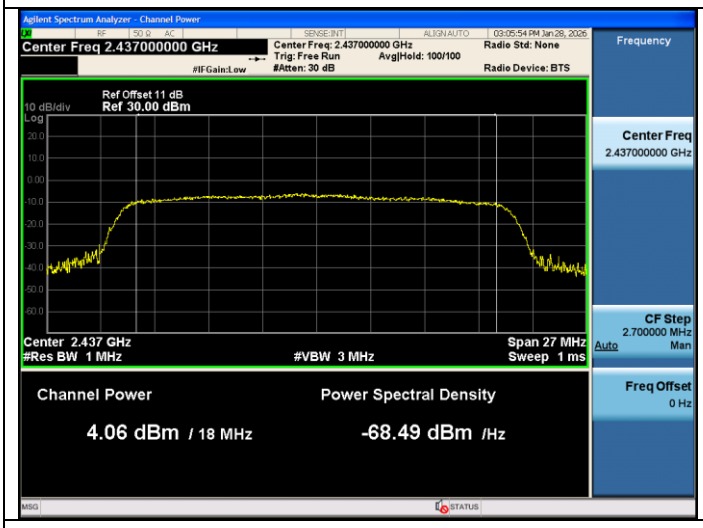
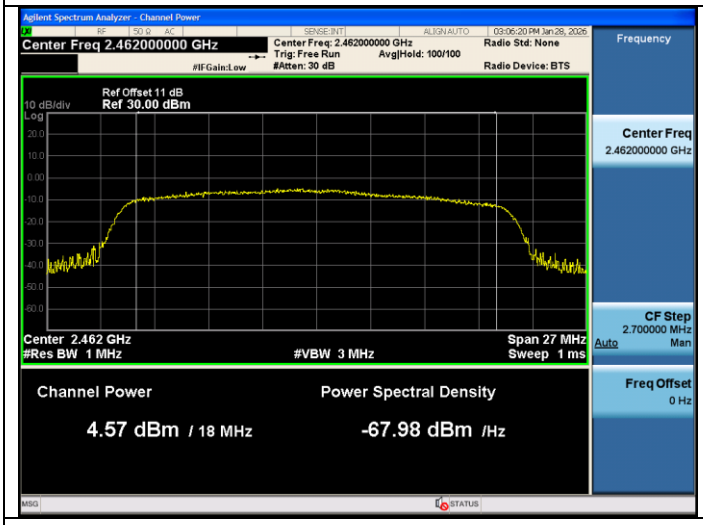
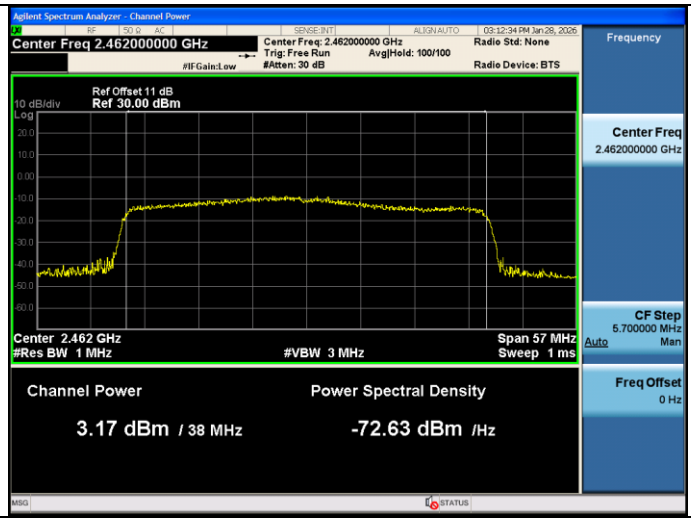
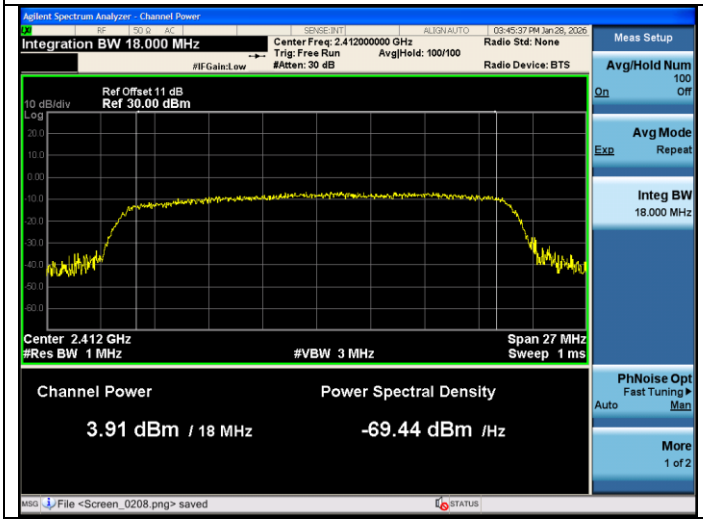
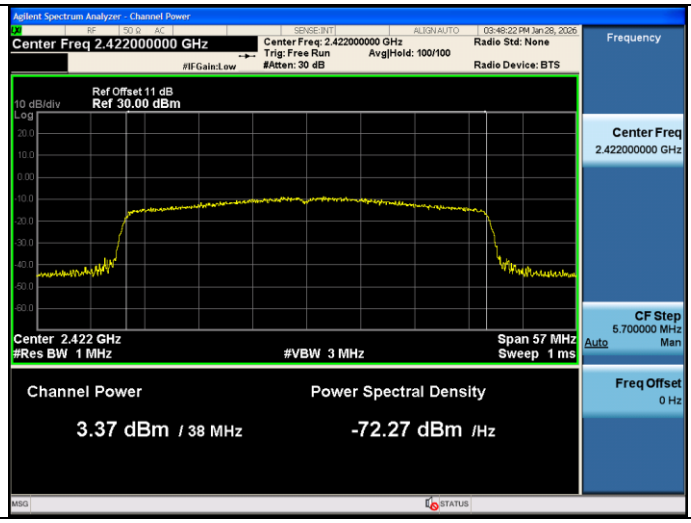
Test Mode: IEEE 802.11ax HE20 Test CH1: 2412MHz	Test Mode: IEEE 802.11ax HE40 Test CH3: 2422MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH9: 2452MHz
	

9. POWER SPECTRAL DENSITY TEST

9.1.Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

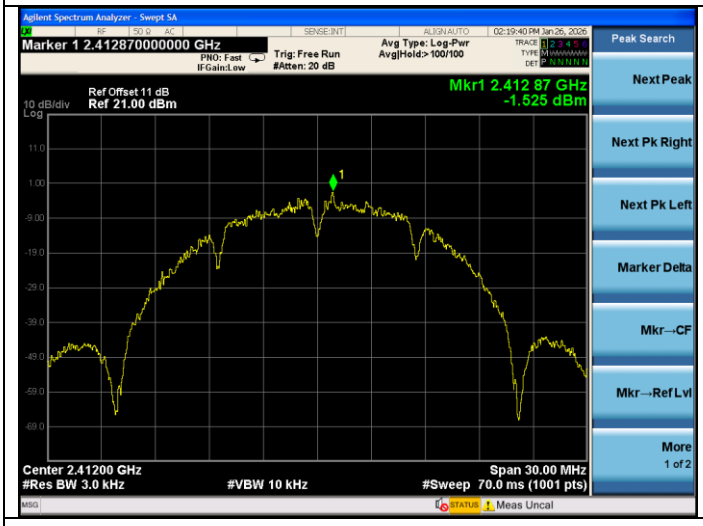
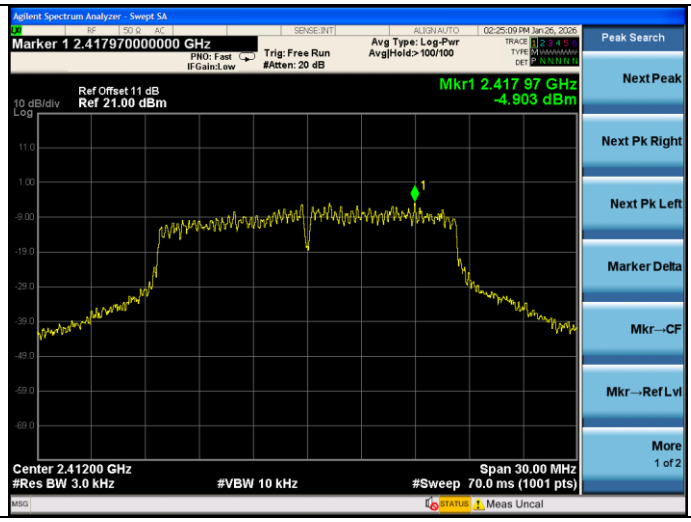
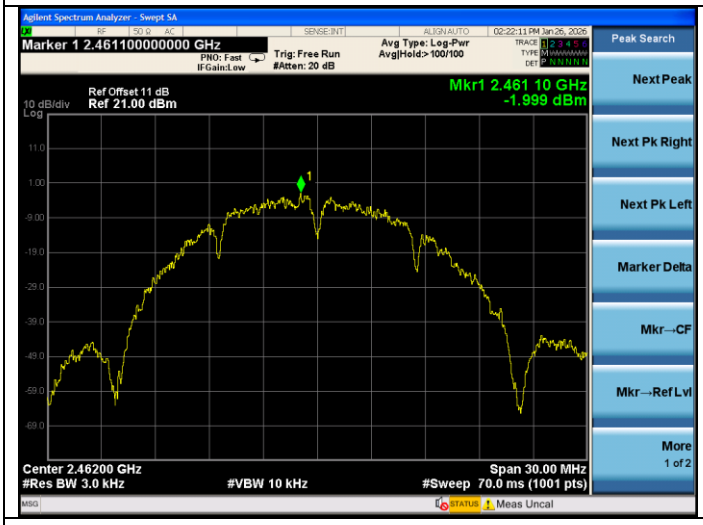
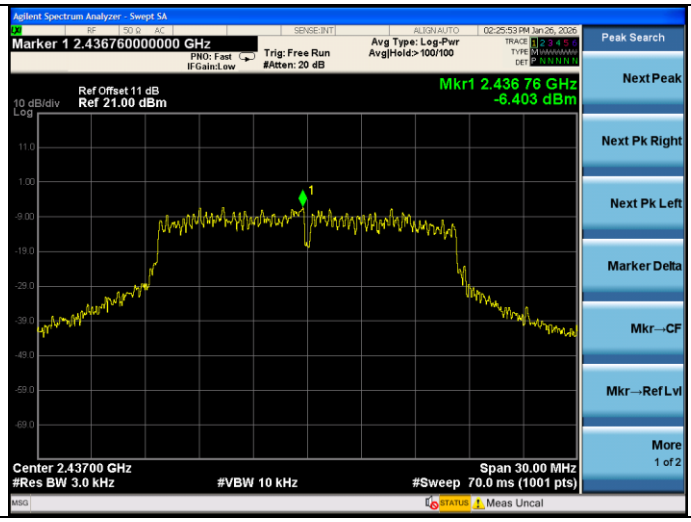
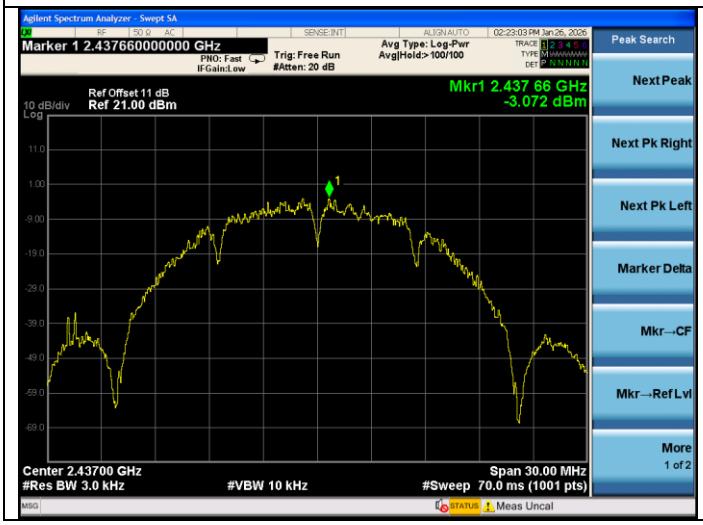
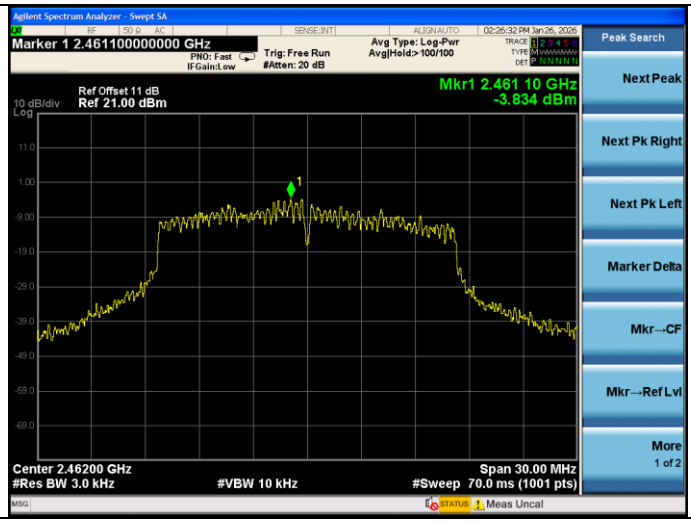
9.2.Test Procedure

a) Set analyzer center frequency to DTS channel center frequency.
b) Set the span to 1.5 DTS bandwidth.
c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
d) Set the VBW ≥ [3 × RBW].
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum amplitude level within the RBW.

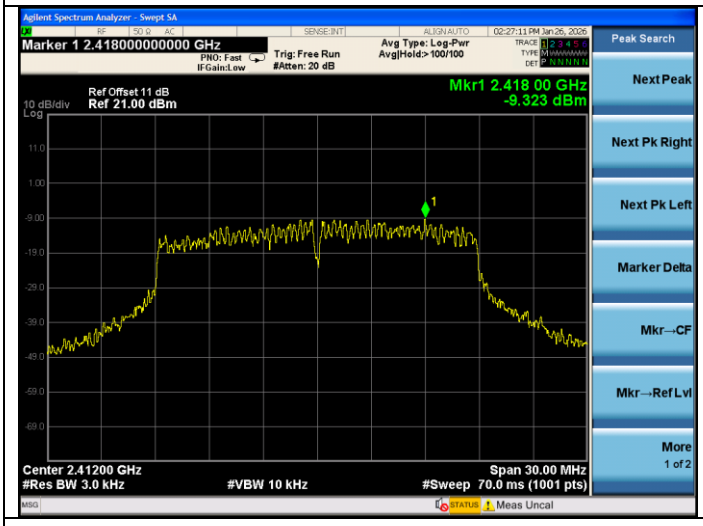
9.3.Test Results

EUT: Starway Global USB WiFi Stick		
M/N: ST2		
Test date: 2026-01-26	Pressure: 102.1±1.0 kpa	Humidity: 52.5±3.0%
Tested by: Epoch	Test site: RF site	Temperature: 23.2±0.6℃

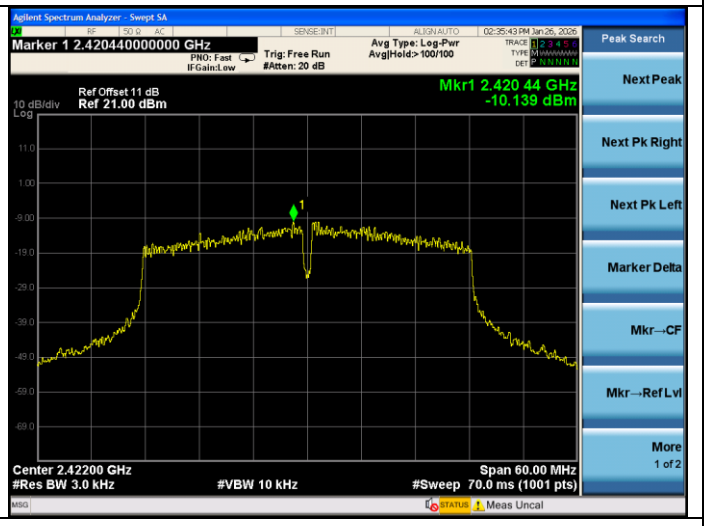
Test Mode	CH	Power Spectral Density (dBm/3KHz)	Limit (dBm/3KHz)
11b	CH1	-1.525	8
	CH6	-1.999	
	CH11	-3.072	
11g	CH1	-4.903	8
	CH6	-6.403	
	CH11	-3.834	
11n HT20	CH1	-9.323	8
	CH6	-9.056	
	CH11	-7.412	
11n HT40	CH3	-10.139	8
	CH6	-12.194	
	CH9	-10.905	
11ax HE20	CH1	-8.942	8
	CH6	-9.352	
	CH11	-8.242	
11ax HE40	CH3	-12.410	8
	CH6	-13.024	
	CH9	-11.850	
Conclusion: Pass			

Test Mode: IEEE 802.11b Test CH1: 2412MHz	Test Mode: IEEE 802.11g Test CH1: 2412MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH11: 2462MHz
	

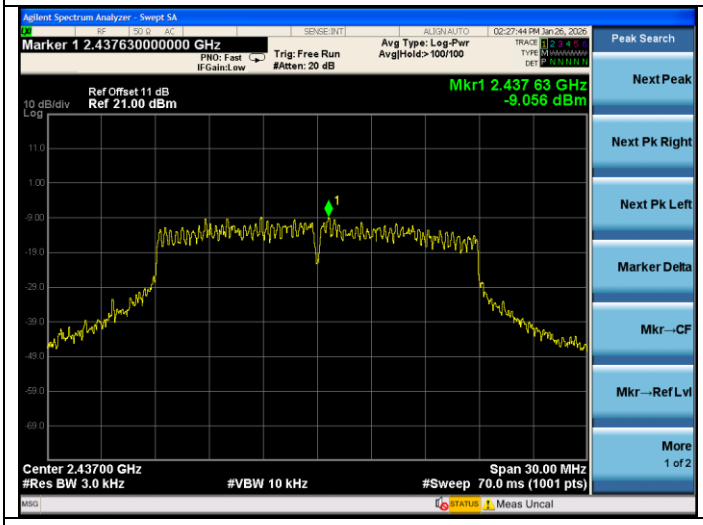
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



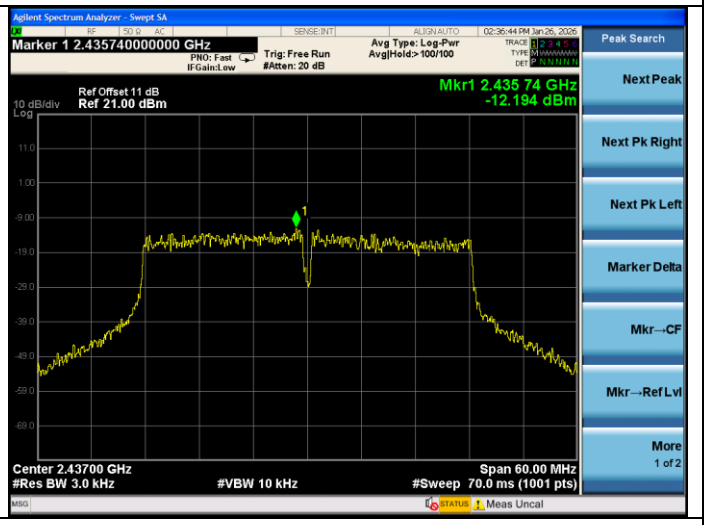
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



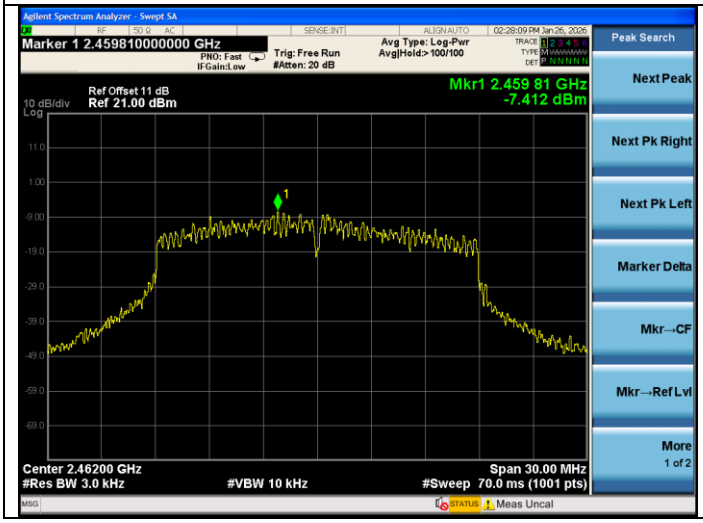
Test CH6: 2437MHz



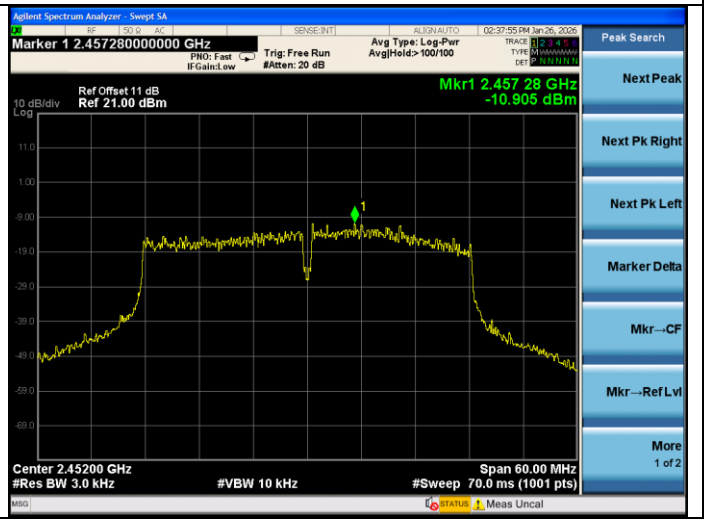
Test CH6: 2437MHz



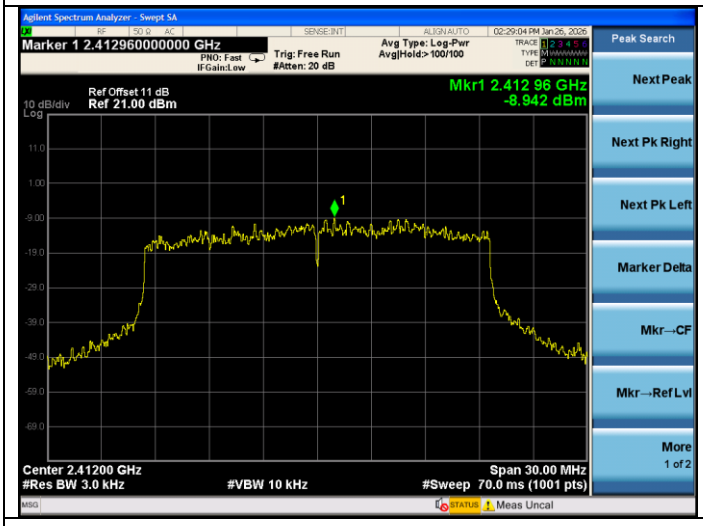
Test CH11: 2462MHz



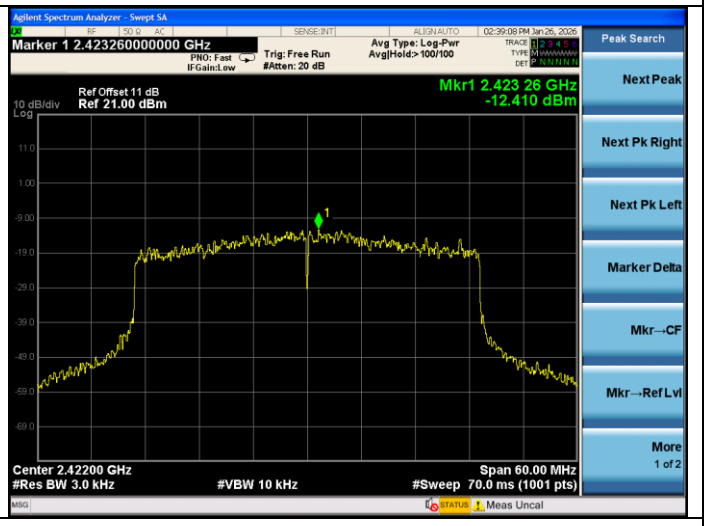
Test CH9: 2452MHz



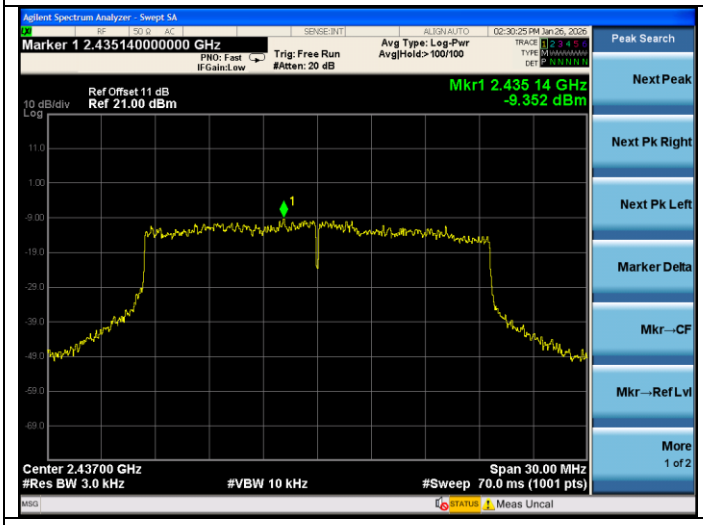
Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



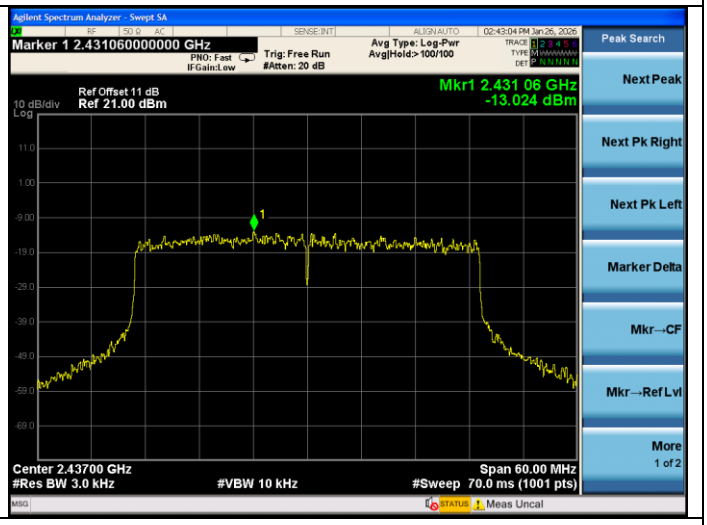
Test Mode: IEEE 802.11ax HE40
Test CH3: 2422MHz



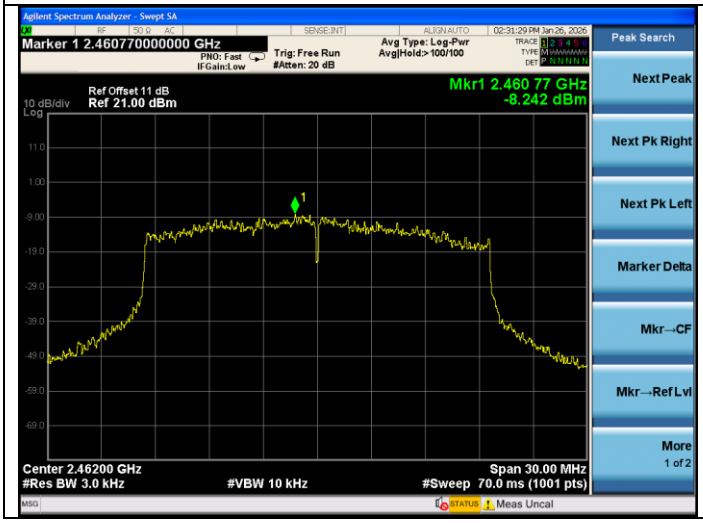
Test CH6: 2437MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH9: 2452MHz

10. ANTENNA REQUIREMENT

10.1. Standard Applicable

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.

10.2. Antenna Connected Construction

The antennas used for this product are PIFA antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 2.43 dBi.

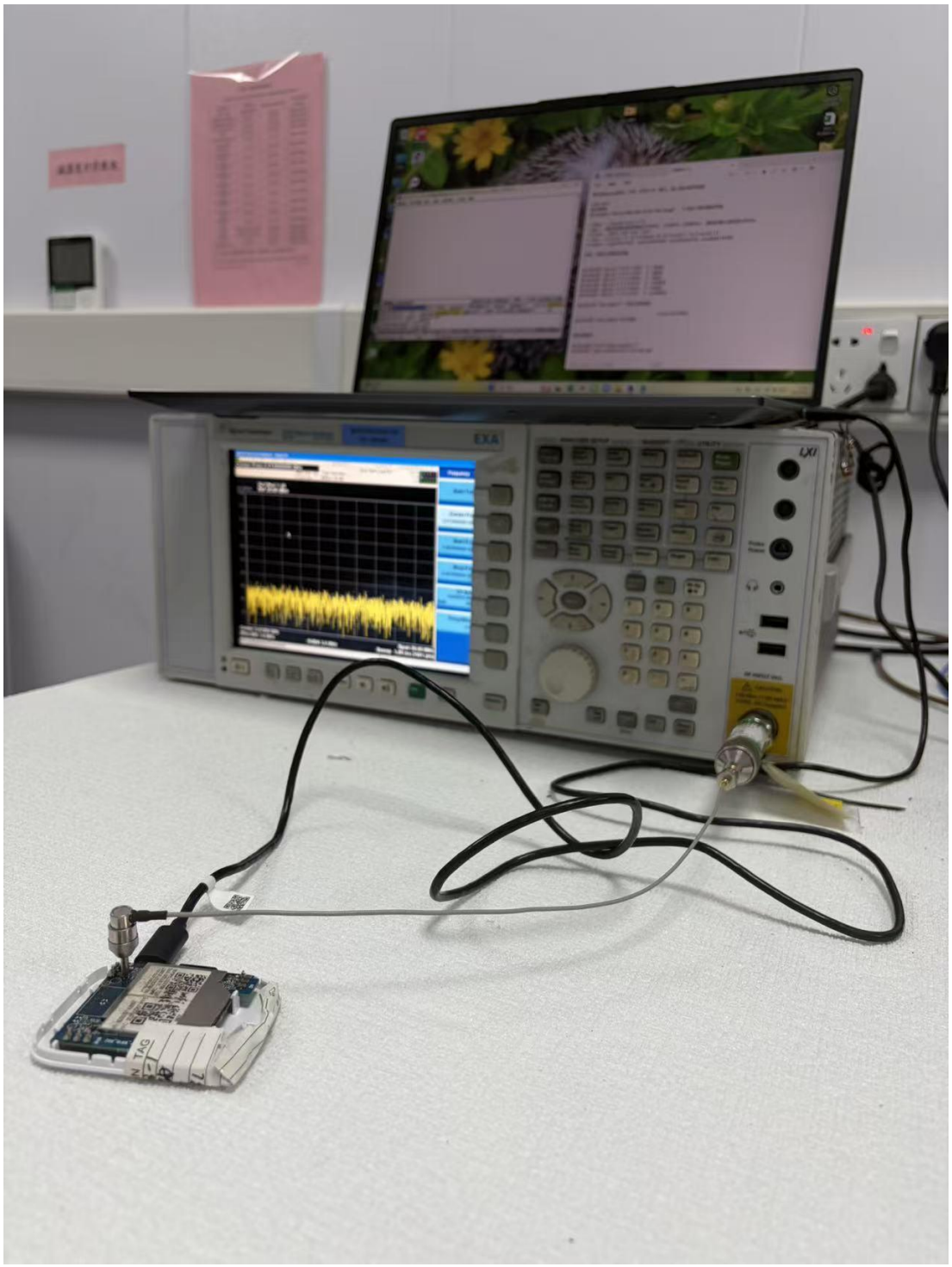
11. DEVIATION TO TEST SPECIFICATIONS

[NONE]

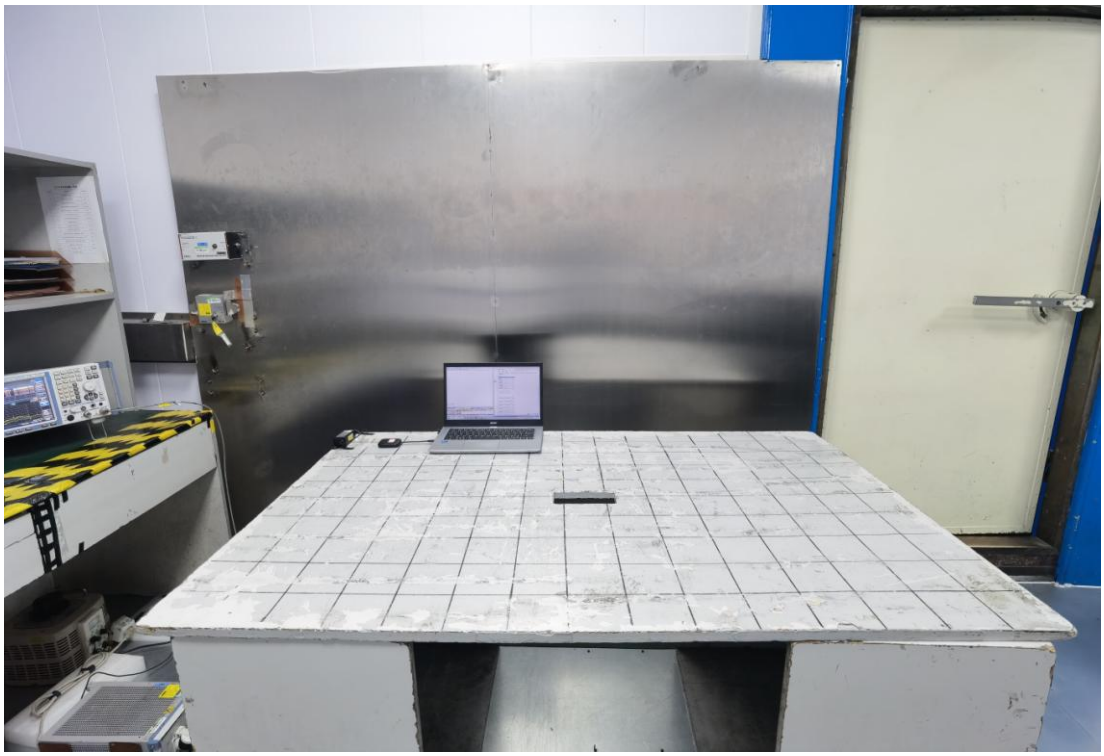
THE END

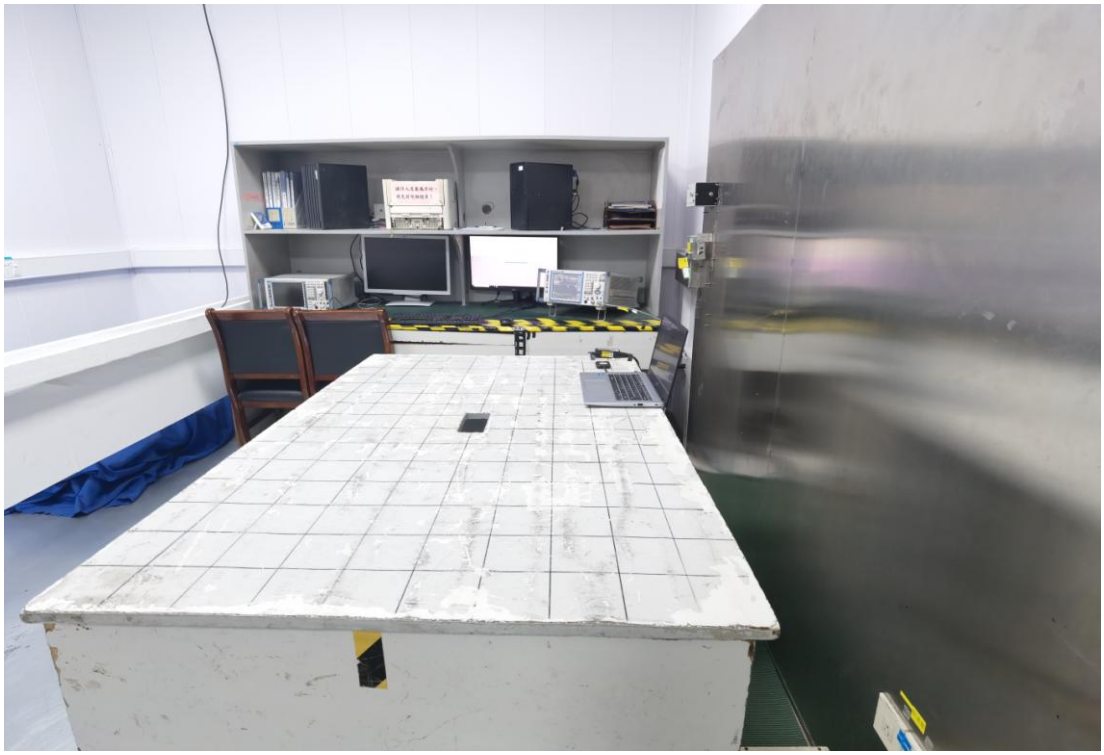
Appendix A. Photograph of Test

A.1 EUT is Connected and set

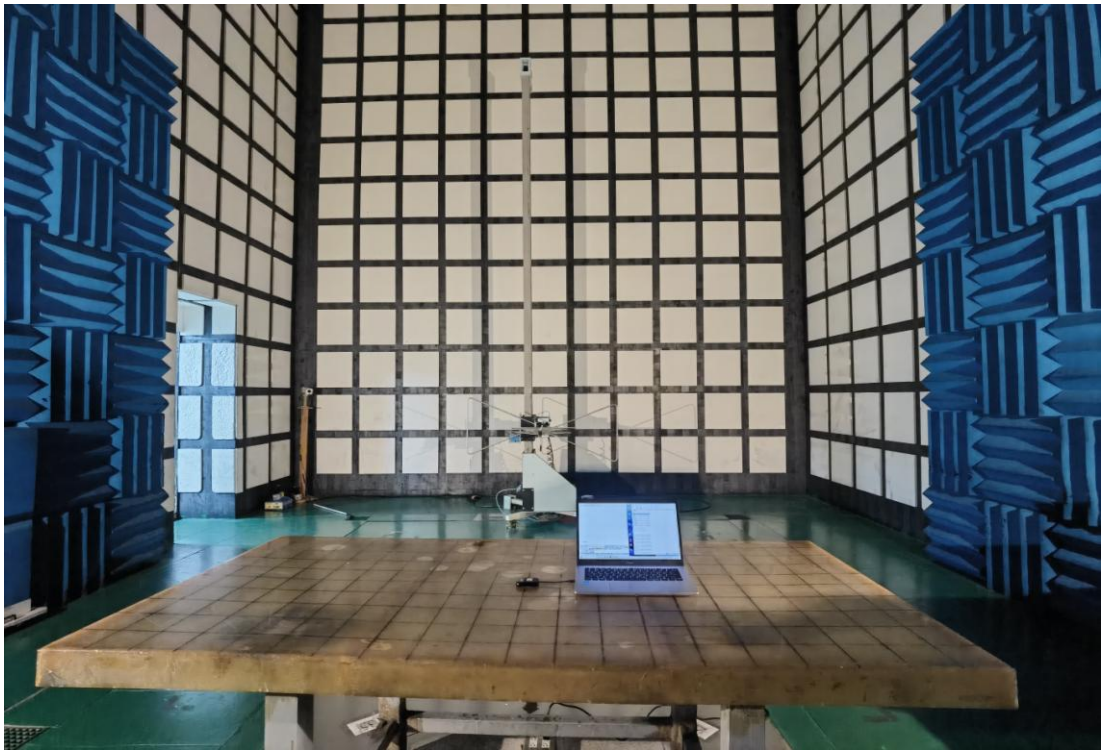


A.2 Photos of Power Line Conducted Emission Test





A.3 Photos of Radiated Emission Test



(Above 1000MHz)

THE END