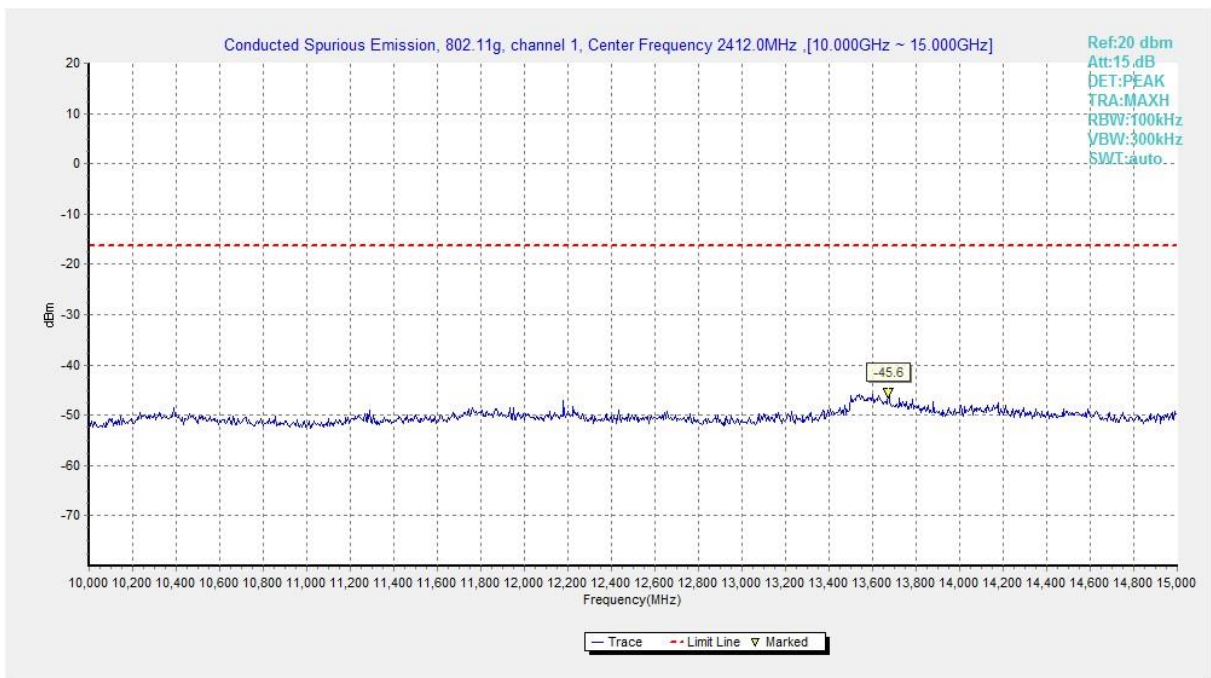
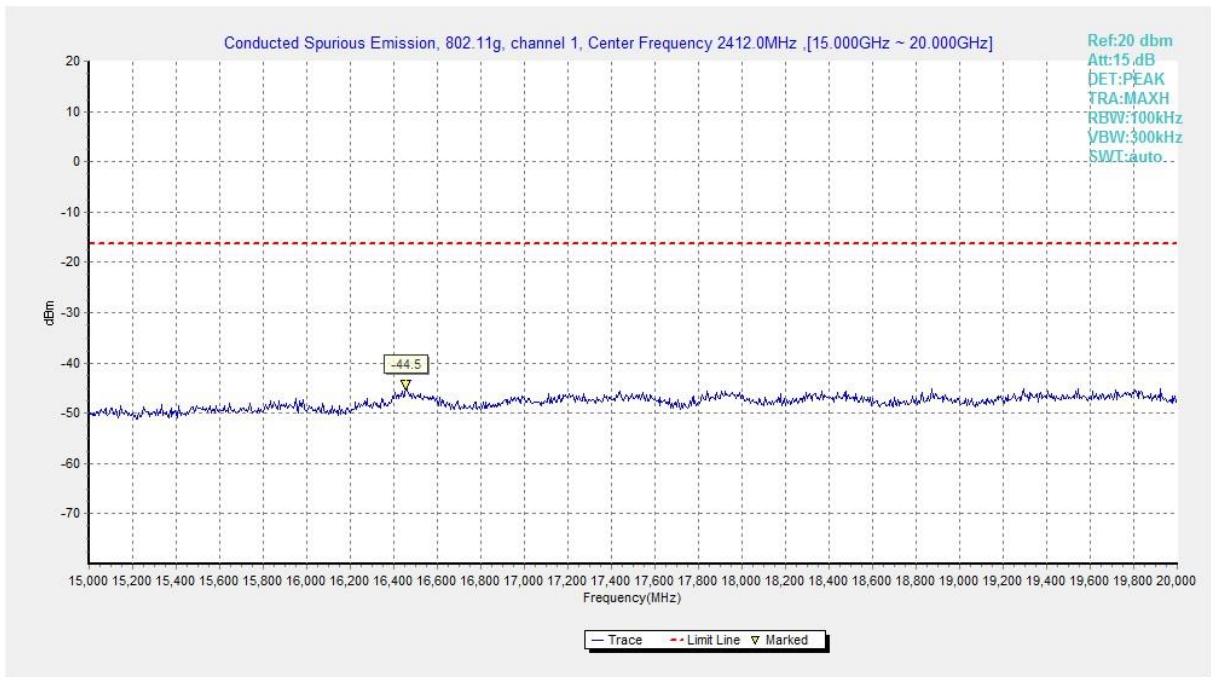


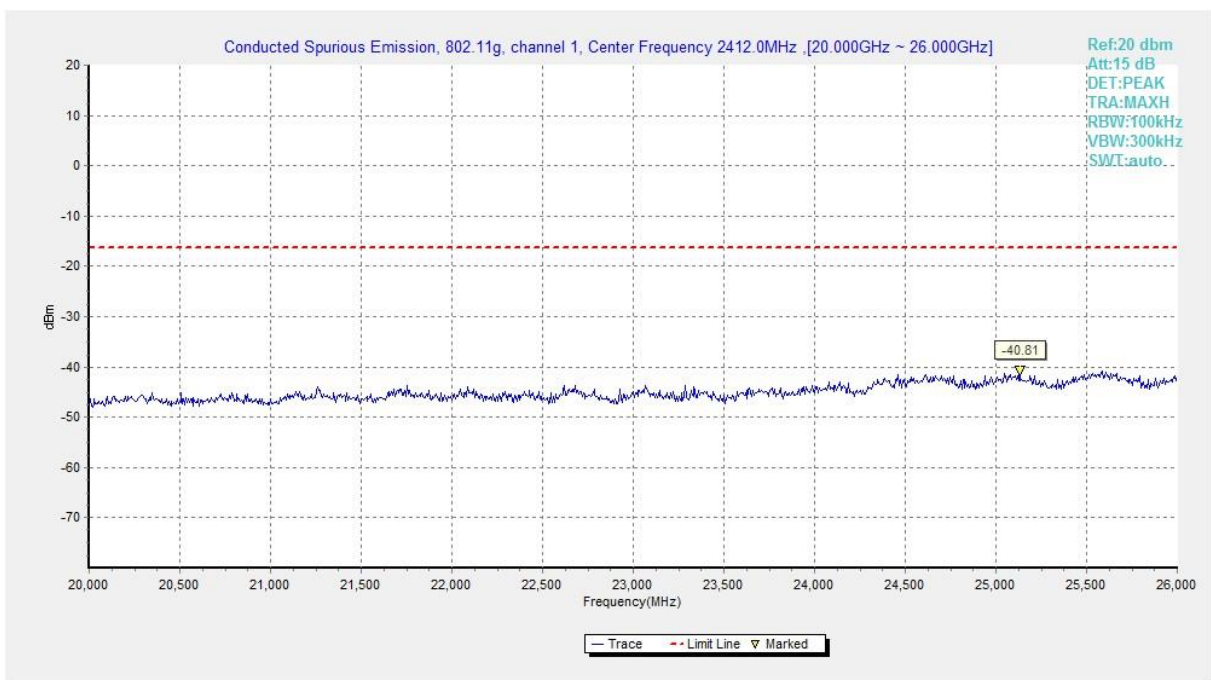
**Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)**



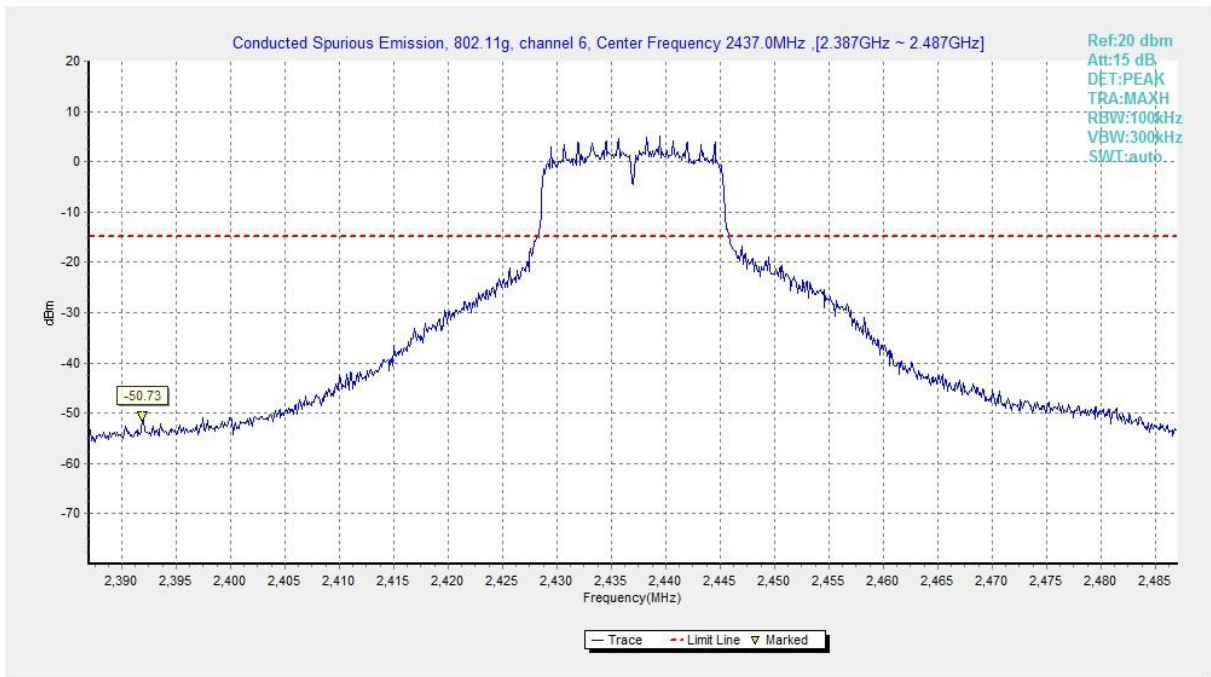
**Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)**



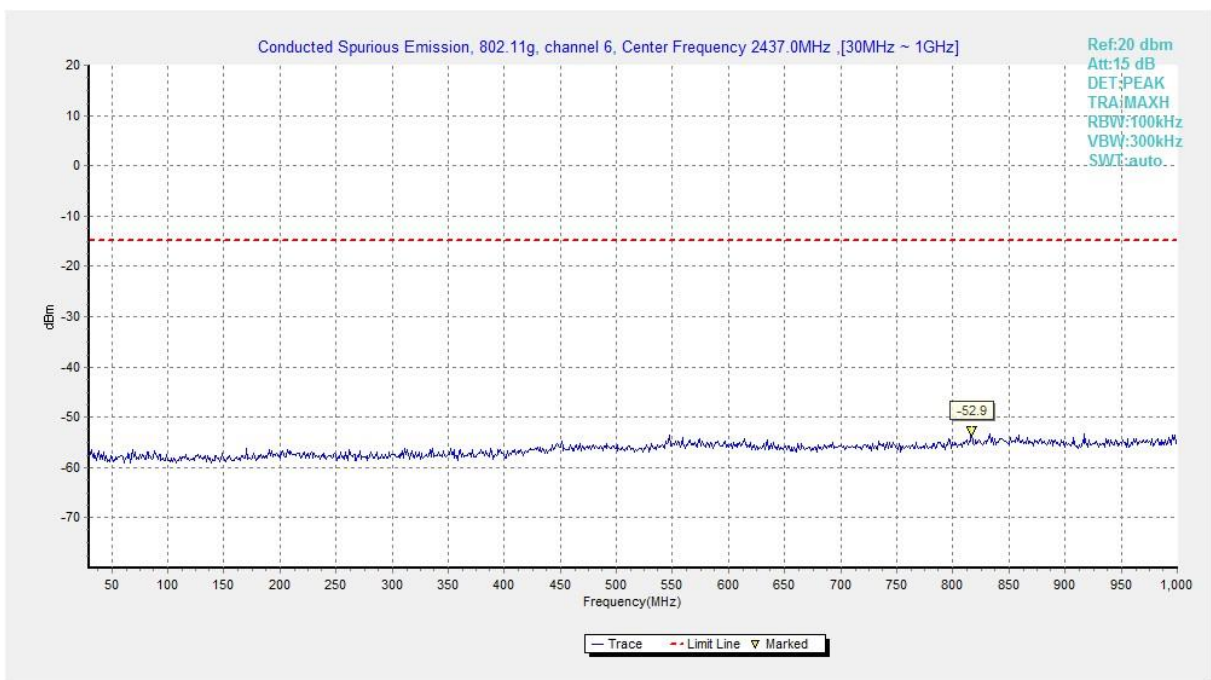
**Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)**



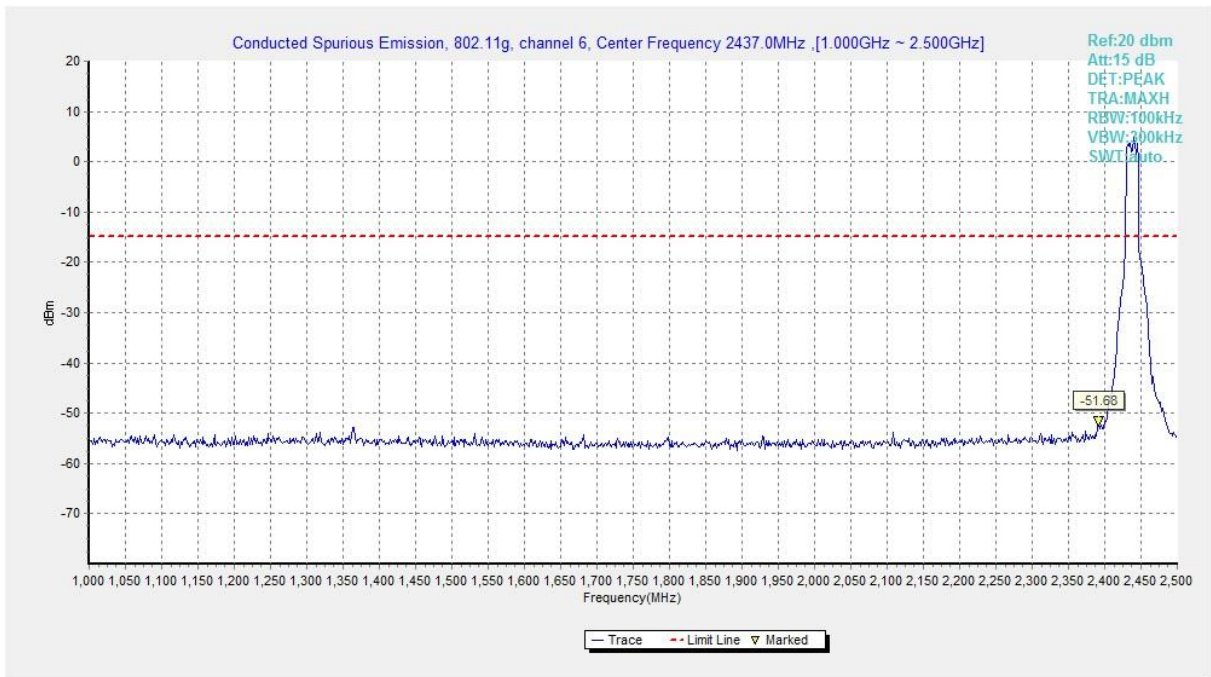
**Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)**



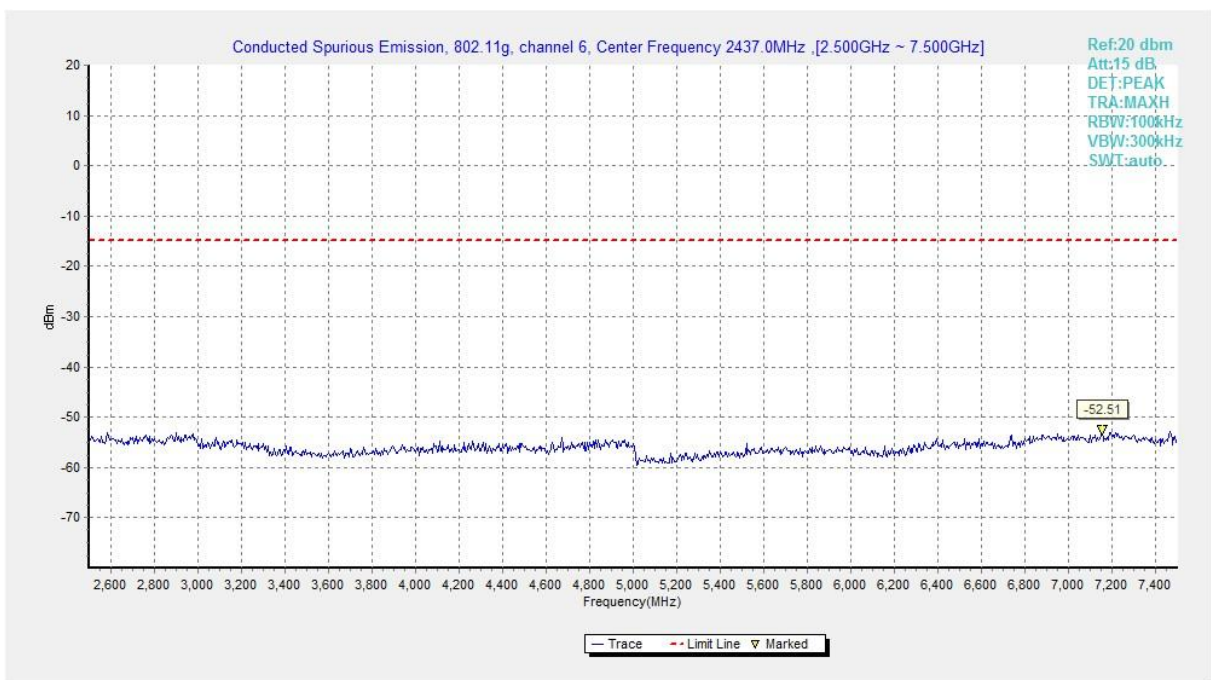
**Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)**



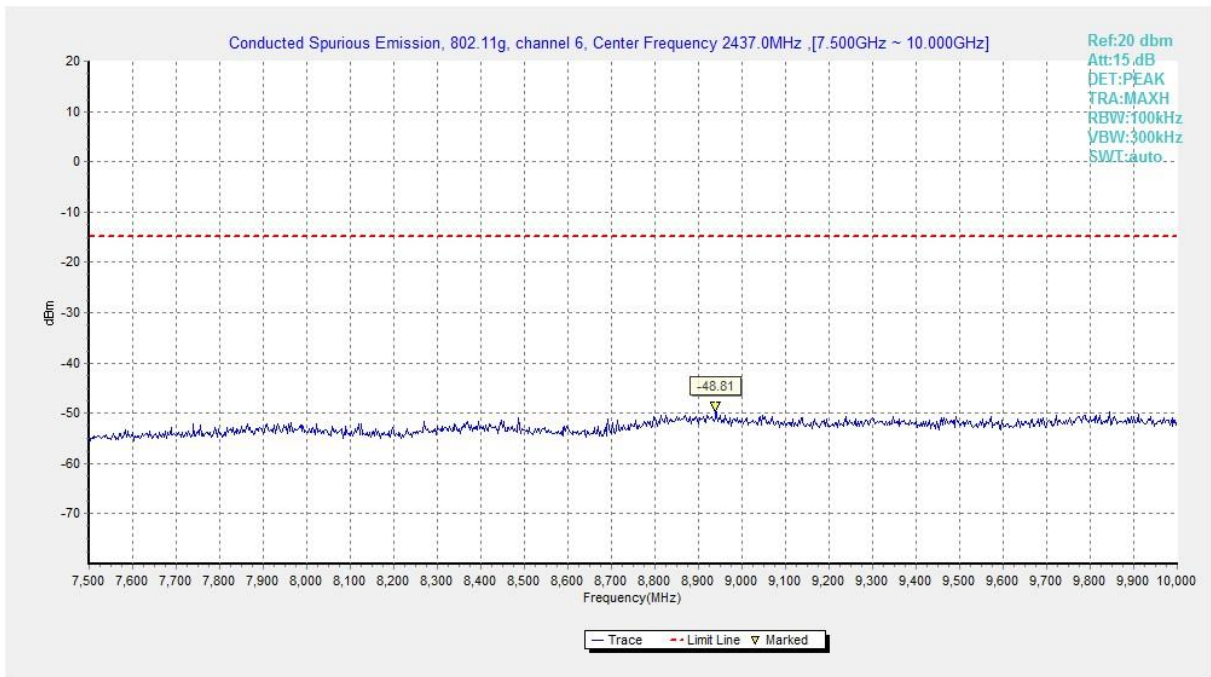
**Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)**



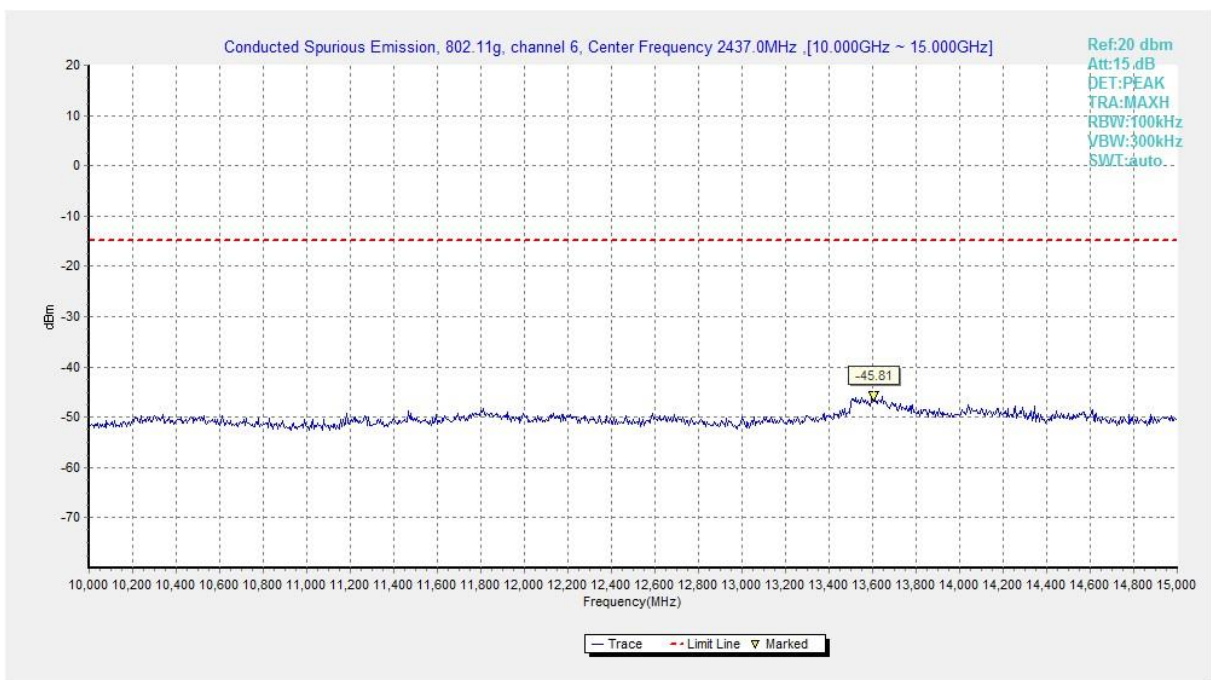
**Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)**



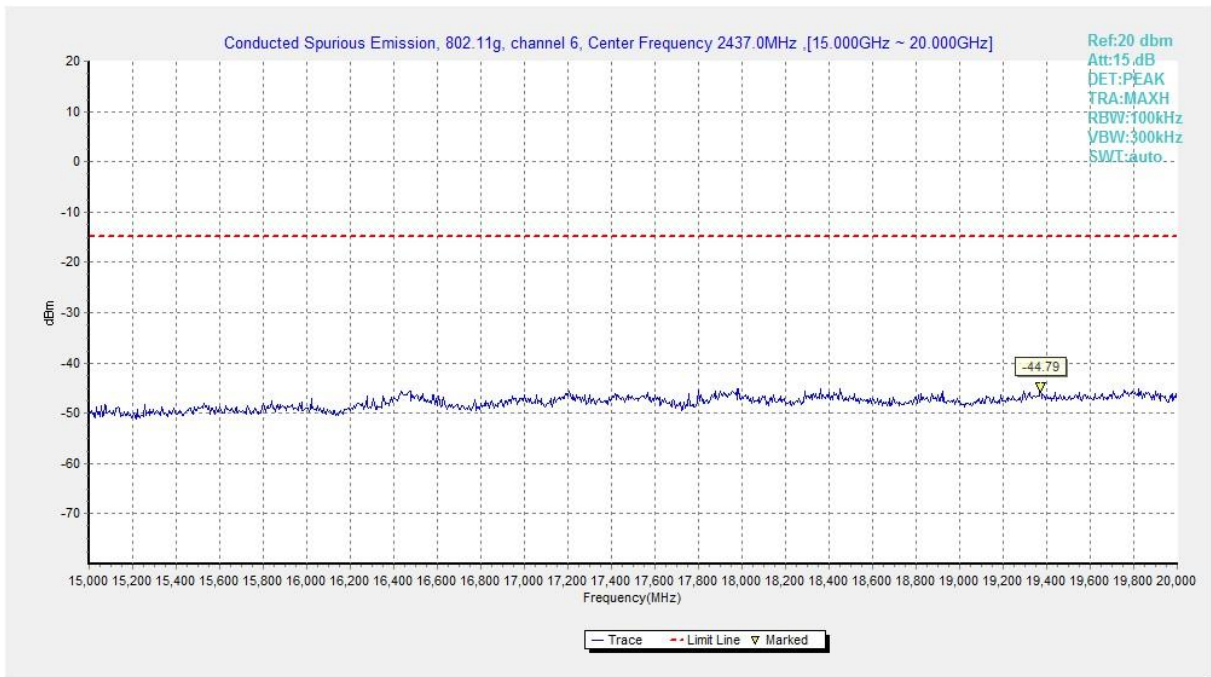
**Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)**



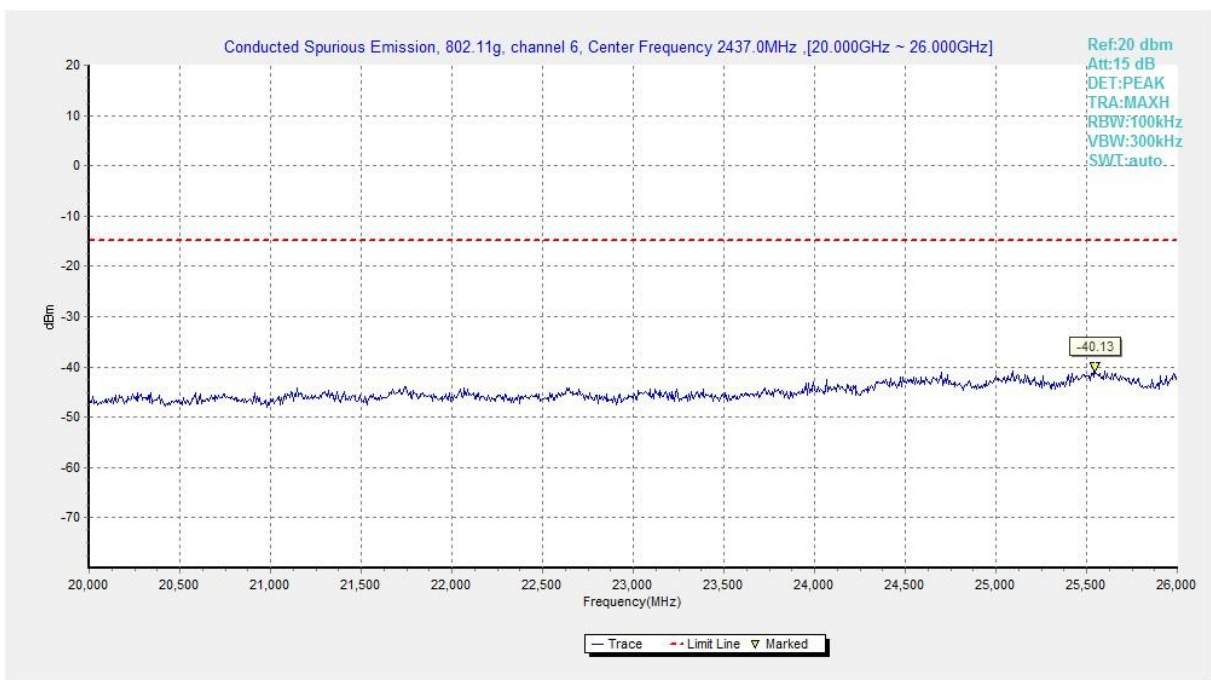
**Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)**



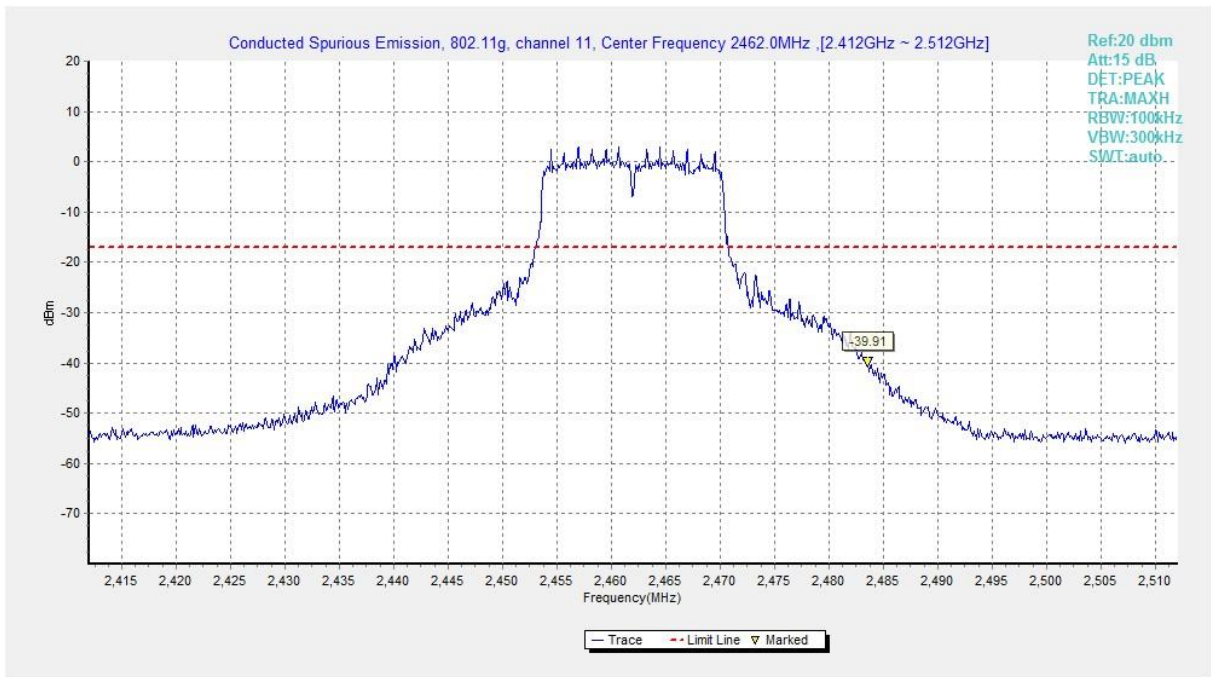
**Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)**



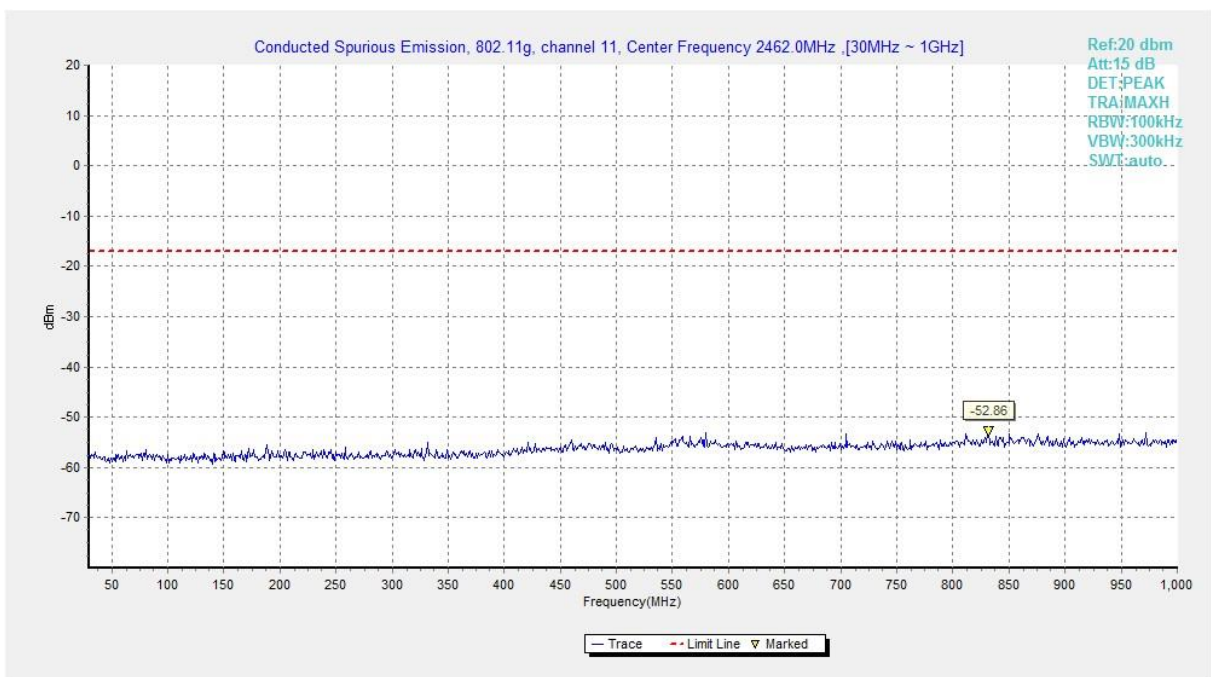
**Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)**



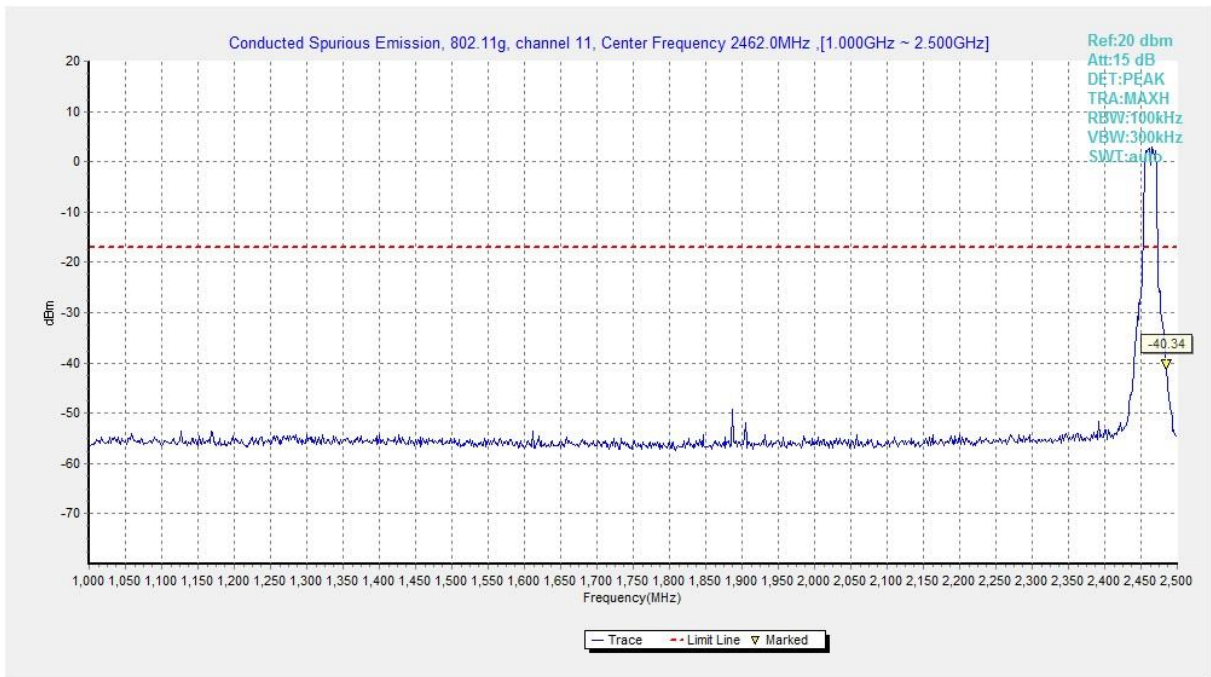
**Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)**



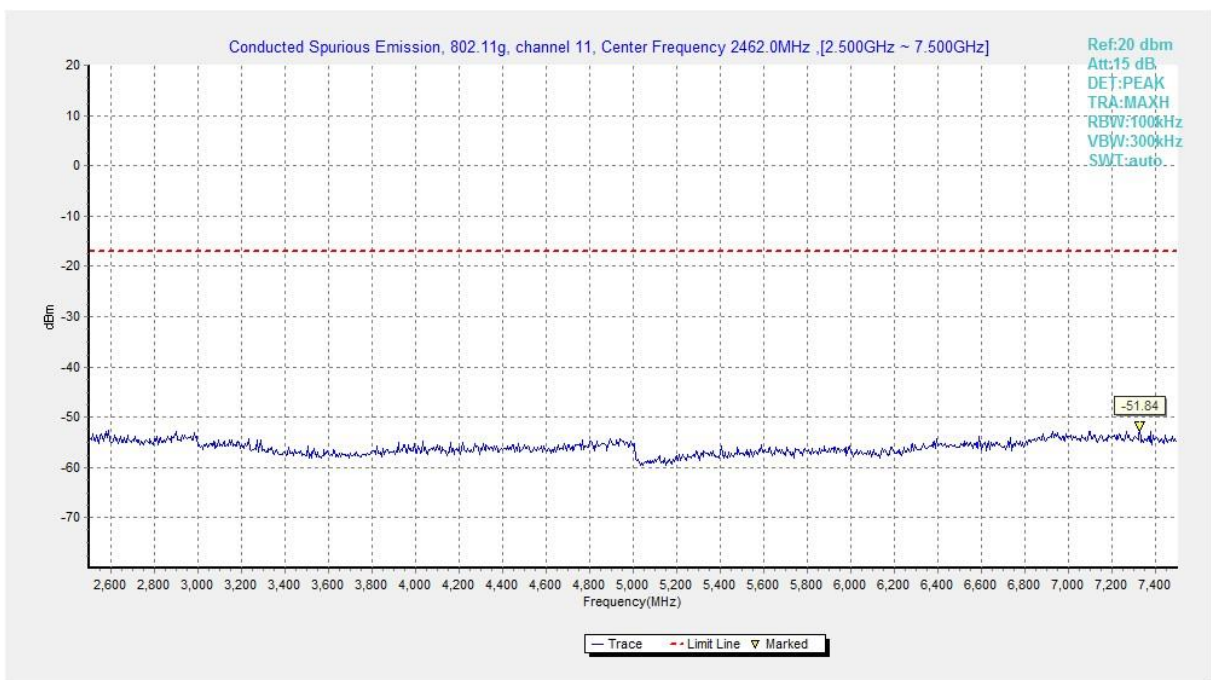
**Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)**



**Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)**

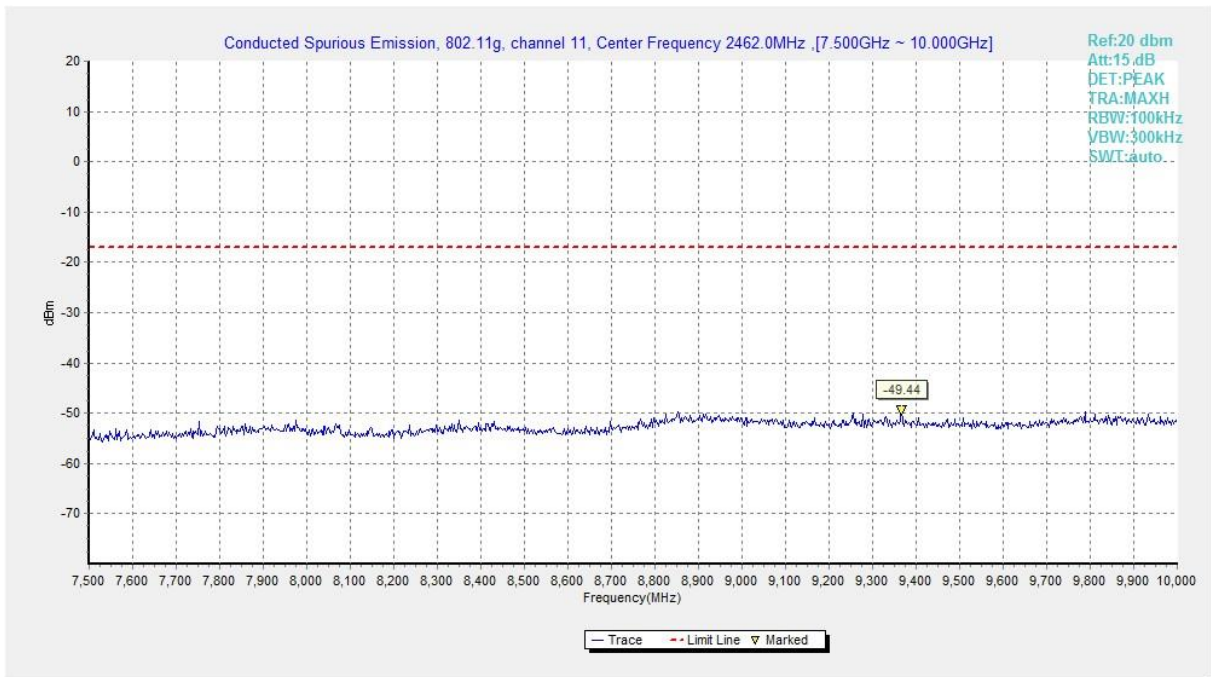


**Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)**

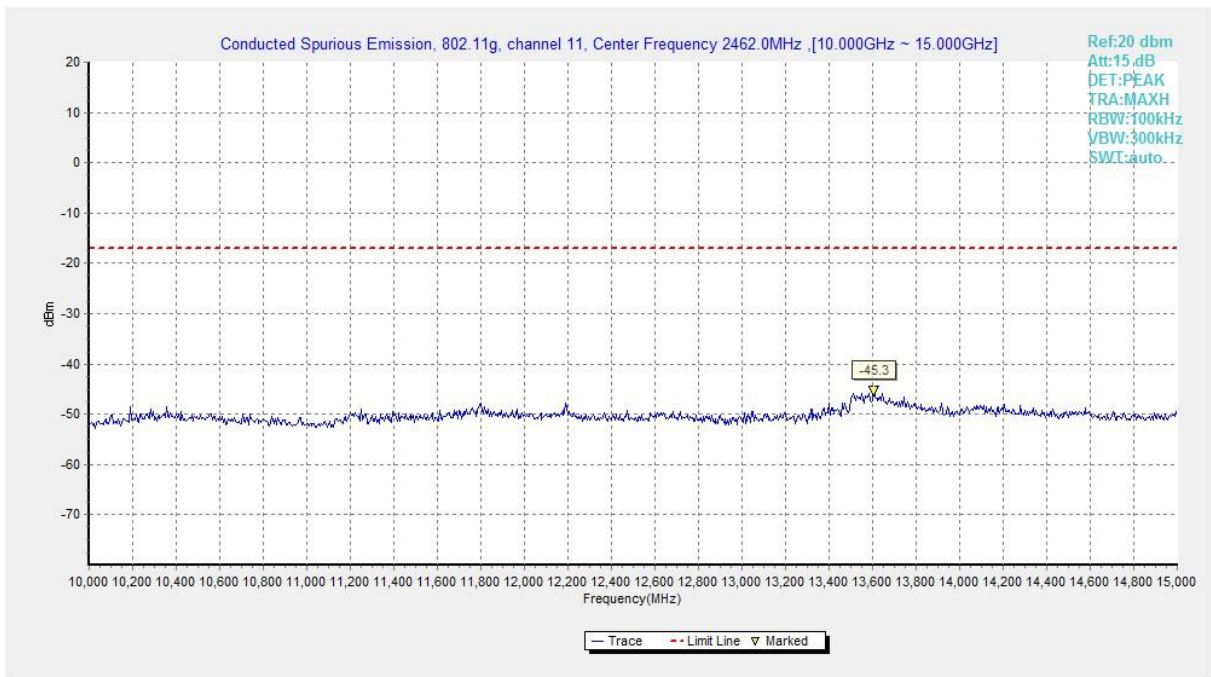


**Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)**

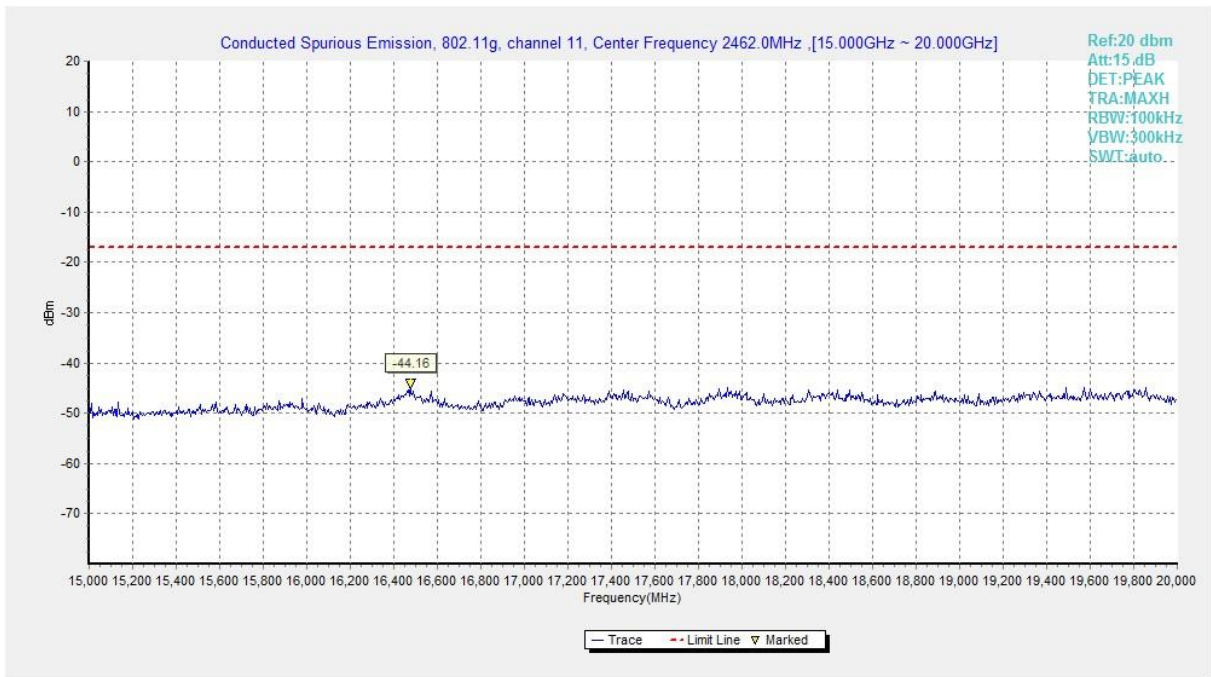




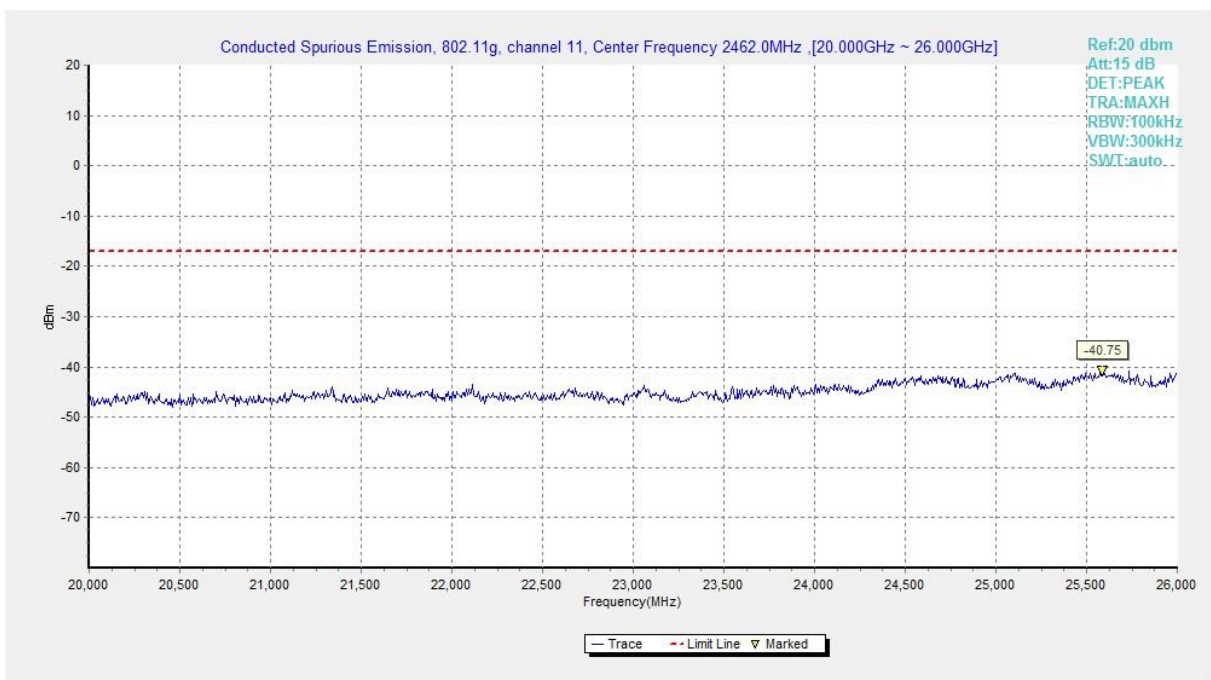
**Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)**



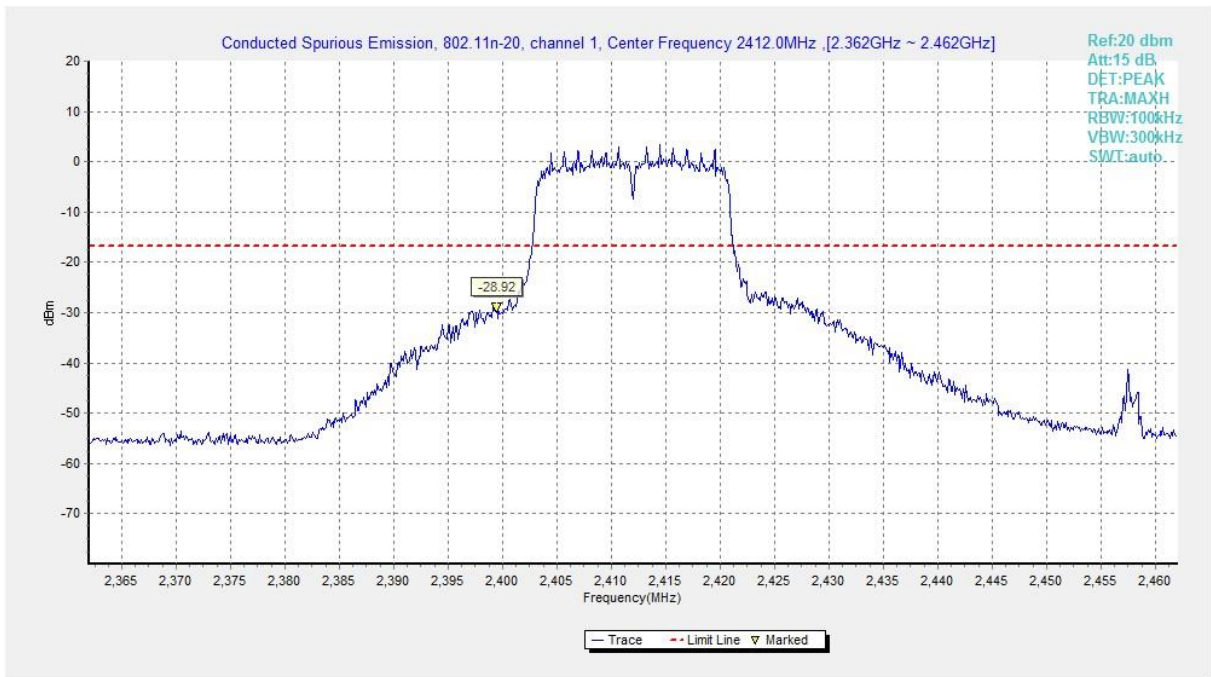
**Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)**



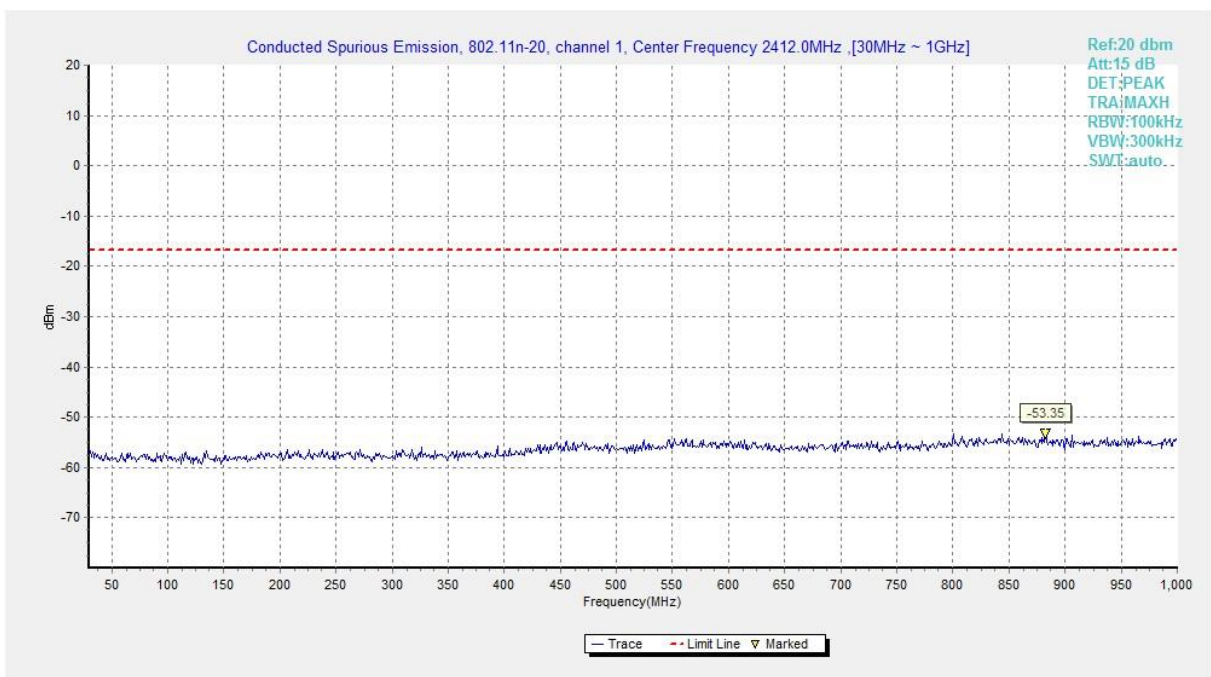
**Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)**



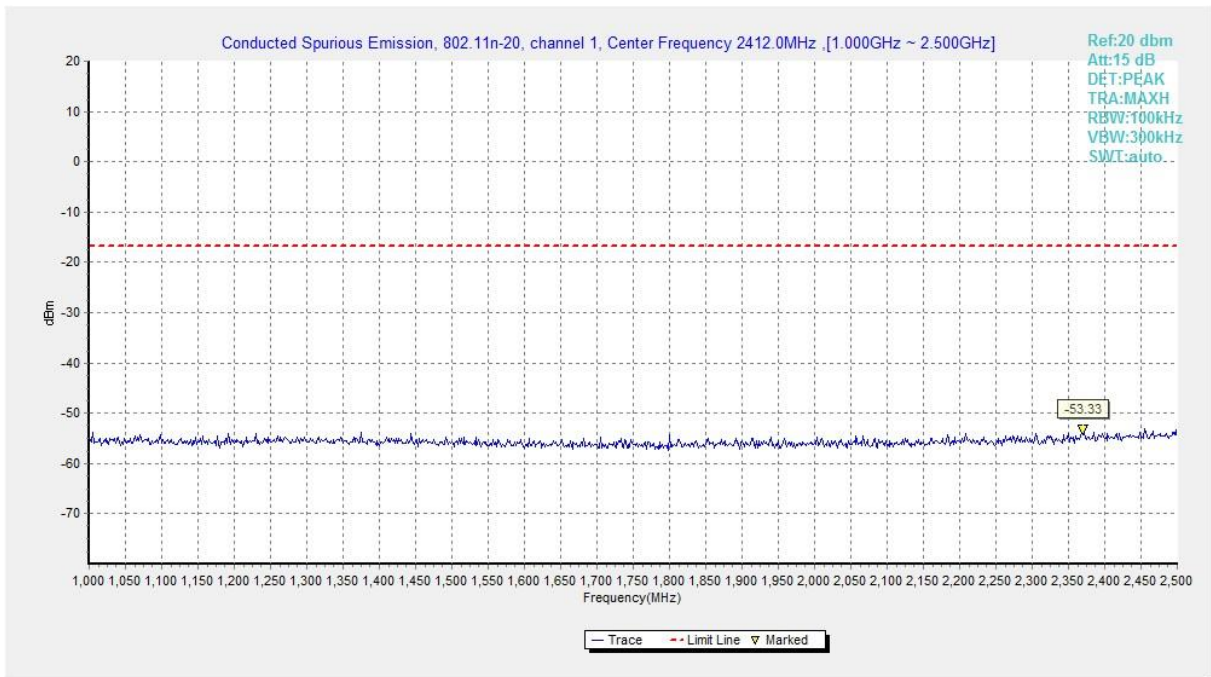
**Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)**



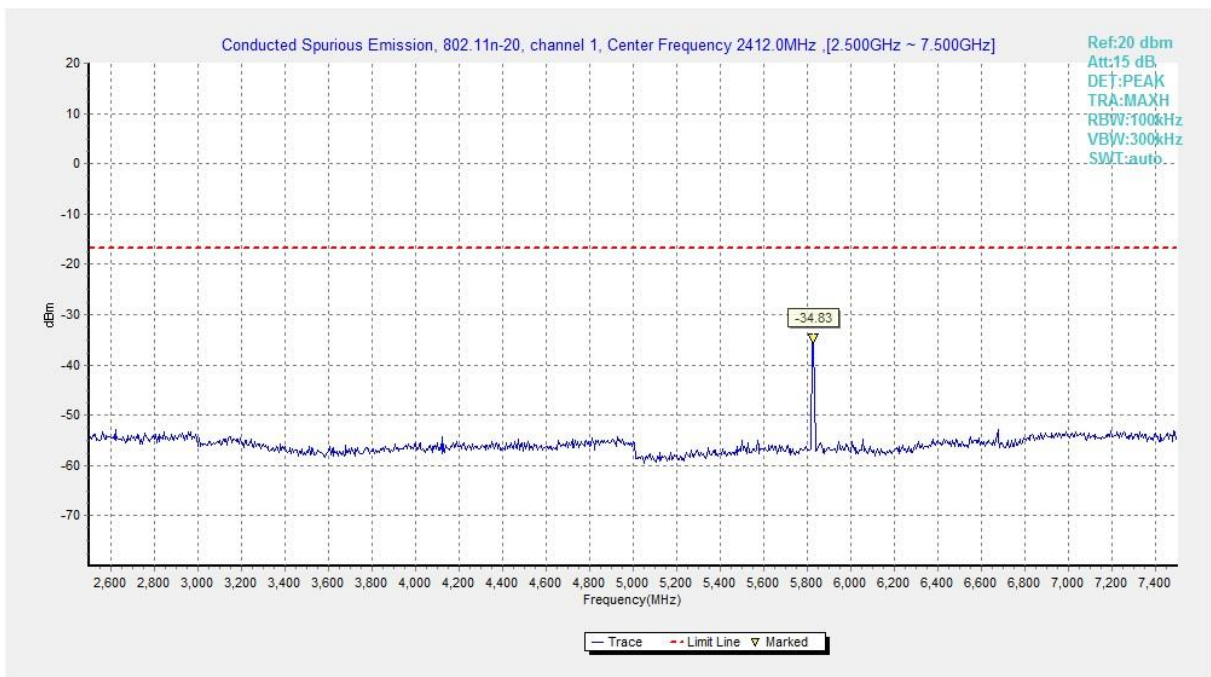
**Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)**



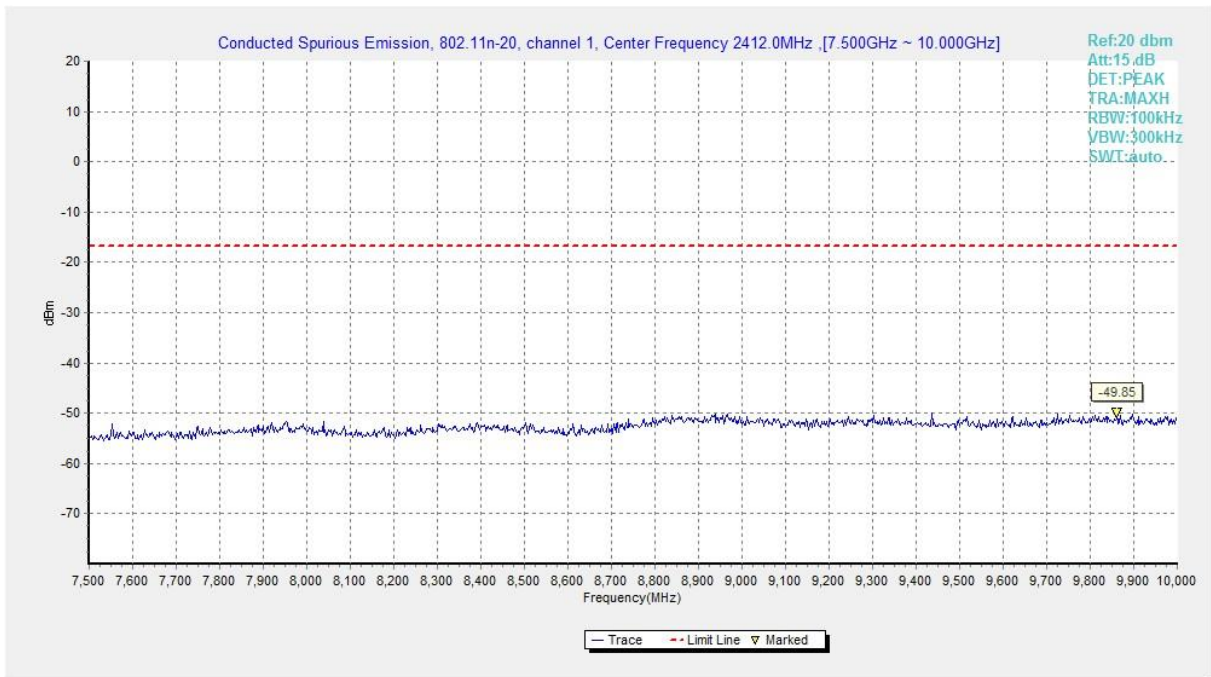
**Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)**



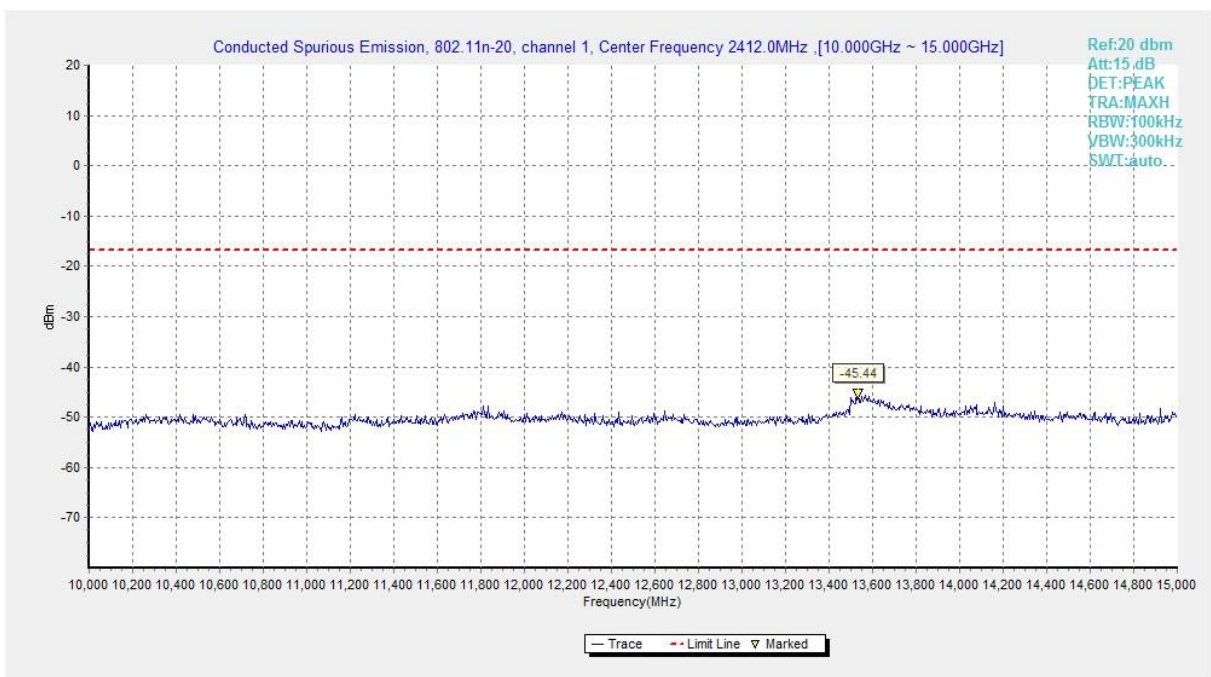
**Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)**



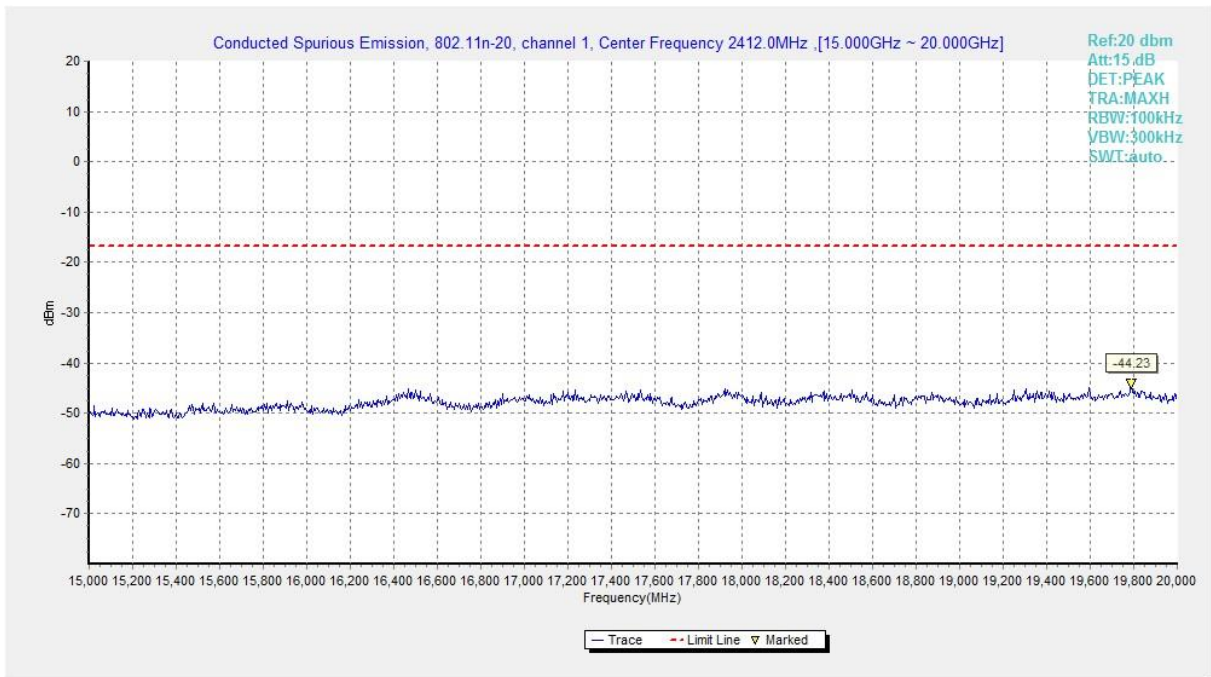
**Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)**



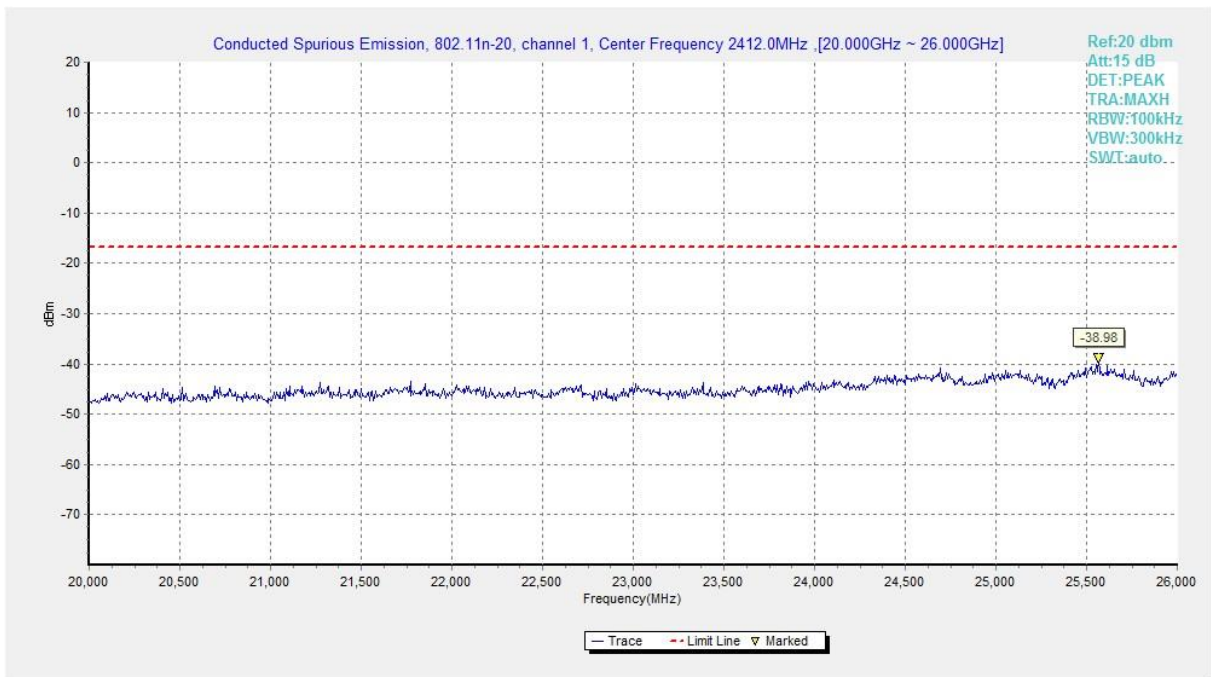
**Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)**



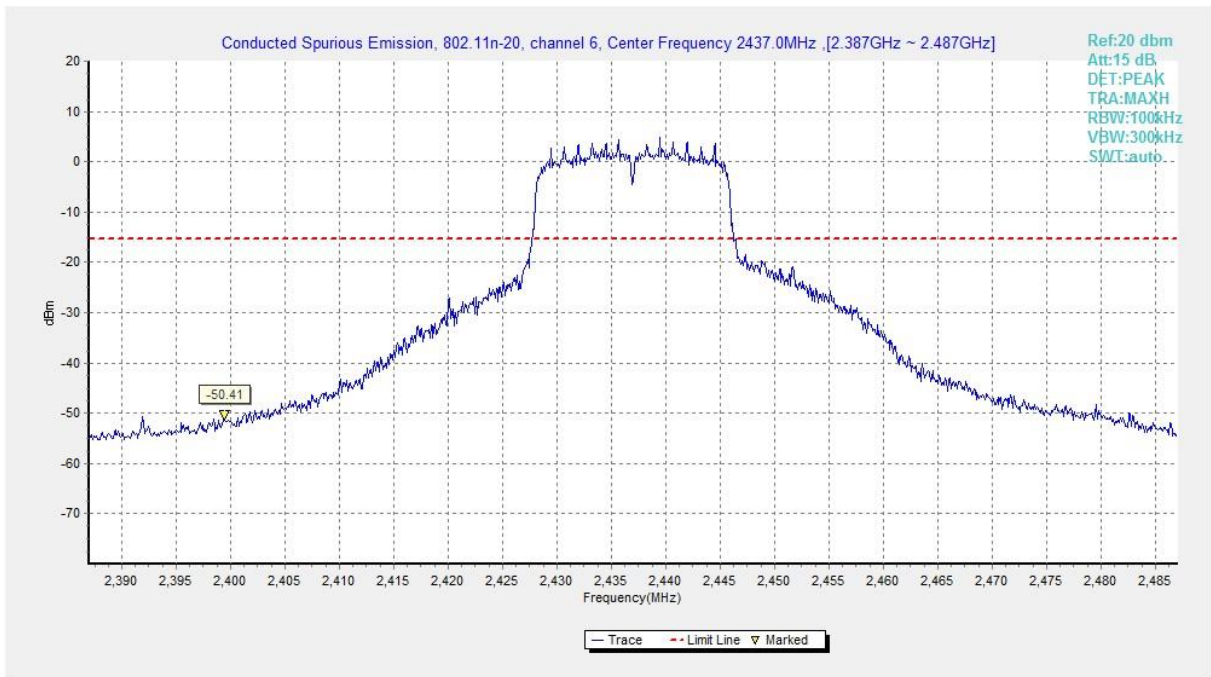
**Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)**



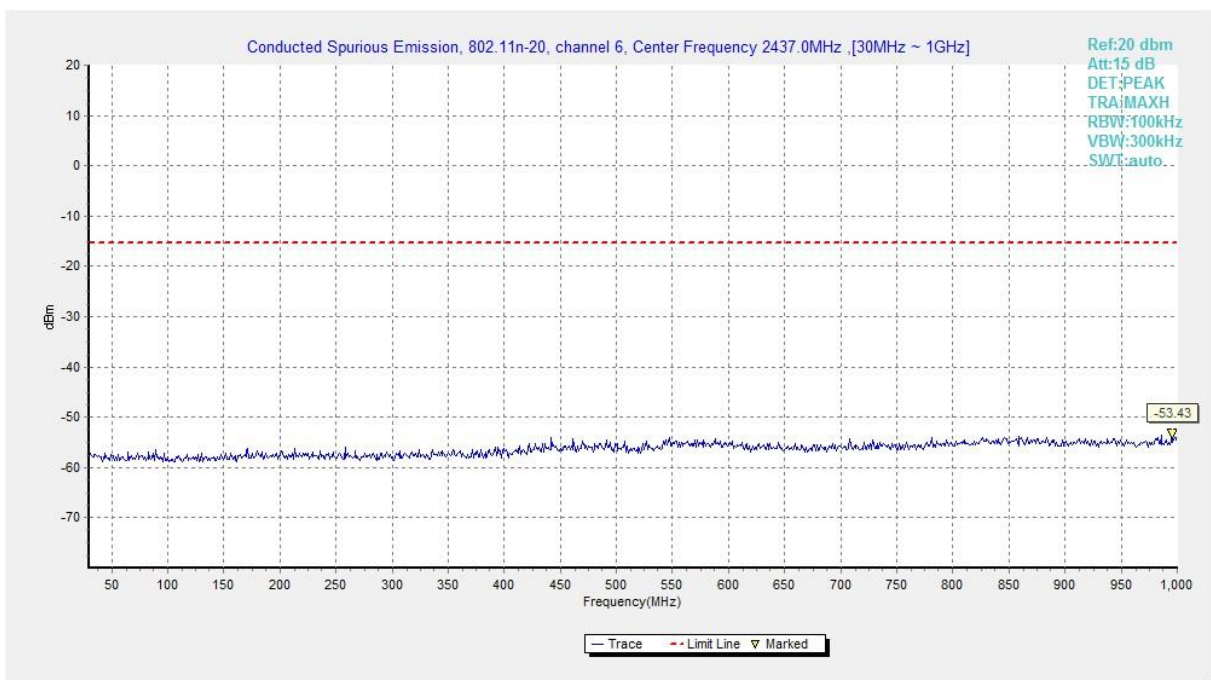
**Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)**



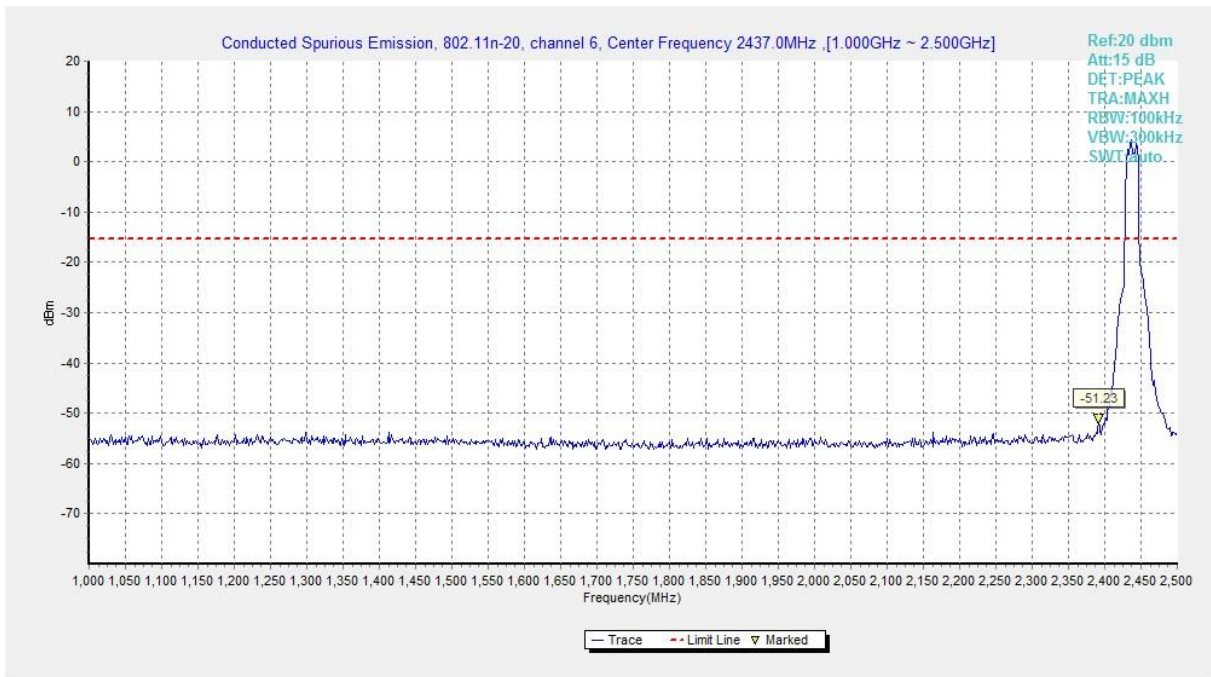
**Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)**



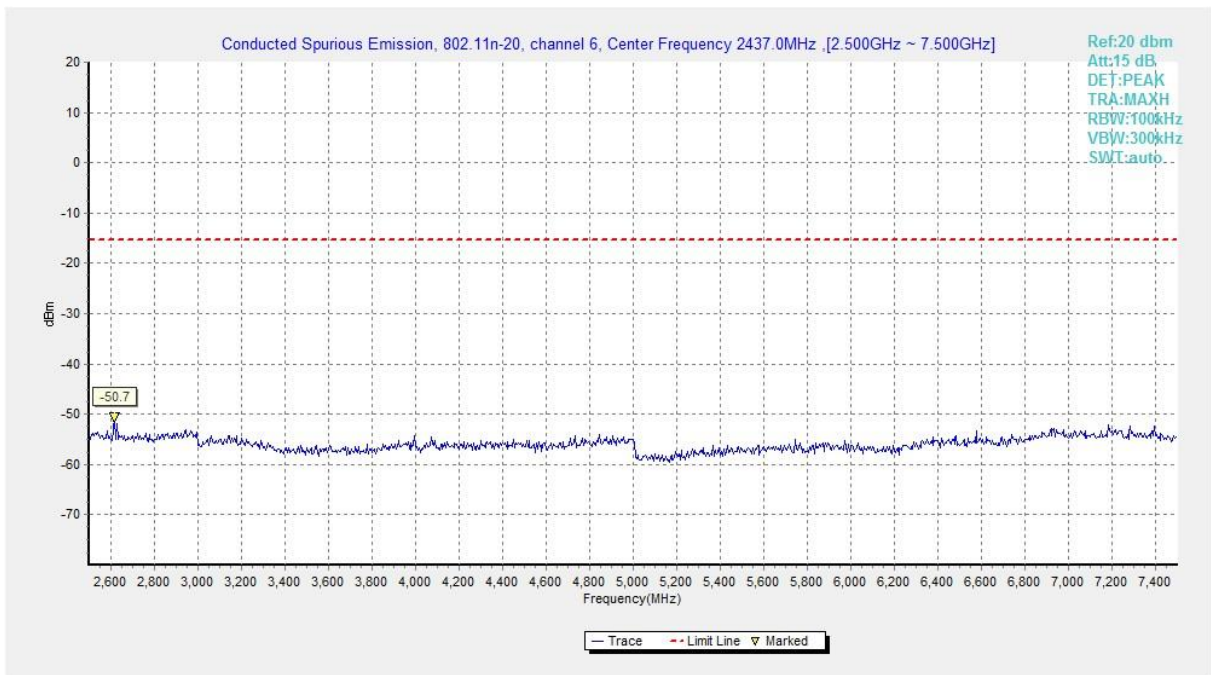
**Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)**



**Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)**

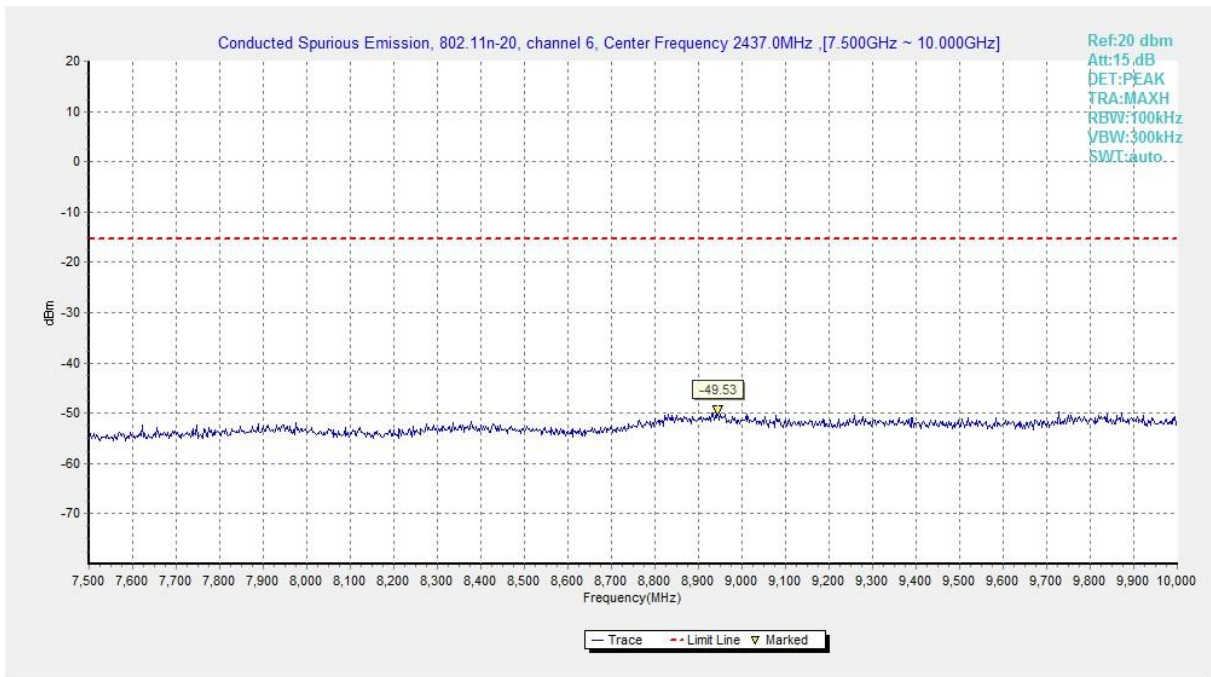


**Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)**

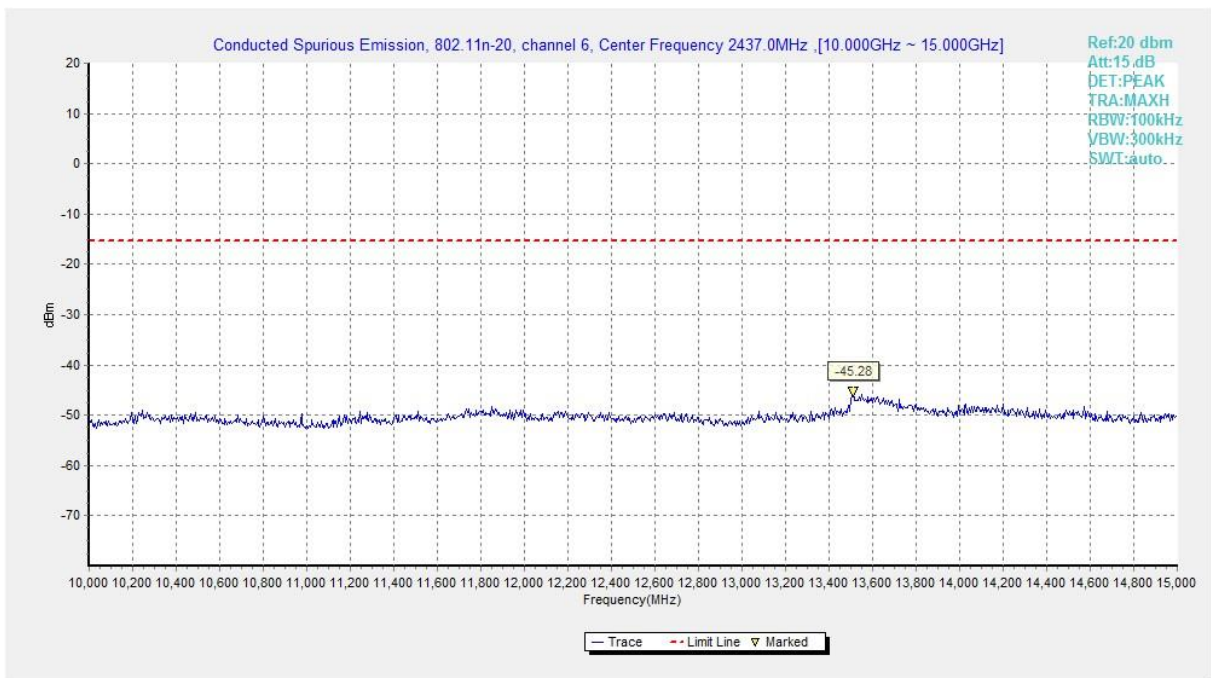


**Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)**

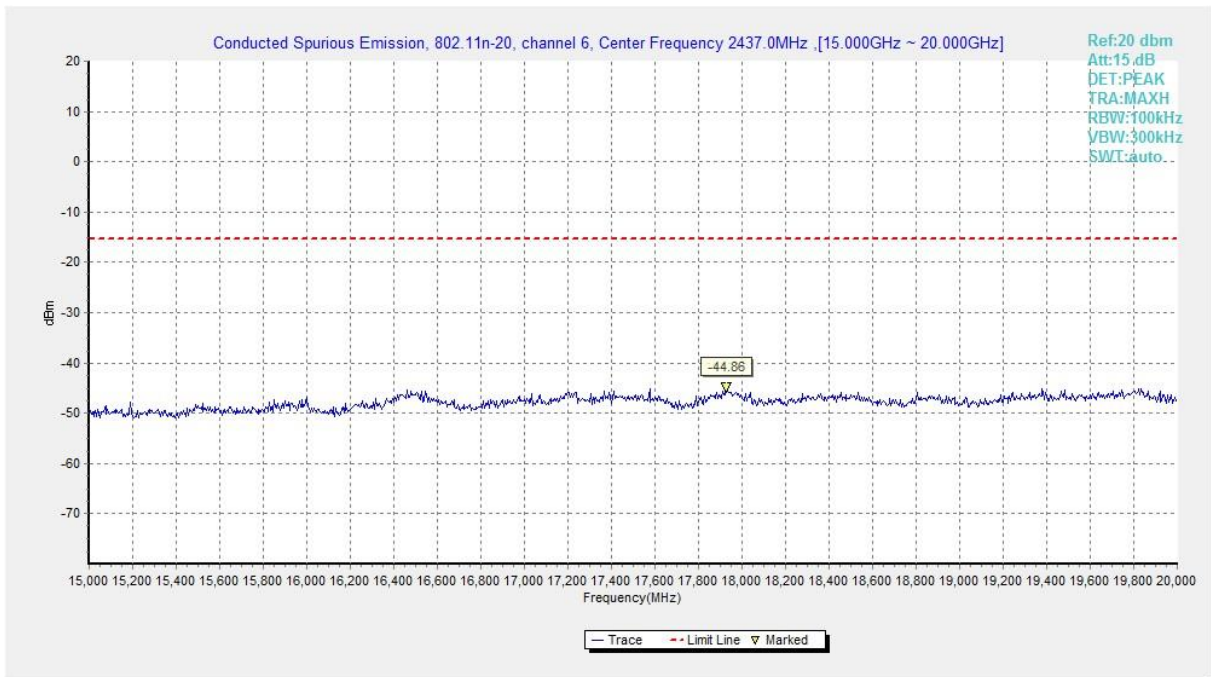




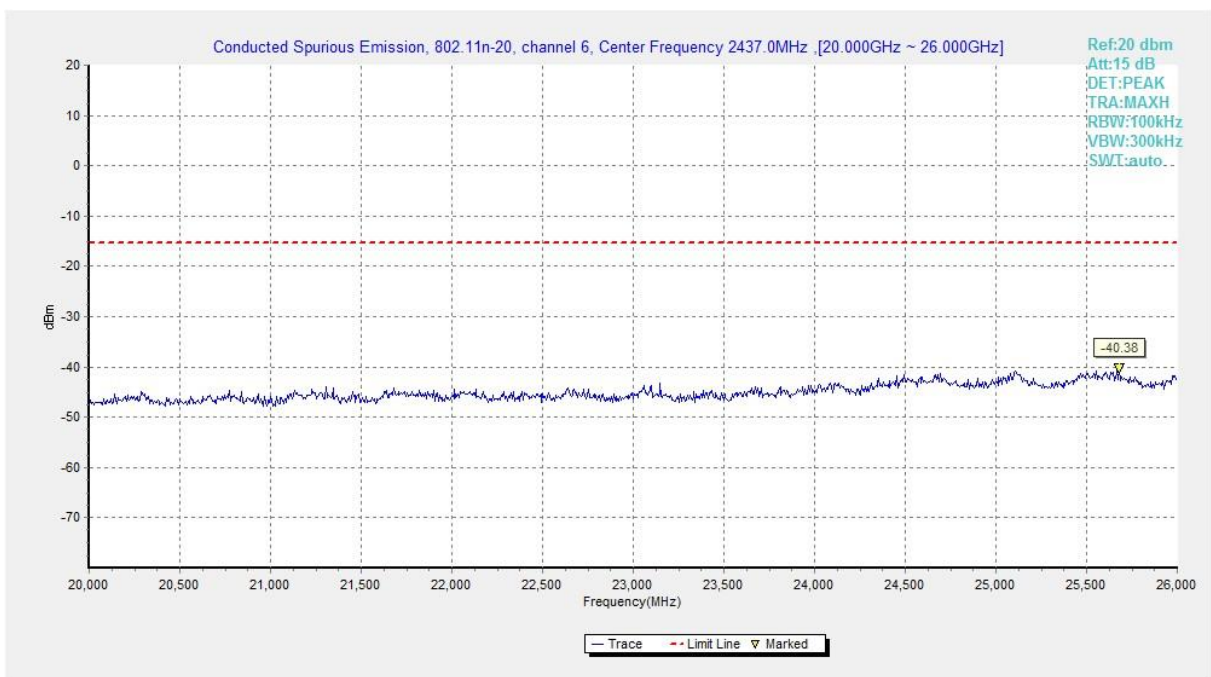
**Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)**



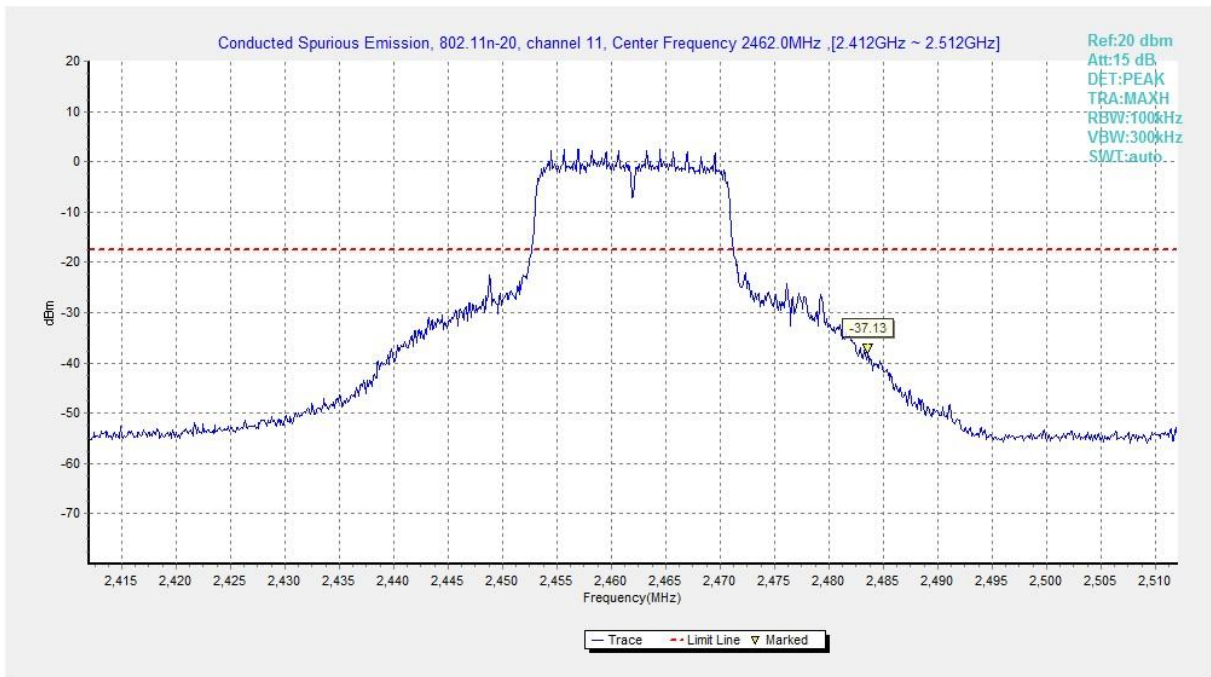
**Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)**



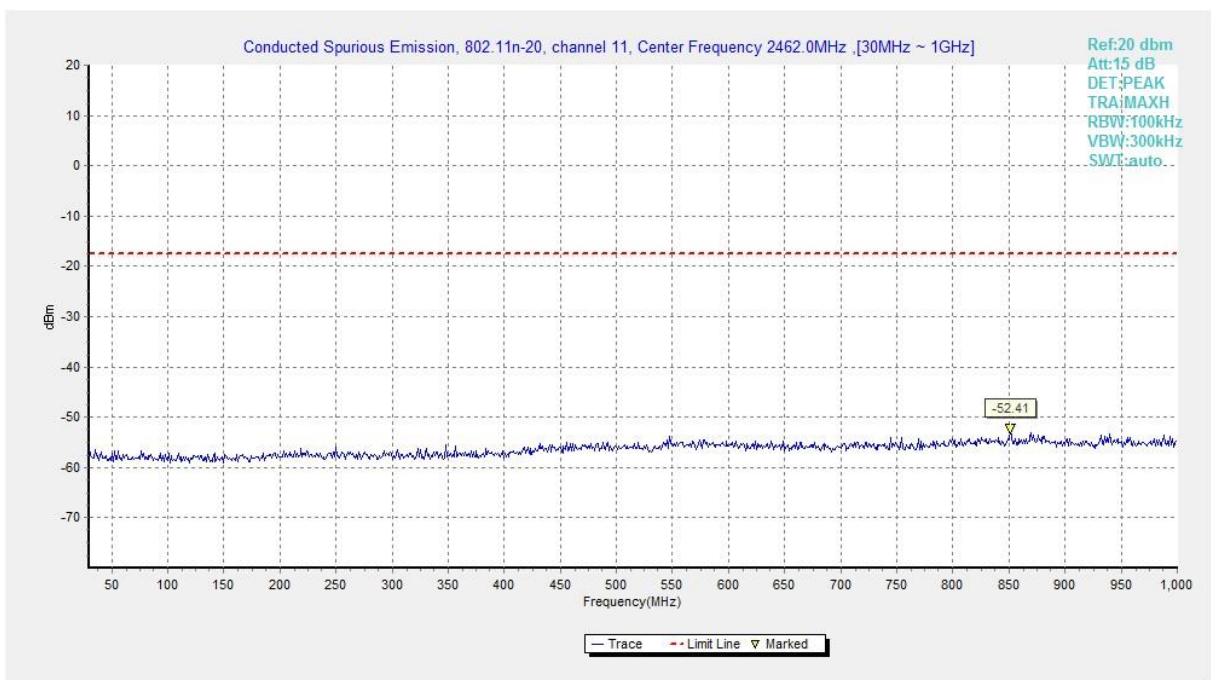
**Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)**



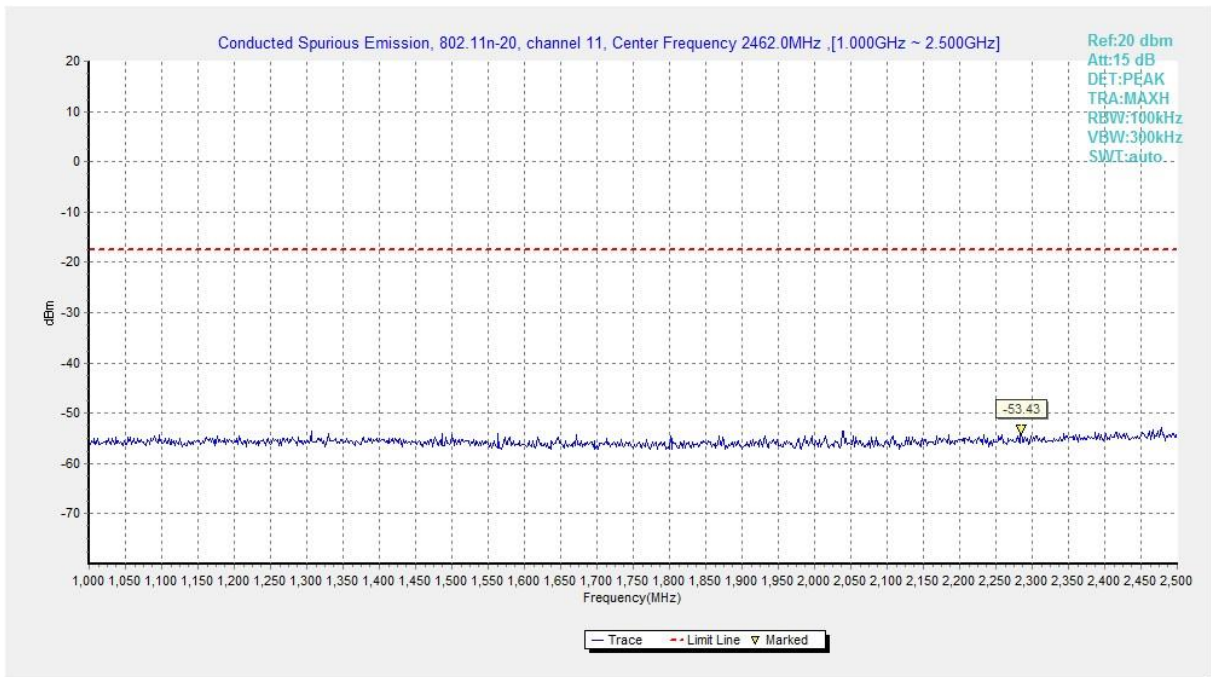
**Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)**



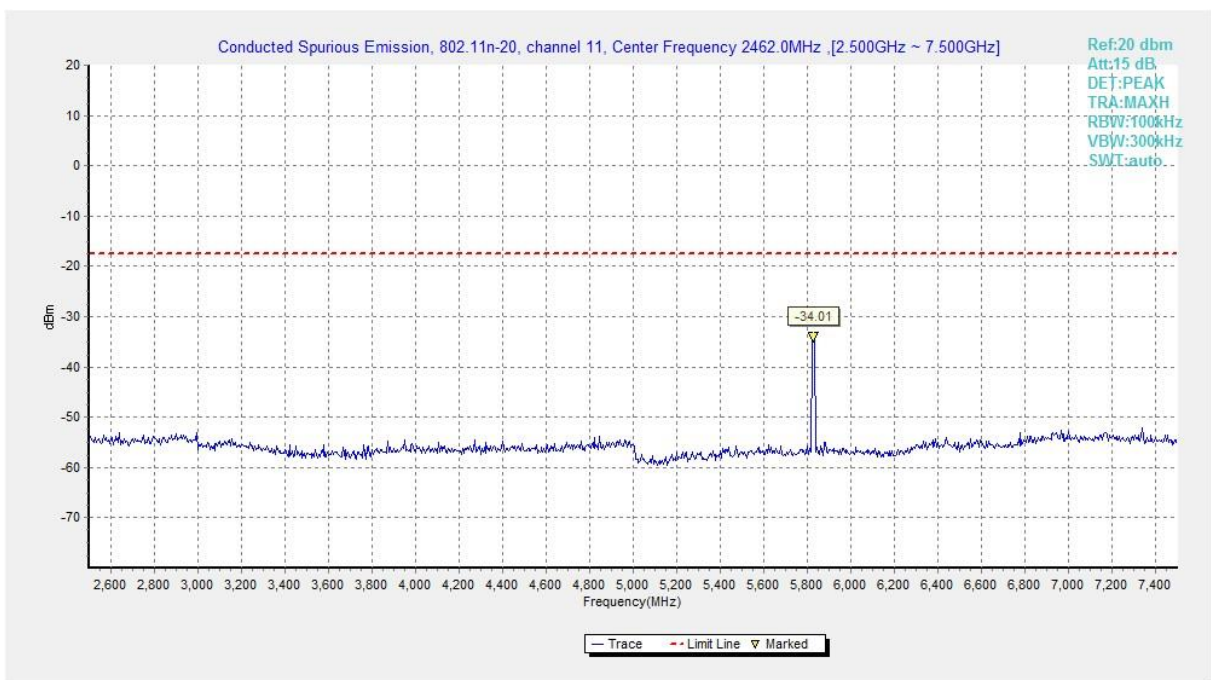
**Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)**



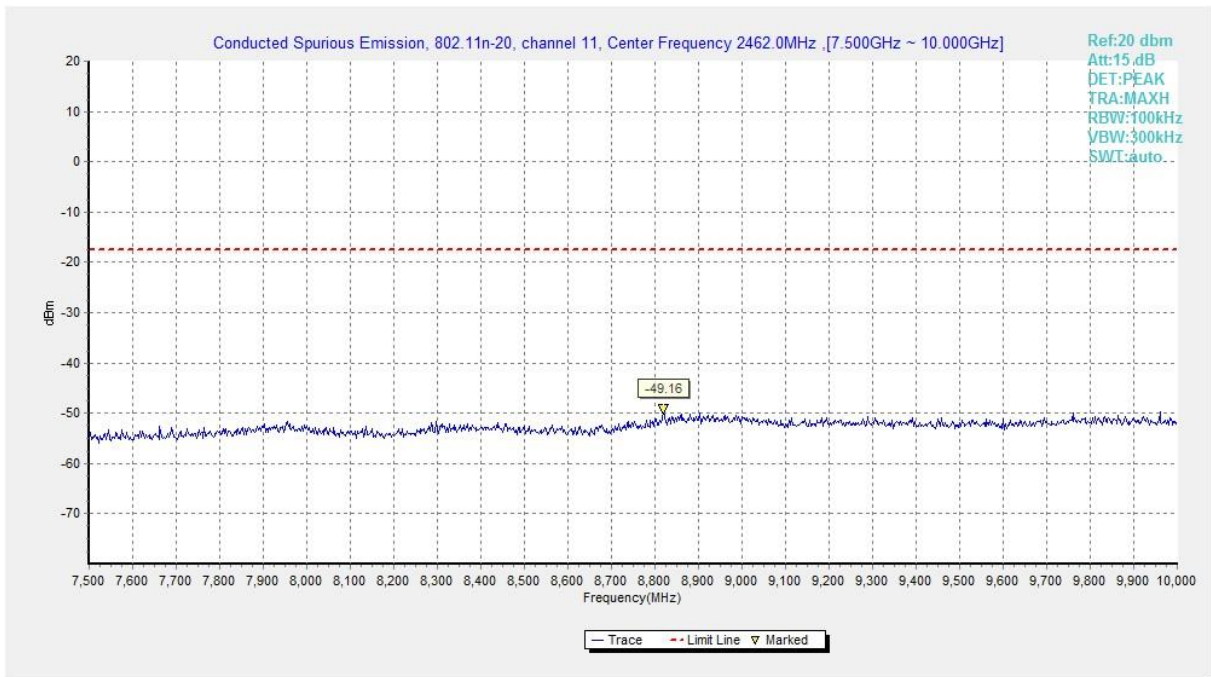
**Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)**



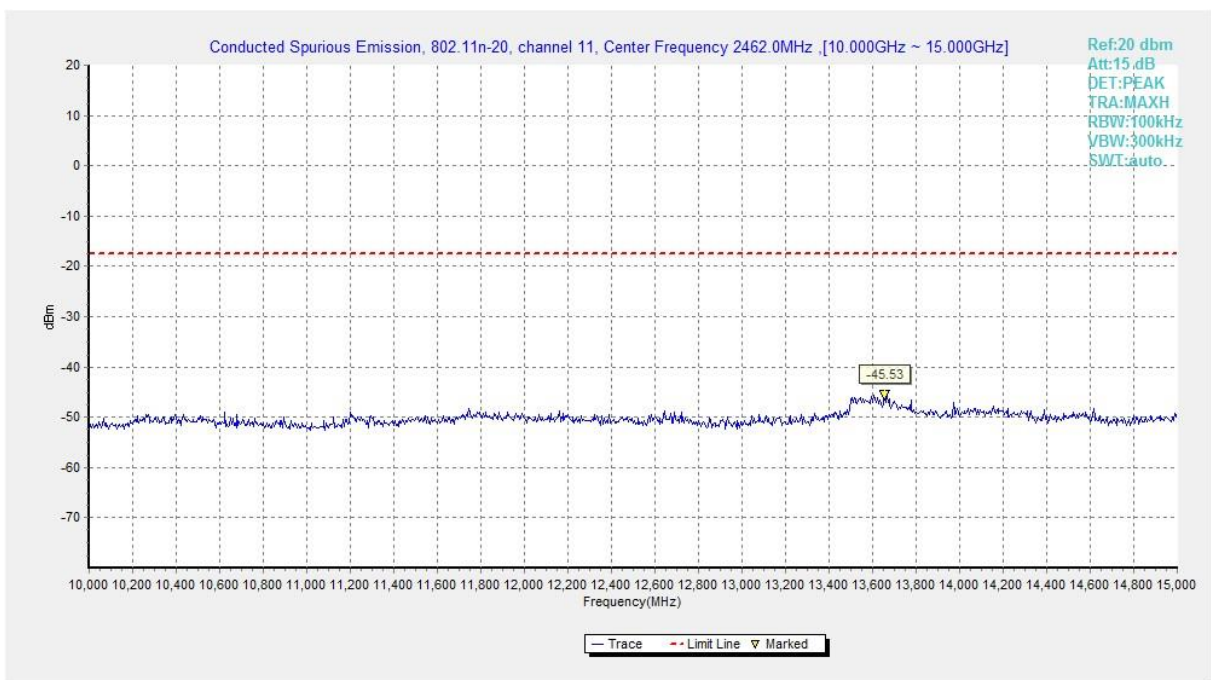
**Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)**



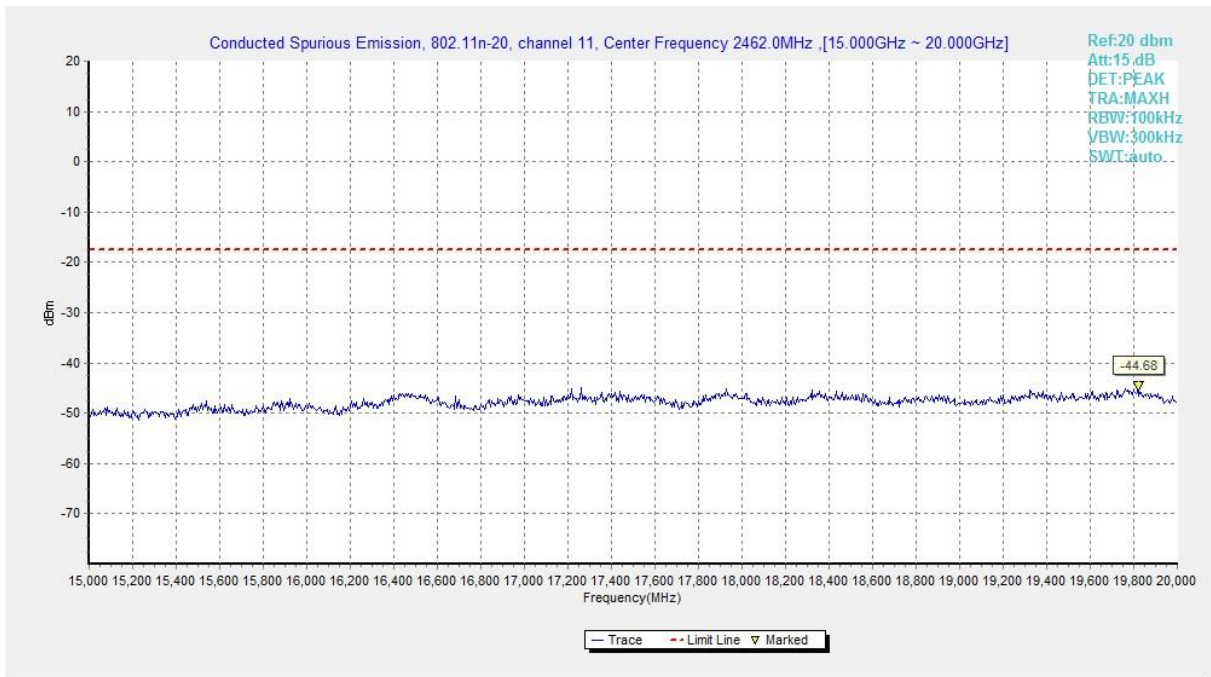
**Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)**



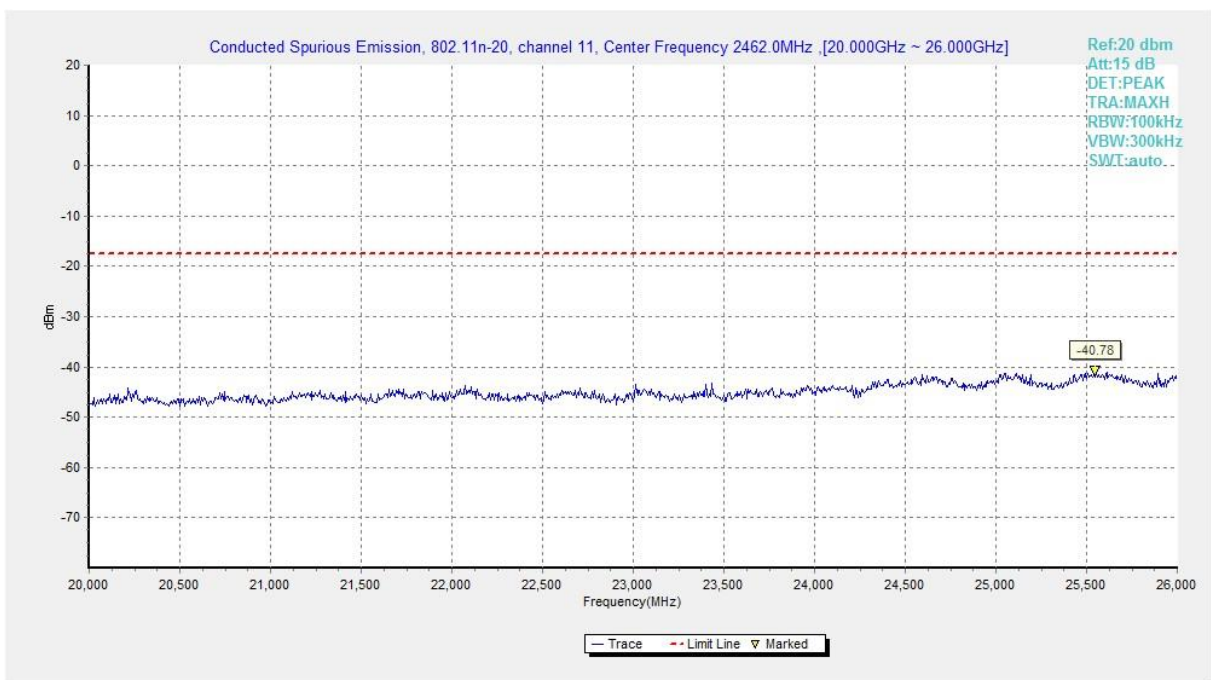
**Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)**



**Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)**



**Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)**



**Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 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)	Measurement distance (m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Frequency (MHz)	Field strength(μV/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

**Set up:**

Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m

The EUT and transmitting antenna shall be centered on the turntable.

**Test Procedure**

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

**The receiver references:**

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: UT09a**
**Measurement results:**
**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>

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

1. 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:

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

2. The range of evaluated frequency is from 9 kHz to 26GHz. Measurement value show only up to 6 maximum emissions noted.



**Peak**  
**802.11b**

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2384.410	60.34	2.62	27.66	30.06	74.00	13.66	V
2385.793	59.96	2.62	27.66	29.68	74.00	14.04	V
4823.906	41.05	-37.50	32.06	46.49	74.00	32.95	V
7236.094	46.98	-37.00	35.78	48.21	74.00	27.02	H
9647.812	45.17	-36.00	37.80	43.37	74.00	28.83	H
12060.000	46.92	-34.81	39.06	42.67	74.00	27.08	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2190.625	38.31	-40.52	27.58	51.25	74.00	35.69	H
2692.375	39.05	-40.04	28.23	50.87	74.00	34.95	H
4874.062	43.13	-37.87	32.19	48.81	74.00	30.87	H
7311.094	43.91	-37.06	35.96	45.02	74.00	30.09	V
9748.125	45.98	-35.41	37.80	43.60	74.00	28.02	H
12185.156	47.76	-34.73	38.99	43.50	74.00	26.24	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.250	60.33	2.65	27.69	29.99	74.00	13.67	H
2485.444	60.77	2.66	27.69	30.42	74.00	13.23	H
4924.219	42.59	-37.91	32.31	48.19	74.00	31.41	H
7386.094	45.28	-36.93	36.13	46.08	74.00	28.72	H
9847.969	46.54	-35.56	37.80	44.29	74.00	27.46	H
12309.844	47.66	-34.68	38.91	43.43	74.00	26.34	H

**802.11g**
**Ch1**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.488	66.55	2.62	27.66	36.27	74.00	7.45	H
2388.925	66.77	2.62	27.66	36.49	74.00	7.23	H
4823.906	39.85	-37.50	32.06	45.30	74.00	34.15	V
7236.094	44.86	-37.00	35.78	46.08	74.00	29.14	H
9647.812	45.60	-36.00	37.80	43.80	74.00	28.40	V
12060.000	47.38	-34.81	39.06	43.13	74.00	26.62	H

**Ch6**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2286.000	38.50	-40.50	27.62	51.38	74.00	35.50	H
2619.875	38.53	-40.13	28.03	50.63	74.00	35.47	V
4874.062	40.70	-37.87	32.19	46.39	74.00	33.30	V
7311.094	42.78	-37.06	35.96	43.89	74.00	31.22	H
9748.125	46.28	-35.41	37.80	43.90	74.00	27.72	V
12185.156	47.32	-34.73	38.99	43.06	74.00	26.68	H

**Ch11**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.594	62.90	2.64	27.69	32.56	74.00	11.10	H
2483.850	63.01	2.65	27.69	32.67	74.00	10.99	V
4924.219	40.33	-37.91	32.31	45.92	74.00	33.67	V
7386.094	44.35	-36.93	36.13	45.15	74.00	29.65	V
9847.969	45.53	-35.56	37.80	43.29	74.00	28.47	H
12309.844	47.85	-34.68	38.91	43.61	74.00	26.15	V

**802.11n-HT20**

## Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.573	66.01	2.62	27.66	35.72	74.00	7.99	V
2389.992	65.73	2.62	27.66	35.45	74.00	8.27	V
4823.906	40.10	-37.50	32.06	45.54	74.00	33.90	V
7236.094	43.88	-37.00	35.78	45.10	74.00	30.12	V
9647.812	45.90	-36.00	37.80	44.10	74.00	28.10	H
12060.000	47.98	-34.81	39.06	43.73	74.00	26.02	V

## Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2171.875	38.20	-40.62	27.57	51.25	74.00	35.80	H
2665.375	38.79	-40.18	28.16	50.81	74.00	35.21	V
4874.062	40.97	-37.87	32.19	46.65	74.00	33.03	V
7311.094	43.67	-37.06	35.96	44.78	74.00	30.33	H
9748.125	46.76	-35.41	37.80	44.37	74.00	27.24	V
12185.156	48.08	-34.73	38.99	43.82	74.00	25.92	H

## Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.537	64.18	2.65	27.69	33.84	74.00	9.82	V
2483.594	64.11	2.65	27.69	33.77	74.00	9.89	V
4924.219	40.57	-37.91	32.31	46.16	74.00	33.43	V
7386.094	44.70	-36.93	36.13	45.50	74.00	29.30	H
9847.969	47.23	-35.56	37.80	44.99	74.00	26.77	V
12309.844	48.26	-34.68	38.91	44.02	74.00	25.74	V

**Average**
**802.11b**

## Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2386.750	46.63	2.62	27.66	16.35	54.00	7.37	V
2387.150	46.82	2.62	27.66	16.54	54.00	7.18	V
4823.750	31.20	-37.50	32.06	36.65	54.00	22.80	V
7236.250	36.69	-37.00	35.78	37.91	54.00	17.31	V
9648.125	33.87	-36.00	37.80	32.07	54.00	20.13	H
12060.000	35.77	-34.81	39.06	31.52	54.00	18.23	H

## Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2419.625	46.94	2.63	27.67	16.64	54.00	7.06	V
2454.375	46.74	2.62	27.68	16.44	54.00	7.26	V
4873.750	35.80	-37.87	32.18	41.48	54.00	18.20	V
7311.250	34.17	-37.06	35.96	35.28	54.00	19.83	H
9748.125	34.39	-35.41	37.80	32.00	54.00	19.61	V
12185.000	36.57	-34.73	38.99	32.31	54.00	17.43	H

## Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.600	46.54	2.65	27.69	16.20	54.00	7.46	V
2483.725	46.47	2.65	27.69	16.13	54.00	7.53	V
4923.750	35.83	-37.90	32.31	41.42	54.00	18.17	V
7386.250	35.65	-36.93	36.13	36.44	54.00	18.35	V
9848.125	34.65	-35.56	37.80	32.41	54.00	19.35	H
12310.000	36.10	-34.67	38.91	31.87	54.00	17.90	H

**802.11g**
**Ch1**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.350	47.37	2.62	27.66	17.09	54.00	6.63	V
2389.675	47.52	2.62	27.66	17.24	54.00	6.48	V
4823.750	28.33	-37.50	32.06	33.78	54.00	25.67	V
7236.250	33.04	-37.00	35.78	34.26	54.00	20.96	V
9648.125	33.93	-36.00	37.80	32.13	54.00	20.07	V
12060.000	35.64	-34.81	39.06	31.39	54.00	18.36	V

**Ch6**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2412.775	46.82	2.63	27.67	16.52	54.00	7.18	V
2461.600	47.63	2.60	27.69	17.35	54.00	6.37	V
4873.750	29.57	-37.87	32.18	35.25	54.00	24.43	V
7311.250	32.34	-37.06	35.96	33.45	54.00	21.66	H
9748.125	34.52	-35.41	37.80	32.13	54.00	19.48	H
12185.000	36.54	-34.73	38.99	32.28	54.00	17.46	V

**Ch11**

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	47.14	2.65	27.69	16.80	54.00	6.86	V
2483.575	47.09	2.65	27.69	16.74	54.00	6.91	V
4923.750	29.38	-37.90	32.31	34.97	54.00	24.62	H
7386.250	33.44	-36.93	36.13	34.23	54.00	20.56	V
9848.125	34.72	-35.56	37.80	32.48	54.00	19.28	V
12310.000	36.21	-34.67	38.91	31.97	54.00	17.79	H

**802.11n-HT20**

## Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.900	47.65	2.62	27.66	17.37	54.00	6.35	V
2389.975	47.71	2.62	27.66	17.42	54.00	6.29	V
4823.750	28.21	-37.50	32.06	33.65	54.00	25.79	V
7236.250	33.24	-37.00	35.78	34.47	54.00	20.76	H
9648.125	33.87	-36.00	37.80	32.06	54.00	20.13	H
12060.000	36.94	-34.81	39.06	32.69	54.00	17.06	V

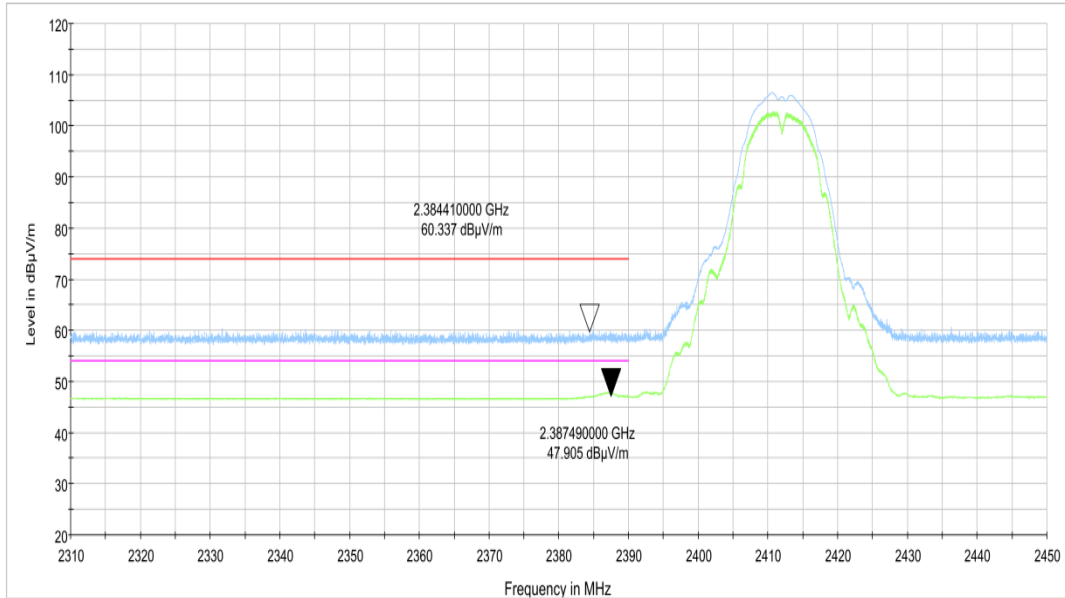
## Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2411.775	47.15	2.63	27.67	16.85	54.00	6.85	V
2463.525	47.33	2.59	27.69	17.05	54.00	6.67	V
4873.750	30.00	-37.87	32.18	35.68	54.00	24.00	V
7311.250	32.17	-37.06	35.96	33.28	54.00	21.83	V
9748.125	34.37	-35.41	37.80	31.98	54.00	19.63	H
12185.000	36.36	-34.73	38.99	32.10	54.00	17.64	V

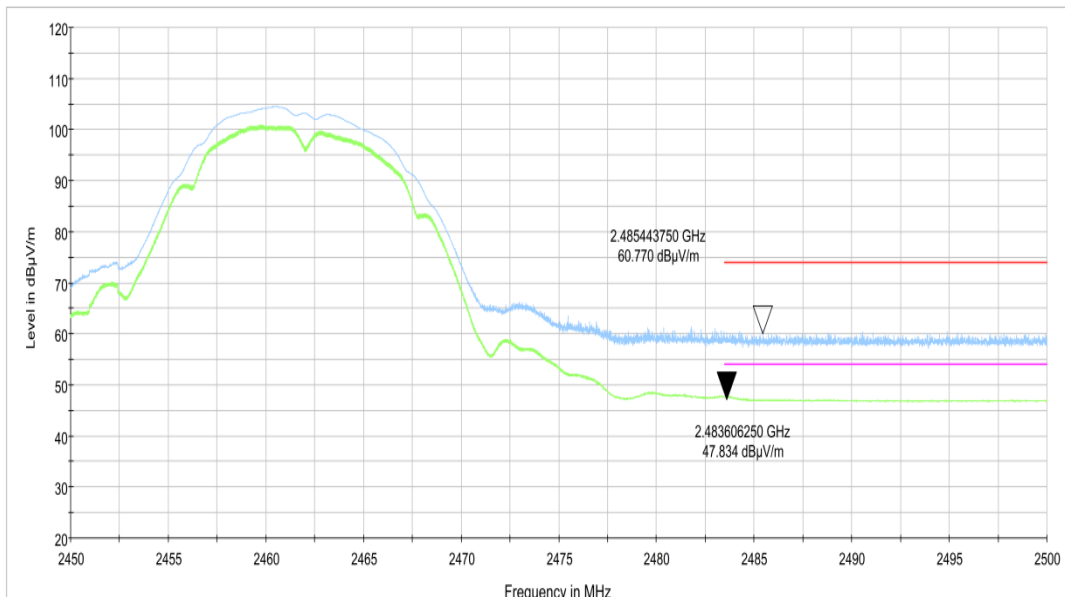
## Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.600	47.79	2.65	27.69	17.45	54.00	6.21	V
2483.700	47.72	2.65	27.69	17.38	54.00	6.28	V
4923.750	29.55	-37.90	32.31	35.15	54.00	24.45	V
7386.250	33.18	-36.93	36.13	33.98	54.00	20.82	V
9848.125	34.58	-35.56	37.80	32.34	54.00	19.42	H
12310.000	36.28	-34.67	38.91	32.04	54.00	17.72	H

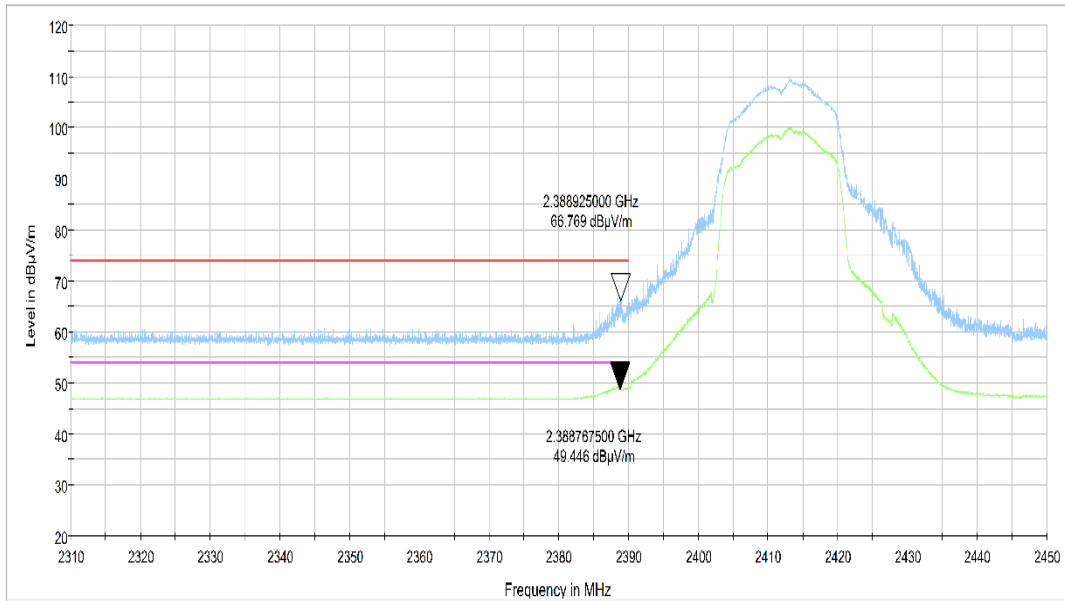
Test graphs as below:



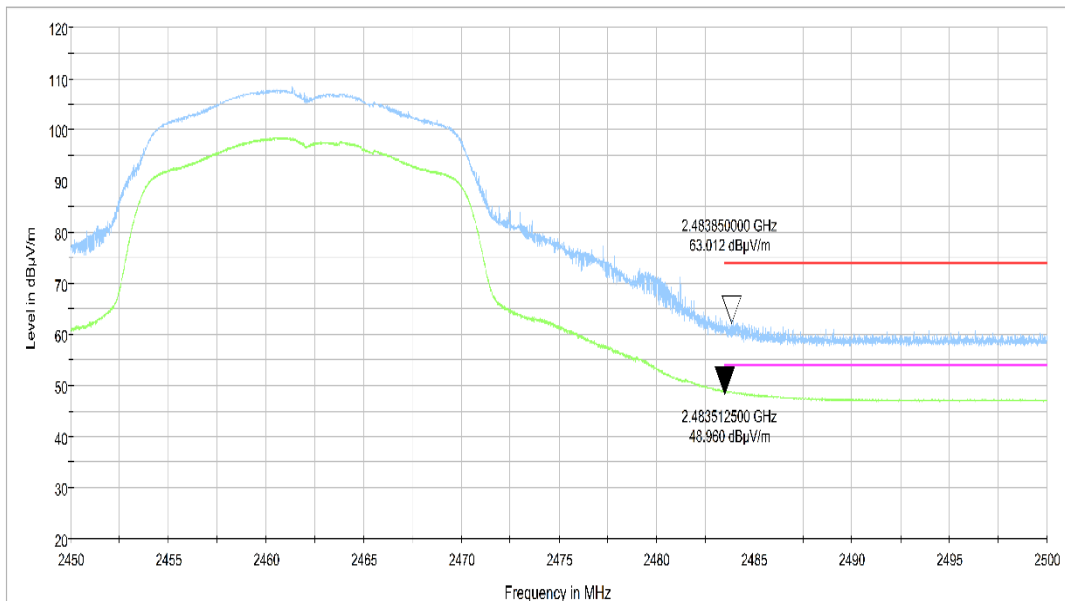
**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz**



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

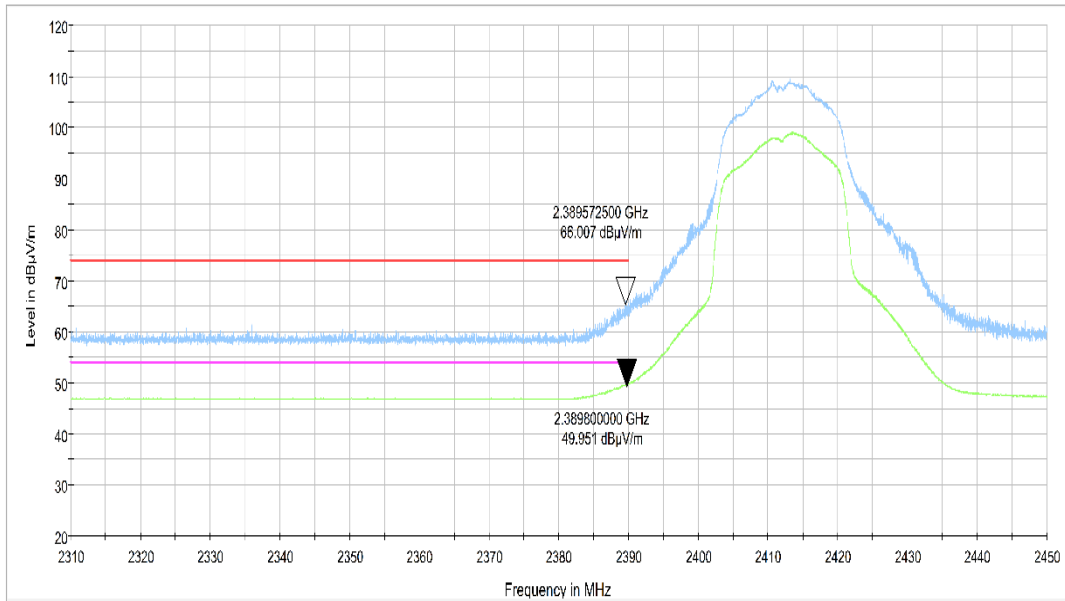


**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz**

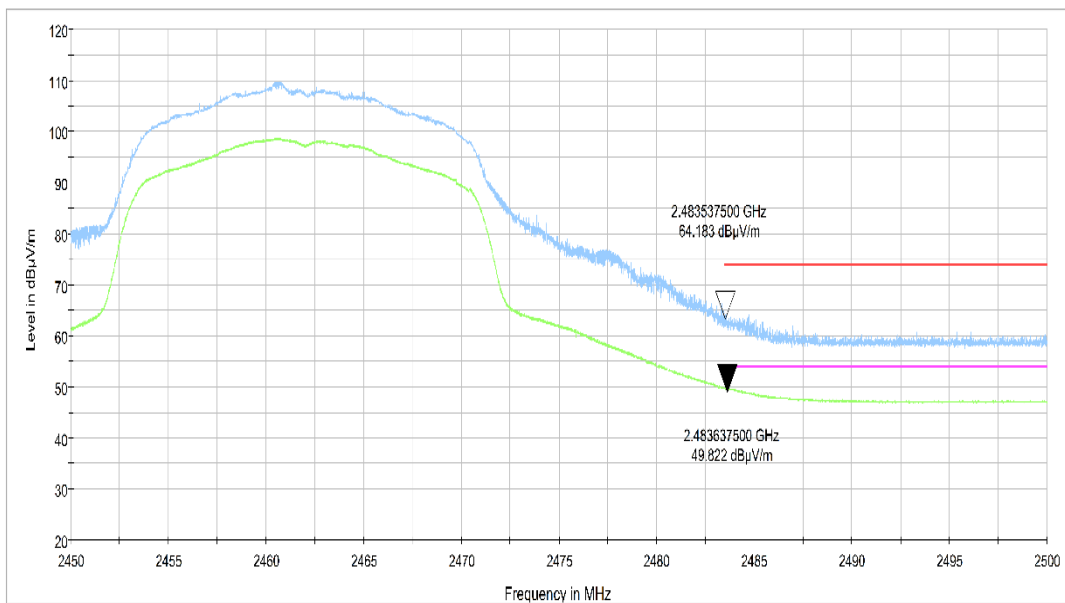


**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**





**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**

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

### Method of Measurement:

See Clause 6.2 of ANSI C63.10-2013 specifically.

See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

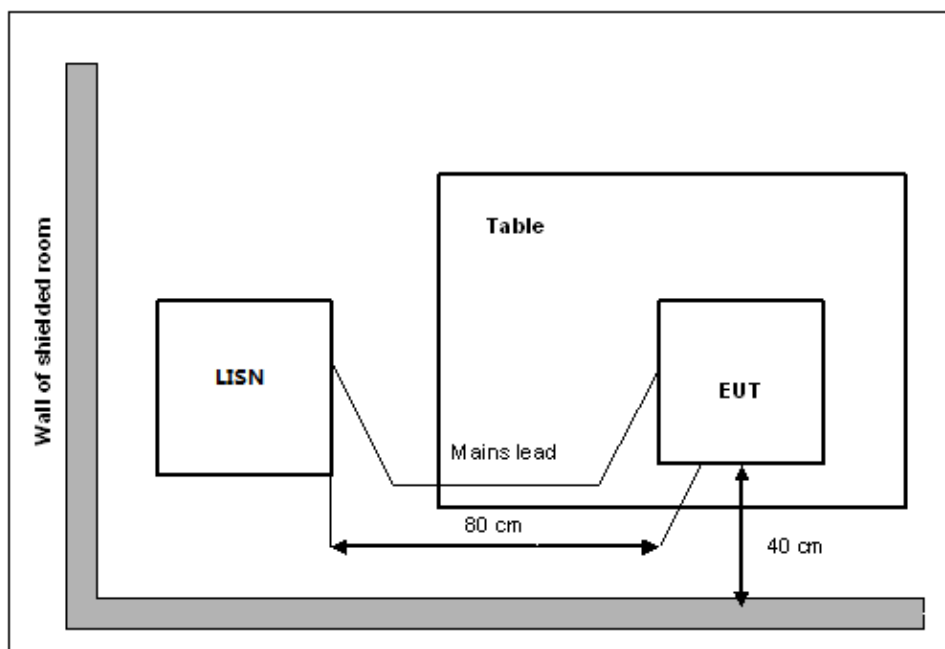
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

### Test Condition:

Voltage (V)	Frequency (Hz)
120	60

### Measurement Setup



**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)**

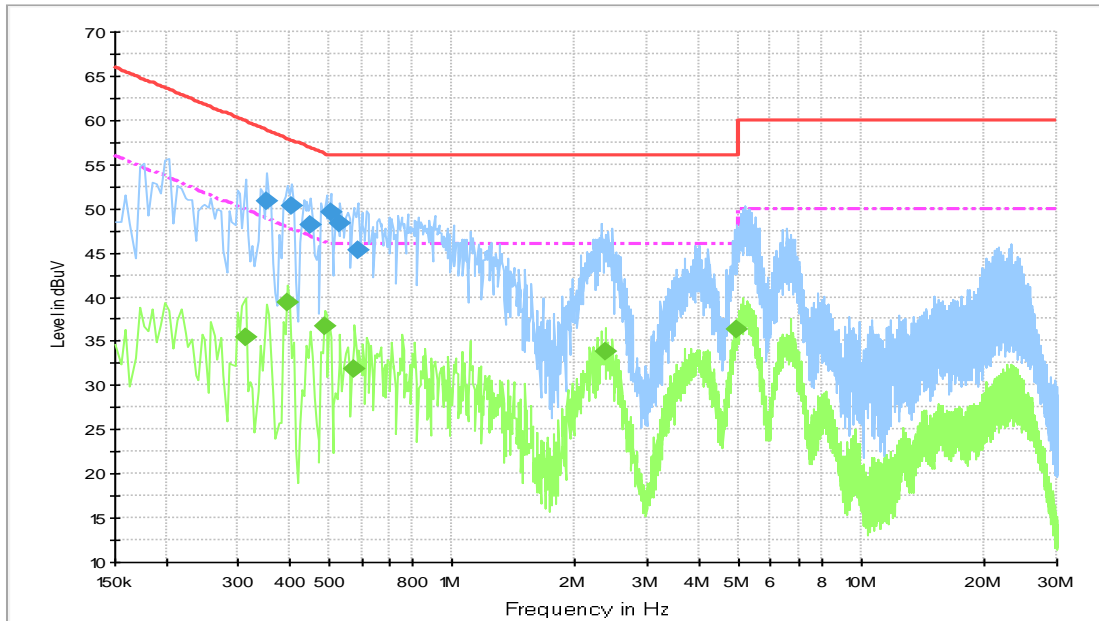
Frequency range (MHz)	Average Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1	Fig.A.7.2	<b>P</b>
0.5 to 5	46			
5 to 30	50			

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:**

**Result for Traffic:**



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

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

**Final Result 1**

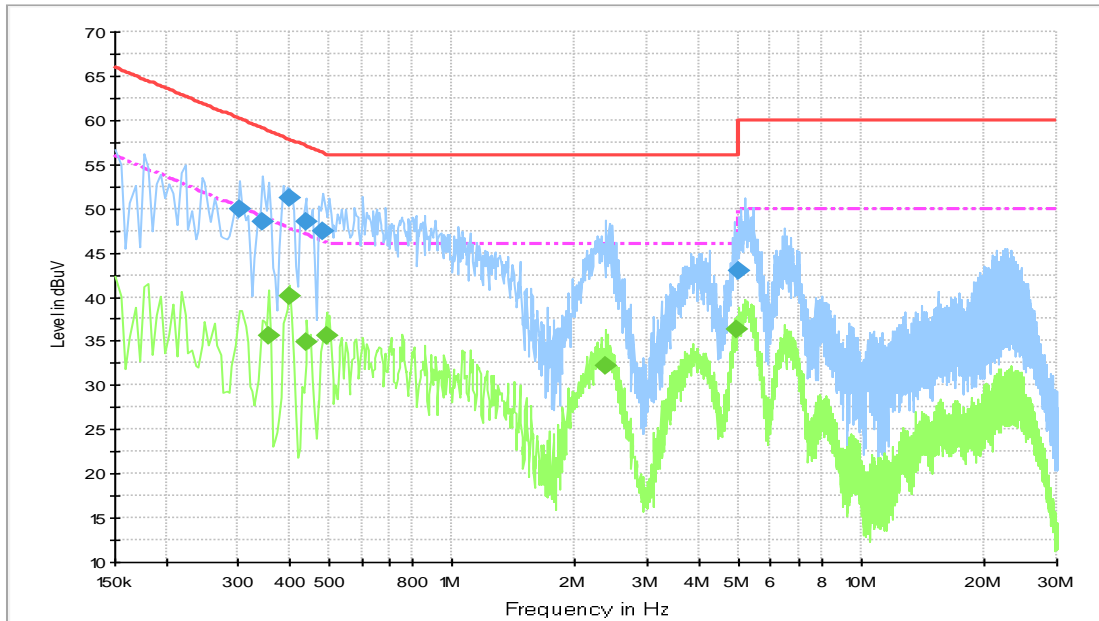
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.352500	50.8	3000.	9.000	N	25.1	8.1	58.9
0.406500	50.4	3000.	9.000	L1	24.4	7.3	57.7
0.451500	48.1	3000.	9.000	L1	23.9	8.7	56.8
0.505500	49.6	3000.	9.000	N	23.4	6.4	56.0
0.532500	48.4	3000.	9.000	N	23.2	7.6	56.0
0.586500	45.3	3000.	9.000	L1	22.7	10.7	56.0

**Final Result 2**

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.312000	35.4	3000.	9.000	L1	25.7	14.5	49.9
0.397500	39.3	3000.	9.000	L1	24.5	8.6	47.9
0.487500	36.7	3000.	9.000	L1	23.6	9.5	46.2
0.577500	31.8	3000.	9.000	N	22.8	14.2	46.0
2.364000	33.8	3000.	9.000	L1	19.9	12.2	46.0
4.978500	36.3	3000.	9.000	L1	19.7	9.7	46.0

Note: The measurement results showed here are worst cases of the combinations of different Adapters.

**Result for Idle:**



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

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

**Final Result 1**

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.303000	49.9	3000.	9.000	N	25.8	10.2	60.2
0.343500	48.5	3000.	9.000	L1	25.2	10.6	59.1
0.402000	51.2	3000.	9.000	N	24.5	6.6	57.8
0.438000	48.5	3000.	9.000	N	24.1	8.6	57.1
0.483000	47.5	3000.	9.000	L1	23.6	8.8	56.3
4.992000	43.0	3000.	9.000	N	19.7	13.0	56.0

**Final Result 2**

Frequency (MHz)	Average (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.357000	35.7	3000.	9.000	N	25.0	13.1	48.8
0.402000	40.1	3000.	9.000	L1	24.5	7.7	47.8
0.442500	34.9	3000.	9.000	L1	24.0	12.2	47.0
0.492000	35.7	3000.	9.000	L1	23.6	10.5	46.1
2.364000	32.2	3000.	9.000	N	19.9	13.8	46.0
4.974000	36.4	3000.	9.000	L1	19.7	9.6	46.0

Note: The measurement results showed here are worst cases of the combinations of different Adapters.



## **ANNEX B: EUT parameters**

Disclaimer: The worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

## ANNEX C: 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 Communiqué dated January 2009).</i>	
2021-09-29 through 2022-09-30 <i>Effective Dates</i>	 For the National Voluntary Laboratory Accreditation Program

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