



# FCC PART 15C & RSS 247 TEST REPORT

## No. I18N00939-WLAN

for

**Spectralink Corp**

**Wifi/BT handset**

**9540**

with

**Hardware Version: PIO**

**Software Version: vF03**

**FCC ID: IYG95XX**

**IC: 2128B-95XX**

**Issued Date: 2018-09-20**

**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:**

Shenzhen Academy of Information and Communications Technology

Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518026.

Tel: +86(0)755-33322000, Fax: +86(0)755-33322001, Email: yewu@caict.ac.cn [www.cszit.com](http://www.cszit.com)

## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I18N00939-WLAN	Rev.0	1st edition	2018-09-20

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## **1. Test Laboratory**

### **1.1. Testing Location**

Location: Shenzhen Academy of Information and Communications Technology  
Address: Building G, Shenzhen International Innovation Center, No.1006  
Shennan Road, Futian District, Shenzhen, Guangdong  
Province, China  
Postal Code: 518026  
Telephone: +86(0)755-33322000  
Fax: +86(0)755-33322001

### **1.2. Testing Environment**

Normal Temperature: 15-30°C  
Relative Humidity: 35-60%

### **1.3. Project data**

Testing Start Date: 2018-08-09  
Testing End Date: 2018-09-10

### **1.4. Signature**

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**An Ran**  
**(Prepared this test report)**

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**Tang Weisheng**  
**(Reviewed this test report)**

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**Zhang Bojun**  
**(Approved this test report)**

## **2. Client Information**

### **2.1. Applicant Information**

Company Name: Spectralink Corp  
Address: 2560 55th Street Boulder, CO 80301 USA  
Contact Person Andrew Duncan  
E-Mail Andrew.duncan@spectralink.com  
Telephone: +1 720-925-0480  
Fax: /

### **2.2. Manufacturer Information**

Company Name: Spectralink Corp  
Address: 2560 55th Street Boulder, CO 80301 USA  
Contact Person Andrew Duncan  
E-Mail Andrew.duncan@spectralink.com  
Telephone: +1 720-925-0480  
Fax: /

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

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

Description	Wifi/BT handset
Model Name	9540
Market Name	Versity
RF Protocol	IEEE 802.11 b/g/n-HT20/n-HT40
Operating Frequency	2412MHz~2462MHz
Number of Channels	11
Antenna Type	Integrated
Antenna Gain	0.5dBi(ANT0),0.6dBi(ANT1)
Power Supply	3.7V DC by Battery
FCC ID	IYG95XX
IC number	2128B-95XX
Condition of EUT as received	No abnormality in appearance

Note: Components list, please refer to documents of the manufacturer.

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

<b>EUT ID*</b>	<b>IMEI</b>	<b>HW Version</b>	<b>SW Version</b>	<b>Receive Date</b>
EUT1	357023090001067	PIO	vF03	2018-08-09

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

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

<b>AE ID*</b>	<b>Description</b>	<b>Mode</b>	<b>Manufacturer</b>
AE1	Switching Adapter	ASUC71w-050912300	Aquil Star Precision Industrial (ShenZhen) Co., Ltd

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

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

The Equipment Under Test (EUT) are a model of Wifi/BT handset with integrated antenna.

It consists of normal options: travel Charger, USB cable.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

Note: The Wifi/BT handset 9540 manufactured by Spectralink Corp. According to the declaration of changes, Radiated Emissions and AC Power line Conducted test needs to be performed. else results are cited from the initial model. The report number for initial model is I18N00940-WLAN

## **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.

<b>Reference</b>	<b>Title</b>	<b>Version</b>
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	2017
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 April, 2018
KDB 662911	D01 Multiple Transmitter Output	v02r01

## 5. Test Results

### 5.1. Summary of Test Results

No	Test cases	Sub-clause of Part 15C	Sub-clause of IC	Verdict
0	Antenna Requirement	15.203	/	<b>P</b>
1	Radiated Emission	15.247, 15.205, 15.209	RSS-247 section 5.5/ RSS-Gen section 6.13	<b>P</b>
2	AC Power line Conducted	15.207	RSS-Gen section 8.8	<b>P</b>

See **ANNEX A** for details.

### 5.2. Statements

SAICT has evaluated the test cases requested by the applicant/matrixufacturer as listed in section 5.1 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.

### 5.3. Terms used in the result table

Terms used in Verdict column

P	Pass
NA	Not Available
F	Fail

Abbreviations

AC	Alternating Current
AFH	Adaptive Frequency Hopping
BW	Band Width
E.I.R.P.	equivalent isotropic radiated power
ISM	Industrial, Scientific and Medical
R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
Tx	Transmitter



#### **5.4. Laboratory Environment**

**Semi-anechoic chamber** did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, 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

**Conducted shielded room** did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. =20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-10000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω

**Fully-anechoic chamber** did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, 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

## 6. Test Facilities Utilized

### Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
3	Test Receiver	ESCI	100702	Rohde & Schwarz	2019.06.20	1 year
4	LISN	ENV216	102067	Rohde & Schwarz	2019.07.18	1 year

### Radiated test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Chamber	FACT3-2.0	1285	ETS-Lindgren	2020.07.20	3 years
2	Test Receiver	ESR7	101676	Rohde & Schwarz	2018.11.29	1 year
3	Spectrum Analyser	FSV40	101192	Rohde & Schwarz	2019.05.21	1 year
4	BiLog Antenna	3142E	00224831	ETS-Lindgren	2021.05.17	3 years
5	Horn Antenna	3117	00066577	ETS-Lindgren	2019.04.05	3 years
6	Loop Antenna	HLA6120	35779	TESEQ	2019.05.02	3 years
7	Horn Antenna	QSH-SL-1 8-26-S-20	17013	Q-par	2020.01.15	3 years

### Test software

No.	Equipment	Manufacturer	Version
2	EMC32	Rohde & Schwarz	10.01.00
3	EMC32	Rohde & Schwarz	10.01.00

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. Measurement Uncertainty

Test Name	Uncertainty	
1. Transmitter Spurious Emission - Radiated	9kHz≤f≤30MHz	1.84dB
	30MHz≤f≤1GHz	4.90dB
	1GHz≤f≤18GHz	5.12dB
	18GHz≤f≤40GHz	4.66dB
2. AC Power line Conducted Emission	150kHz≤f≤30MHz	3.10dB

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

### **A.0 Antenna requirement**

**Measurement Limit:**

<b>Standard</b>	<b>Requirement</b>
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 are 0.5dBi(ANT0) and 0.6dBi(ANT1).The RF transmitter uses an integrate antenna without connector.**

## A.1 Radiated Emission

### Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209 & RSS-247 Section 5.5/RSS-Gen 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( $\mu\text{V}/\text{m}$ )	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:**

**SISO (Antenna 0):**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	CH 1	1 GHz ~18 GHz	Fig.1	P
	CH 6	1 GHz ~18 GHz	Fig.2	P
	CH 11	1 GHz ~18 GHz	Fig.3	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.4	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.5	P
802.11g	CH 1	1 GHz ~18 GHz	Fig.6	P
	CH 6	1 GHz ~18 GHz	Fig.7	P
	CH 11	1 GHz ~18 GHz	Fig.8	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.9	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.10	P
802.11n HT20	CH 1	1 GHz ~18 GHz	Fig.11	P
	CH 6	1 GHz ~18 GHz	Fig.12	P
	CH 11	1 GHz ~18 GHz	Fig.13	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.14	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.15	P
802.11n HT40	CH 3	1 GHz ~18 GHz	Fig.16	P
	CH 6	1 GHz ~18 GHz	Fig.17	P
	CH 9	1 GHz ~18 GHz	Fig.18	P
	Restricted Band (CH3)	2.38 GHz ~ 2.45 GHz	Fig.19	P
	Restricted Band (CH9)	2.45 GHz ~ 2.5 GHz	Fig.20	P
/	All Channels	9 kHz ~30 MHz	Fig.21	P
		30 MHz ~1 GHz	Fig.22	P
		18 GHz ~26.5 GHz	Fig.23	P

**MIMO:**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n HT20	CH 1	1 GHz ~18 GHz	Fig.24	P
	CH 6	1 GHz ~18 GHz	Fig.25	P
	CH 11	1 GHz ~18 GHz	Fig.26	P
	Restricted Band (CH1)	2.38 GHz ~ 2.45 GHz	Fig.27	P
	Restricted Band (CH11)	2.45 GHz ~ 2.5 GHz	Fig.28	P
802.11n HT40	CH 3	1 GHz ~18 GHz	Fig.29	P
	CH 6	1 GHz ~18 GHz	Fig.30	P
	CH 9	1 GHz ~18 GHz	Fig.31	P
	Restricted Band (CH3)	2.38 GHz ~ 2.45 GHz	Fig.32	P
	Restricted Band (CH9)	2.45 GHz ~ 2.5 GHz	Fig.33	P
/	All Channels	9 kHz ~30 MHz	Fig.34	P
		30 MHz ~1 GHz	Fig.35	P
		18 GHz ~26.5 GHz	Fig.36	P

**Worst-Case Result:**

**802.11b CH6 (1-18GHz)**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB)
12544.000000	56.60	74.00	17.40	H	20.0
14555.500000	56.96	74.00	17.04	H	20.4
15029.000000	57.01	74.00	16.99	H	20.0
15730.500000	58.08	74.00	15.92	H	21.1
16647.000000	59.09	74.00	14.91	H	22.4
17738.000000	57.25	74.00	16.75	H	22.8

Frequency (MHz)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB)
12433.500000	44.68	54.00	9.32	H	19.4
12891.500000	45.11	54.00	8.89	H	19.9
13987.000000	45.29	54.00	8.71	H	19.6
14689.500000	46.16	54.00	7.84	H	20.7
15670.000000	47.07	54.00	6.93	H	21.3
16647.000000	46.94	54.00	7.06	H	22.4

**802.11g CH1 (1GHz-18GHz)**

Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB)
12912.000000	56.30	74.00	17.70	H	20.0
13632.500000	55.45	74.00	18.55	H	19.1
14839.000000	57.20	74.00	16.81	H	20.8
15674.500000	58.21	74.00	15.79	H	21.3
16607.500000	58.67	74.00	15.33	H	22.8
17879.000000	56.55	74.00	17.45	H	23.7

Frequency (MHz)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Pol	Corr. (dB)
12889.500000	44.80	54.00	9.20	H	19.9
14000.500000	44.85	54.00	9.15	H	19.6
14696.500000	45.71	54.00	8.29	H	20.7
15658.500000	46.92	54.00	7.08	H	21.3
16637.000000	46.88	54.00	7.12	H	22.5
17702.000000	45.63	54.00	8.37	H	22.9

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

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12850.500000	56.00	74.00	18.00	H	19.7
13929.000000	56.72	74.00	17.28	H	19.7
14539.000000	56.45	74.00	17.55	H	20.4
15027.500000	56.18	74.00	17.82	H	20.0
16644.000000	57.12	74.00	16.88	H	22.4
17962.500000	56.51	74.00	17.49	H	23.3

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12893.000000	44.86	54.00	9.14	H	19.9
13952.500000	44.38	54.00	9.62	H	19.7
14560.500000	45.19	54.00	8.81	H	20.4
15574.500000	45.12	54.00	8.88	H	21.0
16592.000000	46.38	54.00	7.62	H	22.8
17700.000000	45.46	54.00	8.54	H	22.9

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

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12891.000000	55.70	74.00	18.30	H	19.9
13891.500000	55.62	74.00	18.38	H	19.8
14678.000000	57.45	74.00	16.55	H	20.7
16050.500000	57.26	74.00	16.74	H	21.8
16963.000000	57.35	74.00	16.65	H	22.8
17695.000000	56.72	74.00	17.28	H	22.9

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Corr. (dB)
12899.000000	44.49	54.00	9.51	H	20.0
13949.500000	44.33	54.00	9.67	H	19.7
14682.000000	45.20	54.00	8.80	H	20.7
15657.000000	46.31	54.00	7.69	H	21.3
16594.500000	46.14	54.00	7.86	H	22.8
17703.000000	45.59	54.00	8.41	H	22.9



**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**

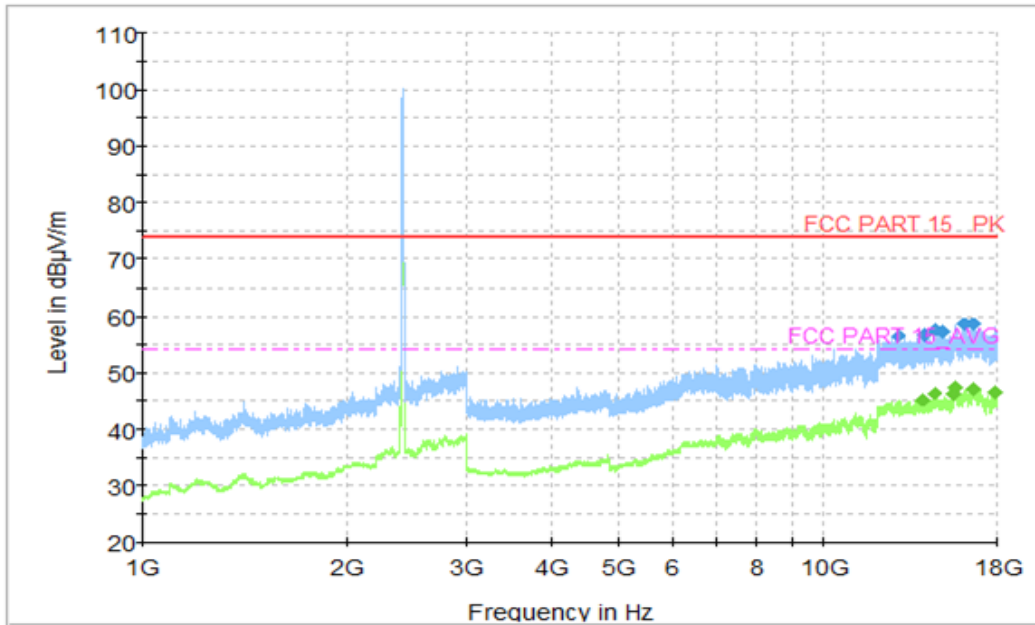


Fig.1 Radiated Spurious Emission (802.11b, CH1, 1 GHz-18GHz)

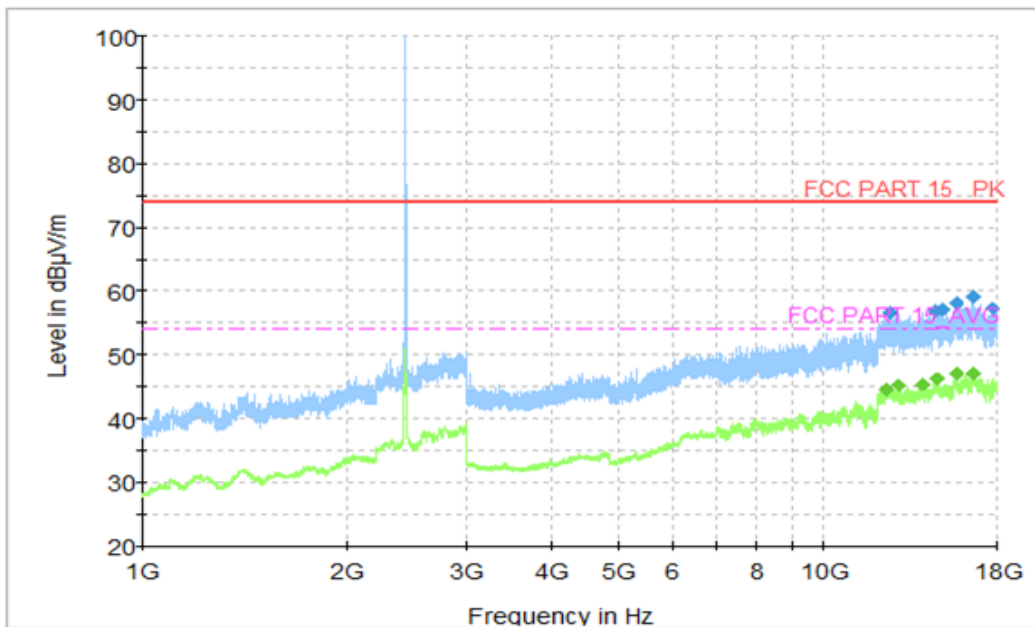


Fig.2 Radiated Spurious Emission (802.11b, CH6, 1 GHz-18GHz)

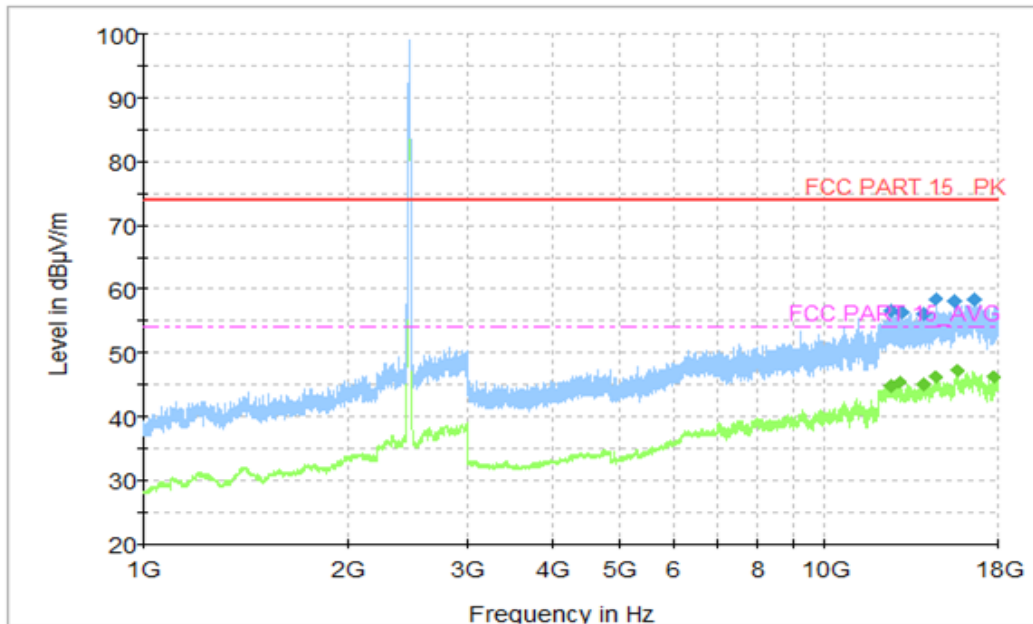


Fig.3 Radiated Spurious Emission (802.11b, CH11, 1 GHz-18GHz)

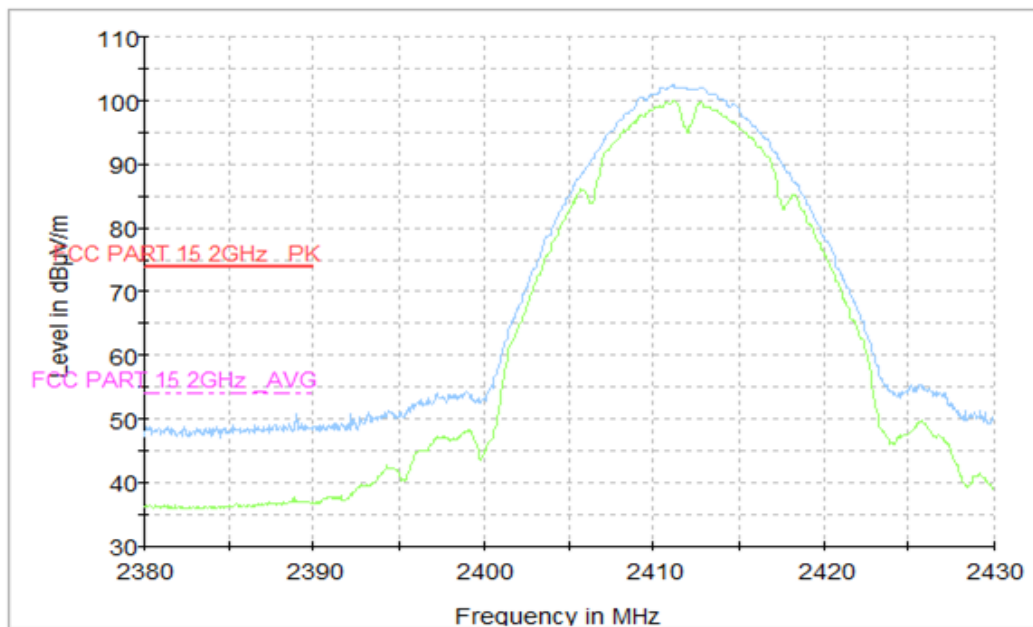


Fig.4 Radiated Restricted Band (802.11b, CH1, 2.38GHz~2.45GHz)

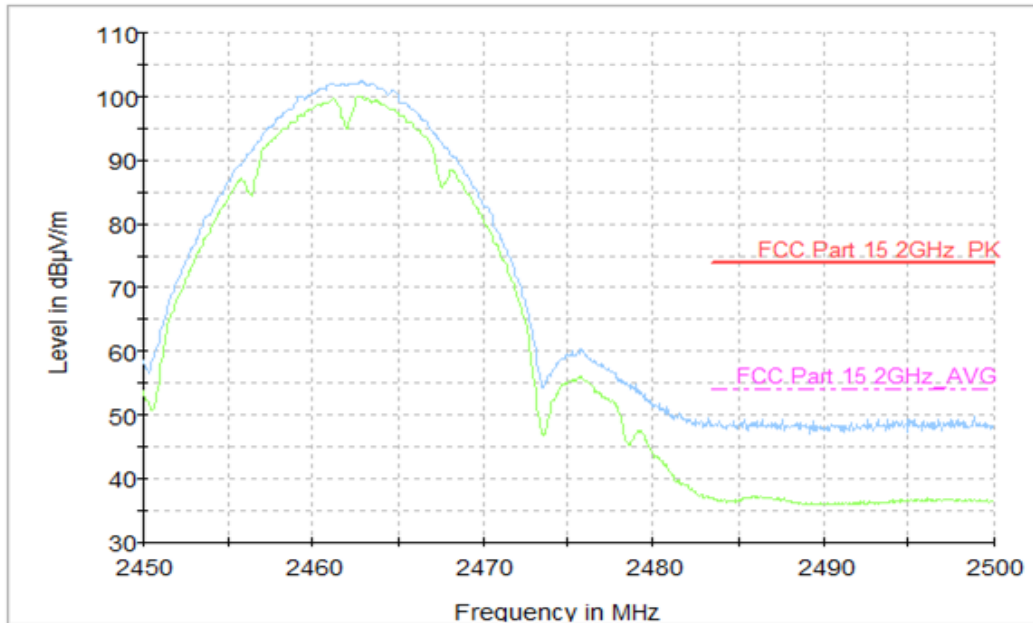


Fig.5 Radiated Restricted Band (802.11b, CH11, 2.45GHz~2.5GHz)

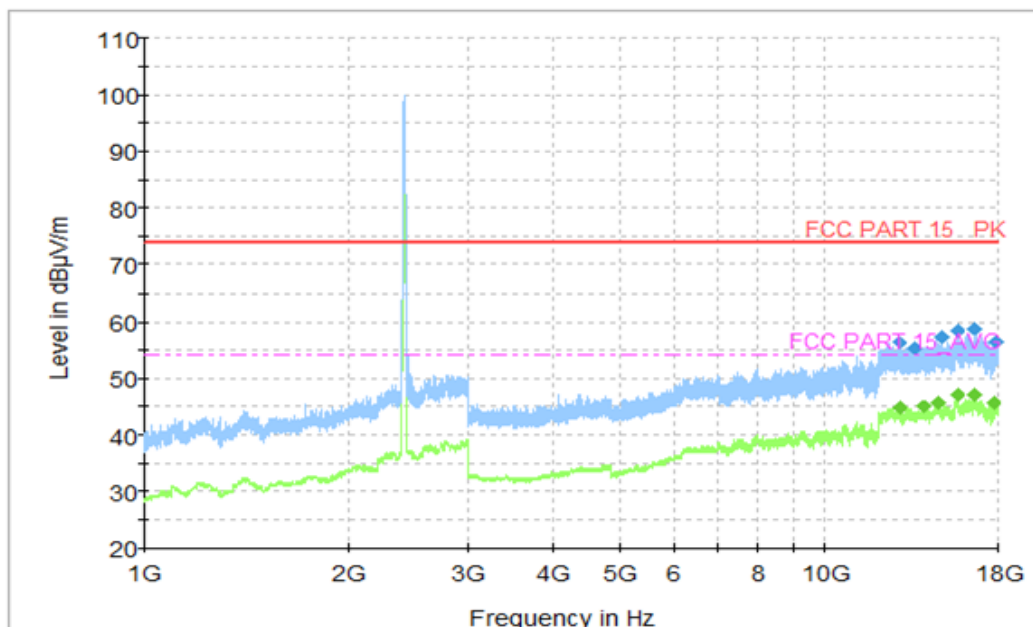


Fig.6 Radiated Spurious Emission (802.11g, CH1, 1 GHz-18 GHz)

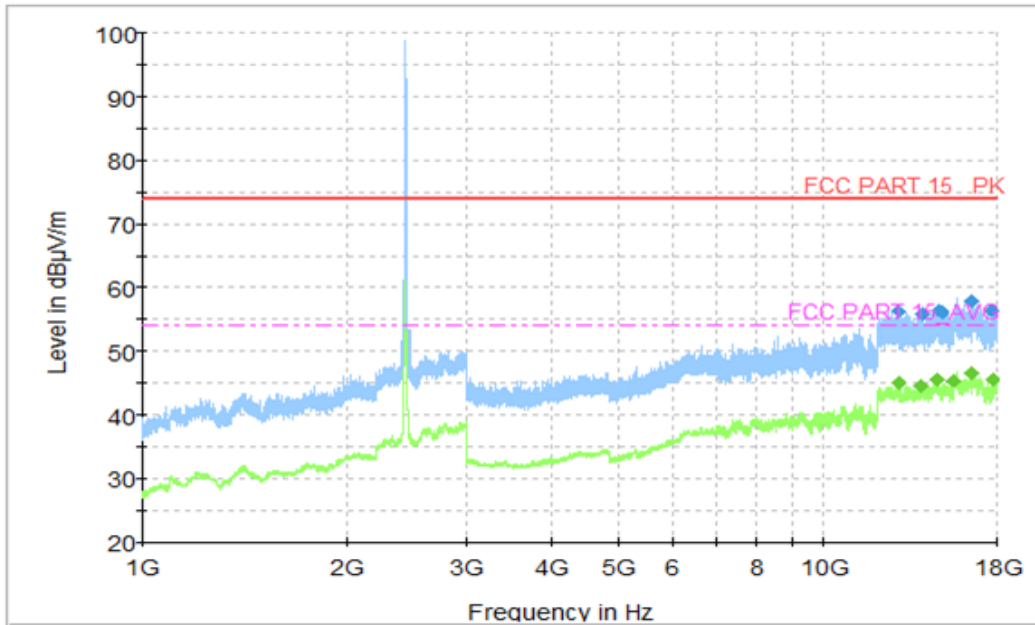


Fig.7 Radiated Spurious Emission (802.11g, CH6, 1 GHz-18 GHz)

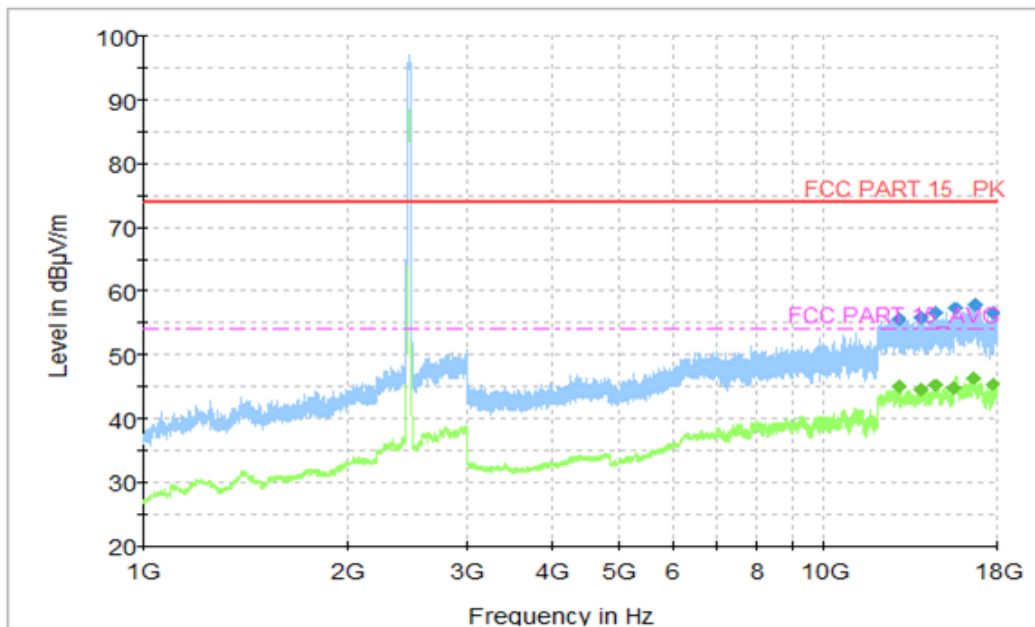


Fig.8 Radiated Spurious Emission (802.11g, CH11, 1 GHz-18 GHz)

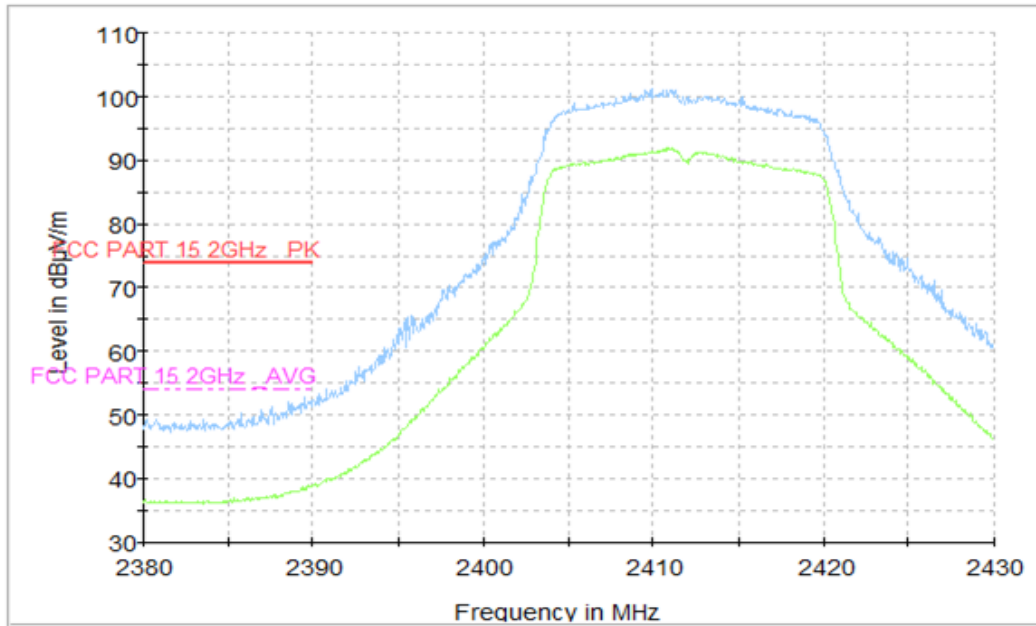


Fig.9 Radiated Restricted Band (802.11g, CH1, 2.38GHz~2.45GHz)

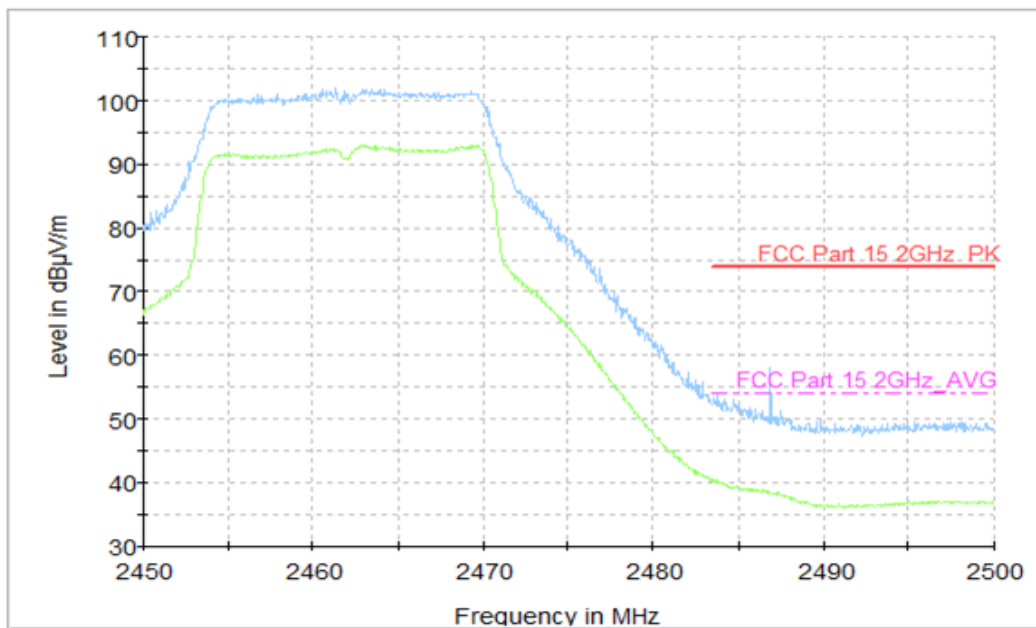


Fig.10 Radiated Restricted Band (802.11g, CH11, 2.45GHz~2.5GHz)

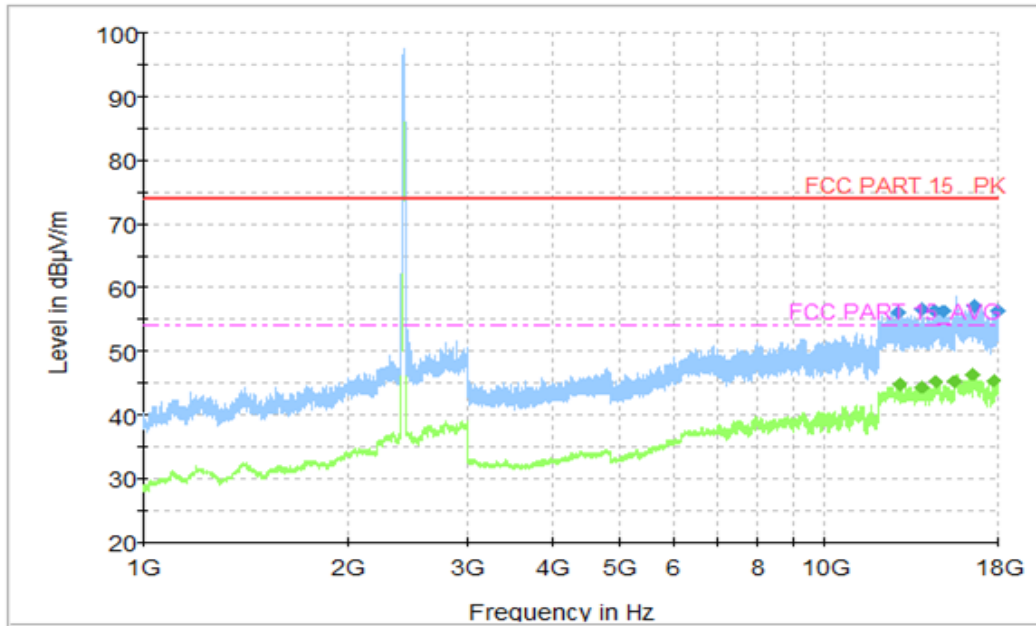


Fig.11 Radiated Spurious Emission (802.11n HT20, CH1, 1 GHz-18 GHz)

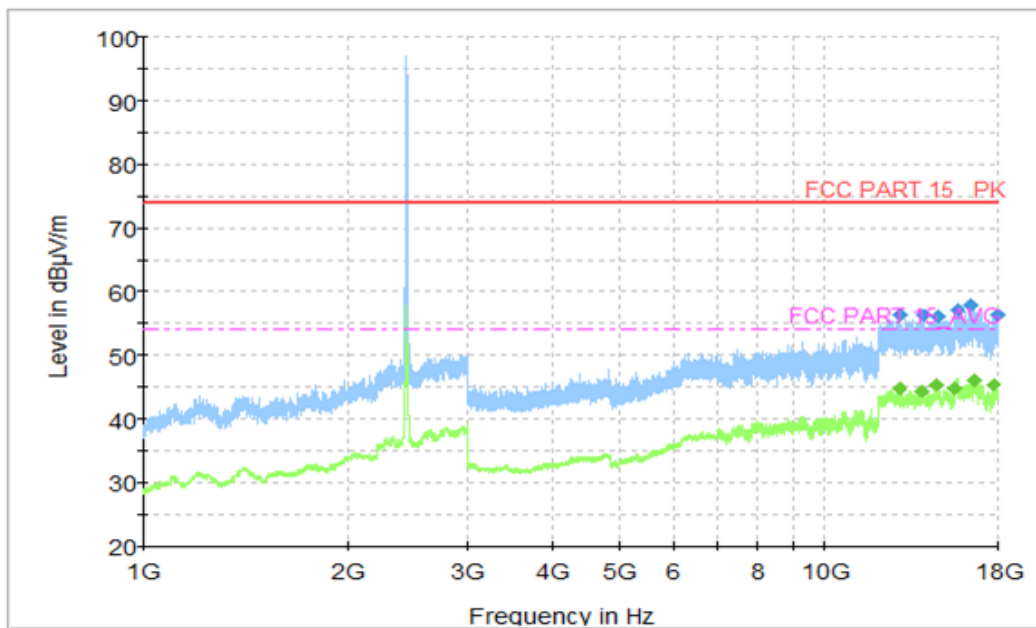


Fig.12 Radiated Spurious Emission (802.11n HT20, CH6, 1 GHz-18 GHz)

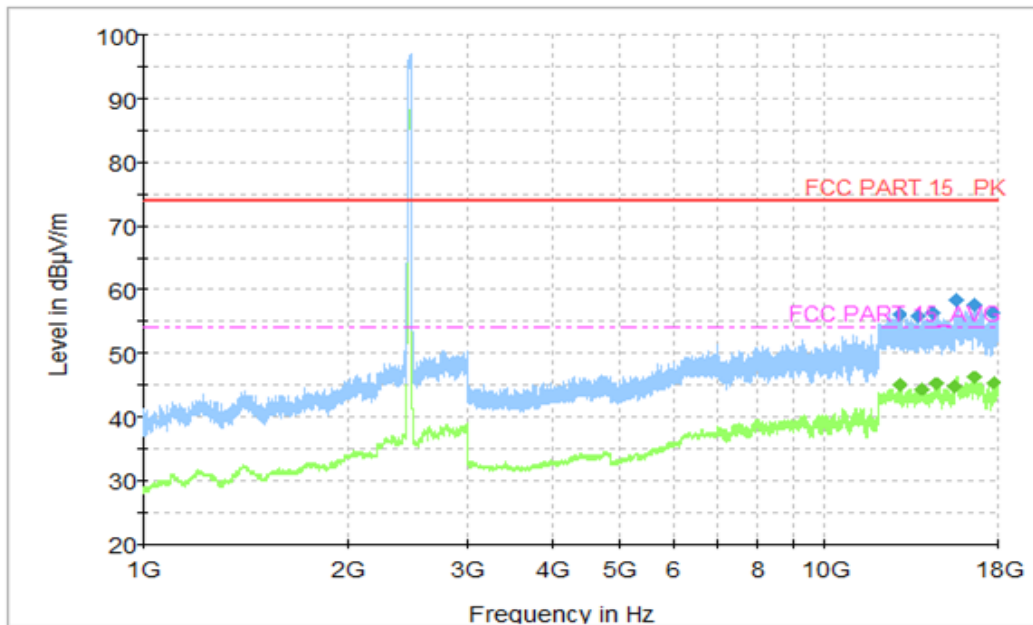


Fig.13 Radiated Spurious Emission (802.11n HT20, CH11, 1 GHz-18 GHz)

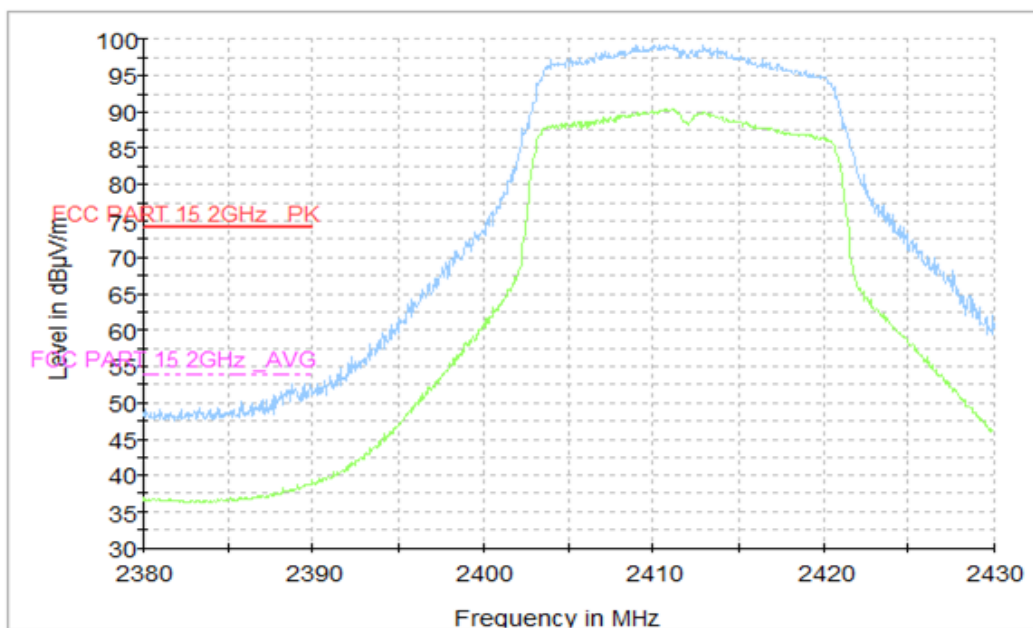


Fig.14 Radiated Restricted Band (802.11n HT20, CH1, 2.38GHz~2.45GHz)



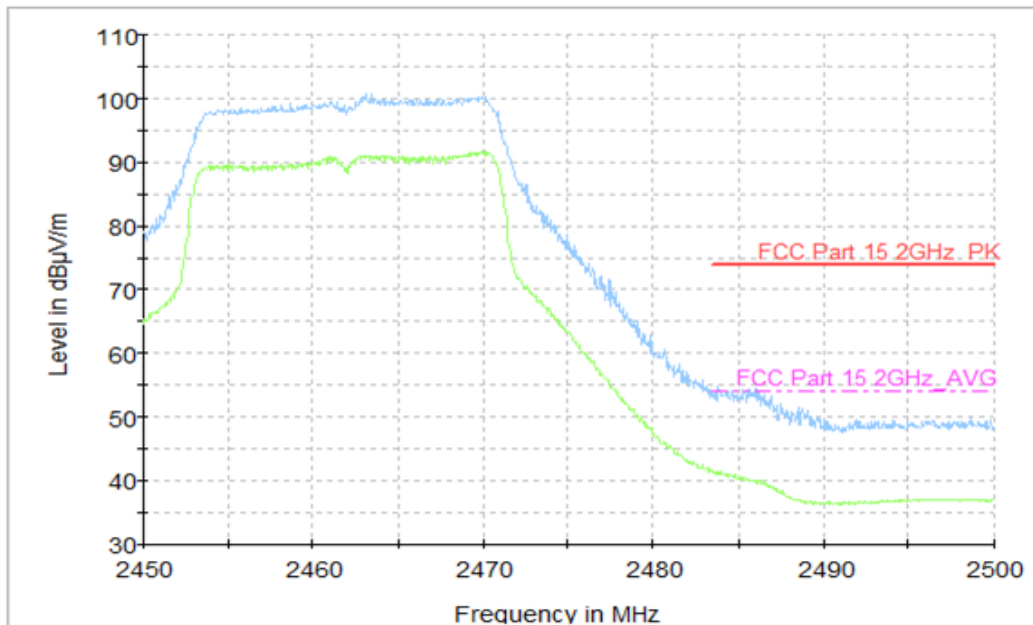


Fig.15 Radiated Restricted Band (802.11n HT20, CH11, 2.45GHz~2.5GHz)

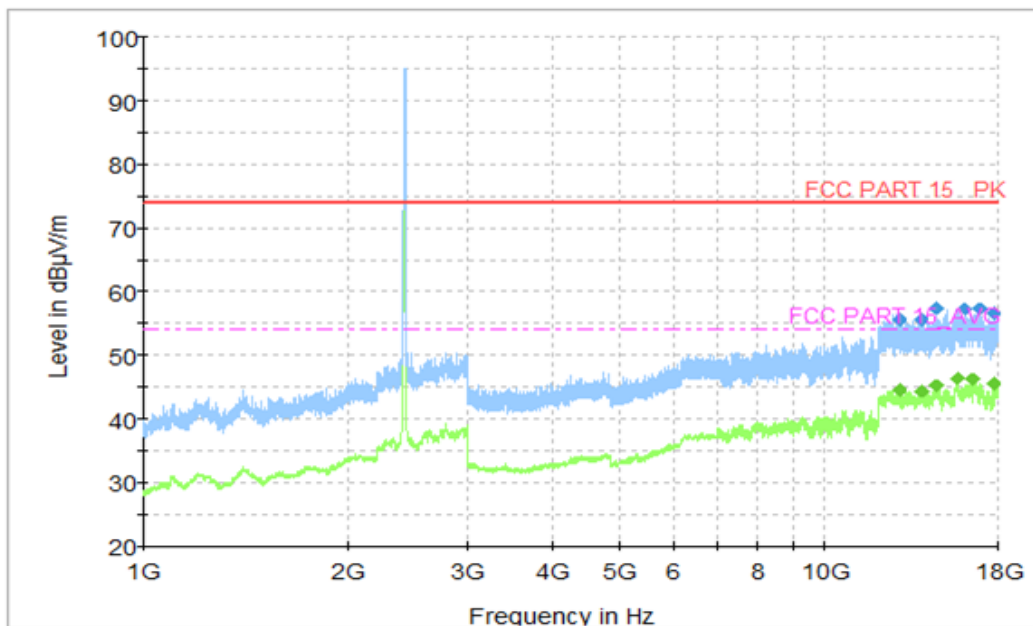


Fig.16 Radiated Spurious Emission (802.11n HT40, CH3, 1 GHz-18 GHz)

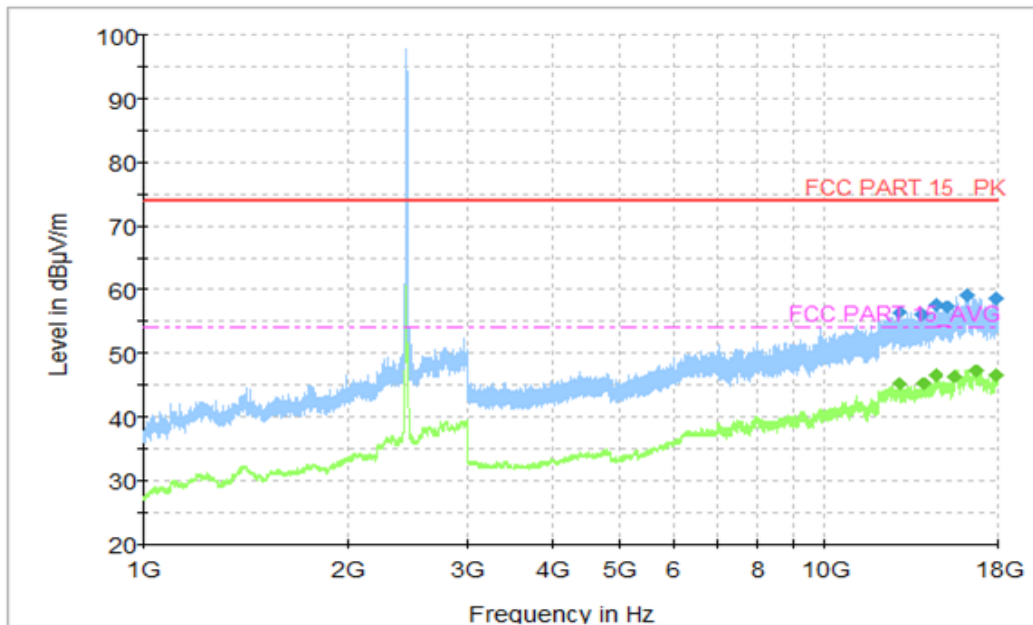


Fig.17 Radiated Spurious Emission (802.11n HT40, CH6, 1 GHz-18 GHz)

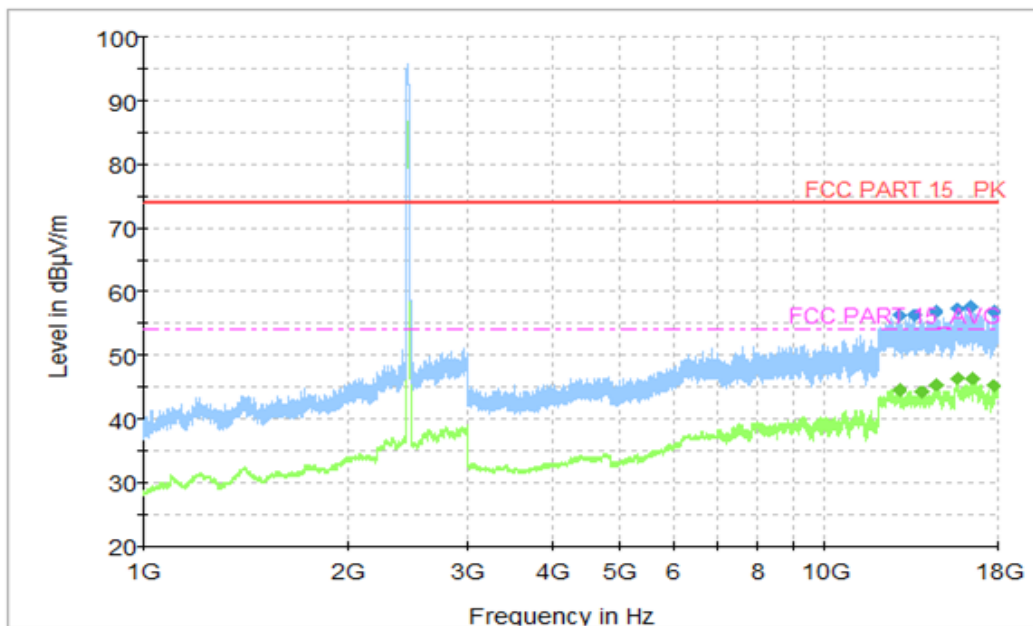


Fig.18 Radiated Spurious Emission (802.11n HT40, CH9, 1 GHz-18 GHz)

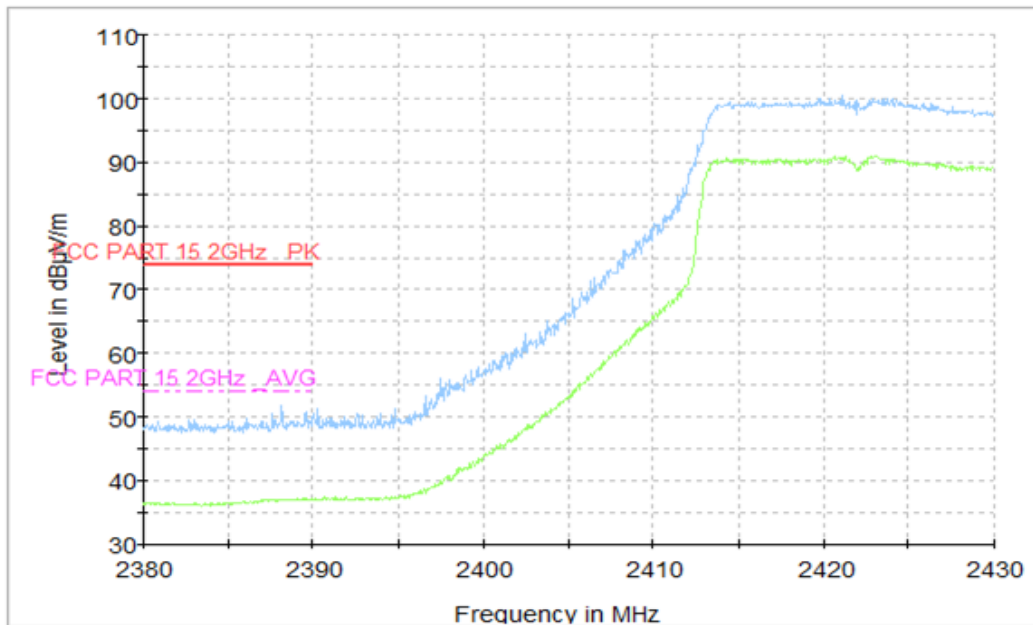


Fig.19 Radiated Restricted Band (802.11n HT40, CH3, 2.38GHz~2.45GHz)

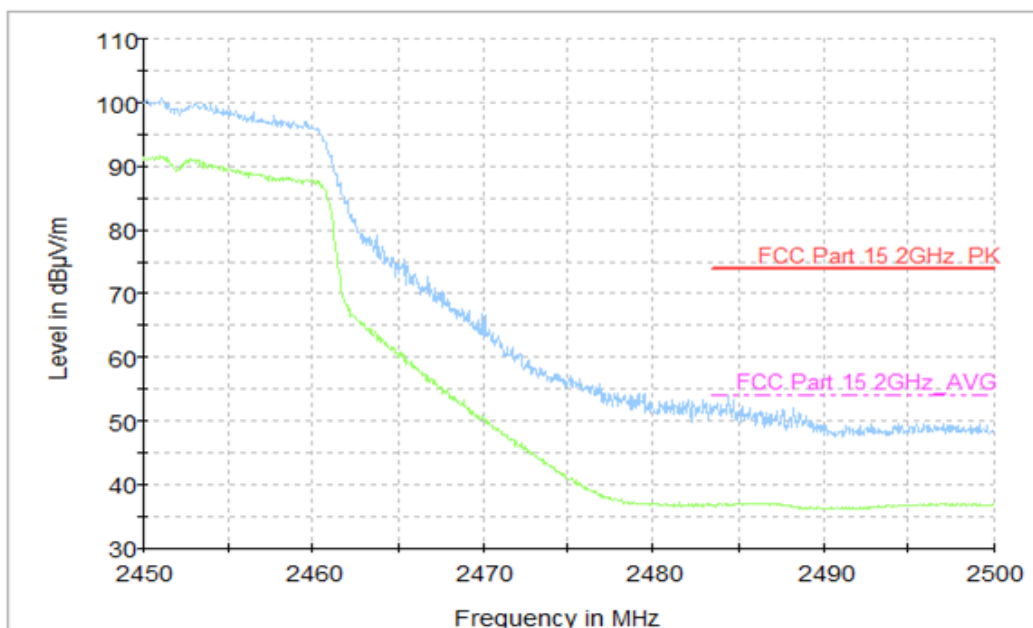


Fig.20 Radiated Restricted Band (802.11n HT40, CH9, 2.45GHz~2.5GHz)

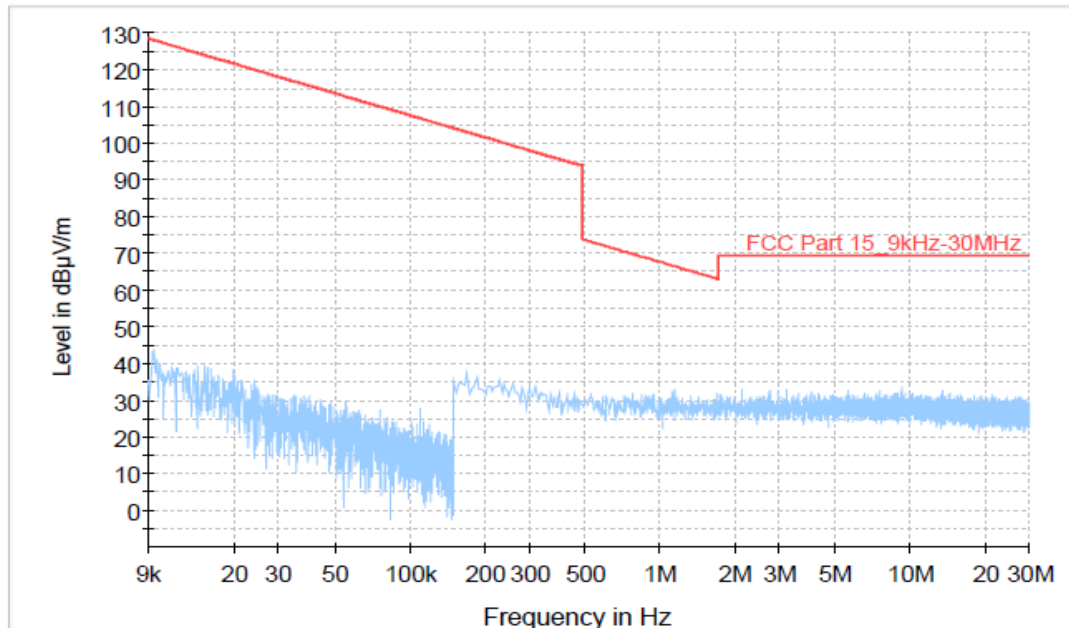


Fig.21 Radiated Spurious Emission (All Channels, 9KHz-30 MHz)

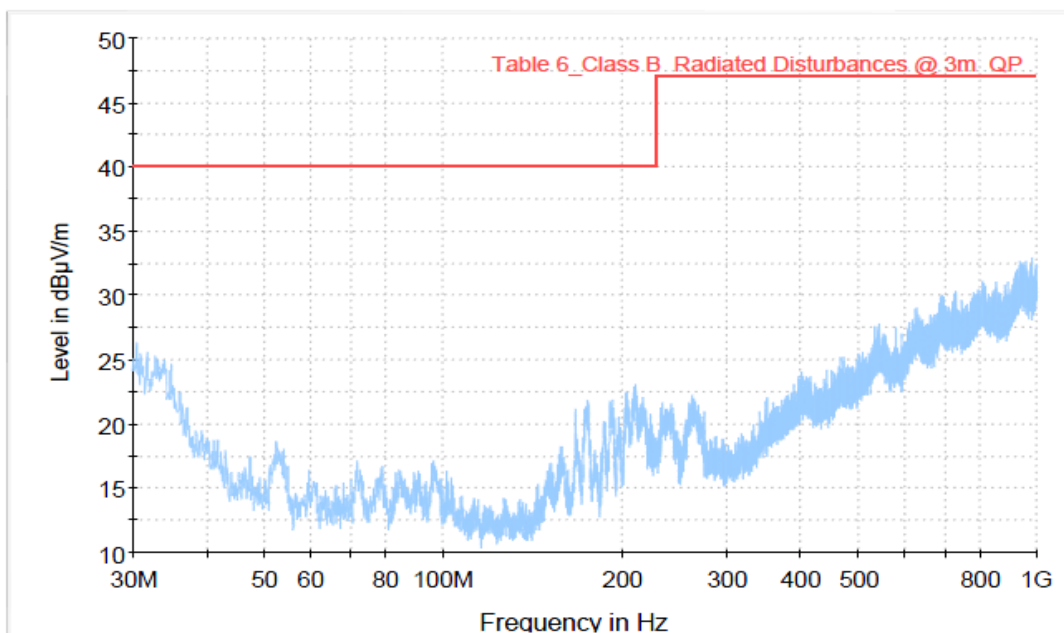


Fig.22 Radiated Spurious Emission (All Channels, 30MHz-1 GHz)

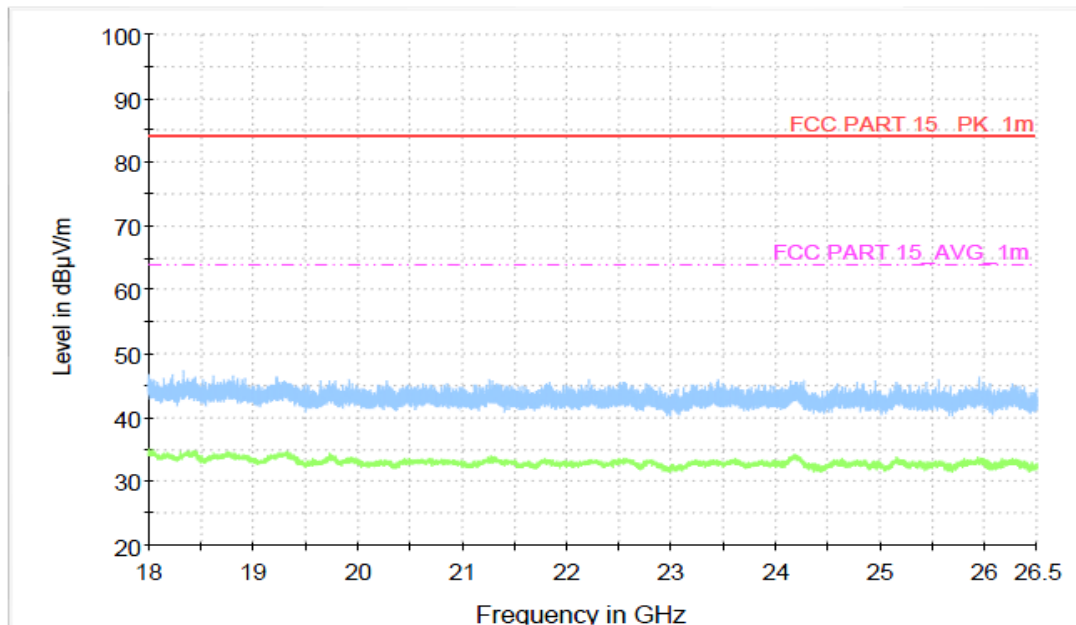


Fig.23 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz)

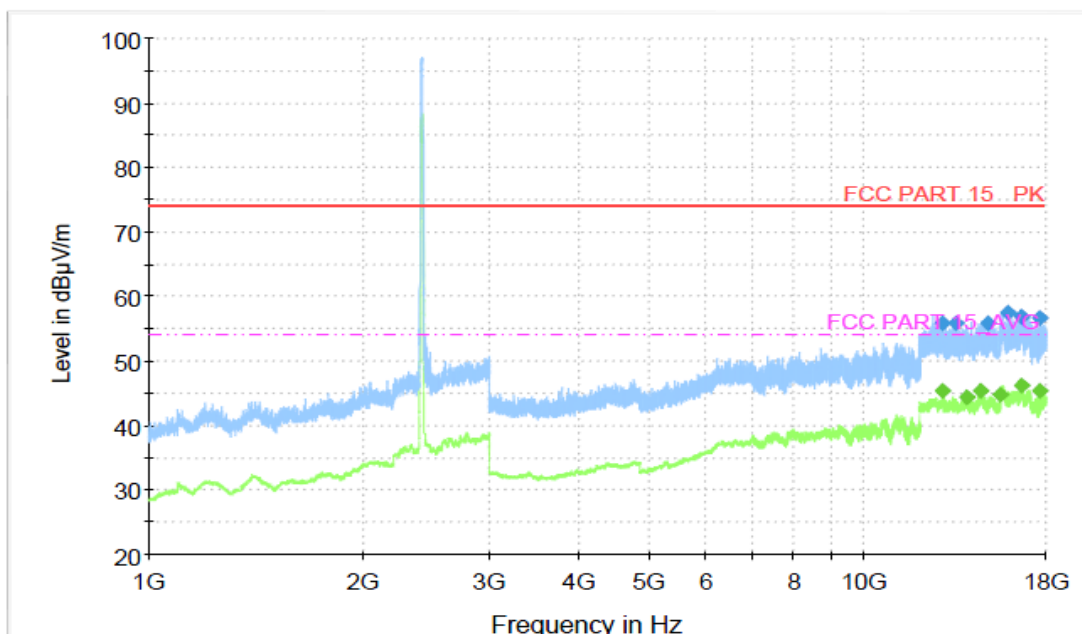


Fig.24 Radiated Spurious Emission (802.11n HT20, CH1, 1 GHz-18 GHz)

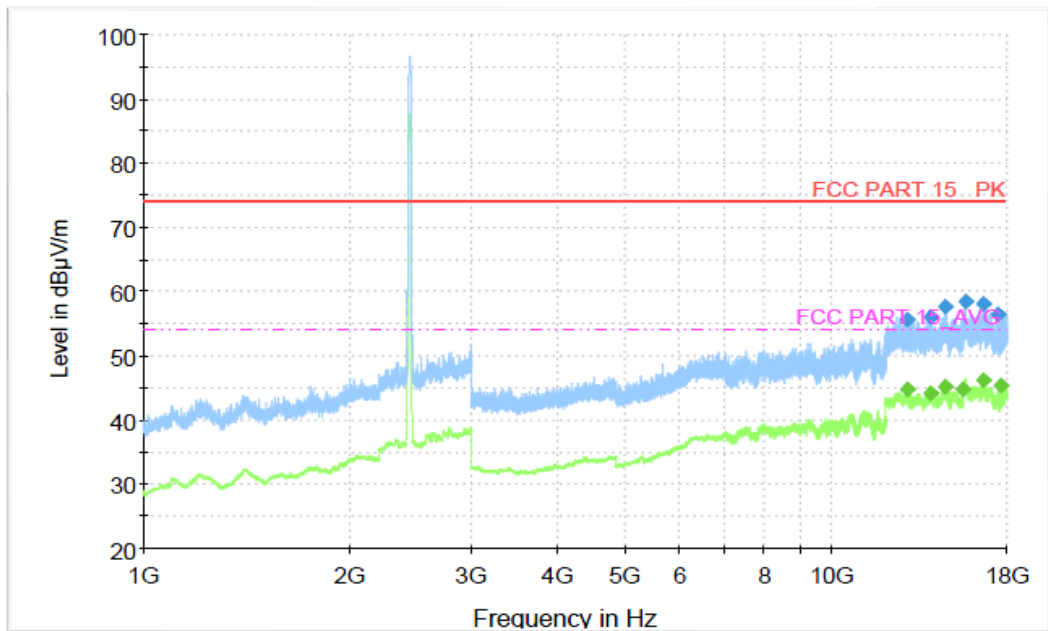


Fig.25 Radiated Spurious Emission (802.11n HT20, CH6, 1 GHz-18 GHz)

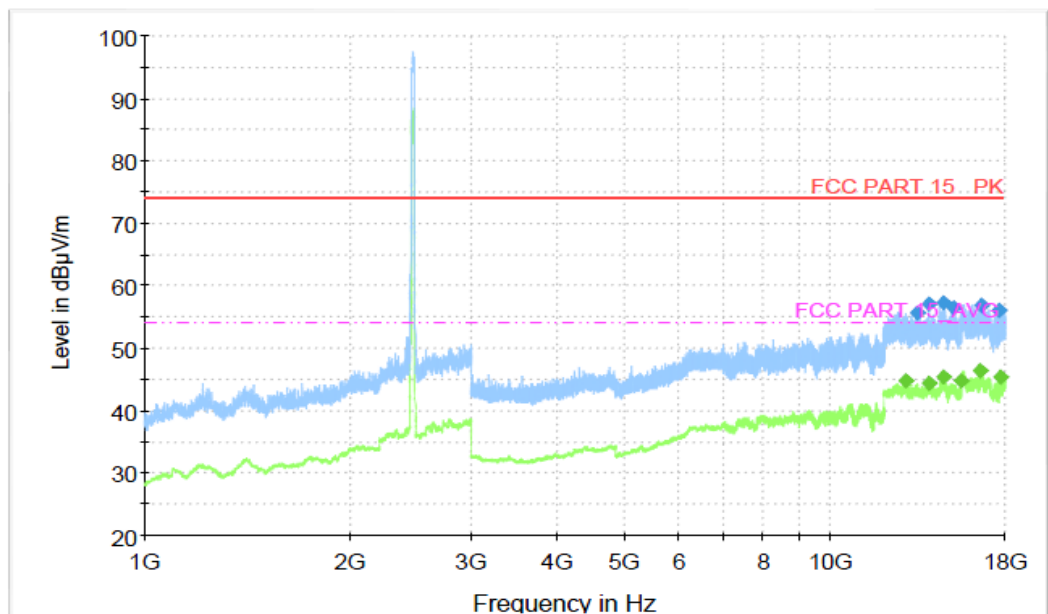


Fig.26 Radiated Spurious Emission (802.11n HT20, CH11, 1 GHz-18 GHz)

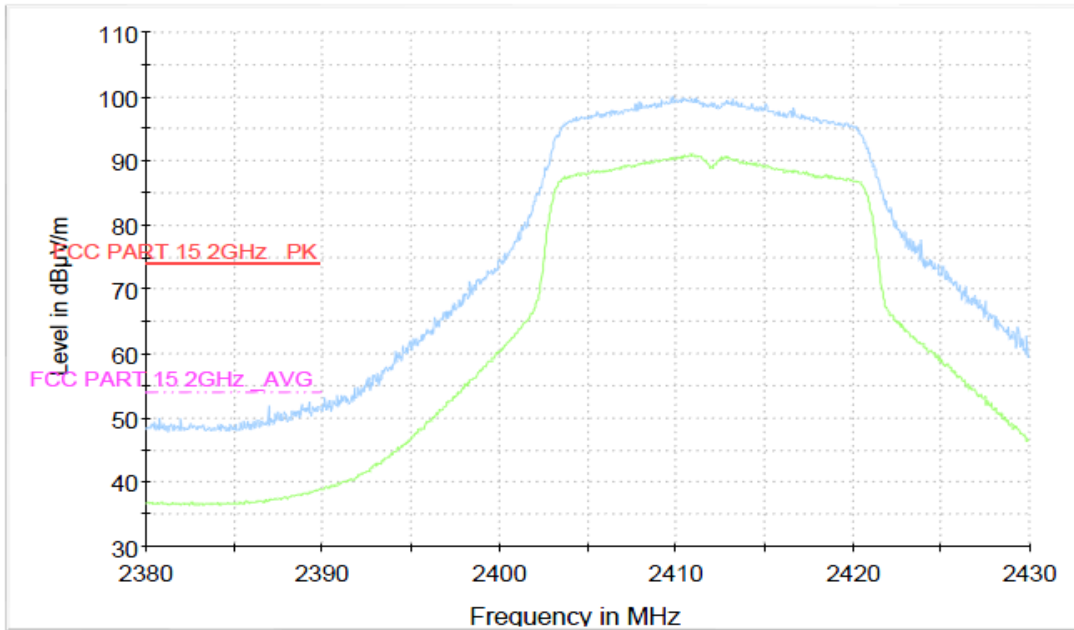


Fig.27 Radiated Restricted Band (802.11n HT20, CH1, 2.38GHz~2.45GHz)

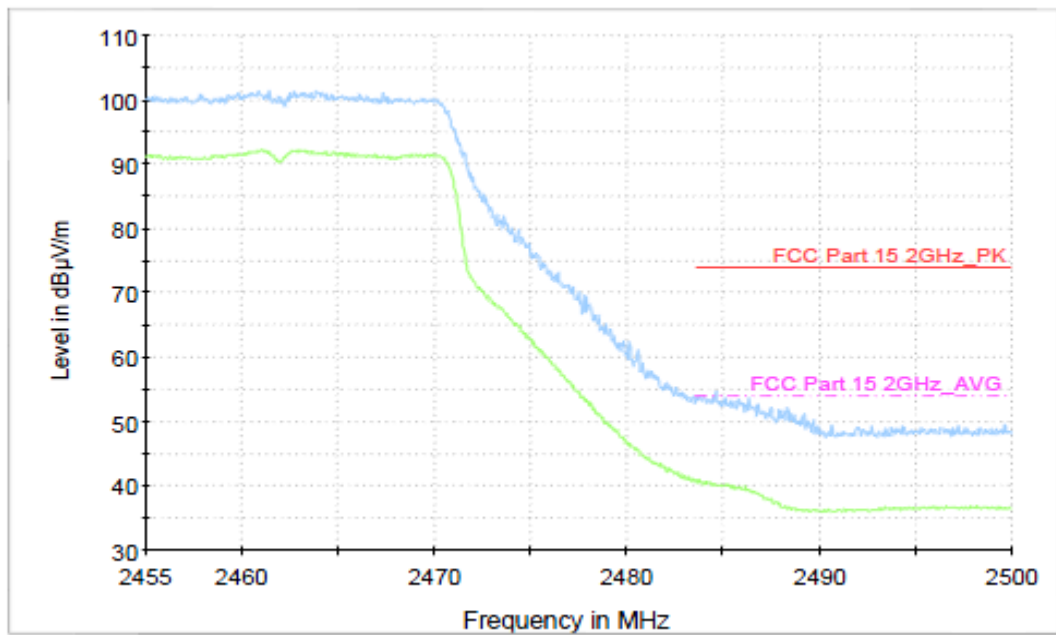


Fig.28 Radiated Restricted Band (802.11n HT20, CH11, 2.45GHz~2.5GHz)

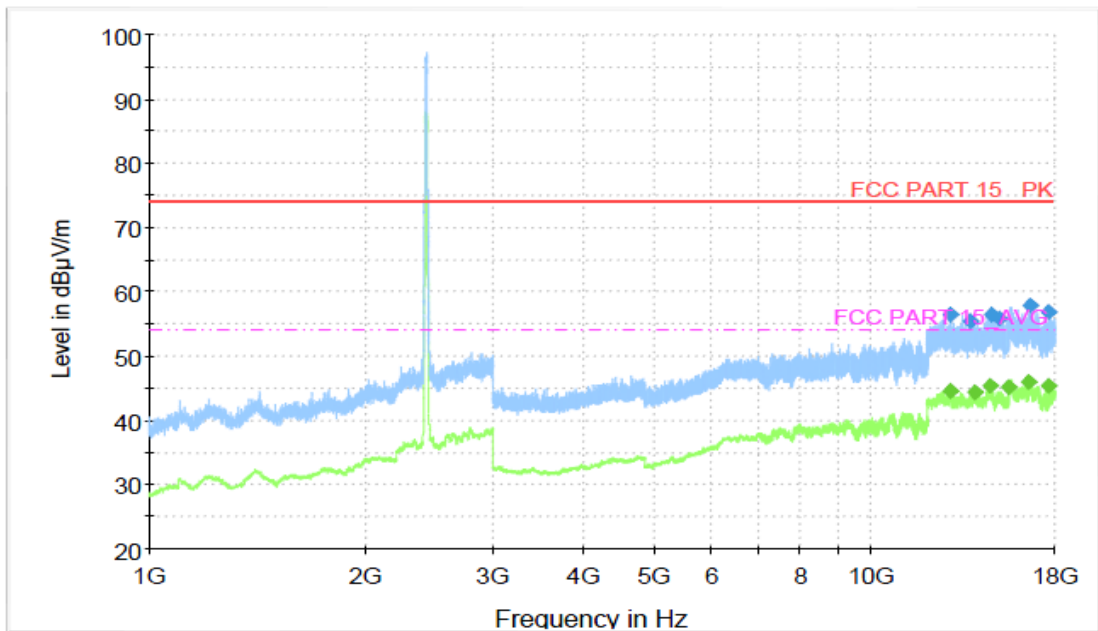


Fig.29 Radiated Spurious Emission (802.11n HT40, CH3, 1 GHz-18 GHz)

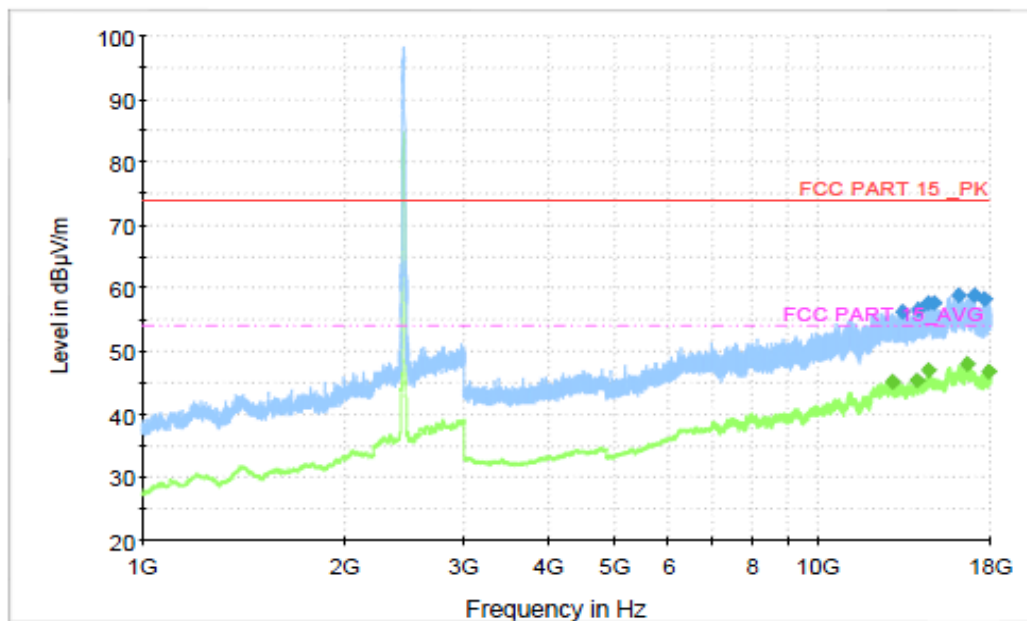


Fig.30 Radiated Spurious Emission (802.11n HT40, CH6, 1 GHz-18 GHz)



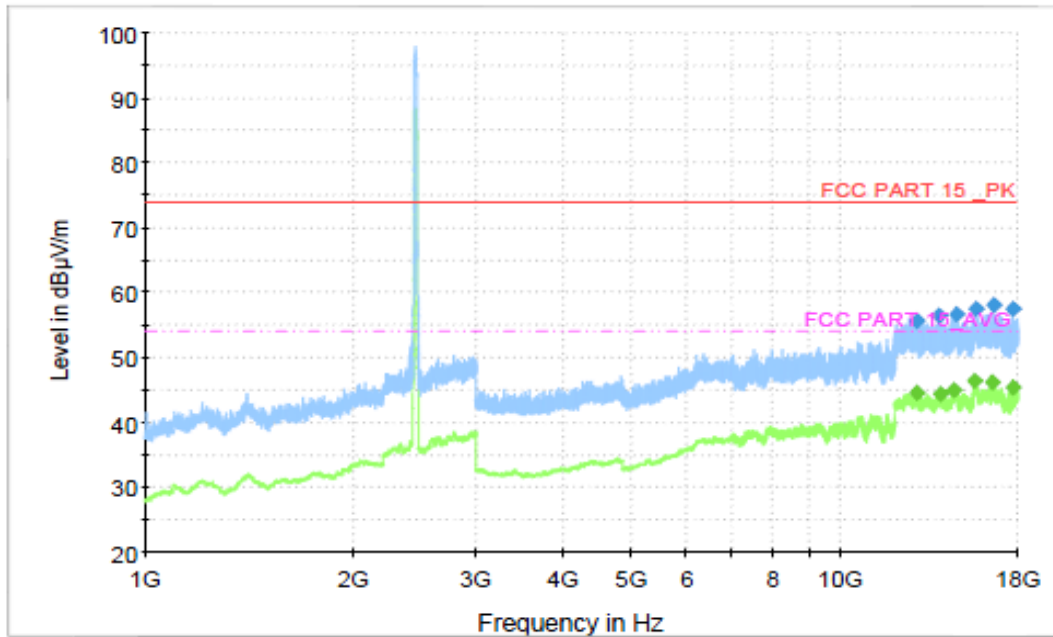


Fig.31 Radiated Spurious Emission (802.11n HT40, CH9, 1 GHz-18 GHz)



Fig.32 Radiated Restricted Band (802.11n HT40, CH1, 2.38GHz~2.45GHz)

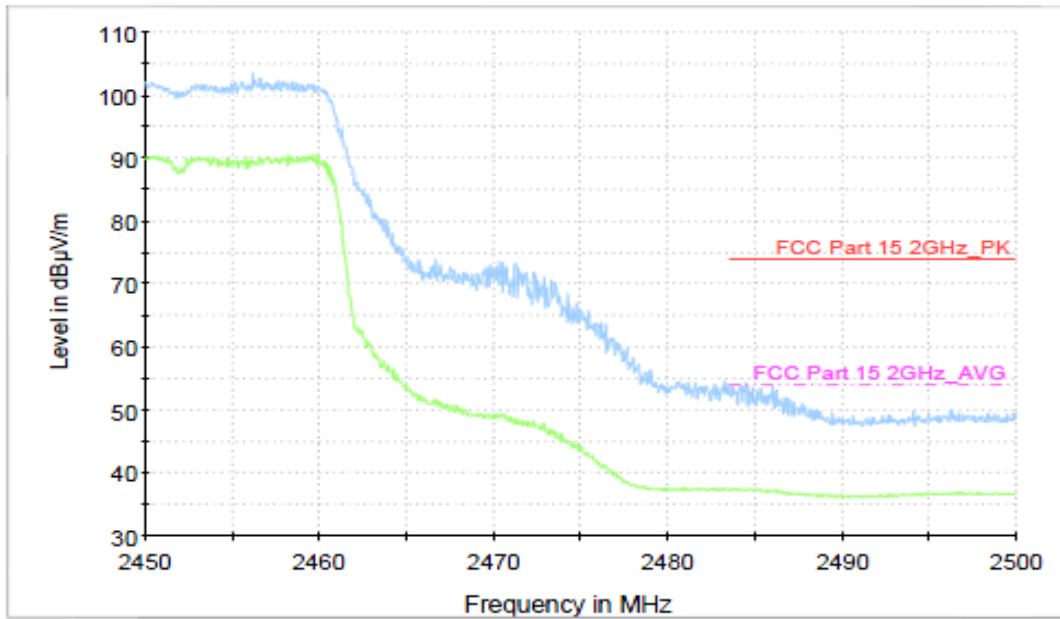


Fig.33 Radiated Restricted Band (802.11n HT40, CH11, 2.45GHz~2.5GHz)

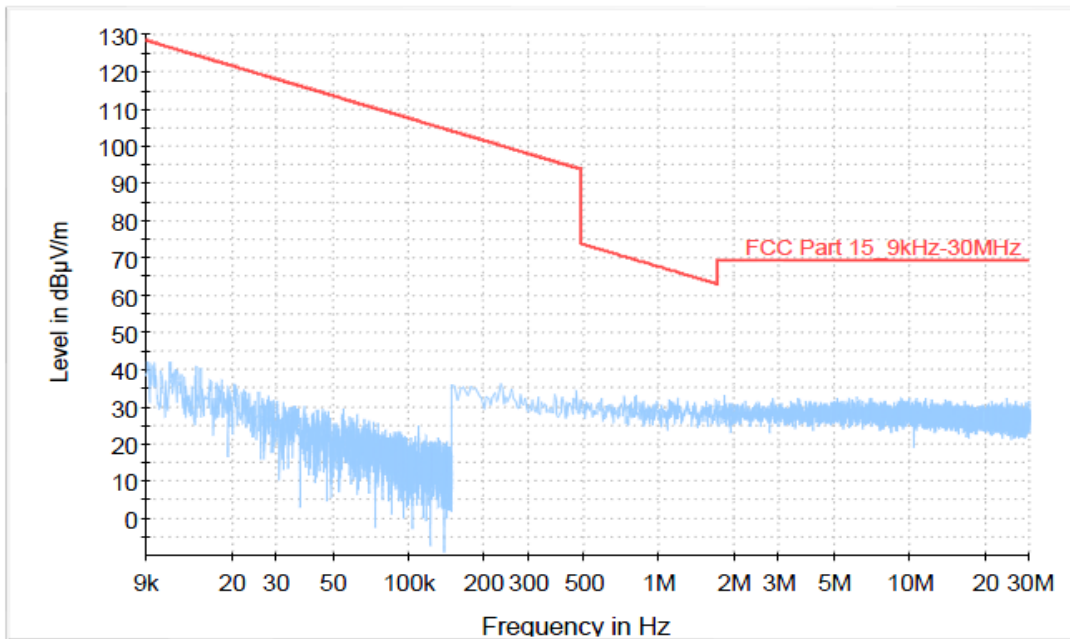


Fig.34 Radiated Spurious Emission (All Channels, 9KHz-30 MHz)

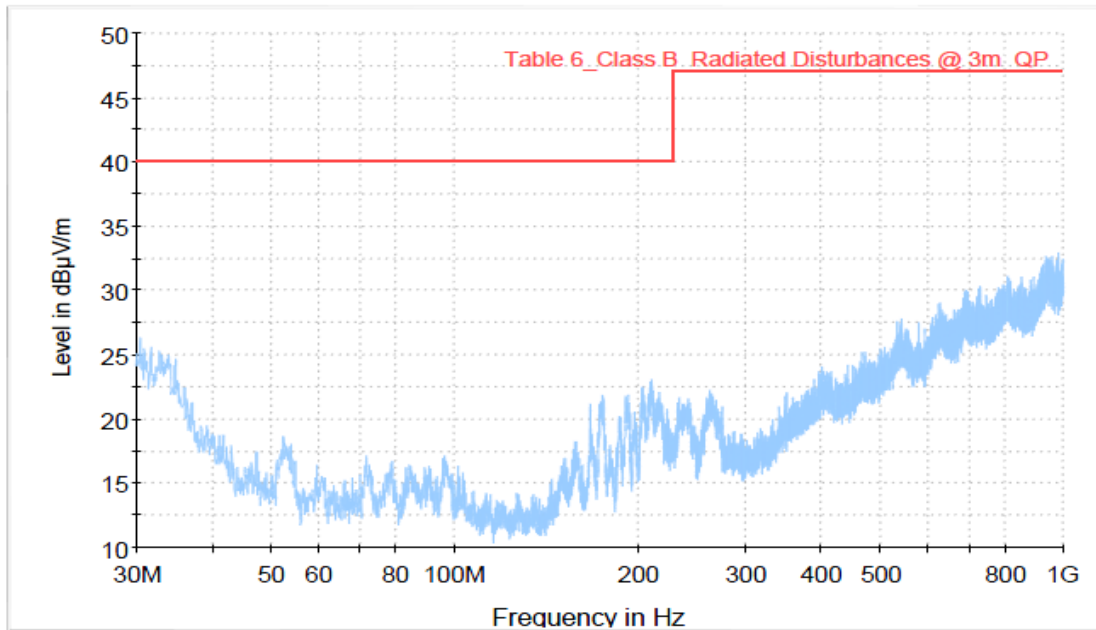


Fig.35 Radiated Spurious Emission (All Channels, 30MHz-1 GHz)

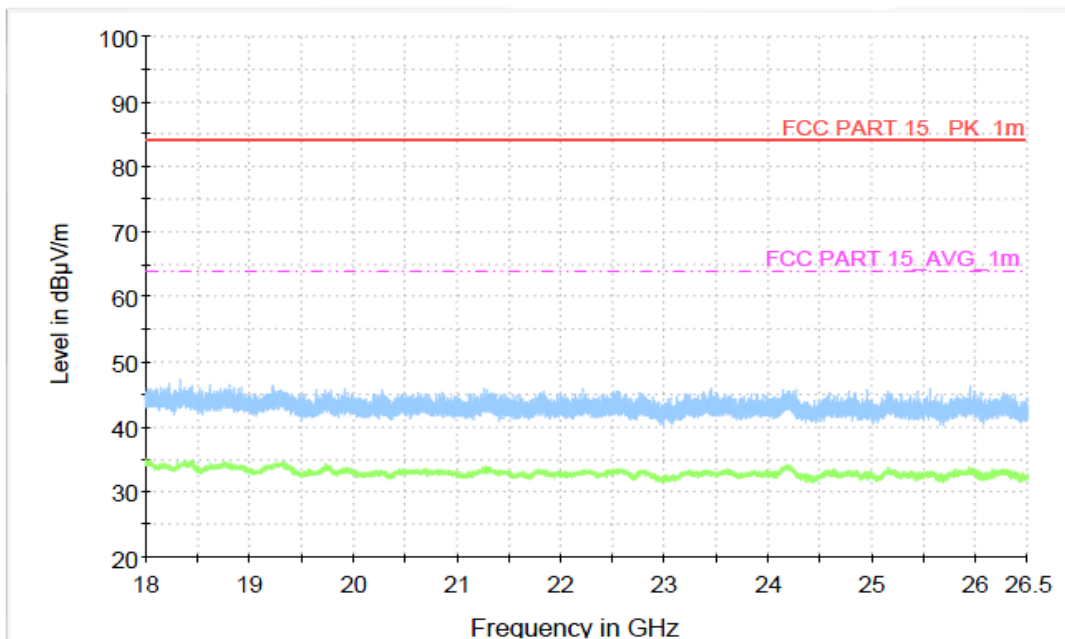


Fig.36 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz)

## A.2 AC Power line Conducted Emission

### Test Condition:

Voltage (V)	Frequency (Hz)
120	60

### Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.37	Fig.38	<b>P</b>
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

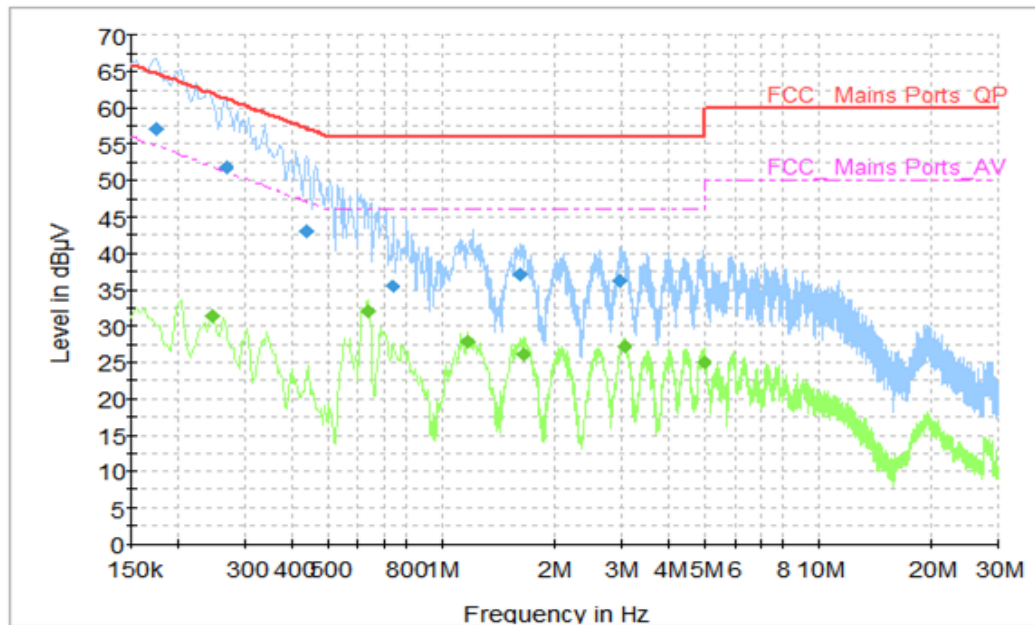
Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		Traffic	Idle	
0.16 to 0.5	66 to 56	Fig.37	Fig.38	<b>P</b>
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

**Note:** The measurement results include the L1 and N measurements.

**See below for test graphs.**

**Conclusion: PASS**



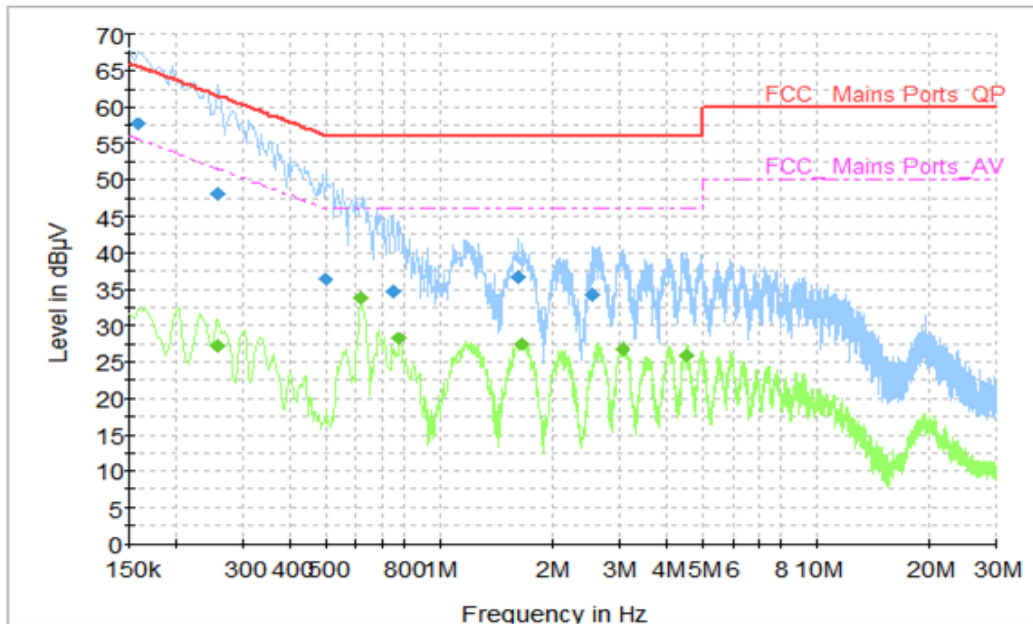
**Fig.37 AC Power line Conducted Emission (Traffic)**

**Measurement Results: Quasi Peak**

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174000	57.18	64.77	7.59	L1	ON	9.7
0.266000	51.81	61.24	9.43	L1	ON	9.7
0.438000	43.02	57.10	14.08	N	ON	9.7
0.742000	35.40	56.00	20.60	N	ON	9.7
1.610000	37.00	56.00	19.00	N	ON	9.7
2.974000	36.14	56.00	19.86	N	ON	9.7

**Measurement Results: Average**

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.246000	31.37	51.89	20.52	N	ON	9.6
0.638000	32.13	46.00	13.87	N	ON	9.7
1.170000	27.79	46.00	18.21	N	ON	9.7
1.634000	26.01	46.00	19.99	N	ON	9.7
3.050000	27.22	46.00	18.78	N	ON	9.7
4.970000	25.08	46.00	20.92	N	ON	9.7



**Fig.38 AC Power line Conducted Emission (Idle)**

**Measurement Results: Quasi Peak**

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.158000	57.72	65.57	7.85	N	ON	9.6
0.258000	48.09	61.50	13.40	N	ON	9.6
0.498000	36.41	56.03	19.62	N	ON	9.7
0.750000	34.67	56.00	21.33	N	ON	9.7
1.610000	36.59	56.00	19.41	N	ON	9.7
2.542000	34.20	56.00	21.80	N	ON	9.7

**Measurement Results: Average**

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.258000	27.21	51.50	24.28	N	ON	9.6
0.614000	33.88	46.00	12.12	N	ON	9.7
0.782000	28.17	46.00	17.83	N	ON	9.7
1.662000	27.45	46.00	18.55	N	ON	9.7
3.058000	26.76	46.00	19.24	N	ON	9.7
4.486000	25.94	46.00	20.06	N	ON	9.7

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