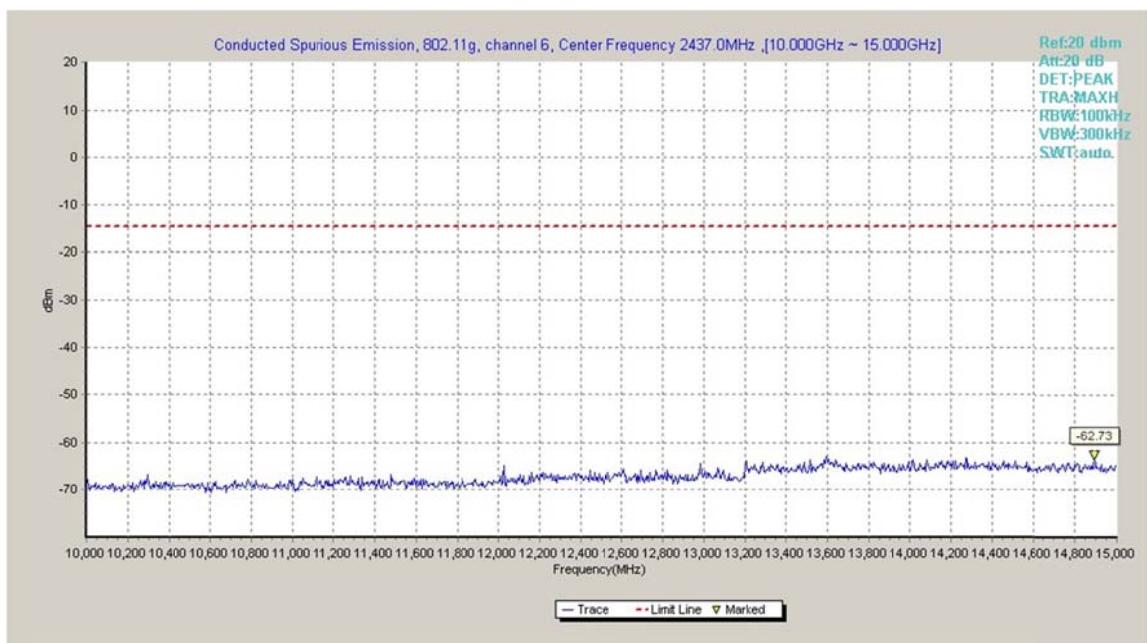
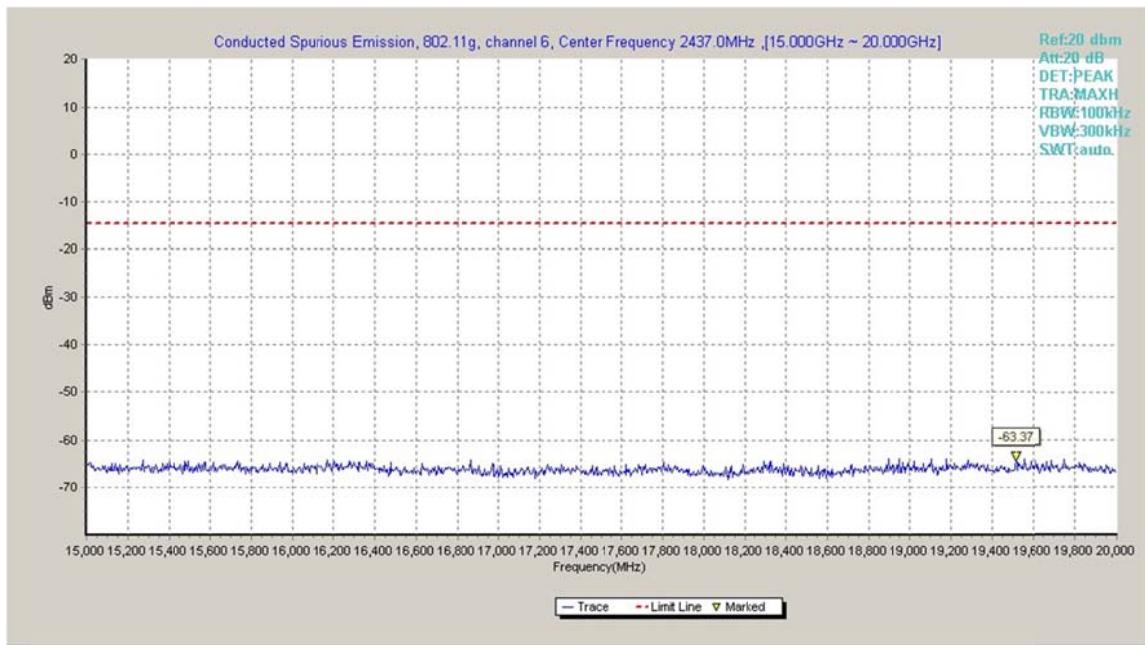


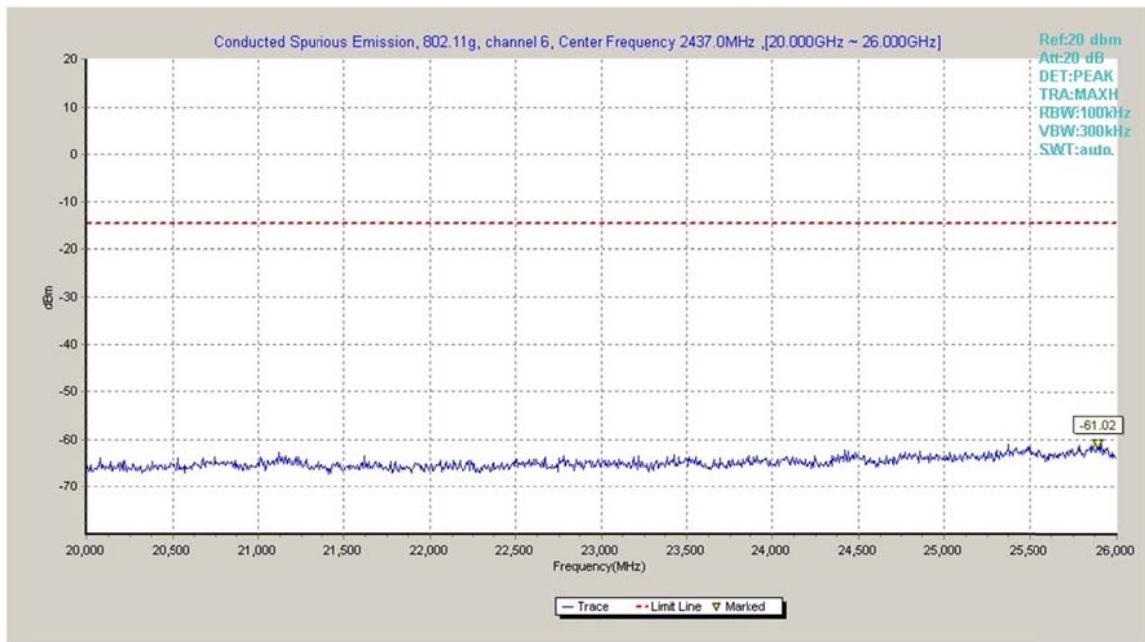
**Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)**



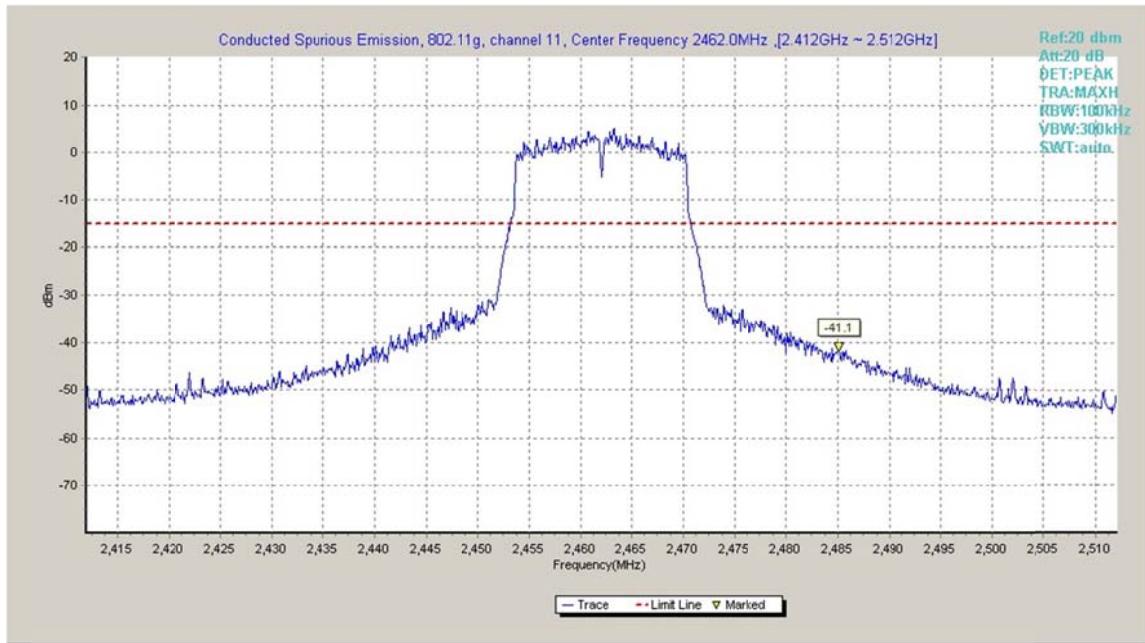
**Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)**



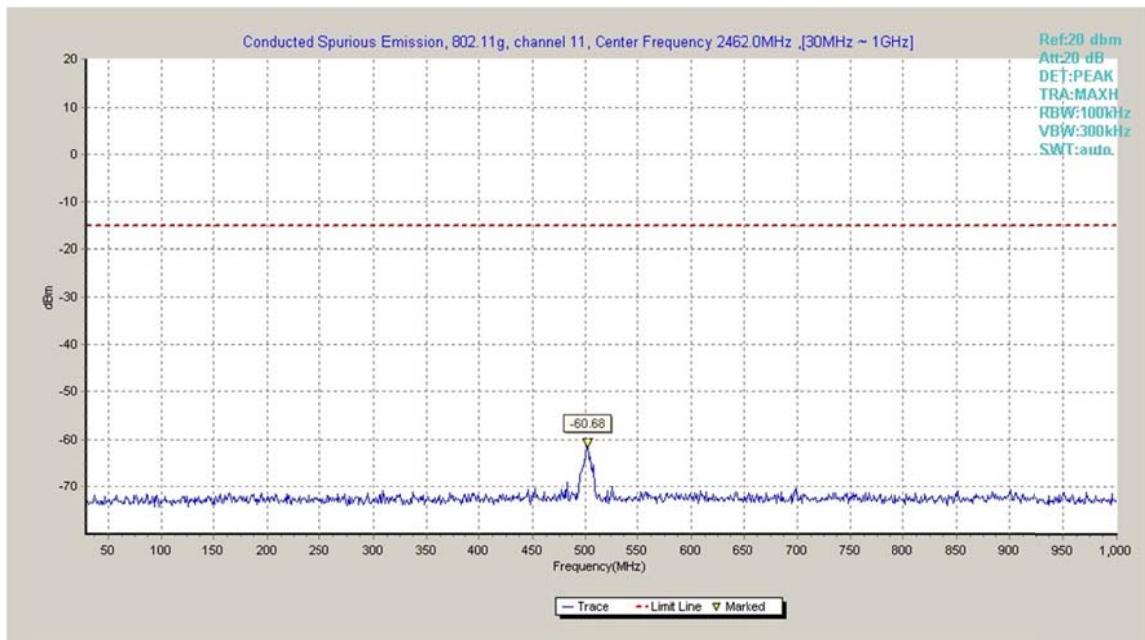
**Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)**



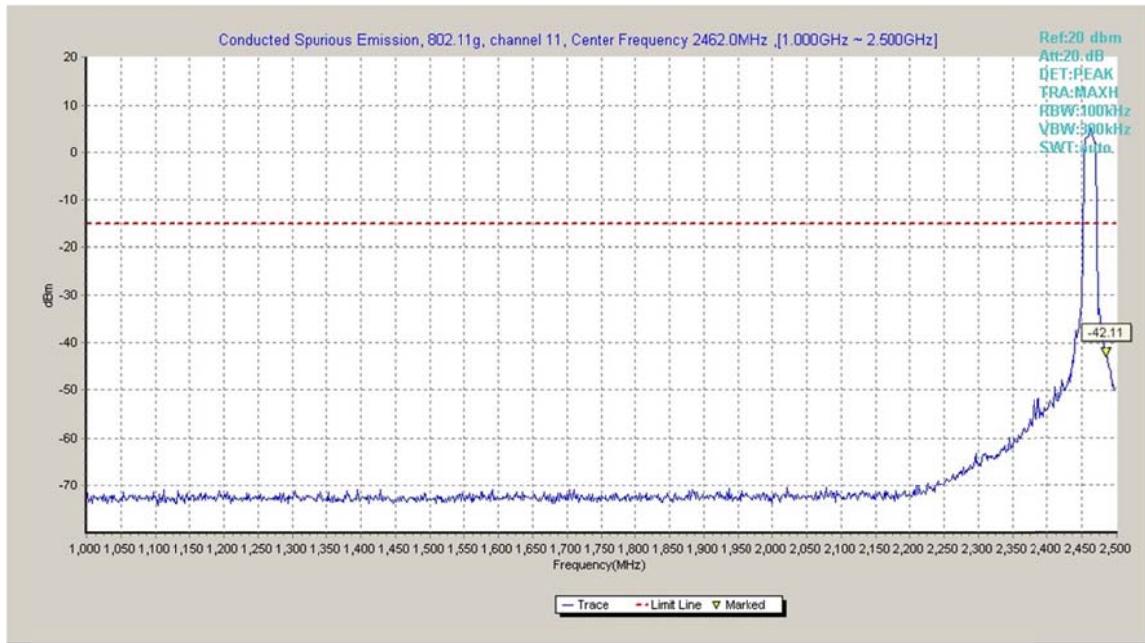
**Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)**



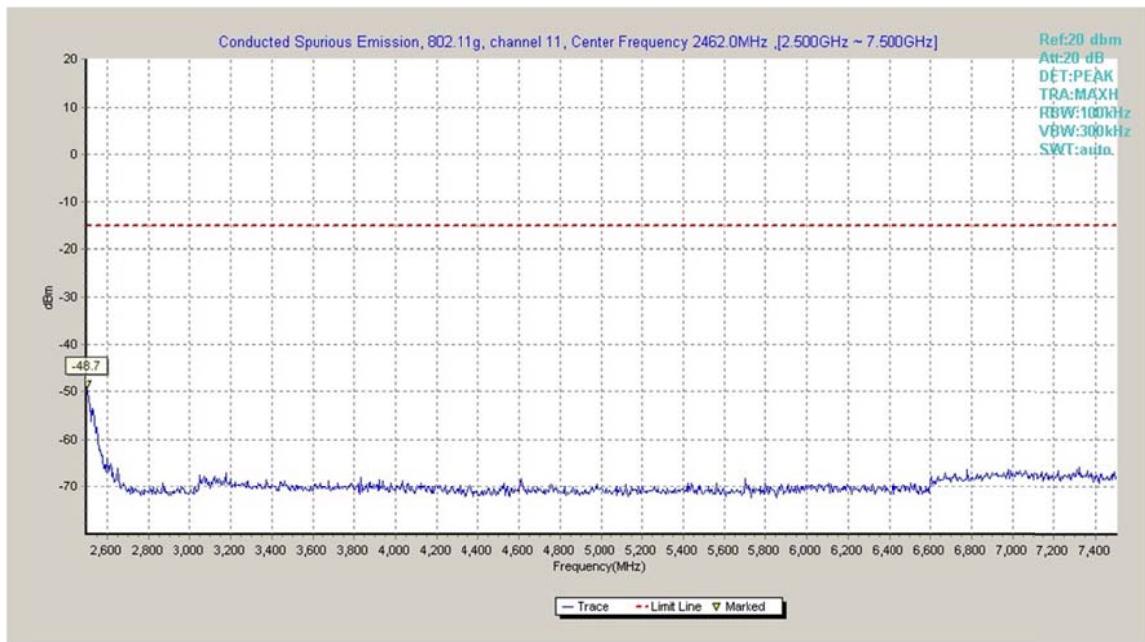
**Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)**



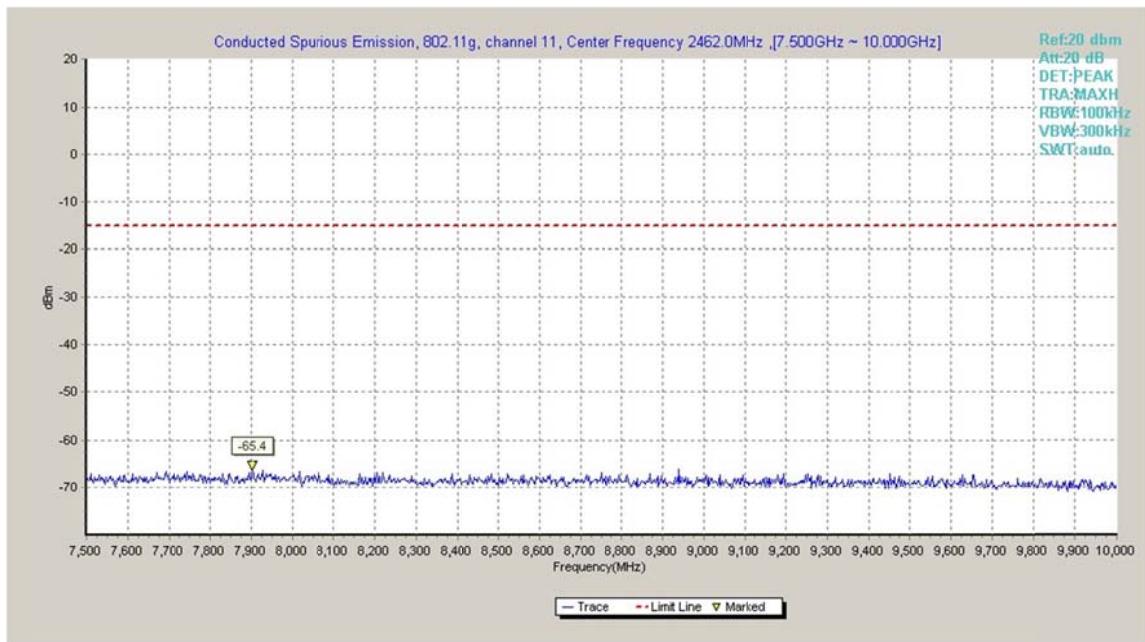
**Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)**



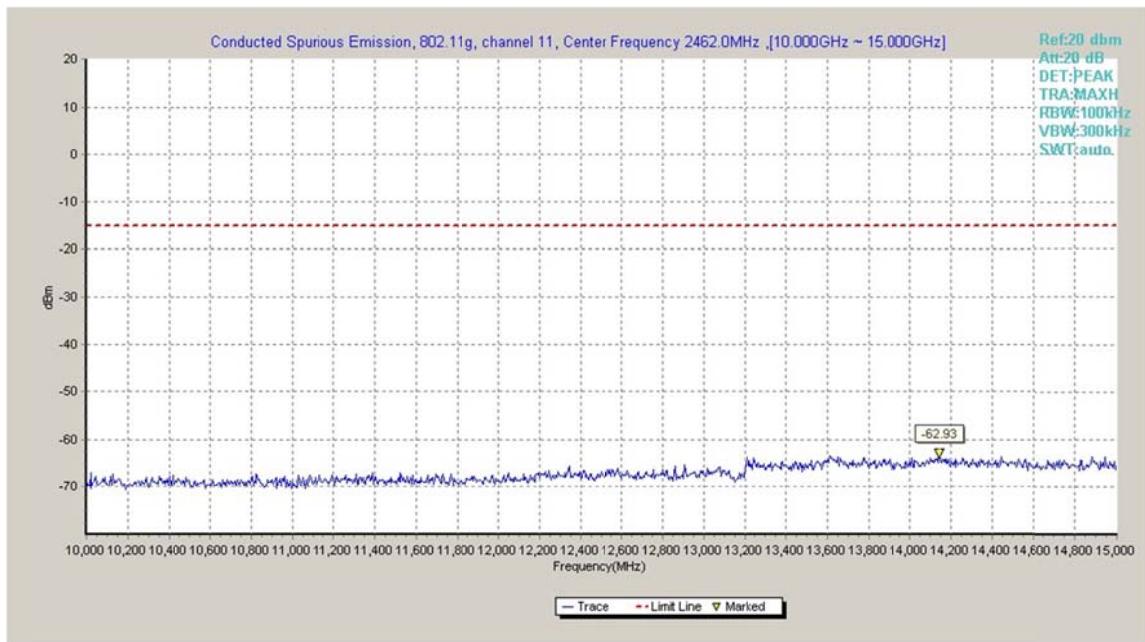
**Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)**



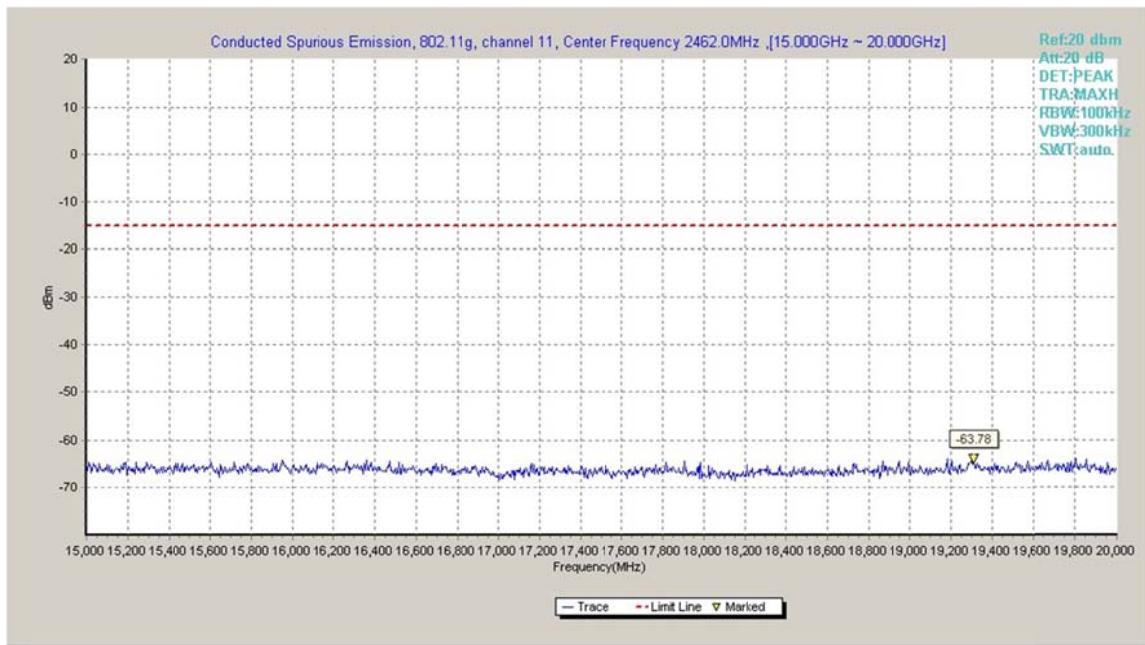
**Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)**



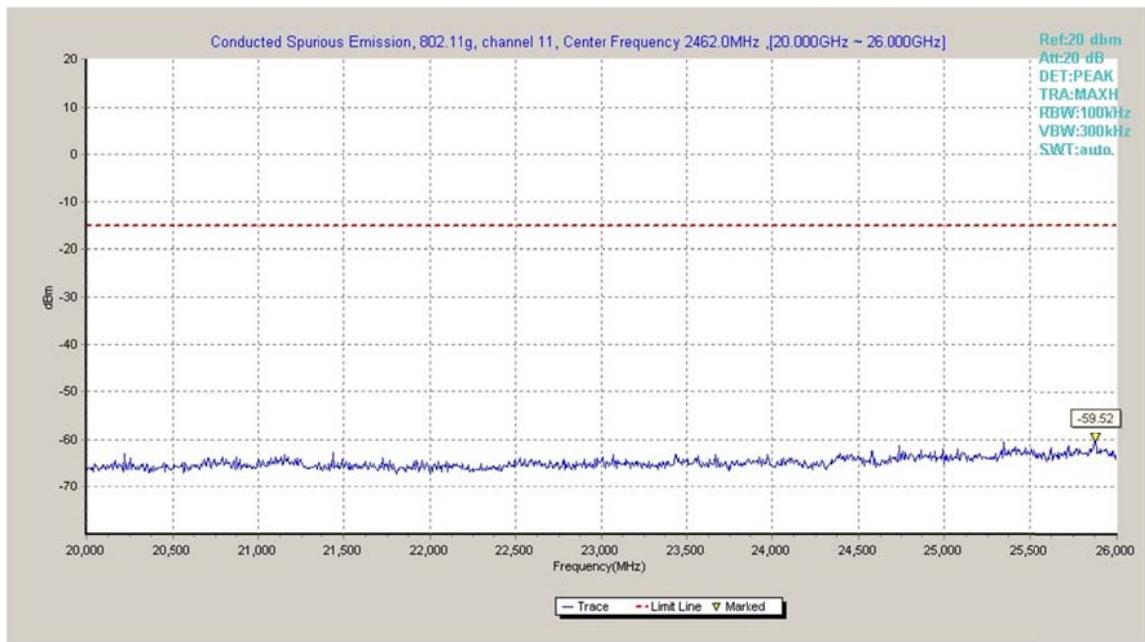
**Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)**



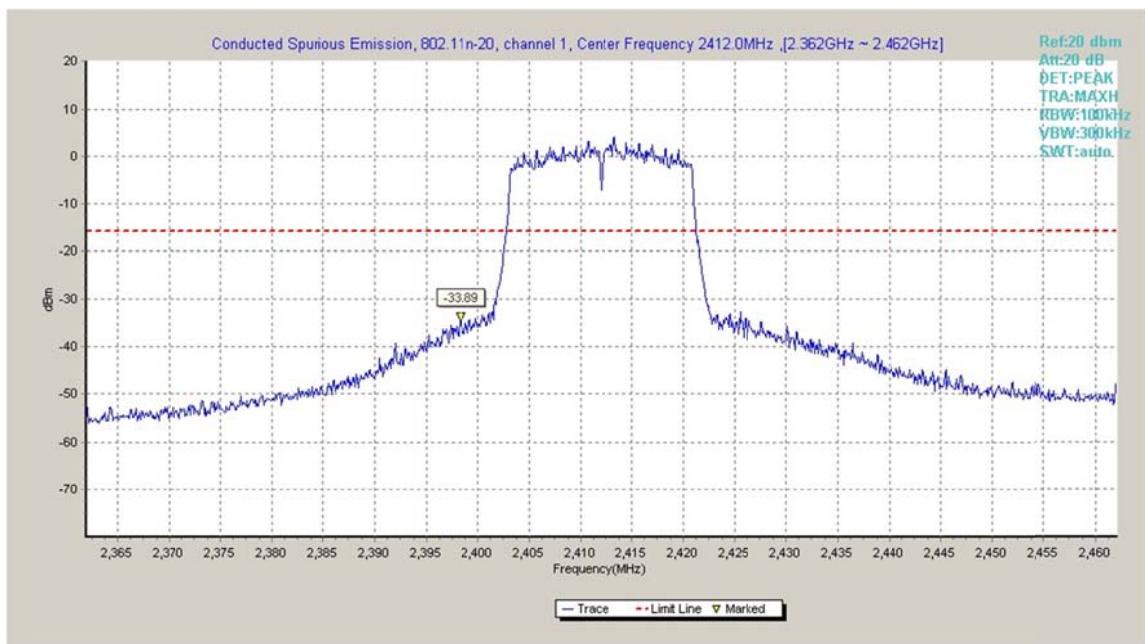
**Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)**



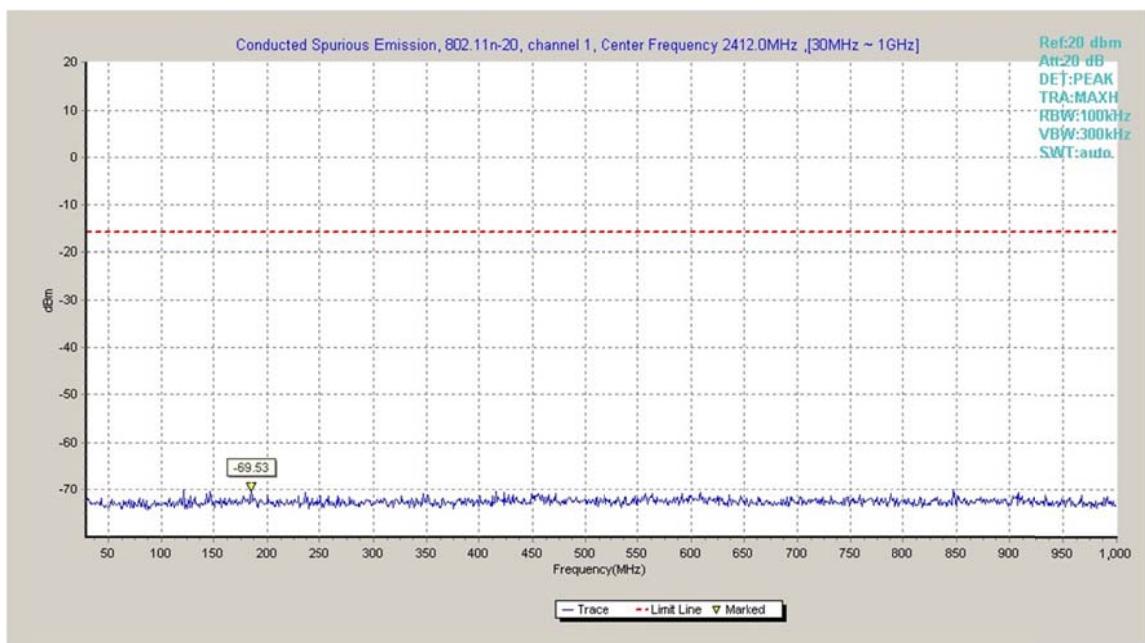
**Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)**



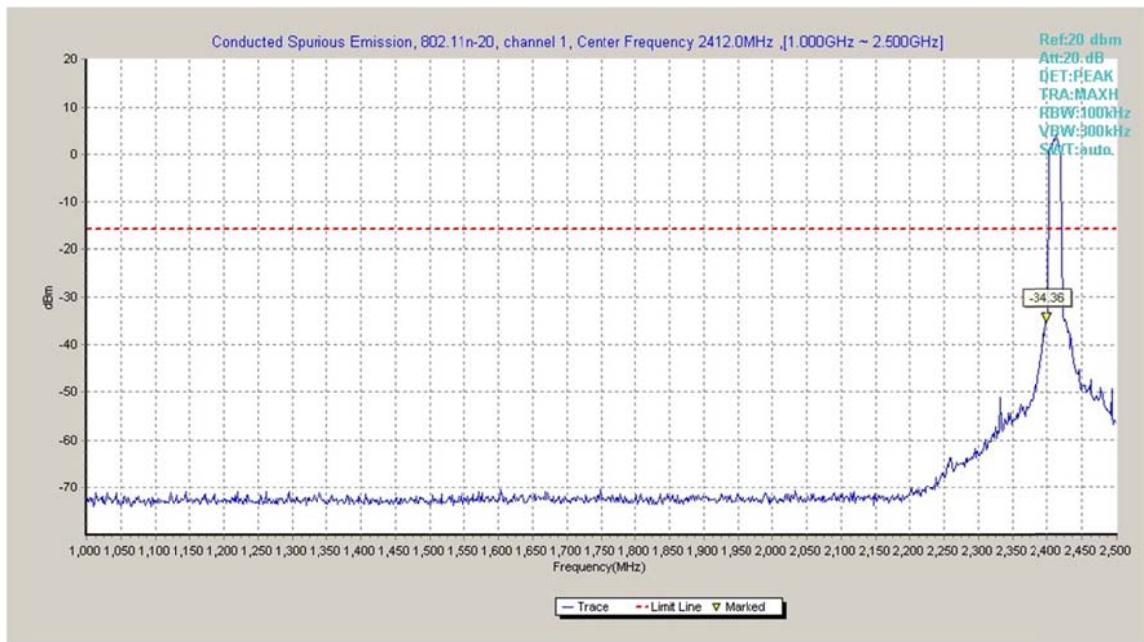
**Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)**



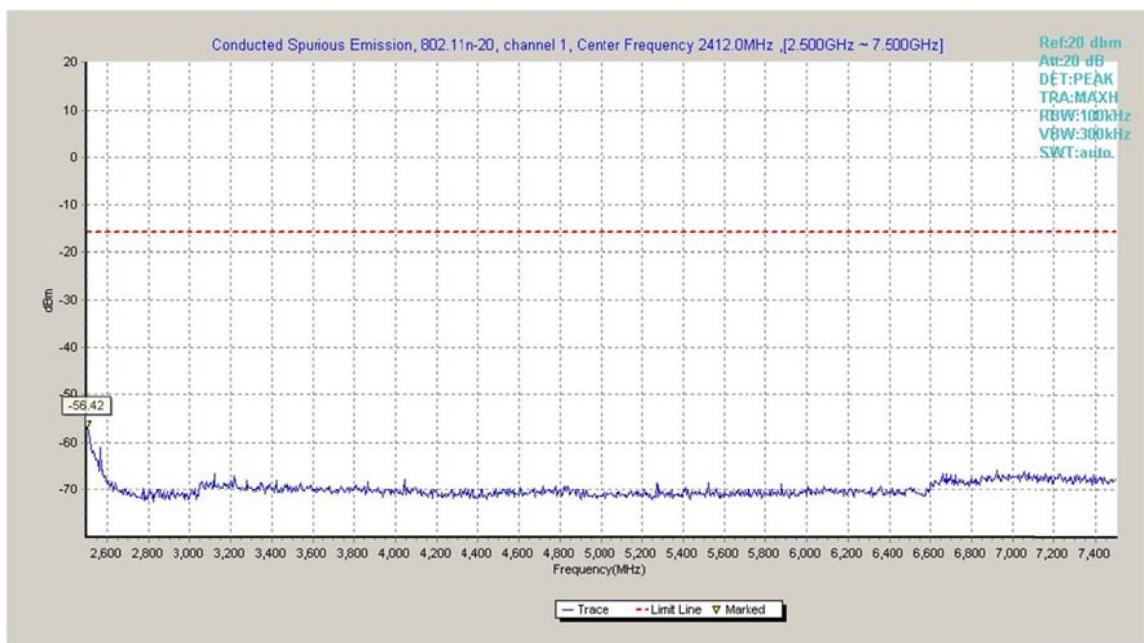
**Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)**



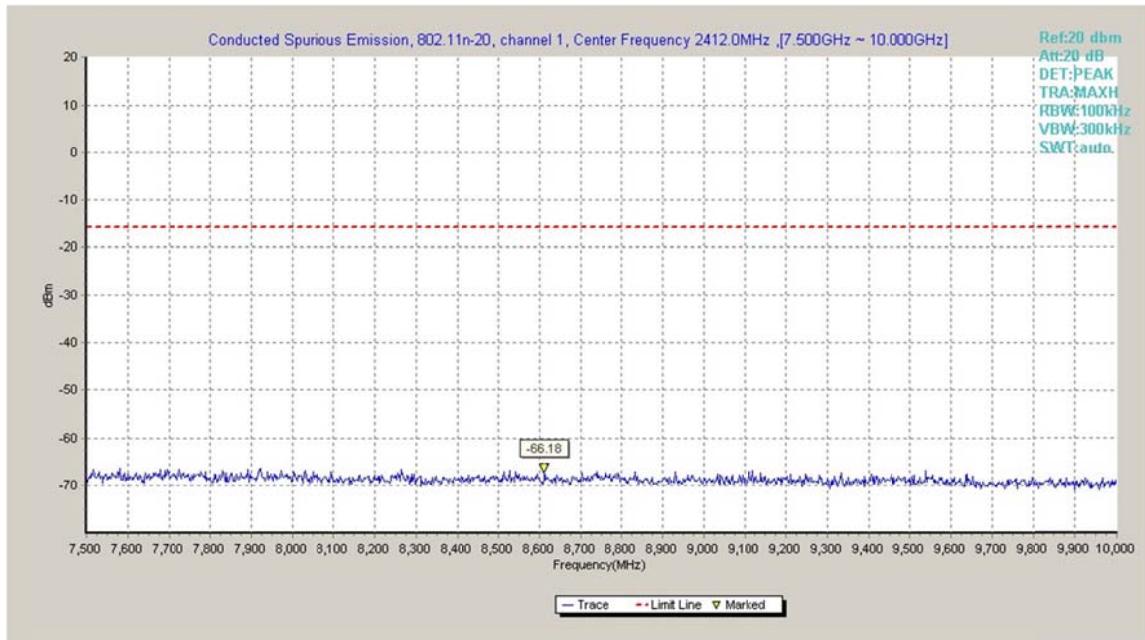
**Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)**



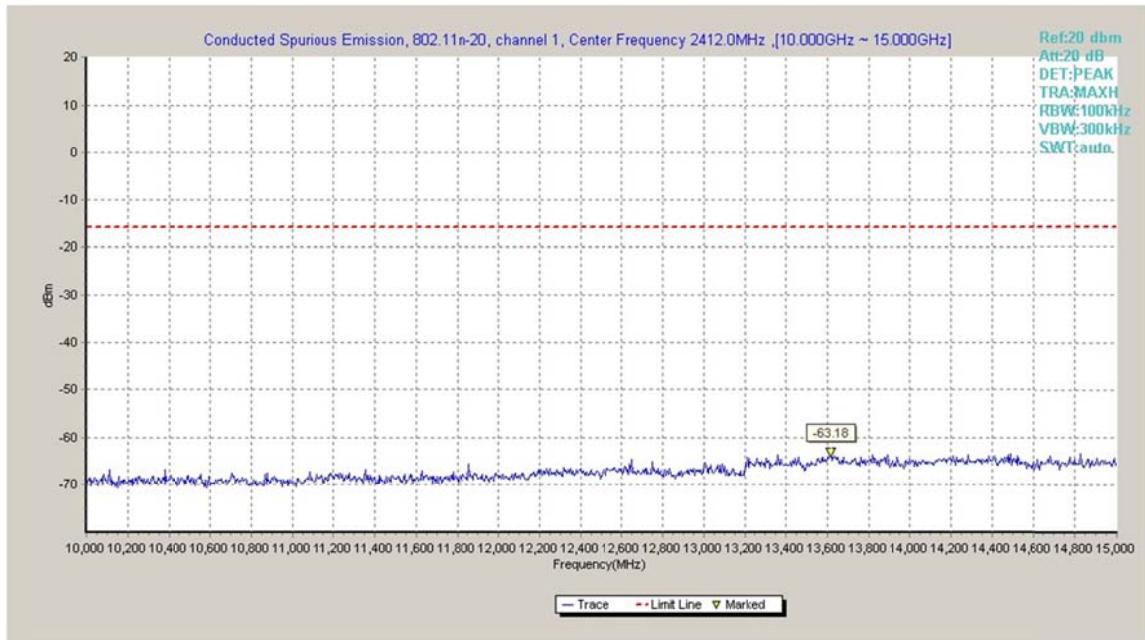
**Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)**



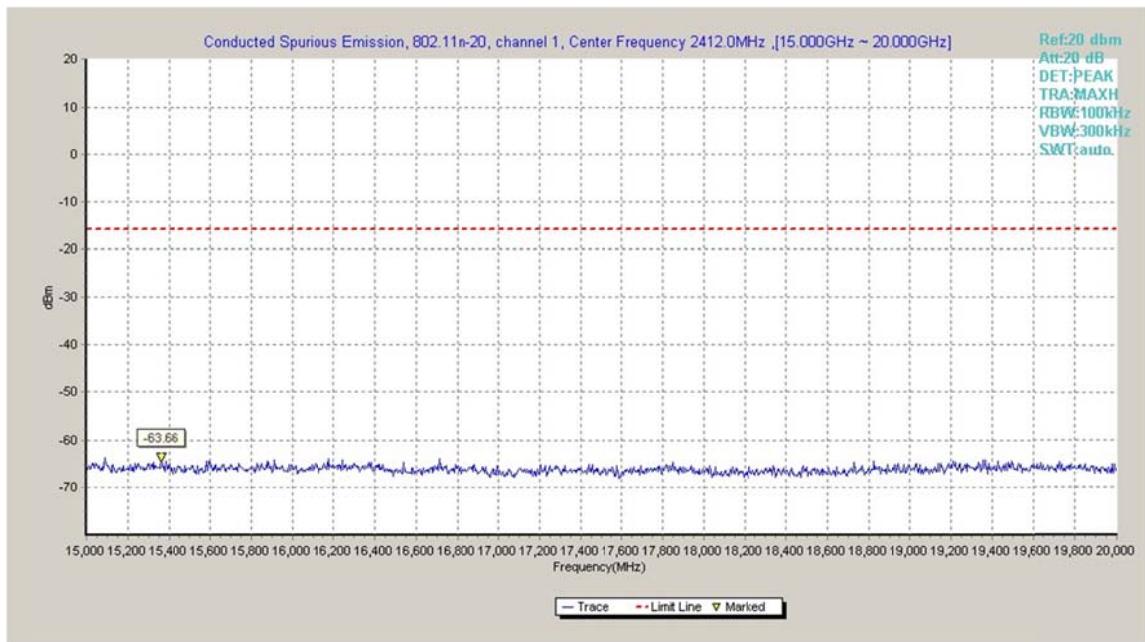
**Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)**



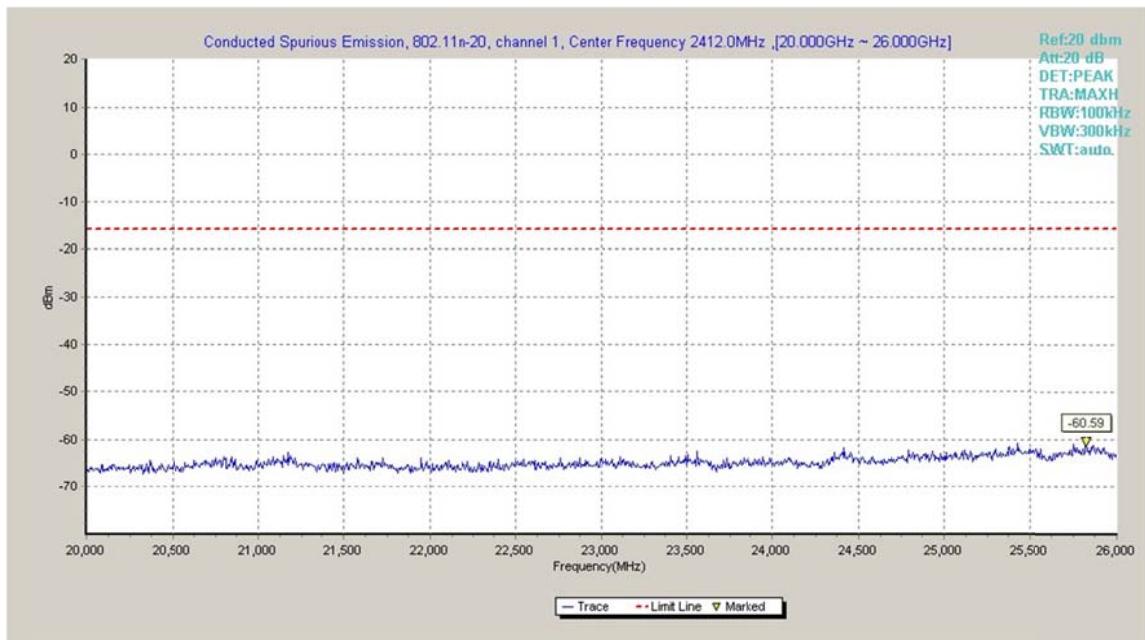
**Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)**



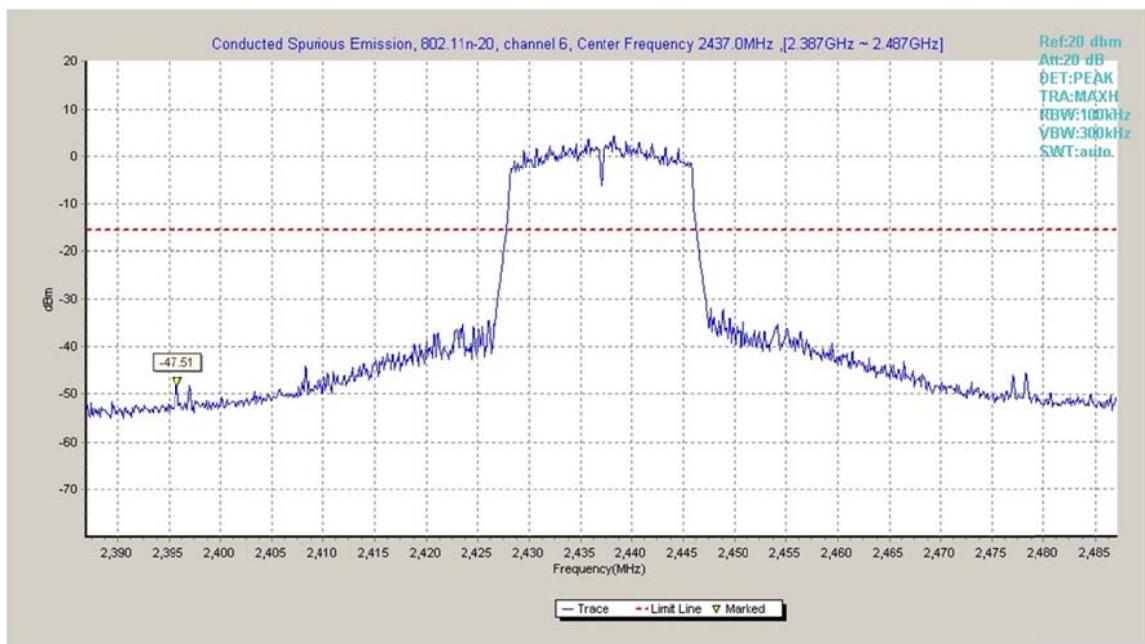
**Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)**



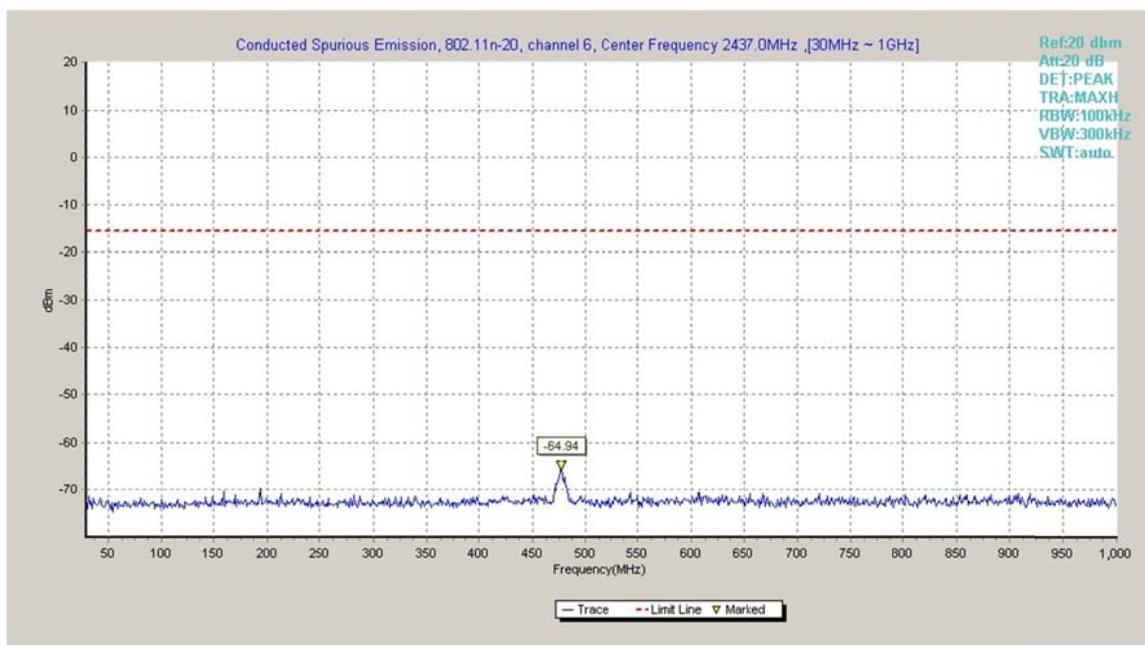
**Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)**



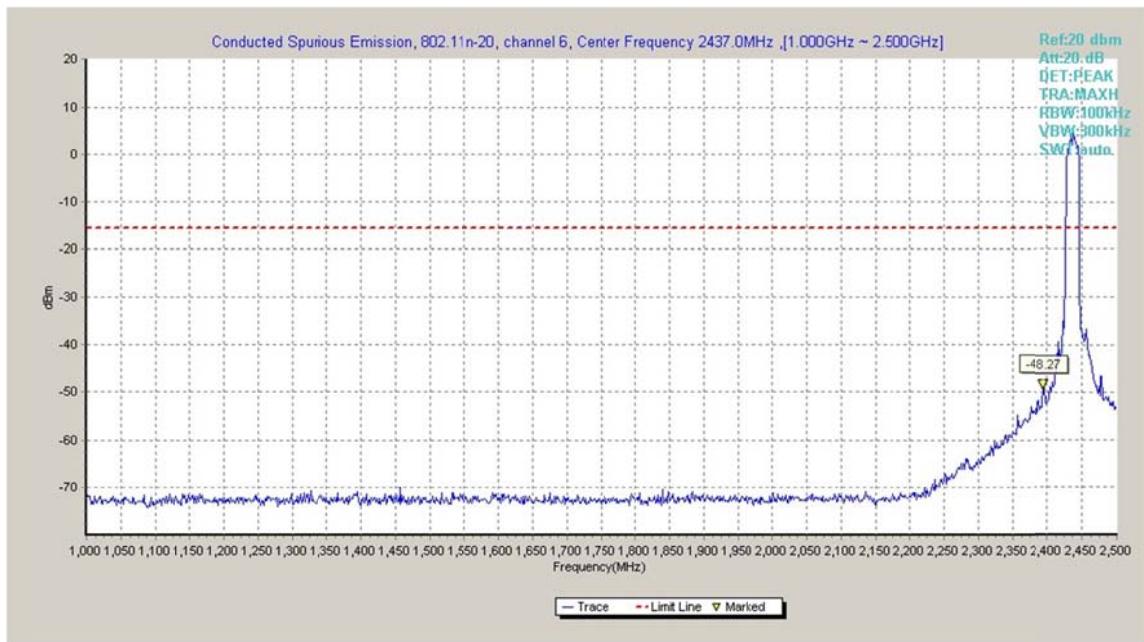
**Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)**



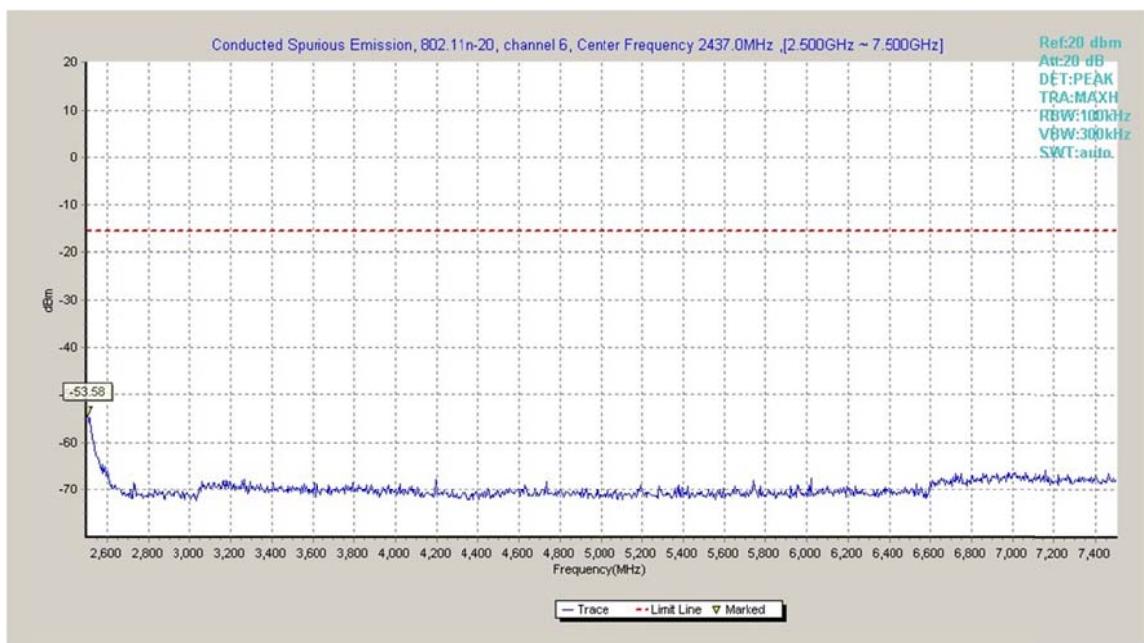
**Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)**



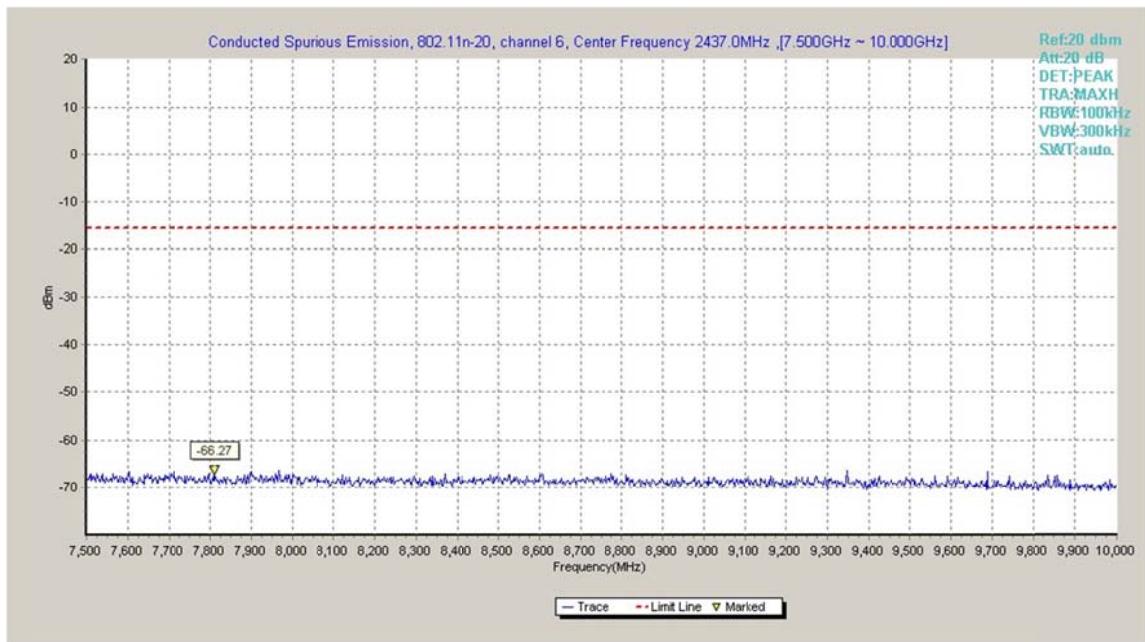
**Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)**



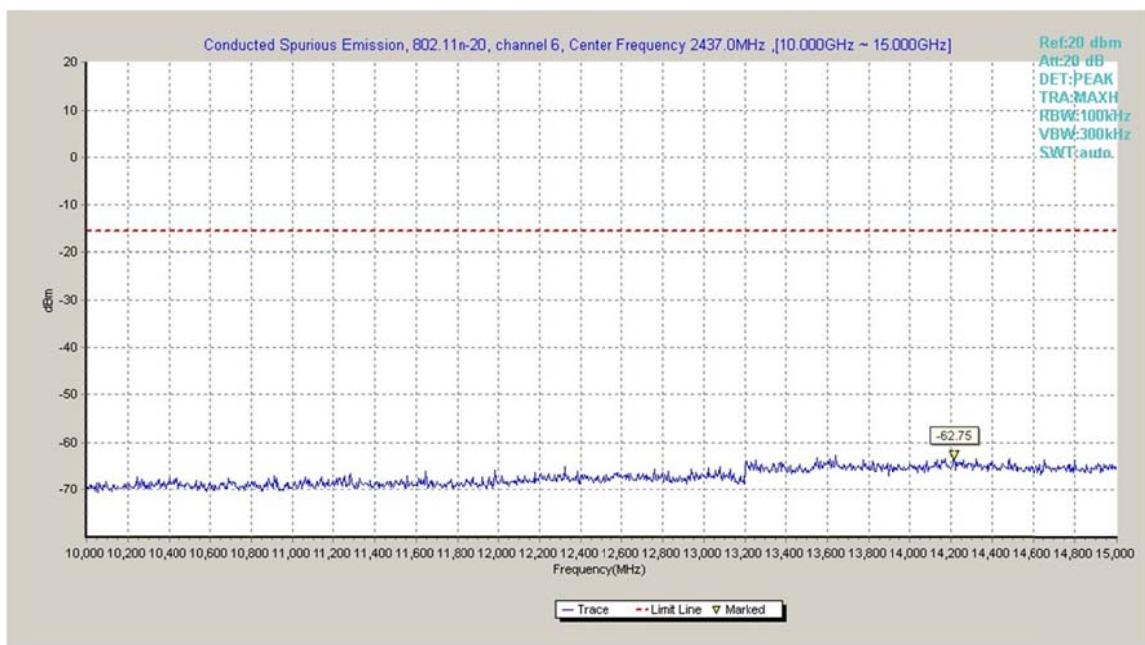
**Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)**



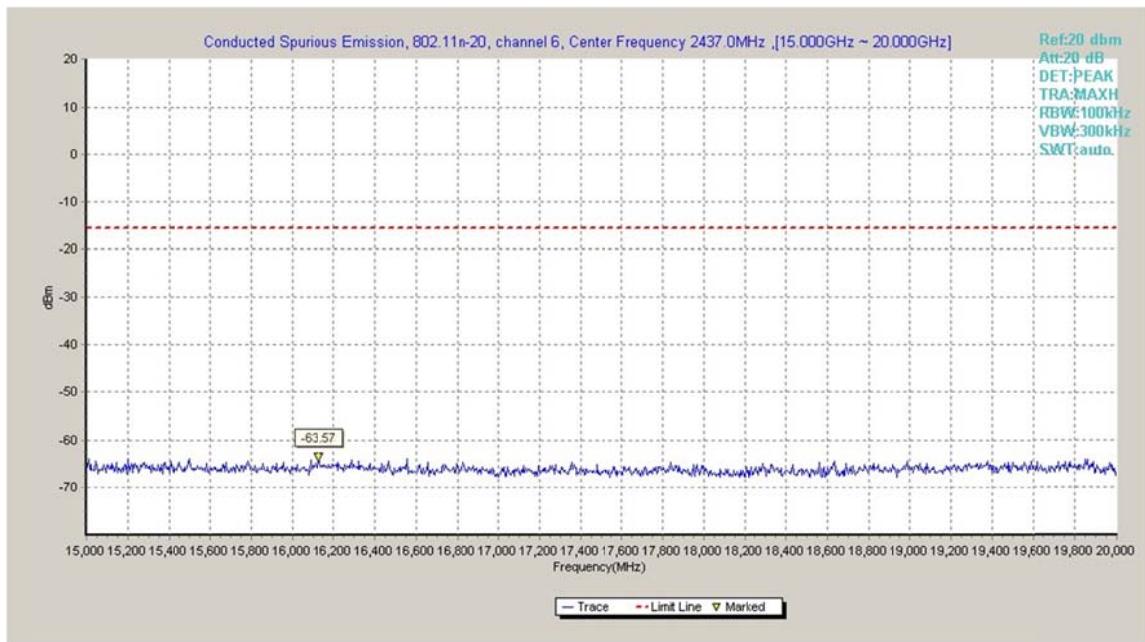
**Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)**



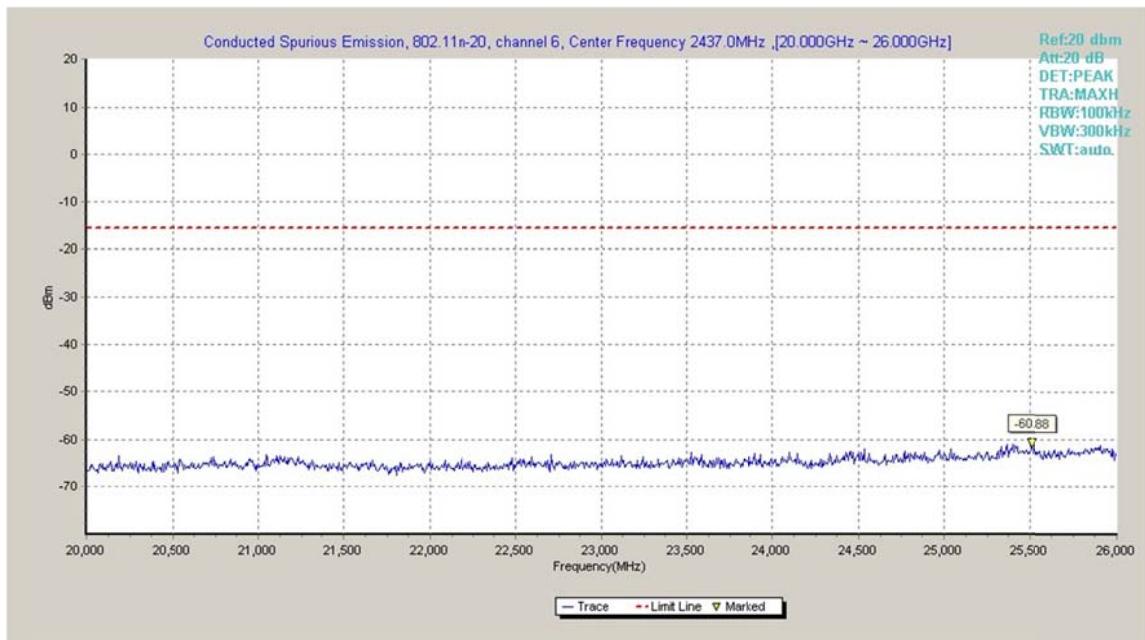
**Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)**



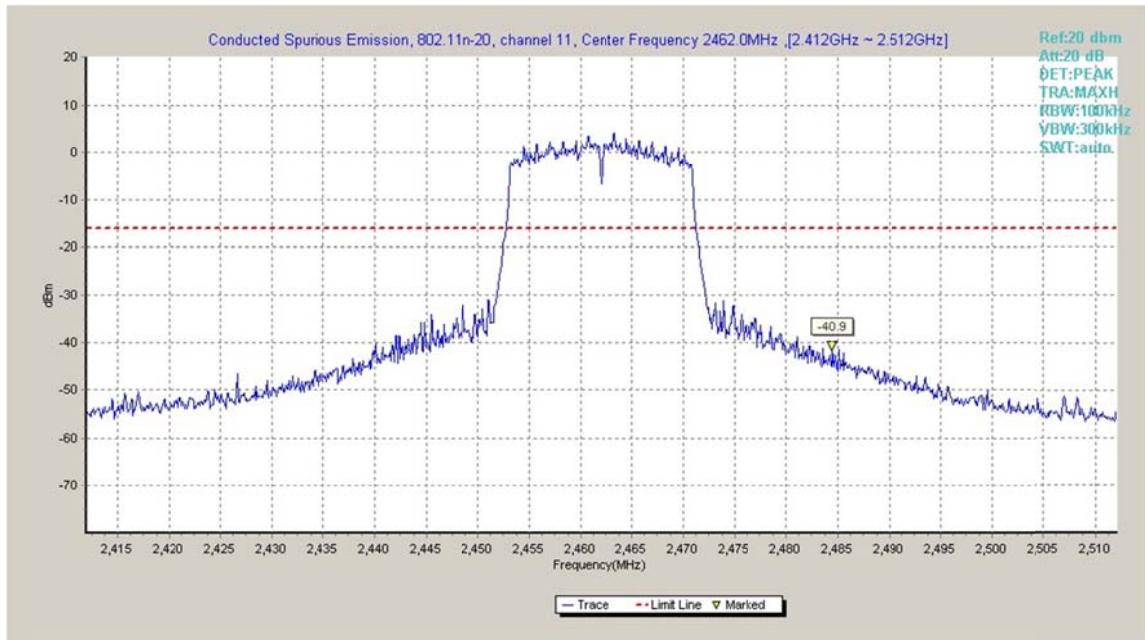
**Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)**



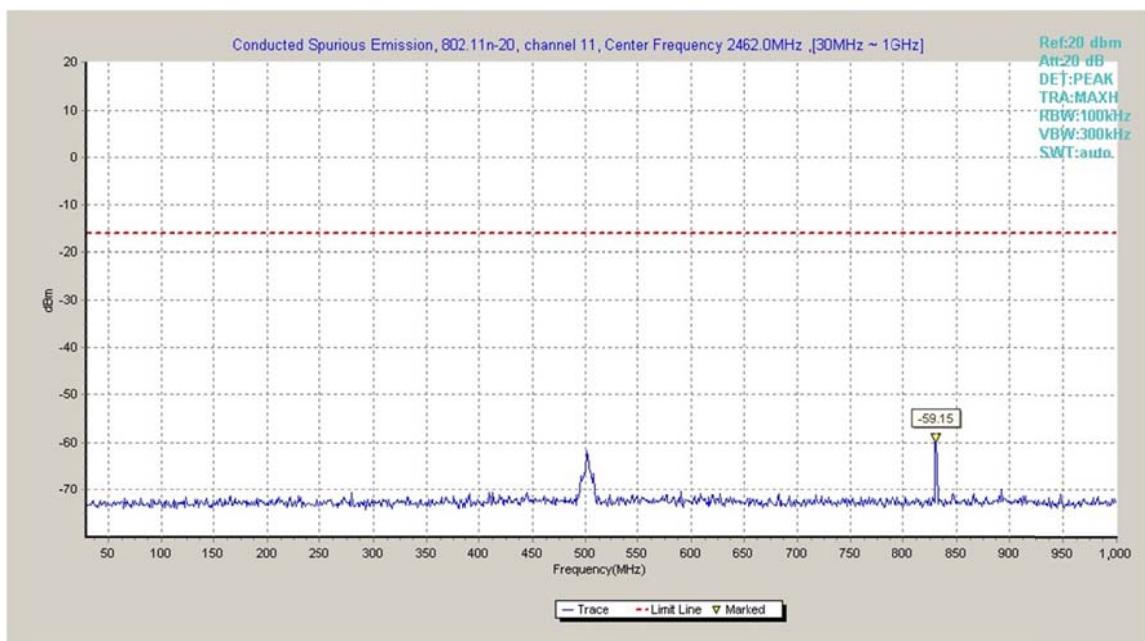
**Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)**



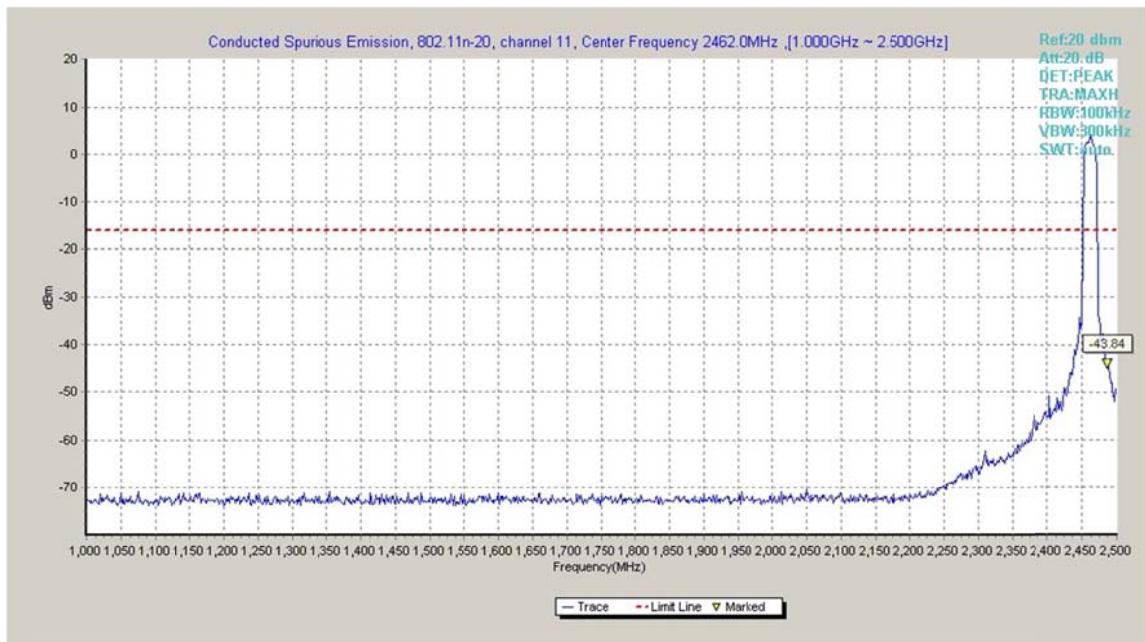
**Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)**



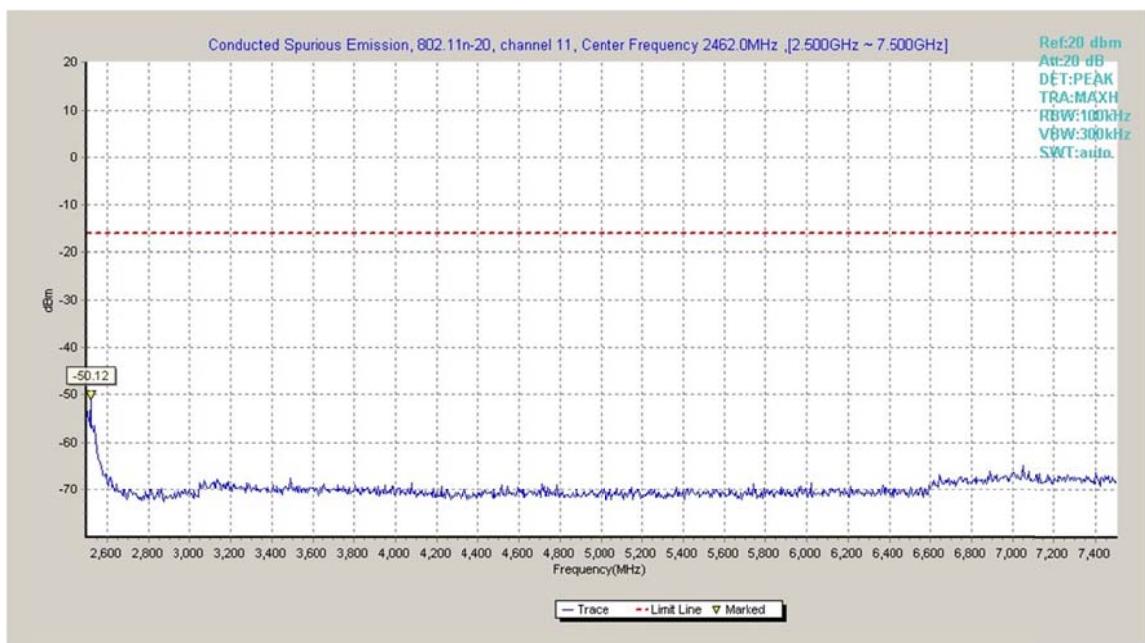
**Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)**



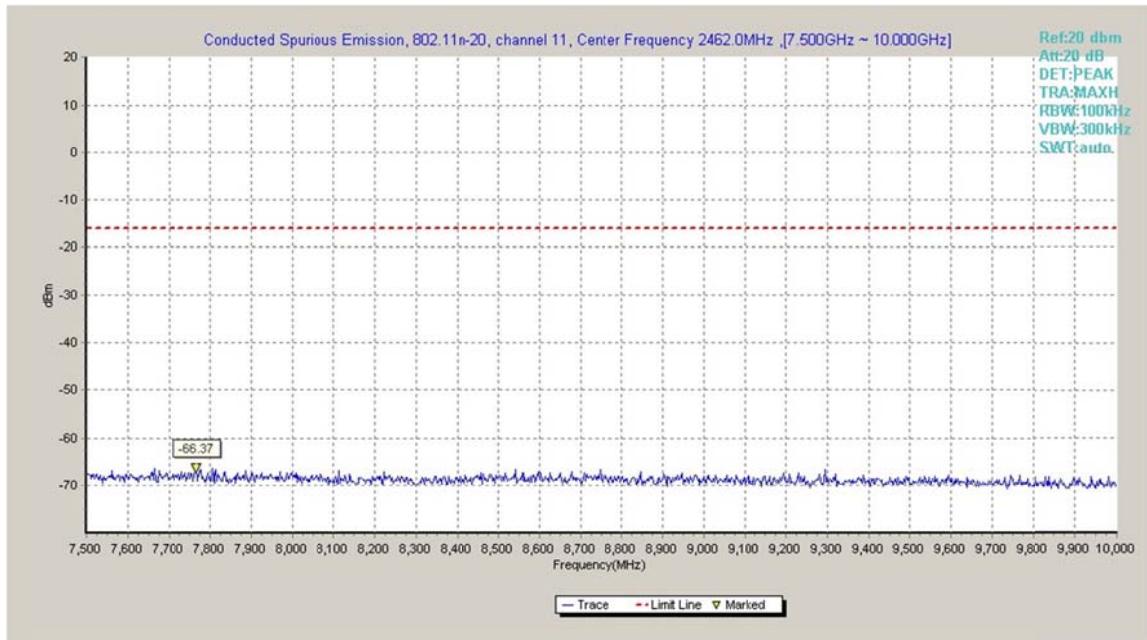
**Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)**



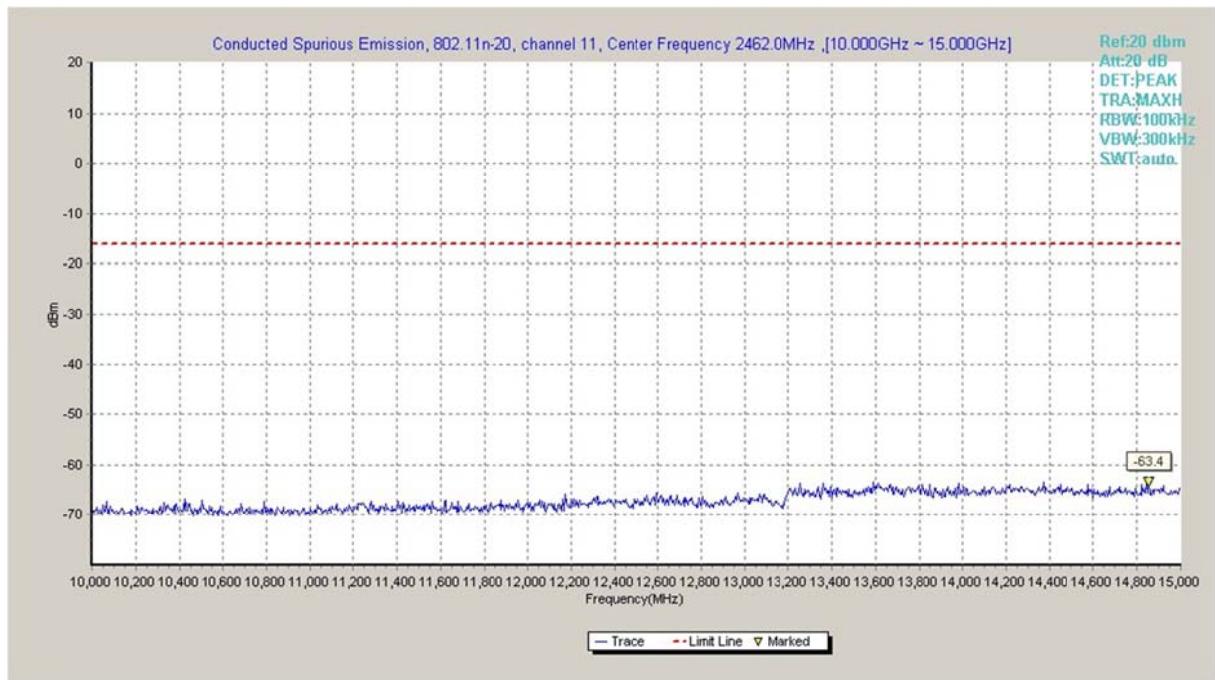
**Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)**



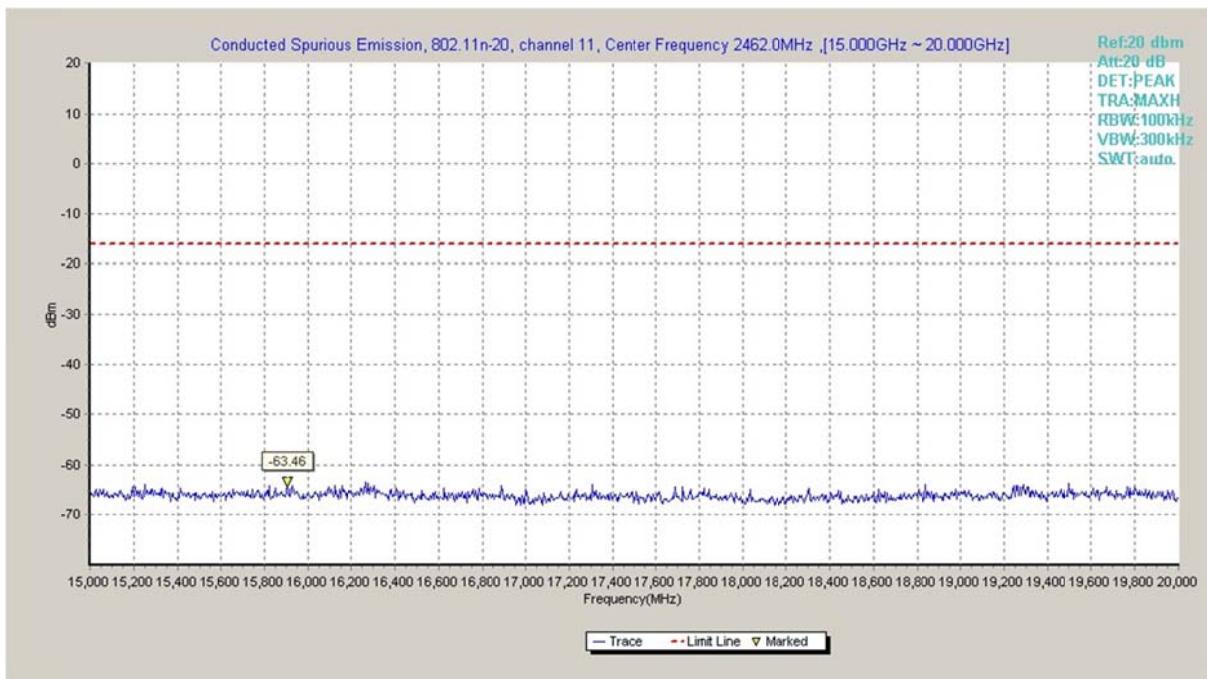
**Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)**



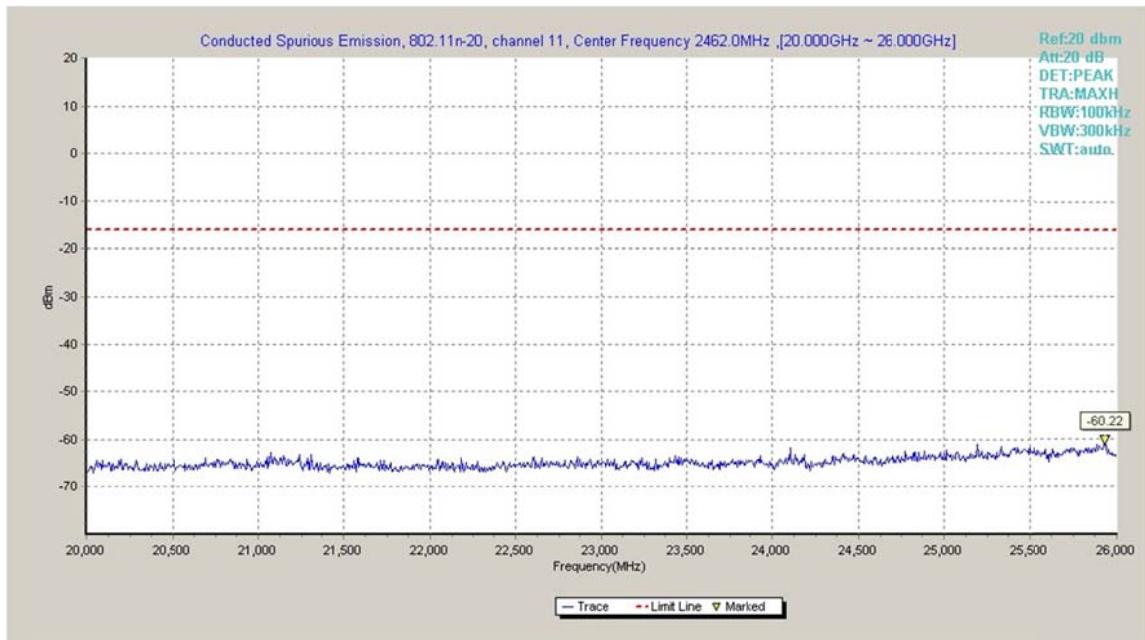
**Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)**



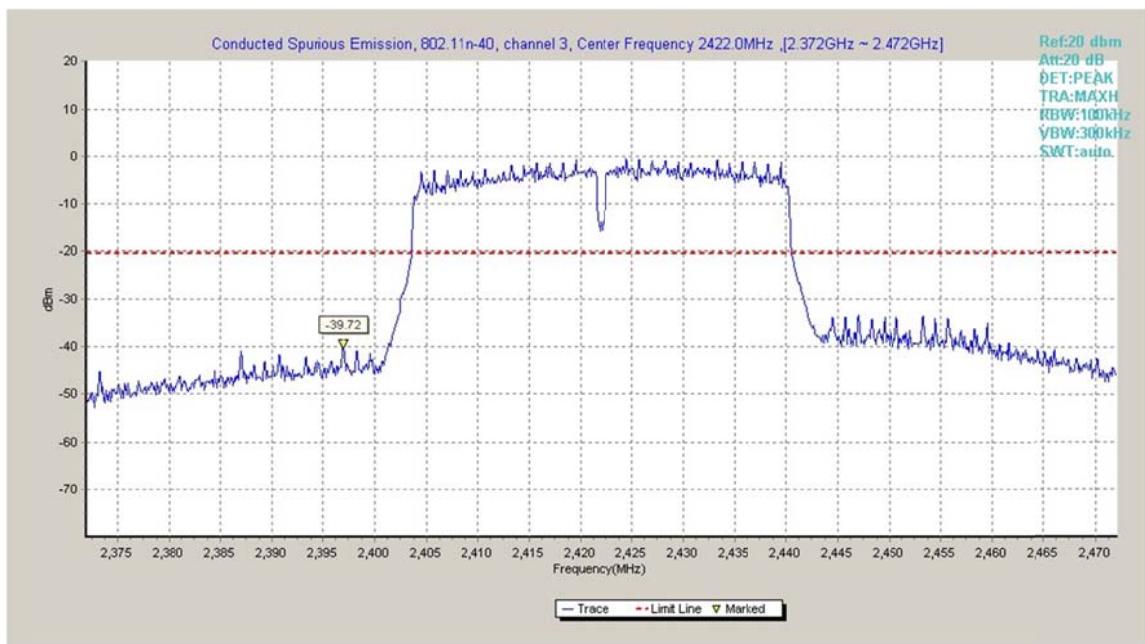
**Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)**



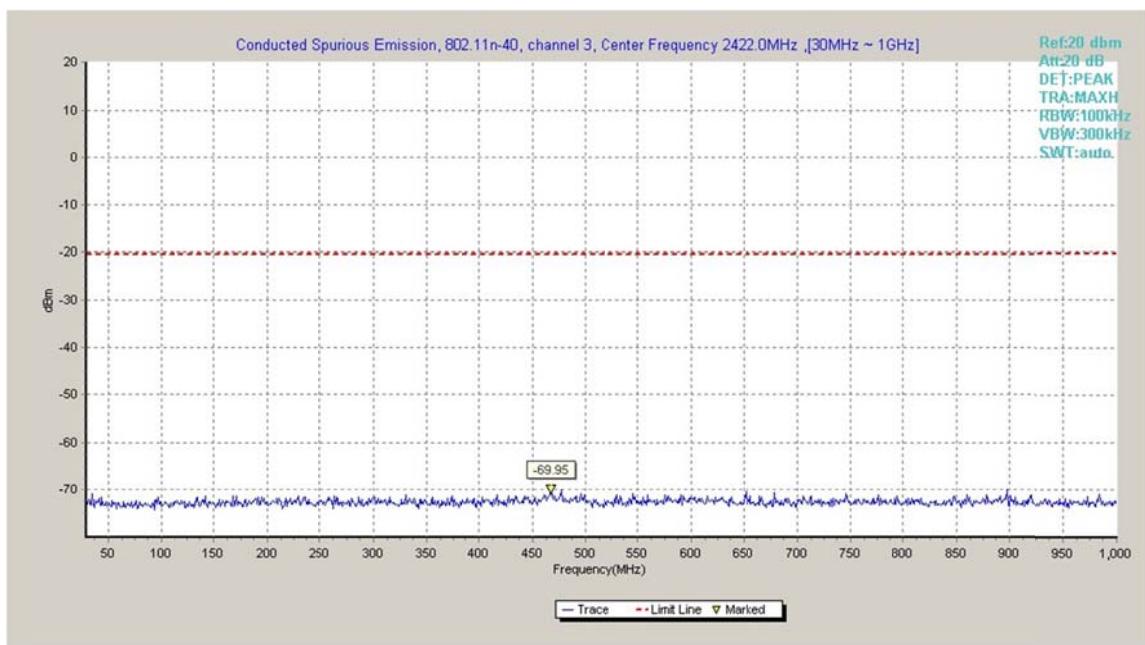
**Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)**



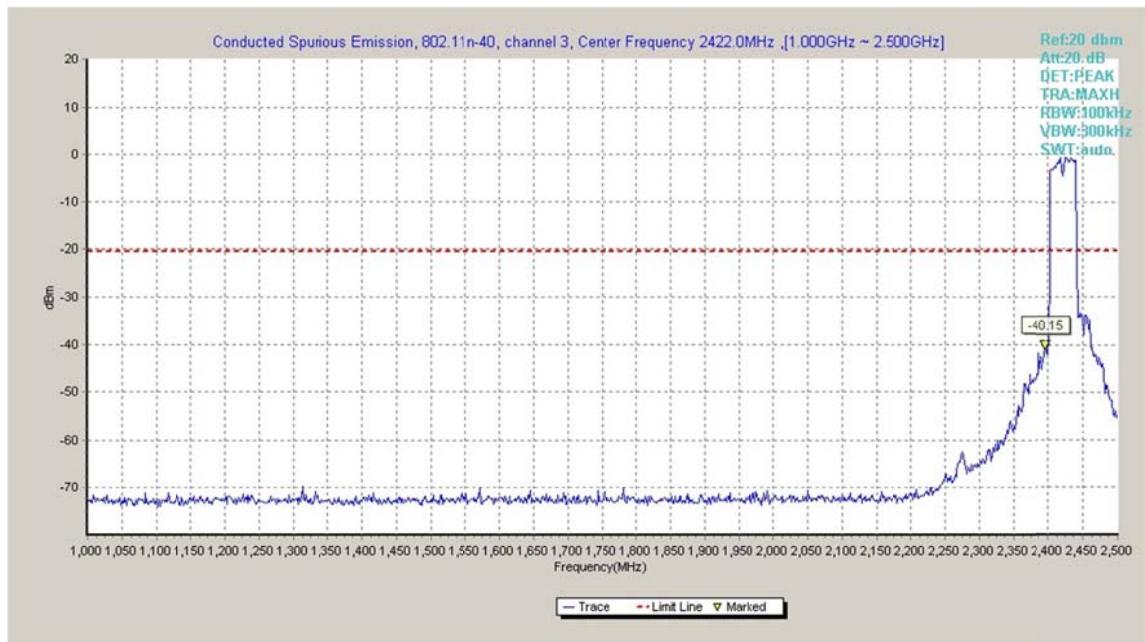
**Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)**



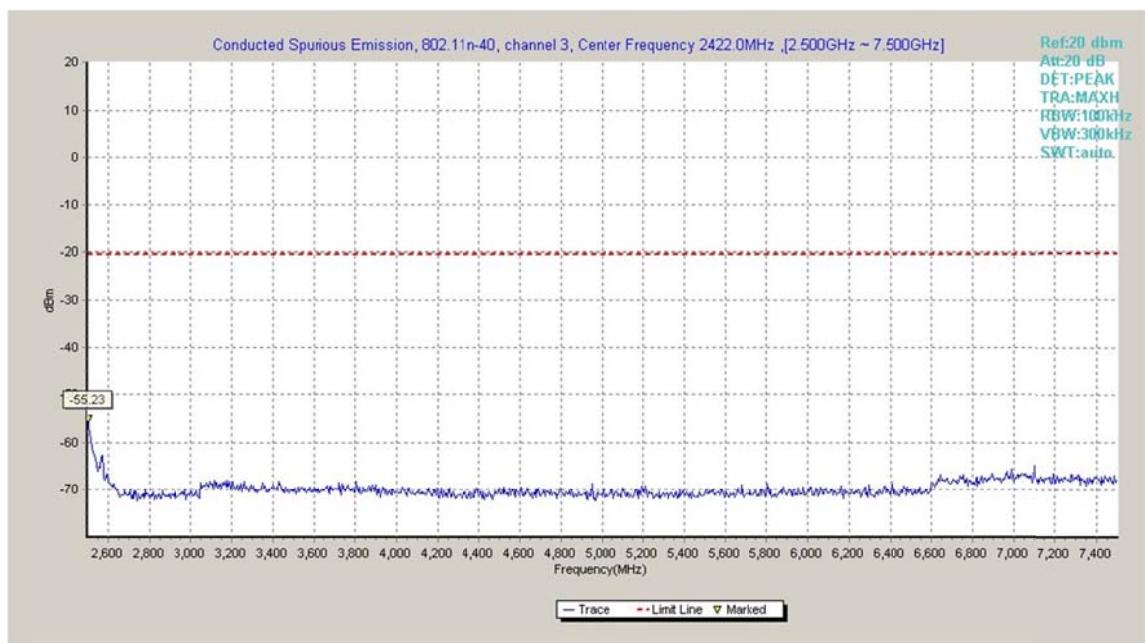
**Fig.A.6.1.73 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)**



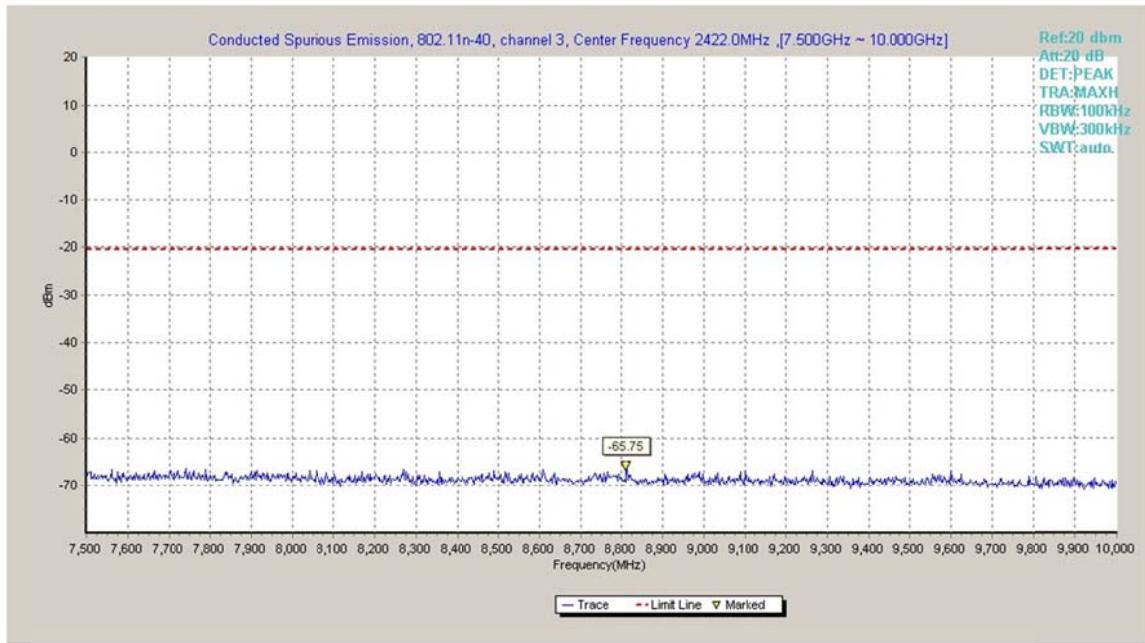
**Fig.A.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)**



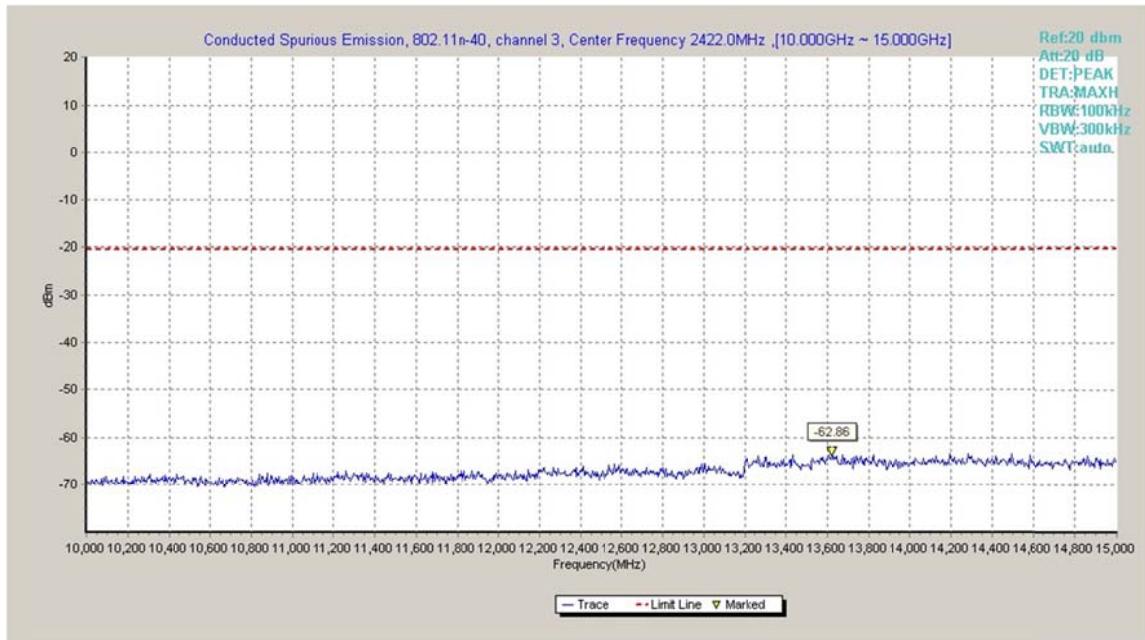
**Fig.A.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)**



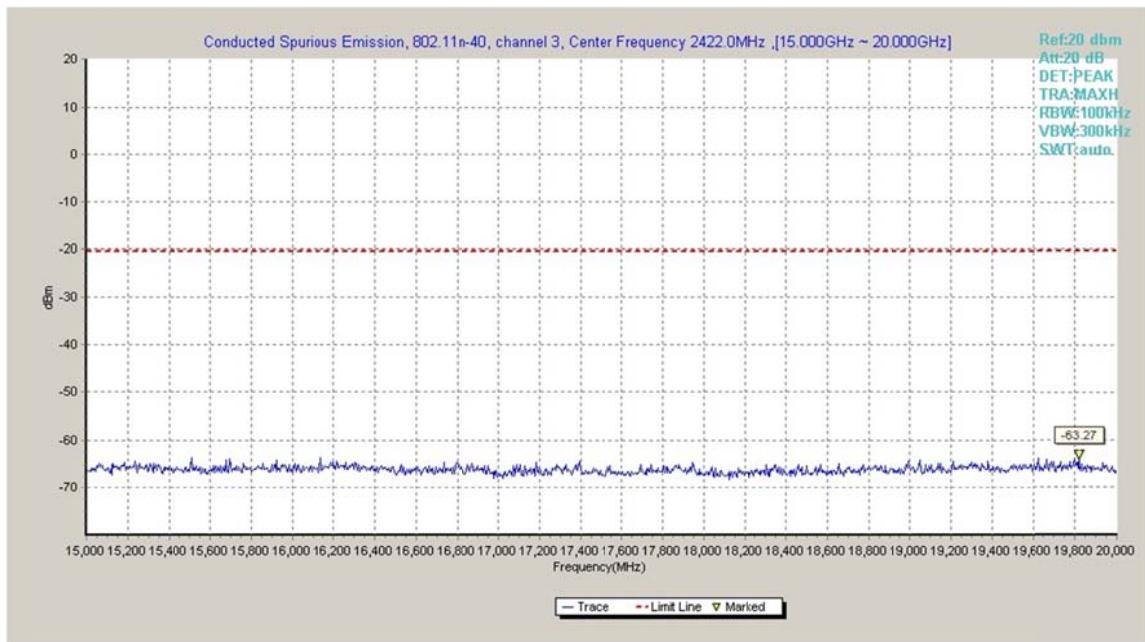
**Fig.A.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)**



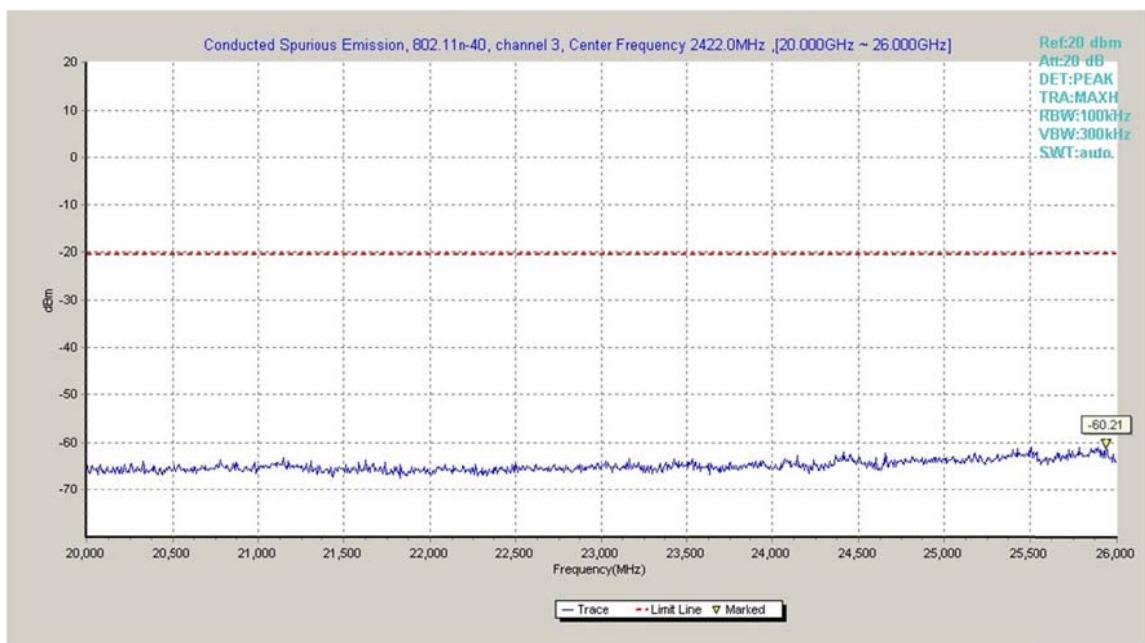
**Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)**



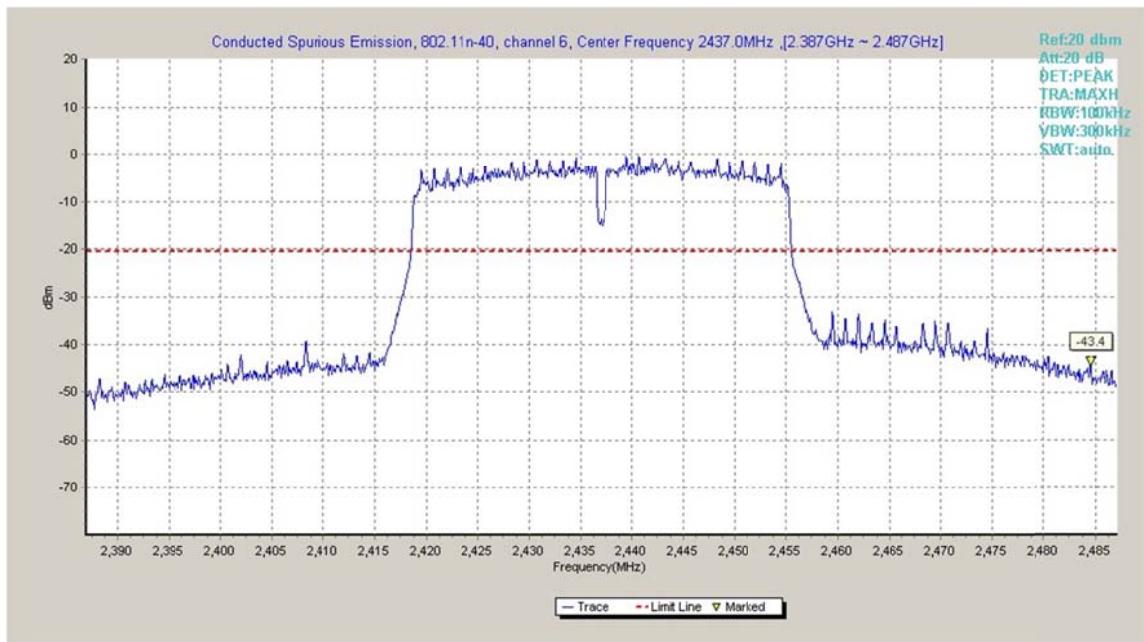
**Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)**



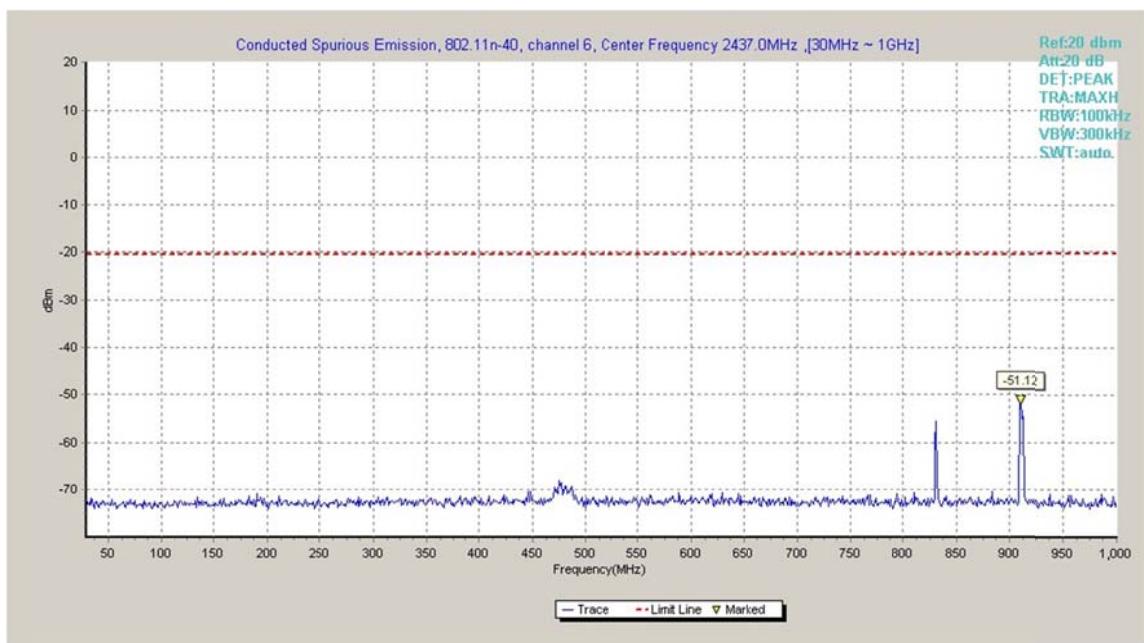
**Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)**



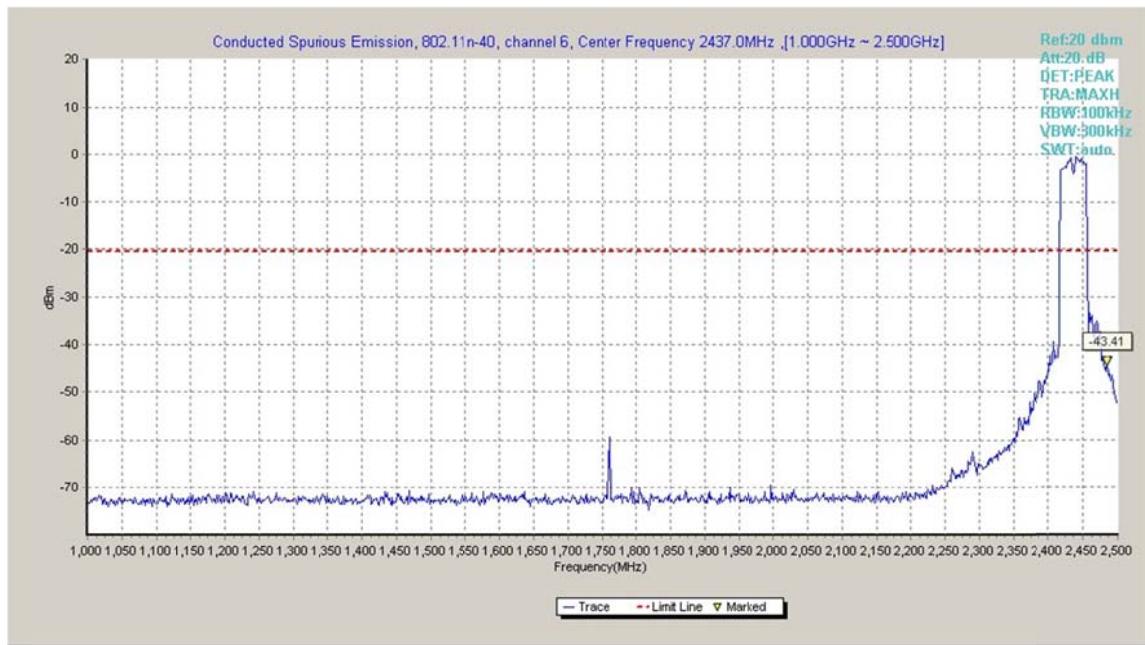
**Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)**



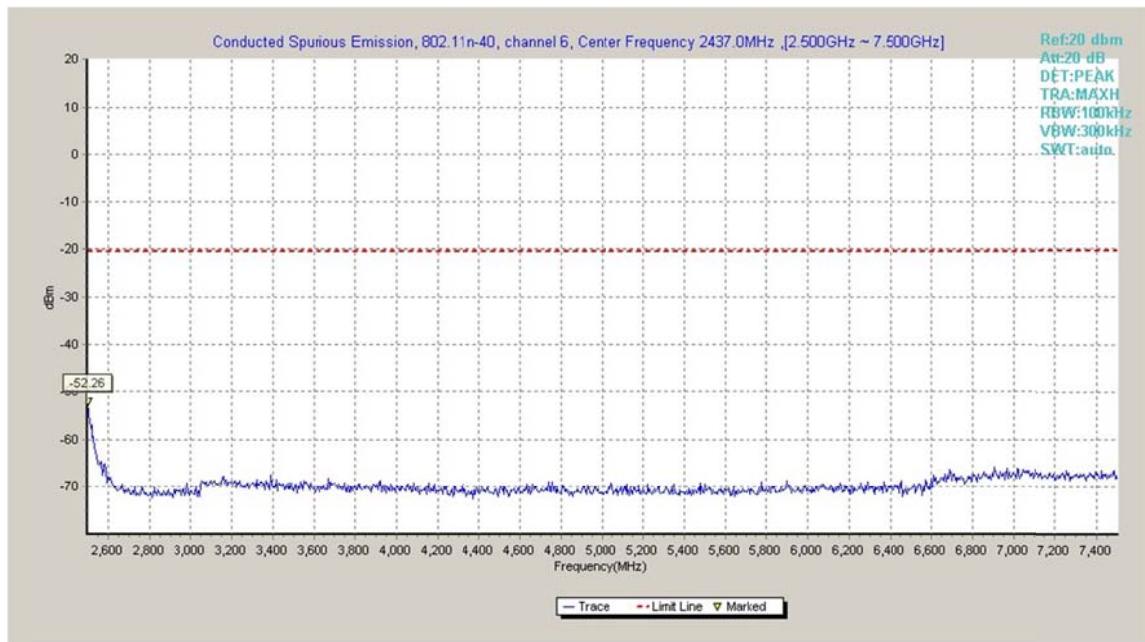
**Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)**



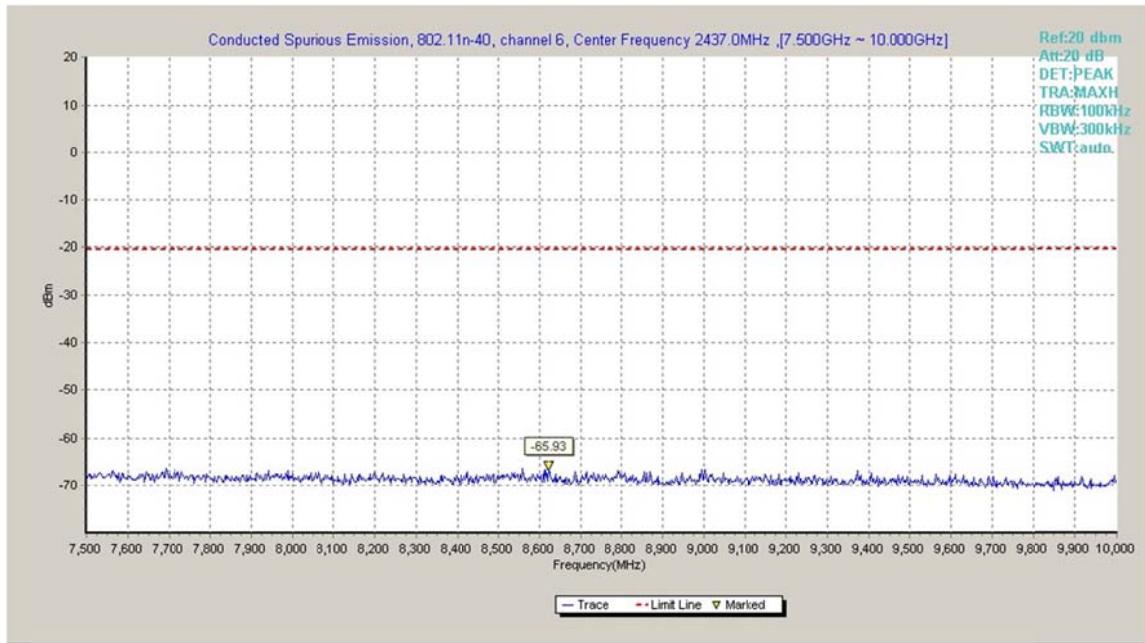
**Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)**



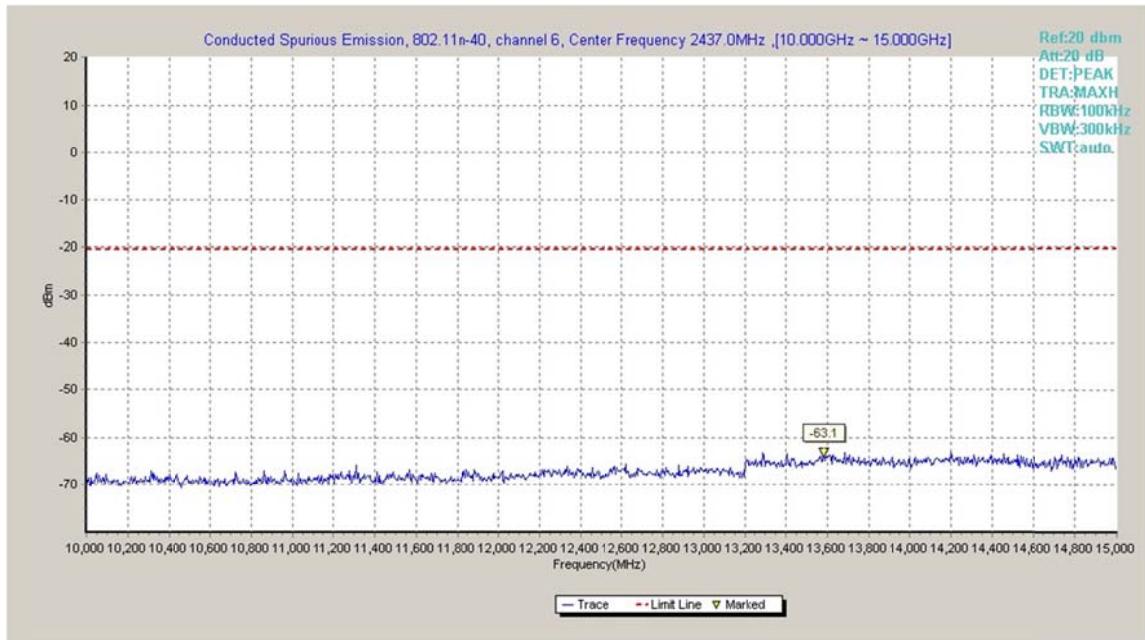
**Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)**



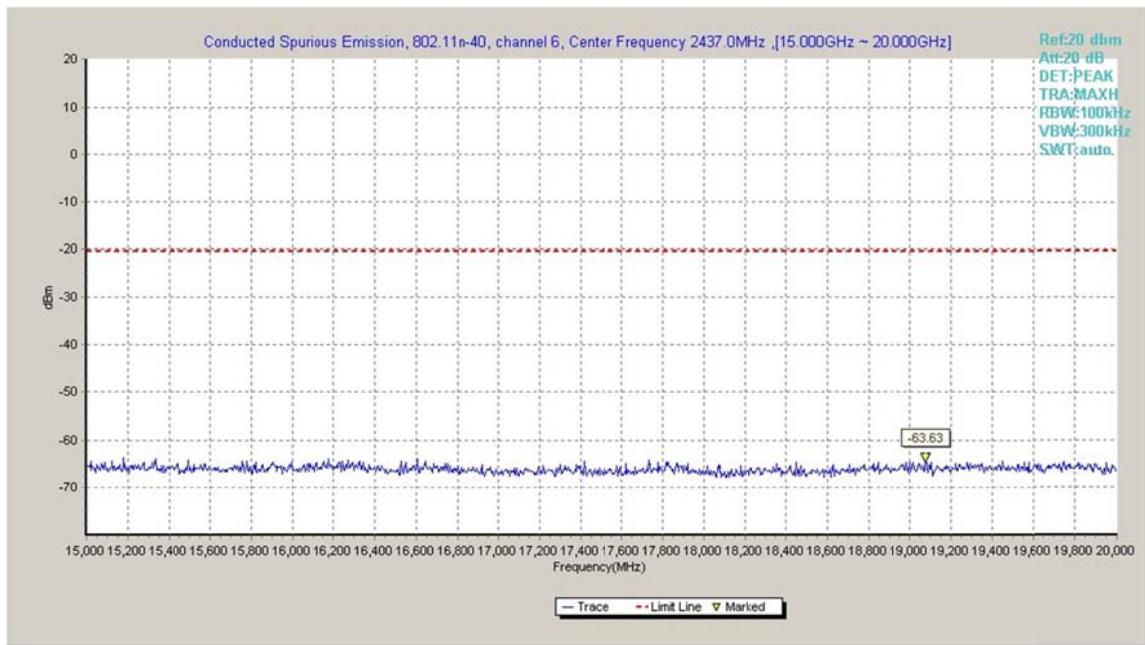
**Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)**



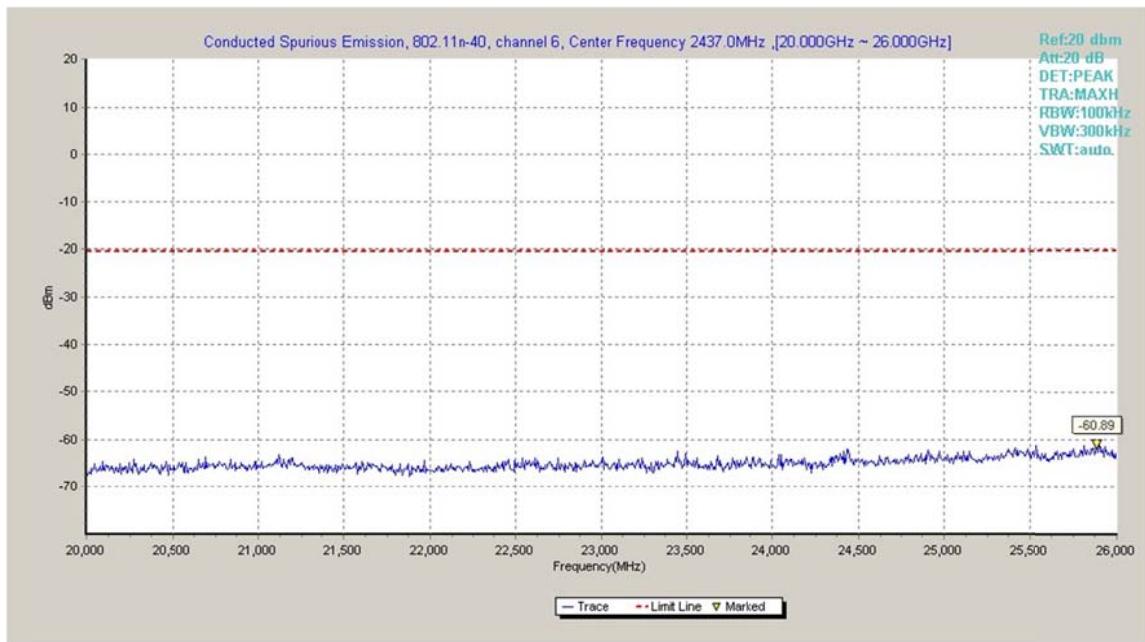
**Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)**



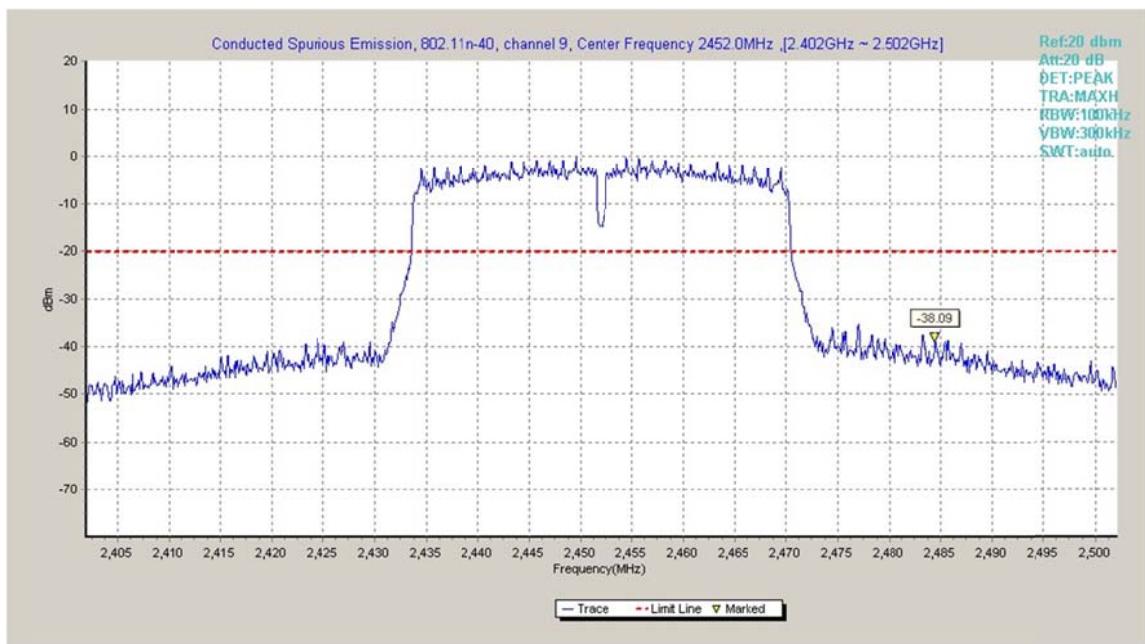
**Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)**



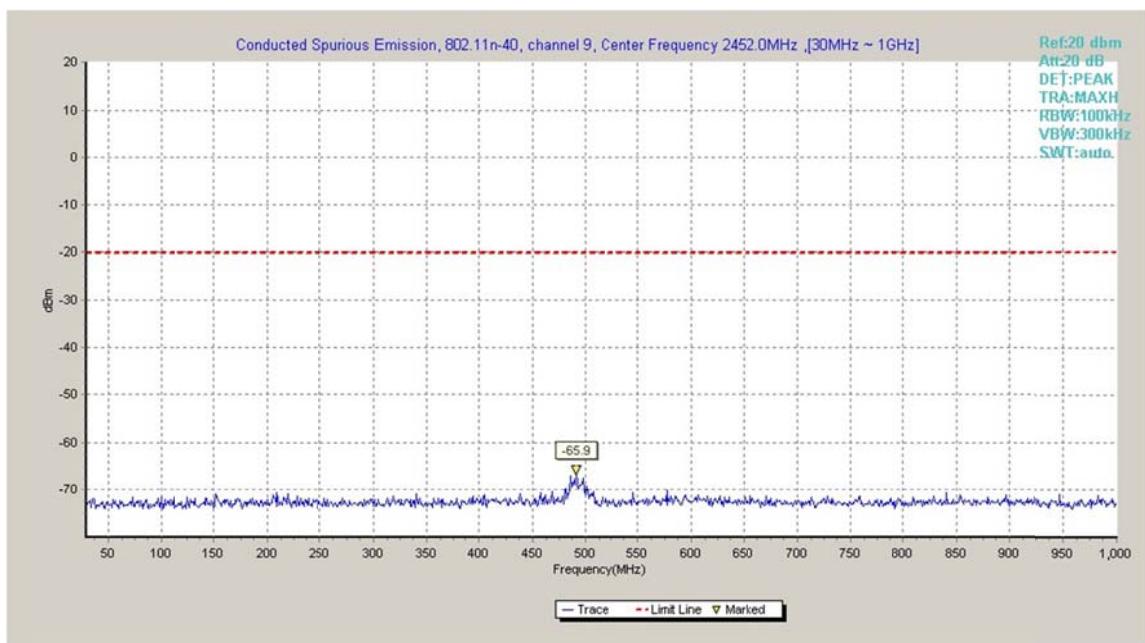
**Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)**



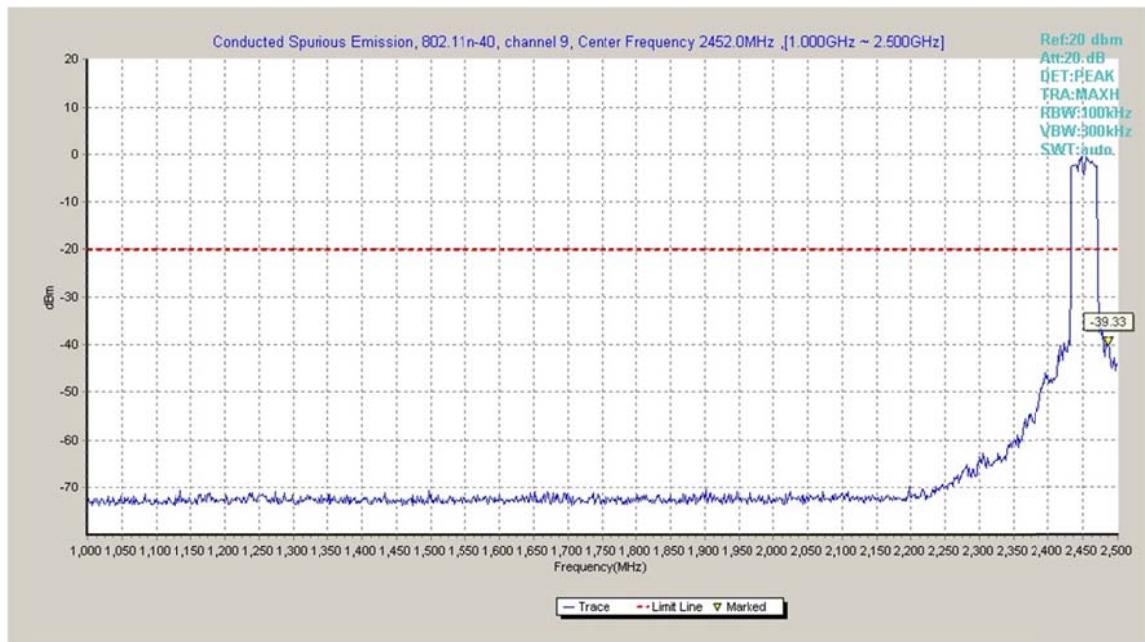
**Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)**



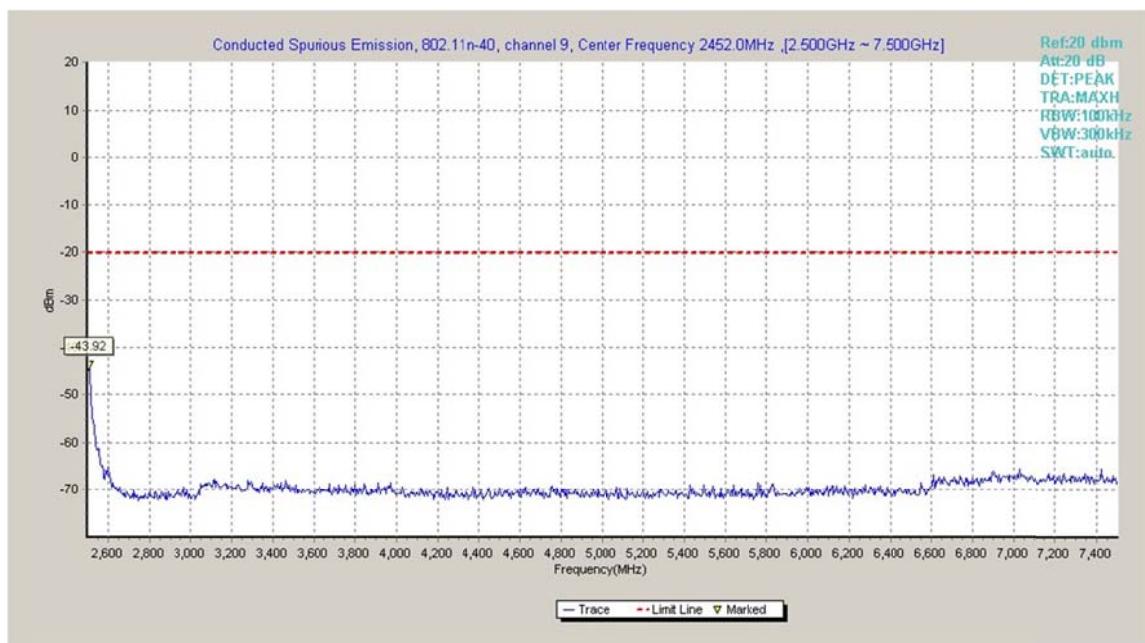
**Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)**



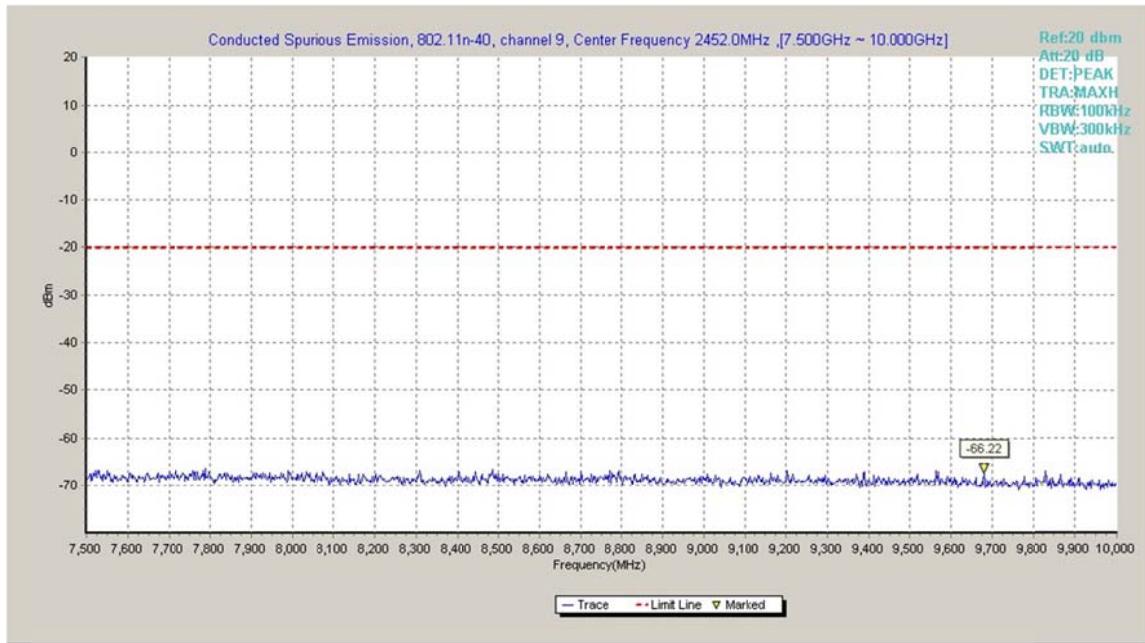
**Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)**



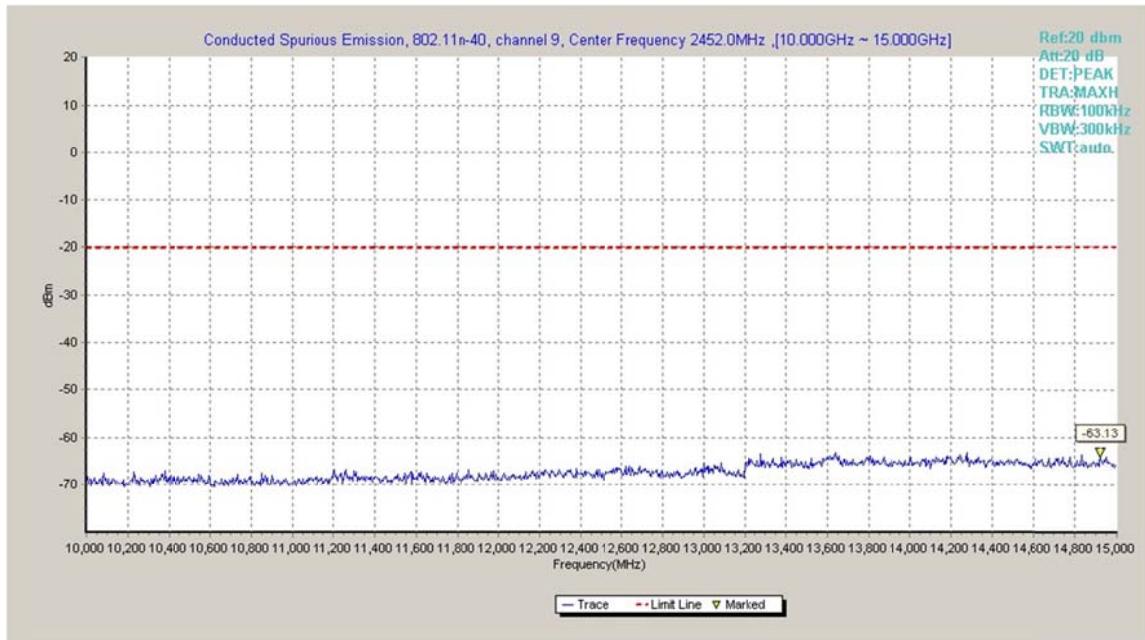
**Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)**



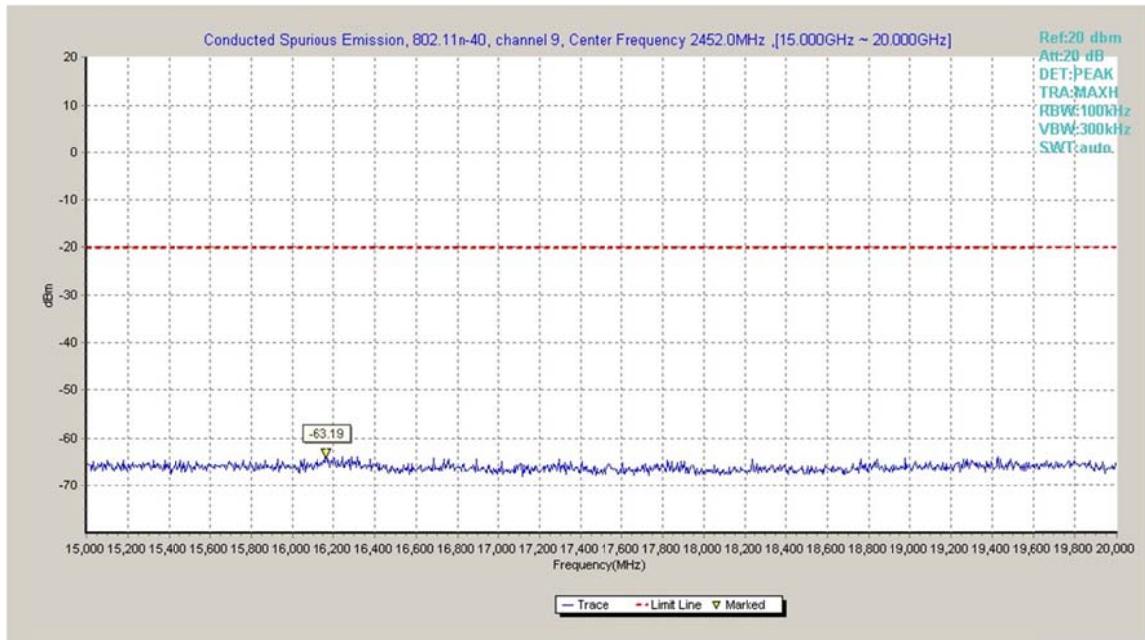
**Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)**



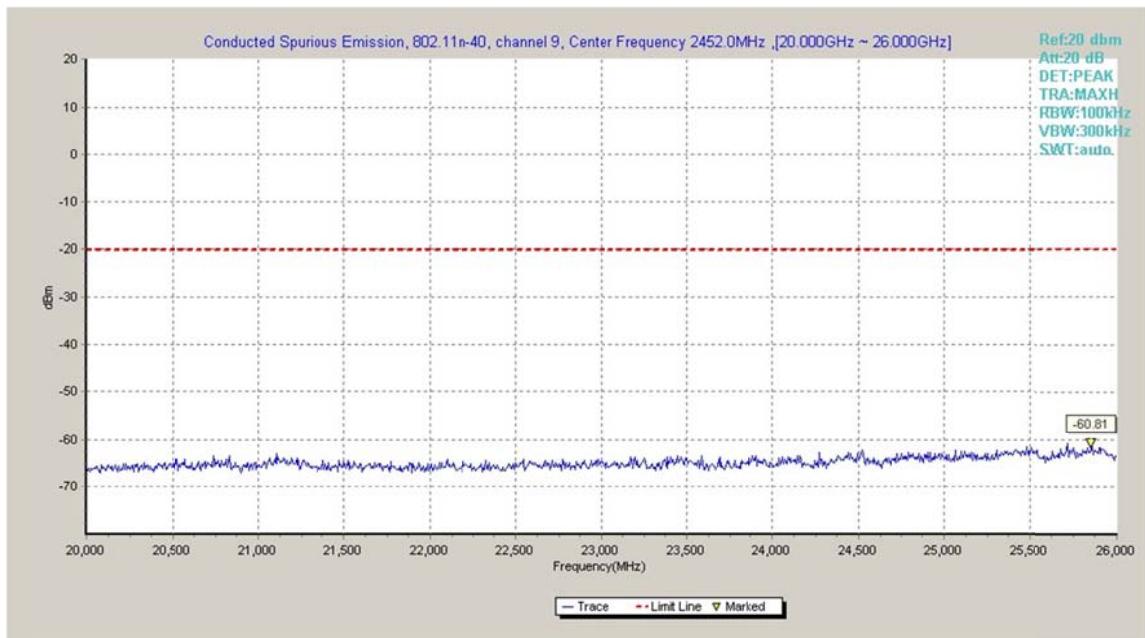
**Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)**



**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 3/10 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: EUT11**

**Measurement Results for Set.10:**
**802.11b mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.43GHz	Fig.A.6.2.1	P
	1	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	9 kHz ~30 MHz	--	P
		30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.2	P
	11	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P

**802.11g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.A.6.2.3	P
	1	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.4	P
	11	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P

**802.11n-HT20 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power	2.38GHz ~2.43GHz	Fig.A.6.2.5	P
	1	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.6	P
	11	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P

**802.11n-HT40 mode**

<b>Mode</b>	<b>Channel</b>	<b>Frequency Range</b>	<b>Test Results</b>	<b>Conclusion</b>
802.11n (HT40)	Power	2.38GHz ~2.43GHz	Fig.A.6.2.7	P
	3	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.8	P
	9	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	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)
2483.70	47.5	2.9	32.8	11.83	54.0	6.5	H	155	8
2484.30	47.4	2.9	32.7	11.77	54.0	6.6	H	155	6
4824.00	36.21	-32.8	34.5	34.46	54.0	17.8	H	155	25
7236.00	32.19	-31.7	36.1	27.83	54.0	21.8	H	155	70
9648.00	33.22	-30.4	37.0	26.53	54.0	20.8	H	155	135
12060.00	36.36	-29.6	39.3	26.68	54.0	17.6	H	155	270

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)
2382.40	46.7	2.9	32.0	11.77	54.0	7.3	H	155	170
2492.50	47.2	2.9	32.5	11.75	54.0	6.8	H	155	150
4874.00	34.16	-32.7	34.5	32.37	54.0	19.8	H	155	20
7311.00	36.16	-31.9	36.1	32.00	54.0	17.8	H	155	180
9748.00	33.00	-30.7	37.2	26.47	54.0	21.0	H	155	202
12185.00	40.54	-29.4	39.2	30.75	54.0	13.5	H	155	8

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)
2483.70	47.5	2.9	32.8	11.83	54.0	6.5	H	155	25
2484.20	47.4	2.9	32.7	11.76	54.0	6.6	H	155	49
4924.00	31.61	-33.1	34.5	30.19	54.0	22.4	H	155	4
7386.00	36.54	-31.8	36.0	32.34	54.0	17.5	H	155	6
9848.00	35.28	-30.1	37.3	28.02	54.0	18.7	H	155	25
12310.00	38.93	-29.7	39.2	29.45	54.0	15.1	H	155	186

**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)
2386.398	59.3	2.9	32.0	24.43	74.0	14.7	H	155	0
2386.398	59.3	2.9	32.0	24.43	74.0	14.7	V	155	0
17746.500	53.0	-24.0	41.0	36.00	74.0	21.0	V	155	22
17797.500	52.9	-23.2	41.0	35.10	74.0	21.1	V	155	66
17792.250	52.9	-23.3	41.0	35.18	74.0	21.1	V	155	132
17775.000	52.8	-23.6	41.0	35.36	74.0	21.2	V	155	274

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)
2374.800	50.9	-26.7	32.1	45.45	74.0	23.1	H	155	176
2558.400	52.2	-26.8	33.1	45.98	74.0	21.8	H	155	154
17780.250	52.9	-23.5	41.0	35.39	74.0	21.1	V	155	22
17733.750	52.8	-24.2	41.0	36.06	74.0	21.2	V	155	176
17835.750	52.8	-23.3	40.9	35.24	74.0	21.2	H	155	198
17748.000	52.8	-24.0	41.0	35.77	74.0	21.2	H	155	0

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)
2483.510	61.2	2.9	32.8	25.50	74.0	12.8	H	155	22
2484.220	61.0	2.9	32.7	25.33	74.0	13.0	V	155	44
17741.250	52.3	-24.1	41.0	35.40	74.0	21.7	H	155	0
17898.000	52.3	-24.2	40.9	35.56	74.0	21.7	H	155	0
17868.750	52.2	-23.8	40.9	35.09	74.0	21.8	H	155	22
17787.000	52.2	-23.4	41.0	34.59	74.0	21.8	H	155	176

**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)
2380.80	46.3	2.9	32.1	11.40	54.0	7.7	H	155	20
2382.40	46.3	2.9	32.0	11.40	54.0	7.7	H	155	45
4824.00	30.12	-32.8	34.5	28.37	54.0	23.9	H	155	240
7236.00	30.59	-31.7	36.1	26.22	54.0	23.4	H	155	180
9648.00	33.21	-30.4	37.0	26.53	54.0	20.8	H	155	85
12060.00	35.33	-29.6	39.3	25.65	54.0	18.7	H	155	25

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)
2384.61	46.8	2.9	32.0	11.87	54.0	7.2	H	155	175
2390.28	47.0	2.9	32.0	12.18	54.0	7.0	H	155	5
4874.00	30.24	-32.7	34.5	28.45	54.0	23.8	H	155	26
7311.00	30.96	-31.9	36.1	26.79	54.0	23.0	H	155	355
9748.00	33.49	-30.7	37.2	26.96	54.0	20.5	H	155	6
12185.00	35.64	-29.4	39.2	25.85	54.0	18.4	H	155	12

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)
2483.74	47.5	2.9	32.8	11.83	54.0	6.5	H	155	20
2484.43	47.4	2.9	32.7	11.78	54.0	6.6	H	155	248
4924.00	29.43	-33.1	34.5	28.01	54.0	24.6	H	155	49
7386.00	30.95	-31.8	36.0	26.74	54.0	23.1	H	155	335
9848.00	33.85	-30.1	37.3	26.60	54.0	20.2	H	155	180
12310.00	35.21	-29.7	39.2	25.74	54.0	18.8	H	155	8

**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)
2385.096	59.8	2.9	32.0	24.94	74.0	14.2	H	155	22
2389.842	60.1	2.9	32.0	25.29	74.0	13.9	H	155	44
17799.000	53.2	-23.2	41.0	35.39	74.0	20.8	H	155	242
17790.750	52.5	-23.3	41.0	34.82	74.0	21.5	H	155	176
17805.750	52.3	-23.1	41.0	34.43	74.0	21.7	H	155	88
17839.500	52.2	-23.4	40.9	34.72	74.0	21.8	V	155	22

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)
2372.400	50.9	-26.8	32.1	45.66	74.0	23.1	H	155	176
2494.400	52.2	-23.4	32.5	43.19	74.0	21.8	H	155	0
17769.750	52.9	-23.6	41.0	35.56	74.0	21.1	V	155	22
17052.750	52.3	-25.5	41.4	36.50	74.0	21.7	V	155	352
17776.500	52.2	-23.5	41.0	34.73	74.0	21.8	V	155	0
17866.500	52.2	-23.8	40.9	35.03	74.0	21.8	V	155	0

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)
2483.610	71.5	2.9	32.8	35.79	74.0	2.5	H	155	22
2484.010	70.8	2.9	32.7	35.17	74.0	3.2	H	155	242
17892.000	53.3	-24.1	40.9	36.48	74.0	20.7	V	155	44
17805.000	52.8	-23.1	41.0	34.92	74.0	21.2	H	155	330
17733.750	52.7	-24.2	41.0	35.90	74.0	21.3	H	155	176
17793.000	52.6	-23.3	41.0	34.94	74.0	21.4	H	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)
2382.02	46.3	2.9	32.0	11.43	54.0	7.7	H	155	135
2385.30	46.4	2.9	32.0	11.48	54.0	7.6	H	155	160
4824.00	30.21	-32.8	34.5	28.46	54.0	23.8	H	155	92
7236.00	30.63	-31.7	36.1	26.26	54.0	23.4	H	155	115
9648.00	33.41	-30.4	37.0	26.73	54.0	20.6	H	155	112
12060.00	35.42	-29.6	39.3	25.75	54.0	18.6	H	155	85

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)
2388.50	46.7	2.9	32.0	11.82	54.0	7.3	H	155	5
2489.56	47.2	2.9	32.6	11.70	54.0	6.8	H	155	25
4874.00	30.11	-32.7	34.5	28.32	54.0	23.9	H	155	356
7311.00	30.65	-31.9	36.1	26.48	54.0	23.4	H	155	350
9748.00	33.42	-30.7	37.2	26.89	54.0	20.6	H	155	185
12185.00	35.44	-29.4	39.2	25.64	54.0	18.6	H	155	187

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)
2484.10	47.8	2.9	32.7	12.11	54.0	6.2	H	155	46
2484.40	47.7	2.9	32.7	12.06	54.0	6.3	H	155	60
4924.00	30.22	-33.1	34.5	28.81	54.0	23.8	H	155	116
7386.00	30.85	-31.8	36.0	26.64	54.0	23.2	H	155	8
9848.00	33.95	-30.1	37.3	26.69	54.0	20.1	H	155	128
12310.00	35.24	-29.7	39.2	25.76	54.0	18.8	H	155	94

**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)
2389.492	61.0	2.9	32.0	26.19	74.0	13.0	H	155	132
2388.162	60.1	2.9	32.0	25.24	74.0	13.9	H	155	154
17772.750	53.1	-23.6	41.0	35.70	74.0	20.9	V	155	88
17800.500	52.7	-23.1	41.0	34.83	74.0	21.3	H	155	110
17748.000	52.5	-24.0	41.0	35.46	74.0	21.5	V	155	110
17934.000	52.5	-24.7	40.9	36.27	74.0	21.5	V	155	88

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)
2380.400	51.2	-26.1	32.1	45.32	74.0	22.8	H	155	0
2640.200	52.3	-26.8	33.5	45.47	74.0	21.7	H	155	22
17792.250	52.7	-23.3	41.0	35.03	74.0	21.3	H	155	352
17748.000	52.6	-24.0	41.0	35.56	74.0	21.4	V	155	352
17794.500	52.4	-23.2	41.0	34.72	74.0	21.6	V	155	176
17746.500	52.3	-24.0	41.0	35.36	74.0	21.7	V	155	176

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)
2484.150	70.5	2.9	32.7	34.86	74.0	3.5	H	155	44
2484.330	71.0	2.9	32.7	35.33	74.0	3.0	H	155	66
17796.000	53.4	-23.2	41.0	35.67	74.0	20.6	V	155	110
17766.000	52.9	-23.7	41.0	35.66	74.0	21.1	V	155	0
17807.250	52.8	-23.0	41.0	34.84	74.0	21.2	H	155	132
17777.250	52.6	-23.5	41.0	35.16	74.0	21.4	H	155	88

**802.11n-HT40-Average**

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)	Antenna Height (cm)	Turntable angle (deg)
2381.00	46.4	2.9	32.1	11.48	54.0	7.6	H	155	226
2387.50	46.5	2.9	32.0	11.66	54.0	7.5	H	155	92
4844.00	29.61	-32.7	34.5	27.80	54.0	24.4	H	155	70
7266.00	30.81	-31.9	36.1	26.58	54.0	23.2	H	155	8
9688.00	33.00	-30.7	37.1	26.62	54.0	21.0	H	155	48
12110.00	35.38	-29.5	39.3	25.61	54.0	18.6	H	155	246

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)
2383.67	46.9	2.9	32.0	11.96	54.0	7.2	H	155	6
2491.34	47.2	2.9	32.5	11.73	54.0	6.8	H	155	26
4874.00	29.85	-32.7	34.5	28.06	54.0	24.2	H	155	92
7311.00	31.32	-31.9	36.1	27.16	54.0	22.7	H	155	24
9748.00	33.26	-30.7	37.2	26.74	54.0	20.7	H	155	136
12185.00	35.57	-29.4	39.2	25.78	54.0	18.4	H	155	356

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)	Antenna Height (cm)	Turntable angle (deg)
2487.90	47.4	2.9	32.6	12.01	54.0	6.6	H	155	46
2492.32	47.4	2.9	32.5	12.02	54.0	6.7	H	155	70
4904.00	29.96	-32.9	34.5	28.36	54.0	24.0	H	155	92
7356.00	31.24	-31.9	36.1	27.09	54.0	22.8	H	155	268
9808.00	33.38	-30.4	37.3	26.46	54.0	20.6	H	155	292
12260.00	35.30	-29.6	39.2	25.67	54.0	18.7	H	155	316

**802.11n-HT40-Peak**

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)	Antenna Height (cm)	Turntable angle (deg)
2388.190	64.2	2.9	32.0	29.30	74.0	9.8	H	155	220
2386.762	64.3	2.9	32.0	29.46	74.0	9.7	V	155	88
17799.750	53.1	-23.2	41.0	35.33	74.0	20.9	H	155	66
17891.250	53.0	-24.1	40.9	36.17	74.0	21.0	H	155	0
16987.500	52.8	-25.6	41.4	36.99	74.0	21.2	H	155	44
17829.750	52.4	-23.3	40.9	34.78	74.0	21.6	V	155	242

Ch6

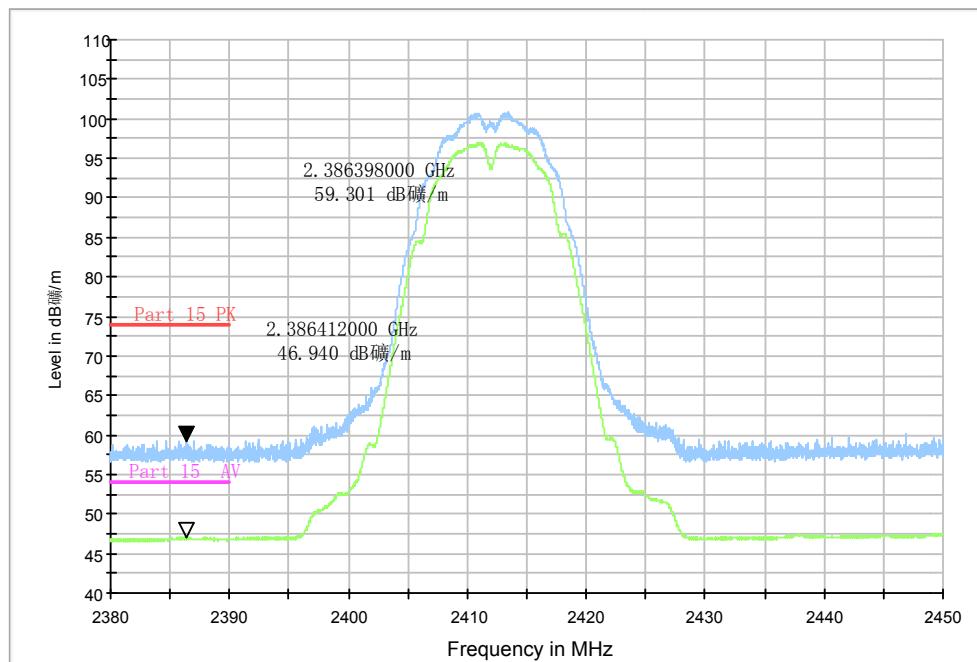
Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2351.200	49.7	-27.8	31.7	45.79	74.0	24.3	V	155	0
2643.400	52.4	-26.7	33.6	45.54	74.0	21.6	V	155	22
17796.000	53.0	-23.2	41.0	35.27	74.0	21.0	V	155	88
17865.000	52.9	-23.7	40.9	35.70	74.0	21.1	V	155	22
17847.000	52.7	-23.5	40.9	35.24	74.0	21.3	H	155	132
17795.250	52.6	-23.2	41.0	34.89	74.0	21.4	H	155	352

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)	Antenna Height (cm)	Turntable angle (deg)
2483.570	70.3	2.9	32.8	34.66	74.0	3.7	H	155	44
2484.530	70.4	2.9	32.7	34.71	74.0	3.6	H	155	66
17733.750	52.9	-24.2	41.0	36.12	74.0	21.1	H	155	88
17740.500	52.4	-24.1	41.0	35.49	74.0	21.6	H	155	264
17727.750	52.3	-24.3	41.0	35.64	74.0	21.7	H	155	286
17967.750	52.3	-25.1	40.8	36.55	74.0	21.7	H	155	308

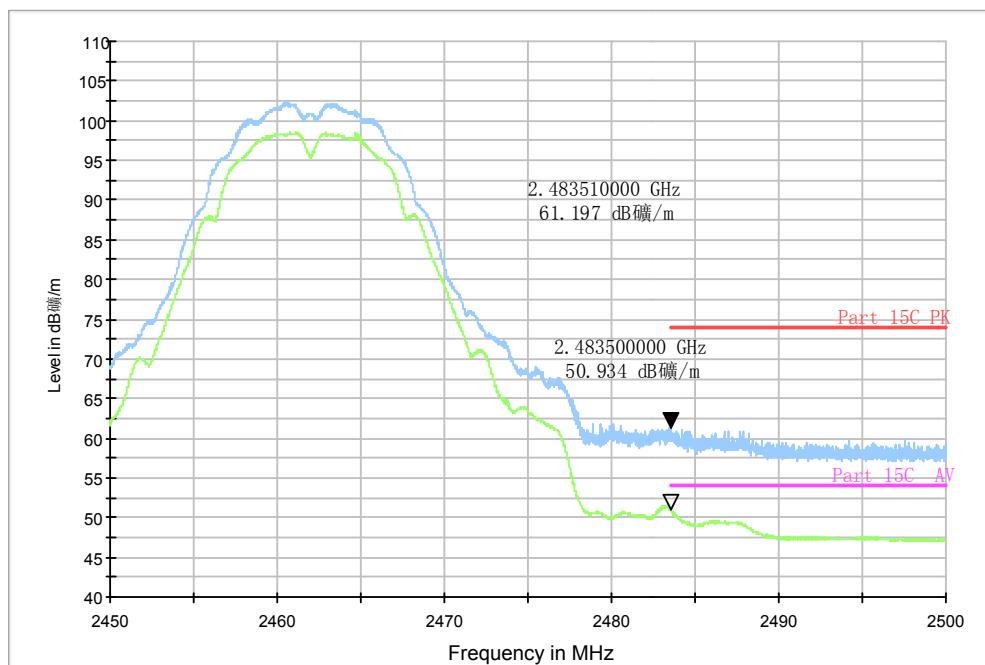
Test graphs as below:

RE - Power-2.38GHz-2.45GHz



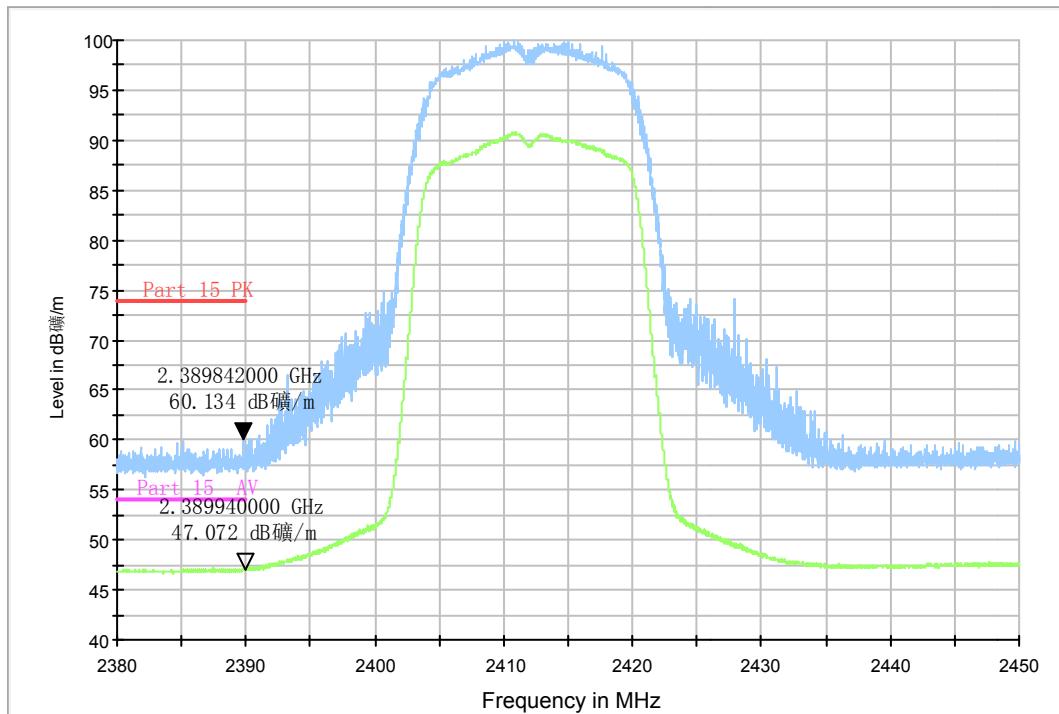
**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz**

RE - Power-2.45GHz-2.5GHz



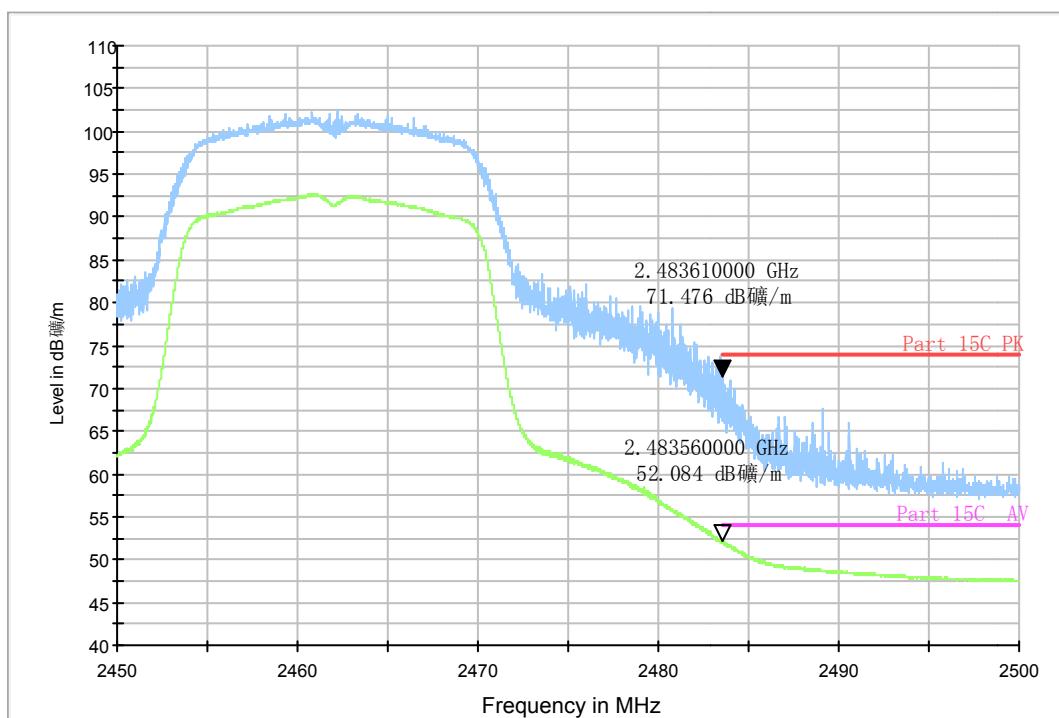
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



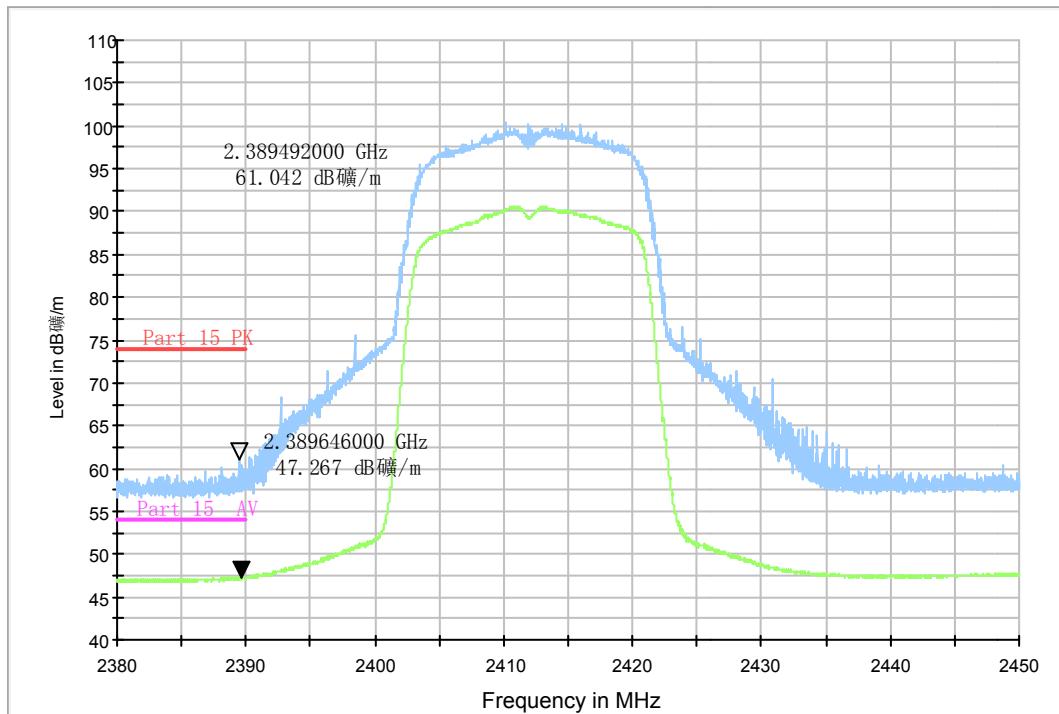
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz**

RE - Power-2.45GHz-2.5GHz



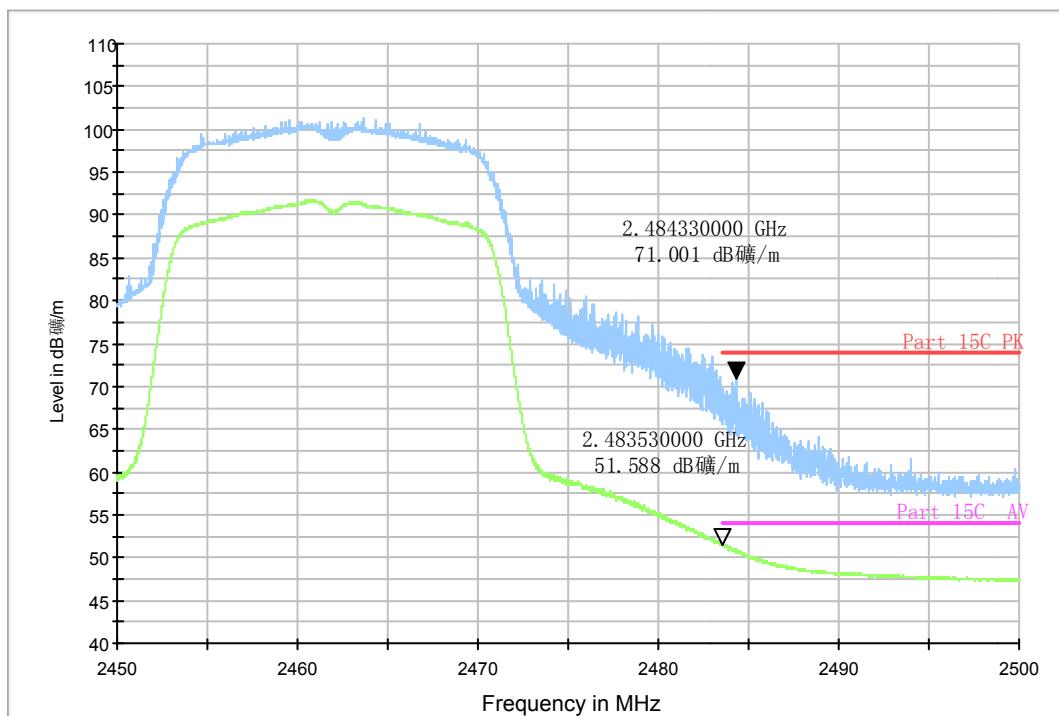
**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



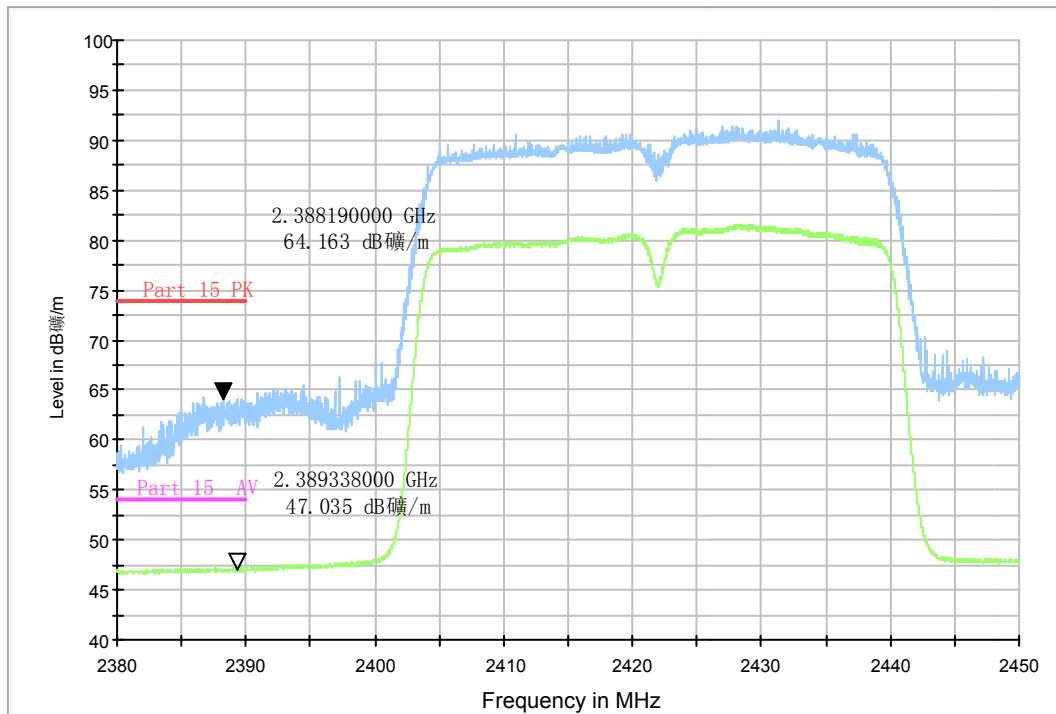
**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**

RE - Power-2.45GHz-2.5GHz



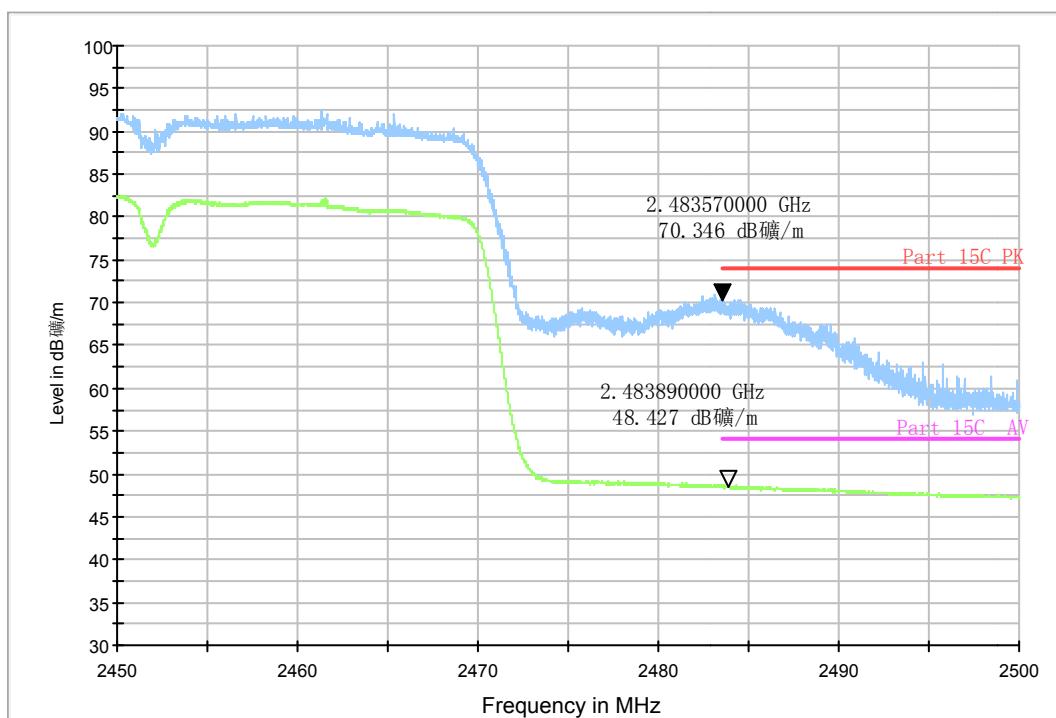
**Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz**

RE - Power-2.38GHz-2.45GHz



**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz**

RE - Power-2.45GHz-2.5GHz



**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.<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.7.2	Fig.A.7.3	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.

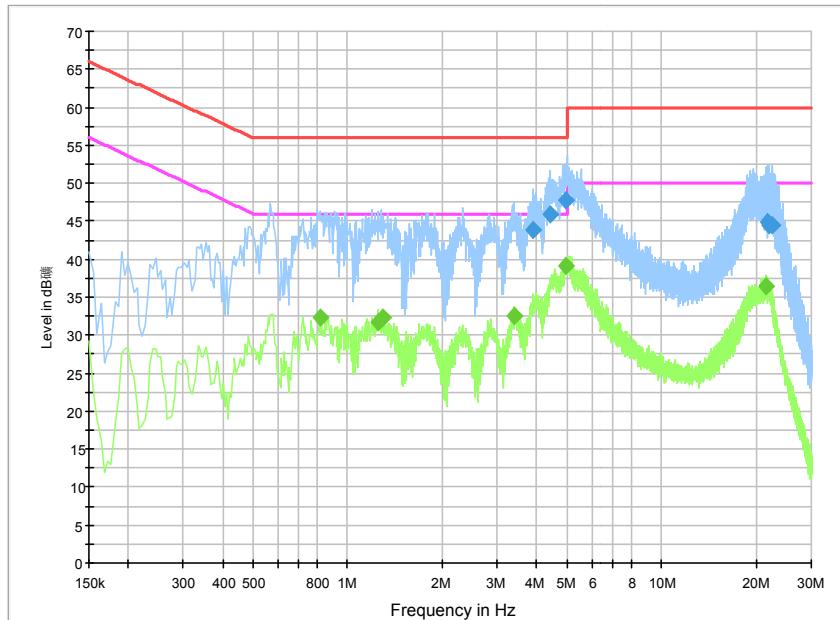
WLAN (Average Limit)

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.7.2	Fig.A.7.3	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.10**

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

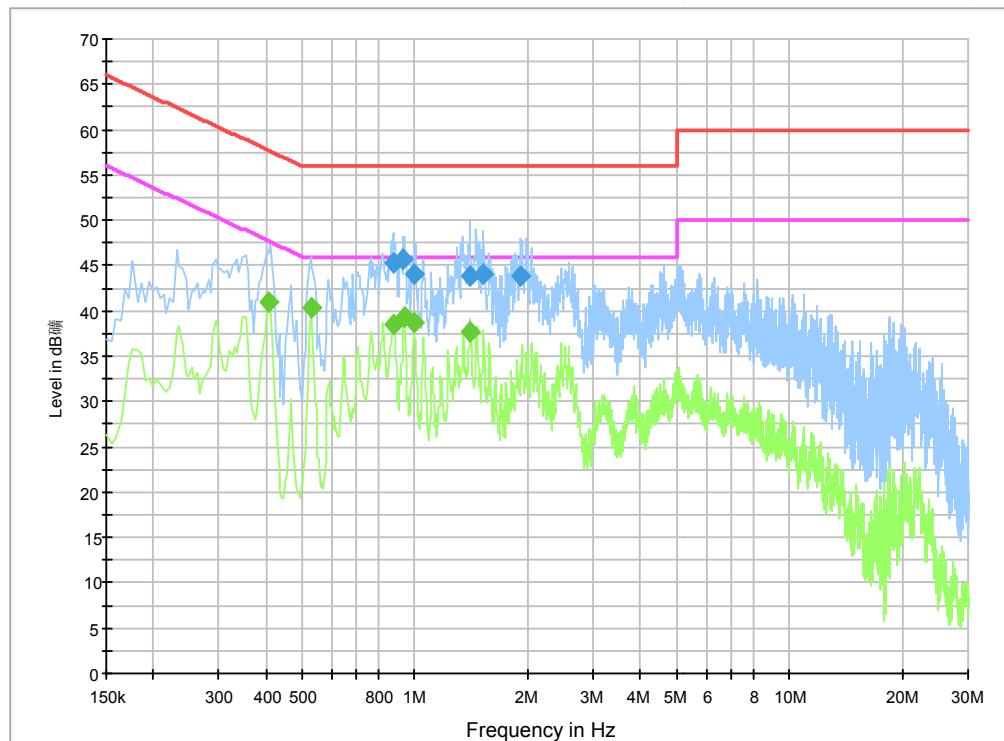
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

## Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
3.898500	43.9	GND	N	10.4	12.1	56.0
4.438500	46.0	GND	N	10.4	10.0	56.0
4.974000	47.8	GND	N	10.4	8.2	56.0
21.682500	44.9	GND	N	11.0	15.1	60.0
22.038000	44.4	GND	N	11.0	15.6	60.0
22.407000	44.4	GND	N	11.0	15.6	60.0

## Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.816000	32.4	GND	N	10.3	13.6	46.0
1.248000	31.6	GND	N	10.3	14.4	46.0
1.293000	32.3	GND	N	10.3	13.7	46.0
3.385500	32.6	GND	N	10.4	13.4	46.0
4.974000	39.1	GND	N	10.4	6.9	46.0
21.484500	36.4	GND	N	11.0	13.6	50.0

**Traffic: Set.11**

**Fig.A.7.2 AC Powerline Conducted Emission-802.11b**

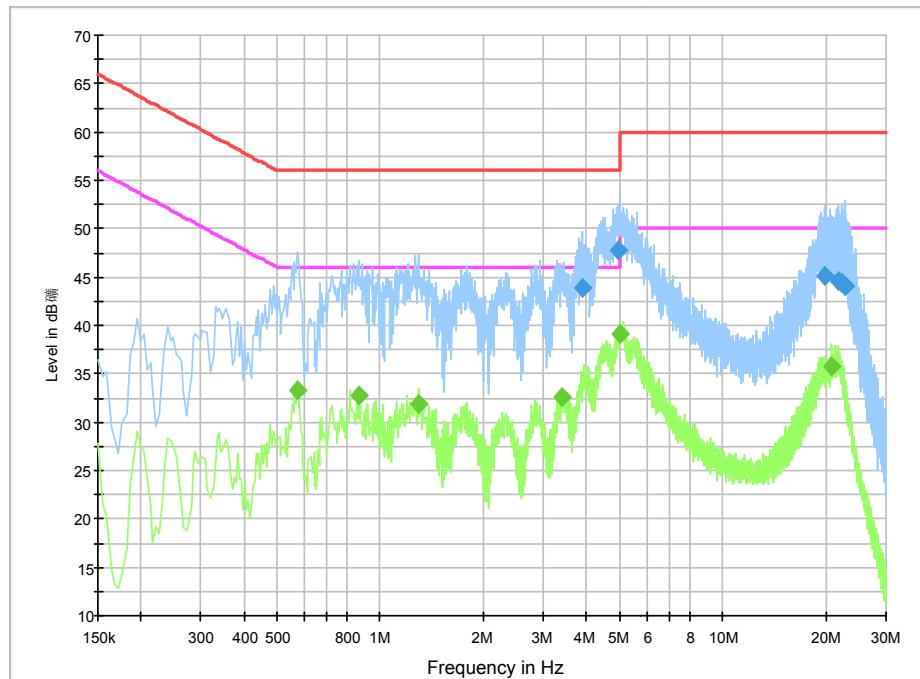
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

## Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.874500	45.2	GND	N	10.3	10.8	56.0
0.933000	45.6	GND	N	10.3	10.4	56.0
0.996000	44.0	GND	N	10.3	12.0	56.0
1.405500	43.8	GND	N	10.3	12.2	56.0
1.518000	44.0	GND	N	10.3	12.0	56.0
1.923000	43.8	GND	N	10.3	12.2	56.0

## Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.406500	41.1	GND	N	10.3	6.6	47.7
0.528000	40.4	GND	N	10.3	5.6	46.0
0.879000	38.6	GND	N	10.3	7.4	46.0
0.937500	39.4	GND	N	10.3	6.6	46.0
0.996000	38.8	GND	N	10.3	7.2	46.0
1.405500	37.7	GND	N	10.3	8.3	46.0

**Idle: Set.10**

**Fig.A.7.3 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)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
3.907500	43.9	GND	N	10.4	12.1	56.0
4.965000	47.7	GND	N	10.4	8.3	56.0
19.788000	45.1	GND	N	11.0	14.9	60.0
21.777000	44.6	GND	N	11.0	15.4	60.0
22.317000	44.5	GND	N	11.0	15.5	60.0
22.875000	44.1	GND	N	11.0	16.0	60.0

## Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.573000	33.4	GND	N	10.3	12.6	46.0
0.865500	32.7	GND	N	10.3	13.3	46.0
1.297500	31.9	GND	N	10.3	14.1	46.0
3.390000	32.6	GND	N	10.4	13.4	46.0
4.992000	39.1	GND	N	10.4	6.9	46.0
20.881500	35.8	GND	N	11.0	14.2	50.0

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