





9. OUT OF BAND EMISSIONS TEST

9.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

9.2 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP

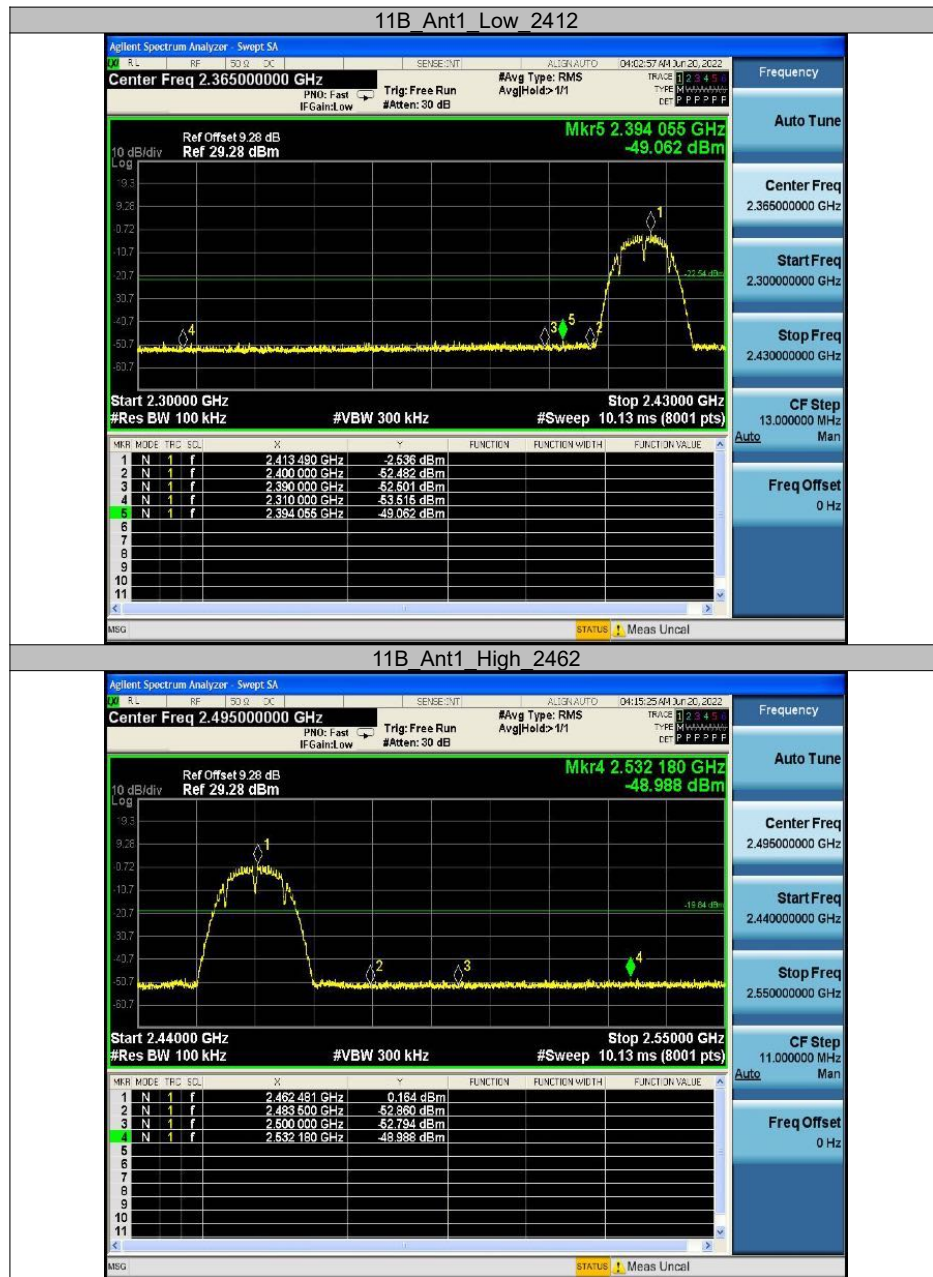


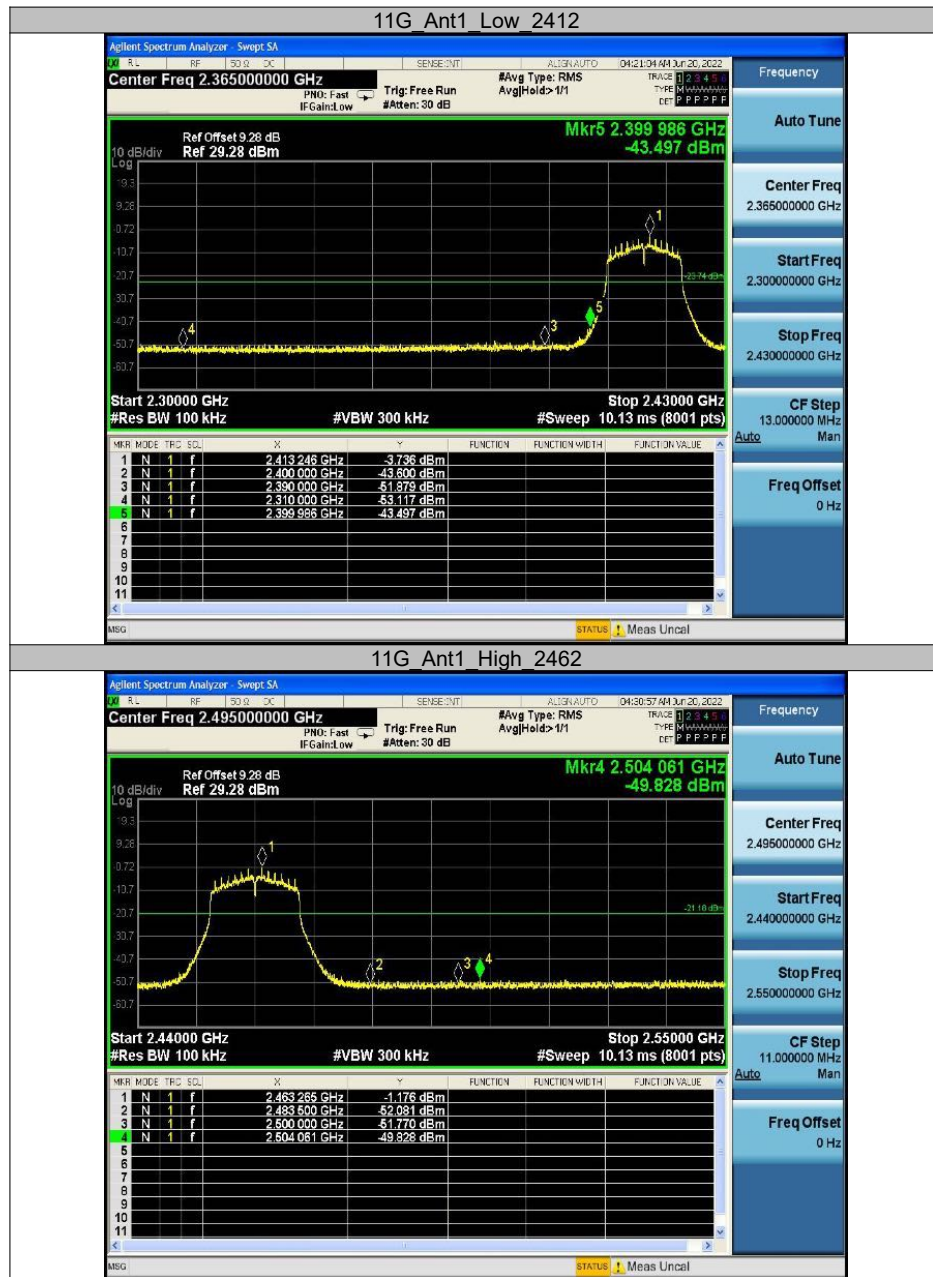
9.5 EUT OPERATION CONDITIONS

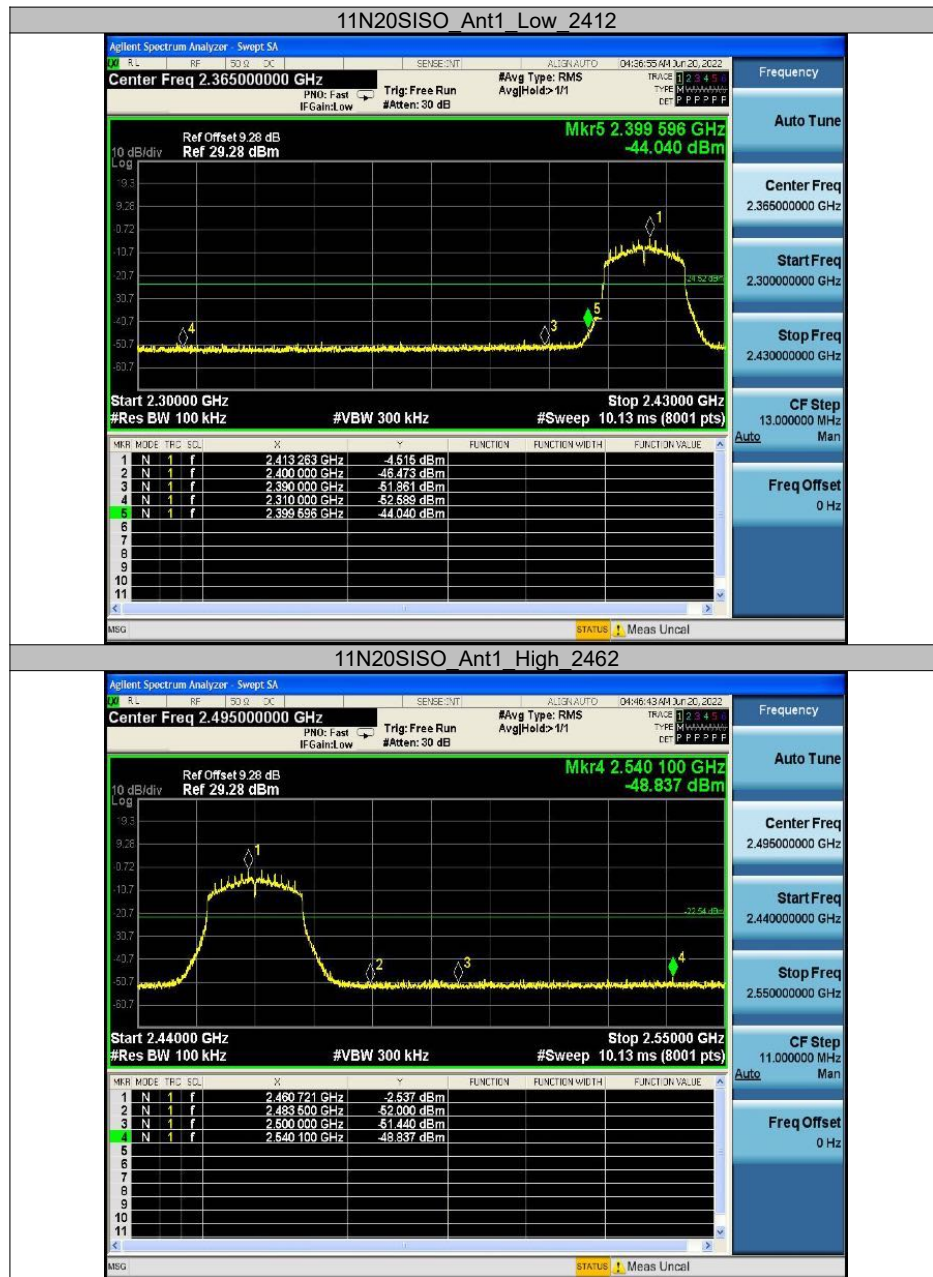
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

9.6 TEST RESULTS

WIFI						
Test Mode	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Low	2412	-2.54	-49.06	≤ -22.54	PASS
	High	2462	0.16	-48.99	≤ -19.84	PASS
11G	Low	2412	-3.74	-43.50	≤ -23.74	PASS
	High	2462	-1.18	-49.83	≤ -21.18	PASS
11N20SISO	Low	2412	-4.52	-44.04	≤ -24.52	PASS
	High	2462	-2.54	-48.84	≤ -22.54	PASS

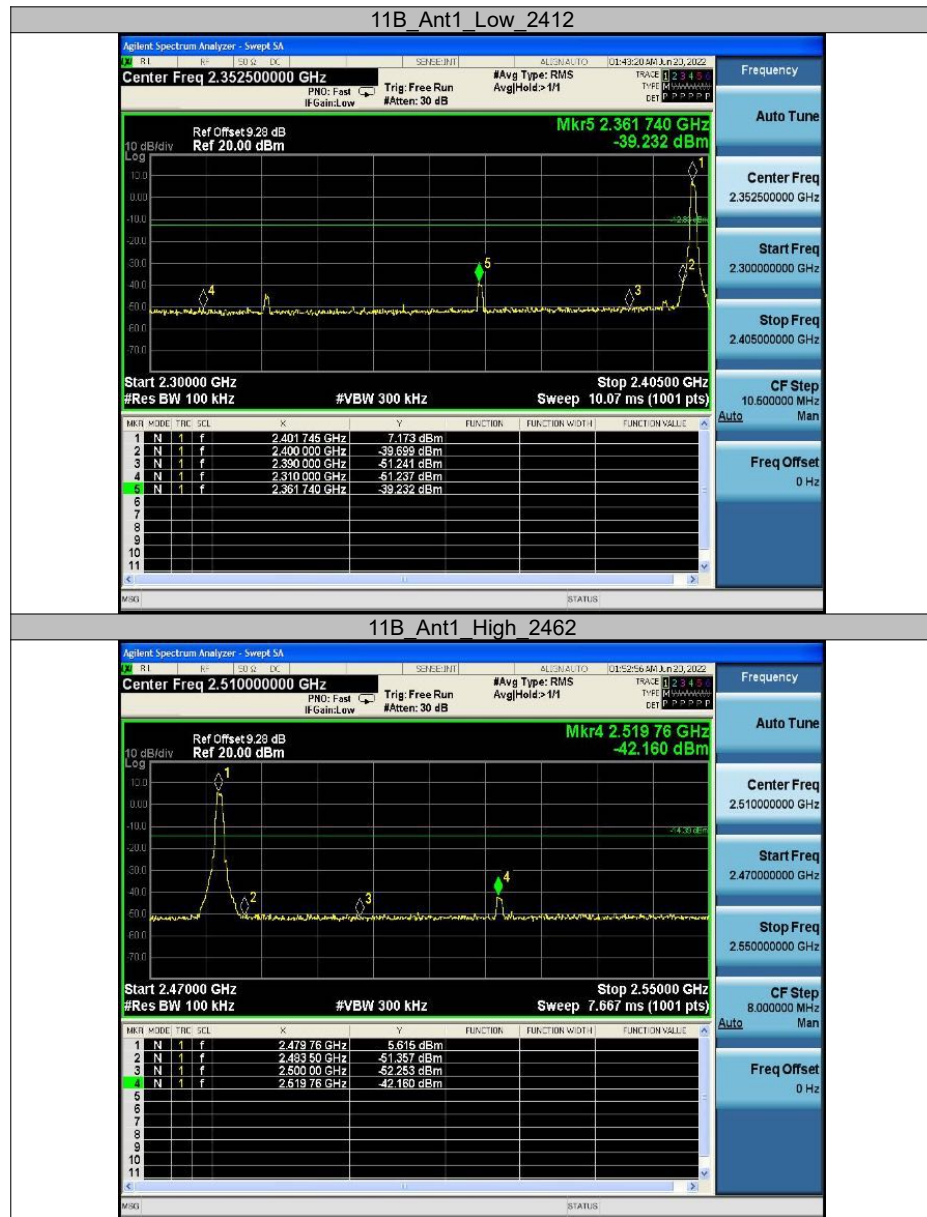








BLE						
Test Mode	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
GFSK	Low	2402	7.17	-39.23	≤ -12.83	PASS
	High	2480	5.62	-42.32	≤ -14.39	PASS





10. SPURIOUS RF CONDUCTED EMISSION

10.1 APPLIED PROCEDURES / LIMIT

1. Below -20dB of the highest emission level in operating band.
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.
3. For below 30MHz, For 9KHz-150kHz, 150K-10MHz, We use the RBW 1KHz, 10KHz, So the limit need to calculated by " $10\lg(BW1/BW2)$ ". for example For 9KHz-150kHz, RBW 1KHz, The Limit= the highest emission level-20-10lg(100/1)= the highest emission level-40.

10.2 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.

10.3 DEVIATION FROM STANDARD

No deviation.

10.4 TEST SETUP



10.5 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.



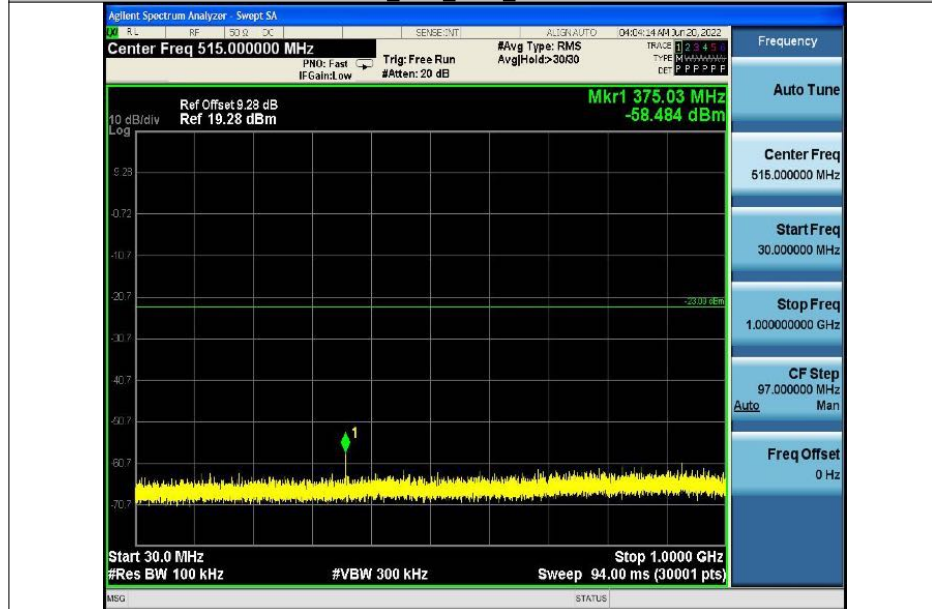
10.6 TEST RESULTS

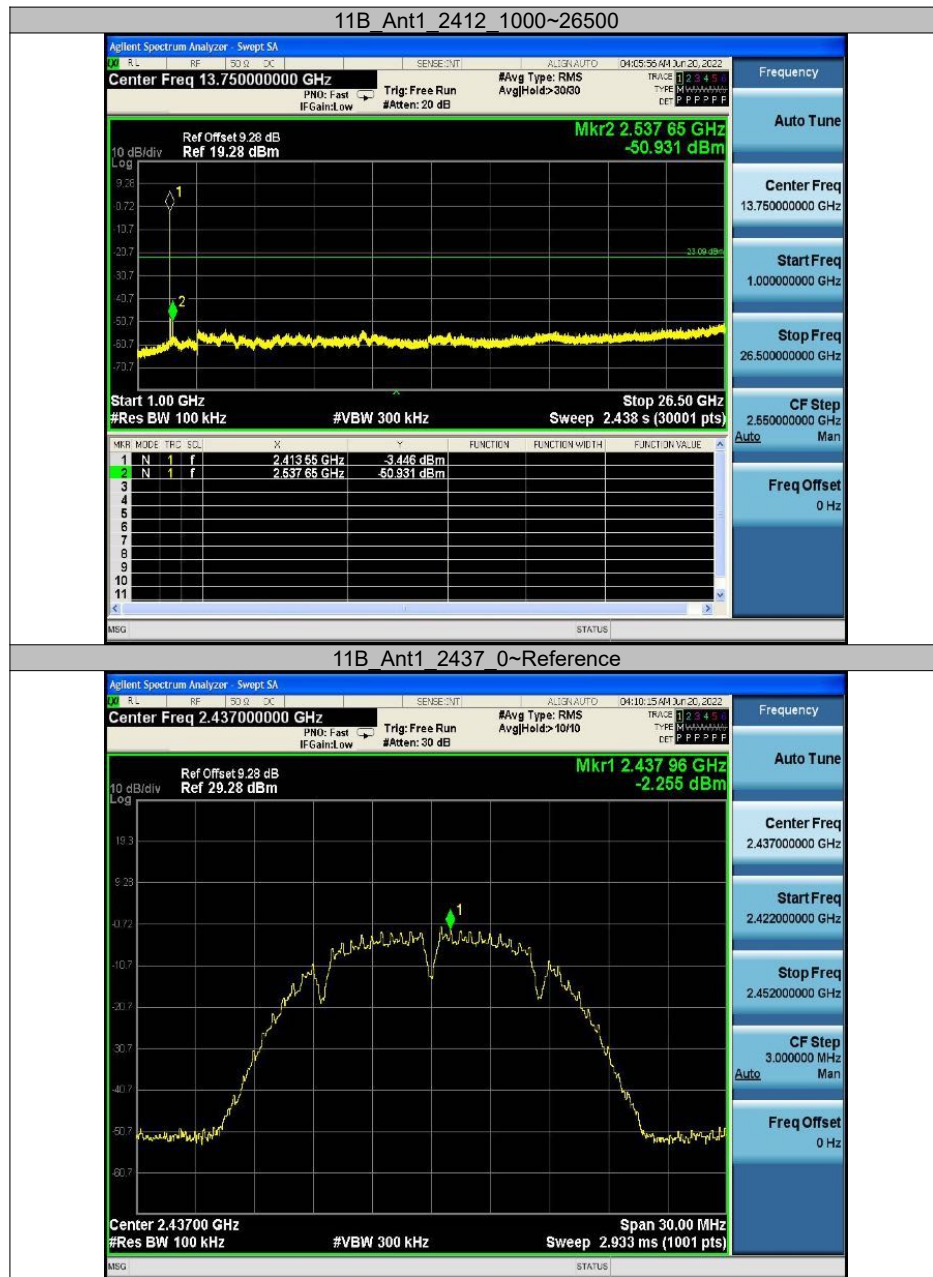
802.11b Worst Case

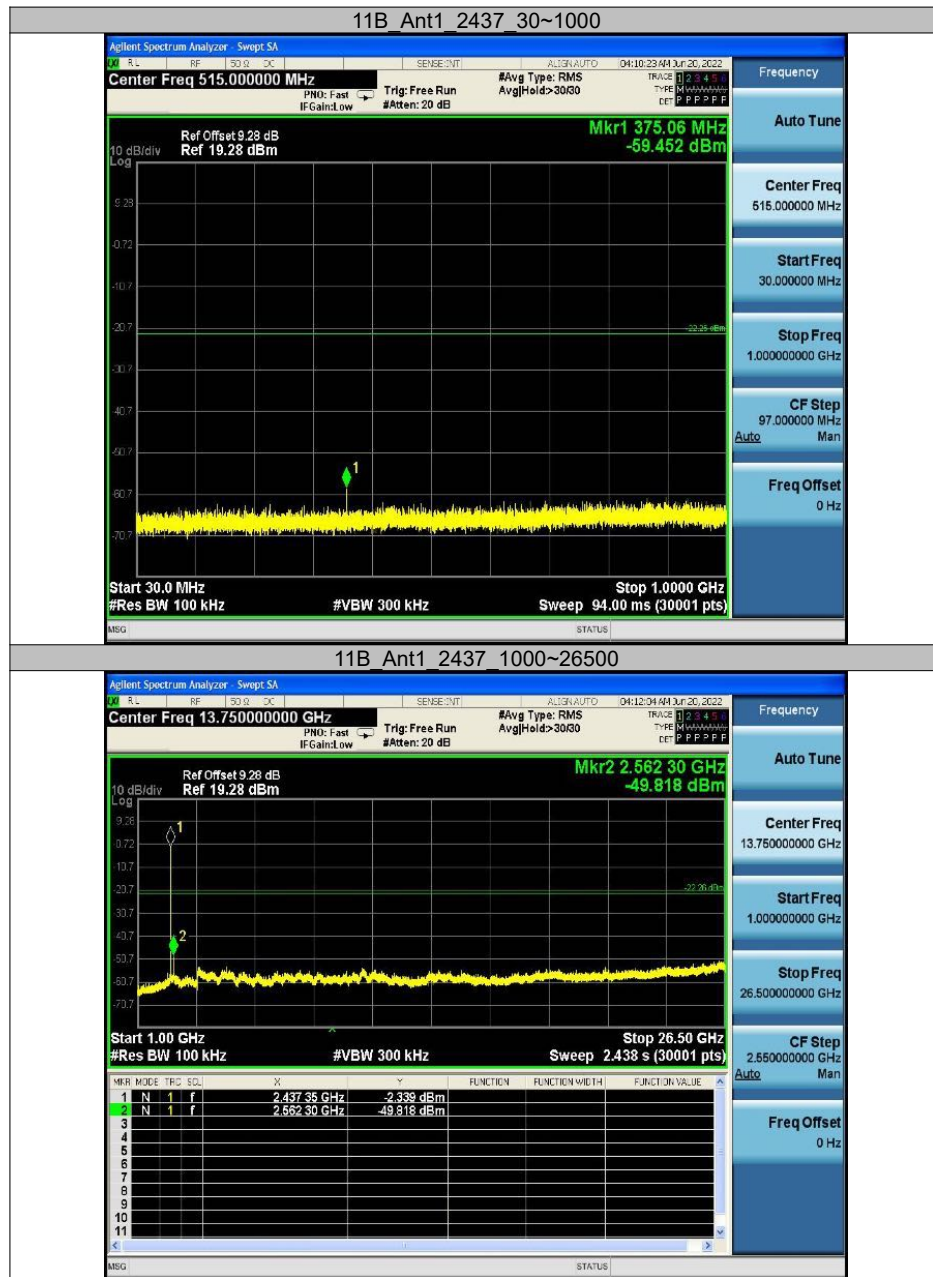
11B_Ant1_2412_0~Reference

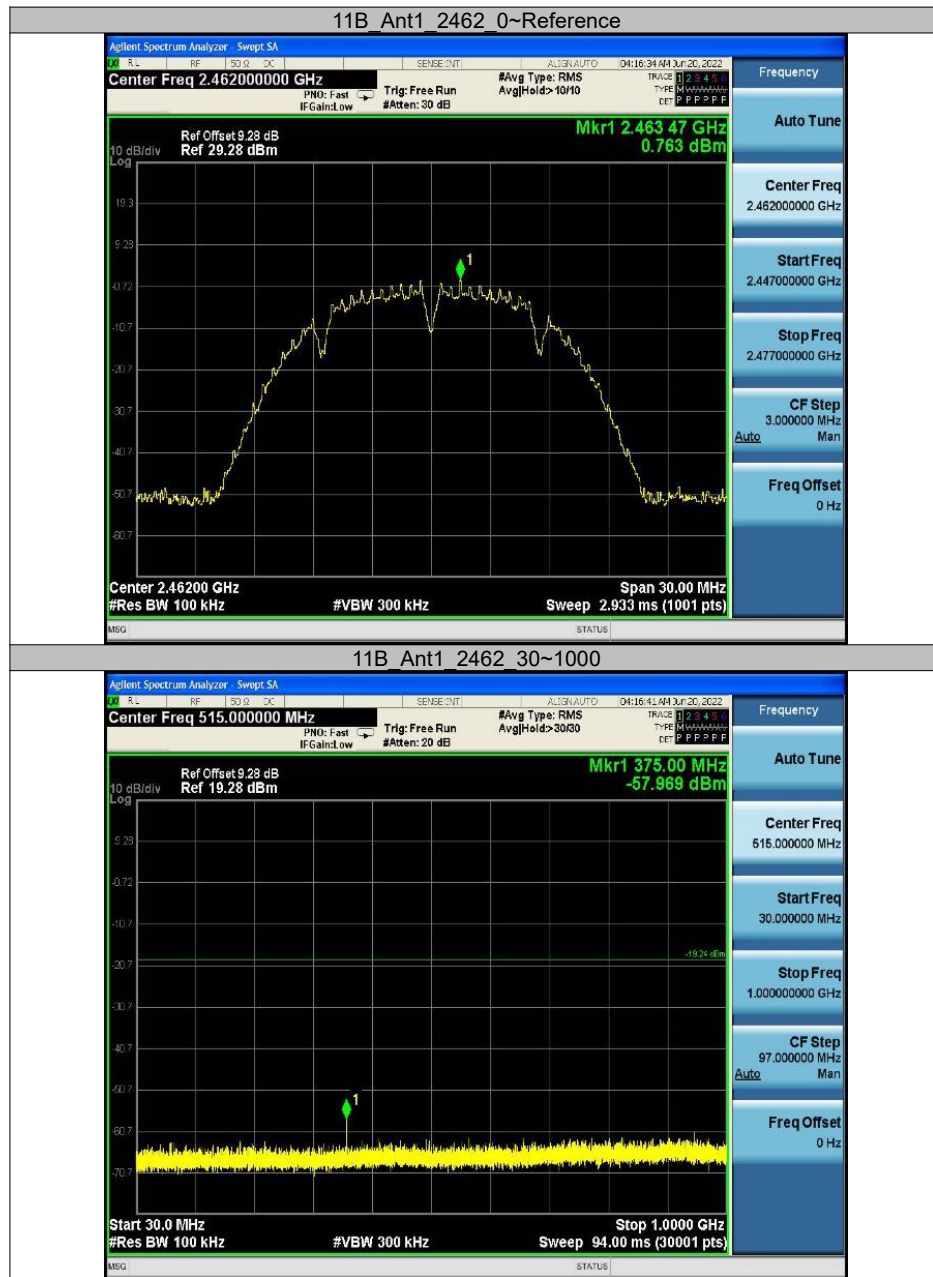


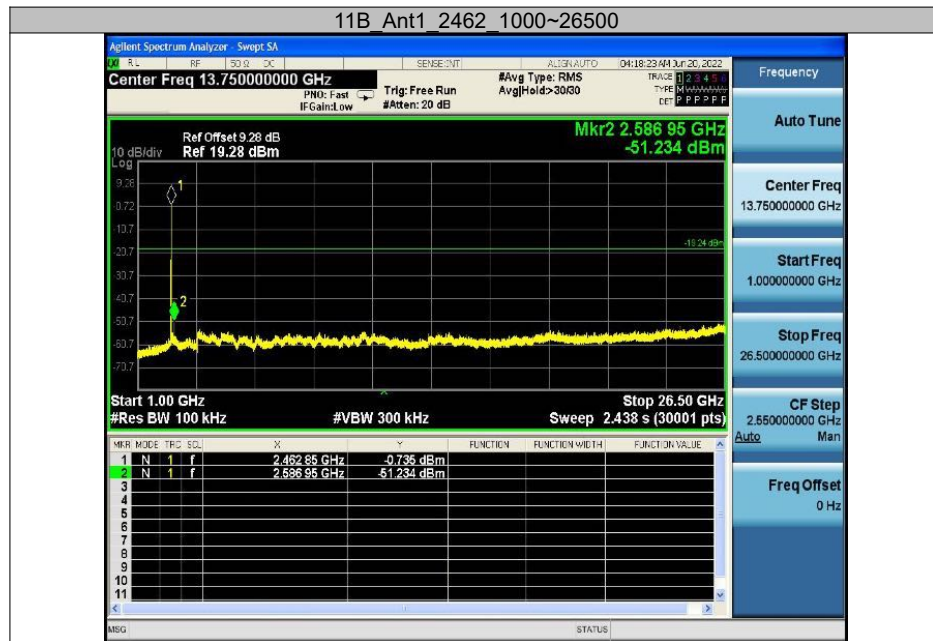
11B_Ant1_2412_30~1000





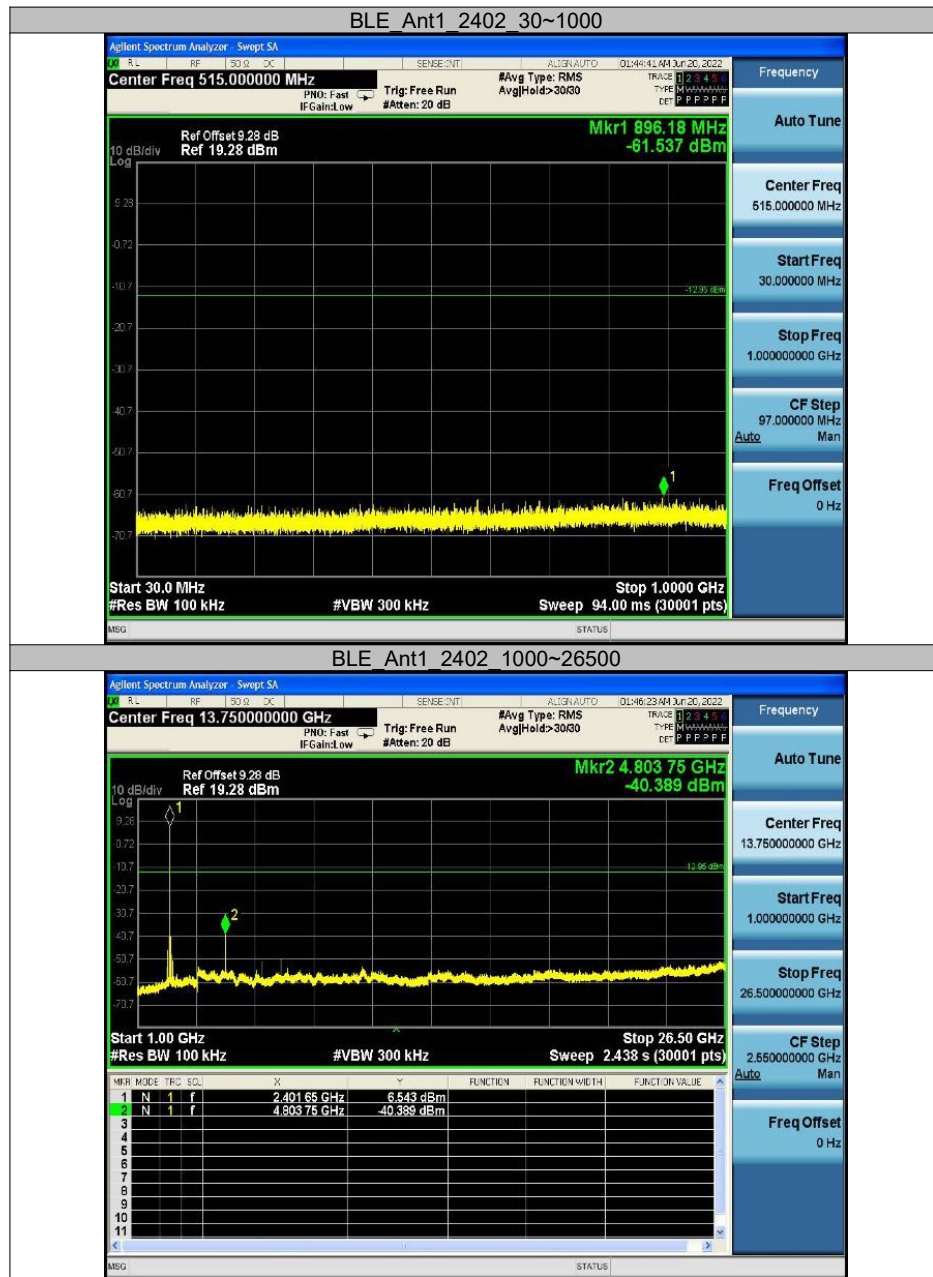


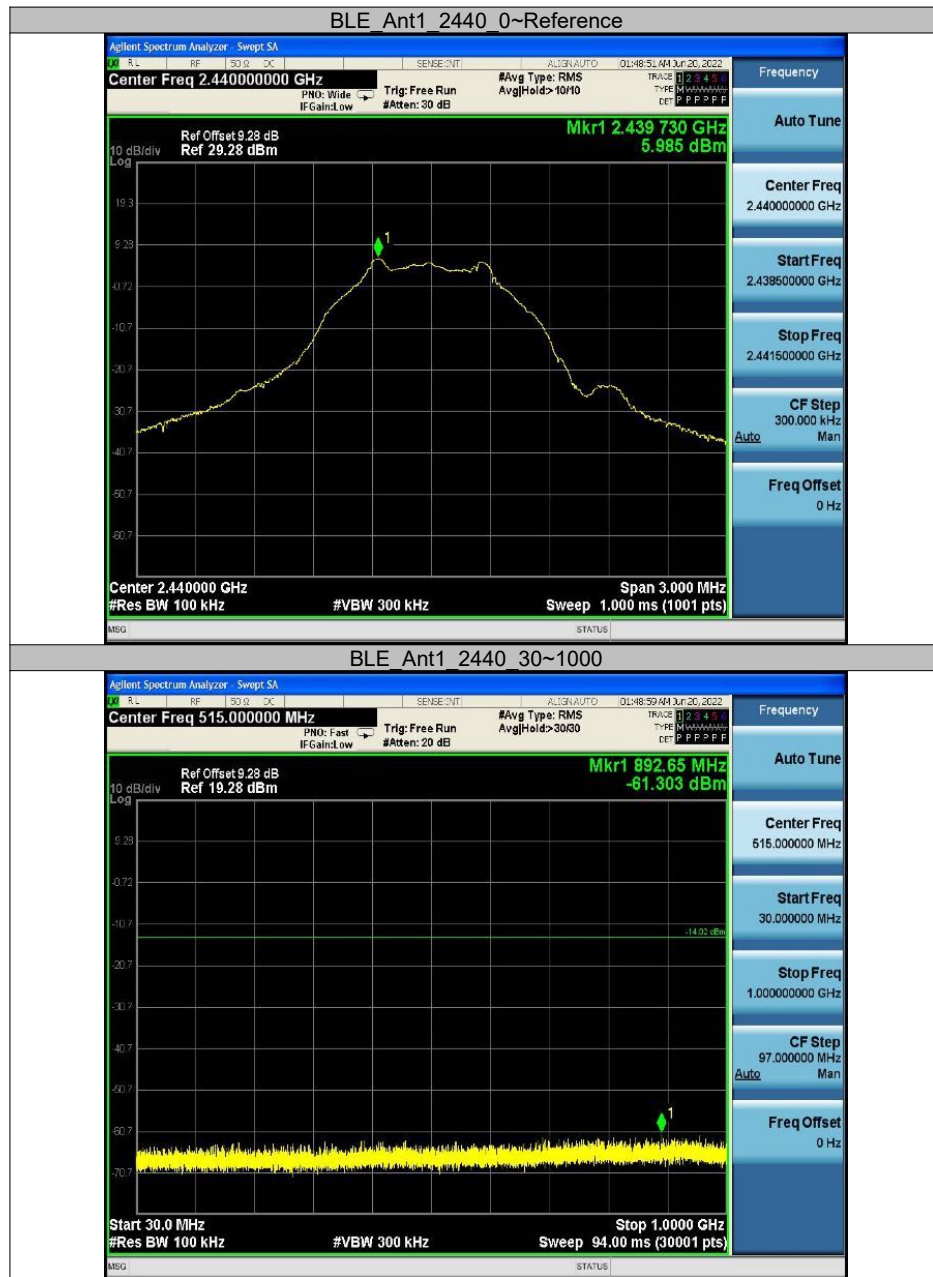


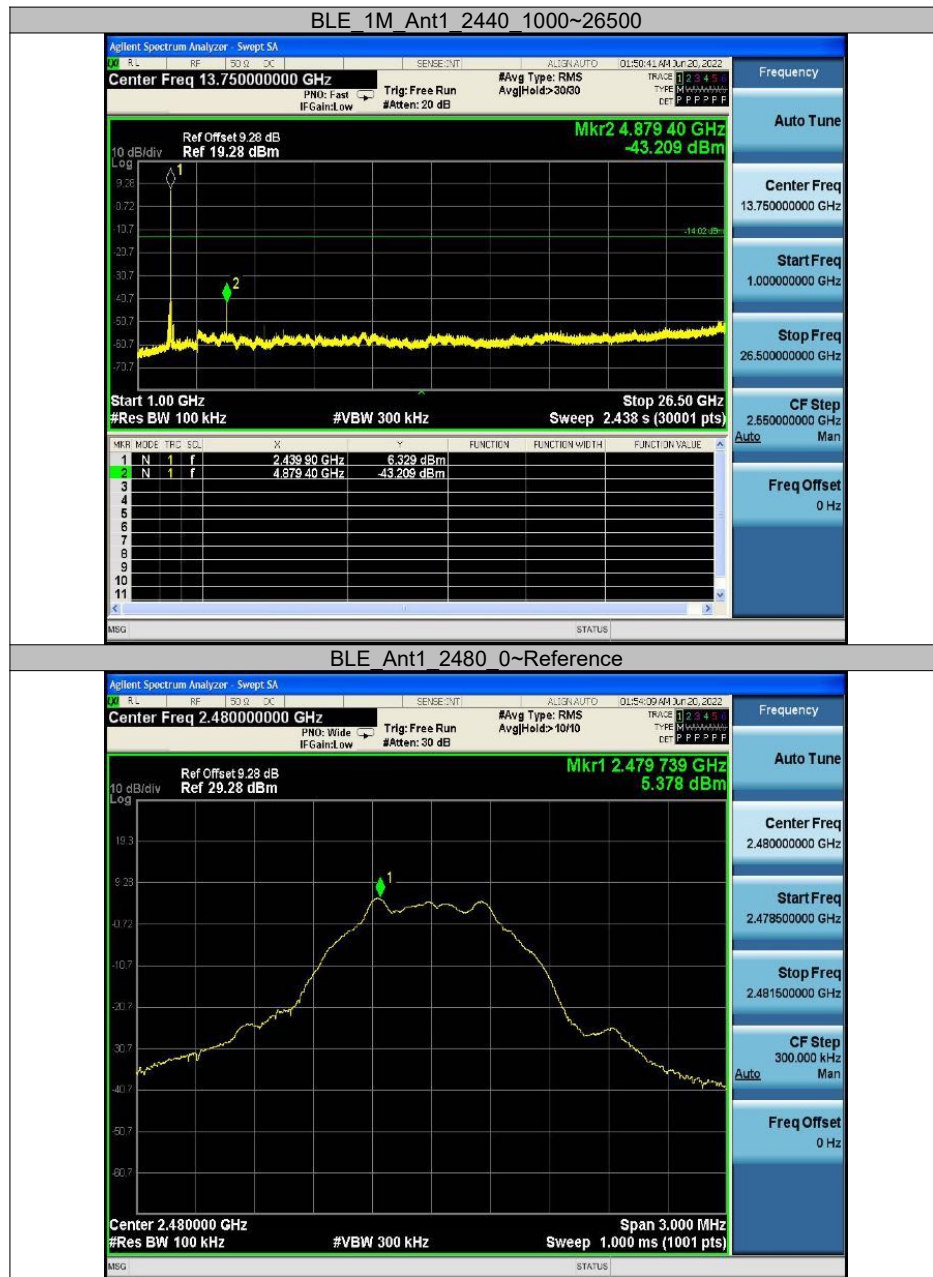


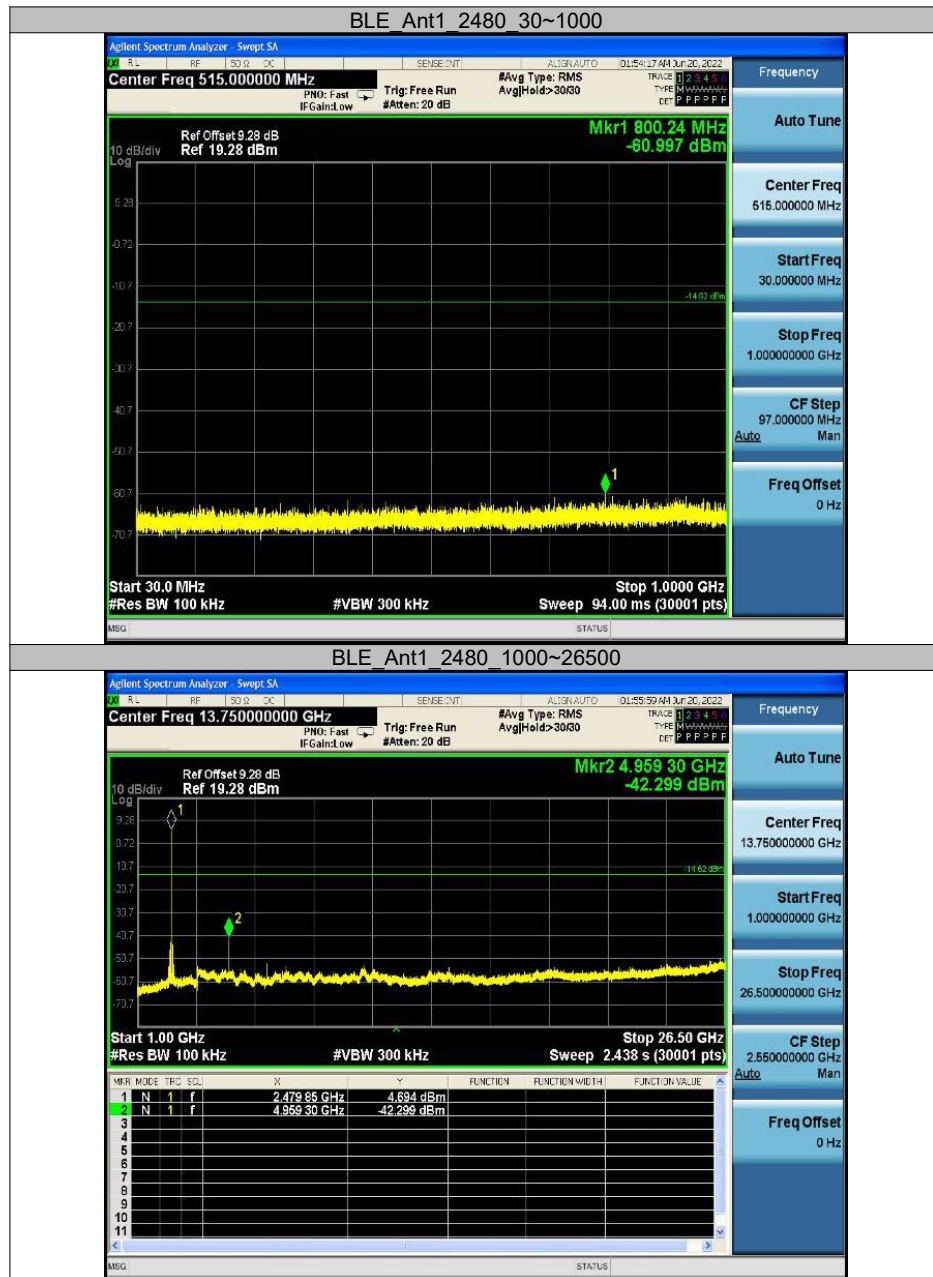
BLE













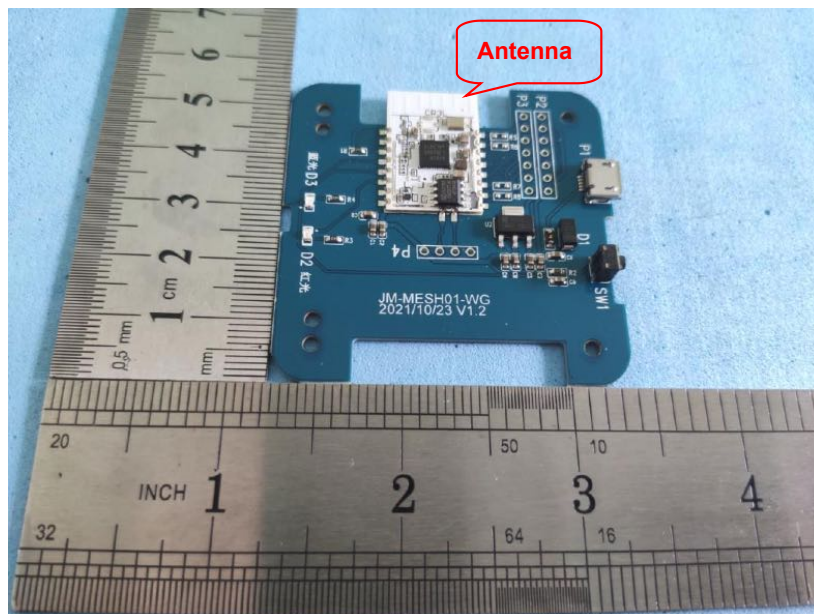
11. ANTENNA REQUIREMENT

11.1 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.

11.2 EUT ANTENNA

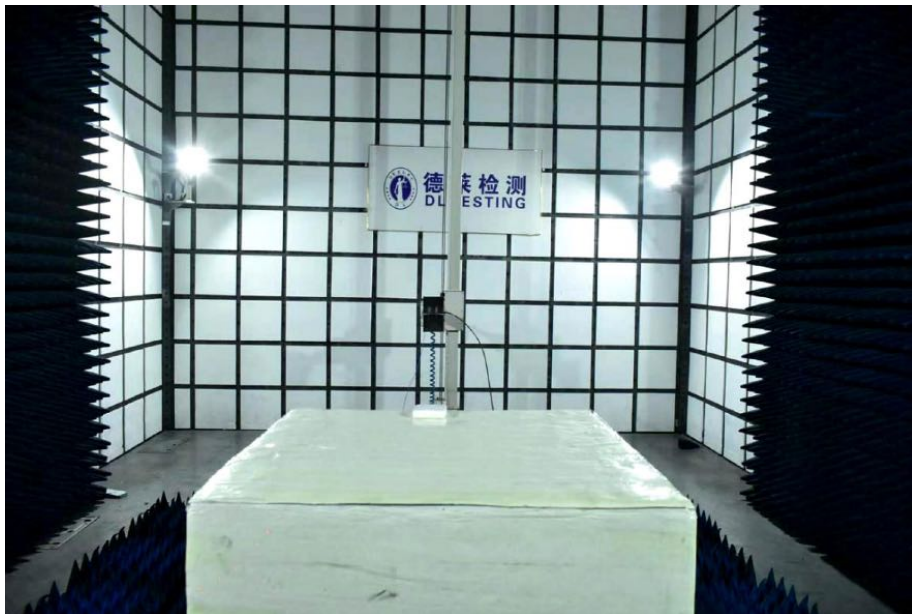
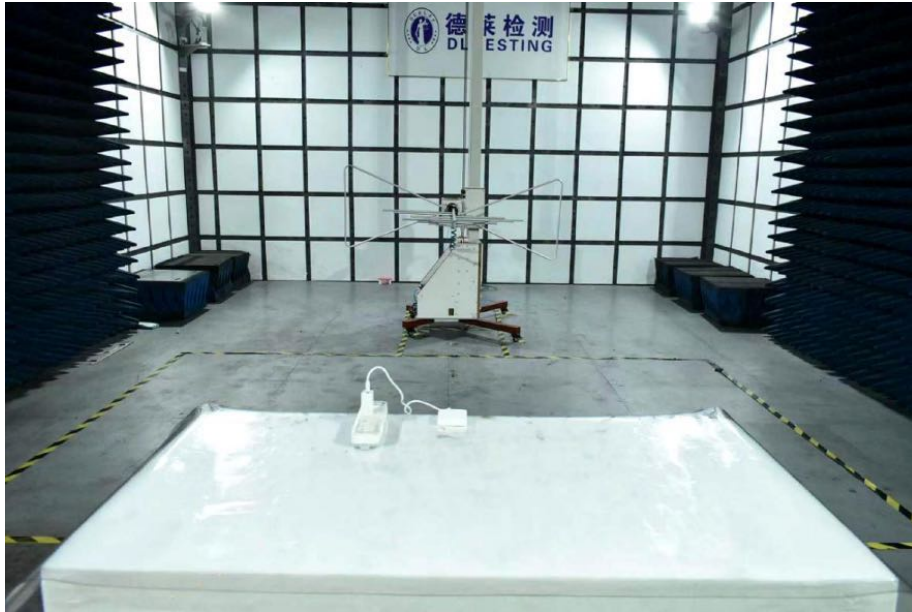
The EUT antenna is PCB Antenna. It comply with the standard requirement.





12. TEST SEUUP PHOTO

Radiated Measurement Photos





Conducted Measurement Photos



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