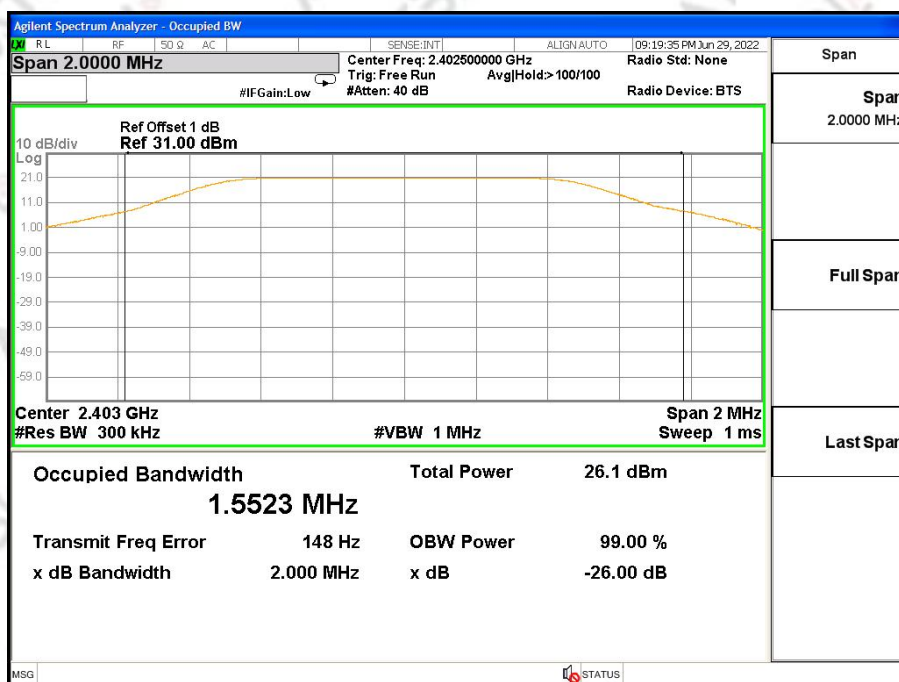


8.5 TEST RESULTS

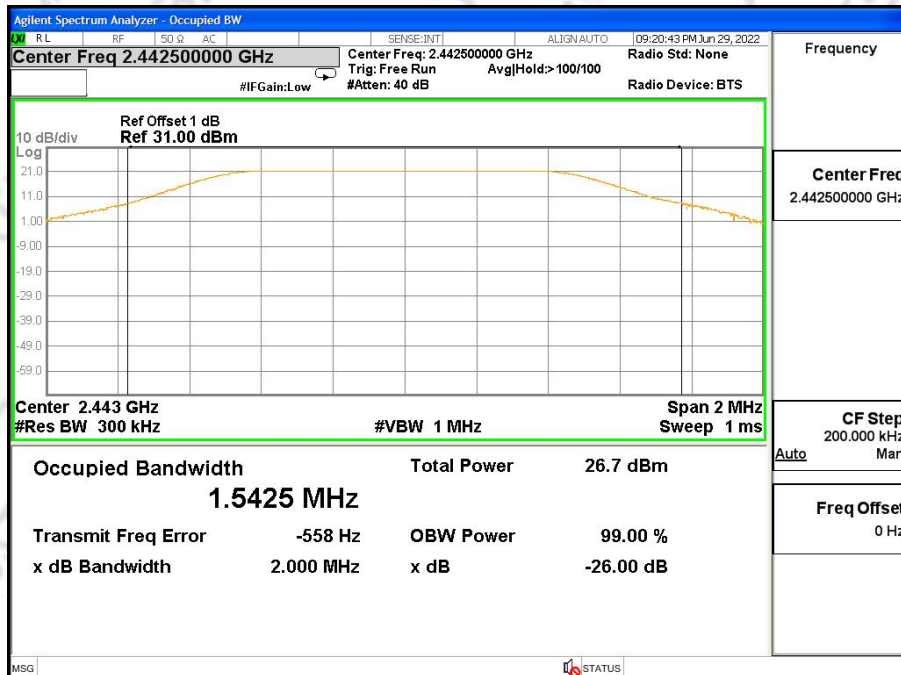
Temperature:	25°C	Relative Humidity:	50%
Test Mode:	Mode 1/2/3	Test Voltage:	DC 7.4V

Frequency	99% Bandwidth (MHz)	20dB Bandwidth (MHz)	Result
2402.5 MHz	1.552	1.189	PASS
2442.5 MHz	1.543	1.190	PASS
2482.5 MHz	1.541	1.191	PASS

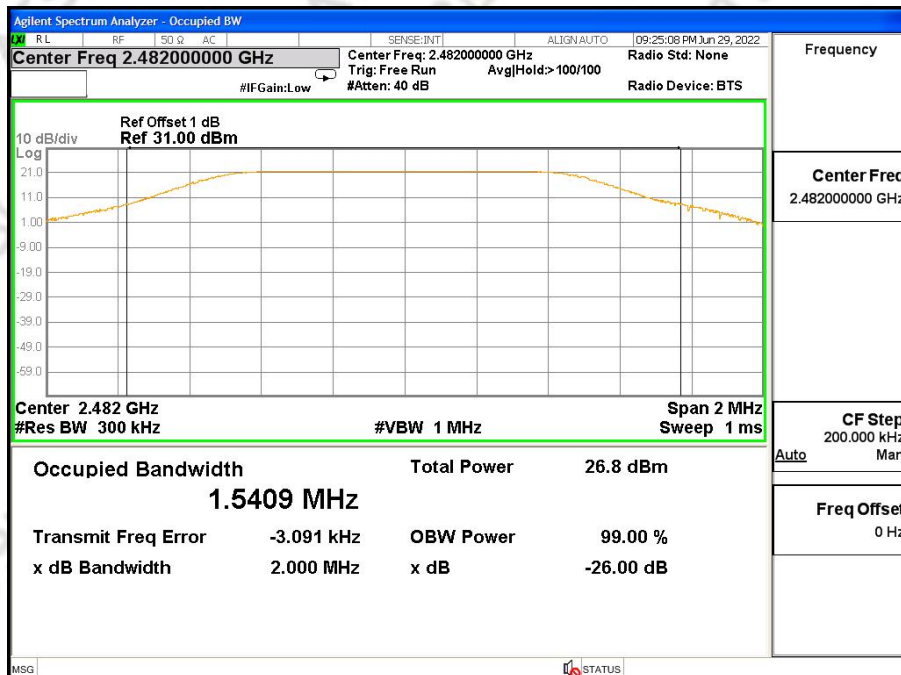
99% Bandwidth
2405.47 MHz



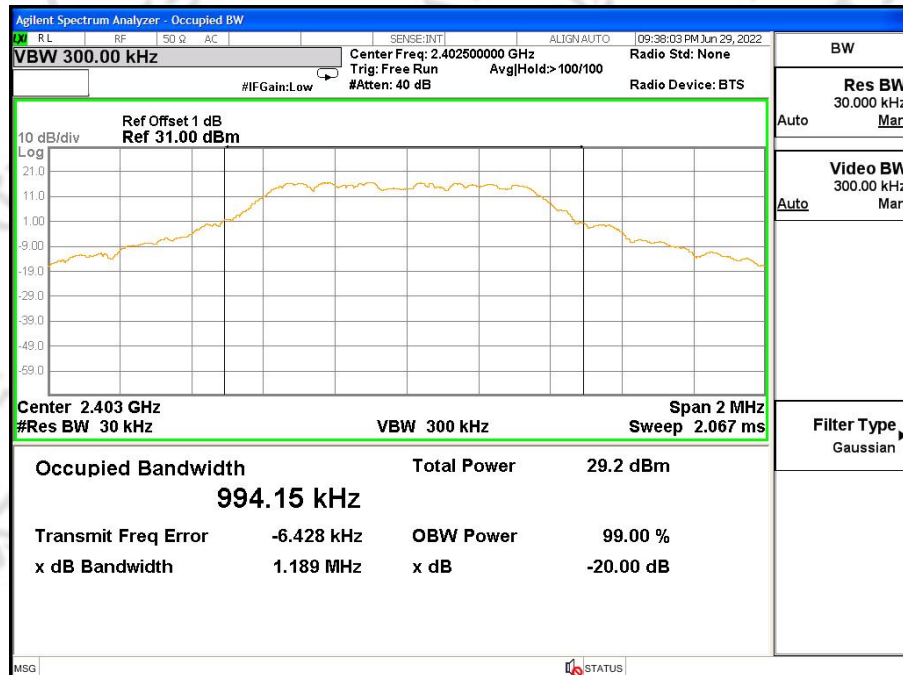
2442.5 MHz



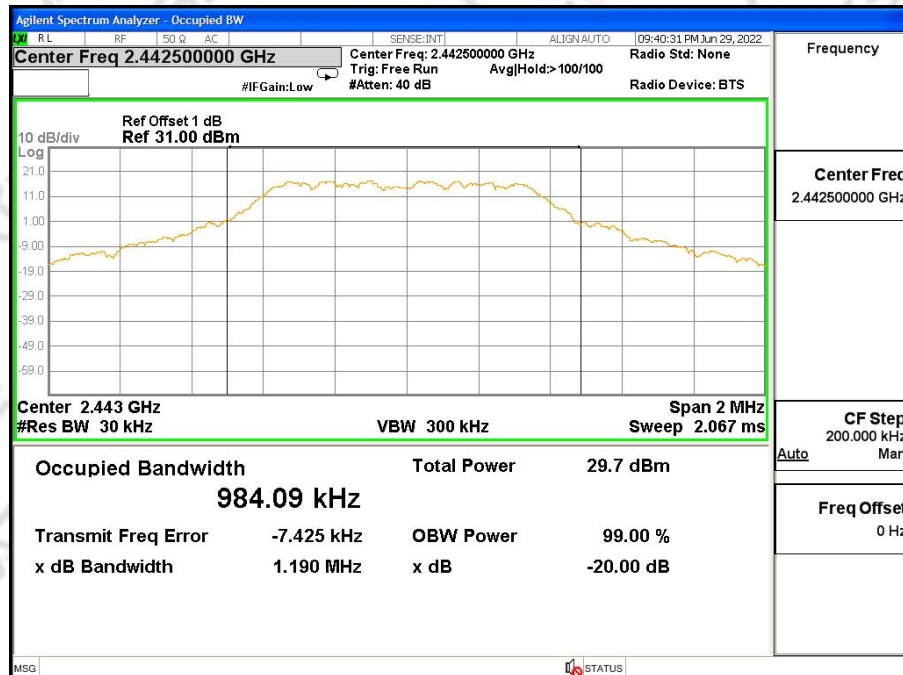
2482.5 MHz



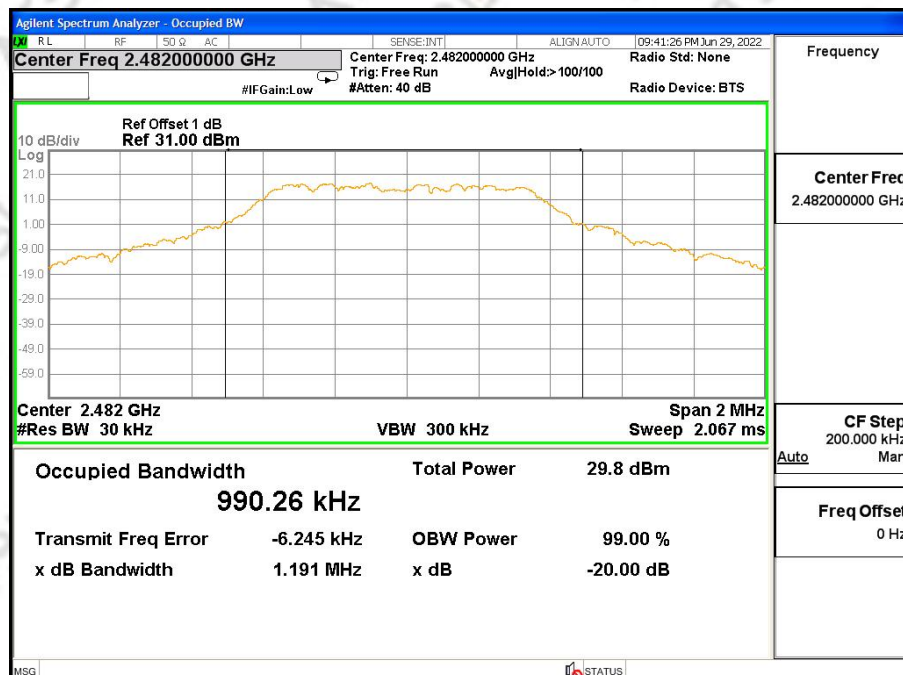
20dB Bandwidth
2402.5 MHz



2442.5 MHz



2482.5 MHz



9. OUTPUT POWER TEST

9.1 LIMIT

FCC Part 15.247				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247 (a)(1)&(b)(1)	Output Power	1 W or 0.125W	2400-2483.5	PASS
		if channel separation > 2/3 bandwidth provided the systems operate with an output power no greater than 125 mW(20.97dBm)		

9.2 TEST PROCEDURE

This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. The hopping shall be disabled for this test:

a) Use the following spectrum analyzer settings:

- 1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- 2) RBW > 20 dB bandwidth of the emission being measured.
- 3) VBW ≥ RBW.
- 4) Sweep: Auto.
- 5) Detector function: Peak.
- 6) Trace: Max hold.

b) Allow trace to stabilize.

c) Use the marker-to-peak function to set the marker to the peak of the emission.

d) The indicated level is the peak output power, after any corrections for external attenuators and cables.

e) A plot of the test results and setup description shall be included in the test report.

NOTE—A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.

PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DSS bandwidth and shall use a fast-responding diode detector.

9.3 TEST SETUP



9.4 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

9.5 TEST RESULTS

Temperature:	25°C	Relative Humidity:	50%
Test Mode:	Mode 1/2/3	Test Voltage:	DC 7.4V

Mode	Channel Number	Frequency (MHz)	Peak Power	Average Power	Limit
			(dBm)	(dBm)	(dBm)
LoRa	1	2402.5	19.75	16.60	20.97
	9	2442.5	20.22	16.35	20.97
	17	2482.5	20.04	16.38	20.97

Note:the channel separation >20dB bandwidth

10. ANTENNA REQUIREMENT

10.1 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.

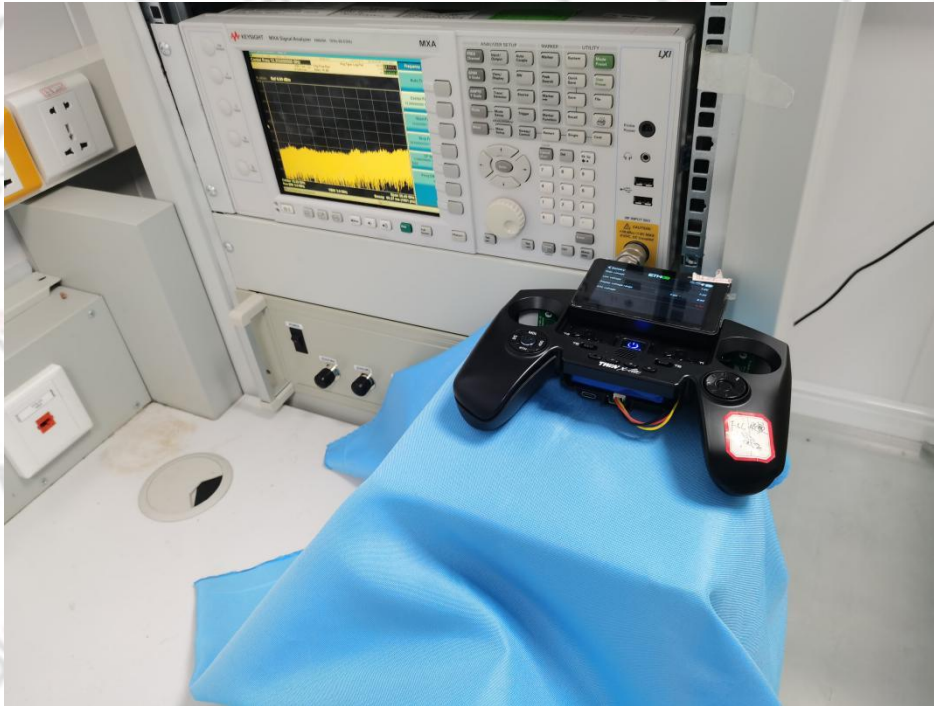
10.2 EUT ANTENNA

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

APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

Conducted for RF



Radiation Emission
30MHz-1000MHz



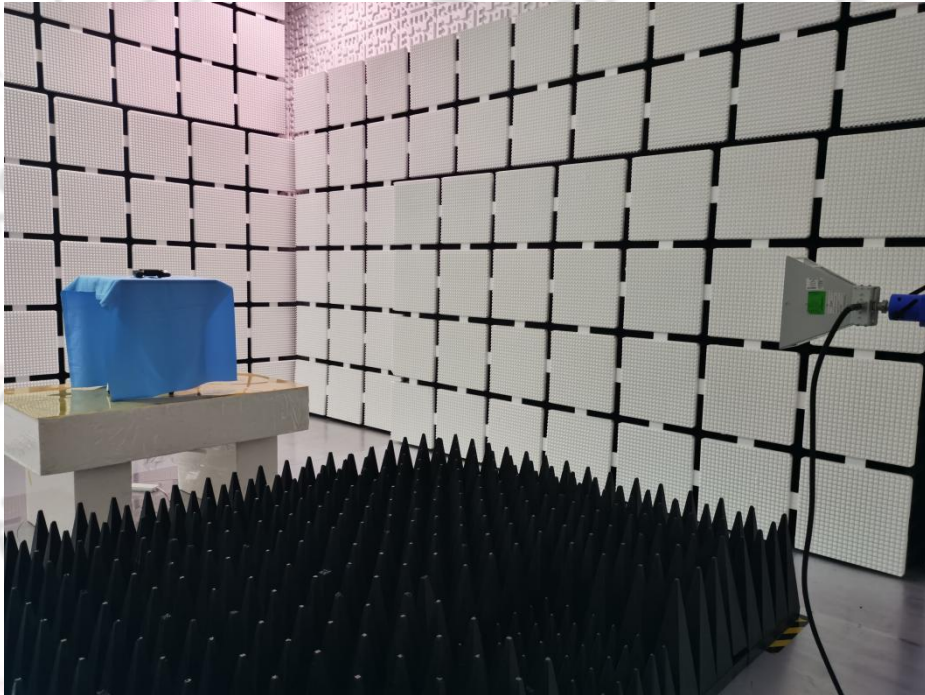
Radiated Spurious Emission
9kHz-30MHz



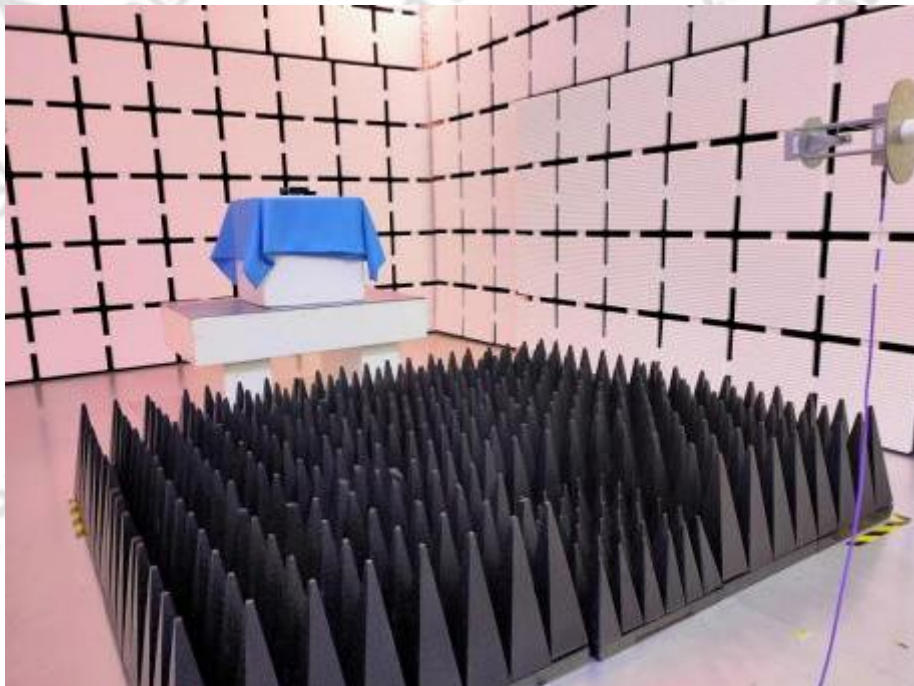
30MHz-1000MHz



1GHz-18GHz



Above 18GHz



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