

Report No.: SZEM200900891601
Page: 1 of 25

TEST REPORT

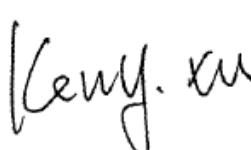
Application No.: SZEM2009008916CR
Applicant: DT Research, Inc.
Address of Applicant: 3RD FL NO 36 WUQUAN 7TH RD WUGU DISTRICT, NEW TAIPEI, Taiwan
Manufacturer: DT Research, Inc.
Address of Manufacturer: 2000 Concourse Drive, San Jose, CA 95131, USA
Factory: DT Research, Inc.Taiwan Branch
Address of Factory: 6F., No.36 Wuquan 7 th Rd., Wugu Dist. New Taipei City 248 Taiwan
Equipment Under Test (EUT):
EUT Name: Rugged Convertible Laptop
Model No.: LT33XX-XXX(X=blank, A~Z or 0~9) *

* Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.

Trade mark: DT Research, Inc.
Standard(s) : 47 CFR Part 15, Subpart B
Date of Receipt: 2020-09-07
Date of Test: 2020-09-08 to 2020-09-28
Date of Issue: 2020-09-28

Test Result:	Pass*
---------------------	--------------

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



Keny Xu
EMC Laboratory Manager



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that the information contained therein reflects the Company's understanding of the relevant international and national codes of Client's jurisdiction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Room 105, Building A, Xintong Technology Industrial Park, No.50 Fengtang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·宝龙·福永街道新田社区凤塘大道50号鑫龙科技园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Revision Record

Version	Chapter	Date	Modifier	Remark
01		2020-09-28		Original

Authorized for issue by:

**Edison Li/Project Engineer****Eric Fu/Reviewer**

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. | Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Futian District, Shenzhen, China 518103 | t (86-755) 26012053 | f (86-755) 26710594 | www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 | 邮编: 518103 | t (86-755) 26012053 | f (86-755) 26710594 | sgs.china@sgs.com

2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass*
Radiated Emissions (above 1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass*

*: the radiated emissions were scanned from 30MHz-40GHz, only the 30MHz-18GHz data is shown in the report, No emission was detected in the range 18GHz-40GHz.

Remark:

Model No.: LT33XX-XXX(X=blank, A~Z or 0~9)

Only the model LT330 was tested, since according to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above models, with only difference on model No..

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS) EEC Laboratory

Room 105, Building A, Xinxing Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

3 Contents

	Page
1 COVER PAGE	1
2 TEST SUMMARY	3
3 CONTENTS	4
4 GENERAL INFORMATION	5
4.1 DETAILS OF E.U.T	5
4.2 CABLE	5
4.3 DESCRIPTION OF SUPPORT UNITS	5
4.4 MEASUREMENT UNCERTAINTY	6
4.5 TEST LOCATION	7
4.6 TEST FACILITY	7
4.7 DEVIATION FROM STANDARDS	7
4.8 ABNORMALITIES FROM STANDARD CONDITIONS	7
5 EQUIPMENT LIST	8
6 EMISSION TEST RESULTS	10
6.1 CONDUCTED EMISSIONS AT MAINS TERMINALS (150KHz-30MHz)	10
6.1.1 E.U.T. Operation	10
6.1.2 Test Mode Description	10
6.1.3 Test Setup Diagram	11
6.1.4 Measurement Procedure and Data	11
6.2 RADIATED EMISSIONS (30MHz-1GHz)	16
6.2.1 E.U.T. Operation	16
6.2.2 Test Mode Description	16
6.2.3 Test Setup Diagram	17
6.2.4 Measurement Procedure and Data	17
6.3 RADIATED EMISSIONS (ABOVE 1GHz)	20
6.3.1 E.U.T. Operation	20
6.3.2 Test Mode Description	20
6.3.3 Test Setup Diagram	21
6.3.4 Measurement Procedure and Data	21
7 TEST SETUP PHOTO	24
8 EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS)	25

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service located at <http://www.sgs.com/en/Terms-and-Conditions-Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /Inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. | Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 | t (86-755) 26012053 | f (86-755) 26710594 | www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 | 邮编: 518103 | t (86-755) 26012053 | f (86-755) 26710594 | sgs.china@sgs.com

4 General Information

4.1 Details of E.U.T.

Power adapter:	AC Adapter Model: A11-065N1A Input: AC 100-240V, 50/60Hz, 1.7A Output: DC 19V, 3.42A 65W
Test voltage:	AC 120V, 60Hz
Battery:	Rechargeable Lithium-Ion Polymer Battery1 Model: ACC-006-60K(3ICP9/36/115) Rated Capacity: 5400mAh Voltage: DC 11.4V Watt-Hour: 61.56Wh Max Charge Voltage: 13.05V Rechargeable Lithium-Ion Polymer Battery2 Model: ACC-006-60K(3ICP9/36/115) Rated Capacity: 5400mAh Voltage: DC 11.4V Watt-Hour: 61.56Wh Max Charge Voltage: 13.05V
Internal Source:	4.9GHz

4.2 Cable

Cable	Length	Shielding	Core
DC cable	180cm	Unshielded	Non-Core
AC cable	175cm	Unshielded	Non-Core

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Earphone	PHILIPS	SHE6000	REF. No.SEA1000
HDMI Cable	Apple	MC838FE/B	REF. No.SEA0900
Network Cable	SGS	N/A	REF. No.SEA1100
Television	SONY	KDL-24EX520	6351646
U-Disk	Sandisk	SDCZ60-016G	REF. No.SEA0100

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Testing and Inspection Services at <http://www.sgs.com/en/Terms-and-Conditions-Test-and-Inspection.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS) EEC Laboratory

Room 105, Building A, Xintian Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at Mains Terminals (150kHz-30MHz)	± 3.0dB
Radiated Emissions (30MHz-1GHz)	± 4.5dB
Radiated Emissions (above 1GHz)	± 4.8dB

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cispr} (CISPR Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /Inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (CE) EEC Laboratory

Room 105, Building A, Xinxing Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.6 Test Facility

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

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /Inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

5 Equipment List

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2019-06-13	2022-06-12
EMI Test Receiver	Rohde&Schwarz	ESCI	SEM004-02	2020-03-24	2021-03-23
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2020-07-10	2021-07-09
LISN	Rohde&Schwarz	ENV216	SEM007-01	2020-09-23	2021-09-22
LISN	ETS-LINDGREN	3816/2	SEM007-02	2020-04-01	2021-03-31

Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2020-07-19	2023-07-18
MXE EMI Receiver	Agilent Technologies	N9038A	SEM004-15	2019-12-16	2020-12-15
BiConiLog Antenna	ETS-LINDGREN	3142C	SEM003-02	2019-05-24	2022-05-23
Pre-Amplifier	Agilent Technologies	8447D	SEM005-01	2020-04-01	2021-03-31
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2020-07-10	2021-07-09

Radiated Emissions (above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
EXA Signal Analyzer	Agilent Technologies Inc	N9010A	SEM004-12	2020-04-09	2021-04-08
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2020-09-23	2021-09-22
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2020-04-01	2021-03-31
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2020-07-10	2021-07-09

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Use available at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



Room 105, Building A, Xintian Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

General used equipment

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2019-09-26	2020-09-25
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2020-04-07	2021-04-06

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /Inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (CEC Laboratory) | Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Futian District, Shenzhen, China 518103 | t (86-755) 26012053 | f (86-755) 26710594 | www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 | 邮编: 518103 | t (86-755) 26012053 | f (86-755) 26710594 | sgs.china@sgs.com

6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Limit:

0.15M-0.5MHz 66dB(µV)-56dB(µV) quasi-peak, 56dB(µV)-46dB(µV) average

0.5M-5MHz 56dB(µV) quasi-peak, 46dB(µV) average

5M-30MHz 60dB(µV) quasi-peak, 50dB(µV) average

Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1000 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	BT+ WLAN + battery1 + + battery2 + adapter + USB1 + USB2 + LAN + HDMI + RSS-232 + Eraphone + Back Camera.
Pre-scan	01	BT+ WLAN + battery1 + + battery2 + adapter + USB1 + USB2 + LAN + HDMI + RSS-232 + Eraphone + Front Camera.
Pre-scan	05	Charging mode, keep EUT in charging with Adapter.
Final test	06	HDMI: Keep EUT working with external HDMI source.
Pre-scan	07	Idle mode, Keep the EUT at standby mode.
Pre-scan	08	LAN: Keep EUT working via LAN port.
Pre-scan	09	On mode, keep EUT working normally.
Final test	18	USB1 Play: Keep EUT playing with USB stick.
Pre-scan	19	USB2 Play: Keep EUT playing with USB stick.
Pre-scan	20	RSS-232: Keep EUT connected to an external load via RSS-232.

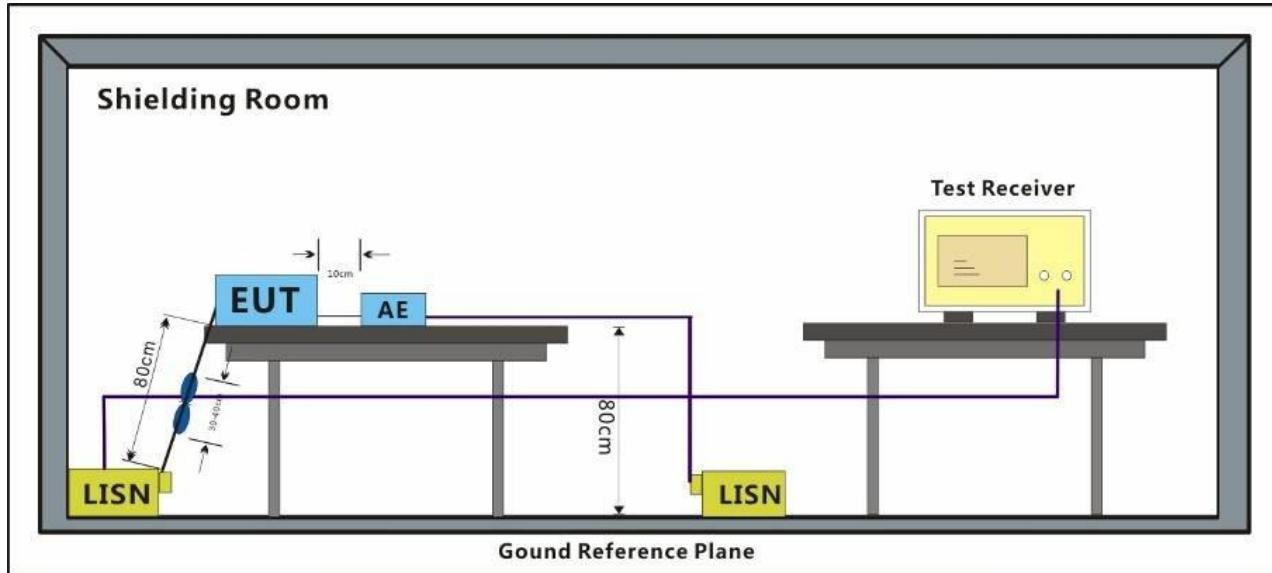
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on the reverse of the document or at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6.1.3 Test Setup Diagram**6.1.4 Measurement Procedure and Data**

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Use printed on the document page at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

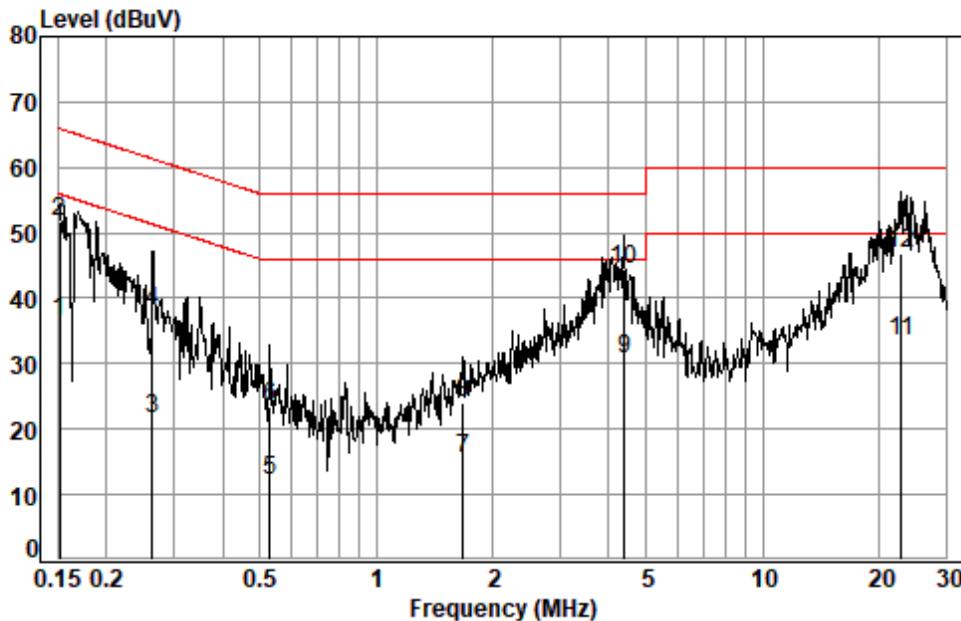
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



Room 105, Building A, Xinxing Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 06; Line: Live line



Site : Shielding Room

Condition: Line

Job No. : 08916CR

Test mode: 06

Freq	Cable Loss	LISN Factor	Read	Limit		Over Limit	Remark
			Level	Level	Line		
MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1516	0.01	9.59	27.02	36.62	55.91	-19.29 Average
2	0.1516	0.01	9.59	42.02	51.62	65.91	-14.29 QP
3	0.2630	0.03	9.59	11.88	21.50	51.34	-29.84 Average
4	0.2630	0.03	9.59	28.54	38.16	61.34	-23.18 QP
5	0.5293	0.06	9.59	2.60	12.25	46.00	-33.75 Average
6	0.5293	0.06	9.59	13.63	23.28	56.00	-32.72 QP
7	1.6802	0.14	9.61	5.91	15.66	46.00	-30.34 Average
8	1.6802	0.14	9.61	14.17	23.92	56.00	-32.08 QP
9	4.3838	0.16	9.66	20.98	30.80	46.00	-15.20 Average
10	4.3838	0.16	9.66	34.60	44.42	56.00	-11.58 QP
11	22.8965	0.25	10.54	22.69	33.48	50.00	-16.52 Average
12	22.8965	0.25	10.54	36.19	46.98	60.00	-13.02 QP

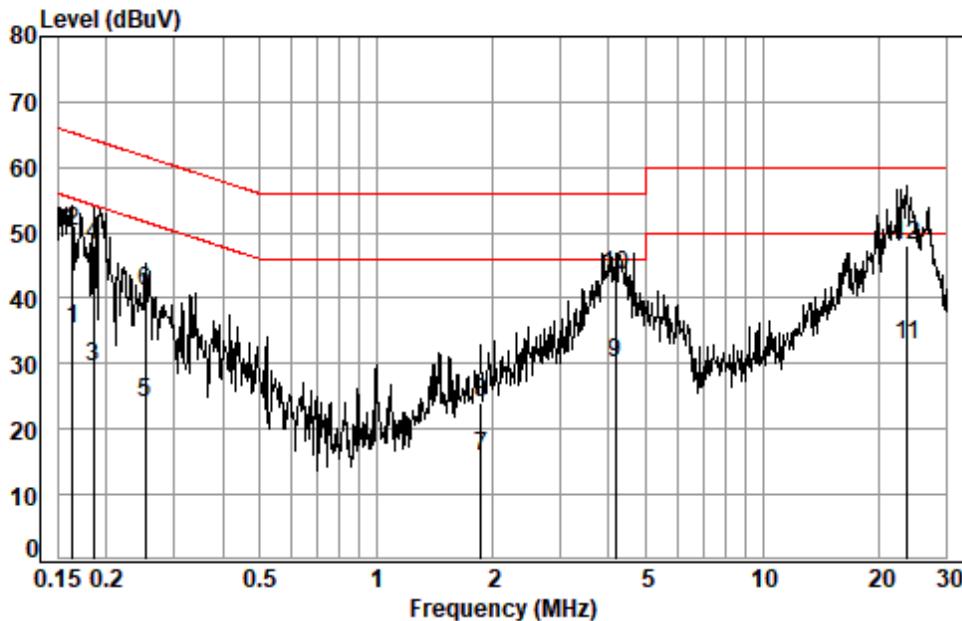
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS) is an EEC Laboratory.

Test Mode: 06; Line: Neutral Line



Site : Shielding Room

Condition: Neutral

Job No. : 08916CR

Test mode: 06

Freq	Cable Loss	LISN Factor	Read	Limit Line	Over Limit	Remark
			Level			
MHz	dB	dB	dBuV	dBuV	dBuV	dB
1	0.1633	0.01	9.55	25.80	35.36	55.30 -19.94 Average
2	0.1633	0.01	9.55	40.52	50.08	65.30 -15.22 QP
3	0.1854	0.02	9.55	20.09	29.66	54.24 -24.58 Average
4	0.1854	0.02	9.55	38.61	48.18	64.24 -16.06 QP
5	0.2521	0.03	9.54	14.49	24.06	51.69 -27.63 Average
6	0.2521	0.03	9.54	31.64	41.21	61.69 -20.48 QP
7	1.8680	0.15	9.56	6.18	15.89	46.00 -30.11 Average
8	1.8680	0.15	9.56	14.37	24.08	56.00 -31.92 QP
9	4.1575	0.16	9.61	20.33	30.10	46.00 -15.90 Average
10	4.1575	0.16	9.61	33.83	43.60	56.00 -12.40 QP
11	23.7616	0.26	10.60	22.13	32.99	50.00 -17.01 Average
12	23.7616	0.26	10.60	37.23	48.09	60.00 -11.91 QP

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service located at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

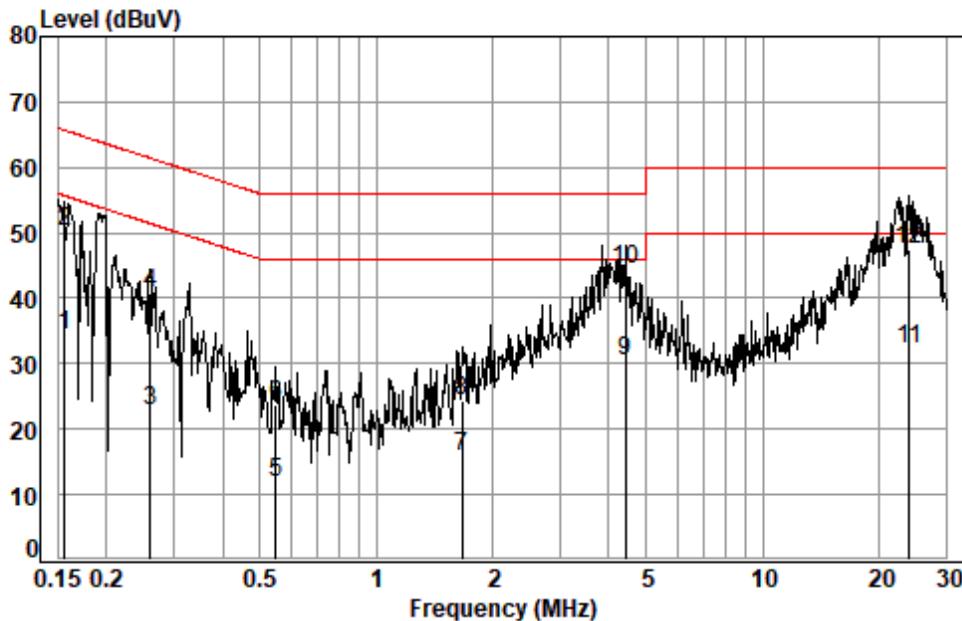
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch (CEC Laboratory) Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 18; Line: Live line



Site : Shielding Room

Condition: Line

Job No. : 08916CR

Test mode: 18

Freq	Cable Loss	LISN Factor	Read	Limit Line	Over Limit	Remark
			Level			
MHz	dB	dB	dBuV	dBuV	dBuV	dB
1	0.1557	0.01	9.59	24.71	34.31	55.69 -21.38 Average
2	0.1557	0.01	9.59	40.52	50.12	65.69 -15.57 QP
3	0.2603	0.03	9.59	13.18	22.80	51.42 -28.62 Average
4	0.2603	0.03	9.59	31.25	40.87	61.42 -20.55 QP
5	0.5493	0.06	9.60	2.12	11.78	46.00 -34.22 Average
6	0.5493	0.06	9.60	13.92	23.58	56.00 -32.42 QP
7	1.6713	0.14	9.61	6.21	15.96	46.00 -30.04 Average
8	1.6713	0.14	9.61	14.72	24.47	56.00 -31.53 QP
9	4.4071	0.16	9.66	20.46	30.28	46.00 -15.72 Average
10	4.4071	0.16	9.66	34.62	44.44	56.00 -11.56 QP
11	24.0148	0.26	10.51	21.60	32.37	50.00 -17.63 Average
12	24.0148	0.26	10.51	36.79	47.56	60.00 -12.44 QP

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com

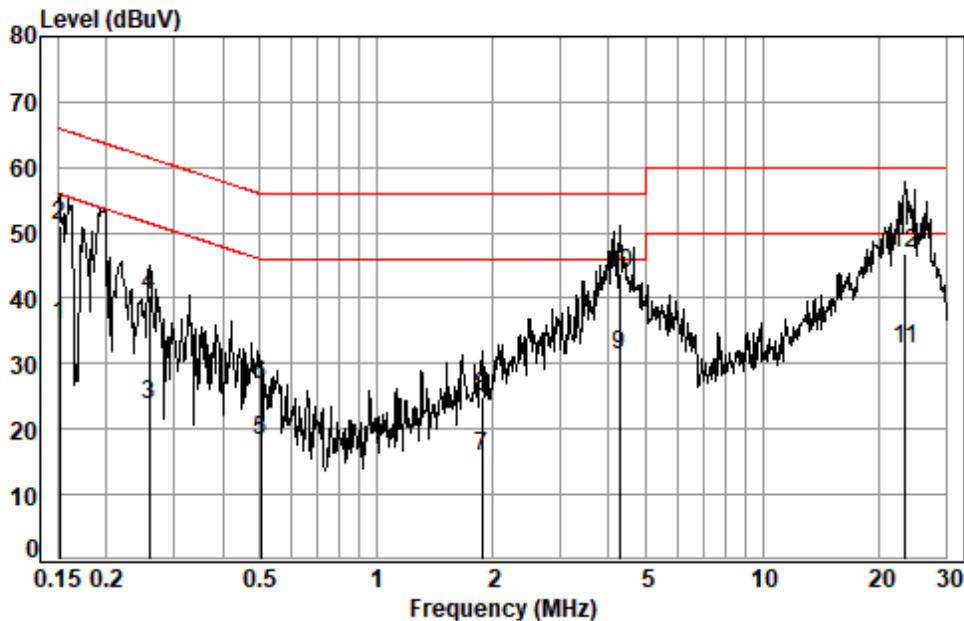


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS) is an EEC Laboratory.

Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 18; Line: Neutral Line



Site : Shielding Room

Condition: Neutral

Job No. : 08916CR

Test mode: 18

Freq	Cable	LISN	Read	Limit		Over	Remark
	MHz	Loss	Factor	Level	Level	Line	
1	0.1516	0.01	9.55	26.29	35.85	55.91	-20.06 Average
2	0.1516	0.01	9.55	41.62	51.18	65.91	-14.73 QP
3	0.2589	0.03	9.54	14.15	23.72	51.47	-27.75 Average
4	0.2589	0.03	9.54	30.82	40.39	61.47	-21.08 QP
5	0.5020	0.06	9.54	8.63	18.23	46.00	-27.77 Average
6	0.5020	0.06	9.54	17.11	26.71	56.00	-29.29 QP
7	1.8779	0.15	9.56	6.05	15.76	46.00	-30.24 Average
8	1.8779	0.15	9.56	15.31	25.02	56.00	-30.98 QP
9	4.2692	0.16	9.61	21.70	31.47	46.00	-14.53 Average
10	4.2692	0.16	9.61	34.00	43.77	56.00	-12.23 QP
11	23.3869	0.25	10.61	21.49	32.35	50.00	-17.65 Average
12	23.3869	0.25	10.61	36.08	46.94	60.00	-13.06 QP

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service located at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (No. 501) EEC Laboratory

Room 105, Building A, Xintian Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Limit:

FREQUENCY (MHz)	dBuV/m (At 10m)	dBuV/m (At 3m)
	Class B	Class B
30MHz -88MHz	29.5(dB μ V/m) quasi-peak	40.0(dB μ V/m) quasi-peak
88MHz-216MHz	33.1(dB μ V/m) quasi-peak	43.5(dB μ V/m) quasi-peak
216MHz-960MHz	35.6(dB μ V/m) quasi-peak	46.0(dB μ V/m) quasi-peak
960MHz-1000MHz	43.5(dB μ V/m) quasi-peak	54.0(dB μ V/m) quasi-peak

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to 1000MHz

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 51 % RH Atmospheric Pressure: 1000 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	BT+ WLAN + battery1 + + battery2 + adapter + USB1 + USB2 + LAN + HMDI + RSS-232 + Eraphone + Back Camera.
Pre-scan	01	BT+ WLAN + battery1 + + battery2 + adapter + USB1 + USB2 + LAN + HMDI + RSS-232 + Eraphone + Front Camera.
Pre-scan	05	Charging mode, keep EUT in charging with Adapter.
Final test	06	HDMI: Keep EUT working with external HDMI source.
Pre-scan	07	Idle mode, Keep the EUT at standby mode.
Pre-scan	08	LAN: Keep EUT working via LAN port.
Pre-scan	09	On mode, keep EUT working normally.
Pre-scan	18	USB1 Play: Keep EUT playing with USB stick.
Pre-scan	19	USB2 Play: Keep EUT playing with USB stick.
Pre-scan	20	RSS-232: Keep EUT connected to an external load via RSS-232.

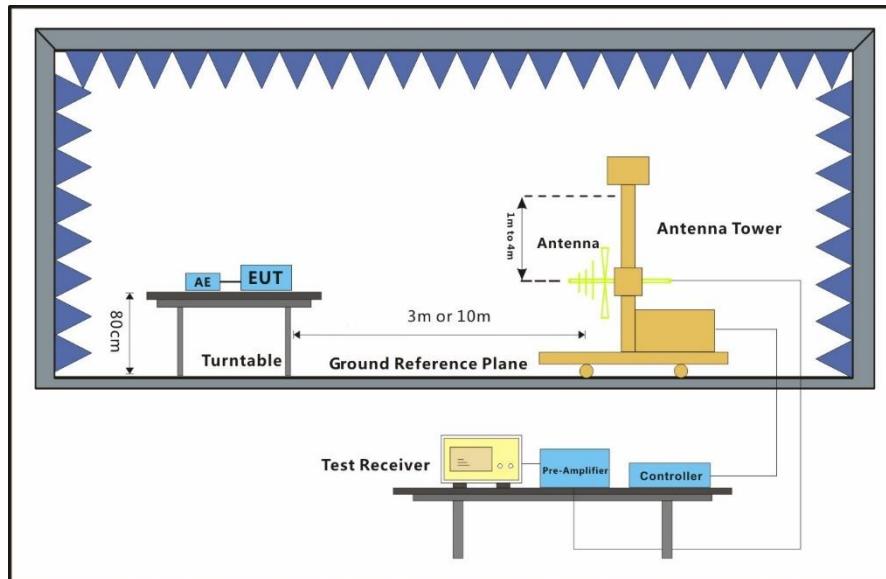
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service located at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's sole responsibility to its Client and at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Room 105, Building A, Xintian Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

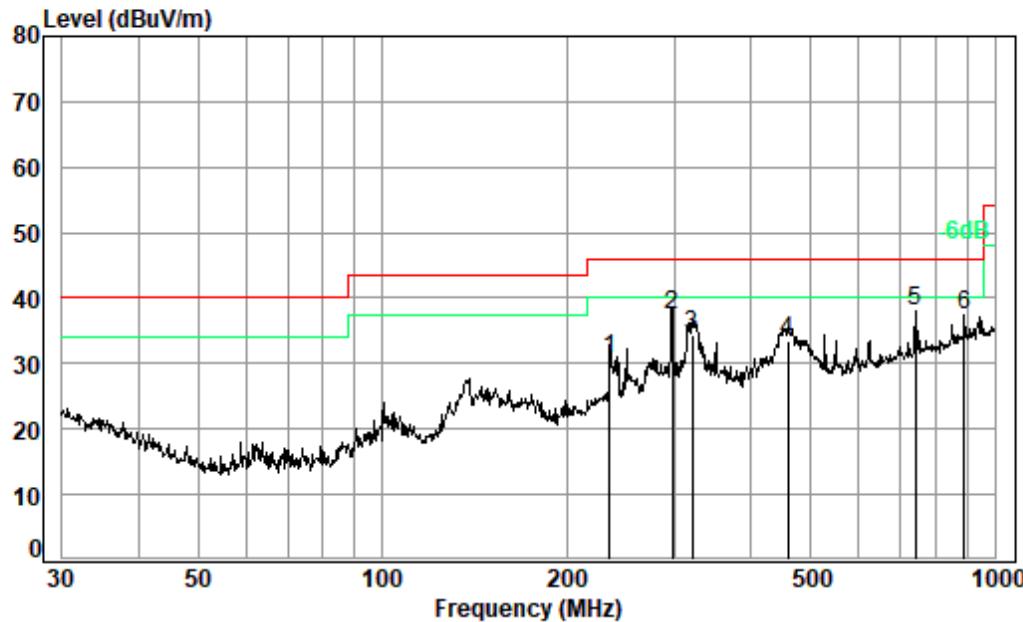
6.2.3 Test Setup Diagram**6.2.4 Measurement Procedure and Data**

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Use printed on the document or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /Inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com

Test Mode: 06; Polarity: Horizontal



Condition: 3m HORIZONTAL

Job No. : 08916CR

Test Mode: 06

Freq	Cable	Ant	Preamp	Read	Limit	Over	Remark	
	Loss	Factor	Factor	Level				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	234.99	1.52	17.55	27.03	38.75	30.79	46.00	-15.21 QP
2	297.22	1.98	18.88	26.88	43.35	37.33	46.00	-8.67 QP
3	321.06	2.07	19.84	26.99	39.54	34.46	46.00	-11.54 QP
4	459.11	2.42	22.89	27.64	35.92	33.59	46.00	-12.41 QP
5 pp	742.26	3.08	27.99	27.83	34.81	38.05	46.00	-7.95 QP
6	890.73	3.48	28.99	27.21	32.20	37.46	46.00	-8.54 QP

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service located at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

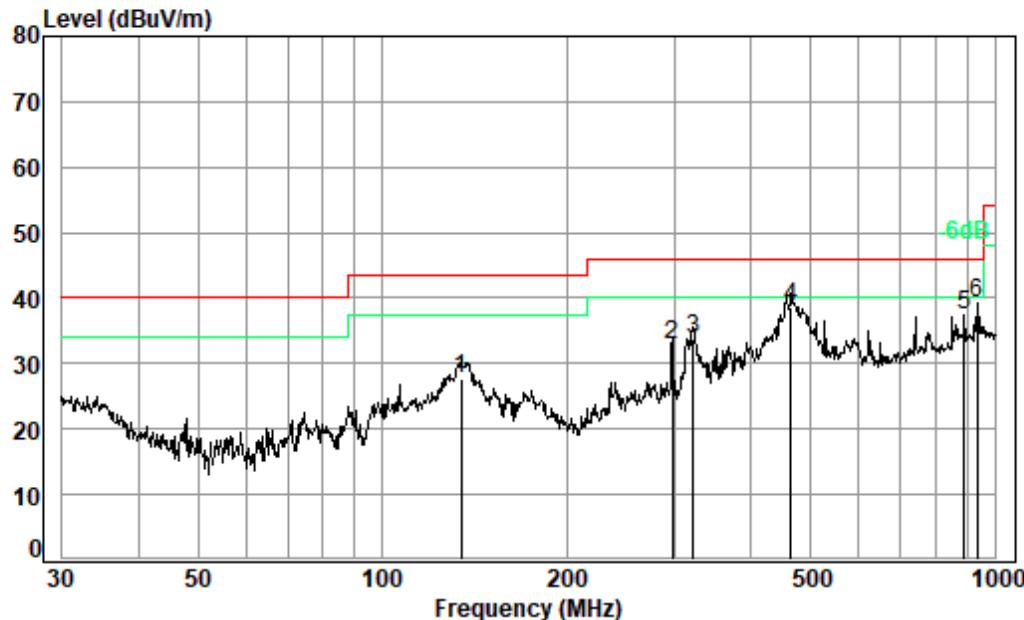
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. | Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 | t (86-755) 26012053 | f (86-755) 26710594 | www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 | 邮编: 518103 | t (86-755) 26012053 | f (86-755) 26710594 | sgs.china@sgs.com

Test Mode: 06; Polarity: Vertical



Condition: 3m VERTICAL

Job No. : 08916CR

Test Mode: 06

Freq	Cable	Ant	Preamp	Read	Limit	Over	Remark	
	Loss	Factor	Factor	Level				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	134.56	1.14	12.92	27.41	41.01	27.66	43.50	-15.84 QP
2	297.22	1.98	18.88	26.88	38.88	32.86	46.00	-13.14 QP
3	322.19	2.07	19.89	27.00	38.73	33.69	46.00	-12.31 QP
4	463.97	2.43	23.18	27.66	40.80	38.75	46.00	-7.25 QP
5	890.73	3.48	28.99	27.21	32.25	37.51	46.00	-8.49 QP
6 pp	935.55	3.54	29.20	26.98	33.40	39.16	46.00	-6.84 QP

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service located at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6.3 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Limit:

Above 1GHz 74(dB μ V/m) peak, 54(dB μ V/m) average

Detector: Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C Humidity: 56.3 % RH Atmospheric Pressure: 1000 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	BT+ WLAN + battery1 + + battery2 + adapter + USB1 + USB2 + LAN + HDMI + RSS-232 + Eraphone + Back Camera.
Pre-scan	01	BT+ WLAN + battery1 + + battery2 + adapter + USB1 + USB2 + LAN + HDMI + RSS-232 + Eraphone + Front Camera.
Pre-scan	05	Charging mode, keep EUT in charging with Adapter.
Final test	06	HDMI: Keep EUT working with external HDMI source.
Pre-scan	07	Idle mode, Keep the EUT at standby mode.
Pre-scan	08	LAN: Keep EUT working via LAN port.
Pre-scan	09	On mode, keep EUT working normally.
Pre-scan	18	USB1 Play: Keep EUT playing with USB stick.
Pre-scan	19	USB2 Play: Keep EUT playing with USB stick.
Pre-scan	20	RSS-232: Keep EUT connected to an external load via RSS-232.

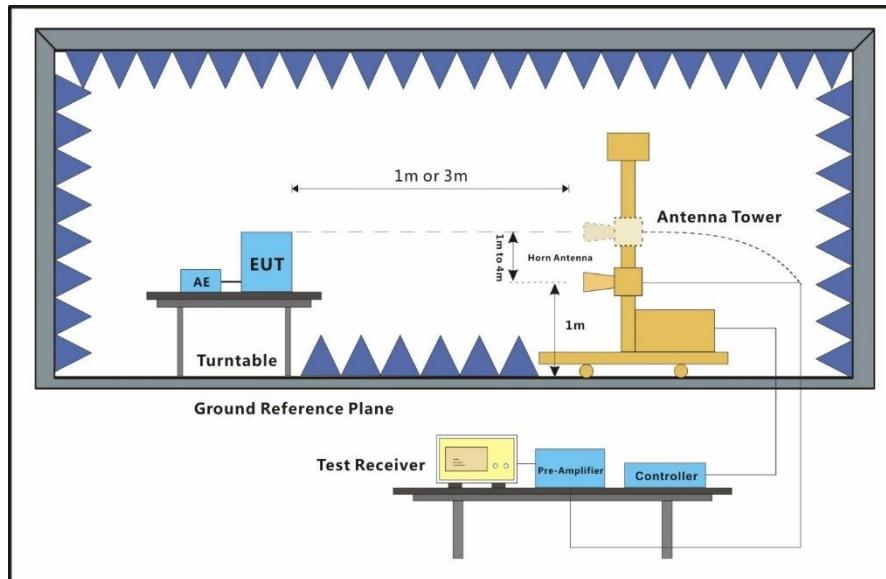
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on the reverse of the document or at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. | Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 | t (86-755) 26012053 | f (86-755) 26710594 | www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 | 邮编: 518103 | t (86-755) 26012053 | f (86-755) 26710594 | sgs.china@sgs.com

6.3.3 Test Setup Diagram**6.3.4 Measurement Procedure and Data**

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Use printed on the document page at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com

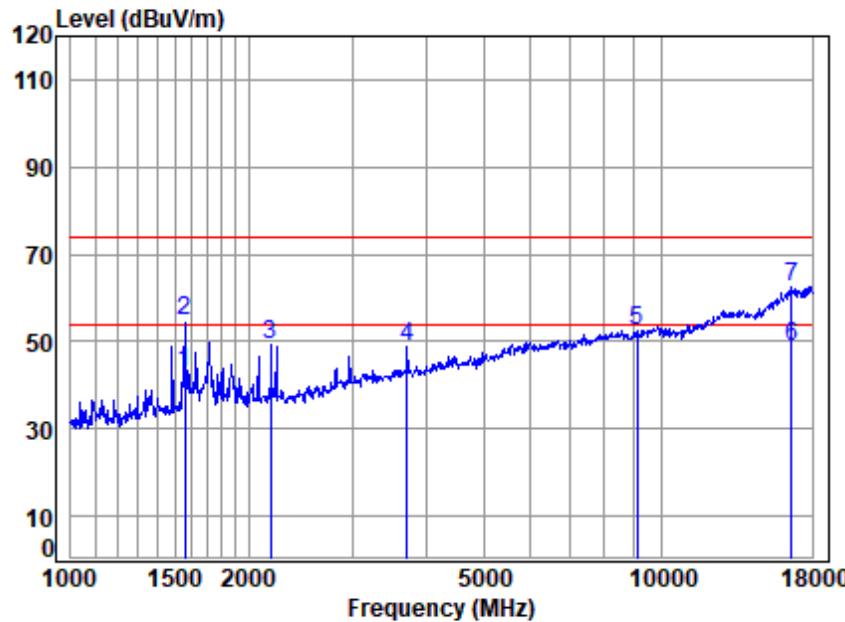


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (CEC) EEC Laboratory

Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 06; Polarity: Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No : 08916CR
Mode : 06
Note :

Freq	Cable	Ant	Preamp	Read	Limit	Over	Remark
	Loss	Factor	Factor	Level	Level	Line	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 1560.673	3.31	26.08	40.55	53.84	42.68	54.00	-11.32 Average
2 1560.673	3.31	26.08	40.55	65.89	54.73	74.00	-19.27 Peak
3 2182.346	3.99	28.15	40.88	58.23	49.49	74.00	-24.51 Peak
4 3714.443	5.86	32.15	41.91	52.83	48.93	74.00	-25.07 Peak
5 9099.724	10.41	37.28	39.35	44.27	52.61	74.00	-21.39 Peak
6 16600.640	14.69	42.28	40.54	32.57	49.00	54.00	-5.00 Average
7 16600.640	14.69	42.28	40.54	46.09	62.52	74.00	-11.48 Peak

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on the reverse of the document or at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

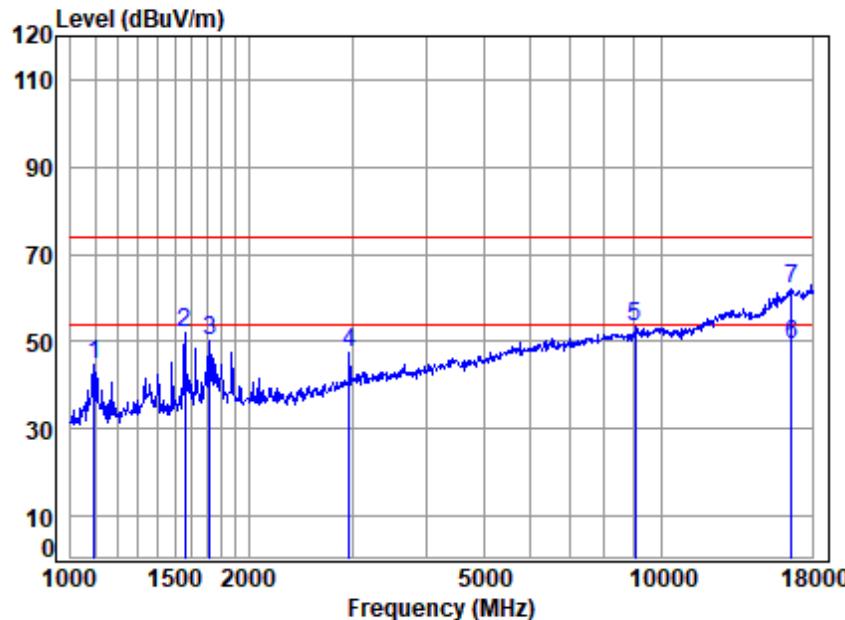
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch (SGS) is an EEC Laboratory.

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

Test Mode: 06; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 08916CR
Mode : 06
Note :

Freq	Cable	Ant	Preamp	Read	Limit	Over	Remark
	Loss	Factor	Factor	Level			
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 1096.904	2.57	24.10	40.19	58.18	44.66	74.00	-29.34 Peak
2 1560.673	3.31	26.08	40.55	63.07	51.91	74.00	-22.09 Peak
3 1716.864	3.44	26.74	40.64	60.76	50.30	74.00	-23.70 Peak
4 2964.712	4.84	30.76	41.19	53.00	47.41	74.00	-26.59 Peak
5 9047.272	10.35	37.24	39.44	45.01	53.16	74.00	-20.84 Peak
6 16600.640	14.69	42.28	40.54	32.65	49.08	54.00	-4.92 Average
7 16600.640	14.69	42.28	40.54	45.42	61.85	74.00	-12.15 Peak

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



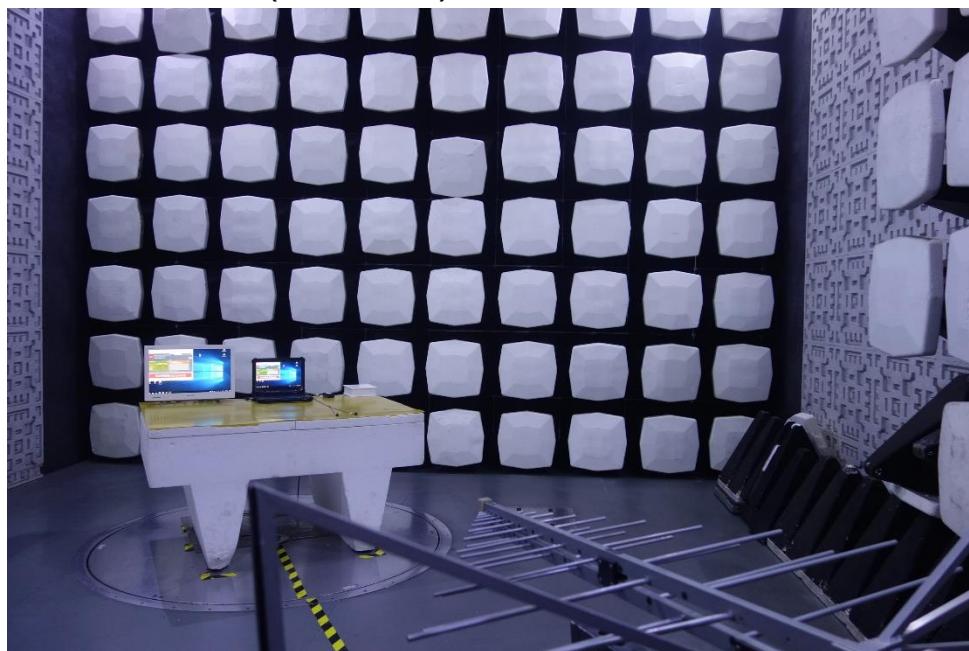
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS) is an EEC Laboratory.

7 Test Setup Photo

Conducted Emissions at Mains Terminals (150kHz-30MHz)



Radiated Emissions (30MHz-1GHz)

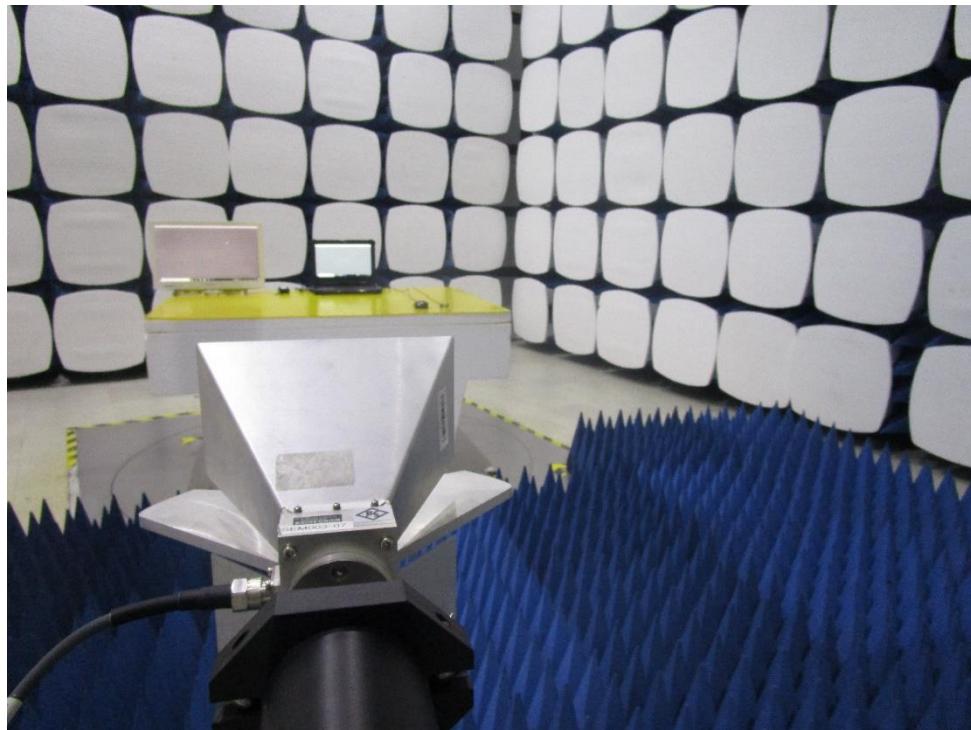


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (testing) EEC Laboratory
Room 105, Building A, Xintong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Radiated Emissions (above 1GHz)

8 EUT Constructional Details (EUT Photos)

Please Refer to external and internal photos for details.

- End of the Report -

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions of Service printed on <http://www.sgs.com/en/SGS-Conditions-Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SGS) is a EEC Laboratory.

Room 105, Building A, Xinxing Technology Industrial Park, No. 50 Fenghang Road, Xintian Community, Futian District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn

中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com