

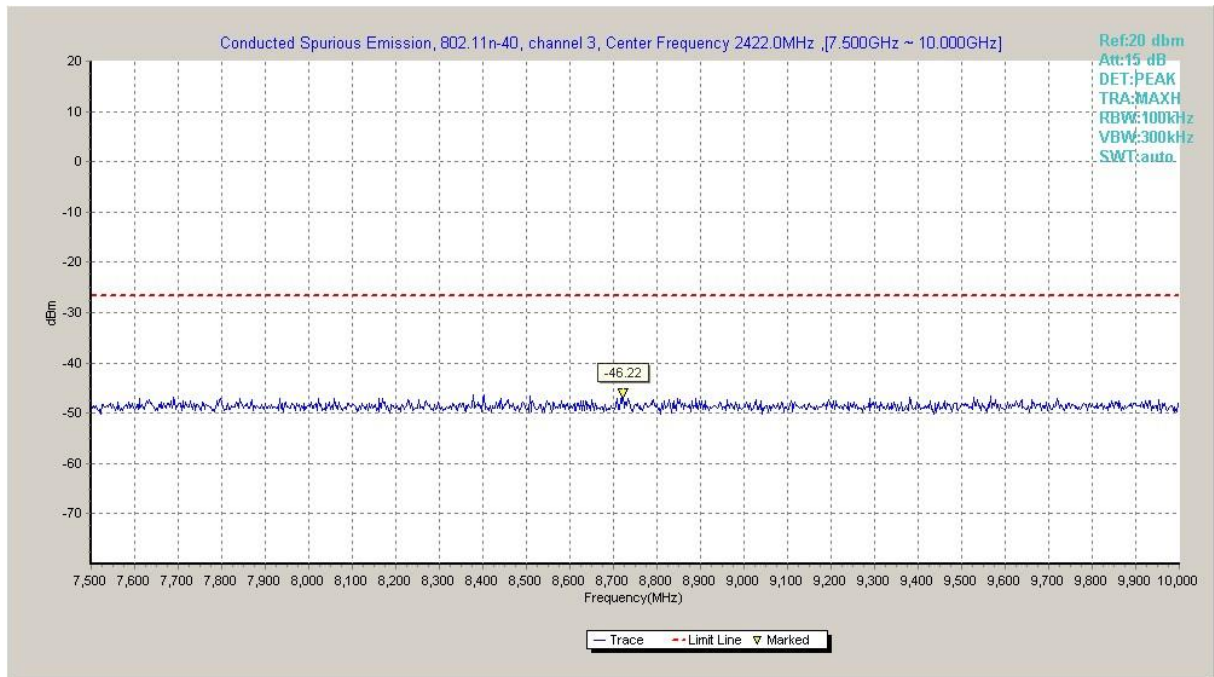


Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)

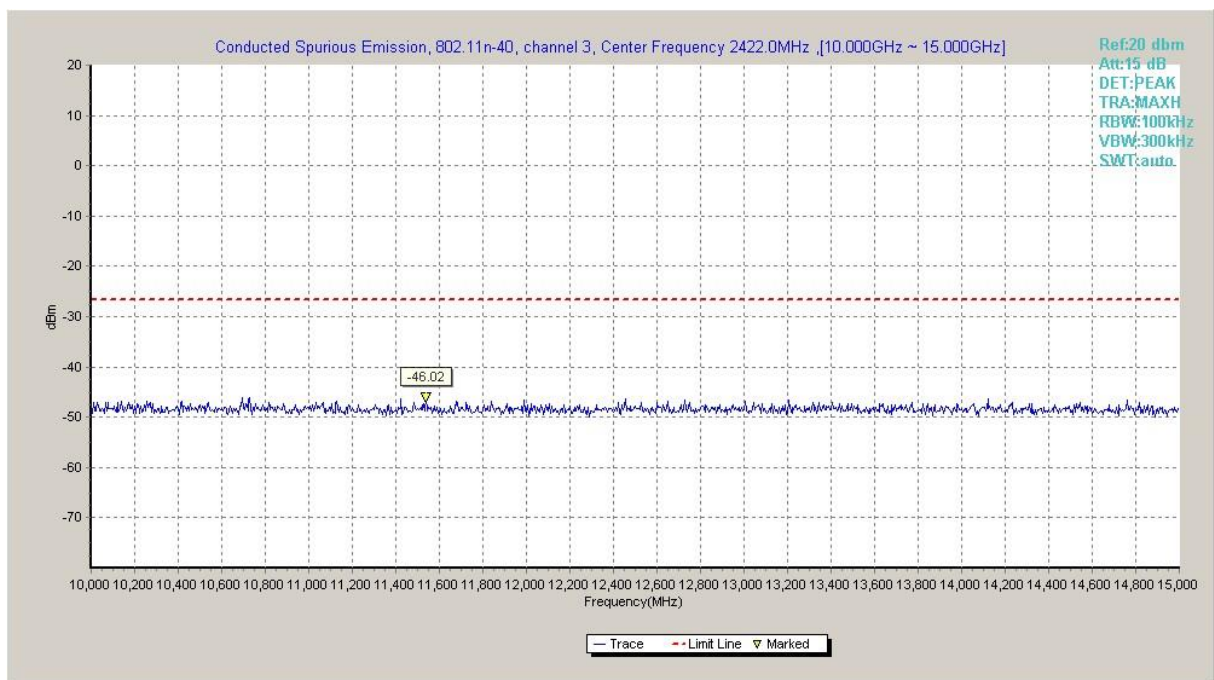


Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)

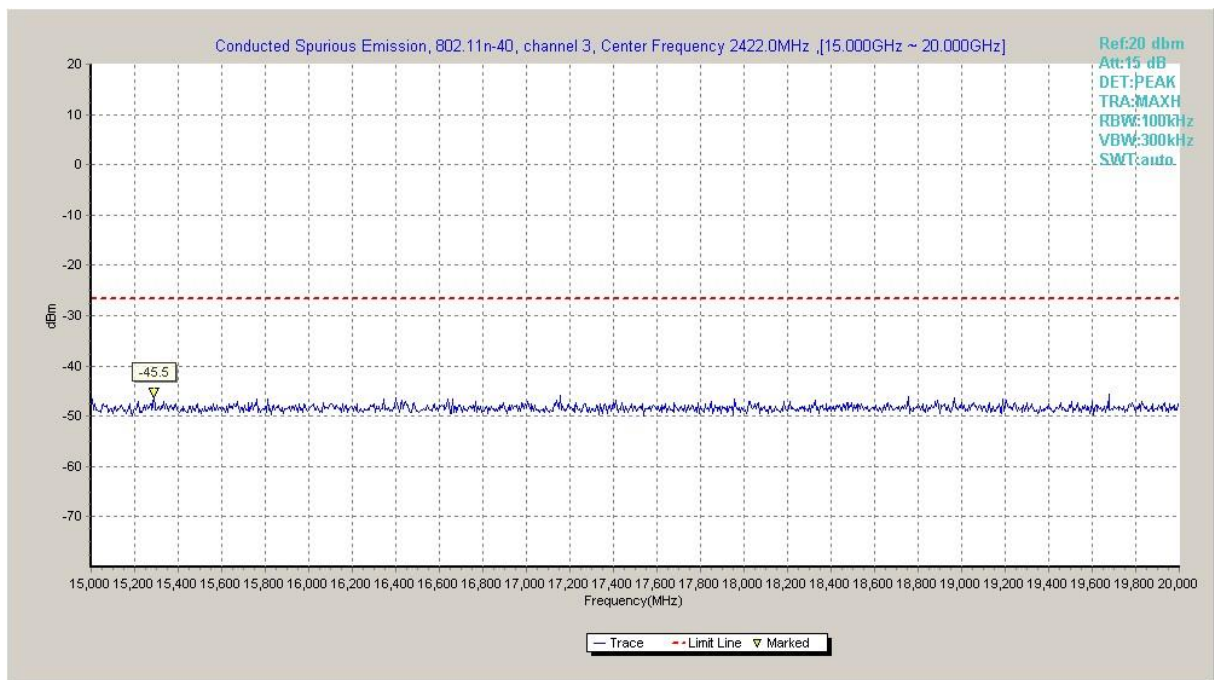


Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)

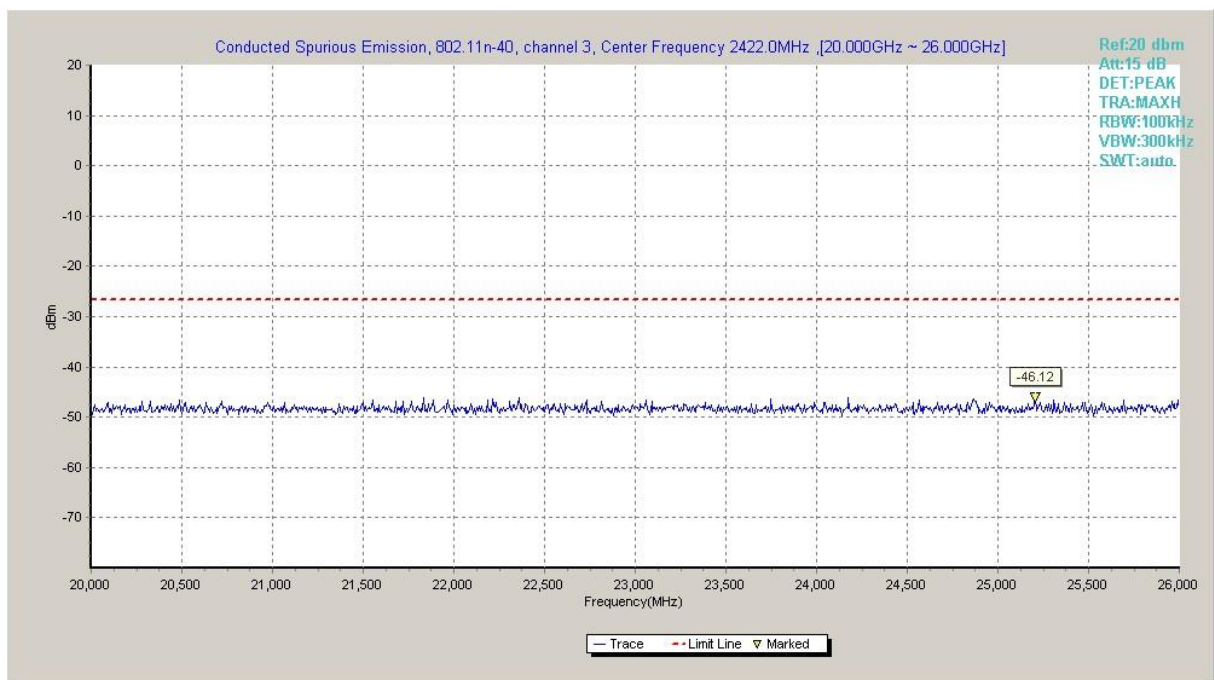


Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

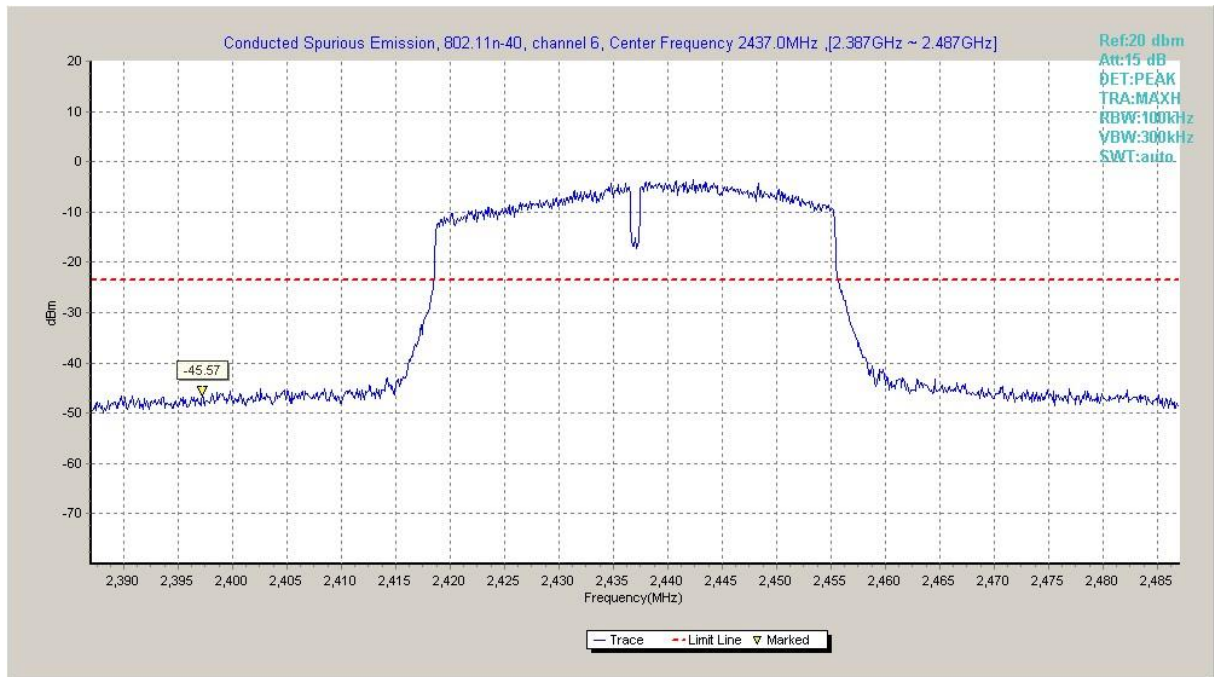


Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

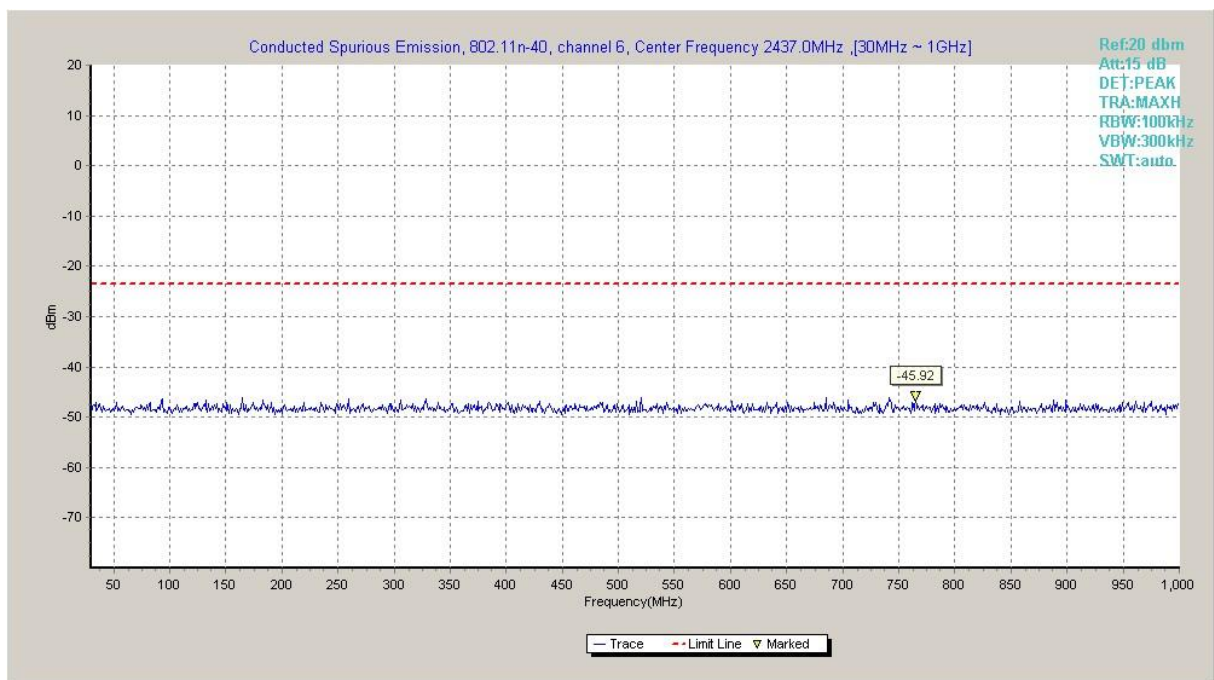


Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

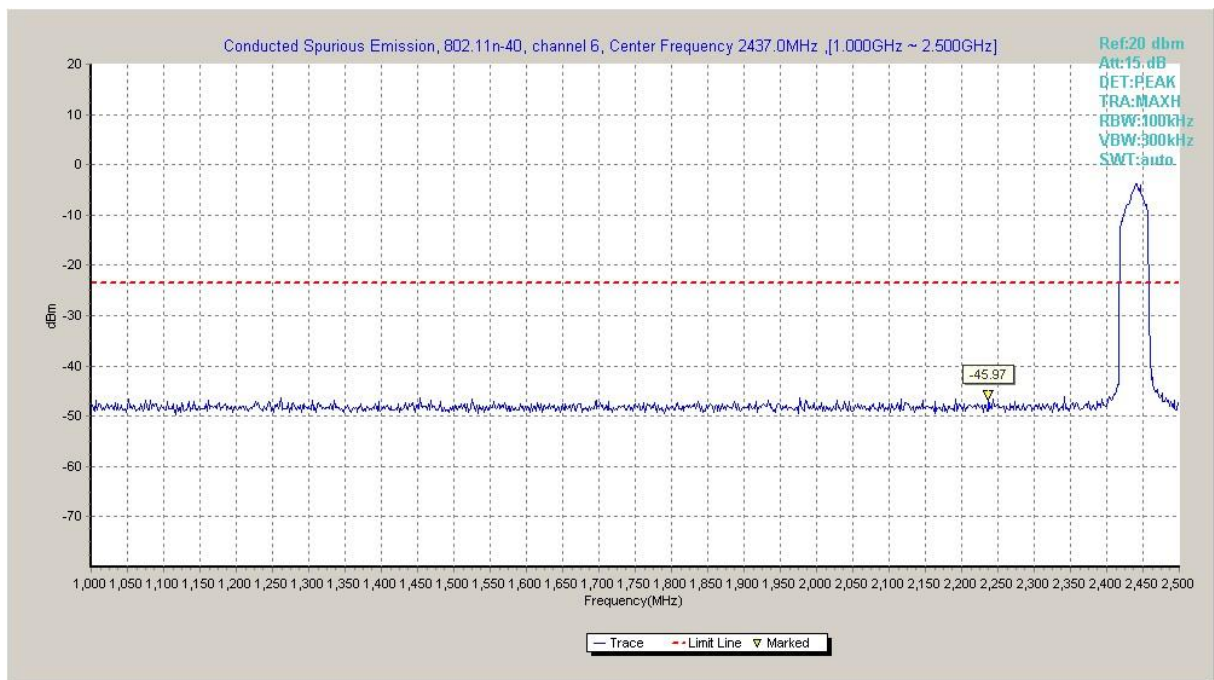


Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

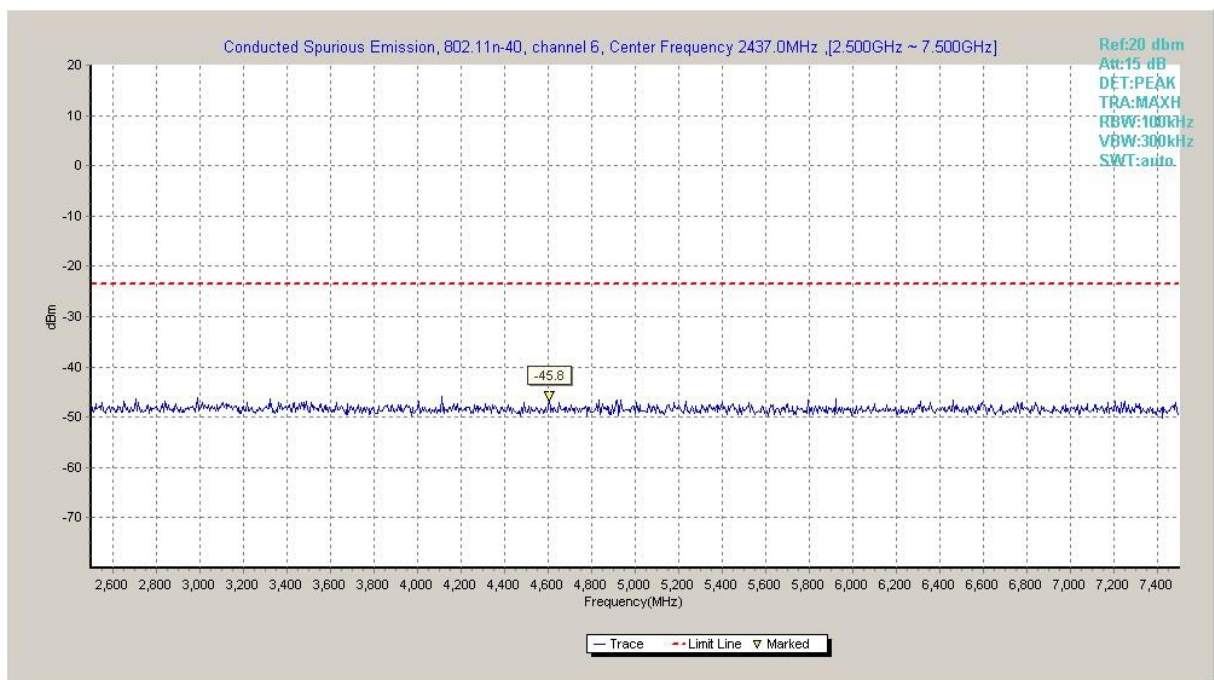


Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

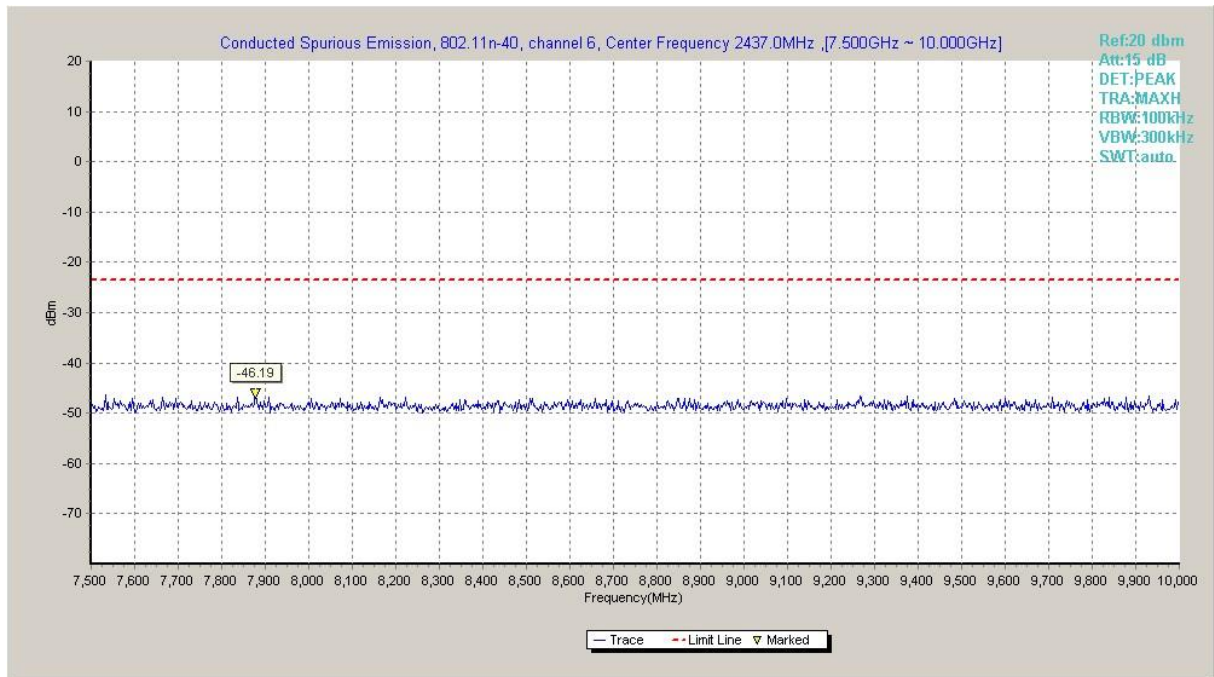


Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

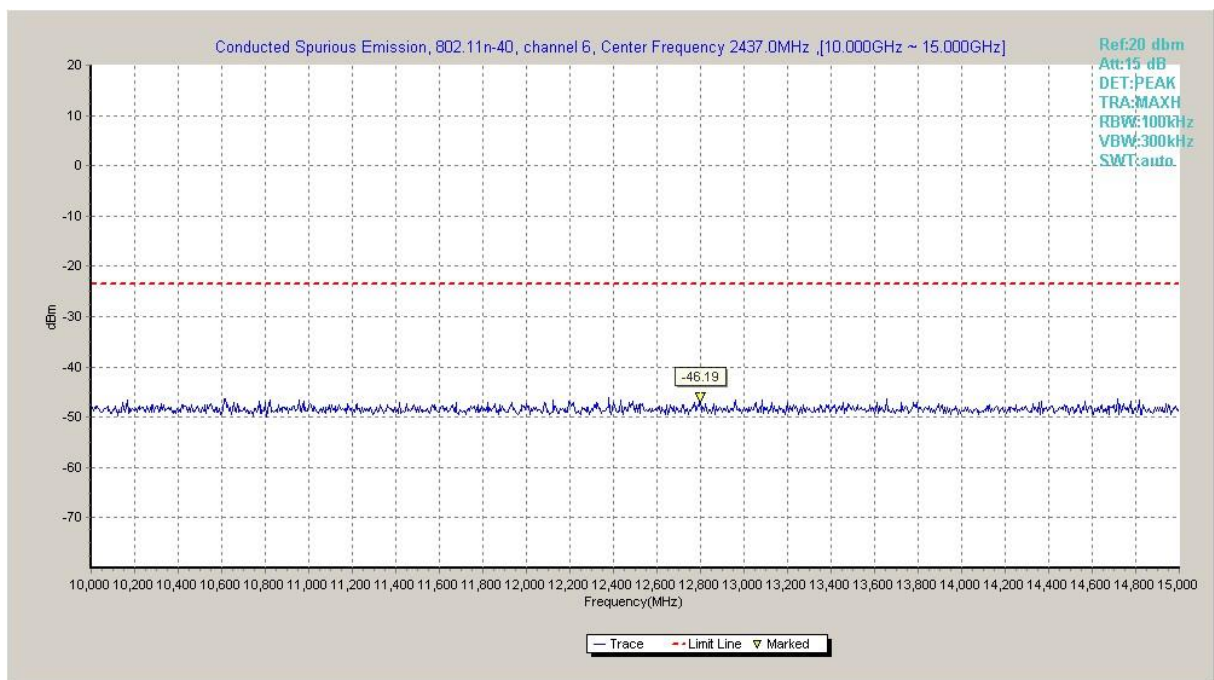


Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

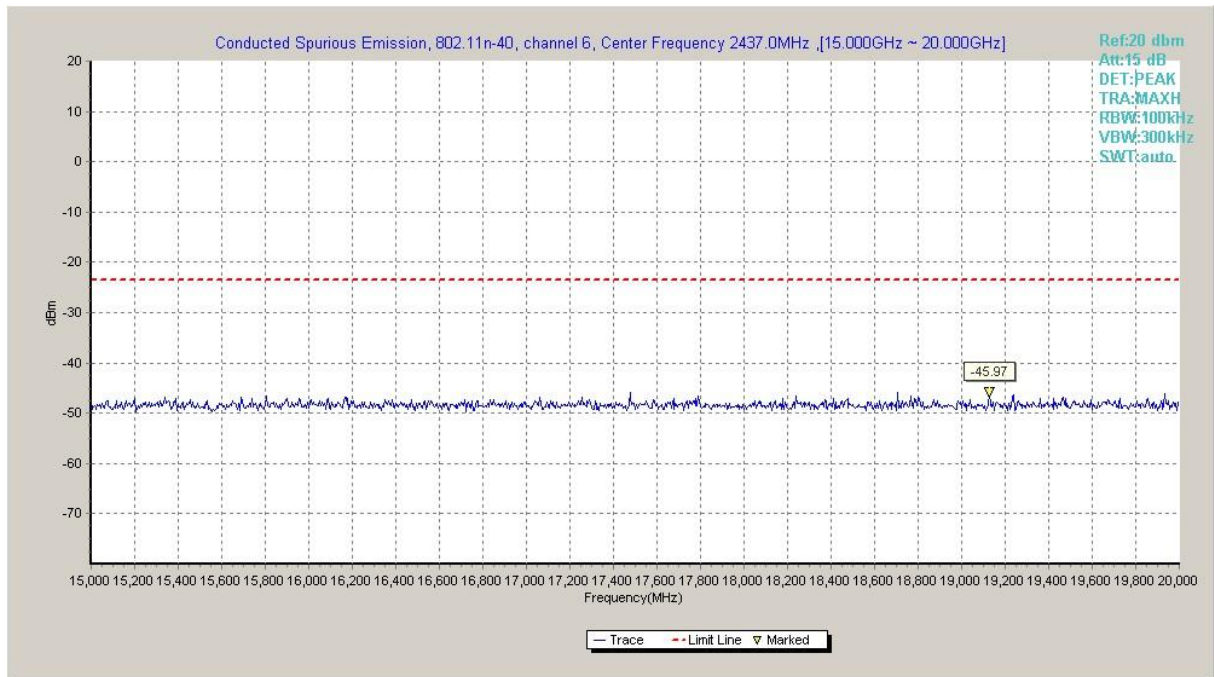


Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

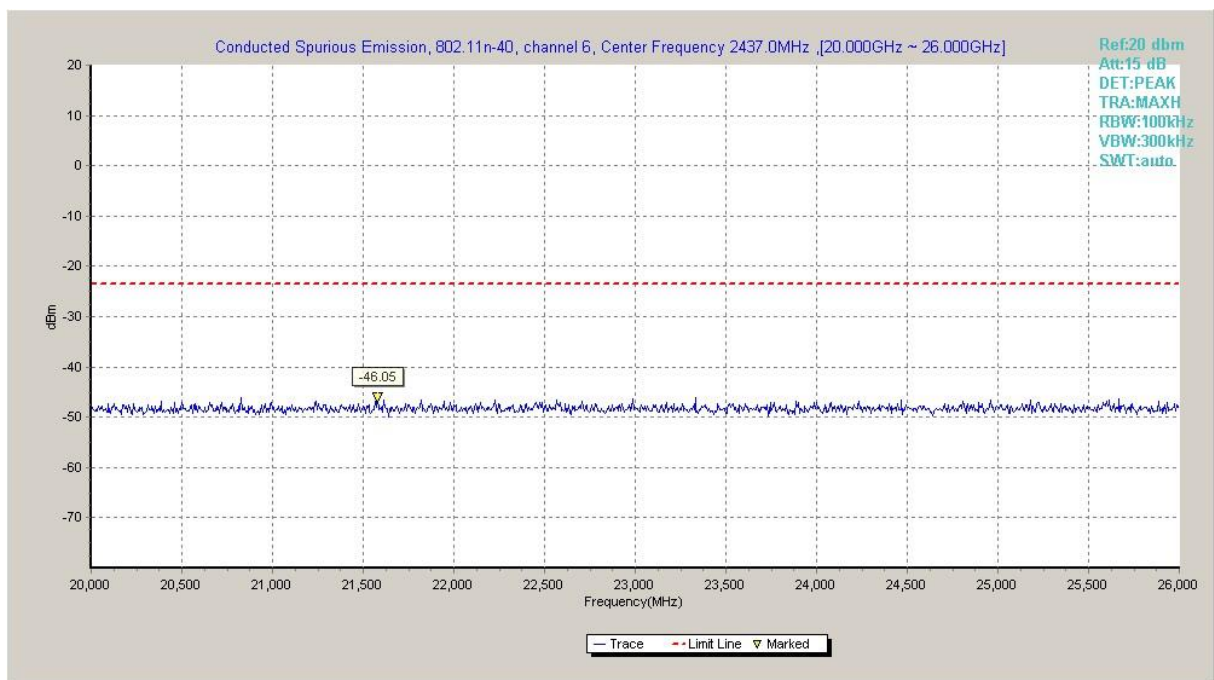


Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

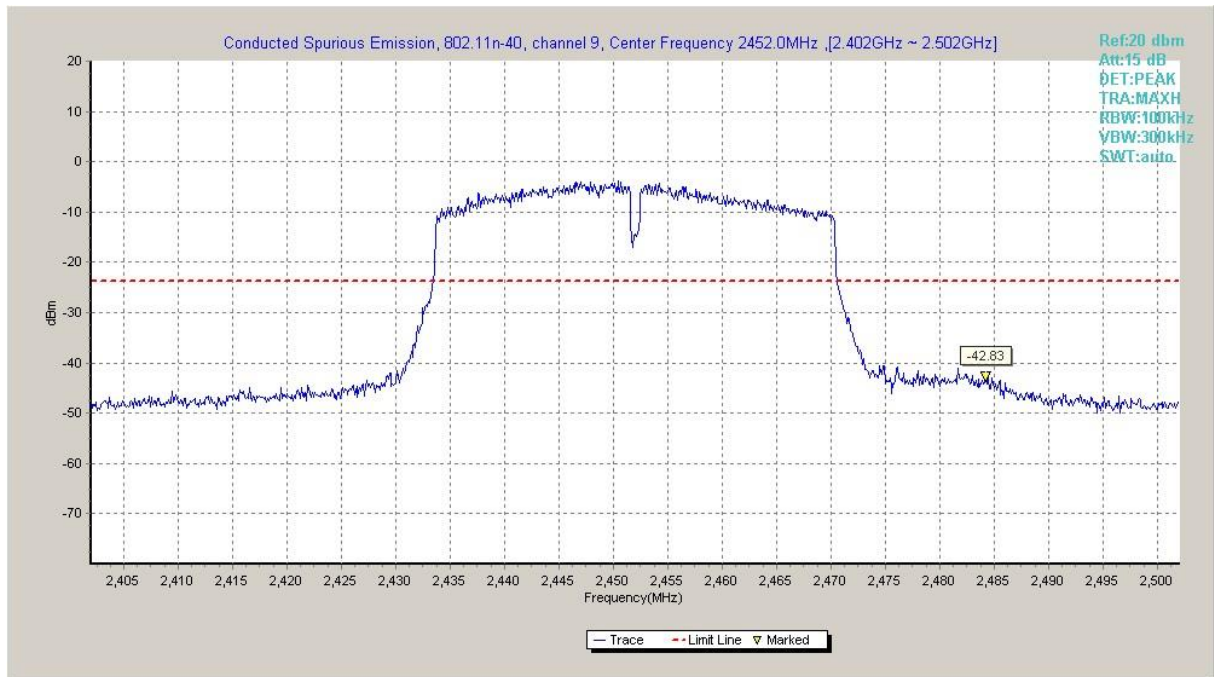


Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

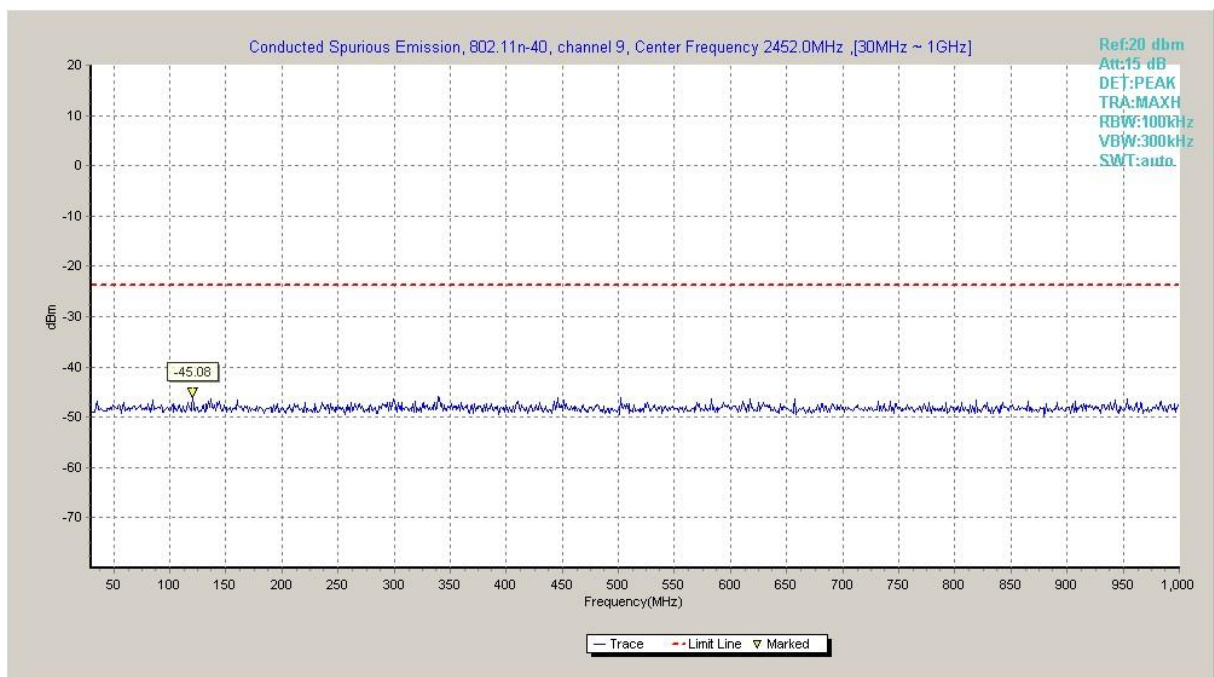


Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

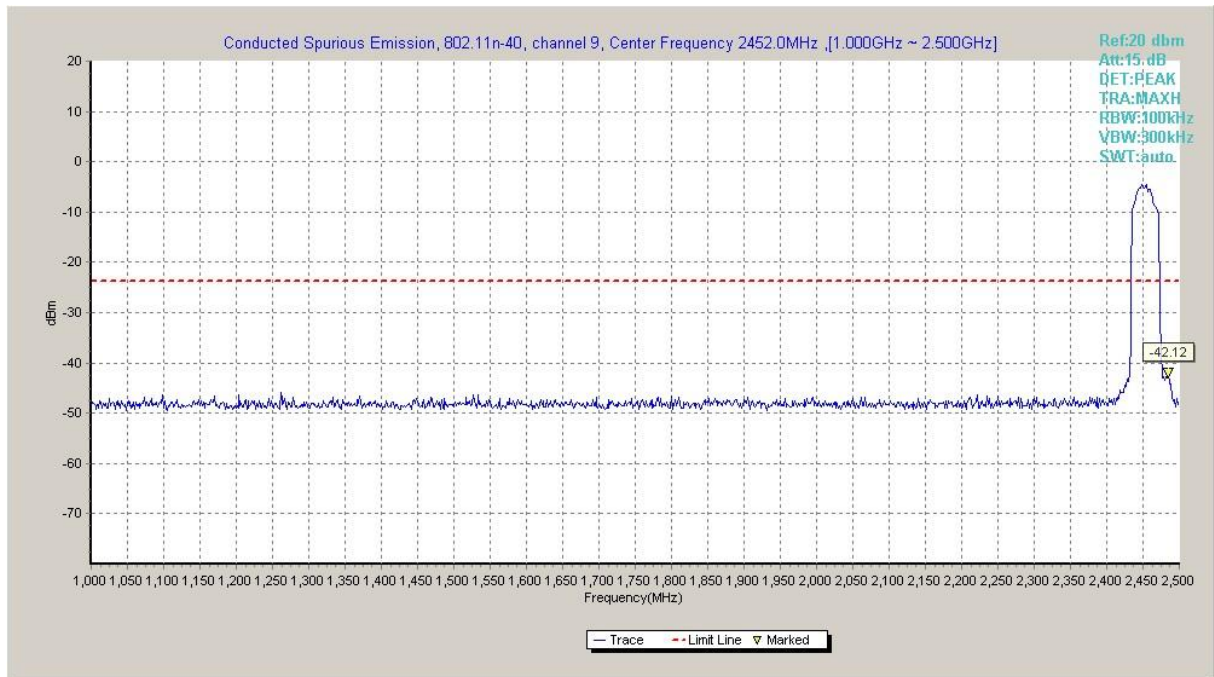


Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

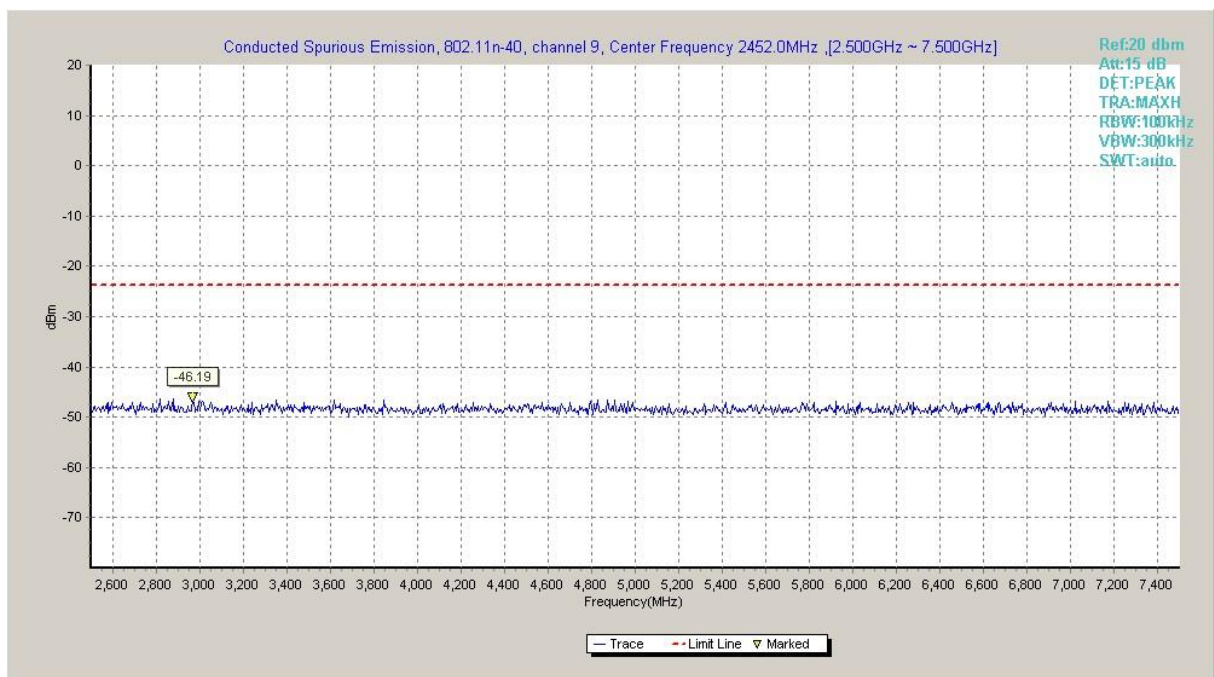


Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

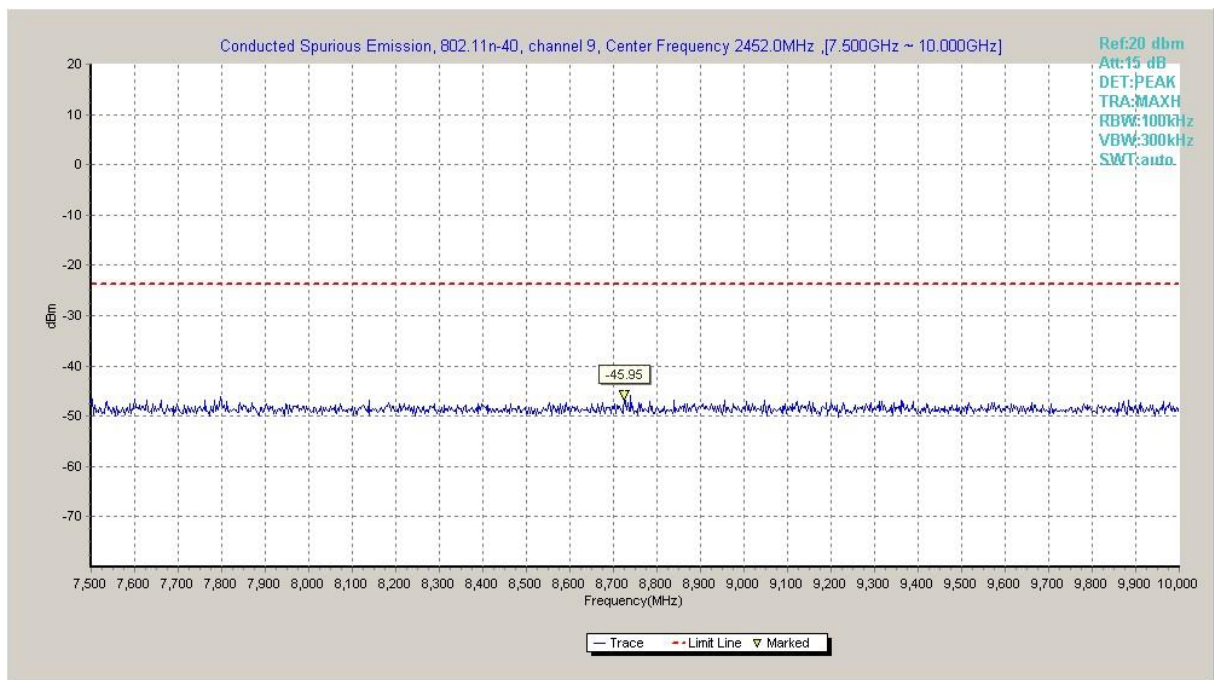


Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

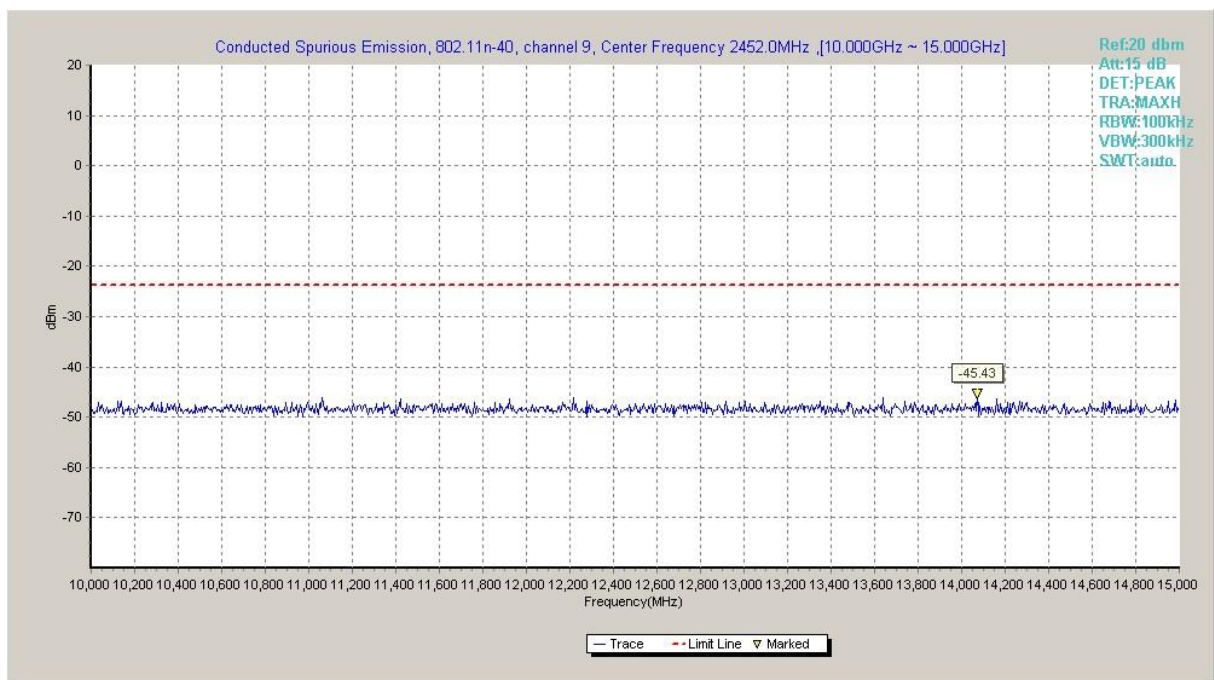


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

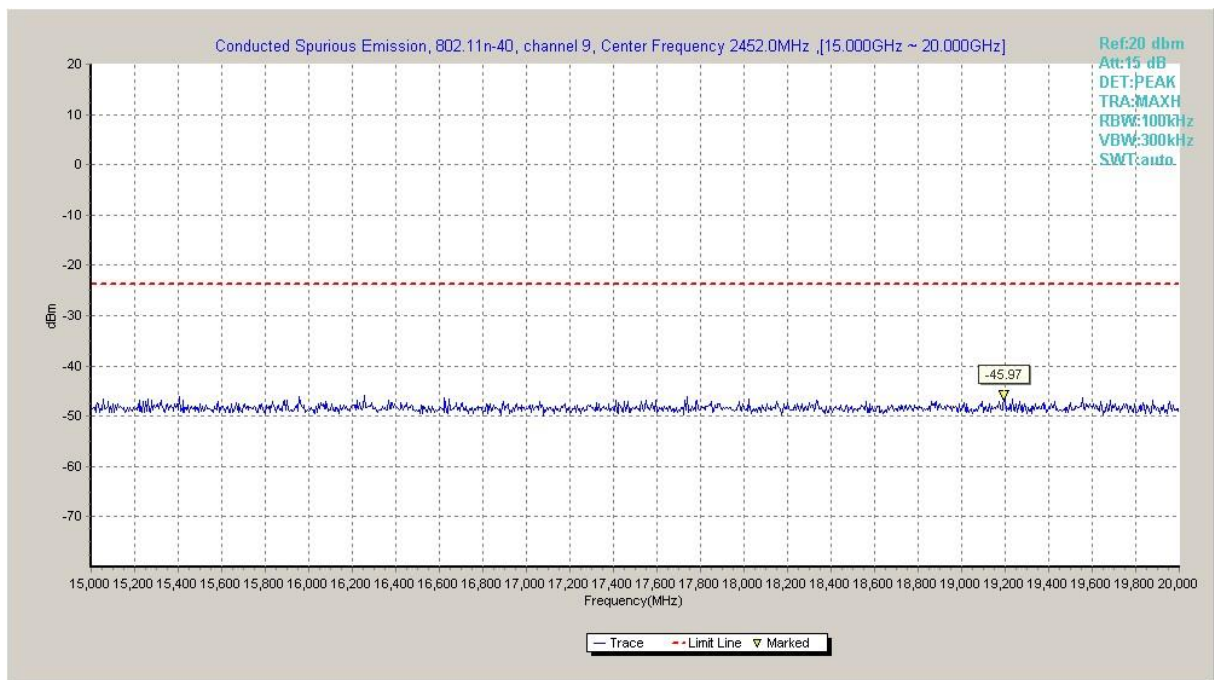


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

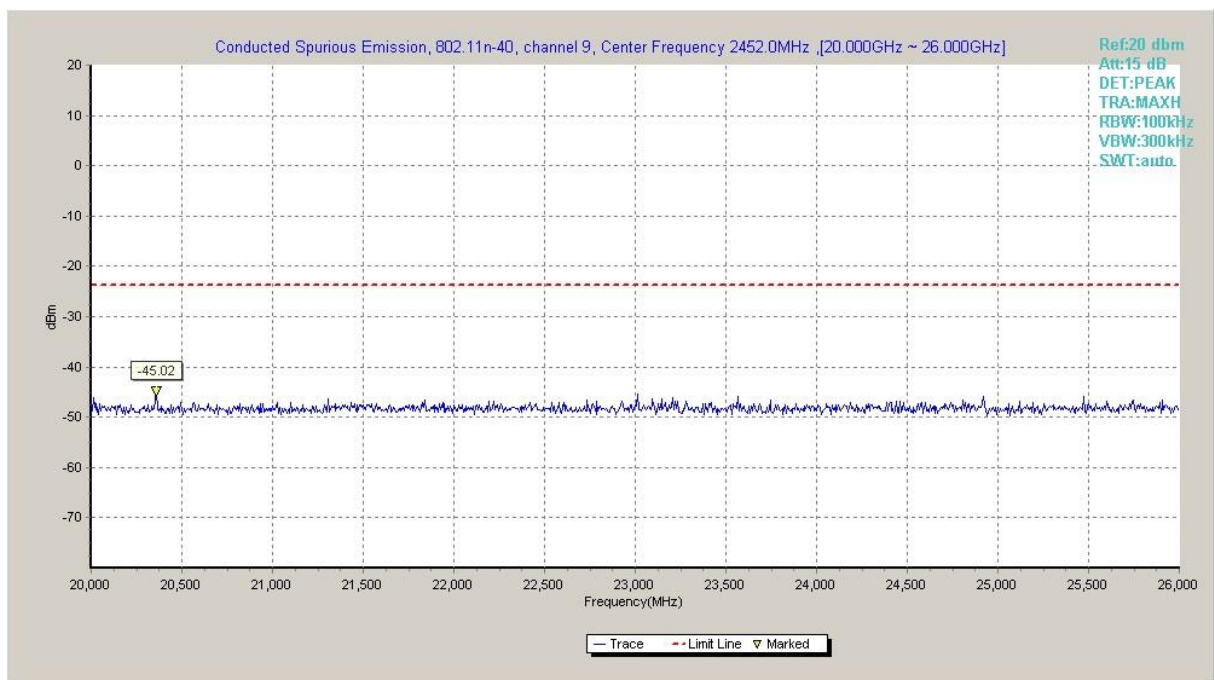


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

A.6.2 Transmitter Spurious Emission - Radiated

Method of Measurement: See ANSI C63.10-2013-clause 6.4 & 6.5 & 6.6

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Frequency (MHz)	Field strength(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

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

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

EUT ID: EUT1

Measurement Results:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.45GHz	Fig.A.6.2.1	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.2	P

802.11g mode

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

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power	2.38GHz ~2.45GHz	Fig.A.6.2.5	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.6	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	Power	2.38GHz ~2.45GHz	Fig.A.6.2.7	P
	Power	2.45GHz ~2.5GHz	Fig.A.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:

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

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)
17986.5	41.4	-25.5	43.4	23.5	V	54.0	12.6
17980.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17988	41.2	-25.5	43.4	23.3	V	54.0	12.8
17982	41.1	-25.5	43.4	23.2	V	54.0	12.9
17994	41.1	-25.5	43.4	23.2	V	54.0	12.9
2386.2	45	-14.2	27.2	32	H	54.0	9.0

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17991	41.4	-25.5	43.4	23.5	V	54.0	12.6
17992.5	41.3	-25.5	43.4	23.4	V	54.0	12.7
17982	41.2	-25.5	43.4	23.3	V	54.0	12.8
17973	41.1	-25.5	43.4	23.2	V	54.0	12.9
17979	41.1	-25.5	43.4	23.2	V	54.0	12.9
17983.5	41.1	-25.5	43.4	23.2	V	54.0	12.9

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17994	41.4	-25.5	43.4	23.5	V	54.0	12.6
17995.5	41.3	-25.5	43.4	23.4	V	54.0	12.7
17988	41.1	-25.5	43.4	23.2	V	54.0	12.9
17997	41.1	-25.5	43.4	23.2	V	54.0	12.9
17986.5	41	-25.5	43.4	23.1	V	54.0	13.0
2485	42.9	-14.2	27.2	29.9	H	54.0	11.1

802.11g
Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17995.5	41.3	-25.5	43.4	23.4	V	54.0	12.7
17977.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17989.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17992.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17986.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
2387.1	42.8	-14.2	27.2	29.8	H	54.0	11.2

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17983.5	41.3	-25.5	43.4	23.4	V	54.0	12.7
17986.5	41.3	-25.5	43.4	23.4	V	54.0	12.7
17988	41.2	-25.5	43.4	23.3	V	54.0	12.8
17989.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17994	41.2	-25.5	43.4	23.3	V	54.0	12.8
17995.5	41.2	-25.5	43.4	23.3	V	54.0	12.8

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17994	41.2	-25.5	43.4	23.3	V	54.0	12.8
17995.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17997	41.2	-25.5	43.4	23.3	V	54.0	12.8
17983.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17985	41.1	-25.5	43.4	23.2	V	54.0	12.9
2485.1	42.3	-14.2	27.2	29.3	H	54.0	11.7

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)
17997	41.2	-25.5	43.4	23.3	V	54.0	12.8
17954.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17989.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17973	41	-25.5	43.4	23.1	V	54.0	13.0
17976	41	-25.5	43.4	23.1	V	54.0	13.0
2390	47.8	-14.2	27.2	34.8	H	54.0	6.2

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17995.5	41.4	-25.5	43.4	23.5	V	54.0	12.6
17982	41.2	-25.5	43.4	23.3	V	54.0	12.8
17988	41.1	-25.5	43.4	23.2	V	54.0	12.9
17989.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17992.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17994	41.1	-25.5	43.4	23.2	V	54.0	12.9

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17983.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17994	41.1	-25.5	43.4	23.2	V	54.0	12.9
17997	41.1	-25.5	43.4	23.2	V	54.0	12.9
17980.5	41	-25.5	43.4	23.1	V	54.0	13.0
17986.5	41	-25.5	43.4	23.1	V	54.0	13.0
2485.1	43.7	-14.2	27.2	30.7	H	54.0	10.3

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)
17995.5	41.4	-25.5	43.4	23.5	V	54.0	12.6
17994	41.3	-25.5	43.4	23.4	V	54.0	12.7
17989.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17976	41.1	-25.5	43.4	23.2	V	54.0	12.9
17980.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
2389.4	43	-14.2	27.2	30	H	54.0	11.0

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17985	41.3	-25.5	43.4	23.4	V	54.0	12.7
17954.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17988	41.2	-25.5	43.4	23.3	V	54.0	12.8
17992.5	41.2	-25.5	43.4	23.3	V	54.0	12.8
17980.5	41.1	-25.5	43.4	23.2	V	54.0	12.9
17991	41.1	-25.5	43.4	23.2	V	54.0	12.9

Ch9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
2483.805	43.4	-38.9	27.7	54.6	H	54.0	10.6
17991	41.3	-17.7	45.6	13.4	H	54.0	12.7
17997	41.2	-17.7	45.6	13.3	V	54.0	12.8
17976	41.2	-17.7	45.6	13.3	H	54.0	12.8
17998.5	41.2	-17.7	45.6	13.3	H	54.0	12.8
17973	41.2	-17.7	45.6	13.3	H	54.0	12.8

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)
17964	52.9	-25.5	43.4	35	V	74.0	21.1
17890.5	52.8	-25.5	43.4	34.9	V	74.0	21.2
17905.5	52.7	-25.5	43.4	34.8	H	74.0	21.3
17989.5	52.6	-25.5	43.4	34.7	V	74.0	21.4
17775	52.5	-25.5	43.4	34.6	H	74.0	21.5
2389.3	58.2	-14.2	27.2	45.2	H	74.0	15.8

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17860.5	52.6	-25.5	43.4	34.7	V	74.0	21.4
17902.5	52.5	-25.5	43.4	34.6	V	74.0	21.5
17886	52.4	-25.5	43.4	34.5	V	74.0	21.6
17961	52.4	-25.5	43.4	34.5	V	74.0	21.6
17527.5	52.3	-26.9	43.4	35.8	H	74.0	21.7
17973	52.3	-25.5	43.4	34.4	V	74.0	21.7

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17992.5	54.2	-25.5	43.4	36.3	V	74.0	19.8
17989.5	53	-25.5	43.4	35.1	H	74.0	21.0
17994	53	-25.5	43.4	35.1	V	74.0	21.0
17901	52.6	-25.5	43.4	34.7	H	74.0	21.4
17959.5	52.6	-25.5	43.4	34.7	V	74.0	21.4
2486.9	55.1	-14.2	27.2	42.1	H	74.0	18.9

802.11g
Ch1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17967	53.3	-25.5	43.4	35.4	V	74.0	20.7
17833.5	52.9	-25.5	43.4	35	V	74.0	21.1
17878.5	52.7	-25.5	43.4	34.8	V	74.0	21.3
17980.5	52.6	-25.5	43.4	34.7	V	74.0	21.4
17985	52.6	-25.5	43.4	34.7	V	74.0	21.4
2388.6	55.4	-14.2	27.2	42.4	V	74.0	18.6

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17989.5	53.1	-25.5	43.4	35.2	V	74.0	20.9
17988	52.7	-25.5	43.4	34.8	V	74.0	21.3
17901	52.5	-25.5	43.4	34.6	V	74.0	21.5
17983.5	52.4	-25.5	43.4	34.5	V	74.0	21.6
17779.5	52.3	-25.5	43.4	34.4	V	74.0	21.7
17899.5	52.2	-25.5	43.4	34.3	V	74.0	21.8

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17989.5	53.6	-25.5	43.4	35.7	V	74.0	20.4
17973	53.4	-25.5	43.4	35.5	V	74.0	20.6
17971.5	52.8	-25.5	43.4	34.9	V	74.0	21.2
17976	52.6	-25.5	43.4	34.7	H	74.0	21.4
17970	52.5	-25.5	43.4	34.6	H	74.0	21.5
2496.6	55.4	-14.2	27.2	42.4	V	74.0	18.6

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)
17907	53.2	-25.5	43.4	35.3	V	74.0	20.8
17965.5	52.9	-25.5	43.4	35	H	74.0	21.1
17985	52.9	-25.5	43.4	35	H	74.0	21.1
17989.5	52.8	-25.5	43.4	34.9	V	74.0	21.2
17799	52.5	-25.5	43.4	34.6	V	74.0	21.5
2389.8	60.5	-14.2	27.2	47.5	H	74.0	13.5

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17967	53.2	-25.5	43.4	35.3	H	74.0	20.8
17971.5	52.5	-25.5	43.4	34.6	V	74.0	21.5
17979	52.3	-25.5	43.4	34.4	H	74.0	21.7
17997	52.3	-25.5	43.4	34.4	V	74.0	21.7
17976	52.2	-25.5	43.4	34.3	V	74.0	21.8
17985	52.2	-25.5	43.4	34.3	H	74.0	21.8

Ch11

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17895	52.6	-25.5	43.4	34.7	V	74.0	21.4
17989.5	52.6	-25.5	43.4	34.7	V	74.0	21.4
17968.5	52.5	-25.5	43.4	34.6	V	74.0	21.5
17983.5	52.5	-25.5	43.4	34.6	V	74.0	21.5
17976	52.4	-25.5	43.4	34.5	V	74.0	21.6
2485.1	55.5	-14.2	27.2	42.5	H	74.0	18.5

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)
17992.5	52.9	-25.5	43.4	35	V	74.0	21.1
17908.5	52.6	-25.5	43.4	34.7	V	74.0	21.4
17917.5	52.5	-25.5	43.4	34.6	V	74.0	21.5
17985	52.5	-25.5	43.4	34.6	V	74.0	21.5
17931	52.4	-25.5	43.4	34.5	V	74.0	21.6
2333	55.7	-14.6	27.2	43.1	V	74.0	18.3

Ch6

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
17992.5	54	-25.5	43.4	36.1	V	74.0	20.0
17883	52.7	-25.5	43.4	34.8	V	74.0	21.3
17901	52.6	-25.5	43.4	34.7	V	74.0	21.4
17949	52.6	-25.5	43.4	34.7	V	74.0	21.4
17890.5	52.5	-25.5	43.4	34.6	V	74.0	21.5
17965.5	52.5	-25.5	43.4	34.6	V	74.0	21.5

Ch9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	P _{Mea} (dBuV/m)	Polarization	Limit (dBuV/m)	Margin (dBuV/m)
2483.815	57.8	-38.9	27.7	69	H	74.0	16.2
17502	53	-19.2	45.6	26.6	H	74.0	21.0
17985	52.9	-17.7	45.6	25	V	74.0	21.1
17944.5	52.8	-17.7	45.6	24.9	H	74.0	21.2
17898	52.7	-18.5	45.6	25.6	H	74.0	21.3
17979	52.7	-17.7	45.6	24.8	H	74.0	21.3

Test graphs as below:

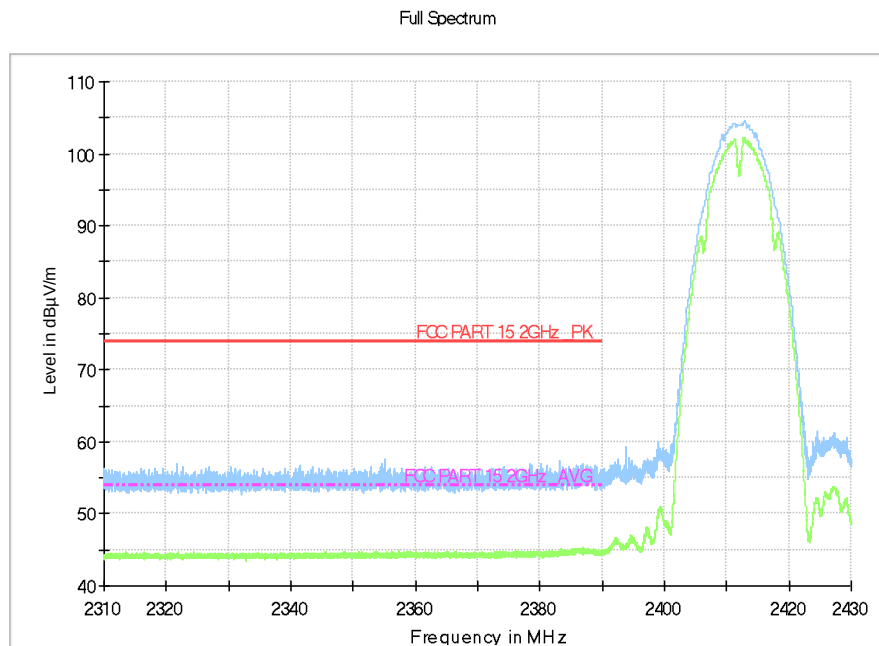


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz

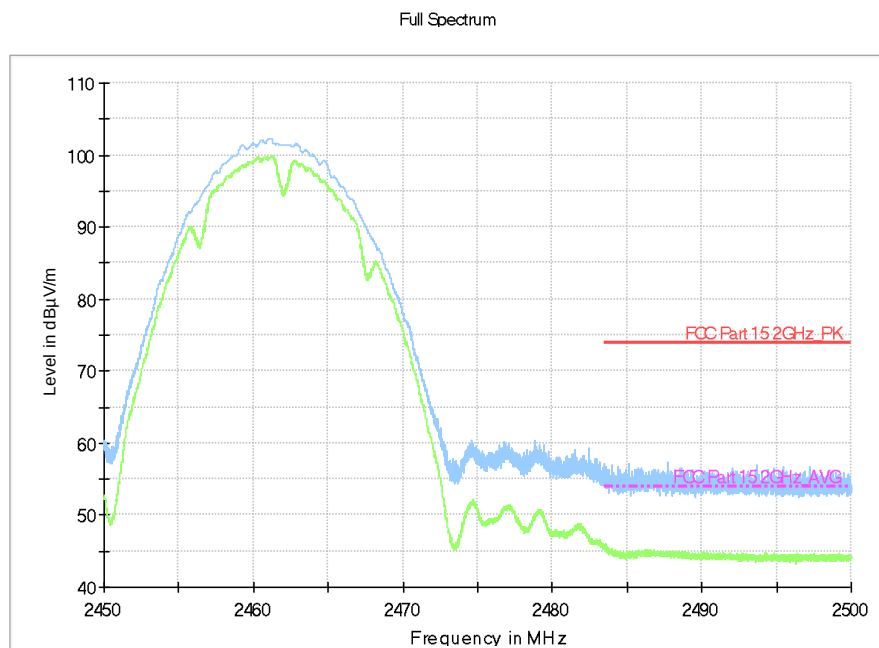


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

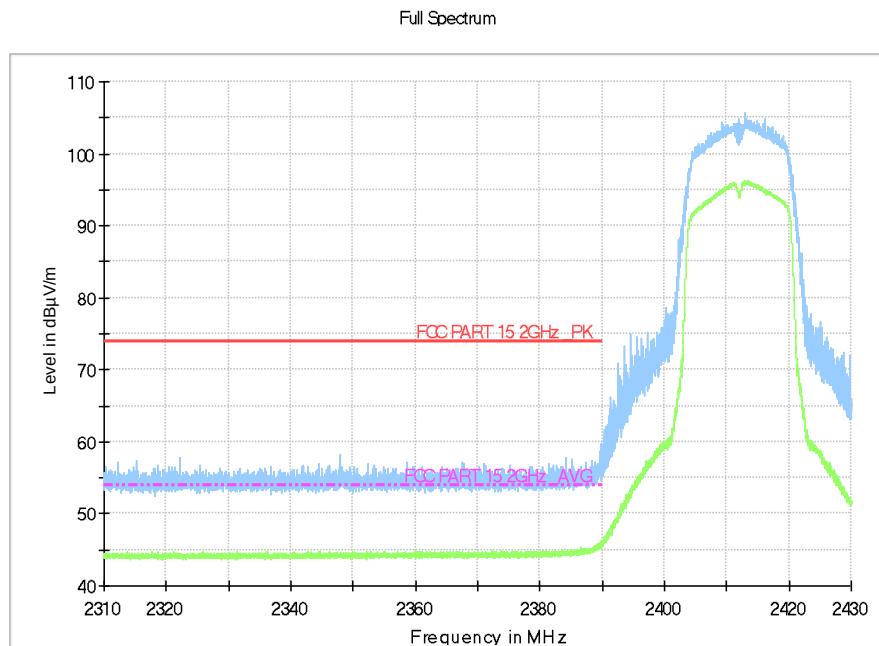


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz

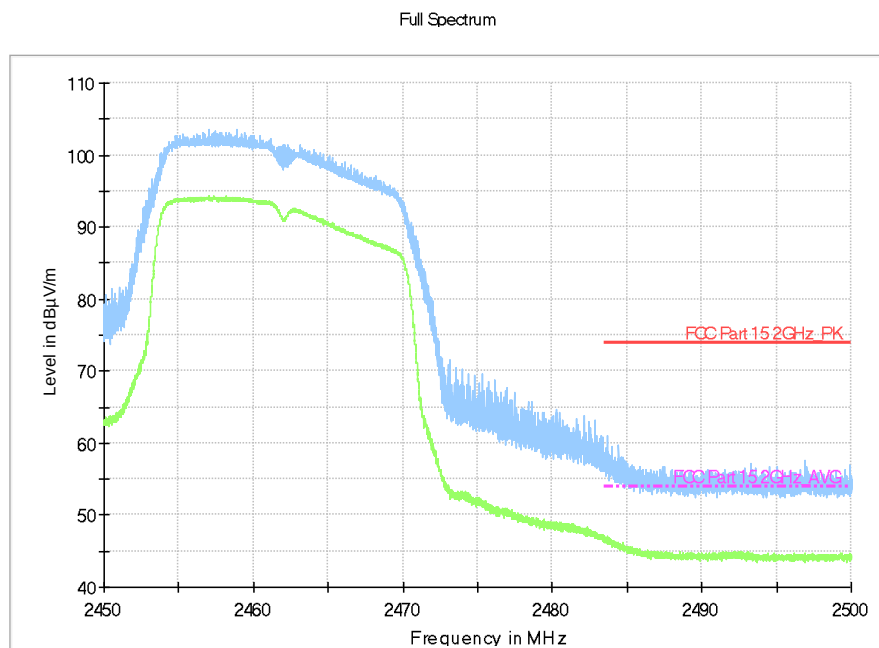
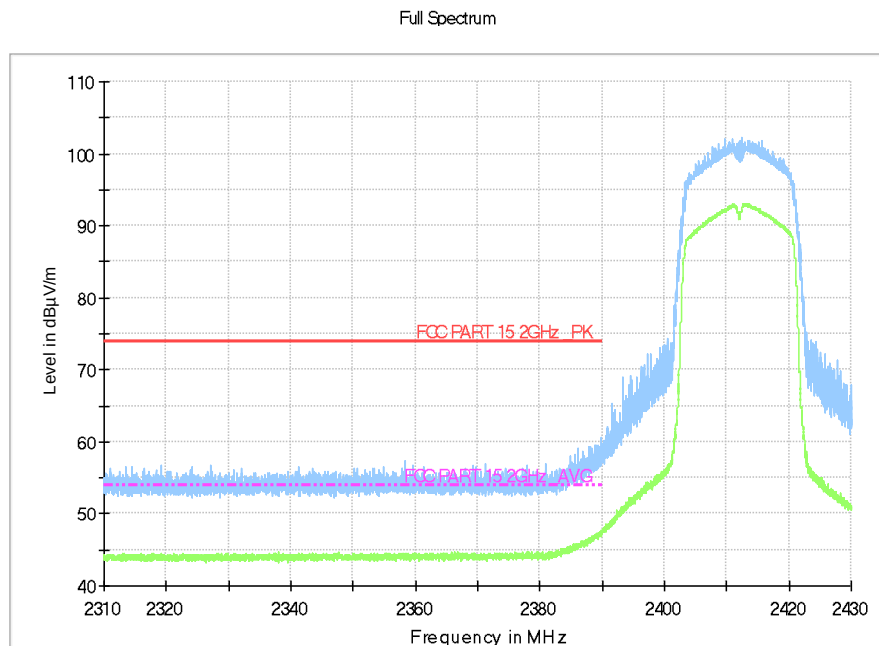
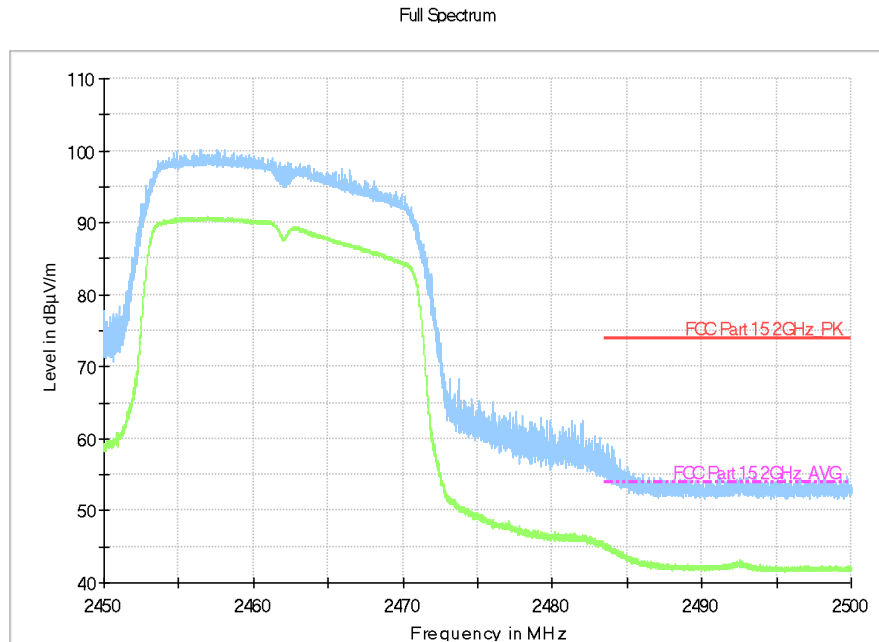


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz



**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1,
2.38 GHz - 2.45GHz**
Fig.A.6.2.6 GHz)



**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11,
2.45 GHz - 2.50GHz**

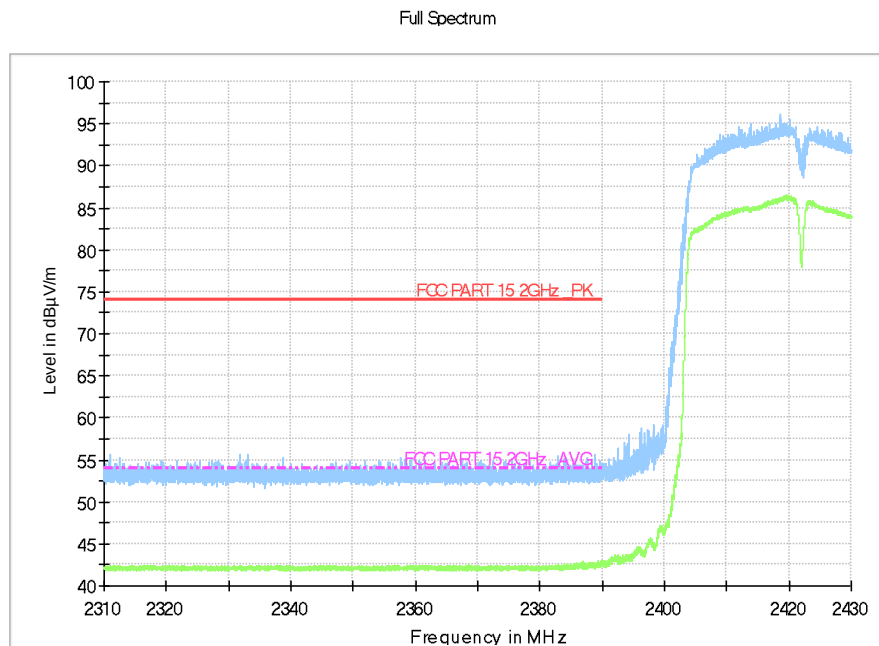


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.45GHz

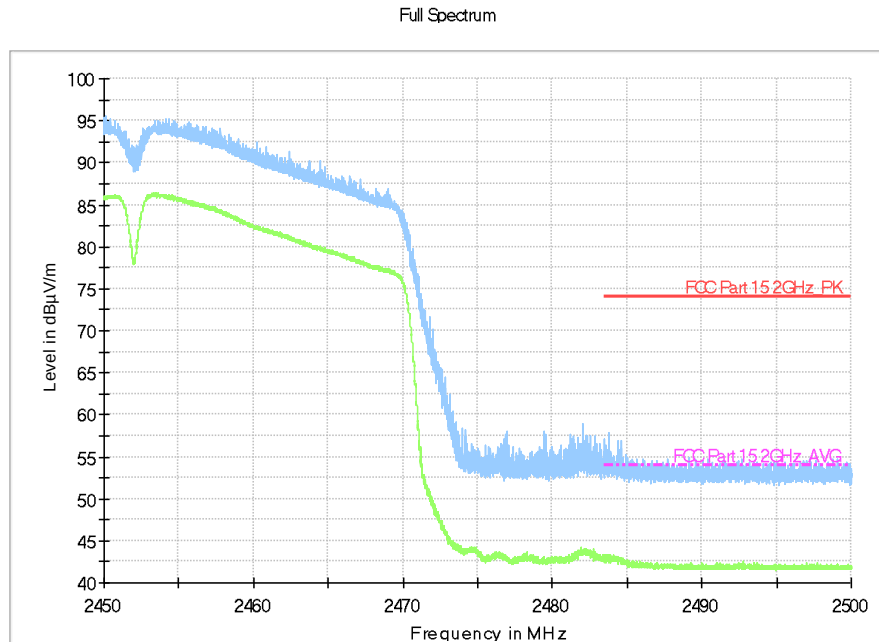


Fig.A.6.2.9 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

A.7. AC Power-line Conducted Emission

Method of Measurement: See ANSI C63.10-2013-clause 6.2

- 1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
- 2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
- 3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
- 4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.
- 5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements 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:

Set.1

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.				

Set.2

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	67 to 56	Fig.A.7.3	Fig.A.7.4	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.7.3	Fig.A.7.4	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:

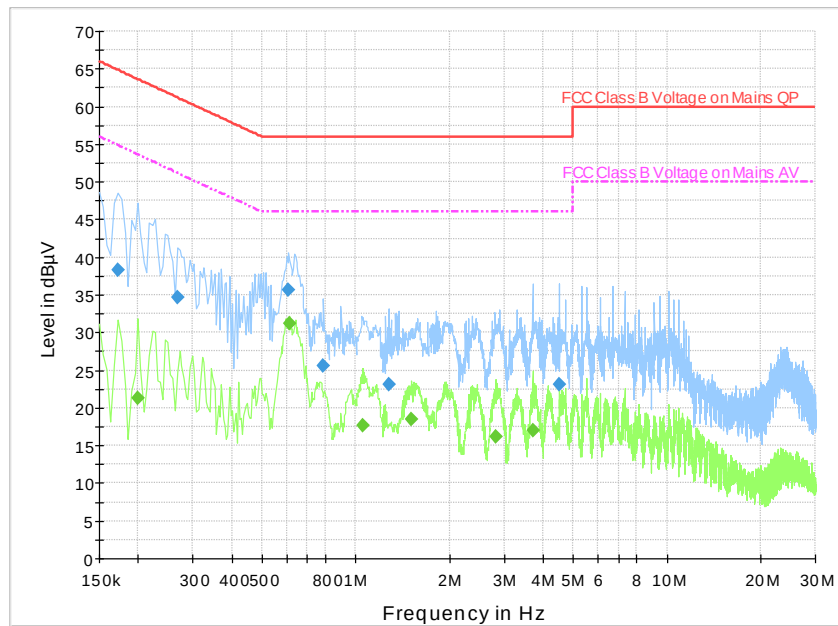


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.172500	38.3	L1	19.8	26.5	64.8
0.267000	34.7	L1	19.8	26.5	61.2
0.609000	35.7	L1	19.9	20.3	56.0
0.789000	25.6	N	19.9	30.4	56.0
1.275000	23.1	N	19.9	32.9	56.0
4.510500	23.1	L1	19.8	32.9	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.199500	21.2	L1	19.8	32.4	53.6
0.613500	31.2	L1	19.9	14.8	46.0
1.054500	17.7	L1	19.8	28.3	46.0
1.513500	18.4	L1	19.8	27.6	46.0
2.814000	16.1	L1	19.8	29.9	46.0
3.705000	17.0	L1	19.8	29.0	46.0

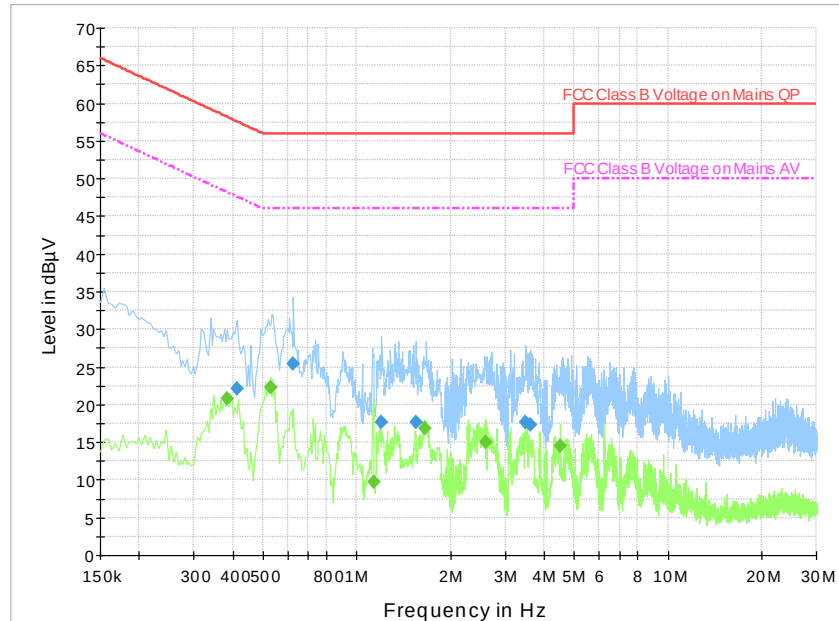


Fig.A.7.2 AC Powerline Conducted Emission-Iidle

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)
0.411000	22.1	N	19.9	35.5	57.6
0.627000	25.4	N	19.9	30.6	56.0
1.203000	17.6	N	19.9	38.4	56.0
1.554000	17.7	N	19.8	38.3	56.0
3.498000	17.7	N	19.8	38.3	56.0
3.610500	17.3	N	19.8	38.7	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.384000	20.8	L1	19.8	27.4	48.2
0.528000	22.3	L1	19.8	23.7	46.0
1.131000	9.7	L1	19.8	36.3	46.0
1.662000	16.8	L1	19.8	29.2	46.0
2.607000	15.0	L1	19.8	31.0	46.0
4.524000	14.6	L1	19.8	31.4	46.0

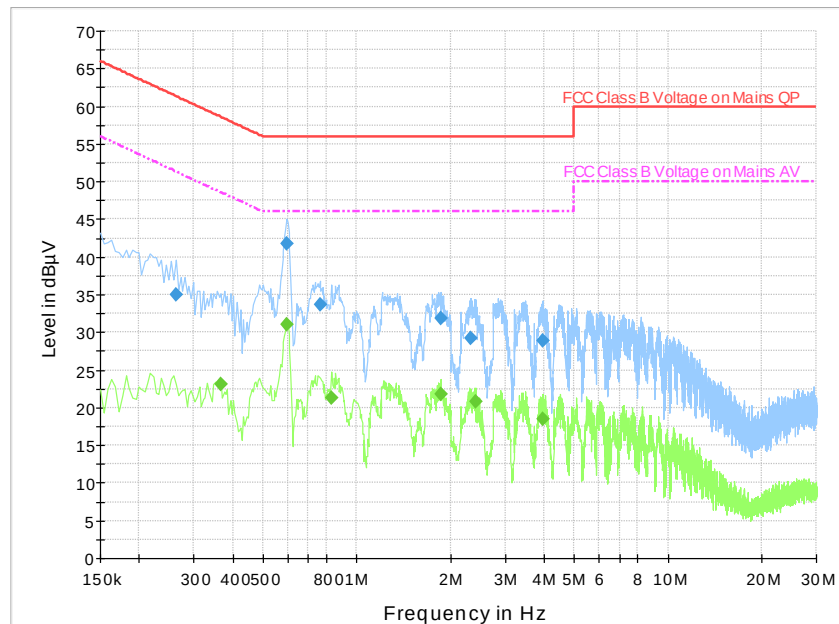


Fig.A.7.3 AC Powerline Conducted Emission-802.11b

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

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.262500	35.0	N	19.9	26.3	61.4
0.595500	41.7	L1	19.9	14.3	56.0
0.762000	33.7	L1	19.8	22.3	56.0
1.869000	31.8	L1	19.8	24.2	56.0
2.332500	29.3	L1	19.8	26.7	56.0
3.966000	28.9	L1	19.8	27.1	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.366000	23.0	L1	19.8	25.5	48.6
0.595500	31.1	L1	19.9	14.9	46.0
0.829500	21.4	L1	19.8	24.6	46.0
1.869000	21.7	L1	19.8	24.3	46.0
2.409000	20.7	L1	19.8	25.3	46.0
3.966000	18.5	L1	19.8	27.5	46.0

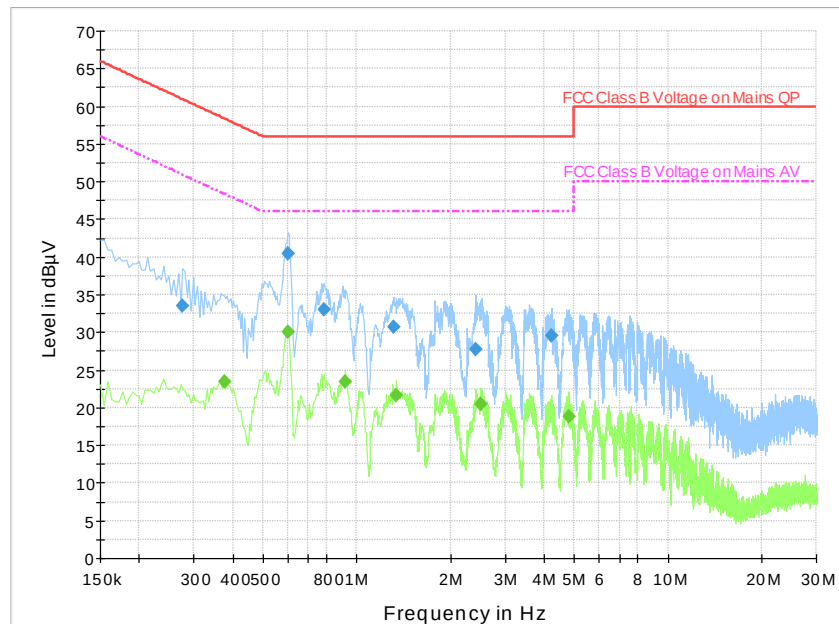


Fig.A.7.4 AC Powerline Conducted Emission-Iidle

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

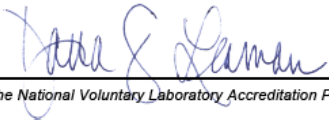
Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.276000	33.5	N	19.9	27.4	60.9
0.600000	40.4	L1	19.9	15.6	56.0
0.784500	33.0	L1	19.8	23.0	56.0
1.315500	30.7	L1	19.8	25.3	56.0
2.404500	27.8	L1	19.8	28.2	56.0
4.222500	29.6	L1	19.8	26.4	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.375000	23.4	L1	19.8	25.0	48.4
0.600000	30.1	L1	19.9	15.9	46.0
0.919500	23.5	L1	19.8	22.5	46.0
1.342500	21.6	L1	19.8	24.4	46.0
2.512500	20.4	L1	19.8	25.6	46.0
4.789500	18.8	L1	19.8	27.2	46.0

ANNEX B: Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology NVLAP[®] Certificate of Accreditation to ISO/IEC 17025:2005 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 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i> 2019-09-26 through 2020-09-30 Effective Dates   For the National Voluntary Laboratory Accreditation Program

END OF REPORT