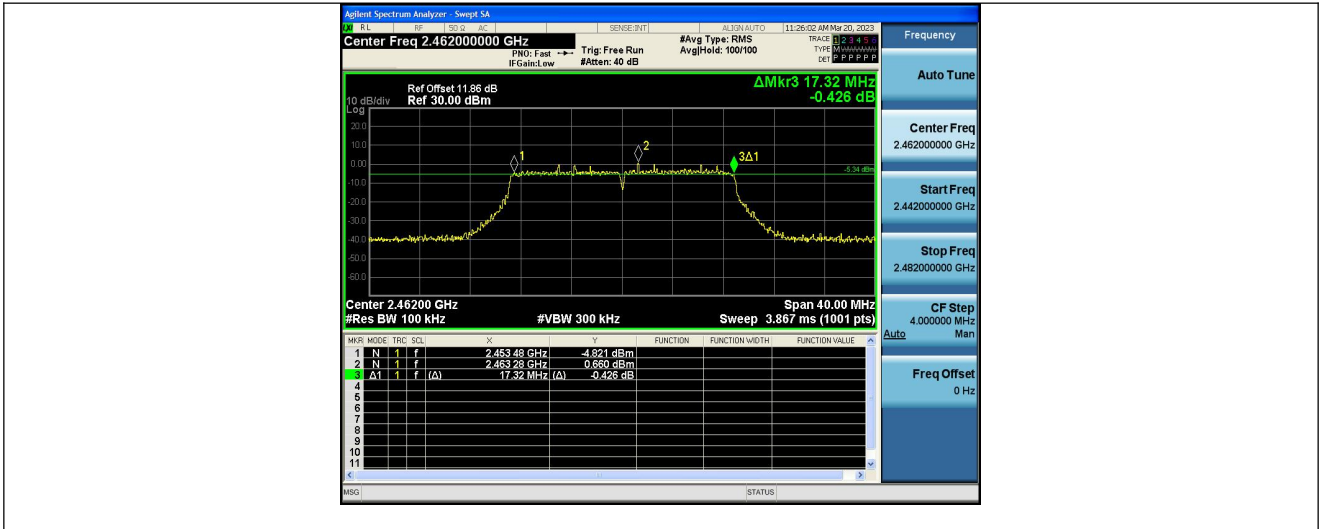


11N20SISO-Ant1-2437



11N20SISO-Ant1-2462



Occupied Channel Bandwidth

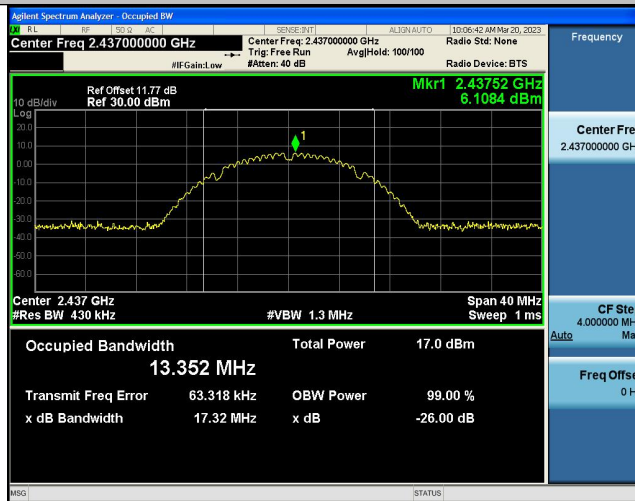
TestMode	Antenna	Channel Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11B	Ant1	2412	13.518	2405.1839	2418.7019	---	---
11B	Ant1	2437	13.352	2430.3873	2443.7393	---	---
11B	Ant1	2462	13.501	2455.3876	2468.8886	---	---
11G	Ant1	2412	16.763	2403.6767	2420.4397	---	---
11G	Ant1	2437	16.748	2428.7146	2445.4626	---	---
11G	Ant1	2462	16.810	2453.7247	2470.5347	---	---
11N20SISO	Ant1	2412	17.950	2403.0492	2420.9992	---	---
11N20SISO	Ant1	2437	17.989	2428.0580	2446.0470	---	---
11N20SISO	Ant1	2462	18.050	2453.0796	2471.1296	---	---



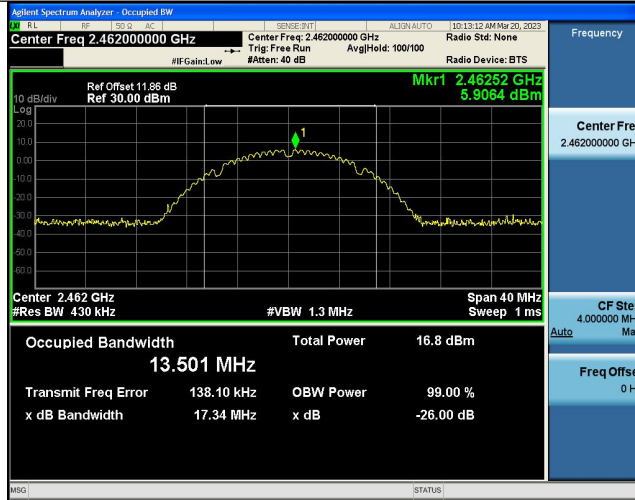
11B-Ant1-2412



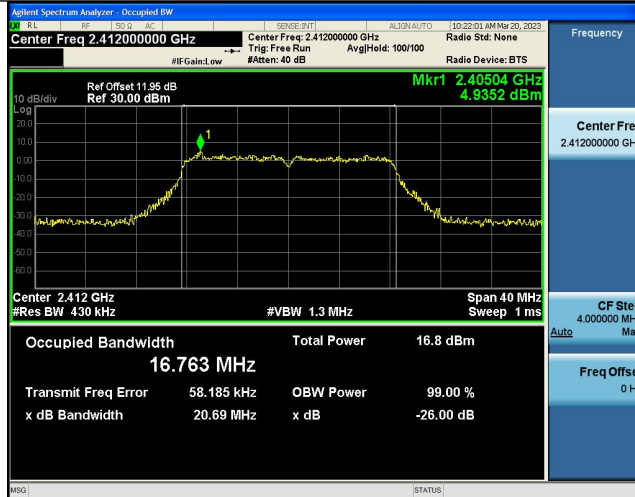
11B-Ant1-2437



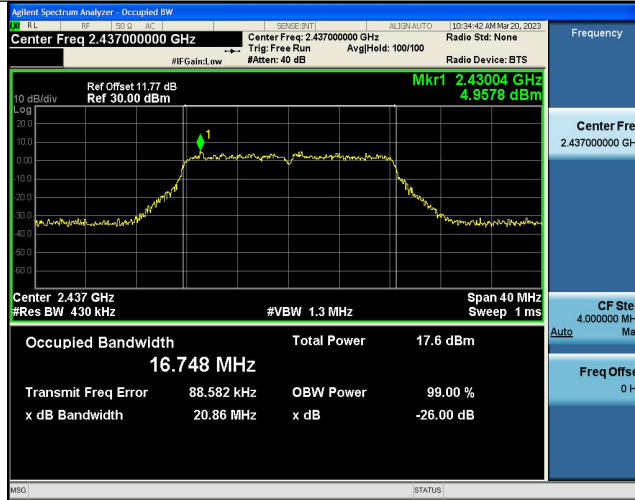
11B-Ant1-2462



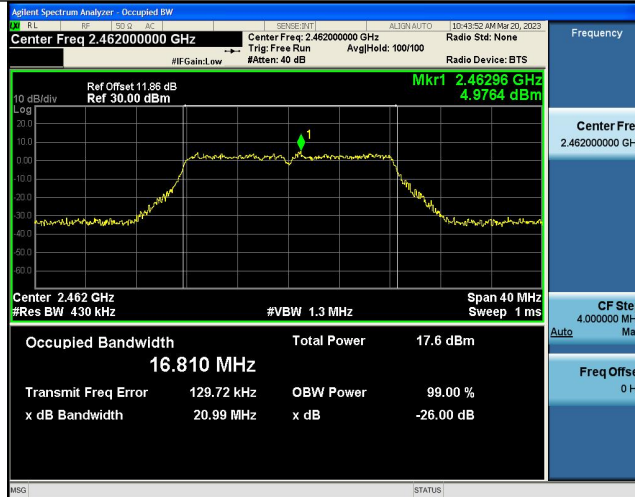
11G-Ant1-2412



11G-Ant1-2437



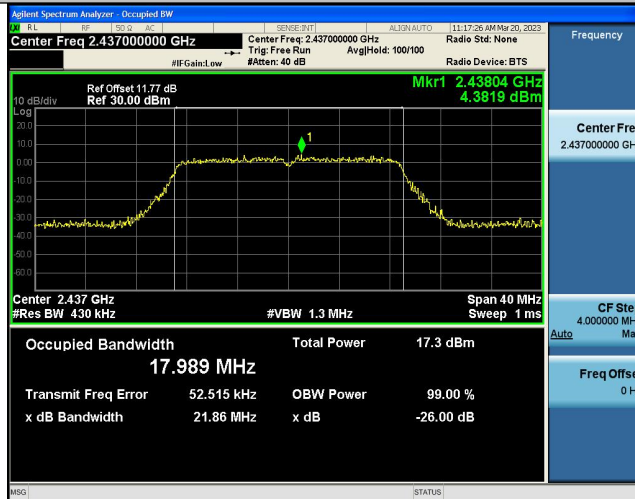
11G-Ant1-2462



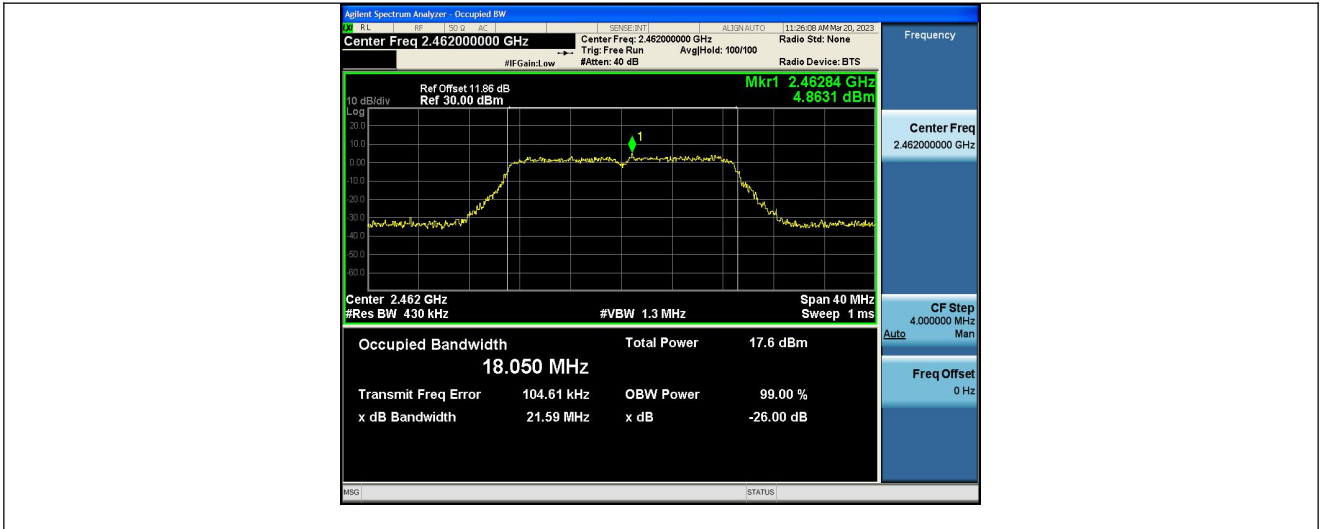
11N20SISO-Ant1-2412



11N20SISO-Ant1-2437



11N20SISO-Ant1-2462



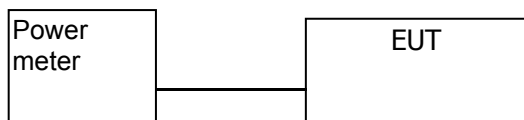


10 Maximum Peak Output Power

- Test Requirement : FCC CFR47 Part 15 Section 15.247
- Test Method : ANSI C63.10:2013
- Test Limit : Regulation 15.247 (b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power.

10.1 Test Procedure

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 D01 15.247 Meas Guidance v05 section 8.3.1.
 2. The RF output of EUT was connected to the spectrum by RF cable . The path loss was compensated to the results for each measurement.
 3. Set to the maximum power setting and enable the EUT transmit continuously.
 4. Measure the conducted output power and record the results in the test report.
- 5.Set up:



10.2 Test Result

TestMode	Antenna	Frequenc y[MHz]	Set Power	Peak Power[dBm]	Conducted Limit[dBm]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
11B	Ant1	2412	---	16.50	≤30.00	18.50	≤36.00	PASS
11B	Ant1	2437	---	16.62	≤30.00	18.62	≤36.00	PASS
11B	Ant1	2462	---	16.33	≤30.00	18.33	≤36.00	PASS
11G	Ant1	2412	---	17.57	≤30.00	19.57	≤36.00	PASS
11G	Ant1	2437	---	18.49	≤30.00	20.49	≤36.00	PASS
11G	Ant1	2462	---	18.56	≤30.00	20.56	≤36.00	PASS
11N20SISO	Ant1	2412	---	17.59	≤30.00	19.59	≤36.00	PASS
11N20SISO	Ant1	2437	---	18.30	≤30.00	20.30	≤36.00	PASS
11N20SISO	Ant1	2462	---	18.63	≤30.00	20.63	≤36.00	PASS

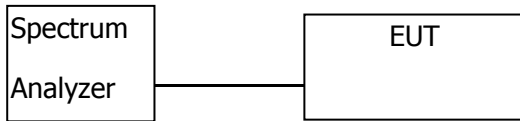


11 Power Spectral density

- Test Requirement : FCC CFR47 Part 15 Section 15.247
- Test Method : ANSI C63.10:2013
- Test Limit : Regulation 15.247(f) The power spectral density conducted from the intentional radiator to the antenna due to the digital modulation operation of the hybrid system, with the frequency hopping operation turned off, shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

11.1 Test Procedure

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below:
 Center frequency=DTS channel center frequency
 Span = 1.5 times the DTS bandwidth
 RBW = 3KHz, VBW = 10KHz
 Sweep time = auto couple
 Detector = peak
 Trace mode =max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
4. Use the peak marker function to determine the maximum amplitude level within the RBW.
5. If measured value exceeds limit, reduce RBW(no less than 3KHz) and repeat.
6. Set up:



11.2 Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-1.76	≤8.00	PASS
11B	Ant1	2437	-0.29	≤8.00	PASS
11B	Ant1	2462	-0.5	≤8.00	PASS
11G	Ant1	2412	-16.15	≤8.00	PASS
11G	Ant1	2437	-15.75	≤8.00	PASS
11G	Ant1	2462	-15.73	≤8.00	PASS
11N20SISO	Ant1	2412	-15.76	≤8.00	PASS
11N20SISO	Ant1	2437	-15.05	≤8.00	PASS
11N20SISO	Ant1	2462	-14.8	≤8.00	PASS



11B-Ant1-2412--1.76-0.00-0.00-0.00



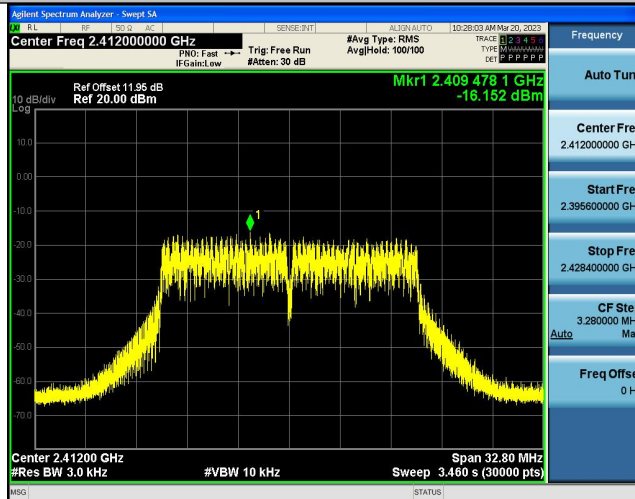
11B-Ant1-2437--0.29-0.00-0.00-0.00



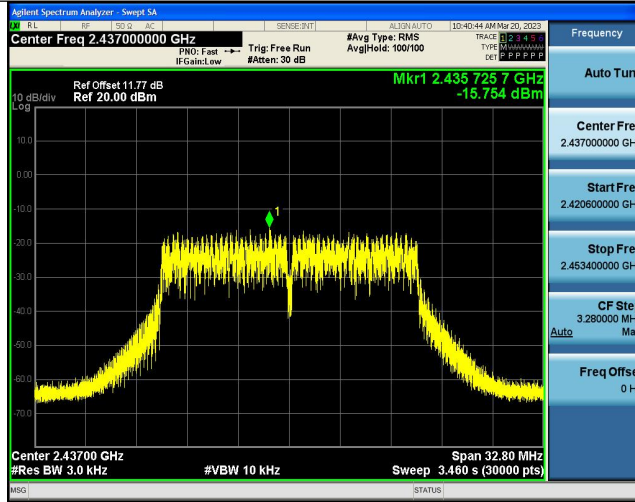
11B-Ant1-2462--0.50-0.00-0.00-0.00



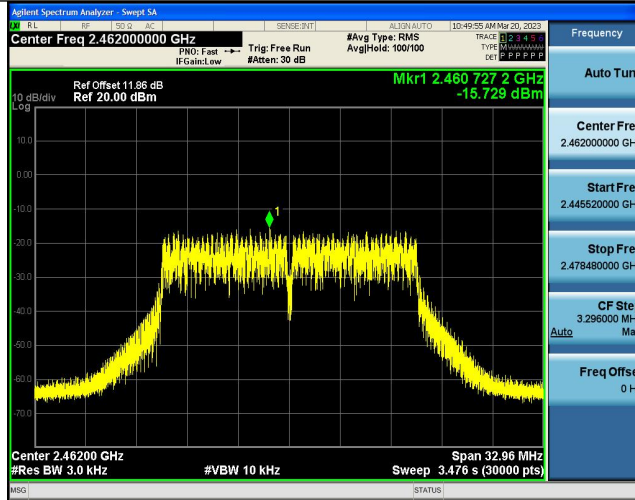
11G-Ant1-2412--16.15-0.00-0.00-0.00



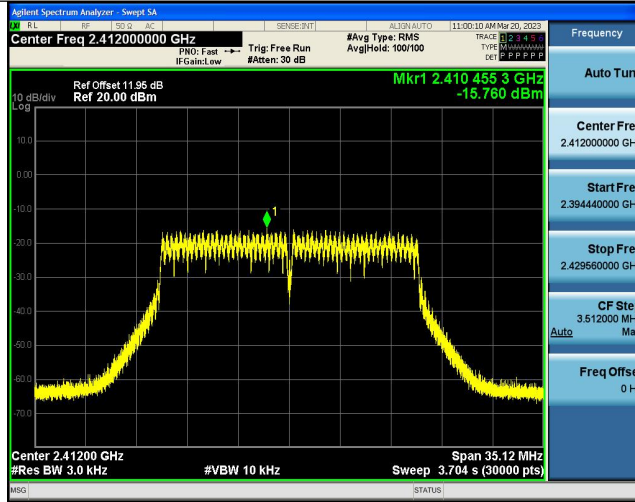
11G-Ant1-2437--15.75-0.00-0.00-0.00



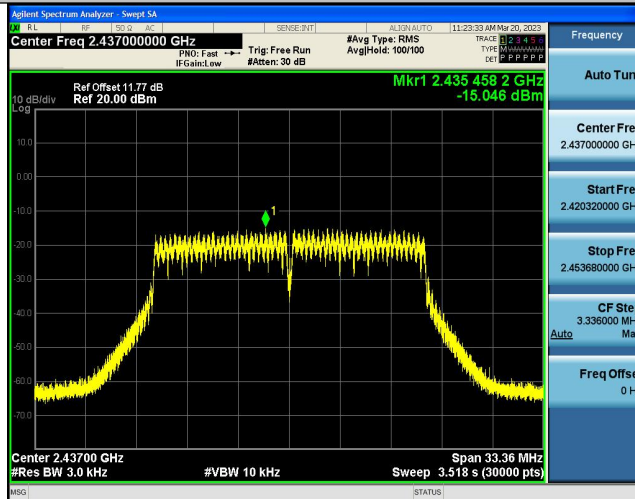
11G-Ant1-2462--15.73-0.00-0.00-0.00



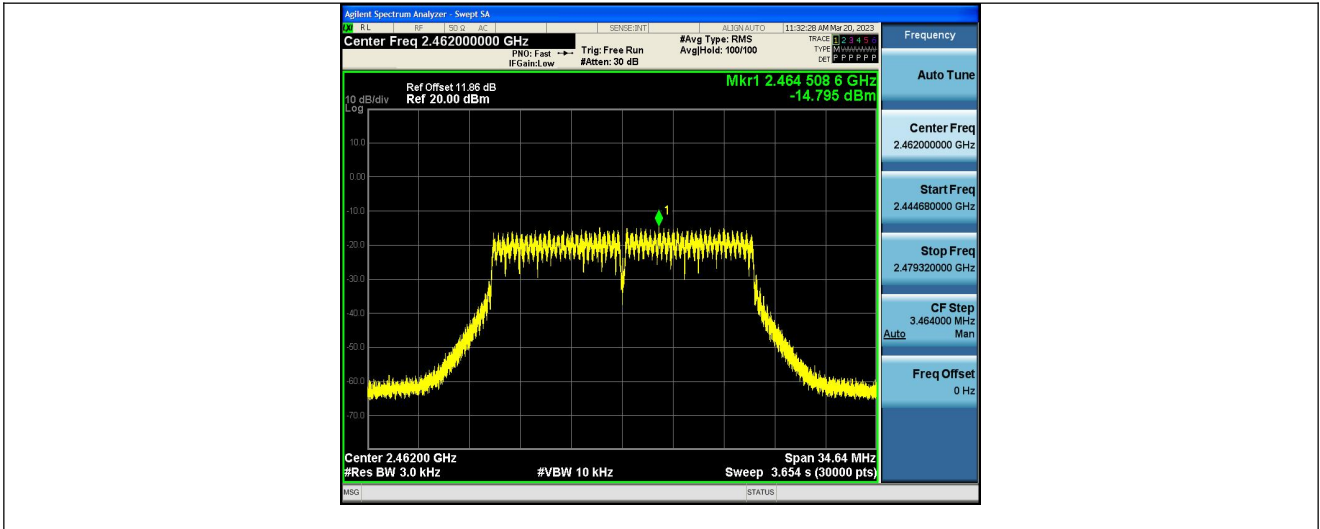
11N20SISO-Ant1-2412--15.76-0.00-0.00-0.00



11N20SISO-Ant1-2437--15.05-0.00-0.00-0.00



11N20SISO-Ant1-2462--14.80-0.00-0.00-0.00





12 Antenna Application

12.1 Antenna Requirement

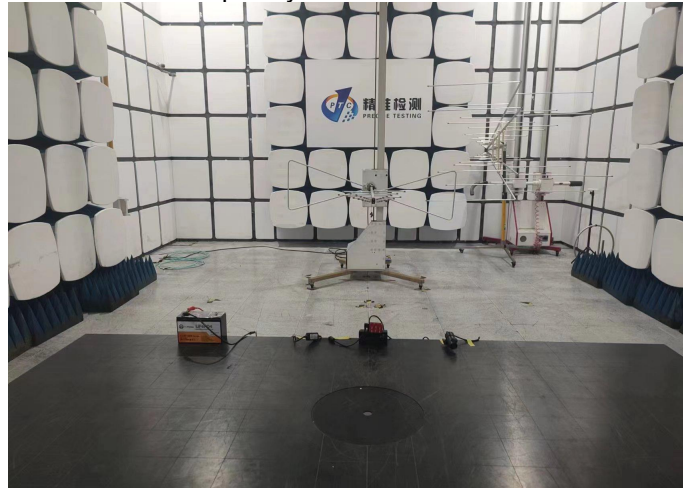
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

12.2 Result

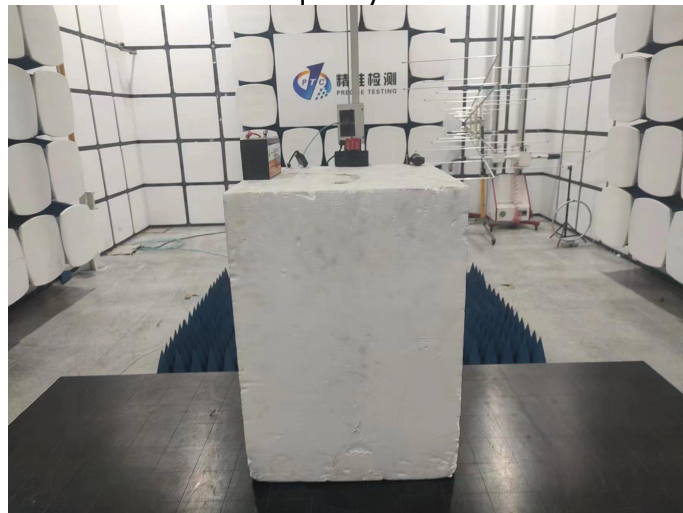
The EUT'S antenna, permanent attached antenna, is Fpcb Antenna. The antenna's gain is 4.54dBi and meets the requirement.

13 Test Setup

Radiated Spurious Emissions
Test Frequency From 30MHz-1000MHz



Test Frequency above 1G





Report No.: PTC23020606604E-FC01

14 EUT PHOTOS

Reference file External Photo and Internal Photo.

*******THE END REPORT*******