



FCC TEST REPORT

FCC ID: 2AFD2-VEGA

On Behalf of

DALI A/S

DALI VEGA

Model No.: DALI VEGA

Prepared for : DALI A/S
Address : Dali Allé 1, DK-9610 Nørager, Denmark

Prepared By : Shenzhen PSI Testing Co., Ltd.
Address : 1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road,
Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

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Date of Receipt : June 10, 2025
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TEST REPORT DECLARATION

Applicant : DALI A/S
Address : Dali Allé 1, DK-9610 Nørager, Denmark
Manufacturer : DALI A/S
Address : Dali Allé 1, DK-9610 Nørager, Denmark
EUT Description : DALI VEGA
(A) Model No. : DALI VEGA
(B) Trademark : 

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247

ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC Part 15C requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:

Felix Pang
Test Engineer


.....

Approved by (name + signature).....:

Simple Guan
Project Manager


.....

Date of issue.....:

November 28, 2025

Revision History

Revision	Issue Date	Revisions	Revised By
V0	November 28, 2025	Initial released Issue	Felix Pang

1. Summary Of Standards And Results

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Test Item	Standards Paragraph	Result
Conducted Emission	FCC Part 15: 15.207ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
6dB Bandwidth	FCC PART 15:15.247(a)(2), ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
Output Power	FCC Part 15: 15.247(b)(3), ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
Radiated Spurious Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d), ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
Conducted Spurious & Band Edge Emission	FCC Part 15: 15.247(d), ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
Power Spectral Density	FCC PART 15:15.247(e), ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
Radiated Band Edge Emission	FCC Part 15: 15.247(d), ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024	P
Antenna Requirement	FCC Part 15: 15.203	P
Note: 1. P is an abbreviation for Pass. 2. F is an abbreviation for Fail. 3. N/A is an abbreviation for Not Applicable. 4. Conclusion determination rules of this report: Unless there are clear provisions on measurement uncertainty in the standard or customer requirements, decision by actual test data without considering measurement uncertainty. 5. Measurement method usage KDB 558074 D01 15.247 Meas Guidance v05r02.		

2. General Information

2.1. Description of Device (EUT)

Product Name : DALI VEGA
 Model : DALI VEGA
 Diff : N/A
 Test Voltage : AC 120V/60Hz

Radio technology : 2.4G WiFi

Operation frequency : 2412MHz-2462MHz for IEEE 802.11 b, g, n/HT20
 2422MHz-2452MHz for IEEE 802.11n/HT40

Channel No. : 802.11b/802.11g/802.11n(HT20): 11CH
 802.11n(HT40): 7CH

Modulation type : IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)
 IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)
 IEEE 802.11n: OFDM(64QAM, 16QAM, QPSK, BPSK)

Antenna Type : Internal PCB antenna, maximum gain is 2dBi.

Software version : 4.5

Hardware version : PP

Note : Antenna information is provided by applicant.
 : Testing lab is not responsible for the accuracy of the information.

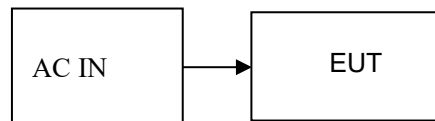
2.2. Accessories of Device (EUT)

Accessories 1 : /
Manufacturer : /
Model : /
Rating : /

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number
1	PC	DELL	3511	N/A
2	USB TO TTL	N/A	N/A	N/A

2.4. Block Diagram of Connection Between EUT and Simulators



2.5. Test Mode Description

Keeping TX

Mode	Data rate (Mbps)	Channel	Frequency(MHz)
IEEE 802.11 b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11 g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11 n/HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11 n/HT40	13.5	Low :CH1	2422
	13.5	Middle:CH4	2437
	13.5	High:CH7	2452

Note: According exploratory test, EUT will have maximum output power in those data rate. So those data rate were used for all test.

Channel list:

For IEEE 802.11b, g, n/HT20

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437	CH10	2457
CH3	2422	CH7	2442	CH11	2462
CH4	2427	CH8	2447		

For IEEE 802.11 n/HT40

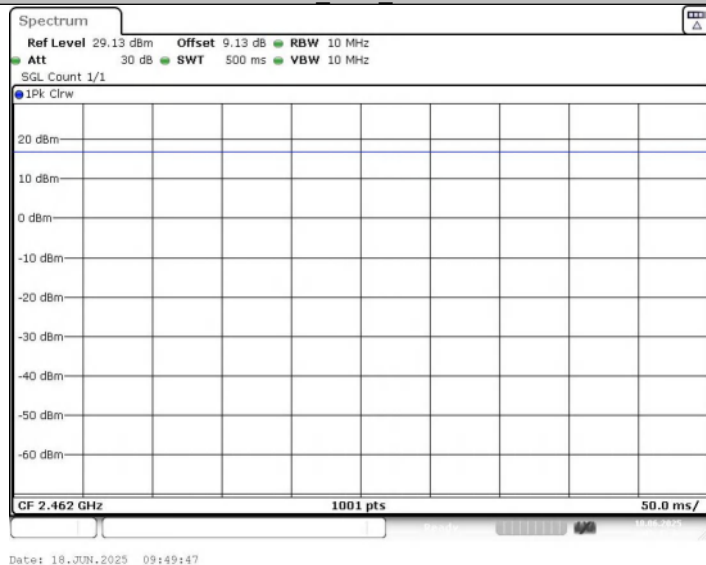
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2422	CH5	2442		
CH2	2427	CH6	2447		
CH3	2432	CH7	2452		
CH4	2437				

Note: duty cycle see below:

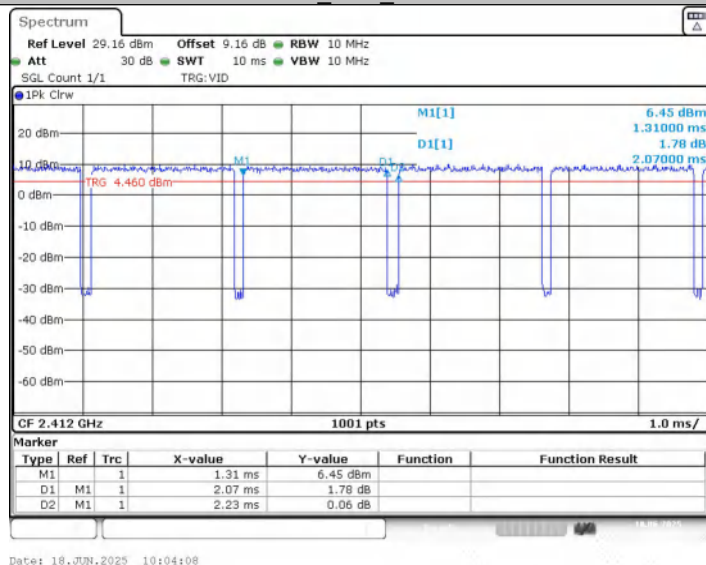
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant1	2412	50.00	50.00	100
		2437	50.00	50.00	100
		2462	50.00	50.00	100
11G	Ant1	2412	2.07	2.23	92.83
		2437	2.06	2.22	92.79
		2462	2.06	2.17	94.93
11N20SISO	Ant1	2412	0.23	0.40	57.50
		2437	0.23	0.41	56.10
		2462	0.23	0.41	56.10
11N40SISO	Ant1	2422	1.30	1.34	97.01
		2437	0.12	0.30	40.00
		2452	0.12	0.30	40.00

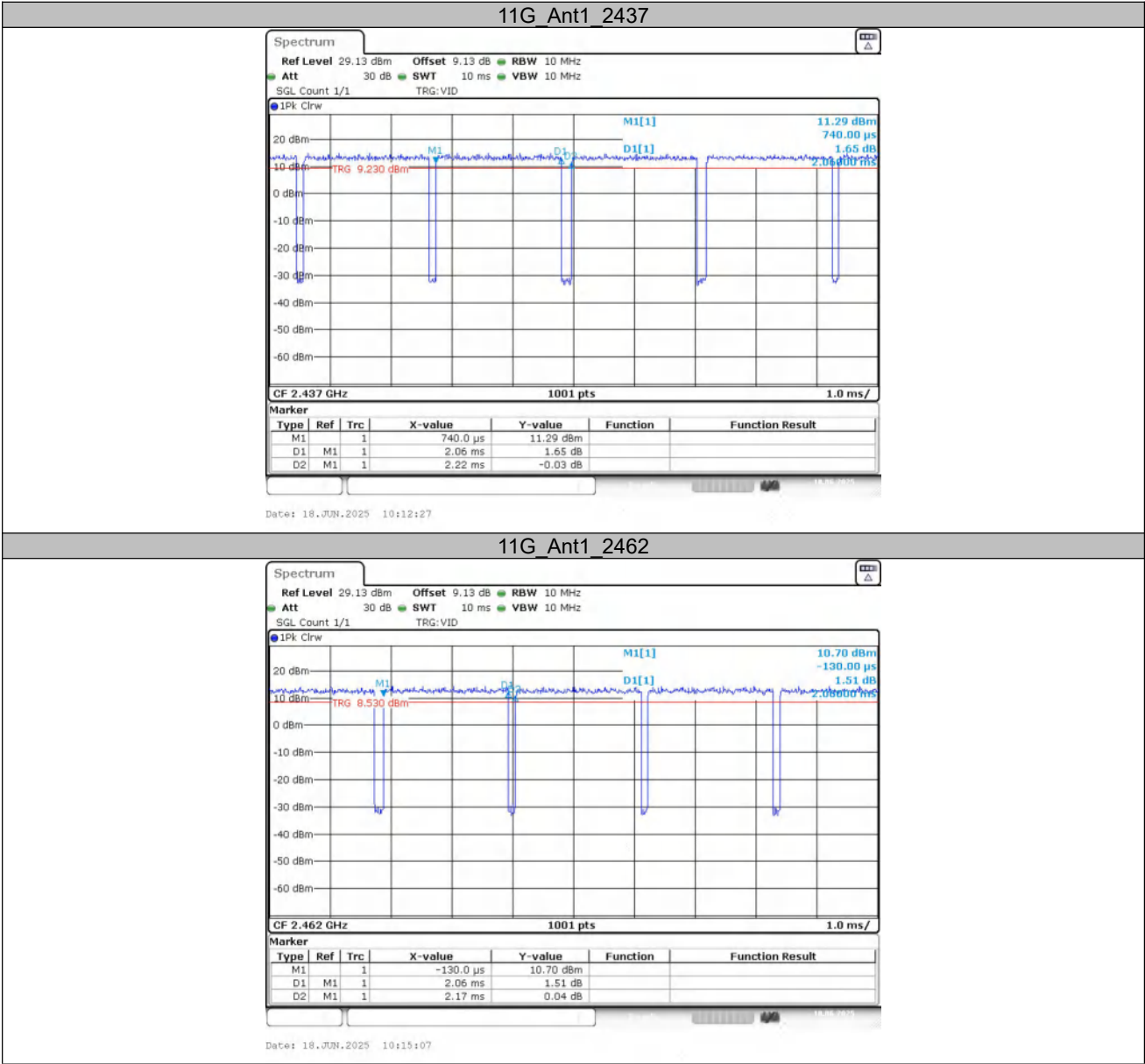


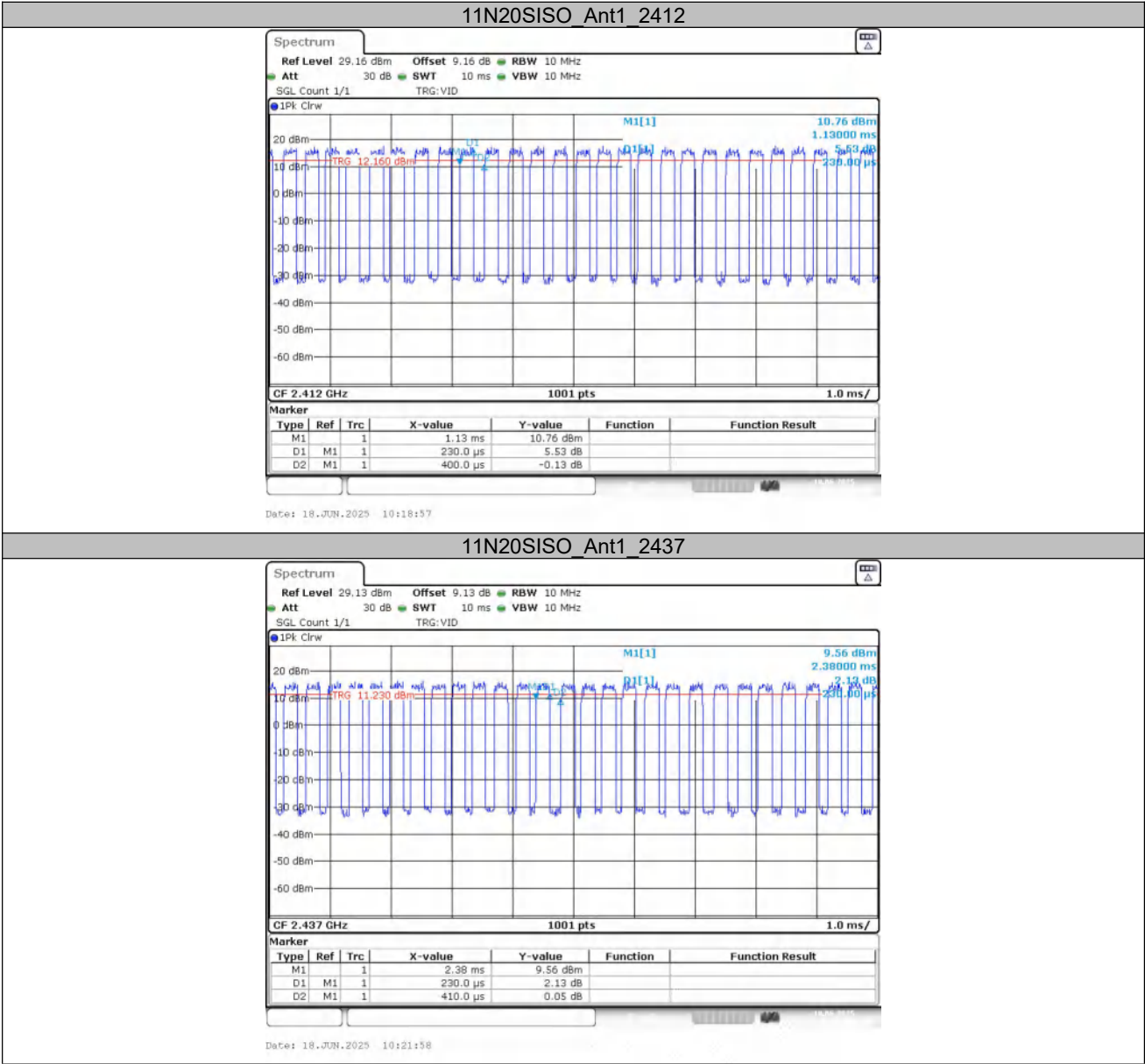
11B_Ant1_2462

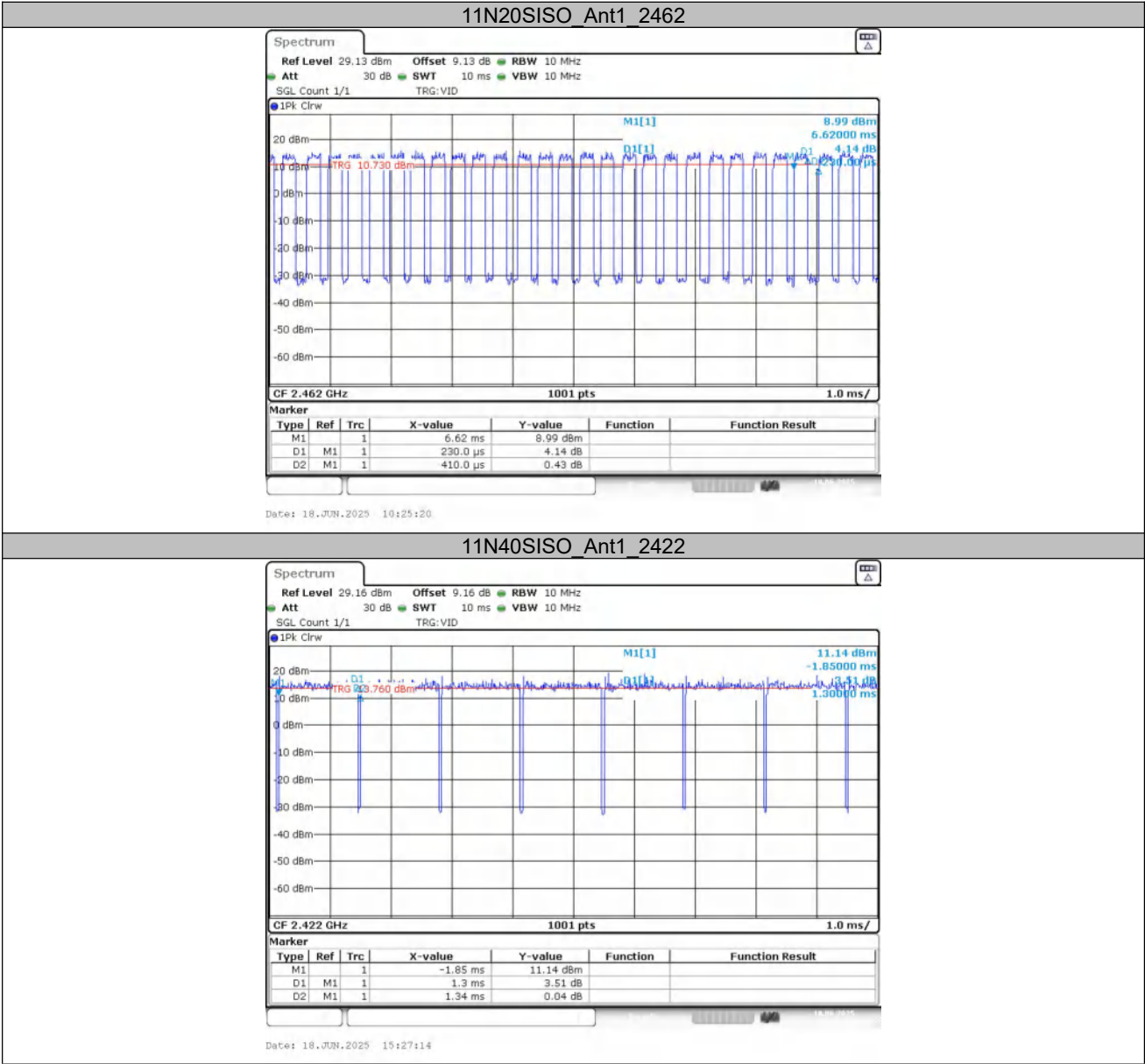


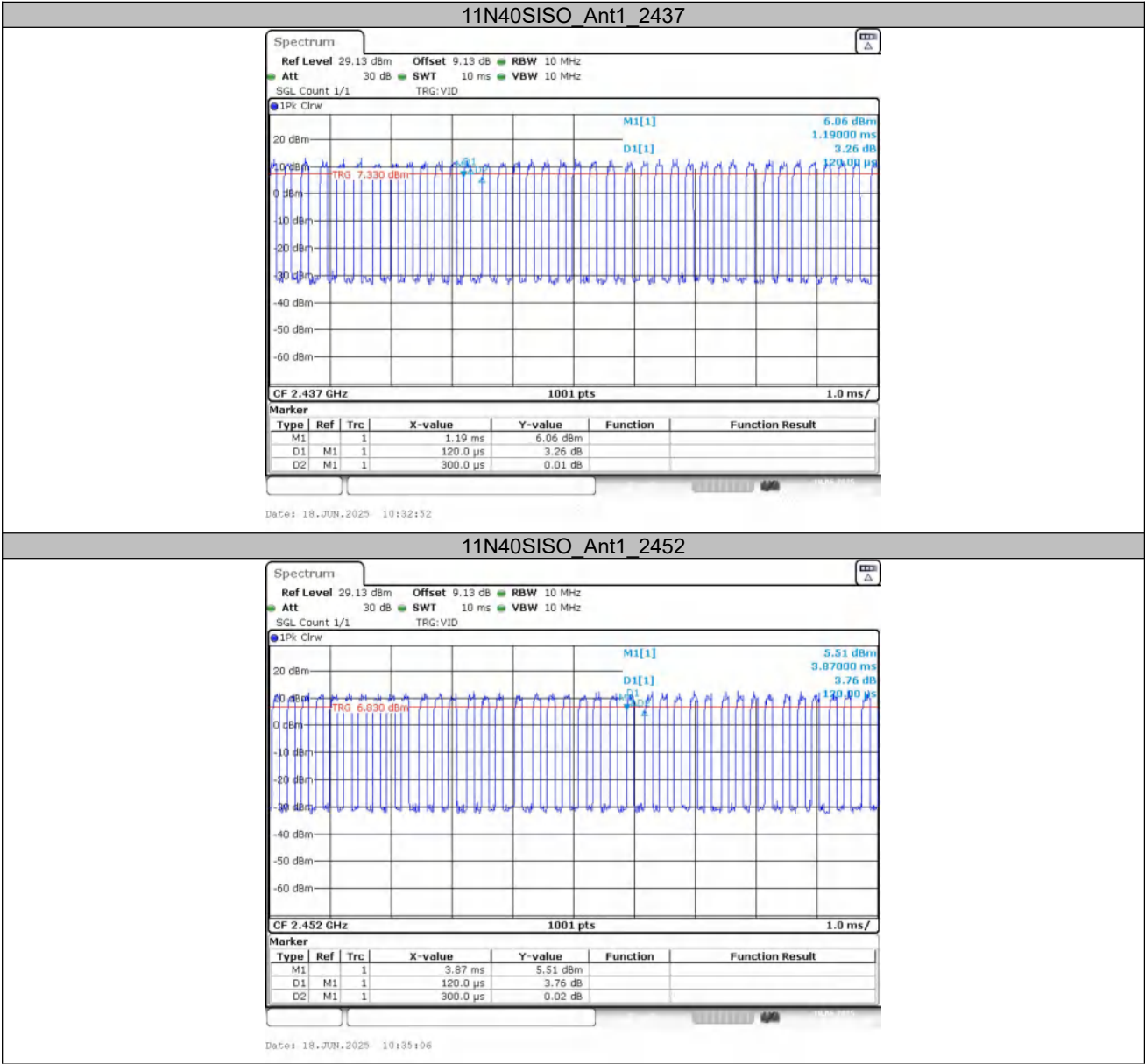
11G_Ant1_2412











2.6. Software test version and power setting information

Software testing version	wlan.ko con mode=5		
Mode	The client 's preset testing software is used to control the operation of EUT in continuous transmission mode and select the testing channel, wireless mode:		
Power level setup by client			
Mode	Channel	Frequency (MHz)	Soft Set
IEEE 802.11b/g/n20	Low :CH1	2412	TX level is set as defaults value.
	Middle: CH6	2437	TX level is set as defaults value.
	High: CH11	2462	TX level is set as defaults value.
IEEE 802.11n40	Low :CH1	2422	TX level is set as defaults value.
	Middle:CH4	2437	TX level is set as defaults value.
	High:CH7	2452	TX level is set as defaults value.

2.7. Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	26℃
Humidity range:	25-75%	54%
Pressure range:	86-106kPa	101kPa

2.8. Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission

Registration Number: 916281

2.9. Measurement Uncertainty

(95% confidence levels, k=2)

Item	Uncertainty
Power Line Conducted Emissions Test	2.13dB
Radiation Emission test in 3m chamber(Below 30MHz)	4.07dB
Radiation Emission test in 3m chamber(30MHz to 1GHz)	4.51dB
Radiation Emission test in 3m chamber(1GHz to 18GHz)	5.07dB
Radiation Emission test in 3m chamber(18GHz to 40GHz)	5.21dB
Radio Frequency	48.24KHz
Conducted RF Power	0.41dB
Power Spectral Density	0.39 dB
Occupied-Bandwidth	968Hz
Duty Cycle	1%
Conducted-Spurious Emission	1.26dB

2.10. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2022.12.20	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2024.12.18	1 Year
3.	L.I.S.N.#1	Rohde&Schwarz	ENV216	102282	/	2024.12.18	1 Year
4.	L.I.S.N.#2	RFT	NNB111	13835240	/	2024.12.18	1 Year
5.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2025.01.02	2 Year
6.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2025.01.02	2 Year
7.	Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101648	3.70	2024.12.18	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2025.01.02	2 Year
9.	Amplifier	SKET	LAPA_01G1 8G-45dB	SK20220329 01	/	2024.12.18	1 Year
10.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2024.12.31	2 Year
11.	Amplifier	SKET	LNPA_0118 G-45	SK20200108 01	/	2024.12.18	1 Year
12.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.0 2-1111533-F Z	/	2024.12.18	1 Year
13.	RF Sensor Unit	Tachoy	TR1029-2	20220428P0 08	/	2024.12.18	1 Year
14.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2024.12.18	1 Year
15.	Temp. & Humid Chamber	Auchno	9606	/	/	2024.12.18	1 Year
16.	Regulated DC Power Supply	Xinouhua	ADC120V10 A	2022112516 38	/	2024.12.18	1 Year
17.	Cable	SKET	Cable-RE-1	#02/#03	/	2024.12.18	1 Year
18.	Cable	SKET	Cable-RE-2	#01	/	2024.12.18	1 Year
19.	Cable	SKET	Cable-RE-3	#04	/	2024.12.18	1 Year
20.	Cable	SKET	Cable-CE-1	A-E-24	/	2024.12.18	1 Year
21.	6dB Attenuator	Schwarzbeck	DGA 9552N 6dB	CK4186	/	2024.12.18	1 Year
22.	Power meter	Agilent	E4419B	GB40202121	/	2024.12.18	1 Year
23.	Comprehensive Test Instrument	Rohde&Schwarz	CMW 500	145266	/	2024.12.18	1 Year
For Test Software Information							
Item	Software Name	Manufacturer		Version			
RE	EZ EMC	Farad		PSI-3A1			
CE	EZ EMC	Farad		PSI-3A1			
RF	RTS	TACHOY		V1.0.0			

3. Spurious Emission

3.1. Test Limits

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100 **	3
88-216	150 **	3
216-960	200 **	3
Above 960	500	3

Note: The peak limit is 20 dB higher than the average limit

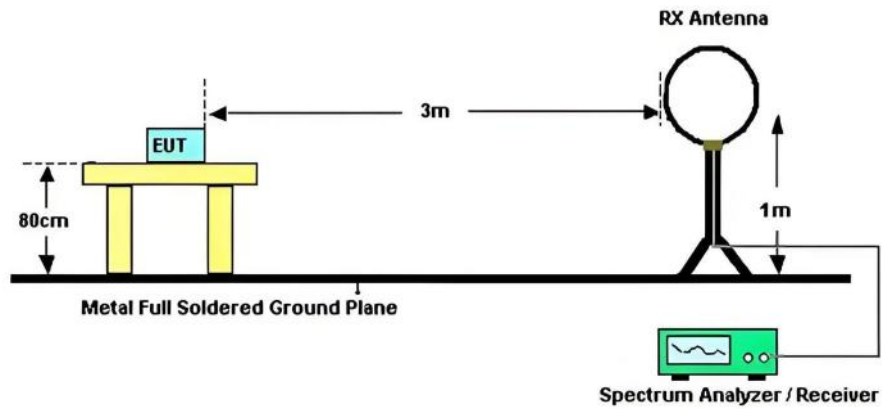
All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

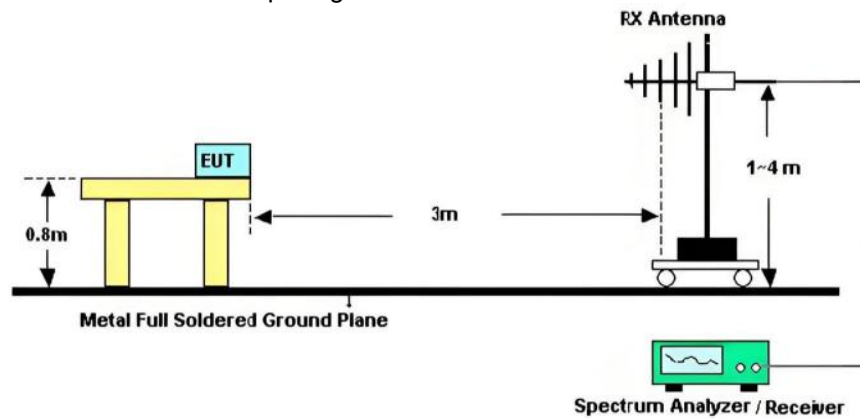
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

3.2. Block Diagram of Test setup

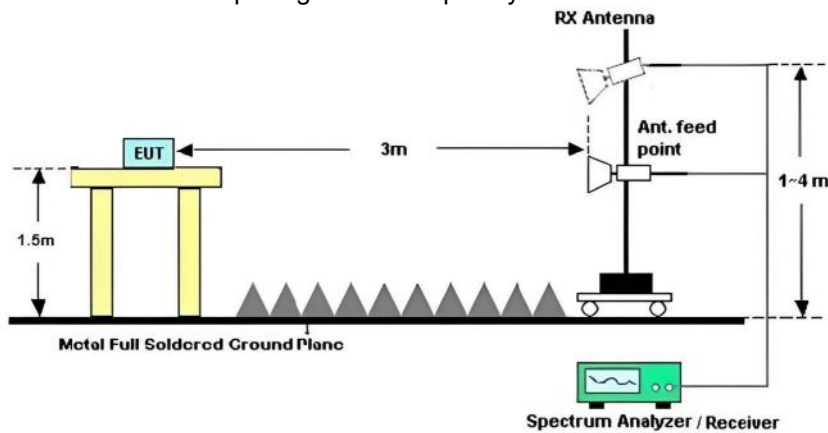
a. In 3m Anechoic Chamber Test Setup Diagram for below 30MHz



b. In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



c. In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



3.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and simulator
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
 - (a) Change work frequency or channel of device if practicable.
 - (b) Change modulation type of device if practicable.
 - (c) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024 on Radiated Emission test.
- (6) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW > [1 / (minimum transmitter on time)] and no less than 1Hz, RMS detector for AV value.

Test setup information:

9KHz~150KHz	RBW200Hz	VBW1KHz
150KHz~30MHz	RBW9KHz	VBW 30KHz
30MHz~1GHz	RBW120KHz	VBW 300KHz
Above1GHz	RBW1MHz	VBW 3MHz

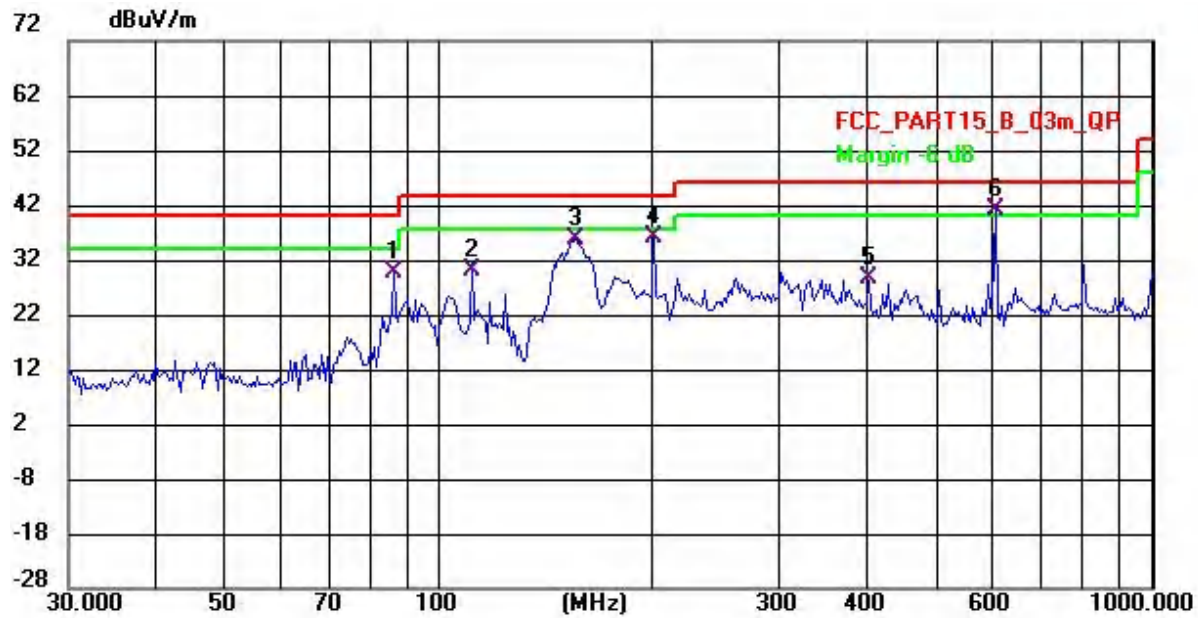
3.4. Test Results

We have scanned from 9kHz to the 10th harmonic of the EUT's highest frequency.
Detailed information please see the following page.

From 9KHz to 30MHz:	
Test Date : 2025.06.20	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : IEEE 802.11b mode	
Test Results : PASS	
Note:	The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

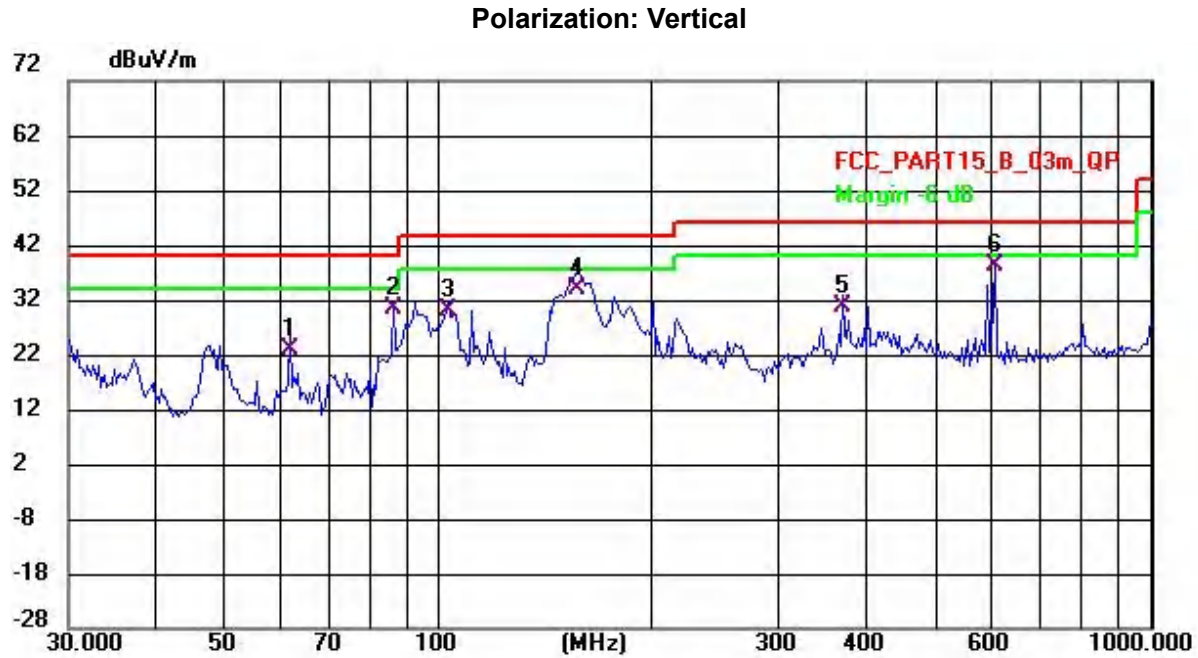
From 30MHz to 1000MHz:	
Test Date : 2025.06.20	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : IEEE 802.11b mode	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. All modes have been tested, and only worst data of IEEE 802.11b mode, Channel 2412MHz was listed in this report.

Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	86.0795	55.42	-25.80	29.62	40.00	-10.38	QP
2	110.8580	53.90	-23.76	30.14	43.50	-13.36	QP
3	155.3305	56.37	-20.76	35.61	43.50	-7.89	QP
4	200.0431	60.68	-24.67	36.01	43.50	-7.49	QP
5	401.1050	47.88	-19.19	28.69	46.00	-17.31	QP
6 *	602.9287	54.76	-13.71	41.05	46.00	-4.95	QP

Level = Reading + Factor, Margin = Level - Limit



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	61.4343	45.77	-22.76	23.01	40.00	-16.99	QP
2	86.0794	56.05	-25.80	30.25	40.00	-9.75	QP
3	102.6115	54.57	-24.56	30.01	43.50	-13.49	QP
4	156.4258	54.76	-20.75	34.01	43.50	-9.49	QP
5	368.6681	51.00	-20.11	30.89	46.00	-15.11	QP
6 *	602.9287	52.02	-13.71	38.31	46.00	-7.69	QP

Level = Reading + Factor, Margin = Level - Limit

From 1GHz to 25GHz:	
Test Date : 2025.06.20	Temperature : 26℃
Test Engineer : Felix Pang	Humidity : 54%
Test Mode : WiFi mode	
Test Results : PASS	
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out. 4. During the test, pre-scan 802.11b, 802.11g, 802.11n20, 802.11n40 mode, found 802.11b was worse case mode. The report only reflects the test data of worst mode

802.11b Channel 1 / 2412 MHz									
Frequency	Ant.Pol. H/V	Peak reading (dBuV)	AV reading (dBuV)	Correction Factor	Emission Level		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)
					Peak (dBuV/m)	AV (dBuV/m)			
4824	H	54.26	51.3	-1.89	52.37	49.41	74	54	-21.63
7236	H	44.19	---	7.9	52.09	---	74	54	-21.91
---	H	---	---	---	---	---	---	---	---
4824	V	55.82	---	-1.89	53.93	---	74	54	-20.07
7236	V	43.35	---	7.9	51.25	---	74	54	-22.75
---	V	---	---	---	---	---	---	---	---

802.11b Channel 6 / 2437 MHz									
Frequency	Ant.Pol. H/V	Peak reading (dBuV)	AV reading (dBuV)	Correction Factor	Emission Level		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)
					Peak (dBuV/m)	AV (dBuV/m)			
4874	H	55.66	52.31	-1.57	54.09	50.74	74	54	-19.91
7311	H	41.53	---	8.2	49.73	---	74	54	-24.27
---	H	---	---	---	---	---	---	---	---
4874	V	54.46	---	-1.57	52.89	---	74	54	-21.11
7311	V	43.46	---	8.2	51.66	---	74	54	-22.34
---	V	---	---	---	---	---	---	---	---

802.11b Channel 11 / 2462 MHz									
Frequency	Ant.Pol. H/V	Peak reading (dBuV)	AV reading (dBuV)	Correction Factor	Emission Level		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)
					Peak (dBuV/m)	AV (dBuV/m)			
4924	H	53.57	52	-1.28	52.29	50.72	74	54	-21.71
7386	H	41.03	---	9.3	50.33	---	74	54	-23.67
---	H	---	---	---	---	---	---	---	---
4924	V	54.34	---	-1.28	53.06	---	74	54	-20.94
7386	V	43.59	---	9.3	52.89	---	74	54	-21.11
---	V	---	---	---	---	---	---	---	---

1. Means other frequency and mode comply with standard requirements and at least have 20dB margin.

2. Correct Factor=Cable Loss+ Antenna Factor-Amplifier Gain.

3. Emission Level=Reading + Correct Factor, Margin= Emission Level-Limit.

4. Power Line Conducted Emission

4.1. Test Limits

Frequency (MHz)	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 -0.50	66 -56*	56 - 46*
0.50 -5.00	56	46
5.00 -30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

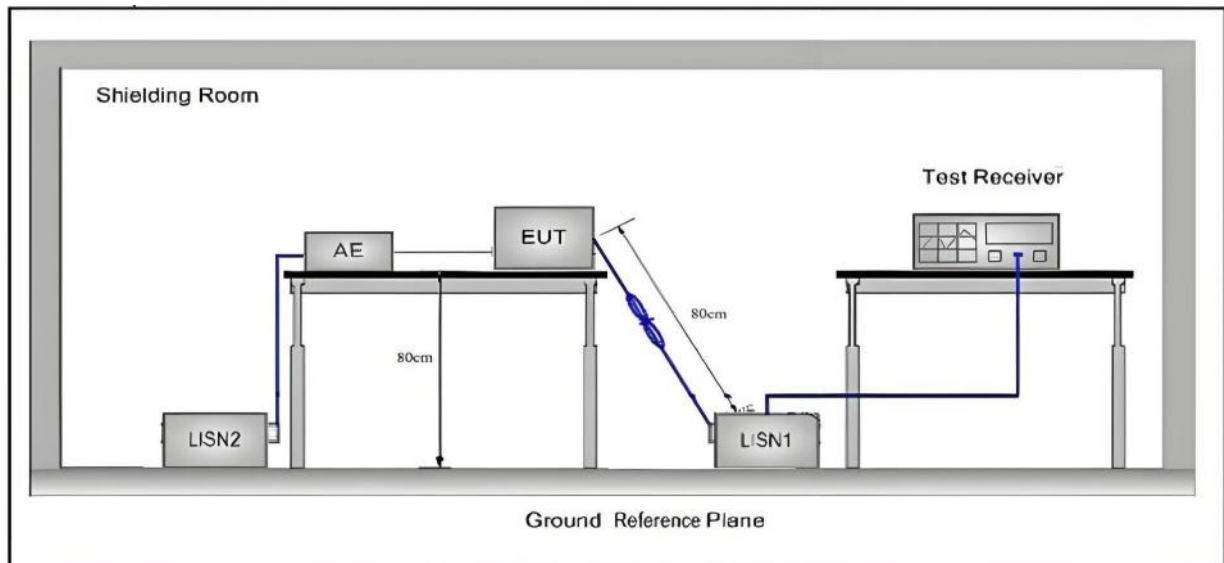
4.2. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSIC63.10-2020+Cor.

1-2023+C63.10a-2024 +Errata to C63.10a-2024 on Conducted Emission Measurement.

The bandwidth of test receiver is set at 9 kHz.

4.3. Test Setup



4.4. Test Results

Test Date	: 2025.06.13	Temperature	: 26℃
Test Engineer	: Felix Pang	Humidity	: 54%
Test Mode	: WIFI mode		
Test Results	: PASS		

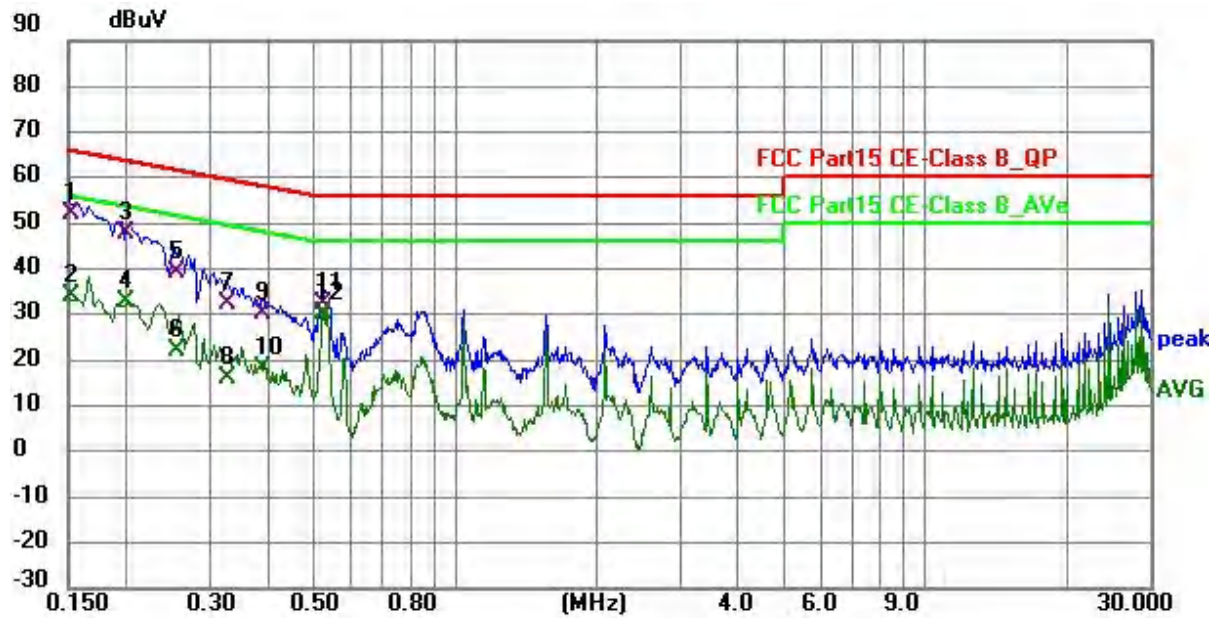
Note: 1. The test results are listed in next pages.

2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out.

3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.

4. All modes have been tested, and only worst data of b mode, Channel 2412MHz (AC 120V/ 60Hz) was listed in this report.

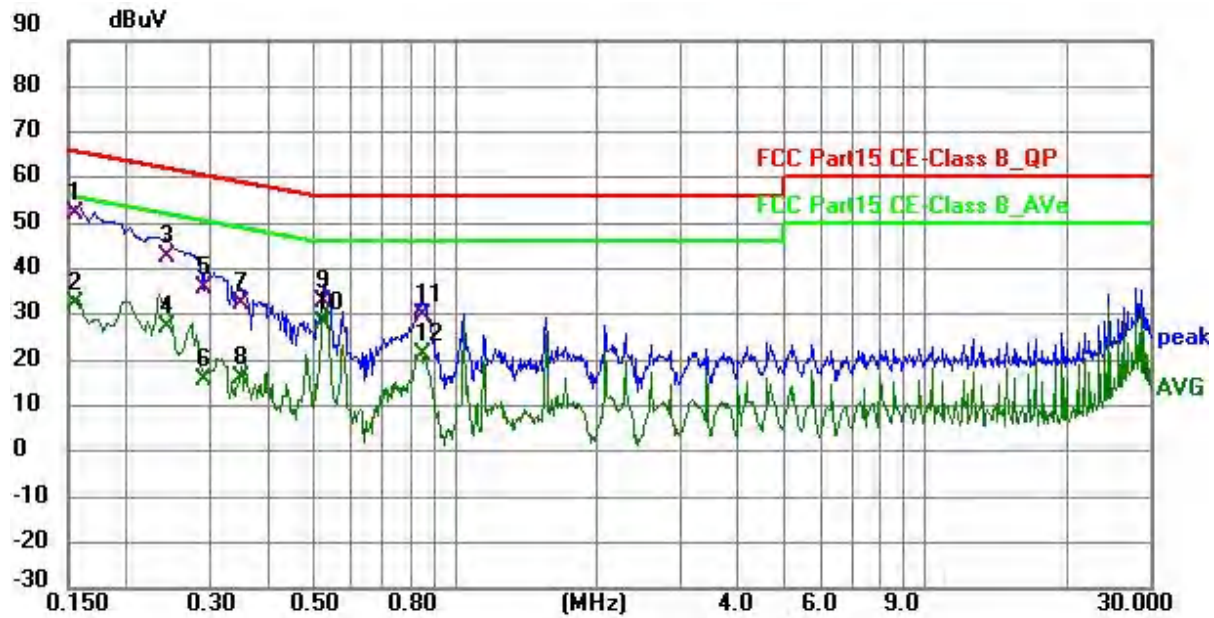
Polarization: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1518	42.47	9.63	52.10	65.90	-13.80	QP	P	
2	0.1518	24.63	9.63	34.26	55.90	-21.64	AVG	P	
3	0.1986	38.35	9.63	47.98	63.67	-15.69	QP	P	
4	0.1986	23.27	9.63	32.90	53.67	-20.77	AVG	P	
5	0.2566	29.49	9.63	39.12	61.54	-22.42	QP	P	
6	0.2566	12.56	9.63	22.19	51.54	-29.35	AVG	P	
7	0.3274	22.78	9.63	32.41	59.52	-27.11	QP	P	
8	0.3274	6.31	9.63	15.94	49.52	-33.58	AVG	P	
9	0.3874	20.61	9.63	30.24	58.12	-27.88	QP	P	
10	0.3874	8.47	9.63	18.10	48.12	-30.02	AVG	P	
11	0.5216	22.80	9.62	32.42	56.00	-23.58	QP	P	
12	0.5216	20.74	9.62	30.36	46.00	-15.64	AVG	P	

Note: Level = Reading + Factor, Margin = Level - Limit

Polarization: N



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1561	42.31	9.62	51.93	65.67	-13.74	QP	P	
2	0.1561	22.74	9.62	32.36	55.67	-23.31	AVG	P	
3	0.2440	32.91	9.63	42.54	61.96	-19.42	QP	P	
4	0.2440	17.67	9.63	27.30	51.96	-24.66	AVG	P	
5	0.2905	26.09	9.62	35.71	60.51	-24.80	QP	P	
6	0.2905	6.07	9.62	15.69	50.51	-34.82	AVG	P	
7	0.3489	22.59	9.62	32.21	58.99	-26.78	QP	P	
8	0.3489	6.65	9.62	16.27	48.99	-32.72	AVG	P	
9	0.5243	23.15	9.62	32.77	56.00	-23.23	QP	P	
10	0.5243	18.25	9.62	27.87	46.00	-18.13	AVG	P	
11	0.8515	20.33	9.62	29.95	56.00	-26.05	QP	P	
12	0.8515	11.48	9.62	21.10	46.00	-24.90	AVG	P	

Note: Level = Reading + Factor, Margin = Level - Limit

5. Out-of-band Emissions

5.1. Test Limits

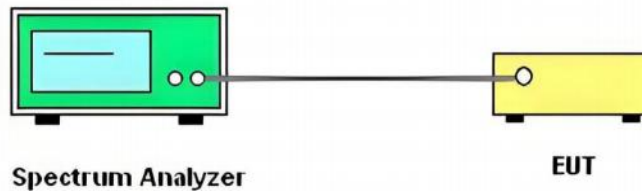
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.

5.2. Test Procedure

ANSIC63.10-2020+Cor. 1-2023+C63.10a-2024 +Errata to C63.10a-2024 Section 11.11.1, Section 11.11.2, Section 11.11.3

Connect the transmitter output to spectrum analyzer using a low loss RF cable, and set the spectrum analyzer to RBW=100 kHz, VBW= 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, band edge and out-of-band emissions.

5.3. Test Setup



5.4. Test Results

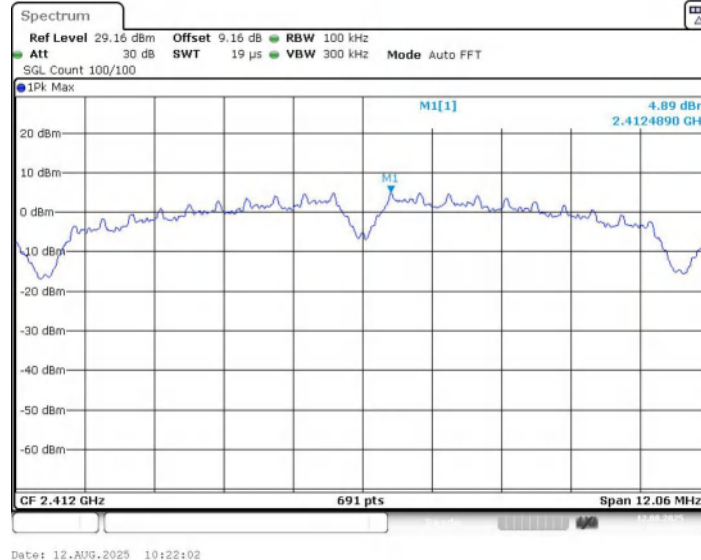
PASS.

The test results are listed in next pages.

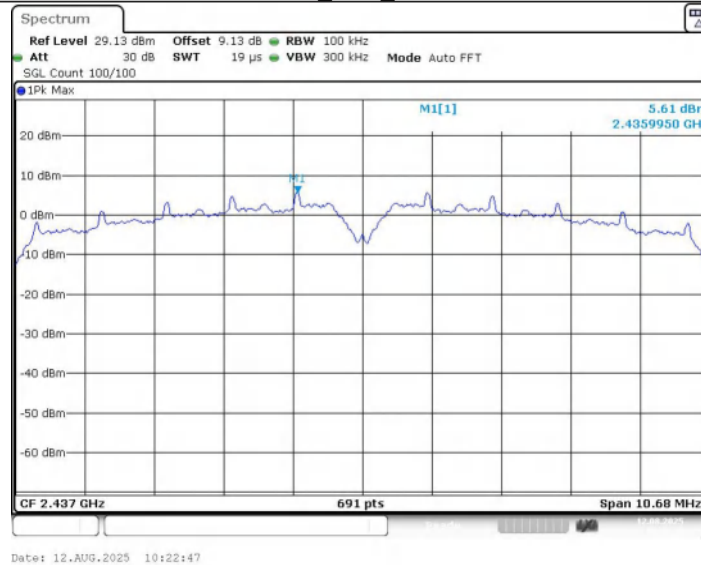
Reference level measurement:

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2412.49	4.89
		2437	2436.00	5.61
		2462	2463.00	3.78
11G	Ant1	2412	2410.72	1.87
		2437	2436.36	-2.01
		2462	2460.73	0.45
11N20SISO	Ant1	2412	2413.23	1.81
		2437	2435.74	1.31
		2462	2463.23	0.25
11N40SISO	Ant1	2422	2427.00	-1.41
		2437	2434.47	-2.81
		2452	2449.47	-3.88

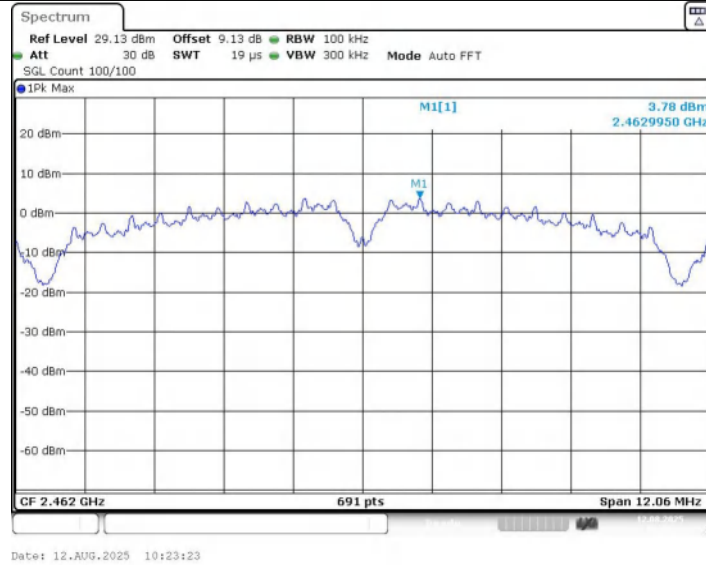
11B_Ant1_2412



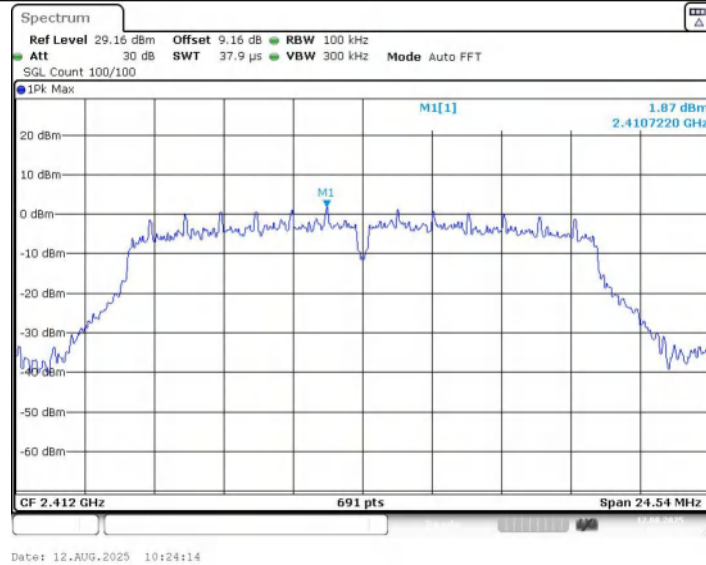
11B_Ant1_2437



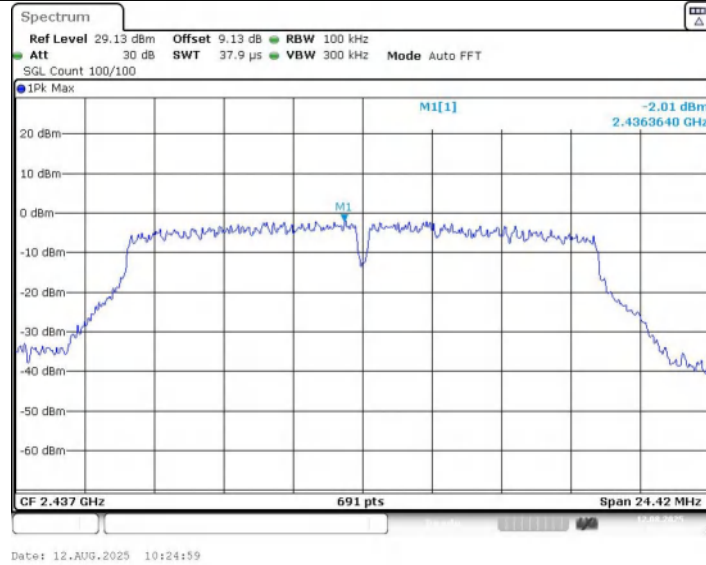
11B_Ant1_2462



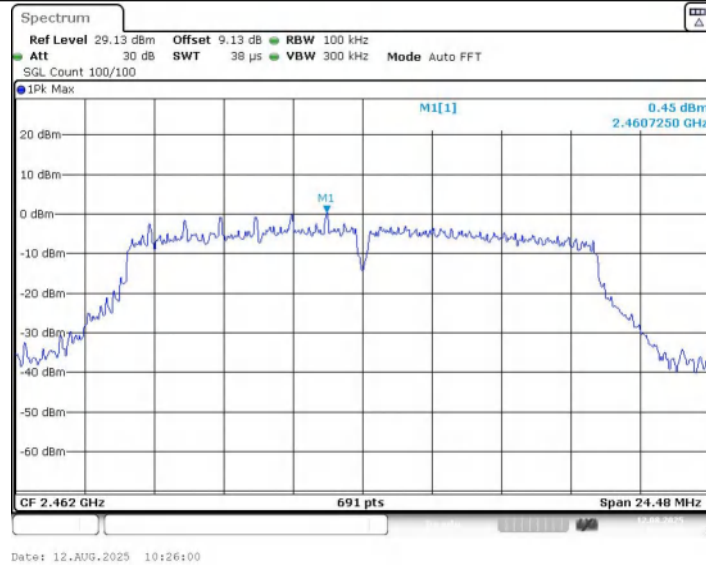
11G_Ant1_2412



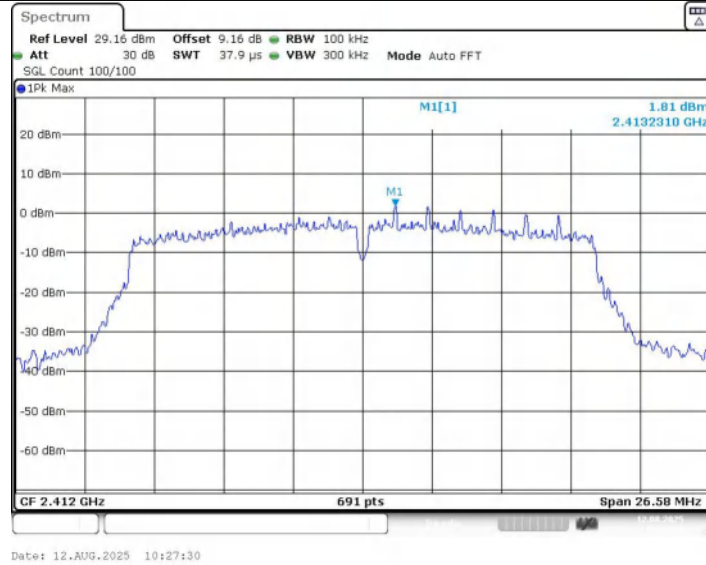
11G_Ant1_2437



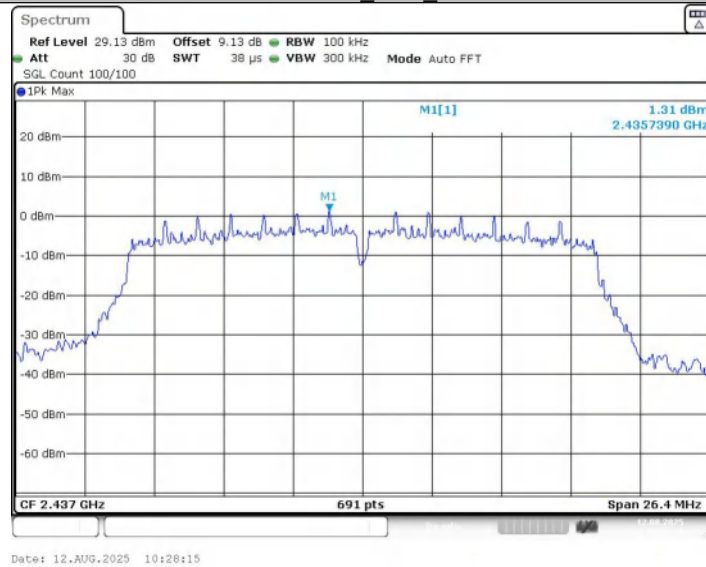
11G_Ant1_2462



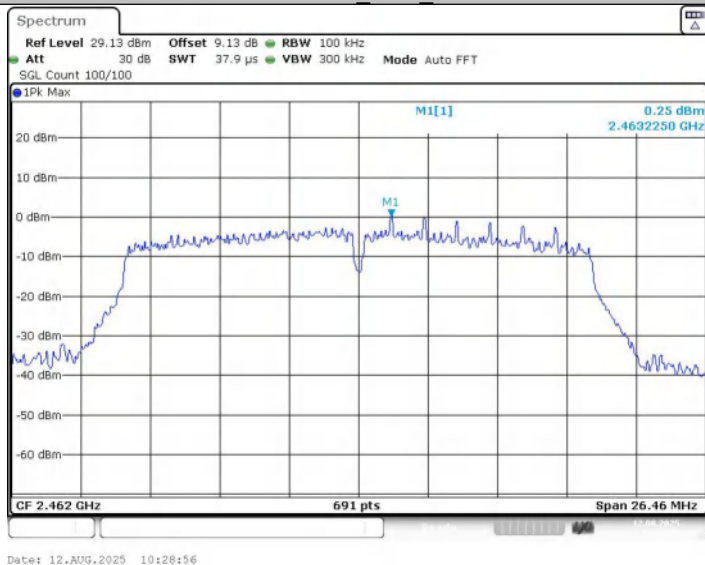
11N20SISO_Ant1_2412



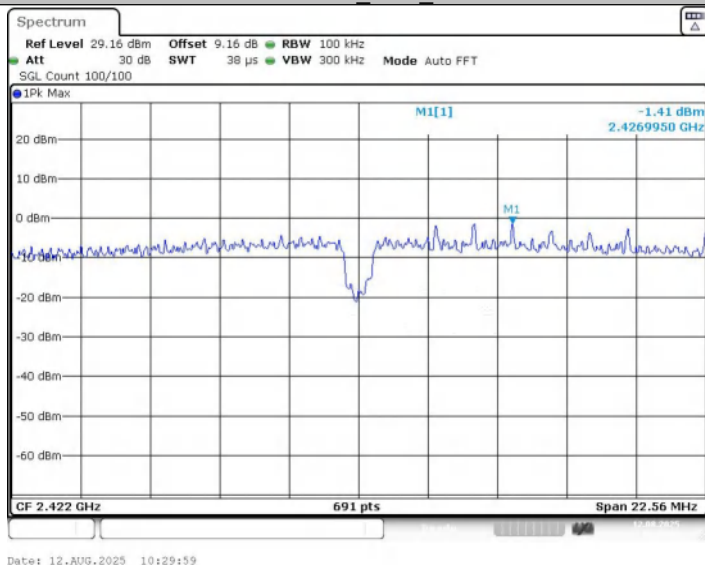
11N20SISO_Ant1_2437



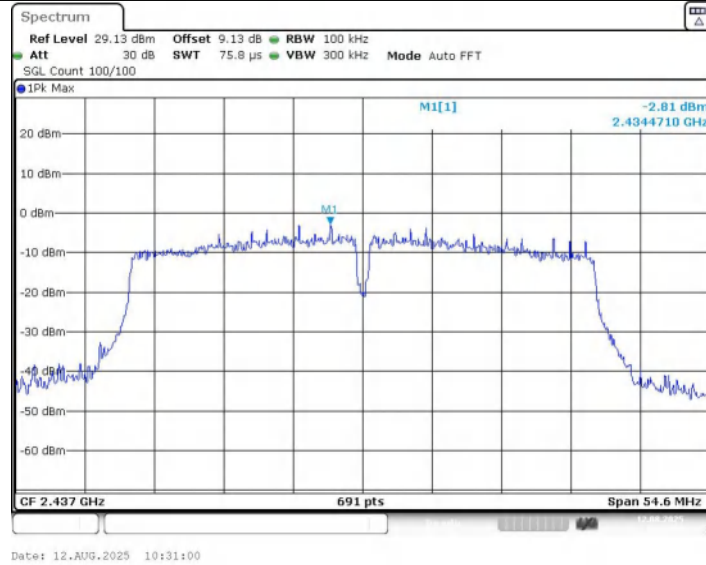
11N20SISO_Ant1_2462



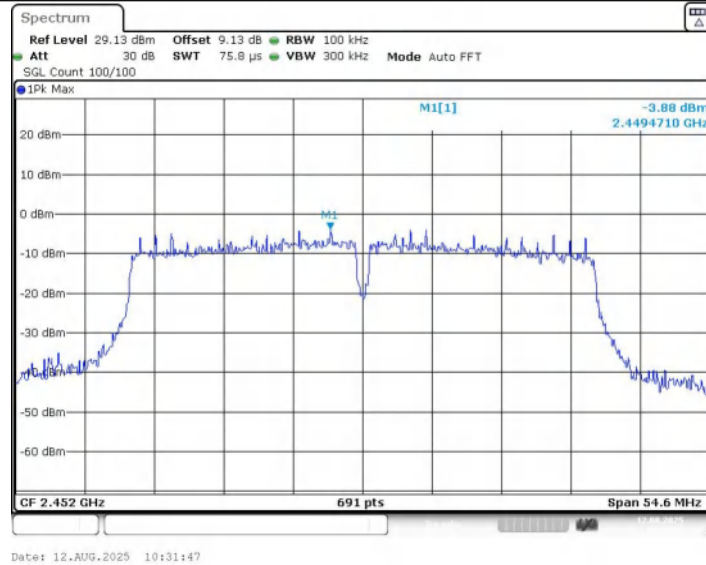
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437

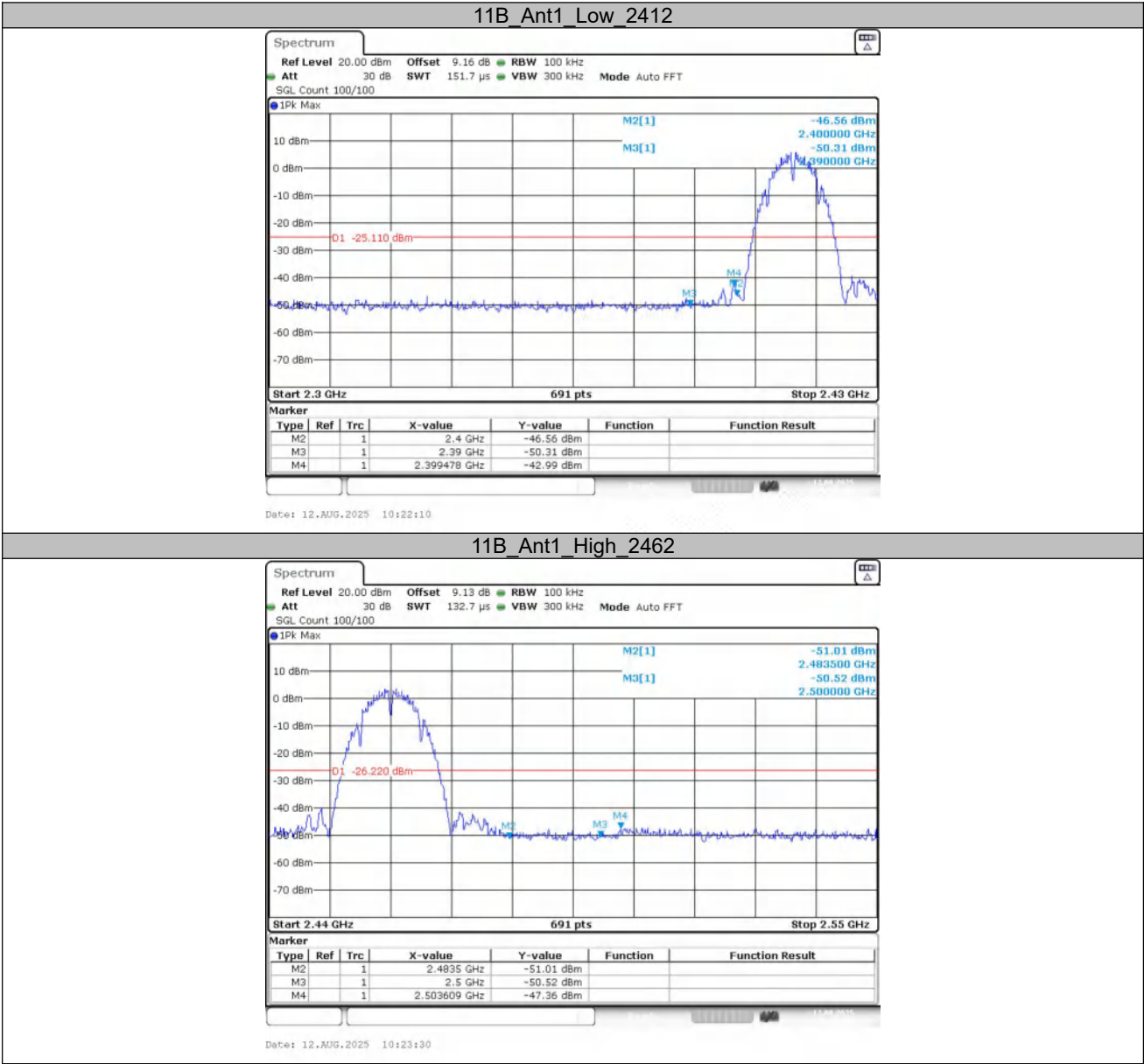


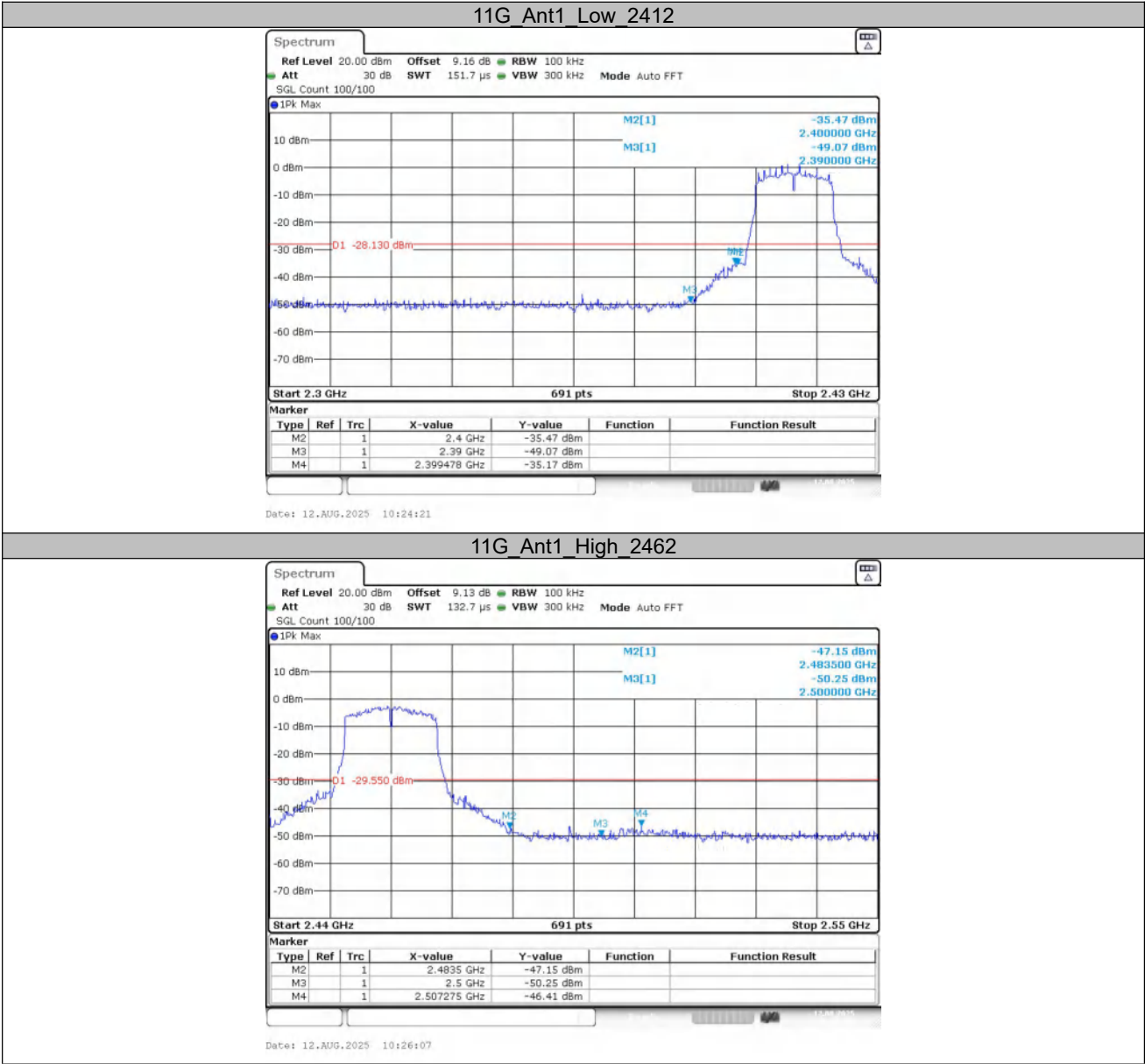
11N40SISO_Ant1_2452

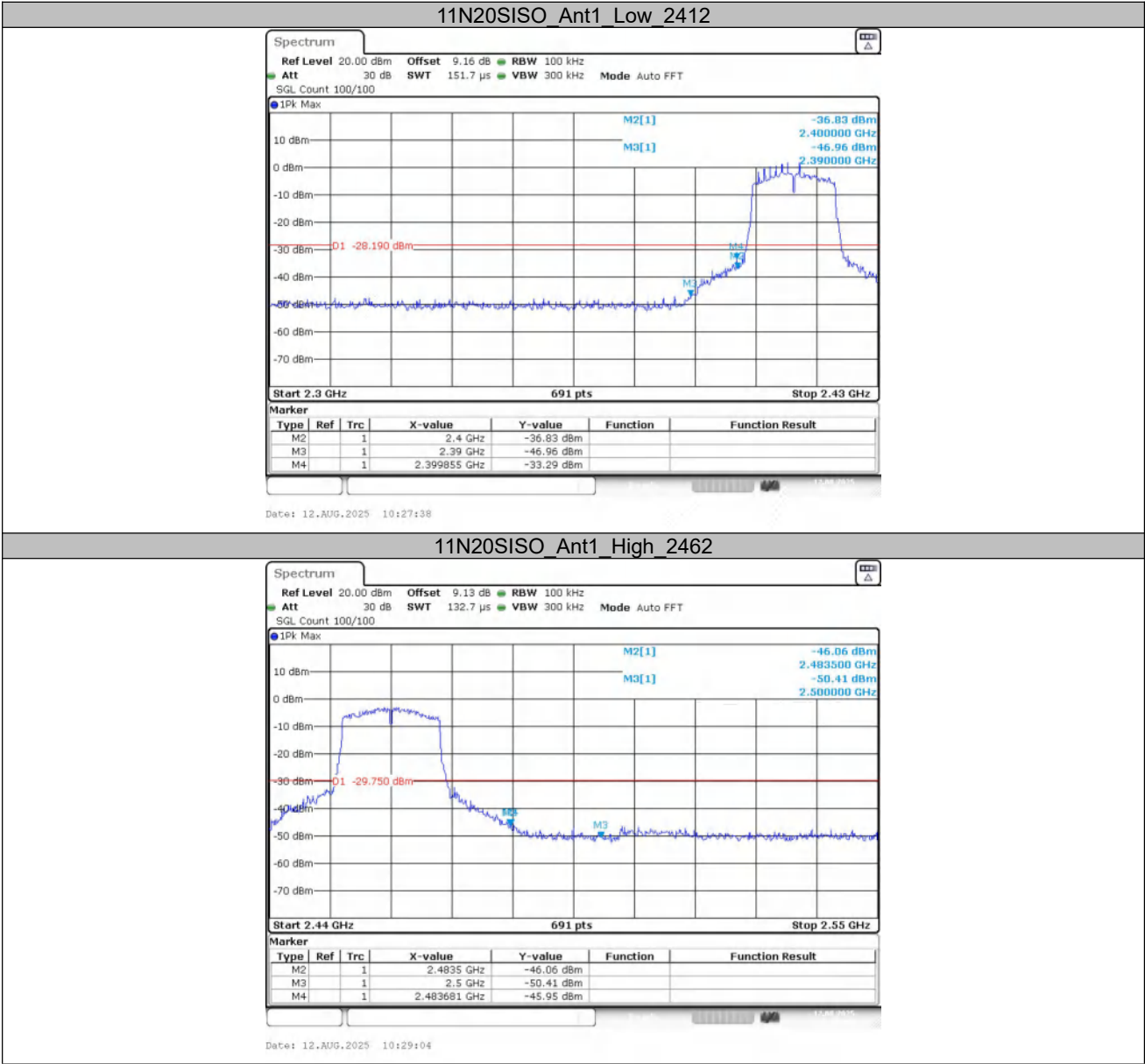


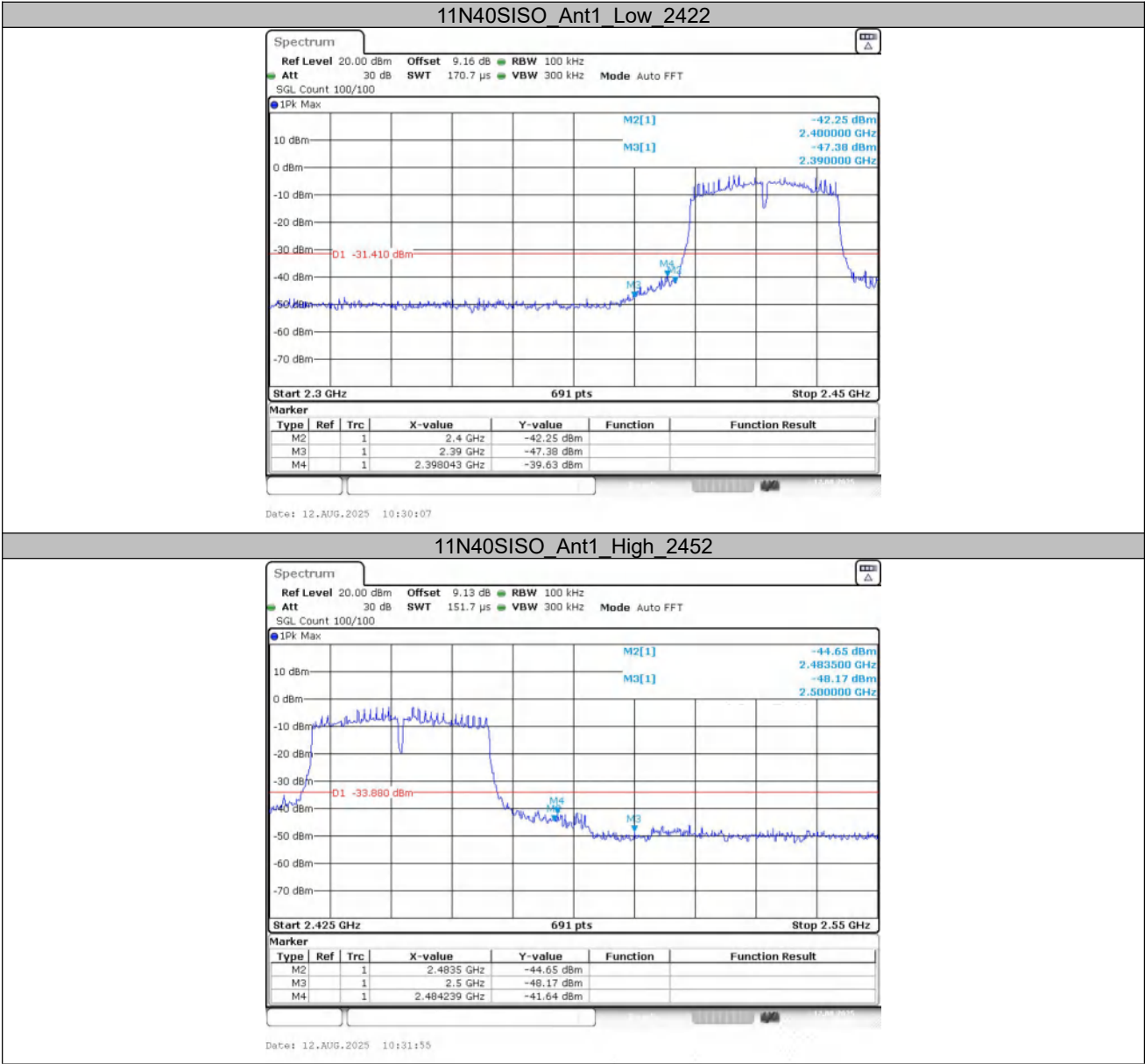
Band Edge: Pass.

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.89	-42.99	≤-25.11	PASS
		High	2462	3.78	-47.36	≤-26.22	PASS
11G	Ant1	Low	2412	1.87	-35.17	≤-28.13	PASS
		High	2462	0.45	-46.41	≤-29.55	PASS
11N20SISO	Ant1	Low	2412	1.81	-33.29	≤-28.19	PASS
		High	2462	0.25	-45.95	≤-29.75	PASS
11N40SISO	Ant1	Low	2422	-1.41	-39.63	≤-31.41	PASS
		High	2452	-3.88	-41.64	≤-33.88	PASS





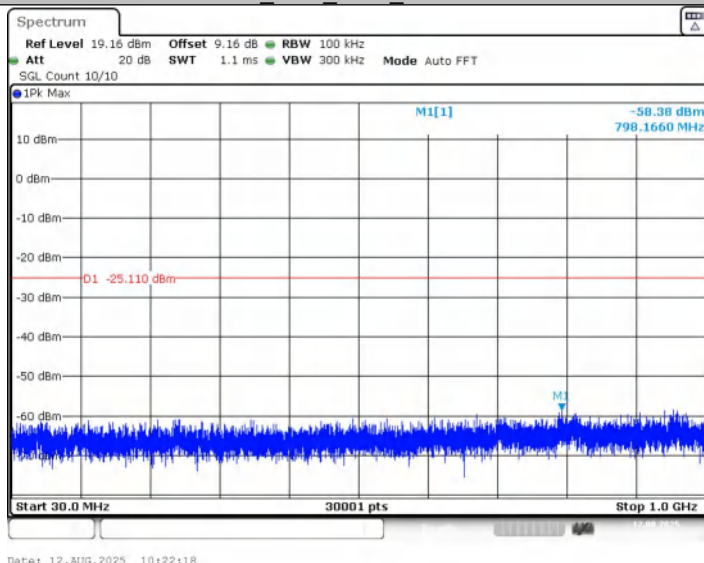




Conducted spurious emission: Pass.

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	4.89	-58.38	≤-25.11	PASS
			1000~26500	4.89	-43.02	≤-25.11	PASS
		2437	30~1000	5.61	-59.19	≤-24.39	PASS
			1000~26500	5.61	-42.89	≤-24.39	PASS
		2462	30~1000	3.78	-58.69	≤-26.22	PASS
			1000~26500	3.78	-43.65	≤-26.22	PASS
11G	Ant1	2412	30~1000	1.87	-58.83	≤-28.13	PASS
			1000~26500	1.87	-43.6	≤-28.13	PASS
		2437	30~1000	-2.01	-58.44	≤-32.01	PASS
			1000~26500	-2.01	-43.14	≤-32.01	PASS
		2462	30~1000	0.45	-56.4	≤-29.55	PASS
			1000~26500	0.45	-43.9	≤-29.55	PASS
11N20SISO	Ant1	2412	30~1000	1.81	-58.37	≤-28.19	PASS
			1000~26500	1.81	-42.66	≤-28.19	PASS
		2437	30~1000	1.31	-58.04	≤-28.69	PASS
			1000~26500	1.31	-44.18	≤-28.69	PASS
		2462	30~1000	0.25	-57.79	≤-29.75	PASS
			1000~26500	0.25	-43.66	≤-29.75	PASS
11N40SISO	Ant1	2422	30~1000	-1.41	-58.07	≤-31.41	PASS
			1000~26500	-1.41	-44.33	≤-31.41	PASS
		2437	30~1000	-2.81	-58.63	≤-32.81	PASS
			1000~26500	-2.81	-43.99	≤-32.81	PASS
		2452	30~1000	-3.88	-58.83	≤-33.88	PASS
			1000~26500	-3.88	-43.93	≤-33.88	PASS

11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500

