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Chişinău, c/bAGRNMD2X437



Reprezentant exclusiv al
«TT Aviation Technology» Co., Ltd

ГАРАНТИЯ

Компания "DRON ASSISTANCE" гарантирует ремонт и замену запасных частей на БПЛА M6E-X2, пульте управления, аккумуляторной батареи и зарядном устройстве в течение 12 месяцев с момента поставки.

ГАРАНТИЯ НЕ РАСПРОСТРАНЯЕТСЯ НА НЕДОСТАТКИ И ПОЛОМКИ, ПРОИЗОШЕДШИЕ ПО ВИНЕ ПОКУПАТЕЛЯ.

ЭКСПЛУАТАЦИЯ ОБОРУДОВАНИЯ ДОЛЖНА ПРОИЗВОДИТЬСЯ СОГЛАСНО ТРЕБОВАНИЯМ ПРОИЗВОДИТЕЛЯ.

Администратор



Сакарэ Виталие


Certificate of Compliance

Certificate No.: TMC190726102-C

Applicant/ Address: **Beijing TT Aviation Technology Co., Ltd.**
No.1 TTA Building, Niantou Industrial Park, Changping District, Beijing, China

Manufacturer/ Address: **Beijing TT Aviation Technology Co., Ltd.**
No.1 TTA Building, Niantou Industrial Park, Changping District, Beijing, China

Product Name: **UAV**

Trade Name: 

Model/Item Number : M6E-1, M4E, M4H, M6E, M6E-C M6E-X, M6E-G100, M6E-G200, M6A PRO, M8A PRO, M6FA, M8FA, M6FC, M8FD, M6T1, SP-7, SP-9, SP-8 VTOL, SP-9 VTOL, SP-10 VTOL, SP-11 VTOL

Date and Number of Test Report: August 01, 2019
TMC190726102-C

EC-directive: RoHS 2.0 Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
IEC62321-1:2013
IEC62321-3-1:2013
IEC62321-4:2013
IEC62321-5:2013

Test Standard: IEC 62321-6:2015
IEC 62321-7-1:2015
IEC 62321-7-2:2017
IEC 62321-8:2017

Conclusion

This Certification of RoHS Compliance has been granted to applicant based on the results of tests, performed by Laboratory of TMC Testing Services (Shenzhen) Co., Ltd on sample of the above-mentioned product in accordance with the provisions of the relevant specific standards and the RoHS 2.0 Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU. It is possible to use RoHS marking to demonstrate the compliance with this directive.

Place and date of issue: Shenzhen, August 01, 2019

TMC Testing Services (Shenzhen) Co., Ltd.

1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shilong Community, Shiyan Street, Baoan District, Shenzhen, China

Tel: +86-755- 86642861

Email: cert@tmc-lab.com

Http://www.tmc-lab.com



Lab Director
Leyong






Certificate of Compliance

Certificate No.: TMC190726102-RC

Applicant/ **Beijing TT Aviation Technology Co., Ltd.**
Address: No.1 TTA Building, Niantou Industrial Park, Changping District, Beijing, China

Manufacturer/ **Beijing TT Aviation Technology Co., Ltd.**
Address: No.1 TTA Building, Niantou Industrial Park, Changping District, Beijing, China

Product Name: **UAV**

Trade Name: 

Model/Item Number : M6E-1, M4E, M4H, M6E, M6E-C, M6E-X, M6E-G100, M6E-G200, M6A PRO, M8A PRO, M6FA, M8FA, M6FC, M8FD, M6T1, SP-7, SP-9, SP-8 VTOL, SP-9 VTOL, SP-10 VTOL, SP-11 VTOL

Rated: Input: 50.4V^{DC} 20A
 For battery: 44.4V^{DC} 14000mAh

Date and July 25, 2019- Aug. 01, 2019

Number of Test TMC190726102-S TMC190726102-E

Report: TMC190726102-R TMC190726102-H

EC-Directive: RE Directive 2014/53/EU

Test Standard: EN 62368-1:2014+A11:2017
 ETSI EN 301 489-1 V2.2.0 (2017-03)
 ETSI EN 301 489-17 V3.2.0 (2017-03)
 ETSI EN 300 328 V2.2.0 (2017-11)
 EN 62311:2008

Conclusion

This Certification of RED Compliance has been granted to applicant based on the results of tests, performed by Laboratory of TMC Testing Services (Shenzhen) Co., Ltd. on sample of the above-mentioned product in accordance with the provisions of the relevant Specific standards and the RE Directive (2014/53/EU). It is possible to use CE marking to demonstrate the compliance with this Directive.

Place and date of issue: August 01, 2019

TMC Testing Services (Shenzhen) Co., Ltd.

1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2,
 Shihuan Road, Shilong Community, Shiyan Street, Baoan
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 Http://www.tmc-lab.com



방송통신기자재등의 적합등록 필증

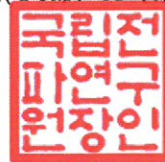
Registration of Broadcasting and Communication Equipments

상호 또는 성명 Trade Name or Registrant	드론안전기술
기자재명칭(제품명칭) Equipment Name	전기충전기
기본모델명 Basic Model Number	M6E BATTERY CHARGER
파생모델명 Series Model Number	
등록번호 Registration No.	R-REI-Drn-M6E-BC
제조사/제조(조립)국가 Manufacturer/Country of Origin	R-Founder Technology(Zhengzhou)Co.,Ltd / 중국
등록연월일 Date of Registration	2018-03-21
기타 Others	

위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다.
It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2018년(Year) 03월(Month) 21일(Day)

국립전파연구원장



Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다.
위반시 과태료 처분 및 등록이 취소될 수 있습니다.

CERTIFICATE

Certification No.
ATSE17101181153

Report No.
ATSE171011811



DECLARATION OF CONFORMITY

This Verification of Compliance is hereby issued to the product designated below

Applicant : Beijing TT Aviation Technology Co., Ltd.
Address : No.1 TTA Building, Niantou Industrial Park, Changping District, Beijing, China
Manufacturer : SHENZHEN GREPOW BATTERY CO., LTD.
Address : 1ST to 3rd floor of complex building, 1st to 4th floor of 2nd building, 1st to 4th floor of 1st building, Gaofeng community, Dalang Street, Baoan District, Shenzhen City, Guangdong Province, P.R. China
Product: Polymer Li-ion Battery
Model: 5862 14000mAh
Rating(s): Input: 50.4Vdc
Tested according to : EN 61000-6-3:2007+A1:2011/AC:2012
EN 61000-6-1:2007

This certificate of conformity is based on evaluation of a sample of the above mentioned product. Technical report and documentation are at the licence Holder's disposal. This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 2014/30/EU, referred to as the EMC. This certificate does not imply assessment of the series-production of the product. The holder of the certificate is authorized to use this certificate in Connection with the EC declaration of conformity according to Annex IV of the Directive.

ATS Electronic Technology Co., Ltd.

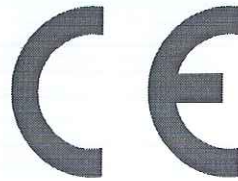
Tel : 86-769-3897 5958 e-mail: ats@dgats.com
Fax: 86-769-3897 5968 http://www.dgats.com

Date of issue: 2017-11-30



 The CE Marking may be used if all relevant and effective EC Directives are complied with. 

EMC TEST REPORT



For Electromagnetic Interference of

Report Reference No.....: ATSE171011811

Date of issue.....: 2017-11-02

Testing Laboratory: ATS Electronic Technology Co., Ltd.

Address.....: 3/F, Building A, No. 1 Hedong Three Road, Jinxia Community,
Changan Town, Dongguan City, Guangdong, P.R.China

Applicant's name: Beijing TT Aviation Technology Co., Ltd.

Address.....: No.1 TTA Building, Niantou Industrial Park, Changping
District, Beijing, China

Test item description.....: Polymer Li-ion Battery

Model/Type reference: 5862 14000mAh

Ratings.....: I/P: 50.4Vdc

Responsible Engineer

(Rock Huang / Engineer)



(Simon Zeng / EMC Manager)

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1. CERTIFICATION

Testing Laboratory ATS Electronic Technology Co., Ltd.
 Address 3/F, Building A, No. 1 Hedong Three Road, Jinxia Community,
 Changan Town, Dongguan City, Guangdong, P.R.China
 Applicant's name..... Beijing TT Aviation Technology Co., Ltd.
 Address No.1 TTA Building, Niantou Industrial Park, Changping
 District, Beijing, China
 Manufacturer.....: SHENZHEN GREPOW BATTERY CO.,LTD.
 Address.....: 1ST to 3rd floor of complex building,1st to 4th floor of 2nd
 building,1st to 4th floor of 1st building, Gaofeng community,
 Dalang Street,Baoan District,Shenzhen City,Guangdong
 Province,P.R. China
 Factory.....: SHENZHEN GREPOW BATTERY CO.,LTD.
 Address.....: 1ST to 3rd floor of complex building,1st to 4th floor of 2nd
 building,1st to 4th floor of 1st building, Gaofeng community,
 Dalang Street,Baoan District,Shenzhen City,Guangdong
 Province,P.R. China
 Test specification:
 Test item description Polymer Li-ion Battery
 Model/Type reference 5862 14000mAh
 Test Sample: 5862 14000mAh
 Tested Power: 50.4Vdc
 Standards EN 61000-6-3:2007+A1:2011/AC:2012
 EN 61000-6-1:2007

The device described above was tested by ATS Electronic Technology Co., Ltd. to determine the maximum emission levels emanated from the device and severity levels of the device endure and its performance criterion. The measurement results are contained in this test report and ATS Electronic Technology Co., Ltd. assumes full responsibility for the accuracy and completeness of these measurements. This report shows the EUT is technically compliance with the above official standards.

This report applies to the above sample only and shall not be reproduced in part without written approval of ATS Electronic Technology Co., Ltd.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
EN 61000-6-3:2007+A1: 2011/AC:2012	Radiated Emission	Table 1	PASS	
EMC Immunity (EN 61000-6-1:2007)				
Section	Test Item	Performance Criteria	Judgment	Remark
EN 61000-4-2:2009	Electrostatic Discharge	B	PASS	
EN 61000-4-3: 2006+A1:2008+A2:2010	RF electromagnetic field	A	PASS	

REMARK:

(1) "N/A" denotes test is not applicable in this Test Report

2.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

A. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)	NOTE
R03	ANSI	30MHz ~ 200MHz	V	3.42	
	ANSI	30MHz ~ 200MHz	H	3.52	
	ANSI	200MHz ~ 1,000MHz	V	3.52	
	ANSI	200MHz ~ 1,000MHz	H	3.54	

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Charging
Mode 2	Discharge

For Radiated Test	
Final Test Mode	Description
Mode 1	Charging
Mode 2	Discharge

For EMS Test	
Final Test Mode	Description
Mode 1	Charging
Mode 2	Discharge

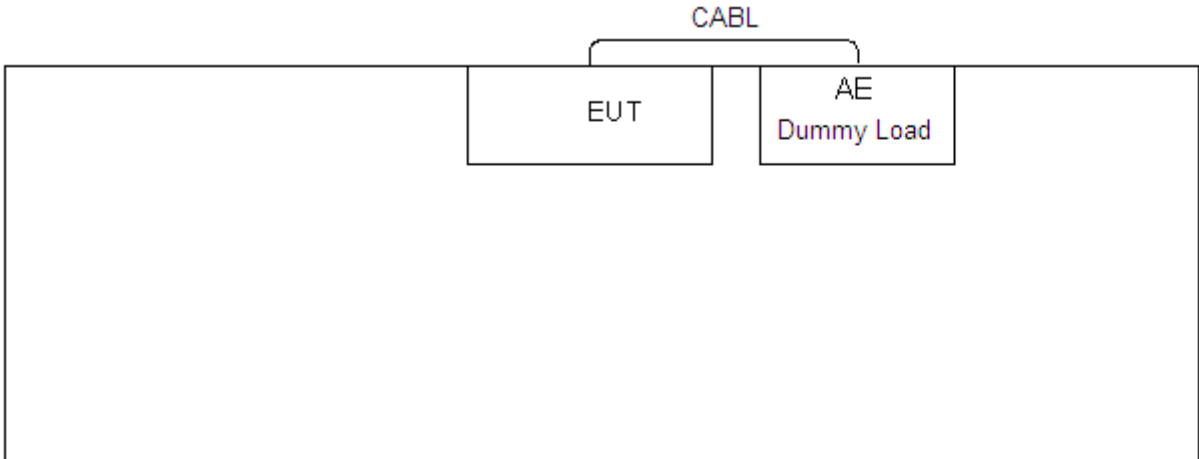
2.3 EQUIPMENT USED DURING TESTING:

Product Type*	Device	Manufacturer	Model No.	Comments
AE	Dummy Load	/	/	/
CABL	/	/	/	/

*Note: Use abbreviations:

- EUT - Equipment Under Test,
- AE - Auxiliary/Associated Equipment, or
- SIM - Simulator (Not Subjected to Test)
- CABL – Connecting cables

2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3. EMC EMISSION TEST

3.1 RADIATED EMISSION MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	Field strengths limits at 3m Measuring distance: dBuV/m
30 – 230	40
230 – 1000	47

Notes:

- (1) The limit for radiated test was performed according to as following:
EN61000-6-3.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The highest internal source of the EUT is less than 108 MHz, the measurement shall only be Made up to 1GHz.

3.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Log-Bicon Antenna	SCHWARZBECK	VULB9168	VULB9168-192	11/13/2017
2	Pre-Amplifier	EM Electronics Corporation	EM330	60603	11/13/2017
3	EMI Test Receiver	R&S	ESCI	101368	11/13/2017
4	Turn Table	UC	UC3000	N/A	N/A
5	Antenna Mast	UC	UC3000	N/A	N/A

Remark: " N/A" denotes No Model No. / Serial No. and No Calibration specified.

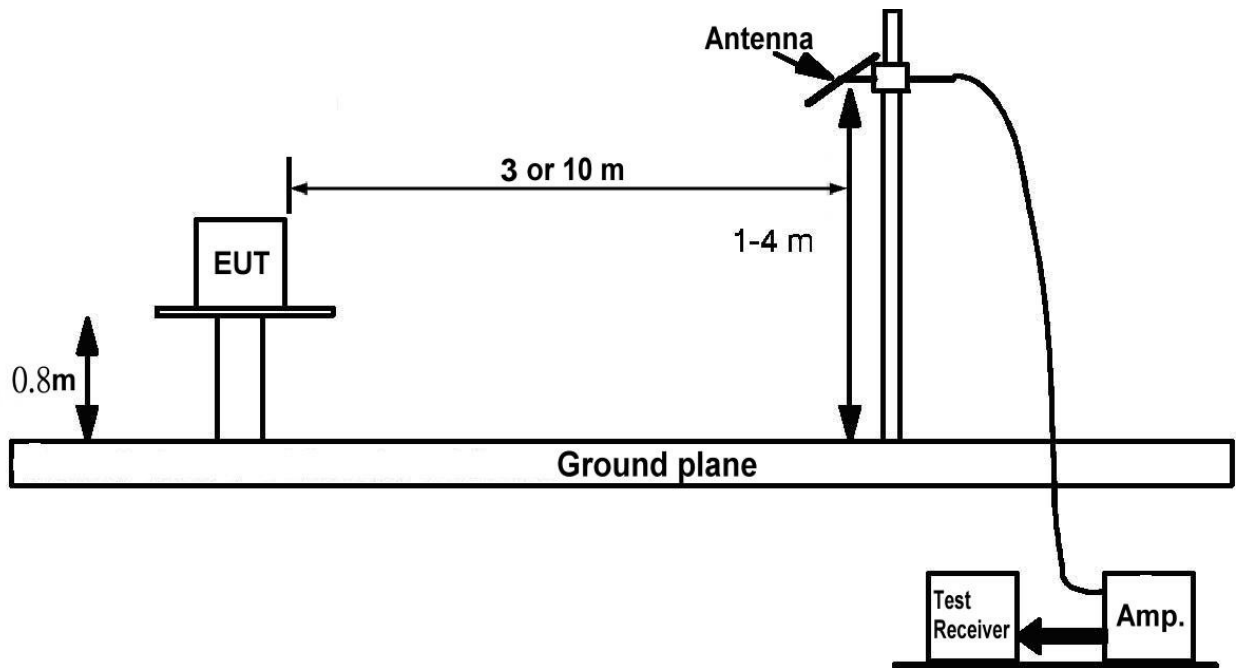
3.1.3 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m or 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.4 DEVIATION FROM TEST STANDARD

No deviation

3.1.5 TEST SETUP



3.1.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.2 Unless otherwise a special operating condition is specified in the follows during the testing.

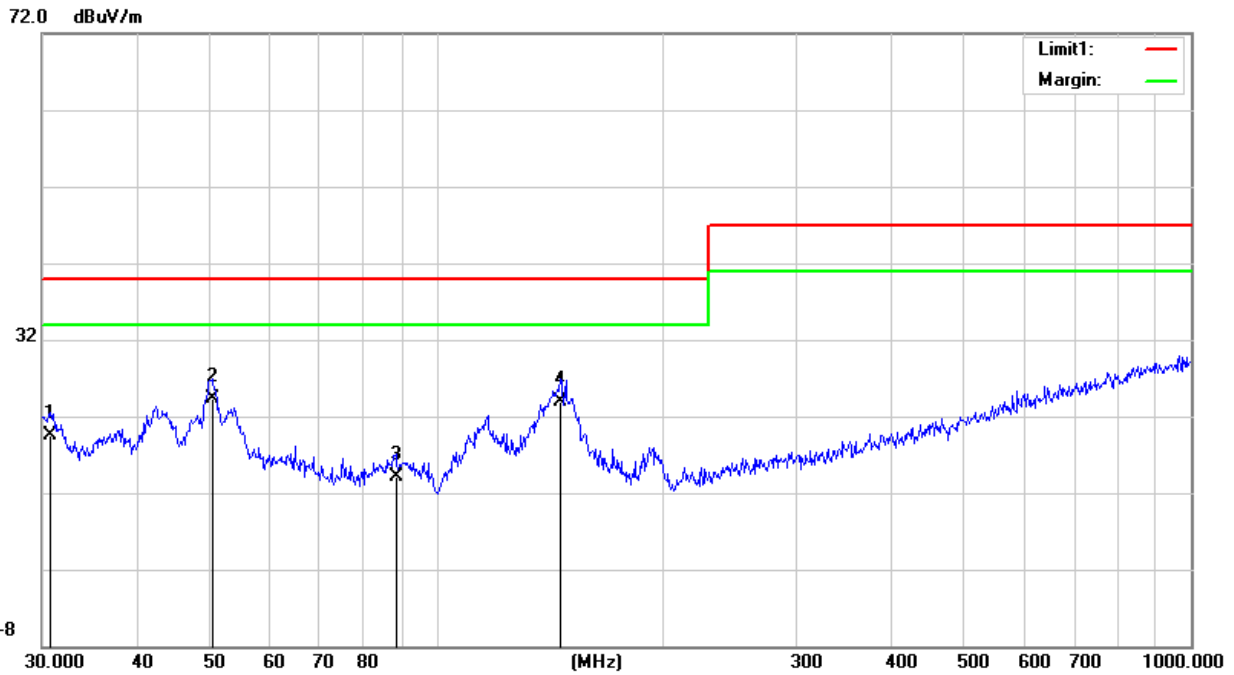
3.1.7 TEST RESULTS

EUT :	Polymer Li-ion Battery
Model No. :	5862 14000mAh
Test Mode :	Charging, Discharge
Test Result:	PASS

Remark:

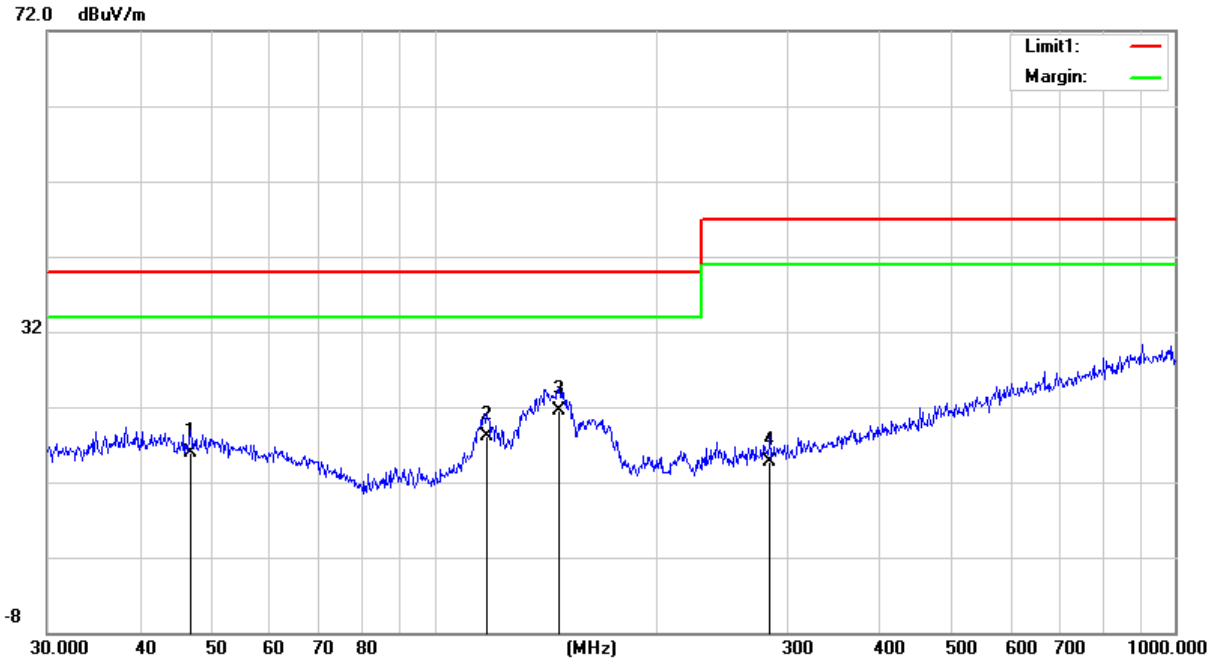
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz; SPA setting in RBW=120KHz, VBW =120KHz, Sweep. Time = 0.3 sec./MHz.
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table.
- (5) Measurement Result = Reading + Correct

EUT :	Polymer Li-ion Battery	Model No. :	5862 14000mAh
Temperature :	24 °C	Relative Humidity :	55 %
Distance:	3m	Test Power :	50.4Vdc by DC source input 230Vac/50Hz
Polarization:	Vertical	Test By:	Jack
Standard:	(RE)EN6100-6-3 3M		
Test Mode :	Charging		



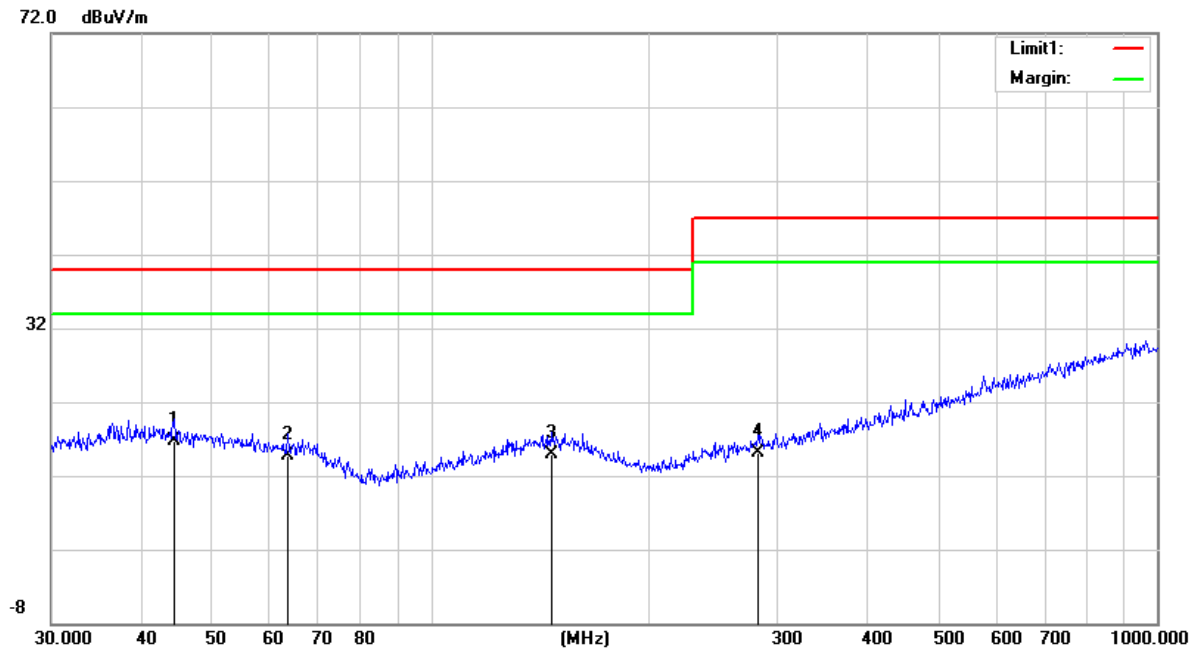
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector	Comment
1		30.7454	7.35	12.12	19.47	40.00	-20.53	QP	
2	*	50.4089	11.39	12.96	24.35	40.00	-15.65	QP	
3		88.3421	5.82	8.27	14.09	40.00	-25.91	QP	
4		145.8610	11.44	12.42	23.86	40.00	-16.14	QP	

EUT :	Polymer Li-ion Battery	Model No. :	5862 14000mAh
Temperature :	24 °C	Relative Humidity :	55 %
Distance:	3m	Test Power :	50.4Vdc by DC source input 230Vac/50Hz
Polarization:	Horizontal	Test By:	Jack
Standard:	(RE)EN6100-6-3 3M		
Test Mode :	Charging		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dB/m	dB		
1		46.8303	2.72	13.16	15.88	40.00	-24.12	QP	
2		117.7725	7.34	10.79	18.13	40.00	-21.87	QP	
3	*	147.4036	9.10	12.45	21.55	40.00	-18.45	QP	
4		283.9791	2.10	12.66	14.76	47.00	-32.24	QP	

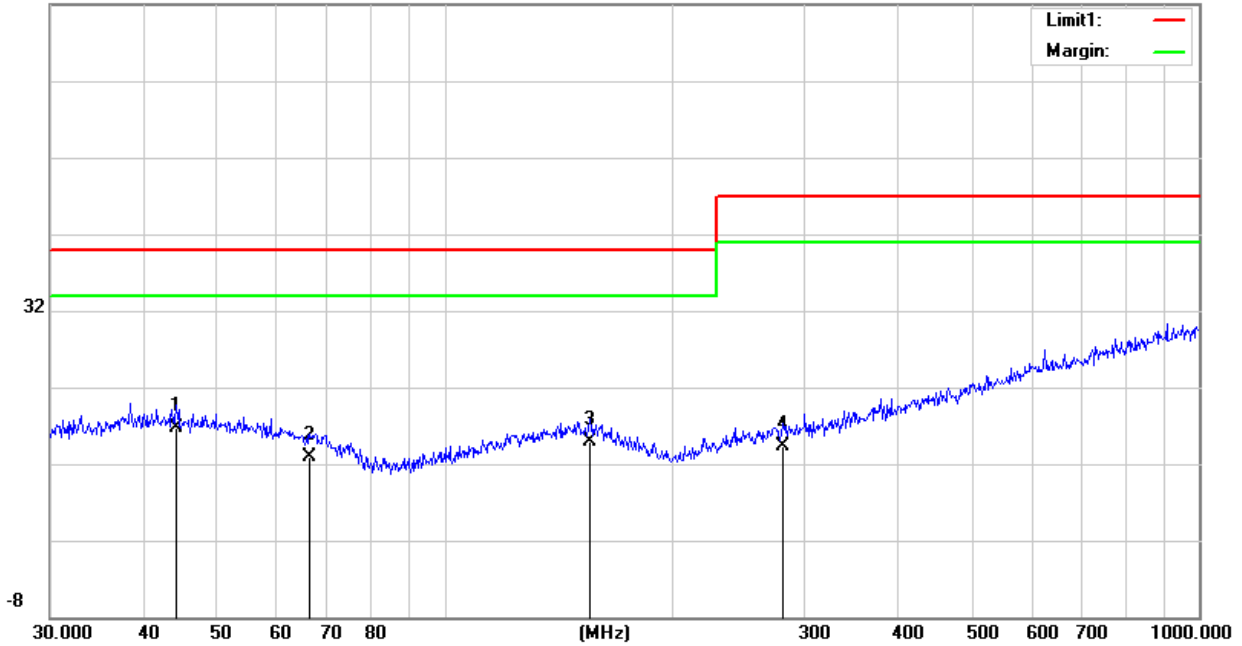
EUT :	Polymer Li-ion Battery	Model No. :	5862 14000mAh
Temperature :	24 °C	Relative Humidity :	55 %
Distance:	3m	Test Power :	50.4Vdc
Polarization:	Vertical	Test By:	Jack
Standard:	(RE)EN6100-6-3 3M		
Test Mode :	Discharge		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector	Comment
1	*	44.2751	3.43	13.29	16.72	40.00	-23.28	QP	
2		63.5356	3.13	11.51	14.64	40.00	-25.36	QP	
3		146.3735	2.52	12.43	14.95	40.00	-25.05	QP	
4		281.9945	2.40	12.63	15.03	47.00	-31.97	QP	

EUT :	Polymer Li-ion Battery	Model No. :	5862 14000mAh
Temperature :	24 °C	Relative Humidity :	55 %
Distance:	3m	Test Power :	50.4Vdc
Polarization:	Horizontal	Test By:	Jack
Standard:	(RE)EN6100-6-3 3M		
Test Mode :	Discharge		

72.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector	Comment
1	*	44.1200	3.45	13.29	16.74	40.00	-23.26	QP	
2		66.2661	1.75	11.21	12.96	40.00	-27.04	QP	
3		155.9100	2.32	12.62	14.94	40.00	-25.06	QP	
4		281.0074	1.74	12.61	14.35	47.00	-32.65	QP	

4. EMC IMMUNITY TEST

4.1 STANDARD COMPLIANCE/SERVIRITY LEVEL/CRITERIA

Tests Standard No.	TEST SPECIFICATION Level	Test Mode Test Ports	Perform. Criteria	Remark
1. ESD IEC/EN 61000-4-2	8KV air discharge 4KV contact discharge	Direct Mode	B	
	4KV HCP discharge 4KV VCP discharge	Indirect Mode	B	
2. RS IEC/EN 61000-4-3	80 MHz to 1000 MHz: 3V/m 1.4 GHz to 2 GHz: 3V/m 2G Hz to 2.7 GHz: 1V/m (rms), 1 KHz, 80%, AM modulated	Enclosure	A	
3. EFT/Burst IEC/EN 61000-4-4	1.0KV(peak) 5/50ns Tr/Th 5KHz Repetition Freq.	AC Power Port	B	N/A
	0.5 KV(peak) 5/50ns Tr/Th 5KHz Repetition Freq.	CTL/Signal Data Line Port	B	N/A
4. Surges IEC/EN 61000-4-5	1 KV(5P/5N) 1.2/50(8/20) Tr/Th us	L-N	B	N/A
	2 KV(5P/5N) 1.2/50(8/20) Tr/Th us	L-PE N-PE	B	N/A
5 Injected Current IEC/EN 61000-4-6	0.15 MHz to 80 MHz 3V(rms), 1KHz 80%, AM Modulated 150Ω source impedance	CTL/Signal Port	A	N/A
	0.15 MHz to 80 MHz 3V(rms), 1KHz 80%, AM Modulated 150Ω source impedance	AC Power Port	A	N/A
	0.15 MHz to 80 MHz 3V(rms), 1KHz 80%, AM Modulated 150Ω source impedance	DC Power Port	A	N/A
6. Power Frequency Magnetic Field IEC/EN 61000-4-8	50 Hz, 1A/m	Enclosure	A	N/A
7. Volt. Interruptions Volt. Dips IEC/EN 61000-4-11	Voltage dip >95% / 30% Interruption >95%	<5% / 70% <5%	B / C C	N/A

* Remark:

(1) "N/A": denotes test is not applicable in this Test Report.

:

4.2 GENERAL PERFORMANCE CRITERIA

According to EN61000-6-1 standard, the general performance criteria as following:

<p>Criterion A</p>	<p>The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.</p>
<p>Criterion B</p>	<p>After the test, the equipment shall continue to operate as intended without operator Intervention. No degradation of performance or loss of function is allowed, after the application of the phenomenon below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is allowed. However, no change of operating state if stored data allowed to persist after the test. If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.</p>
<p>Criterion C</p>	<p>Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. Functions, and/or information stored in non-volatile memory, or protected by a Polymer Li-ion Battery backup, shall not be lost.</p>

4.3 GENERAL PERFORMANCE CRITERIA TEST SETUP

The EUT tested system was configured as the statements of 4.2 Unless otherwise a special operating condition is specified in the follows during the testing.

4.4 ESD TESTING

4.4.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-2
Discharge Impedance:	330 ohm / 150 pF
Required Performance	B
Discharge Voltage:	Air Discharge: 2kV/4kV/8kV (Direct) Contact Discharge: 2kV/4kV (Direct/Indirect)
Polarity:	Positive & Negative
Number of Discharge:	Air Discharge: min. 25 times at each test point Contact Discharge: min. 200 times in total
Discharge Mode:	Single Discharge
Discharge Period:	1 second minimum

4.4.2 MEASUREMENT INSTRUMENTS

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Electrostatic Discharge Simulator	Prima	ESD61002BG	PR15092978	11/13/2017

4.4.3 TEST PROCEDURE

The test generator necessary to perform direct and indirect application of discharges to the EUT in the following manner:

- a. Contact discharge was applied to conductive surfaces and coupling planes of the EUT.

During the test, it was performed with single discharges. For the single discharge time between successive single discharges was at least 1 second. The EUT shall be exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points. One of the test points shall be subjected to at least 50 indirect discharges to the center of the front edge of the horizontal coupling plane. The remaining three test points shall each receive at least 50 direct contact discharges.

If no direct contact test points are available, then at least 200 indirect discharges shall be applied in the indirect mode. Test shall be performed at a maximum repetition rate of one discharge per second.

Vertical Coupling Plane (VCP):
The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.
The four faces of the EUT will be performed with electrostatic discharge.

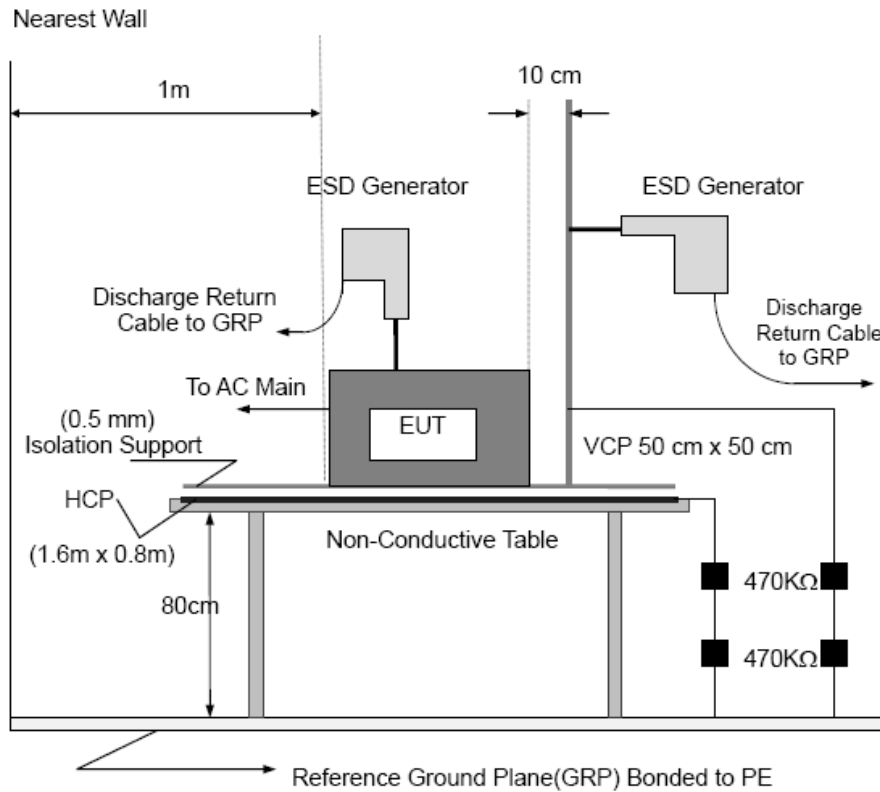
Horizontal Coupling Plane (HCP):
The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.
The four faces of the EUT will be performed with electrostatic discharge.
- b. Air discharges at insulation surfaces of the EUT.

It was at least ten single discharges with positive and negative at the same selected point.
- c. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



Note:

TABLE-TOP EQUIPMENT

The configuration consisted of a wooden table 0.8 meters high standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum at least 0.25mm thick, and 2.5 meters square connected to the protective grounding system. A Horizontal Coupling Plane (1.6m x 0.8m) was placed on the table and attached to the GRP by means of a cable with 940k total impedance. The equipment under test, was installed in a representative system as described in section 7 of IEC /EN 61000-4-2, and its cables were placed on the HCP and isolated by an insulating support of 0.5mm thickness. A distance of 1-meter minimum was provided between the EUT and the walls of the laboratory and any other metallic structure.

FLOOR-STANDING EQUIPMENT

The equipment under test was installed in a representative system as described in section 7 of IEC/EN 61000-4-2, and its cables were isolated from the Ground Reference Plane by an insulating support of 0.1-meter thickness. The GRP consisted of a sheet of aluminum that is at least 0.25mm thick, and 2.5meters square connected to the protective grounding system and extended at least 0.5 meters from the EUT on all sides.

4.4.6 TEST RESULTS

EUT:	Polymer Li-ion Battery	Model No. :	5862 14000mAh
Temperature:	24 °C	Relative Humidity:	55 %
Pressure:	1007 hPa	Test Power :	50.4Vdc
Test Mode :	Charging; Discharge		

Mode	Air Discharge								Contact Discharge							
	2KV		4KV		8KV		12KV		2KV		4KV		6KV		8KV	
Location	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N
Slot	A	A	A	A	A	A										
Enclosure	A	A	A	A	A	A										
Criteria	B								N/A							
Result	A								N/A							
Judgment	PASS								PASS							

Mode	HCP Discharge								VCP Discharge							
	2KV		4KV		6KV		8KV		2KV		4KV		6KV		8KV	
Location	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N
Front	A	A	A	A					A	A	A	A				
Rear	A	A	A	A					A	A	A	A				
Left	A	A	A	A					A	A	A	A				
Right	A	A	A	A					A	A	A	A				
Criteria	B								B							
Result	A								A							
Judgment	PASS								PASS							

Note:

- 1) P/N denotes the Positive/Negative polarity of the output voltage.
- 2) Test condition:
Direct / Indirect (HCP/VCP) discharges: Minimum 20 times (Positive/Negative) at each point. Air discharges: Minimum 50 times (Positive/Negative) at each point.
- 3) Test location(s) in which discharge (Air and contact discharge) to be applied illustrated by photos shown in next page(s)
- 4) The Indirect (HCP/VCP) discharges description of test point as following:
1.left side 2.right side 3.front side 4.rear side
- 5) N/A - denotes test is not applicable in this test report
- 6) Criteria B: The EUT function loss during the test, but self-recoverable after the test.

4.5 RS TESTING

4.5.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-3
Required Performance	A
Frequency Range:	80 MHz - 1000 MHz, 1.4 GHz – 2 GHz, 2GHz – 2.7 GHz
Field Strength:	3 V/m, 1V/m
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of fundamental
Polarity of Antenna:	Horizontal and Vertical
Test Distance:	3 m
Antenna Height:	1.5 m
Dwell Time:	at least 3 seconds

4.5.2 MEASUREMENT INSTRUMENTS

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Signal Generator	Agilent	N517113-50B	MY53050160	11/13/2017
2	Amplifier	A&R	150W1000M3	313157	11/13/2017
3	Log-periodic Antenna	Schwarzbeck	STLP 9128E	9128E-012	11/13/2017
4	Isotropic Field Probe	A&R	FL7006	0342652	11/13/2017
5	Amplifier	A&R	50SIG6M2	0342835	11/13/2017
6	Antenna	Schwarzbeck	STLP9149	9149.222	11/13/2017

4.5.3 TEST PROCEDURE

The EUT and support equipment, which are placed on a table that is 0.8 meter above ground and the testing was performed in a fully-anechoic chamber.

The testing distance from antenna to the EUT was 3 meters.

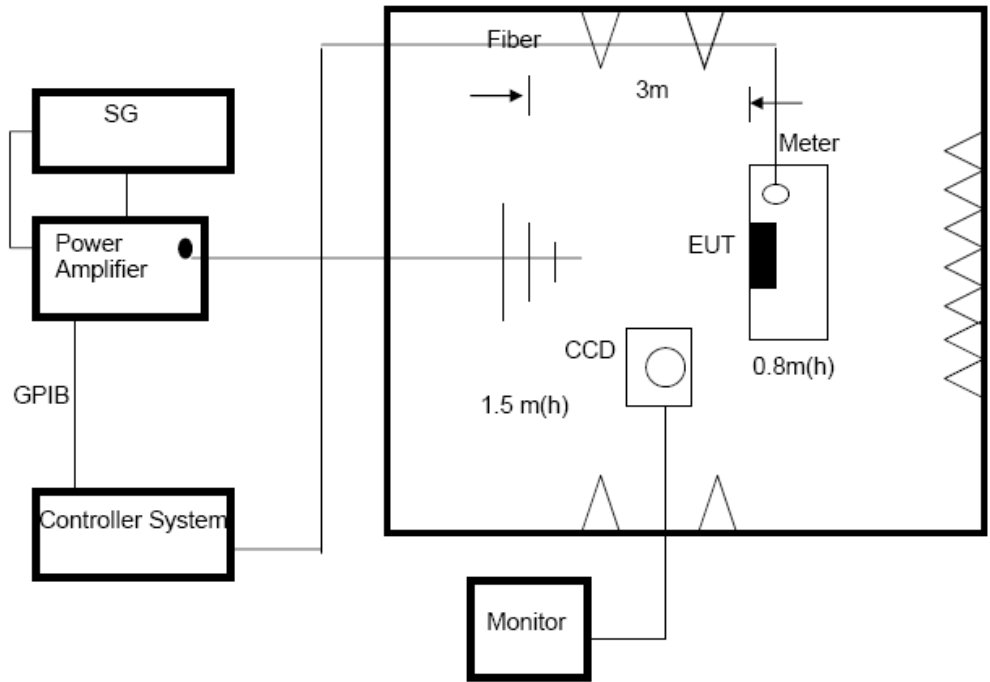
The other condition as following manner:

- a. The field strength level was 3V/m.
- b. The frequency range is swept from 80 MHz to 1000 MHz, with the signal 80%amplitude modulated with a 1kHz sine wave. The rate of sweep did not exceed 1.5×10^{-3} decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- c. The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.
- d. The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



Note:

TABLE-TOP EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN 61000-4-3 was placed on a non-conductive table 0.8 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

FLOOR-STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN 61000-4-3 was placed on a non-conductive wood support 0.1 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

4.5.6 TEST RESULTS

EUT :	Polymer Li-ion Battery	Model No. :	5862 14000mAh
Temperature :	24 °C	Relative Humidity :	55 %
Pressure :	1004 hPa	Test Power :	50.4Vdc
Test Mode :	Charging; Discharge		

Frequency Range	RF Field Position	R.F. Field Strength	Azimuth	Perform. Criteria	Results	Judgment
80MHz - 1000MHz	H / V	3 V/m (rms) AM Modulated 1000Hz, 80%	0	A	A	PASS
			90			
			180			
			270			
1.4 GHz – 2 GHz,	H / V	3 V/m (rms) AM Modulated 1000Hz, 80%	0	A	A	PASS
			90			
			180			
			270			
2GHz – 2.7 GHz	H / V	1 V/m (rms) AM Modulated 1000Hz, 80%	0	A	A	PASS
			90			
			180			
			270			

Note:

- 1) H/V denotes the Horizontal/Vertical polarity of the RF field.
- 2) Criteria A: There was no change operated with initial operating during the test.
- 3) Criteria B: The EUT function loss during the test, but self-recoverable after the test.
- 4) Criteria C: The system shut down during the test.

5. EUT TEST PHOTOS

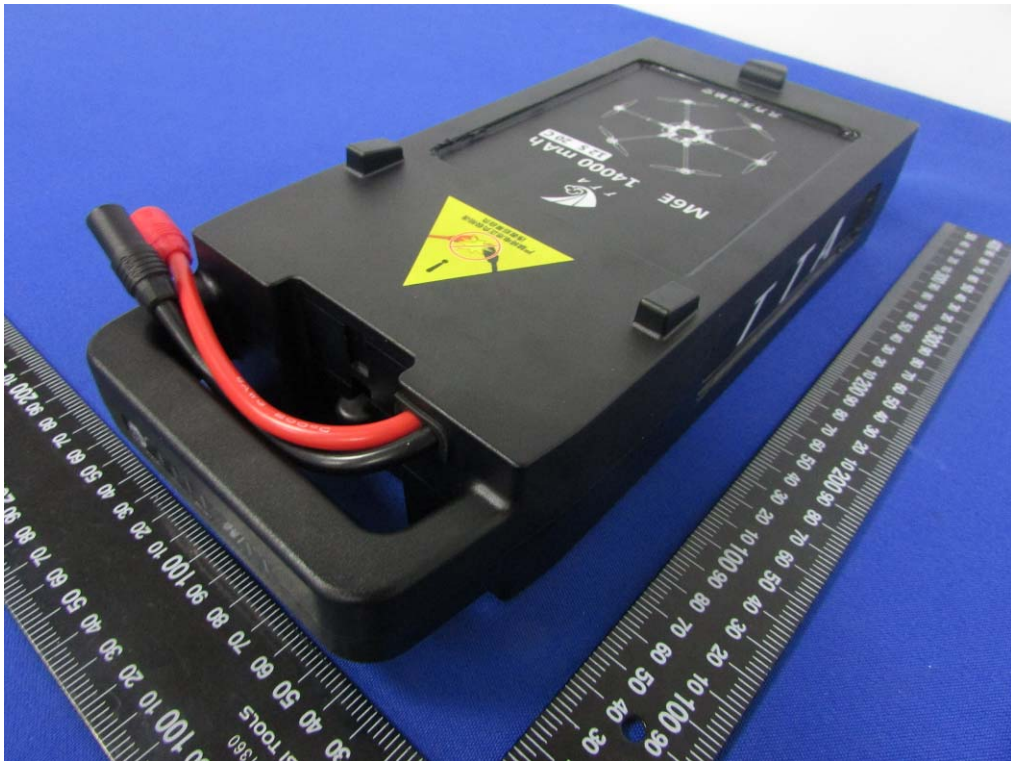
Radiated Measurement Photo



ESD Measurement Photo



6. EUT PHOTOS



END OF REPORT



CERTIFICATE *of* COMPLIANCE

CERTIFICATE OF COMPLIANCE

R210-131840 / 23 Jul 2019 / Rev A

for Radio Equipment in JAPAN

MiCOM Labs Inc. declares, on the basis of the assessment of the tests and the technical documentation provided by the applicant that the following product complies with the requirements of the above noted regulator.

Product Name:

2.4G Video Transmitter & Receiver

Approval Holder Name:

Beijing TT Aviation Technology Co., Ltd.



Gordon Hurst, Product Certifier

This Certificate is Issued under the Authority of:

MiCOM Labs Inc., 575 Boulder Court, Pleasanton, California 94566, USA

Registered Certification Body ID Number: 210

Product Name:

2.4G Video Transmitter & Receiver

 Product Model Numbers: **TTA-R4, TTA-X4**

 Brand Name: **TTA**

Approval Holder: **Beijing TT Aviation Technology Co., Ltd.**, No.1 TTA Building Niantou Industrial Park, Changping District, Beijing, China

Test Lab: **Global United Technology Services Co., Ltd.**, No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China

Standards
Group

Article 2 paragraph 1 item (19)

Description of Apparatus

Company Name	Beijing TT Aviation Technology Co., Ltd.
Certification No.	R210-131840
Issue Date / Rev	23 Jul 2019 / Rev A
Equipment Description	2.4G Video Transmitter & Receiver
Brand Name	TTA
Hardware Version	V1.0
Firmware Version	V1.0

Emission Information

Technology	Frequency Range		Emission Designator	RF Power		Field Strength		Antenna Power
	From	To		Max.	Type	dBuV/m	@Dist.	
SRD	2420MHz	2480MHz	61M5F1D	--	--	--	--	0.05mW/MHz

Antennas

Antenna Type	Manufacturer	Model/Part No.	Gain (dBi)	Frequency Range (MHz)
External	Dongguan Yuanyang Electronics Co., Ltd	CP0063	2	2400-2500
Integral	Foshan Miaotai Electronics co., ltd.	CP0061	2	2400-2500

Technical Construction File Details: (Documents Reviewed)

Technical Report(s):

Article 2 paragraph 1 item (19):
GTS201906000194M01

Supporting Documentation:

Service Agreement
Agent Authorization
Japan Application
Japan Product Quality
Japan Radio Protection Declaration
Antenna Specifications
Block Diagram
BOM or Parts List
External Photographs
Internal Photographs
Label and its Location
Operational Description
PCB Layout
Schematics
Test Setup - Japan
User Manual

Type Marking

The validity of this Certificate is limited to products, which are equal to the one examined in the type - examination.

- When the manufacturer(or holder of this certificate) is placing the product on the Japanese market, the product must be affixed with the following Specified Radio Equipment marking:

