

Test Graphs





11B-Ant1-2462-PASS



11G-Ant1-2412-PASS



11G-Ant1-2437-PASS



11G-Ant1-2462-PASS



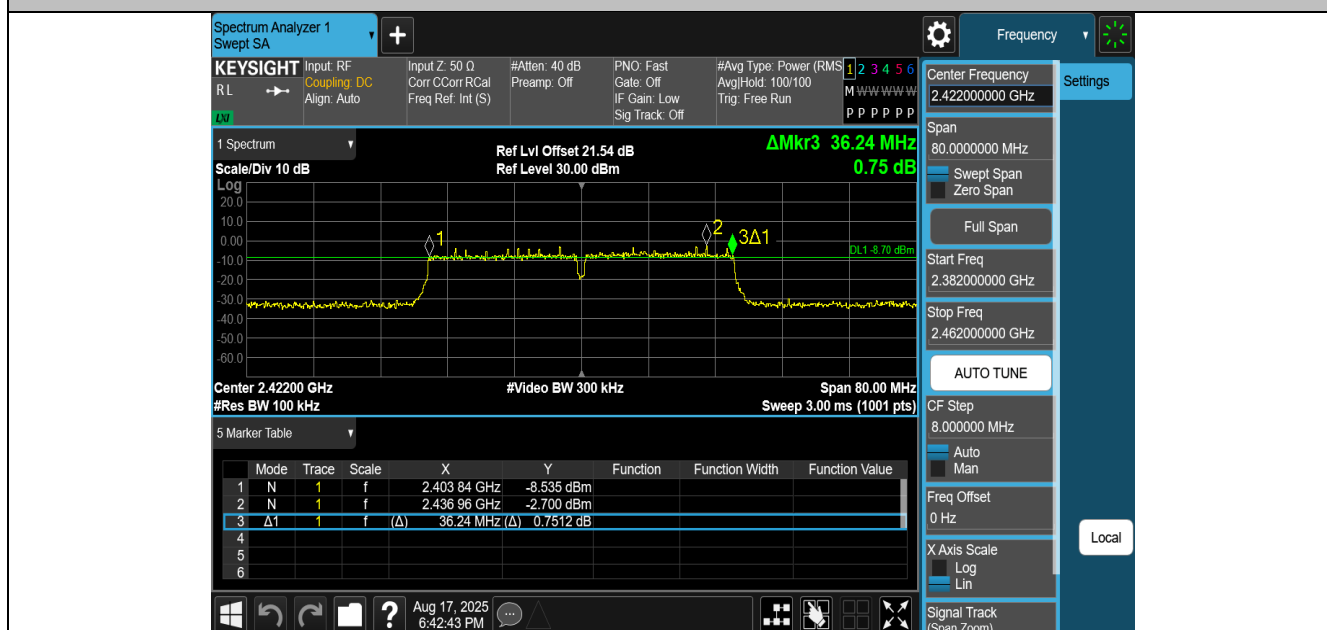
11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



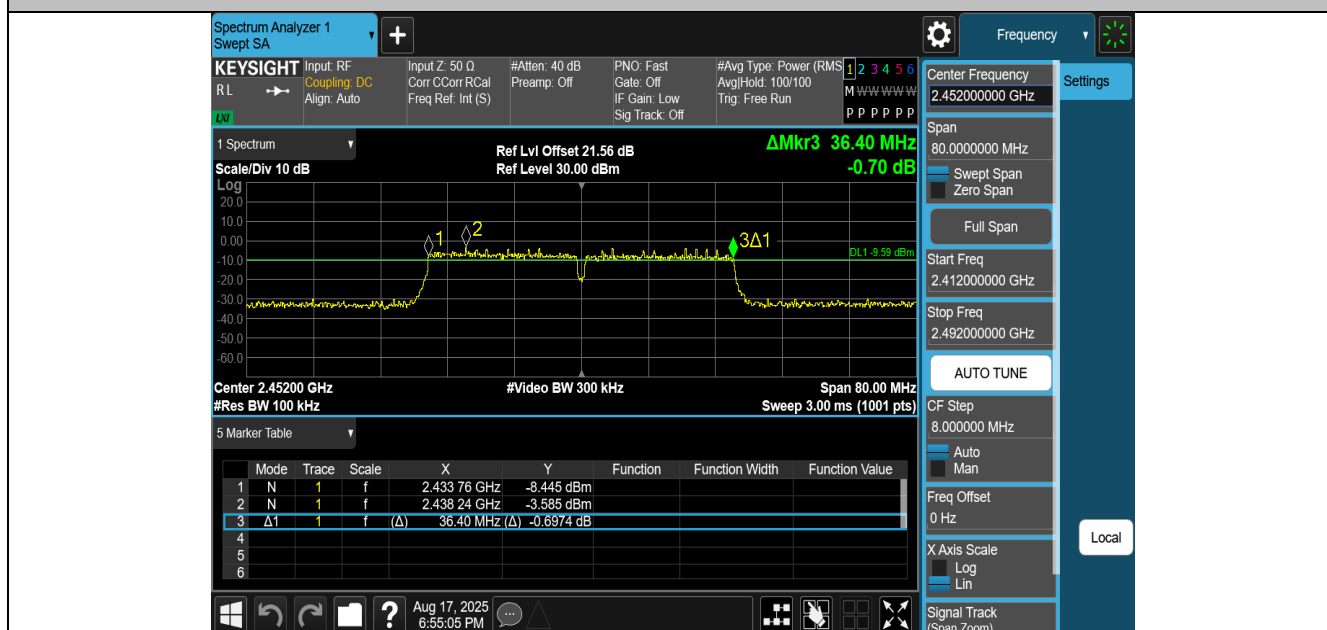
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS

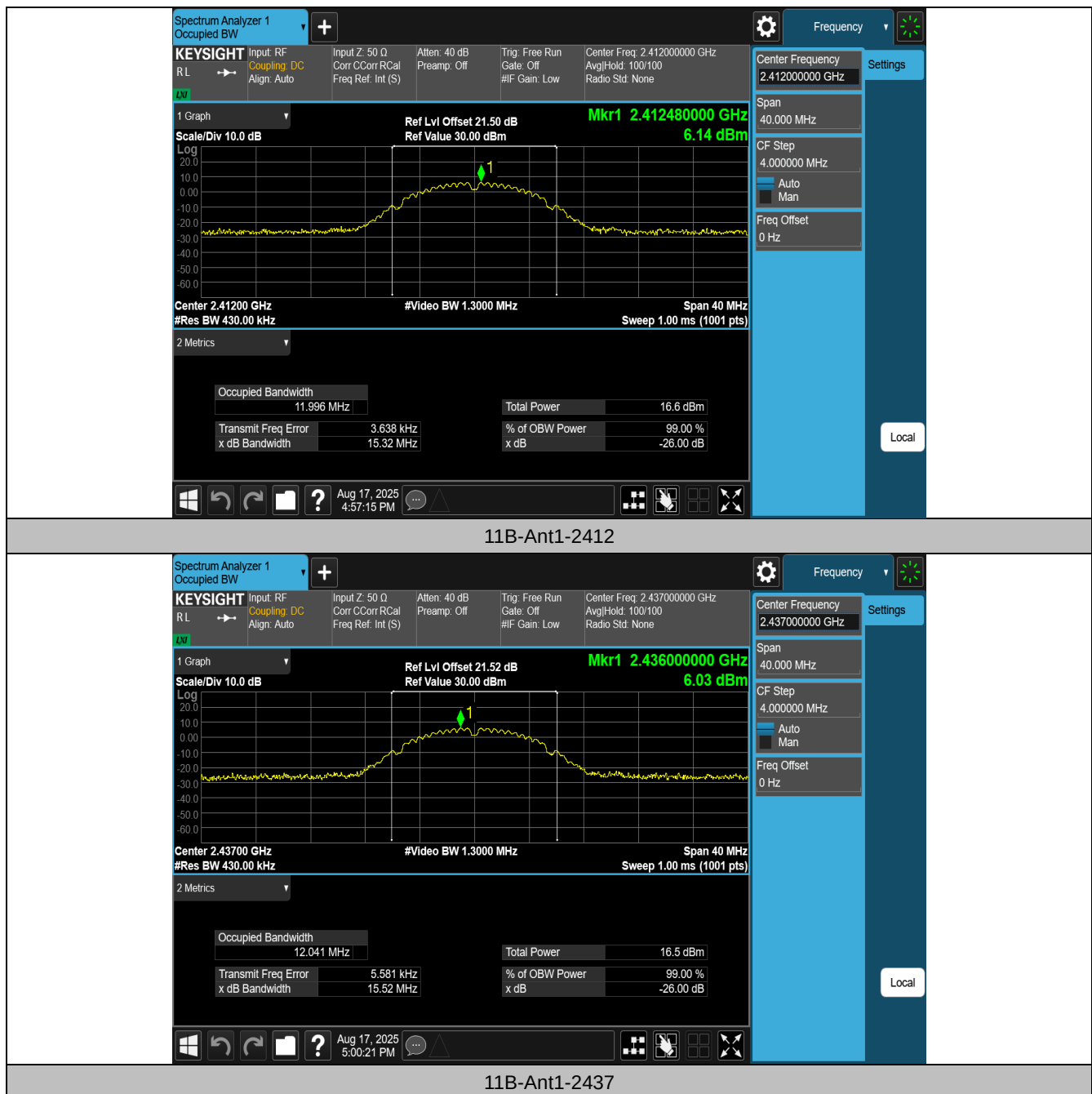


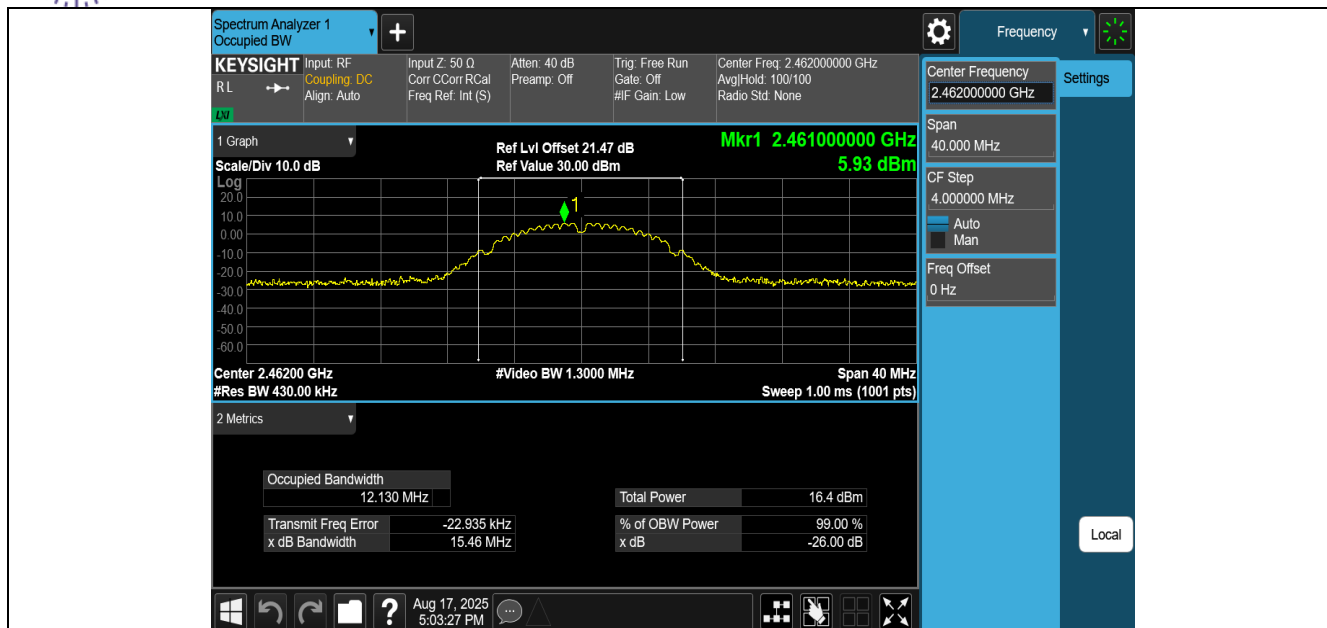
11N40SISO-Ant1-2452-PASS

Occupied Channel Bandwidth

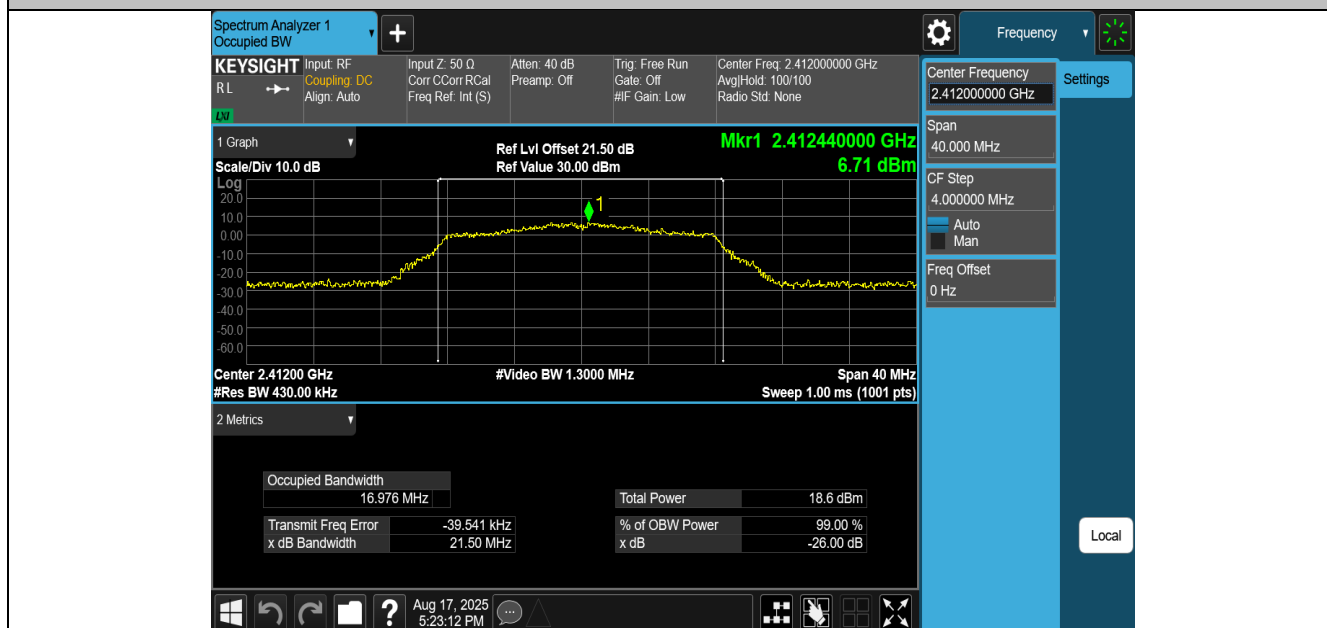
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.996	2406.0056	2418.0016	---	---
11B	Ant1	2437	12.041	2430.9851	2443.0261	---	---
11B	Ant1	2462	12.130	2455.9121	2468.0421	---	---
11G	Ant1	2412	16.976	2403.4725	2420.4485	---	---
11G	Ant1	2437	17.045	2428.4422	2445.4872	---	---
11G	Ant1	2462	16.809	2453.5213	2470.3303	---	---
11N20SISO	Ant1	2412	18.035	2402.9701	2421.0051	---	---
11N20SISO	Ant1	2437	17.916	2428.0056	2445.9216	---	---
11N20SISO	Ant1	2462	17.921	2452.9592	2470.8802	---	---
11N40SISO	Ant1	2422	36.855	2403.5860	2440.4410	---	---
11N40SISO	Ant1	2437	36.943	2418.4860	2455.4290	---	---
11N40SISO	Ant1	2452	36.990	2433.3316	2470.3216	---	---

Test Graphs

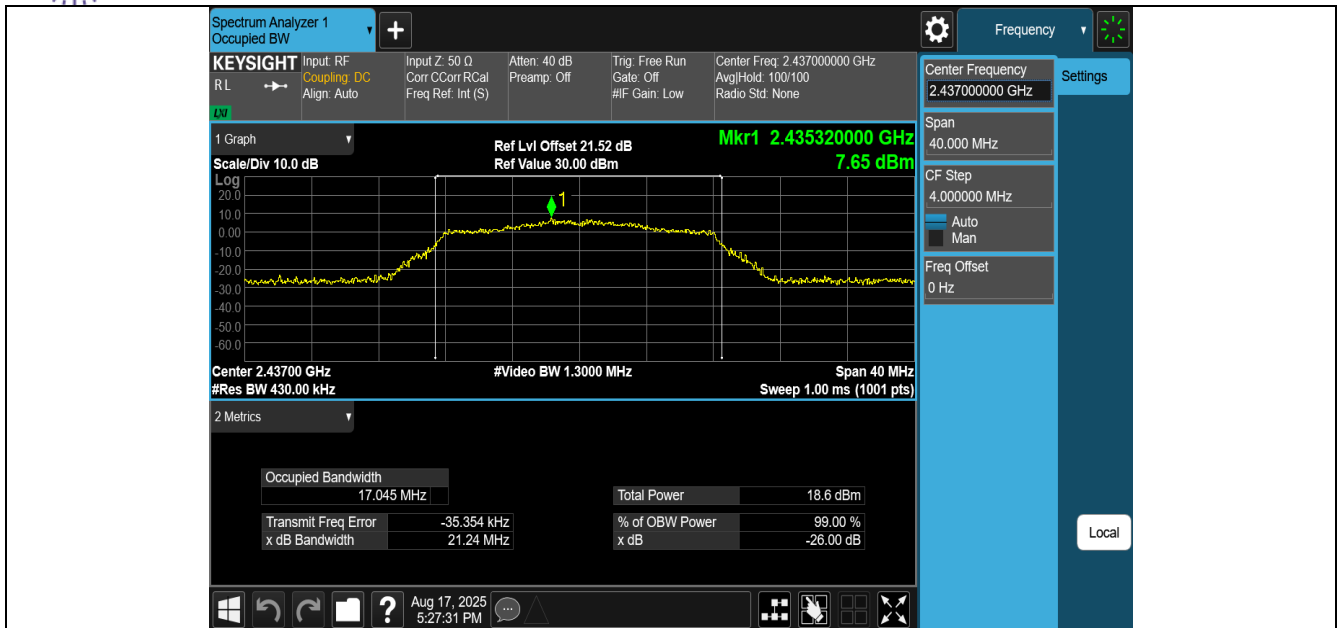




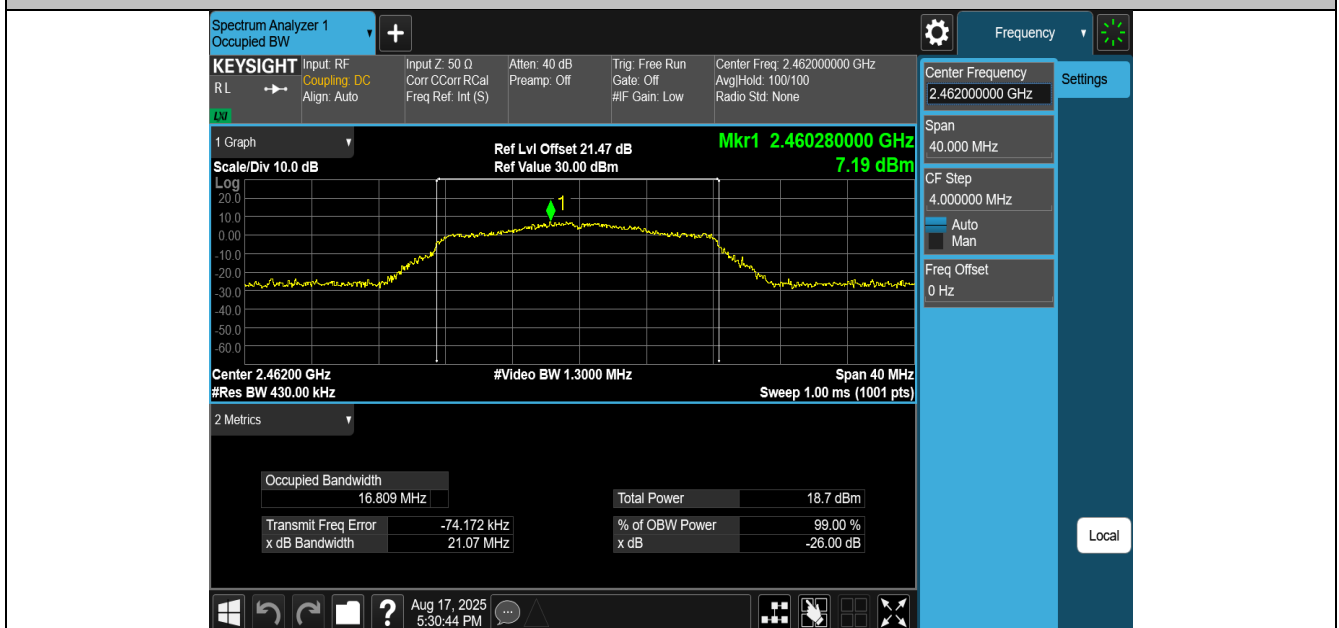
11B-Ant1-2462



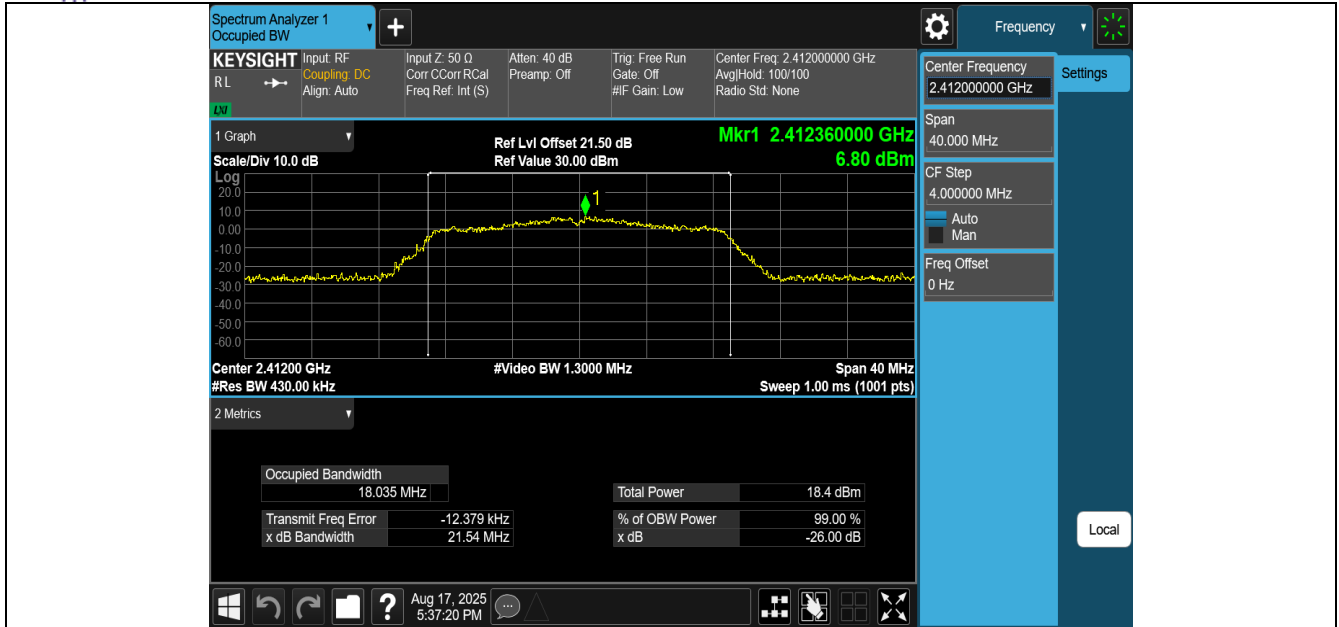
11G-Ant1-2412



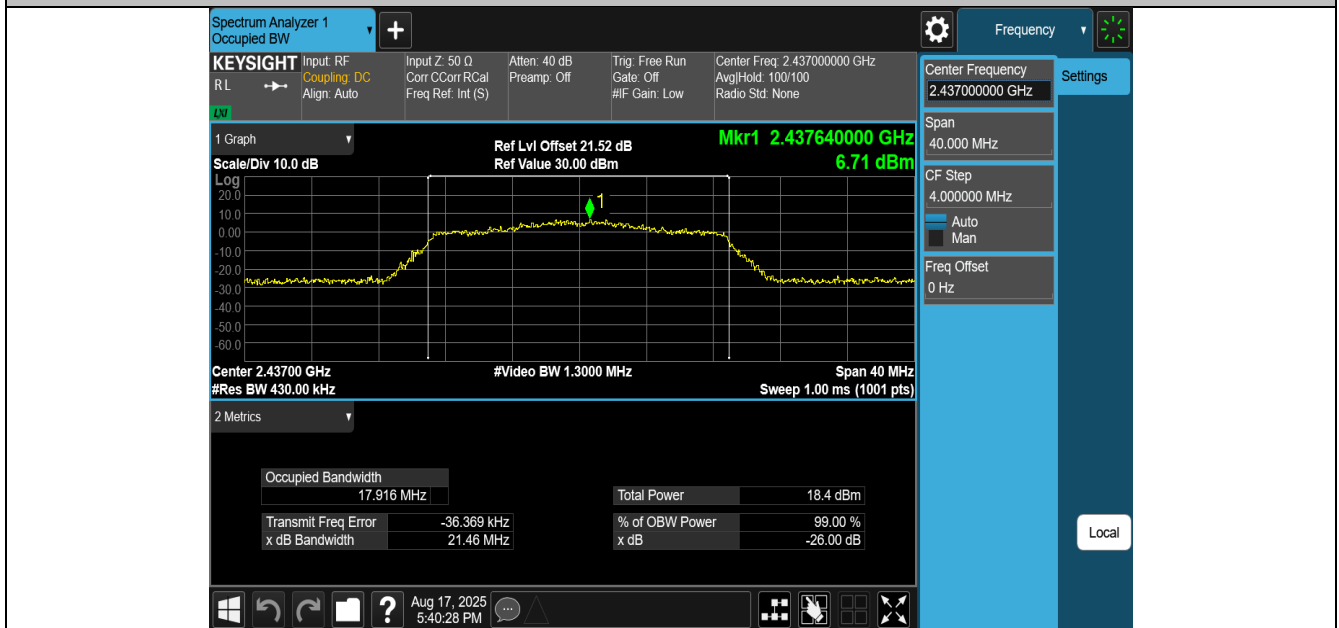
11G-Ant1-2437



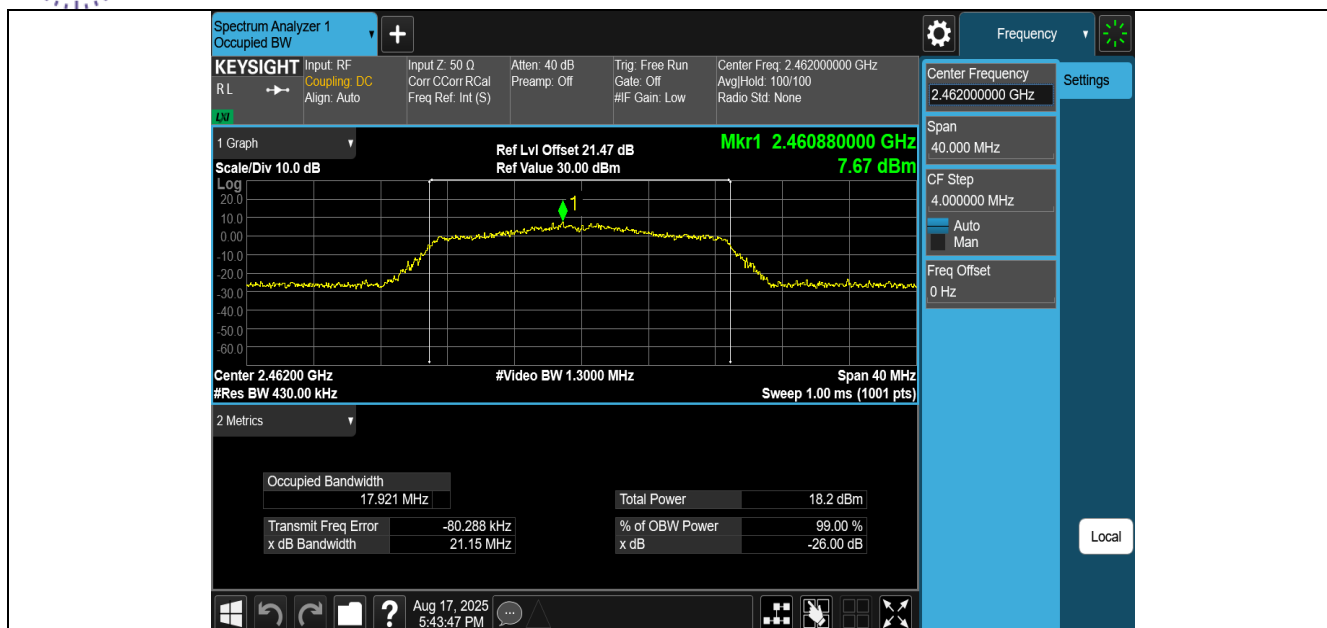
11G-Ant1-2462



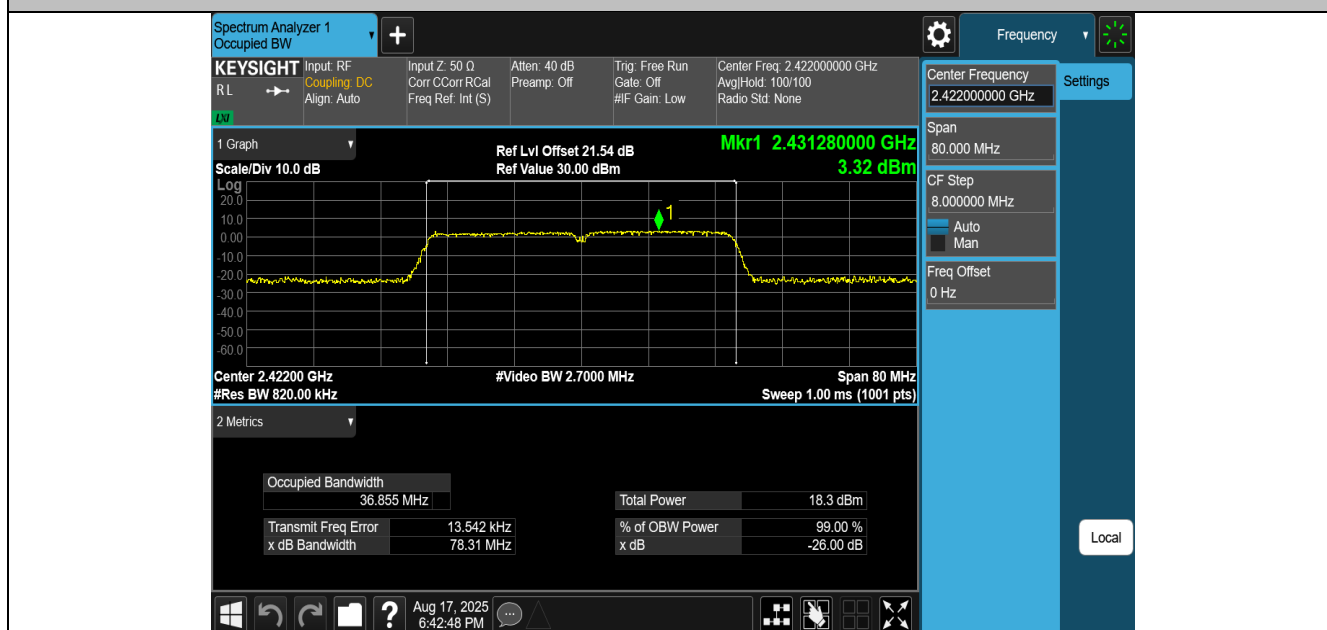
11N20SISO-Ant1-2412



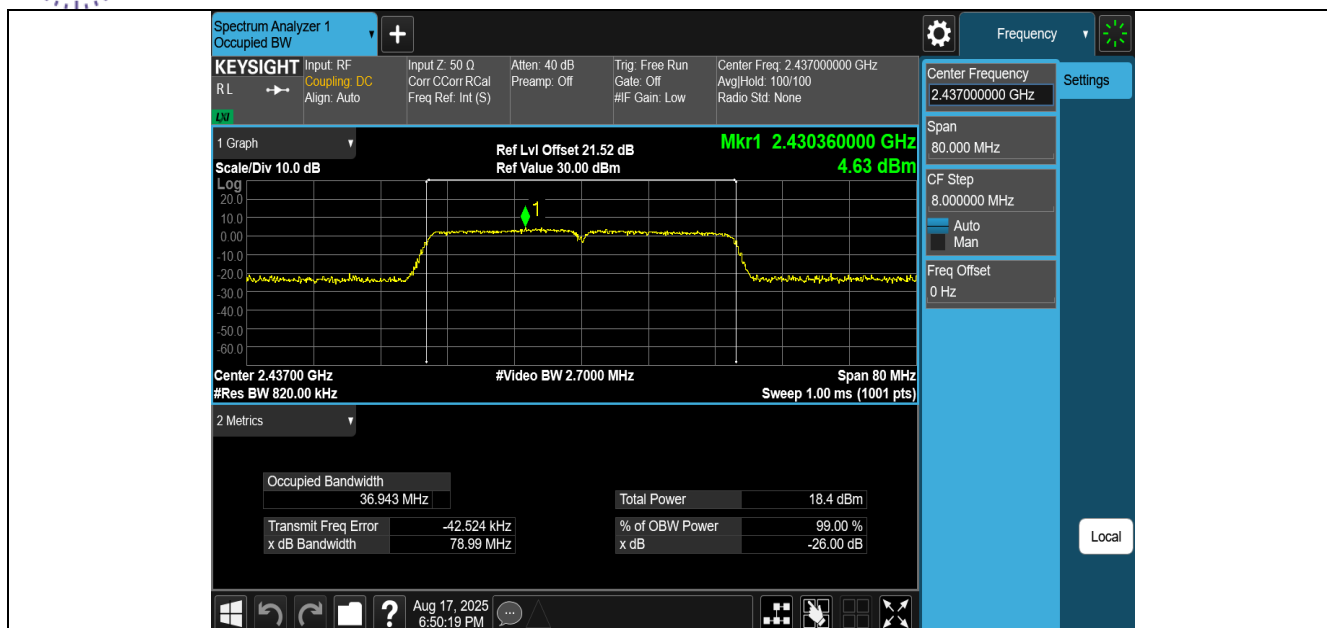
11N20SISO-Ant1-2437



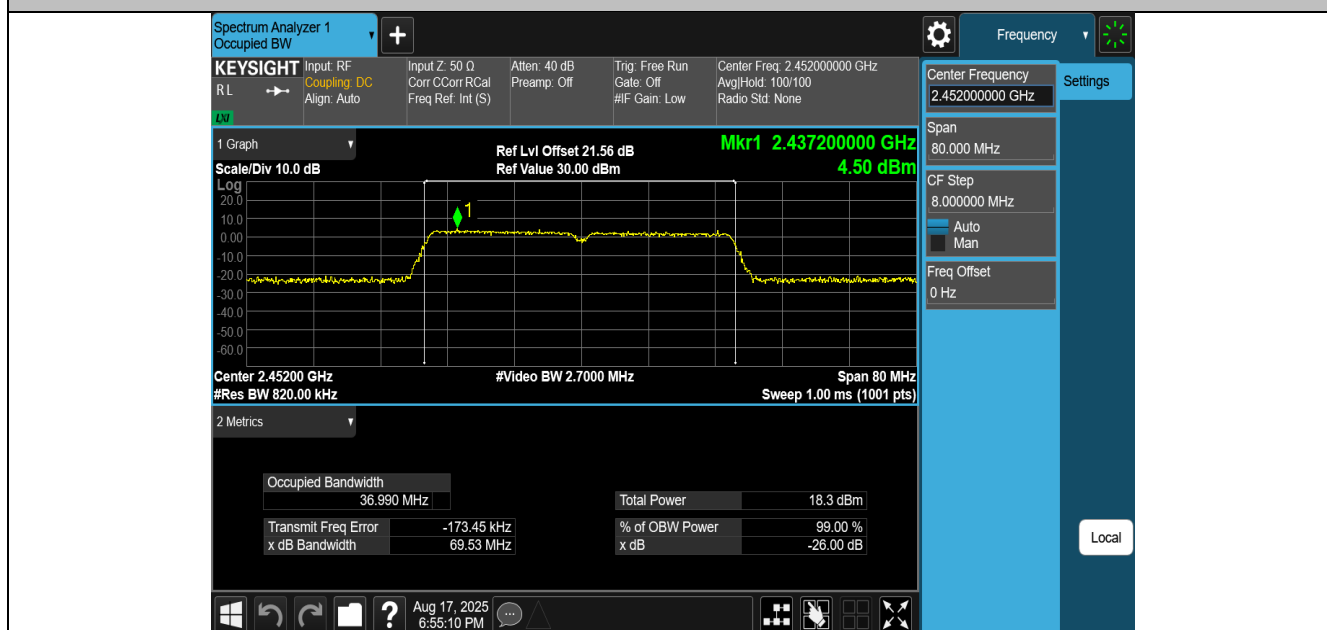
11N20SISO-Ant1-2462



11N40SISO-Ant1-2422



11N40SISO-Ant1-2437



11N40SISO-Ant1-2452

3.5 Maximum conducted output power

3.5.1 Limit

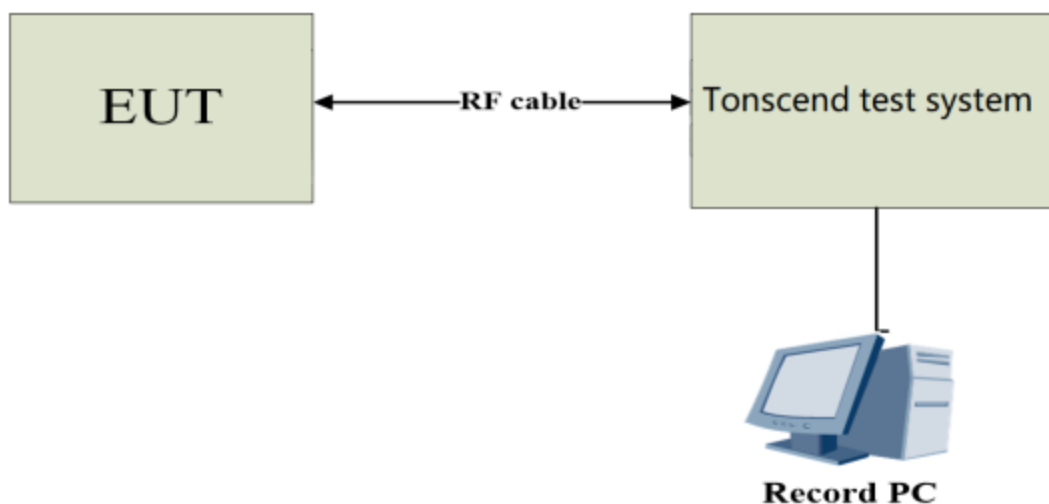
For systems using digital modulation in the 2400~2483.5MHz, The Maximum output Power shall not exceed 1W(30dBm)

3.5.2 Test Procedure

Test Method	
☒ Conducted Measurement	☐ Radiated Measurement
Test Channels	
☒ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme
Note: ● : Test ○ : No Test	

- The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.2.3.1 (for method AVGPM)of ANSI C63.10-2013.

3.5.3 Test Setup



3.5.4 Table of Parameters of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

For Power setting value

Test Mode	Power Level Setting defined by Manufacturer		
Test Software Version	cmd.exe		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	Default	Default	Default
IEEE 802.11g	Default	Default	Default
IEEE 802.11n(20)	Default	Default	Default
Frequency (MHz)	2422	2437	2452
IEEE 802.11n(20)	Default	Default	Default

3.5.5 The Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	13.61	≤30.00	PASS
11B	Ant1	2437	13.57	≤30.00	PASS
11B	Ant1	2462	13.46	≤30.00	PASS
11G	Ant1	2412	12.73	≤30.00	PASS
11G	Ant1	2437	12.61	≤30.00	PASS
11G	Ant1	2462	12.63	≤30.00	PASS
11N20SISO	Ant1	2412	12.42	≤30.00	PASS
11N20SISO	Ant1	2437	12.23	≤30.00	PASS
11N20SISO	Ant1	2462	12.12	≤30.00	PASS
11N40SISO	Ant1	2422	11.40	≤30.00	PASS
11N40SISO	Ant1	2437	11.47	≤30.00	PASS
11N40SISO	Ant1	2452	11.32	≤30.00	PASS

Note: The duty cycle factor is compensated in the average conducted output power.

3.6 Power Spectral Density

3.6.1 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 transmitting.

3.6.2 Test Procedure

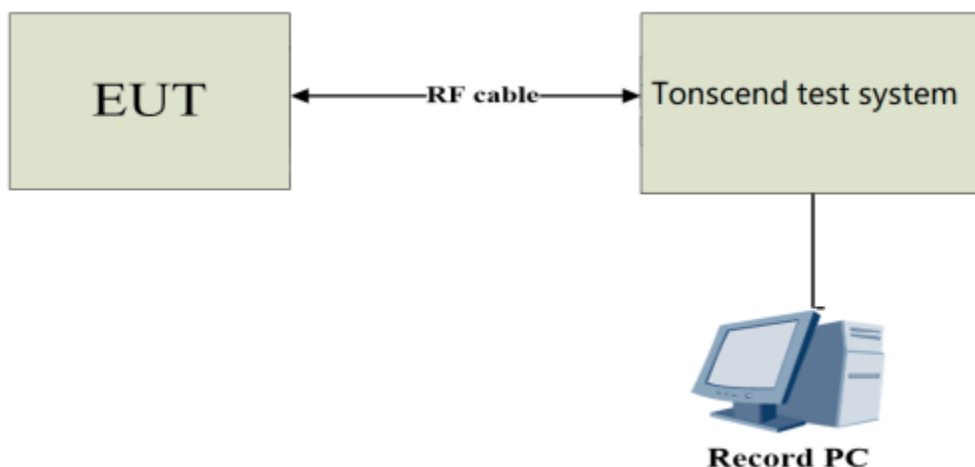
Test Method	
☒ Conducted Measurement	☐ Radiated Measurement
Test Channels	
☒ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme
Note: ● : Test ○ : No Test	

a) The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below.

b) Spectrum analyser settings as following:

Spectrum Parameters	Setting
Span Frequency	2 times the OBW bandwidth
RBW	3 kHz
VBW	10 kHz
Detector	AVGPM
Trace	Max Hold
Sweep Time	Auto

3.6.3 Test Setup

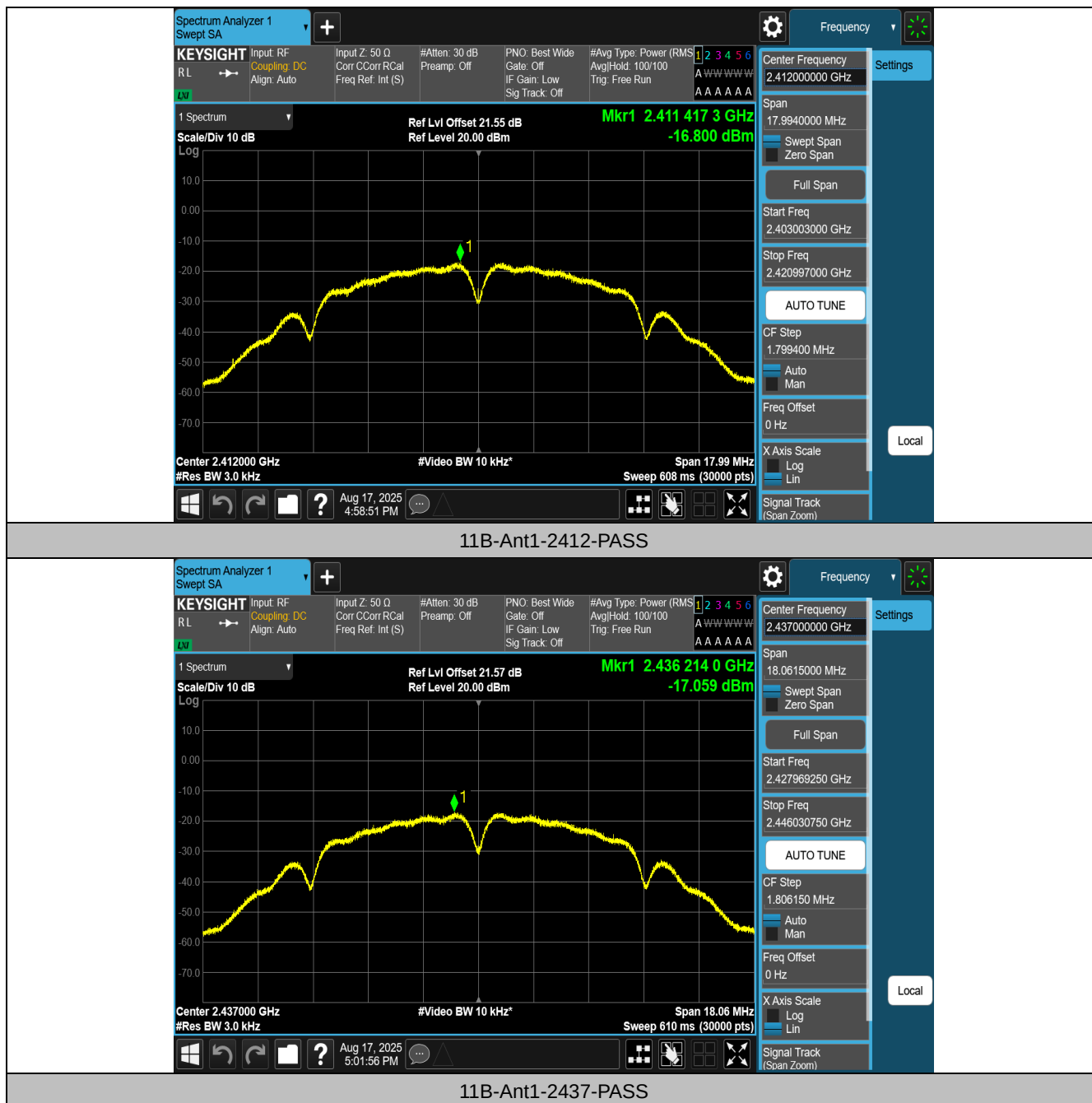


3.6.4 The Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.80	≤8.00	PASS
11B	Ant1	2437	-17.06	≤8.00	PASS
11B	Ant1	2462	-17.18	≤8.00	PASS
11G	Ant1	2412	-15.28	≤8.00	PASS
11G	Ant1	2437	-15.37	≤8.00	PASS
11G	Ant1	2462	-14.93	≤8.00	PASS
11N20SISO	Ant1	2412	-19.09	≤8.00	PASS
11N20SISO	Ant1	2437	-19.29	≤8.00	PASS
11N20SISO	Ant1	2462	-19.20	≤8.00	PASS
11N40SISO	Ant1	2422	-23.64	≤8.00	PASS
11N40SISO	Ant1	2437	-24.41	≤8.00	PASS
11N40SISO	Ant1	2452	-24.19	≤8.00	PASS

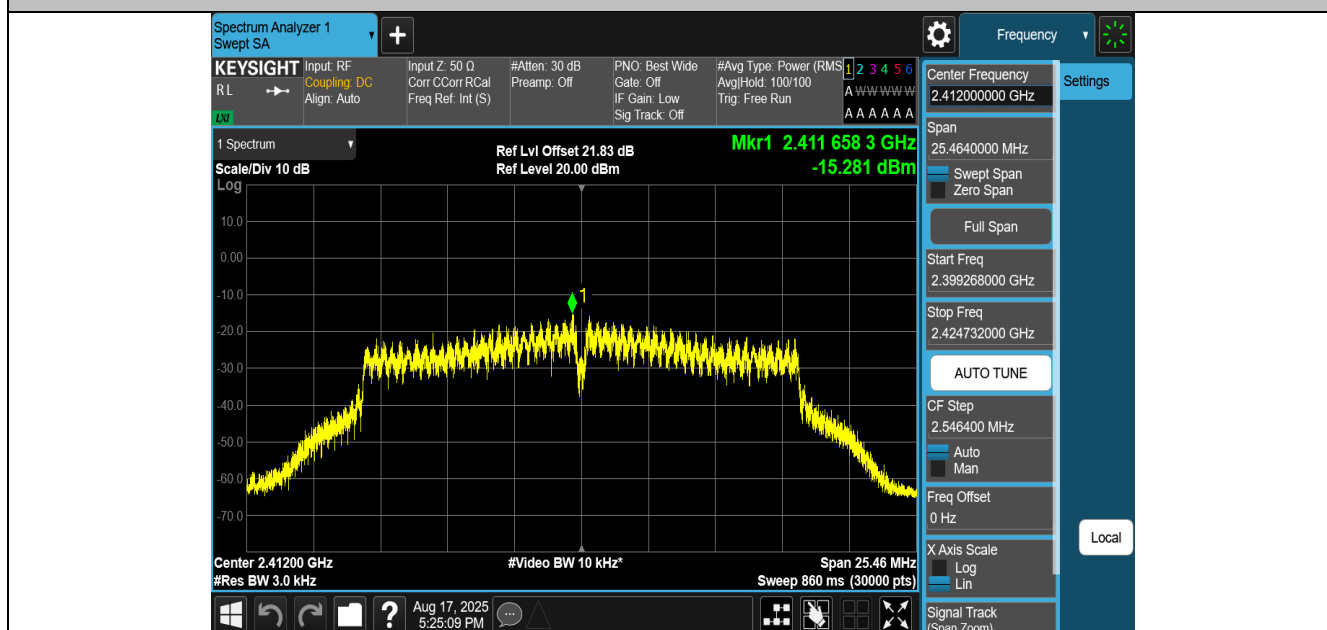
Note: The line loss are compensated in the test graph.

Test Graphs

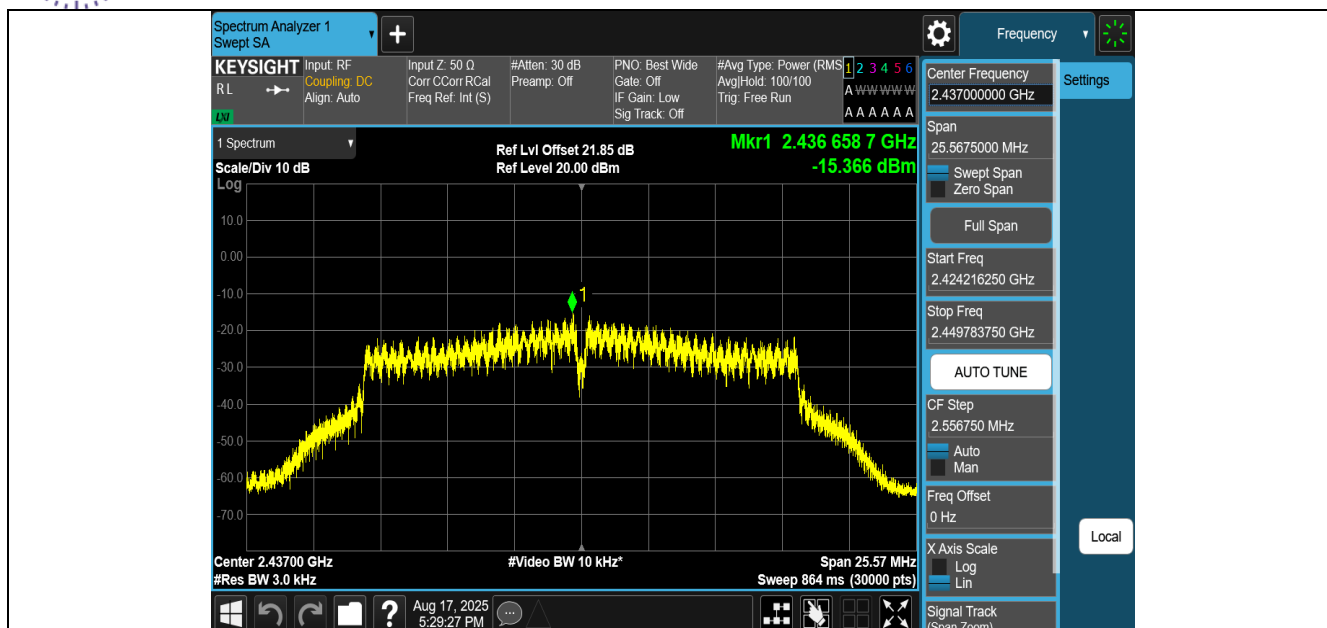




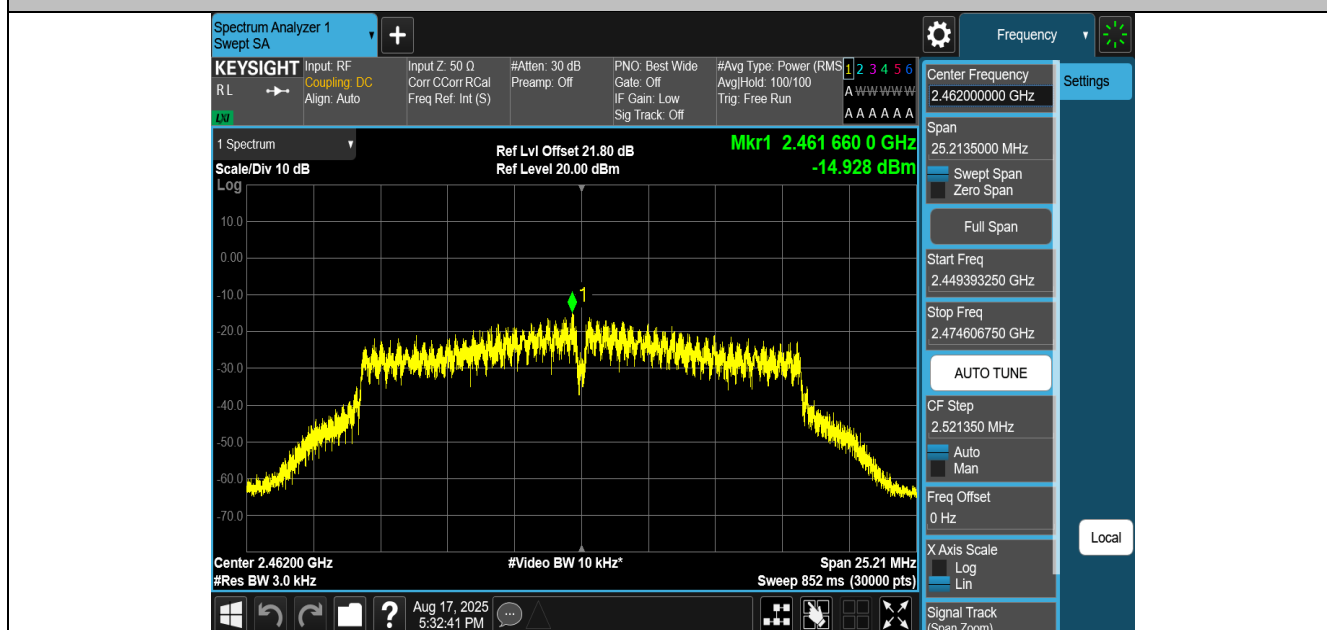
11B-Ant1-2462-PASS



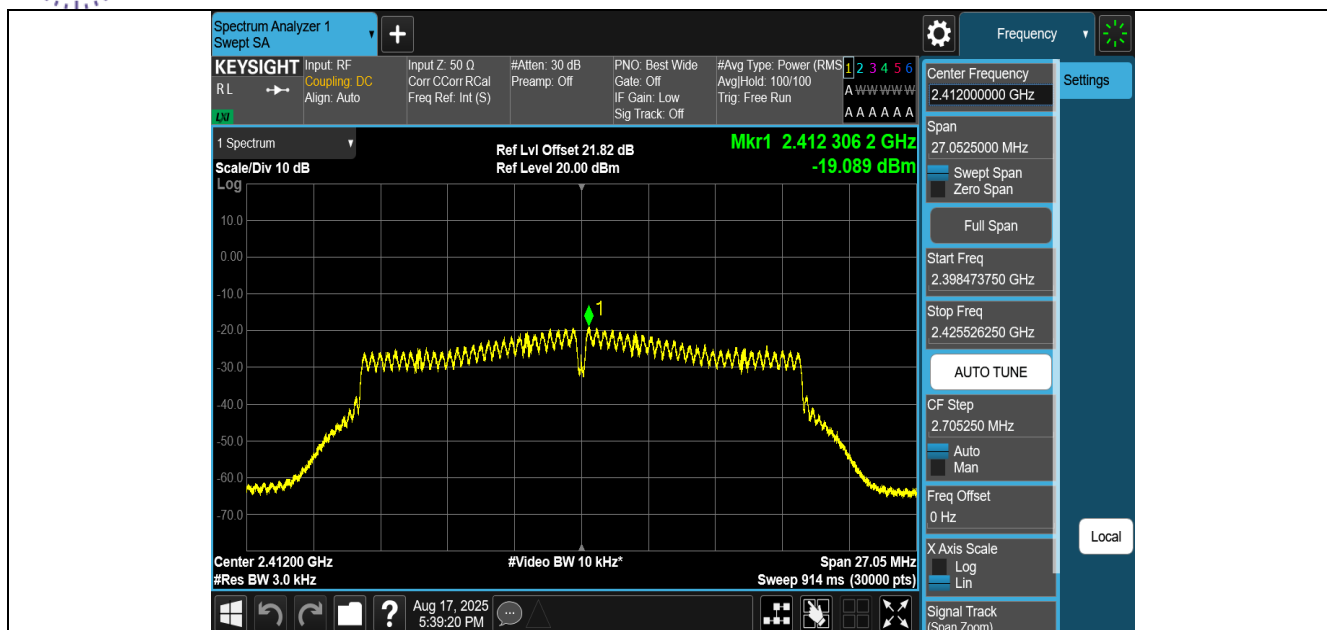
11G-Ant1-2412-PASS



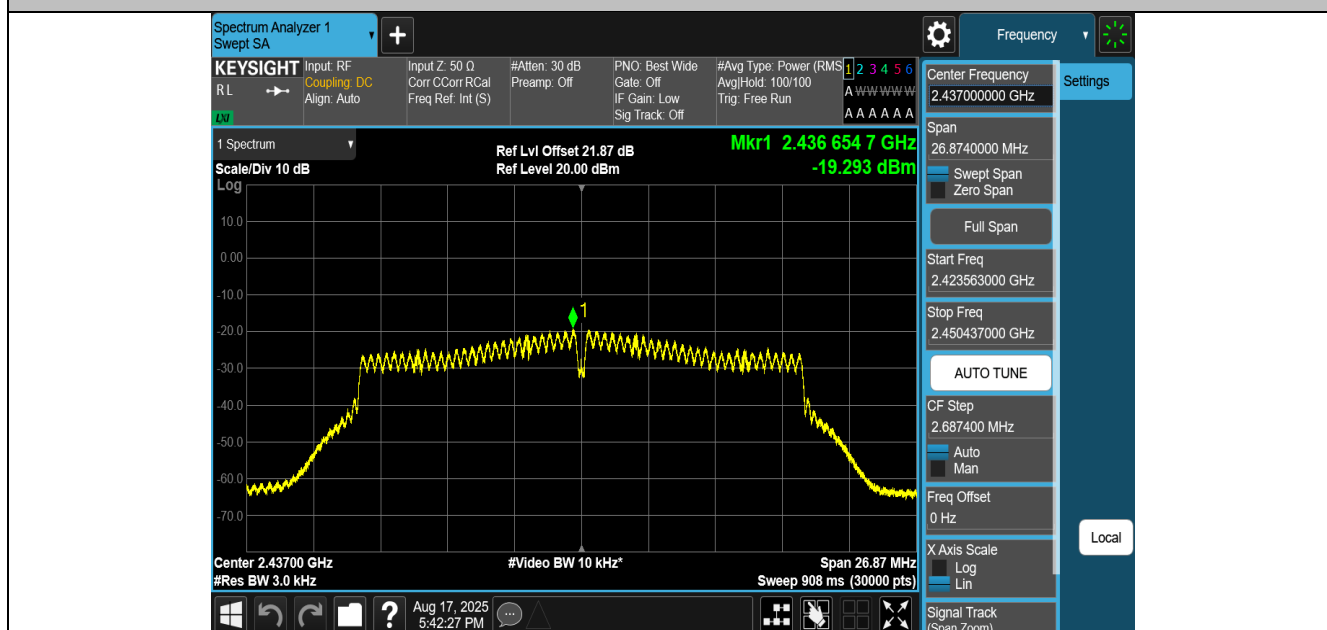
11G-Ant1-2437-PASS



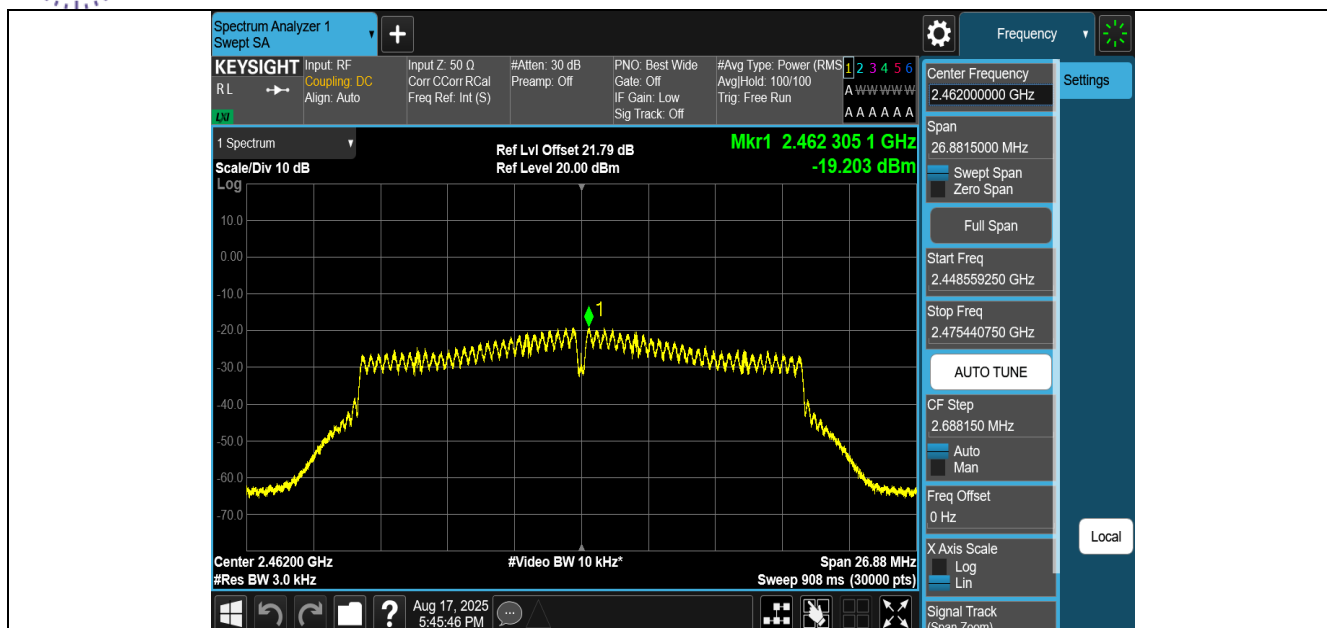
11G-Ant1-2462-PASS



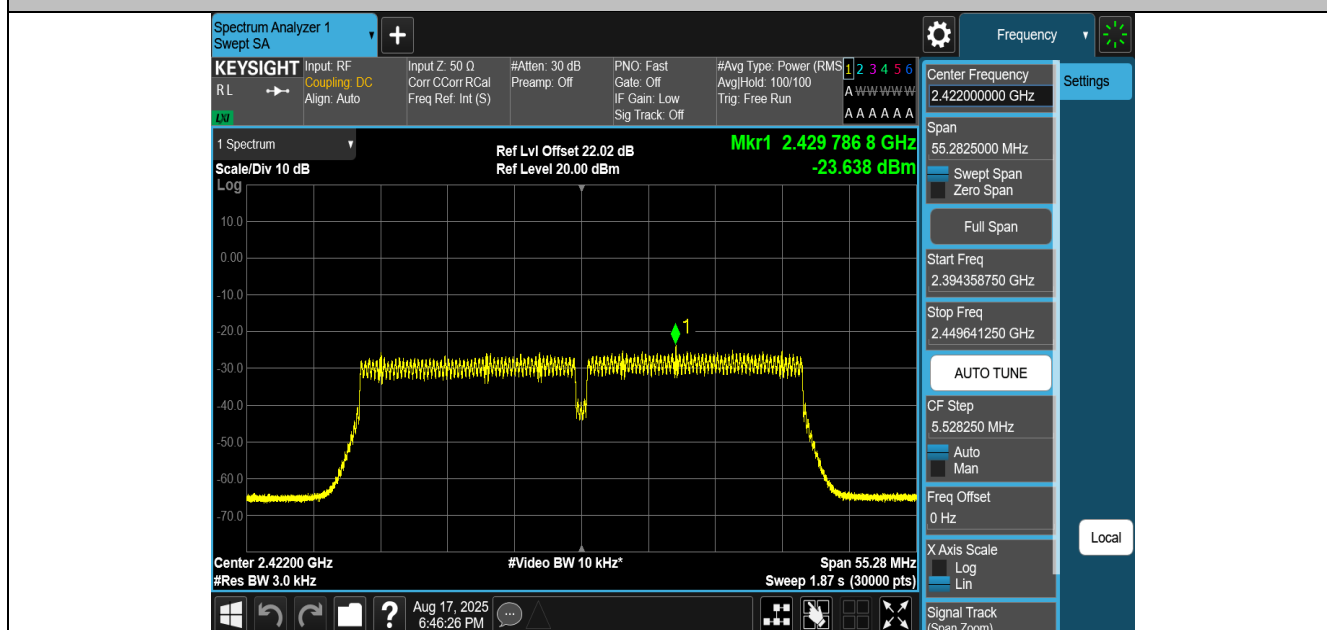
11N20SISO-Ant1-2412-PASS



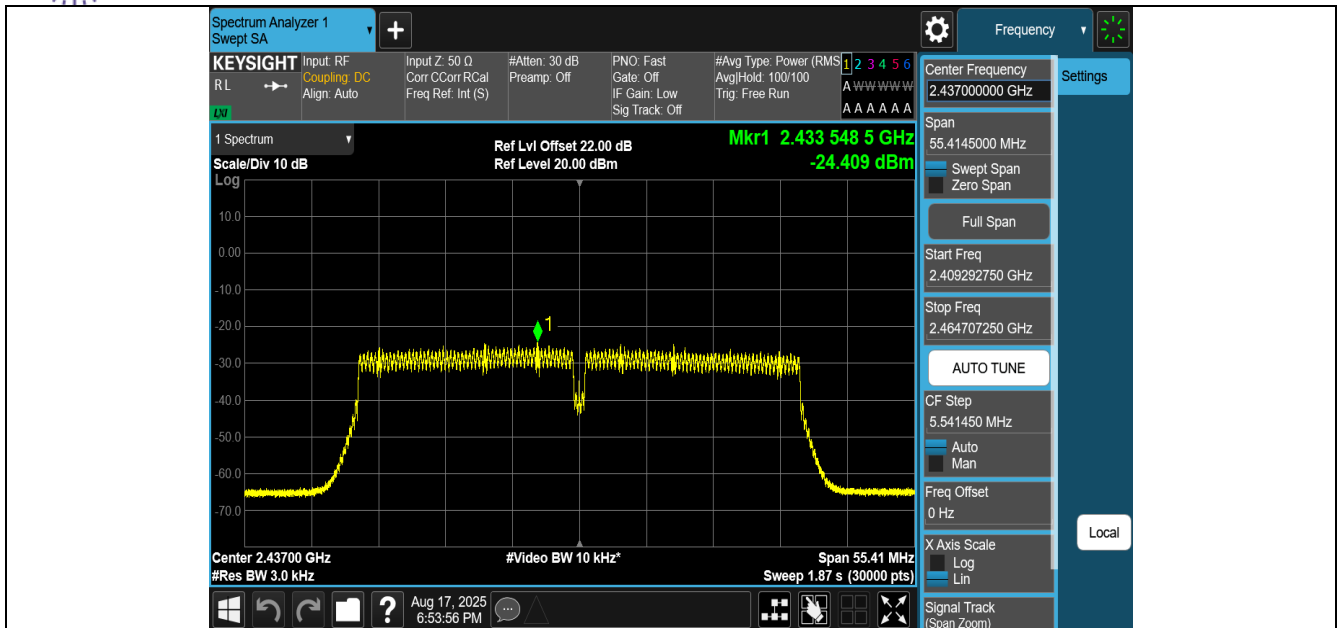
11N20SISO-Ant1-2437-PASS



11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technical Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Standard Technical Co., Ltd.

Address: Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China

Tel: 0755-26024411

Email: service@hy-lab.cn

End of Test Report