	45.32	74.00	28.68	V	5.5
13218.500000	47.33	74.00	26.67	H	9.9
14478.500000	48.58	74.00	25.42	V	11.6
16593.000000	50.73	74.00	23.27	H	15.3
17911.500000	51.34	74.00	22.66	V	17.3

Frequency (MHz)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB/m)
4848.500000	34.20	54.00	19.80	V	0.0
9688.000000	33.20	54.00	20.80	H	4.7
11490.500000	34.12	54.00	19.88	H	7.0
13119.500000	35.51	54.00	18.49	V	9.6
14494.000000	36.61	54.00	17.39	H	11.7
17908.000000	40.29	54.00	13.71	H	17.4

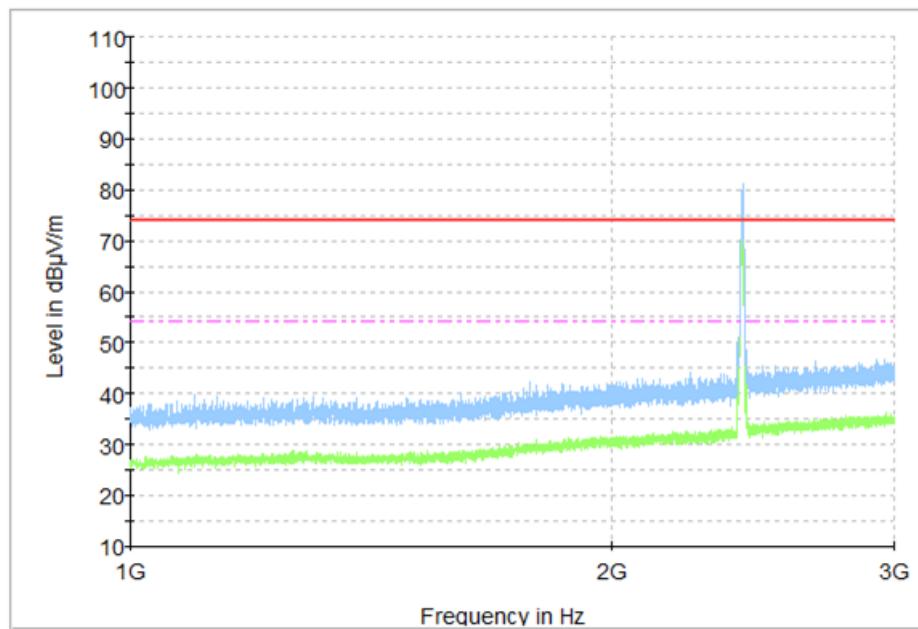
**Note:**

A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss", and Antenna Factor, the gain of the preamplifier, the cable loss.  $P_{Mea}$  is the field strength recorded from the instrument. The measurement results are obtained as described below:

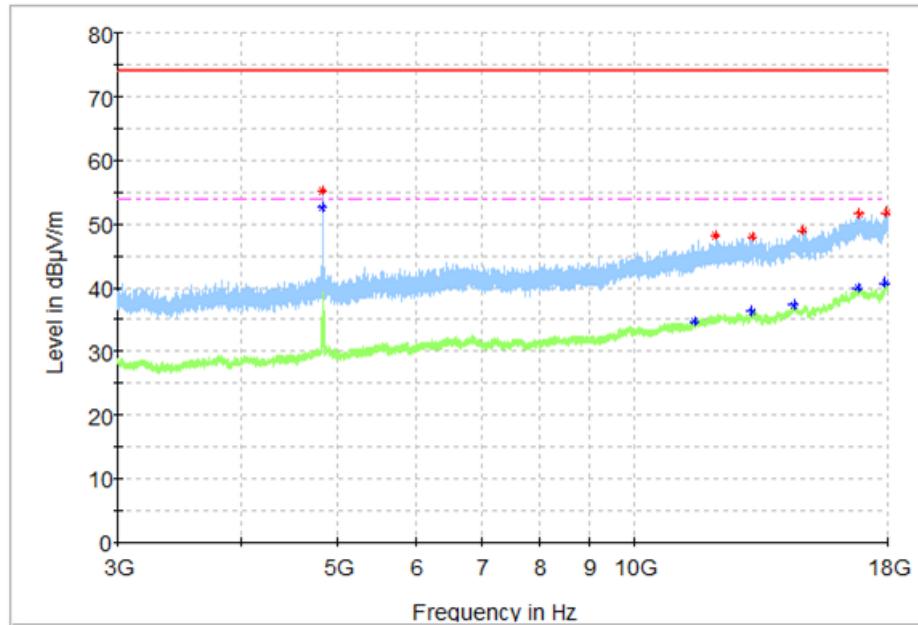
Result=  $P_{Mea}$  +Cable Loss +Antenna Factor-Gain of the preamplifier.

**See below for test graphs.**

**Conclusion: PASS**



**Fig.1 Radiated Spurious Emission (802.11b, CH1, 1 GHz-3 GHz)**



**Fig.2 Radiated Spurious Emission (802.11b, CH1, 3 GHz-18 GHz)**

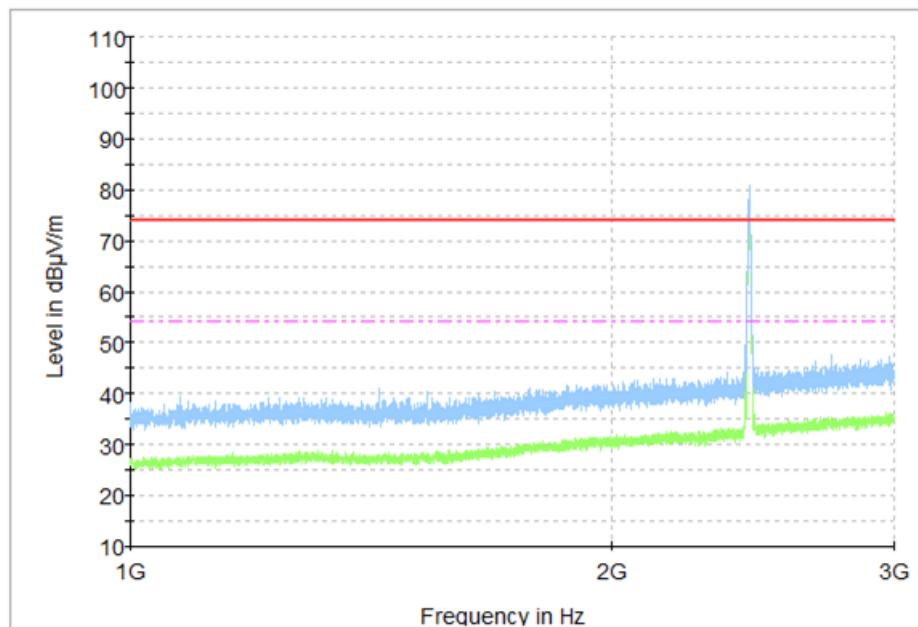


Fig.3 Radiated Spurious Emission (802.11b, CH6, 1 GHz-3 GHz)

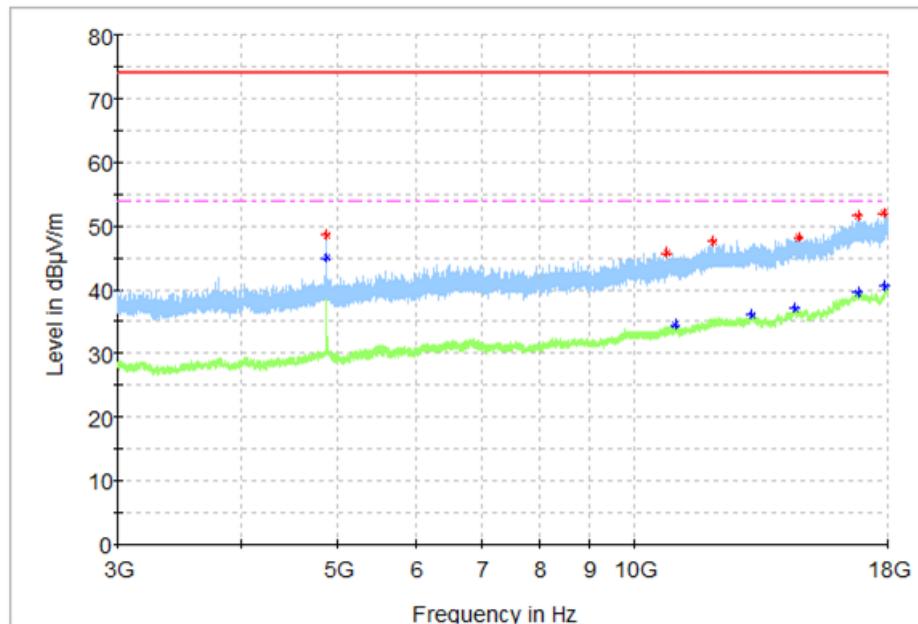
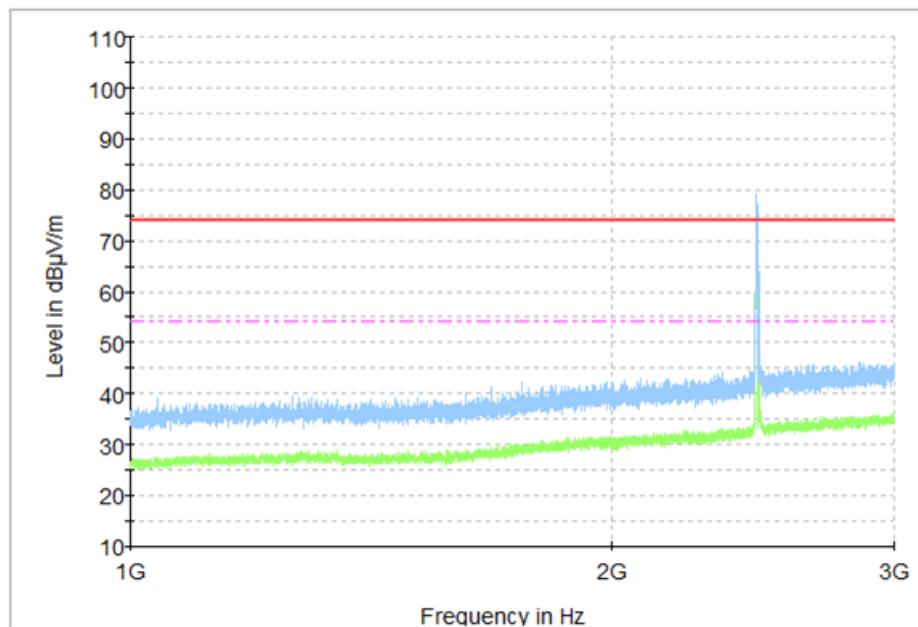
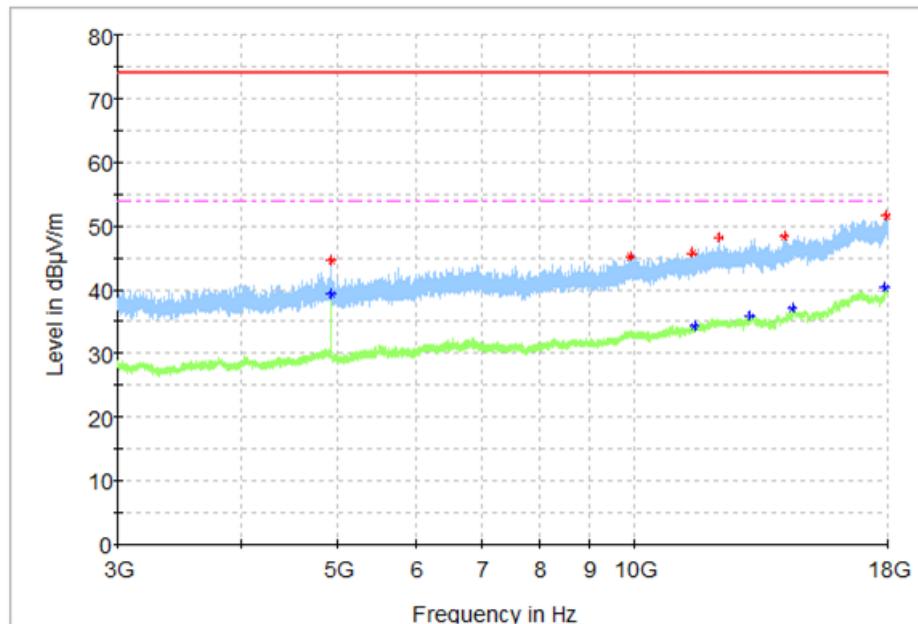


Fig.4 Radiated Spurious Emission (802.11b, CH6, 3 GHz-18 GHz)



**Fig.5 Radiated Spurious Emission (802.11b, CH11, 1 GHz-3GHz)**



**Fig.6 Radiated Spurious Emission (802.11b, CH11, 3 GHz-18GHz)**

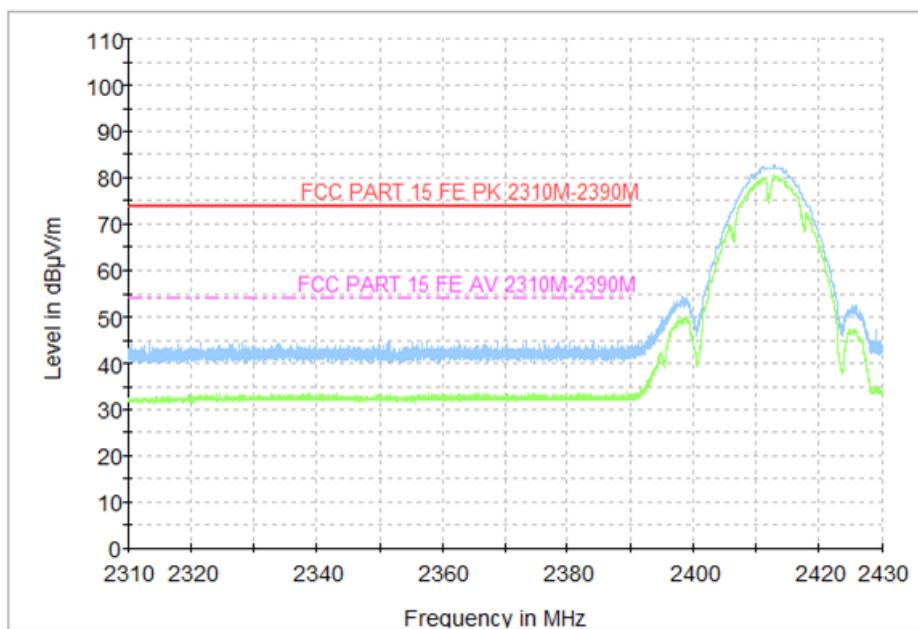


Fig.7 Radiated Restricted Band (802.11b, CH1, 2.38GHz~2.45GHz)

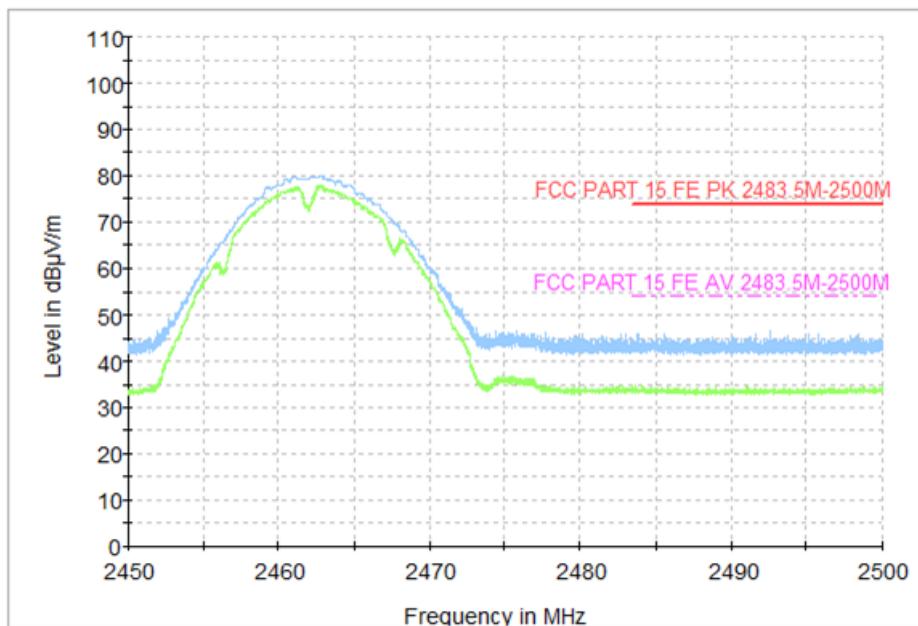


Fig.8 Radiated Restricted Band (802.11b, CH11, 2.45GHz~2.5GHz)

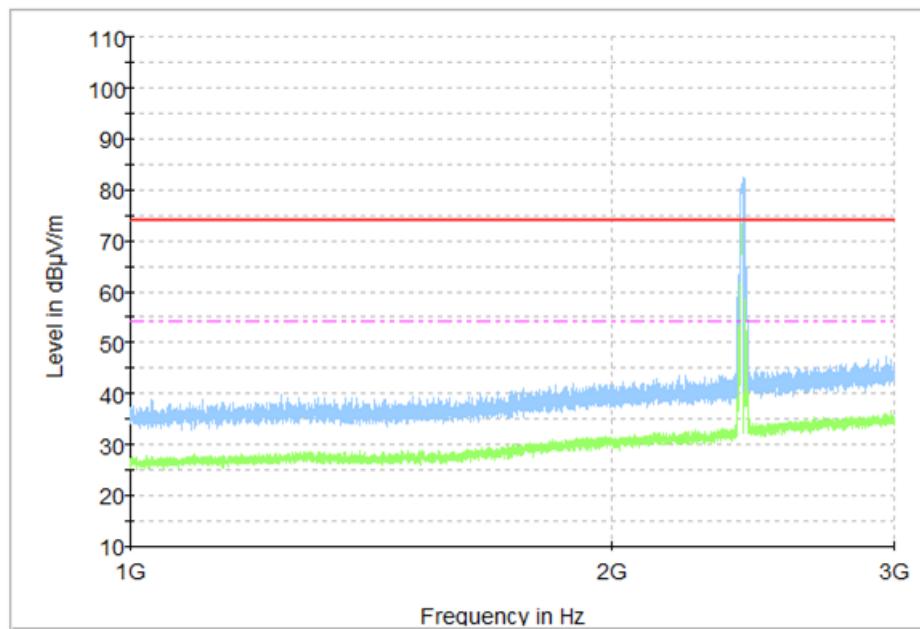


Fig.9 Radiated Spurious Emission (802.11g, CH1, 1 GHz-3 GHz)

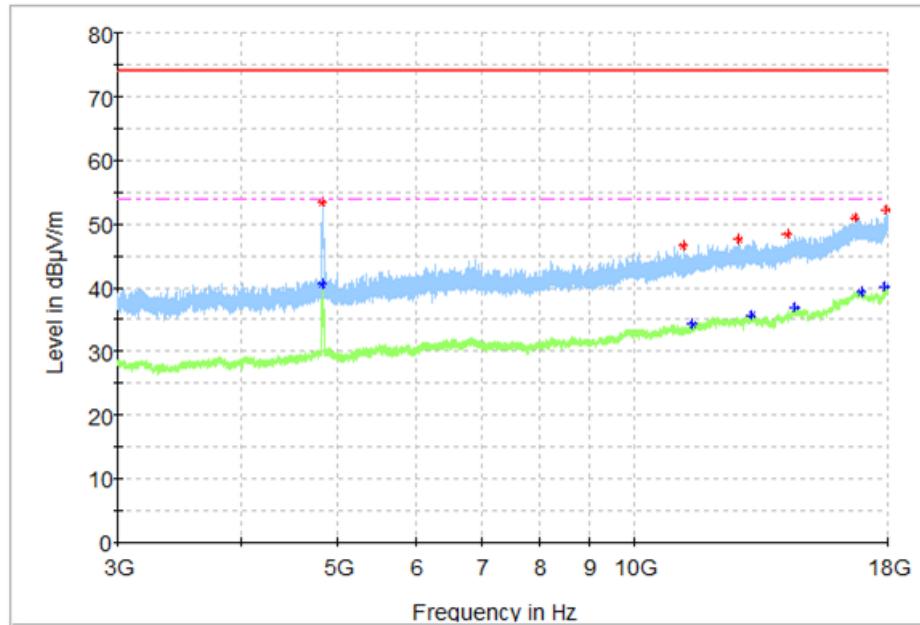


Fig.10 Radiated Spurious Emission (802.11g, CH1, 3 GHz-18 GHz)

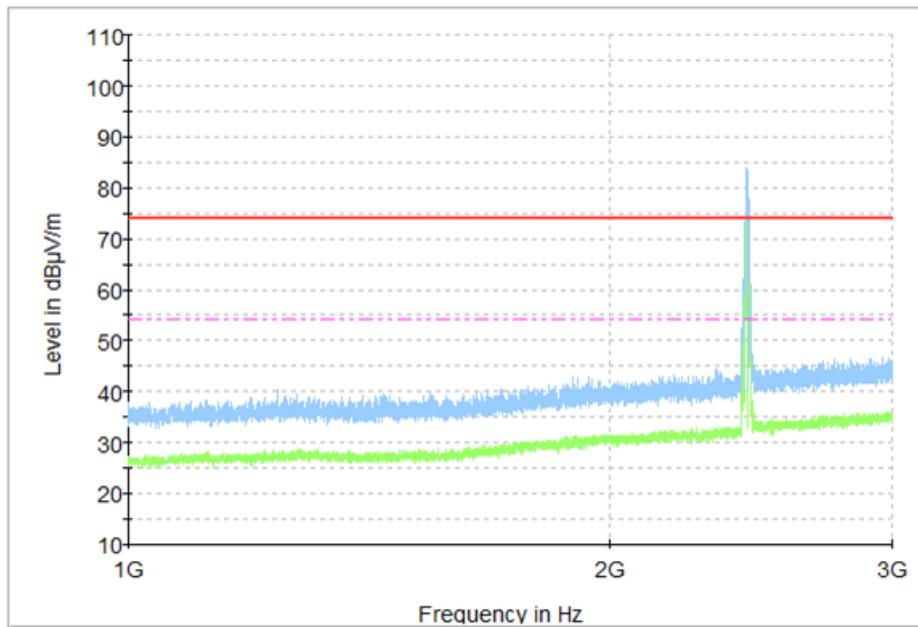


Fig.11 Radiated Spurious Emission (802.11g, CH6, 1 GHz-3 GHz)

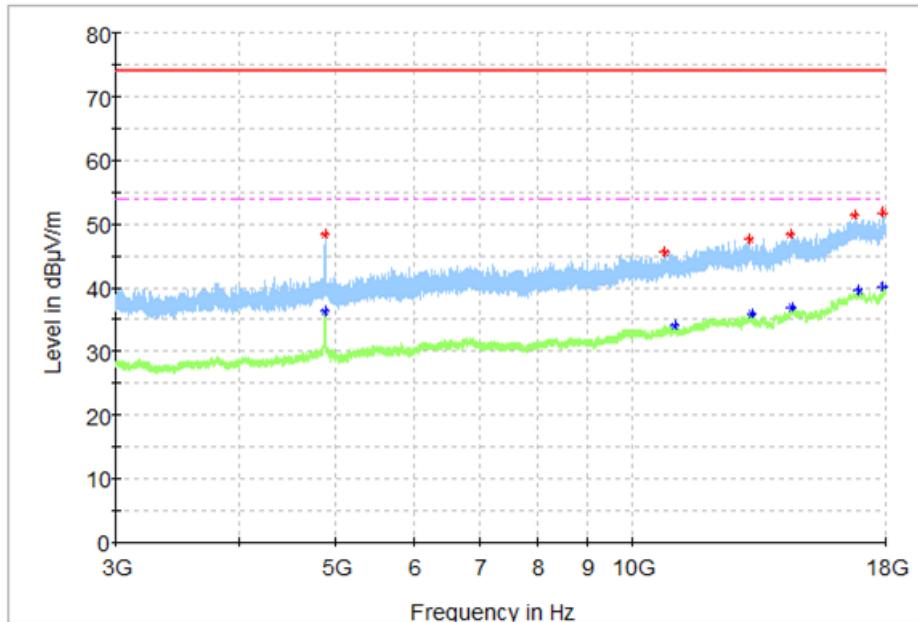


Fig.12 Radiated Spurious Emission (802.11g, CH6, 3 GHz-18 GHz)

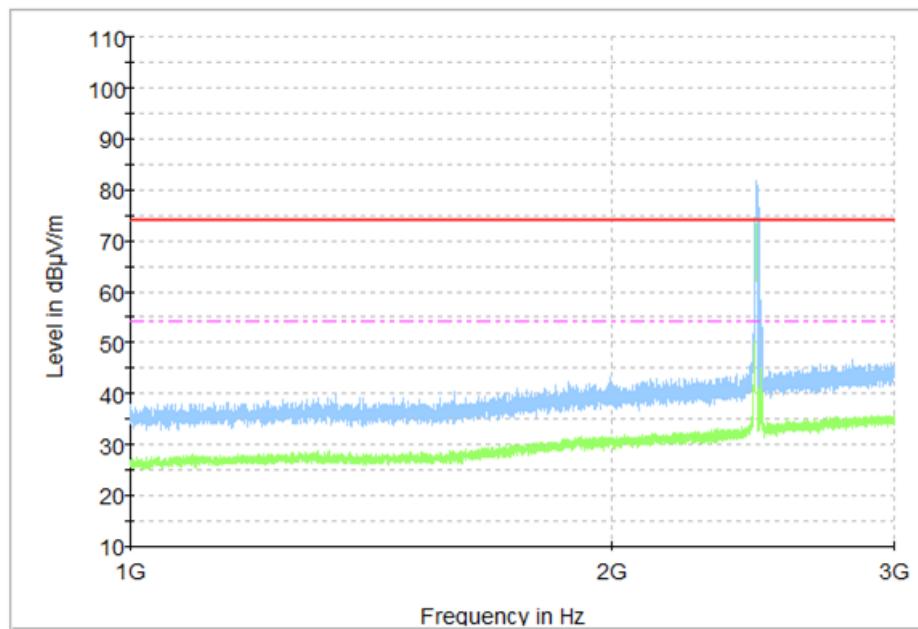


Fig.13 Radiated Spurious Emission (802.11g, CH11, 1 GHz-3 GHz)

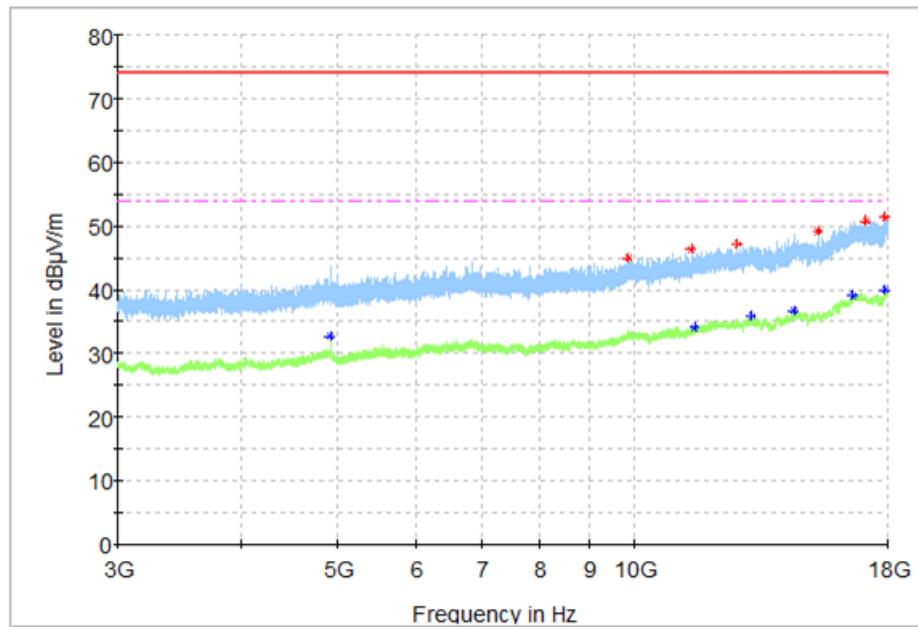


Fig.14 Radiated Spurious Emission (802.11g, CH11, 3 GHz-18 GHz)

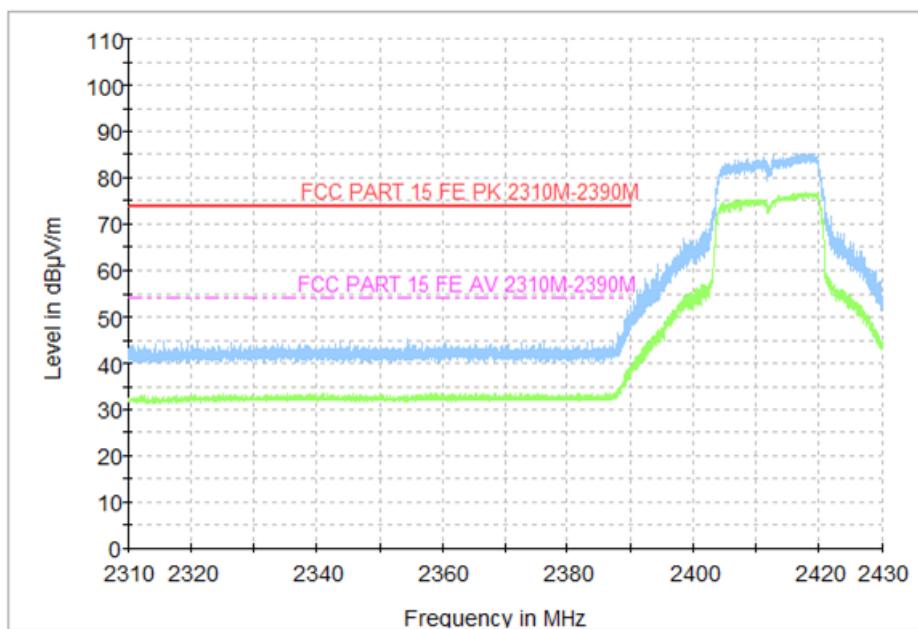


Fig.15 Radiated Restricted Band (802.11g, CH1, 2.38GHz~2.45GHz)

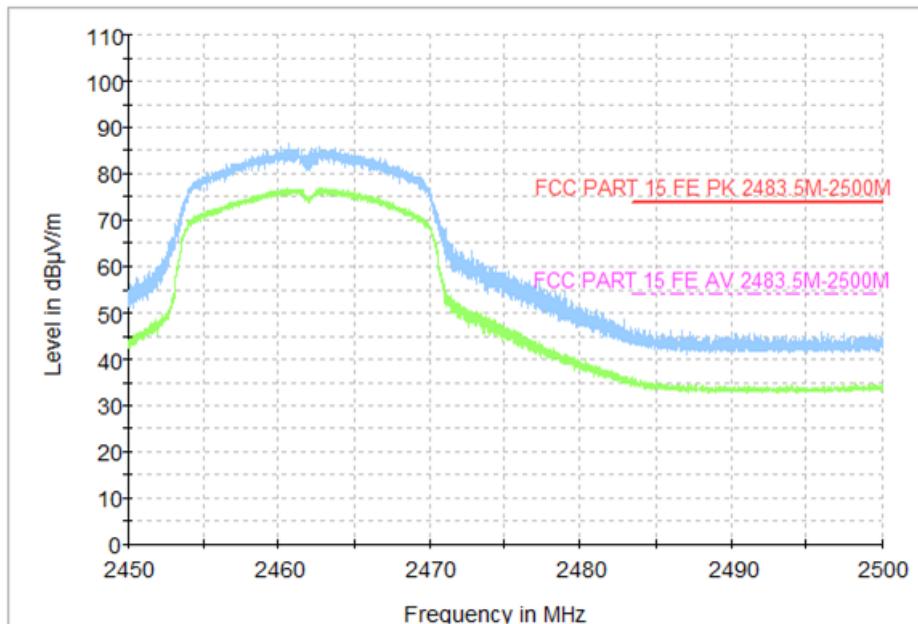


Fig.16 Radiated Restricted Band (802.11g, CH11, 2.45GHz~2.5GHz)

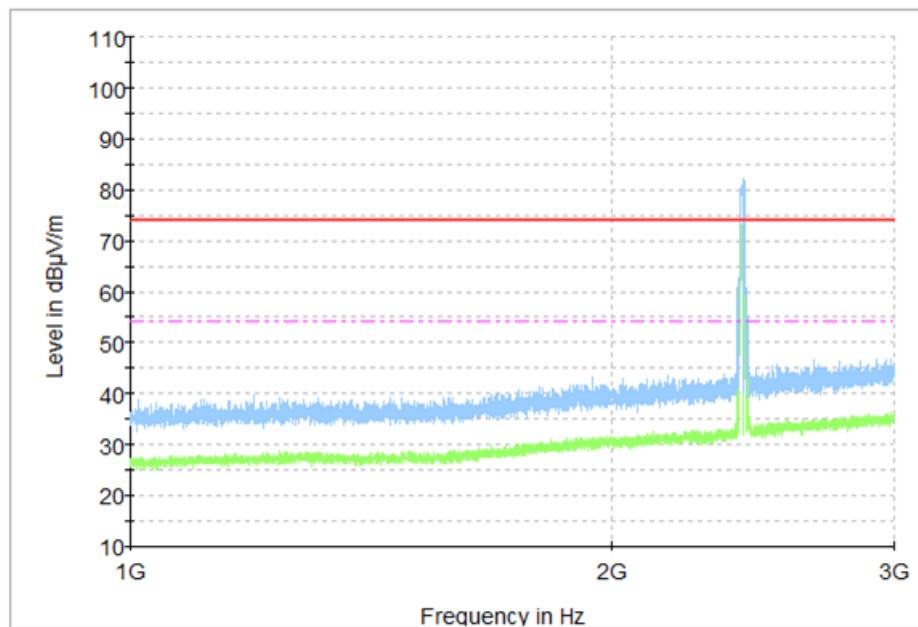


Fig.17 Radiated Spurious Emission (802.11n-HT20, CH1, 1 GHz-3 GHz)

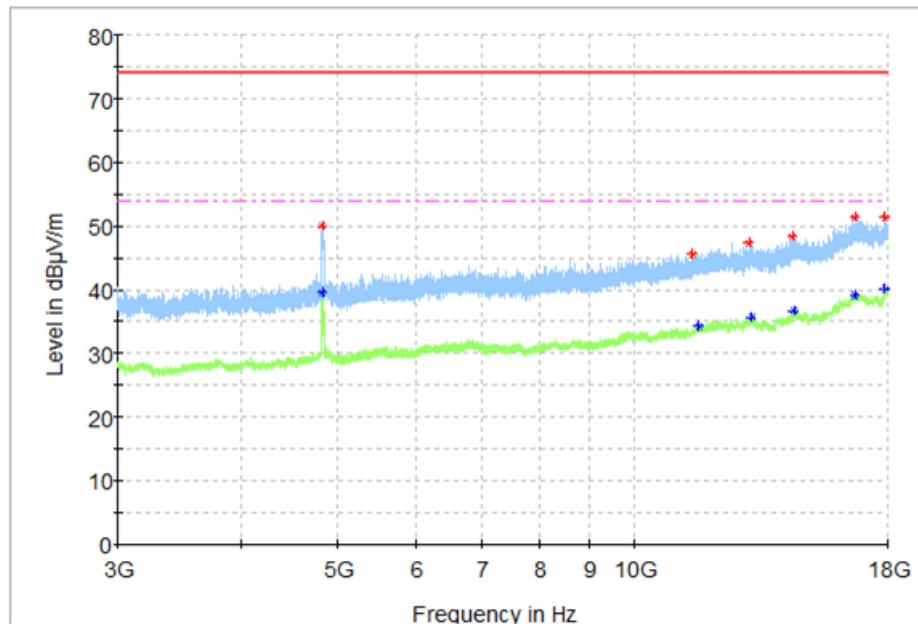


Fig.18 Radiated Spurious Emission (802.11n-HT20, CH1, 3 GHz-18 GHz)

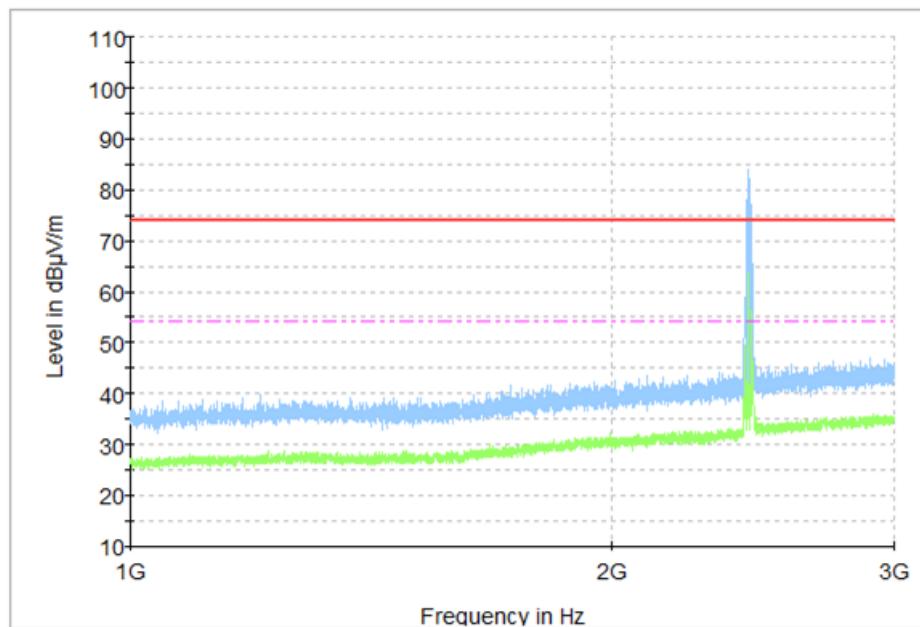


Fig.19 Radiated Spurious Emission (802.11n-HT20, CH6, 1 GHz-3 GHz)

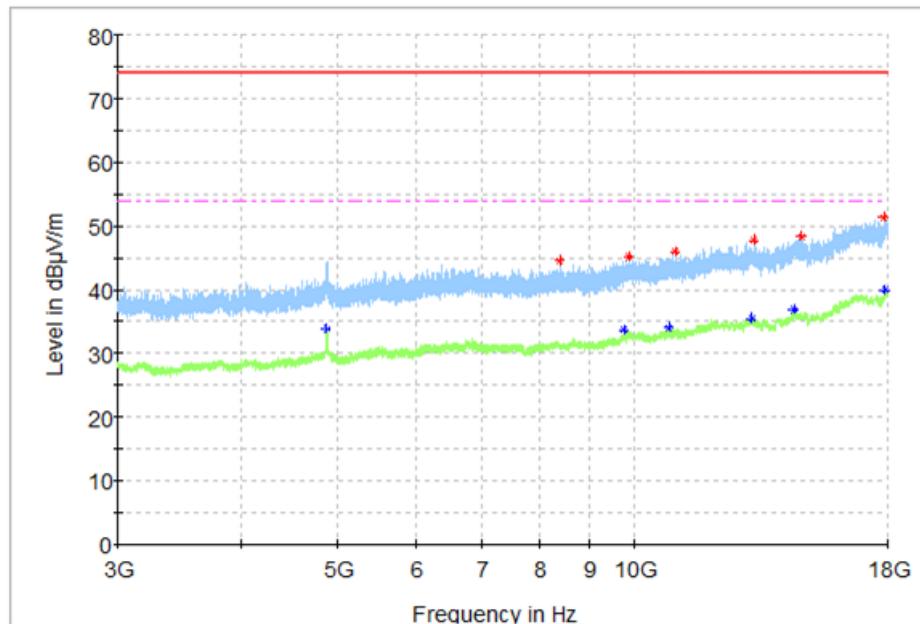


Fig.20 Radiated Spurious Emission (802.11n-HT20, CH6, 3 GHz-18 GHz)

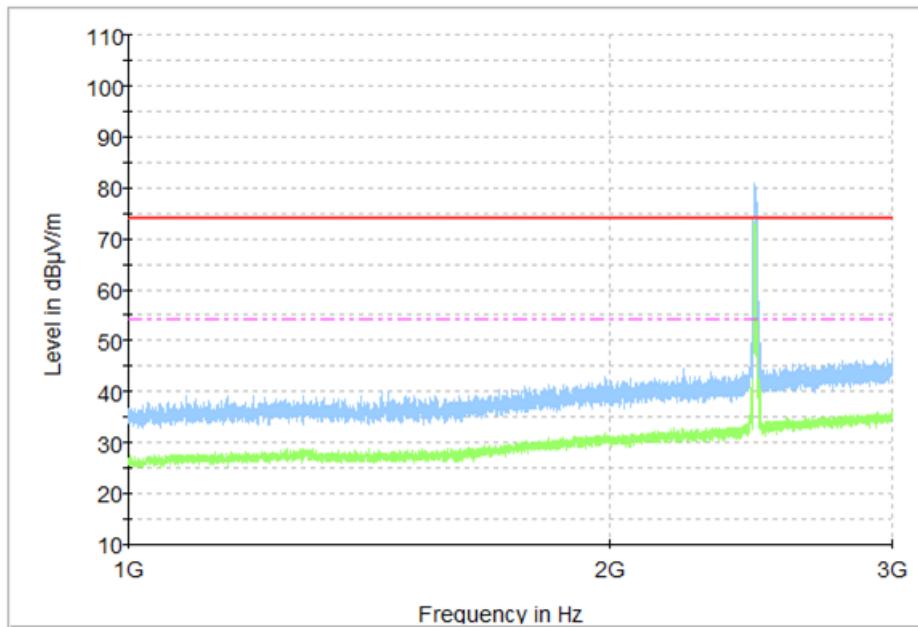


Fig.21 Radiated Spurious Emission (802.11n-HT20, CH11, 1 GHz-3 GHz)

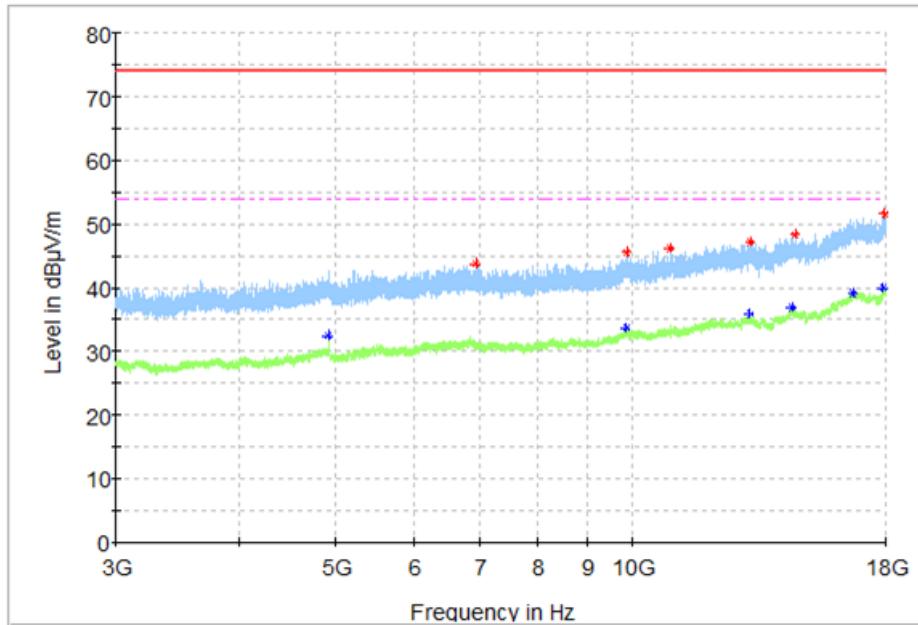


Fig.22 Radiated Spurious Emission (802.11n-HT20, CH11, 3 GHz-18 GHz)

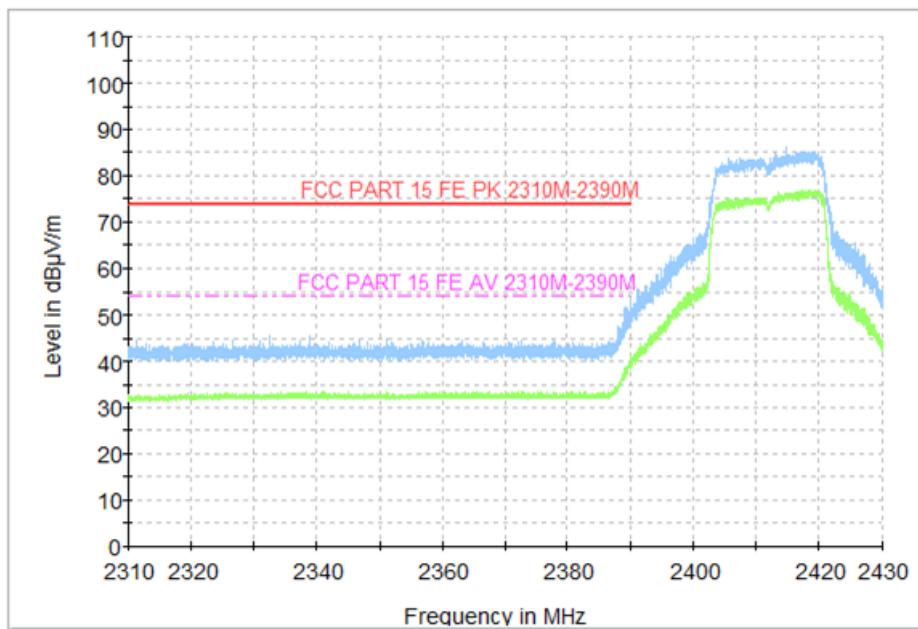


Fig.23 Radiated Restricted Band (802.11n-HT20, CH1, 2.38GHz~2.45GHz)

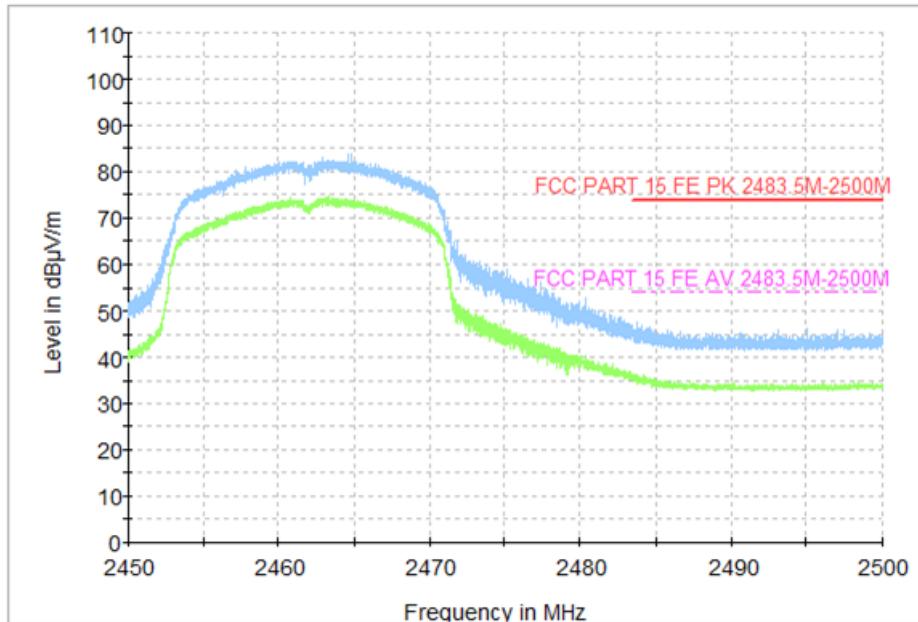


Fig.24 Radiated Restricted Band (802.11n-HT20, CH11, 2.45GHz~2.5GHz)

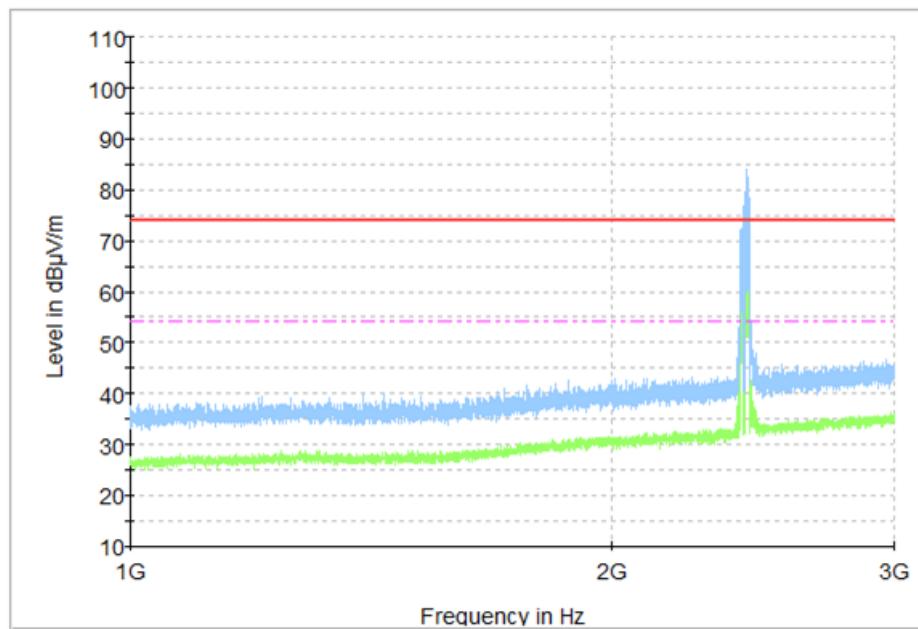


Fig.25 Radiated Spurious Emission (802.11n-HT40, CH3, 1 GHz-3 GHz)

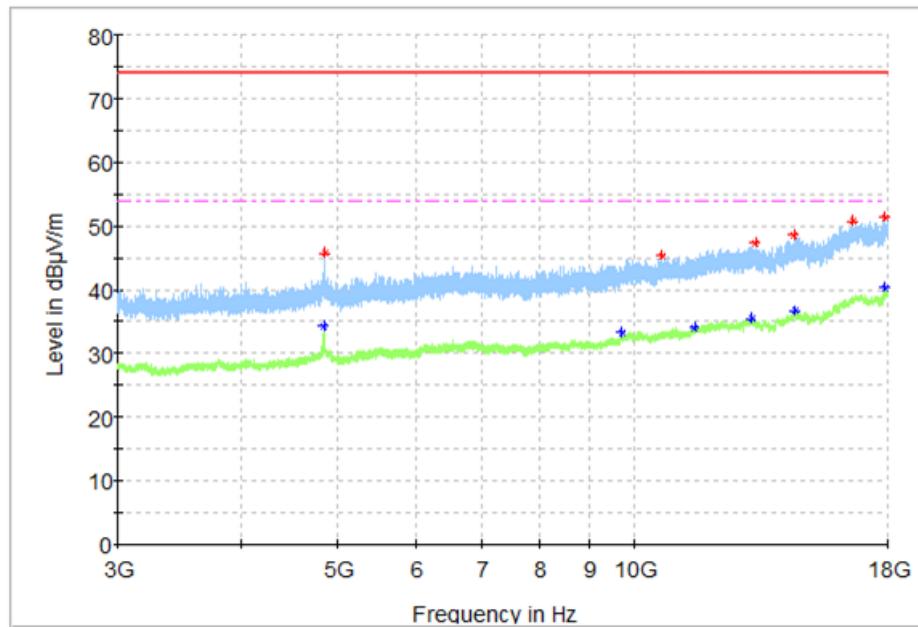


Fig.26 Radiated Spurious Emission (802.11n-HT40, CH3, 3 GHz-18 GHz)

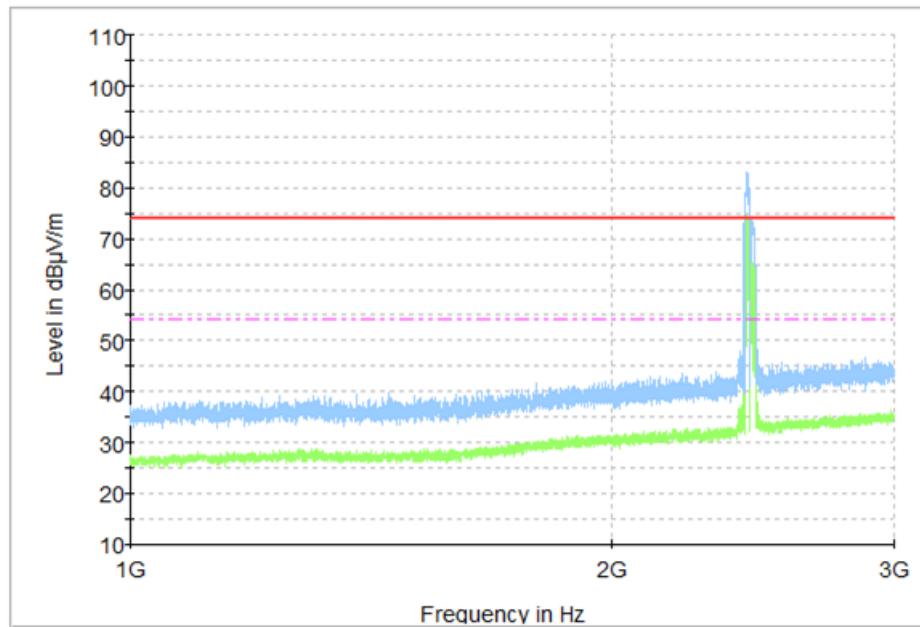


Fig.27 Radiated Spurious Emission (802.11n-HT40, CH6, 1 GHz-3 GHz)

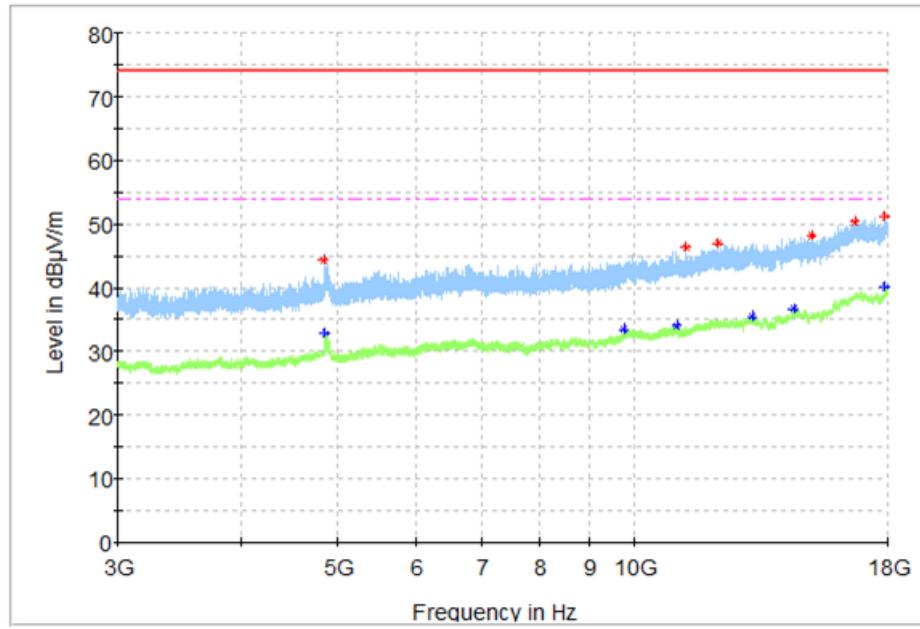


Fig.28 Radiated Spurious Emission (802.11n-HT40, CH6, 3 GHz-18 GHz)

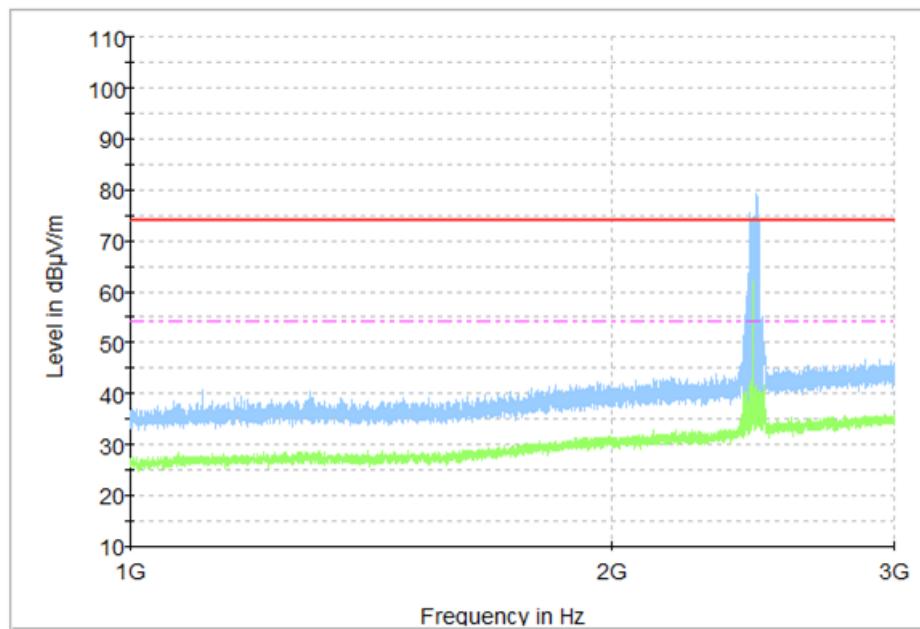


Fig.29 Radiated Spurious Emission (802.11n-HT40, CH9, 1 GHz-3 GHz)

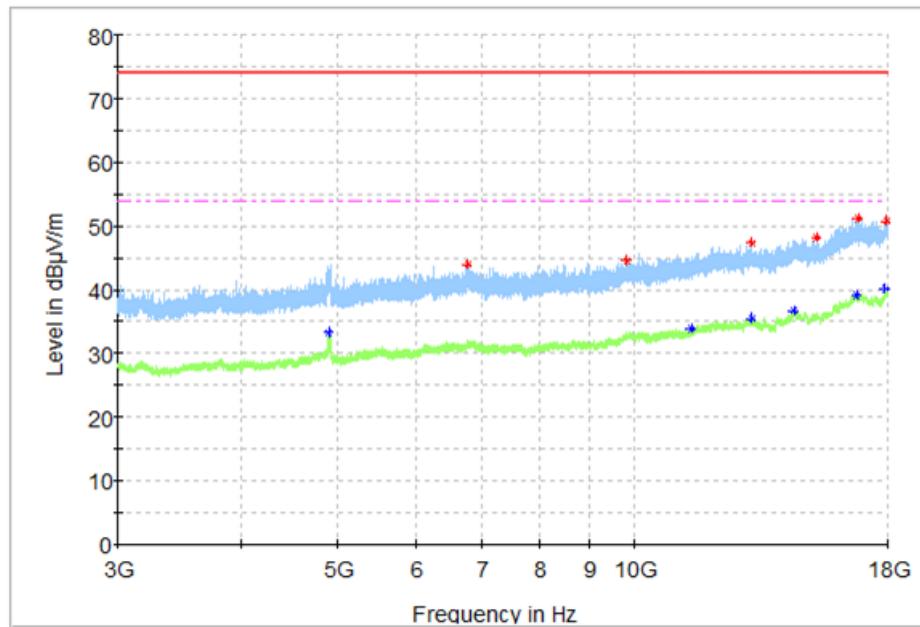


Fig.30 Radiated Spurious Emission (802.11n-HT40, CH9, 3 GHz-18 GHz)

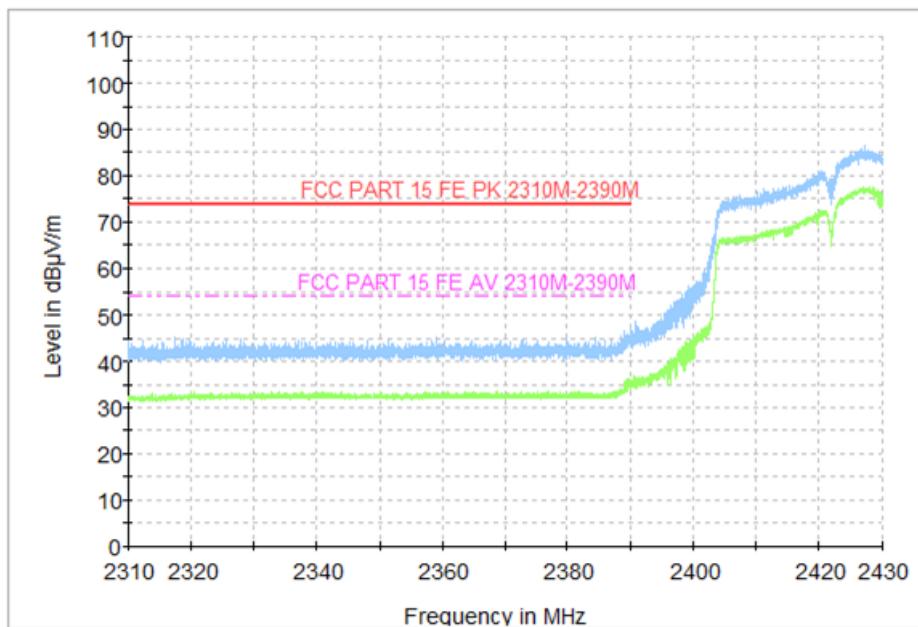


Fig.31 Radiated Restricted Band (802.11n-HT40, CH3, 2.38GHz~2.45GHz)

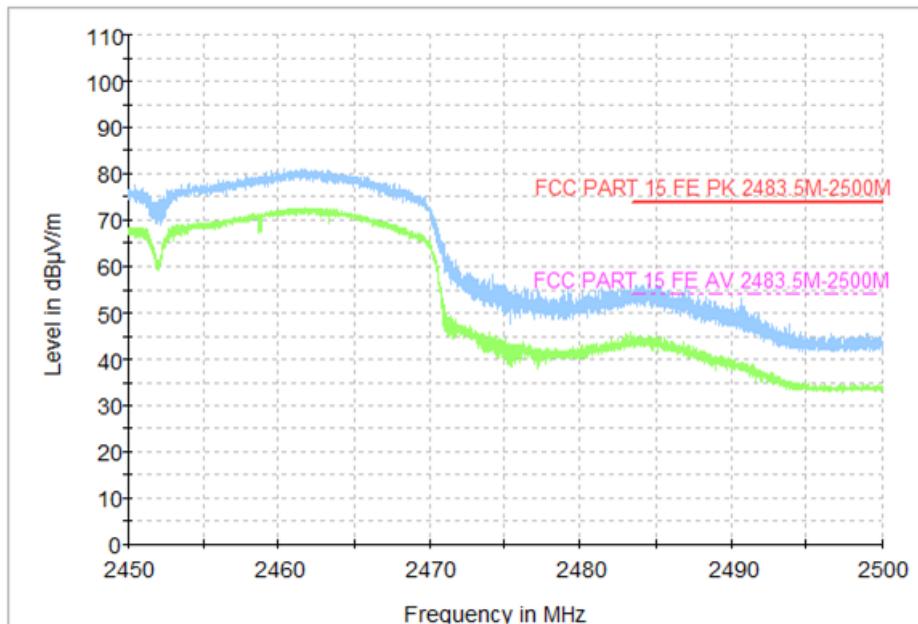


Fig.32 Radiated Restricted Band (802.11n-HT40, CH9, 2.45GHz~2.5GHz)

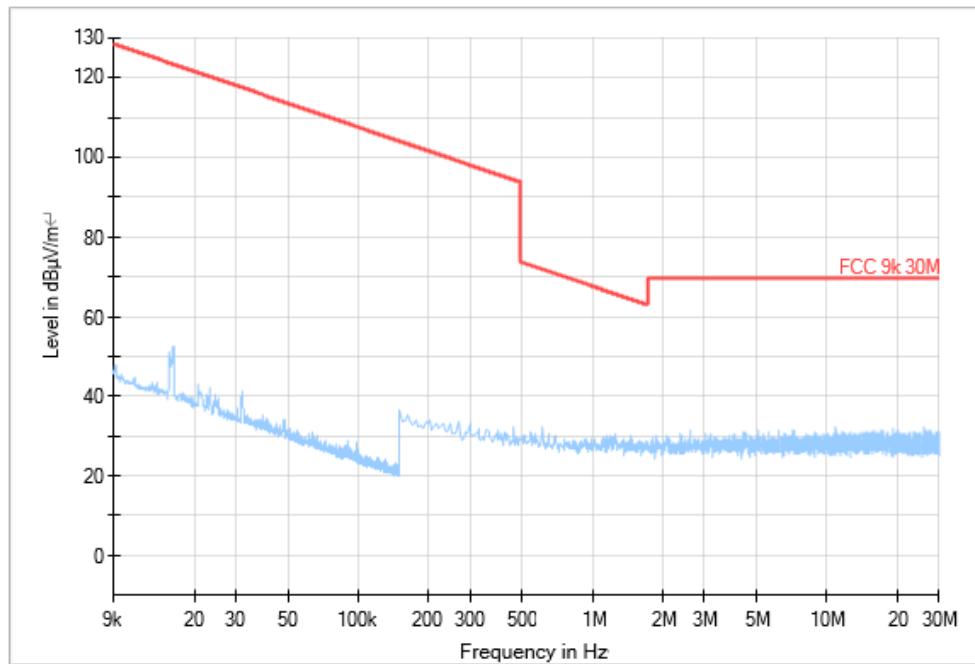


Fig.33 Radiated Spurious Emission (All Channels, 9 kHz-30 MHz)

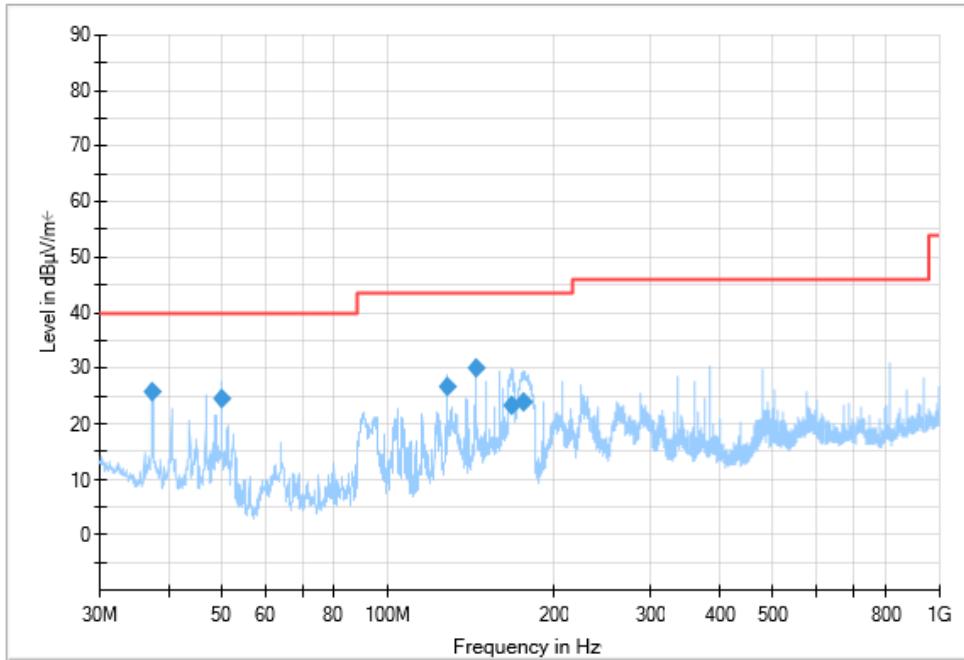
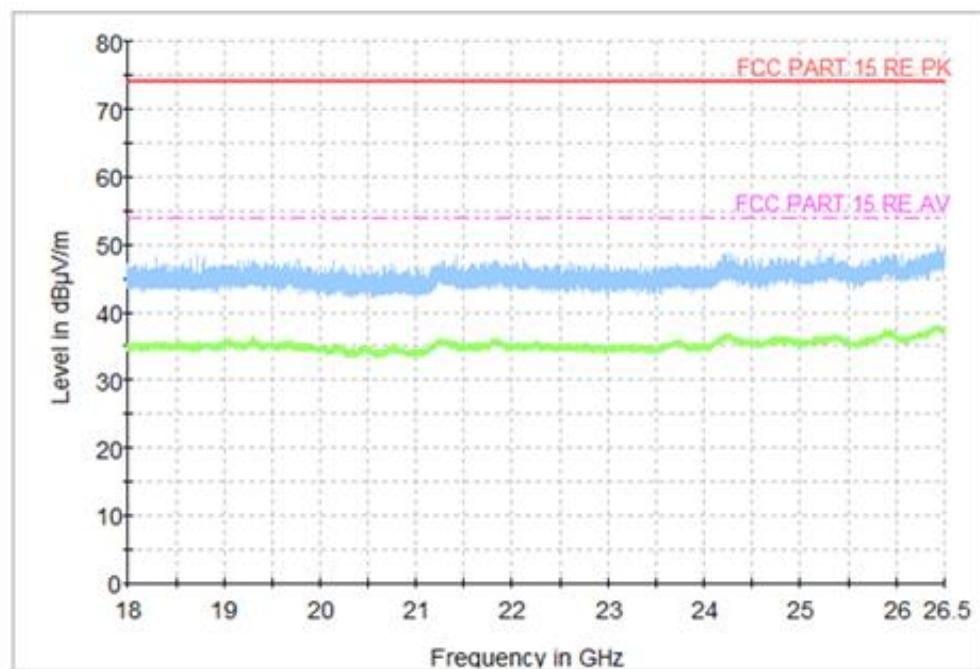


Fig.34 Radiated Spurious Emission (All Channels, 30MHz-1 GHz)



**Fig.35 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz)**

## **ANNEX B- Spot Check of Output Power**

**Difference between sampling test data and module report data.**

Mode	RF Output Power -Max. (Sampling data)	RF Output Power -Min. (Module Report)
802.11b	15.62dBm	15.74dBm
802.11g	13.31dBm	13.60dBm
802.11n-HT20	13.31dBm	13.71dBm
802.11n-HT40	12.69dBm	12.75dBm

**Note:**

From the above data, it can be concluded that the measured RF output power data is close to and less than the module reported power data. And the conduction test data can refer to the module report.

**\*\*\*END OF REPORT\*\*\***