

# TEST REPORT

Applicant Name: QUEST USA CORP  
Address: 495 Flatbush Ave, Brooklyn, NY 11225, USA  
Report Number: 2401Z35190E-RF-00  
FCC ID: 2AJQ7KEYBOARD

## Test Standard (s)

FCC PART 15.249

## Sample Description

Product Type: IJOY TRANSLUCENT WIRELESS KEYBOARD WITH DONGLE  
Model No.: IJ10390-FB  
Multiple Model(s) No.: IJ10389-FB, IJAST477-FB  
Trade Mark: IJOY  
Date Received: 2024/11/12  
Issue Date: 2025/01/03

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

## Prepared and Checked By:

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Gala Liu  
RF Engineer

## Approved By:

*Michelle Zeng*

Michelle Zeng  
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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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401Z35190E-RF-00	Original Report	2025/01/03

## GENERAL INFORMATION

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

Product	IJOY TRANSLUCENT WIRELESS KEYBOARD WITH DONGLE
Tested Model	IJ10390-FB
Multiple Model(s)	IJ10389-FB, IJAST477-FB
Frequency Range	2402-2480MHz
Maximum E-field strength	90.16 dBuV/m@3m
Modulation Technique	GFSK
Antenna Specification <sup>#</sup>	2.34dBi (provided by the applicant)
Voltage Range	DC 3.0 V from Battery
Sample serial number	2U6E-1 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A
Note: The multiple models are electrically identical with the test model except for model number, color and combination. Please refer to the declaration letter <sup>#</sup> for more detail, which was provided by manufacturer.	

### Objective

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

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.209 and 15.249 rules.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, 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	9kHz-150kHz	3.63dB(k=2, 95% level of confidence)
	150kHz-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 by manufacturer.

### Frequency Channel List:

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2402	11	2422	21	2442	31	2462
2	2404	12	2424	22	2444	32	2464
3	2406	13	2426	23	2446	33	2466
4	2408	14	2428	24	2448	34	2468
5	2410	15	2430	25	2450	35	2470
6	2412	16	2432	26	2452	26	2472
7	2414	17	2434	27	2454	37	2474
8	2416	18	2436	28	2456	38	2476
9	2418	19	2438	29	2458	39	2478
10	2420	20	2440	30	2460	40	2480

Note: Test on Channel 1, 20 and 40.

### EUT Exercise Software

“FCC test tool .exe V 2.4”<sup>#</sup> exercise software was used and the power level is -10<sup>#</sup>. The power level was provided by the manufacturer.

### Equipment Modifications

No modifications were made to the unit tested.

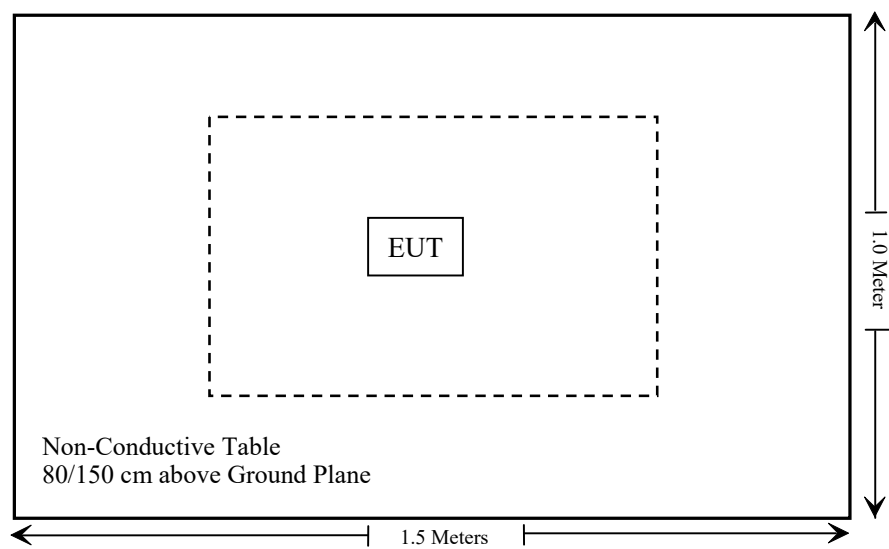
### Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

### Support Cable Descriptions

Cable Description	Length (m)	From/Port	To
/	/	/	/

Block Diagram of Test Setup



**SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Result
§1.1307(b)(3)(i)(A)& §2.1093	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.207(a)	Conduction Emissions	Not Applicable
15.205, §15.209, §15.249(d)	Radiated Emissions& Outside of Band Emission	Compliant
§15.215 (c)	20 dB Bandwidth	Compliant

Not Applicable: The device is only powered by battery.

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Radiated Emissions Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sonoma instrument	Pre-amplifier	310 N	186238	2024/05/21	2025/05/20
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber A Cable 1	N/A	2024/06/18	2025/06/17
Unknown	Cable	XH500C	J-10M-A	2024/06/18	2025/06/17
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
COM-POWER	Pre-amplifier	PA-122	181919	2024/06/18	2025/06/17
Schwarzbeck	Horn Antenna	BBHA9120D(12 01)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	735	2024/06/18	2025/06/17
Unknown	RF Cable	UFA147	219661	2024/06/18	2025/06/17
JD	Multiplex Switch Test Control Set	DT7220FSU	DQ77926	2024/06/18	2025/06/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
A.H.System	Pre-amplifier	PAM-1840VH	190	2024/06/18	2025/06/17
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/06/18	2025/06/17
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

\* **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(b)(3)(i)(A) & §2.1093 - RF EXPOSURE****Applicable Standard**

According to FCC §2.1093 and §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D04 Interim General RF Exposure Guidance v01, clause 2.1.2 – 1-mW test Exemption:

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

**Test Result**

For worst case:

Frequency (MHz)	Maximum EIRP (dBuV/m@3m)	Maximum EIRP (dBm)	Maximum ERP		1-mW test Exemption
			(dBm)	(mW)	
2402-2480	90.16	-5.04	-7.19	0.19	Yes

Note: Use the maximum E-field strength for the RF exposure evaluation

$$\text{EIRP} = \text{E-Field} - 95.2 @ 3\text{m}$$

$$\text{ERP(dBm)} = \text{EIRP(dBm)} - 2.15$$

**Result: Compliant.**

## **FCC§15.203 - ANTENNA REQUIREMENT**

### **Applicable Standard**

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

### **Antenna Connector Construction**

The EUT has a PCB antenna which was permanently attached and the antenna gain<sup>#</sup> is 2.34dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Antenna Type	Antenna Gain <sup>#</sup> (dBi)	Impedance	Frequency Range
PCB	2.34	50Ω	2402-2480MHz

**Result: Compliant.**

## FCC§15.205, §15.209 & §15.249(d) - RADIATED EMISSIONS

### Applicable Standard

As per FCC§15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

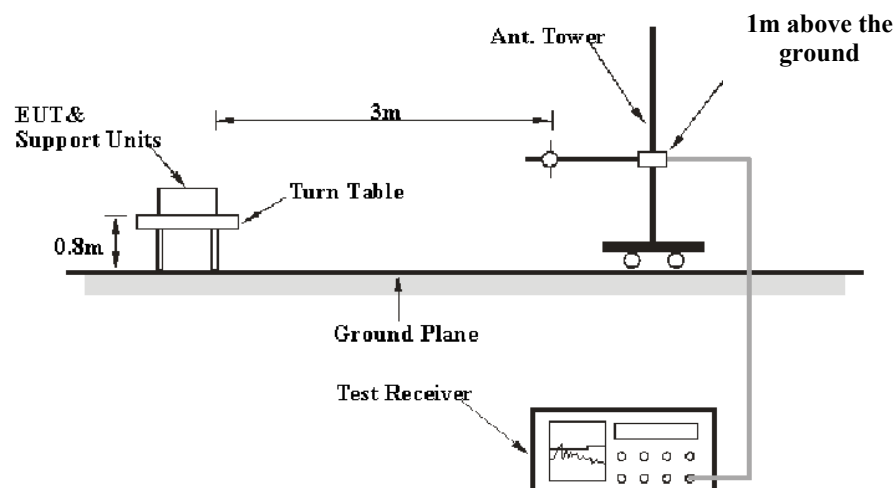
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

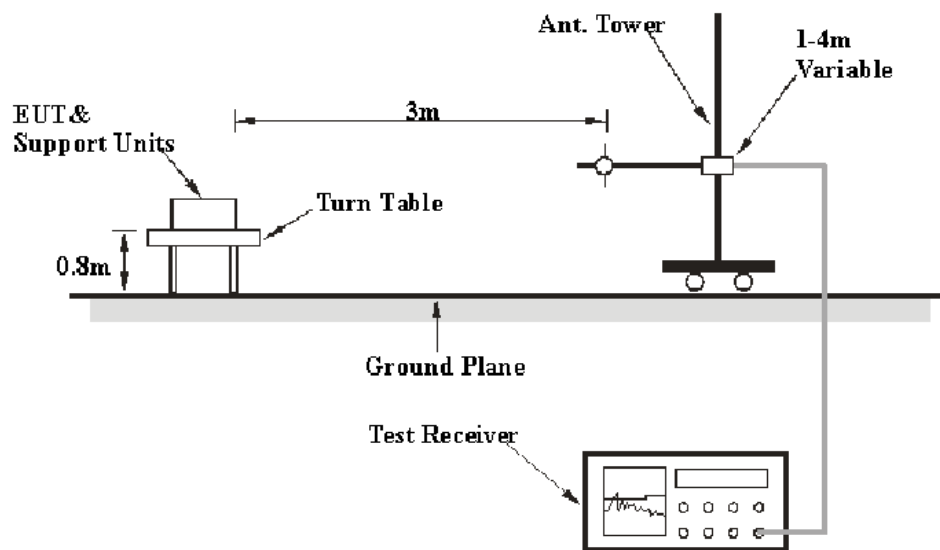
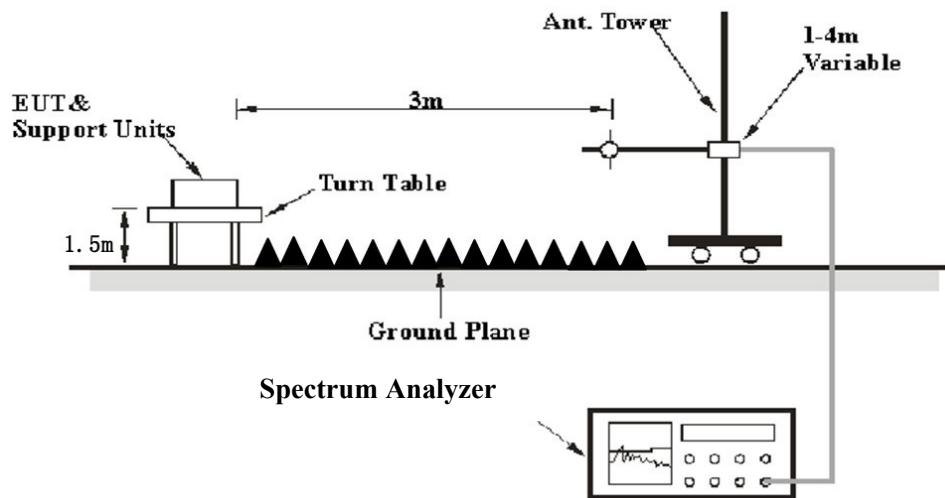
As per FCC§15.249 (c), Field strength limits are specified at a distance of 3 meters.

As per FCC§15.249 (d), Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

### EUT Setup

9 kHz-30MHz:



**30MHz-1GHz:****Above 1GHz:**

The radiated emission and out of band emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209/15.205 and FCC 15.249 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	Measurement	Detector
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	Peak
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	Peak
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	PK	Peak

1-25GHz:

Pre-scan

Measurement	RBW	Video B/W	Detector
PK	1MHz	3 MHz	Peak
AV	1MHz	1 kHz	Peak

Final measurement for emission identified during pre-scan

Measurement	RBW	Video B/W	Detector
PK	1MHz	3 MHz	PK
AV	1MHz	10 Hz	PK

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.

## Test Procedure

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

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 0.8 meter above ground plane for below 1GHz or 1.5 meter for above 1GHz, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

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.

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/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 calculation is as follows:

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

## Test Data

### Environmental Conditions

Temperature:	22~25.1 °C
Relative Humidity:	40~54 %
ATM Pressure:	101 kPa

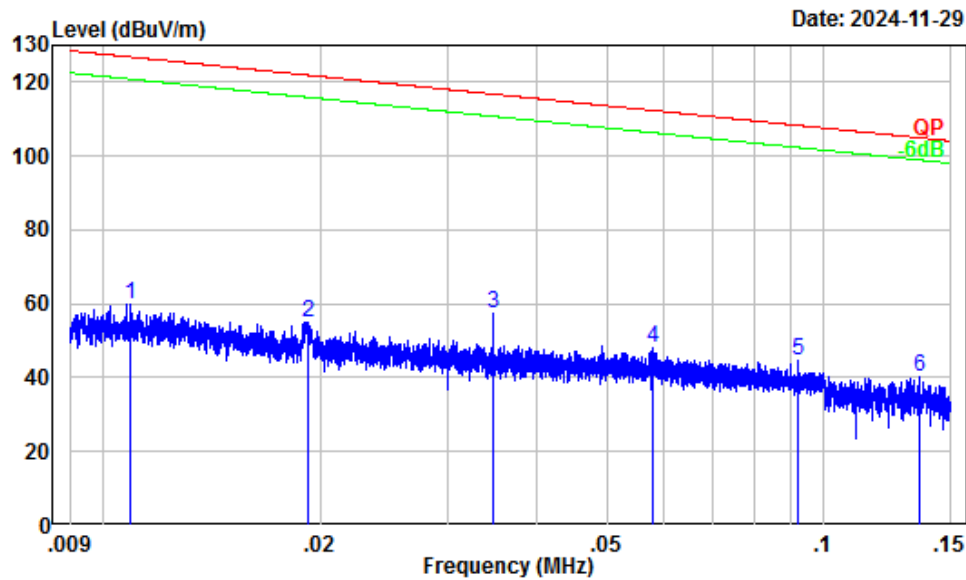
*The testing was performed by Anson Su on 2024-11-29 for below 1GHz and Dylan Yang from 2024-12-03 to 2024-12-05 for above 1GHz.*

*EUT operation mode: Transmitting*

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

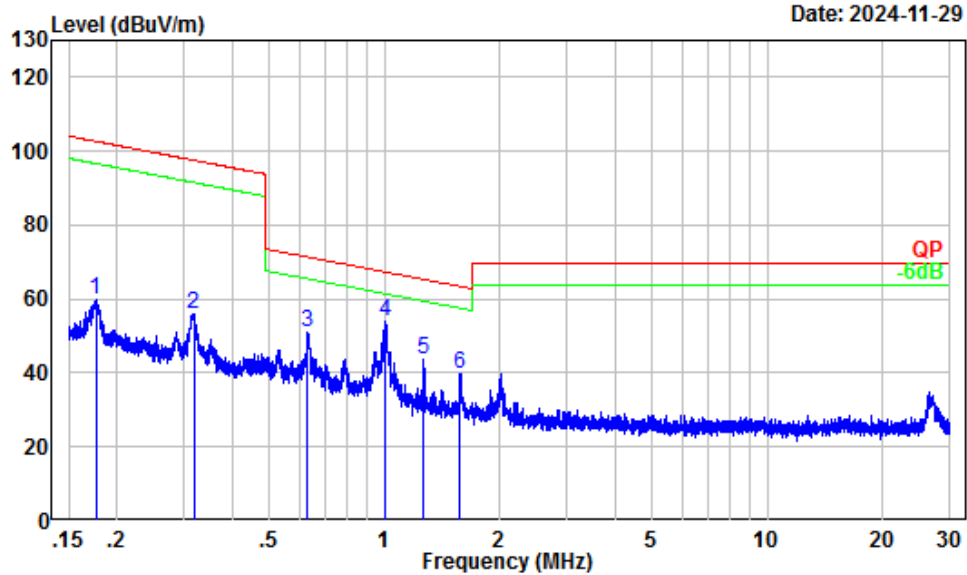
9 kHz-30MHz: (Maximum output power mode, Middle channel)

Parallel (worst case)



Site : Chamber A  
Condition : 3m  
Project Number: 2401Z35190E-RF  
Test Mode : Transmitting  
Setting PK : RBW:0.3kHz VBW:1kHz  
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	32.13	27.77	59.90	126.85	-66.95	Peak
2	0.02	30.54	24.58	55.12	121.90	-66.78	Peak
3	0.03	28.00	29.57	57.57	116.79	-59.22	Peak
4	0.06	25.61	22.32	47.93	112.35	-64.42	Peak
5	0.09	22.56	21.93	44.49	108.32	-63.83	Peak
6	0.14	19.90	20.52	40.42	104.96	-64.54	Peak

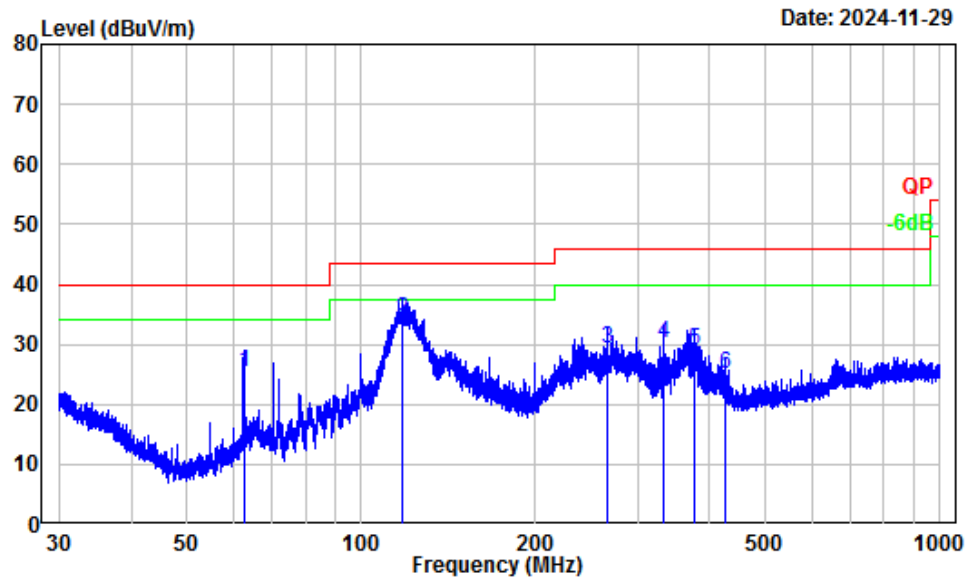


Site : Chamber A  
Condition : 3m  
Project Number: 2401Z35190E-RF  
Test Mode : Transmitting  
Setting PK : RBW:10kHz VBW:30kHz  
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.18	17.50	42.44	59.94	102.68	-42.74	Peak
2	0.32	9.86	46.19	56.05	97.56	-41.51	Peak
3	0.63	4.80	46.01	50.81	71.58	-20.77	Peak
4	1.01	1.18	52.55	53.73	67.41	-13.68	Peak
5	1.26	0.46	43.39	43.85	65.40	-21.55	Peak
6	1.58	-0.42	40.23	39.81	63.42	-23.61	Peak

30MHz-1GHz: (Maximum output power mode, Middle channel)

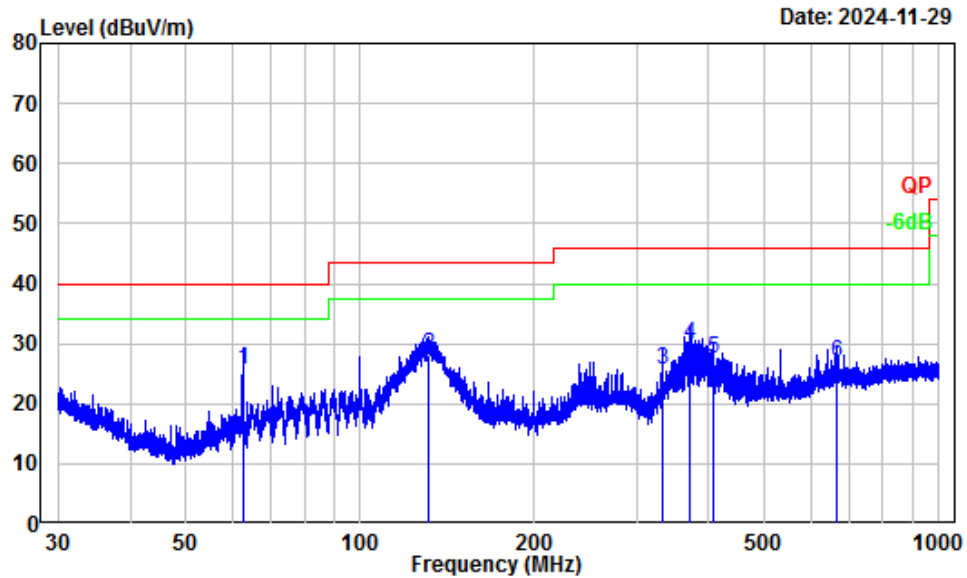
Horizontal



Site : Chamber A  
Condition : 3m Horizontal  
Project Number: 2401Z35190E-RF  
Test Mode : Transmitting  
Setting QP : RBW:120kHz  
Tester : Anson Su

	Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	62.60	-18.11	43.49	25.38	40.00	-14.62	QP
2	117.72	-11.71	45.95	34.24	43.50	-9.26	QP
3	266.38	-12.15	41.50	29.35	46.00	-16.65	QP
4	332.96	-10.58	40.83	30.25	46.00	-15.75	QP
5	375.61	-9.27	38.40	29.13	46.00	-16.87	QP
6	425.77	-7.86	32.80	24.94	46.00	-21.06	QP

## Vertical



Site : Chamber A  
Condition : 3m Vertical  
Project Number: 2401Z35190E-RF  
Test Mode : Transmitting  
Setting QP : RBW:120kHz  
Tester : Anson Su

	Freq Factor		Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	62.68	-18.11	43.87	25.76	40.00	-14.24 QP
2	131.41	-11.31	39.26	27.95	43.50	-15.55 QP
3	331.94	-10.61	36.40	25.79	46.00	-20.21 QP
4	371.35	-9.46	39.23	29.77	46.00	-16.23 QP
5	408.59	-8.20	35.66	27.46	46.00	-18.54 QP
6	666.68	-3.86	30.70	26.84	46.00	-19.16 QP

**Above 1GHz:**

Frequency (MHz)	Reading (dBμV)	Detector (PK/AV)	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low Channel							
2402.00	92.18	PK	H	-3.21	88.97	114	-25.03
2402.00	91.28	AV	H	-3.21	88.07	94	-5.93
2402.00	87.15	PK	V	-3.21	83.94	114	-30.06
2402.00	86.22	AV	V	-3.21	83.01	94	-10.99
4804.00	54.41	PK	H	2.42	56.83	74	-17.17
4804.00	49.73	AV	H	2.42	52.15	54	-1.85
4804.00	53.12	PK	V	2.42	55.54	74	-18.46
4804.00	49.52	AV	V	2.42	51.94	54	-2.06
Middle Channel							
2440.00	93.29	PK	H	-3.13	90.16	114	-23.84
2440.00	92.49	AV	H	-3.13	89.36	94	-4.64
2440.00	87.22	PK	V	-3.13	84.09	114	-29.91
2440.00	86.32	AV	V	-3.13	83.19	94	-10.81
4880.00	55.39	PK	H	2.58	57.97	74	-16.03
4880.00	50.24	AV	H	2.58	52.82	54	-1.18
4880.00	53.60	PK	V	2.58	56.18	74	-17.82
4880.00	49.97	AV	V	2.58	52.55	54	-1.45
High Channel							
2480.00	93.08	PK	H	-3.17	89.91	114	-24.09
2480.00	92.19	PK	H	-3.17	89.02	94	-4.98
2480.00	89.02	PK	V	-3.17	85.85	114	-28.15
2480.00	88.11	PK	V	-3.17	84.94	94	-9.06
4960.00	54.77	PK	H	2.69	57.46	74	-16.54
4960.00	50.31	AV	H	2.69	53.00	54	-1.00
4960.00	54.12	PK	V	2.69	56.81	74	-17.19
4960.00	50.14	AV	V	2.69	52.83	54	-1.17

**Note:**

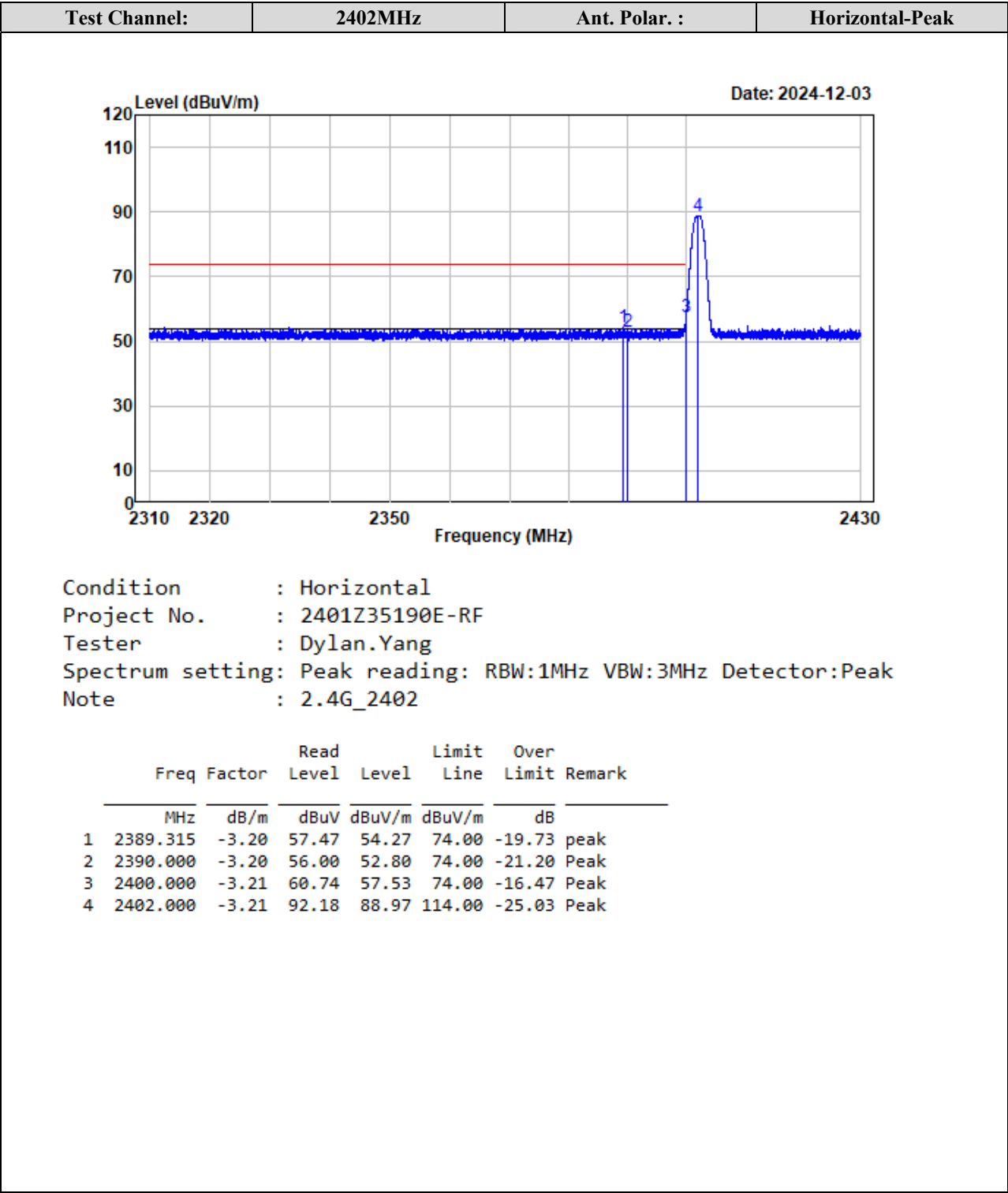
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Absolute Level/Level= Factor + Reading

Margin = Absolute Level/Level - Limit

The other spurious emission which is 20dB to the limit or in noise floor level was not recorded.

Test plots for Band Edge Measurements (Radiated):

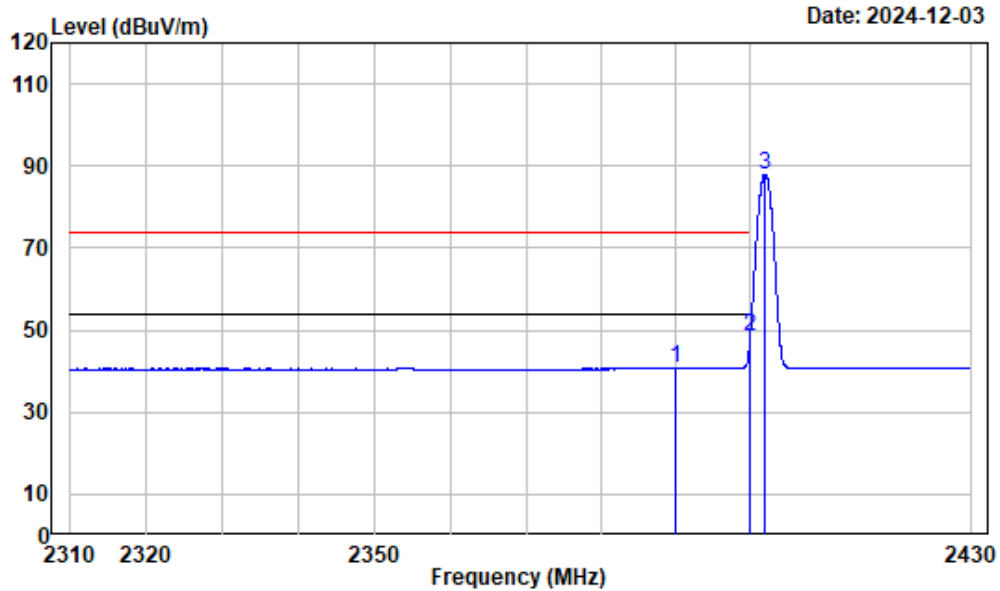


Test Channel:

2402MHz

Ant. Polar. :

Horizontal -Average



Condition : Horizontal

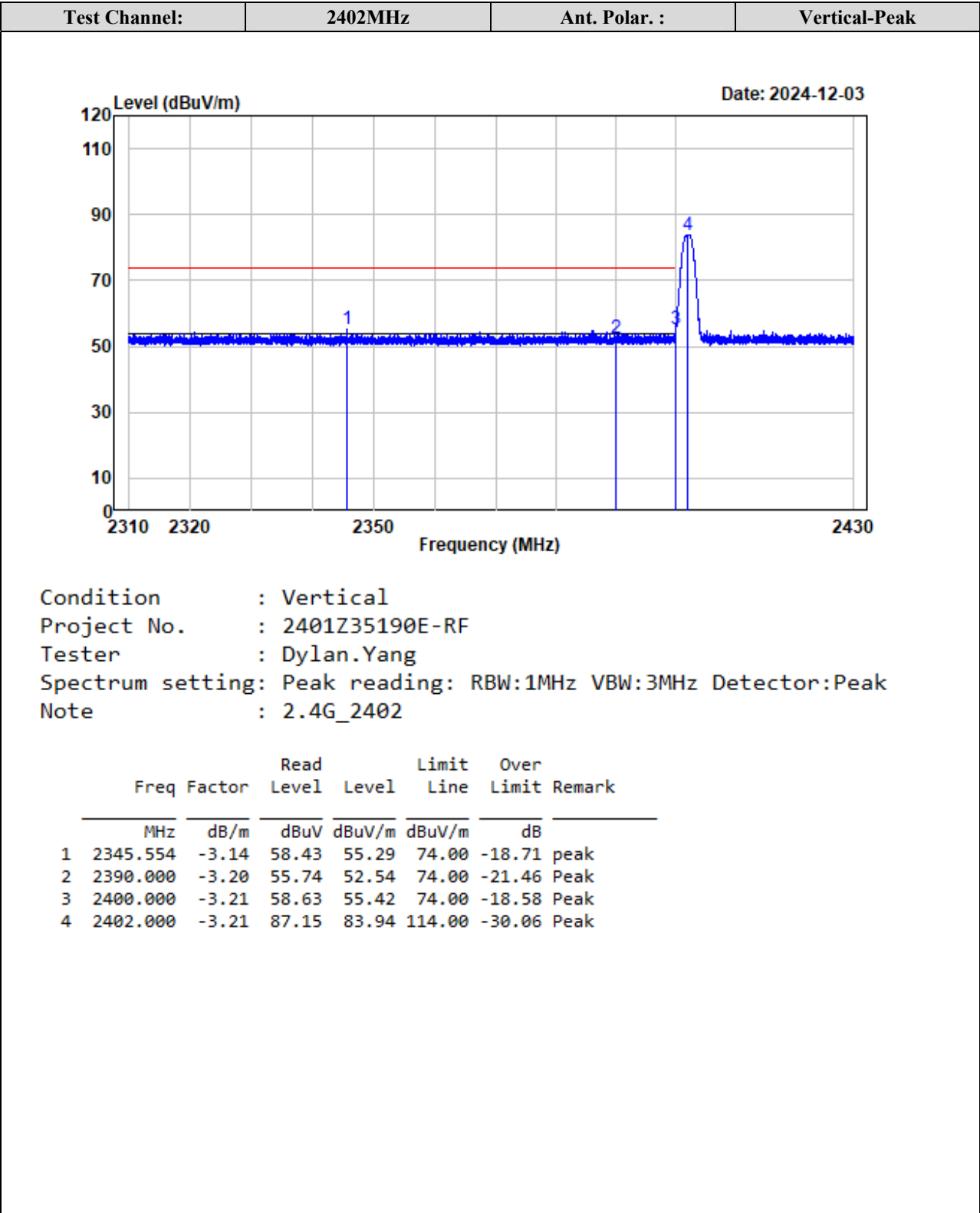
Project No. : 2401Z35190E-RF

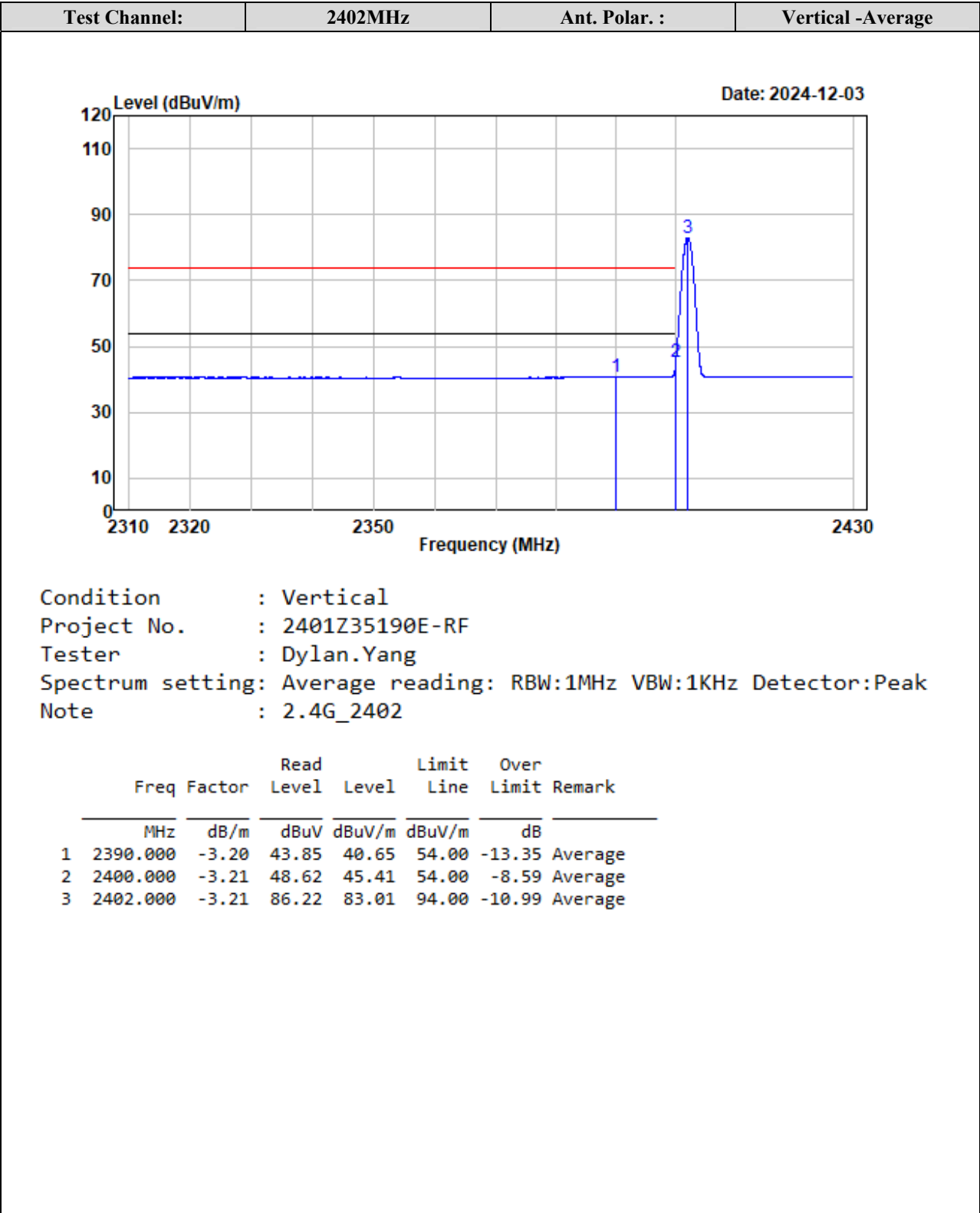
Tester : Dylan.Yang

Spectrum setting: Average reading: RBW:1MHz VBW:1KHz Detector:Peak

Note : 2.4G\_2402

Freq		Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2390.000	-3.20	43.85	40.65	54.00	-13.35	Average
2	2400.000	-3.21	51.46	48.25	54.00	-5.75	Average
3	2402.000	-3.21	91.28	88.07	94.00	-5.93	Average



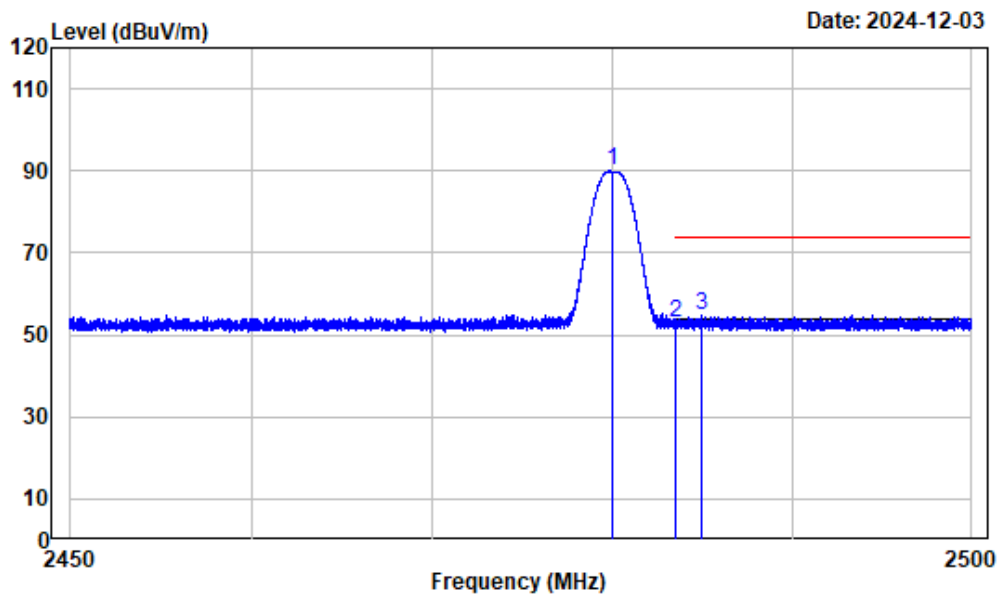


Test Channel:

2480MHz

Ant. Polar. :

Horizontal-Peak



Condition : Horizontal

Project No. : 2401Z35190E-RF

Tester : Dylan.Yang

Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

Note : 2.4G\_2480

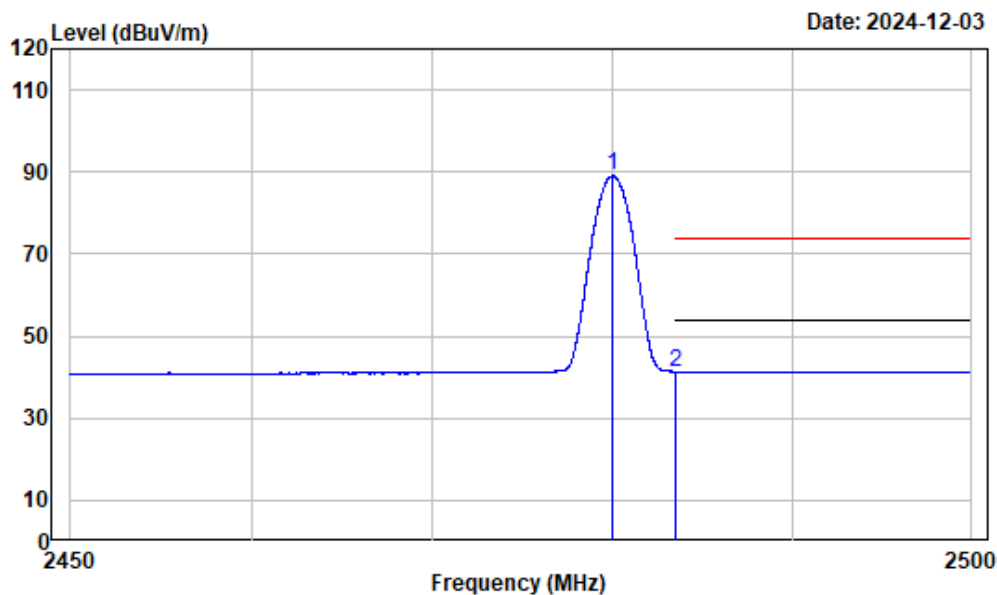
		Read		Limit	Over	Remark
Freq Factor		Level	Level	Line	Limit	
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1 2480.000	-3.17	93.08	89.91	114.00	-24.09	Peak
2 2483.500	-3.17	56.05	52.88	74.00	-21.12	Peak
3 2484.954	-3.17	57.89	54.72	74.00	-19.28	peak

Test Channel:

2480MHz

Ant. Polar. :

Horizontal -Average



Condition : Horizontal

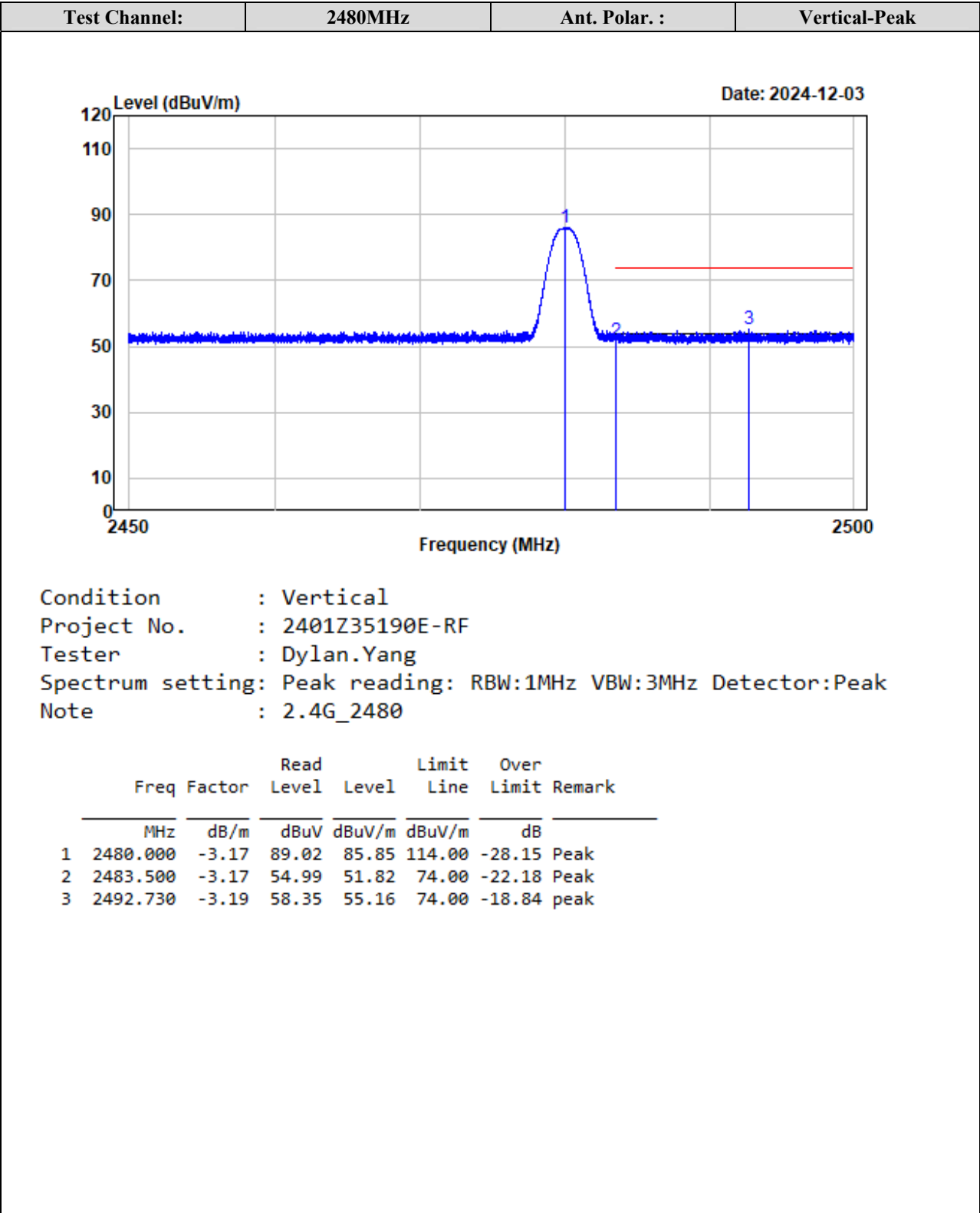
Project No. : 2401Z35190E-RF

Tester : Dylan.Yang

Spectrum setting: Average reading: RBW:1MHz VBW:1KHz Detector:Peak

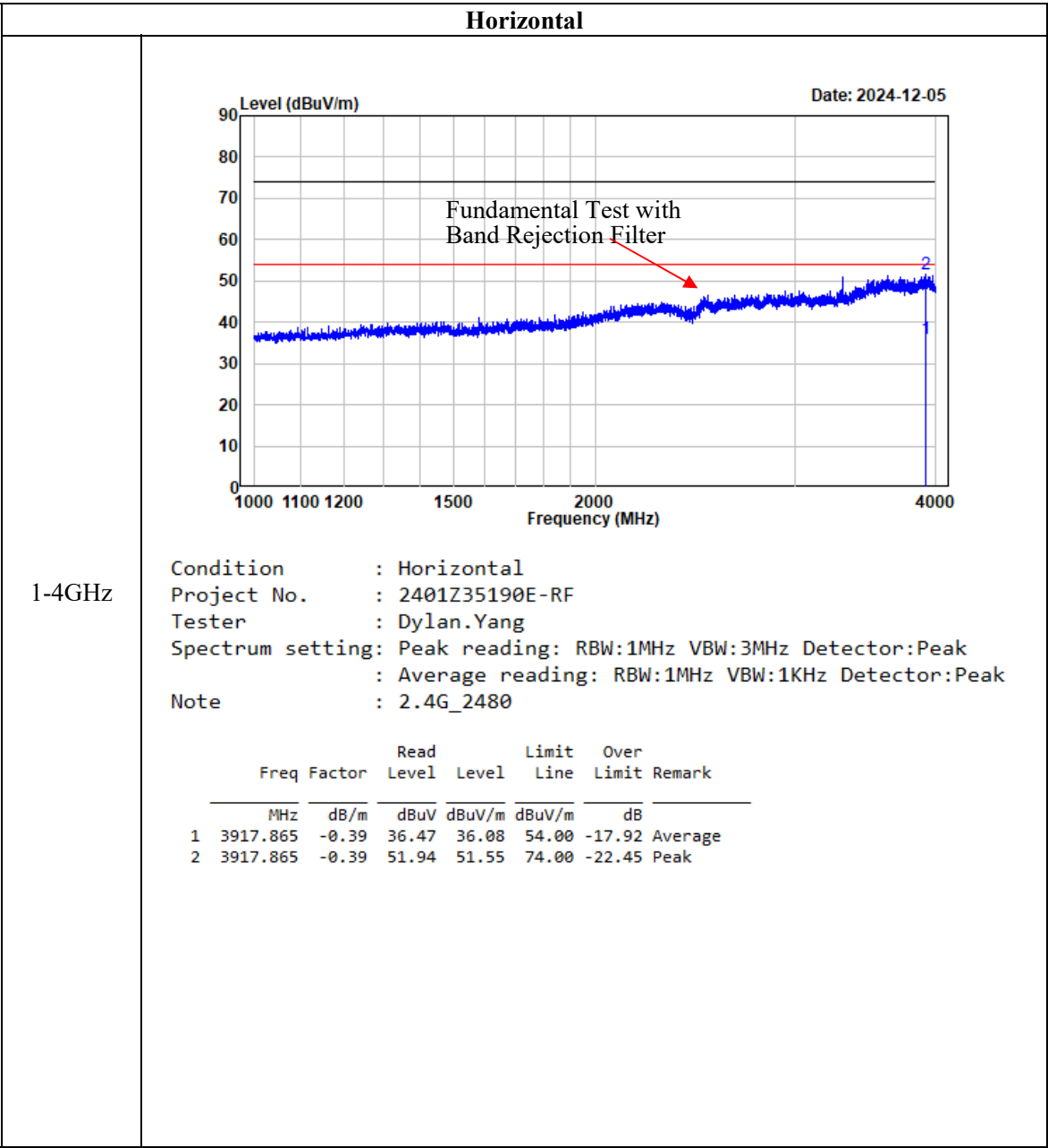
Note : 2.4G\_2480

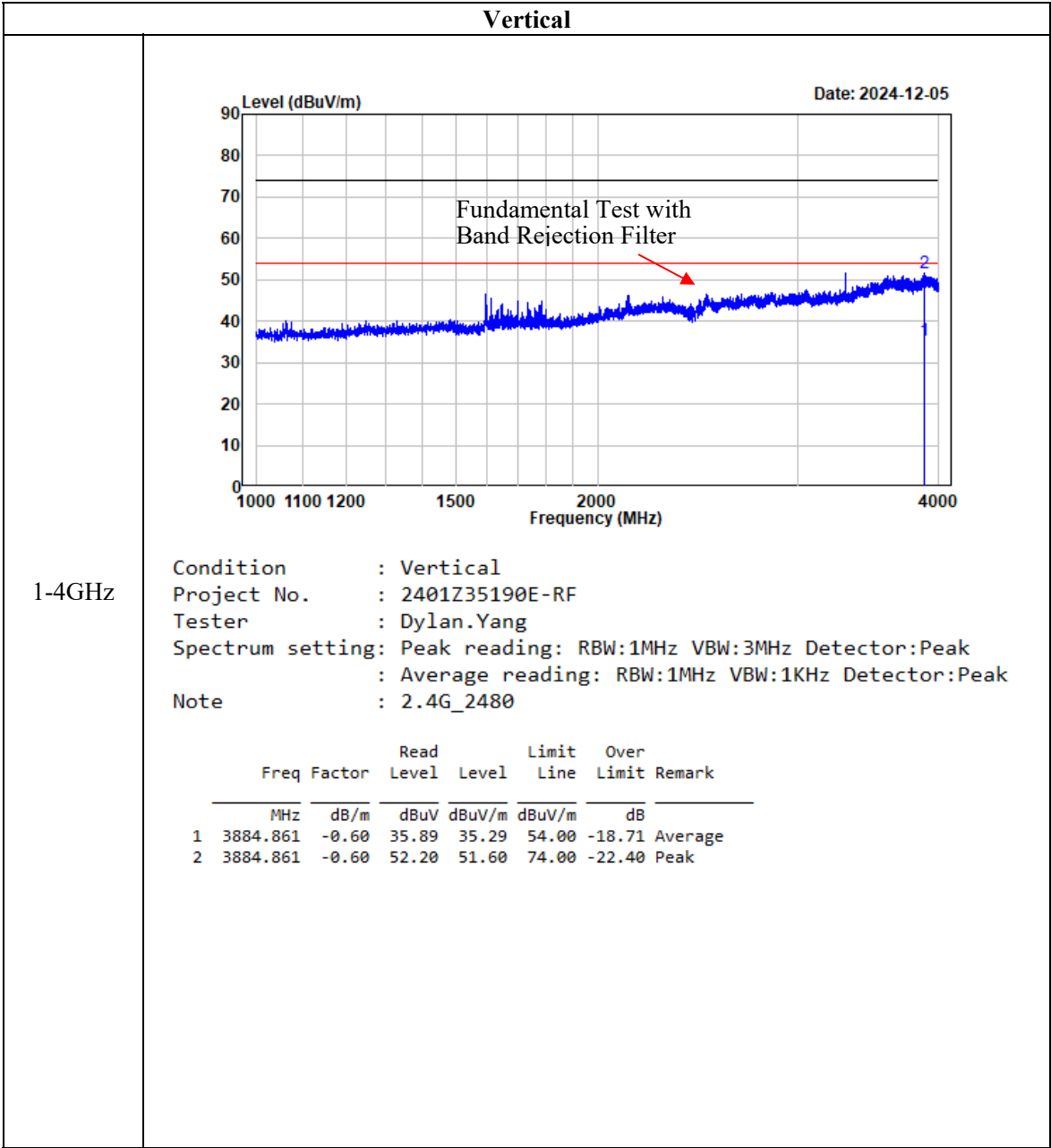
Freq		Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2480.000	-3.17	92.19	89.02	94.00	-4.98	Average
2	2483.500	-3.17	44.55	41.38	54.00	-12.62	Average

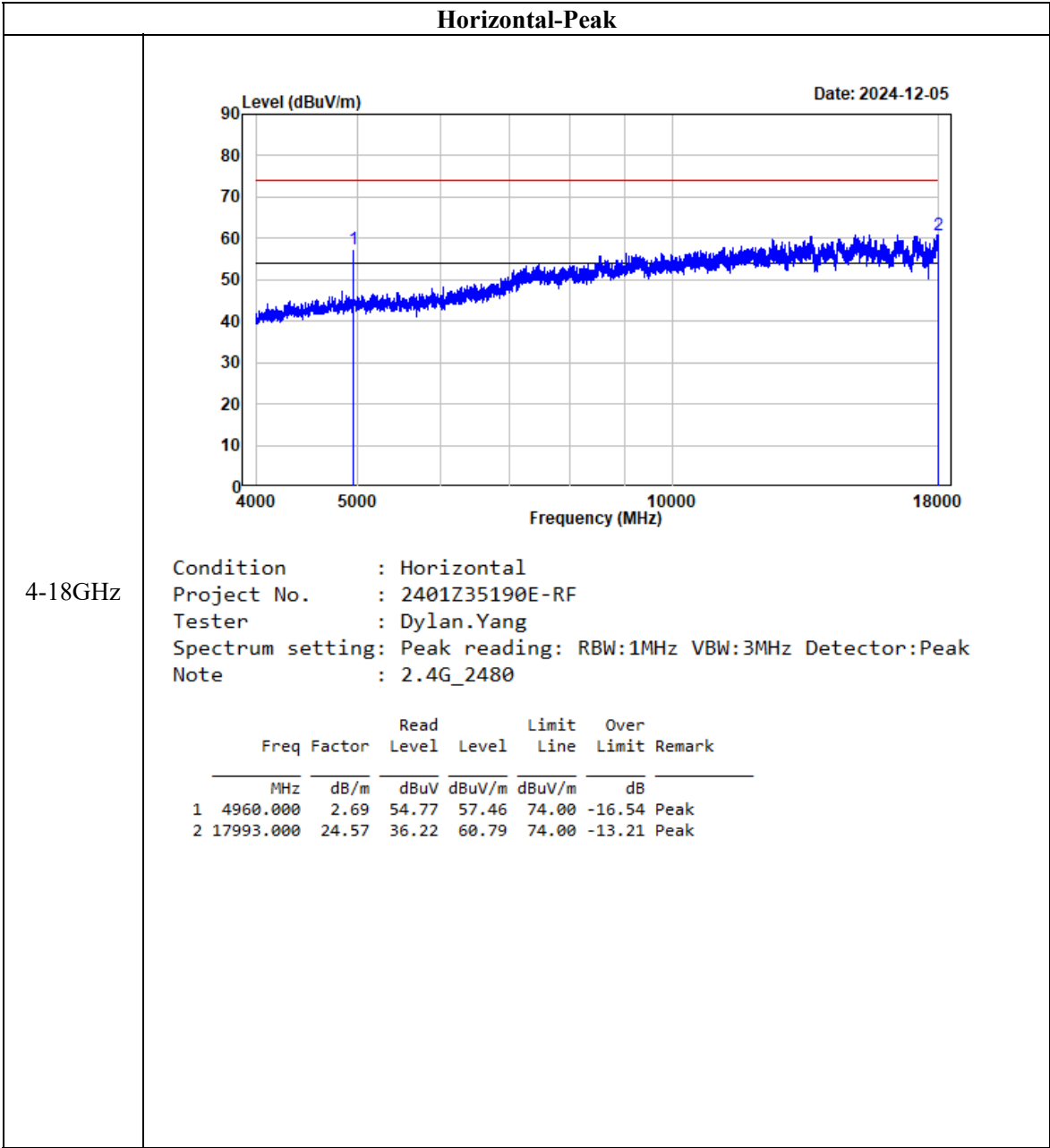


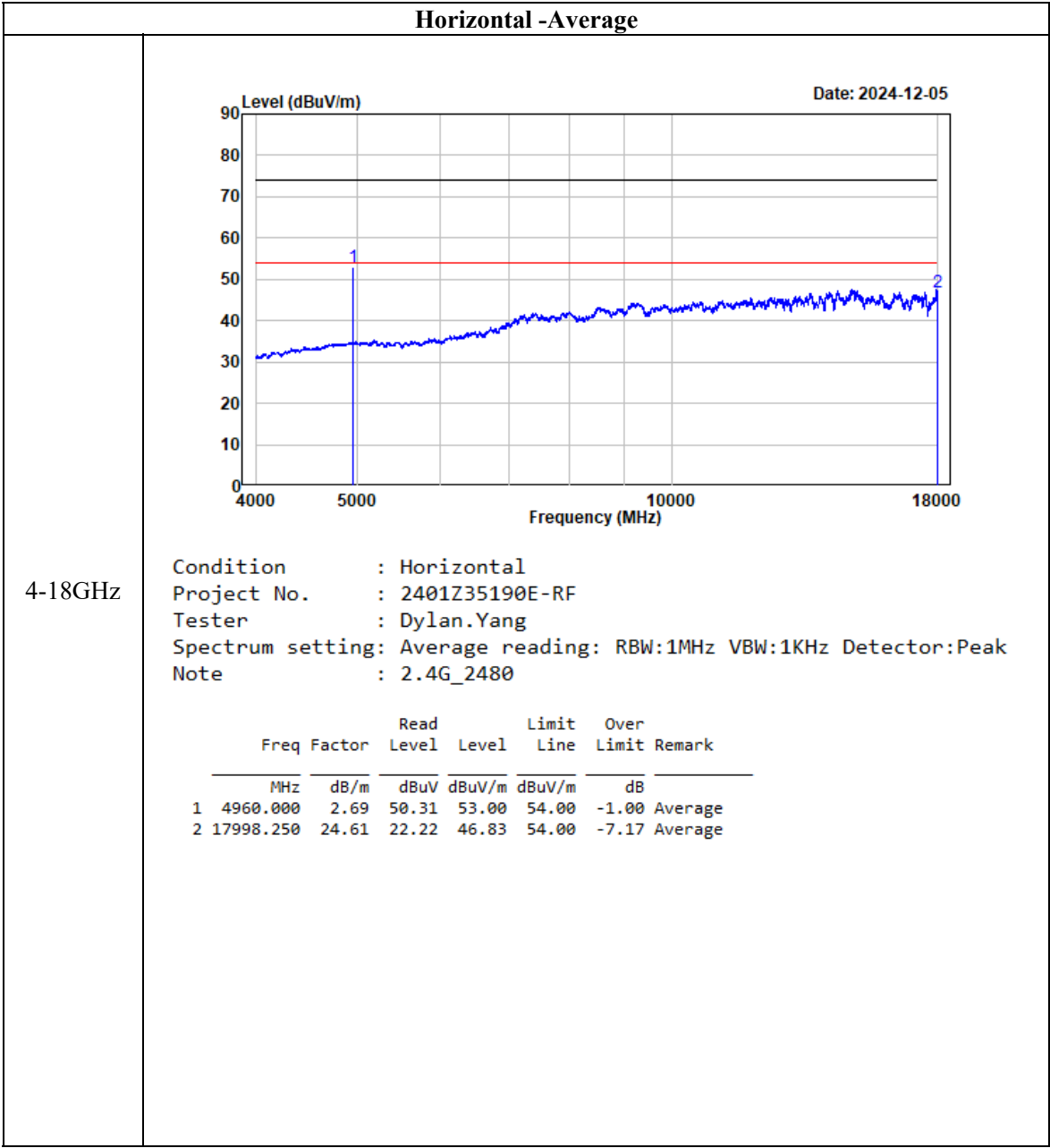


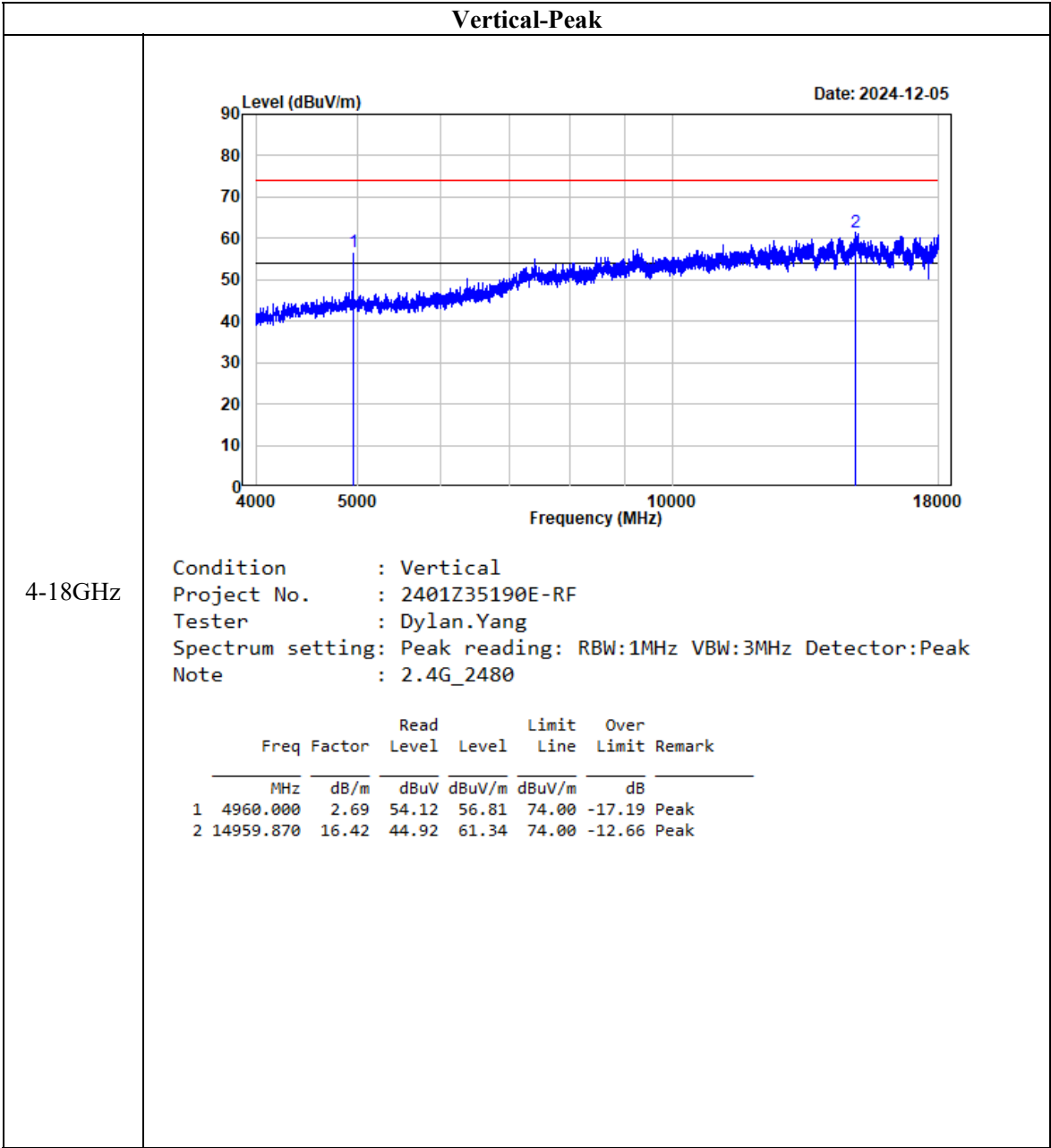
Listed with the worst harmonic margin test plot:

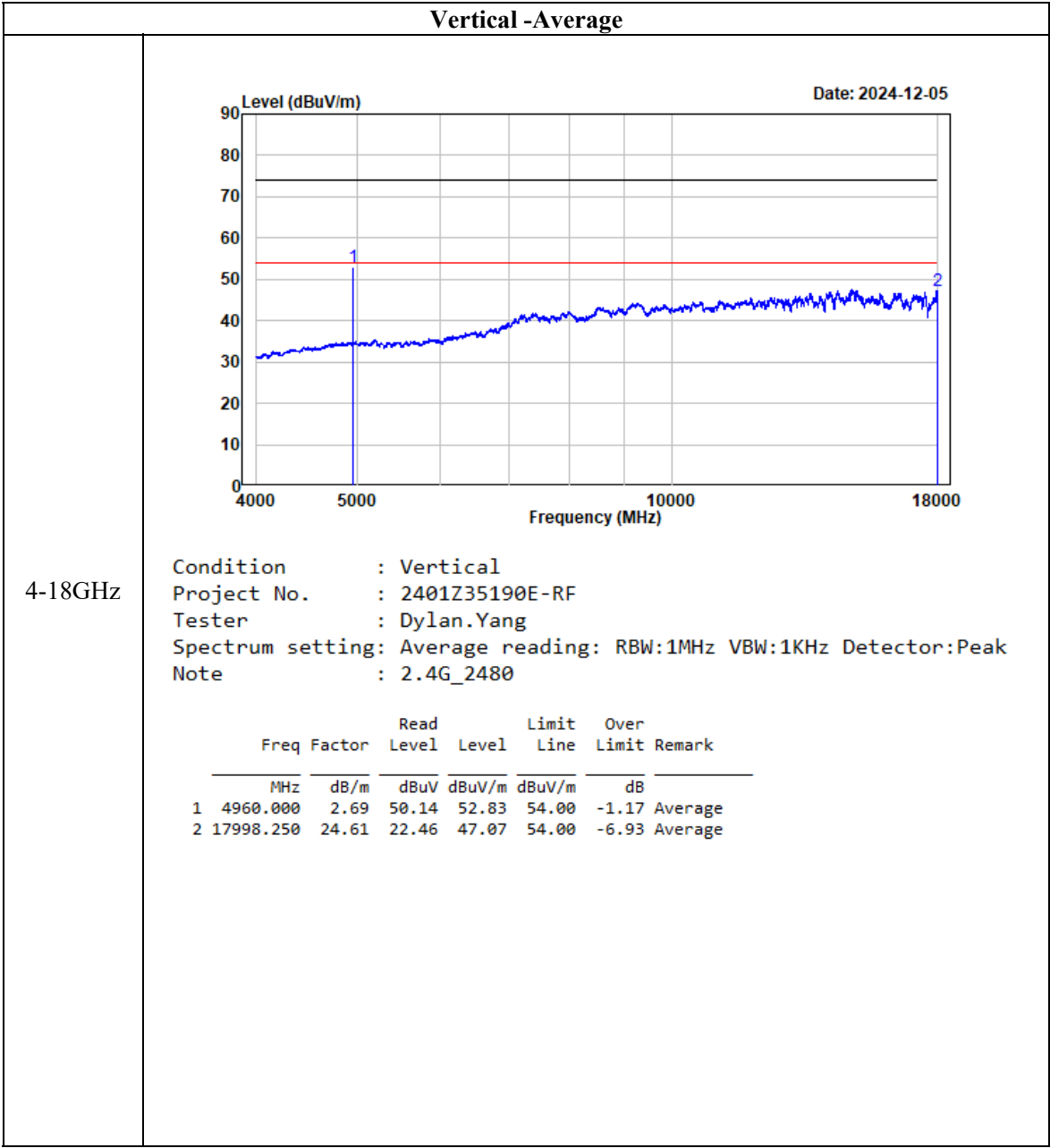


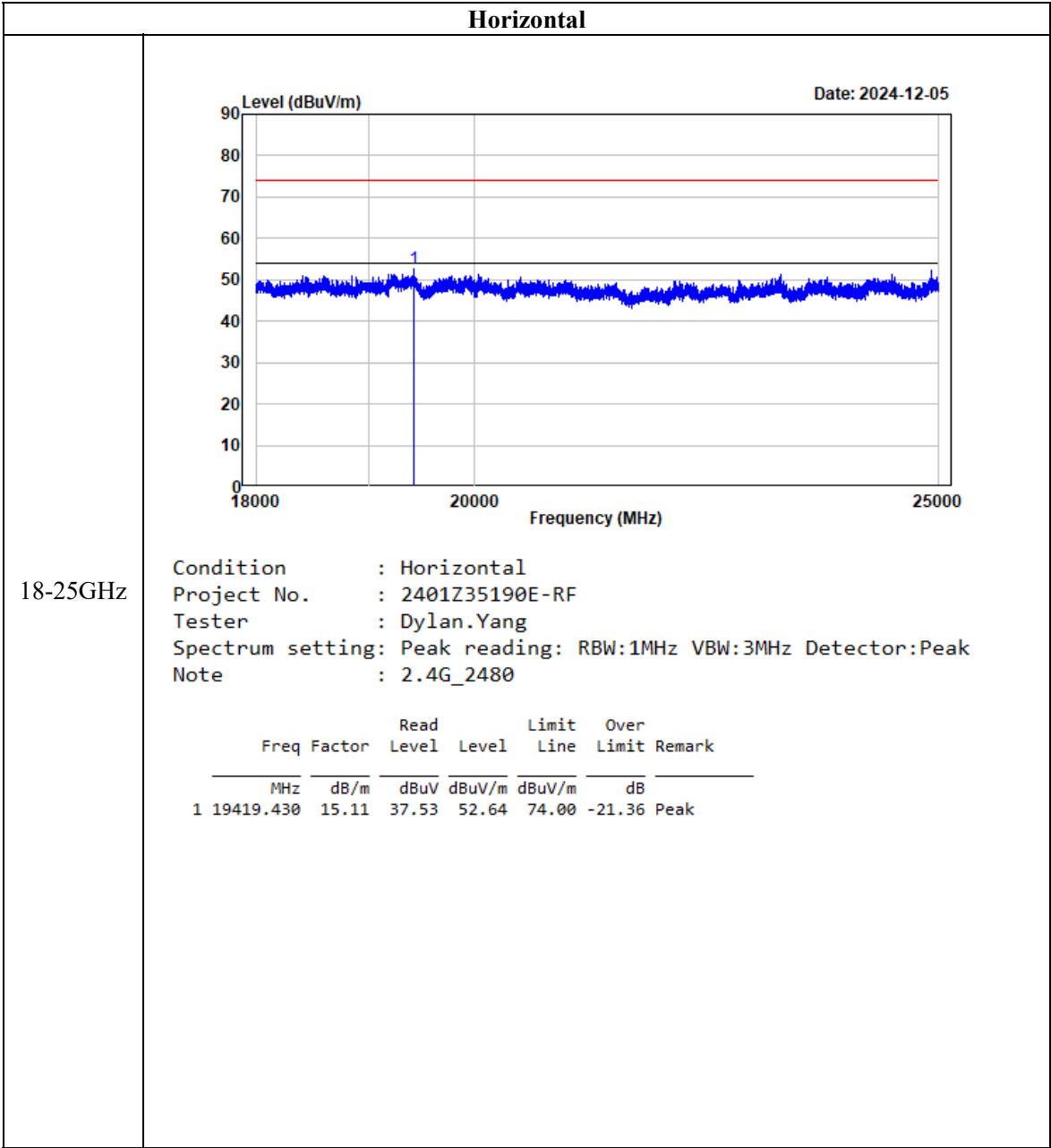


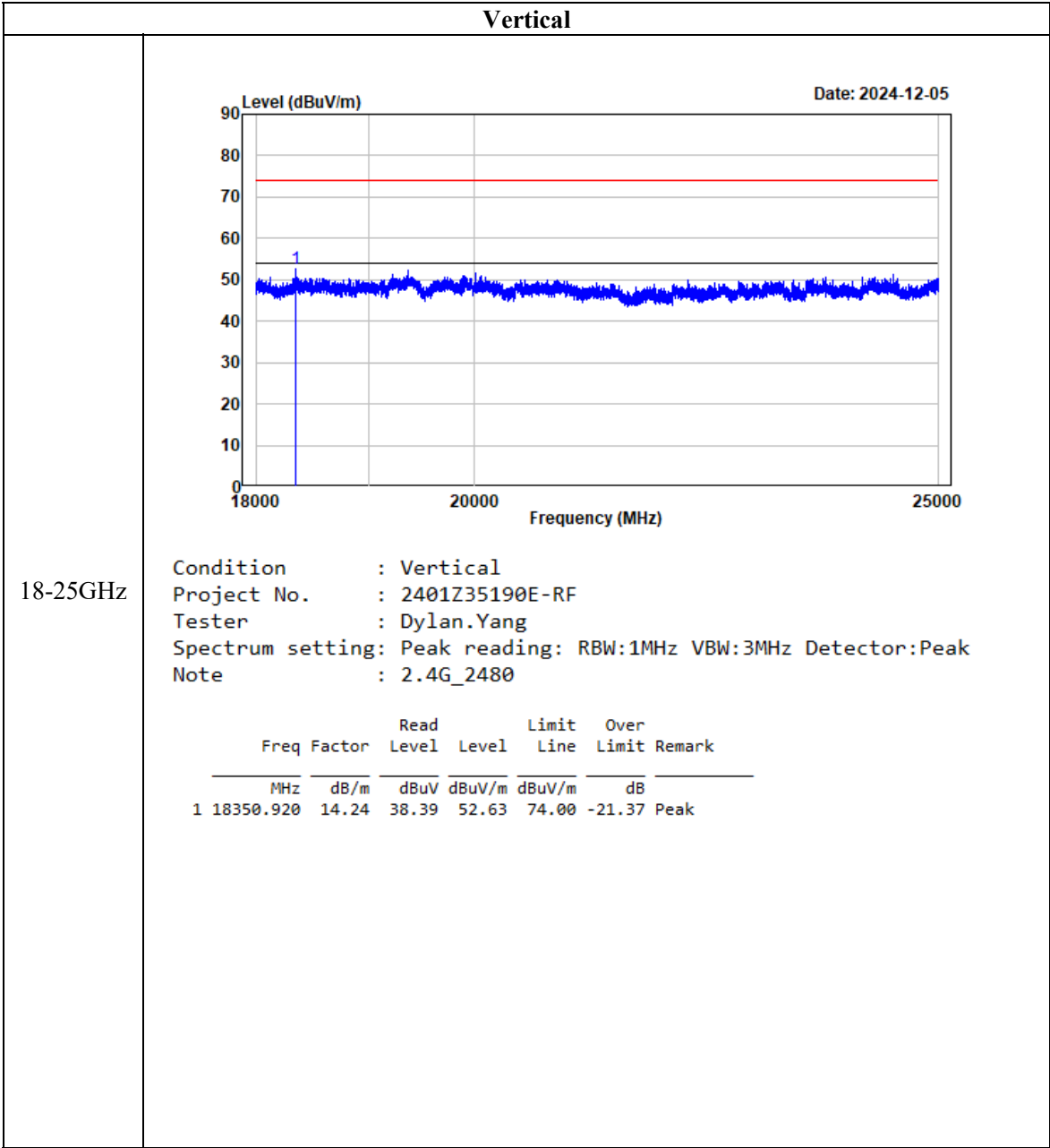












## FCC§15.215(c) - 20dB EMISSION BANDWIDTH

### Applicable Standard

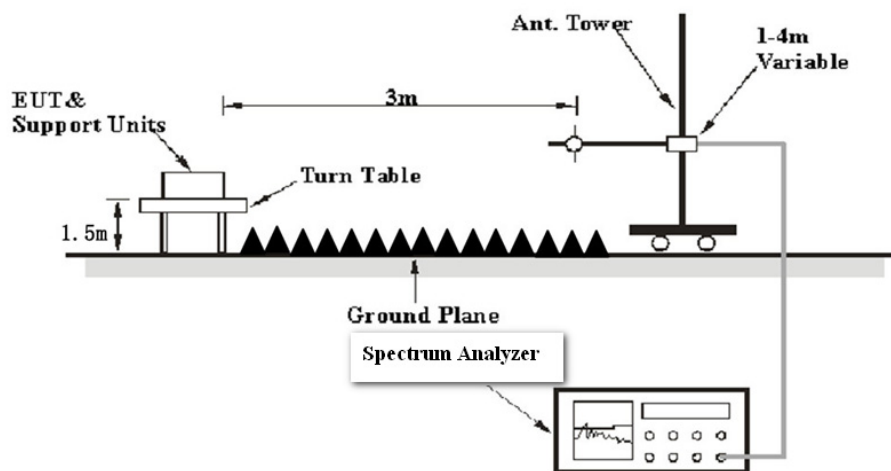
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

### Test Procedure

Test Method: ANSI C63.10-2013 Clause 7.8.7 & Clause 6.9.2

The following conditions shall be observed for measuring the occupied bandwidth and 20 dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / 20 dB bandwidth if the device is not transmitting continuously.
- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW/ 20dB bandwidth and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.



Test Data

Environmental Conditions

Temperature:	24.1°C
Relative Humidity:	47 %
ATM Pressure:	101 kPa

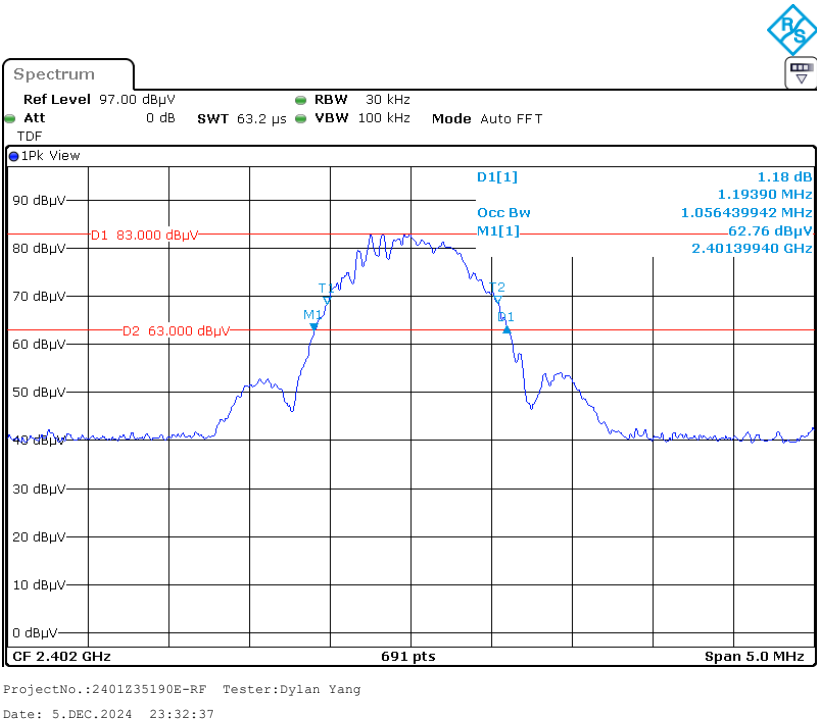
*The testing was performed by Dylan Yang on 2024-12-05.*

*EUT operation mode: Transmitting*

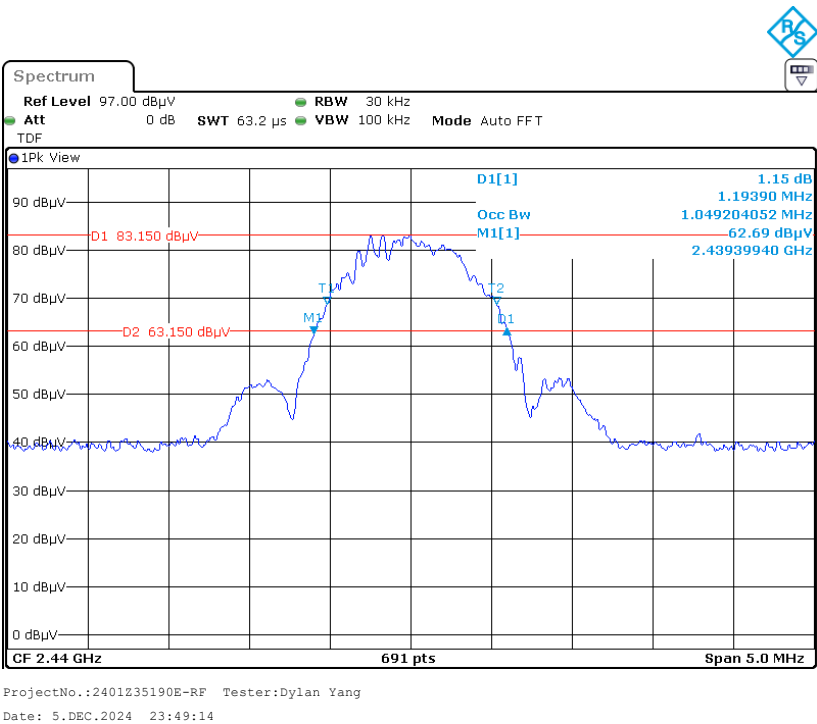
*Please refer to the following table and plots.*

Channel	Frequency (MHz)	20dB Bandwidth (MHz)
Low	2402	1.194
Middle	2440	1.194
High	2480	1.194

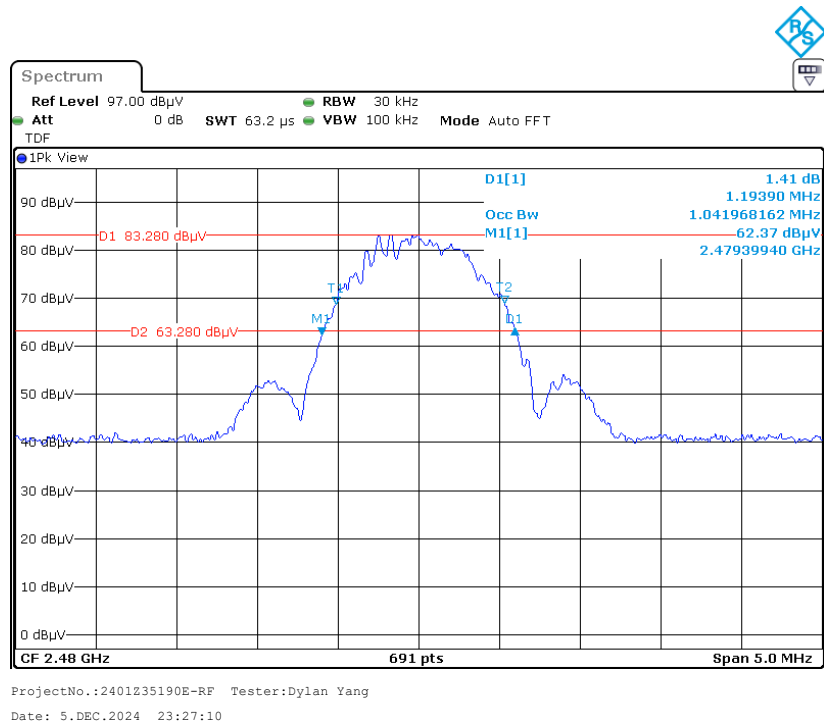
Low channel



Middle Channel



### High Channel



## **EUT PHOTOGRAPHS**

Please refer to the attachment 2401Z35190E-RF External photo and 2401Z35190E-RF Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2401Z35190E-RF Test Setup photo.

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