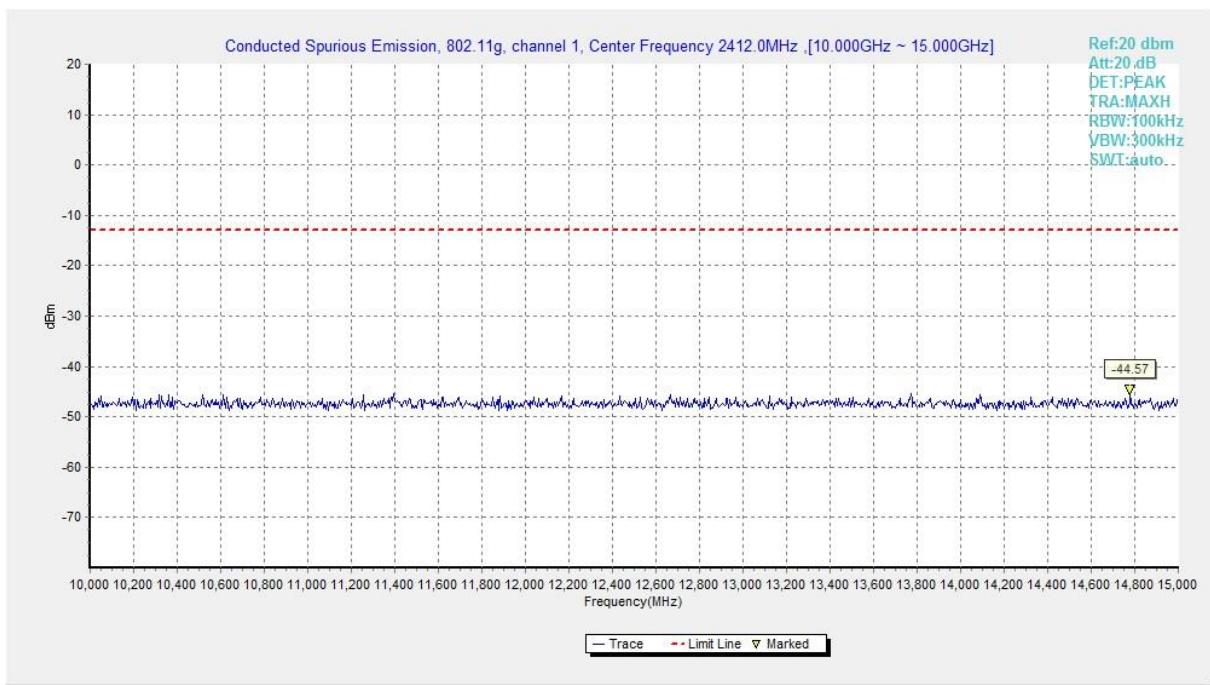
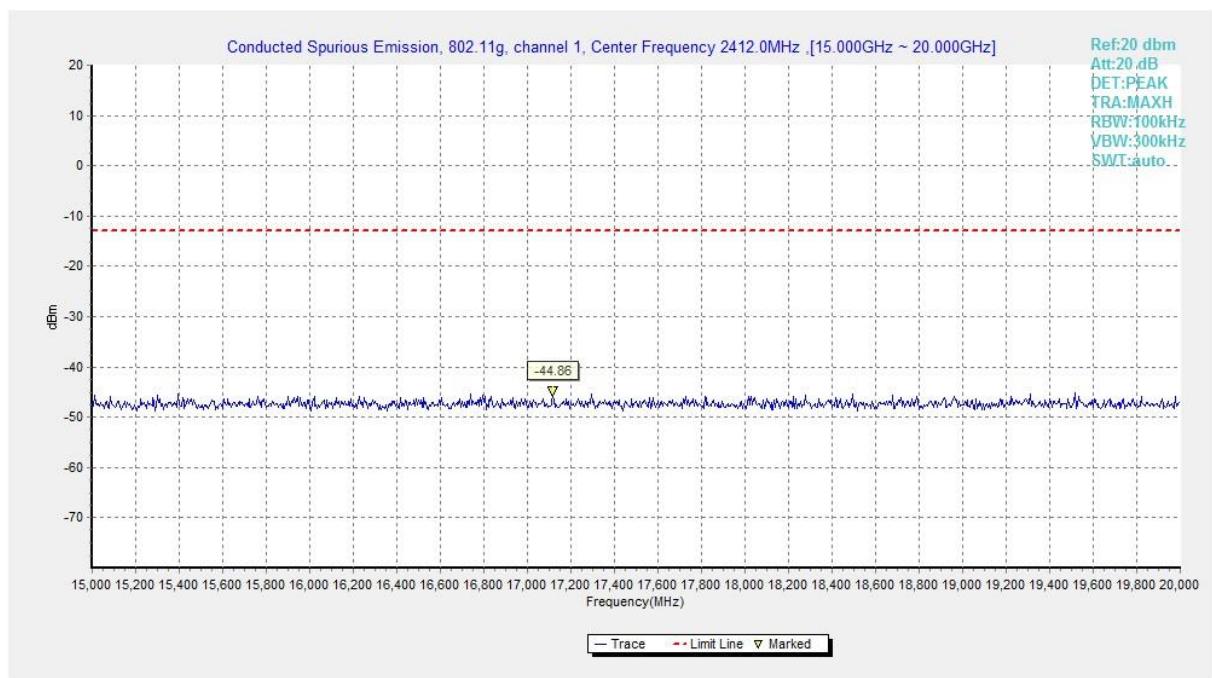


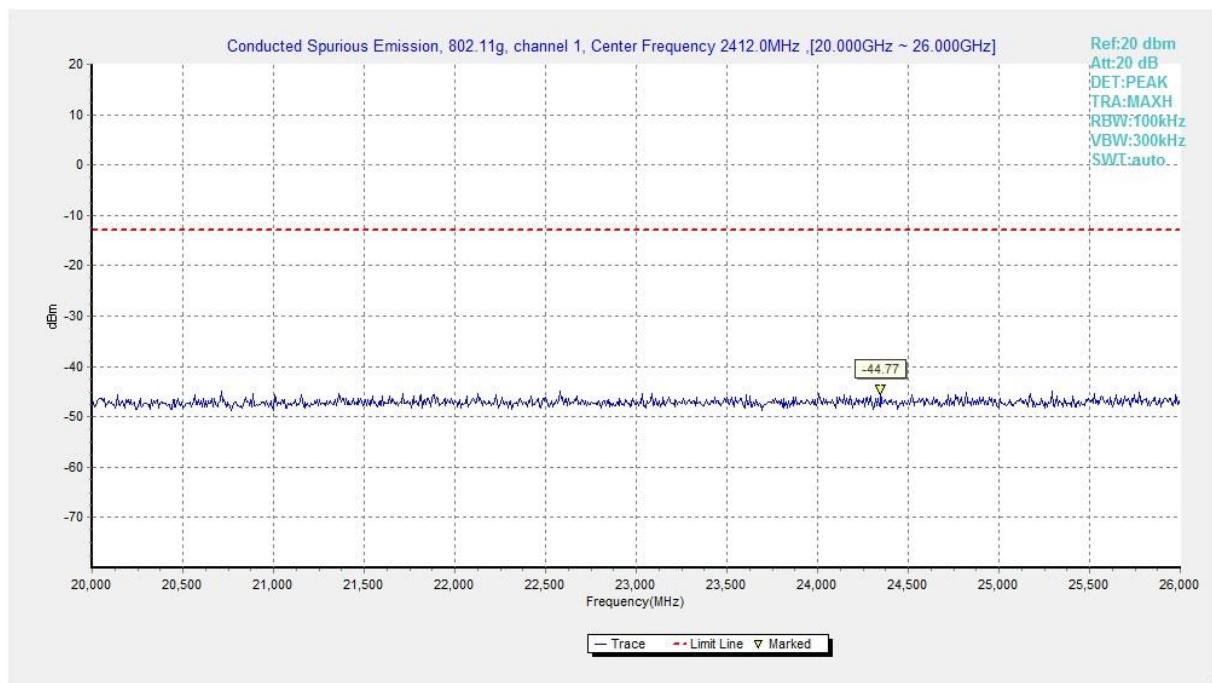
**Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)**



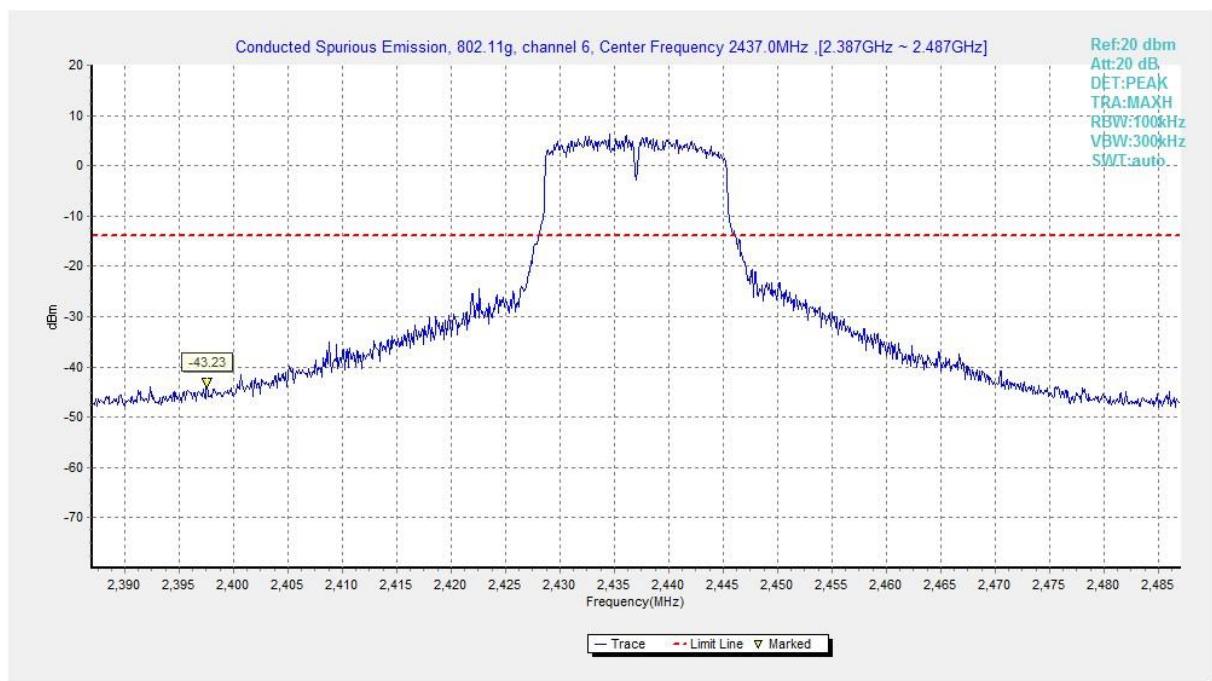
**Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)**



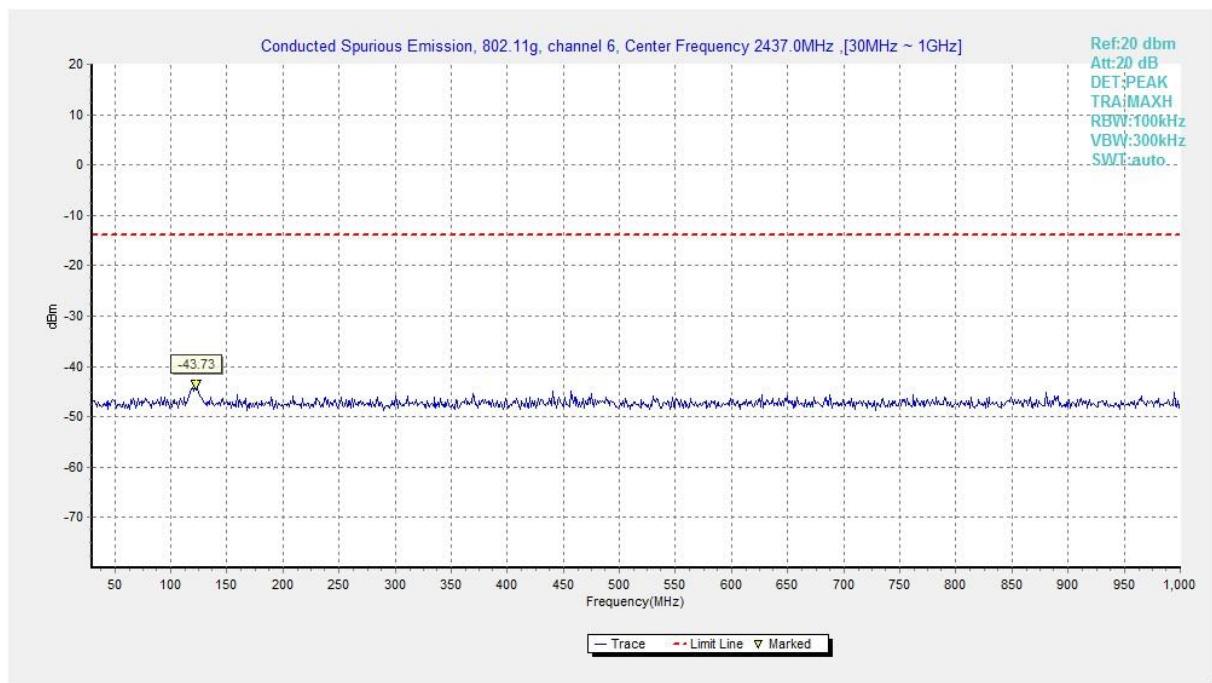
**Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)**



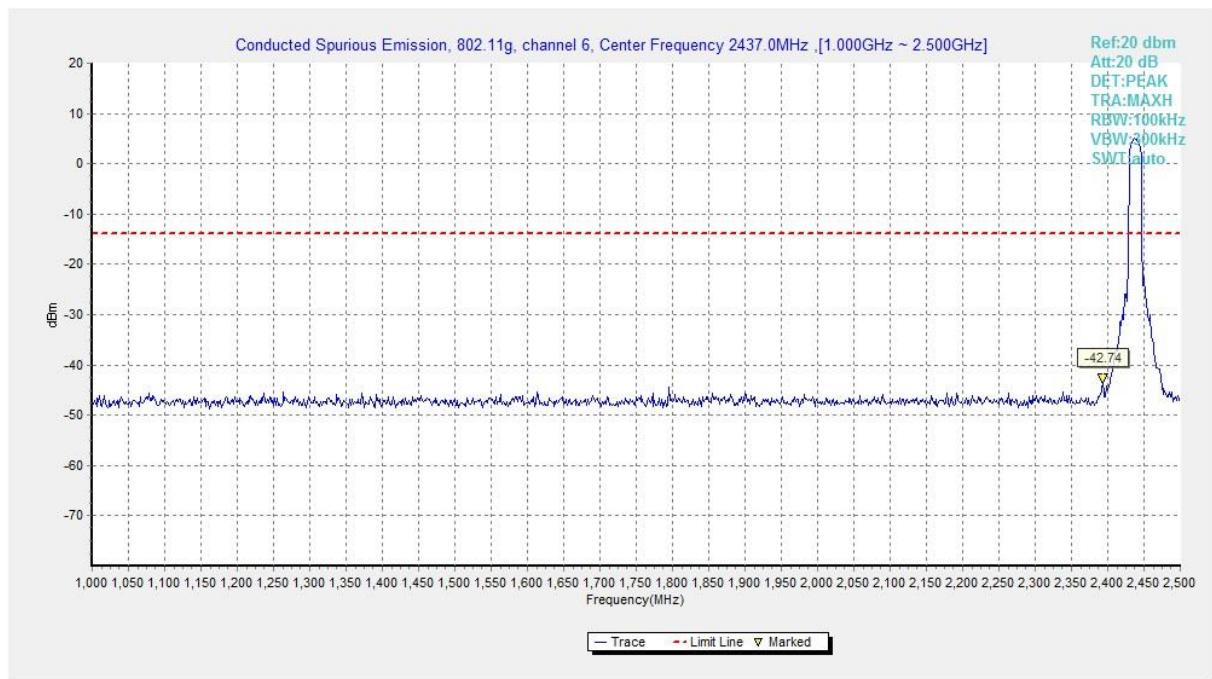
**Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)**



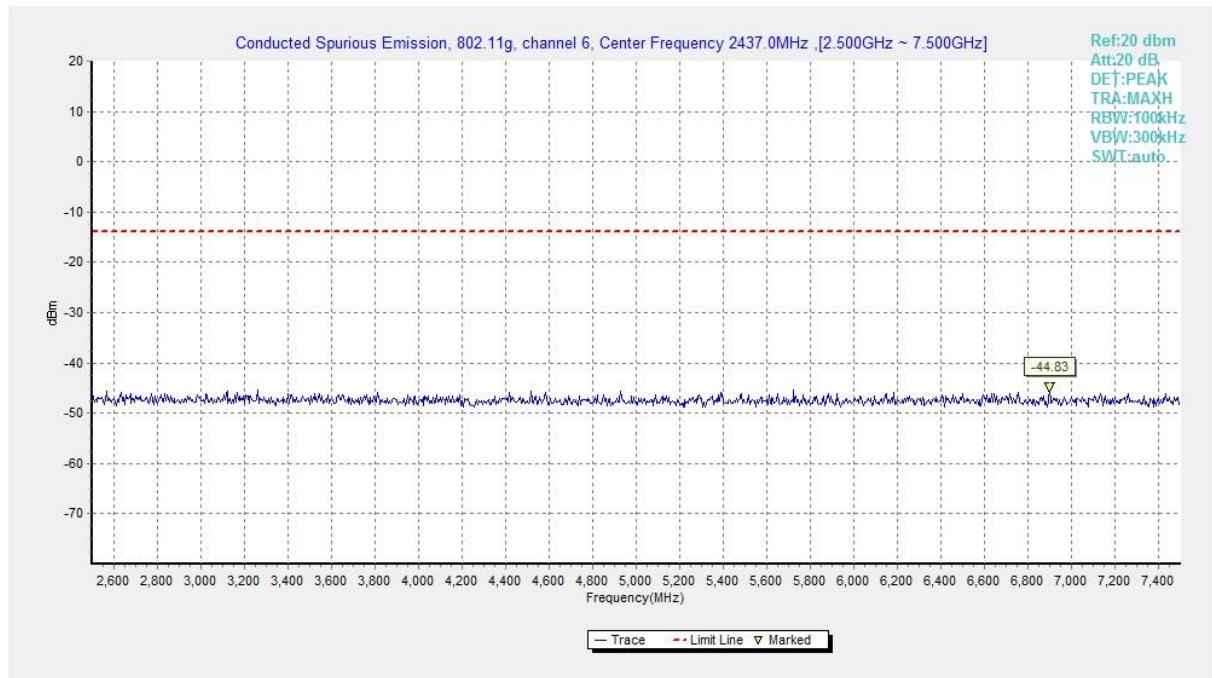
**Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)**



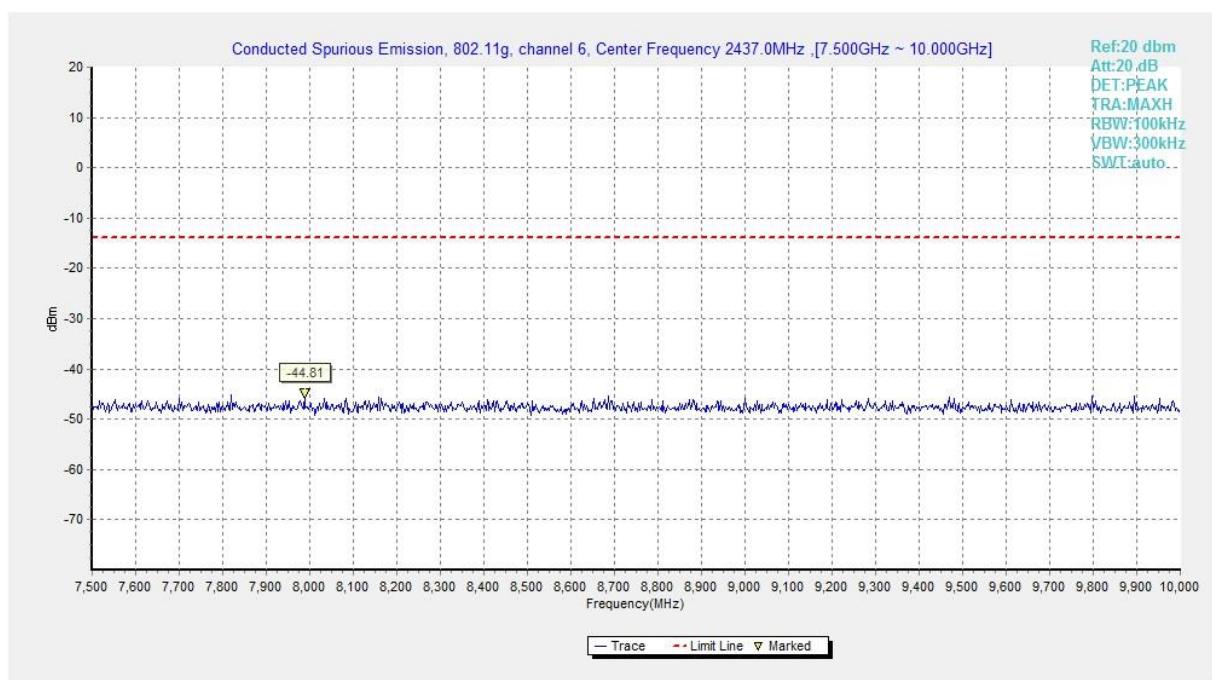
**Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)**



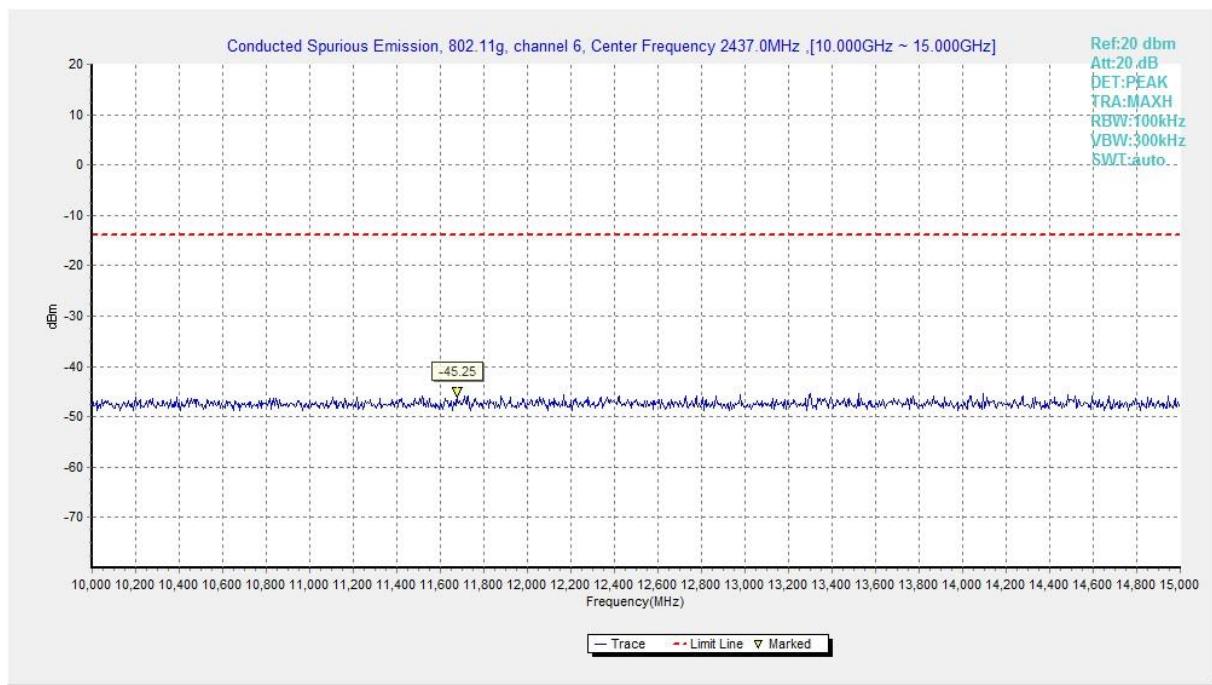
**Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)**



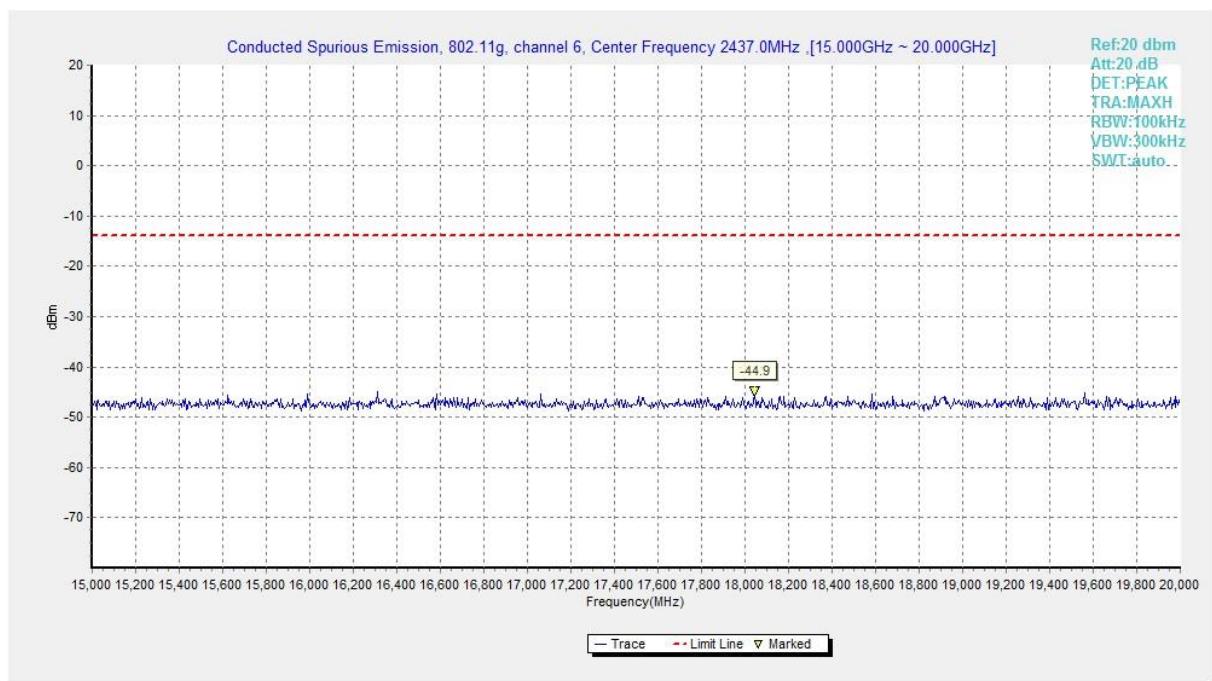
**Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)**



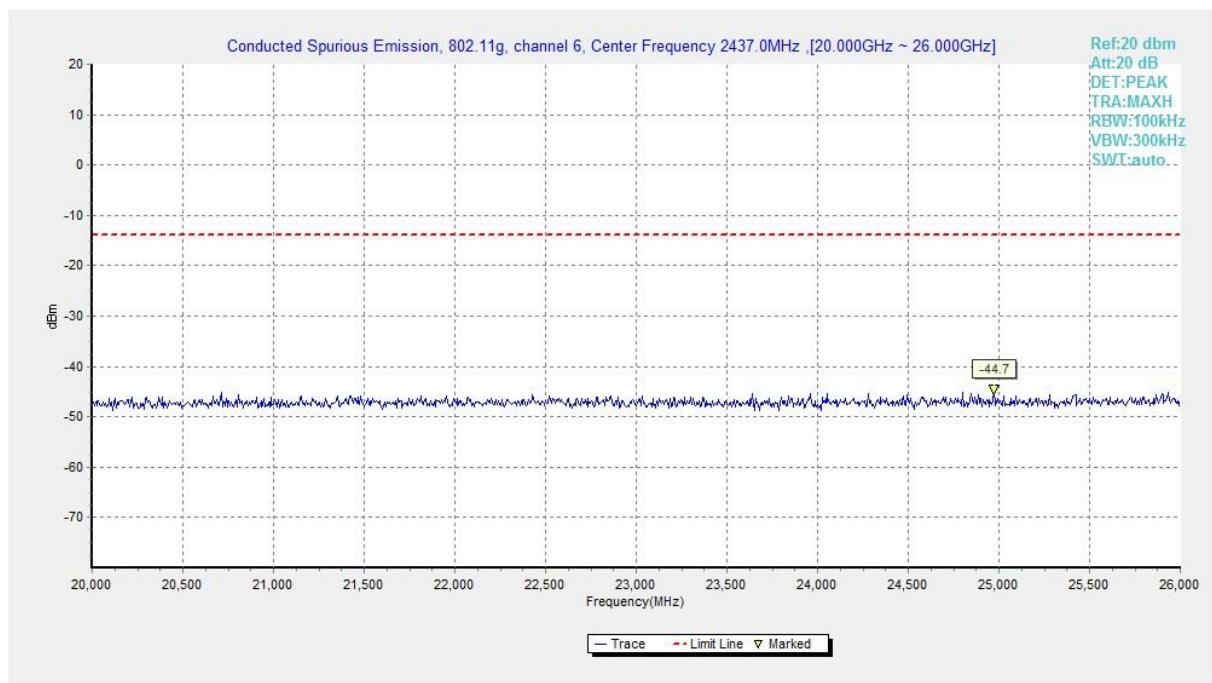
**Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)**



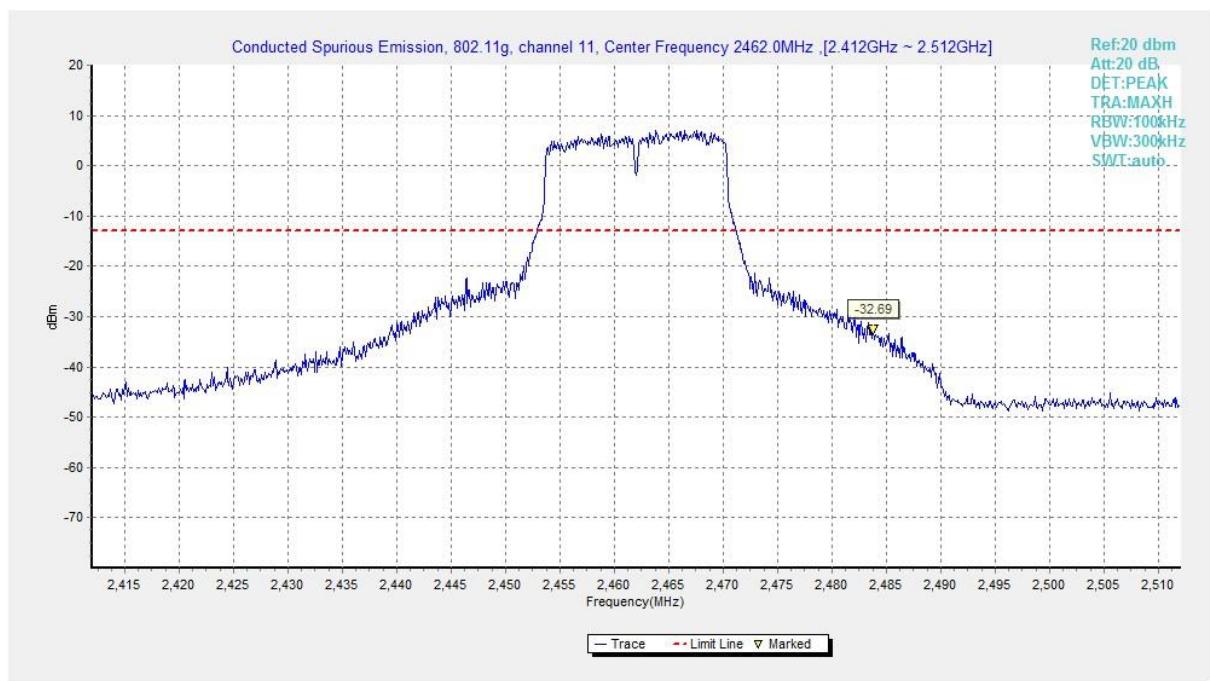
**Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)**



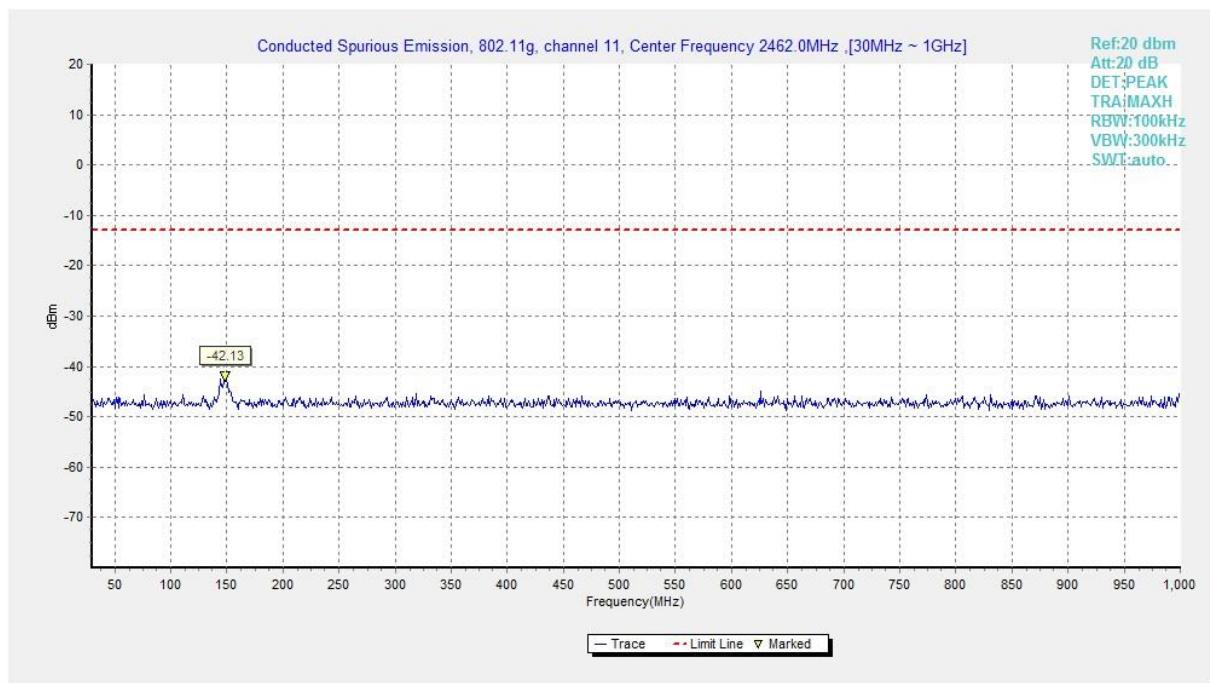
**Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)**



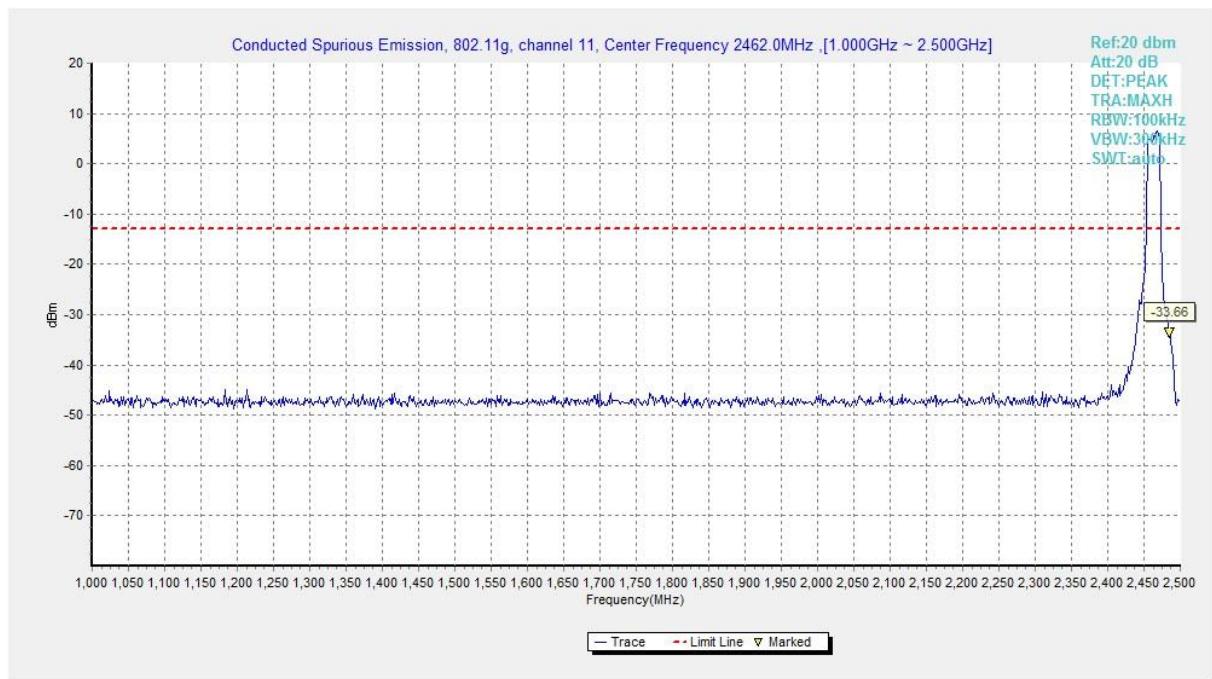
**Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)**



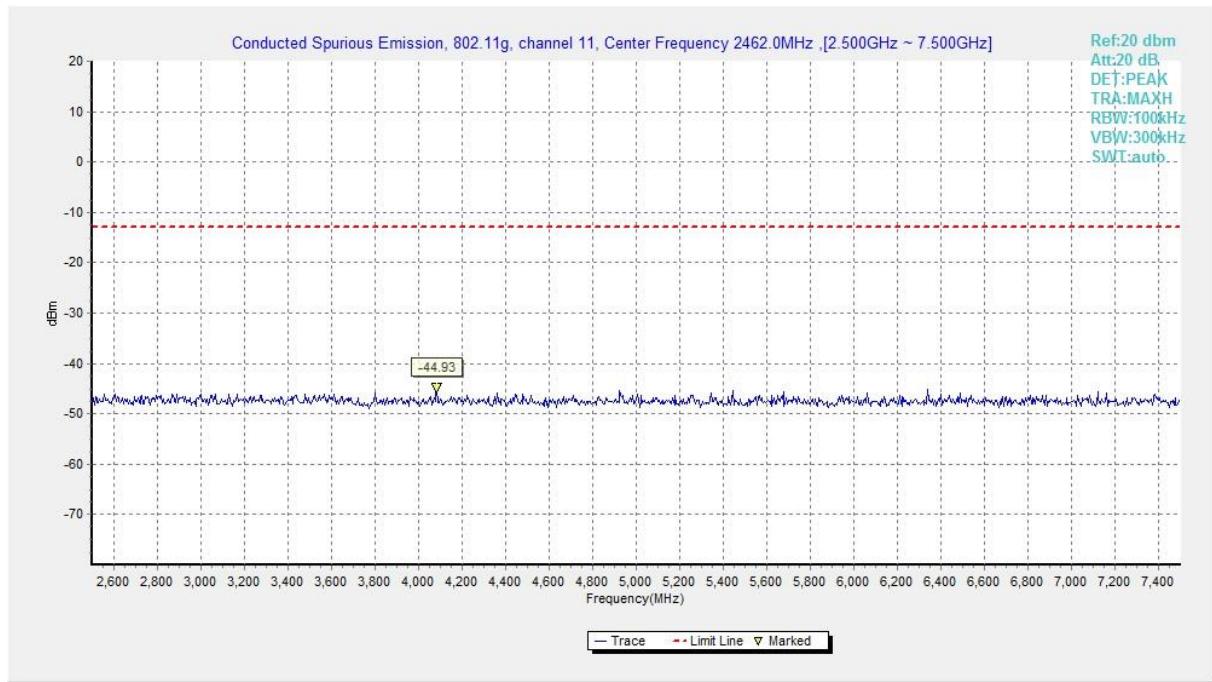
**Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)**



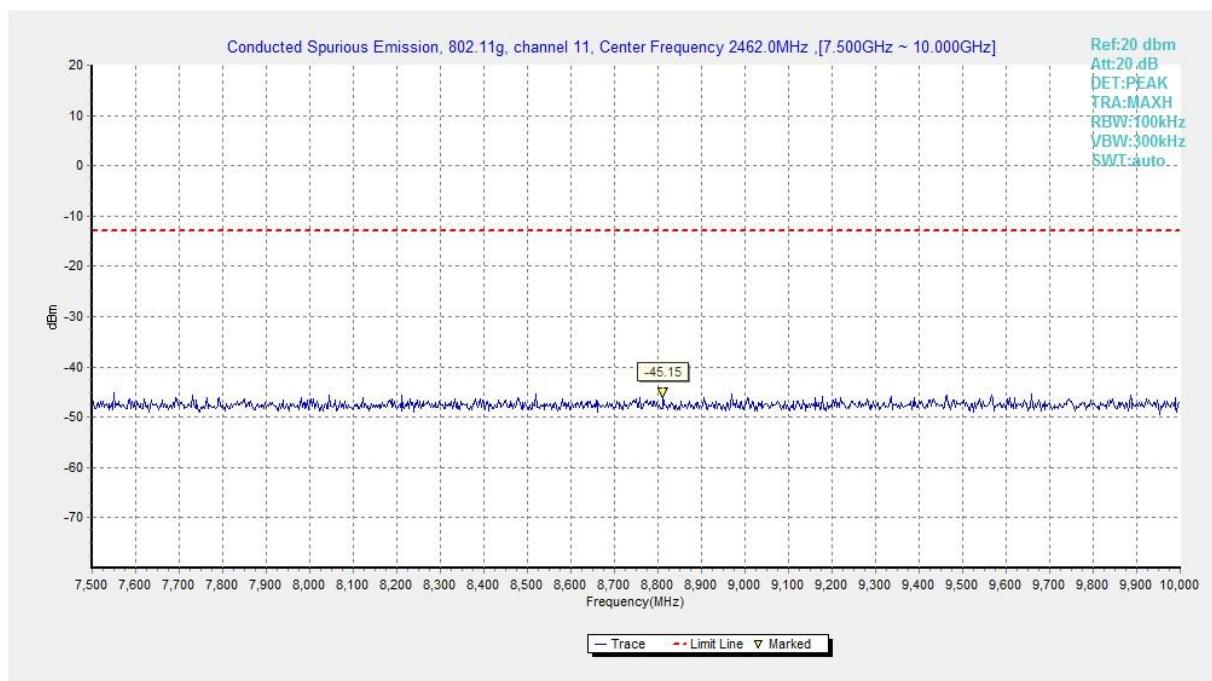
**Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)**



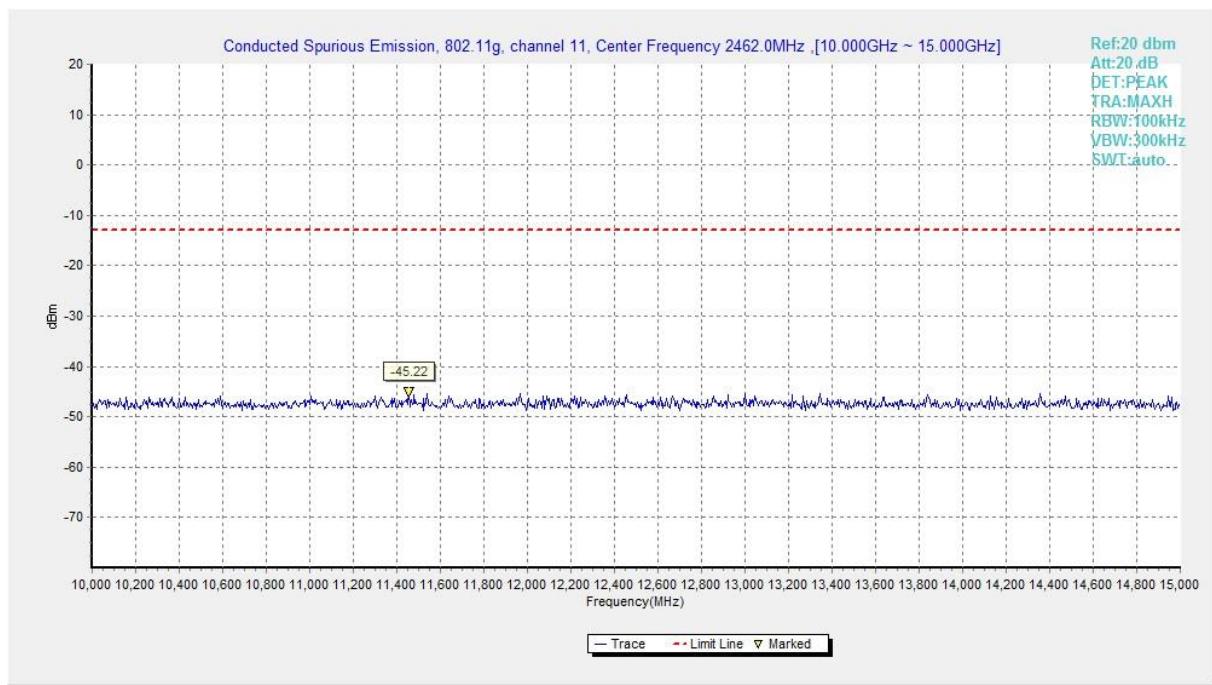
**Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)**



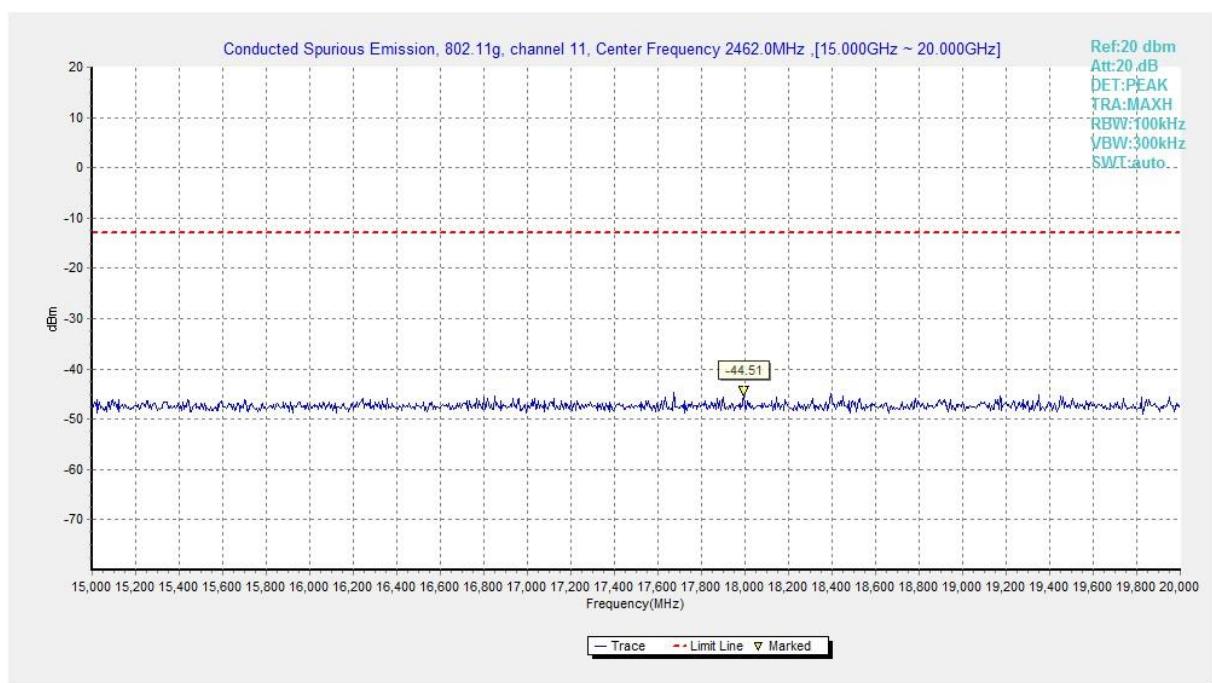
**Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)**



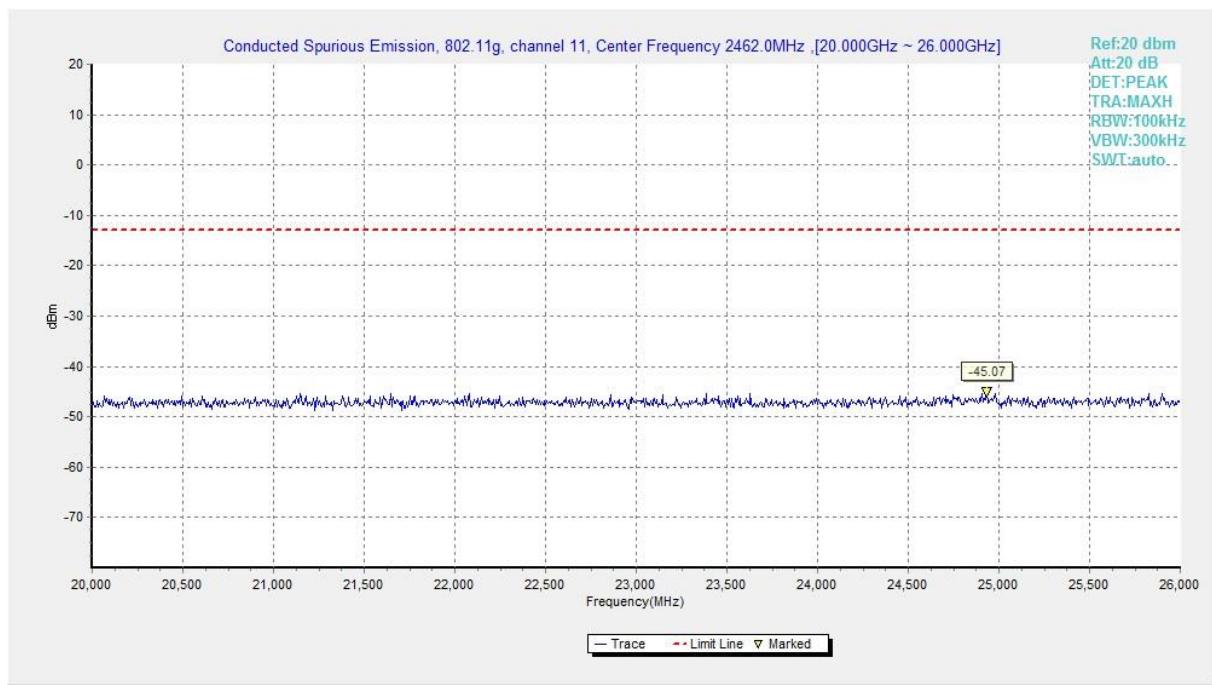
**Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)**



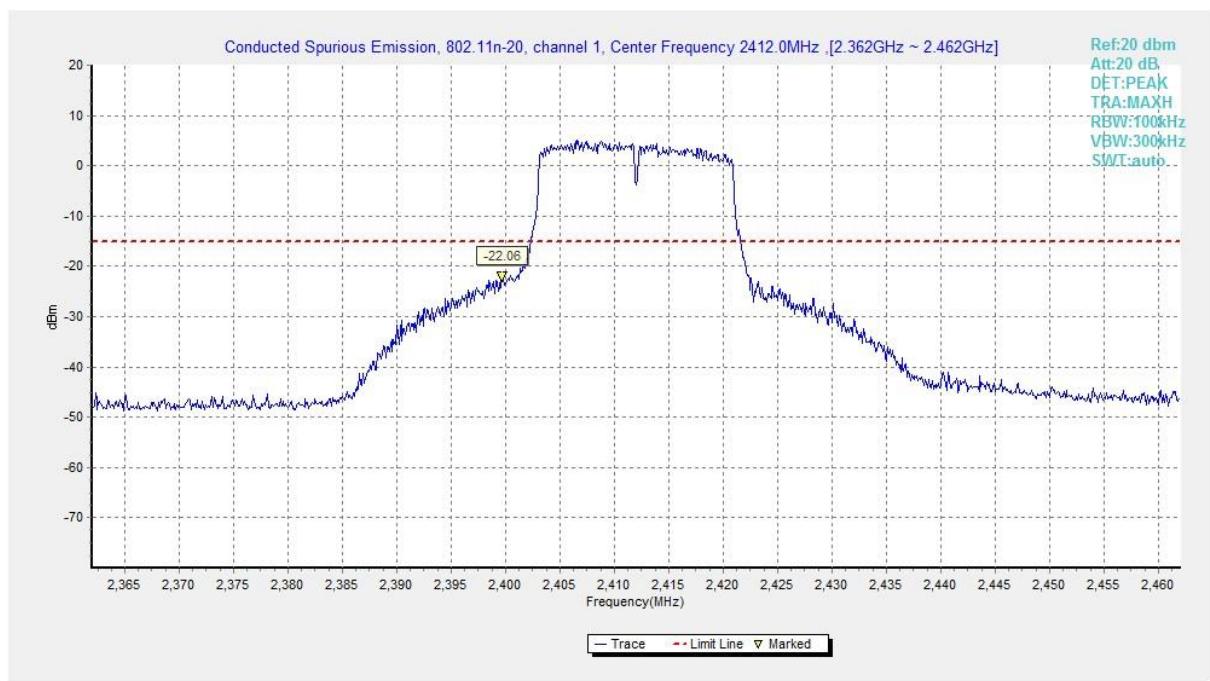
**Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)**



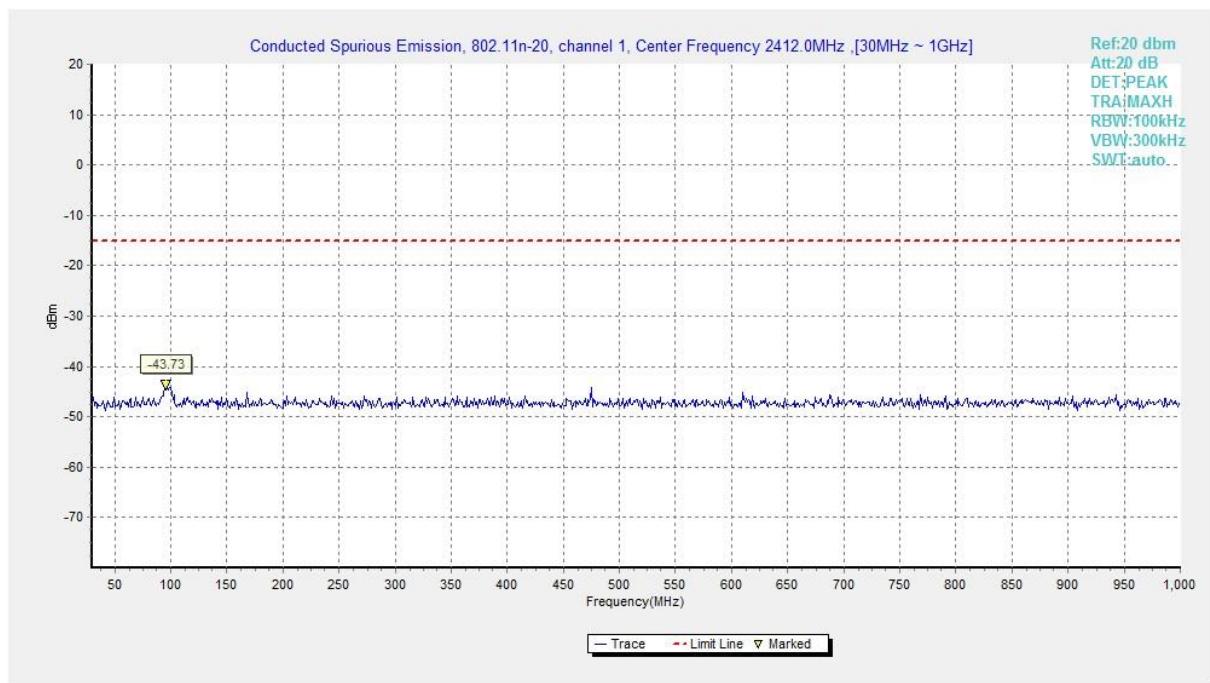
**Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)**



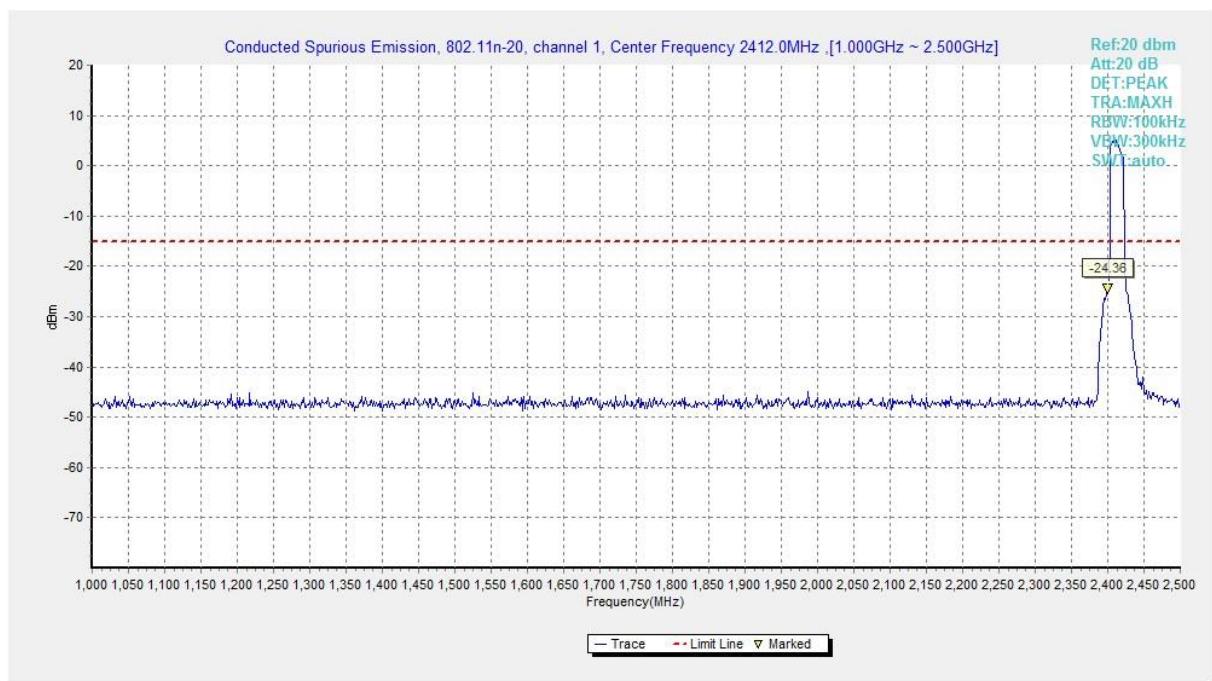
**Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)**



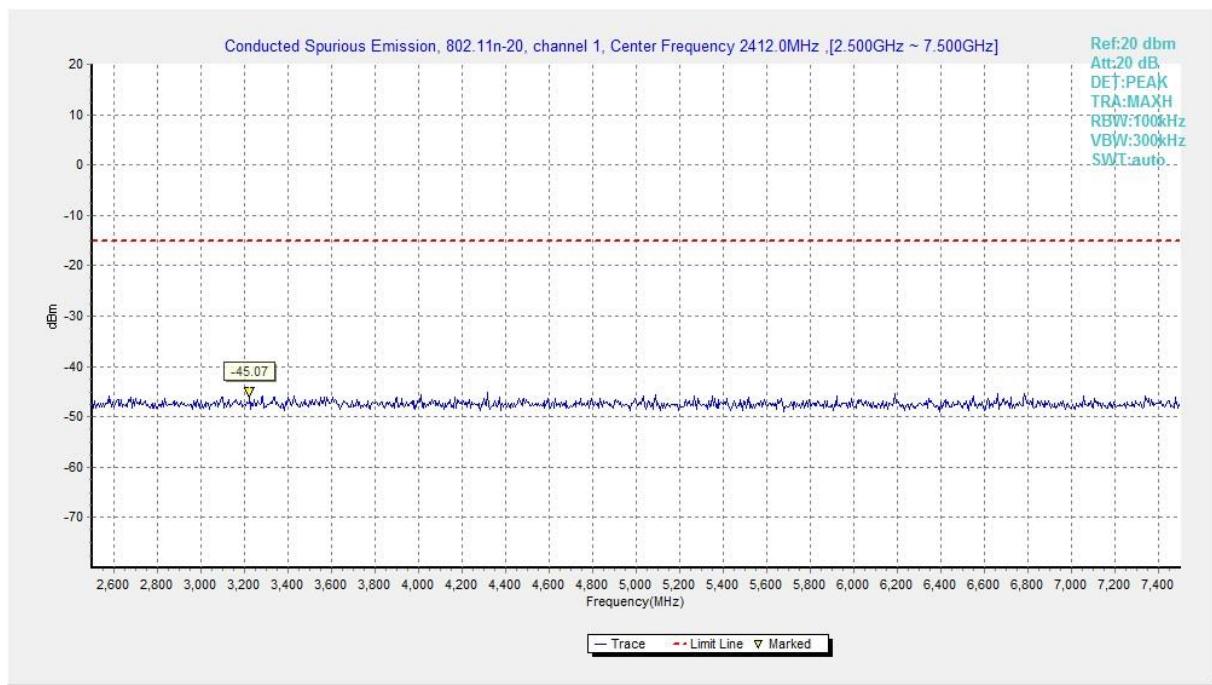
**Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)**



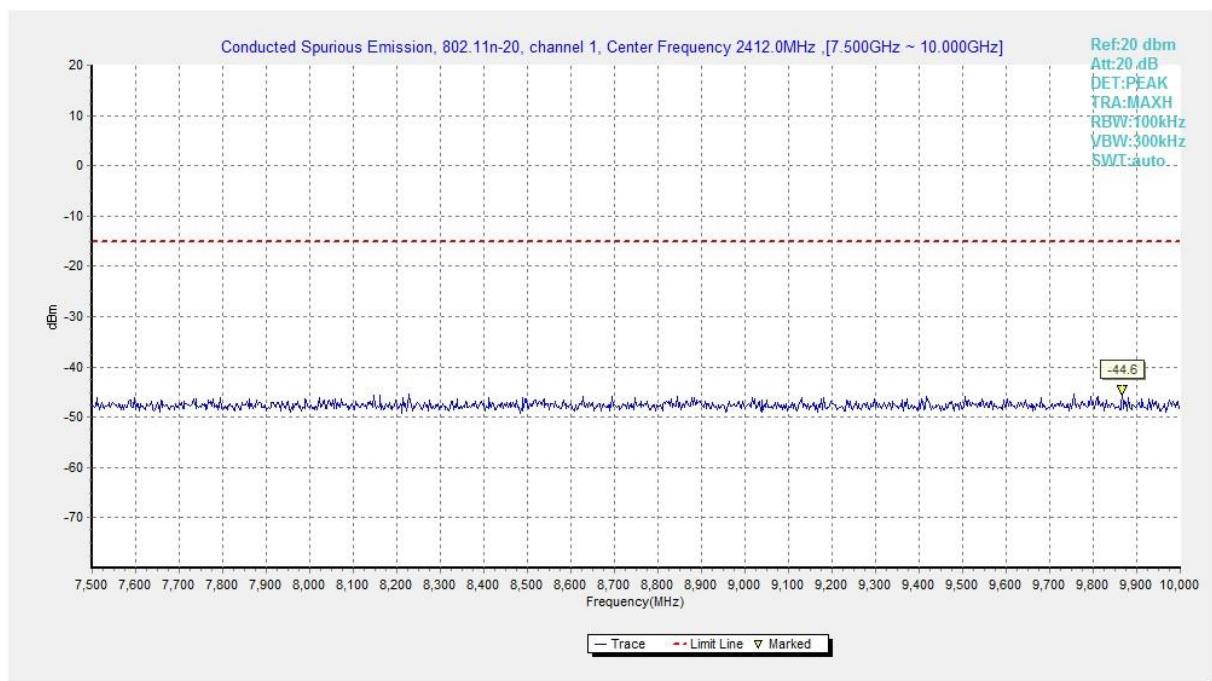
**Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)**



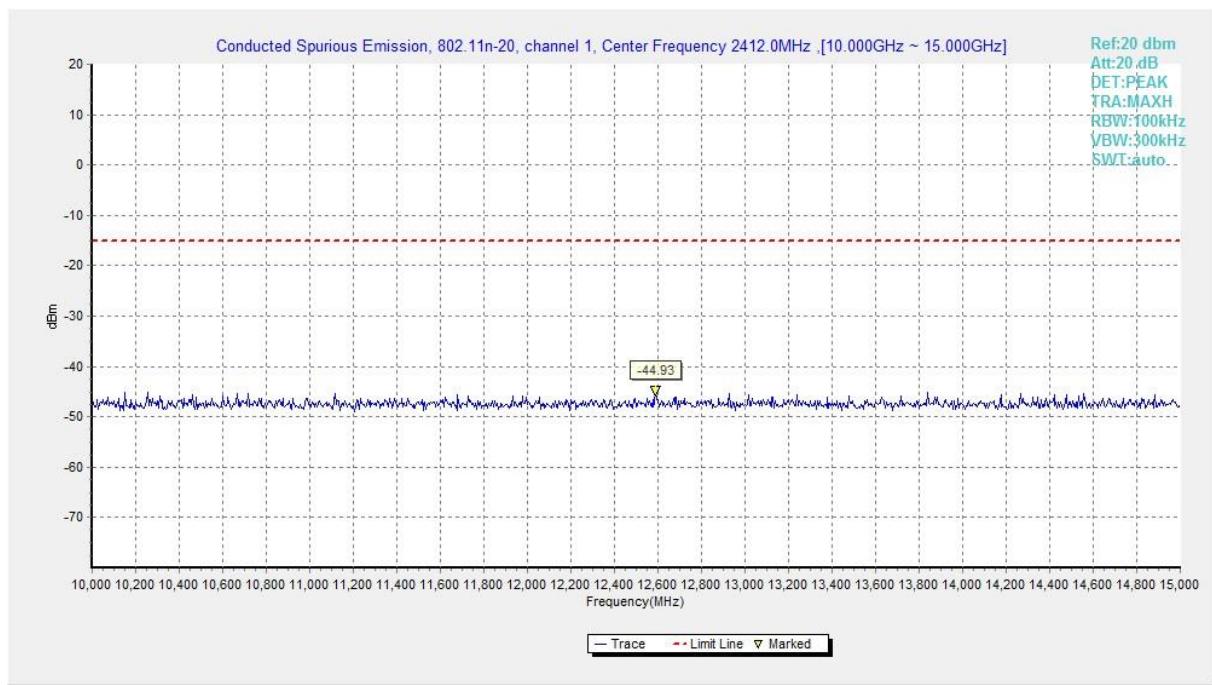
**Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)**



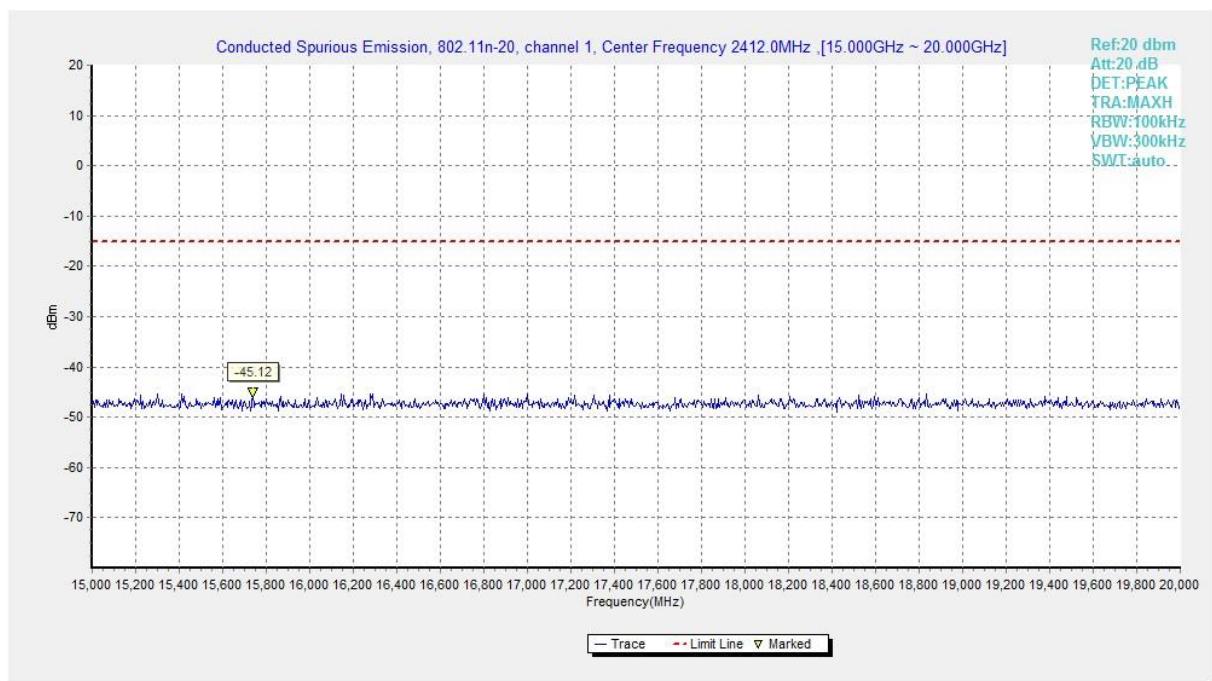
**Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)**



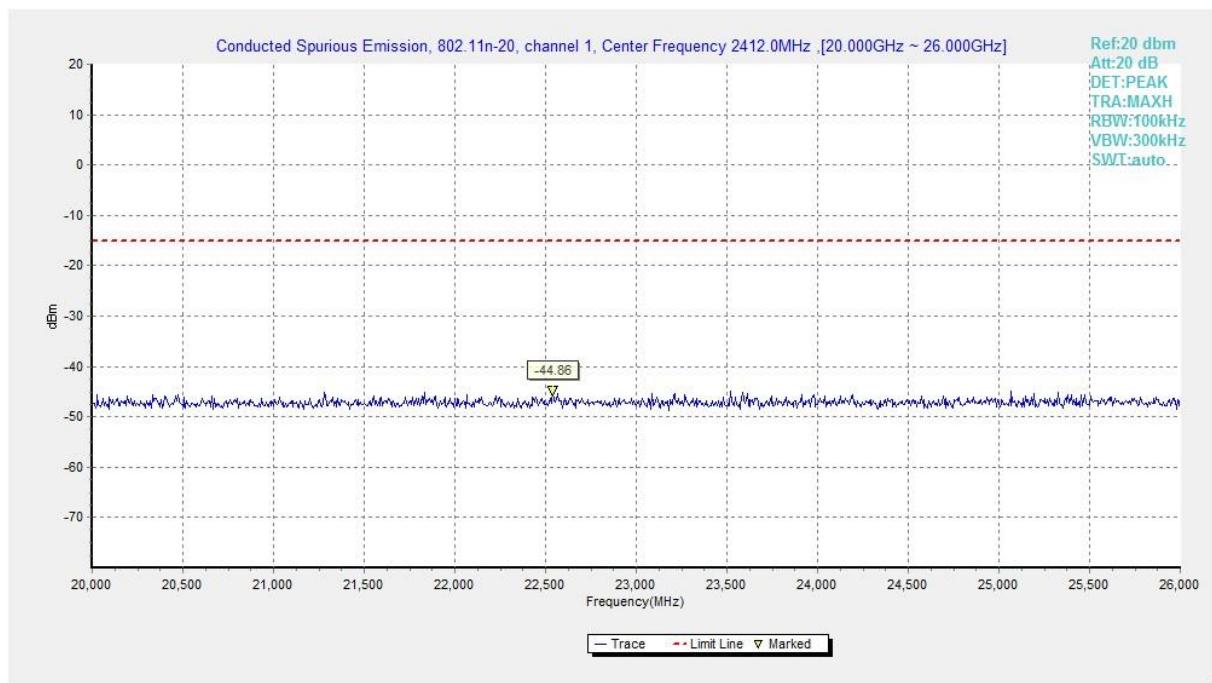
**Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)**



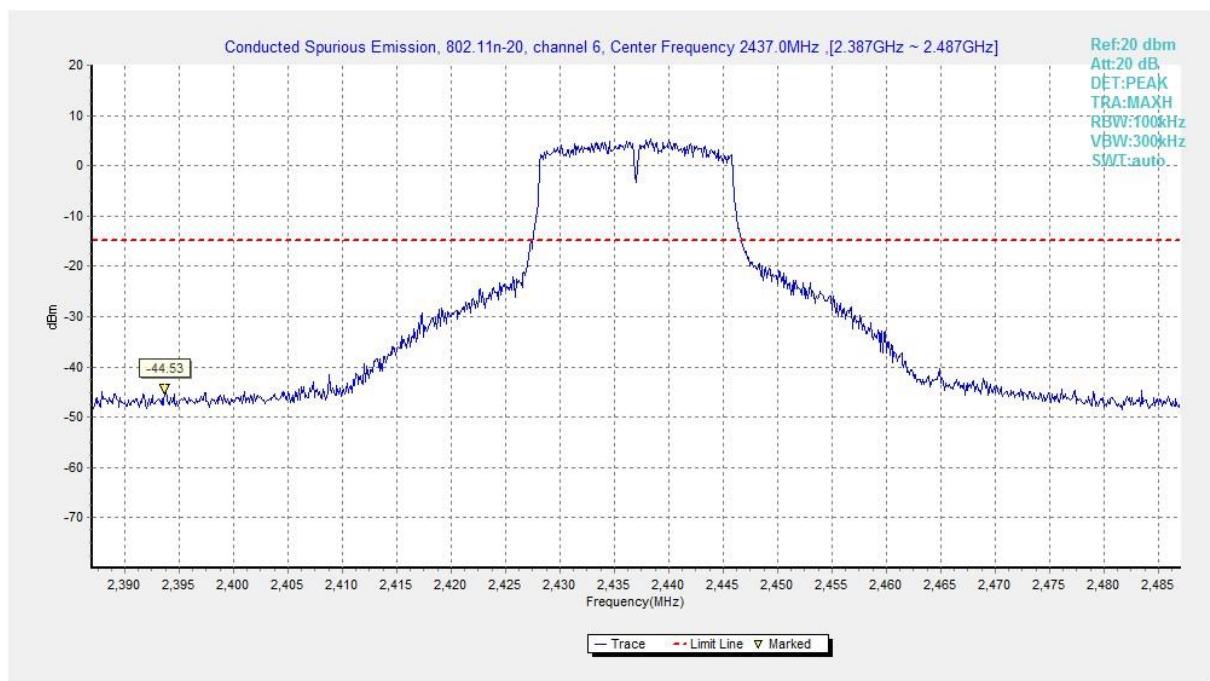
**Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)**



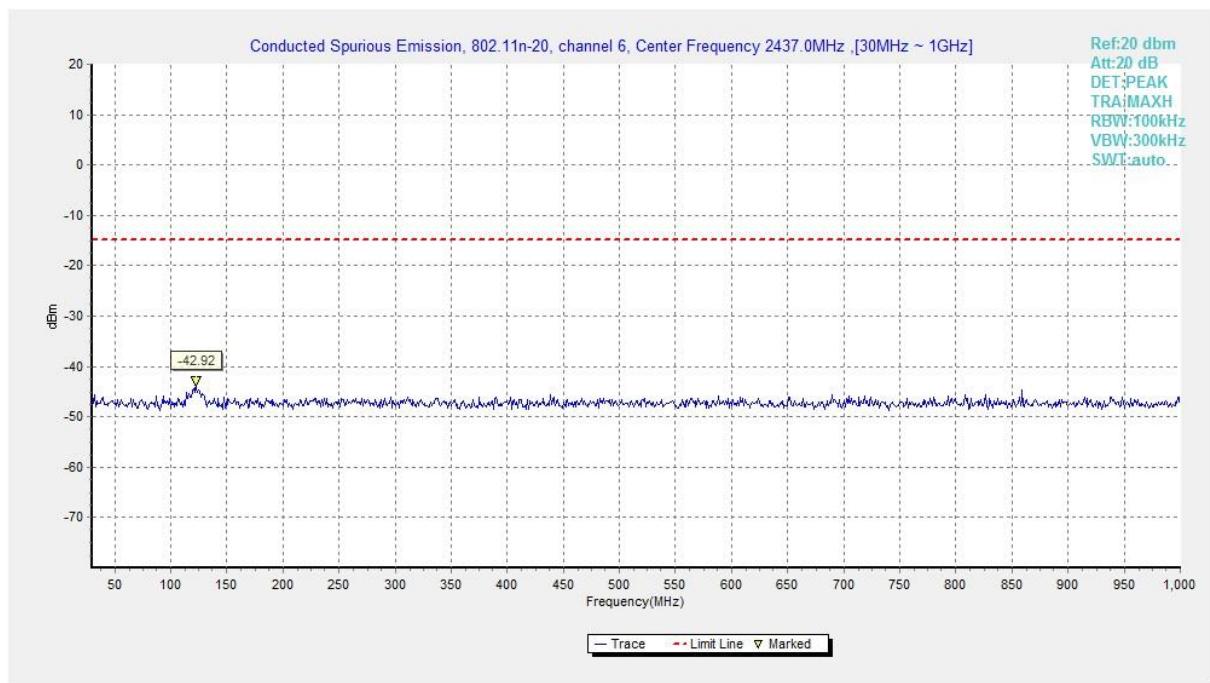
**Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)**



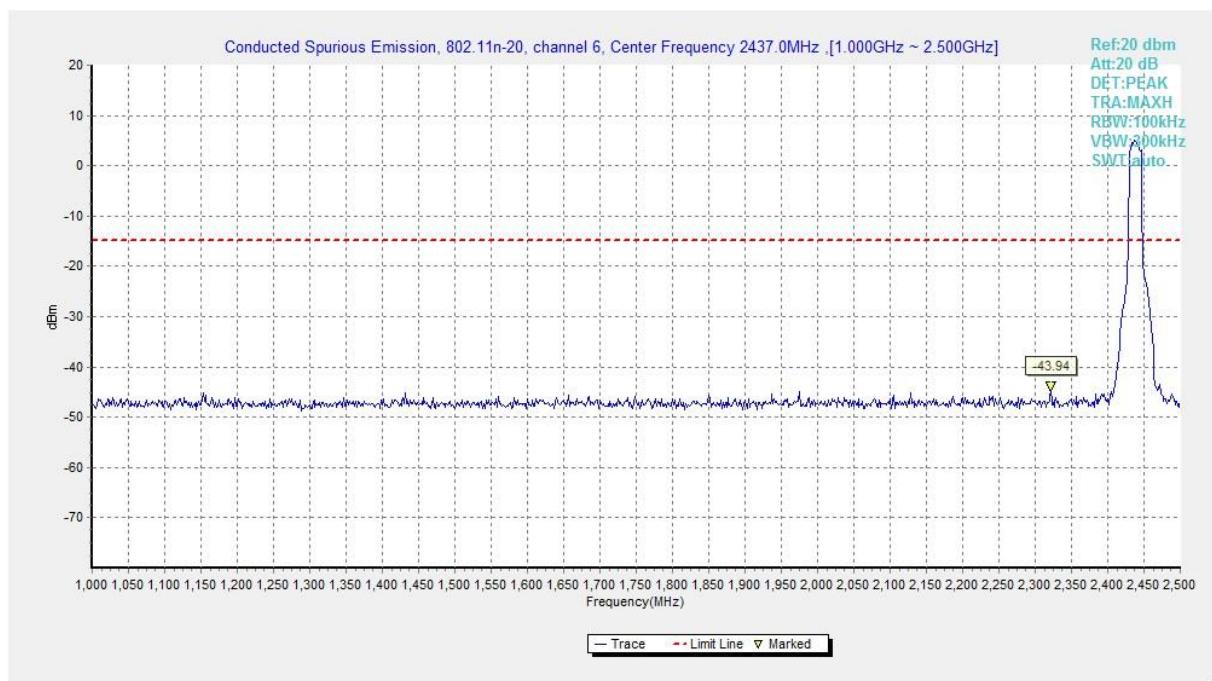
**Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)**



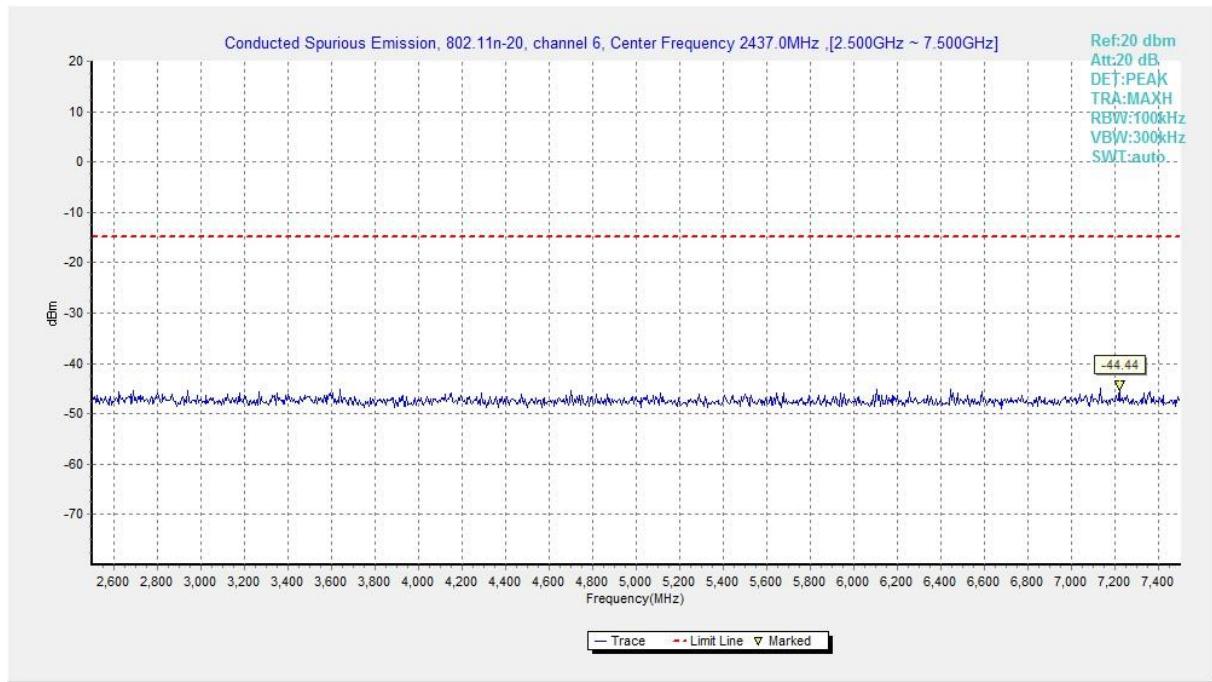
**Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)**



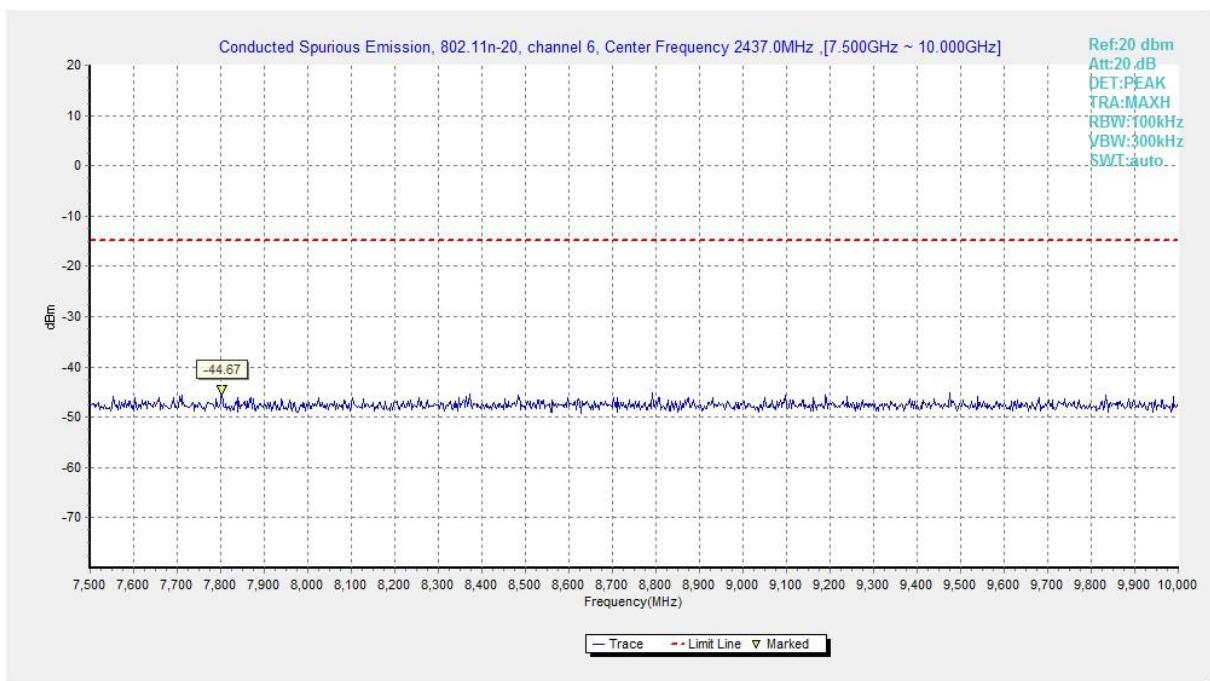
**Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)**



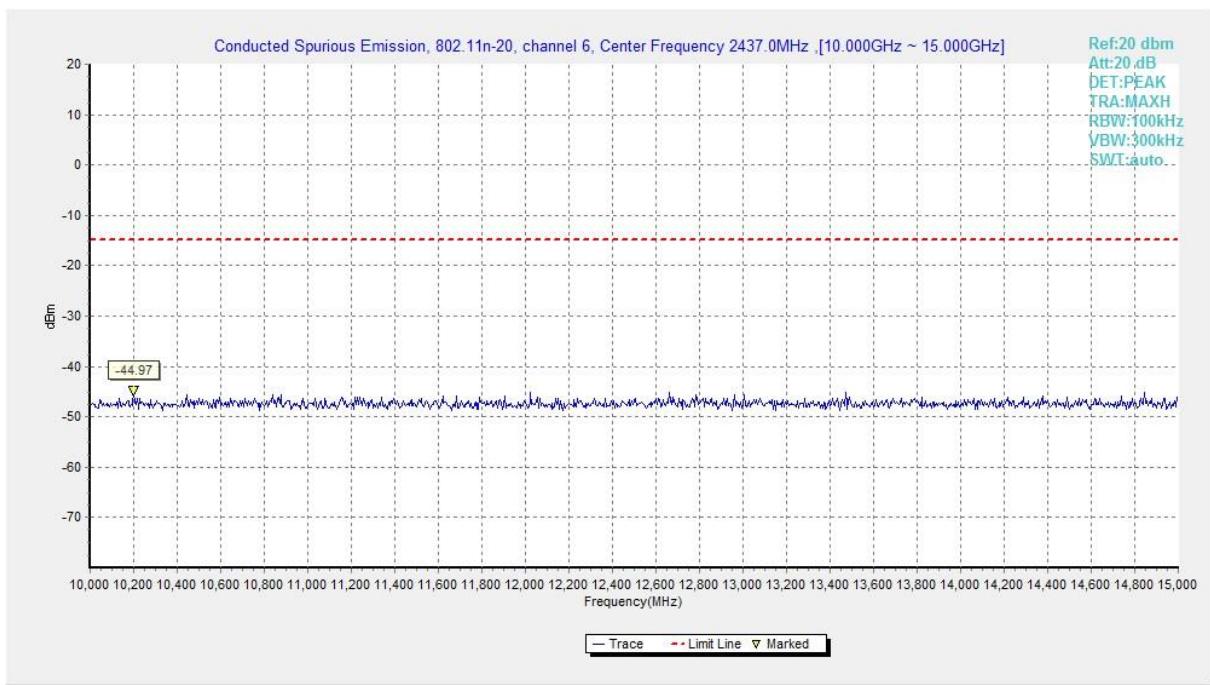
**Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)**



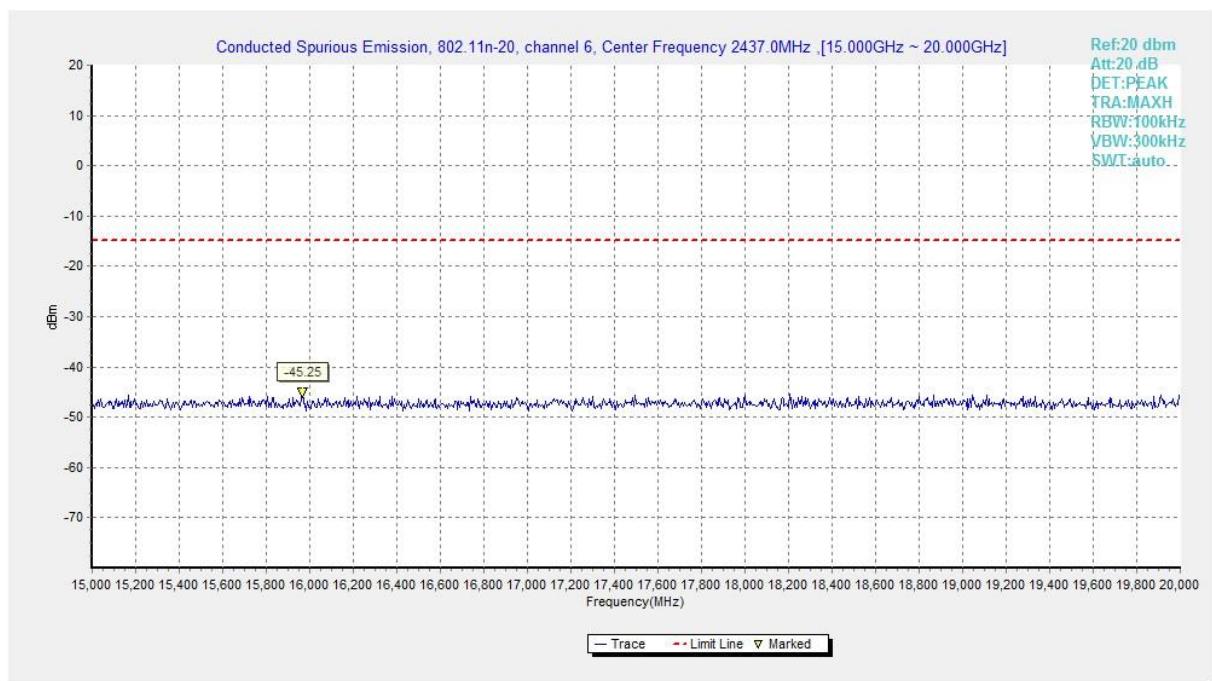
**Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)**



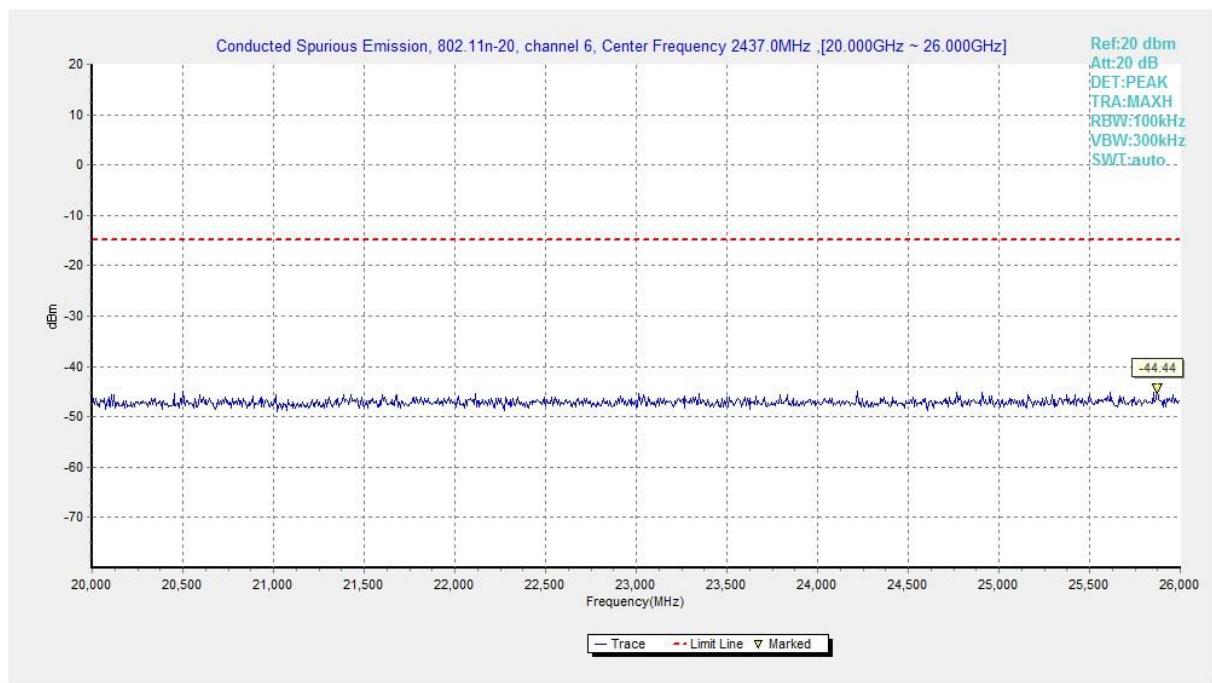
**Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)**



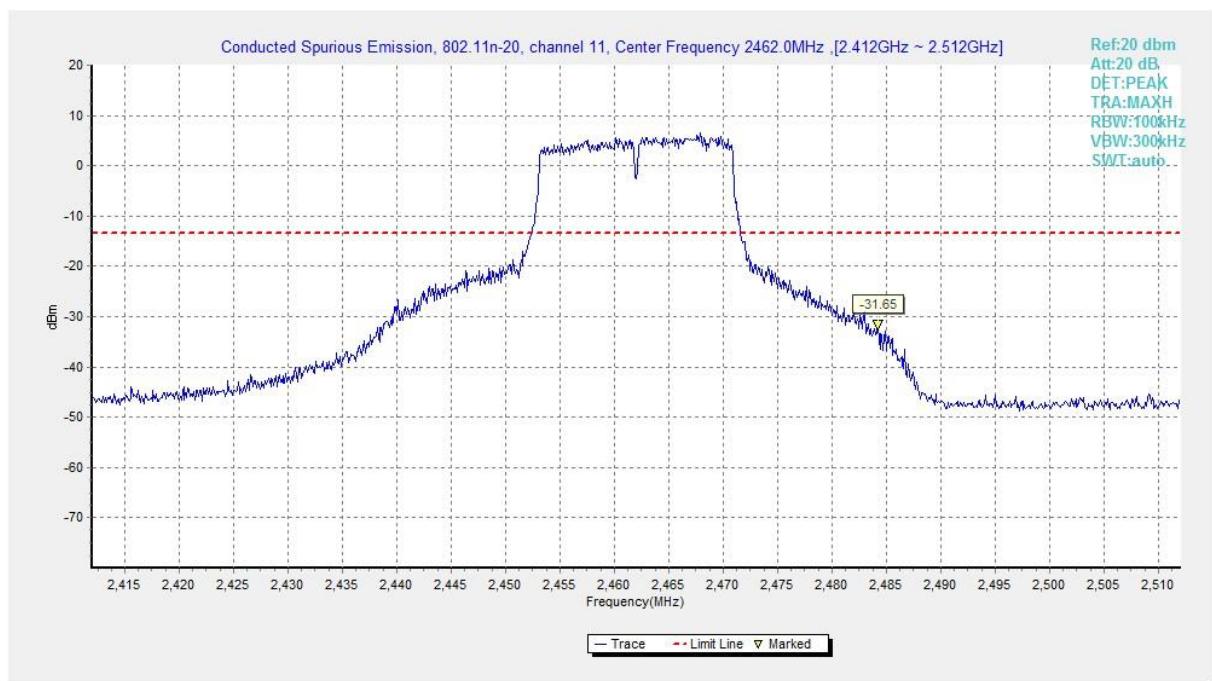
**Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)**



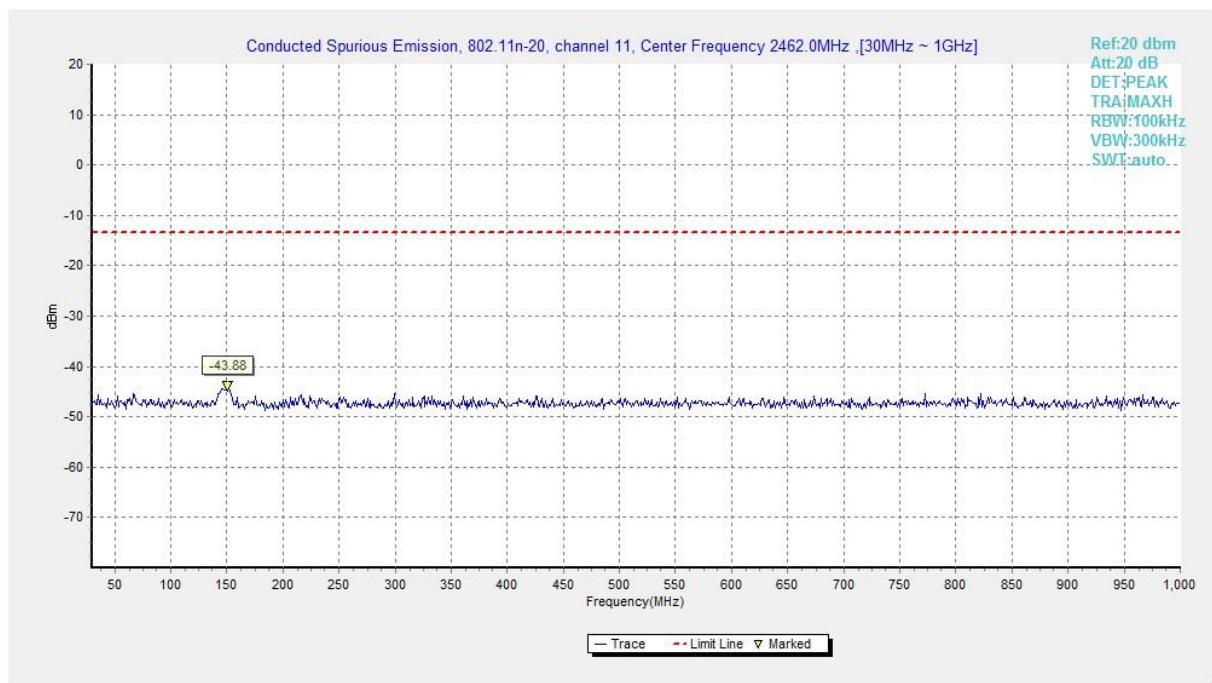
**Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)**



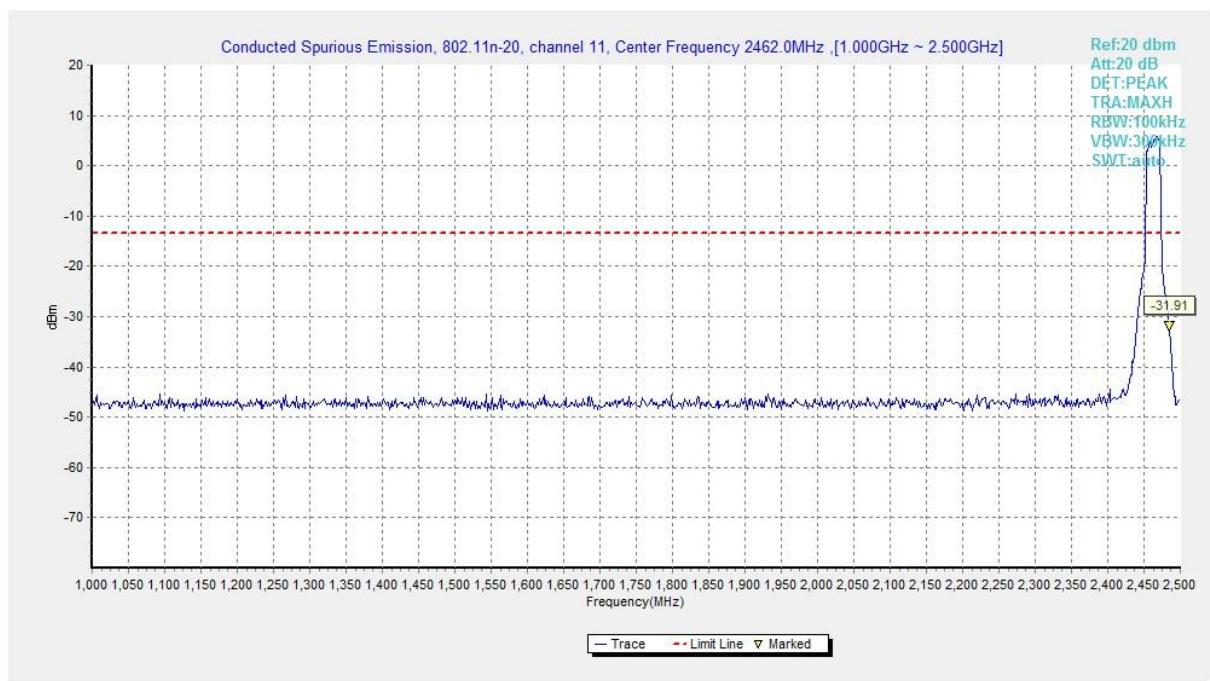
**Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)**



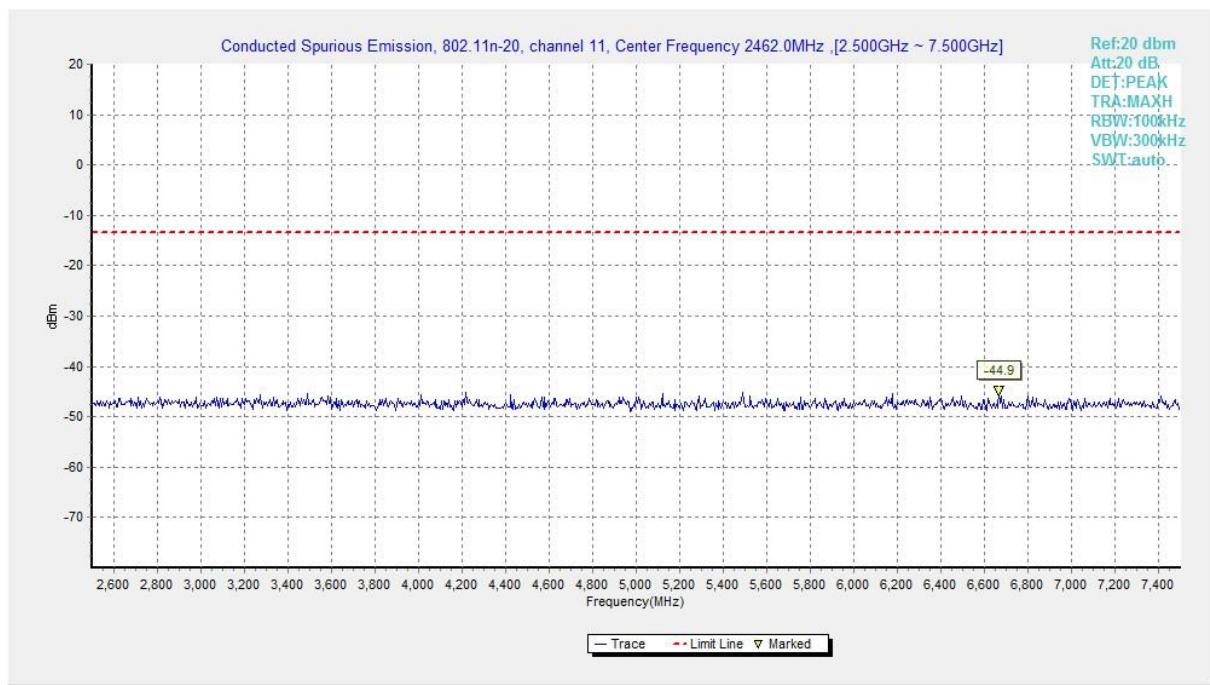
**Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)**



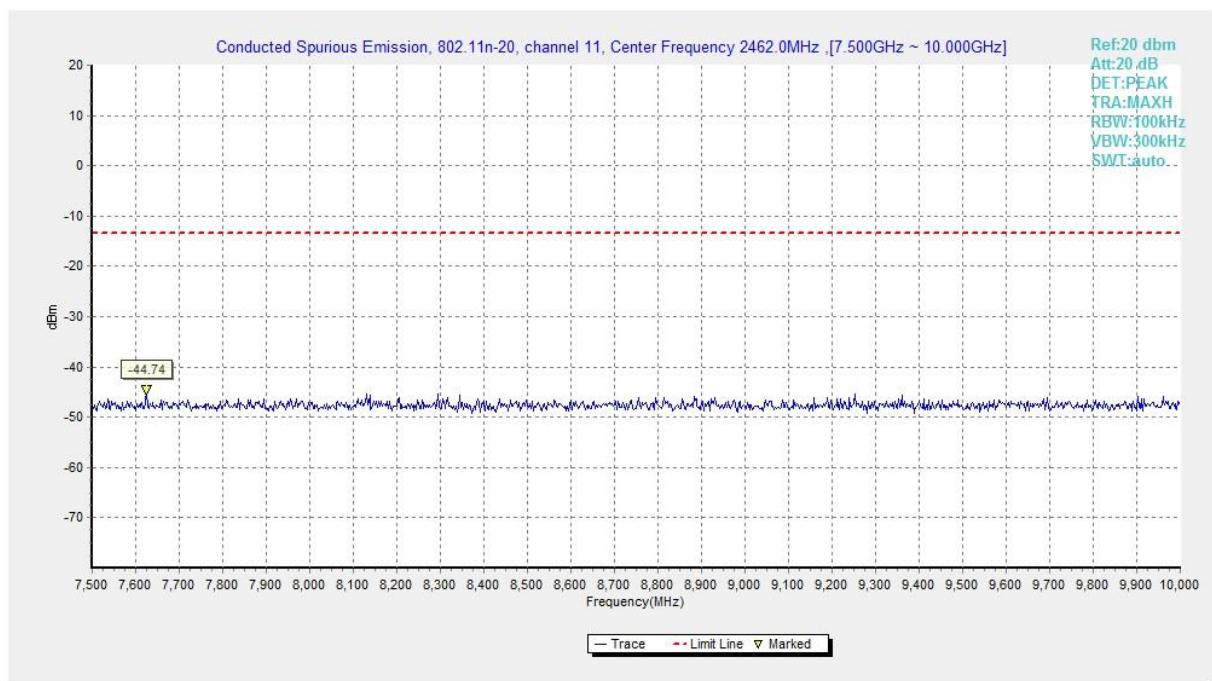
**Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)**



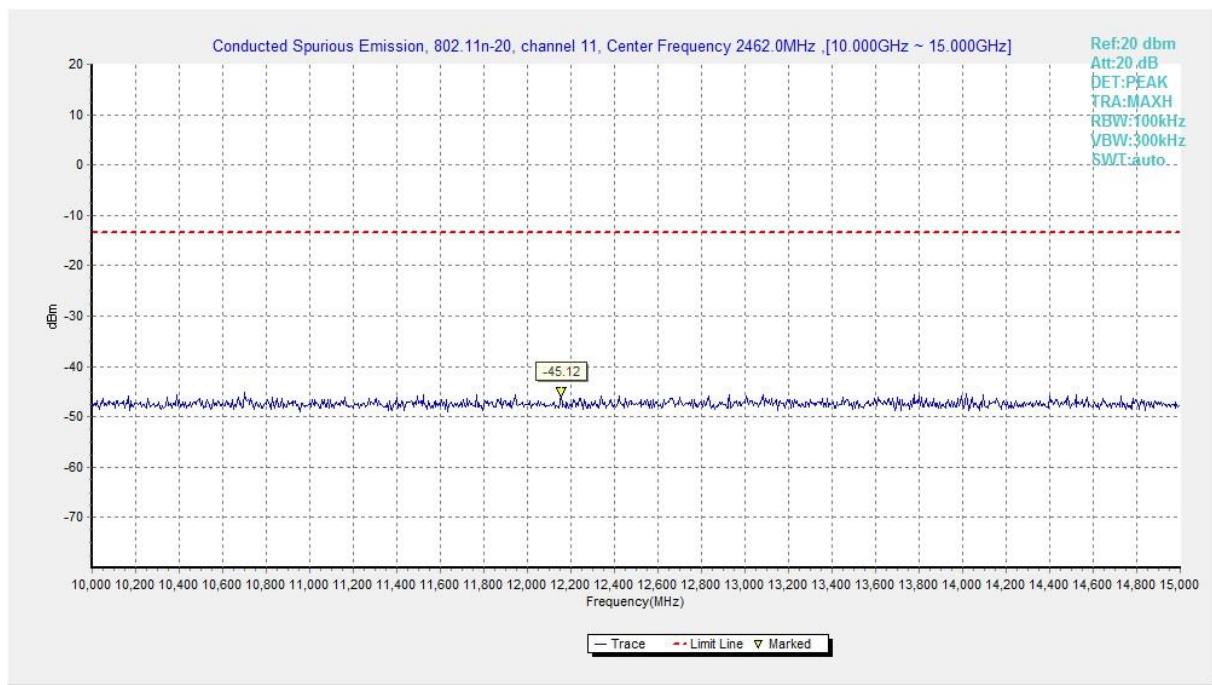
**Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)**



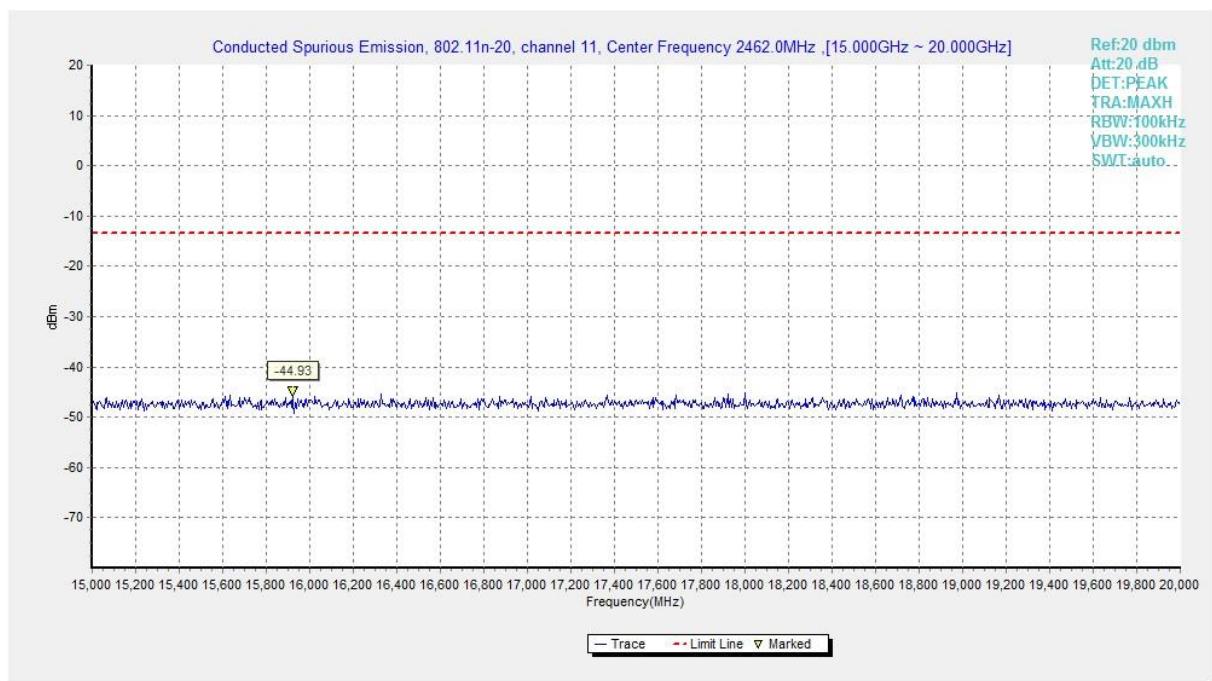
**Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)**



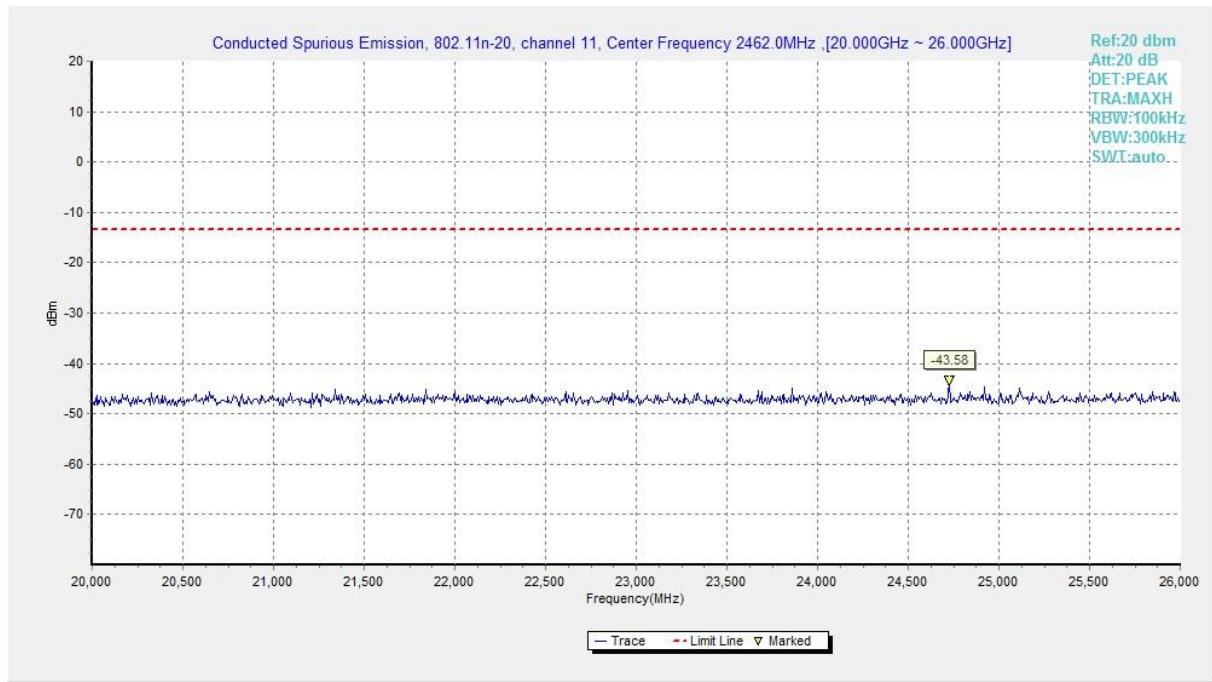
**Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)**



**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)
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/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

**EUT ID: EUT1**

**Measurement Results for Set.11:****802.11b mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power(ch1)	2.38GHz ~2.43GHz	Fig.A.6.2.1	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.A.6.2.2	P

**802.11g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power(ch1)	2.38GHz ~2.43GHz	Fig.A.6.2.3	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.A.6.2.4	P

**802.11n-HT20 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power(ch1)	2.38GHz ~2.43GHz	Fig.A.6.2.5	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.A.6.2.6	P

**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:

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

**802.11b-Average**

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)	Antenna Height (cm)	Turntable angle (deg)
2387.900	46.31	2.9	32.0	11.49	54.0	7.7	H	155	28
2390.000	46.26	2.9	32.0	11.44	54.0	7.7	H	155	74
4824.000	42.29	-35.2	34.1	43.44	54.0	11.7	H	155	140
7236.000	37.26	-32.4	35.8	33.90	54.0	16.7	H	155	8
9648.000	40.34	-30.1	36.8	33.70	54.0	13.7	H	155	80
12060.000	41.61	-31.0	38.9	33.72	54.0	12.4	H	155	243

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)	Antenna Height (cm)	Turntable angle (deg)
2410.700	46.66	2.9	32.0	11.81	54.0	7.3	H	155	135
2462.600	46.73	2.9	32.0	11.83	54.0	7.3	H	155	160
4873.500	35.45	-35.5	34.1	36.87	54.0	18.5	H	155	92
7311.000	38.16	-31.6	35.8	33.96	54.0	15.8	H	155	115
9748.500	39.20	-31.3	36.9	33.58	54.0	14.8	H	155	112
12184.500	43.75	-29.1	39.0	33.91	54.0	10.3	H	155	85

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)	Antenna Height (cm)	Turntable angle (deg)
2483.500	46.81	2.9	32.0	11.89	54.0	7.2	H	155	4
2487.500	46.78	2.9	32.0	11.85	54.0	7.2	H	155	32
4923.000	43.36	-35.2	34.1	44.45	54.0	10.6	H	155	72
7386.000	38.67	-31.2	35.8	34.10	54.0	15.3	H	155	90
9847.500	40.08	-30.6	37.0	33.62	54.0	13.9	H	155	46
12310.500	41.56	-31.6	39.0	34.15	54.0	12.4	H	155	16

**802.11b-Peak**

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)	Antenna Height (cm)	Turntable angle (deg)
2385.908	60.61	2.9	32.0	25.79	74.0	13.4	H	155	22
2389.086	60.60	2.9	32.0	25.78	74.0	13.4	H	155	66
4823.500	47.02	-35.2	34.1	48.16	74.0	27.0	V	155	132
7236.000	44.21	-32.4	35.8	40.85	74.0	29.8	H	155	0
9648.000	45.28	-30.1	36.8	38.64	74.0	28.7	V	155	88
12060.000	46.05	-31.0	38.9	38.16	74.0	28.0	V	155	242

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)	Antenna Height (cm)	Turntable angle (deg)
2362.800	47.61	-27.4	31.9	43.08	74.0	26.4	H	155	132
2534.800	47.17	-26.8	32.0	41.94	74.0	26.8	H	155	154
4873.500	45.71	-35.5	34.1	47.13	74.0	28.3	V	155	88
7311.000	42.75	-31.6	35.8	38.55	74.0	31.3	H	155	110
9748.000	43.41	-31.3	36.9	37.79	74.0	30.6	V	155	110
12185.000	46.54	-29.1	39.0	36.68	74.0	27.5	V	155	88

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)	Antenna Height (cm)	Turntable angle (deg)
2487.710	60.54	2.9	32.0	25.61	74.0	13.5	H	155	0
2491.210	60.89	2.9	32.0	25.95	74.0	13.1	H	155	22
4924.000	48.43	-35.2	34.1	49.51	74.0	25.6	V	155	66
7386.000	43.68	-31.2	35.8	39.11	74.0	30.3	V	155	88
9848.000	45.22	-30.5	37.0	38.74	74.0	28.8	V	155	44
12310.000	45.68	-31.6	39.0	38.25	74.0	28.3	H	155	22

**802.11g - Average**

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)	Antenna Height (cm)	Turntable angle (deg)
2389.100	48.59	2.9	32.0	13.77	54.0	5.4	H	155	170
2390.000	49.85	2.9	32.0	15.03	54.0	4.1	H	155	150
4825.500	34.19	-35.2	34.1	35.35	54.0	19.8	H	155	20
7236.000	37.29	-32.4	35.8	33.94	54.0	16.7	H	155	180
9648.000	40.34	-30.1	36.8	33.69	54.0	13.7	H	155	202
12060.000	41.59	-31.0	38.9	33.70	54.0	12.4	H	155	8

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)	Antenna Height (cm)	Turntable angle (deg)
2406.200	46.31	2.9	32.0	11.47	54.0	7.7	H	155	180
2469.800	47.54	2.9	32.0	12.63	54.0	6.5	H	155	202
4873.500	33.75	-35.5	34.1	35.16	54.0	20.3	H	155	222
7311.000	38.09	-31.6	35.8	33.89	54.0	15.9	H	155	190
9748.500	39.20	-31.3	36.9	33.58	54.0	14.8	H	155	240
12184.500	43.70	-29.1	39.0	33.86	54.0	10.3	H	155	270

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)	Antenna Height (cm)	Turntable angle (deg)
2483.500	48.94	2.9	32.0	14.02	54.0	5.1	H	155	175
2484.100	48.41	2.9	32.0	13.48	54.0	5.6	H	155	5
4924.500	33.68	-35.2	34.1	34.76	54.0	20.3	H	155	26
7386.000	38.64	-31.2	35.8	34.07	54.0	15.4	H	155	355
9847.500	40.28	-30.6	37.0	33.82	54.0	13.7	H	155	6
12310.500	41.56	-31.6	39.0	34.15	54.0	12.4	H	155	12

**802.11g - Peak**

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)	Antenna Height (cm)	Turntable angle (deg)
2389.632	68.24	2.9	32.0	33.42	74.0	5.8	H	155	176
2389.954	68.22	2.9	32.0	33.39	74.0	5.8	H	155	154
4823.000	45.66	-35.2	34.1	46.80	74.0	28.3	V	155	22
7236.000	44.17	-32.4	35.8	40.81	74.0	29.8	V	155	176
9648.000	45.79	-30.1	36.8	39.15	74.0	28.2	H	155	198
12060.000	46.18	-31.0	38.9	38.29	74.0	27.8	H	155	0

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)	Antenna Height (cm)	Turntable angle (deg)
2365.200	48.14	-27.3	32.0	43.46	74.0	25.9	H	155	176
2509.400	48.49	-26.5	32.0	42.96	74.0	25.5	H	155	198
4874.000	42.31	-35.5	34.1	43.73	74.0	31.7	V	155	220
7311.000	43.57	-31.6	35.8	39.37	74.0	30.4	V	155	198
9748.000	43.78	-31.3	36.9	38.16	74.0	30.2	H	155	242
12185.000	46.62	-29.1	39.0	36.77	74.0	27.4	V	155	264

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)	Antenna Height (cm)	Turntable angle (deg)
2483.500	70.12	2.9	32.0	35.19	74.0	3.9	H	155	176
2483.560	69.75	2.9	32.0	34.83	74.0	4.2	H	155	0
4924.000	42.16	-35.2	34.1	43.23	74.0	31.8	V	155	22
7386.000	44.70	-31.2	35.8	40.13	74.0	29.3	V	155	352
9848.000	46.59	-30.5	37.0	40.12	74.0	27.4	V	155	0
12310.000	46.07	-31.6	39.0	38.65	74.0	27.9	V	155	0

**802.11n-HT20-Average**

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)	Antenna Height (cm)	Turntable angle (deg)
2389.600	49.85	2.9	32.0	15.03	54.0	4.1	H	155	84
2390.000	50.37	2.9	32.0	15.54	54.0	3.6	H	155	136
4819.500	34.45	-35.2	34.1	35.55	54.0	19.6	H	155	72
7236.000	37.30	-32.4	35.8	33.94	54.0	16.7	H	155	92
9648.000	40.36	-30.1	36.8	33.72	54.0	13.6	H	155	40
12060.000	41.53	-31.0	38.9	33.64	54.0	12.5	H	155	6

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)	Antenna Height (cm)	Turntable angle (deg)
2404.700	46.66	2.9	32.0	11.82	54.0	7.3	H	155	4
2568.200	48.28	3.0	32.1	13.20	54.0	5.7	H	155	2
4873.500	33.73	-35.5	34.1	35.14	54.0	20.3	H	155	25
7311.000	38.27	-31.6	35.8	34.06	54.0	15.7	H	155	350
9748.500	39.29	-31.3	36.9	33.67	54.0	14.7	H	155	92
12184.500	43.81	-29.1	39.0	33.96	54.0	10.2	H	155	85

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)	Antenna Height (cm)	Turntable angle (deg)
2483.500	49.36	2.9	32.0	14.44	54.0	4.6	H	155	86
2484.300	48.82	2.9	32.0	13.89	54.0	5.2	H	155	107
4924.500	33.82	-35.2	34.1	34.89	54.0	20.2	H	155	130
7386.000	38.58	-31.2	35.8	34.00	54.0	15.4	H	155	152
9847.500	40.29	-30.6	37.0	33.83	54.0	13.7	H	155	174
12310.500	41.51	-31.6	39.0	34.09	54.0	12.5	H	155	195

**802.11n-HT20-Peak**

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)	Antenna Height (cm)	Turntable angle (deg)
2388.980	71.63	2.9	32.0	36.81	74.0	2.4	H	155	88
2389.492	72.27	2.9	32.0	37.45	74.0	1.7	H	155	132
4822.500	44.49	-35.2	34.1	45.63	74.0	29.5	V	155	66
7236.000	43.89	-32.4	35.8	40.54	74.0	30.1	H	155	88
9648.000	45.13	-30.1	36.8	38.48	74.0	28.9	V	155	44
12060.000	46.15	-31.0	38.9	38.27	74.0	27.8	V	155	0

Ch6

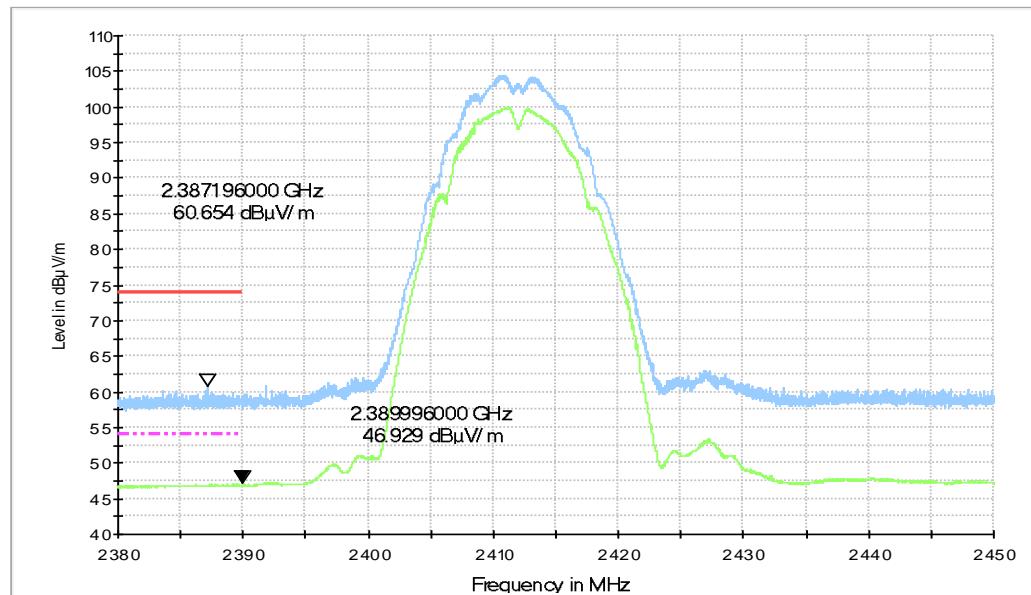
Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2356.600	47.91	-27.7	31.9	43.67	74.0	26.1	H	155	0
2522.000	47.50	-26.8	32.0	42.23	74.0	26.5	H	155	0
4875.000	43.20	-35.5	34.1	44.62	74.0	30.8	V	155	22
7311.000	44.02	-31.6	35.8	39.82	74.0	30.0	V	155	352
9748.000	42.94	-31.3	36.9	37.32	74.0	31.1	V	155	88
12185.000	46.36	-29.1	39.0	36.50	74.0	27.6	V	155	88

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)	Antenna Height (cm)	Turntable angle (deg)
2483.680	73.13	2.9	32.0	38.21	74.0	0.9	V	155	88
2483.890	70.69	2.9	32.0	35.76	74.0	3.3	H	155	110
4924.000	40.83	-35.2	34.1	41.91	74.0	33.2	V	155	132
7386.000	44.36	-31.2	35.8	39.78	74.0	29.6	H	155	154
9848.000	46.30	-30.5	37.0	39.83	74.0	27.7	V	155	176
12310.000	45.45	-31.6	39.0	38.02	74.0	28.6	V	155	198

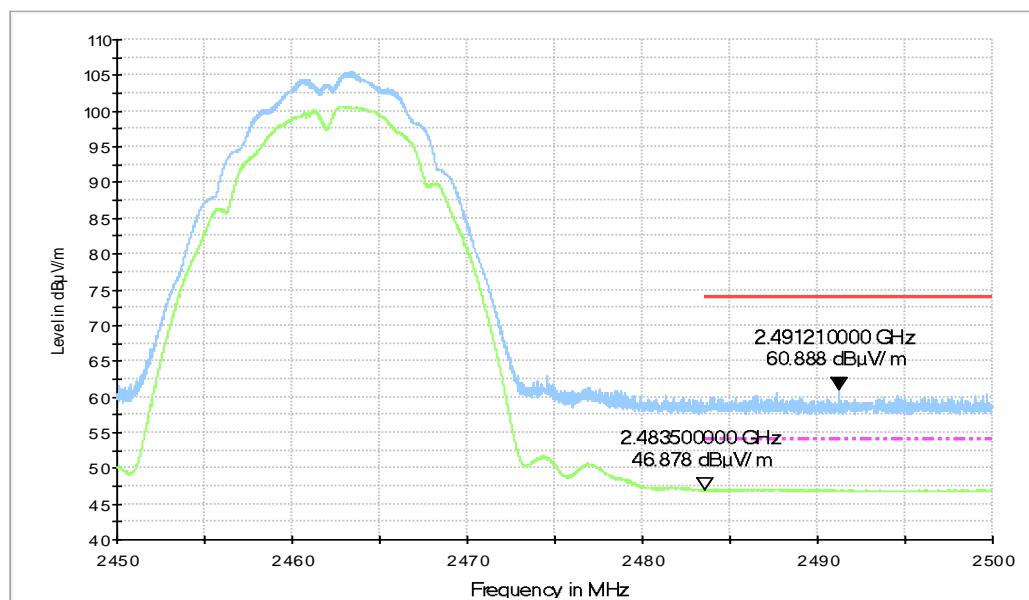
**Test graphs as below:**

RE - Power-2.38GHz-2.45GHz



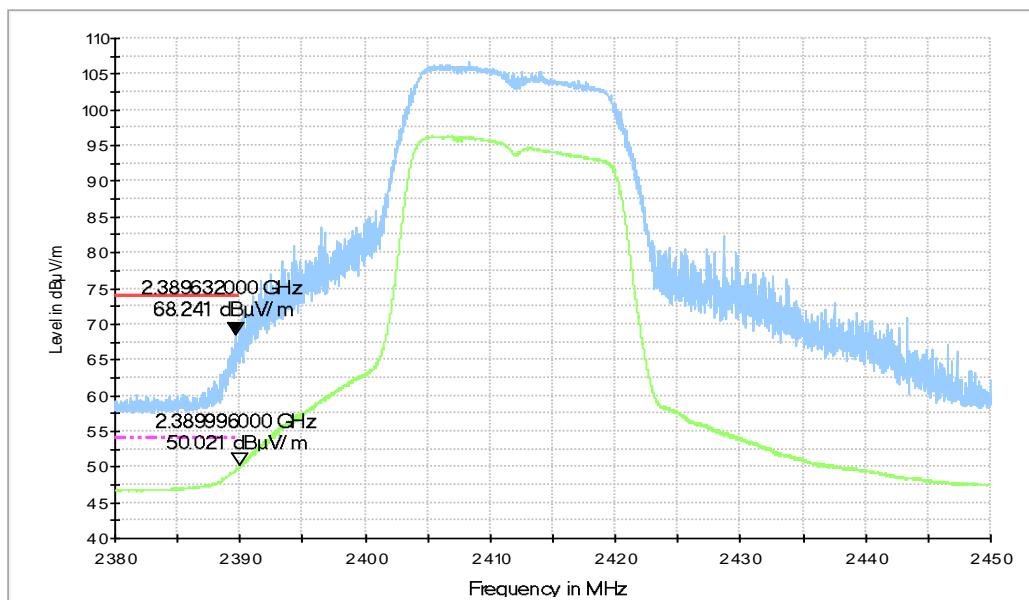
**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz**

RE - Power-2.45GHz-2.5GHz



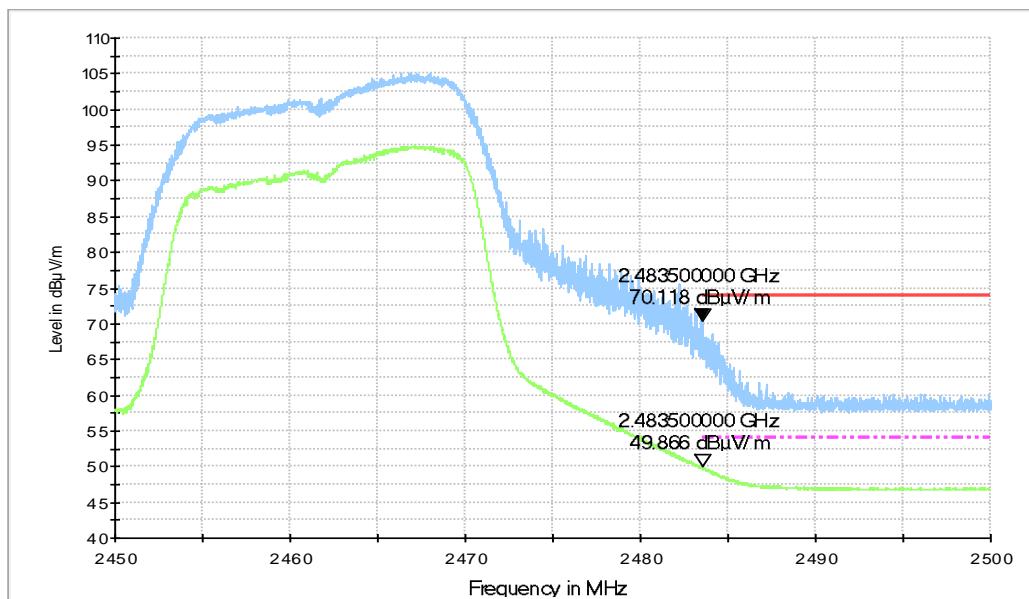
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



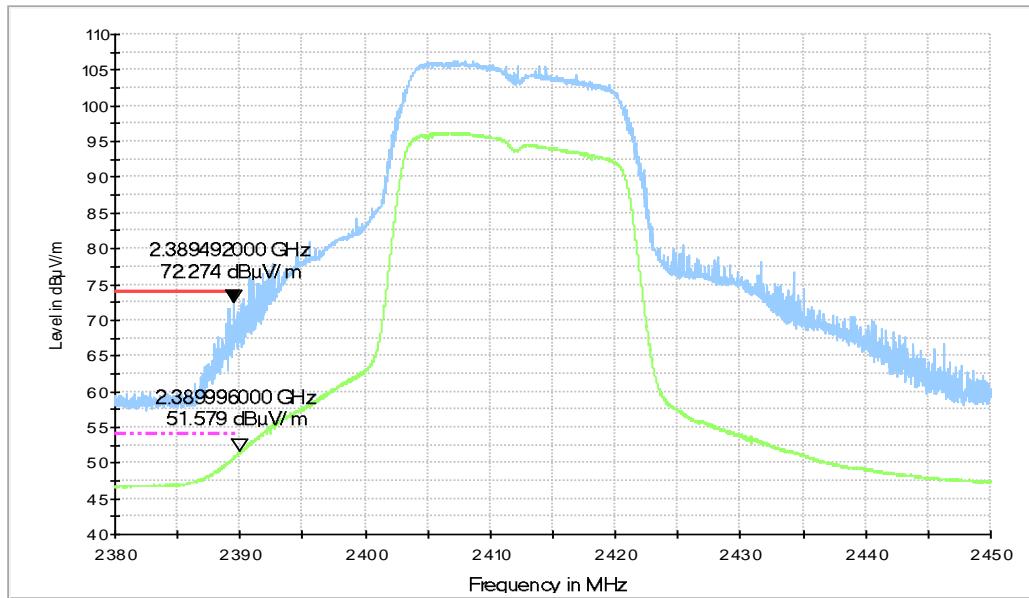
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz**

RE - Power-2.45GHz-2.5GHz



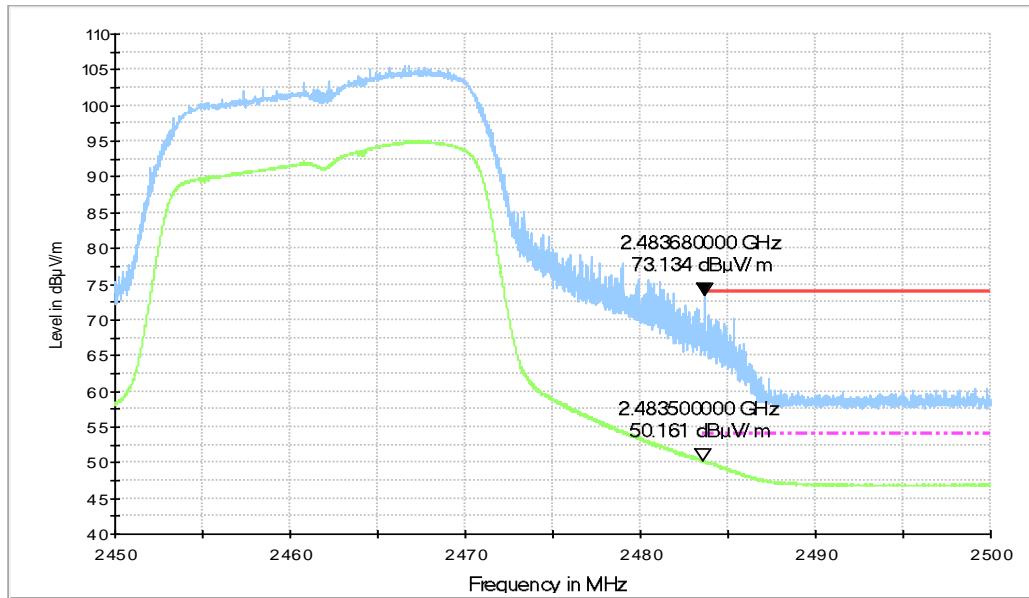
**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**

RE - Power-2.45GHz-2.5GHz



**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 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.<sup>36</sup> 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:**

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	
		With charger			
		802.11b	Idle		
0.15 to 0.5	66 to 56	Fig.A.7.1 Fig.A.7.3	Fig.A.7.2	P	
0.5 to 5	56				
5 to 30	60				

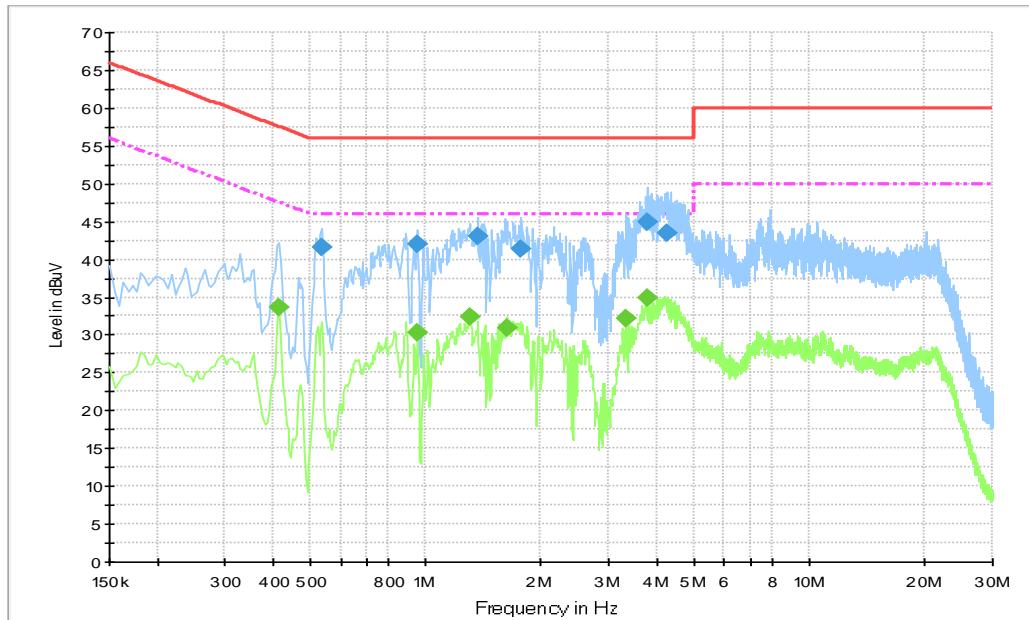
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

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.7.3	Fig.A.7.2	P	
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:**

**Traffic: Set.11**

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

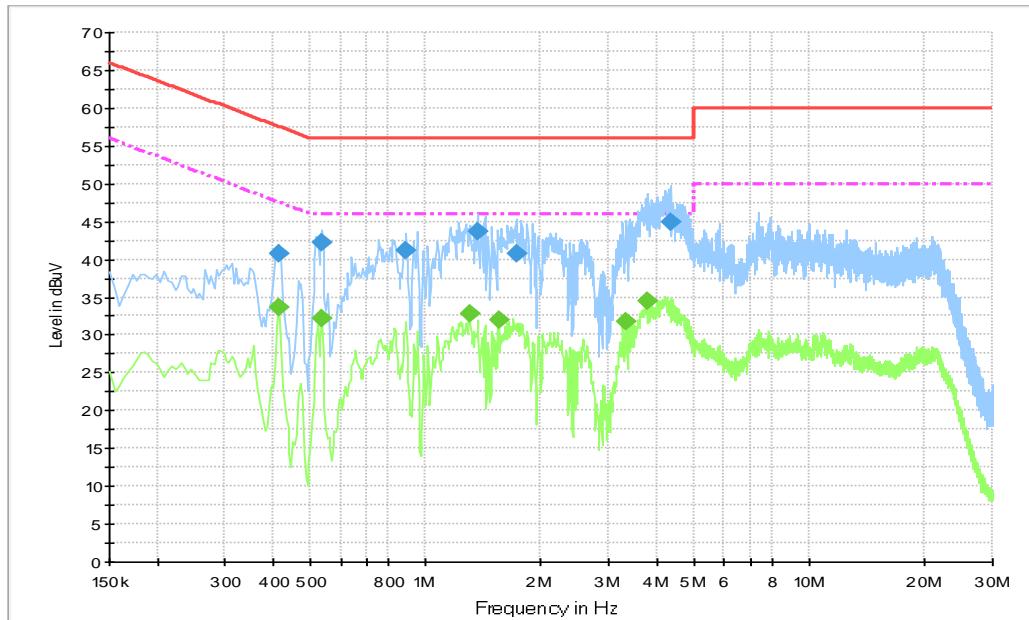
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

### Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.537000	41.5	10000	9.000	GND	L1	10.3	14.5	56.0
0.951000	42.1	10000	9.000	GND	L1	10.4	13.9	56.0
1.365000	43.1	10000	9.000	GND	L1	10.4	12.9	56.0
1.779000	41.4	10000	9.000	GND	L1	10.4	14.6	56.0
3.799500	45.0	10000	9.000	GND	L1	10.5	11.0	56.0
4.263000	43.5	10000	9.000	GND	L1	10.5	12.5	56.0

### Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.415500	33.7	10000.	9.000	GND	L1	10.3	13.8	47.5
0.951000	30.4	10000.	9.000	GND	L1	10.4	15.6	46.0
1.306500	32.4	10000.	9.000	GND	L1	10.4	13.6	46.0
1.635000	31.0	10000.	9.000	GND	L1	10.4	15.0	46.0
3.327000	32.1	10000.	9.000	GND	L1	10.5	13.9	46.0
3.799500	34.9	10000.	9.000	GND	L1	10.5	11.1	46.0

**Idle: Set.11**

**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.

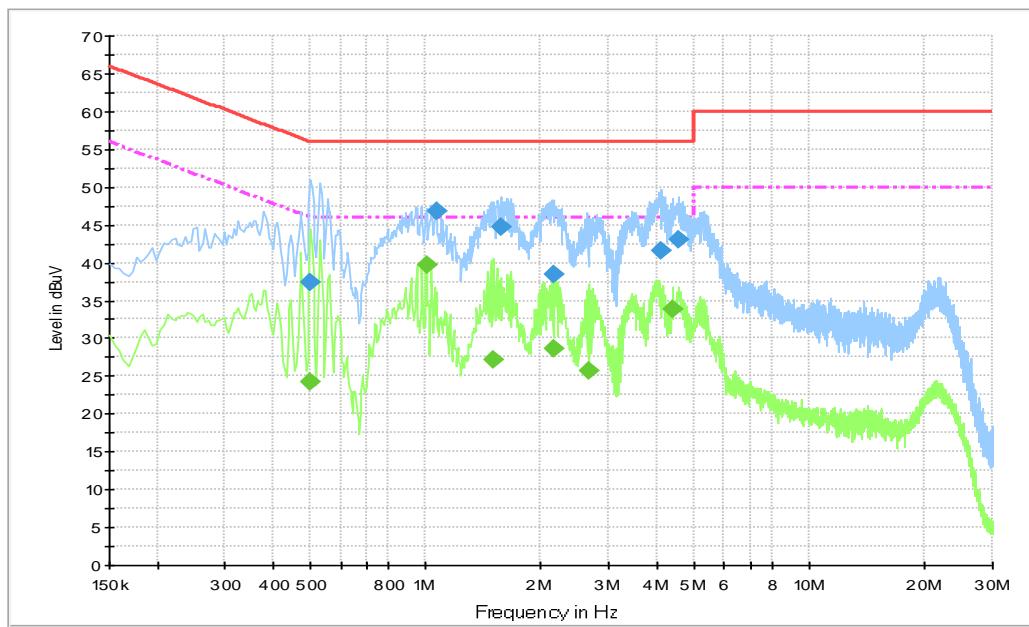
## Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.415500	40.8	10000	9.000	GND	L1	10.3	16.8	57.5
0.537000	42.1	10000	9.000	GND	L1	10.3	13.9	56.0
0.892500	41.2	10000	9.000	GND	L1	10.3	14.8	56.0
1.365000	43.6	10000	9.000	GND	L1	10.4	12.4	56.0
1.720500	40.8	10000	9.000	GND	L1	10.4	15.2	56.0
4.339500	45.0	10000	9.000	GND	L1	10.5	11.0	56.0

## Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.415500	33.7	10000.	9.000	GND	L1	10.3	13.9	47.5
0.537000	32.1	10000.	9.000	GND	L1	10.3	13.9	46.0
1.306500	32.7	10000.	9.000	GND	L1	10.4	13.3	46.0
1.549500	32.0	10000.	9.000	GND	L1	10.4	14.0	46.0
3.327000	31.7	10000.	9.000	GND	L1	10.5	14.3	46.0
3.799500	34.4	10000.	9.000	GND	L1	10.5	11.6	46.0

**Traffic: Set.12**


**Fig.A.7.3 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 (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.501000	37.4	10000	9.000	GND	L1	10.3	18.6	56.0
1.068000	46.8	10000	9.000	GND	L1	10.4	9.2	56.0
1.572000	44.6	10000	9.000	GND	L1	10.4	11.4	56.0
2.157000	38.5	10000	9.000	GND	L1	10.4	17.5	56.0
4.128000	41.5	10000	9.000	GND	L1	10.5	14.5	56.0
4.551000	43.1	10000	9.000	GND	L1	10.5	12.9	56.0

### Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.501000	24.1	10000.	9.000	GND	L1	10.3	21.9	46.0
1.005000	39.7	10000.	9.000	GND	L1	10.3	6.3	46.0
1.504500	27.3	10000.	9.000	GND	L1	10.4	18.7	46.0
2.161500	28.7	10000.	9.000	GND	L1	10.4	17.3	46.0
2.665500	25.8	10000.	9.000	GND	L1	10.5	20.2	46.0
4.393500	33.9	10000.	9.000	GND	L1	10.5	12.1	46.0

**ANNEX B: Accreditation Certificate**

United States Department of Commerce  
National Institute of Standards and Technology

**Certificate of Accreditation to ISO/IEC 17025:2005**

NVLAP LAB CODE: 600118-0

**Telecommunication Technology Labs, CAICT**

Beijing  
China

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Electromagnetic Compatibility & Telecommunications**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
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).*

2018-09-28 through 2019-09-30

Effective Dates



*For the National Voluntary Laboratory Accreditation Program*



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