

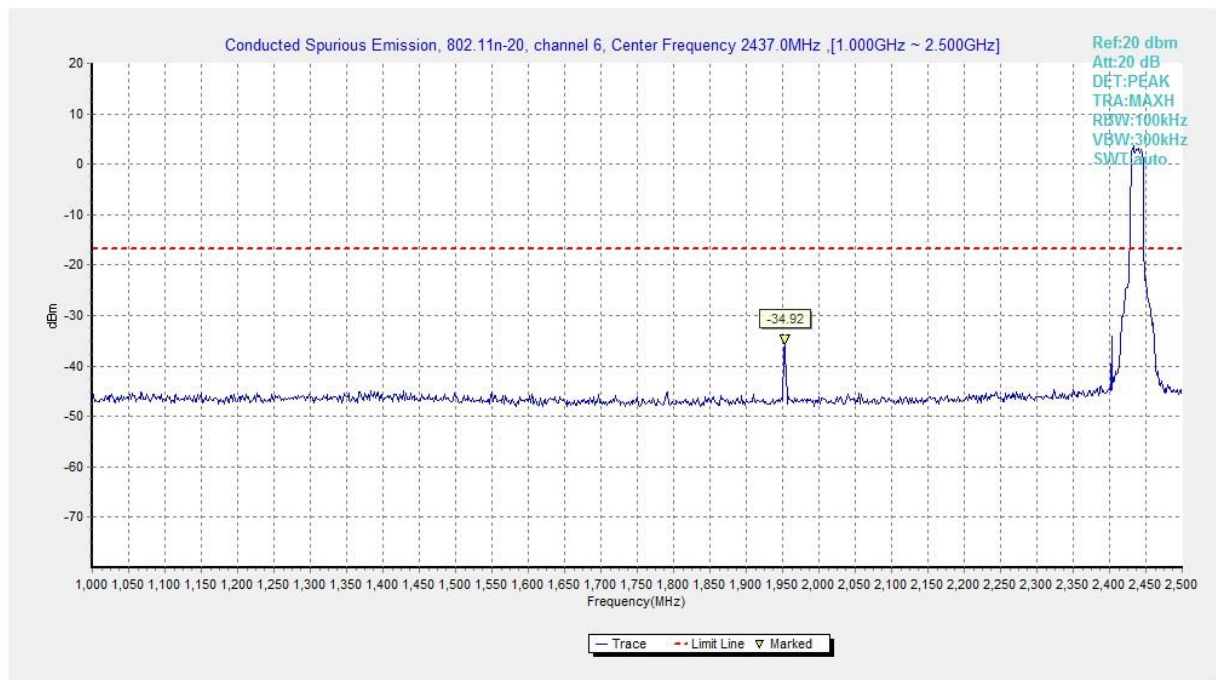


Fig.B.6.1.59 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 1 GHz-2.5 GHz)

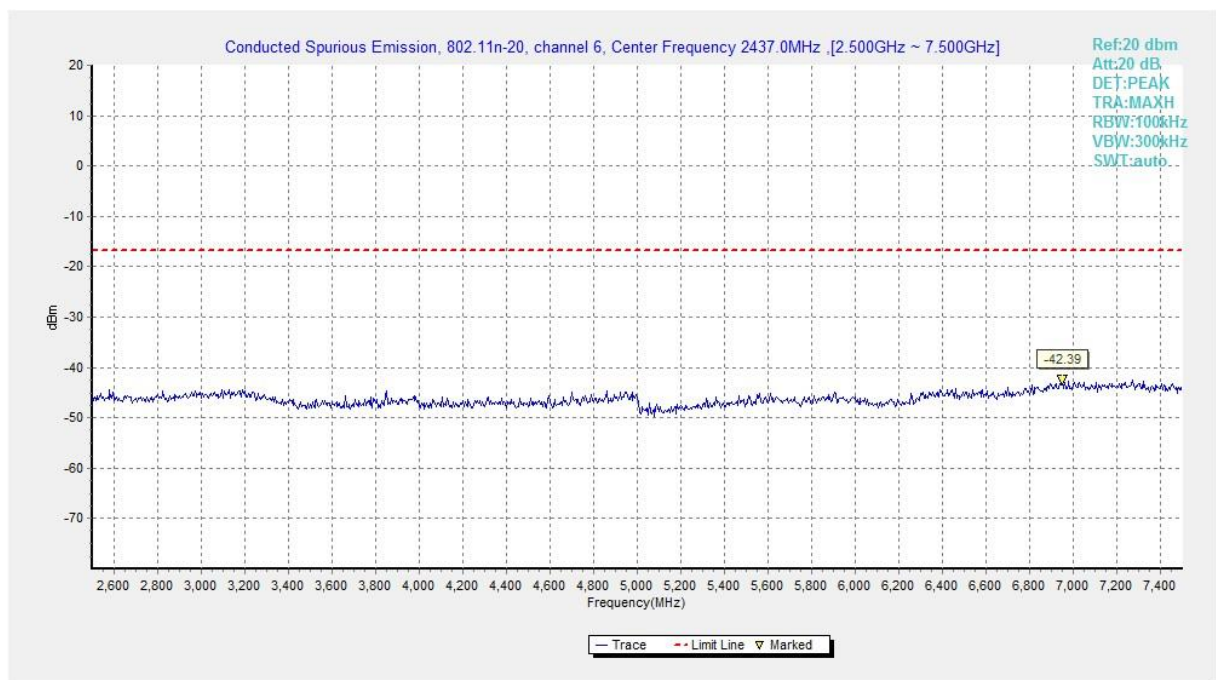


Fig.B.6.1.60 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 2.5 GHz-7.5 GHz)

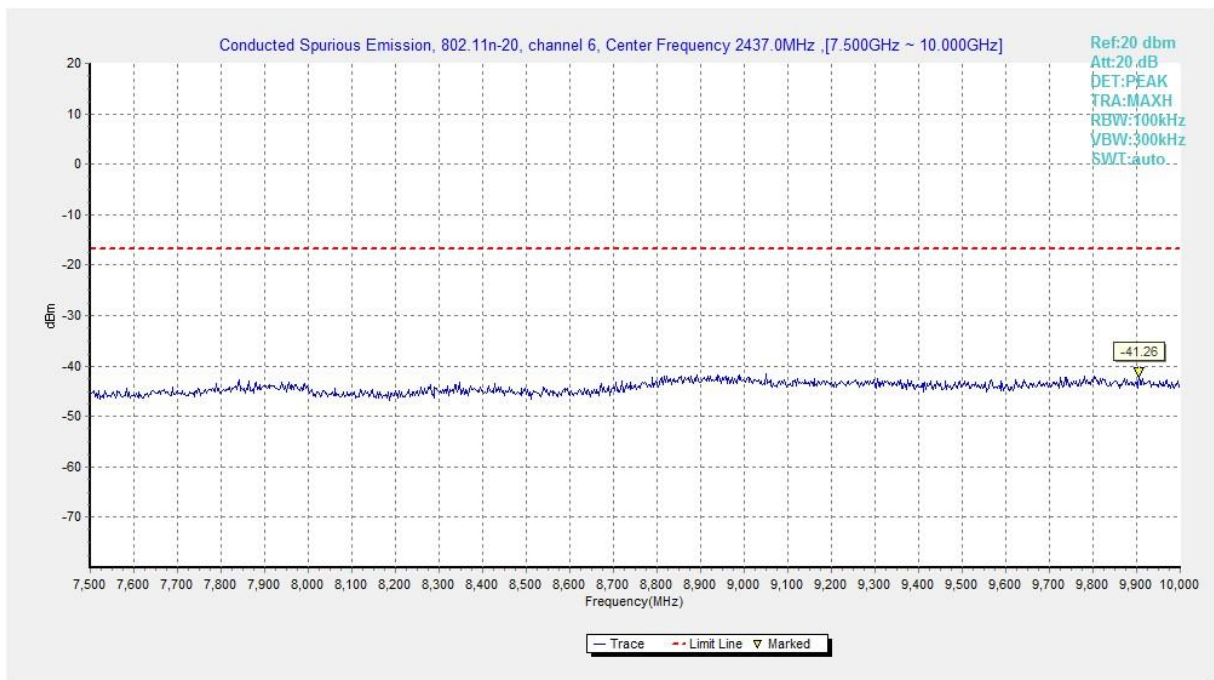


Fig.B.6.1.61 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 7.5 GHz-10 GHz)

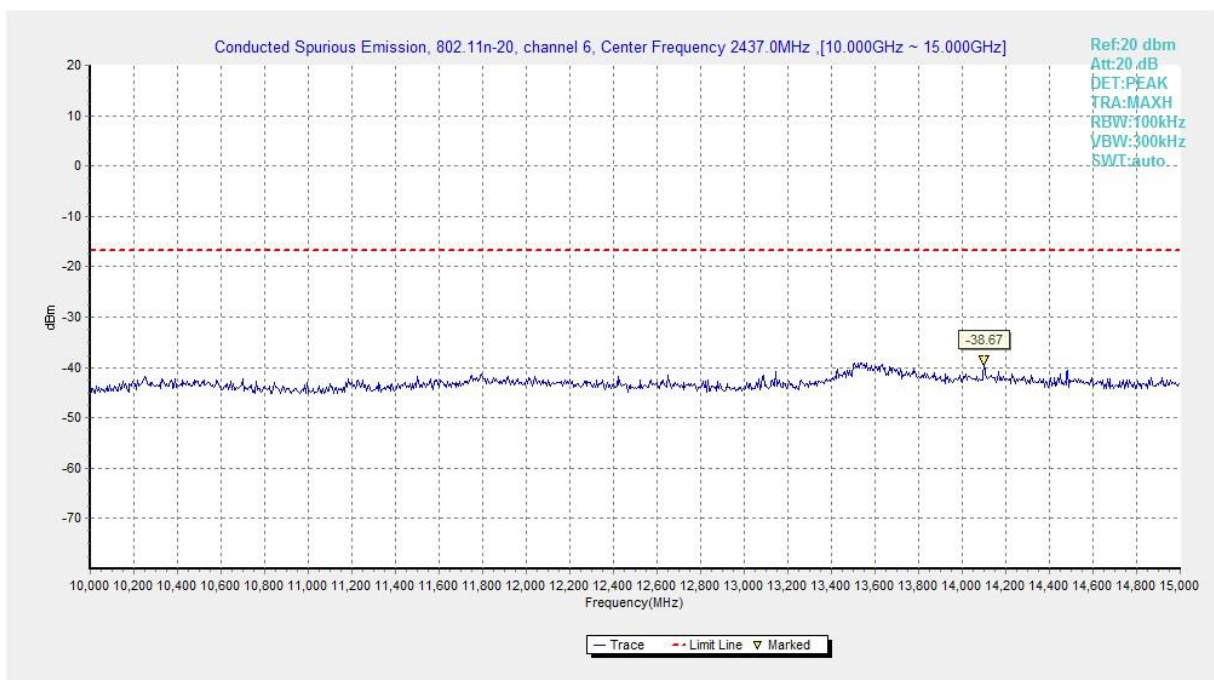


Fig.B.6.1.62 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 10 GHz-15 GHz)

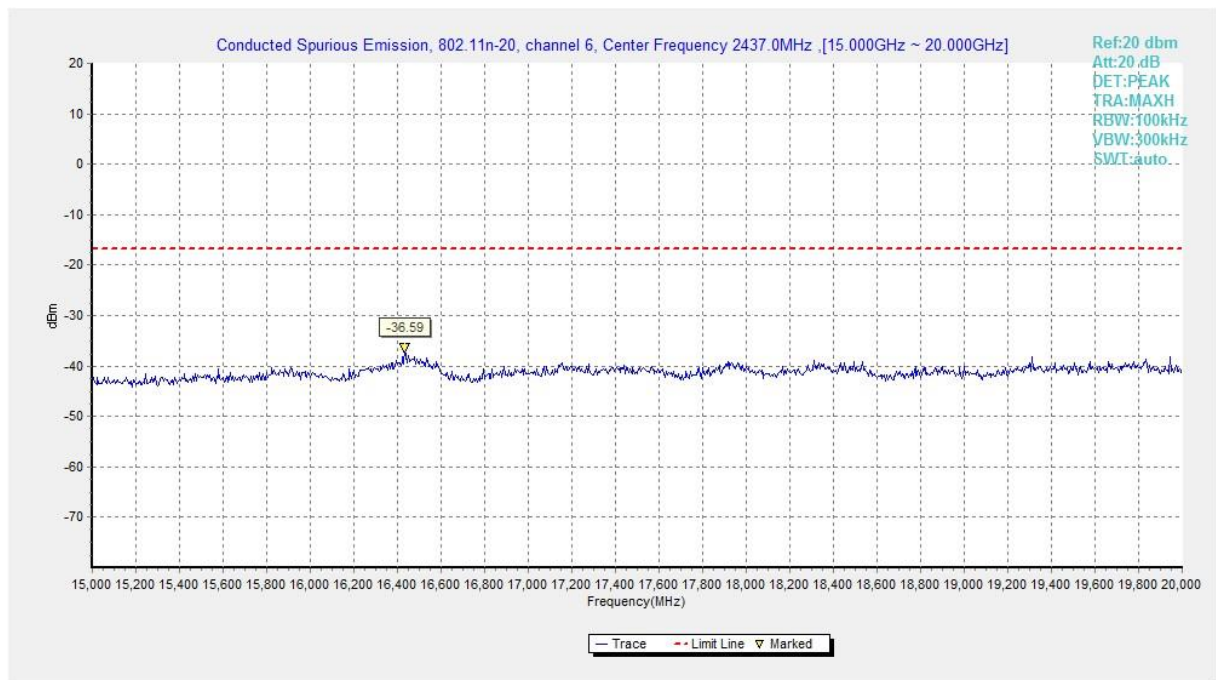


Fig.B.6.1.63 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 15 GHz-20 GHz)

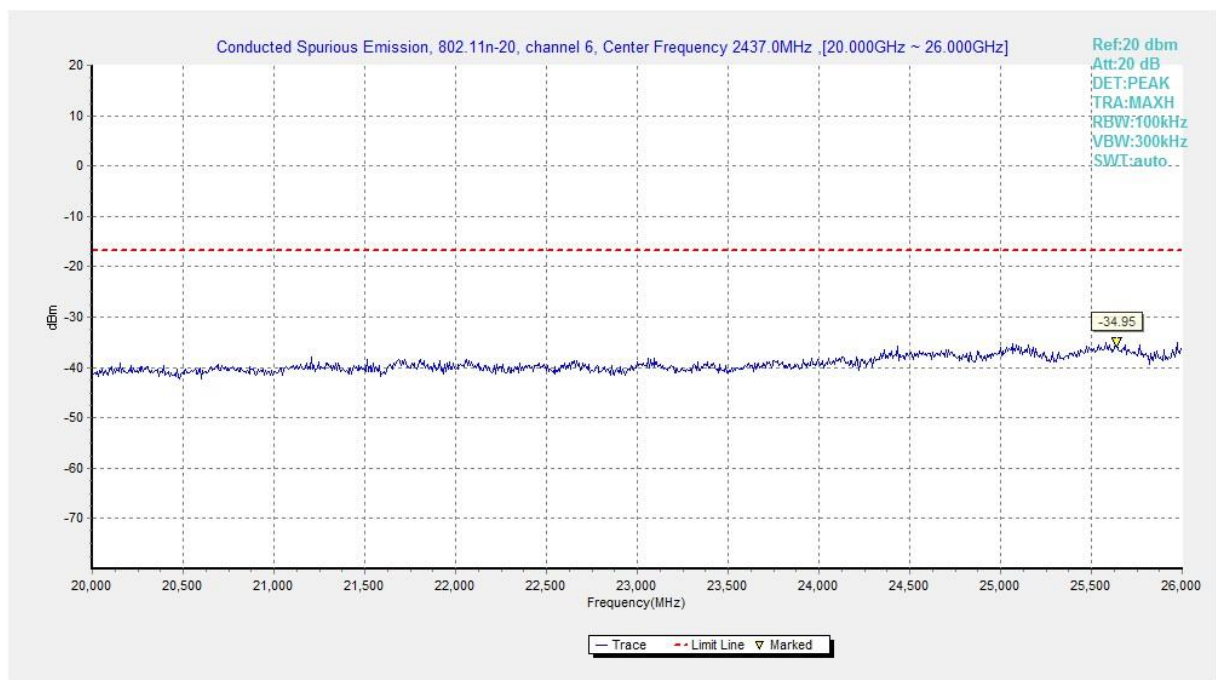


Fig.B.6.1.64 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch6, 20 GHz-26 GHz)

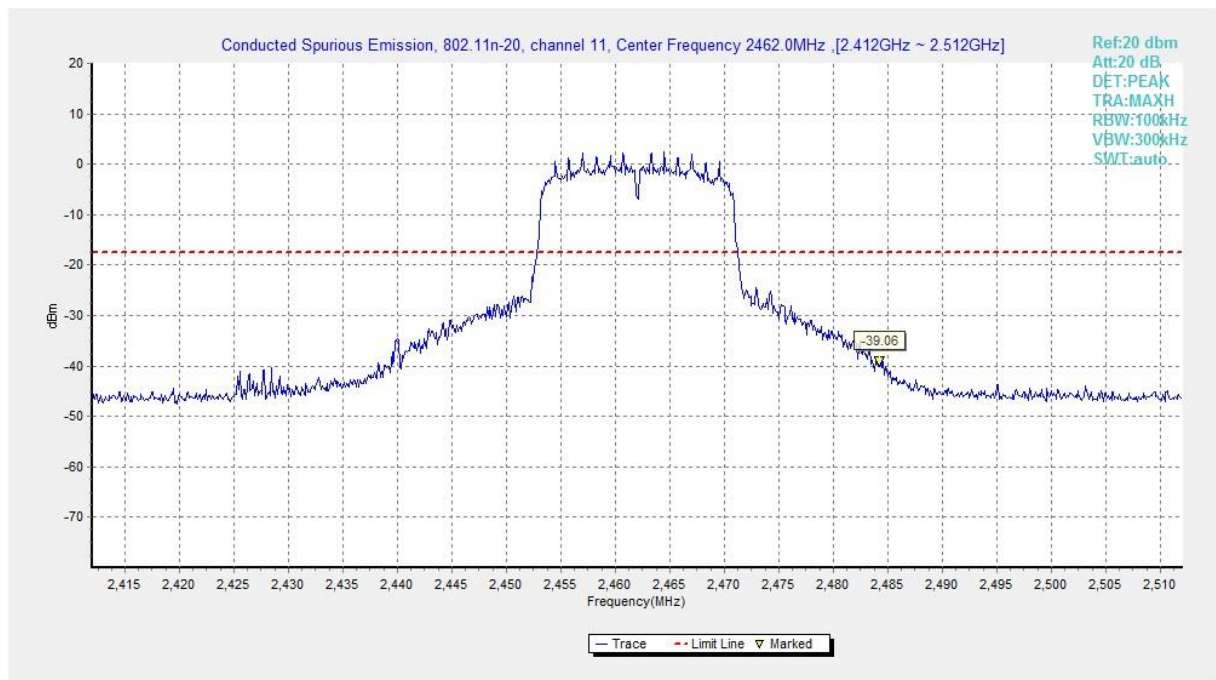


Fig.B.6.1.65 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, Center Frequency)

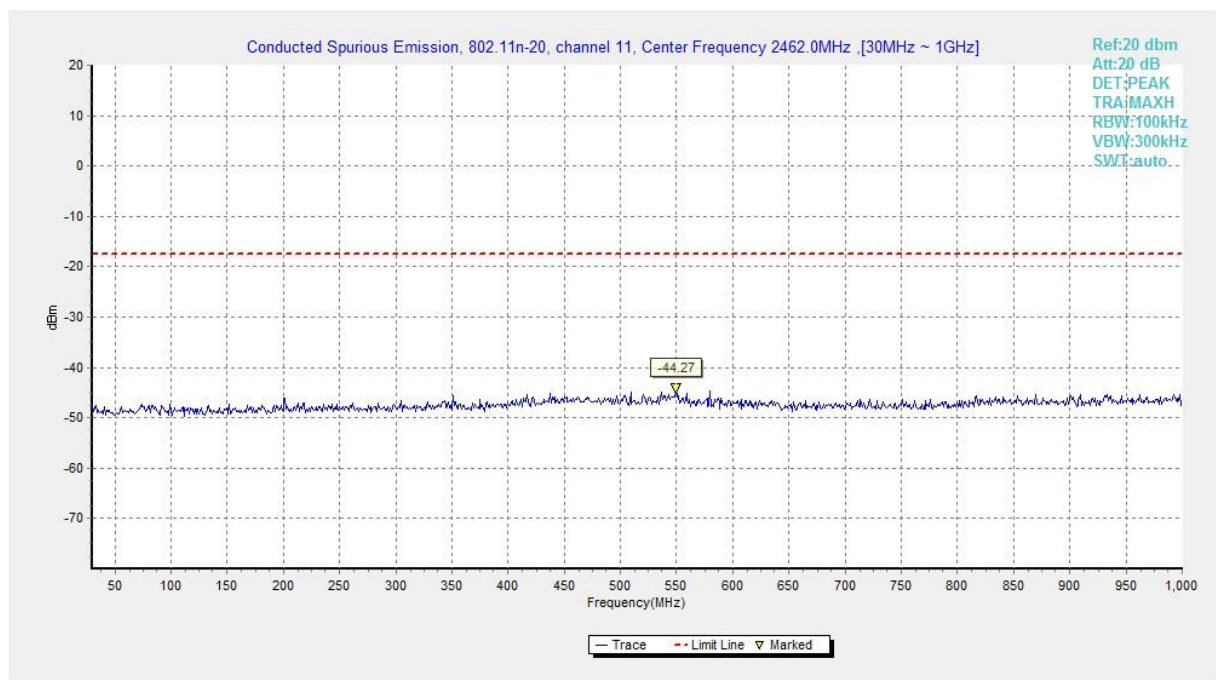


Fig.B.6.1.66 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 30 MHz-1 GHz)

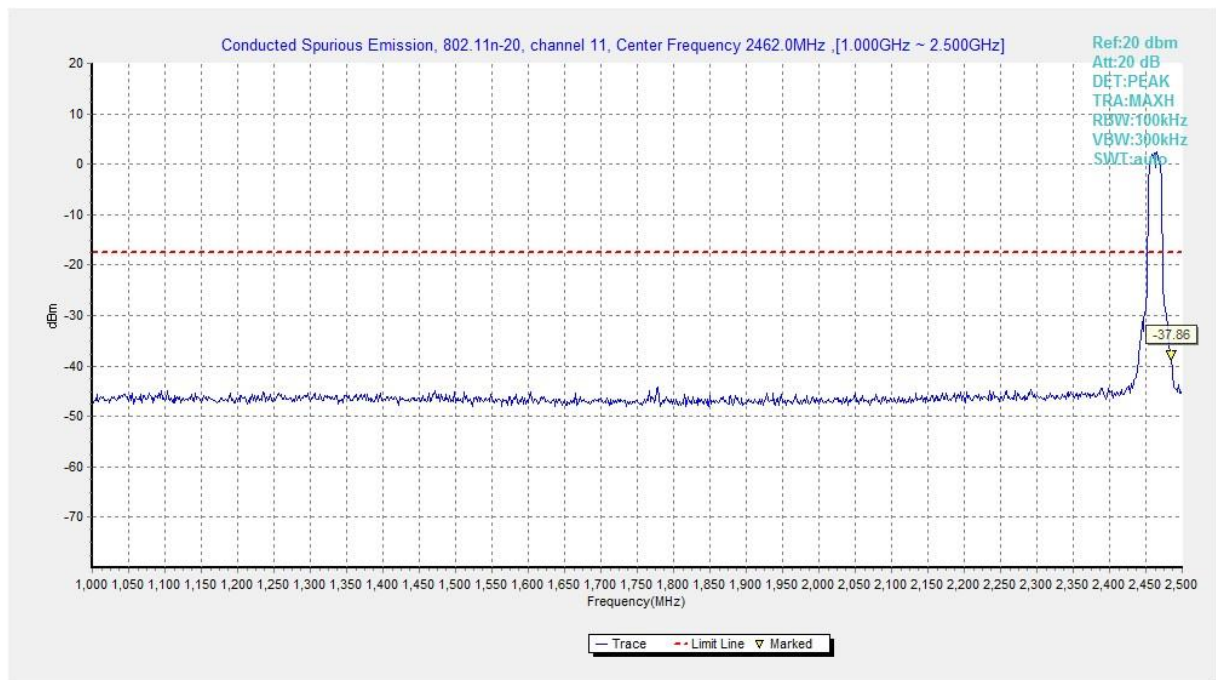


Fig.B.6.1.67 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 1 GHz-2.5 GHz)

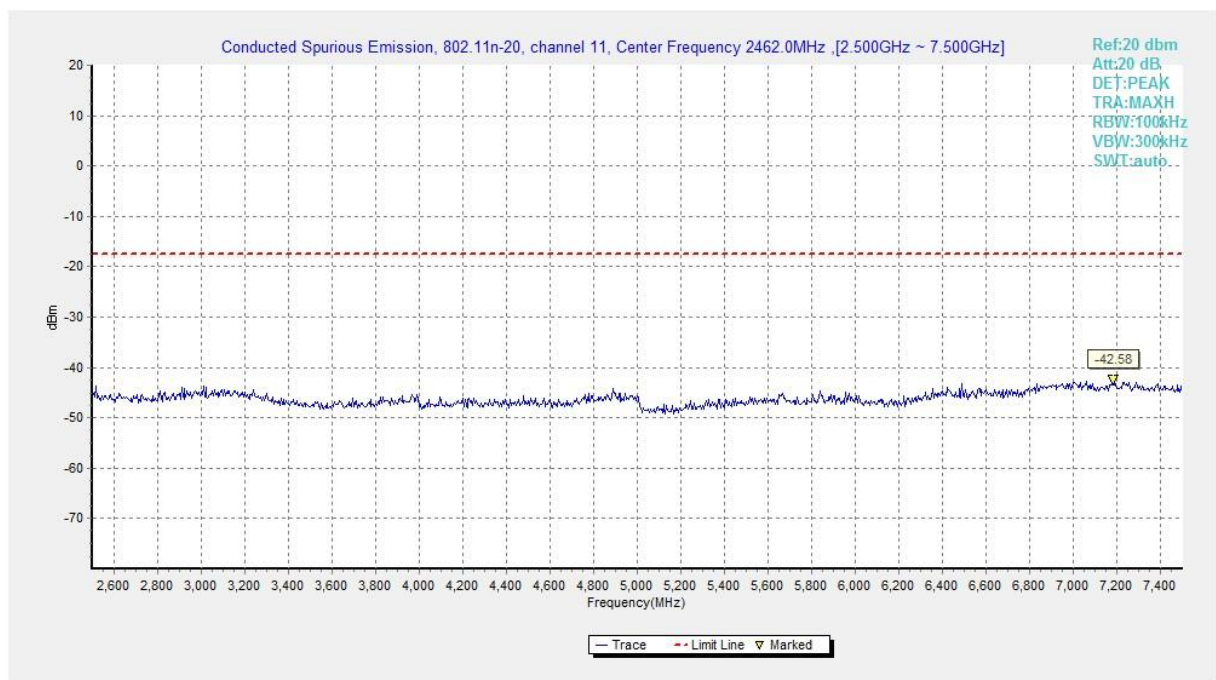


Fig.B.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

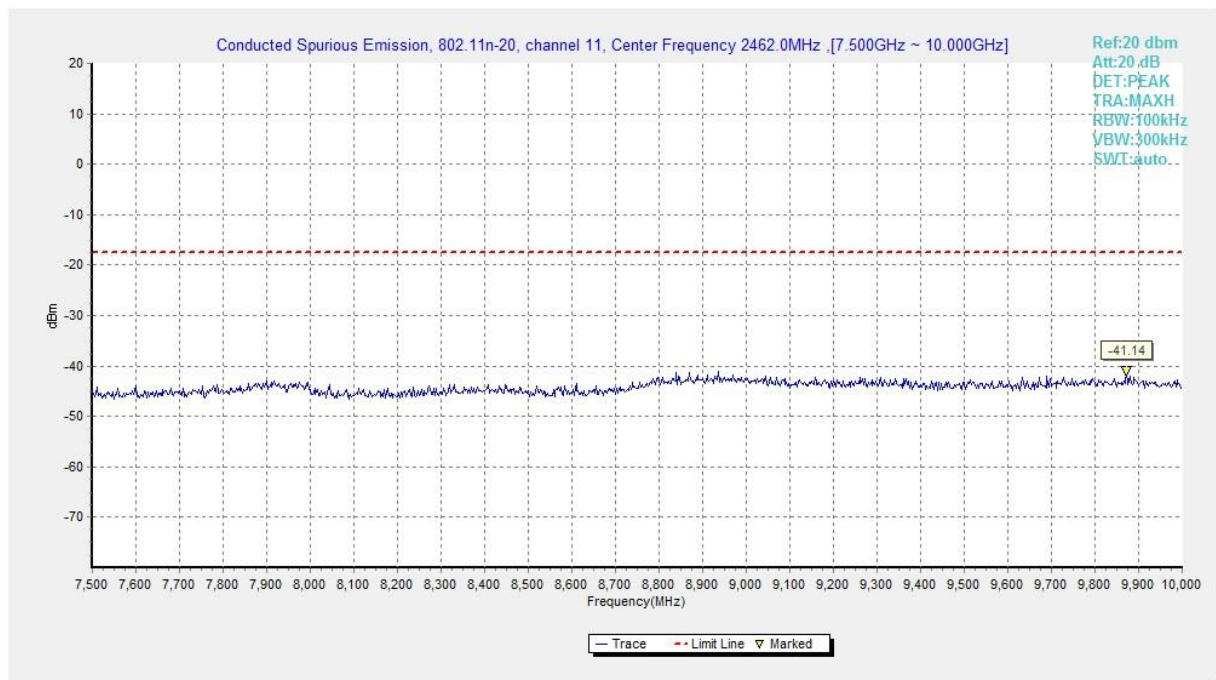


Fig.B.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

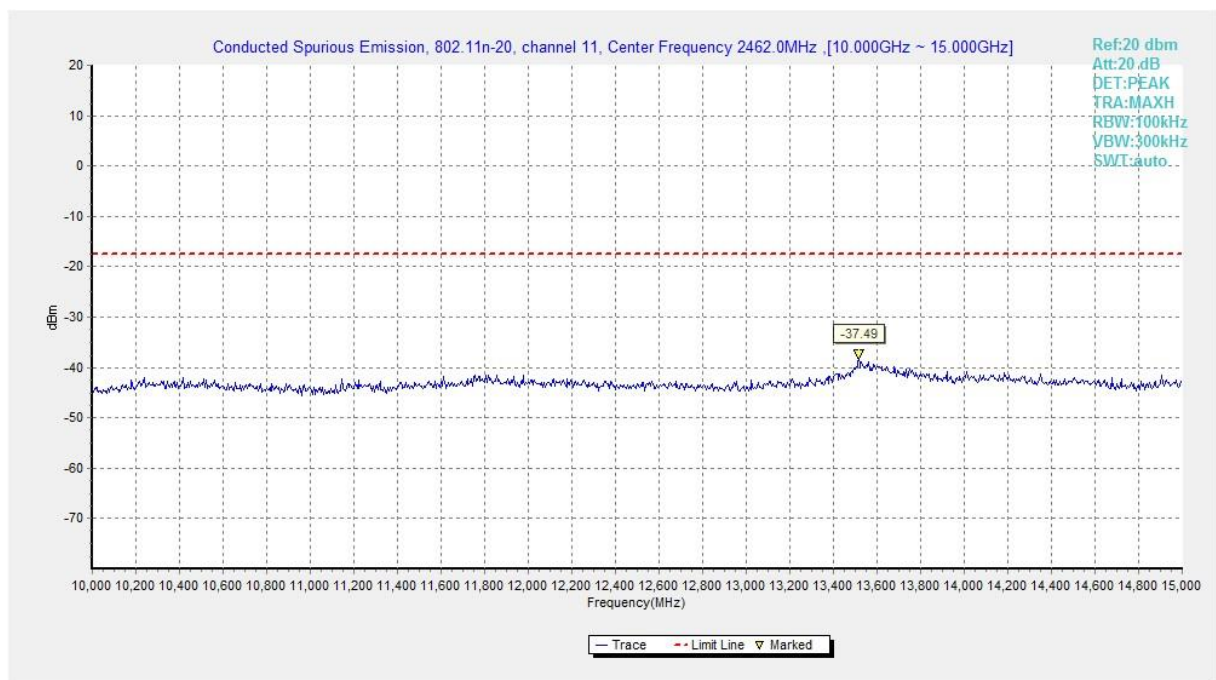


Fig.B.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

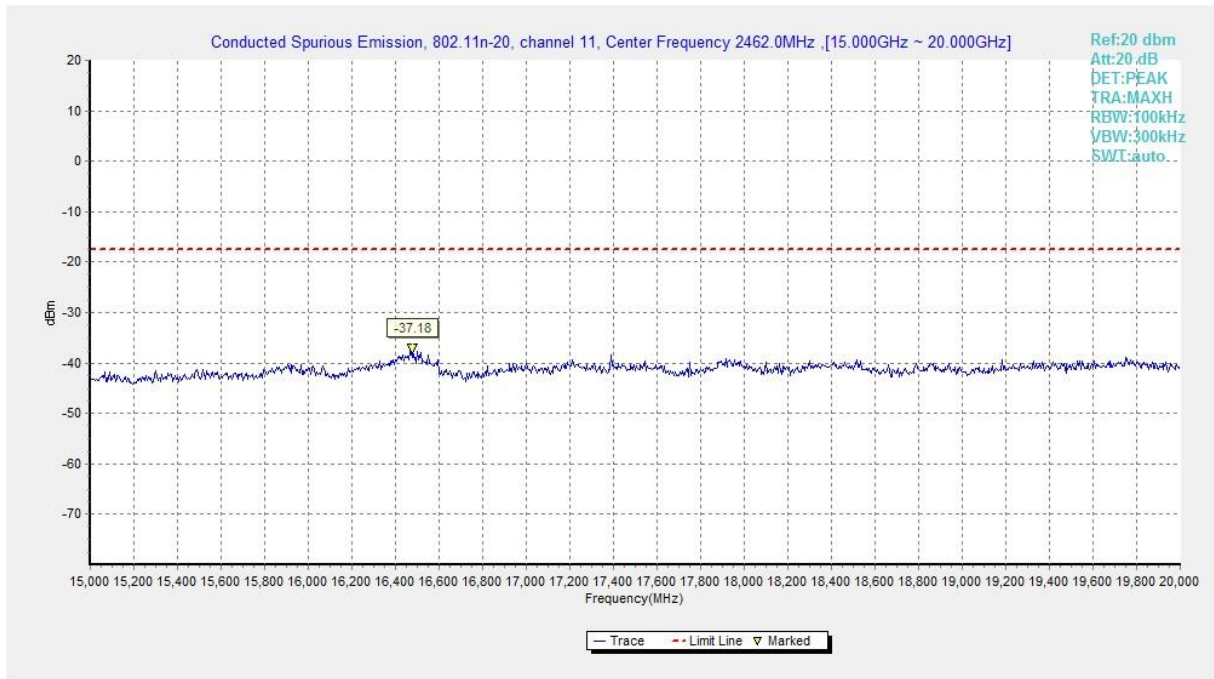


Fig.B.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

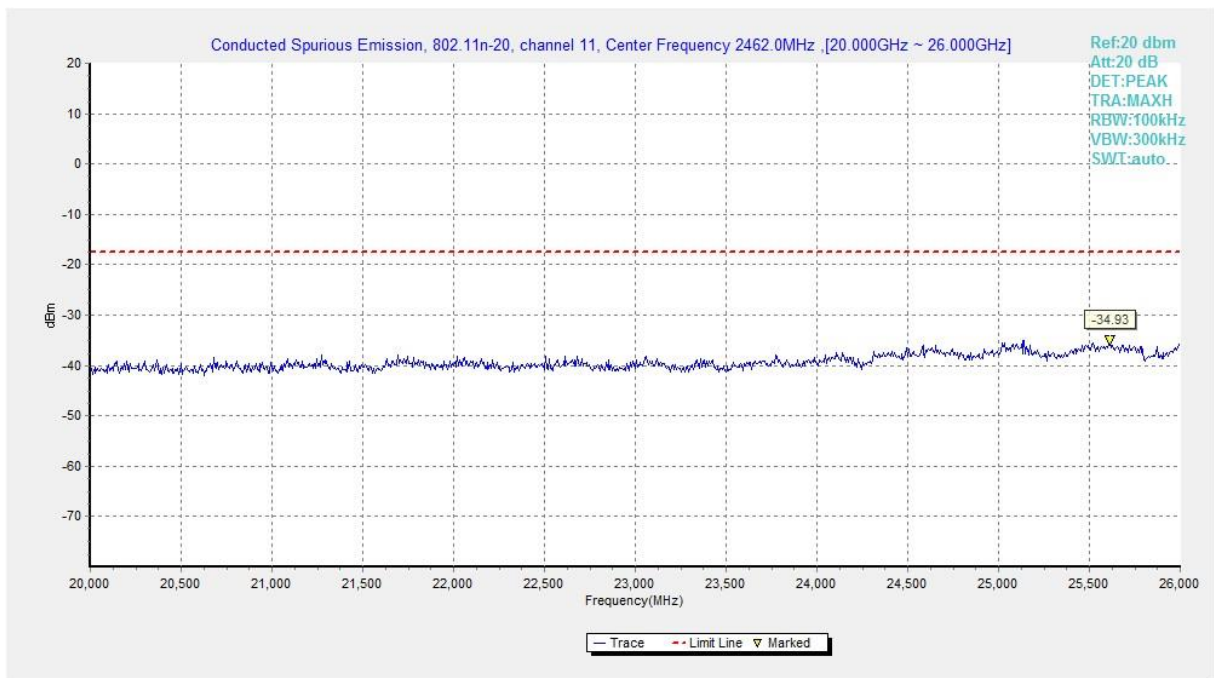


Fig.B.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

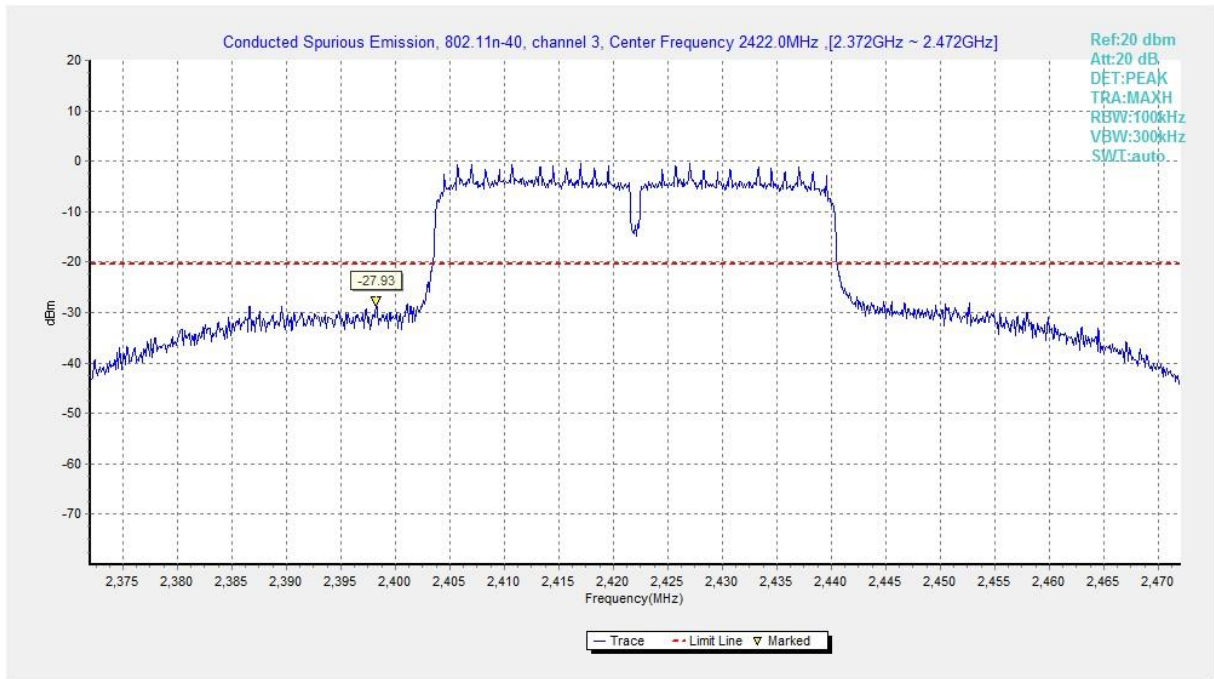


Fig.B.6.1.73 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)

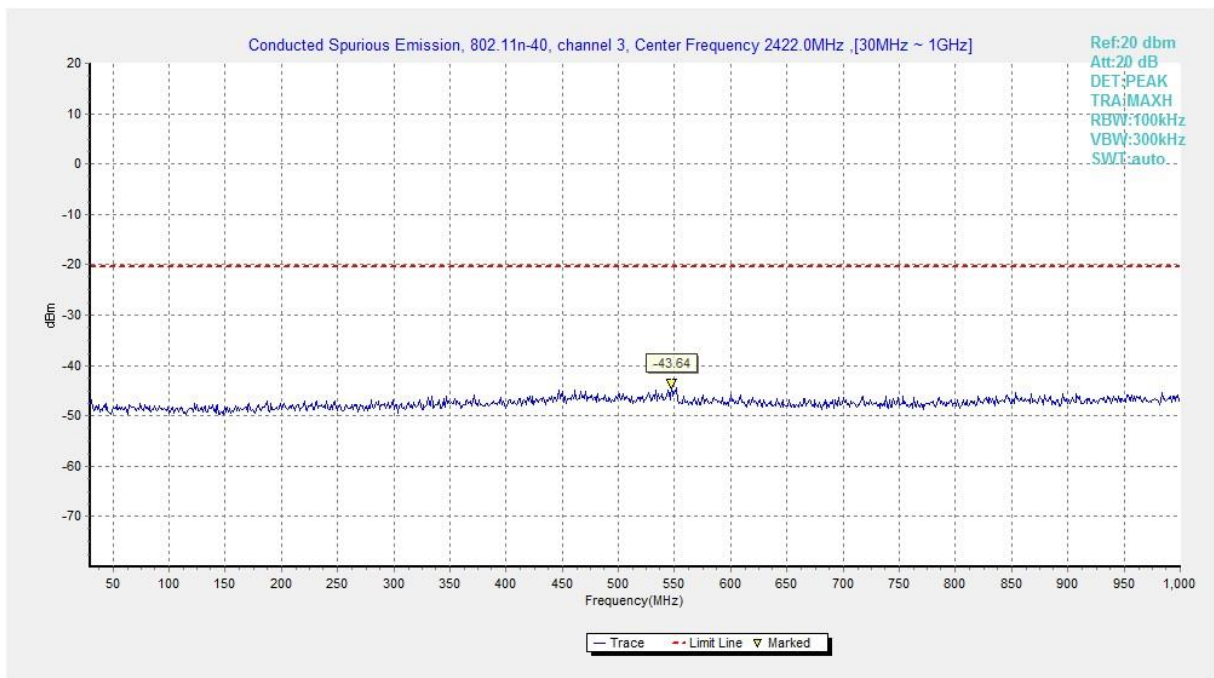


Fig.B.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)

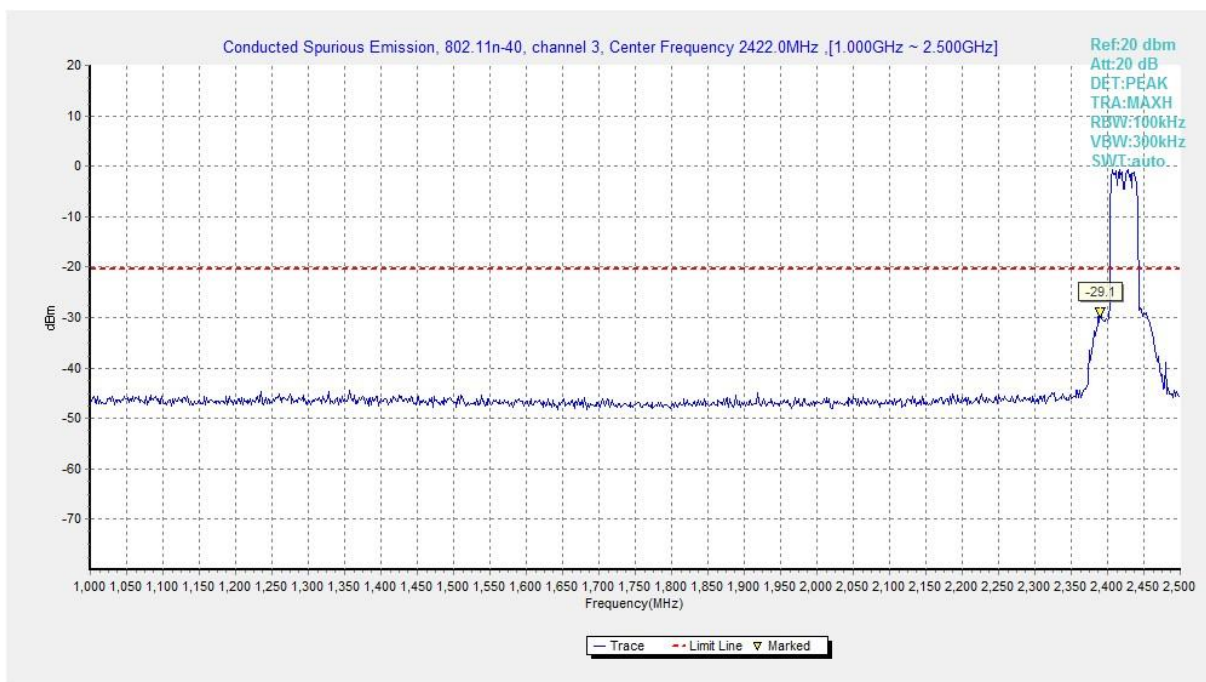


Fig.B.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)

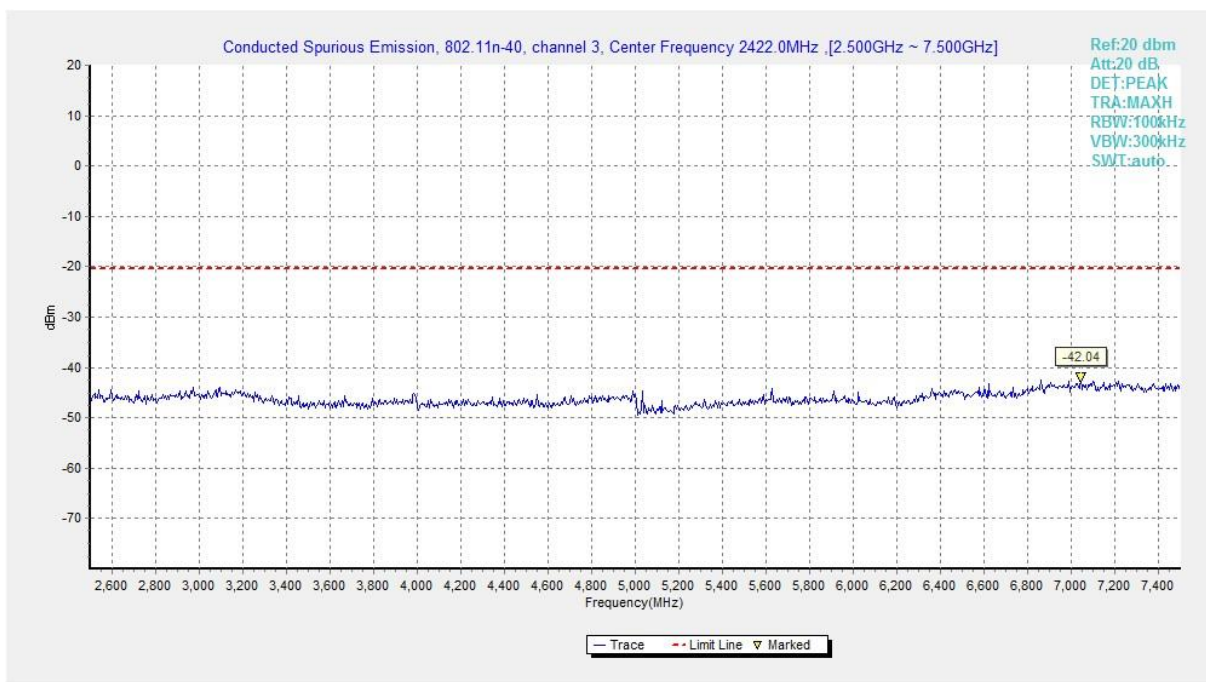


Fig.B.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)

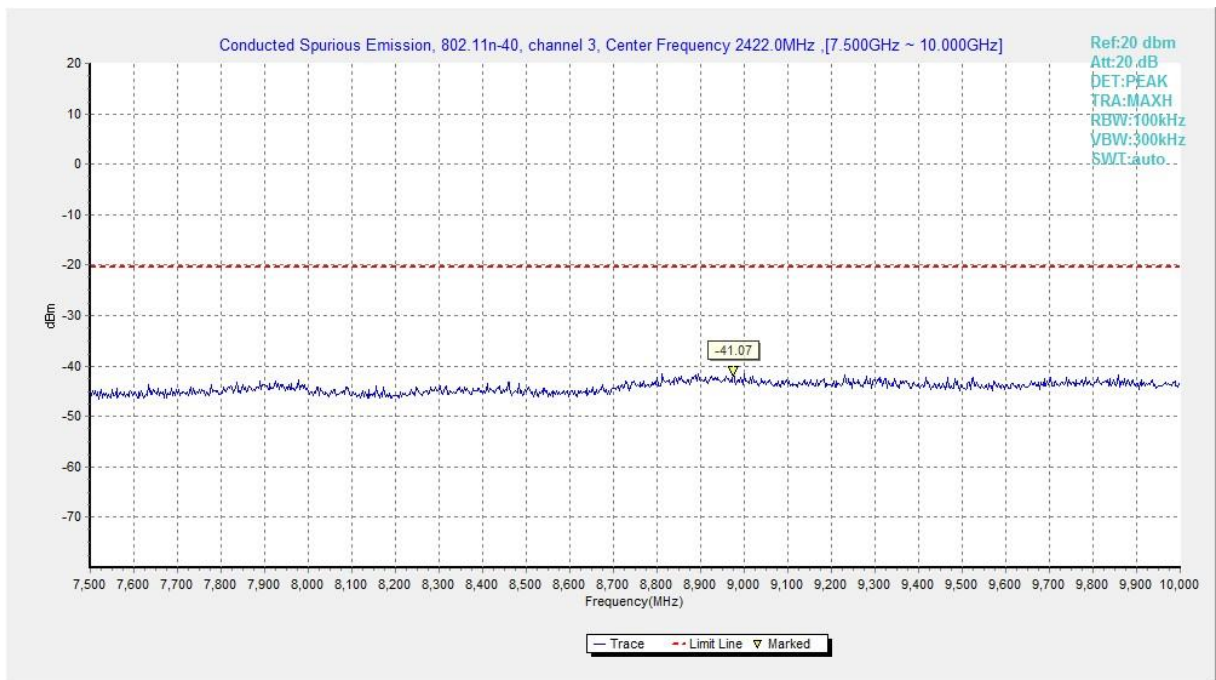


Fig.B.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)

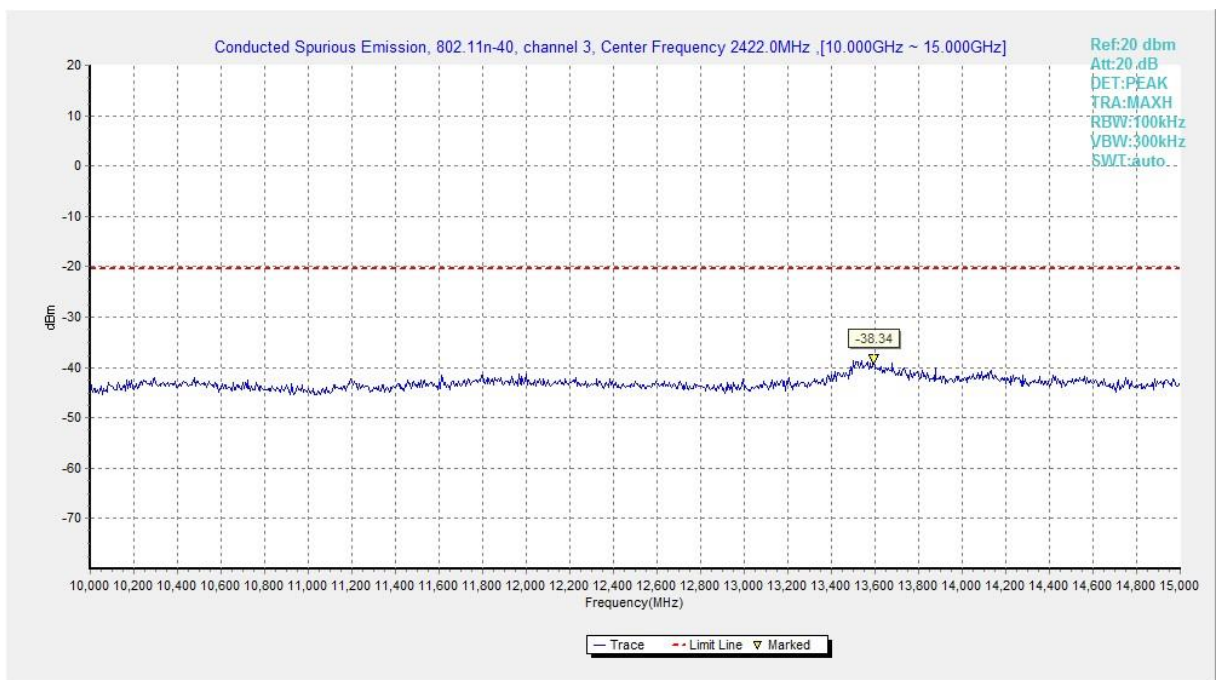


Fig.B.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)

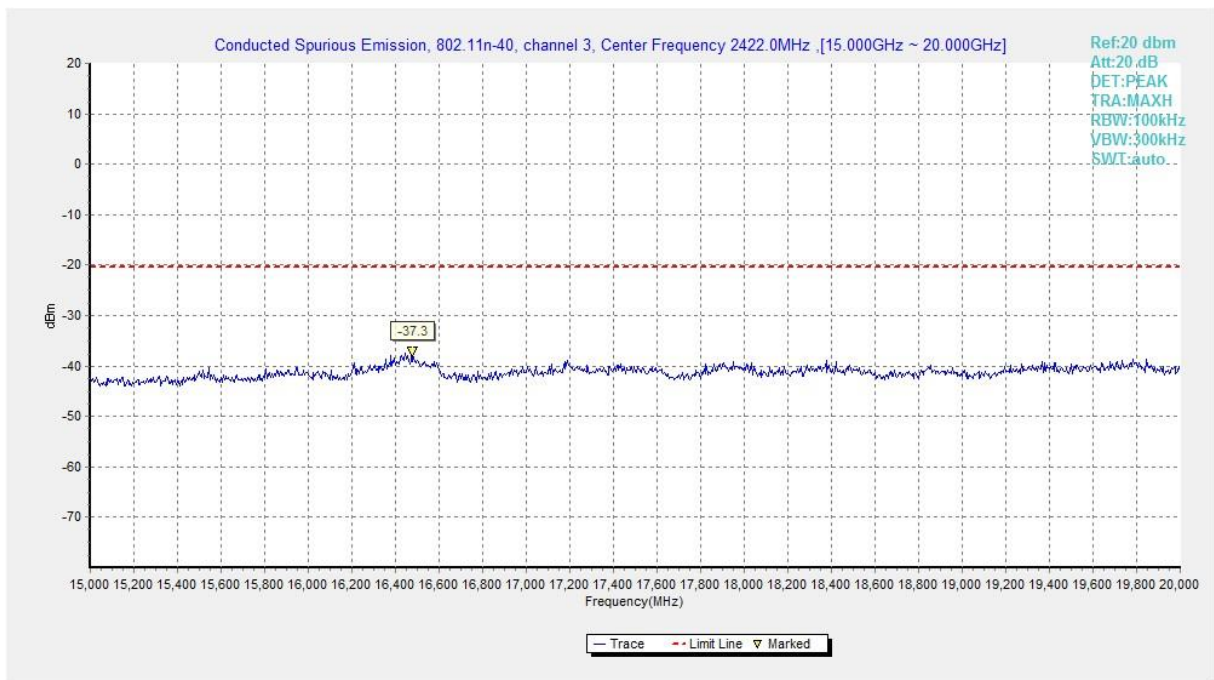


Fig.B.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)

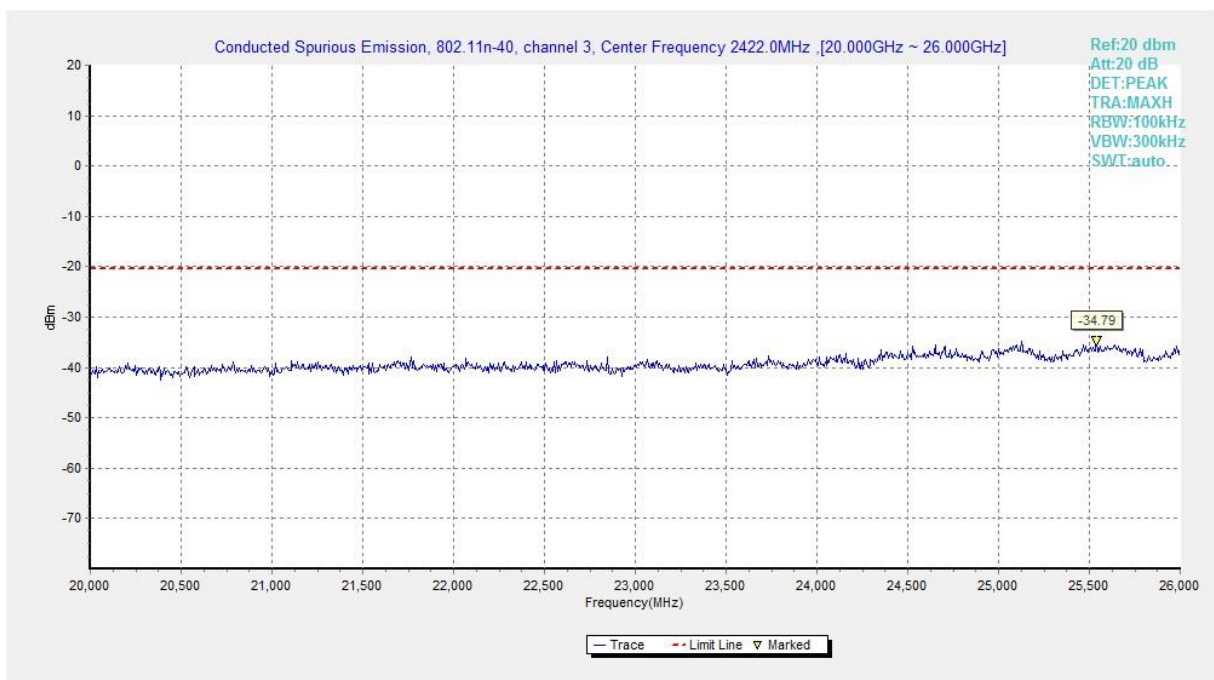


Fig.B.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

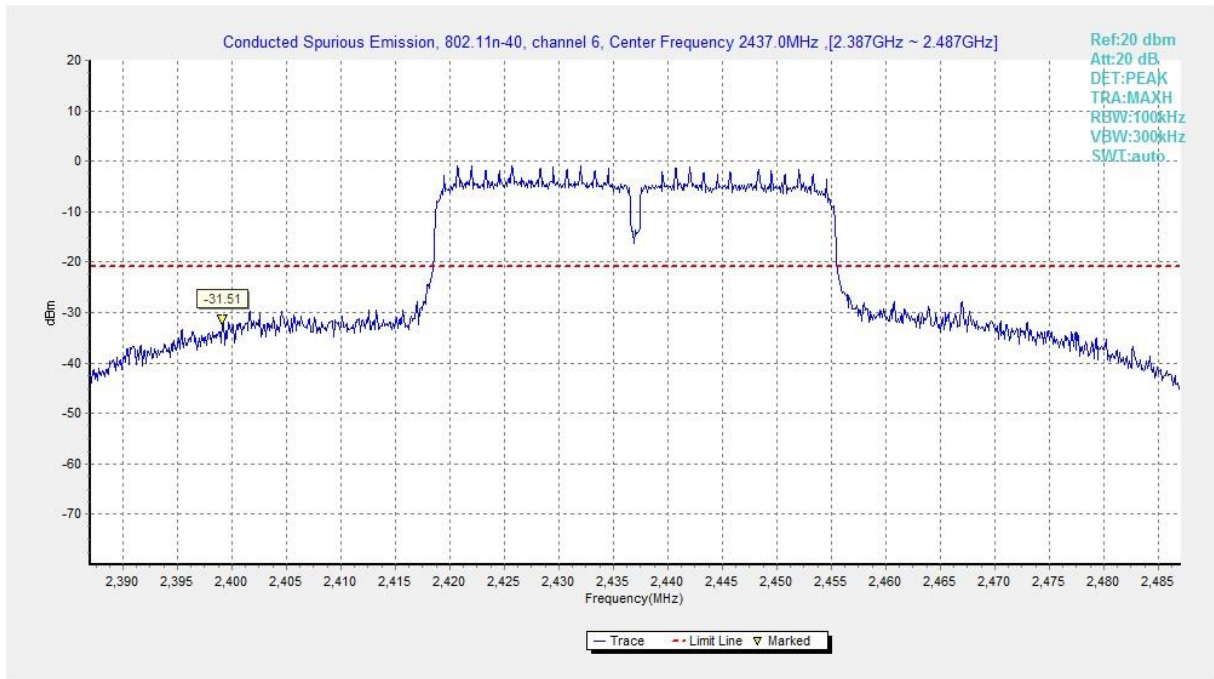


Fig.B.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

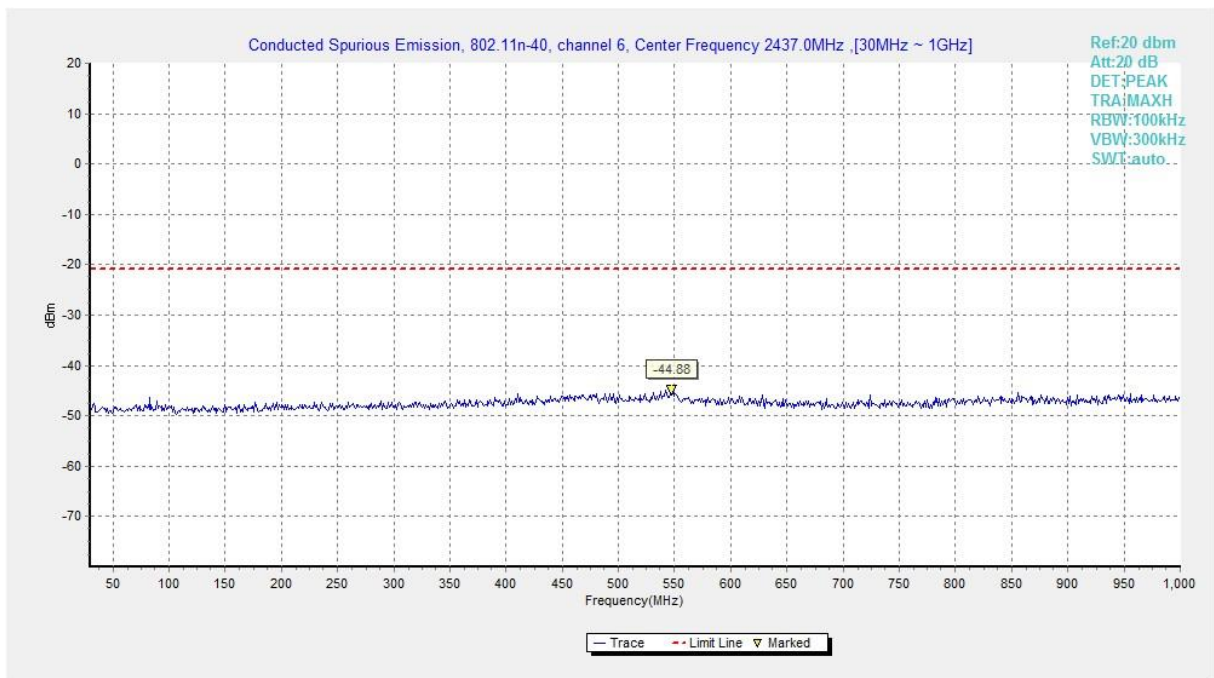


Fig.B.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

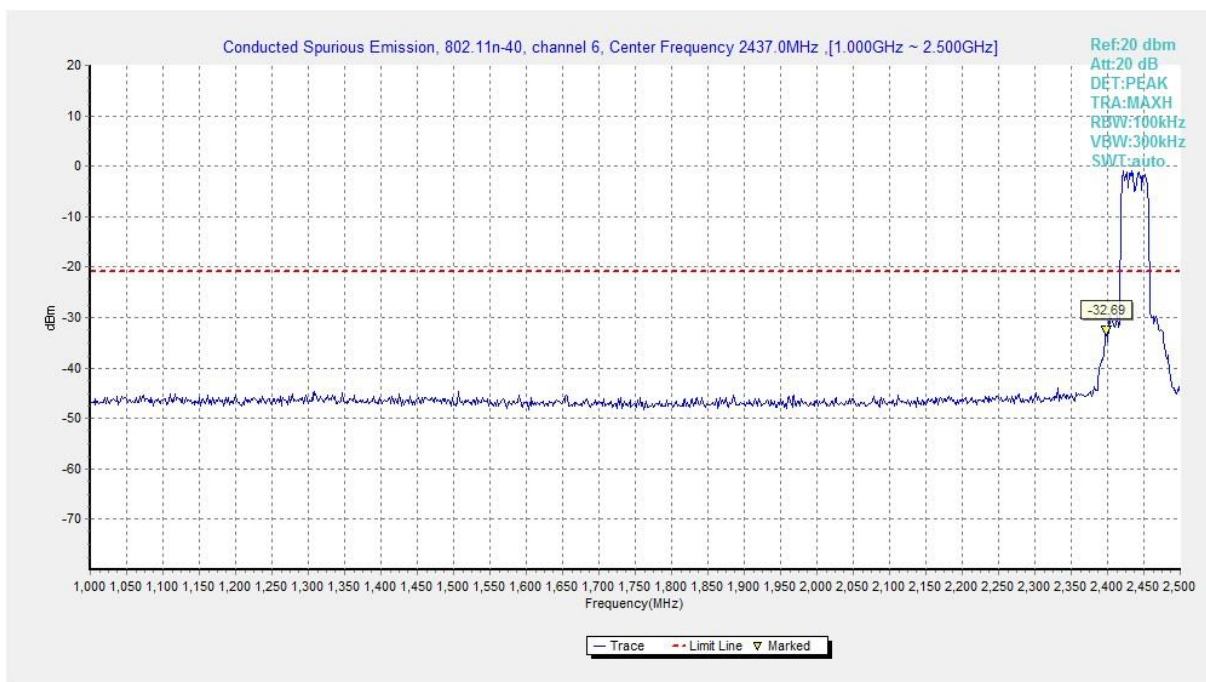


Fig.B.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

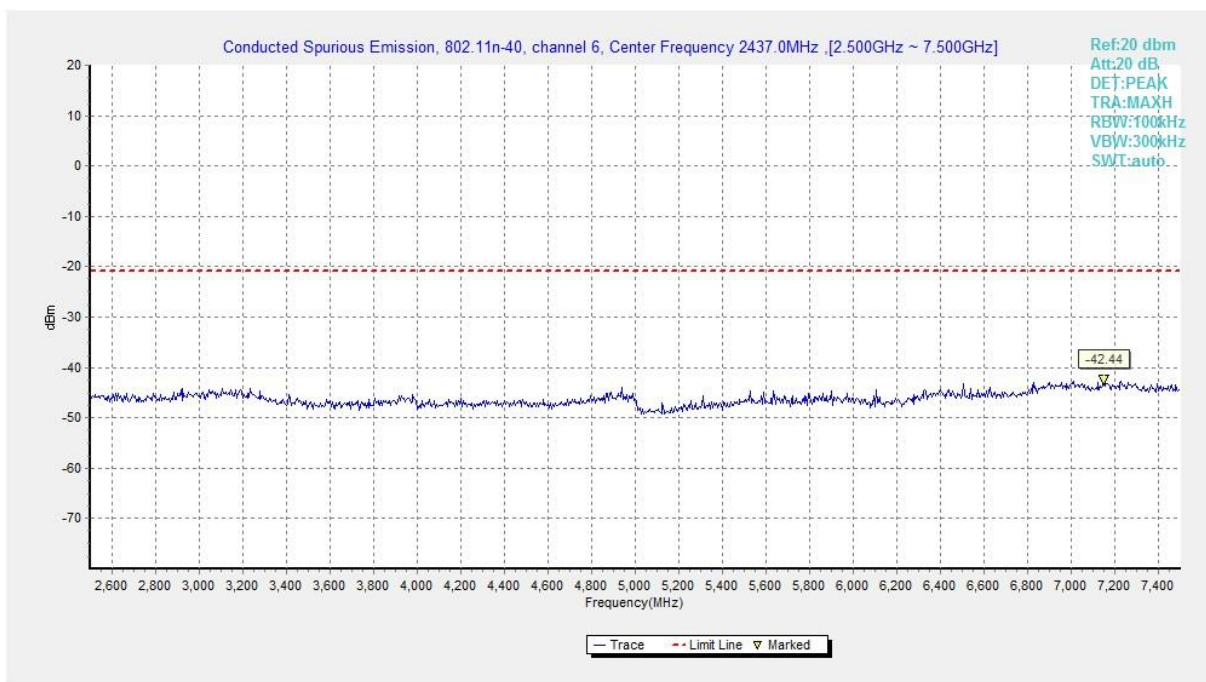


Fig.B.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)



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

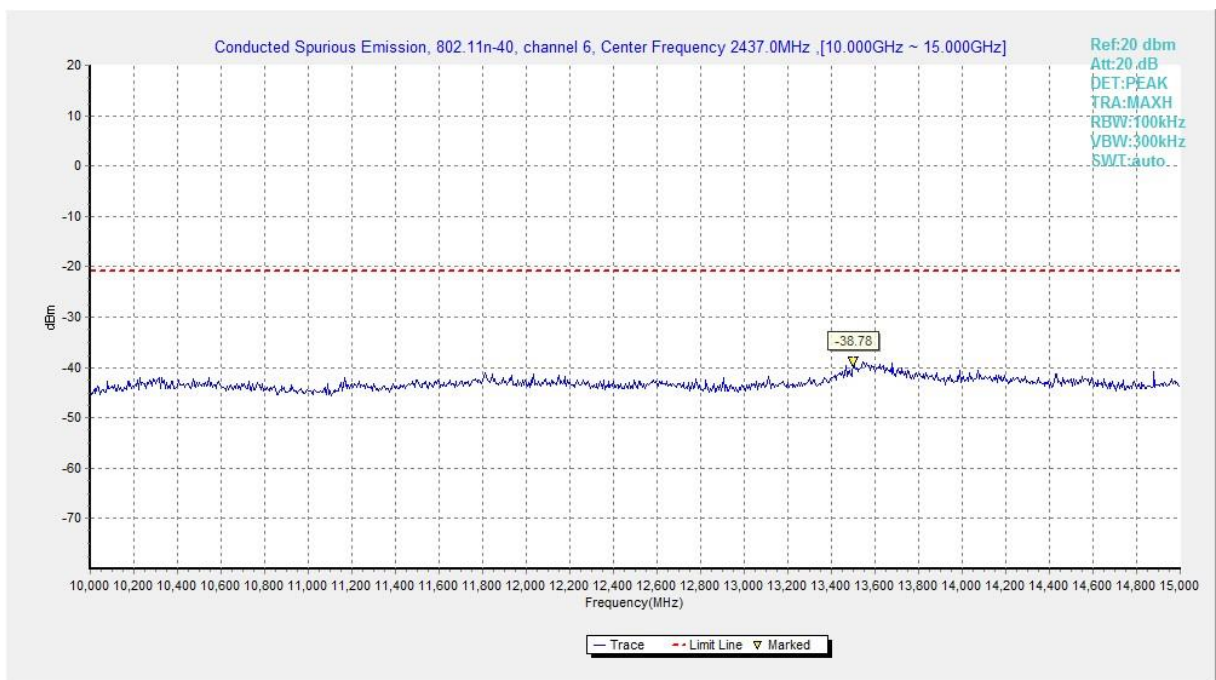


Fig.B.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

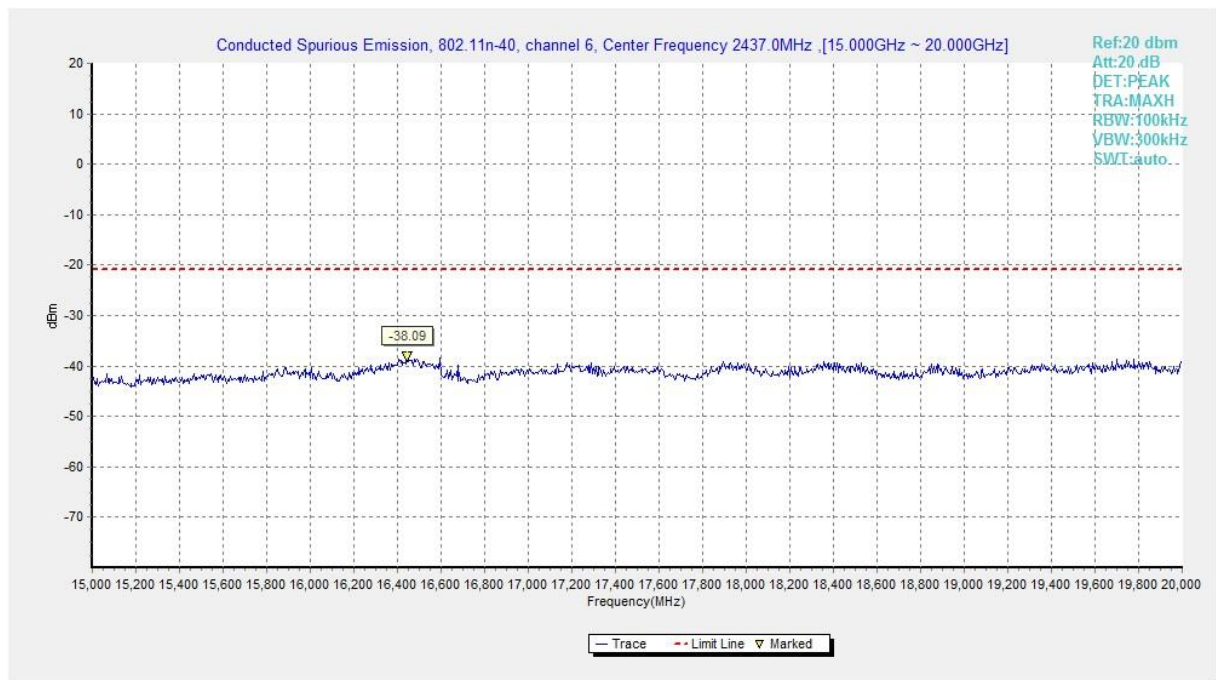


Fig.B.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

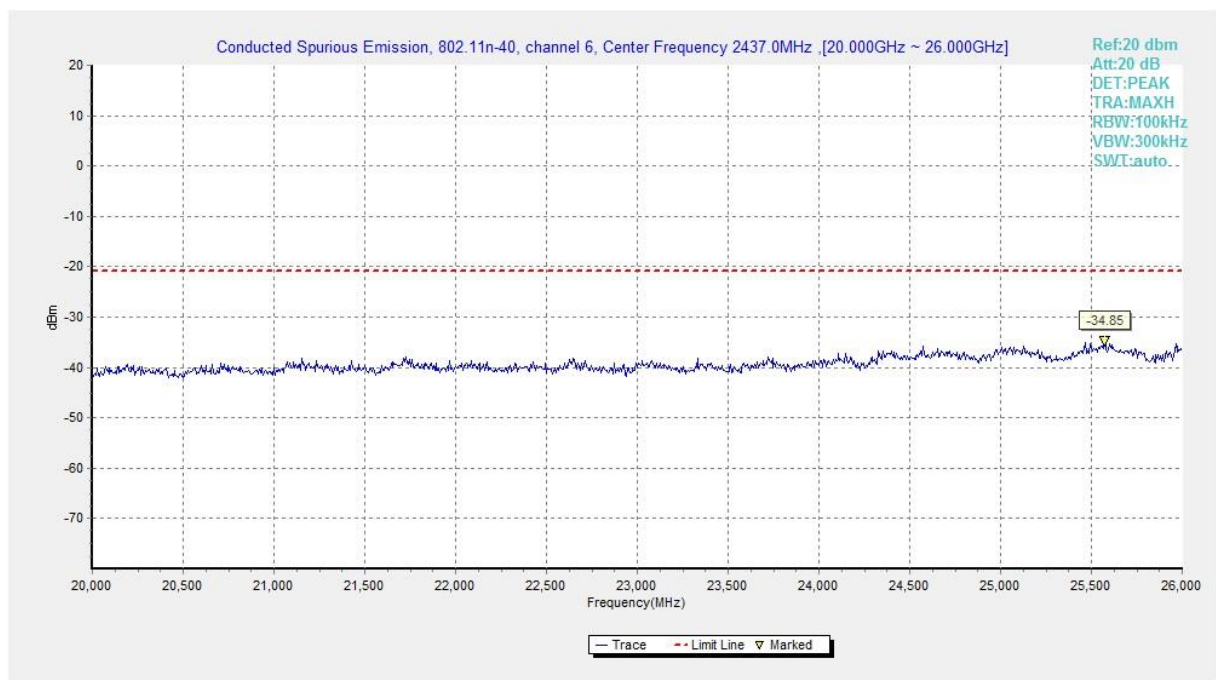


Fig.B.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

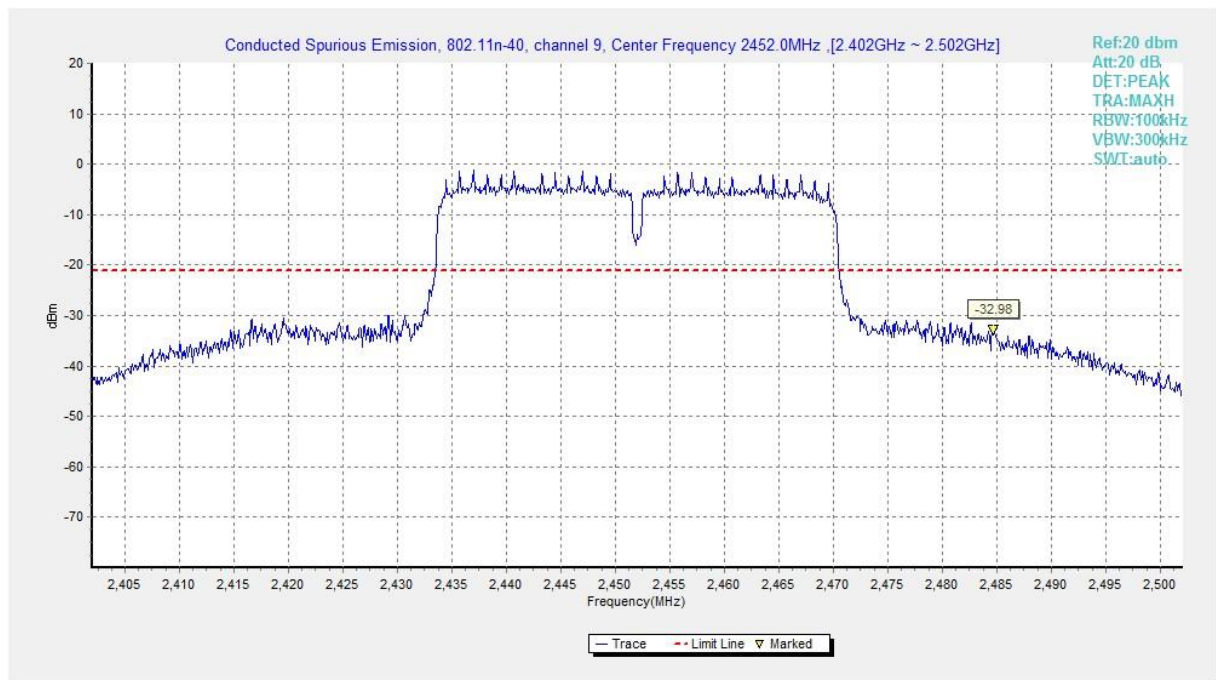


Fig.B.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

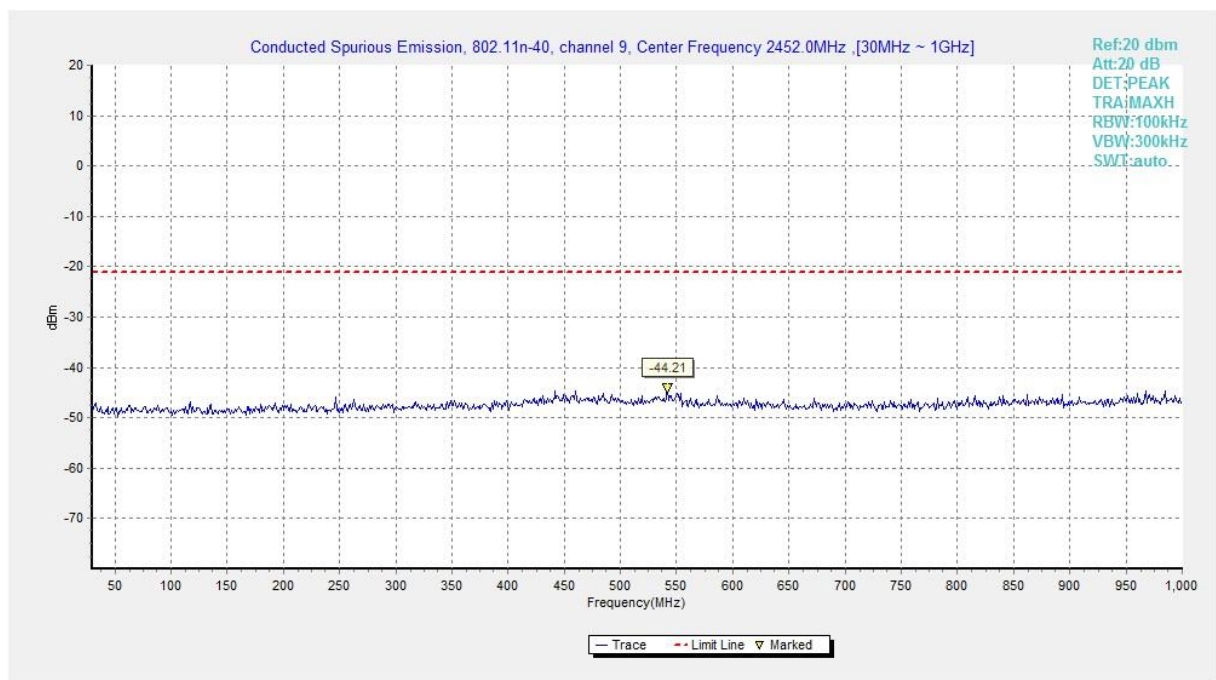


Fig.B.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

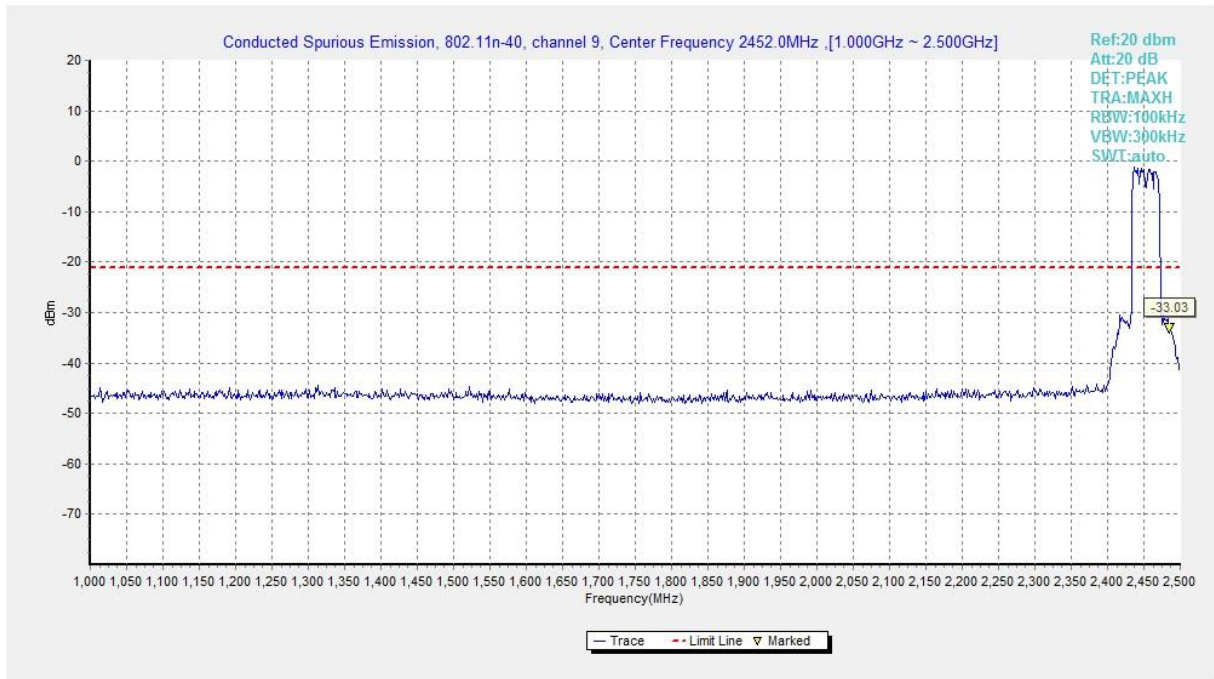


Fig.B.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

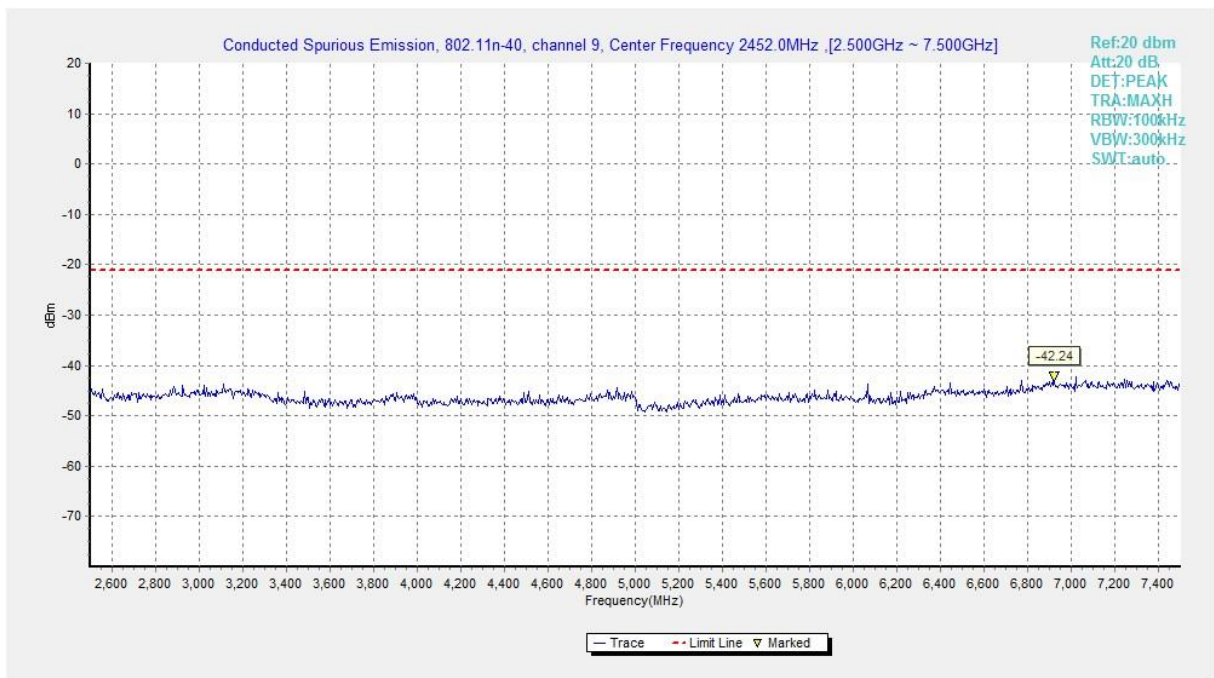


Fig.B.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

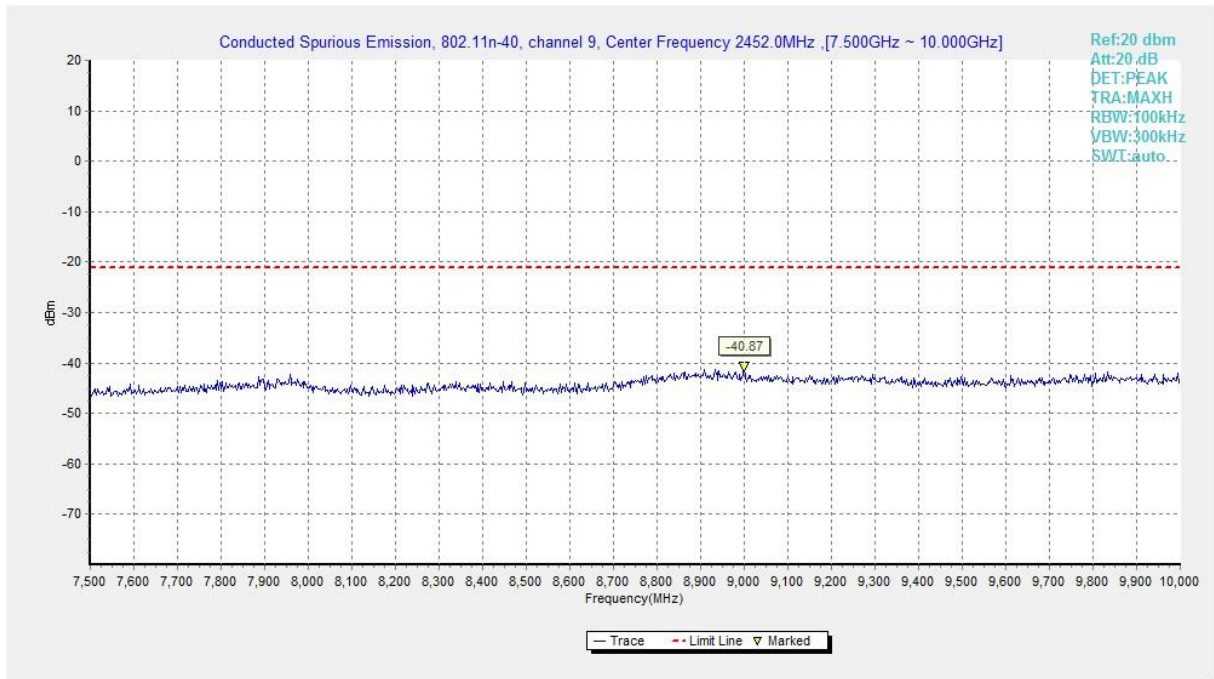


Fig.B.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

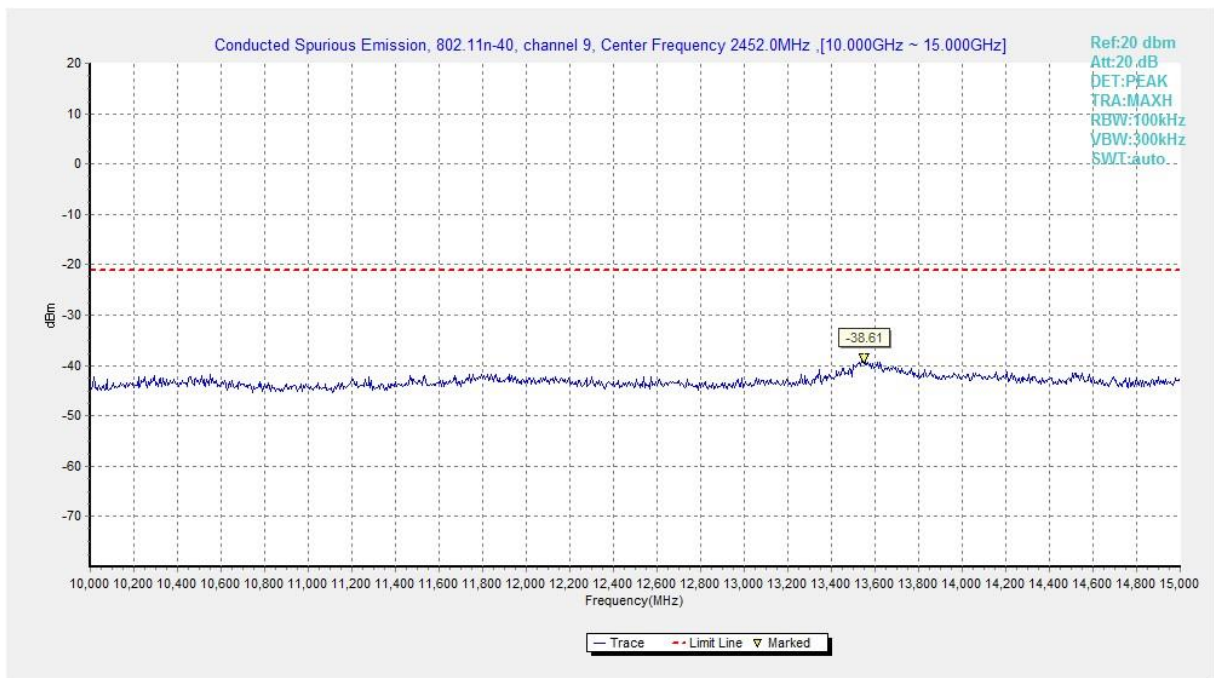


Fig.B.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

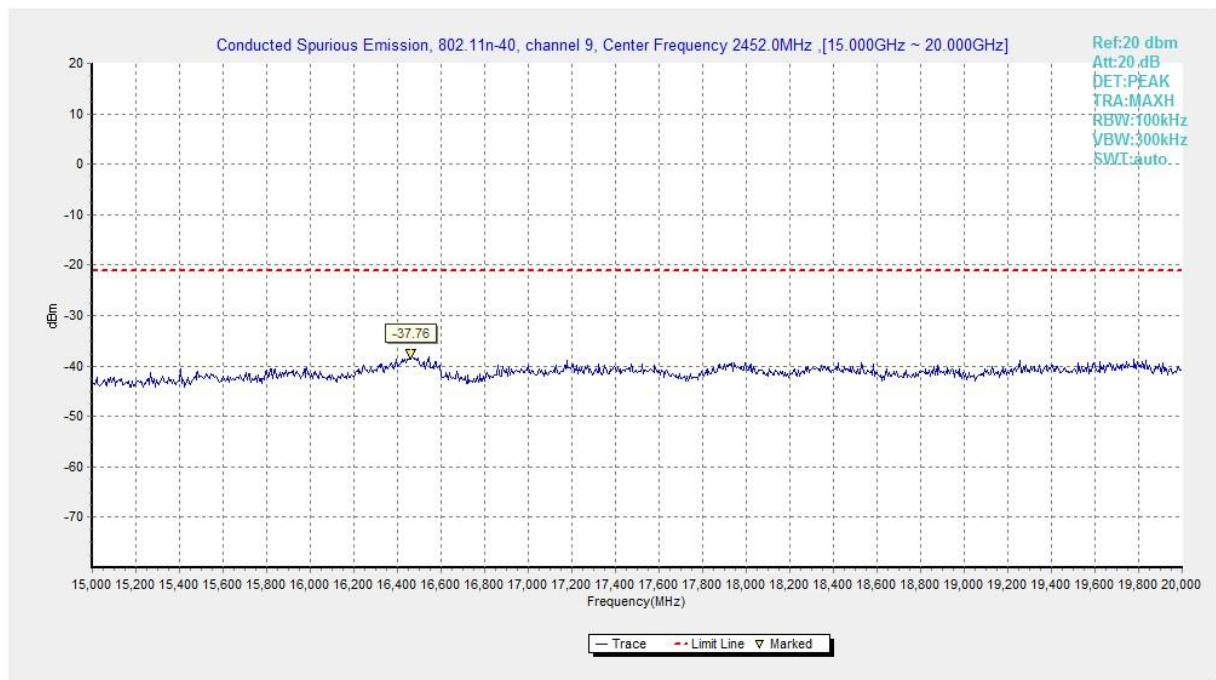


Fig.B.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

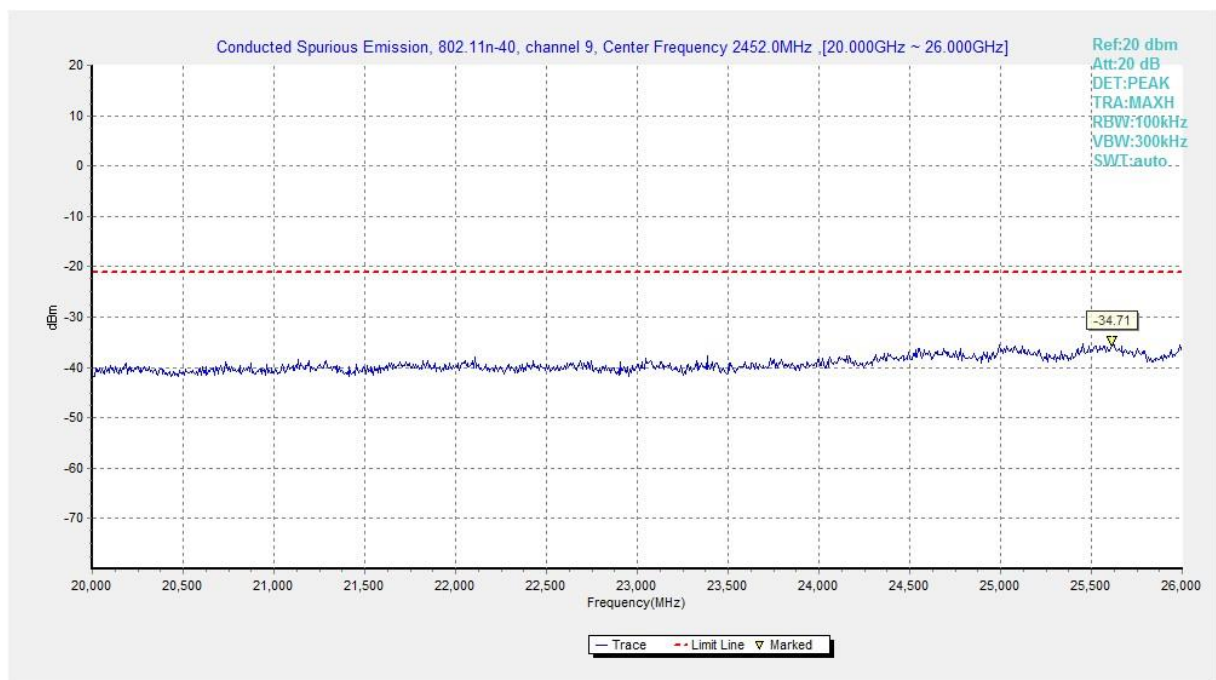


Fig.B.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

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(μ V/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	CH1	2.33GHz ~2.43GHz	Fig.B.6.2.1	P
	CH11	2.45GHz ~2.5GHz	Fig.B.6.2.2	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	CH1	2.31GHz ~2.43GHz	Fig.B.6.2.3	P
	CH11	2.45GHz ~2.5GHz	Fig.B.6.2.4	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	CH1	2.31GHz ~2.43GHz	Fig.B.6.2.5	P
	CH11	2.45GHz ~2.5GHz	Fig.B.6.2.6	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	CH3	2.31GHz ~2.43GHz	Fig.B.6.2.7	P
	CH9	2.45GHz ~2.5GHz	Fig.B.6.2.8	P

Conclusion: Pass

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

The measurement results are obtained as described below:

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

Note: The range of evaluated frequency is from 9 kHz to 26GHz. Measurement value show only up to 6 maximum emissions. 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)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17985	54.2	-25.5	46.7	33	V	74	19.8
17998	53.6	-25.5	46.7	32.4	H	74	20.4
17898	53.4	-25.5	46.7	32.2	V	74	20.6
17916.5	53.4	-25.5	46.7	32.2	V	74	20.6
17781.5	53.3	-25.5	46.7	32.1	V	74	20.7
2388.7	62.9	-20	28.1	54.9	H	74	11.1

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17997	54.5	-25.5	46.7	33.3	H	74	19.5
17911.5	53.5	-25.5	46.7	32.3	V	74	20.5
17992	53.5	-25.5	46.7	32.3	V	74	20.5
17506	53.4	-26.9	45.2	35	H	74	20.6
17763	53.3	-25.5	46.7	32.1	H	74	20.7
17773.5	53.3	-25.5	46.7	32.1	H	74	20.7

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17489.5	53.5	-26.9	45.2	35.1	H	74	20.5
17981.5	53.4	-25.5	46.7	32.2	H	74	20.6
17987	53.4	-25.5	46.7	32.2	V	74	20.6
17498	53.3	-26.9	45.2	34.9	H	74	20.7
17798.5	53.3	-25.5	46.7	32.1	V	74	20.7
2487.1	57.9	-20	28.3	49.6	H	74	16.1

802.11g
Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17450.5	53.9	-26.9	45.2	35.5	H	74	20.1
17705	53.9	-25.7	46	33.7	V	74	20.1
17088	53.5	-26.6	43.4	36.7	H	74	20.5
17967	53.5	-25.5	46.7	32.3	H	74	20.5
17675.5	53.4	-25.7	46	33.2	V	74	20.6
2389.9	60.5	-20	28.1	52.5	H	74	13.5

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17808.5	53.6	-25.5	46.7	32.4	H	74	20.4
17995.5	53.5	-25.5	46.7	32.3	V	74	20.5
17977.5	53.3	-25.5	46.7	32.1	V	74	20.7
17506	53.2	-26.9	45.2	34.8	H	74	20.8
17899	53.2	-25.5	46.7	32	H	74	20.8
17597	53.1	-25.7	46	32.9	V	74	20.9

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17968	54.1	-25.5	46.7	32.9	V	74	19.9
17990	54	-25.5	46.7	32.8	V	74	20
17983.5	53.8	-25.5	46.7	32.6	H	74	20.2
17989.5	53.7	-25.5	46.7	32.5	V	74	20.3
17919.5	53.5	-25.5	46.7	32.3	V	74	20.5
2485.5	55.2	-20	28.3	46.9	H	74	18.8

802.11n-HT20
Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17902	53.9	-25.5	46.7	32.7	H	74	20.1
17413	53.7	-26.9	45.2	35.3	H	74	20.3
17439.5	53.7	-26.9	45.2	35.3	V	74	20.3
17595	53.4	-25.7	46	33.2	V	74	20.6
17881	53.4	-25.5	46.7	32.2	H	74	20.6
2389.8	66.4	-20	28.1	58.4	H	74	7.6

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17886.5	53.9	-25.5	46.7	32.7	V	74	20.1
17898	53.6	-25.5	46.7	32.4	V	74	20.4
17863.5	53.4	-25.5	46.7	32.2	V	74	20.6
17975	53.4	-25.5	46.7	32.2	V	74	20.6
17986.5	53.4	-25.5	46.7	32.2	H	74	20.6
17368.5	53.3	-25.9	44.4	34.9	H	74	20.7

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17884.5	53.9	-25.5	46.7	32.7	H	74	20.1
17970	53.8	-25.5	46.7	32.6	V	74	20.2
17753	53.6	-25.5	46.7	32.4	V	74	20.4
17660.5	53.4	-25.7	46	33.2	V	74	20.6
17898.5	53.4	-25.5	46.7	32.2	H	74	20.6
2485.2	58.8	-20	28.3	50.5	H	74	15.2

802.11n-HT40
Ch3

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17983.5	54.2	-25.5	46.7	33	H	74	19.8
17896.5	53.9	-25.5	46.7	32.7	V	74	20.1
17514.5	53.4	-26.9	45.2	35	H	74	20.6
17773	53.4	-25.5	46.7	32.2	V	74	20.6
17213.5	53.3	-26.6	43.4	36.5	V	74	20.7
2387.8	67	-20	28.1	59	H	74	7

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17507	54.1	-26.9	45.2	35.7	V	74	19.9
17582.5	53.9	-25.7	46	33.7	V	74	20.1
17869	53.5	-25.5	46.7	32.3	H	74	20.5
17963.5	53.3	-25.5	46.7	32.1	H	74	20.7
17978	53.3	-25.5	46.7	32.1	H	74	20.7
17559.5	53.2	-26.9	45.2	34.8	H	74	20.8

Ch9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17790.5	53.8	-29.9	46.0	37.7	V	74	20.2
17993.0	53.5	-29.1	46.7	35.9	V	74	20.5
17953.5	53.5	-28.9	46.7	35.8	H	74	20.5
17684.5	53.4	-30.0	45.2	38.1	H	74	20.6
17973.5	53.2	-29.1	46.7	35.6	H	74	20.8
2485.0	62.8	-39.7	28.2	74.3	H	74	11.2

Average Measurement results

802.11b

Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17993.5	42.6	-25.5	46.7	21.4	V	54	11.4
17997	42.3	-25.5	46.7	21.1	V	54	11.7
17884	42.2	-25.5	46.7	21	V	54	11.8
17894	42.1	-25.5	46.7	20.9	V	54	11.9
17896	42.1	-25.5	46.7	20.9	H	54	11.9
2387.3	47.6	-20	28.1	39.6	H	54	6.4

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17893	42.2	-25.5	46.7	21	H	54	11.8
17953.5	42.1	-25.5	46.7	20.9	H	54	11.9
17962	42.1	-25.5	46.7	20.9	V	54	11.9
17990.5	42.1	-25.5	46.7	20.9	V	54	11.9
17998	42.1	-25.5	46.7	20.9	V	54	11.9
17895.5	42	-25.5	46.7	20.8	V	54	12

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17982.5	42.3	-25.5	46.7	21.1	V	54	11.7
17989	42.3	-25.5	46.7	21.1	V	54	11.7
17994	42.3	-25.5	46.7	21.1	H	54	11.7
17996	42.3	-25.5	46.7	21.1	H	54	11.7
17967.5	42.1	-25.5	46.7	20.9	V	54	11.9
2485.2	45.8	-20	28.3	37.5	H	54	8.2

802.11g
Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17904	42.1	-25.5	46.7	20.9	V	54	11.9
17972.5	42.1	-25.5	46.7	20.9	H	54	11.9
17979.5	42.1	-25.5	46.7	20.9	V	54	11.9
17982.5	42.1	-25.5	46.7	20.9	V	54	11.9
17988.5	42.1	-25.5	46.7	20.9	V	54	11.9
2389.9	46.6	-20	28.1	38.6	H	54	7.4

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17886	42.2	-25.5	46.7	21	H	54	11.8
17989.5	42.2	-25.5	46.7	21	V	54	11.8
17991	42.1	-25.5	46.7	20.9	V	54	11.9
17502	42	-26.9	45.2	23.6	V	54	12
17923	42	-25.5	46.7	20.8	V	54	12
17974.5	42	-25.5	46.7	20.8	H	54	12

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17989	42.3	-25.5	46.7	21.1	H	54	11.7
17995.5	42.2	-25.5	46.7	21	H	54	11.8
17499	42.1	-26.9	45.2	23.7	V	54	11.9
17945.5	42.1	-25.5	46.7	20.9	H	54	11.9
17979.5	42.1	-25.5	46.7	20.9	H	54	11.9
2485.1	42.5	-20	28.3	34.2	H	54	11.5

802.11n-HT20
Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17983.5	42.6	-25.5	46.7	21.4	H	54	11.4
17991	42.4	-25.5	46.7	21.2	V	54	11.6
17999	42.4	-25.5	46.7	21.2	H	54	11.6
17983	42.3	-25.5	46.7	21.1	H	54	11.7
17971	42.2	-25.5	46.7	21	V	54	11.8
2389.9	48.6	-20	28.1	40.6	H	54	5.4

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17982.5	42.4	-25.5	46.7	21.2	H	54	11.6
17988.5	42.3	-25.5	46.7	21.1	V	54	11.7
17984	42.2	-25.5	46.7	21	V	54	11.8
17985	42.2	-25.5	46.7	21	V	54	11.8
17995	42.2	-25.5	46.7	21	V	54	11.8
17998	42.2	-25.5	46.7	21	H	54	11.8

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17990.5	42.4	-25.5	46.7	21.2	H	54	11.6
17956.5	42.2	-25.5	46.7	21	V	54	11.8
17970	42.2	-25.5	46.7	21	V	54	11.8
17982.5	42.2	-25.5	46.7	21	V	54	11.8
17894	42.1	-25.5	46.7	20.9	V	54	11.9
2485	42.8	-20	28.3	34.5	H	54	11.2

802.11n-HT40
Ch3

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17972.5	42.3	-25.5	46.7	21.1	H	54	11.7
17991	42.3	-25.5	46.7	21.1	H	54	11.7
17995.5	42.2	-25.5	46.7	21	H	54	11.8
17997.5	42.2	-25.5	46.7	21	V	54	11.8
17901	42.1	-25.5	46.7	20.9	H	54	11.9
2389.4	49.7	-20	28.1	41.7	H	54	4.3

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17997	42.6	-25.5	46.7	21.4	V	54	11.4
17970.5	42.3	-25.5	46.7	21.1	V	54	11.7
17997.5	42.2	-25.5	46.7	21	V	54	11.8
17926	42.1	-25.5	46.7	20.9	V	54	11.9
17989.5	42.1	-25.5	46.7	20.9	V	54	11.9
17918	42	-25.5	46.7	20.8	V	54	12

Ch9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17993.5	42.3	-29.1	46.7	24.7	V	54	11.7
17975.5	42.2	-29.1	46.7	24.6	V	54	11.8
17972.5	42.2	-29.1	46.7	24.6	H	54	11.8
17996	42.2	-29.1	46.7	24.6	H	54	11.8
17979.5	42.1	-29.1	46.7	24.5	V	54	11.9
2485.94	43.9	-39.7	28.2	55.4	H	54	10.1

Test graphs as below:

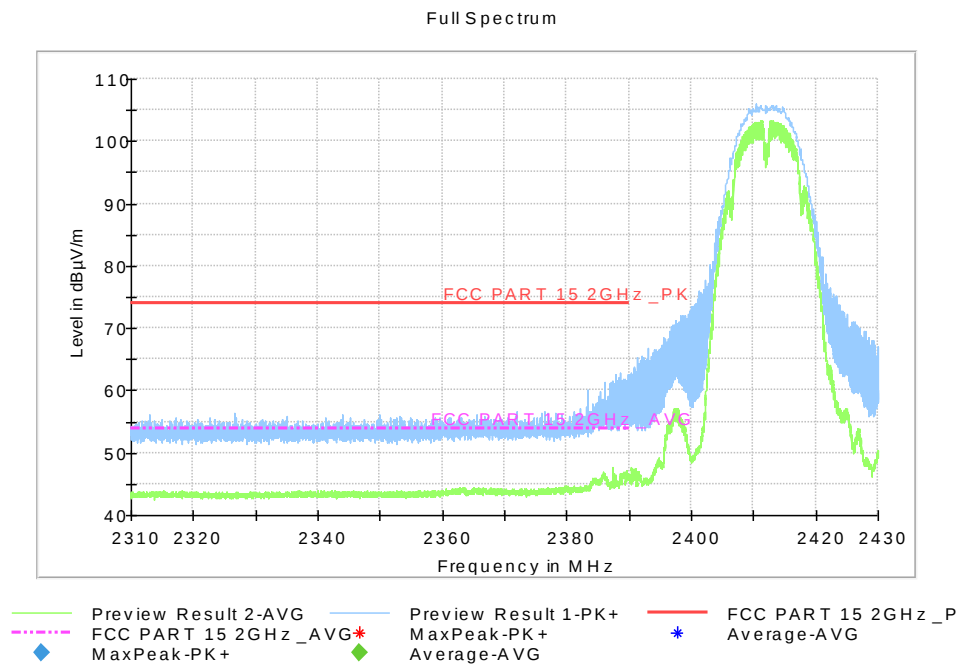


Fig.B.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.43GHz

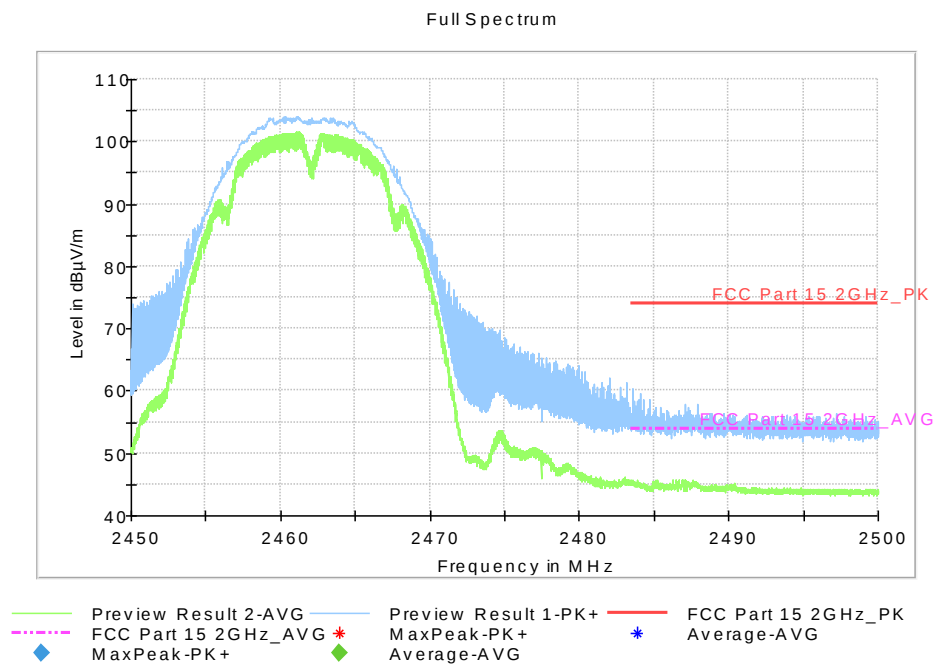


Fig.B.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

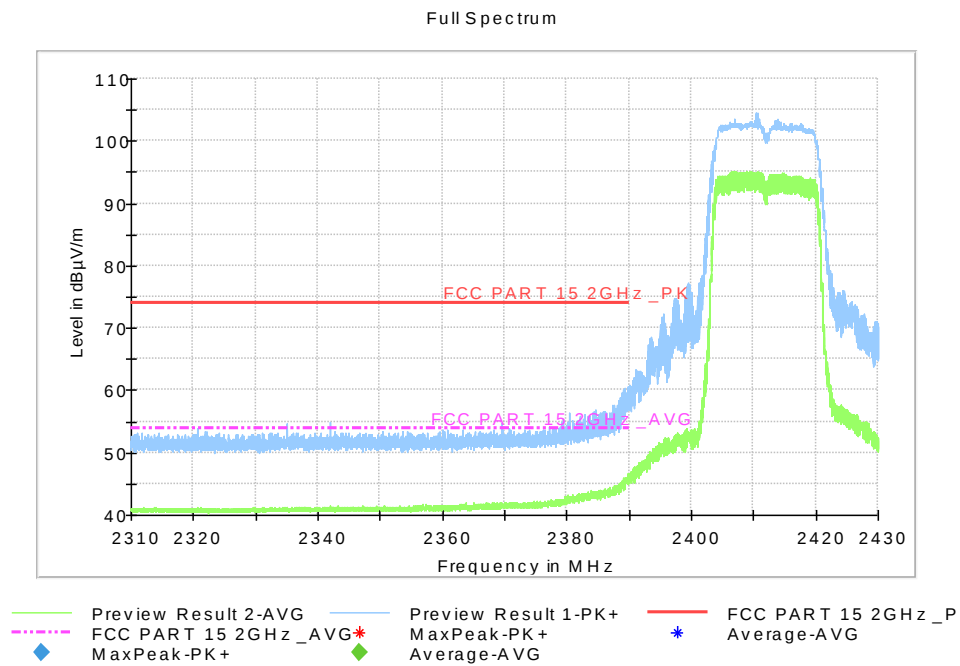


Fig.B.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.43GHz

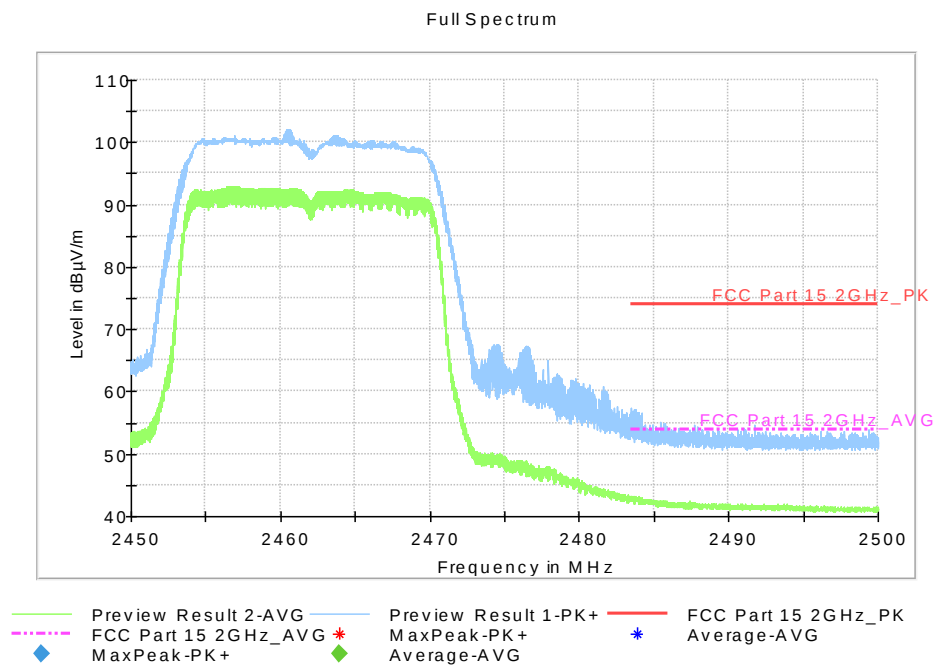


Fig.B.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

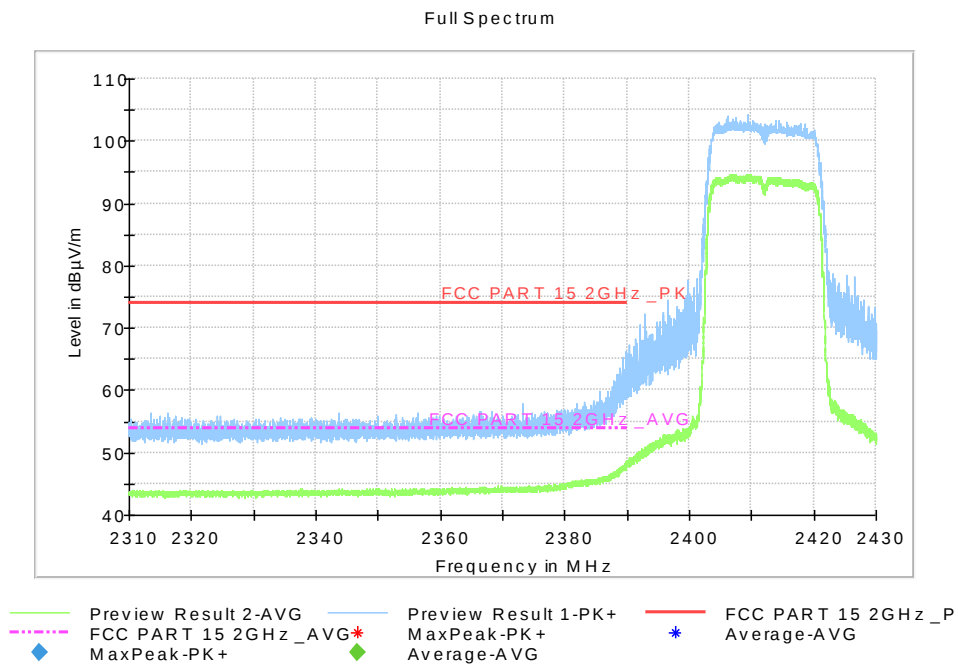


Fig.B.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz

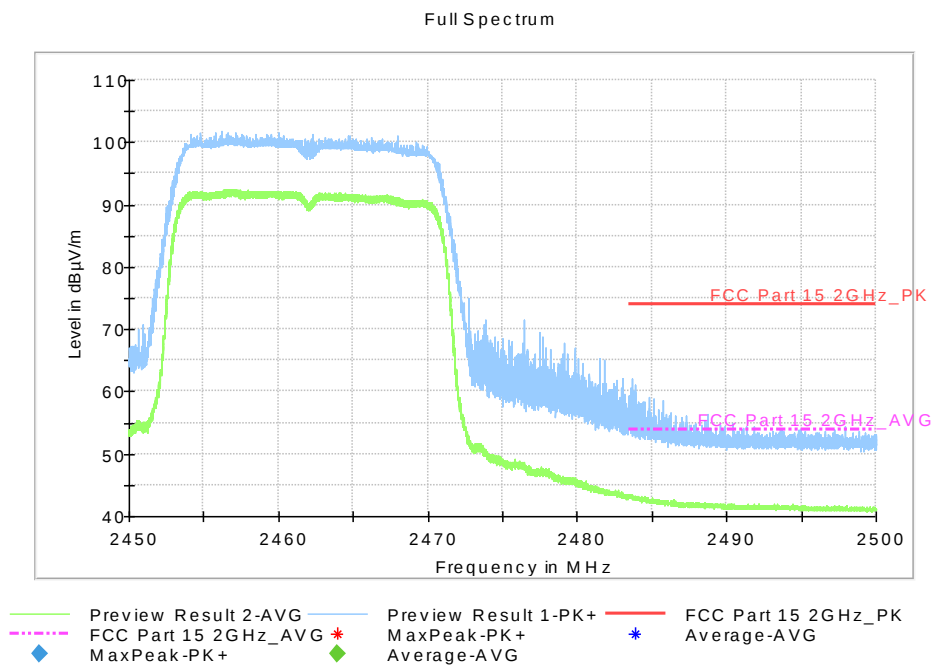


Fig.B.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

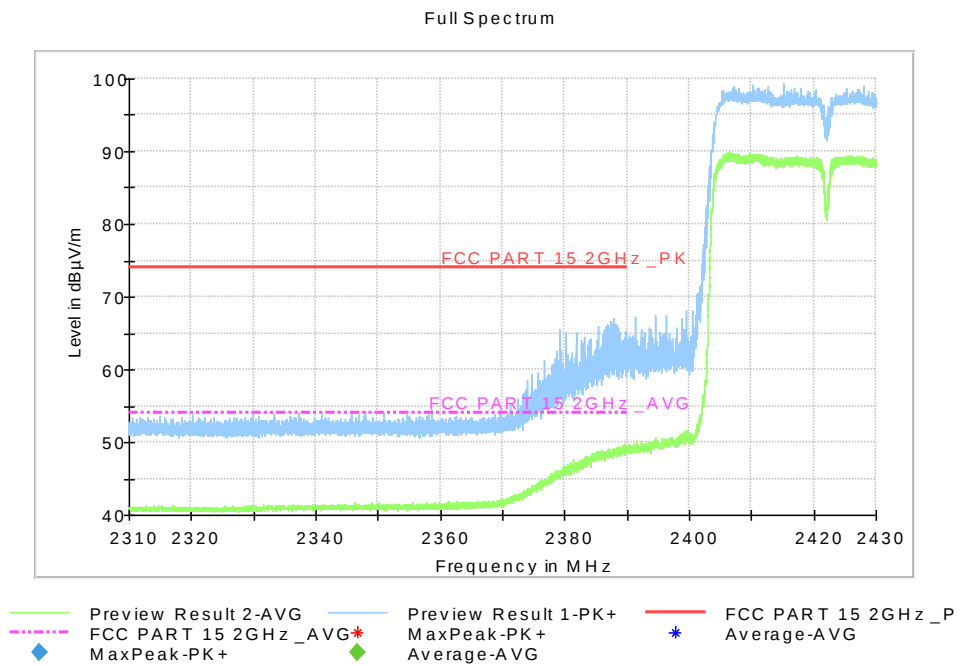


Fig.B.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.45GHz

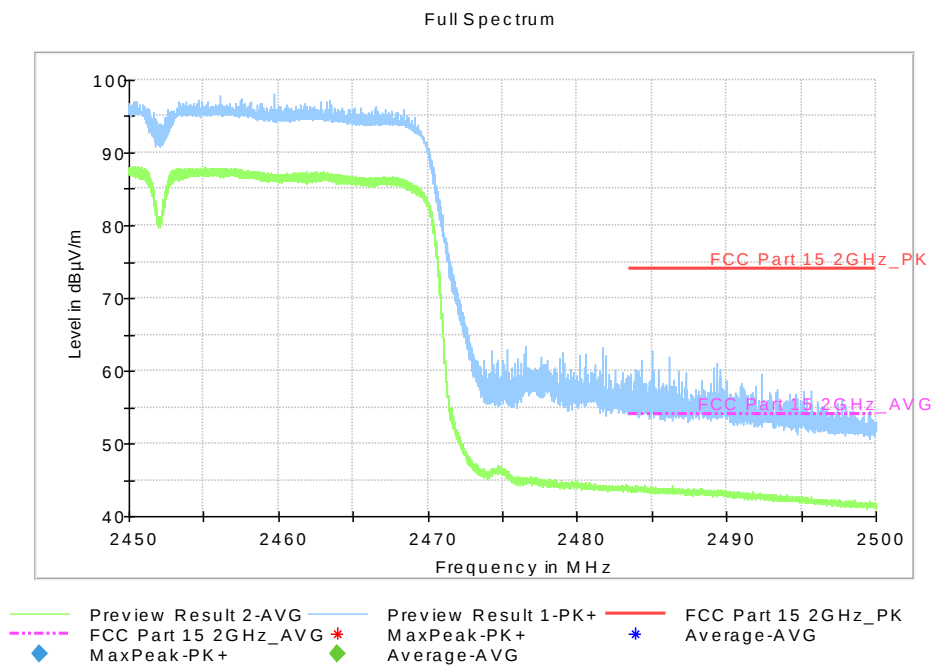


Fig.B.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

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:

EUT1 with AE1 & AE2

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.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 (dBμV)	Result (dBμV)		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.

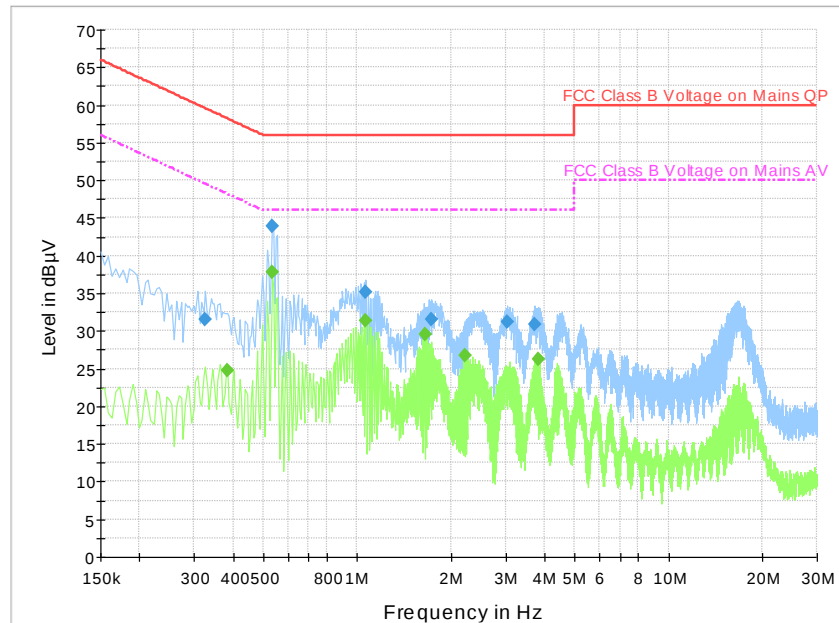


Fig.B.7.1 AC Powerline Conducted Emission-802.11b

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)
0.325500	31.6	L1	19.6	28.0	59.6
0.532500	43.8	L1	19.6	12.2	56.0
1.068000	35.2	L1	19.6	20.8	56.0
1.729500	31.5	L1	19.5	24.5	56.0
3.030000	31.2	L1	19.6	24.8	56.0
3.718500	30.8	L1	19.7	25.2	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.384000	24.8	N	19.6	23.4	48.2
0.532500	37.9	L1	19.6	8.1	46.0
1.068000	31.3	N	19.6	14.7	46.0
1.657500	29.6	N	19.6	16.4	46.0
2.211000	26.8	N	19.6	19.2	46.0
3.813000	26.2	N	19.7	19.8	46.0

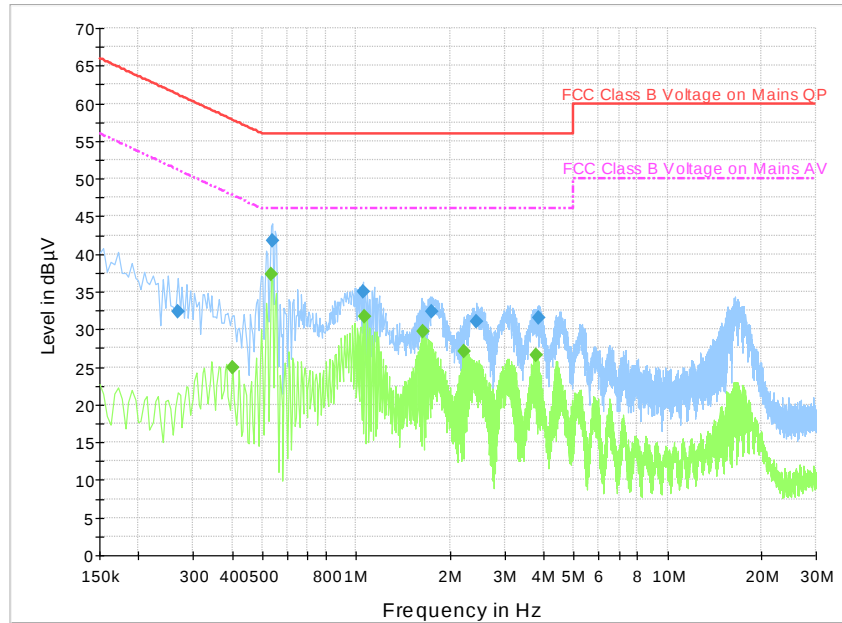


Fig.B.7.2 AC Powerline Conducted Emission-Idle

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

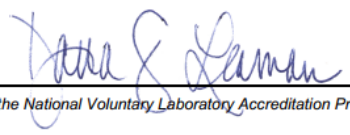
Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.267000	32.4	L1	19.6	28.8	61.2
0.537000	41.7	L1	19.6	14.3	56.0
1.050000	34.9	L1	19.6	21.1	56.0
1.752000	32.4	L1	19.5	23.6	56.0
2.440500	31.0	L1	19.6	25.0	56.0
3.849000	31.6	L1	19.7	24.4	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.402000	24.9	N	19.6	23.0	47.8
0.532500	37.3	N	19.5	8.7	46.0
1.068000	31.7	N	19.6	14.3	46.0
1.639500	29.8	N	19.6	16.2	46.0
2.211000	27.0	N	19.6	19.0	46.0
3.795000	26.6	N	19.7	19.4	46.0

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	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
Electromagnetic Compatibility & Telecommunications	
<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 Communiqué dated January 2009).</i>	
2020-09-29 through 2021-09-30 <i>Effective Dates</i>	 DEPARTMENT OF COMMERCE UNITED STATES OF AMERICA  _____ For the National Voluntary Laboratory Accreditation Program

END OF REPORT