



8. 6DB BANDWIDTH TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range(MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$	2400-2483.5	PASS

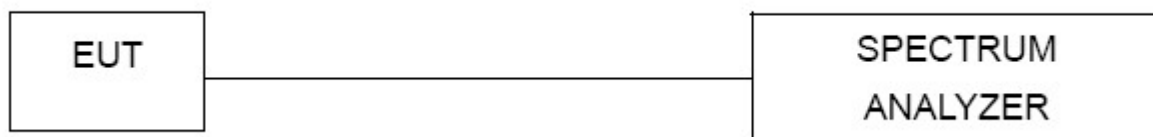
8.2 TEST PROCEDURE

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.
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 20 dB relative to the maximum level measured in the fundamental emission.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 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.

8.6 TEST RESULTS

Test Mode	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	2412	10.040	2406.960	2417.000	0.5	PASS
	2437	10.040	2431.960	2442.000	0.5	PASS
	2462	10.040	2456.960	2467.000	0.5	PASS
11G	2412	15.040	2404.440	2419.480	0.5	PASS
	2437	15.000	2429.480	2444.480	0.5	PASS
	2462	12.560	2456.960	2469.520	0.5	PASS
11N20SISO	2412	15.000	2404.480	2419.480	0.5	PASS
	2437	15.000	2429.480	2444.480	0.5	PASS
	2462	15.040	2454.440	2469.480	0.5	PASS



11B_Ant1_2412



11B_Ant1_2437





11B_Ant1_2462

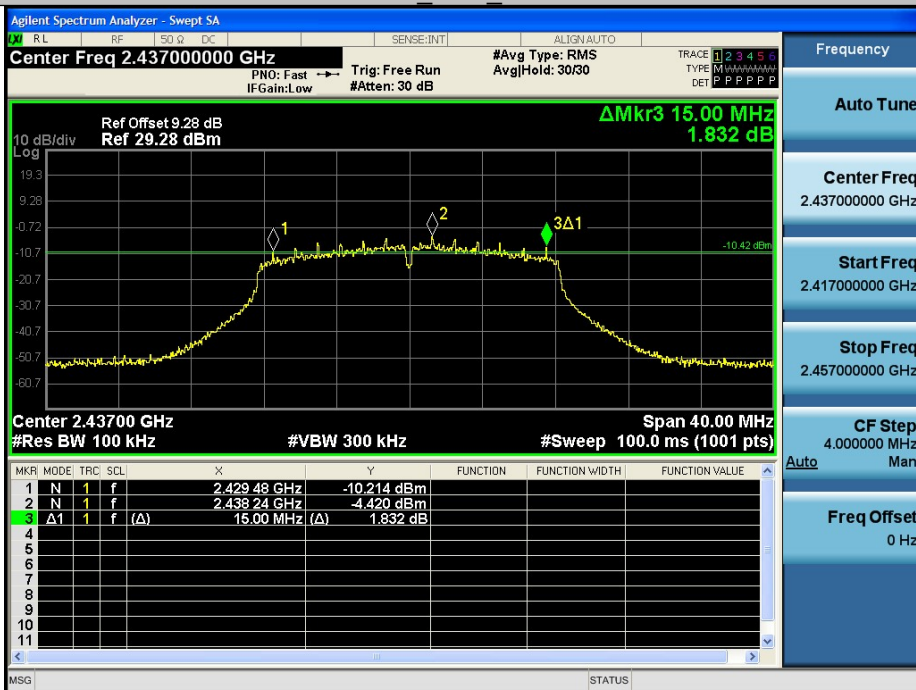


11G_Ant1_2412





11G_Ant1_2437

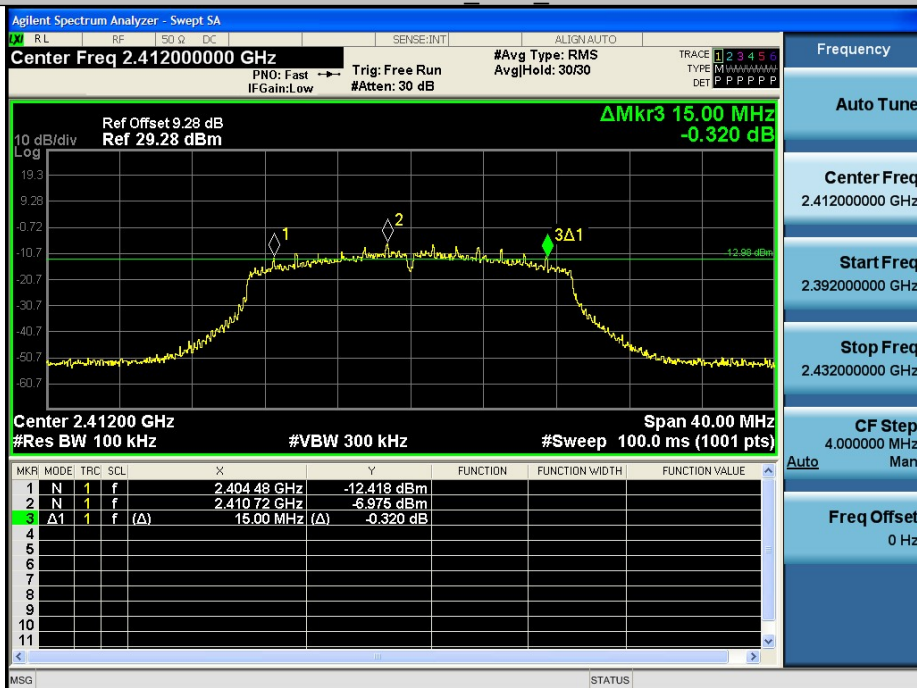


11G_Ant1_2462

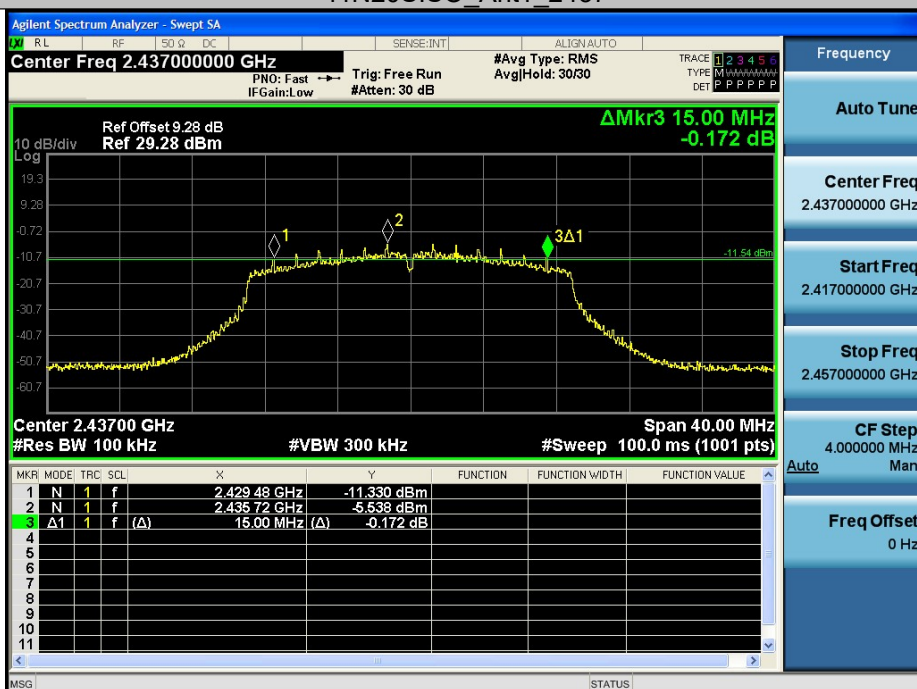


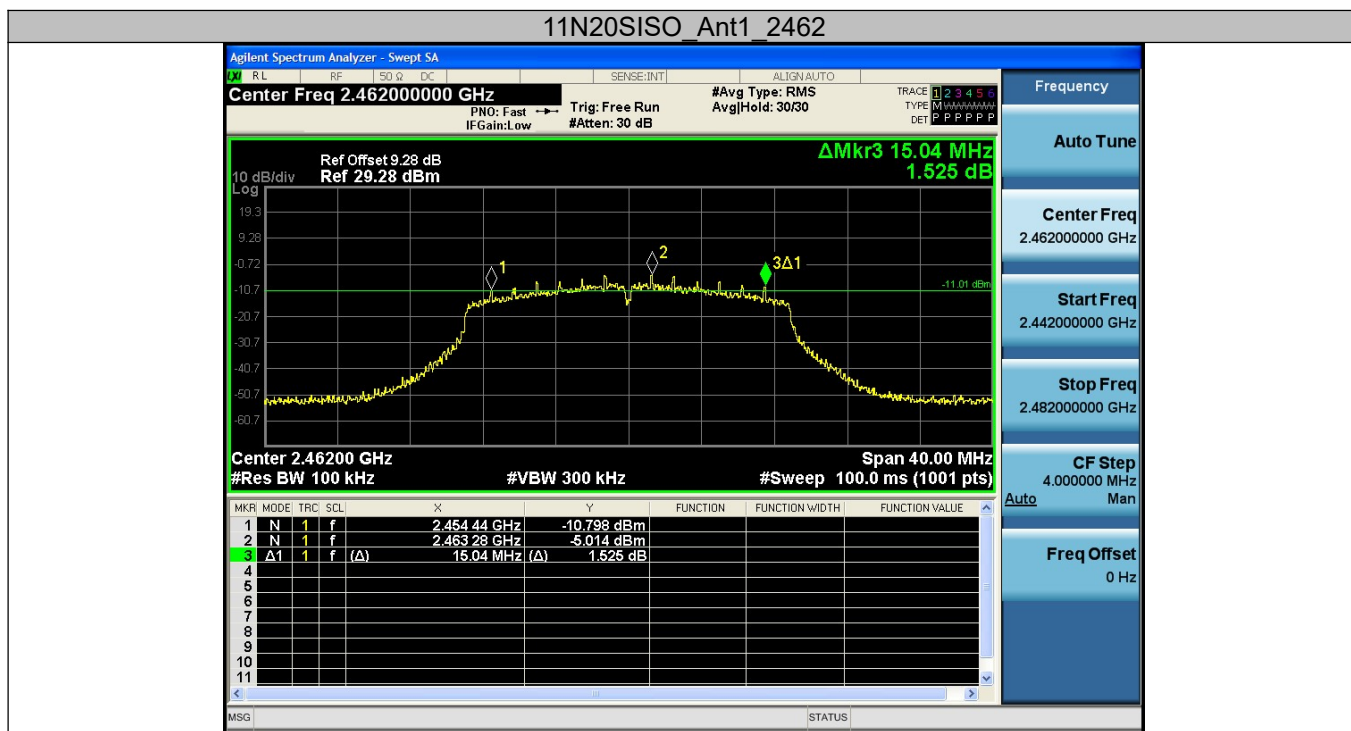


11N20SISO_Ant1_2412



11N20SISO_Ant1_2437







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

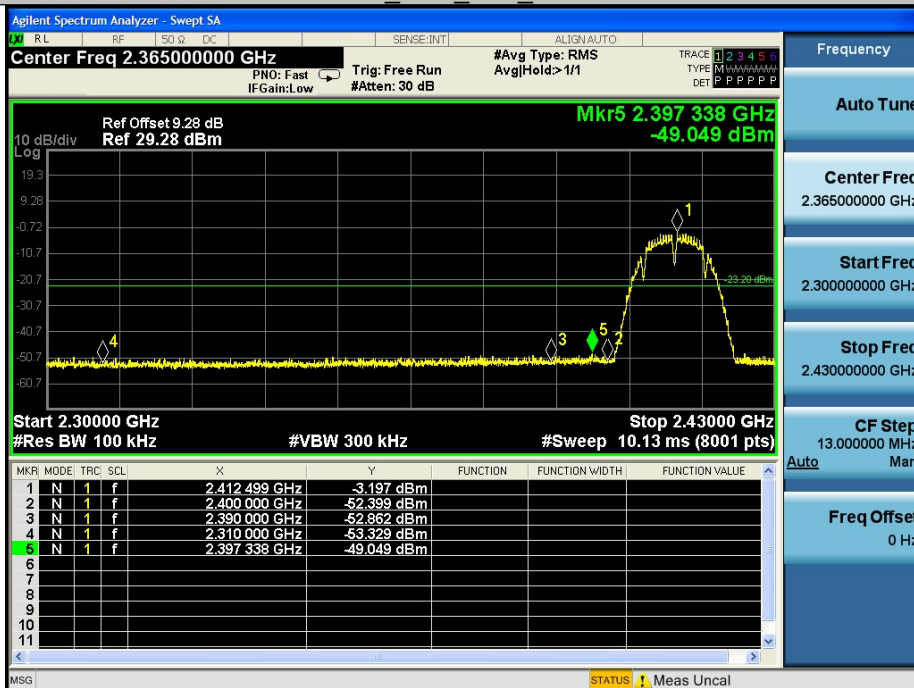
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

9.6 TEST RESULTS

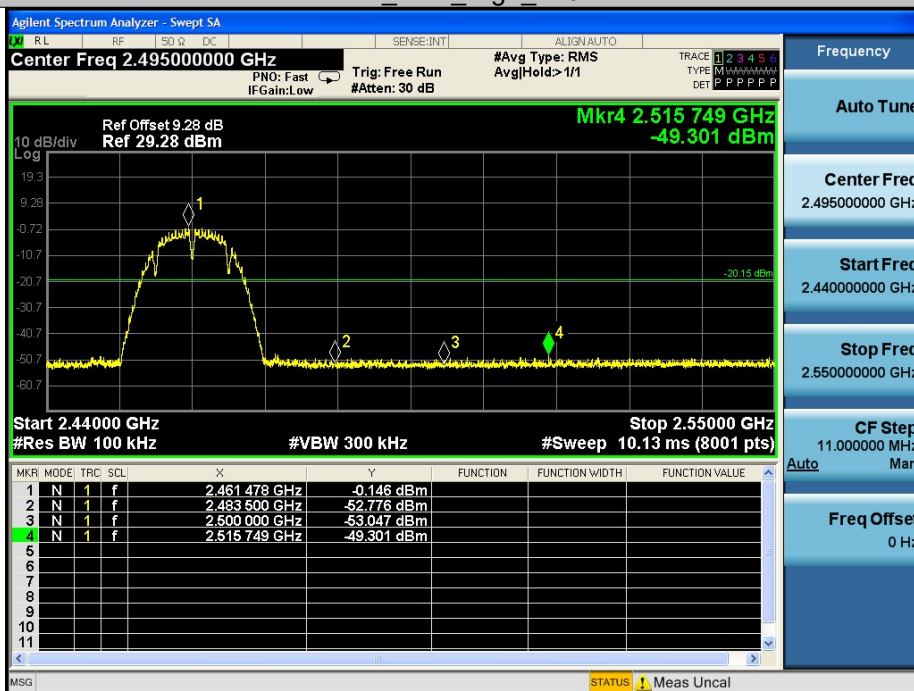
Test Mode	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Low	2412	-3.20	-49.05	≤ -23.20	PASS
	High	2462	-0.15	-49.30	≤ -20.15	PASS
11G	Low	2412	-4.38	-45.83	≤ -24.38	PASS
	High	2462	-2.69	-49.27	≤ -22.69	PASS
11N20SISO	Low	2412	-6.07	-45.72	≤ -26.07	PASS
	High	2462	-4.29	-49.63	≤ -24.29	PASS



11B_Ant1_Low_2412

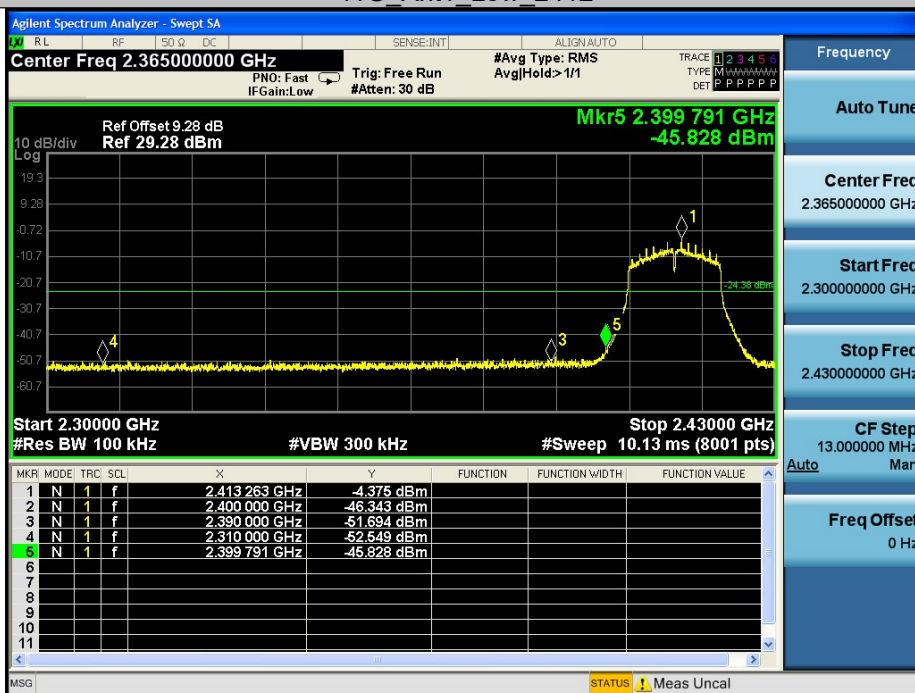


11B_Ant1_High_2462

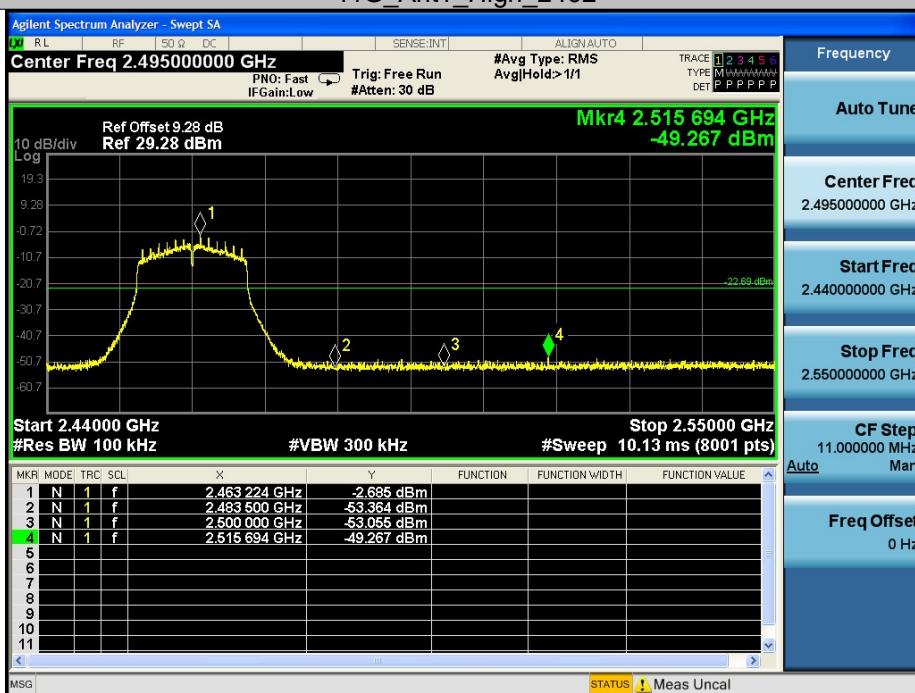


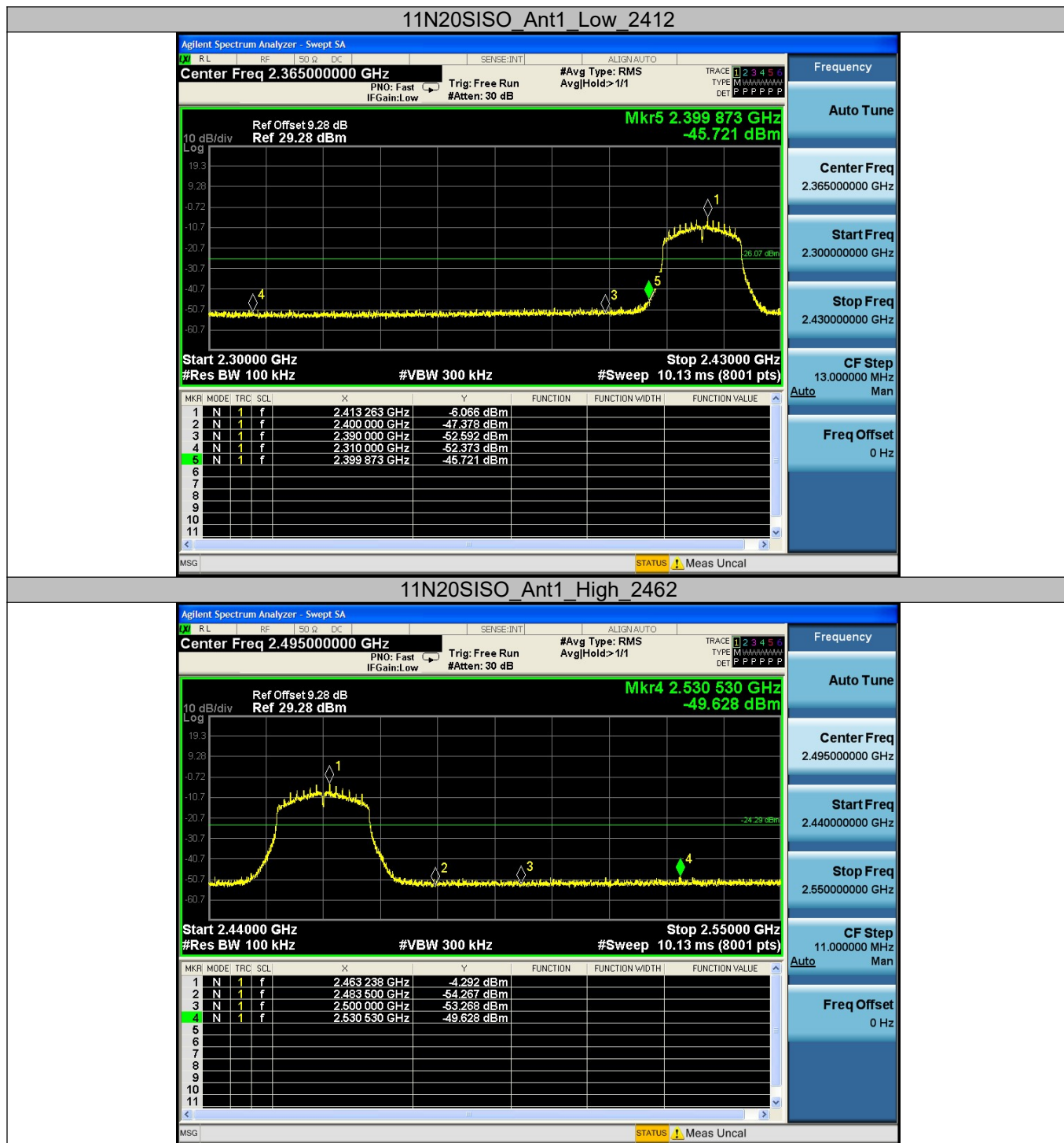


11G_Ant1_Low_2412



11G_Ant1_High_2462







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 be calculated by " $10\lg(BW1/BW2)$ ". for example For 9KHz-150kHz, RBW 1KHz, The Limit = the highest emission level - $20 - 10\lg(100/1) =$ 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.



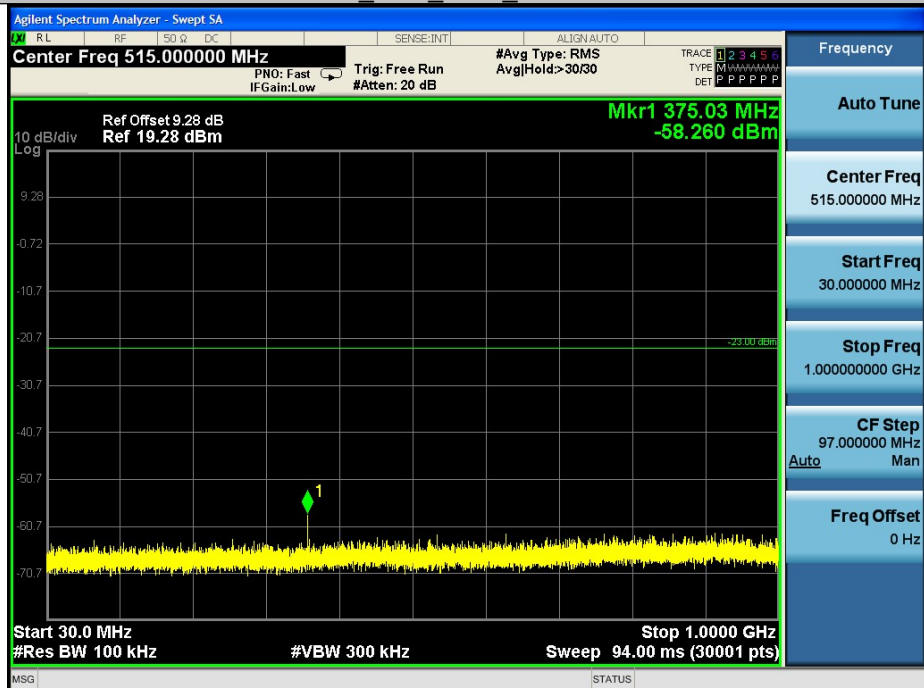
10.6 TEST RESULTS

802.11b Worst Case

11B_Ant1_2412_0~Reference

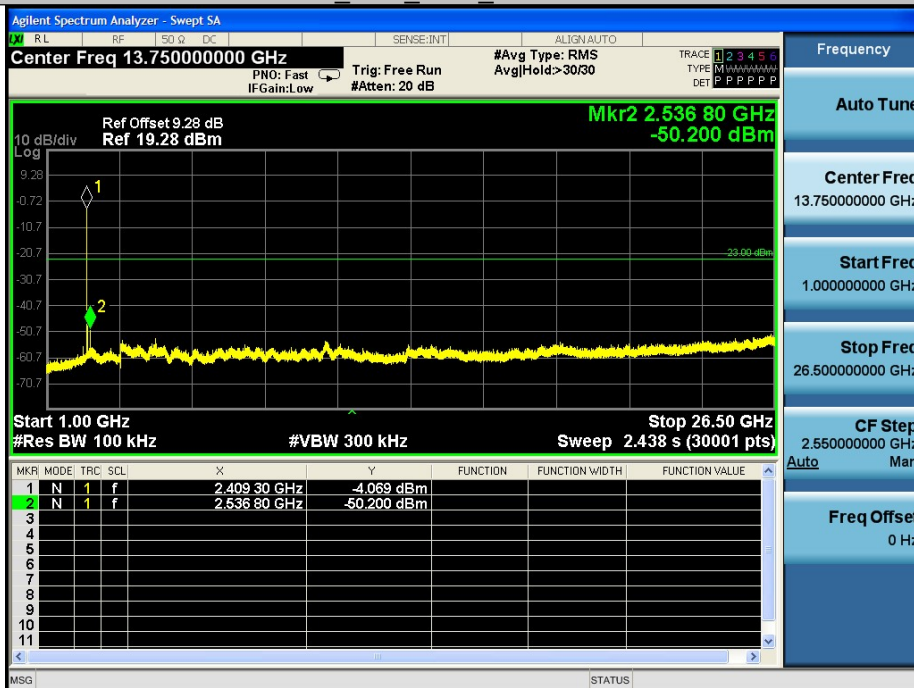


11B_Ant1_2412_30~1000



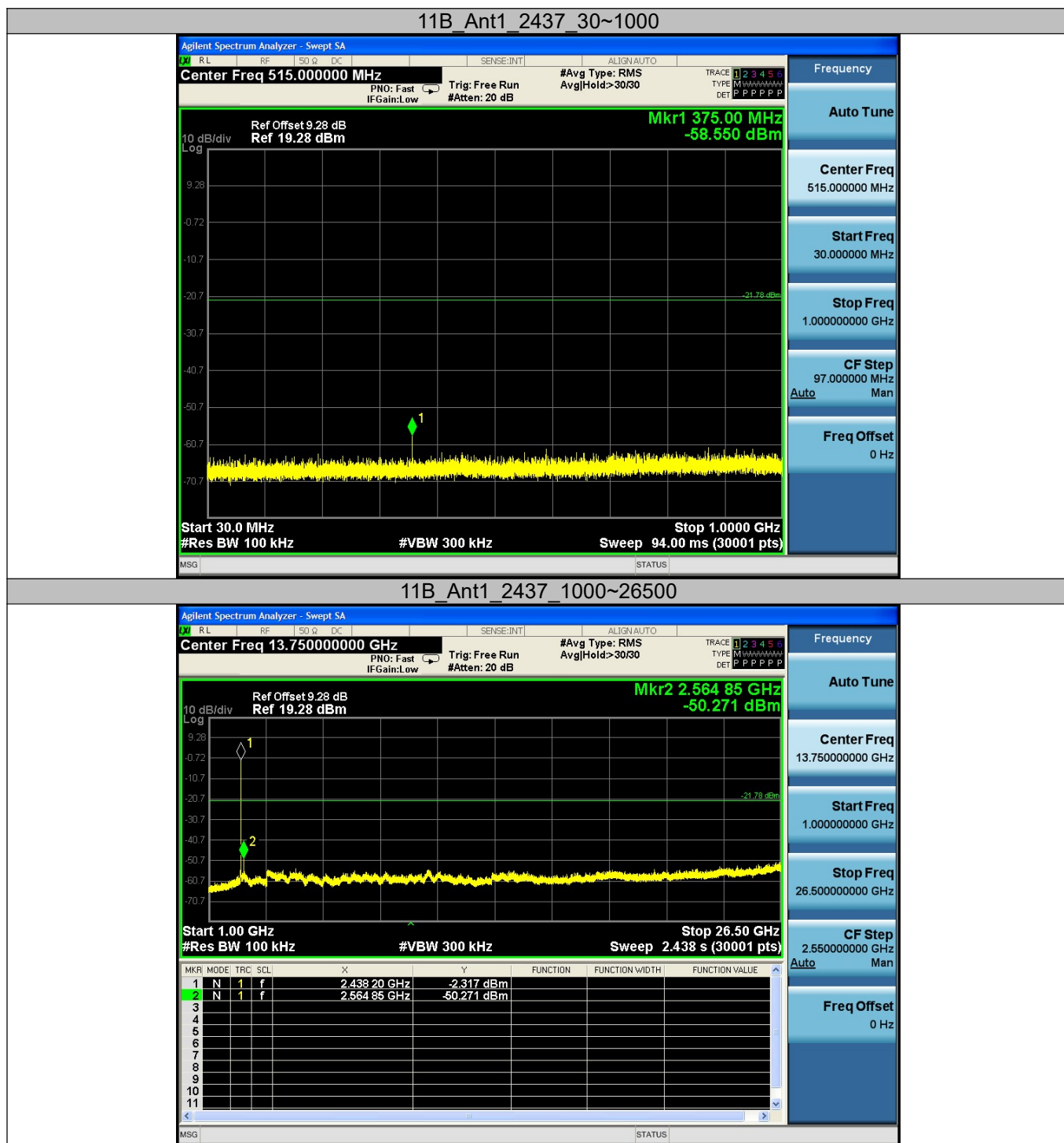


11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



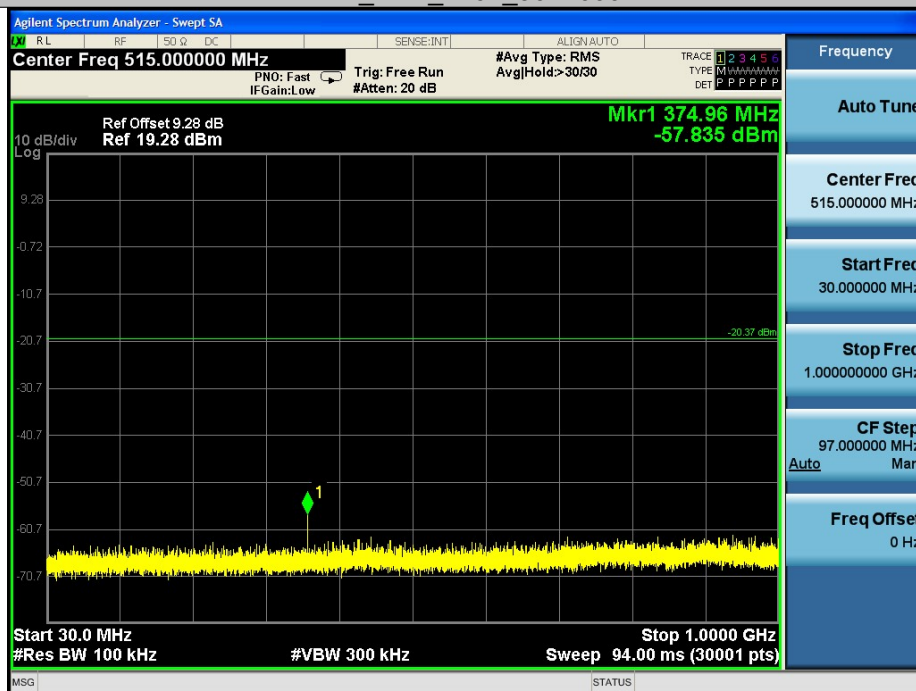


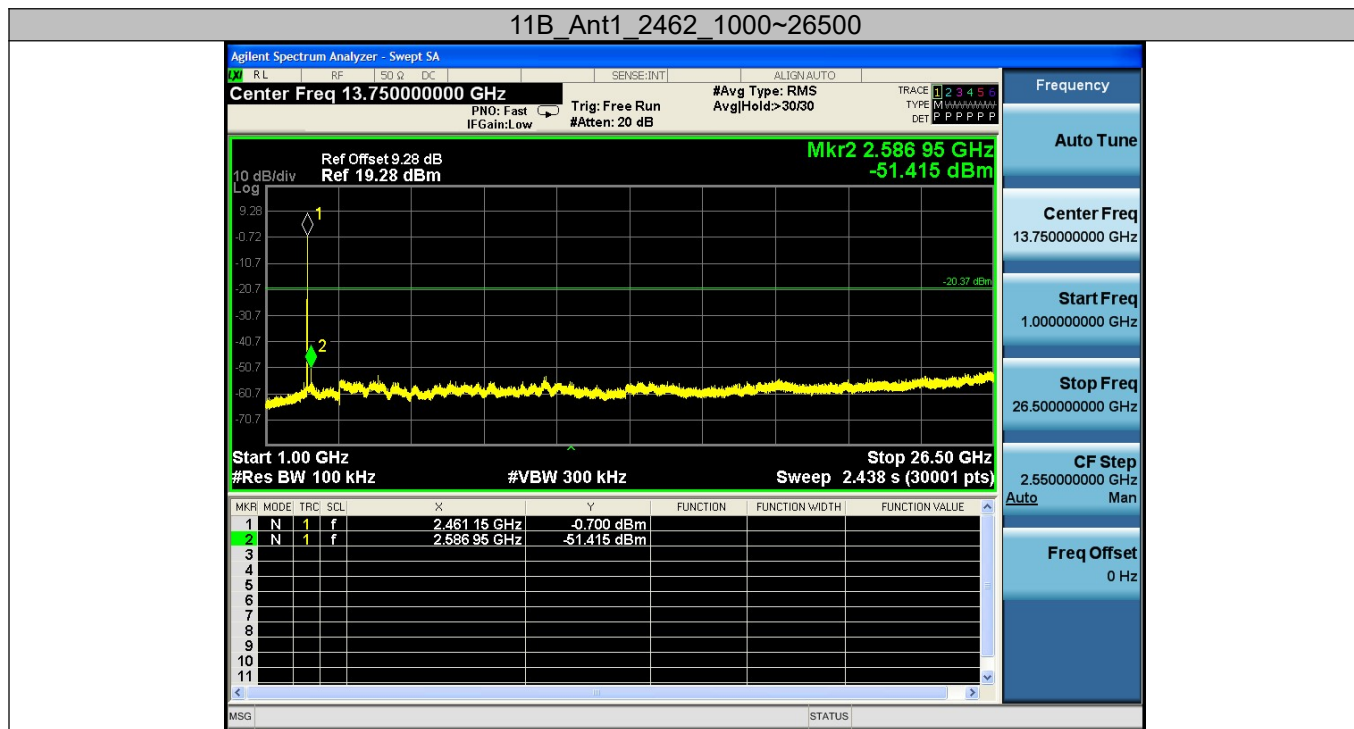


11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000





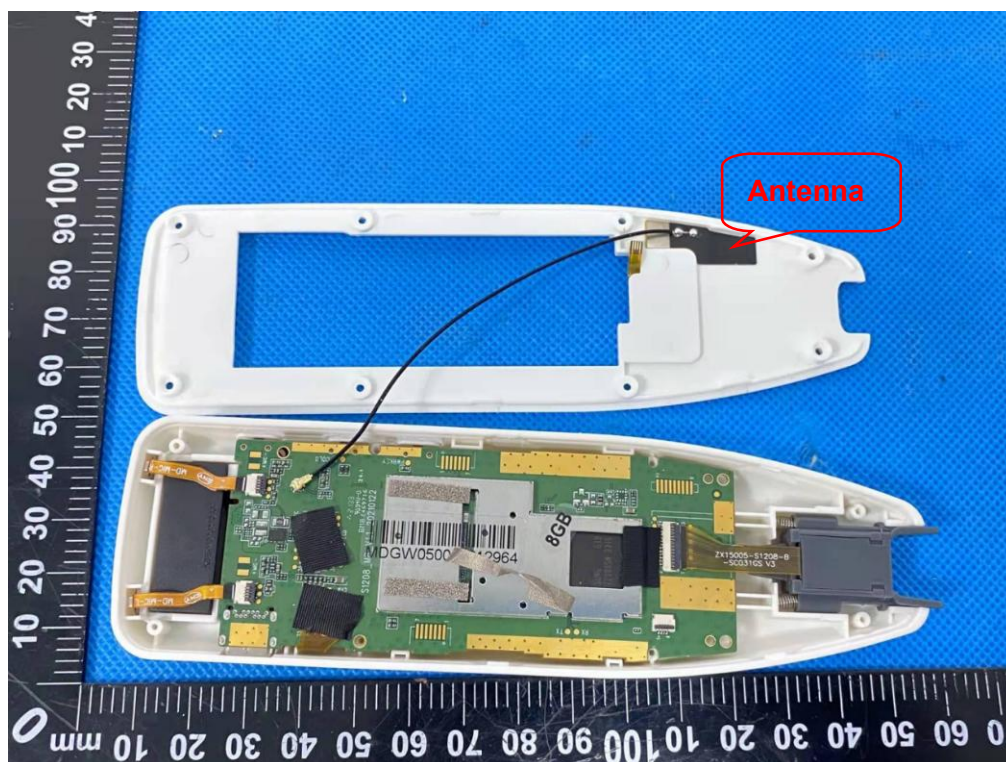
11. ANTENNA REQUIREMENT

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.

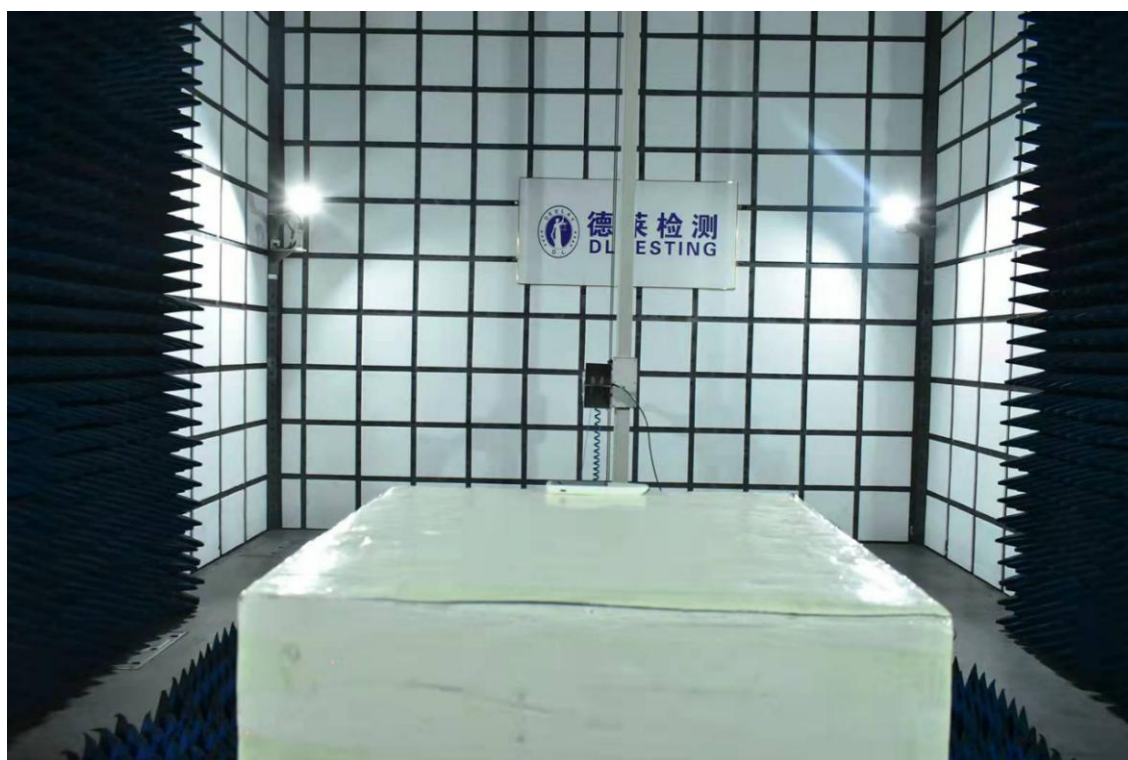
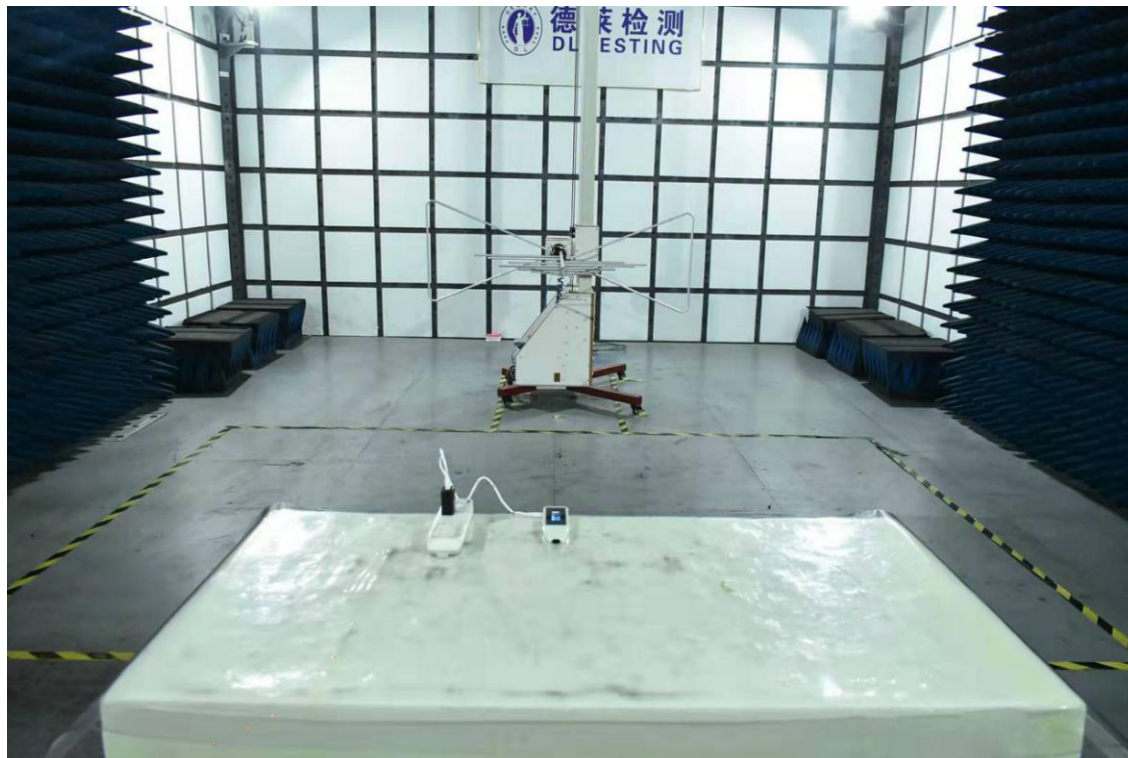
11.2 EUT ANTENNA

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



12. TEST SEUUP PHOTO

Radiated Measurement Photos





Conducted Measurement Photos



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