

Test Report No:
2660287R-RFUSV01S-B

TEST REPORT

FCC Rules & Regulations

Product Name	WIRELESS GAMING MOUSE
Brand Name	ASUS
Model No.	P729
FCC ID	009P729
Applicant's Name / Address	G.Tech Technology Ltd. No.8, Jinyuan 1st Road, Tangjiawan Town High-tech Zone, Zhuhai, 519085, China
Manufacturer's Name	ASUSTeK COMPUTER INC.
Test Method Requested, Standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247
Verdict Summary	IN COMPLIANCE
Documented By Jinn Chen	
Approved By Alan Chen	
Date of Receipt	2026/06/08
Date of Issue	2026/07/23
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 Applied Standards.....	8
1.4. Testing Location Information	9
1.5. Ambient Conditions In The Laboratory.....	10
1.6. Measurement Uncertainty	10
1.7. List of Test Equipment	11
2. Test Configuration of EUT	12
2.1. Test Condition	12
2.2. Test Frequency Mode	12
2.3. Duty Cycle	12
2.4. Measurement Configuration	13
2.5. Tested System Details	14
2.6. Configuration of Tested System	14
3. AC Power Line Conducted Emission	15
3.1. Test Setup.....	15
3.2. Test Limit	15
3.3. Test Procedure	15
3.4. Test Result of AC Power Line Conducted Emission.....	15
4. Occupied Bandwidth & 20dB Bandwidth.....	16
4.1. Test Setup.....	16
4.2. Test Limit	16
4.3. Test Procedures.....	16
4.4. Test Result of Occupied Bandwidth & 20dB Bandwidth.....	16
5. Carrier Frequency Separation	17
5.1. Test Setup.....	17
5.2. Test Limit	17
5.3. Test Procedures.....	17
5.4. Test Result of Carrier Frequency Separation	17
6. Maximum Peak Conducted Output Power	18
6.1. Test Setup.....	18

6.2.	Test Limit	18
6.3.	Test Procedures.....	18
6.4.	Test Result of Maximum Peak Conducted Output Power	18
7.	Number of Hopping Frequency	19
7.1.	Test Setup.....	19
7.2.	Test Limit	19
7.3.	Test Procedure	19
7.4.	Test Result of Number of Hopping Frequency	19
8.	Dwell Time.....	20
8.1.	Test Setup.....	20
8.2.	Test Limit	20
8.3.	Test Procedure	20
8.4.	Test Result of Dwell Time	20
9.	Antenna Port Conducted Emission	21
9.1.	Test Setup.....	21
9.2.	Test Limit	21
9.3.	Test Procedure	21
9.4.	Test Result of Antenna Port Conducted Emission.....	21
10.	Radiated Emission.....	22
10.1.	Test Setup.....	22
10.2.	Test Limit	23
10.3.	Test Procedure	23
10.4.	Test Result of Radiated Emission (Below 30 MHz).....	24
10.5.	Test Result of Radiated Emission.....	24
Appendix A. Test Result of AC Power Line Conducted Emission		
Appendix B. Test Result of Occupied Bandwidth & 20dB Bandwidth		
Appendix C. Test Result of Carrier Frequency Separation		
Appendix D. Test Result of Maximum Peak Conducted Output Power		
Appendix E. Test Result of Number of Hopping Frequency		
Appendix F. Test Result of Dwell Time		
Appendix G. Test Result of Antenna Port Conducted Emission		
Appendix H. Test Result of Radiated Emission		
Appendix I. 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	2026/07/23

Summary of Test Result

Report Clause	Test Items	Result (PASS/FAIL)	Remark
3	AC Power Line Conducted Emission	PASS	-
4	Occupied Bandwidth & 20dB Bandwidth	PASS	-
5	Carrier Frequency Separation	PASS	-
6	Maximum Peak Conducted Output Power	PASS	-
7	Number of Hopping Frequency	PASS	-
8	Dwell Time	PASS	-
9	Antenna Port Conducted Emission	PASS	-
10	Radiated Emission	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	2404 ~ 2478 MHz
Channel Number	37 Channels
Type of Modulation	GFSK (2 Mbps)

Accessories Information					
No.	Equipment Name	Brand Name	Model No.	Rating	Remark
1	WIRELESS DONGLE	ASUS	MPDONGLE3	DC 5V	N/A
No.	Equipment Name	Description			
2	USB Type C Cable	Shielded, 2m			

Antenna Information				
No.	Brand Name	Part No.	Type	Gain (dBi)
1	JIA DE	WJ.05.0000068	Metal Antenna	3.20

Note:

1. The antenna of EUT conforms to FCC 15.203.

Center Frequency of Each Channel:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
-	-	01	2404	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	38	2478	-	-

1.2. EUT Information

EUT Power Type	From USB / Battery
----------------	--------------------

1.3. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC CFR Title 47 Part 15 Subpart C Section 15.247
- ♦ ANSI C63.10-2020

The following reference test guidance is not within the scope of accreditation of TAF:

- ♦ FCC KDB 558074 D01 15.247 Meas Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01

1.4. 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
	USA	FCC Designation Number: TW0033 / FCC Registration Number: 647365
	Canada	CAB Identifier Number: TW3023 / Company Number: 26930
	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
	USA	Test site Designation No. TW3024 with FCC.
	Canada	CAB Identifier Number: TW3024 / Company Number: 22397
	Site Description	Accredited by TAF Accredited Number: 3024
	Address/ Performed Location	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
	USA	Test site Designation No. TW3024 with FCC.
	Canada	CAB Identifier Number: TW3024 / Company Number: 22397
	Site Description	Accredited by TAF Accredited Number: 3024

1.5. Ambient Conditions In The Laboratory

Performed Item	Items	Required	Actual	Test Date	Tested By
AC Power Line	Temperature (°C)	10~40 °C	23.2 °C	2026/06/23	Kevin Lai
Conducted Emission	Humidity (%RH)	10~90 %	62.1 %		
RF Conducted Emission	Temperature (°C)	10~40 °C	22.3~23.2 °C	2026/06/12 ~ 2026/07/07	Kevin Lai
	Humidity (%RH)	10~90 %	61.5~72.6 %		
Radiated Emission	Temperature (°C)	10~40 °C	22.8~23.2 °C	2026/06/19 ~ 2026/06/21	Rock Liang
	Humidity (%RH)	10~90 %	64.5~65.7 %		

1.6. 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
AC Power Line Conducted Emission	± 3.73 dB
Occupied Bandwidth & 20dB Bandwidth	± 1580.61 Hz
Carrier Frequency Separation	± 1580.61 Hz
Maximum Peak Conducted Output Power	Spectrum Analyzer: ± 2.13 dB Power Meter: ± 1.06 dB
Number of Hopping Frequency	N/A
Dwell Time	± 0.65 %
Antenna Port Conducted Emission	± 2.13 dB
Radiated Emission	9 kHz~30 MHz: ± 3.30 dB 30 MHz~1 GHz: ± 5.39 dB 1 GHz~18 GHz: ± 4.24 dB 18 GHz~40 GHz: ± 3.62 dB
Duty Cycle	± 0.65 %

1.7. List of Test Equipment

For Conduction Measurements / HY-SR01

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	EMI Test Receiver	R&S	ESR7	101601	2026/04/20	2027/04/19
V	Two-Line V-Network	R&S	ENV216	101306	2026/03/27	2028/03/26
V	Two-Line V-Network	R&S	ENV216	101307	2025/08/06	2027/08/05
V	Coaxial Cable	SUHNER	RG400_BNC	RF001	2026/01/10	2027/01/09

Note:

1. Two-Line V-Network is calibrated every two years, the other equipment is calibrated every year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: e3 230303 dekra V9.

For Conducted Measurements / HY-SR02

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	Spectrum Analyzer	R&S	FSV30	103467	2026/04/24	2027/04/23
V	Spectrum Analyzer	KEYSIGHT	N9010A	MY54510317	2025/08/04	2026/08/03
V	Peak Power Analyzer	KEYSIGHT	8990B	MY51000539	2026/04/30	2027/04/29
V	Wideband Power Sensor	KEYSIGHT	N1923A	MY59240002	2026/05/06	2027/05/05
V	Wideband Power Sensor	KEYSIGHT	N1923A	MY59240003	2026/05/06	2027/05/05

Note:

1. All equipment is calibrated every year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version : DTC_RF_Tool_Release V2.0.37.

For Radiated Measurements /HY-CB03

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	Loop Antenna	TESEQ	HLA6121	49611	2026/02/04	2027/02/03
V	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-0675	2025/08/14	2027/08/13
V	Horn Antenna	Com-Power	AH-840	101100	2025/10/07	2027/10/06
V	Horn Antenna	RF SPIN	DRH18-E	210507A18ES	2026/04/24	2028/04/23
V	Pre-Amplifier	SGH	SGH0301-9	20211007-11	2026/01/10	2027/01/09
V	Pre-Amplifier	SGH	PRAMP118	20200701	2026/01/10	2027/01/09
V	Pre-Amplifier	EMCI	EMC05820SE	980310	2026/01/10	2027/01/09
V	Pre-Amplifier	EMCI	EMC184045SE	980369	2026/01/10	2027/01/09
V	Coaxial Cable	EMCI	EMC102-KM-KM-600	160311	2026/01/10	2027/01/09
V	Coaxial Cable	SGH	HC360-2.92M/2.92M-7.0M	202108-1	2026/01/10	2027/01/09
V	Filter	MICRO TRONICS	BRM20887	G003	2026/01/05	2027/01/04
V	EMI Test Receiver	R&S	ESR3	102793	2025/12/01	2026/11/30
V	Spectrum Analyzer	R&S	FSV3044	101114	2026/04/08	2027/04/07
V	Coaxial Cable	SGH	SGH18	2021005-1	2026/01/10	2027/01/09
V	Coaxial Cable	SGH	SGH18	202108-4	2026/01/10	2027/01/09
V	Coaxial Cable	SGH	HA800	GD20110223-1	2026/01/10	2027/01/09
V	Coaxial Cable	SGH	HA800	GD20110222-8	2026/01/10	2027/01/09

Note:

1. Bi-Log Antenna and Horn Antenna are calibrated every two years, the other equipment is calibrated every year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: e3 230303 dekra V9.

2. Test Configuration of EUT

2.1. Test Condition

EUT Operational Condition	
Testing Voltage	DC 5V

2.2. Test Frequency Mode

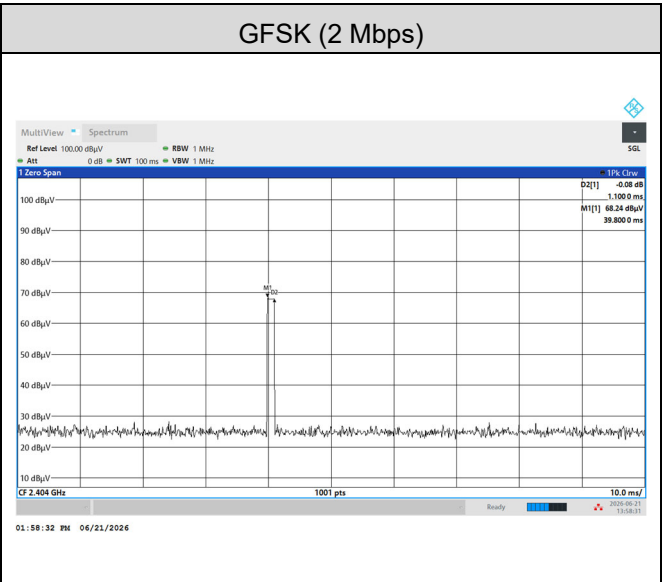
Test Software Version	AB1620_Airoha_Tool_Kit(ATK) / Version 1.1.0.51
-----------------------	--

Modulation	Frequency (MHz)	Power Setting			
		SISO A	SISO B	MIMO A	MIMO B
GFSK (2 Mbps)	2404	57	--	--	--
	2440	57	--	--	--
	2478	58	--	--	--

2.3. Duty Cycle

Modulation or Mode	Time on of 100 ms (ms)	Duty Cycle (Ton/100 ms)	Duty Cycle Correction Factor (dB)
GFSK (2 Mbps)	1.10	0.011	-39.172

Note: Duty Cycle Correction Factor = 20*Log(Duty Cycle).



2.4. Measurement Configuration

Tests Item	AC Power Line Conducted Emission
Test Condition	AC power line conducted measurement for line and neutral
Operating Mode	Transmit

Tests Item	Occupied Bandwidth & 20dB Bandwidth Carrier Frequency Separation Maximum Peak Conducted Output Power Number of Hopping Frequency Dwell Time Antenna Port Conducted Emission
Test Condition	Conducted measurement at transmit chains
Operating Mode	Transmit

Tests Item	Radiated Emission
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Transmit
Operating Mode > 1GHz	Transmit

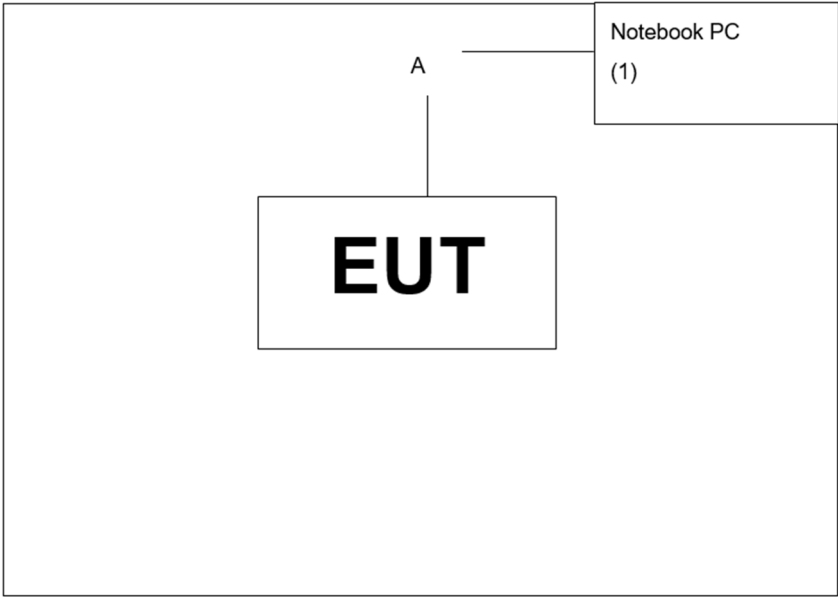
Note:

1. Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. For radiated emissions below 1 GHz and AC power line conducted emissions, all modes of operation were investigated, and the worst-case emissions are reported.
3. The radiation measurements are performed in the X, Y, and Z axis positions. Only the worst case is shown in the report.
4. The EUT is available in two colors: black and white, with white as the primary color for testing purposes. The color does not affect the test results.

2.5. Tested System Details

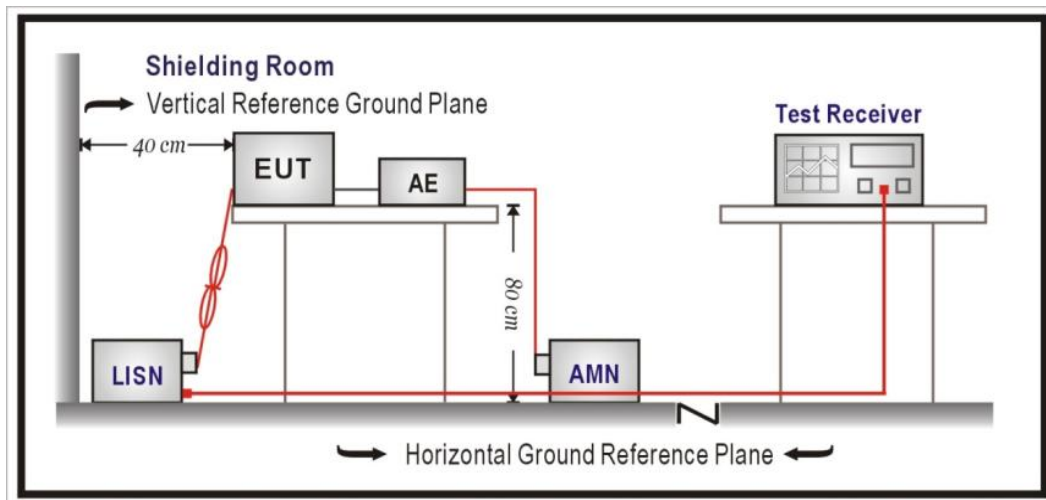
No.	Equipment	Brand Name	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	Latitude 5491	1PL56S2	N/A

2.6. Configuration of Tested System

Connection Diagram		
		
Signal Cable Type		Signal cable Description
A	USB Type C Cable	Shielded, 2m

3. AC Power Line Conducted Emission

3.1. Test Setup



3.2. Test Limit

Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.3. Test Procedure

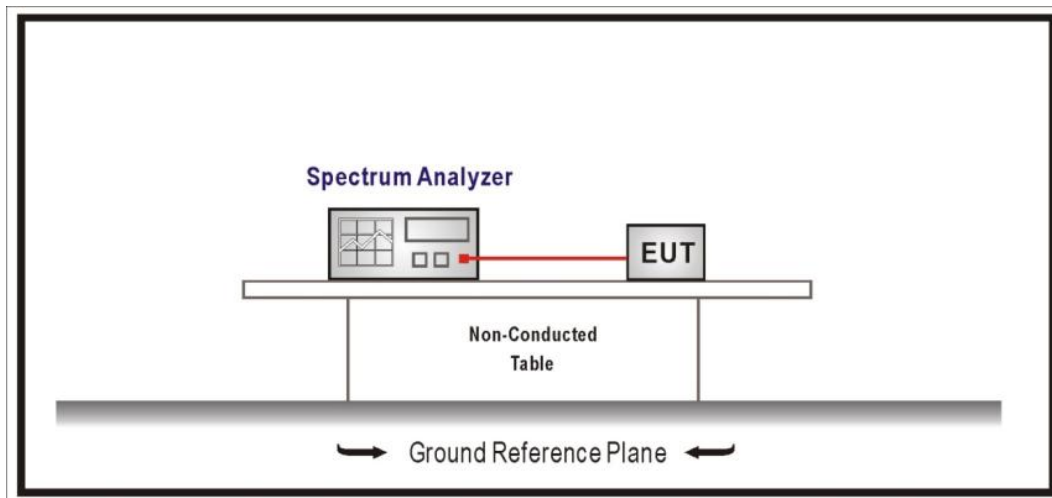
The EUT was setup according to ANSI C63.10-2020 for AC Power Line Conducted Emissions.

3.4. Test Result of AC Power Line Conducted Emission

Refer as Appendix A

4. Occupied Bandwidth & 20dB Bandwidth

4.1. Test Setup



4.2. Test Limit

N/A

4.3. Test Procedures

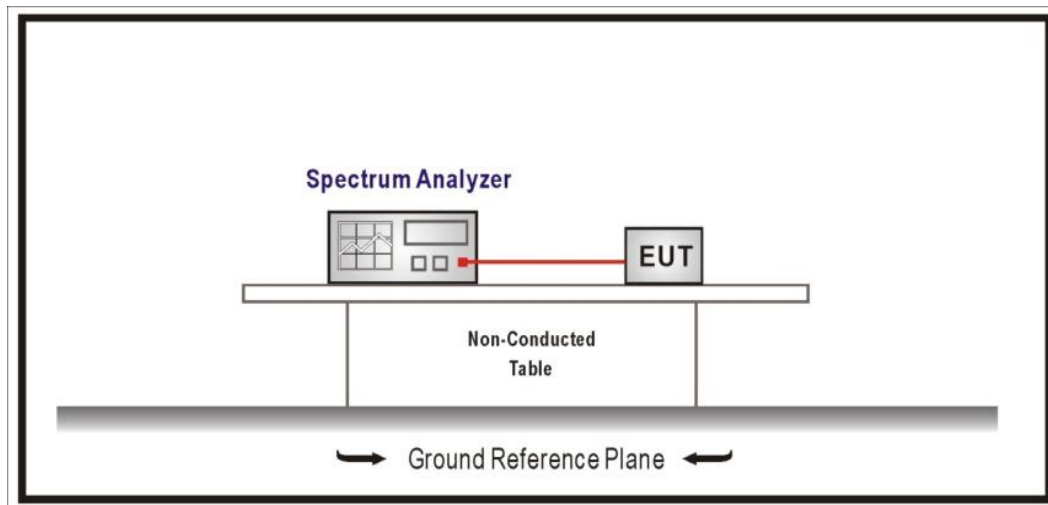
The EUT was setup according to ANSI C63.10-2020 and tested according to FHSS test procedure of KDB 558074.

4.4. Test Result of Occupied Bandwidth & 20dB Bandwidth

Refer as Appendix B

5. Carrier Frequency Separation

5.1. Test Setup



5.2. Test Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400 ~ 2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with a Maximum Conducted Output Power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

5.3. Test Procedures

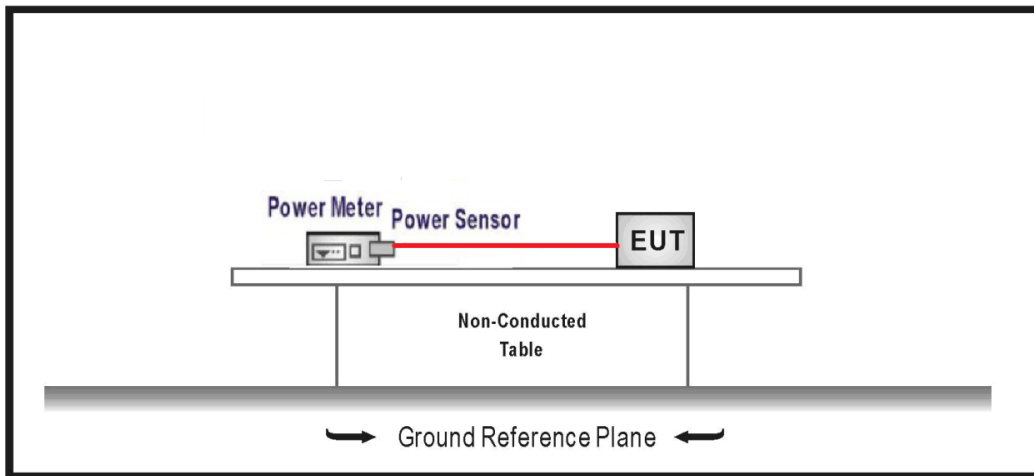
The EUT was setup according to ANSI C63.10-2020 and tested according to FHSS test procedure of KDB 558074.

5.4. Test Result of Carrier Frequency Separation

Refer as Appendix C

6. Maximum Peak Conducted Output Power

6.1. Test Setup



6.2. Test Limit

For frequency hopping systems operating in the 2400 ~ 2483.5 MHz band:

1. Number of Hopping Frequencies ≥ 75 : 1 watt (30dBm)
2. Number of Hopping Frequencies ≥ 15 : 0.125 watts (20.97dBm)

6.3. Test Procedures

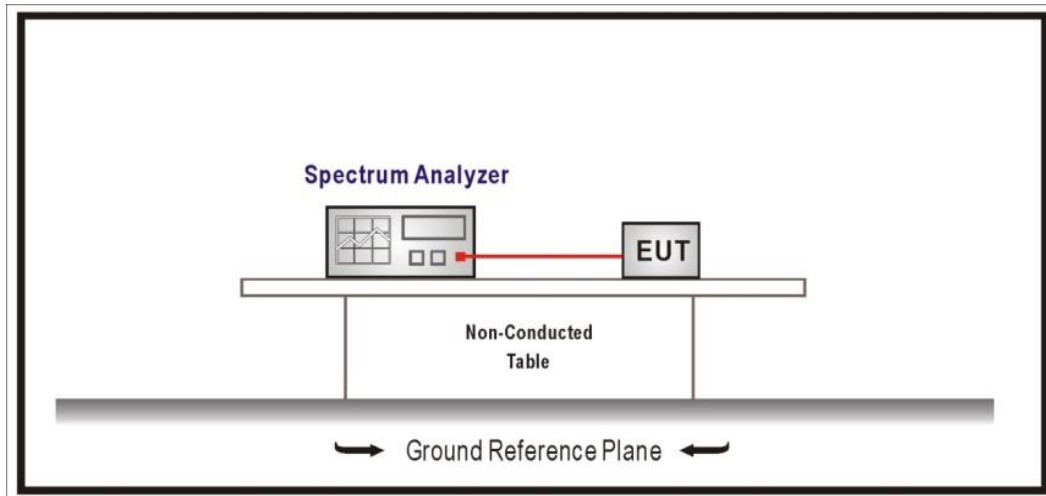
The EUT was setup according to ANSI C63.10-2020 and tested according to FHSS test procedure of KDB 558074.

6.4. Test Result of Maximum Peak Conducted Output Power

Refer as Appendix D

7. Number of Hopping Frequency

7.1. Test Setup



7.2. Test Limit

Frequency hopping systems in the 2400 ~ 2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

7.3. Test Procedure

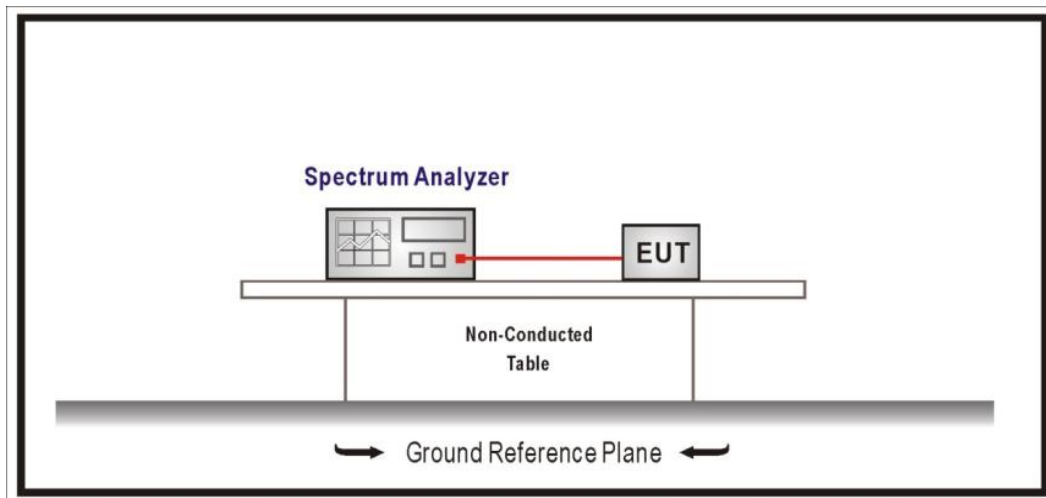
The EUT was setup according to ANSI C63.10-2020 and tested according to FHSS test procedure of KDB 558074.

7.4. Test Result of Number of Hopping Frequency

Refer as Appendix E

8. Dwell Time

8.1. Test Setup



8.2. Test Limit

For frequency hopping systems operating in the 2400-2483.5 MHz bands. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

8.3. Test Procedure

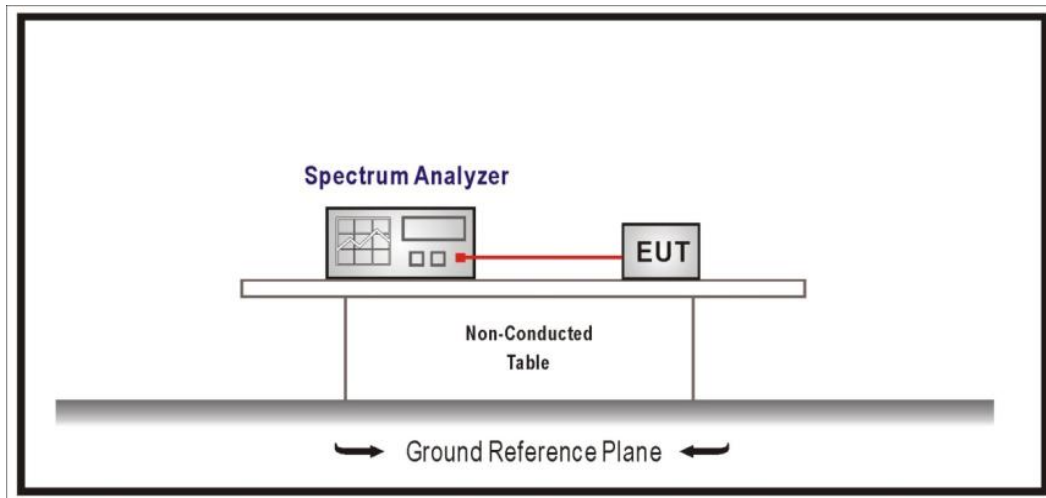
The EUT was setup according to ANSI C63.10-2020 and tested according to FHSS test procedure of KDB 558074.

8.4. Test Result of Dwell Time

Refer as Appendix F

9. Antenna Port Conducted Emission

9.1. Test Setup



9.2. Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limit.

9.3. Test Procedure

The EUT was setup according to ANSI C63.10-2020 and tested according to FHSS test procedure of KDB 558074.

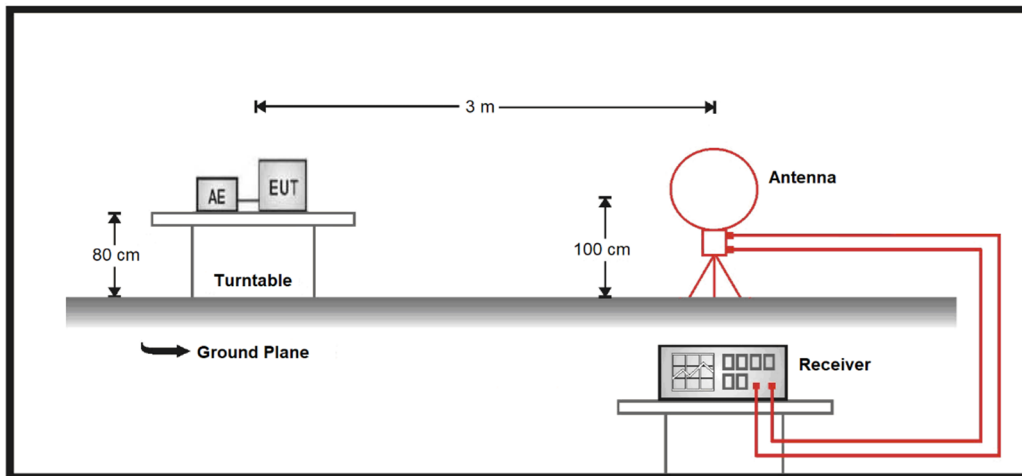
9.4. Test Result of Antenna Port Conducted Emission

Refer as Appendix G

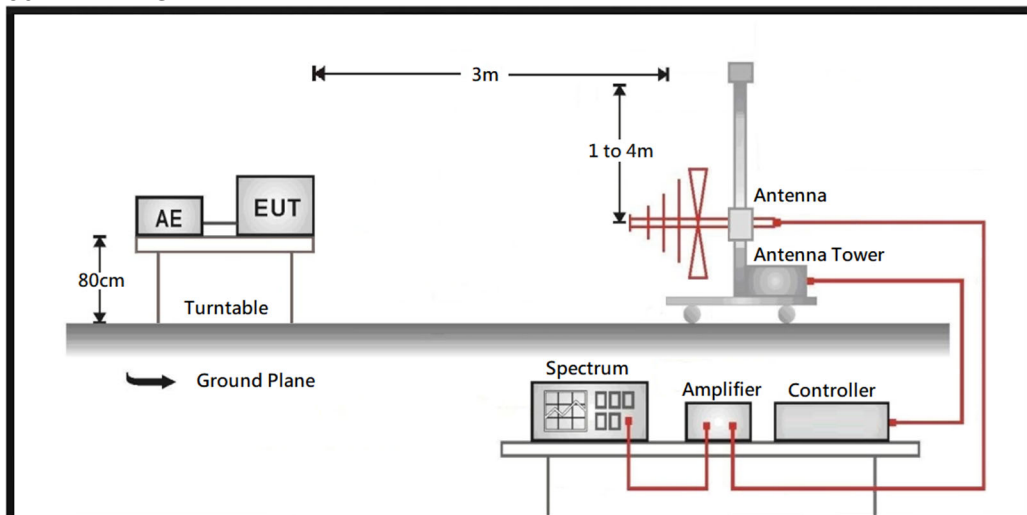
10. Radiated Emission

10.1. Test Setup

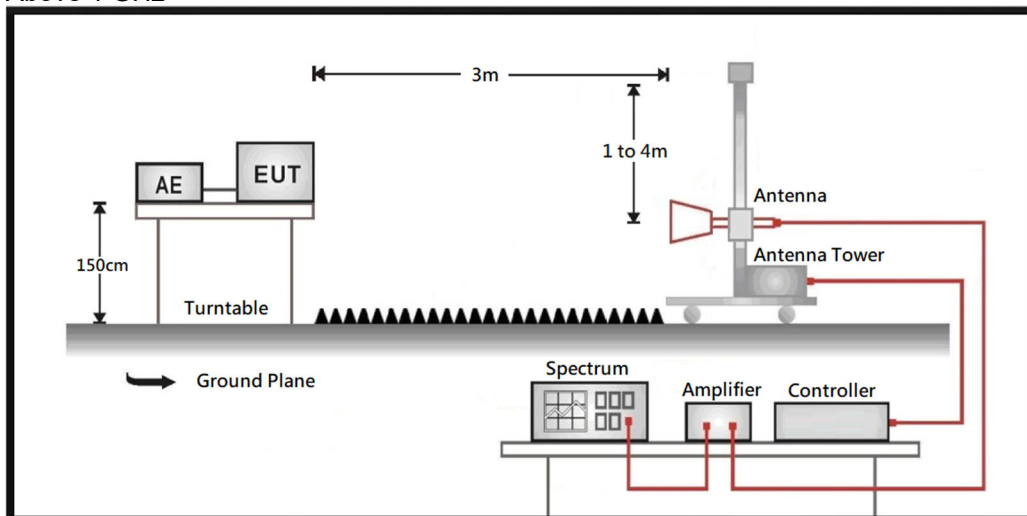
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



10.2. Test Limit

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	20 log (2400/F(kHz))	300
0.490 – 1.705	24000/F(kHz)	20 log (24000/F(kHz))	30
1.705 - 30	30	29.5	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

1. Field strength (dBuV/m) = 20 log Field strength (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

10.3. Test Procedure

The EUT and all the supporting units are placed on a turn table which is 0.8 or 1.5 meters above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10-2020 on radiated measurement.

On any frequency or frequencies from 9 kHz (include the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limit shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limit shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

The bandwidth below 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.

10.4. Test Result of Radiated Emission (Below 30 MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

10.5. Test Result of Radiated Emission

Refer as Appendix H