



## FCC PART 15.247

### TEST REPORT

For

### FUJIAN YESOUL HEALTH TECHNOLOGY CO.,LTD

RM-B616, BLDG., NO.1, STRAIT ECONOMIC AND TRADE PLAZA, FUZHOU FREE TRADE ZONE, FUZHOU, FUJIAN, China

**FCC ID: 2A3YB-YS-001**

<b>Report Type:</b> Original Report	<b>Product Name:</b> YESOUL Smart Cycling Bike
<b>Report Number:</b> <u>2407X32126E-RF-01</u>	
<b>Report Date:</b> <u>2025-01-14</u>	
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## REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2407X32126E-RF-01	R1V1	2025-01-14	Initial Release

## GENERAL INFORMATION

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

Product Name:	YESOUL Smart Cycling Bike
Tested Model:	YS-001
Multiple Model(s):	YS-BJ1PLUS, C1AEV
Power Supply:	DC 24V from Adapter
Adapter Information	Model: J652-2403000DI
	Input: AC 100-240V, 50/60Hz, 1.7A
	Output: DC 24V, 3.0A, 72W
Maximum Conducted Peak Output Power:	BLE: 2.69dBm 2.4G WIFI: 18.32dBm
Frequency Range:	BLE: 2402-2480MHz 2.4G WIFI: 802.11b/g/n20: 2412-2462 MHz 802.11n40: 2422-2452 MHz
Modulation Technique:	BLE: GFSK 2.4G WIFI: 802.11b: DSSS 802.11g/n: OFDM
Antenna Type:	PCB Antenna
★Maximum Antenna Gain:	3.71dBi
EUT Received Status:	Good

*Note:*

1. The Maximum Antenna Gain was declared by manufacturer.
2. The test model is identify with the series models except for the model name, please refer to declaration letter for more detail.
3. All measurement and test data in this report was gathered from production sample serial number:  
2RG1-2 (Assigned by the BACL(Xiamen). The EUT supplied by the applicant was received on 2024-09-09)

### Objective

This report is prepared on behalf of FUJIAN YESOUL HEALTH TECHNOLOGY CO.,LTD in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission's rules.

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

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and KDB 558074 D01 15.247 Meas Guidance v05r02.

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

## Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the product as specified in CISPR 16-4-2. This uncertainty represents expanded uncertainty expressed at 95% confidence level using a coverage factor of k=2.

$$u_c(y) = \sqrt{\sum_i c_i^2 u^2(x_i)}$$

Item	Frequency Range	$U_{lab} = 2 u_c(y)$ (Confidence of 95%)
Conducted Emissions	150kHz-30MHz	2.33 dB
Radiated Spurious Emission	9kHz-30MHz	2.59 dB
	30MHz~200MHz	4.38 dB
	200MHz~1GHz	4.50 dB
	1GHz~6GHz	4.58 dB
	6GHz~18GHz	5.43 dB
	18GHz~26.5GHz	5.47 dB
Transmitter Conducted Power		0.624 dB
Power Spectral Density		0.61 dB
Occupied Bandwidth		0.053 kHz
Voltage (DC)		0.4%
Temperature		1 °C
Humidity		5%

## SYSTEM TEST CONFIGURATION

### Test Mode and Voltage

The system was configured for testing in a typical mode (as normally used by a typical user).	
Test mode:	Test Mode: Transmitting
Test voltage:	AC 120V/60Hz
Remark:	During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report.

### Description of Test Configuration

For BLE mode, 40 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	21	2444
2	2406	22	2446
3	2408	23	2448
4	2410	24	2450
5	2412	25	2452
6	2414	26	2454
7	2416	27	2456
8	2418	28	2458
9	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

EUT was tested with Channel 0, 19 and 39.

For 802.11b, 802.11g, 802.11n-HT20, 802.11n-HT40 mode, 11 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	/	/
6	2437	/	/
7	2442	/	/

For 802.11b, 802.11g, 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.

For 802.11n-HT40 mode, EUT was tested with Channel 3, 6 and 9.

## Equipment Modifications

No modification was made to the EUT tested.

### ★EUT Exercise Software

BLE & 2.4G Wi-Fi test in the engineer mode.

RF Test Tool: EspRFTestTool\_v3.6\_Manual.exe

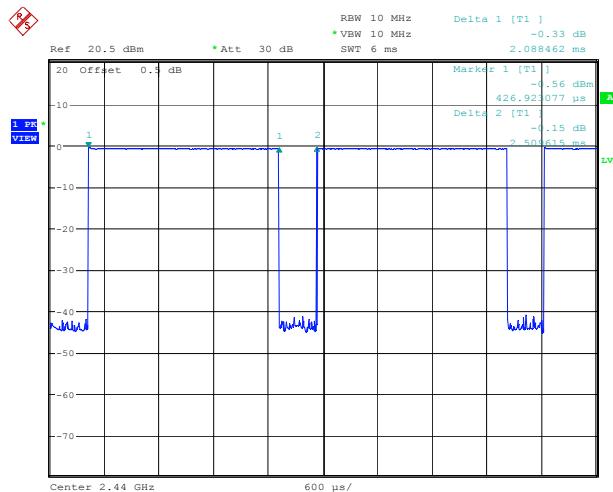
The device was tested with the worst case was performed as below:

Mode	Data rate	Power level		
		Low channel	Middle channel	High channel
802.11b	1 Mbps	12	12	12
802.11g	6 Mbps	32	32	32
802.11n-HT20	MCS0	32	32	32
802.11n-HT40	MCS0	32	32	32
BLE	1 Mbps	6	6	6

Pre-scan with all the data rates, the above data rate is the worst case for 2.4G Wi-Fi and BLE test.

**Duty cycle****For BLE:**

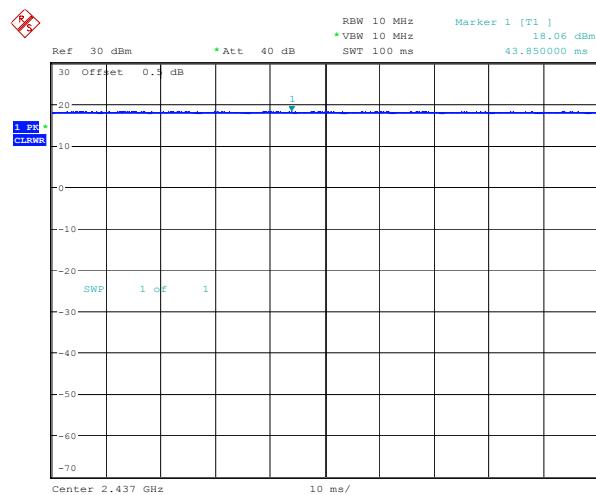
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	VBW Setting (kHz)
BLE 1Mbps	2.09	2.51	83.27	478	0.50

**BLE 1Mbps Middle Channel**

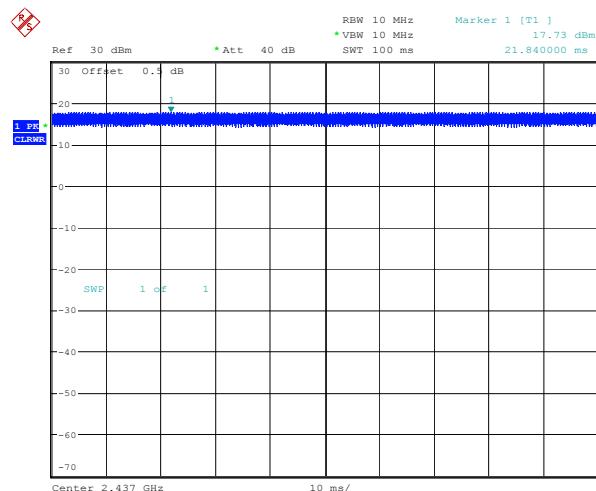
Project No.:2407X56114E-RF Tester:Jason Hu  
Date: 13.SEP.2024 17:36:26

**For 2.4G WIFI:**

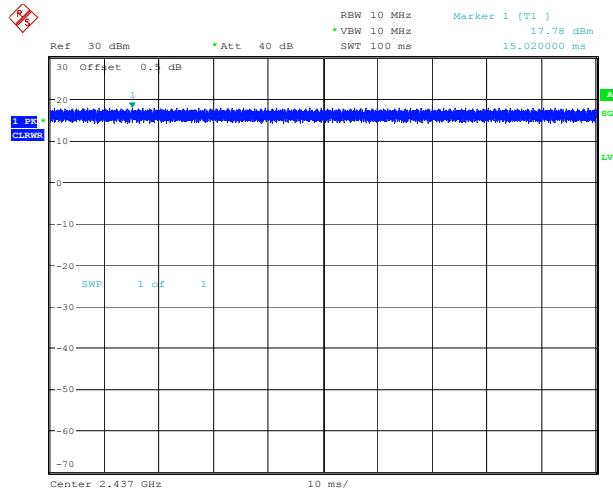
Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty Factor (dB)	VBW Setting (kHz)
802.11b	100	100	100.00	10	/	0.01
802.11g	100	100	100.00	10	/	0.01
802.11n ht20	100	100	100.00	10	/	0.01
802.11n ht40	100	100	100.00	10	/	0.01

**802.11b Middle Channel**

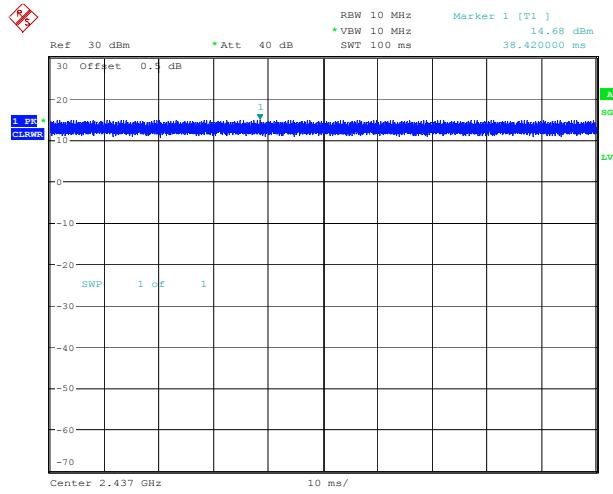
ProjectNo.:2407X32126E-RF Tester:Jason Hu  
Date: 10.SEP.2024 14:00:59

**802.11g Middle Channel**

ProjectNo.:2407X32126E-RF Tester:Jason Hu  
Date: 10.SEP.2024 14:02:07

**802.11n ht20 Middle Channel**

ProjectNo.:2407X32126E-RF Tester:Jason Hu  
Date: 10.SEP.2024 14:02:30

**802.11n ht40 Middle Channel**

ProjectNo.:2407X32126E-RF Tester:Jason Hu  
Date: 10.SEP.2024 14:02:57

## Support Equipment List and Details

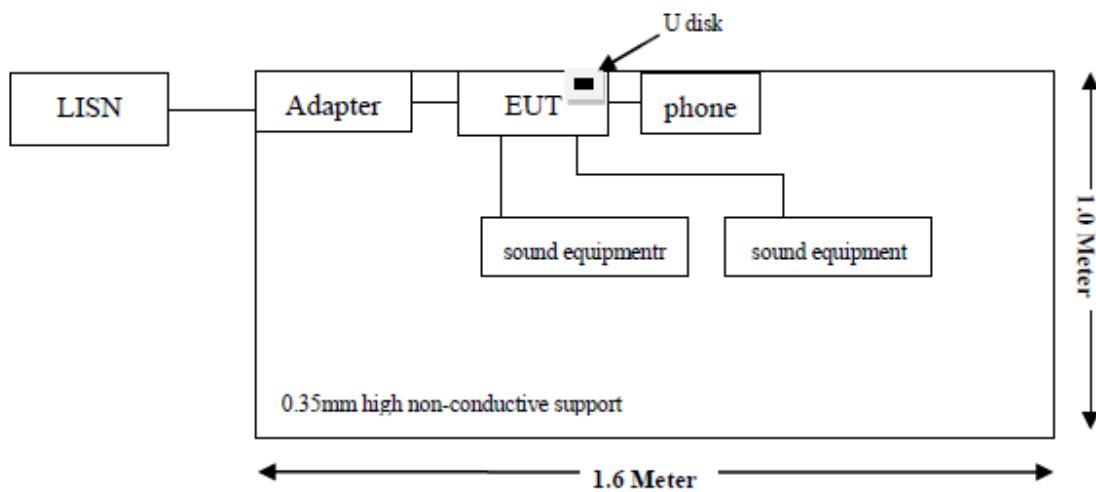
Manufacturer	Description	Model	Serial Number
Apple	mobile phone	MLDU3CH/A	KY4D4MP4YC
YESOUL	sound equipment	BT-2020:06.26.0013	Unknown
YESOUL	sound equipment	BT-2020:06.26.0011	Unknown
Kingston	U disk	DTSE9G3	Unknown
YESOUL	Adapter	J652-2403000DI	Unknown

## External I/O Cable

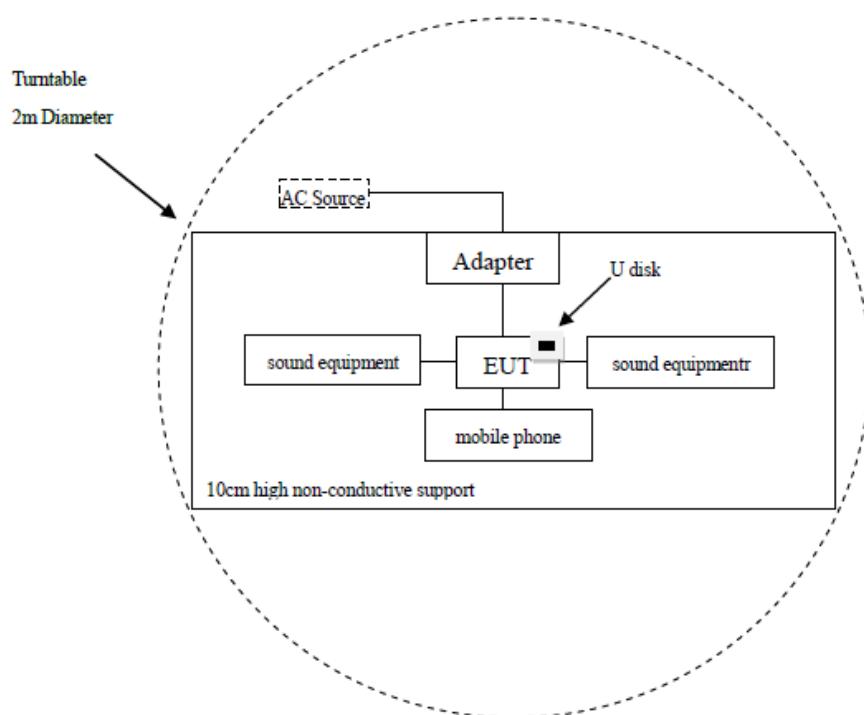
Cable Description	Length (m)	From Port	To
USB Cable	1	mobile phone	EUT
3.5mm audio cable	0.5	sound equipment	EUT
3.5mm audio cable	1.5	sound equipment	EUT
Power Cable	1.5	Adapter	EUT

## Block Diagram of Test Setup

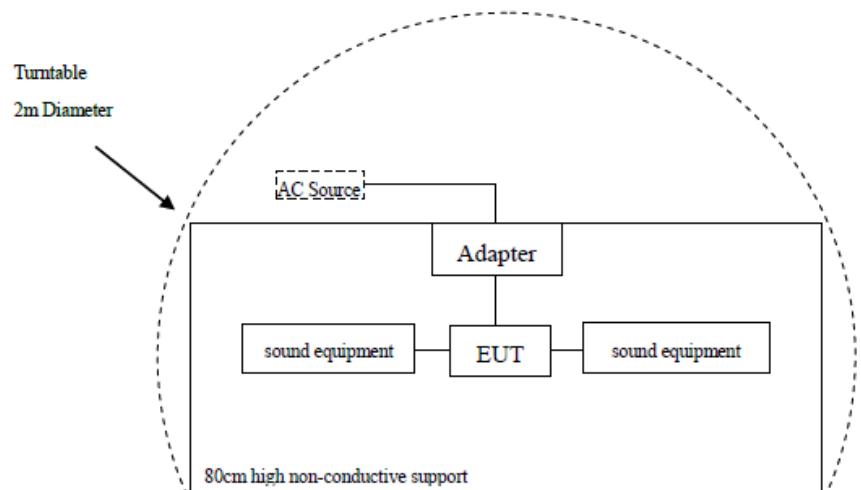
Conducted Emission:



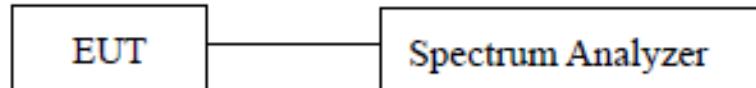
Radiated Emission:  
Below 1GHz



Above 1GHz



RF Conduction:



Note: The cable assembly insertion loss of 0.5dB was entered as an offset in the spectrum analyzer/power sensor. (Actual cable loss was unavailable at the time of testing, therefore loss of 0.5dB was assumed as worst case.) This was later verified to be true by laboratory.

## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247 (d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance
§15.247 (b)(3)	Maximum Conducted Output Power	Compliance
§15.247 (d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247 (e)	Power Spectral Density	Compliance

## TEST EQUIPMENT LIST

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Conducted Emissions</b>					
EMI Test Receiver	Rohde & Schwarz	ESR	103105	2024/03/29	2025/03/28
LISN	Rohde & Schwarz	ENV216	100129	2024/03/29	2025/03/28
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	0357.8810.54	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC001	2024/03/29	2025/03/28
Test Software	Audix	E3	18621a	N/A	N/A
<b>Radiated Emissions Below 1GHz</b>					
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2024/03/29	2025/03/28
Loop Antenna	Rohde & Schwarz	HFH2-Z2	830749/001	2023/07/27	2026/07/26
Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26
Amplifier	Sonoma	310B	120903	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	HFH2-CC	335.3609	2024/03/29	2025/03/28
Test Software	Audix	E3	18621a	N/A	N/A
<b>Radiated Emissions Above 1 GHz</b>					
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102051	2024/03/29	2025/03/28
Filter Switch Unit	Decentest	DT7220FSU	DS79904	2024/02/23	2025/02/22
Multiplex Switch Test Control Set	Decentest	DT7220SCU	DS79901	2024/02/23	2025/02/22
Horn Aantenna	EMCO	3115	9002-3355	2024/11/19	2027/11/18
Double Ridge Guide Horn Antenna	A.H.Systems	SAS-571	1980	2023/07/28	2026/07/27
Preamplifier	A.H.Systems	PAM-0118P	489	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH800A-N-6M	CC003	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH800A-N-1M	CC005	2024/03/29	2025/03/28
Horn Antenna	EMCO	3116	9407-2232	2023/07/31	2026/07/30
Preamplifier	A.H.Systems	PAM-1840	200	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH360A-2.92- 3M	CC008	2024/03/29	2025/03/28
Coaxial Cable	XINHANGWEIBO	XH360A-2.92- 1M	CC009	2024/03/29	2025/03/28
Test Software	Audix	E3	18621a	N/A	N/A
<b>RF Conducted Test</b>					
Spectrum Analyzer	Rohde & Schwarz	FSU	100405	2024/03/29	2025/03/28
Coaxial Cable	N/A	N/A	N/A	Each time	Each time
USB Wideband Power Sensor	Boonton	55318	8934	2023/09/20	2024/09/19

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

## FCC §15.203 - ANTENNA REQUIREMENT

### Applicable Standard

According to § 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### Antenna Connector Construction

The EUT has one PCB antenna arrangement for Bluetooth & 2.4G WIFI, which was permanently attached and the antenna gain is 3.71 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

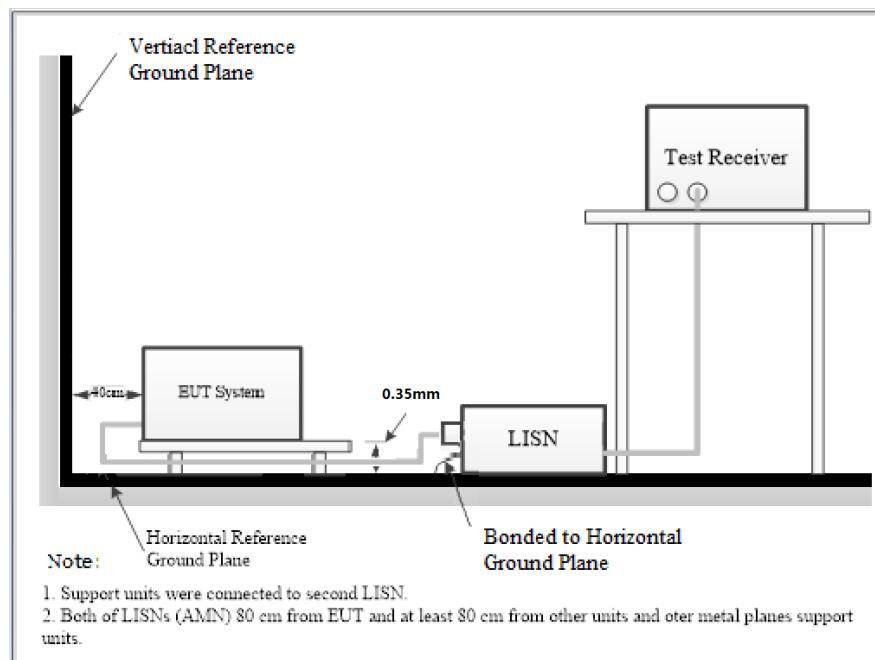
### Result: Compliance

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

### Applicable Standard

FCC§15.207

### EUT Setup



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.

## Result & Margin Calculation

The Result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\text{Factor (dB)} = \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)}$$
$$\text{Result (dB}\mu\text{V)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}$$

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

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

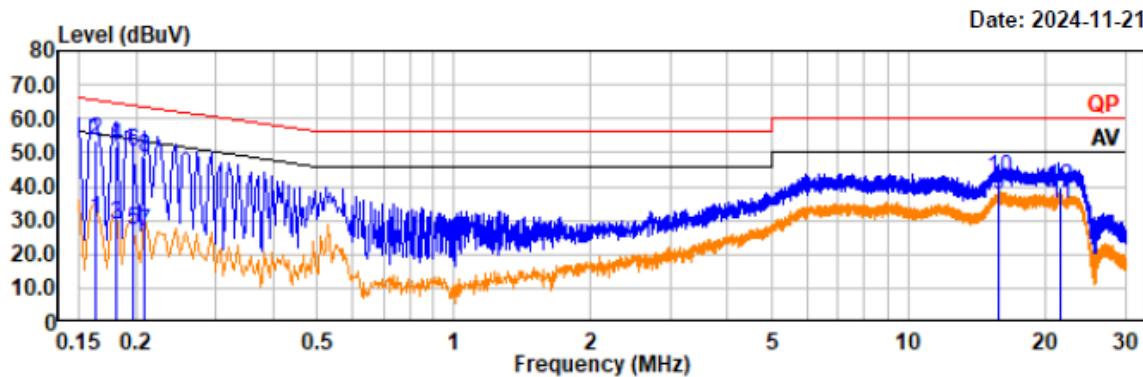
## Test Data

<b>Temperature:</b>	25.6°C
<b>Relative Humidity:</b>	57%
<b>ATM Pressure:</b>	100.1kPa
<b>Test Date:</b>	2024-11-21
<b>Test Engineer:</b>	Spike Gao

**For BLE:***EUT operation mode: Transmitting in BLE 1Mbps high channel (worst case).*

Project No.: 2407X32126E-RF  
Test Mode: 1M 2480  
EUT Model: YS-001

Temp/Humi/ATM: 25.6°C/57%/100.1kPa  
Tested by: Spike Gao  
Power Source: AC 120V/60Hz

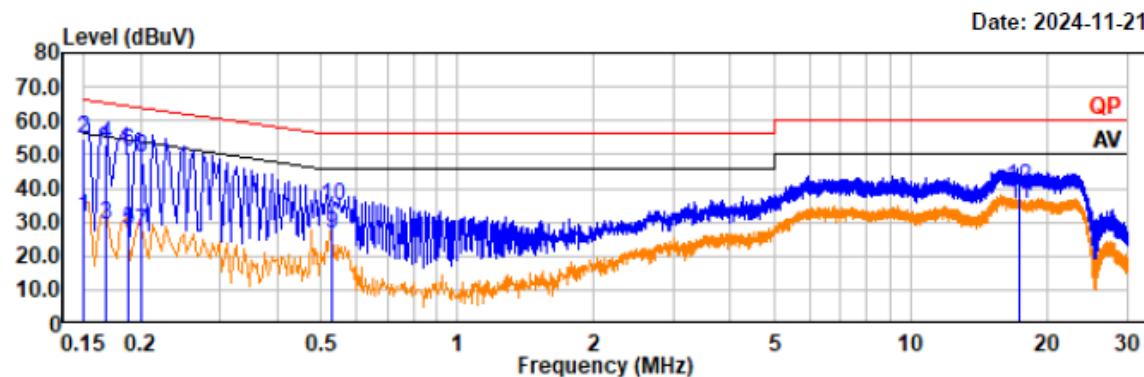


Trace: 1

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.16	9.32	21.11	30.43	55.31	24.88	Line	Average
0.16	32.59	21.11	53.70	65.31	11.61	Line	QP
0.18	7.39	21.18	28.57	54.41	25.84	Line	Average
0.18	30.45	21.18	51.63	64.41	12.78	Line	QP
0.20	5.62	21.25	26.87	53.76	26.89	Line	Average
0.20	28.74	21.25	49.99	63.76	13.77	Line	QP
0.21	5.19	21.23	26.42	53.28	26.86	Line	Average
0.21	27.48	21.23	48.71	63.28	14.57	Line	QP
15.84	16.15	21.10	37.25	50.00	12.75	Line	Average
15.84	21.39	21.10	42.49	60.00	17.51	Line	QP
21.47	13.70	21.17	34.87	50.00	15.13	Line	Average
21.47	18.70	21.17	39.87	60.00	20.13	Line	QP

Project No.: 2407X32126E-RF  
Test Mode: 1M 2480  
EUT Model: YS-001

Temp/Humi/ATM: 25.6°C/57%/100.1kPa  
Tested by: Spike Gao  
Power Source: AC 120V/60Hz



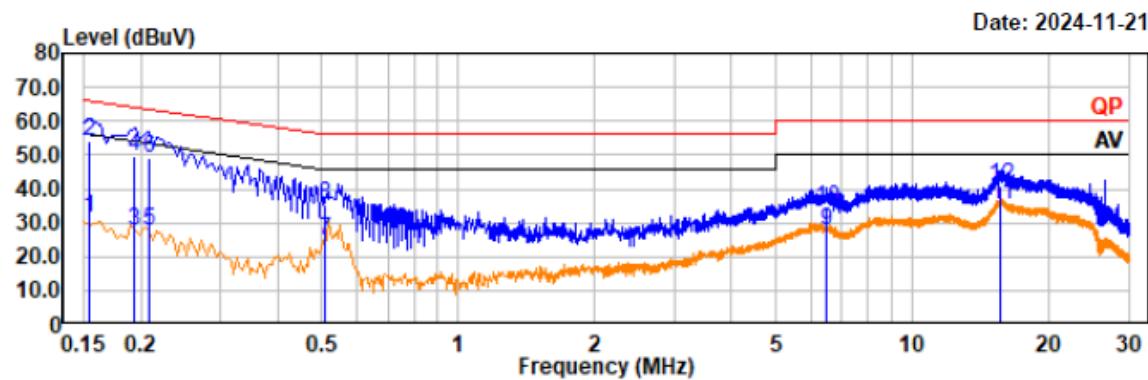
Trace: 1

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.15	10.82	20.83	31.65	55.99	24.34	Neutral	Average
0.15	33.82	20.83	54.65	65.99	11.34	Neutral	QP
0.17	8.56	20.93	29.49	55.10	25.61	Neutral	Average
0.17	32.08	20.93	53.01	65.10	12.09	Neutral	QP
0.19	6.40	21.01	27.41	54.14	26.73	Neutral	Average
0.19	29.69	21.01	50.70	64.14	13.44	Neutral	QP
0.20	5.75	21.07	26.82	53.57	26.75	Neutral	Average
0.20	28.24	21.07	49.31	63.57	14.26	Neutral	QP
0.53	6.11	20.31	26.42	46.00	19.58	Neutral	Average
0.53	14.46	20.31	34.77	56.00	21.23	Neutral	QP
17.26	14.13	21.01	35.14	50.00	14.86	Neutral	Average
17.26	19.36	21.01	40.37	60.00	19.63	Neutral	QP

**For 2.4G WIFI:***EUT operation mode: Transmitting in Wifi 802.11b middle channel (worst case)*

Project No.: 2407X32126E-RF  
 Test Mode: 11b 2437  
 EUT Model: YS-001

Temp/Humi/ATM: 25.6°C /57%/100.1kPa  
 Tested by: Spike Gao  
 Power Source: AC 120V/60Hz

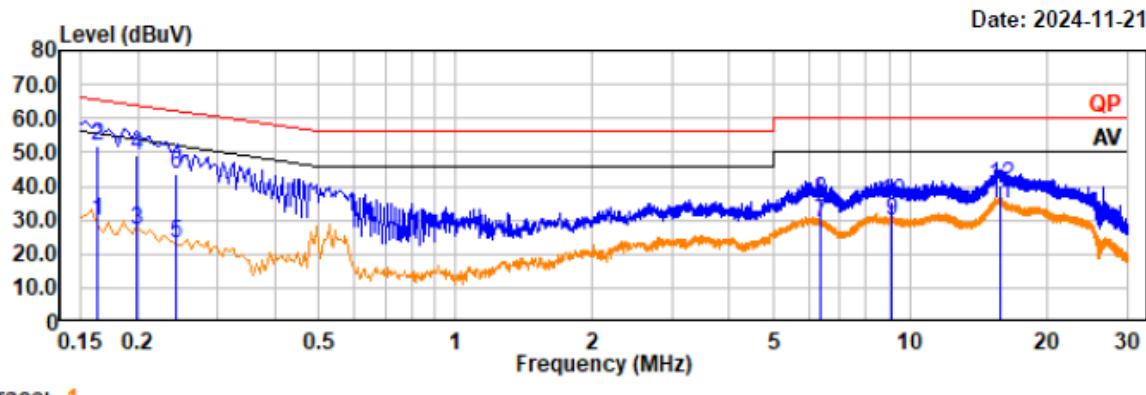


Trace: 1

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.15	12.15	19.50	31.65	55.75	24.10	Line	Average
0.15	34.35	19.50	53.85	65.75	11.90	Line	QP
0.19	7.55	19.99	27.54	53.88	26.34	Line	Average
0.19	29.56	19.99	49.55	63.88	14.33	Line	QP
0.21	7.30	20.05	27.35	53.28	25.93	Line	Average
0.21	29.03	20.05	49.08	63.28	14.20	Line	QP
0.51	5.01	19.66	24.67	46.00	21.33	Line	Average
0.51	15.51	19.66	35.17	56.00	20.83	Line	QP
6.48	8.17	19.64	27.81	50.00	22.19	Line	Average
6.48	14.61	19.64	34.25	60.00	25.75	Line	QP
15.67	15.64	19.78	35.42	50.00	14.58	Line	Average
15.67	20.93	19.78	40.71	60.00	19.29	Line	QP

Project No.: 2407X32126E-RF  
Test Mode: 11b 2437  
EUT Model: YS-001

Temp/Humi/ATM: 25.6°C/57%/100.1kPa  
Tested by: Spike Gao  
Power Source: AC 120V/60Hz



Trace: 1

Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.16	10.60	19.24	29.84	55.32	25.48	Neutral	Average
0.16	32.67	19.24	51.91	65.32	13.41	Neutral	QP
0.20	7.64	19.46	27.10	53.67	26.57	Neutral	Average
0.20	29.60	19.46	49.06	63.67	14.61	Neutral	QP
0.24	3.71	19.49	23.20	52.00	28.80	Neutral	Average
0.24	24.29	19.49	43.78	62.00	18.22	Neutral	QP
6.36	9.63	19.59	29.22	50.00	20.78	Neutral	Average
6.36	16.07	19.59	35.66	60.00	24.34	Neutral	QP
9.07	10.26	19.45	29.71	50.00	20.29	Neutral	Average
9.07	16.12	19.45	35.57	60.00	24.43	Neutral	QP
15.76	15.37	19.58	34.95	50.00	15.05	Neutral	Average
15.76	20.53	19.58	40.11	60.00	19.89	Neutral	QP

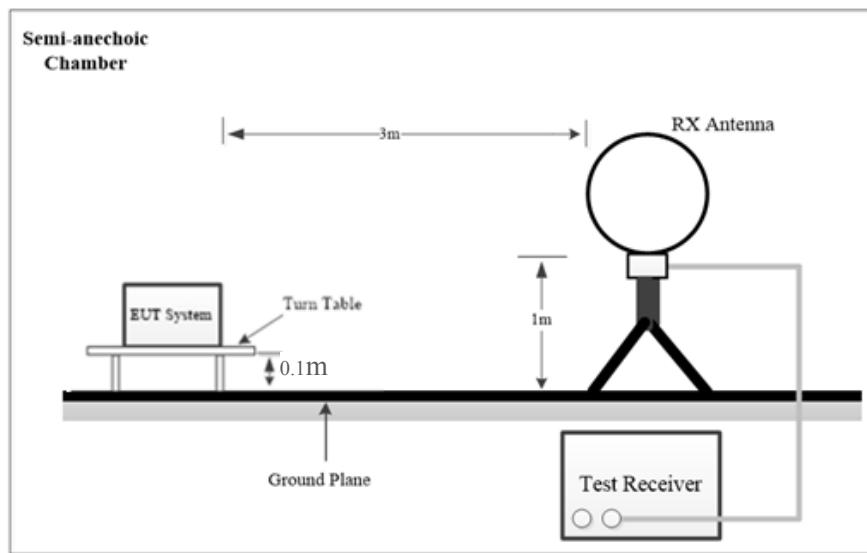
## FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

### Applicable Standard

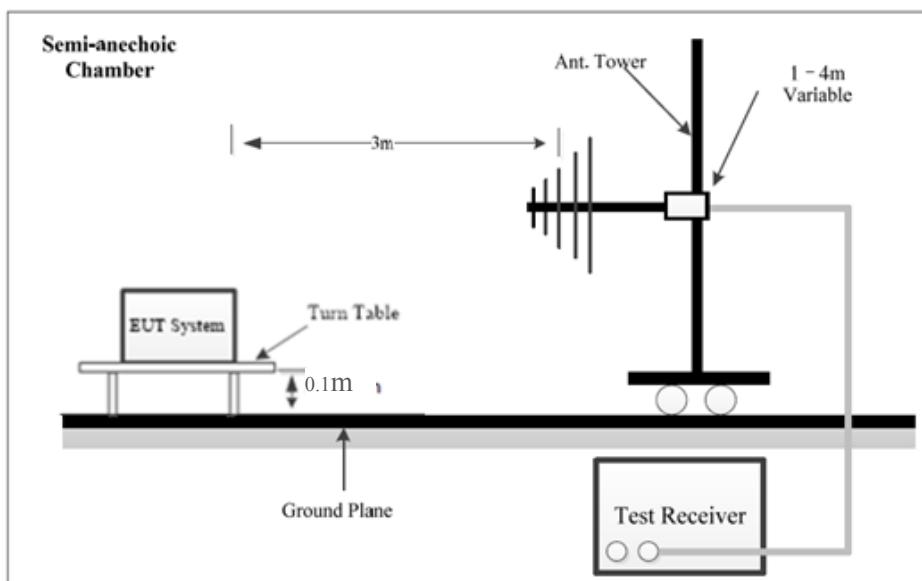
FCC §15.247 (d); §15.209; §15.205;

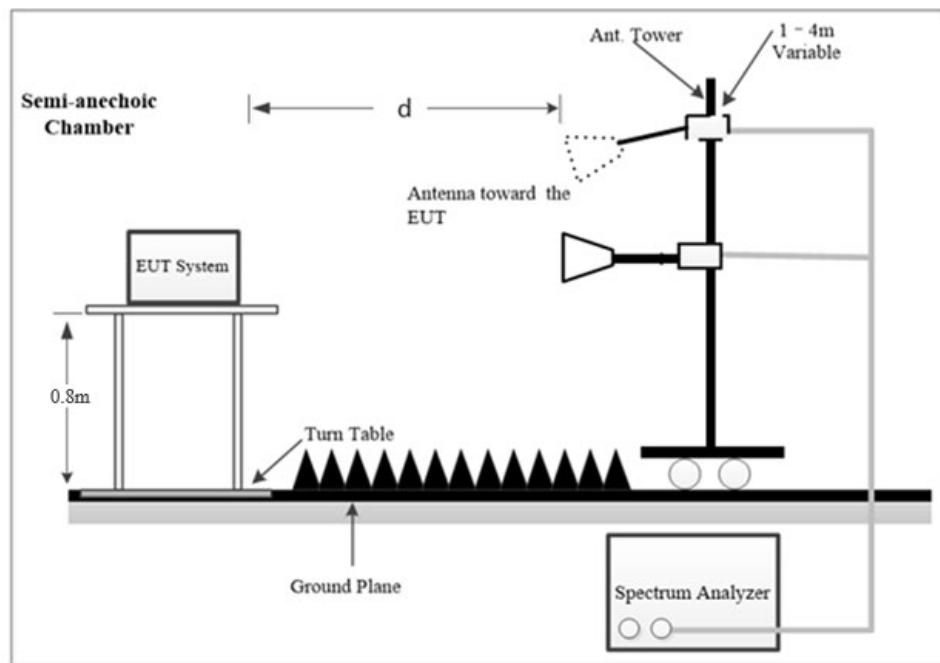
### EUT Setup

**9 kHz-30MHz:**



**30MHz -1 GHz:**



**Above 1GHz:**

The radiated emission tests using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

NOTE: d is testing distance;

For Radiated Emission test (1GHz-18GHz) and Bandedge Emission test, which was performed at 3 m distance.

For Radiated Emission test (18GHz-25GHz), which was performed at 1.0 m distance, according to ANSI C63.10-2013, the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.0m.

Distance extrapolation Factor = $20 \log (\text{specific distance [3m]}/\text{test distance [1.0m]})$  dB= 9.54 dB

**EMI Test Receiver & Spectrum Analyzer Setup**

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver & spectrum analyzer setup were set with the following configurations:

**Below 1GHz:**

Frequency Range	RBW	Video B/W	IF B/W	Measurement
9 kHz – 150 kHz	300Hz	1 kHz	200Hz	QP
150 kHz – 30 MHz	10 kHz	30 kHz	9 kHz	QP
30 MHz – 1000 MHz	100 kHz	300 kHz	/	PK
	/	/	120kHz	QP

**Above 1GHz:**

Pre-scan:

Duty Cycle	RBW	VBW	Measurement
Any	1MHz	3MHz	PK
>98%	1MHz	5kHz	AV
<98%	1MHz	≥1/T, not less than 5kHz	AV

Final measurement for emission identified during the pre-scan:

Duty Cycle	RBW	VBW	Measurement
Any	1MHz	3MHz	PK
>98%	1MHz	10Hz	AV
<98%	1MHz	1/T	AV

Note: T is minimum transmission duration

**Test Procedure**

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

For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. 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, then the following statement shall be made: "all emissions were greater than 20 dB below the limit."

Below 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

Above 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is below the AV emission limit, there's no need to record the measured AV level of the emissions in the report.

**Result & Margin Calculation**

The Result 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:

For 9 kHz to 18GHz Radiated emission test

$$\text{Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

For 18GHz to 25GHz Radiated emission test and Bandedge emissions test

$$\text{Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)} - \text{Extrapolation factor (dB)}$$

Extrapolation factor=9.54dB (distance=1m)

$$\text{Result (dB}\mu\text{V/m)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB/m)}$$

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

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Result (dB}\mu\text{V/m)}$$

## Test Data

Please refer to the below table and plots.

Frequency Range:	Below 1 GHz	Above 1 GHz
Temperature:	23.1°C~23.7°C	23.1°C~24.1°C
Relative Humidity:	48 %~52 %	48%~56%
ATM Pressure:	100.1kPa	100.1kPa
Test Date:	2024-11-20~2024-11-25	2024-10-05~2024-12-16
Test Engineer:	Wlif Wu	Wlif Wu

## 1) 9 kHz~30MHz

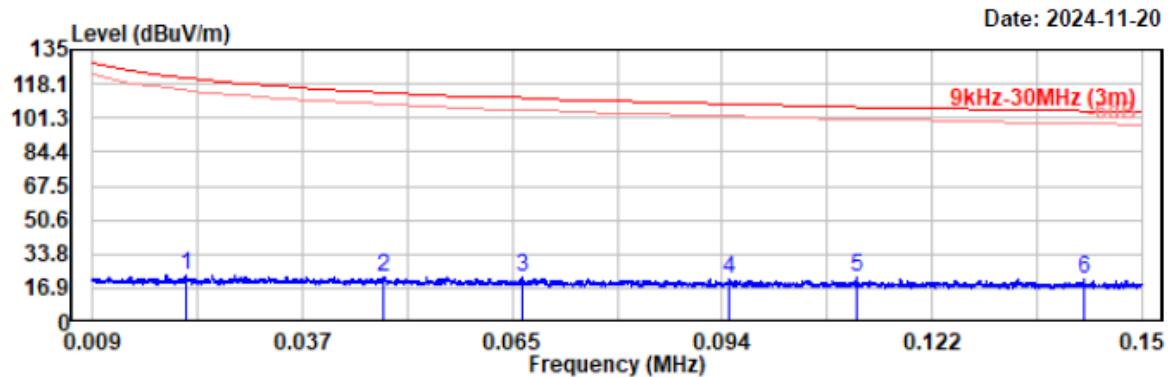
*Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, parallel is worst case.*

For BLE:

EUT operation mode: Transmitting in BLE 1Mbps high channel (worst case).

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

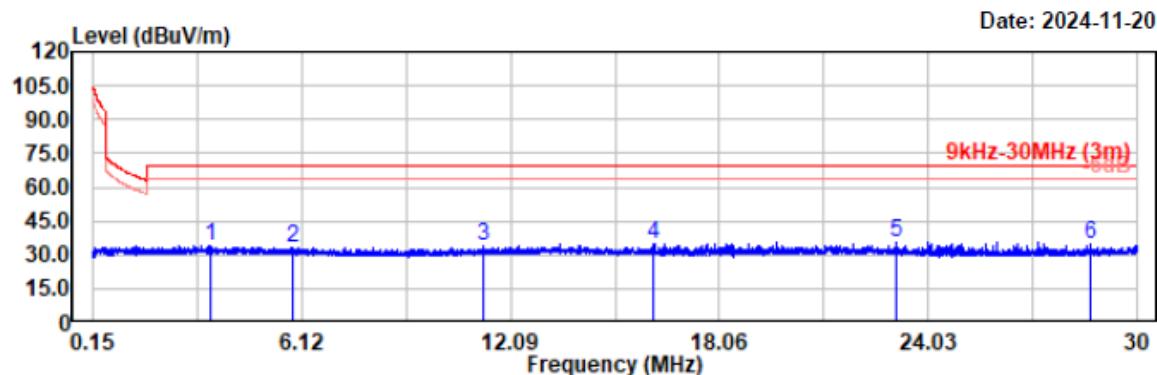
Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.022	3.72	19.83	23.55	121.01	97.46	Peak
0.048	2.54	19.91	22.45	113.98	91.53	Peak
0.067	2.05	19.84	21.89	111.12	89.23	Peak
0.094	1.45	19.78	21.23	108.10	86.87	Peak
0.112	2.29	19.73	22.02	106.65	84.63	Peak
0.142	1.45	19.73	21.18	104.54	83.36	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.1°C /48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz

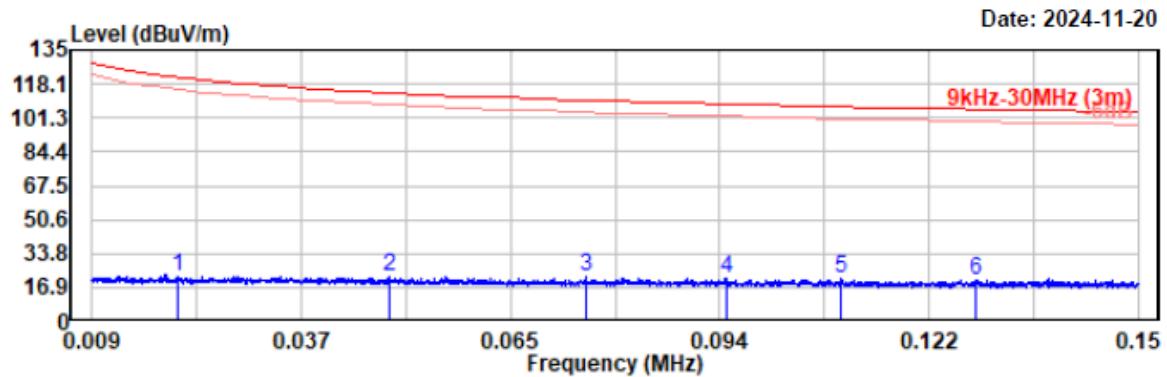


Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
3.484	14.26	19.80	34.06	69.58	35.52	Peak
5.857	13.51	19.79	33.30	69.58	36.28	Peak
11.317	14.20	19.72	33.92	69.58	35.66	Peak
16.168	15.01	19.84	34.85	69.58	34.73	Peak
23.129	15.41	20.17	35.58	69.58	34.00	Peak
28.690	14.61	20.02	34.63	69.58	34.95	Peak

**For 2.4G Wifi:***EUT operation mode: Transmitting in Wifi 802.11b middle channel (worst case).*

Project No.: 2407X32126E-RF  
Test Mode: 11b 2437  
EUT Model: YS-001  
Test distance: 3m

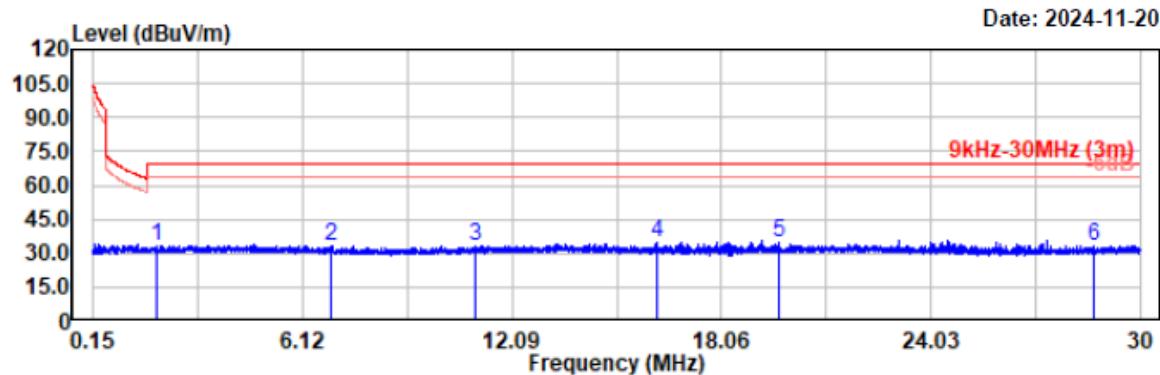
Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.021	2.48	19.82	22.30	121.38	99.08	Peak
0.049	2.22	19.91	22.13	113.79	91.66	Peak
0.076	3.04	19.75	22.79	110.04	87.25	Peak
0.094	2.05	19.78	21.83	108.10	86.27	Peak
0.110	1.59	19.73	21.32	106.78	85.46	Peak
0.128	0.72	19.73	20.45	105.45	85.00	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11b 2437  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
1.950	13.80	19.58	33.38	69.58	36.20	Peak
6.953	13.34	19.68	33.02	69.58	36.56	Peak
11.036	13.67	19.71	33.38	69.58	36.20	Peak
16.227	14.66	19.84	34.50	69.58	35.08	Peak
19.705	14.40	20.07	34.47	69.58	35.11	Peak
28.684	13.10	20.03	33.13	69.58	36.45	Peak

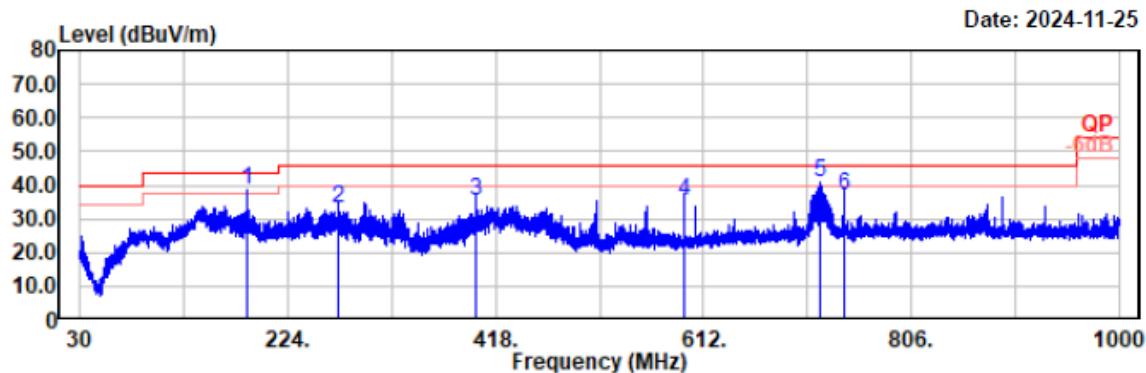
## 2) 30 MHz-1GHz

For BLE:

EUT operation mode: Transmitting in BLE 1Mbps high channel (worst case).

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.7°C/52%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz

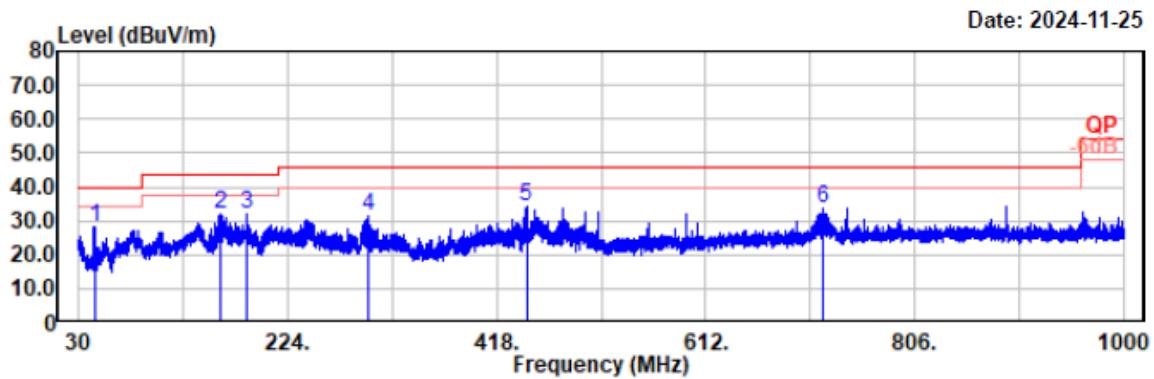


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
186.13	51.06	-12.51	38.55	43.50	4.95	Horizontal	QP
271.53	43.08	-9.74	33.34	46.00	12.66	Horizontal	QP
400.06	41.88	-6.39	35.49	46.00	10.51	Horizontal	QP
594.06	37.77	-2.44	35.33	46.00	10.67	Horizontal	QP
720.00	41.03	0.05	41.08	46.00	4.92	Horizontal	QP
742.56	36.80	0.38	37.18	46.00	8.82	Horizontal	QP

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.7°C/52%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



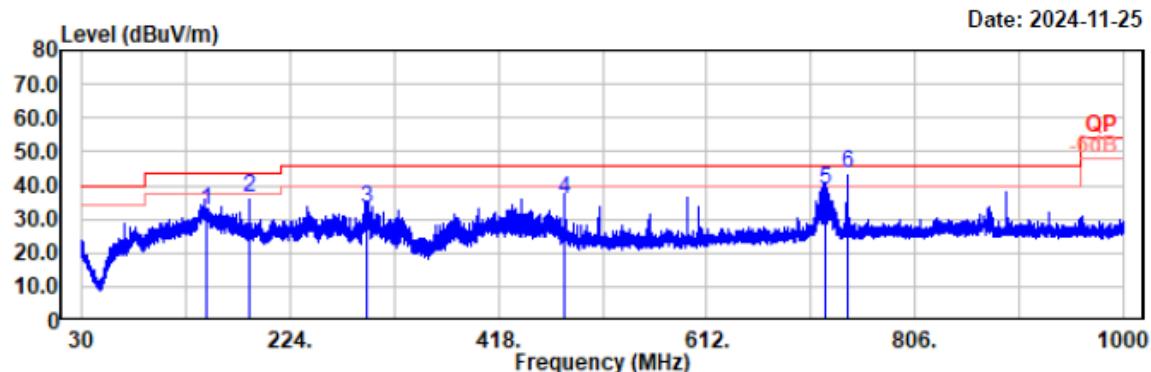
Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
44.65	43.38	-14.97	28.41	40.00	11.59	Vertical	Peak
162.11	43.35	-11.44	31.91	43.50	11.59	Vertical	Peak
186.17	44.58	-12.51	32.07	43.50	11.43	Vertical	Peak
298.11	40.91	-9.22	31.69	46.00	14.31	Vertical	Peak
445.55	39.01	-4.94	34.07	46.00	11.93	Vertical	Peak
720.06	33.76	0.05	33.81	46.00	12.19	Vertical	Peak

**For 2.4G WIFI:***EUT operation mode: Transmitting in Wifi 802.11b middle channel (worst case).*

Project No.: 2407X32126E-RF  
Test Mode: 11b-2437  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.7°C/52%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC 120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
145.50	43.56	-10.97	32.59	43.50	10.91	Horizontal	QP
186.12	49.02	-12.52	36.50	43.50	7.00	Horizontal	QP
295.39	42.66	-9.29	33.37	46.00	12.63	Horizontal	QP
480.08	39.51	-3.83	35.68	46.00	10.32	Horizontal	QP
722.10	38.43	0.05	38.48	46.00	7.52	Horizontal	QP
742.53	43.47	0.38	43.85	46.00	2.15	Horizontal	QP

Project No.: 2407X32126E-RF

Temp/Humi/ATM: 23.7°C/52%/100.1kPa

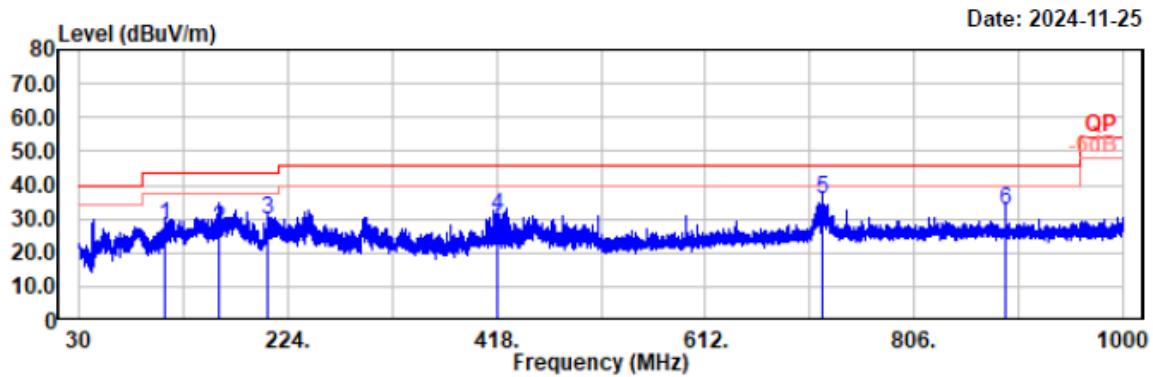
Test Mode: 11b-2437

Tested by: Wlif Wu

EUT Model: YS-001

Power Source: AC 120V/60Hz

Test distance: 3m



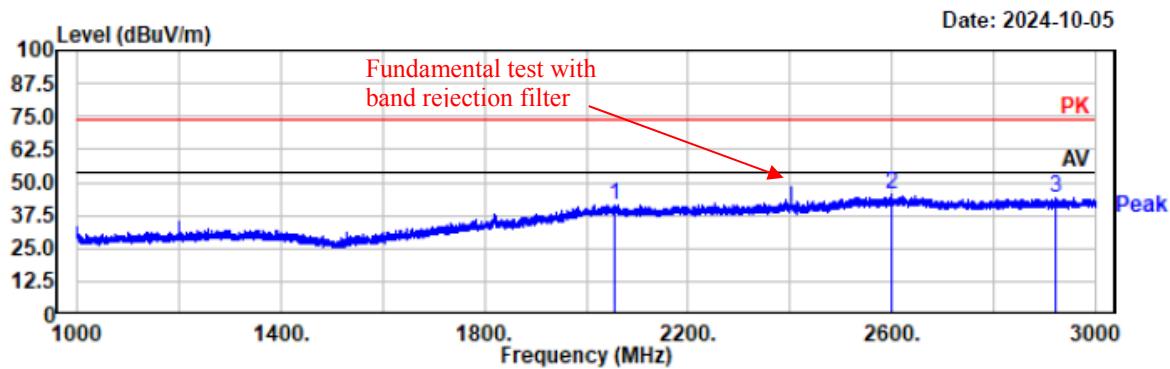
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
109.35	40.43	-12.10	28.33	43.50	15.17	Vertical	QP
160.60	38.58	-11.50	27.08	43.50	16.42	Vertical	QP
204.99	41.77	-12.07	29.70	43.50	13.80	Vertical	QP
418.68	36.64	-5.68	30.96	46.00	15.04	Vertical	QP
720.06	35.61	0.05	35.66	46.00	10.34	Vertical	QP
891.07	30.25	2.49	32.74	46.00	13.26	Vertical	QP

### 3) 1GHz~3GHz

For BLE 1Mbps:

Project No.: 2407X32126E-RF  
Test Mode: 1M-2402  
EUT Model: YS-001  
Test distance: 3m

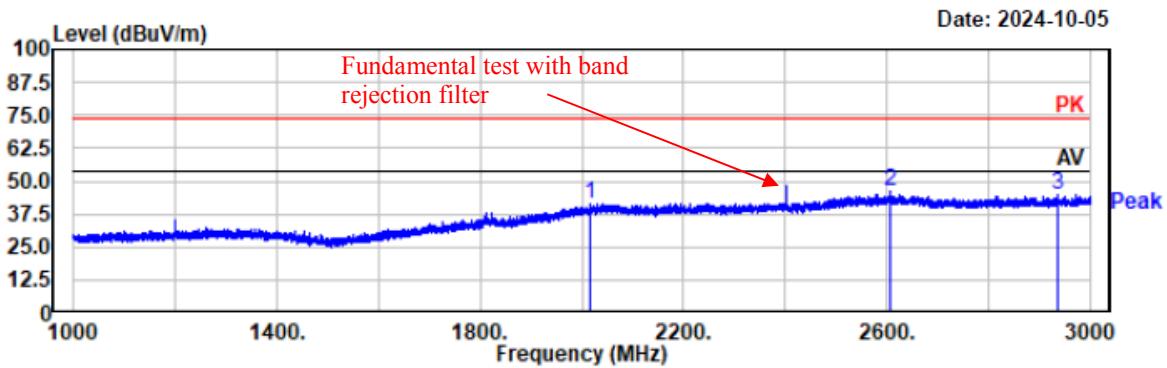
Temp/Humi/ATM: 24.1°C/56%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2055.60	46.24	-4.89	41.35	74.00	32.65	horizontal	Peak
2598.40	47.31	-1.96	45.35	74.00	28.65	horizontal	Peak
2920.60	47.13	-2.88	44.25	74.00	29.75	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2402  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 24.1°C/56%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



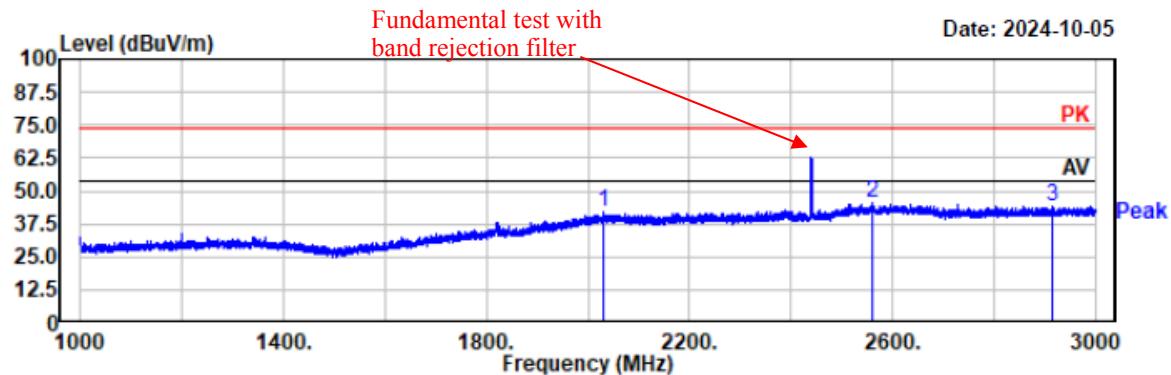
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2014.80	46.65	-5.37	41.28	74.00	32.72	vertical	Peak
2607.20	48.02	-1.95	46.07	74.00	27.93	vertical	Peak
2936.80	47.47	-2.81	44.66	74.00	29.34	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2440  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 24.1°C/56%/100.1kPa

Tested by: Wlif Wu

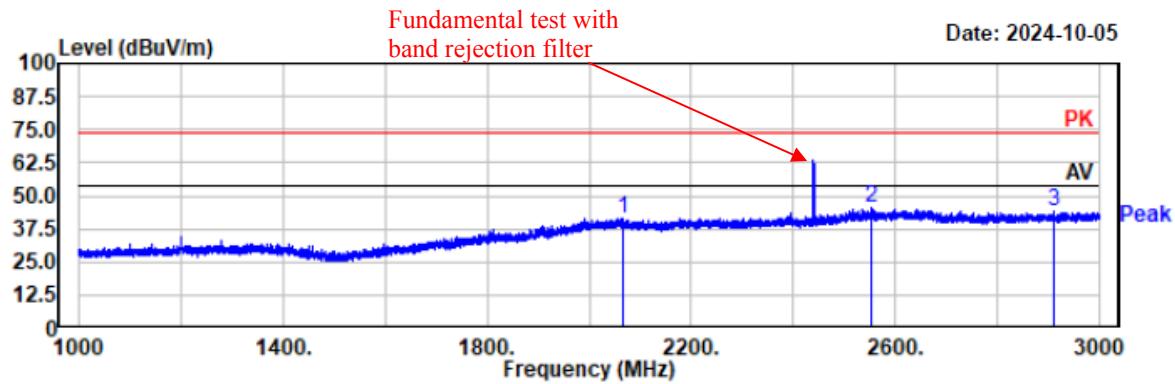
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2029.60	47.11	-5.13	41.98	74.00	32.02	horizontal	Peak
2559.00	47.55	-2.09	45.46	74.00	28.54	horizontal	Peak
2916.00	47.01	-2.89	44.12	74.00	29.88	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2440  
EUT Model: YS-001  
Test distance: 3m

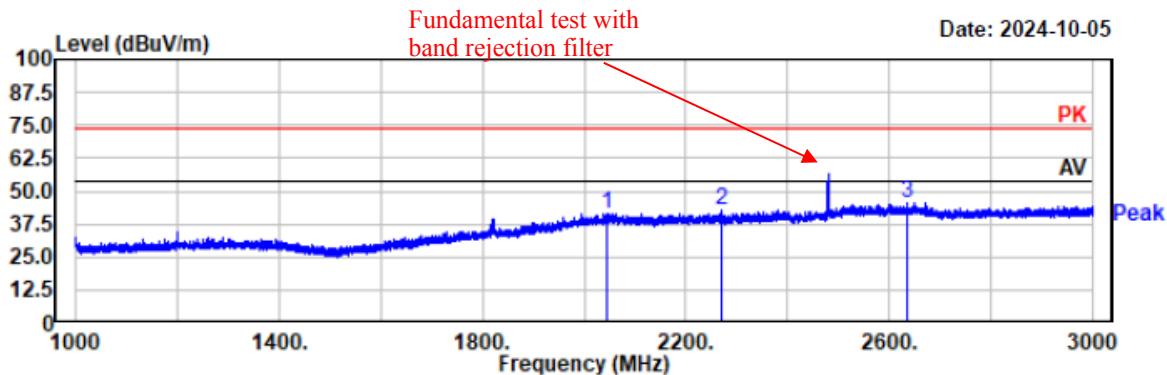
Temp/Humi/ATM: 24.1°C/56%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2065.80	46.49	-5.04	41.45	74.00	32.55	vertical	Peak
2554.80	47.30	-2.11	45.19	74.00	28.81	vertical	Peak
2909.80	46.73	-2.93	43.80	74.00	30.20	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

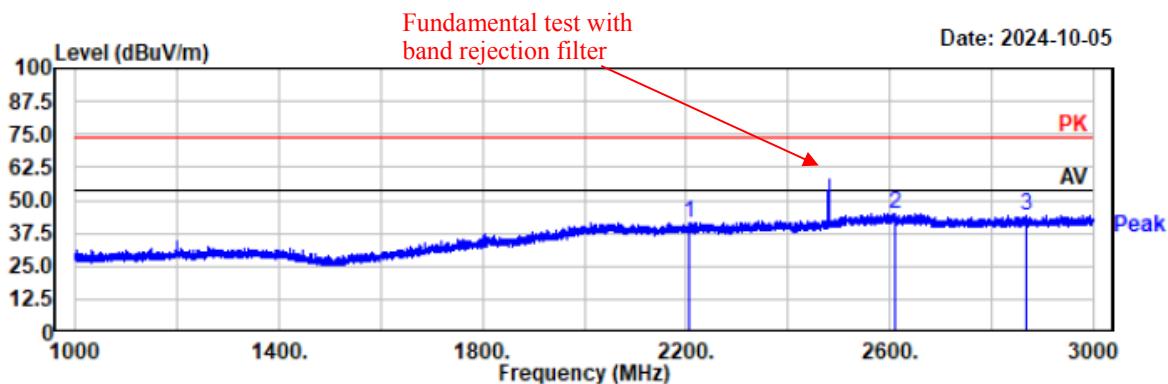
Temp/Humi/ATM: 24.1°C/56%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2044.60	46.48	-4.91	41.57	74.00	32.43	horizontal	Peak
2271.00	47.64	-5.03	42.61	74.00	31.39	horizontal	Peak
2636.20	47.45	-1.99	45.46	74.00	28.54	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

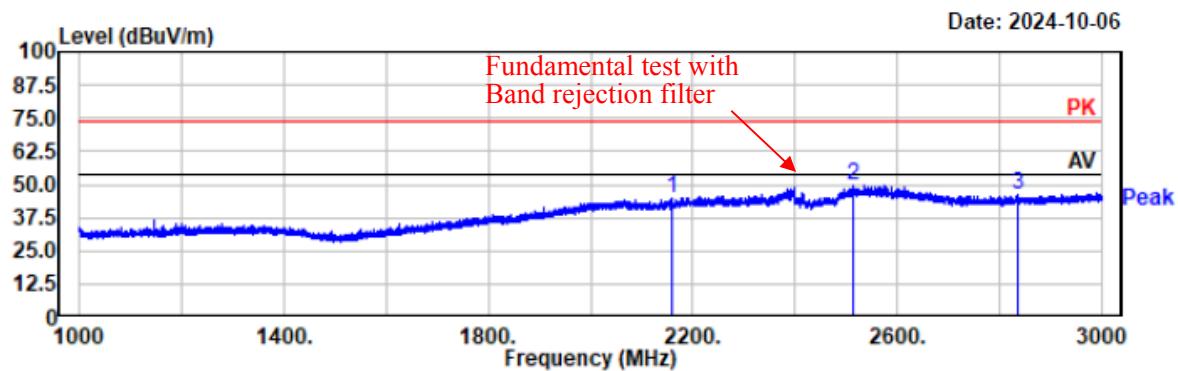
Temp/Humi/ATM: 24.1°C/56%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



**For 2.4G WIFI:**

Project No.: 2407X32126E-RF  
Test Mode: 11b-2412  
EUT Model: YS-001  
Test distance: 3m

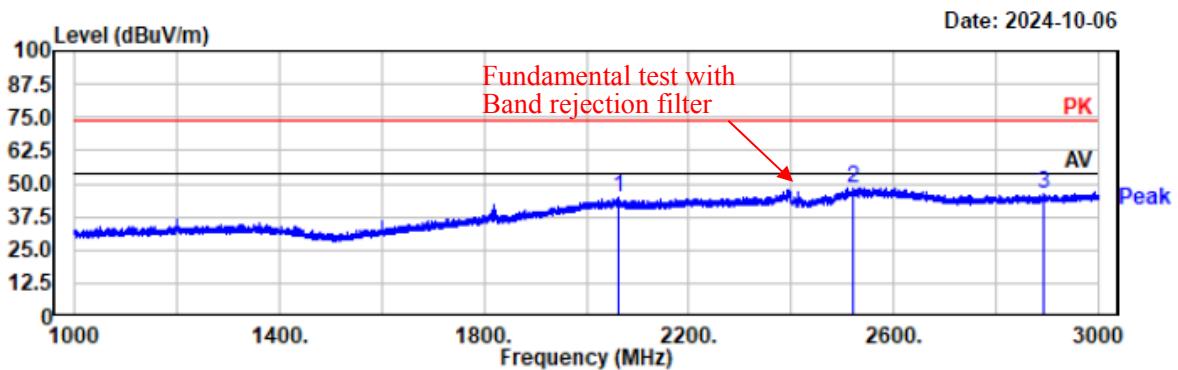
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2160.00	50.44	-5.43	45.01	74.00	28.99	horizontal	Peak
2514.40	52.56	-2.63	49.93	74.00	24.07	horizontal	Peak
2837.00	49.29	-3.17	46.12	74.00	27.88	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11b-2412  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



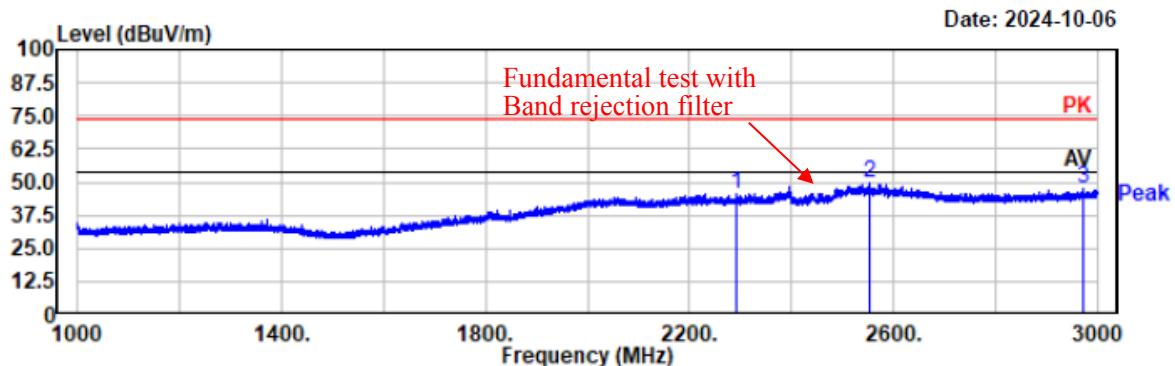
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2063.00	49.60	-5.00	44.60	74.00	29.40	vertical	Peak
2520.80	50.99	-2.53	48.46	74.00	25.54	vertical	Peak
2891.60	48.94	-2.99	45.95	74.00	28.05	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11b-2437  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.6°C /53%/100.1kPa

Tested by: Wlif Wu

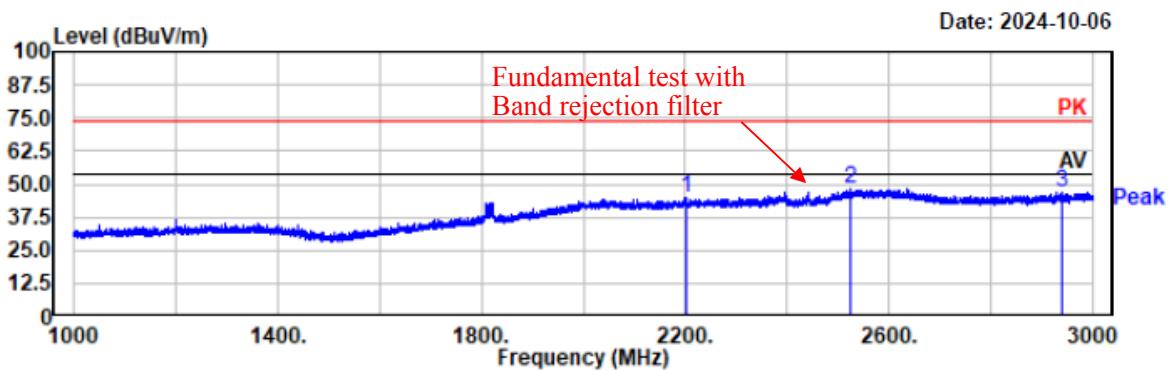
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2293.40	50.83	-5.07	45.76	74.00	28.24	horizontal	Peak
2553.20	51.45	-2.13	49.32	74.00	24.68	horizontal	Peak
2971.00	50.32	-2.69	47.63	74.00	26.37	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11b-2437  
EUT Model: YS-001  
Test distance: 3m

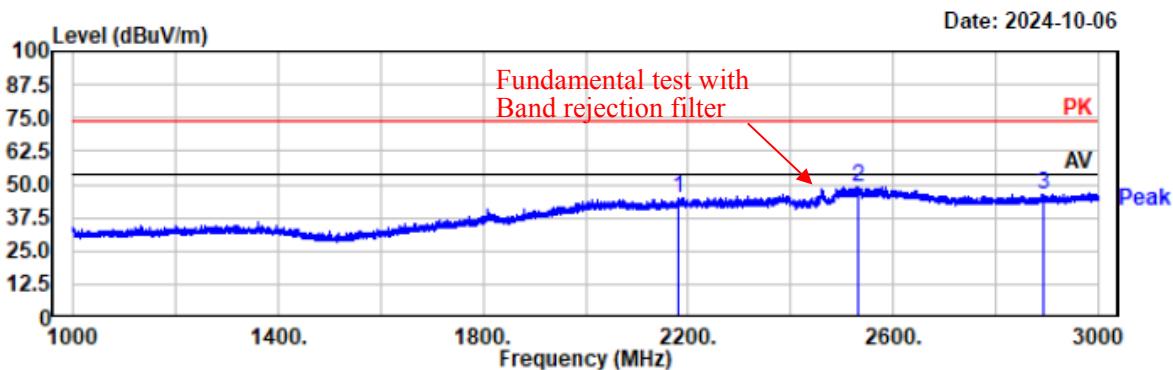
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2202.00	49.84	-5.04	44.80	74.00	29.20	vertical	Peak
2523.60	50.95	-2.50	48.45	74.00	25.55	vertical	Peak
2940.20	49.76	-2.80	46.96	74.00	27.04	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11b-2462  
EUT Model: YS-001  
Test distance: 3m

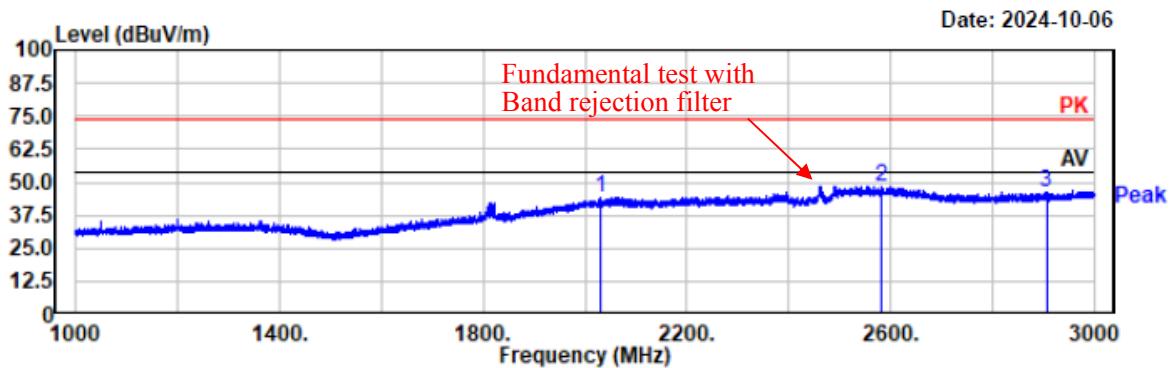
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2180.40	50.11	-5.22	44.89	74.00	29.11	horizontal	Peak
2531.80	51.54	-2.37	49.17	74.00	24.83	horizontal	Peak
2894.60	49.22	-2.97	46.25	74.00	27.75	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11b-2462  
EUT Model: YS-001  
Test distance: 3m

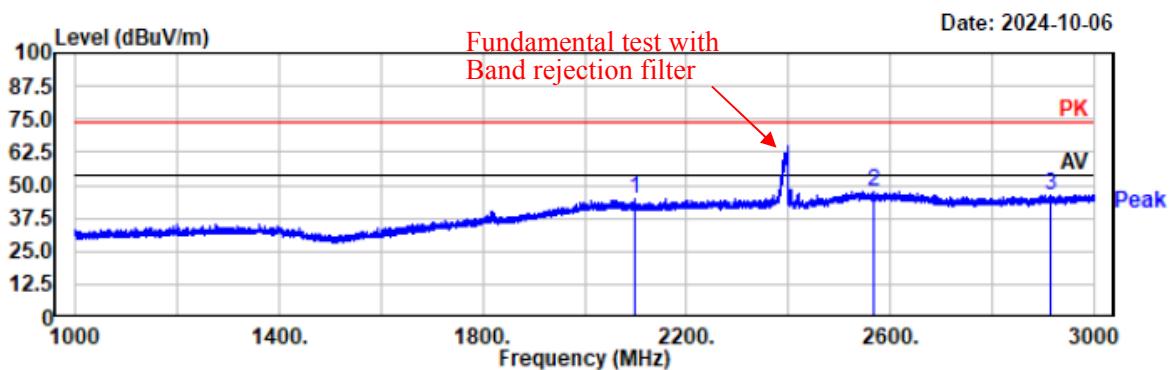
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2032.00	49.34	-5.09	44.25	74.00	29.75	vertical	Peak
2583.00	50.57	-2.02	48.55	74.00	25.45	vertical	Peak
2905.80	49.33	-2.94	46.39	74.00	27.61	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11g-2412  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.6°C/53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2098.20	50.20	-5.50	44.70	74.00	29.30	horizontal	Peak
2566.20	49.61	-2.08	47.53	74.00	26.47	horizontal	Peak
2915.60	49.32	-2.89	46.43	74.00	27.57	horizontal	Peak

Project No.: 2407X32126E-RF

Test Mode: 11g-2412

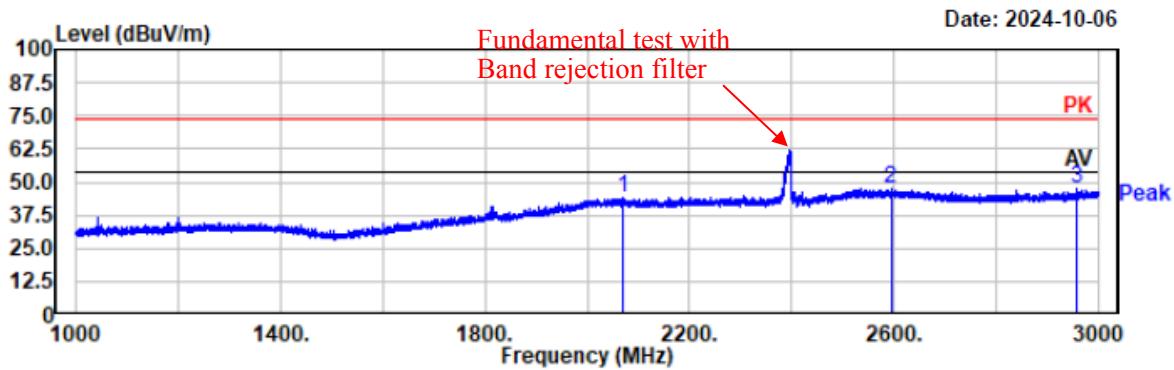
EUT Model: YS-001

Test distance: 3m

Temp/Humi/ATM: 23.6°C /53%/100.1kPa

Tested by: Wlif Wu

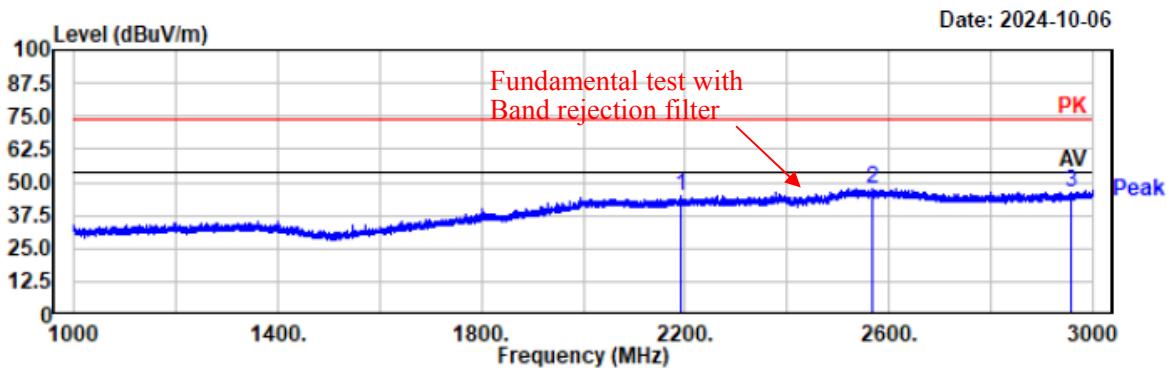
Power Source: AC120V/60Hz



Freq MHz	Reading dB <sub>BuV</sub>	Factor dB/m	Result dB <sub>BuV/m</sub>	Limit dB <sub>BuV/m</sub>	Margin dB	Polarity	Remark
2070.80	49.50	-5.11	44.39	74.00	29.61	vertical	Peak
2594.40	49.48	-1.96	47.52	74.00	26.48	vertical	Peak
2956.20	50.01	-2.73	47.28	74.00	26.72	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11g-2437  
EUT Model: YS-001  
Test distance: 3m

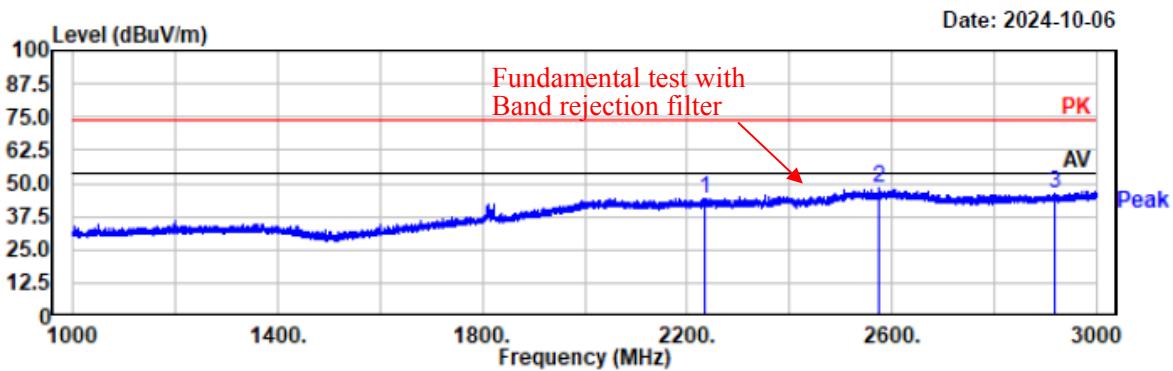
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2191.20	50.05	-5.13	44.92	74.00	29.08	horizontal	Peak
2568.40	49.60	-2.07	47.53	74.00	26.47	horizontal	Peak
2956.60	48.87	-2.73	46.14	74.00	27.86	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11g-2437  
EUT Model: YS-001  
Test distance: 3m

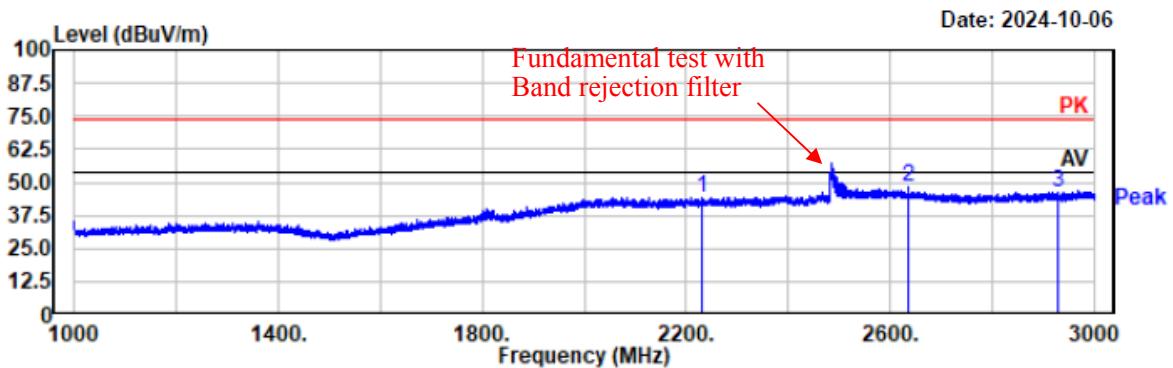
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2235.20	49.18	-5.00	44.18	74.00	29.82	vertical	Peak
2573.40	50.21	-2.05	48.16	74.00	25.84	vertical	Peak
2917.00	49.10	-2.88	46.22	74.00	27.78	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11g-2462  
EUT Model: YS-001  
Test distance: 3m

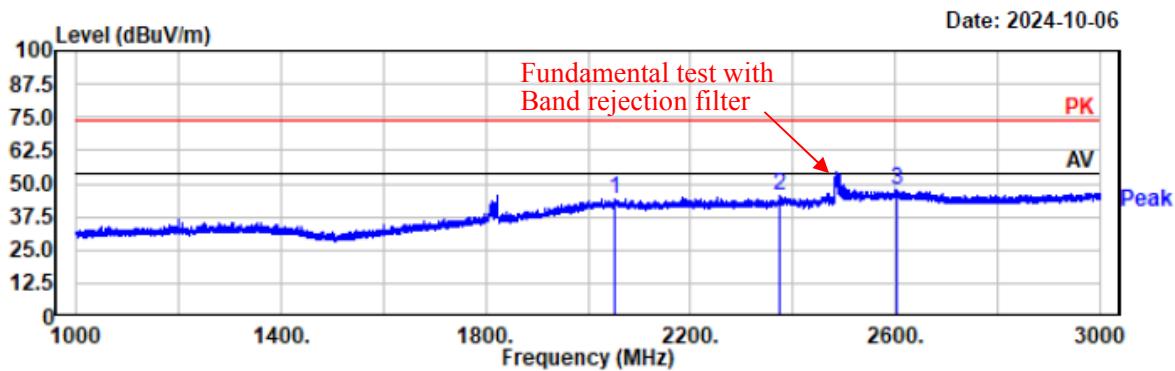
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2229.40	49.31	-5.01	44.30	74.00	29.70	horizontal	Peak
2635.40	50.16	-1.99	48.17	74.00	25.83	horizontal	Peak
2927.40	49.11	-2.85	46.26	74.00	27.74	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11g-2462  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.6°C/53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2053.60	49.12	-4.86	44.26	74.00	29.74	vertical	Peak
2375.80	49.66	-4.23	45.43	74.00	28.57	vertical	Peak
2604.00	49.81	-1.96	47.85	74.00	26.15	vertical	Peak

Project No.: 2407X32126E-RF

Test Mode: 11n20-2412

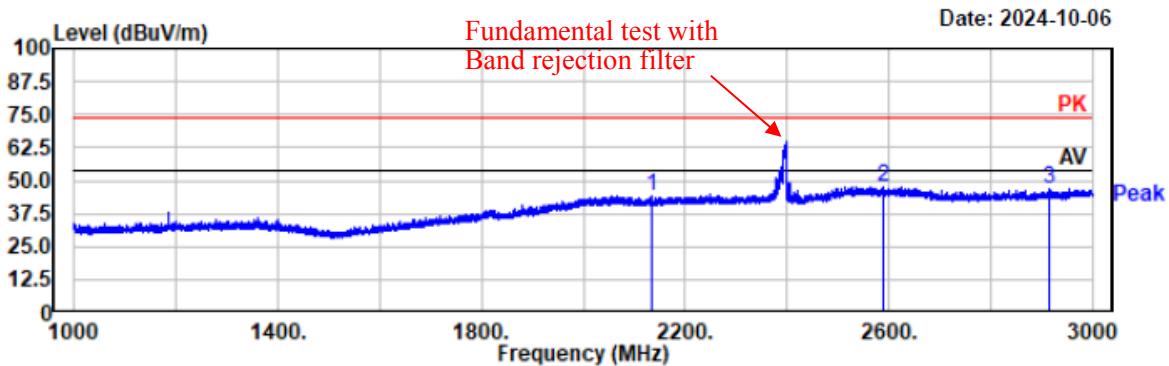
EUT Model: YS-001

Test distance: 3m

Temp/Humi/ATM: 23.6°C /53%/100.1kPa

Tested by: Wlif Wu

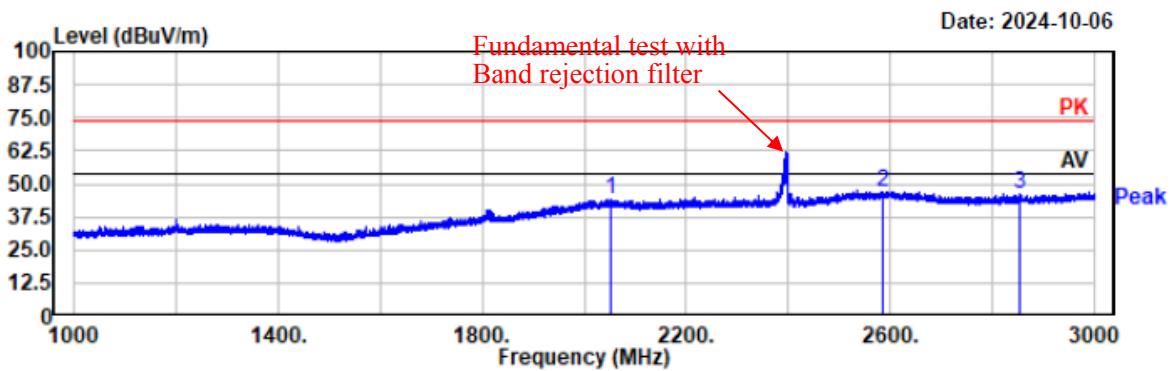
Power Source: AC120V/60Hz



Freq MHz	Reading dB <sub>UV</sub>	Factor dB/m	Result dB <sub>UV</sub> /m	Limit dB <sub>UV</sub> /m	Margin dB	Polarity	Remark
2133.40	49.57	-5.54	44.03	74.00	29.97	horizontal	Peak
2589.00	49.75	-1.99	47.76	74.00	26.24	horizontal	Peak
2915.40	49.46	-2.89	46.57	74.00	27.43	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n20-2412  
EUT Model: YS-001  
Test distance: 3m

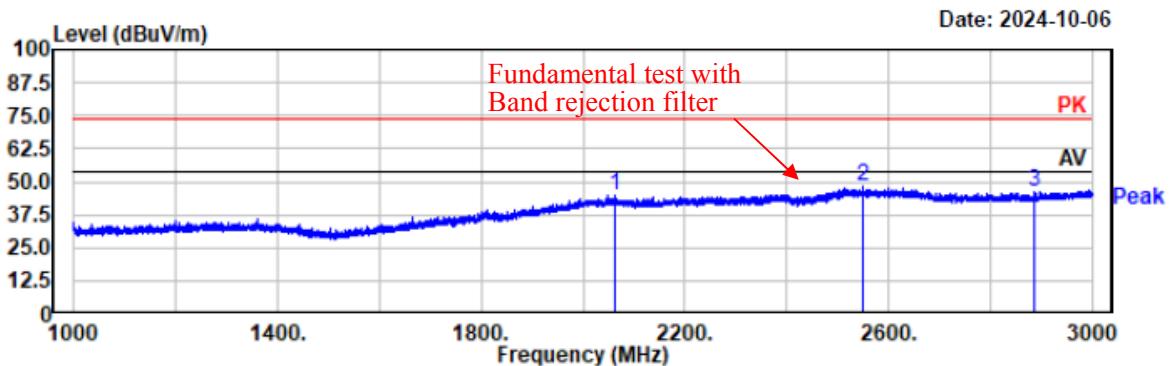
Temp/Humi/ATM: 23.6°C/53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2051.20	48.78	-4.82	43.96	74.00	30.04	vertical	Peak
2585.00	48.96	-2.01	46.95	74.00	27.05	vertical	Peak
2855.40	49.35	-3.11	46.24	74.00	27.76	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n20-2437  
EUT Model: YS-001  
Test distance: 3m

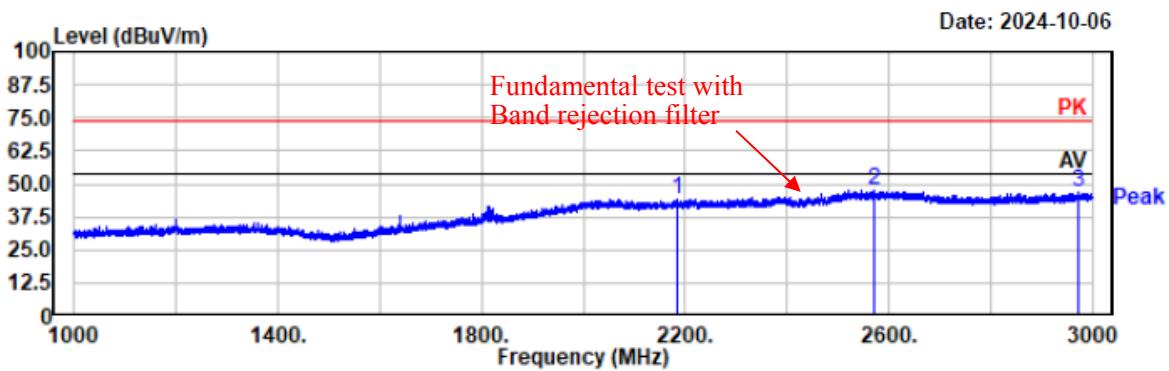
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2062.00	49.64	-4.98	44.66	74.00	29.34	horizontal	Peak
2550.00	50.56	-2.14	48.42	74.00	25.58	horizontal	Peak
2886.40	49.24	-3.01	46.23	74.00	27.77	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n20-2437  
EUT Model: YS-001  
Test distance: 3m

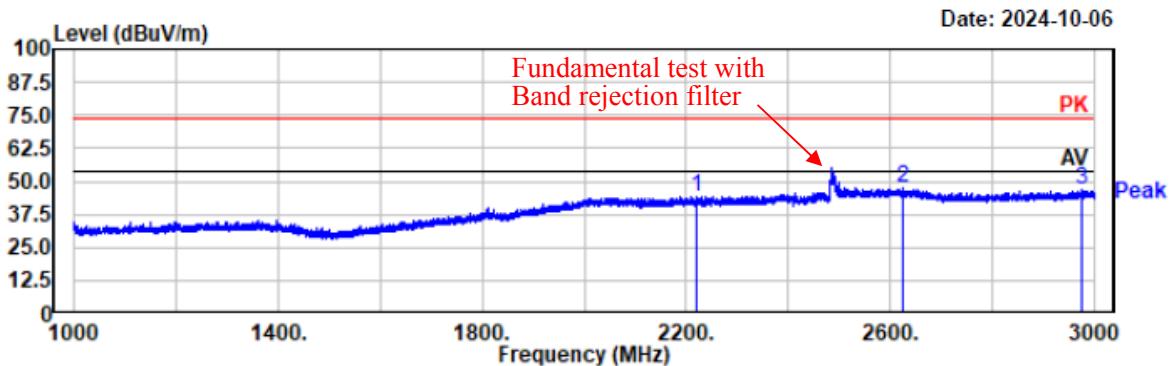
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2183.80	49.61	-5.19	44.42	74.00	29.58	vertical	Peak
2572.60	49.96	-2.05	47.91	74.00	26.09	vertical	Peak
2973.60	49.42	-2.67	46.75	74.00	27.25	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n20-2462  
EUT Model: YS-001  
Test distance: 3m

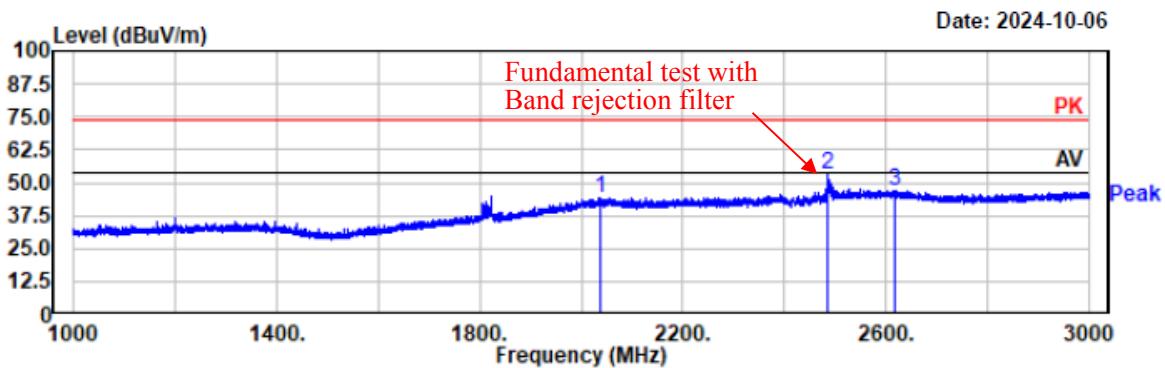
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2221.60	49.09	-5.03	44.06	74.00	29.94	horizontal	Peak
2625.40	49.32	-1.97	47.35	74.00	26.65	horizontal	Peak
2976.80	49.43	-2.65	46.78	74.00	27.22	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n20-2462  
EUT Model: YS-001  
Test distance: 3m

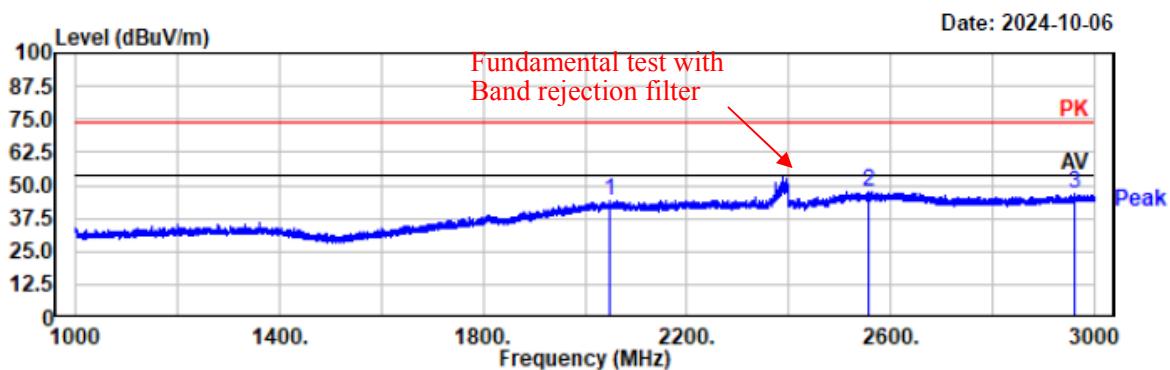
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2036.40	49.37	-5.03	44.34	74.00	29.66	vertical	Peak
2485.00	56.07	-3.11	52.96	74.00	21.04	vertical	Peak
2616.60	49.17	-1.97	47.20	74.00	26.80	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n40-2422  
EUT Model: YS-001  
Test distance: 3m

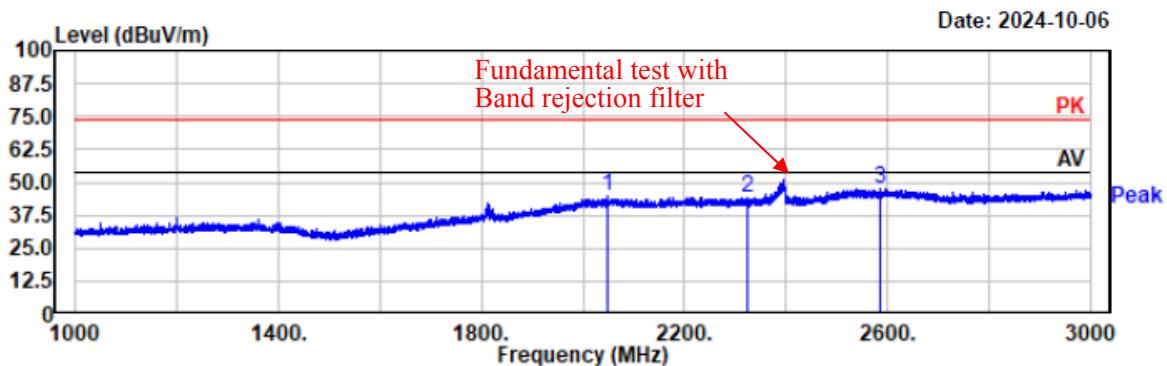
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2048.80	49.00	-4.83	44.17	74.00	29.83	horizontal	Peak
2557.80	49.76	-2.10	47.66	74.00	26.34	horizontal	Peak
2960.60	49.29	-2.72	46.57	74.00	27.43	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n40-2422  
EUT Model: YS-001  
Test distance: 3m

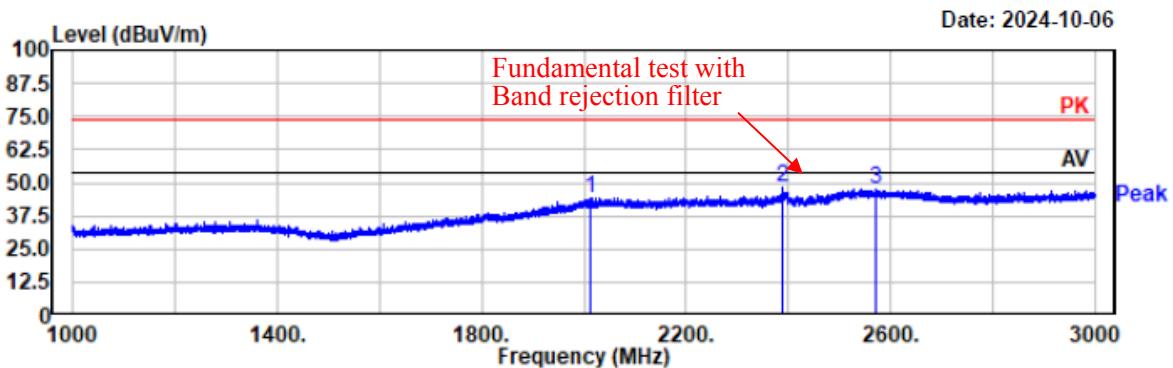
Temp/Humi/ATM: 23.6°C/53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2049.60	49.73	-4.82	44.91	74.00	29.09	vertical	Peak
2325.20	49.22	-4.83	44.39	74.00	29.61	vertical	Peak
2585.60	49.64	-2.01	47.63	74.00	26.37	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n40-2437  
EUT Model: YS-001  
Test distance: 3m

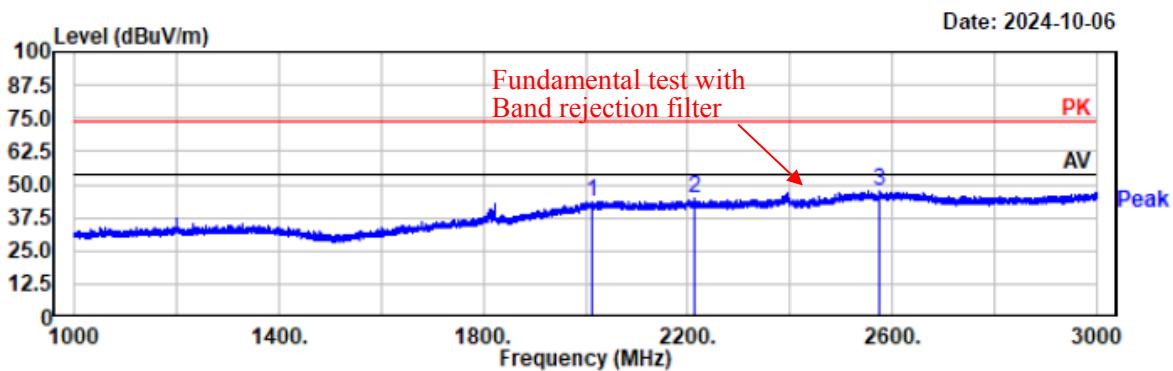
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2011.40	49.77	-5.41	44.36	74.00	29.64	horizontal	Peak
2389.00	52.16	-4.05	48.11	74.00	25.89	horizontal	Peak
2571.80	49.87	-2.05	47.82	74.00	26.18	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n40-2437  
EUT Model: YS-001  
Test distance: 3m

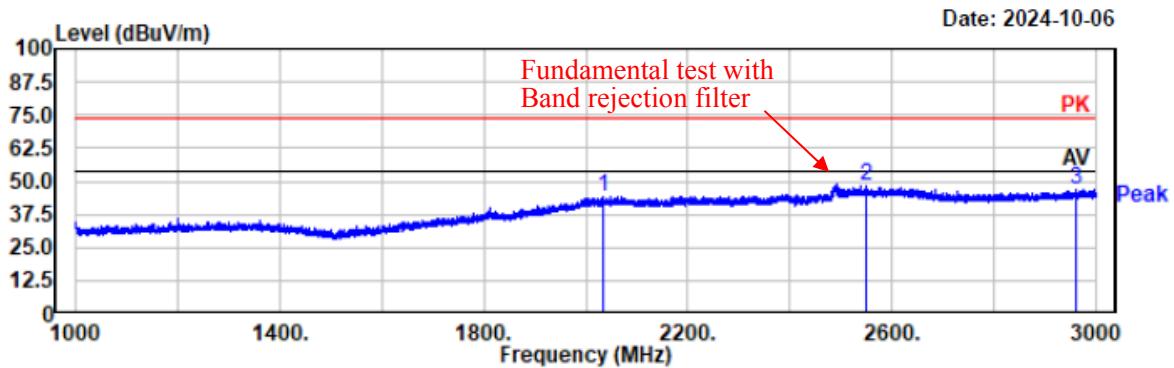
Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2012.20	49.09	-5.40	43.69	74.00	30.31	vertical	Peak
2214.00	49.52	-5.02	44.50	74.00	29.50	vertical	Peak
2574.60	49.95	-2.04	47.91	74.00	26.09	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n40-2452  
EUT Model: YS-001  
Test distance: 3m

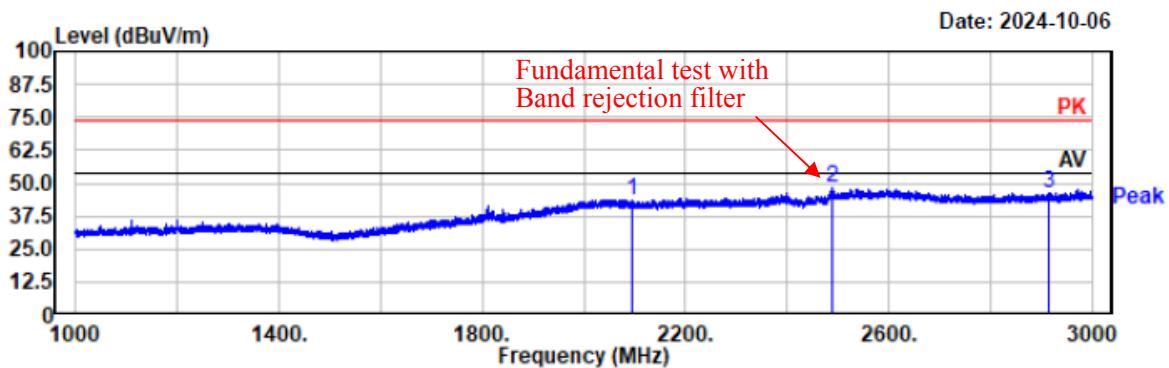
Temp/Humi/ATM: 23.6°C/53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
2033.20	48.99	-5.07	43.92	74.00	30.08	horizontal	Peak
2549.60	50.09	-2.14	47.95	74.00	26.05	horizontal	Peak
2962.60	49.39	-2.71	46.68	74.00	27.32	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 11n40-2452  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.6°C /53%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz

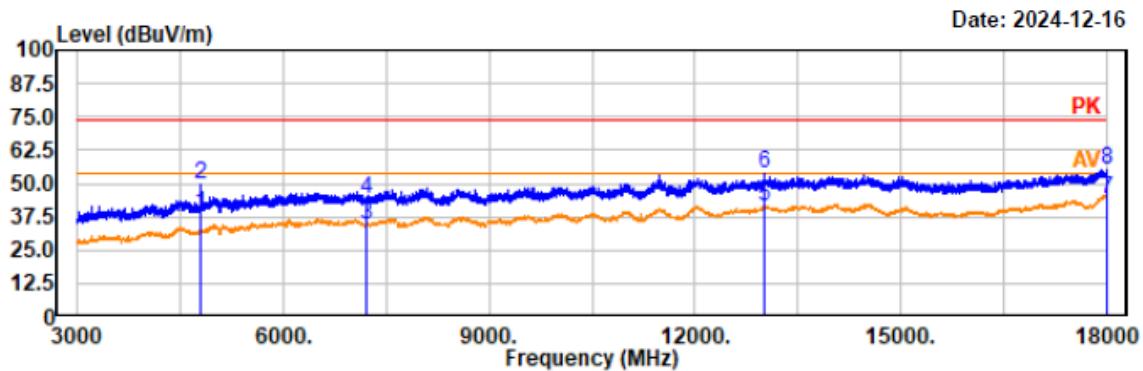


## 5) 3GHz~18GHz

For BLE 1Mbps:

Project No.: 2407X32126E-RF  
 Test Mode: 1M-2402  
 EUT Model: YS-001  
 Test distance: 3m

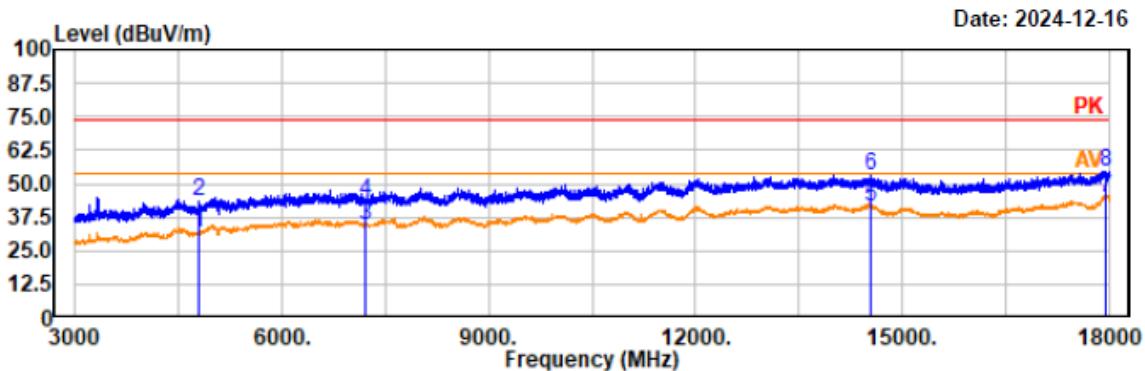
Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
 Tested by: Wlif Wu  
 Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4804.00	42.83	-4.45	38.38	54.00	15.62	horizontal	Average
4804.00	53.86	-4.45	49.41	74.00	24.59	horizontal	Peak
7206.00	36.16	-1.73	34.43	54.00	19.57	horizontal	Average
7206.00	45.97	-1.73	44.24	74.00	29.76	horizontal	Peak
13005.00	36.24	5.18	41.42	54.00	12.58	horizontal	Average
13005.00	48.43	5.18	53.61	74.00	20.39	horizontal	Peak
17997.00	36.10	7.74	43.84	54.00	10.16	horizontal	Average
17997.00	47.27	7.74	55.01	74.00	18.99	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2402  
EUT Model: YS-001  
Test distance: 3m

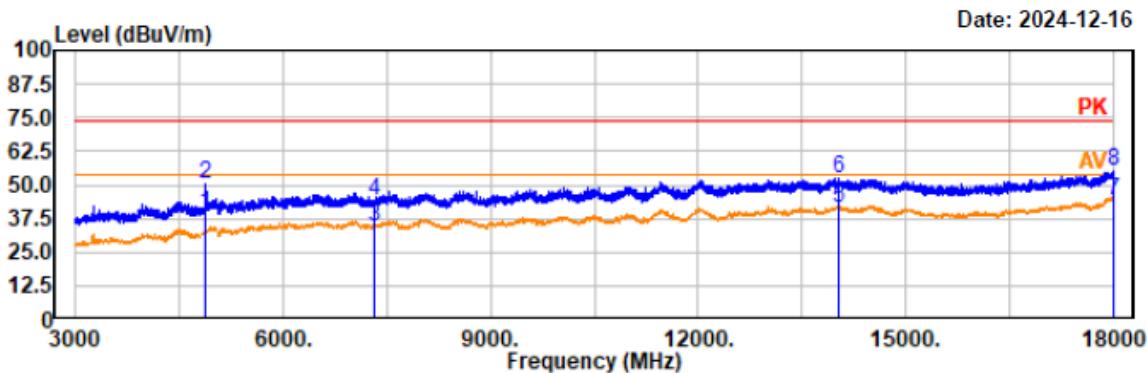
Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4804.00	36.45	-4.45	32.00	54.00	22.00	vertical	Average
4804.00	47.56	-4.45	43.11	74.00	30.89	vertical	Peak
7206.00	36.08	-1.73	34.35	54.00	19.65	vertical	Average
7206.00	45.25	-1.73	43.52	74.00	30.48	vertical	Peak
14530.50	36.55	4.95	41.50	54.00	12.50	vertical	Average
14530.50	48.05	4.95	53.00	74.00	21.00	vertical	Peak
17956.50	37.10	7.68	44.78	54.00	9.22	vertical	Average
17956.50	47.04	7.68	54.72	74.00	19.28	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2440  
EUT Model: YS-001  
Test distance: 3m

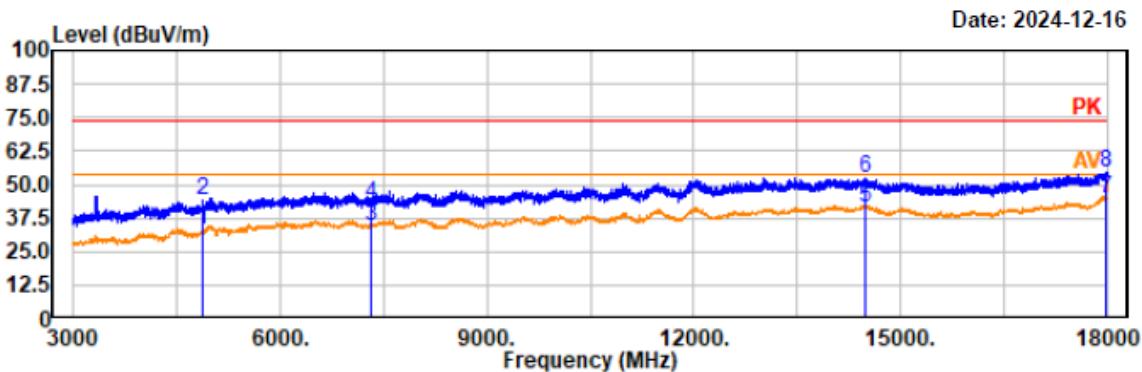
Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4880.00	43.42	-4.25	39.17	54.00	14.83	horizontal	Average
4880.00	54.58	-4.25	50.33	74.00	23.67	horizontal	Peak
7320.00	35.90	-1.61	34.29	54.00	19.71	horizontal	Average
7320.00	45.97	-1.61	44.36	74.00	29.64	horizontal	Peak
14032.50	36.11	5.13	41.24	54.00	12.76	horizontal	Average
14032.50	47.46	5.13	52.59	74.00	21.41	horizontal	Peak
17998.50	36.21	7.74	43.95	54.00	10.05	horizontal	Average
17998.50	47.21	7.74	54.95	74.00	19.05	horizontal	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2440  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



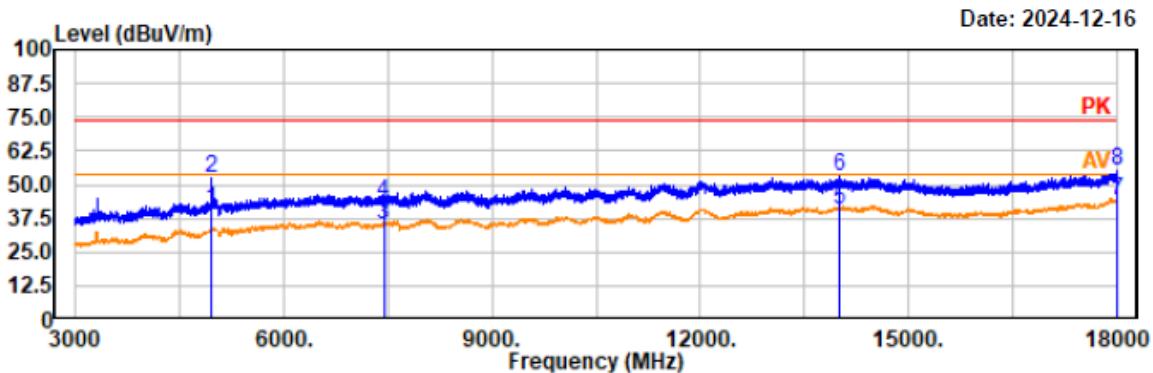
Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto  
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4880.00	37.09	-4.25	32.84	54.00	21.16	vertical	Average
4880.00	48.30	-4.25	44.05	74.00	29.95	vertical	Peak
7320.00	36.20	-1.61	34.59	54.00	19.41	vertical	Average
7320.00	44.66	-1.61	43.05	74.00	30.95	vertical	Peak
14488.50	36.15	4.99	41.14	54.00	12.86	vertical	Average
14488.50	47.73	4.99	52.72	74.00	21.28	vertical	Peak
17982.00	36.93	7.71	44.64	54.00	9.36	vertical	Average
17982.00	46.64	7.71	54.35	74.00	19.65	vertical	Peak

Project No.: 2407X32126E-RF  
Test Mode: 1M-2480  
EUT Model: YS-001  
Test distance: 3m

Temp/Humi/ATM: 23.1°C/48%/100.1kPa  
Tested by: Wlif Wu  
Power Source: AC120V/60Hz



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4960.00	44.90	-4.01	40.89	54.00	13.11	horizontal	Average
4960.00	56.75	-4.01	52.74	74.00	21.26	horizontal	Peak
7440.00	37.03	-1.59	35.44	54.00	18.56	horizontal	Average
7440.00	45.26	-1.59	43.67	74.00	30.33	horizontal	Peak
14016.00	35.85	5.11	40.96	54.00	13.04	horizontal	Average
14016.00	47.88	5.11	52.99	74.00	21.01	horizontal	Peak
17995.50	36.69	7.74	44.43	54.00	9.57	horizontal	Average
17995.50	47.12	7.74	54.86	74.00	19.14	horizontal	Peak