

Fig.B.6.1.27 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 1 GHz-2.5 GHz)

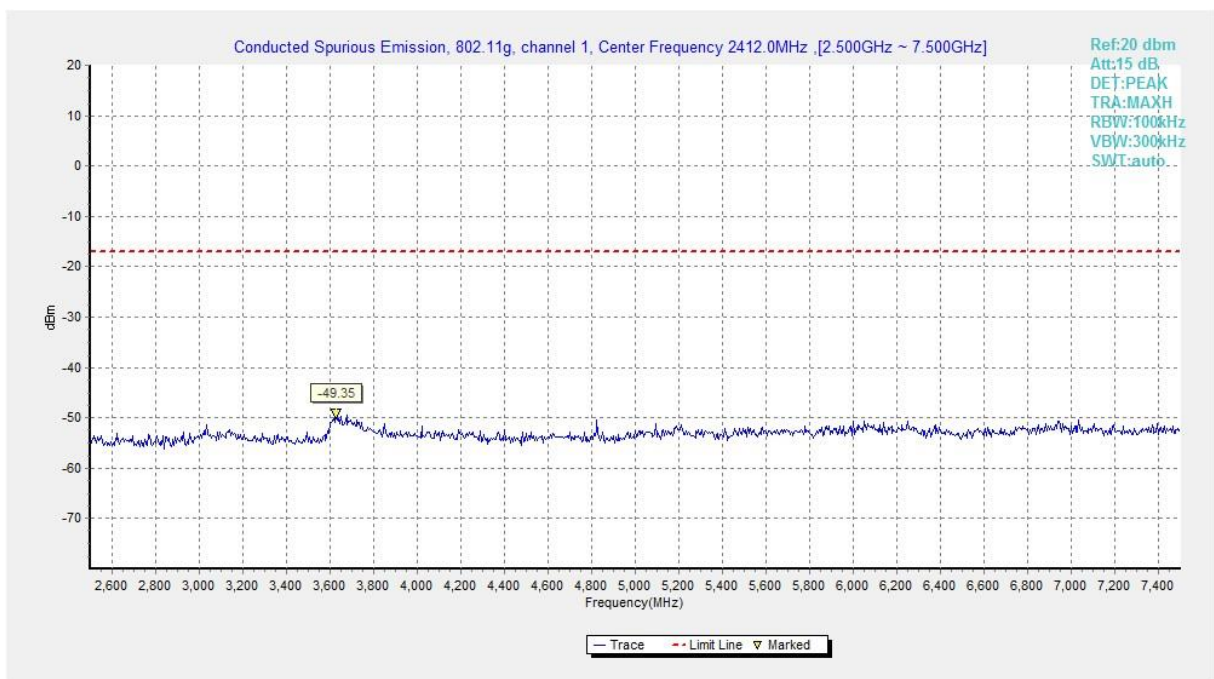


Fig.B.6.1.28 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 2.5 GHz-7.5 GHz)

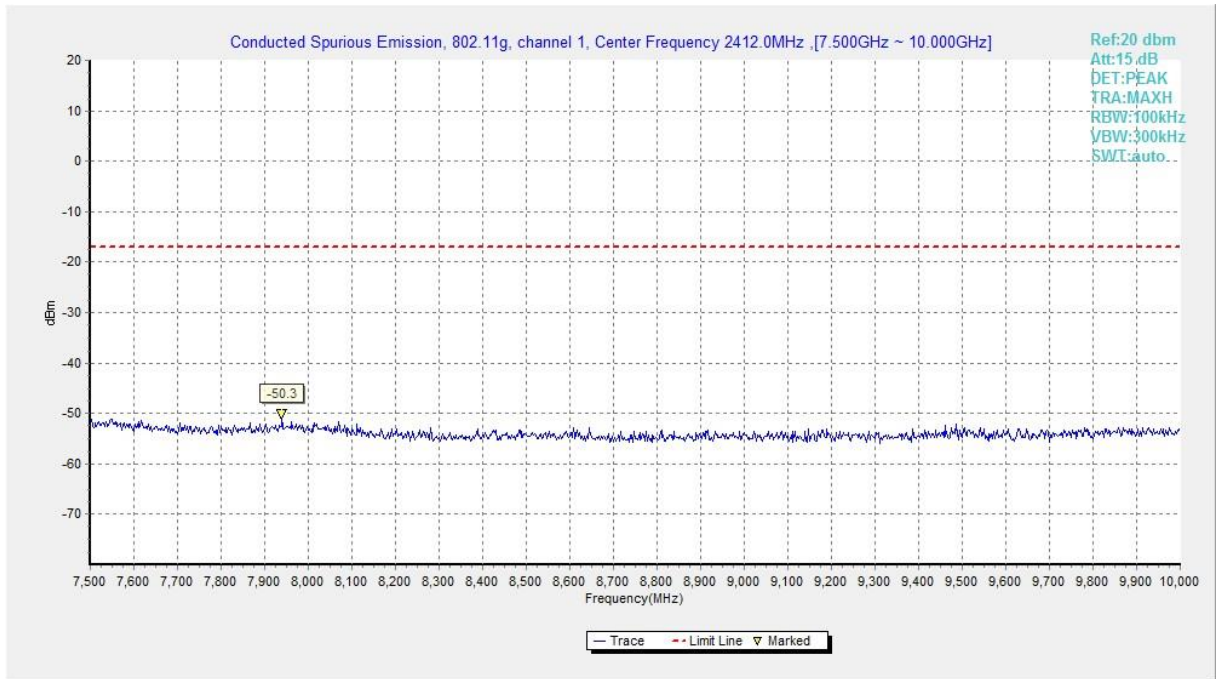


Fig.B.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)

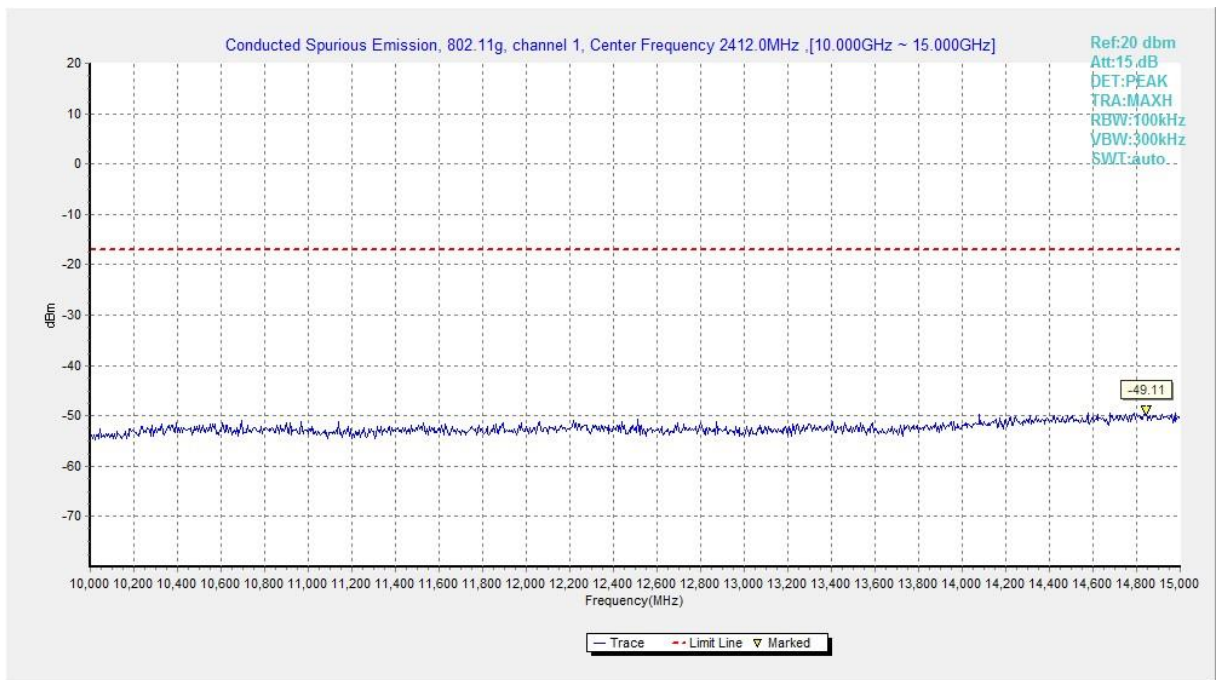


Fig.B.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)

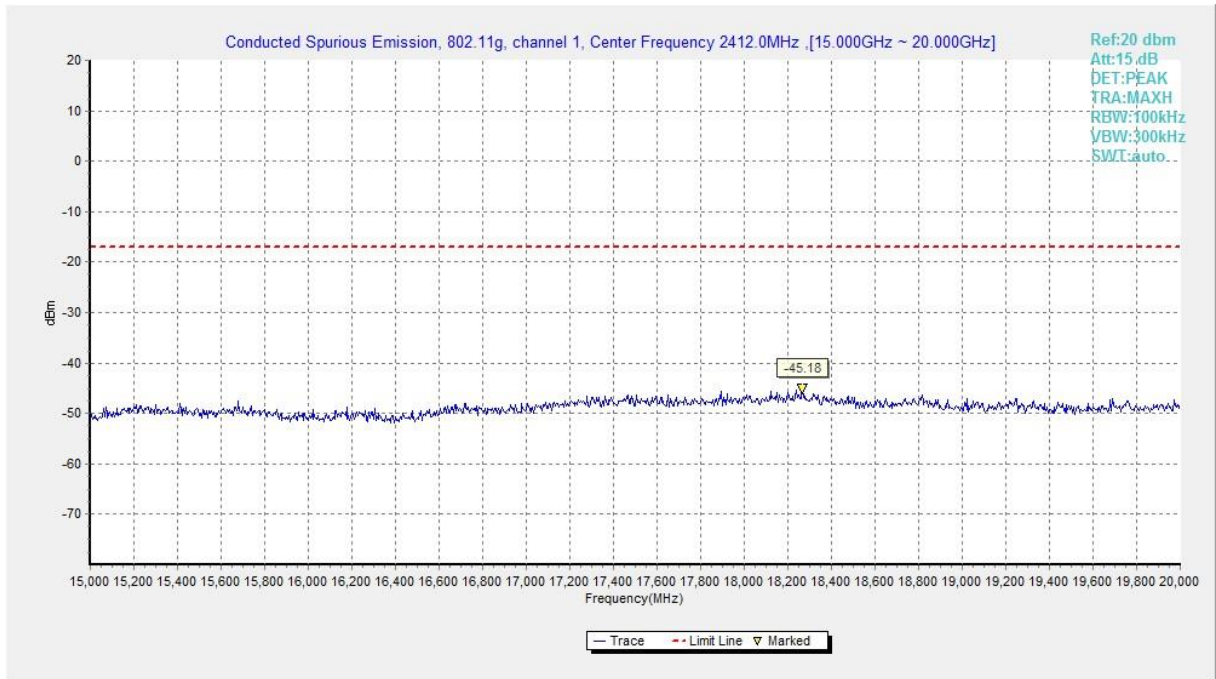


Fig.B.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)

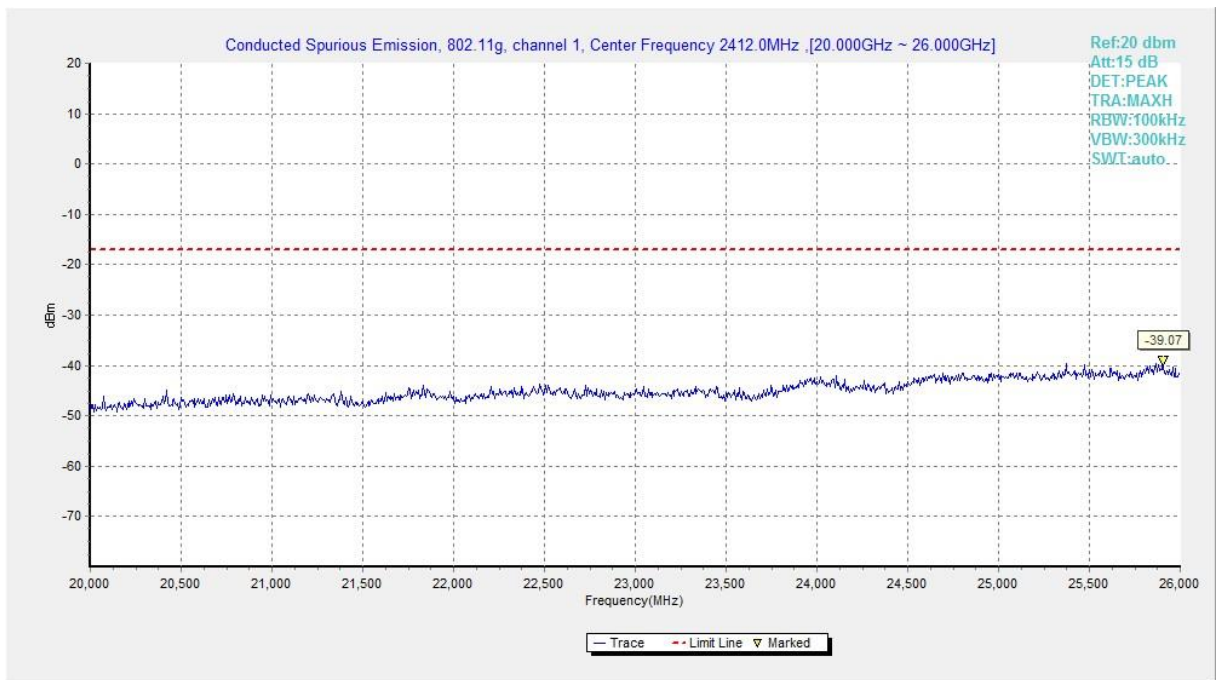


Fig.B.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)

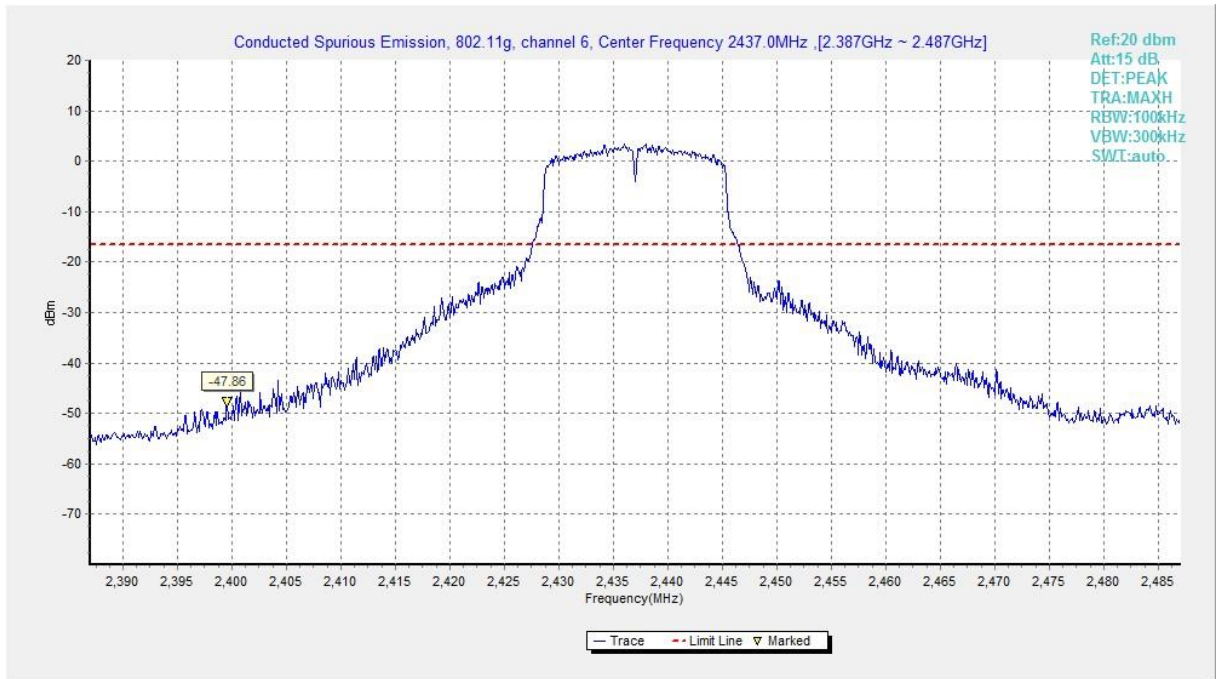


Fig.B.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

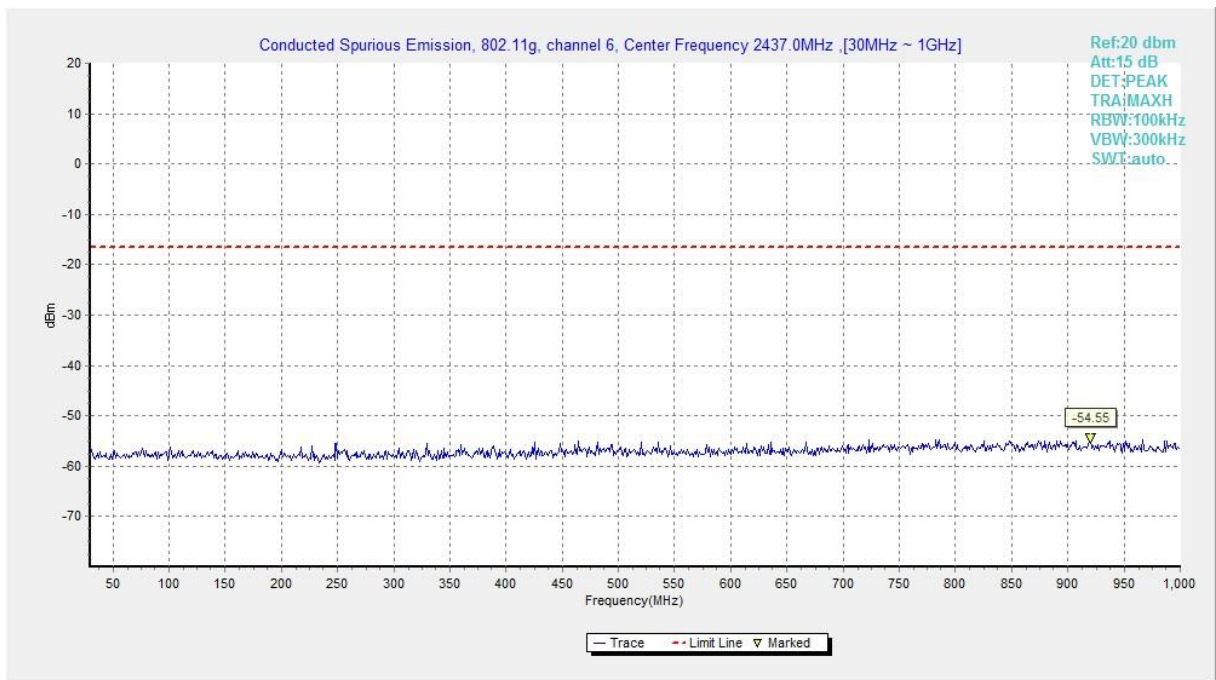


Fig.B.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)

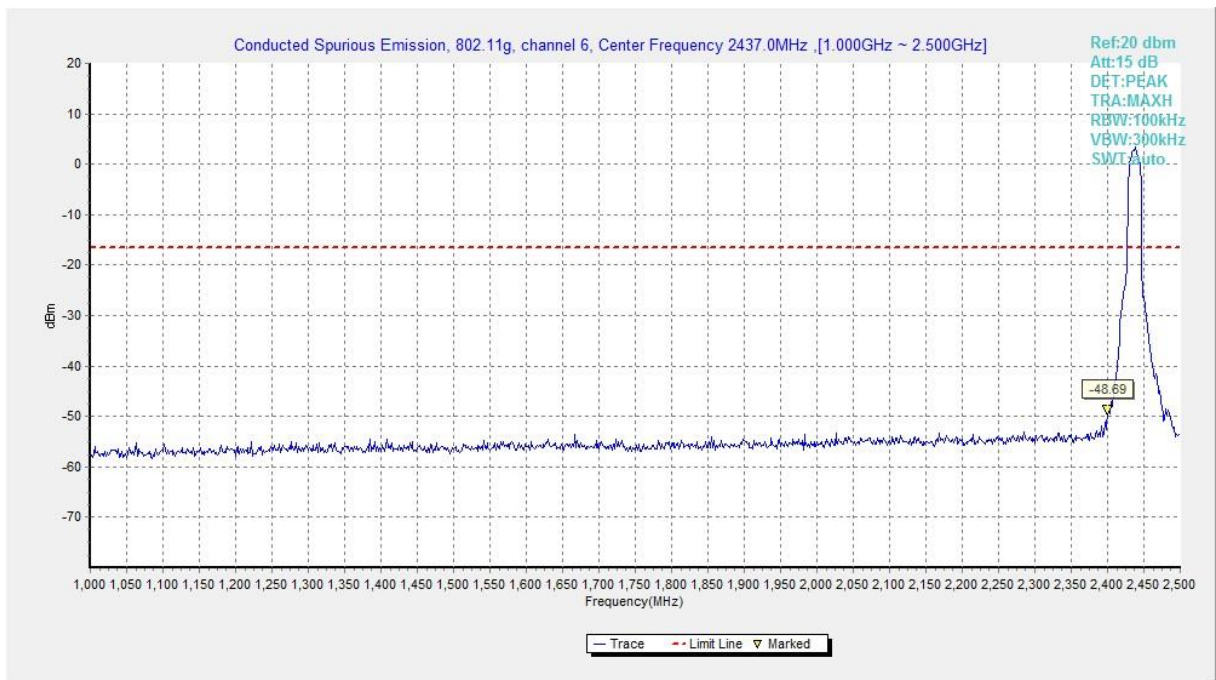


Fig.B.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)

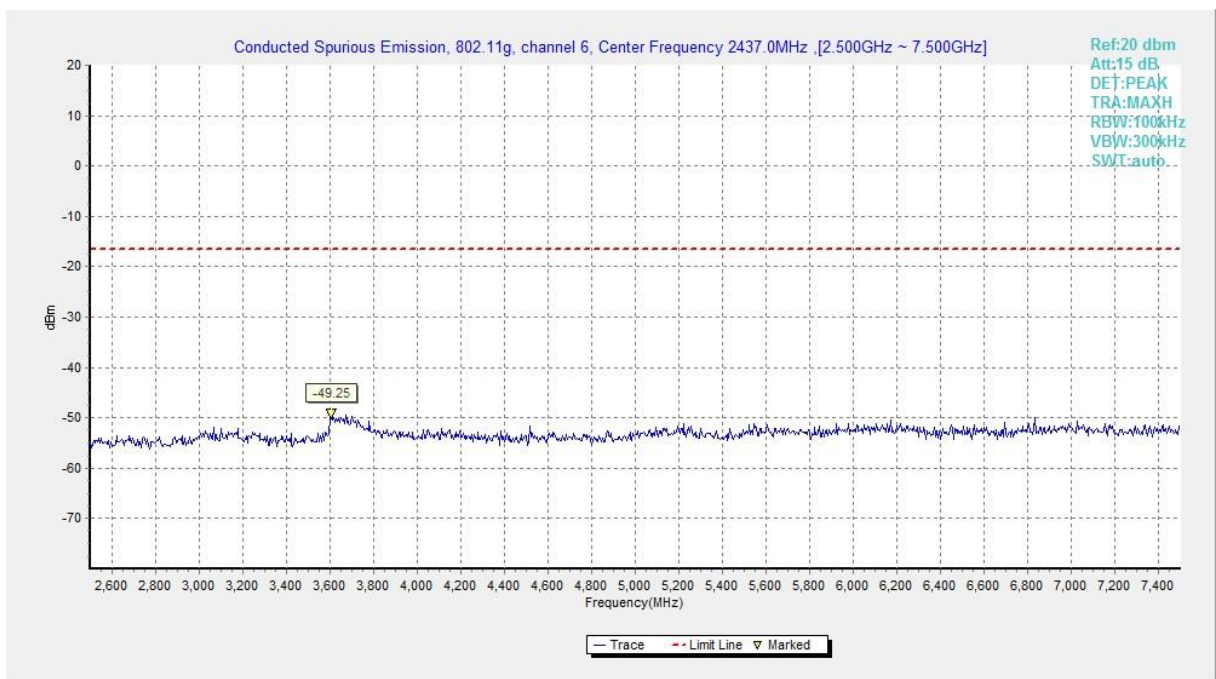


Fig.B.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)

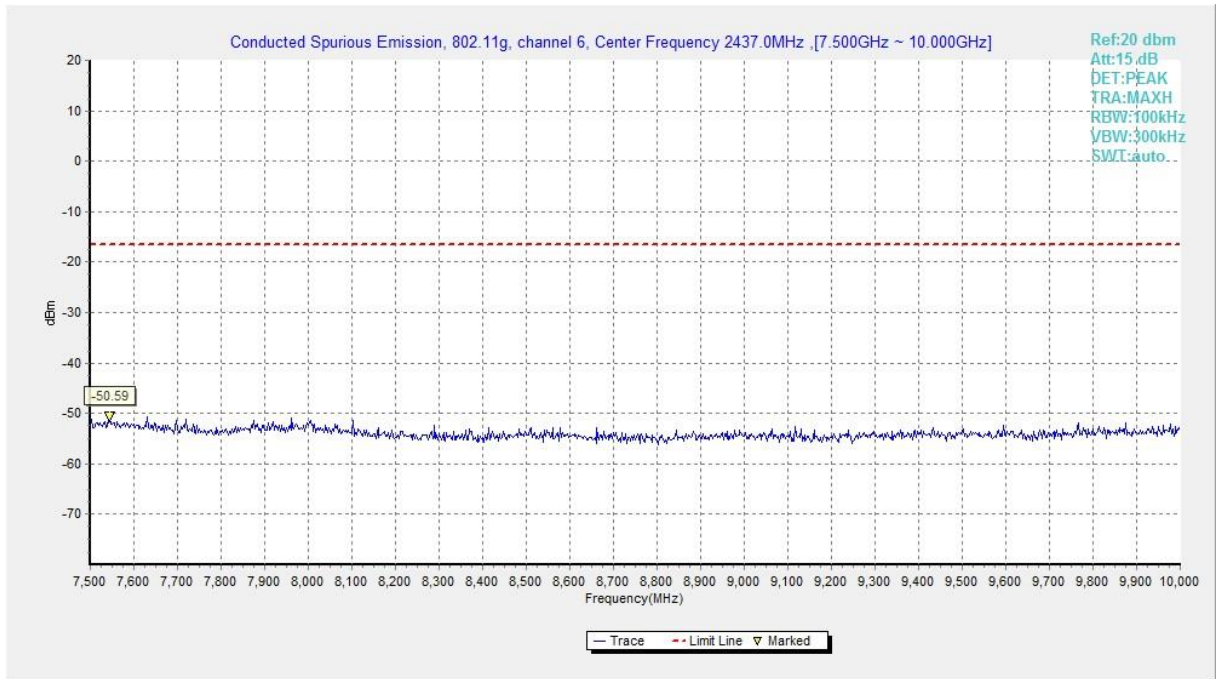


Fig.B.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)

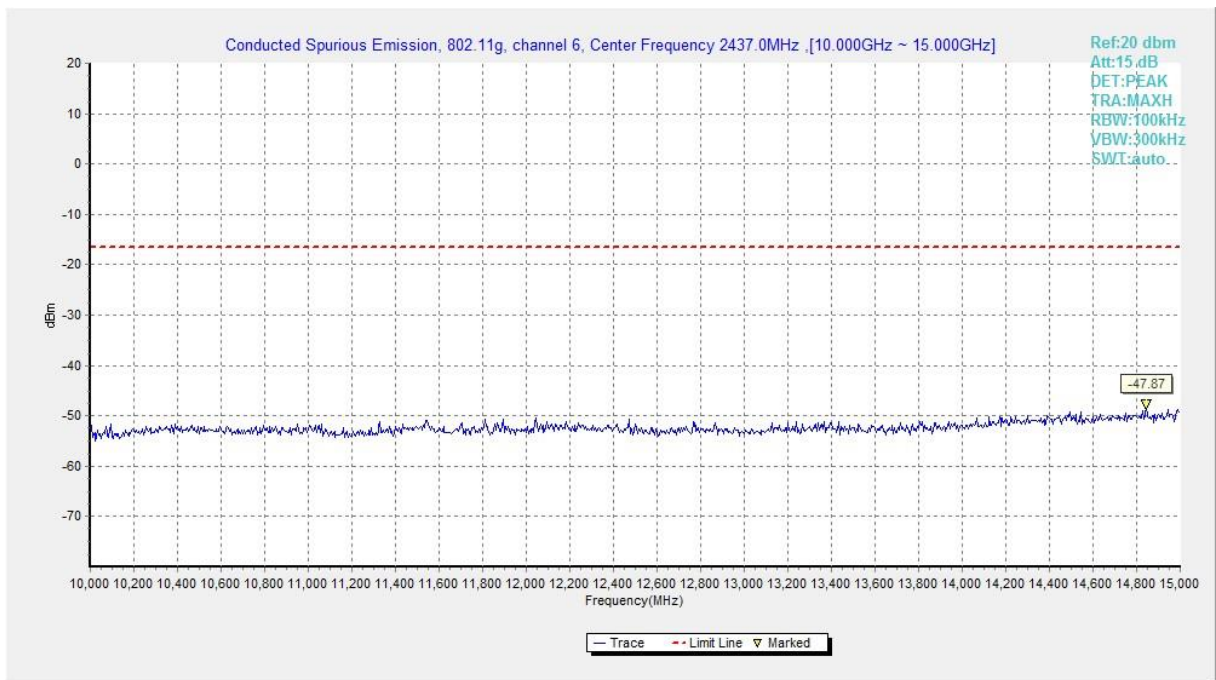


Fig.B.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)

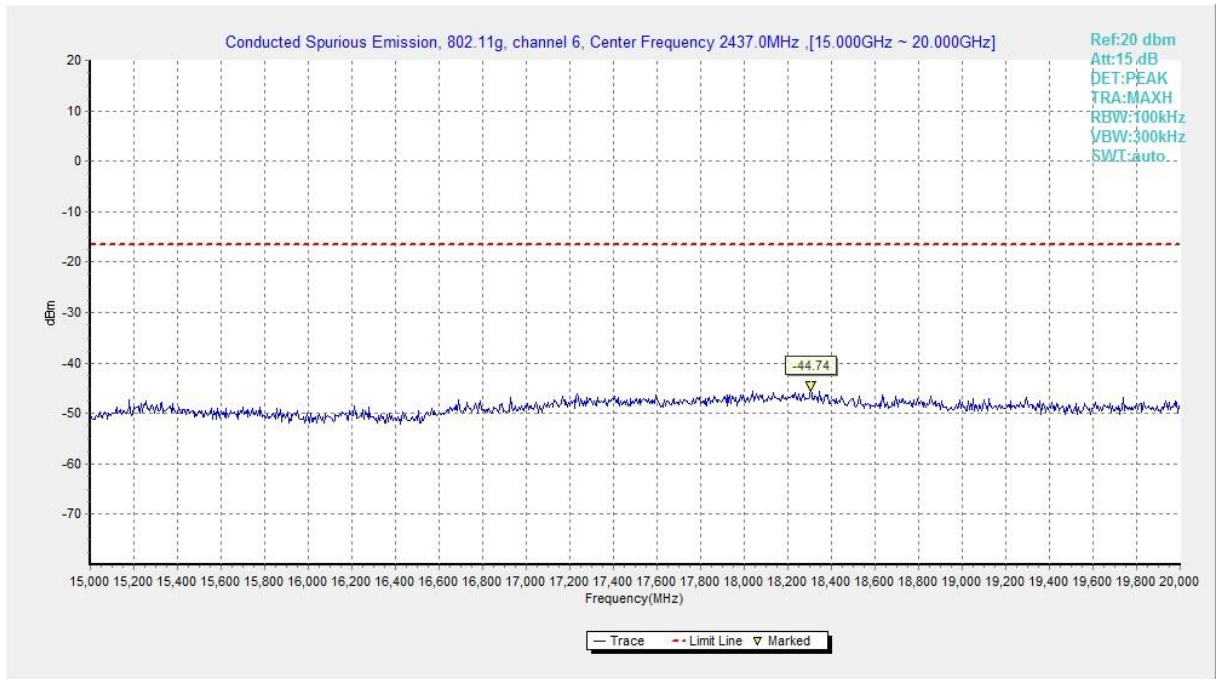


Fig.B.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)

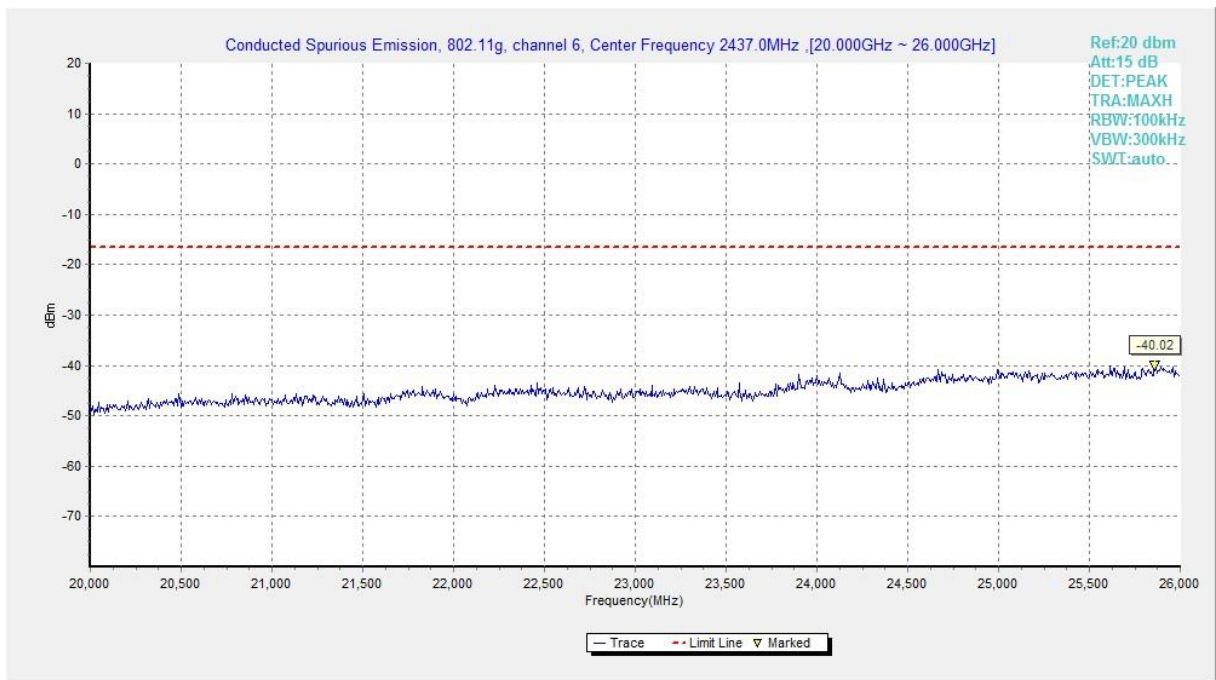


Fig.B.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)

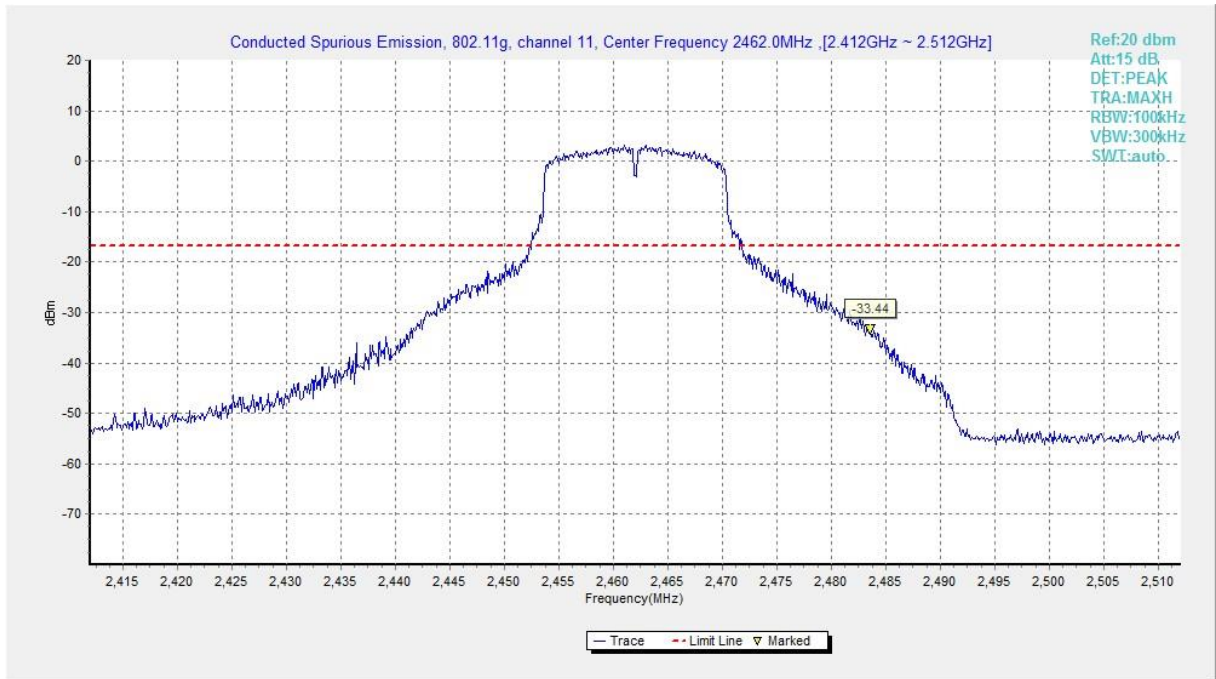


Fig.B.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)

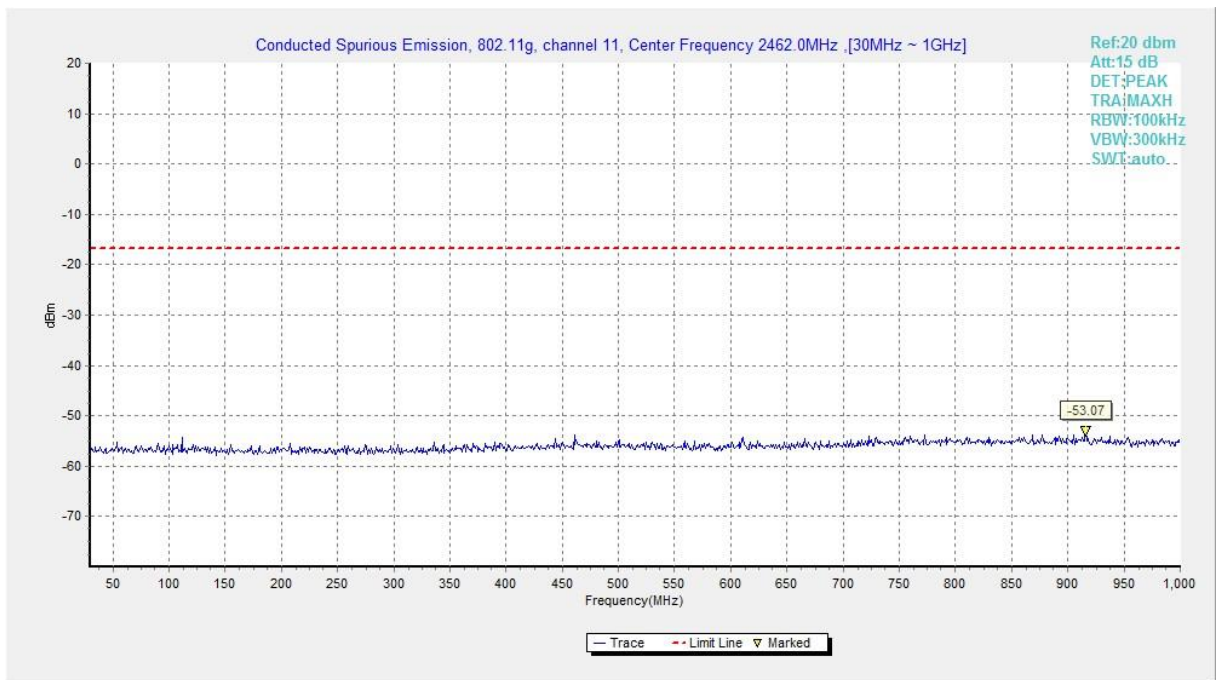


Fig.B.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)

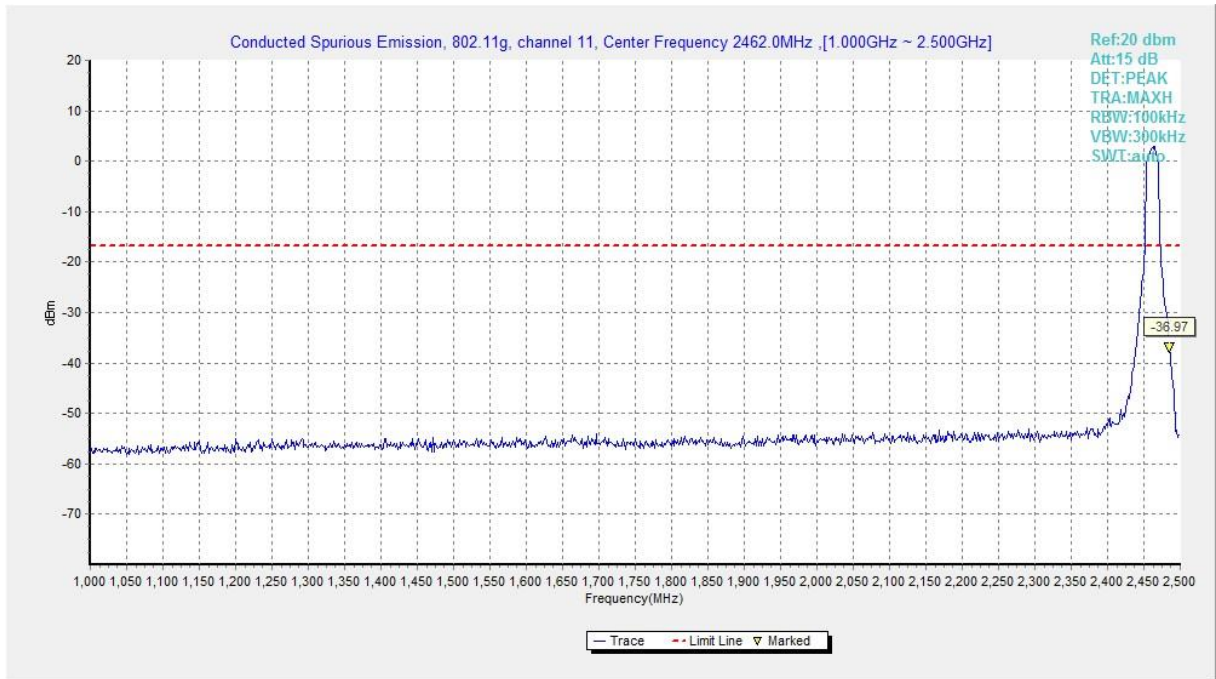


Fig.B.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)

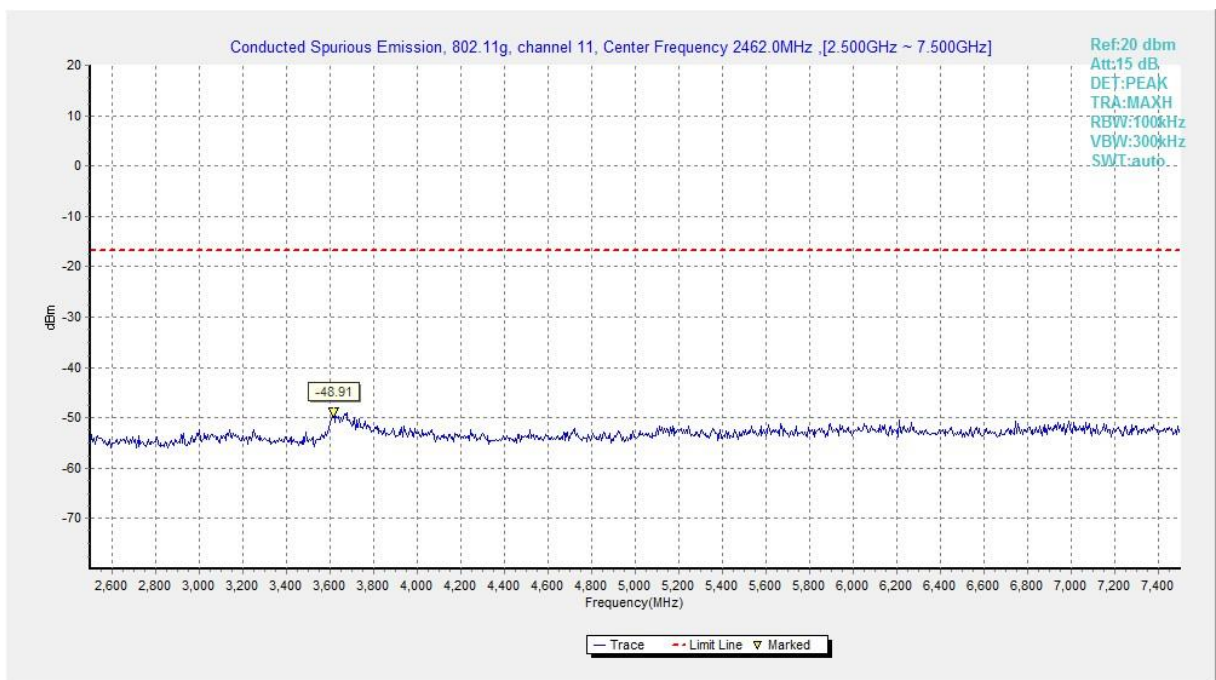


Fig.B.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)

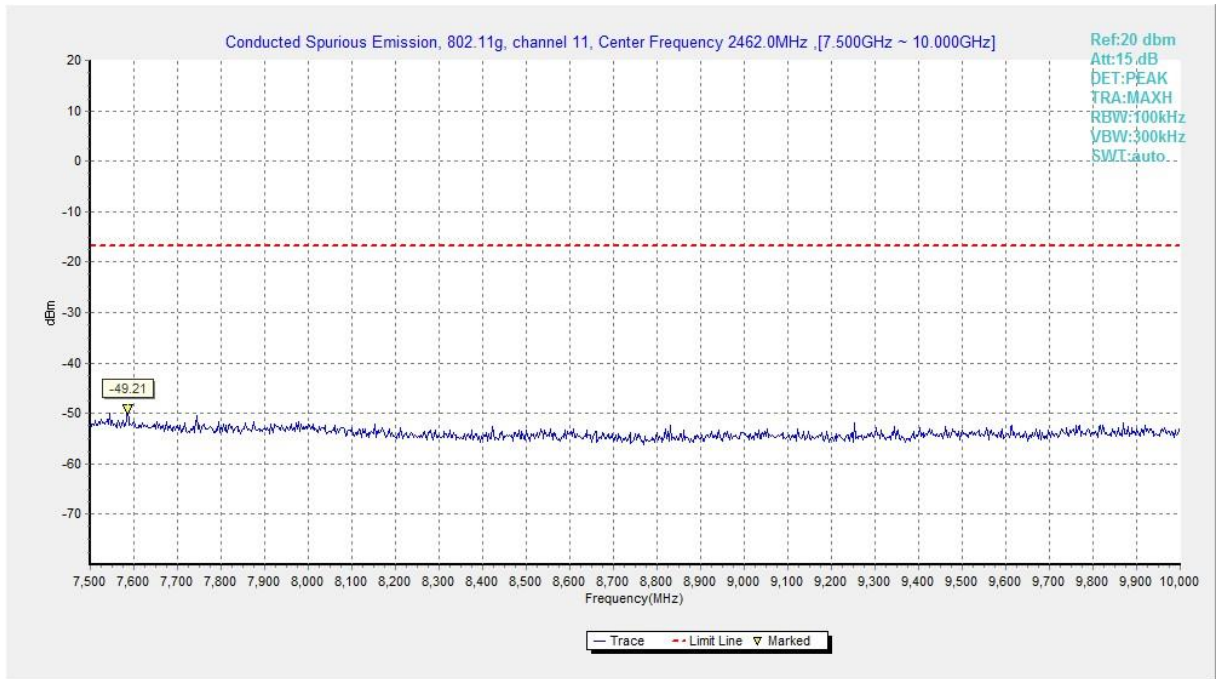


Fig.B.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)

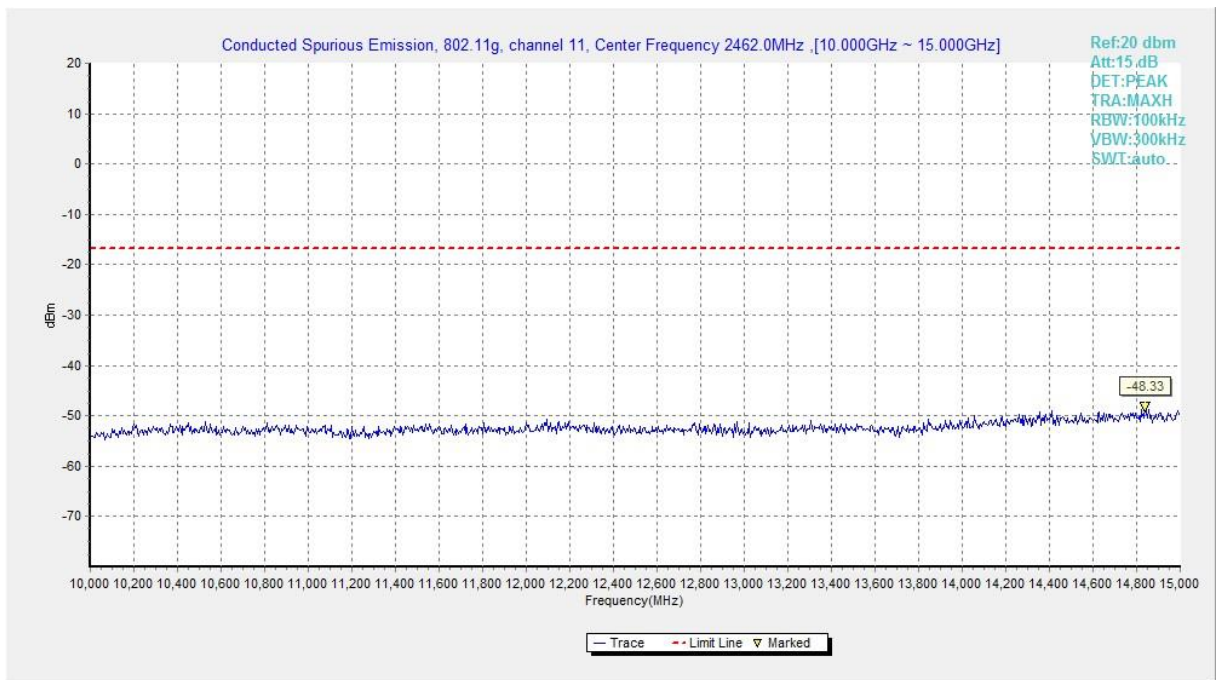


Fig.B.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)

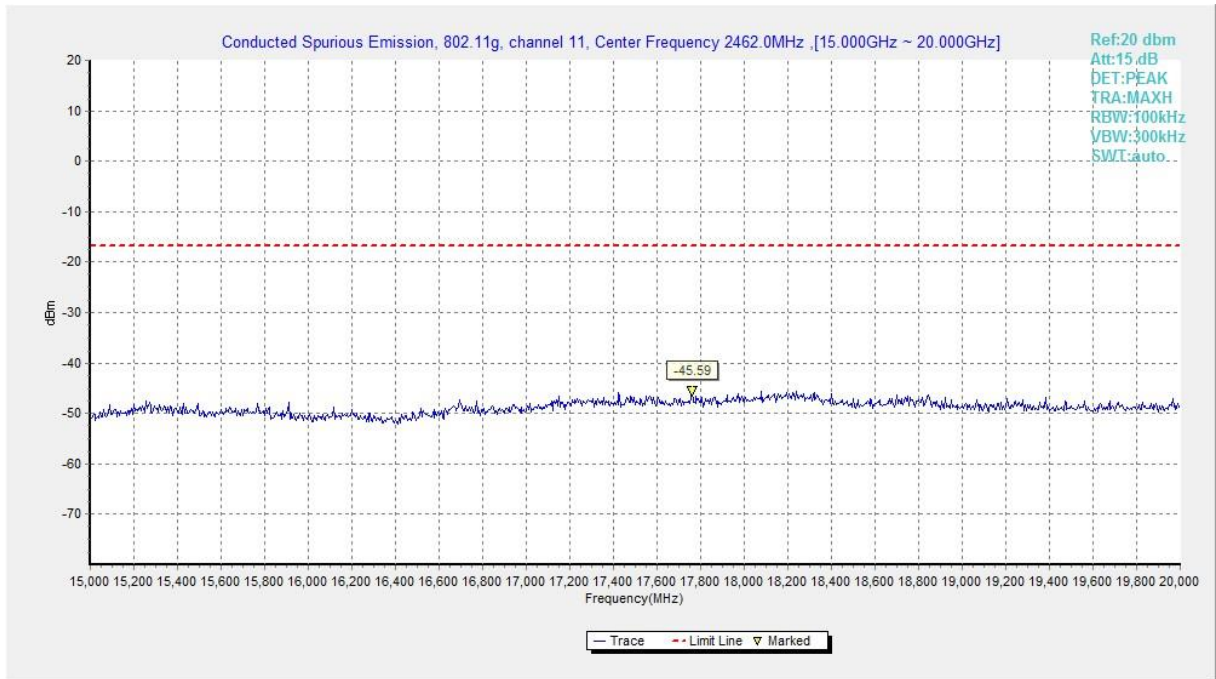


Fig.B.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)

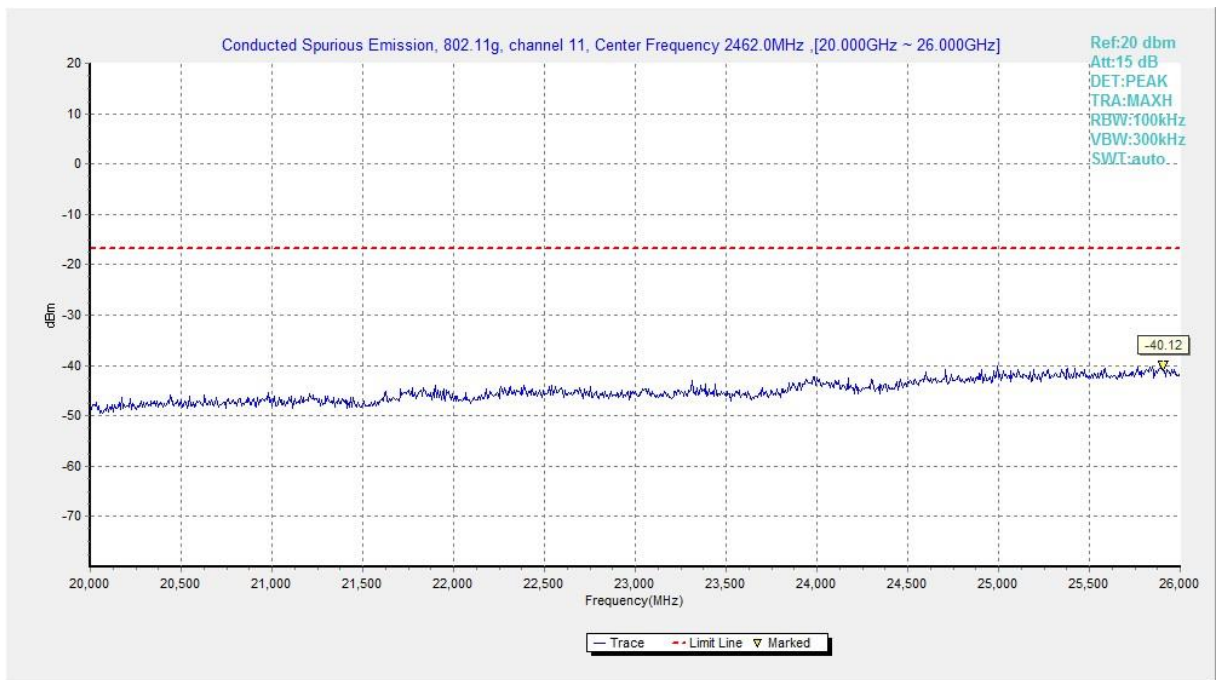


Fig.B.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)

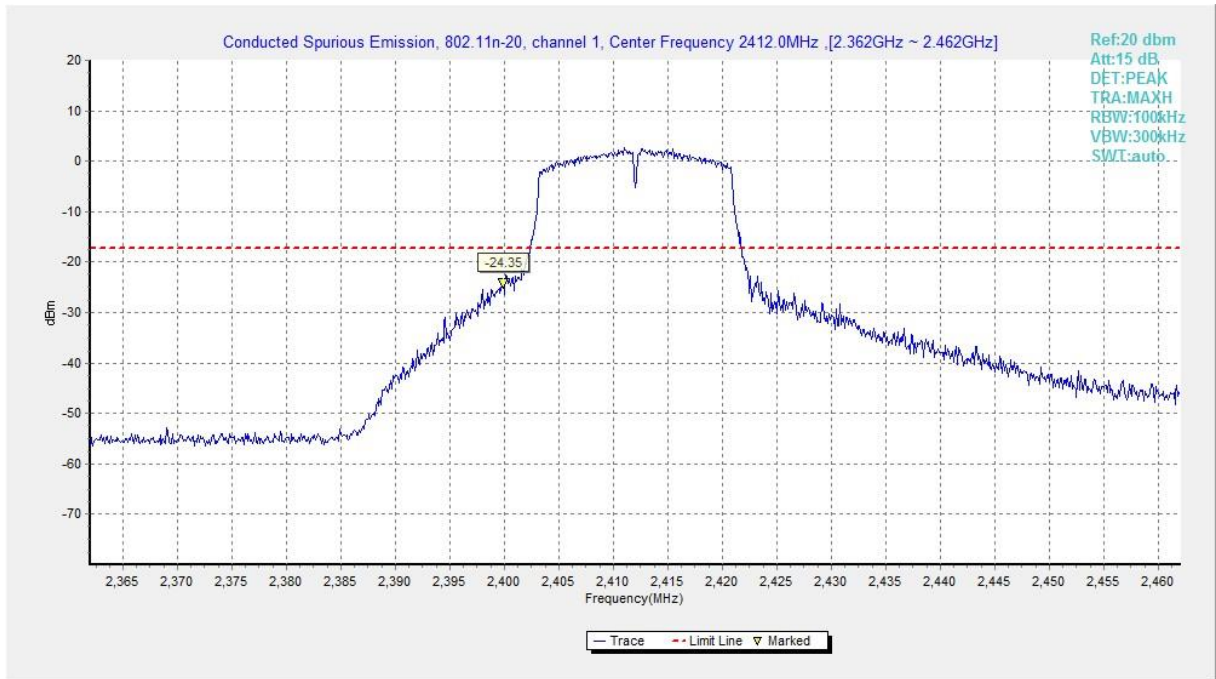


Fig.B.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)

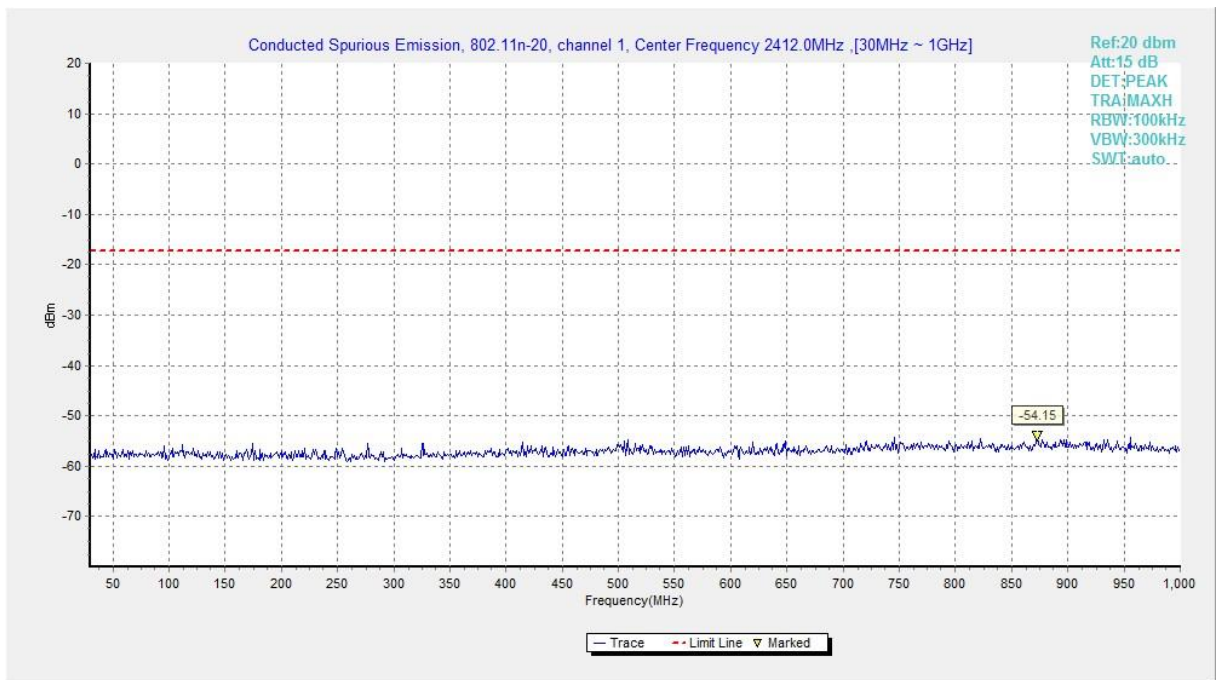


Fig.B.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)

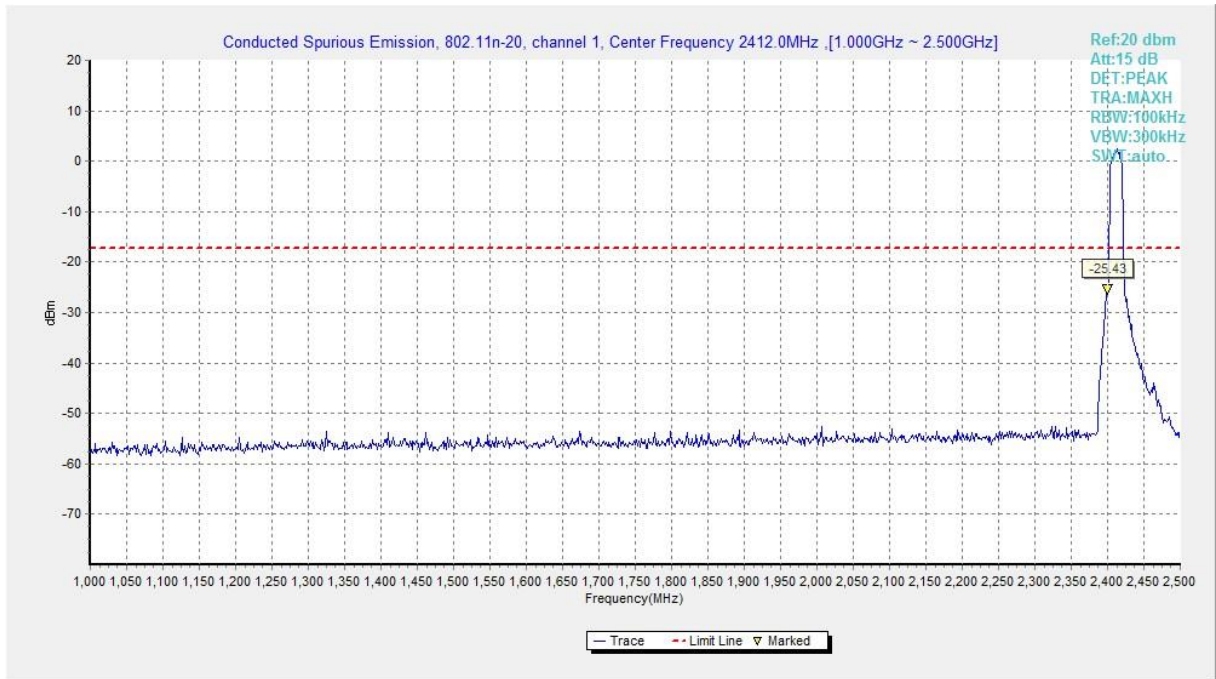


Fig.B.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)

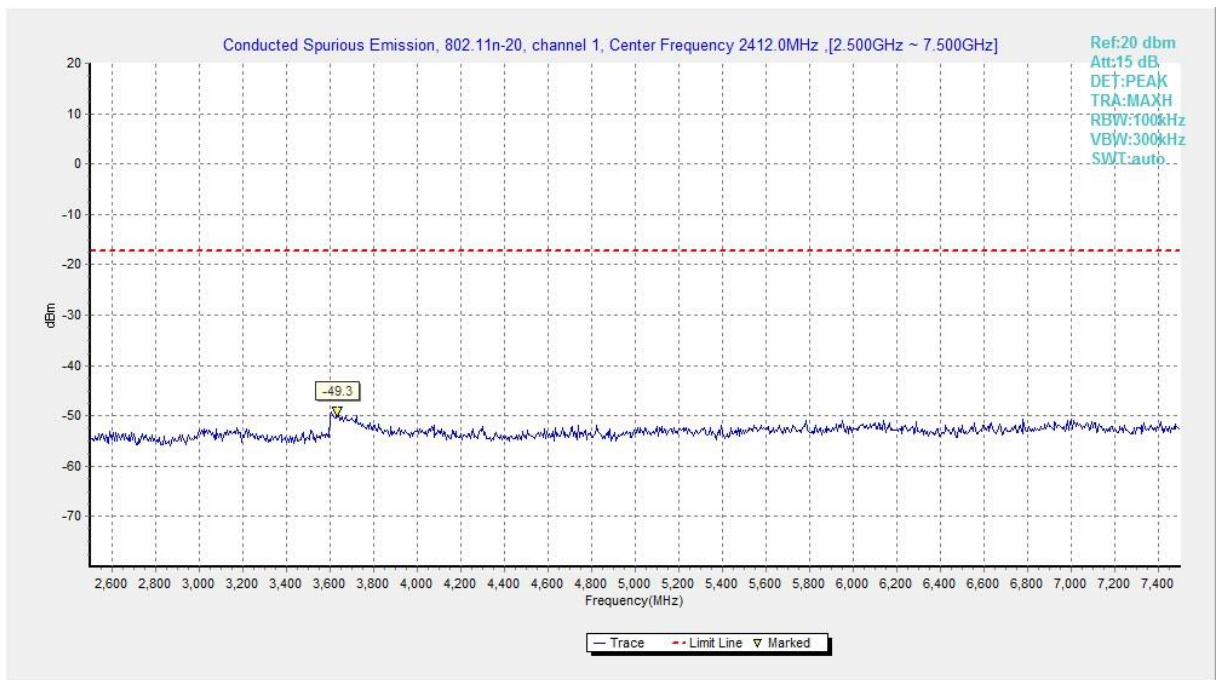


Fig.B.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)

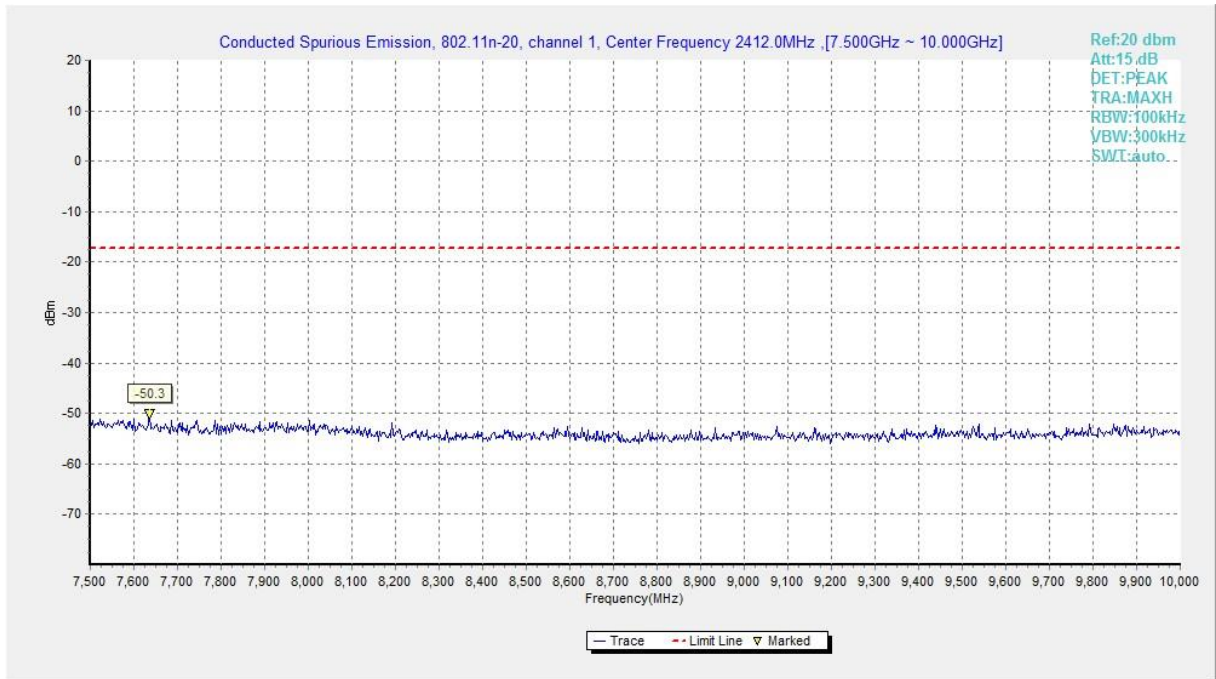


Fig.B.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)

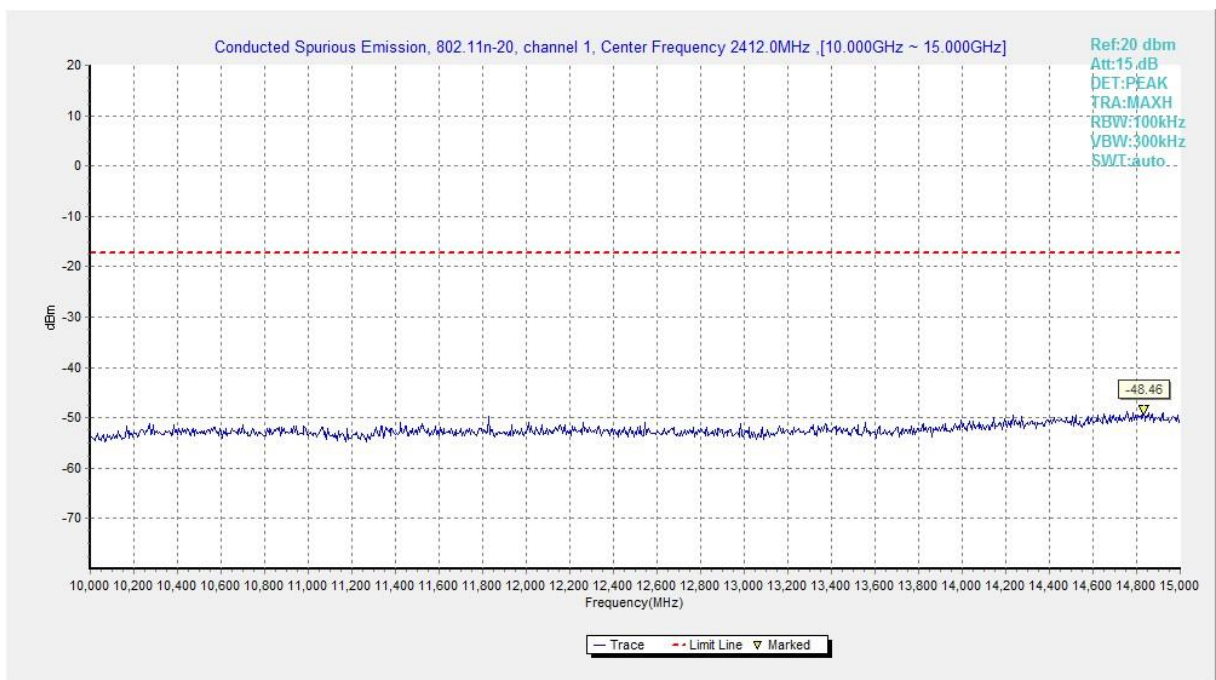


Fig.B.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)

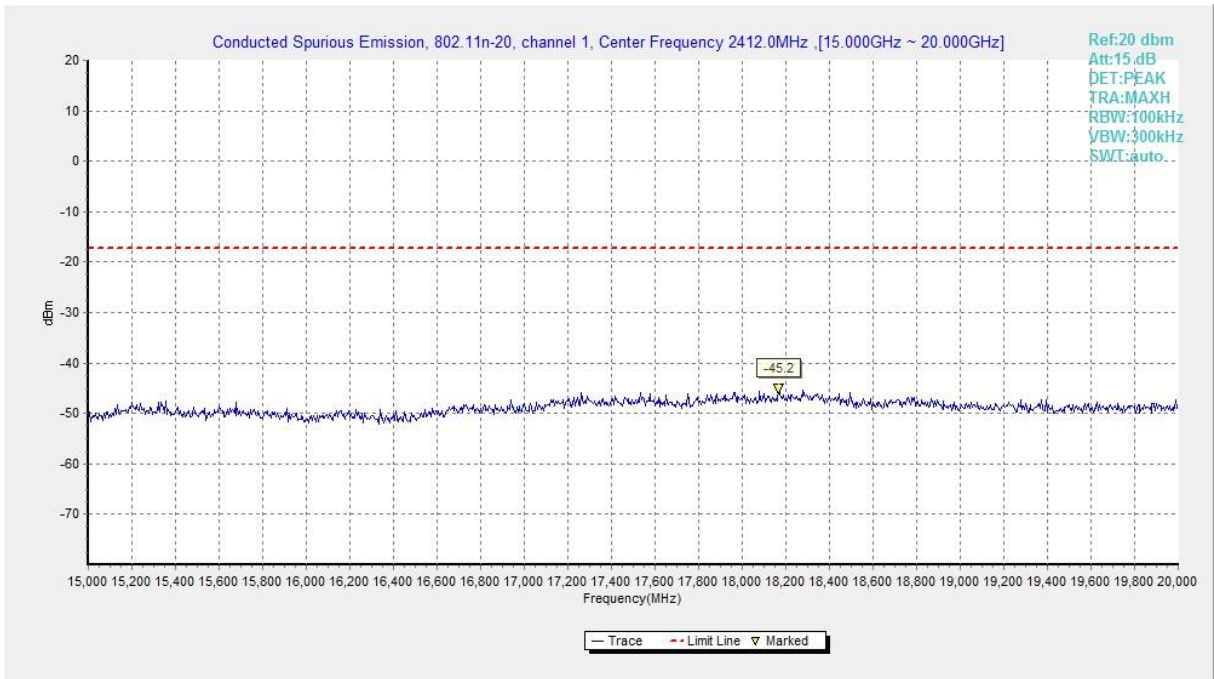


Fig.B.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)

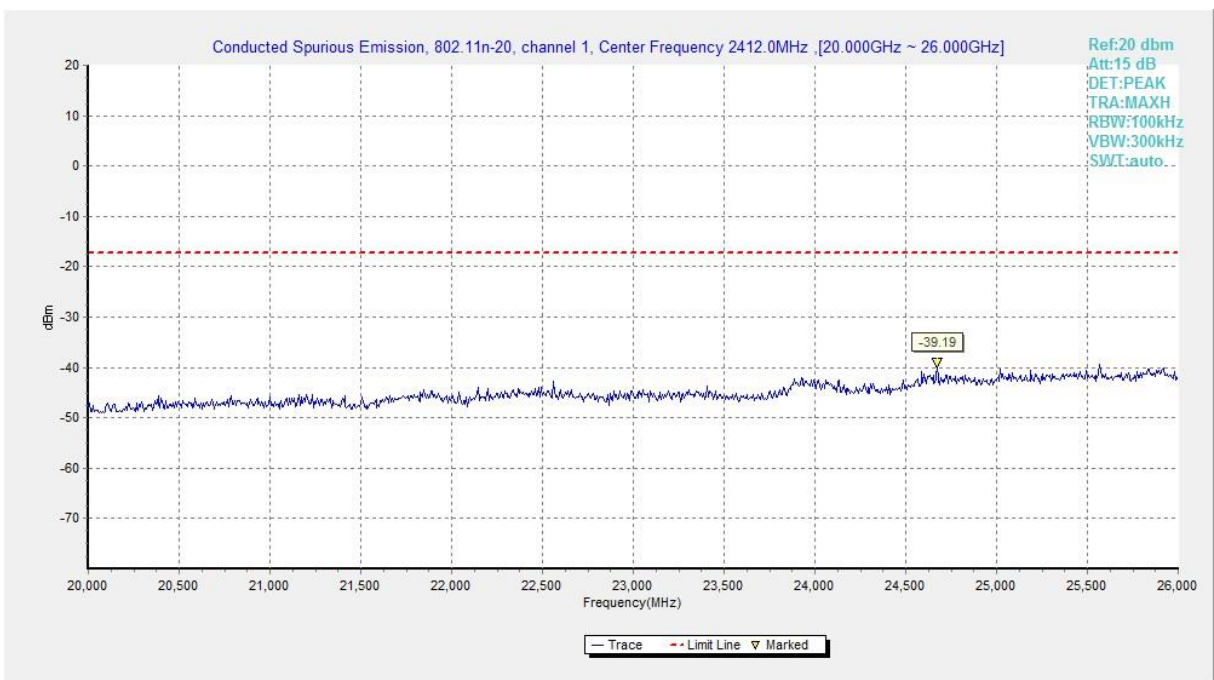


Fig.B.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)

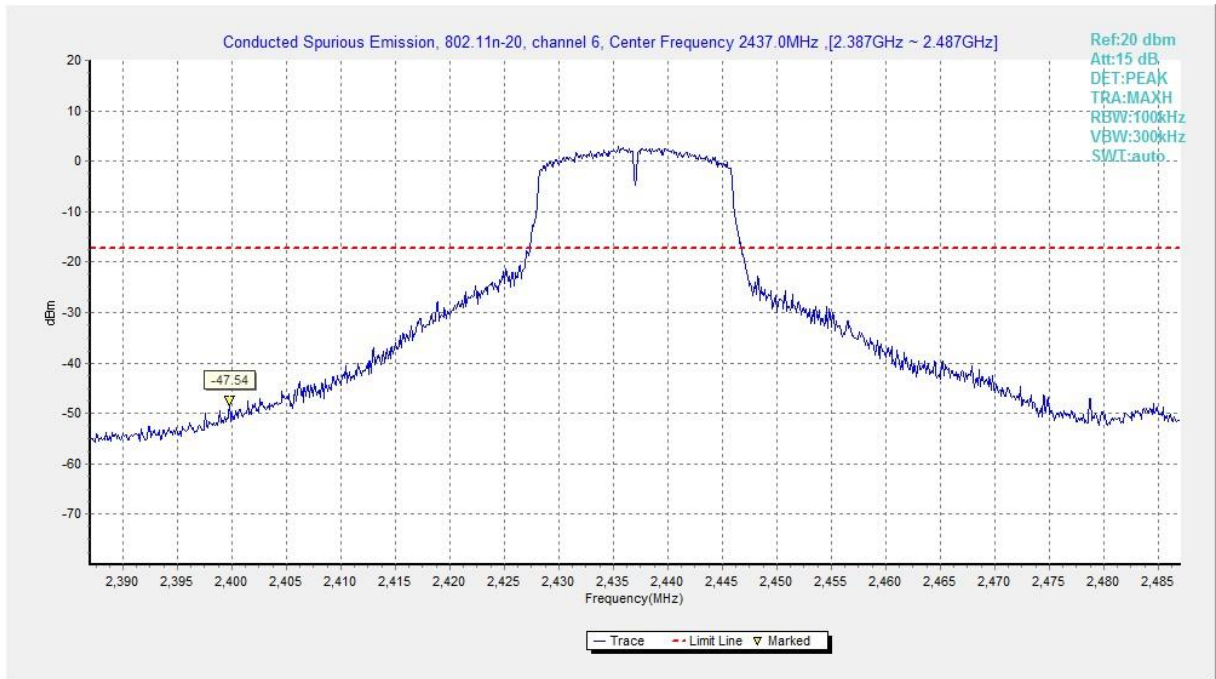


Fig.B.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

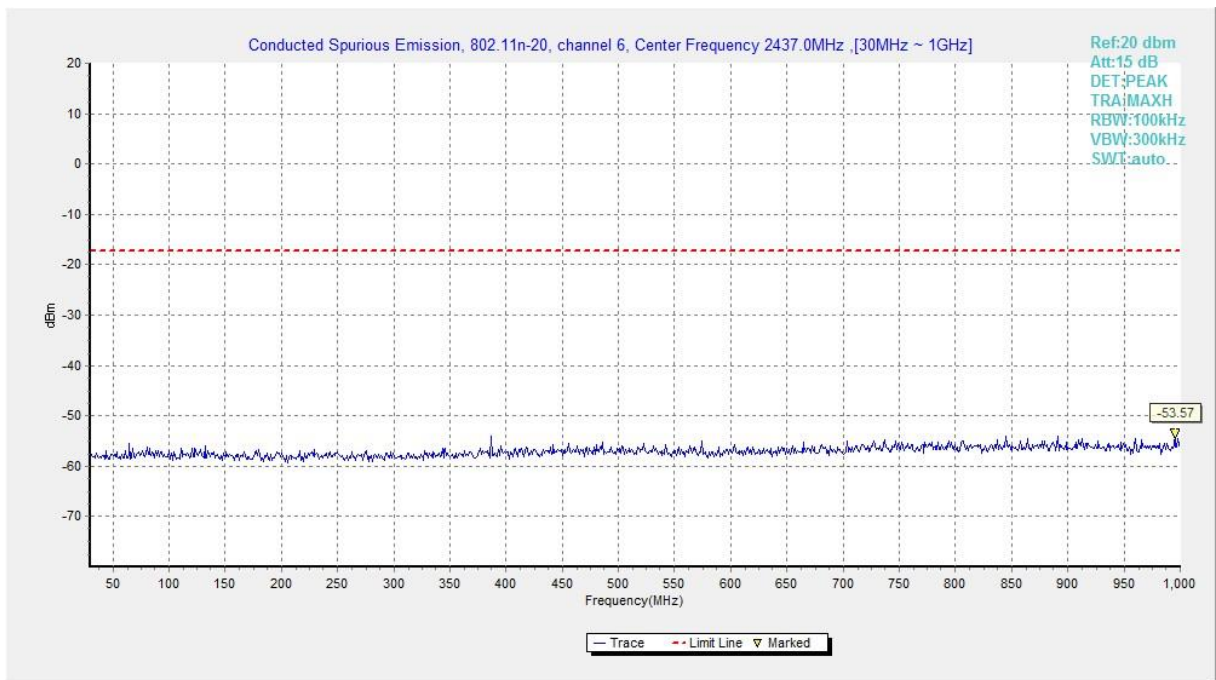


Fig.B.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)

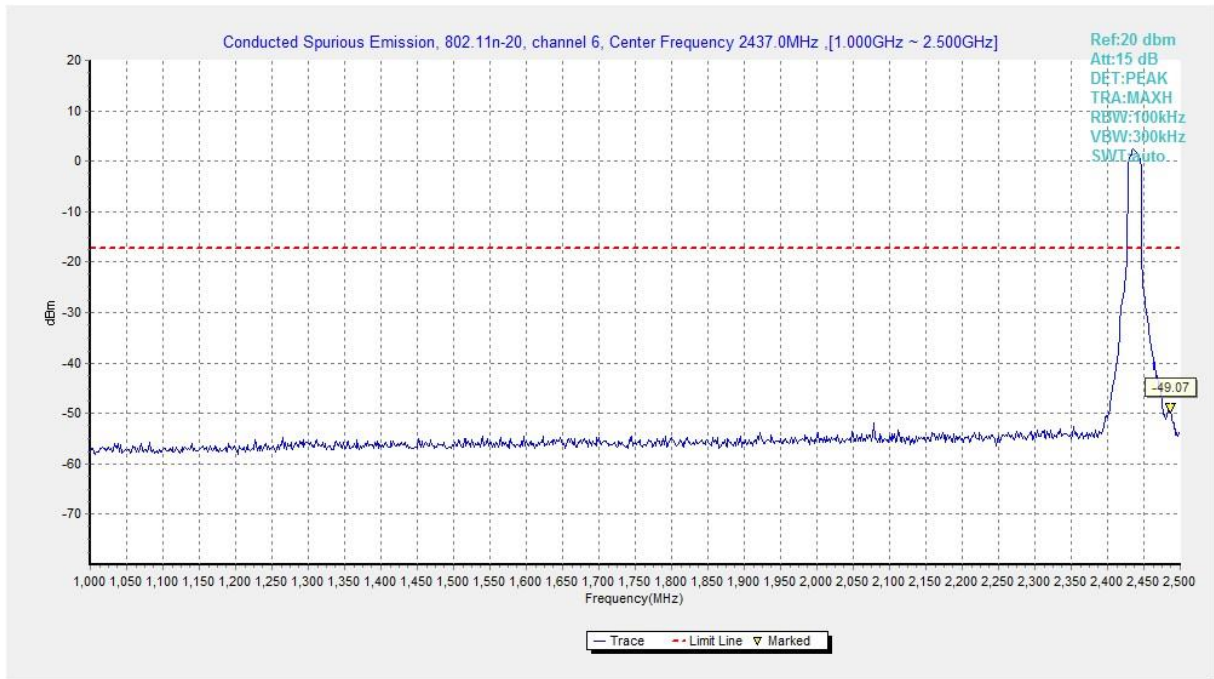


Fig.B.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

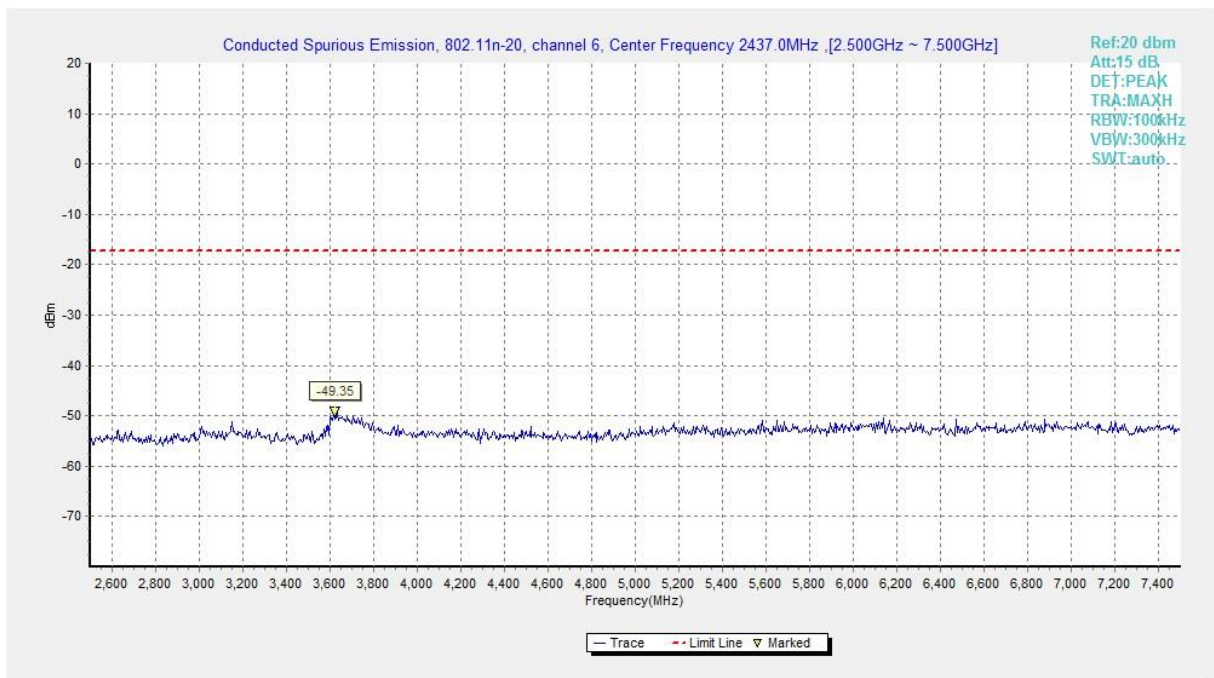


Fig.B.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

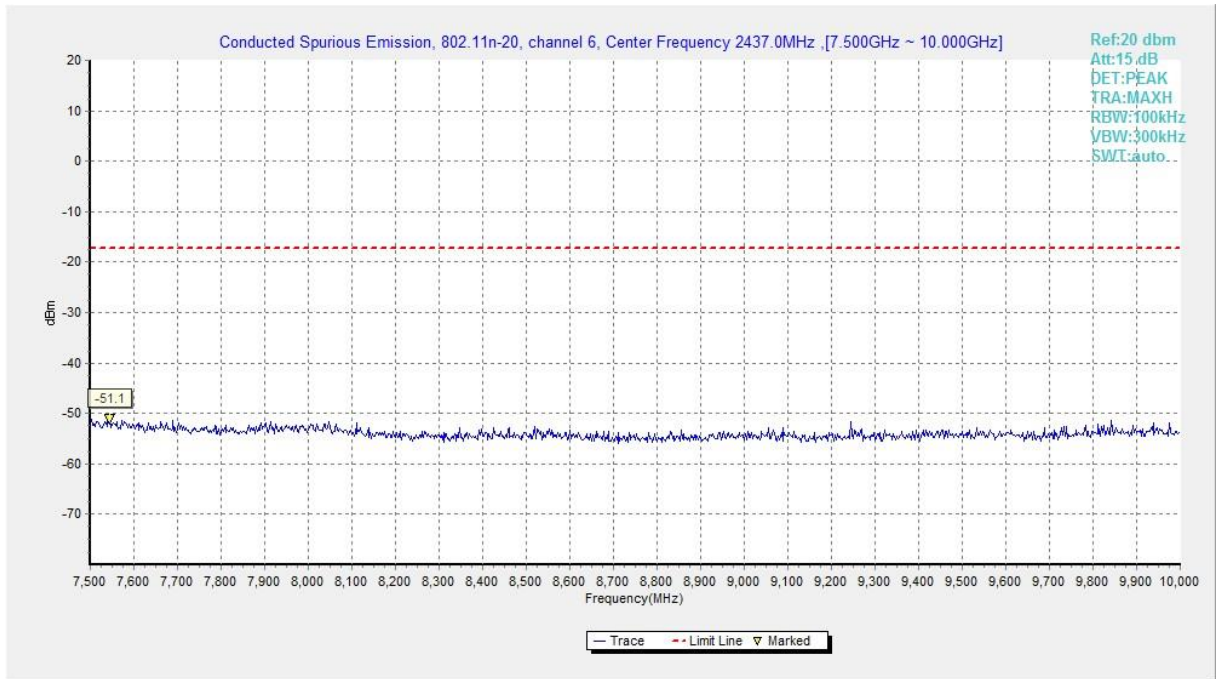


Fig.B.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

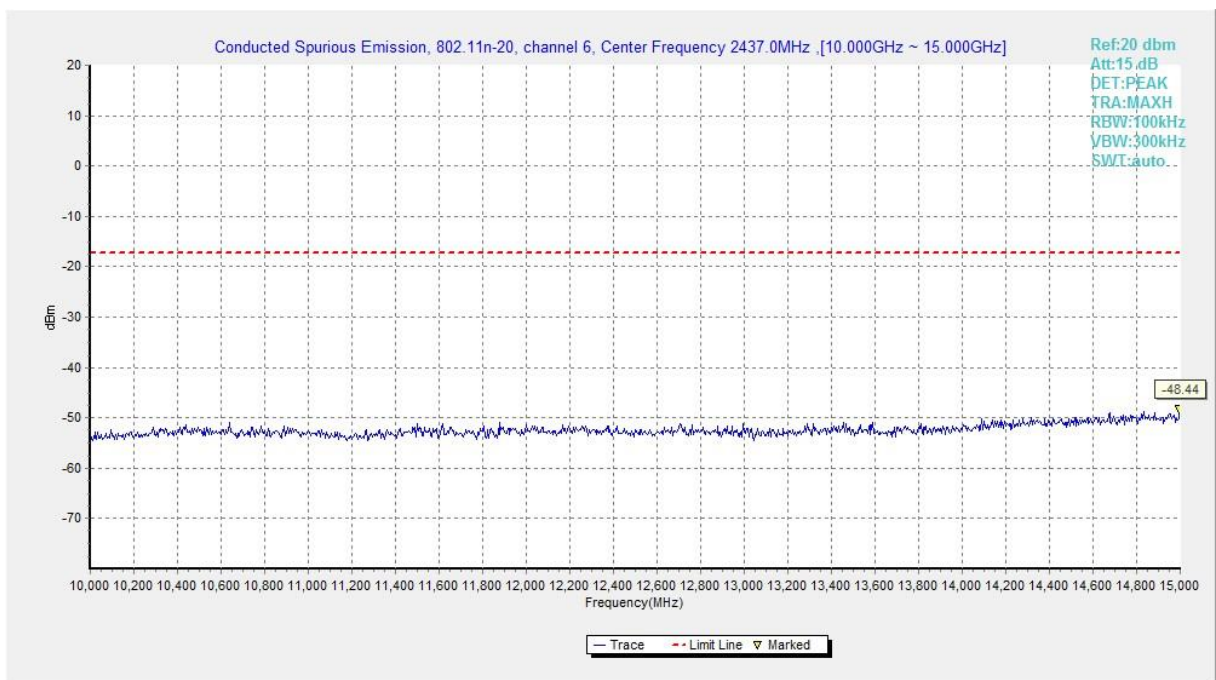


Fig.B.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

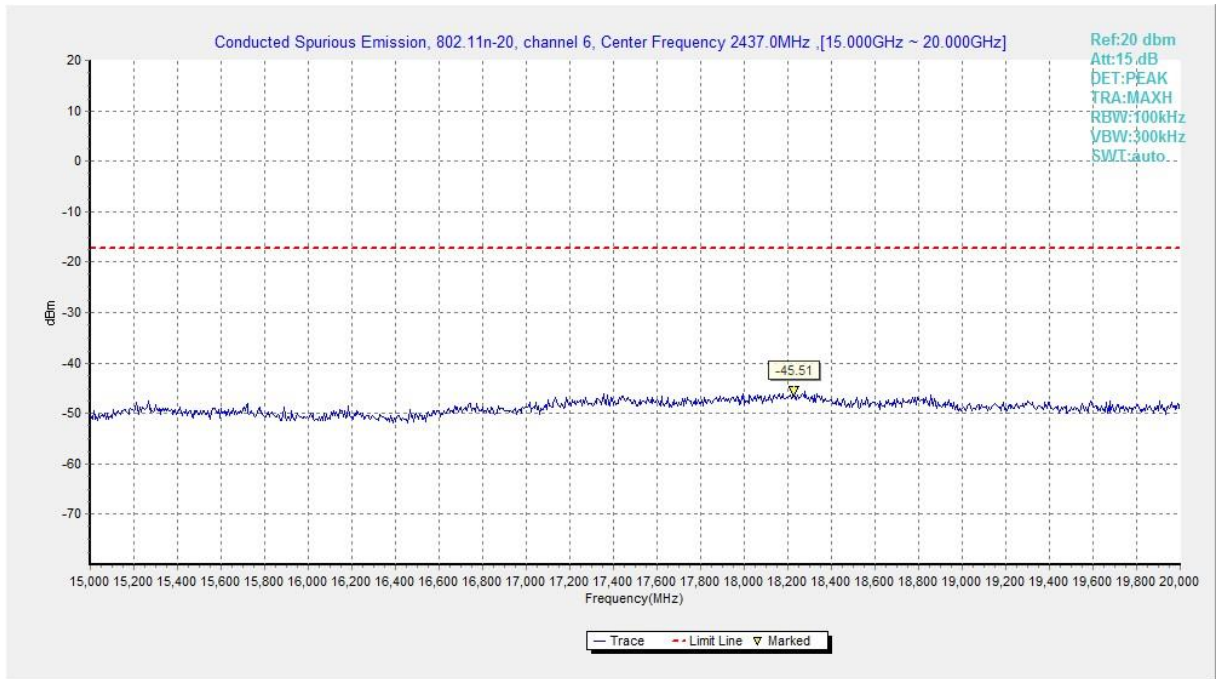


Fig.B.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

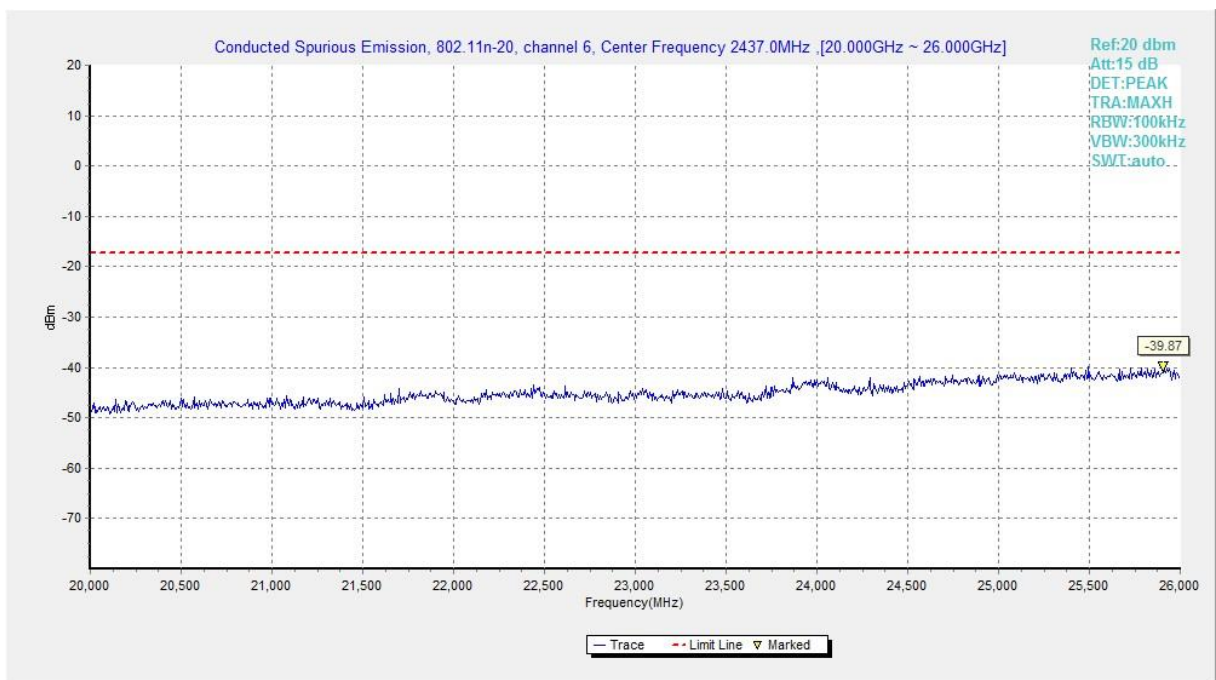


Fig.B.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

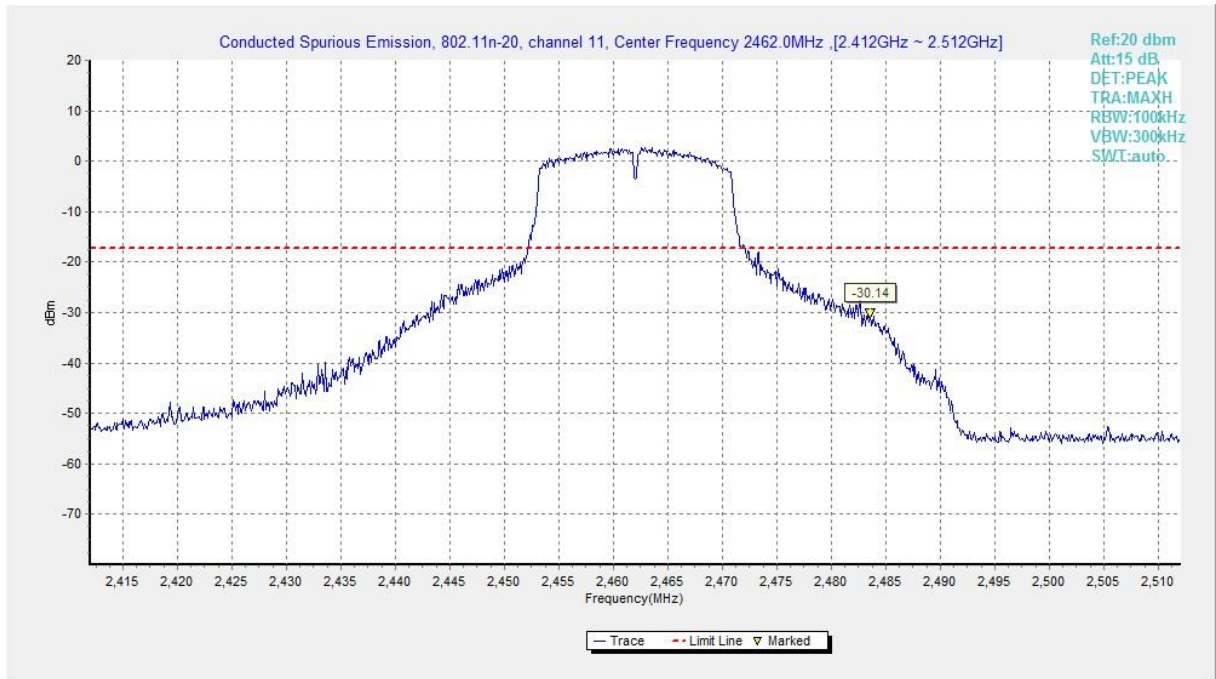


Fig.B.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

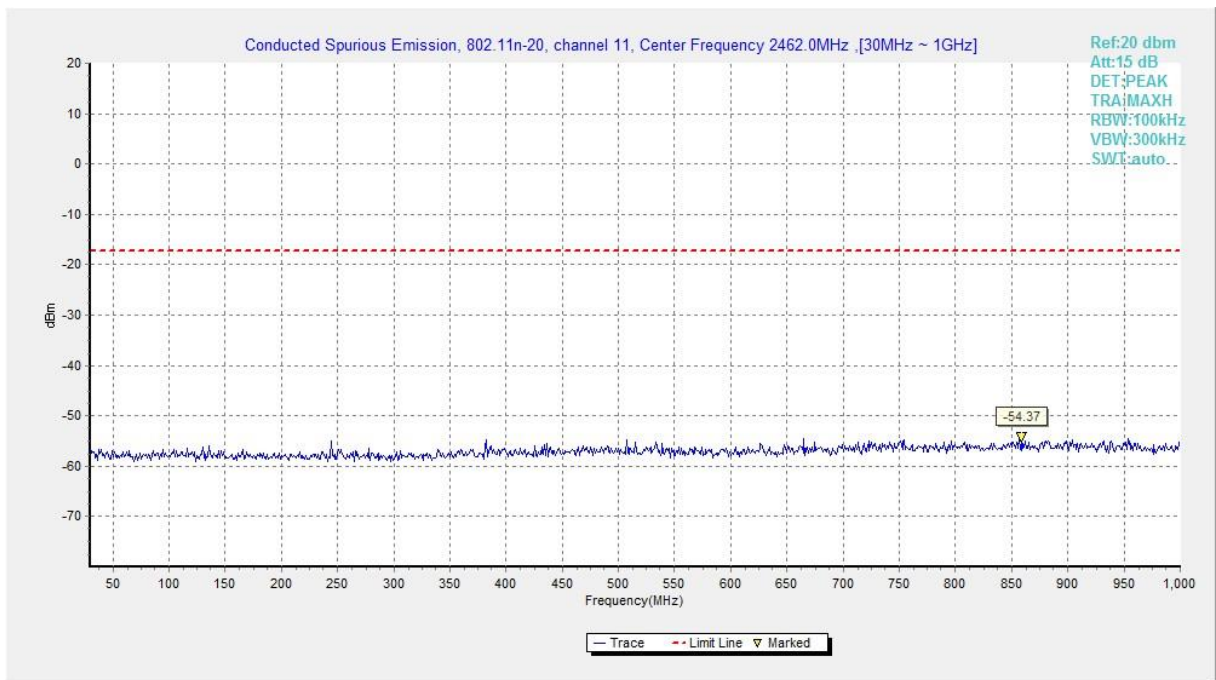


Fig.B.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

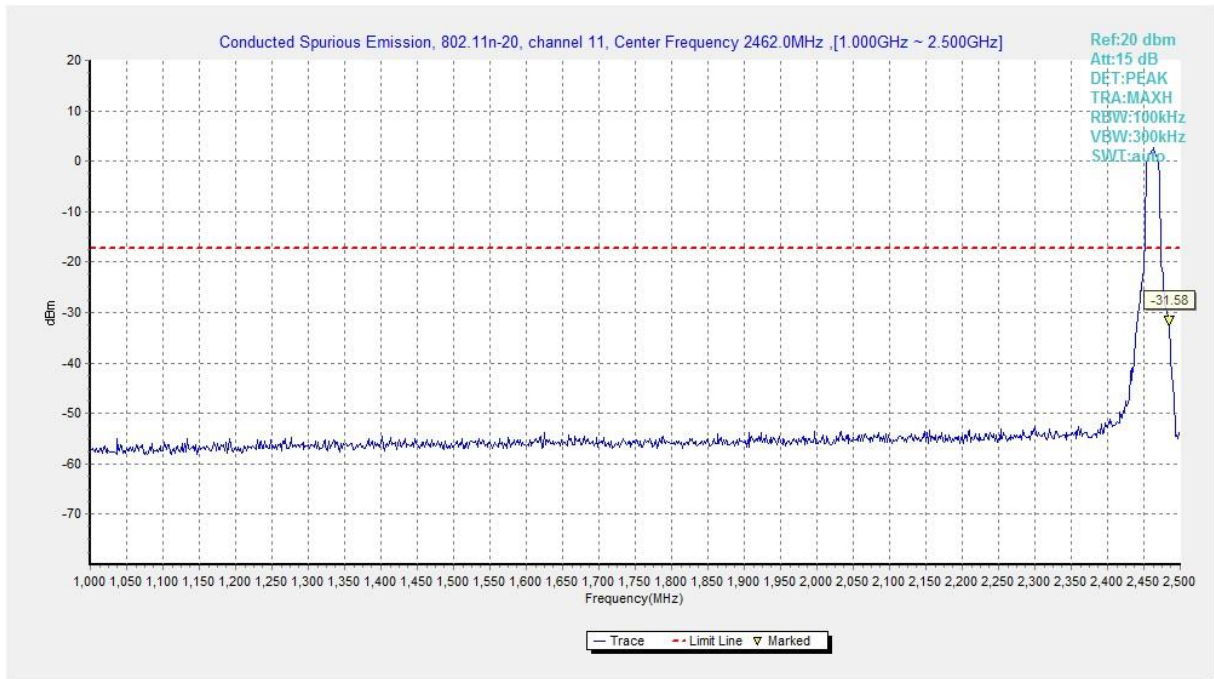


Fig.B.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

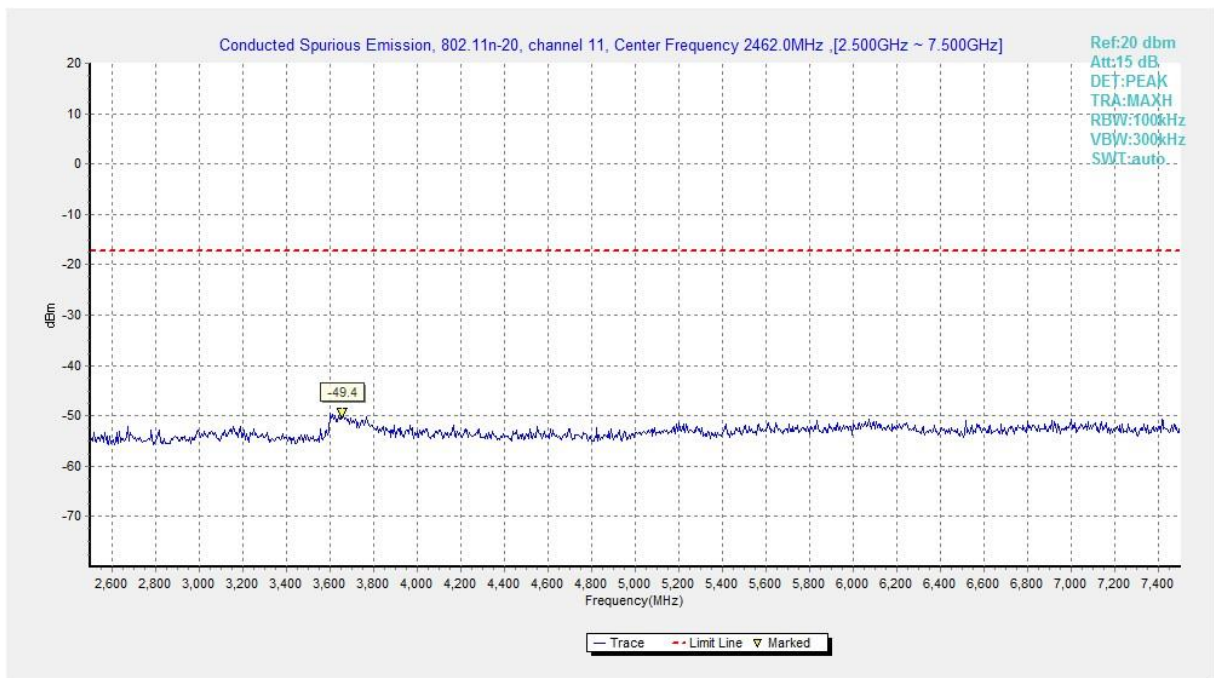


Fig.B.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

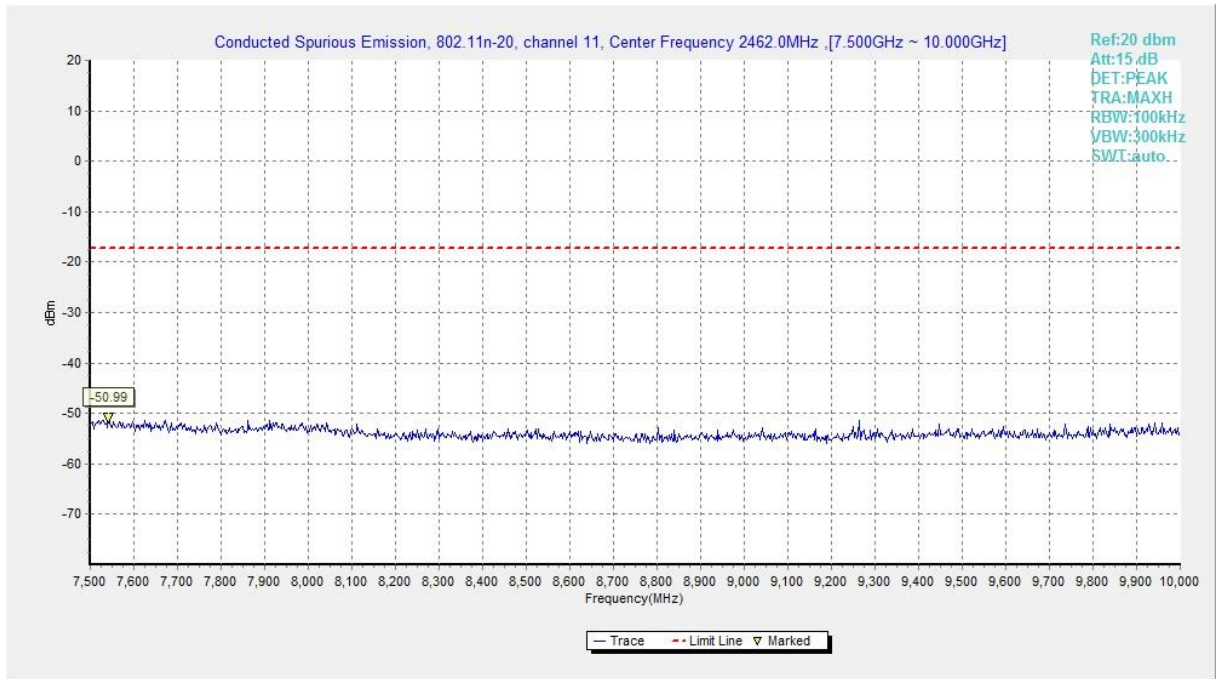


Fig.B.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

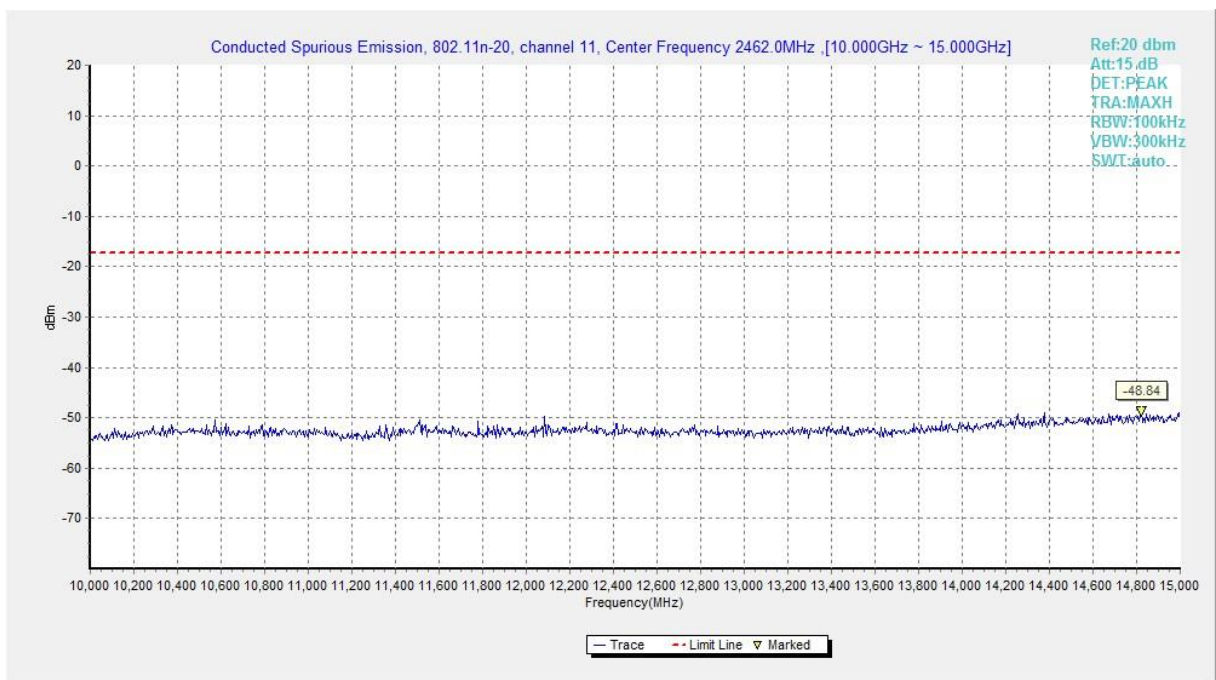


Fig.B.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

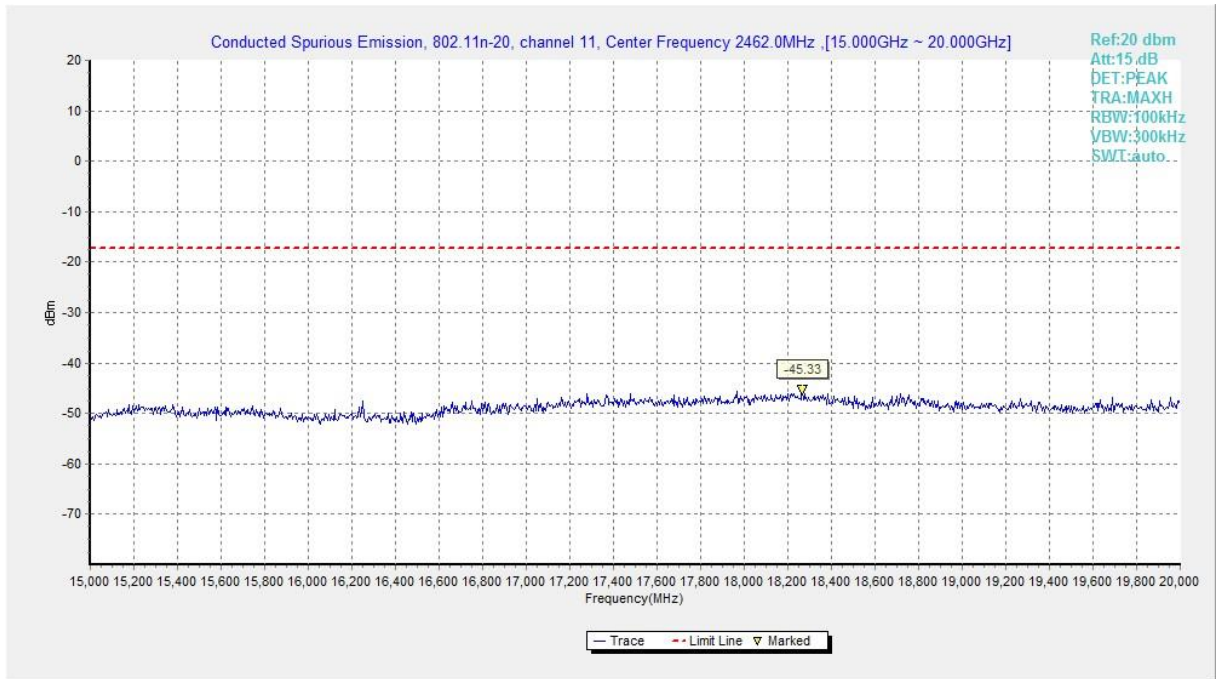


Fig.B.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

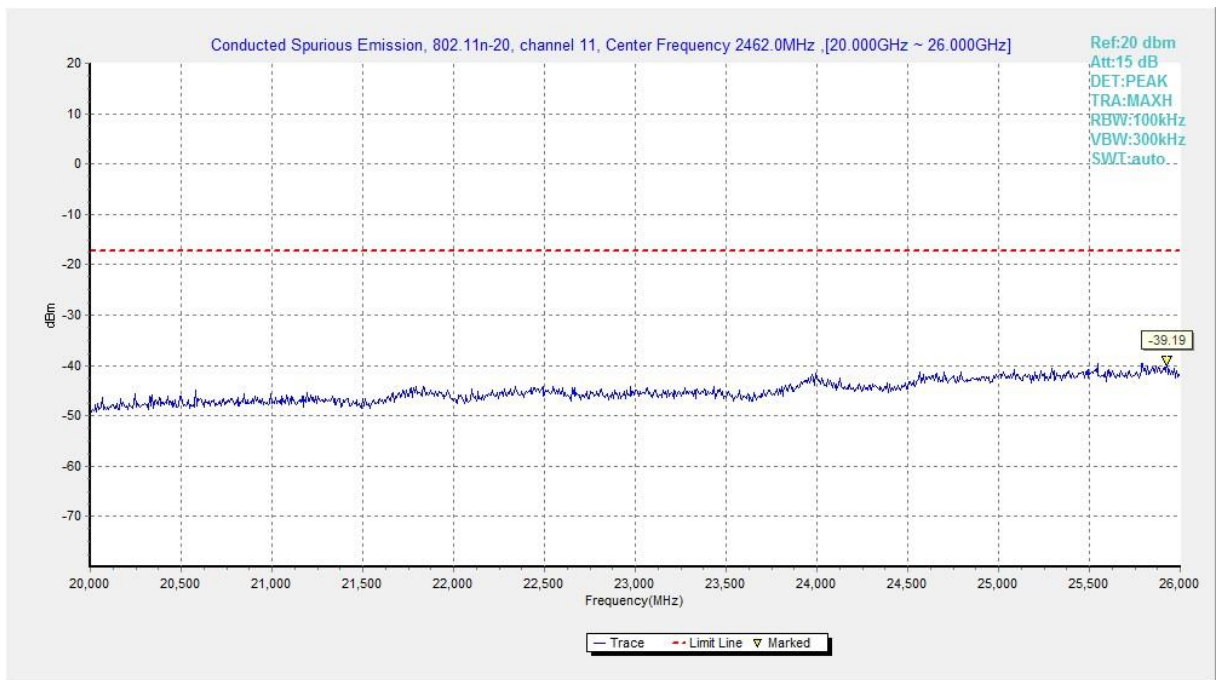


Fig.B.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

B.6.2 Transmitter Spurious Emission - Radiated

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)).

The measurement is made according to ANSI C63.10.

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 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.B.6.2.1	P
	Power	2.45GHz ~2.5GHz	Fig.B.6.2.2	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.B.6.2.3	P
	Power	2.45GHz ~2.5GHz	Fig.B.6.2.4	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power	2.38GHz ~2.45GHz	Fig.B.6.2.5	P
	Power	2.45GHz ~2.5GHz	Fig.B.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:

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

Note: The measurement results showed here are worst cases.

Peak Measurement results
802.11b

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2387.756	59.89	2.9	32.0	25.03	74.0	14.1	V
2389.212	60.18	2.9	32.0	25.32	74.0	13.8	H
4824.000	50.31	-33.2	34.1	49.42	74.0	23.7	H
7234.500	45.96	-30.9	35.8	41.06	74.0	28.0	H
9648.000	41.92	-30.5	36.7	35.67	74.0	32.1	H
12060.000	45.46	-28.7	38.7	35.43	74.0	28.5	V

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2370.200	43.72	-34.5	32.0	46.22	74.0	30.3	V
2511.200	44.69	-34.3	32.1	46.83	74.0	29.3	V
4874.000	50.30	-33.3	34.2	49.45	74.0	23.7	V
7312.000	45.77	-30.8	35.8	40.77	74.0	28.2	V
9748.000	43.87	-30.3	36.9	37.35	74.0	30.1	V
12185.000	45.94	-28.1	38.8	35.24	74.0	28.1	H

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2484.880	60.04	2.9	32.1	25.02	74.0	14.0	V
2486.015	60.06	2.9	32.1	25.04	74.0	13.9	H
4924.000	51.33	-33.5	34.2	50.69	74.0	22.7	V
7386.000	41.56	-31.5	35.9	37.16	74.0	32.4	V
9848.000	42.89	-30.2	37.0	36.08	74.0	31.1	V
12310.000	46.55	-27.8	38.9	35.41	74.0	27.5	H

802.11g

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2385.012	60.20	2.9	32.0	25.34	74.0	13.8	H
2385.754	60.26	2.9	32.0	25.40	74.0	13.7	H
4820.500	43.94	-33.2	34.1	43.05	74.0	30.1	V
7236.000	40.35	-30.9	35.8	35.44	74.0	33.6	H
9648.000	41.52	-30.5	36.7	35.27	74.0	32.5	V
12060.000	44.51	-28.7	38.7	34.47	74.0	29.5	V

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2370.400	44.04	-34.5	32.0	46.53	74.0	30.0	V
2515.200	44.54	-34.3	32.1	46.72	74.0	29.5	V
4874.000	44.83	-33.3	34.2	43.98	74.0	29.2	H
7311.000	41.95	-30.8	35.8	36.94	74.0	32.1	V
9748.000	42.72	-30.3	36.9	36.20	74.0	31.3	H
12185.000	44.92	-28.1	38.8	34.21	74.0	29.1	H

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2483.680	70.48	2.9	32.1	35.46	74.0	3.5	H
2483.975	70.01	2.9	32.1	34.99	74.0	4.0	H
4924.000	45.33	-33.5	34.2	44.69	74.0	28.7	V
7386.000	41.69	-31.5	35.9	37.28	74.0	32.3	V
9848.000	43.64	-30.2	37.0	36.82	74.0	30.4	V
12310.000	44.67	-27.8	38.9	33.54	74.0	29.3	V

802.11n-HT20

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2389.534	60.29	2.9	32.0	25.42	74.0	13.7	H
2389.982	60.07	2.9	32.0	25.21	74.0	13.9	H
4821.000	45.35	-33.2	34.1	44.46	74.0	28.6	V
7236.000	41.16	-30.9	35.8	36.24	74.0	32.8	V
9648.000	41.16	-30.5	36.7	34.90	74.0	32.8	H
12060.000	43.27	-28.7	38.7	33.24	74.0	30.7	V

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2374.200	44.29	-34.3	32.0	46.63	74.0	29.7	V
2511.000	44.49	-34.3	32.1	46.64	74.0	29.5	V
4869.000	43.91	-33.3	34.1	43.05	74.0	30.1	H
7311.000	39.99	-30.8	35.8	34.98	74.0	34.0	V
9748.000	40.84	-30.3	36.9	34.32	74.0	33.2	V
12185.000	43.82	-28.1	38.8	33.12	74.0	30.2	H

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2483.805	70.21	2.9	32.1	35.19	74.0	3.8	V
2484.200	69.80	2.9	32.1	34.78	74.0	4.2	H
4931.500	45.07	-33.6	34.2	44.47	74.0	28.9	V
7386.000	40.33	-31.5	35.9	35.93	74.0	33.7	V
9848.000	40.70	-30.2	37.0	33.88	74.0	33.3	V
12310.000	44.74	-27.8	38.9	33.61	74.0	29.3	V

Average Measurement results
802.11b

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2389.200	46.34	2.9	32.0	11.48	54.0	7.7	V
2389.980	46.31	2.9	32.0	11.44	54.0	7.7	V
4823.900	46.40	-33.2	34.1	45.51	54.0	7.6	V
7234.100	37.11	-30.9	35.8	32.21	54.0	16.9	V
9648.200	30.75	-30.5	36.7	24.49	54.0	23.3	H
12059.700	33.64	-28.7	38.7	23.61	54.0	20.4	V

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2422.080	49.68	2.9	32.0	14.76	54.0	4.3	V
2452.260	49.86	2.9	32.1	14.89	54.0	4.1	V
4873.300	47.28	-33.3	34.2	46.43	54.0	6.7	H
7309.500	36.40	-30.8	35.8	31.38	54.0	17.6	H
9748.300	30.79	-30.3	36.9	24.27	54.0	23.2	H
12184.500	33.73	-28.1	38.8	23.03	54.0	20.3	H

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2487.360	46.89	2.9	32.1	11.86	54.0	7.1	V
2487.960	46.91	2.9	32.1	11.89	54.0	7.1	V
4924.000	43.98	-33.5	34.2	43.34	54.0	10.0	V
7386.200	29.36	-31.5	35.9	24.96	54.0	24.6	H
9848.400	30.62	-30.2	37.0	23.81	54.0	23.4	H
12310.600	33.14	-27.8	38.9	22.00	54.0	20.9	V

802.11g

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2389.080	46.44	2.9	32.0	11.58	54.0	7.6	V
2389.980	46.59	2.9	32.0	11.72	54.0	7.4	V
4822.600	30.31	-33.2	34.1	29.42	54.0	23.7	H
7235.400	29.45	-30.9	35.8	24.54	54.0	24.5	V
9648.200	29.71	-30.5	36.7	23.46	54.0	24.3	H
12059.700	32.46	-28.7	38.7	22.43	54.0	21.5	H

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2413.560	47.45	2.9	32.0	12.54	54.0	6.6	V
2459.700	47.37	2.9	32.1	12.39	54.0	6.6	V
4874.600	33.06	-33.3	34.2	32.21	54.0	20.9	V
7310.800	30.88	-30.8	35.8	25.87	54.0	23.1	V
9748.300	30.72	-30.3	36.9	24.20	54.0	23.3	V
12184.500	33.47	-28.1	38.8	22.77	54.0	20.5	H

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2483.820	48.87	2.9	32.1	13.85	54.0	5.1	V
2484.180	48.64	2.9	32.1	13.62	54.0	5.4	V
4924.000	30.55	-33.5	34.2	29.90	54.0	23.5	H
7386.200	29.32	-31.5	35.9	24.92	54.0	24.7	V
9848.400	30.70	-30.2	37.0	23.89	54.0	23.3	V
12310.600	33.16	-27.8	38.9	22.02	54.0	20.8	H

802.11n-HT20

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2388.600	46.52	2.9	32.0	11.66	54.0	7.5	V
2390.000	46.84	2.9	32.0	11.98	54.0	7.2	V
4820.000	30.74	-33.2	34.1	29.86	54.0	23.3	H
7235.400	29.51	-30.9	35.8	24.60	54.0	24.5	V
9648.200	29.83	-30.5	36.7	23.57	54.0	24.2	V
12059.700	32.54	-28.7	38.7	22.51	54.0	21.5	V

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2410.500	46.86	2.9	32.0	11.97	54.0	7.1	V
2471.640	47.00	2.9	32.1	12.00	54.0	7.0	V
4869.400	30.78	-33.3	34.1	29.92	54.0	23.2	V
7310.800	29.49	-30.8	35.8	24.48	54.0	24.5	H
9748.300	30.17	-30.3	36.9	23.65	54.0	23.8	H
12184.500	32.95	-28.1	38.8	22.25	54.0	21.0	H

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Limit (dBuV/m)	Magin (dBuV/m)	Polarization
2483.520	48.74	2.9	32.1	13.73	54.0	5.3	V
2484.180	48.57	2.9	32.1	13.56	54.0	5.4	V
4924.000	31.44	-33.5	34.2	30.79	54.0	22.6	H
7386.200	28.81	-31.5	35.9	24.41	54.0	25.2	V
9848.000	30.19	-30.2	37.0	23.38	54.0	23.8	V
12310.600	32.77	-27.8	38.9	21.64	54.0	21.2	H

Test graphs as below:

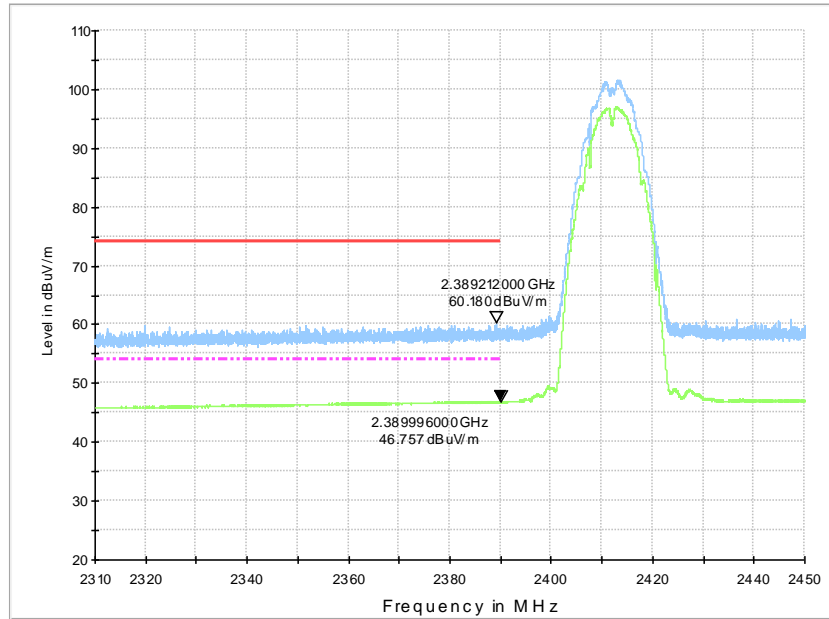


Fig.B.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz

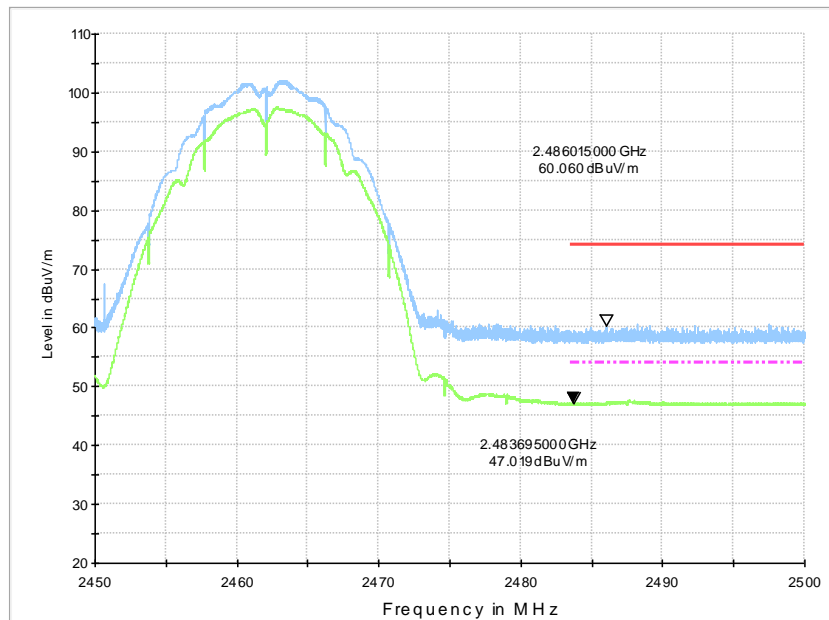


Fig.B.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

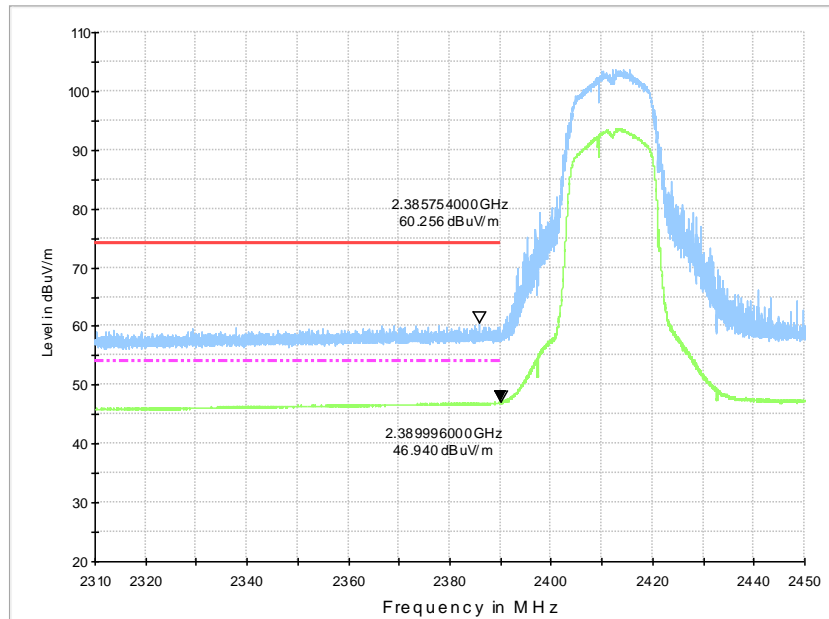


Fig.B.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

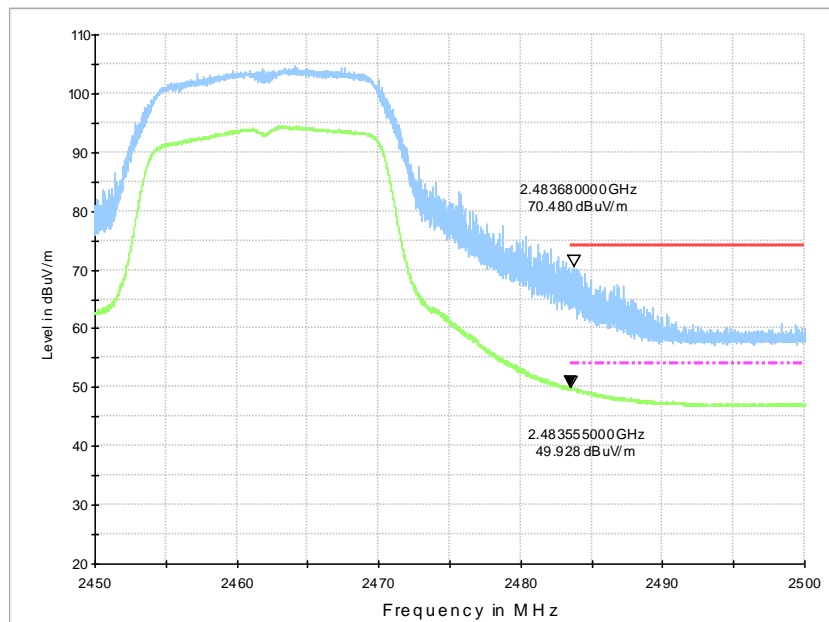


Fig.B.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

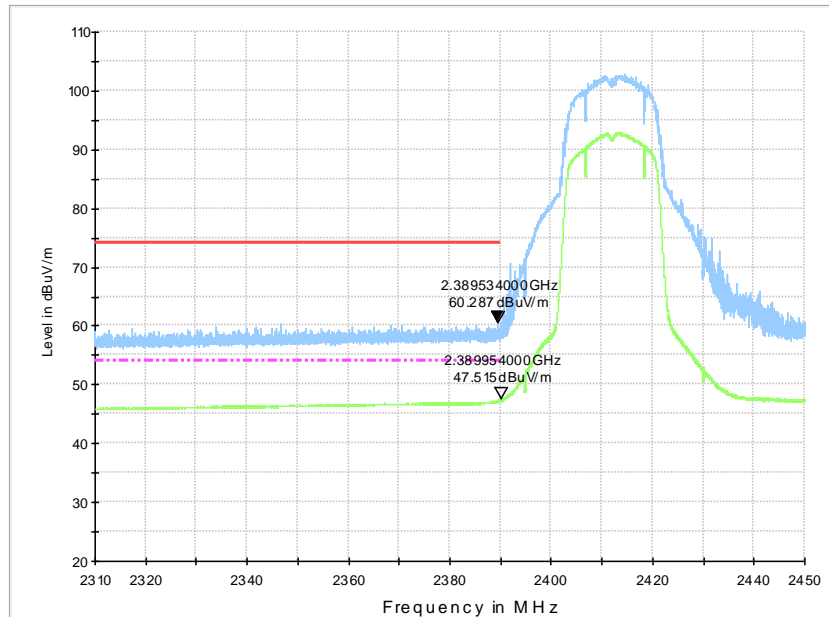


Fig.B.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

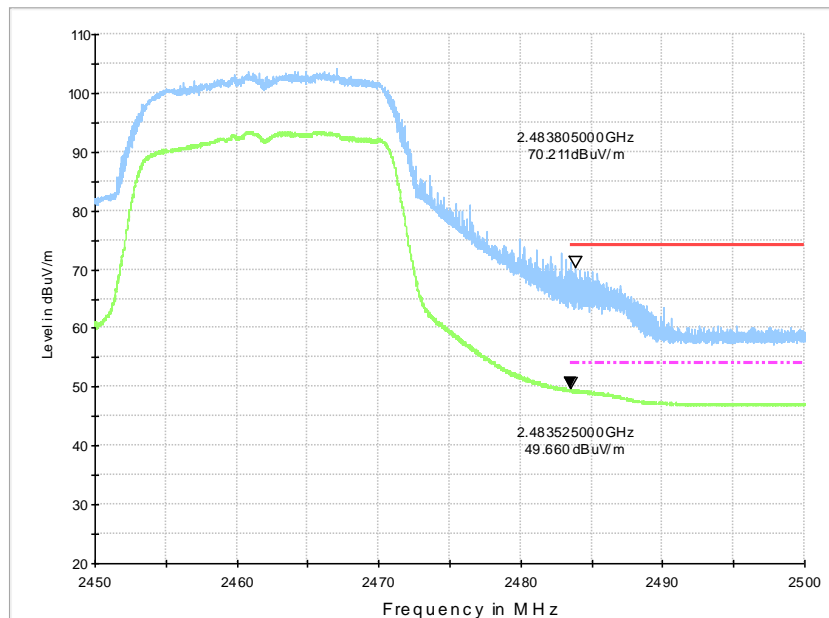


Fig.B.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

B.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 within the fundamental emission band of the transmitter, but only for those 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.B.7.1	Fig.B.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.B.7.1	Fig.B.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:

Note: The measurement results showed here are worst cases.

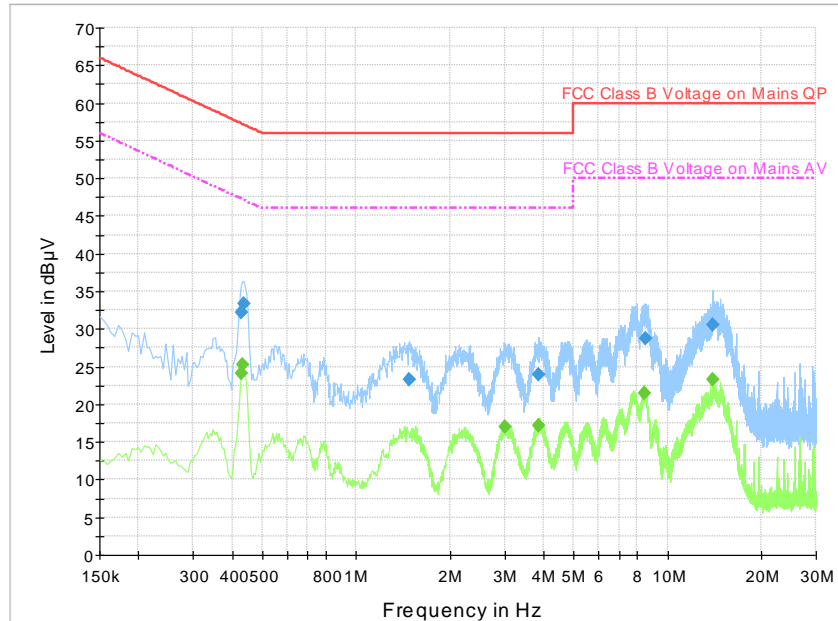


Fig.B.7.1 AC Powerline Conducted Emission-802.11b

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)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.429000	32.2	L1	19.6	25.1	57.3
0.438000	33.3	L1	19.6	23.8	57.1
1.477500	23.3	L1	19.6	32.7	56.0
3.844500	23.9	L1	19.7	32.1	56.0
8.529000	28.7	L1	19.8	31.3	60.0
13.969500	30.6	L1	20.0	29.4	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.429000	24.2	L1	19.6	23.1	47.3
0.433500	25.3	L1	19.6	21.9	47.2
3.012000	16.9	L1	19.6	29.1	46.0
3.844500	17.2	L1	19.7	28.8	46.0
8.443500	21.5	L1	19.8	28.5	50.0
13.969500	23.2	L1	20.0	26.8	50.0

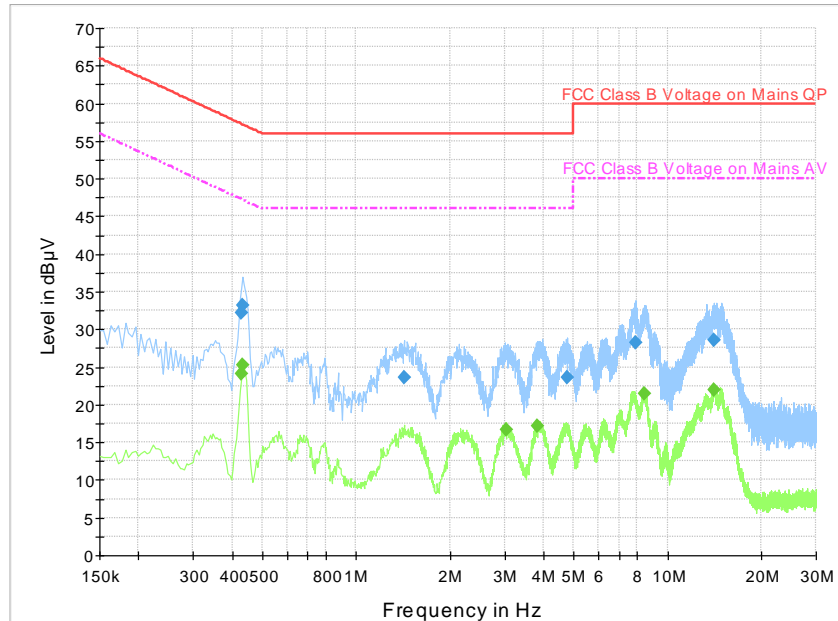


Fig.B.7.2 AC Powerline Conducted Emission-Idle

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



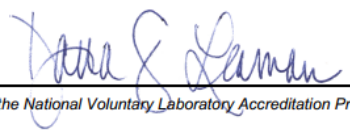
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.429000	32.2	L1	19.6	25.1	57.3
0.433500	33.3	L1	19.6	23.9	57.2
1.423500	23.5	L1	19.6	32.5	56.0
4.771500	23.5	L1	19.8	32.5	56.0
7.899000	28.2	L1	19.8	31.8	60.0
14.140500	28.6	L1	20.0	31.4	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.429000	24.1	L1	19.6	23.2	47.3
0.433500	25.3	L1	19.6	21.9	47.2
3.034500	16.7	L1	19.6	29.3	46.0
3.831000	17.1	L1	19.7	28.9	46.0
8.443500	21.5	L1	19.8	28.5	50.0
14.158500	21.9	L1	20.0	28.1	50.0

ANNEX C: Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p> <div style="display: flex; justify-content: space-around; align-items: center;"><div style="font-size: 2em; font-weight: bold; letter-spacing: 0.5em;">NVLAP[®]</div><div style="text-align: center;"></div></div> <hr/> <p style="font-size: 1.2em; font-weight: bold;">Certificate of Accreditation to ISO/IEC 17025:2017</p> <hr/> <p>NVLAP LAB CODE: 600118-0</p> <p style="text-align: center;">Telecommunication Technology Labs, CAICT Beijing China</p> <p style="text-align: center;"><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p> <p style="text-align: center;">Electromagnetic Compatibility & Telecommunications</p> <p style="text-align: center;"><i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i></p> <div style="display: flex; justify-content: space-between; align-items: center;"><div style="text-align: center;"><hr/><p>2020-09-29 through 2021-09-30 <i>Effective Dates</i></p></div><div style="text-align: center;"></div><div style="text-align: center;"> <hr/><p><i>For the National Voluntary Laboratory Accreditation Program</i></p></div></div>	
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END OF REPORT