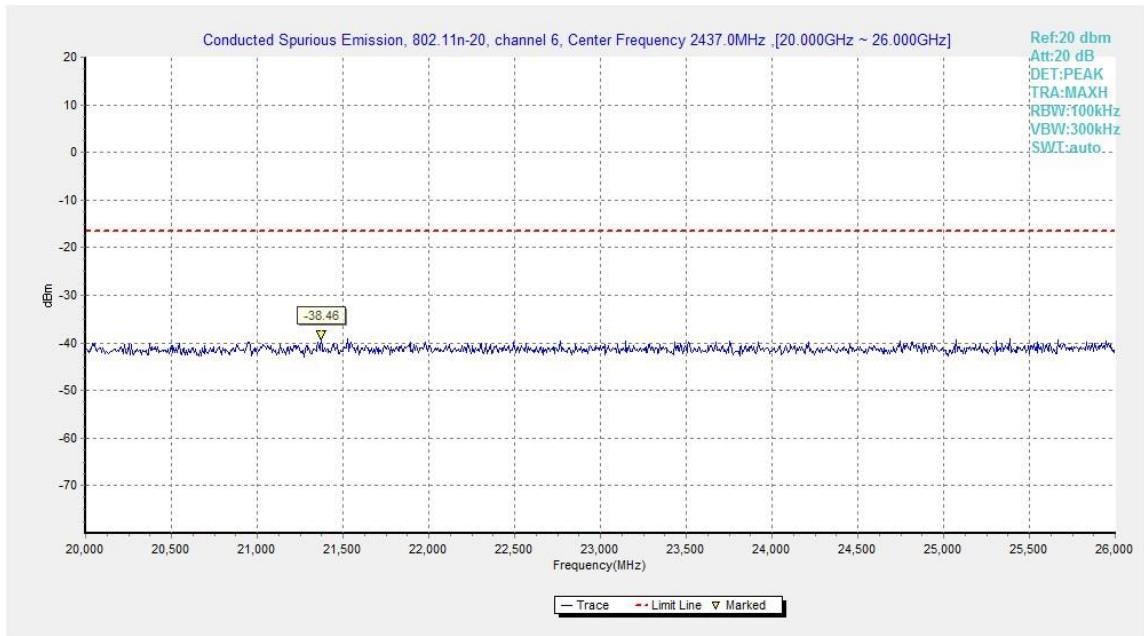
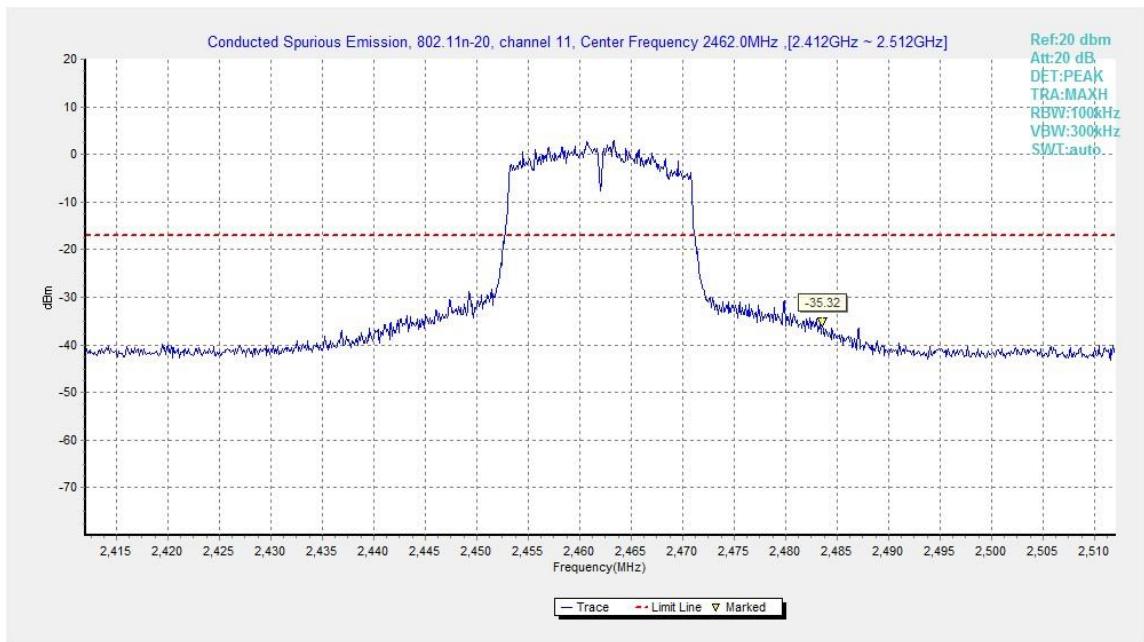


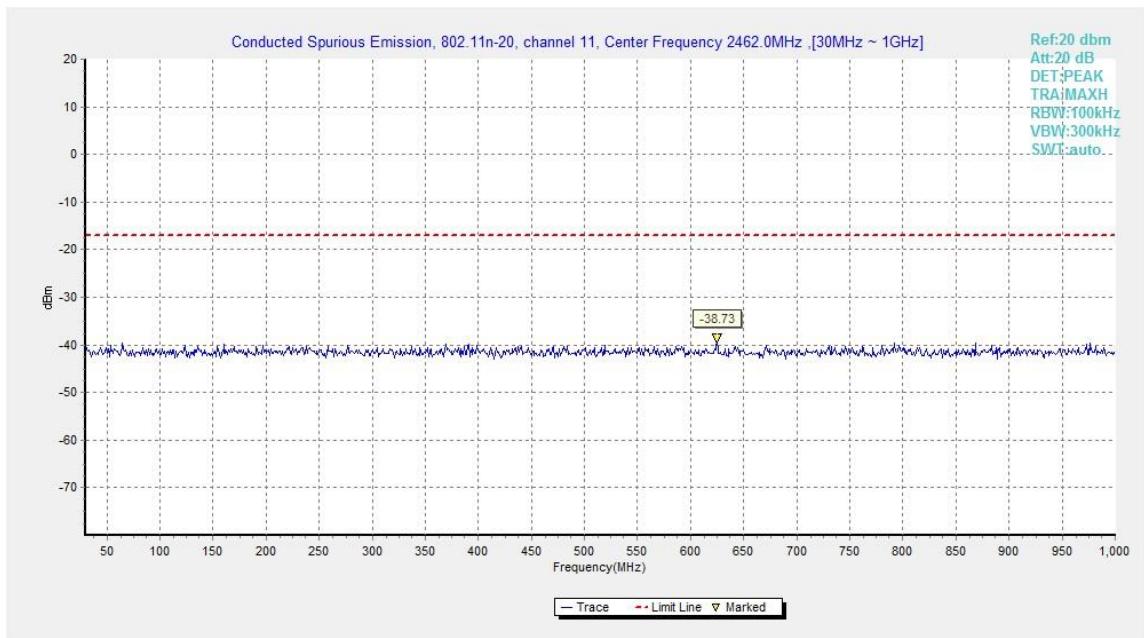
**Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)**



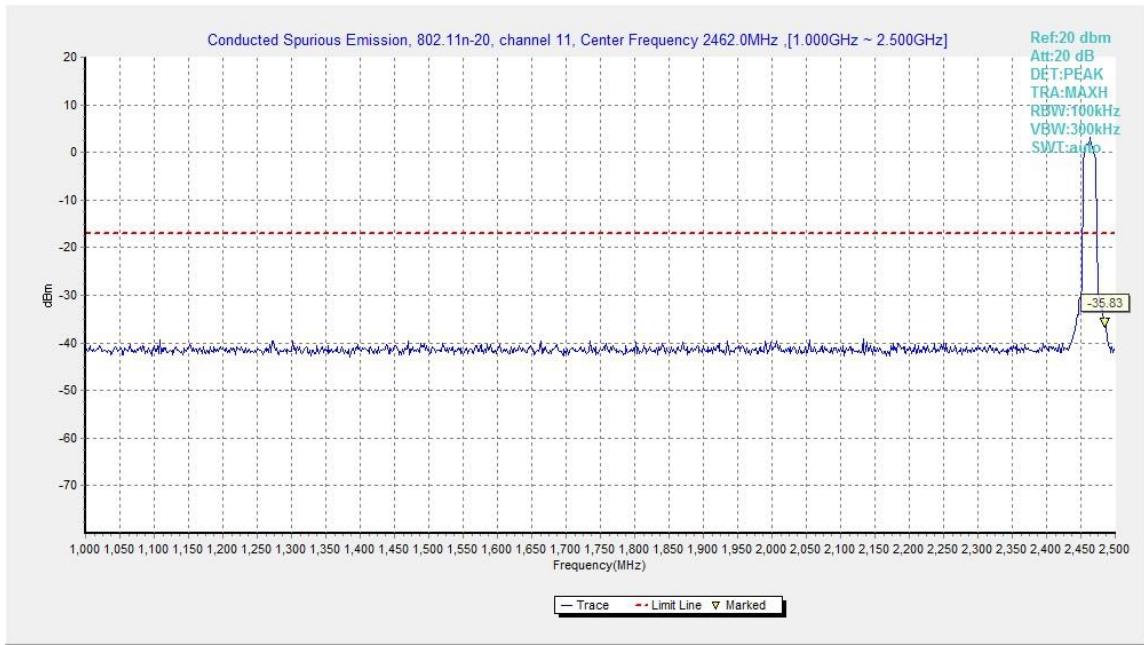
**Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)**



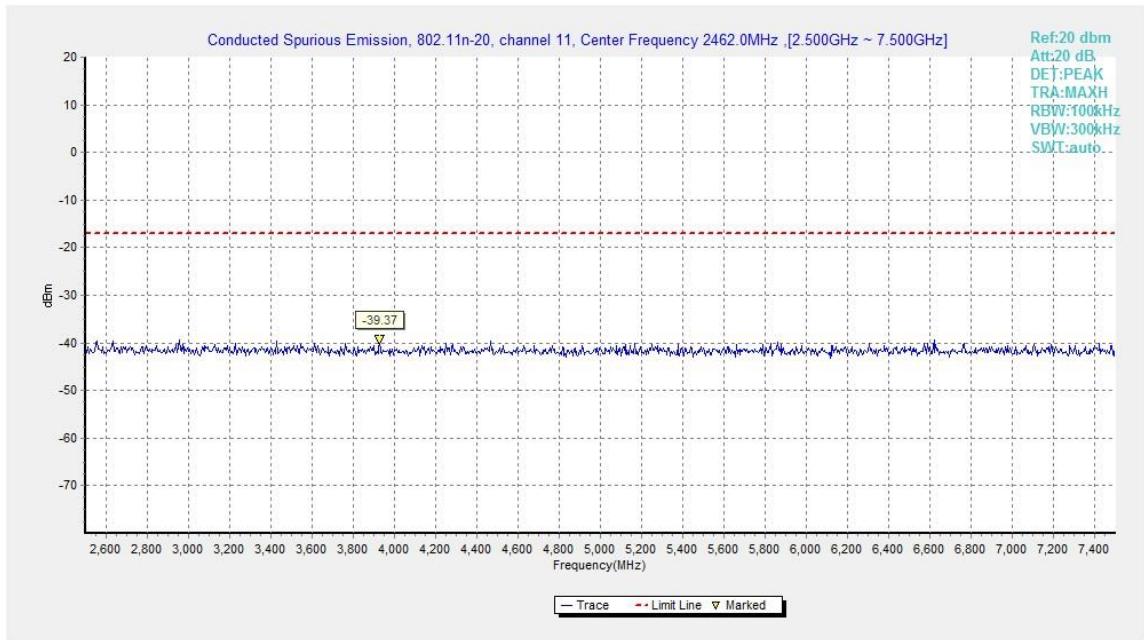
**Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)**



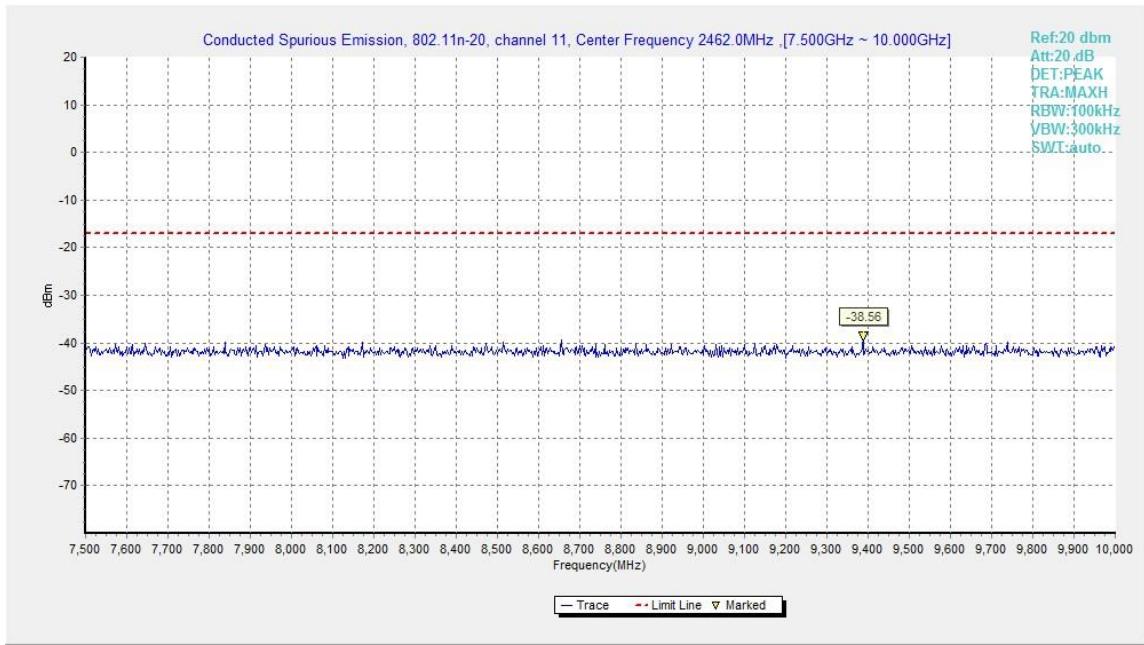
**Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)**



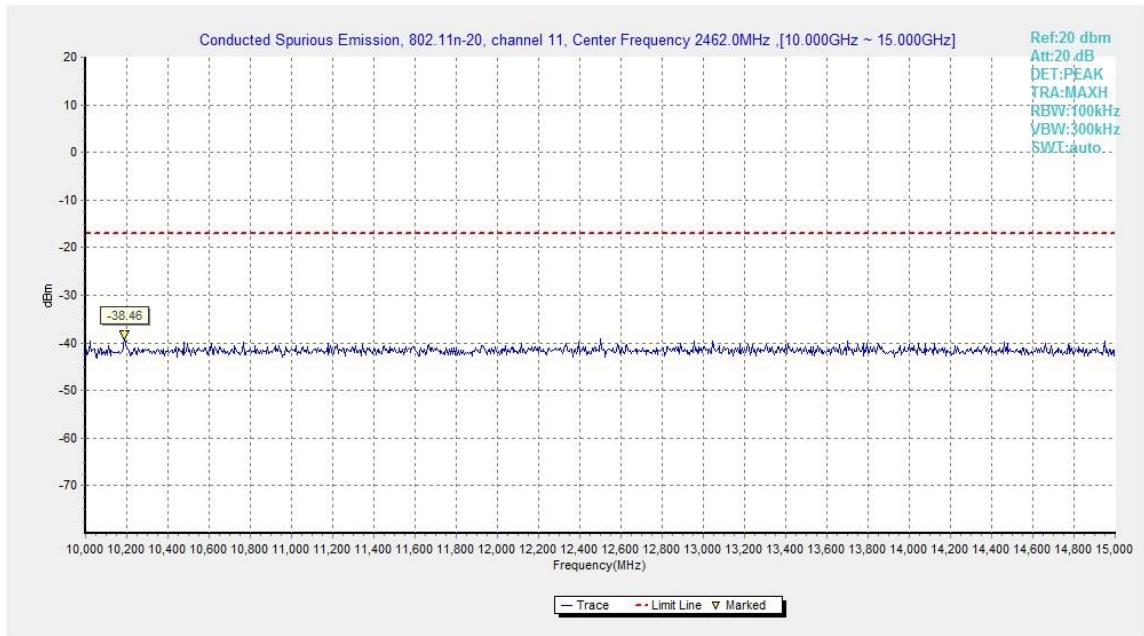
**Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)**



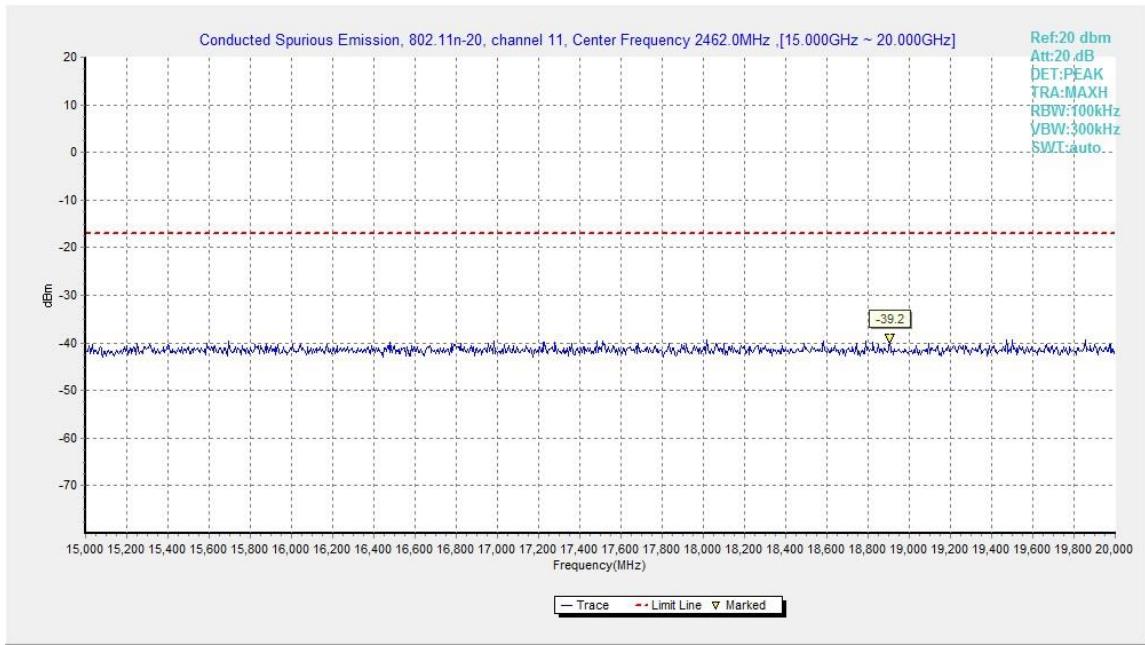
**Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)**



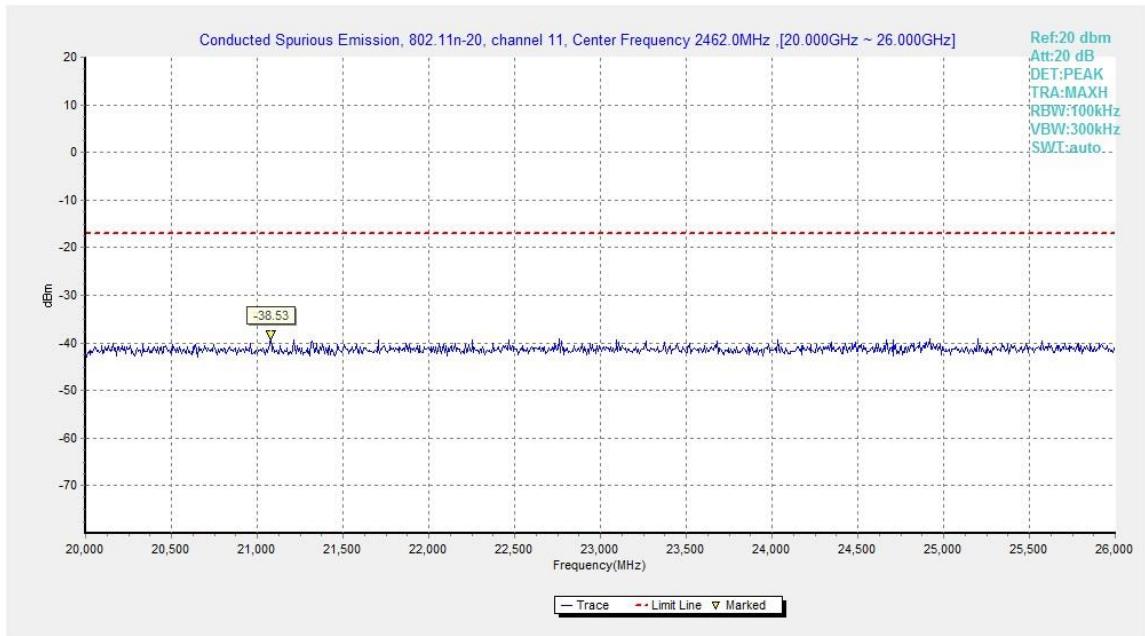
**Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)**



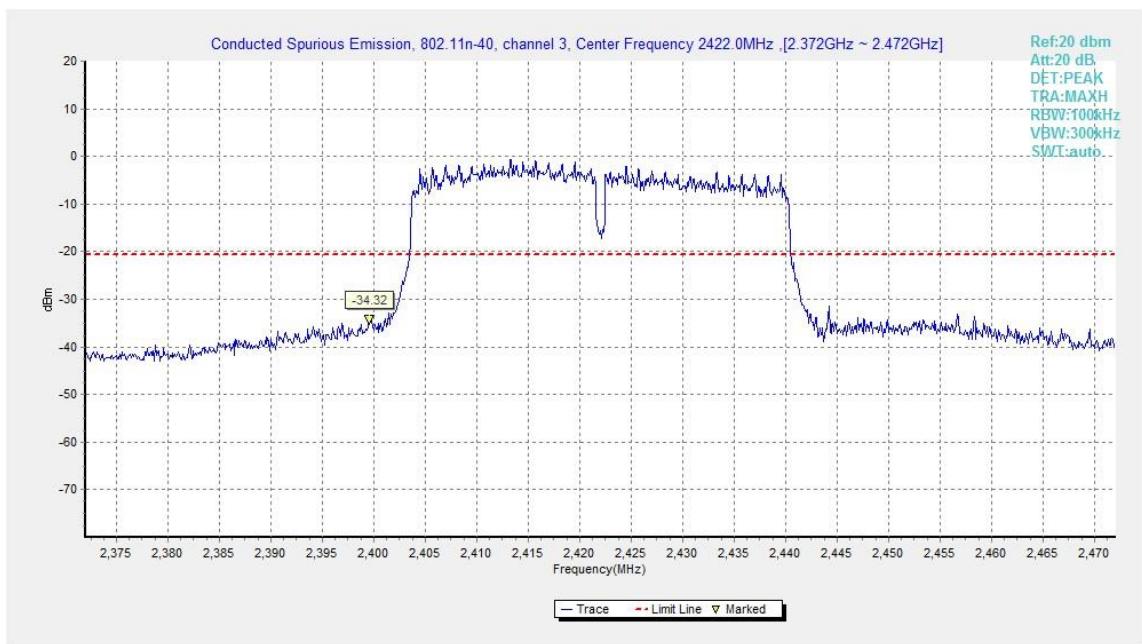
**Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)**



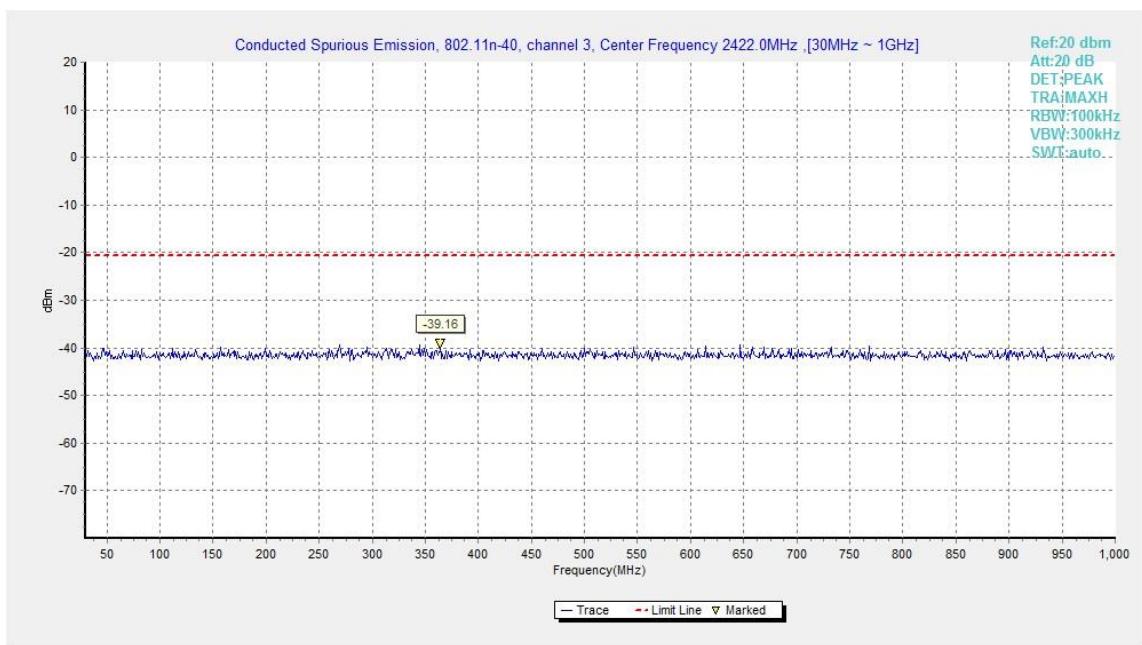
**Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)**



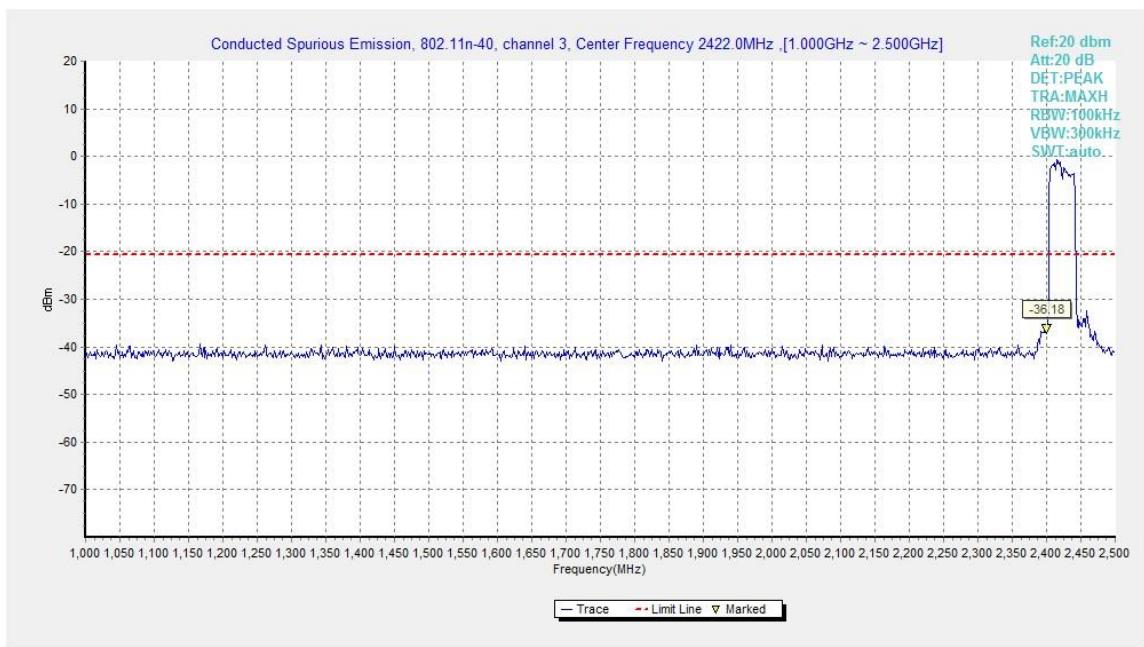
**Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)**



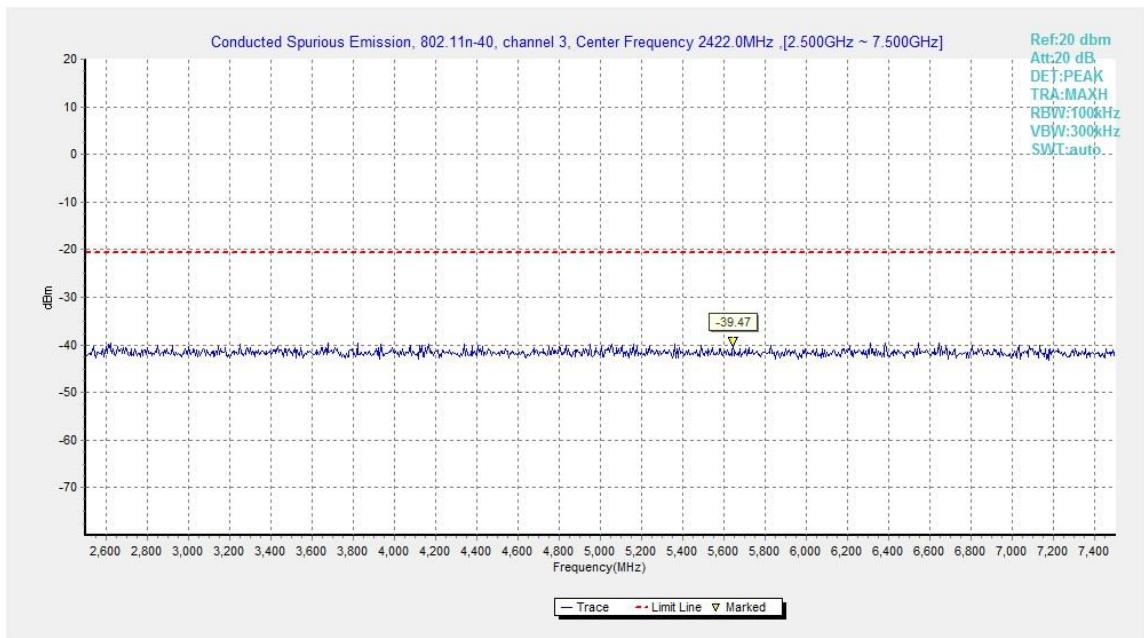
**Fig.A.6.1.73 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)**



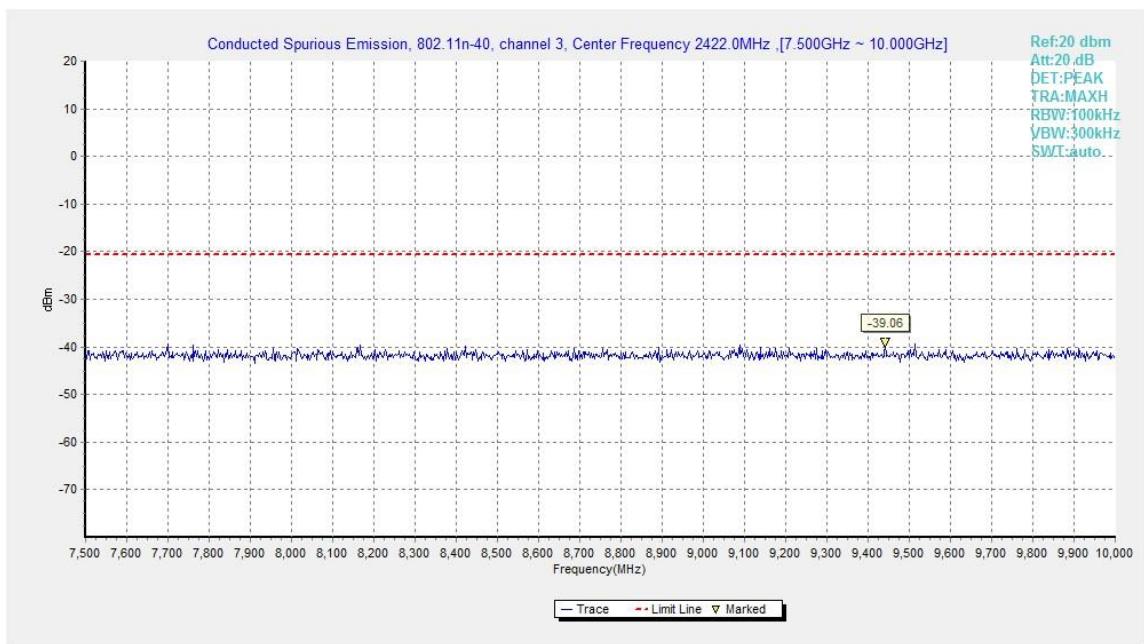
**Fig.A.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)**



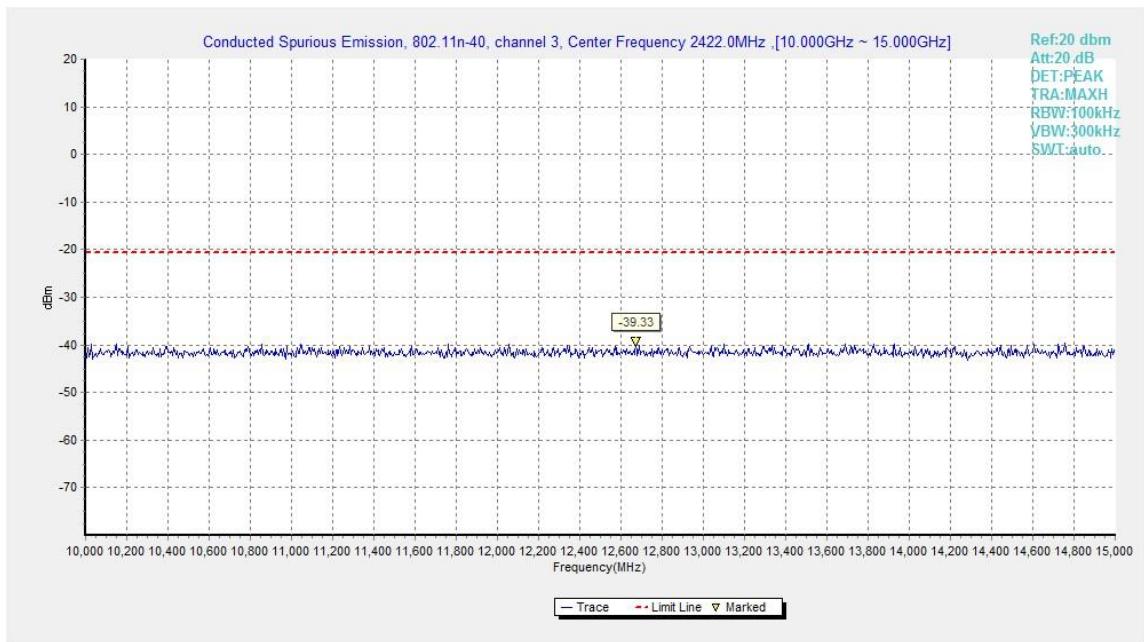
**Fig.A.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)**



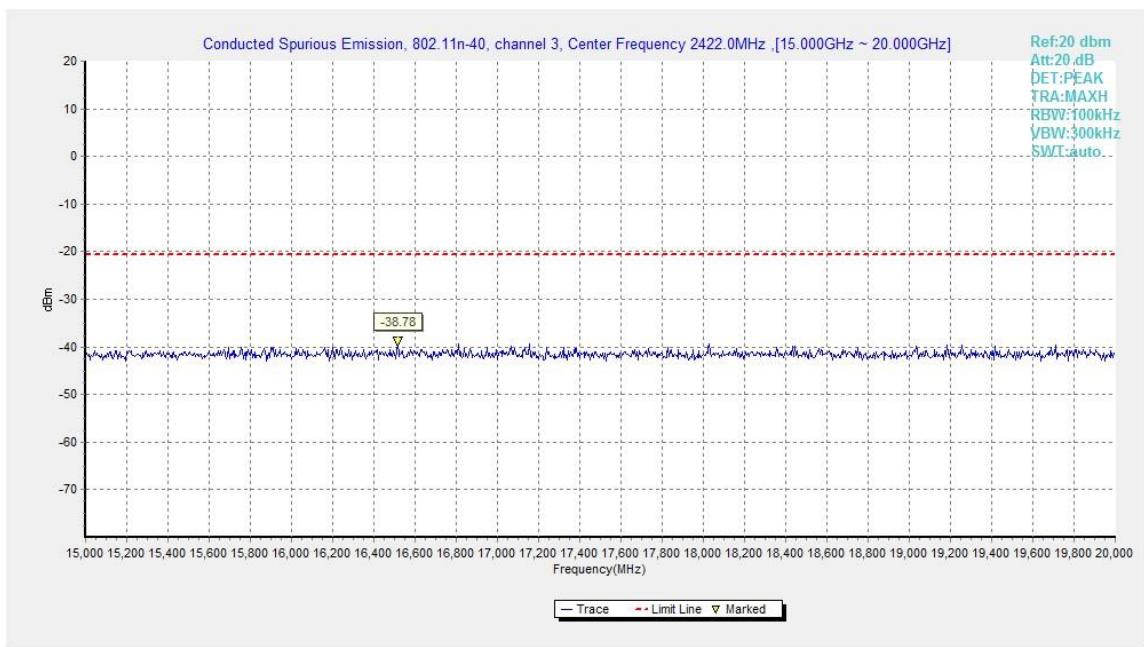
**Fig.A.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)**



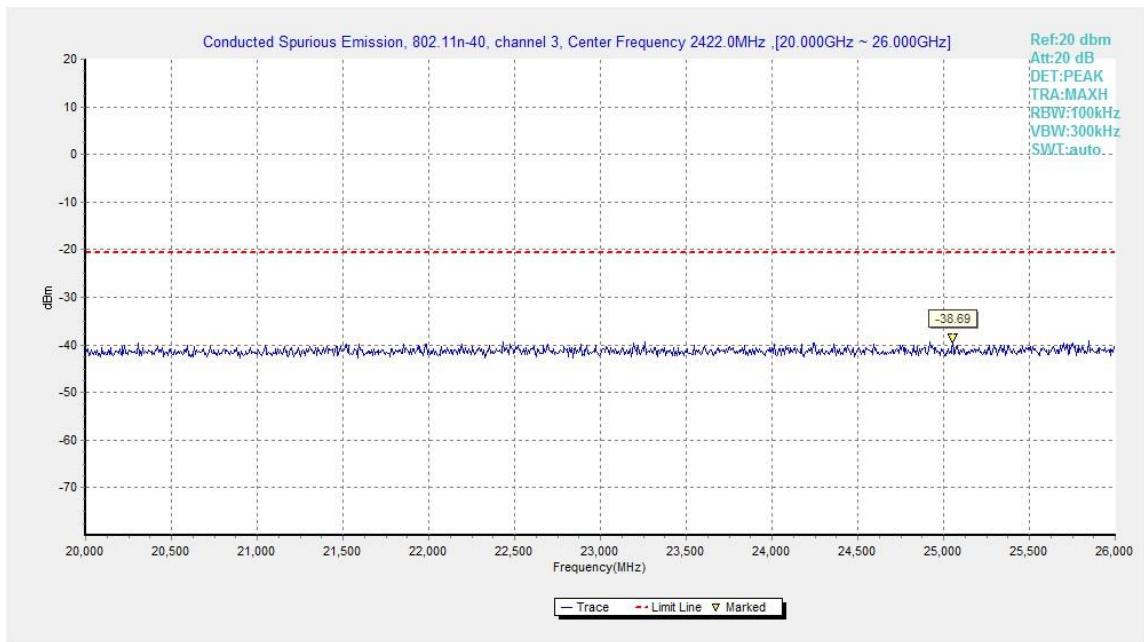
**Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)**



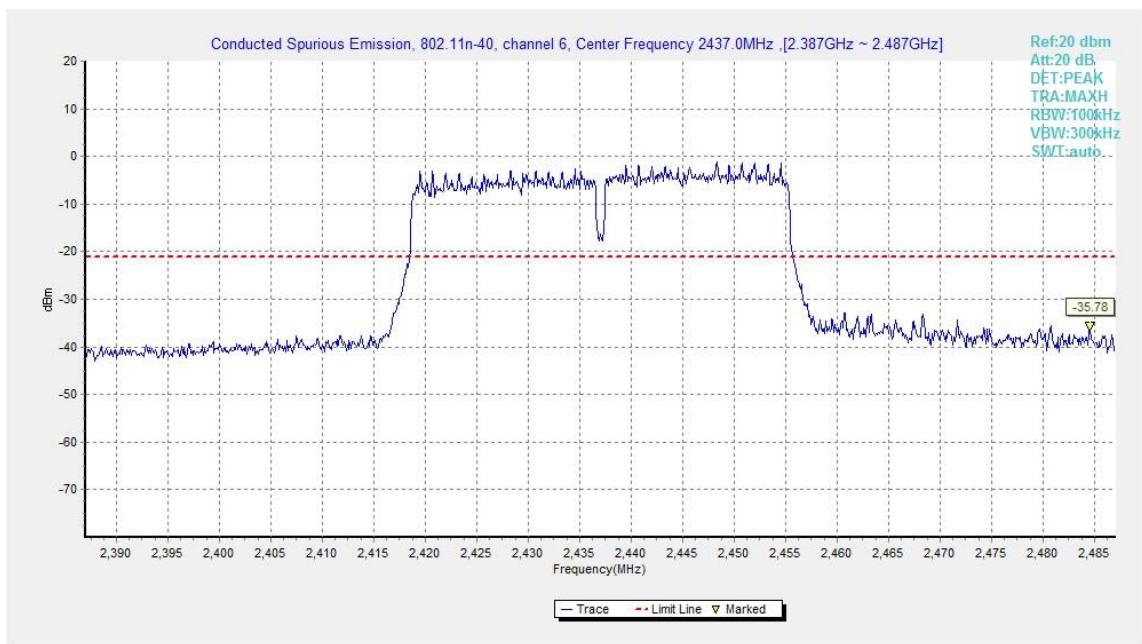
**Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)**



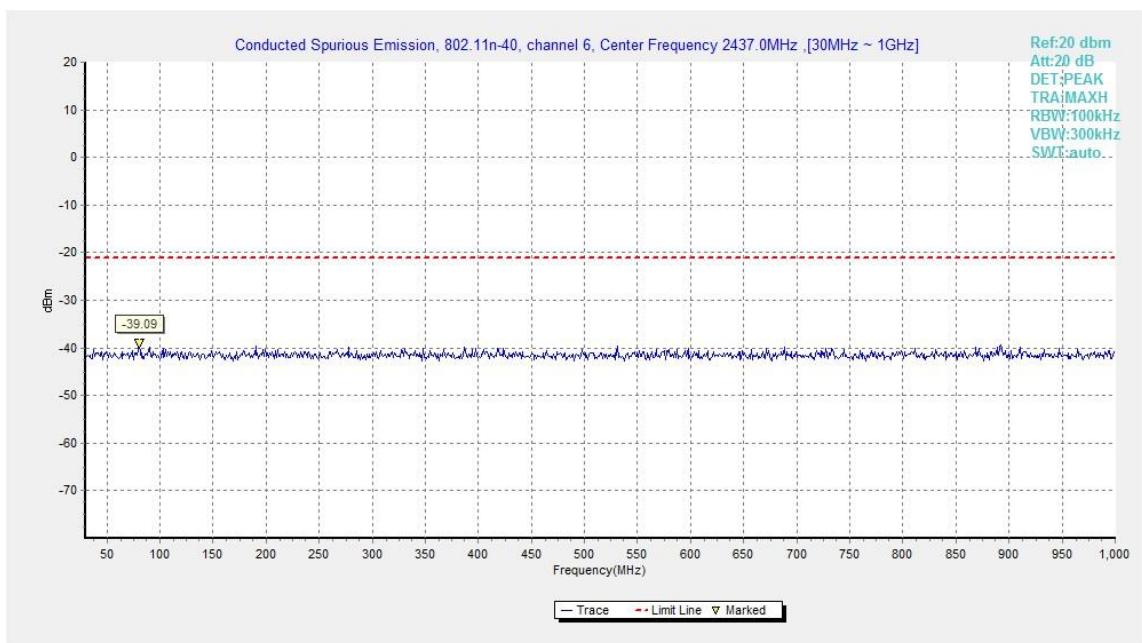
**Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)**



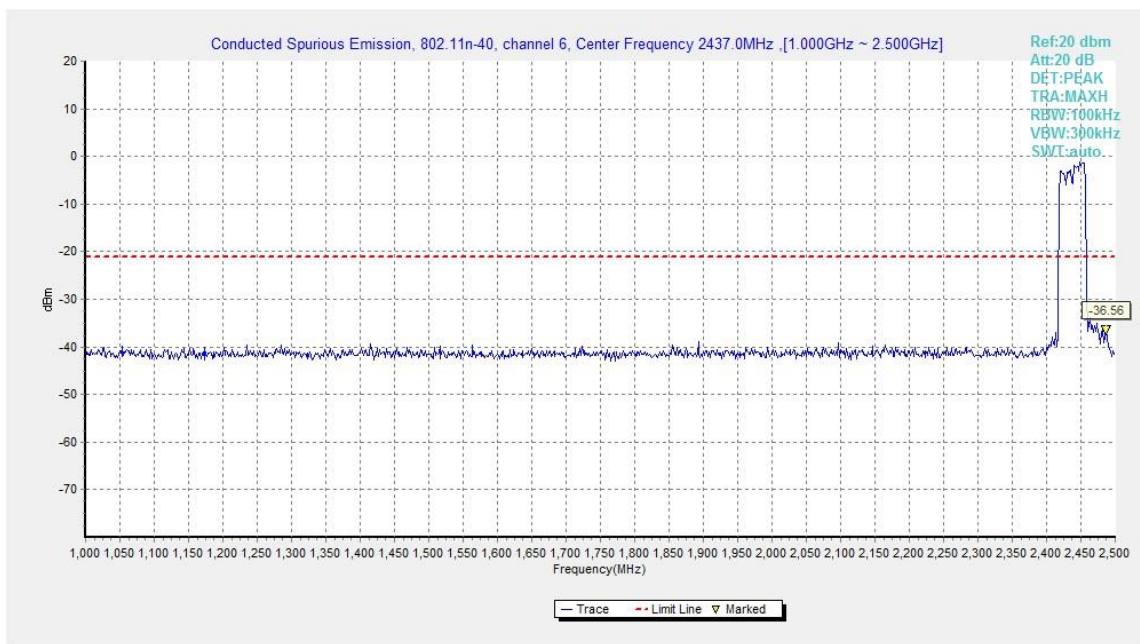
**Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)**



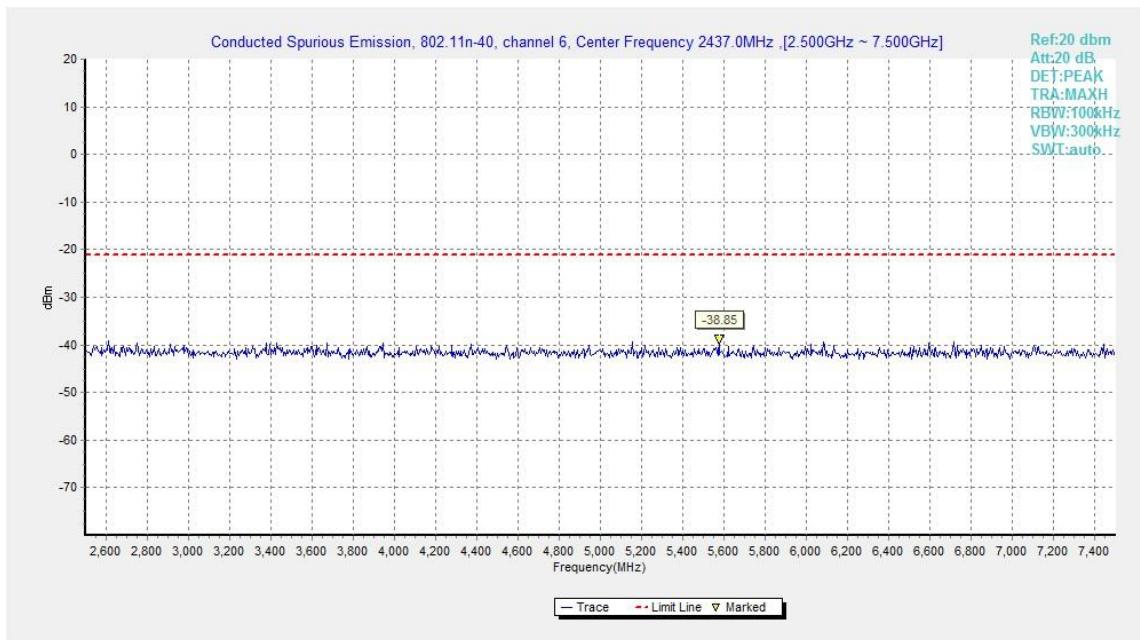
**Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)**



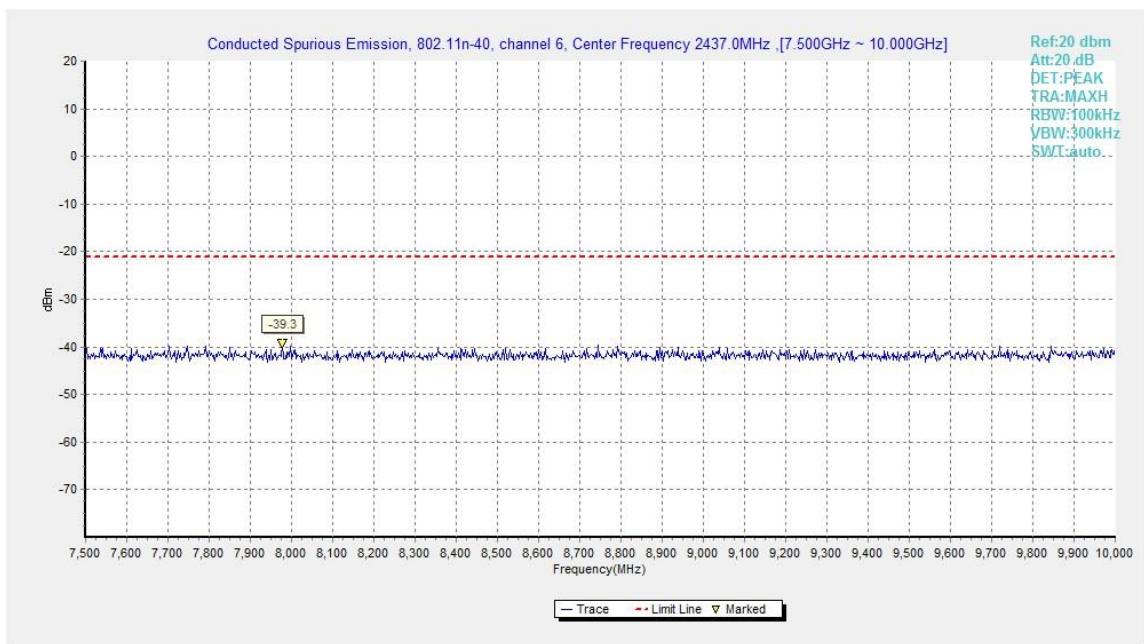
**Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)**



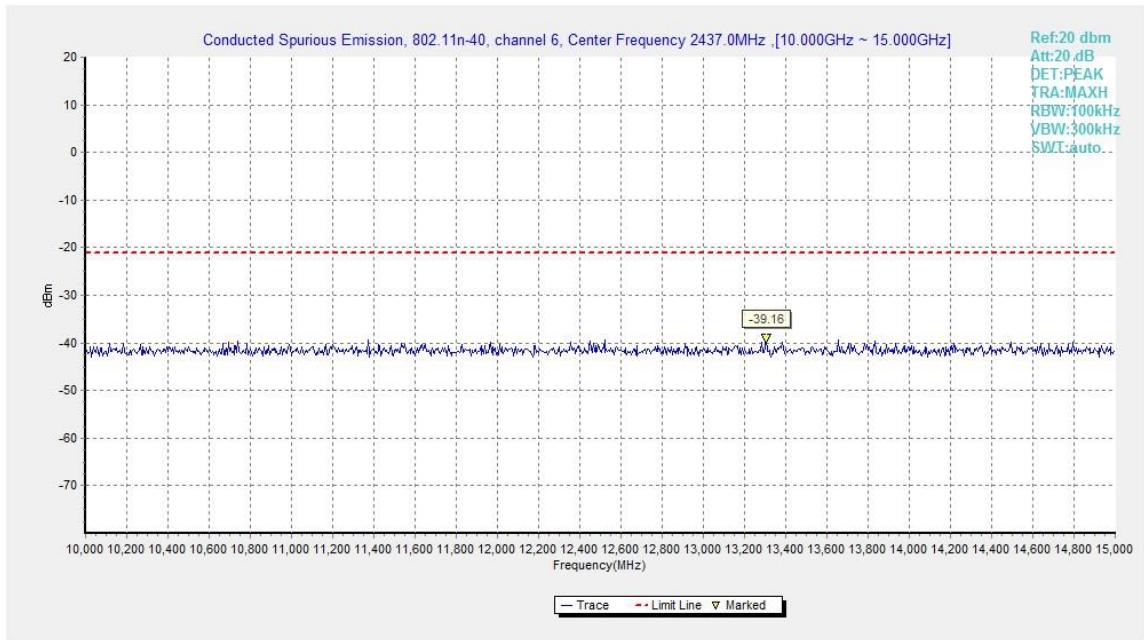
**Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)**



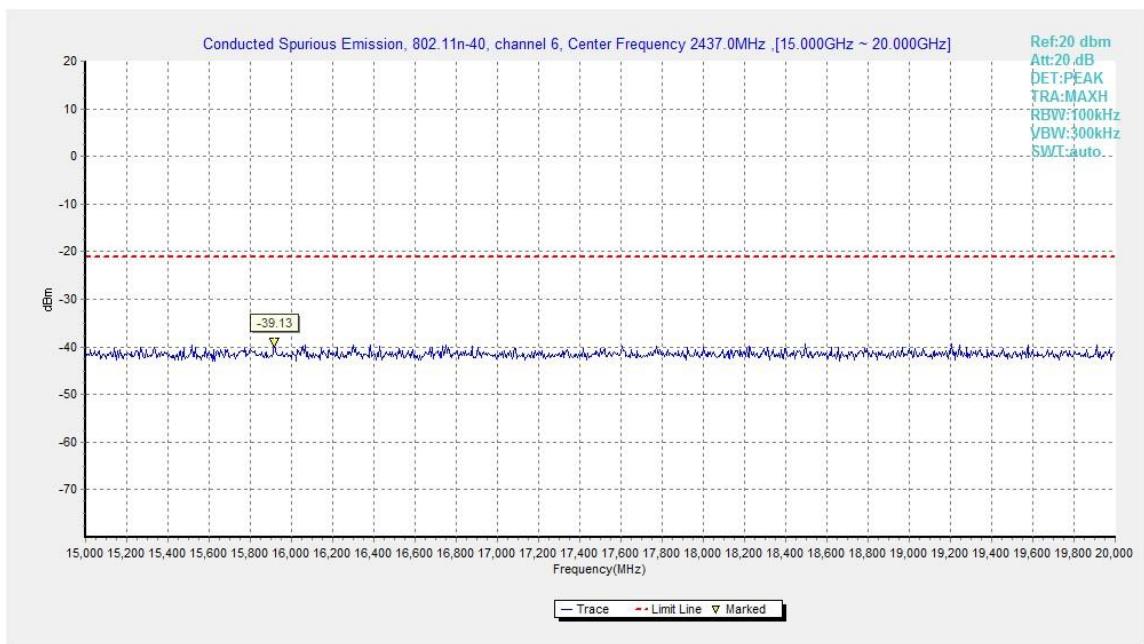
**Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)**



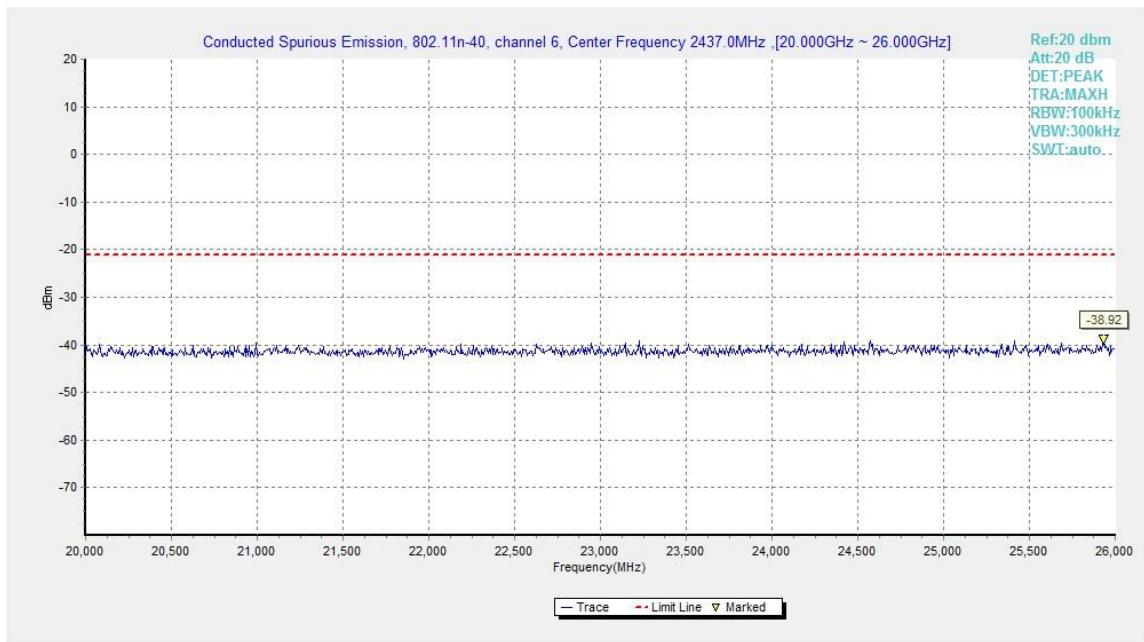
**Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)**



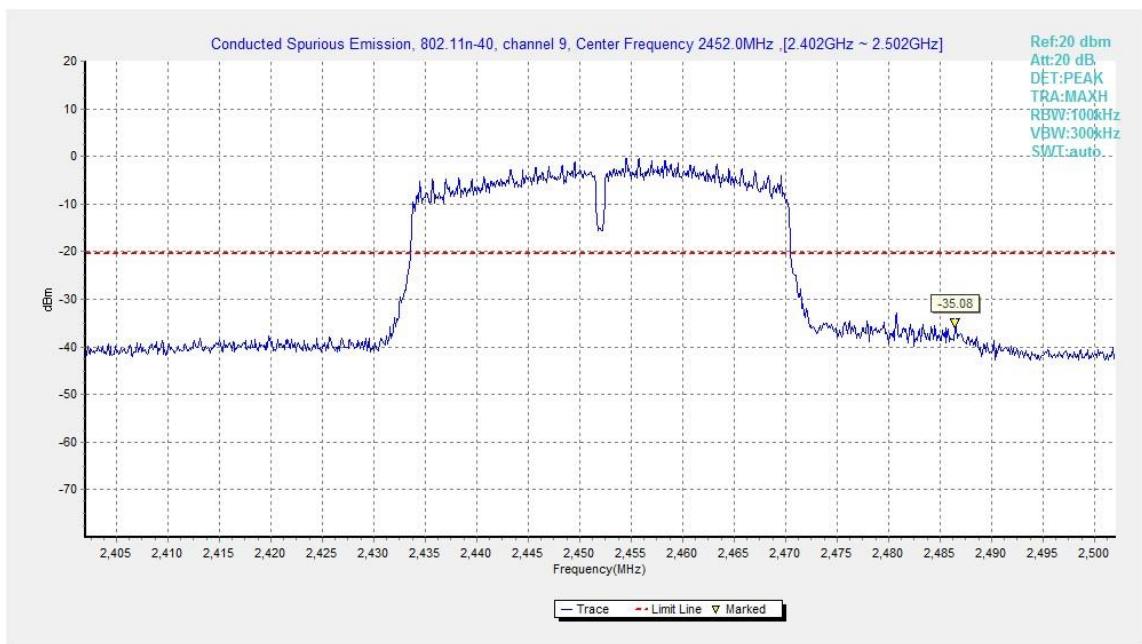
**Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)**



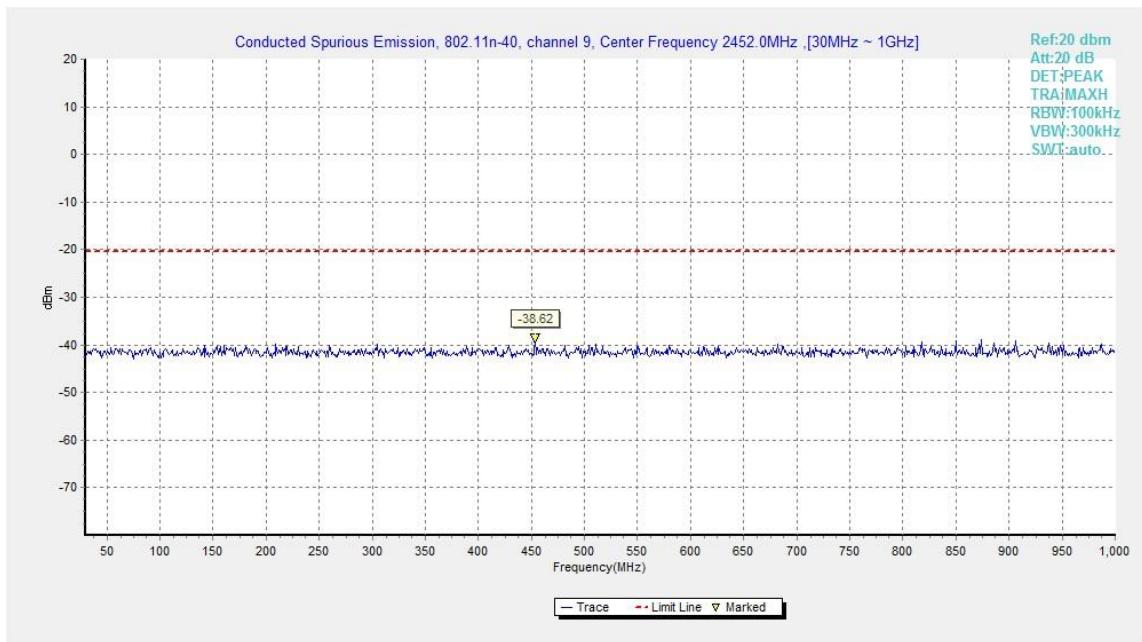
**Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)**



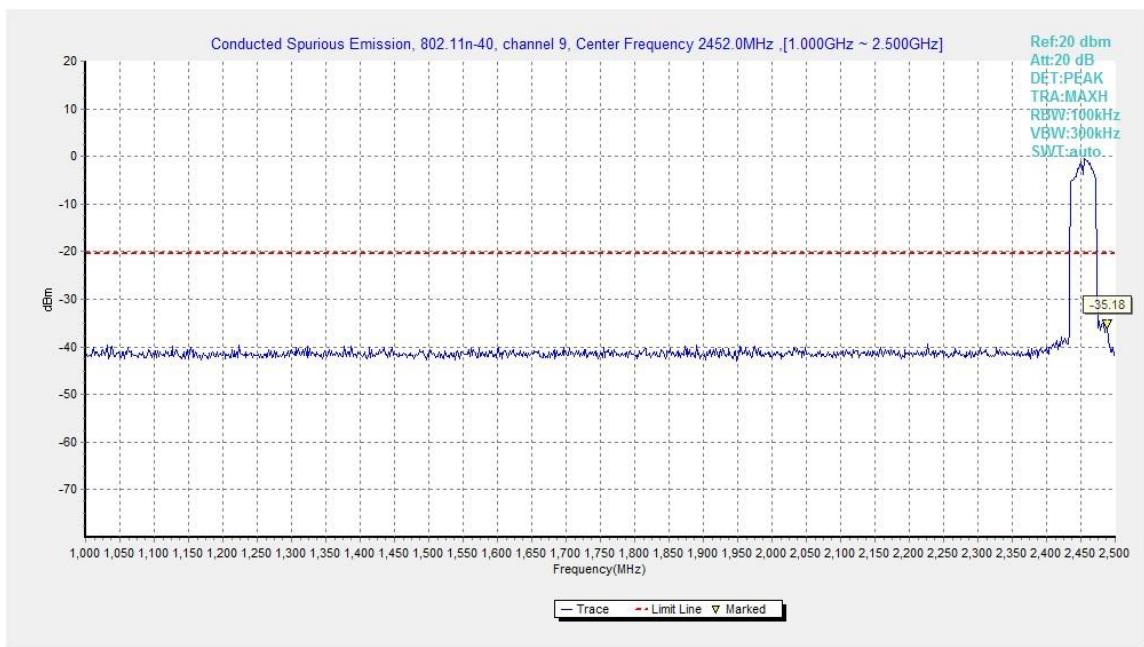
**Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)**



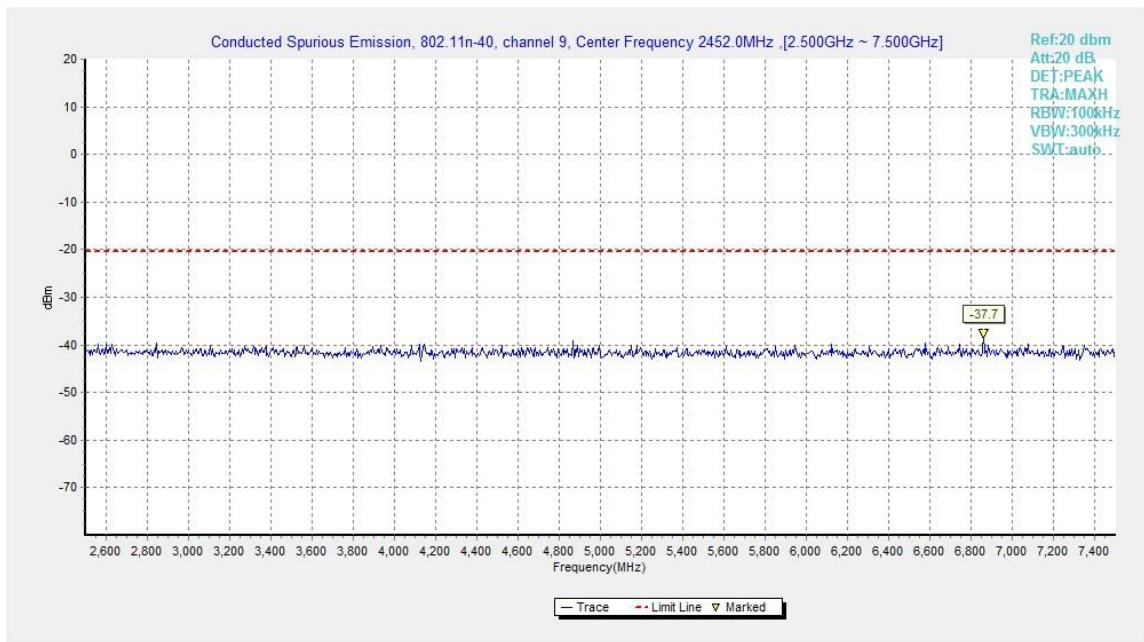
**Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)**



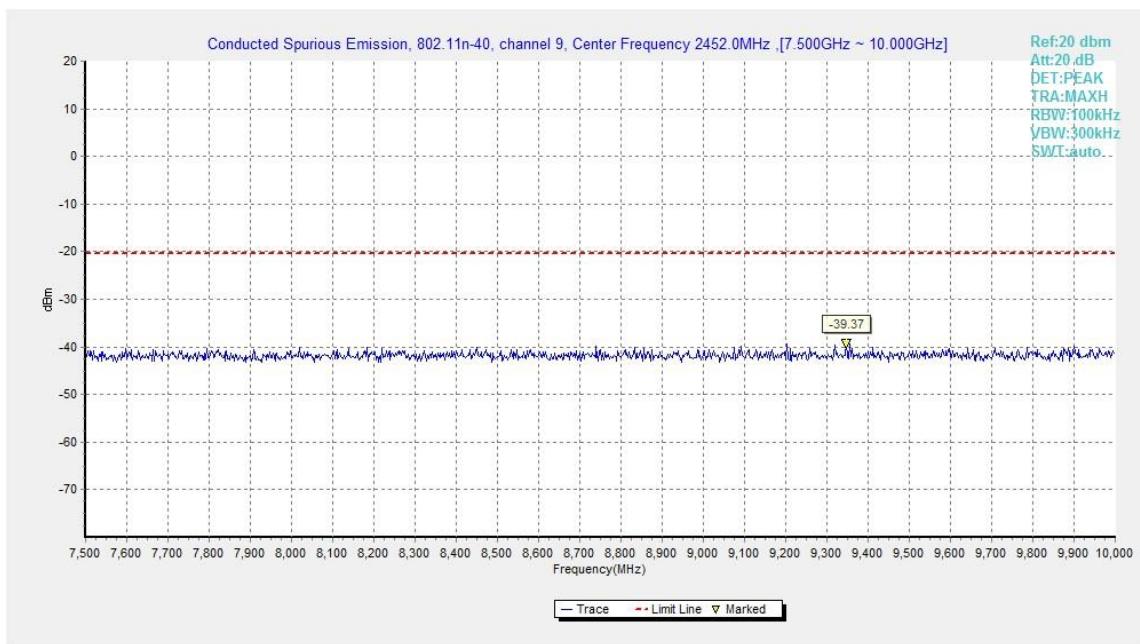
**Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)**



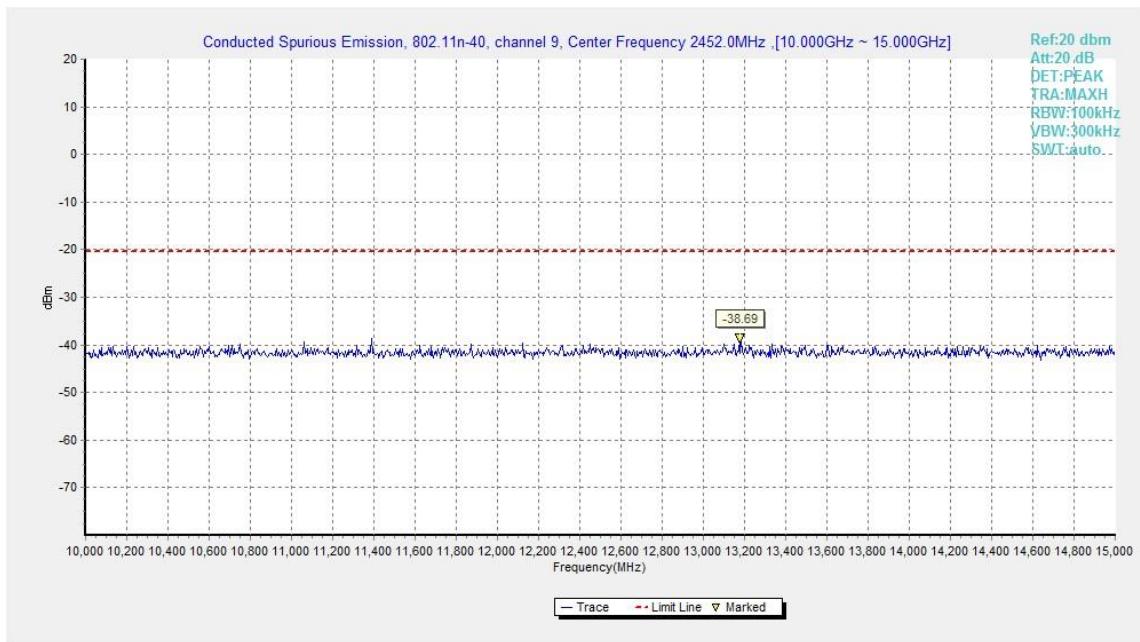
**Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)**



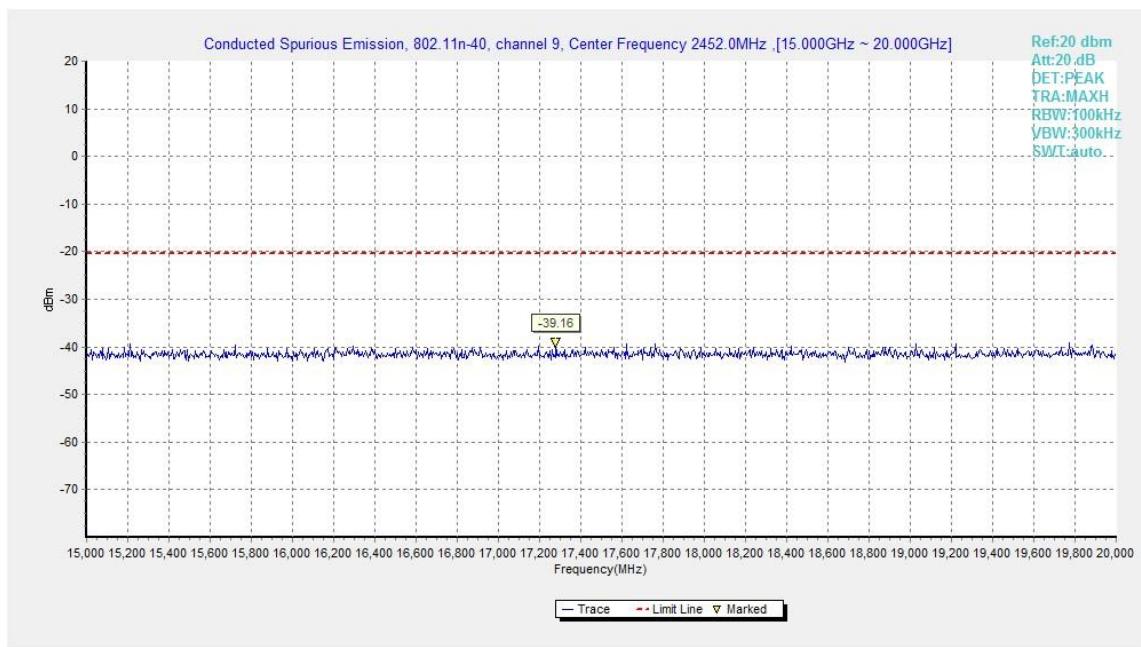
**Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)**



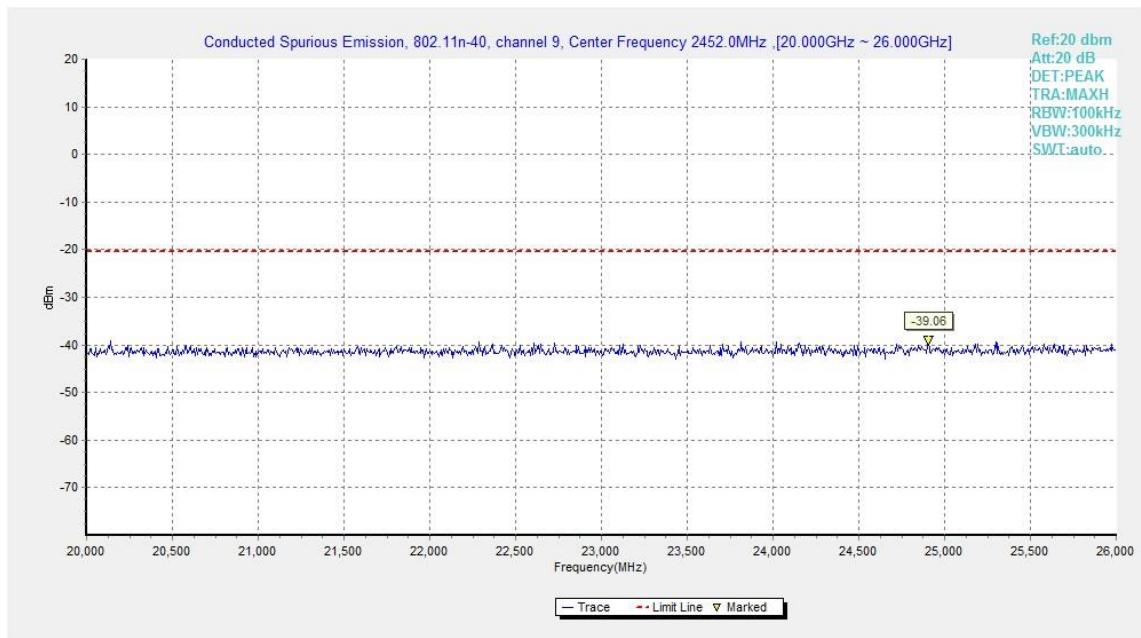
**Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)**



**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 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:**

**802.11b mode**

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

**802.11g mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.A.6.2.3	P
	Power	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	2.38GHz ~2.45GHz	Fig.A.6.2.5	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.6	P

**802.11n-HT40 mode**

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	Power	2.38GHz ~2.45GHz	Fig.A.6.2.7	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.8	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:

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

**AVERAGE**

**802.11b**

Ch1

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2387.200	46.4	2.9	32.0	11.53	54.0	7.6	H
2390.000	46.6	2.9	32.0	11.76	54.0	7.4	H
4824.000	35.40	-32.8	34.5	33.65	54.0	18.6	H
7236.000	37.90	-31.7	36.1	33.54	54.0	16.1	H
9648.000	40.40	-30.4	37.0	33.72	54.0	13.6	H
12060.000	43.50	-29.6	39.3	33.83	54.0	10.5	H

Ch6

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2417.900	46.3	2.9	31.8	11.66	54.0	7.7	H
2458.500	47.5	2.9	32.6	12.01	54.0	6.5	H
4873.500	35.50	-32.7	34.5	33.71	54.0	18.5	H
7311.000	37.70	-31.9	36.1	33.53	54.0	16.3	H
9748.500	40.10	-30.7	37.2	33.57	54.0	13.9	H
12184.500	43.70	-29.4	39.2	33.91	54.0	10.3	H

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)
2483.600	47.4	2.9	32.8	11.71	54.0	6.6	H
2486.200	47.4	2.9	32.7	11.78	54.0	6.6	H
4924.500	35.40	-33.1	34.5	33.99	54.0	18.6	H
7836.000	38.30	-31.2	36.0	33.45	54.0	15.7	H
9847.500	40.90	-30.1	37.3	33.65	54.0	13.1	H
12310.500	43.50	-29.7	39.2	34.03	54.0	10.5	H

**802.11g**

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)
2389.400	47.8	2.9	32.0	12.98	54.0	6.2	H
2389.700	48.1	2.9	32.0	13.28	54.0	5.9	H
4824.000	35.40	-32.8	34.5	33.65	54.0	18.6	H
7236.000	37.90	-31.7	36.1	33.54	54.0	16.1	H
9648.000	40.40	-30.4	37.0	33.72	54.0	13.6	H
12060.000	43.50	-29.6	39.3	33.83	54.0	10.5	H

Ch6

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2384.560	46.8	2.9	31.8	12.10	54.0	7.2	H
2489.500	47.8	2.9	32.7	12.13	54.0	6.2	H
4873.500	35.50	-32.7	34.5	33.71	54.0	18.5	H
7311.000	37.60	-31.9	36.1	33.43	54.0	16.4	H
9748.500	40.20	-30.7	37.2	33.67	54.0	13.8	H
12184.500	43.60	-29.4	39.2	33.81	54.0	10.4	H

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)
2488.600	47.1	2.9	32.6	11.55	54.0	6.9	H
2486.900	47.1	2.9	32.7	11.53	54.0	6.9	H
4924.500	35.40	-33.1	34.5	33.99	54.0	18.6	H
7836.000	38.30	-31.2	36.0	33.45	54.0	15.7	H
9847.500	41.00	-30.1	37.3	33.75	54.0	13.0	H
12310.500	43.50	-29.7	39.2	34.03	54.0	10.5	H

**802.11n-HT20**

Ch1

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2389.000	47.4	2.9	32.0	12.55	54.0	6.6	H
2389.700	47.8	2.9	32.0	12.95	54.0	6.2	H
4824.000	35.50	-32.8	34.5	33.75	54.0	18.5	H
7236.000	38.00	-31.7	36.1	33.64	54.0	16.0	H
9648.000	40.40	-30.4	37.0	33.72	54.0	13.6	H
12060.000	43.50	-29.6	39.3	33.83	54.0	10.5	H

Ch6

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2412.600	46.6	2.9	31.8	11.92	54.0	7.4	H
2474.600	47.6	2.9	33.0	11.68	54.0	6.4	H
4873.500	35.50	-32.7	34.5	33.71	54.0	18.5	H
7311.000	37.70	-31.9	36.1	33.53	54.0	16.3	H
9748.500	40.20	-30.7	37.2	33.67	54.0	13.8	H
12184.500	43.80	-29.4	39.2	34.01	54.0	10.2	H

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)
2483.500	52.0	2.9	32.8	16.31	54.0	2.0	H
2483.700	51.8	2.9	32.8	16.11	54.0	2.2	H
4924.500	35.30	-33.1	34.5	33.89	54.0	18.7	H
7836.000	38.40	-31.2	36.0	33.55	54.0	15.6	H
9847.500	40.90	-30.1	37.3	33.65	54.0	13.1	H
12310.500	43.60	-29.7	39.2	34.13	54.0	10.4	H

**802.11n-HT40**

Ch3

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2388.100	47.3	2.9	32.0	12.42	54.0	6.7	H
2388.000	47.4	2.9	32.0	12.56	54.0	6.6	H
4843.500	35.50	-32.7	34.5	33.69	54.0	18.5	H
7266.000	37.80	-31.9	36.1	33.57	54.0	16.2	H
9688.500	40.00	-30.7	37.1	33.62	54.0	14.0	H
12109.500	43.60	-29.5	39.3	33.83	54.0	10.4	H

Ch6

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2386.500	46.3	2.9	32.0	11.43	54.0	7.7	H
2489.200	47.2	2.9	32.6	11.66	54.0	6.8	H
4873.500	35.60	-32.7	34.5	33.81	54.0	18.4	H
7311.000	37.70	-31.9	36.1	33.53	54.0	16.3	H
9748.500	40.10	-30.7	37.2	33.57	54.0	13.9	H
12184.500	43.80	-29.4	39.2	34.01	54.0	10.2	H

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)
2483.500	48.8	2.9	32.8	13.07	54.0	5.2	H
2484.500	48.4	2.9	32.7	12.72	54.0	5.6	H
4903.500	35.60	-32.9	34.5	33.99	54.0	18.4	H
7356.000	38.00	-31.9	36.1	33.85	54.0	16.0	H
9808.500	40.50	-30.3	37.3	33.58	54.0	13.5	H
12259.500	43.70	-29.6	39.2	34.07	54.0	10.3	H

**PEAK**
**802.11b**

Ch1

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2387.308	59.0	2.9	32.0	24.14	74.0	15.0	H
2389.758	59.0	2.9	32.0	24.15	74.0	15.0	H
4824.000	40.5	-32.8	34.5	38.76	74.0	33.5	H
7236.000	41.9	-31.7	36.1	37.54	74.0	32.1	H
9648.000	44.4	-30.4	37.0	37.72	74.0	29.6	V
12060.000	46.5	-29.6	39.3	36.83	74.0	27.5	H

Ch6

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2277.420	48.8	-28.1	30.8	46.06	74.0	25.2	H
2545.620	51.1	-26.8	33.0	44.90	74.0	22.9	H
4874.250	40.0	-32.7	34.5	38.21	74.0	34.0	V
7311.000	40.6	-31.9	36.1	36.43	74.0	33.4	V
9747.750	44.6	-30.7	37.2	38.07	74.0	29.4	H
12185.250	46.5	-29.4	39.2	36.71	74.0	27.5	V

Ch11

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2484.050	59.6	2.9	32.7	23.92	74.0	14.4	H
2486.080	59.6	2.9	32.7	23.98	74.0	14.4	H
4923.750	40.0	-33.1	34.5	38.58	74.0	34.0	H
7836.000	41.5	-31.2	36.0	36.65	74.0	32.5	V
9848.250	44.6	-30.1	37.3	37.34	74.0	29.4	H
12309.750	45.2	-29.7	39.2	35.72	74.0	28.8	H

**802.11g**

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)
2389.530	68.2	2.9	32.0	33.39	74.0	5.8	H
2388.690	68.6	2.9	32.0	33.79	74.0	5.4	H
4824.000	41.9	-32.8	34.5	40.15	74.0	32.1	V
7236.000	42.2	-31.7	36.1	37.84	74.0	31.8	H
9648.000	43.8	-30.4	37.0	37.12	74.0	30.2	H
12060.000	46.2	-29.6	39.3	36.53	74.0	27.8	V

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)
2366.100	49.1	-27.2	31.9	44.34	74.0	24.9	H
2526.200	52.0	-26.8	32.7	46.10	74.0	22.0	H
4874.250	41.1	-32.7	34.5	39.31	74.0	32.9	H
7311.000	40.8	-31.9	36.1	36.63	74.0	33.2	H
9747.750	43.8	-30.7	37.2	37.27	74.0	30.2	H
12185.250	45.8	-29.4	39.2	36.01	74.0	28.2	H

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)
2483.580	66.5	2.9	32.8	30.76	74.0	7.5	H
2483.740	66.0	2.9	32.8	30.28	74.0	8.0	H
4923.750	40.2	-33.1	34.5	38.78	74.0	33.8	H
7836.000	42.0	-31.2	36.0	37.15	74.0	32.0	V
9848.250	44.0	-30.1	37.3	36.74	74.0	30.0	H
12309.750	46.0	-29.7	39.2	36.52	74.0	28.0	V

**802.11n-HT20**

Ch1

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2389.520	64.5	2.9	32.0	29.65	74.0	9.5	H
2389.940	64.5	2.9	32.0	29.65	74.0	9.5	H
4824.000	40.0	-32.8	34.5	38.25	74.0	34.0	V
7236.000	40.9	-31.7	36.1	36.54	74.0	33.1	V
9648.000	44.4	-30.4	37.0	37.72	74.0	29.6	H
12060.000	46.7	-29.6	39.3	37.03	74.0	27.3	V

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)
2361.450	49.7	-27.5	31.9	45.32	74.0	24.3	H
2641.800	52.2	-26.7	33.6	45.34	74.0	21.8	H
4874.250	39.3	-32.7	34.5	37.51	74.0	34.7	V
7311.000	40.6	-31.9	36.1	36.43	74.0	33.4	H
9747.750	44.7	-30.7	37.2	38.17	74.0	29.3	V
12185.250	46.4	-29.4	39.2	36.61	74.0	27.6	V

Ch11

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2483.890	73.4	2.9	32.8	37.72	74.0	0.6	H
2484.090	72.5	2.9	32.7	36.82	74.0	1.5	H
4923.750	40.7	-33.1	34.5	39.28	74.0	33.3	H
7836.000	41.1	-31.2	36.0	36.25	74.0	32.9	V
9848.250	44.9	-30.1	37.3	37.64	74.0	29.1	V
12309.750	44.2	-29.7	39.2	34.72	74.0	29.8	H

**802.11n-HT40**

Ch3

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2388.350	64.4	2.9	32.0	29.51	74.0	9.6	H
2389.380	64.4	2.9	32.0	29.59	74.0	9.6	H
4844.250	39.7	-32.7	34.5	37.89	74.0	34.3	V
7266.000	42.4	-31.9	36.1	38.17	74.0	31.6	V
9687.750	44.1	-30.7	37.1	37.72	74.0	29.9	V
12110.250	46.1	-29.5	39.3	36.33	74.0	27.9	H

Ch6

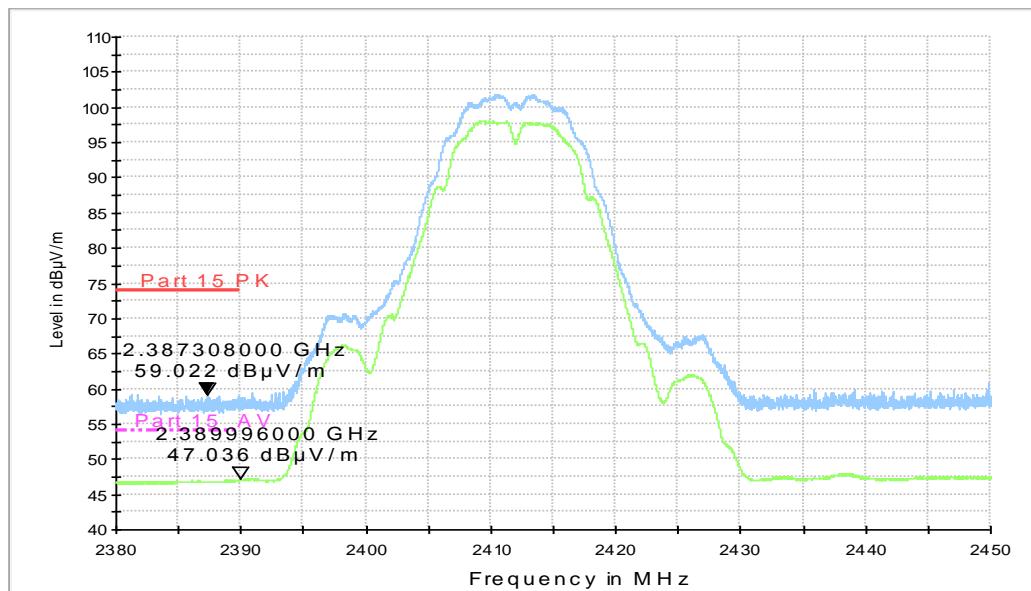
Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2375.600	49.4	-26.6	32.1	43.93	74.0	24.6	H
2544.460	51.6	-26.8	33.0	45.40	74.0	22.4	H
4874.250	40.0	-32.7	34.5	38.21	74.0	34.0	V
7311.000	40.3	-31.9	36.1	36.13	74.0	33.7	H
9747.750	43.9	-30.7	37.2	37.37	74.0	30.1	V
12185.250	46.4	-29.4	39.2	36.61	74.0	27.6	V

Ch9

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
2483.534	70.3	2.9	32.8	34.62	74.0	3.7	H
2484.596	69.8	2.9	32.7	34.12	74.0	4.2	H
4904.250	39.6	-32.9	34.5	38.00	74.0	34.4	V
7356.000	41.9	-31.9	36.1	37.75	74.0	32.1	H
9807.750	44.0	-30.4	37.3	37.08	74.0	30.0	V
12260.250	45.5	-29.6	39.2	35.88	74.0	28.5	V

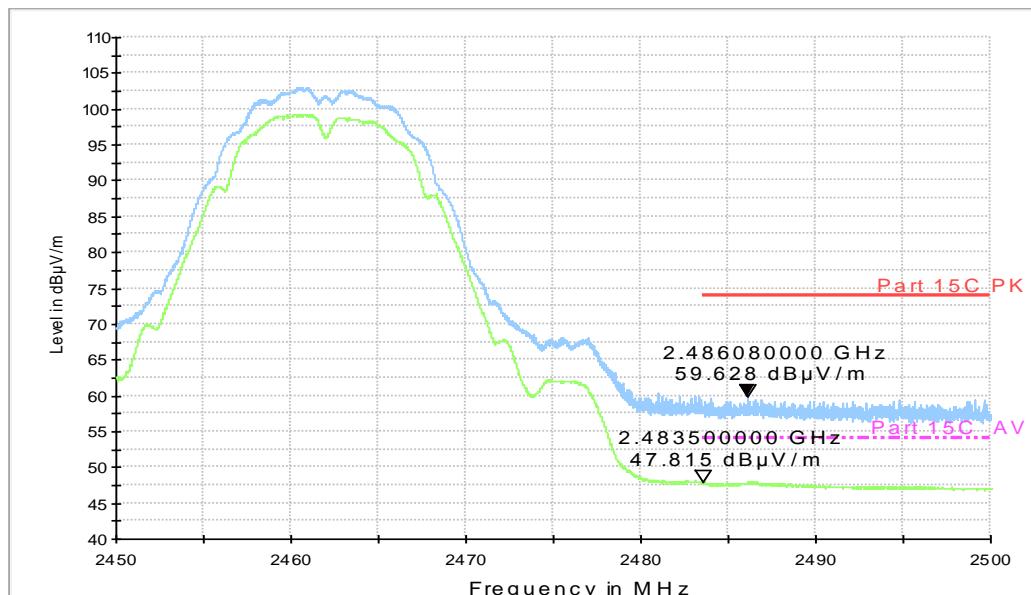
Test graphs as below:

R E - Power-2.38GHz-2.45GHz

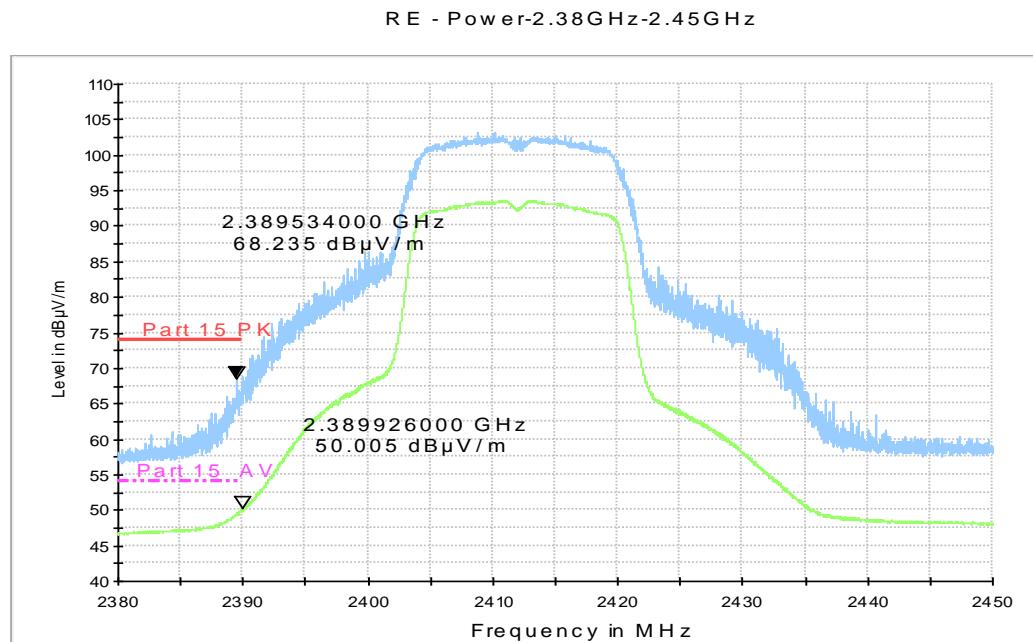


**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz**

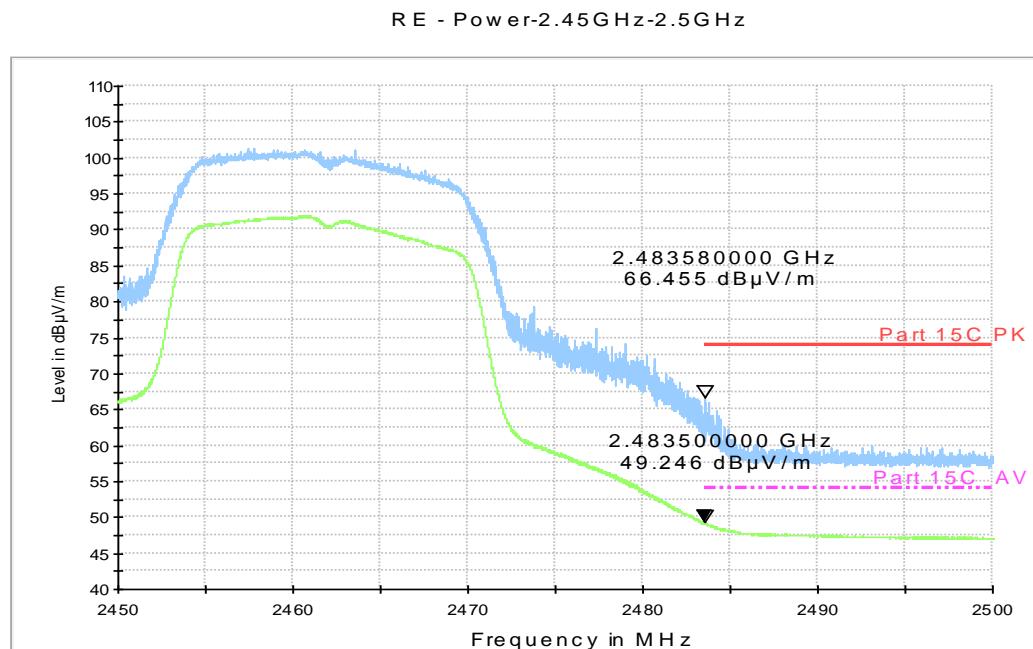
R E - Power-2.45GHz-2.5GHz



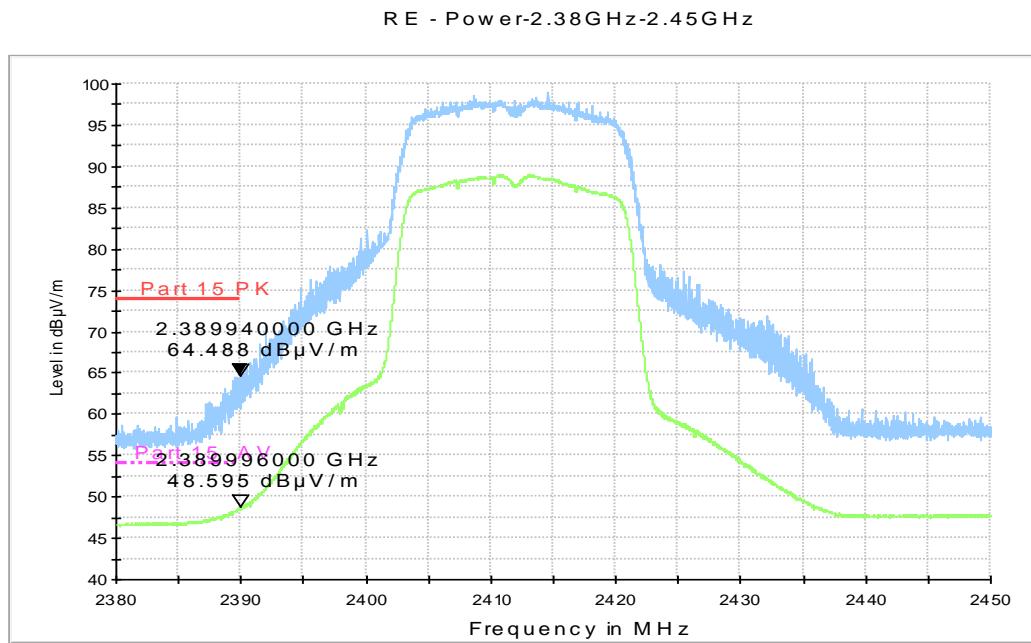
**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**



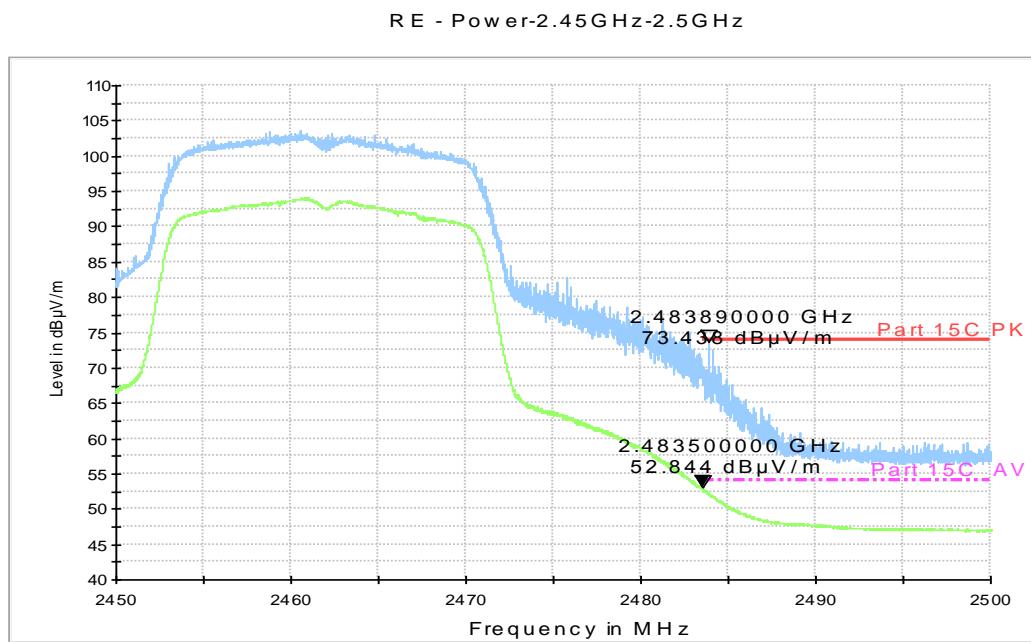
**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz**



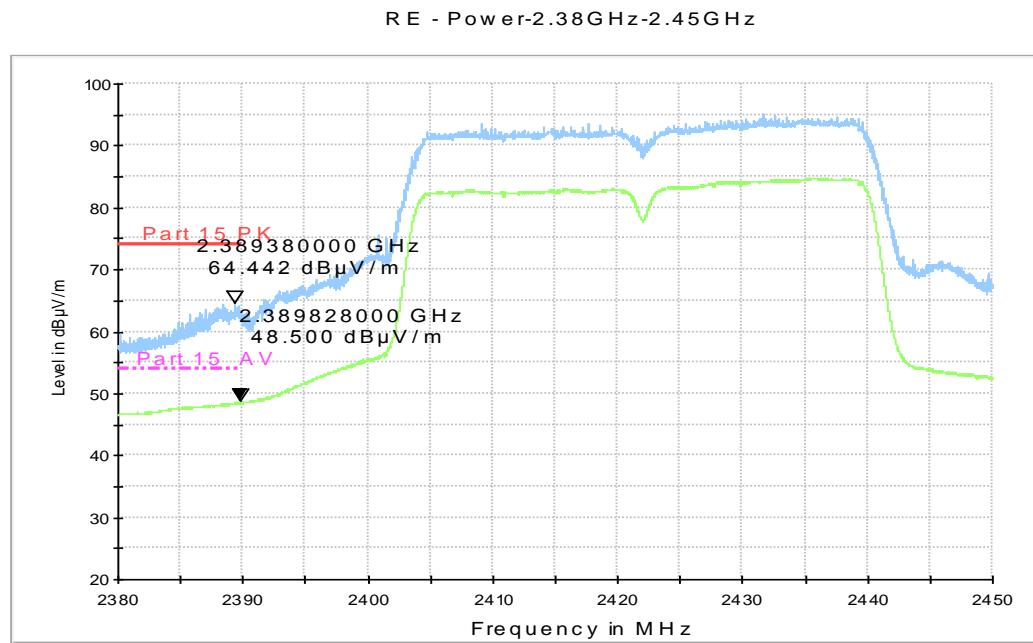
**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**



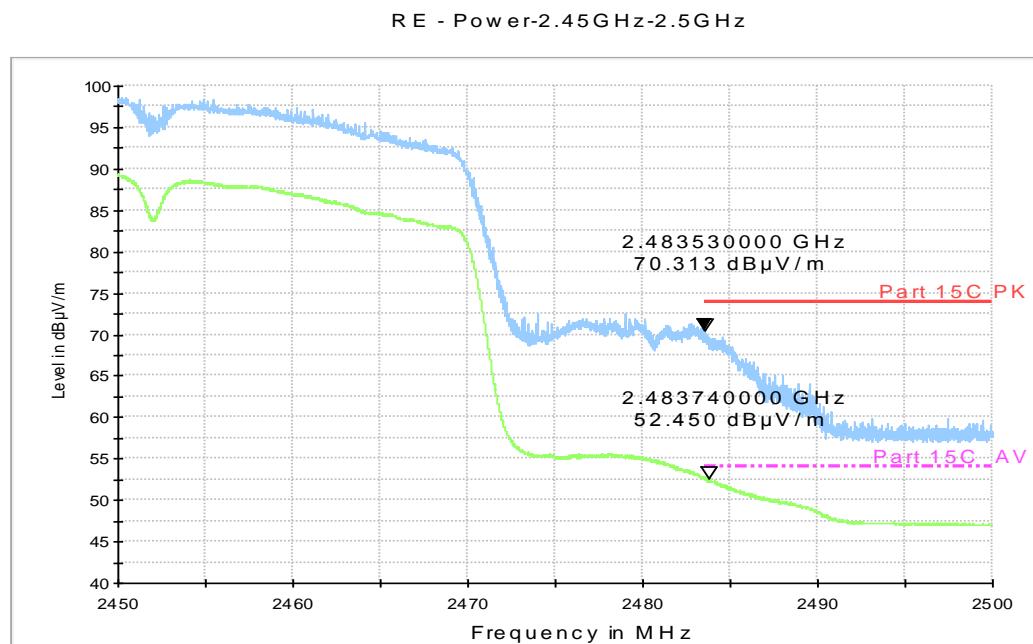
**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**



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



**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.45GHz**



**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	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.

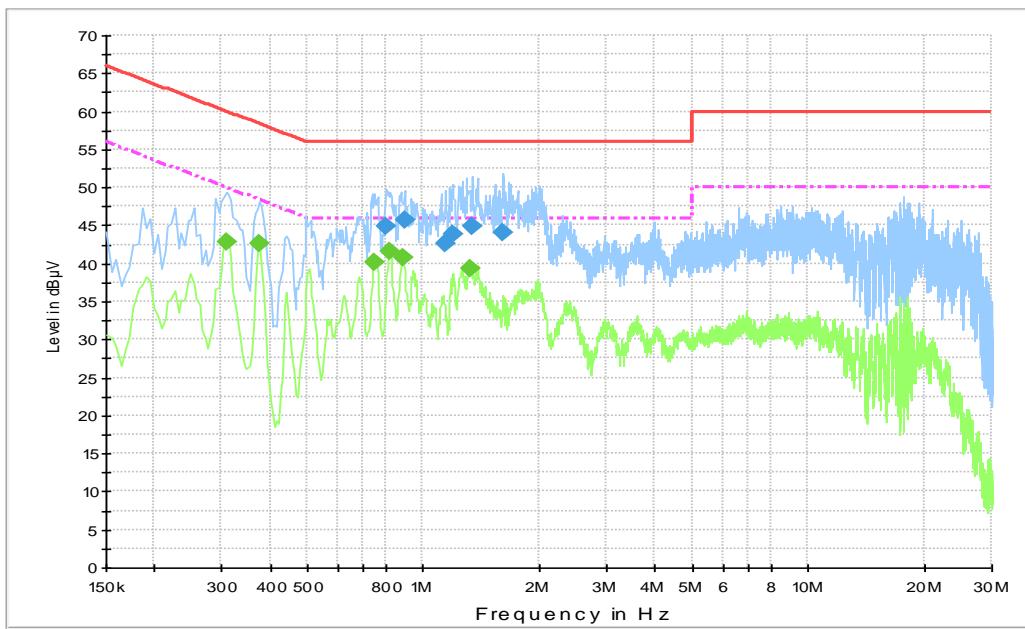
WLAN (Average Limit)

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	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:**


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

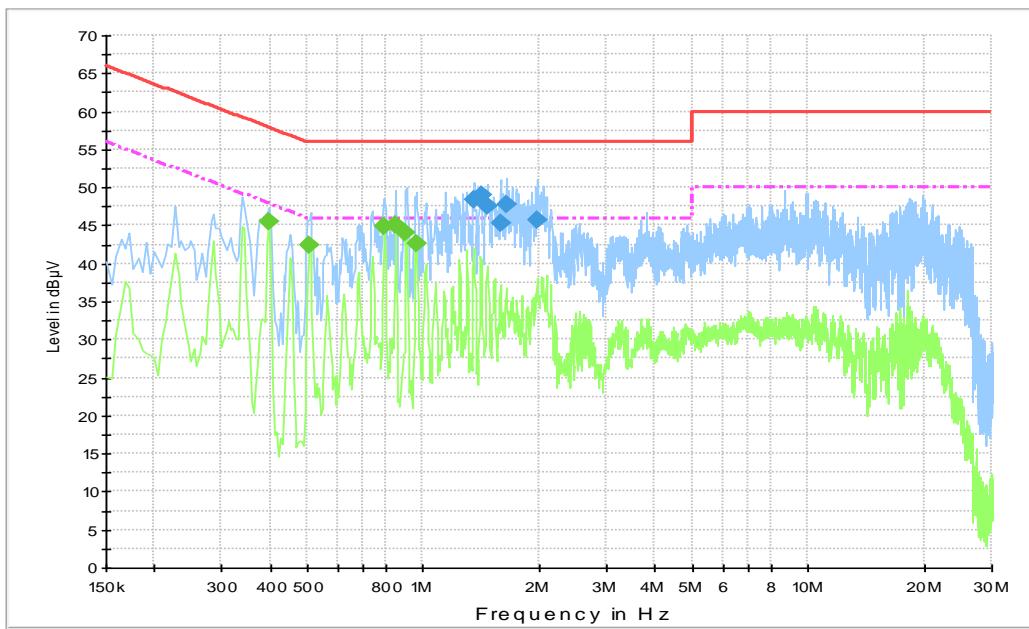
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

## Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.802500	44.9	GND	N	10.3	11.1	56.0
0.892500	45.6	GND	N	10.3	10.4	56.0
1.140000	42.5	GND	L1	10.2	13.5	56.0
1.189500	43.8	GND	L1	10.2	12.2	56.0
1.338000	44.8	GND	N	10.3	11.2	56.0
1.617000	44.1	GND	L1	10.2	11.9	56.0

## Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.307500	42.8	GND	N	10.3	7.2	50.0
0.375000	42.7	GND	N	10.3	5.7	48.4
0.744000	40.1	GND	N	10.3	5.9	46.0
0.820500	41.6	GND	N	10.3	4.4	46.0
0.883500	40.8	GND	N	10.3	5.2	46.0
1.324500	39.3	GND	N	10.3	6.7	46.0


**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)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
1.356000	48.4	GND	N	10.3	7.6	56.0
1.414500	49.0	GND	N	10.3	7.0	56.0
1.464000	47.5	GND	N	10.3	8.5	56.0
1.585500	45.4	GND	L1	10.2	10.6	56.0
1.639500	47.7	GND	L1	10.2	8.3	56.0
1.981500	45.7	GND	L1	10.3	10.3	56.0

## Final Result 2

Frequency (MHz)	Average (dB $\mu$ V)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.397500	45.4	GND	N	10.3	2.5	47.9
0.505500	42.4	GND	N	10.3	3.6	46.0
0.793500	44.9	GND	N	10.3	1.1	46.0
0.847500	45.1	GND	N	10.3	0.9	46.0
0.901500	44.1	GND	N	10.3	1.9	46.0
0.960000	42.5	GND	N	10.3	3.5	46.0

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