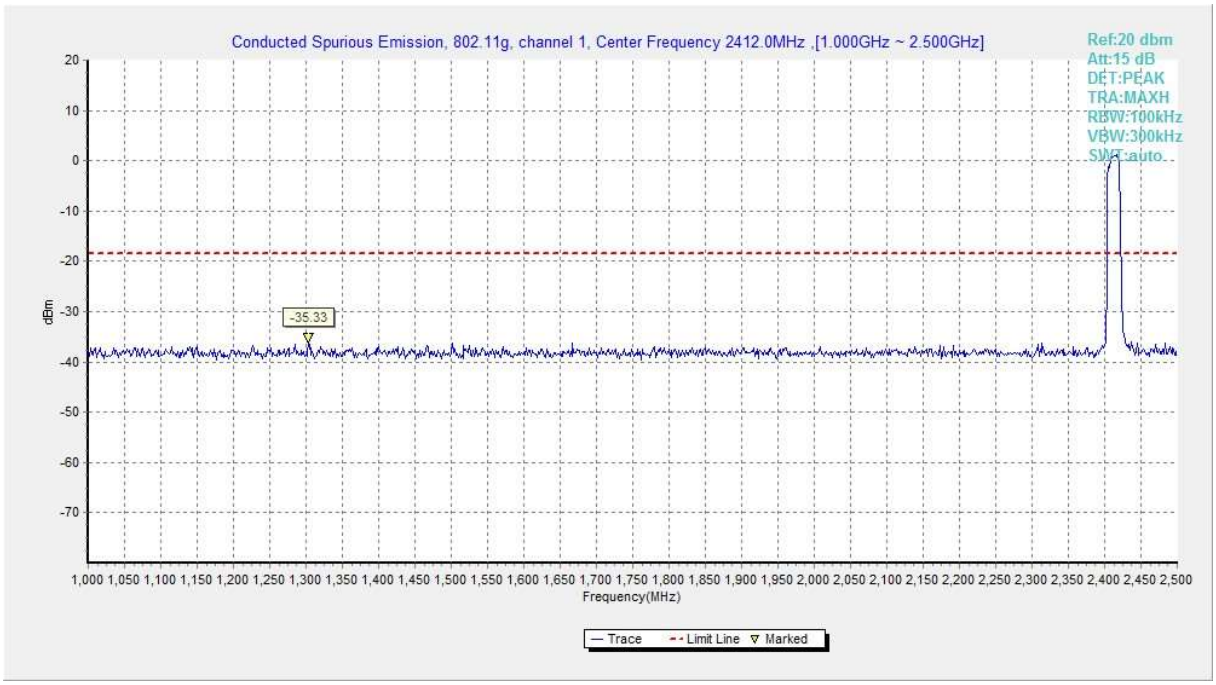


Fig.A.6.1.27 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 1 GHz-2.5 GHz)

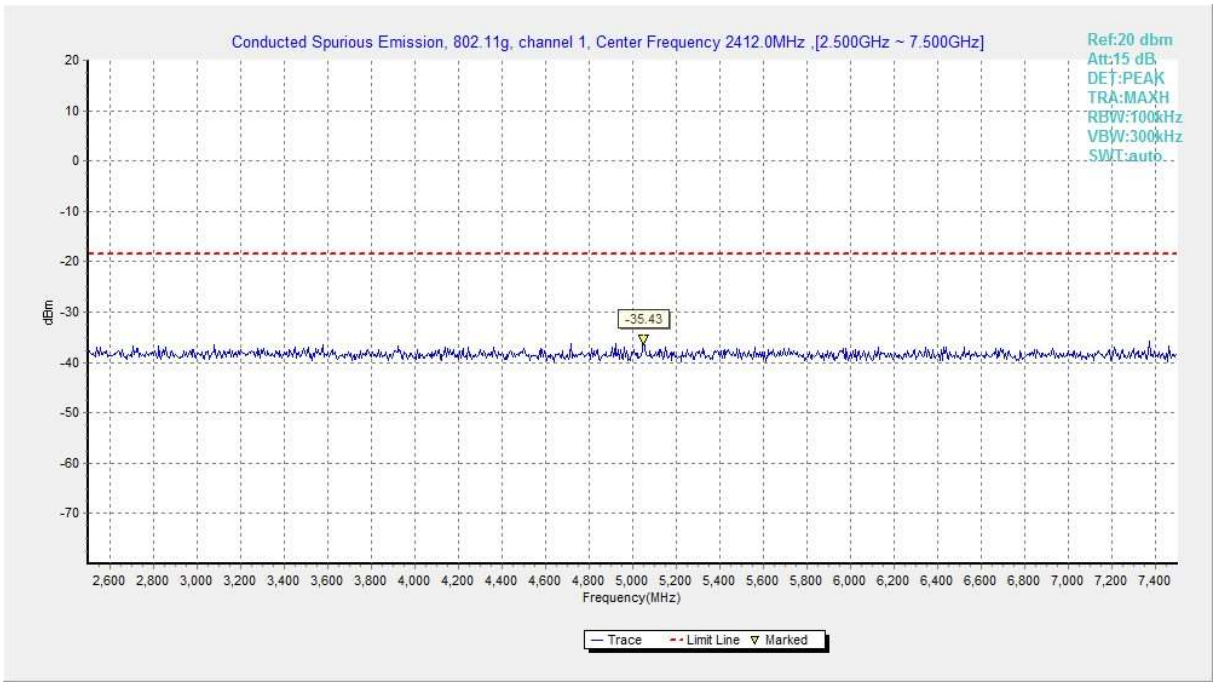


Fig.A.6.1.28 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 2.5 GHz-7.5 GHz)

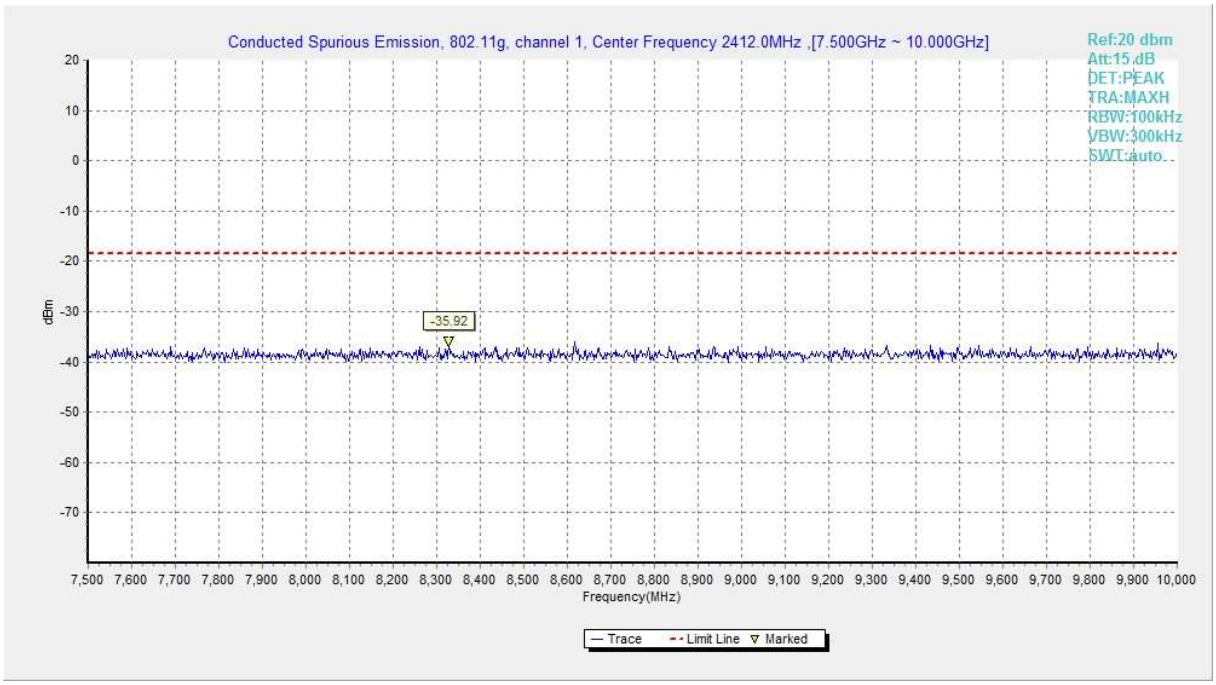


Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)

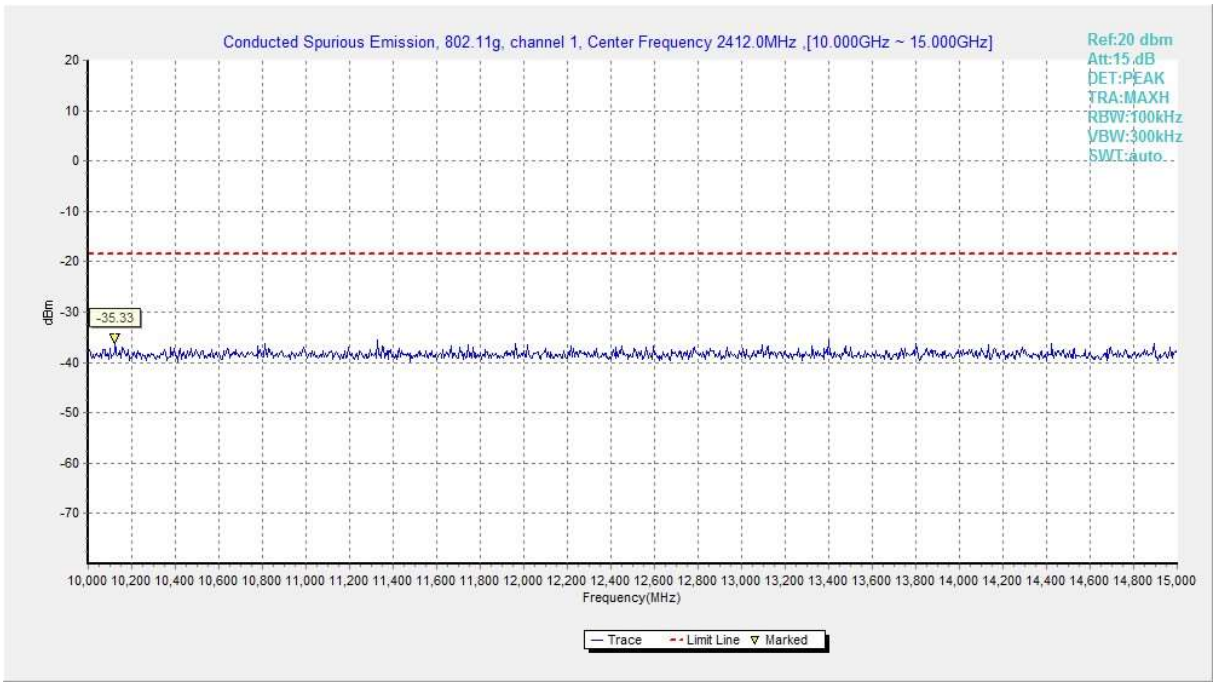


Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)

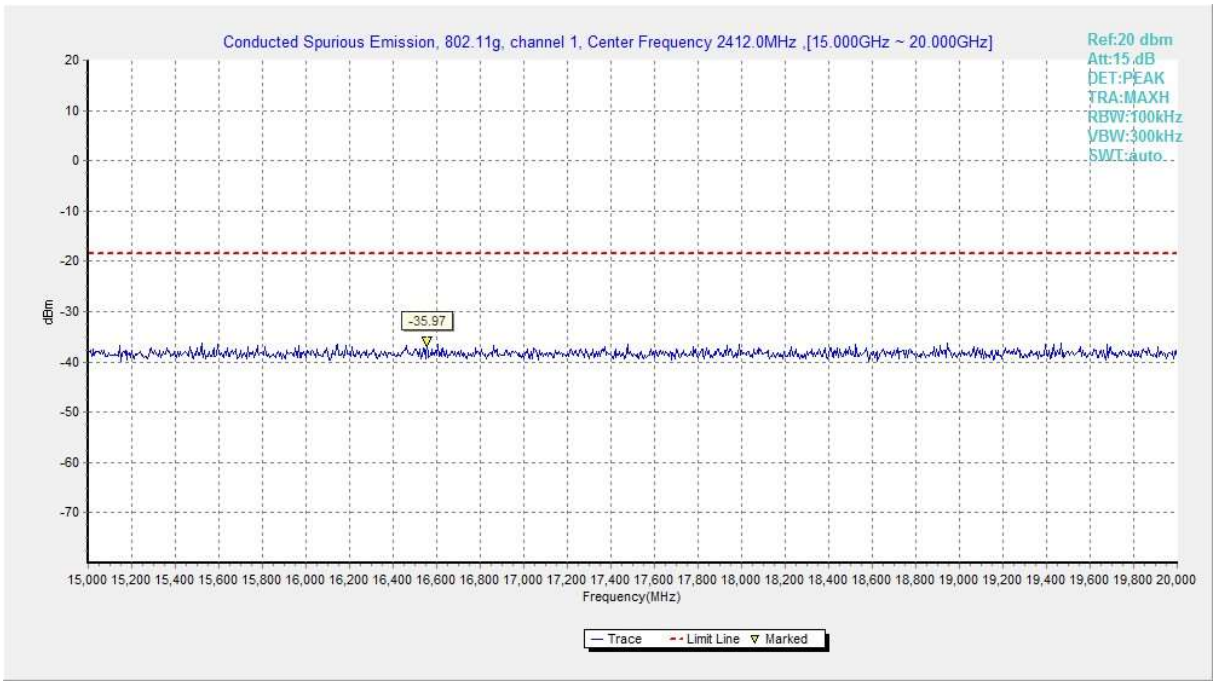


Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)

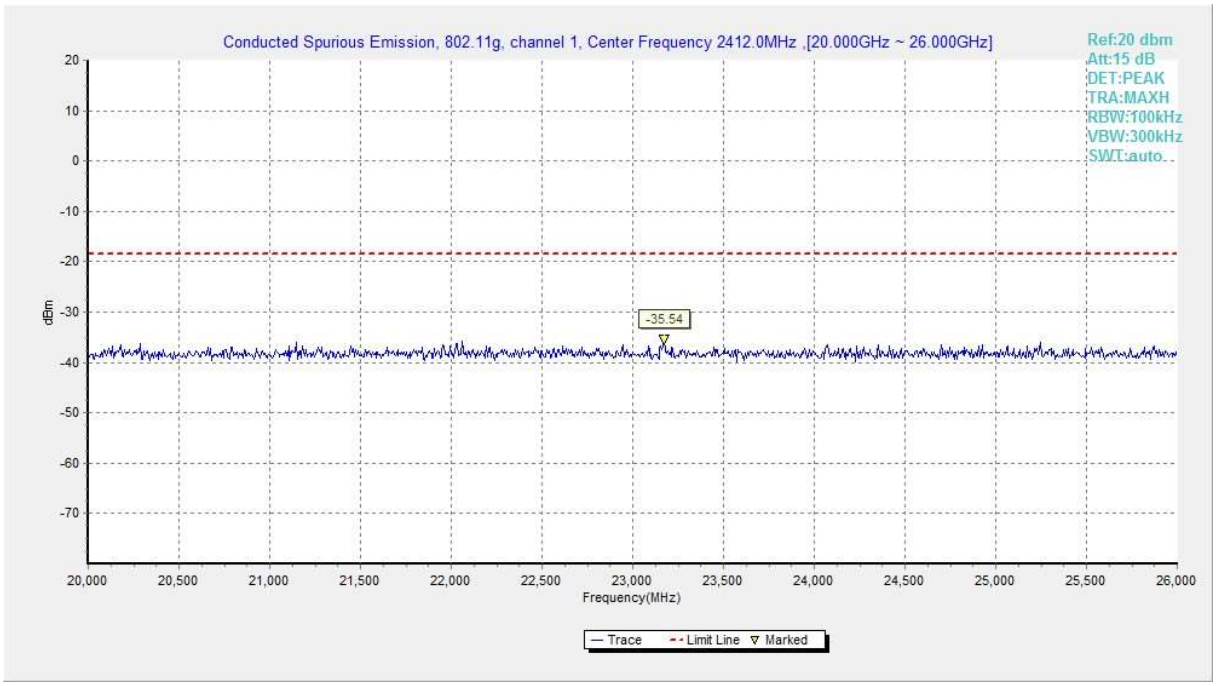


Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)

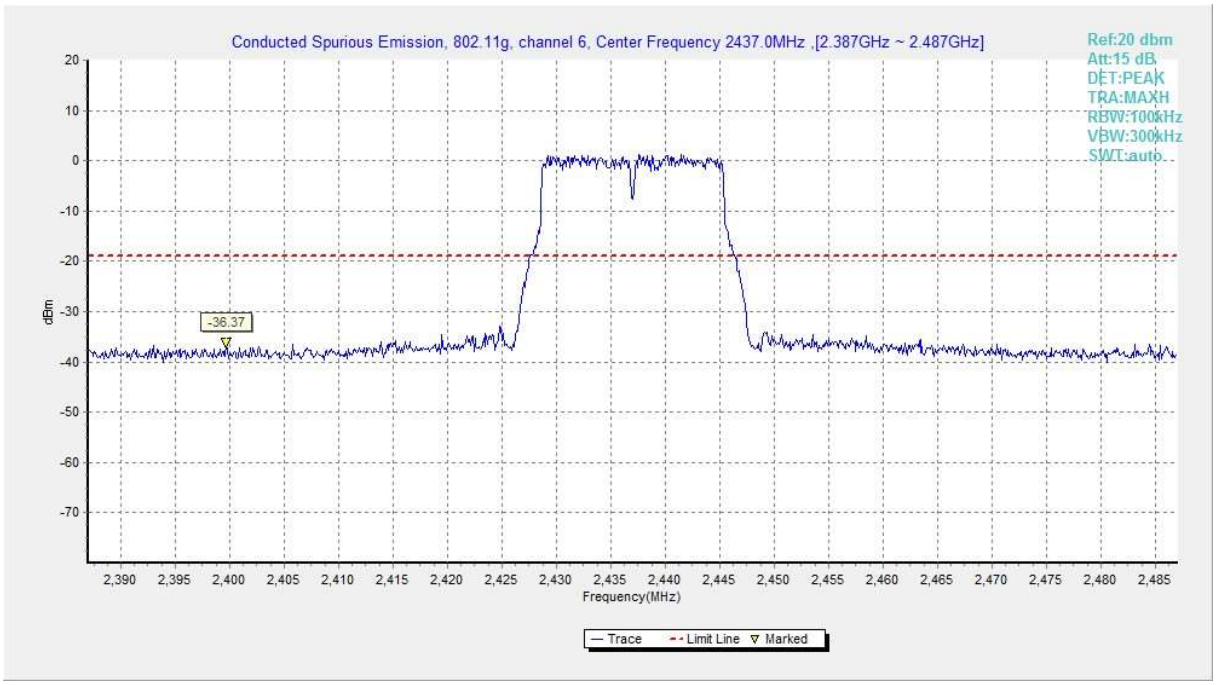


Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

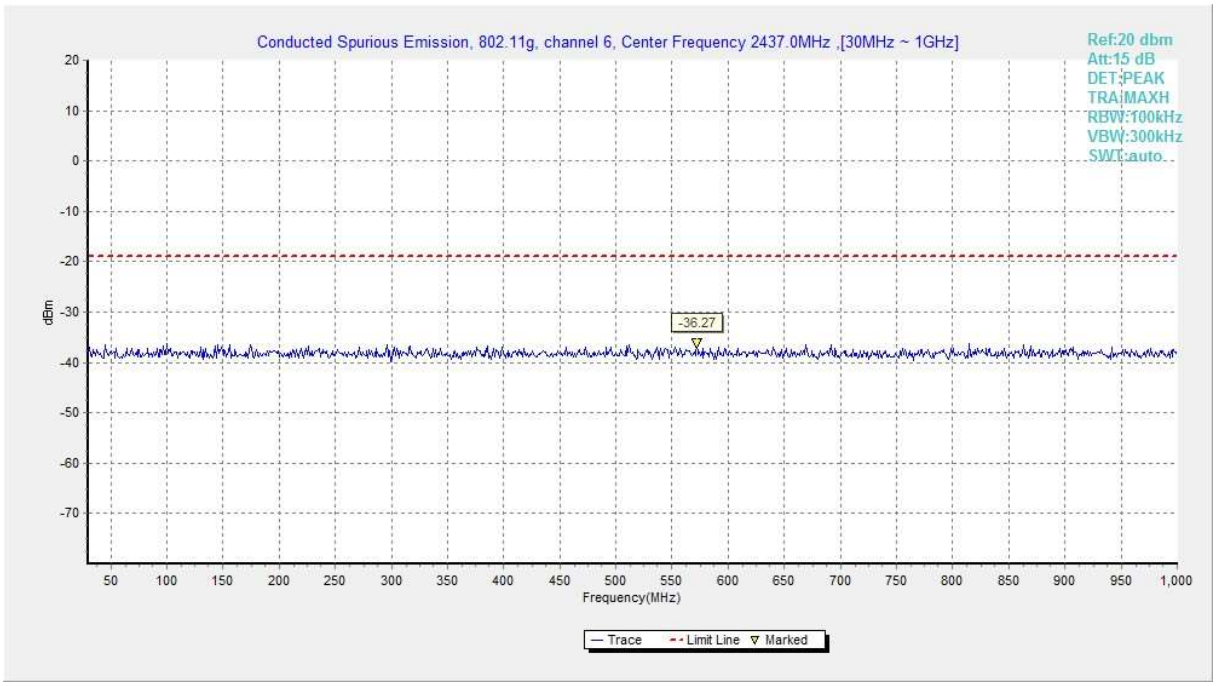


Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)

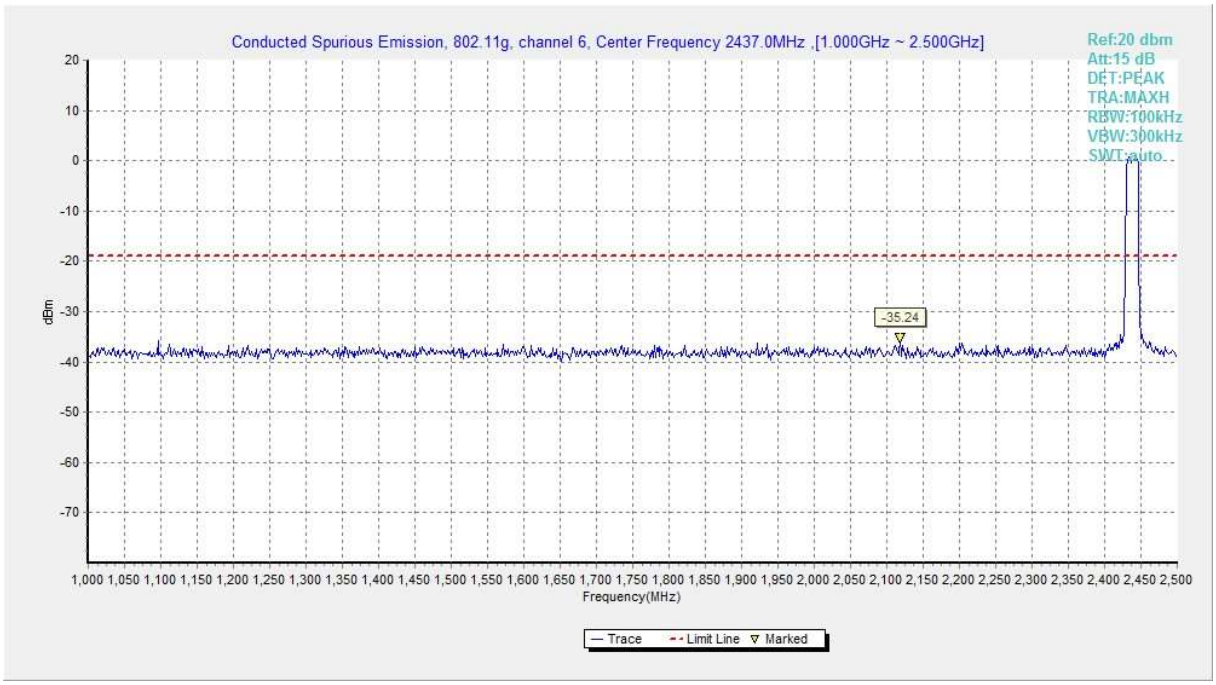


Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)

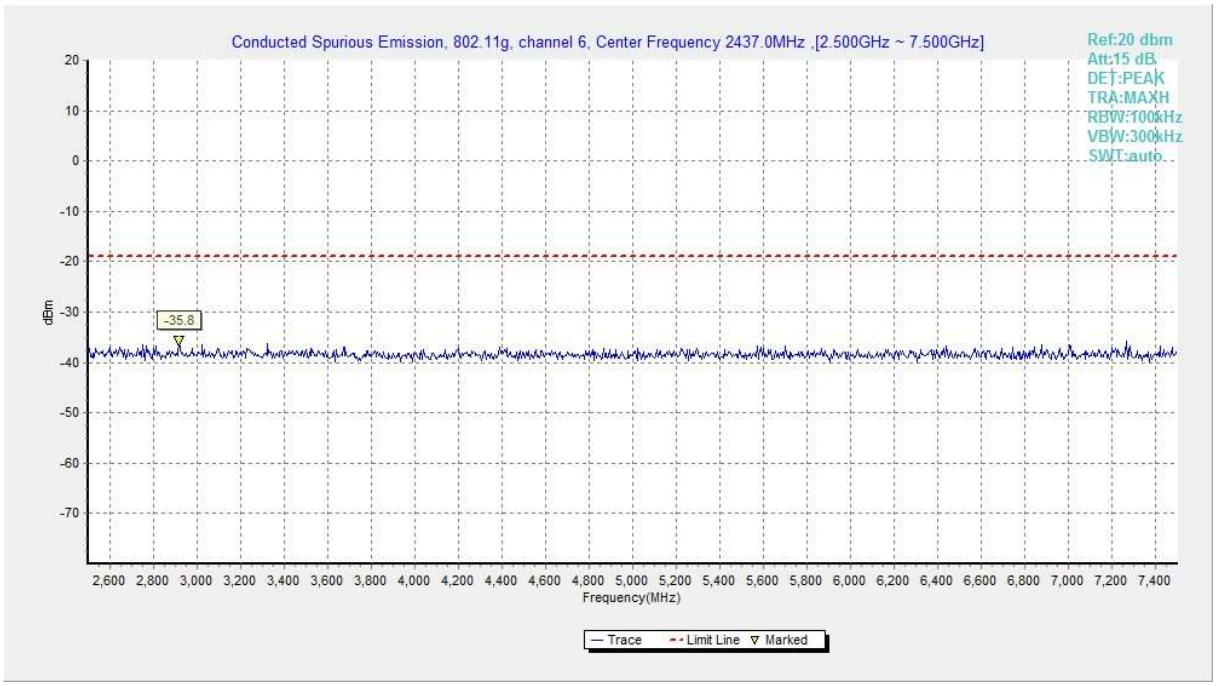


Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)

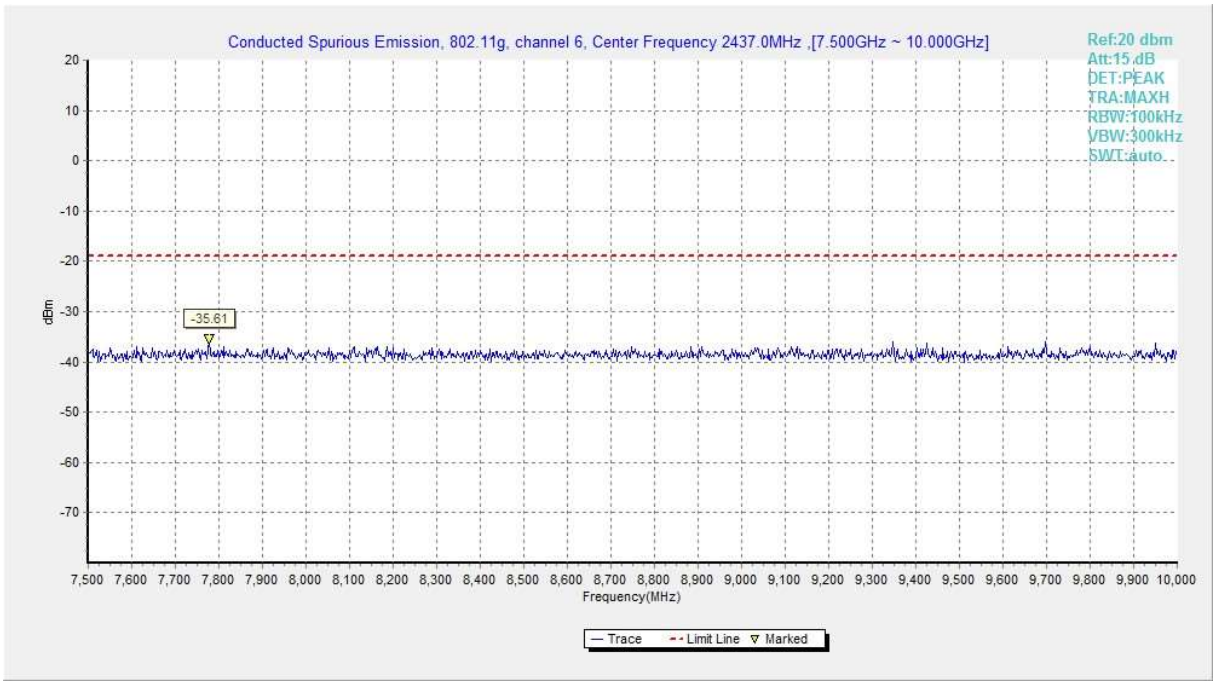


Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)

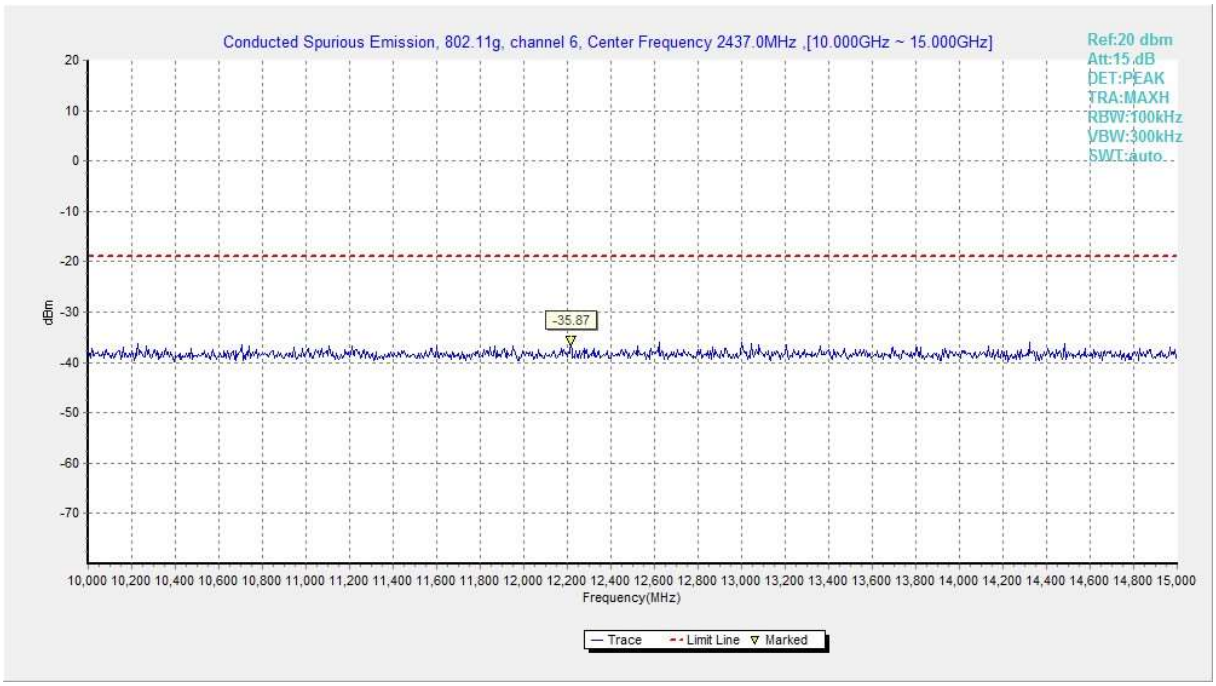


Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)

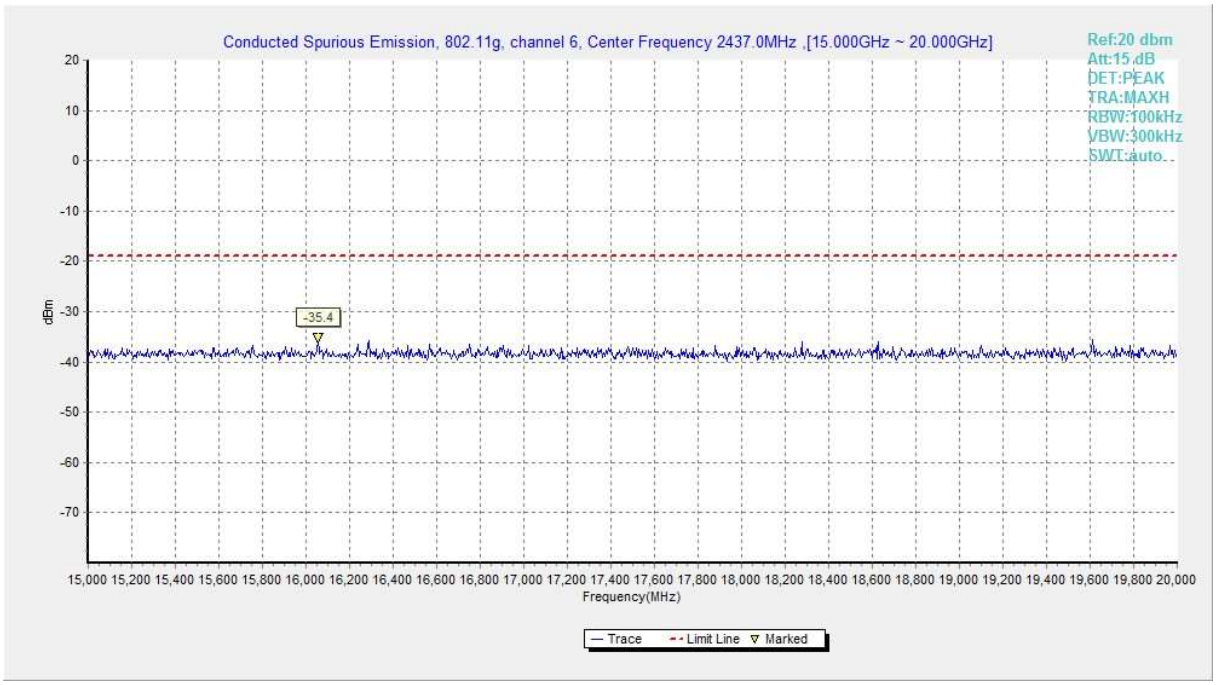


Fig.A.6.1.39 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 15 GHz-20 GHz)

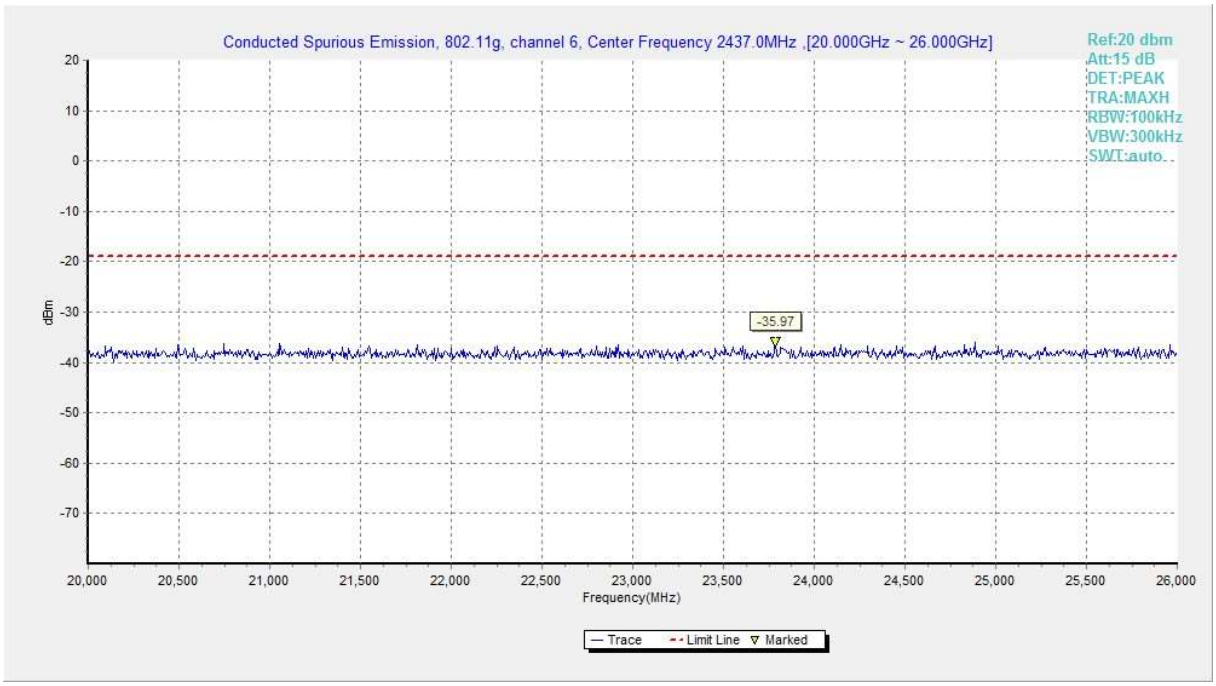


Fig.A.6.1.40 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 20 GHz-26 GHz)

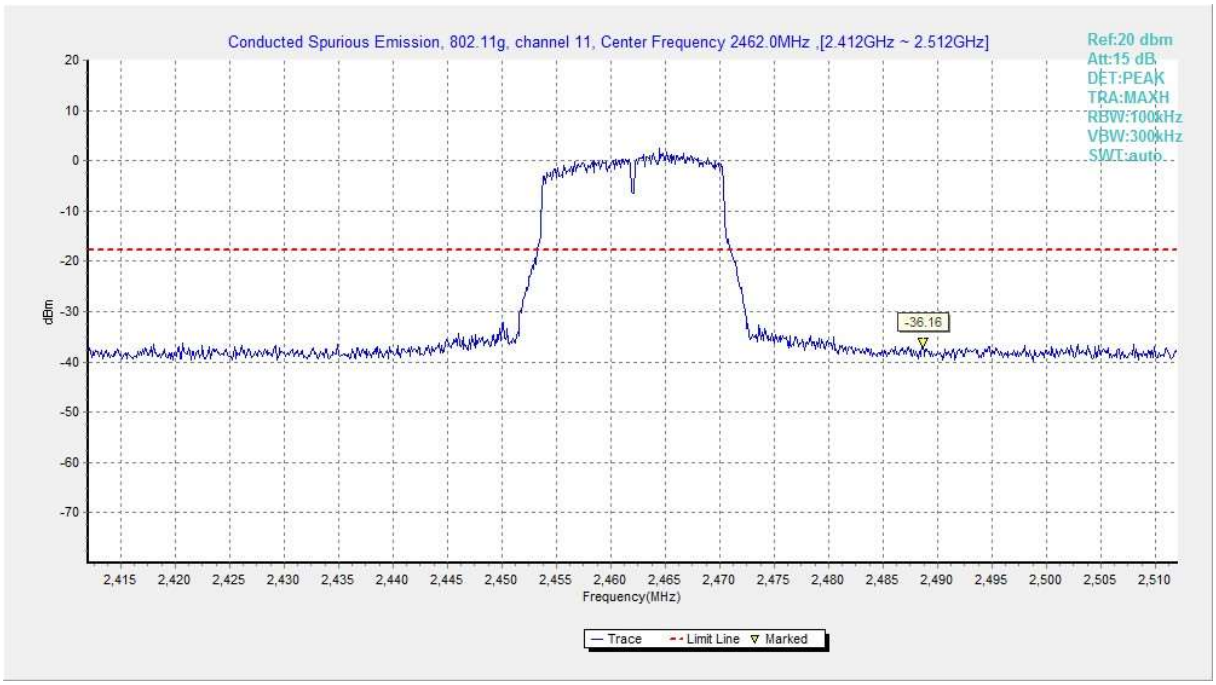


Fig.A.6.1.41 Transmitter Spurious Emission - Conducted (802.11g, Ch11, Center Frequency)

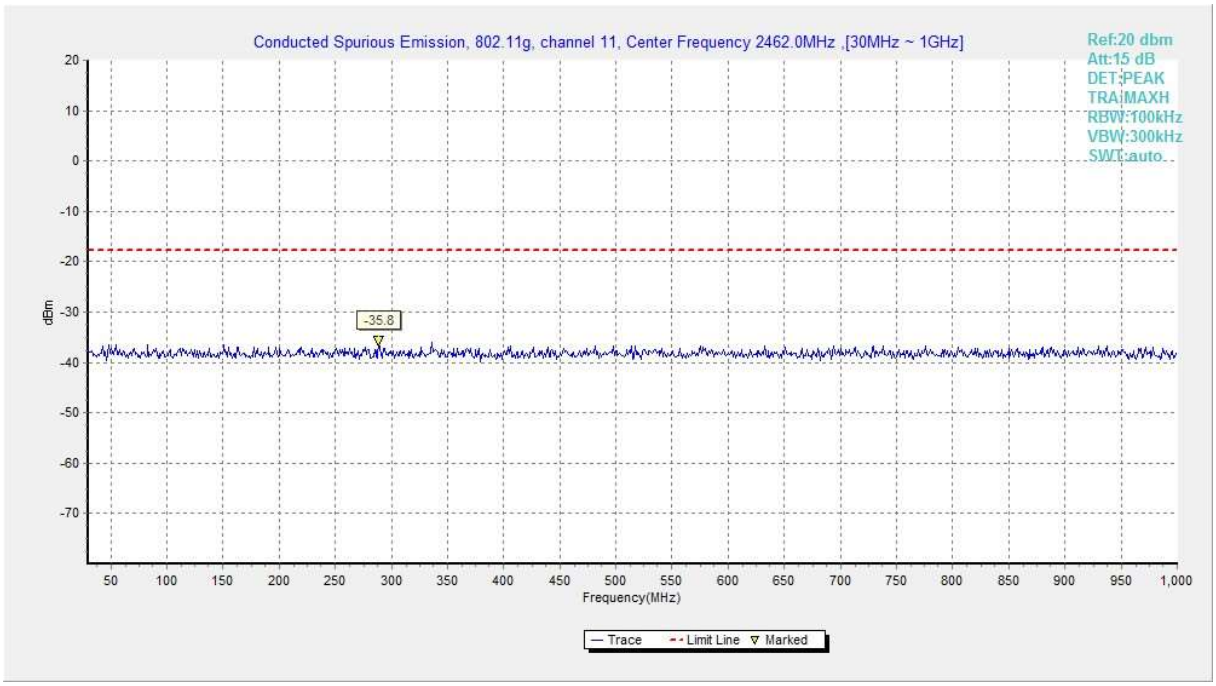


Fig.A.6.1.42 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 30 MHz-1 GHz)

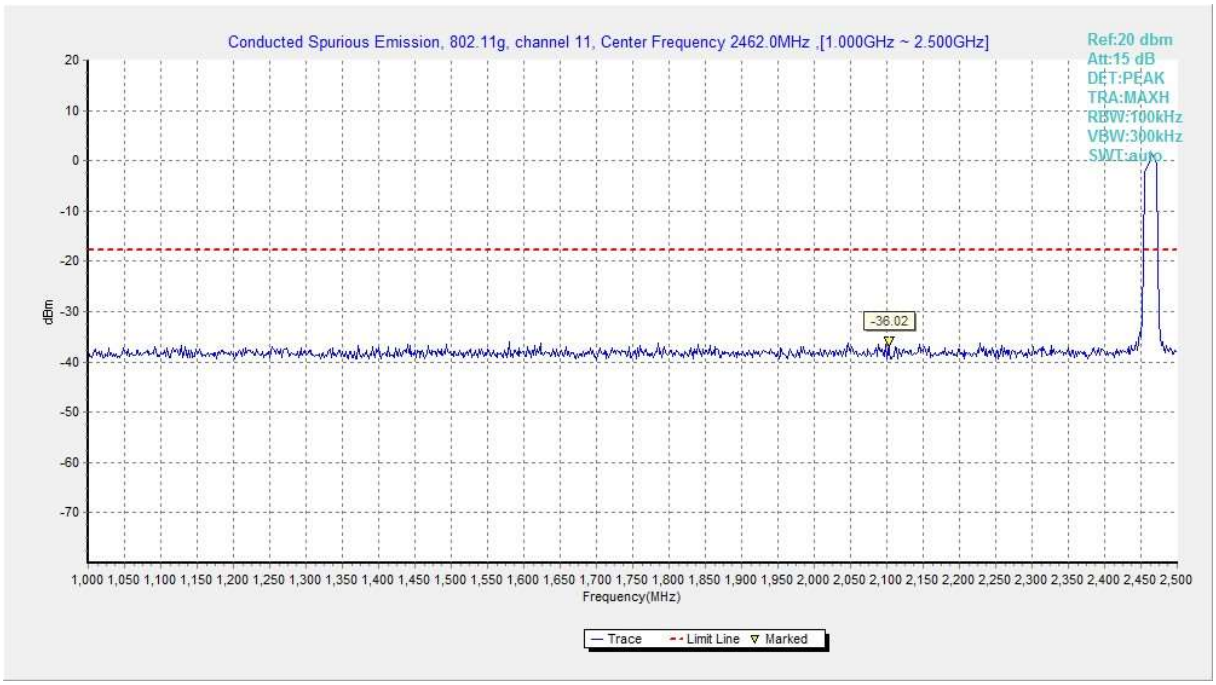


Fig.A.6.1.43 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 1 GHz-2.5 GHz)

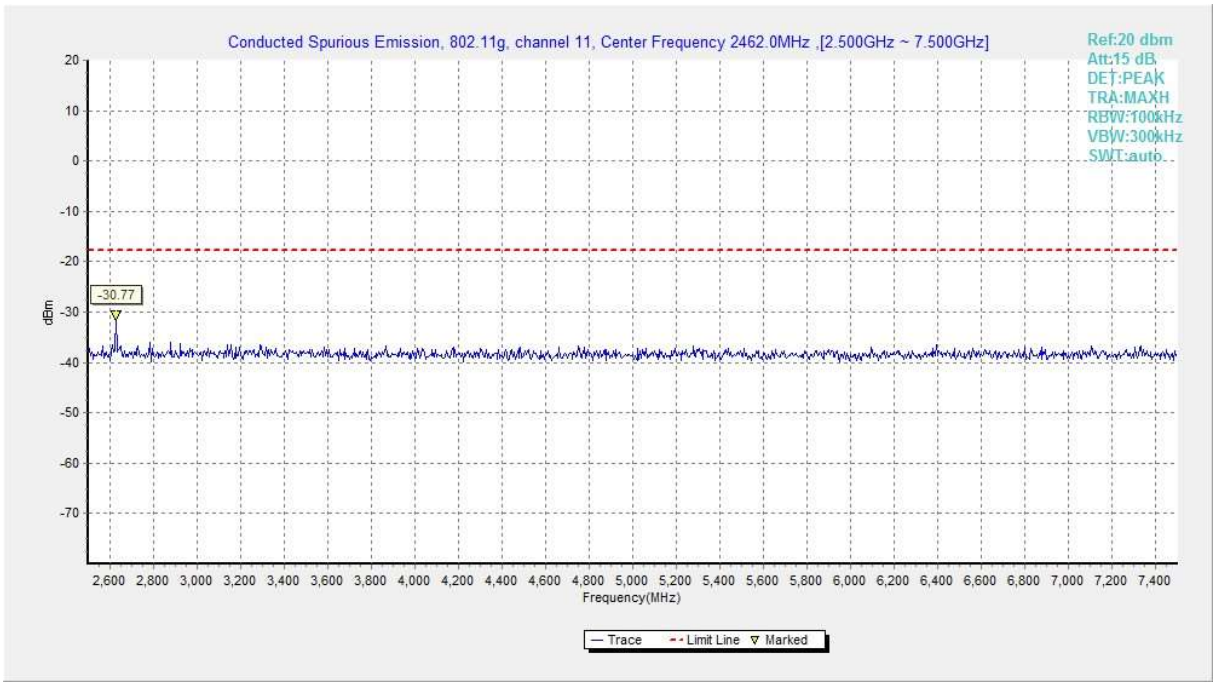


Fig.A.6.1.44 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 2.5 GHz-7.5 GHz)

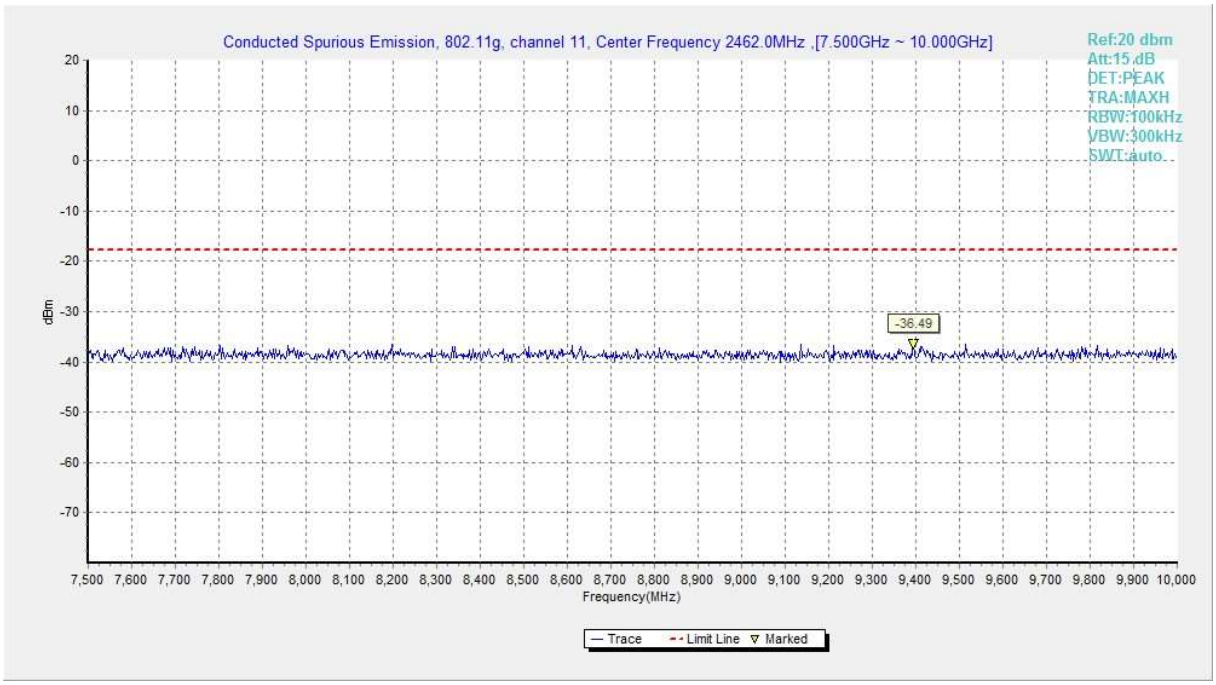


Fig.A.6.1.45 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 7.5 GHz-10 GHz)

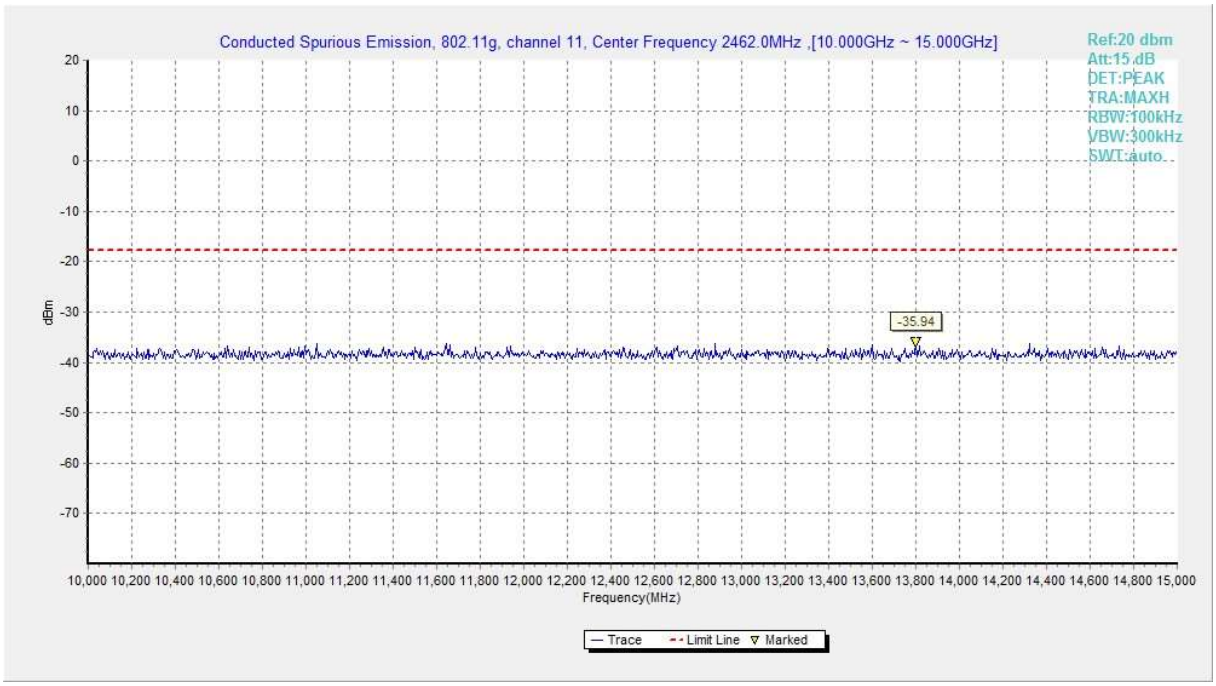


Fig.A.6.1.46 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 10 GHz-15 GHz)

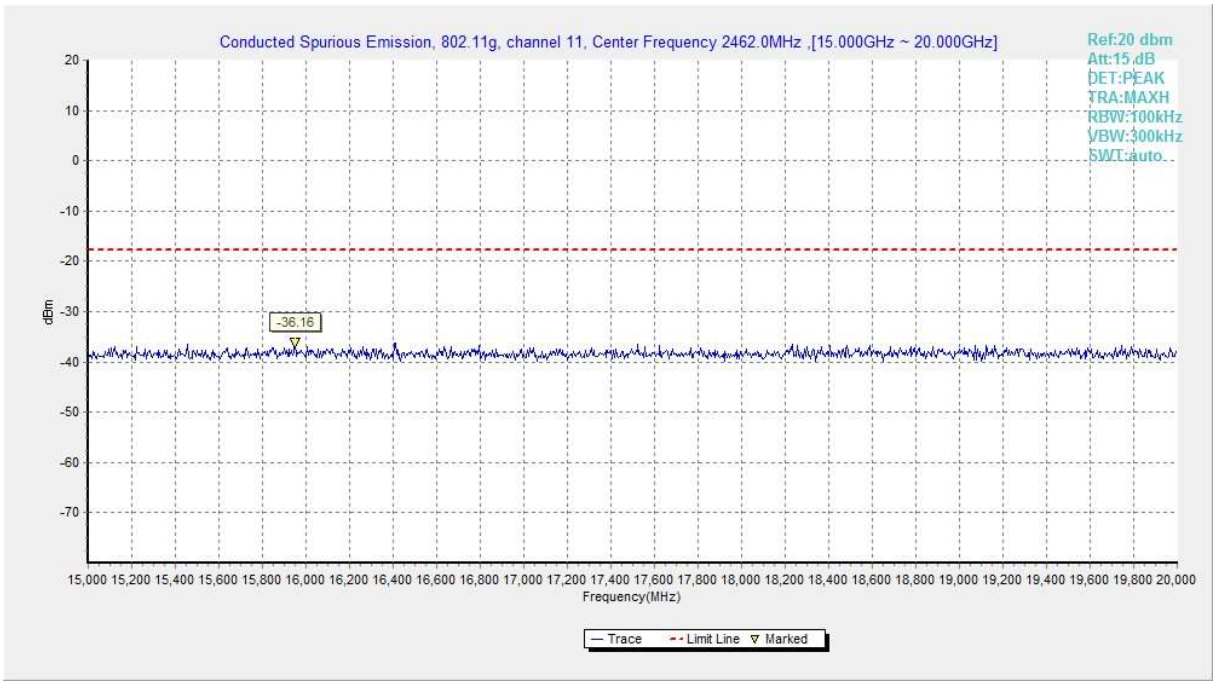


Fig.A.6.1.47 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 15 GHz-20 GHz)

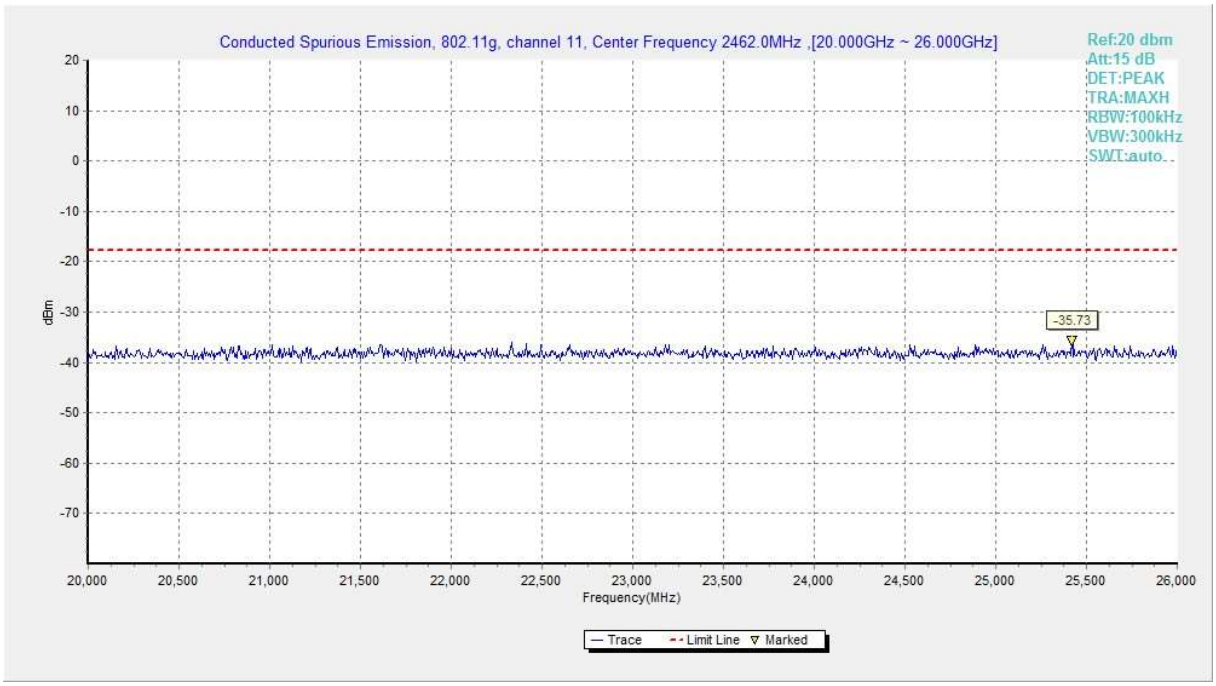


Fig.A.6.1.48 Transmitter Spurious Emission - Conducted (802.11g, Ch11, 20 GHz-26 GHz)

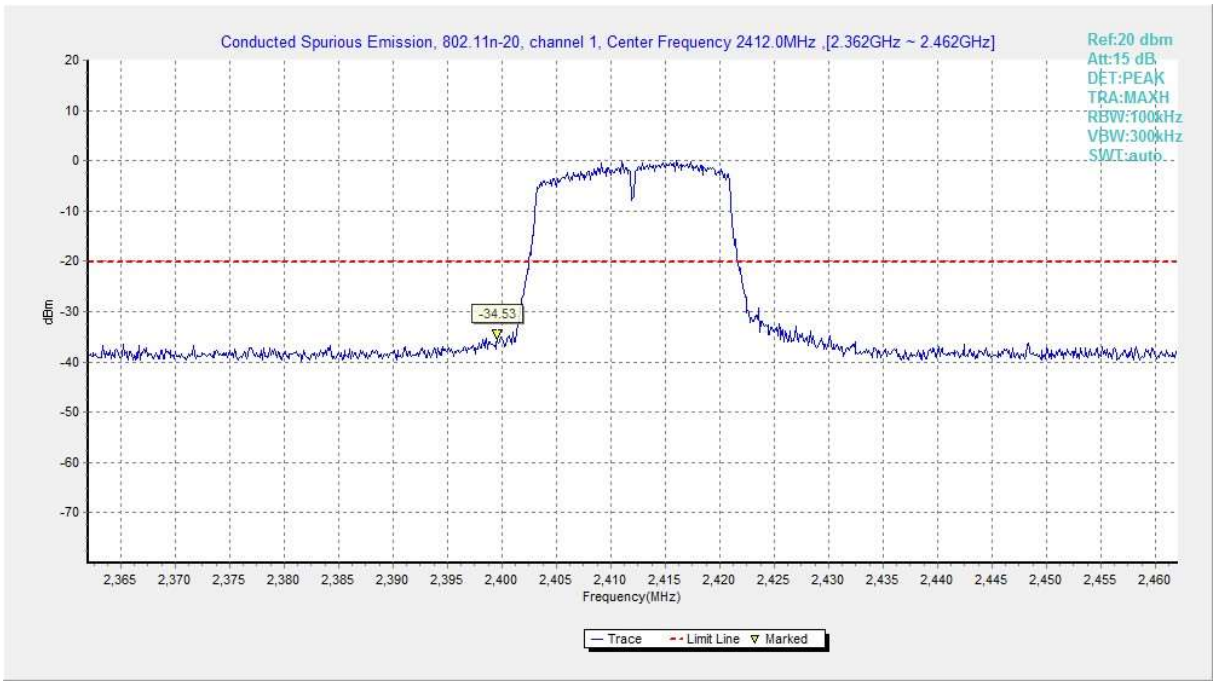


Fig.A.6.1.49 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, Center Frequency)

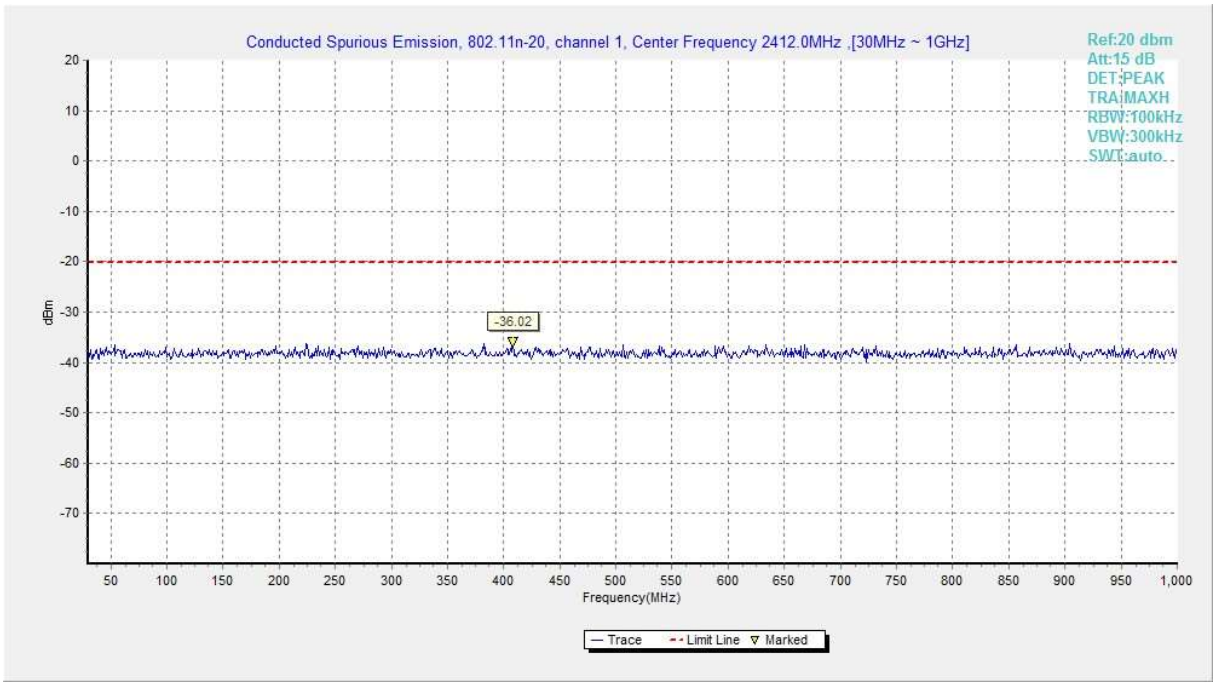


Fig.A.6.1.50 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 30 MHz-1 GHz)

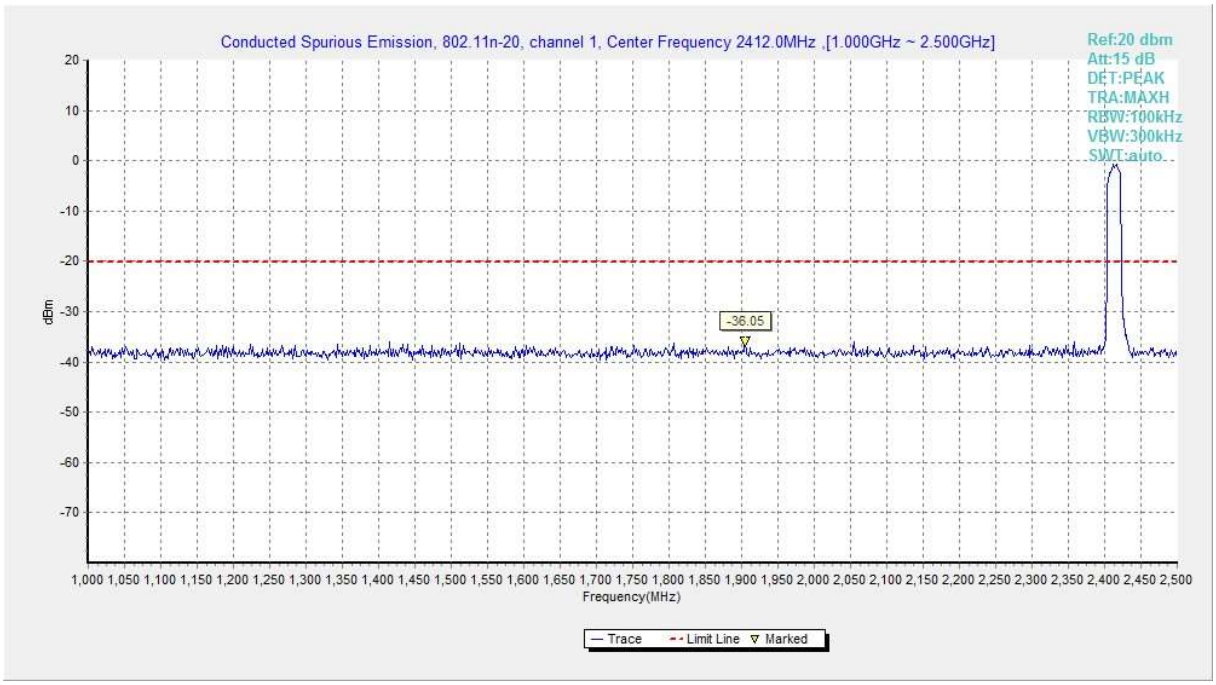


Fig.A.6.1.51 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 1 GHz-2.5 GHz)

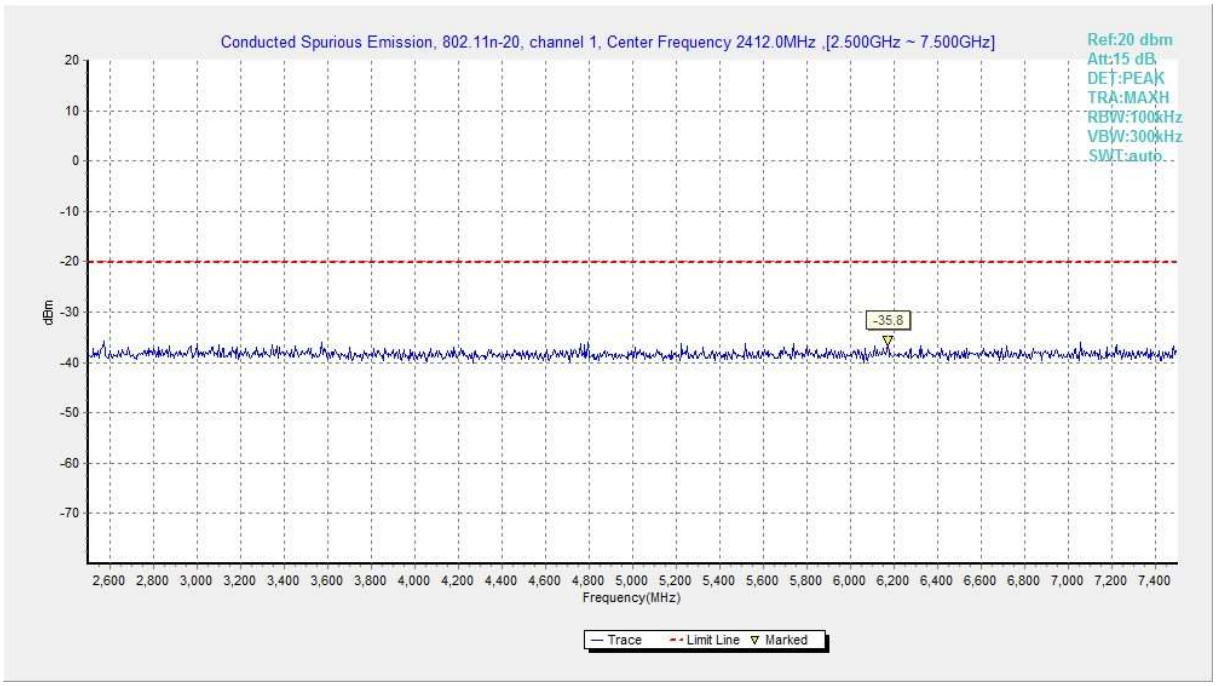


Fig.A.6.1.52 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 2.5 GHz-7.5 GHz)

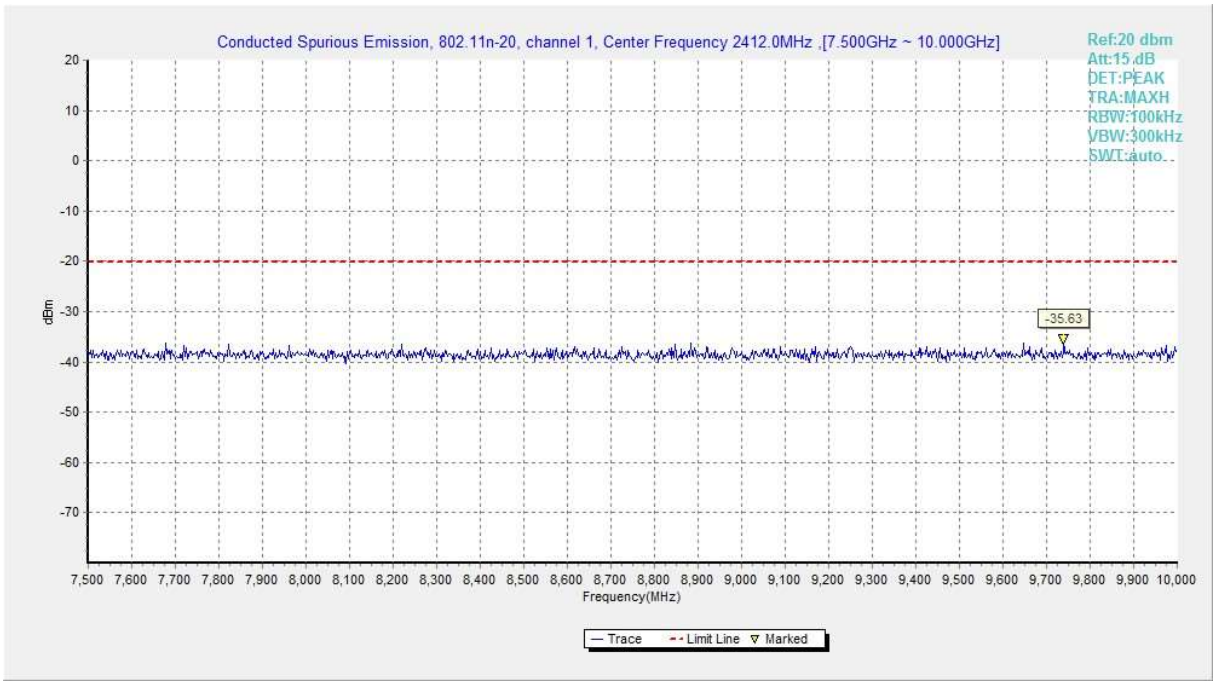


Fig.A.6.1.53 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 7.5 GHz-10 GHz)

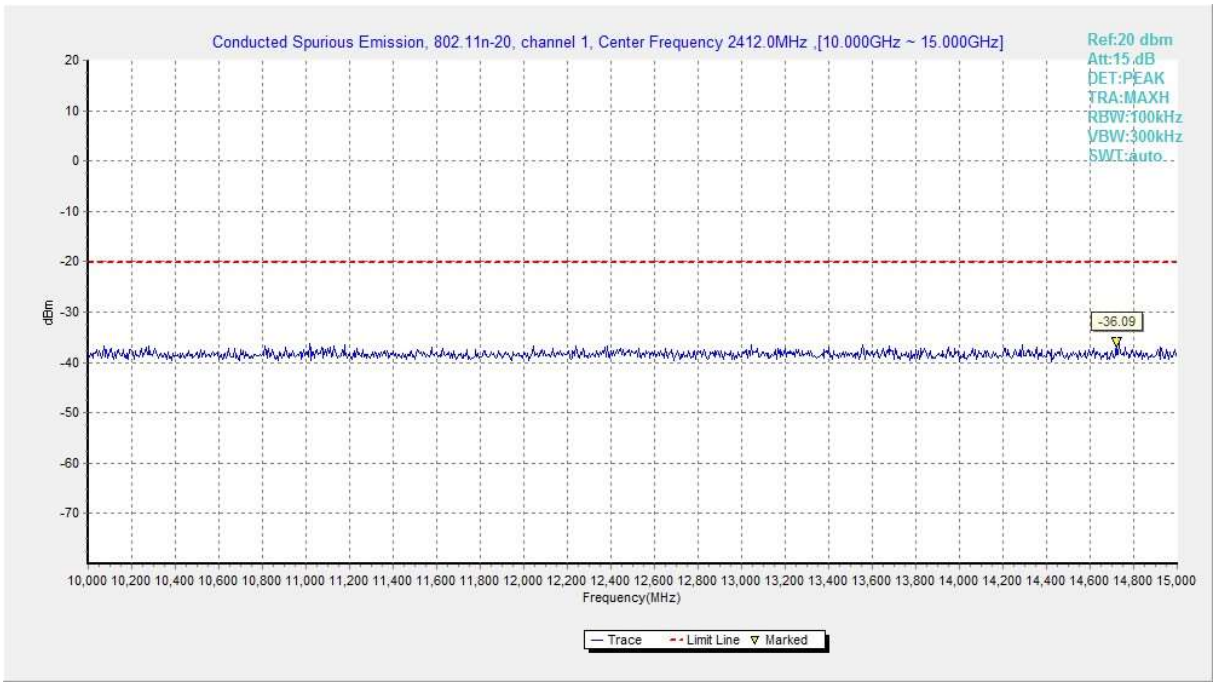


Fig.A.6.1.54 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 10 GHz-15 GHz)

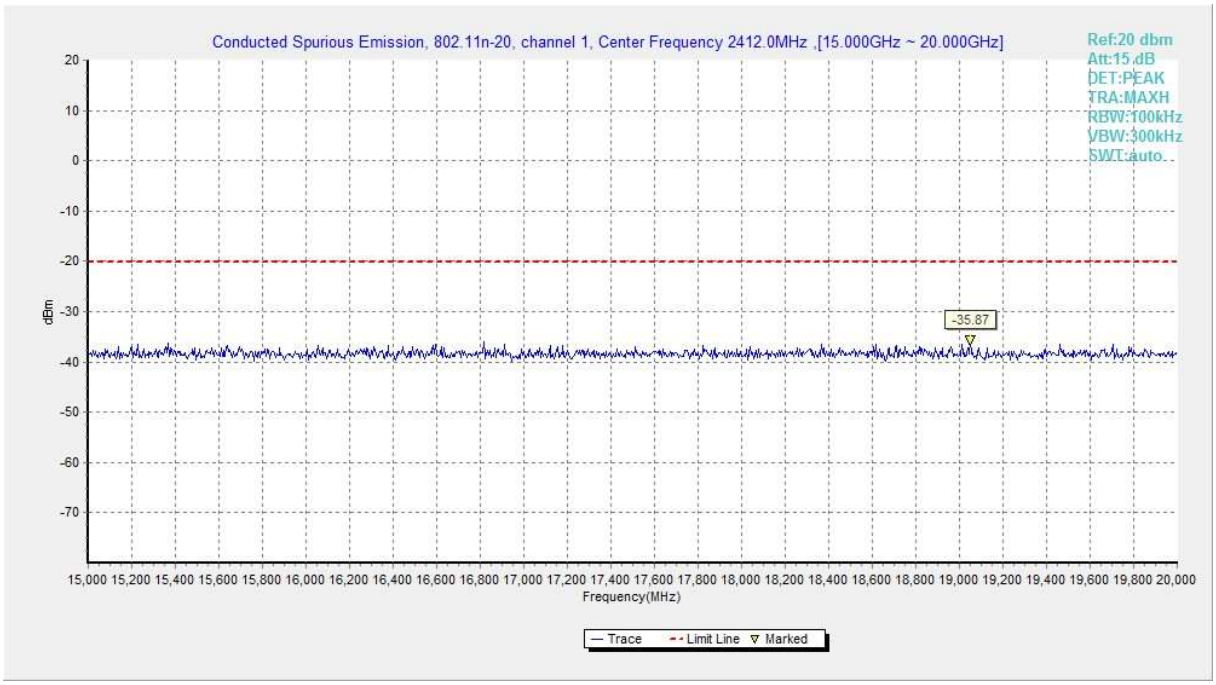


Fig.A.6.1.55 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 15 GHz-20 GHz)

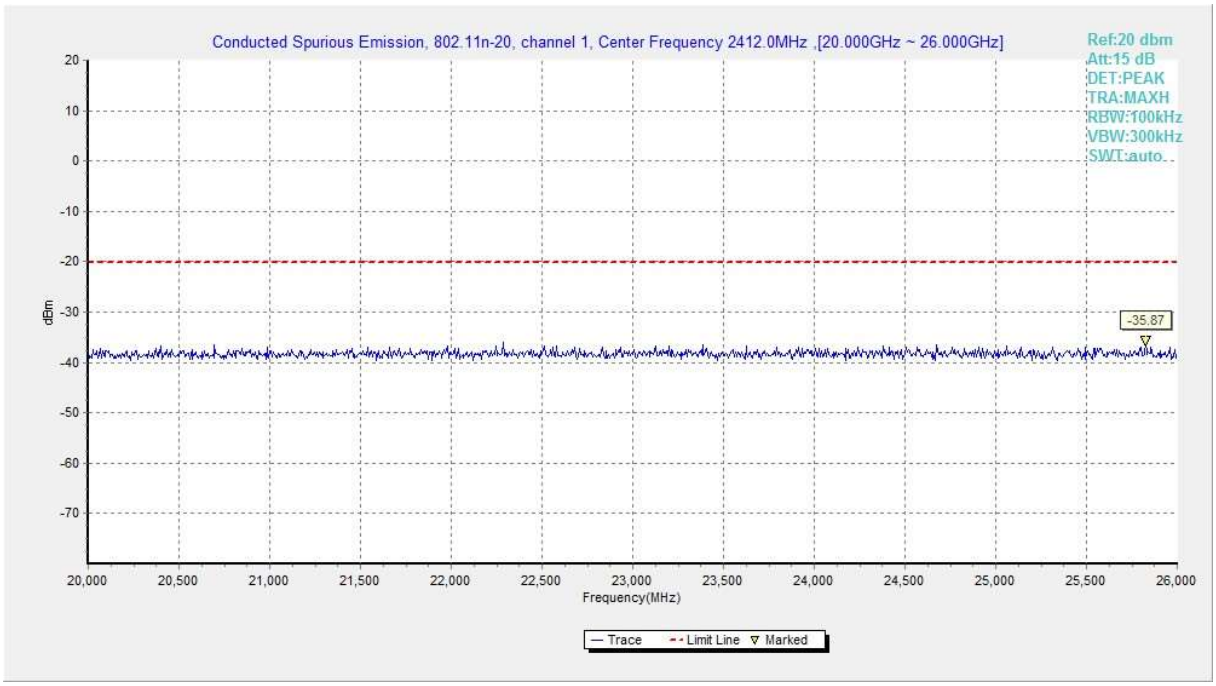


Fig.A.6.1.56 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch1, 20 GHz-26 GHz)

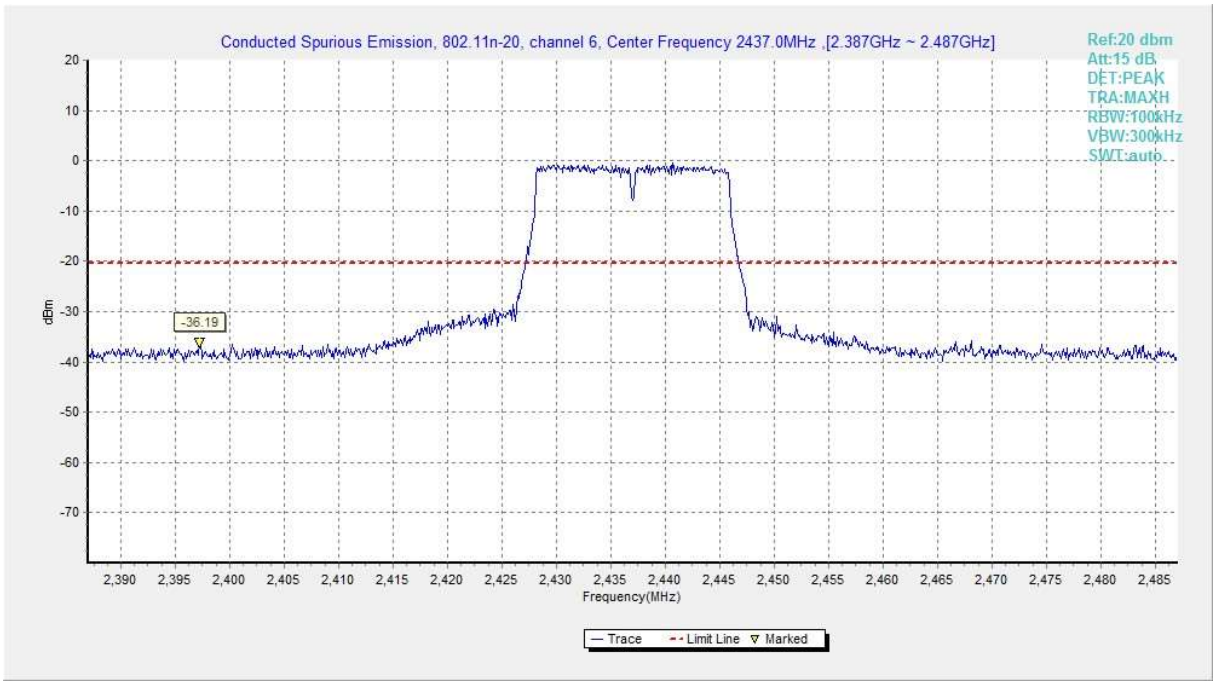


Fig.A.6.1.57 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, Center Frequency)

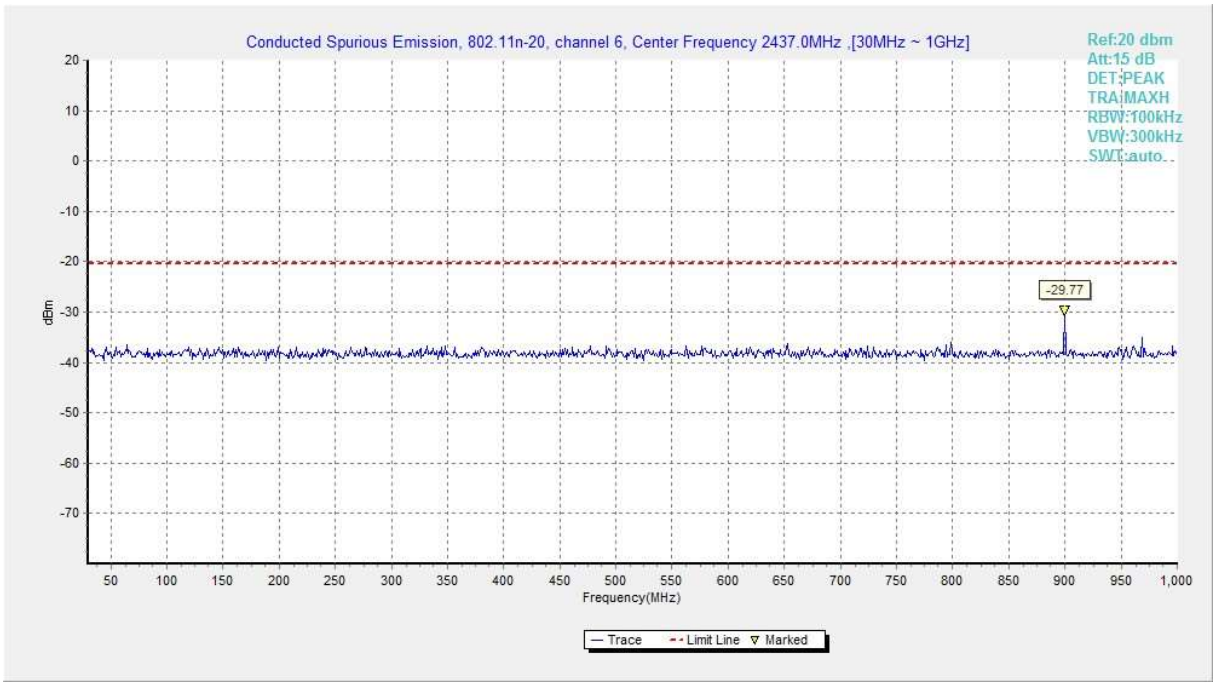


Fig.A.6.1.58 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 30 MHz-1 GHz)

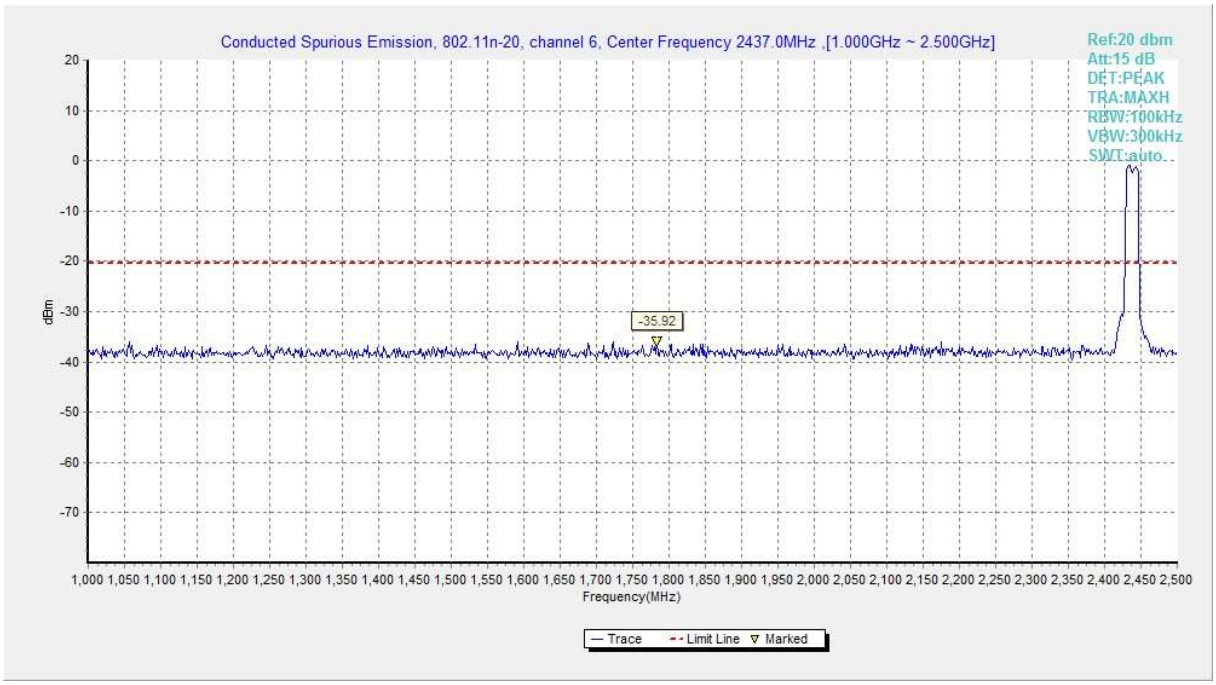


Fig.A.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

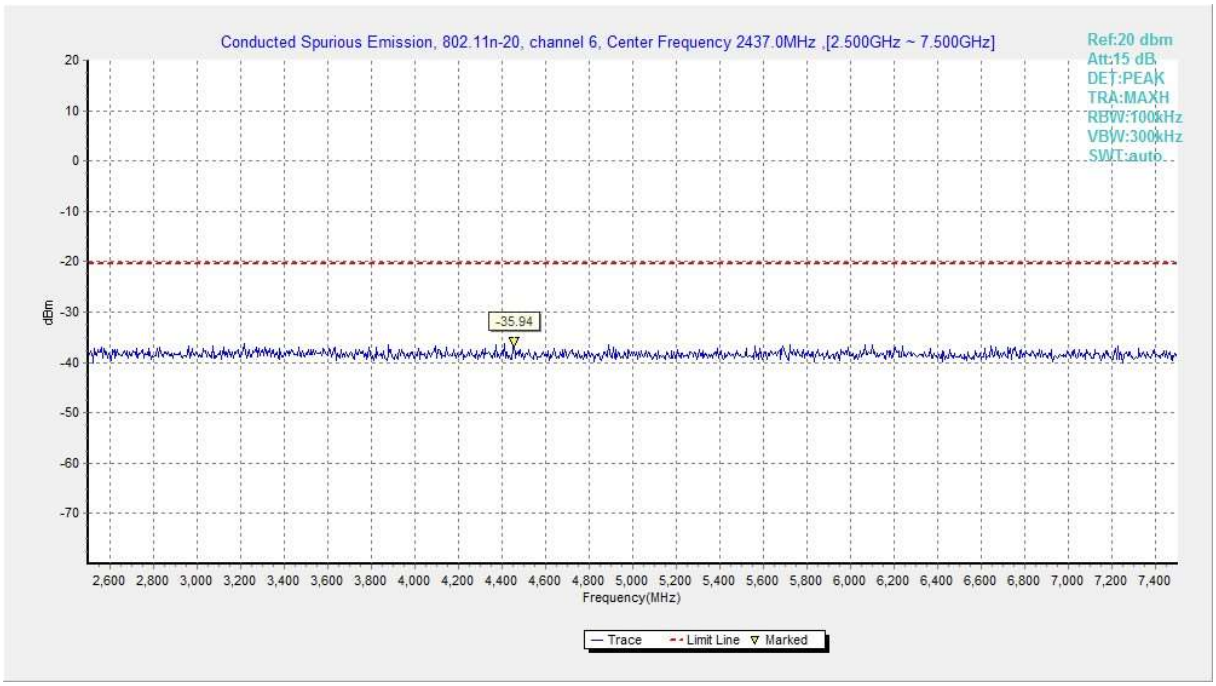


Fig.A.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

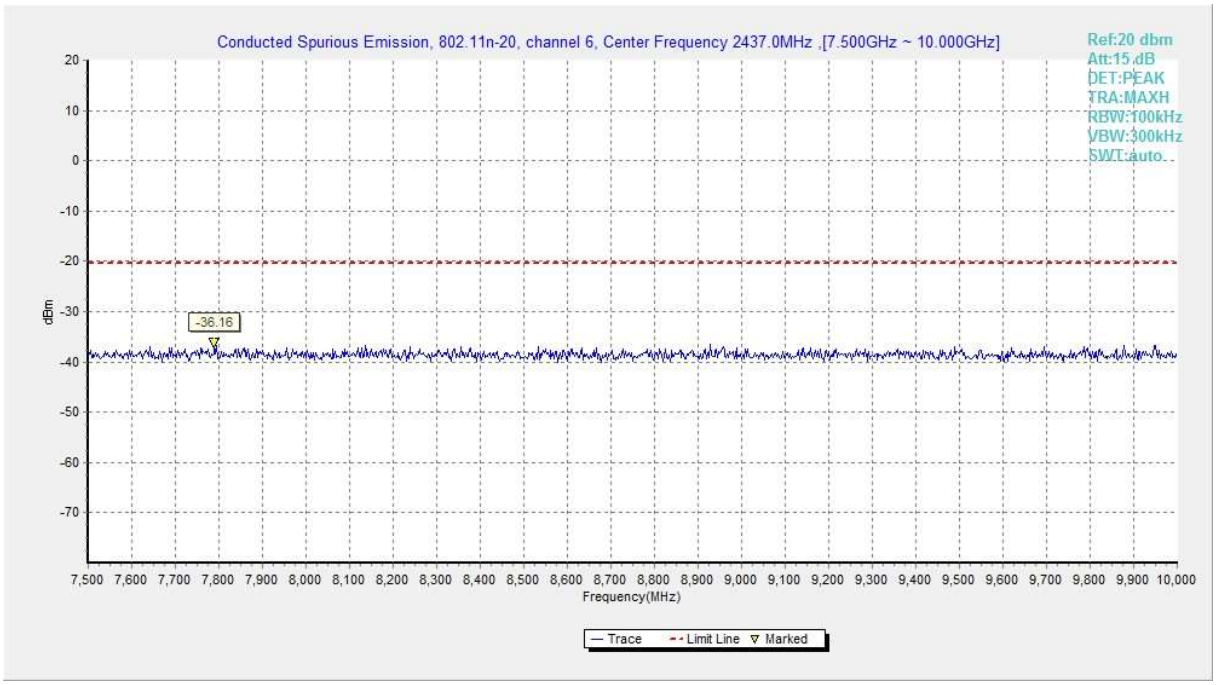


Fig.A.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

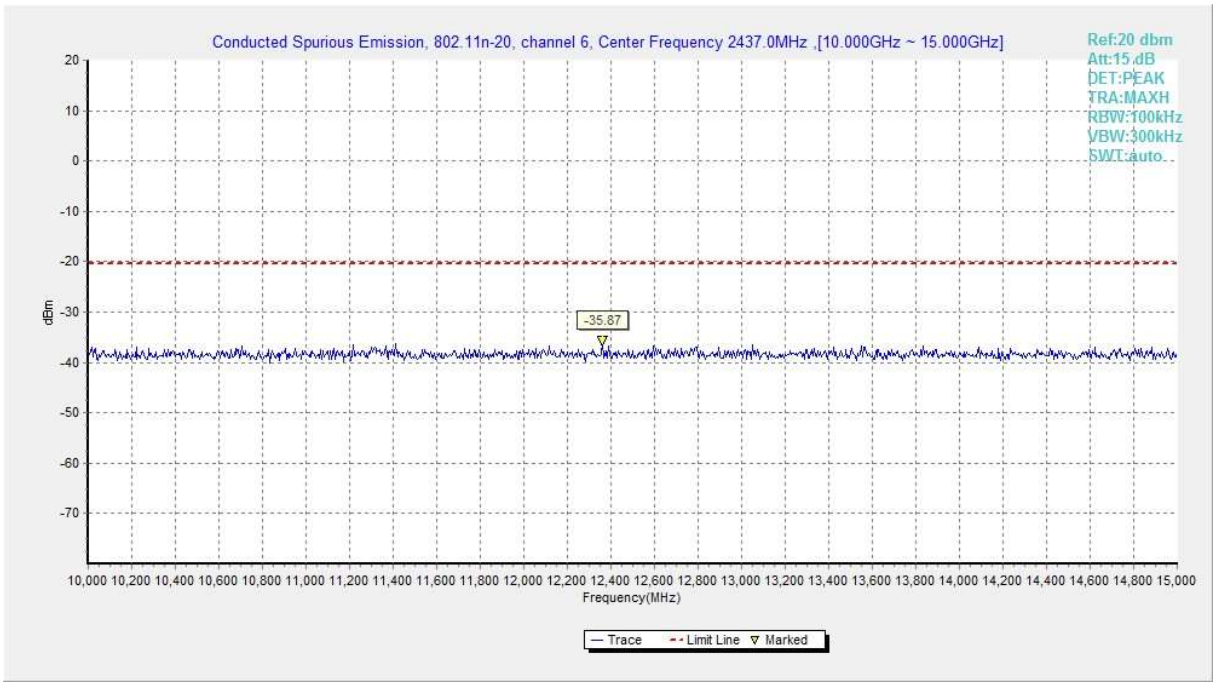


Fig.A.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

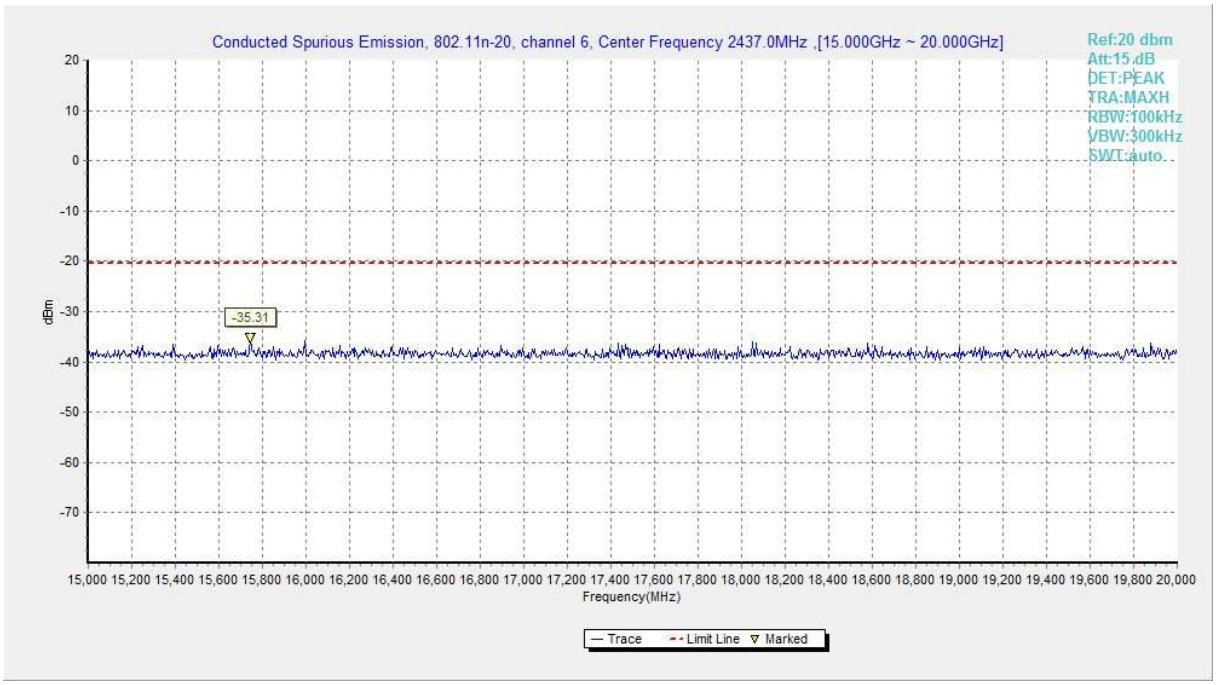


Fig.A.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

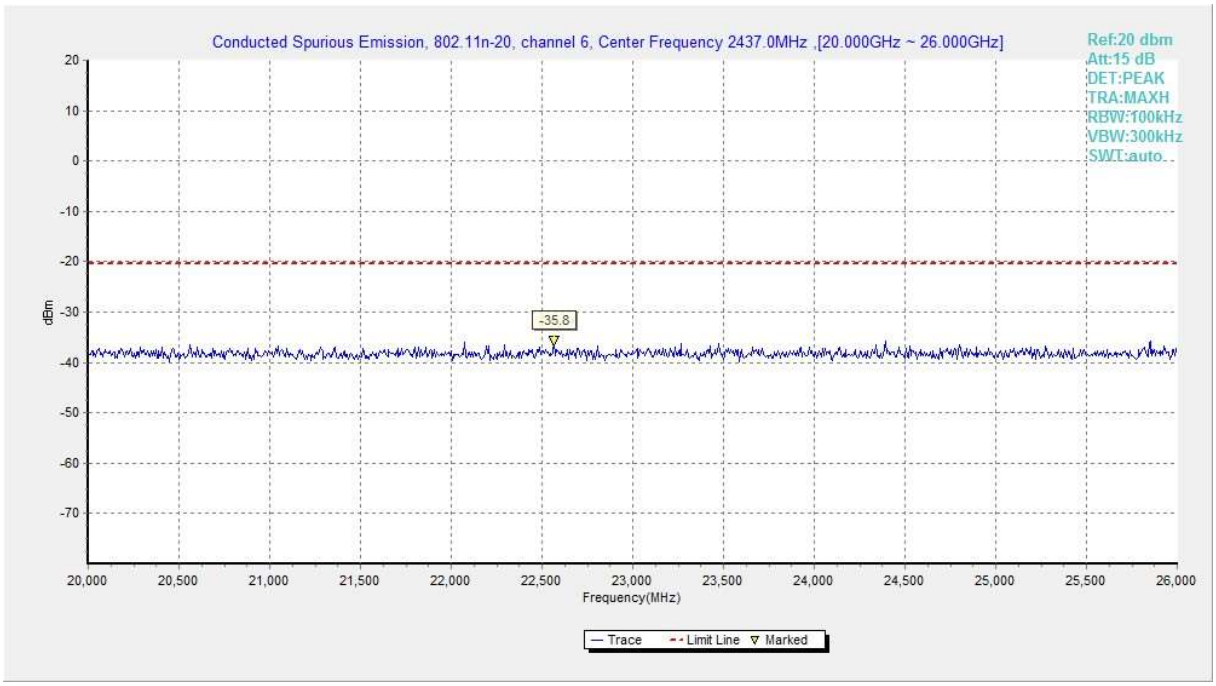


Fig.A.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

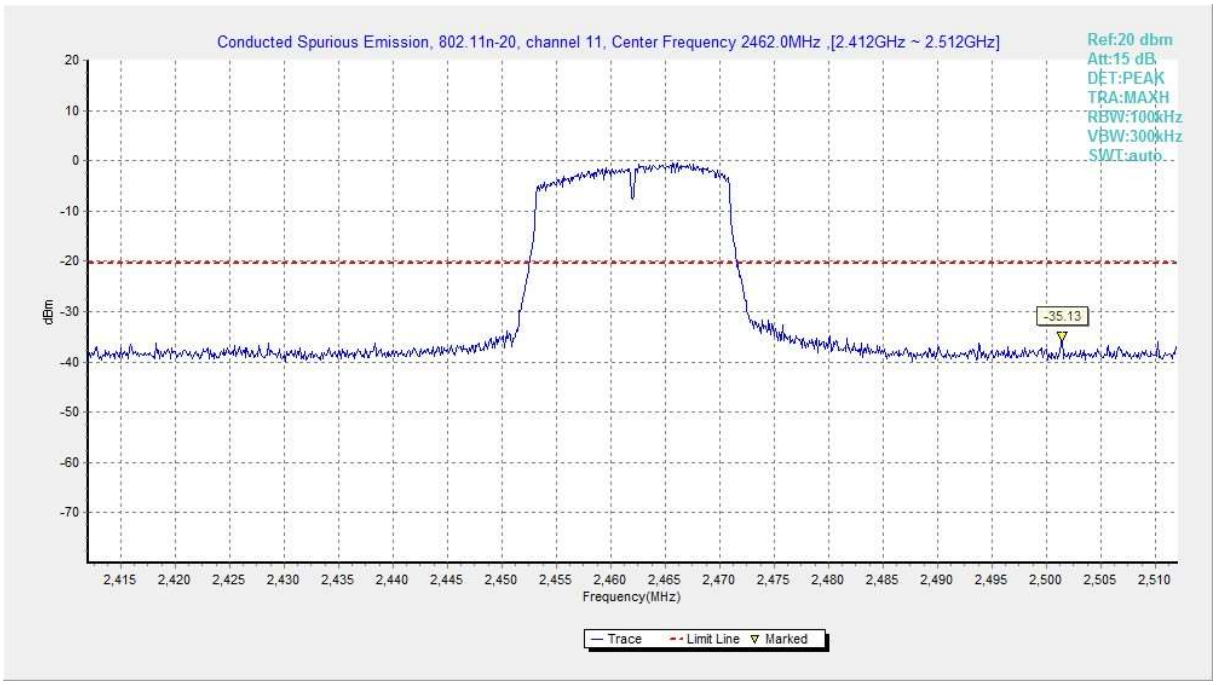


Fig.A.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

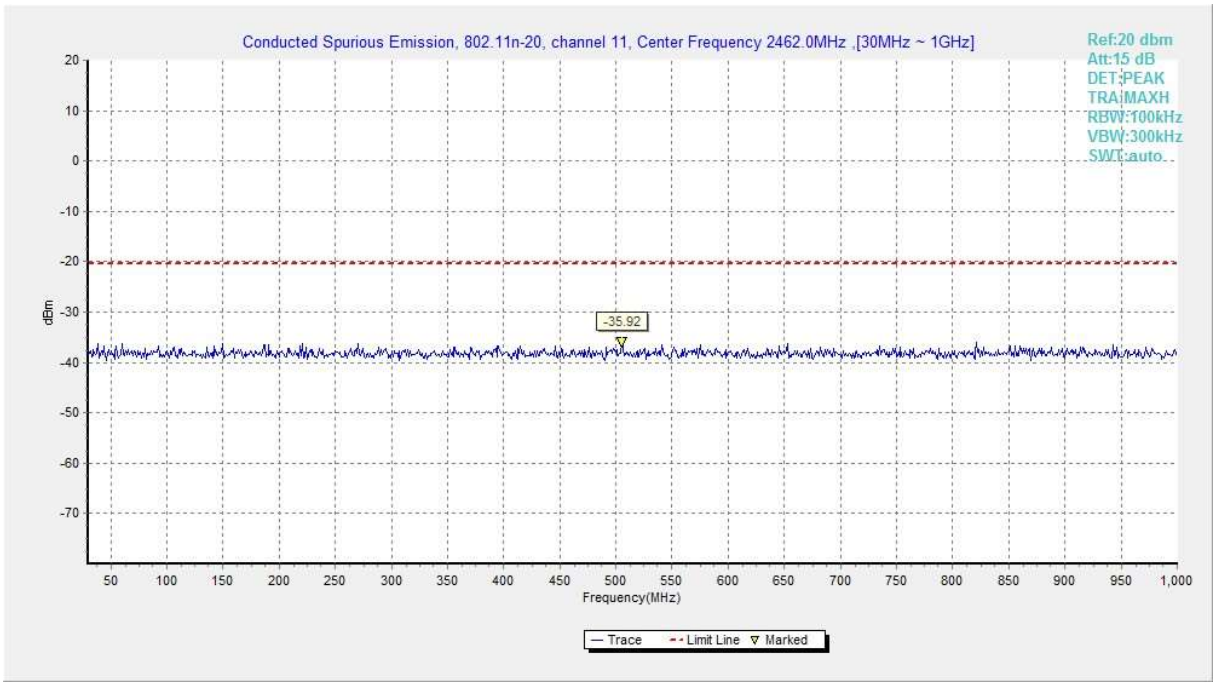


Fig.A.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

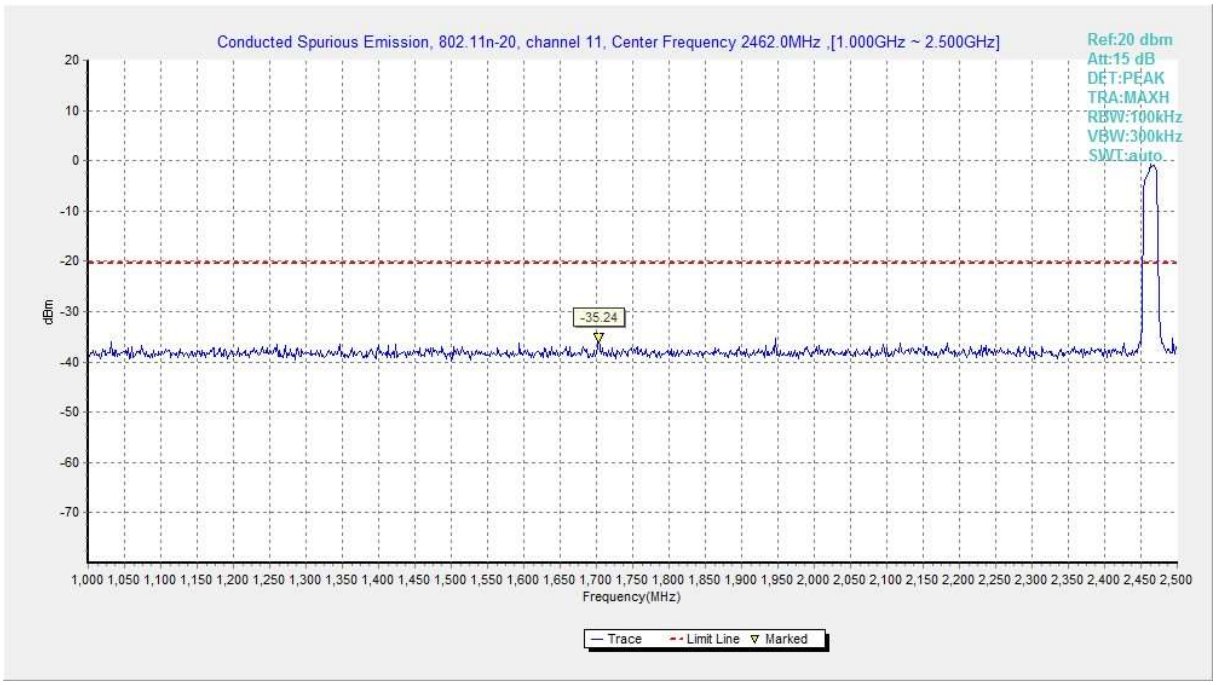


Fig.A.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

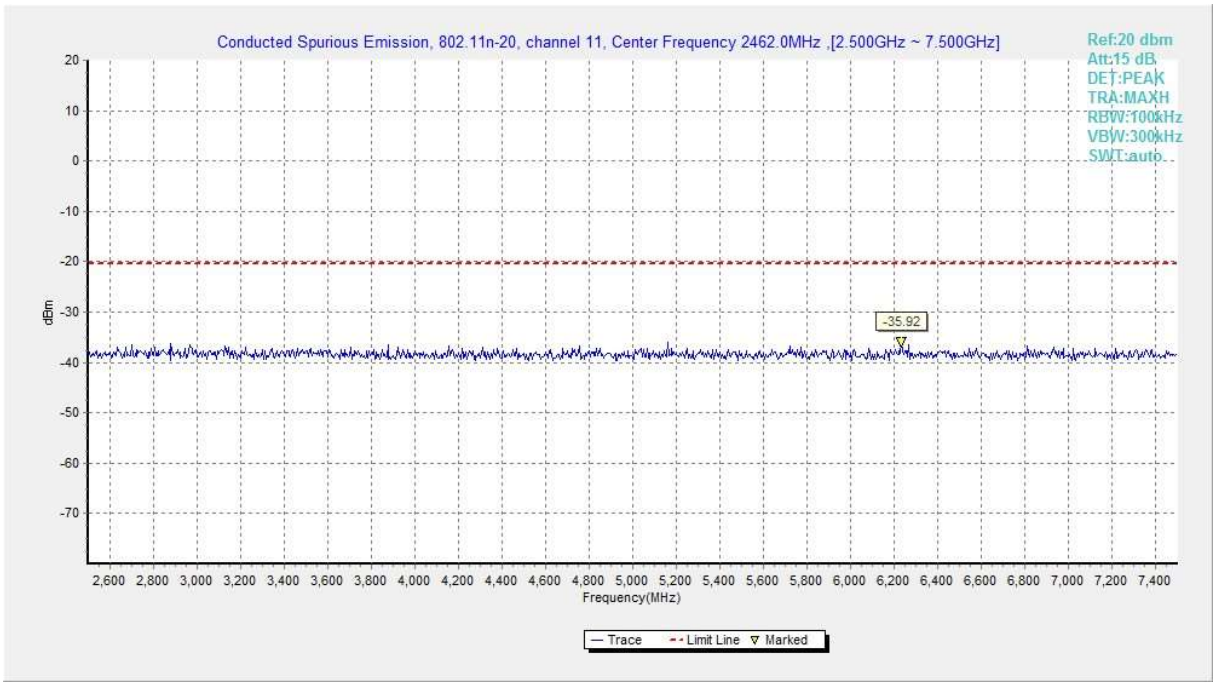


Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

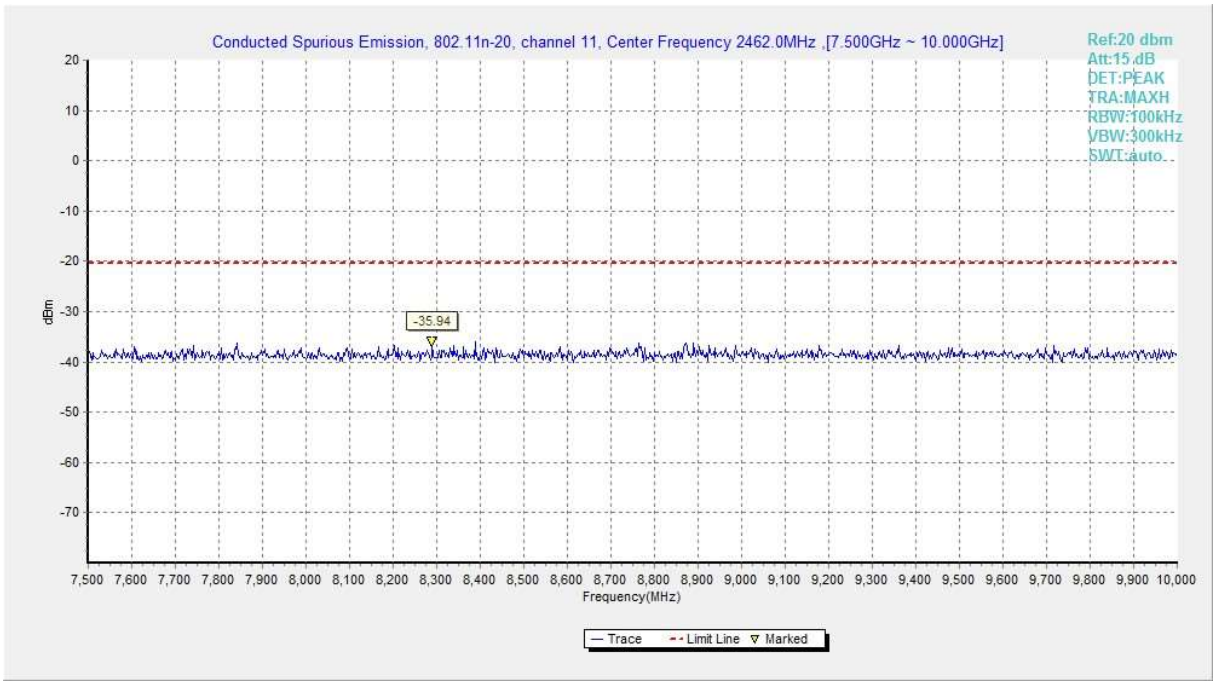


Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

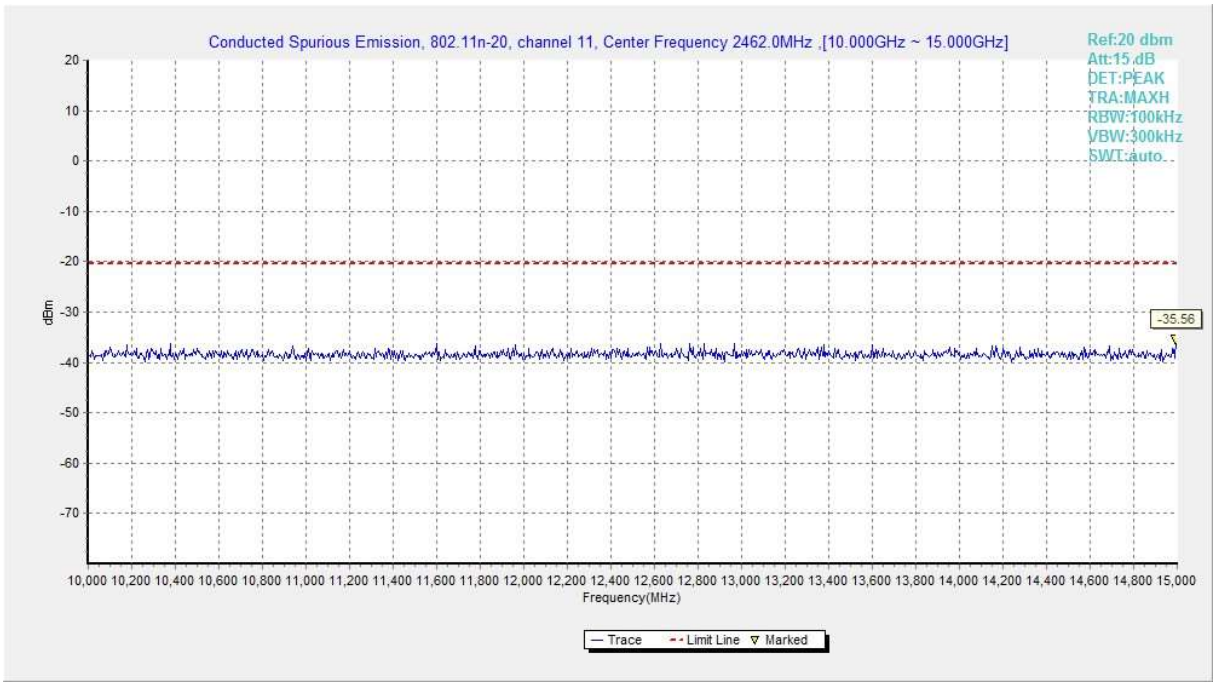


Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

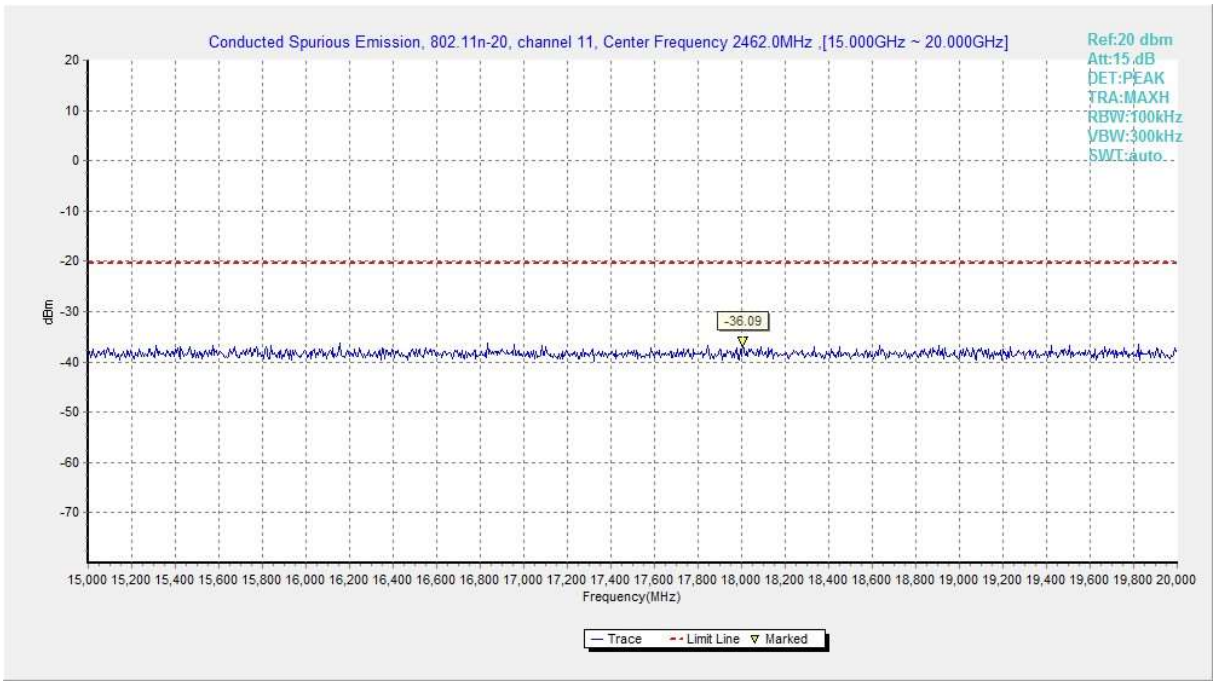


Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

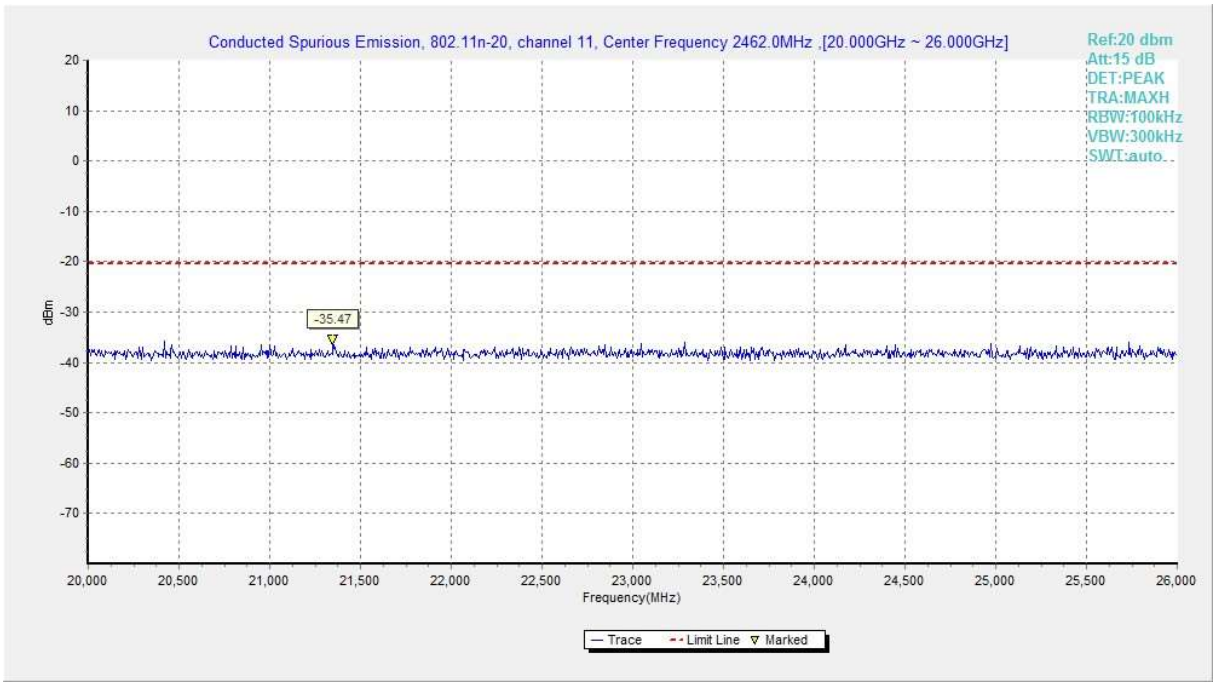


Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

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**
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.4	**P**

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.31GHz~2.43GHz---L	Fig.A.6.2.5	**P**
	11	2.45GHz~2.50GHz---H	Fig.A.6.2.6	**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)
2388.540	62.29	4.61	32.20	25.48	74.00	11.71	H
2389.058	63.17	4.61	32.20	26.36	74.00	10.83	H
4825.000	41.08	-35.92	34.03	42.97	74.00	32.92	V
7237.000	43.91	-34.54	35.65	42.80	74.00	30.09	V
9648.000	44.34	-33.48	36.81	41.02	74.00	29.66	V
12060.500	46.81	-31.76	38.81	39.76	74.00	27.19	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)
2363.200	45.29	-36.92	32.15	50.06	74.00	28.71	H
2510.000	45.64	-36.70	32.41	49.92	74.00	28.36	H
4873.500	44.63	-35.79	34.05	46.37	74.00	29.37	V
7310.500	42.97	-34.28	35.66	41.59	74.00	31.03	V
9748.000	45.02	-33.54	36.95	41.61	74.00	28.98	V
12185.000	46.52	-31.61	38.84	39.29	74.00	27.48	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)
2489.715	62.90	4.64	32.38	25.88	74.00	11.10	H
2490.545	63.16	4.63	32.38	26.14	74.00	10.84	H
4924.000	42.15	-35.70	34.07	43.78	74.00	31.85	V
7386.000	43.68	-34.09	35.68	42.09	74.00	30.32	H
9847.500	44.13	-33.44	37.09	40.48	74.00	29.87	V
12310.000	46.34	-31.47	38.86	38.95	74.00	27.66	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)
2388.120	68.56	4.61	32.19	31.75	74.00	5.44	H
2389.814	70.28	4.61	32.20	33.46	74.00	3.72	H
4824.500	41.38	-35.93	34.03	43.28	74.00	32.62	H
7237.000	42.69	-34.54	35.65	41.57	74.00	31.31	H
9647.500	44.10	-33.48	36.81	40.77	74.00	29.90	V
12059.500	46.63	-31.75	38.81	39.57	74.00	27.37	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)
2370.000	45.04	-36.77	32.16	49.64	74.00	28.96	H
2508.600	45.31	-36.67	32.41	49.57	74.00	28.69	H
4875.000	41.31	-35.79	34.05	43.05	74.00	32.69	V
7311.000	43.91	-34.28	35.66	42.52	74.00	30.09	H
9749.500	44.17	-33.54	36.95	40.75	74.00	29.83	H
12185.500	46.15	-31.61	38.84	38.92	74.00	27.85	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)
2483.505	69.32	4.65	32.37	32.29	74.00	4.68	H
2483.670	68.12	4.65	32.37	31.10	74.00	5.88	H
4924.000	41.04	-35.70	34.07	42.67	74.00	32.96	H
7386.000	43.26	-34.09	35.68	41.67	74.00	30.74	H
9848.000	43.82	-33.44	37.09	40.17	74.00	30.18	H
12310.000	45.61	-31.47	38.86	38.22	74.00	28.39	H

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)
2388.722	68.62	4.61	32.20	31.81	74.00	5.38	H
2389.688	68.53	4.61	32.20	31.72	74.00	5.47	H
48240.000	41.04	0.00	0.00	41.04	74.00	32.96	H
72360.000	41.86	0.00	0.00	41.86	74.00	32.14	V
96480.000	44.24	0.00	0.00	44.24	74.00	29.76	V
12060.000	47.05	-31.76	38.81	39.99	74.00	26.95	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)
2364.600	44.63	-36.89	32.15	49.37	74.00	29.37	H
2508.000	46.05	-36.66	32.41	50.30	74.00	27.95	H
4874.000	42.21	-35.79	34.05	43.95	74.00	31.79	H
7311.000	42.93	-34.28	35.66	41.54	74.00	31.07	H
9748.000	43.48	-33.54	36.95	40.06	74.00	30.52	H
12185.000	45.43	-31.61	38.84	38.20	74.00	28.57	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)
2483.655	70.25	4.65	32.37	33.23	74.00	3.75	H
2483.865	70.46	4.65	32.37	33.44	74.00	3.54	H
4924.000	41.27	-35.70	34.07	42.90	74.00	32.73	V
7386.000	43.25	-34.09	35.68	41.67	74.00	30.75	H
9848.000	43.78	-33.44	37.09	40.14	74.00	30.22	V
12310.000	46.06	-31.47	38.86	38.67	74.00	27.94	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)
2388.990	48.52	4.61	32.20	11.72	54.00	5.48	V
2389.020	48.52	4.61	32.20	11.71	54.00	5.48	V
4824.100	28.65	-35.93	34.03	30.55	54.00	25.35	V
7236.100	30.22	-34.54	35.65	29.11	54.00	23.78	H
9648.100	31.40	-33.48	36.81	28.07	54.00	22.60	H
12060.100	33.95	-31.76	38.81	26.89	54.00	20.05	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)
2401.170	49.03	4.64	32.22	12.17	54.00	4.97	V
2472.720	49.03	4.68	32.35	12.00	54.00	4.97	V
4873.900	38.61	-35.79	34.05	40.35	54.00	15.39	H
7311.100	30.58	-34.28	35.66	29.19	54.00	23.42	V
9387.100	31.42	-33.43	36.51	28.34	54.00	22.58	V
12184.900	33.77	-31.61	38.84	26.54	54.00	20.23	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)
2485.980	49.05	4.65	32.37	12.03	54.00	4.95	V
2486.040	49.06	4.65	32.37	12.04	54.00	4.94	V
4924.000	29.13	-35.70	34.07	30.76	54.00	24.87	V
7386.100	31.03	-34.09	35.68	29.44	54.00	22.97	V
9451.000	31.51	-33.38	36.56	28.33	54.00	22.49	H
12310.000	33.58	-31.47	38.86	26.19	54.00	20.42	V

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)
2389.170	49.37	4.61	32.20	12.56	54.00	4.63	V
2389.740	49.45	4.61	32.20	12.63	54.00	4.55	V
4824.100	28.62	-35.93	34.03	30.52	54.00	25.38	H
7390.900	31.14	-34.09	35.68	29.56	54.00	22.86	V
9437.800	31.57	-33.36	36.55	28.39	54.00	22.43	H
12060.100	33.90	-31.76	38.81	26.85	54.00	20.10	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)
2401.900	49.76	4.64	32.22	12.89	54.00	4.24	V
2471.160	49.84	4.68	32.35	12.81	54.00	4.16	V
4873.900	29.36	-35.79	34.05	31.09	54.00	24.64	H
7311.100	30.49	-34.28	35.66	29.10	54.00	23.51	V
9454.000	31.52	-33.39	36.56	28.34	54.00	22.48	V
12184.900	33.73	-31.61	38.84	26.50	54.00	20.27	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)
2483.490	49.05	4.65	32.37	12.03	54.00	4.95	V
2483.970	49.04	4.65	32.37	12.02	54.00	4.96	V
4924.000	29.32	-35.70	34.07	30.95	54.00	24.68	V
7386.100	30.97	-34.09	35.68	29.38	54.00	23.03	H
9425.200	31.59	-33.35	36.54	28.39	54.00	22.41	H
12310.000	33.77	-31.47	38.86	26.37	54.00	20.23	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)
2389.530	49.63	4.61	32.20	12.82	54.00	4.37	V
2389.950	49.63	4.62	32.20	12.82	54.00	4.37	V
4824.100	28.63	-35.93	34.03	30.53	54.00	25.37	V
7362.400	30.96	-34.09	35.67	29.38	54.00	23.04	V
9394.600	31.57	-33.41	36.52	28.46	54.00	22.43	V
12060.100	34.01	-31.76	38.81	26.96	54.00	19.99	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)
2388.030	48.99	4.61	32.19	12.19	54.00	5.01	V
2488.800	49.52	4.64	32.38	12.50	54.00	4.48	V
4873.900	29.38	-35.79	34.05	31.11	54.00	24.62	V
7311.100	30.47	-34.28	35.66	29.08	54.00	23.53	H
9425.200	31.52	-33.35	36.54	28.32	54.00	22.48	V
12184.000	33.94	-31.61	38.84	26.72	54.00	20.06	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)
2483.610	49.13	4.65	32.37	12.11	54.00	4.87	V
2484.540	49.12	4.65	32.37	12.10	54.00	4.88	V
4924.000	29.19	-35.70	34.07	30.82	54.00	24.81	H
7386.100	31.02	-34.09	35.68	29.44	54.00	22.98	V
9462.100	31.62	-33.40	36.57	28.44	54.00	22.38	H
12310.000	33.82	-31.47	38.86	26.43	54.00	20.18	V

Test graphs as below:

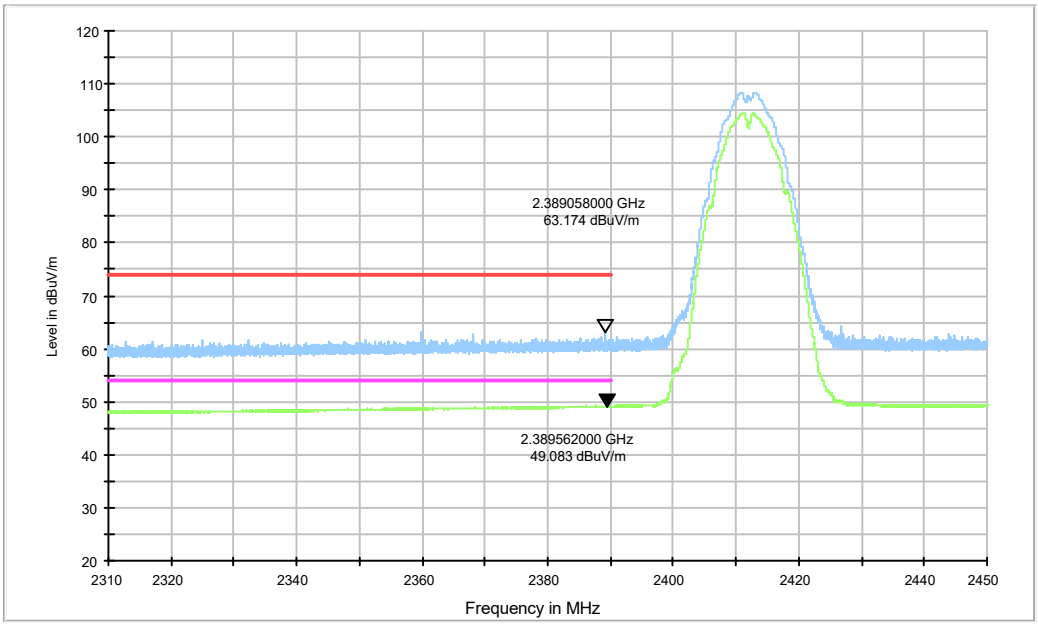


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz

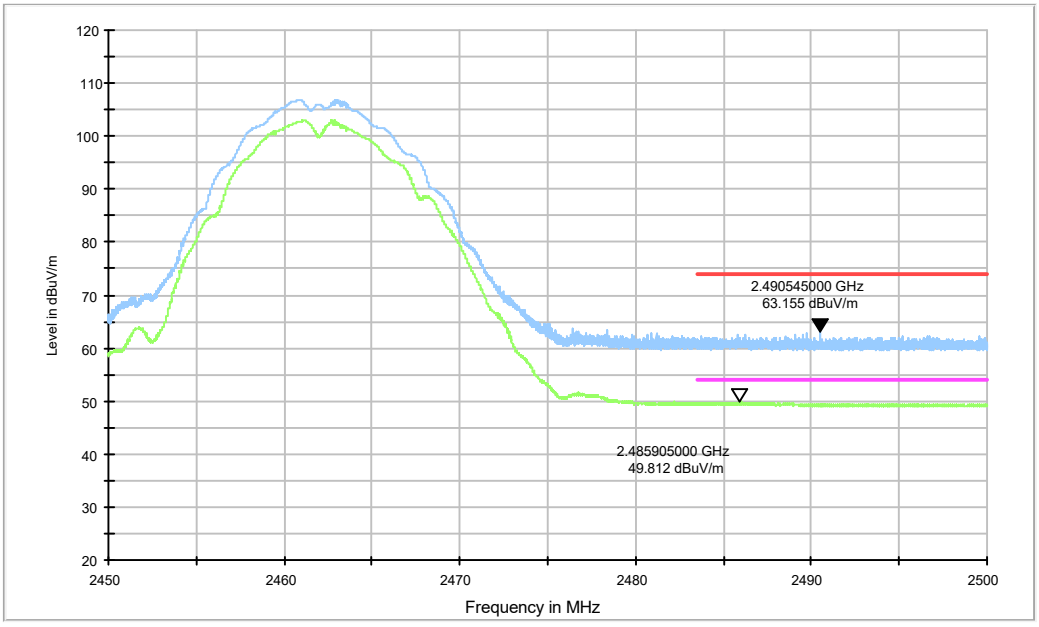


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

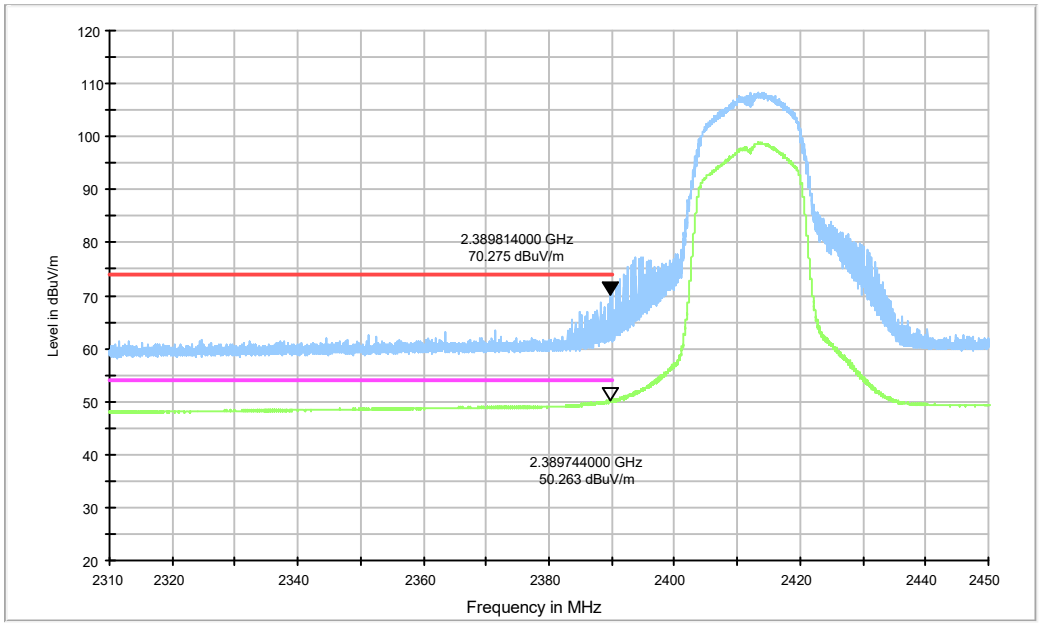


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz

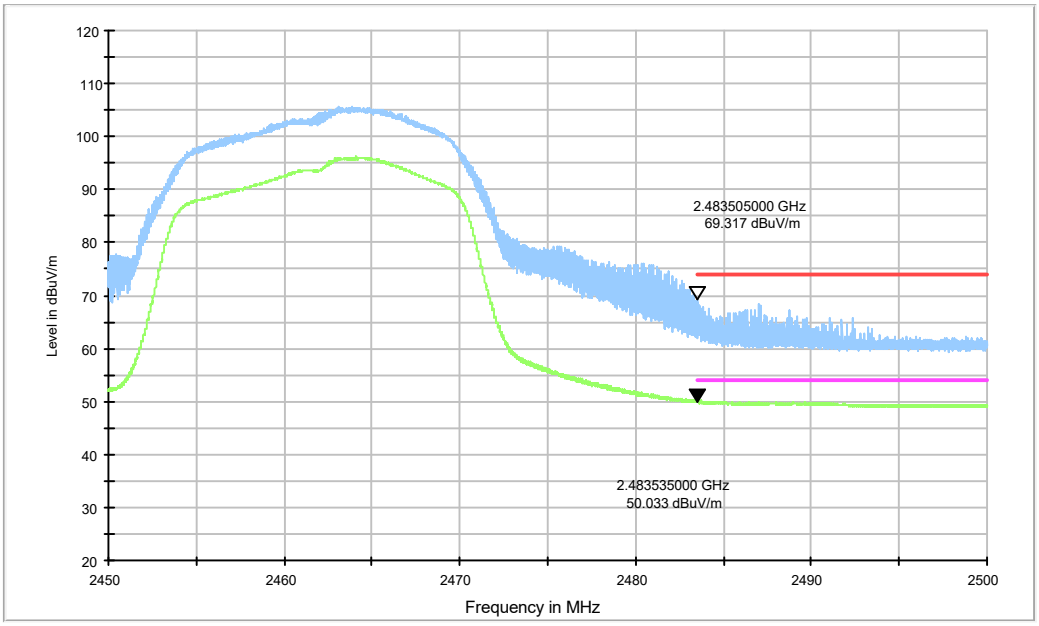


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

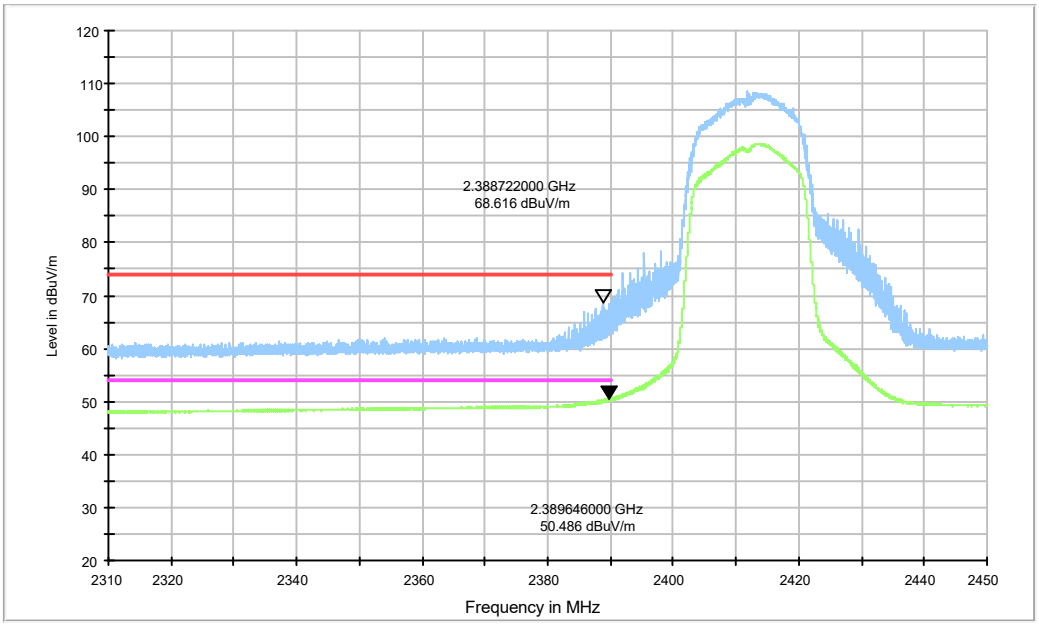


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz

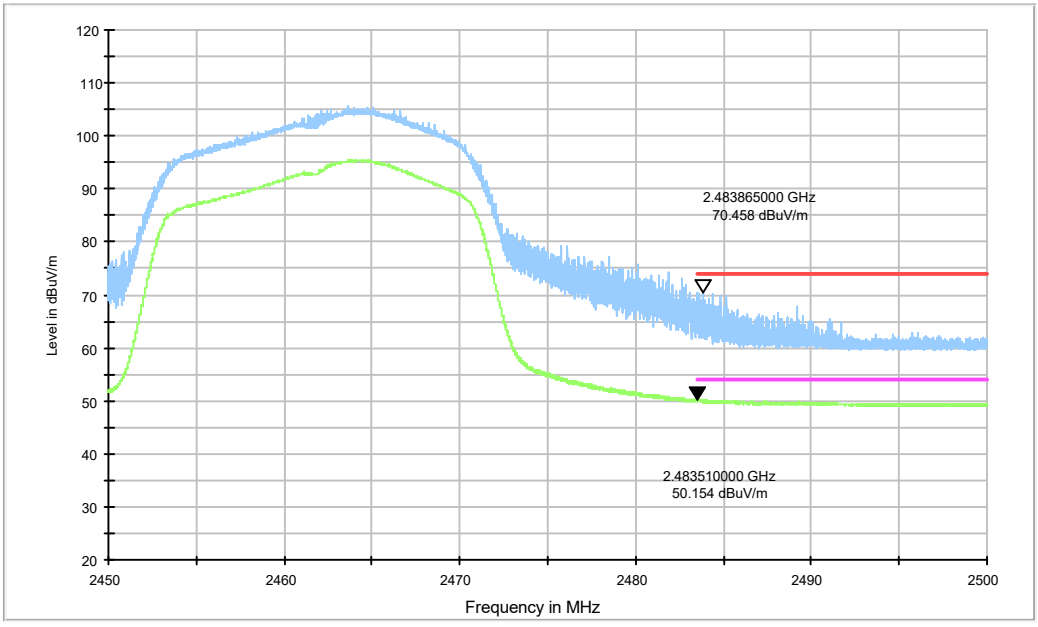


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

A.7. AC Power-line Conducted Emission

Method of Measurement:

See 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.

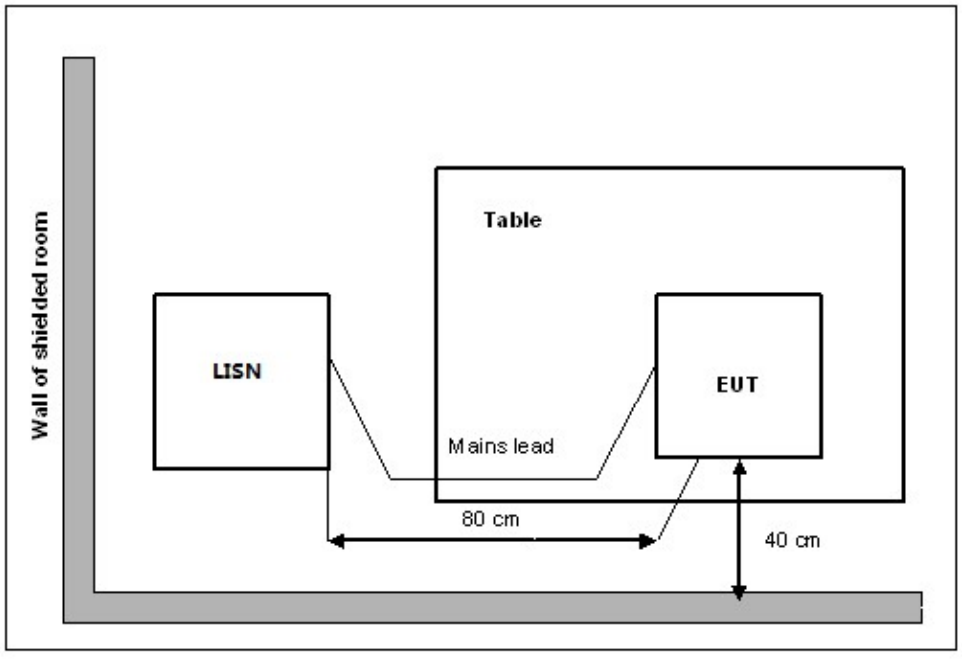
The measurement bandwidth is:

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:

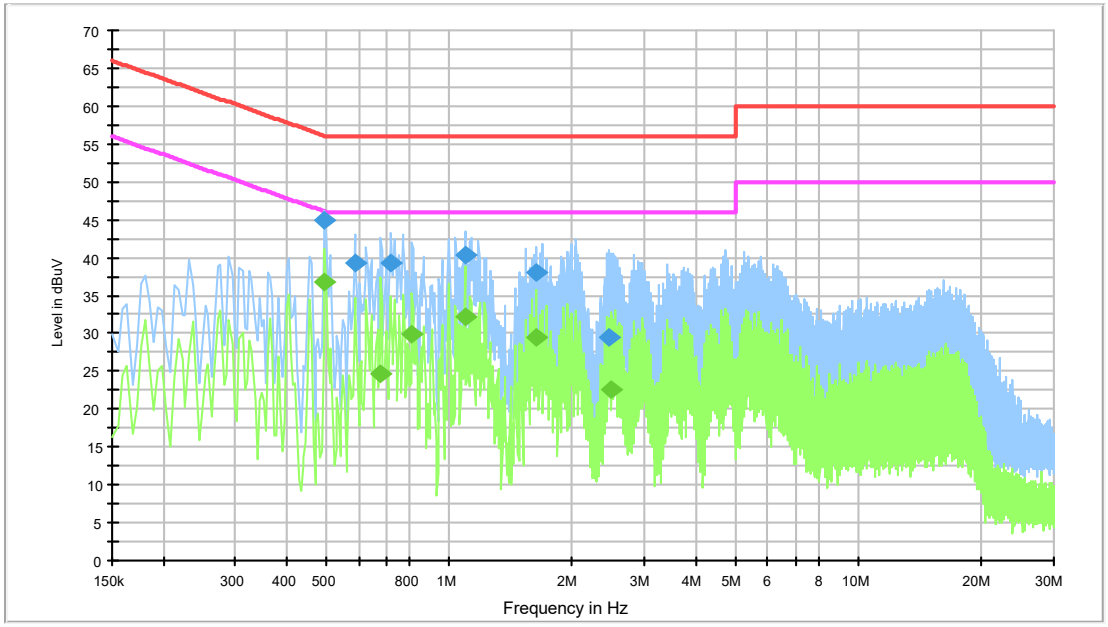


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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)
0.496500	44.9	3000.	9.000	L1	19.8	11.2	56.1
0.586500	39.2	3000.	9.000	L1	19.7	16.8	56.0
0.721500	39.3	3000.	9.000	L1	19.7	16.7	56.0
1.090500	40.4	3000.	9.000	L1	19.7	15.6	56.0
1.630500	38.0	3000.	9.000	L1	19.6	18.0	56.0
2.463000	29.5	3000.	9.000	N	19.6	26.5	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.496500	36.8	3000.0	9.000	L1	19.8	9.3	46.1
0.681000	24.8	3000.0	9.000	N	19.8	21.2	46.0
0.811500	29.9	3000.0	9.000	L1	19.7	16.1	46.0
1.090500	32.1	3000.0	9.000	L1	19.7	13.9	46.0
1.630500	29.5	3000.0	9.000	L1	19.6	16.5	46.0
2.494500	22.6	3000.0	9.000	N	19.6	23.4	46.0

Result for Idle:

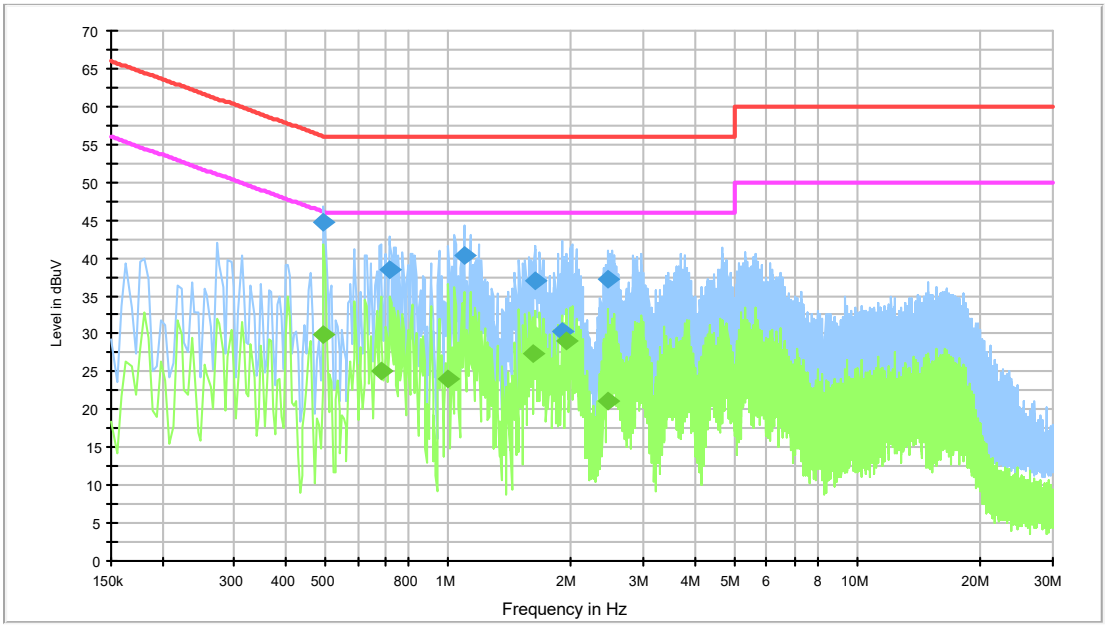


Fig.A.7.2 AC Powerline Conducted Emission-Idle

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)
0.496500	44.8	3000.	9.000	L1	19.8	11.3	56.1
0.717000	38.5	3000.	9.000	L1	19.7	17.5	56.0
1.090500	40.4	3000.	9.000	L1	19.7	15.6	56.0
1.621500	37.1	3000.	9.000	L1	19.6	18.9	56.0
1.896000	30.4	3000.	9.000	N	19.6	25.6	56.0
2.454000	37.2	3000.	9.000	L1	19.6	18.8	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.496500	29.9	3000.0	9.000	N	19.8	16.2	46.1
0.685500	25.0	3000.0	9.000	N	19.8	21.0	46.0
1.000500	23.9	3000.0	9.000	N	19.7	22.1	46.0
1.617000	27.3	3000.0	9.000	L1	19.6	18.7	46.0
1.950000	29.1	3000.0	9.000	L1	19.6	16.9	46.0
2.454000	21.0	3000.0	9.000	N	19.6	25.0	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

United States Department of Commerce
National Institute of Standards and Technology

NVLAP® ilac-MRA

Certificate of Accreditation to ISO/IEC 17025:2017

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 17025:2017. 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).

2021-09-29 through 2022-09-30
Effective Dates

For the National Voluntary Laboratory Accreditation Program

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