Testing Laboratory
3023

Test Report No:
2650021R-RFJPV02S-B

TEST REPORT
Japan Rules & Regulations

Product Name	Wireless Gaming Controller
Brand Name	ASUS
Model No.	GC701
Applicant´s Name / Address	ASUSTeK COMPUTER INC. 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Manufacturer's Name	ASUSTeK COMPUTER INC.
Test Method Requested, Standard	MIC Notice No.88 Appendix No.43 Article 2 Paragraph 1 of Item 19
Verdict Summary	IN COMPLIANCE
Documented by Jinn Chen	Jinn Chen
Approved by Alan Chen	Alan Chen
Date of Receipt	2026/05/04
Date of Issue	2026/07/06
Report Version	V1.0

INDEX

		page
Competences and Guarantees		4
General Conditions		4
Revision History		5
Summary of Test Result		6
1.	General Information	7
1.1.	EUT Description	7
1.2.	EUT Information	8
1.3.	Testing Location Information	8
1.4.	Ambient Conditions In The Laboratory	9
1.5.	Measurement Uncertainty	9
1.6.	List of Test Equipment	10
2.	Test Configuration of EUT	11
2.1.	Test Condition	11
2.2.	Power Supply Voltage Fluctuation	11
2.3.	Test Frequency Mode	11
2.4.	Duty Cycle	12
2.5.	RF and IF Section Must be Tamper Requirement	13
2.6.	Measurement Configuration	14
2.7.	Tested System Details	15
2.8.	Configuration of Tested System	15
3.	Antenna Power, Antenna Power Tolerance and E.I.R.P.	17
3.1.	Test Setup	17
3.2.	Test Limit	17
3.3.	Test Method	17
3.4.	Test Procedure	18
3.5.	Test Result of Antenna Power, Antenna Power Tolerance and E.I.R.P.	18
4.	Occupied Bandwidth	19
4.1.	Test Setup	19
4.2.	Test Limit	19
4.3.	Test Method	19
4.4.	Test Procedure	20
4.5.	Test Result of Occupied Bandwidth	20
5.	Frequency Tolerance	21
5.1.	Test Setup	21
5.2.	Test Limit	21
5.3.	Test Method	21

5.4. Test Procedure 22
5.5. Test Result of Frequency Tolerance 22
6. Unwanted Emission Strength 23
6.1. Test Setup 23
6.2. Test Limit 23
6.3. Test Method 23
6.4. Test Procedure 24
6.5. Test Result of Unwanted Emission Strength 24
7. Secondary Radiated Emission Strength 25
7.1. Test Setup 25
7.2. Test Limit 25
7.3. Test Method 25
7.4. Test Procedure 26
7.5. Test Result of Secondary Radiated Emission Strength 26
8. Interference Prevention Function 26
8.1. Test Setup 26
8.2. Test Method 26
8.3. Test Procedure 26
8.4. Test Result of Interference Prevention Function 26
Appendix A. Test Result of Antenna Power, Antenna Power Tolerance and E.I.R.P
Appendix B. Test Result of Occupied Bandwidth
Appendix C. Test Result of Frequency Tolerance
Appendix D. Test Result of Unwanted Emission Strength
Appendix E. Test Result of Secondary Radiated Emission Strength
Appendix F. Test Result of Interference Prevention Function
Appendix G. Test Setup Photograph

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

General Conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	2026/07/06

Summary of Test Result

Report Clause	Test Items	Result (PASS/FAIL)	Remark
3	Antenna Power, Antenna Power Tolerance and E.I.R.P	PASS	-
4	Occupied Bandwidth	PASS	-
5	Frequency Tolerance	PASS	-
6	Unwanted Emission Strength	PASS	-
7	Secondary Radiated Emission Strength	PASS	-
8	Interference Prevention Function	PASS	-

Comments and Explanations
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1. General Information

1.1. EUT Description

Frequency Band	2400 ~ 2483.5 MHz
Operating Frequency	2406 ~ 2476 MHz
Channel Number	35 Channels
Type of Modulation	GFSK (4 Mbps)
Declared Antenna Power	5.4702 mW

Accessories Information		
No.	Equipment Name	Description
1	USB Type C® Cable	Shielded, 3m
2	Charging dock	-
3	USB Wireless Dongle	-

Antenna Information				
No.	Brand Name	Part No.	Type	Gain (dBi)
1	JOYMAX	IBF-A018MPXB-W009	Monopole	2.3

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
02	2406	03	2408	04	2410	05	2412
06	2414	07	2416	08	2418	09	2420
10	2422	11	2424	13	2428	14	2430
15	2432	16	2434	17	2436	18	2438
19	2440	20	2442	21	2444	22	2446
23	2448	24	2450	25	2452	26	2454
27	2456	28	2458	29	2460	30	2462
31	2464	32	2466	33	2468	34	2470
35	2472	36	2474	37	2476	-	-

1.2. EUT Information

EUT Power Type	From DC 5V / Battery			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point

1.3. Testing Location Information

Testing Location Information			
Test Laboratory：DEKRA Testing and Certification Co., Ltd.			
V	Address	No. 85, Wenlin St., Linkou Dist., New Taipei City 244017, Taiwan, R.O.C.	
	Performed Location	No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.	
	Phone/Fax Number	TEL: +886-3-275-7255	FAX: +886-3-327-8031
	Site Description	Accredited by TAF	
		Accredited Number: 3023	
	Address/ Performed Location	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.	
	Phone/Fax Number	TEL: +886-3-582-8001	FAX: +886-3-582-8958
	Site Description	Accredited by TAF	
		Accredited Number: 3024	
	Address/ Performed Locatio	No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.	
	Phone/Fax Number	TEL: +886-3-582-8001	FAX: +886-3-582-8958
	Site Description	Accredited by TAF	
		Accredited Number: 3024	

1.4. Ambient Conditions In The Laboratory

Performed Item	Items	Required	Actual	Test Date	Tested By
RF Conducted Emission	Temperature (°C)	5~35 °C	21.1~24.2 °C	2026/05/19 ~ 2026/05/20	Kevin Lai
	Humidity (%RH)	45~85 %	53.5~62.6 %		

1.5. Measurement Uncertainty

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test item	Uncertainty
Antenna Power, Antenna Power Tolerance and E.I.R.P	Spectrum Analyzer: ±2.13 dB Power Meter: ±1.06 dB
Occupied Bandwidth	±1580.61 Hz
Frequency Tolerance	±1580.61 Hz
Unwanted Emission Strength	±2.13 dB
Secondary Radiated Emission Strength	±2.13 dB
Interference Prevention Function	N/A

1.6. List of Test Equipment

For Conducted Measurements / HY-SR02

Equipment		Manufacturer	Model No.	Serial No.	Cal. by	Cal. Method	Cal. Date	Due Date
V	DC Power Supply	KEYSIGHT	E36234A	MY59001234	ETC	*(c)	2025/10/27	2026/10/26
V	Spectrum Analyzer	R&S	FSV30	103466	ETC	*(c)	2025/12/18	2026/12/17
V	Power Meter	Anritsu	ML2496A	1947001	ETC	*(c)	2025/12/22	2026/12/21
V	Power Sensor	Anritsu	MA2411B	1911082	ETC	*(c)	2025/12/22	2026/12/21
V	Power Sensor	Anritsu	MA2411B	1911083	ETC	*(c)	2025/12/22	2026/12/21

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with “V” are used to measure the final test results.
3. Test Software Version: DEKRA Conduction Test System V9.0.6.
4. a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1).
   b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992).
   c) Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated agency under Article 102-18 paragraph (1).
   d) Calibration conducted by using other equipment that listed above from a) to c).

2. Test Configuration of EUT

2.1. Test Condition

EUT Operational Condition	
Testing Voltage	DC 5V (Power by USB)

2.2. Power Supply Voltage Fluctuation

Voltage Test Item	Test Voltage	Voltage Meter Reading Value
Nominal Voltage	DC 5 V	DC 3.3 V
Highest Voltage	DC 5.5 V	DC 3.3 V
Lowest Voltage	DC 4.5 V	DC 3.3 V

Note:

1. The Voltage supply for RF Chip U16 pin C76 is DC 3.3 V.
2. The internal supply gives a fluctuation value less than 1 % (Around 0% from max. to min.)

2.3. Test Frequency Mode

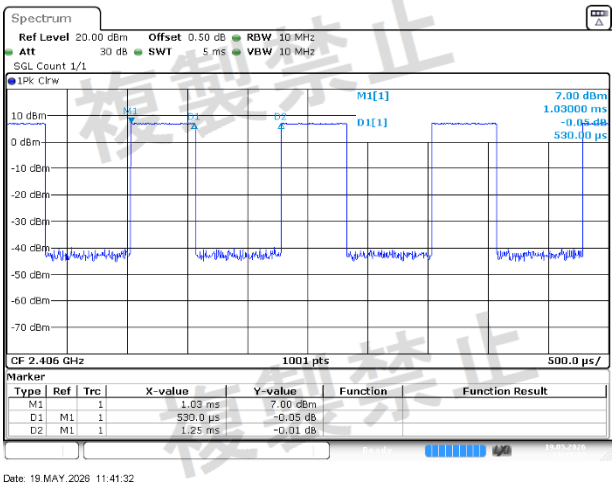
Test Software Version	AB1620_Airoha_Tool_Kit(ATK) / Version 1.0.1.7

Modulation or Mode	Frequency (MHz)	Power Setting
GFSK (ULL4M)	2406	60
	2440	60
	2476	60

2.4. Duty Cycle

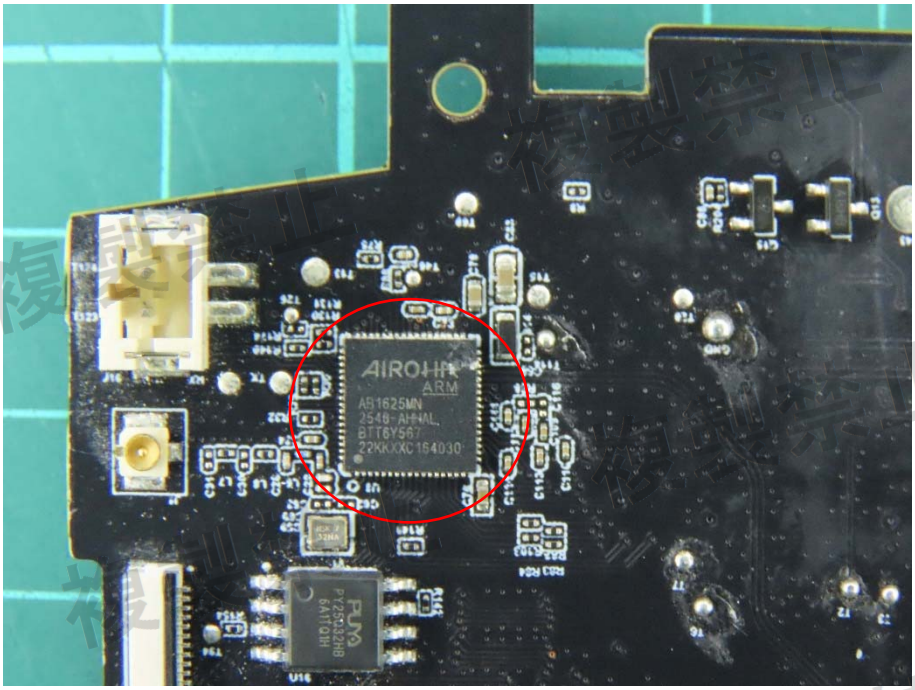
Modulation or Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)
GFSK (ULL4M)	0.5300	1.2500	42.40	3.73

GFSK (ULL4M)



2.5. RF and IF Section Must be Tamper Requirement

Requirement	Comments	Result
RF, IF and Modulation section must be tamper	☐Use Special Screw ☐Metal Shielding is Soldered ☒Use Ball Grid Array (BGA) (Please refer to the attachment: EUT Detailed Photographs)	Complete
	☒RF module/Chip pin >10 ☒RF module/Chip pins distance <1.5mm (Please refer to the attachment: EUT Detailed Photographs)	Complete



2.6. Measurement Configuration

Tests Item	Antenna Power, Antenna Power Tolerance and E.I.R.P Occupied Bandwidth Frequency Tolerance Unwanted Emission Strength Secondary Radiated Emission Strength Interference Prevention Function
Test Condition	Conducted measurement at transmit chains

Note:

1. Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
3. 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%, therefore, the test is carried out only at the normal voltage.
4. The EUT is available in two colors: black and white, with black as the primary color for testing purposes. The color does not affect the test results.
5. The internal photos show that one PCB is available in two versions: the shipping version and the inventory version. The only difference between them is the location of the connector slot.

2.7. Tested System Details

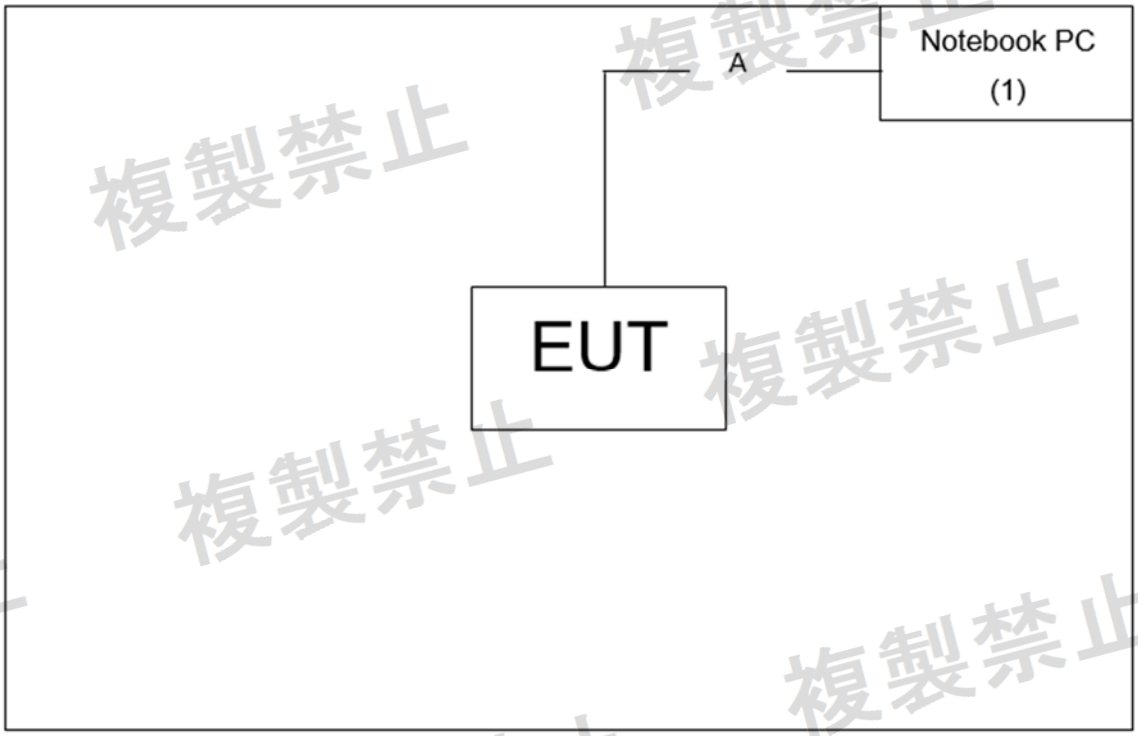
No.	Equipment	Brand Name	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	Latitude 5580	GDZN7H2	N/A

For Charge Mode

No.	Equipment	Brand Name	Model No.	Serial No.	Power Cord
1	Power Adapter	Apple	A1385	N/A	N/A
2	Charging dock	ASUS	GC71	N/A	N/A

2.8. Configuration of Tested System

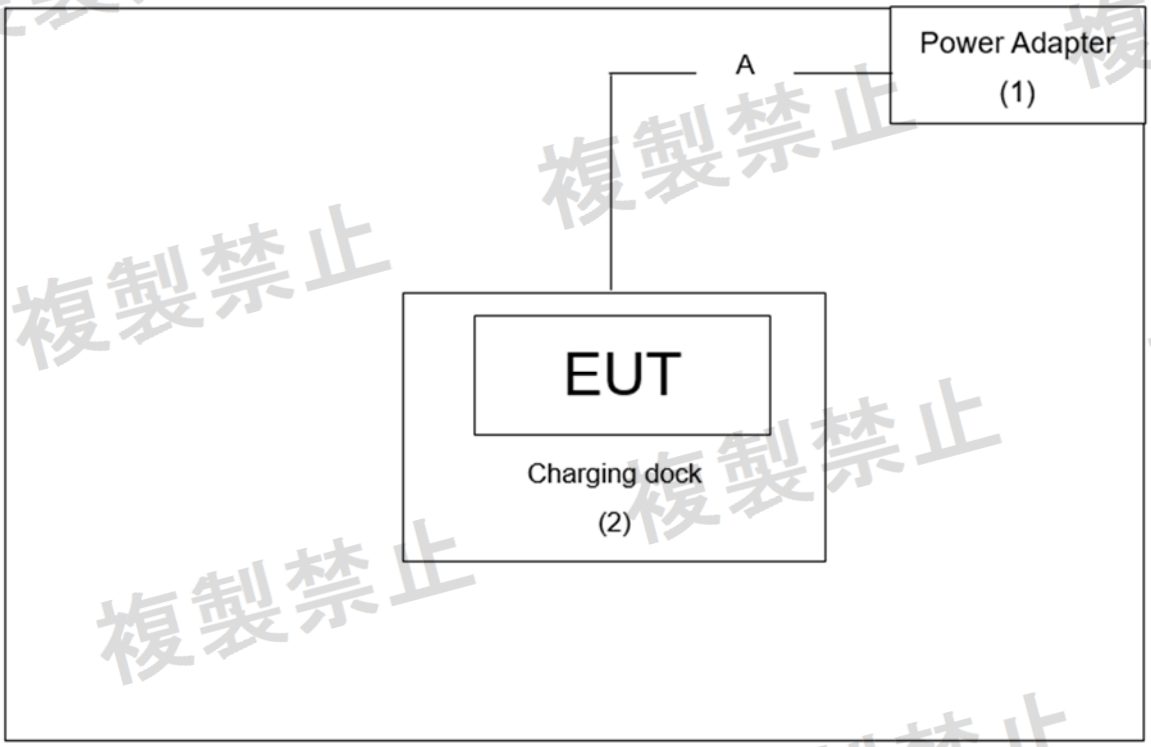
Connection Diagram



Signal Cable Type		Signal cable Description
A	USB Type C® Cable	Shielded, 3m

For Charge Mode

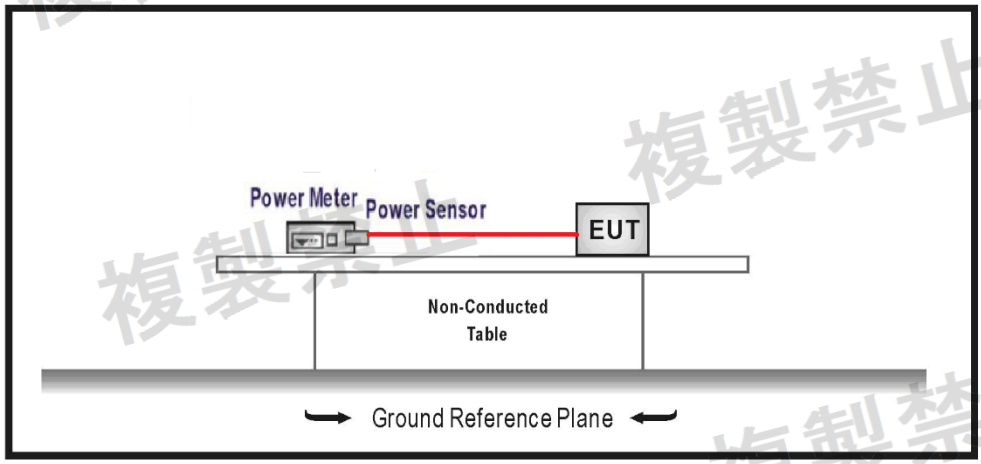
Connection Diagram



Signal Cable Type		Signal cable Description
A	USB Type C® Cable	Shielded, 3m

3. Antenna Power, Antenna Power Tolerance and E.I.R.P.

3.1. Test Setup



3.2. Test Limit

Antenna Power: ≦10mW for Other Digital Methods

Antenna Power Tolerance: ≦+20%

EIRP: ≦12.14dBm for Other Digital Methods

3.3. Test Method

According to MIC Notice No. 88 Annex 43.

3.4. Test Procedure

a. Connect a high-frequency power meter to the output of the dummy load (attenuator) and measure the output power.

b. Output power shall be as follows.

(a) Value of a continuous wave.

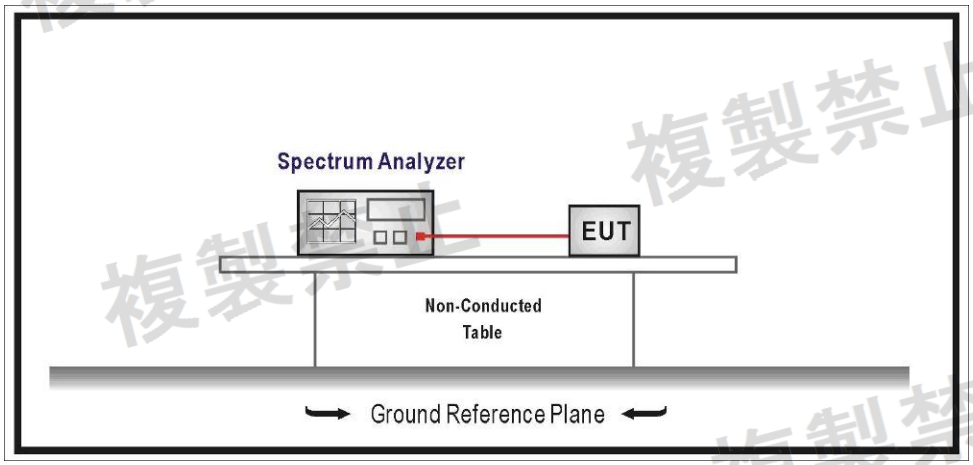
(b) The output power is calculated from the value and the duty factor.

3.5. Test Result of Antenna Power, Antenna Power Tolerance and E.I.R.P.

Refer as Appendix A

4. Occupied Bandwidth

4.1. Test Setup



4.2. Test Limit

≦26 MHz for DSSS

4.3. Test Method

According to MIC Notice No. 88 Annex 43.

4.4. Test Procedure

A spectrum analyzer or similar device shall be used to observe a sample of the modulated transmitter's radio frequency power output.

(a) A positive peak detector function must be used.

(b) A measurement instrument with an integrated 99% power bandwidth function may be used to automate the test process.

(c) The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slowly, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.

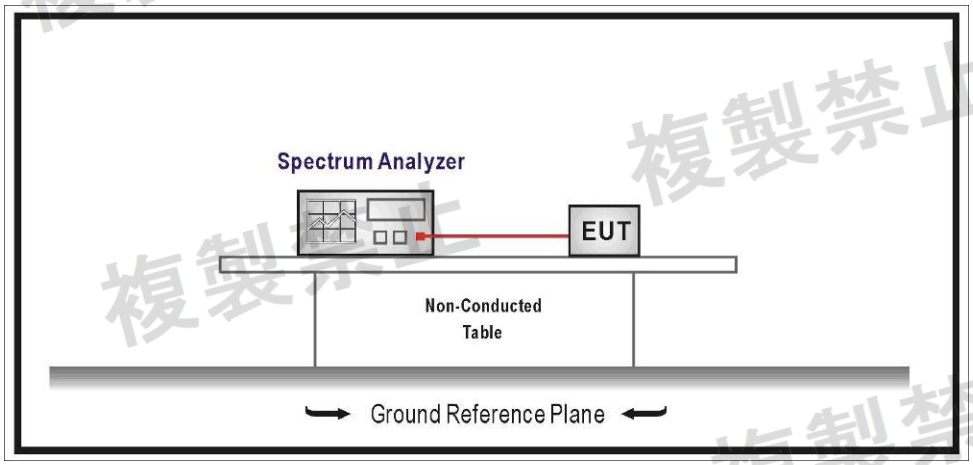
(d) 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

4.5. Test Result of Occupied Bandwidth

Refer as Appendix B

5. Frequency Tolerance

5.1. Test Setup



5.2. Test Limit

± 50 ppm

5.3. Test Method

According to MIC Notice No. 88 Annex 43.

5.4. Test Procedure

A spectrum analyzer or similar device shall be used to observe a sample of the unmodulated or modulated transmitter's radio frequency power output.

(a) A positive peak detector function must be used.

(b) The measurement instrument bandwidth and span must be set sufficiently wide, and the scan time set sufficiently slowly, to ensure all products of the unmodulated signal are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.

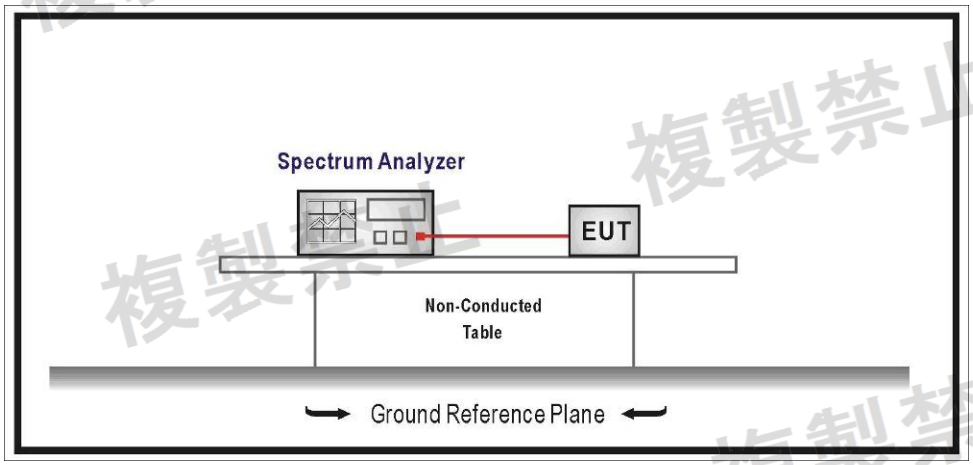
(c) 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

5.5. Test Result of Frequency Tolerance

Refer as Appendix C

6. Unwanted Emission Strength

6.1. Test Setup



6.2. Test Limit

≤ 2.5uW/MHz for 30 MHz < f < 2387 MHz

≤ 25uW/MHz for 2387 MHz ≤ f < 2400 MHz

≤ 25uW/MHz for 2483.5 MHz < f ≤ 2496.5 MHz

≤ 2.5uW/MHz for 2496.5 MHz < f < 12500 MHz

6.3. Test Method

According to MIC Notice No. 88 Annex 43.

6.4. Test Procedure

The EUT is connected to the spectrum analyzer and it is configured at maximum output power in the different test channels.

(a) A positive peak detector function must be used.

(b) The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slow, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.

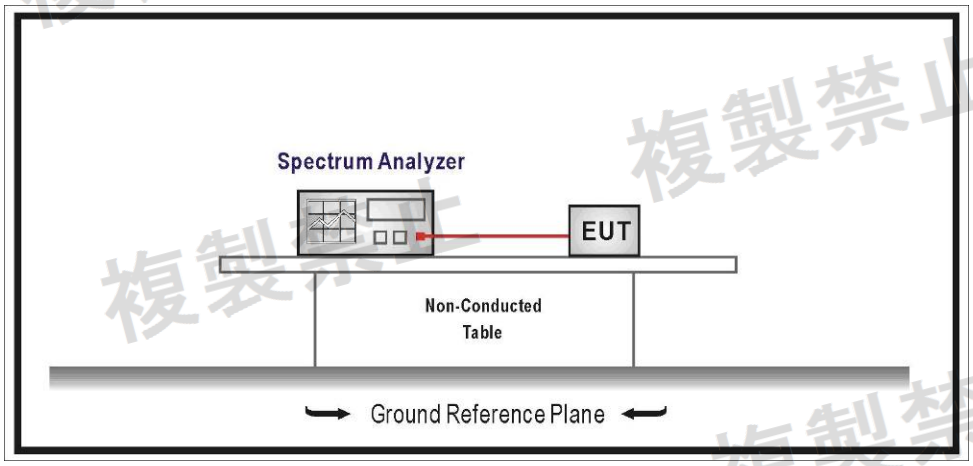
(c) 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

6.5. Test Result of Unwanted Emission Strength

Refer as Appendix D

7. Secondary Radiated Emission Strength

7.1. Test Setup



7.2. Test Limit

≤ 4nW for 30 MHz < f < 1000 MHz

≤ 20nW for 1000 MHz ≤ f < 12500 MHz

7.3. Test Method

According to MIC Notice No. 88 Annex 43.

7.4. Test Procedure

The EUT is connected to the spectrum analyzer and it is configured in reception mode in the different test channels.

(a) A positive peak detector function must be used.

(b) The measurement instrument bandwidth and span must be set sufficiently with, and, the scan time set sufficiently slowly, to ensure all major modulation products are captured. Note that the measurement bandwidth should also be set sufficiently narrow to avoid adding significant error to the test result.

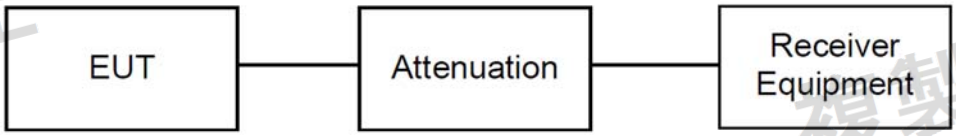
(c) 'Maximum Hold' mode may be used to accumulate the measurement result over several scans provided the emission is repetitive in nature.

7.5. Test Result of Secondary Radiated Emission Strength

Refer as Appendix E

8. Interference Prevention Function

8.1. Test Setup



8.2. Test Method

According to MIC Notice No. 88 Annex 43.

8.3. Test Procedure

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

8.4. Test Result of Interference Prevention Function

Refer as Appendix F