

# TEST REPORT

Applicant Name: WATT (ShenZhen) Electronics Co.,Ltd.  
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Pingdi Street, Longgang District, Shenzhen, China  
Report Number: 2501X01819E-RF-00  
FCC ID: 2BOJX-LGTUC101S-102

## Test Standard (s)

FCC PART 15.225

## Sample Description

Product Type: Electric Vehicle (EV) Charger  
Model No.: UC102  
Multiple Model(s) No.: UC101S  
Trade Mark: VeiPhlox  
Date Received: 2025/09/15  
Issue Date: 2025/09/22

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

## Prepared and Checked By:

*Wills Yu*

Wills Yu  
RF Engineer

## Approved By:

*Nancy Wang*

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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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501X01819E-RF-00	Original Report	2025/09/22

## GENERAL INFORMATION

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

Product	Electric Vehicle (EV) Charger
Tested Model	UC102
Multiple Model(s)	UC101S
Frequency Range	13.56 MHz
E-field Strength	74.53dBuV/m@3m
Modulation Technique	ASK
Voltage Range	AC 240V
Sample serial number	UC102: 3A34-1, UC101S: 3A34-2 (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 Display board model, LCD screen and contains difference certified wireless module. Please refer to the declaration letter <sup>#</sup> for more detail, which was provided by manufacturer.	

### Objective

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

The objective is to determine the compliance of the EUT with FCC rules, section 15.203, 15.205, 15.207, 15.209 and 15.225.

### 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)
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)
Temperature		$\pm 1^{\circ}\text{C}$
Humidity		$\pm 1\%$
Supply voltages		$\pm 0.4\%$

*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 a typical fashion (as normally used by a typical user).

EUT with Power card test transmission mode, without Power card test standby mode.

### EUT Exercise Software

No Exercise Software was used.

### Equipment Modifications

No modification on the EUT.

### Support Equipment List and Details

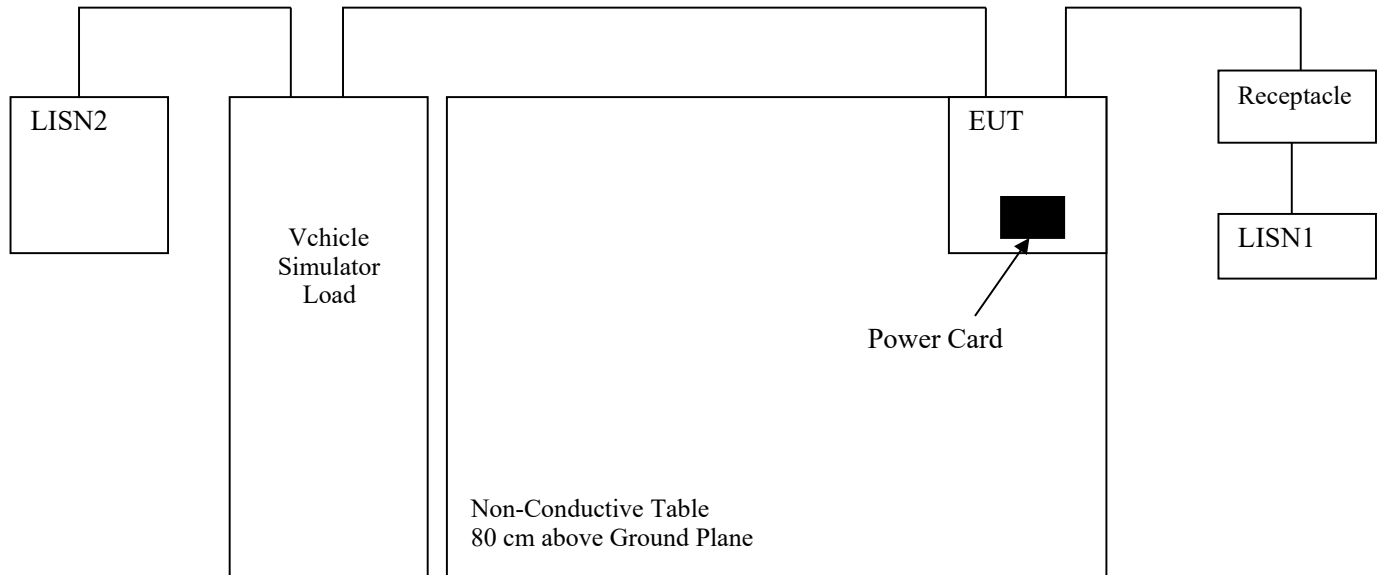
Manufacturer	Description	Model	Serial Number
Unknown	Receptacle	Unknown	Unknown
VEIPHLOX	Power Card	Unknown	E79BB366
VEIPHLOX	Power Card	Unknown	2E7E5EC2
Guang Lu Da	Vchicle Simulator Load	GROADA-AC380V-32A-R	GROADA-FZX24051701
Unknown	Dummy load	50 $\Omega$	Unknown

### External I/O Cable

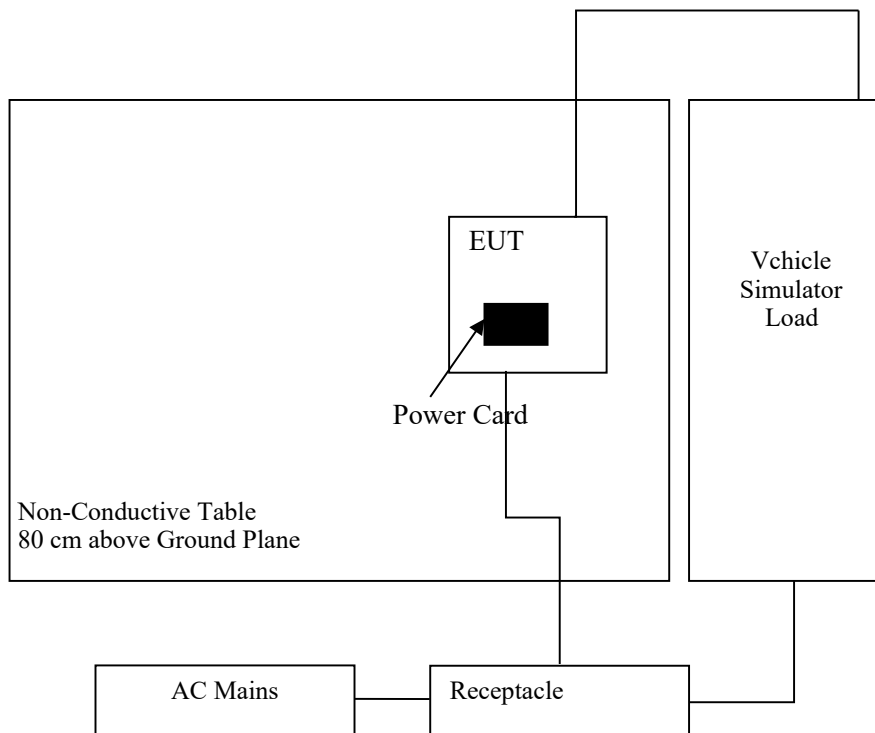
Cable Description	Length (m)	From Port	To
Un-shielding Detachable AC Cable	5.0	EUT	Vchicle Simulator Load
Shielded Un-detachable AC Cable	1.5	Receptacle	LISN1/AC Mains
Shielding Detachable AC Cable	1.0	EUT	Receptacle
Shielding Detachable AC Cable	1.5	Vehicle Simulator Load	LISN2

## Block Diagram of Test Setup

For Conducted Emission:



For Radiated Emissions:



**SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Result
§ 15.203	Antenna Requirement	Compliant
§ 1.1307 (b) & § 2.1091	Maximum Permissible Exposure (MPE)	Compliant
§ 15.207	AC Line Conducted Emission	Compliant
§ 15.225 § 15.209 § 15.205	Radiated Emission Test	Compliant
§ 15.225(e)	Frequency Stability	Compliant
§ 15.215(c)	20dB Emission Bandwidth	Compliant

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Conducted Emissions Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2025/09/01	2026/08/31
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
Narda	LISN	L3-100	210WT600902	2024/12/04	2025/12/03
<b>Radiated Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
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>Frequency Stability</b>					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
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
BACL	Temperature & Humidity Chamber	BTH-150-40	30144	2024/12/06	2025/12/05
Fluke	Digital Multimeter	287	19000011	2025/04/29	2026/04/28
HELLVIAO	Contact voltage regulator	TDGC2-5KVA	Unknown	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).

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**FCC§15.203 - ANTENNA REQUIREMENT**

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**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 Connected Construction**

The EUT has one internal antenna arrangement for NFC which was permanently attached; fulfill the requirement of this section. Please refer to the EUT photos.

**Result: Compliant.**

## **§1.1307 (b) & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

### **Applicable Standard**

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
<b>Frequency Range (MHz)</b>	<b>Electric Field Strength (V/m)</b>	<b>Magnetic Field Strength (A/m)</b>	<b>Power Density (mW/cm<sup>2</sup>)</b>	<b>Averaging Time (Minutes)</b>
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; \* = Plane-wave equivalent power density;  
According to §1.1310 and §2.1091 RF exposure is calculated.

### **Result**

#### **Calculated Formulary:**

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

**Result****For worst case:**

For Sample 3A34-1

Mode	Frequency (MHz)	Antenna Gain <sup>#</sup>		Tune up conducted power <sup>#</sup>		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
		(dBi)	(numeric)	(dBm)	(mW)			
Bluetooth Module(BLE)	2402-2480	-2.92	0.51	1.0	1.26	20	0.0001	1.0
NFC	13.56	/	/	-20	0.631	20	<<0.0001	0.98

Note:

1. The tune-up power and antenna gain was declared by the applicant.
2. EIRP(dBm)=E(dBuV/m)-95.2 for 3 meters distance, E(dBuV/m)=74.53dBuV/m@3m
3. The device built in a certified Bluetooth module, FCC ID: 2BOJX-LGT185.

Simultaneous transmitting consideration (worst case):

$$\text{The ratio} = \text{MPE}_{\text{BT}} / \text{limit}_{\text{BT}} + \text{MPE}_{\text{NFC}} / \text{limit}_{\text{NFC}} = 0.0001 / 1 + 0.0001 / 0.98 = 0.0002 < 1.0$$

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

For Sample 3A34-2

Mode	Frequency (MHz)	Antenna Gain <sup>#</sup>		Tune up conducted power <sup>#</sup>		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
		(dBi)	(numeric)	(dBm)	(mW)			
Module (2.4G Wi-Fi /BT)	2402-2480	2.21	1.66	7	5.01	20	0.002	1.0
	2412-2462	2.21	1.66	18	63.10	20	0.021	1.0
NFC	13.56	/	/	-20	0.631	20	<<0.0001	0.98

Note:

1. The tune-up power and antenna gain was declared by the applicant.
2. EIRP(dBm)=E(dBuV/m)-95.2 for 3 meters distance, E(dBuV/m)=72.58dBuV/m@3m
3. The device built in a certified 2.4G Wi-Fi/ BT module, FCC ID: 2ANDL-CBU.

Simultaneous transmitting consideration (worst case):

$$\text{The ratio} = \text{MPE}_{2.4\text{G Wi-Fi}} / \text{limit}_{2.4\text{G Wi-Fi}} + \text{MPE}_{\text{NFC}} / \text{limit}_{\text{NFC}} = 0.021 / 1 + 0.0001 / 0.98 = 0.022 < 1.0$$

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

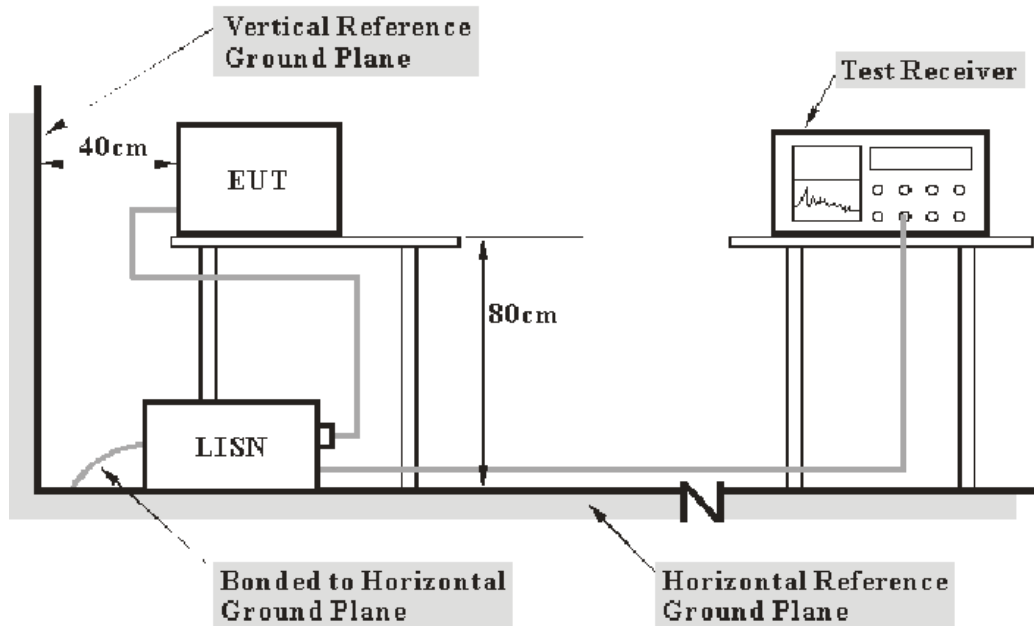
**Result: Compliant.**

## FCC §15.207 - AC LINE CONDUCTED EMISSION

### Applicable Standard

FCC§15.207

### 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 setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

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 30MHz.

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

Frequency Range	RBW
150 kHz - 30MHz	9 kHz

## Test Procedure

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>	27.4 °C
<b>Relative Humidity:</b>	69 %
<b>ATM Pressure:</b>	101.1 kPa

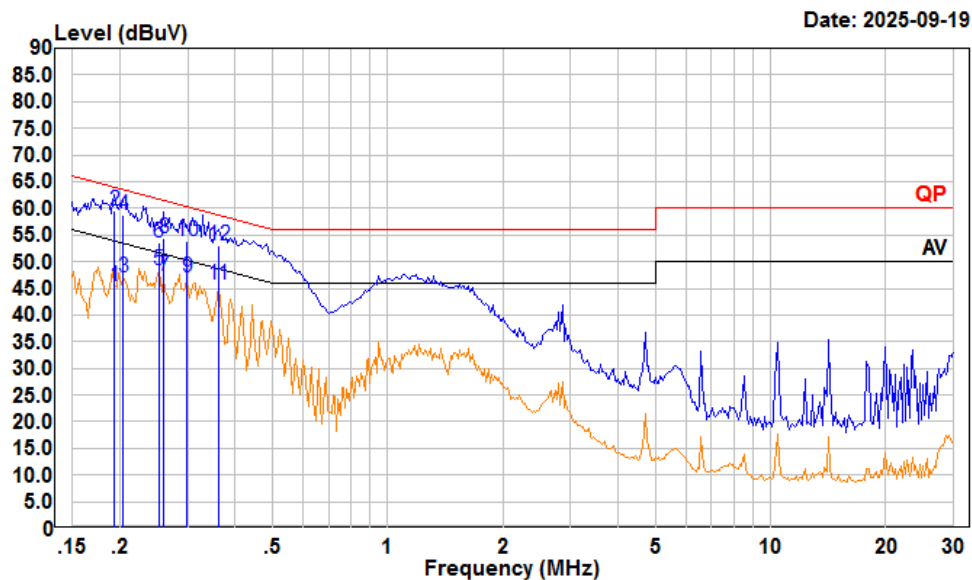
*The testing was performed by Macy Shi from 2025-09-18 to 2025-09-19.*

*Test mode: Transmitting (With power Card to test was the worst.)*

*According to KDB 174176, test with the antenna connected and with a dummy load*

For Sample 3A34-1

Dummy load  
AC 240V, Line



Condition: Line

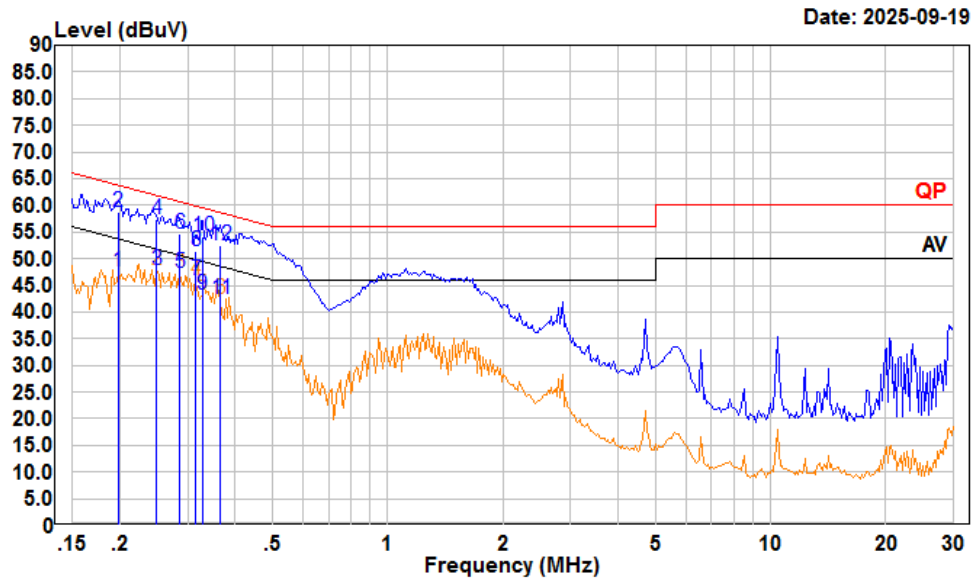
Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	34.93	45.47	0.41	10.13	53.89	-8.42	Average
2	0.193	49.01	59.55	0.41	10.13	63.89	-4.34	QP
3	0.204	36.48	47.07	0.41	10.18	53.45	-6.38	Average
4	0.204	48.03	58.62	0.41	10.18	63.45	-4.83	QP
5	0.252	37.76	48.42	0.49	10.17	51.69	-3.27	Average
6	0.252	42.91	53.57	0.49	10.17	61.69	-8.12	QP
7	0.260	36.58	47.21	0.46	10.17	51.42	-4.21	Average
8	0.260	43.72	54.35	0.46	10.17	61.42	-7.07	QP
9	0.299	36.61	47.08	0.30	10.17	50.28	-3.20	Average
10	0.299	43.43	53.90	0.30	10.17	60.28	-6.38	QP
11	0.361	35.06	45.68	0.45	10.17	48.69	-3.01	Average
12	0.361	42.40	53.02	0.45	10.17	58.69	-5.67	QP

## AC 240V, Neutral



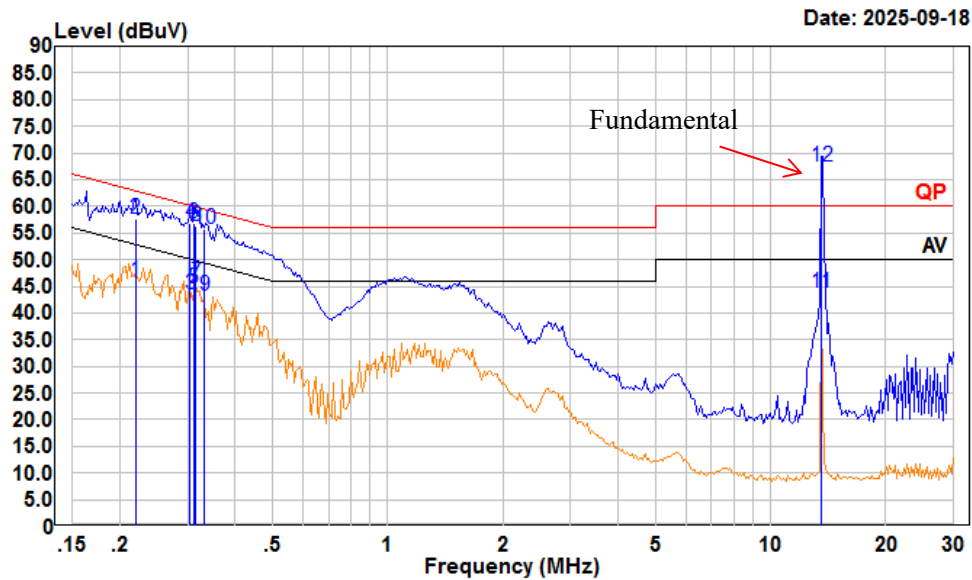
Condition: Neutral

Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.198	36.96	47.69	0.60	10.13	53.71	-6.02	Average
2	0.198	48.00	58.73	0.60	10.13	63.71	-4.98	QP
3	0.249	36.93	47.80	0.70	10.17	51.78	-3.98	Average
4	0.249	46.60	57.47	0.70	10.17	61.78	-4.31	QP
5	0.286	36.37	47.24	0.70	10.17	50.63	-3.39	Average
6	0.286	43.69	54.56	0.70	10.17	60.63	-6.07	QP
7	0.315	34.93	45.83	0.73	10.17	49.84	-4.01	Average
8	0.315	40.38	51.28	0.73	10.17	59.84	-8.56	QP
9	0.329	32.27	43.20	0.76	10.17	49.49	-6.29	Average
10	0.329	43.32	54.25	0.76	10.17	59.49	-5.24	QP
11	0.365	31.58	42.42	0.67	10.17	48.61	-6.19	Average
12	0.365	41.54	52.38	0.67	10.17	58.61	-6.23	QP

**With NFC Antenna  
AC 240V, Line**

Condition: Line

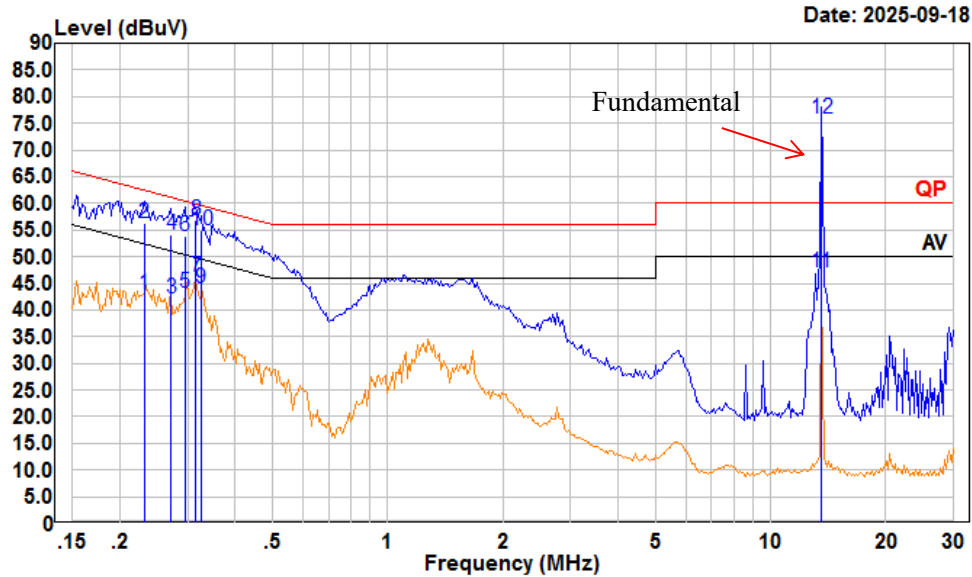
Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.220	35.33	45.94	0.44	10.17	52.83	-6.89	Average
2	0.220	47.11	57.72	0.44	10.17	62.83	-5.11	QP
3	0.305	33.10	43.58	0.31	10.17	50.10	-6.52	Average
4	0.305	46.40	56.88	0.31	10.17	60.10	-3.22	QP
5	0.312	34.21	44.70	0.32	10.17	49.93	-5.23	Average
6	0.312	46.31	56.80	0.32	10.17	59.93	-3.13	QP
7	0.315	35.20	45.70	0.33	10.17	49.84	-4.14	Average
8	0.315	45.80	56.30	0.33	10.17	59.84	-3.54	QP
9	0.332	32.70	43.24	0.37	10.17	49.40	-6.16	Average
10	0.332	45.20	55.74	0.37	10.17	59.40	-3.66	QP
11	13.560	32.40	43.87	1.00	10.47	50.00	-6.13	Average
12	13.560	56.10	67.57	1.00	10.47	60.00	7.57	QP

## AC 240V, Neutral



Condition: Neutral

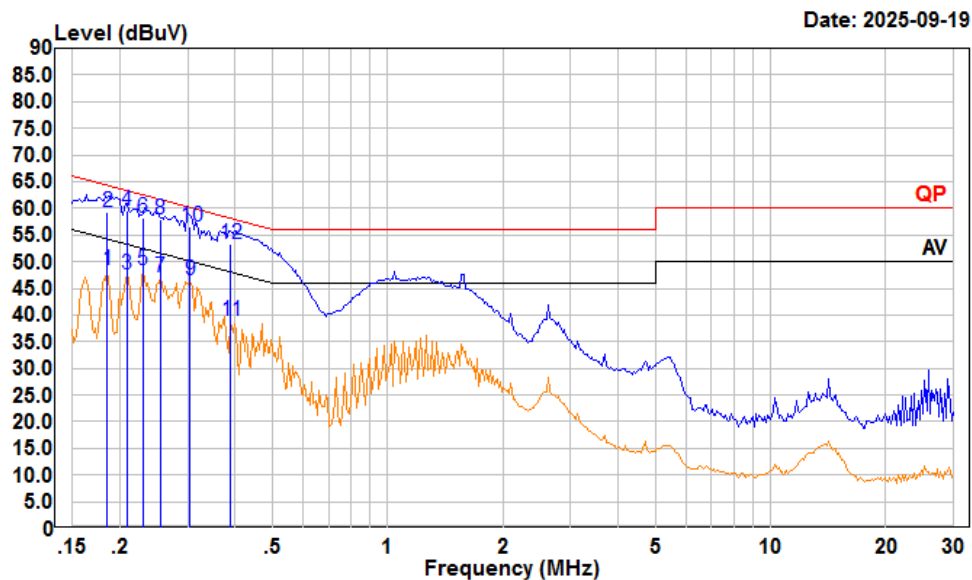
Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.232	32.10	42.94	0.67	10.17	52.39	-9.45	Average
2	0.232	45.40	56.24	0.67	10.17	62.39	-6.15	QP
3	0.272	31.40	42.27	0.70	10.17	51.07	-8.80	Average
4	0.272	43.20	54.07	0.70	10.17	61.07	-7.00	QP
5	0.296	32.50	43.37	0.70	10.17	50.37	-7.00	Average
6	0.296	43.10	53.97	0.70	10.17	60.37	-6.40	QP
7	0.315	35.20	46.10	0.73	10.17	49.84	-3.74	Average
8	0.315	45.90	56.80	0.73	10.17	59.84	-3.04	QP
9	0.325	33.20	44.12	0.75	10.17	49.57	-5.45	Average
10	0.325	43.90	54.82	0.75	10.17	59.57	-4.75	QP
11	13.560	35.48	47.07	1.12	10.47	50.00	-2.93	Average
12	13.560	64.41	76.00	1.12	10.47	60.00	16.00	QP

For Sample 3A34-2

**Dummy load**  
**AC 240V, Line**

Condition: Line

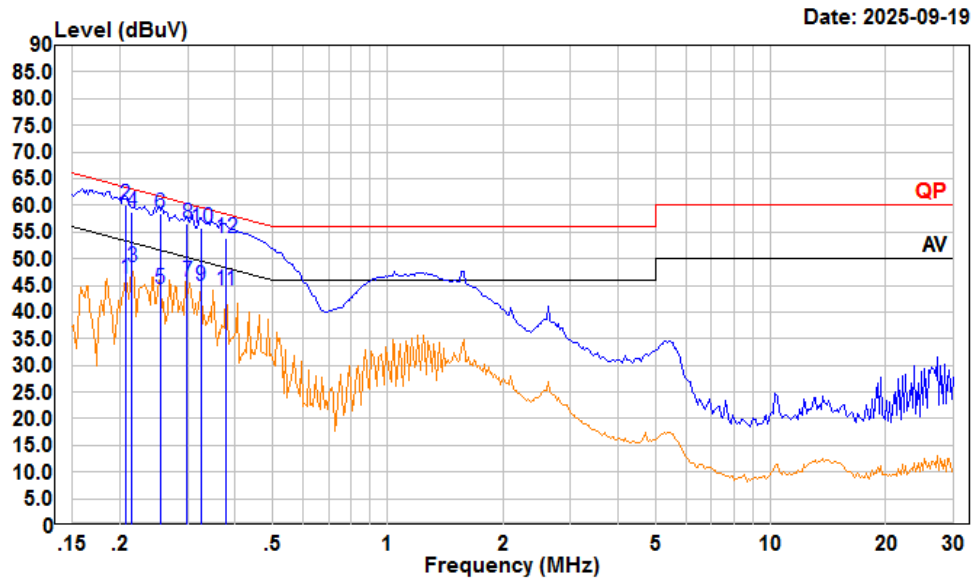
Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.185	37.88	48.44	0.43	10.13	54.24	-5.80	Average
2	0.185	48.70	59.26	0.43	10.13	64.24	-4.98	QP
3	0.208	36.88	47.48	0.42	10.18	53.27	-5.79	Average
4	0.208	48.89	59.49	0.42	10.18	63.27	-3.78	QP
5	0.229	37.84	48.47	0.46	10.17	52.48	-4.01	Average
6	0.229	47.61	58.24	0.46	10.17	62.48	-4.24	QP
7	0.255	36.53	47.18	0.48	10.17	51.60	-4.42	Average
8	0.255	47.30	57.95	0.48	10.17	61.60	-3.65	QP
9	0.305	36.01	46.49	0.31	10.17	50.10	-3.61	Average
10	0.305	46.10	56.58	0.31	10.17	60.10	-3.52	QP
11	0.389	28.26	38.99	0.56	10.17	48.08	-9.09	Average
12	0.389	42.50	53.23	0.56	10.17	58.08	-4.85	QP

## AC 240V, Neutral



Condition: Neutral

Project : 2501X01819E-RF

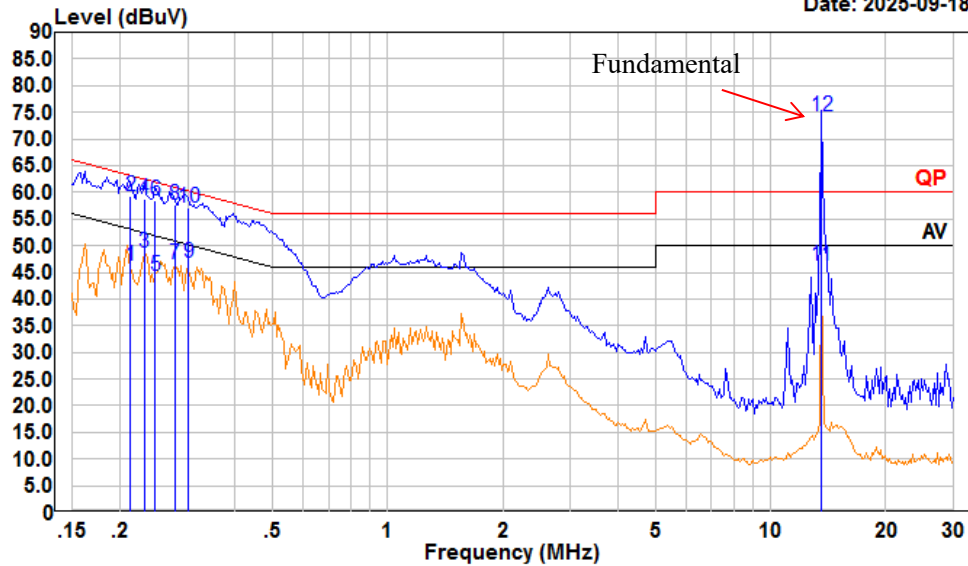
tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.206	35.47	46.26	0.61	10.18	53.36	-7.10	Average
2	0.206	49.20	59.99	0.61	10.18	63.36	-3.37	QP
3	0.215	37.61	48.41	0.63	10.17	53.01	-4.60	Average
4	0.215	48.01	58.81	0.63	10.17	63.01	-4.20	QP
5	0.255	33.41	44.28	0.70	10.17	51.60	-7.32	Average
6	0.255	47.50	58.37	0.70	10.17	61.60	-3.23	QP
7	0.299	34.75	45.62	0.70	10.17	50.28	-4.66	Average
8	0.299	45.60	56.47	0.70	10.17	60.28	-3.81	QP
9	0.325	33.98	44.90	0.75	10.17	49.57	-4.67	Average
10	0.325	44.70	55.62	0.75	10.17	59.57	-3.95	QP
11	0.377	33.31	44.06	0.58	10.17	48.34	-4.28	Average
12	0.377	43.10	53.85	0.58	10.17	58.34	-4.49	QP

**With NFC Antenna**  
**AC 240V, Line**

Date: 2025-09-18



Condition: Line

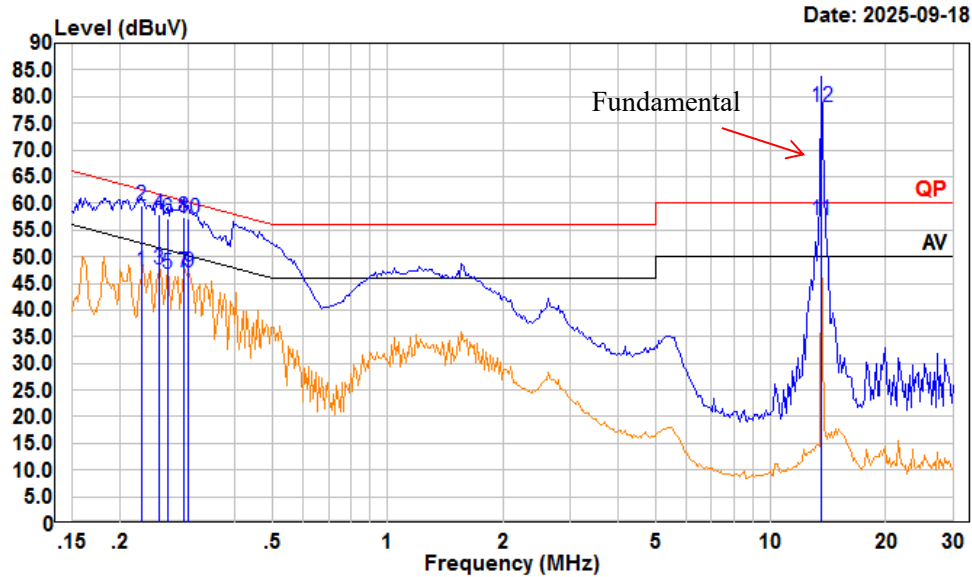
Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.213	35.59	46.20	0.43	10.18	53.10	-6.90	Average
2	0.213	48.69	59.30	0.43	10.18	63.10	-3.80	QP
3	0.232	38.12	48.76	0.47	10.17	52.39	-3.63	Average
4	0.232	48.20	58.84	0.47	10.17	62.39	-3.55	QP
5	0.247	33.61	44.27	0.49	10.17	51.86	-7.59	Average
6	0.247	47.81	58.47	0.49	10.17	61.86	-3.39	QP
7	0.277	35.82	46.38	0.39	10.17	50.90	-4.52	Average
8	0.277	47.00	57.56	0.39	10.17	60.90	-3.34	QP
9	0.302	36.30	46.77	0.30	10.17	50.19	-3.42	Average
10	0.302	46.71	57.18	0.30	10.17	60.19	-3.01	QP
11	13.561	34.85	46.32	1.00	10.47	50.00	-3.68	Average
12	13.561	62.70	74.17	1.00	10.47	60.00	14.17	QP

## AC 240V, Neutral



Condition: Neutral

Project : 2501X01819E-RF

tester : Macy.shi Note:NFC Transmitting

Setting : RBW:9kHz

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.227	36.53	47.36	0.66	10.17	52.57	-5.21	Average
2	0.227	48.70	59.53	0.66	10.17	62.57	-3.04	QP
3	0.252	36.85	47.72	0.70	10.17	51.69	-3.97	Average
4	0.252	47.10	57.97	0.70	10.17	61.69	-3.72	QP
5	0.266	35.89	46.76	0.70	10.17	51.25	-4.49	Average
6	0.266	46.30	57.17	0.70	10.17	61.25	-4.08	QP
7	0.292	36.27	47.14	0.70	10.17	50.46	-3.32	Average
8	0.292	46.50	57.37	0.70	10.17	60.46	-3.09	QP
9	0.302	36.15	47.02	0.70	10.17	50.19	-3.17	Average
10	0.302	46.21	57.08	0.70	10.17	60.19	-3.11	QP
11	13.560	45.24	56.83	1.12	10.47	50.00	6.83	Average
12	13.560	66.41	78.00	1.12	10.47	60.00	18.00	QP

## FCC§15.225, §15.205& §15.209 - RADIATED EMISSIONS TEST

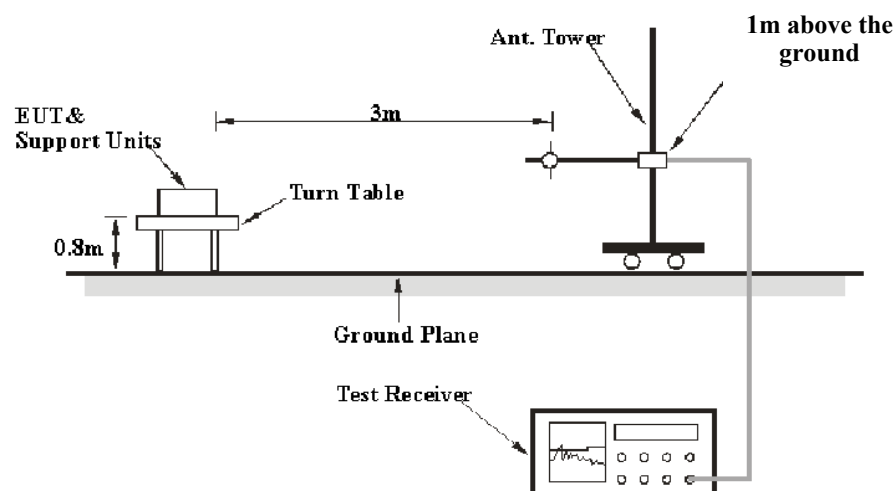
### Applicable Standard

As per FCC Part 15.225

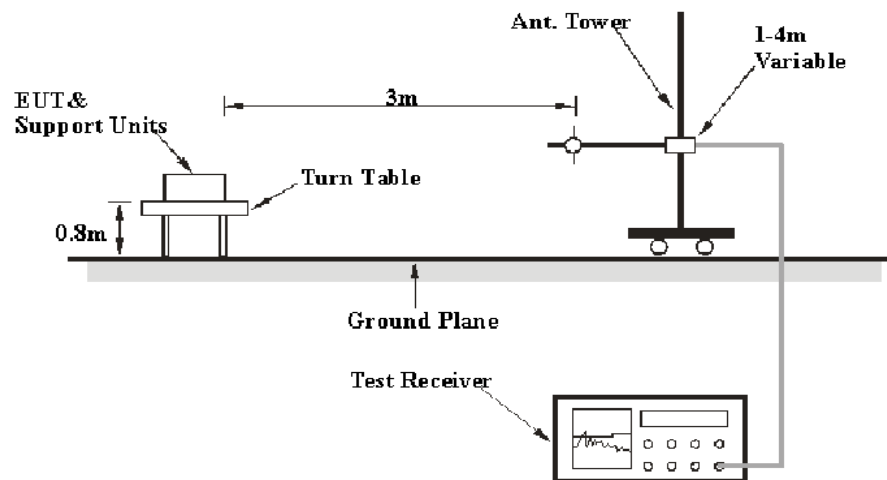
- (a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110–14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

### EUT Setup

9 kHz-30MHz:



Note: Antenna is set up at 1m during test for below 30MHz.

**30MHz-1GHz:**

The radiated emission tests were performed in the 3-meter chamber a test site, using the setup accordance with the ANSI C63.10-2020.

**EMI Test Receiver Setup**

According to FCC Rules, 47 CFR 15.33, the EUT emissions were investigated up to 1000 MHz.

During the radiated emission test, the EMI test Receiver was 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	/	PK	PK
150 kHz - 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	PK
30 MHz - 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	PK	PK

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

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

## Factor & Over Limit/Margin Calculation

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

$$\begin{aligned}\text{Factor} &= \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

The “**Over Limit**” 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:

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

## Test Data

### Environmental Conditions

<b>Temperature:</b>	24.4~24.6 °C
<b>Relative Humidity:</b>	53~56 %
<b>ATM Pressure:</b>	100.1 kPa

*The testing was performed by Nico Wu on 2025-09-18.*

*Test mode: Transmitting (With power Card to test was the worst.)*

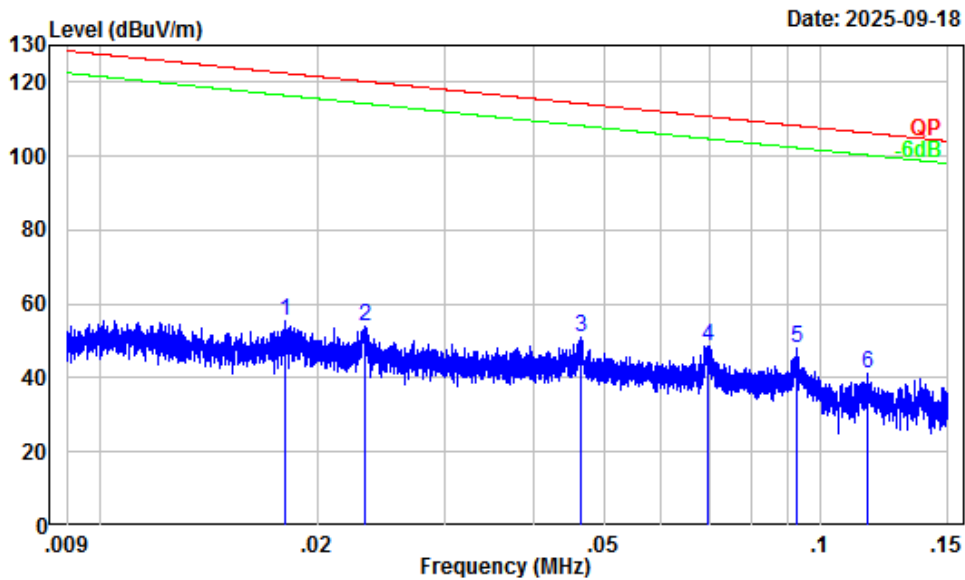
1) Spurious Emissions (9 kHz~30 MHz):

Part 15 Section 15.31(f)(2) (9kHz-30MHz)

Limit @ 3m=Limit @ 300m-40\*log(3(m)/300(m))

Limit @ 3m=Limit @ 30m-40\*log(3(m)/30(m))

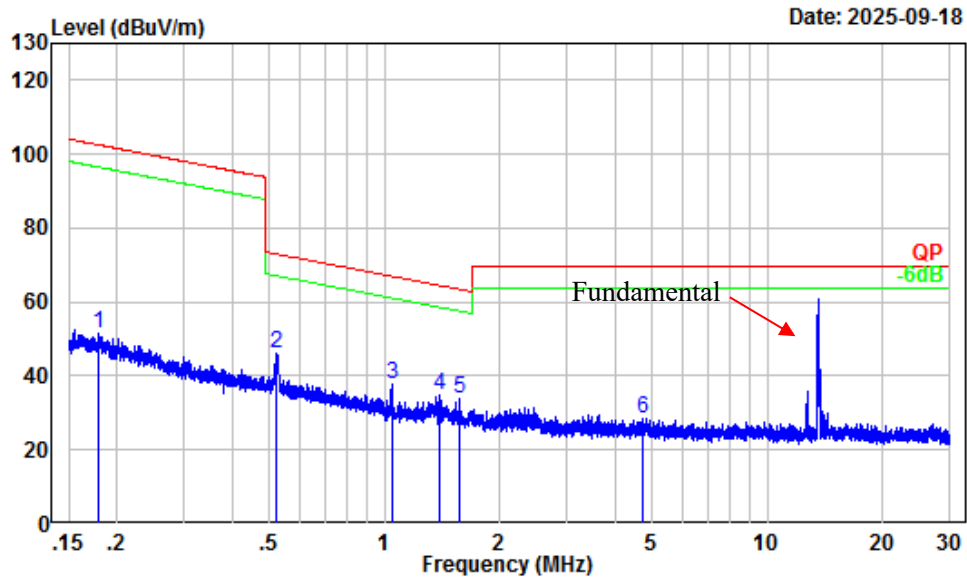
For Sample 3A34-1  
Ground-parallel  
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : ground-parallel  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.018	30.76	24.55	55.31	122.46	-67.15	Peak
2	0.023	29.76	24.10	53.86	120.23	-66.37	Peak
3	0.046	26.77	24.44	51.21	114.27	-63.06	Peak
4	0.070	24.41	24.16	48.57	110.72	-62.15	Peak
5	0.093	22.52	25.33	47.85	108.28	-60.43	Peak
6	0.116	21.04	20.37	41.41	106.30	-64.89	Peak

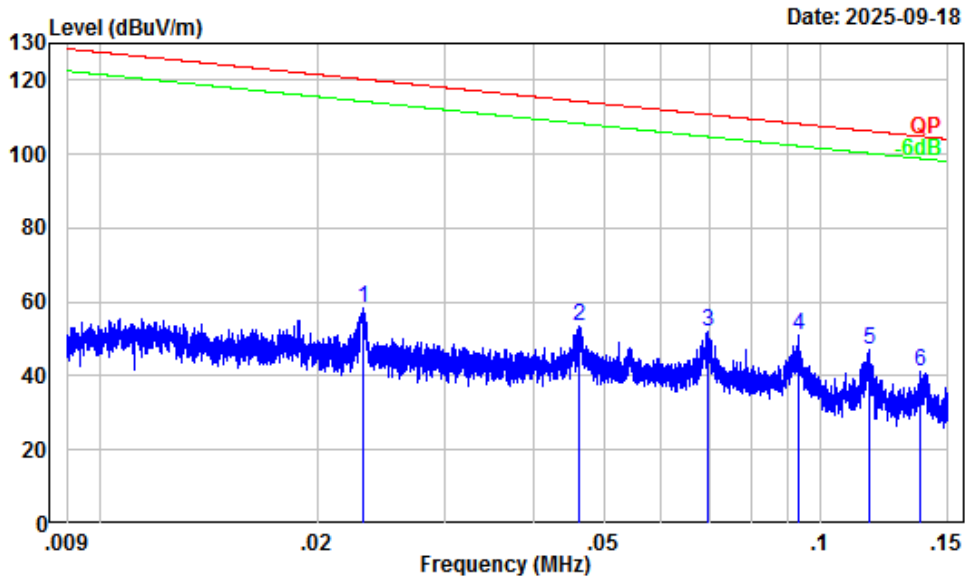
150 kHz~30 MHz



Site : Chamber A  
 Condition : 3m  
 Project Number : 2501X01819E-RF  
 Test Mode : Transmitting  
 Note : ground-parallel  
 Detector: Peak RBW/VBW: 10/30kHz  
 Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.179	17.32	34.31	51.63	102.53	-50.90	Peak
2	0.525	6.09	40.25	46.34	73.19	-26.85	Peak
3	1.046	1.07	36.86	37.93	67.08	-29.15	Peak
4	1.400	0.08	34.60	34.68	64.49	-29.81	Peak
5	1.573	-0.40	34.17	33.77	63.46	-29.69	Peak
6	4.731	-2.77	31.43	28.66	69.54	-40.88	Peak

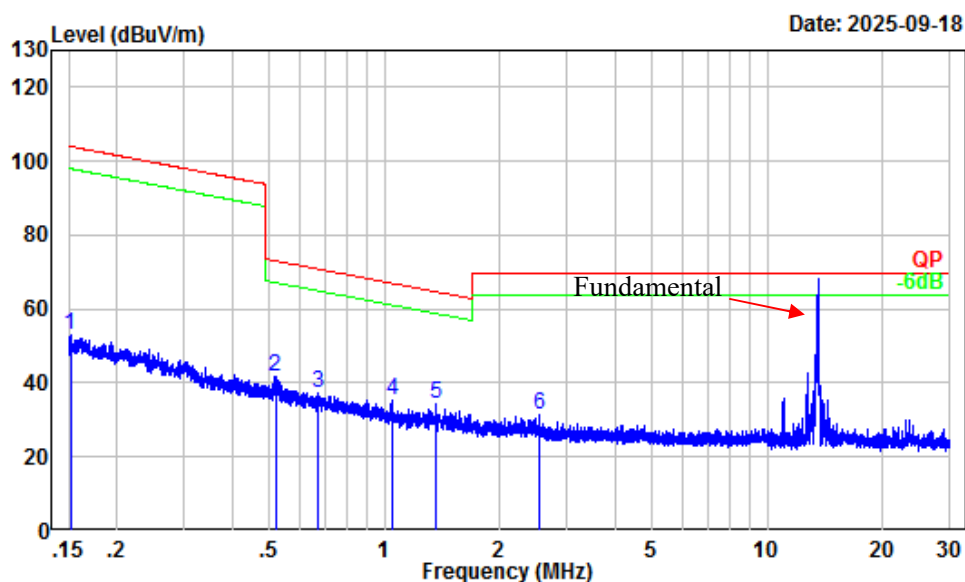
Perpendicular  
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : perpendicular  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.023	29.78	28.57	58.35	120.28	-61.93	Peak
2	0.046	26.81	26.48	53.29	114.33	-61.04	Peak
3	0.070	24.44	27.68	52.12	110.76	-58.64	Peak
4	0.093	22.48	28.51	50.99	108.23	-57.24	Peak
5	0.117	21.02	25.86	46.88	106.27	-59.39	Peak
6	0.138	19.79	21.40	41.19	104.84	-63.65	Peak

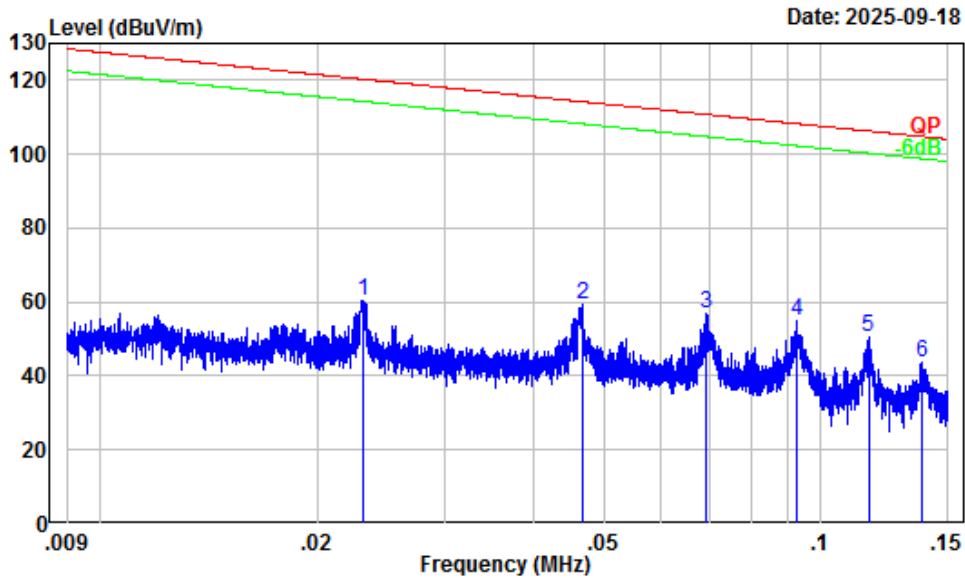
150 kHz~30 MHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : perpendicular  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.151	18.97	33.93	52.90	104.01	-51.11	Peak
2	0.519	6.16	35.57	41.73	73.29	-31.56	Peak
3	0.669	4.31	32.80	37.11	71.04	-33.93	Peak
4	1.046	1.07	34.27	35.34	67.07	-31.73	Peak
5	1.367	0.17	34.02	34.19	64.70	-30.51	Peak
6	2.533	-1.89	33.18	31.29	69.54	-38.25	Peak

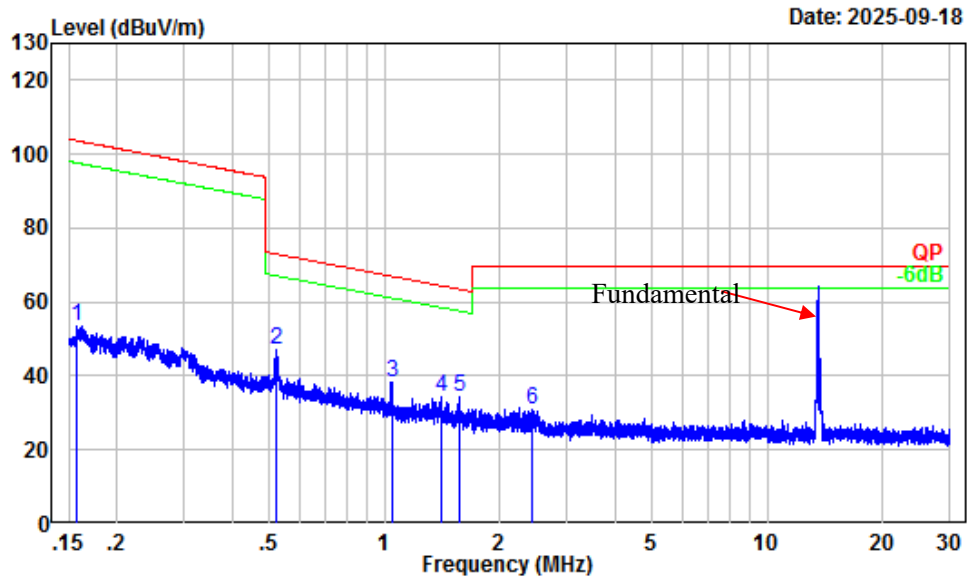
Parallel  
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : parallel  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.023	29.79	30.61	60.40	120.30	-59.90	Peak
2	0.047	26.75	32.43	59.18	114.23	-55.05	Peak
3	0.069	24.47	32.37	56.84	110.79	-53.95	Peak
4	0.093	22.52	32.62	55.14	108.27	-53.13	Peak
5	0.116	21.03	29.49	50.52	106.28	-55.76	Peak
6	0.138	19.75	24.01	43.76	104.80	-61.04	Peak

150 kHz~30 MHz

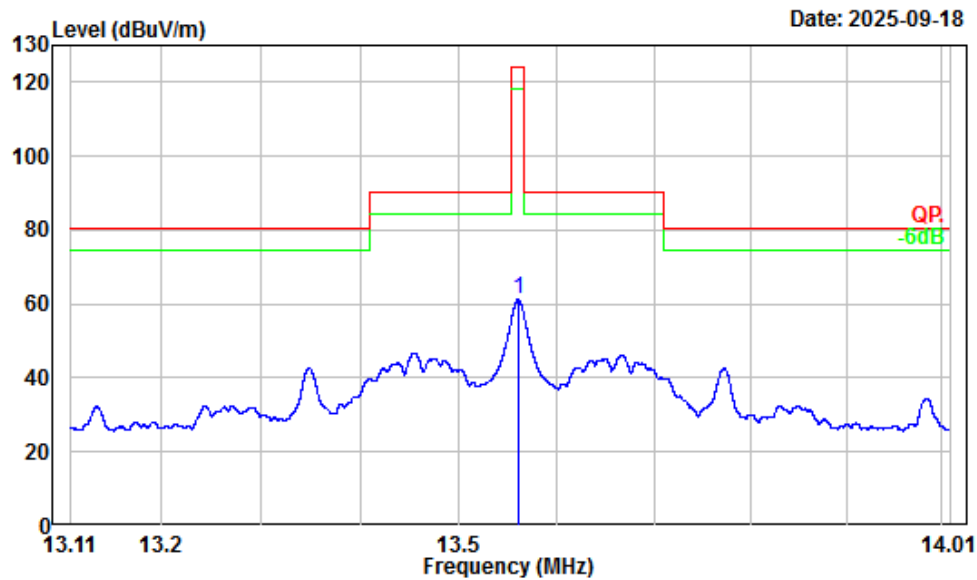


Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : parallel  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.157	18.62	34.96	53.58	103.67	-50.09	Peak
2	0.522	6.13	41.19	47.32	73.24	-25.92	Peak
3	1.046	1.07	37.33	38.40	67.08	-28.68	Peak
4	1.402	0.07	34.08	34.15	64.47	-30.32	Peak
5	1.571	-0.40	34.77	34.37	63.46	-29.09	Peak
6	2.431	-1.84	32.72	30.88	69.54	-38.66	Peak

2) Emission Mask & Fundamental:

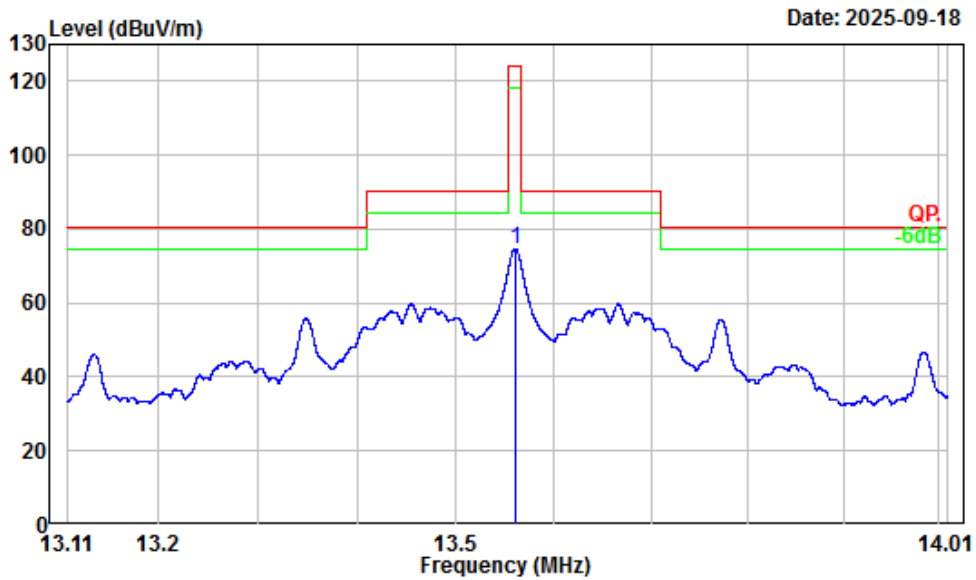
Ground-parallel



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : ground-parallel  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.560	-2.72	63.87	61.15	124.00	-62.85	Peak

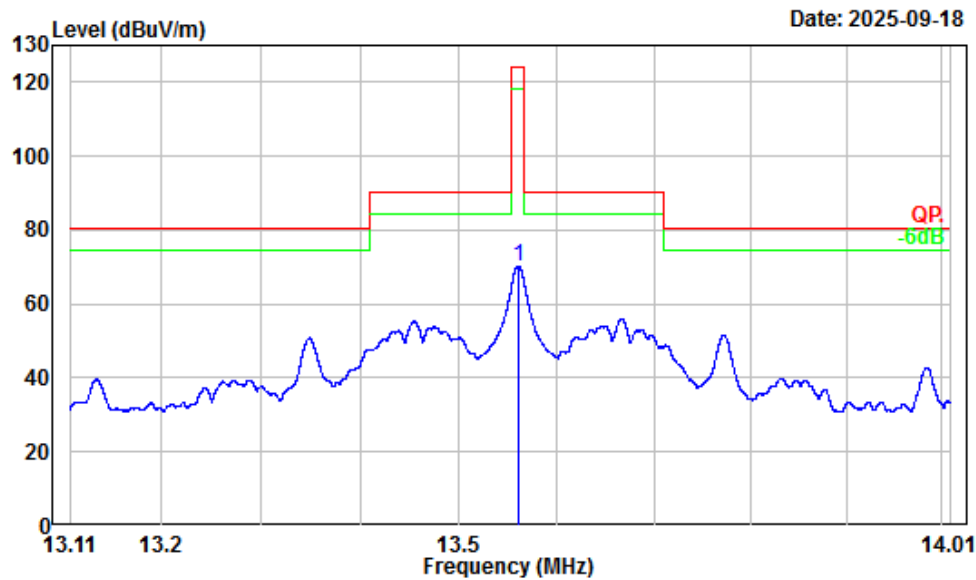
Perpendicular



Site : Chamber A  
 Condition : 3m  
 Project Number : 2501X01819E-RF  
 Test Mode : Transmitting  
 Note : perpendicular  
 Detector: Peak RBW/VBW: 10/30kHz  
 Tester : Nico Wu

	Freq Factor		Read Level		Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.56	-2.72	77.25	74.53	124.00	-49.47	Peak

Parallel

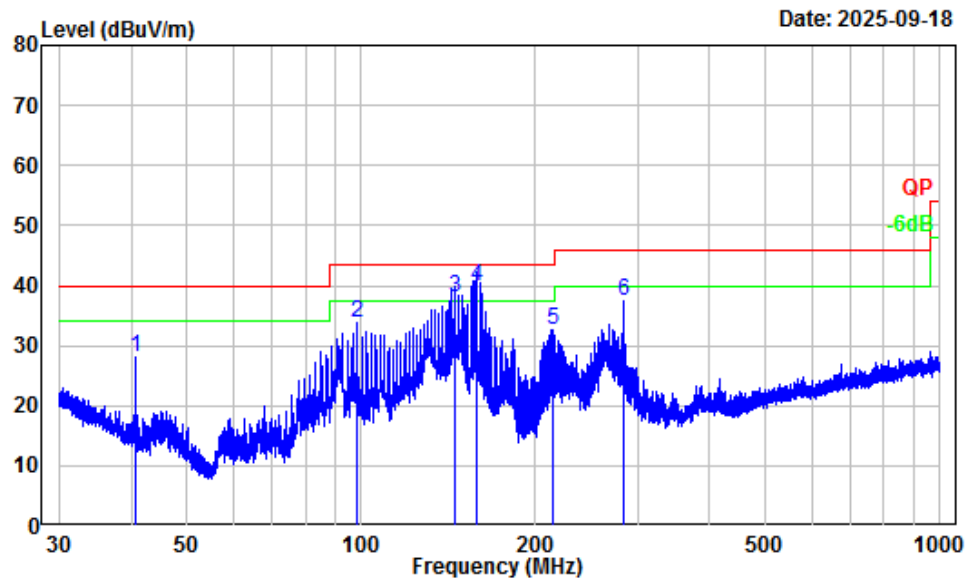


Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : parallel  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.56	-2.72	72.95	70.23	124.00	-53.77	Peak

3) Spurious Emissions (30 MHz~1GHz):

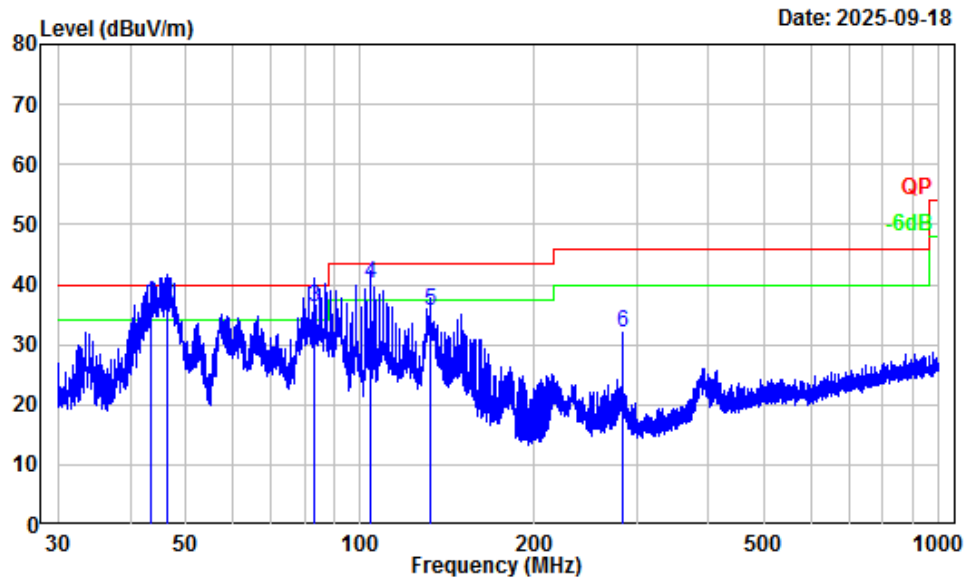
Horizontal



Site : Chamber A  
Condition : 3m Horizontal  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	40.67	-12.84	40.81	27.97	40.00	-12.03	Peak
2	98.40	-16.39	50.09	33.70	43.50	-9.80	Peak
3	145.35	-12.21	50.10	37.89	43.50	-5.61	QP
4	158.39	-12.67	52.50	39.83	43.50	-3.67	QP
5	214.70	-14.20	46.70	32.50	43.50	-11.00	Peak
6	284.73	-11.23	48.65	37.42	46.00	-8.58	Peak

## Vertical



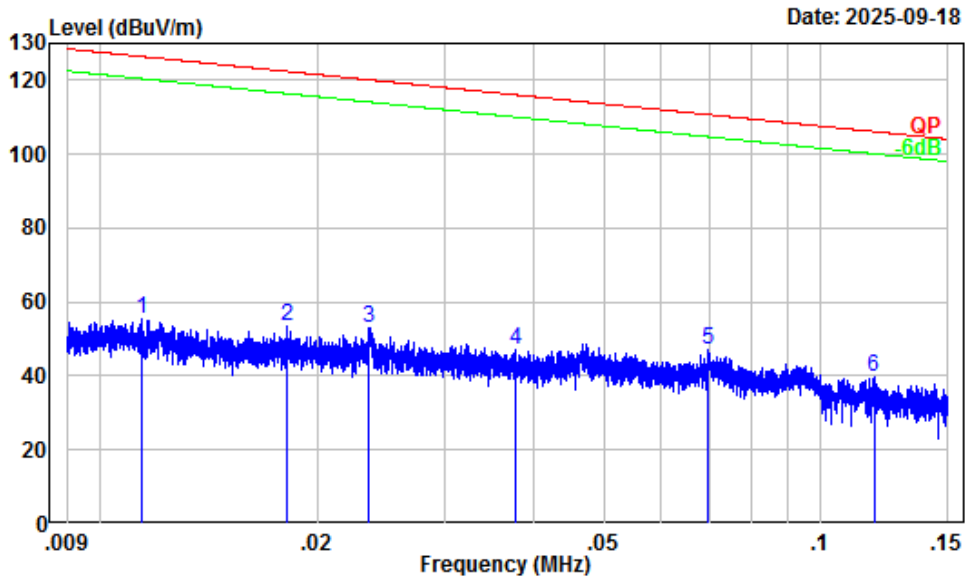
Site : Chamber A  
Condition : 3m Vertical  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Tester : Nico Wu

	Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	43.39	-14.80	51.69	36.89	40.00	-3.11	QP
2	46.52	-16.72	53.70	36.98	40.00	-3.02	QP
3	83.41	-18.09	54.20	36.11	40.00	-3.89	QP
4	104.08	-14.63	54.90	40.27	43.50	-3.23	QP
5	132.28	-11.33	46.90	35.57	43.50	-7.93	QP
6	284.85	-11.23	43.30	32.07	46.00	-13.93	Peak

For Sample 3A34-2

Ground-parallel

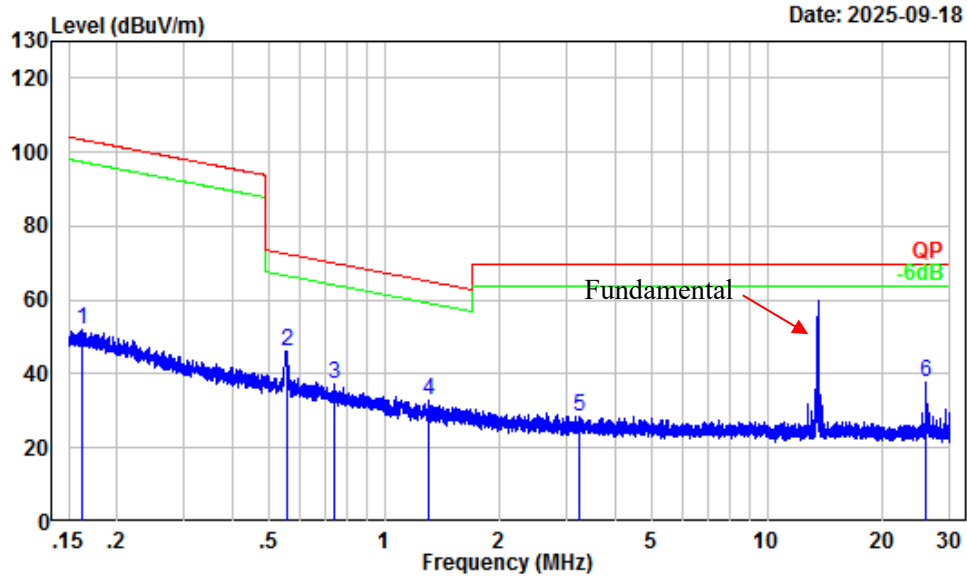
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : ground-parallel  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.011	32.02	23.56	55.58	126.42	-70.84	Peak
2	0.018	30.75	22.77	53.52	122.43	-68.91	Peak
3	0.024	29.71	23.30	53.01	120.13	-67.12	Peak
4	0.038	27.70	19.54	47.24	116.09	-68.85	Peak
5	0.070	24.43	22.72	47.15	110.74	-63.59	Peak
6	0.118	20.91	19.06	39.97	106.14	-66.17	Peak

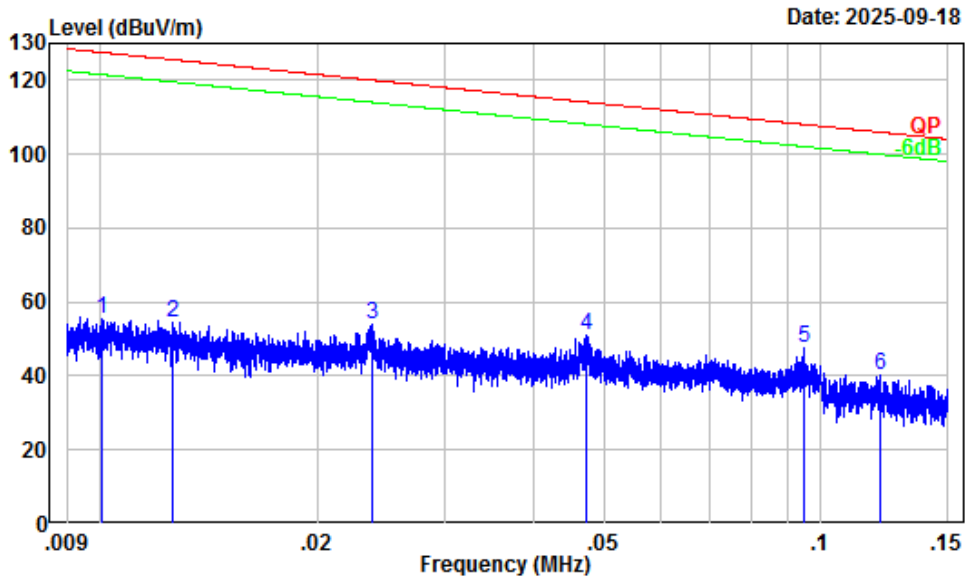
150 kHz~30 MHz



Site : Chamber A  
 Condition : 3m  
 Project Number : 2501X01819E-RF  
 Test Mode : Transmitting  
 Note : ground-parallel  
 Detector: Peak RBW/VBW: 10/30kHz  
 Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.163	18.28	33.66	51.94	103.36	-51.42	Peak
2	0.556	5.71	40.37	46.08	72.67	-26.59	Peak
3	0.742	3.42	33.77	37.19	70.12	-32.93	Peak
4	1.307	0.34	32.63	32.97	65.10	-32.13	Peak
5	3.215	-2.27	30.87	28.60	69.54	-40.94	Peak
6	26.070	-3.28	41.24	37.96	69.54	-31.58	Peak

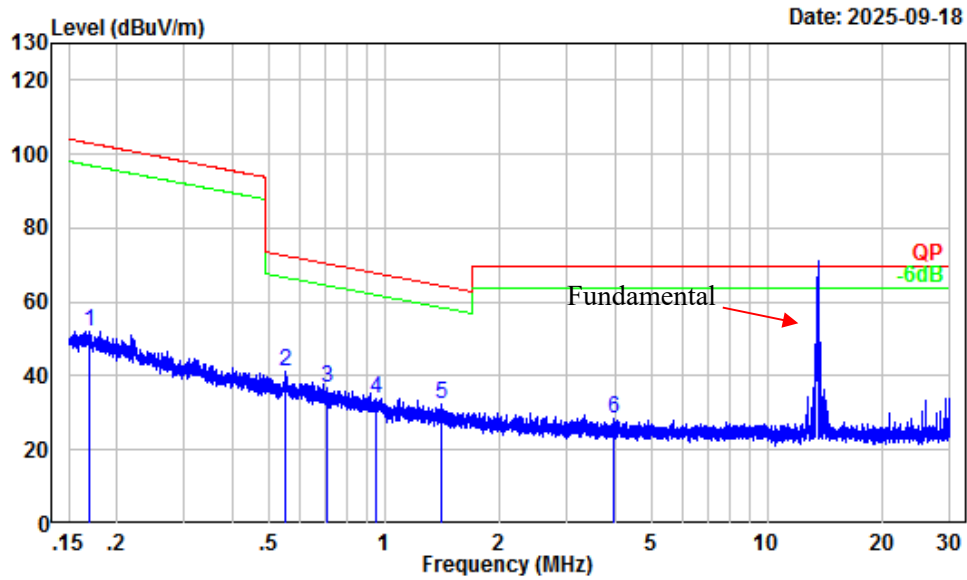
Perpendicular  
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : perpendicular  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	32.29	23.21	55.50	127.54	-72.04	Peak
2	0.013	31.81	22.65	54.46	125.60	-71.14	Peak
3	0.024	29.66	24.45	54.11	120.05	-65.94	Peak
4	0.047	26.69	24.31	51.00	114.12	-63.12	Peak
5	0.095	22.37	25.28	47.65	108.07	-60.42	Peak
6	0.121	20.78	19.38	40.16	105.97	-65.81	Peak

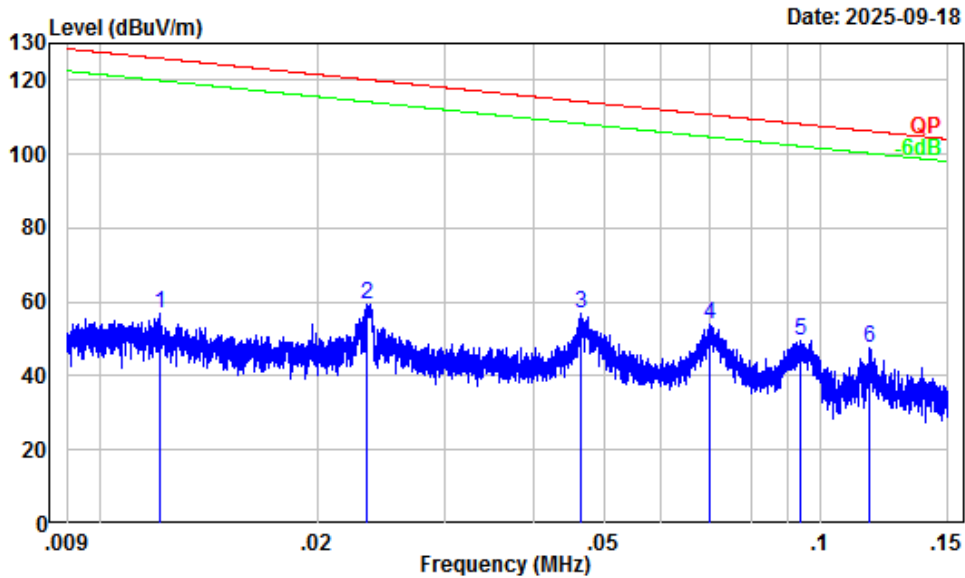
150 kHz~30 MHz



Site : Chamber A  
 Condition : 3m  
 Project Number : 2501X01819E-RF  
 Test Mode : Transmitting  
 Note : perpendicular  
 Detector: Peak RBW/VBW: 10/30kHz  
 Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.170	17.86	34.34	52.20	102.99	-50.79	Peak
2	0.553	5.75	35.60	41.35	72.73	-31.38	Peak
3	0.712	3.79	33.15	36.94	70.49	-33.55	Peak
4	0.954	1.55	32.54	34.09	67.89	-33.80	Peak
5	1.402	0.07	32.17	32.24	64.47	-32.23	Peak
6	3.964	-2.68	30.95	28.27	69.54	-41.27	Peak

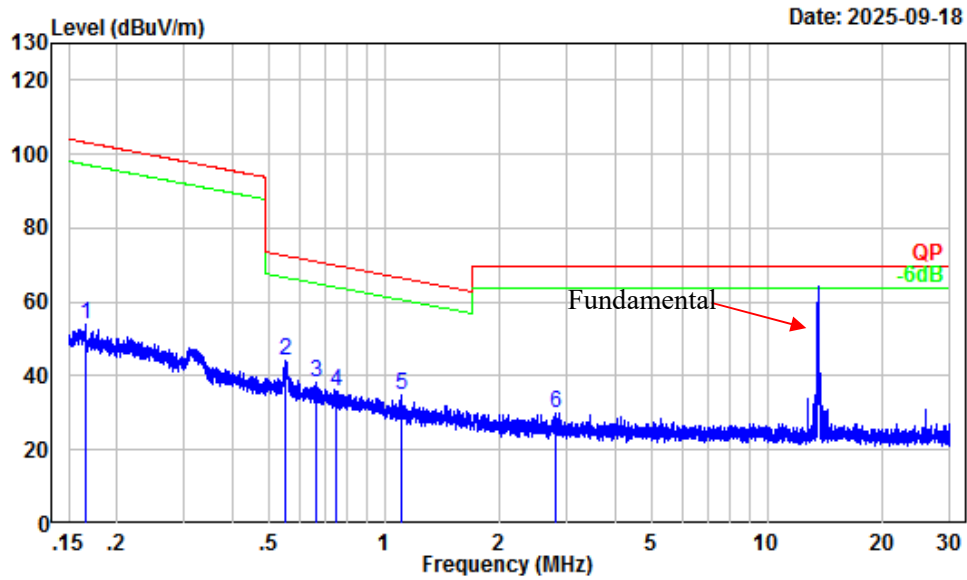
Parallel  
9 kHz~150 kHz



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : parallel  
Detector: Peak RBW/VBW: 0.3/1kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBUV/m	dBUV/m	dB	
1	0.012	31.90	24.99	56.89	125.95	-69.06	Peak
2	0.023	29.74	29.58	59.32	120.18	-60.86	Peak
3	0.047	26.76	30.02	56.78	114.24	-57.46	Peak
4	0.070	24.38	29.43	53.81	110.68	-56.87	Peak
5	0.094	22.45	26.92	49.37	108.18	-58.81	Peak
6	0.117	20.99	26.39	47.38	106.24	-58.86	Peak

150 kHz~30 MHz

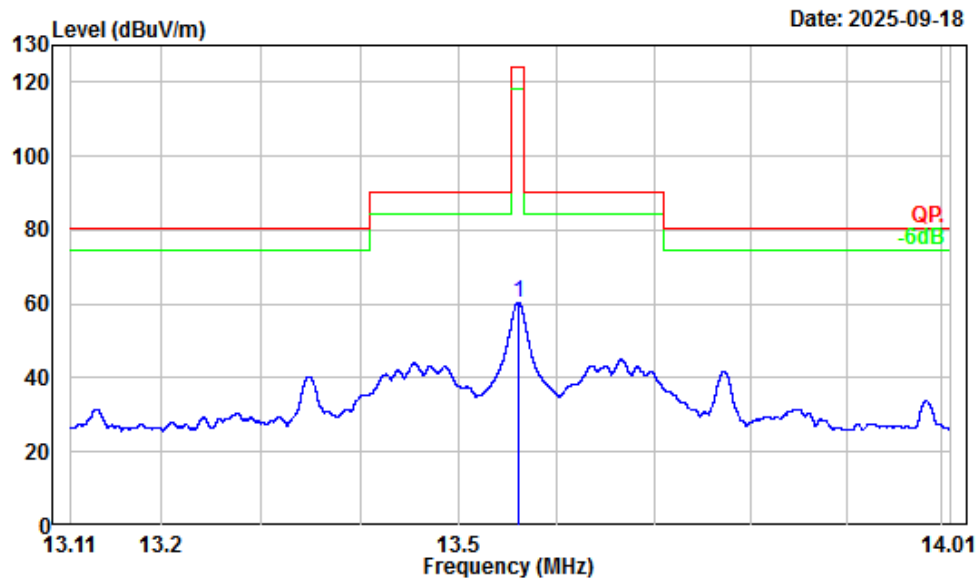


Site : Chamber A  
 Condition : 3m  
 Project Number : 2501X01819E-RF  
 Test Mode : Transmitting  
 Note : parallel  
 Detector: Peak RBW/VBW: 10/30kHz  
 Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.166	18.13	35.63	53.76	103.23	-49.47	Peak
2	0.552	5.76	38.41	44.17	72.74	-28.57	Peak
3	0.666	4.36	33.94	38.30	71.08	-32.78	Peak
4	0.750	3.31	32.61	35.92	70.02	-34.10	Peak
5	1.104	0.91	34.02	34.93	66.59	-31.66	Peak
6	2.815	-2.05	32.05	30.00	69.54	-39.54	Peak

2) Emission Mask & Fundamental:

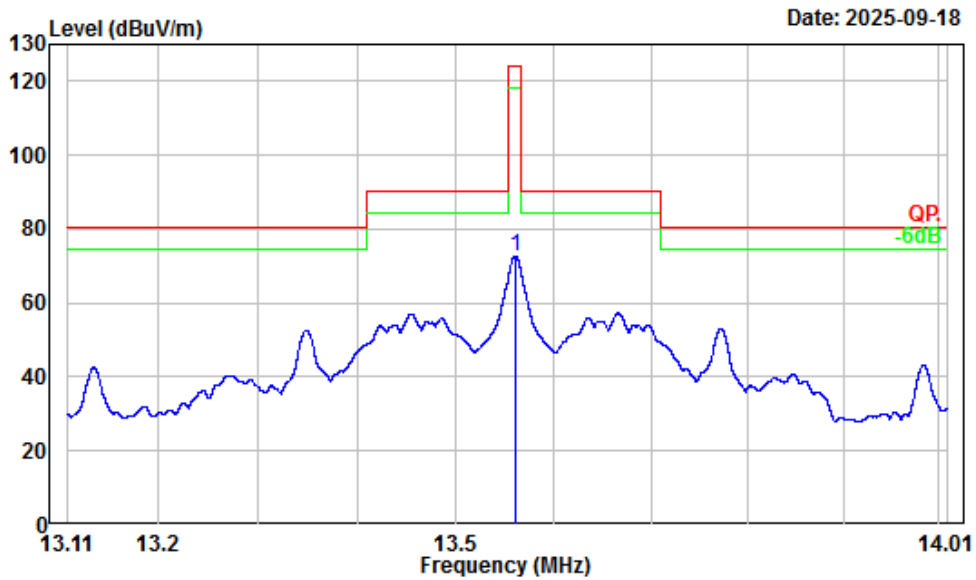
Ground-parallel



Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : ground-parallel  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.561	-2.72	63.06	60.34	124.00	-63.66	Peak

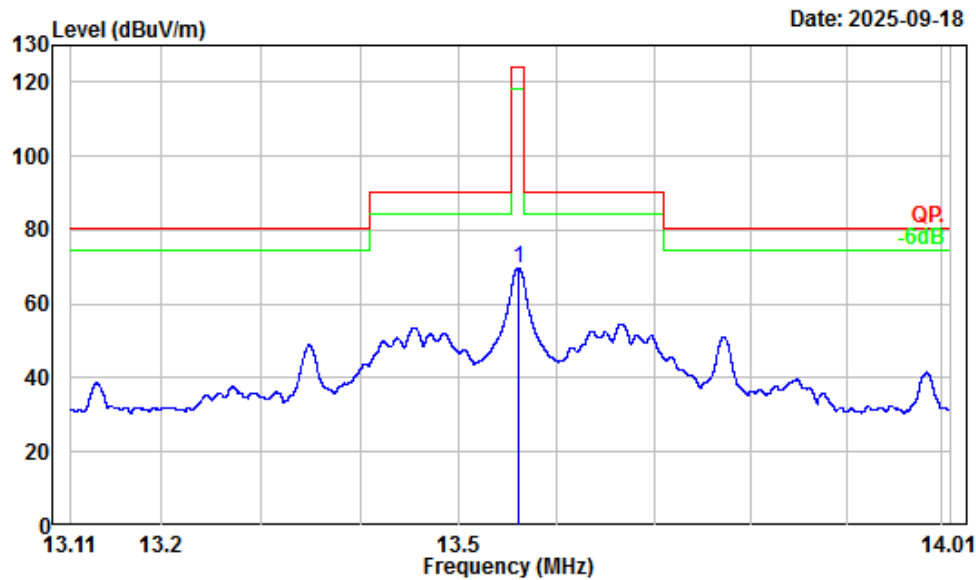
Perpendicular



Site : Chamber A  
 Condition : 3m  
 Project Number : 2501X01819E-RF  
 Test Mode : Transmitting  
 Note : perpendicular  
 Detector: Peak RBW/VBW: 10/30kHz  
 Tester : Nico Wu

	Freq Factor		Read Level		Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.56	-2.72	75.30	72.58	124.00	-51.42	Peak

Parallel

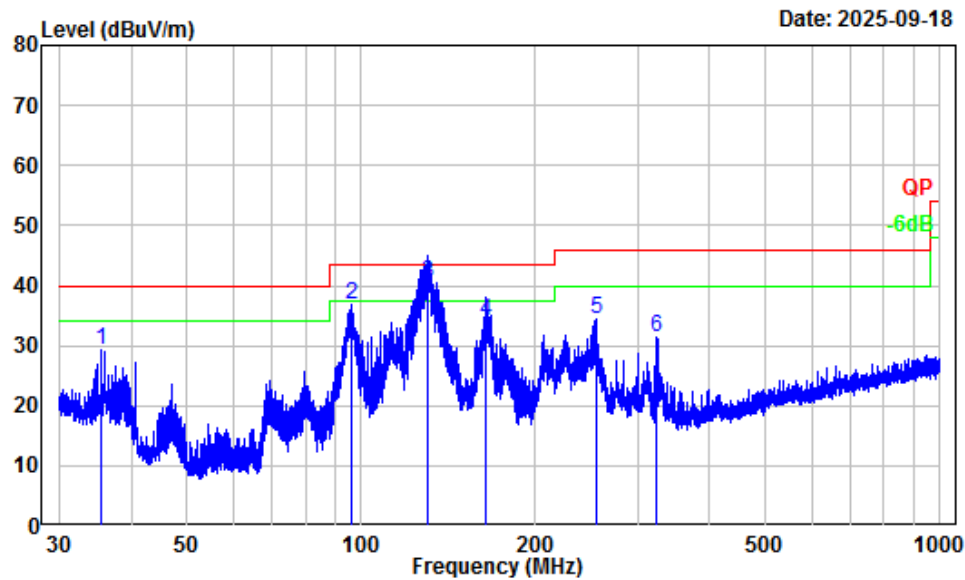


Site : Chamber A  
Condition : 3m  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Note : parallel  
Detector: Peak RBW/VBW: 10/30kHz  
Tester : Nico Wu

	Freq Factor		Read Level		Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	13.56	-2.72	72.49	69.77	124.00	-54.23	Peak

3) Spurious Emissions (30 MHz~1GHz):

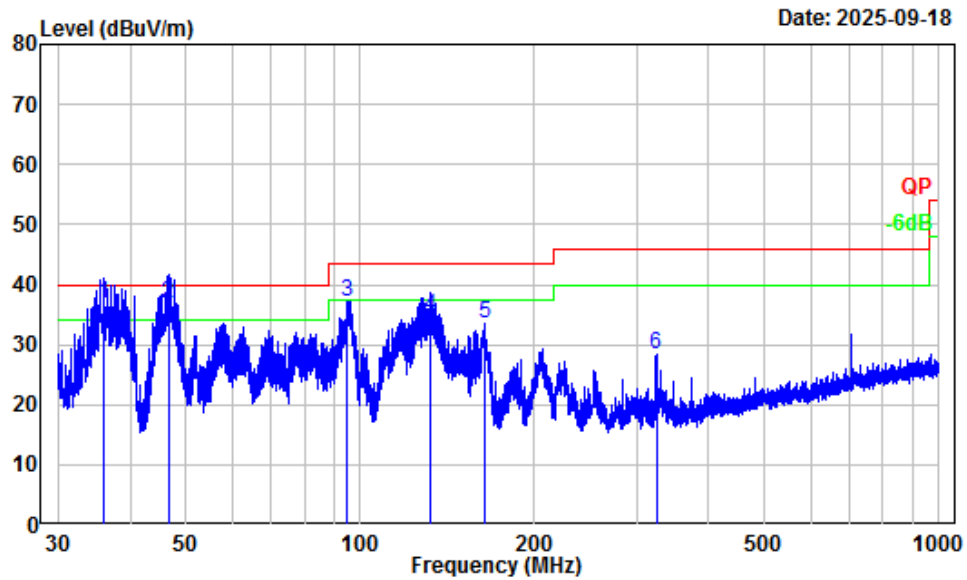
Horizontal



Site : Chamber A  
Condition : 3m Horizontal  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Detector QP RBW : 120kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	35.51	-9.19	38.36	29.17	40.00	-10.83	Peak
2	95.85	-17.08	53.77	36.69	43.50	-6.81	Peak
3	130.26	-11.24	51.70	40.46	43.50	-3.04	QP
4	163.97	-12.81	46.80	33.99	43.50	-9.51	QP
5	254.06	-13.08	47.37	34.29	46.00	-11.71	Peak
6	324.60	-10.69	42.21	31.52	46.00	-14.48	Peak

## Vertical



Site : Chamber A  
Condition : 3m Vertical  
Project Number : 2501X01819E-RF  
Test Mode : Transmitting  
Detector: Peak RBW/VBW: 100/300kHz  
Detector QP RBW : 120kHz  
Tester : Nico Wu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	36.02	-9.49	46.39	36.90	40.00	-3.10	QP
2	46.54	-16.73	53.70	36.97	40.00	-3.03	QP
3	94.97	-17.34	54.62	37.28	43.50	-6.22	Peak
4	132.45	-11.35	46.10	34.75	43.50	-8.75	QP
5	164.04	-12.81	46.30	33.49	43.50	-10.01	Peak
6	324.74	-10.69	39.08	28.39	46.00	-17.61	Peak

## FCC§15.225(e) - FREQUENCY STABILITY

### Applicable Standard

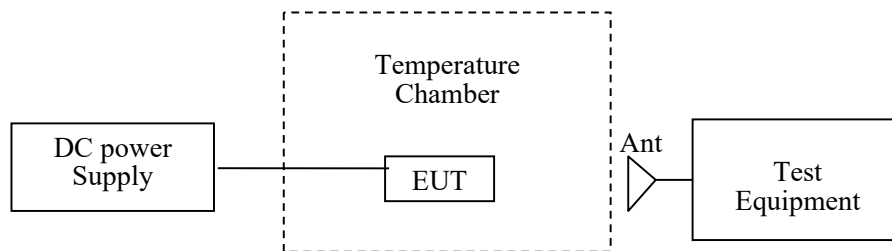
The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of  $-20$  degrees to  $+50$  degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

### Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and inductive antenna was connected to a Spectrum Analyzer. The EUT was placed inside the temperature chamber.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the Spectrum Analyzer.

Frequency Stability vs. Voltage: An external DC power supply Source. The voltage was set to 115% of the nominal value and was then decreased until the transmitter light no longer illuminated; i.e., the end point. The output frequency was recorded for each voltage.



### Test Data

#### Environmental Conditions

Temperature:	24.6 °C
Relative Humidity:	56 %
ATM Pressure:	100.1 kPa

*The testing was performed by Nico Wu on 2025-09-19.*

*Test Mode: Transmitting*

**Test Result: Pass**

For Sample 3A34-1

Voltage Supply (V <sub>AC</sub> )	Temperature (°C)	Measured Frequency (MHz)	Frequency Error (%)	Part 15.225 Limit (%)
240	-20	13.56059	0.0044	±0.01
	-10	13.56057	0.0042	±0.01
	0	13.56058	0.0043	±0.01
	10	13.56056	0.0041	±0.01
	20	13.56055	0.0041	±0.01
	30	13.56054	0.0040	±0.01
	40	13.56052	0.0038	±0.01
	50	13.56053	0.0039	±0.01
204	20	13.56052	0.0038	±0.01
275	20	13.56057	0.0042	±0.01

Note: the extreme voltage was declared by the applicant.

For Sample 3A34-2

Voltage Supply (V <sub>AC</sub> )	Temperature (°C)	Measured Frequency (MHz)	Frequency Error (%)	Part 15.225 Limit (%)
240	-20	13.56058	0.0043	±0.01
	-10	13.56056	0.0041	±0.01
	0	13.56058	0.0043	±0.01
	10	13.56057	0.0042	±0.01
	20	13.56055	0.0041	±0.01
	30	13.56053	0.0039	±0.01
	40	13.56051	0.0038	±0.01
	50	13.56052	0.0038	±0.01
204	20	13.56051	0.0038	±0.01
275	20	13.56060	0.0044	±0.01

Note: the extreme voltage was declared by the applicant.

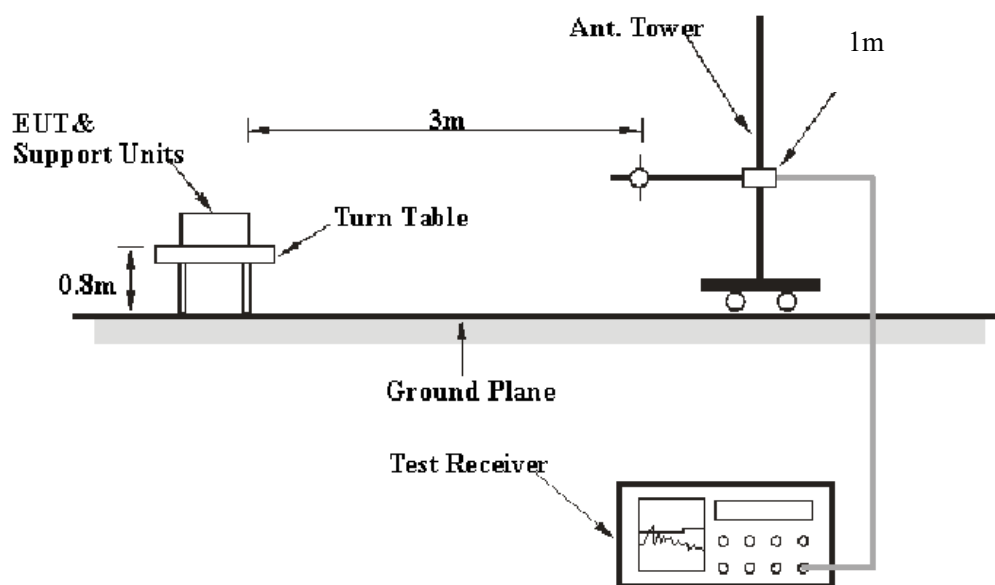
## FCC§15.215(c) - 20dB EMISSION BANDWIDTH

### Requirement

Per 15.215 (c) 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. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

### Test Procedure

Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.



Test Data

Environmental Conditions

Temperature:	24.6 °C
Relative Humidity:	56 %
ATM Pressure:	100.1 kPa

The testing was performed by Nico Wu on 2025-09-19.

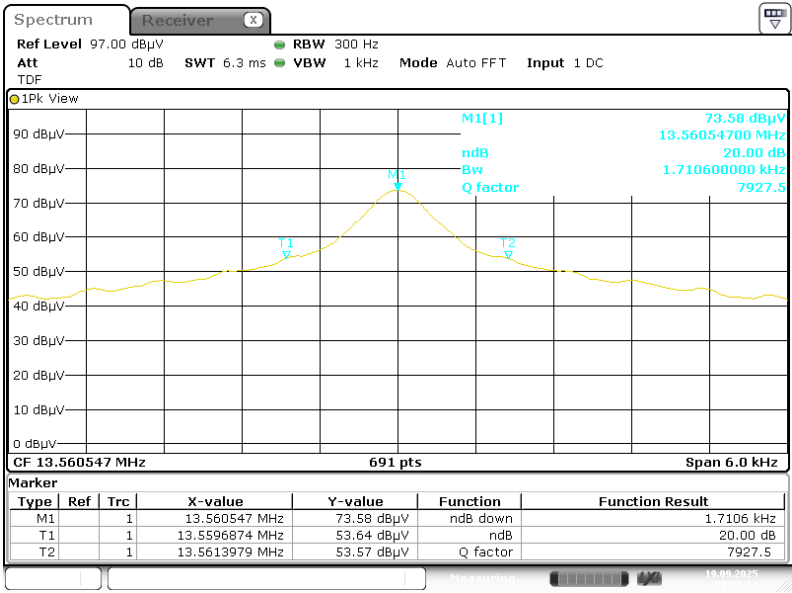
Test Mode: Transmitting

Test Result: Pass

For Sample 3A34-1

Test Frequency (MHz)	20dB Bandwidth (kHz)
13.56	1.711

20 dB Emission Bandwidth

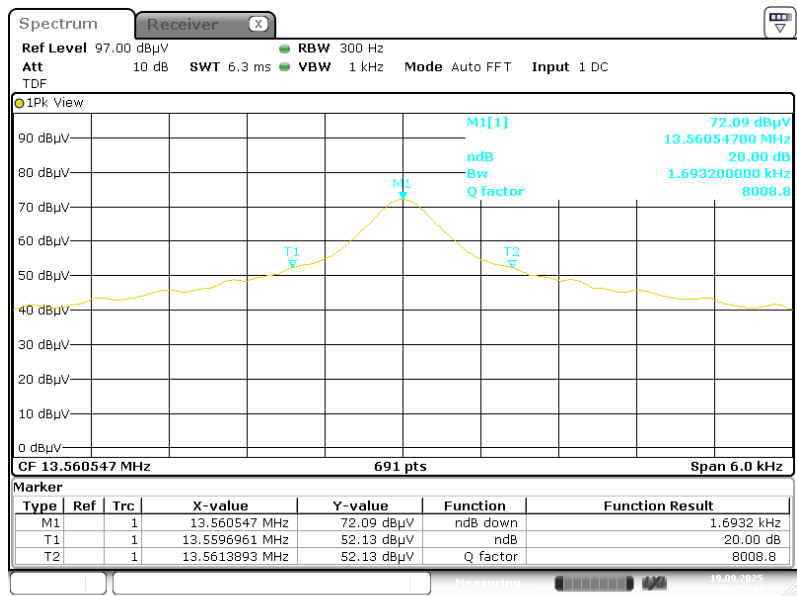


ProjectNo.:2501X01819E-RF Tester:Nico Wu  
Date: 19.SEP.2025 09:35:13

For Sample 3A34-2

Test Frequency (MHz)	20dB Bandwidth (kHz)
13.56	1.693

20 dB Emission Bandwidth



ProjectNo.:2501X01819E-RF Tester:Nico Wu  
Date: 19.SEP.2025 09:27:44

## **EUT PHOTOGRAPHS**

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Please refer to the attachment 2501X01819E-RF-EXP External photo and 2501X01819E-RF-INP Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2501X01819E-RF-TSP Test Setup photo.

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