



## Test Report

Date : 2018-02-28  
No. : HM17120026

Page 1 of 5

### 3.1.3 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310  
Test Date: 2017-12-20 , 2018-02-21

### EUT Operation:

This device has been tested the worst status of full load .  
The test used phone with follow detail:  
Model: SAMSUNG S8+

### Limit:

Frequency range (MHz)	Electric field strength(V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time(minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30
F=frequency in MHz *=Plane-wave equivalent power density RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).				

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Tai Po Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@hkstc.org Website: www.stc-group.org

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2018-02-28  
No. : HM17120026

Page 2 of 5

**Test Result: PASS**

Electric Field Emissions  
Charging at Battery Capacity = 10 %

Side	Separation Distance(m)	E-field(V/m)	E-field(V/m)Limit	E-field(V/m)Limit 30%
Side 1	0.1	0.043	614	184.2
Side 2	0.1	0.029	614	184.2
Side 3	0.1	0.021	614	184.2
Side 4	0.1	0.033	614	184.2
Side 5	0.1	0.049	614	184.2
Side 6	0.1	0.015	614	184.2

Charging at Battery Capacity = 50 %

Side	Separation Distance(m)	E-field(V/m)	E-field(V/m)Limit	E-field(V/m)Limit 30%
Side 1	0.1	0.045	614	184.2
Side 2	0.1	0.025	614	184.2
Side 3	0.1	0.022	614	184.2
Side 4	0.1	0.037	614	184.2
Side 5	0.1	0.047	614	184.2
Side 6	0.1	0.019	614	184.2

Charging at Battery Capacity = 90 %

Side	Separation Distance(m)	E-field(V/m)	E-field(V/m)Limit	E-field(V/m)Limit 30%
Side 1	0.1	0.041	614	184.2
Side 2	0.1	0.024	614	184.2
Side 3	0.1	0.023	614	184.2
Side 4	0.1	0.032	614	184.2
Side 5	0.1	0.058	614	184.2
Side 6	0.1	0.018	614	184.2

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Tai Po Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@hkstc.org](mailto:hkstc@hkstc.org) Website: [www.stc-group.org](http://www.stc-group.org)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2018-02-28  
No. : HM17120026

Page 3 of 5

Magnetic Field Emissions

Charging at Battery Capacity = 10 %

Side	Separation Distance(m)	H-field(A/m)	H-field(A/m)Limit	H-field(A/m)Limit 30%
Side 1	0.1	0.00013	1.63	0.489
Side 2	0.1	0.00007	1.63	0.489
Side 3	0.1	0.00008	1.63	0.489
Side 4	0.1	0.00007	1.63	0.489
Side 5	0.1	0.00025	1.63	0.489
Side 6	0.1	0.00007	1.63	0.489

Charging at Battery Capacity = 50 %

Side	Separation Distance(m)	H-field(A/m)	H-field(A/m)Limit	H-field(A/m)Limit 30%
Side 1	0.1	0.00014	1.63	0.489
Side 2	0.1	0.00008	1.63	0.489
Side 3	0.1	0.00009	1.63	0.489
Side 4	0.1	0.00007	1.63	0.489
Side 5	0.1	0.00023	1.63	0.489
Side 6	0.1	0.00008	1.63	0.489

Charging at Battery Capacity = 90 %

Side	Separation Distance(m)	H-field(A/m)	H-field(A/m)Limit	H-field(A/m)Limit 30%
Side 1	0.1	0.00014	1.63	0.489
Side 2	0.1	0.00008	1.63	0.489
Side 3	0.1	0.00007	1.63	0.489
Side 4	0.1	0.00010	1.63	0.489
Side 5	0.1	0.00024	1.63	0.489
Side 6	0.1	0.00007	1.63	0.489

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@hkstc.org](mailto:hkstc@hkstc.org) Website: [www.stc-group.org](http://www.stc-group.org)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

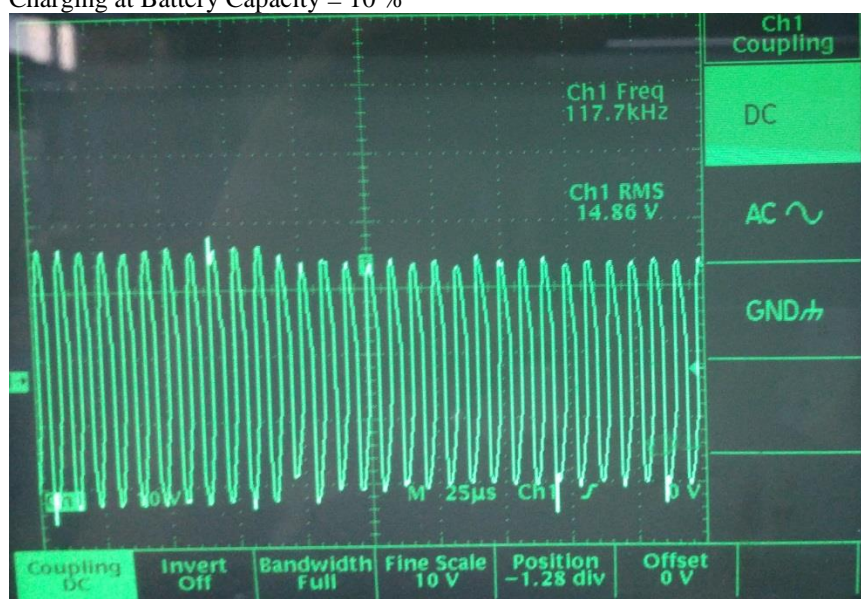
Date : 2018-02-28  
No. : HM17120026

Page 4 of 5

Conducted Power Measurement

Battery Capacity	Frequency (kHz)	Voltage (V)	Current (A)	Power (W)
10%	117.7	14.86	1.23	18.28
50%	125.1	15.27	1.31	20.00
90%	134.4	14.92	1.27	18.95

Charging at Battery Capacity = 10 %



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Tai Po Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@hkstc.org](mailto:hkstc@hkstc.org) Website: [www.stc-group.org](http://www.stc-group.org)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

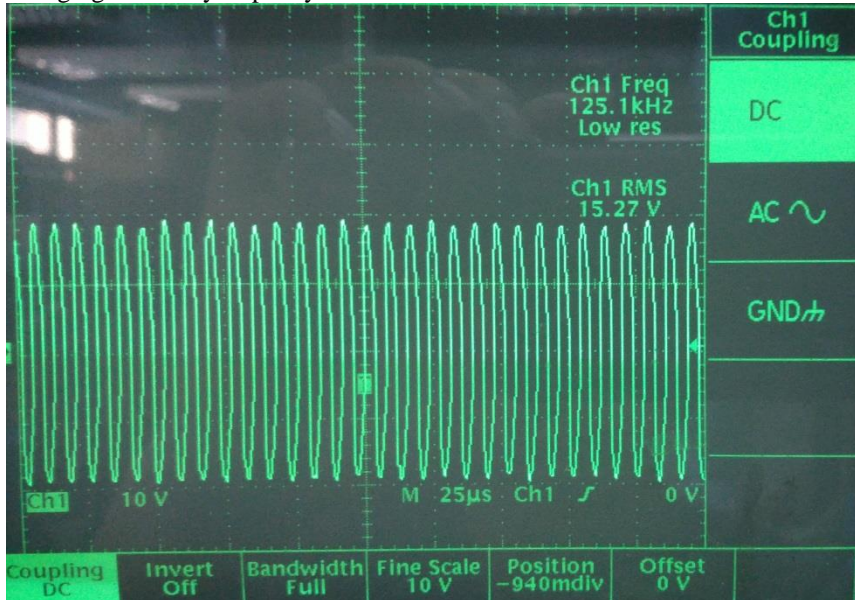
For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Test Report

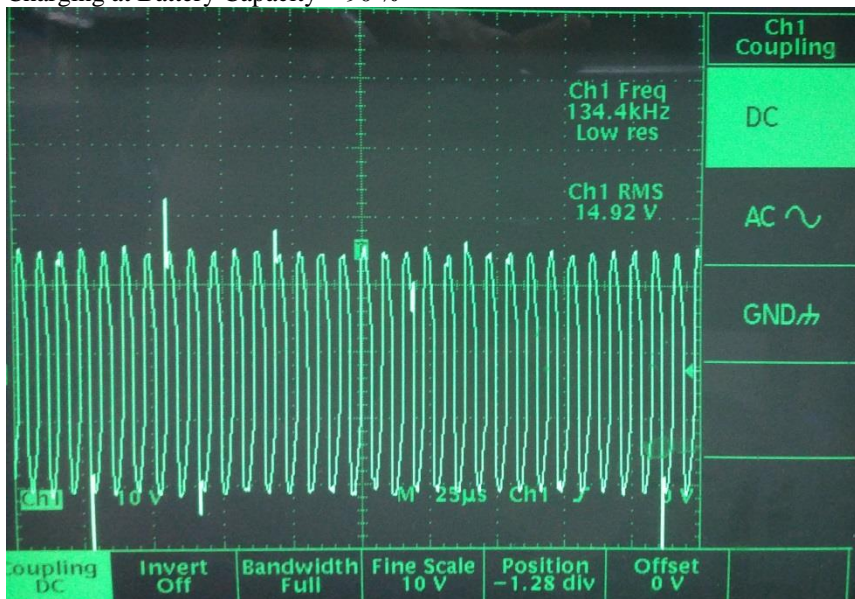
Date : 2018-02-28  
No. : HM17120026

Page 5 of 5

Charging at Battery Capacity = 50 %



Charging at Battery Capacity = 90 %



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@hkstc.org](mailto:hkstc@hkstc.org) Website: [www.stc-group.org](http://www.stc-group.org)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Conditions of Issuance of Test Reports

1. All samples and goods are accepted by The Hong Kong Standards & Testing Centre Limited (the “Company”) solely for testing and reporting in accordance with the following terms and conditions. The Company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the “Clients”).
2. Any report issued by the Company as a result of this application for testing service (the “Report”) shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to his customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. The Report refers only to the sample tested and does not apply to the bulk, unless the sampling has been carried out by the Company and is stated as such in the Report.
5. In the event of the improper use the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
6. Sample submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
7. The Company will not be liable for or accept responsibility for any loss or damage howsoever arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
8. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
9. Subject to the variable length of retention time for test data and report stored hereinto as to otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of this test report for a period of three years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after the retention period. Under no circumstances shall we be liable for damages of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.
10. Issuance records of the Report are available on the internet at [www.stc-group.org](http://www.stc-group.org). Further enquiry of validity or verification of the Reports should be addressed to the Company.