5. POWER SPECTRAL DENSITY TEST

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW ≥ 3kHz
VB	VBW ≥ 3RBW
Detector	power averaging (rms) or sample detector (when rms not available).
Trace	rms/average
Sweep Time	Auto

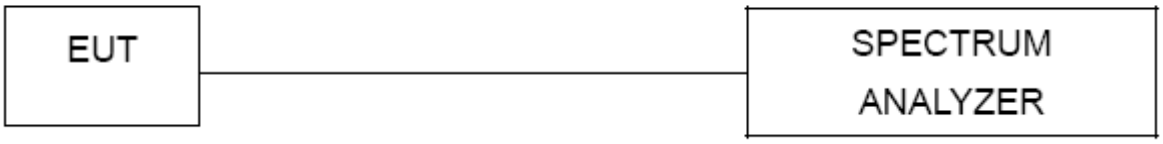
5.1.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP

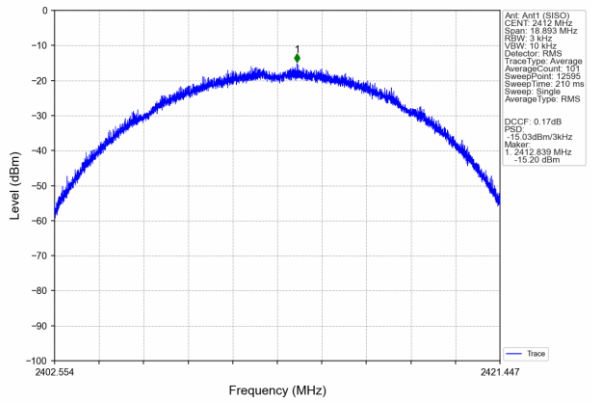
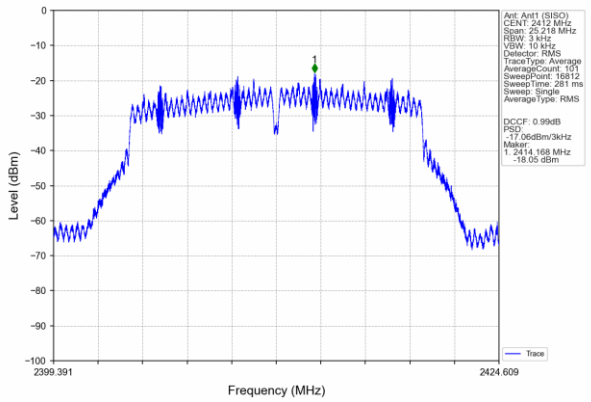
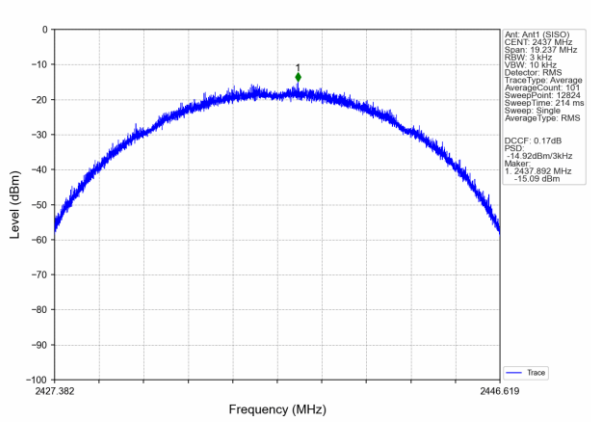
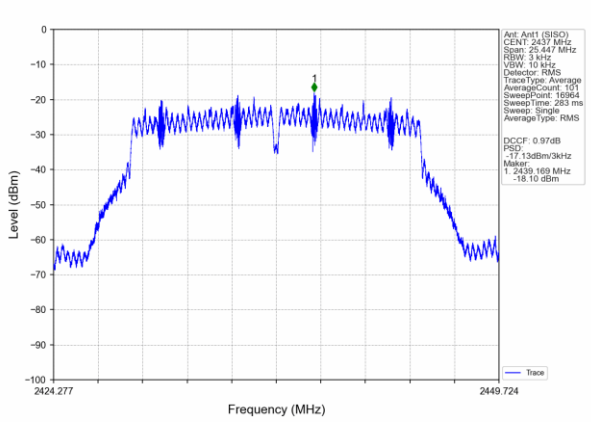
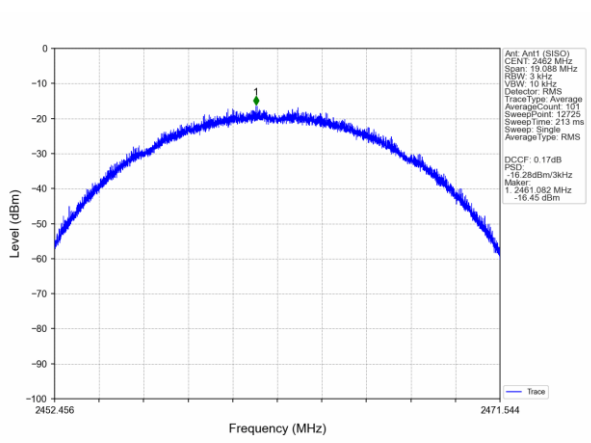
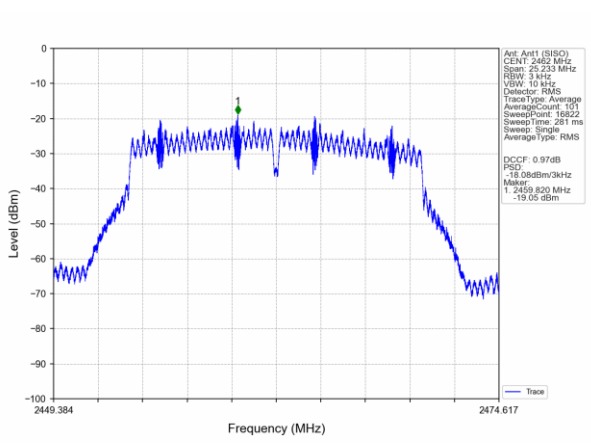


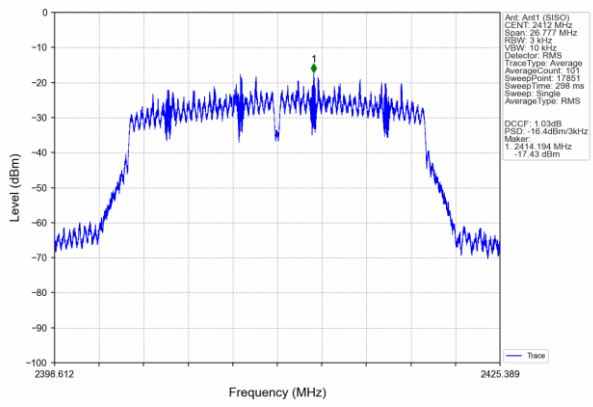
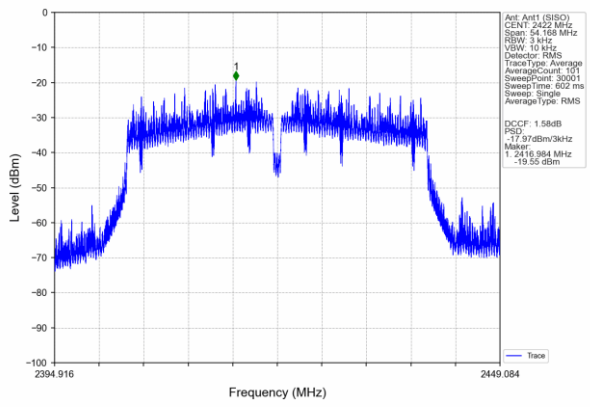
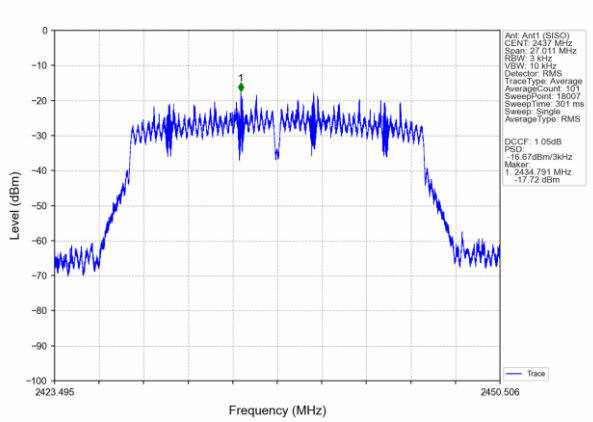
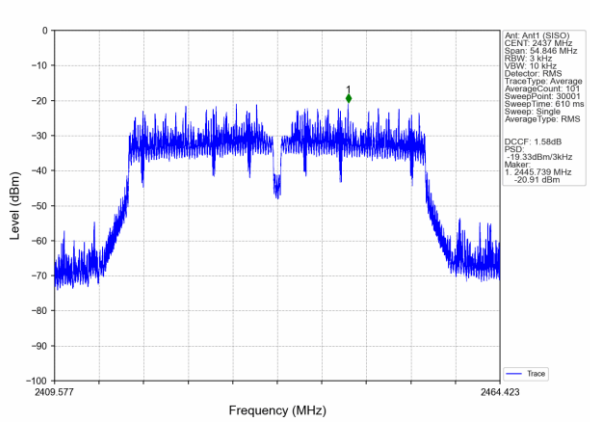
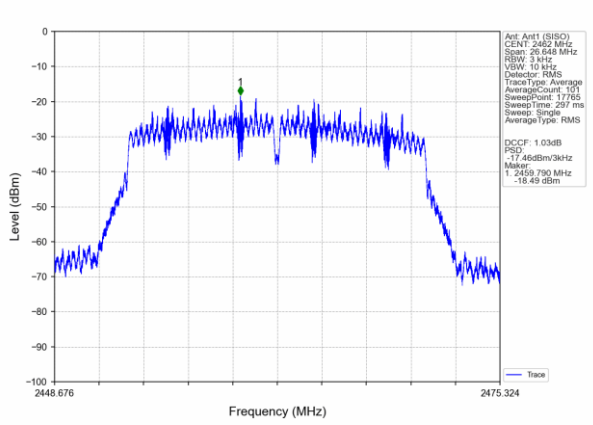
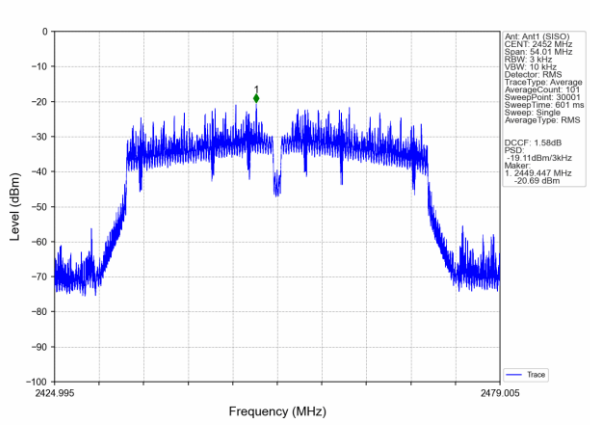
5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 TEST RESULTS

Mode	Test Channel	Test Result (dBm/3kHz)	Limit (dBm/3kHz)	Result
802.11b	Low	-15.03	8	PASS
	Middle	-14.92	8	PASS
	High	-16.28	8	PASS
802.11g	Low	-17.06	8	PASS
	Middle	-17.13	8	PASS
	High	-18.08	8	PASS
802.11n20	Low	-16.40	8	PASS
	Middle	-16.67	8	PASS
	High	-17.46	8	PASS
802.11n40	Low	-17.97	8	PASS
	Middle	-19.33	8	PASS
	High	-19.11	8	PASS

802.11b	802.11g
	
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

6. 6DB BANDWIDTH TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range(MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

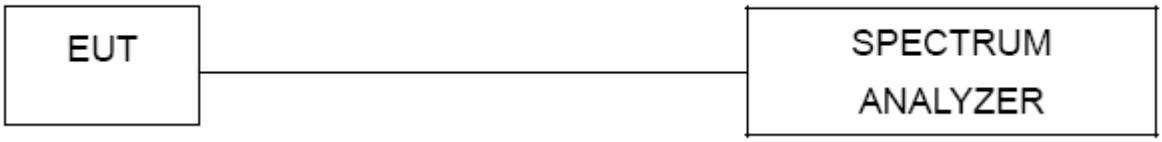
6.1.1 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



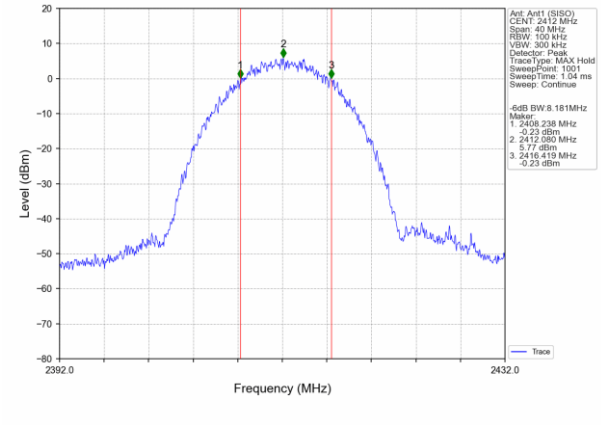
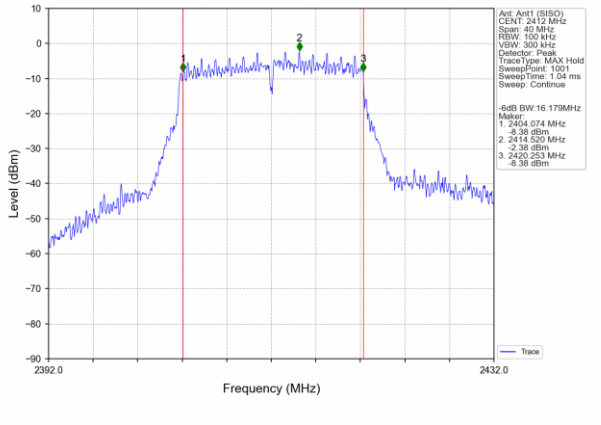
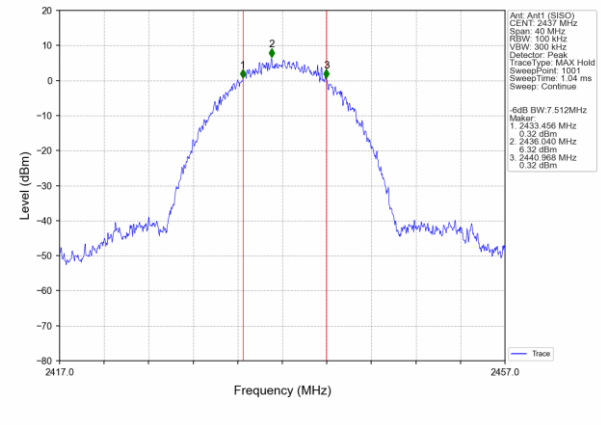
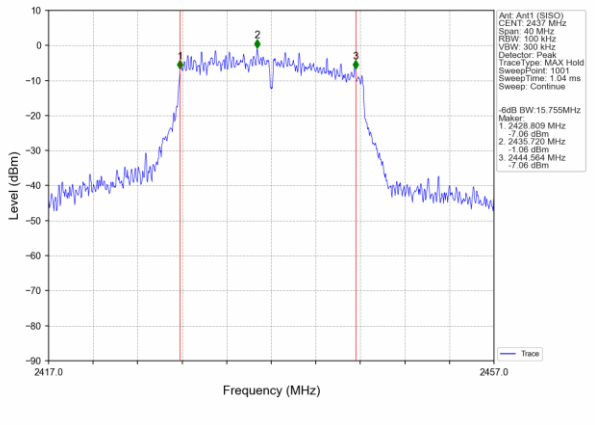
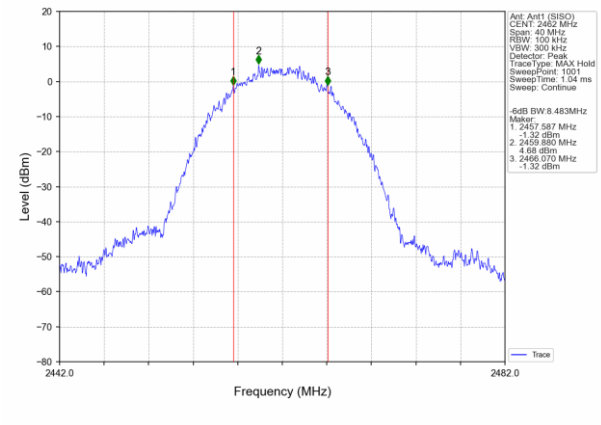
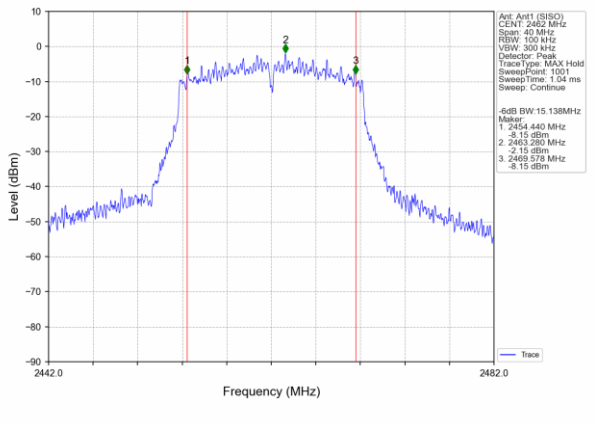
6.1.4 EUT OPERATION CONDITIONS

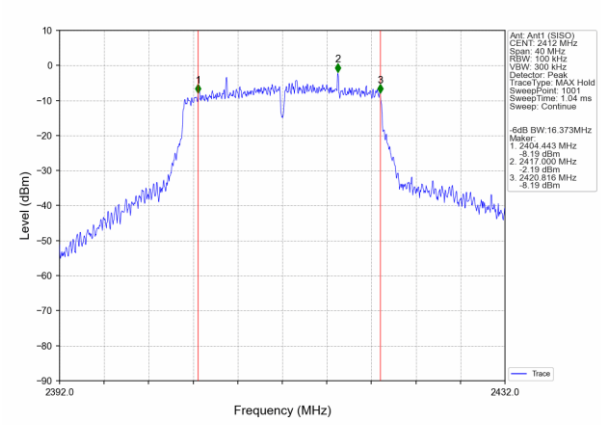
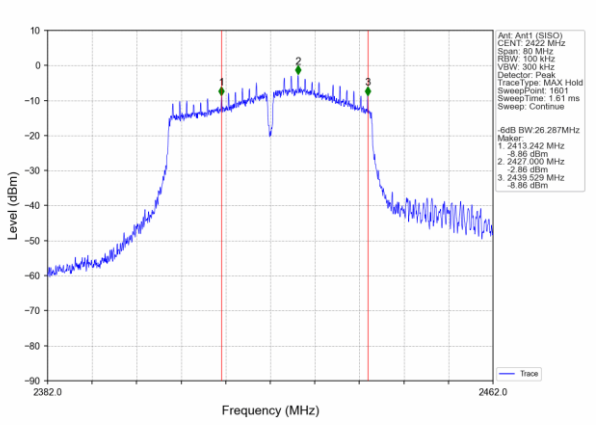
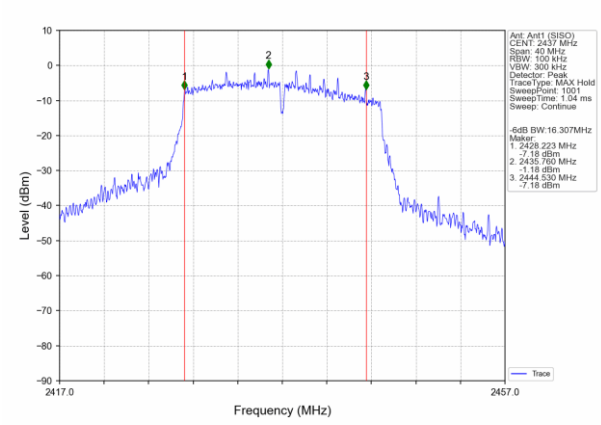
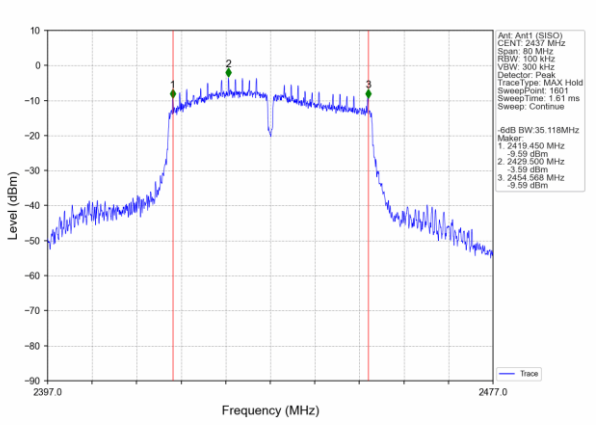
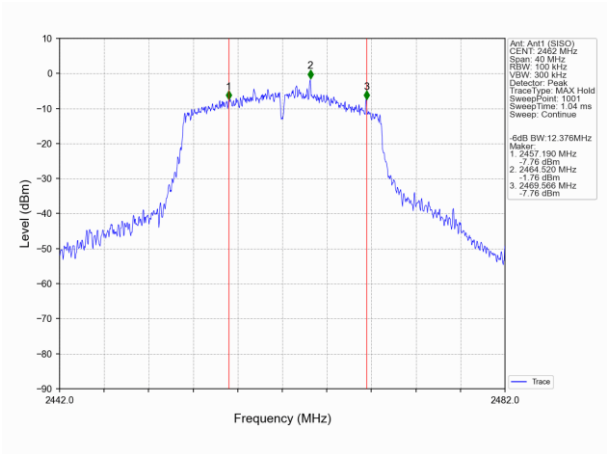
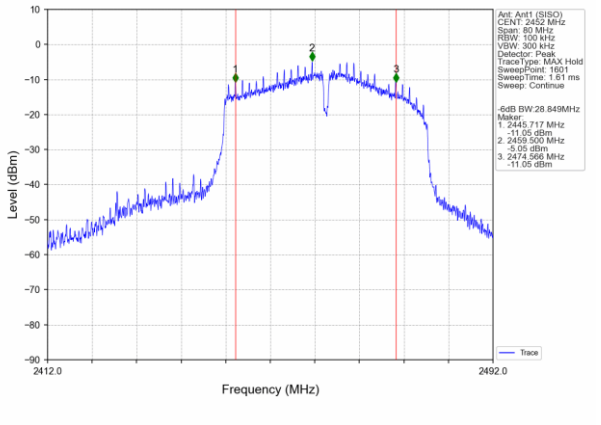
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

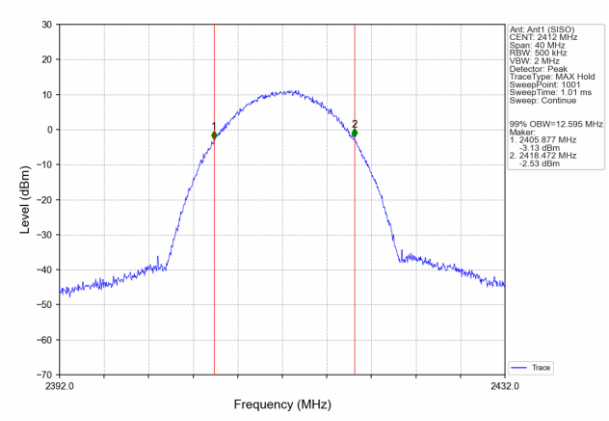
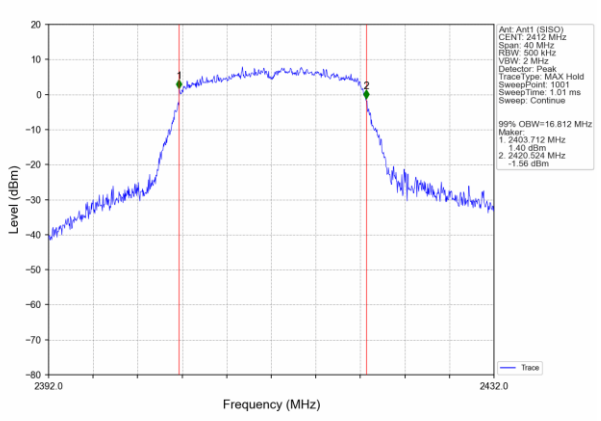
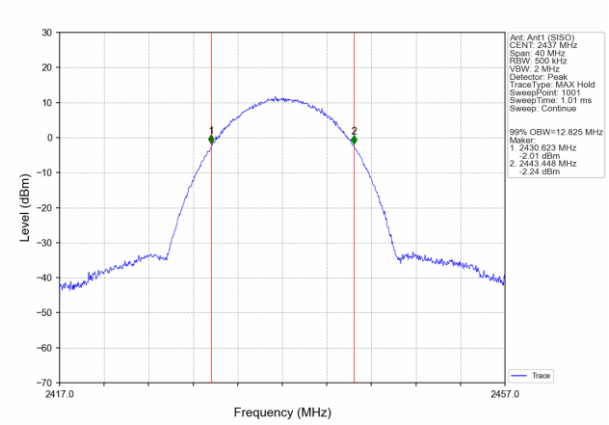
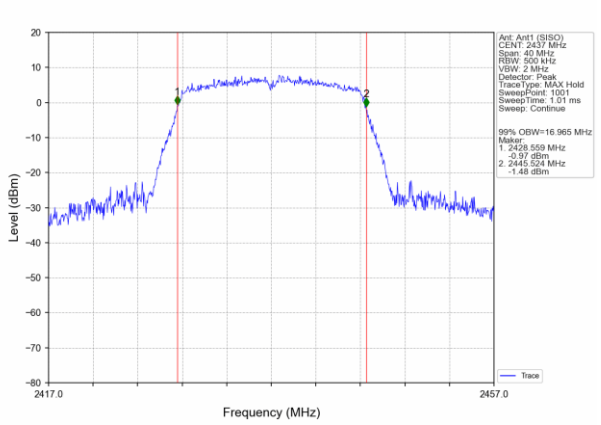
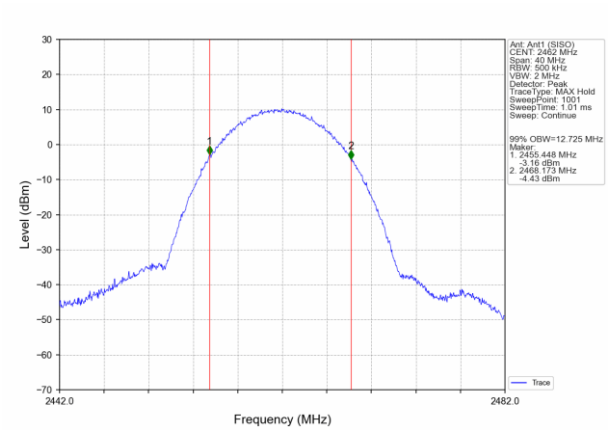
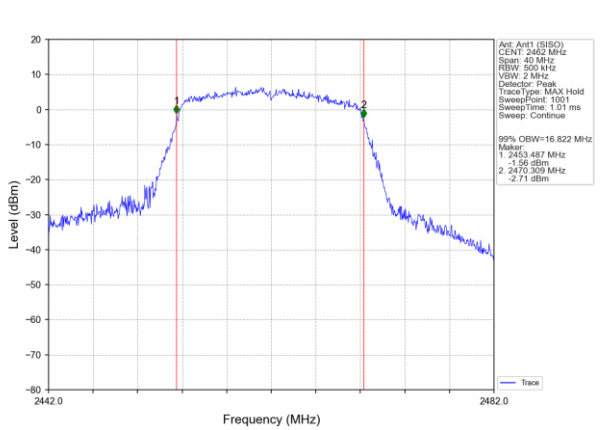
	Test Channel	6dB Bandwidth (MHz)	99%Bandwidth (MHz)	Limit (MHz)	Result
802.11b	Low	8.181	12.595	0.5	Pass
	Middle	7.512	12.825	0.5	Pass
	High	8.483	12.725	0.5	Pass
802.11g	Low	16.179	16.812	0.5	Pass
	Middle	15.755	16.965	0.5	Pass
	High	15.138	16.822	0.5	Pass
802.11n HT20	Low	16.373	17.851	0.5	Pass
	Middle	16.307	18.007	0.5	Pass
	High	12.376	17.765	0.5	Pass
802.11n HT40	Low	26.287	36.112	0.5	Pass
	Middle	35.118	36.564	0.5	Pass
	High	28.849	36.007	0.5	Pass

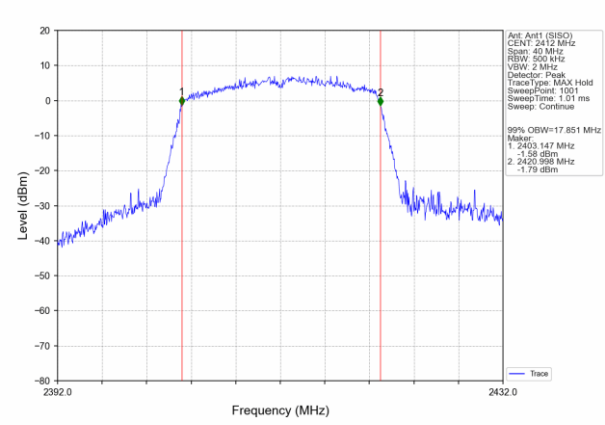
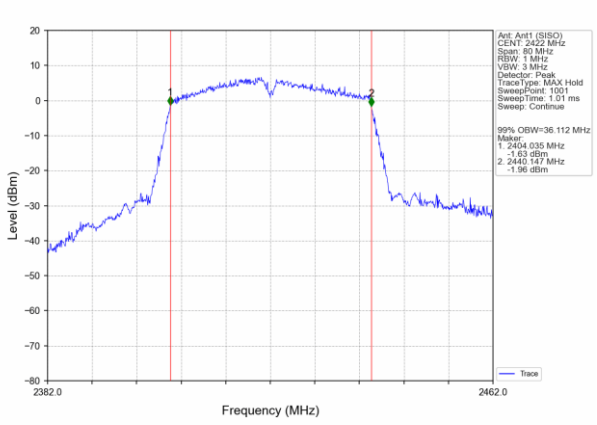
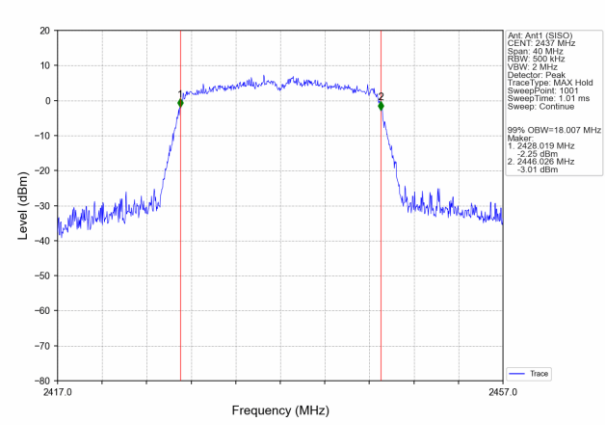
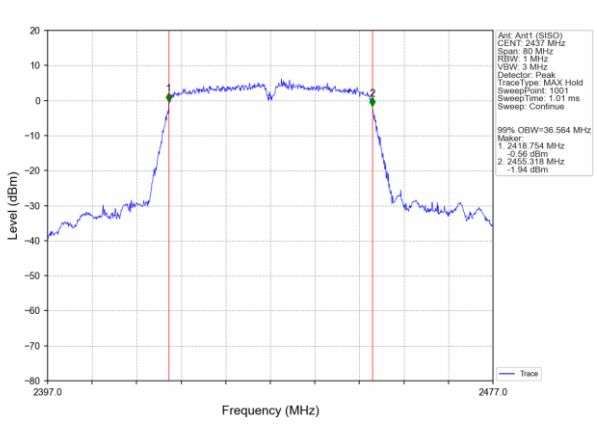
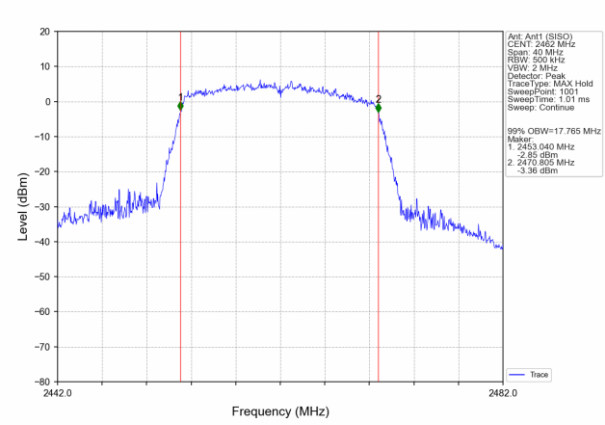
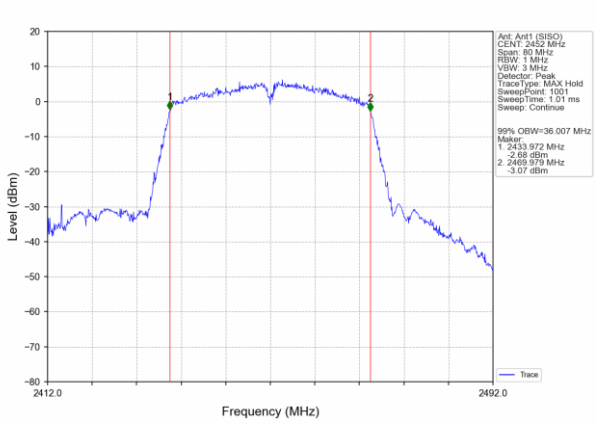
6dB Bandwidth

802.11b	802.11g
	
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

99% Bandwidth

802.11b	802.11g
	
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

7. ANTENNA REQUIREMENT

7.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

7.2 EUT ANTENNA

The EUT antenna is Internal Antenna, It comply with the standard requirement.

8. TEST SEUUP PHOTO

Reference to the appendix I for details.

9. EUT PHOTO

Reference to the appendix II for details.

※※※※※ **END OF REPORT** ※※※※※