TEST REPORT

.

Applicant:	SHANTOU CITY CHENGHAI DISTRICT DONG SHENG FA TOYS FACTORY
Address of Applicant:	Dahaimen Industrial Area, Chenghai District, Shantou City,Guangdong Province, China
Manufacturer:	SHANTOU CITY CHENGHAI DISTRICT DONG SHENG FA TOYS FACTORY
Address of Manufacturer:	Dahaimen Industrial Area, Chenghai District, Shantou City,Guangdong Province, China

Equipment Under Test (EUT)

Product Name:	Remote control toy car
Model No.:	See section 5.1
FCC ID:	2BQGS-MT1595
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.227
Date of sample receipt:	June 24, 2025
Date of Test:	June 25, 2025-July 03, 2025
Date of report issued:	July 03, 2025
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

深圳市环球众一科技有限公司 Global United Technology Services Co., Ltd. 检验检测专用章 Inspection&Testing Services

Robinson Luo

Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
01	*July 03, 2025*	*Original*

Prepared By: ***Date:*** *July 03, 2025*

Project Engineer

Check By: ***Date:*** *July 03, 2025*

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna Requirement	15.203/15.227	Pass
AC Power Line Conducted Emission	15.207	N/A
20dB Bandwidth	15.215(c)	Pass
Field Strength of the Fundamental Signal	15.227(a)	Pass
Radiated Emissions	15.227(b) & C 15.209	Pass

Remarks:

1. *Pass: The EUT complies with the essential requirements in the standard.*
2. *N/A: Not applicable. The product does not work while charging.*
3. *Test according to ANSI C63.10:2013*

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz-30MHz	3.1dB	(1)
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

Product Name:	Remote control toy car
Model No.:	888-1A, MT1595, 6688-86A, 6688-87A, 6688-88A, 6688-89A, 6688-91A, 6688-110A, 6688-111A, 6688-112A, 6688-113A, 6688-114A, 6688-137A, 6688-138A, 6688-141A, 6688-142A, 6688-150A, 6688-151A, 6688-152A, 6688-153A, 6688-155A, 6688-156A, 6688-157A, 6688-159A, 6688-160A, 6688-161A, 6688-162A, 6688-163A, 6688-164A, 6688-165A, 6688-166A, 6688-167A, 6688-168A, 6688-169A, 6688-170A, 6688-171A, 6688-172A, 6688-173A, 6688-174A, 6688-175A, 6688-176A, 6688-177A, 6688-178A, 6688-179A, 6688-180A, 6688-181A, 6688-182A, 6688-183A, 6688-184A, 6688-185A, 6688-186A, 6688-187A, YB-001, YB-002, YB-003, YB-004, YB-005, YB-006, YB-007, YB-008, YB-009, YB-010, YB-011, YB-012, YB-013, YB-014, YB-015, YB-016, YB-017, YB-018, YB-019, YB-020, YB-021, YB-022, YB-023, YB-024, YB-025, YB-026, YB-027, YB-028, YB-029, YB-030, YB-031, YB-032, YB-033, YB-034, 3688-F1, 3688-F2, 3688-F3, 3688-F4, 3688-F5, 3688-F6, 3688-F7, 3688-F8, 3688-F9, 3688-F10, 3688-F11, 3688-F12, 3688-F13, 3688-F14, 3688-F15, 3688-F16, 3688-F17, 3688-F18, 3688-F19, 3688-F20, 3688-F21, 3688-F22, 3688-F23, 3688-F24, 3688-F25, 3688-F26, 3688-F27, 3688-F28, 3688-F29, 3688-F30, 3688-F31, 3688-F32, 3688-F33, 3688-F34, 868-1, 868-2, 868-3, 868-4, 868-5, 868-6, 868-7, 868-8, 868-9, 868-10, 868-11, 868-12, 868-13, 868-14, 868-15, 868-16, 868-17, 868-18, 868-19, 868-20, 868-21, 868-22, 868-23, 868-24, 868-25, 868-26, 868-27, 868-28, 868-29, 868-30, 868-31, 868-32, 868-33, 868-34, 868-1A, 868-2A, 868-3A, 868-4A, 868-1C, 868-2C, 868-3C, 868-4C, 868-1D, 868-2D, 868-1E, 882-1, 882-2, 888-1A, 888-2A, 888-3A, 888-4A, 888-5A, 888-6A, 888-7A, 888-8A, 888-9A, 888-10A, 888-11A, 888-12A, 888-13A, 888-14A, 888-15A, 888-16A, 888-17A, 888-18A, 888-19A, 888-20A, 888-21A, 888-22A, 888-23A, 888-24A, 888-25A, 888-26A, 888-27A, 888-28A, 888-29A, 888-30A, 888-31A, 888-32A, 888-33A, 888-34A, 888-35A
Test Model No.:	MT1595
Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are appearance design, appearance color and model name for commercial purpose.	
Serial No.:	N/A
Test sample(s) ID:	GTS2025060451-1
Sample(s) Status:	Engineer sample
Operation Frequency:	27.145MHz
Channel Number:	1
Modulation:	ASK
Antenna type:	Spring antenna
Antenna gain:	0dBi(Declared by applicant)
Power supply:	DC 3V(2*1.5V Size“AA” Battery)

Remark:

1. Antenna gain information provided by the customer

2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

5.2 Test mode

Transmitter mode	Keep the EUT in continuously transmitting.
Remark: New battery is used during all test.	

Pre-test mode.

GTS has verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	62.30	63.73	61.44

Final Test Mode:

According to ANSI C63.10 standards, the test results are both the “worst case” and “worst setup”: Y axis (see the test setup photo)

5.3 Description of Support Units

None.

5.4 Test Facility

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

● **FCC—Registration No.: 381383**
Designation Number: CN5029
Global United Technology Services Co., Ltd., Shenzhen 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 files.

● **ISED—Registration No.: 9079A**
CAB identifier: CN0091
The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing

● **NVLAP (LAB CODE:600179-0)**
Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102
Tel: 0755-27798480
Fax: 0755-27798960

6 Equipment List

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Apr. 11, 2025	Apr. 10, 2026
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Apr. 12, 2025	Apr. 11, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 12, 2025	Apr. 11, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul. 01, 2025	Jun. 30, 2026
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.16, 2024	Nov.15, 2025
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 11, 2025	Apr. 10, 2026
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 11, 2025	Apr. 10, 2026
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 11, 2025	Mar. 10, 2026
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 13, 2024	Nov. 12, 2025
14	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	Apr. 11, 2025	Apr. 10, 2026
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 15, 2025	Apr. 14, 2026
16	RE cable 1	GTS	N/A	GTS675	Jul. 01, 2025	Jun. 30, 2026
17	RE cable 2	GTS	N/A	GTS676	Jul. 01, 2025	Jun. 30, 2026
18	RE cable 3	GTS	N/A	GTS677	Jul. 01, 2025	Jun. 30, 2026
19	RE cable 4	GTS	N/A	GTS678	Jul. 01, 2025	Jun. 30, 2026
20	RE cable 5	GTS	N/A	GTS679	Jul. 01, 2025	Jun. 30, 2026
21	RE cable 6	GTS	N/A	GTS680	Jul. 01, 2025	Jun. 30, 2026
22	RE cable 7	GTS	N/A	GTS681	Jul. 05, 2024	Jul. 04, 2025
23	RE cable 8	GTS	N/A	GTS682	Jul. 05, 2024	Jul. 04, 2025
24	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A

RF Conducted Test:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	Apr. 11, 2025	Apr. 10, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	Apr. 11, 2025	Apr. 10, 2026
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	Apr. 11, 2025	Apr. 10, 2026
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Power Meter	Keysighte	N1924A	GTS673	Apr. 11, 2025	Apr. 10, 2026
7	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
8	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
10	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 15, 2025	Apr. 14, 2026

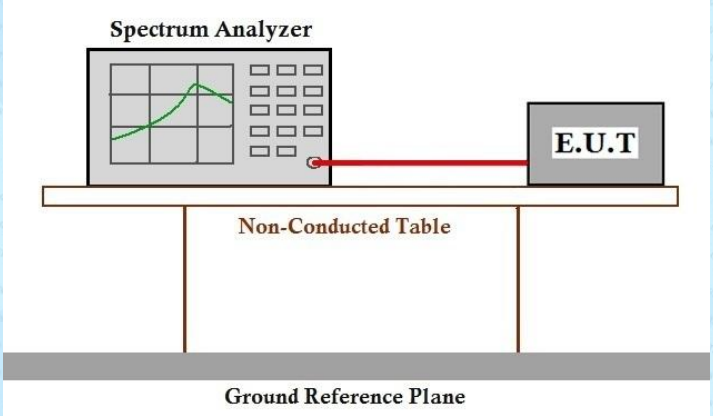
General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Barometer	KUMAO	SF132	GTS647	Aug. 17, 2024	Aug. 16, 2025

7 Test results and Measurement Data

7.1 Antenna Requirement

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: 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.	
E.U.T Antenna:	
The antenna is spring antenna, reference to the appendix II for details.	

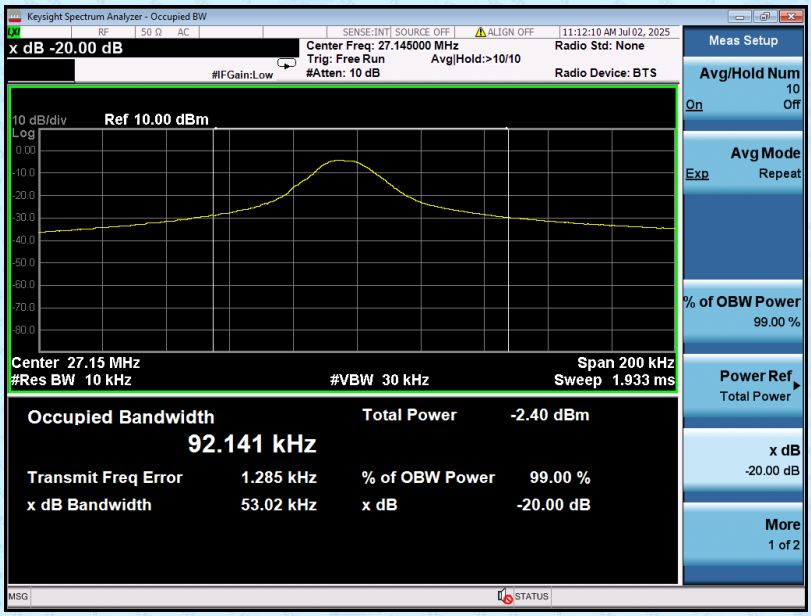
7.2 20dB Bandwidth

Test Requirement:	47 CFR Part 15, Subpart C 15.215(c)
Test Method:	ANSI C63.10:2013
Test setup:	
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar
Test Instruments:	Refer to section 6 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

Mode	Frequency (MHz)	-20dB Bandwidth (KHz)	Limit	Conclusion
TX	27.145	53.02	N/A	Pass

Test plot as follows:



7.3 Field Strength of the Fundamental Signal and Radiated Emissions

Test Requirement:	47 CFR Part 15, Subpart C 15.227(a), 15.227(b) & 15.209
Test Method:	ANSI C63.10:2013
Test Frequency Range:	9kHz to 1000MHz
Test site:	Measurement Distance: 3m
Limit: (Field strength of the fundamental signal)	

Frequency	Limit (dBuV/m @3m)	Remark
26.96-27.28MHz	80	Average Value
	100	Peak Value

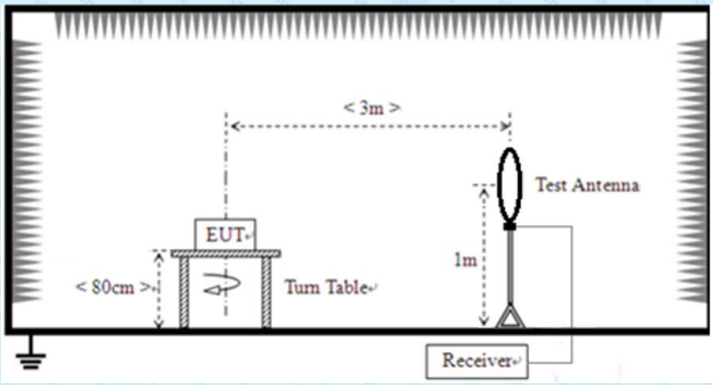
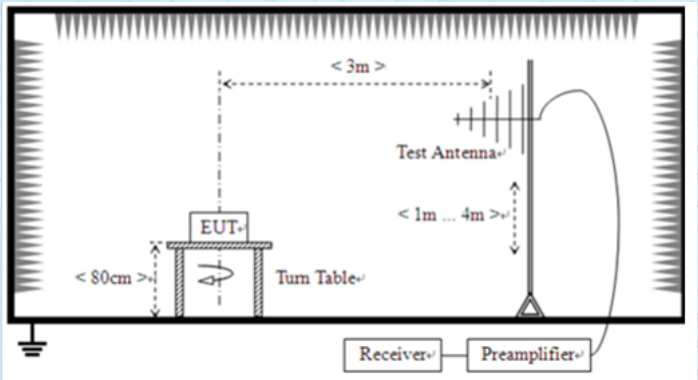
Limit:
(Radiated Emissions)

Frequency(MHz)	Field strength (microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz and 110-490kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

Frequency(MHz)	Field strength (microvolts/meter)	Measurement distance(meters)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

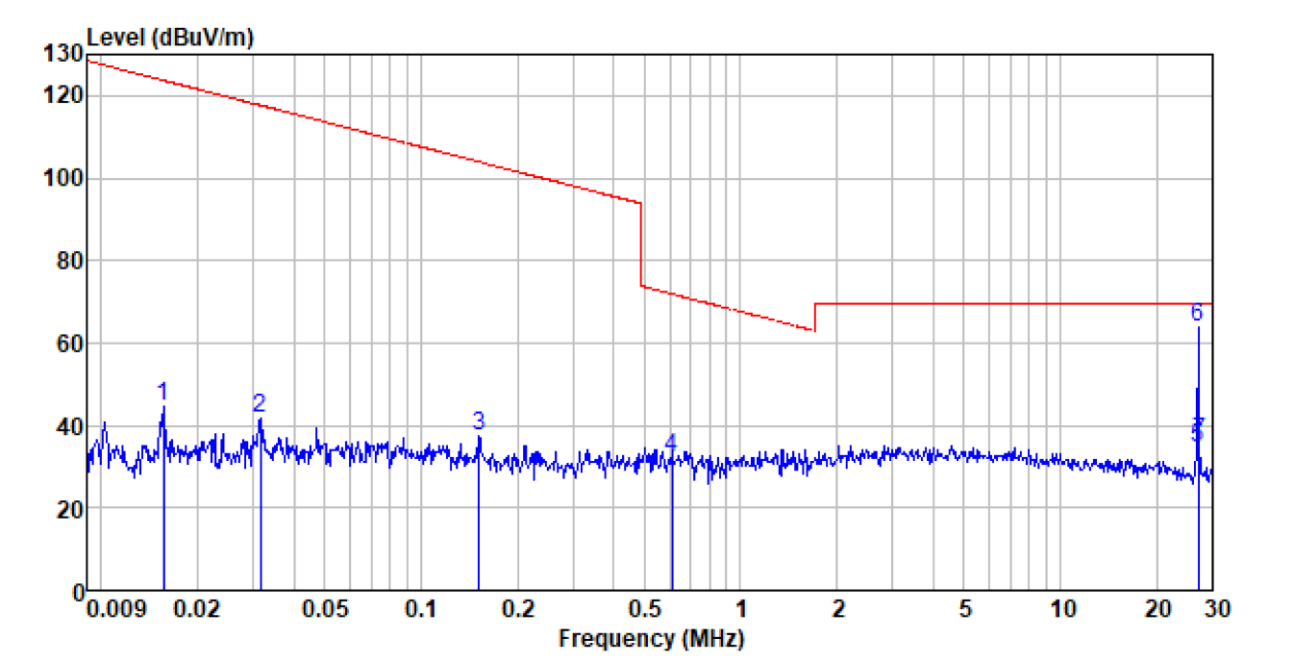
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for above 1000MHz. Radiated emission limits above 1000MHz is based on measurements employing an average detector.

Test setup:	Below 30MHz  Below 1GHz 
Test Procedure:	Below 30MHz: a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is fixed at one meter d. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. e. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Facto 30Mhz-1000MHz: a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna

	tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	50%	Press.:	1 010mbar
Test voltage:	DC 3V					
Test results:	Pass					

Measurement data:

9kHz~30MHz



No. Mk.	Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark
1	0.016	23.15	21.30	0.04	0.00	44.49	123.73	-79.24	Peak
2	0.031	20.69	21.00	0.09	0.00	41.78	117.67	-75.89	Peak
3	0.151	17.20	20.20	0.19	0.00	37.59	104.00	-66.41	Peak
4	0.611	11.47	20.43	0.29	0.00	32.19	71.89	-39.70	QP
5	26.960	13.20	20.59	0.55	0.00	34.34	69.54	-35.20	QP
6*	27.145	42.61	20.57	0.55	0.00	63.73	100.00	-36.27	Peak
7	27.280	14.99	20.54	0.55	0.00	36.08	69.54	-33.46	QP

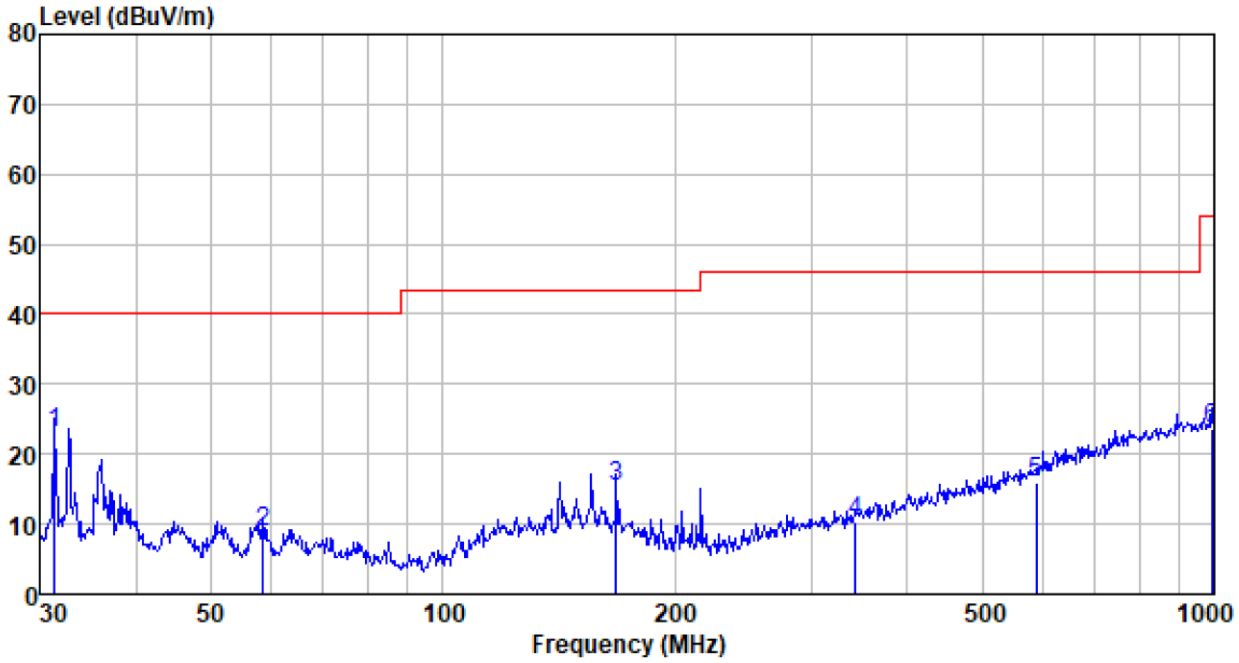
Remarks:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
   Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
2) *: Field Strength of the Fundamental Signal.

The peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the above measurement data were shown in the report.

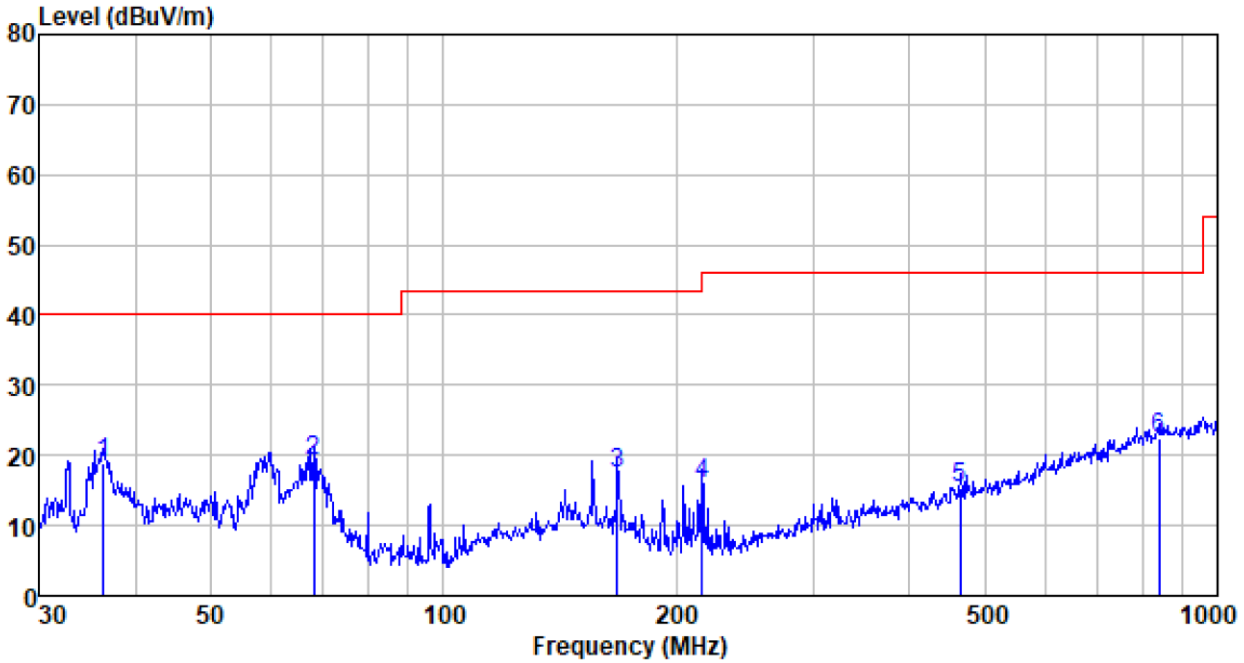
30MHz~1GHz

Mode:	Transmitting mode	Polarization:	Horizontal



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
31.399	41.80	12.50	1.13	32.30	23.13	40.00	-16.87	QP
58.407	27.56	12.18	1.47	32.33	8.88	40.00	-31.12	QP
167.824	31.42	13.62	2.62	32.43	15.23	43.50	-28.27	QP
343.180	25.48	13.36	3.64	32.28	10.20	46.00	-35.80	QP
586.844	24.73	18.64	4.58	31.88	16.07	46.00	-29.93	QP
993.011	24.64	24.00	6.00	31.10	23.54	54.00	-30.46	QP

Mode:	Transmitting mode	Polarization:	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
36.381	36.66	13.38	1.21	32.30	18.95	40.00	-21.05	QP
67.913	39.07	11.01	1.62	32.37	19.33	40.00	-20.67	QP
167.824	33.65	13.62	2.62	32.43	17.46	40.00	-22.54	QP
216.024	35.68	9.76	2.96	32.38	16.02	40.00	-23.98	QP
465.599	27.39	16.21	4.09	32.22	15.47	47.00	-31.53	QP
839.182	25.41	22.48	5.58	31.10	22.37	47.00	-24.63	QP

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

------End------