

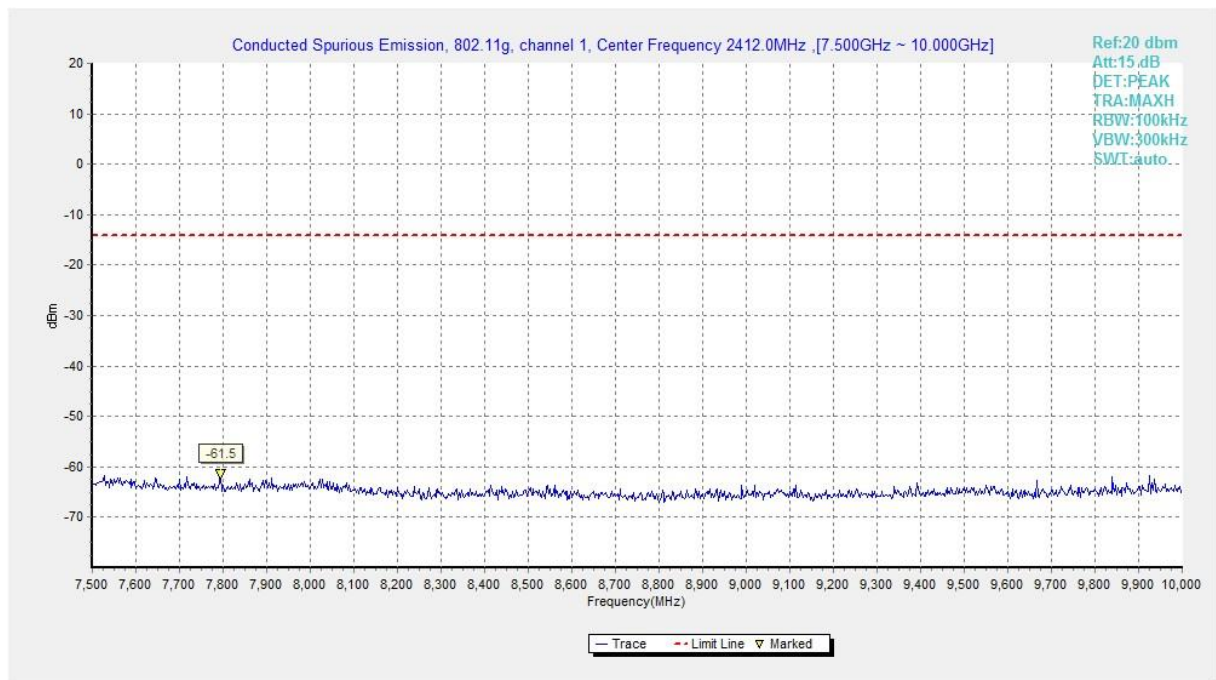


Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)

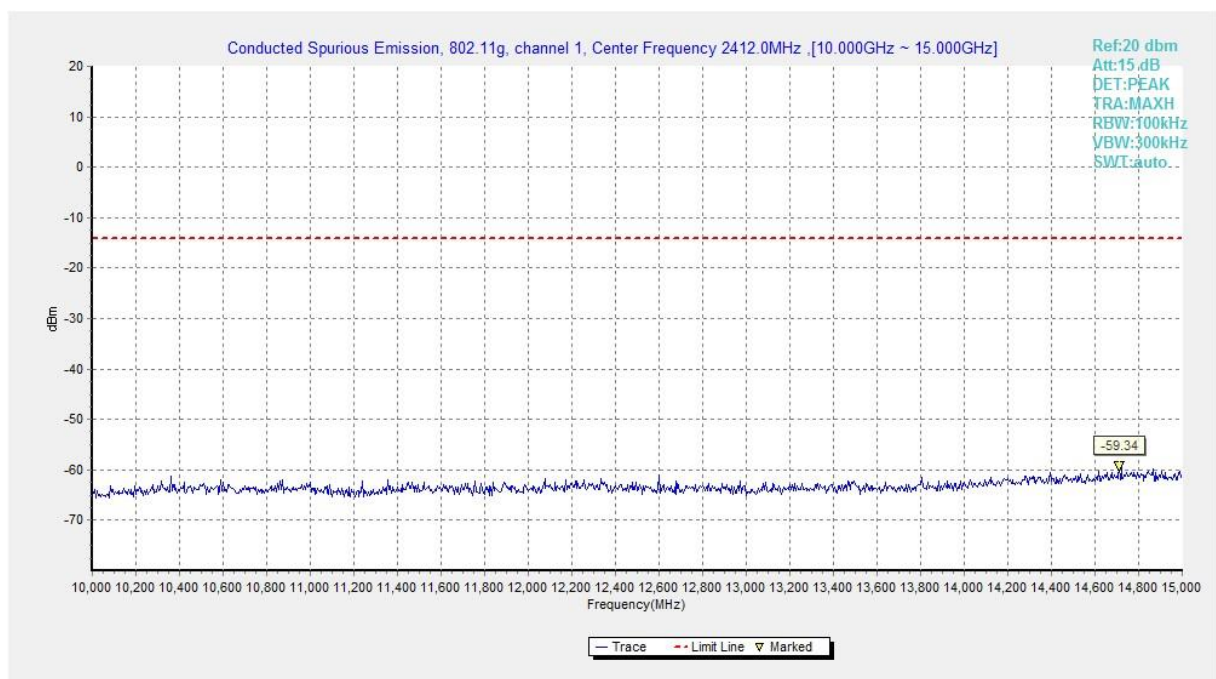


Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)

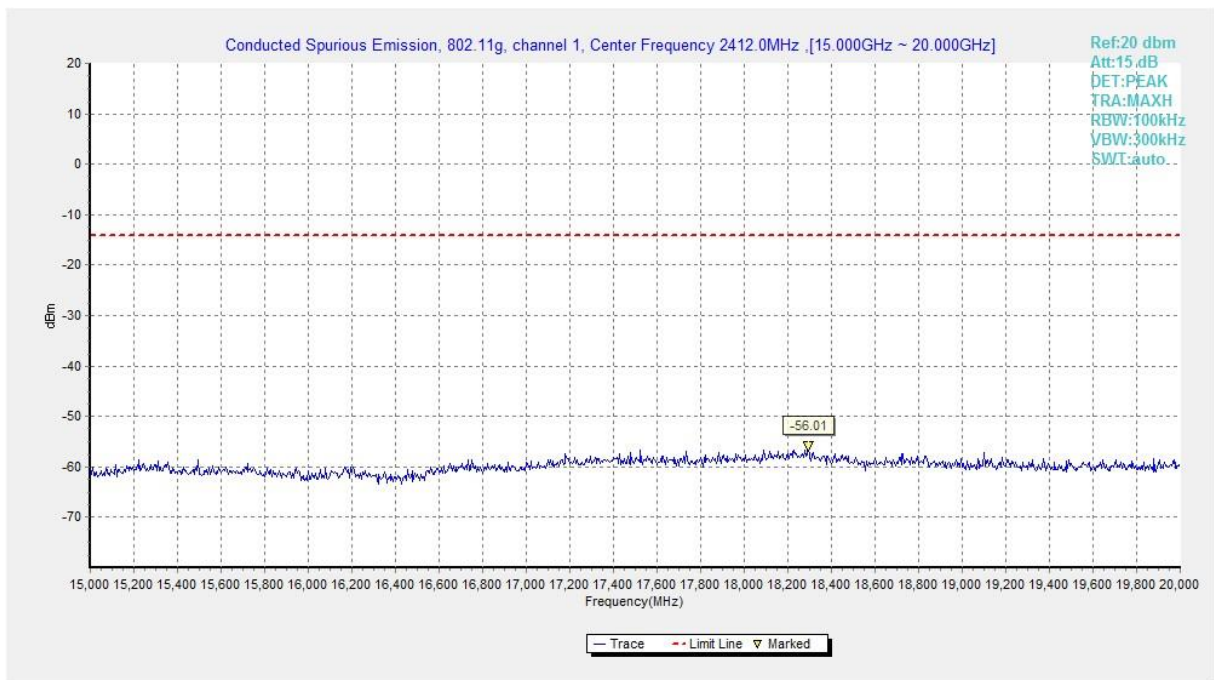


Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)

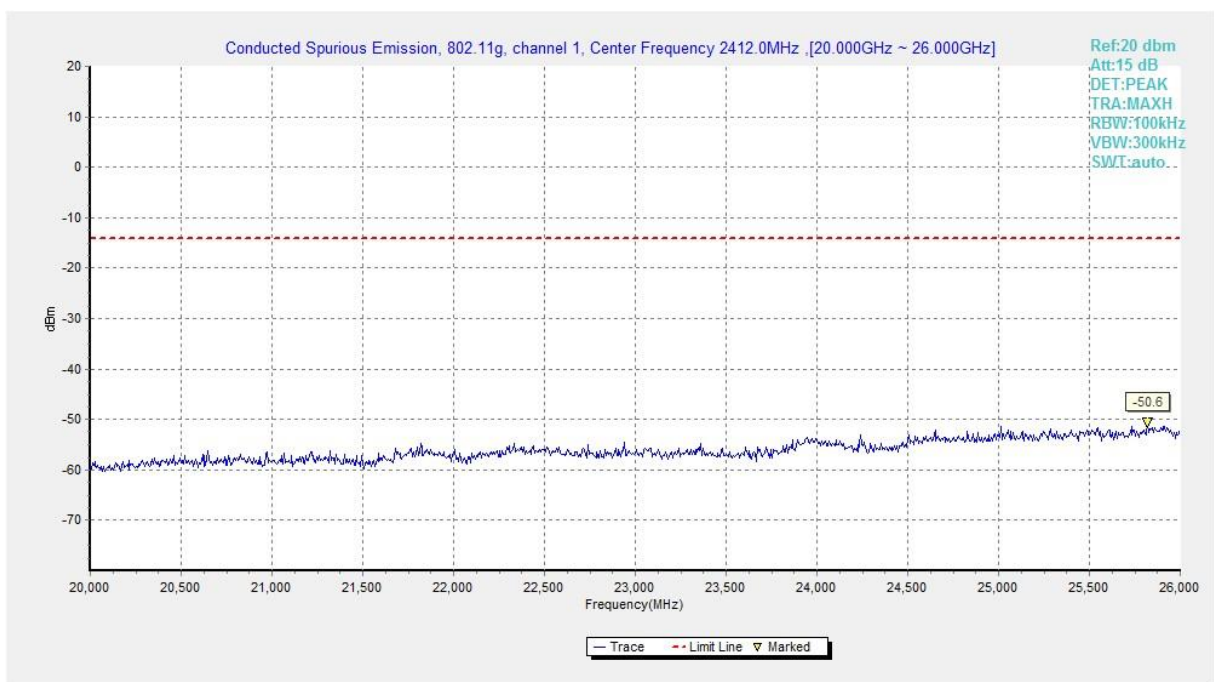


Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)

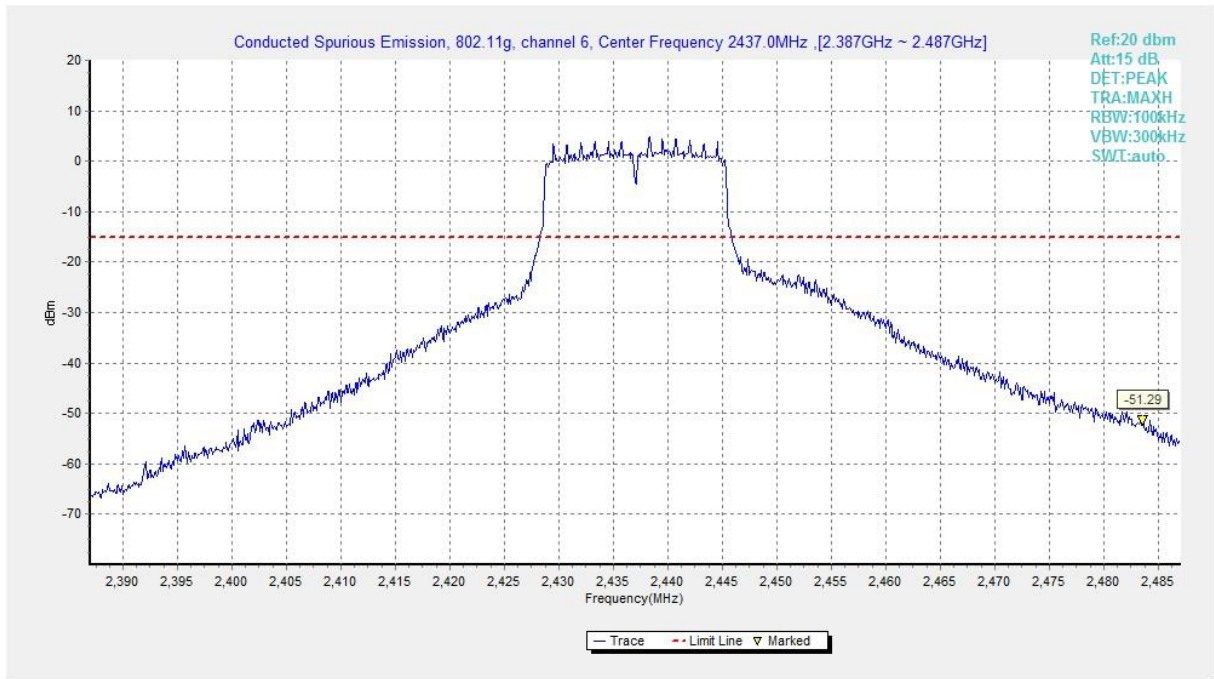


Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

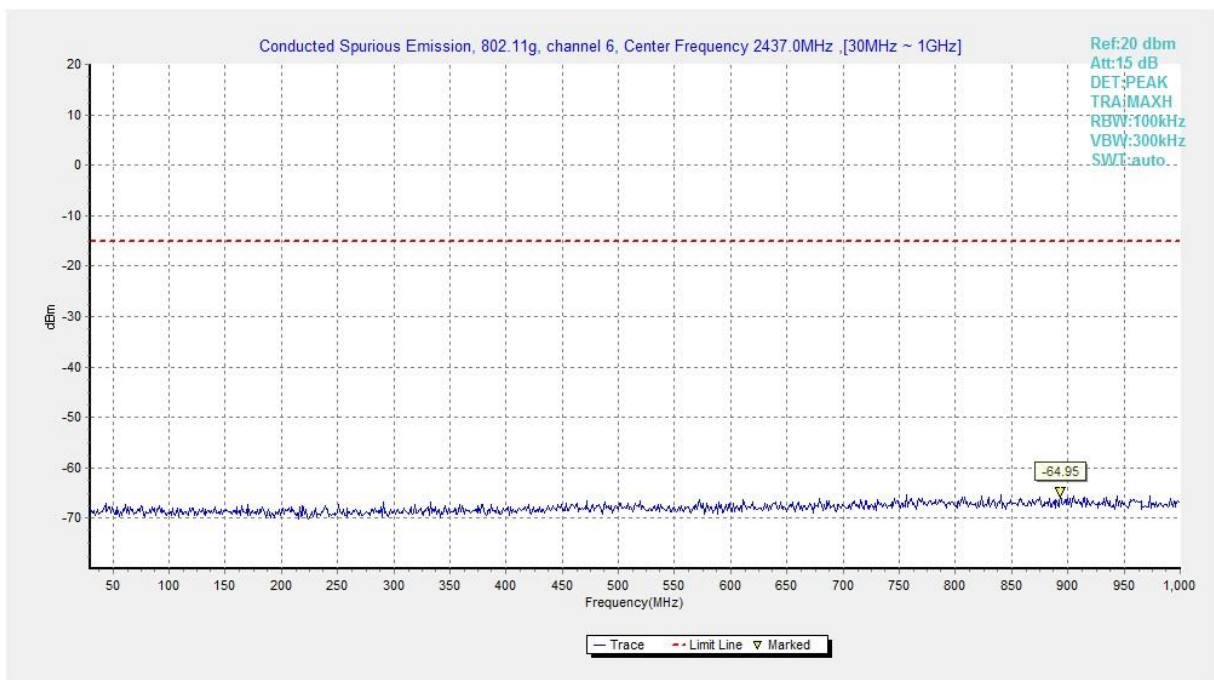


Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)

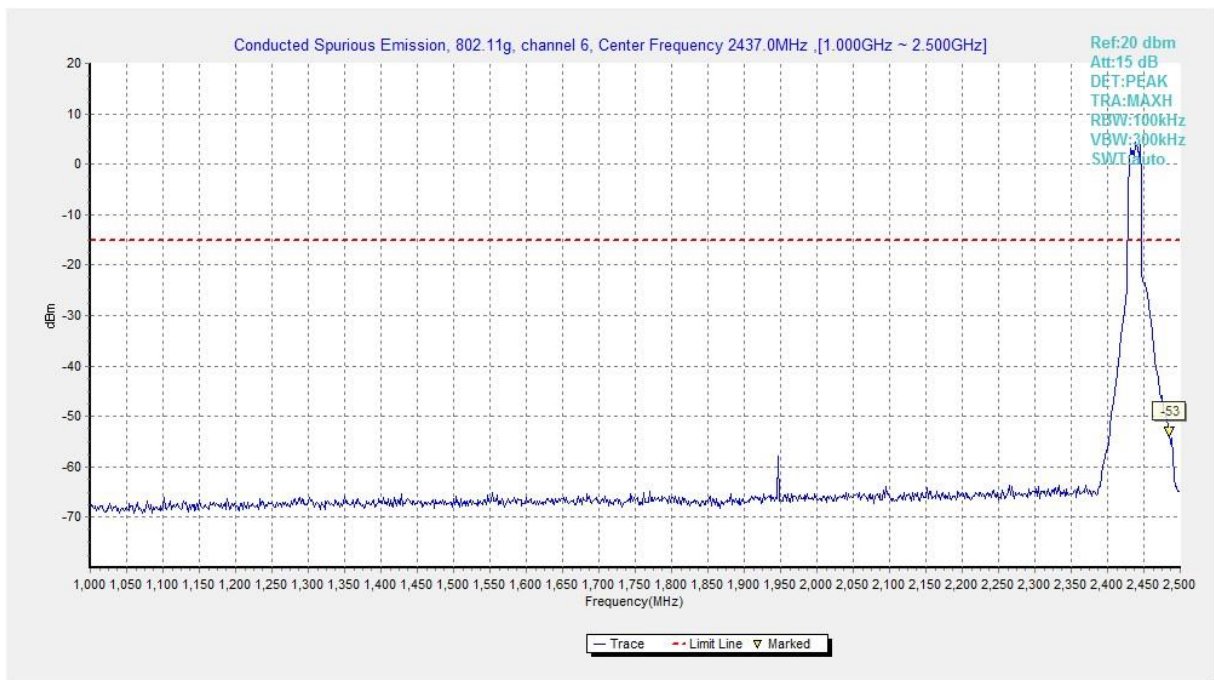


Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)

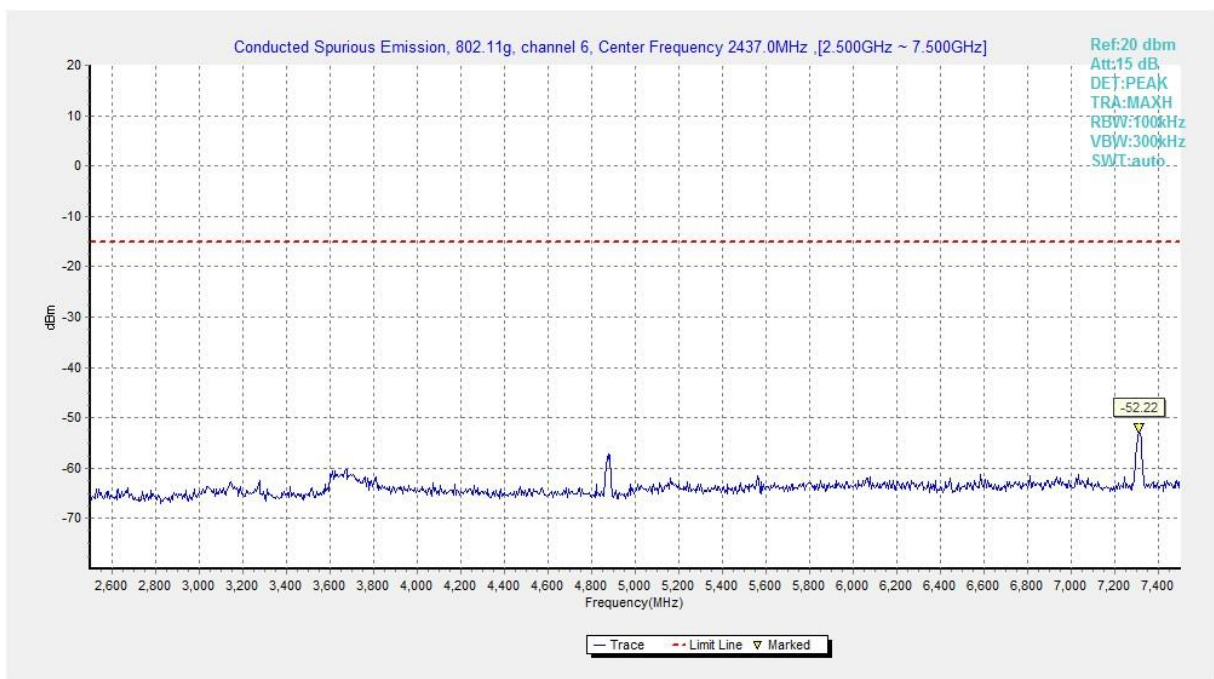


Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)

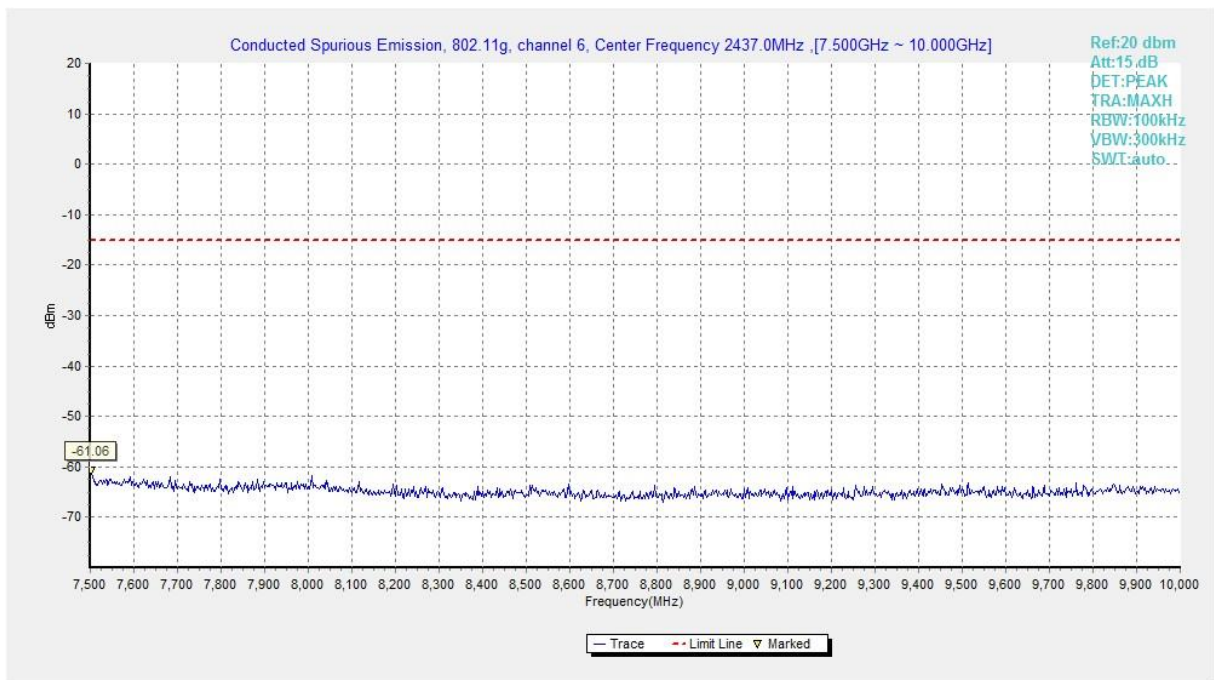


Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)

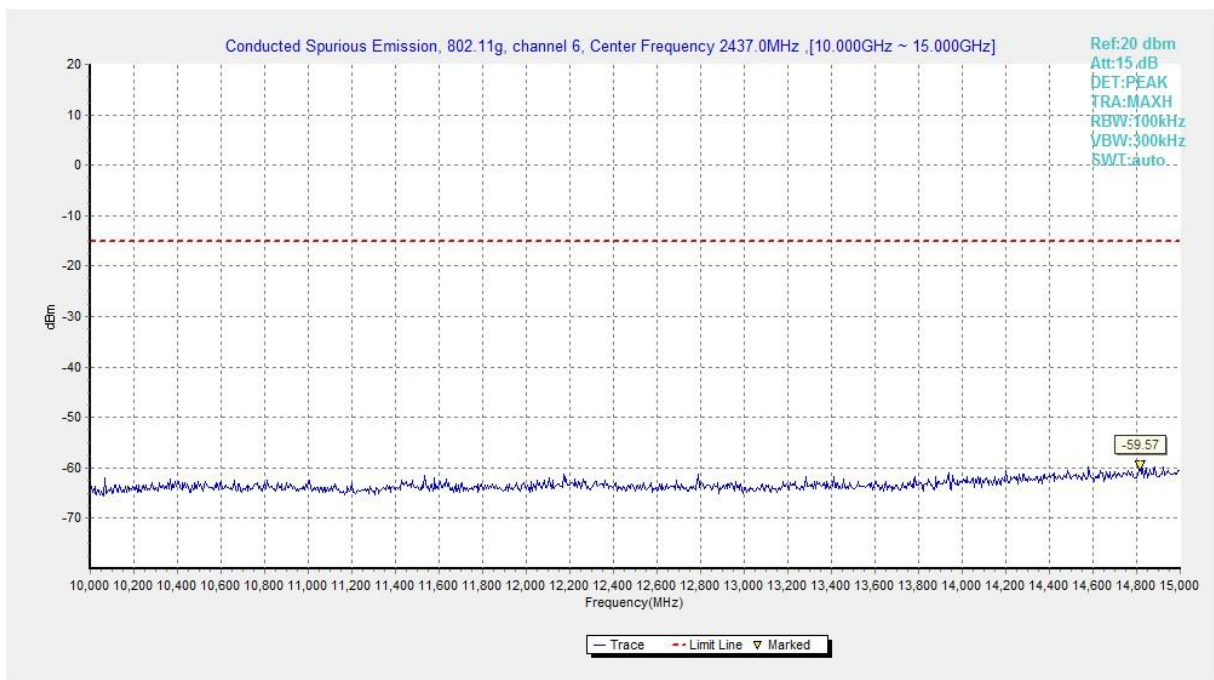


Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)

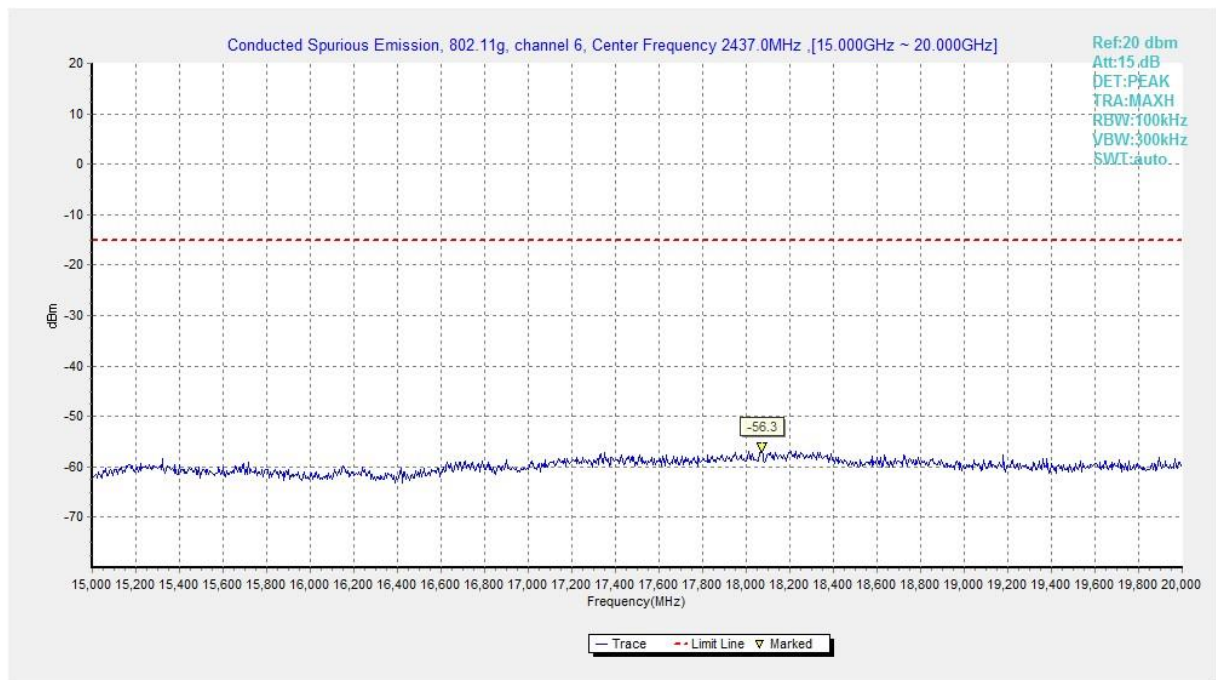


Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)

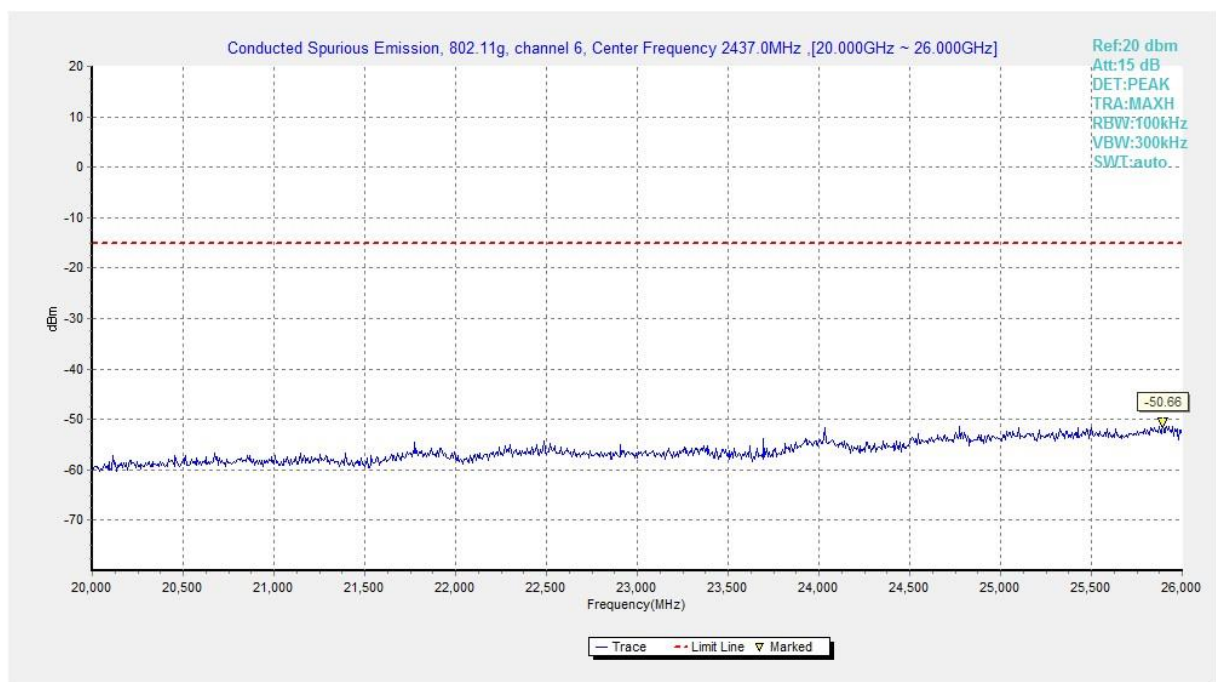


Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)

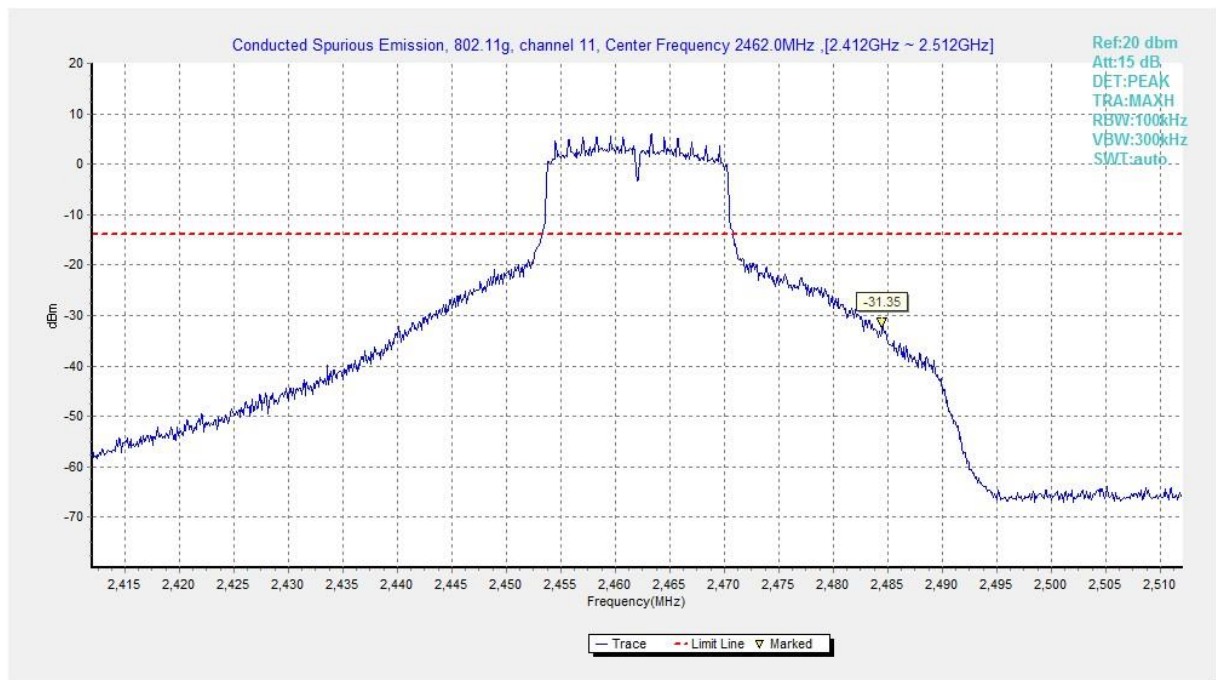


Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)

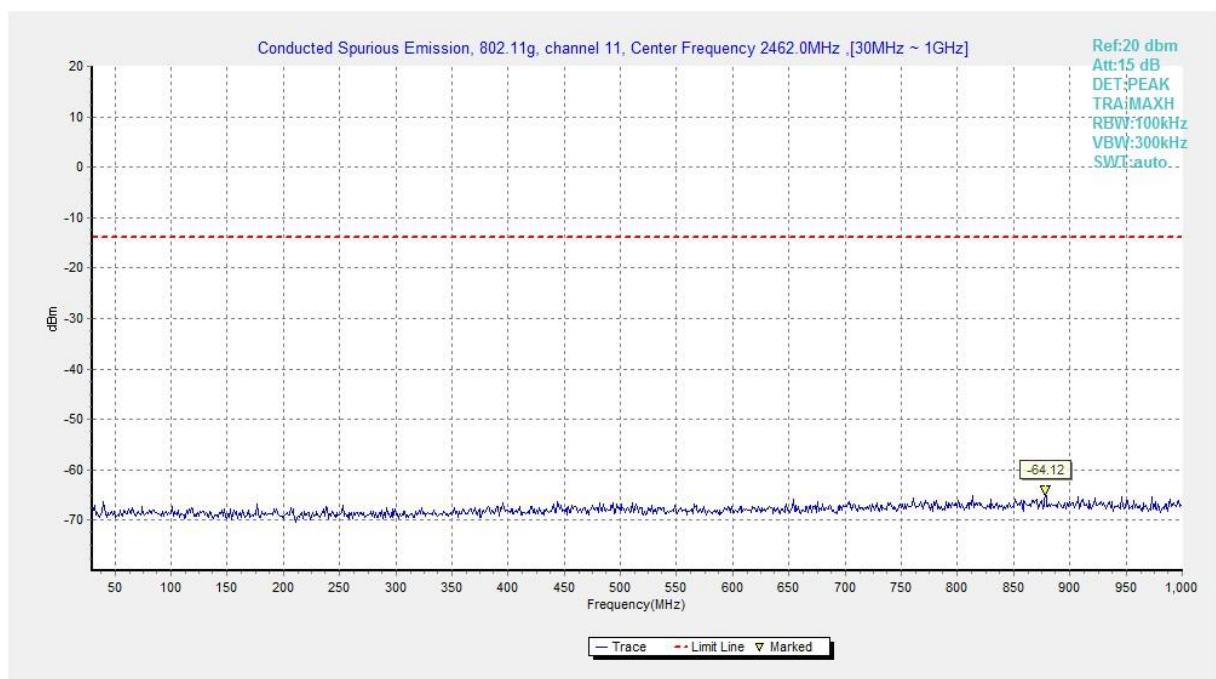


Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)

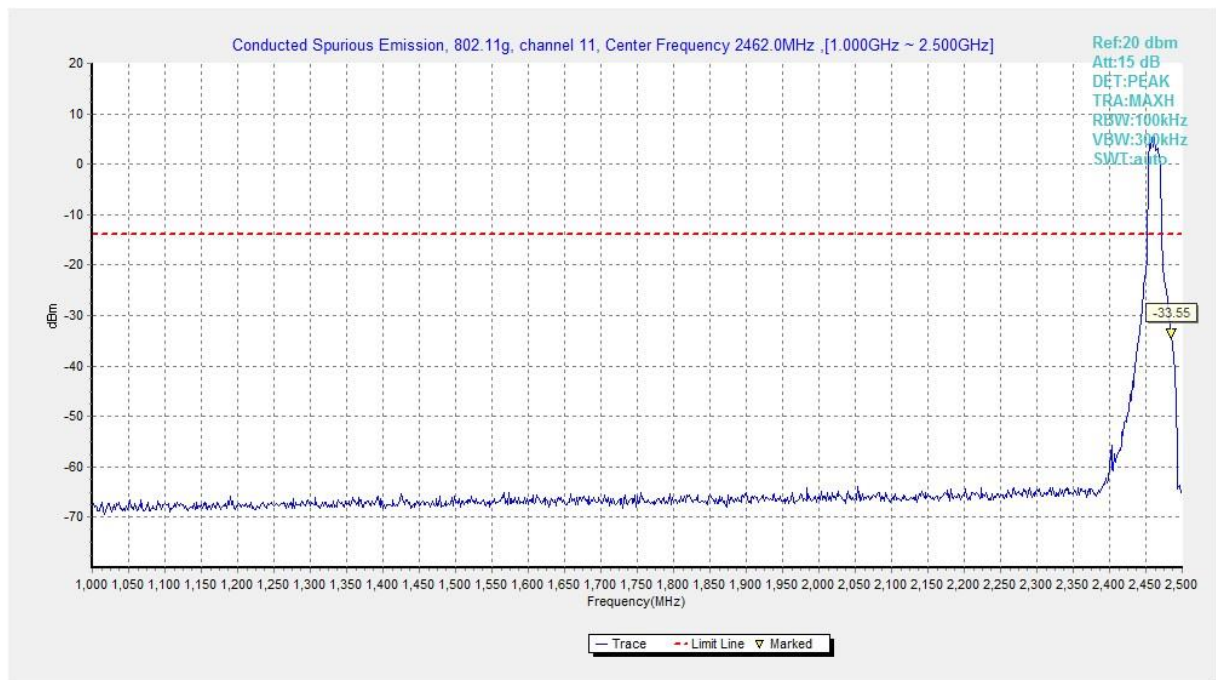


Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)

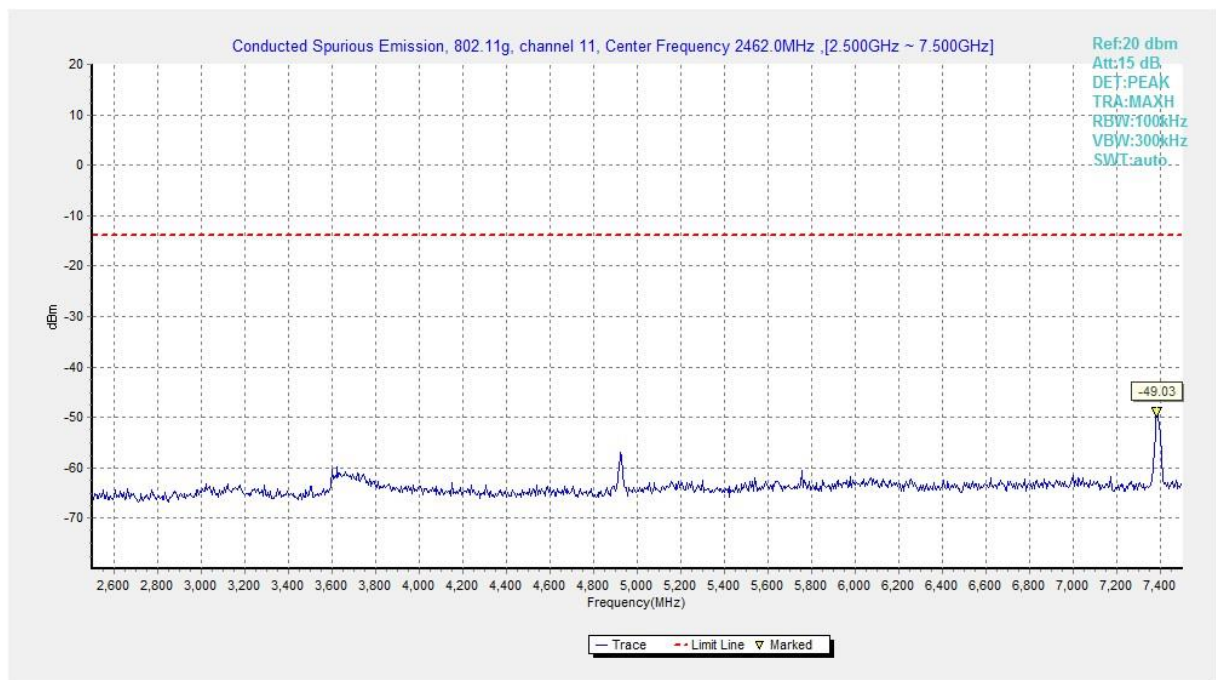


Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)

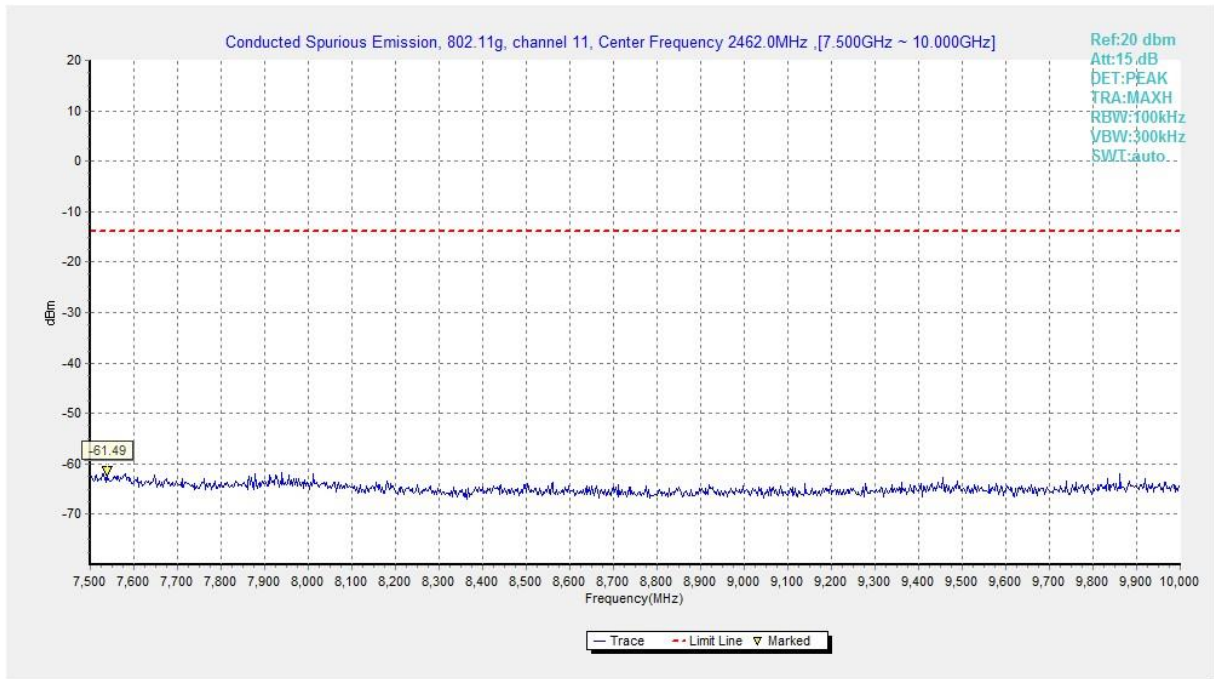


Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)

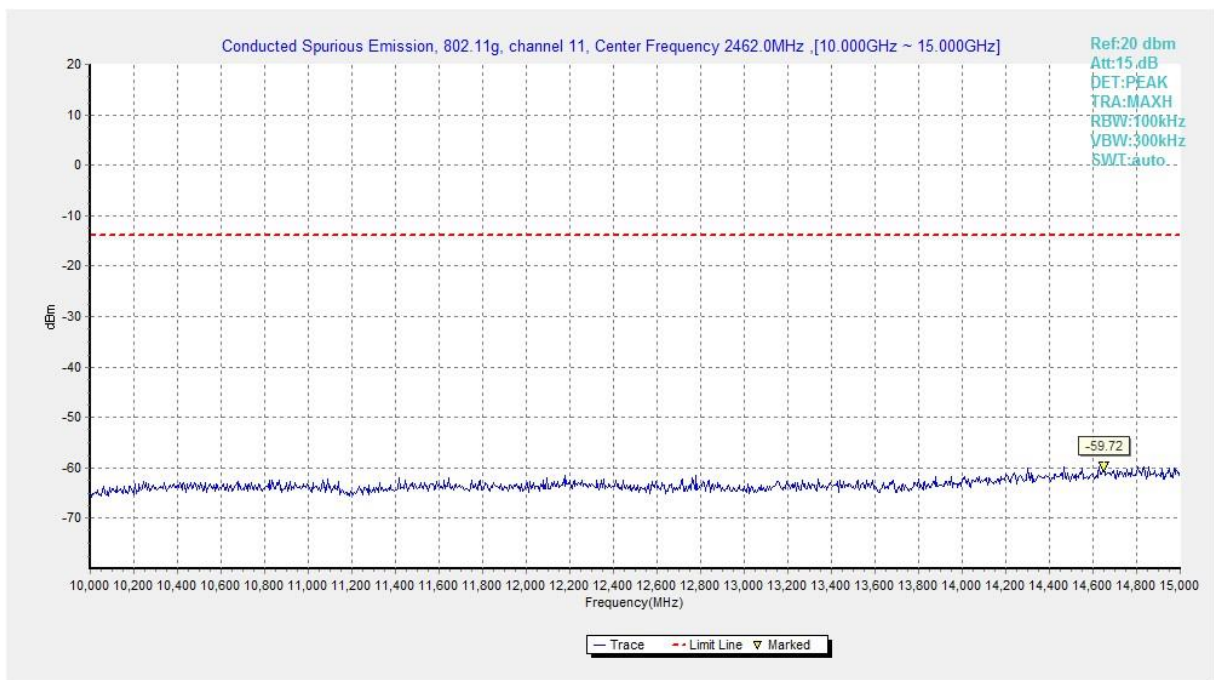


Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)

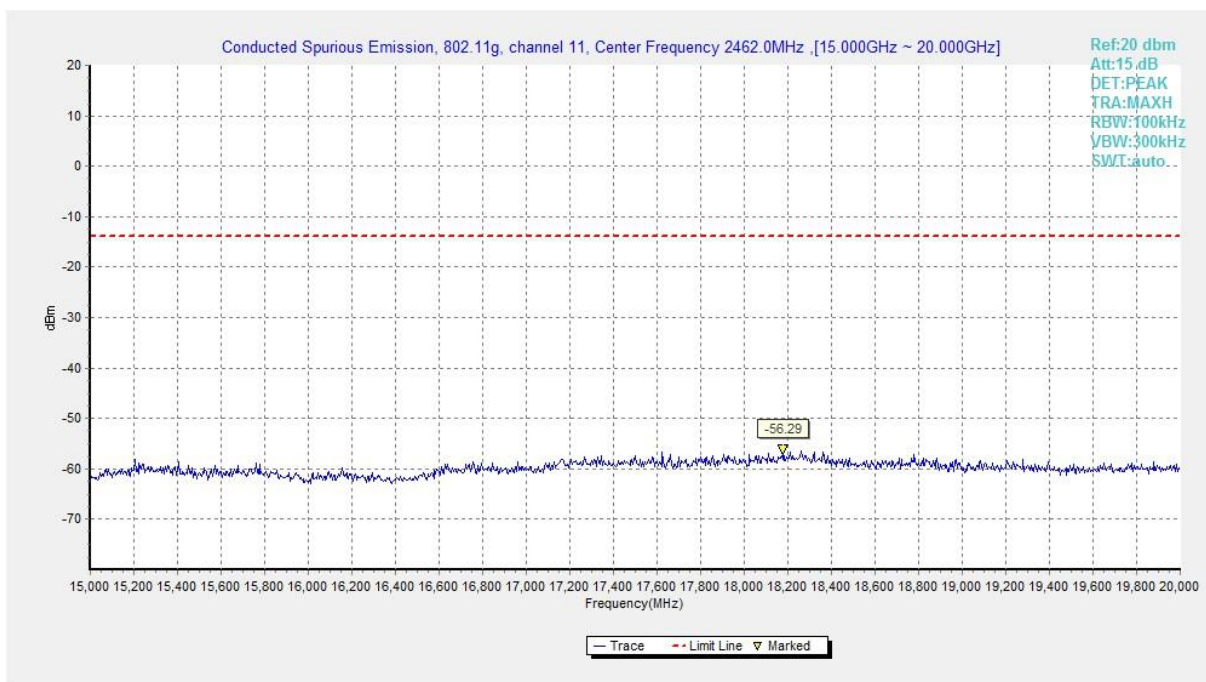


Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)

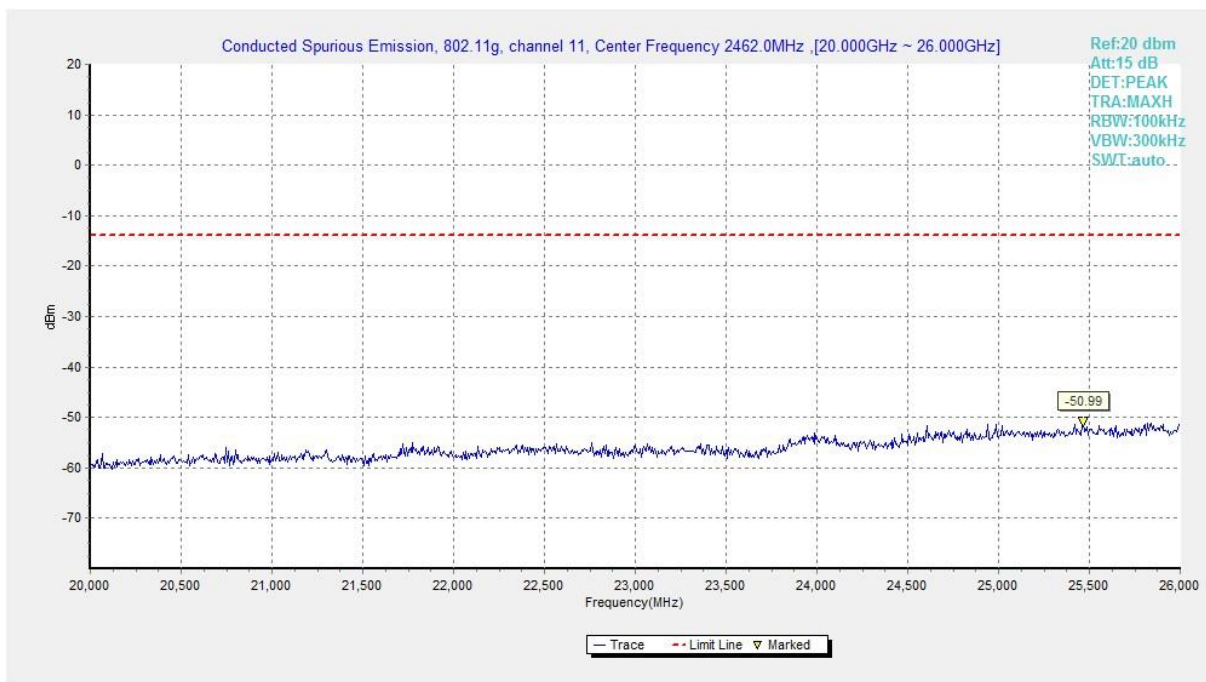


Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)

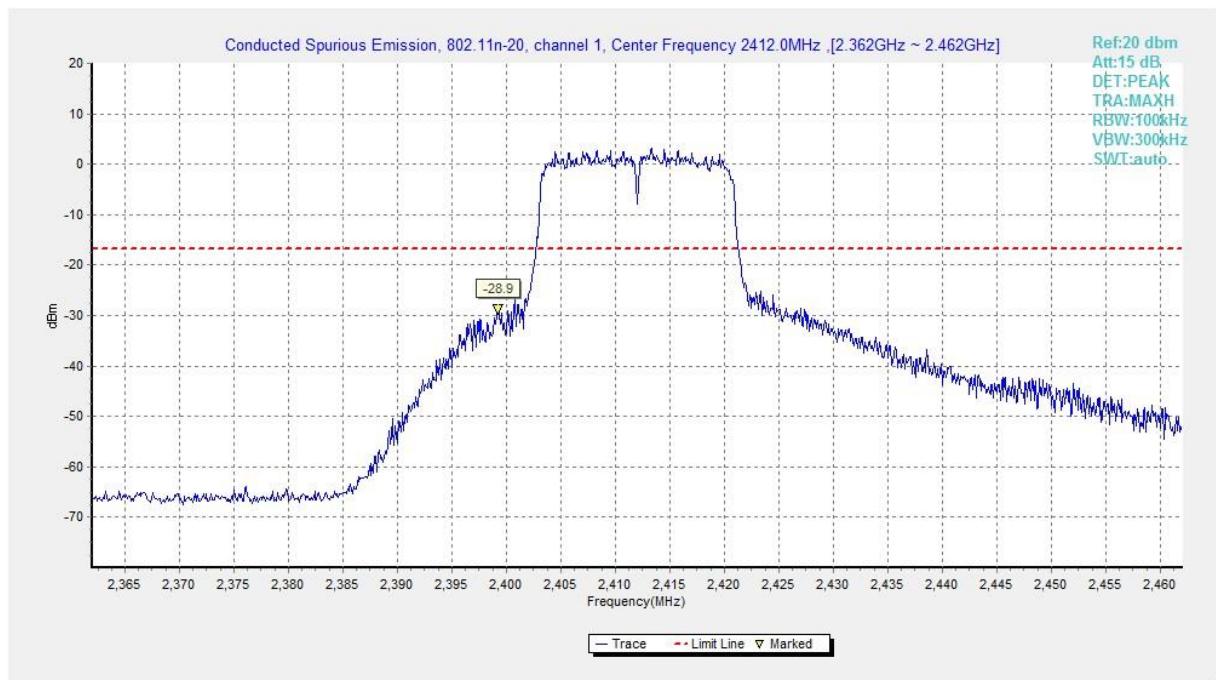


Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)

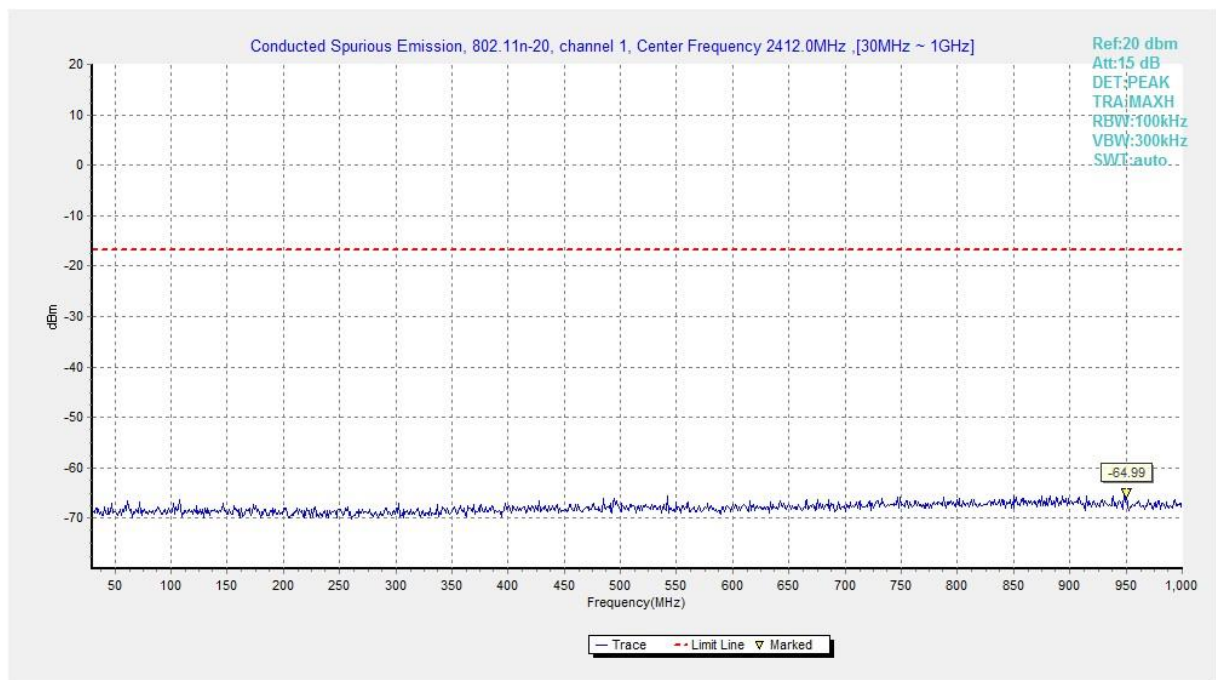


Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)

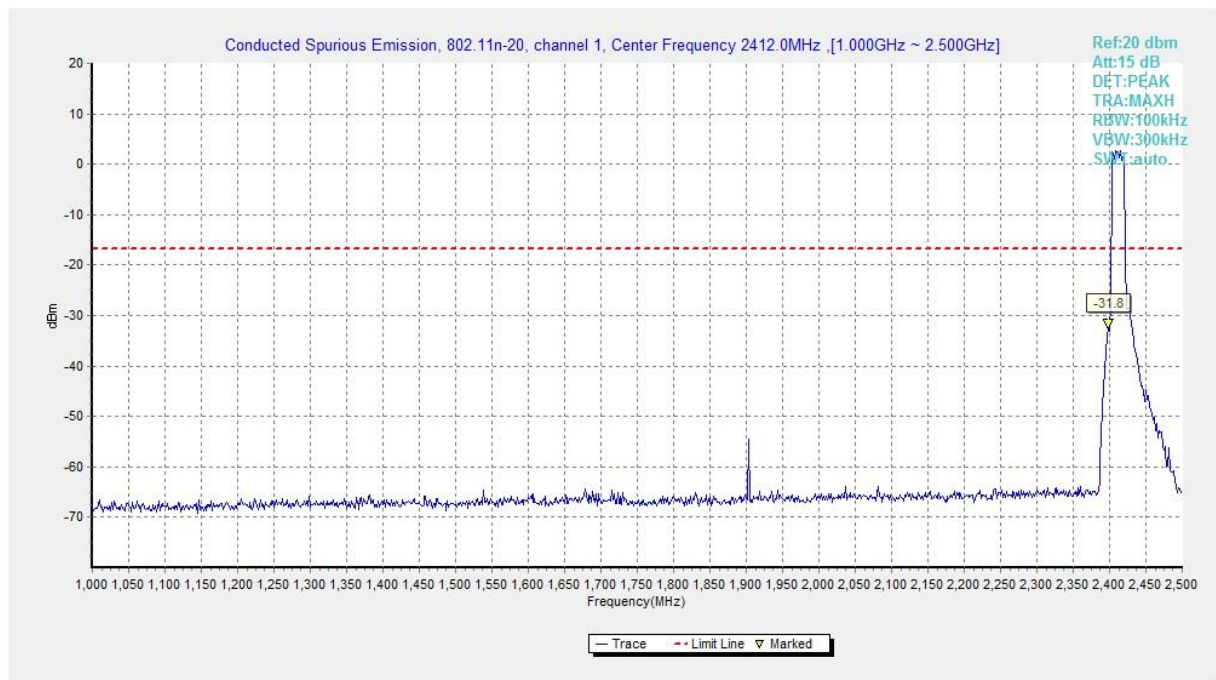


Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)

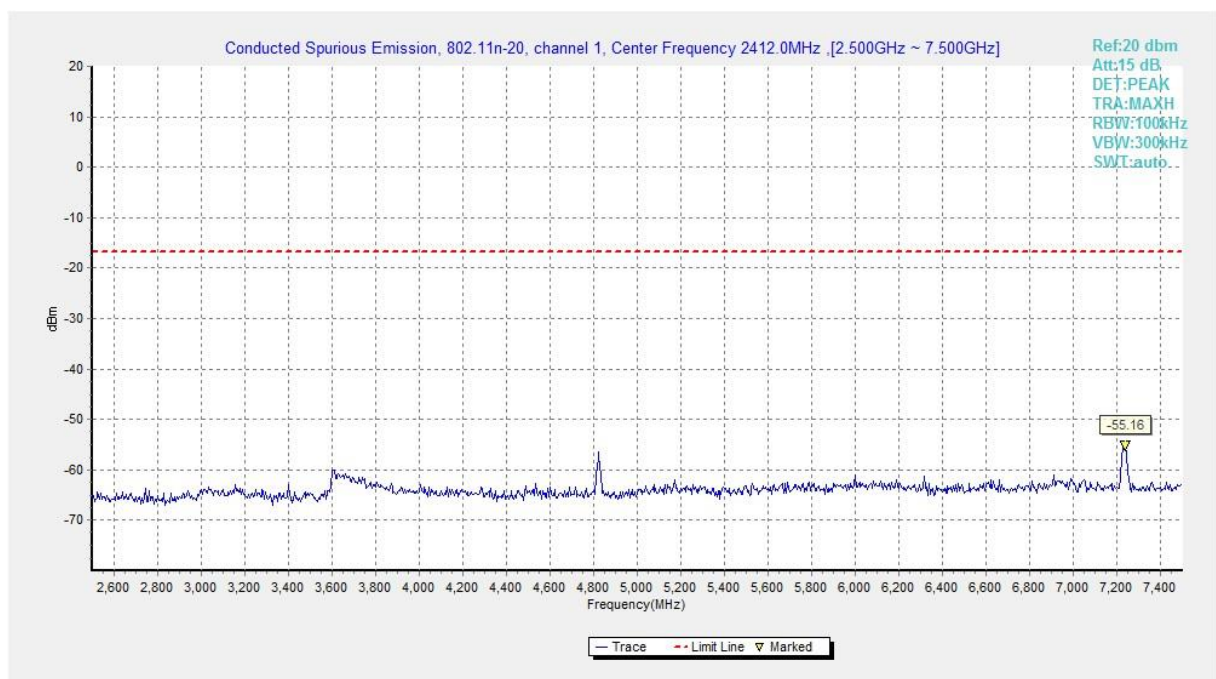


Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)

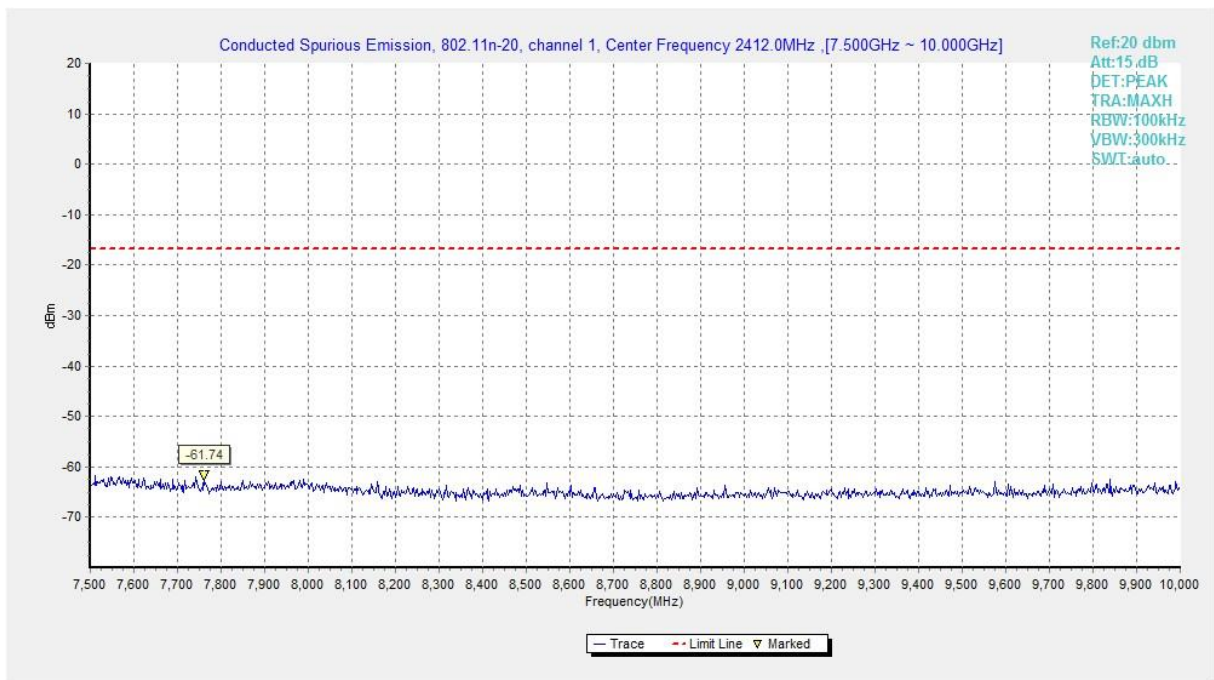


Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)

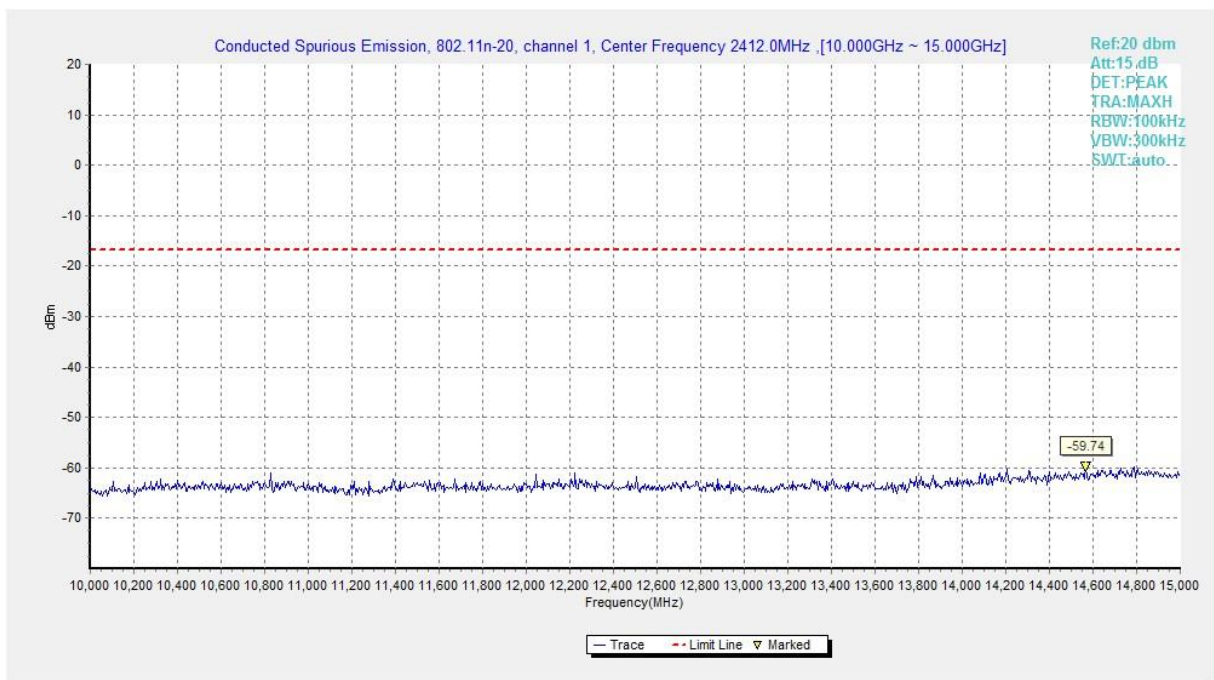


Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)

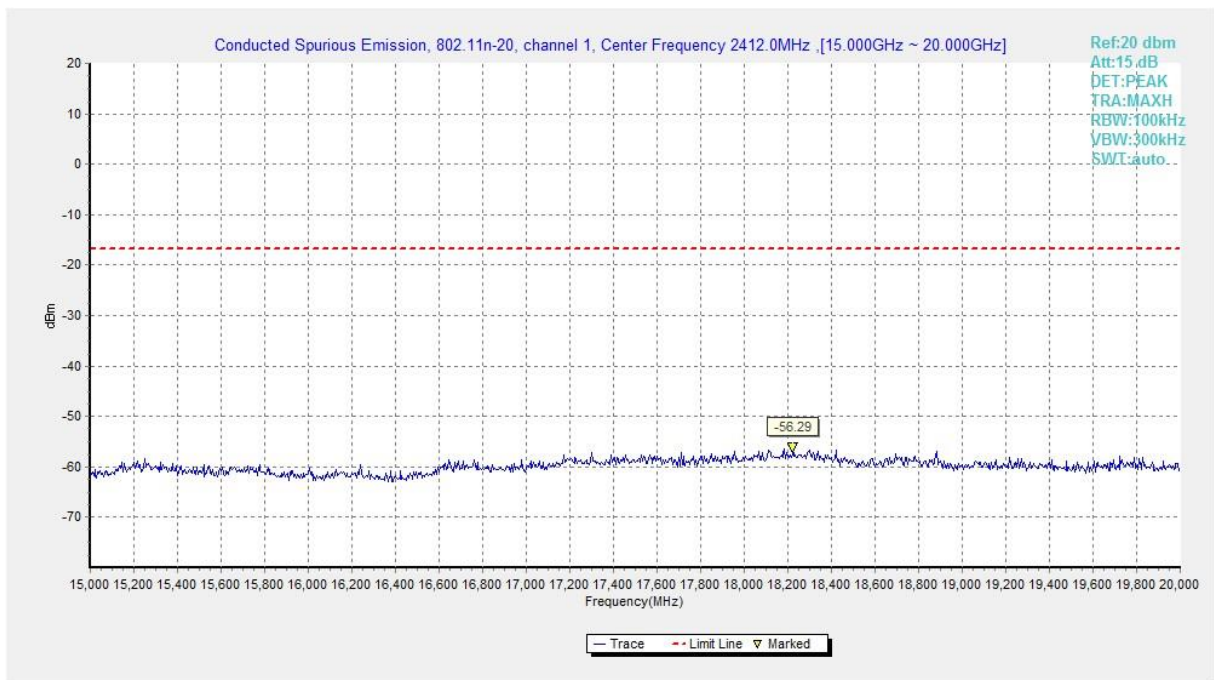


Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)

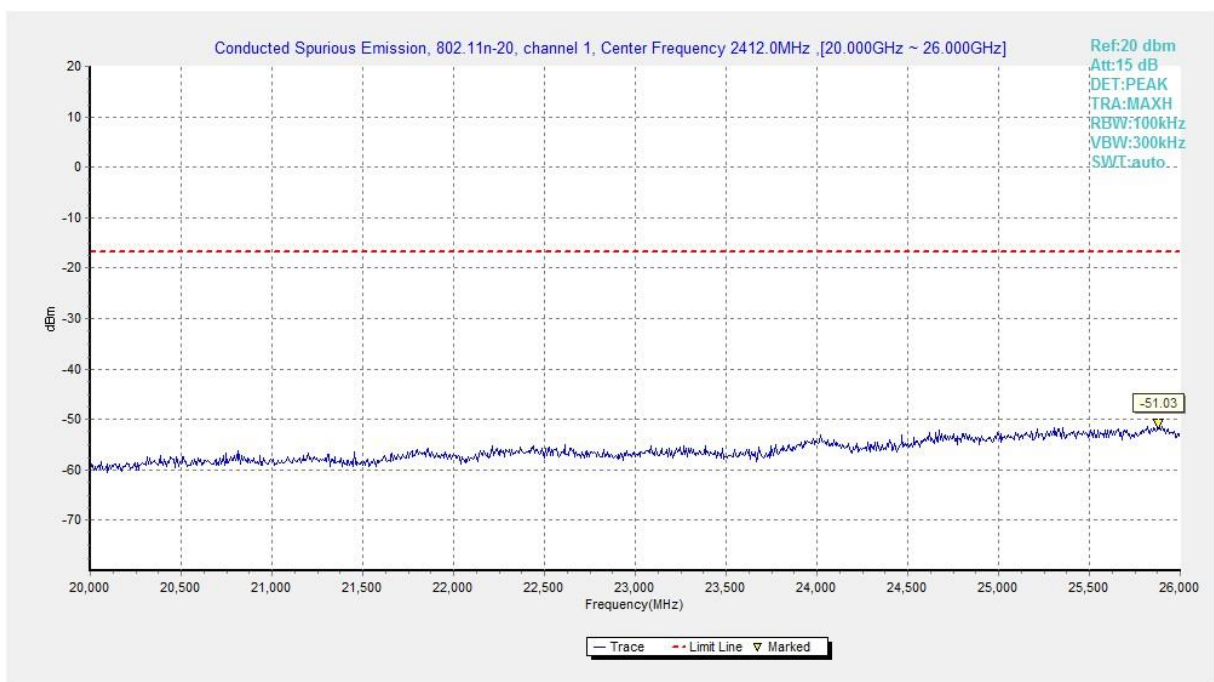


Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)

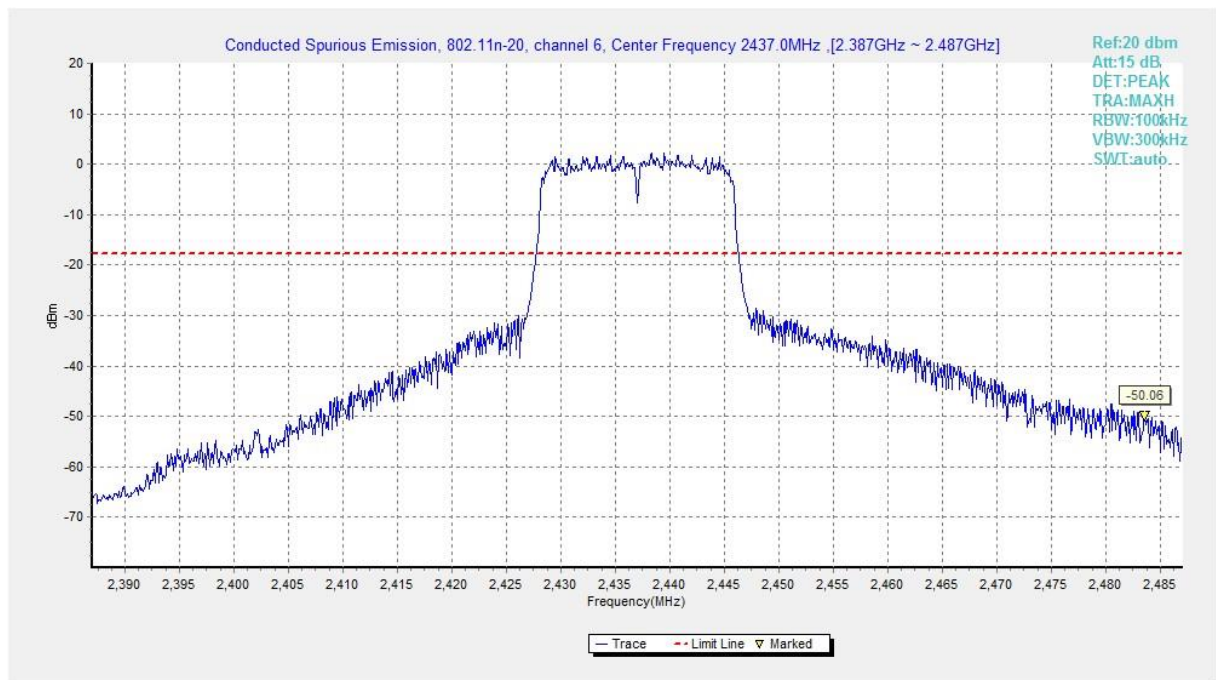


Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

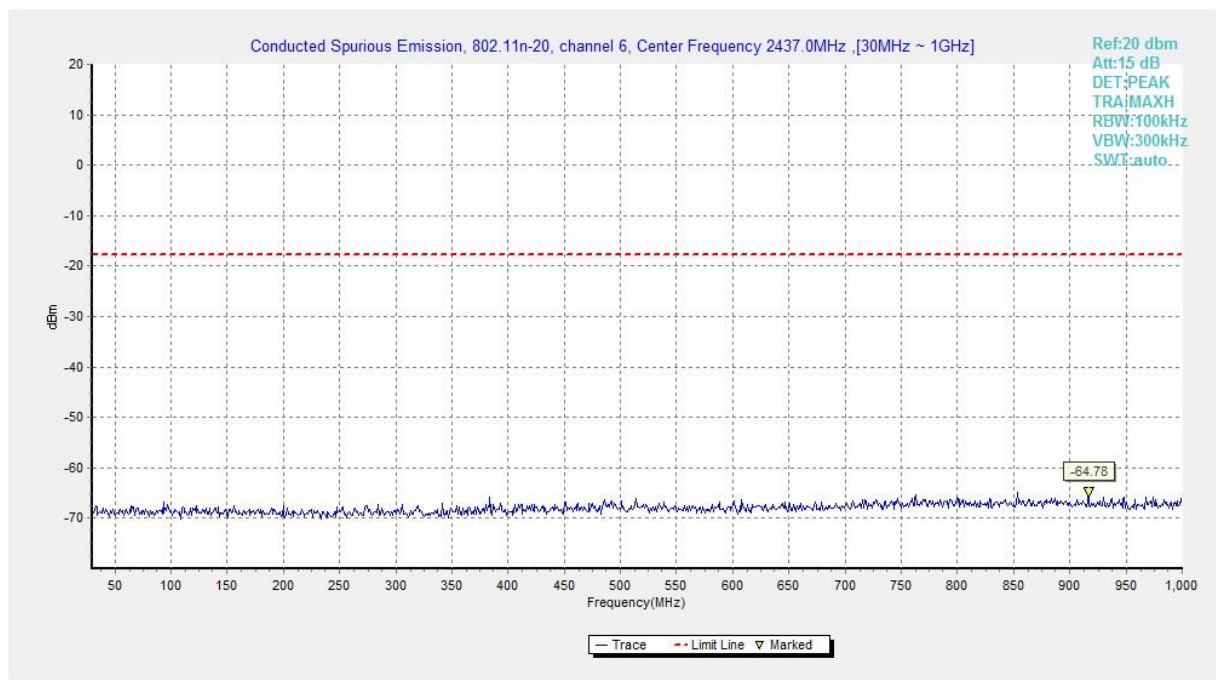


Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)

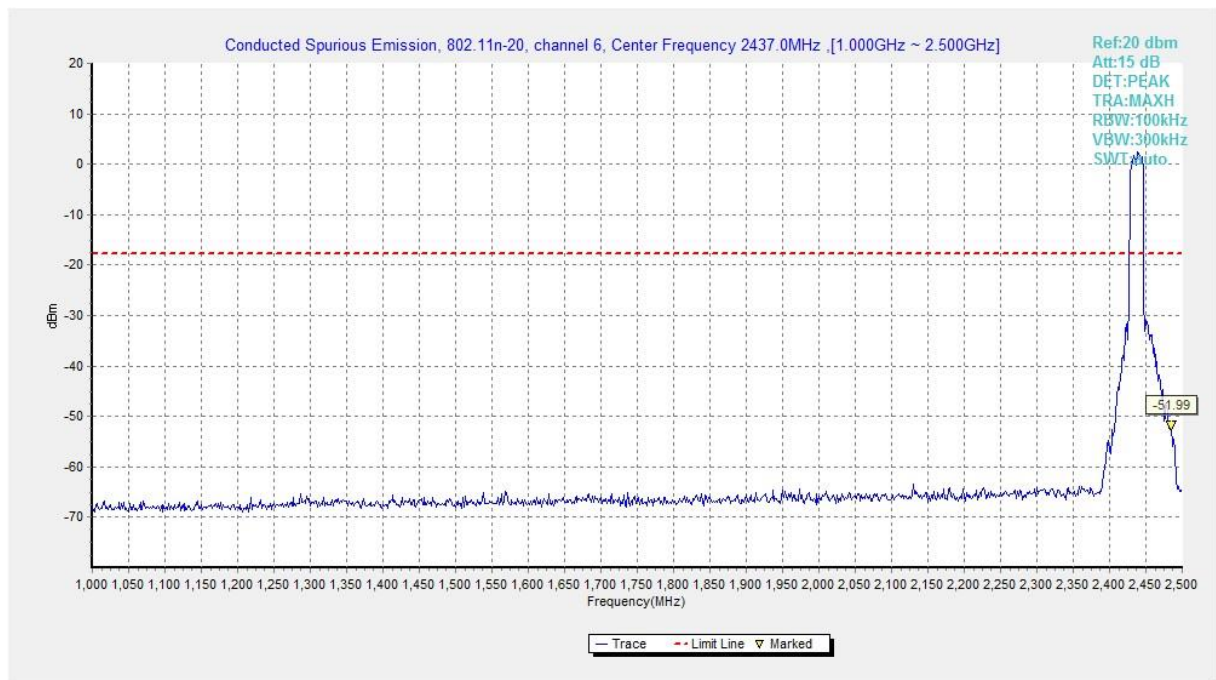


Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

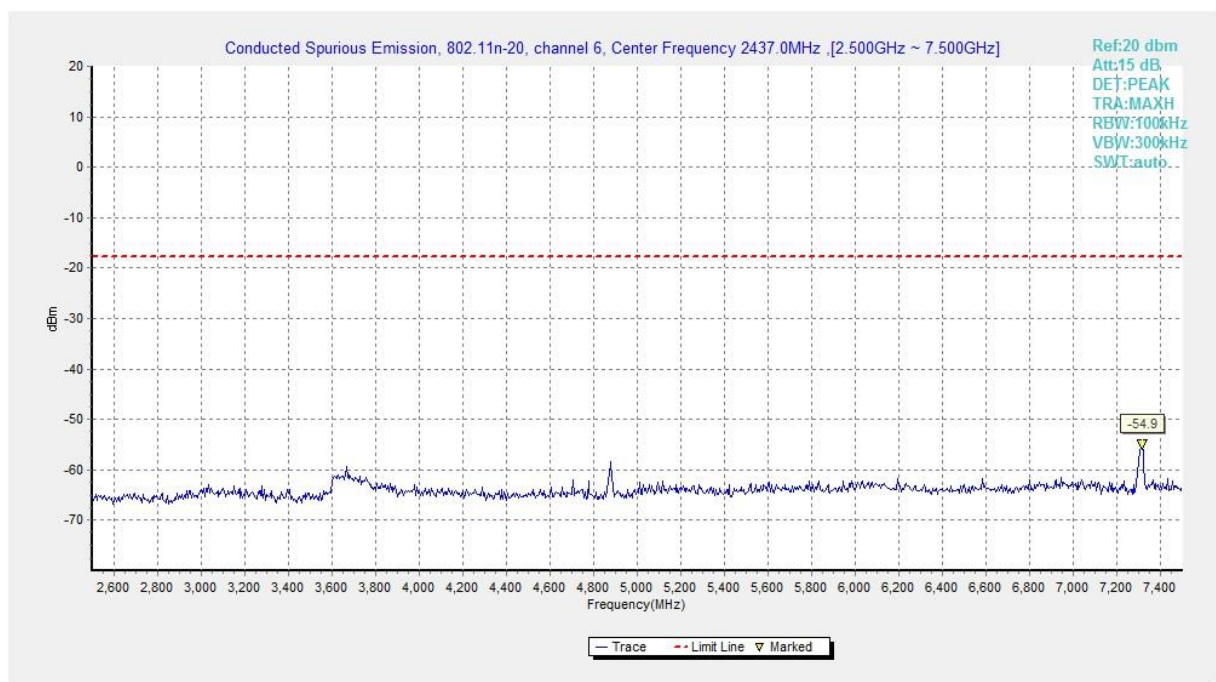


Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

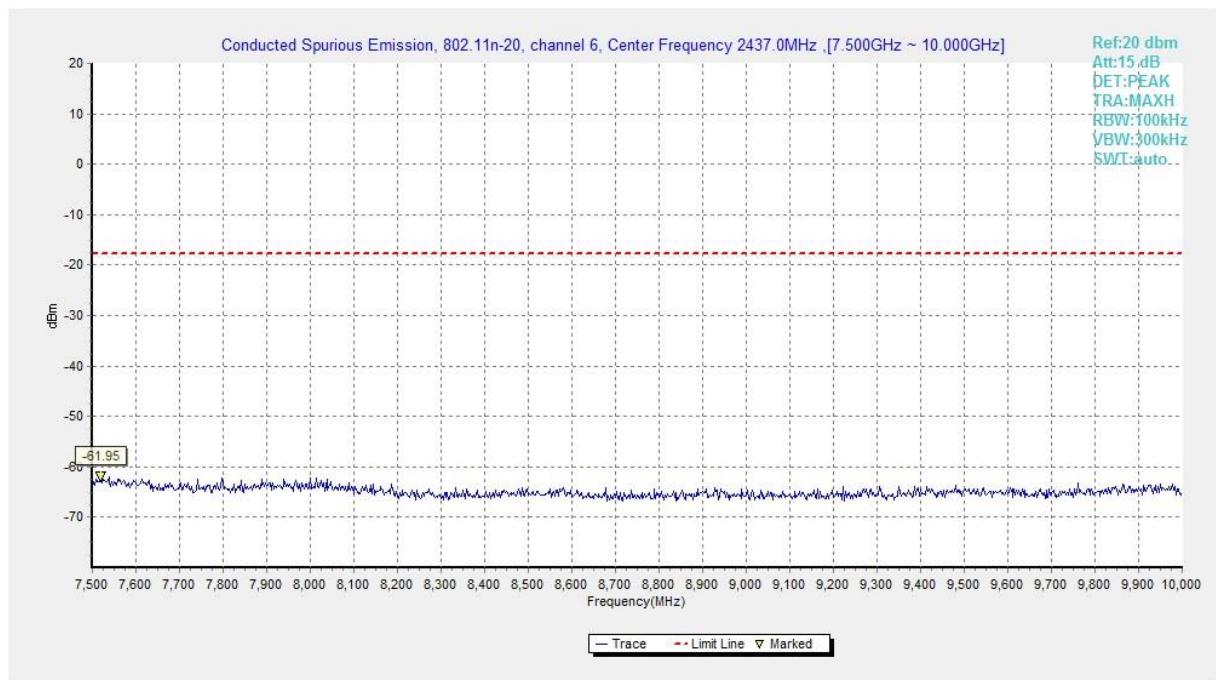


Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

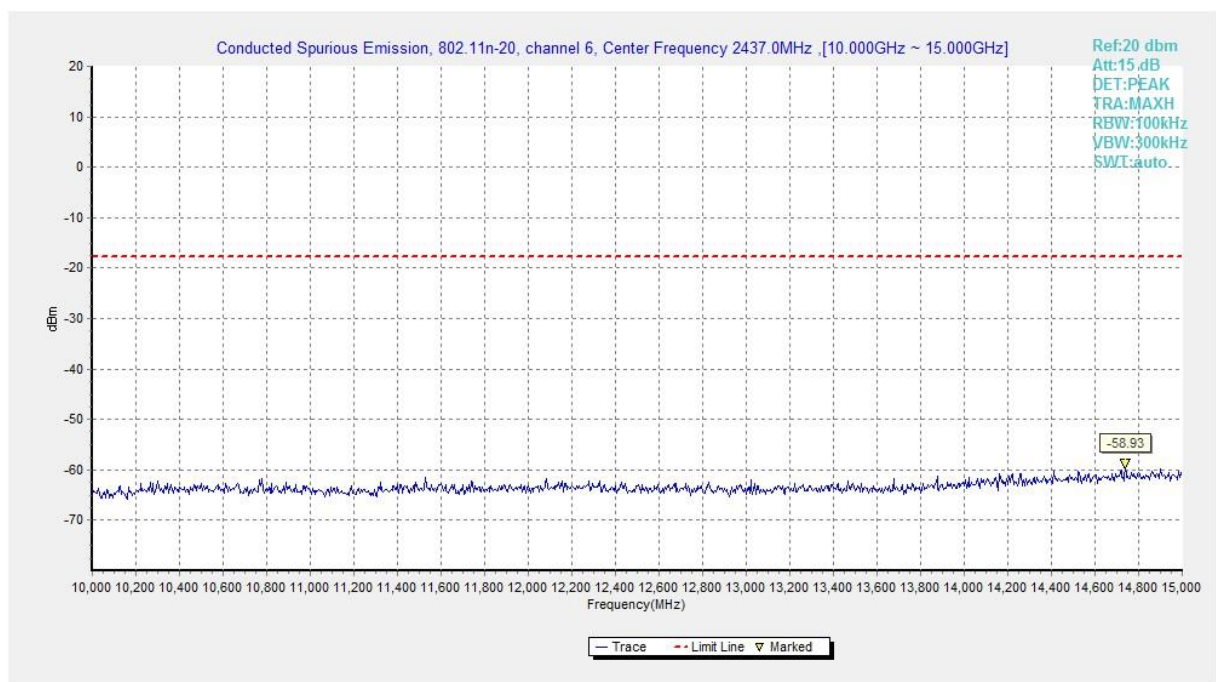


Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

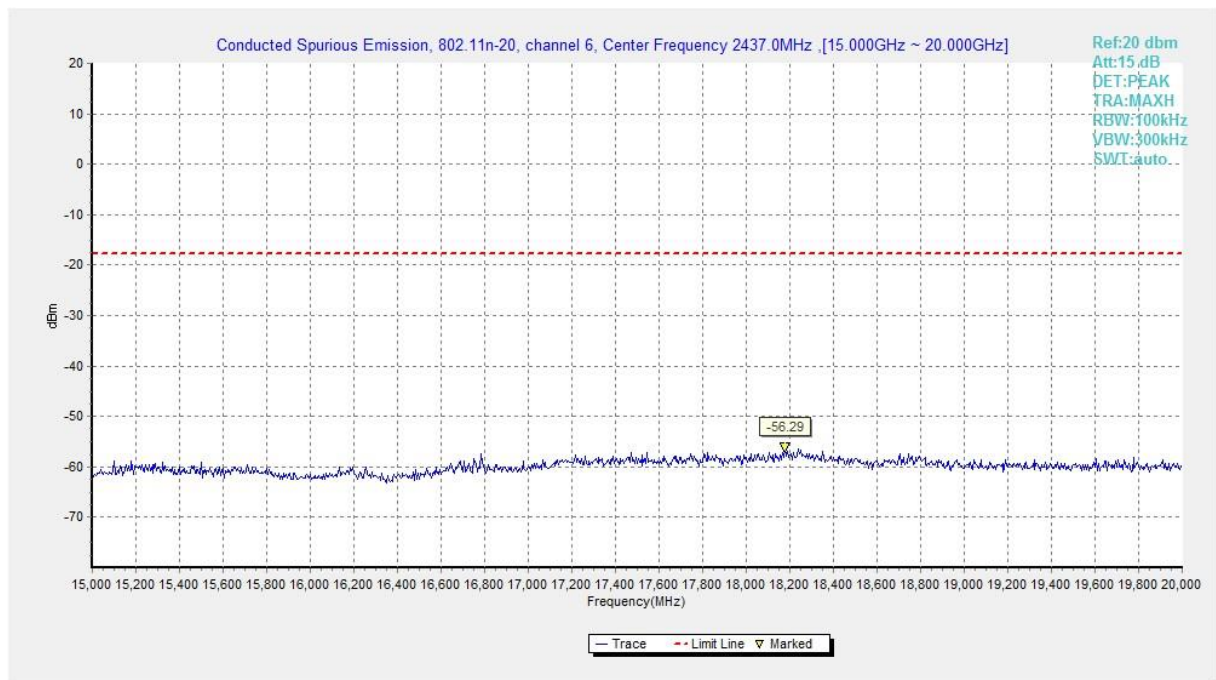


Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

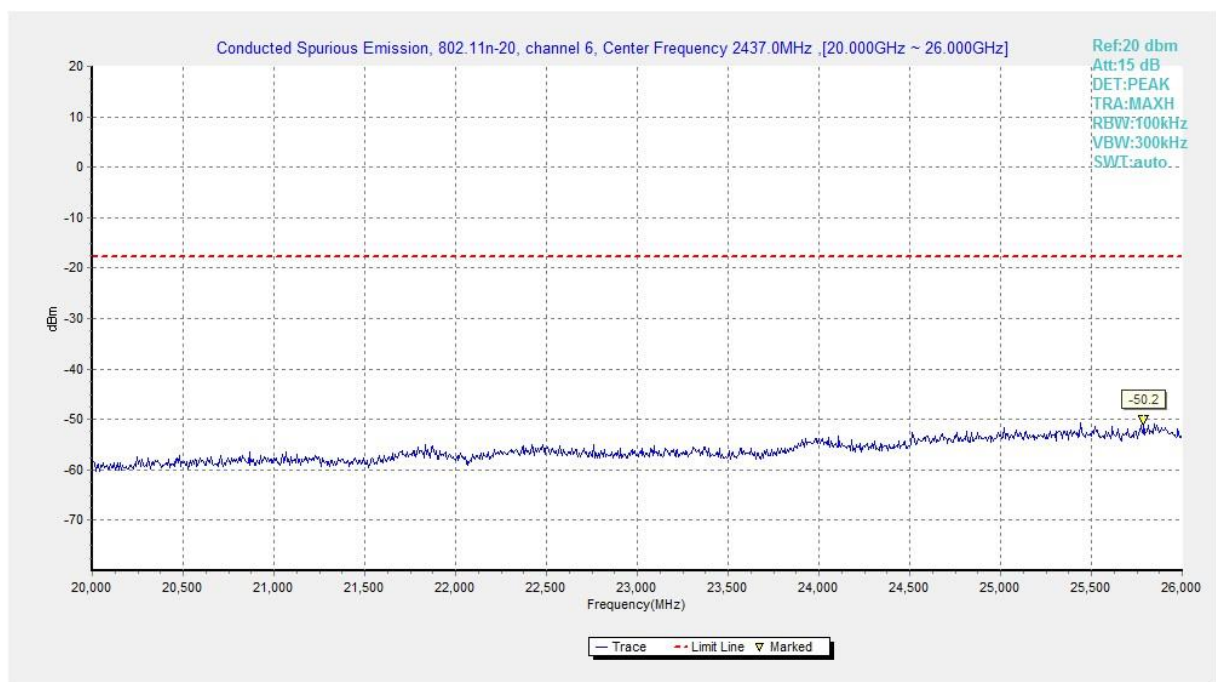


Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

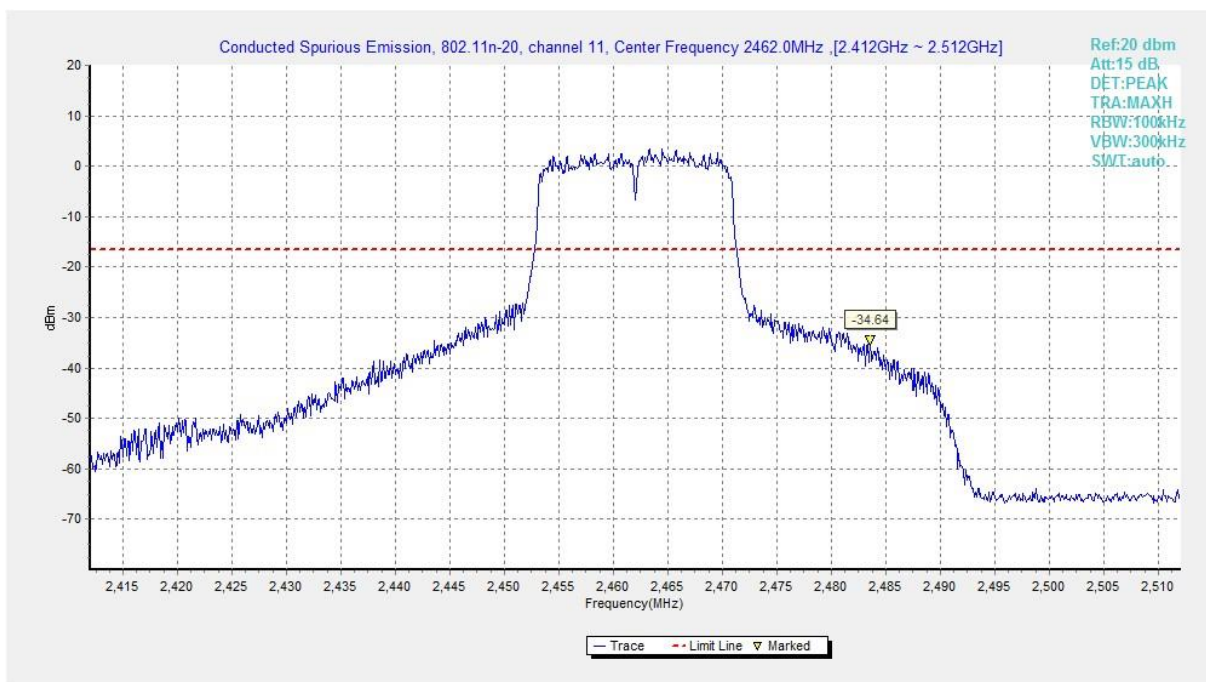


Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

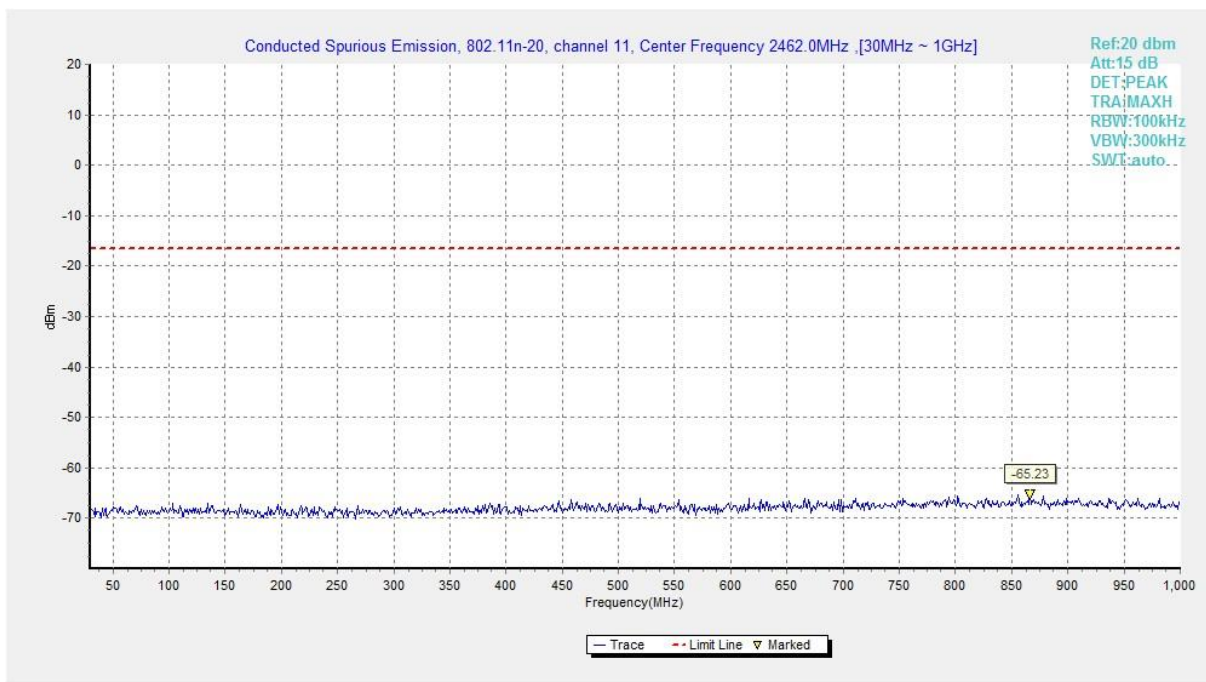


Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

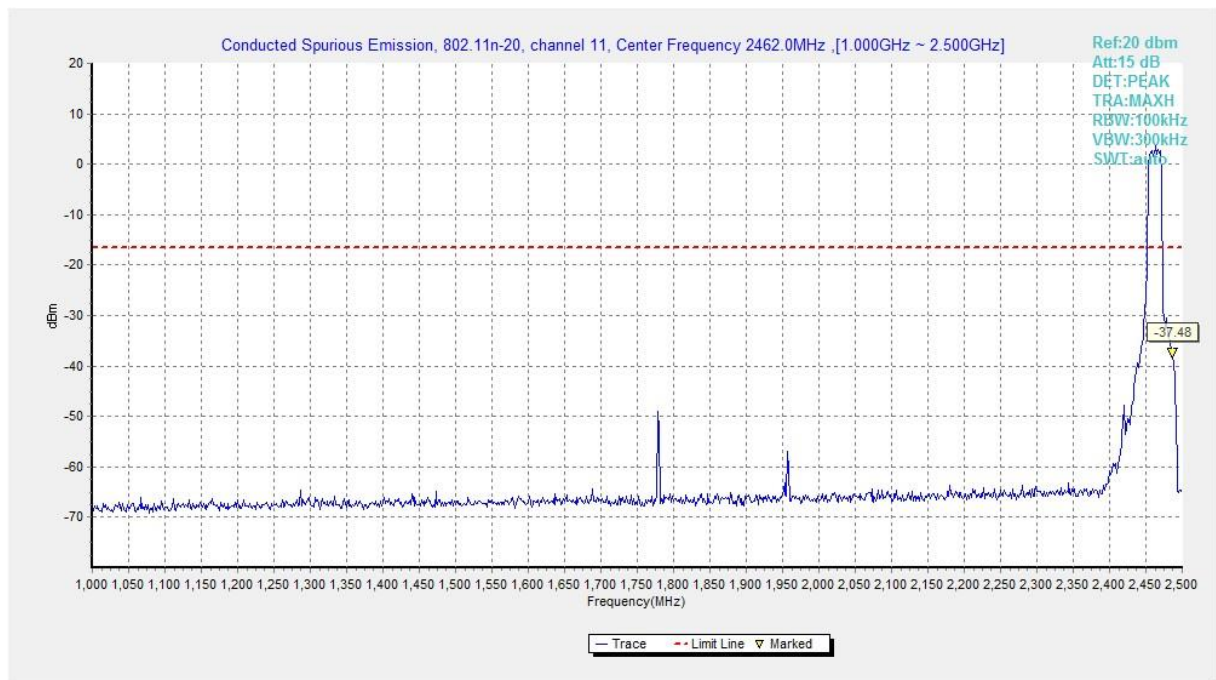


Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

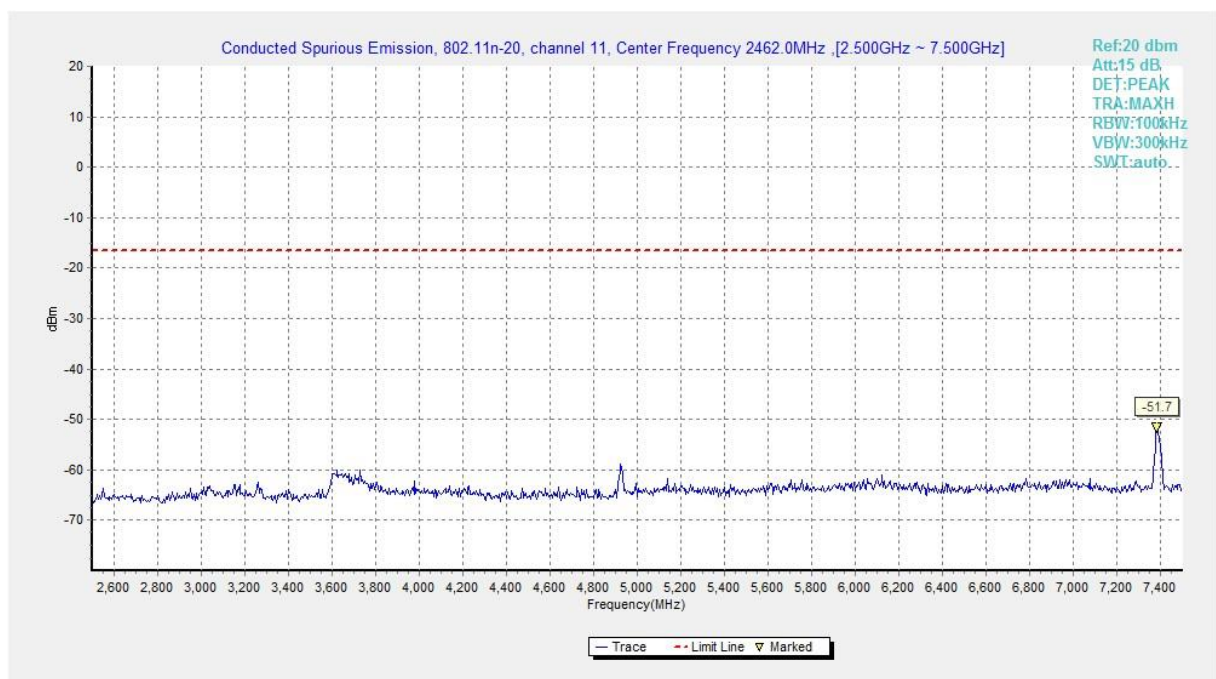


Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

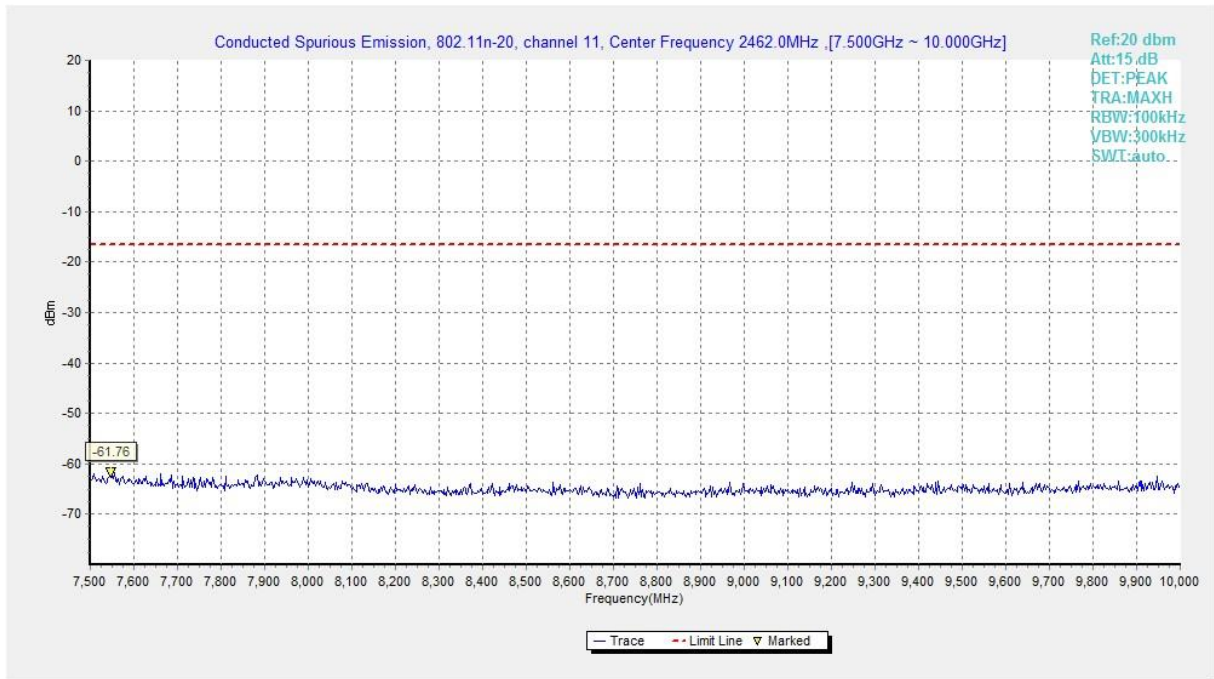


Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

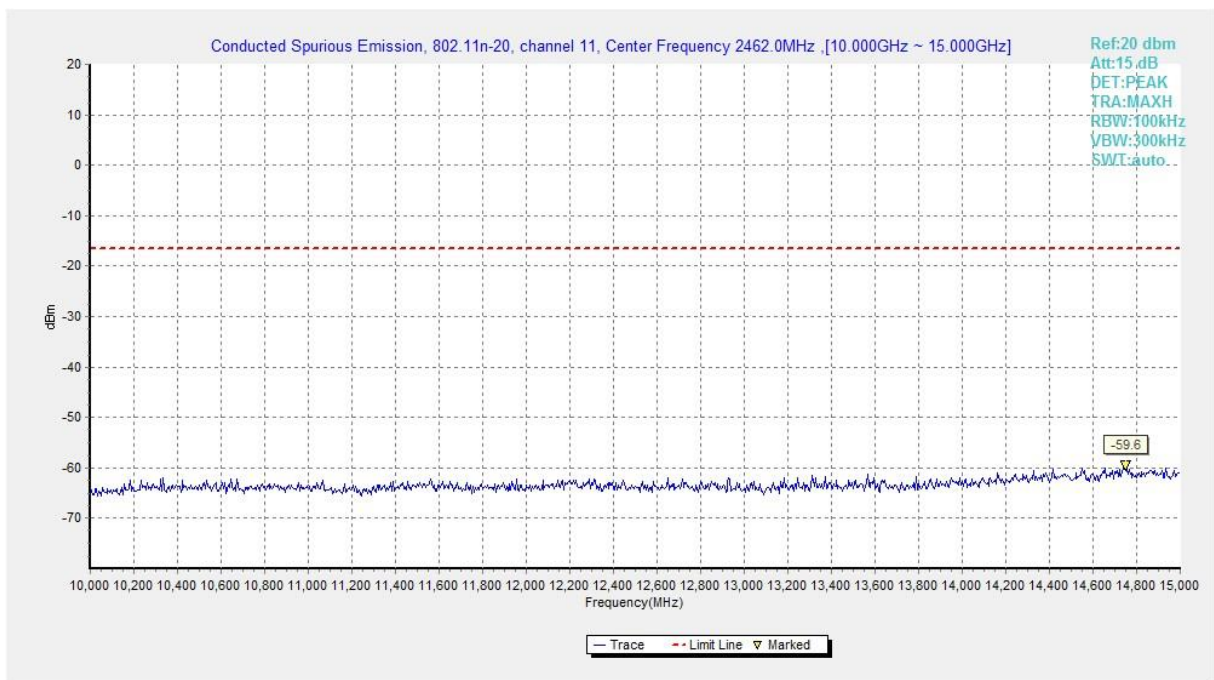


Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

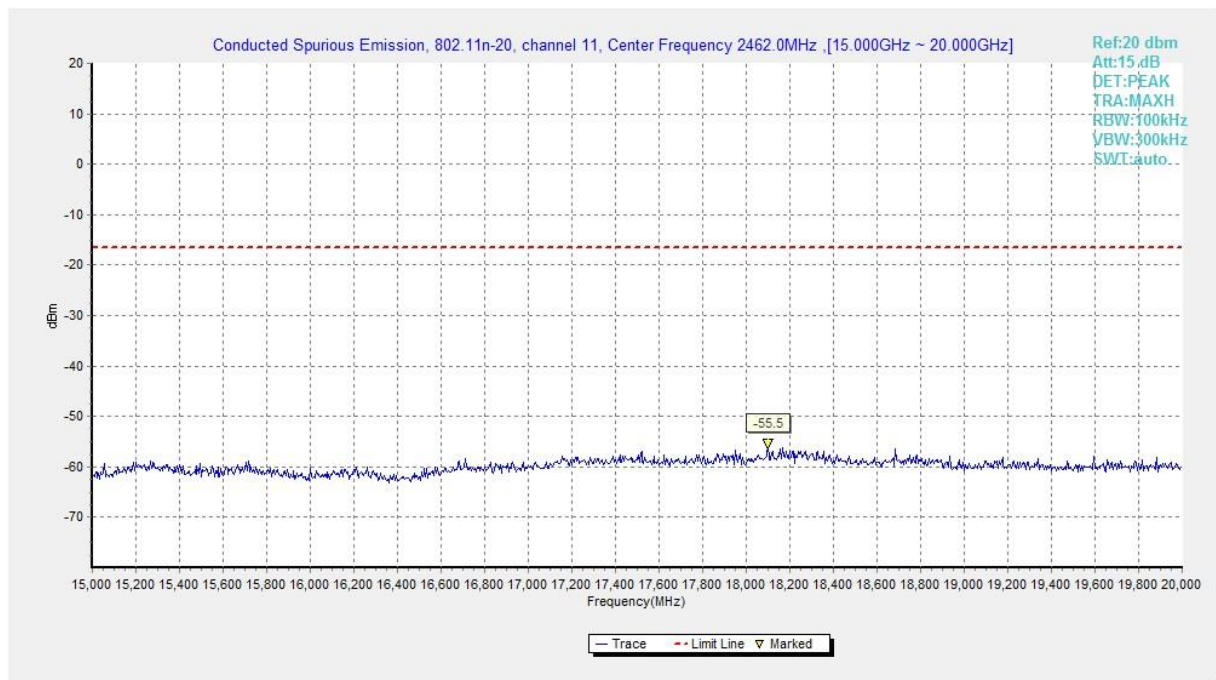


Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

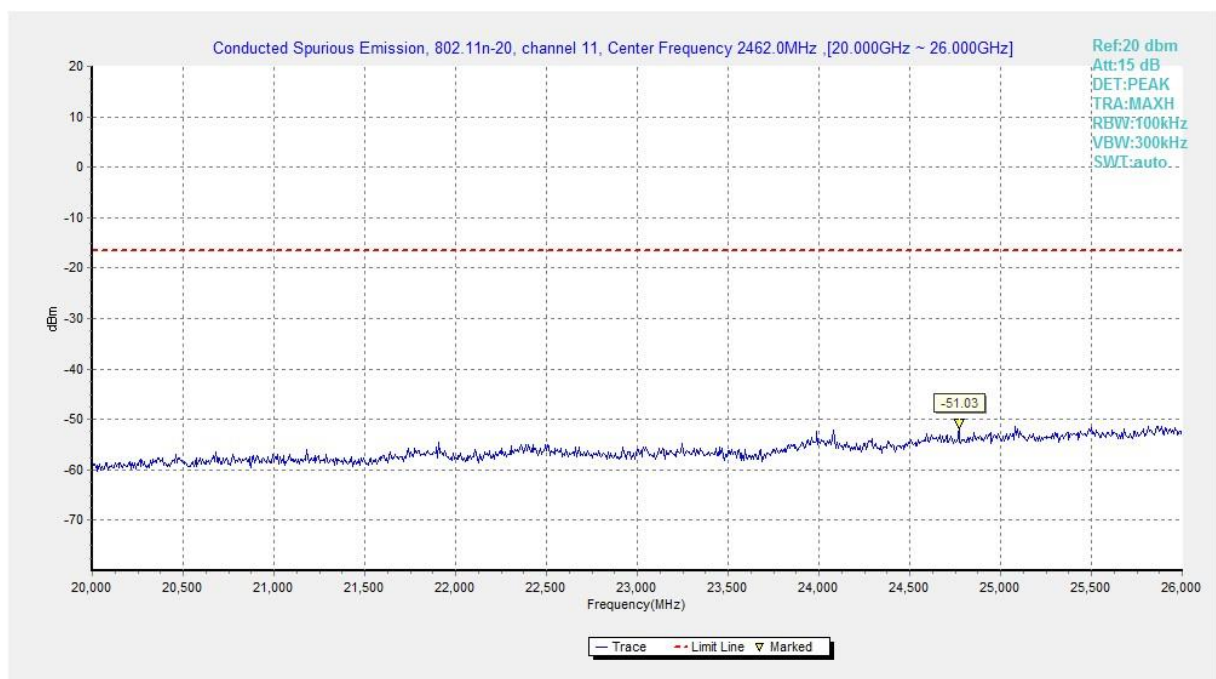


Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

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)	Measurement distance (m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Frequency (MHz)	Field strength(μV/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

Set up:

Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m

The EUT and transmitting antenna shall be centered on the turntable.

Test Procedure

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The receiver references:

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Measurement results:
802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.31GHz~2.43GHz---L	Fig.A.6.2.1	P
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.2	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.31GHz~2.43GHz---L	Fig.A.6.2.3	P
	10	2.45GHz~2.50GHz---H	Fig.A.6.2.4	P
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.5	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.31GHz~2.43GHz---L	Fig.A.6.2.6	P
	10	2.45GHz~2.50GHz---H	Fig.A.6.2.7	P
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.8	P

Conclusion: Pass
Note:

1. 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:

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

2. The range of evaluated frequency is from 9 kHz to 26GHz. Measurement value show only up to 6 maximum emissions noted.

Peak
802.11b
Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2385.418	60.55	3.48	31.87	25.20	74.00	13.45	H
2387.518	60.33	3.48	31.88	24.98	74.00	13.67	H
4824.000	46.69	-21.52	33.93	34.28	74.00	27.31	H
7236.000	50.55	-20.80	35.60	35.74	74.00	23.45	V
9648.000	45.40	-19.72	36.98	28.13	74.00	28.60	H
12060.000	47.32	-19.56	38.90	27.99	74.00	26.68	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2306.200	46.85	-32.00	31.78	47.07	74.00	27.15	H
2510.600	48.45	-30.03	32.02	46.46	74.00	25.55	H
4784.000	44.34	-21.88	33.92	32.30	74.00	29.66	H
7310.500	54.47	-20.79	35.60	39.65	74.00	19.53	V
9748.000	46.98	-19.69	37.10	29.57	74.00	27.02	H
12185.000	49.49	-19.42	38.90	30.01	74.00	24.51	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.230	60.97	3.41	31.98	25.58	74.00	13.03	H
2484.615	61.22	3.40	31.98	25.83	74.00	12.78	H
4924.000	46.58	-21.42	33.97	34.03	74.00	27.42	H
7387.000	51.55	-20.73	35.60	36.68	74.00	22.45	V
9848.000	45.88	-19.93	37.22	28.59	74.00	28.12	H
12310.000	49.48	-19.37	38.90	29.96	74.00	24.52	H

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2377.354	60.98	3.42	31.86	25.69	74.00	13.02	H
2385.782	61.19	3.48	31.87	25.83	74.00	12.81	H
4824.000	45.74	-21.52	33.93	33.32	74.00	28.26	H
7244.500	54.77	-20.81	35.60	39.97	74.00	19.23	V
9648.000	48.29	-19.72	36.98	31.02	74.00	25.71	V
12060.000	48.16	-19.56	38.90	28.82	74.00	25.84	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2336.600	48.08	-31.68	31.82	47.93	74.00	25.92	H
2505.800	48.73	-29.98	32.01	46.69	74.00	25.27	V
4874.000	44.97	-21.52	33.95	32.54	74.00	29.03	H
7311.000	51.73	-20.79	35.60	36.92	74.00	22.27	V
9748.000	48.48	-19.69	37.10	31.06	74.00	25.52	H
12185.000	49.17	-19.42	38.90	29.69	74.00	24.83	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.560	68.00	3.41	31.98	32.61	74.00	6.00	H
2483.765	67.50	3.41	31.98	32.10	74.00	6.50	H
4924.000	46.33	-21.42	33.97	33.79	74.00	27.67	H
7388.500	49.25	-20.73	35.60	34.38	74.00	24.75	V
9848.000	47.57	-19.93	37.22	30.28	74.00	26.43	V
12310.000	49.76	-19.37	38.90	30.23	74.00	24.24	V

802.11n-HT20
Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2387.028	60.50	3.48	31.88	25.15	74.00	13.50	H
2388.232	60.38	3.48	31.88	25.02	74.00	13.62	H
4824.000	46.38	-21.52	33.93	33.97	74.00	27.62	H
7236.000	55.42	-20.80	35.60	40.62	74.00	18.58	V
9648.000	47.95	-19.72	36.98	30.69	74.00	26.05	V
12060.000	48.65	-19.56	38.90	29.31	74.00	25.35	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2346.000	47.24	-31.58	31.83	46.99	74.00	26.76	V
2529.000	48.48	-30.25	32.05	46.69	74.00	25.52	V
4874.000	47.05	-21.52	33.95	34.62	74.00	26.95	H
7313.000	58.80	-20.78	35.60	43.98	74.00	15.20	V
9748.000	48.40	-19.69	37.10	30.98	74.00	25.60	H
12185.000	49.31	-19.42	38.90	29.83	74.00	24.69	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.790	68.61	3.41	31.98	33.21	74.00	5.39	H
2484.525	68.58	3.41	31.98	33.19	74.00	5.42	H
4924.000	48.18	-21.42	33.97	35.63	74.00	25.82	H
7382.000	53.81	-20.73	35.60	38.95	74.00	20.19	V
9484.000	48.88	-19.88	36.78	31.97	74.00	25.12	V
12310.000	48.52	-19.37	38.90	29.00	74.00	25.48	H

Average

802.11b

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2387.767	46.92	3.5	31.88	11.57	54.00	7.08	H
2389.591	46.92	3.5	31.88	11.56	54.00	7.08	H
4824.000	41.89	-21.5	33.93	29.47	54.00	12.11	H
7235.000	46.61	-20.8	35.60	31.80	54.00	7.39	V
9648.000	34.18	-19.7	36.98	16.92	54.00	19.82	V
12060.000	35.71	-19.6	38.90	16.37	54.00	18.29	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2423.202	47.35	3.4	31.92	12.01	54.00	6.65	V
2448.719	47.55	3.5	31.94	12.11	54.00	6.45	V
4873.500	32.30	-21.5	33.95	19.87	54.00	21.70	H
7310.000	47.40	-20.8	35.60	32.59	54.00	6.60	V
9748.000	34.62	-19.7	37.10	17.20	54.00	19.38	V
12185.000	36.29	-19.4	38.90	16.81	54.00	17.71	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.508	47.99	3.4	31.98	12.59	54.00	6.01	H
2483.584	47.95	3.4	31.98	12.55	54.00	6.05	H
4924.000	40.37	-21.4	33.97	27.82	54.00	13.64	H
7385.500	44.82	-20.7	35.60	29.95	54.00	9.18	V
9848.000	34.91	-19.9	37.22	17.62	54.00	19.09	H
12310.000	36.33	-19.4	38.90	16.81	54.00	17.67	H

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.240	46.86	3.5	31.88	11.50	54.00	7.14	H
2389.515	46.96	3.5	31.88	11.59	54.00	7.05	H
4824.000	33.20	-21.5	33.93	20.78	54.00	20.80	H
7235.000	38.34	-20.8	35.60	23.54	54.00	15.66	V
9648.000	34.98	-19.7	36.98	17.72	54.00	19.02	H
12060.000	36.43	-19.6	38.90	17.10	54.00	17.57	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2414.956	47.49	3.4	31.91	12.19	54.00	6.51	V
2448.871	48.52	3.5	31.94	13.08	54.00	5.48	V
4874.000	32.52	-21.5	33.95	20.09	54.00	21.48	H
7311.500	38.94	-20.8	35.60	24.13	54.00	15.06	V
9748.000	35.49	-19.7	37.10	18.07	54.00	18.51	V
12185.000	36.66	-19.4	38.90	17.18	54.00	17.34	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.565	49.62	3.4	31.98	14.23	54.00	4.38	H
2483.622	49.45	3.4	31.98	14.05	54.00	4.56	H
4923.500	35.40	-21.4	33.97	22.86	54.00	18.60	H
7386.000	37.07	-20.7	35.60	22.20	54.00	16.93	V
9848.000	35.46	-19.9	37.22	18.18	54.00	18.54	V
12310.000	36.56	-19.4	38.90	17.04	54.00	17.44	V

802.11n-HT20
Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.572	47.00	3.5	31.88	11.63	54.00	7.01	H
2389.762	47.01	3.5	31.88	11.65	54.00	6.99	H
4823.500	36.33	-21.5	33.93	23.92	54.00	17.67	H
7238.500	39.44	-20.8	35.60	24.64	54.00	14.56	V
9648.000	35.78	-19.7	36.98	18.52	54.00	18.22	H
12060.000	36.79	-19.6	38.90	17.45	54.00	17.22	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2412.277	47.17	3.4	31.90	11.87	54.00	6.83	V
2453.336	48.62	3.5	31.95	13.19	54.00	5.38	V
4873.500	35.37	-21.5	33.95	22.94	54.00	18.63	H
7308.500	36.33	-20.8	35.60	21.52	54.00	17.67	H
9748.000	35.96	-19.7	37.10	18.55	54.00	18.04	V
12185.000	36.86	-19.4	38.90	17.38	54.00	17.14	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.508	50.86	3.4	31.98	15.46	54.00	3.14	H
2483.679	50.67	3.4	31.98	15.27	54.00	3.33	H
4923.500	36.07	-21.4	33.97	23.52	54.00	17.93	H
7386.500	37.89	-20.7	35.60	23.02	54.00	16.11	V
9848.000	36.00	-19.9	37.22	18.71	54.00	18.00	V
12310.000	36.75	-19.4	38.90	17.22	54.00	17.25	V

Test graphs as below:

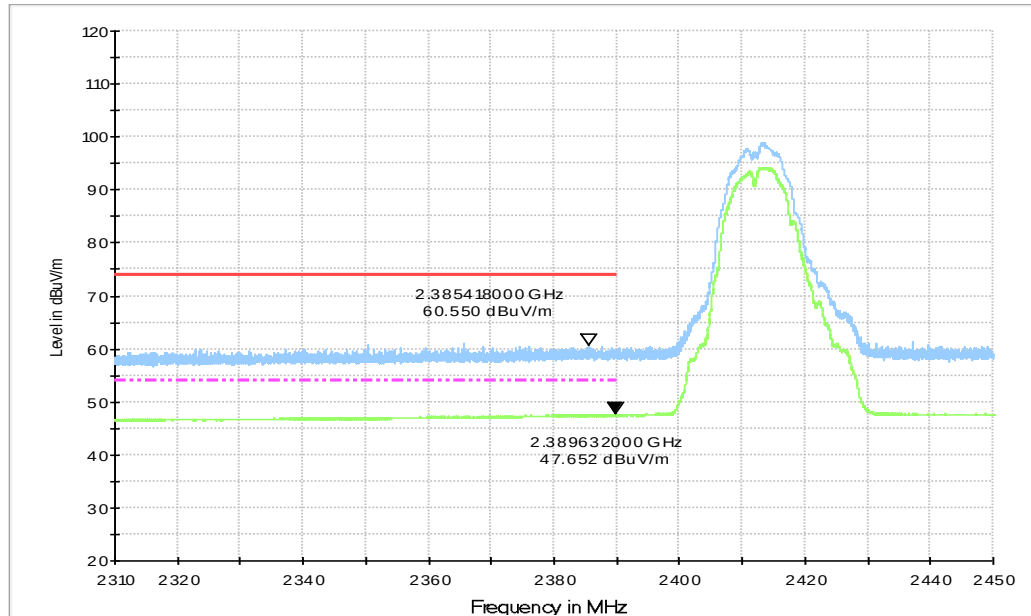


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz

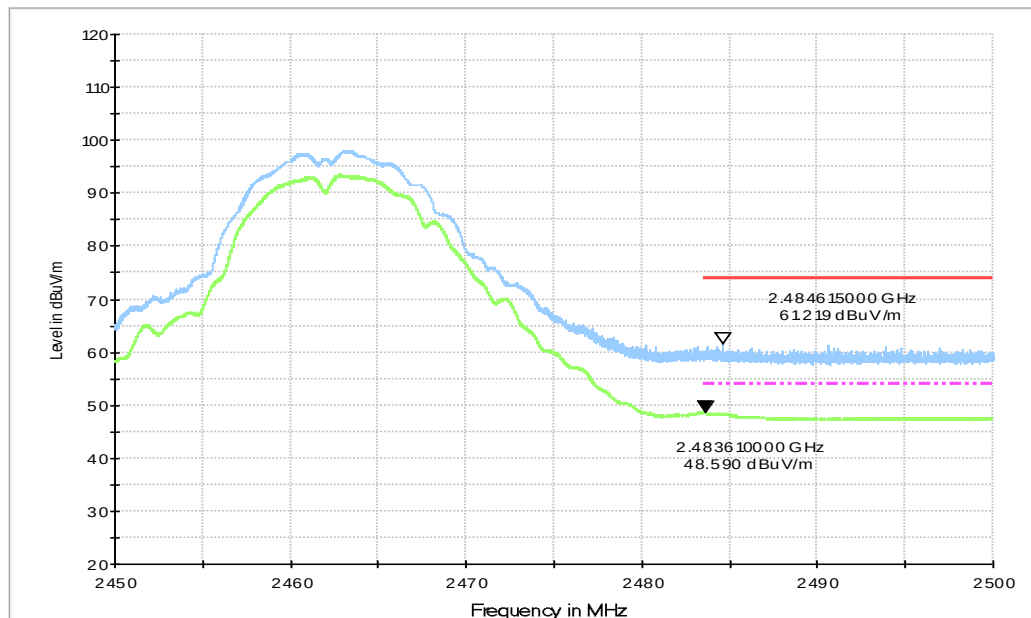


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

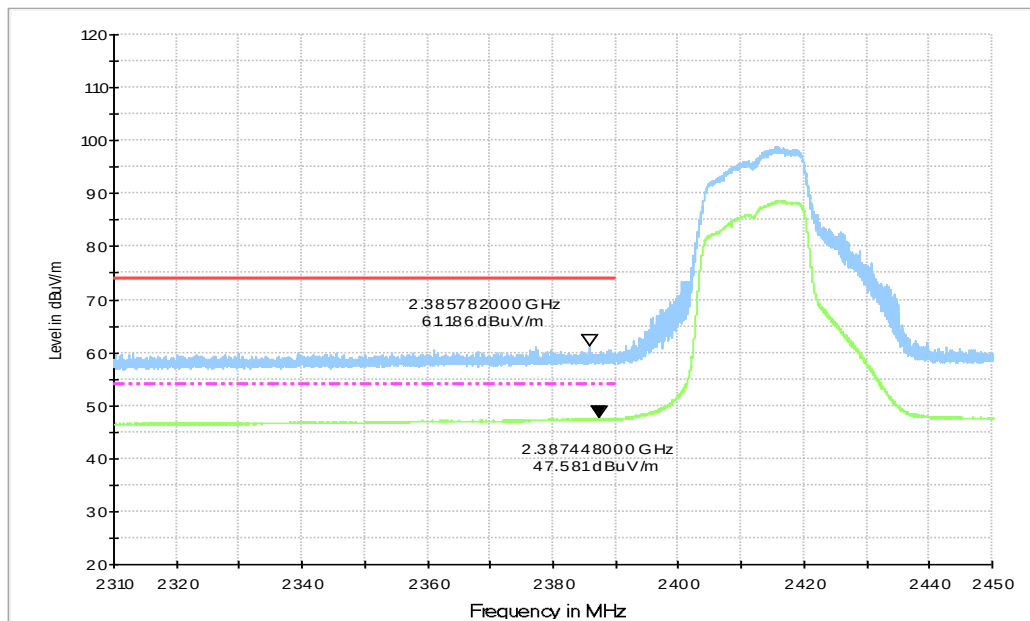


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz

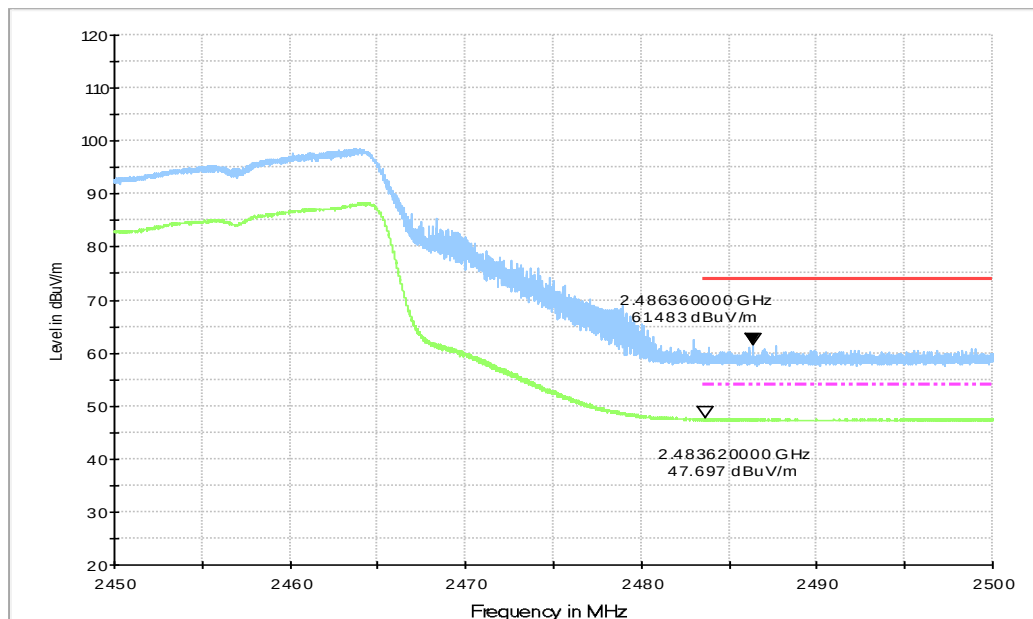


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch10, 2.45 GHz - 2.50GHz

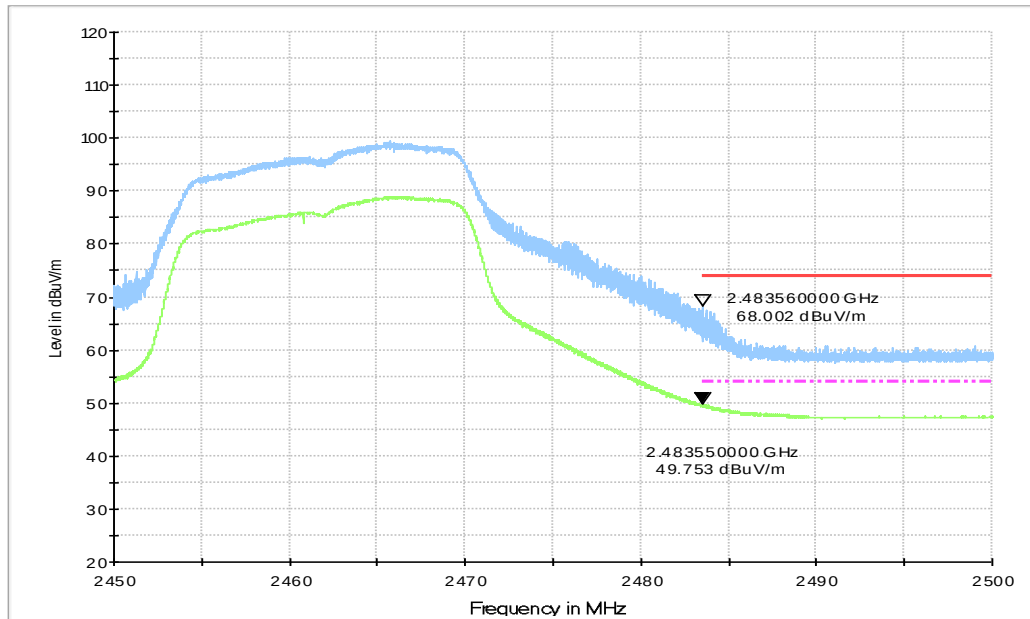


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

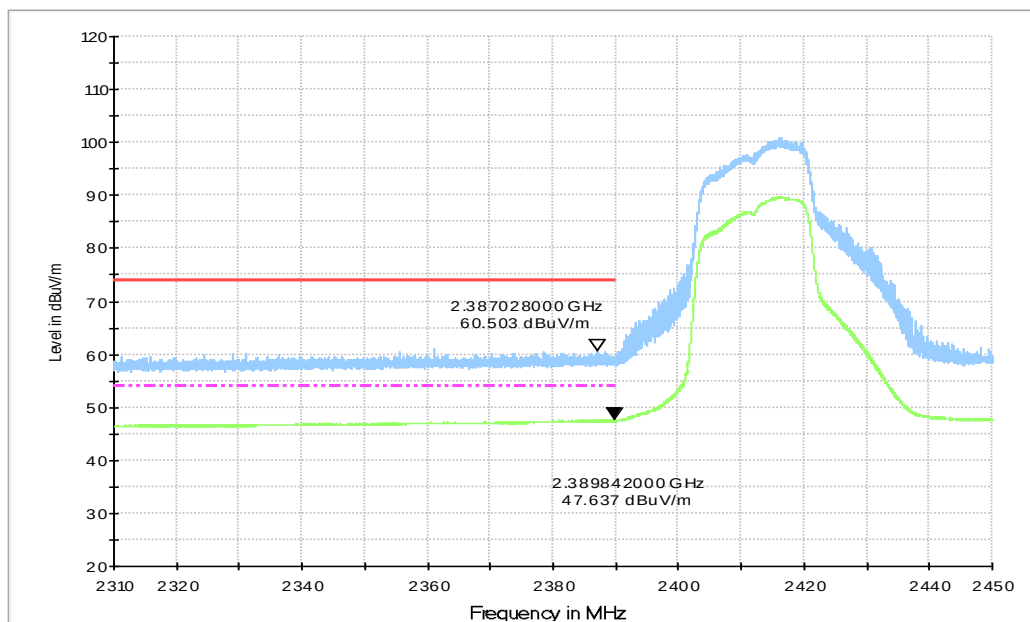


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz

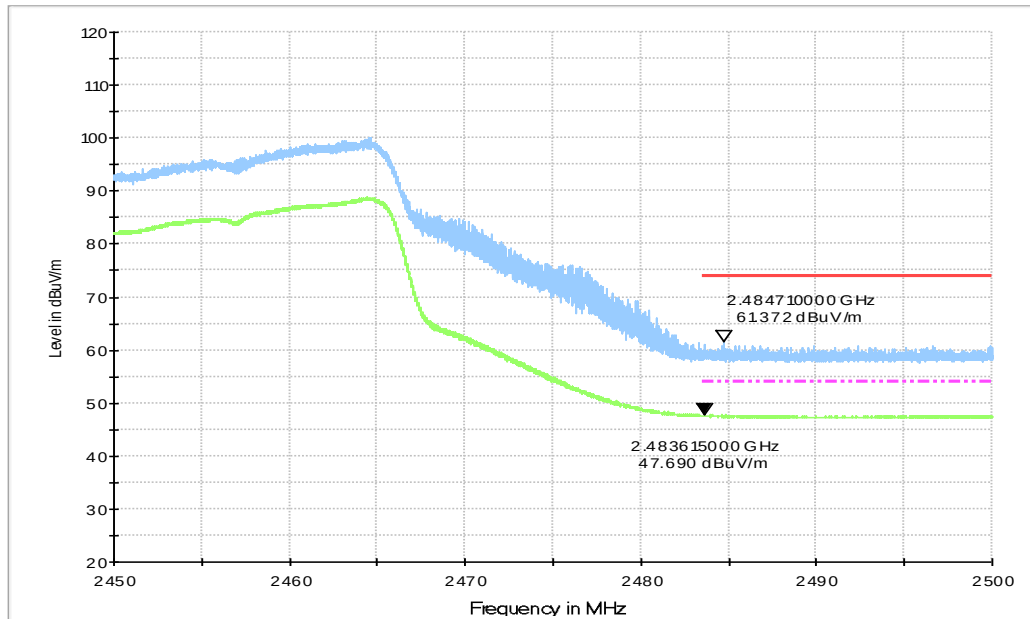


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch10, 2.45 GHz - 2.50GHz

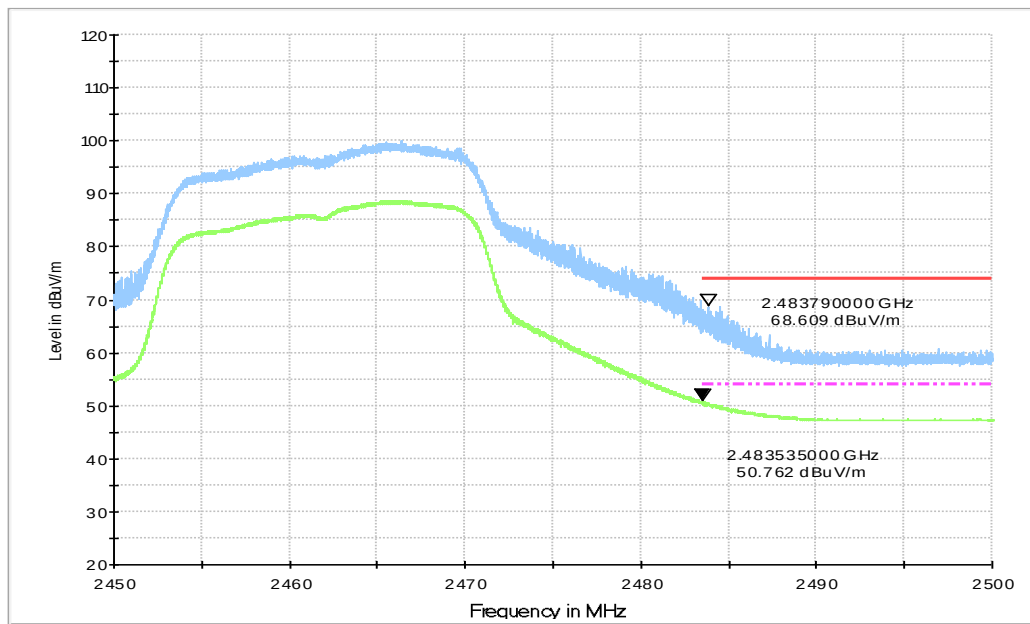


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

A.7. AC Power-line Conducted Emission

Method of Measurement:

See Clause 6.2 of ANSI C63.10-2013 specifically.

See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver:
Quasi-Peak / Average Detector.

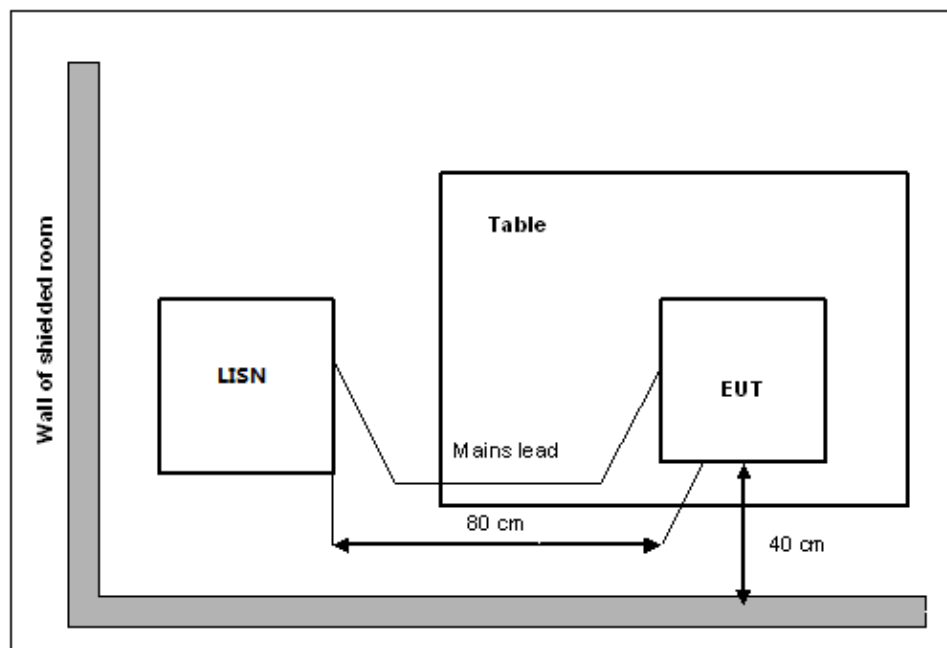
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Setup



Measurement Result and limit:
WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		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 (dBμV)	Result (dBμV)		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:

Result for Traffic:

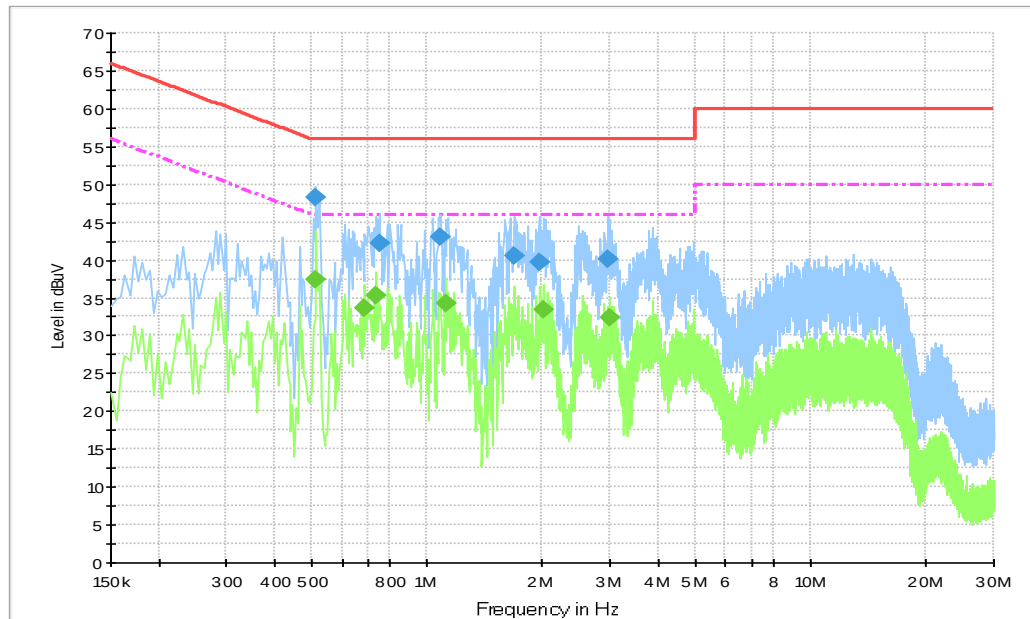


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

Note1: 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)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.514500	48.3	5000.	9.000	L1	19.9	7.7	56.0
0.753000	42.2	5000.	9.000	L1	19.8	13.8	56.0
1.086000	43.1	5000.	9.000	L1	19.7	12.9	56.0
1.698000	40.5	5000.	9.000	L1	19.7	15.5	56.0
1.959000	39.6	5000.	9.000	L1	19.7	16.4	56.0
2.971500	40.0	5000.	9.000	L1	19.6	16.0	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.514500	37.4	5000.0	9.000	N	19.9	8.6	46.0
0.690000	33.6	5000.0	9.000	L1	19.8	12.4	46.0
0.739500	35.3	5000.0	9.000	L1	19.8	10.7	46.0
1.122000	34.3	5000.0	9.000	L1	19.7	11.7	46.0
2.013000	33.5	5000.0	9.000	L1	19.7	12.5	46.0
2.994000	32.3	5000.0	9.000	L1	19.6	13.7	46.0

Result for Idle:

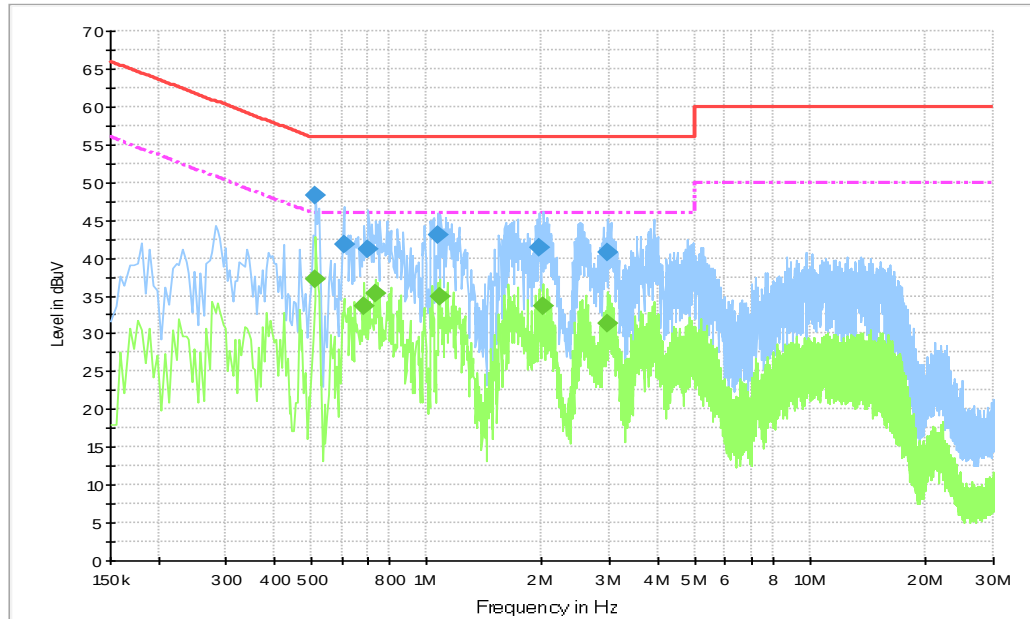


Fig.A.7.2 AC Powerline Conducted Emission-Idle

Note1: 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)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.514500	48.4	5000.	9.000	L1	19.9	7.6	56.0
0.609000	41.9	5000.	9.000	L1	19.8	14.2	56.0
0.703500	41.2	5000.	9.000	L1	19.8	14.8	56.0
1.072500	43.1	5000.	9.000	L1	19.7	12.9	56.0
1.977000	41.4	5000.	9.000	L1	19.7	14.6	56.0
2.953500	40.8	5000.	9.000	L1	19.6	15.2	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.514500	37.3	5000.0	9.000	N	19.9	8.7	46.0
0.690000	33.7	5000.0	9.000	L1	19.8	12.3	46.0
0.739500	35.3	5000.0	9.000	L1	19.8	10.7	46.0
1.081500	35.0	5000.0	9.000	L1	19.7	11.0	46.0
2.013000	33.6	5000.0	9.000	L1	19.7	12.4	46.0
2.962500	31.4	5000.0	9.000	L1	19.6	14.6	46.0

Note: The measurement results showed here are worst cases.

ANNEX B: EUT parameters

Disclaimer: The antenna gain provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate



END OF REPORT