



No.:
TELECSZ2025-0018-RF1

TEST REPORT

NAME OF SAMPLE : viaim OpenNote

APPLICANT : Hong Kong Future Intelligent Technology Co., Ltd

CLASSIFICATION OF TEST : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.



Applicant		Name: Hong Kong Future Intelligent Technology Co.,Ltd Address: Room 1450 14/F, Eton Tower, 8 Hysan Avenue, Causeway Bay, Hong Kong, China	
Manufacturer		Name: Hong Kong Future Intelligent Technology Co.,Ltd Address: Room 1450 14/F, Eton Tower, 8 Hysan Avenue, Causeway Bay, Hong Kong, China	
Equipment Under Test		Product Name: viaim OpenNote Model Name: XFVI-E97 Additional Model Name: N/A Brand Name: viaim Serial NO.: N/A Sample NO.: 4-1	
Date of Receipt.	Jul. 21, 2025	Date of Testing	Jul. 21, 2025 ~ Aug. 08, 2025
Test Specification		Test Result	
ARIB STD-T66 Article 2 Section 1 Item 19 MIC Notice No.88 Appendix No.43		PASS	
Evaluation of Test Result		The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: Aug. 08, 2025	
Compiled by: Zhu Yulin Name Signature	Reviewed by: Mo Xianbiao Name Signature	Approved by: Dong Sanbi Name Signature	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 SUMMARY OF TEST RESULTS	5
1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS	6
1.2 TEST LOCATION	6
1.3 MEASUREMENT UNCERTAINTY	7
2 GENERAL INFORMATION	8
2.1 GENERAL PRODUCT INFORMATION	8
2.2 DESCRIPTION OF ACCESSORIES	9
2.3 DESCRIPTION OF TEST CHANNELS	10
2.4 ENVIRONMENTAL CONDITIONS	11
2.5 ASSEMBLY	11
2.6 ANTENNA SPECIFICATIONS	11
2.7 GENERAL DESCRIPTION OF APPLIED STANDARDS	12
2.8 DESCRIPTION OF SUPPORT UNITS	12
3 TEST TYPES AND RESULTS	13
3.1 FREQUENCY TOLERANCE MEASUREMENT	13
3.2 OCCUPIED BANDWIDTH MEASUREMENT (99% POWER BANDWIDTH)	14
3.3 SPREADING BANDWIDTH MEASUREMENT (90% POWER BANDWIDTH)	15
3.4 SPURIOUS EMISSIONS FOR TRANSMITTER MEASUREMENT	16
3.5 ANTENNA POWER MEASUREMENT	17
3.6 SPURIOUS EMISSIONS FOR RECEIVER	18
3.7 DWELL TIME	19
3.8 INTERFERENCE PREVENTION FUNCTION	20
4 PHOTOGRAPHS OF TEST SETUP	21
5 PHOTOGRAPHS OF THE EUT	22



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
TELECSZ2025-0018-RF1	Original release	Aug. 08, 2025



1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

Item	Article 2 Section 1 Item 19 Reference	ARIB STD-T66 Reference	Report reference	Result
GENERAL PROVISIONS				
Frequency Tolerance	C	3.2 (4)	3.1	PASS
Occupied bandwidth	D	3.2 (7)	3.2/3.3	PASS
Spurious emissions	E	3.2 (6)	3.4	PASS
TRANSMITTING EQUIPMENT				
Antenna power	F	3.2 (1)	3.5	PASS
SAR	--	--	--	N/A
TRANSMITTING ANTENNA				
Type, configuration, etc. of transmitting antenna	--	--	2.6	PASS
Direction pattern of transmitting antenna	--	--	2.6	PASS
RECEIVING EQUIPMENT				
Spurious emissions of receiver	H	3.3 (1)	3.6	PASS
Refer to all articles for transmitting antenna	--	--	2.6	PASS
OPERATING FREQUENCY 2402 TO 2480MHz				
High Frequency/modulation section cannot be opened easily	--	3.7 (1)	2.5	PASS
Communication method	--	3.1 (1)	2.1	PASS
Modulation method	--	3.2 (1)a	2.1	PASS
Spread spectrum method	--	3.2 (1)a	3.3	Only for reported
Antenna power	--	3.2 (2)	3.5	PASS
Diffusion bandwidth	--	3.2 (8)	3.3	PASS
Frequency retention time (FH employed)	--	3.4.1 (1)	3.7	PASS
Interference Prevention Function	--	3.4.1 (3)	3.8	PASS
Note: N/A: In this whole report not applicable.				



1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Due
Antenna Port Conducted Test					
Signal&Spectrum Analyzer	Rohde&Schwarz	FSV 30	104408	1 year	2026/4/22
#3Shielding room	MORI	443	N/A	3 year	2026/5/16
Wideband radio communication tester	Rohde&Schwarz	CMW 500	168587	1 year	2026/6/5
Analog signal Generator (100kHz ~ 40GHz)	Rohde&Schwarz	SMB 100A	181934	1 year	2026/4/22
Vector signal Generator (9kHz ~ 6GHz)	Rohde&Schwarz	SGT 100A	111724	1 year	2026/4/22
RF control unit(BT/WiFi)	Tonscend	JS0806-2-8CH	CS0300023	1 year	2026/4/22
10db attenuator	JUNKE	SMA-10-18-N	250312743	1 year	2026/6/6
Power splitter	Anritsu	K240CPOWERDIVIDER	012334	1 year	2026/6/6
<p>Note:</p> <p>☐ 1. Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as *NICT*) or a designated calibration agency under Article 102-18 paragraph (1) in JRL.</p> <p>☐ 2. Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act(Act No.51 of 1992)</p> <p>☒ 3. Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1). The calibrations are traceable to CVC/CHINA.</p> <p>☐ 4. Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (2) to (4).</p>					

1.2 TEST LOCATION

The tests and measurements refer to this report were performed by EMC testing Lab of CVC Testing Technology (Shenzhen) Co., Ltd.

Address: No. 1301-14&16, Guangguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn

FCC(Test firm designation number: CN1363)

IC(Test firm CAB identifier number: CN0137)

CNAS(Test firm designation number: L16091)



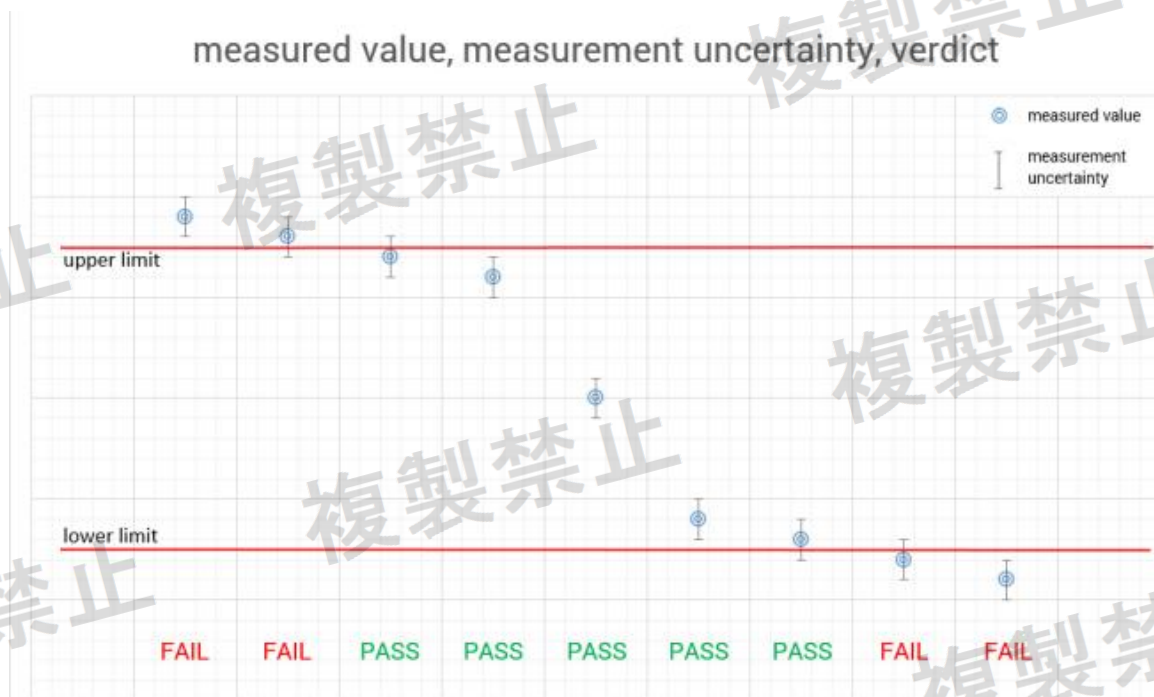
1.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Support Equipment		
1	Radio frequency	$\pm 6.4 \times 10^{-8}$
2	Occupied Channel Bandwidth	$\pm 1.86 \%$
3	RF output power, conducted	$\pm 0.9 \text{ dB}$
4	Power Spectral Density	$\pm 0.8 \text{ dB}$
5	Spurious emissions ,conducted	$\pm 2.7 \text{ dB}$
6	Supply voltages	$\pm 0.68 \%$
7	Time	$\pm 0.19 \%$
8	Adjacent Channel Power	$\pm 1.3 \text{ dB}$
Remark: 95% Confidence Levels, k=2.		

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed.

The measurement uncertainty is mentioned in this test report, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong.





2 GENERAL INFORMATION

2.1 GENERAL PRODUCT INFORMATION

PRODUCT NAME	viaim OpenNote
BRAND NAME	viaim
MODEL NAME	XFVI-E97
ADDITIONAL MODEL NAME	N/A
POWER SUPPLY	DC 3.85V from Li-ion Battery
TYPE OF EQUIPMENT	Data transmission equipment operating in the 2.4GHz
MODULATION TECHNOLOGY	FHSS
MODULATION TYPE	GFSK, $\pi/4$ DQPSK, 8DPSK
OPERATING FREQUENCY	2402MHz ~ 2480MHz
NUMBER OF CHANNEL	79
RATED POWER	See Remark 5
CONDUCTED POWER DENSITY	See Remark 5
EIRP POWER DENSITY	See Remark 5
ANTENNA TYPE (Remark 4)	Left: FPC Antenna, with -1.99dBi gain Right: FPC Antenna, with -3.33dBi gain
HARDWARE VERSION:	V1.0
SOFTWARE VERSION:	7.0.0.56
I/O PORTS	Refer to User's Manual
CABLE SUPPLIED	N/A

Remark:

- For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
- Please refer to the EUT photo document (Reference No.:TELECSZ2025-0018-EUT) for detailed product photo.
- Since the above data and/or information is provided by the client, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- The RF output power as below table:

Mode		Rated output power density(mW/MHz)	Conducted power density (mW/MHz)	EIRP power density (dBm/MHz)
BT	GFSK	Left: 0.1	Left: 0.0194	Left: -19.11
		Right: 0.1	Right: 0.0201	Right: -20.30
	$\pi/4$ DQPSK	Left: 0.1	Left: 0.0194	Left: -19.11
		Right: 0.1	Right: 0.0104	Right: -23.16
	8DPSK	Left: 0.1	Left: 0.0100	Left: -21.99
		Right: 0.1	Right: 0.0104	Right: -23.16



2.2 DESCRIPTION OF ACCESSORIES

	Charging case
Brand	viaim
Model No.:	XFVI-E97
Input:	5V $\overline{\text{---}}$ 1.2A
Output:	5V $\overline{\text{---}}$ 0.4A
SN	E973D2452000033
AC Cable:	N/A
DC Cable:	N/A



2.3 DESCRIPTION OF TEST CHANNELS

Operation frequency each of channel.

Operation Frequency Each of Channel							
For BT (GFSK, $\pi/4$ DQPSK, 8DPSK)							
CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report except the RF output power test was shown all conditions.
- By means of test software which provided by manufacture, the power levels during the tests were set according to the following codes:

GFSK, $\pi/4$ DQPSK, 8DPSK	
CHANNEL	POWER SETTING
0	default
39	default
78	default



2.4 ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

Battery Voltage	Normal Voltage /NV	DC 3.85V
	Low Voltage /LV	DC 3.47V
	High Voltage /HV	DC 4.24V
RF Module Voltage	Normal Voltage /NV	DC 3.3V
	Low Voltage /LV	DC 3.3V
	High Voltage /HV	DC 3.3V
AC Voltage	Normal Voltage /NV	--
	Low Voltage /LV	--
	High Voltage /HV	--
Other	Normal Temperature/Tnor	25°C
	lative Humidity	55 %
	Air Pressure	989 hPa

Note: After checking the fluctuation of input voltage to the circuit of the radio part (excluding the power supply) of the equipment to be tested, the fluctuation less than +/- 1 % when input voltage from an external supply into the equipment fluctuates +/- 10%.

2.5 ASSEMBLY

The RF circuits are located inside of the EUT. The RF circuit was covered by metal shielding case, Also it won't be easy to be opened. Frequency Band, channels and modulation parameters are fixed inside the module. They cannot be edited or modified by end-user.

2.6 ANTENNA SPECIFICATIONS

2.6.1 ANTENNA GAIN

Modulation Mode	Ant.Tag	Ant. Type	Connector Type	Highest Peak Gain (dBi) 2.4GHz ~ 2.5GHz
BT	1	FPC Antenna	N/A	Left: -1.99 Right: -3.33

2.6.2 ANTENNA PATTERN

Please refer to the attached file (Antenna report).



2.7 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

ARIB STD-T66

ARTICLE 2 SECTION 1 ITEM 19

MIC Notice No.88 Appendix No.43

All test items have been performed and recorded as per the above standards

2.8 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

During the tests.

Support Equipment							
NO	Description	Brand	Model No.	Serial Number	Supplied by		
1	N/A	N/A	N/A	N/A	N/A		
Support Cable							
NO	Description	Quantity (Number)	Length (m)	Detachable (Yes/ No)	Shielded (Yes/ No)	Cores (Number)	Supplied by
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A



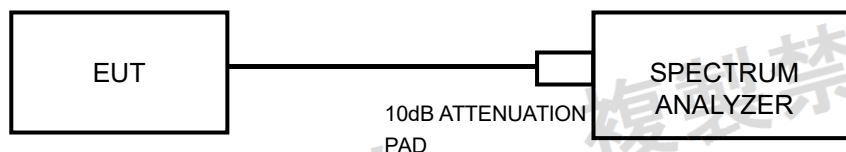
3 TEST TYPES AND RESULTS

3.1 FREQUENCY TOLERANCE MEASUREMENT

3.1.1 Limit

Tolerance of frequency shall be +/- 50ppm

3.1.2 Test setup



3.1.3 Test Procedure:

Frequency: Test Frequency
Span: 3MHz
RBW: 10 kHz(Modulation ON),
VBW: 10 kHz(Modulation ON),
Sweep: Time Auto
Detector mode: peak
Trace mode Max hold

3.1.4 Test results

Please refer Appendix

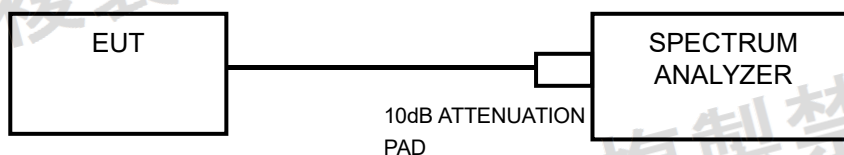


3.2 OCCUPIED BANDWIDTH MEASUREMENT (99% POWER BANDWIDTH)

3.2.1 Limit

Occupied bandwidth shall be 83.5MHz or less.

3.2.2 Test setup



3.2.3 Test Procedure:

Spectrum Analyzer conditions: Frequency: Test Frequency
Span 200 MHz (FHSS);
RBW 1 MHz (FHSS); 3% OBW (Others)
VBW 1 MHz (FHSS); 3 times RBW (Others)
Sweep Time Auto
Detector mode Positive peak
Trace mode Max hold
OBW 99%

3.2.4 Test results

Please refer Appendix

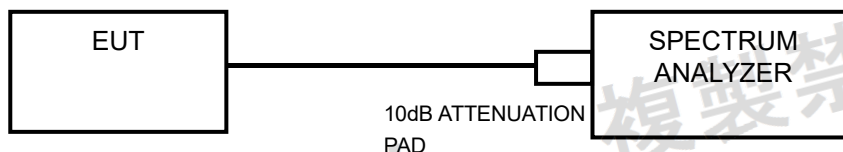


3.3 SPREADING BANDWIDTH MEASUREMENT (90% POWER BANDWIDTH)

3.3.1 Limits

ITEM	LIMIT	REMARK
SPREADING BANDWIDTH	Only for reported	(For DSSS, FHSS)

3.3.2 Test setup



3.3.3 Test Procedure:

Spectrum Analyzer conditions: Frequency: Test Frequency
Span 200 MHz (FHSS);
RBW 1 MHz (FHSS); 3% OBW (Others)
VBW 1 MHz (FHSS); 3 times RBW (Others)
Sweep Time Auto
Detector mode Positive peak
Trace mode Max hold
OBW 90%

3.3.4 Test result

Please refer Appendix

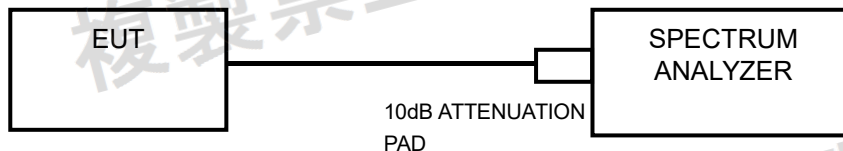


3.4 SPURIOUS EMISSIONS FOR TRANSMITTER MEASUREMENT

3.4.1 Limits

Frequencies (MHz)	Limit	
(MHz)	uW	dBm
Operating frequency 2400 to 2483.5MHz		
$2387 \leq f < 2400$	≤ 25	-16
$2483.5 < f \leq 2496.5$	≤ 25	-16
All other frequencies	≤ 2.5	-26

3.4.2 Test setup



3.4.3 Test Procedure:

Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

Step 2

IF the value measured by Step1 is 3 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz – 2400 MHz , 2483.5 MHz –13 GHz

RBW 1 MHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 3 MHz (30 – 1GHz) , 3 MHz (over 1GHz)

Sweep Time Auto

Detector mode Positive peak

Trace mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

Span 0 Hz

RBW 1 MHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 3 MHz (30 – 1GHz) , 3 MHz (over 1GHz)

Sweep Time Auto

Detector mode Sample

Trace mode Max hold

3.4.4 Test result

Please refer Appendix



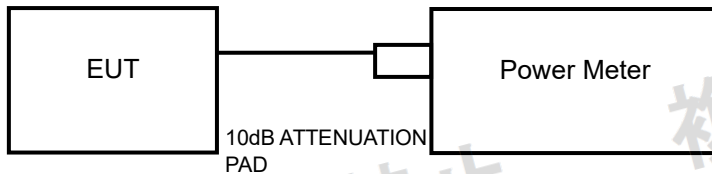
3.5 ANTENNA POWER MEASUREMENT

3.5.1 Limits

Antenna power shall be 3mW/MHz or less.

Tolerance of antenna power shall be +20% (upper value)

3.5.2 Test setup



3.5.3 Test Procedure:

1. Measure the power with the power meter.
2. Record the reading on the power meter as antenna output power.

3.5.4 Test result

Please refer Appendix

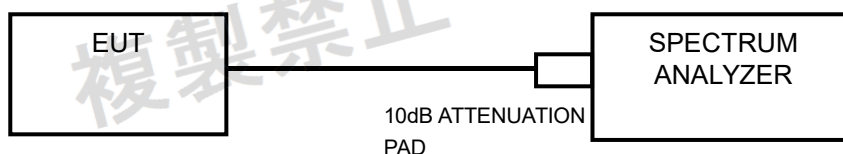


3.6 SPURIOUS EMISSIONS FOR RECEIVER

3.6.1 Limits

Frequencies (MHz)	Limit	
(MHz)	nW	dBm
Below 1GHz	≤ 4	-54
Above 1GHz	≤ 20	-47

3.6.2 Test setup



3.6.3 Test Procedure:

Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

Step 2

IF the value measured by Step1 is 3 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz – 2400 MHz , 2483.5 MHz –13 GHz

RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 300 kHz (30 – 1GHz) , 3 MHz (over 1GHz)

Sweep Time Auto

Detector mode Positive peak

Trace mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

Span 0 Hz

RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 300 kHz (30 – 1GHz) , 3 MHz (over 1GHz)

Sweep Time Auto

Detector mode Sample

Trace mode Max hold

3.6.4 Test result

Please refer Appendix

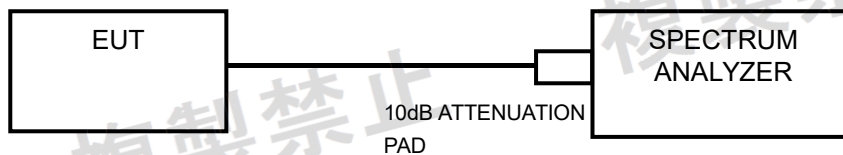


3.7 DWELL TIME

3.7.1 Limits

The frequency retention time in the frequency hopping method shall be 0.4 second or less. The total sum of the frequency retention time in any frequency within the time obtained by multiplying the diffusion rate by 0.4 second shall be 0.4 second or shorter.

3.7.2 Test setup



3.7.3 Test Procedure:

Step 1: Test the period of pulse (A/ms)

Step 2: Test the number of pulses in 3.16S (B/per)

Step 3: The number of pulses within 31.6S (B*10) is calculated to obtain the dwell time (A*B*10/ms)

3.7.4 Test result

Please refer Appendix

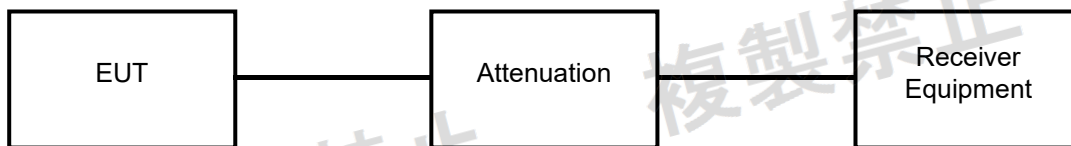


3.8 INTERFERENCE PREVENTION FUNCTION

3.8.1 Limits

Radio equipment used mainly on the same premises and automatically transmits or receives identification code.

3.8.2 Test setup



3.8.3 Test Procedure:

Standard Requirement:

- 1) Measurement system diagram as shown above and test equipment keep transmitting identification code.
- 2) Condition of measuring instrument
 - (1) Demodulator must be able to demodulate the transmitting signal emitted by test equipment and to indicate the identification code.
- 3) Condition of test equipment The mode of normal use.
- 4) Measuring operation procedure
 - (1) When test equipment has the function to transmit identification code automatically:
 - A) Transmit the predetermined identification code from test equipment.
 - B) Confirm the transmitted identification code by demodulator.

3.8.4 Test result

Please refer Appendix



4 PHOTOGRAPHS OF TEST SETUP

Please refer to the attached file (Test Setup Photo).



5 PHOTOGRAPHS OF THE EUT

Please refer to the attached file (External Photos report and Internal Photos).

----- End of the Report -----



Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

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