

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

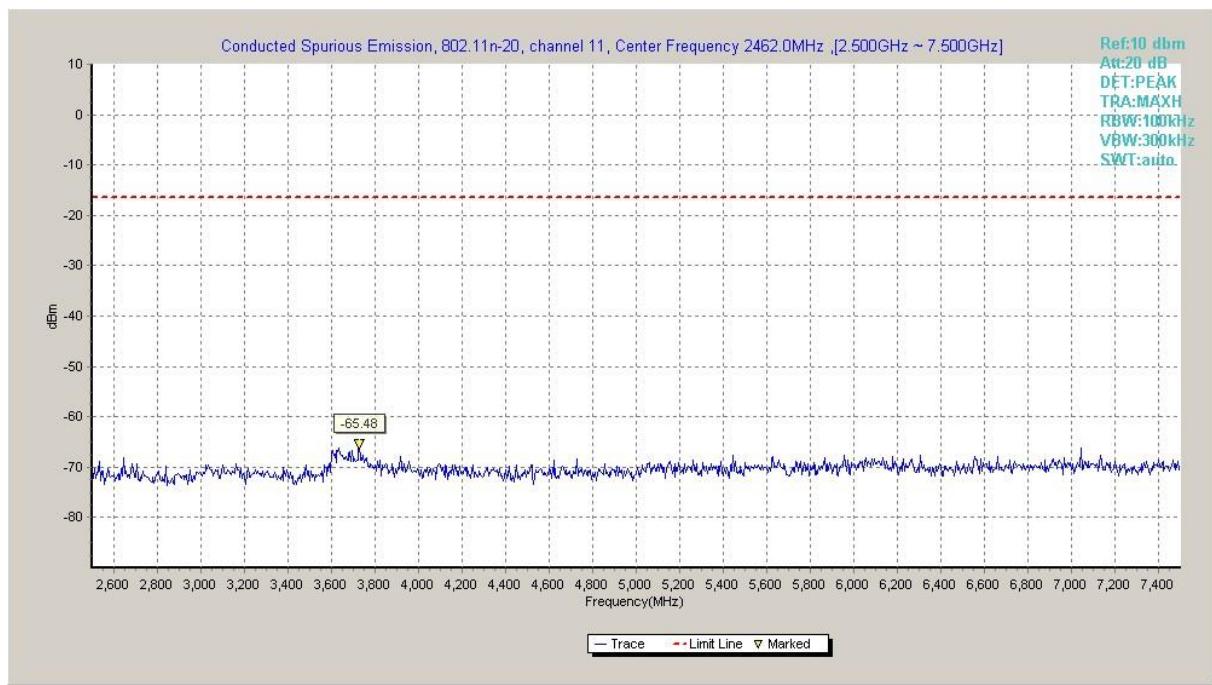


Fig.A.6.1.68 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 2.5 GHz-7.5 GHz)

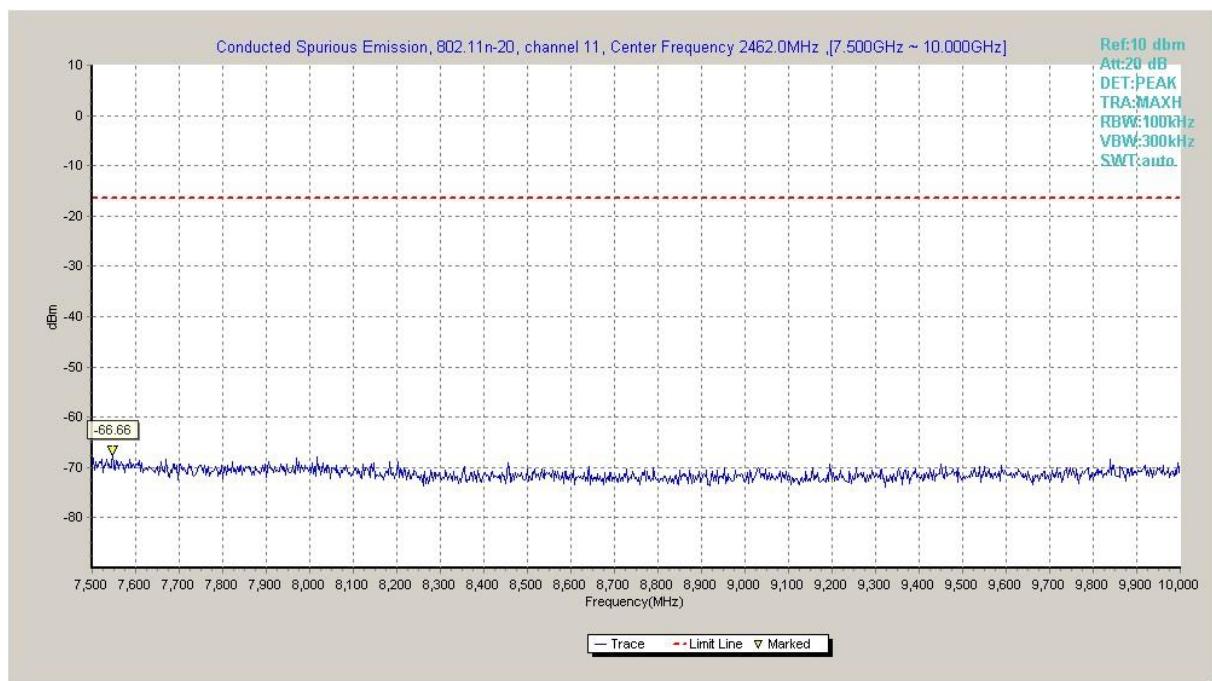


Fig.A.6.1.69 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 7.5 GHz-10 GHz)

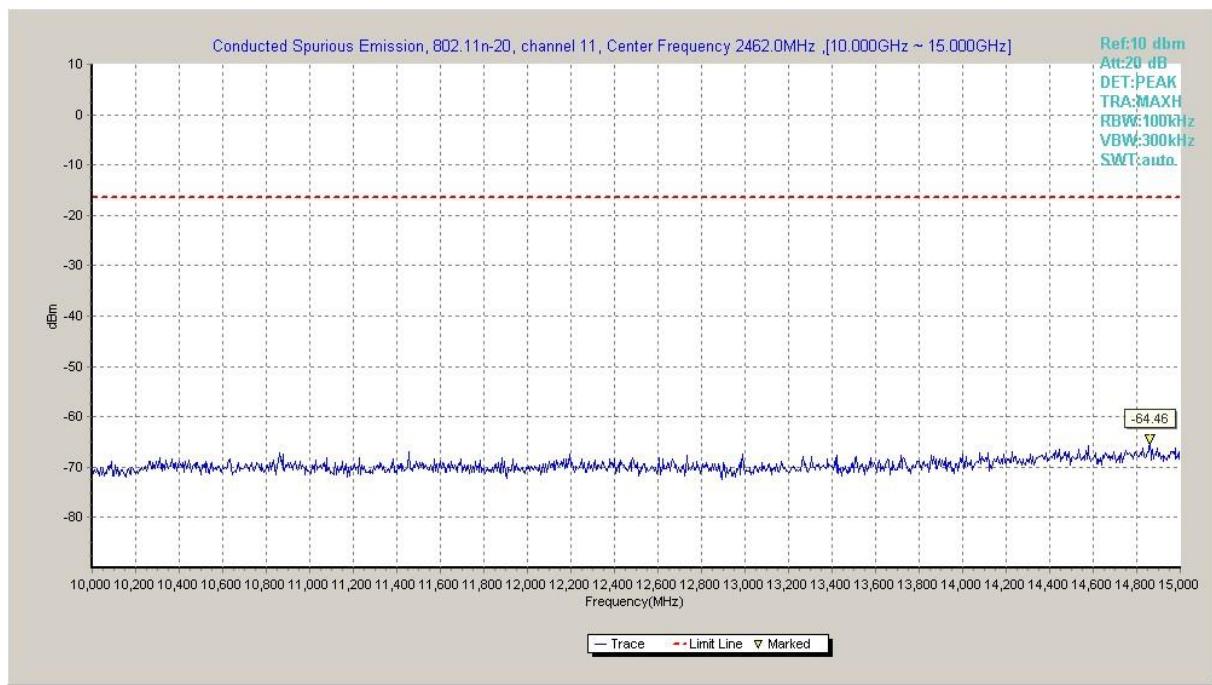


Fig.A.6.1.70 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 10 GHz-15 GHz)

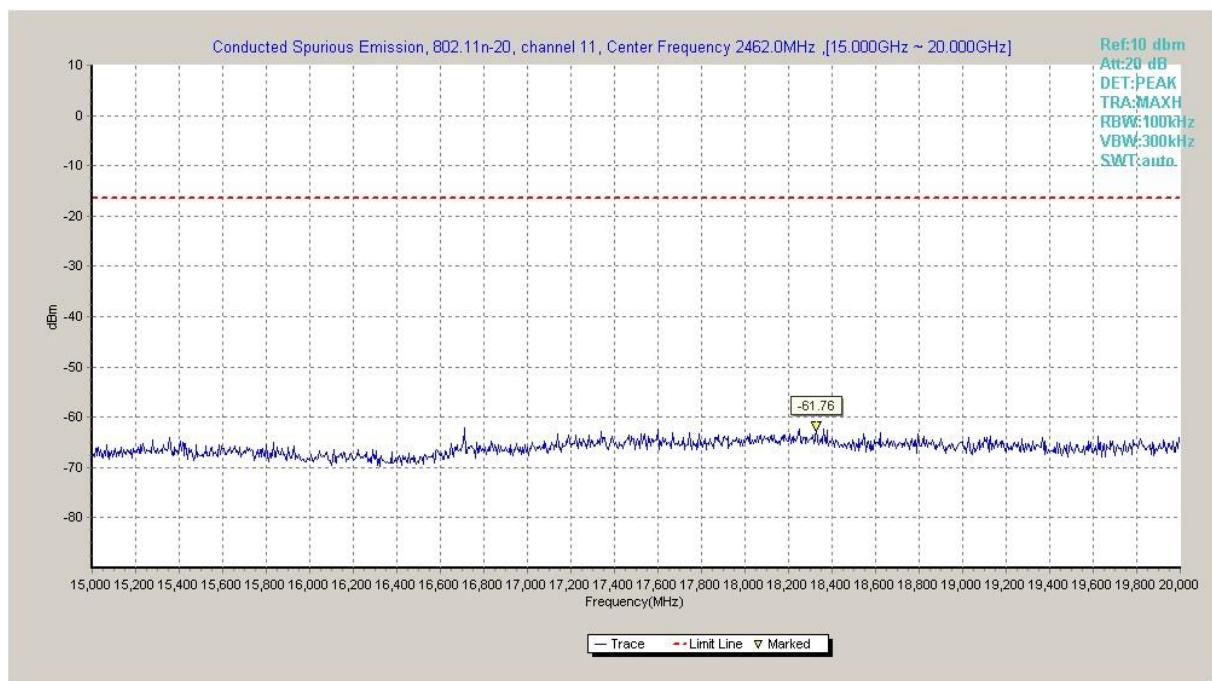


Fig.A.6.1.71 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 15 GHz-20 GHz)

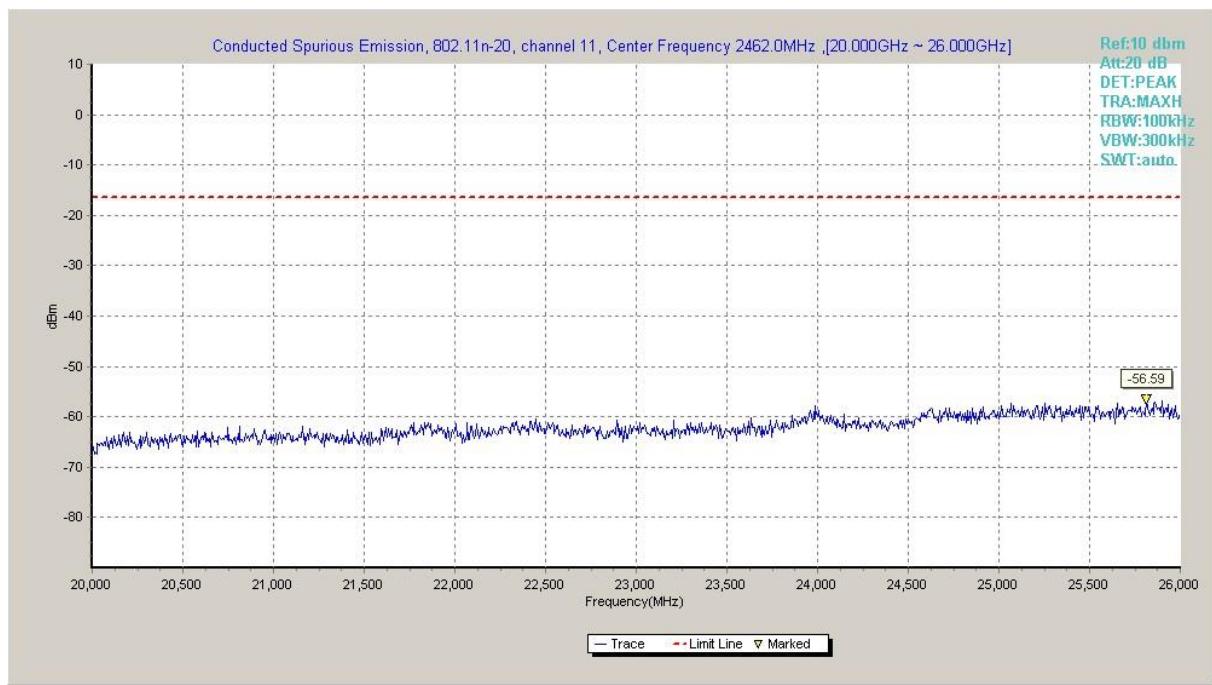


Fig.A.6.1.72 Transmitter Spurious Emission - Conducted (802.11n-HT20, Ch11, 20 GHz-26 GHz)

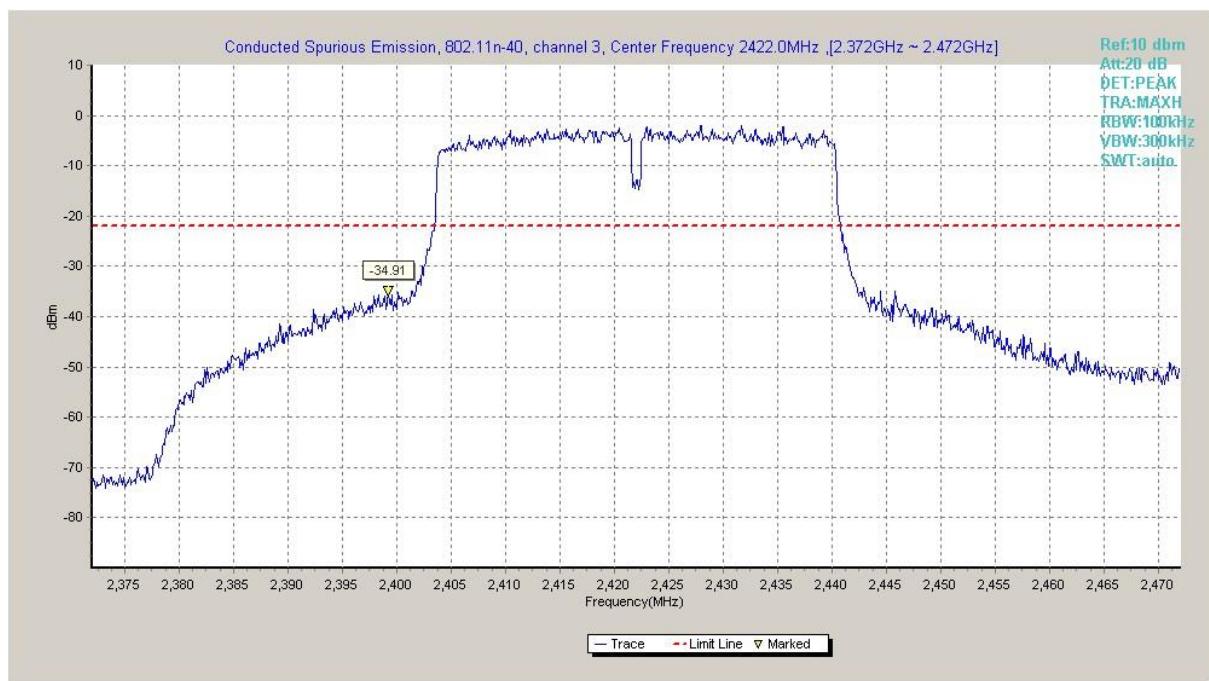


Fig.A.6.1.73 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, Center Frequency)

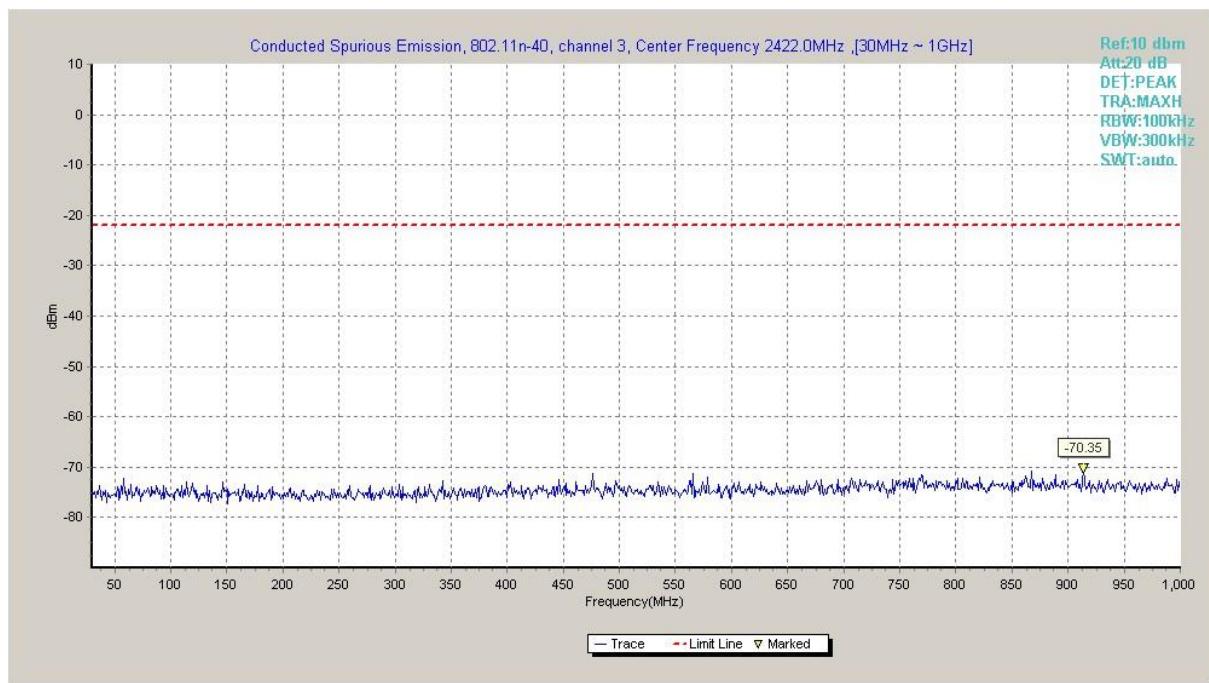


Fig.A.6.1.74 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 30 MHz-1 GHz)

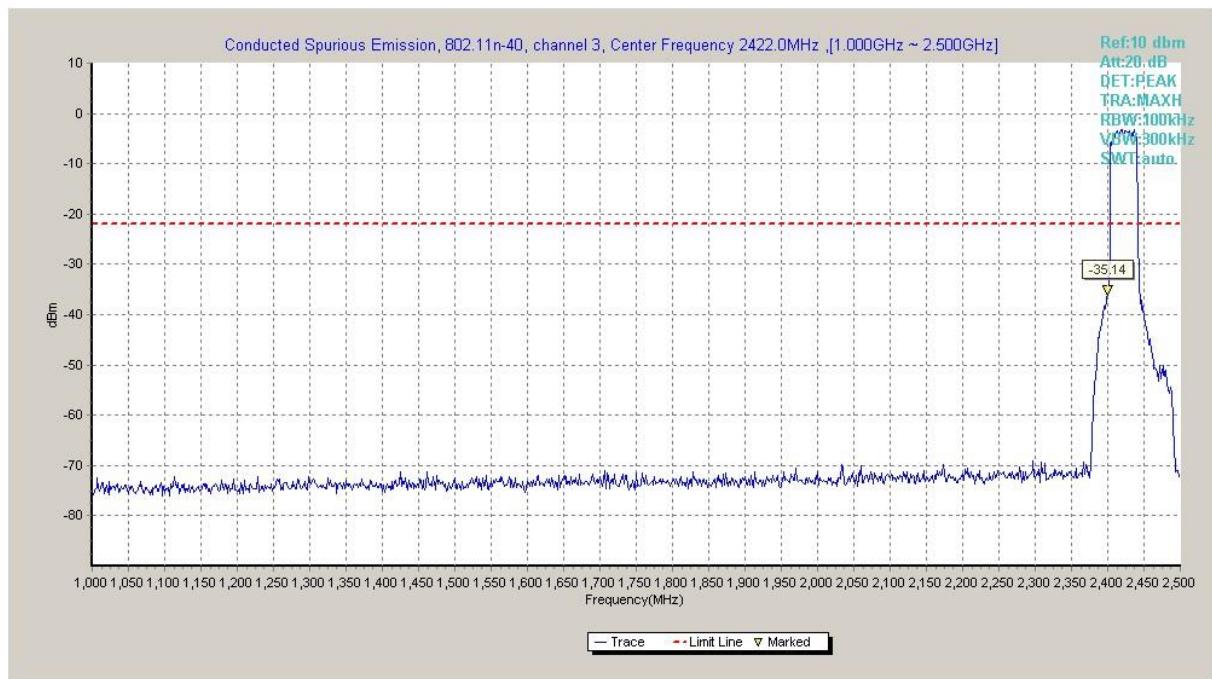


Fig.A.6.1.75 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 1 GHz-2.5 GHz)

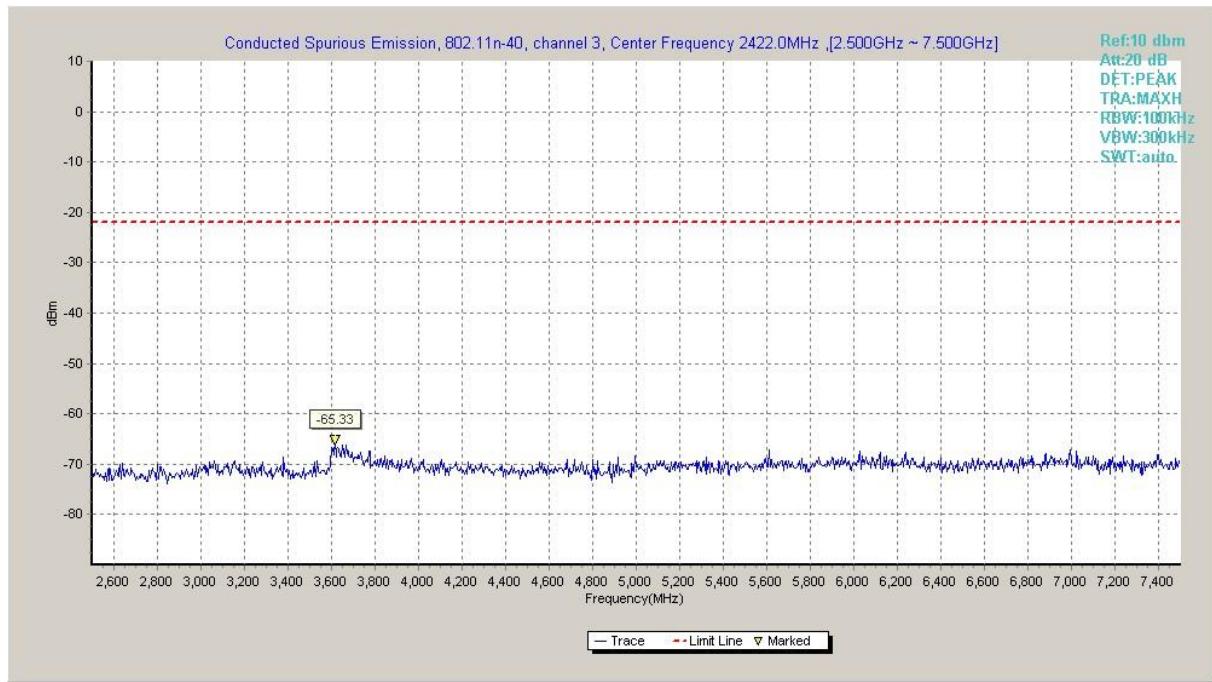


Fig.A.6.1.76 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 2.5 GHz-7.5 GHz)

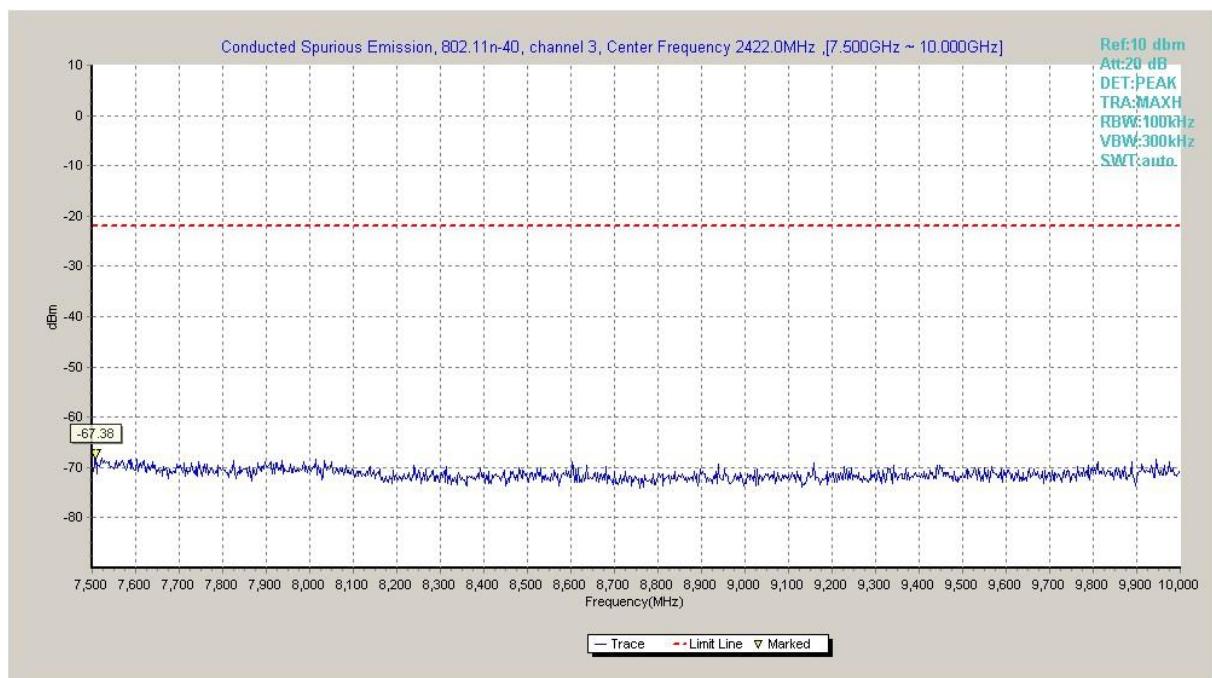


Fig.A.6.1.77 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 7.5 GHz-10 GHz)

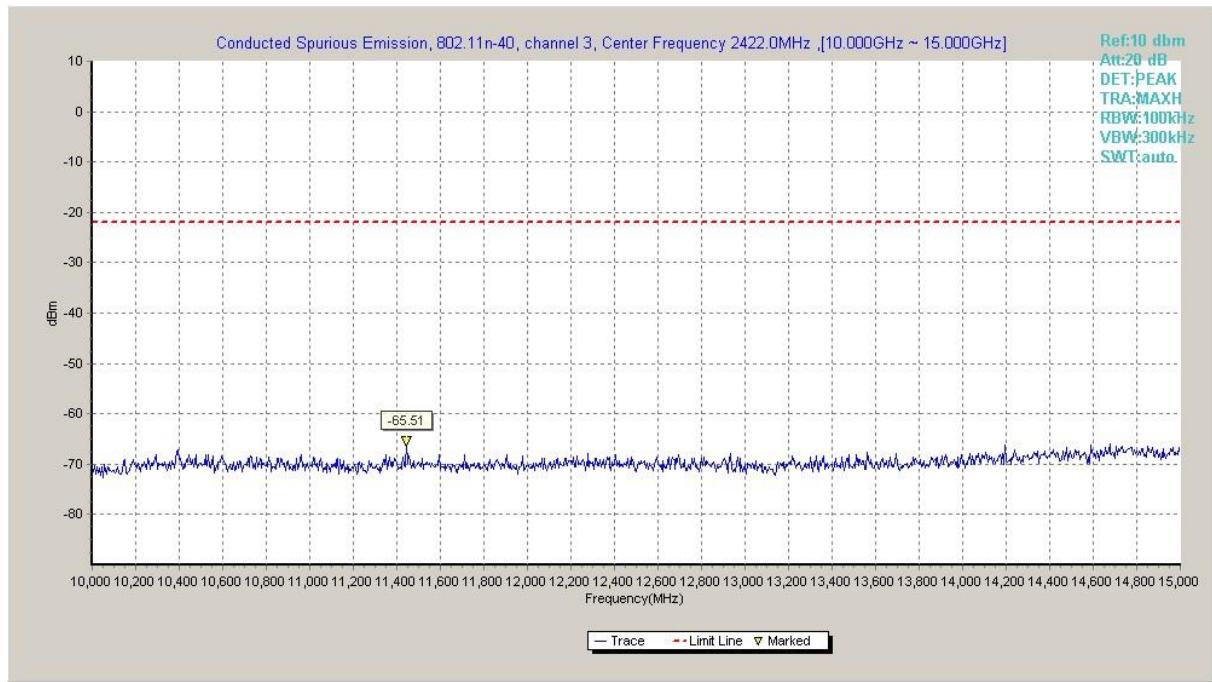


Fig.A.6.1.78 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 10 GHz-15 GHz)

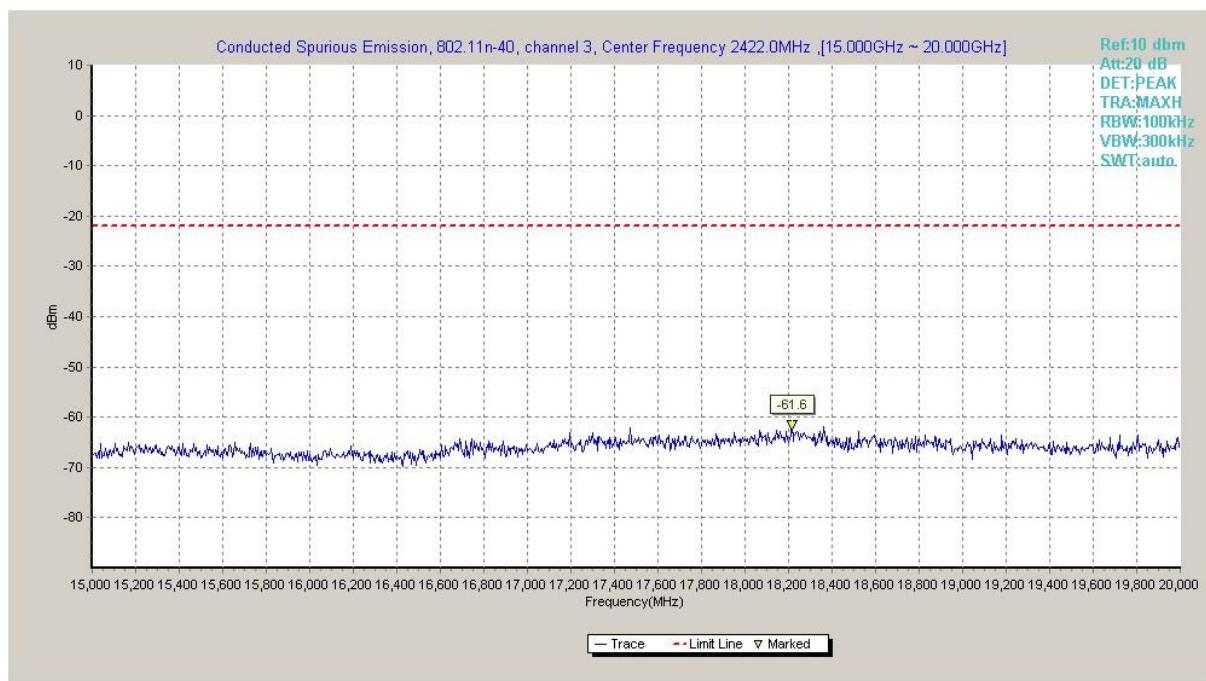


Fig.A.6.1.79 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 15 GHz-20 GHz)

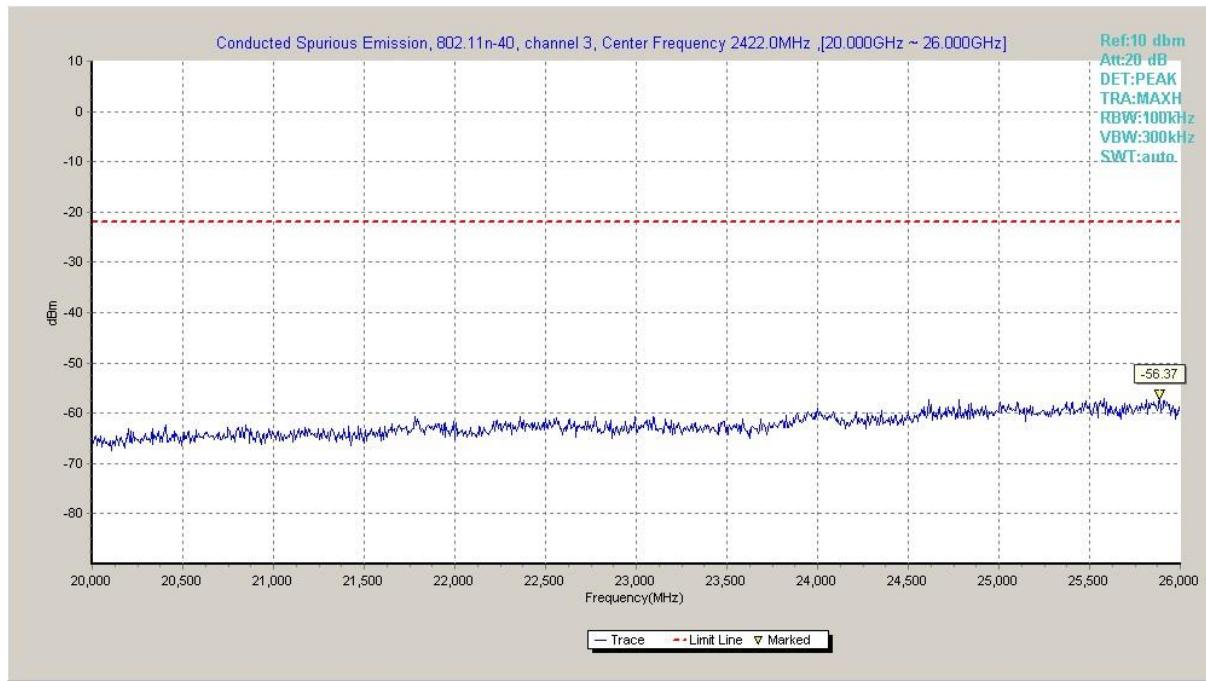


Fig.A.6.1.80 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch3, 20 GHz-26 GHz)

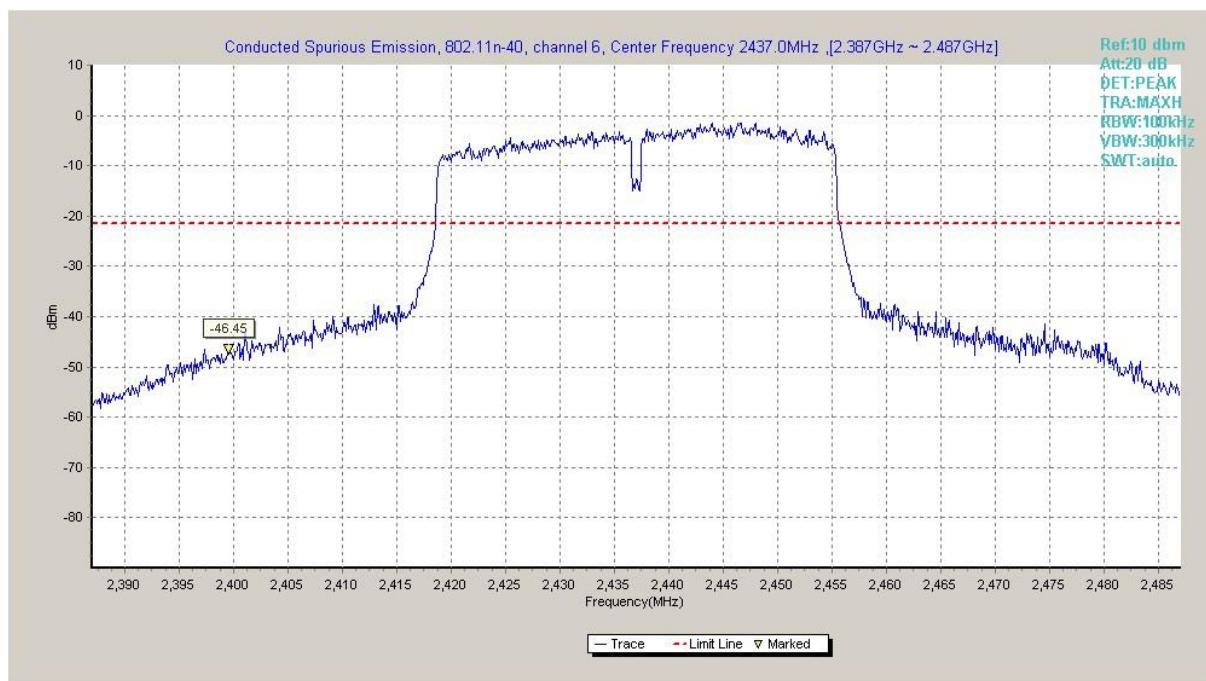


Fig.A.6.1.81 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, Center Frequency)

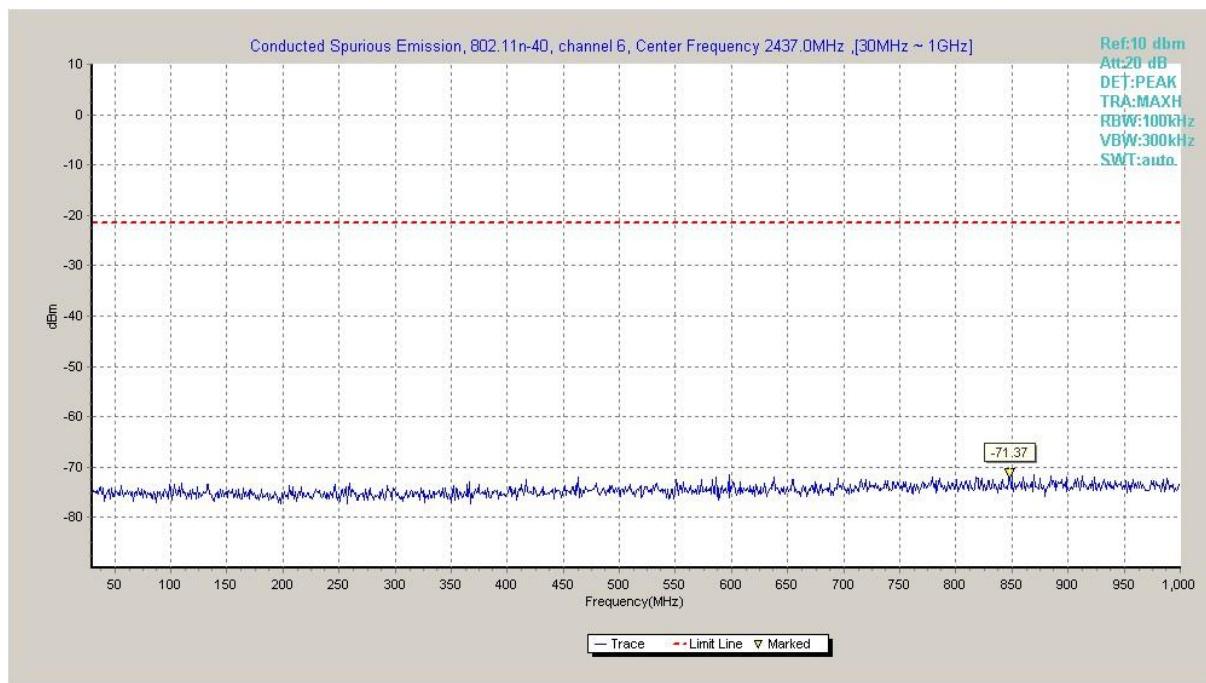


Fig.A.6.1.82 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 30 MHz-1 GHz)

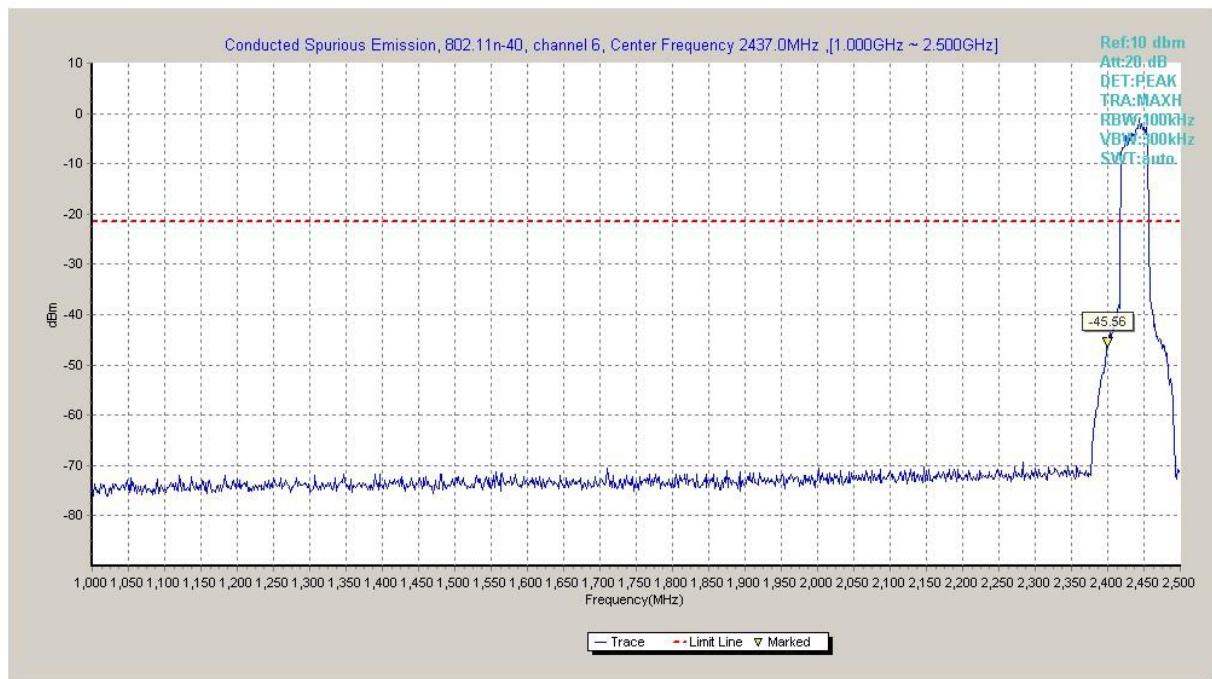


Fig.A.6.1.83 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 1 GHz-2.5 GHz)

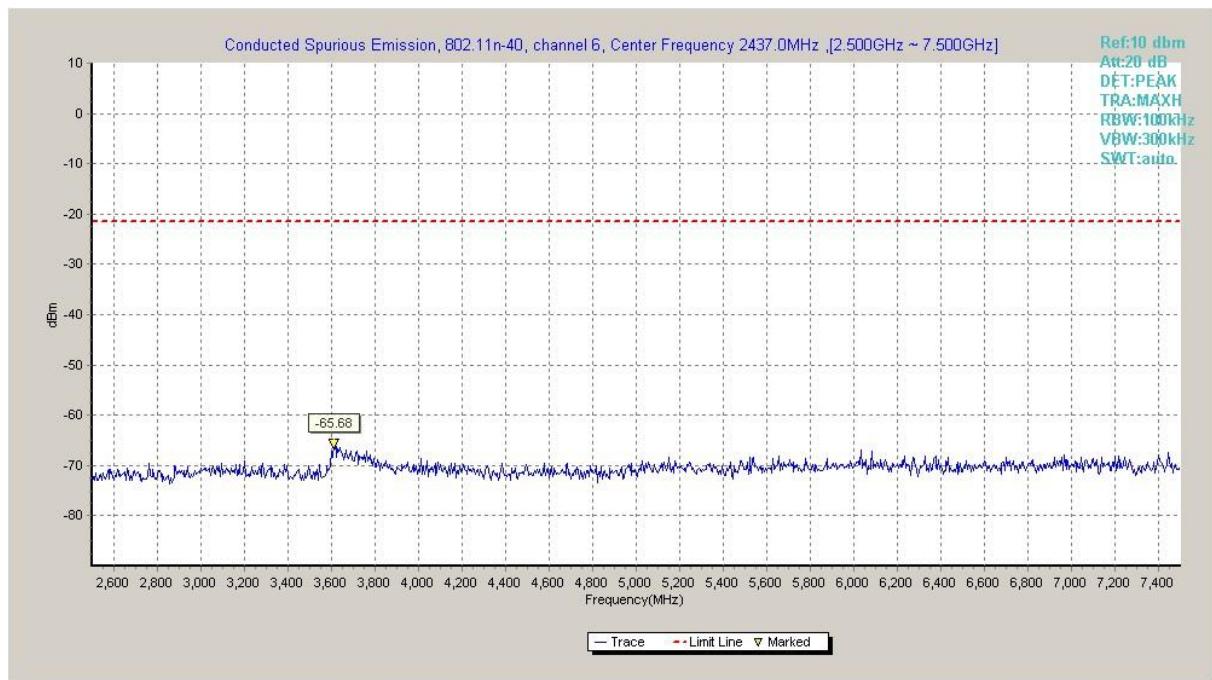


Fig.A.6.1.84 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 2.5 GHz-7.5 GHz)

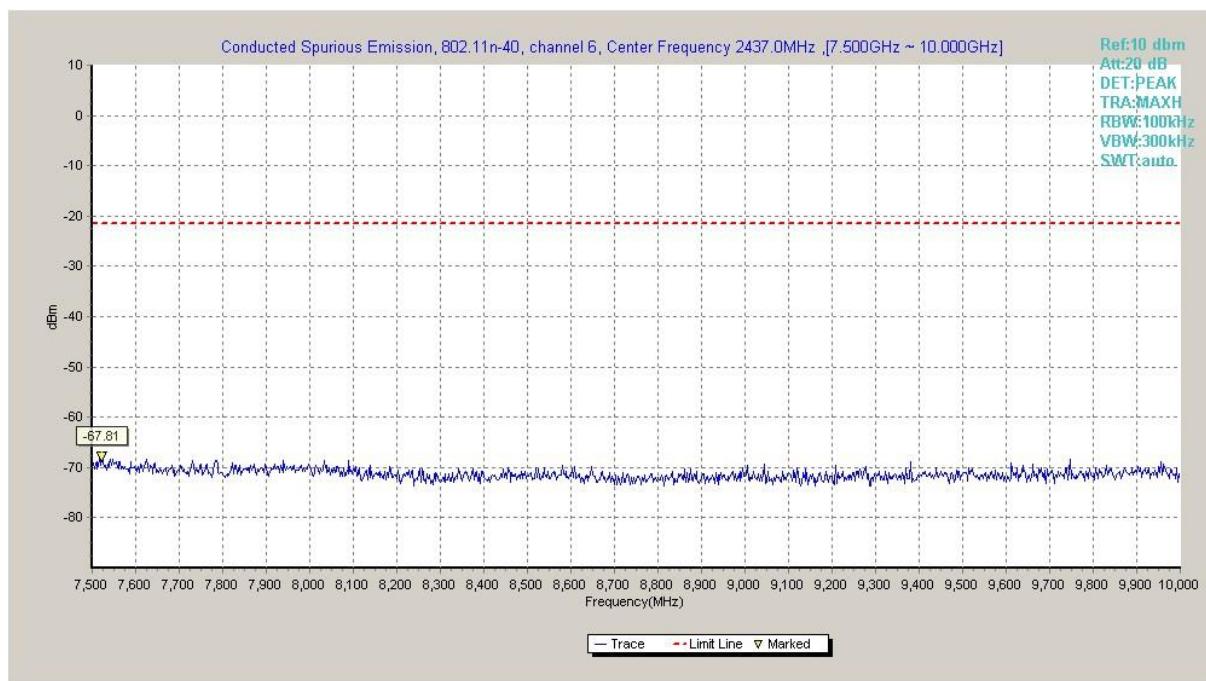


Fig.A.6.1.85 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 7.5 GHz-10 GHz)

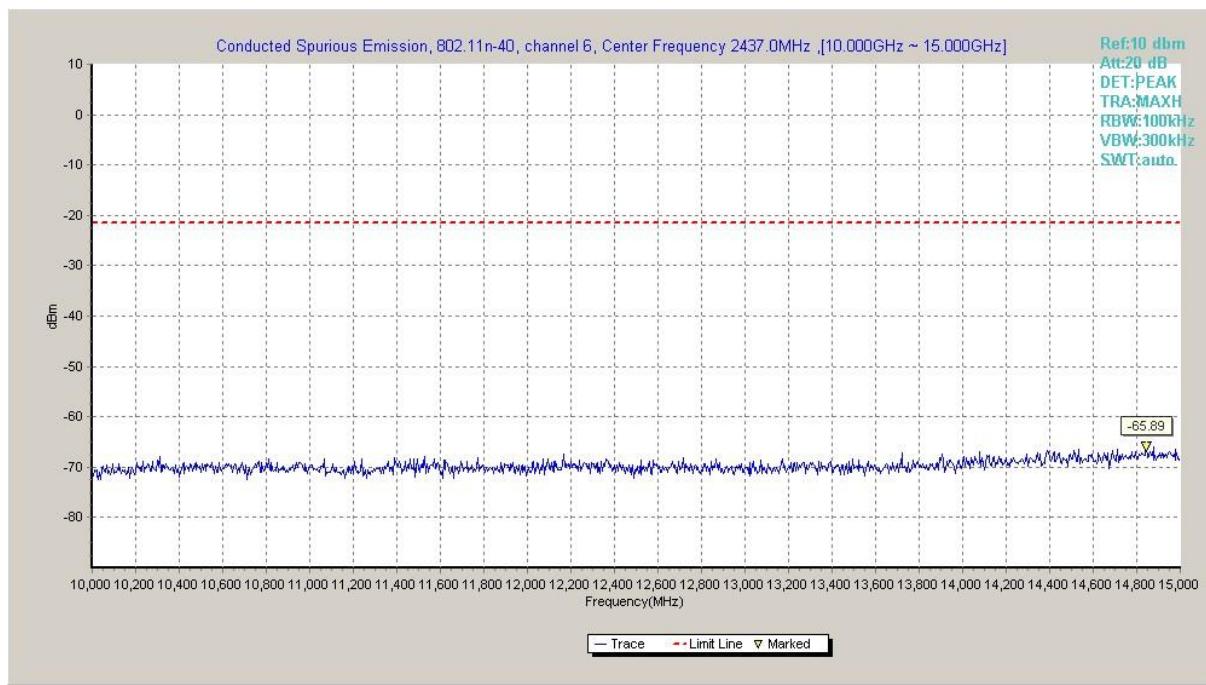


Fig.A.6.1.86 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 10 GHz-15 GHz)

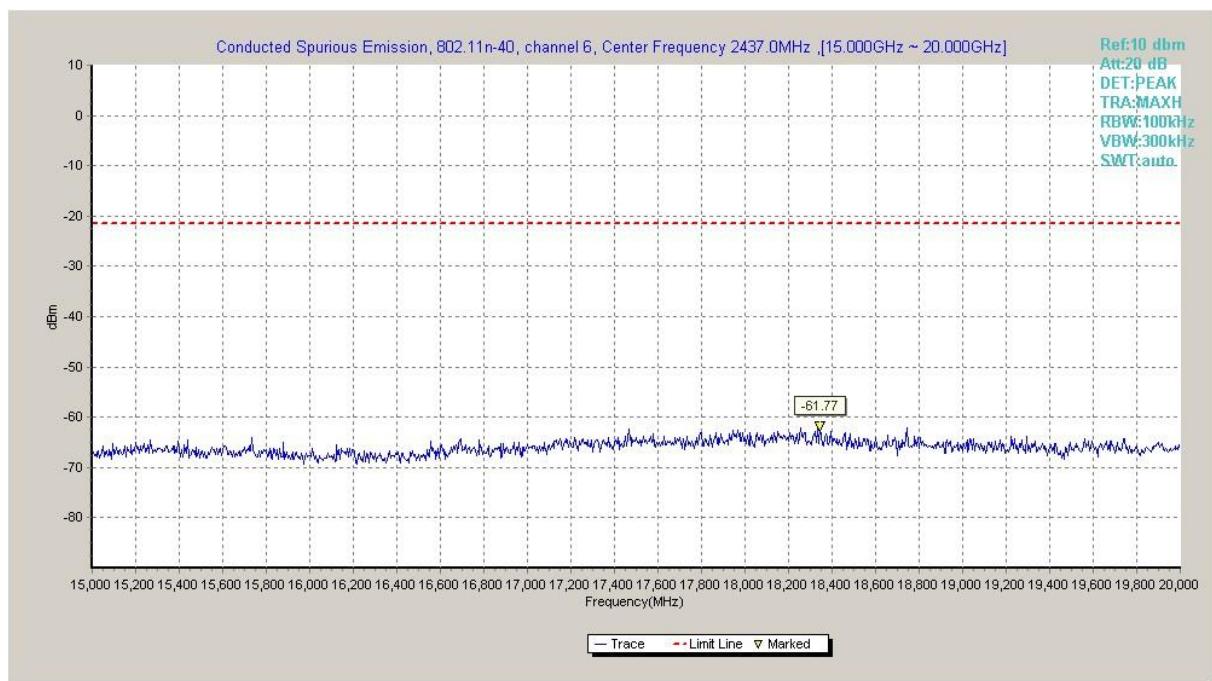


Fig.A.6.1.87 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 15 GHz-20 GHz)

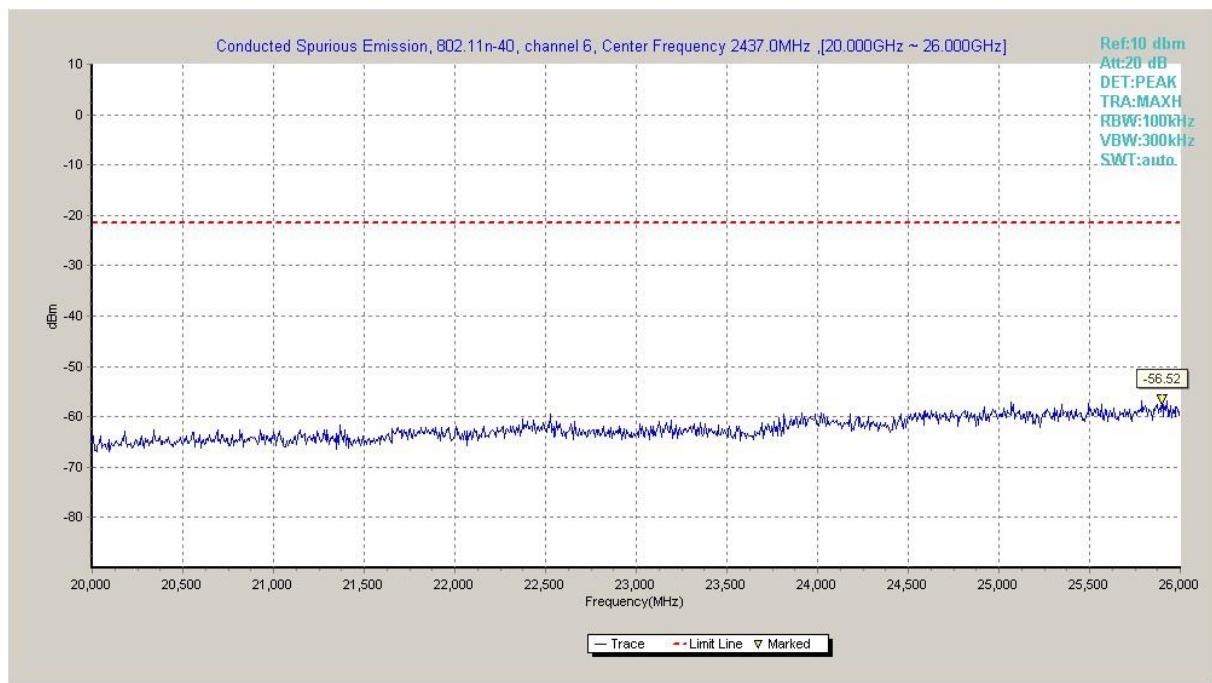


Fig.A.6.1.88 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch6, 20 GHz-26 GHz)

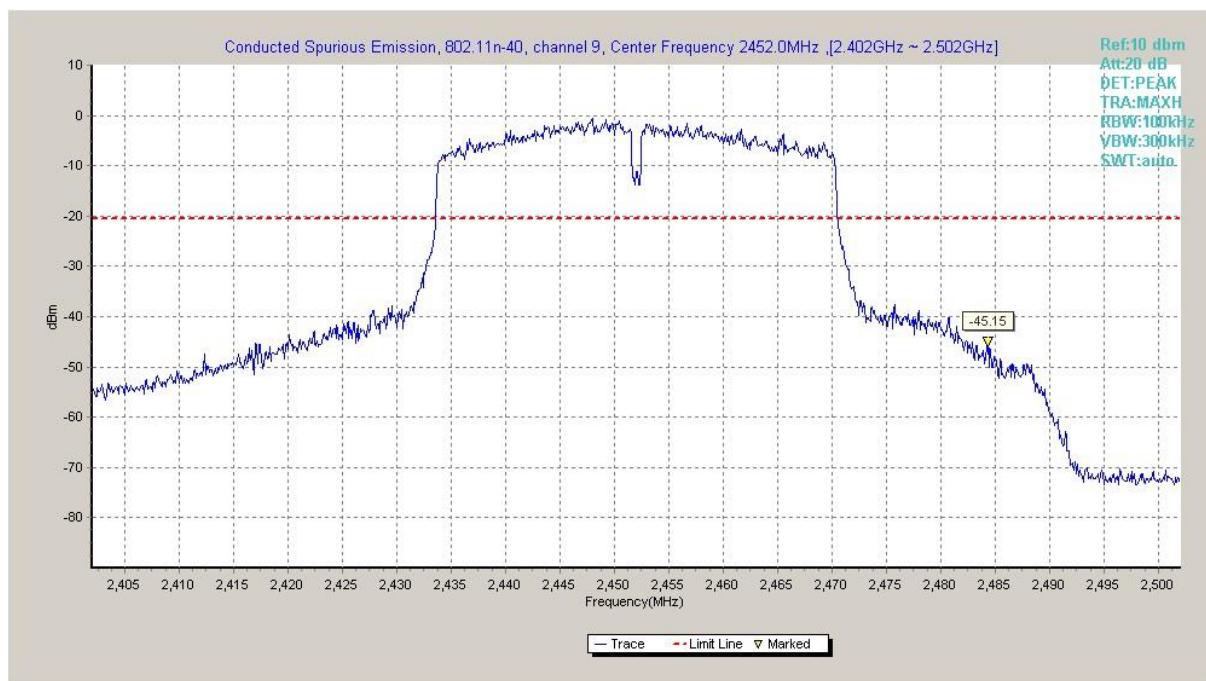


Fig.A.6.1.89 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, Center Frequency)

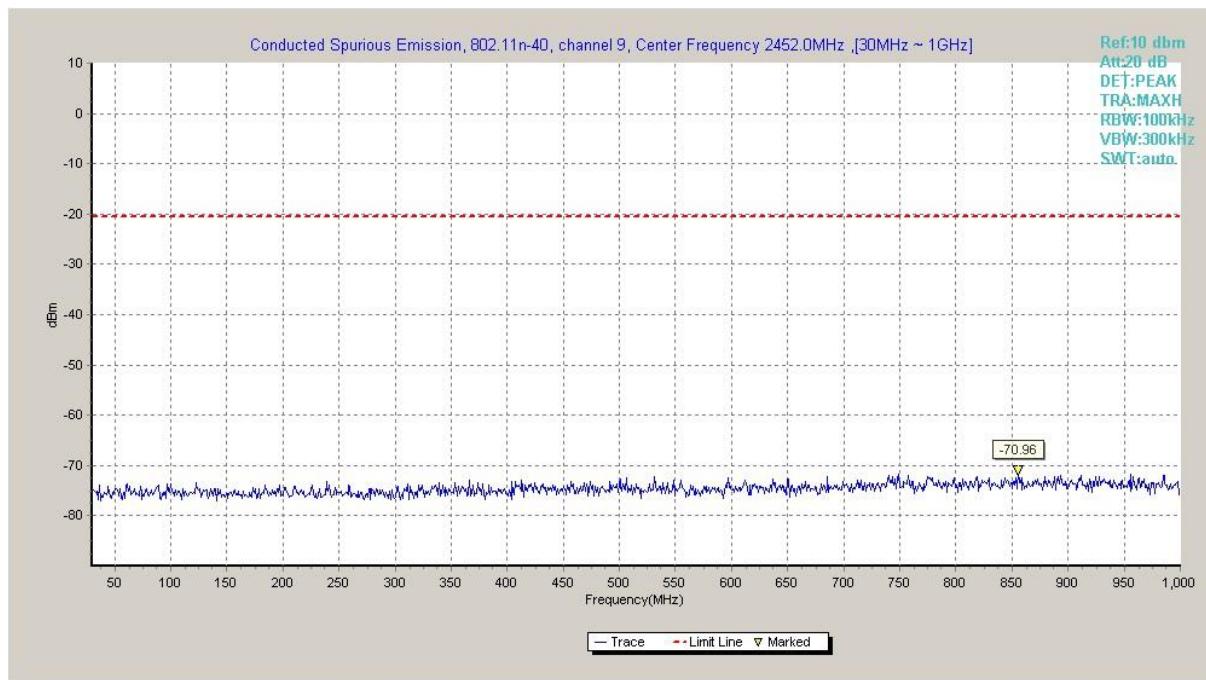


Fig.A.6.1.90 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 30 MHz-1 GHz)

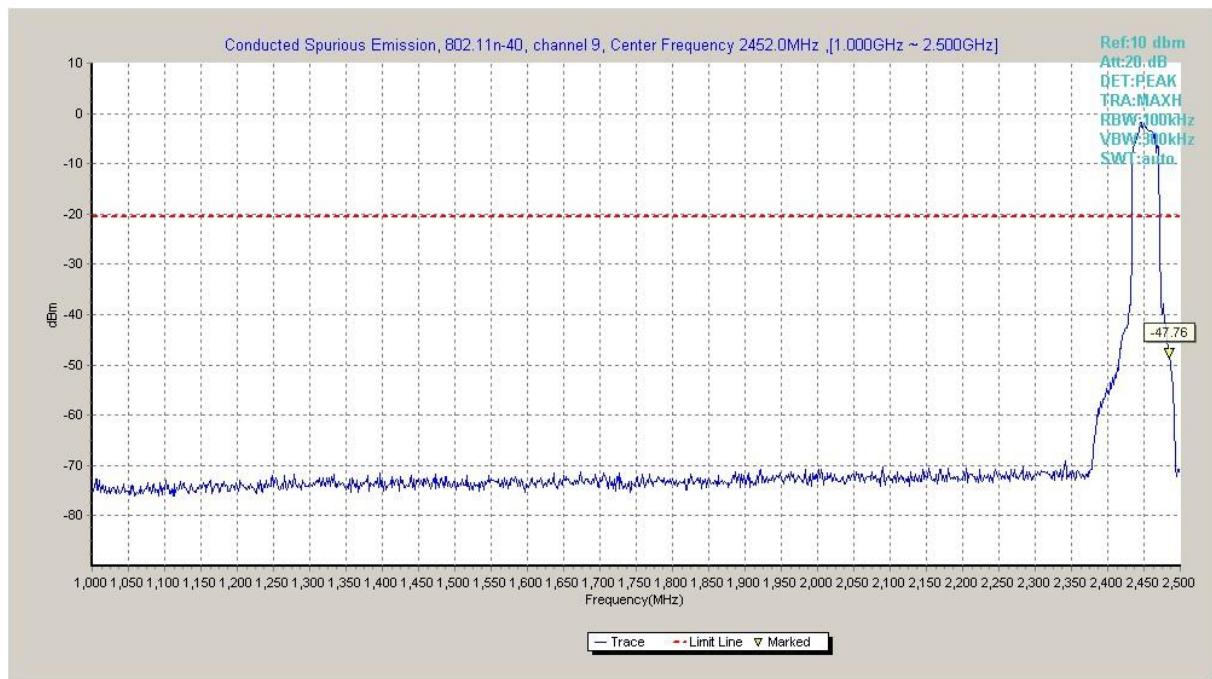


Fig.A.6.1.91 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 1 GHz-2.5 GHz)

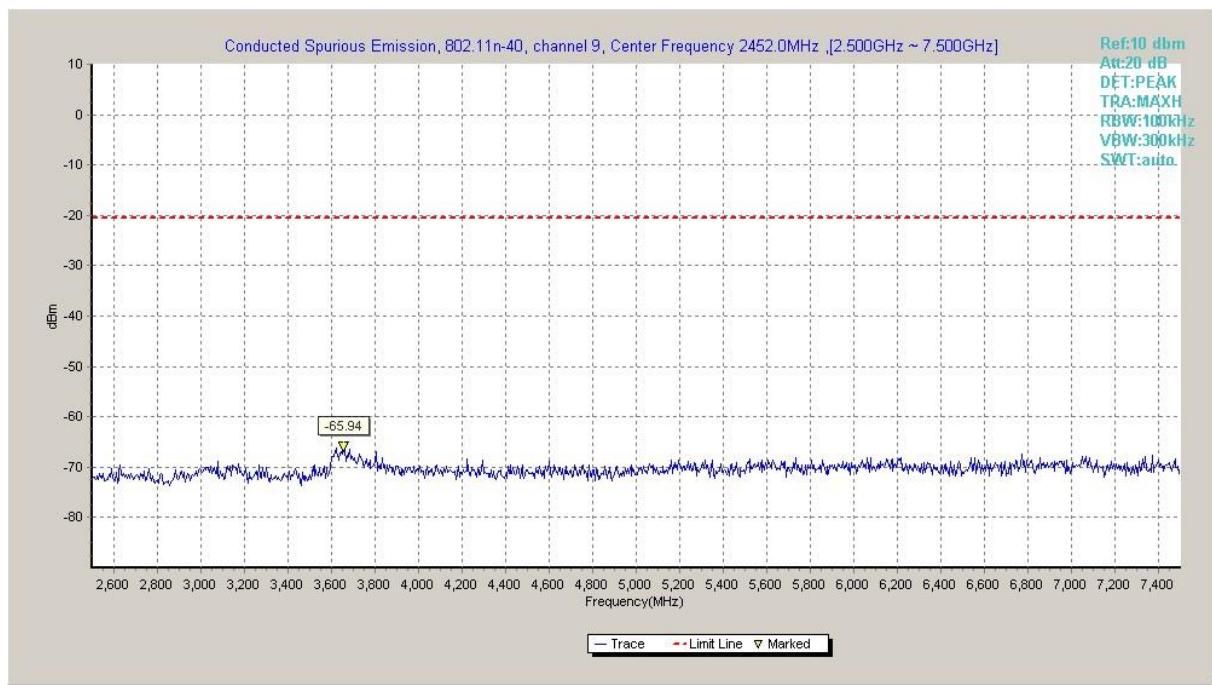


Fig.A.6.1.92 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 2.5 GHz-7.5 GHz)

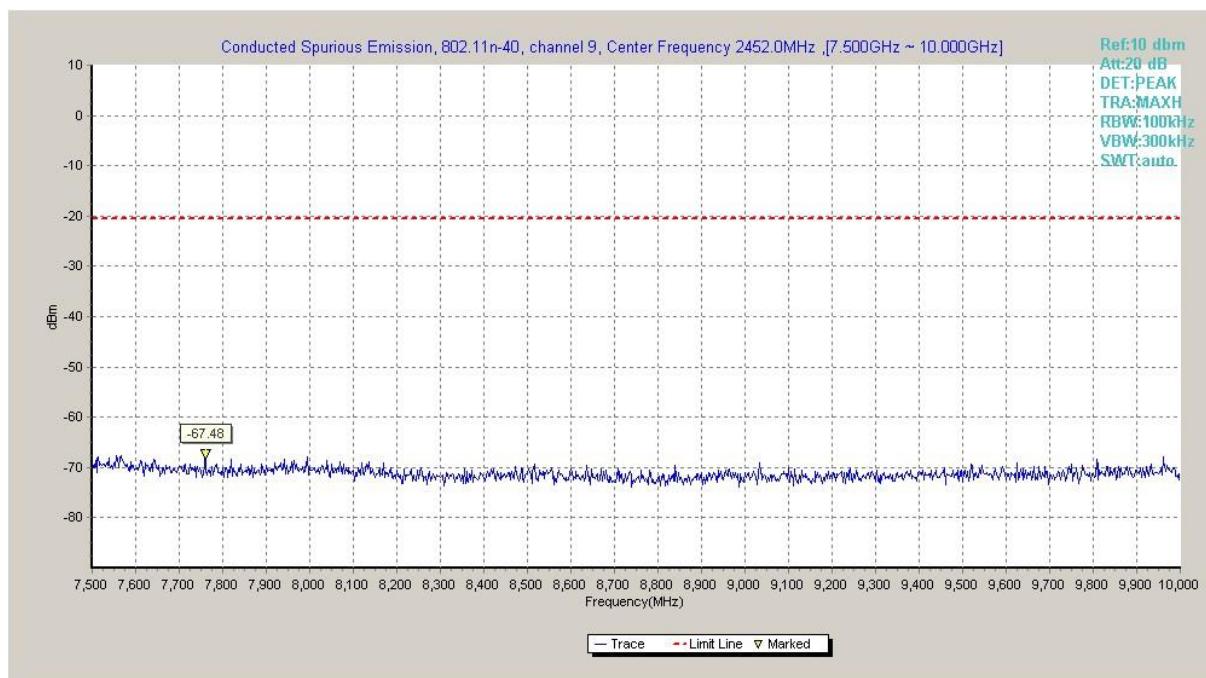


Fig.A.6.1.93 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 7.5 GHz-10 GHz)

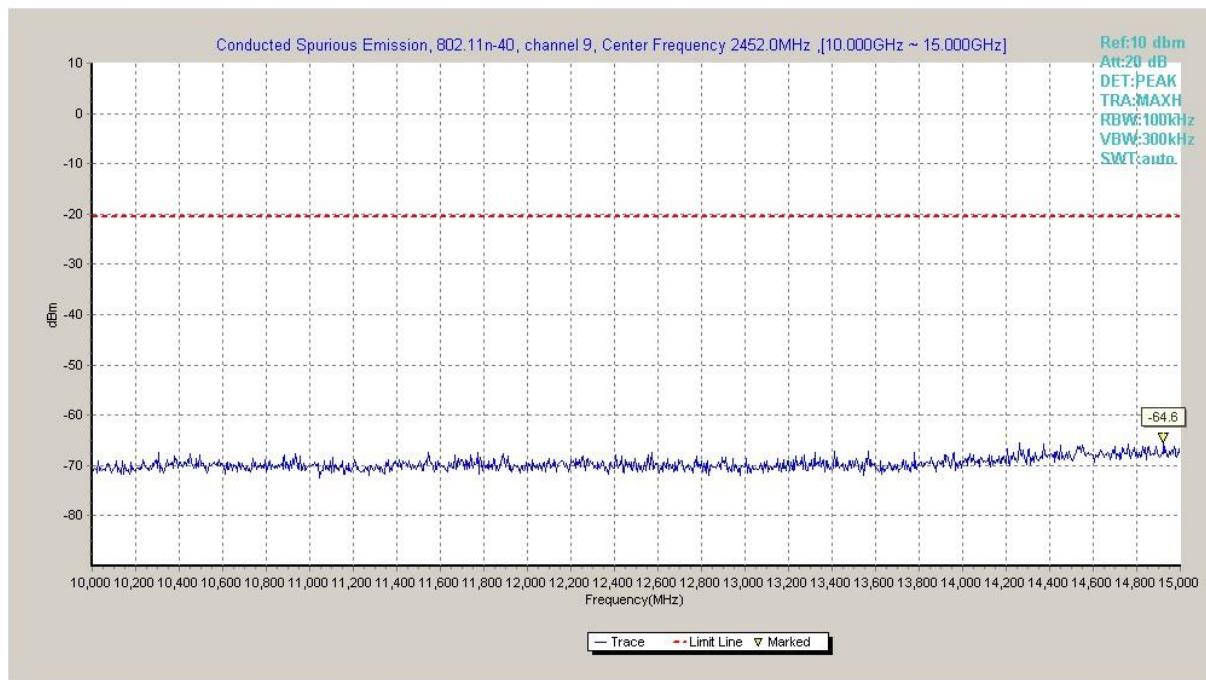


Fig.A.6.1.94 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 10 GHz-15 GHz)

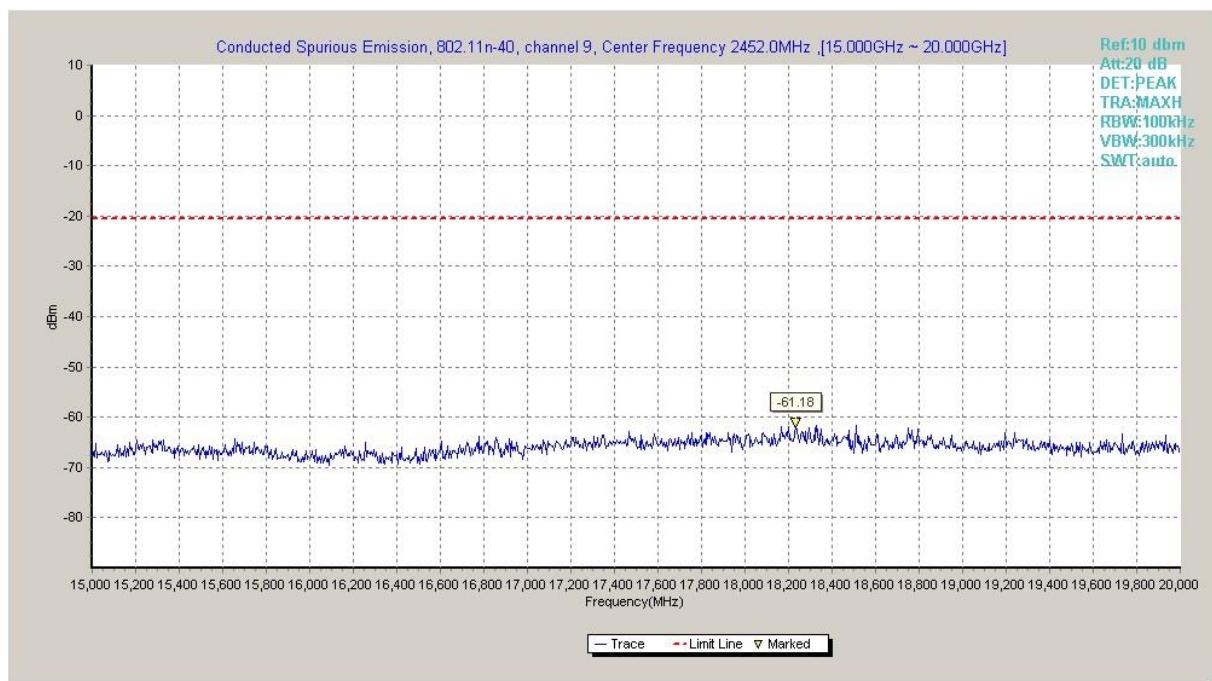


Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)

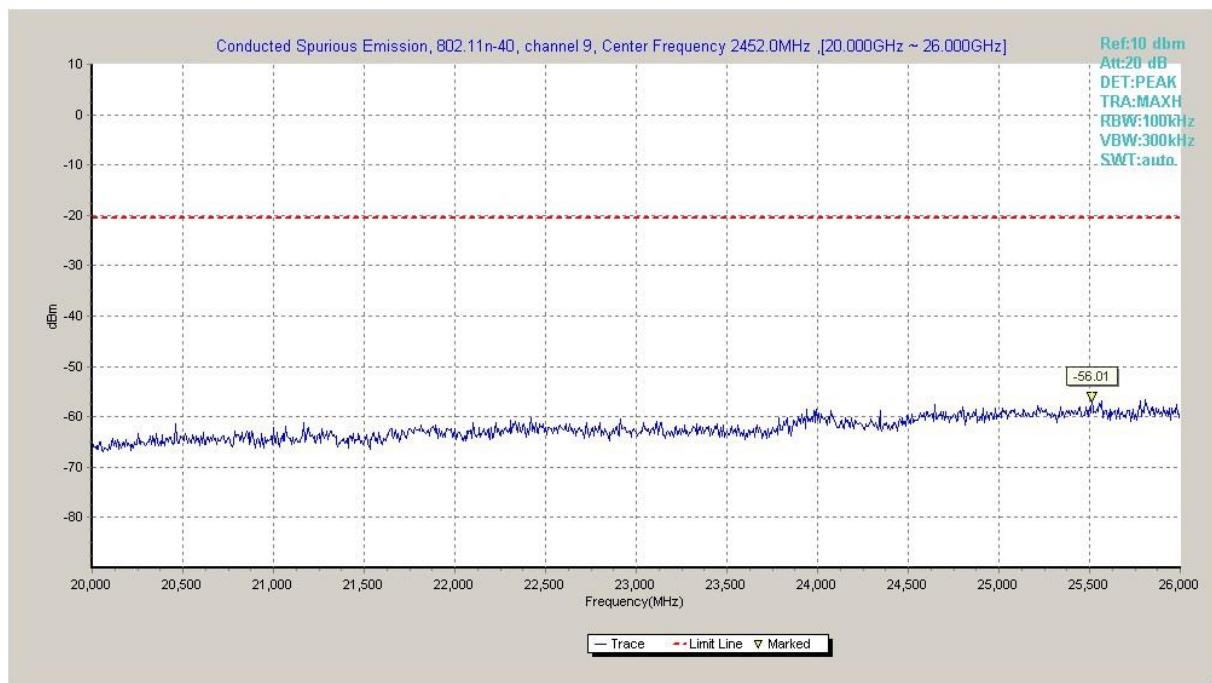


Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)

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(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(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: EUT2

Measurement Results for Set.1:
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
		18 GHz~ 26.5 GHz	--	P
	Power	2.45GHz ~2.5GHz	Fig.A.6.2.2	P
	11	1 GHz ~ 3 GHz	--	P
		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)	3	Power	2.38GHz ~2.43GHz	Fig.A.6.2.7
		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
	9	Power	2.45GHz ~2.5GHz	Fig.A.6.2.8
		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)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2389.565	42.6	-38.8	27.7	53.700	H
17767.000	38.6	-18.5	45.6	11.500	H
17865.000	38.5	-18.5	45.6	11.400	V
17900.000	38.4	-18.5	45.6	11.300	H
17915.500	38.4	-17.7	45.6	10.500	H
17832.000	38.4	-18.5	45.6	11.300	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17760.000	38.7	-18.5	45.6	11.600	H
17858.000	38.5	-18.5	45.6	11.400	H
17842.000	38.5	-18.5	45.6	11.400	V
17871.000	38.5	-18.5	45.6	11.400	H
17814.000	38.5	-18.5	45.6	11.400	H
17784.500	38.5	-18.5	45.6	11.400	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2484.855	45.0	-38.9	27.7	56.200	H
17768.500	38.6	-18.5	45.6	11.500	H
17861.000	38.4	-18.5	45.6	11.300	V
17866.000	38.4	-18.5	45.6	11.300	H
17885.000	38.4	-18.5	45.6	11.300	H
17749.500	38.4	-18.5	45.6	11.300	H

802.11b-Peak

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2389.485	54.2	-38.8	27.7	65.300	H
17450.500	50.2	-19.2	41.5	27.900	H
17926.500	50.2	-17.7	45.6	22.300	V
17875.000	50.1	-18.5	45.6	23.000	H
17404.500	50.0	-19.2	41.5	27.700	H
17987.500	49.9	-17.7	45.6	22.000	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
17884.000	50.3	-18.5	45.6	23.200	H
17659.500	50.2	-18.9	45.6	23.500	H
17537.500	50.0	-19.2	45.6	23.600	V
17862.000	49.9	-18.5	45.6	22.800	H
17779.500	49.8	-18.5	45.6	22.700	H
17859.000	49.8	-18.5	45.6	22.700	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2484.855	57.4	-38.9	27.7	68.600	H
17266.500	50.7	-19.5	41.5	28.700	H
17844.000	50.2	-18.5	45.6	23.100	V
17403.500	50.1	-19.2	41.5	27.800	H
17906.500	50.1	-18.5	45.6	23.000	H
17777.000	49.8	-18.5	45.6	22.700	H

802.11g - Average

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2389.480	45.9	-38.8	27.7	57.000	H
17848.500	38.9	-18.5	45.6	11.800	H
17870.500	38.5	-18.5	45.6	11.400	V
17760.000	38.5	-18.5	45.6	11.400	H
17882.000	38.5	-18.5	45.6	11.400	H
17787.000	38.4	-18.5	45.6	11.300	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17833.000	38.5	-18.5	45.6	11.400	H
17745.000	38.5	-18.5	45.6	11.400	H
17853.500	38.4	-18.5	45.6	11.300	V
17883.000	38.4	-18.5	45.6	11.300	H
17771.000	38.4	-18.5	45.6	11.300	H
17866.500	38.4	-18.5	45.6	11.300	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2484.885	42.5	-38.9	27.7	53.700	H
17435.500	38.6	-19.2	41.5	16.300	H
17807.500	38.5	-18.5	45.6	11.400	V
17852.500	38.5	-18.5	45.6	11.400	H
17879.000	38.5	-18.5	45.6	11.400	H
17844.000	38.5	-18.5	45.6	11.400	H

802.11g - Peak

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2389.745	61.5	-38.8	27.7	72.600	H
17433.500	51.5	-19.2	41.5	29.200	H
17933.000	50.6	-17.7	45.6	22.700	V
17327.500	49.9	-19.5	41.5	27.900	H
17407.500	49.8	-19.2	41.5	27.500	H
17442.500	49.8	-19.2	41.5	27.500	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17656	50.4	-18.9	45.6	23.7	H
17728	50.2	-18.9	45.6	23.5	H
17864	49.7	-18.5	45.6	22.6	V
17938.5	49.6	-17.7	45.6	21.7	H
17819	49.6	-18.5	45.6	22.5	H
17783	49.4	-18.5	45.6	22.3	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2484.215	57.4	-38.9	27.7	68.600	H
17424.500	50.2	-19.2	41.5	27.900	H
17743.500	50.1	-18.5	45.6	23.000	V
17639.500	50.1	-18.9	45.6	23.400	H
17391.000	49.8	-19.2	41.5	27.500	H
17375.000	49.8	-19.5	41.5	27.800	H

802.11n-HT20-Average

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17831.500	38.6	-18.5	45.6	11.500	H
17842.000	38.5	-18.5	45.6	11.400	H
17843.000	38.5	-18.5	45.6	11.400	V
17822.500	38.5	-18.5	45.6	11.400	H
17761.500	38.5	-18.5	45.6	11.400	H
17867.500	38.5	-18.5	45.6	11.400	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17831.500	38.6	-18.5	45.6	11.500	H
17842.000	38.5	-18.5	45.6	11.400	H
17843.000	38.5	-18.5	45.6	11.400	V
17822.500	38.5	-18.5	45.6	11.400	H
17761.500	38.5	-18.5	45.6	11.400	H
17867.500	38.5	-18.5	45.6	11.400	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2484.530	46.4	-38.9	27.7	57.600	H
17850.500	38.5	-18.5	45.6	11.400	H
17766.000	38.5	-18.5	45.6	11.400	V
17870.000	38.5	-18.5	45.6	11.400	H
17858.000	38.5	-18.5	45.6	11.400	H
17756.000	38.5	-18.5	45.6	11.400	H

802.11n-HT20-Peak

Ch1

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2389.720	64.4	-38.8	27.7	75.500	H
17778.500	50.8	-18.5	45.6	23.700	H
17791.500	50.3	-18.5	45.6	23.200	V
17869.500	50.3	-18.5	45.6	23.200	H
17834.500	50.3	-18.5	45.6	23.200	H
17838.500	49.6	-18.5	45.6	22.500	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
16978.500	50.2	-19.9	39.9	30.200	H
17563.000	50.1	-18.9	45.6	23.400	H
17323.500	50.0	-19.5	41.5	28.000	V
17332.000	50.0	-19.5	41.5	28.000	H
17390.000	49.9	-19.2	41.5	27.600	H
17760.500	49.9	-18.5	45.6	22.800	H

Ch11

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2484.065	60.9	-38.9	27.7	72.100	H
17763.500	50.2	-18.5	45.6	23.100	H
17858.500	50.2	-18.5	45.6	23.100	V
17943.000	50.0	-17.7	45.6	22.100	H
17495.500	50.0	-19.2	41.5	27.700	H
17758.500	49.9	-18.5	45.6	22.800	H

802.11n-HT40-Average

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2388.955	47.9	-38.8	27.7	59.000	H
17875.500	38.8	-18.5	45.6	11.700	H
17873.500	38.6	-18.5	45.6	11.500	V
17857.000	38.6	-18.5	45.6	11.500	H
17866.000	38.6	-18.5	45.6	11.500	H
17741.500	38.5	-18.5	45.6	11.400	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17879.000	38.6	-18.5	45.6	11.500	H
17759.500	38.5	-18.5	45.6	11.400	H
17890.000	38.5	-18.5	45.6	11.400	V
17856.000	38.5	-18.5	45.6	11.400	H
17869.500	38.5	-18.5	45.6	11.400	H
17873.500	38.4	-18.5	45.6	11.300	H

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2485.105	38.8	-38.9	27.7	50.000	H
17840.500	38.7	-18.5	45.6	11.600	H
17876.500	38.6	-18.5	45.6	11.500	V
17859.500	38.5	-18.5	45.6	11.400	H
17764.500	38.5	-18.5	45.6	11.400	H
17857.000	49.7	-18.5	45.6	22.600	H

802.11n-HT40-Peak

Ch3

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2388.860	63.3	-38.8	27.7	74.400	H
17449.500	50.5	-19.2	41.5	28.200	H
17751.000	50.4	-18.5	45.6	23.300	V
17931.500	50.0	-17.7	45.6	22.100	H
17314.000	49.9	-19.5	41.5	27.900	H
17370.000	49.9	-19.5	41.5	27.900	H

Ch6

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
17390.000	50.6	-19.2	41.5	28.300	H
17780.000	50.0	-18.5	45.6	22.900	H
17959.500	49.9	-17.7	45.6	22.000	V
17894.500	49.7	-18.5	45.6	22.600	H
17383.000	49.7	-19.5	41.5	27.700	H
17701.000	49.7	-18.9	45.6	23.000	H

Ch9

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dB μ V)	Polarization
2484.780	56.8	-38.9	27.7	68.000	H
17425.000	50.1	-19.2	41.5	27.800	H
17933.500	50.1	-17.7	45.6	22.200	V
17340.000	49.9	-19.5	41.5	27.900	H
17633.000	49.8	-18.9	45.6	23.100	H
17436.500	49.7	-19.2	41.5	27.400	H

Test graphs as below for Set1:

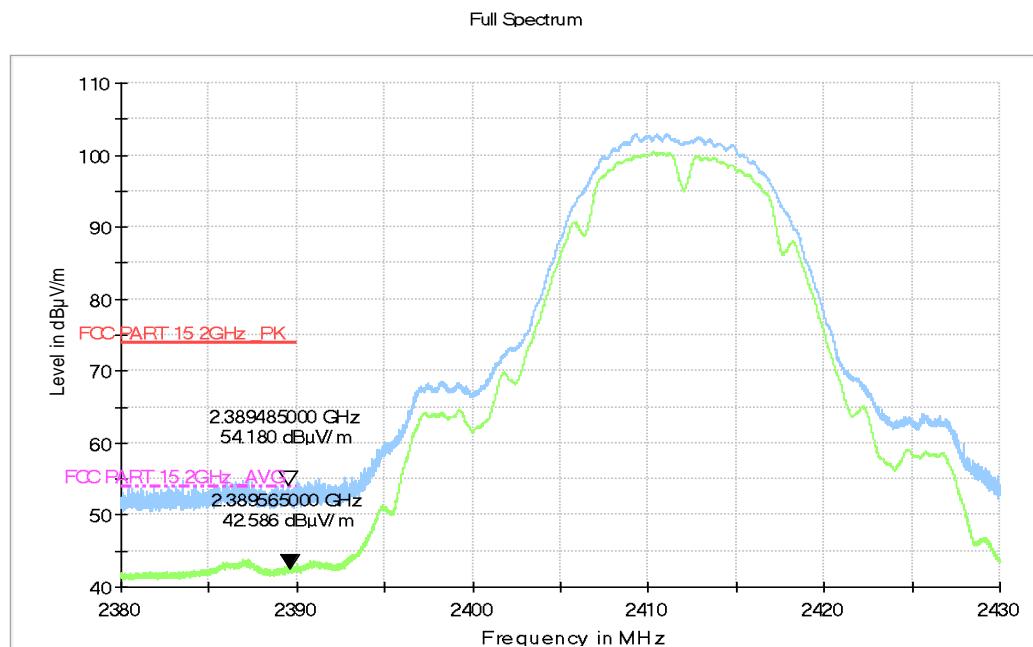


Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.43GHz

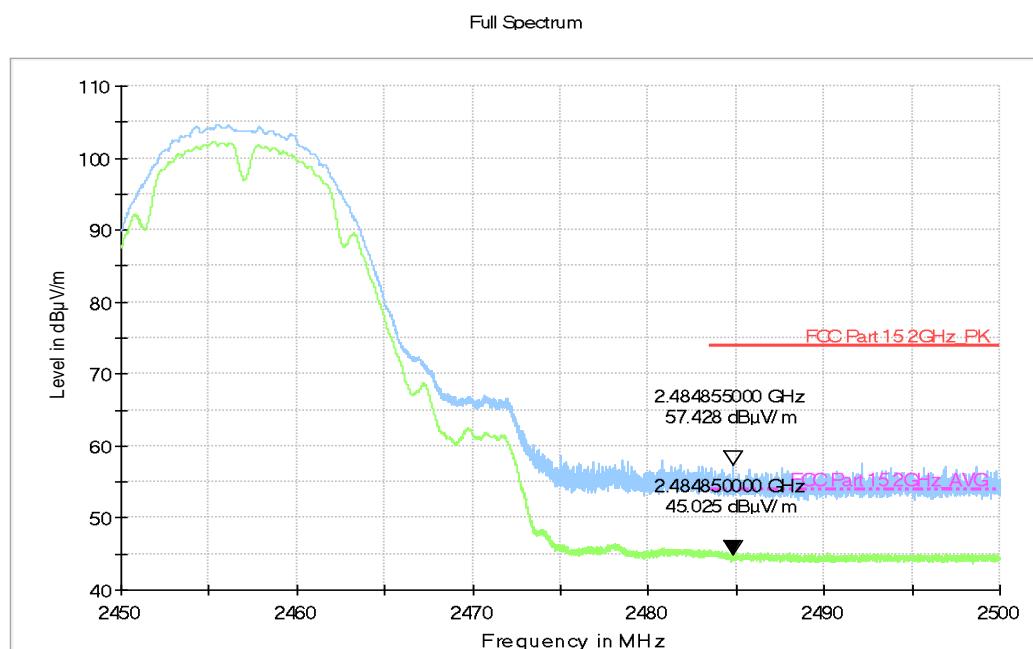


Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

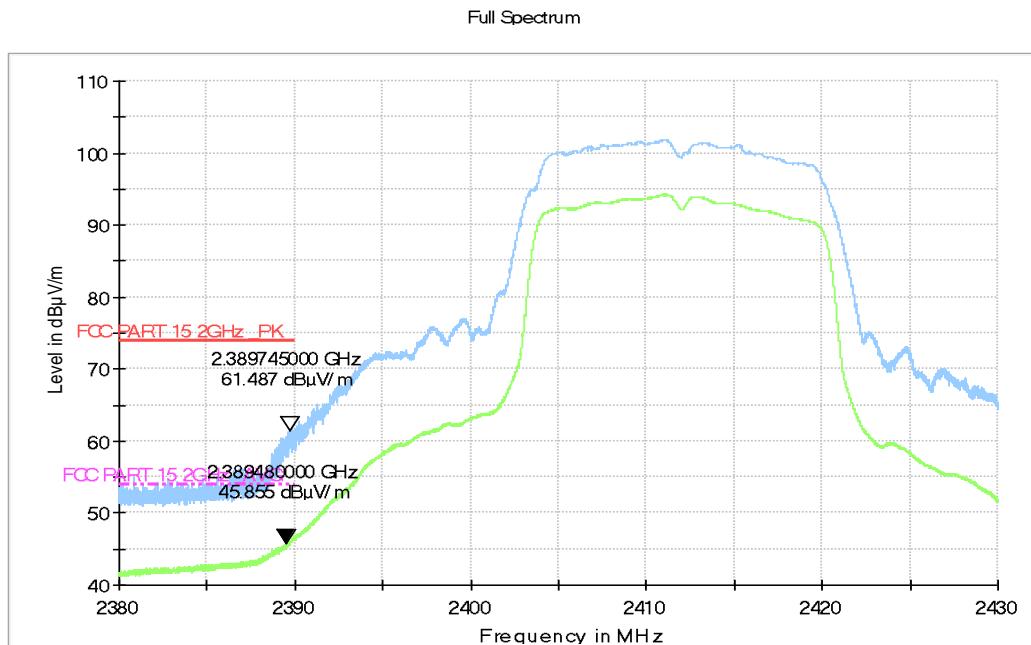
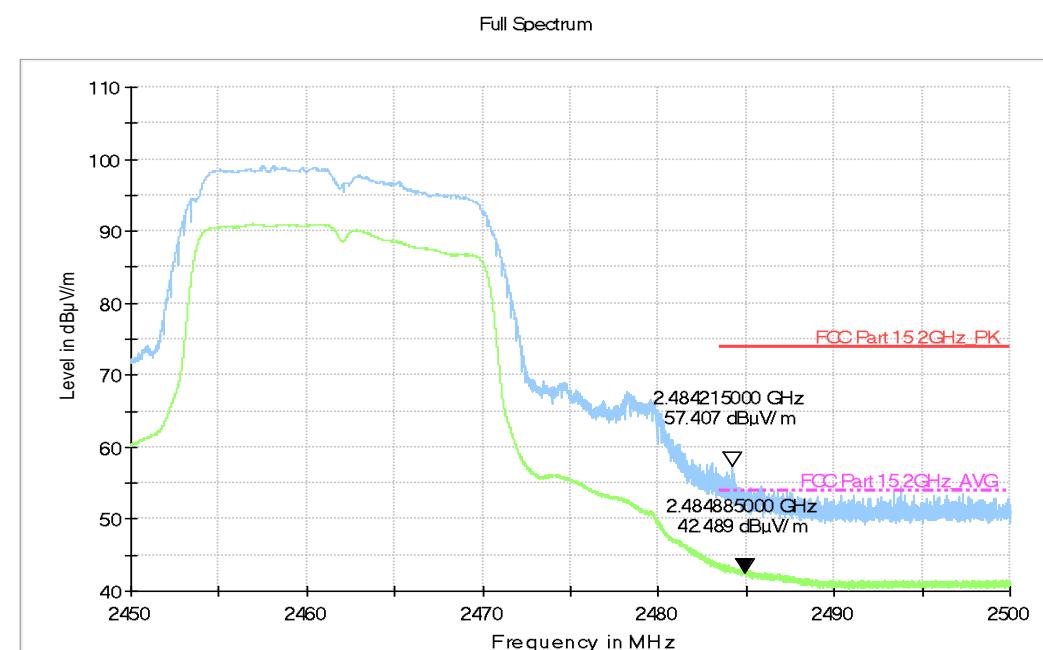


Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.43GHz



3

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

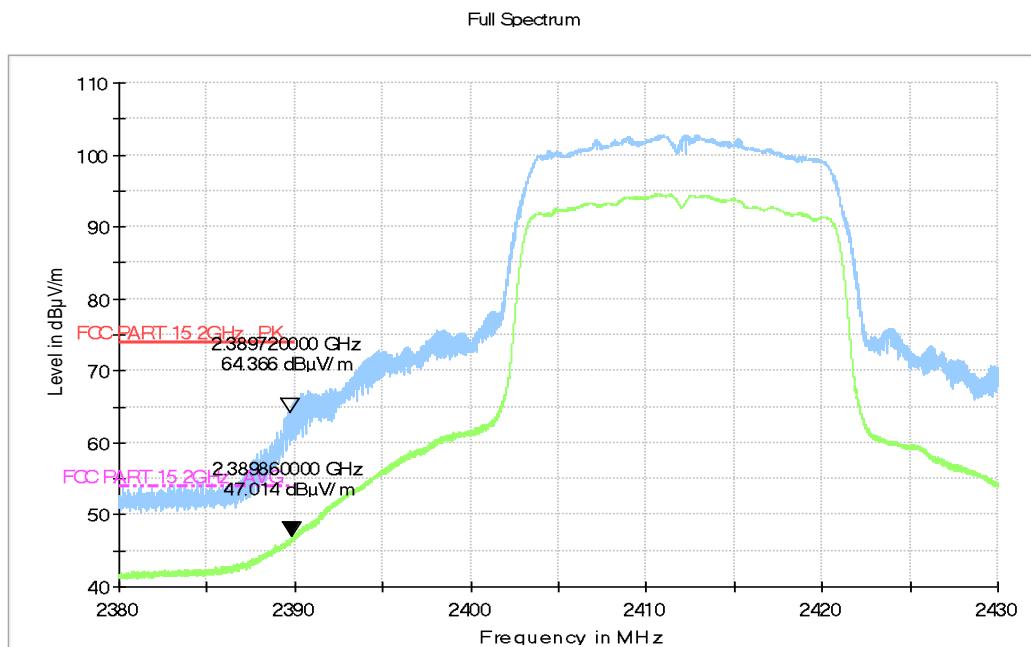


Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz

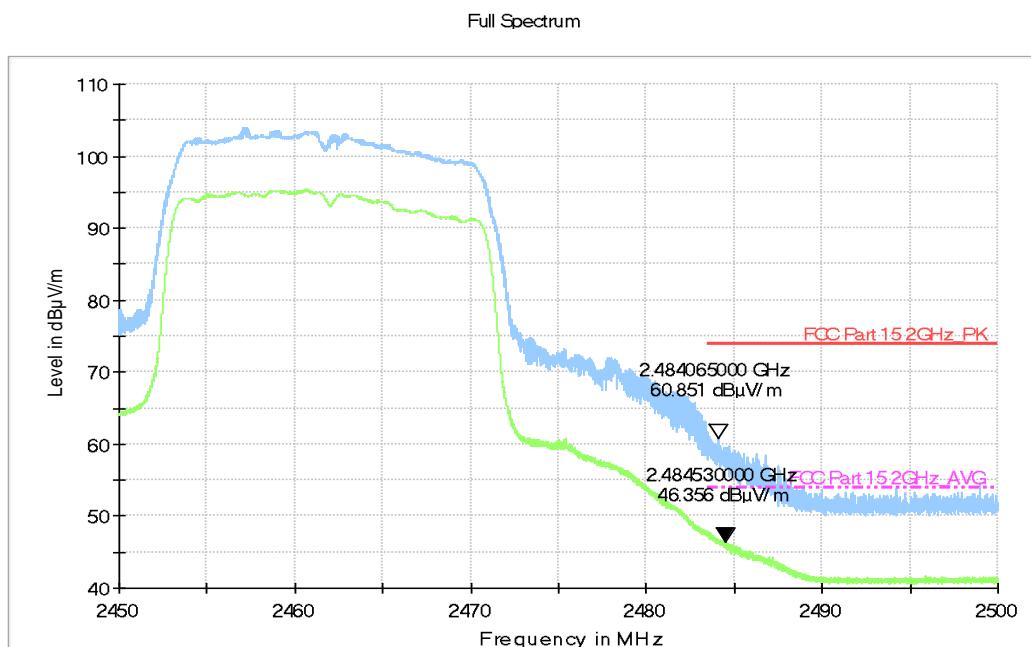


Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

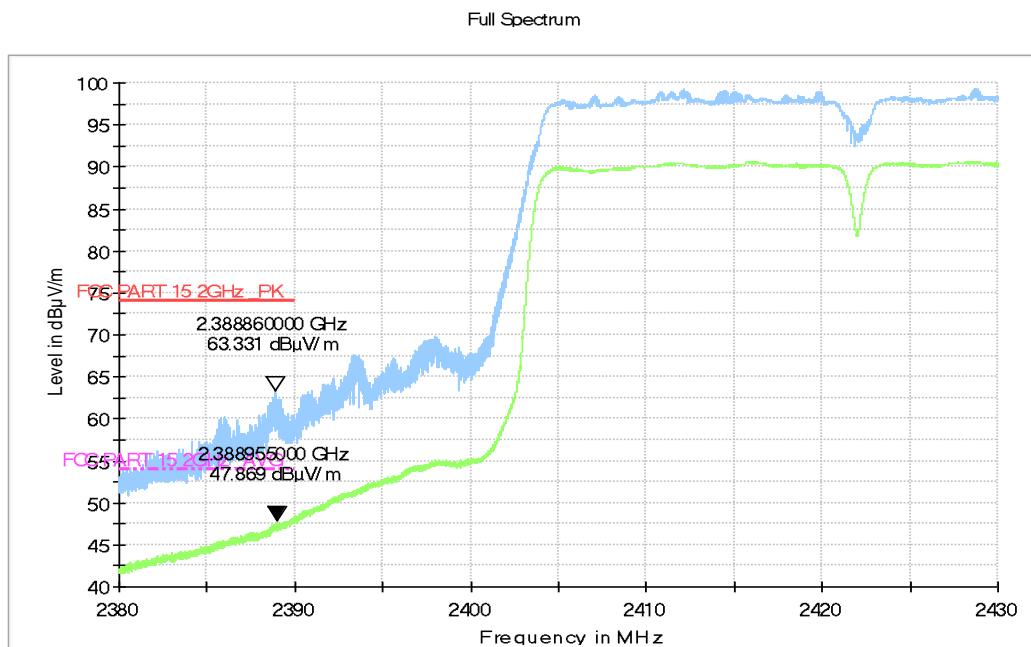


Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.43GHz

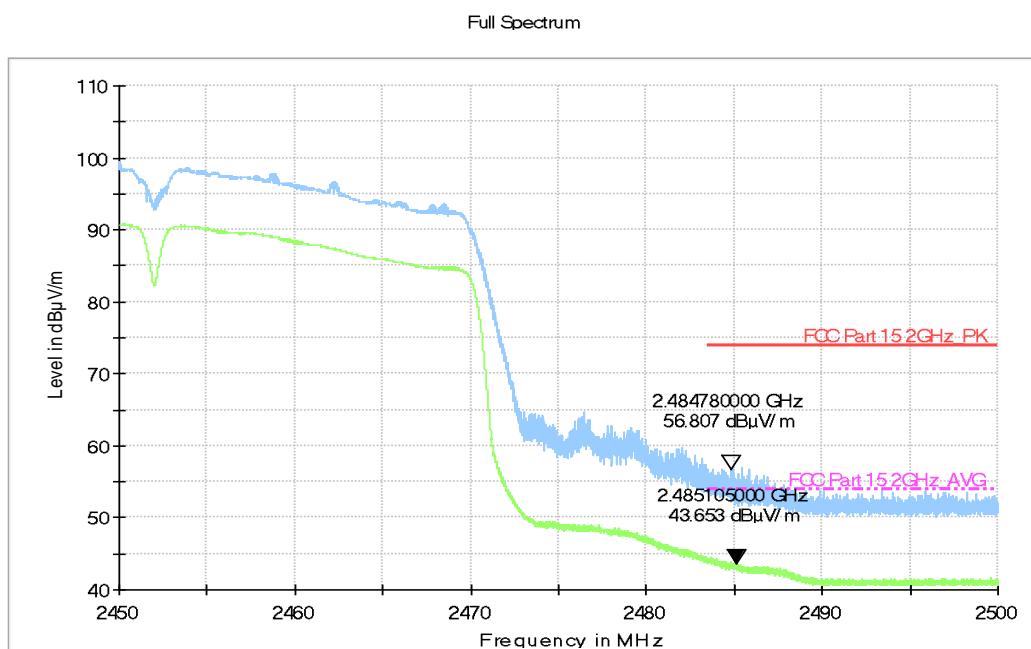


Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

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.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	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.

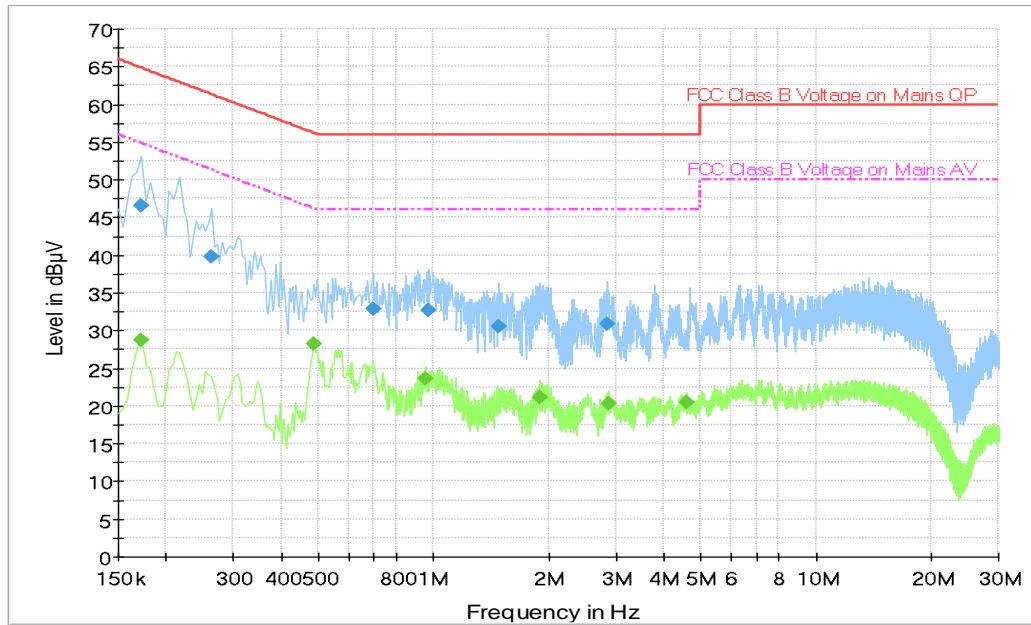
WLAN (Average Limit)

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	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.1

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

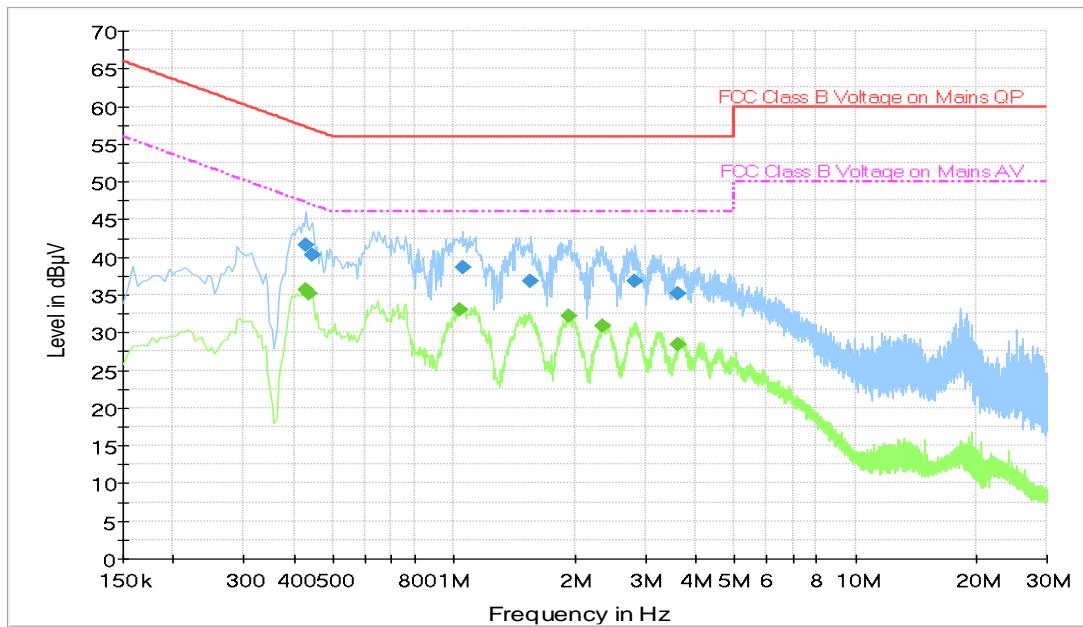
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.172500	46.6	2000.0	9.000	On	L1	19.8	18.2	64.8
0.262500	39.8	2000.0	9.000	On	L1	19.8	21.6	61.4
0.694500	32.8	2000.0	9.000	On	L1	19.8	23.2	56.0
0.969000	32.7	2000.0	9.000	On	L1	19.6	23.3	56.0
1.482000	30.6	2000.0	9.000	On	L1	19.6	25.4	56.0
2.850000	30.8	2000.0	9.000	On	L1	19.7	25.2	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.172500	28.7	2000.0	9.000	On	L1	19.8	26.2	54.8
0.487500	28.2	2000.0	9.000	On	L1	19.9	18.0	46.2
0.951000	23.6	2000.0	9.000	On	L1	19.6	22.4	46.0
1.896000	21.1	2000.0	9.000	On	L1	19.7	24.9	46.0
2.868000	20.3	2000.0	9.000	On	L1	19.7	25.7	46.0
4.605000	20.4	2000.0	9.000	On	L1	19.6	25.6	46.0

Traffic: Set.2

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

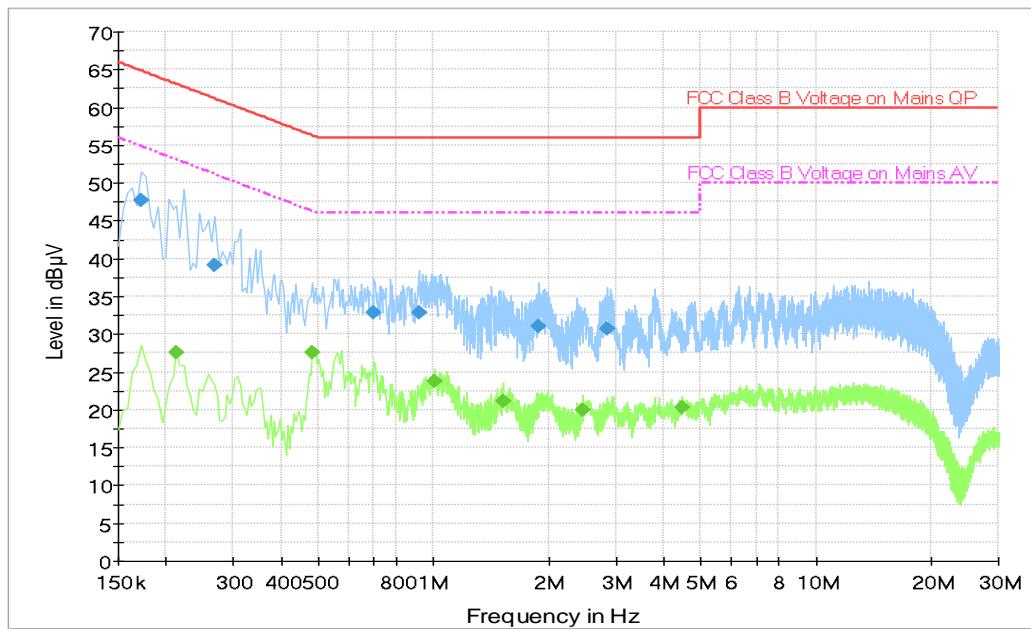
Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.429000	41.6	2000.0	9.000	On	N	19.9	15.6	57.3
0.442500	40.3	2000.0	9.000	On	N	19.9	16.7	57.0
1.050000	38.6	2000.0	9.000	On	L1	19.6	17.4	56.0
1.558500	36.8	2000.0	9.000	On	L1	19.7	19.2	56.0
2.832000	36.8	2000.0	9.000	On	N	19.6	19.2	56.0
3.633000	35.2	2000.0	9.000	On	N	19.7	20.8	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.429000	35.6	2000.0	9.000	On	N	19.9	11.7	47.3
0.438000	35.1	2000.0	9.000	On	N	19.9	12.0	47.1
1.036500	33.1	2000.0	9.000	On	N	19.7	12.9	46.0
1.927500	32.1	2000.0	9.000	On	N	19.6	13.9	46.0
2.350500	30.9	2000.0	9.000	On	N	19.6	15.1	46.0
3.628500	28.3	2000.0	9.000	On	N	19.7	17.7	46.0

Idle: Set.1

Fig.A.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 (dB μ V)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.172500	47.7	2000.0	9.000	On	N	19.8	17.1	64.8
0.267000	39.1	2000.0	9.000	On	N	19.8	22.1	61.2
0.699000	32.8	2000.0	9.000	On	L1	19.8	23.2	56.0
0.915000	32.8	2000.0	9.000	On	L1	19.7	23.2	56.0
1.882500	31.1	2000.0	9.000	On	L1	19.7	24.9	56.0
2.845500	30.8	2000.0	9.000	On	L1	19.7	25.2	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.213000	27.5	2000.0	9.000	On	L1	19.8	25.6	53.1
0.483000	27.5	2000.0	9.000	On	L1	19.9	18.8	46.3
1.005000	23.7	2000.0	9.000	On	L1	19.6	22.3	46.0
1.518000	21.2	2000.0	9.000	On	L1	19.7	24.8	46.0
2.467500	20.0	2000.0	9.000	On	L1	19.7	26.0	46.0
4.465500	20.4	2000.0	9.000	On	L1	19.6	25.6	46.0



ANNEX B: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology



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 Communiqué dated January 2009).*

2016-09-29 through 2017-09-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program

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