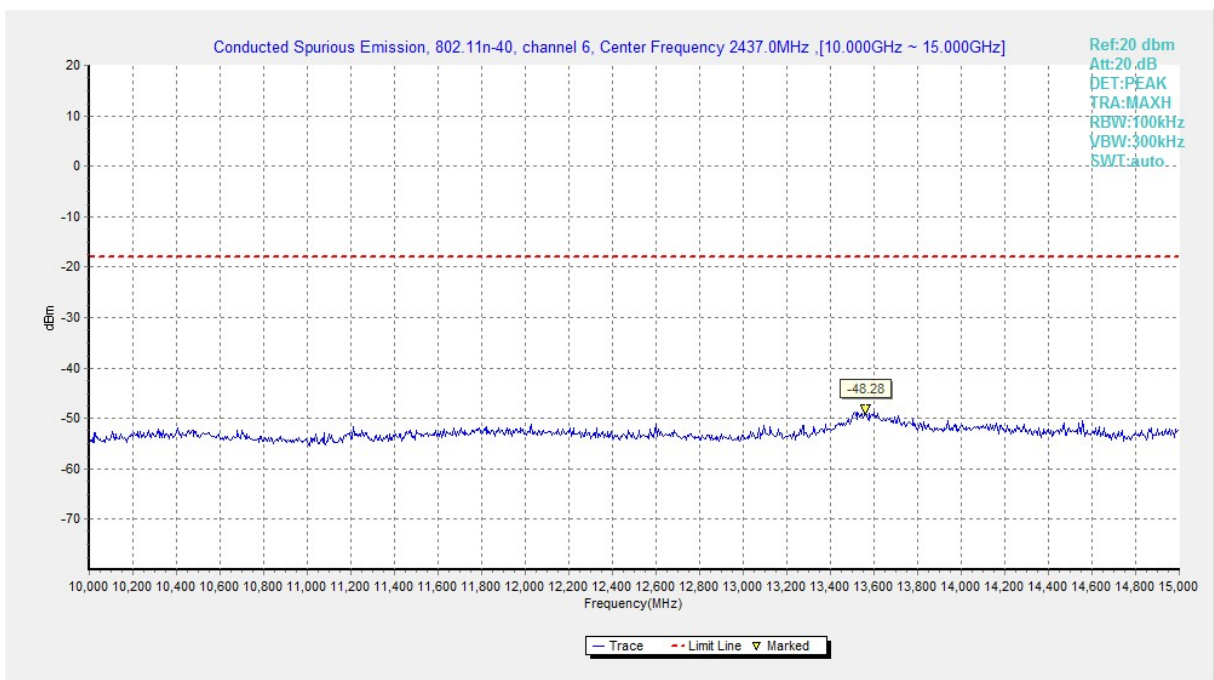
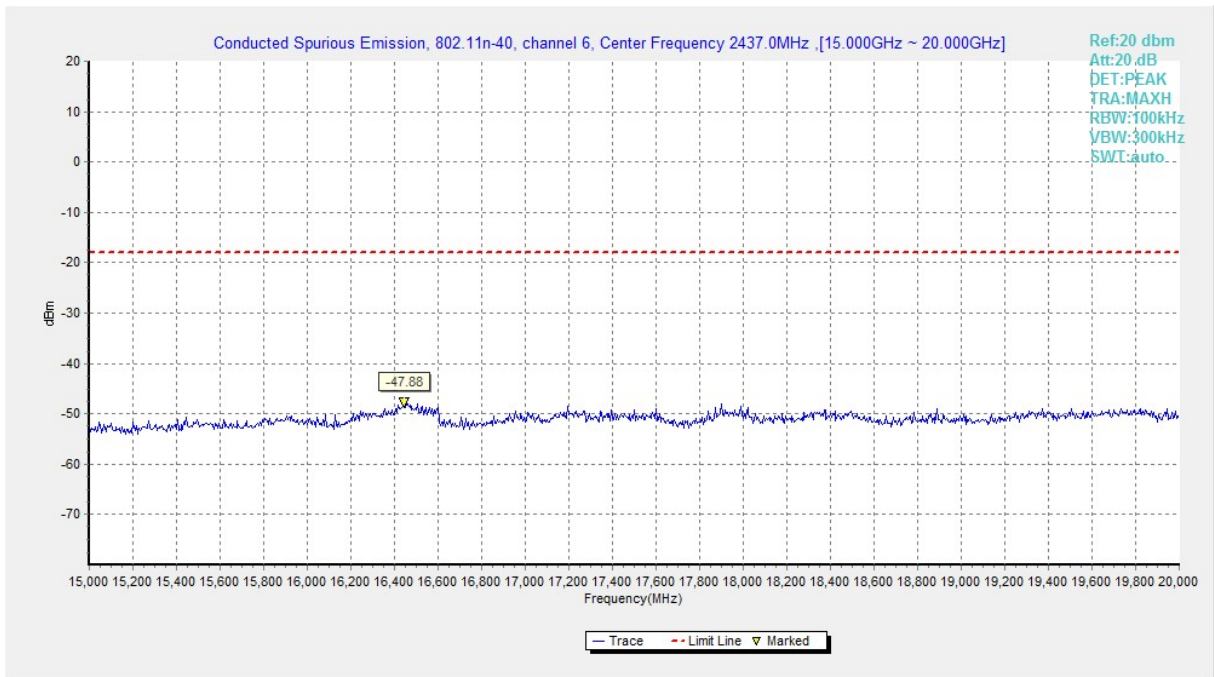


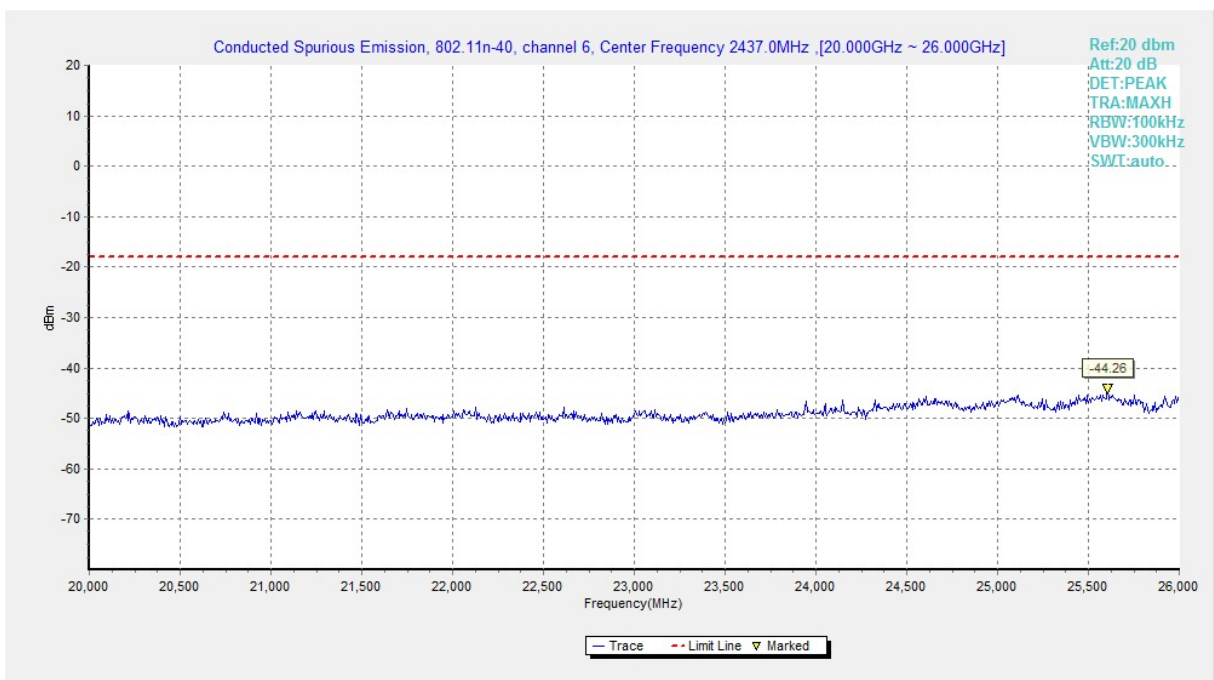
**Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)**



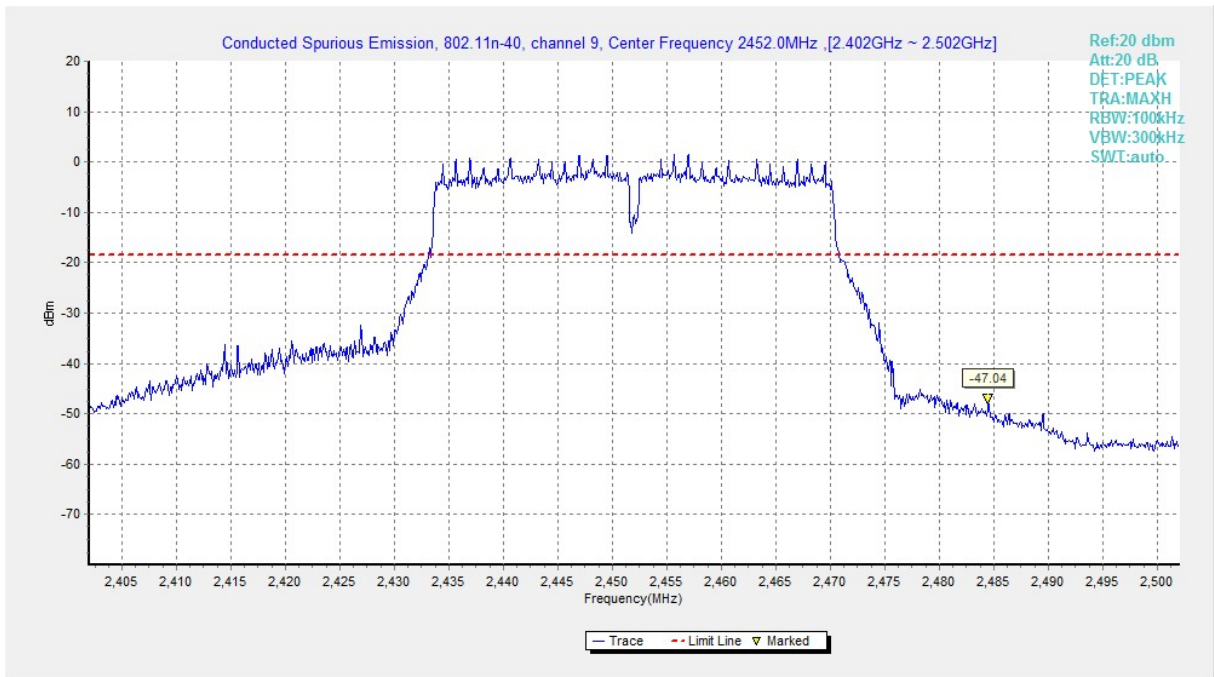
**Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)**



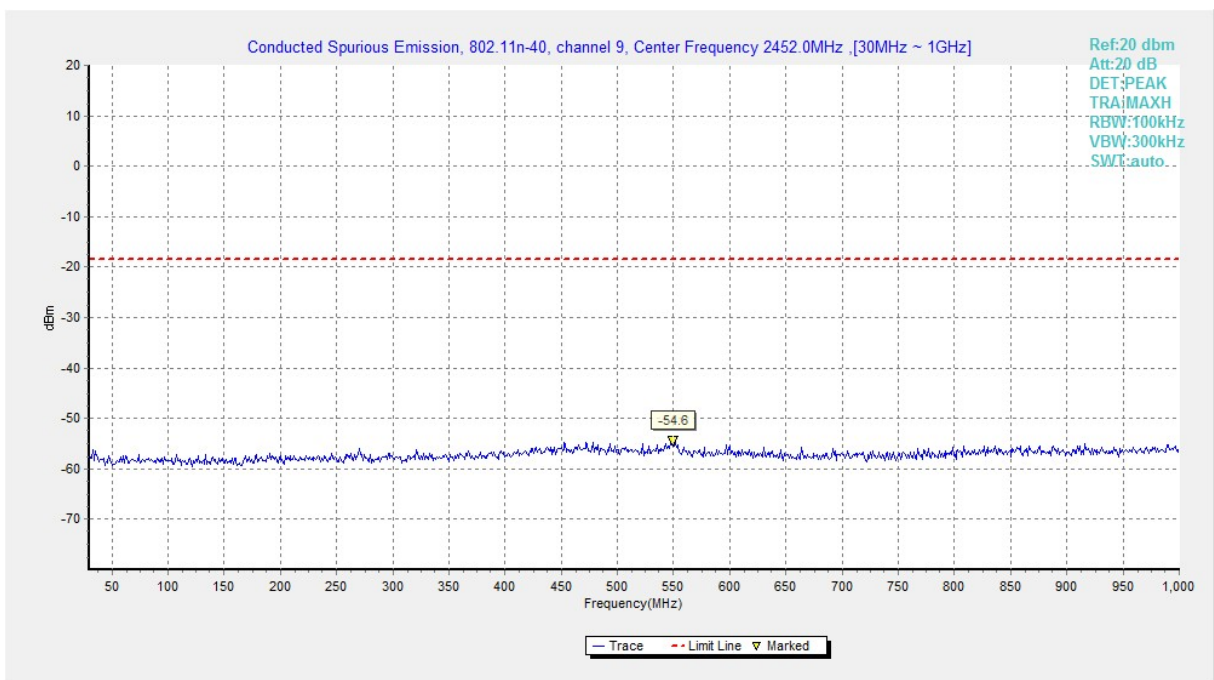
**Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)**



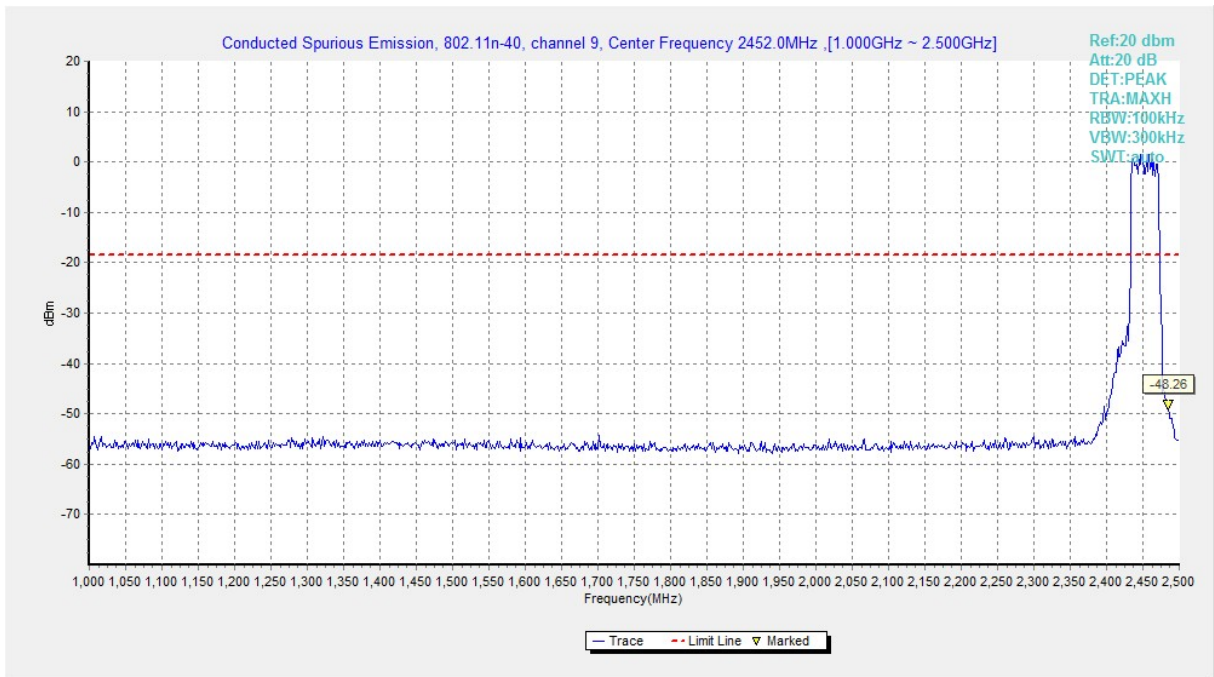
**Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)**



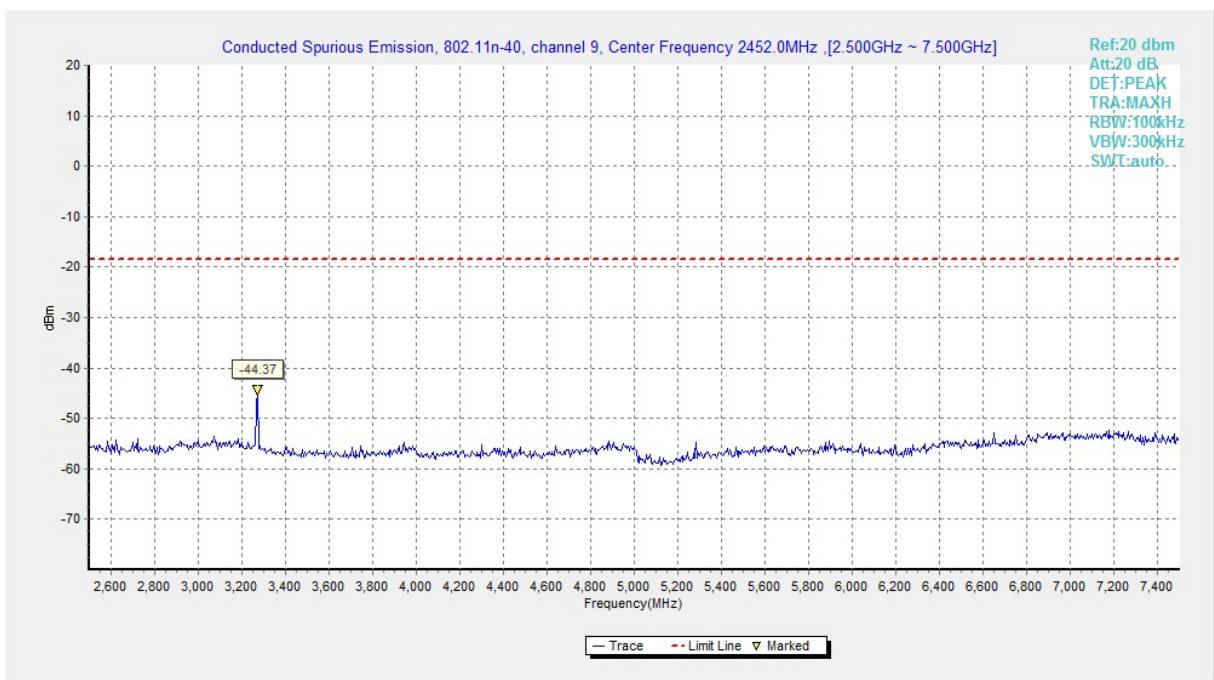
**Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)**



**Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)**

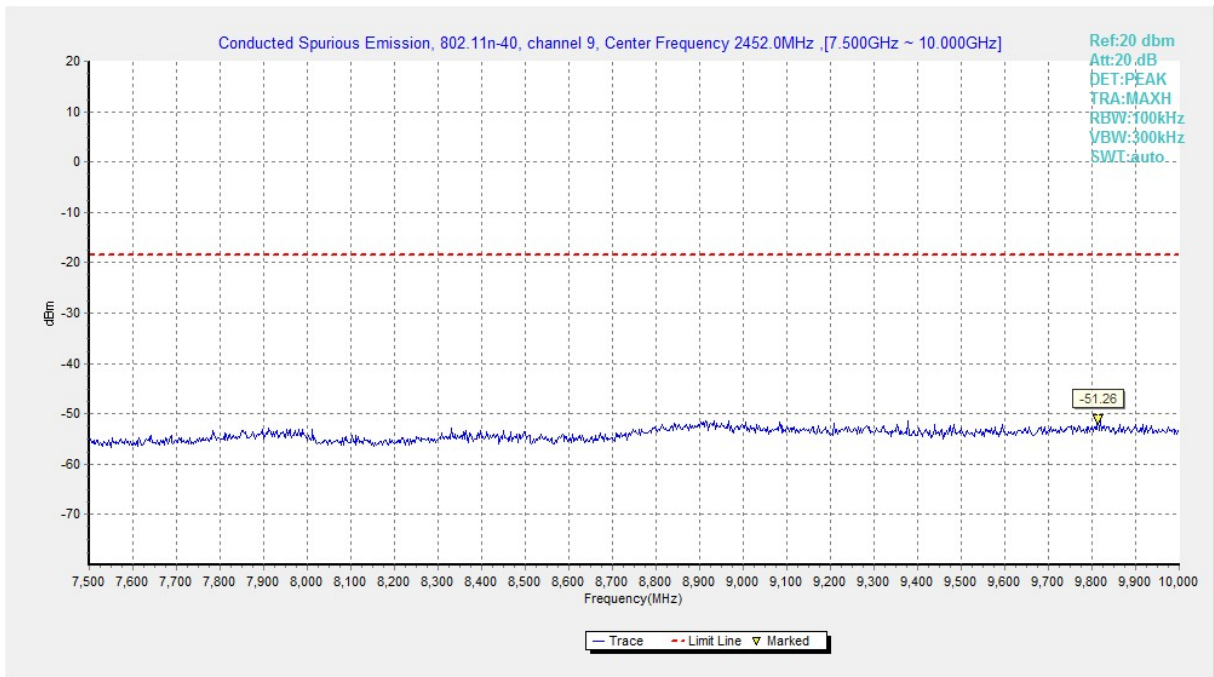


**Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)**

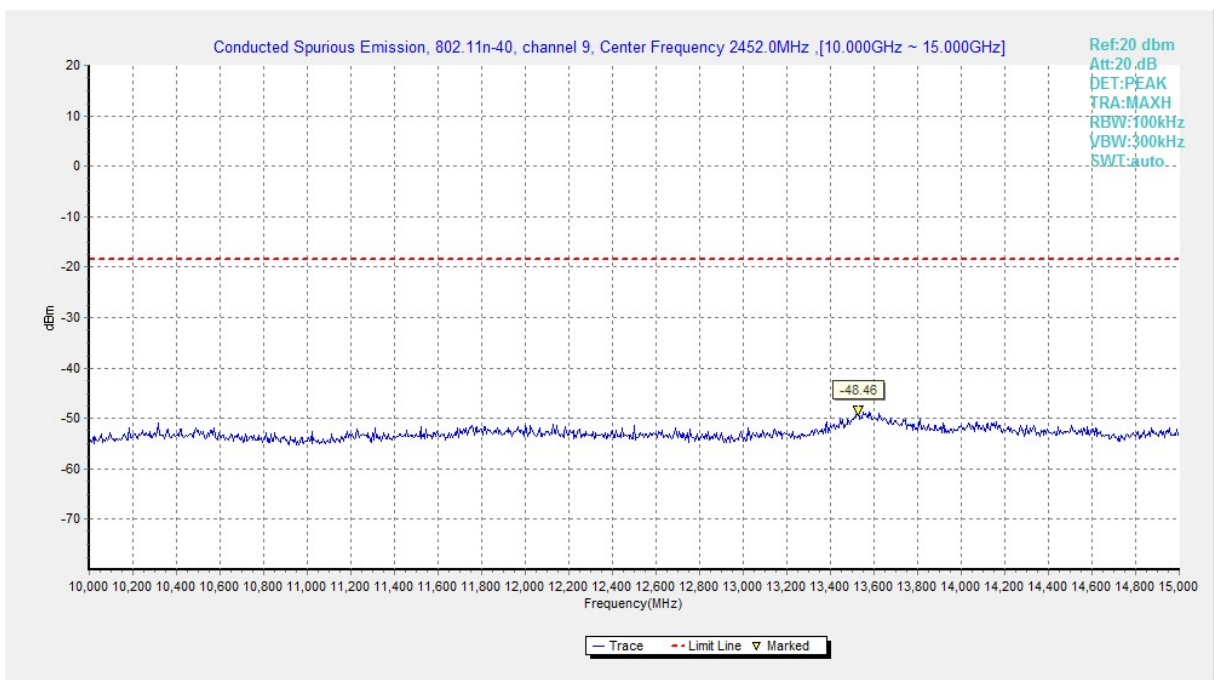


**Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)**

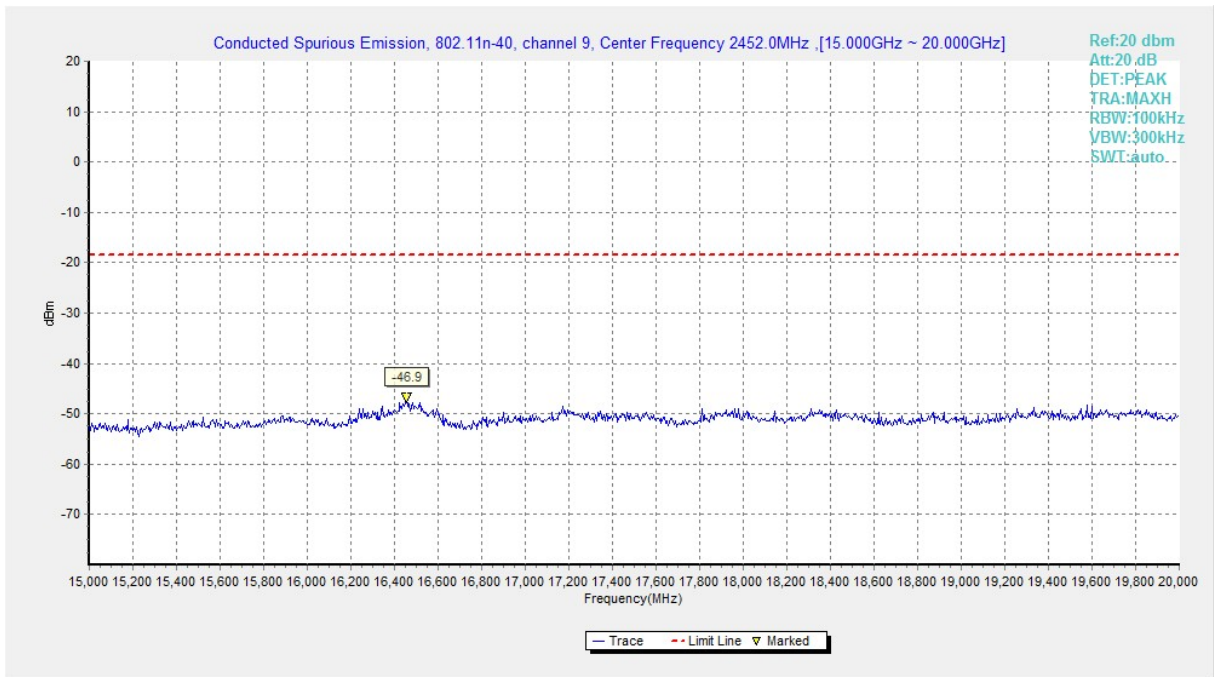




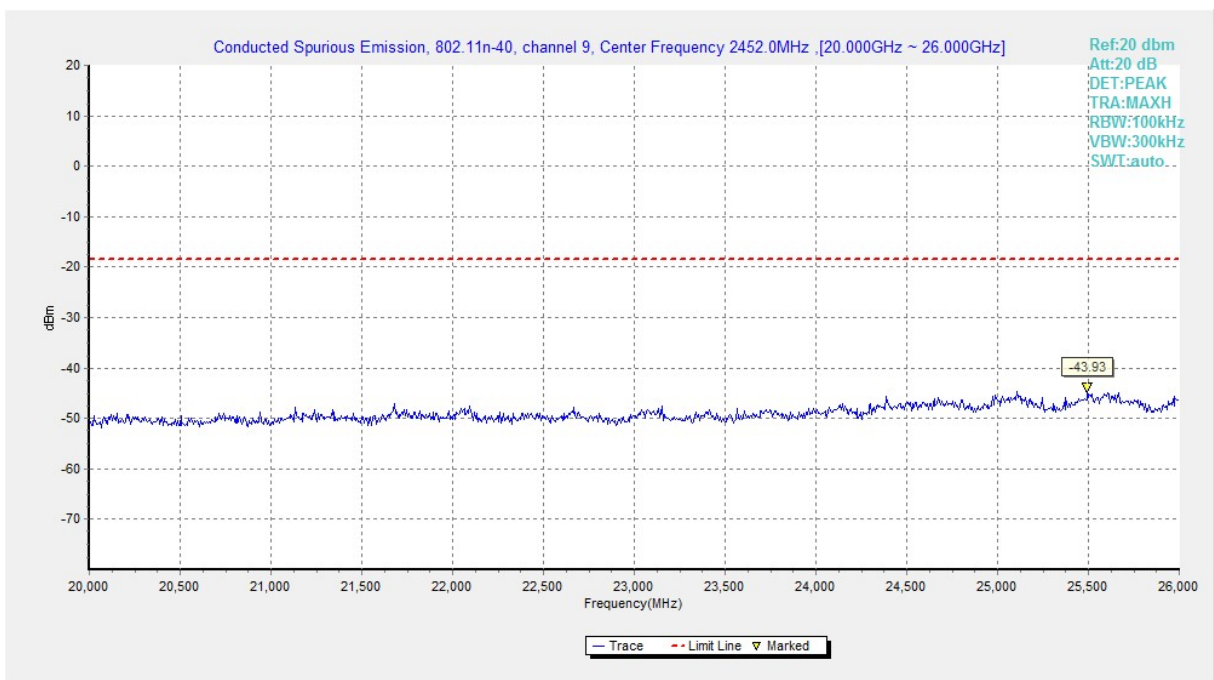
**Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)**



**Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)**



**Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)**



**Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)**

## A.6.2 Transmitter Spurious Emission - Radiated

**Method of Measurement:** See ANSI C63.10-2013-clause 6.4&6.5 & 6.6

**Measurement Limit:**

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	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(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Field strength( $\mu$ V/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

### 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	100KHz/300KHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

**EUT ID:EUT1(UT16a)**

**Measurement results for Set.1:**
**802.11b mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.31GHz~2.43GHz---L	Fig.A.6.2.1	<b>P</b>
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.2	<b>P</b>

**802.11g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.31GHz~2.43GHz---L	Fig.A.6.2.3	<b>P</b>
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.4	<b>P</b>

**802.11n-HT20 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.31GHz~2.43GHz---L	Fig.A.6.2.5	<b>P</b>
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.6	<b>P</b>

**802.11n-HT40 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	3	2.31GHz~2.43GHz---L	Fig.A.6.2.7	<b>P</b>
	9	2.45GHz~2.50GHz---H	Fig.A.6.2.8	<b>P</b>

**Conclusion: Pass**
**Note:**

A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss", and including the gain of receive antenna, 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:

$$\text{Result} = P_{Mea} + A_{Rpl} = P_{Mea} + \text{Cable Loss} + \text{Antenna Factor}$$



**Peak**
**802.11b**
**Ch1**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17691.5	57.7	-25.7	46.0	37.5	74.0	36.5	V
17973.5	57.5	-25.5	46.7	36.3	74.0	37.7	V
17996	57.4	-25.5	46.7	36.2	74.0	37.8	V
17956	57.3	-25.5	46.7	36.1	74.0	37.9	V
17756	57.2	-25.5	46.7	36.0	74.0	38.0	V
2389.7	57.3	-20.0	28.1	49.3	74.0	24.7	H

**Ch6**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17981	57.5	-25.5	46.7	36.3	74.0	37.7	V
17874	57.1	-25.5	46.7	35.9	74.0	38.1	V
17886.5	57.1	-25.5	46.7	35.9	74.0	38.1	V
17987.5	57.1	-25.5	46.7	35.9	74.0	38.1	V
17877.5	57.0	-25.5	46.7	35.8	74.0	38.2	V
17901.5	57.0	-25.5	46.7	35.8	74.0	38.2	V

**Ch11**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17895.5	57.6	-25.5	46.7	36.4	74.0	37.6	V
17944	57.5	-25.5	46.7	36.3	74.0	37.7	V
17947	57.4	-25.5	46.7	36.2	74.0	37.8	V
17955	57.4	-25.5	46.7	36.2	74.0	37.8	V
17978	57.4	-25.5	46.7	36.2	74.0	37.8	V
2495.7	55.5	-20.0	28.3	47.2	74.0	26.8	H

**802.11g**
**Ch1**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17923.5	58.0	-25.5	46.7	36.8	74.0	37.2	V
17967.5	57.6	-25.5	46.7	36.4	74.0	37.6	V
17997	57.5	-25.5	46.7	36.3	74.0	37.7	V
17850	57.3	-25.5	46.7	36.1	74.0	37.9	V
17994.5	57.3	-25.5	46.7	36.1	74.0	37.9	V
2389.7	55.8	-20.0	28.1	47.8	74.0	26.2	H

**Ch6**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.5	58.0	-25.5	46.7	36.8	74.0	37.2	V
17960	57.8	-25.5	46.7	36.6	74.0	37.4	V
17996.5	57.7	-25.5	46.7	36.5	74.0	37.5	V
17984.5	57.6	-25.5	46.7	36.4	74.0	37.6	V
17944	57.3	-25.5	46.7	36.1	74.0	37.9	V
17848.5	57.2	-25.5	46.7	36.0	74.0	38.0	V

**Ch11**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17977	58.0	-25.5	46.7	36.8	74.0	37.2	V
17984.5	57.3	-25.5	46.7	36.1	74.0	37.9	V
17958.5	57.2	-25.5	46.7	36.0	74.0	38.0	V
17938	57.1	-25.5	46.7	35.9	74.0	38.1	V
17957.5	57.1	-25.5	46.7	35.9	74.0	38.1	V
2488.4	57.5	-20.0	28.3	49.2	74.0	24.8	H

**802.11n-HT20**
**Ch1**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17974.5	57.6	-25.5	46.7	36.4	74.0	37.6	V
17985	57.4	-25.5	46.7	36.2	74.0	37.8	V
17993	57.1	-25.5	46.7	35.9	74.0	38.1	V
17882	57.0	-25.5	46.7	35.8	74.0	38.2	V
17943.5	57.0	-25.5	46.7	35.8	74.0	38.2	V
2389.6	57.9	-20.0	28.1	49.9	74.0	24.1	H

**Ch6**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.5	58.9	-25.5	46.7	37.7	74.0	36.3	V
17976.5	58.3	-25.5	46.7	37.1	74.0	36.9	V
17976	57.8	-25.5	46.7	36.6	74.0	37.4	V
17913	57.4	-25.5	46.7	36.2	74.0	37.8	V
17896.5	57.2	-25.5	46.7	36.0	74.0	38.0	V
17930.5	57.2	-25.5	46.7	36.0	74.0	38.0	V

**Ch11**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17877	57.7	-25.5	46.7	36.5	74.0	37.5	V
17948	57.5	-25.5	46.7	36.3	74.0	37.7	V
17984.5	57.2	-25.5	46.7	36.0	74.0	38.0	V
17852.5	57.0	-25.5	46.7	35.8	74.0	38.2	V
17575	56.9	-25.7	46.0	36.7	74.0	37.3	V
2485.5	55.9	-20.0	28.3	47.6	74.0	26.4	H

**802.11n-HT40**
**Ch3**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17987	57.8	-25.5	46.7	36.6	74.0	37.4	V
17981.5	57.6	-25.5	46.7	36.4	74.0	37.6	V
17905	57.4	-25.5	46.7	36.2	74.0	37.8	V
17900.5	57.3	-25.5	46.7	36.1	74.0	37.9	V
17943.5	57.3	-25.5	46.7	36.1	74.0	37.9	V
2388.5	60.9	-20.0	28.1	52.9	74.0	21.1	H

**Ch6**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17970.5	58.4	-25.5	46.7	37.2	74.0	36.8	V
17953	57.4	-25.5	46.7	36.2	74.0	37.8	V
17961.5	57.4	-25.5	46.7	36.2	74.0	37.8	V
17933	57.3	-25.5	46.7	36.1	74.0	37.9	V
17869	57.2	-25.5	46.7	36.0	74.0	38.0	V
17914.5	57.2	-25.5	46.7	36.0	74.0	38.0	V

**Ch9**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17960.5	58.1	-25.5	46.7	36.9	74.0	37.1	V
17737	58.0	-25.5	46.7	36.8	74.0	37.2	V
17970.5	58.0	-25.5	46.7	36.8	74.0	37.2	V
17903	57.7	-25.5	46.7	36.5	74.0	37.5	V
17952	57.6	-25.5	46.7	36.4	74.0	37.6	V
2487.5	60.0	-20.0	28.3	51.7	74.0	22.3	H

**Average**
**802.11b**

## Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.5	47.0	-25.5	46.7	25.8	54.0	28.2	V
17971.5	46.9	-25.5	46.7	25.7	54.0	28.3	V
17948	46.7	-25.5	46.7	25.5	54.0	28.5	V
17952.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17955.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
2386.4	45.0	-20.0	28.1	37.0	54.0	17.0	H

## Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17955	46.8	-25.5	46.7	25.6	54.0	28.4	V
17983.5	46.8	-25.5	46.7	25.6	54.0	28.4	V
17953	46.7	-25.5	46.7	25.5	54.0	28.5	V
17879.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17953.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17968.5	46.6	-25.5	46.7	25.4	54.0	28.6	V

## Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17981.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17984	46.7	-25.5	46.7	25.5	54.0	28.5	V
17995	46.7	-25.5	46.7	25.5	54.0	28.5	V
17944.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17966.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
2486.6	43.1	-20.0	28.3	34.8	54.0	19.2	H



**802.11g**
**Ch1**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17955.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17981.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17966	46.6	-25.5	46.7	25.4	54.0	28.6	V
17981	46.6	-25.5	46.7	25.4	54.0	28.6	V
17944	46.5	-25.5	46.7	25.3	54.0	28.7	V
2390	44.2	-20.0	28.1	36.2	54.0	17.8	H

**Ch6**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17992	46.9	-25.5	46.7	25.7	54.0	28.3	V
17943	46.7	-25.5	46.7	25.5	54.0	28.5	V
17954	46.7	-25.5	46.7	25.5	54.0	28.5	V
17965.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17941.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17968.5	46.6	-25.5	46.7	25.4	54.0	28.6	V

**Ch11**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.5	46.8	-25.5	46.7	25.6	54.0	28.4	V
17988	46.7	-25.5	46.7	25.5	54.0	28.5	V
17974.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17941.5	46.5	-25.5	46.7	25.3	54.0	28.7	V
17957.5	46.5	-25.5	46.7	25.3	54.0	28.7	V
2485.1	43.3	-20.0	28.3	35.0	54.0	19.0	H

**802.11n-HT20**
**Ch1**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17991.5	46.8	-25.5	46.7	25.6	54.0	28.4	V
17979	46.7	-25.5	46.7	25.5	54.0	28.5	V
17998	46.7	-25.5	46.7	25.5	54.0	28.5	V
17948.5	46.5	-25.5	46.7	25.3	54.0	28.7	V
17957	46.5	-25.5	46.7	25.3	54.0	28.7	V
2389.9	45.3	-20.0	28.1	37.3	54.0	16.7	H

**Ch6**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17989	47.0	-25.5	46.7	25.8	54.0	28.2	V
17944	46.8	-25.5	46.7	25.6	54.0	28.4	V
17954.5	46.8	-25.5	46.7	25.6	54.0	28.4	V
17976.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17980.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17868.5	46.5	-25.5	46.7	25.3	54.0	28.7	V

**Ch11**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17997	46.9	-25.5	46.7	25.7	54.0	28.3	V
17977.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17953	46.6	-25.5	46.7	25.4	54.0	28.6	V
17955.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17959.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
2485.1	43.7	-20.0	28.3	35.4	54.0	18.6	H

**802.11n-HT40**
**Ch3**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17947	47.0	-25.5	46.7	25.8	54.0	28.2	V
17962	46.6	-25.5	46.7	25.4	54.0	28.6	V
17973.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17978	46.6	-25.5	46.7	25.4	54.0	28.6	V
17990	46.6	-25.5	46.7	25.4	54.0	28.6	V
2389.9	49.9	-20.0	28.1	41.9	54.0	12.1	H

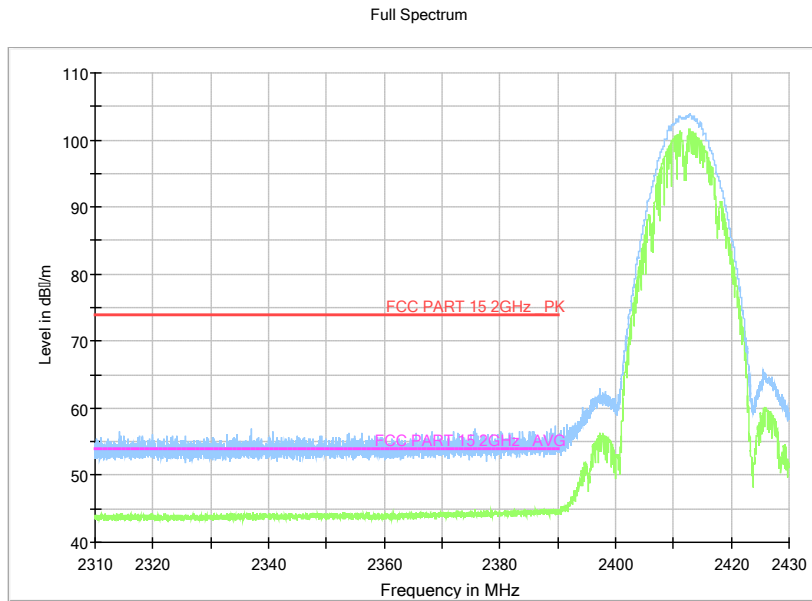
**Ch6**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17987.5	46.7	-25.5	46.7	25.5	54.0	28.5	V
17940.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17947	46.6	-25.5	46.7	25.4	54.0	28.6	V
17950	46.6	-25.5	46.7	25.4	54.0	28.6	V
17962	46.6	-25.5	46.7	25.4	54.0	28.6	V
17964	46.6	-25.5	46.7	25.4	54.0	28.6	V

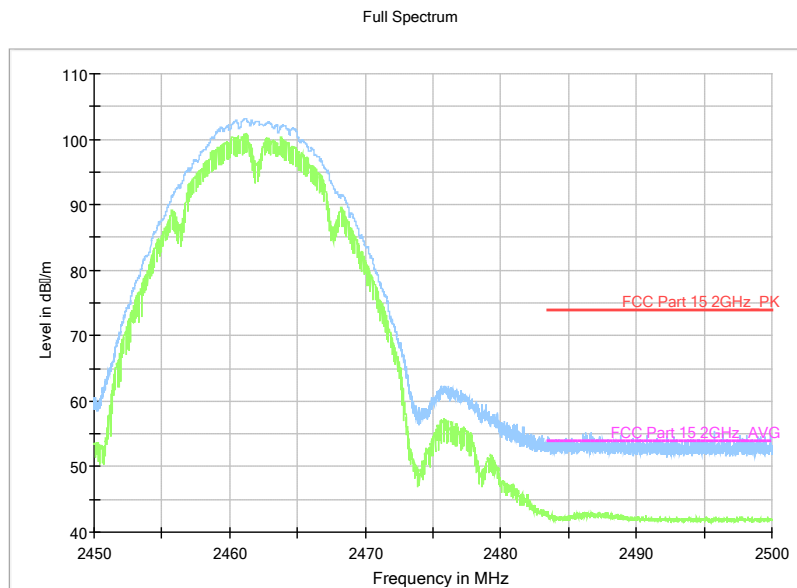
**Ch9**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17952.5	46.8	-25.5	46.7	25.6	54.0	28.4	V
17903	46.6	-25.5	46.7	25.4	54.0	28.6	V
17960.5	46.6	-25.5	46.7	25.4	54.0	28.6	V
17941.5	46.5	-25.5	46.7	25.3	54.0	28.7	V
17955.5	46.5	-25.5	46.7	25.3	54.0	28.7	V
2485	46.9	-20.0	28.3	38.6	54.0	15.4	H

Test graphs as below:

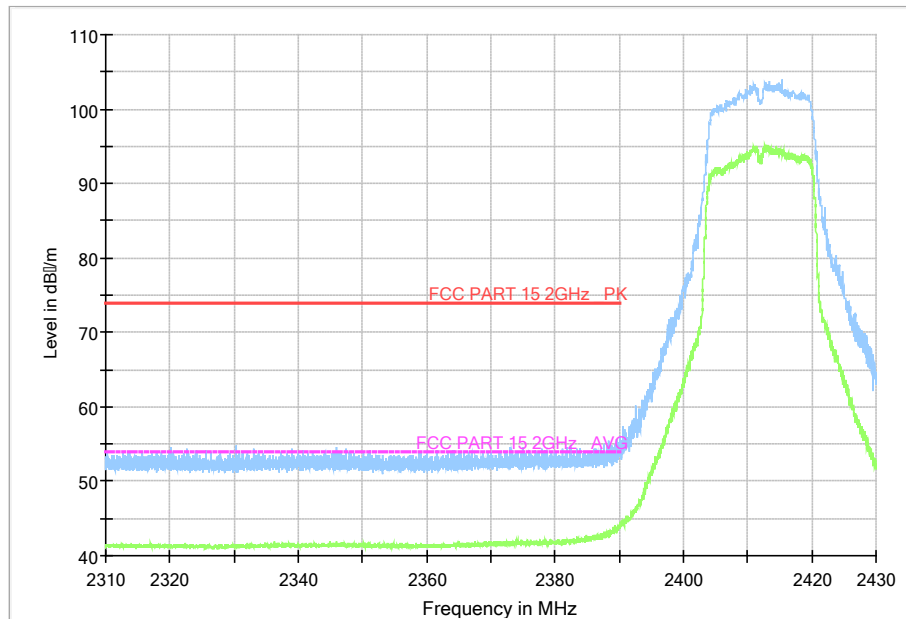


**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz**



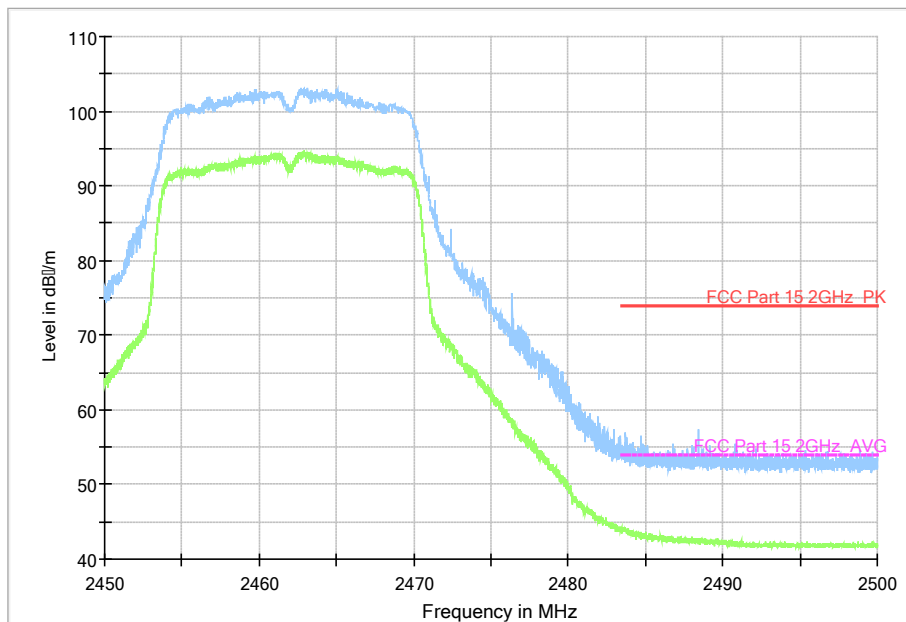
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**

Full Spectrum



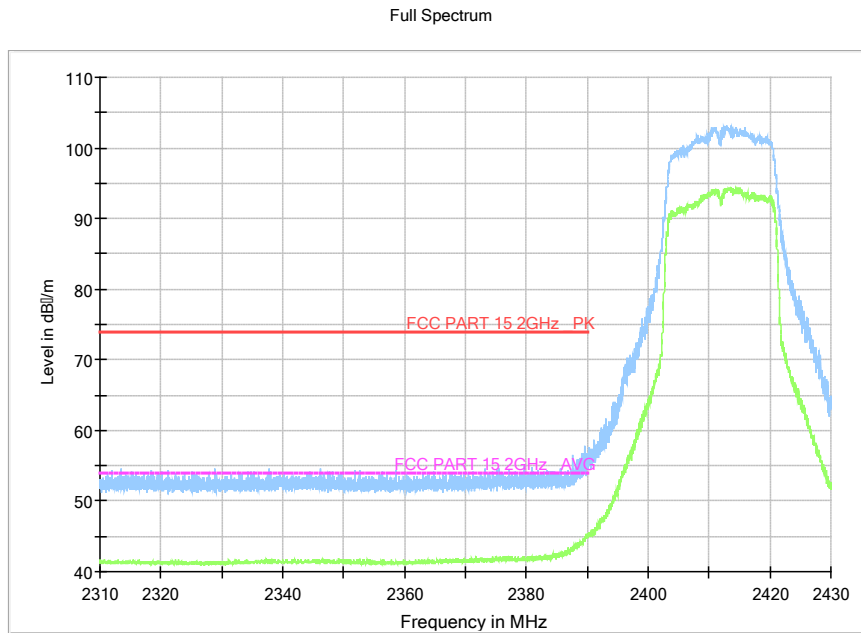
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz**

Full Spectrum

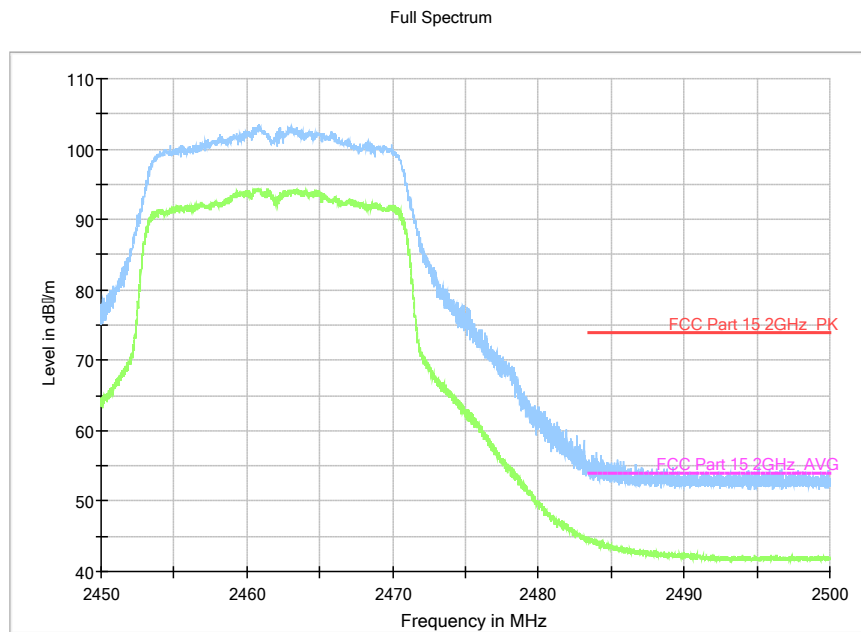


**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**



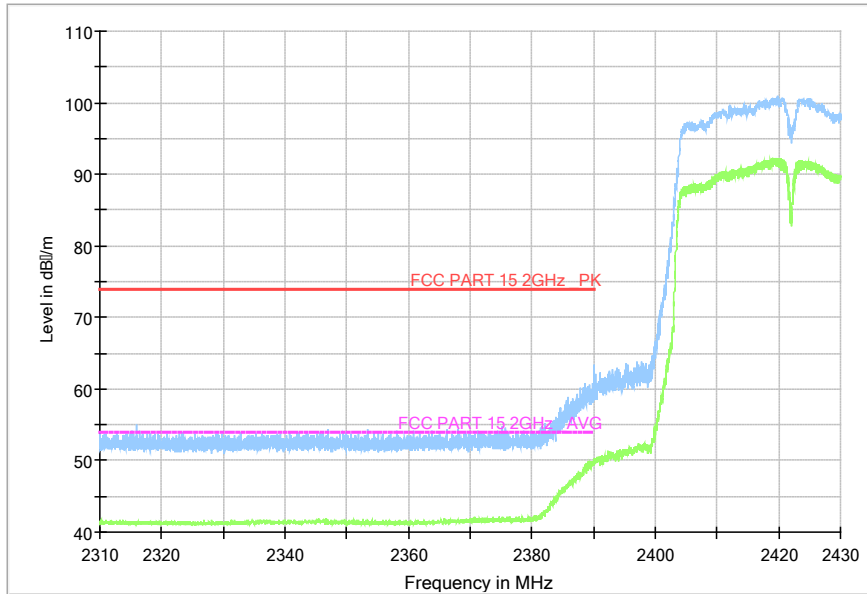


**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz**



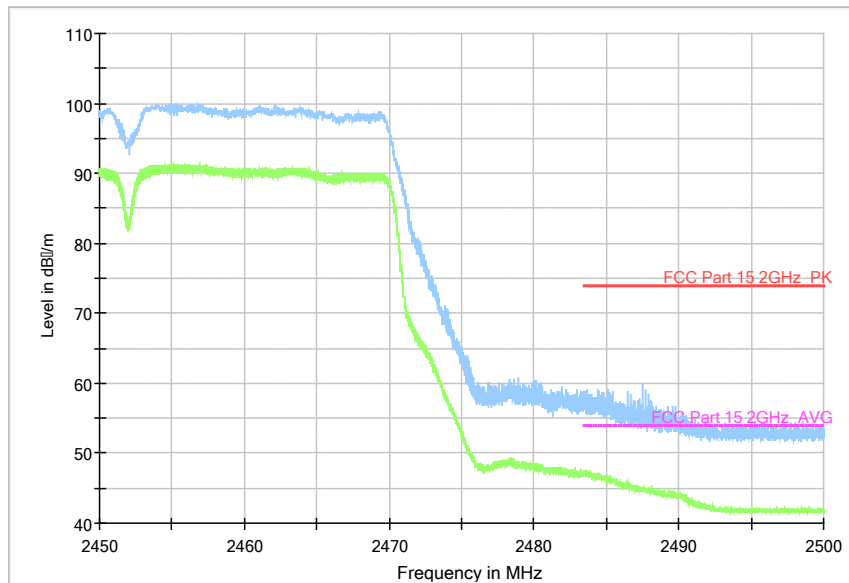
**Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz**

Full Spectrum



**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.45GHz**

Full Spectrum



**Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz**

## **A.7. AC Power-line Conducted Emission**

### **Method of Measurement: See ANSI C63.10-2013-clause 6.2**

- 1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
- 2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
- 3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
- 4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.
- 5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements. Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

### **Test Condition:**

<b>Voltage (V)</b>	<b>Frequency (Hz)</b>
120	60

**Measurement Result and limit:**
**WLAN (Quasi-peak Limit)**

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1	Fig.A.7.2	<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)	Average Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1	Fig.A.7.2	<b>P</b>
0.5 to 5	46			
5 to 30	50			

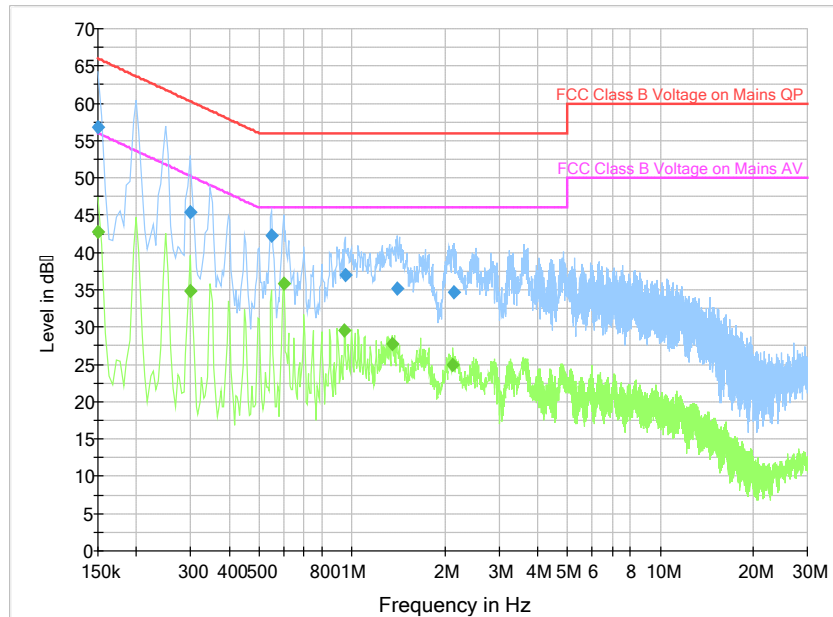
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

**Conclusion: Pass**

**Test graphs as below:**

**Measurement results for Set.1:**

**Result for Traffic:**



**Fig.A.7.1 AC Powerline Conducted Emission-802.11b**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

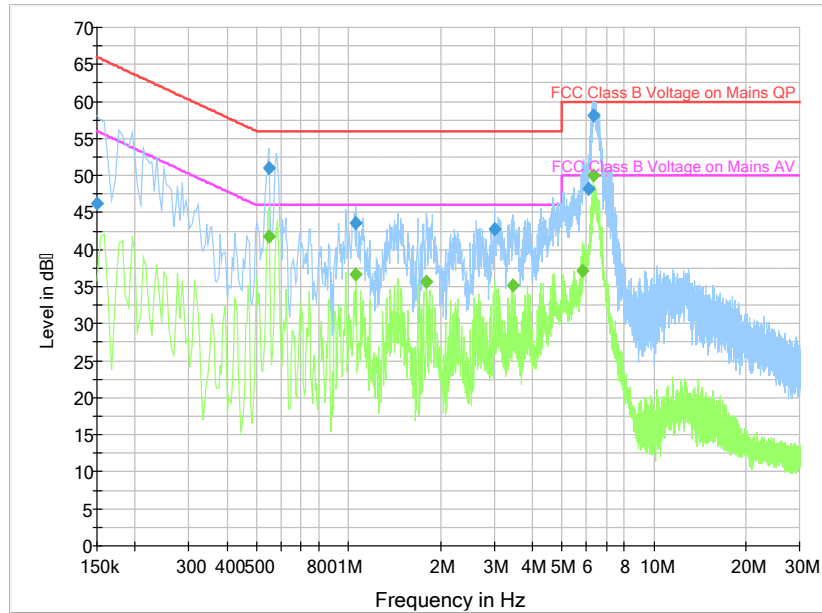
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.150000	56.8	1000.0	9.000	On	N	19.5	9.2	66.0	
0.298500	45.5	1000.0	9.000	On	L1	19.6	14.8	60.3	
0.550500	42.2	1000.0	9.000	On	L1	19.6	13.8	56.0	
0.951000	37.0	1000.0	9.000	On	L1	19.6	19.0	56.0	
1.401000	35.2	1000.0	9.000	On	N	19.6	20.8	56.0	
2.139000	34.7	1000.0	9.000	On	L1	19.5	21.3	56.0	

**Final Result 2**

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.150000	42.7	1000.0	9.000	On	L1	19.6	13.3	56.0	
0.298500	34.9	1000.0	9.000	On	L1	19.6	15.4	50.3	
0.600000	35.8	1000.0	9.000	On	N	19.5	10.2	46.0	
0.946500	29.6	1000.0	9.000	On	N	19.6	16.4	46.0	
1.347000	27.7	1000.0	9.000	On	L1	19.6	18.3	46.0	
2.125500	24.9	1000.0	9.000	On	N	19.5	21.1	46.0	



**Measurement results for Set.2:**
**Result for Idle:**

**Fig.A.7.2 AC Powerline Conducted Emission-Idle**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.




**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.150000	46.2	1000.0	9.000	On	L1	19.6	19.8	66.0	
0.550500	51.0	1000.0	9.000	On	N	19.5	5.0	56.0	
1.059000	43.6	1000.0	9.000	On	N	19.6	12.4	56.0	
3.016500	42.8	1000.0	9.000	On	N	19.6	13.2	56.0	
6.112500	48.1	1000.0	9.000	On	L1	19.7	11.9	60.0	
6.346500	58.2	1000.0	9.000	On	N	19.7	1.8	60.0	

**Final Result 2**

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.550500	41.8	1000.0	9.000	On	N	19.5	4.2	46.0	
1.059000	36.7	1000.0	9.000	On	N	19.6	9.3	46.0	
1.801500	35.7	1000.0	9.000	On	N	19.5	10.3	46.0	
3.448500	35.1	1000.0	9.000	On	N	19.6	10.9	46.0	
5.838000	37.2	1000.0	9.000	On	N	19.7	12.8	50.0	
6.346500	50.1	1000.0	9.000	On	N	19.7	-0.1	50.0	

## ANNEX B: Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p>  	
<hr/> <b>Certificate of Accreditation to ISO/IEC 17025:2017</b> <hr/>	
NVLAP LAB CODE: 600118-0	
<b>Telecommunication Technology Labs, CAICT</b> Beijing China	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
<b>Electromagnetic Compatibility &amp; Telecommunications</b>	
<i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i>	
<hr/> 2020-09-29 through 2021-09-30 <i>Effective Dates</i>	 <hr/> <i>[Signature]</i> For the National Voluntary Laboratory Accreditation Program

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