

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

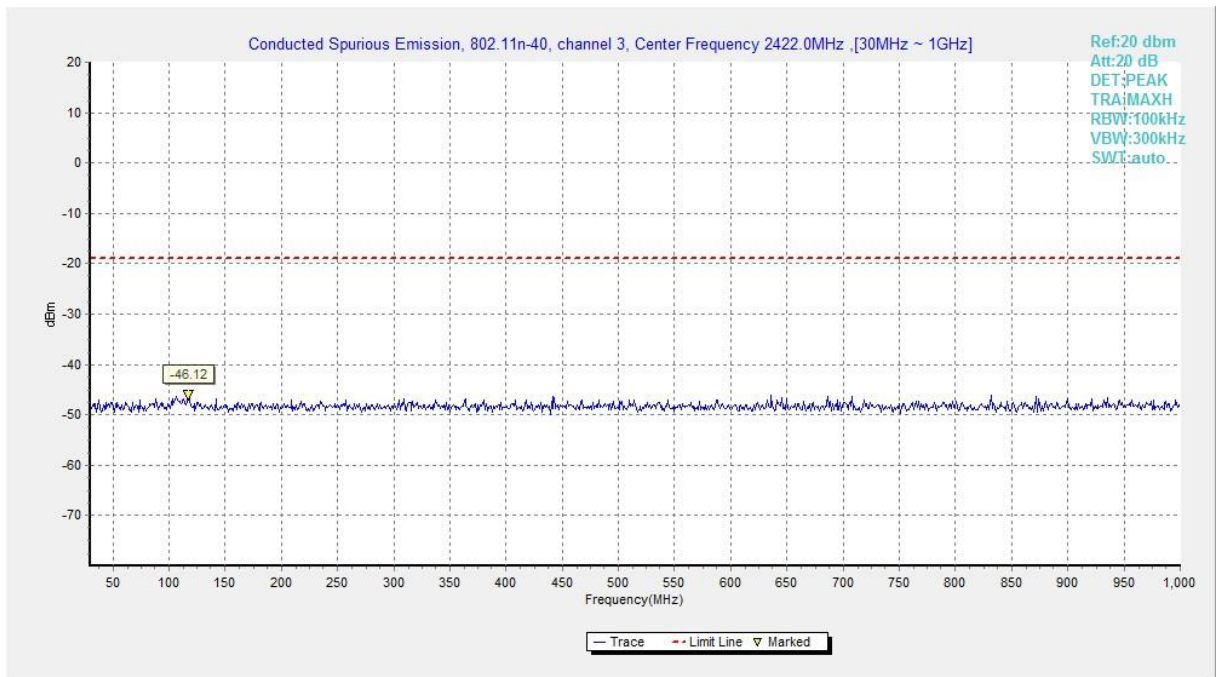


Fig.A.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)

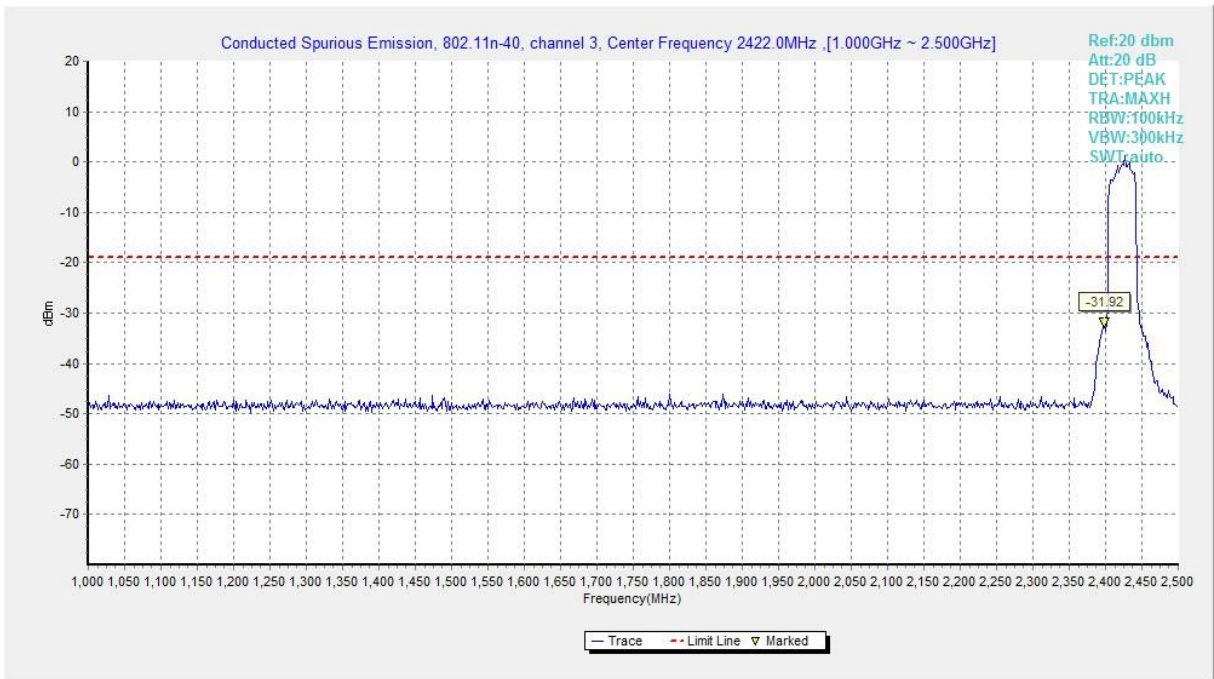


Fig.A.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)

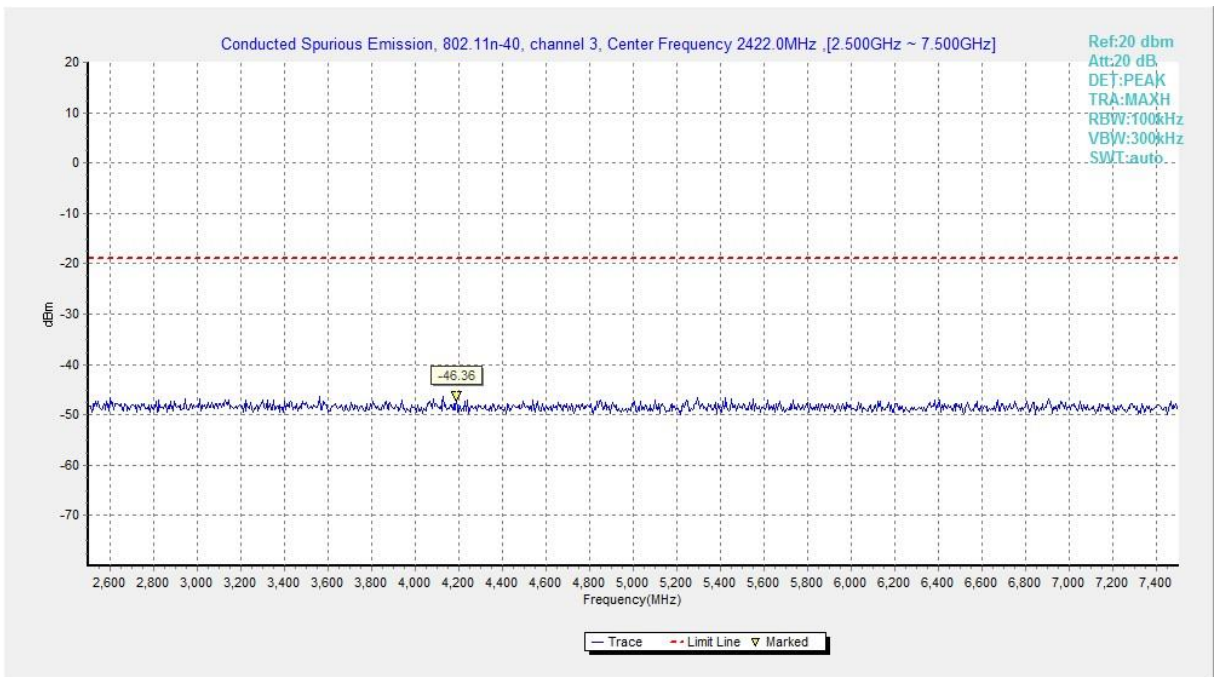


Fig.A.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)

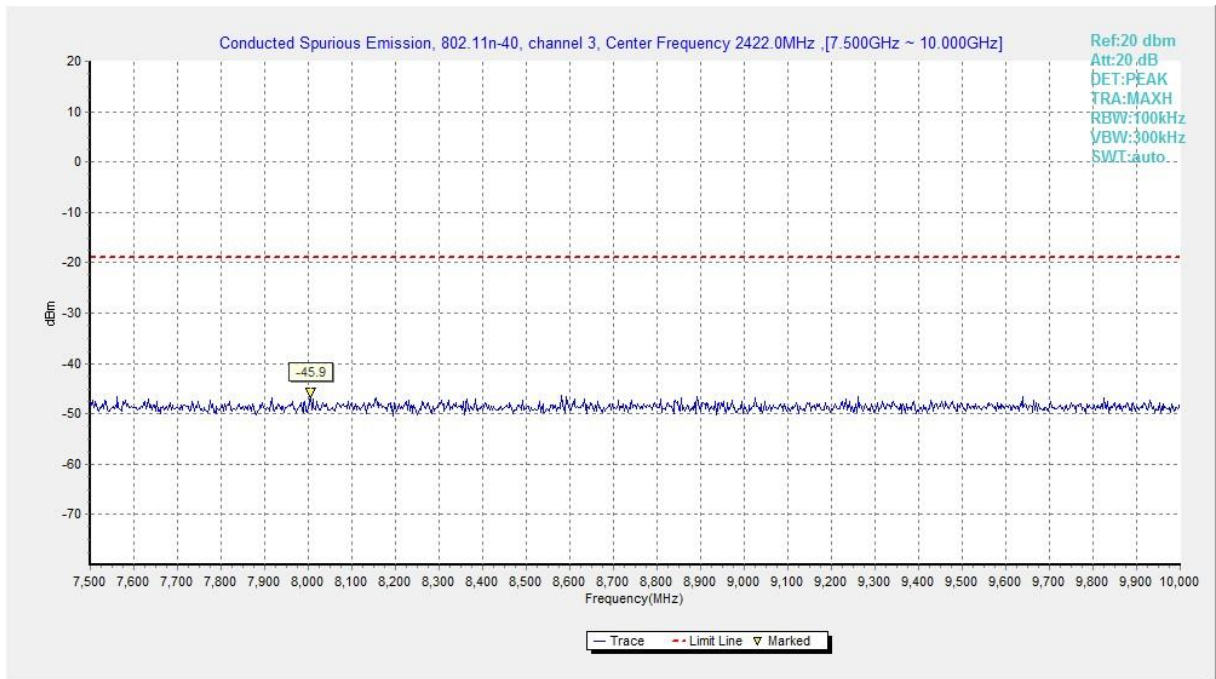


Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)

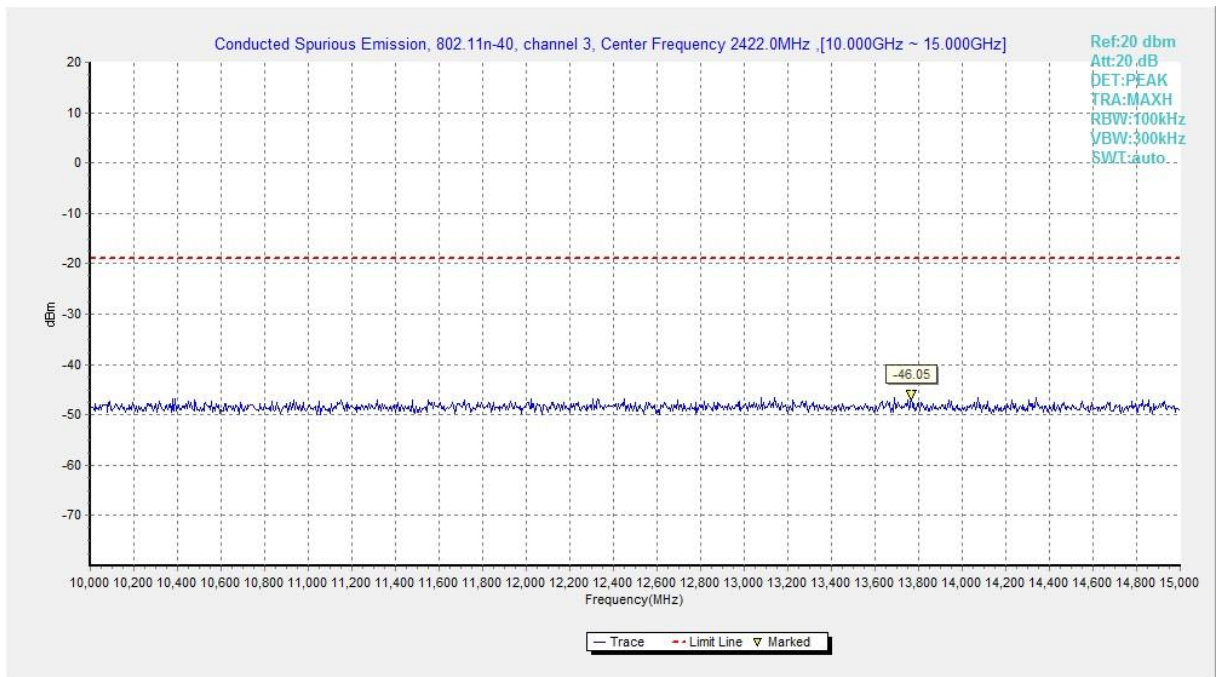


Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)

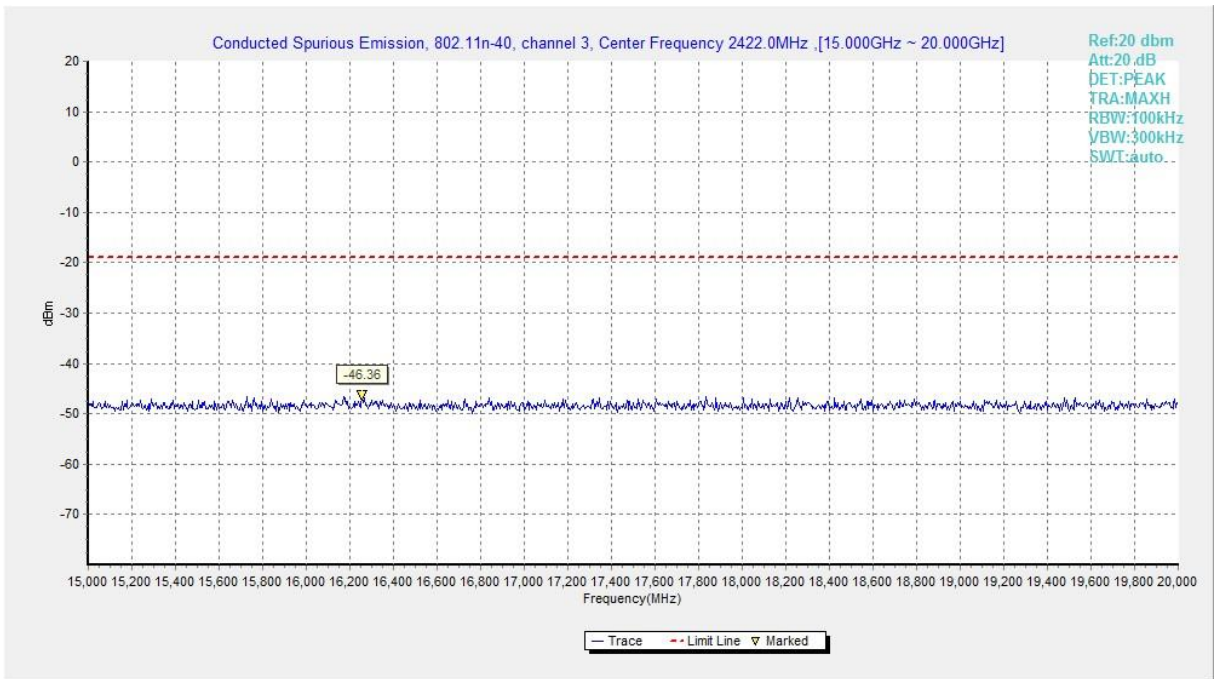


Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)

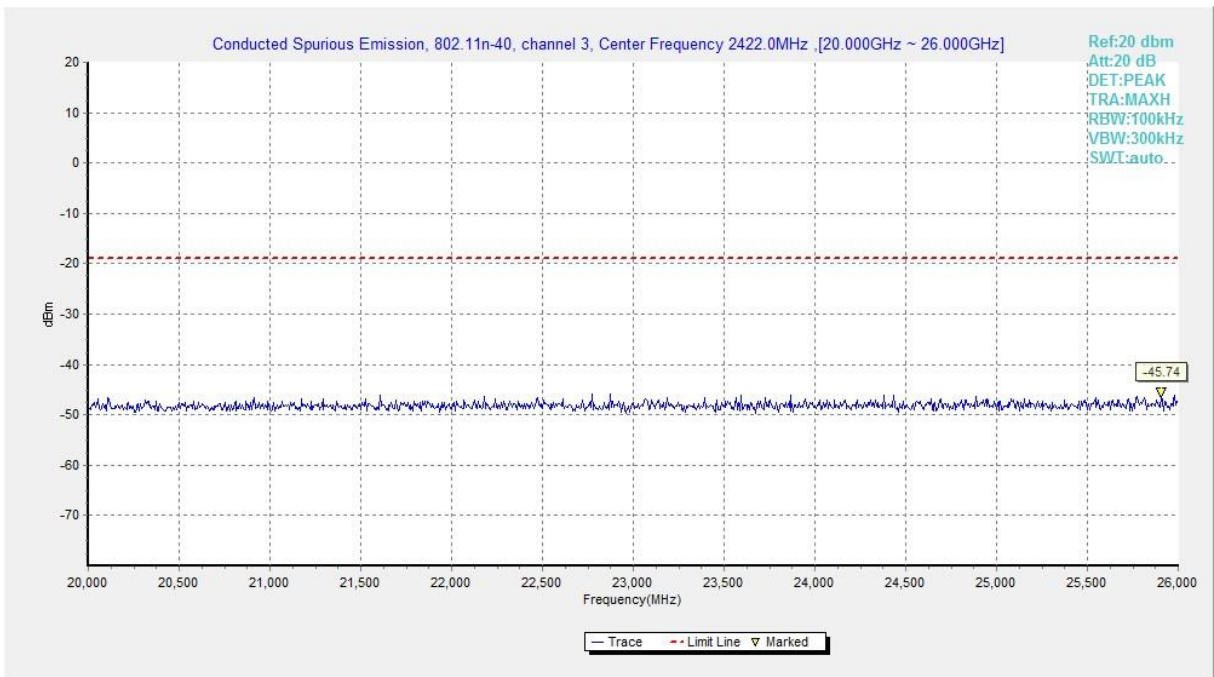


Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

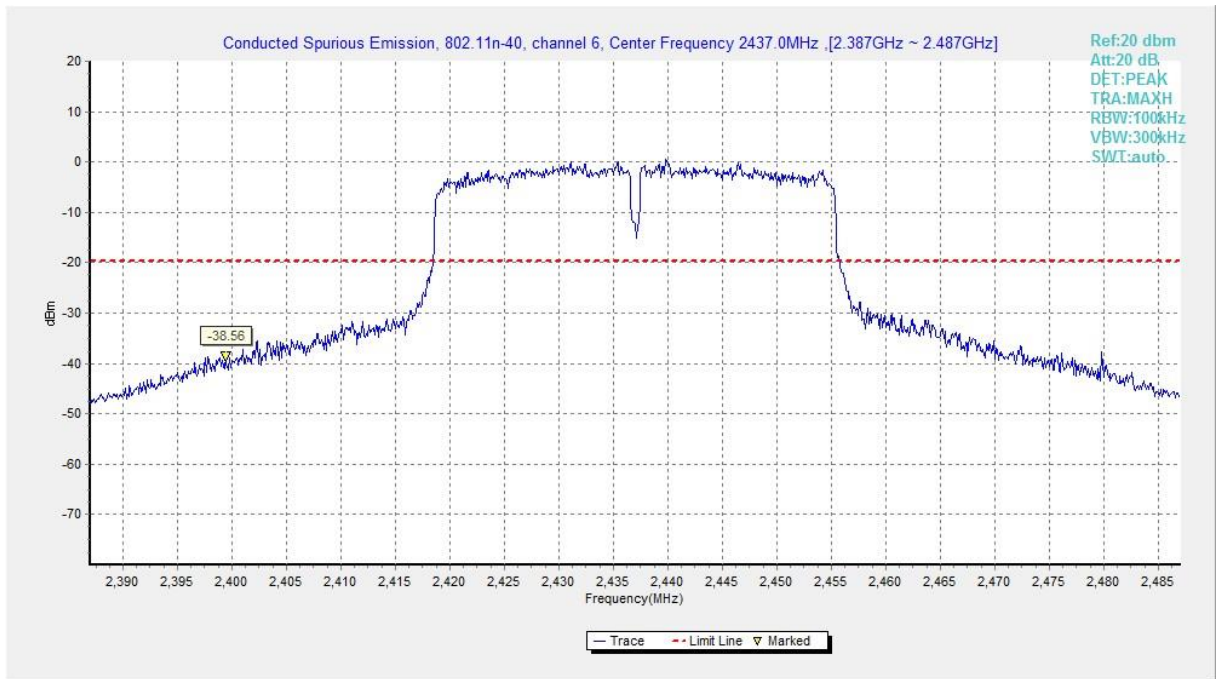


Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

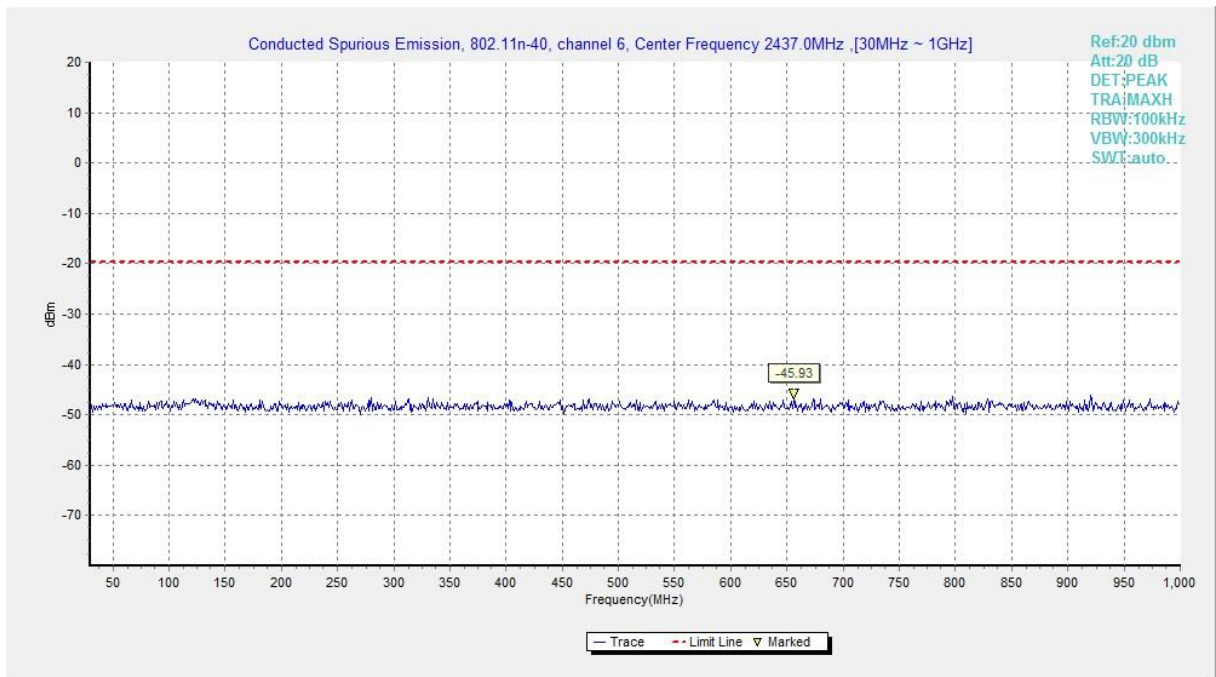


Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

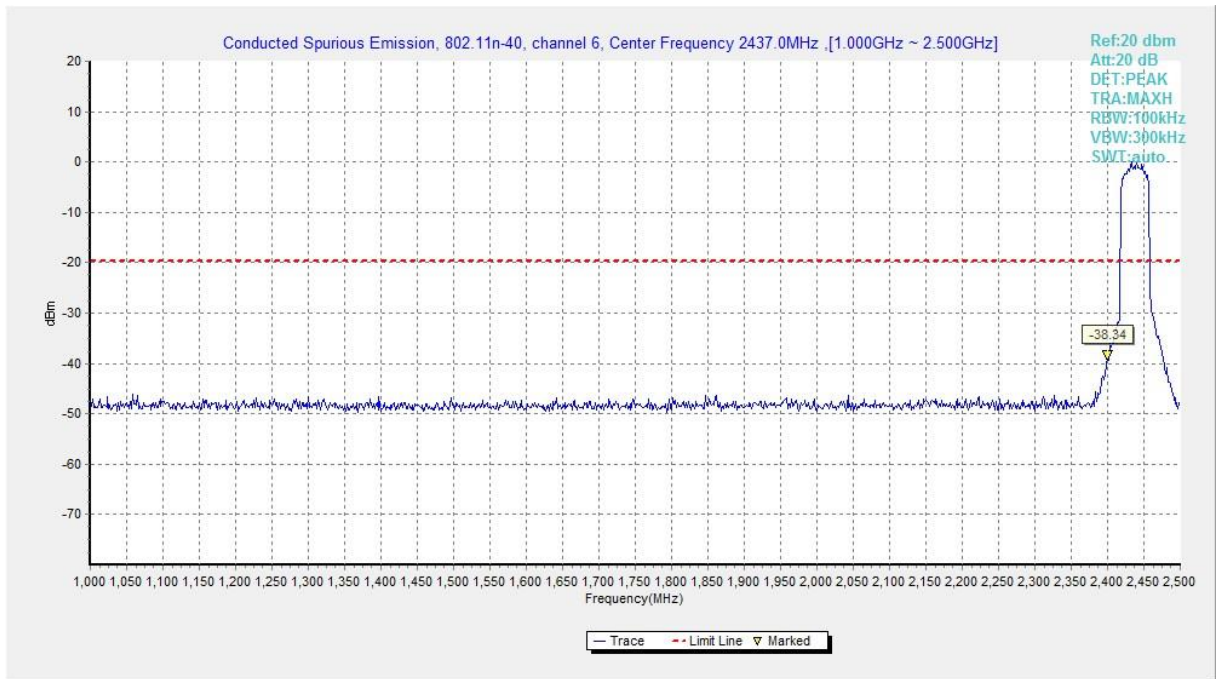


Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

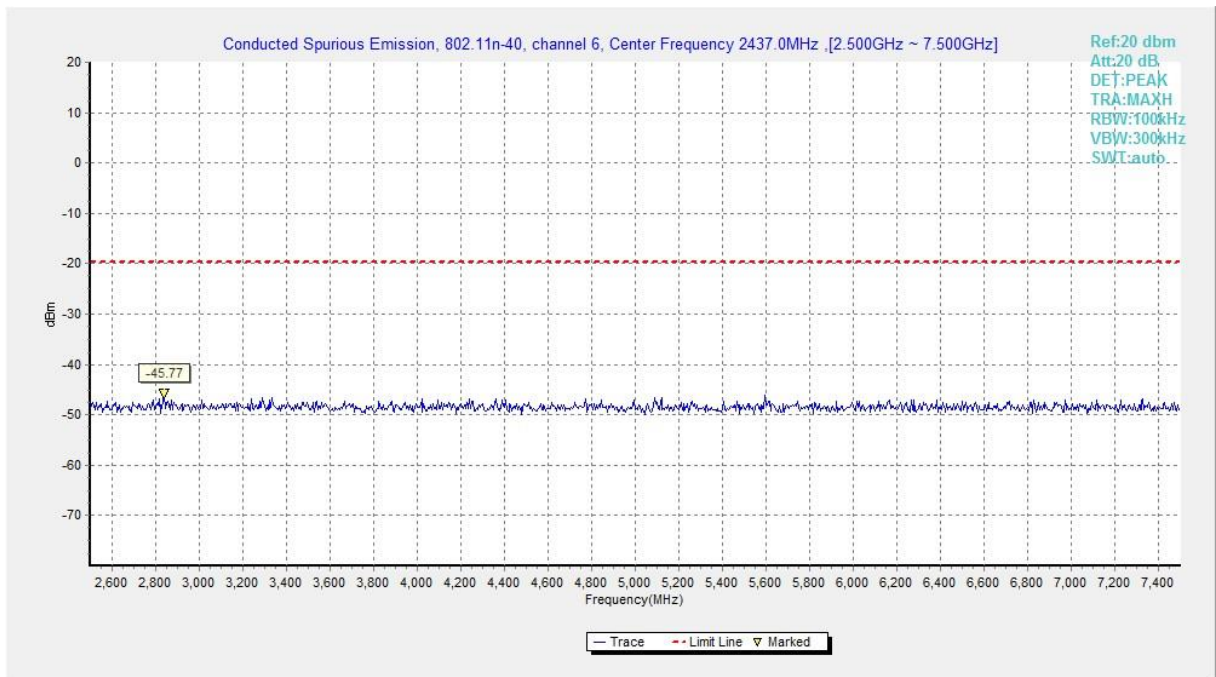


Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

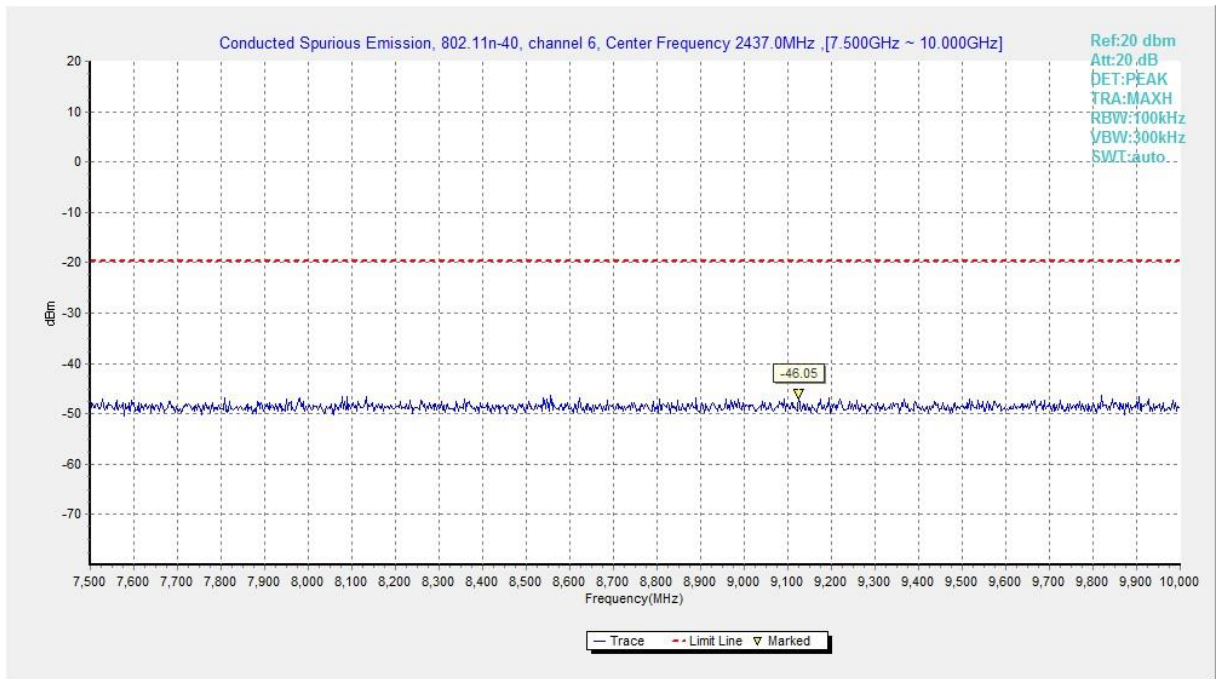


Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

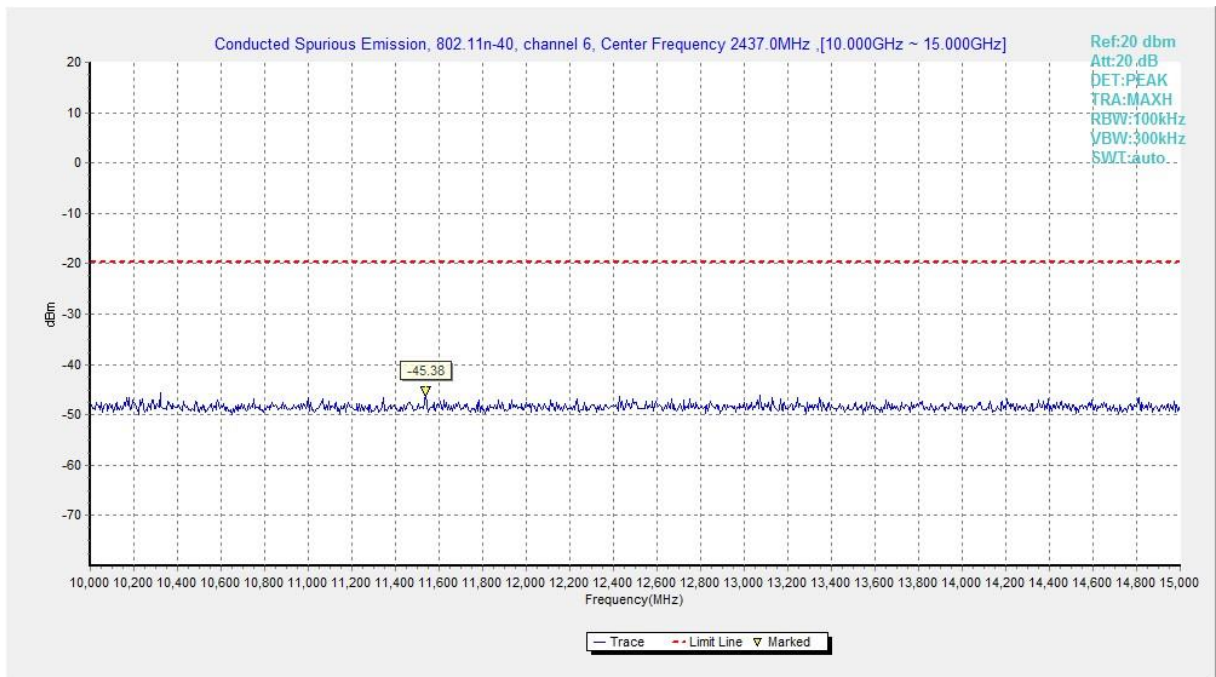


Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

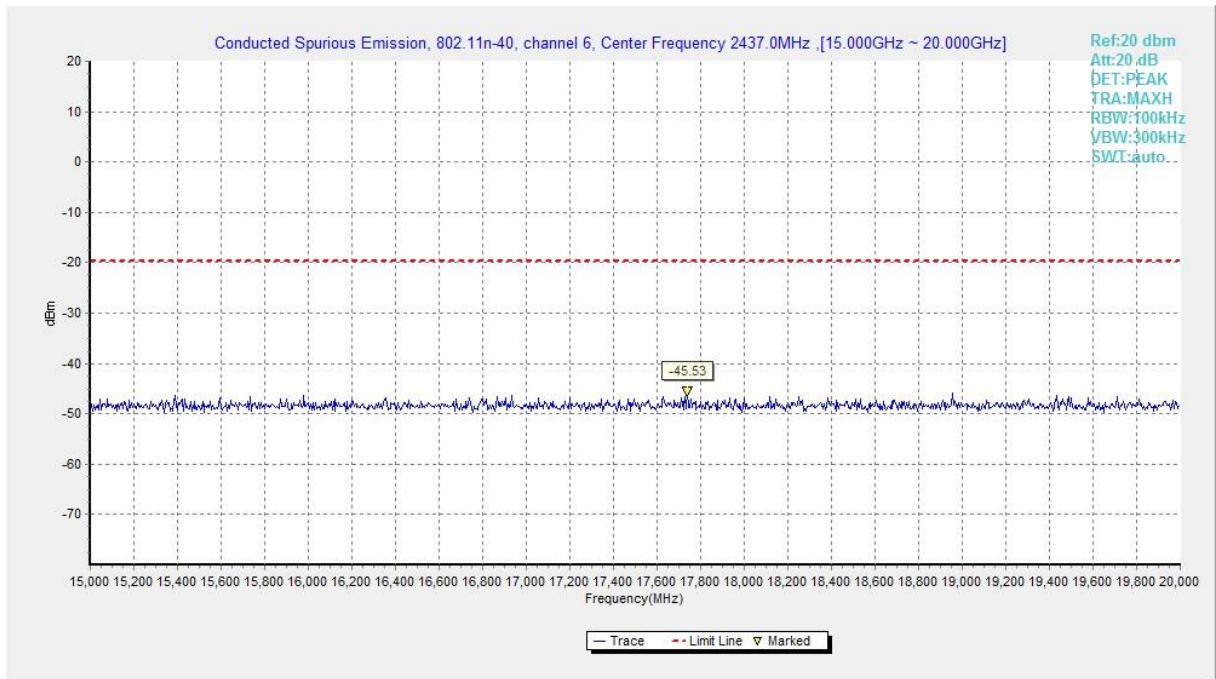


Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

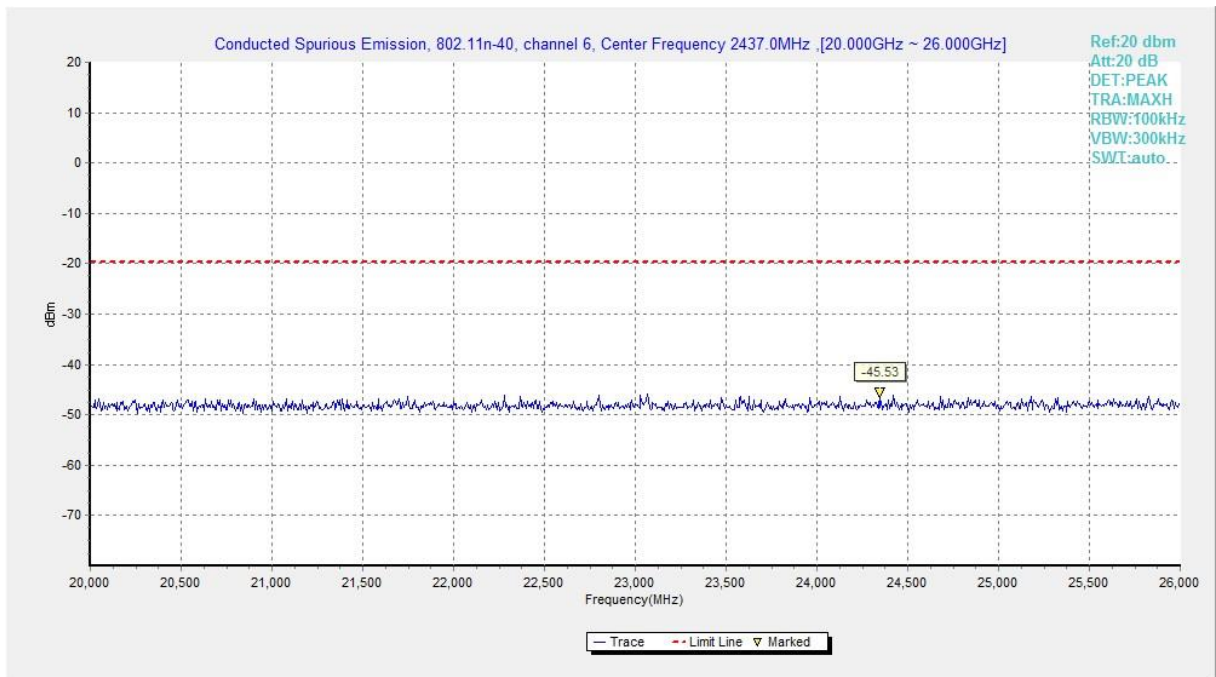


Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

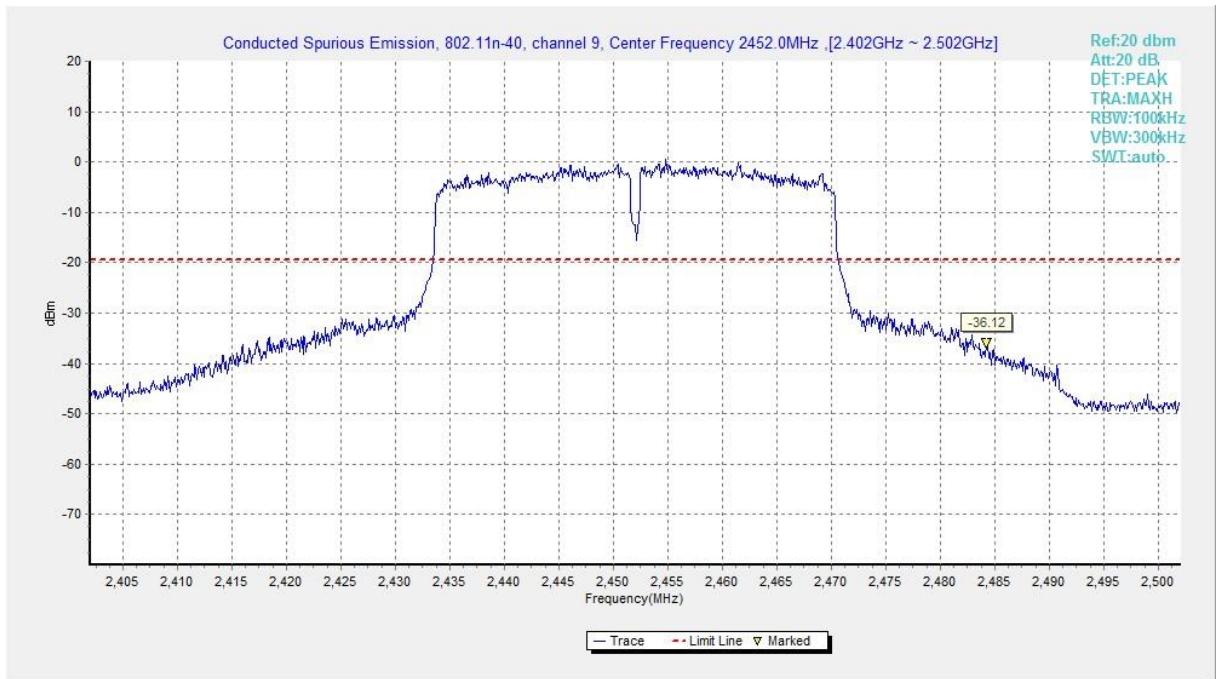


Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

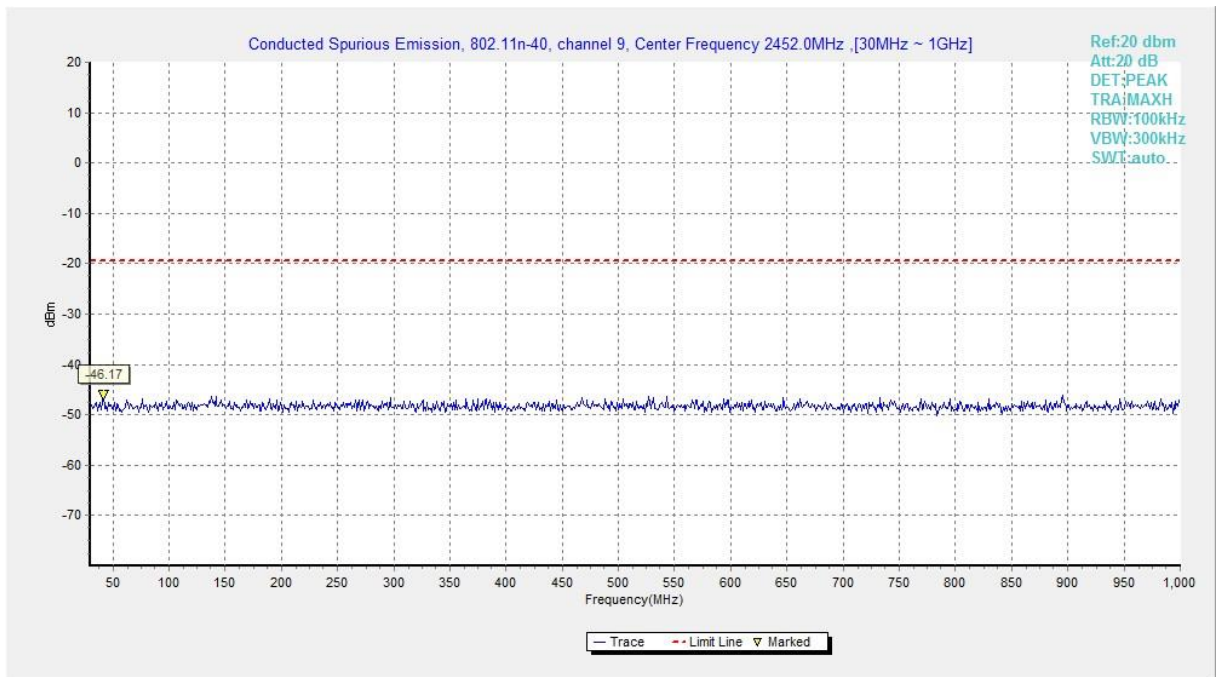


Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

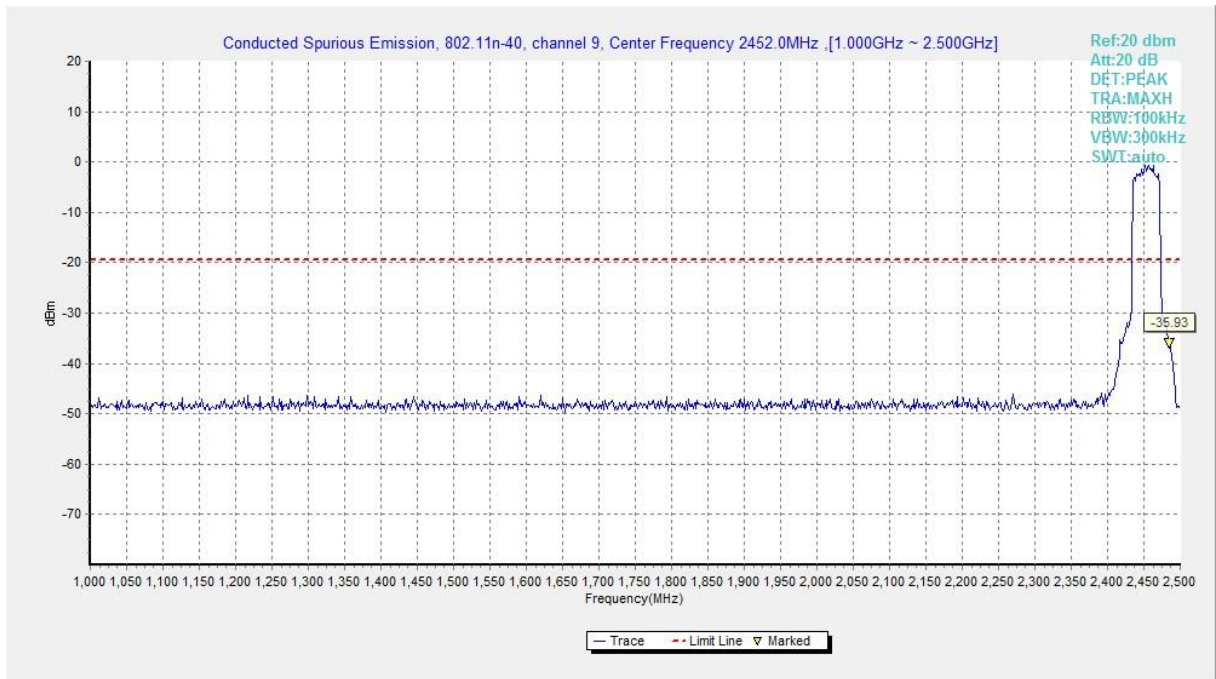


Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

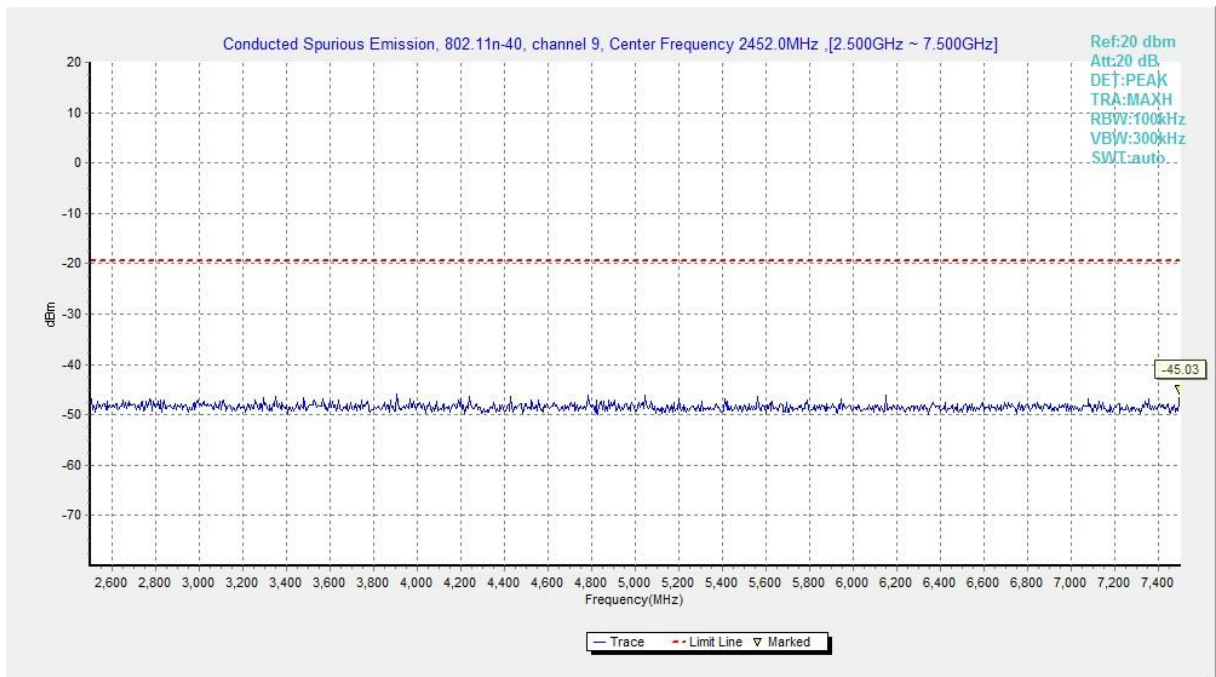


Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

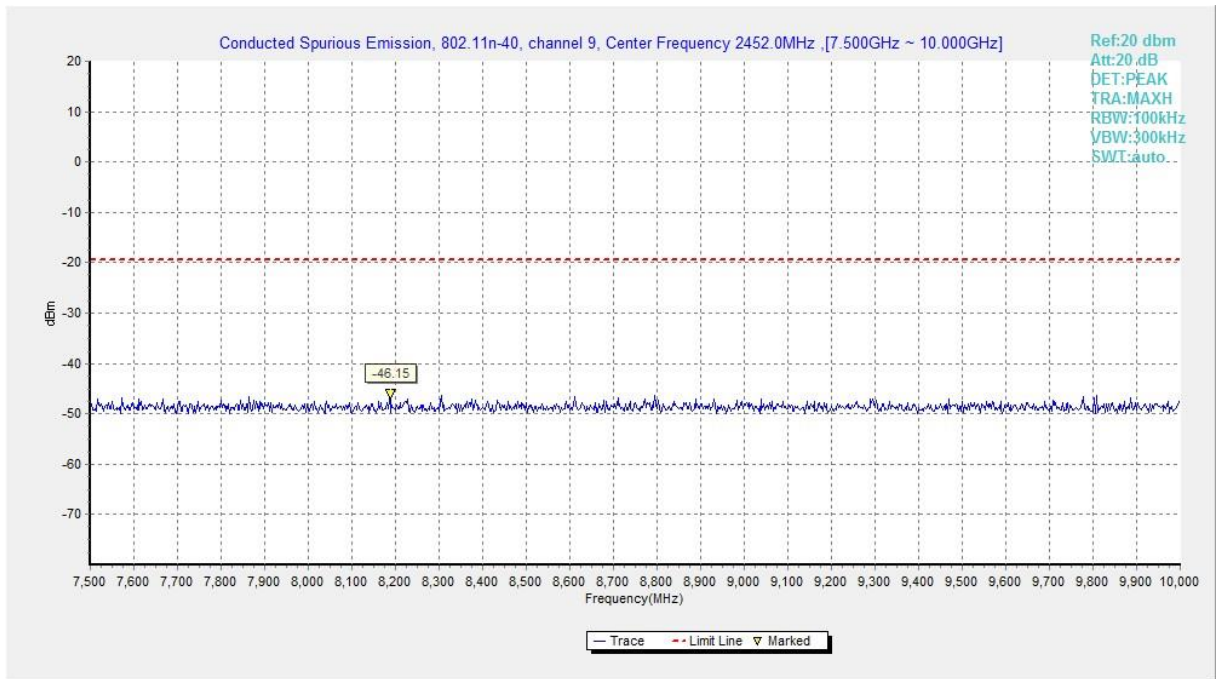


Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

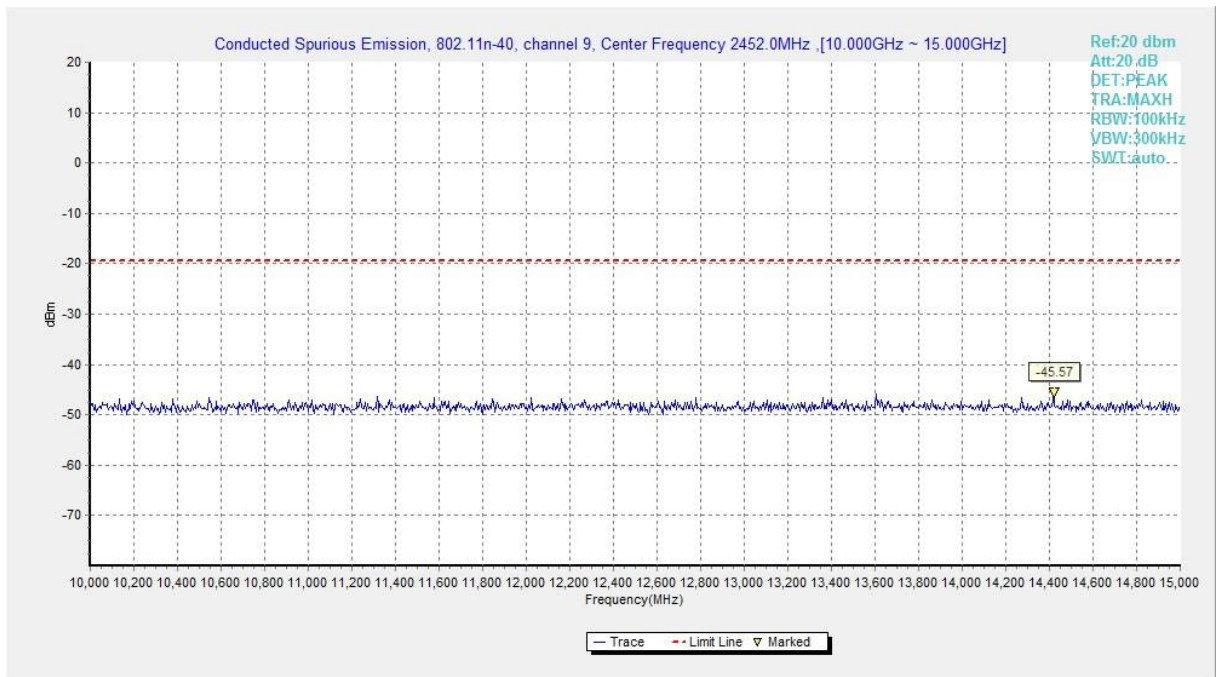


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

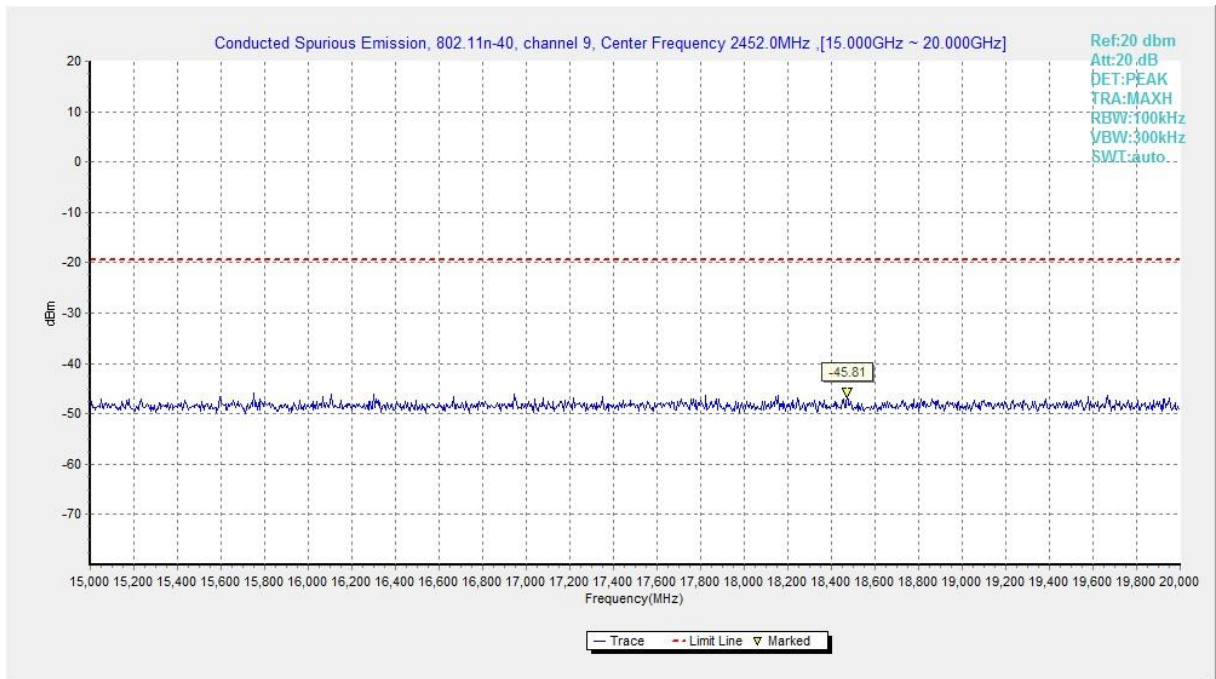


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

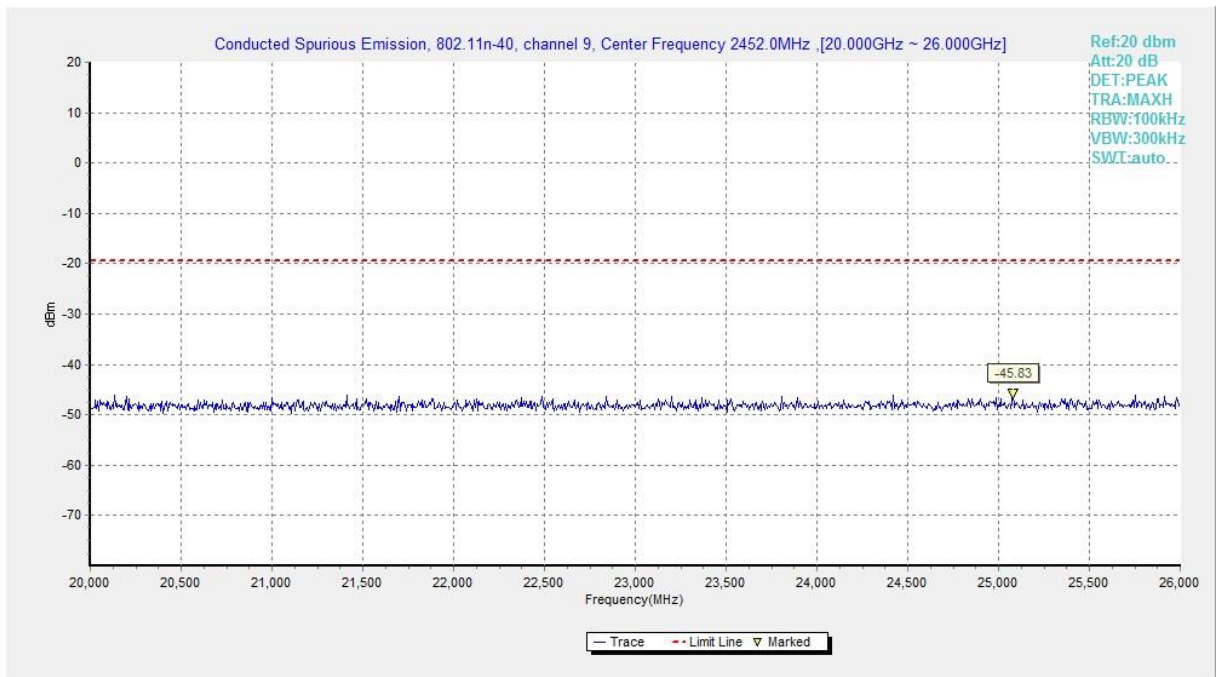


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

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(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 for Set.11:

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power	2.38GHz ~2.43GHz	Fig.A.6.2.1	P
	1	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	9 kHz ~30 MHz	--	P
		30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	Power	18 GHz~ 26.5 GHz	--	P
		2.45GHz ~2.5GHz	Fig.A.6.2.2	P
		11	1 GHz ~ 3 GHz	--
	3 GHz ~ 18 GHz		--	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power	2.38GHz ~2.43GHz	Fig.A.6.2.3	P
	1	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.4	P
	11	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	Power	2.38GHz ~2.43GHz	Fig.A.6.2.5	P
	1	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.6	P
	11	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P



802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	Power	2.38GHz ~2.43GHz	Fig.A.6.2.7	P
	3	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
	6	30 MHz ~1 GHz	--	P
		1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	P
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.8	P
	9	1 GHz ~ 3 GHz	--	P
		3 GHz ~ 18 GHz	--	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:

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



802.11b-Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2384.840	41.7	-38.8	27.2	53.349	H
4824.000	45.4	-37.3	32.3	50.372	H
18000.000	41.0	-26.5	46.4	21.105	V
17988.000	40.8	-25.5	43.4	22.902	H
17994.000	40.8	-25.5	43.4	22.902	H
17997.000	40.7	-25.5	43.4	22.802	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
4873.500	49.1	-37.5	32.3	54.274	H
17995.500	41.2	-25.5	43.4	23.302	H
17998.500	40.8	-25.5	43.4	22.902	V
17991.000	40.8	-25.5	43.4	22.902	H
17985.000	40.8	-25.5	43.4	22.902	H
17986.500	40.8	-25.5	43.4	22.902	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2486.755	42.4	-39.0	27.2	54.214	H
4923.000	42.8	-37.2	32.3	47.701	H
17992.500	40.9	-25.5	43.4	23.002	V
17998.500	40.8	-25.5	43.4	22.902	H
18000.000	40.7	-26.5	46.4	20.805	H
17995.500	40.7	-25.5	43.4	22.802	H



802.11b-Peak

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2388.425	54.5	-38.8	27.2	66.149	H
17967.000	52.6	-25.5	43.4	34.702	H
17983.500	52.6	-25.5	43.4	34.702	V
17722.500	52.5	-26.9	43.4	35.952	H
17925.000	52.4	-25.5	43.4	34.502	H
4824.000	52.3	-37.3	32.3	57.272	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
4873.500	53.9	-37.5	32.3	59.074	H
17911.500	53.0	-25.7	43.4	35.342	H
17947.500	52.6	-25.5	43.4	34.702	V
17895.000	52.5	-25.7	43.4	34.842	H
17940.000	52.4	-25.5	43.4	34.502	H
18000.000	52.1	-26.5	46.4	32.205	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2486.575	54.6	-39.0	27.2	66.414	H
17935.500	52.3	-25.5	43.4	34.402	H
17826.000	52.0	-25.7	43.4	34.342	V
17649.000	52.0	-26.9	43.4	35.452	H
17943.000	52.0	-25.5	43.4	34.102	H
17958.000	51.8	-25.5	43.4	33.902	H



802.11g - Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2389.050	44.6	-38.8	27.2	56.249	H
17991.000	53.1	-25.5	43.4	35.202	H
17995.500	40.8	-25.5	43.4	22.902	V
18000.000	40.7	-26.5	46.4	20.805	H
17994.000	40.7	-25.5	43.4	22.802	H
17928.000	40.7	-25.5	43.4	22.802	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
4873.500	41.2	-37.5	32.3	46.374	H
4870.500	40.9	-37.5	32.3	46.074	H
18000.000	40.7	-26.5	46.4	20.805	V
17994.000	40.7	-25.5	43.4	22.802	H
17991.000	40.7	-25.5	43.4	22.802	H
17988.000	40.7	-25.5	43.4	22.802	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2485.145	44.0	-39.0	27.2	55.814	H
17997.000	40.9	-25.5	43.4	23.002	H
18000.000	40.7	-26.5	46.4	20.805	V
17986.500	40.7	-25.5	43.4	22.802	H
17994.000	40.6	-25.5	43.4	22.702	H
17943.000	40.6	-25.5	43.4	22.702	H



802.11g - Peak

Ch1

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
2389.500	59.9	-38.8	27.2	71.549	H
17917.500	53.1	-25.5	43.4	35.202	H
17989.500	52.7	-25.5	43.4	34.802	V
17992.500	52.5	-25.5	43.4	34.602	H
17935.500	52.5	-25.5	43.4	34.602	H
18000.000	52.3	-26.5	46.4	32.405	H

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
17956.500	52.5	-25.5	43.4	34.602	H
17914.500	52.4	-25.5	43.4	34.502	H
17991.000	52.1	-25.5	43.4	34.202	V
4873.500	52.0	-37.5	32.3	57.174	H
4875.000	52.0	-37.5	32.3	57.174	H
17976.000	51.8	-25.5	43.4	33.902	H

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
2484.040	59.3	-39.0	27.2	71.114	H
17922.000	52.2	-25.5	43.4	34.302	H
17811.000	52.2	-25.7	43.4	34.542	V
17784.000	51.9	-25.7	43.4	34.242	H
17991.000	51.9	-25.5	43.4	34.002	H
17950.500	51.7	-25.5	43.4	33.802	H



802.11n-HT20-Average

Ch1

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2386.465	45.7	-38.8	27.2	57.349	H
17992.500	40.9	-25.5	43.4	23.002	H
18000.000	40.8	-26.5	46.4	20.905	V
17989.500	40.8	-25.5	43.4	22.902	H
17994.000	40.7	-25.5	43.4	22.802	H
17988.000	40.7	-25.5	43.4	22.802	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
4870.500	41.9	-37.5	32.3	47.074	H
4873.500	41.8	-37.5	32.3	46.974	H
4872.000	41.7	-37.5	32.3	46.874	V
4875.000	41.6	-37.5	32.3	46.774	H
4869.000	41.4	-37.5	32.3	46.574	H
4876.500	41.2	-37.5	32.3	46.374	H

Ch11

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2483.710	45.2	-39.0	27.2	57.014	H
17998.500	40.8	-25.5	43.4	22.902	H
17995.500	40.7	-25.5	43.4	22.802	V
17994.000	40.7	-25.5	43.4	22.802	H
18000.000	40.7	-26.5	46.4	20.805	H
17986.500	40.7	-25.5	43.4	22.802	H



802.11n-HT20-Peak

Ch1

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
2387.385	62.3	-38.8	27.2	73.949	H
17952.000	52.7	-25.5	43.4	34.802	H
17937.000	52.5	-25.5	43.4	34.602	V
17971.500	52.4	-25.5	43.4	34.502	H
17997.000	52.2	-25.5	43.4	34.302	H
17794.500	52.0	-25.7	43.4	34.342	H

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
4873.500	54.8	-37.5	32.3	59.974	H
4872.000	54.8	-37.5	32.3	59.974	H
4866.000	54.2	-37.5	32.3	59.374	V
4869.000	54.1	-37.5	32.3	59.274	H
4878.000	53.8	-37.5	32.3	58.974	H
4870.500	53.7	-37.5	32.3	58.874	H

Ch11

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
2483.605	58.0	-39.0	27.2	69.814	H
17985.000	53.2	-25.5	43.4	35.302	H
17826.000	52.4	-25.7	43.4	34.742	V
17983.500	52.3	-25.5	43.4	34.402	H
17874.000	52.3	-25.7	43.4	34.642	H
17998.500	51.9	-25.5	43.4	34.002	H



802.11n-HT40-Average

Ch3

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2388.855	64.3	-38.8	27.2	75.949	H
17997.000	40.8	-25.5	43.4	22.902	H
17992.500	40.8	-25.5	43.4	22.902	V
18000.000	40.7	-26.5	46.4	20.805	H
17994.000	40.7	-25.5	43.4	22.802	H
17929.500	40.7	-25.5	43.4	22.802	H

Ch6

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17995.500	41.0	-25.5	43.4	23.102	H
18000.000	40.9	-26.5	46.4	21.005	H
17994.000	40.8	-25.5	43.4	22.902	V
17997.000	40.8	-25.5	43.4	22.902	H
17988.000	40.8	-25.5	43.4	22.902	H
17998.500	40.8	-25.5	43.4	22.902	H

Ch9

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
2484.615	47.9	-39.0	27.2	59.714	H
17991.000	40.7	-25.5	43.4	22.802	H
17992.500	40.7	-25.5	43.4	22.802	V
17995.500	40.7	-25.5	43.4	22.802	H
17989.500	40.7	-25.5	43.4	22.802	H
17959.500	40.6	-25.5	43.4	22.702	H



802.11n-HT40-Peak

Ch3

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
2388.855	64.3	-38.8	27.2	75.949	H
17998.500	52.2	-25.5	43.4	34.302	H
18000.000	52.2	-26.5	46.4	32.305	V
17824.500	52.1	-25.7	43.4	34.442	H
17805.000	52.1	-25.7	43.4	34.442	H
17932.500	52.0	-25.5	43.4	34.102	H

Ch6

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
17968.500	53.1	-25.5	43.4	35.202	H
17859.000	52.4	-25.7	43.4	34.742	H
17982.000	52.2	-25.5	43.4	34.302	V
17983.500	52.2	-25.5	43.4	34.302	H
17961.000	52.2	-25.5	43.4	34.302	H
17953.500	52.1	-25.5	43.4	34.202	H

Ch9

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
2484.405	60.3	-39.0	27.2	72.114	H
17983.500	52.9	-25.5	43.4	35.002	H
17958.000	52.6	-25.5	43.4	34.702	V
17974.500	52.4	-25.5	43.4	34.502	H
17944.500	52.3	-25.5	43.4	34.402	H
17959.500	52.2	-25.5	43.4	34.302	H

Test graphs as below:

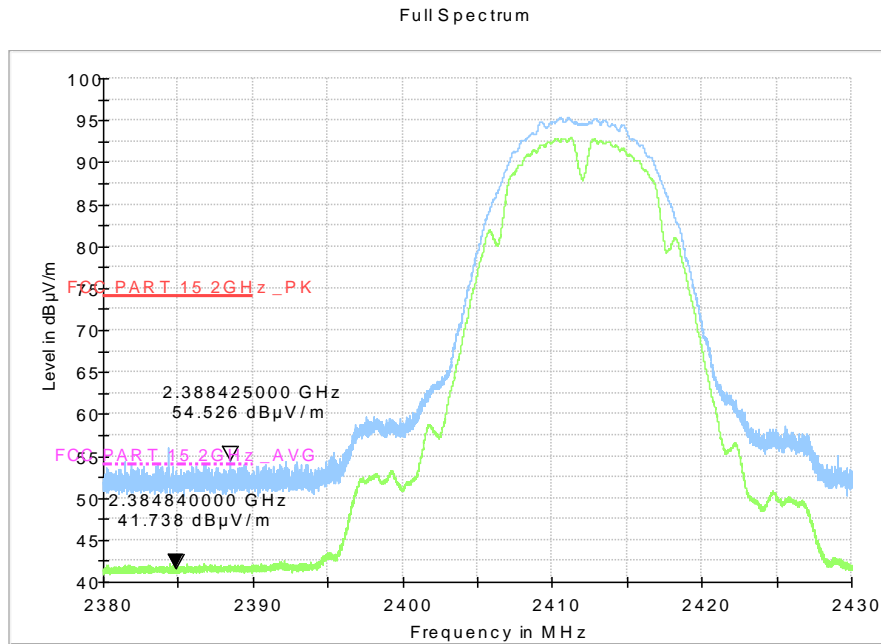


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz - 2.43GHz

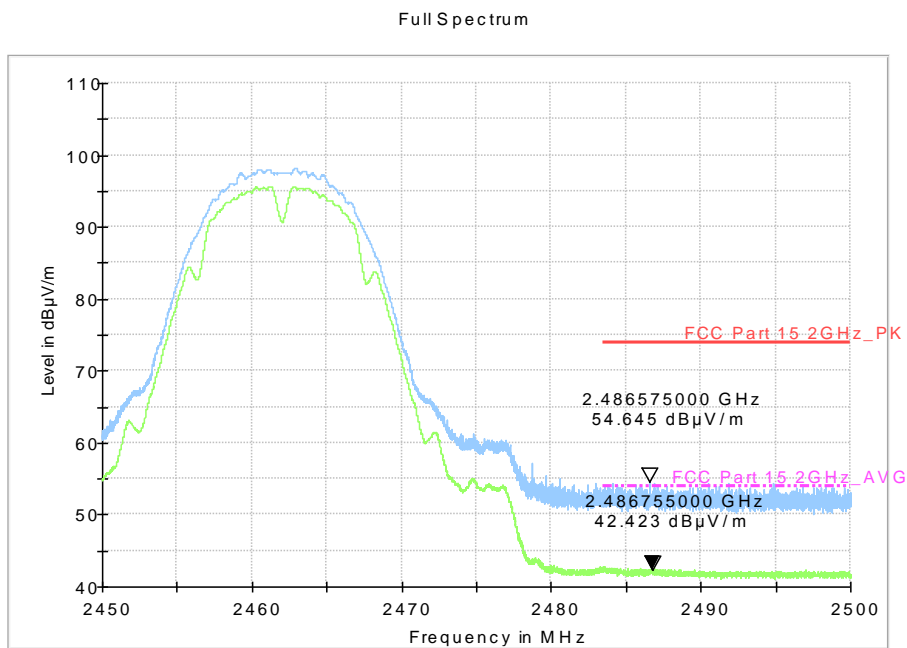


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

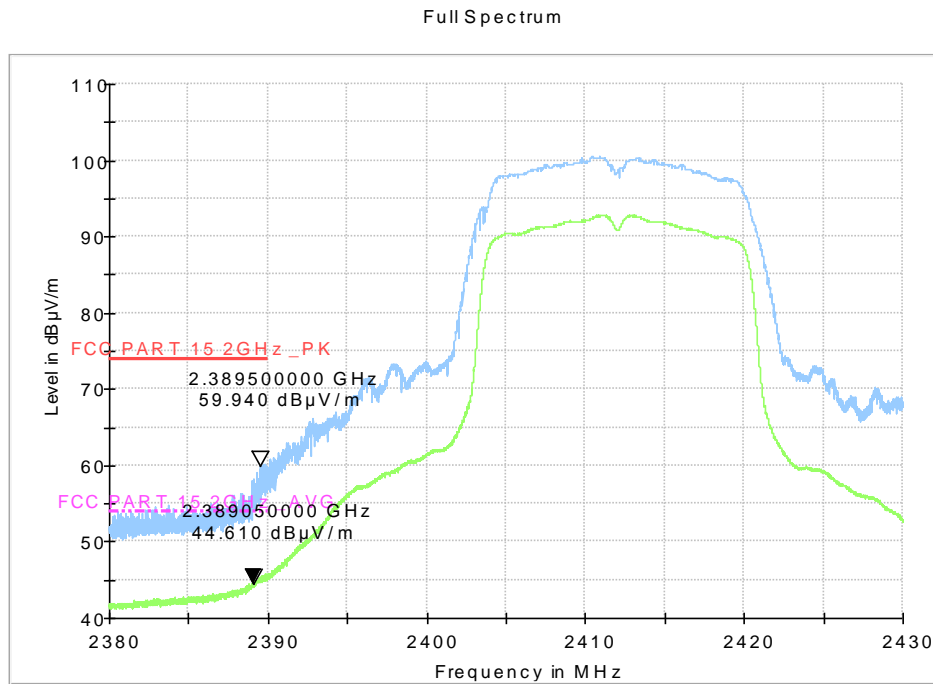


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz

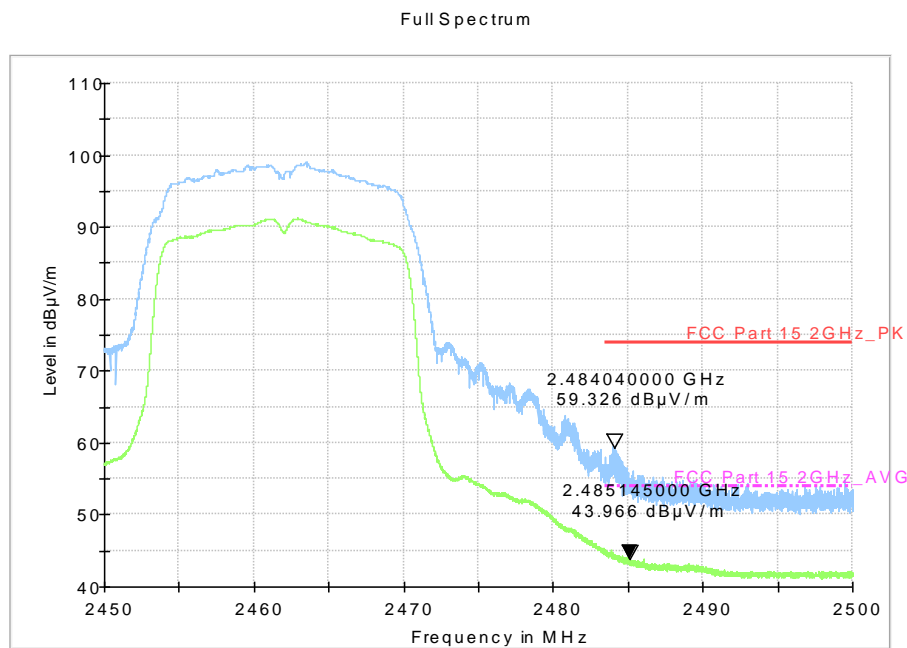


Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

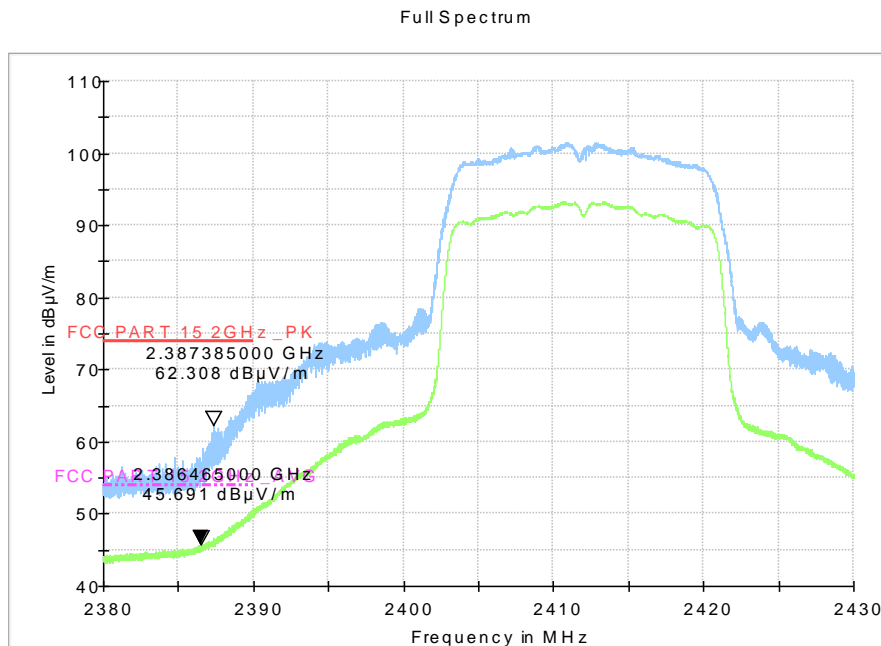


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

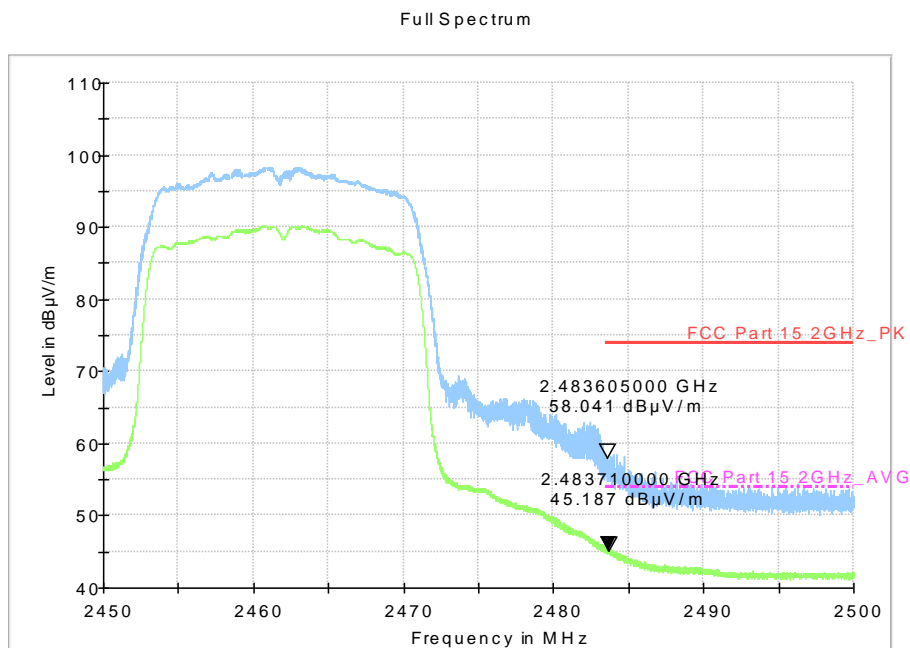


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

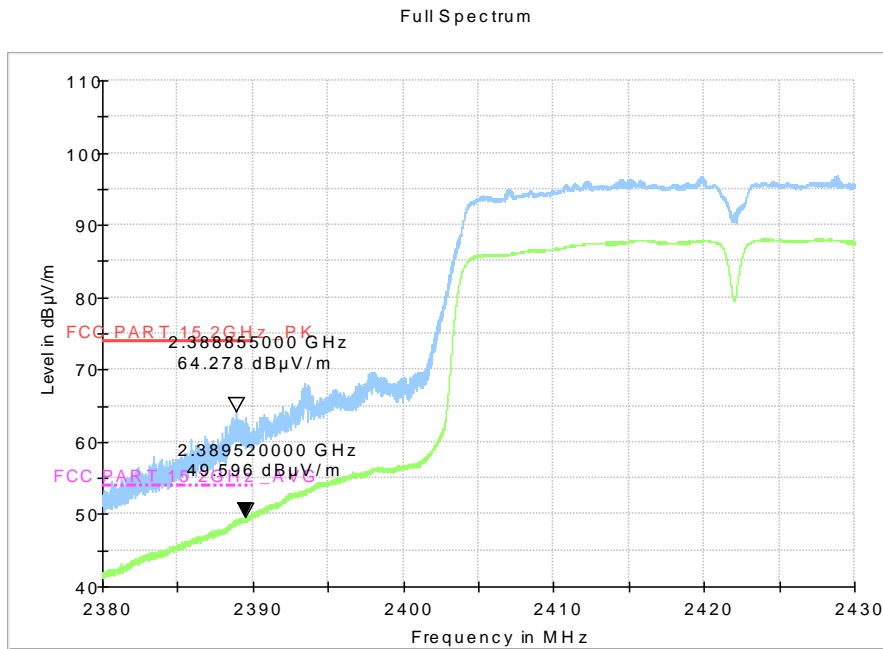


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz

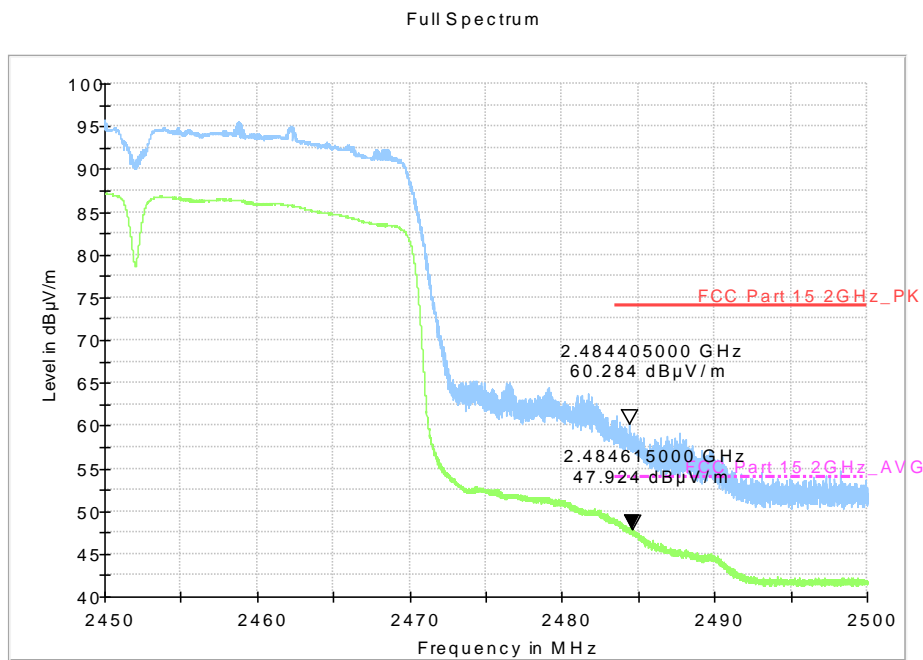


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

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:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	P
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.7.1 Fig.A.7.2	Fig.A.7.3	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:

Traffic: Set.10

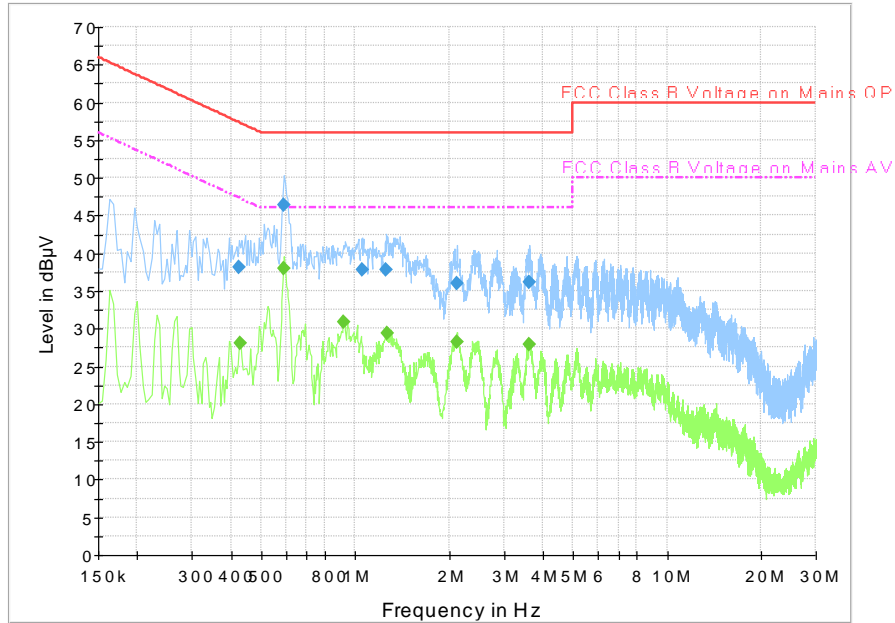


Fig.A.7.1 AC Powerline Conducted Emission-802.11b

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)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.424500	38.1	2000.0	9.000	On	L1	19.9	19.3	57.4	
0.591000	46.4	2000.0	9.000	On	L1	19.9	9.6	56.0	
1.050000	37.8	2000.0	9.000	On	N	19.7	18.2	56.0	
1.261500	37.7	2000.0	9.000	On	L1	19.6	18.3	56.0	
2.125500	36.1	2000.0	9.000	On	L1	19.7	19.9	56.0	
3.628500	36.2	2000.0	9.000	On	L1	19.6	19.8	56.0	

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.429000	28.1	2000.0	9.000	On	L1	19.9	19.2	47.3	
0.591000	38.0	2000.0	9.000	On	L1	19.9	8.0	46.0	
0.919500	30.8	2000.0	9.000	On	L1	19.7	15.2	46.0	
1.270500	29.5	2000.0	9.000	On	L1	19.6	16.5	46.0	
2.125500	28.3	2000.0	9.000	On	L1	19.7	17.7	46.0	
3.619500	27.9	2000.0	9.000	On	L1	19.6	18.1	46.0	

Traffic: Set.11

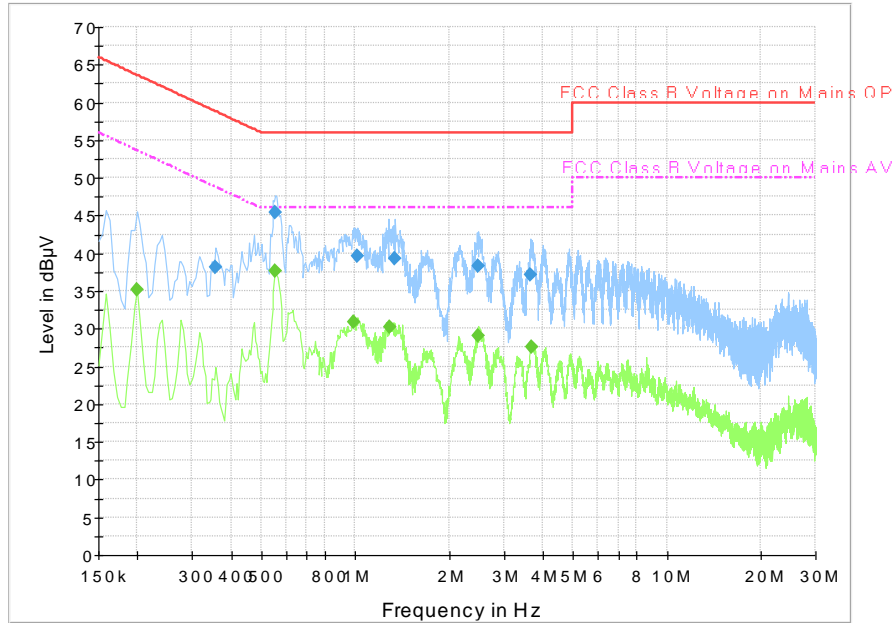


Fig.A.7.2 AC Powerline Conducted Emission-802.11b

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)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.357000	38.2	2000.0	9.000	On	N	19.9	20.6	58.8	
0.555000	45.3	2000.0	9.000	On	L1	19.9	10.7	56.0	
1.018500	39.7	2000.0	9.000	On	L1	19.6	16.3	56.0	
1.342500	39.2	2000.0	9.000	On	L1	19.6	16.8	56.0	
2.490000	38.3	2000.0	9.000	On	L1	19.7	17.7	56.0	
3.651000	37.2	2000.0	9.000	On	L1	19.6	18.8	56.0	

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.199500	35.1	2000.0	9.000	On	N	19.8	18.5	53.6	
0.555000	37.6	2000.0	9.000	On	N	19.9	8.4	46.0	
0.987000	30.9	2000.0	9.000	On	L1	19.6	15.1	46.0	
1.293000	30.2	2000.0	9.000	On	L1	19.6	15.8	46.0	
2.490000	29.0	2000.0	9.000	On	L1	19.7	17.0	46.0	
3.682500	27.6	2000.0	9.000	On	L1	19.6	18.4	46.0	

Idle: Set.10

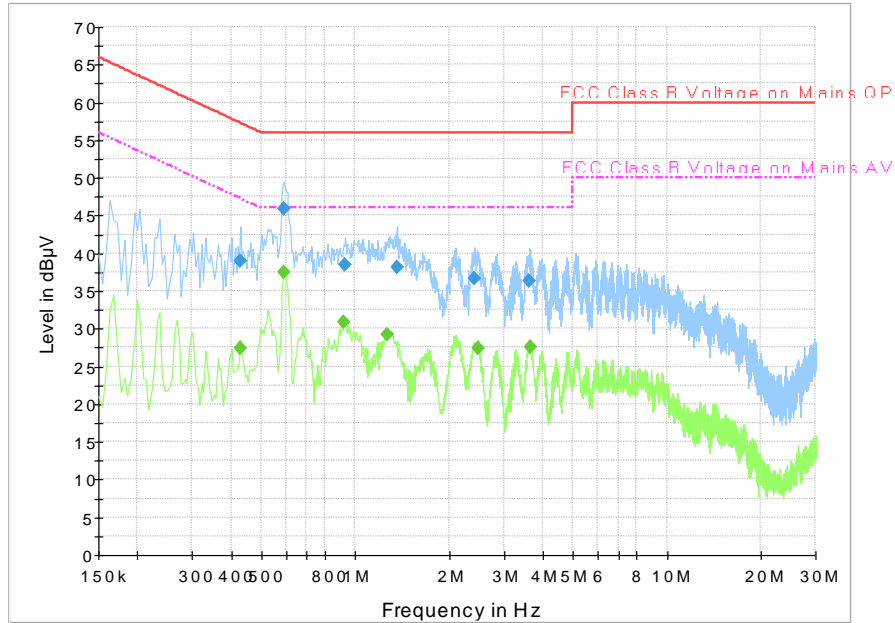


Fig.A.7.3 AC Powerline Conducted Emission-Idle

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)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.429000	39.0	2000.0	9.000	On	L1	19.9	18.2	57.3	
0.591000	45.9	2000.0	9.000	On	L1	19.9	10.1	56.0	
0.928500	38.4	2000.0	9.000	On	L1	19.7	17.6	56.0	
1.360500	38.2	2000.0	9.000	On	N	19.6	17.8	56.0	
2.418000	36.7	2000.0	9.000	On	L1	19.7	19.3	56.0	
3.606000	36.3	2000.0	9.000	On	L1	19.6	19.7	56.0	

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.429000	27.3	2000.0	9.000	On	L1	19.9	19.9	47.3	
0.591000	37.4	2000.0	9.000	On	L1	19.9	8.6	46.0	
0.919500	30.9	2000.0	9.000	On	L1	19.7	15.1	46.0	
1.266000	29.2	2000.0	9.000	On	L1	19.6	16.8	46.0	
2.481000	27.4	2000.0	9.000	On	L1	19.7	18.6	46.0	
3.646500	27.6	2000.0	9.000	On	L1	19.6	18.4	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

*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 17025:2005.
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).*

2017-08-22 through 2018-09-30
Effective Dates




For the National Voluntary Laboratory Accreditation Program

END OF REPORT