

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

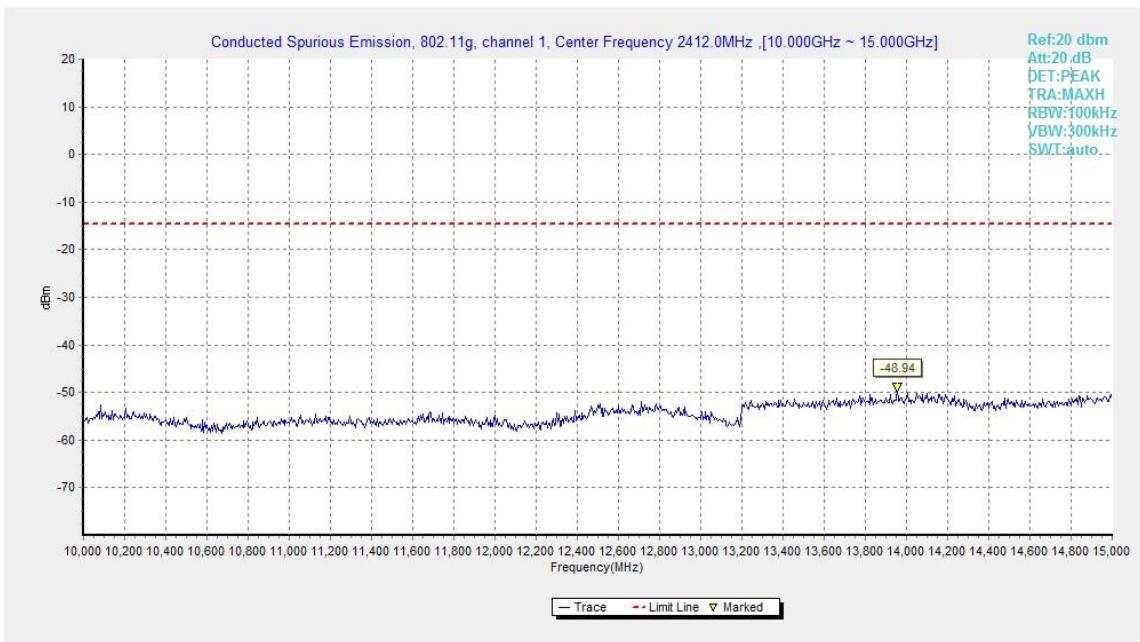


Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)

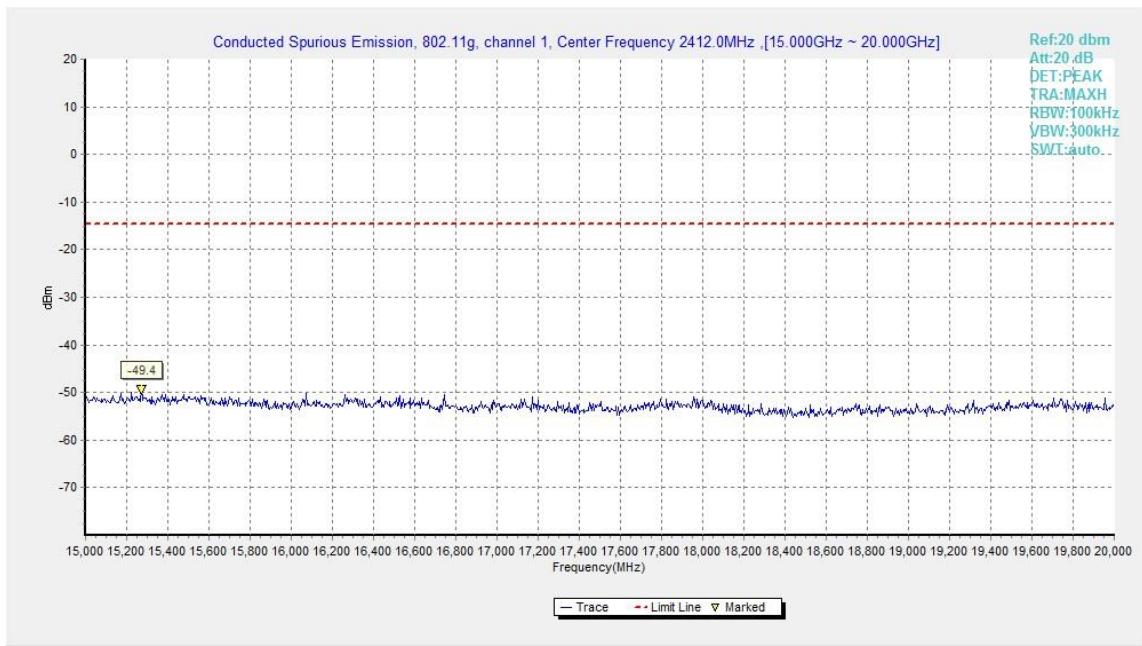


Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)

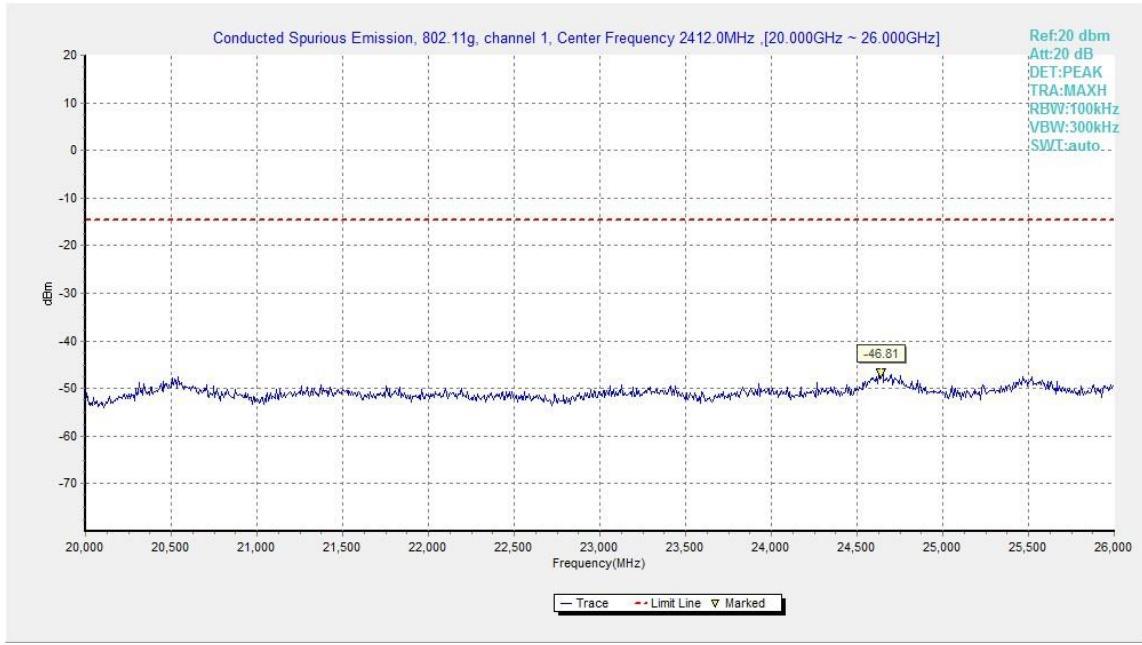


Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)

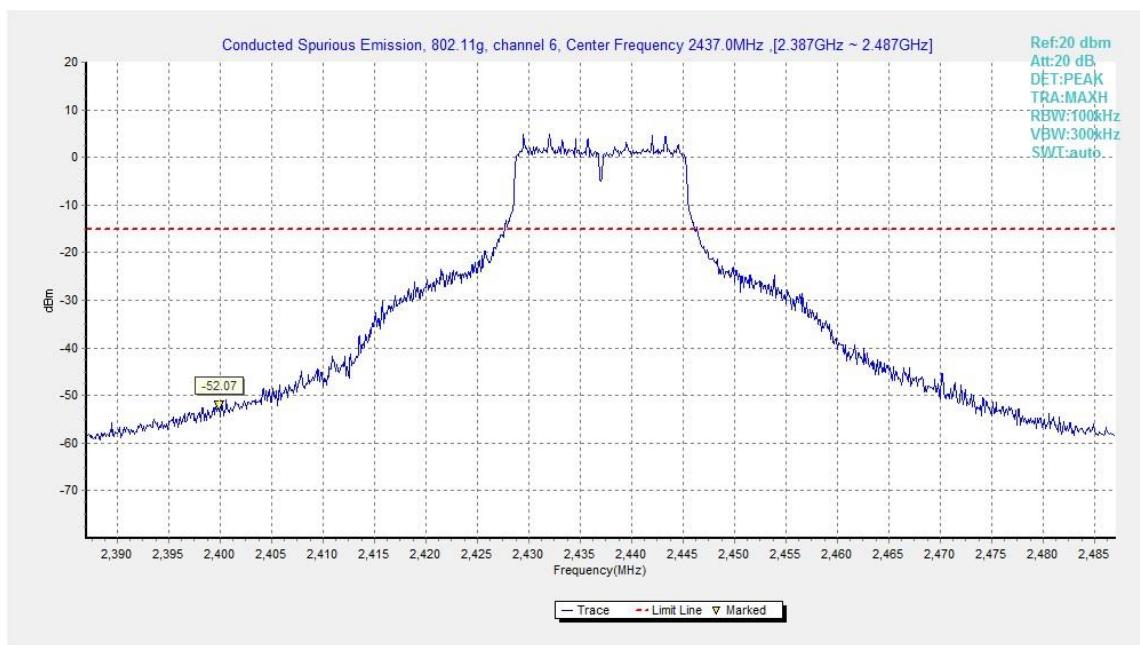


Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

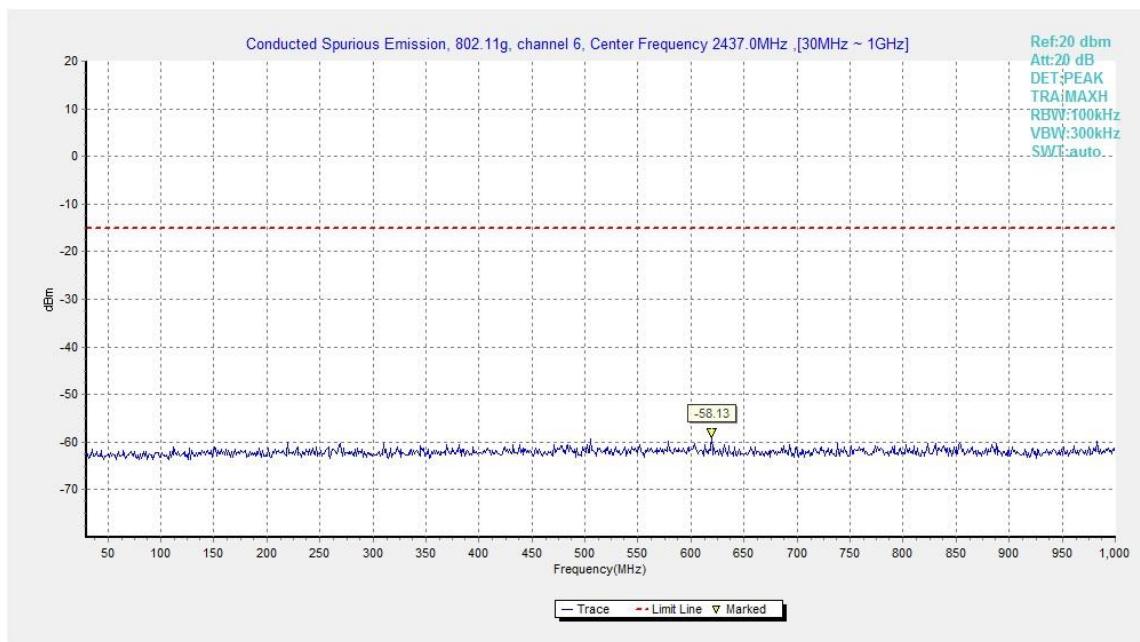


Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)

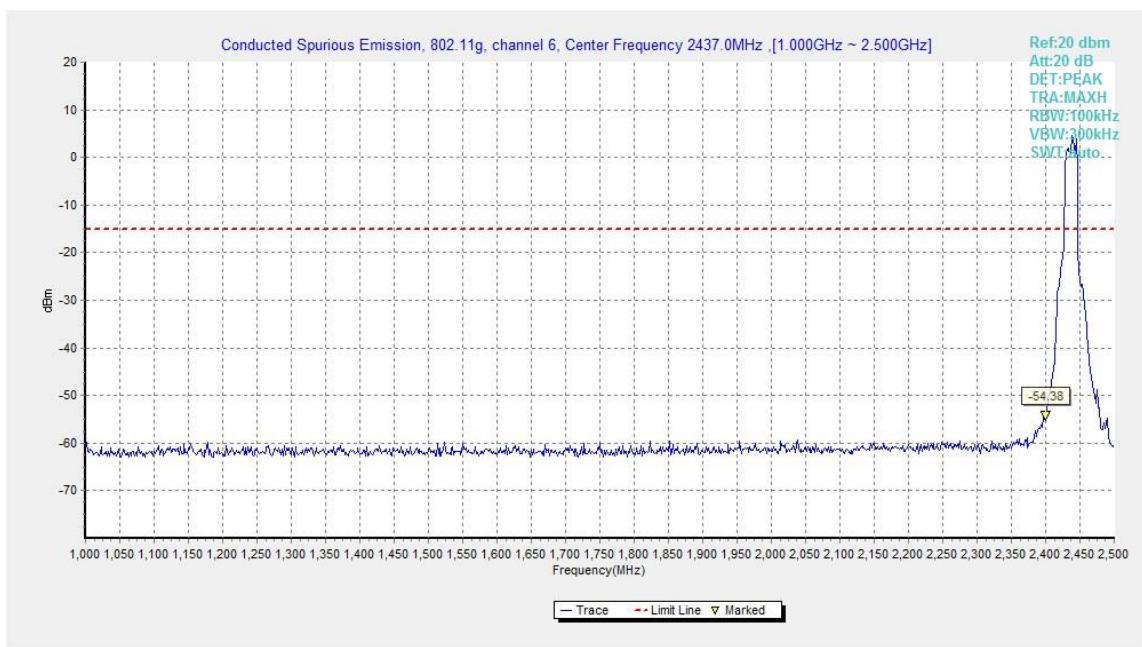


Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)

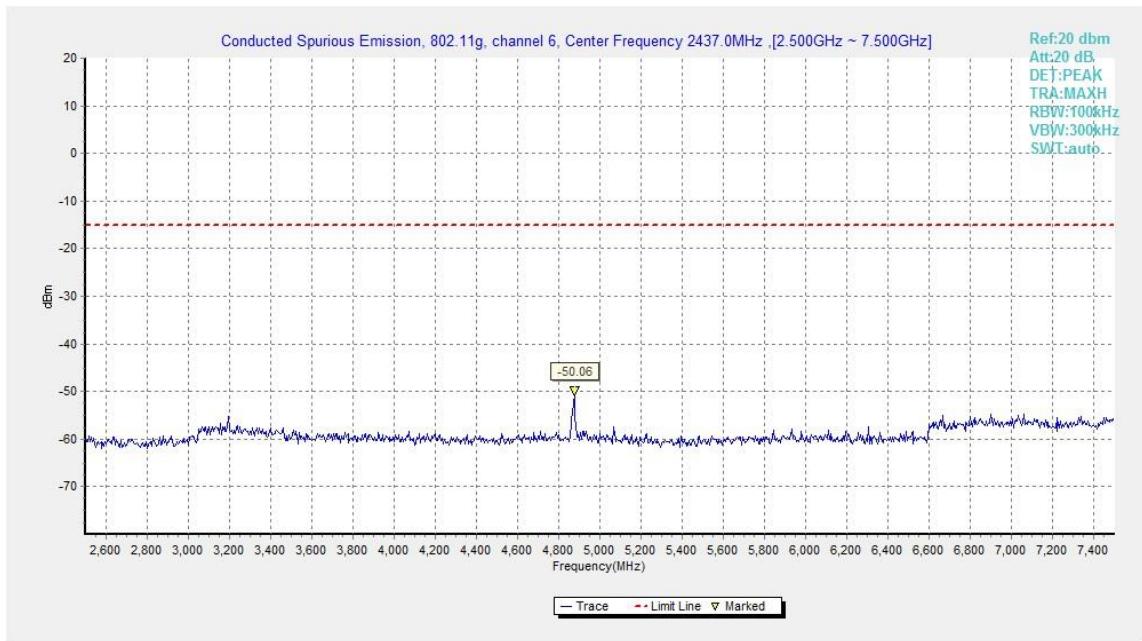


Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)

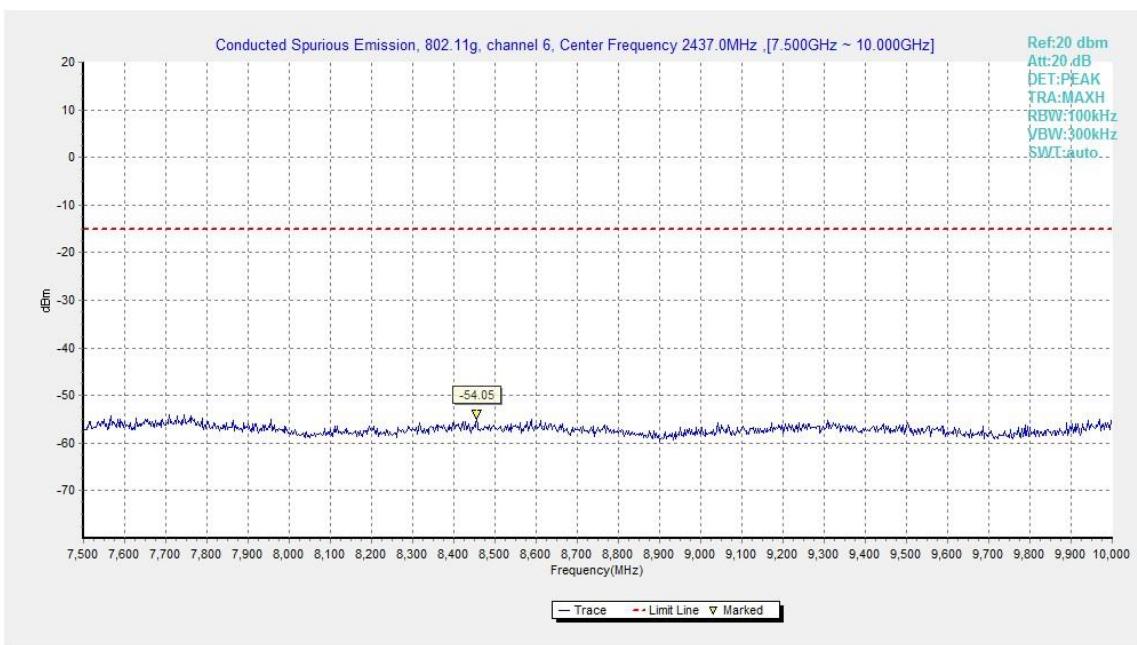


Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)

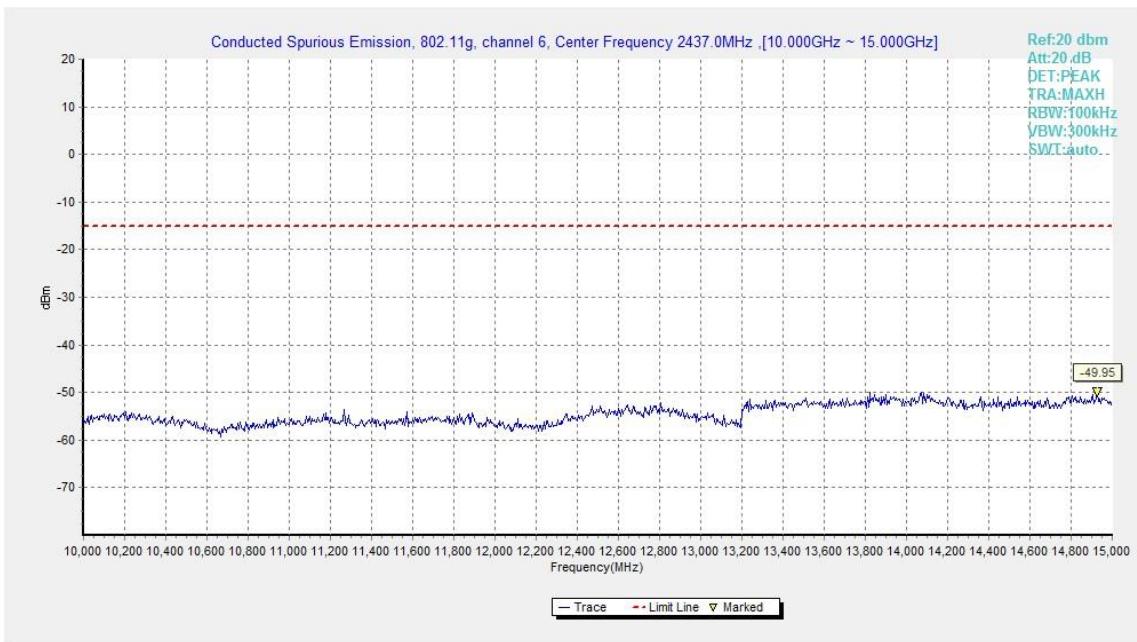


Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)

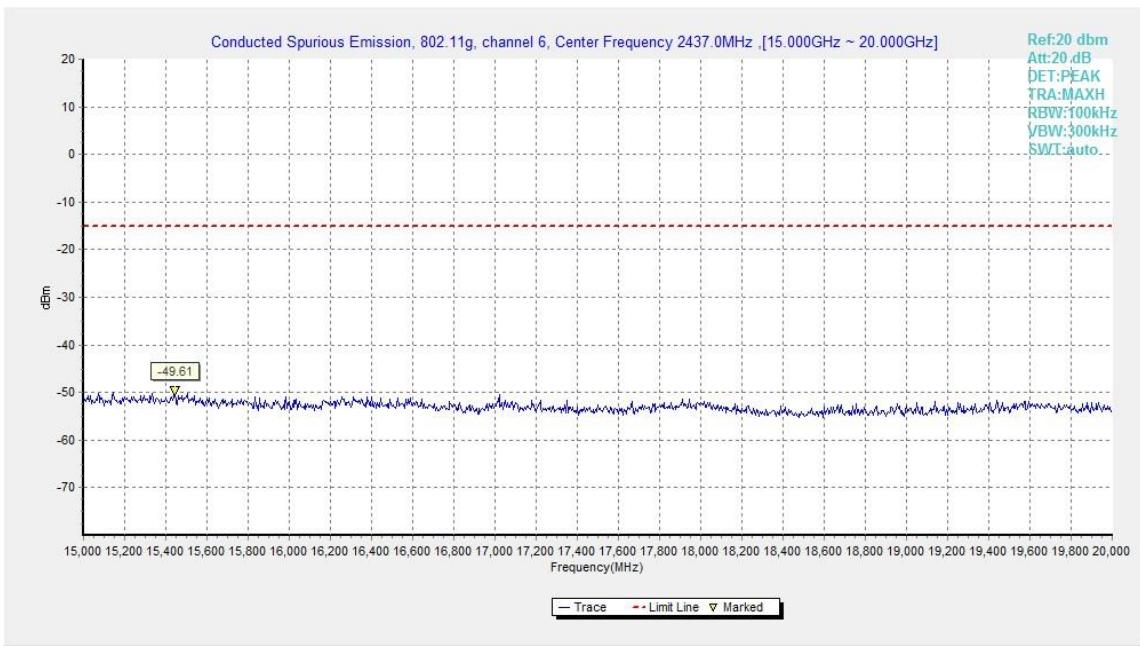


Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)

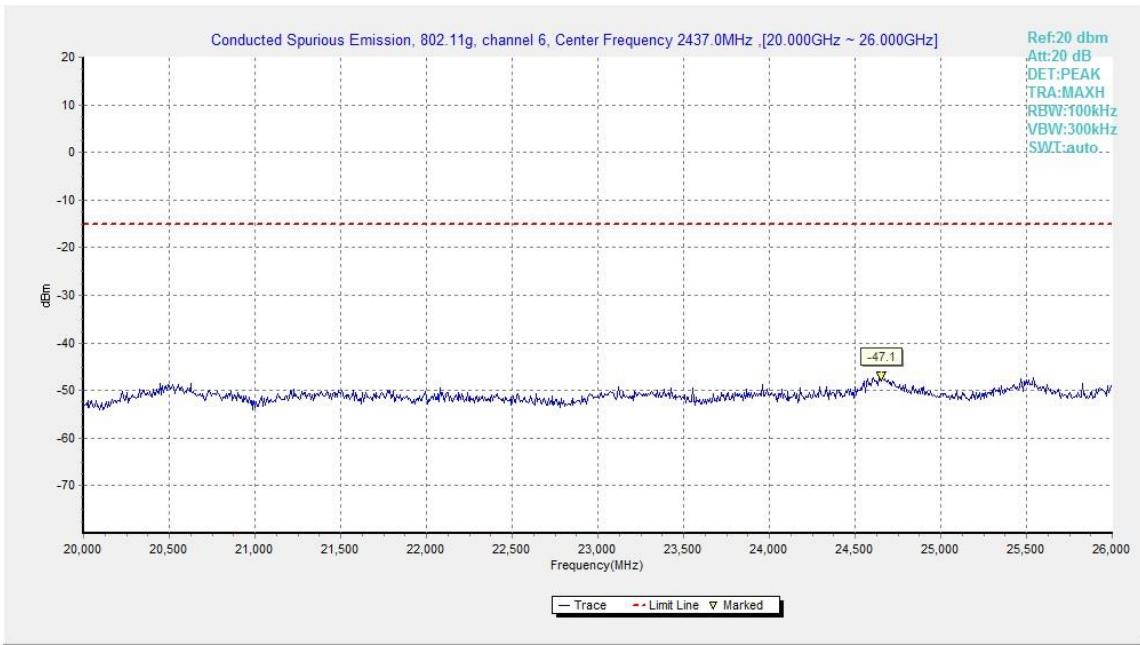


Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)

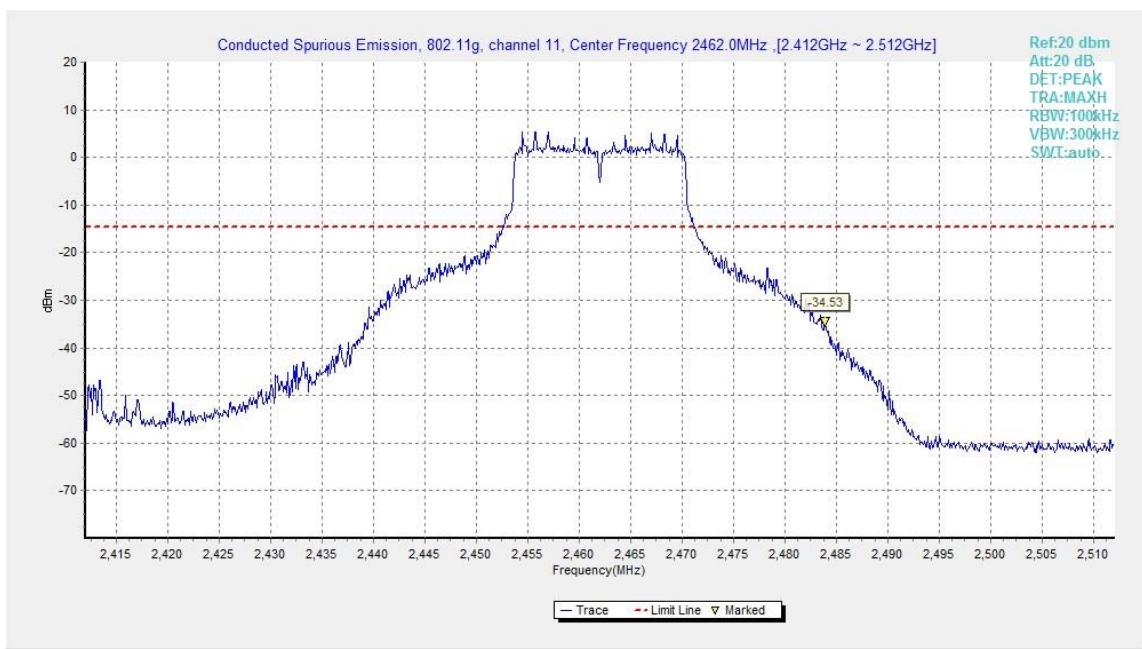


Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)

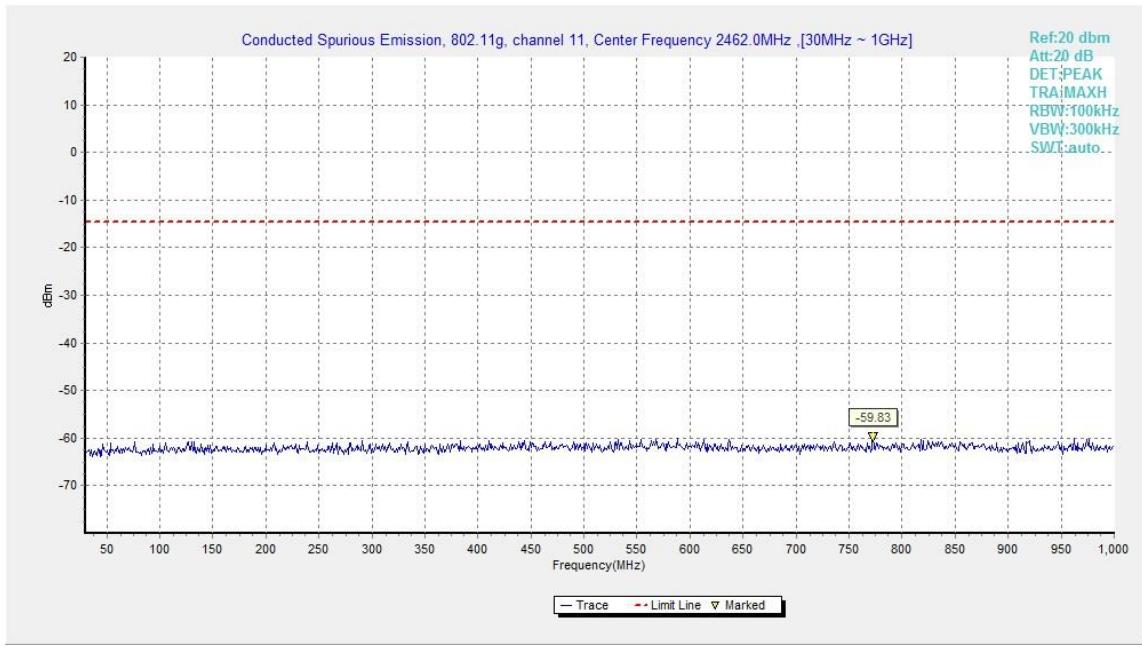


Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)

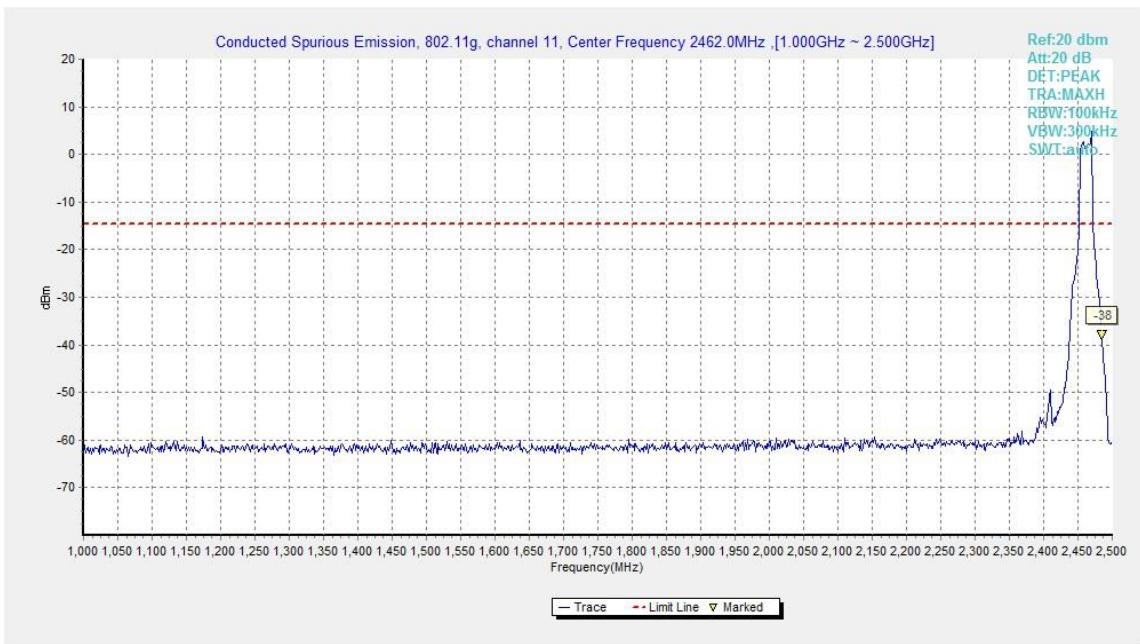


Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)

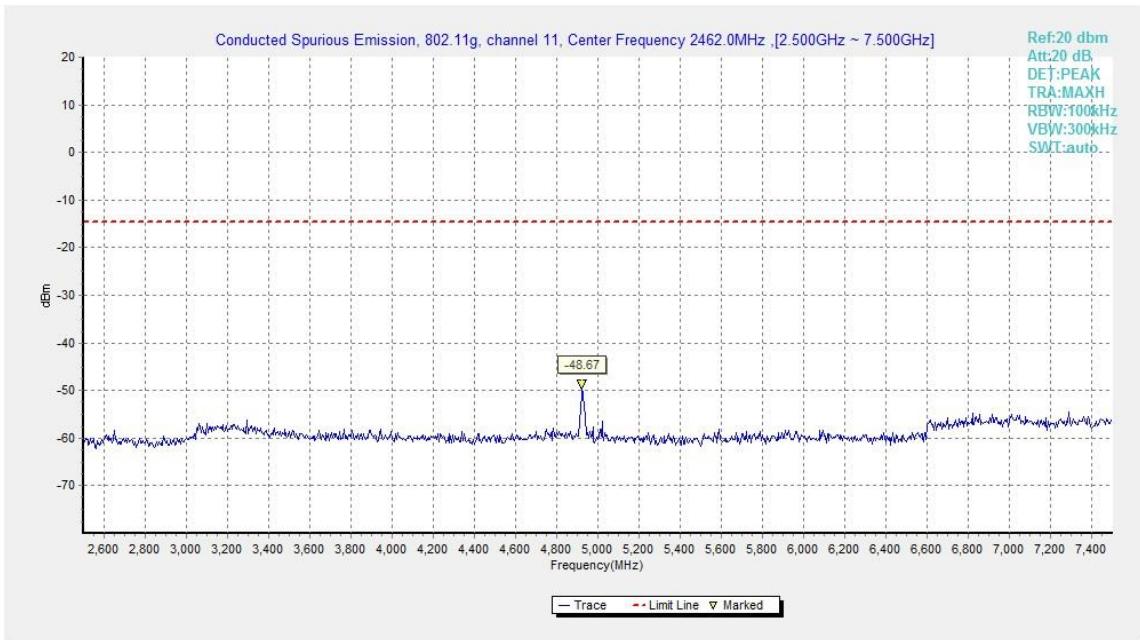


Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)

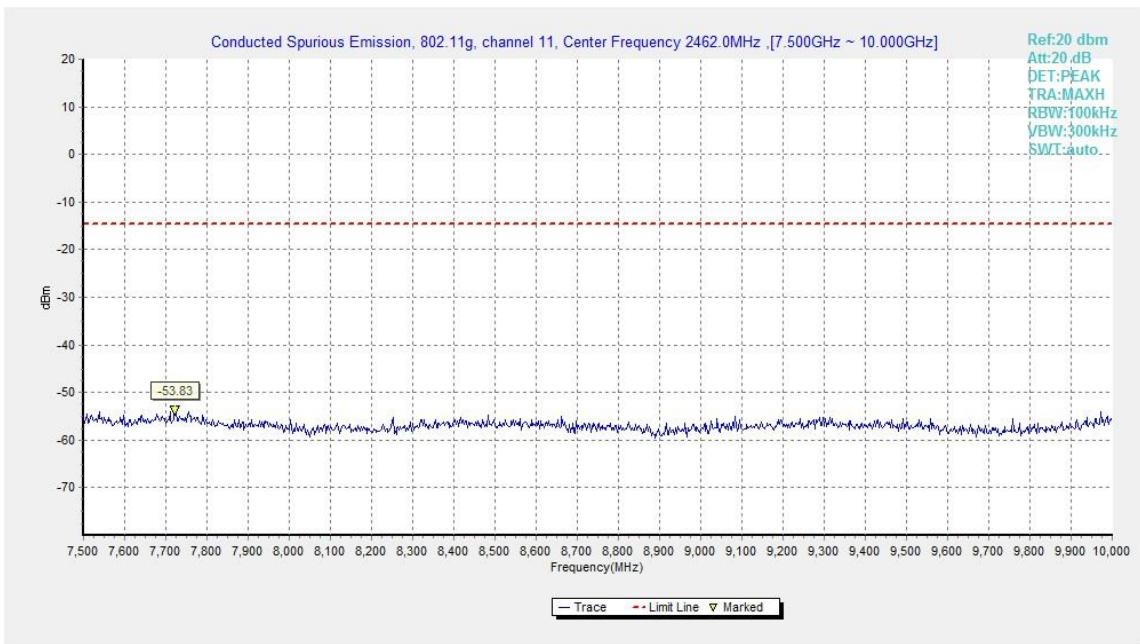


Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)

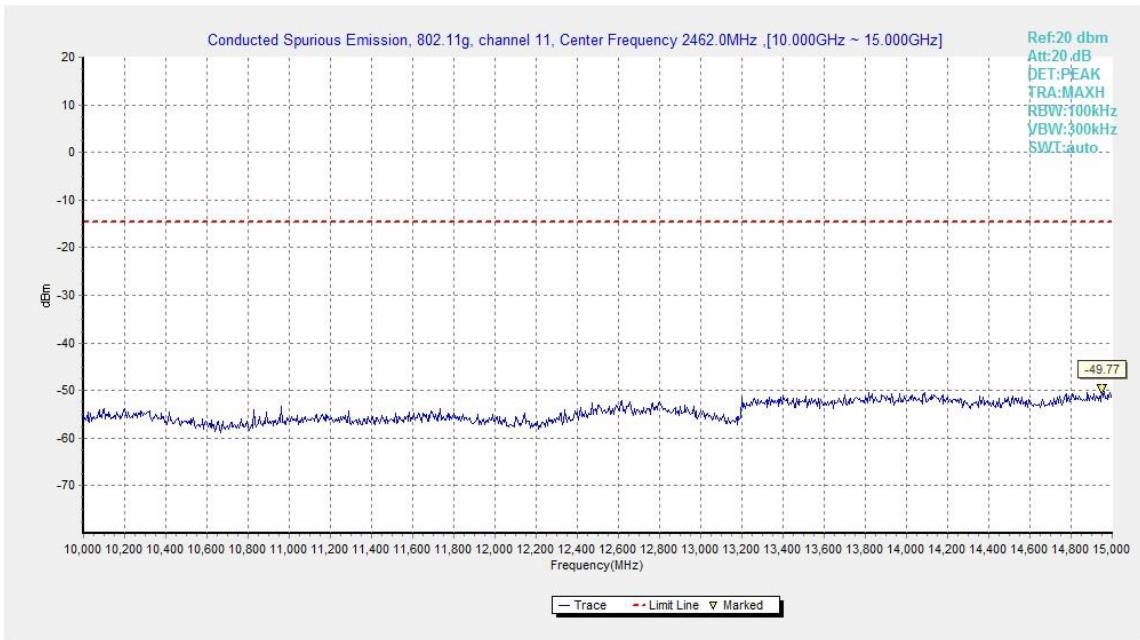


Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)

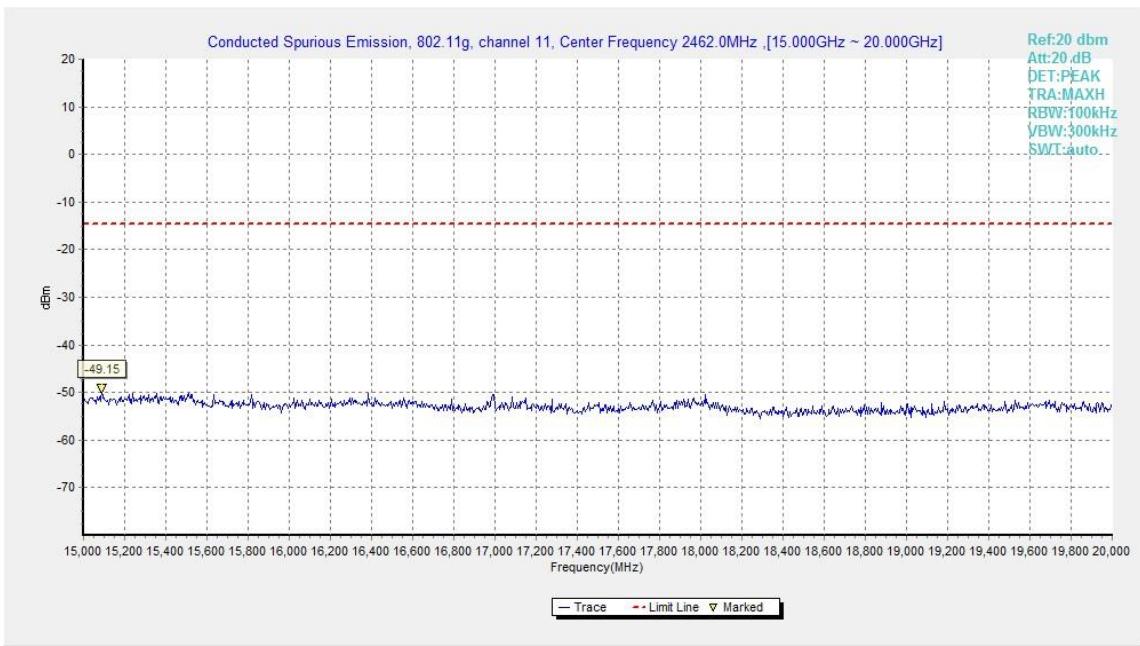


Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)

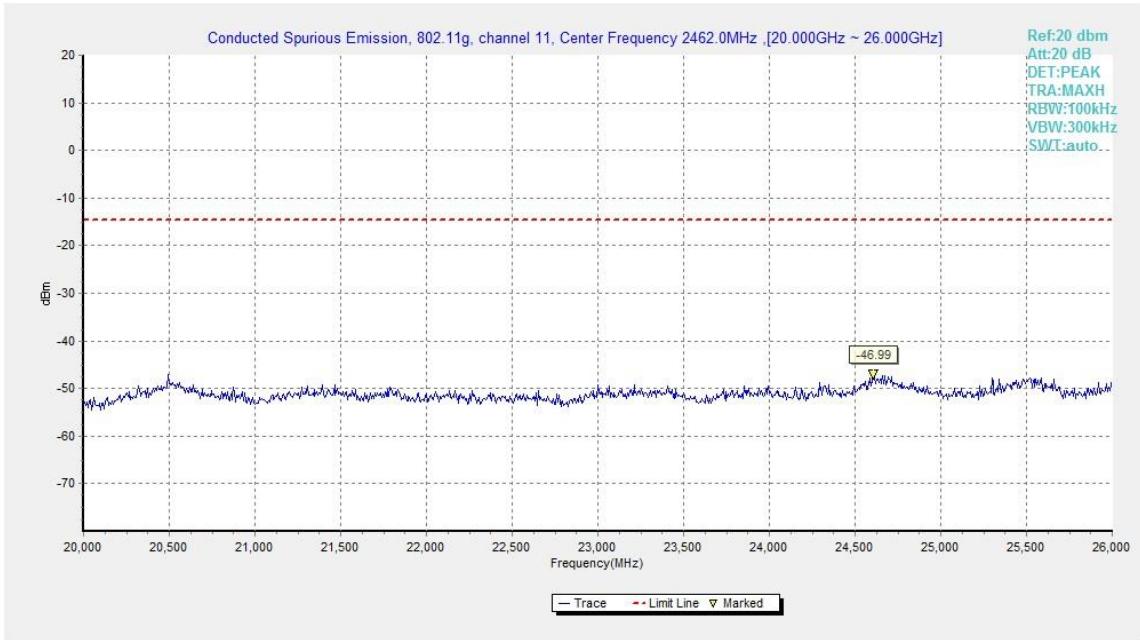


Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)

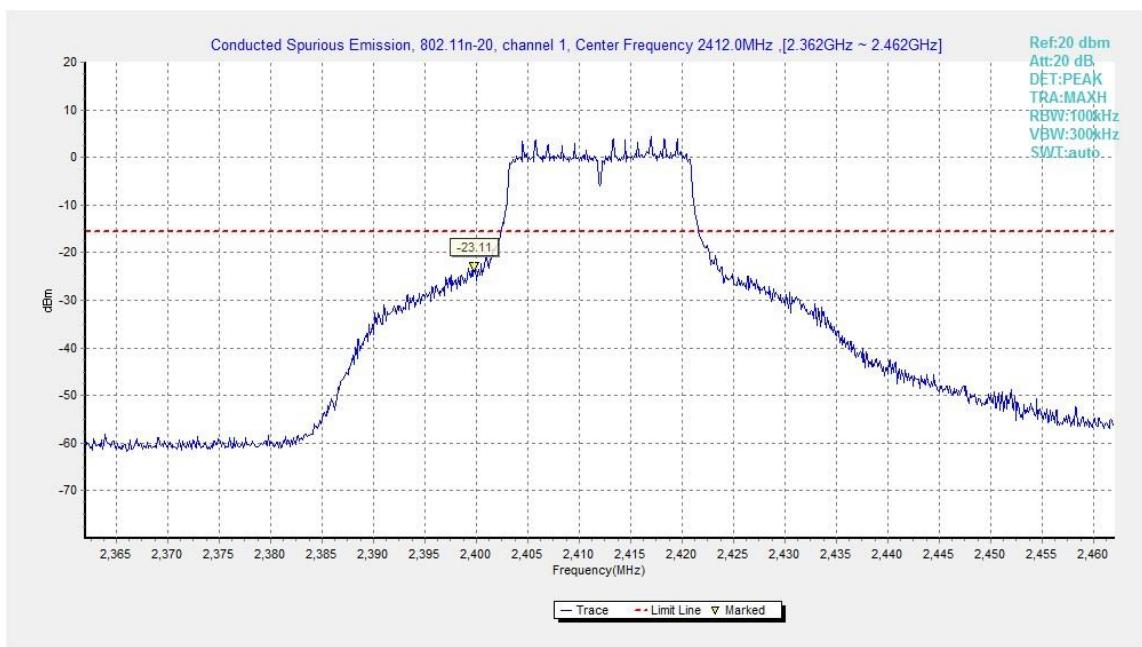


Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)

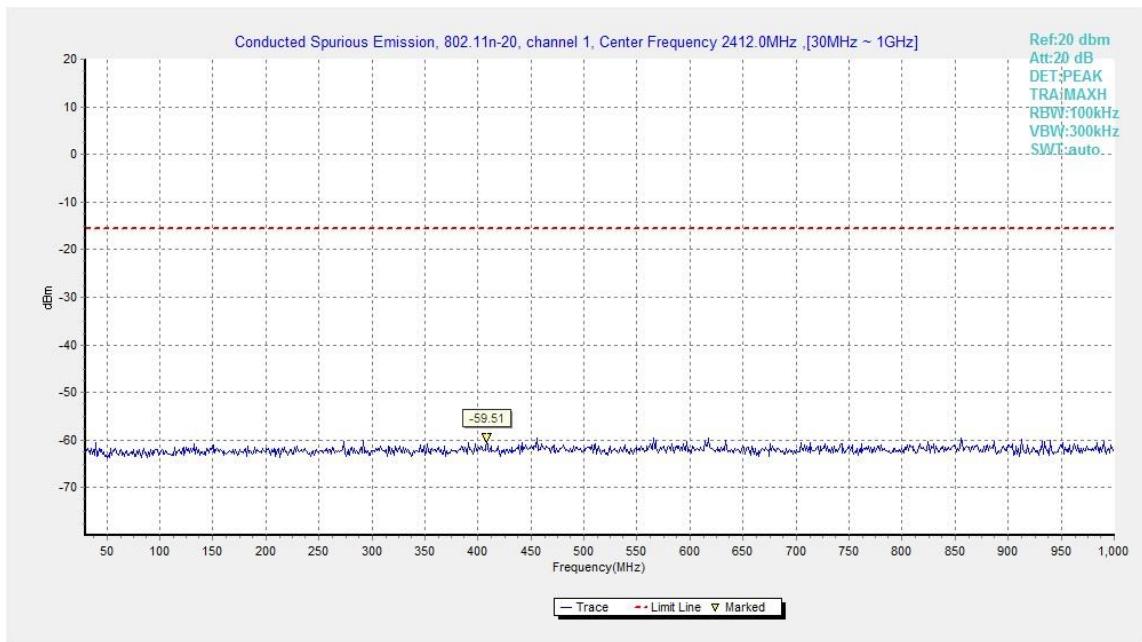


Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)

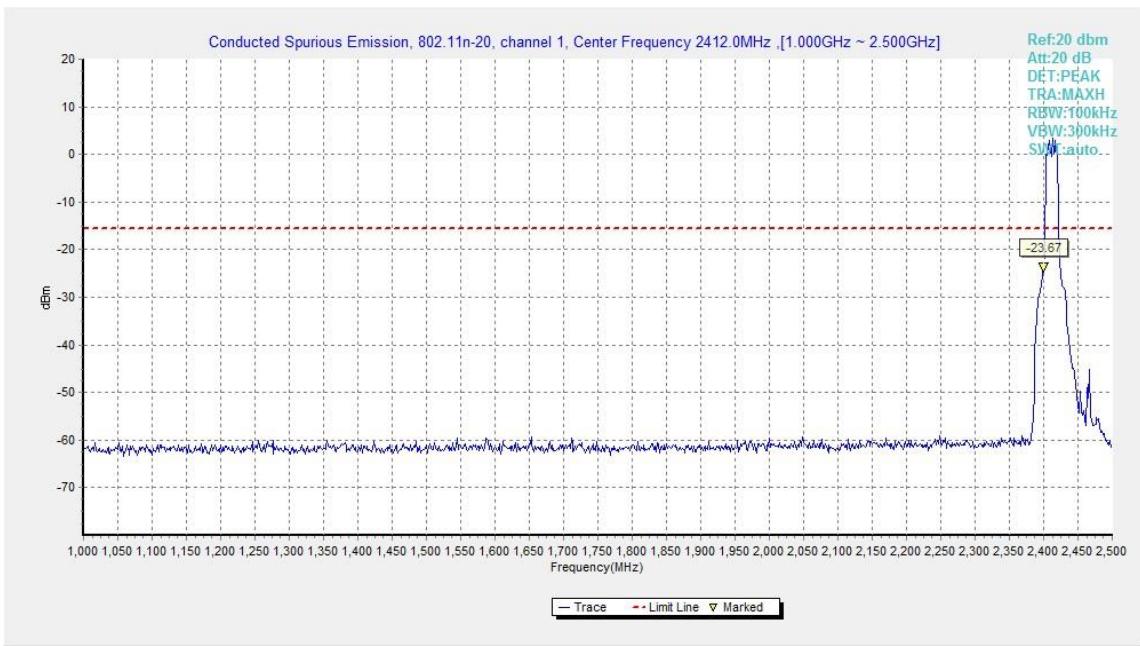


Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)

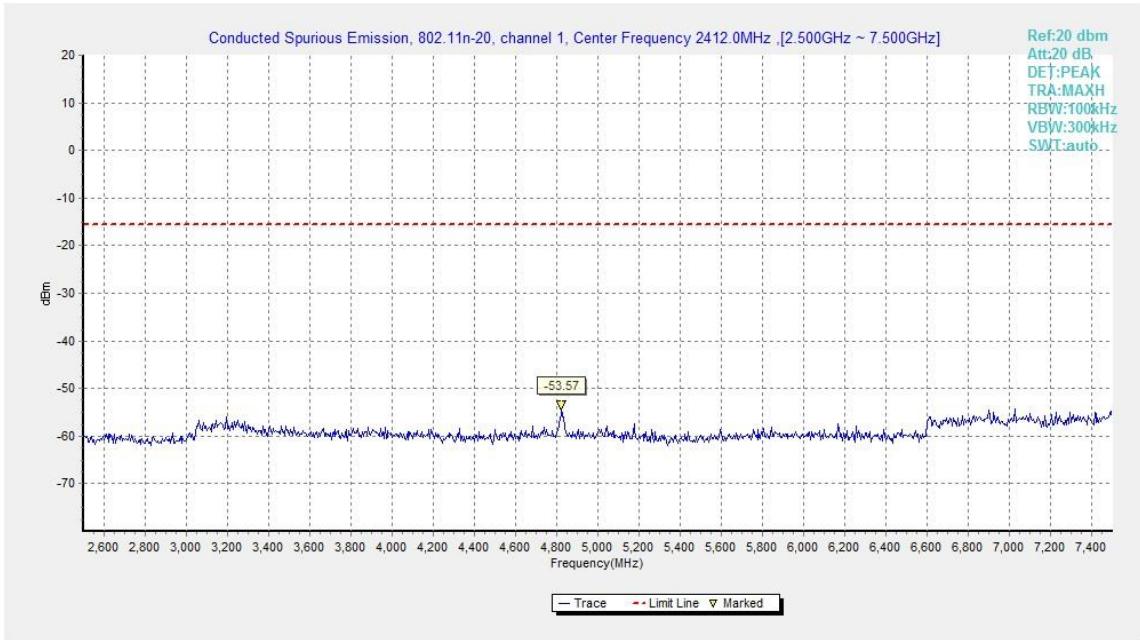


Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)

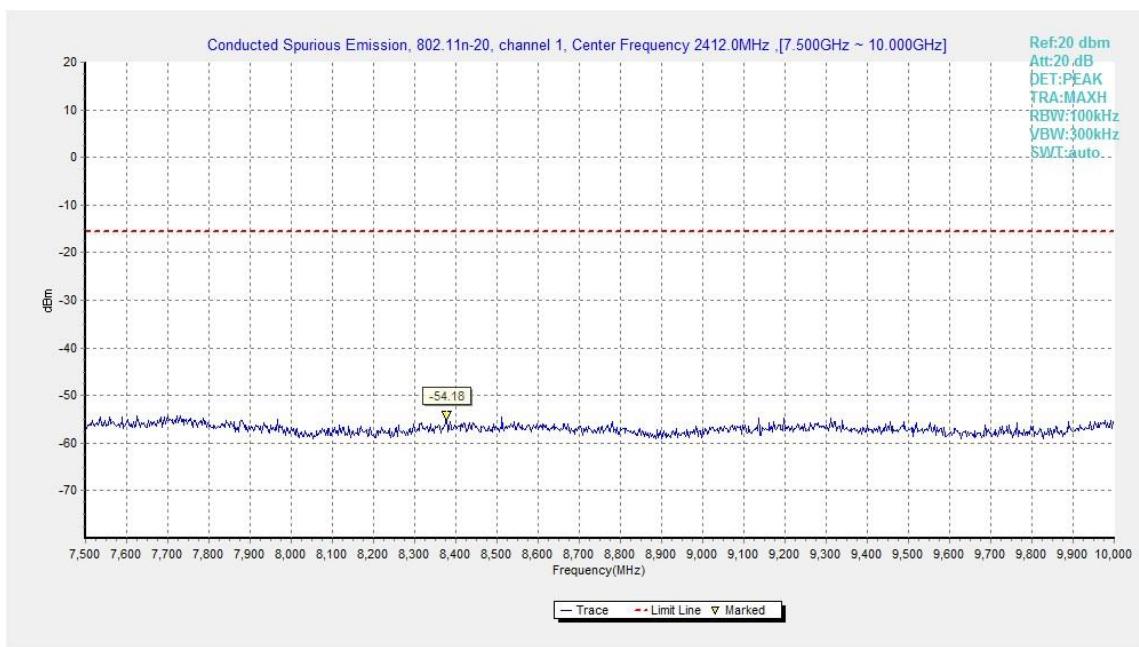


Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)

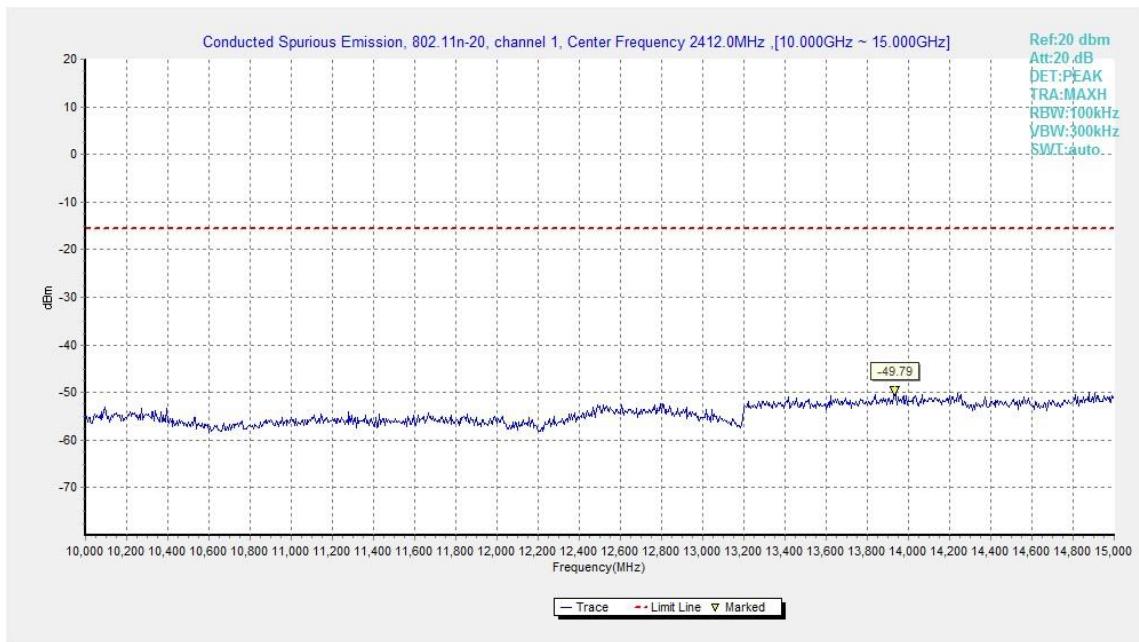


Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)

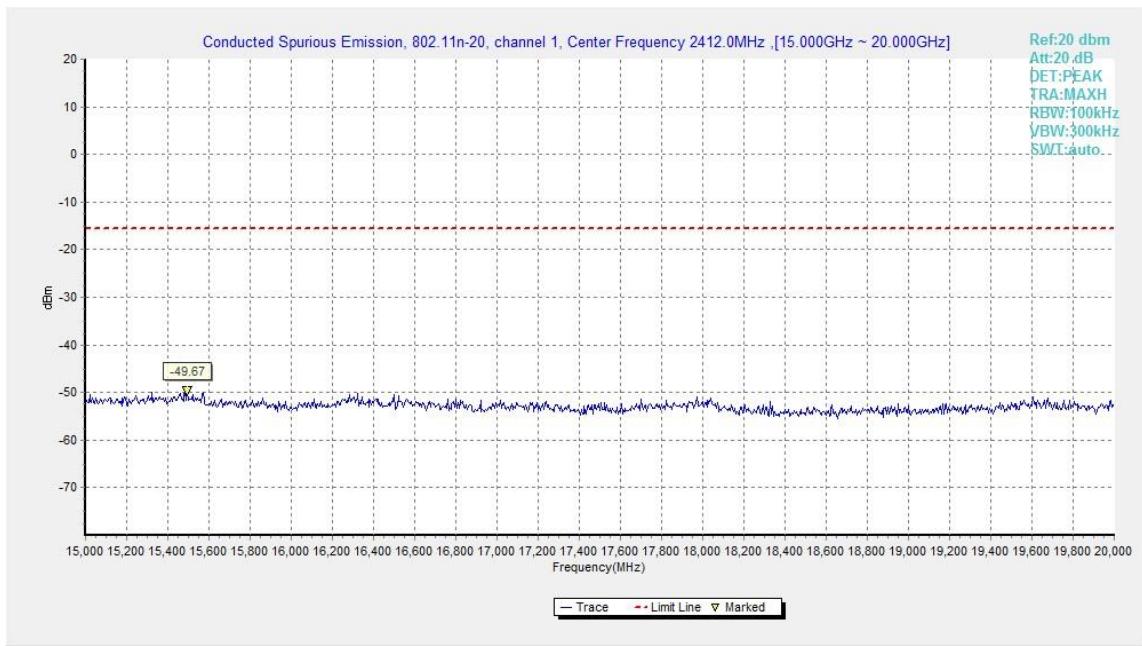


Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)

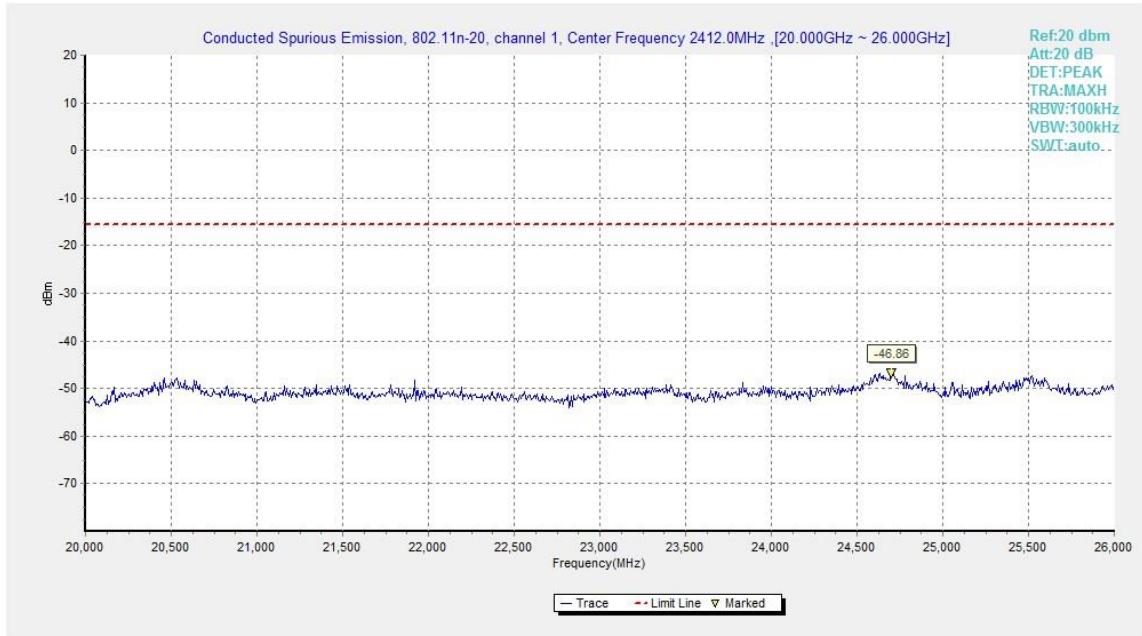


Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)

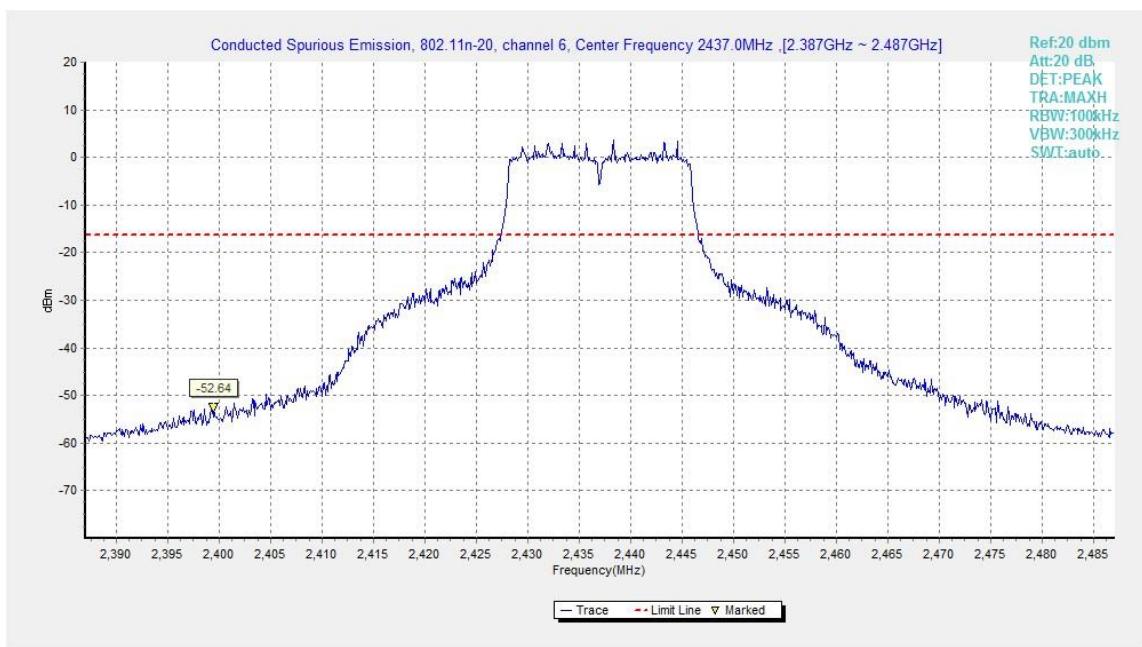


Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

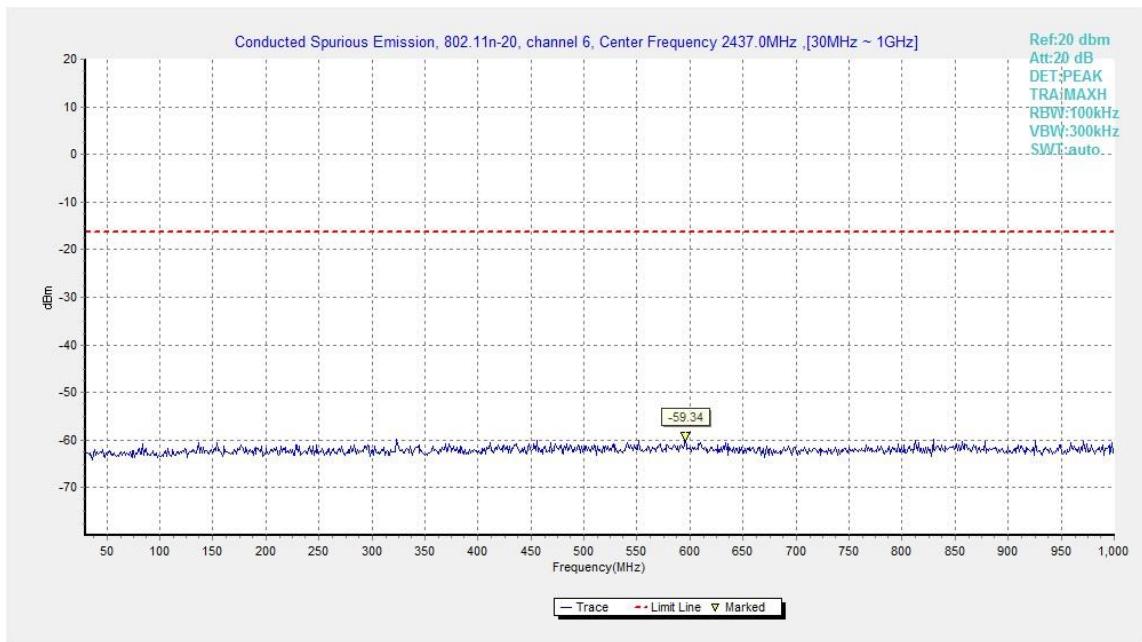


Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)

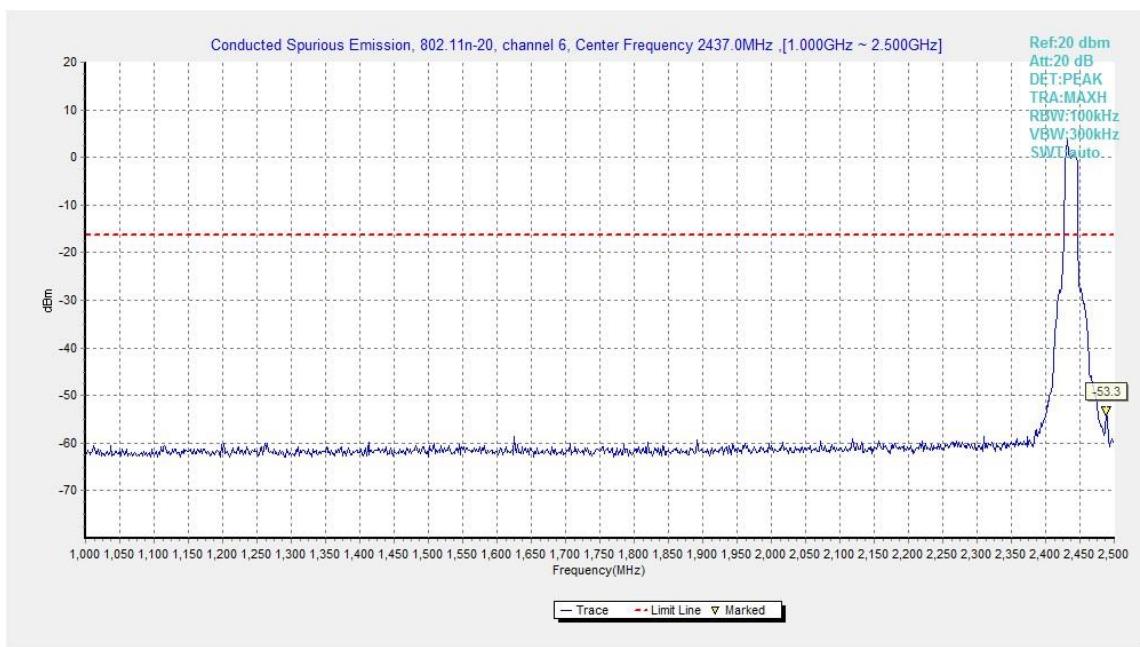


Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

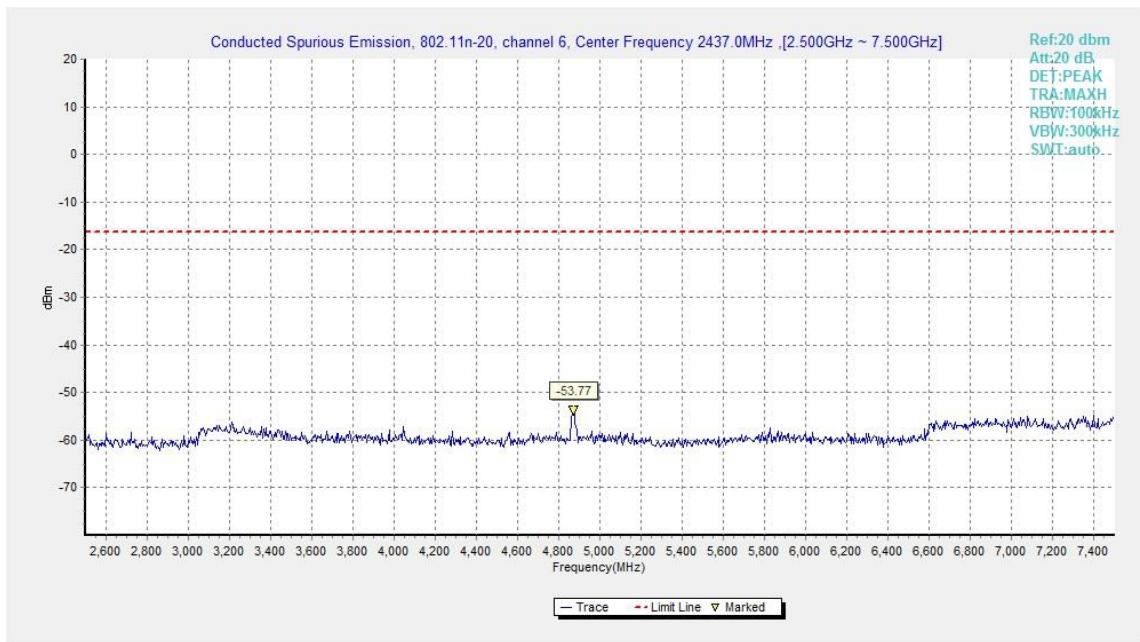


Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

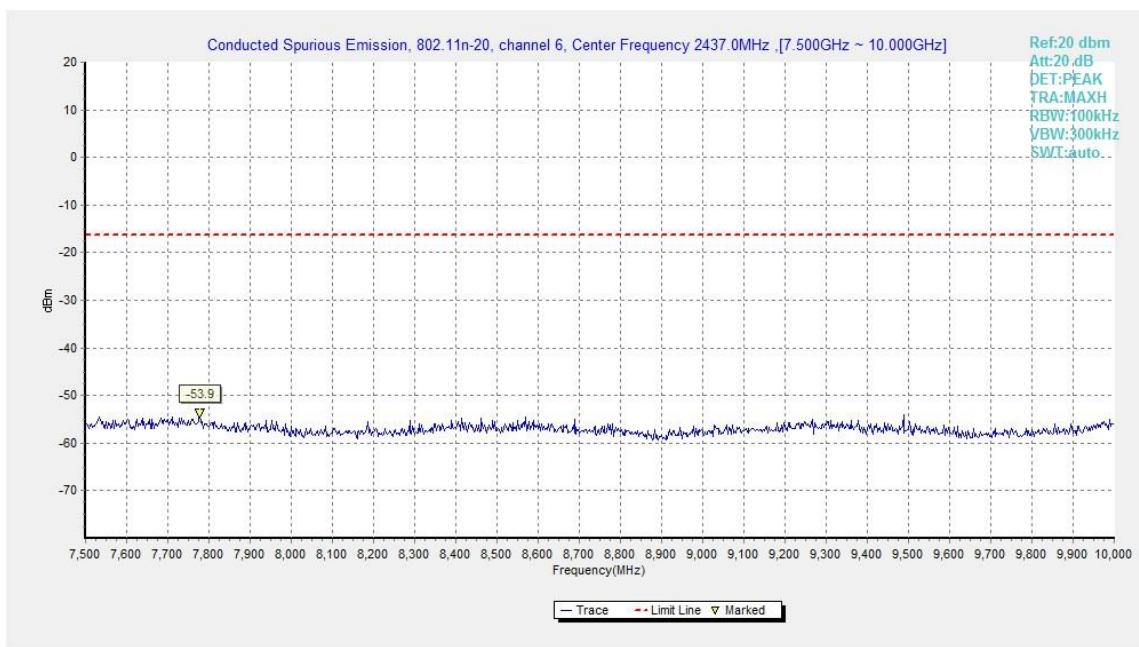


Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

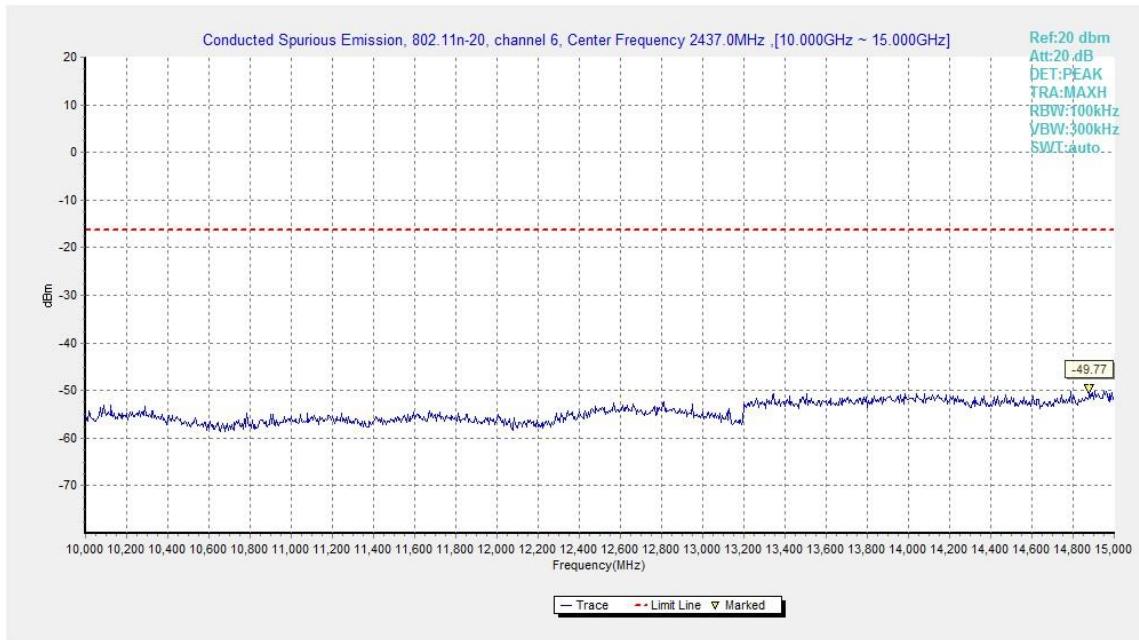


Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

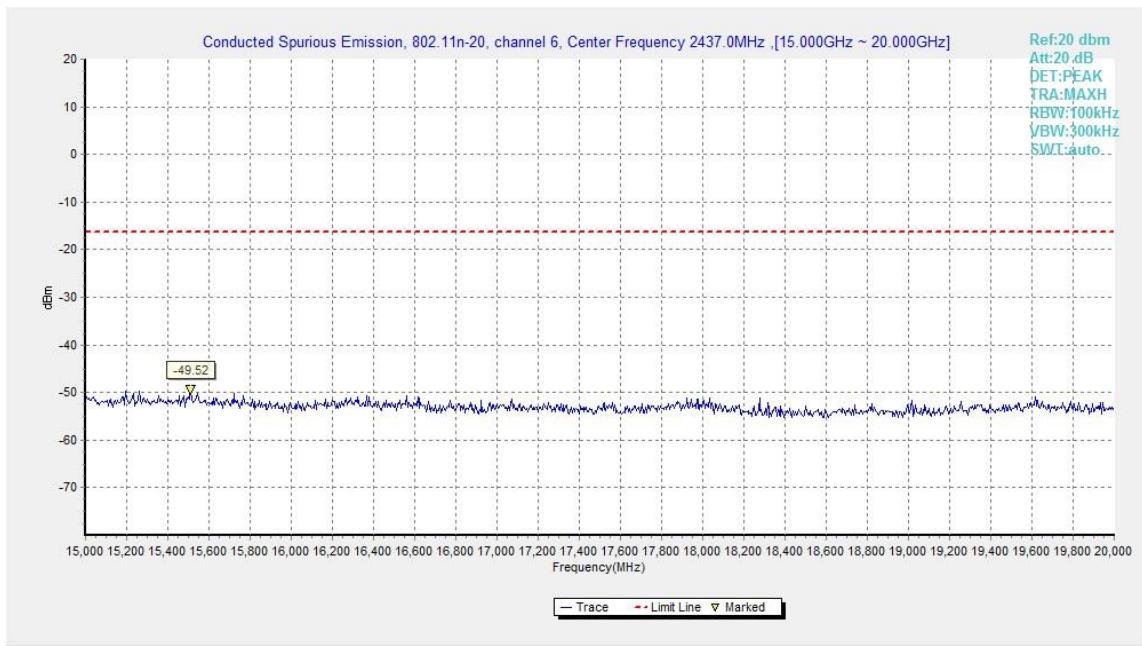


Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

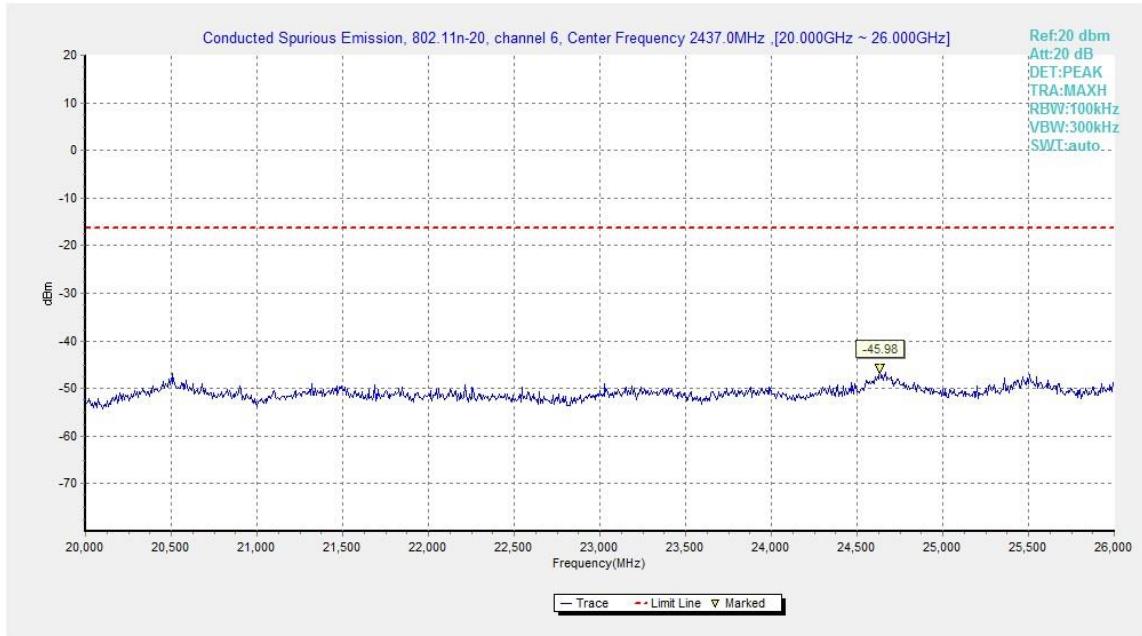


Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

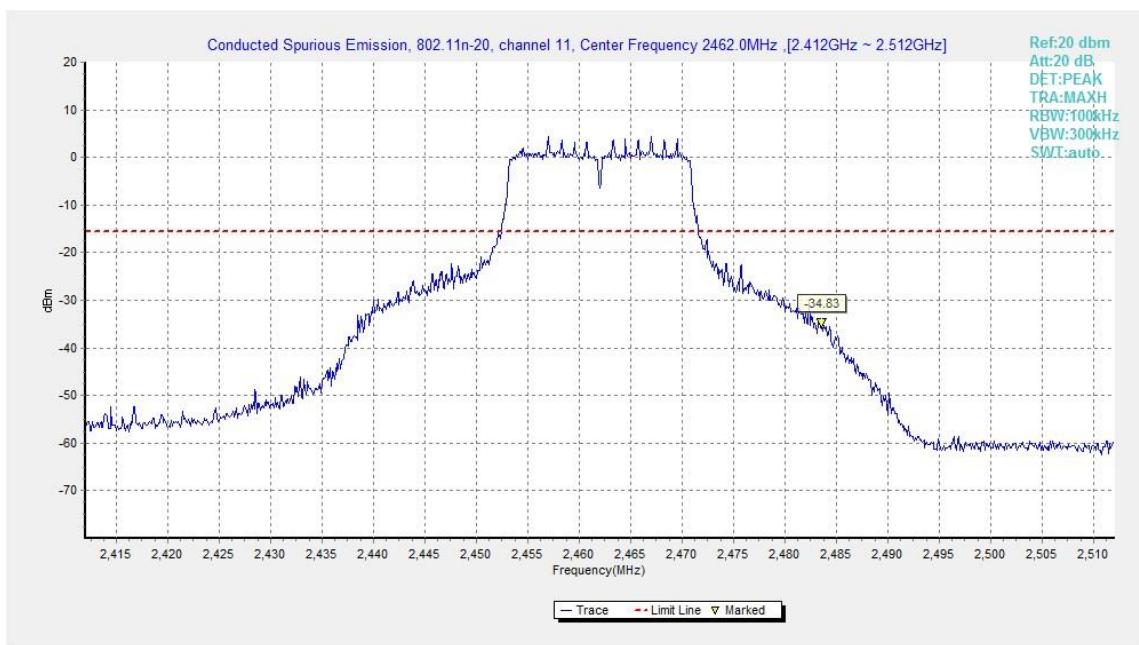


Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

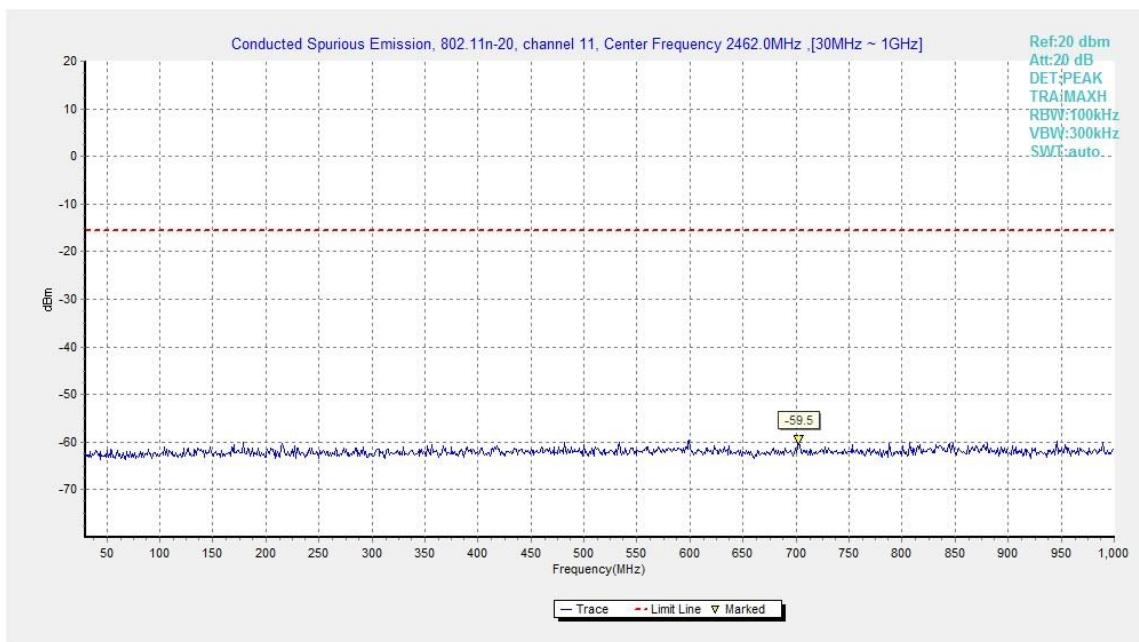


Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

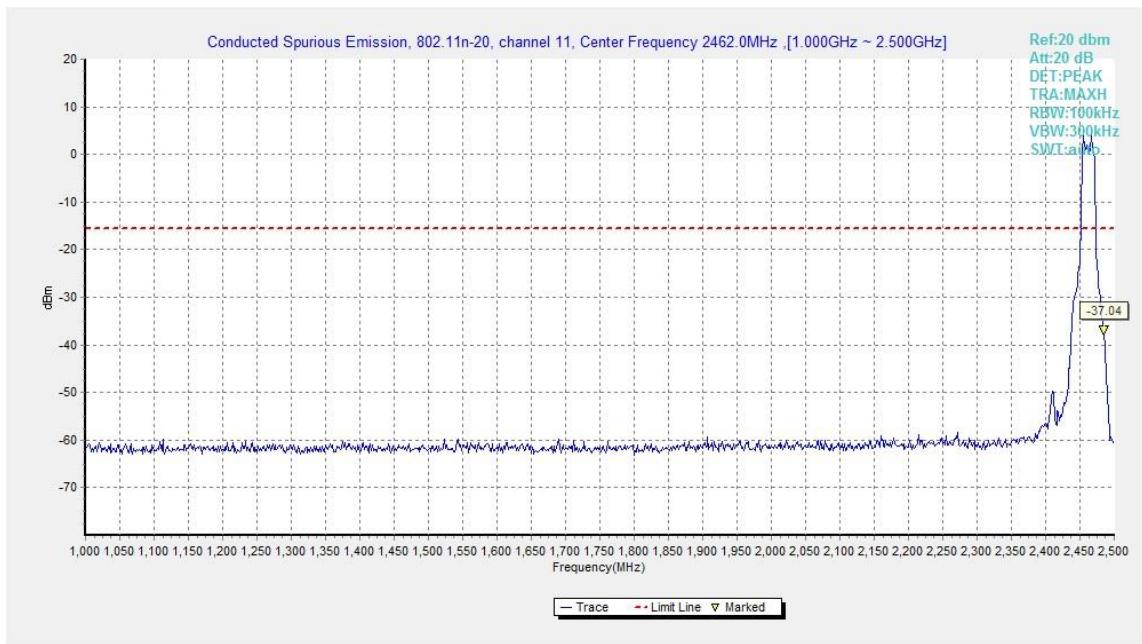


Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

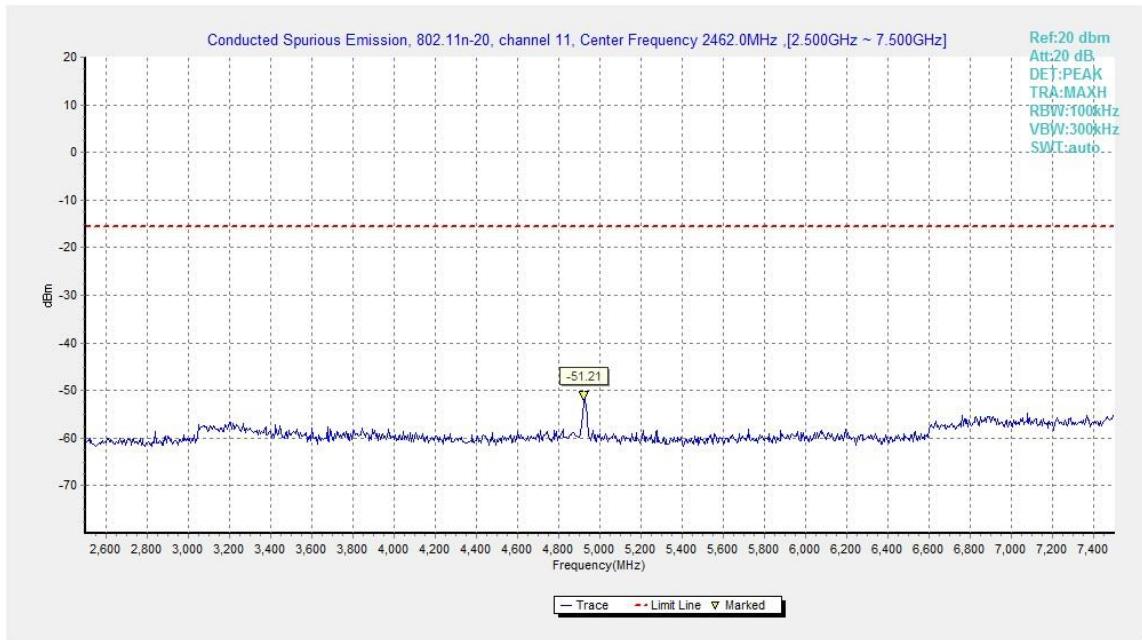


Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

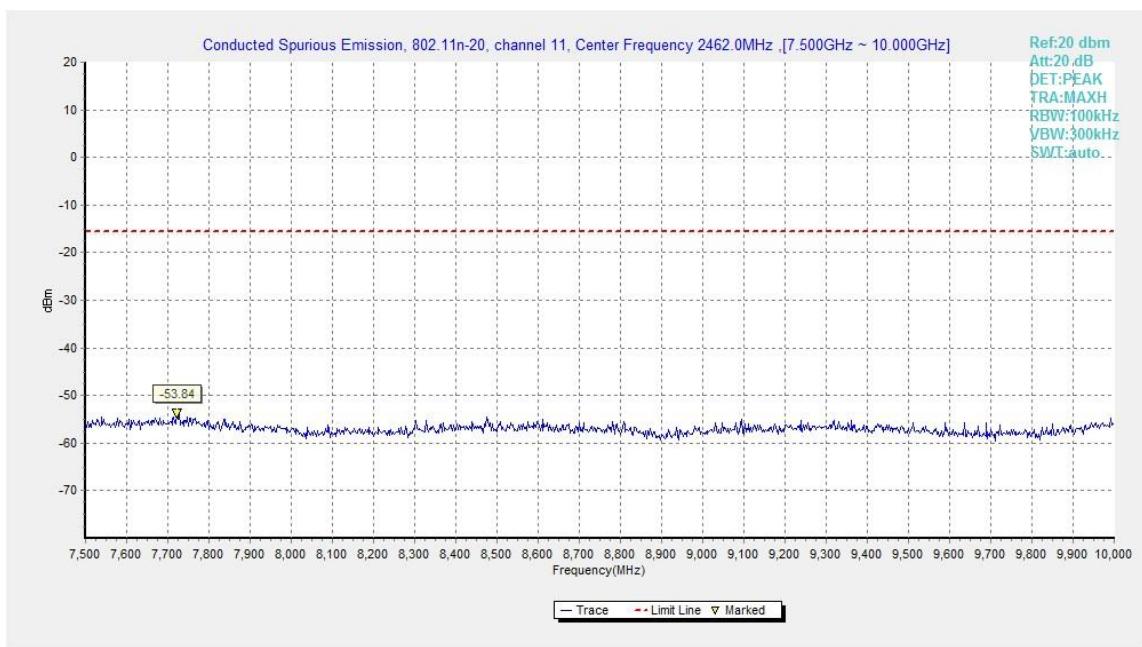


Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

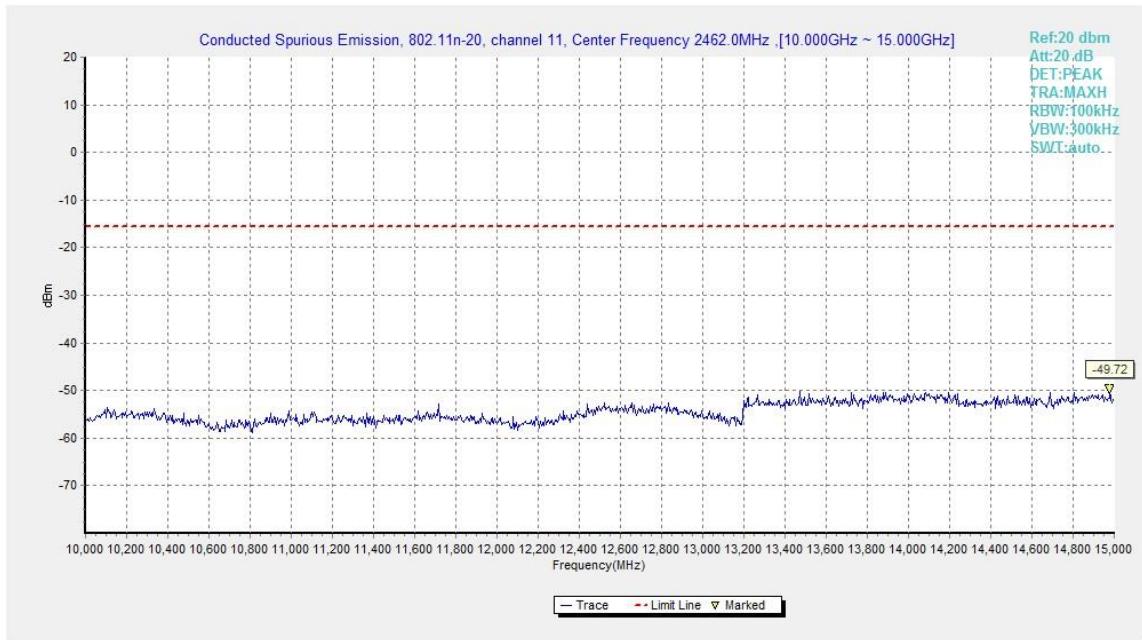


Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

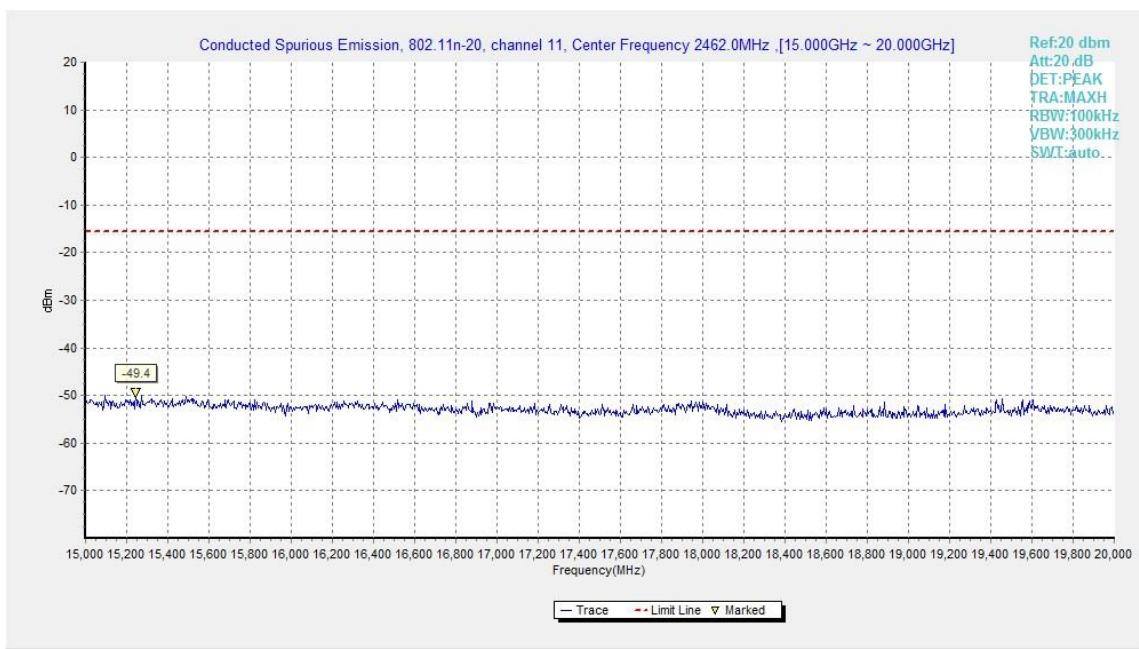


Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

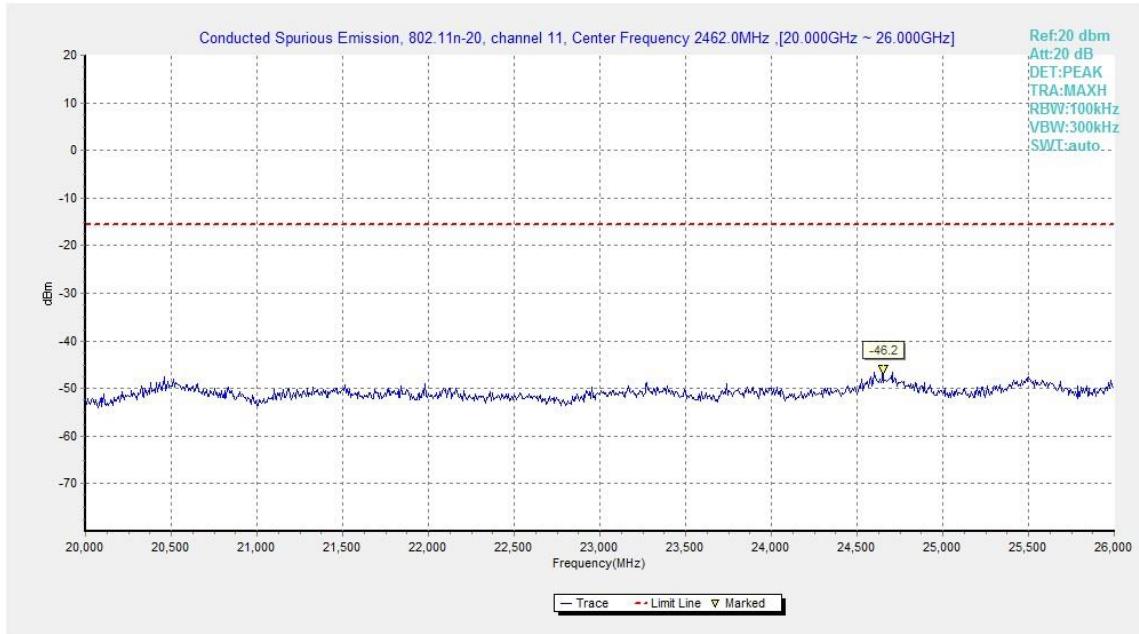


Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

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(μ 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: EUT1

Measurement Results:**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 μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2388.600	46.28	2.9	32.0	11.42	54.0	7.7	H	155	170
2389.600	46.38	2.9	32.0	11.53	54.0	7.6	H	155	150
4824.000	45.50	-32.8	34.5	43.76	54.0	8.5	H	155	20
7236.000	37.32	-31.7	36.1	32.96	54.0	16.7	H	155	180
9648.000	40.43	-30.4	37.0	33.75	54.0	13.6	H	155	202
12060.000	41.69	-29.6	39.3	32.01	54.0	12.3	H	155	8

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2411.300	46.93	2.9	31.8	12.24	54.0	7.1	H	155	16
2462.300	48.31	2.9	32.7	12.72	54.0	5.7	H	155	48
4873.500	43.42	-32.7	34.5	41.63	54.0	10.6	H	155	80
7311.000	38.27	-31.9	36.1	34.10	54.0	15.7	H	155	8
9748.500	39.30	-30.7	37.2	32.77	54.0	14.7	H	155	102
12184.500	43.76	-29.4	39.2	33.97	54.0	10.2	H	155	118

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.700	47.12	2.9	32.8	11.43	54.0	6.9	H	155	142
2484.100	47.04	2.9	32.7	11.36	54.0	7.0	H	155	168
4924.000	40.65	-33.1	34.5	39.23	54.0	13.4	H	155	90
7836.000	37.95	-31.2	36.0	33.10	54.0	16.0	H	155	102
9848.000	40.25	-30.1	37.3	33.00	54.0	13.7	H	155	118
12310.000	41.56	-29.7	39.2	32.09	54.0	12.4	H	155	94

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

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2386.916	60.30	2.9	32.0	25.43	74.0	13.7	H	155	176
2389.002	60.20	2.9	32.0	25.34	74.0	13.8	H	155	154
4824.000	49.41	-32.8	34.5	47.66	74.0	24.6	V	155	22
7236.000	43.54	-31.7	36.1	39.18	74.0	30.5	V	155	176
9648.000	45.82	-30.4	37.0	39.14	74.0	28.2	H	155	198
12060.000	46.41	-29.6	39.3	36.73	74.0	27.6	H	155	0

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2369.800	48.14	-27.0	32.0	43.14	74.0	25.9	H	155	22
2502.000	48.38	-26.3	32.3	42.36	74.0	25.6	H	155	44
4874.000	48.84	-32.7	34.5	47.04	74.0	25.2	V	155	88
7311.000	44.81	-31.9	36.1	40.64	74.0	29.2	V	155	0
9748.000	44.38	-30.7	37.2	37.85	74.0	29.6	H	155	110
12185.000	48.00	-29.4	39.2	38.20	74.0	26.0	H	155	132

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.970	60.37	2.9	32.7	24.68	74.0	13.6	H	155	132
2487.340	60.68	2.9	32.7	25.09	74.0	13.3	V	155	154
4924.000	46.54	-33.1	34.5	45.12	74.0	27.5	H	155	88
7386.000	44.44	-31.8	36.0	40.24	74.0	29.6	V	155	110
9848.000	46.07	-30.1	37.3	38.81	74.0	27.9	V	155	110
12310.000	45.68	-29.7	39.2	36.20	74.0	28.3	V	155	88

802.11g - Average

Ch1

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2389.400	47.50	2.9	32.0	12.65	54.0	6.5	H	155	46
2389.600	47.65	2.9	32.0	12.80	54.0	6.4	H	155	60
4821.000	34.94	-32.8	34.5	33.20	54.0	19.1	H	155	116
7236.000	37.29	-31.7	36.1	32.93	54.0	16.7	H	155	8
9648.000	40.51	-30.4	37.0	33.83	54.0	13.5	H	155	128
12060.000	41.65	-29.6	39.3	31.97	54.0	12.4	H	155	94

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2411.900	47.07	2.9	31.8	12.38	54.0	6.9	H	155	28
2470.000	46.94	2.9	32.9	11.15	54.0	7.1	H	155	248
4868.000	33.60	-32.7	34.5	31.80	54.0	20.4	H	155	38
7311.000	38.18	-31.9	36.1	34.01	54.0	15.8	H	155	98
9748.000	39.26	-30.7	37.2	32.73	54.0	14.7	H	155	183
12185.000	43.80	-29.4	39.2	34.01	54.0	10.2	H	155	356

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2492.500	46.46	2.9	32.5	11.01	54.0	7.5	H	155	28
2493.800	46.37	2.9	32.5	10.96	54.0	7.6	H	155	49
4925.000	34.08	-33.1	34.5	32.67	54.0	19.9	H	155	246
7386.000	38.71	-31.8	36.0	34.50	54.0	15.3	H	155	182
9848.000	40.16	-30.1	37.3	32.90	54.0	13.8	H	155	94
12310.000	41.58	-29.7	39.2	32.11	54.0	12.4	H	155	42

802.11g - Peak

Ch1

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2389.772	67.69	2.9	32.0	32.84	74.0	6.3	H	155	44
2389.982	66.09	2.9	32.0	31.24	74.0	7.9	H	155	66
4828.000	47.17	-32.7	34.5	45.40	74.0	26.8	V	155	110
7236.000	42.56	-31.7	36.1	38.20	74.0	31.4	V	155	0
9648.000	44.44	-30.4	37.0	37.76	74.0	29.6	H	155	132
12060.000	45.97	-29.6	39.3	36.29	74.0	28.0	H	155	88

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2375.400	47.93	-26.6	32.1	42.45	74.0	26.1	H	155	22
2504.800	47.99	-26.4	32.4	41.98	74.0	26.0	H	155	242
4867.000	43.02	-32.7	34.5	41.22	74.0	31.0	V	155	44
7311.000	44.05	-31.9	36.1	39.88	74.0	30.0	H	155	88
9748.000	43.78	-30.7	37.2	37.25	74.0	30.2	V	155	176
12185.000	47.99	-29.4	39.2	38.19	74.0	26.0	H	155	0

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.710	69.32	2.9	32.8	33.63	74.0	4.7	H	155	22
2483.910	67.94	2.9	32.7	32.26	74.0	6.1	H	155	44
4924.500	42.22	-33.1	34.5	40.80	74.0	31.8	V	155	242
7386.000	44.48	-31.8	36.0	40.28	74.0	29.5	H	155	176
9848.000	45.45	-30.1	37.3	38.20	74.0	28.5	V	155	88
12310.000	44.79	-29.7	39.2	35.32	74.0	29.2	V	155	22



802.11n-HT20-Average

Ch1

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2388.300	47.01	2.9	32.0	12.15	54.0	7.0	H	155	132
2389.100	47.36	2.9	32.0	12.51	54.0	6.6	H	155	28
4824.000	34.37	-32.8	34.5	32.62	54.0	19.6	H	155	38
7236.000	37.26	-31.7	36.1	32.90	54.0	16.7	H	155	65
9648.000	40.54	-30.4	37.0	33.86	54.0	13.5	H	155	4
12060.000	41.64	-29.6	39.3	31.97	54.0	12.4	H	155	24

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2408.300	46.66	2.9	31.8	11.95	54.0	7.3	H	155	4
2469.400	46.86	2.9	32.9	11.08	54.0	7.1	H	155	2
4870.000	33.52	-32.7	34.5	31.73	54.0	20.5	H	155	25
7311.000	38.12	-31.9	36.1	33.95	54.0	15.9	H	155	350
9748.000	39.33	-30.7	37.2	32.80	54.0	14.7	H	155	92
12185.000	43.72	-29.4	39.2	33.92	54.0	10.3	H	155	85

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.500	48.67	2.9	32.8	12.98	54.0	5.3	H	155	268
2484.100	48.39	2.9	32.7	12.71	54.0	5.6	H	155	138
4924.000	33.76	-33.1	34.5	32.34	54.0	20.2	H	155	104
7386.000	38.70	-31.8	36.0	34.50	54.0	15.3	H	155	40
9848.000	40.25	-30.1	37.3	33.00	54.0	13.7	H	155	28
12310.000	41.57	-29.7	39.2	32.10	54.0	12.4	H	155	8

**802.11n-HT20-Peak**

Ch1

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2389.380	68.60	2.9	32.0	33.75	74.0	5.4	H	155	110
2389.464	69.50	2.9	32.0	34.65	74.0	4.5	H	155	22
4823.500	44.99	-32.8	34.5	43.24	74.0	29.0	V	155	44
7236.000	43.79	-31.7	36.1	39.43	74.0	30.2	V	155	66
9648.000	45.64	-30.4	37.0	38.95	74.0	28.4	V	155	0
12060.000	45.74	-29.6	39.3	36.07	74.0	28.3	H	155	22

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2363.800	47.67	-27.4	31.9	43.13	74.0	26.3	H	155	0
2513.800	47.71	-26.6	32.5	41.76	74.0	26.3	H	155	0
4871.000	43.22	-32.7	34.5	41.43	74.0	30.8	V	155	22
7311.000	42.96	-31.9	36.1	38.80	74.0	31.0	V	155	352
9748.000	43.15	-30.7	37.2	36.62	74.0	30.9	V	155	88
12185.000	47.05	-29.4	39.2	37.26	74.0	26.9	V	155	88

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)	Antenna Height (cm)	Turntable angle (deg)
2483.630	67.04	2.9	32.8	31.35	74.0	7.0	H	155	264
2483.850	66.64	2.9	32.8	30.95	74.0	7.4	H	155	132
4923.500	42.39	-33.1	34.5	40.97	74.0	31.6	H	155	110
7386.000	44.63	-31.8	36.0	40.43	74.0	29.4	H	155	44
9848.000	45.55	-30.1	37.3	38.30	74.0	28.4	H	155	22
12310.000	44.52	-29.7	39.2	35.05	74.0	29.5	V	155	0

Test graphs as below:

RE - Power-2.38GHz-2.45GHz

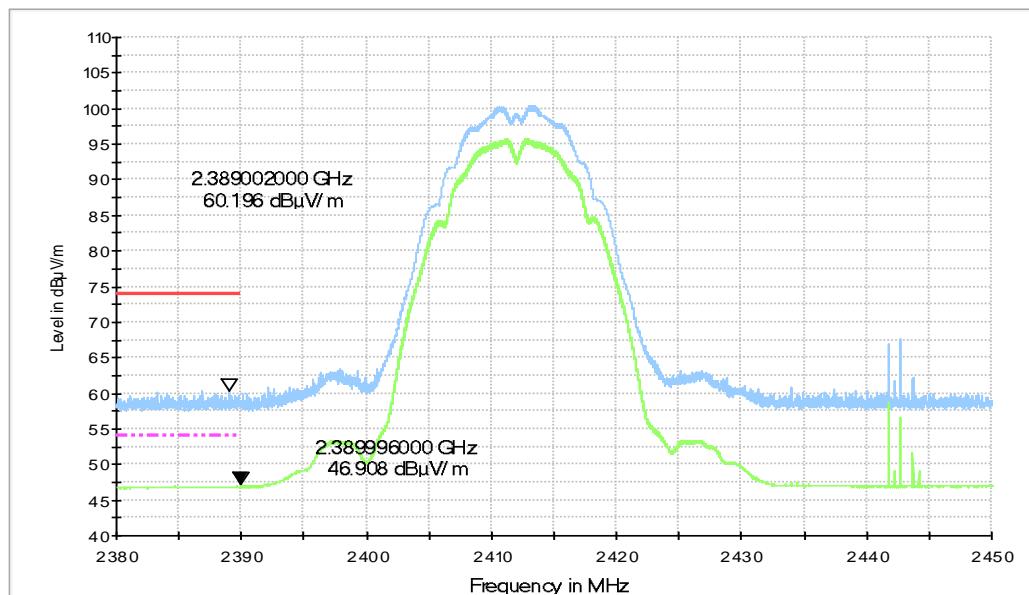


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz

RE - Power-2.45GHz-2.5GHz

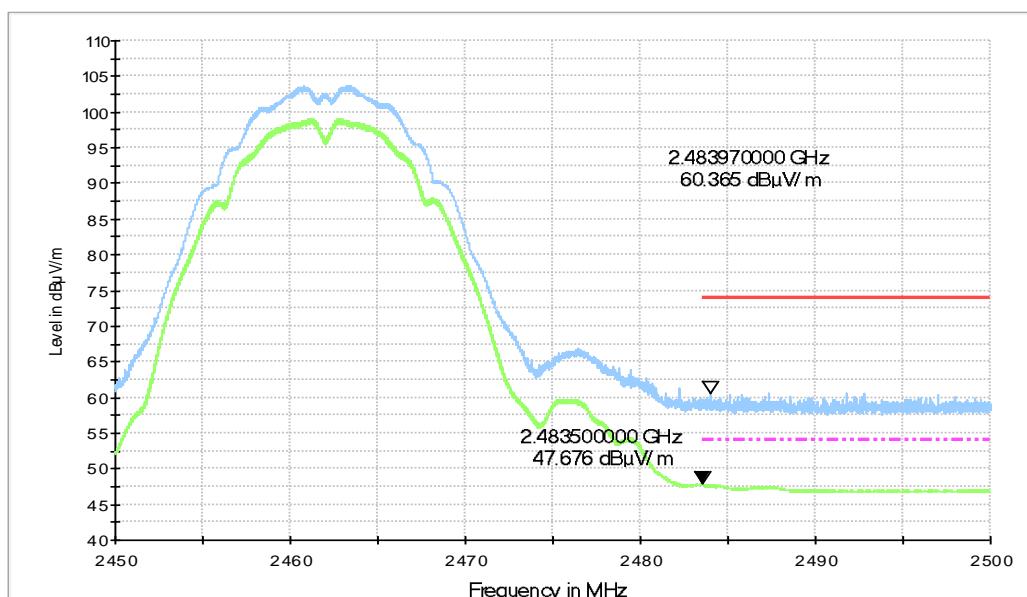


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

RE - Power-2.38GHz-2.45GHz

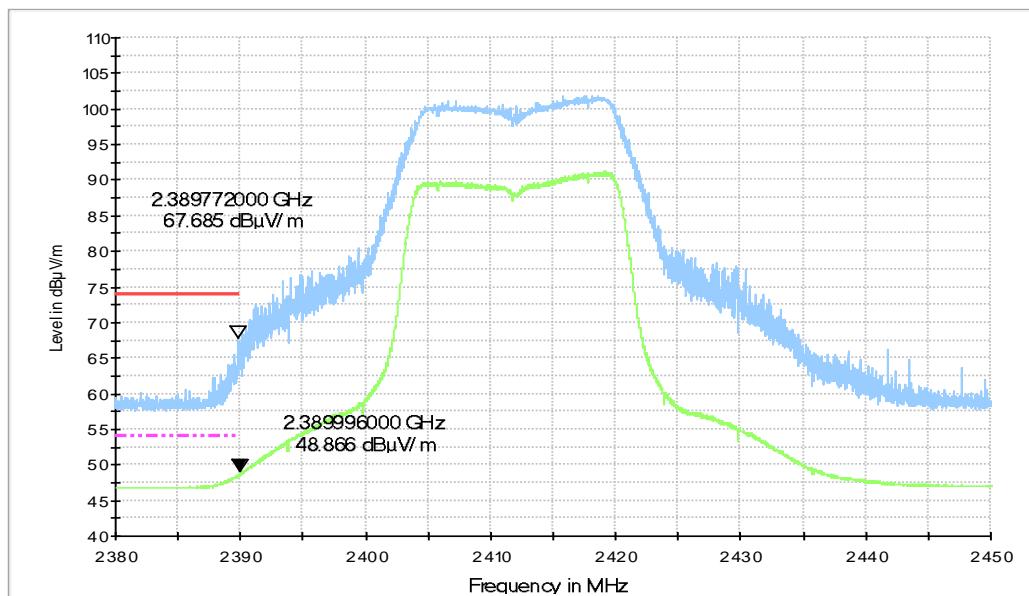


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz

RE - Power-2.45GHz-2.5GHz

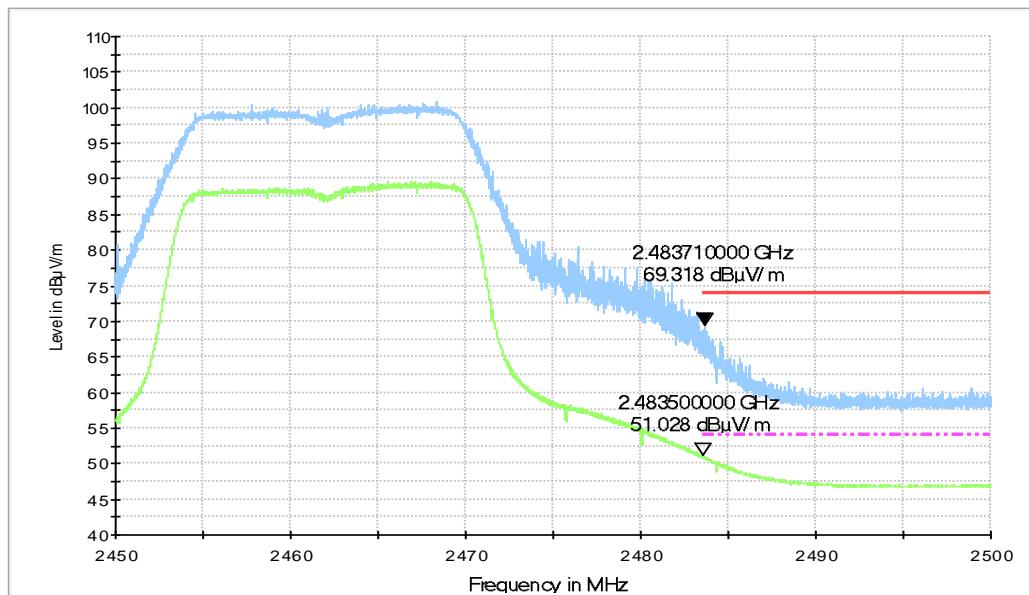


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

RE - Power-2.38GHz-2.45GHz

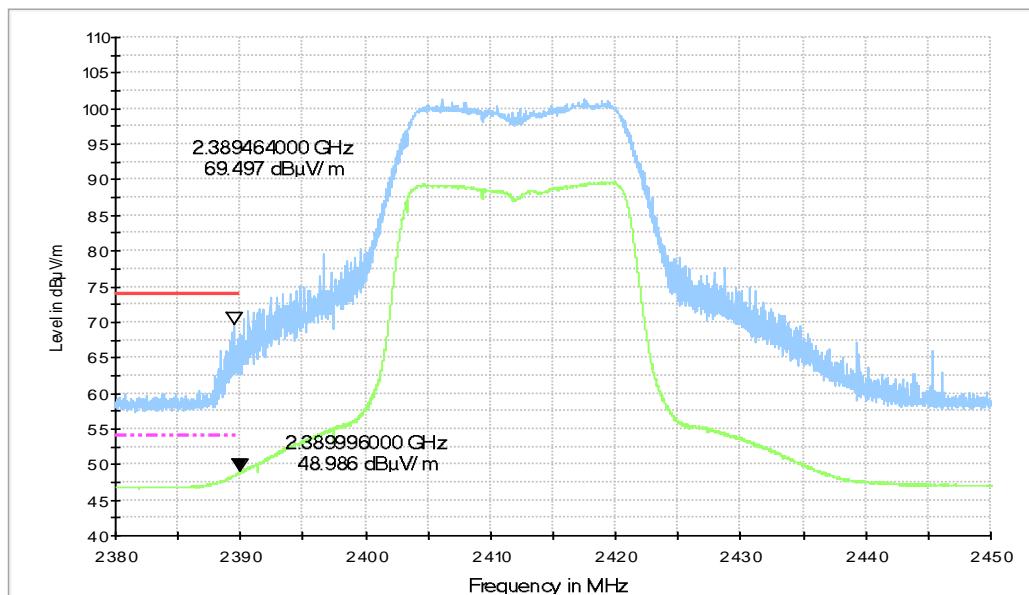


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

RE - Power-2.45GHz-2.5GHz

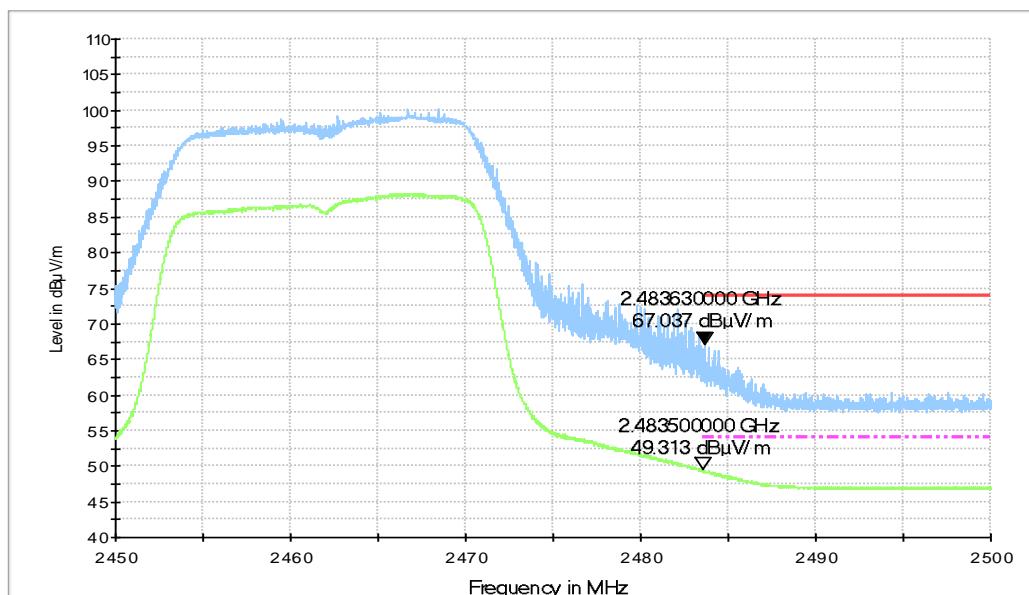


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

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.³⁶ 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 μ V)	Result (dB μ 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				

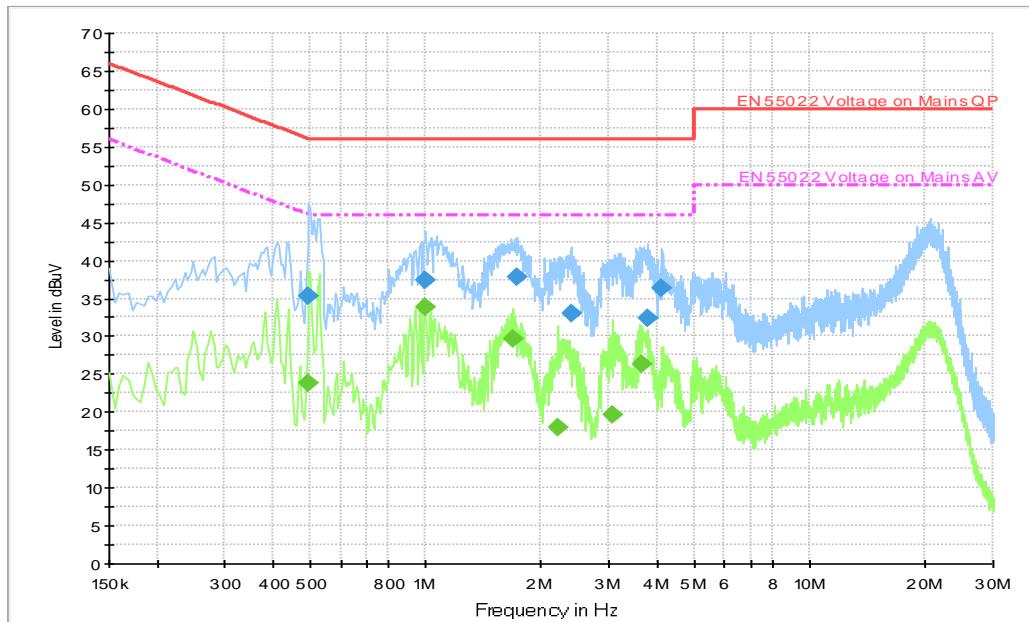
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ 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 (With AE3):

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

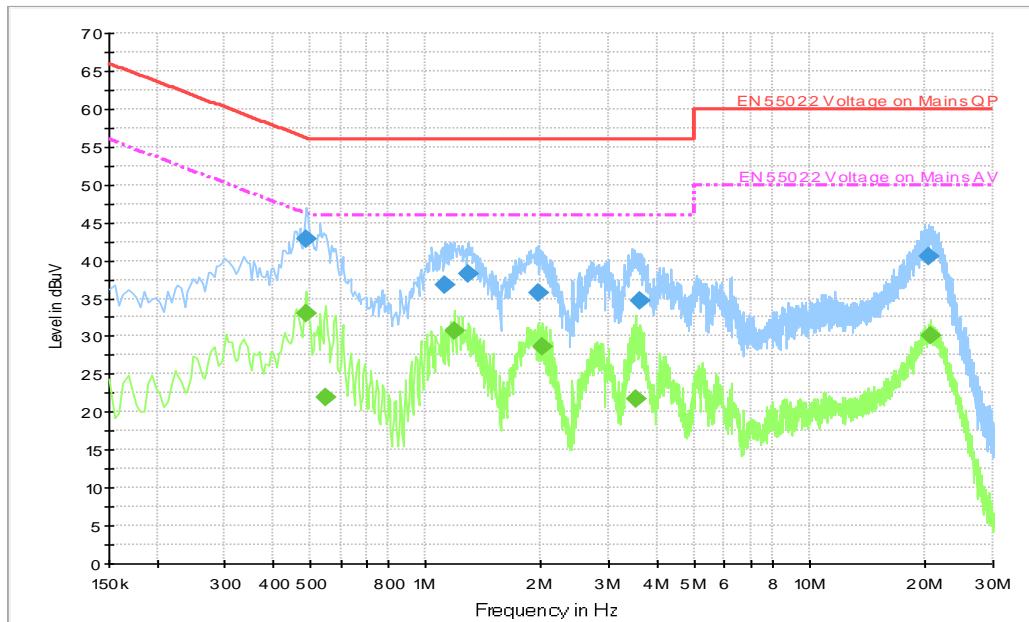
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.496500	35.4	10000	9.000	GND	L1	10.3	20.6	56.1
1.000500	37.4	10000	9.000	GND	L1	10.3	18.6	56.0
1.738500	37.9	10000	9.000	GND	L1	10.4	18.1	56.0
2.386500	32.9	10000	9.000	GND	L1	10.4	23.1	56.0
3.790500	32.5	10000	9.000	GND	L1	10.5	23.5	56.0
4.128000	36.3	10000	9.000	GND	L1	10.5	19.7	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.496500	23.8	10000.	9.000	GND	L1	10.3	22.3	46.1
0.996000	33.9	10000.	9.000	GND	L1	10.3	12.1	46.0
1.689000	29.7	10000.	9.000	GND	L1	10.4	16.3	46.0
2.215500	18.1	10000.	9.000	GND	L1	10.4	27.9	46.0
3.075000	19.6	10000.	9.000	GND	L1	10.5	26.4	46.0
3.637500	26.3	10000.	9.000	GND	L1	10.5	19.7	46.0

Idle (With AE3):

Fig.A.7.2 AC Powerline Conducted Emission-Idle

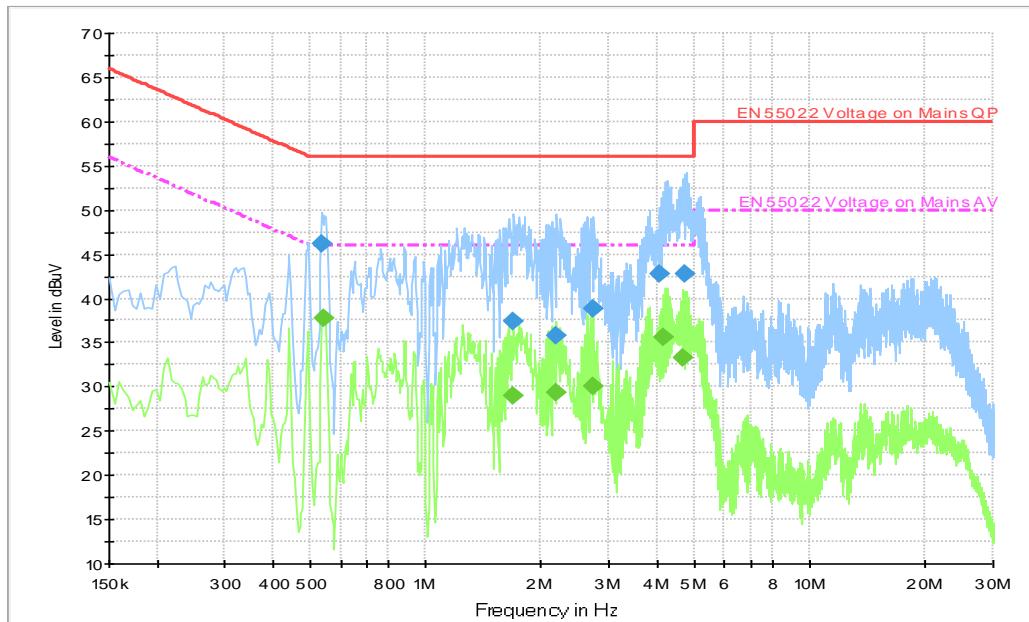
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.487500	42.8	10000	9.000	GND	L1	10.3	13.4	56.2
1.126500	36.7	10000	9.000	GND	L1	10.4	19.3	56.0
1.284000	38.3	10000	9.000	GND	L1	10.4	17.7	56.0
1.963500	35.8	10000	9.000	GND	L1	10.4	20.2	56.0
3.628500	34.7	10000	9.000	GND	L1	10.5	21.3	56.0
20.368500	40.5	10000	9.000	GND	L1	11.4	19.5	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.487500	33.0	10000.	9.000	GND	L1	10.3	13.2	46.2
0.550500	21.9	10000.	9.000	GND	L1	10.3	24.1	46.0
1.189500	30.7	10000.	9.000	GND	L1	10.4	15.3	46.0
2.017500	28.7	10000.	9.000	GND	L1	10.4	17.3	46.0
3.543000	21.8	10000.	9.000	GND	L1	10.4	24.2	46.0
20.665500	30.1	10000.	9.000	GND	L1	11.4	19.9	50.0

Traffic (With AE4):

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 (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.537000	46.2	10000	9.000	GND	L1	10.3	9.8	56.0
1.698000	37.4	10000	9.000	GND	L1	10.4	18.6	56.0
2.193000	35.7	10000	9.000	GND	L1	10.4	20.3	56.0
2.737500	38.9	10000	9.000	GND	L1	10.5	17.1	56.0
4.056000	42.7	10000	9.000	GND	L1	10.5	13.3	56.0
4.717500	42.8	10000	9.000	GND	L1	10.5	13.2	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.541500	37.7	10000.	9.000	GND	L1	10.3	8.3	46.0
1.693500	29.0	10000.	9.000	GND	L1	10.4	17.0	46.0
2.188500	29.4	10000.	9.000	GND	L1	10.4	16.6	46.0
2.737500	30.0	10000.	9.000	GND	L1	10.5	16.0	46.0
4.168500	35.5	10000.	9.000	GND	L1	10.5	10.5	46.0
4.663500	33.2	10000.	9.000	GND	L1	10.5	12.8	46.0



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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