TEST REPORT

Applicant Name:	Meizhou Guo Wei Electronics Co., Ltd.
Address:	AD1 Section, Economic Development Area, Dongsheng Industrial District, Meizhou, Guangdong, China.
Report Number:	2501T12074E-RFA3
FCC ID:	2ARRB-VM85PU
IC:	20353-VM85PU

Test Standard (s)

FCC PART 15.247; RSS-GEN ISSUE 5, FEBRUARY 2021 AMENDMENT 2; RSS-247 ISSUE 3, AUGUST 2023

Sample Description

Product Type:	Video baby monitor
Model No.:	VM40 CONNECTPU
Multiple Model(s) No.:	VM85 CONNECTPU
Trade Mark:	Motorola
Date Received:	2025/06/06
Issue Date:	2025/09/20

Test Result:	Pass▲

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

Prepared and Checked By:

Wills Yu
RF Engineer

Approved By:

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.
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 "▼".

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	SZ1210301-05161EC	Original Report	2021/05/28
1	2501T12074E-RFA3	Amended Report	2025/09/20

This is a CIIPC application based on FCC ID: 2ARRB-VM85PU & IC: 20353-VM85PU, the details as below:

(1) Change battery.

(2) Change Battery connector and new location (shifted little bit only).

(3) New back cabinet plastic is used.

(4) Add adapter (AT-538A-050100A, EP04-050100WXLZ, PS05Q050K10000UD).

(5) Upgrading the standard version to “RSS-247 ISSUE 3, AUGUST 2023”.

(6) Change HVIN to “VM85APU”.

Based on above differences, it will affect partial test data, so the changed items were performed. Other test data and photo please refer to the report SZ1210301-05161EC.

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

HVIN	VM85APU
FVIN	N/A
Product	Video baby monitor
Tested Model	VM40 CONNECTPU
Multiple Model(s)	VM85 CONNECTPU
Frequency Range	2402-2477MHz
Maximum conducted Peak output power	15.79 dBm
Modulation Technique	GFSK
Antenna Specification#	0dBi (provided by the applicant)
Voltage Range	DC 3.6V from battery or DC 5.0V from adapter
Sample number	33NW-2 for Conducted and Radiated Emissions Test 33NW-1 for RF Conducted Test (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
New Added Adapter Information	Adapter 1 Model: AT-538A-050100A Input: AC 100-240V, 50/60Hz 0.2A MAX Output: DC 5.0V, 1.0A, 5.0W Adapter 2 Model: EP04-050100WXLZ Input: AC 100-240V, 50/60Hz 0.2A Max Output: DC 5.0V, 1.0A, 5.0W Adapter 3 Model: PS05Q050K10000UD Input: AC 100-240V, 50/60Hz, 0.25A Max Output: DC 5.0V, 1.0A, 5.0W
Note: The Multiple models are electrically identical with the test model except for model number, different LCD lens color and packing configuration. Please refer to the declaration letter# for more detail, which was provided by manufacturer.	

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules and RSS-247 Issue 3, August 2023, RSS-GEN Issue 5, Feb. 2021Amendment 2 of the Innovation, Science and Economic Development Canada rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and RSS-247 Issue 3, August 2023, RSS-GEN Issue 5, Feb. 2021 Amendment 2 of the Innovation, Science and Economic Development Canada rules.

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)
RF Frequency		56.6Hz(k=2, 95% level of confidence)
RF output power, conducted		0.86dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.60dB(k=2, 95% level of confidence)
AC Power Lines Conducted Emissions	9 kHz~150 KHz	3.63dB(k=2, 95% level of confidence)
	150 kHz ~30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	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℃
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.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0023.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

Frequency List

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2402	12	2445
2	2404	13	2450
3	2406	14	2455
4	2408	15	2460
5	2410	16	2465
6	2415	17	2467
7	2420	18	2469
8	2425	19	2471
9	2430	20	2473
10	2435	21	2475
11	2440	22	2477

EUT was tested with Channel 1, 11 and 22.

EUT Exercise Software

No exercise software was used.

Special Accessories

No special accessory.

Equipment Modifications

"Teraterm"[#] software was used to test and power level is default [#]. The software and power level was provided by the applicant.

Support Equipment List and Details

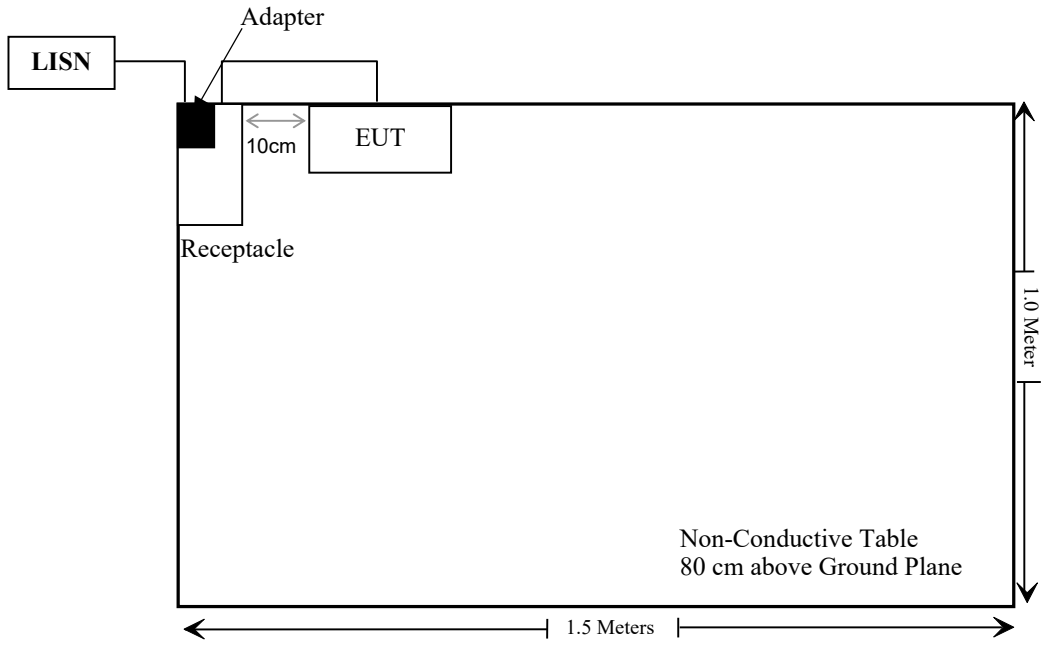
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

Cable Description	Length (m)	From Port	To
Un-shielding Detachable DC Cable	1.5	EUT	Adapter
Un-shielding Detachable AC Cable	1.2	Receptacle	LISN/AC Mains

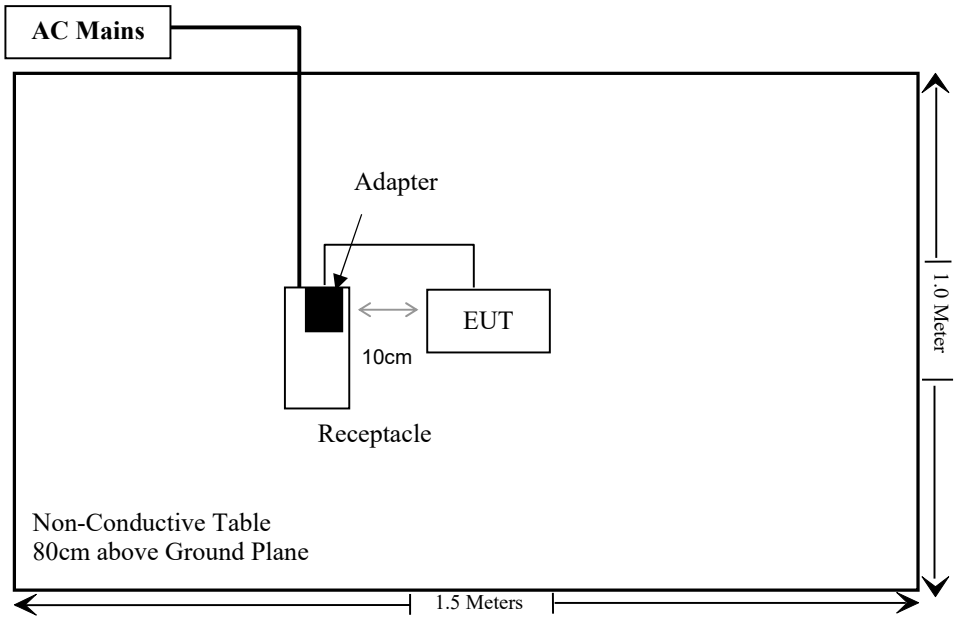
Block Diagram of Test Setup

For Conducted Emissions:

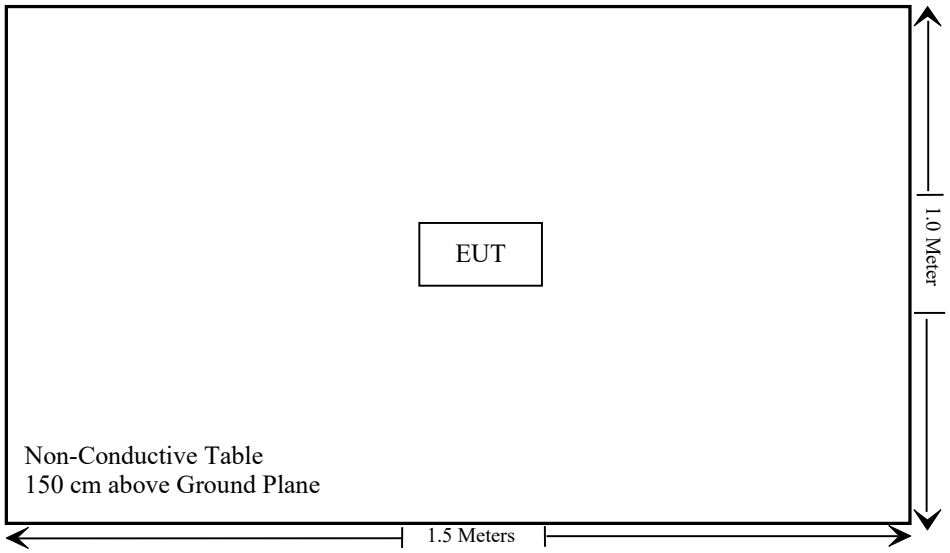


For Radiated Emissions:

Below 1GHz



Above 1GHz



SUMMARY OF TEST RESULTS

FCC Rules	ISEDC Rules	Description of Test	Result
§2.1093	RSS-102	RF Exposure (SAR)	Compliant
§15.203	RSS-Gen §6.8	Antenna Requirement	Compliant
§15.207(a)	RSS-Gen §8.8	AC Line Conducted Emissions	Compliant
§15.205, §15.209 & §15.247(d)	RSS-247 § 5.5	Radiated Emissions	Compliant
§15.247(a)(1)	RSS- Gen§6.7, RSS-247 § 5.1 (a)	99% Occupied Bandwidth & 20 dB Emission Bandwidth	Compliant*
§15.247(a)(1)	RSS-247 § 5.1 (b)	Channel Separation Test	Compliant*
§15.247(a)(1)(iii)	RSS-247 § 5.1 (d)	Time of Occupancy (Dwell Time)	Compliant*
§15.247(a)(1)(iii)	RSS-247 § 5.1 (d)	Quantity of hopping channel Test	Compliant*
§15.247(b)(1)	RSS-247 § 5.1(b) &§ 5.4(b)	Peak Output Power Measurement	Compliant (Report only)
§15.247(d)	RSS-247 § 5.5	Band edges	Compliant*

Compliant*: Please refer to the report SZ1210301-05161EC.

TEST EQUIPMENT LIST

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	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
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
Sonoma instrument	Pre-amplifier	310 N	186238	2025/04/29	2026/04/28
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber A Cable 1	N/A	2025/04/29	2026/04/28
Unknown	Cable	XH500C	J-10M-A	2025/04/29	2026/04/28
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2025/03/26	2026/03/25
A.H.System	Preamplifier	PAM-0118P	489	2024/11/15	2025/11/14
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	735	2024/12/06	2025/12/05
Unknown	RF Cable	UFA147	219661	2024/12/06	2025/12/05
JD	Filter Switch Unit	DT7220FSU	DS79906	2024/09/09	2025/09/08
JD	Multiplex Switch Test Control Set	DT7220SCU	DS79903	2024/09/09	2025/09/08
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
A.H.System	Pre-amplifier	PAM-1840VH	190	2025/04/29	2026/04/28
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/12/18	2025/12/17
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV40	101942	2024/09/20	2025/09/19
WEINSCHEL	3dB Attenuator	Unknown	F-03-EM220	2025/06/26	2026/06/25

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

FCC §1.1307 & §2.1093 - RF EXPOSURE

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: 2501T12074E-SAAA3.

RSS-102 - RF EXPOSURE

Applicable Standard

According to RSS-102 Issue 6, 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 guideline.

Result: Compliant.

Please refer to SAR Report Number: 2501T12074E-SABA3.

FCC §15.203 & RSS-GEN §6.8 - 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.

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:
This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.
Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

Antenna Connector Construction

The EUT has an external antenna arrangement which was permanently attached fulfill the requirement of this section. Please refer to the EUT photos.

Type	Antenna Gain	Impedance
Dipole	0dBi	50Ω

Result: Compliant

FCC §15.207 (a) & RSS-GEN §8.8 - AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a) & RSS-Gen §8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 µH / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Table 4 - AC Power Lines Conducted Emission Limits		
Frequency range (MHz)	Conducted limit (dBµV)	
	Quasi-Peak	Average
0.15 – 0.5	66 to 56[1]	56 to 46[1]
0.5 – 5	56	46
5 – 30	60	50

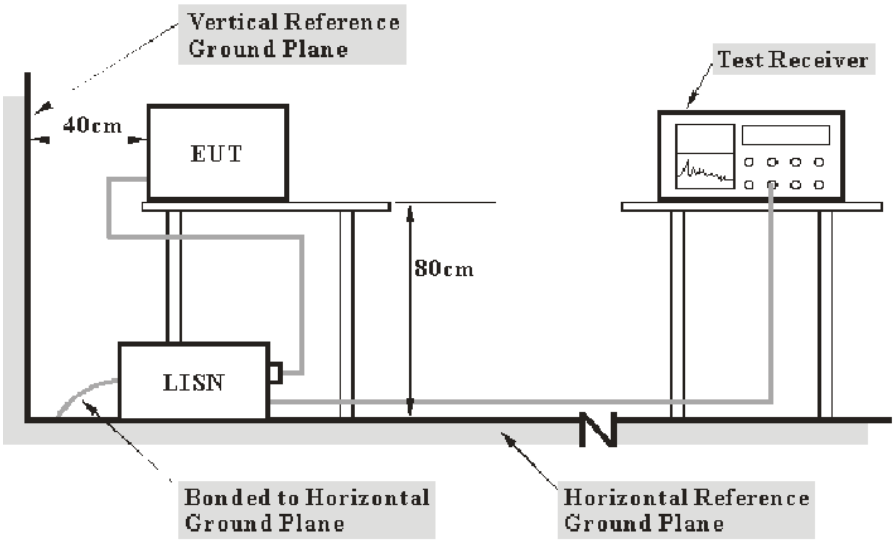
Note 1: The level decreases linearly with the logarithm of the frequency.

For an EUT with a permanent or detachable antenna operating between 150 kHz and 30 MHz, the AC power-line conducted emissions must be measured using the following configurations:

(a) Perform the AC power-line conducted emissions test with the antenna connected to determine compliance with the limits of table 4 outside the transmitter's fundamental emission band.

(b) Retest with a dummy load instead of the antenna to determine compliance with the limits of table 4 within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network that simulates the antenna in the fundamental frequency band.

EUT Setup



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

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

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 30 MHz.

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

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

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

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

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

Factor & Over Limit Calculation

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

Factor = LISN VDF + 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:

Over Limit = Level – Limit
Level = Read Level + Factor

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

Test Data

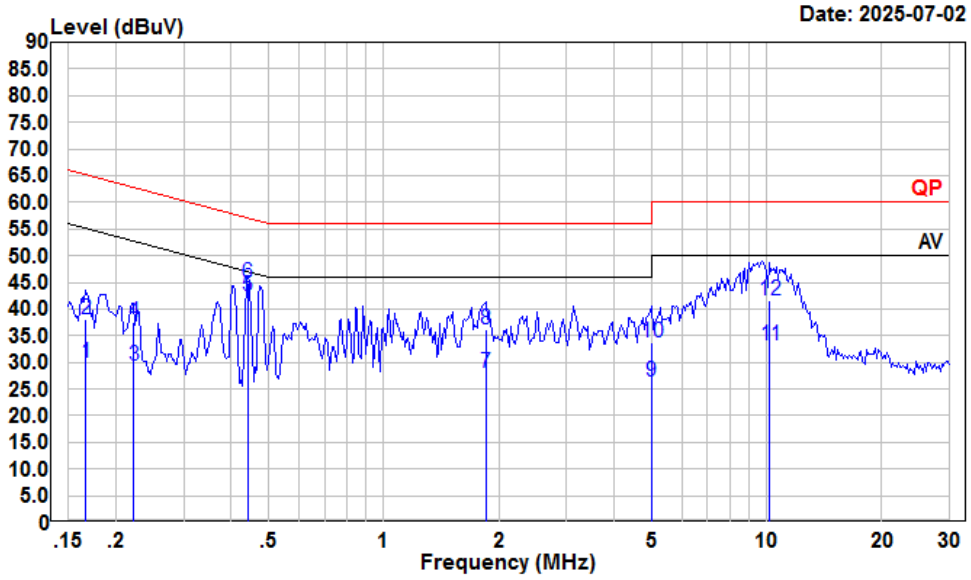
Environmental Conditions

Temperature:	25~27 ℃
Relative Humidity:	55~74 %
ATM Pressure:	100~100.1 kPa

The testing was performed by Macy Shi on 2025-07-02 and 2025-08-28.

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

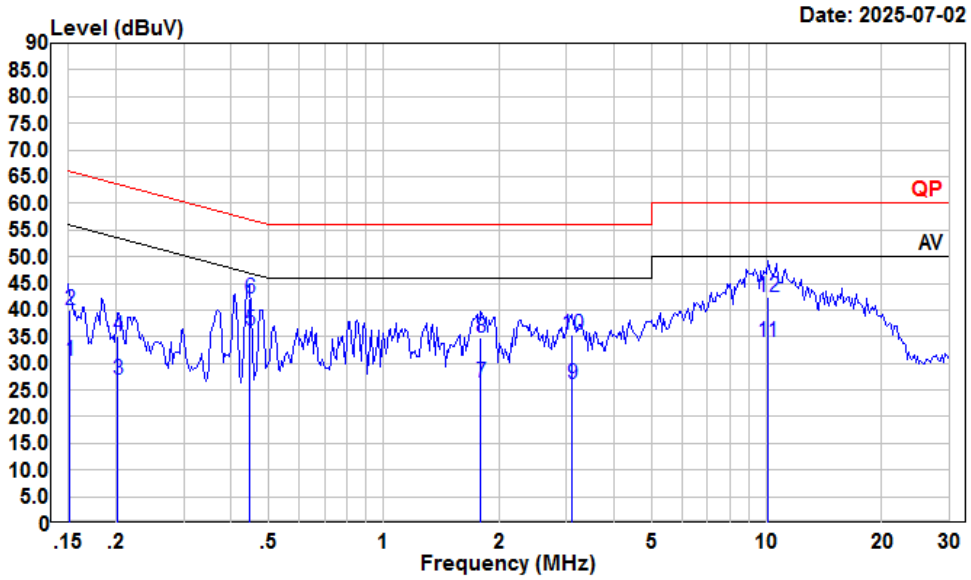
Adapter 1
AC 120V/60 Hz, Line



Condition: Line
Project : 2501T12074E-RFA3
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.167	9.25	29.95	10.51	10.19	55.12	-25.17	Average
2	0.167	17.44	38.14	10.51	10.19	65.12	-26.98	QP
3	0.222	8.55	29.42	10.68	10.19	52.74	-23.32	Average
4	0.222	16.64	37.51	10.68	10.19	62.74	-25.23	QP
5	0.442	21.79	42.52	10.53	10.20	47.02	-4.50	Average
6	0.442	24.07	44.80	10.53	10.20	57.02	-12.22	QP
7	1.848	6.64	27.90	11.04	10.22	46.00	-18.10	Average
8	1.848	15.00	36.26	11.04	10.22	56.00	-19.74	QP
9	5.005	5.27	26.33	10.78	10.28	50.00	-23.67	Average
10	5.005	12.68	33.74	10.78	10.28	60.00	-26.26	QP
11	10.179	12.54	33.10	10.30	10.26	50.00	-16.90	Average
12	10.179	20.99	41.55	10.30	10.26	60.00	-18.45	QP

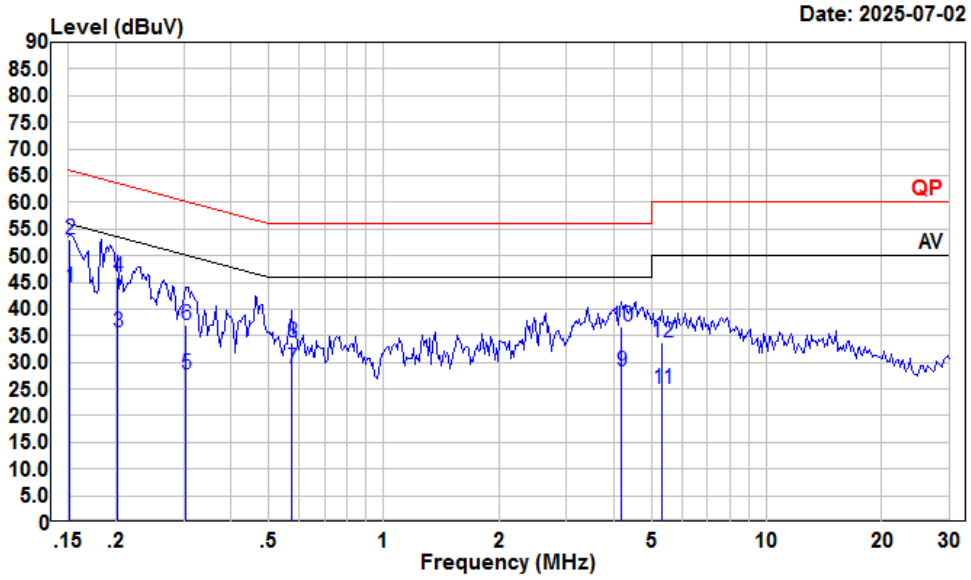
AC 120V/60 Hz, Neutral



Condition: Neutral
Project : 2501T12074E-RFA3
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.152	9.99	30.56	10.41	10.16	55.91	-25.35	Average
2	0.152	19.39	39.96	10.41	10.16	65.91	-25.95	QP
3	0.202	5.83	26.82	10.80	10.19	53.54	-26.72	Average
4	0.202	14.11	35.10	10.80	10.19	63.54	-28.44	QP
5	0.447	15.49	36.23	10.54	10.20	46.93	-10.70	Average
6	0.447	21.35	42.09	10.54	10.20	56.93	-14.84	QP
7	1.790	5.52	26.46	10.72	10.22	46.00	-19.54	Average
8	1.790	13.93	34.87	10.72	10.22	56.00	-21.13	QP
9	3.107	4.84	26.00	10.89	10.27	46.00	-20.00	Average
10	3.107	14.15	35.31	10.89	10.27	56.00	-20.69	QP
11	10.072	13.23	33.99	10.50	10.26	50.00	-16.01	Average
12	10.072	21.68	42.44	10.50	10.26	60.00	-17.56	QP

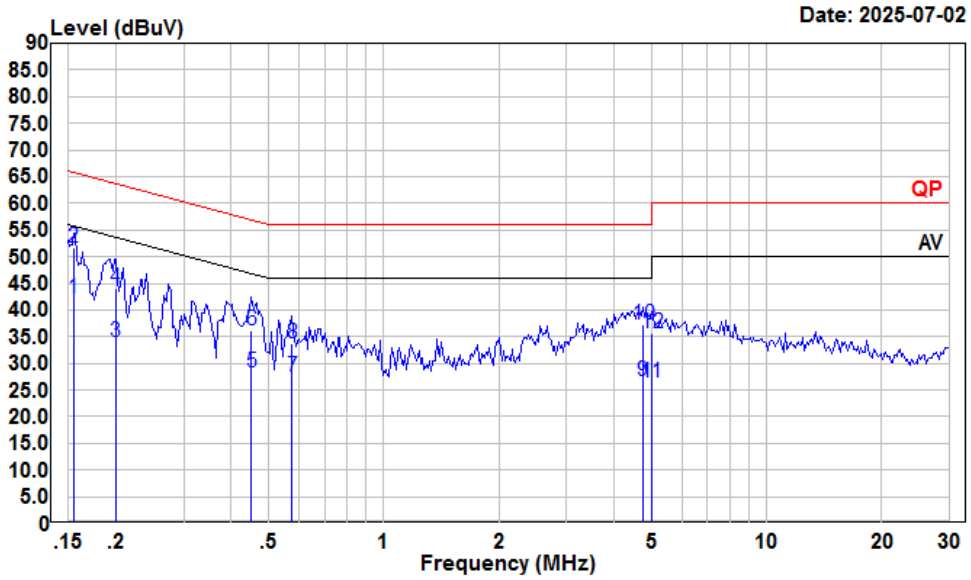
Adapter 2
AC 120V/60 Hz, Line



Condition: Line
Project : 2501T12074E-RFA3
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.152	23.37	43.94	10.41	10.16	55.91	-11.97	Average
2	0.152	32.42	52.99	10.41	10.16	65.91	-12.92	QP
3	0.202	14.85	35.74	10.70	10.19	53.54	-17.80	Average
4	0.202	25.10	45.99	10.70	10.19	63.54	-17.55	QP
5	0.305	6.99	27.79	10.61	10.19	50.10	-22.31	Average
6	0.305	16.28	37.08	10.61	10.19	60.10	-23.02	QP
7	0.576	7.95	28.84	10.67	10.22	46.00	-17.16	Average
8	0.576	12.80	33.69	10.67	10.22	56.00	-22.31	QP
9	4.180	7.17	28.30	10.88	10.25	46.00	-17.70	Average
10	4.180	15.57	36.70	10.88	10.25	56.00	-19.30	QP
11	5.333	4.06	25.08	10.75	10.27	50.00	-24.92	Average
12	5.333	12.83	33.85	10.75	10.27	60.00	-26.15	QP

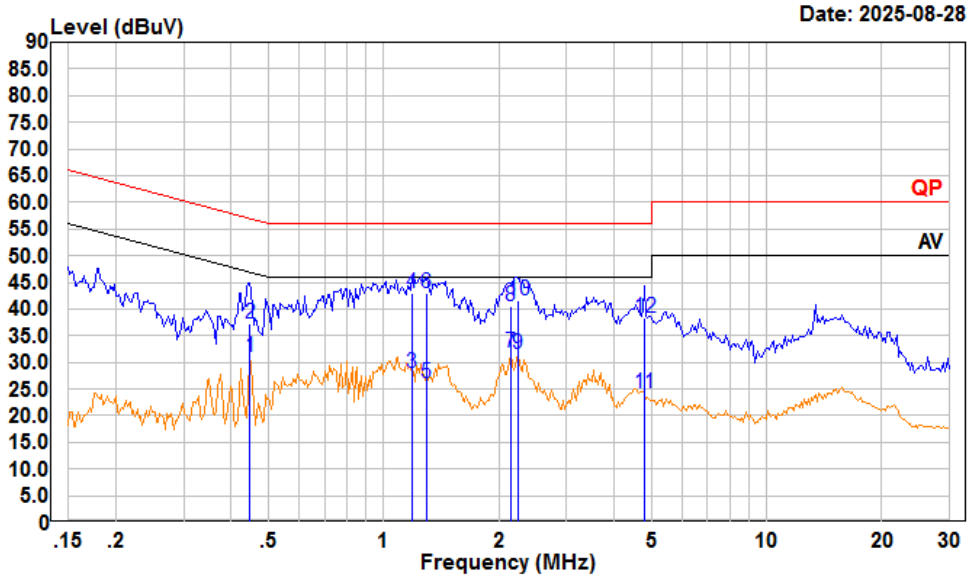
AC 120V/60 Hz, Neutral



Condition: Neutral
Project : 2501T12074E-RFA3
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.155	21.53	42.14	10.44	10.17	55.74	-13.60	Average
2	0.155	30.96	51.57	10.44	10.17	65.74	-14.17	QP
3	0.200	13.07	34.06	10.80	10.19	53.62	-19.56	Average
4	0.200	23.14	44.13	10.80	10.19	63.62	-19.49	QP
5	0.452	7.46	28.19	10.53	10.20	46.85	-18.66	Average
6	0.452	15.35	36.08	10.53	10.20	56.85	-20.77	QP
7	0.576	6.72	27.48	10.54	10.22	46.00	-18.52	Average
8	0.576	12.84	33.60	10.54	10.22	56.00	-22.40	QP
9	4.746	5.46	26.61	10.88	10.27	46.00	-19.39	Average
10	4.746	16.09	37.24	10.88	10.27	56.00	-18.76	QP
11	5.005	5.16	26.28	10.84	10.28	50.00	-23.72	Average
12	5.005	14.50	35.62	10.84	10.28	60.00	-24.38	QP

Adapter 3
AC 120V/60 Hz, Line

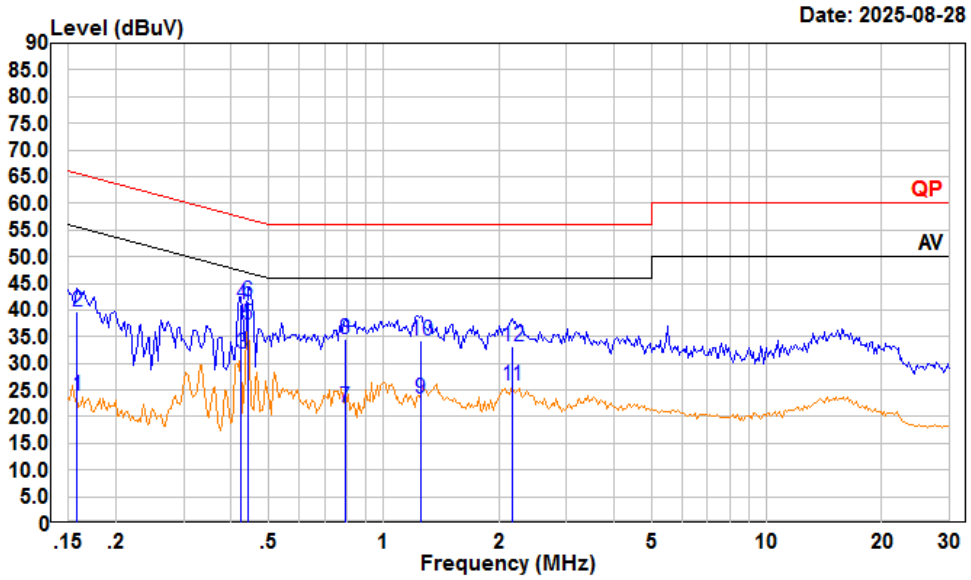


Trace: 1

Condition: Line
Project : 2501T12074E-RFA3
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Cable Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.447	10.26	30.98	10.52	10.20	46.93	-15.95	Average
2	0.447	16.51	37.23	10.52	10.20	56.93	-19.70	QP
3	1.184	7.23	28.12	10.72	10.17	46.00	-17.88	Average
4	1.184	22.10	42.99	10.72	10.17	56.00	-13.01	QP
5	1.289	5.14	26.09	10.78	10.17	46.00	-19.91	Average
6	1.289	22.01	42.96	10.78	10.17	56.00	-13.04	QP
7	2.144	10.62	31.94	11.08	10.24	46.00	-14.06	Average
8	2.144	19.10	40.42	11.08	10.24	56.00	-15.58	QP
9	2.237	10.11	31.42	11.07	10.24	46.00	-14.58	Average
10	2.237	20.20	41.51	11.07	10.24	56.00	-14.49	QP
11	4.797	3.13	24.20	10.80	10.27	46.00	-21.80	Average
12	4.797	17.20	38.27	10.80	10.27	56.00	-17.73	QP

AC 120V/60 Hz, Neutral



Trace: 1

Condition: Neutral
Project : 2501T12074E-RFA3
tester : Macy.shi Note:Transmitting
Setting : RBW:9kHz

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.158	3.24	23.88	10.47	10.17	55.56	-31.68	Average
2	0.158	19.11	39.75	10.47	10.17	65.56	-25.81	QP
3	0.424	11.12	31.88	10.55	10.21	47.37	-15.49	Average
4	0.424	20.20	40.96	10.55	10.21	57.37	-16.41	QP
5	0.442	16.59	37.33	10.54	10.20	47.02	-9.69	Average
6	0.442	21.00	41.74	10.54	10.20	57.02	-15.28	QP
7	0.792	0.86	21.76	10.67	10.23	46.00	-24.24	Average
8	0.792	13.70	34.60	10.67	10.23	56.00	-21.40	QP
9	1.249	2.33	23.27	10.77	10.17	46.00	-22.73	Average
10	1.249	13.40	34.34	10.77	10.17	56.00	-21.66	QP
11	2.167	5.00	25.97	10.73	10.24	46.00	-20.03	Average
12	2.167	12.10	33.07	10.73	10.24	56.00	-22.93	QP

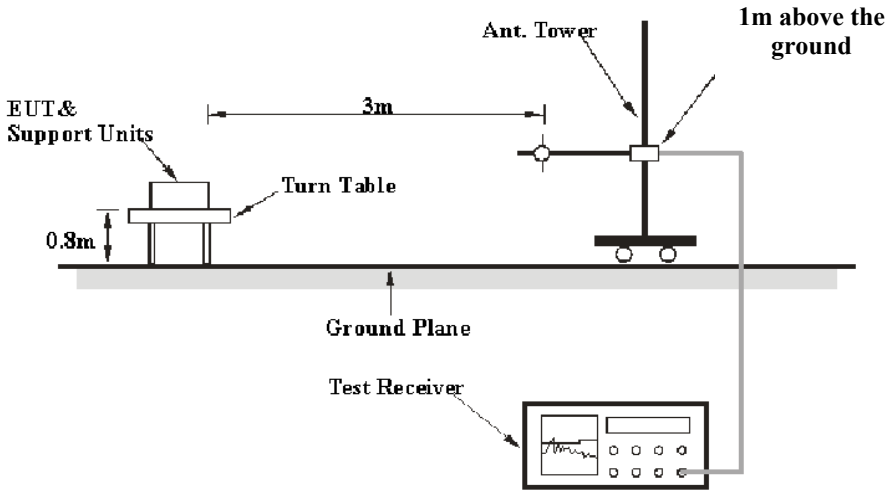
FCC §15.205, §15.209 & §15.247(d) & RSS-247§ 5.5 - RADIATED EMISSIONS

Applicable Standard

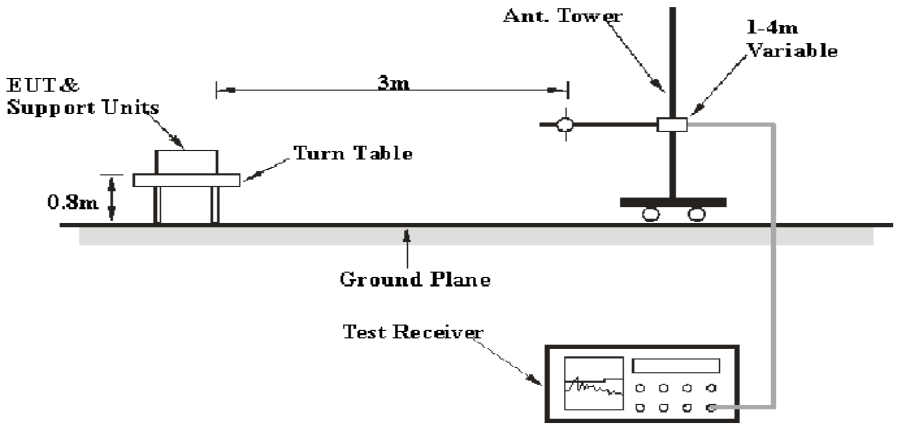
FCC §15.205; §15.209; §15.247(d) and RSS-247§ 5.5; RSS-GEN § 8.10

EUT Setup

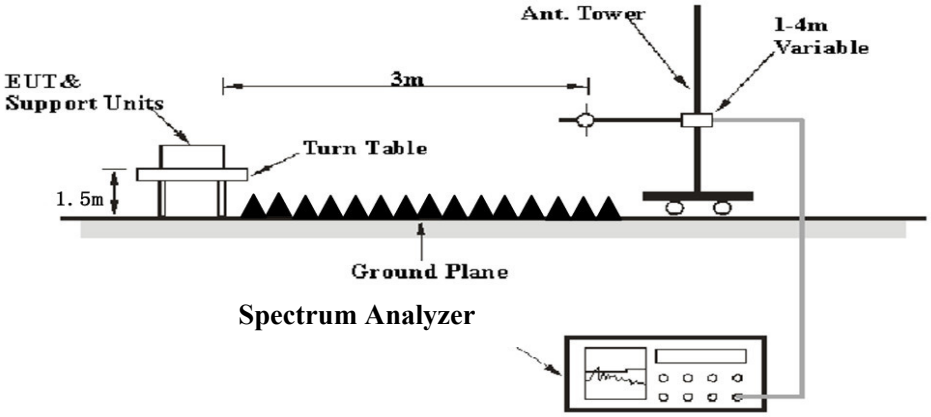
9 kHz-30MHz:



30MHz-1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, FCC 15.247 limits and RSS-247/RSS-Gen 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
Above 1 GHz	Harmonics				
	1MHz	3 MHz	/	PK	Peak
	Average Emission Level=Peak Emission Level+20*log(Duty cycle)				
	Band Edge & Other Emissions				
	1MHz	3 MHz	/	PK	Peak
	1MHz	≥10 Hz	/	Average	Peak

For Duty cycle measurement:

Use the duty cycle factor correction factor method per 15.35(c).
Duty cycle=On time/100milliseconds, On time=N1*L1+N2*L2+…Nn-1*Ln-1+Nn*Ln,
Where N1 is number of type 1 pulses, L1 is length of type 1 pulse, etc.

Test Procedure

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

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

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

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

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

Factor & Over Limit/Margin Calculation

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

Factor = Antenna Factor + Cable Loss - 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:

Over Limit/Margin = Level/Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

Temperature:	20.6~25.4 ℃
Relative Humidity:	50~55 %
ATM Pressure:	100.5 kPa

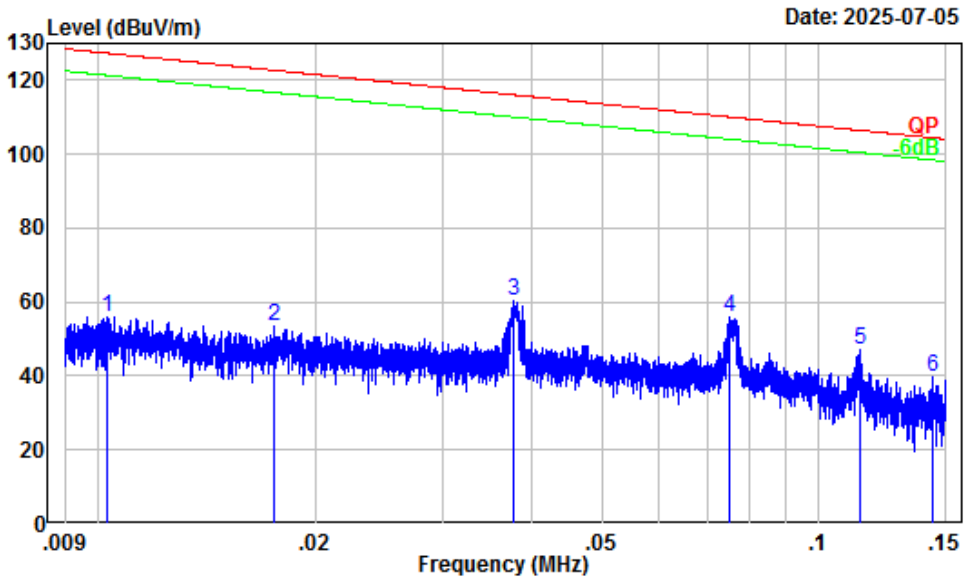
The testing was performed by Anson Su and Kungfumaster Liang from 2025-07-05 to 2025-08-29 for below 1GHz and Ive Wang on 2025-07-05& Wing K Ji on 2025-08-04 for above 1GHz.

EUT operation mode: Transmitting

Note 1: The spurious emission from 9 kHz-30MHz of IC RSS-Gen standard, the unit of final result on the test plots are dBµV/m, so the limit should be added by 51,5 dB from dBµA/m to dBµV/m.

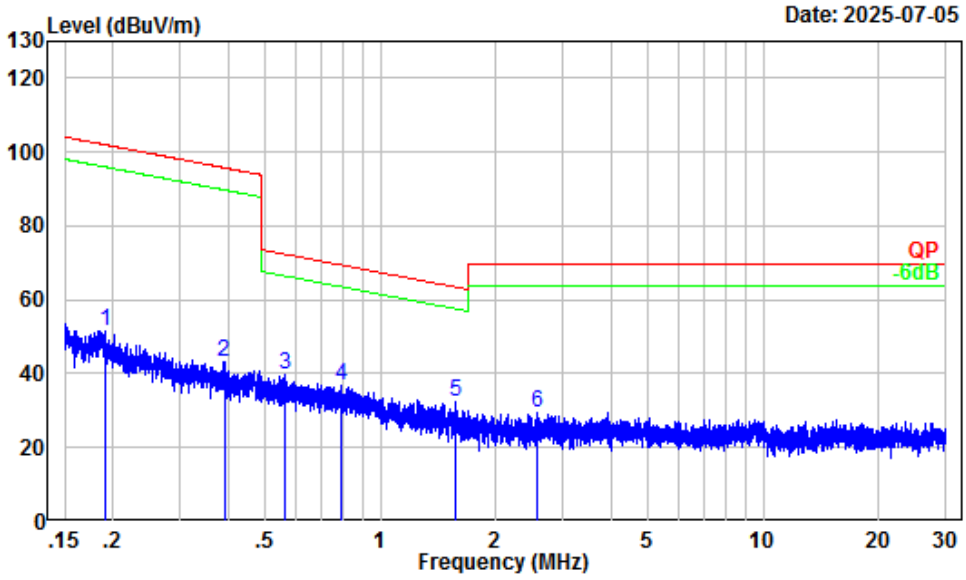
Note 2: Pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation were recorded.

Adapter 1
9kHz-30MHz: (Maximum output power: High channel)
Parallel (worst case)



Site : Chamber A
Condition : 3m
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	32.24	23.71	55.95	127.34	-71.39	Peak
2	0.018	30.87	22.48	53.35	122.73	-69.38	Peak
3	0.038	27.69	32.50	60.19	116.08	-55.89	Peak
4	0.075	23.87	32.09	55.96	110.06	-54.10	Peak
5	0.114	21.17	25.76	46.93	106.46	-59.53	Peak
6	0.144	19.41	20.48	39.89	104.44	-64.55	Peak

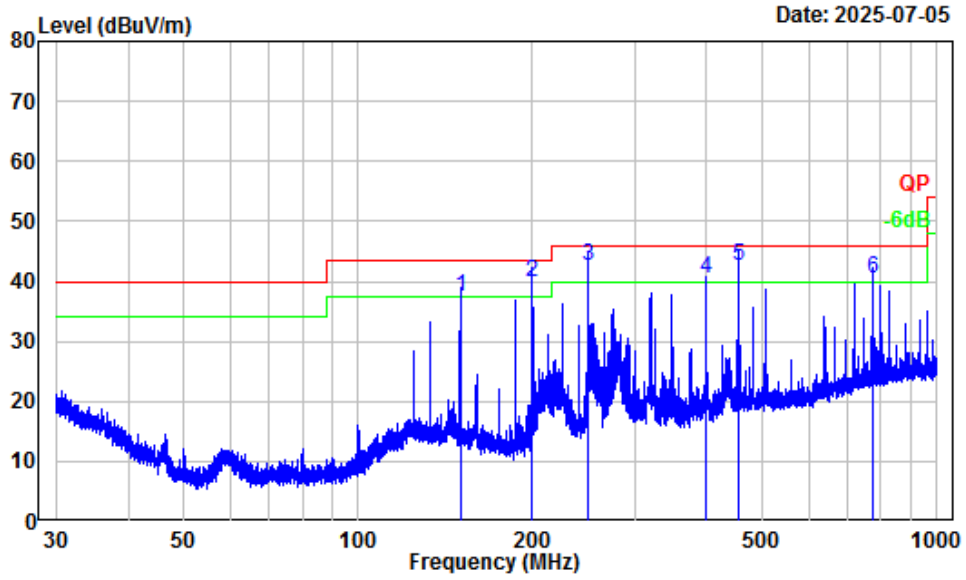


Site : Chamber A
Condition : 3m
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.191	16.61	35.03	51.64	101.97	-50.33	Peak
2	0.391	8.47	34.50	42.97	95.76	-52.79	Peak
3	0.561	5.64	34.03	39.67	72.59	-32.92	Peak
4	0.788	2.85	33.88	36.73	69.59	-32.86	Peak
5	1.570	-0.40	32.86	32.46	63.47	-31.01	Peak
6	2.577	-1.92	31.19	29.27	69.54	-40.27	Peak

30MHz-1GHz: (Maximum output power: High channel)

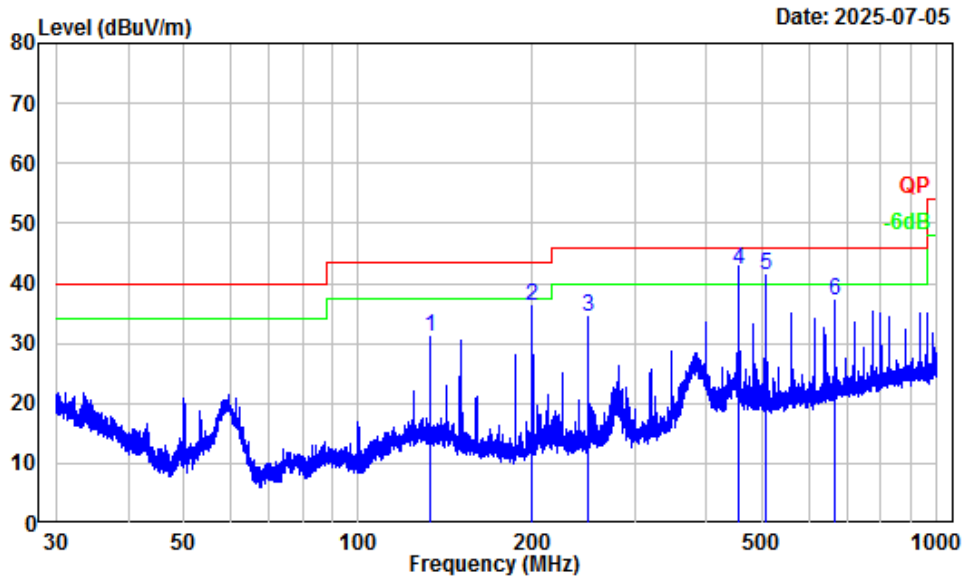
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	150.01	-12.44	50.00	37.56	43.50	-5.94	QP
2	199.99	-13.06	53.00	39.94	43.50	-3.56	QP
3	249.97	-13.05	55.50	42.45	46.00	-3.55	QP
4	400.08	-8.42	49.00	40.58	46.00	-5.42	QP
5	453.51	-6.87	49.49	42.62	46.00	-3.38	QP
6	773.48	-2.47	43.00	40.53	46.00	-5.47	QP

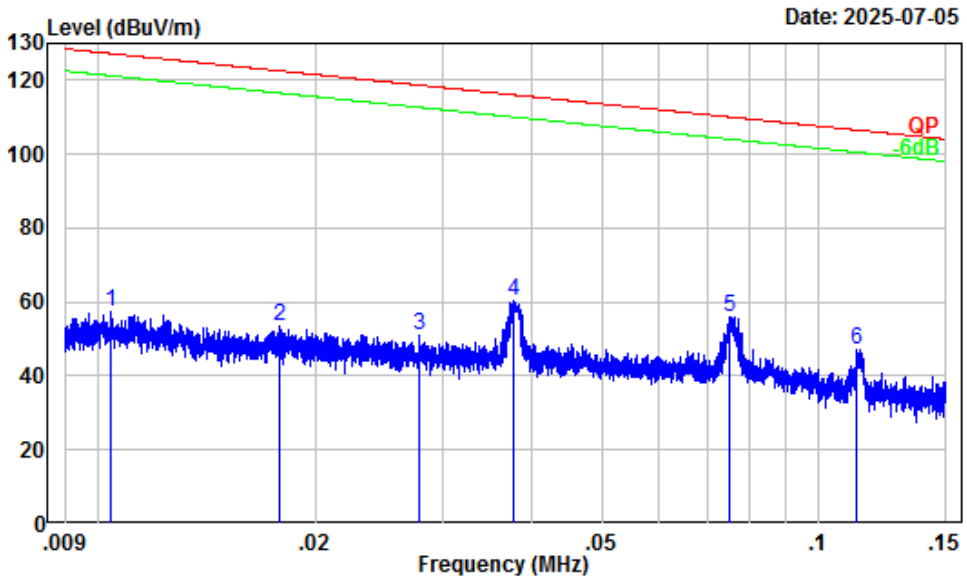
Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

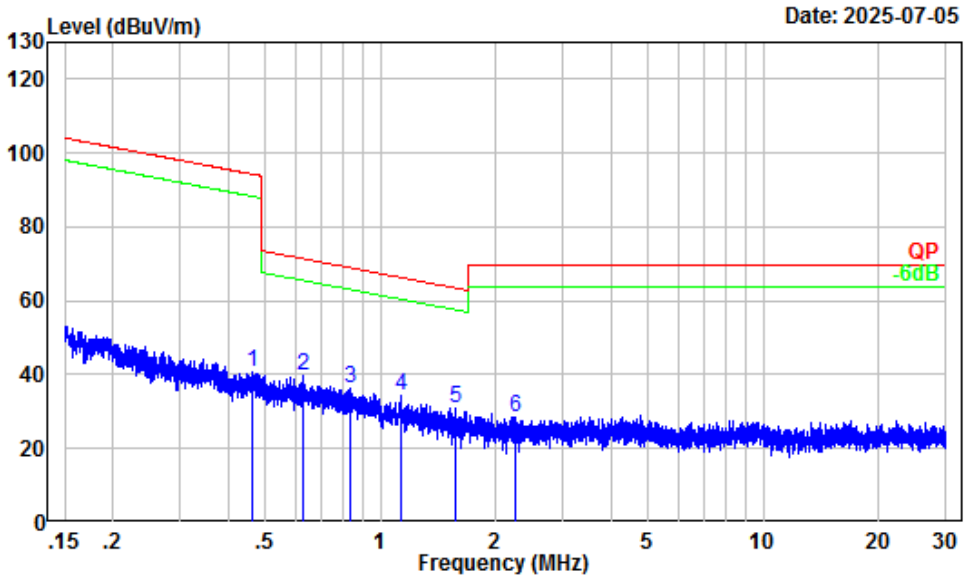
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	133.33	-11.37	42.34	30.97	43.50	-12.53	Peak
2	199.99	-13.06	49.36	36.30	43.50	-7.20	Peak
3	250.08	-13.05	47.54	34.49	46.00	-11.51	Peak
4	453.51	-6.87	49.19	42.32	46.00	-3.68	QP
5	506.70	-5.75	47.00	41.25	46.00	-4.75	QP
6	666.68	-3.76	40.75	36.99	46.00	-9.01	Peak

Adapter 2
9kHz-30MHz: (Maximum output power: High channel)
Parallel (worst case)



Site : Chamber A
Condition : 3m
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.010	32.22	25.11	57.33	127.26	-69.93	Peak
2	0.018	30.80	22.81	53.61	122.55	-68.94	Peak
3	0.028	28.89	22.32	51.21	118.68	-67.47	Peak
4	0.038	27.70	32.69	60.39	116.09	-55.70	Peak
5	0.075	23.87	32.02	55.89	110.06	-54.17	Peak
6	0.113	21.24	25.92	47.16	106.55	-59.39	Peak

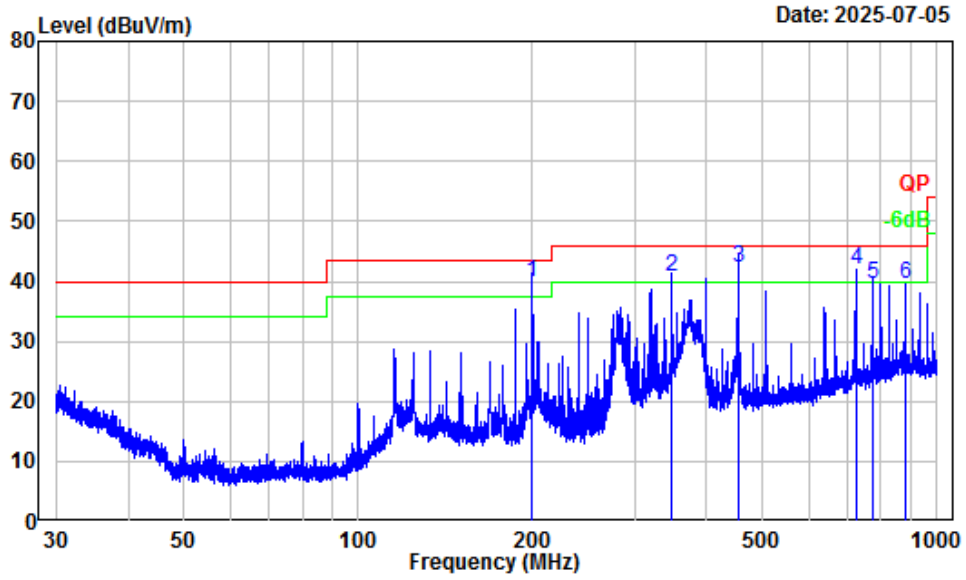


Site : Chamber A
Condition : 3m
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.465	7.07	33.59	40.66	94.26	-53.60	Peak
2	0.628	4.82	35.15	39.97	71.59	-31.62	Peak
3	0.839	2.41	34.04	36.45	69.03	-32.58	Peak
4	1.131	0.83	33.73	34.56	66.38	-31.82	Peak
5	1.565	-0.38	31.24	30.86	63.50	-32.64	Peak
6	2.243	-1.73	30.12	28.39	69.54	-41.15	Peak

30MHz-1GHz: (Maximum output power: High channel)

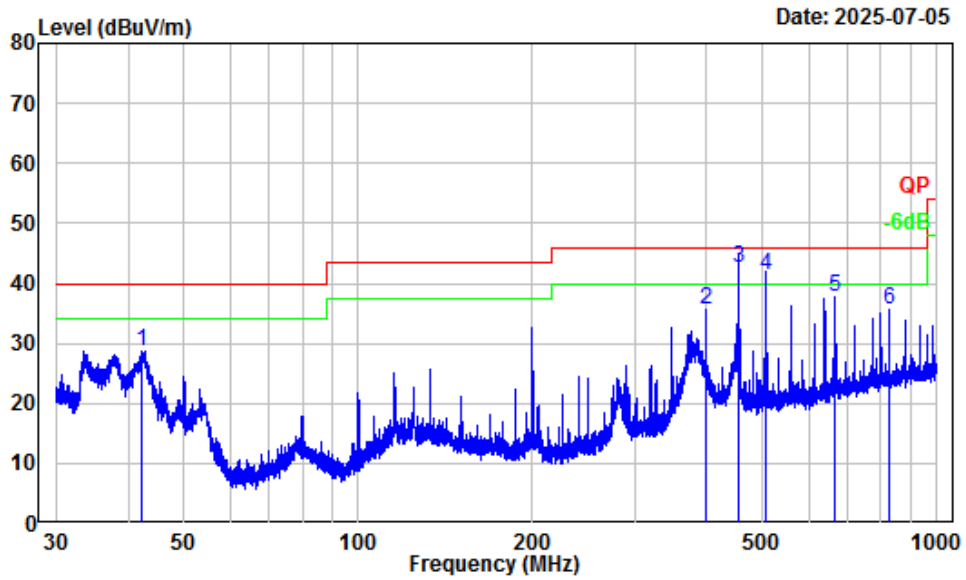
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	199.99	-13.06	53.00	39.94	43.50	-3.56	QP
2	346.66	-10.17	51.00	40.83	46.00	-5.17	QP
3	453.51	-6.87	48.99	42.12	46.00	-3.88	QP
4	725.85	-3.12	44.99	41.87	46.00	-4.13	QP
5	773.48	-2.47	42.00	39.53	46.00	-6.47	QP
6	880.25	-1.43	40.89	39.46	46.00	-6.54	Peak

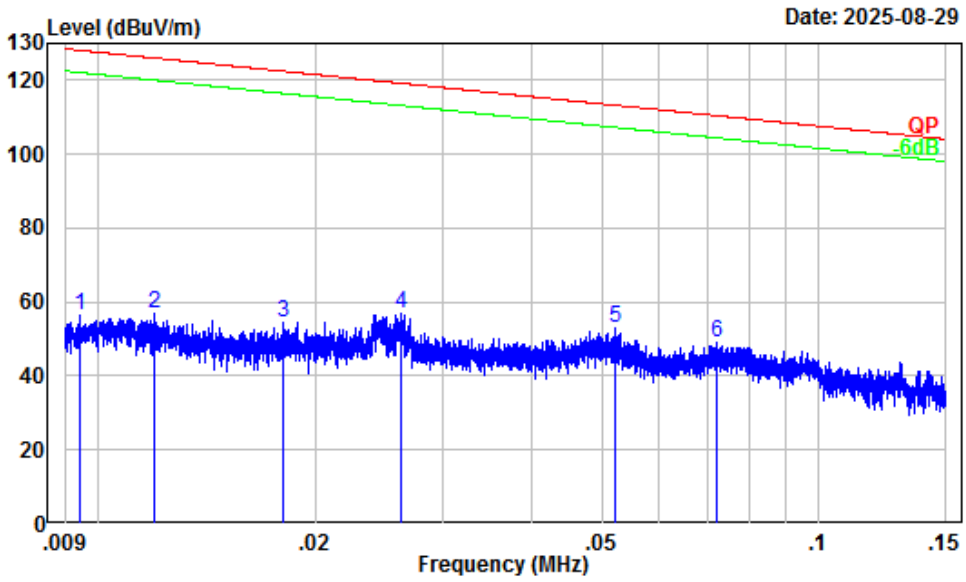
Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

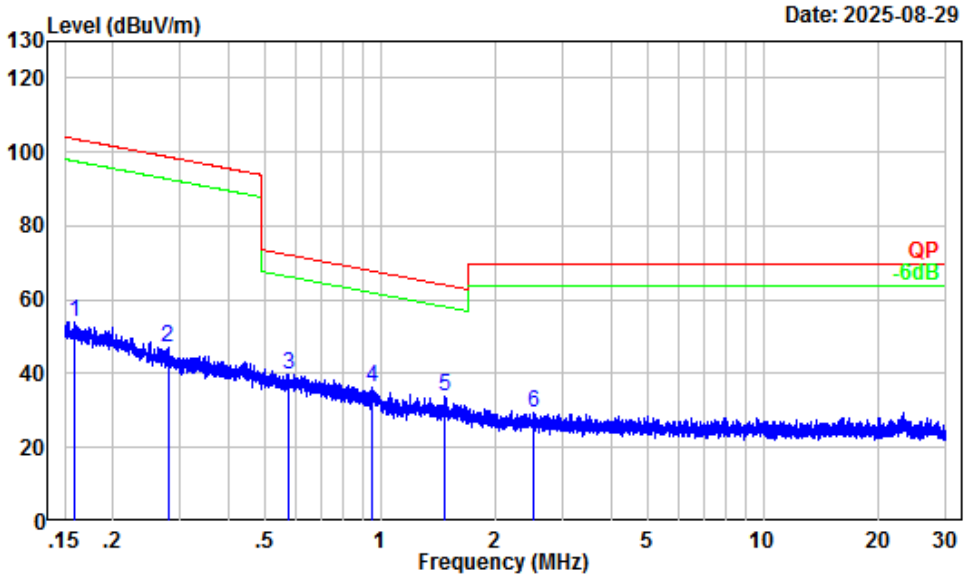
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	42.27	-13.97	42.51	28.54	40.00	-11.46	Peak
2	400.08	-8.42	44.03	35.61	46.00	-10.39	Peak
3	453.32	-6.88	49.50	42.62	46.00	-3.38	QP
4	506.70	-5.75	47.00	41.25	46.00	-4.75	QP
5	666.68	-3.76	41.56	37.80	46.00	-8.20	Peak
6	826.77	-1.90	37.48	35.58	46.00	-10.42	Peak

Adapter 3
9kHz-30MHz: (Maximum output power: High channel)
Parallel (worst case)



Site : Chamber A
Condition : 3m
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Kungfumaster Liang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.009	32.41	24.03	56.44	128.10	-71.66	Peak
2	0.012	31.93	24.98	56.91	126.05	-69.14	Peak
3	0.018	30.76	23.48	54.24	122.44	-68.20	Peak
4	0.026	29.21	27.85	57.06	119.22	-62.16	Peak
5	0.052	26.20	26.68	52.88	113.28	-60.40	Peak
6	0.072	24.20	24.87	49.07	110.46	-61.39	Peak

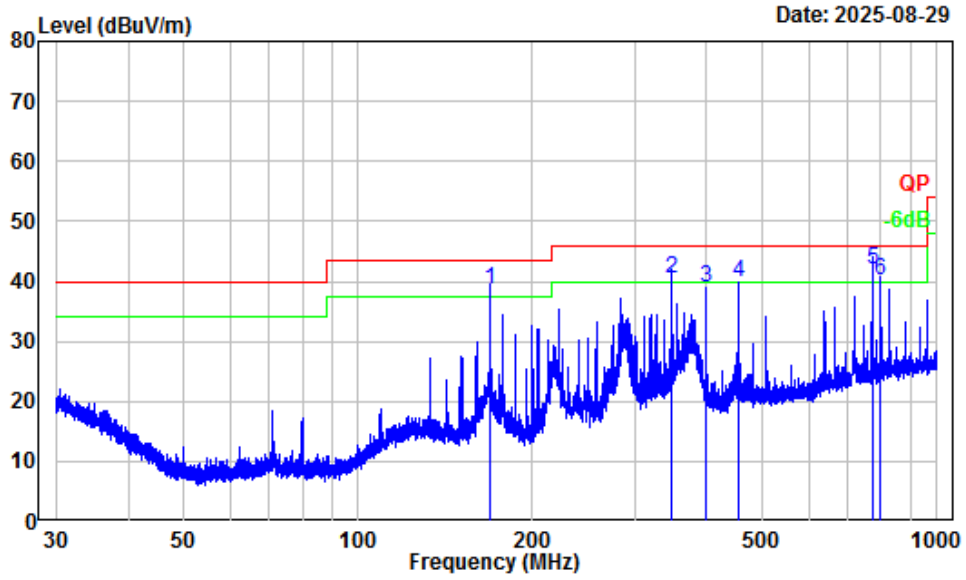


Site : Chamber A
Condition : 3m
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 10/30kHz
Tester : Kungfumaster Liang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.160	18.48	35.27	53.75	103.54	-49.79	Peak
2	0.279	11.45	35.77	47.22	98.70	-51.48	Peak
3	0.573	5.50	34.37	39.87	72.41	-32.54	Peak
4	0.952	1.56	34.97	36.53	67.91	-31.38	Peak
5	1.473	-0.12	34.20	34.08	64.04	-29.96	Peak
6	2.517	-1.88	31.33	29.45	69.54	-40.09	Peak

30MHz-1GHz: (Maximum output power: High channel)

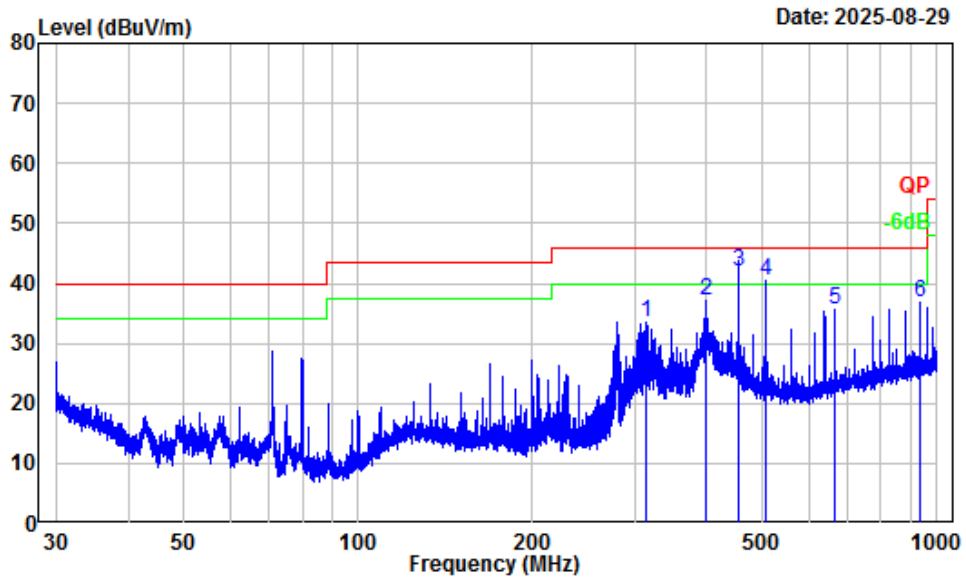
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Kungfumaster Liang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	168.931	-13.09	51.70	38.61	43.50	-4.89	QP
2	346.657	-10.25	50.71	40.46	46.00	-5.54	QP
3	400.081	-8.41	47.47	39.06	46.00	-6.94	Peak
4	453.315	-7.37	47.13	39.76	46.00	-6.24	Peak
5	773.480	-2.49	44.48	41.99	46.00	-4.01	QP
6	800.031	-2.14	42.20	40.06	46.00	-5.94	QP

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2501T12074E-RFA3
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Kungfumaster Liang

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	313.963	-10.96	44.50	33.54	46.00	-12.46	Peak
2	400.081	-8.41	45.64	37.23	46.00	-8.77	Peak
3	453.514	-7.35	49.22	41.87	46.00	-4.13	QP
4	506.701	-5.77	46.20	40.43	46.00	-5.57	QP
5	666.680	-3.86	39.34	35.48	46.00	-10.52	Peak
6	933.498	-1.04	37.86	36.82	46.00	-9.18	Peak

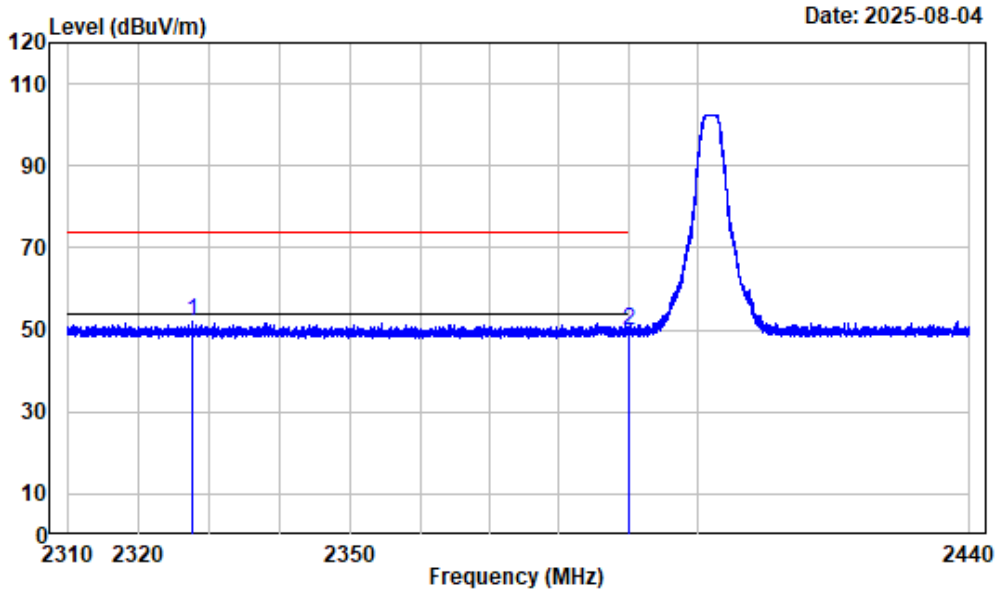
1-25 GHz:

Frequency (MHz)	Reading (dBµV)	PK/AV	Polar (H/V)	Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low Channel 2402MHz							
4804.00	55.39	PK	H	-7.79	47.60	74	-26.40
4804.00	54.45	PK	V	-7.79	46.66	74	-27.34
Middle Channel 2440MHz							
4880.00	54.63	PK	H	-7.59	47.04	74	-26.96
4880.00	53.31	PK	V	-7.59	45.72	74	-28.28
High Channel 2477MHz							
4954.00	53.89	PK	H	-7.62	46.27	74	-27.73
4954.00	52.48	PK	V	-7.62	44.86	74	-29.14

Note:
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude/Level = Corrected 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.

Test plots for Band Edge Measurements (Radiated):

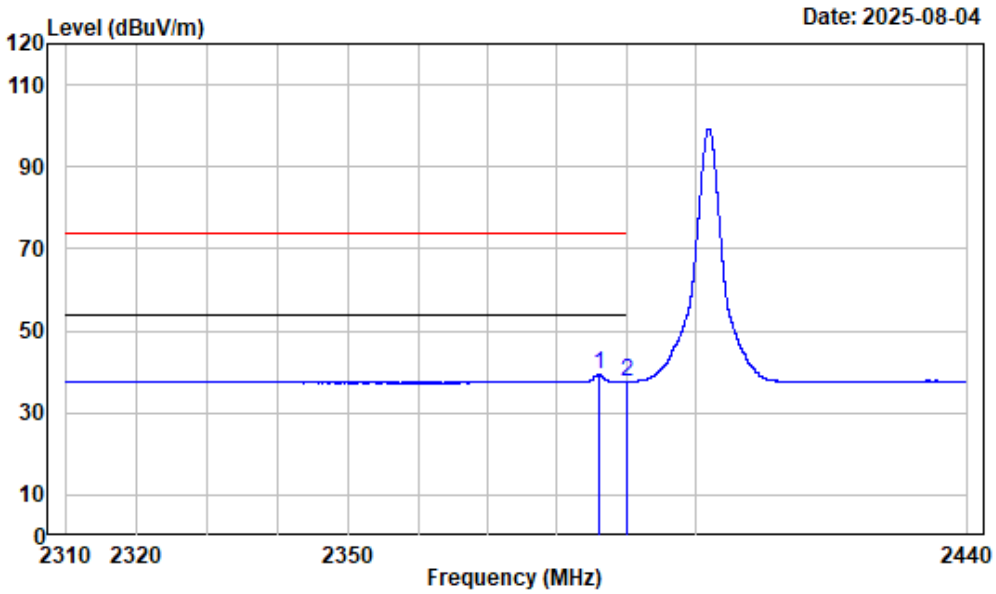
Test Channel:	2402MHz	Ant. Polar. :	Horizontal-Peak



Condition : Horizontal
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2327.552	-10.84	62.92	52.08	74.00	-21.92	Peak
2	2390.000	-10.98	60.82	49.84	74.00	-24.16	Peak

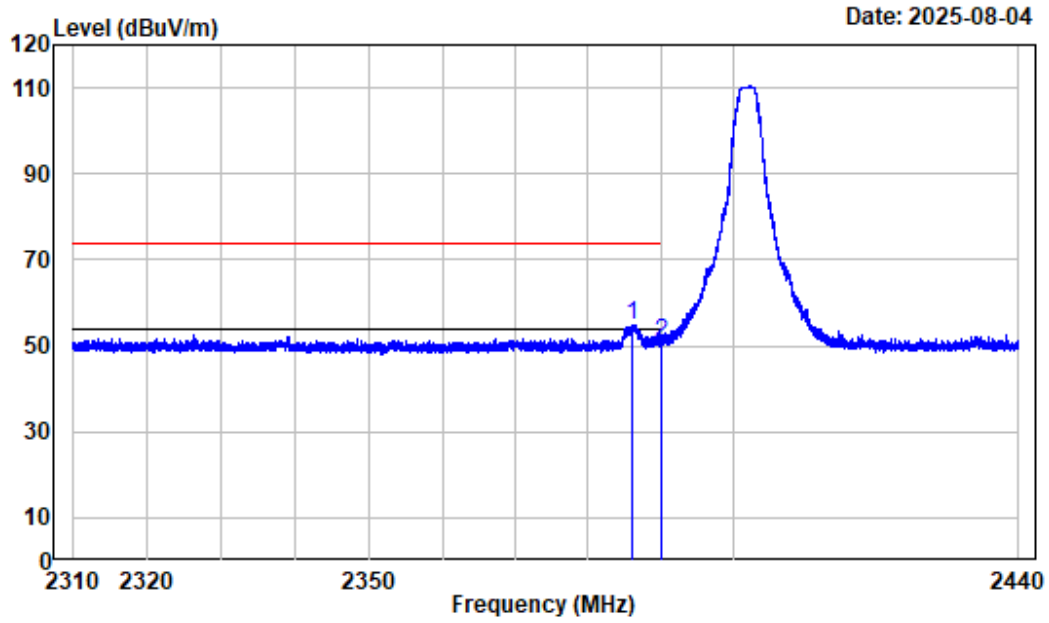
Test Channel:	2402MHz	Ant. Polar. :	Horizontal-Average



Condition : Horizontal
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:10Hz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2386.011	-10.97	50.41	39.44	54.00	-14.56	Average
2	2390.000	-10.98	48.67	37.69	54.00	-16.31	Average

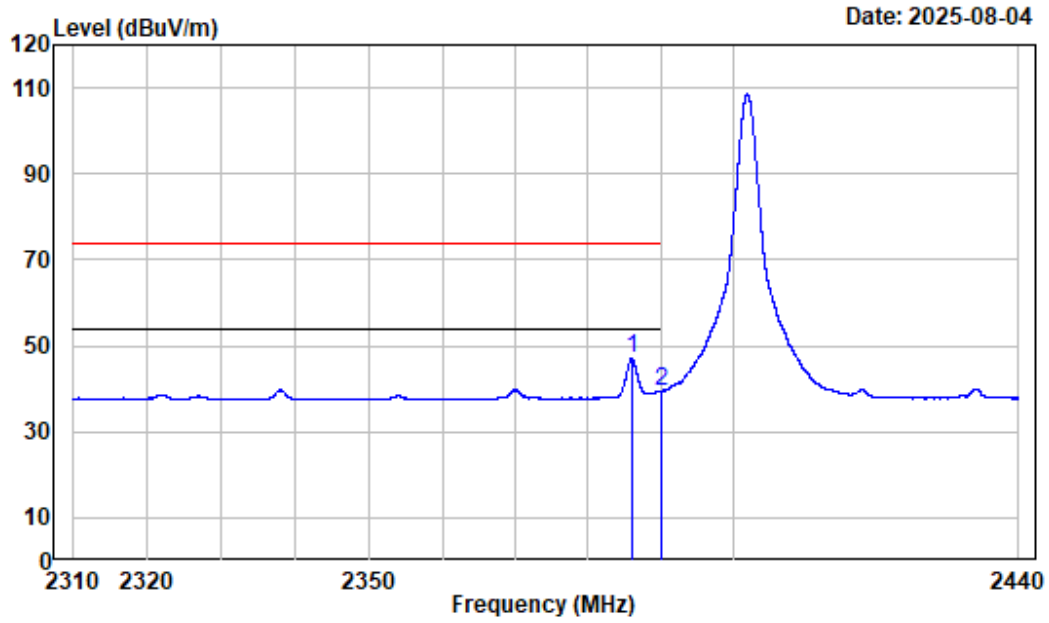
Test Channel:	2402MHz	Ant. Polar. :	Vertical-Peak



Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2385.994	-10.97	65.90	54.93	74.00	-19.07	Peak
2	2390.000	-10.98	61.53	50.55	74.00	-23.45	Peak

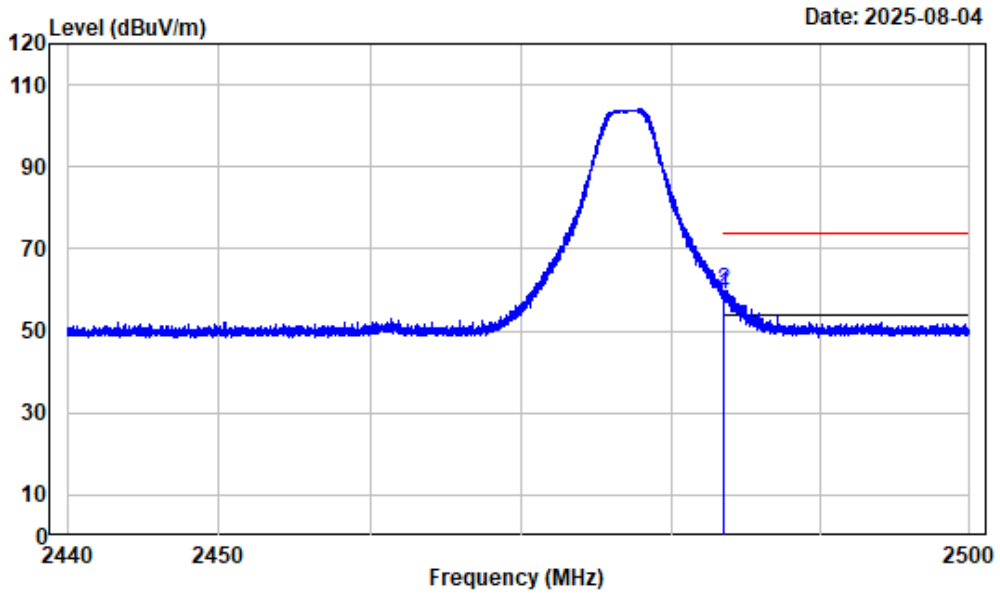
Test Channel:	2402MHz	Ant. Polar. :	Vertical-Average



Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:10Hz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2385.946	-10.97	57.91	46.94	54.00	-7.06	Average
2	2390.000	-10.98	50.46	39.48	54.00	-14.52	Average

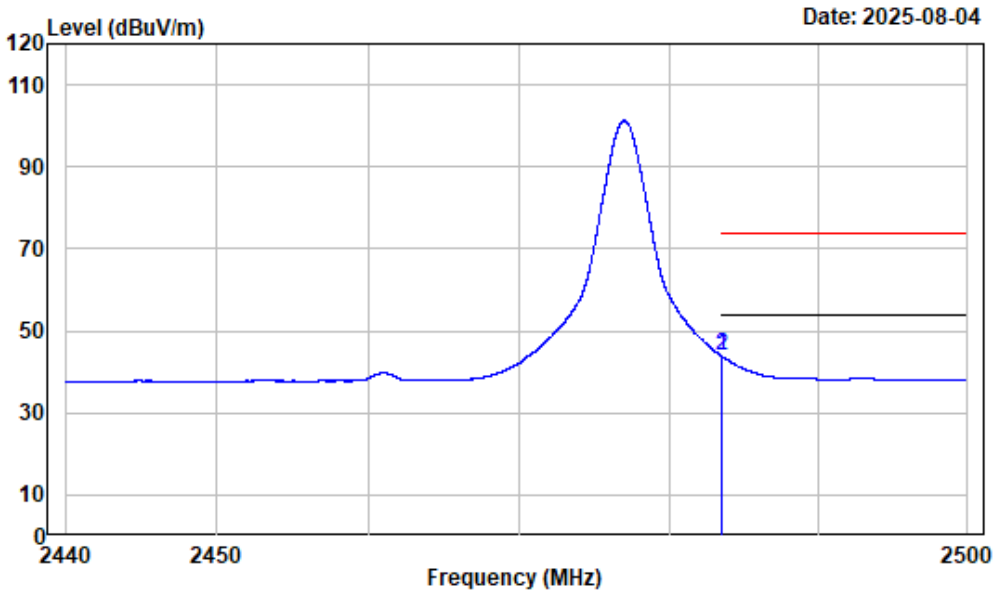
Test Channel:	2477MHz	Ant. Polar. :	Horizontal-Peak



Condition : Horizontal
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2477

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.97	69.99	59.02	74.00	-14.98	Peak
2	2483.558	-10.97	70.86	59.89	74.00	-14.11	Peak

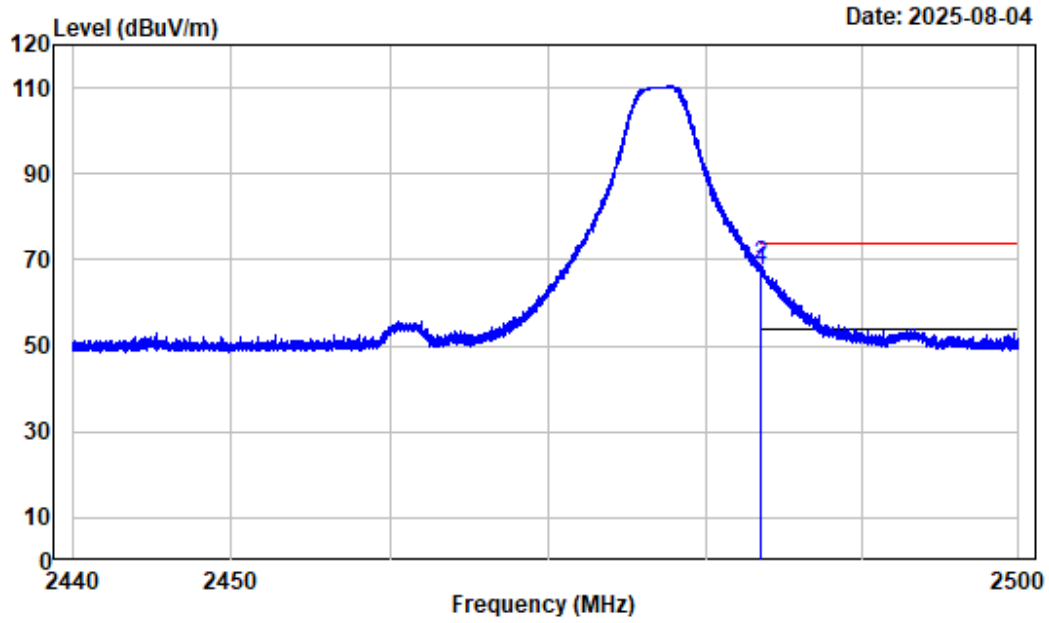
Test Channel:	2477MHz	Ant. Polar. :	Horizontal-Average



Condition : Horizontal
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:10Hz Detector:Peak
Note : GFSK_2477

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.97	54.81	43.84	54.00	-10.16	Average
2	2483.522	-10.97	54.83	43.86	54.00	-10.14	Average

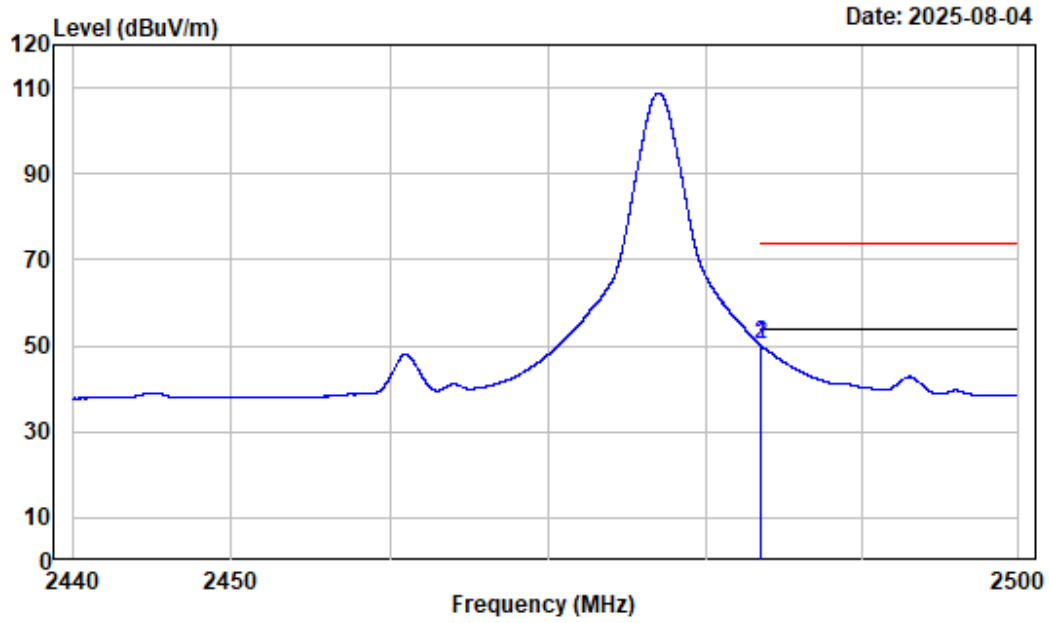
Test Channel:	2477MHz	Ant. Polar. :	Vertical-Peak



Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2477

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.97	78.52	67.55	74.00	-6.45	Peak
2	2483.513	-10.97	79.94	68.97	74.00	-5.03	Peak

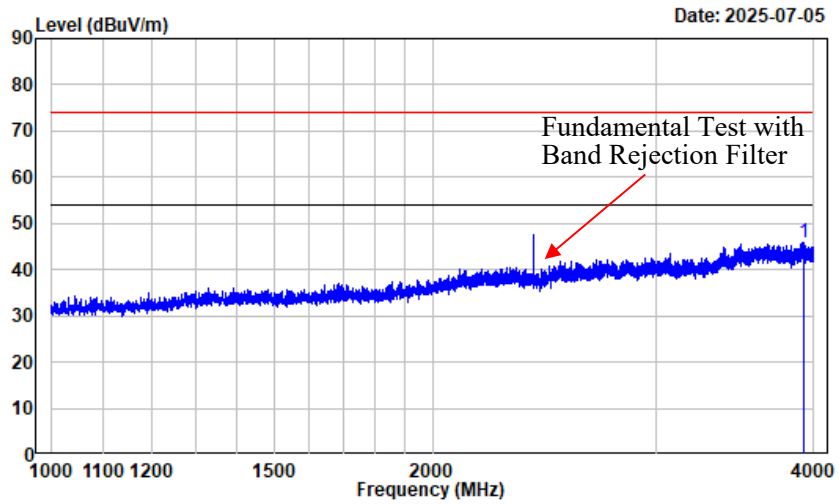
Test Channel:	2477MHz	Ant. Polar. :	Vertical-Average



Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Wing K Ji
Spectrum setting: Average reading: RBW:1MHz VBW:10Hz Detector:Peak
Note : GFSK_2477

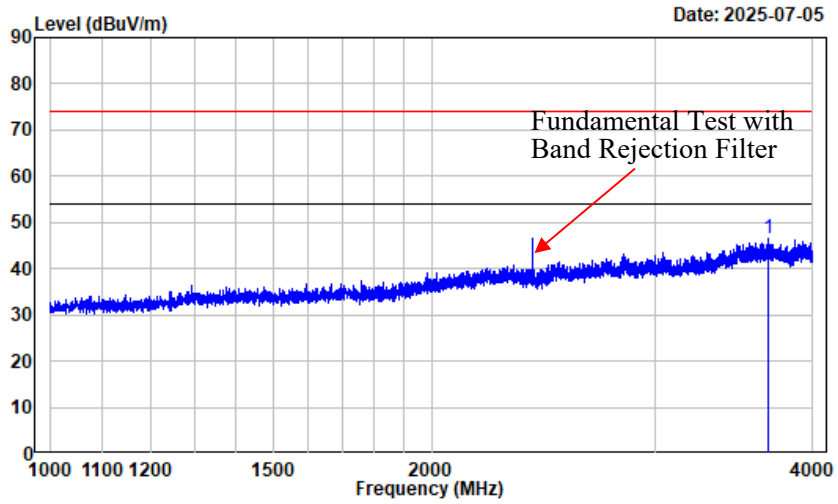
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2483.500	-10.97	61.12	50.15	54.00	-3.85	Average
2	2483.513	-10.97	61.13	50.16	54.00	-3.84	Average

1-18GHz (Listed with the worst margin test plots):

Horizontal	
1-4GHz	 Condition : Horizontal Project No. : 2501T12074E-RFA3 Tester : Ive Wang Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : GFSK_2402 Freq Factor Read Level Limit Line Over Limit Remark MHz dB/m dBuV dBuV/m dBuV/m dB 1 3927.991 -9.55 55.27 45.72 74.00 -28.28 Peak

Vertical

1-4GHz

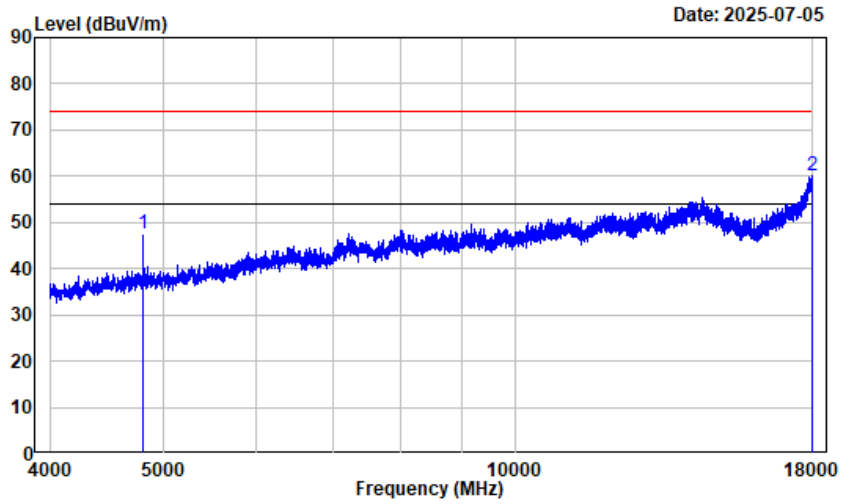



```
Condition        : Vertical
Project No.      : 2501T12074E-RFA3
Tester           : Ive Wang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note             : GFSK_2402
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	3690.586	-9.54	56.05	46.51	74.00	-27.49	Peak

Horizontal-Peak

4-18GHz

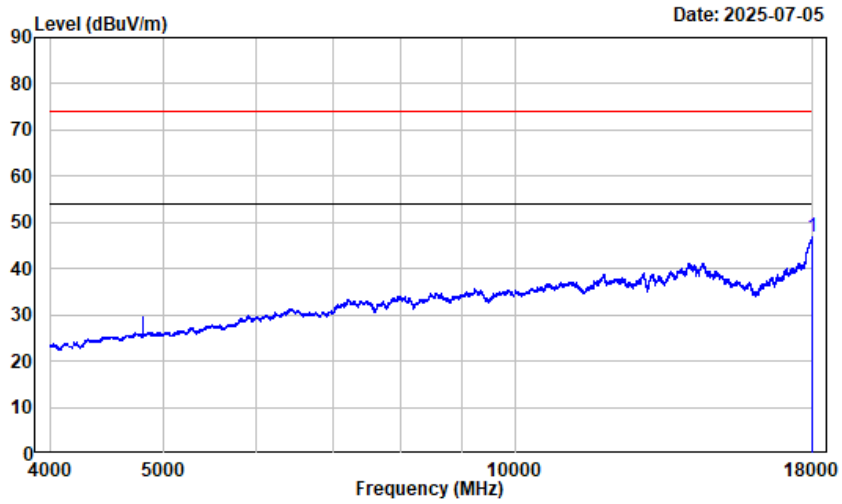


Condition : Horizontal
Project No. : 2501T12074E-RFA3
Tester : Ive Wang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4804.000	-7.79	55.39	47.60	74.00	-26.40	Peak
2	18000.000	13.20	46.98	60.18	74.00	-13.82	Peak

Horizontal-Average

4-18GHz

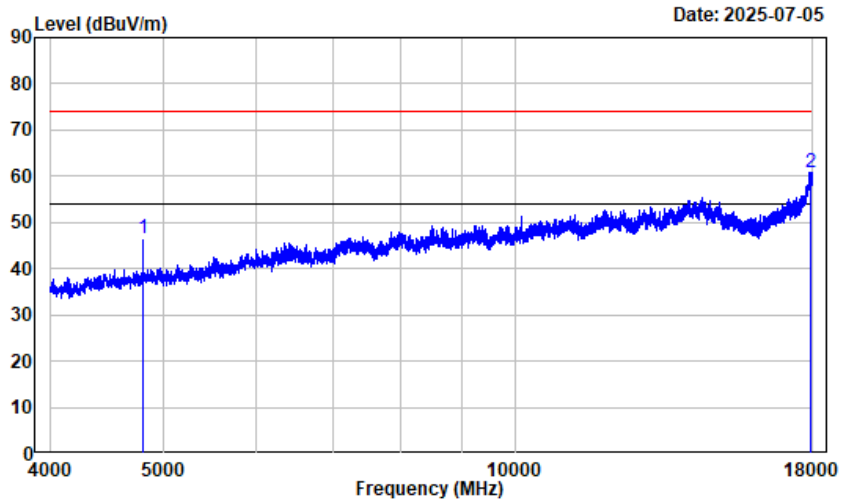


Condition : Horizontal
Project No. : 2501T12074E-RFA3
Tester : Ive Wang
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	17998.250	13.19	33.54	46.73	54.00	-7.27	Average

Vertical-Peak

4-18GHz

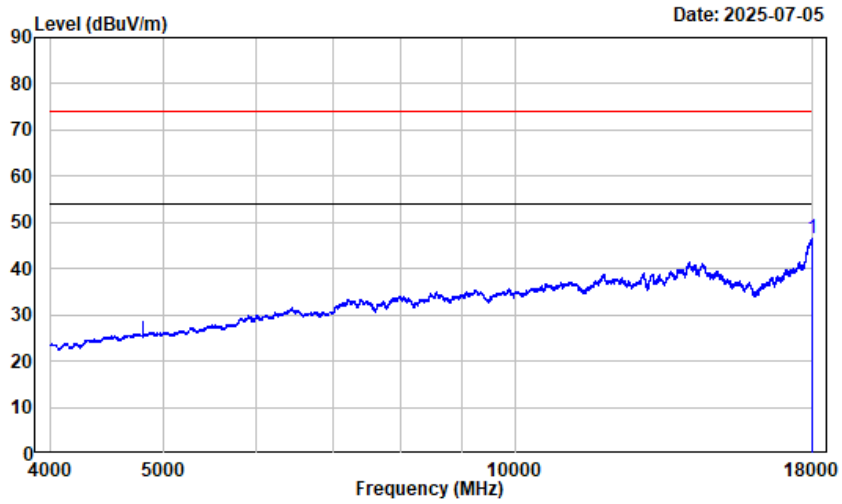


Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Ive Wang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	4804.000	-7.79	54.45	46.66	74.00	-27.34	Peak
2	17910.740	12.76	48.10	60.86	74.00	-13.14	Peak

Vertical-Average

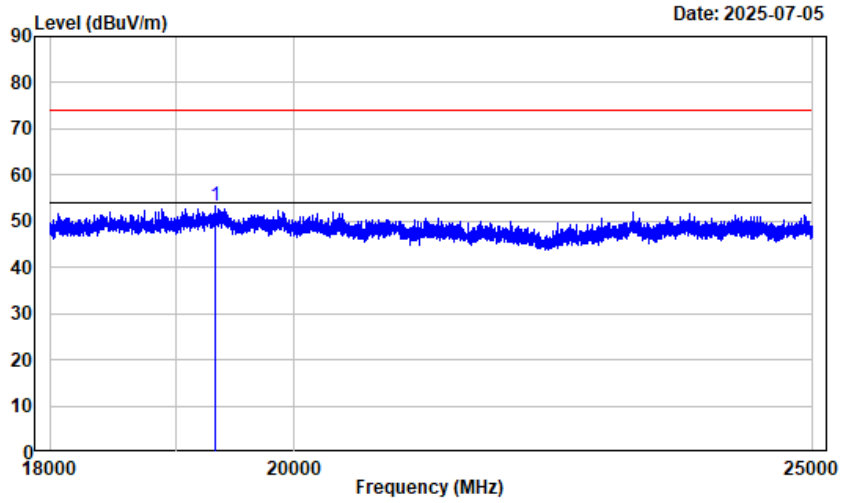
4-18GHz



Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Ive Wang
Spectrum setting: Average reading: RBW:1MHz VBW:1kHz Detector:Peak
Note : GFSK_2402

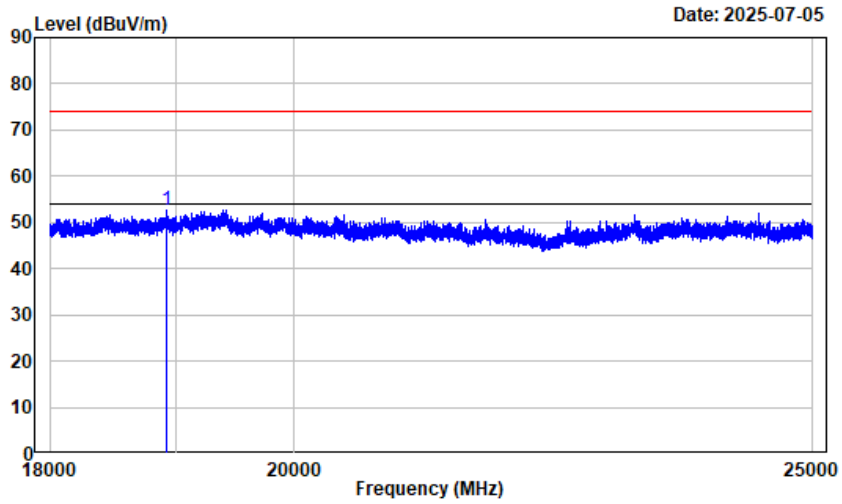
	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	18000.000	13.20	33.41	46.61	54.00	-7.39	Average

18-25GHz (*Only with worst case margin mode plot***):**

Horizontal	
18-25GHz	 Condition : Horizontal Project No. : 2501T12074E-RFA3 Tester : Ive Wang Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak Note : GFSK_2402 Freq / Factor / Read Level / Limit Level / Limit Line / Over Limit / Remark MHz / dB/m / dBuV / dBuV/m / dBuV/m / dB 1 19328.420 15.43 37.73 53.16 74.00 -20.84 peak

Vertical

18-25GHz



Condition : Vertical
Project No. : 2501T12074E-RFA3
Tester : Ive Wang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak
Note : GFSK_2402

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	18924.120	15.13	37.66	52.79	74.00	-21.21	peak

FCC §15.247(b) (1) & RSS-247§ 5.1(b) &§ 5.4(b) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

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

According to § RSS-247§ 5.4(b), For frequency hopping systems (FHSs) operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W (see Section 5.4(e) for exceptions).

According to § RSS-247§ 5.1(b), Frequency hopping systems (FHSs) shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, FHSs operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the -20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W.

Test Procedure

Test Method: ANSI C63.10-2020 Clause 7.8.5

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

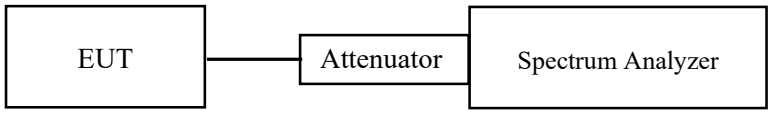
a) Use the following spectrum analyzer settings:

1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
2) RBW > 20 dB bandwidth of the emission being measured.
3) VBW ≥ RBW.
4) Sweep: Auto.
5) Detector function: Peak.
6) Trace: Max hold.

b) Allow trace to stabilize.

c) Use the marker-to-peak function to set the marker to the peak of the emission.

d) The indicated level is the peak output power, after any corrections for external attenuators and cables.



Note 1: A short RF cable with low cable loss connected to the EUT antenna port, which was provided by client or lab, the cable loss was add with offset into test equipment, the total offset consists of attenuator and/or RF cable loss
Note 2: Worst Offset (3.5dB) = Attenuator (3dB) + Cable loss (0.5dB)

Test Data

Environmental Conditions

Temperature:	24.3 ℃
Relative Humidity:	53 %
ATM Pressure:	101.2 kPa

The testing was performed by Brian Li on 2025-08-01.

EUT operation mode: Transmitting

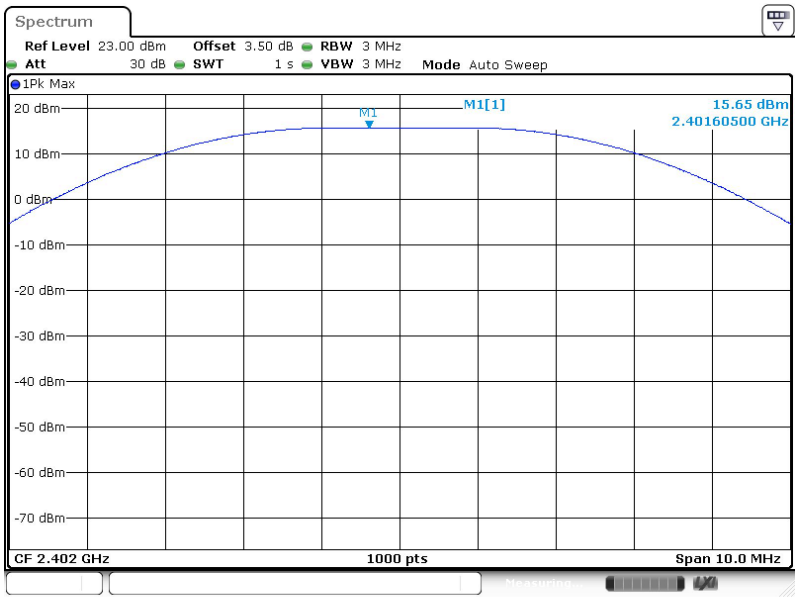
Test Result: Compliant.

Per spot check with the output power with the same RF parameters according to the original report SZ1210301-05161EC

Mode	Test Frequency (MHz)	Conducted Peak Output Power(dBm)	FCC Limit (dBm)	ERIP (dBm)	ISEDC Limit (dBm)	Verdict
GFSK	2402	15.65	21	15.65	36	Pass
	2440	15.79	21	15.79	36	Pass
	2477	15.57	21	15.57	36	Pass

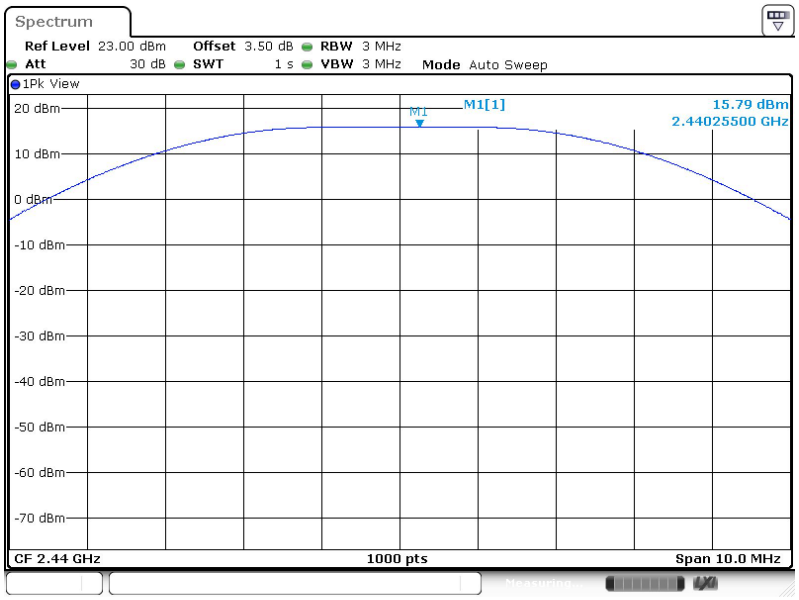
Note: The EIRP= Conducted Peak Output Power+ Antenna gain

2402MHz



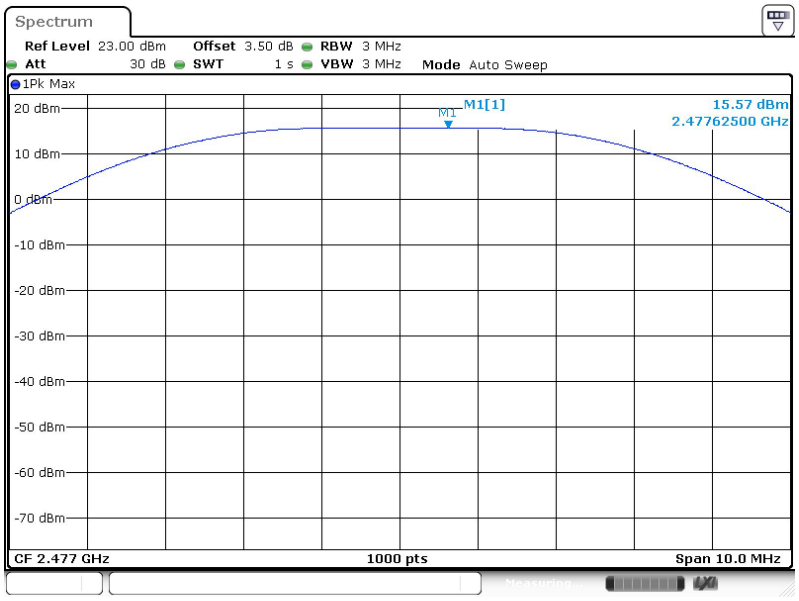
ProjectNo.:2501T12074E-RFA3 Tester:Brian Li
Date: 1.AUG.2025 20:57:48

2440MHz



ProjectNo.:2501T12074E-RFA3 Tester:Brian Li
Date: 1.AUG.2025 20:59:50

2477MHz



ProjectNo.:2501T12074E-RFA3 Tester:Brian Li
Date: 1.AUG.2025 21:07:53

EUT PHOTOGRAPHS

Please refer to the attachment 2501T12074E-RFA3 External photo and 2501T12074E-RFA3 Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2501T12074E-RFA3-TSP Test Setup photo.

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