

MAY CHEONG TOY PRODUCTS FTY., LTD

TEST REPORT

SCOPE OF WORK

RAIDO FREQUENCY AND EMC TESTING-81240(12049/12119/81241)
ADDITIONAL MODELS: SEE PAGE 1

REPORT NUMBER

SZHH01137922-003S2

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RADIO COMMUNICATIONS AND EMC TESTING REPORT

MAY CHEONG TOY PRODUCTS FTY., LTD

Model: 81240(12049/12119/81241)

Additional Models: 81019, 81203, 81242, 81243, 81244, 81245, 81246, 81247, 81248, 81249, 81271, 81272, 81273, 81274, 81021, 81022, 81024, 81026, 81028,81031, 81032, 81041, 81042, 81044, 81045, 81275, 81276, 81152, 81156, 83156, 81158, 81325, 81781, 83022, 81164, 83016, 83017(10099, 09078, 16950); 81323, 83233(15005); 81341, 81342, 81343, 81344, 81345, 81346, 81347, 81348, 81349

1:14 R/C,Asst

Additional Names: 1:10 Radio Control Vehicle Collection, Assorted, Sand Runner R/C, Asst, Radio Control Vehicle R/C Rock Crawler,Assorted, Radio Control Vehicle R/C Rock Crawler Extreme, RC Rock Crawler Extreme without battery in FFP packaging, R/C Rock Crawler 6x6, 1:16 Rock Crawler Extreme R/C, Radio Control Vehicle Rock Crawler & Rock Crawler Extreme, Asst, Rock Crawler in mailer box pack, Rock Crawler Extreme in mailer box pack, Rock Crawler Ford Raptor

Test Report No. : SZHH01137922-003S2

Remark: This report bases on the previous report with report No. SZHH01137922-003S1 dated 9 April 2018. Only update issue date, don't test after engineer evaluate.

Test Engineer :	Terry Tang Senior Engineer	Sign On File
Report Approved By :	Jimmy Wen Assistant Manager	
Date :	16 March 2020	

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RADIO PERFORMANCE MEASUREMENTS RESULT SUMMARY

Requirements	ETSI EN 300 220-2	ETSI EN 300 220-1	Compliance
	Clause Number		
Operating Frequency	4.2.1	5.1.1	Complied
Effective Radiated Power	4.3.1	5.2.1	Complied
Unwanted emissions in the spurious domain (Transmitter Portion)	4.2.2	5.9.1	Complied
Unwanted emissions in the spurious domain (Receiver Portion)	4.2.2	5.9.1	Complied
Adjacent Channel Power	4.3.7	5.11.1	Complied
Tx Out Of Band Emissions	4.3.5	5.8.1	N/A
TX behaviour Under Low-voltage Conditions	4.3.8	5.12.1	Complied
Transient Power	4.3.6	5.10.1	Complied
Blocking	4.4.2	5.18.1	Complied
Occupied Bandwidth	4.3.4	5.6.1	Complied
Duty Cycle	4.3.3	5.4.1	Complied
When determining of the test conclusion, the Measurement Uncertainty of test has been considered.			

EMC COMPLIANCE MEASUREMENTS RESULT SUMMARY

	ETSI EN 301 489-3	ETSI EN 301 489-1	Compliance
	Clause Number		
EMC Emission	7.2	8.2	Complied
Electrostatic Discharge	7.3	9.3	Complied
Radio Frequency Electromagnetic Field (80MHz-6GHz)	7.3	9.2	Complied
When determining the test conclusion, the Measurement Uncertainty of test has been considered.			

EQUIPMENT UNDER TEST (EUT) INFORMATION

Applicant: MAY CHEONG TOY PRODUCTS FTY., LTD
UNIT 901-2, 9/F., EAST OCEAN CENTRE, 98 GRANVILLE ROAD,
TSIMSHATSUI EAST, KOWLOON, HONG KONG

Description of EUT : 1:14 R/C,Asst

Brand Name(s) / Type Number(s) : Maisto / 81240(12049/12119/81241)

Serial Number(s) : Not Labelled

Equipment Received : 11 May 2017

Test Date(s) : 11 May 2017 to 21 May 2017

Type of EUT : RC Toys

Receiver category of EUT : Class 3 Type III Equipment

Temperature Category of EUT: Category I: -20°C to +55°C

Type of Modulation: Pulse Modulation

Test Specification(s) : ETSI EN 300 220-2: V3.1.1 (2017-02)
ETSI EN 300 220-1: V3.1.1 (2017-02)
Draft ETSI EN 301 489-1 V2.2.0 (2017-03)
Final Draft ETSI EN 301 489-3 V2.1.1 (2017-03)

CONTENTS

EXHIBIT 1 GENERAL DESCRIPTION	6
1 Introduction	7
2 Test Specification	8
EXHIBIT 2 TEST RESULT OF RADIO PERFORMANCE MEASUREMENTS	10
3 Equivalent Isotropically Radiated Power (EIRP) and Spurious Emissions	11
4 Permitted Range of Operating Frequencies	17
5 Adjacent Channel Power	19
6 Tx Out Of Band Emissions	22
7 TX behaviour Under Low-voltage Conditions	24
8 Transient Power	27
9 Blocking	30
10 Occupied Bandwidth	32
11 Duty Cycle	35
EXHIBIT 3 TEST RESULT OF EMC COMPLIANCE MEASUREMENTS	36
12 EMC Emission Test	37
13 Electrostatic Discharge	39
14 Radio Frequency Electromagnetic Field	41
EXHIBIT 4 PHOTOS OF EUT	43
15 EUT Photos	44

EXHIBIT 1

GENERAL DESCRIPTION

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

1 INTRODUCTION

Intertek Testing Services Shenzhen Limited Longhua Branch (address: 1F/2F, Building B, QiaoAn Scientific Technology Park, ShangKeng Community, GuanHu Subdistrict, LongHua District, ShenZhen. P.R. China, 518110) has tested the MAY CHEONG TOY PRODUCTS FTY., LTD, 1:14 R/C,Asst, 81240(12049/12119/81241). The sample was tested to the relevant performance specification published by the European Telecommunications Standards Institute. This report contains the results of these tests and is submitted MAY CHEONG TOY PRODUCTS FTY., LTD as the final test results.

The additional names: 1:10 Radio Control Vehicle Collection, Assorted, Sand Runner R/C, Asst, Radio Control Vehicle R/C Rock Crawler, Assorted, Radio Control Vehicle R/C Rock Crawler Extreme, RC Rock Crawler Extreme without battery in FFP packaging, R/C Rock Crawler 6x6, 1:16 Rock Crawler Extreme R/C, Radio Control Vehicle Rock Crawler & Rock Crawler Extreme, Asst, Rock Crawler in mailer box pack, Rock Crawler Extreme in mailer box pack, Rock Crawler Ford Raptor are the same as 1:14 R/C, Asst in hardware aspect except the different appearance.

The models: 81240, 81019, 81203, 81152, 81156, 83156, 81158, 81325, 81781, 83022, 81164, 83016, 83017(10099, 09078, 16950); 81323, 83233(15005); 81341, 81342, 81343, 81344, 81345, 81346, 81347, 81348, 81349 are package numbers. The model: 81240 include a transmitter and a receiver, the transmitter model number is 12049 or 12119, receiver model number is 81241, the additional receiver models: 81242, 81243, 81244, 81245, 81246, 81247, 81248, 81249, 81271, 81272, 81273, 81274, 81021, 81022, 81024, 81026, 81028, 81031, 81032, 81041, 81042, 81044, 81045, 81275, 81276 are same as the model: 81241 in hardware and electrical aspect. Theirs difference in the appearance and model number.

The production units are required to conform to the initial sample as received when the units are placed on the market.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

2 TEST SPECIFICATION

2.1 RELEVANT PERFORMANCE SPECIFICATION

The relevant performance specifications for MAY CHEONG TOY PRODUCTS FTY., LTD, 1:14 R/C,Asst, 81240(12049/12119/81241) are the harmonised standard is ETSI EN 300 220-2 V3.1.1 (2017-02) and the technical standards are ETSI EN300 220-1 V3.1.1 (2017-02), Final Draft ETSI EN301 489-3 V2.1.1 (2017-03) and Draft ETSI EN301 489-1 V2.2.0 (2017-03).

The tests performed are those required to demonstrate compliance with the essential requirements of Article 3.1(b) and 3.2 of the Radio Equipment Directive - RED for regulatory purposes.

2.2 TEST ENVIRONMENT

The tests were performed in the Radio communications and Electromagnetic Compatibility Test Facility at Intertek Testing Services Shenzhen Limited Longhua Branch (CNAS No.: L0327). The sample was subjected to the ambient conditions in the laboratory and indoor test site except during tests at extremes of temperatures and the Radiated Emissions Tests. The temperature and relative humidity recorded during the period of each test are given in the results.

2.3 CONFIGURATION OF TEST SAMPLE

The test sample consisted of one transmitter and one receiver.

2.4 TEST POWER SOURCES

The sample of transmitter is intended to operate from battery DC 3.0V (2 x 1.5V AAA batteries) and DC 3.0V (2 x 1.5V AA batteries).The test power source voltage declared by the manufacturer were:

Nominal test voltage (V_{nom})	DC 3.0V
Lower extreme test voltage (V_{min})	DC 2.4V
Upper extreme test voltage (V_{max})	DC 3.0V

The sample of receiver is intended to operate from battery DC 9.0V (6 x 1.5V AA batteries).

2.5 TEST FREQUENCIES

The model 12049 nominal operating frequency 27.144000 MHz at DC 3.0V.

The model 12119 nominal operating frequency 27.143000 MHz at DC 3.0V.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

2.6 MEASUREMENT UNCERTAINTY

All measurement uncertainties stated in this report are estimated to a 95% confidence level.

2.7 SUPPORT EQUIPMENT – RADIO PERFORMANCE MEASUREMENTS

N/A

2.8 SUPPORT EQUIPMENT – EMC COMPLIANCE MEASUREMENTS

N/A

2.9 PERFORMANCE CRITERIA**2.9.1 PERFORMANCE CRITERIA FOR CONTINUOUS PHENOMENA (CT & CR)**

At the conclusion of the test the EUT shall operated as intended with no loss of user control functions or stored data, the communication link shall have been maintained during the test.

Where the EUT is transmitter, tests shall be repeated with the EUT in standby mode to ensure that any unintentional transmission does not occur.

2.9.2 PERFORMANCE CRITERIA FOR TRANSIENT PHENOMENA (TT & TR)

At the conclusion of each exposure the EUT shall operated with no user noticeable loss of communication link.

Where the EUT is transmitter, tests shall be repeated with the EUT in standby mode to ensure that any unintentional transmission does not occur.

EXHIBIT 2

**TEST RESULT
OF
RADIO PERFORMANCE MEASUREMENTS**

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

3 EFFECTIVE RADIATED POWER (ERP) AND SPURIOUS EMISSIONS

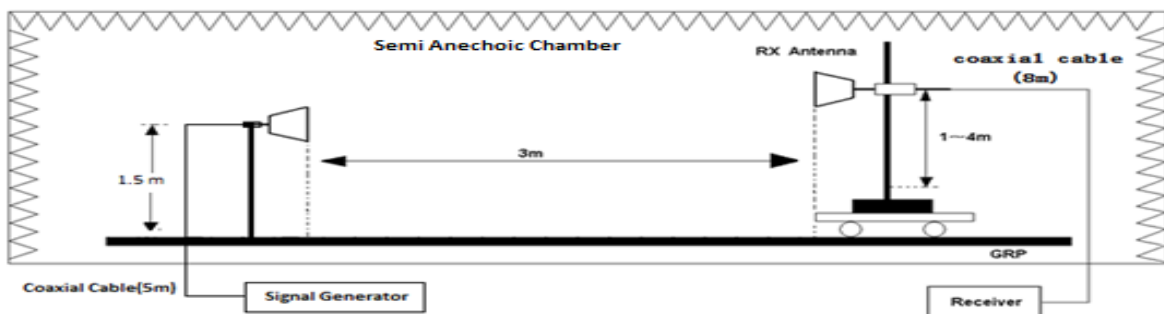
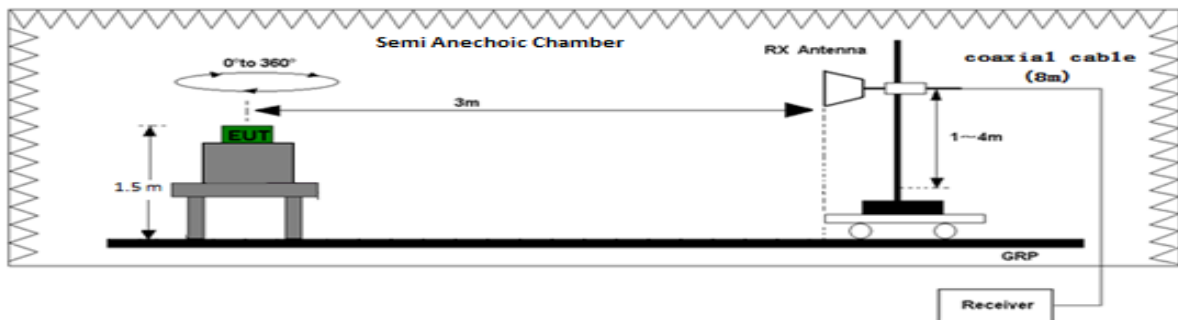
3.1 TEST METHOD AND SUMMARY

	Effective Radiated Power (ERP)	Spurious Emissions	
Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)		
Clause :	4.3.1	4.2.2	4.2.2
Application :	Transmitter with an Integral or Dedicated Antenna	All Transmitters	All Receivers

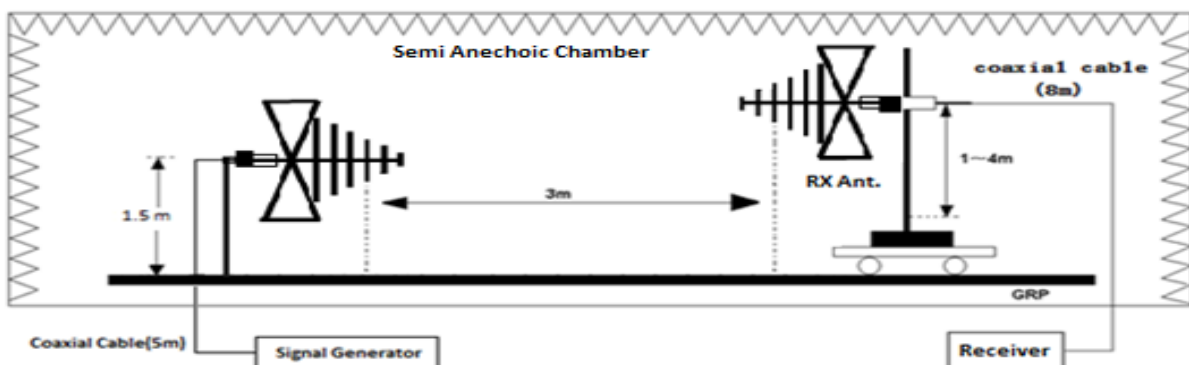
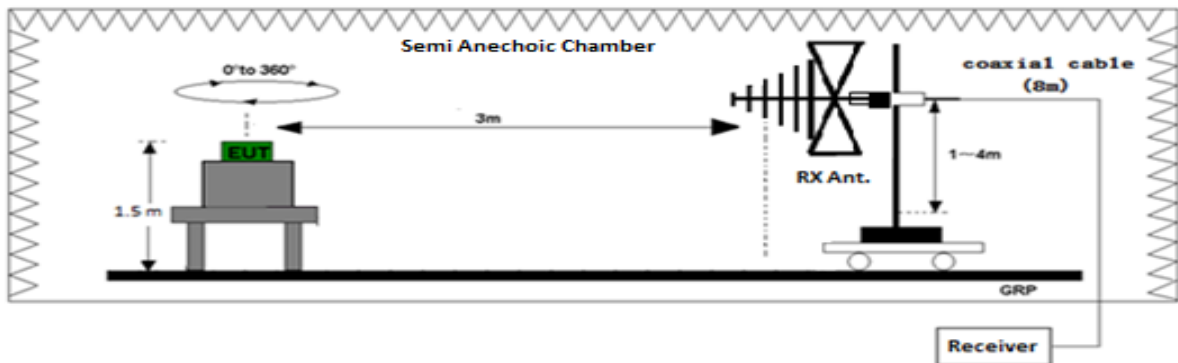
3.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ185-01	EMI Receiver	R&S	ESCI	6-Jan-17	6-Jul-17
SZ056-03	Spectrum Analyzer	R&S	FSP	14-Jun-16	14-Jun-17
SZ061-03	BiConiLog Antenna	ETS	3142C	12-Oct-16	12-Oct-17
SZ061-07	Pyramidal Horn Antenna	ETS	3115	12-Oct-16	12-Oct-17
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	30-May-16	30-May-17
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	16-Jan-17	16-Jan-19
SZ062-02	RF Cable	RG 213U	N/A	6-Jan-17	6-Jul-17
SZ062-05	RF Cable	0.04-26.5GHz	N/A	16-Mar-17	16-Sep-17

3.3 Test Setup



Test set-up of radiated disturbance (above 1GHz)



Test set-up of radiated disturbance (30MHz-1GHz)

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

3.4 TEST RESULT - EFFECTIVE RADIATED POWER (ERP) - TRANSMITTER PORTION

Ambient Test Conditions: Temperature 25°C; Humidity 50%

TX Model: 12049

Polarization	Frequency (MHz)	ERP (mW)	ERP (dBm)	Limit (dBm)	Margin (dB)
V	27.144000	0.0204	-16.9	10	-26.9

TX Model: 12119

Polarization	Frequency (MHz)	ERP (mW)	ERP (dBm)	Limit (dBm)	Margin (dB)
V	27.143000	0.0141	-18.5	10	-28.5

Notes:

1. Negative sign (-) in the margin column signify levels below the limit.
2. 10dBm corresponds to 10mW
3. Measurement uncertainty is ± 4.8 dB at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

3.5 TEST RESULT – SPURIOUS EMISSIONS (TRANSMITTER PORTION)

3.5.1 CONDUCTED

Not applicable. Equipment has integral antenna.

3.5.2 RADIATED

3.5.2.1 SPURIOUS EMISSIONS – OPERATING

Test Conditions: Temperature 25.0°C; Humidity 50.0%

TX Model: 12049

Polarization	Frequency (MHz)	ERP at 3m (dBm)	ERP Limit at 3m (dBm)	Margin (dB)
V	54.366	-62.1	-54.0	-8.1
V	81.549	-55.7	-36.0	-19.7
V	108.732	-82.3	-54.0	-28.3
V	135.915	-82.1	-36.0	-46.1
V	163.098	-75.0	-36.0	-39.0
V	190.281	-73.5	-54.0	-19.5

No emissions significantly above equipment noise floor.

TX Model: 12119

Polarization	Frequency (MHz)	ERP at 3m (dBm)	ERP Limit at 3m (dBm)	Margin (dB)
V	54.365	-72.3	-54.0	-18.3
V	81.542	-69.8	-36.0	-33.8
V	108.730	-82.3	-54.0	-28.3
V	135.924	-82.1	-36.0	-46.1
V	163.088	-75.0	-36.0	-39.0
V	190.285	-75.0	-54.0	-21.0

No emissions significantly above equipment noise floor.

Notes:

1. Negative sign (-) in the margin column signify levels below the limit.
2. Other emissions found were at least 10 dB below the limit.
3. -54 dBm corresponds to 4 nW
4. -47 dBm corresponds to 20 nW.
5. -36 dBm corresponds to 250 nW
6. -30 dBm corresponds to 1000 nW.
7. Measurement uncertainty is ± 4.8 dB at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

3.5.2.2 SPURIOUS EMISSIONS – STANDBY

- There were no emissions found above system measuring level (at least 10 dB below the limit).
- The transmitter cannot be operated in the standby mode. (WITHOUT STAND-BY MODE)
- (STAND BY MODE WITH TABLE)

TX Model: 12049

Polarization	Frequency (MHz)	ERP at 3m (dBm)	ERP Limit at 3m (dBm)	Margin (dB)
/	/	/	/	/

TX Model: 12119

Polarization	Frequency (MHz)	ERP at 3m (dBm)	ERP Limit at 3m (dBm)	Margin (dB)
/	/	/	/	/

Notes:

1. Negative sign (-) in the margin column signify levels below the limit.
2. Other emissions found were at least 10 dB below the limit.
3. -57 dBm corresponds to 2 nW
4. -47 dBm corresponds to 20 nW.
5. -36 dBm corresponds to 250 nW
6. -30 dBm corresponds to 1000 nW.
7. Measurement Uncertainty : ± 4.8 dB at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

3.6 TEST RESULT – SPURIOUS EMISSIONS (RECEIVER PORTION)

3.6.1 CONDUCTED

Not applicable. Equipment has integral antenna.

3.6.2 RADIATED

3.6.2.1 SPURIOUS EMISSIONS – OPERATING

Test Conditions: Temperature 25.0°C; Humidity 50.0%).

Polarization	Frequency (MHz)	ERP at 3m (dBm)	ERP Limit at 3m (dBm)	Margin (dB)
/	/	/	/	/

No emissions significantly above equipment noise floor.

Notes:

1. Negative sign (-) in the margin column signify levels below the limit.
2. Other emissions found were at least 10 dB below the limit.
3. -57 dBm corresponds to 2 nW.
4. -47 dBm corresponds to 20 nW.
5. Measurement uncertainty is ± 4.8 dB at a level of confidence of 95%.

3.6.2.2 SPURIOUS EMISSIONS –STANDBY

No Test Result.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

4 PERMITTED RANGE OF OPERATING FREQUENCY

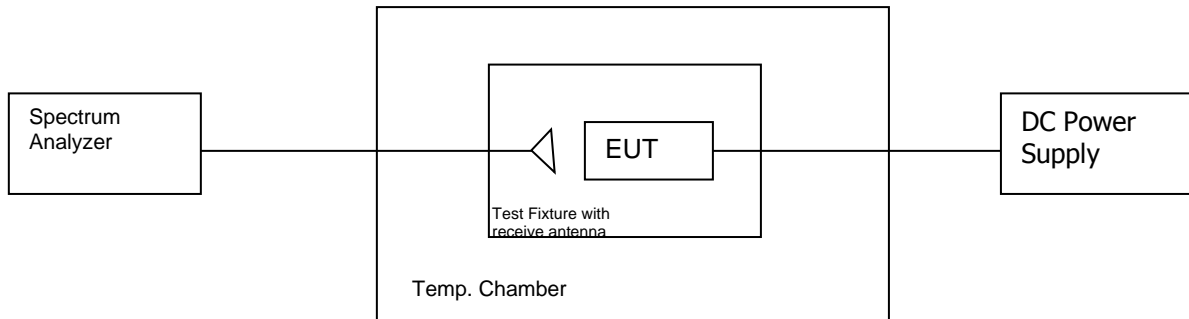
4.1 TEST METHOD AND SUMMARY

Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.2.1
Application :	all transmitter

4.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

4.3 Test Setup



4.4 TEST RESULT

TX Model: 12049

Test Conditions		Frequency (MHz)	Frequency Drift (Hz)
Nominal frequency stated by the manufacturer: 27.144000MHz			
H _{nom} 50.0% T _{nom} 25.0°C	V _{DC nom} DC 3.0V	27.144200	200.0
Value		Notes	
Operational Frequency Band		26.957-27.283MHz	Declared by manufacturer
Nominal Operating Frequency		27.144000MHz	Declared by manufacturer
Operating Channel Width-OCW		16.8kHz	Declared by manufacturer

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

TX Model: 12119

Test Conditions		Frequency (MHz)	Frequency Drift (Hz)
Nominal frequency stated by the manufacturer: 27.143000MHz			
H _{nom} 50.0% T _{nom} 25.0°C	V _{DC nom} DC 3.0V	27.143100	100.0
Value		Notes	
Operational Frequency Band		26.957-27.283MHz	Declared by manufacturer
Nominal Operating Frequency		27.143000MHz	Declared by manufacturer
Operating Channel Width-OCW		16.4kHz	Declared by manufacturer

Note:

1. The Assigned Frequency Band is 26.957-27.283MHz.
- 2.. Measurement uncertainty is ± 0.5 ppm at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

5 ADJACENT CHANNEL POWER

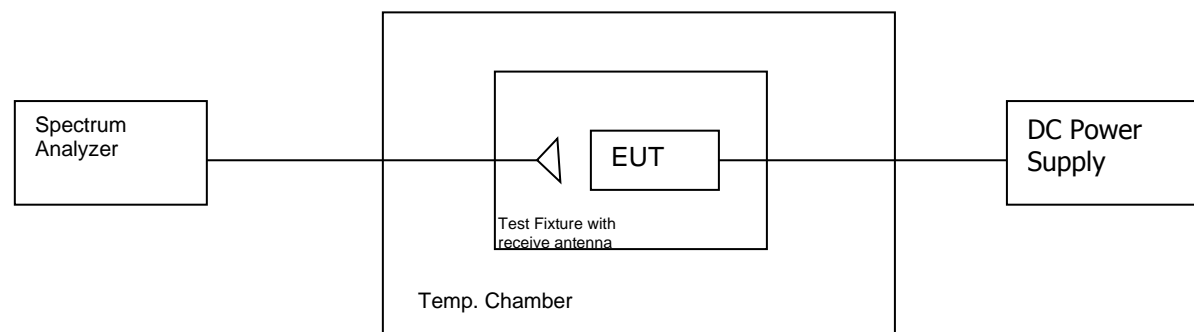
5.1 TEST METHOD AND SUMMARY

Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.3.7
Application :	all transmitter with OCW \leq 25 kHz

5.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

5.3 Test Setup



TEST REPORT

Intertek Report No. : SZHH01137922-003S2

5.4 TEST RESULT

5.4.1 TEST RESULT – DC TEST VOLTAGE

TX Model: 12049

Adjacent Channel Power

Test Conditions <input checked="" type="checkbox"/> OCW < 20kHz / <input type="checkbox"/> 20kHz ≤ OCW ≤ 25kHz	Adjacent channel	Attenuation (dBc)	Adjacent channel power (dBm)	Limit (dBm)	Result
V _{nom} : DC 3.0V T _{nom} : 25.0°C RH _{nom} : 50.0%	Lower	9.4	-38.3	-20.0 dBm	Complied
	Upper	9.4	-39.4		Complied
V _{max} : DC 3.0V T _{max} : +55°C RH _{max} : 50.0 %	Lower	9.4	-35.5	-15.0 dBm	Complied
	Upper	9.4	-34.5		Complied
V _{min} : DC 2.4V T _{max} : +55°C RH _{max} : 50.0%	Lower	9.4	-36.1		Complied
	Upper	9.4	-35.8		Complied
V _{max} : DC 3.0V T _{min} : -20°C RH _{min} : 0 %	Lower	9.4	-38.7		Complied
	Upper	9.4	-39.3		Complied
V _{min} : DC 2.4V T _{min} : -20°C RH _{min} : 0 %	Lower	9.4	-39.0		Complied
	Upper	9.4	-40.2		Complied

Alternate Adjacent Channel Power

Test Conditions <input checked="" type="checkbox"/> OCW < 20kHz / <input type="checkbox"/> 20kHz ≤ OCW ≤ 25kHz	Adjacent channel	Attenuation (dBc)	Adjacent channel power (dBm)	Limit (dBm)	Result
V _{nom} : DC 3.0V T _{nom} : 25.0°C RH _{nom} : 50.0%	Lower	9.4	-39.3	-20.0 dBm	Complied
	Upper	9.4	39.9		Complied
V _{max} : DC 3.0V T _{max} : +55°C RH _{max} : 50.0 %	Lower	9.4	-38.5	-20.0 dBm	Complied
	Upper	9.4	-38.1		Complied
V _{min} : DC 2.4V T _{max} : +55°C RH _{max} : 50.0%	Lower	9.4	-38.5		Complied
	Upper	9.4	-37.3		Complied
V _{max} : DC 3.0V T _{min} : -20°C RH _{min} : 0 %	Lower	9.4	-39.5		Complied
	Upper	9.4	-39.8		Complied
V _{min} : DC 2.4V T _{min} : -20°C RH _{min} : 0 %	Lower	9.4	-40.3		Complied
	Upper	9.4	-40.2		Complied

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

TX Model: 12119

Adjacent Channel Power

Test Conditions <input checked="" type="checkbox"/> OCW < 20kHz / <input type="checkbox"/> 20kHz ≤ OCW ≤ 25kHz	Adjacent channel	Attenuation (dBc)	Adjacent channel power (dBm)	Limit (dBm)	Result
V _{nom} : DC 3.0V T _{nom} : 25.0°C RH _{nom} : 50.0%	Lower	9.1	-38.8	-20.0 dBm	Complied
	Upper	9.1	-37.4		Complied
V _{max} : DC 3.0V T _{max} : +55°C RH _{max} : 50.0 %	Lower	9.1	-36.5	-15.0 dBm	Complied
	Upper	9.1	-36.5		Complied
V _{min} : DC 2.4V T _{max} : +55°C RH _{max} : 50.0%	Lower	9.1	-37.1		Complied
	Upper	9.1	-36.8		Complied
V _{max} : DC 3.0V T _{min} : -20°C RH _{min} : 0 %	Lower	9.1	-37.7		Complied
	Upper	9.1	-39.8		Complied
V _{min} : DC 2.4V T _{min} : -20°C RH _{min} : 0 %	Lower	9.1	-39.2		Complied
	Upper	9.1	-41.2		Complied

Alternate Adjacent Channel Power

Test Conditions <input checked="" type="checkbox"/> OCW < 20kHz / <input type="checkbox"/> 20kHz ≤ OCW ≤ 25kHz	Adjacent channel	Attenuation (dBc)	Adjacent channel power (dBm)	Limit (dBm)	Result
V _{nom} : DC 3.0V T _{nom} : 25.0°C RH _{nom} : 50.0%	Lower	9.1	-39.2	-20.0 dBm	Complied
	Upper	9.1	-39.1		Complied
V _{max} : DC 3.0V T _{max} : +55°C RH _{max} : 50.0 %	Lower	9.1	-37.5	-20.0 dBm	Complied
	Upper	9.1	-37.1		Complied
V _{min} : DC 2.4V T _{max} : +55°C RH _{max} : 50.0%	Lower	9.1	-38.3		Complied
	Upper	9.1	-38.3		Complied
V _{max} : DC 3.0V T _{min} : -20°C RH _{min} : 0 %	Lower	9.1	-41.5		Complied
	Upper	9.1	-40.8		Complied
V _{min} : DC 2.4V T _{min} : -20°C RH _{min} : 0 %	Lower	9.1	-41.3		Complied
	Upper	9.1	-41.2		Complied

Remark:

- 15.0dBm corresponds to 32 μW
- 20.0dBm corresponds to 10 μW
- 32.0dBm corresponds to 630 nW
- 37.0dBm corresponds to 200 nW
- 40.0dBm corresponds to 100 nW

Note:

Measurement uncertainty is ±3.0dB at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

6 TX OUT OF BAND EMISSIONS

6.1 TEST METHOD AND SUMMARY

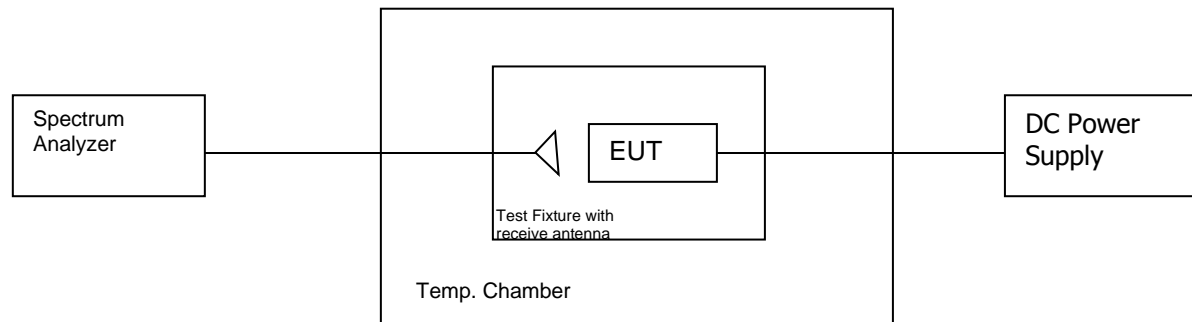
Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.3.5
Application :	all transmitter with OCW >25 kHz

6.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

* The Equipment would be verified together with the test system before testing.

6.3 TEST SETUP



6.4 TEST LIMIT

Domain	Frequency Range	RBW _{REF}	Max power limit
OOB limits applicable to Operational Frequency Band (See Figure 6)	$f \leq f_{low_OFB} - 400 \text{ kHz}$	10 kHz	-36 dBm
	$F_{low_OFB} - 400 \text{ kHz} \leq f \leq f_{low_OFB} - 200 \text{ kHz}$	1 kHz	-36 dBm
	$f_{low} - 200 \text{ kHz} \leq f < f_{low_OFB}$	1 kHz	See Figure 6
	$f = f_{low_OFB}$	1 kHz	0 dBm
	$f = f_{high_OFB}$	1 kHz	0 dBm
	$F_{high_OFB} < f \leq f_{high_OFB} + 200 \text{ kHz}$	1 kHz	See Figure 6
	$F_{high_OFB} + 200 \text{ kHz} \leq f \leq f_{high_OFB} + 400 \text{ kHz}$	1 kHz	-36 dBm
	$F_{high_OFB} + 400 \text{ kHz} \leq f$	10 kHz	-36 dBm
OOB limits applicable to Operating Channel (See Figure 5)	$f = f_c - 2.5 \times \text{OCW}$	1 kHz	-36 dBm
	$f_c - 2.5 \times \text{OCW} \leq f \leq f_c - 0.5 \times \text{OCW}$	1 kHz	See Figure 5
	$f = f_c - 0.5 \times \text{OCW}$	1 kHz	0 dBm
	$f = f_c + 0.5 \times \text{OCW}$	1 kHz	0 dBm
	$f_c + 0.5 \times \text{OCW} \leq f \leq f_c + 2.5 \times \text{OCW}$	1 kHz	See Figure 5
	$f = f_c + 2.5 \times \text{OCW}$	1 kHz	-36 dBm

NOTE: f is the measurement frequency.
 f_c is the Operating Frequency.
 F_{low_OFB} is the lower edge of the Operational Frequency Band.
 F_{high_OFB} is the upper edge of the Operational Frequency Band.
OCW is the operating channel bandwidth.

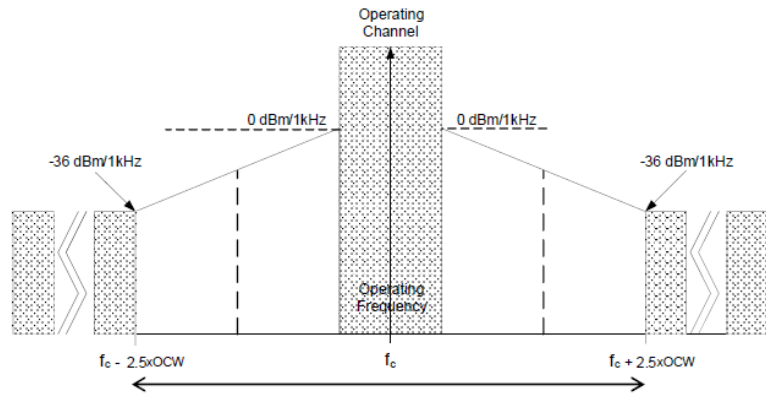


Figure 5: Out Of Band Domain for Operating Channel with reference BW

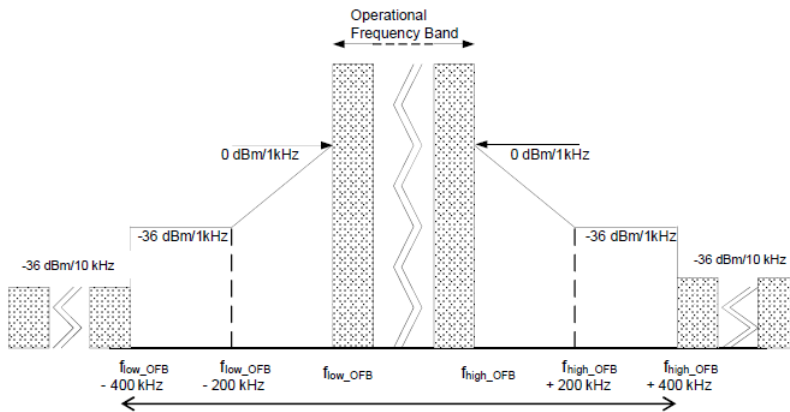


Figure 6: Out Of Band Domain for Operational Frequency Band with reference BW

6.5 TEST RESULT AND PLOTS

6.5.1 TEST RESULT – DC TEST VOLTAGE

Not applicable due to $\text{OCW} \leq 25 \text{ kHz}$.

Note:

1. OCW is 16.8KHz and 16.4KHz.
2. Measurement uncertainty is $\pm 3.0 \text{ dB}$ at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

7 TX BEHAVIOUR UNDER LOW-VOLTAGE CONDITIONS

7.1 TEST METHOD AND SUMMARY

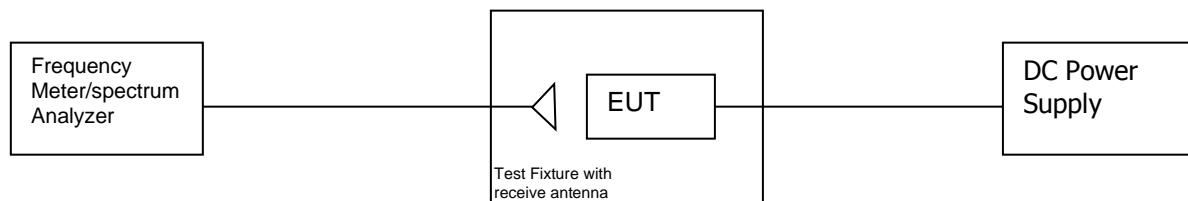
Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.3.8
Application :	Battery-Operated Transmitter

7.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

* The Equipment would be verified together with the test system before testing.

7.3 TEST SETUP



TEST REPORT

Intertek Report No. : SZHH01137922-003S2

7.4 TEST RESULT

TX Model: 12049

Test Conditions: Ambient

Below Lower Extreme Test Voltage (V)	Frequency (MHz)	Frequency Drift (Hz)	Limit (Hz)	Result
2.4	27.144260	260	Within Operational Frequency Band	Complied
2.0	27.144140	140	Within Operational Frequency Band	Complied
1.5	27.143780	-220	Within Operational Frequency Band	Complied
1.2	27.143700	-300	Within Operational Frequency Band	Complied

Notes:

1. The effective radiated power of the transmitter is below the spurious emission limit. Therefore, the transmitter is deemed to comply with this test.
2. When the test voltage is below ____VDC, the effective radiated power of the transmitter is below the spurious emission limit.
 The transmitter ceases to function below 1.2VDC.
3. The Assigned Frequency Band: 26.957-27.283MHz.
4. Measurement uncertainty is ± 17 Hz at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

TX Model: 12119

Test Conditions: Ambient

Below Lower Extreme Test Voltage (V)	Frequency (MHz)	Frequency Drift (Hz)	Limit (Hz)	Result
2.4	27.143060	60	Within Operational Frequency Band	Complied
2.0	27.142940	-60	Within Operational Frequency Band	Complied
1.5	27.142770	-230	Within Operational Frequency Band	Complied
1.1	27.142700	-300	Within Operational Frequency Band	Complied

Notes:

5. The effective radiated power of the transmitter is below the spurious emission limit. Therefore, the transmitter is deemed to comply with this test.
6. When the test voltage is below ____VDC, the effective radiated power of the transmitter is below the spurious emission limit.
 The transmitter ceases to function below 1.1VDC.
7. The Assigned Frequency Band: 26.957-27.283MHz.
8. Measurement uncertainty is ± 17 Hz at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

8 TRANSIENT POWER

8.1 TEST METHOD AND SUMMARY

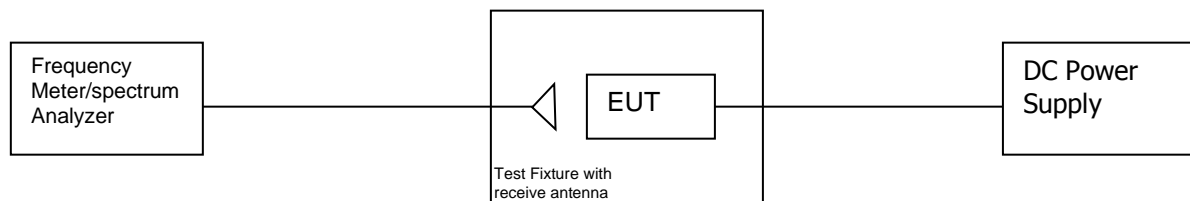
Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.3.6
Application :	All transmitters

8.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

* The Equipment would be verified together with the test system before testing.

8.3 TEST SETUP



TEST REPORT

Intertek Report No. : SZHH01137922-003S2

8.4 TEST RESULT

TX Model: 12049

Test Conditions: Temperature 25.0°C; Humidity 50.0%

Measurement points: offset from centre frequency	Analyser RBW (kHz)	Limit (dBm)	Transient Power (dBm)	Result
- 0,5 x OCW - 3 kHz:*	1	0	N/A	N/A
+ 0,5 x OCW + 3 kHz:*				
- max (12,5 kHz, OCW):	Max (RBW pattern 1/3/10) ≤ Offset frequency/6 =	0	-58.3	Complied
+ max (12,5 kHz, OCW):			-59.1	
-0,5 x OCW - 400 kHz:	100	-27	-48.5	Complied
0,5 x OCW + 400 kHz:			-48.8	
-0,5 x OCW -1 200 kHz:	300	-27	-52.6	Complied
0,5 x OCW + 1200kHz:			-59.5	

*Not applicable for OCW <25kHz

Note:

1. Measurement uncertainty is ± 4.8dB at a level of confidence of 95%.
2. OCW is 16.8KHz.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

TX Model: 12119

Test Conditions: Temperature 25.0°C; Humidity 50.0%

Measurement points: offset from centre frequency	Analyser RBW (kHz)	Limit (dBm)	Transient Power (dBm)	Result
- 0,5 x OCW - 3 kHz:*	1	0	N/A	N/A
+ 0,5 x OCW + 3 kHz:*				
- max (12,5 kHz, OCW):	Max (RBW pattern 1/3/10) ≤ Offset frequency/6 =	0	-58.5	Complied
+ max (12,5 kHz, OCW):			-59.4	
-0,5 x OCW - 400 kHz:	100	-27	-48.5	Complied
0,5 x OCW + 400 kHz:			-48.8	
-0,5 x OCW -1 200 kHz:	300	-27	-52.7	Complied
0,5 x OCW + 1200kHz:			-58.2	

*Not applicable for OCW <25kHz

Note:

1. Measurement uncertainty is ± 4.8dB at a level of confidence of 95%.
2. OCW is 16.4KHz.

8.5 TEST LIMIT:

Absolute offset from centre frequency	RBW _{REF}	Peak power limit applicable at measurement points
≤ 400 kHz	1 kHz	0 dBm
> 400 kHz	1 kHz	-27 dBm

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

9 BLOCKING

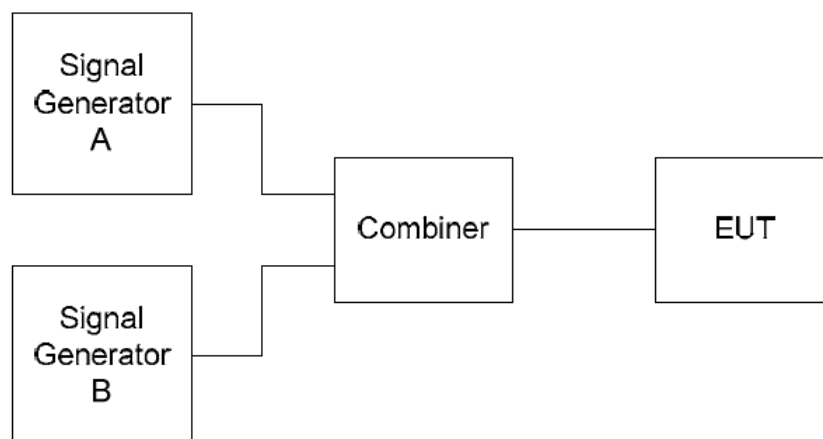
9.1 TEST METHOD AND SUMMARY

Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.4.2
Application :	All category of receiver

9.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP	14-Jun-16	14-Jun-17
SZ070-16	Combiner	Mini-Circuits	ZFSC-2-2500-S+	27-Oct-16	27-Oct-17
SZ180-01	Signal Generator	R&S	SML03	23-May-16	23-May-17
SZ180-02	Signal Generator	Aeroflex	2023A	9-Feb-17	9-Feb-18
SZ070-18	Adjust Attenuator	Agilent	8495B & 8494B	9-Feb-17	9-Feb-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17
SZ068-01	Acoustical Shielded Case	R/S	AF-BOX	6-Jan-17	6-Jul-17
SZ062-14	RF cable	Tek	Torc080	6-Jan-17	6-Jul-17

9.3 TEST SETUP



TEST REPORT

Intertek Report No. : SZHH01137922-003S2

9.4 TEST RESULT

Test Conditions: Temperature 25.0°C; Humidity 50.0%

TX Model: 12049

Power level of Signal Generator A = -19.6dBm

Test Frequency offset (MHz) (OCW: 16.8KHz) (Centre Frequency: 27.144000MHz)		Unwanted Emission Power Level Signal B (dBm)	Limit (For Receiver Category 3)	Result
OC Egde +/-2MHz	Lower: 25.144000MHz	-5.6	-80 dBm	Complied
	Upper: 29.144000MHz	-4.8		Complied
OC Egde +/-10MHz	Lower: 17.144000MHz	-3.2	-60 dBm	Complied
	Upper: 37.144000MHz	-4.8		Complied
MAX (+/-5% of F _{Centre} or +/- 15 MHz)	Lower: 12.144000MHz	-1.8	-60 dBm	Complied
	Upper: 42.144000MHz	-1.3		Complied

TX Model: 12119

Power level of Signal Generator A = -20.4dBm

Test Frequency offset (MHz) (OCW: 16.4KHz) (Centre Frequency: 27.143000MHz)		Unwanted Emission Power Level Signal B (dBm)	Limit (For Receiver Category 3)	Result
OC Egde +/-2MHz	Lower: 25.143000MHz	-5.6	-80 dBm	Complied
	Upper: 29.143000MHz	-4.8		Complied
OC Egde +/-10MHz	Lower: 17.143000MHz	-3.2	-60 dBm	Complied
	Upper: 37.143000MHz	-4.8		Complied
MAX (+/-5% of F _{Centre} or +/- 15 MHz)	Lower: 12.143000MHz	-1.8	-60 dBm	Complied
	Upper: 42.143000MHz	-1.3		Complied

Note:

1. Measurement uncertainty is ± 4.8 dB at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

10 OCCUPIED BANDWIDTH

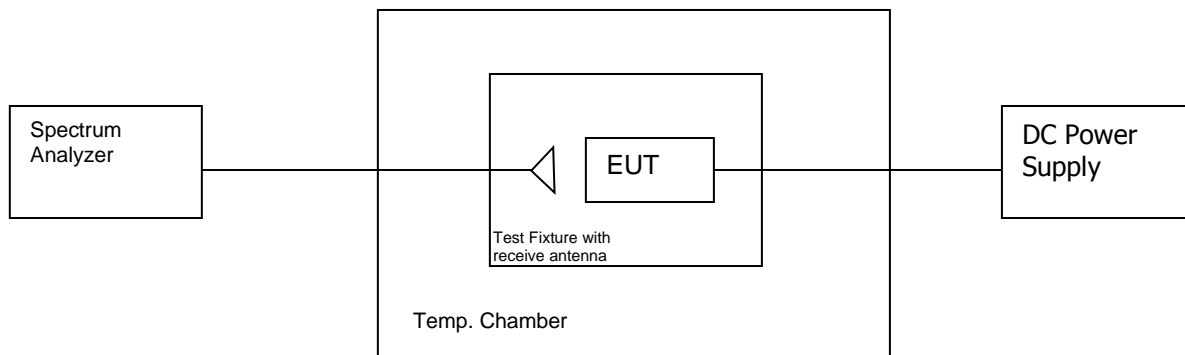
10.1 TEST METHOD AND SUMMARY

Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.3.4
Application :	All transmitter

10.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

10.3 TEST SETUP



TEST REPORT

Intertek Report No. : SZHH01137922-003S2

10.4 TEST RESULT

TX Model: 12049

Test Conditions		Occupied Bandwidth(kHz)	Flow (MHz)	Fhigh (MHz)
Nominal frequency stated by the manufacturer: 27.144000MHz				
T _{nom} : 25.0°C H _{nom} : 50.0%	V _{DC nom} DC 3.0V	16.800	27.135600	27.152400
T _{min} : -20°C H _{min} : 0 %	V _{DC max} DC 3.0V	16.801	27.135599	27.152400
	V _{DC min} DC 2.4V	16.801	27.135599	27.152400
T _{max} : +55°C H _{max} : 50.0 %	V _{DC max} DC 3.0V	16.801	27.135599	27.152400
	V _{DC min} DC 2.4V	16.801	27.135599	27.152400

Maximum Occupied Bandwidth 16.801 (kHz)

		Frequency (MHz)	Within Assigned Frequency Band
Lowest F _{LM}	F _{LM}	27.135599	Complied
Highest F _{HM}	F _{HM}	27.152400	Complied

Note:

Test environment	Normal or extreme conditions
Centre Frequency	The highest or lowest operating frequency as declared by the manufacturer and any other frequencies used in the test case
Occupied Bandwidth	The value measured with the spectrum analyzer
Maximum Occupied Bandwidth	Highest measured OBW value or if the measurement is only performed at normal temperature conditions, the upper and lower frequency error results have to be added and subtracted to measured OBW to calculate the Maximum Occupied Bandwidth

Measurement uncertainty is ± 5% ppm at a level of confidence of 95%.

TEST REPORT

Intertek Report No. : SZHH01137922-003S2

TX Model: 12119

Test Conditions		Occupied Bandwidth(kHz)	Flow (MHz)	F _{high} (MHz)
Nominal frequency stated by the manufacturer: 27.144000MHz				
T _{nom} : 25.0°C H _{nom} : 50.0%	V _{DC nom} DC 3.0V	16.400	27.134800	27.151200
T _{min} : -20°C H _{min} : 0 %	V _{DC max} DC 3.0V	16.402	27.134799	27.151201
	V _{DC min} DC 2.4V	16.402	27.134799	27.151201
T _{max} : +55°C H _{max} : 50.0 %	V _{DC max} DC 3.0V	16.402	27.134799	27.151201
	V _{DC min} DC 2.4V	16.400	27.134800	27.151200

Maximum Occupied Bandwidth 16.402 (kHz)

		Frequency (MHz)	Within Assigned Frequency Band
Lowest F _{LM}	F _{LM}	27.134799	Complied
Highest F _{HM}	F _{HM}	27.151201	Complied

Note:

Test environment	Normal or extreme conditions
Centre Frequency	The highest or lowest operating frequency as declared by the manufacturer and any other frequencies used in the test case
Occupied Bandwidth	The value measured with the spectrum analyzer
Maximum Occupied Bandwidth	Highest measured OBW value or if the measurement is only performed at normal temperature conditions, the upper and lower frequency error results have to be added and subtracted to measured OBW to calculate the Maximum Occupied Bandwidth

Measurement uncertainty is ± 5% ppm at a level of confidence of 95%.

11 DUTY CYCLE

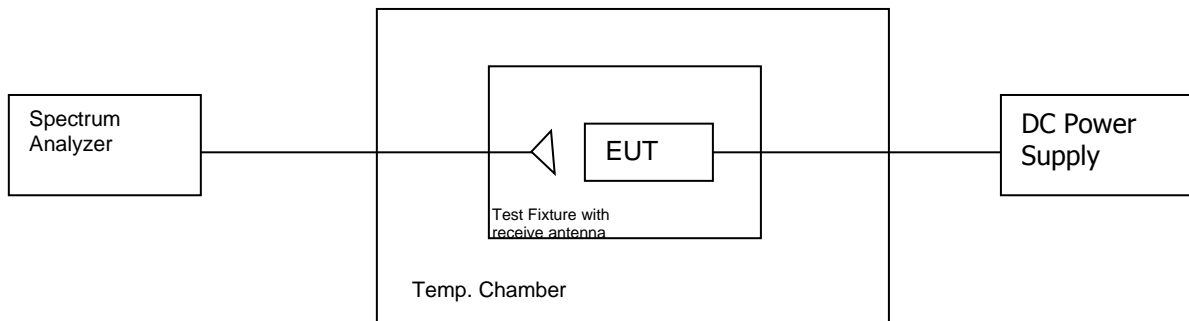
11.1 TEST METHOD AND SUMMARY

Basic Standard :	ETSI EN 300 220-2 V3.1.1 (2017-02)
Clause :	4.3.3
Application :	All transmitter

11.2 EQUIPMENT LIST

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ056-03	Spectrum Analyzer	R&S	FSP 30	14-Jun-16	14-Jun-17
SZ016-02	Programmable Temperature & Humidity Chamber	DongZhiXun	WGD/SJ-415-A	9-Mar-17	9-Mar-18
SZ006-06	DC Power Supply	Guwei	GPR-6030D	14-Mar-17	14-Sep-17

11.3 TEST SETUP



11.4 TEST RESULT

Test Conditions: Temperature 25.0°C; Humidity 50.0%

- No requirement for Frequency Band on 26.957-27.283MHz refer to Annex B, Table B.1 and Band No. A or C of harmonised standard.

EXHIBIT 3

**TEST RESULT
OF
EMC COMPLIANCE MEASUREMENTS**

12 EMC EMISSION TEST

12.1 TEST METHOD AND SUMMARY

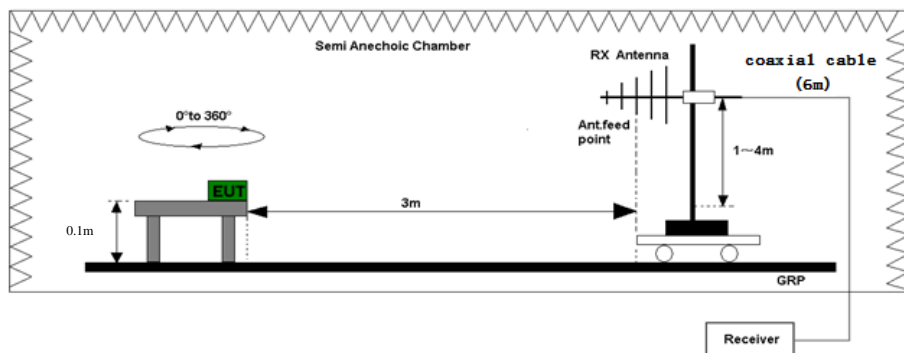
Basic Standard :	EN55032: 2015
Test :	Radiated Emission
Classification :	Class B
Port :	Enclosure Port of Ancillary Equipment

12.2 RADIATED EMISSION TEST

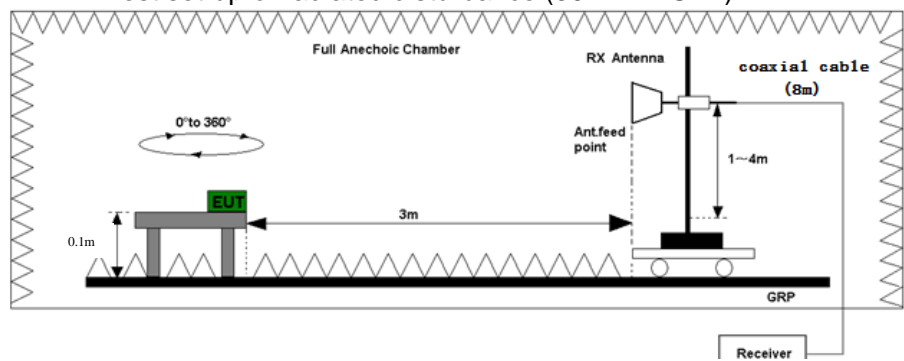
12.2.1 TEST EQUIPMENT

Equipment No.	Equipment	Manufacturer	Model No.	Calibration Date	Next Calibration Due Date
SZ185-01	EMI Receiver	R&S	ESCI	9-Feb-17	9-Feb-18
SZ061-03	BiConiLog Antenna	ETS	3142C	14-Jun-16	14-Jun-17
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	16-Apr-16	16-Apr-18
SZ062-04	RF Cable	RADIALL	RG 213U	7-Apr-16	7-Oct-16
SZ062-13	RF Cable	Habia	0.026-26.5GHz	7-Apr-16	7-Oct-16
SZ185-01	EMI Receiver	R&S	ESCI	9-Feb-17	9-Feb-18
SZ061-03	BiConiLog Antenna	ETS	3142C	14-Jun-16	14-Jun-17

12.2.2 TEST SETUP



Test set-up of radiated disturbance (30MHz-1GHz)



Test set-up of radiated disturbance (above 1GHz)

12.2.3 TEST RESULT

Worst-case Operating Mode: Running (Motor)

Polarization	Frequency (MHz)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
H	291.415	40.0	47.0	-7.0
H	311.785	42.1	47.0	-4.9
H	675.050	38.5	47.0	-8.5
V	308.390	33.4	47.0	-13.6
V	614.910	37.6	47.0	-9.4
V	709.000	32.3	47.0	-14.7

No emissions significantly above equipment noise floor.

Notes:

1. Quasi-Peak Detector Data
2. Negative sign (-) in the margin column signify levels below the limit
3. Frequency range scanned: 30 MHz to 1000 MHz
4. Only emissions significantly above equipment noise floor are reported
5. Measurement Uncertainty: ±4.8dB.

12.2.4 MEASUREMENT UNCERTAINTY

Measurement Uncertainties: ± 4.8dB. The measured result is above the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliance based on the 95% level of confidence. However, the result indicates that compliance is more probable than non-compliance with the specification limit.

13 ELECTROSTATIC DISCHARGE

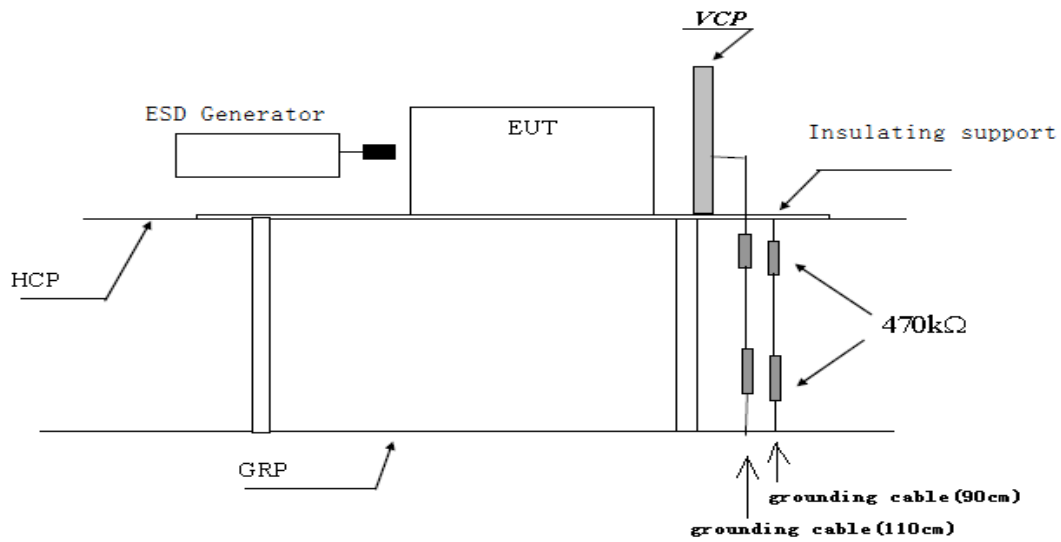
13.1 TEST METHOD AND SUMMARY

Basic Standard :		EN 61000-4-2: 2009
Port :		Enclosure
Required Performance Criterion :		TT & TR
Level :		± 2.0, ± 4.0, ±8.0 kV (Air Discharge) ± 2.0, ±4.0 kV (Contact Discharge) ± 2.0, ±4.0 kV (Indirect Contact Discharge)
No. of Discharge(s) :		Minimum of 10 Discharges per Each Polarity
Time Between Each Discharge :		1 second
Test Mode :		TX : Stand-by and Transmission Modes, Power- Off RX : Stand-by and Operating (Motor), Power off
Test Setup :		Table-top
Temperature :		23.0°C
Relative Humidity :		55.0%
Test of Post-installation :		N/A
Test Point	Air Discharge:	All insulated enclosure and seams
		All the points where contact discharge cannot be applied
	Contact:	All conductive surfaces of the EUT
	HCP:	All sides of the EUT
	VCP:	Four faces of the EUT

13.2 TEST EQUIPMENT

Equipment No.	Equipment	Manufacturer	Model No.	Cal. Date	Due Date
SZ189-03	ESD Simulator	Teseq	NSG 435	9-Nov-16	9-Nov-17

13.3 TEST SETUP



Test set-up of electrostatic discharge

13.4 TEST RESULT

13.4.1 TEST RESULT

Discharge Type	Applied Voltage	Result (Pursuant to ETSI EN 301 489-3 Criterion TT & TR)
Contact Discharge	$\pm 2.0, \pm 4\text{kV}$	Complied
Air Discharge	$\pm 2, \pm 4, \pm 8\text{kV}$	Complied
Indirect HCP Discharge	$\pm 2.0, \pm 4\text{kV}$	Complied
Indirect VCP Discharge	$\pm 2.0, \pm 4\text{kV}$	Complied

13.4.2 ADDITIONAL RESULT INFORMATION

No observable change.

14 RADIO FREQUENCY ELECTROMAGNETIC FIELD

14.1 TEST METHOD AND SUMMARY

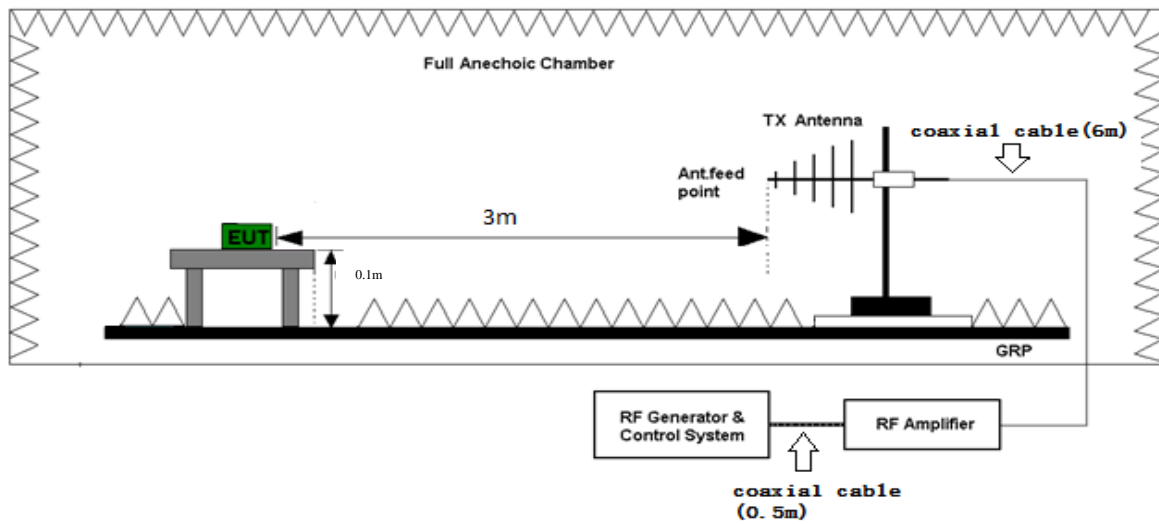
Basic Standard :	EN 61000-4-3: 2006 + A1: 2008 + A2: 2010
Port :	Enclosure
Required Performance Criterion :	CT & CR
Level :	3.0 V/m (rms)
Test Modulation :	1kHz, 80% AM
Frequency :	80 MHz to 6000 MHz
Dwell Time :	1s
Frequency Step :	10%
Temperature :	25.3°C
Relative Humidity :	47.7%
Test Facility :	Full Anechoic Chamber
Antenna Polarization :	Horizontal and Vertical
Type of Antenna :	Broadband Antenna
Test Distance :	3m
Test Mode :	TX : Stand-by and Transmission Modes, Power- Off RX : Stand-by and Operating (Motor), Power off
Test Setup :	Table-top

14.2 TEST EQUIPMENT

Equipment No.	Equipment	Manufacturer	Model No.	Cal. Date	Due Date
SZ061-04	BiConiLog Antenna	ETS	3142C	17-Oct-17	17-Oct-18
EM061-06	Stacked double log-Per. Antenna	SCHWARZBEC K	STLP 9149	10-Nov-17	10-Nov-18
SZ180-01	Signal Generator	R&S	SML03	1-Jun-17	1-Jun-18
SZ180-15	Signal Generator	R&S	SMB 100A	15-Nov-17	15-Nov-18
SZ181-01	Amplifier	PRANA	AP32 MT215	24-Jan-18	24-Jan-19
SZ181-02	Power Amplifier	MILMEGA	AS0825-35	23-May-17	23-May-18
SZ190-07	RF Amplifier	AMETEK	AS0860-75/45	24-Jan-18	24-Jan-19
SZ182-01	RF Power Meter	BOONTON	4232A	24-Jan-18	24-Jan-19
SZ188-02	Anechoic Chamber	ETS	RFD-F/A-100	16-Jan-17	16-Jan-19
SZ062-02	RF Cable	RADIALL	RG 213U(6M)	6-Jan-18	6-Jul-18
SZ186-01	Field Probe	ETS	HI-6105	31-Mar-17	31-Mar-18
SZ070-05	Directional Coupler	Agilent	87300C	28-Dec-17	28-Dec-18

* The Equipment would be verified together with the test system before testing.

14.3 TEST SETUP



Test set-up of Immunity to Radiated Electric Fields

14.4 TEST RESULT

14.4.1 TEST RESULT

Frequency (MHz)	Exposed Side	Result (Pursuant to ETSI EN 301 489-3 Criterion CT & CR)
80 to 6000	Front	Complied
80 to 6000	Left	Complied
80 to 6000	Rear	Complied
80 to 6000	Right	Complied

8.4.2 ADDITIONAL RESULT INFORMATION

No observable change.

EXHIBIT 4

PHOTOS OF EUT

15. EUT PHOTOS

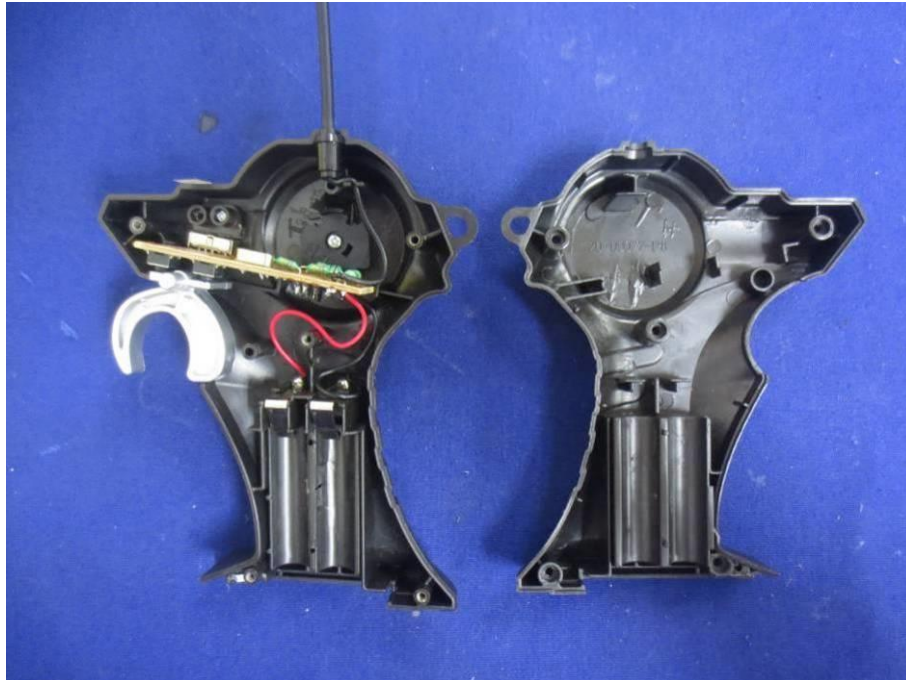
External Photo



External Photo



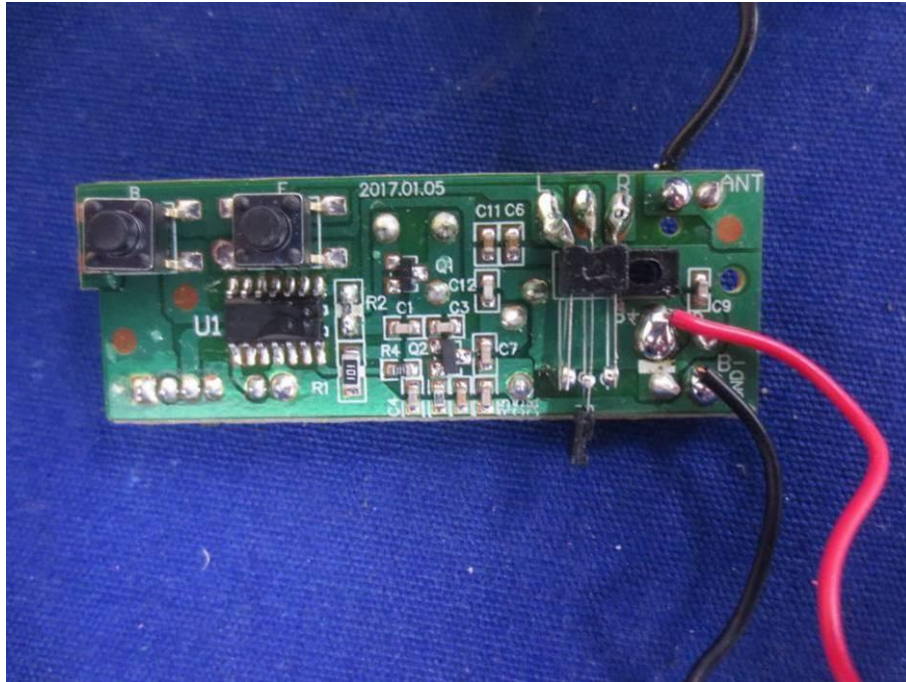
Internal Photo(TX Mode: 12049)



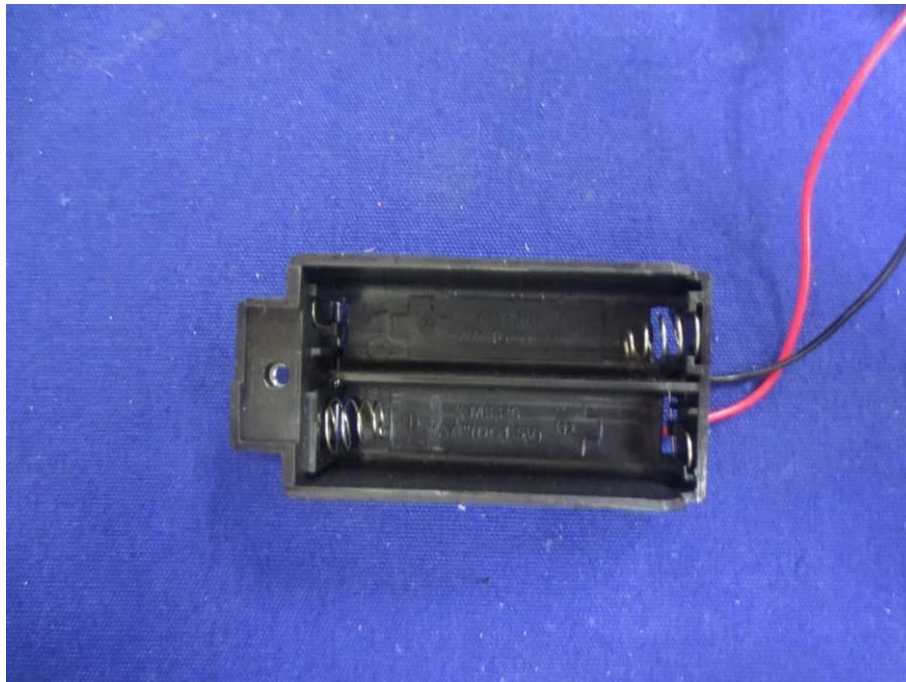
Internal Photo



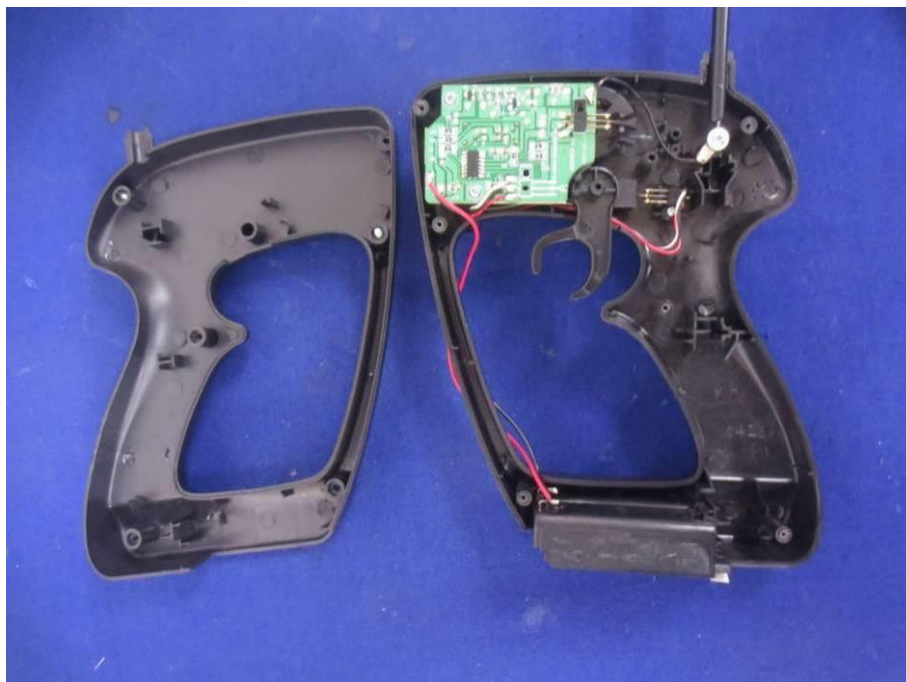
Internal Photo(TX Mode: 12049)



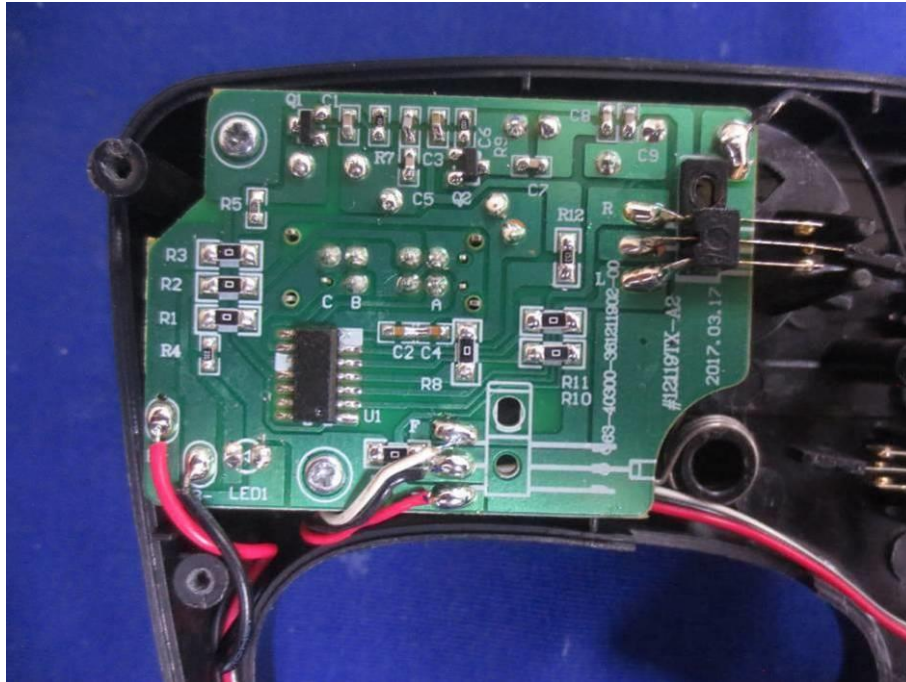
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Internal Photo



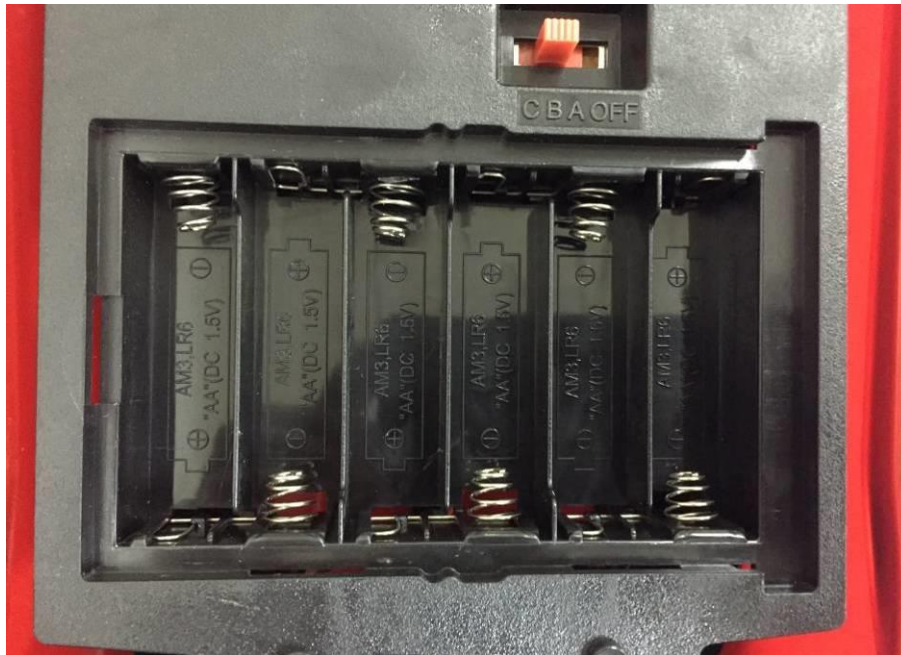
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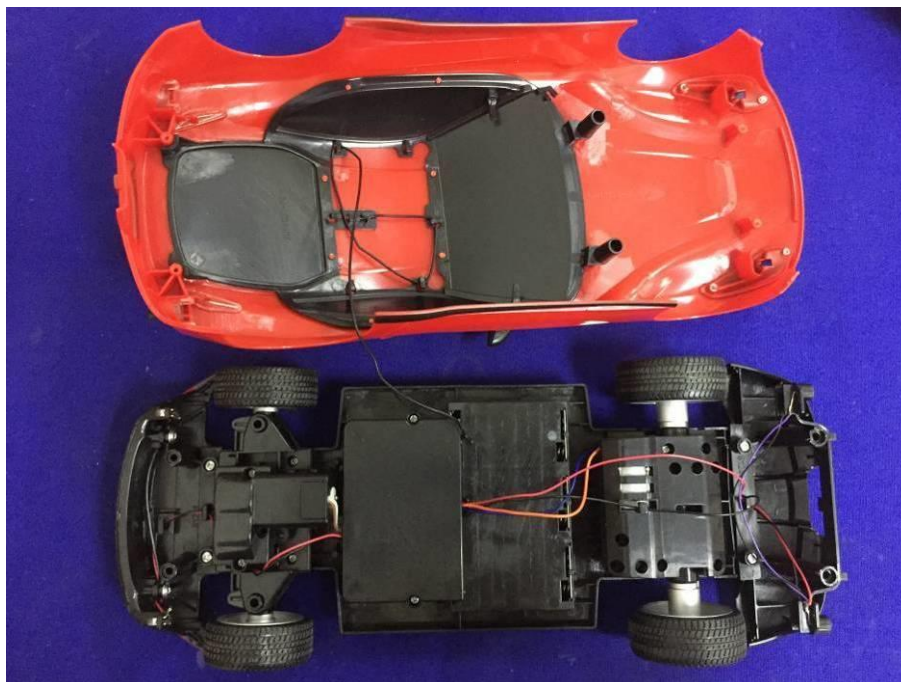
Internal Photo



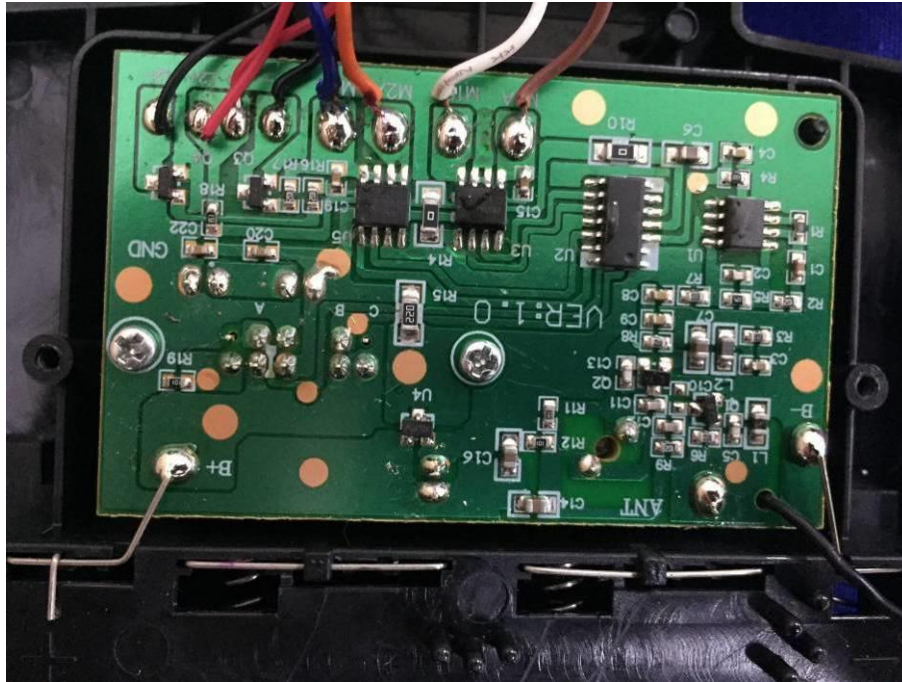
Internal Photo



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