

A.6. Transmitter Spurious Emission

A.6.1 Transmitter Spurious Emission - Conducted

Method of Measurement: See KDB558074 section 12.2.

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz bandwidth

EUT ID: EUT2

Modulation type and data rate tested:

802.11b	802.11g	802.11n-HT20	802.11n-HT40
11Mbps(CCK)	54Mbps(OFDM)	MCS5(OFDM)	MCS4(OFDM)

Measurement Results:

802.11b mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11b	1	2.412 GHz	Fig.A.6.1.1	P
		30 MHz ~ 1 GHz	Fig.A.6.1.2	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.3	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.4	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.5	P
		10 GHz ~ 15 GHz	Fig.A.6.1.6	P
		15 GHz ~ 20 GHz	Fig.A.6.1.7	P
		20 GHz ~ 26 GHz	Fig.A.6.1.8	P
	6	2.437 GHz	Fig.A.6.1.9	P
		30 MHz ~ 1 GHz	Fig.A.6.1.10	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.11	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.12	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.13	P
		10 GHz ~ 15 GHz	Fig.A.6.1.14	P
		15 GHz ~ 20 GHz	Fig.A.6.1.15	P
		20 GHz ~ 26 GHz	Fig.A.6.1.16	P
	11	2.462 GHz	Fig.A.6.1.17	P
		30 MHz ~ 1 GHz	Fig.A.6.1.18	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.19	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.20	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.21	P
		10 GHz ~ 15 GHz	Fig.A.6.1.22	P
		15 GHz ~ 20 GHz	Fig.A.6.1.23	P
		20 GHz ~ 26 GHz	Fig.A.6.1.24	P

802.11g mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11g	1	2.412 GHz	Fig.A.6.1.25	P
		30 MHz ~ 1 GHz	Fig.A.6.1.26	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.27	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.28	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.29	P
		10 GHz ~ 15 GHz	Fig.A.6.1.30	P
		15 GHz ~ 20 GHz	Fig.A.6.1.31	P
		20 GHz ~ 26 GHz	Fig.A.6.1.32	P
	6	2.437 GHz	Fig.A.6.1.33	P
		30 MHz ~ 1 GHz	Fig.A.6.1.34	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.35	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.36	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.37	P
		10 GHz ~ 15 GHz	Fig.A.6.1.38	P
		15 GHz ~ 20 GHz	Fig.A.6.1.39	P
		20 GHz ~ 26 GHz	Fig.A.6.1.40	P
	11	2.462 GHz	Fig.A.6.1.41	P
		30 MHz ~ 1 GHz	Fig.A.6.1.42	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.43	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.44	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.45	P
		10 GHz ~ 15 GHz	Fig.A.6.1.46	P
		15 GHz ~ 20 GHz	Fig.A.6.1.47	P
		20 GHz ~ 26 GHz	Fig.A.6.1.48	P

802.11n-HT20 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	1	2.412 GHz	Fig.A.6.1.49	P
		30 MHz ~ 1 GHz	Fig.A.6.1.50	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.51	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.52	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.53	P
		10 GHz ~ 15 GHz	Fig.A.6.1.54	P
		15 GHz ~ 20 GHz	Fig.A.6.1.55	P
		20 GHz ~ 26 GHz	Fig.A.6.1.56	P
	6	2.437 GHz	Fig.A.6.1.57	P
		30 MHz ~ 1 GHz	Fig.A.6.1.58	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.59	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.60	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.61	P
		10 GHz ~ 15 GHz	Fig.A.6.1.62	P
		15 GHz ~ 20 GHz	Fig.A.6.1.63	P
		20 GHz ~ 26 GHz	Fig.A.6.1.64	P
	11	2.462 GHz	Fig.A.6.1.65	P
		30 MHz ~ 1 GHz	Fig.A.6.1.66	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.67	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.68	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.69	P
		10 GHz ~ 15 GHz	Fig.A.6.1.70	P
		15 GHz ~ 20 GHz	Fig.A.6.1.71	P
		20 GHz ~ 26 GHz	Fig.A.6.1.72	P

802.11n-HT40 mode

MODE	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	3	2.422 GHz	Fig.A.6.1.73	P
		30 MHz ~ 1 GHz	Fig.A.6.1.74	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.75	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.76	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.77	P
		10 GHz ~ 15 GHz	Fig.A.6.1.78	P
		15 GHz ~ 20 GHz	Fig.A.6.1.79	P
		20 GHz ~ 26 GHz	Fig.A.6.1.80	P
	6	2.437 GHz	Fig.A.6.1.81	P
		30 MHz ~ 1 GHz	Fig.A.6.1.82	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.83	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.84	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.85	P
		10 GHz ~ 15 GHz	Fig.A.6.1.86	P
		15 GHz ~ 20 GHz	Fig.A.6.1.87	P
		20 GHz ~ 26 GHz	Fig.A.6.1.88	P
	9	2.452 GHz	Fig.A.6.1.89	P
		30 MHz ~ 1 GHz	Fig.A.6.1.90	P
		1 GHz ~ 2.5 GHz	Fig.A.6.1.91	P
		2.5 GHz ~ 7.5 GHz	Fig.A.6.1.92	P
		7.5 GHz ~ 10 GHz	Fig.A.6.1.93	P
		10 GHz ~ 15 GHz	Fig.A.6.1.94	P
		15 GHz ~ 20 GHz	Fig.A.6.1.95	P
		20 GHz ~ 26 GHz	Fig.A.6.1.96	P

Conclusion: Pass

Measurement Uncertainty:

Frequency Range	Uncertainty(dB)
30MHz ≤ f ≤ 2GHz	0.63
2GHz ≤ f ≤ 3.6GHz	0.82
3.6GHz ≤ f ≤ 8GHz	1.55
8GHz ≤ f ≤ 20GHz	1.86
20GHz ≤ f ≤ 22GHz	1.90
22GHz ≤ f ≤ 26GHz	2.20

Test graphs as below:

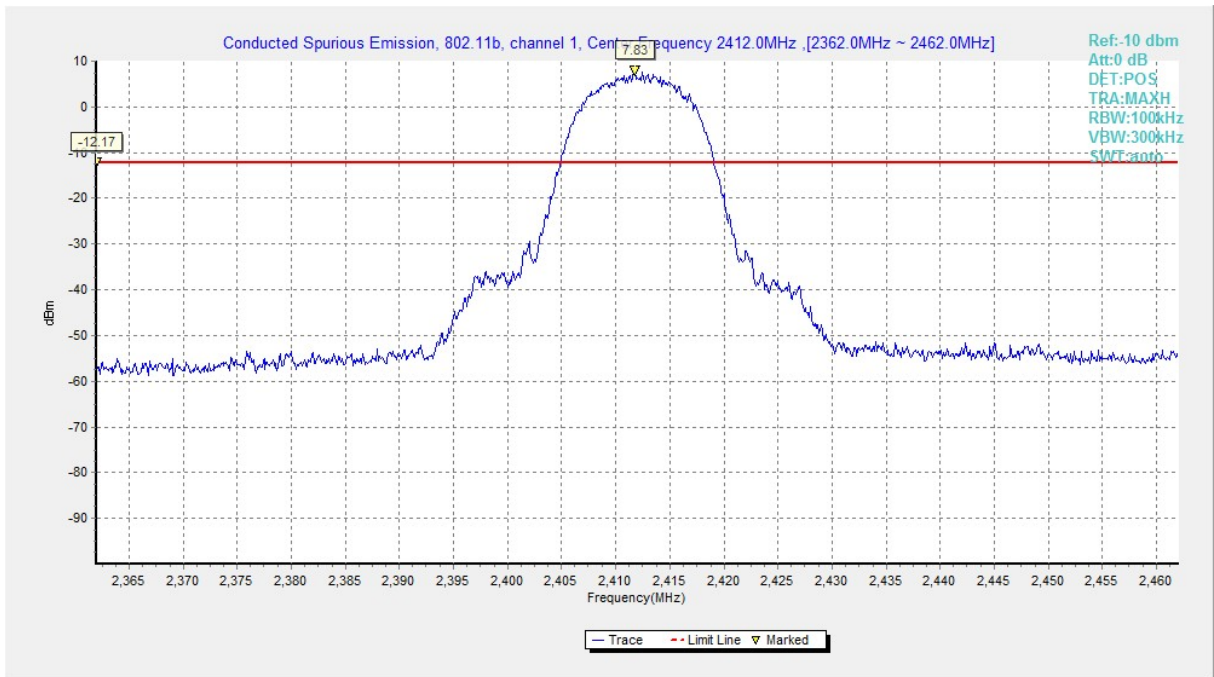


Fig.A.6.1.1 Conducted Spurious Emission (802.11b, Ch1, Center Frequency)

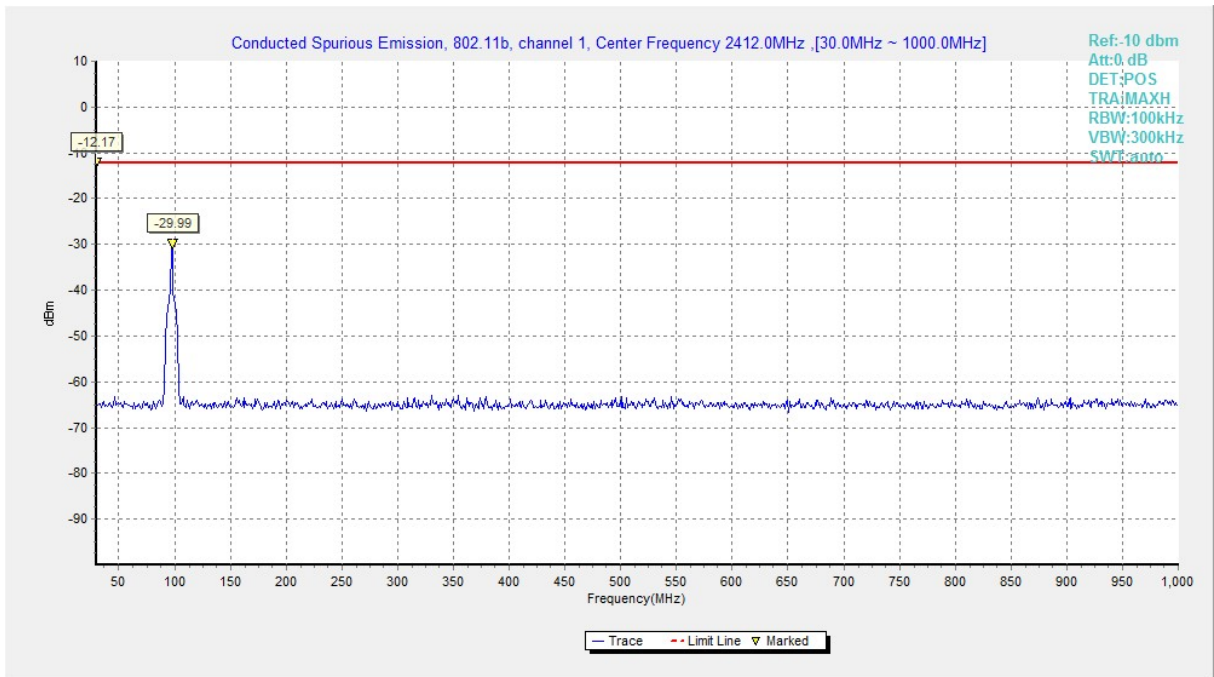


Fig.A.6.1.2 Conducted Spurious Emission (802.11b, Ch1, 30 MHz-1 GHz)

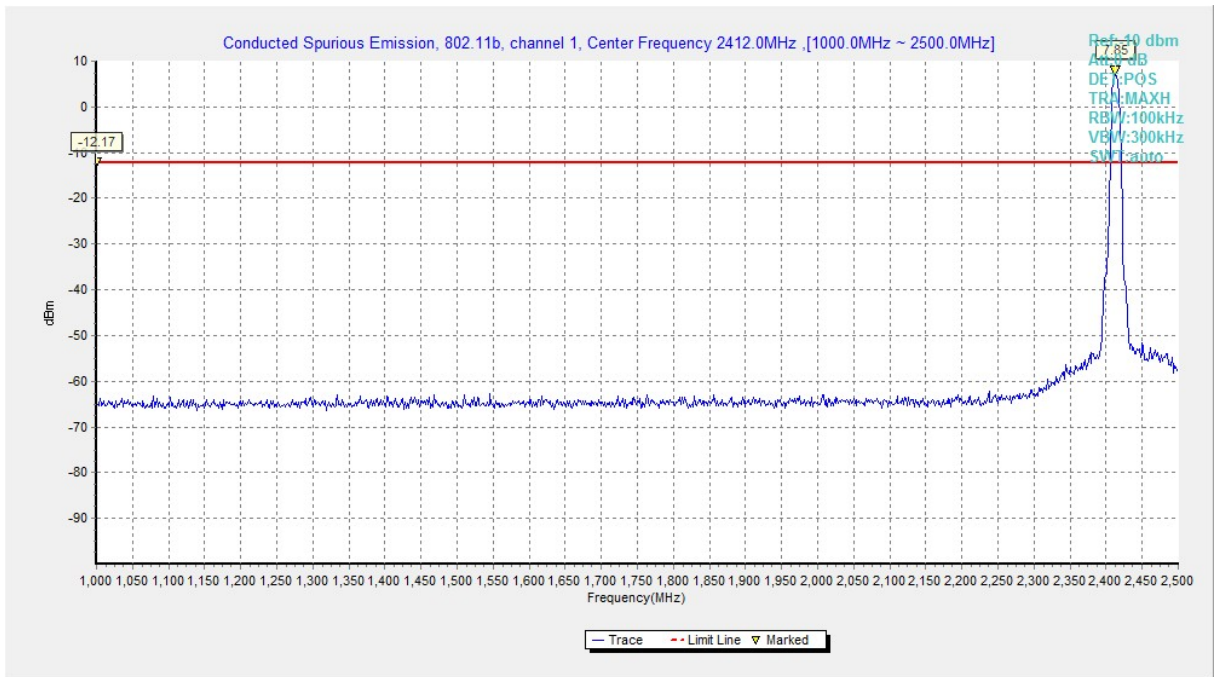


Fig.A.6.1.3 Conducted Spurious Emission (802.11b, Ch1, 1 GHz-2.5 GHz)

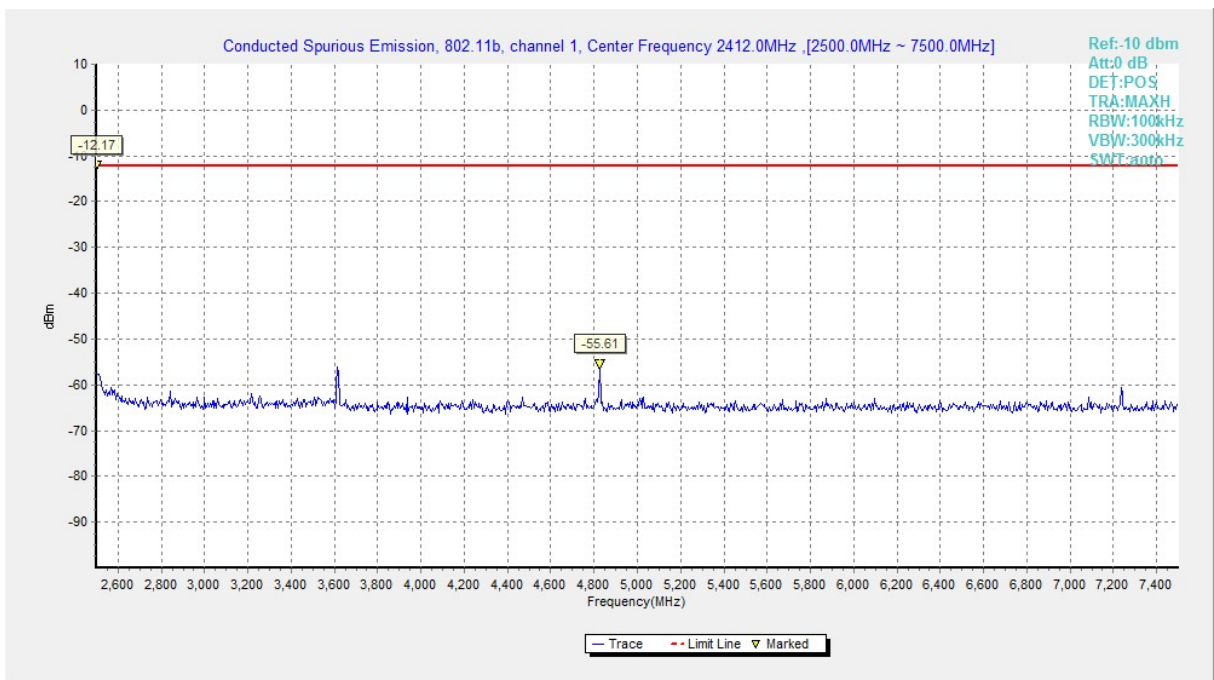


Fig.A.6.1.4 Conducted Spurious Emission (802.11b, Ch1, 2.5 GHz-7.5 GHz)

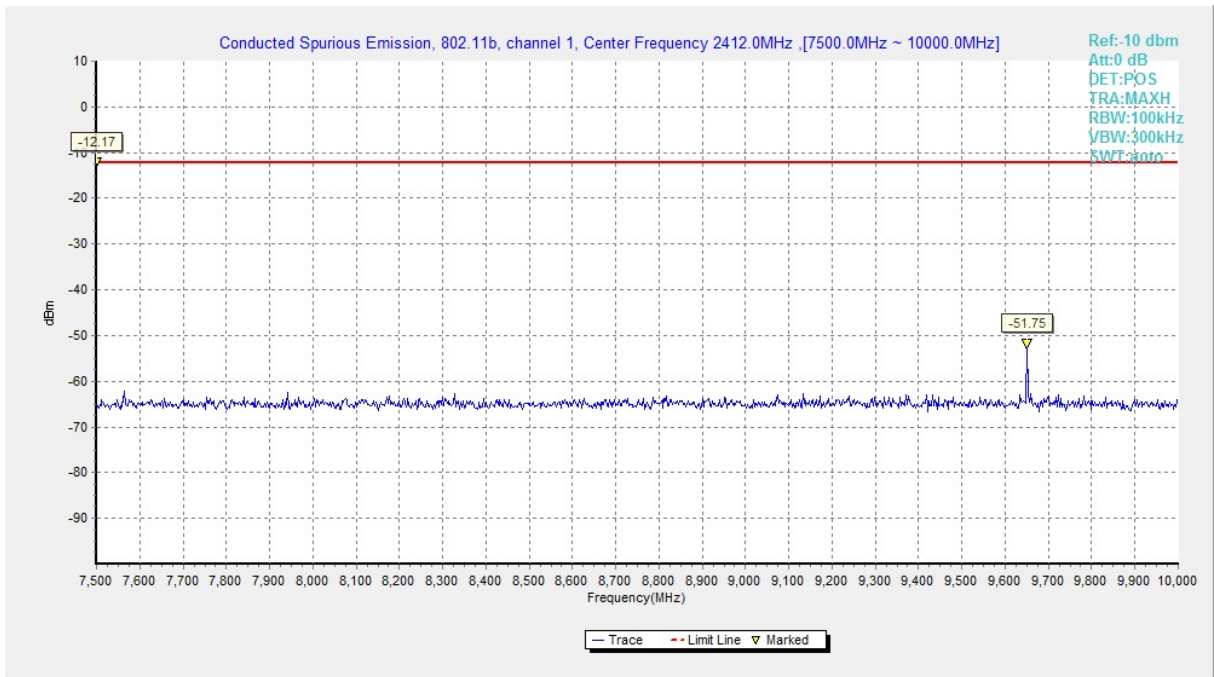


Fig.A.6.1.5 Conducted Spurious Emission (802.11b, Ch1, 7.5 GHz-10 GHz)

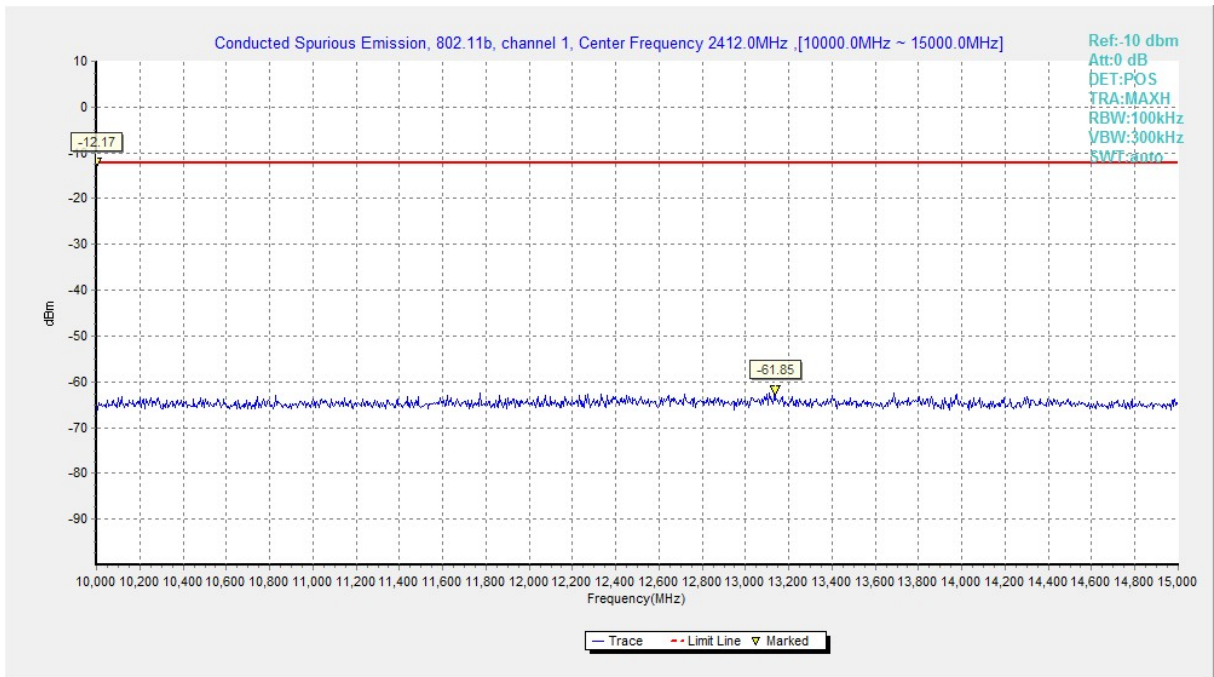


Fig.A.6.1.6 Conducted Spurious Emission (802.11b, Ch1, 10 GHz-15 GHz)

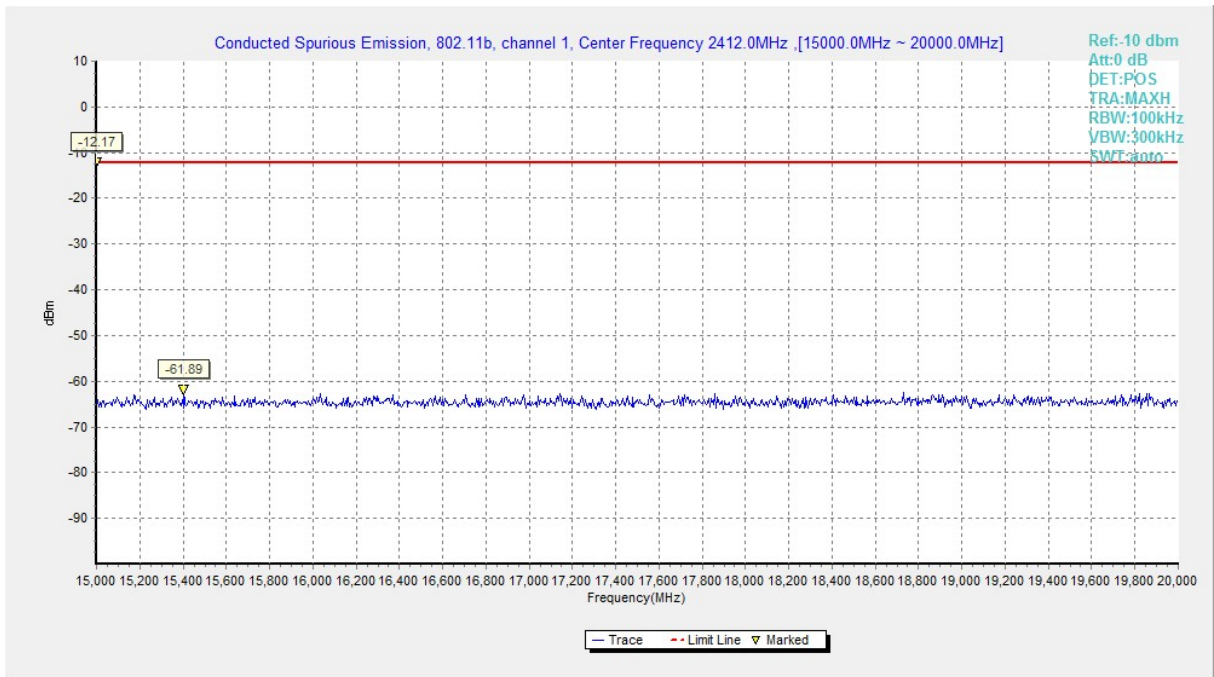


Fig.A.6.1.7 Conducted Spurious Emission (802.11b, Ch1, 15 GHz-20 GHz)

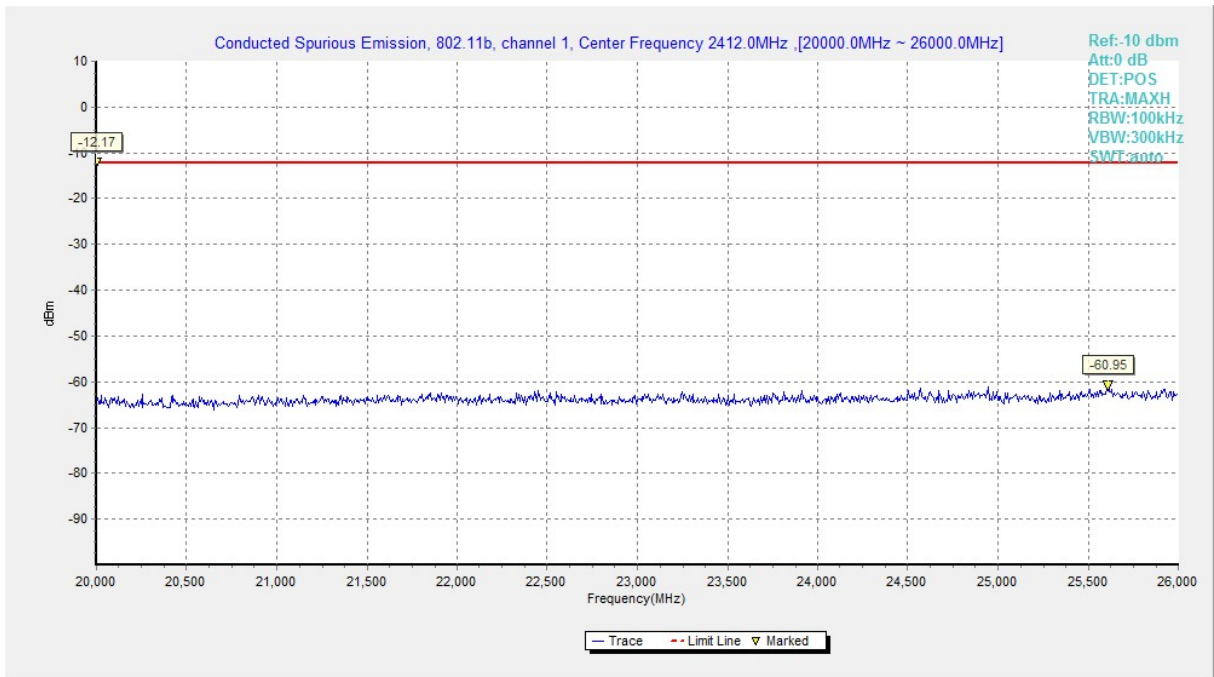


Fig.A.6.1.8 Conducted Spurious Emission (802.11b, Ch1, 20 GHz-26 GHz)

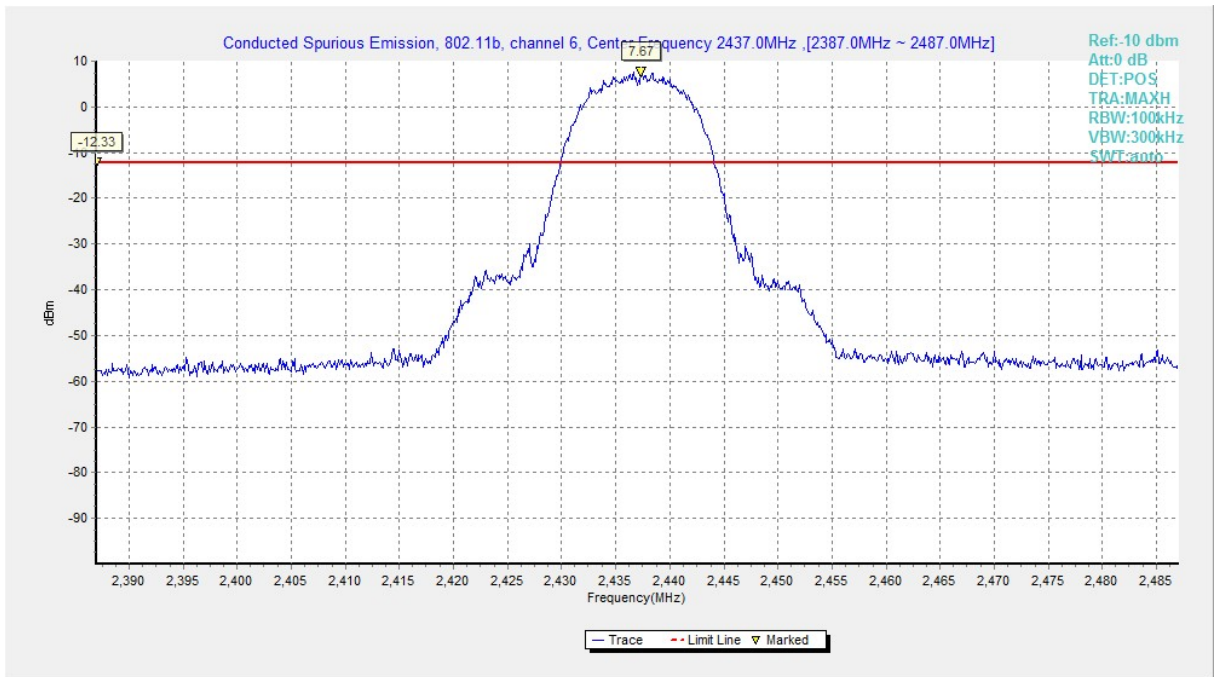


Fig.A.6.1.9 Conducted Spurious Emission (802.11b, Ch6, Center Frequency)

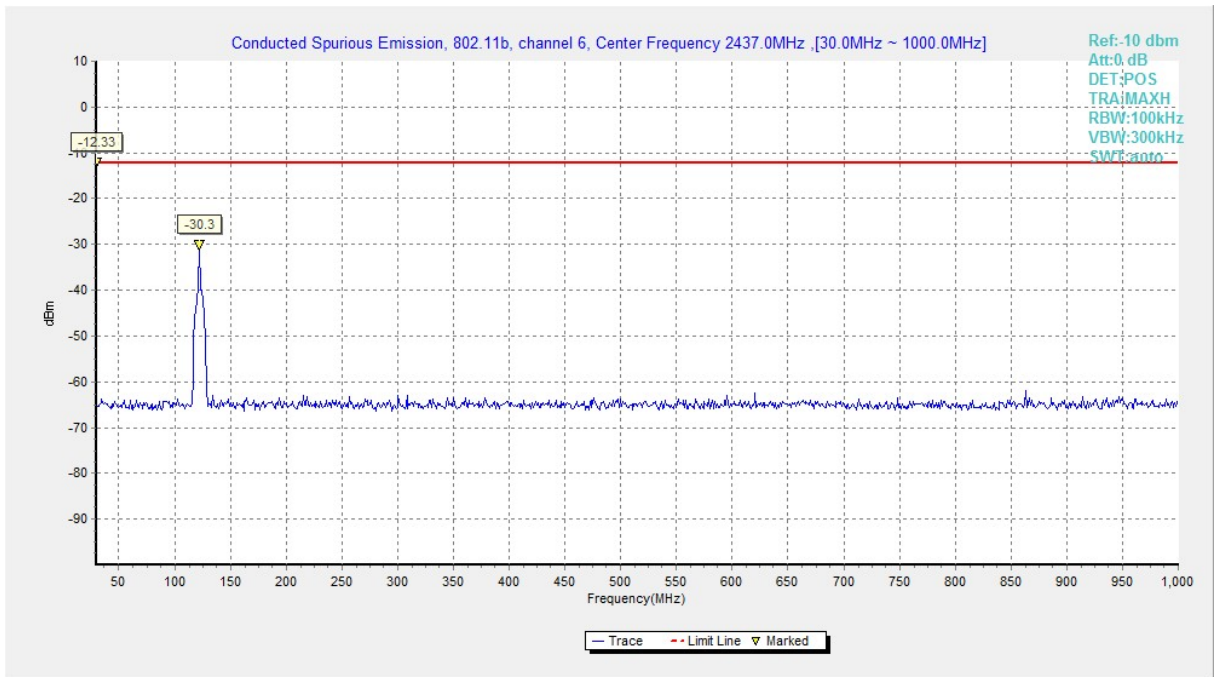


Fig.A.6.1.10 Conducted Spurious Emission (802.11b, Ch6, 30 MHz-1 GHz)

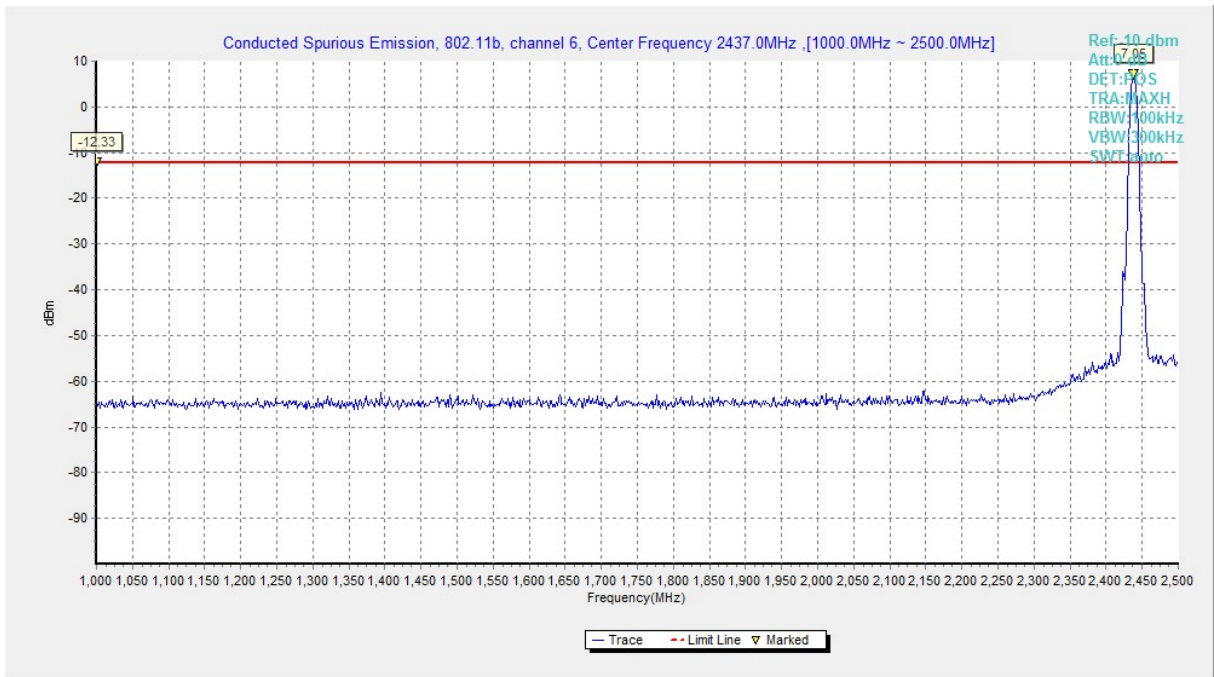


Fig.A.6.1.11 Conducted Spurious Emission (802.11b, Ch6, 1 GHz-2.5 GHz)

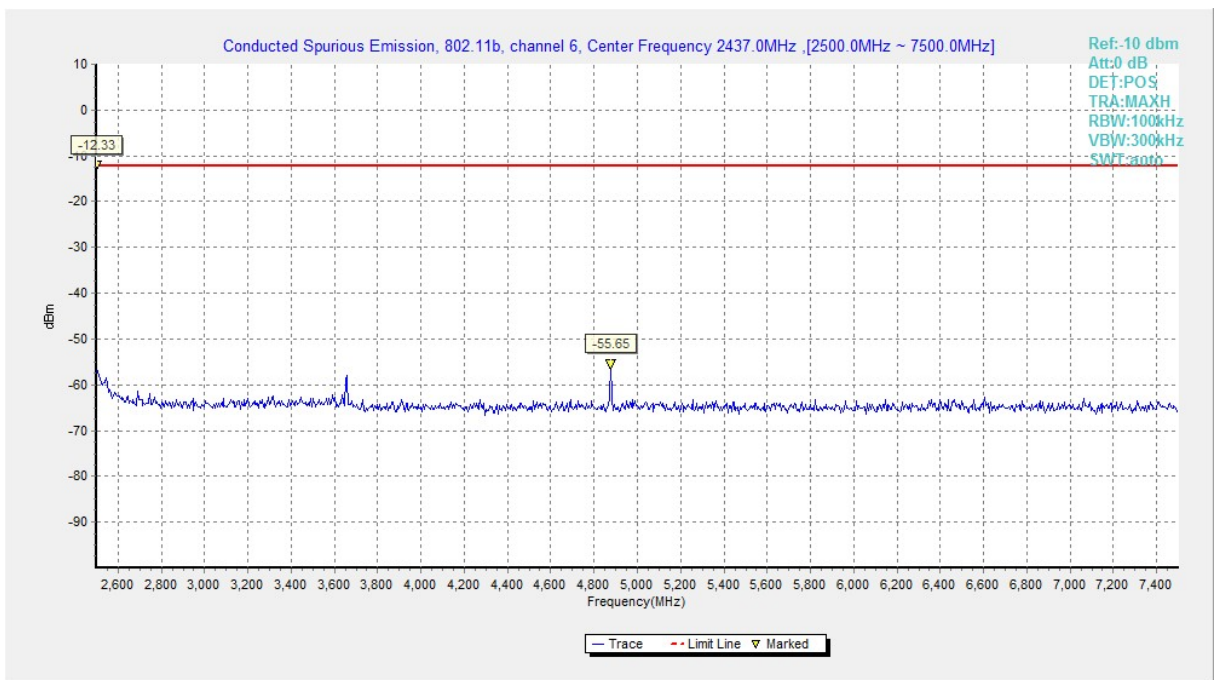


Fig.A.6.1.12 Conducted Spurious Emission (802.11b, Ch6, 2.5 GHz-7.5 GHz)

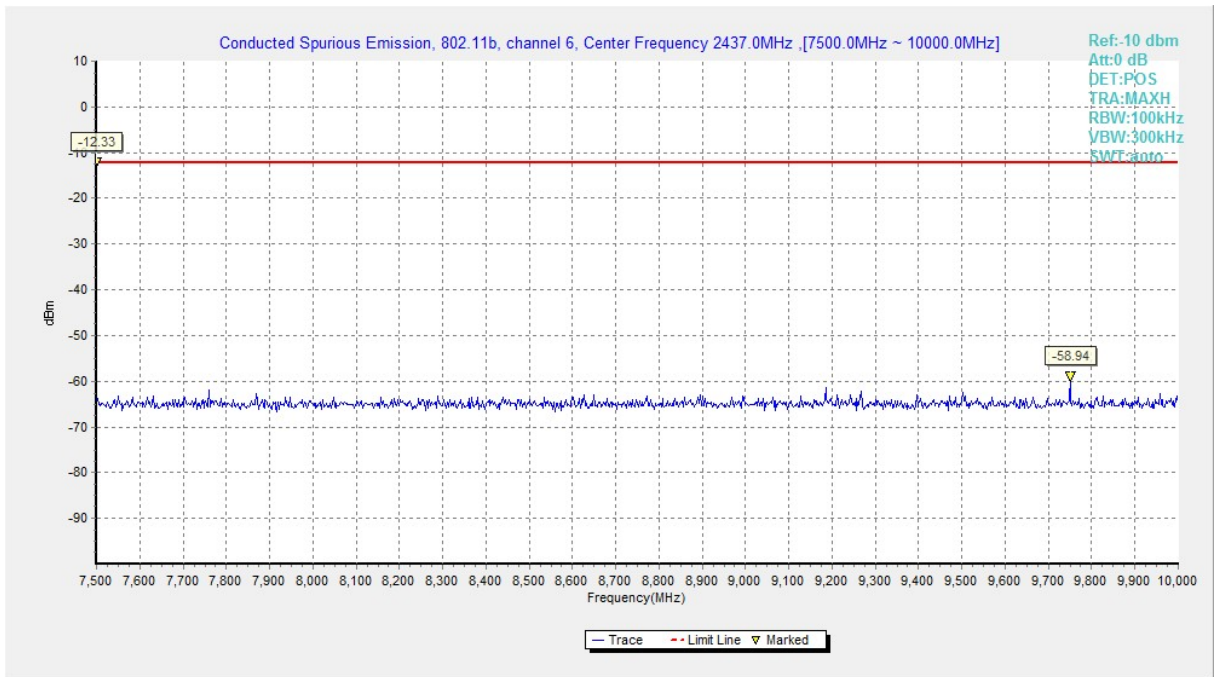


Fig.A.6.1.13 Conducted Spurious Emission (802.11b, Ch6, 7.5 GHz-10 GHz)

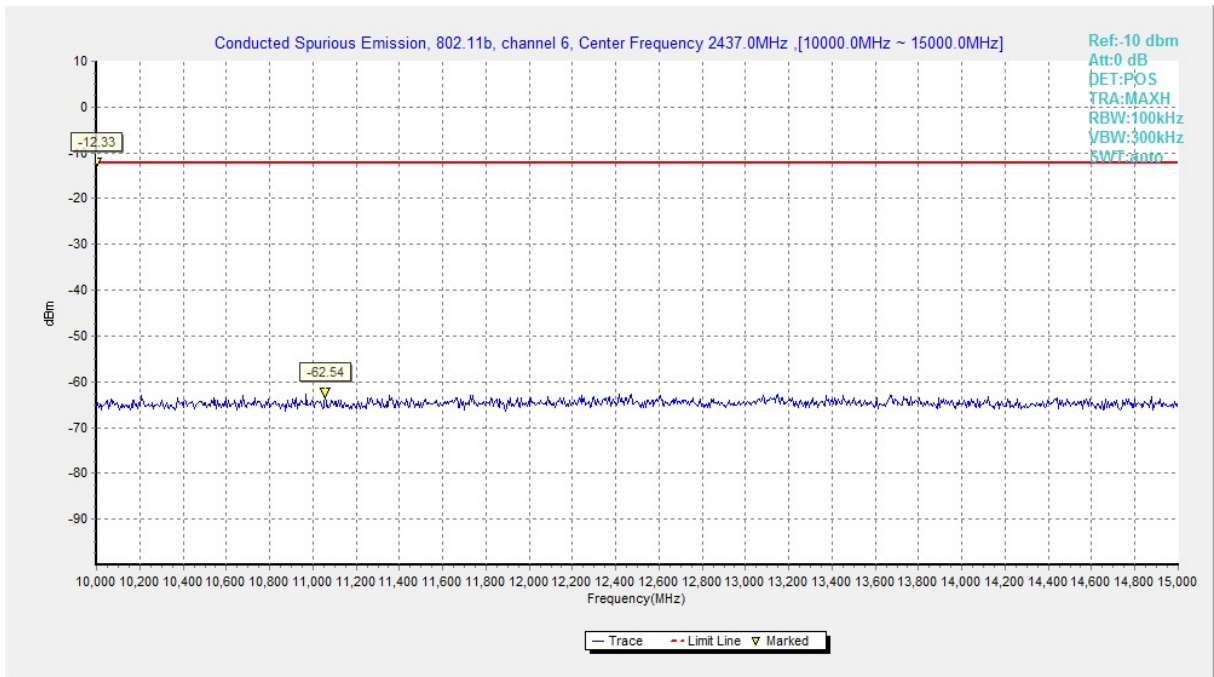


Fig.A.6.1.14 Conducted Spurious Emission (802.11b, Ch6, 10 GHz-15 GHz)

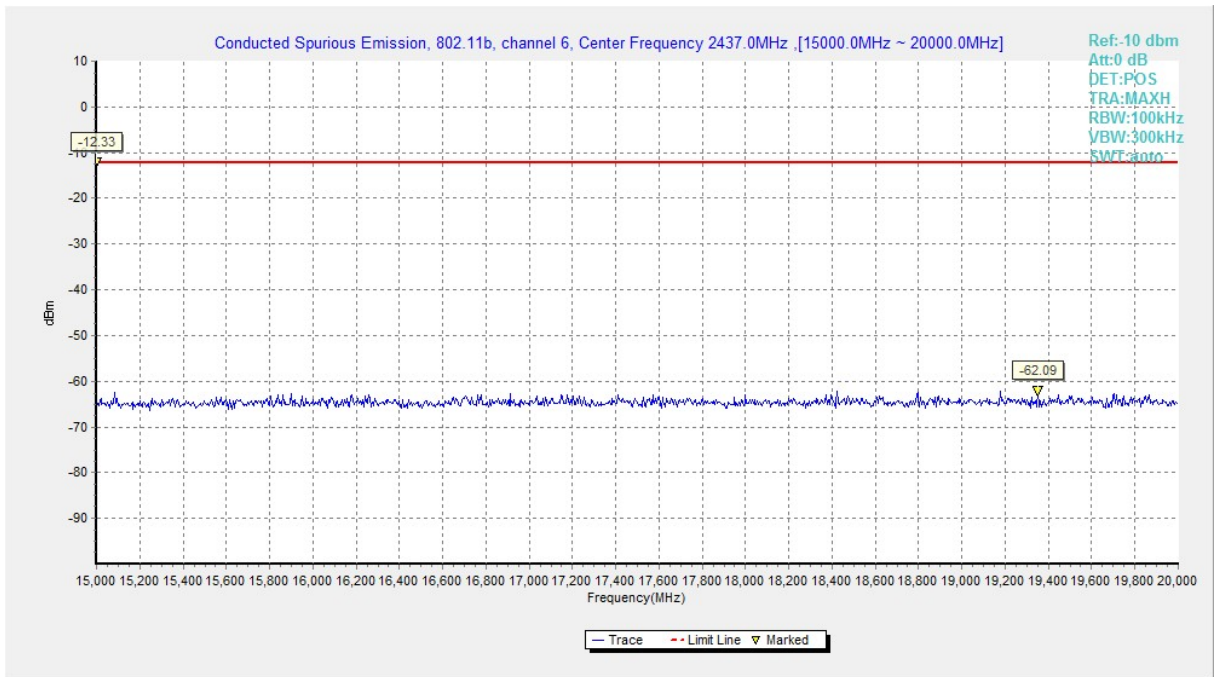


Fig.A.6.1.15 Conducted Spurious Emission (802.11b, Ch6, 15 GHz-20 GHz)

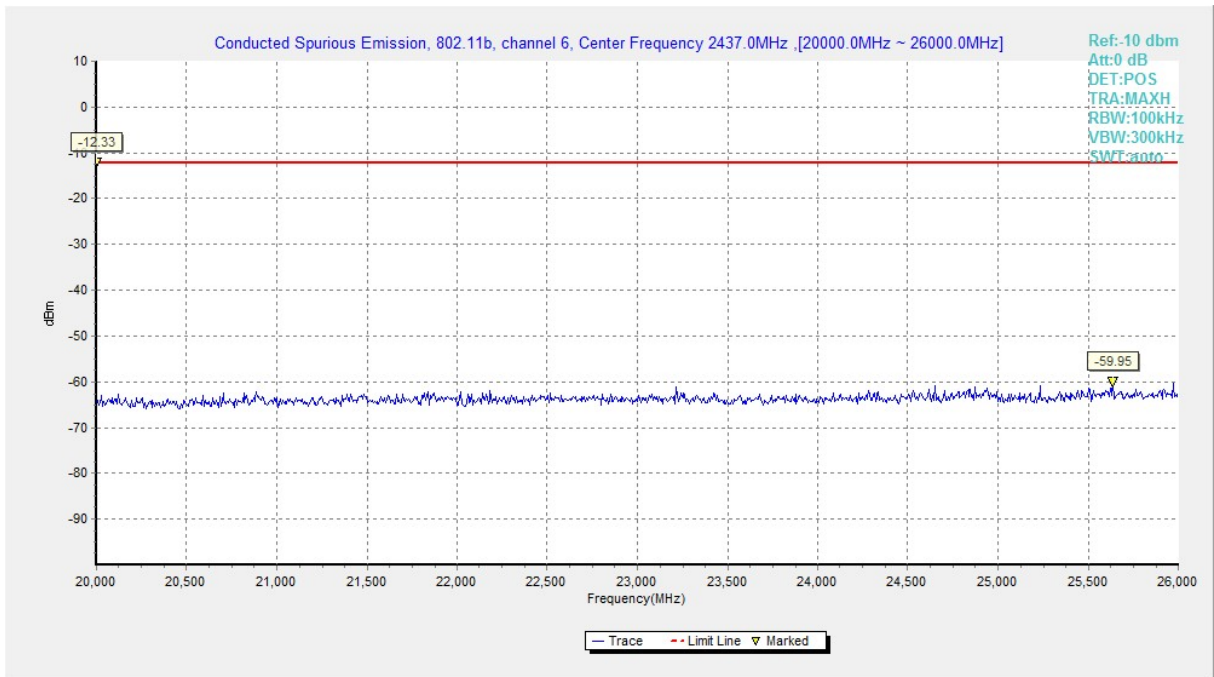


Fig.A.6.1.16 Conducted Spurious Emission (802.11b, Ch6, 20 GHz-26 GHz)

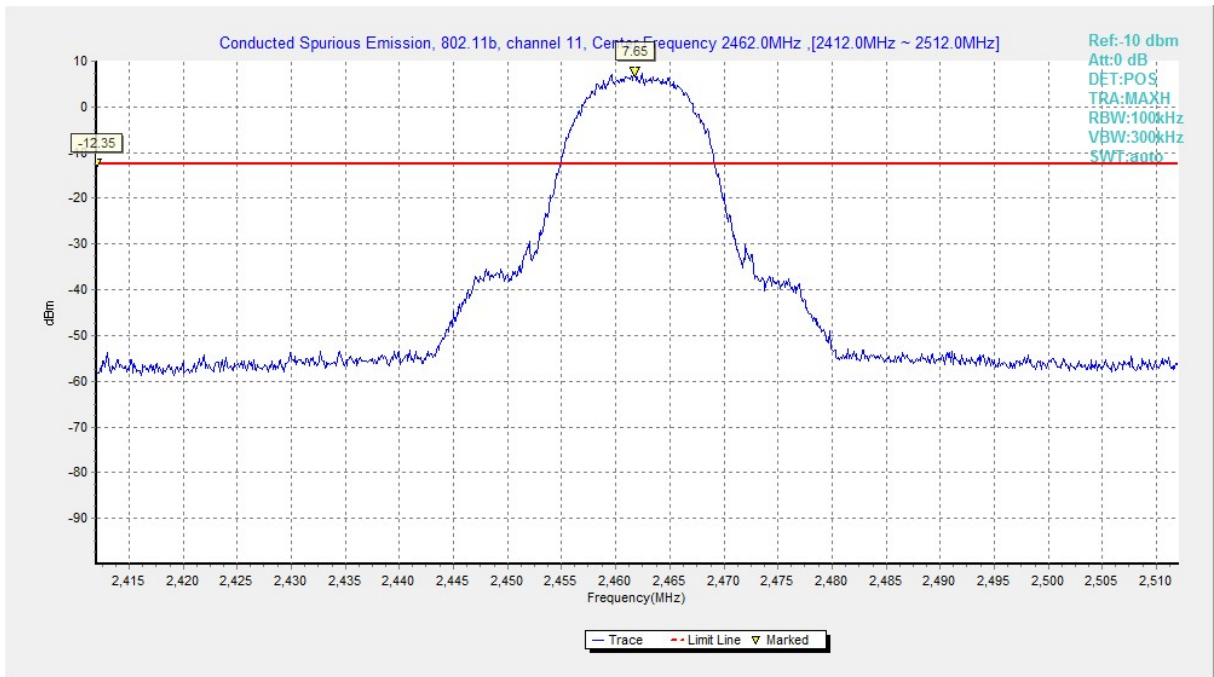


Fig.A.6.1.17 Conducted Spurious Emission (802.11b, Ch11, Center Frequency)

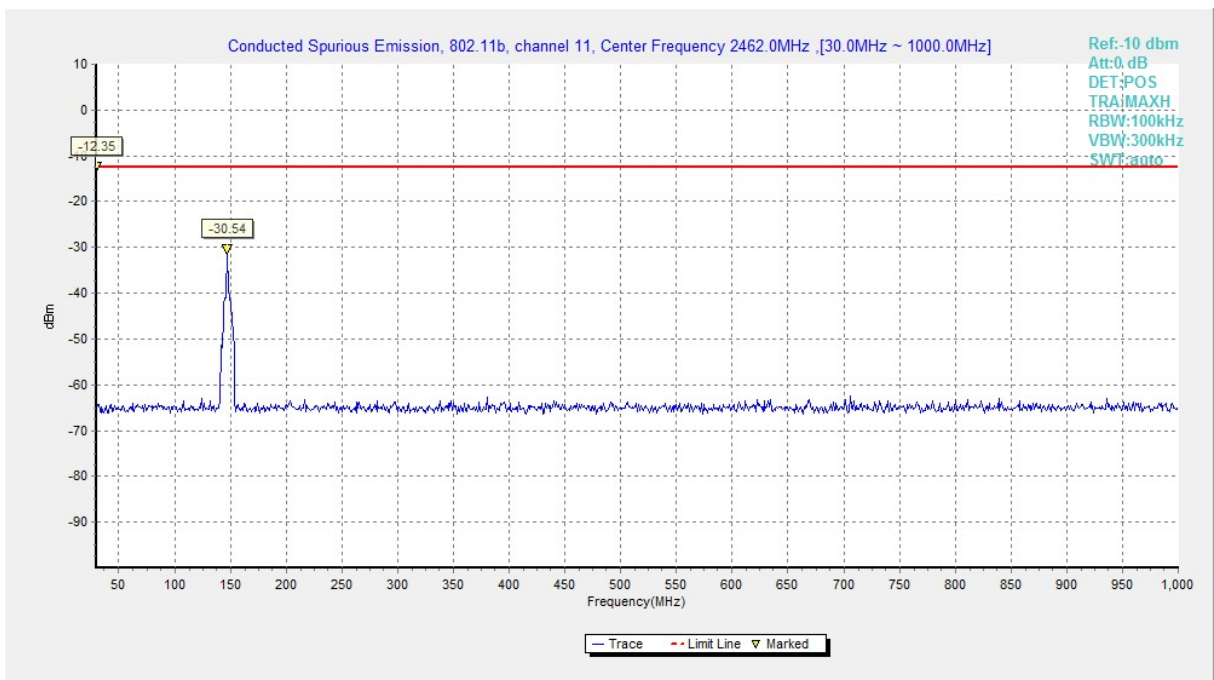


Fig.A.6.1.18 Conducted Spurious Emission (802.11b, Ch11, 30 MHz-1 GHz)

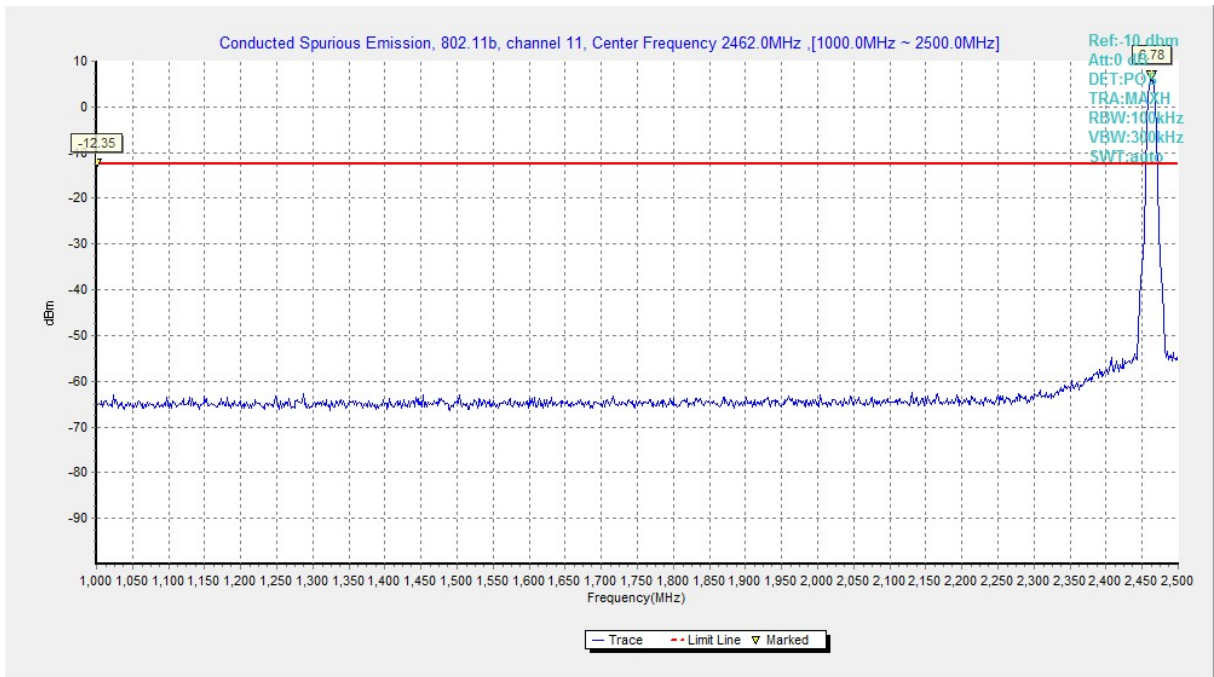


Fig.A.6.1.19 Conducted Spurious Emission (802.11b, Ch11, 1 GHz-2.5 GHz)

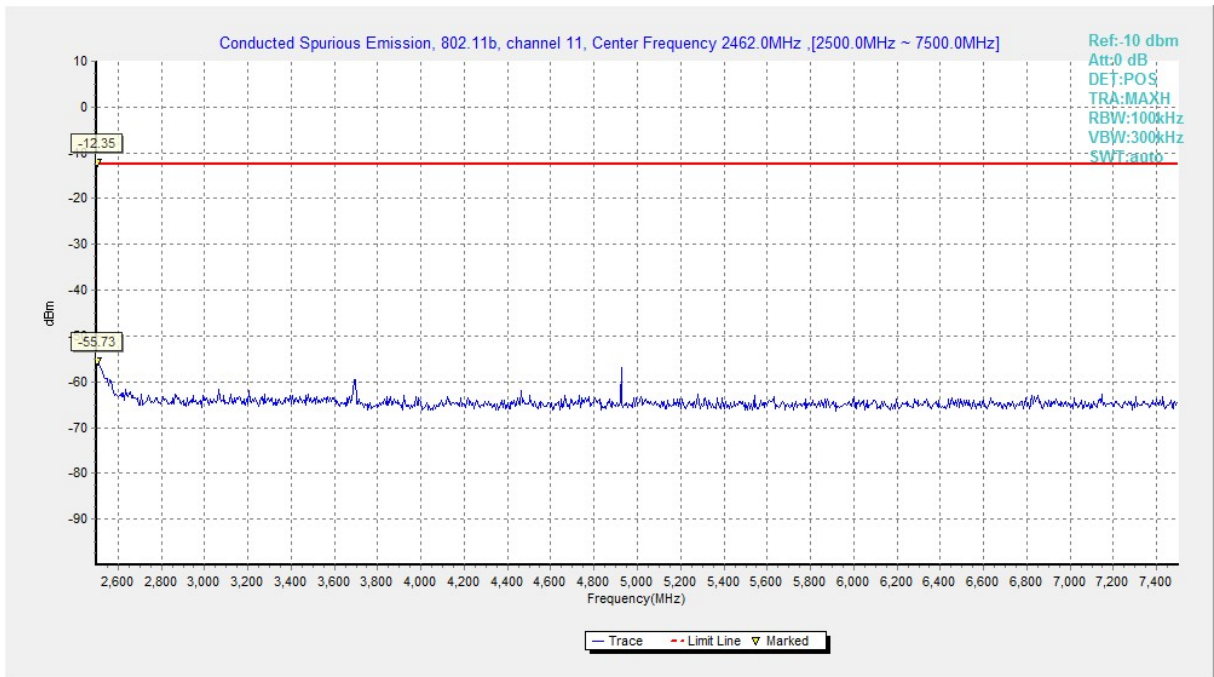


Fig.A.6.1.20 Conducted Spurious Emission (802.11b, Ch11, 2.5 GHz-7.5 GHz)

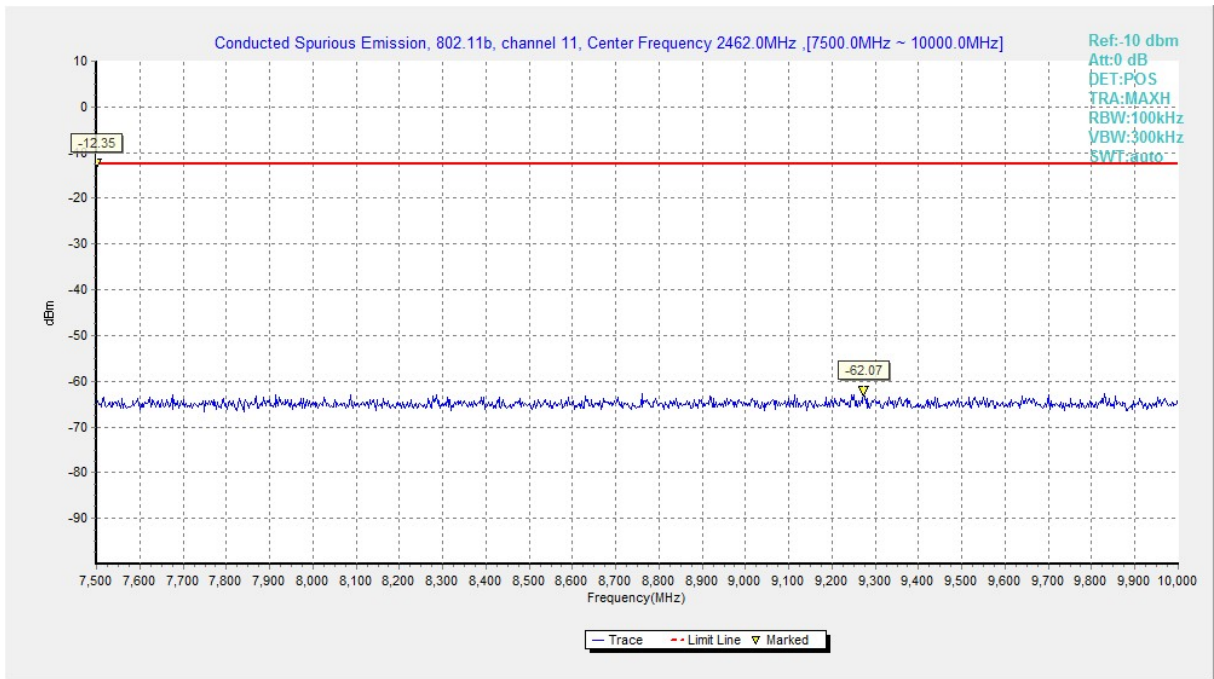


Fig.A.6.1.21 Conducted Spurious Emission (802.11b, Ch11, 7.5 GHz-10 GHz)

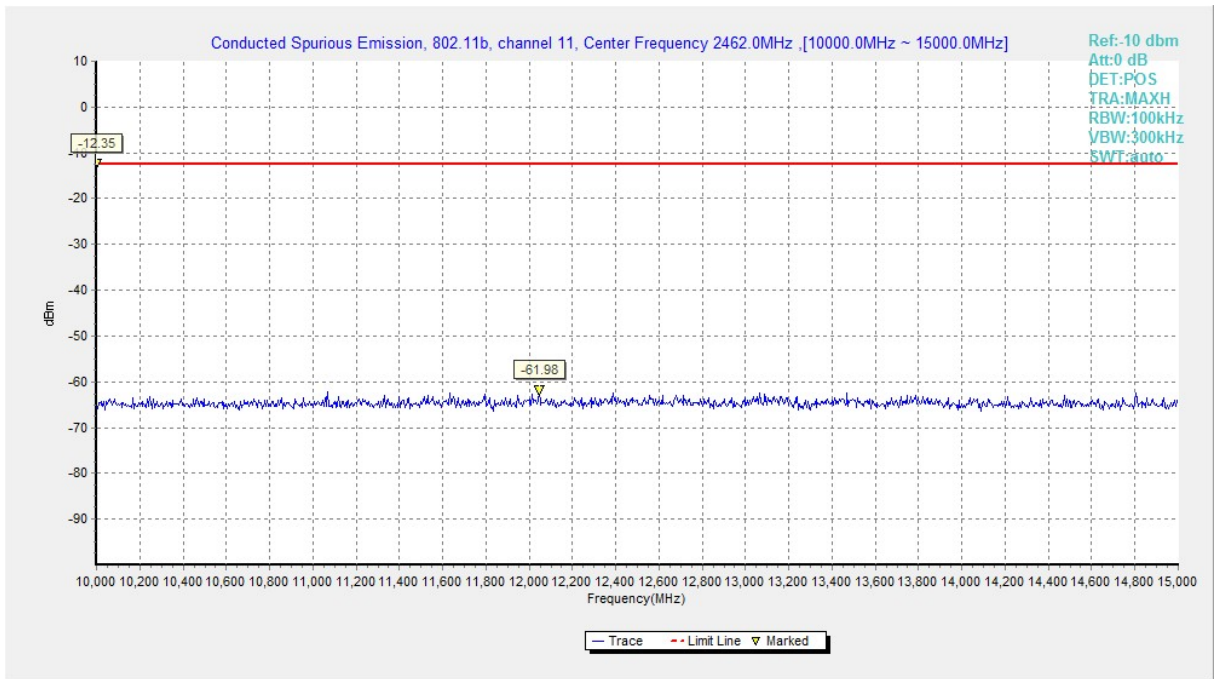


Fig.A.6.1.22 Conducted Spurious Emission (802.11b, Ch11, 10 GHz-15 GHz)

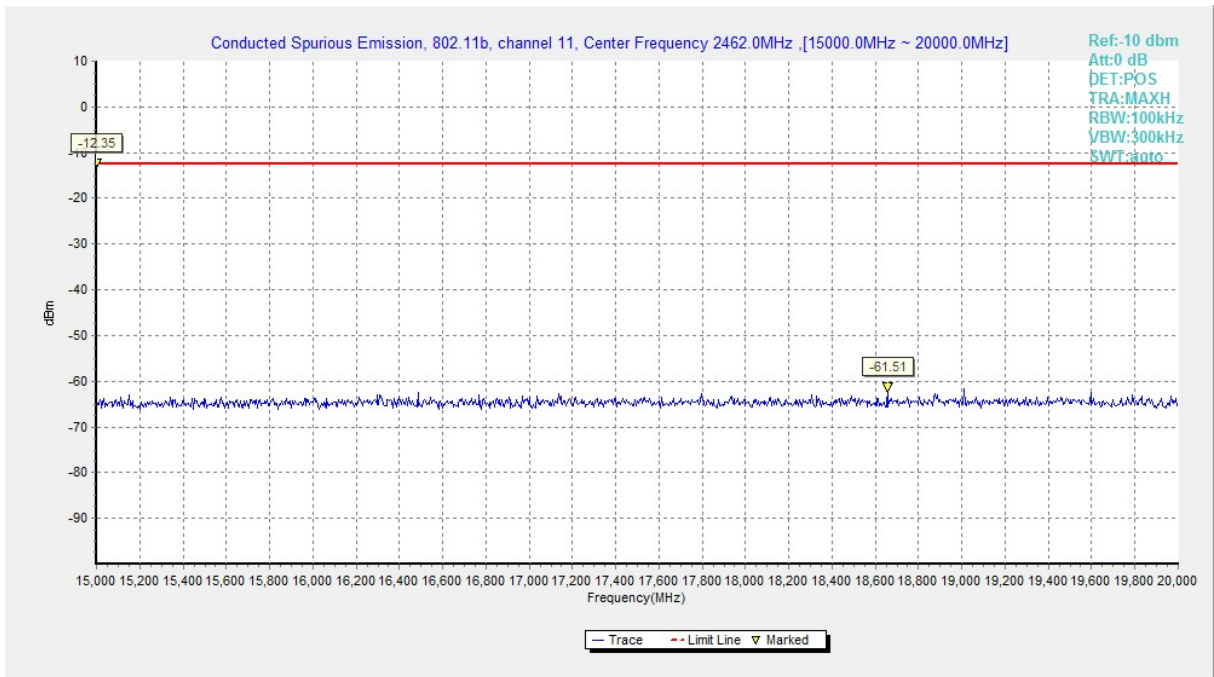


Fig.A.6.1.23 Conducted Spurious Emission (802.11b, Ch11, 15 GHz-20 GHz)

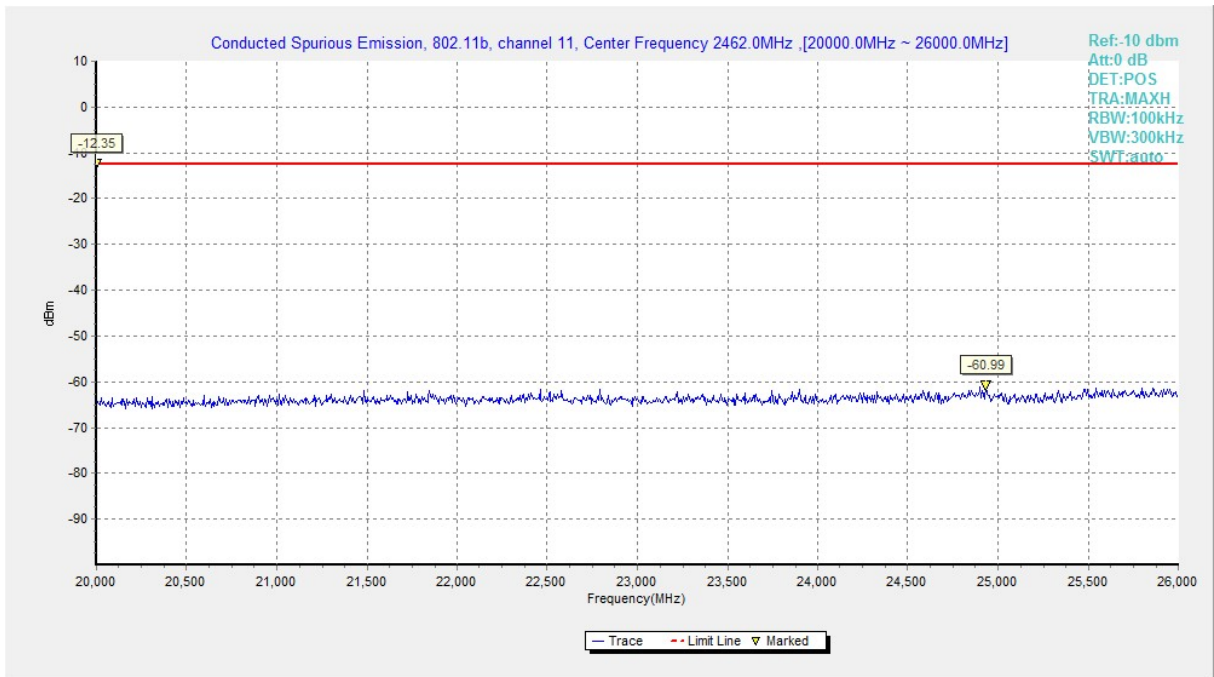


Fig.A.6.1.24 Conducted Spurious Emission (802.11b, Ch11, 20 GHz-26 GHz)

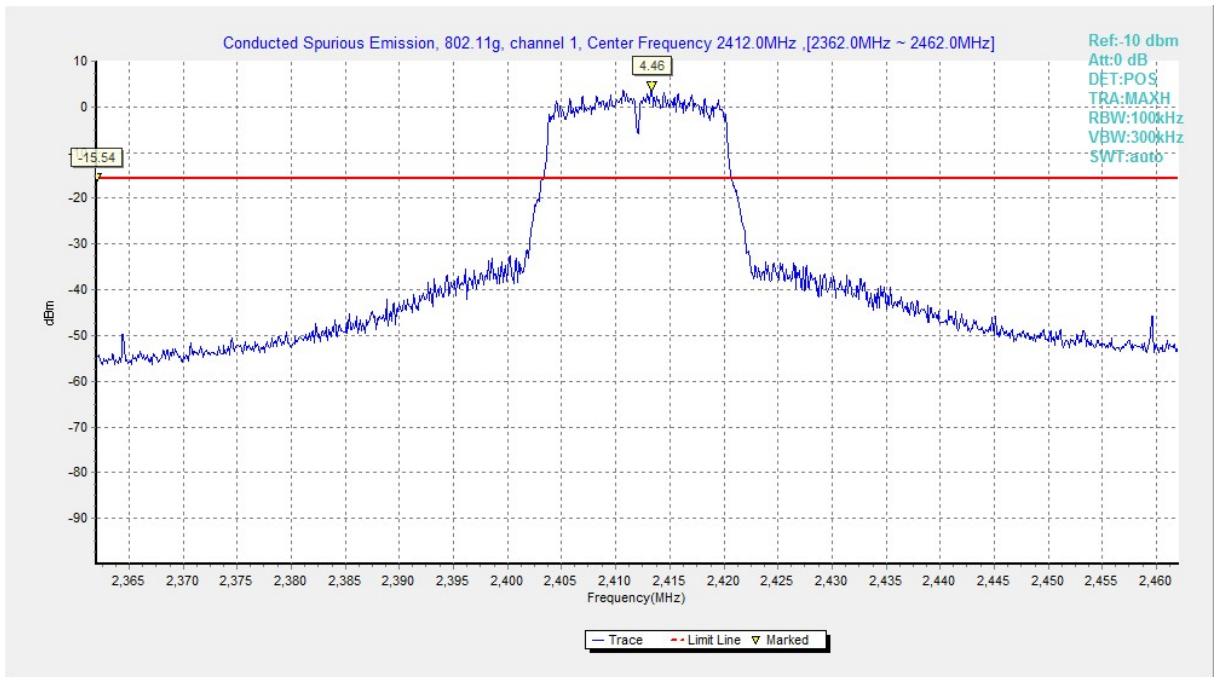


Fig.A.6.1.25 Conducted Spurious Emission (802.11g, Ch1, Center Frequency)

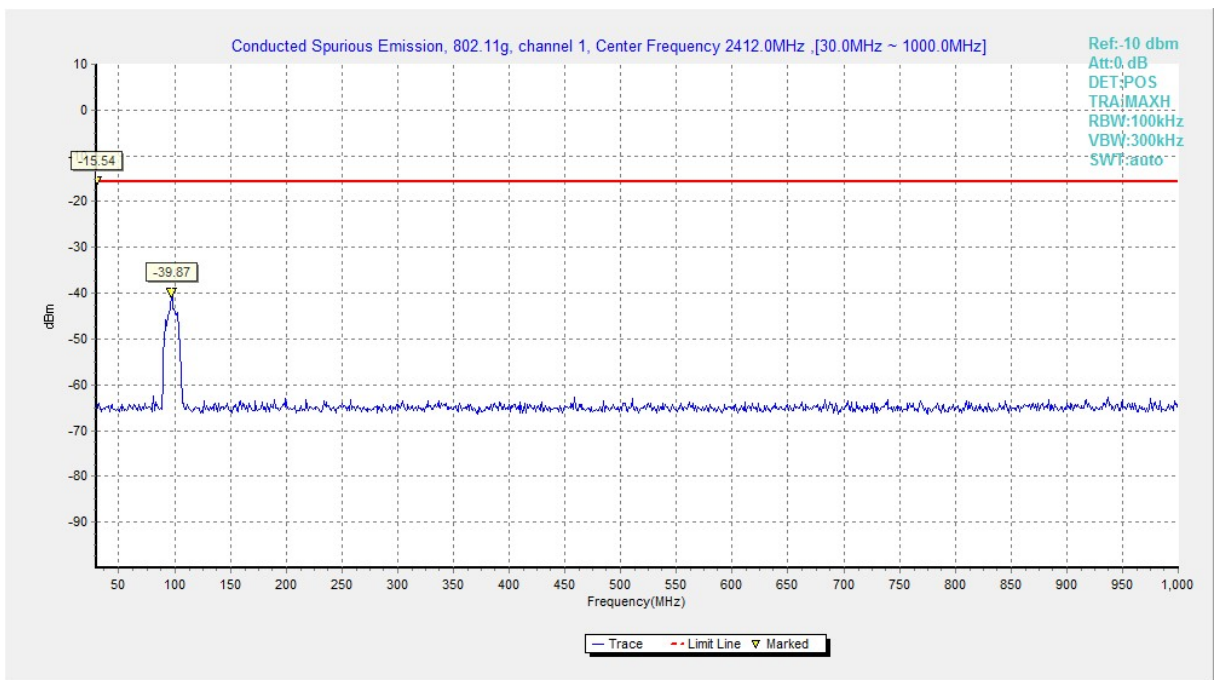


Fig.A.6.1.26 Conducted Spurious Emission (802.11g, Ch1, 30 MHz-1 GHz)

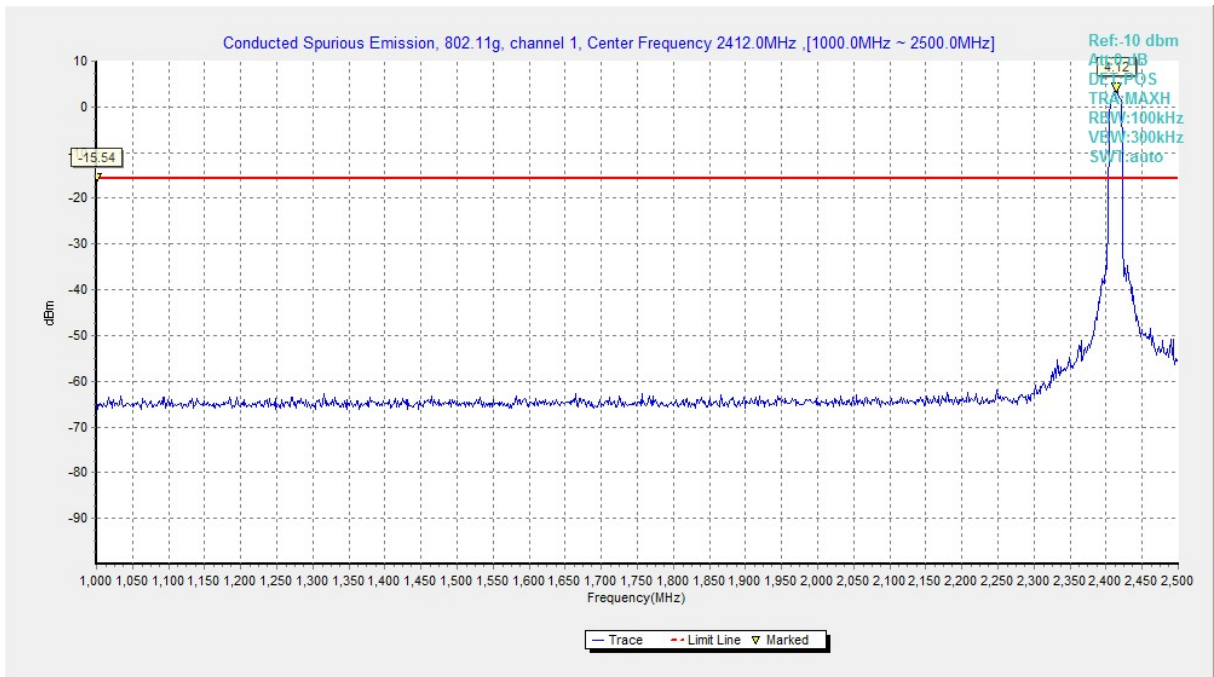


Fig.A.6.1.27 Conducted Spurious Emission (802.11g, Ch1, 1 GHz-2.5 GHz)

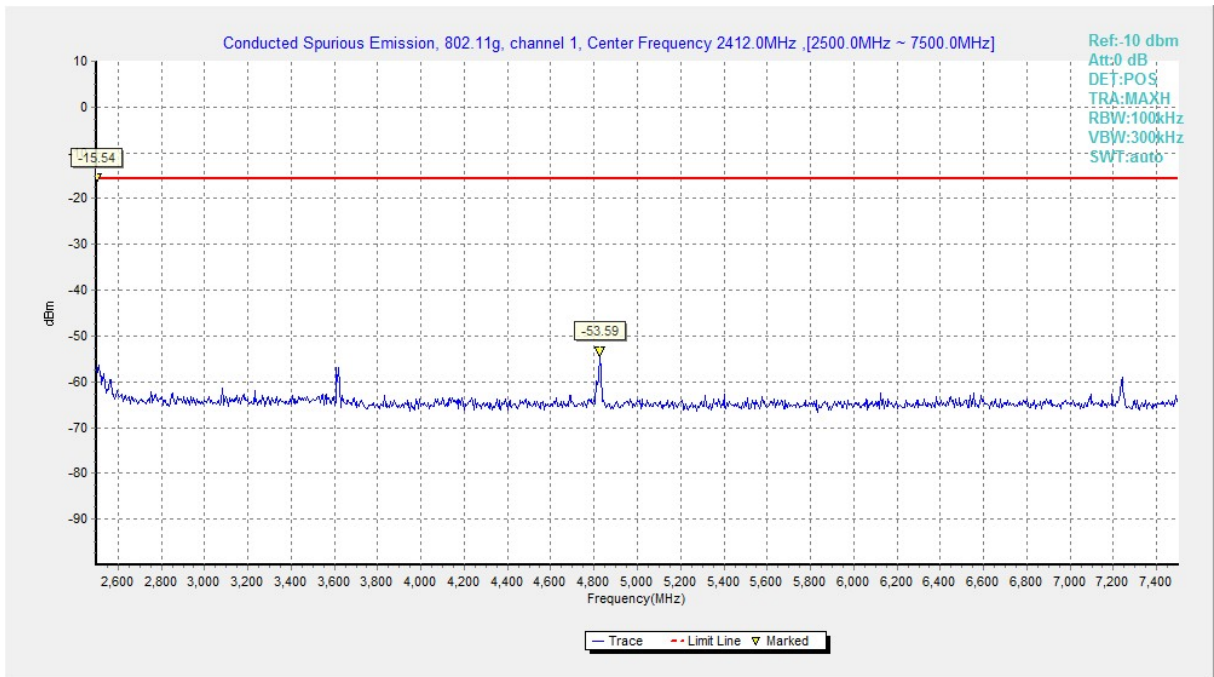


Fig.A.6.1.28 Conducted Spurious Emission (802.11g, Ch1, 2.5 GHz-7.5 GHz)

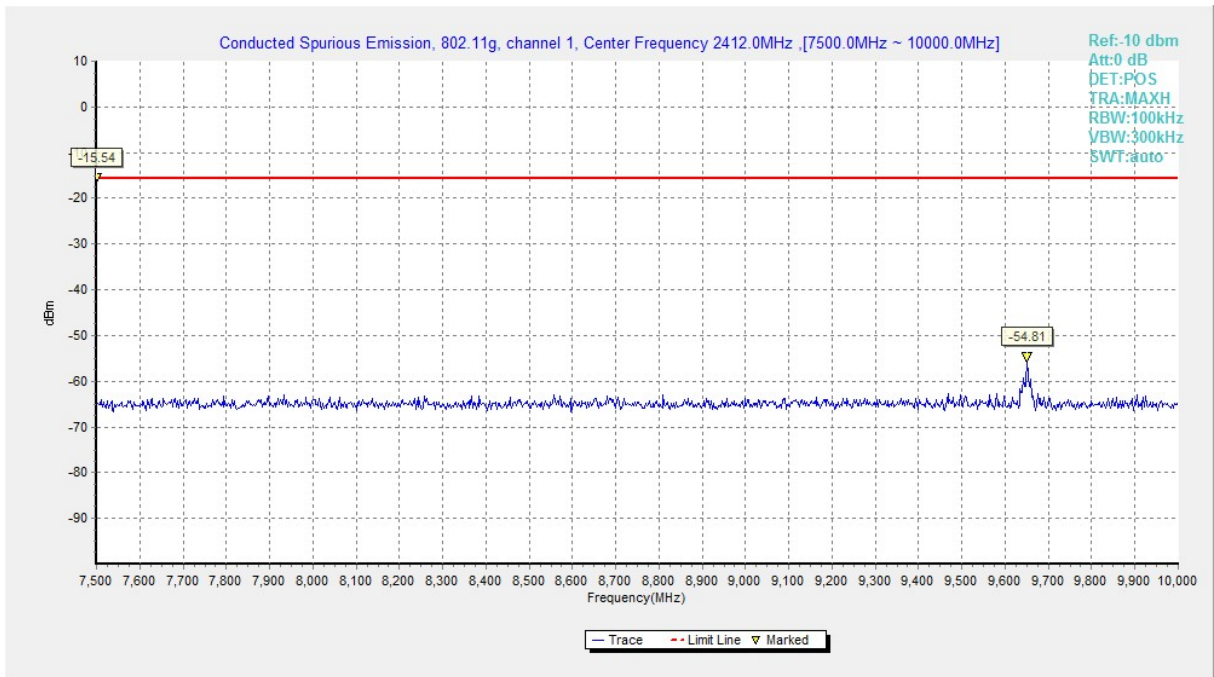


Fig.A.6.1.29 Conducted Spurious Emission (802.11g, Ch1, 7.5 GHz-10 GHz)

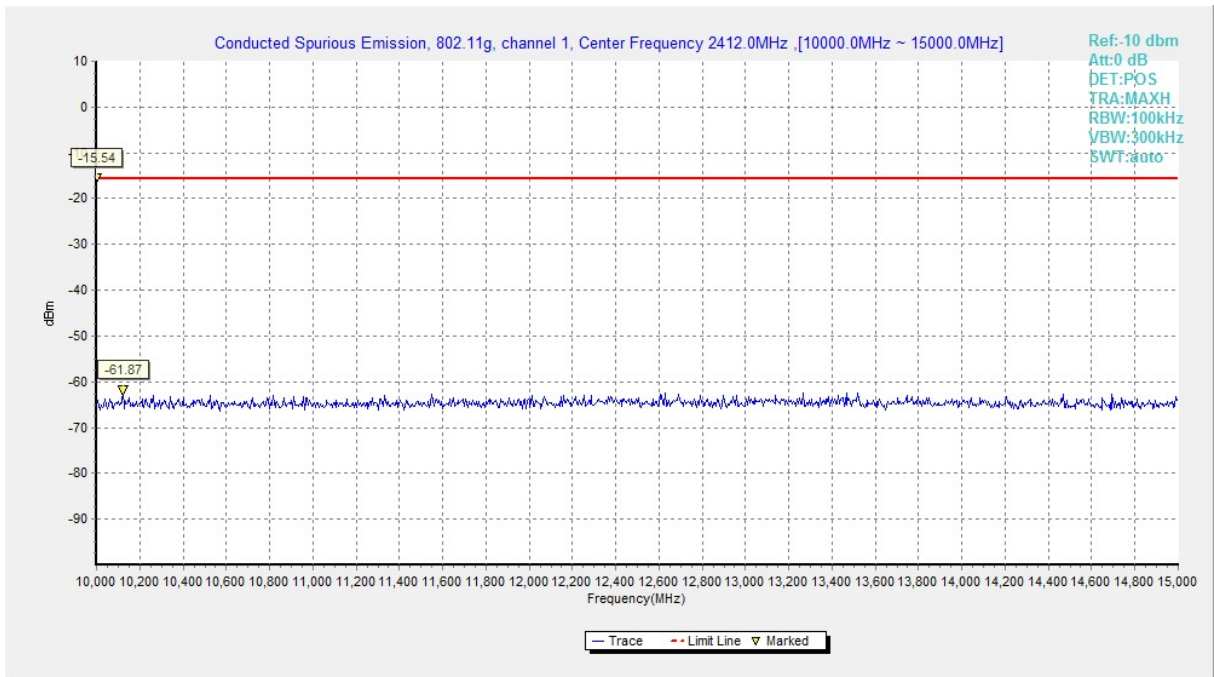


Fig.A.6.1.30 Conducted Spurious Emission (802.11g, Ch1, 10 GHz-15 GHz)

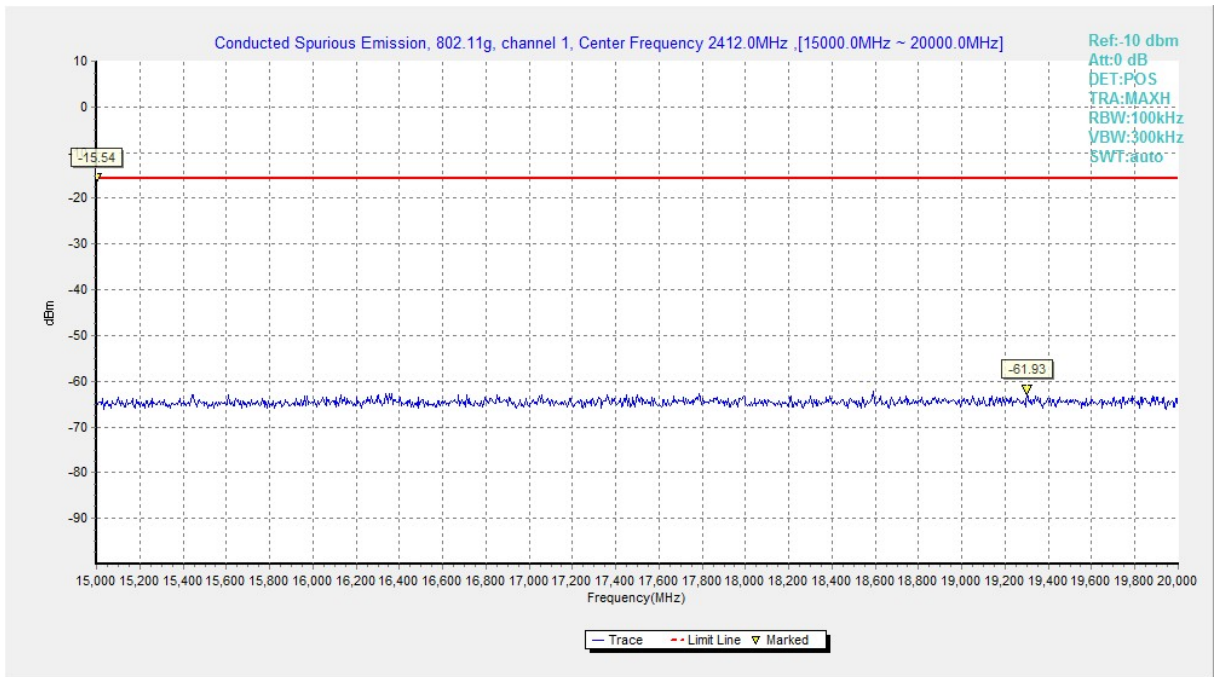


Fig.A.6.1.31 Conducted Spurious Emission (802.11g, Ch1, 15 GHz-20 GHz)

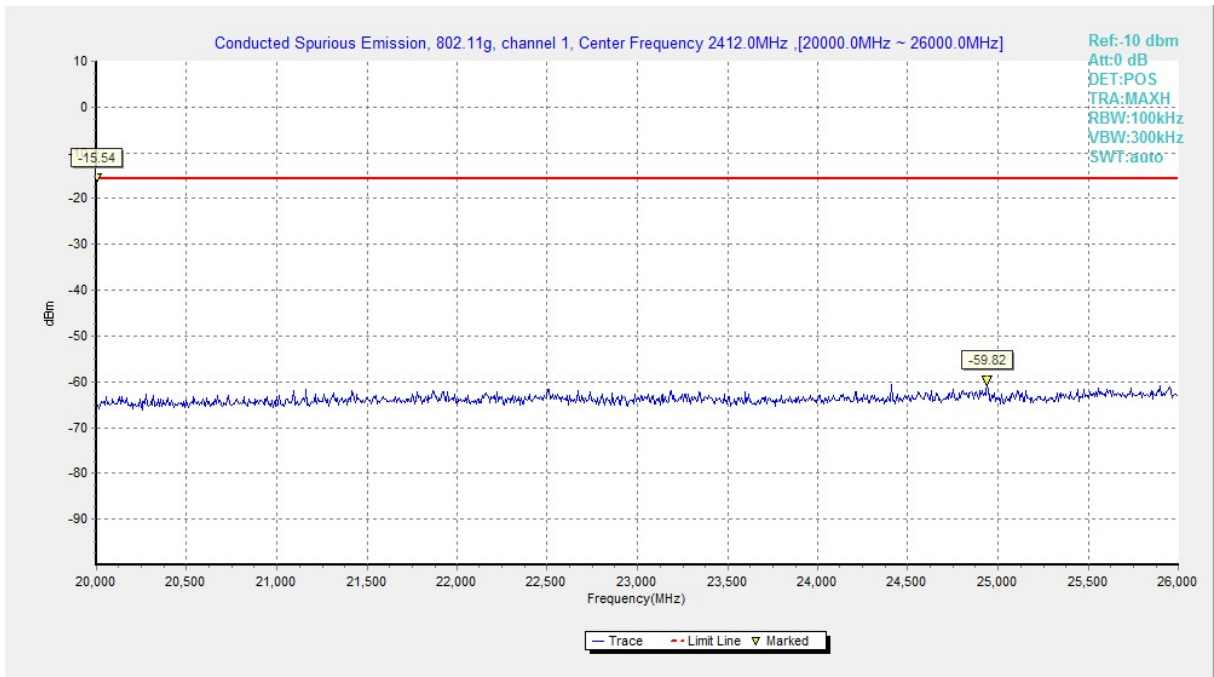


Fig.A.6.1.32 Conducted Spurious Emission (802.11g, Ch1, 20 GHz-26 GHz)

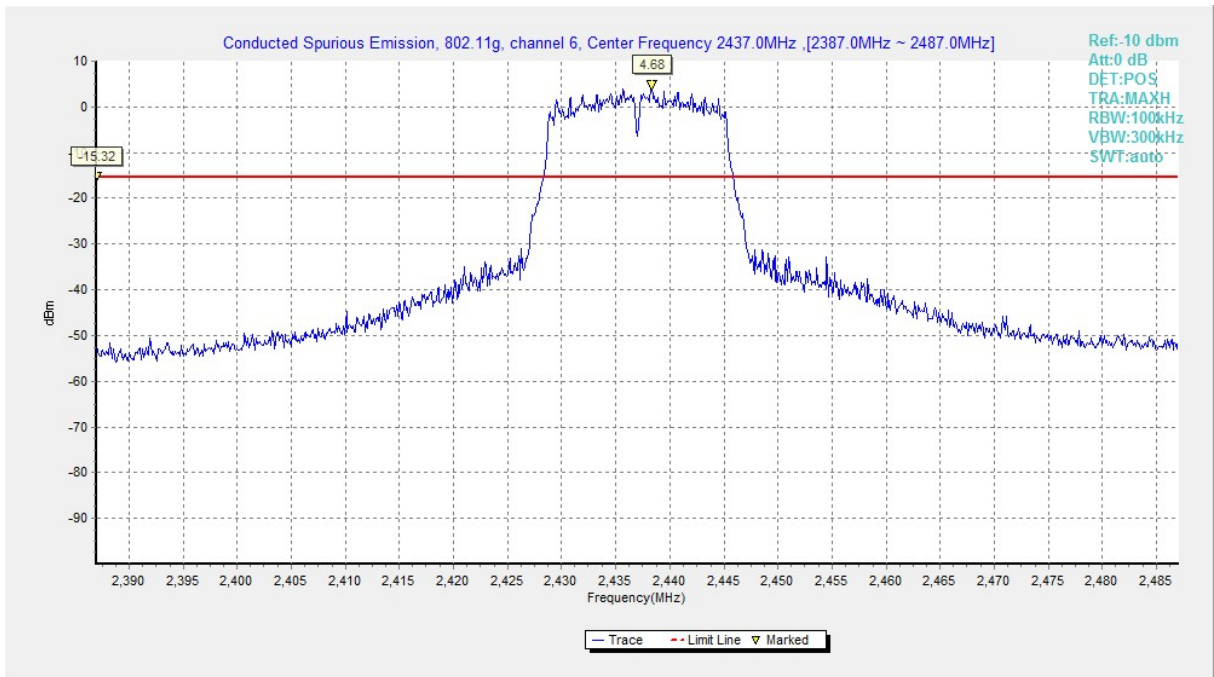


Fig.A.6.1.33 Conducted Spurious Emission (802.11g, Ch6, Center Frequency)

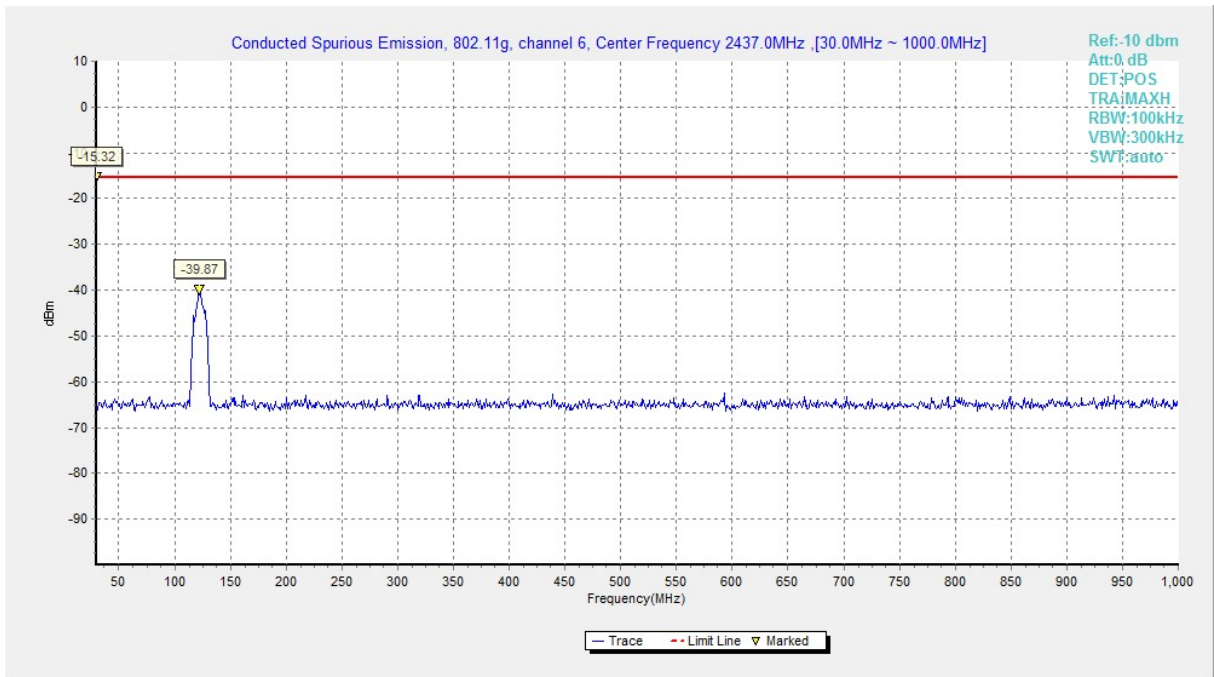


Fig.A.6.1.34 Conducted Spurious Emission (802.11g, Ch6, 30 MHz-1 GHz)

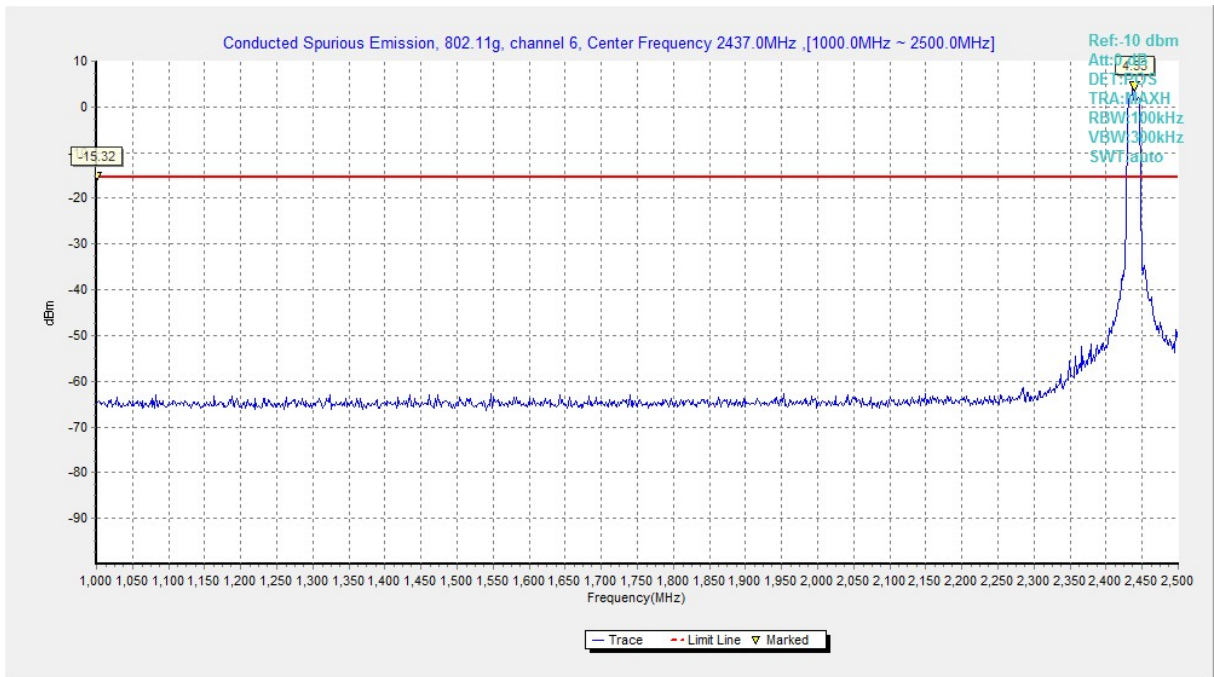


Fig.A.6.1.35 Conducted Spurious Emission (802.11g, Ch6, 1 GHz-2.5 GHz)

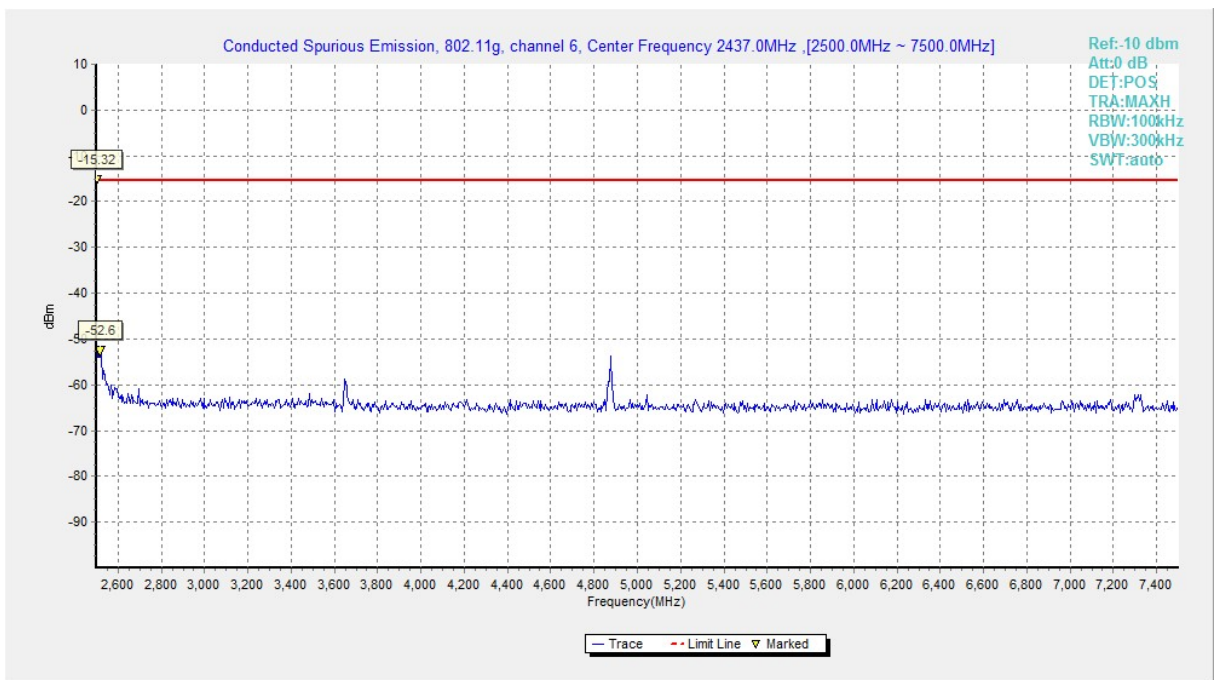


Fig.A.6.1.36 Conducted Spurious Emission (802.11g, Ch6, 2.5 GHz-7.5 GHz)

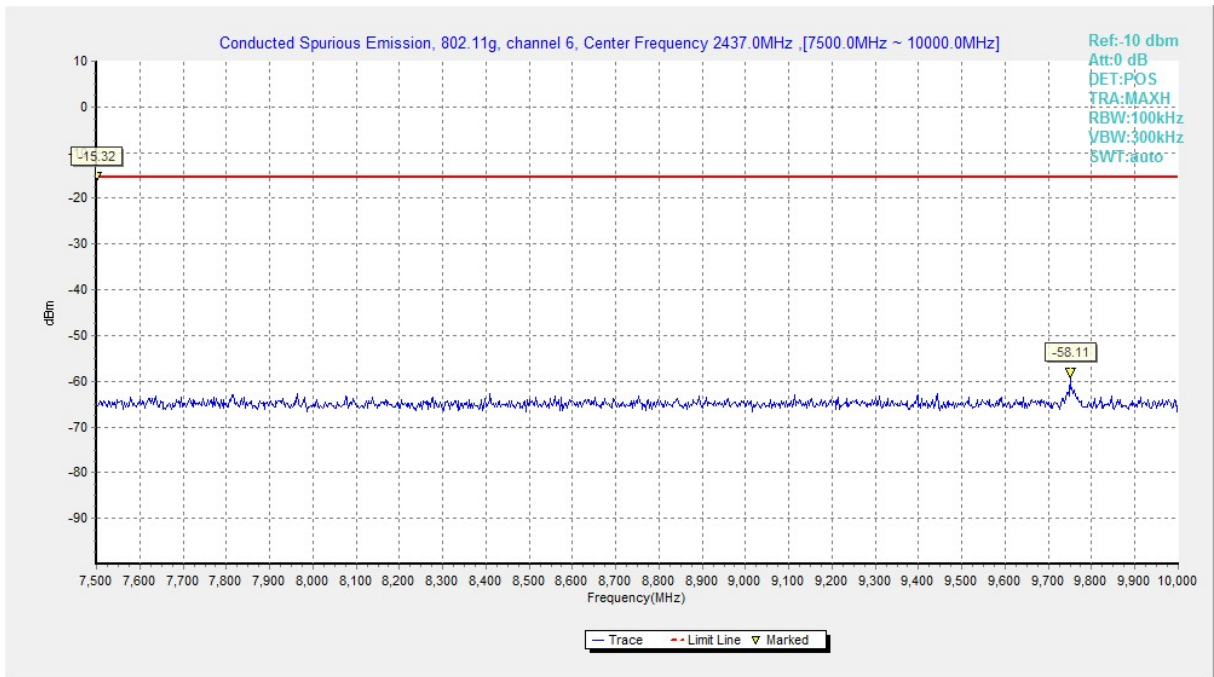


Fig.A.6.1.37 Conducted Spurious Emission (802.11g, Ch6, 7.5 GHz-10 GHz)

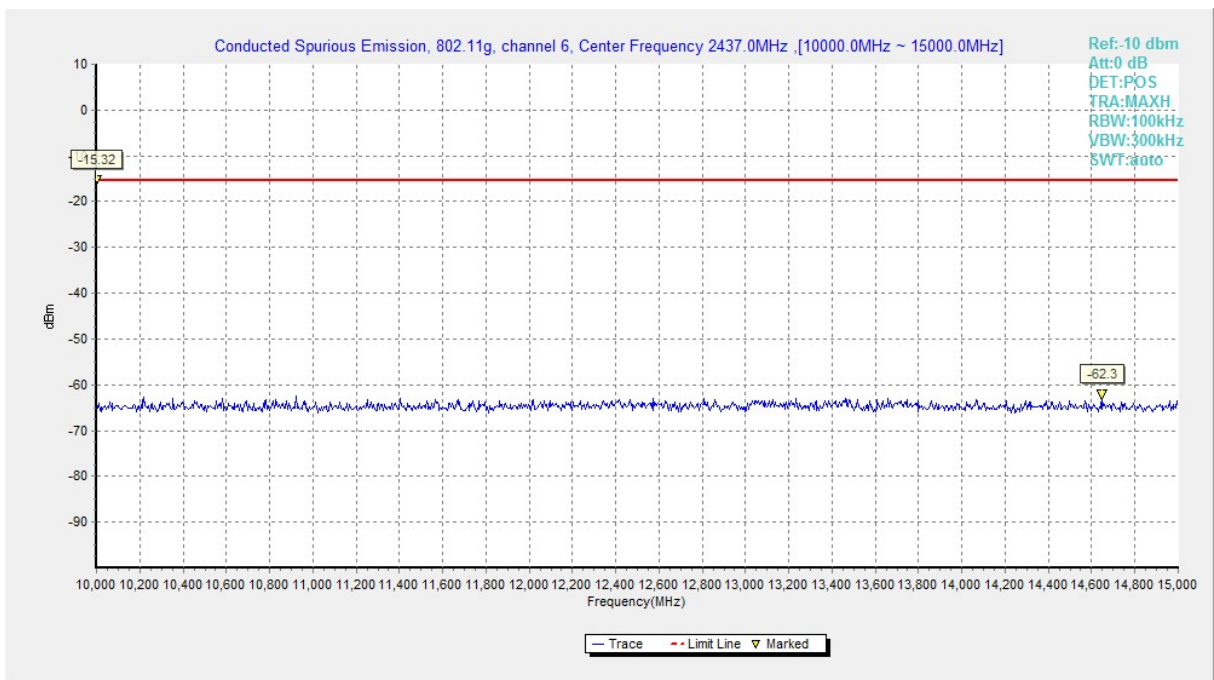


Fig.A.6.1.38 Conducted Spurious Emission (802.11g, Ch6, 10 GHz-15 GHz)

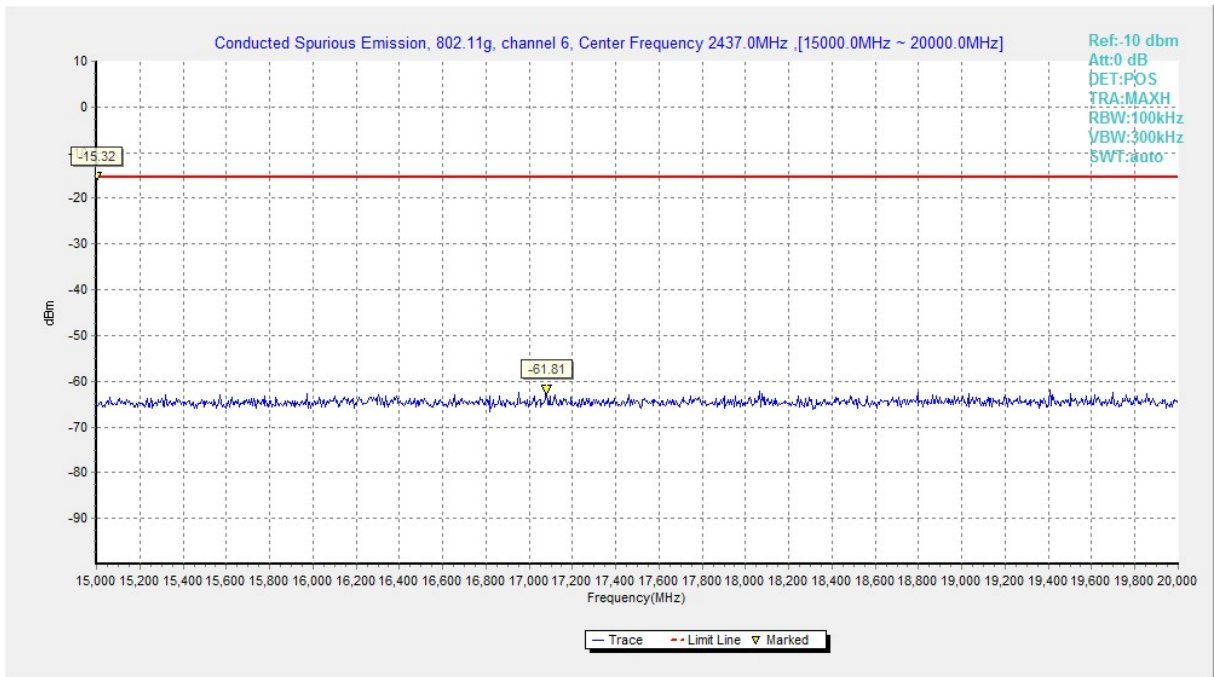


Fig.A.6.1.39 Conducted Spurious Emission (802.11g, Ch6, 15 GHz-20 GHz)

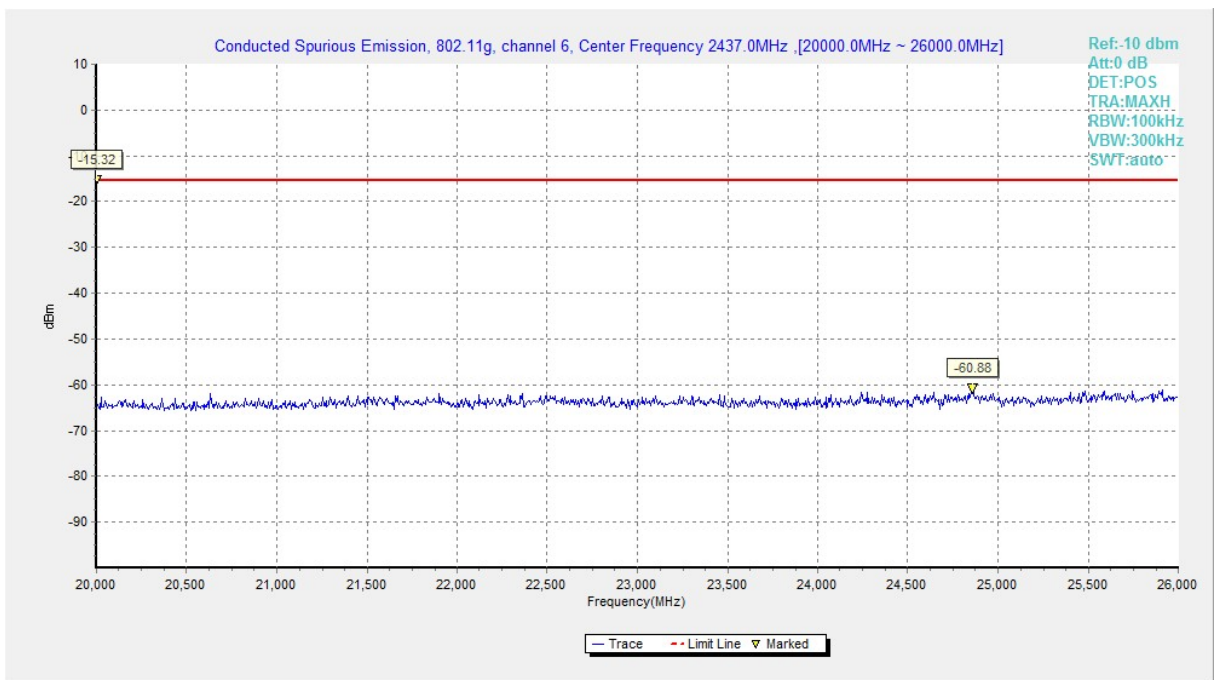


Fig.A.6.1.40 Conducted Spurious Emission (802.11g, Ch6, 20 GHz-26 GHz)

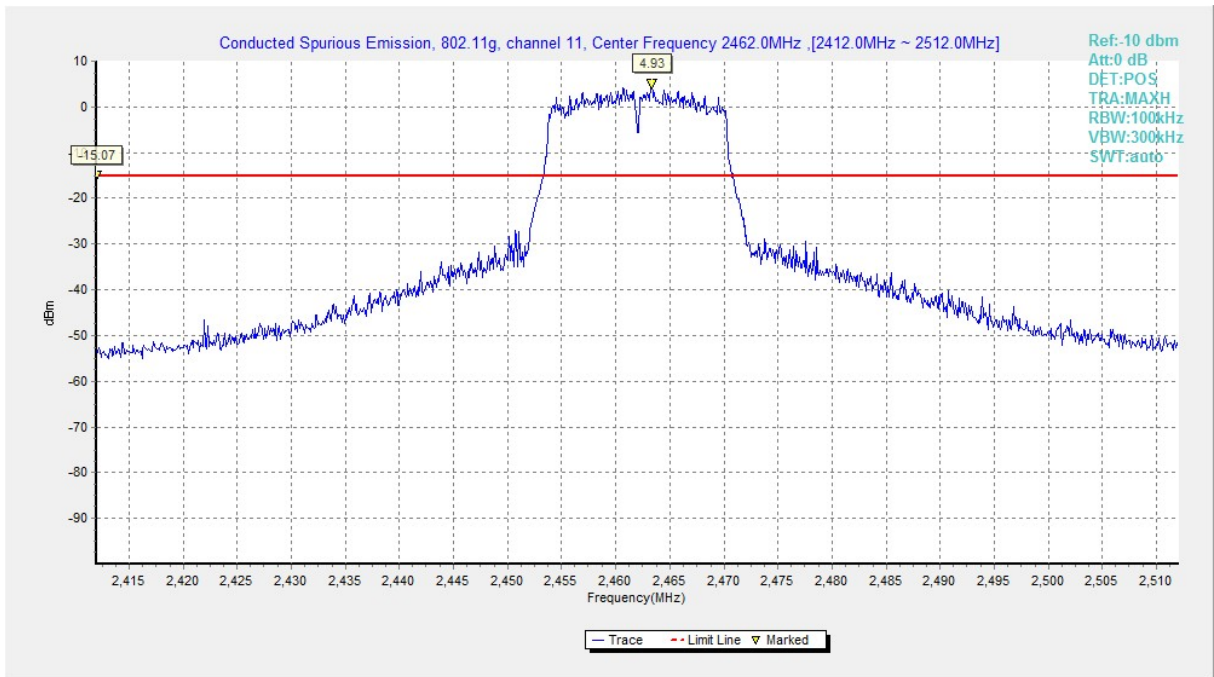


Fig.A.6.1.41 Conducted Spurious Emission (802.11g, Ch11, Center Frequency)

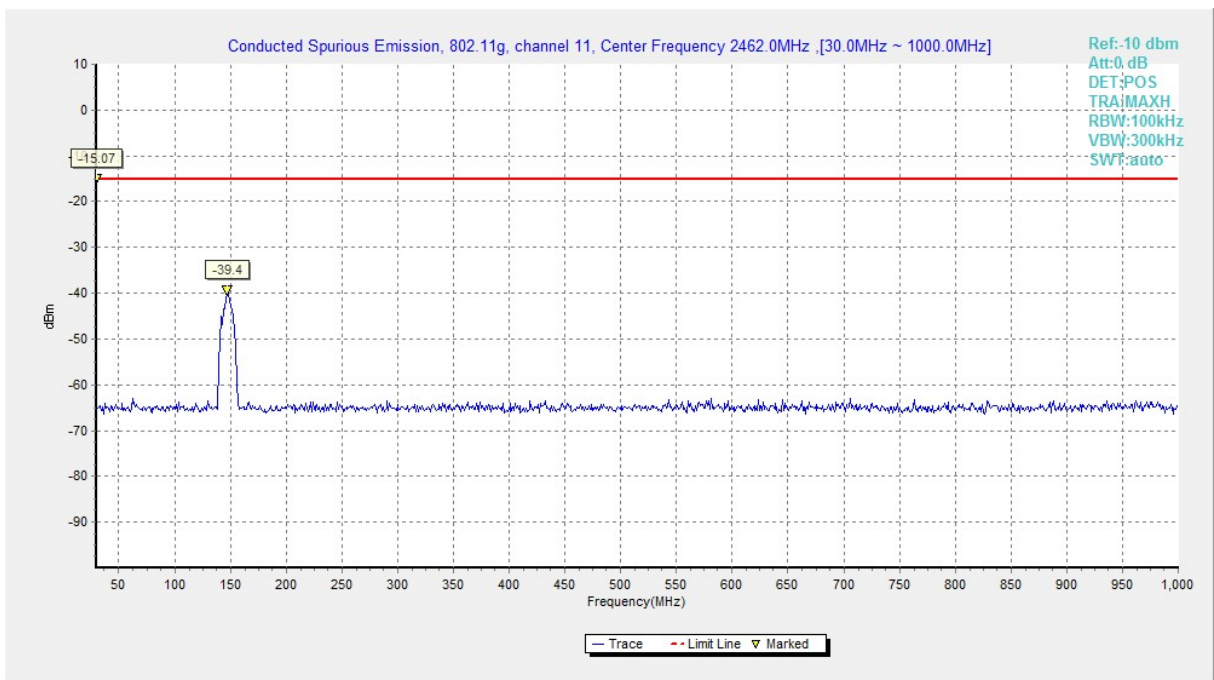


Fig.A.6.1.42 Conducted Spurious Emission (802.11g, Ch11, 30 MHz-1 GHz)