



MEASUREMENT REPORT

FCC PART 15.247 WLAN 802.11b/g/n

Report No.: S2025021260650104

Issue Date: 08-07-2025

Applicant: Neusoft Group (Dalian) Co., Ltd
Address: No.901-7 Huangpu Road. Ganjingzi District, Dalian City, Liaoning Province, China
FCC ID: 2AZAXCUSP000D00
Product: Cockpit domain controller
Model No.: CUSP000D00
FCC Classification: Digital Transmission System (DTS)
FCC Rule Part(s): Part 15 Subpart C (15.247)
Test Procedure(s): ANSI C63.10-2013, KDB 558074 D01v05r02
Result: Pass
Item Receipt Date: Feb.12, 2025
Test Date: Mar.19, 2025 ~ Mar.21, 2025

Compiled By

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(Stone Zhang)
Senior Test Engineer

Approved By

Line Chen

(Line Chen)
Engineer Manager



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s)

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The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

Revision History

Report No.	Version	Description	Issue Date
S2025021260650104	Rev. 01	/	08-07-2025

Note 1: Except for radiated spurious emissions, the test results of all conducted test items please refer to the module FCC test report (Report No.: JCF241024031-003, FCC ID:2BMJZ-P13A01H4) which issued on 2025/3/7 by Guangzhou Jingce Testing Technology Co., Ltd..

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§2.1033 General Information

Applicant:	Neusoft Group (Dalian) Co., Ltd
Applicant Address:	No.901-7 Huangpu Road. Ganjingzi District, Dalian City, Liaoning Province, China
Manufacturer:	Neusoft Group (Dalian) Co., Ltd
Manufacturer Address:	No.901-7 Huangpu Road. Ganjingzi District, Dalian City, Liaoning Province, China
Factory:	Qingdao Daesung Electronic Co., Ltd
Factory's Address:	No.37,Mengshahe 1 Road,Jimo Zone Qingdao,Shandong,266200 China
Test Site:	Fanguang Inspection & Testing Co., Ltd.
LAB ID:	CN5037
Test Site Address:	No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China
FCC Rule Part(s):	Part 15 Subpart C (15.247)
FCC ID:	2AZAXCUSP000D00
Test Device Serial No.:	S/N.:/ <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering
FCC Classification:	Digital Transmission System (DTS)

1. Introduction

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

1.2. FangguangTest Location

These measurement tests were performed at the Fangguang Inspection and testing Co.,LTD located at No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China. The detailed description of the measurement facility was found to be in compliance with the requirements of ANSI C63.10-2013.

2. Product Information

2.1. Equipment Description

Product Name:	Cockpit domain controller
Model Name:	CUSP000D00
Additional Model:	/
Model Description:	/
Trade Mark:	/
Input Voltage Range:	DC 12V
Hardware Version:	HWA.0.3
Software Version:	SWA.0.20241226a
EUT sample number:	S20250212606501-1-1(Radiated)

Note: This information is provided by the Customer and its authenticity is the responsibility of the Customer.

2.2. Product Specification Subjective to this Report

Frequency Band:	2412MHz-2462MHz for 802.11b/g/n HT20 2422MHz-2452MHz: 802.11n HT40
Type of Modulation:	DSSS for 802.11b mode; OFDM for 802.11g/n HT20/n HT40 mode
Antenna Specification:	PCB printed antenna 1 with 4.86dBi (Max.), PCB printed antenna 2 with 3.49dBi (Max.)
Note:	The EUT antenna gain is provided by the applicant. This report is made solely on the basis of such data and/or information. We accept no responsibility for the authenticity and completeness of the above data and information and the validity of the results and/or conclusions.

2.3. Operation Frequency / Channel List

802.11b/g/n-HT20/n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	--	--

EUT was tested with Channel 01, 03, 06, 09 and 11.

2.4. Device Capabilities

This device contains the following capabilities: 2.4GHz WLAN (DTS)

Note: The duty cycles are refer to the module FCC test report (Report No.: JCF241024031-003, FCC ID: 2BMJZ-P13A01H4) which issued on 2025/3/7 by Guangzhou Jingce Testing Technology Co., Ltd..

2.5. Description of Test Software

Test software:

Software version
Scrcpy

Power Setting:

Mode	Data Rate	Frequency (MHz)	Power Setting	
			ANT1	ANT2
802.11b	1M	2412	21	23
		2437	21	22
		2462	21	22
802.11g	6M	2412	15	16
		2437	15	16
		2462	15	16
802.11n HT20	MCS8	2412	13	13
		2437	13	13
		2462	13	13
802.11n HT40	MCS8	2422	13	13
		2437	13	13
		2452	13	13

Note: Only 802.11n HT20/HT40 support MIMO mode.

2.6. Test Mode

Test Mode	Mode 1: Transmit by 802.11b
	Mode 2: Transmit by 802.11g
	Mode 3: Transmit by 802.11n-HT20/ n-HT40

2.7. Test Configuration

The EUT was tested per the guidance of KDB 558074 D01 v05r02. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.8. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.9. EUT Photo

The EUT external photo, internal photo and test setup photo, please refer to the plots in the S20250212606501-A1/A2/A3.

2.10. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase.

However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

2.11. Calculation with all conversion and correction factors used

For Radiated Emissions Below 1GHz Test:

Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

For Radiated Emissions Above 1GHz Test:

Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

3. Description of Test

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 558074 D01 v05r02 were used in the measurement of the EUT.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. The turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-25GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. Antenna Requirements

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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.”

- Use a unique coupling to the intentional radiator.

5. Test Equipment Calibration Date

Conducted Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	FWXGJC-2016-181	1 year	2026/07/08
Two-Line V-Network	R&S	ENV 216	FWXGJC-2016-182	1 year	2026/07/09
Thermohygrometer	Yuhuaze	HTC-1	FWXDA-2016-387	1 year	2025/09/03

Radiated Emission

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Loop Antenna	Schwarzbeck	FMZB 1519B	FWXGJC-2018-015	1 year	2026/06/21
Bi-Log Antenna	R&S	HL562E	FWXGJC-2016-267-06	1 year	2026/01/17
Broadband Horn Antenna	R&S	HF907	FWXGJC-2016-267-07	1 year	2026/06/21
Broadband Horn Antenna	Schwarzbeck	BBHA 9170	FWXGJC-2018-016	1 year	2026/06/21
EMI Receiver	R&S	ESCI3	FGZZ-2024-033	1 year	2026/07/17
EXA Signal Analyzer	Keysight	N9010B	FWXGJC-2018-010	1 year	2026/07/16
Pre-Amplifier	Tonscend	TAP0118048	FWXGJC-2024-037	1 year	2026/06/21
Pre-Amplifier	Chengyi	EMC184055SE	FWXGJC-2018-018	1 year	2026/06/21
Thermohygrometer	Yuhuaze	HTC-1	FWXDA-2016-385	1 year	2025/09/03
Anechoic Chamber	SAEMC	FSAC318	FWXGJC-2024-035	3 year	2027/06/02

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Keysight	N9010B	FWXGJC-2018-010	1 year	2026/07/16
RF Control Unit	Tonscend	JS0806-2	FWXGJC-2018-013	1 year	2026/07/25
Thermohygrometer	Yuhuaze	HTC-1	FWXDA-2016-386	1 year	2025/09/03

Test Software	Manufacturer	Version	Asset No.	Function
JS1120-3 Test System	tonscend	V3.3.10	/	Conducted Test
JS32	tonscend	V5.0.0	/	Radiated Emission
EMI Test Software	R&S	9.26.00	/	Conducted Emission

Auxiliary Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Filter	Tonscend	ZBSF6	07247867	1 year	2026/07/25
Filter	Tonscend	ZHPF6	07233297	1 year	2026/07/25
Attenuator	Tonscend	10dB	/	1 year	2026/07/25
RF Cable	Tonscend	T-1	/	1 year	2026/07/25

6. Measurement Uncertainty

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

AC Conducted Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 2.68dB
Radiated Emission Measurement (9kHz - 30MHz)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 3.06dB
Radiated Emission Measurement (30MHz -1GHz)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 4.01dB
Radiated Emission Measurement (1-18GHz)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 4.97dB
Radiated Emission Measurement (18-40GHz)
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 5.32dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 30MHz-1GHz: 1.00 dB 1GHz-12.75GHz: 1.30 dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.60dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.80dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.20MHz
Frequency Stability
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.1×10^{-6} MHz

7. Test Result

7.1. Summary

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result
15.247(a)(2)	6dB Bandwidth	$\geq 500\text{kHz}$	Conducted	Pass
15.247(b)(3)	Output Power	$\leq 30\text{dBm}$		Pass
15.247(e)	Power Spectral Density	$\leq 8\text{dBm}/3\text{kHz}$		Pass
15.247(d)	Band Edge	$\geq 30\text{dBc}$		Pass
15.247(d)	Out-of-Band Emissions	$\geq 30\text{dBc}$		Pass
15.205 15.209	General Field Strength Limits(Restricted Bands andRadiated Emission Limits)	Emissions in restrictedbands must meet theradiated limits detailed in15.209	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Not Applicable

Notes:

- 1) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- 4) The test results of all conducted test items please refer to the module FCC test report (Report No.: JCF241024031-003, FCC ID:2BMJZ-P13A01H4) which issued on 2025/3/7 by Guangzhou Jingce Testing Technology Co., Ltd..
- 5) The EUT is DC supply, this item only for the EUT is designed to be connected to the public utility (AC) power line.

7.2. Radiated Spurious Emission Measurement

7.2.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.2.2. Test Procedure Used

ANSI C63.10-2013 – Section 6.6.4.3

7.2.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold

- Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

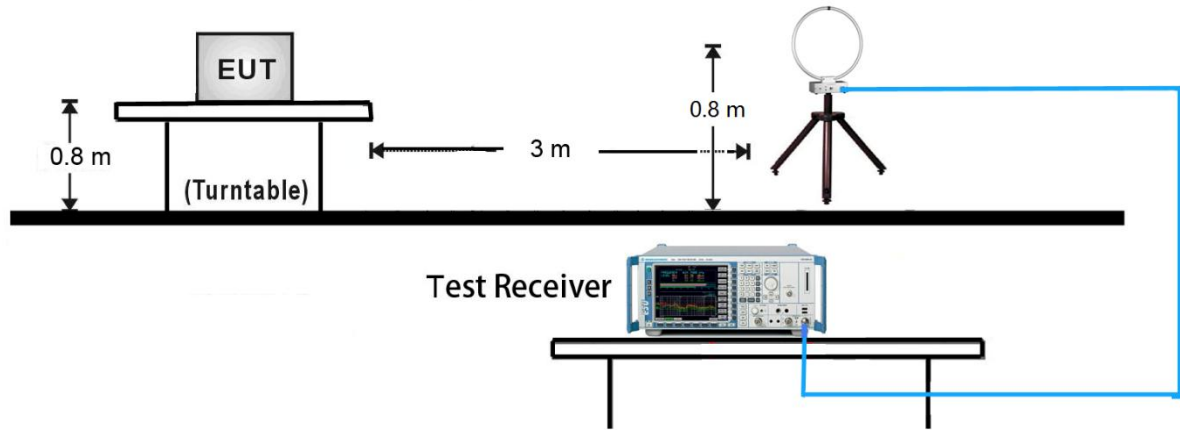
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

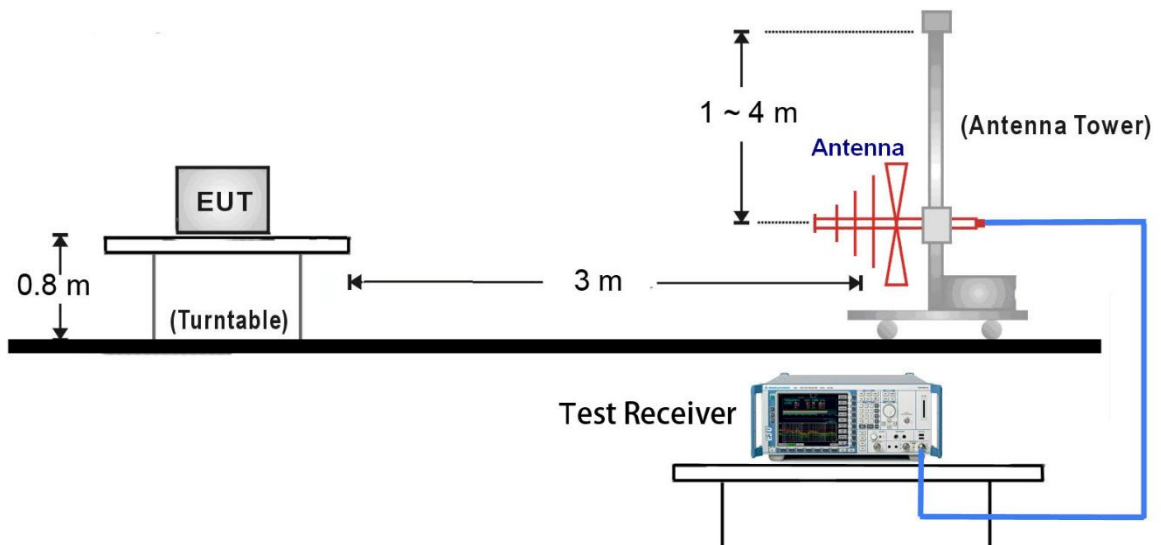
- Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- RBW = 1MHz
- VBW = 3MHz
- Detector = Power Average (RMS)
- Number of sweep point = 2001 (Number of sweep points must be $\geq 2 \times \text{span} / \text{RBW}$)
- Sweep time = auto
- Trace (RMS) averaging was performed over at least 100 traces.

7.2.4. Test Setup

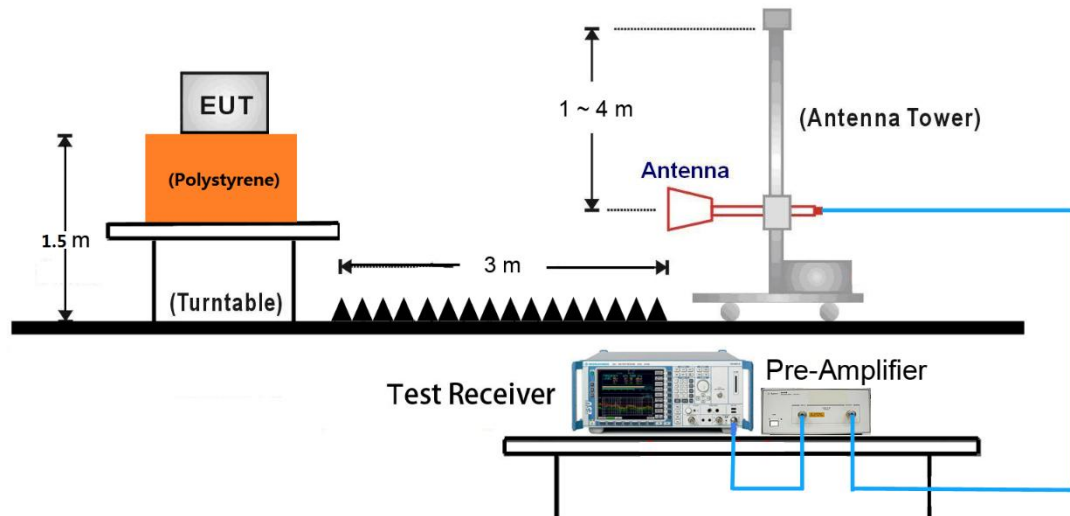
9kHz ~30MHz Test Setup:



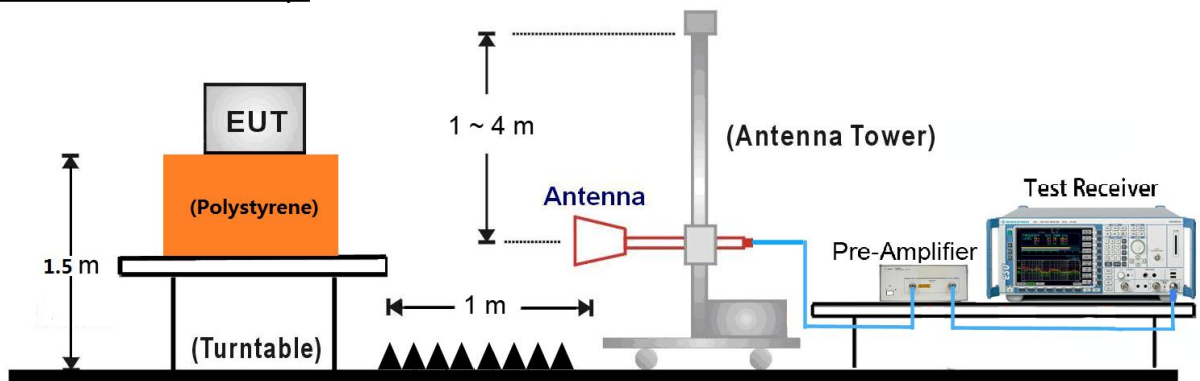
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 25GHz Test Setup:

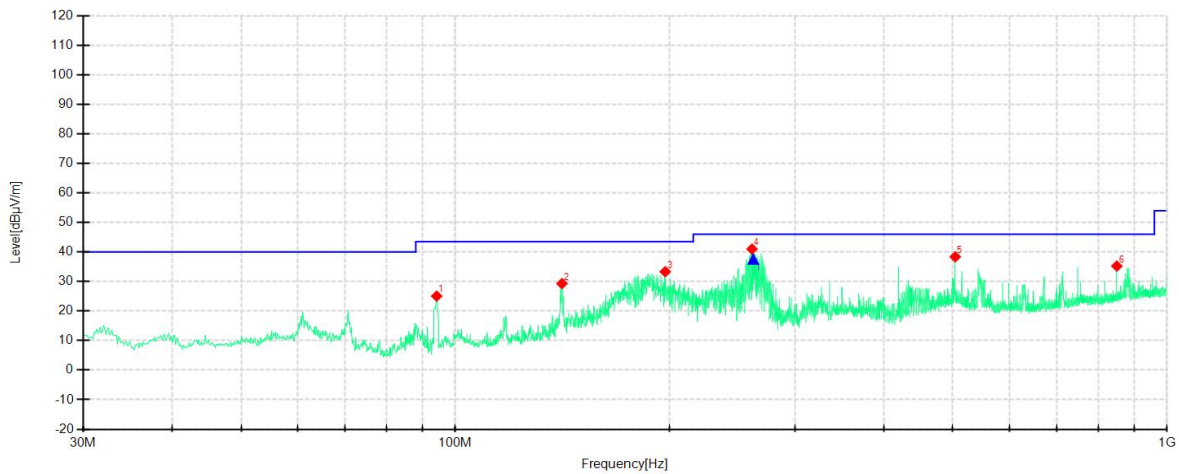


7.2.5. Test Result

All models were pretested and only the worst modes and channels were recorded in this report. (IEEE 802.11b 2437MHz ANT2).

Below 1GHz:

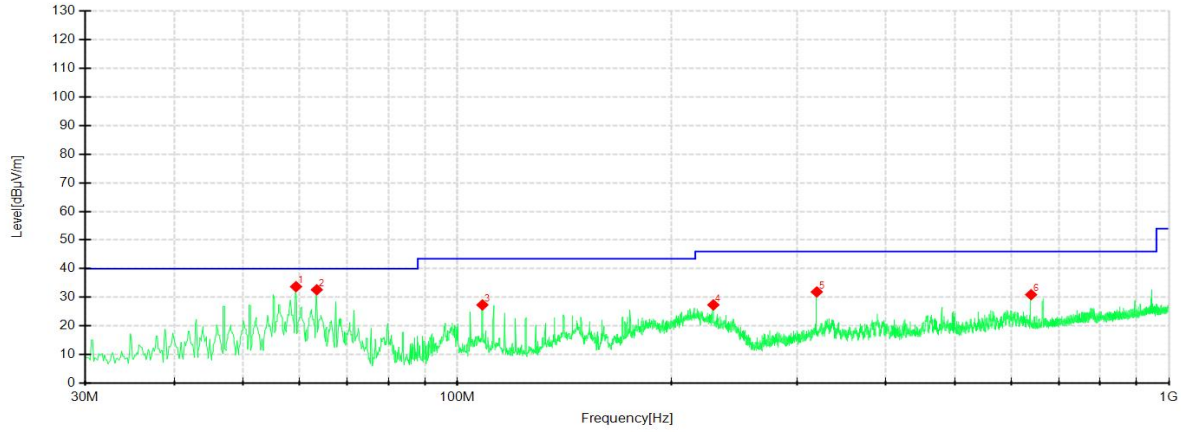
Power supply:	DC 12V	Environmental Conditions:	18.3°C/33%RH/102.3kPa
Test Engineer:	Stone Zhang	Test Date:	2025-03-20



NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Trace	Height [cm]	Angle [°]	Polarity	Verdict
1	94.1493	58.18	25.08	-33.10	43.50	18.42	QP	200	259	Horizontal	PASS
2	141.2002	57.80	29.31	-28.49	43.50	14.19	QP	200	272	Horizontal	PASS
3	197.2247	64.67	33.34	-31.33	43.50	10.16	QP	100	248	Horizontal	PASS
4	261.1314	70.26	41.01	-29.25	46.00	4.99	QP	100	92	Horizontal	PASS
5	504.0255	59.96	38.39	-21.57	46.00	7.61	QP	200	338	Horizontal	PASS
6	850.1163	51.55	35.25	-16.30	46.00	10.75	QP	200	312	Horizontal	PASS

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBμV/m]	Level [dBμV/m]	QP Limit[dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	262.2348	-29.25	66.85	37.60	46.00	8.40	100	94.1	Horizontal	PASS



NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Trace	Height [cm]	Angle [°]	Polarity	Verdict
1	32.1828	63.52	34.18	-29.34	40.00	5.82	QP	100	307	Vertical	PASS
2	70.7451	59.36	27.84	-31.52	40.00	12.16	QP	100	99	Vertical	PASS
3	184.6131	67.01	36.73	-30.28	43.50	6.77	QP	100	321	Vertical	PASS
4	210.9276	65.81	34.57	-31.24	43.50	8.93	QP	100	20	Vertical	PASS
5	419.9887	61.25	37.92	-23.33	46.00	8.08	QP	100	215	Vertical	PASS
6	504.0255	59.10	37.53	-21.57	46.00	8.47	QP	100	86	Vertical	PASS

Final Data List											
NO.	Freq. [MHz]	Factor [dB]	QP Reading[dBμV/m]	Level [dBμV/m]	QP Limit[dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict	
1	32.1558	-29.34	64.04	34.70	40.00	5.30	100	233.6	Vertical	PASS	

Remark:

- 1 No emission found between lowest internal used/generated frequency to 30MHz.
- 2 Radiated emissions measured in frequency range from 9kHz to 1GHz were made with an instrument using Quasi-peak detector mode.
- 3 The IF bandwidth of Receiver between 30MHz to 1GHz was 120kHz.

1GHz-18GHz:

Mode: IEEE 802.11b

Middle Frequency (2437MHz)

Environment: 15.6°C/32%RH/103.0kPa

Voltage: DC 12V

Tested By: Stone Zhang

Date: 2025-03-19

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1612.4000	49.81	42.36	-7.45	74.00	31.64	200	313	Horizontal
2	1908.8000	49.87	45.70	-4.17	74.00	28.30	200	15	Horizontal
3	4873.0000	56.33	49.04	-7.29	74.00	24.96	200	200	Horizontal
4	7636.0000	53.93	55.41	1.48	74.00	18.59	100	141	Horizontal
5	11746.0000	52.93	64.80	11.87	74.00	9.20	100	260	Horizontal
6	15674.0000	56.88	67.24	10.36	74.00	6.76	100	80	Horizontal

AV Final Data List

NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4874.0580	-7.29	56.24	48.95	54.00	5.05	199	202	Horizontal
2	7639.0900	1.48	30.45	31.93	54.00	22.07	100	96	Horizontal
3	11752.1200	11.87	24.43	36.30	54.00	17.70	100	268.5	Horizontal
4	15696.6800	10.36	25.92	36.28	54.00	17.72	163	102.5	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1134.2000	53.72	43.06	-10.66	74.00	30.94	100	130	Vertical
2	1908.6000	53.79	49.14	-4.65	74.00	24.86	100	21	Vertical
3	3340.0000	55.92	42.63	-13.29	74.00	31.37	200	72	Vertical
4	4090.0000	53.59	43.23	-10.36	74.00	30.77	200	1	Vertical
5	4874.0000	56.49	49.41	-7.08	74.00	24.59	200	220	Vertical
6	14976.0000	54.12	67.95	13.83	74.00	6.05	100	235	Vertical

AV Final Data List

NO.	Freq. [MHz]	Factor [dB]	AV Reading	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin	Height [cm]	Angle [°]	Polarity
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			[dB μ V/m]			[dB]			
1	1908.6830	-4.65	48.87	44.22	54.00	9.78	121	62.8	Vertical
2	4874.0710	-7.08	55.01	47.93	54.00	6.07	170	226.2	Vertical
3	15021.7300	13.83	23.28	37.11	54.00	16.89	195	273.7	Vertical

18GHz-26.5GHz:

Pre-scan all modes and recorded the worst case (IEEE 802.11n HT40 2422MHz) results in this report.

The peak test results is less than the average limits, so the average test results had not reported.

Environment: 23.0°C/35%RH/102.2kPa

Voltage: DC 12V

Tested By: Stone Zhang

Date: 2025-03-21

Suspected Data List

NO	Freq. [MHz]	Reading [dB μ V/m]	Level for 1m [dB μ V/m]	Level for 3m [dB μ V/m]	Factor [dB]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18909.075	46.63	49.64	40.10	3.01	74	33.90	100	165	Horizontal
2	19523.625	46.13	49.39	39.85	3.26	74	34.15	100	124	Horizontal
3	20680.900	44.50	48.50	38.96	4.00	74	35.04	100	248	Horizontal
4	21781.225	44.45	48.29	38.75	3.84	74	35.25	100	208	Horizontal
5	23859.050	42.27	46.98	37.44	4.71	74	36.56	100	21	Horizontal
6	24806.800	41.71	47.23	37.69	5.52	74	36.31	100	352	Horizontal

Suspected Data List

NO	Freq. [MHz]	Reading [dB μ V/m]	Level for 1m [dB μ V/m]	Level for 3m [dB μ V/m]	Factor [dB]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18574.600	46.64	49.48	39.94	2.84	74	34.06	100	5	Vertical
2	19394.425	46.33	50.02	40.48	3.69	74	33.52	100	318	Vertical
3	20132.225	45.76	50.05	40.51	4.29	74	33.49	100	5	Vertical
4	21285.250	44.66	49.01	39.47	4.35	74	34.53	100	152	Vertical
5	23028.600	42.71	47.74	38.20	5.03	74	35.80	100	5	Vertical
6	24778.750	41.58	47.62	38.08	6.04	74	35.92	100	214	Vertical

Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

- 2 Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Above 18G test distance is 1m, so the Level for 3m= Level for 1m + $20 \cdot \log(1/3)$

8. Conclusion

The data collected relate only the item(s) tested and show that the **Cockpit domain controller** is compliance with Part 15C of the FCC Rules.

Statement

1. This report is invalid for the following states: without the special inspection and testing stamp or the official stamp of our institution; without the signature of the report authorized officer; if the report is altered.
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