

# TEST REPORT

Applicant Name: Meizhou Guo Wei Electronics Co., Ltd.  
Address: AD1 Section, Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China.  
Report Number: 2501U08095E-RF-00A1  
FCC ID: 2ARRB-PIP1700CPU

**Test Standard (s)**

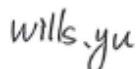
FCC PART 15.247

**Sample Description**

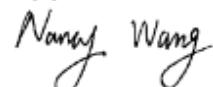
Product Type: Video baby monitor  
Model No.: PIP1710 CONNECT PU  
Multiple Model(s) No.: N/A  
Trade Mark: Motorola  
Date Received: 2025/06/05  
Issue Date: 2025/09/17

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

**Prepared and Checked By:**

Wills Yu  
RF Engineer

**Approved By:**

Nancy Wang  
RF Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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**Bay Area Compliance Laboratories Corp. (Shenzhen)**

5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China  
Tel: +86-755-33320018    Fax: +86-755-33320008    [www.baclcorp.com.cn](http://www.baclcorp.com.cn)

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## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501U08095E-RF-00A1	Class II Permissive Change Report	2025/09/17

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Product	Video baby monitor
Tested Model	PIP1710 CONNECT PU
Multiple Model(s)	N/A
Frequency Range	2402-2477MHz
Maximum conducted peak output power <sup>#</sup>	17.23dBm(It is provided by the applicant)
Modulation Technique	GFSK
Antenna Specification <sup>#</sup>	2.76dBi(It is provided by the applicant)
Voltage Range	DC 3.6V from battery or DC 5V from adapter
Sample serial number	341Q-1 for RF Conducted Test 341Q-10 for Radiated Emissions (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	Adapter1(original) Model: NBS10B050200VUU Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 2.0A Adapter2(New) Model: UT-681A-5200MY Input: AC 100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A, 10.0W

### Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

## Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		109.2kHz(k=2, 95% level of confidence)
RF Frequency		56.6Hz(k=2, 95% level of confidence)
RF output power, conducted		0.86dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.60dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9 kHz~150 KHz	3.63dB(k=2, 95% level of confidence)
	150 kHz ~30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	0.009MHz~30MHz	3.60dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.73dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.34dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.40dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.64dB(k=2, 95% level of confidence)
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode.

Channel list

Channel	Frequency (MHz)						
01	2402	07	2420	13	2450	19	2471
02	2404	08	2425	14	2455	20	2473
03	2406	09	2430	15	2460	21	2475
04	2408	10	2435	16	2465	22	2477
05	2410	11	2440	17	2467	/	/
06	2415	12	2445	18	2469	/	/

EUT was tested with channel 01, 11 and 22.

### EUT Exercise Software

“SecureCRTPortable.exe<sup>#</sup>” exercise software was used and the power level is default<sup>#</sup>. The software and power level was provided by the manufacturer.

### Special Accessories

No special accessory.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

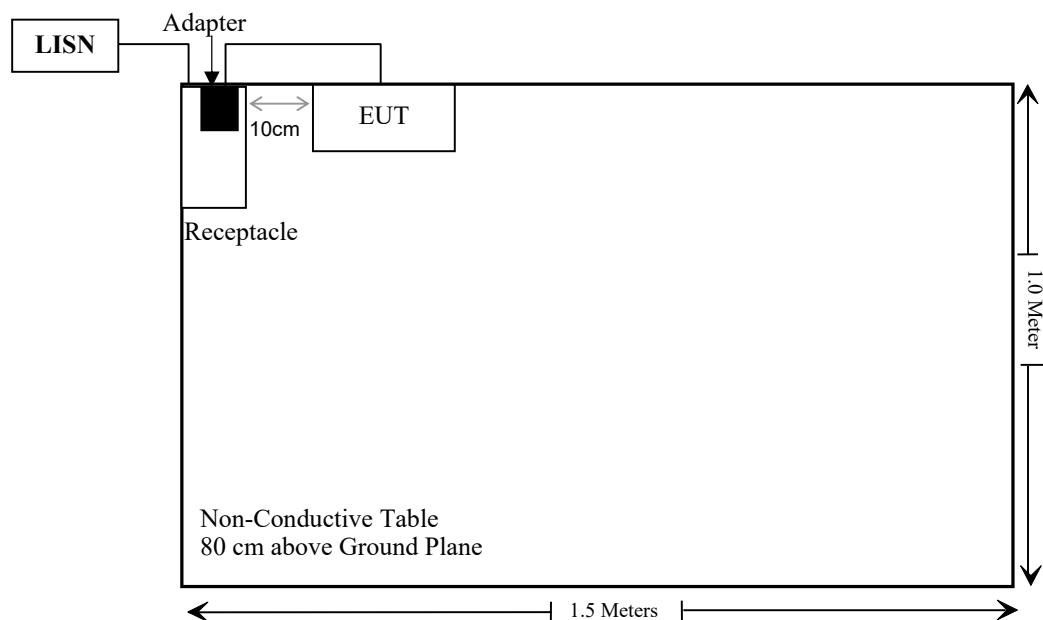
Manufacturer	Description	Model	Serial Number
/	/	/	/

### External I/O Cable

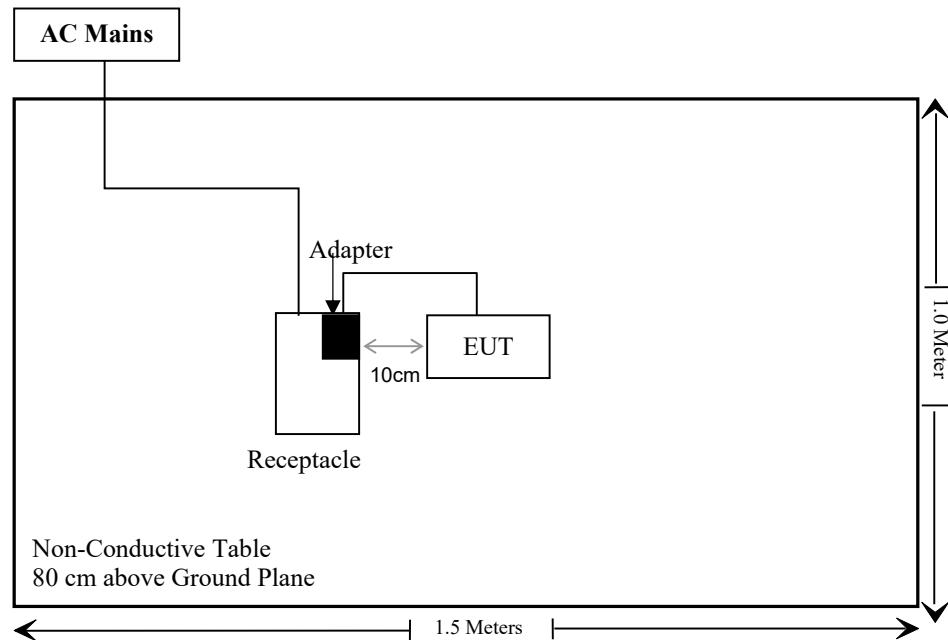
Cable Description	Length (m)	From/Port	To
Un-shielding Un-Detachable DC Cable	1.8	EUT	Adapter
Un-shielding Un-Detachable AC Cable	1.2	Receptacle	AC Mains/LISN

### Block Diagram of Test Setup

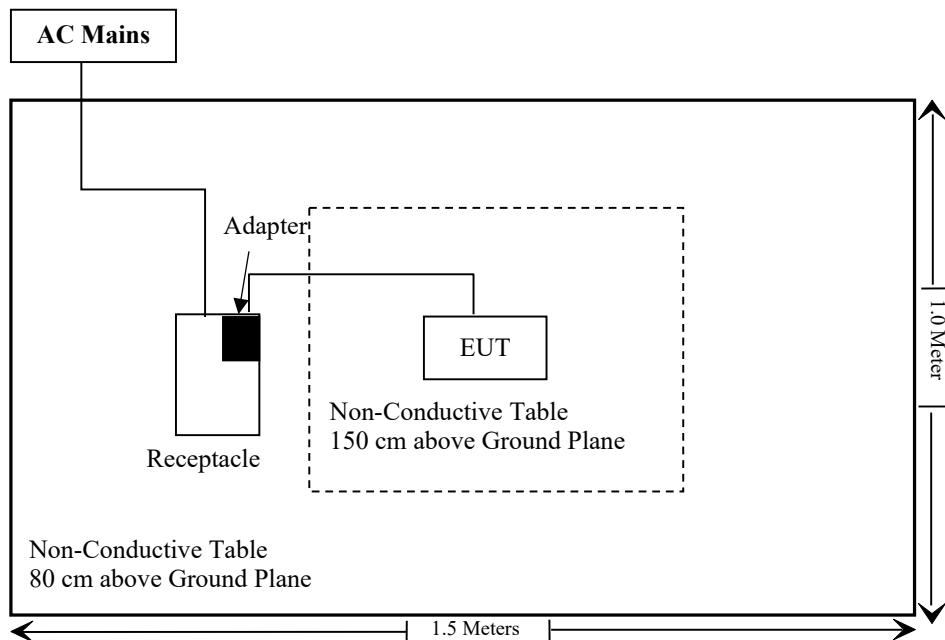
For Conducted Emission



For Radiated Emission below 1GHz:



For Radiated Emission above 1GHz:



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result	Remark
§1.1307 & §2.1093	RF Exposure	Compliant	-
§15.203	Antenna Requirement	-	See note
§15.207(a)	AC Line Conducted Emissions	Compliant	-
§15.205, §15.209 & §15.247(d)	Radiated Emissions	Compliant	-
§15.247(a)(1)	20dB Emission Bandwidth & 99% Occupied Bandwidth	-	See note
§15.247(a)(1)	Channel Separation Test	-	See note
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	-	See note
§15.247(a)(1)(iii)	Quantity of hopping channel Test	-	See note
§15.247(b)(1)	Peak Output Power Measurement	Reporting only	-
§15.247(d)	Band edges	-	See note

Note:

1. This is a CIIPC application for FCC ID: 2ARRB-PIP1700CPU, the below changes was made based on the device granted on 09/20/2023 which was provided by the manufacturer:

- (1) Adding an adapter (Model: UT-681A-5200MY) and removing the adapter (model: UT-681A-5200ZCY).
- (2) Changing the battery:
  - a) The battery shape has been changed from square to cylindrical.
  - b) The battery voltage changed from 3.8V to 3.6V.
  - c) Update the battery connector, remove the old one.
  - d) Due to the battery change, the PU structure was modified and the placement positions of some components on PCB was adjusted.
- (3) Simplify the LCD reset and power supply, operation is same as before.
- (4) Changing the some trace from inter-layer to top layer, the circuit is same as before.
- (5) Changing the model number to “PIP1710 CONNECT PU”.
- (6) Upgrading the C63.10 version to “ANSI C63.10-2020” .

Based on above differences, it will affect partial test data “Conducted Emissions and Radiated Emissions”, so the changed items were performed, we also updated the related photos in the report.

2. The RF output power was spot checked and it's consistently with the original report.
3. The other test data and photos please refer to the report: CR230633250-00.
4. The BACL (SZ) is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report.

## TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Conducted Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/12/04	2025/12/03
Rohde & Schwarz	LISN	ENV216	101613	2024/12/04	2025/12/03
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/04/29	2026/04/28
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/04/29	2026/04/28
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
<b>Radiated Emission Test_ Below 1GHz</b>					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
Sonoma instrument	Pre-amplifier	310 N	186238	2025/04/29	2026/04/28
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber A Cable 1	N/A	2025/04/29	2026/04/28
Unknown	Cable	XH500C	J-10M-A	2025/04/29	2026/04/28
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
<b>Radiated Emission Test_ Above 1GHz</b>					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/03/26	2026/03/25
A.H.System	Preamplifier	PAM-0118P	489	2024/11/15	2025/11/14
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	735	2024/12/06	2025/12/05
Unknown	RF Cable	UFA147	219661	2024/12/06	2025/12/05
JD	Filter Switch Unit	DT7220FSU	DS79906	2024/09/09	2025/09/08
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2024/09/09	2025/09/08
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/04/29	2026/04/28
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/12/18	2025/12/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>RF Conducted Test</b>					
ANRITSU	Microwave peak power sensor	MA24418A	12622	2025/04/29	2026/04/28
Unknown	10dB Attenuator	Unknown	F-03-EM190	2024/06/27	2025/06/26

**\* Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## **FCC §1.1307 & §2.1093 - RF EXPOSURE**

### **Applicable Standard**

FCC§1.1310 and §2.1093.

### **Test Result**

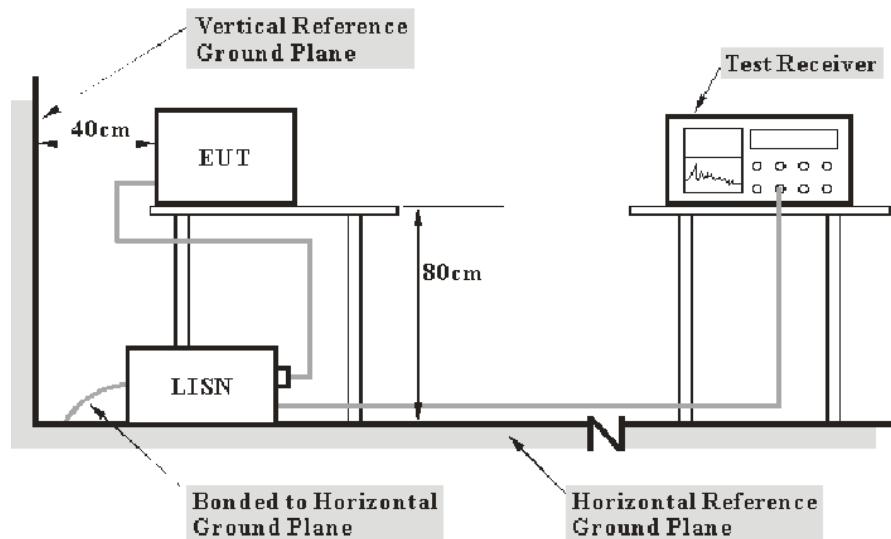
Compliance, please refer to the SAR report: 2501U08095E-SAAA1.

## FCC §15.207 (a) - AC LINE CONDUCTED EMISSIONS

### Applicable Standard

FCC §15.207(a)

### EUT Setup



Note: 1. Support units were connected to second LISN.  
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.10-2020. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

## Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

## Test Data

### Environmental Conditions

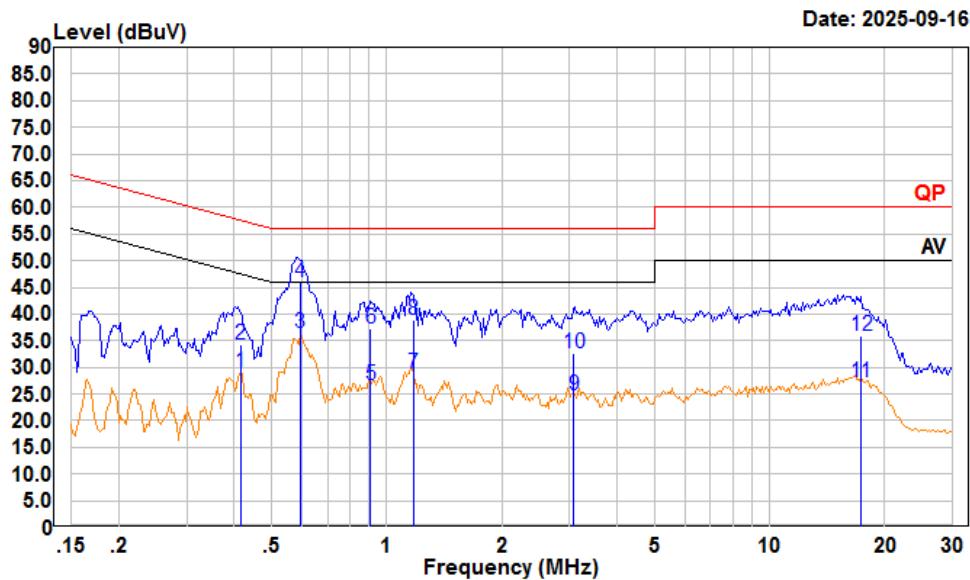
<b>Temperature:</b>	26~28 °C
<b>Relative Humidity:</b>	58~70 %
<b>ATM Pressure:</b>	100~101 kPa

*The testing was performed by Macy Shi from 2025-08-19 to 2025-09-16.*

*EUT operation mode: Transmitting (Maximum output power mode, High channel)*

Adapter1

AC 120V/60 Hz, Line



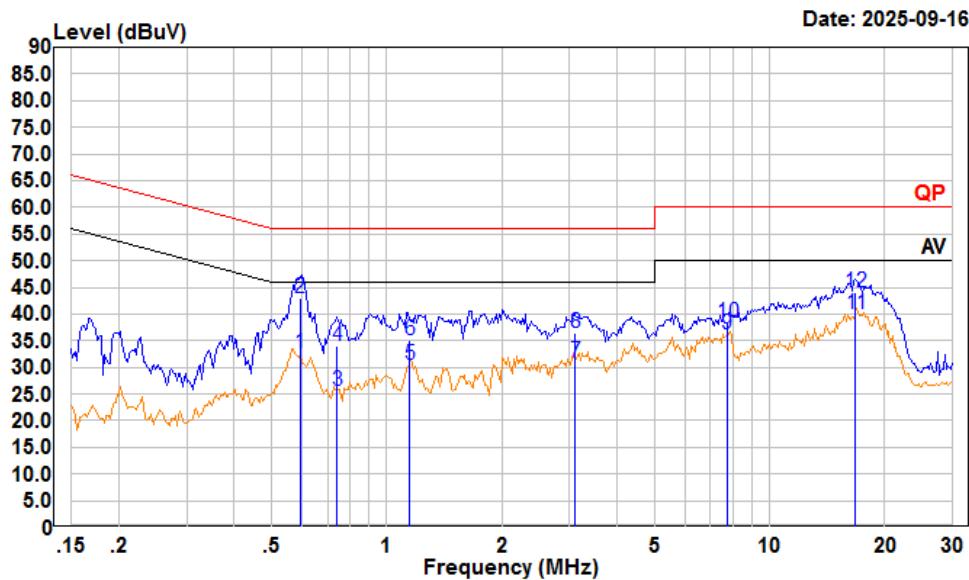
Condition: Line

Project : 2501U08095E-RFA1

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz

Freq	Read	LISN	Cable	Limit	Over	Remark		
	MHz	Level	Level	Factor	Loss	Line	Limit	dB
1	0.415	8.43	29.18	10.54	10.21	47.55	-18.37	Average
2	0.415	13.50	34.25	10.54	10.21	57.55	-23.30	QP
3	0.595	15.38	36.32	10.71	10.23	46.00	-9.68	Average
4	0.595	24.89	45.83	10.71	10.23	56.00	-10.17	QP
5	0.909	5.81	26.71	10.68	10.22	46.00	-19.29	Average
6	0.909	16.30	37.20	10.68	10.22	56.00	-18.80	QP
7	1.172	7.88	28.76	10.71	10.17	46.00	-17.24	Average
8	1.172	18.11	38.99	10.71	10.17	56.00	-17.01	QP
9	3.074	3.38	24.63	10.98	10.27	46.00	-21.37	Average
10	3.074	11.29	32.54	10.98	10.27	56.00	-23.46	QP
11	17.291	6.27	27.18	10.65	10.26	50.00	-22.82	Average
12	17.291	14.90	35.81	10.65	10.26	60.00	-24.19	QP

**AC 120V/60 Hz, Neutral**

Condition: Neutral

Project : 2501U08095E-RFA1

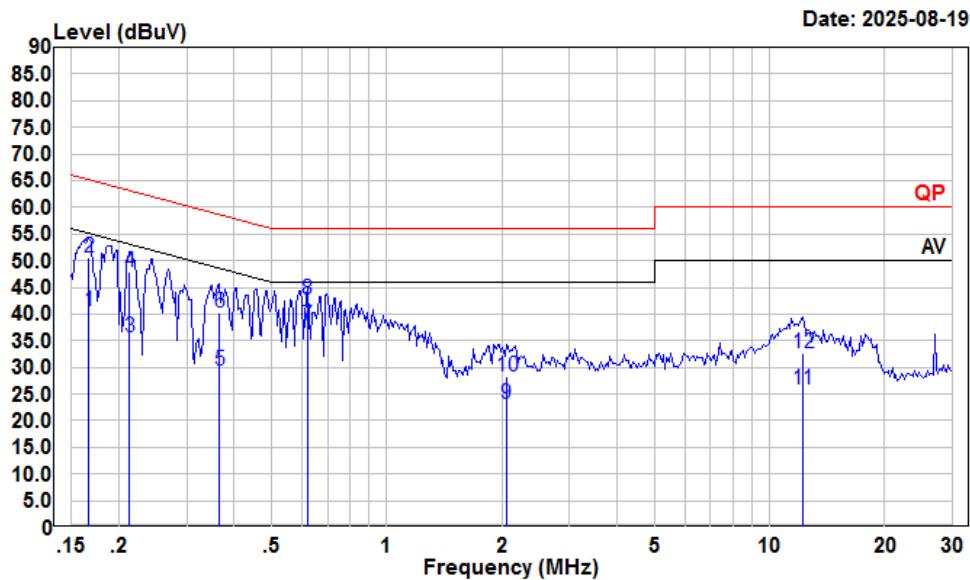
tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz

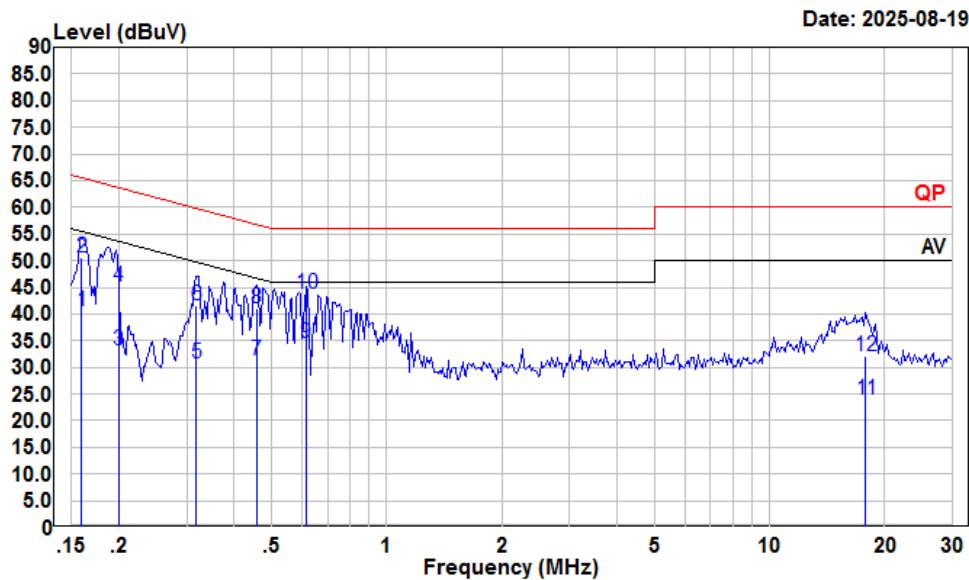
Freq	Read		LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV					
1	0.595	11.93	32.71	10.55	10.23	46.00	-13.29 Average
2	0.595	22.30	43.08	10.55	10.23	56.00	-12.92 QP
3	0.743	4.74	25.60	10.63	10.23	46.00	-20.40 Average
4	0.743	13.10	33.96	10.63	10.23	56.00	-22.04 QP
5	1.147	9.51	30.47	10.78	10.18	46.00	-15.53 Average
6	1.147	14.10	35.06	10.78	10.18	56.00	-20.94 QP
7	3.107	9.83	30.99	10.89	10.27	46.00	-15.01 Average
8	3.107	15.40	36.56	10.89	10.27	56.00	-19.44 QP
9	7.728	15.29	36.10	10.57	10.24	50.00	-13.90 Average
10	7.728	17.60	38.41	10.57	10.24	60.00	-21.59 QP
11	16.750	19.11	39.98	10.61	10.26	50.00	-10.02 Average
12	16.750	23.10	43.97	10.61	10.26	60.00	-16.03 QP

Adapter2

AC 120V/60 Hz, Line



Freq	Read	LISN	Cable	Limit	Over	Remark
	MHz	Level	Level	Factor	Loss	
1	0.167	19.90	40.60	10.51	10.19	55.12 -14.52 Average
2	0.167	29.95	50.65	10.51	10.19	65.12 -14.47 QP
3	0.213	14.69	35.57	10.69	10.19	53.10 -17.53 Average
4	0.213	26.98	47.86	10.69	10.19	63.10 -15.24 QP
5	0.365	8.55	29.31	10.57	10.19	48.61 -19.30 Average
6	0.365	19.39	40.15	10.57	10.19	58.61 -18.46 QP
7	0.621	16.69	37.68	10.76	10.23	46.00 -8.32 Average
8	0.621	21.60	42.59	10.76	10.23	56.00 -13.41 QP
9	2.055	1.81	23.13	11.09	10.23	46.00 -22.87 Average
10	2.055	6.97	28.29	11.09	10.23	56.00 -27.71 QP
11	12.188	5.35	25.91	10.30	10.26	50.00 -24.09 Average
12	12.188	12.06	32.62	10.30	10.26	60.00 -27.38 QP

**AC 120V/60 Hz, Neutral**

Condition: Neutral

Project : 2501U08095E-RFA1

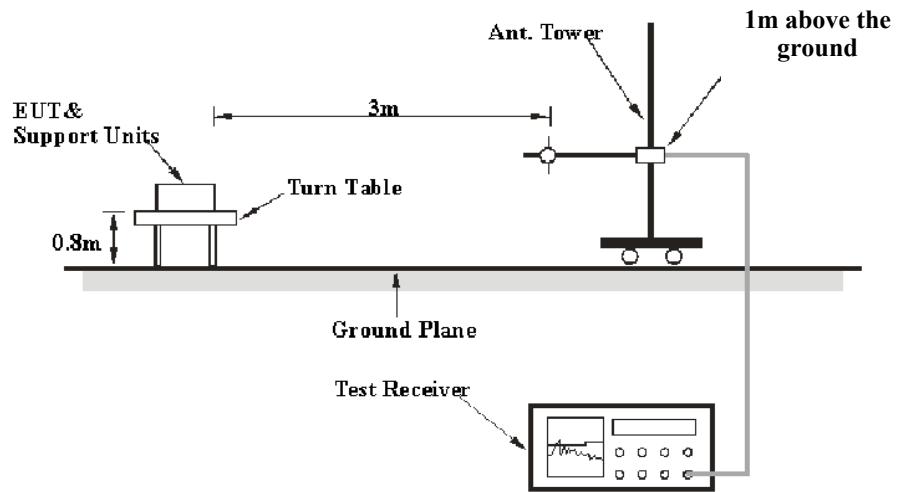
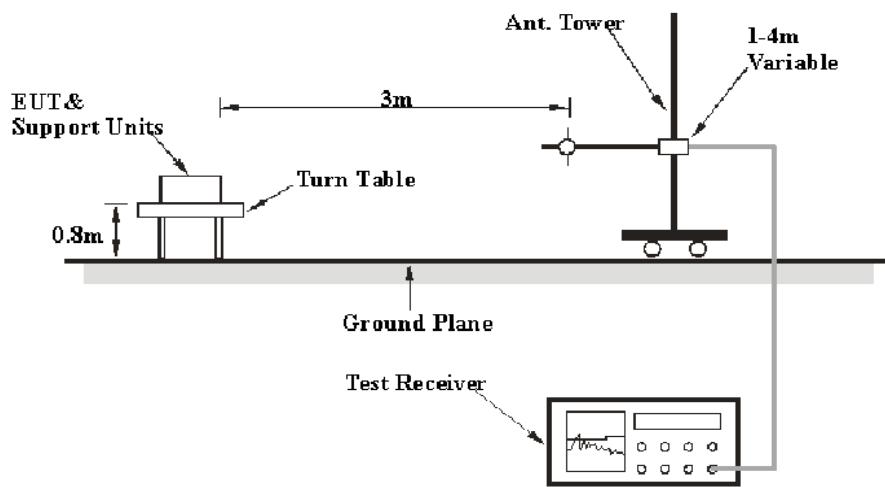
tester : Macy.shi Note:Transmitting

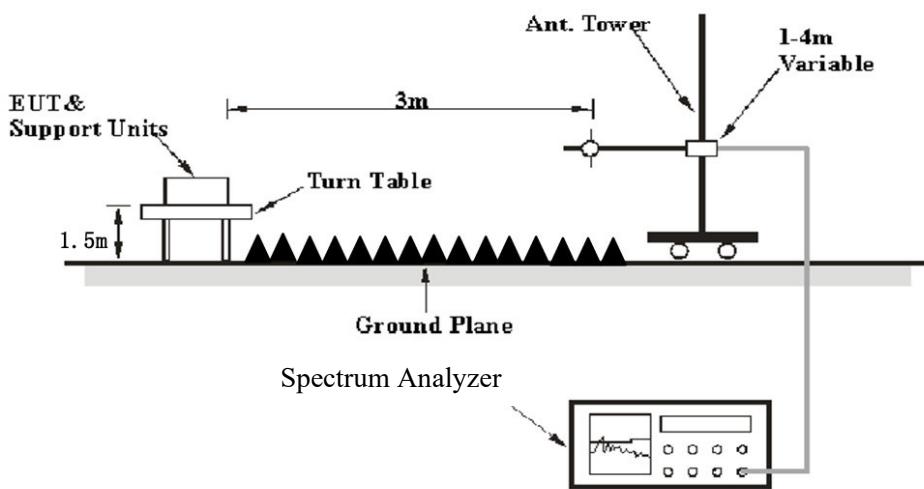
Setting : RBW:9kHz

Freq	Read		LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV					
1	0.160	19.99	40.65	10.49	10.17	55.47	-14.82 Average
2	0.160	30.03	50.69	10.49	10.17	65.47	-14.78 QP
3	0.200	12.22	33.21	10.80	10.19	53.62	-20.41 Average
4	0.200	24.24	45.23	10.80	10.19	63.62	-18.39 QP
5	0.318	9.88	30.72	10.65	10.19	49.75	-19.03 Average
6	0.318	20.76	41.60	10.65	10.19	59.75	-18.15 QP
7	0.456	10.60	31.33	10.53	10.20	46.76	-15.43 Average
8	0.456	20.40	41.13	10.53	10.20	56.76	-15.63 QP
9	0.614	13.70	34.49	10.56	10.23	46.00	-11.51 Average
10	0.614	23.01	43.80	10.56	10.23	56.00	-12.20 QP
11	17.849	2.96	24.00	10.78	10.26	50.00	-26.00 Average
12	17.849	10.92	31.96	10.78	10.26	60.00	-28.04 QP

**FCC §15.205, §15.209&§15.247(d) – RADIATED EMISSIONS****Applicable Standard**

FCC §15.205; §15.209; §15.247(d)

**EUT Setup****9 kHz-30MHz:****30MHz-1GHz:**

**Above 1GHz:**

The radiated emission tests were performed in the 3meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209 and FCC 15.247 limits.

**EMI Test Receiver & Spectrum Analyzer Setup**

The EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector	Measurement
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	Peak	PK
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	Peak	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	Peak	PK
Above 1 GHz	Harmonics				
	1MHz	3 MHz	/	Peak	PK
	Average Emission Level=Peak Emission Level+20*log(Duty cycle)				
	Band Edge & Other Emissions				
	1MHz	3 MHz	/	Peak	PK
	1MHz	$\geq 10$ Hz	/	Peak	Average

For Duty cycle measurement:

Use the duty cycle factor correction factor method per 15.35(c).

Duty cycle=On time/100milliseconds, On time= $N1 \cdot L1 + N2 \cdot L2 + \dots + Nn-1 \cdot Ln-1 + Nn \cdot Ln$ ,

Where N1 is number of type 1 pulses, L1 is length of type 1 pulse, etc.

## Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All final data was recorded in Quasi-peak detection mode except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz, average detection modes for frequency bands 9–90 kHz and 110–490 kHz, peak and average detection modes for frequencies above 1 GHz.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

All emissions under the average limit and under the noise floor have not recorded in the report.

## Factor & Over Limit/Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit or Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit/margin of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\begin{aligned} \text{Margin/Over Limit} &= \text{Corrected Amplitude/Level-Limit} \\ \text{Corrected Amplitude/Level} &= \text{Reading} + \text{Factor} \end{aligned}$$

## Test Data

### Environmental Conditions

<b>Temperature:</b>	20.4~25.5 °C
<b>Relative Humidity:</b>	51~54 %
<b>ATM Pressure:</b>	100.2~100.8 kPa

*The testing was performed by Anson Su and Nico Wu from 2025-08-21 to 2025-09-16 for below 1GHz and Visen Wu on 2025-06-23 for above 1GHz.*

*EUT operation mode: Transmitting*

*Note:*

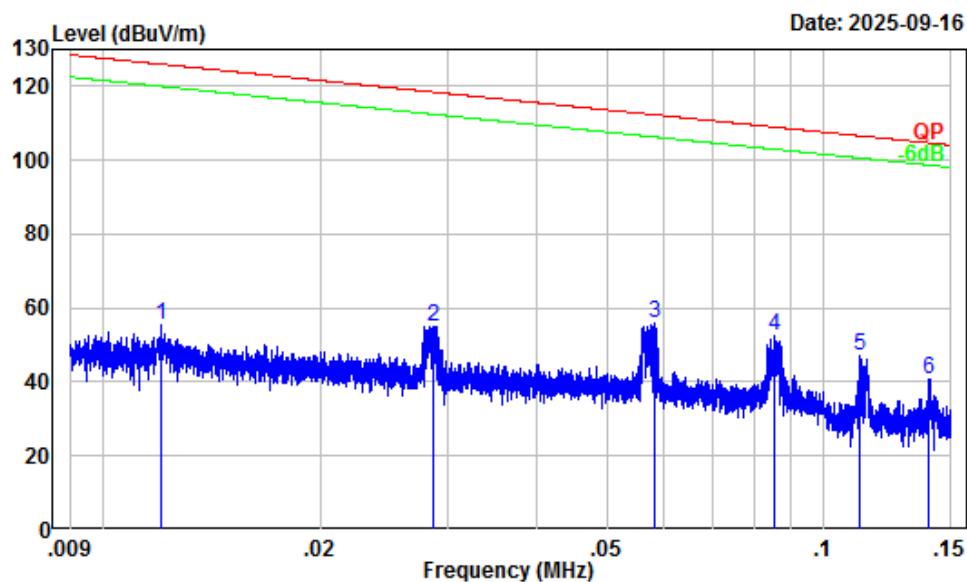
*1. Pre-scan in the X, Y and Z axes of orientation, the worst case X-axis of orientation was recorded.*

*2. For the radiated spurious emission below 1GHz, when the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.*

Adapter1

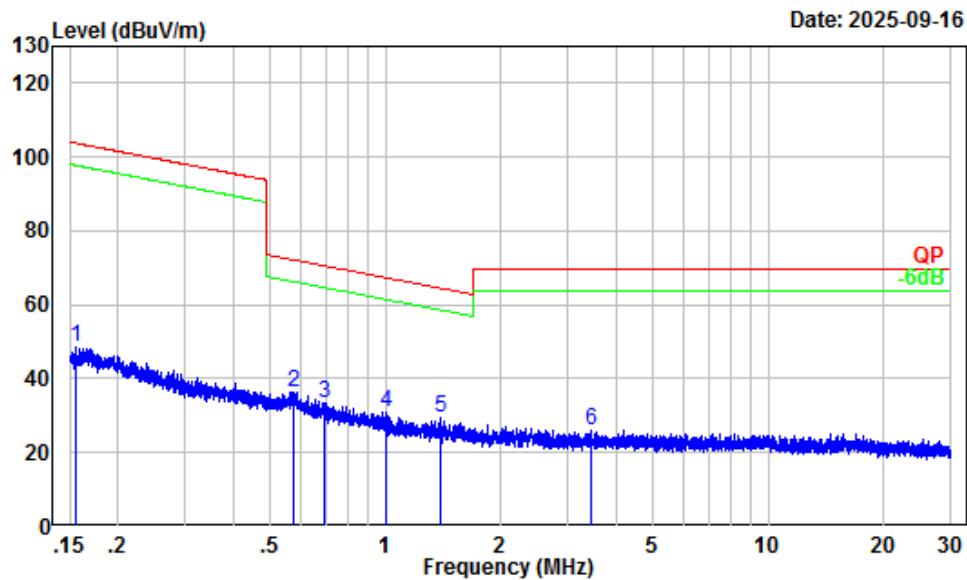
**9 kHz-30MHz:** (Maximum output power mode, High channel)

Parallel (worst case)



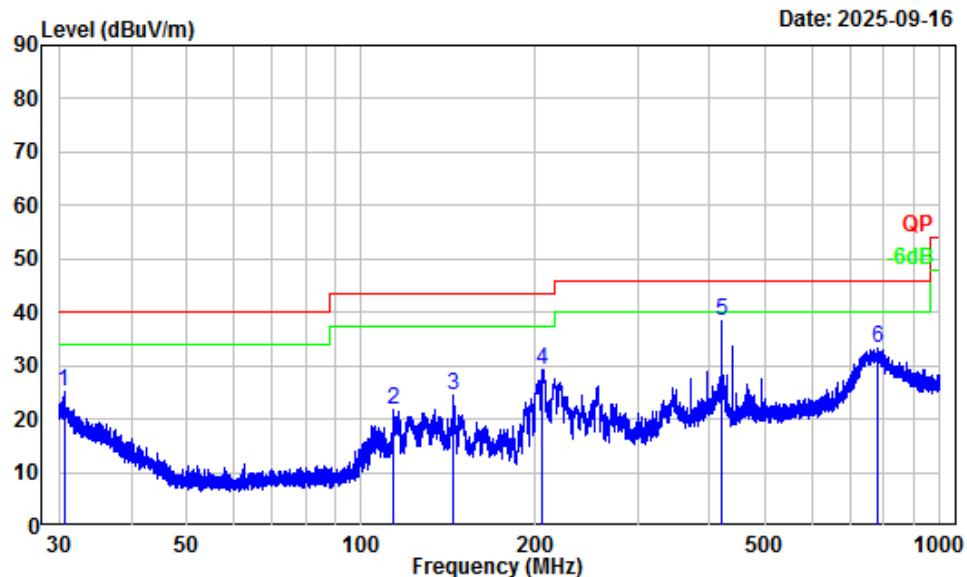
Site : Chamber A  
Condition : 3m  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	dBuV/m	
1	0.012	31.91	23.64	55.55	125.99	-70.44	Peak
2	0.029	28.73	26.34	55.07	118.43	-63.36	Peak
3	0.058	25.58	30.31	55.89	112.31	-56.42	Peak
4	0.085	23.03	29.46	52.49	108.98	-56.49	Peak
5	0.112	21.27	25.81	47.08	106.59	-59.51	Peak
6	0.140	19.64	21.20	40.84	104.68	-63.84	Peak



Site : Chamber A  
Condition : 3m  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

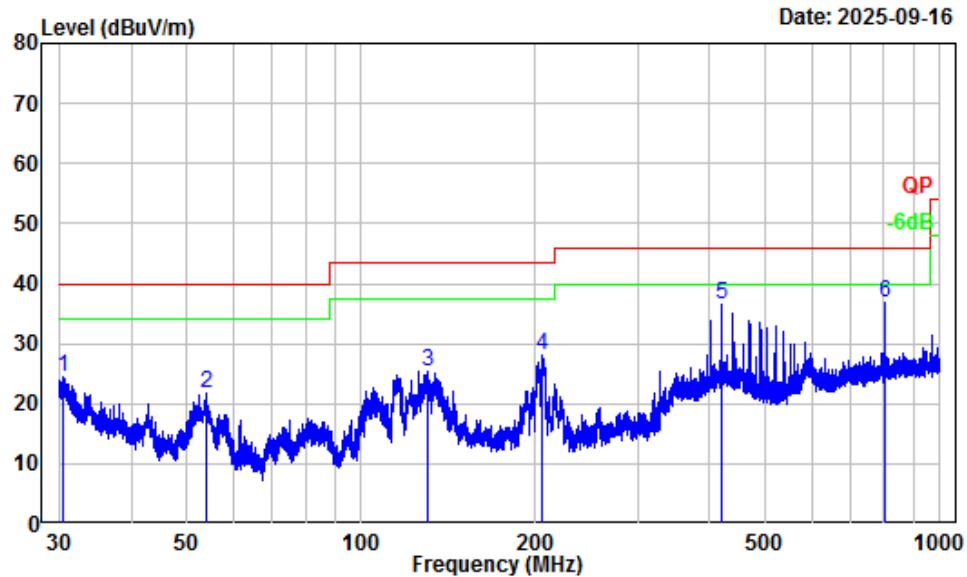
Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m	dBuV/m	
1	0.156	18.70	30.07	48.77	103.74	-54.97	Peak
2	0.579	5.43	30.98	36.41	72.32	-35.91	Peak
3	0.697	3.97	29.21	33.18	70.68	-37.50	Peak
4	1.002	1.20	29.69	30.89	67.46	-36.57	Peak
5	1.388	0.11	29.14	29.25	64.56	-35.31	Peak
6	3.445	-2.39	28.47	26.08	69.54	-43.46	Peak

**30MHz-1GHz:** (Maximum output power mode, High channel)**Horizontal**

Site : Chamber A  
Condition : 3m Horizontal  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Nico Wu

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
1	30.61	-6.28	31.33	25.05	40.00	-14.95 Peak
2	113.86	-12.37	33.96	21.59	43.50	-21.91 Peak
3	143.96	-12.18	36.57	24.39	43.50	-19.11 Peak
4	205.95	-13.55	42.84	29.29	43.50	-14.21 Peak
5	420.03	-7.94	46.18	38.24	46.00	-7.76 Peak
6	779.61	-2.37	35.71	33.34	46.00	-12.66 Peak

## Vertical



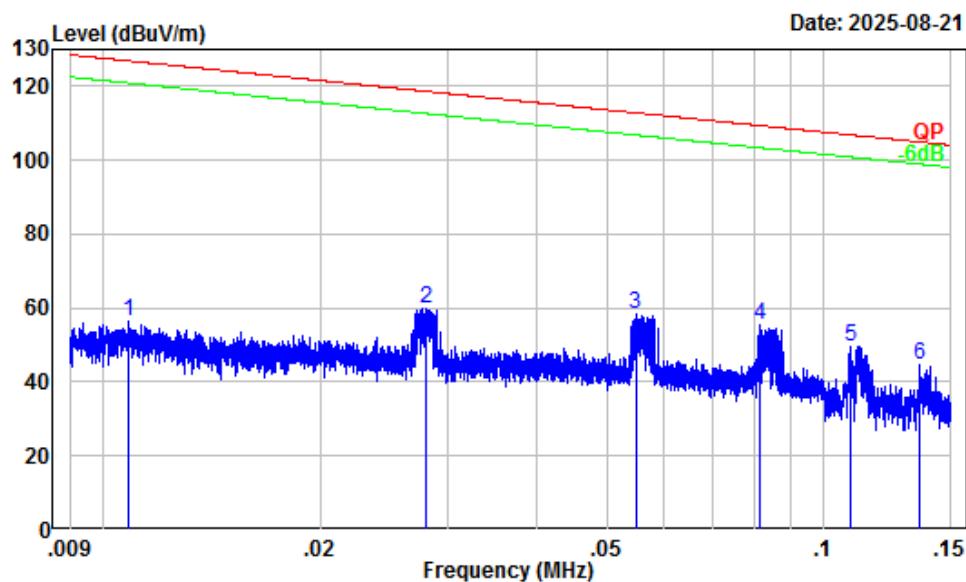
Site : Chamber A  
Condition : 3m Vertical  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Nico Wu

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
1	30.50	-6.22	30.60	24.38	40.00	-15.62 Peak
2	54.00	-18.32	40.01	21.69	40.00	-18.31 Peak
3	129.92	-11.21	36.67	25.46	43.50	-18.04 Peak
4	205.95	-13.55	41.65	28.10	43.50	-15.40 Peak
5	420.03	-7.94	44.46	36.52	46.00	-9.48 Peak
6	804.25	-2.14	39.12	36.98	46.00	-9.02 Peak

Adapter2

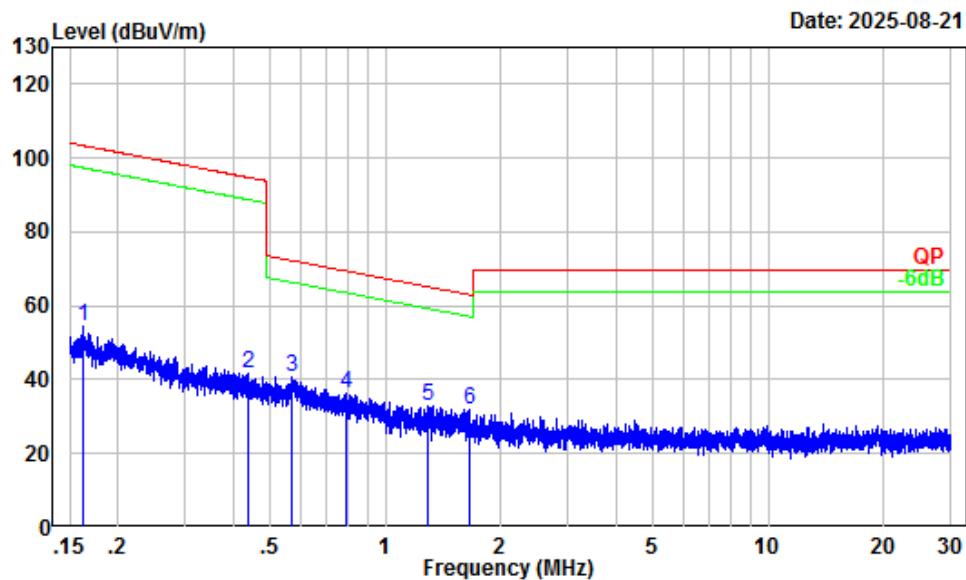
**9 kHz-30MHz:** (Maximum output power mode, High channel)

Parallel (worst case)



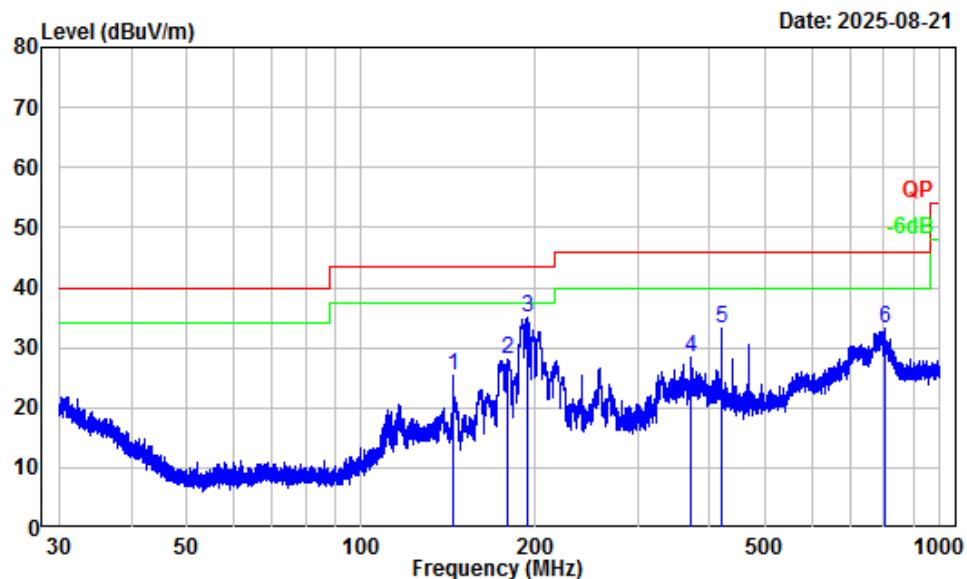
Site : Chamber A  
Condition : 3m  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Anson Su

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1	0.011	32.13	24.20	56.33	126.88	-70.55	Peak
2	0.028	28.86	31.06	59.92	118.62	-58.70	Peak
3	0.055	25.92	32.24	58.16	112.83	-54.67	Peak
4	0.082	23.29	32.33	55.62	109.38	-53.76	Peak
5	0.109	21.47	28.21	49.68	106.86	-57.18	Peak
6	0.136	19.88	24.89	44.77	104.93	-60.16	Peak



Site : Chamber A  
Condition : 3m  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Anson Su

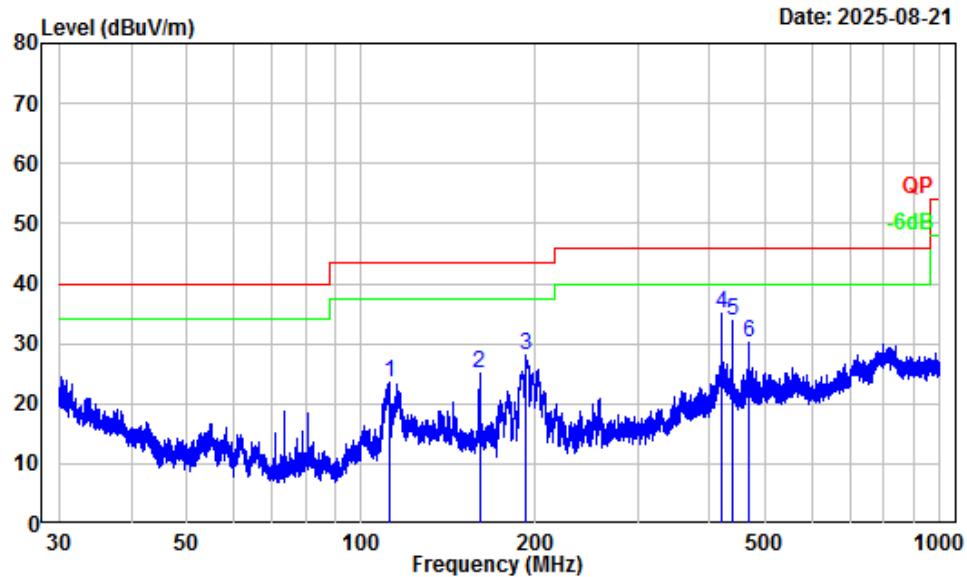
	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz		dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>	dB <sub>uV/m</sub>	
1	0.163	18.30	36.10	54.40	103.37	-48.97	Peak
2	0.440	7.54	34.15	41.69	94.74	-53.05	Peak
3	0.570	5.54	35.18	40.72	72.46	-31.74	Peak
4	0.787	2.87	33.28	36.15	69.60	-33.45	Peak
5	1.288	0.39	32.69	33.08	65.23	-32.15	Peak
6	1.652	-0.62	32.37	31.75	63.02	-31.27	Peak

**30MHz-1GHz:** (Maximum output power mode, High channel)**Horizontal**

Site : Chamber A  
Condition : 3m Horizontal  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Anson Su

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dB <sub>uV</sub>	dB <sub>uV/m</sub>		
1	144.02	-12.15	37.46	25.31	43.50	-18.19	Peak
2	179.39	-13.65	41.77	28.12	43.50	-15.38	Peak
3	193.77	-13.50	48.51	35.01	43.50	-8.49	Peak
4	372.00	-9.39	37.64	28.25	46.00	-17.75	Peak
5	420.03	-7.75	40.94	33.19	46.00	-12.81	Peak
6	801.08	-2.13	35.26	33.13	46.00	-12.87	Peak

## Vertical



Site : Chamber A  
Condition : 3m Vertical  
Project Number : 2501U08095E-RFA1  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Anson Su

Freq	Factor	Read	Limit	Over	Remark	
		Level	Level	Line		
1	111.64	-12.75	36.35	23.60	43.50	-19.90 Peak
2	159.99	-12.71	37.70	24.99	43.50	-18.51 Peak
3	192.08	-13.59	41.77	28.18	43.50	-15.32 Peak
4	420.03	-7.75	42.79	35.04	46.00	-10.96 Peak
5	438.08	-7.32	41.22	33.90	46.00	-12.10 Peak
6	468.05	-6.50	36.66	30.16	46.00	-15.84 Peak

**Above 1GHz:**

Frequency (MHz)	Reading (dB $\mu$ V)	PK/AV	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
Low Channel(2402MHz)							
4804.00	60.50	PK	H	-7.79	52.71	74	-21.29
4804.00	59.48	PK	V	-7.79	51.69	74	-22.31
Middle Channel(2440MHz)							
4880.00	58.46	PK	H	-7.59	50.87	74	-23.13
4880.00	59.67	PK	V	-7.59	52.08	74	-21.92
High Channel(2477MHz)							
4954.00	58.14	PK	H	-7.61	50.53	74	-23.47
4954.00	58.50	PK	V	-7.61	50.89	74	-23.11

Note:

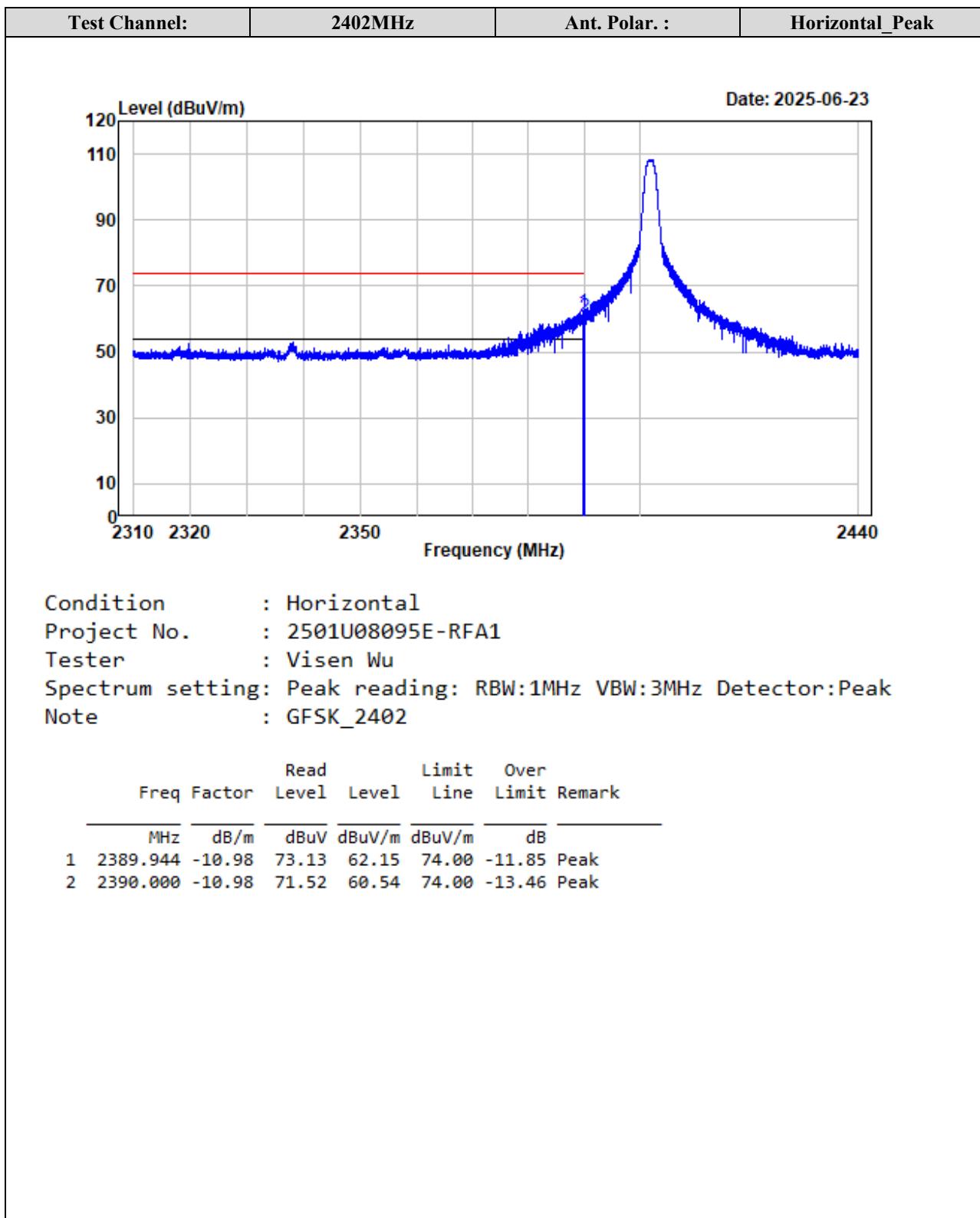
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

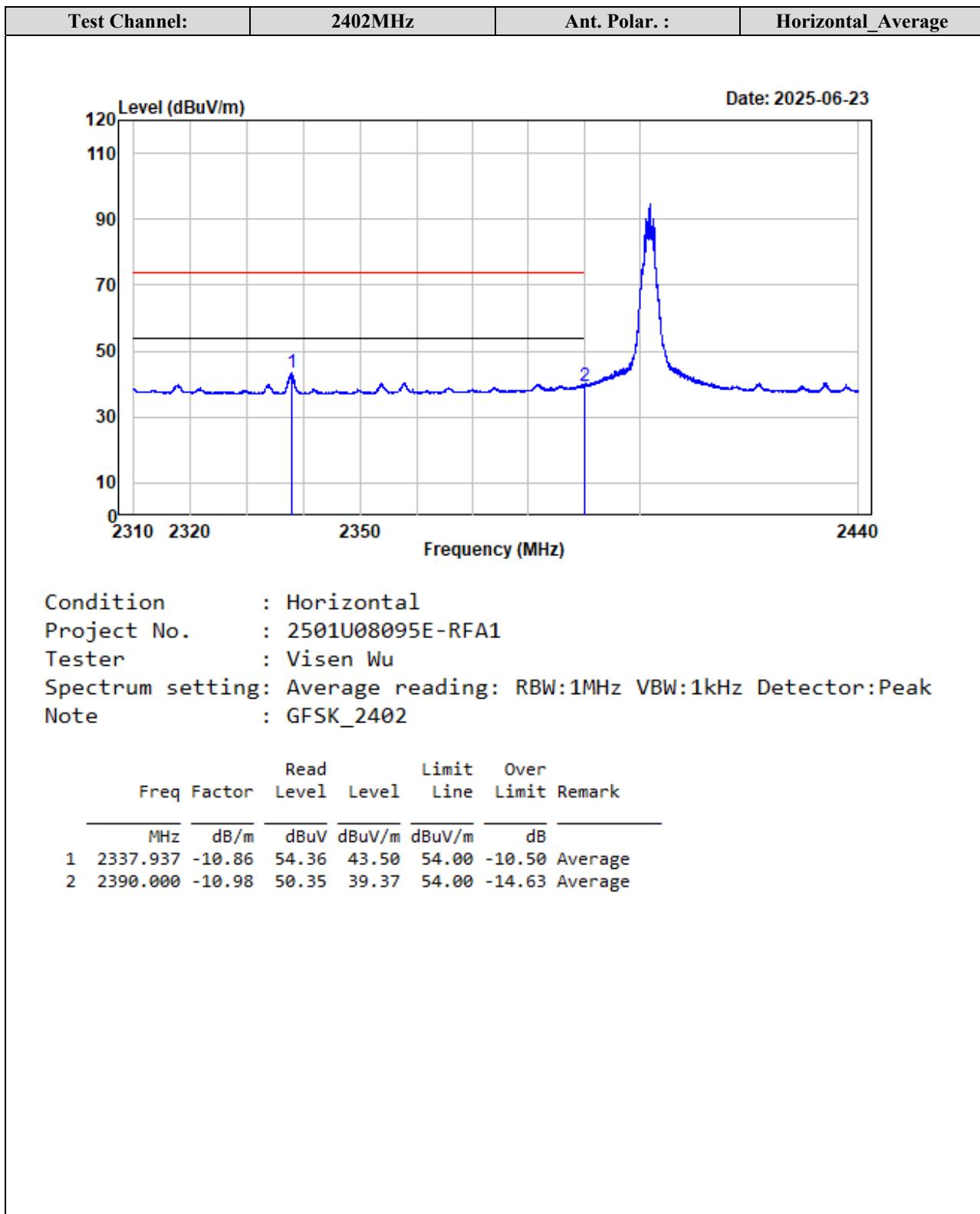
Corrected Amplitude = Corrected Factor + Reading

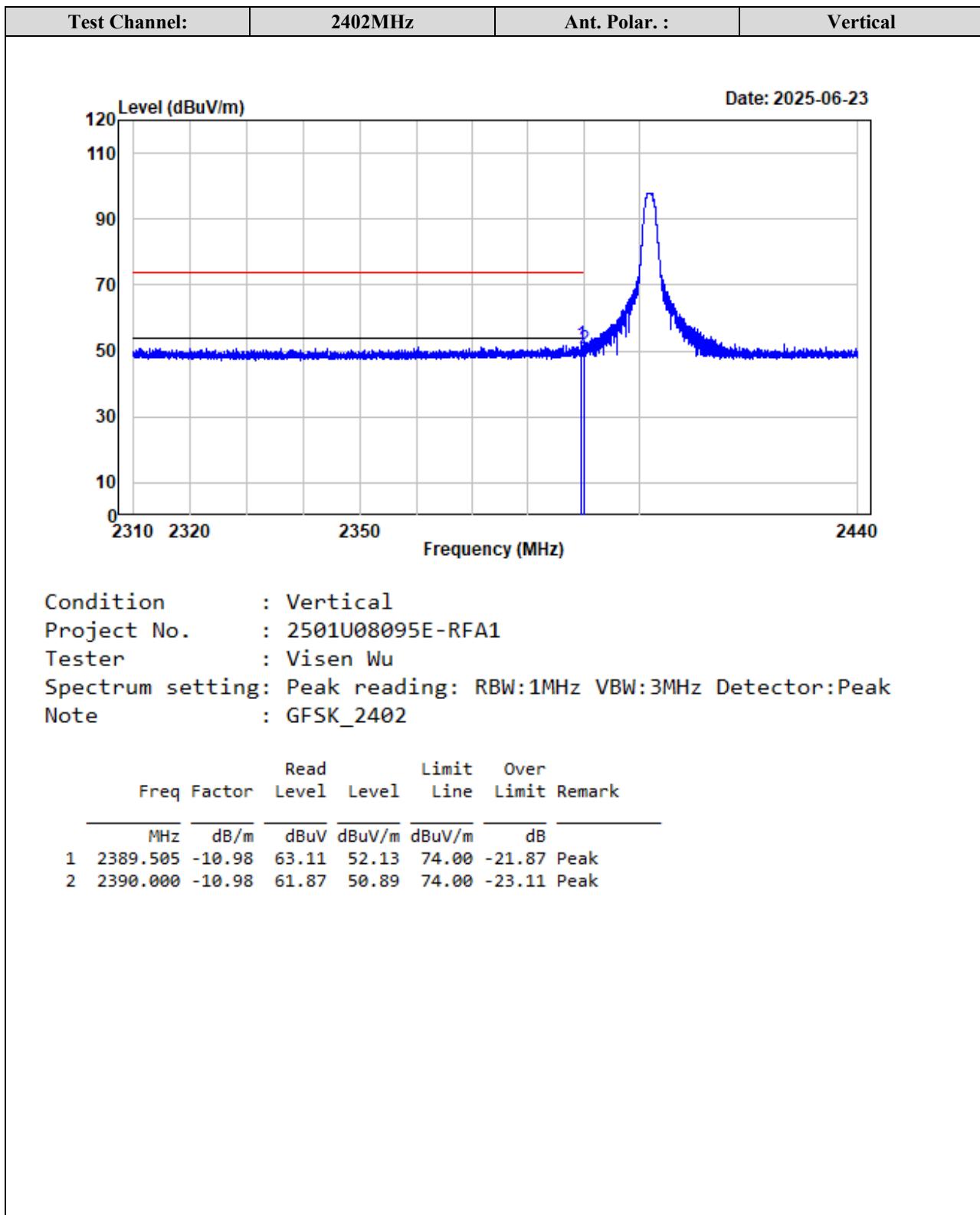
Margin = Corrected. Amplitude - Limit

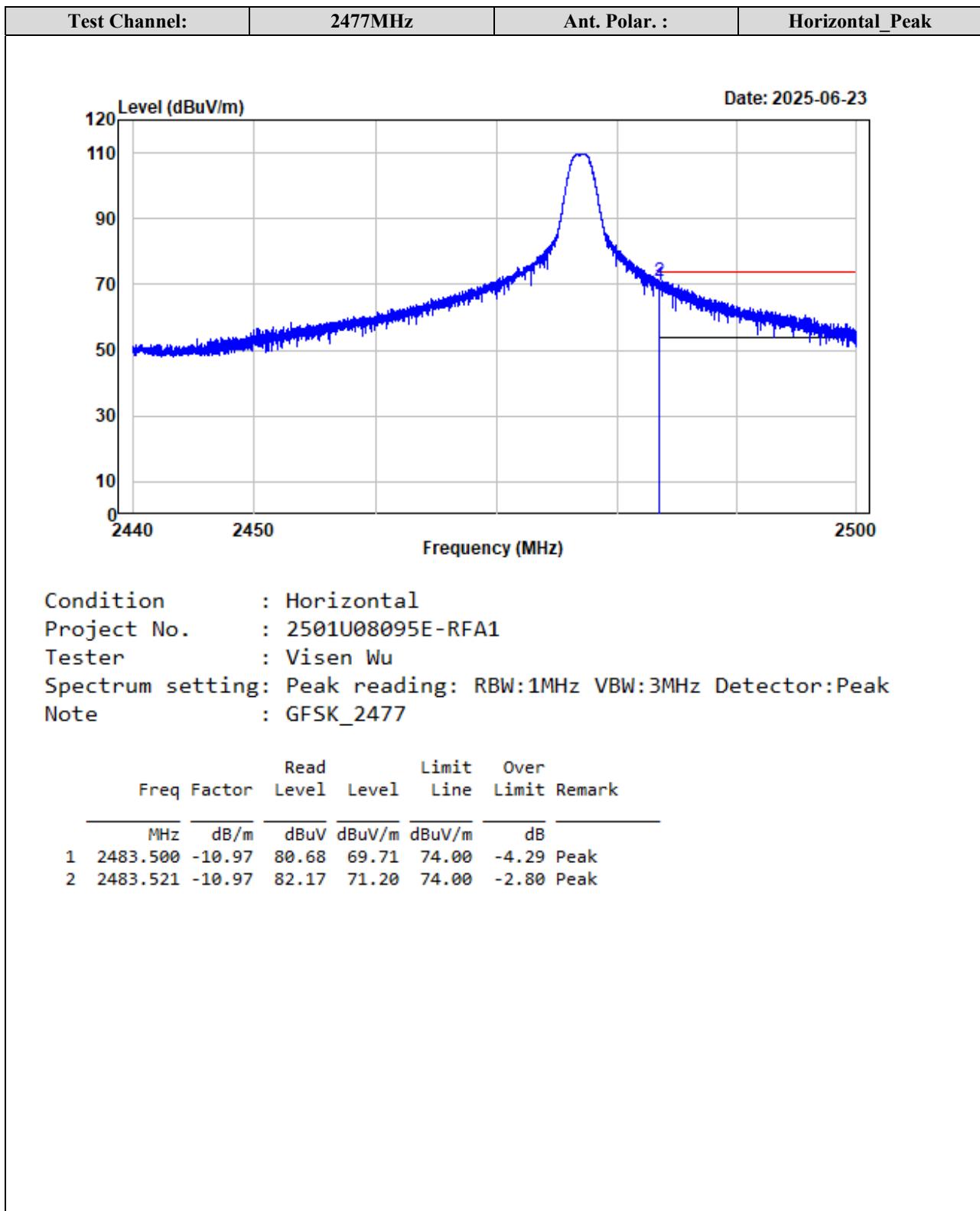
Other emissions which were more than 20dB below limit or on noise floor level was not recorded.

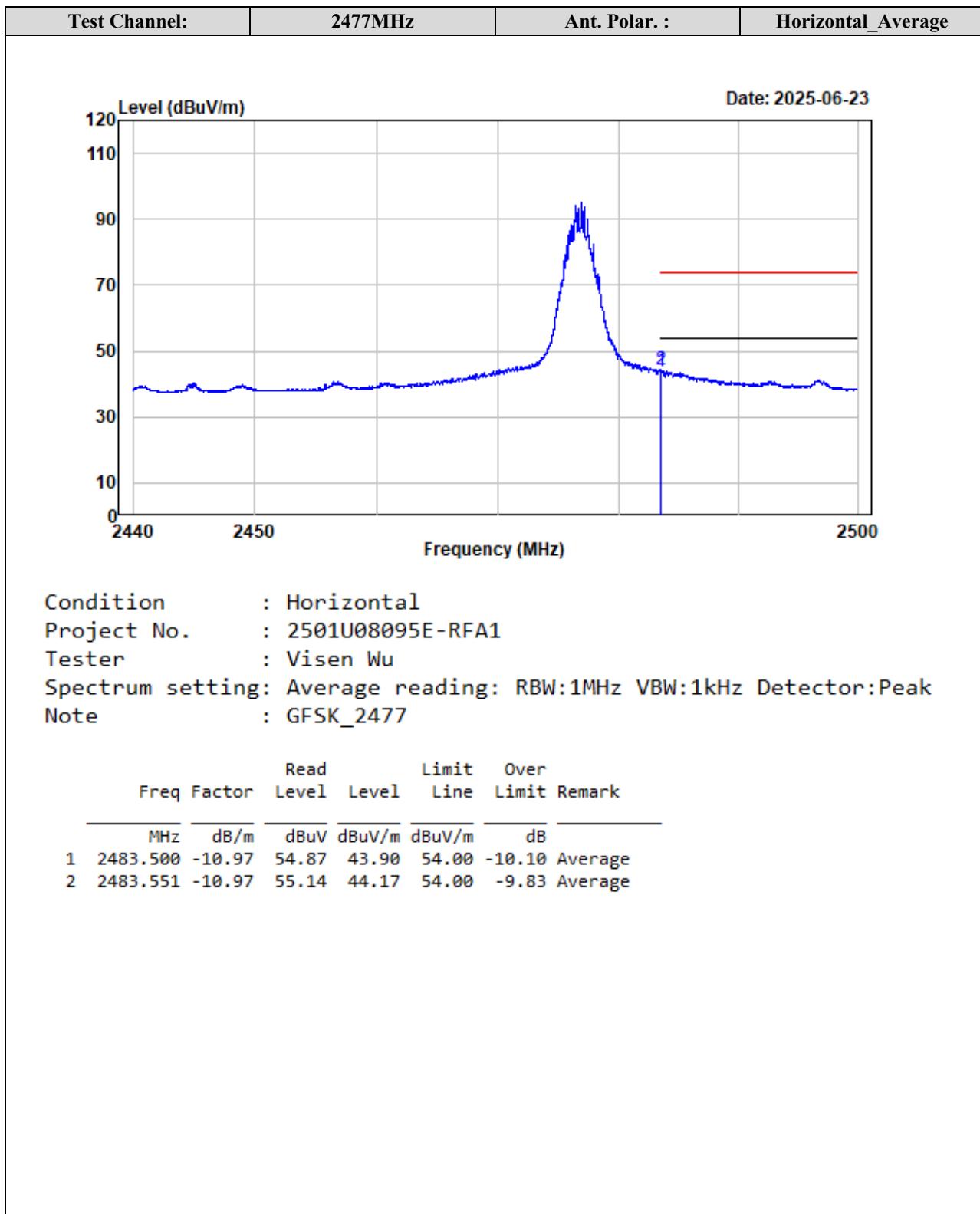
The test result of peak was less than the limit of average, so just peak values were recorded.

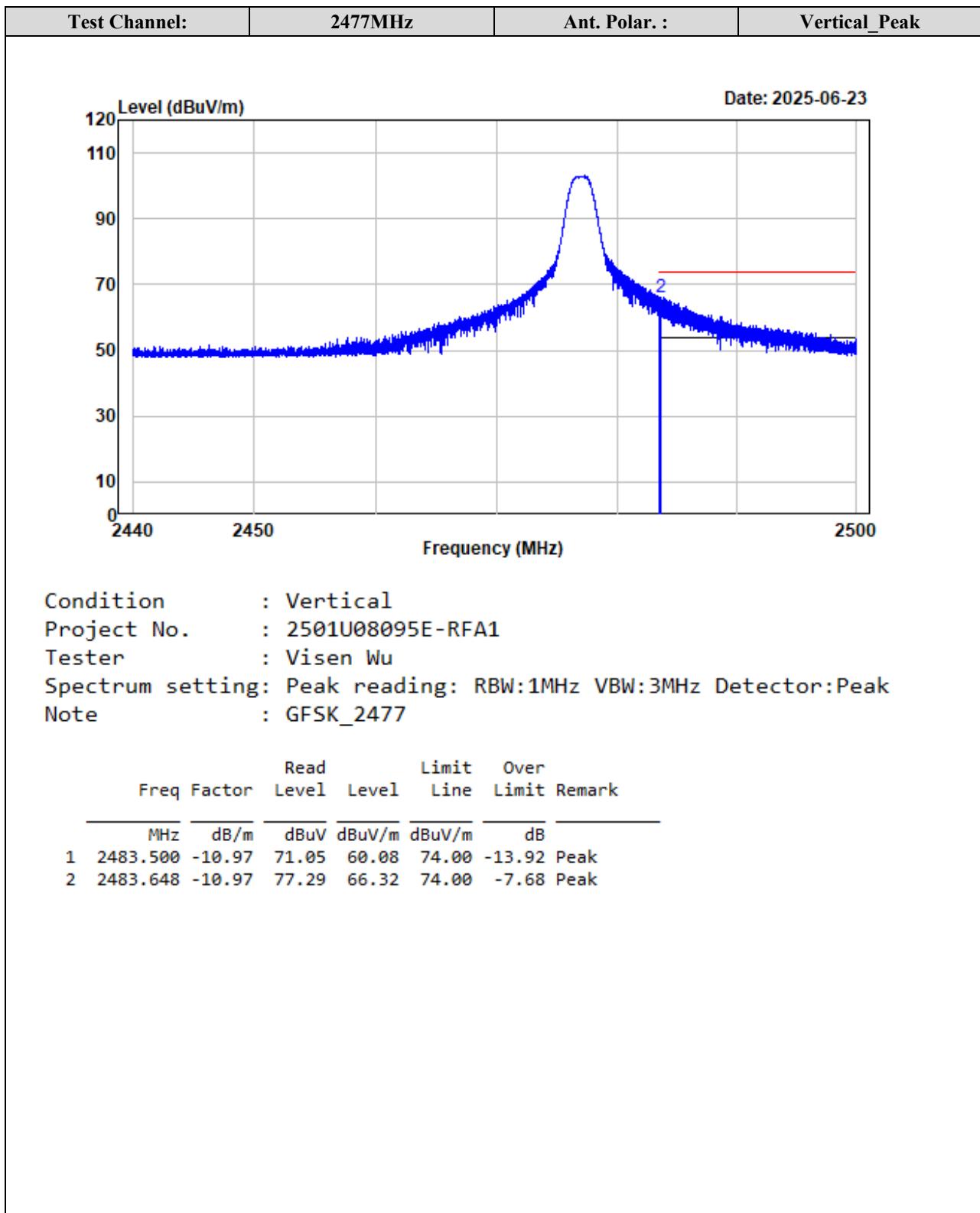
**Test plots for Band Edge Measurements (Radiated):**

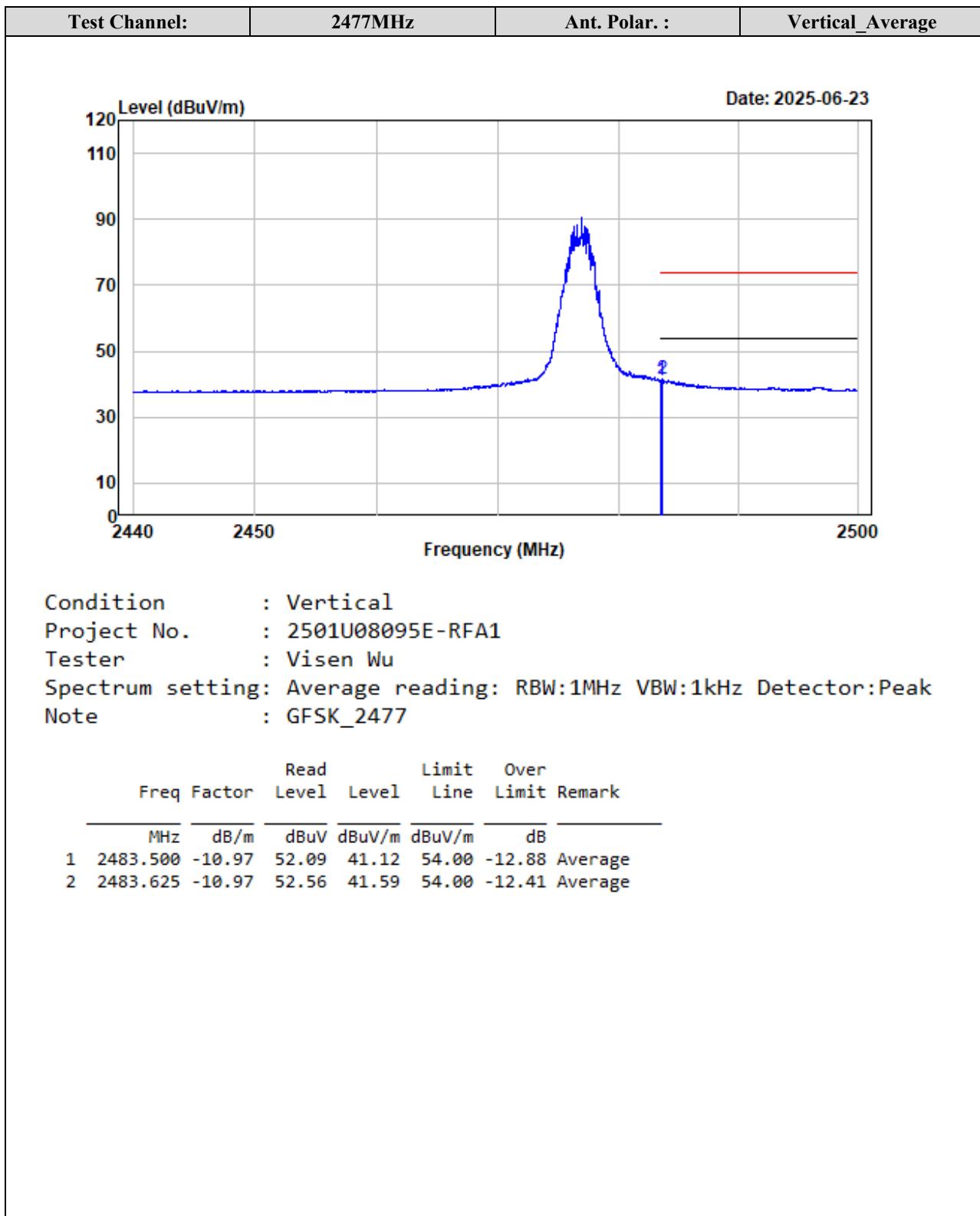


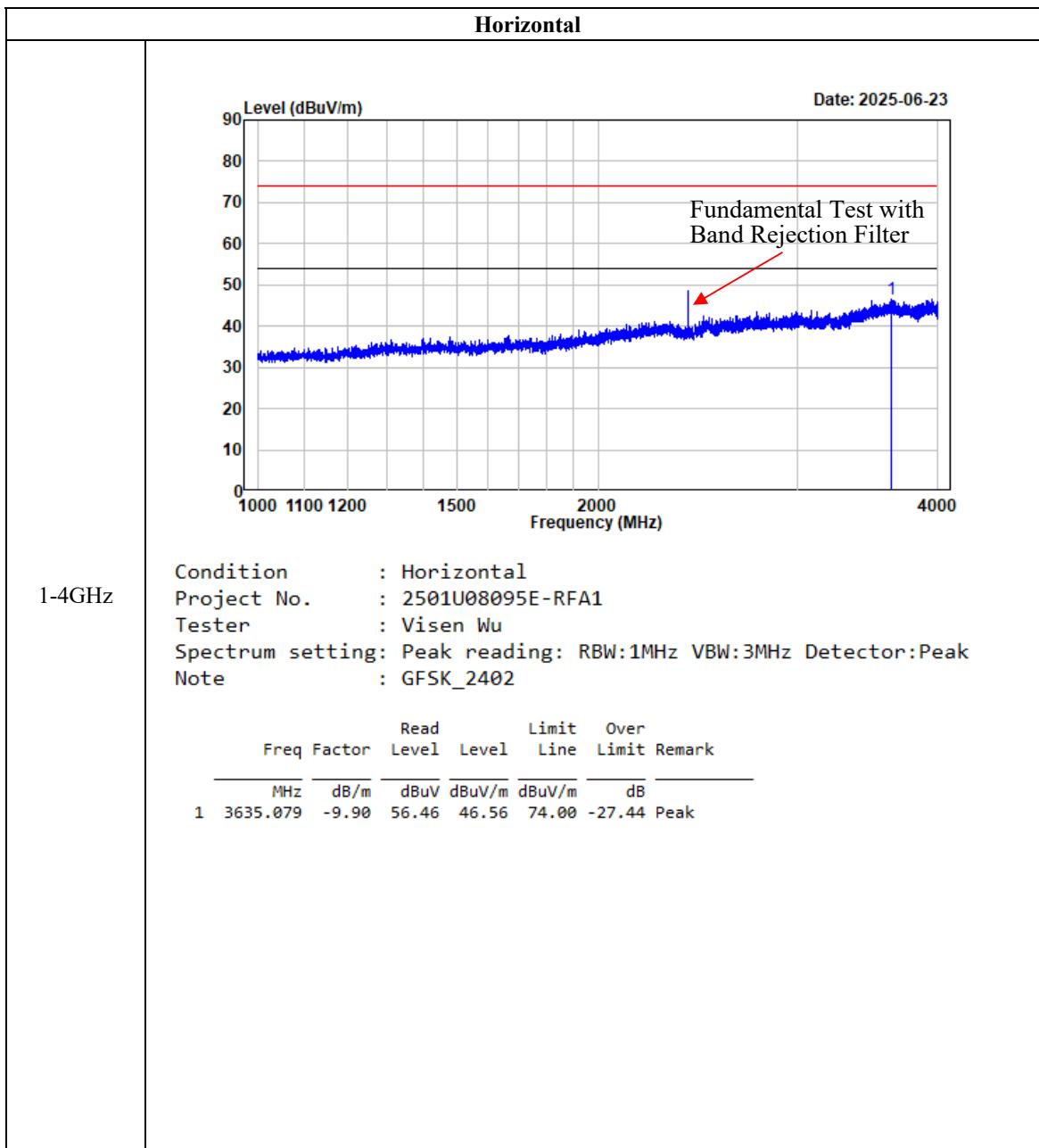


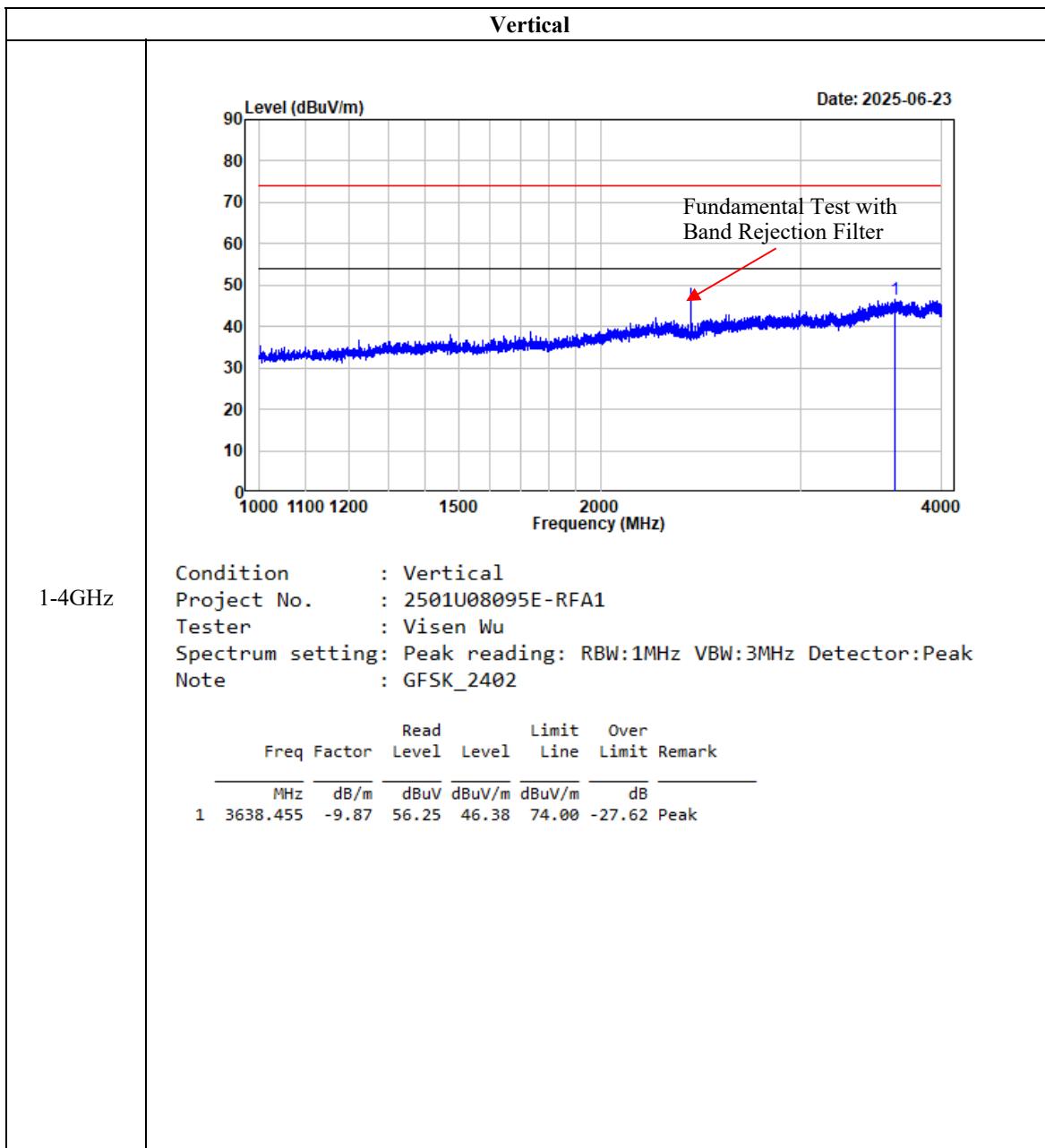


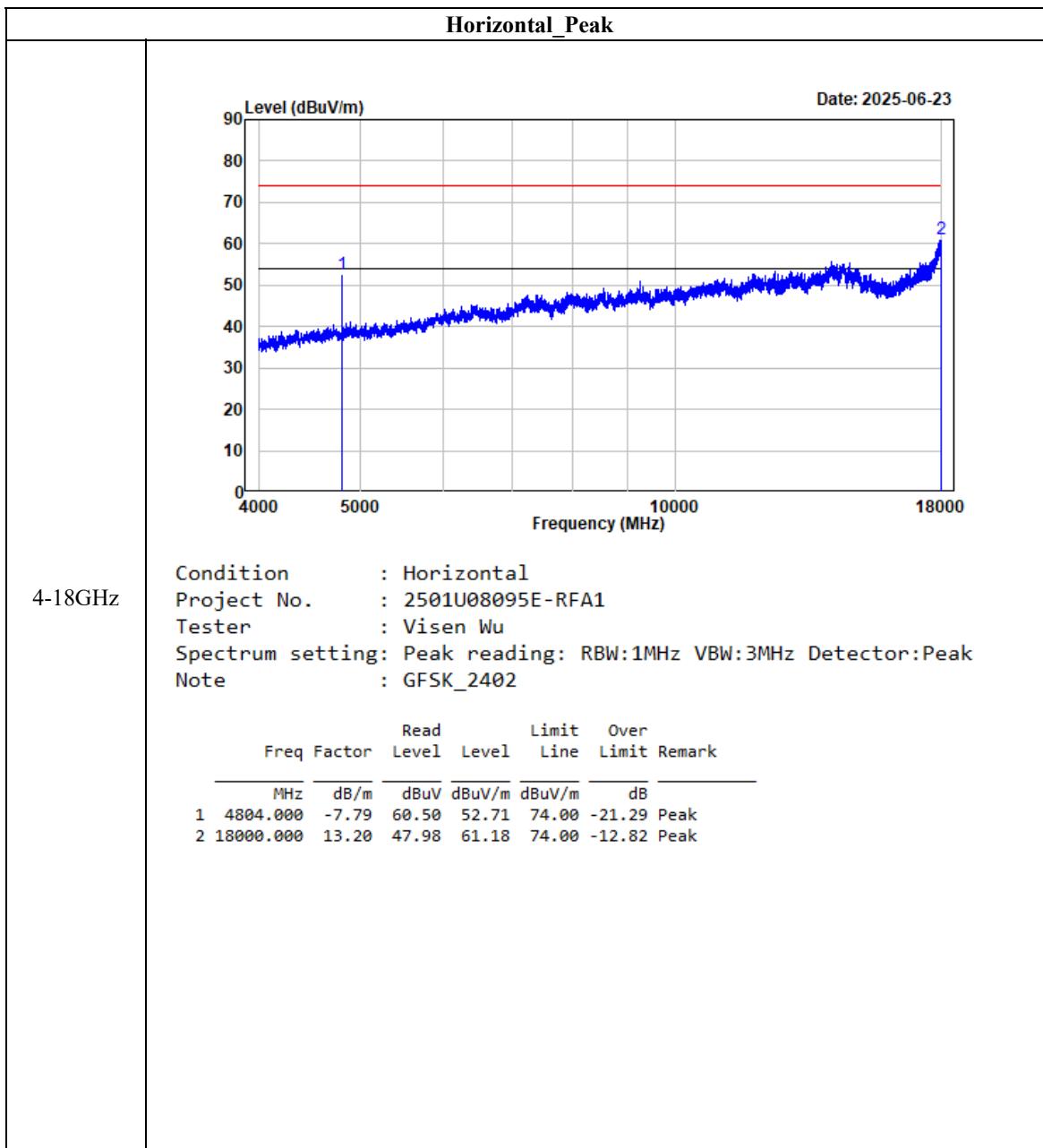


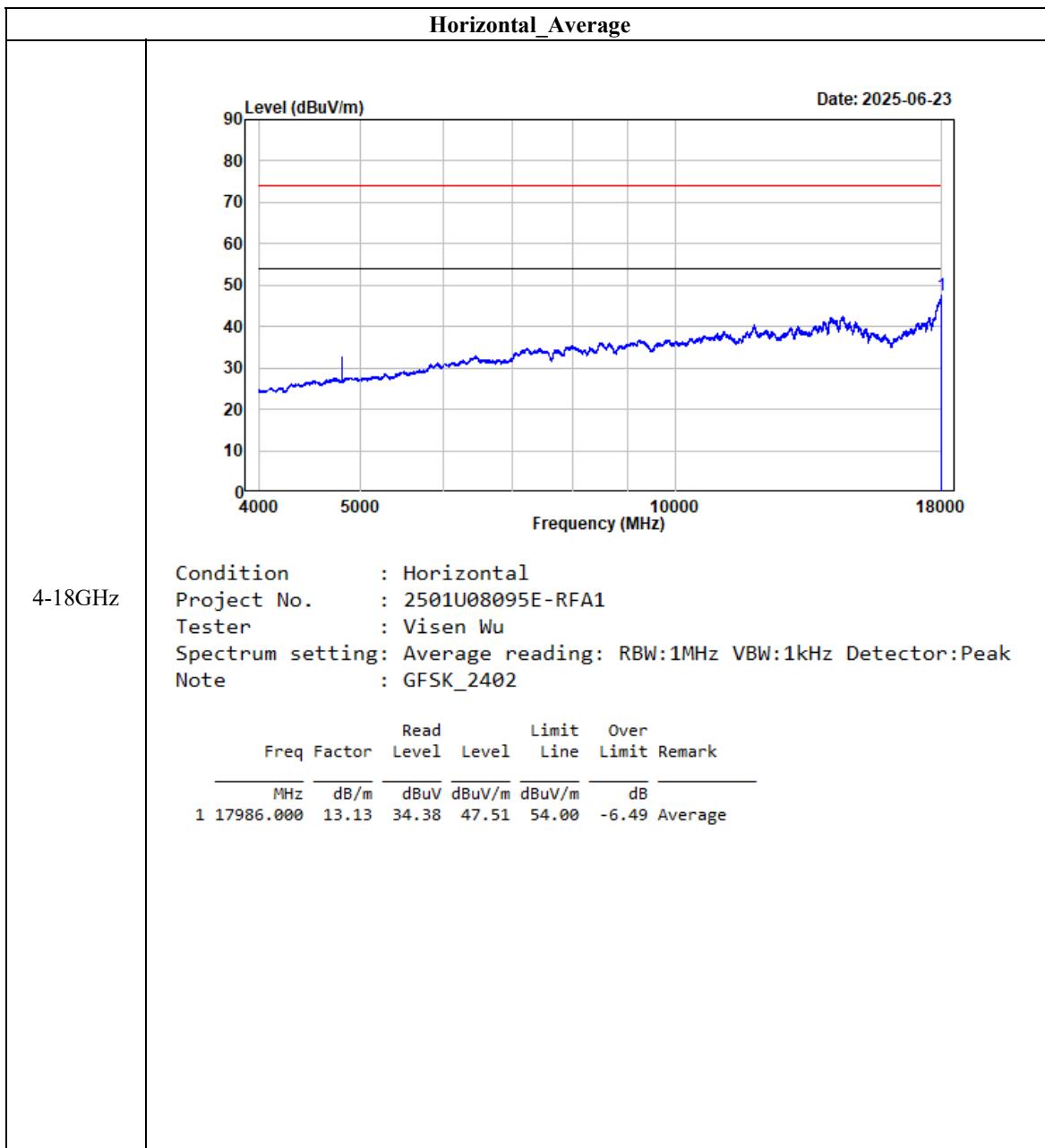


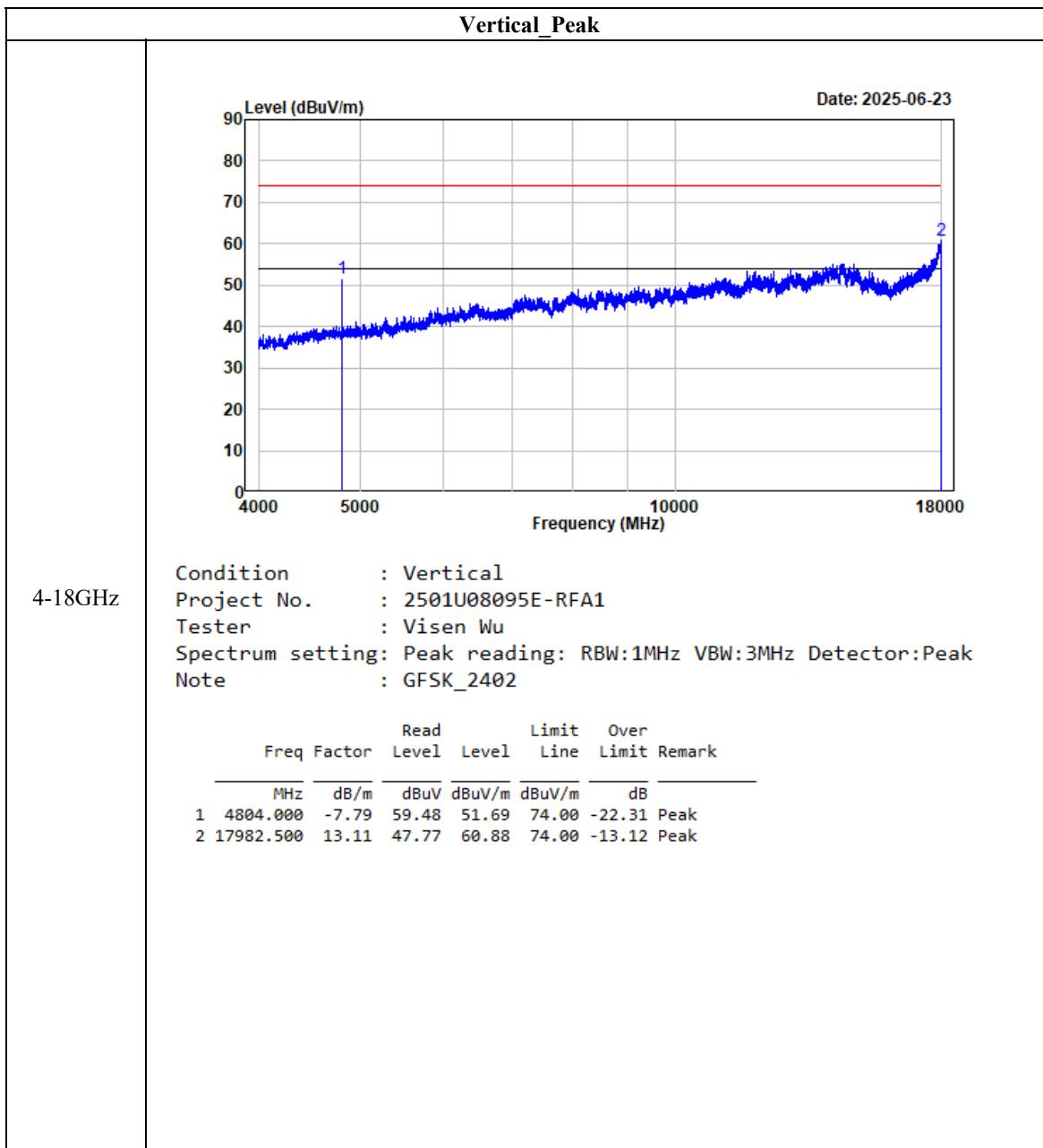


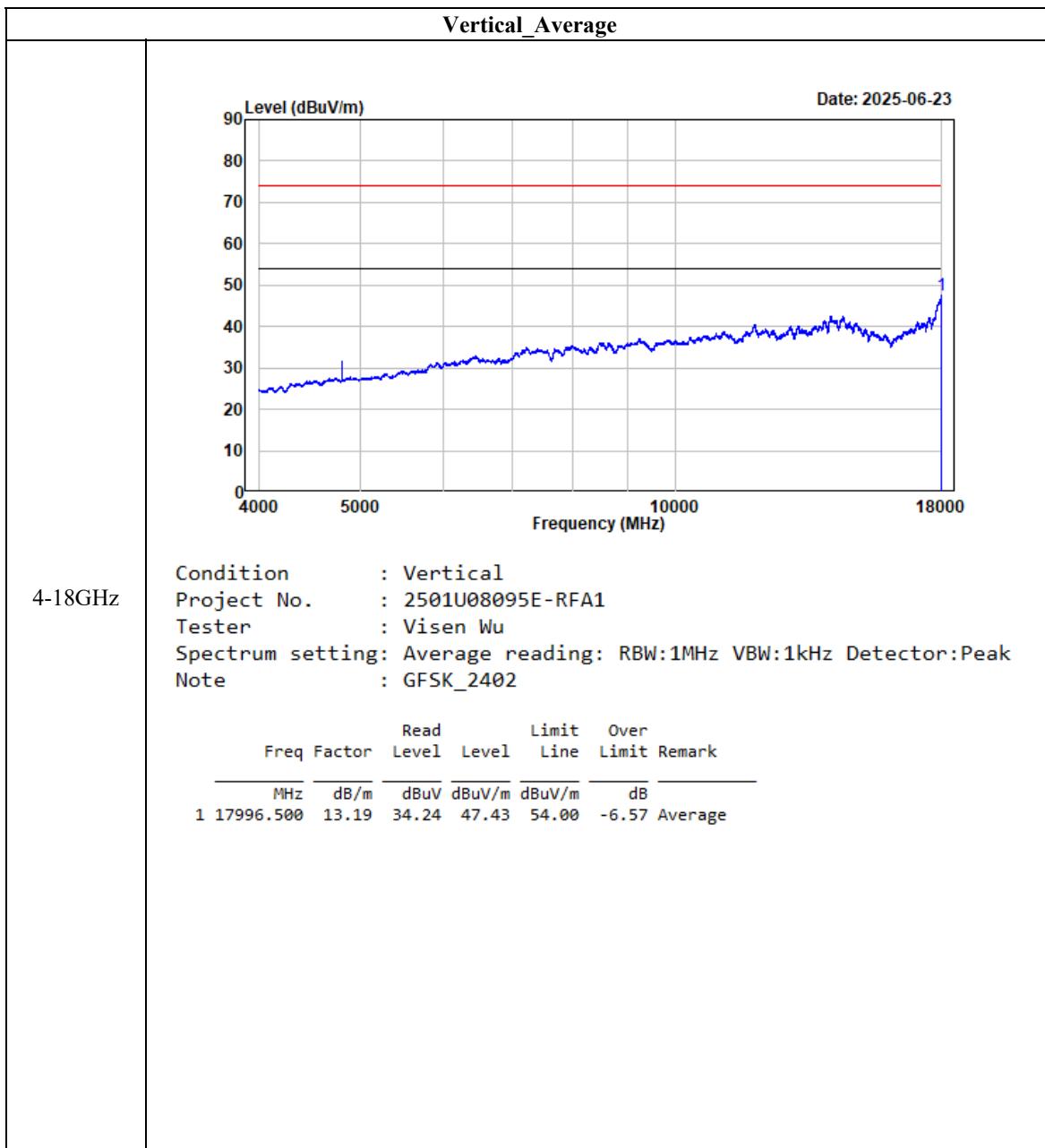
**Listed with the worst harmonic margin test plot:**

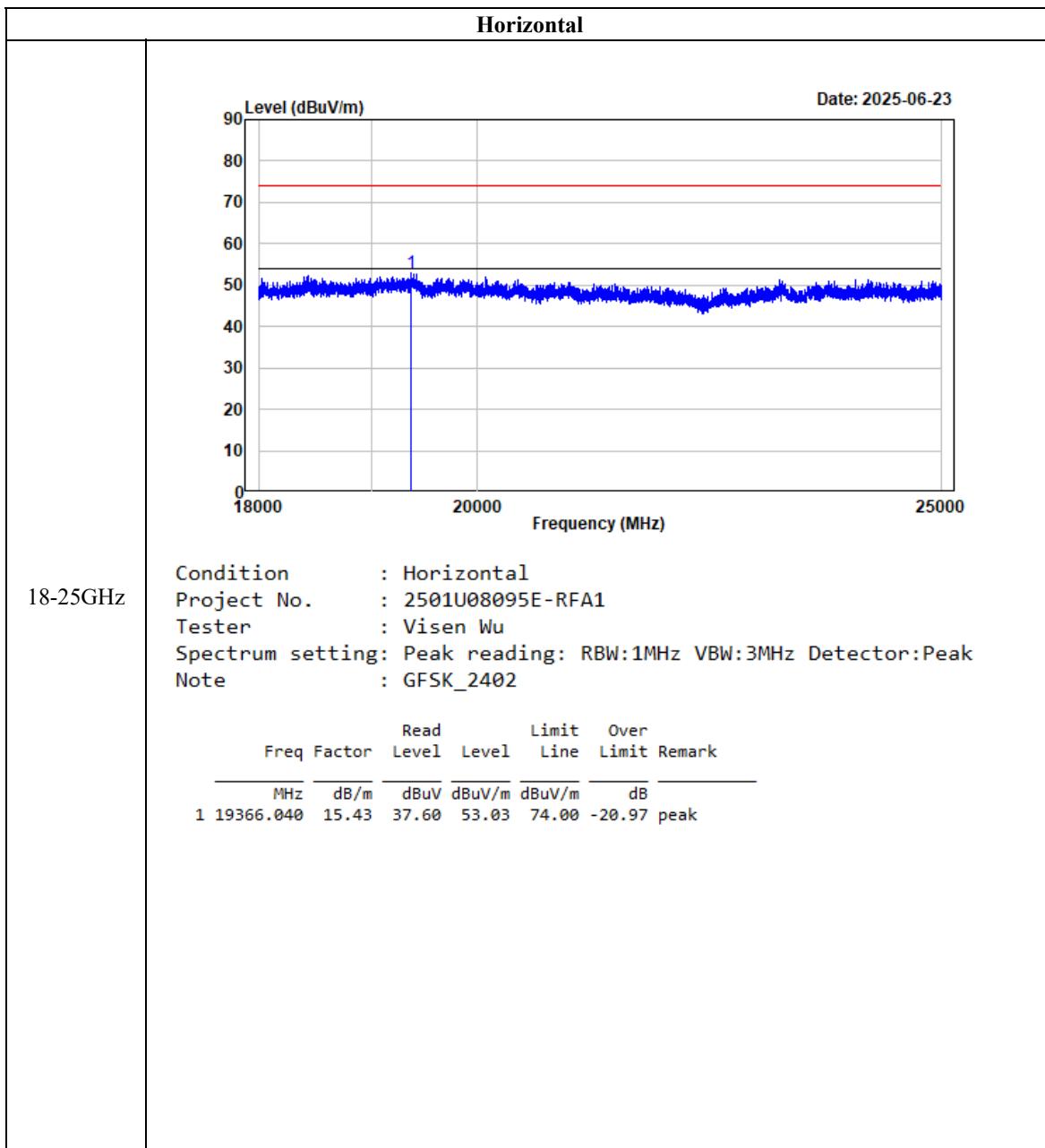


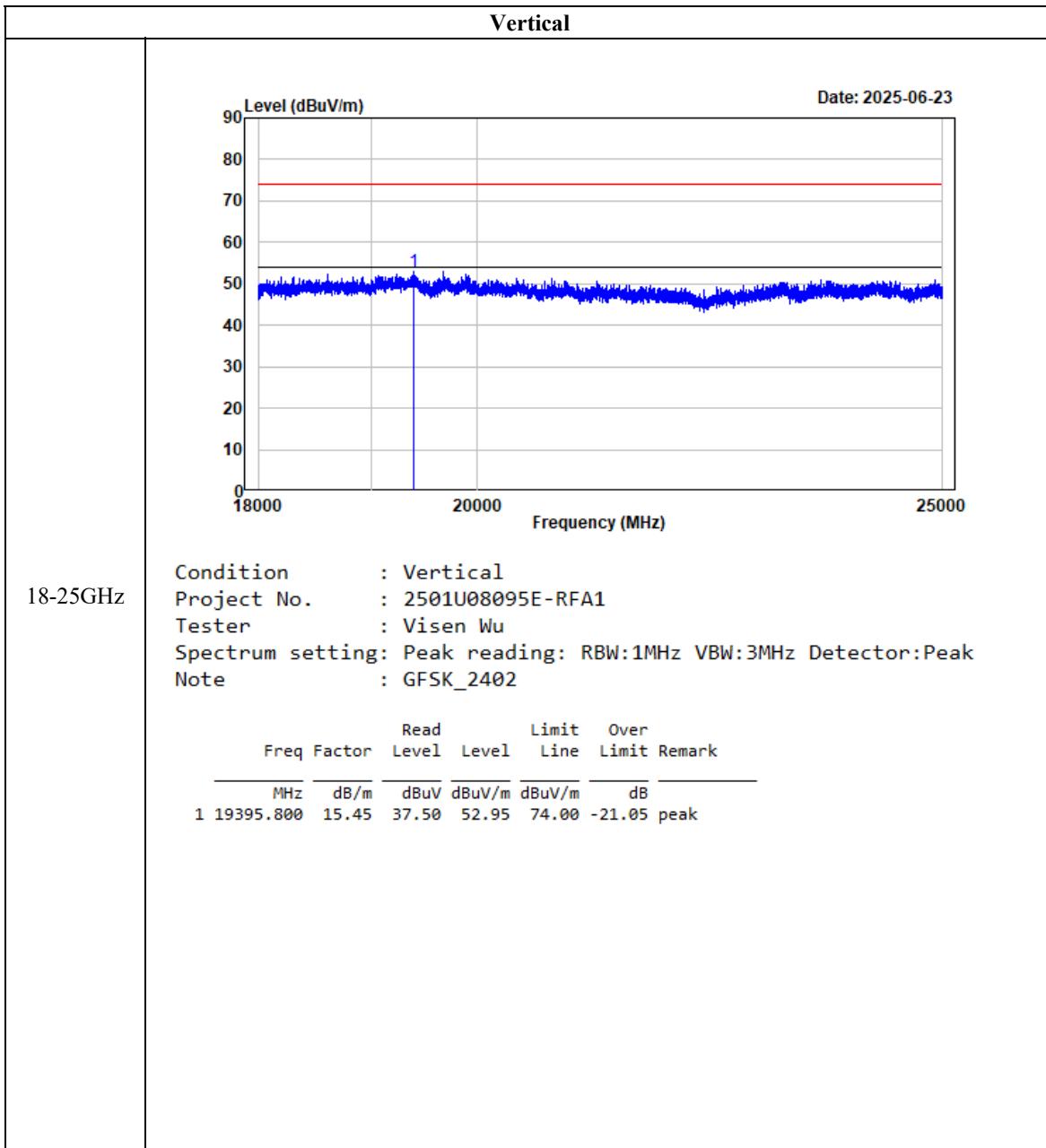












## FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

### Applicable Standard

According to §15.247(b) (1), for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

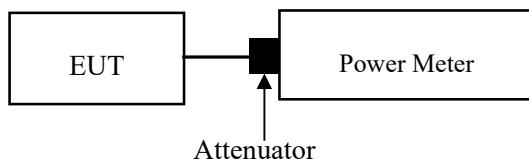
### Test Procedure

Test Method: ANSI C63.10-2020 Clause 7.8.5

This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. Frequency hopping shall be disabled for this test. Use the following spectrum analyzer settings:

- a) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
- b) RBW > 20 dB bandwidth of the emission being measured.
- c) VBW  $\geq$  RBW.
- d) Sweep: No faster than coupled (auto) time.
- e) Detector function: Peak.
- f) Trace: Max-hold.
- g) Allow trace to stabilize.
- h) Use the marker-to-peak function to set the marker to the peak of the emission.
- i) The indicated level is the peak output power, after any corrections for external attenuators and cables.
- j) A spectral plot of the test results and setup description shall be included in the test report.

NOTE— A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.



Note: A short RF cable with low cable loss connected to the EUT antenna port, which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable loss

**Test Data****Environmental Conditions**

<b>Temperature:</b>	25.5 °C
<b>Relative Humidity:</b>	53 %
<b>ATM Pressure:</b>	101.2 kPa

The testing was performed by Brian Li on 2025-06-23.

EUT operation mode: Transmitting

**Test Result: Compliant**

Mode	Test Frequency (MHz)	Peak Output Power(dBm)	Limit (dBm)	Verdict
GFSK	2402	16.49	21	Pass
	2440	16.96	21	Pass
	2477	17.44	21	Pass

## **EUT PHOTOGRAPHS**

Please refer to the attachment 2501U08095E-RFA1 External photo and 2501U08095E-RFA1 Internal photo.

## **TEST SETUP PHOTOGRAPHS**

Please refer to the attachment 2501U08095E-RFA1 Test Setup photo.

**\*\*\*\*\* END OF REPORT \*\*\*\*\***