FCC TEST REPORT

FCC ID: 2BQJR-BX-300

On Behalf of

Bai xin toys factory

RC CAR

Model No.: See mode list

Prepared for	:	Bai xin toys factory
Address	:	Xiacun Industrial Zone, Lianxia Town, Chenghai District, Shantou City, Guangdong Province, China

Prepared By	:	Shenzhen Alpha Product Testing Co., Ltd.
Address	:	Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

Report Number	:	A2506149-C01-R01
Date of Receipt	:	June 12, 2025
Date of Test	:	June 12, 2025 - July 2, 2025
Date of Report	:	July 2, 2025
Version Number	:	V0
Test Result	**:**	**Pass**

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TEST REPORT DECLARATION

Applicant	:	Bai xin toys factory
Address	:	Xiacun Industrial Zone, Lianxia Town, Chenghai District, Shantou City, Guangdong Province, China
Manufacturer	:	Shenzhen Meiyu Electronic Technology Co., Ltd.
Address	:	Xiacun Industrial Zone, Lianxia Town, Chenghai District, Shantou City, Guangdong Province, China
EUT Description	:	RC CAR
	(A) Model No.	: See mode list
	(B) Trademark	: **N/A**

Measurement Standard Used:

FCC CFR Title 47 Part 15 Subpart C Section 15.227

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC CFR Title 47 Part 15 Subpart C Section 15.227 requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....:	Yannis Wen Project Engineer	Yannis Wen
Approved by (name + signature).....:	Jack Xu Project Manager	
Date of issue.....:	July 2, 2025	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	July 2, 2025	Initial released Issue	Yannis Wen

1. Test Result Summary

Requirement	CFR 47 Section	Result
Emission of RF energy on the carrier frequency	§15.209 & §15.227	PASS
The out-of band emissions including harmonics	§15.209	PASS
Emission Within Band Edges	§15.209(a)(f)	PASS

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

5. Decision rules for the conclusion of this test report: decision by actual test data without considering measurement uncertainty.

2. General Information

2.1. Description of Device (EUT)

EUT Name	:	RC CAR
Model No.	:	See mode list
DIFF.	:	There is no difference except the name of the model. All tests are made with the BX-300 model.
Power supply	:	DC 3V from battery.
	:	
Operation frequency	:	27.15MHz
Modulation	:	1 channel
Antenna Type	:	Rod antenna, Maximum Gain is 3dBi (Antenna information is provided by applicant.).
Software version	:	V1.0
Hardware version	:	V1.0
Intend use environment	:	Residential, commercial and light industrial environment

2.2. Accessories of Device (EUT)

Accessories	:	/
Manufacturer	:	/
Model	:	/
specifications	:	/

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or SDoC
1	N/A	N/A	N/A	N/A	N/A

2.4. Block Diagram of connection between EUT and simulators

2.5. Description of Test Modes

Channel	**Frequency (MHz)**
1	27.15

2.6. Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	23℃
Humidity range:	25-75%	55%
Pressure range:	86-106kPa	98kPa

2.7. Test Facility

Shenzhen Alpha Product Testing Co., Ltd
Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

2.8. Measurement Uncertainty

(95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for Power point Conducted Emissions Test	1.63dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.74dB(Polarize: V)
	3.76dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	3.77dB(Polarize: V)
	3.80dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.31 dB(Polarize: V)
	4.30 dB(Polarize: H)
Uncertainty for radio frequency	5.06×10^{-8}GHz
Uncertainty for conducted RF Power	0.40dB
Uncertainty for temperature	0.2℃
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

2.9. Test Equipment List

Equipment	Manufacture	Model No.	Firmware version	Serial No.	Last cal.	Cal Interval
9*6*6 anechoic chamber	CHENYU	9*6*6	/	N/A	2025.03.09	4Year
4*4*3 Shielded room	CHENYU	4*4*3	/	N/A	2025.03.09	4Year
Spectrum analyzer	ROHDE&SCHWARZ	FSV40-N	2.3	102137	2024.08.08	1Year
Spectrum analyzer	Agilent	N9020A	A.14.16	MY499100060	2024.08.08	1Year
Receiver	ROHDE&SCHWARZ	ESR	2.28 SP1	1316.3003K03-102082-Wa	2024.08.08	1Year
Receiver	R&S	ESCI	4.42 SP1	101165	2024.08.08	1Year
Bilog Antenna	Schwarzbeck	VULB 9168	/	VULB 9168#627	2023.08.28	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	/	2106	2023.08.19	2Year
Loop Antenna	SCHWARZBECK	FMZB 1519B	/	00128	2023.08.19	2Year
RF Cable	Resenberger	Cable 1	/	RE1	2024.08.08	1Year
RF Cable	Resenberger	Cable 2	/	RE2	2024.08.08	1Year
RF Cable	Resenberger	Cable 3	/	CE1	2024.08.08	1Year
Pre-amplifier	HP	HP8347A	/	2834A00455	2024.08.08	1Year
Pre-amplifier	Agilent	8449B	/	3008A02664	2024.08.08	1Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	/	8126-466	2024.08.08	1Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	101043	2024.08.08	1Year
Horn Antenna	SCHWARZBECK	BBHA 9170	/	00946	2023.08.19	2Year
Preamplifier	SKET	LNPA_1840-50	/	SK2018101801	2024.08.08	1 Year
Power Meter	Agilent	E9300A	/	MY41496628	2024.08.08	1 Year
Power Sensor	DARE	RPR3006W	/	15100041SNO91	2024.08.08	1 Year
Temp. & Humid. Chamber	Teelong	TL-HW408S	/	TL-20191205-01	2024.07.15	1 Year
Electronic Thermo-Hygrometer	S.H.Qixiang	HTC-1	/	N/A	2024.08.11	1 Year
Switching Mode Power Supply	JUNKE	JK12010S	/	20140927-6	2024.08.08	1 Year
Adjustable attenuator	MWRFtest	N/A	/	N/A	N/A	N/A
10dB Attenuator	Mini-Circuits	DC-6G	/	N/A	N/A	N/A

Software Information			
Test Item	Software Name	Manufacturer	Version
RE	EZ-EMC	Farad	Alpha-3A1
CE	EZ-EMC	Farad	Alpha-3A1
RF-CE	MTS 8310	MWRFtest	2.0.0.0

3. Test Results and Measurement Data

3.1. Radiated Spurious Emission Measurement & Band Edges

3.1.1. Test Specification

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10: 2013</td></tr>
<tr><td>Frequency Range:</td><td>9 kHz to 25 GHz</td></tr>
<tr><td>Measurement Distance:</td><td>3 m</td></tr>
<tr><td>Antenna Polarization:</td><td>Horizontal & Vertical</td></tr>
<tr><td>Operation mode:</td><td>Refer to item 4.1</td></tr>
<tr><td>Receiver Setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>9kHz- 150kHz</td><td>Quasi-peak</td><td>200Hz</td><td>1kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>150kHz-30MHz</td><td>Quasi-peak</td><td>9kHz</td><td>30kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency</td><td>Field Strength (microvolts/meter)</td><td>Measurement Distance (meters)</td></tr>
<tr><td>0.009-0.490</td><td>2400/F(KHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(KHz)</td><td>30</td></tr>
<tr><td>1.705-30</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100</td><td>3</td></tr>
<tr><td>88-216</td><td>150</td><td>3</td></tr>
<tr><td>216-960</td><td>200</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
<table>
<tr><td>Frequency</td><td>Field Strength (microvolts/meter)</td><td>Measurement Distance (meters)</td><td>Detector</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>500</td><td>3</td><td>Average</td></tr>
<tr><td>5000</td><td>3</td><td>Peak</td></tr>
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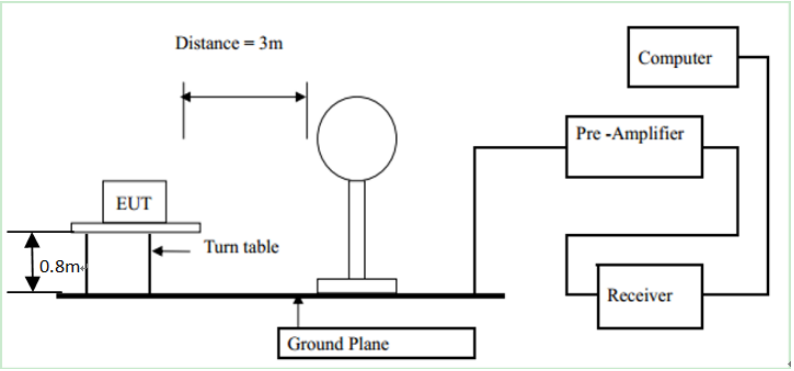
</td></tr>
<tr><td>Test setup:</td><td>For radiated emissions below 30MHz
 

30MHz to 1GHz</td></tr>
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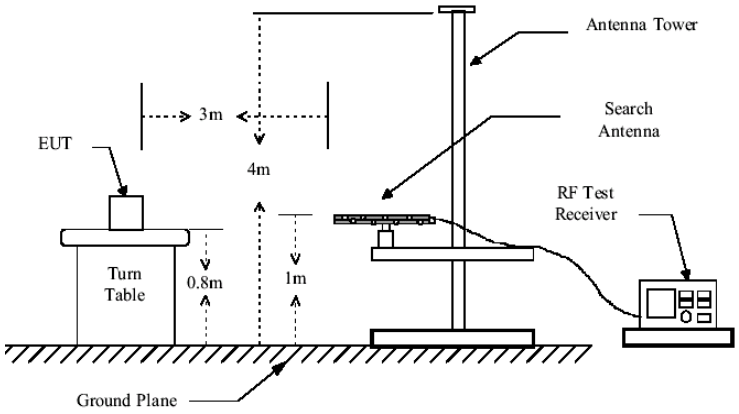
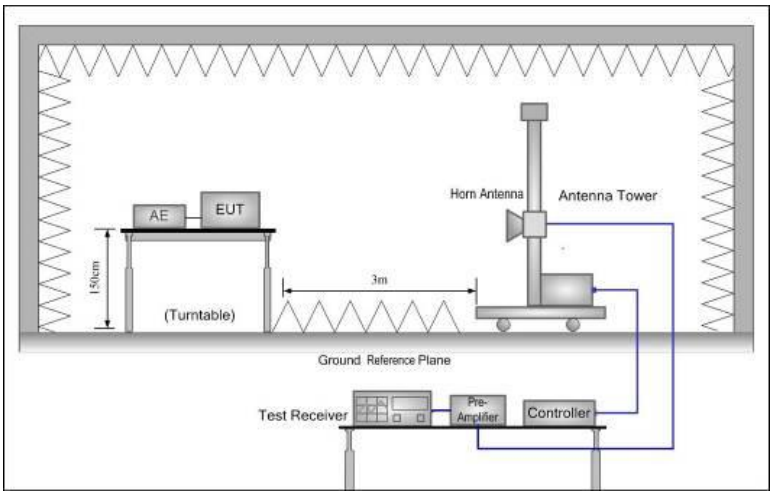


Above 1GHz


</td>
</tr>
<tr>
<td>Test Procedure:</td>
<td>1. For the radiated emission test below 1GHz:
The EUT was placed on a turntable with 0.8 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high PASS filter are used for the test in order to get better signal level.
For the radiated emission test above 1GHz:
Place the measurement antenna on a turntable with 1.5 meter above ground, which is away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
2. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
3. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported.</td>
</tr>
</table>

	Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported. 4. Use the following spectrum analyzer settings: (1) Span shall wide enough to fully capture the emission being measured; (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥RBW; Sweep = auto; Detector function = peak; Trace = max hold; (3) Set RBW = 1 MHz, VBW= 3MHz for f 1 GHz for peak measurement. For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Test mode:	Refer to section 4.1 for details
Test results:	PASS

3.1.2. Test Data

Please refer to following diagram for individual

Frequency Range	:	9KHz~30MHz
Test Mode	:	TX: 27.144kHz
Test Results	:	**PASS**

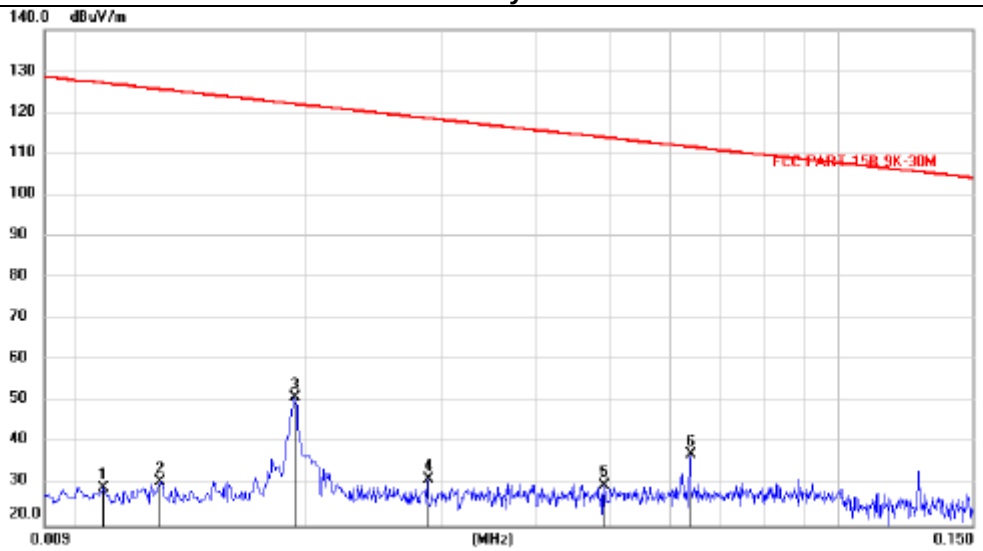
Note: 1. The test results are listed in next pages.

2. This mode is worst case mode, so this report only reflected the worst mode.

3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the quasi-peak detector need not be carried out.

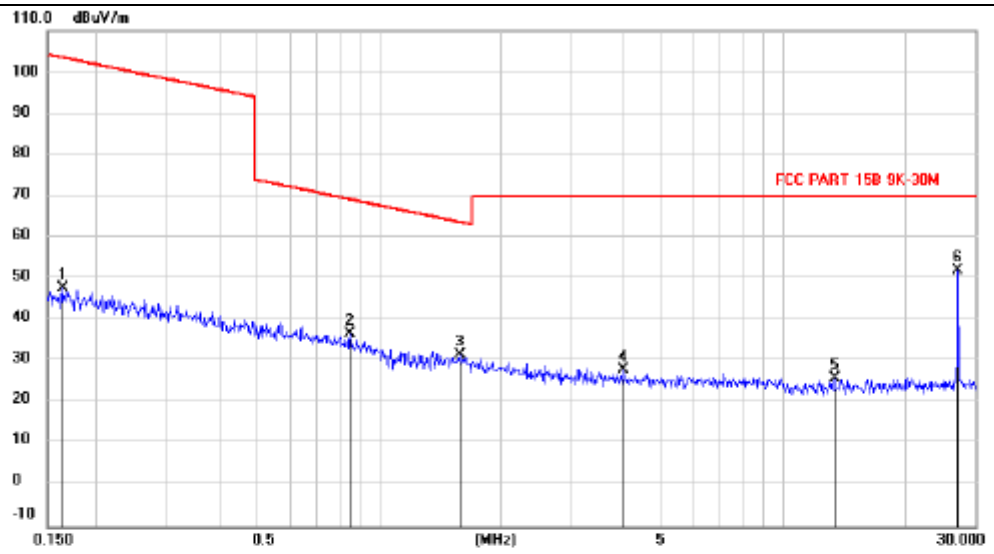
Test Mode	:	TX: 27.15kHz

Polarity: X axis



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0107	7.79	21.48	29.27	127.1	-97.84	peak			
2		0.0128	9.25	21.43	30.68	125.5	-94.88	peak			
3	*	0.0191	29.91	21.27	51.18	122.0	-70.91	peak			
4		0.0287	10.19	21.03	31.22	118.5	-87.35	peak			
5		0.0491	9.95	19.95	29.90	113.9	-84.02	peak			
6		0.0638	17.03	20.11	37.14	111.6	-74.51	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.1635	27.58	20.18	47.76	103.5	-55.74	peak			
2		0.8460	16.75	19.91	36.66	69.18	-32.52	peak			
3		1.5817	11.55	20.15	31.70	63.66	-31.96	peak			
4		4.0295	6.96	21.07	28.03	70.00	-41.97	peak			
5		13.4080	5.40	20.60	26.00	70.00	-44.00	peak			
6	*	27.1557	31.45	20.59	52.04	70.00	-17.96	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

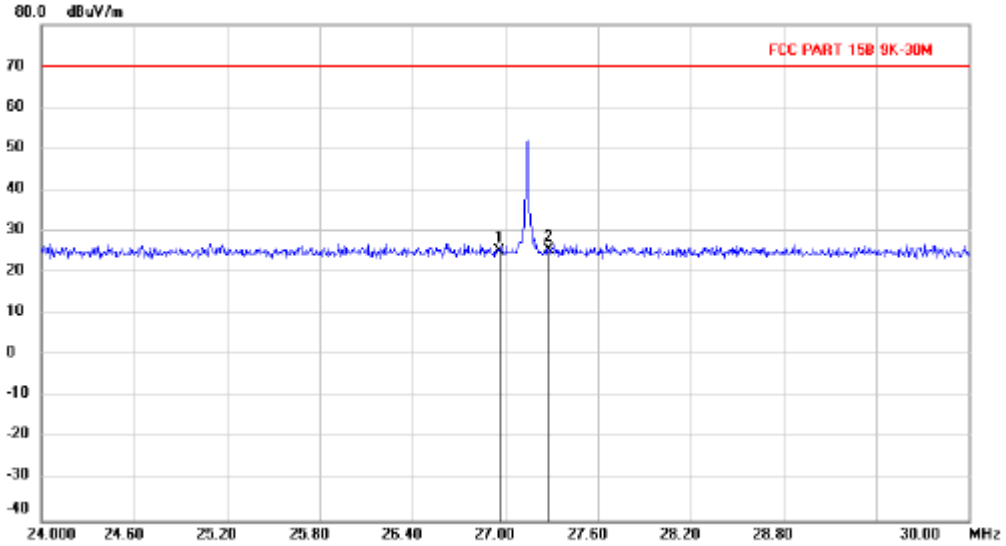
Note: Mark 6 is the EUT launch point

No.	Frequency (MHz)	Level (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	27.1557	52.04	20.59	100	-47.96	PK
2	27.1557	/	/	80	/	AV

Remark: 1. All readings are Quasi-Peak and Average values.
2. Margin = Level(dBuV/m)– Limit
3. When peak value applied to AVG limit, the AVG value is not calculated.

Band Edges

Polarity: X axis



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		26.9600	4.67	20.56	25.23	70.00	-44.77	peak			
2	*	27.2800	4.97	20.62	25.59	70.00	-44.41	peak			

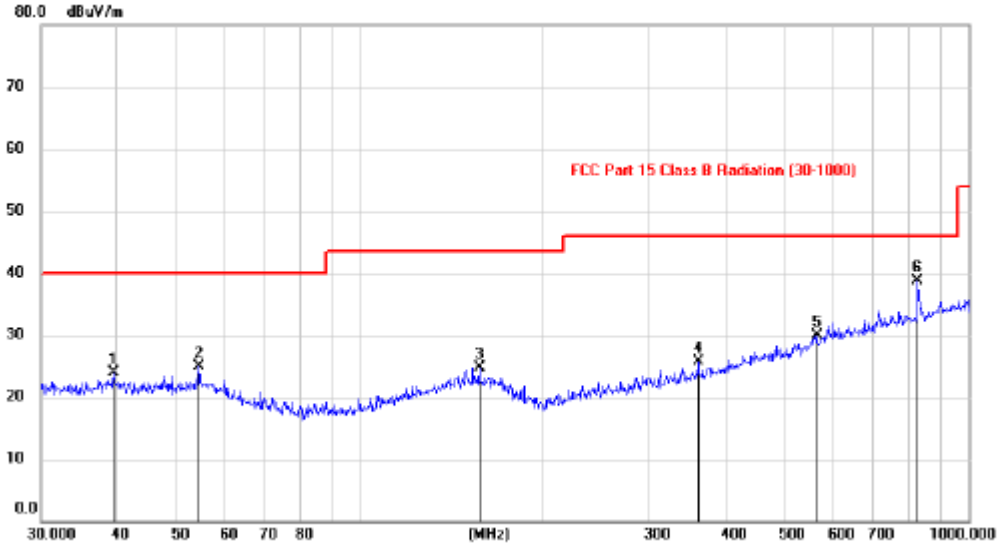
Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Frequency Range	:	30MHz~1000MHz
Test Mode	:	27.15MHz
Test Results	:	**PASS**
Note:	1. The test results are listed in next pages. 2. All test modes has been tested, this report only reflected the worst mode. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the quasi-peak detector need not be carried out.	

Frequency Range	:	Above 1GHz			
EUT	:	/	Test Date	:	/
M/N	:	/	Temperature	:	/
Test Engineer	:	/	Humidity	:	/
Test Mode	:	/			
Test Results	:	N/A			
Note:	1. The highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. So the frequency rang above 1GHz radiation test not applicable.				

30MHz-1GHz

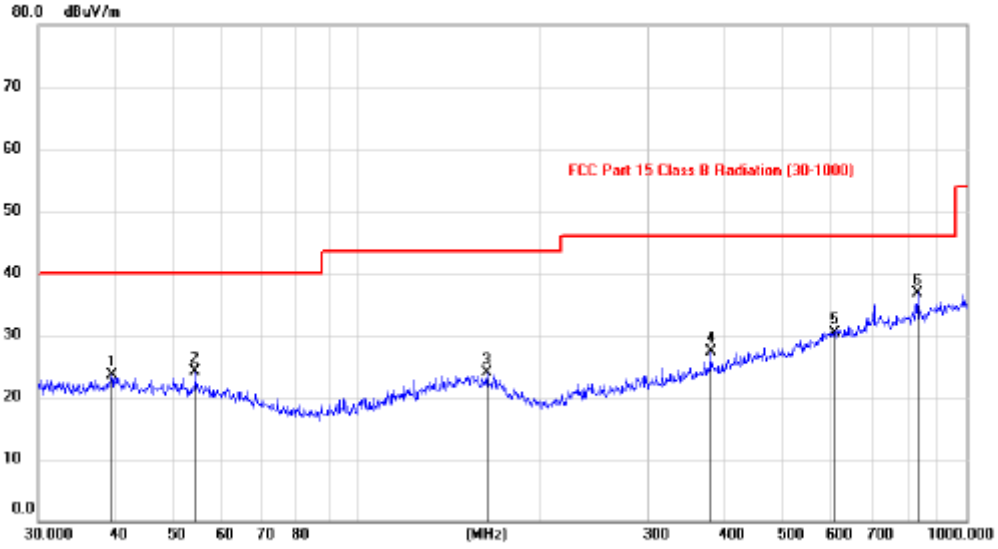
EUT Description	RC CAR	Model No.	See mode list
Temperature	24℃	Humidity	56%
Test Voltage	DC 3V	Test Mode	27.15MHz
Pol	Vertical		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		39.5248	9.37	14.47	23.84	40.00	-16.16	peak			
2		54.5727	11.24	13.63	24.87	40.00	-15.13	peak			
3		157.1359	9.75	15.05	24.80	43.50	-18.70	peak			
4		360.4055	10.18	15.44	25.62	46.00	-20.38	peak			
5		563.0571	10.51	19.42	29.93	46.00	-16.07	peak			
6	*	825.6577	15.60	23.17	38.77	46.00	-7.23	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Pol	Horizontal

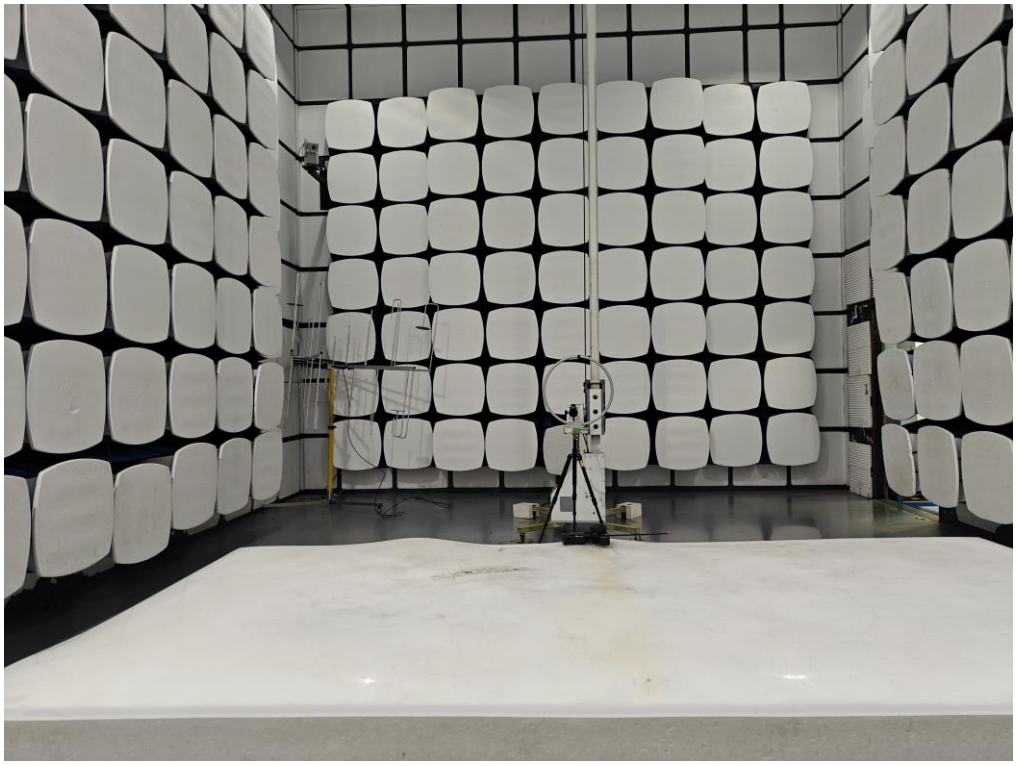


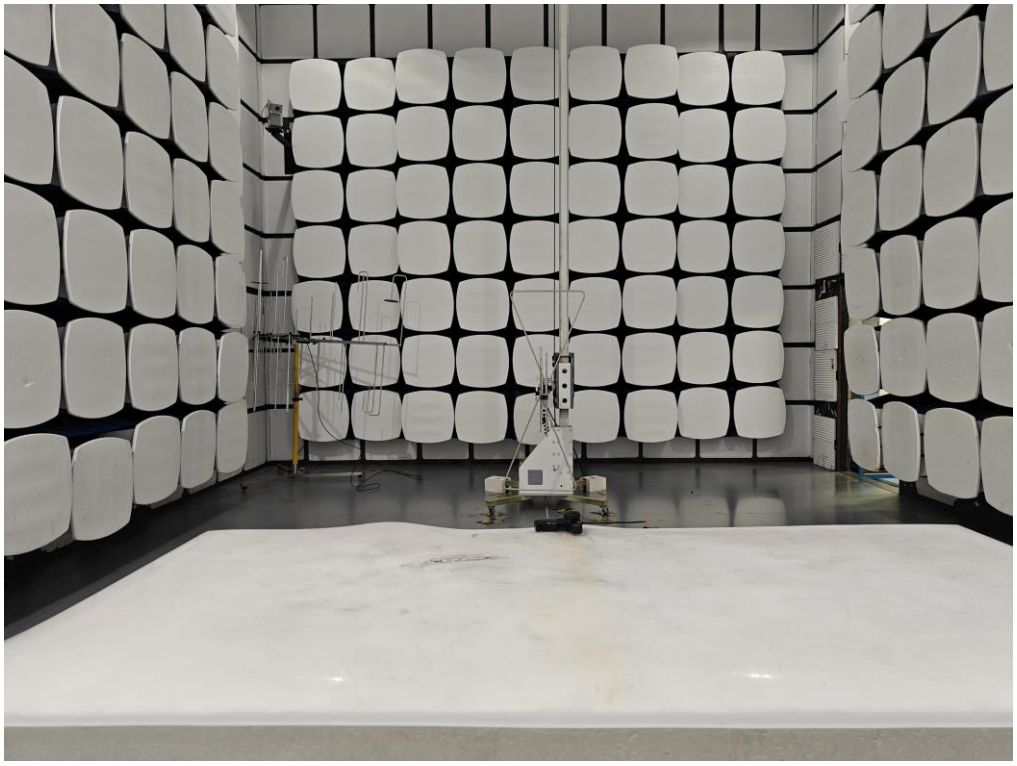
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		39.6683	8.95	14.47	23.42	40.00	-16.58	peak			
2		54.3053	10.44	13.67	24.11	40.00	-15.89	peak			
3		163.3153	9.19	14.72	23.91	43.50	-19.59	peak			
4		380.0473	11.29	15.92	27.21	46.00	-18.79	peak			
5		608.2131	10.02	20.37	30.39	46.00	-15.61	peak			
6	*	831.7600	13.59	23.21	36.80	46.00	-9.20	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

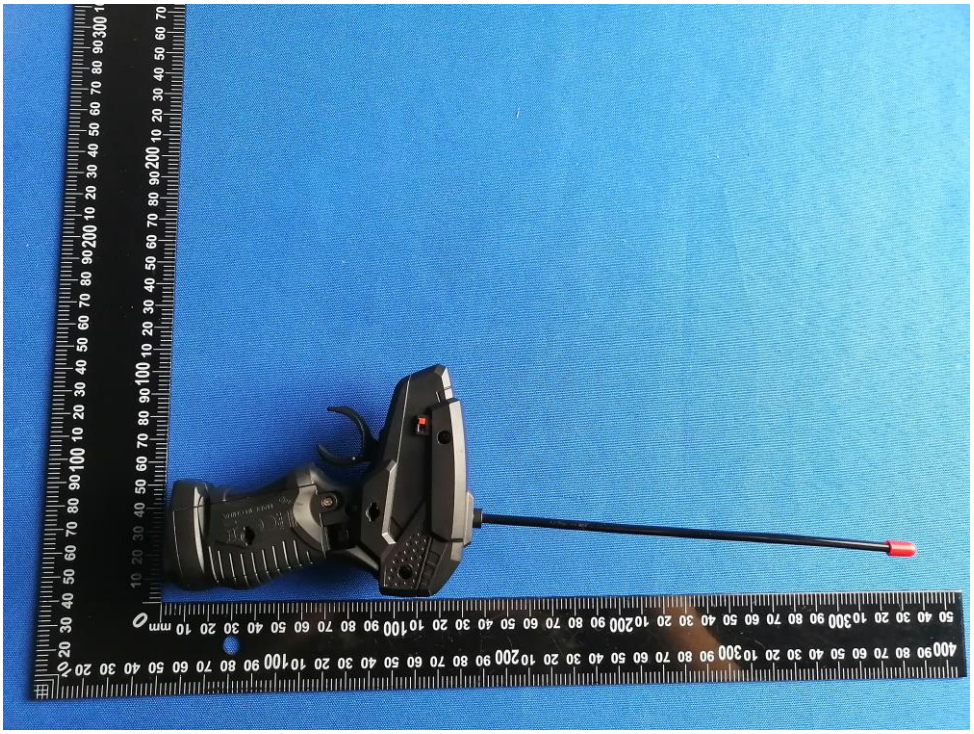
4. Photos of test setup

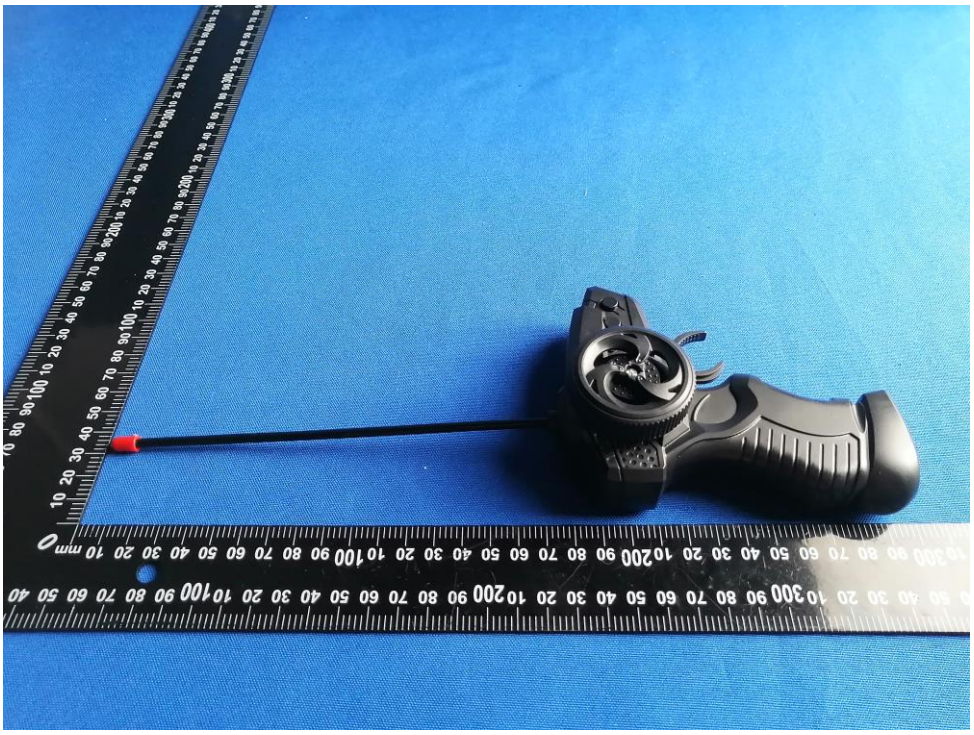
Radiated Emission

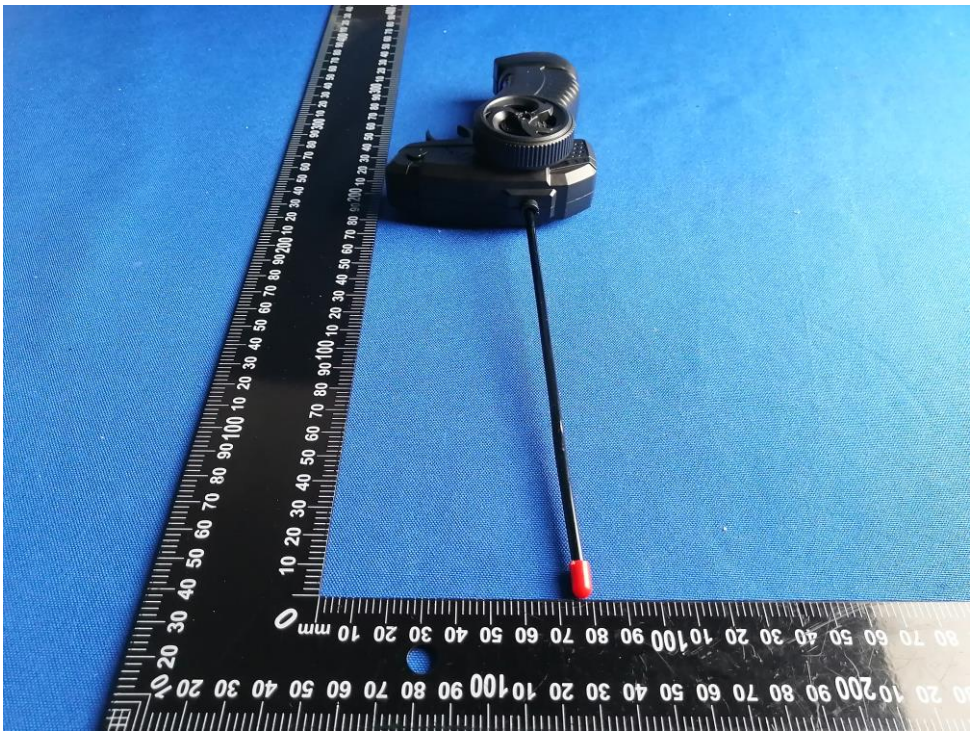




5. Photographs of EUT








OPEN
MADE IN CHINA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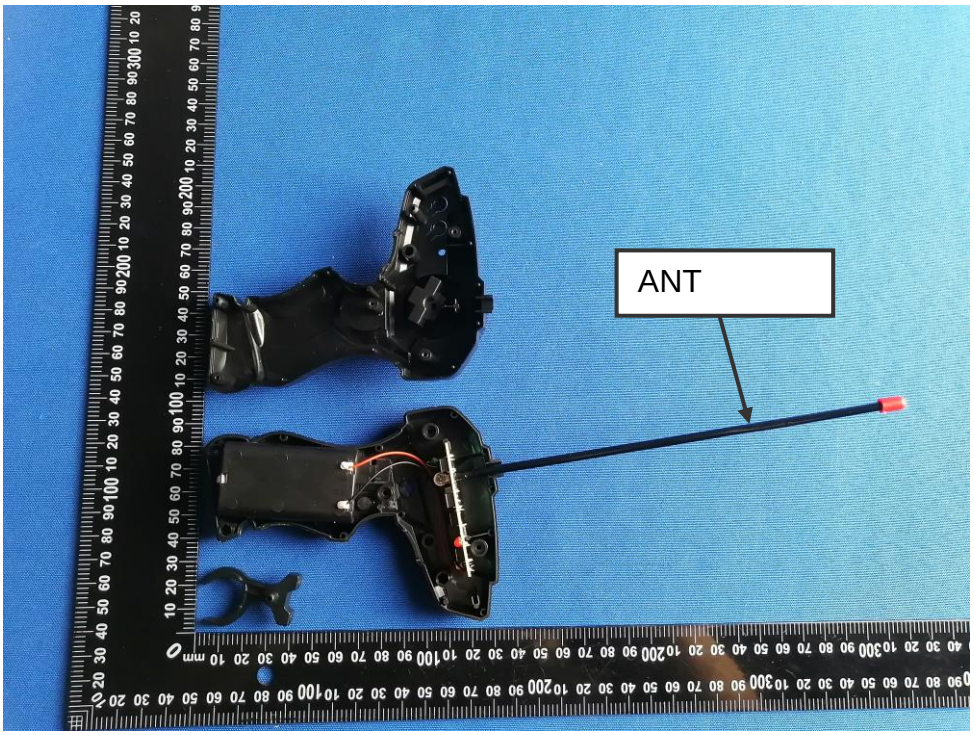
1.5VD.C
AA(UM-3/LR6)
1.5VD.C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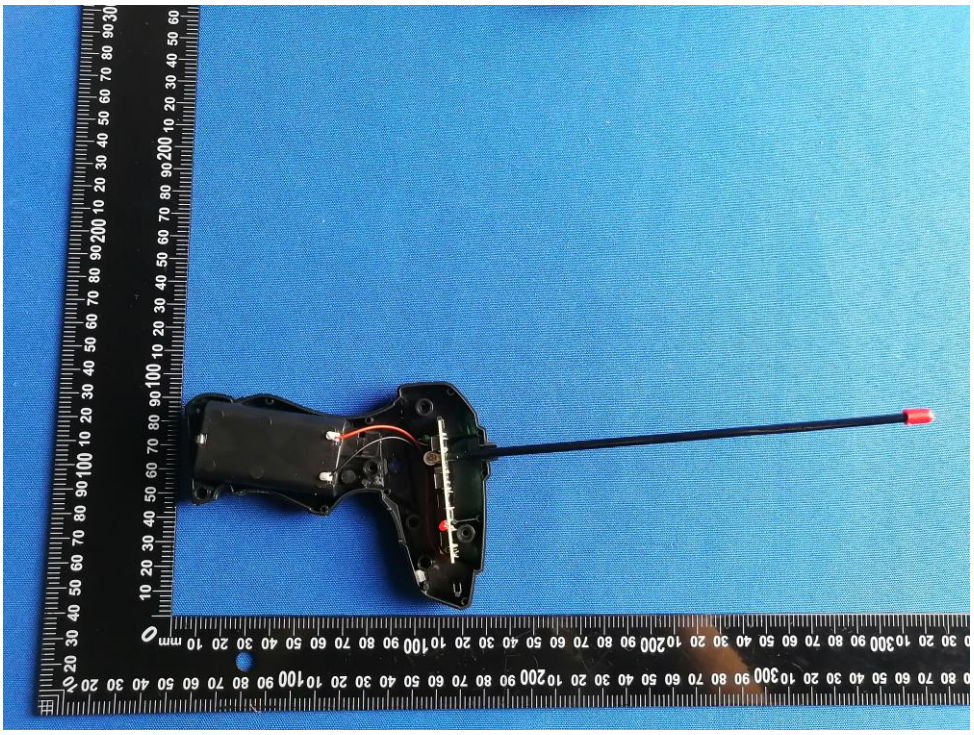
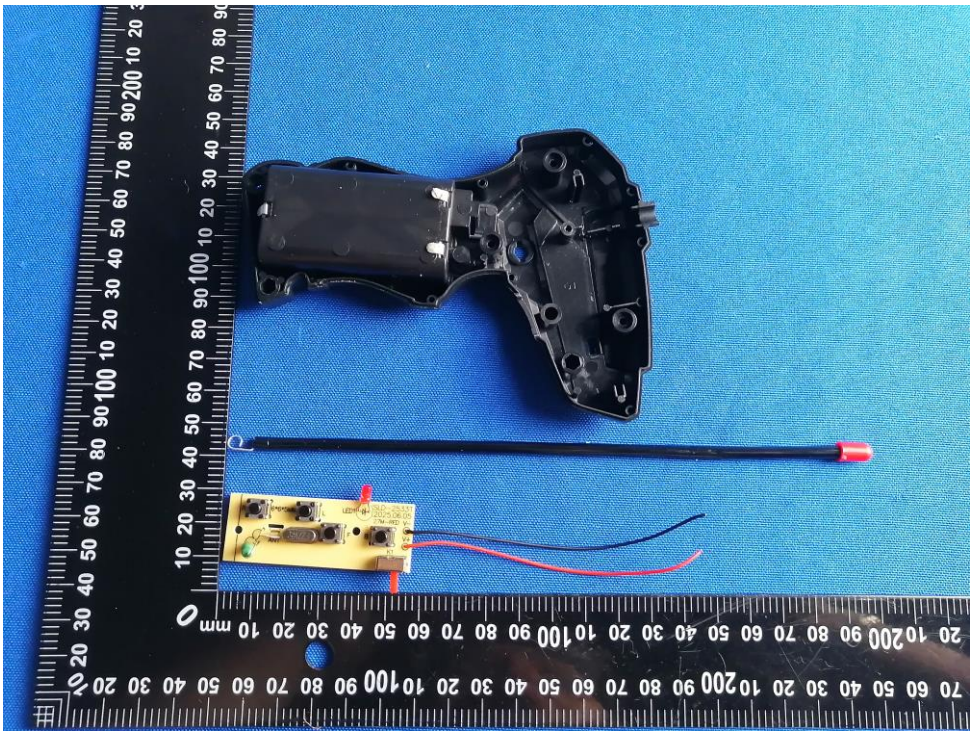
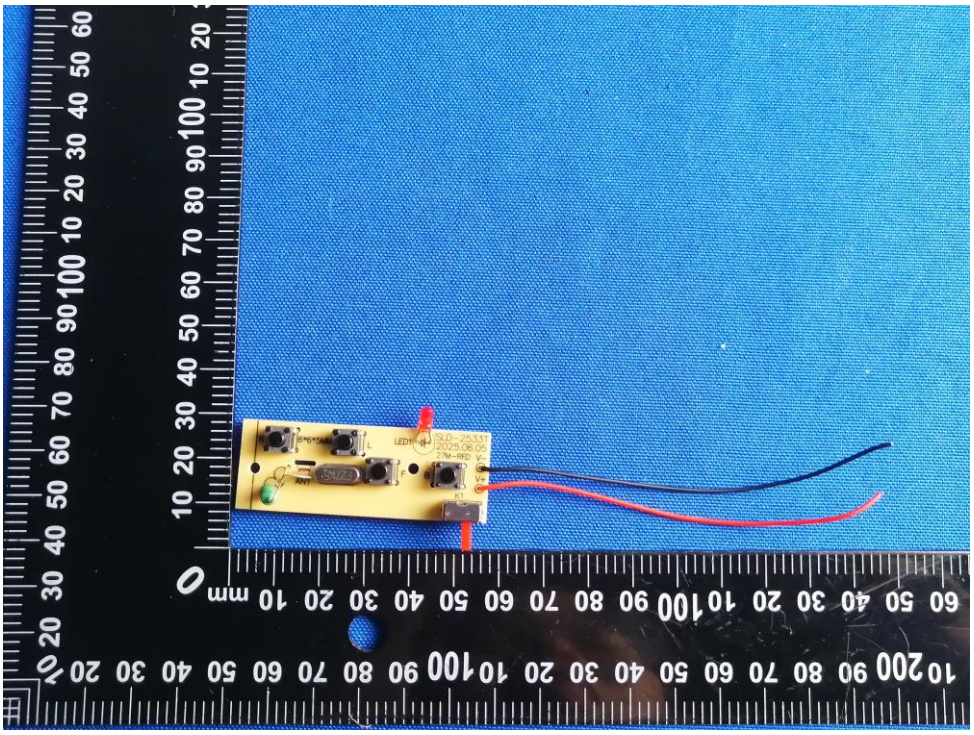
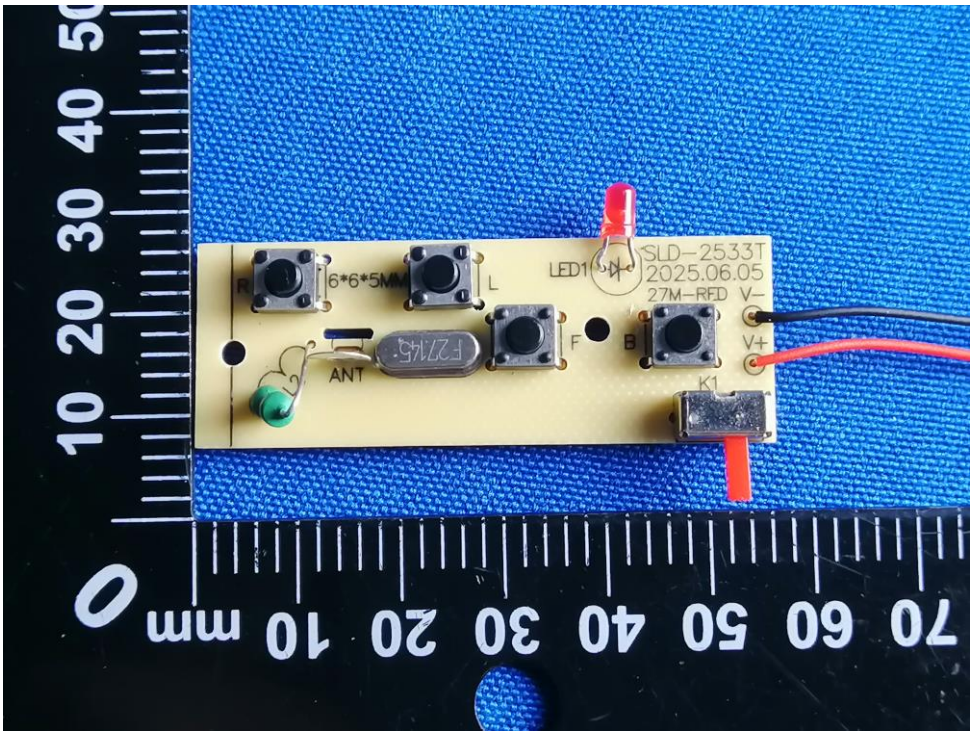
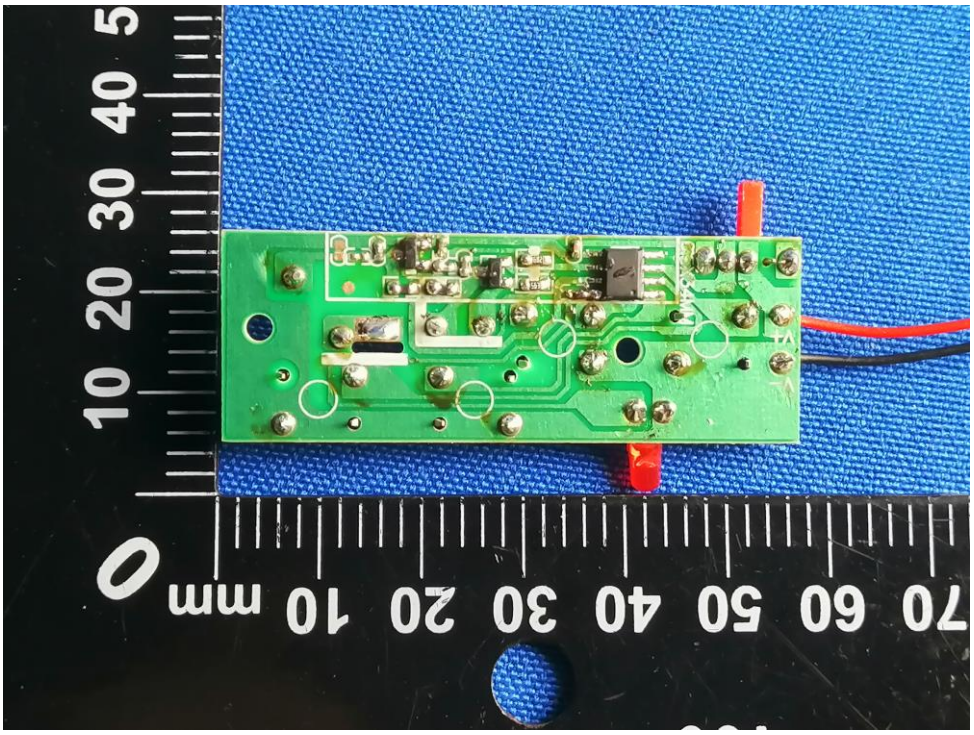
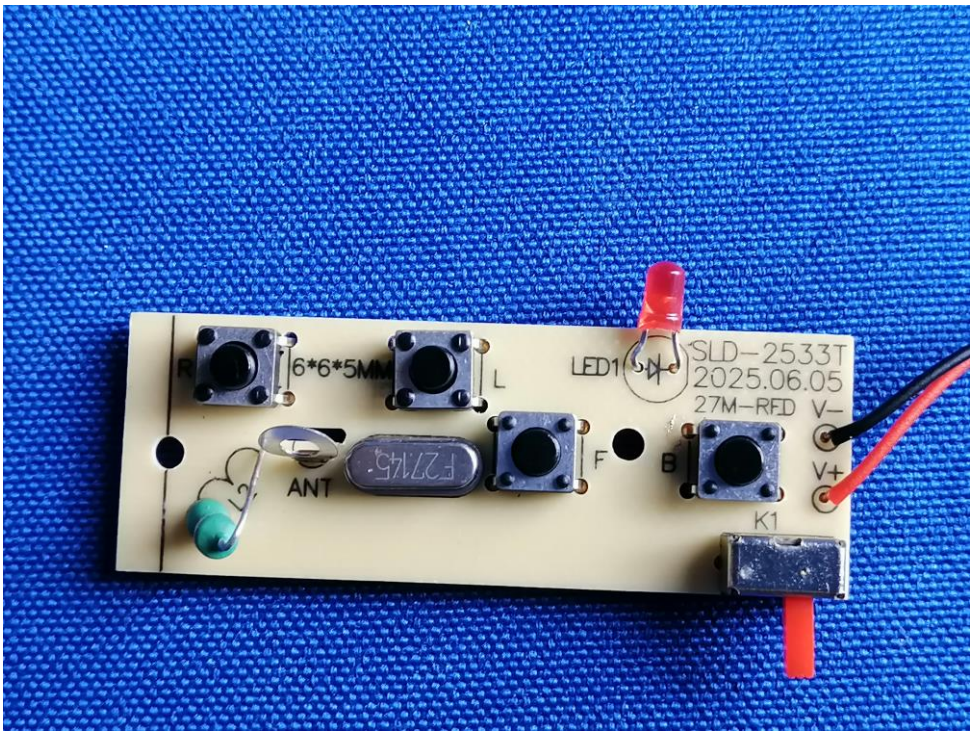


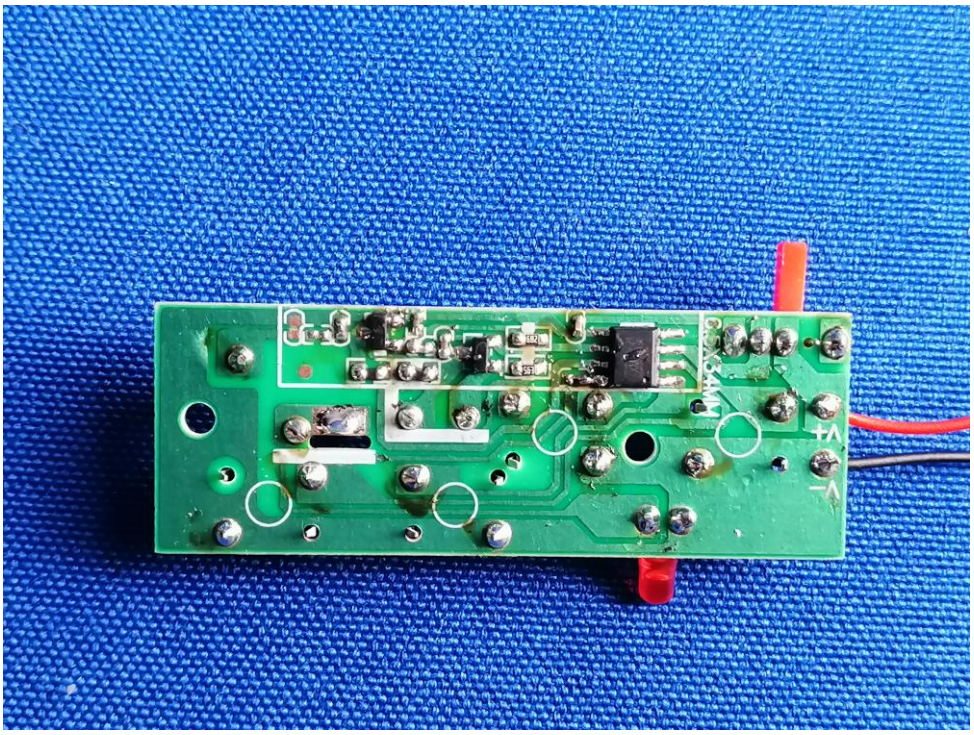


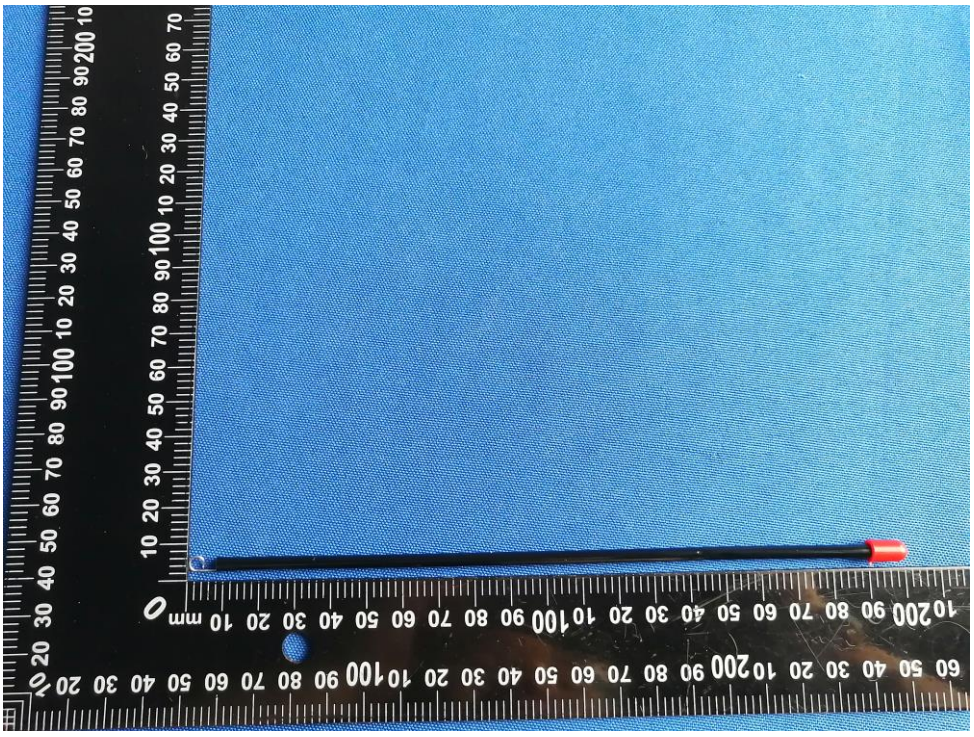



6*6*5MM
L
R
F
B
ANT
F2145
LED1
SLD-2533T
2025.06.05
27M-RFD
V-
V+
K1




6*6*5MM
R
L
F
B
LED1
SLD-2533T
2025.06.05
27M-RED
V-
V+
ANT
K1


V+
V-



6. Mode List

BX-300	662-5	662-6
662-10	662-11	662-21
H394-2A	H394-2B	H394-2C
H394-2D	BX-173	BX-167
BX-168	BX-204	661-1
GB8310	BX-298	BX-299
BX-308	BX-309	BX-302
BX-113D	BX-130D	UJ99-Y242
BX-151D	394-1Y	394-2Y
BX-112	BX-113	BX-114
BX-115	BX-344	BX-345
BX-346	BX-347	BX-348
BX-349	BX-350	BX-353
BX-359D	BX-360D	BX-361D
BX-362D	BX-363	BX-364
BX-365	BX-366	BX-367
BX-368	BX-369	BX-370
BX-371	BX-372	BX-373
BX-374	BX-375	BX-376
BX-377	BX-378	BX-379
BX-380	BX-381D	BX-600
BX-601	BX-602	BX-603
BX-604	BX-605	BX-606
BX-607	BX-608	BX-609
BX-610	BX-611	BX-612
BX-613	BX-614	BX-615
BX-616	BX-617	BX-618
BX-619	BX-620	

------ END OF REPORT-------