

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



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



Occupied Channel Bandwidth

Test Mode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.984	2404.4848	2419.4688	---	---
		2437	15.014	2429.4647	2444.4787	---	---
		2462	15.002	2454.4479	2469.4499	---	---
11G	Ant1	2412	16.447	2403.7607	2420.2077	---	---
		2437	16.447	2428.7833	2445.2303	---	---
		2462	16.502	2453.7299	2470.2319	---	---
11N20SISO	Ant1	2412	17.661	2403.1577	2420.8187	---	---
		2437	17.619	2428.1538	2445.7728	---	---
		2462	17.619	2453.1352	2470.7542	---	---
11N40SISO	Ant1	2422	36.271	2403.8666	2440.1376	---	---
		2437	36.254	2418.8659	2455.1199	---	---
		2452	36.253	2433.9101	2470.1631	---	---
11AX20SISO	Ant1	2412	18.979	2402.4732	2421.4522	---	---
		2437	18.964	2427.4919	2446.4559	---	---
		2462	19.039	2452.4383	2471.4773	---	---
11AX40SISO	Ant1	2422	37.950	2403.0051	2440.9551	---	---
		2437	37.875	2418.0474	2455.9224	---	---
		2452	37.901	2433.0304	2470.9314	---	---

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11B_Ant1_2437



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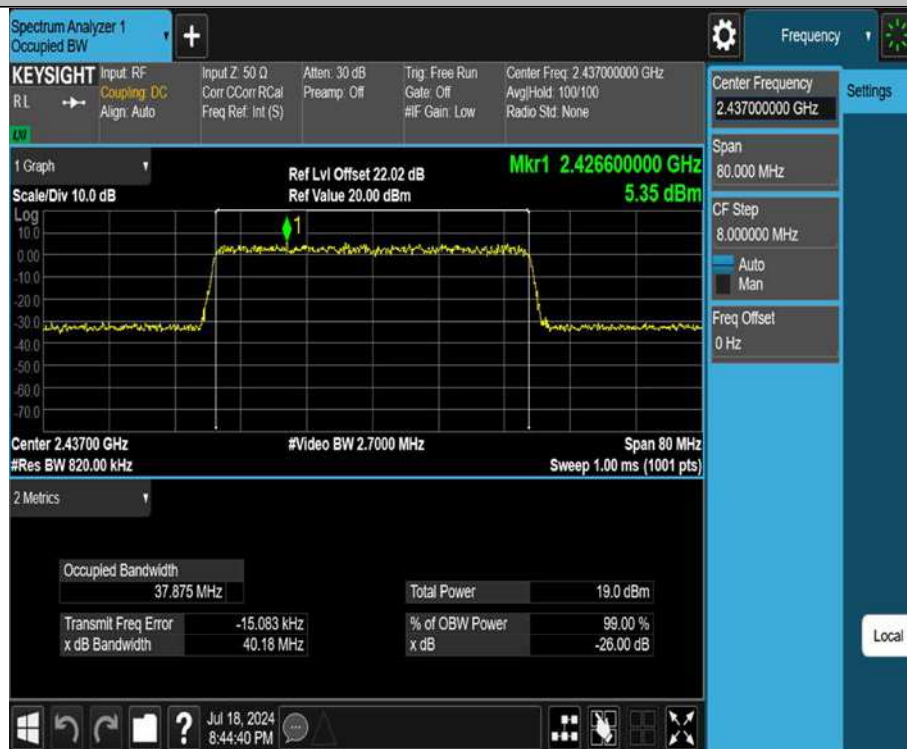
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3.5 Maximum conducted output power

3.5.1 Limit

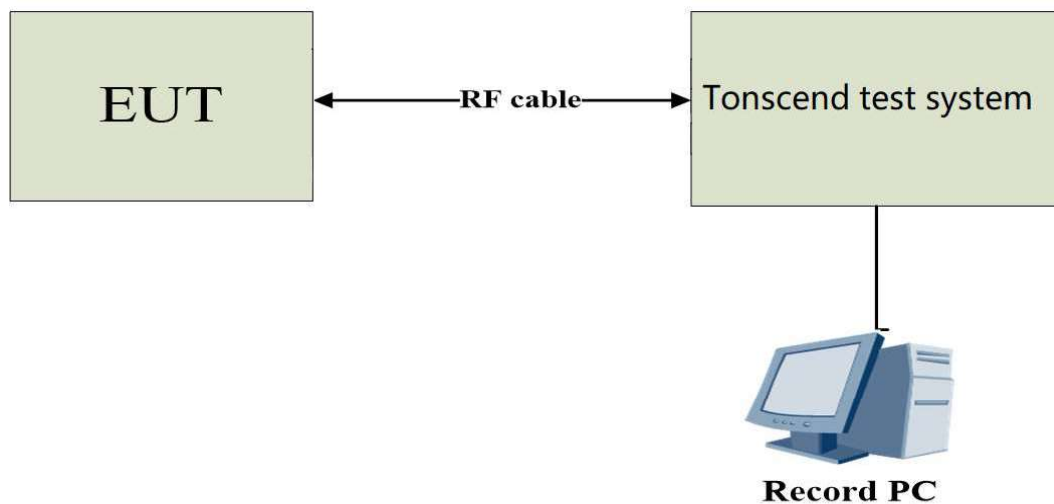
For systems using digital modulation in the 2400~2483.5MHz, The Maximum output Power shall not exceed 1W(30dBm)

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 tonscend test system and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.1.3 (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	DRTU		
Frequency (MHz)	2412	2442	2472
IEEE 802.11b	13	13	13
IEEE 802.11g	13	13	13
IEEE 802.11n (20MHz)	13	13	13
IEEE 802.11ax (20MHz)	13	13	13
Frequency (MHz)	2422	2442	2462
IEEE 802.11n (40MHz)	13	13	13
IEEE 802.11ax (40MHz)	13	13	13

3.5.5 The Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.88	≤30.00	PASS
		2437	14.87	≤30.00	PASS
		2462	14.45	≤30.00	PASS
11G	Ant1	2412	18.89	≤30.00	PASS
		2437	18.20	≤30.00	PASS
		2462	18.19	≤30.00	PASS
11N20SISO	Ant1	2412	18.79	≤30.00	PASS
		2437	18.21	≤30.00	PASS
		2462	17.96	≤30.00	PASS
11N40SISO	Ant1	2422	18.50	≤30.00	PASS
		2437	18.49	≤30.00	PASS
		2452	18.37	≤30.00	PASS
11AX20SISO	Ant1	2412	19.47	≤30.00	PASS
		2437	18.16	≤30.00	PASS
		2462	18.55	≤30.00	PASS
11AX40SISO	Ant1	2422	19.47	≤30.00	PASS
		2437	18.95	≤30.00	PASS
		2452	18.55	≤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

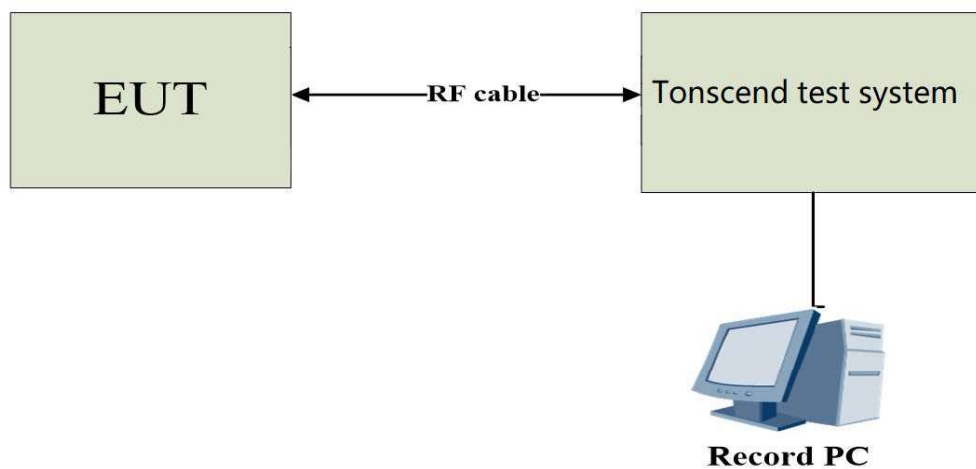
Test Method	
☒ Conducted Measurement	☐ Radiated Measurement
Test Channels	
☒ Lowest, Middle and Highest Channel	☐ Lowest and Highest Channel
Environmental conditions	
☒ Normal	☐ Normal and Extreme
Note: ☒ : Test ☐ : No Test	

a) The EUT was directly connected to the 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	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	-11.61	≤8.00	PASS
		2437	-11.88	≤8.00	PASS
		2462	-12.13	≤8.00	PASS
11G	Ant1	2412	-15.16	≤8.00	PASS
		2437	-15.72	≤8.00	PASS
		2462	-16.07	≤8.00	PASS
11N20SISO	Ant1	2412	-14.00	≤8.00	PASS
		2437	-14.75	≤8.00	PASS
		2462	-15.26	≤8.00	PASS
11N40SISO	Ant1	2422	-15.13	≤8.00	PASS
		2437	-15.86	≤8.00	PASS
		2452	-15.79	≤8.00	PASS
11AX20SISO	Ant1	2412	-13.95	≤8.00	PASS
		2437	-14.74	≤8.00	PASS
		2462	-14.98	≤8.00	PASS
11AX40SISO	Ant1	2422	-16.31	≤8.00	PASS
		2437	-16.77	≤8.00	PASS
		2452	-16.90	≤8.00	PASS

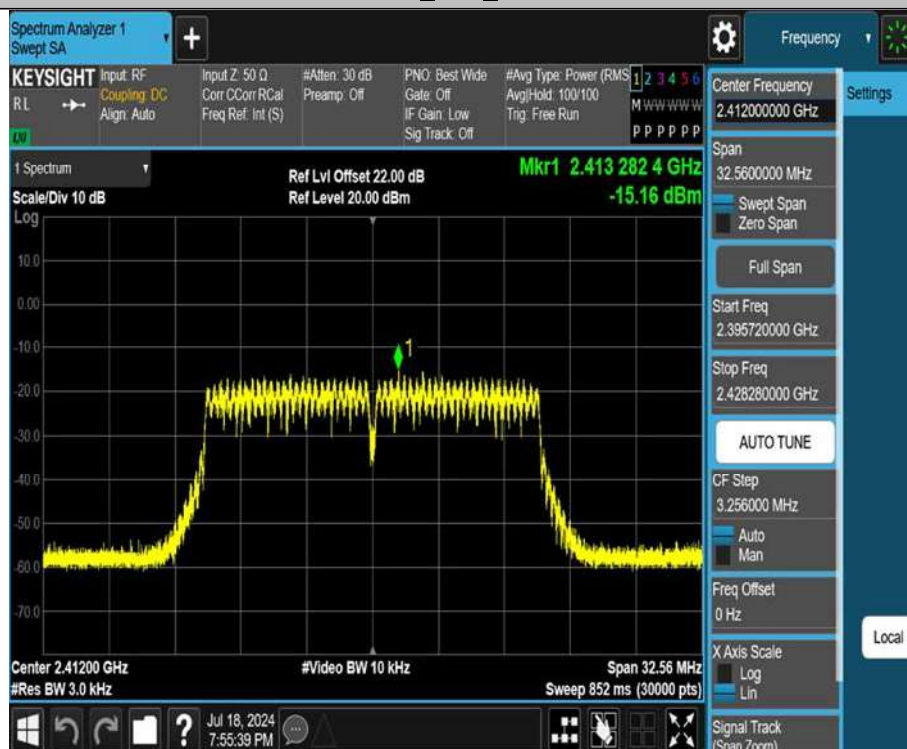
Test graph



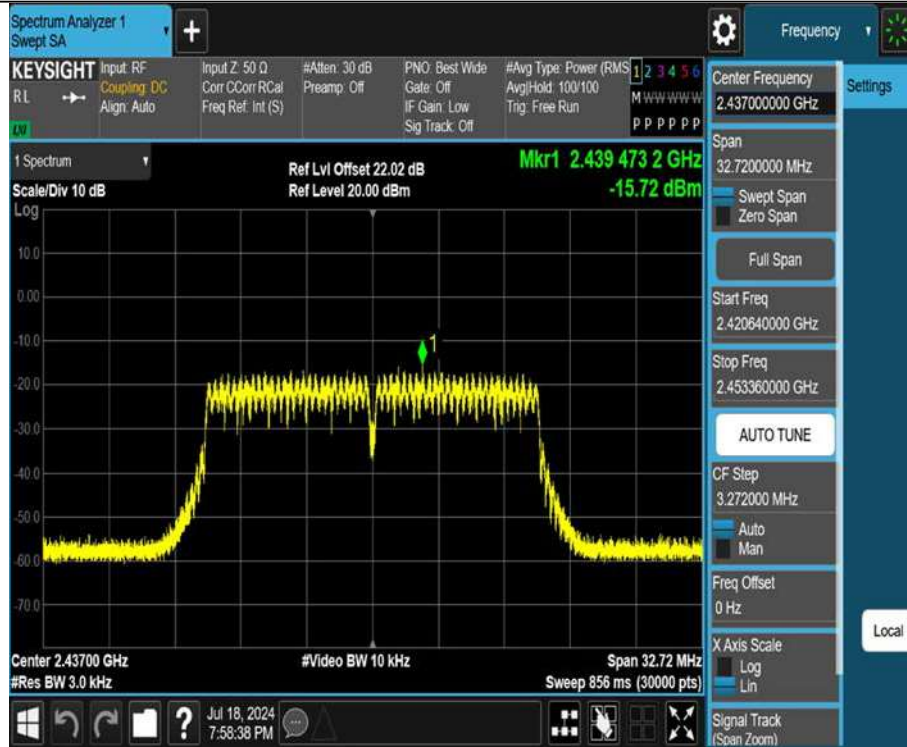
11B_Ant1_2462



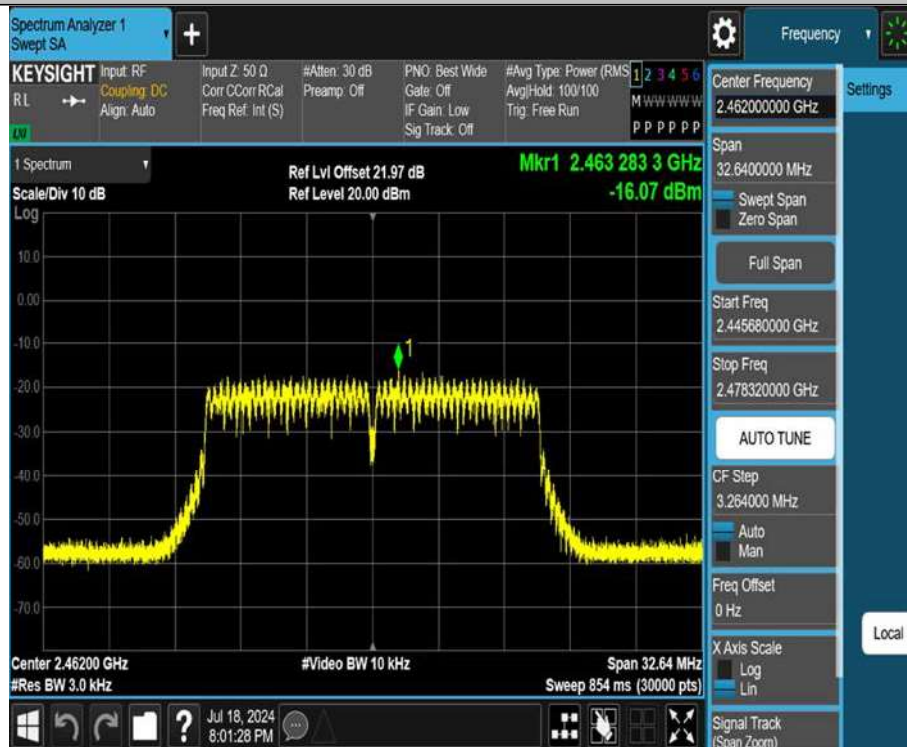
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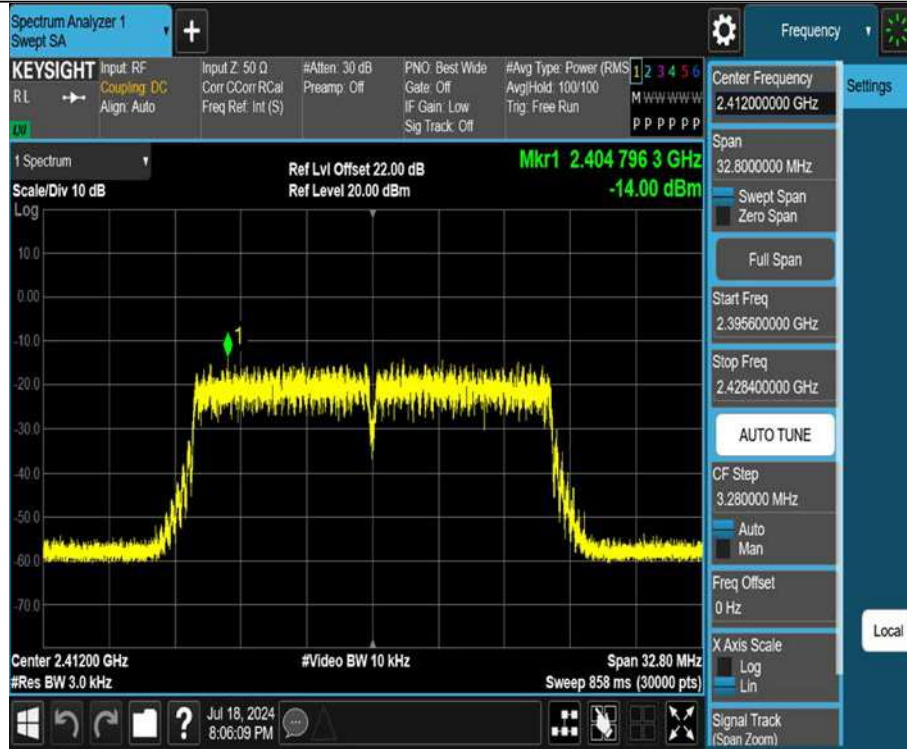
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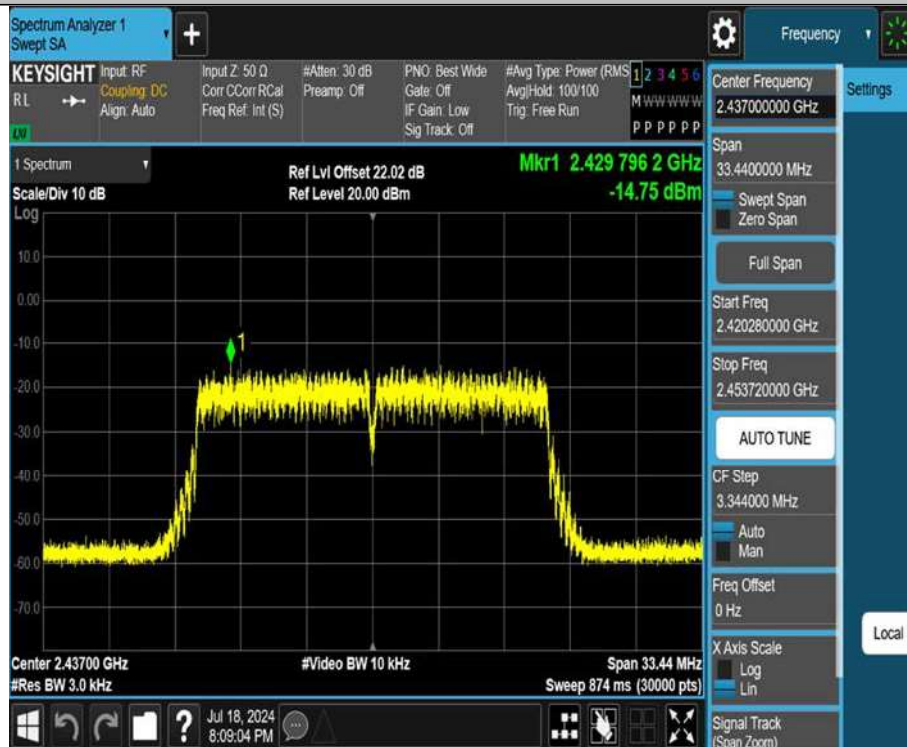
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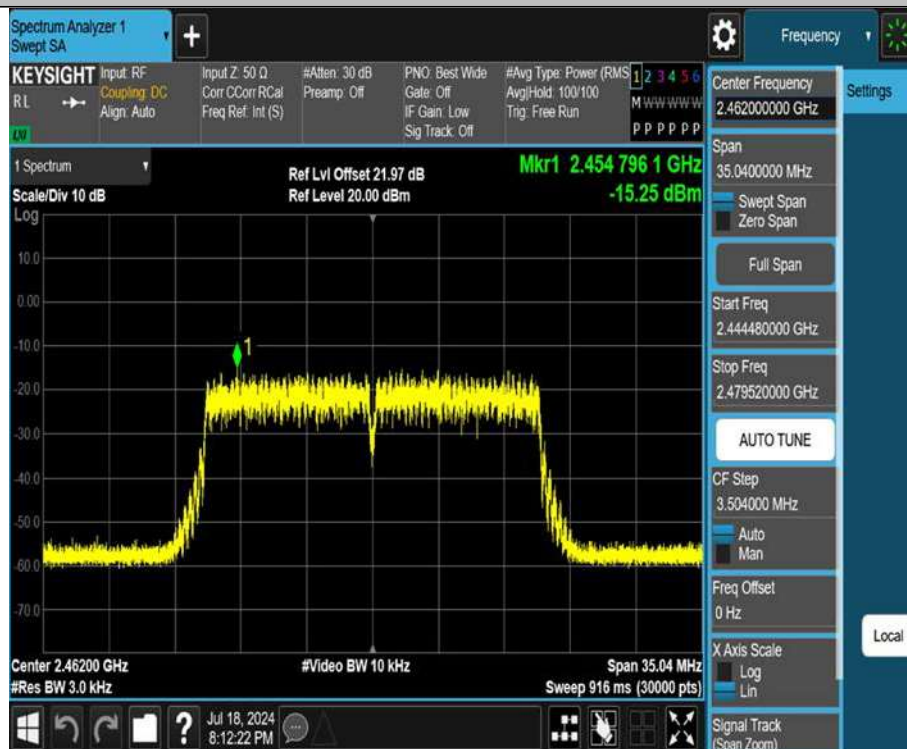
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11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



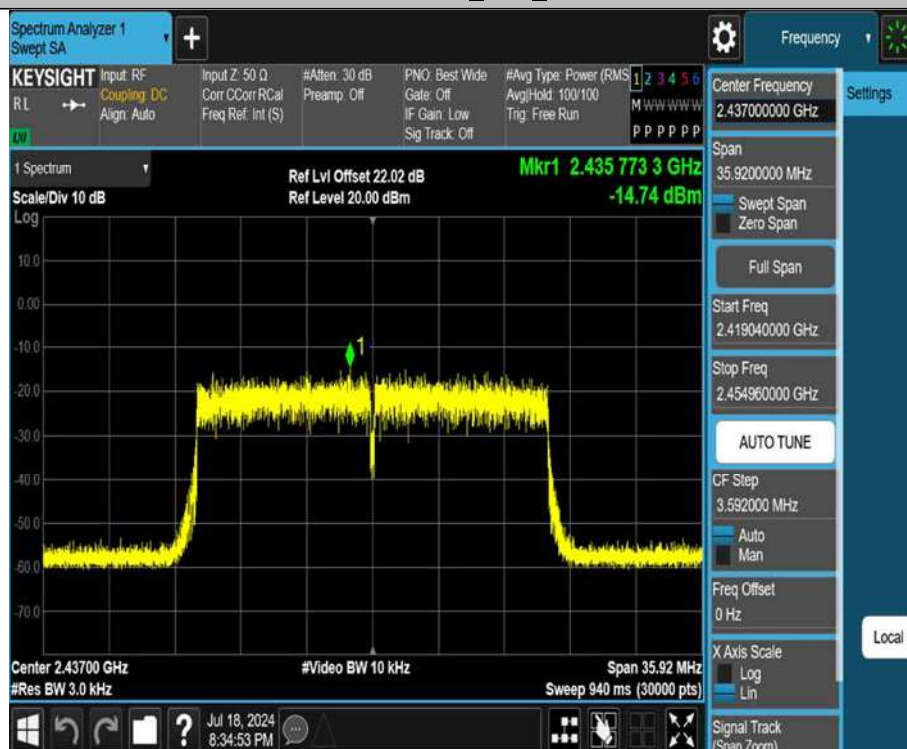
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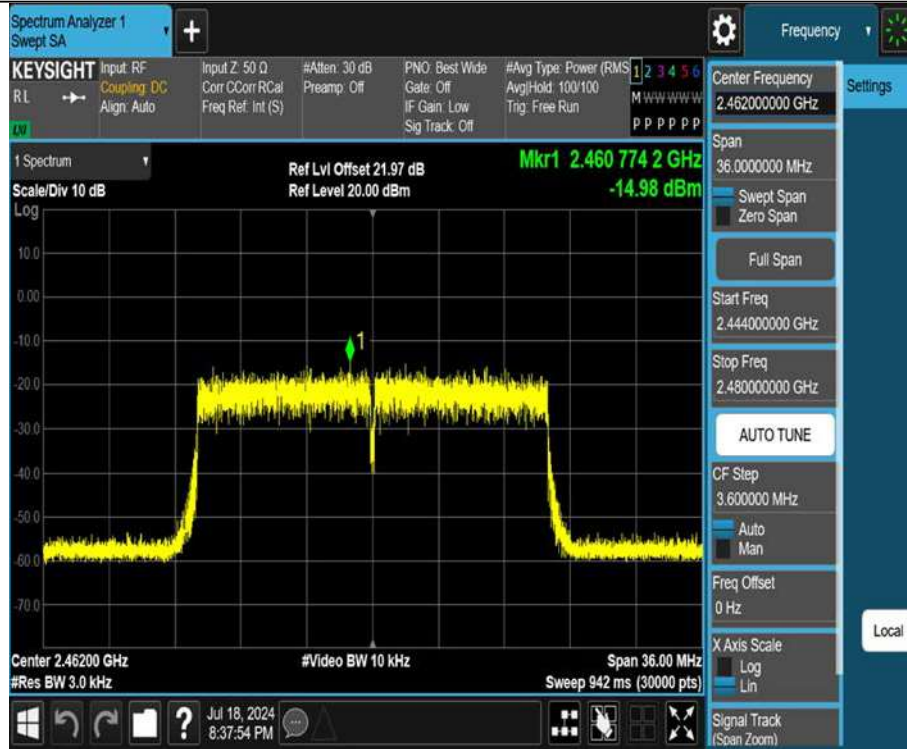
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11AX20SISO_Ant1_2462



11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



11AX40SISO_Ant1_2452



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