

Appendix for 2.4G WiFi(RSE)



1. Appendix H: Radiated Spurious Emission & Spurious in Restricted Band

Note:

- 1. We tested all modes & antennas, the data presented below is the worst case.
- 2. The simultaneous transmission has been considered
- 3. The whole testing range is from "9 KHz to 26.5 GHz (10th harmonics)" is divided into 5 parts according to the test site settings, which are:
- (Part 1): Test range of "9 KHz to 30 MHz", RBW =9 kHz, VBW = 30 kHz
- (Part 2): Test range of "30 GHz to 1 GHz", RBW = 100 kHz, VBW = 300 kHz.
- (Part 3): Test range of "1 GHz to 3 GHz". RBW = 1 MHz, VBW = 3 MHz.
- (Part 4): Test range of "3 GHz to 18 GHz", RBW = 1 MHz, VBW = 3 MHz.
- (Part 5): Test range of "18 GHz to 26.5 GHz". RBW = 1 MHz, VBW = 3 MHz.

1.1. Test Results

1.1.1. 11b20SISO

Test Mode	Antenna Port	Test Channel	Spurious Emissions Result	Spurious Emissions Limit	Verdict
11b20SISO	Ant1	2412	(see Test Graphs)	(see Test Graphs)	PASS
	Ant1	2462	(see Test Graphs)	(see Test Graphs)	PASS

1.1.2. 11g20SISO

Test Mode	Antenna Port	Test Channel	Spurious Emissions Result	Spurious Emissions Limit	Verdict
11g20SISO	Ant1	2412	(see Test Graphs)	(see Test Graphs)	PASS
	Ant1	2462	(see Test Graphs)	(see Test Graphs)	PASS

1.1.3. 11n20SISO

Test Mode Port Spurious Emissions Spurious Emissions Verd Result Limit	'erdict
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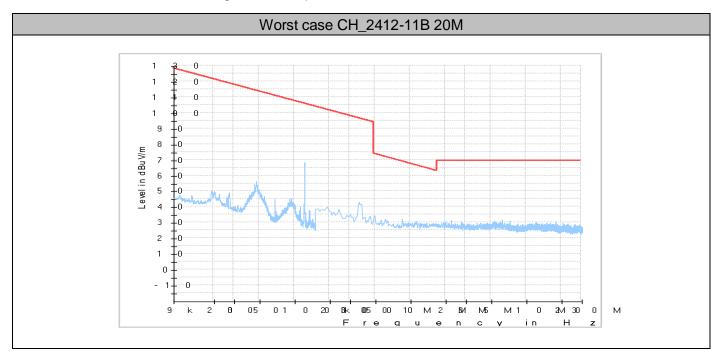


11n20SISO	Ant1	2412	(see Test Graphs)	(see Test Graphs)	PASS
	Ant1	2462	(see Test Graphs)	(see Test Graphs)	PASS

1.2. Test Graphs

1.2.1. Part 1: Testing Range of "9 kHz to 30MHz"

Note 1: The test results and plot for testing range of "9 kHz to 30MHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

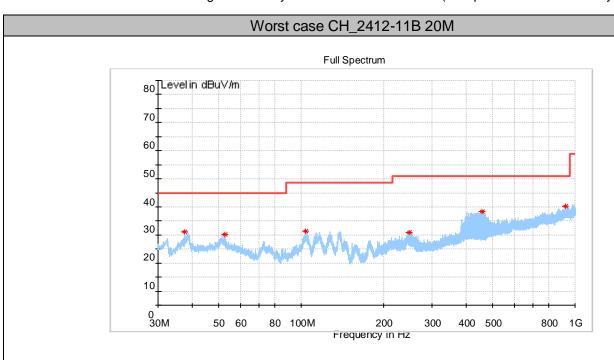




1.2.2. Part 2: Testing Range of "30 MHz to 1 GHz"

Note 1: The test results and plot for testing range of "30 MHz to 1 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



MEASUREMENT RESULT: QP Detector

Frequency	Level	Transd	Limit	Margin	Height	Azimuth	Delevientien
MHz	dΒμV/m	dB	dBµV/m	dB	cm	deg	Polarisation
37.469000	26.07	18.4	40.00	13.93	100.0	208.0	V
52.746500	25.21	20.4	40.00	14.79	100.0	17.0	V
103.720000	26.31	18.6	43.50	17.19	100.0	195.0	V
247.862000	25.94	19.7	46.00	20.06	100.0	342.0	Н
457.915500	33.41	23.9	46.00	12.59	100.0	265.0	V
922.836500	35.12	31.0	46.00	10.88	100.0	21.0	Н



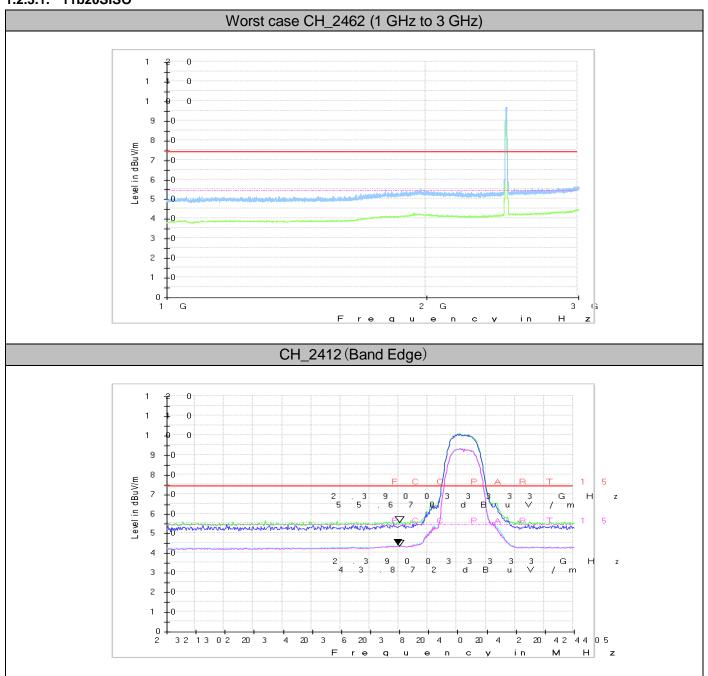
1.2.3. Part 3: Testing Range of "1 GHz to 3 GHz"

Note 1: The testing range of "1 GHz to 3 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands. The test results and plot for testing range of "1 GHz to 3 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

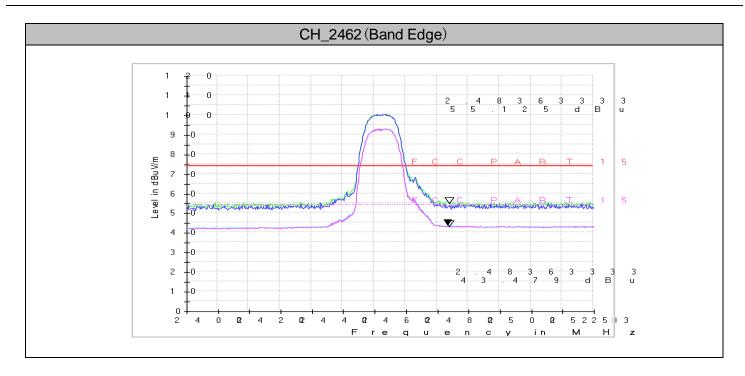
Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).

Note 3: The peak spike exceeds the limit line is EUT's operating frequency.

1.2.3.1. 11b20SISO

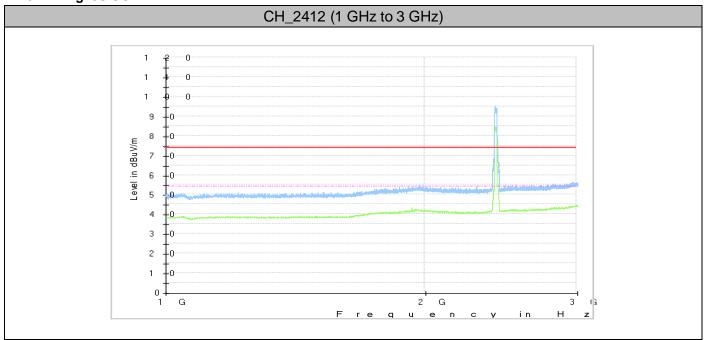




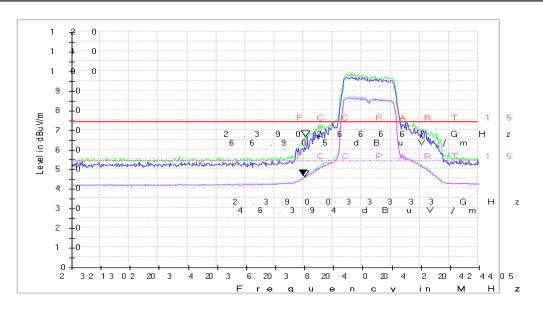




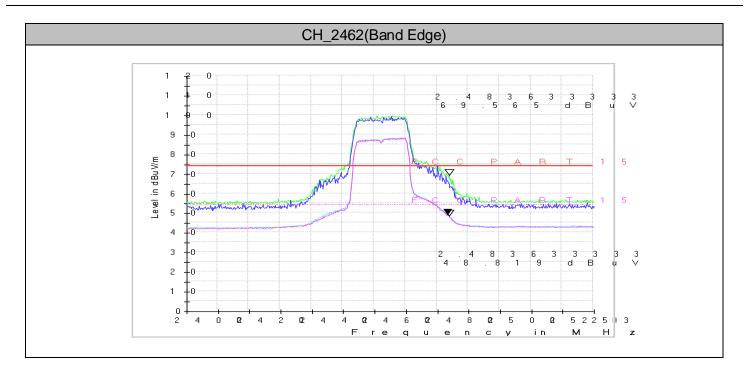
1.2.3.2. 11g20SISO



CH_2412 (Band Edge)

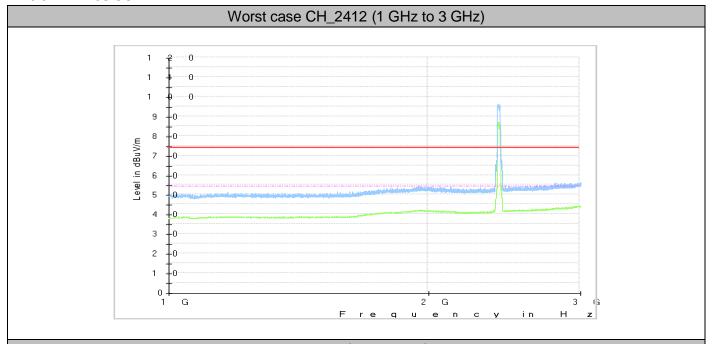


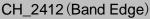


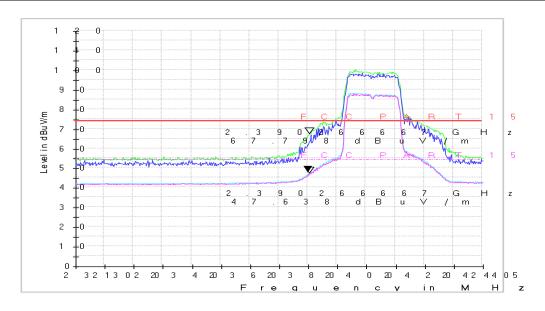




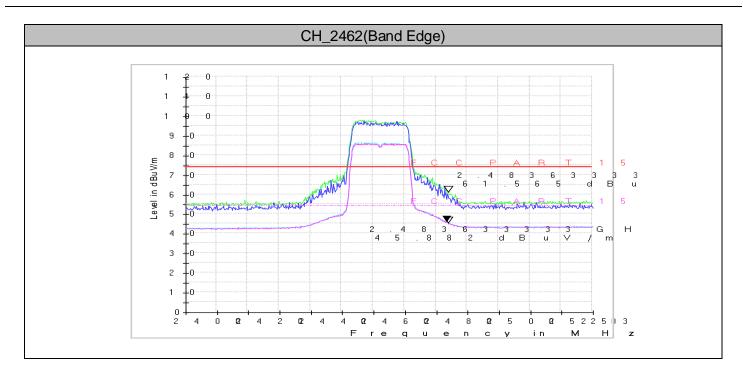
1.2.3.3. 11n20SISO











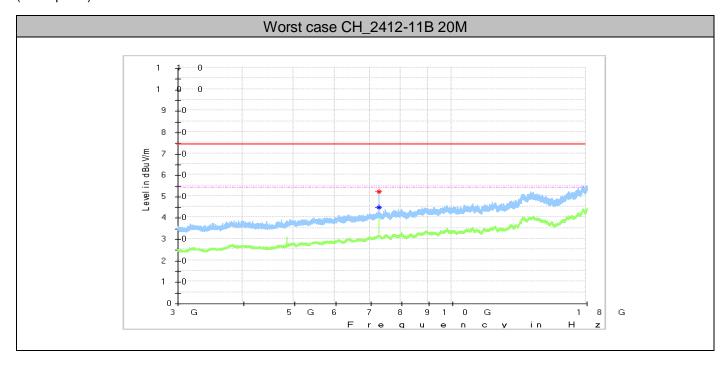


1.2.4. Part 4: Testing Range of "3 GHz to 18 GHz"

Note 1: The test results and plot for testing range of "3 GHz to 18 GHz" showed as below is the worst case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The testing range of "3 GHz to 18 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).



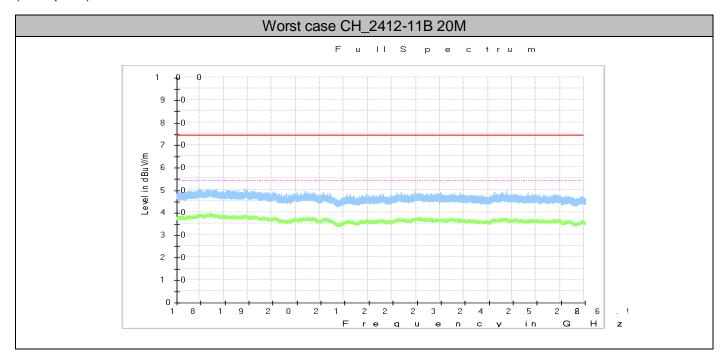


1.2.5. Part 5: Testing Range of "18 GHz to 26.5 GHz"

Note 1: The test results and plot for testing range of "18 GHz to 26.5 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The testing range of "18 GHz to 26.5 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).





2. Appendix I: Conducted Emission at Power Port

Note 1: The test results and plot for testing range of "150 kHz to 30 MHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

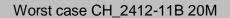
Note 2: RBW =9 kHz; VBW = 30 kHz

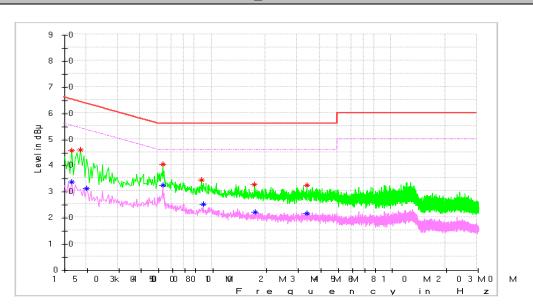
2.1. Test Results

Test Mode	Antenna Port	Test Channel	Maximum Emissions	Limit	Verdict
11b20SISO	Ant1	2412	(see Test Graphs)	(see Test Graphs)	PASS



2.2. Test Graphs





MEASUREMENT RESULT: QP Detector

Frequency	Level	Limit	Transd.	Margin	Line	PE
(MHz)	(dBµV)	(dBµV)	(dB)	(dB)		
0.164925	45.92	65.21	9.7	19.29	L1	FLO
0.183581	46.16	64.32	9.7	18.16	L1	FLO
0.526856	40.63	56.00	9.7	15.37	N	FLO
0.862669	34.67	56.00	9.7	21.33	N	FLO
1.709662	32.95	56.00	9.7	23.05	N	FLO
3.329025	32.49	56.00	9.8	23.51	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency	Level	Limit	Transd.	Margin	Line	PE
(MHz)	(dBµV)	(dBµV)	(dB)	(dB)		
0.164925	33.94	55.21	9.7	21.27	L1	FLO
0.198506	31.35	53.67	9.7	22.32	N	FLO
0.526856	32.65	46.00	9.7	13.35	N	FLO
0.885056	25.35	46.00	9.7	20.65	N	FLO
1.728319	22.42	46.00	9.7	23.58	N	FLO
3.351412	21.77	46.00	9.8	24.23	N	FLO



Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

END