

TEST REPORT

Applicant Name: Trend Makers LLC
Address: 2113 Lewis Turner Blvd. Suite 100 Fort Walton Beach, Florida
32547 United States
Report Number: 2501P24839E-RF-00
FCC ID: 2A88H-0033052284

Test Standard (s)
FCC PART 15.231

Sample Description

Product Type: Digital Doorbell Camera
Model No.: ISB-09
Multiple Model(s) No.: N/A
Trade Mark: i
Date Received: 2025-01-15
Issue Date: 2025-04-29

Test Result:	Pass▲
--------------	-------

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Ekko Wu

Ekko Wu
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.

This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP or any agency of the U.S. Government.

This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

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

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY	4
GENERAL INFORMATION.....	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
OBJECTIVE	5
TEST METHODOLOGY	5
MEASUREMENT UNCERTAINTY.....	6
TEST FACILITY	6
SYSTEM TEST CONFIGURATION.....	7
DESCRIPTION OF TEST CONFIGURATION	7
SPECIAL ACCESSORIES.....	7
EQUIPMENT MODIFICATIONS	7
SUPPORT EQUIPMENT LIST AND DETAILS	7
EXTERNAL I/O CABLE.....	7
BLOCK DIAGRAM OF TEST SETUP	8
SUMMARY OF TEST RESULTS	10
TEST EQUIPMENT LIST AND DETAILS	11
FCC §1.1307 (B) - RF EXPOSURE	12
APPLICABLE STANDARD	12
TEST RESULT:	12
FCC §15.203 - ANTENNA REQUIREMENT.....	13
APPLICABLE STANDARD	13
ANTENNA CONNECTOR CONSTRUCTION	13
FCC §15.207 (A) - AC LINE CONDUCTED EMISSIONS	14
APPLICABLE STANDARD	14
EUT SETUP	14
EMI TEST RECEIVER SETUP.....	14
TEST PROCEDURE	14
FACTOR & OVER LIMIT CALCULATION.....	15
TEST DATA	15
FCC §15.205, §15.209, §15.231 (B) - RADIATED EMISSIONS	18
APPLICABLE STANDARD	18
EUT SETUP	18
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	19
TEST PROCEDURE	20
FACTOR & OVER LIMIT/MARGIN CALCULATION	20
TEST DATA	20
FCC §15.231(A) (1) - DEACTIVATION TESTING.....	28
APPLICABLE STANDARD	28
TEST PROCEDURE	28
TEST DATA	28

FCC §15.231(C) - 20 DB EMISSION BANDWIDTH TESTING.....29
 APPLICABLE STANDARD29
 TEST PROCEDURE29
 TEST DATA29
EUT PHOTOGRAPHS.....31
TEST SETUP PHOTOGRAPHS32

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2501P24839E-RF-00	Original Report	2025-04-29

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Digital Doorbell Camera
Tested Model	ISB-09
Multiple Model(s)	N/A
Frequency Range	433.92MHz
Maximum E-Field	79.75dBuV/m@3m
Modulation Technique	OOK
Voltage Range	DC 3.7V from battery or DC 5V from USB Port
Sample number	2XKO-2 for Conducted and Radiated Emissions Test 2XKO-1 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

Objective

All the test measurements were performed according to the measurement procedure described in ANSI C63.10 - 2013.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.209, 15.35(c) and 15.231 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.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		109.2kHz(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	9kHz - 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.

Special Accessories

No special accessories was used

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

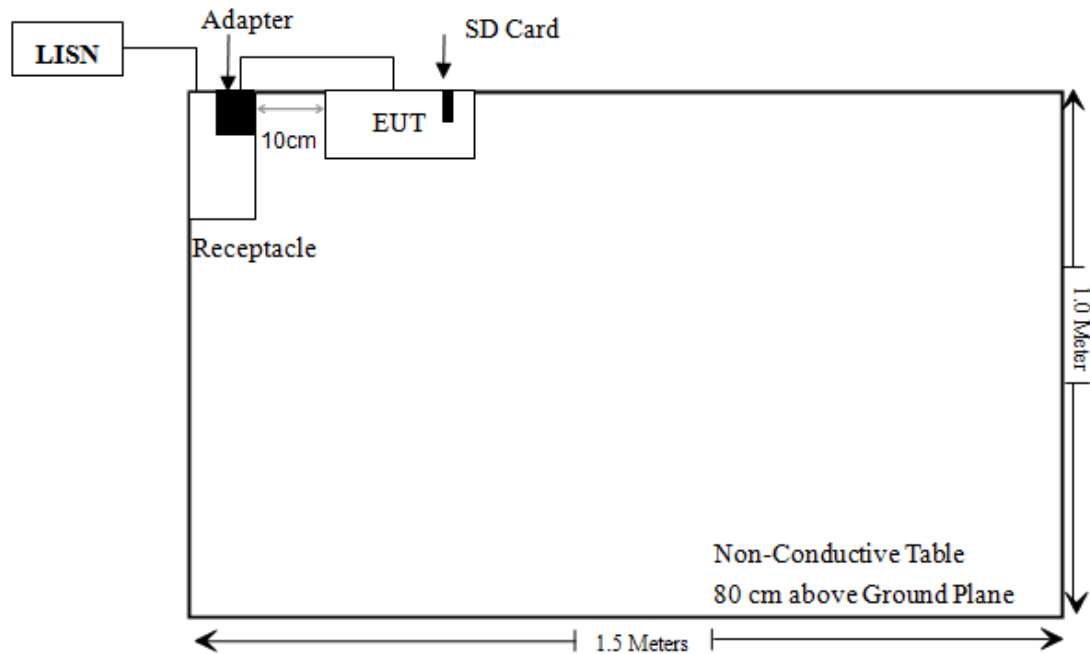
Manufacturer	Description	Model	Serial Number
Huajin	Adapter	HJ-0503000-US	Unknown
OUPU	Receptacle	Receptacle	6971041358020
Sandisk	SD-card	Unknown	Unknown

External I/O Cable

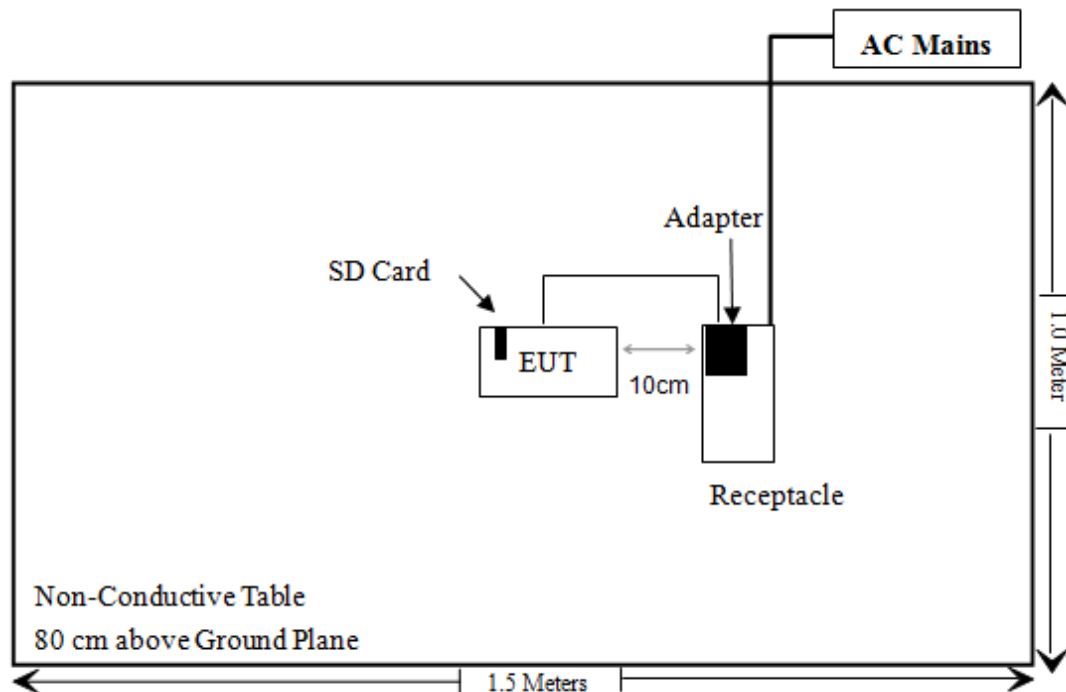
Cable Description	Length (m)	From Port	To
Unshielded Detachable USB cable	1.0	Adapter	EUT
Unshielded Un-detachable AC cable	1.5	Receptacle	LISN/AC Mains

Block Diagram of Test Setup

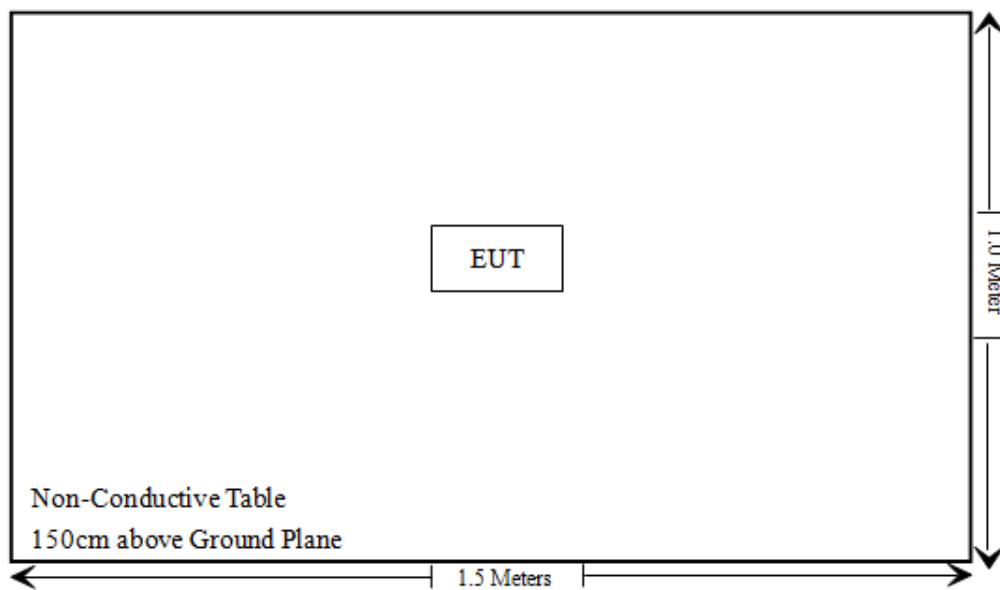
For Conducted Emissions:



For Radiated Emissions below 1GHz:



For Radiated Emissions above 1GHz:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b)	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	Conducted Emissions	Compliant
§15.205, §15.209, §15.231(b)	Radiated Emissions	Compliant
§15.231 (c)	20dB Emission Bandwidth	Compliant
§15.231 (a) (1)	Deactivation	Compliant

TEST EQUIPMENT LIST AND DETAILS

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission Test					
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	2024/05/21	2025/05/20
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2024/05/21	2025/05/20
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
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
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
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
Unknown	RF Cable	XH750A-N	J-10M	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
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101473	2024/12/04	2025/12/03
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 (b) - RF EXPOSURE

Applicable Standard

According to §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:

Mode	Frequency (MHz)	Maximum E-Field (dBuV/m@3m)	Maximum EIRP		Test Exemption (mW)
			(dBm)	(mW)	
SRD	433.92	79.75	-15.45	0.029	1

Note: EIRP = E-Field – 95.2 @3m

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 spring antenna arrangement which was permanently attached. And the antenna gain is -5.0dBi, fulfill the requirement of this section. Please refer to EUT photos.

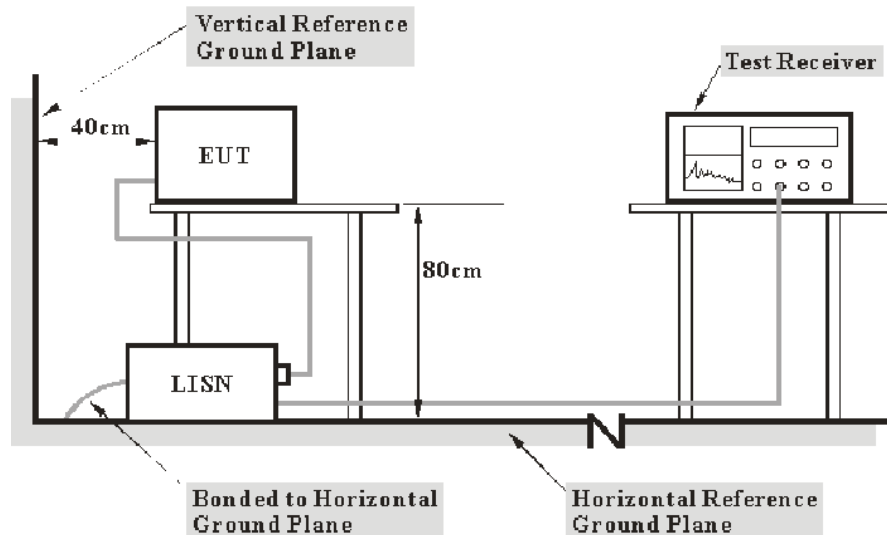
Result: Compliant.

FCC §15.207 (a) - AC LINE CONDUCTED EMISSIONS

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 C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

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	IF B/W
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

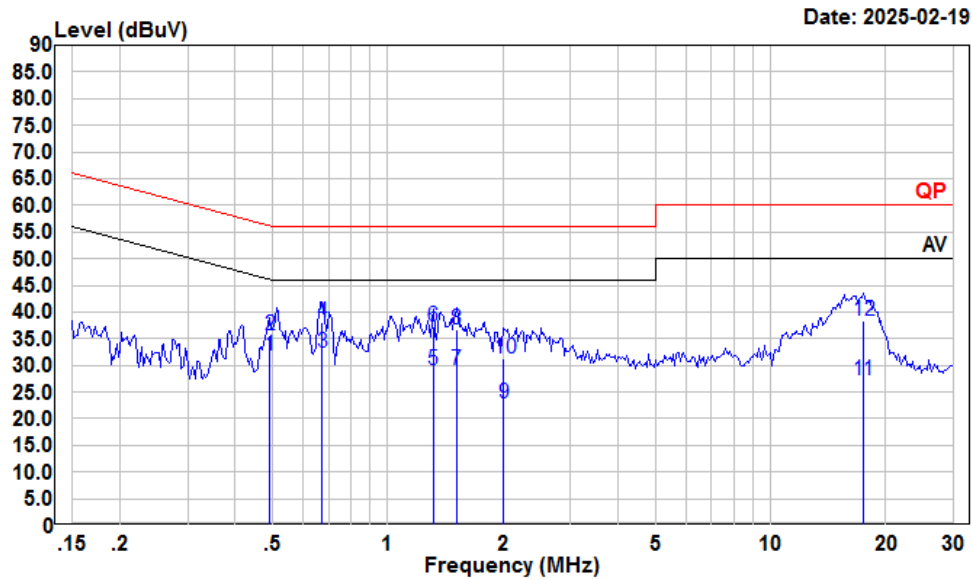
Environmental Conditions

Temperature:	25 °C
Relative Humidity:	40~55 %
ATM Pressure:	100~103 kPa

The testing was performed by Macy Shi on 2025-02-19.

EUT operation mode: Transmitting

AC 120V/60 Hz, Line



Condition: Line

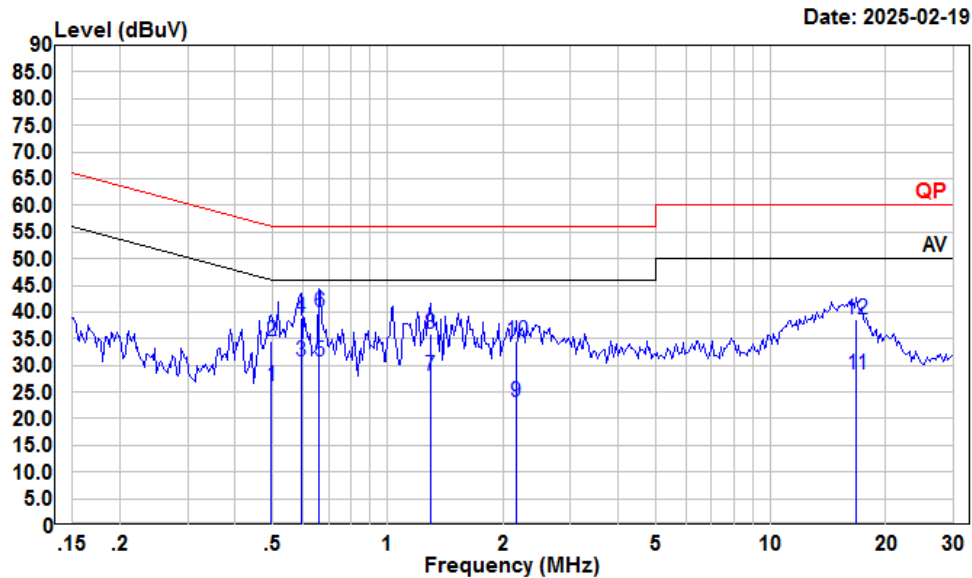
Project : 2501P24839E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:30KHz Detector Peak

		Read		LISN	Cable	Limit	Over	
	Freq	Level	Level	Factor	Loss	Line	Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.491	11.07	31.71	10.50	10.14	46.14	-14.43	Average
2	0.491	15.09	35.73	10.50	10.14	56.14	-20.41	QP
3	0.675	11.36	32.36	10.86	10.14	46.00	-13.64	Average
4	0.675	17.05	38.05	10.86	10.14	56.00	-17.95	QP
5	1.317	8.20	29.15	10.80	10.15	46.00	-16.85	Average
6	1.317	16.40	37.35	10.80	10.15	56.00	-18.65	QP
7	1.511	8.00	29.06	10.90	10.16	46.00	-16.94	Average
8	1.511	15.60	36.66	10.90	10.16	56.00	-19.34	QP
9	2.012	1.63	22.92	11.10	10.19	46.00	-23.08	Average
10	2.012	9.99	31.28	11.10	10.19	56.00	-24.72	QP
11	17.475	6.32	27.19	10.67	10.20	50.00	-22.81	Average
12	17.475	17.45	38.32	10.67	10.20	60.00	-21.68	QP

AC 120V/60 Hz, Neutral



Condition: Neutral

Project : 2501P24839E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:30KHz Detector Peak

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.497	5.51	26.15	10.50	10.14	46.05	-19.90	Average
2	0.497	13.79	34.43	10.50	10.14	56.05	-21.62	QP
3	0.595	10.10	30.77	10.55	10.12	46.00	-15.23	Average
4	0.595	18.20	38.87	10.55	10.12	56.00	-17.13	QP
5	0.661	10.15	30.87	10.58	10.14	46.00	-15.13	Average
6	0.661	19.35	40.07	10.58	10.14	56.00	-15.93	QP
7	1.289	7.10	28.01	10.76	10.15	46.00	-17.99	Average
8	1.289	15.00	35.91	10.76	10.15	56.00	-20.09	QP
9	2.167	2.23	23.14	10.73	10.18	46.00	-22.86	Average
10	2.167	13.54	34.45	10.73	10.18	56.00	-21.55	QP
11	16.750	7.46	28.27	10.61	10.20	50.00	-21.73	Average
12	16.750	17.76	38.57	10.61	10.20	60.00	-21.43	QP

FCC §15.205, §15.209, §15.231 (b) - RADIATED EMISSIONS

Applicable Standard

FCC §15.205, §15.209, §15.231 (b)

According to FCC §15.231(b), the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

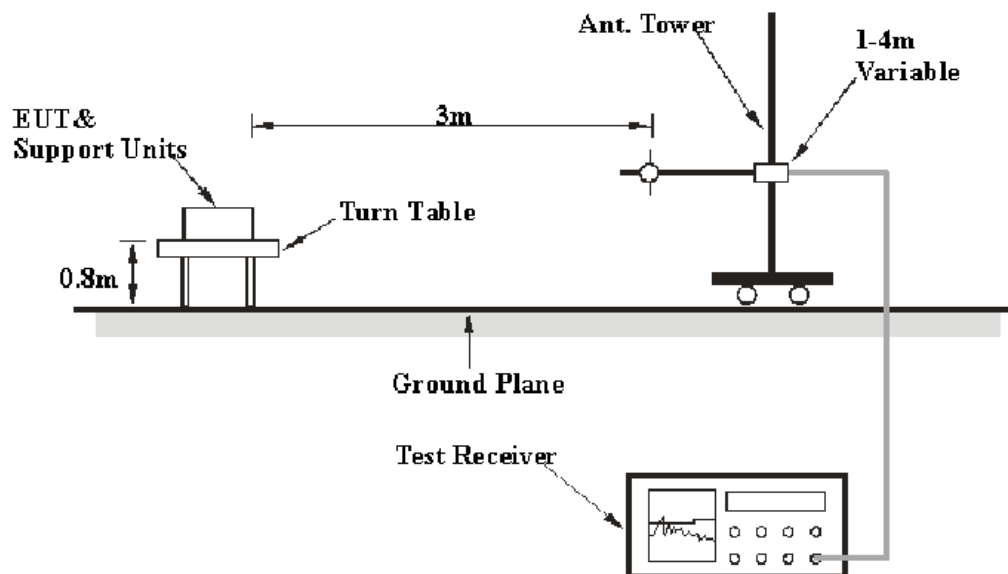
Fundamental frequency (MHz)	Field Strength of Fundamental (Microvolts /meter)	Field Strength of spurious emissions ((Microvolts /meter)
40.66-40.70	2250	225
70-130	1250	125
130-174	1250 to 3750**	125 to 375**
174-260	3750	375
260-470	3750 to 12500**	375 to 1250**
Above 470	12500	1250

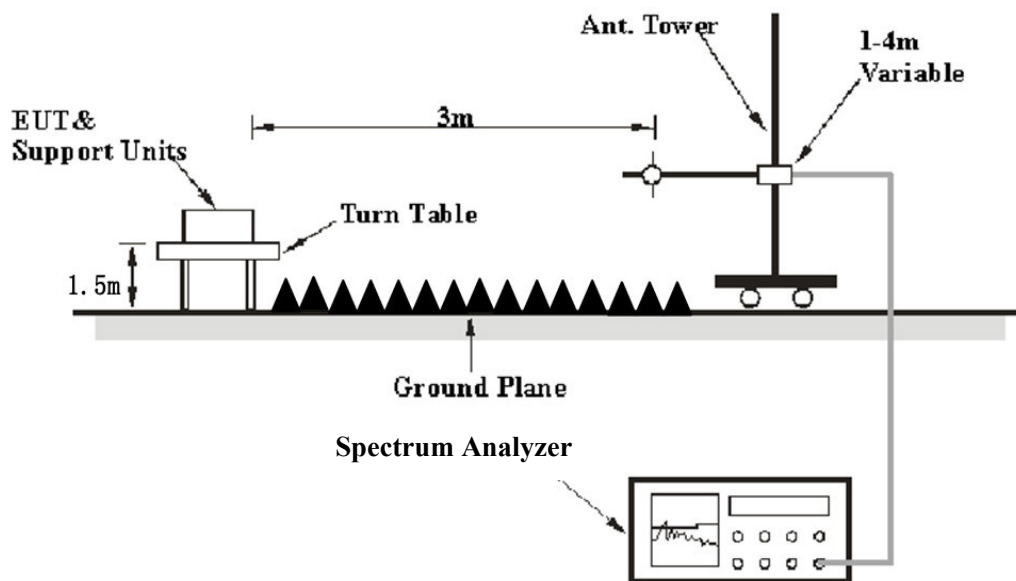
*Linear interpolations.

The above field strength limits are specified at a distance of 3-meters the tighter limits apply at the band edges.

EUT Setup

Below 1 GHz:



Above 1 GHz:

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10 - 2013. The specification used was the FCC 15 § 15.209, 15.205 and 15.231.

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
9 kHz – 150 kHz	/	/	200 Hz	QP
	300 Hz	1 kHz	/	PK
150 kHz – 30 MHz	/	/	9 kHz	QP
	10 kHz	30 kHz	/	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP
	100 kHz	300 kHz	/	PK
Above 1 GHz	1MHz	3 MHz	/	PK
	Average Emission Level=Peak Emission Level+20*log(Duty cycle)			

For Duty cycle measurement:

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

Duty cycle=On time/100milliseconds, On time= $N_1 \cdot L_1 + N_2 \cdot L_2 + \dots + N_{n-1} \cdot L_{n-1} + N_n \cdot L_n$,

Where N_1 is number of type 1 pulses, L_1 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/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:

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

Test Data

Environmental Conditions

Temperature:	23.1~24.2 °C
Relative Humidity:	51~60 %
ATM Pressure:	100.7~101.2 kPa

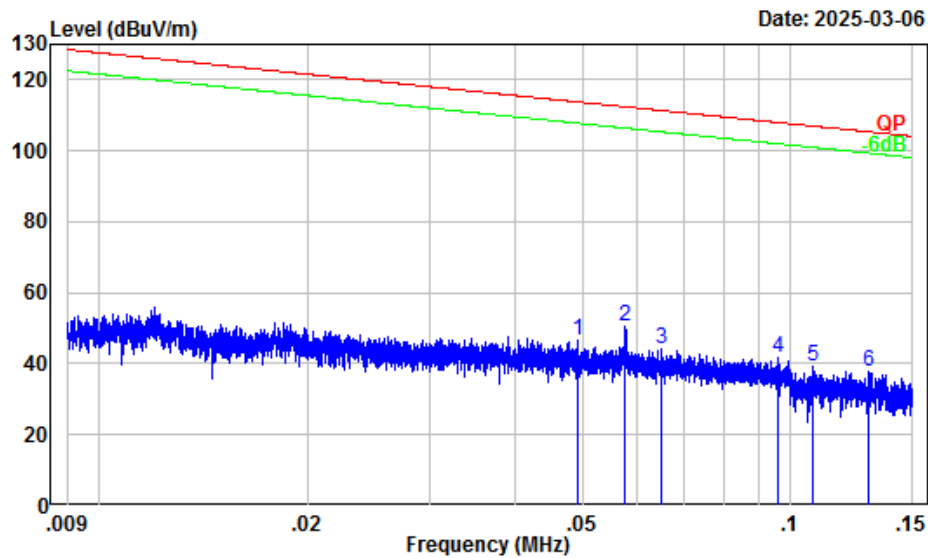
The testing was performed by Alex Yan on 2025-03-06 for below 1GHz, Wing K Ji on 2025-03-13 for above 1GHz.

Test mode: Transmitting

9 kHz-30MHz:

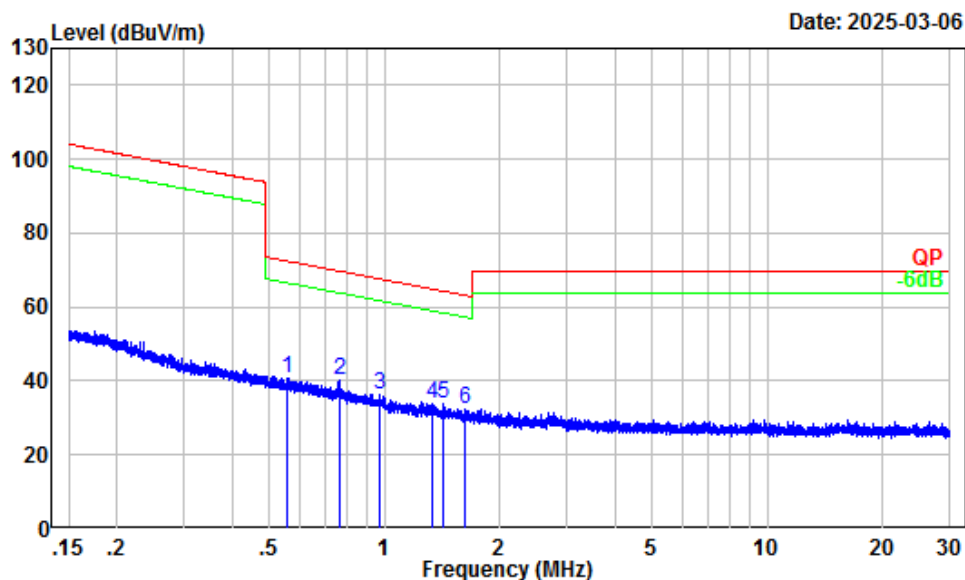
Note: When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.

Parallel (worst case)



Site : Chamber A
Condition : 3m
Project Number : 2501P24839E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.05	26.49	20.20	46.69	113.78	-67.09	Peak
2	0.06	25.64	24.82	50.46	112.39	-61.93	Peak
3	0.07	24.90	19.49	44.39	111.34	-66.95	Peak
4	0.10	22.29	19.18	41.47	107.98	-66.51	Peak
5	0.11	21.53	17.70	39.23	106.94	-67.71	Peak
6	0.13	20.26	17.28	37.54	105.36	-67.82	Peak

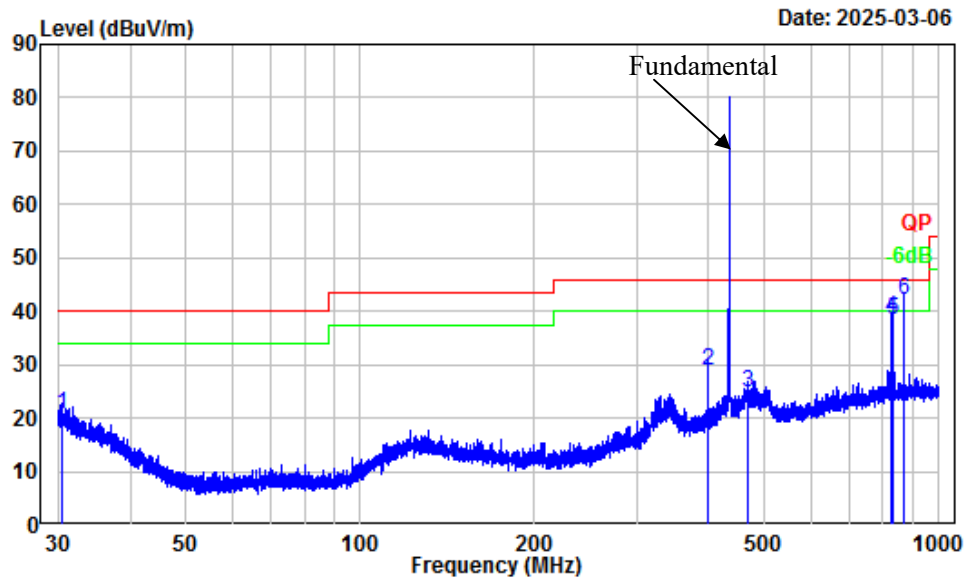


Site : Chamber A
 Condition : 3m
 Project Number : 2501P24839E-RF
 Test Mode : Transmitting
 Detector: Peak RBW/VBW: 10/30kHz
 Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.55	5.72	34.99	40.71	72.70	-31.99	Peak
2	0.76	3.16	37.03	40.19	69.88	-29.69	Peak
3	0.98	1.37	34.92	36.29	67.68	-31.39	Peak
4	1.34	0.25	33.68	33.93	64.89	-30.96	Peak
5	1.43	0.00	33.73	33.73	64.30	-30.57	Peak
6	1.63	-0.55	32.93	32.38	63.16	-30.78	Peak

30MHz – 1 GHz:

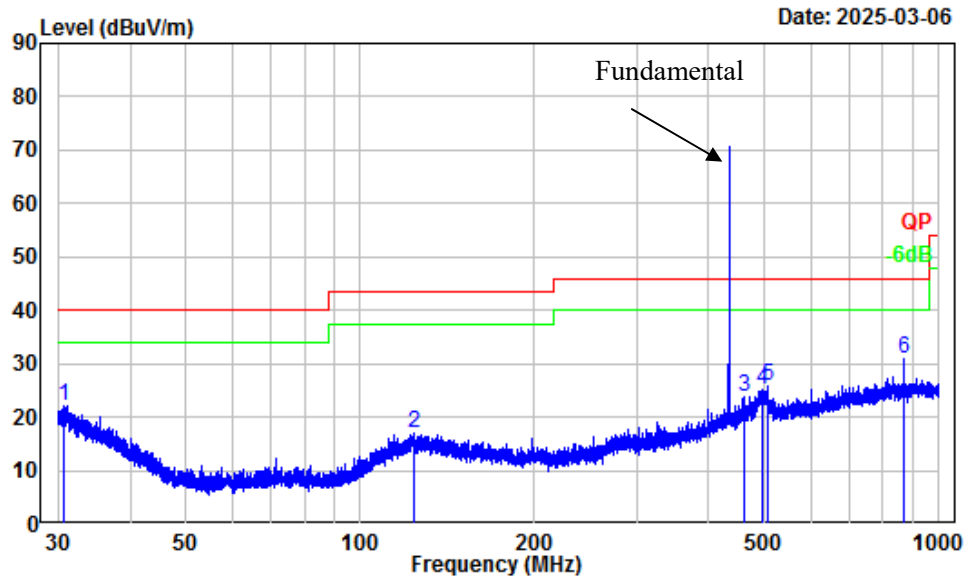
Note: When the test result of peak was less than the limit of QP/Average more than 6dB, just peak value were recorded.

Horizontal

Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501P24839E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.41	-6.17	26.79	20.62	40.00	-19.38	QP
2	400.08	-8.41	37.38	28.97	46.00	-17.03	QP
3	468.88	-6.80	31.67	24.87	46.00	-21.13	QP
4	824.96	-1.93	40.52	38.59	46.00	-7.41	QP
5	830.76	-1.91	40.36	38.45	46.00	-7.55	QP
6	867.99	-1.62	43.65	42.03	46.00	-3.97	QP

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501P24839E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.76	-6.35	28.31	21.96	40.00	-18.04	Peak
2	123.43	-11.14	28.17	17.03	43.50	-26.47	Peak
3	459.32	-7.12	30.98	23.86	46.00	-22.14	Peak
4	496.59	-5.88	31.09	25.21	46.00	-20.79	Peak
5	507.15	-5.77	31.43	25.66	46.00	-20.34	Peak
6	867.99	-1.62	32.69	31.07	46.00	-14.93	Peak

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Comment
	Reading (dB μ V)	Detector (PK/QP/AV)						
433.92	87.51	PK	H	-7.76	79.75	100.83	-21.08	Fundamental
433.92	81.72	PK	V	-7.76	73.96	100.83	-26.87	Fundamental
1301.76	52.16	PK	H	-14.44	37.72	74	-36.28	Harmonic
1301.76	51.66	PK	V	-14.44	37.22	74	-36.78	Harmonic
1735.68	49.70	PK	H	-13.98	35.72	80.83	-45.11	Harmonic
1735.68	49.08	PK	V	-13.98	35.10	80.83	-45.73	Harmonic
2169.60	50.11	PK	H	-11.30	38.81	80.83	-42.02	Harmonic
2169.60	49.86	PK	V	-11.30	38.56	80.83	-42.27	Harmonic
2603.52	52.86	PK	H	-10.77	42.09	80.83	-38.74	Harmonic
2603.52	52.71	PK	V	-10.77	41.94	80.83	-38.89	Harmonic

Note:

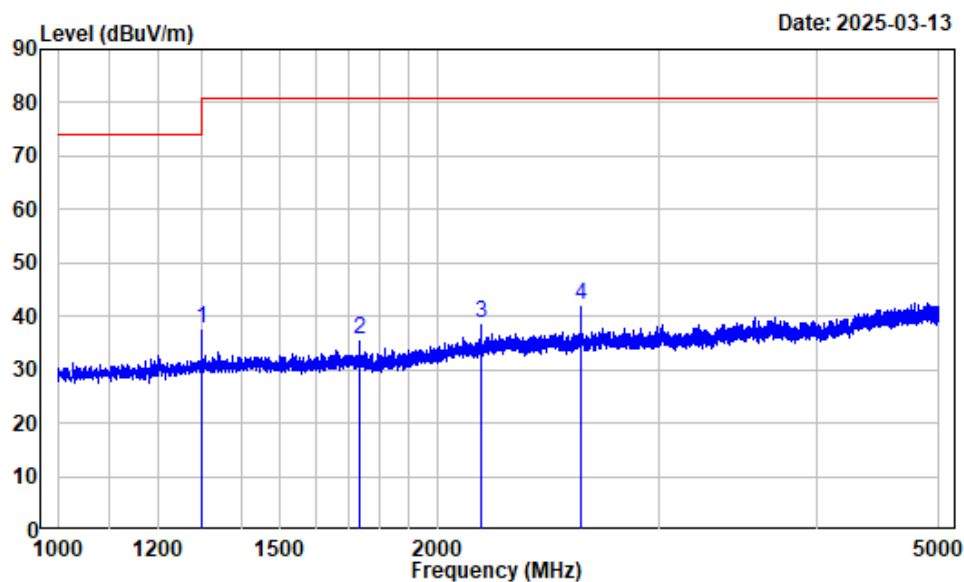
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Corrected Amplitude/Level = Factor + Reading

Margin = Corrected Amplitude/Level - Limit

The other spurious emission which is in the noise floor level was not recorded.

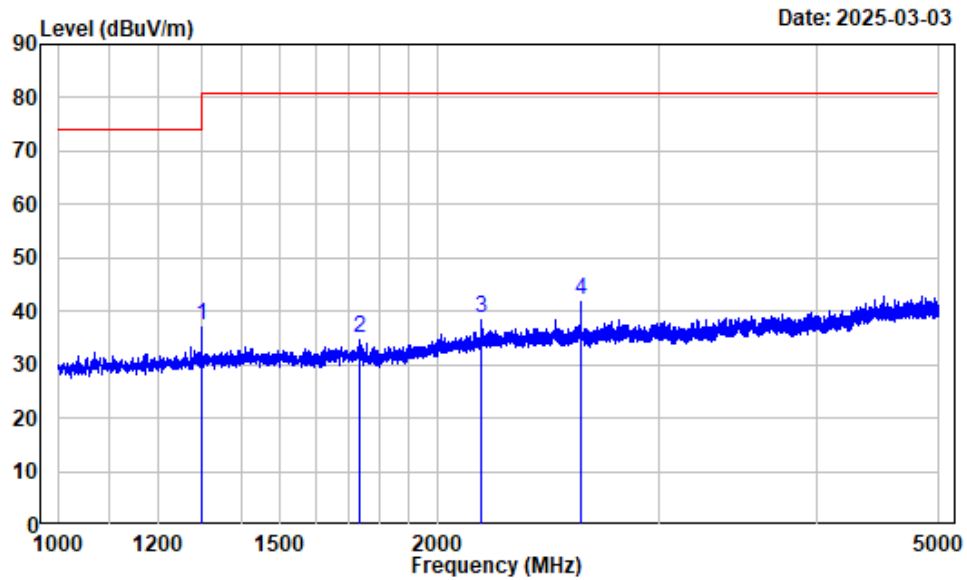
The test result of peak was less than the limit of average, so just peak values were recorded.

1 GHz - 5 GHz:**Horizontal**

Condition : Horizontal
Project No. : 2501P24839E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : 433.92MHz

Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1301.760	-14.44	52.16	37.72	74.00	-36.28 Peak
2	1735.680	-13.98	49.70	35.72	80.83	-45.11 Peak
3	2169.600	-11.30	50.11	38.81	80.83	-42.02 Peak
4	2603.520	-10.77	52.86	42.09	80.83	-38.74 Peak

Vertical



Condition : Vertical
Project No. : 2501P24839E-RF
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : 433.92MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1301.760	-14.44	51.66	37.22	74.00	-36.78	Peak
2	1735.680	-13.98	49.08	35.10	80.83	-45.73	Peak
3	2169.600	-11.30	49.86	38.56	80.83	-42.27	Peak
4	2603.520	-10.77	52.71	41.94	80.83	-38.89	Peak

FCC §15.231(a) (1) - DEACTIVATION TESTING

Applicable Standard

Per FCC §15.231(a) (1), A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

Test Procedure

1. The EUT is setting to the transmit mode, the waveform was received by the test antenna which was connected to the spectrum analyzer.
2. Set center frequency of spectrum analyzer=operating frequency.
3. Set the spectrum analyzer as RBW=1MHz/ VBW=3MHz/ Span=0Hz.
4. Repeat above procedures until all frequency measured was complete.

Test Data

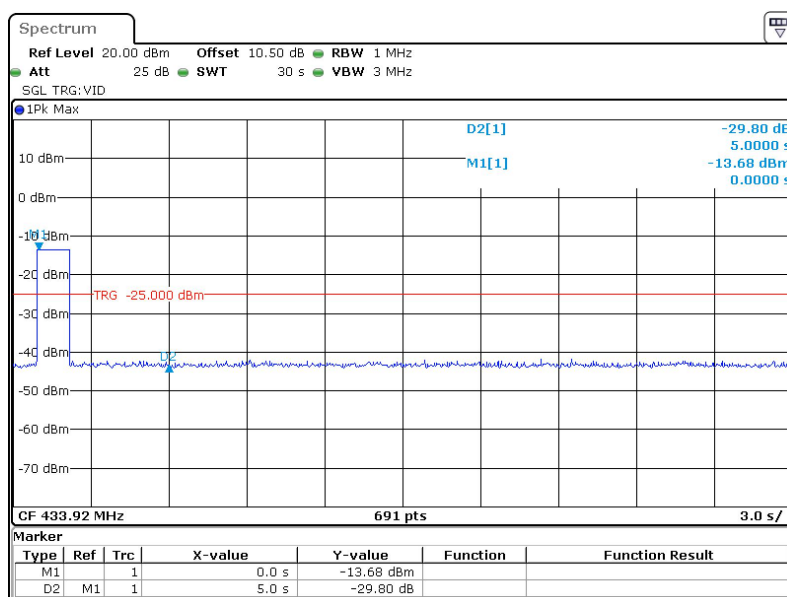
Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	47 %
ATM Pressure:	101.1 kPa

The testing was performed by Brian Li on 2025-03-14.

Test mode: Transmitting

Test Result: Compliant. This product will cease transmission within 5 seconds after activation. Please refer to following plots.



ProjectNo.:2501P24839E-RF Tester:Brian Li
Date: 14.MAR.2025 12:00:39

FCC §15.231(c) - 20 dB EMISSION BANDWIDTH TESTING

Applicable Standard

Per 15.231(c), The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. Bandwidth is determined at the points 20 dB down from the modulated carrier.

Test Procedure

The EUT is setting to the transmit mode, the waveform was received by the test antenna which was connected to the spectrum analyzer, plot the 20 dB bandwidth.

Test Data

Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	47 %
ATM Pressure:	101.1 kPa

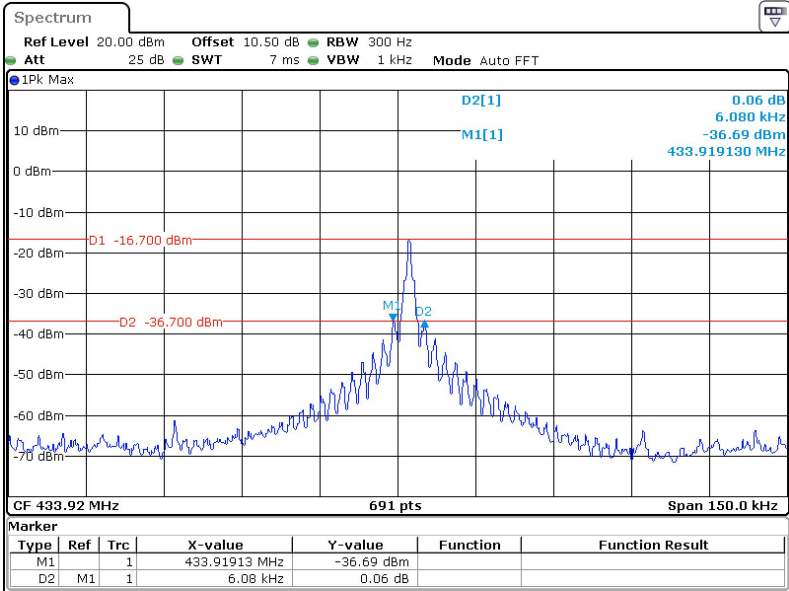
The testing was performed by Brian Li on 2025-03-14.

Test Mode: Transmitting

Please refer to following table and plots.

Channel Frequency (MHz)	20dB Emission Bandwidth (kHz)	Limit (kHz)
433.92	6.080	1085

20 dB Emission Bandwidth



ProjectNo.:2501P24839E-RF Tester:Brian Li
Date: 14.MAR.2025 11:56:24

EUT PHOTOGRAPHS

Please refer to the attachment 2501P24839E-RF External photo and 2501P24839E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2501P24839E-RFB Test Setup photo.

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