



Shenzhen CTL Testing Technology Co., Ltd.
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TEST REPORT

FCC PART 15.227

Report Reference No. : CTL2603163011-WF

Compiled by:
(printed name+signature)

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Happy Guo

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(printed name+signature)

Ivan Xie



Product Name : Remote control car

Model/Type reference : DMF02A

List Model(s) : Please look at page two.

Trade Mark : N/A

FCC ID : 2AZFNDMF02A

Applicant's name : ZHONG JUN TOYS FACTORY

Address of applicant : CHENGHAI DISTRICT SHANTOU CITY, GUANGDONG
PROVINCE China

Test specification :

Standard : FCC Rules Part 15.227: Operation within the band 26.96-27.28 MHz.

TRF Originator : Shenzhen CTL Testing Technology Co., Ltd.

Master TRF : Dated 2011-01

Date of receipt of test item : Mar. 17, 2026

Date of sampling :

Date of Test Date : Mar. 17, 2026–May. 09, 2026

Data of Issue : May. 11, 2026

Result : Pass

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TEST REPORT

Test Report No. :	CTL2603163011-WF	May. 11, 2026
		Date of issue

Equipment under Test : Remote control car

Model /Type : DMF02A

Listed Models : P01A, P011A, P02A, ZJ012A, P03A, PC03A, CM-001, NP01A, NC01A, ZJ001A, NC02A, GC01, ZJ002, PQ02A, PQ03A, DMF01A, F01A, F02A, NB01A, NB02A, NB05A, DW02A, SL01A, SL02A, PC02A, ZWD001A, ZWD002A, ZWD-005, ZWD-007, ZWD-011, WL01A, F06A, F08A, PC08A, CZ01A, F03A, ZJ062A, 9900-166, 9900-160D, 9900-172, 9900-168, 9900-176, 9900-198, 9900-167, CZ04A, CZ06A, SL03A, SL04A, DW06A, JH665, F04A, F09A, ZJ124A, WH8720, CZ15A, F10A, ZJ017A, ZJ018A, ZJ019A, ZJ086A, ZJ090A, ZJ091A, DMF03A, ZJ111A, ZJ112A, 9900-162, ZJ107A, ZJ114A, ZJ115A, ZJ116A, CZ08A, ZJ061A, ZJ104A, ZJ132A, ZJ103A, ZJ102A, PQ05A, ZJ120A, 9900-166A, 9900-166B, DMF01A, F10A, ZJ019A

Applicant : ZHONG JUN TOYS FACTORY

Address : CHENGHAI DISTRICT SHANTOU CITY, GUANGDONG PROVINCE China

Manufacturer : ZHONG JUN TOYS FACTORY

Address : CHENGHAI DISTRICT SHANTOU CITY, GUANGDONG PROVINCE China

Test result	Pass *
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* In the configuration tested, the EUT complied with the standards specified page 5.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.

**** Modified History ****

Version	Description	Issued Data	Report No.	Remark
Version 1.0	Initial Test Report Release	May. 11, 2026	CTL2603163011-WF	Tracy Qi

Note: This device (product name: Remote control car) model name: DMF02A, P01A, P011A, P02A, ZJ012A, P03A, PC03A, CM-001, NP01A, NC01A, ZJ001A, NC02A, GC01, ZJ002, PQ02A, PQ03A, DMF01A, F01A, F02A, NB01A, NB02A, NB05A, DW02A, SL01A, SL02A, PC02A, ZWD001A, ZWD002A, ZWD-005, ZWD-007, ZWD-011, WL01A, F06A, F08A, PC08A, CZ01A, F03A, ZJ062A, 9900-166, 9900-160D, 9900-172, 9900-168, 9900-176, 9900-198, 9900-167, CZ04A, CZ06A, SL03A, SL04A, DW06A, JH665, F04A, F09A, ZJ124A, WH8720, CZ15A, F10A, ZJ017A, ZJ018A, ZJ019A, ZJ086A, ZJ090A, ZJ091A, DMF03A, ZJ111A, ZJ112A, 9900-162, ZJ107A, ZJ114A, ZJ115A, ZJ116A, CZ08A, ZJ061A, ZJ104A, ZJ132A, ZJ103A, ZJ102A, PQ05A, ZJ120A, 9900-166A, 9900-166B, DMF01A, F10A, ZJ019A electrical, PCB, BOM are the same, only the exterior color, model name and the controlled vehicle are different, which does not affect the test results

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1. SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

[FCC Rules Part 15.227](#): Operation within the band 26.96-27.28 MHz.

[ANSI C63.10: 2020](#) : American National Standard for Testing Unlicensed Wireless Devices

1.2. Test Description

FCC PART 15 .227		
FCC Part 15.227	Transmitter Field Strength	PASS
FCC Part 2.1049/15.215	20dB Bandwidth	PASS

Remark: The measurement uncertainty is not included in the test result.

1.3. Test Facility

1.3.1 Address of the test laboratory

Company Name:	Shenzhen CTL Testing Technology Co., Ltd.
Address	Fl.A1, Bldg.A3, No.2533 GuanGuang Road, Fenghuang Community Fenghuang Street, Guangming District, Shenzhen, Guangdong, PR.C

1.3.2 Test location

All tests were performed at:

Company Name:	Shenzhen CTL Testing Technology Co., Ltd.
☒ Satellite location	Fl.A1, Bldg.A3, No.2533 GuanGuang Road, Fenghuang Community Fenghuang Street, Guangming District, Shenzhen, Guangdong, PR.C

1.3.3 Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L7497

Shenzhen CTL Testing Technology Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No. 4343.01

Shenzhen CTL Testing Technology Co., Ltd, EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

IC CAB identifier: CN0041

Main Company Number :9618B

Satellite Company Number:35187

The 3m alternate test site of Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements with Main Company Number:9618B and Satellite Company Number:35187.

FCC-Registration No.: 399832

Designation No.: CN1216

Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation No.: CN1216. Test Firm Registration 399832.

1.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Shenzhen CTL Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for CTL laboratory is reported:

Test Item	Measurement Uncertainty	Notes
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Transmitter power Radiated	± 2.20 dB	(1)
Occupied Bandwidth	± 0.02 ppm	(1)
Radiated Emission 30~1000MHz	± 4.08 dB	(1)
Radiated Emission Above 1GHz	± 4.32 dB	(1)
Conducted Disturbance 0.15~30MHz	± 2.96 dB	(1)
20dB Emission Bandwidth	$\pm 1.9\%$	(1)
Carrier Frequency Separation	$\pm 1.9\%$	(1)
Maximum Power Spectral Density Level	± 0.98 dB	(1)
Number of Hopping Channel	$\pm 1.9\%$	(1)
Time of Occupancy	$\pm 0.11\%$	(1)
Max Peak Conducted Output Power	± 0.98 dB	(1)
Band-edge Spurious Emission	± 1.21 dB	(1)
Conducted RF Spurious Emission	9kHz-7GHz: ± 1.09 dB 7GHz-26.5GHz: ± 3.27 dB	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2.0$.
- (2) Decision rule for Statement of Conformity: The measurement uncertainty is not taken into account but only measured result.

2. GENERAL INFORMATION

2.1. Environmental conditions

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

Normal Temperature:	18-28°C
Relative Humidity:	30-60%
Air Pressure:	965-1030hPa

2.2. General Description of EUT

Product Name:	Remote control car
Model/Type reference:	DMF02A
Power supply:	DC 3.0V from battery
Operation frequency:	27.145MHz
Modulation :	ASK
No. of Channel :	1
Antenna type:	Integrated Antenna
Antenna gain:	OdBi provided by ☒ Applicant ☐ Manufacturer

Note: For more details, please refer to the user's manual of the EUT.

2.3. Equipments Used during the Test

Conducted Emission					
Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
EMI Test Receiver	ROHDE & SCHWARZ	ESCI	1166.5950.03	2026/01/05	2027/01/04
LISN	ROHDE & SCHWARZ	ESH2-Z5	860014/010	2026/01/05	2027/01/04
Limitator	ROHDE & SCHWARZ	ESH3-Z2	100408	2026/01/05	2027/01/04
Software:					
Name of Software:			Version:		
ES-K1			V1.71		

Radiated Emissions and Band Edge					
Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
Loop antenna	BEIJING DAZE TECHNOLOGY CO., LTD	ZN309 00A	N/A	2025/07/02	2026/07/01
ULTRA-BROADBAND ANTENNA	Sunol Sciences Corp.	JB1 Antenna	A06171 3	2025/07/02	2026/07/01

Horn Antenna	Sunol Sciences Corp	DRH-118	A062013	2026/01/05	2027/01/04
Horn Antenna	Ocean Microwave	OBH100400	26999002	2025/07/02	2026/07/01
Amplifier	MRT Technology(Suzhou)Co., Ltd	MRT-AP01M06	S-001	2025/04/28	2026/04/27
Amplifier	Agilent	8449B	3008A02306	2026/01/05	2027/01/04
Amplifier	Brief&Smart	LNA-4018	2104197	2025/07/03	2026/07/02
EMI Test Receiver	ROHDE & SCHWARZ	ESCI	1166.5950.03	2026/01/05	2027/01/04
Spectrum Analyzer	RS	FSP	1164.4391.38	2025/07/03	2026/07/02
Test software					
Name of Software			Version		
EZ_EMG(Below 1GHz)			V1.1.4.2		
EZ_EMG(Above 1GHz)			V1.1.4.2		

Maximum Peak Output Power & 20dB Bandwidth & Frequency Separation & Number of hopping frequency & Dwell Time & Out-of-band Emissions					
Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
Spectrum Analyzer	Keysight	N9020A	MY53420874	2025/07/03	2026/07/02
Power meter	TSTPASS	TSPS2023R	TSCB220016	2025/07/03	2026/07/02
Temperature/Humidity Meter	Ji Yu	MC501	/	2025/07/03	2026/07/02
Test Software					
Name of Software			Version		
TST-PASS			V2.0.2		

RF Cable List and Details

RF Cable	RF Cable loss	RF Cable loss provided by			
RF1.13	0.5dB	☒ Applicant	☐ Manufacturer	☐ Testing Laboratory (CTL)	
RG 316	0.8dB	☒ Applicant	☐ Manufacturer	☐ Testing Laboratory (CTL)	

2.4. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended to comply with Section 15.227 of the FCC Part 15, Subpart C Rules.

2.5. Modifications

No modifications were implemented to meet testing criteria.

3. TEST CONDITIONS AND RESULTS

3.1. Radiated Emission

Limit

the field strength of emissions from intentional radiators operated under this Section shall not exceed the following:

15.227(a):The field strength of any emission within this band shall not exceed 10,000 microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in Section 15.35 for limiting peak emissions apply.

15.227(b) :The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in Section 15.209.

Radiated emission limits

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
0.009-0.49	3	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	$2400/F(\text{KHz})$
0.49-1.705	3	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	$24000/F(\text{KHz})$
1.705-30	3	$20\log(30)+40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

Test Procedure

1) 9 kHz to 30 MHz emissions: For testing performed with the loop antenna. The center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane.

2) 30 MHz to 1 GHz emissions: For testing performed with the bi-log type antenna. The measurement is performed with the EUT rotated 360°, the antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurement for both the horizontal and vertical antenna polarizations.

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

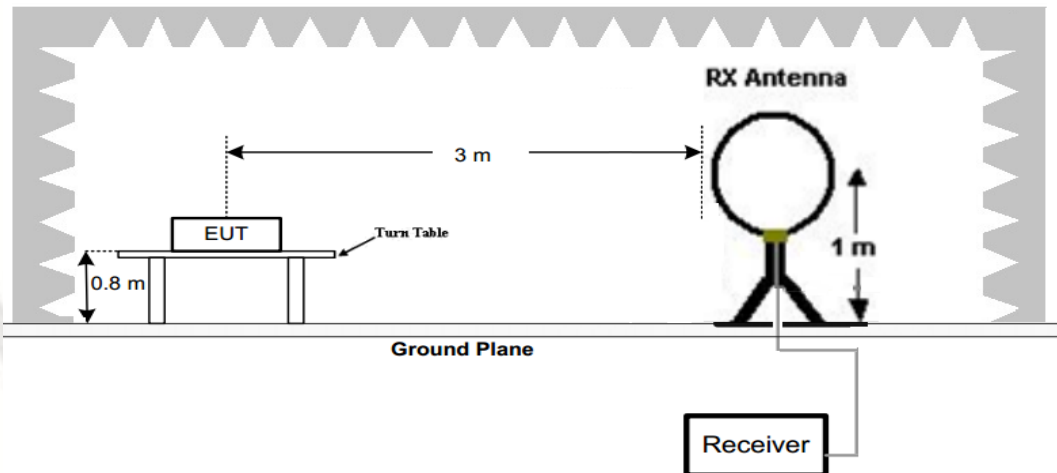
For example

Frequency (MHz)	FS (dBμV/m)	RA (dBμV/m)	AF (dB)	CL (dB)	AG (dB)	Transd (dB)
150.00	40	58.1	12.2	1.6	31.90	-18.1

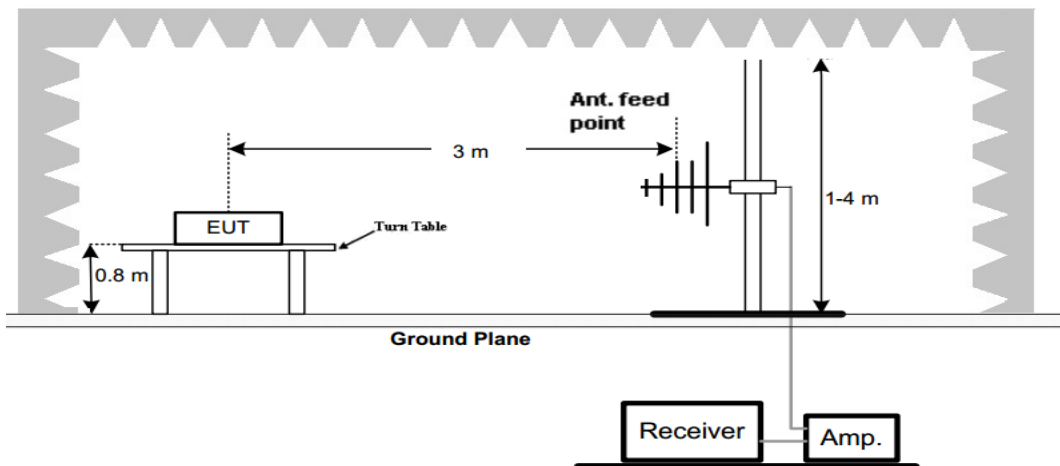
$$\text{Transd} = \text{AF} + \text{CL} - \text{AG}$$

Test Configuration

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



Test Results**Fundamental emission:**

Frequency(MHz):			27MHz			Polarity:		HORIZONTAL	
No.	Frequency (MHz)	Emission Level (dBuV/m)	Detector	Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Correction Factor (dB/m)
1	10.53	47.09	PK	69.54	22.45	42.39	5.26	-0.56	4.7
2	15.36	51.62	PK	69.54	17.92	46.83	5.36	-0.57	4.79
3	16.81	60.79	PK	69.54	8.75	55.91	5.45	-0.57	4.88
4	27.145	61.05	PK	69.54	8.49	55.91	5.49	-0.35	5.14
5	28.91	51.62	PK	69.54	17.92	46.29	5.63	-0.3	5.33

Frequency(MHz):			27MHz			Polarity:		VERTICAL	
No.	Frequency (MHz)	Emission Level (dBuV/m)	Detector	Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Correction Factor (dB/m)
1	10.53	64.55	PK	69.54	4.99	59.85	5.26	-0.56	4.7
2	15.36	57.16	PK	69.54	12.38	52.37	5.36	-0.57	4.79
3	16.81	60.67	PK	69.54	8.87	55.79	5.45	-0.57	4.88
4	27.145	66.46	PK	69.54	3.08	61.32	5.49	-0.35	5.14
5	28.91	64.65	PK	69.54	4.89	59.32	5.63	-0.3	5.33

Test Level =Receiver Reading + Antenna Factor + Cable Loss.

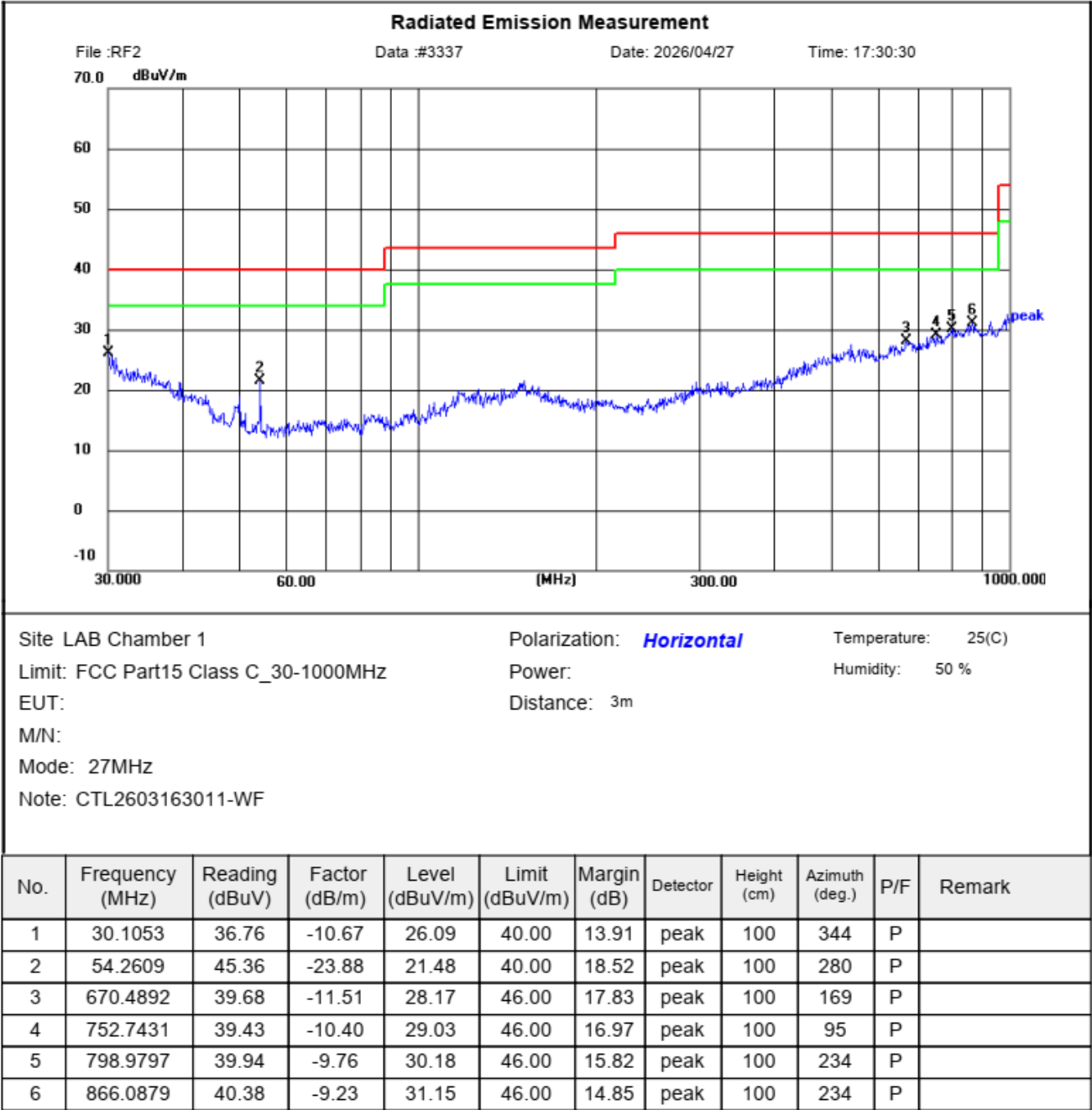
2) Other Emissions:**9 kHz~30 MHz Field Strength of Unwanted Emissions. Quasi-Peak Measurement:**

The measurements with active loop antenna were greater than 20dB below the limit, so the test data were not recorded in the test report.

30 MHz~1 GHz Field Strength of Unwanted Emissions. Quasi-Peak Measurement:



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Unit 01A&B&C&D-1, Building A3, Guangming Sci-Tech Park, Guan Guang Road, Fenghu

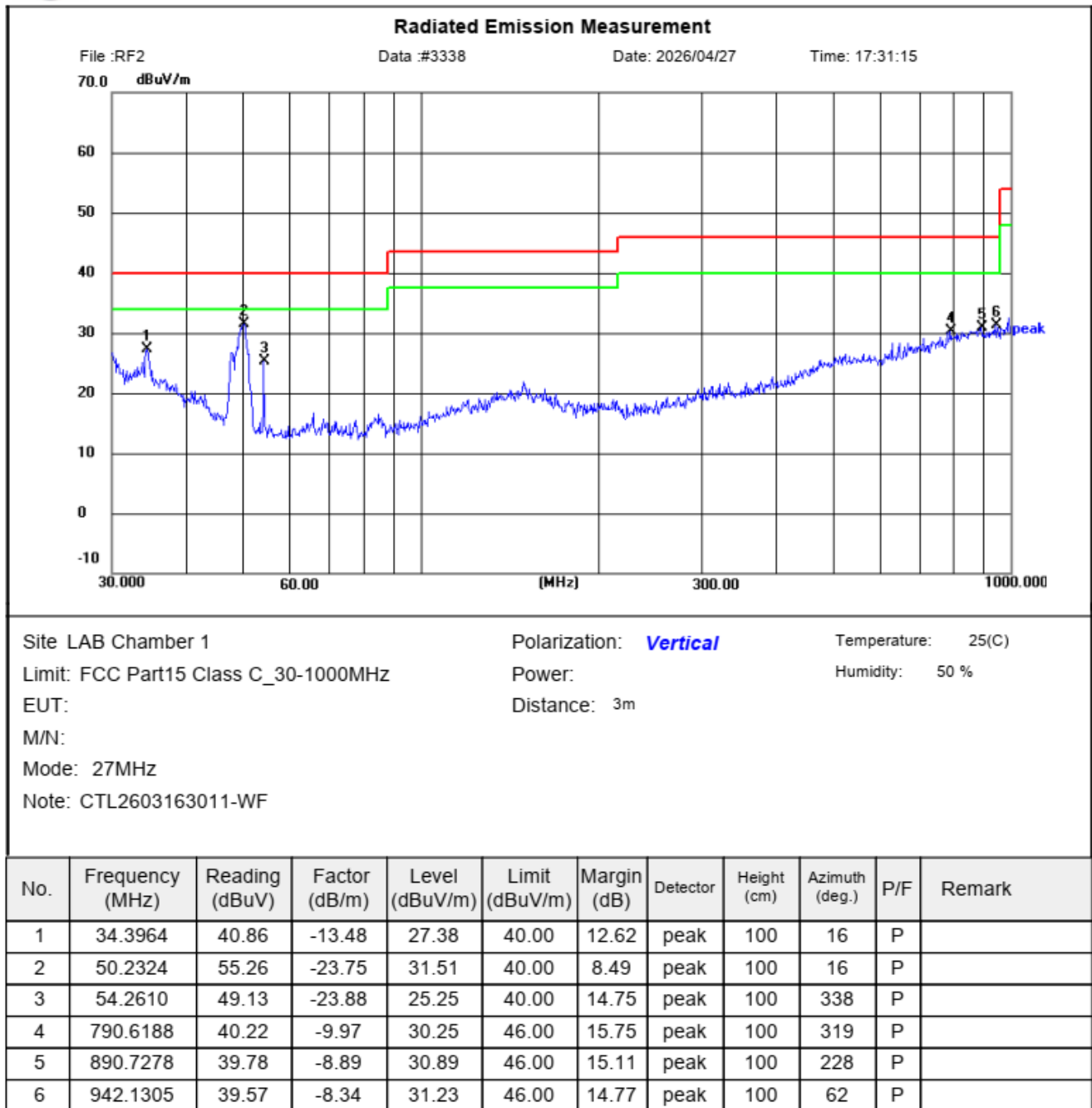




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Tel: +86-755-89486194

Unit 01A&B&C&D-1, Building A3, Guangming Sci-Tech Park, Guan Guang Road, Fenghu



3.2. 20dB Bandwidth

Limit

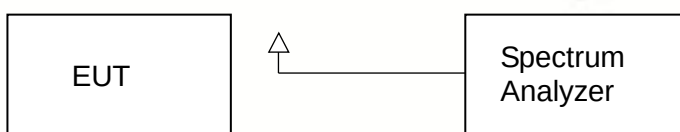
15.215(c), Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the 20 dB bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation. Operation within the band: 26.96 – 27.28 MHz.

Test Procedure

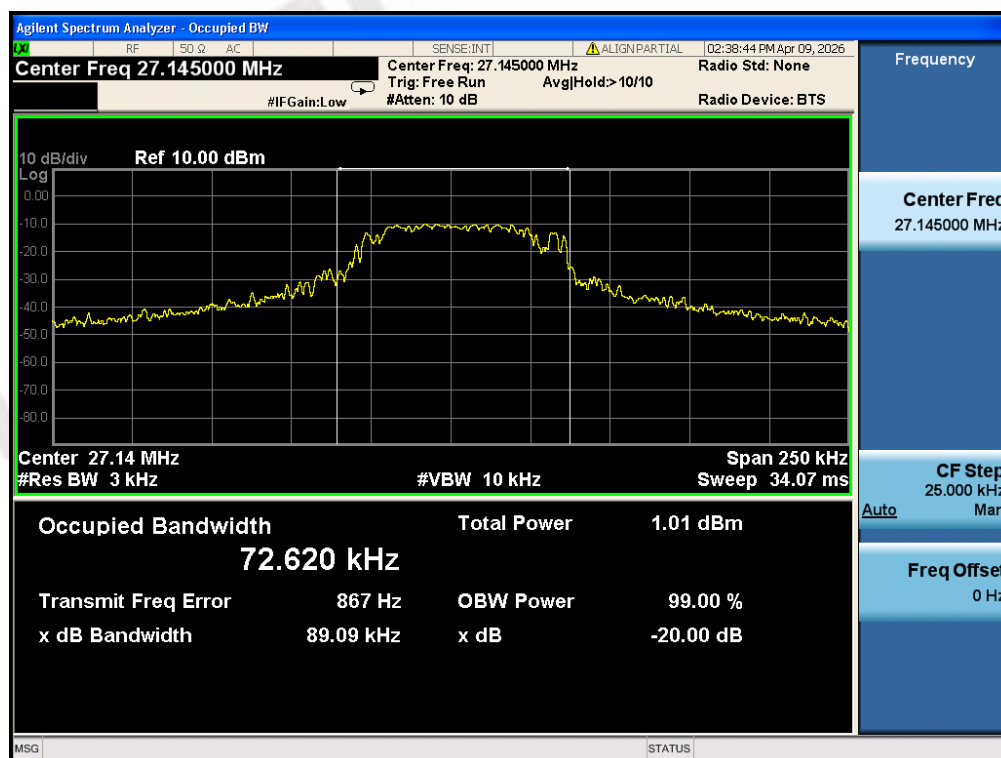
The 20dB bandwidth is measured with a spectrum analyzer connected via a receive antenna placed near the EUT while the EUT is operating in transmission mode.

The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

Test Configuration



Test Results



3.3. Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203:

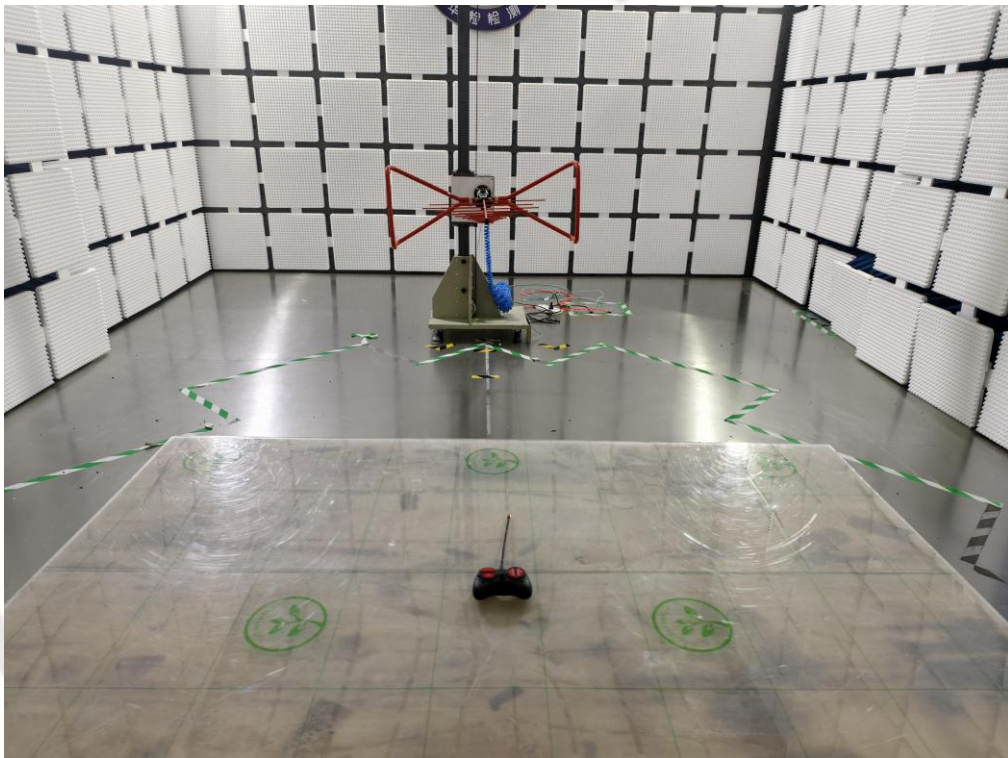
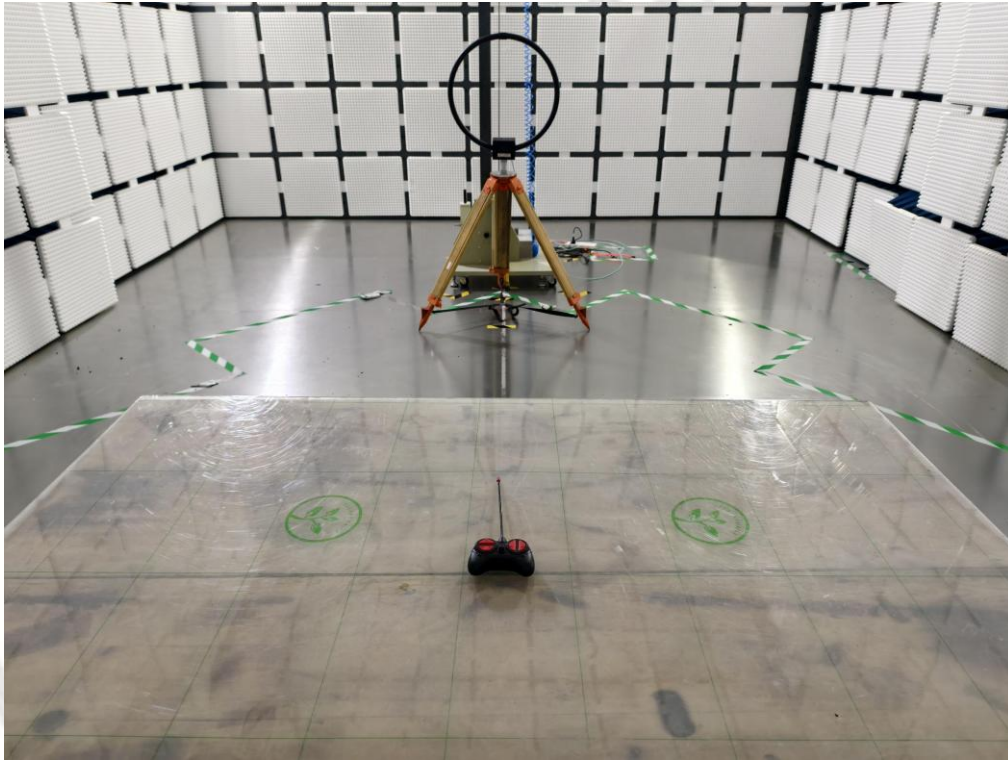
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited

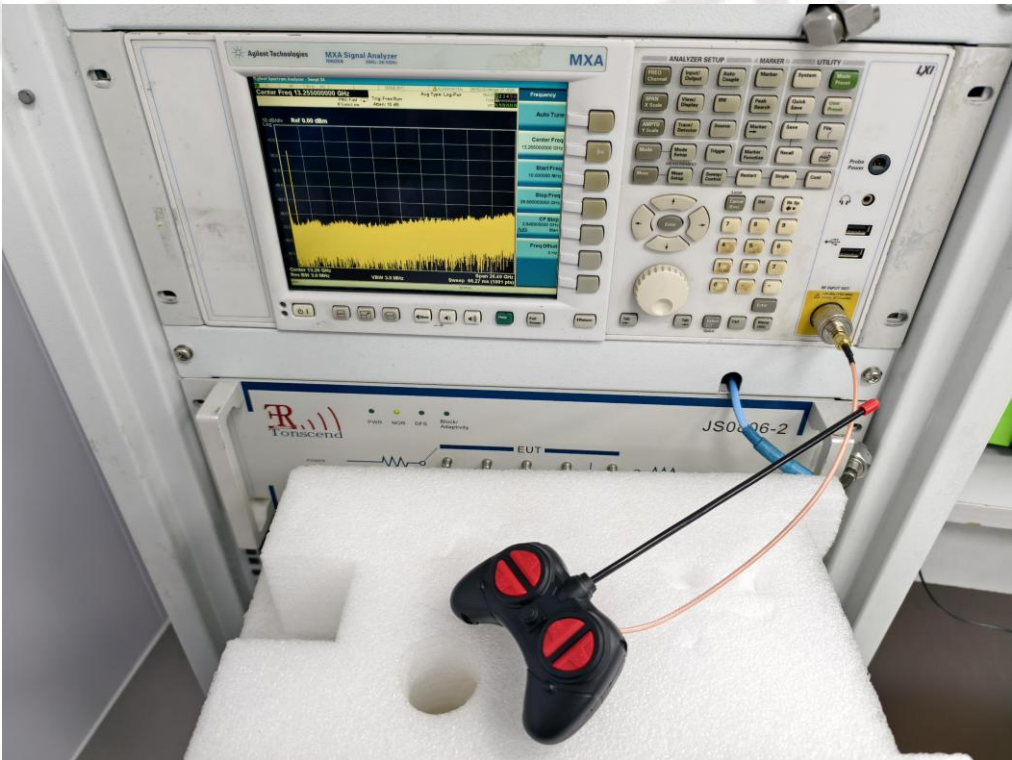
Test Result:

Compliance. The maximum gain of antenna was 0.0dBi.

4. TEST SETUP PHOTOS

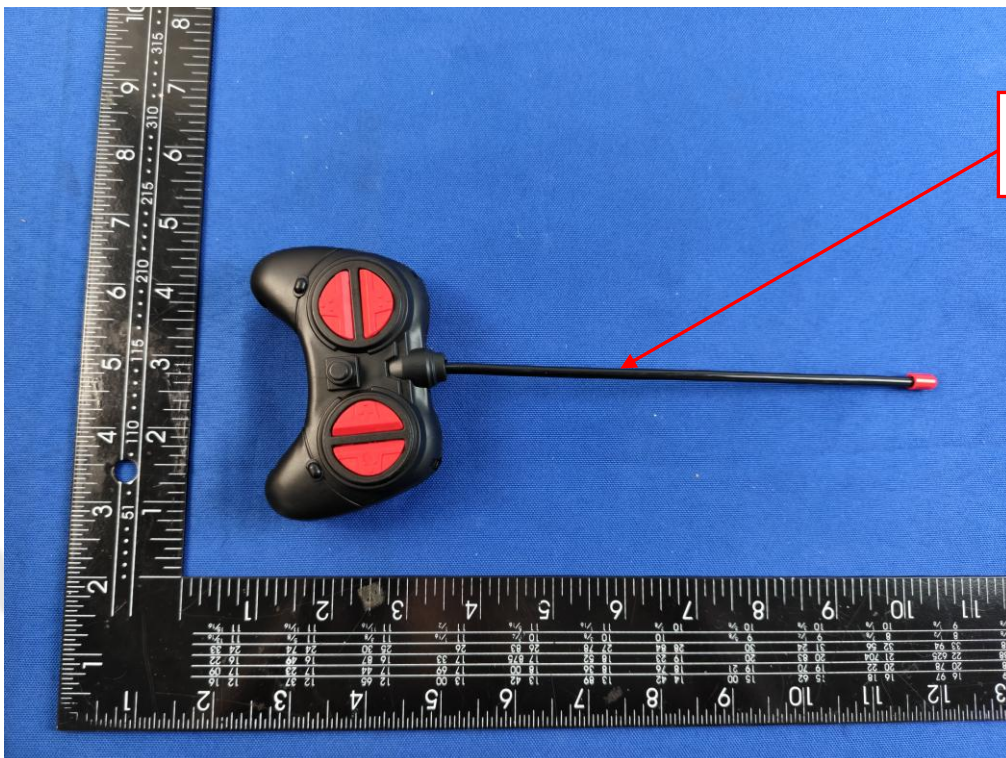
Radiated Emission



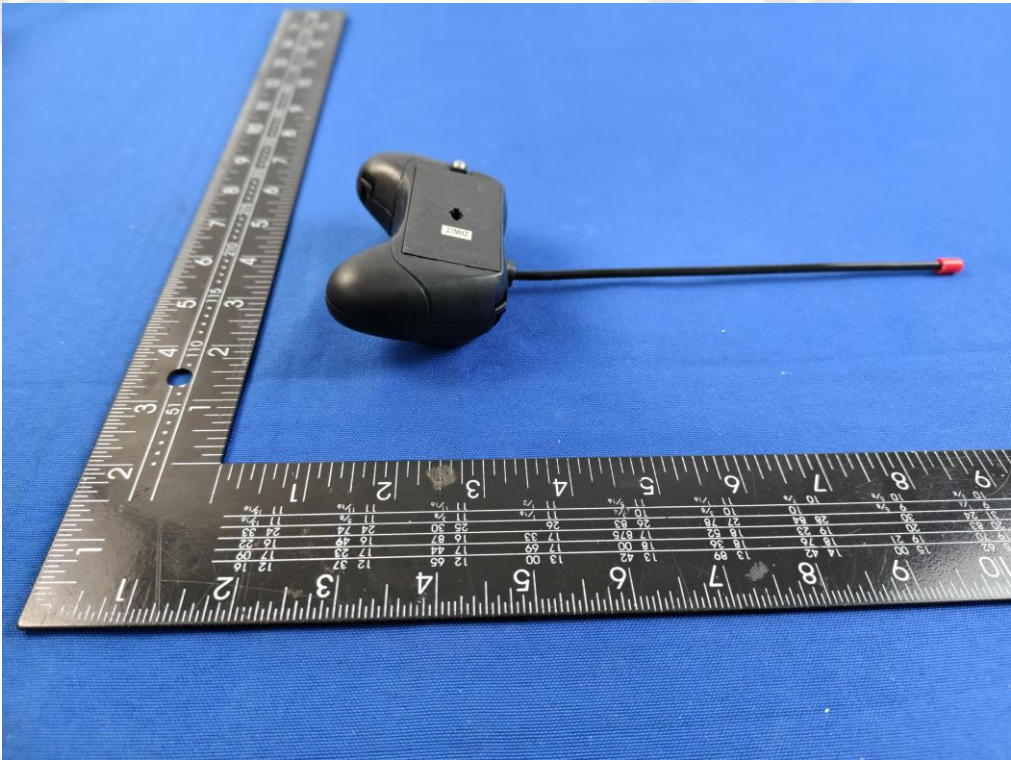


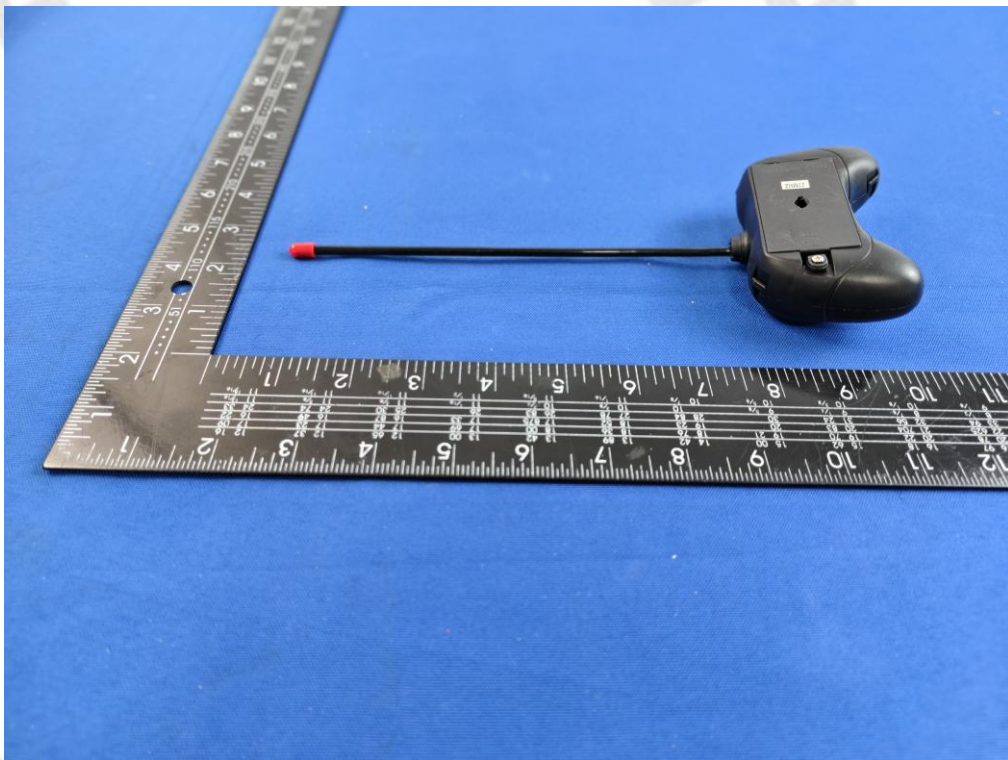
5. External and Internal Photos of the EUT

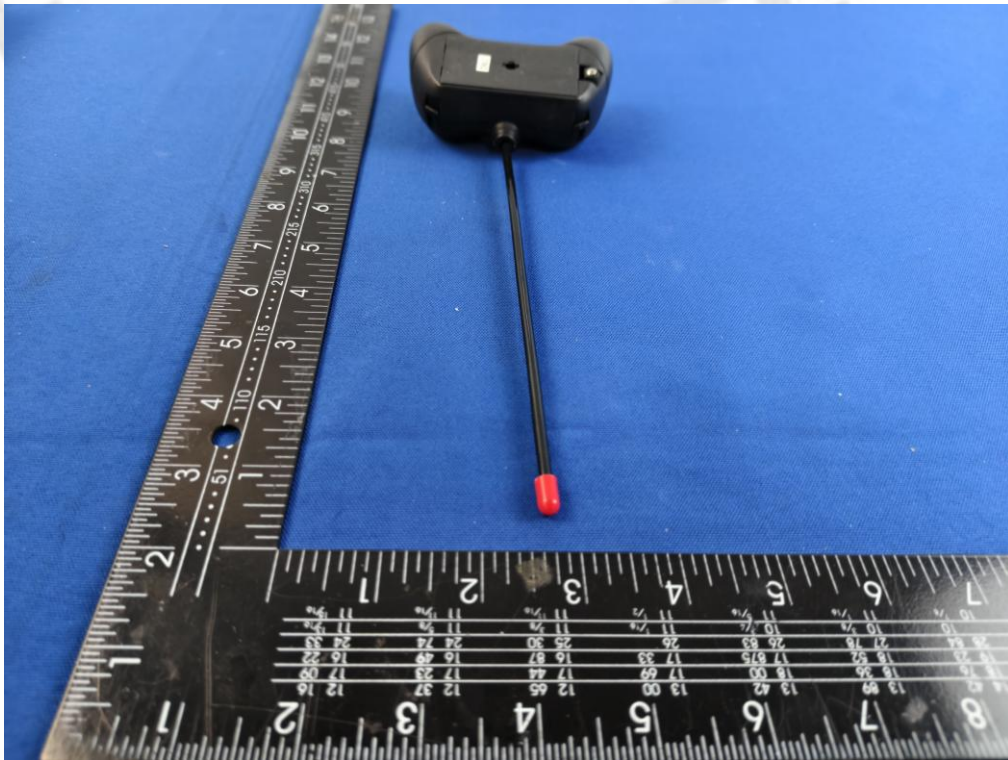
External Photos of EUT

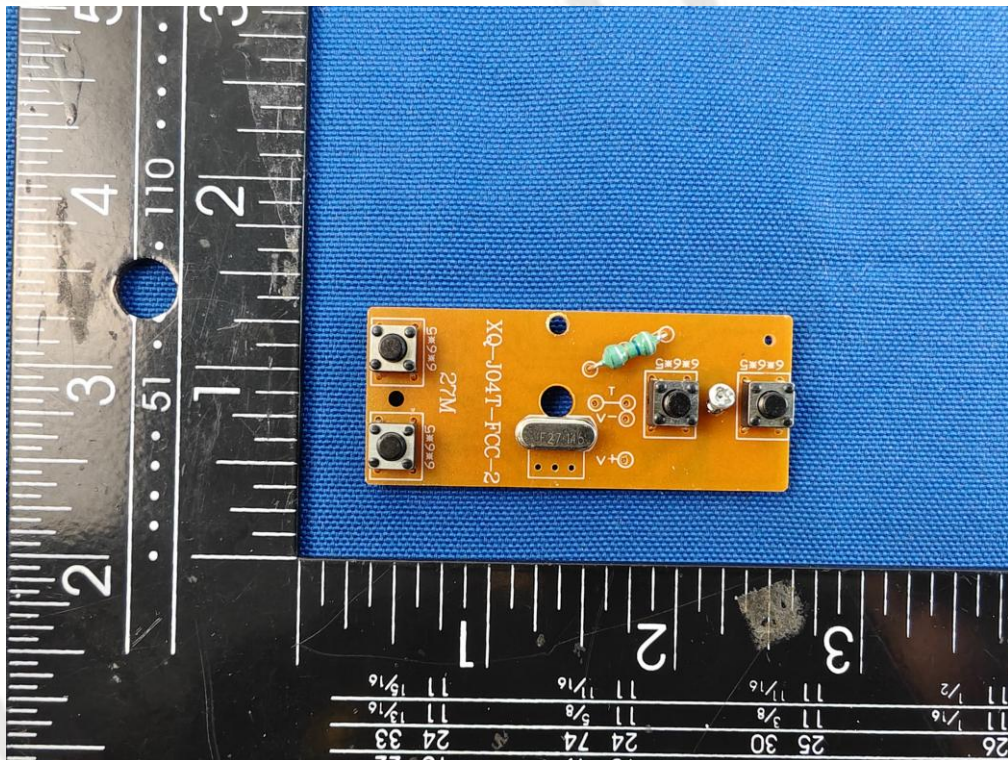


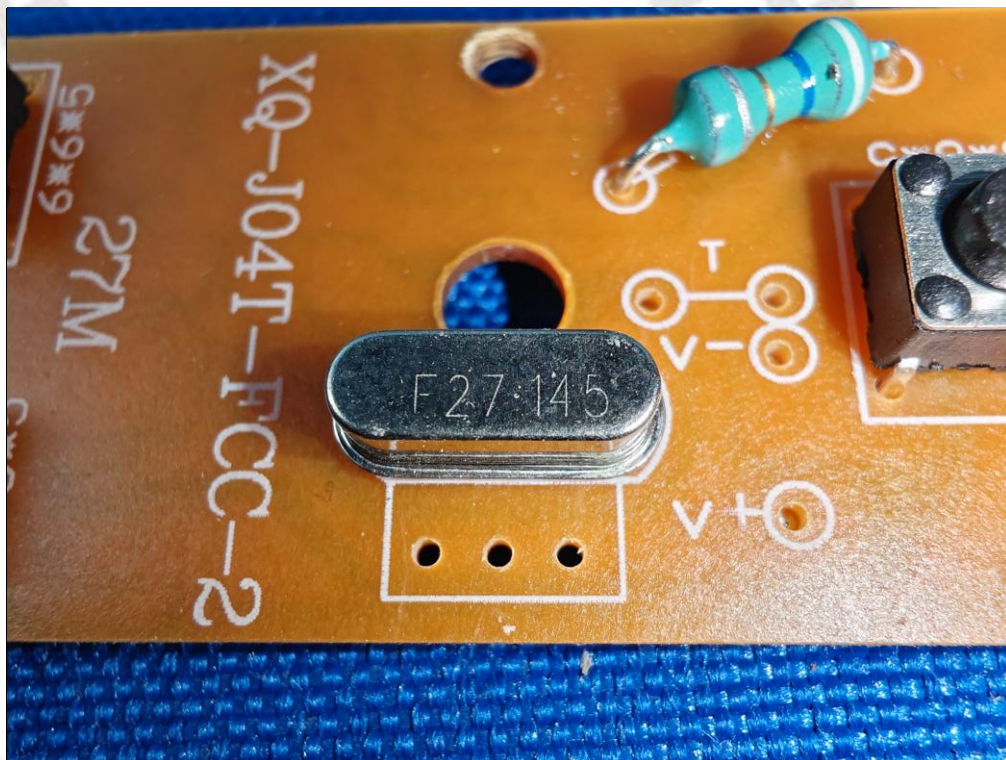
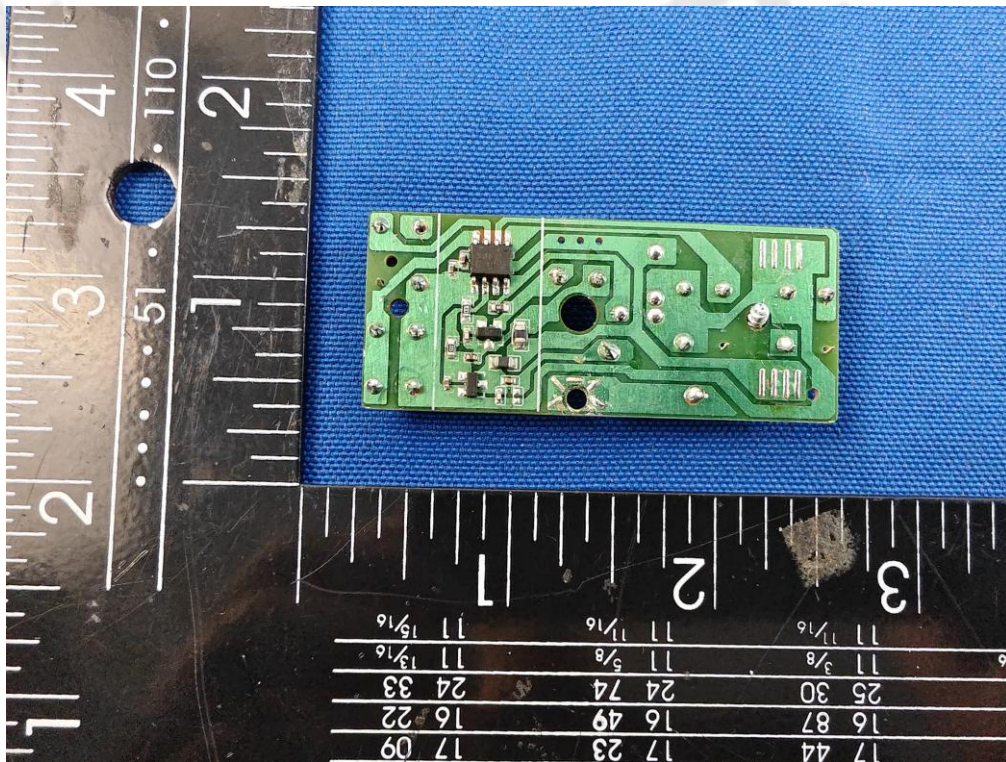
Antenna







Internal Photos of EUT



***** End of Report *****