11G_Ant1_2437

11G_Ant1_2462


11N20SISO_Ant1_2412

11N20SISO_Ant1_2437


11N20SISO_Ant1_2462

11N40SISO_Ant1_2422


11N40SISO_Ant1_2437


11N40SISO_Ant1_2452


Occupied Channel Bandwidth

Test Mode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	15.196	2404.3631	2419.5591	---	---
		2437	15.171	2429.3951	2444.5661	---	---
		2462	15.180	2454.3883	2469.5683	---	---
11G	Ant1	2412	17.128	2403.4461	2420.5741	---	---
		2437	17.086	2428.4720	2445.5580	---	---
		2462	17.106	2453.4314	2470.5374	---	---
11N20SISO	Ant1	2412	18.007	2402.9576	2420.9646	---	---
		2437	18.052	2427.9148	2445.9668	---	---
		2462	17.982	2452.9942	2470.9762	---	---
11N40SISO	Ant1	2422	36.630	2403.6994	2440.3294	---	---
		2437	36.670	2418.6485	2455.3185	---	---
		2452	36.553	2433.6703	2470.2233	---	---

11B_Ant1_2412

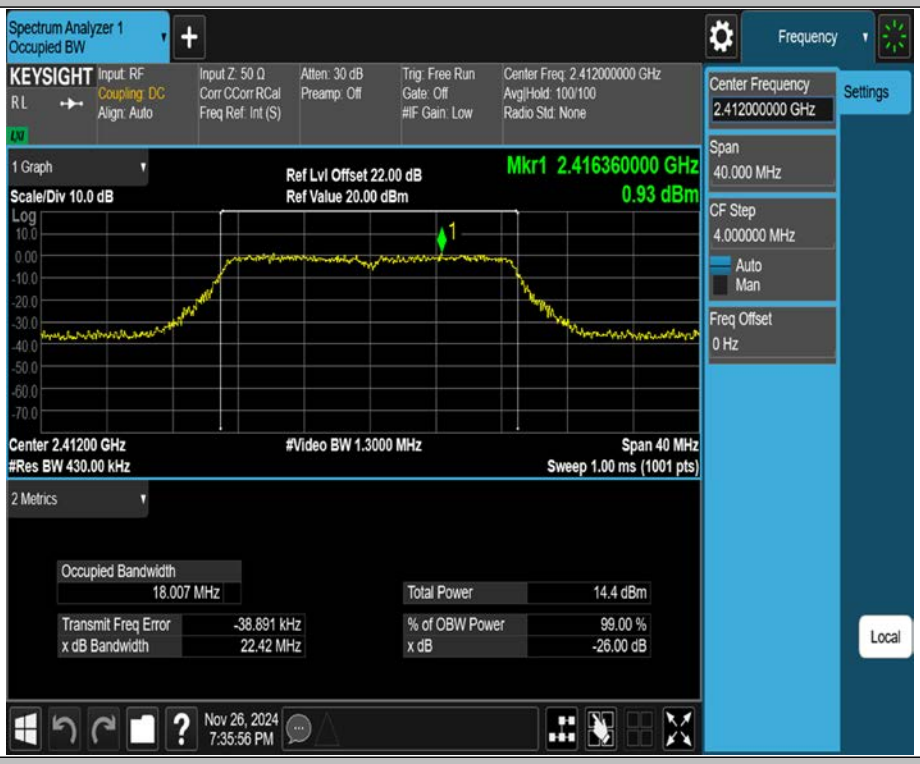
11B_Ant1_2437

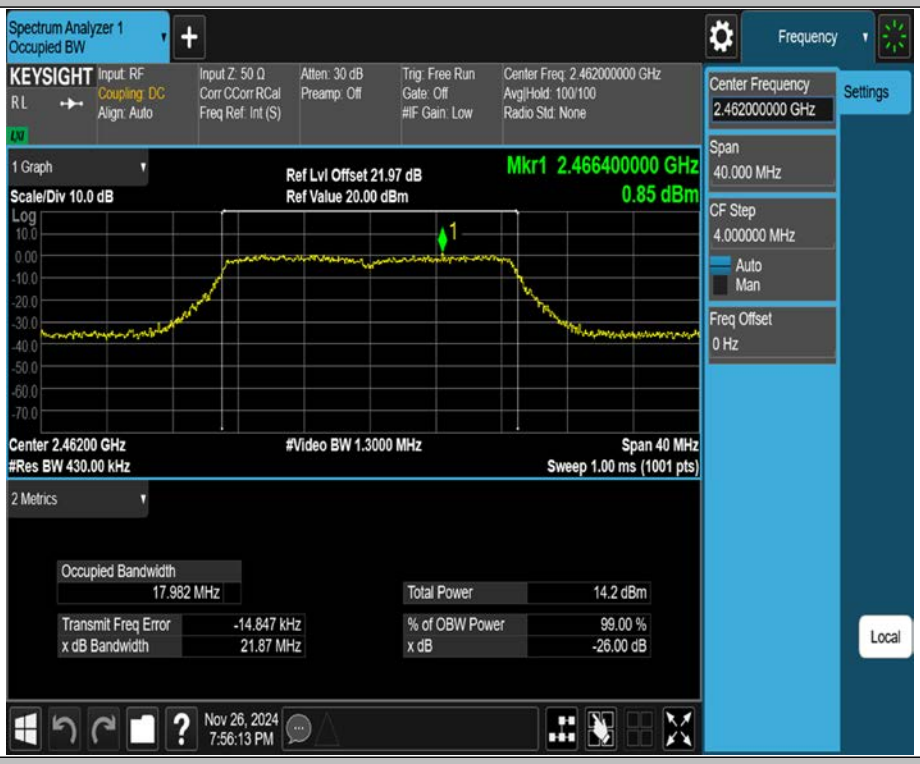

11B_Ant1_2462

11G_Ant1_2412


11G_Ant1_2437

11G_Ant1_2462


11N20SISO_Ant1_2412

11N20SISO_Ant1_2437


11N20SISO_Ant1_2462

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)

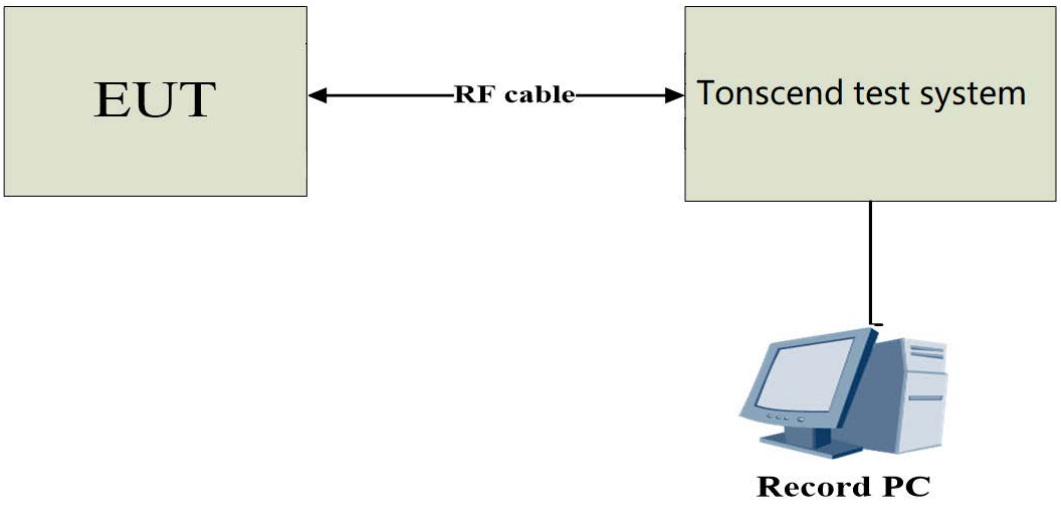
3.5.2 Test Procedure

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	

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

b) The maximum conducted output power was performed in accordance with method 11.9.1.3 (for peak power) 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	MPTool		
Frequency (MHz)	2412	2442	2472
IEEE 802.11b	40	40	40
IEEE 802.11g	40	40	40
IEEE 802.11n (20MHz)	40	40	40
Frequency (MHz)	2422	2442	2462
IEEE 802.11n (40MHz)	40	40	40

3.5.5 The Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	15.49	≤30.00	PASS
		2437	15.03	≤30.00	PASS
		2462	15.94	≤30.00	PASS
11G	Ant1	2412	15.39	≤30.00	PASS
		2437	15.36	≤30.00	PASS
		2462	15.28	≤30.00	PASS
11N20SISO	Ant1	2412	15.43	≤30.00	PASS
		2437	15.46	≤30.00	PASS
		2462	15.22	≤30.00	PASS
11N40SISO	Ant1	2422	15.59	≤30.00	PASS
		2437	15.74	≤30.00	PASS
		2452	15.72	≤30.00	PASS

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

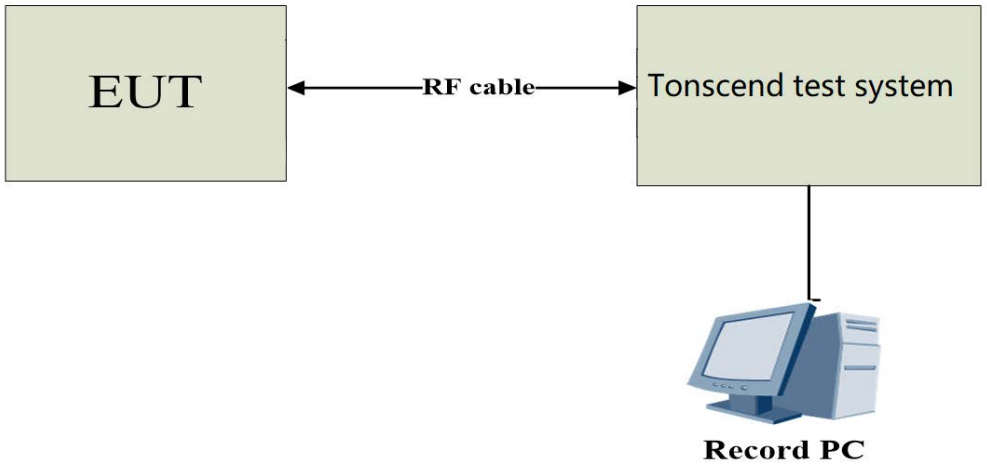
Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

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

b) Spectrum analyser settings as following:

Spectrum Parameters	Setting
Span Frequency	1.5 times the DTS bandwidth
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

3.6.3 Test Setup



3.6.4 The Result

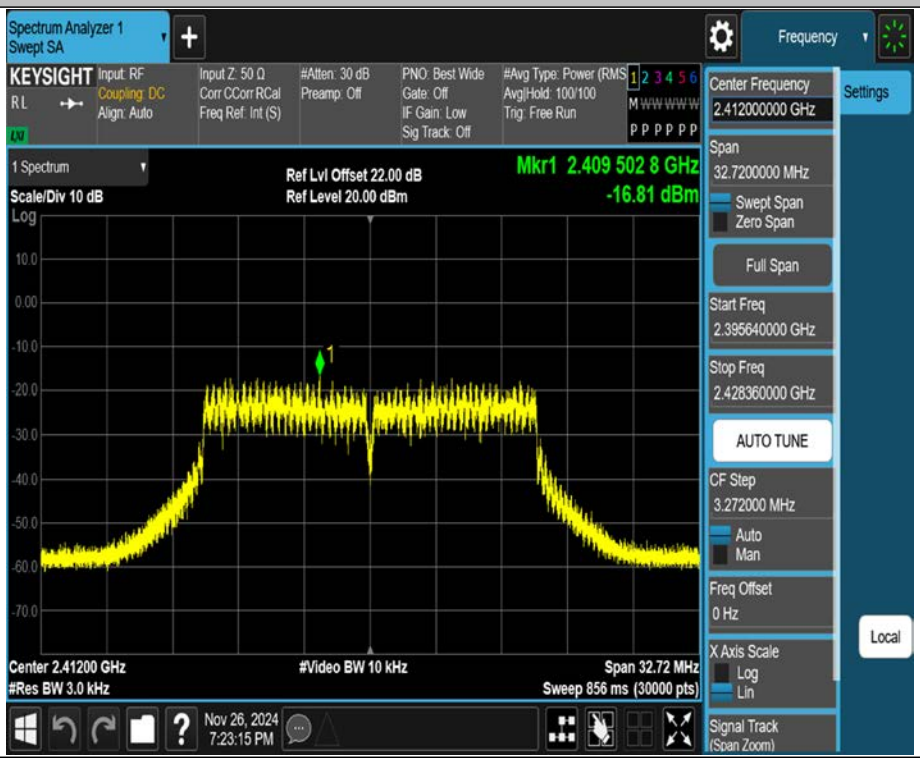
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-10.64	≤8.00	PASS
		2437	-11.05	≤8.00	PASS
		2462	-11.04	≤8.00	PASS
11G	Ant1	2412	-16.81	≤8.00	PASS
		2437	-17.16	≤8.00	PASS
		2462	-17.03	≤8.00	PASS
11N20SISO	Ant1	2412	-16.67	≤8.00	PASS
		2437	-16.74	≤8.00	PASS
		2462	-17.02	≤8.00	PASS
11N40SISO	Ant1	2422	-19.76	≤8.00	PASS
		2437	-19.58	≤8.00	PASS
		2452	-19.56	≤8.00	PASS

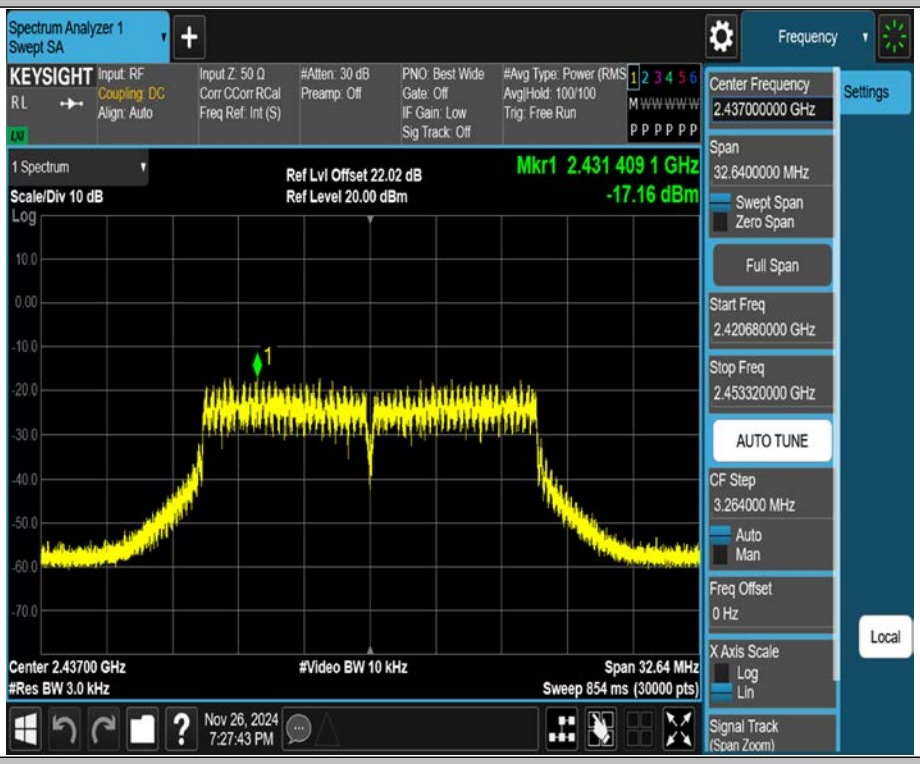
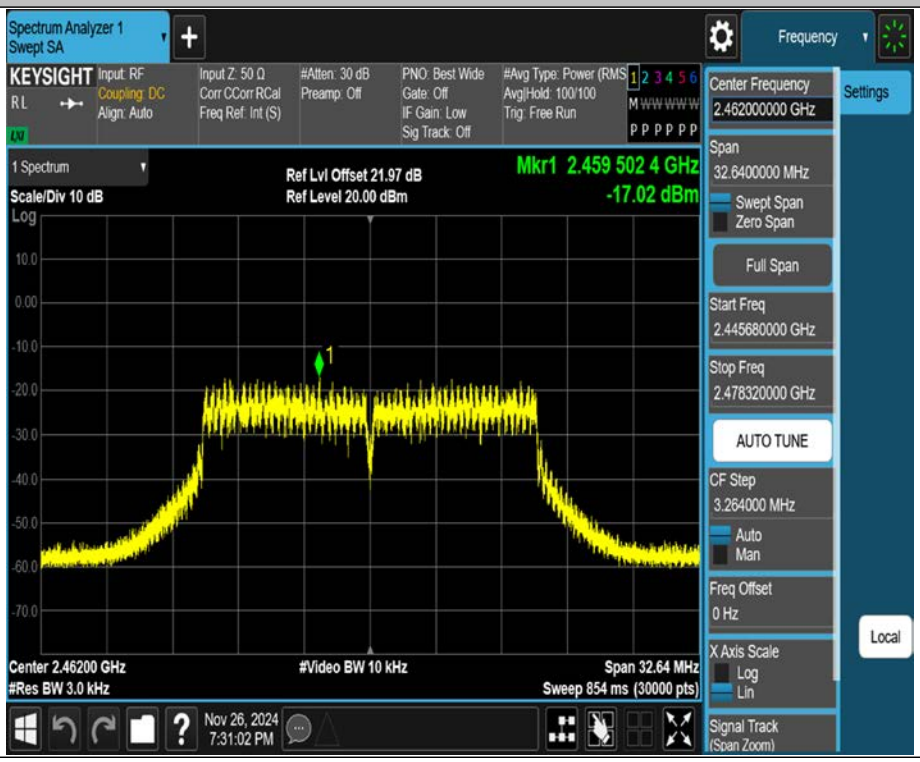
Test graph

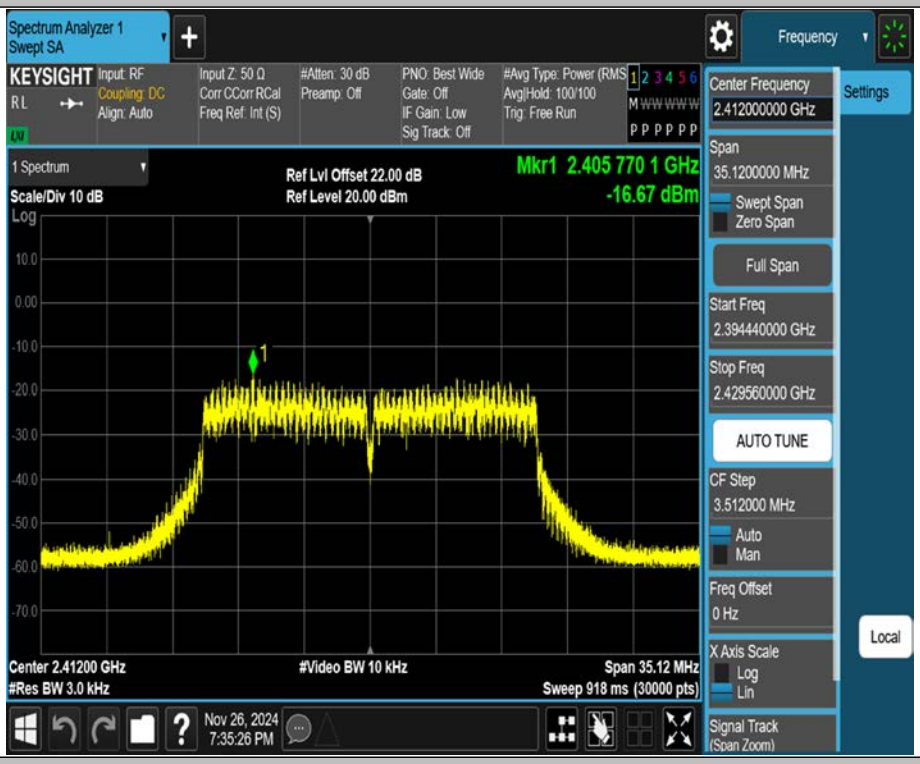
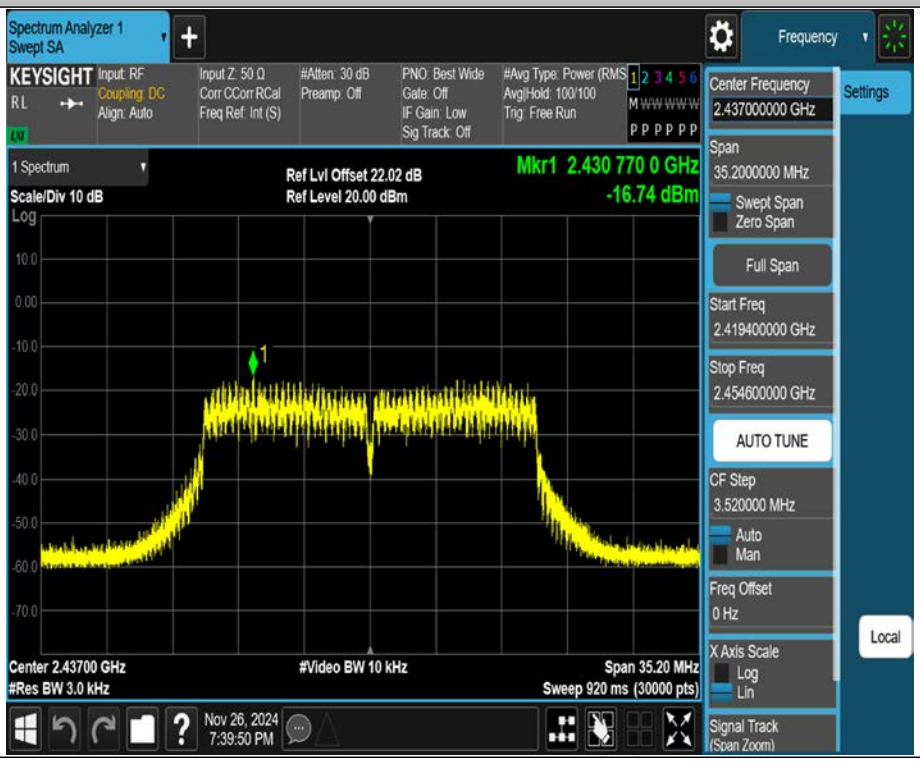
11B_Ant1_2412

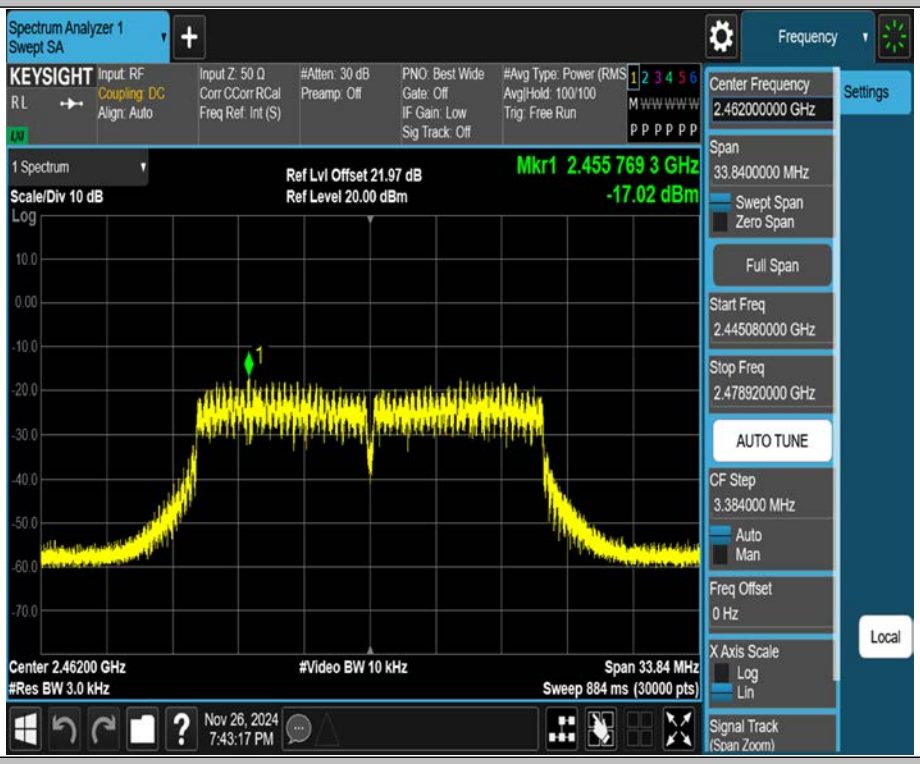
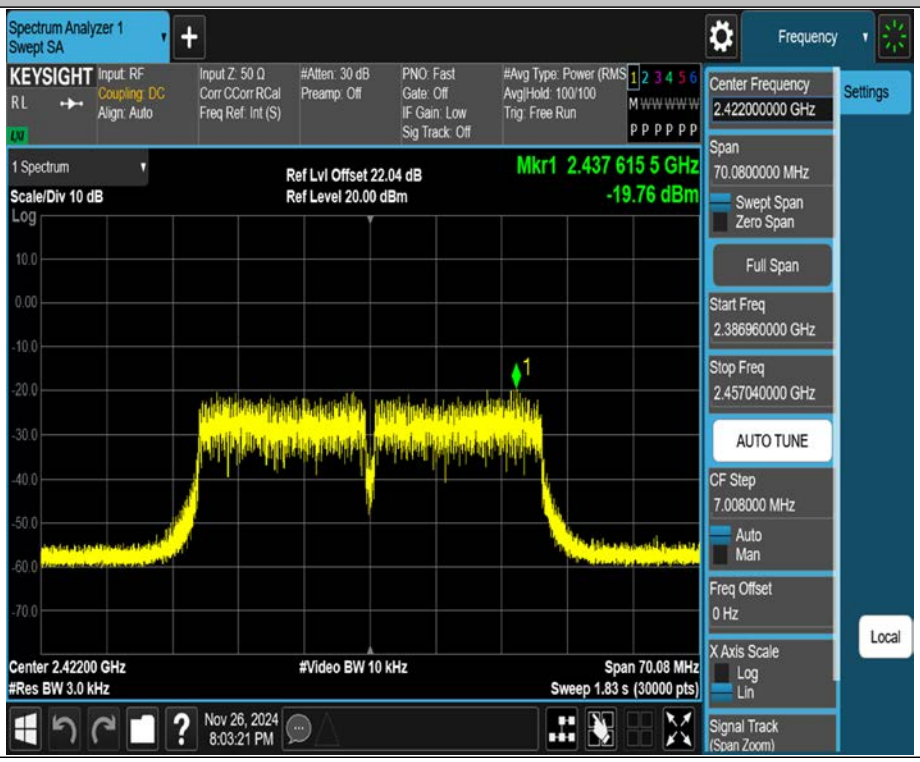
11B_Ant1_2437


11B_Ant1_2462

11G_Ant1_2412


11G_Ant1_2437

11G_Ant1_2462


11N20SISO_Ant1_2412

11N20SISO_Ant1_2437


11N20SISO_Ant1_2462

11N40SISO_Ant1_2422


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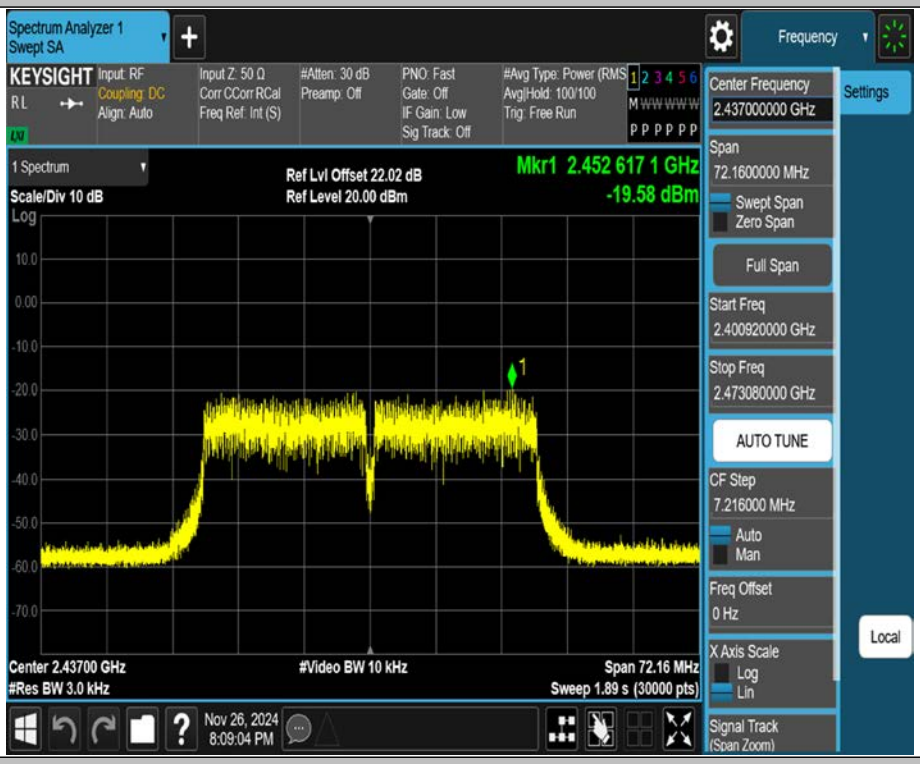
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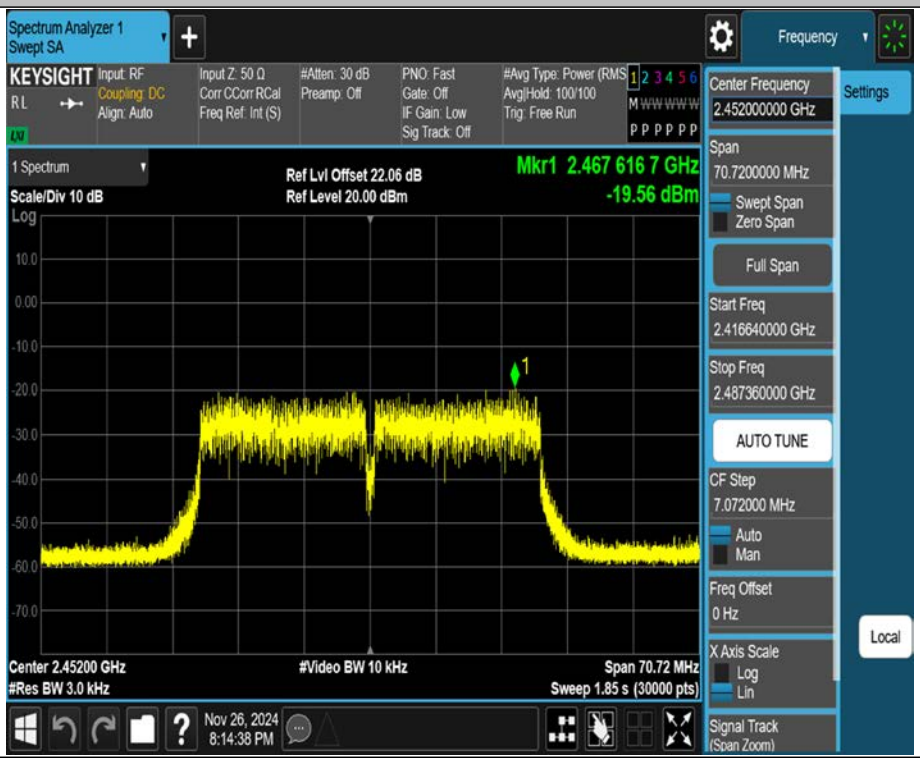

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology 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 Technology Co., Ltd.

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End of Test Report