

TEST REPORT

Application No.: GZEM2602001052HS
Applicant: Guangdong Galanz Enterprises Co., Ltd.
Address of Applicant: No. 25 South Ronggui Avenue, Ronggui Street, Shunde District, Foshan City, Guangdong Province, China
Manufacturer: Guangdong Galanz Appliances Manufacturing Co., Ltd.
Address of Manufacturer: No. 3, East Xingpu Avenue, Maxin Industrial Zone, Huangpu Town, Zhongshan City, Guangdong Province, China
Factory: Guangdong Galanz Appliances Manufacturing Co., Ltd.
Address of Factory: No. 3, East Xingpu Avenue, Maxin Industrial Zone, Huangpu Town, Zhongshan City, Guangdong Province, China
Product Name: Microwave Oven
Model No.: Please refer to page 2.
Trade Mark: GALANZ, FRIGIDAIRE, VIDA, Royal Sovereign, RCA, MAINSTAYS, HAMILTON BEACH, Vissani, MAYTAG, Black+Decker, Whirlpool
Standard(s) : 47 CFR Part 18
Date of Receipt: 2026-02-04
Date of Test: 2026-02-05 to 2026-02-12
Date of Issue: 2026-02-24

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

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



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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

Model No.:

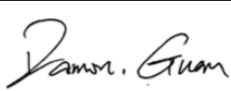
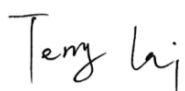
P100J30AP-F1, P100J30(X)-(Y), VSCMWE11S*W-10*, P100J30AYL-WE, OGCMF211BK-10, 043-7017-8, HH1001221, P100J30AL-WP, MS54100112162, MS54W100112162, P100J30AP-F3, EMW1120, P100J30AP-F2(L2), P100J30(X)(Y)(L2), P100J30(X)-(Y)(L2) (X may be L, P, SL, SP, TL, TP, AL, AP, ASL, ASP, ATL, ATP, AYL, EL, EP, ESL, ESP, ETL, ETP, ML, MP, MJ, MSL, MSP, MTL, MTP, MLY; Y may compose by one to five characters from A to Z and/or numbers from 0 to 9), 043-1536-8;HH1001221-V2, RMW30-1000B, RMW30-1000W, RMW30-1000SS, RMW1132-RED, EMW1132, RMW1132-BLACK, RMW1132-WHITE, RMW1134, RMW1178-B, EMW1120, MS8436127995-07, MS**36127995-**, HB8436127995-07, HB**36127995-** (Remark: * could be from 0 to 9 or from A to Z or blank), VSCMWE11S2W2102, MTCMPT11SS10, P100J30AP-PT(L2), BDCM11100SSB, P100J30ALH-UB(L2), WMCS4321TB**, WMCS4321TW**, WMCS4321TZ** (* could be from 0 to 9 or from A to Z or blank) ♣

♣

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



Revision Record			
Version	Report No.	Date	Remark
01	GZEM200901528101	2020-10-28	Original
02	GZEM200901528103	2021-05-07	Copy report: Added models and update series number(X).
03	GZEM200901528104	2021-06-09	Copy report: Added one model.
04	GZEM200901528105	2021-12-13	Copy report: Added new model number:
05	GZEM200901528106	2022-12-16	Copy report: Added one model.
06	GZEM200901528107	2023-06-21	Copy report: Added new model.
07	GZEM200901528108	2023-09-25	Copy report: Deleted information of factory 3; Added one model and trade mark.
08	GZEM200901528109	2024-02-27	Amendment report: Added new models;
09	GZEM200901528110	2024-03-29	Amendment report: Updated manufacturer and factory names; added new models and trademark.
10	GZEM200901528111	2024-12-23	Amendment report: Updated the address of applicant and address of factory; Added new models and trademark.
11	GZEM200901528112	2025-10-16	Amendment report: Updated factory information; Added trade mark and model.
12	GZEM200901528114	2026-02-24	Amendment report: Added trademark and models.

Authorized for issue by:			
			
		Damon Guan/Project Engineer	
Approved By			
		Terry Lai/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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.
Guangzhou Branch (Inspection & Testing Laboratory)

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 18	FCC/OST MP-5:1986	18.307	Pass
Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)		FCC/OST MP-5:1986	18.305(b)	Pass
Radiated Emissions (30MHz-1GHz)		FCC/OST MP-5:1986	18.305(b)	Pass
Radiated Emissions (above 1GHz)		FCC/OST MP-5:1986	18.305(b)	Pass
Output Power Measurement		FCC OST/MP-5:1986	FCC OST/MP-5:1986 Clause 4.3	Pass
Operating Frequency Measurement		FCC OST/MP-5:1986	18.301	Pass
Radiation Hazard Test		FCC OST/MP-5:1986	1 mW/cm ²	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.
Guangzhou Branch (EMC Laboratory)

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

Remark for report GZEM200901528101:

■ Declaration of EUT Family Grouping:

Model No.: P100J30AP-F1, P100J30(X)-(Y)

P: with microwave function only
110: denote the output power is 1000W
J30: denote different cavity in 30 liters.

Variable (X) may be

L,P, SL,SP, TL, TP,AL,AP, ASL,ASP,ATL,ATP,EL,EP, ESL,ESP, ETL,ETP, ML,MP, MSL,MSP,MTL,MTP,MYL.

Variable (Y) may compose by one to five characters from A to Z and/or numbers from 0 to 9. It represents the differences of the appearance.

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on the outer appearance.

Therefore, only one model P100J30AP-F1 was tested in this report.

Remark for copy report GZEM200901528103:

This report GZEM200901528103 was a supplement report based on the report GZEM200901528101. Only added models and update series number(X):

1. Added model number: VSCMW11S*W-10*, P100J30AYL-WE

2. Update series number(X)

Variable (X) may be

L, P, SL, SP, TL, TP, AL, AYL, AP, AYP, ASL, ASP, ATL, ATP, EL, EP, ESL, ESP, ETL, ETP, ML, MP, MSL, MSP, MTL, MTP, MYL.

Variable (Y) may compose by one to five characters from A to Z and/or numbers from 0 to 9. It represents the differences of the appearance.

The electrical circuit design, layout, components used and internal wiring are identical for models P100J30AP-F1 and P100J30AYL-WE, with only difference on the model name.

VSCMW11S*W-10* is identical to P100J30AYL-WE except for the model name.

Remark: * could be from 0 to 9 or from A to Z or blank

Therefore, the original data was kept in this report GZEM200901528103.



Remark for the report GZEM200901528104:

This report GZEM200901528104 was a supplement report based on original report GZEM200901528103, only added one model.

Added one model: OGCMF211BK-10

According to the declaration from the applicant, model OGCMF211BK-10 in this report is identical with model P100J30AP-F2 in original report in the electrical circuit design, PCB layout, components used and internal wiring, with only different in model name and brand name.

Therefore, test data in GZEM200901528103 was kept in this report GZEM200901528104.

Remark for the report GZEM200901528105:

This is a copy report base on GZEM200901528104 report. Only added new model number:

Model in report: GZEM200901528101	New models in copy report: GZEM200901528105
P100J30AP-F1	043-7017-8, HH1001221, P100J30AL-WP

According to the declaration from the applicant, models in this report GZEM200901528105 and model P100J30AP-F1 in report GZEM200901528101 were identical in mechanical and electrical construction, only difference being the model name and brand name.

Therefore, the original data was kept in this report GZEM200901528105.

Remark for copy report GZEM200901528106

This report GZEM200901528106 was a supplement report based on the report GZEM200901528105. Only added model MS54100112162.

According to the declaration from the applicant, model MS54100112162 in this report and model P100J30AP-F1 in previous report were identical in mechanical and electrical construction, only difference being the model name.

Therefore, the original data was kept in this report GZEM200901528106.

Remark for copy report GZEM200901528107

This report GZEM200901528107 was a supplement report based on the report GZEM200901528106. Only added model MS54W100112162, P100J30AP-F3.

According to the declaration from the applicant, model MS54W100112162, P100J30AP-F3 add in this report and model P100J30AP-F1 in previous report were identical in mechanical and electrical construction, only difference being the model name.

Therefore, the original data was kept in this report GZEM200901528107.



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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

Remark for copy report GZEM200901528108

This report GZEM200901528108 was a supplement report based on the report GZEM200901528107. With the follow changes:

1. Deleted information of factory 3.
2. Added trade mark: FRIGIDAIRE
3. Added one model: EMW1120

According to the declaration from the applicant, model EMW1120 add in this report and model P100J30AP-WP in previous report were identical in mechanical and electrical construction, only difference being the model name and trade mark.

Therefore, the original data was kept in this report GZEM200901528108.

Remark for report GZEM200901528109:

This report GZEM200901528109 is based on original report GZEM200901528108, with the following changes:

Added new models:

P100J30AP-F2(L2), P100J30(X)(Y)(L2)

X may be L, P, SL, SP, TL, TP, AL, AP, ASL, ASP, ATL, ATP, EL, EP, ESL, ESP, ETL, ETP, ML, MP, MJ, MSL, MSP, MTL, MTP, MLY

Y may compose by one to five characters from A to Z and/or numbers from 0 to 9. It represents the differences of the appearance.

According to the declaration from the applicant, models added in this report GZEM200901528109 and model P100J30AP-F1 in previous report were identical in mechanical and electrical construction, only with difference on appearance and model name.

All test results in report GZEM200901528108 were kept in this report GZEM200901528109.



Remark for the report GZEM200901528110:

This report GZEM200901528110 is based on original report GZEM200901528109, with the following changes:

1. Updated manufacturer and factory names.
2. Added new models and trademark as below:

According to the declaration from the applicant, the models added in this report and models in original report are totally same, only being different in the appearance, model name and trademark.

Model	Trademark
P100J30(X)-(Y)(L2)	Galanz
043-1536-8; HH1001221-V2	VIDA
RMW30-1000B	Royal Sovereign
RMW30-1000W	Royal Sovereign
RMW30-1000SS	Royal Sovereign
RMW1132-RED	RCA
EMW1132	FRIGIDAIRE
RMW1132-BLACK	RCA
RMW1132-WHITE	RCA
RMW1134	RCA
RMW1178-B	RCA
EMW1120	FRIGIDAIRE
MS8436127995-07 MS**36127995-**	MAINSTAYS
HB8436127995-07 HB**36127995-**	HAMILTON BEACH
VSCMWE11S2W2102	Vissani

3. Added trademark: VIDA, Royal Sovereign, RCA, MAINSTAYS, HAMILTON BEACH, Vissani.

Therefore, test data in GZEM200901528109 was kept in this report GZEM200901528110.



Remark for report GZEM200901528111:

This report GZEM200901528111 is based on original report GZEM200901528110, with the following changes:

1. Updated the address of applicant and address of factory.
2. Added trademark MAYTAG.
3. Added new models MTCMPT11SS10, P100J30AP-PT(L2).

According to the declaration from the applicant, models MTCMPT11SS10, P100J30AP-PT(L2) added in this report GZEM200901528111 and model P100J30AP-F1 in original report GZEM200901528110 were identical in mechanical and electrical construction, only with difference on the outer appearance, PCB and door open method.

Considering to the above difference, full tests were performed to model P100J30AP-PT(L2) and recorded the new test results in this report GZEM200901528111.

Other tests of original model please refer to original report GZEM200901528110 for details.

Remark for the report GZEM200901528112:

This report GZEM200901528112 was based on the report GZEM200901528111, with the follow changes:

1. Updated factory information from two to one.
2. Added new trade mark: Black+Decker.
3. Added new model: BDCM11100SSB.

According to the declaration from the applicant, model BDCM11100SSB in this report and models in original report were identical in electrical circuit design, layout, components used and internal wiring, only with difference on appearance and model name.

According to FCC Part 2 section 2.1043(b)(1), it is ok to update test report by Updated factory information, added new trade mark and new model without filing with the Commission.

FCC Part 2 section 2.1043(b)(1):

A Class I permissive change includes those modifications in the equipment which do not degrade the characteristics reported by the manufacturer and accepted by the Commission when certification is granted. No filing with the Commission is required for a Class I permissive change.

Therefore, all test results in report GZEM200901528111 were kept in this report GZEM200901528112.

Other test data please refer to original report GZEM200901528110 for details.



Remark for report GZEM200901528114:

This report GZEM200901528114 was based on original report GZEM200901528112, with the following changes:

1. Added trademark: Whirlpool
2. Added models P100J30ALH-UB(L2), WMCS4321TB**, WMCS4321TW**, WMCS4321TZ** (* could be from 0 to 9 or from A to Z or blank).

According to the declaration from the applicant, the added new models in this new report and models in original report were different in electrical circuit design, layout, components used, and with difference on trademark and model name.

Model P100J30ALH-UB(L2) the trade mark is GALANZ.

Models WMCS4321TB**, WMCS4321TW**, WMCS4321TZ** (* could be from 0 to 9 or from A to Z or blank) the trade mark is Whirlpool.

Considering to the above difference, full tests were performed to model P100J30ALH-UB(L2) and recorded the new test results in this report GZEM200901528114.

Other tests of original model please refer to original report GZEM200901528110, GZEM200901528112 for details.



3 Contents

	Page
1 Cover Page	1
2 Test Summary	4
3 Contents	11
4 General Information	13
4.1 Details of E.U.T.	13
4.2 Description of Support Units	13
4.3 Measurement Uncertainty	13
4.4 Test Location	13
4.5 Test Facility	14
4.6 Deviation from Standards	14
4.7 Abnormalities from Standard Conditions	14
5 Equipment List	15
6 Emission Test Results	18
6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)	18
6.1.1 E.U.T. Operation	18
6.1.1 Test Mode Description	18
6.1.2 Test Setup Diagram	18
6.1.3 Measurement Procedure and Data	19
6.2 Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)	21
6.2.1 E.U.T. Operation	21
6.2.2 Test Mode Description	21
6.2.3 Test Setup Diagram	21
6.2.4 Measurement Procedure and Data	22
6.3 Radiated Emissions (30MHz-1GHz)	26
6.3.1 E.U.T. Operation	26
6.3.2 Test Mode Description	26
6.3.3 Test Setup Diagram	26
6.3.4 Measurement Procedure and Data	27
6.4 Radiated Emissions (above 1GHz)	29
6.4.1 E.U.T. Operation	29
6.4.2 Test Mode Description	29
6.4.3 Test Setup Diagram	30
6.4.4 Measurement Procedure and Data	30
6.5 Output Power Measurement	41
6.5.1 E.U.T. Operation	41
6.5.2 Test Mode Description	41
6.5.3 Measurement Procedure and Data	42
6.6 Operating Frequency Measurement	43
6.6.1 E.U.T. Operation	44
6.6.2 Test Mode Description	44
6.6.3 Measurement Procedure and Data	44
6.7 Radiation Hazard Test	47



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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

6.7.1	E.U.T. Operation	47
6.7.2	Test Mode Description	47
6.7.3	Measurement Procedure and Data	47
7	Test Setup Photo	48
8	EUT Constructional Details (EUT Photos)	49



4 General Information

4.1 Details of E.U.T.

Power supply: Power supply: AC 120V, 60Hz

Test voltage: AC 120V 60Hz

Microwave frequency: 2450MHz±50MHz

Cable(s): About 1.0m x 3 wires unscreened AC mains cable.

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Load for microwave ovens for testing:

1000mL of water in the beaker for power output and frequency measurement.

One of 700 and the other of 300mL of water for second and third harmonic radiation measurement.

700mL of water for all other measurement

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at Mains Terminals (150kHz-30MHz)	3.13dB (150kHz to 30MHz)
Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)	3.12dB
Radiated Emissions (30MHz-1GHz)	4.61dB (30MHz-1GHz):3m; 4.38dB (30MHz-1GHz):10m
Radiated Emissions (above 1GHz)	4.72dB (1GHz-6GHz); 4.94dB (6GHz-18GHz)

Remark:

The U_{lab} (lab Uncertainty) is less than U_{CISPR} (CISPR Uncertainty) or U_{ETSI} (ETSI Uncertainty).

Emission decision rule:

- Compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit, marked as Pass in the report.
- Non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit, marked as Fail in the report.

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663

Tel: +86 20 82155555

No tests were sub-contracted.



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.
Guangzhou Branch EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

4.5 Test Facility

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

● ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

● SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

● FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

● ISED (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

● VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

● CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.6 Deviation from Standards

None

4.7 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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.
Guangzhou Branch EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 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
Coaxial Cable	HangTianXing	BL03-NMNM-6.00M	EMC0107	2025-08-12	2026-08-11
Shielding Room	ChangZhou ZhongYu	8m x 3m x 3.8m	EMC0306	2025-08-14	2028-08-13
Two-Line V-Network-GZ	Rohde & Schwarz	ENV216	EMC2135	2025-08-13	2026-08-12
EMI Test Receiver (9kHz-3.6GHz)	Rohde & Schwarz	ESR3	EMC2221	2025-11-18	2026-11-17
Test Software E3r	Audix	Ver.6.191211	GZE100-77	N/A	N/A
Artificial Mains Network (LISN)	AFJ Instruments	LT32C	EMC2046	2025-08-12	2026-08-11

Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2025-08-13	2028-08-12
Coaxial cable	Mirco-COAX UTIFLEX	311A	EMC0540	2024-08-19	2026-08-18
Amplifier (9kHz-1.3GHz)	HP	8447F	EMC2065	2025-11-25	2026-11-24
Active Loop Antenna-RED	ETS-Lindgren	6502	EMC2190	2024-04-16	2026-04-15
EMI Test Receiver (9kHz-7GHz)	Rohde & Schwarz	ESR7	EMC2220	2025-11-18	2026-11-17
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2025-08-13	2028-08-12
Coaxial cable	Mirco-COAX UTIFLEX	311A	EMC0540	2024-08-19	2026-08-18
Amplifier (9kHz-1.3GHz)	HP	8447F	EMC2065	2025-11-25	2026-11-24
EMI Test Receiver (9kHz-7GHz)	Rohde & Schwarz	ESR7	EMC2220	2025-11-18	2026-11-17
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Trilog Broadband Antenna (25MHz-2GHz)	Schwarzbeck Mess-Elektronik	VULB 9168	EMC2174	2025-04-21	2027-04-20



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.
Guangzhou Branch (CMAA, CNAS, EEC Laboratory)

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

Radiated Emissions (above 1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
1-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2025-08-11	2026-08-10
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2025-08-11	2026-08-10
Chamber cable (Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2024-08-19	2026-08-18
Horn Antenna (1-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2025-05-13	2027-05-12
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2025-08-12	2026-08-11
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2025-08-12	2026-08-11
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-23	2026-12-22
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

Output Power Measurement					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Digital thermometer	FLUKE	51_2	EMC2200	2025-07-10	2026-07-09
Digital power analyzer for harmonics & flicker testing	EMTEST	DPA 500N	EMC2235	2025-11-18	2026-11-17
Programmable multifunctional ac/dc power source	EMTEST	NETWAVE 7-400	EMC2234	2025-11-18	2026-11-17
NET.Control	EMTEST	Ver 3.2.3	GZE100-80	N/A	N/A

Operating Frequency Measurement					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2025-08-11	2026-08-10
Chamber cable (Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2024-08-19	2026-08-18
Horn Antenna (1-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2025-05-13	2027-05-12
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-23	2026-12-22
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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. Guangzhou Branch (Inspection & Testing Laboratory)
 No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
 t (86-20) 82155555 www.sgsgroup.com.cn
 中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com



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

EMC-TRF-01 Rev 2.1

Report No.: GZEM200901528114

Page: 17 of 49

Radiation Hazard Test					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Electric Field Probe(100KHz-3GHz)	WANDEL & GOLTERMANN	EMR-20	EMC0907	2025-05-14	2026-05-13

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2025-06-03	2026-06-02



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch (EMC Laboratory)

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 <https://www.sgs.com/en/Terms-and-Conditions>. 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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

6.1.3 Measurement Procedure and Data

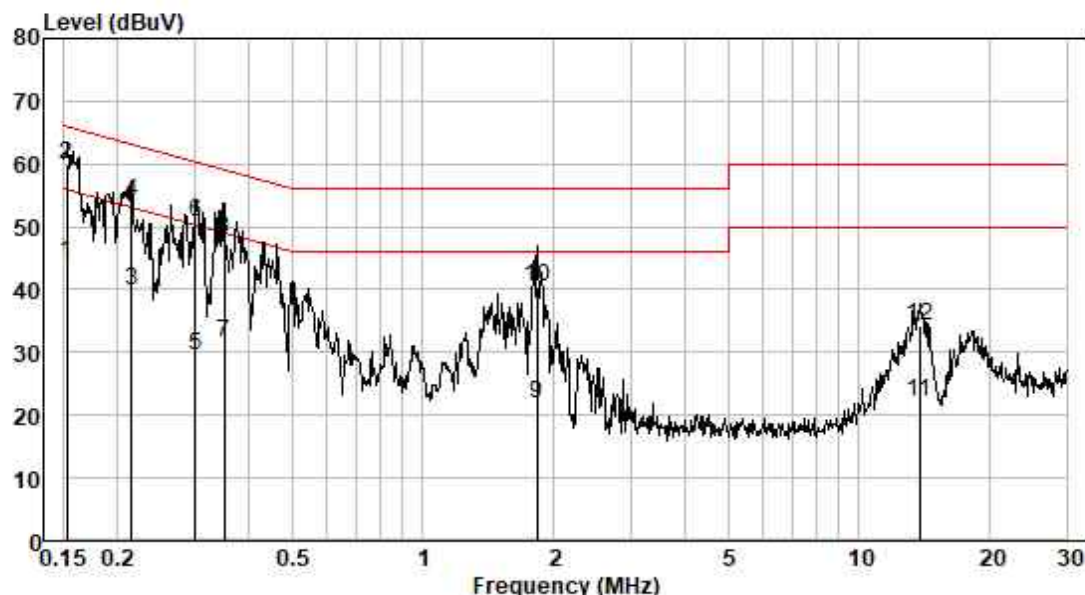
Frequency range: 150KHz-30MHz

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.

The red line show in graphic is the limit in standard used in this section.

Measured Level = Read level + Cable Loss + LISN Factor

Test Mode: 00; Line: Live line

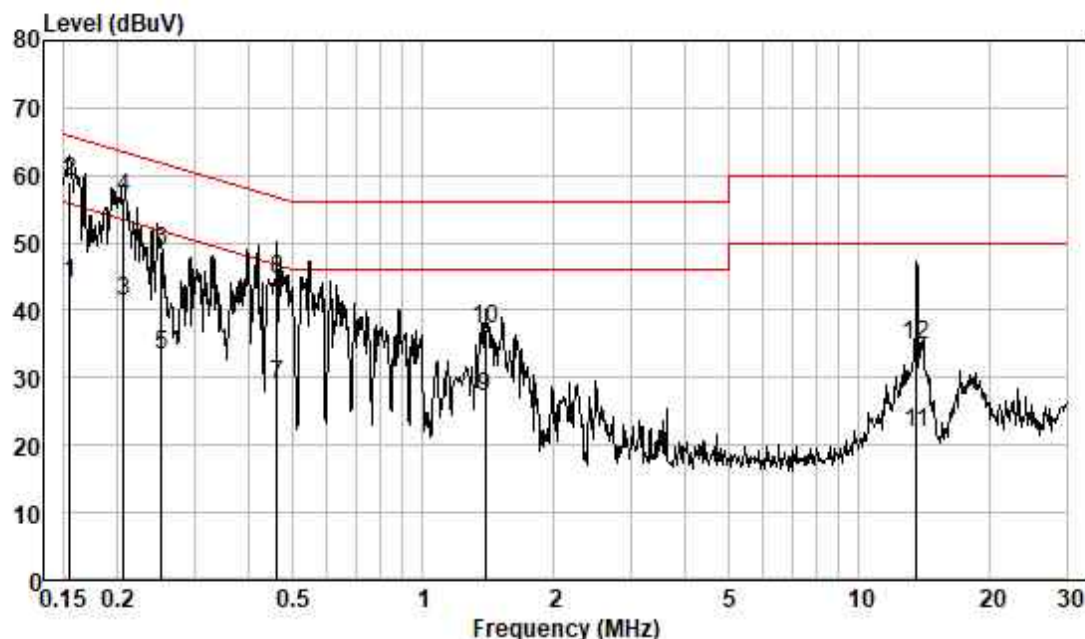


Pol : LINE
Mode :
Model :
Power :

	Frequeunc MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
1	0.152	34.79	0.04	9.57	44.40	55.87	-11.47	Average
2	0.152	50.23	0.04	9.57	59.84	65.87	-6.03	QP
3	0.215	30.20	0.04	9.57	39.81	53.01	-13.20	Average
4	0.215	44.33	0.04	9.57	53.94	63.01	-9.07	QP
5	0.300	20.07	0.04	9.54	29.65	50.24	-20.59	Average
6	0.300	41.10	0.04	9.54	50.68	60.24	-9.56	QP
7	0.350	21.90	0.05	9.59	31.54	48.96	-17.42	Average
8	0.350	38.45	0.05	9.59	48.09	58.96	-10.87	QP
9	1.829	12.13	0.12	9.61	21.86	46.00	-24.14	Average
10	1.829	30.57	0.12	9.61	40.30	56.00	-15.70	QP
11	13.768	12.14	0.31	9.82	22.27	50.00	-27.73	Average
12	13.768	24.08	0.31	9.82	34.21	60.00	-25.79	QP



Test Mode: 00; Line: Neutral Line



Pol : NEUTRAL
Mode :
Model :
Power :

	Frequency MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
1	0.155	34.30	0.04	9.52	43.86	55.74	-11.88	Average
2	0.155	49.37	0.04	9.52	58.93	65.74	-6.81	QP
3	0.206	31.82	0.04	9.55	41.41	53.36	-11.95	Average
4	0.206	46.97	0.04	9.55	56.56	63.36	-6.80	QP
5	0.252	23.75	0.04	9.53	33.32	51.69	-18.37	Average
6	0.252	39.23	0.04	9.53	48.80	61.69	-12.89	QP
7	0.464	19.44	0.05	9.57	29.06	46.63	-17.57	Average
8	0.464	34.96	0.05	9.57	44.58	56.63	-12.05	QP
9	1.388	17.52	0.10	9.54	27.16	46.00	-18.84	Average
10	1.388	27.59	0.10	9.54	37.23	56.00	-18.77	QP
11	13.551	11.61	0.31	9.87	21.79	50.00	-28.21	Average
12	13.551	24.52	0.31	9.87	34.70	60.00	-25.30	QP



6.2 Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC/OST MP-5:1986
 Test Engineer: Bob Qu
 Measurement Distance: 3 m
 Frequency Range: 9kHz to 30MHz
 Detector: Peak for pre-scan, Average for the final result
 (200Hz Resolution Bandwidth for 9kHz to 150kHz;
 9kHz Resolution Bandwidth for 150kHz to 30MHz)

Equipment:	Operating frequency:	RF Power generated by equipment (watts):	Limit dB(uV/m) average:
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	957.6	Limit=20lg(25*SQRT(power/500))+20lg(300/3)= 70.78 dBuV/m @ 3m distance.

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.0 °C

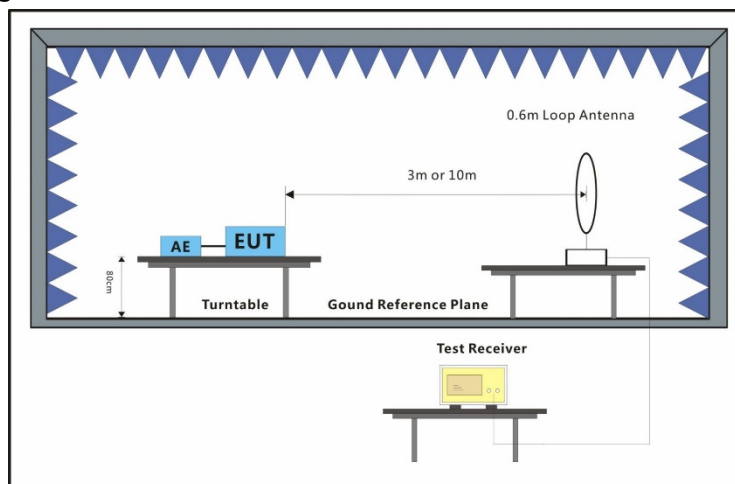
Humidity: 54.3 % RH

Atmospheric Pressure: 1024 mbar

6.2.2 Test Mode Description

Pre-scan/ Mode	Description
Final test Code	
Final test 00	Test the EUT in microwave mode with maximum power.
Pre-scan 01	Test the EUT in microwave mode with middle power.
Pre-scan 02	Test the EUT in microwave mode with lowest power.

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

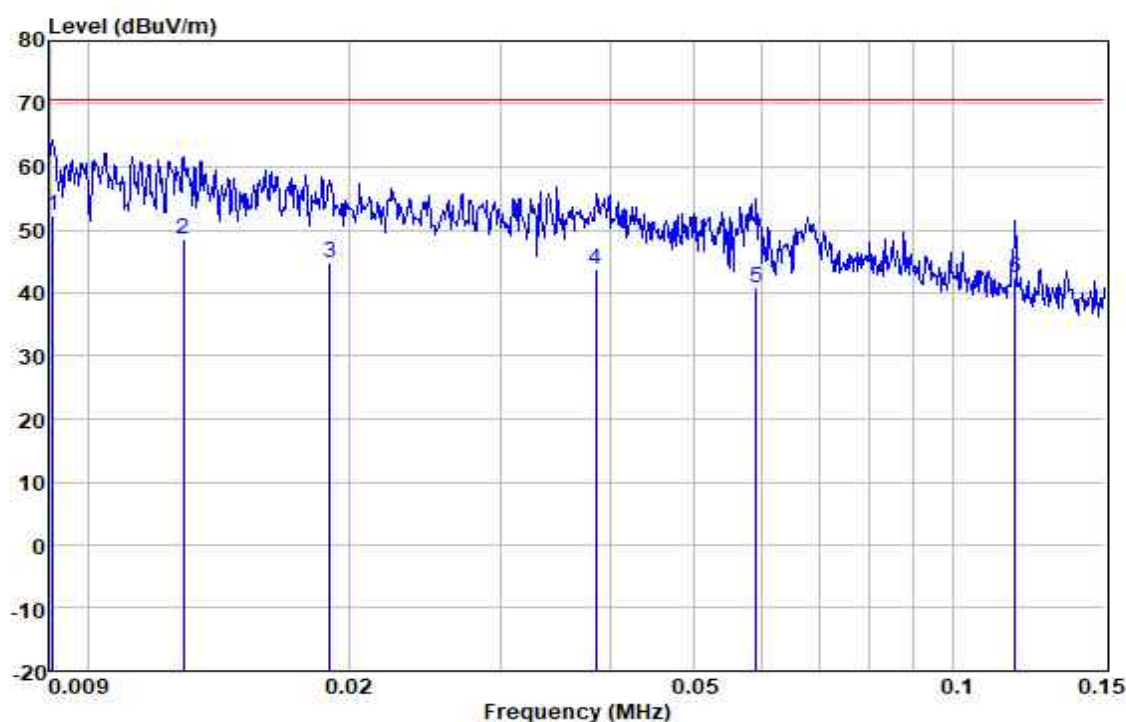
Frequency range: 9KHz-30MHz

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 loop antenna with 2 orthogonal polarities.

The red line show in graphic is the limit in standard used in this section.

Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

Test Mode: 00; Polarity: Horizontal

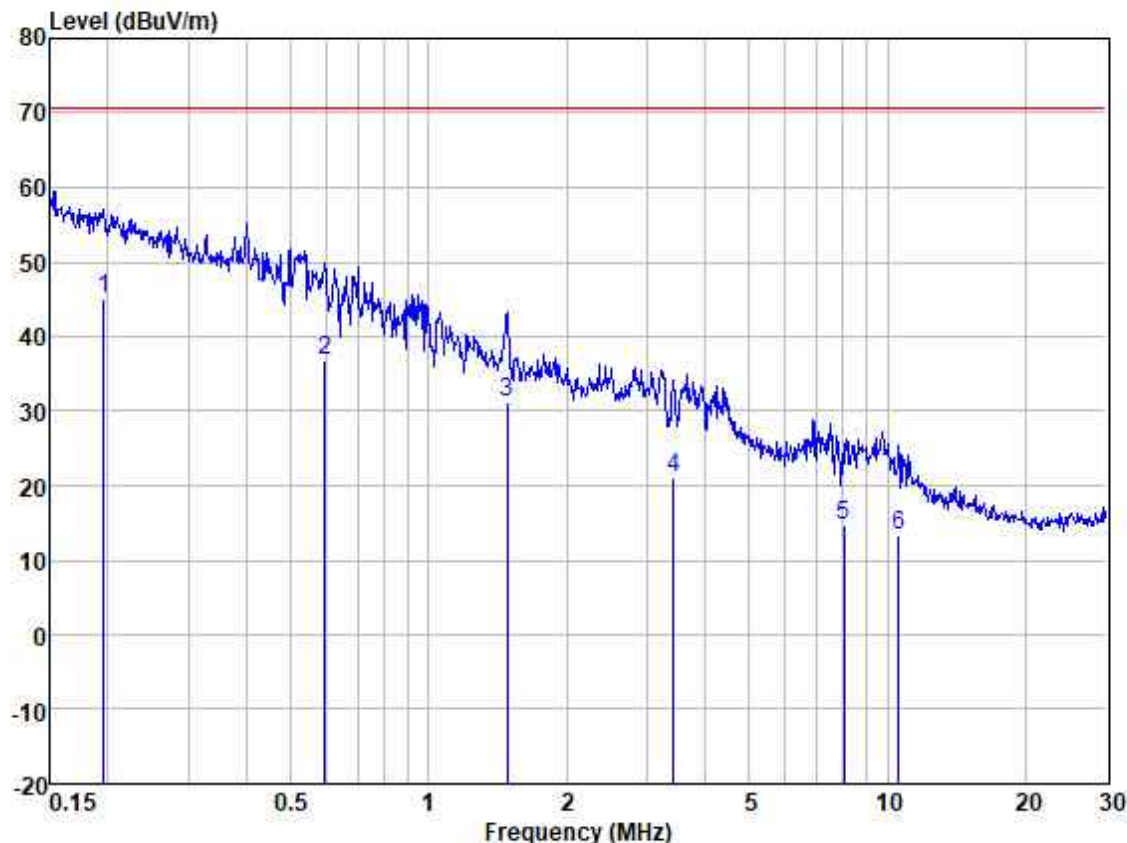


Site : SGS
t :
Model :
Power :
Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	0.009	61.61	18.94	0.00	28.40	52.15	70.78	-18.63	HORIZONTAL	Average
2	0.013	59.96	17.13	0.00	28.46	48.63	70.78	-22.15	HORIZONTAL	Average
3	0.019	59.08	14.35	0.00	28.56	44.87	70.78	-25.91	HORIZONTAL	Average
4	0.039	60.52	12.48	0.01	29.16	43.85	70.78	-26.93	HORIZONTAL	Average
5	0.059	58.02	12.11	0.02	29.30	40.85	70.78	-29.93	HORIZONTAL	Average
6	0.118	59.96	11.94	0.02	29.40	42.52	70.78	-28.26	HORIZONTAL	Average



Test Mode: 00; Polarity: Horizontal

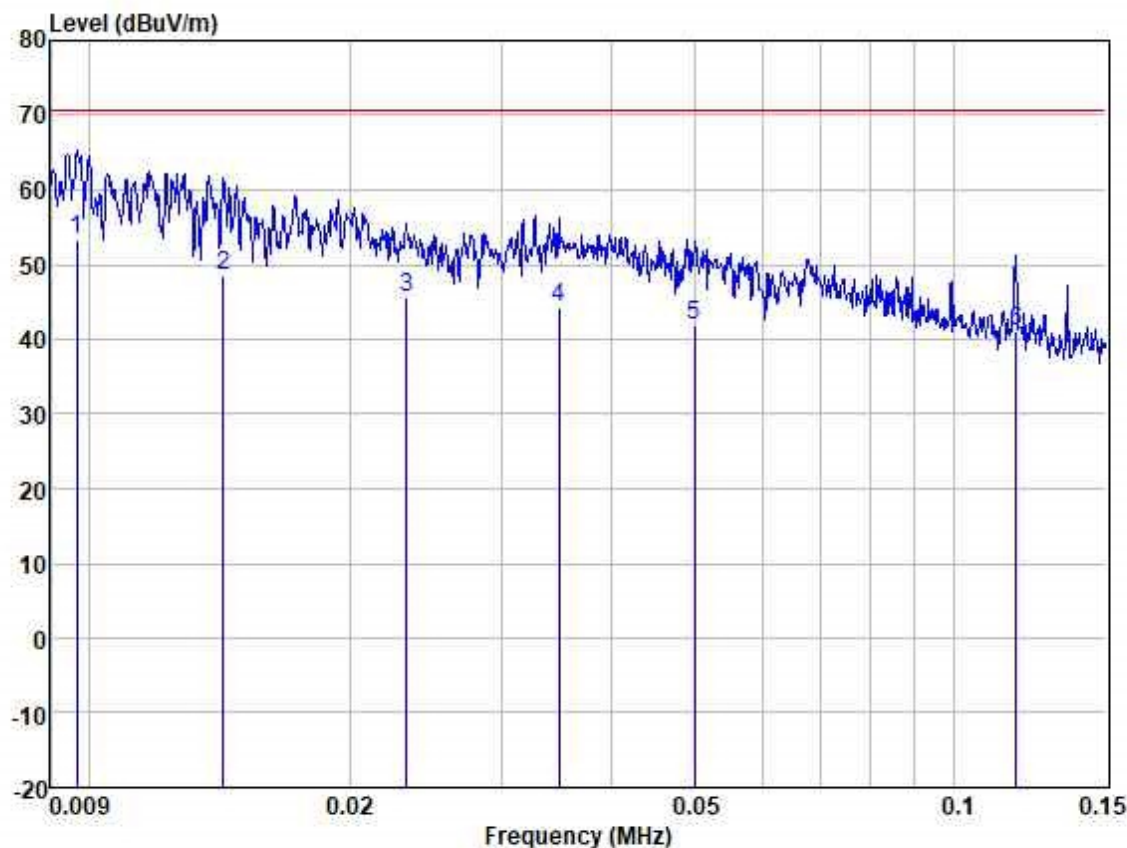


Site : SGS
t :
Model :
Power :
Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	0.195	62.49	11.85	0.03	29.40	44.97	70.78	-25.81	HORIZONTAL	Average
2	0.595	54.26	11.81	0.06	29.40	36.73	70.78	-34.05	HORIZONTAL	Average
3	1.487	48.68	11.84	0.08	29.39	31.21	70.78	-39.57	HORIZONTAL	Average
4	3.417	38.61	11.77	0.16	29.34	21.20	70.78	-49.58	HORIZONTAL	Average
5	8.020	32.00	11.73	0.20	29.30	14.63	70.78	-56.15	HORIZONTAL	Average
6	10.564	32.07	10.47	0.21	29.30	13.45	70.78	-57.33	HORIZONTAL	Average



Test Mode: 00; Polarity: Vertical

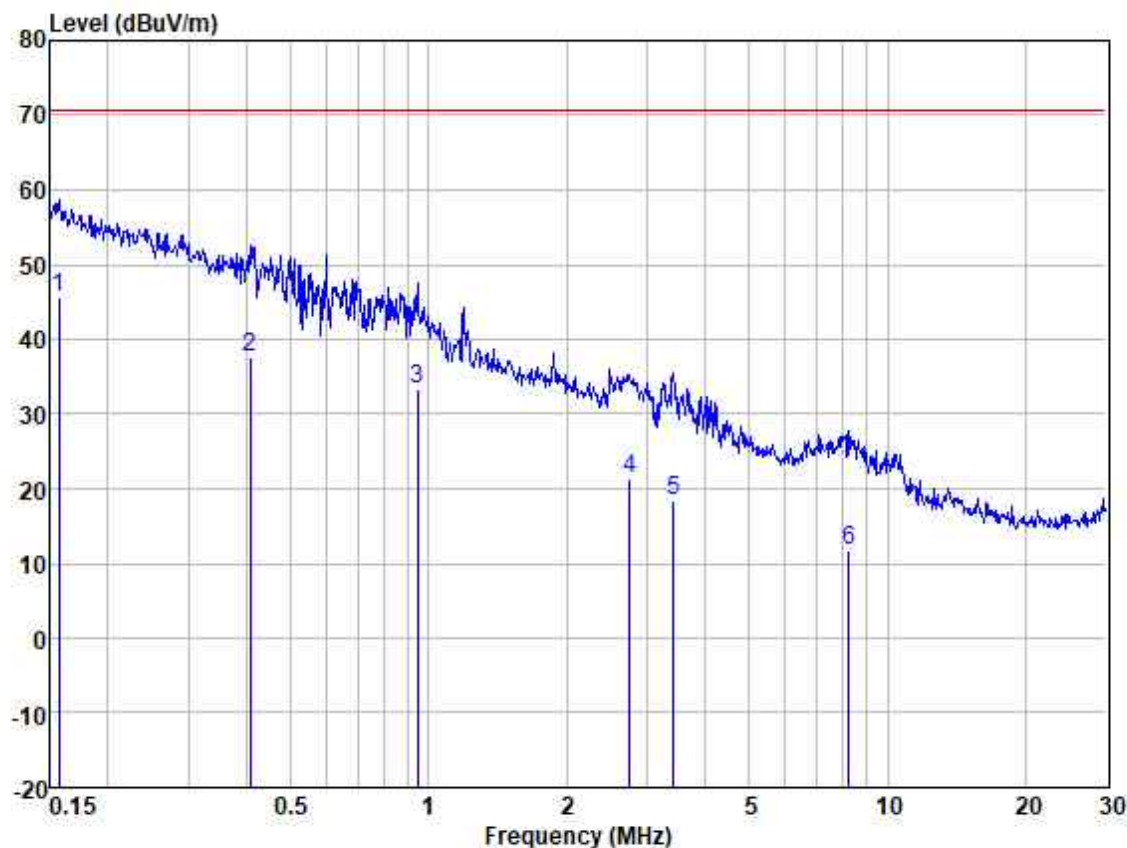


Site : SGS
t :
Model :
Power :
Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	0.010	62.96	18.74	0.00	28.41	53.29	70.78	-17.49	VERTICAL	Average
2	0.014	61.20	15.80	0.00	28.48	48.52	70.78	-22.26	VERTICAL	Average
3	0.023	60.38	13.82	0.00	28.64	45.56	70.78	-25.22	VERTICAL	Average
4	0.035	60.80	12.67	0.01	29.09	44.39	70.78	-26.39	VERTICAL	Average
5	0.050	59.01	12.20	0.02	29.26	41.97	70.78	-28.81	VERTICAL	Average
6	0.118	58.61	11.94	0.02	29.40	41.17	70.78	-29.61	VERTICAL	Average



Test Mode: 00; Polarity: Vertical



Site : SGS
t :
Model :
Power :
Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	0.156	63.12	11.88	0.02	29.40	45.62	70.78	-25.16	VERTICAL	Average
2	0.408	55.13	11.86	0.06	29.40	37.65	70.78	-33.13	VERTICAL	Average
3	0.948	50.92	11.85	0.07	29.40	33.44	70.78	-37.34	VERTICAL	Average
4	2.750	38.68	11.84	0.12	29.37	21.27	70.78	-49.51	VERTICAL	Average
5	3.417	35.81	11.77	0.16	29.34	18.40	70.78	-52.38	VERTICAL	Average
6	8.235	29.37	11.46	0.21	29.30	11.74	70.78	-59.04	VERTICAL	Average



6.3 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC/OST MP-5:1986
 Test Engineer: Bob Qu
 Measurement Distance: 10 m
 Frequency Range: 30 MHz to 1 GHz
 Detector: Peak for pre-scan, average for the final result
 (120 kHz Resolution Bandwidth for 30 MHz to 1 GHz)

Equipment:	Operating frequency:	RF Power generated by equipment (watts):	Limit dB(uV/m) average:
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	957.6	Limit=20lg(25*SQRT(power/500))+20lg(300/10)= 60.32 dBuV/m @ 10m distance.

6.3.1 E.U.T. Operation

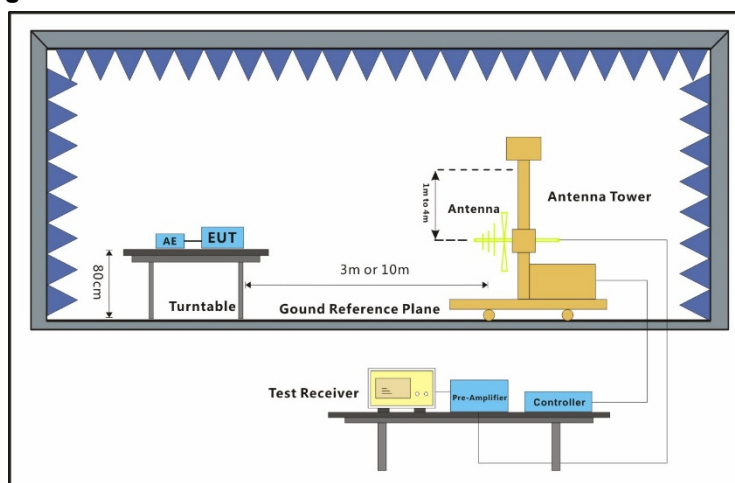
Operating Environment:

Temperature: 22.0 °C Humidity: 53.9 % RH Atmospheric Pressure: 1024 mbar

6.3.2 Test Mode Description

Pre-scan/ Mode	Description
Final test Code	
Final test 00	Test the EUT in microwave mode with maximum power.
Pre-scan 01	Test the EUT in microwave mode with middle power.
Pre-scan 02	Test the EUT in microwave mode with lowest power.

6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

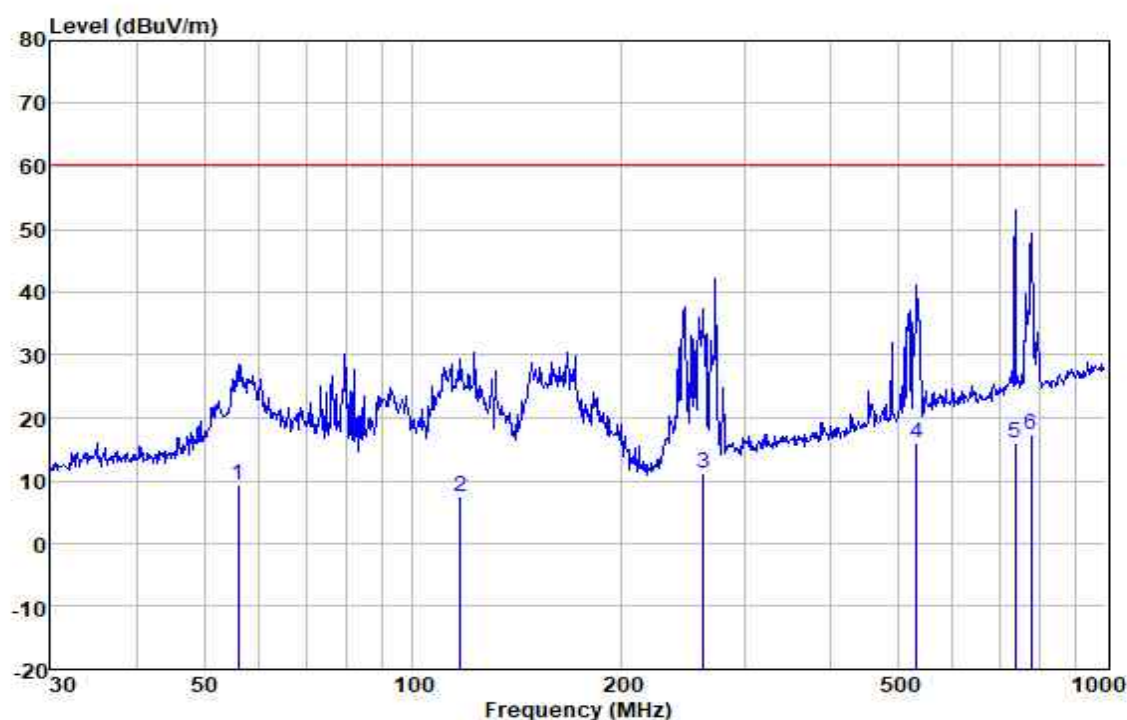
Frequency range: 30MHz-1GHz

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 BiConiLog antenna with 2 orthogonal polarities.

The red line show in graphic is the limit in standard used in this section.

Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

Test Mode: 00; Polarity: Horizontal

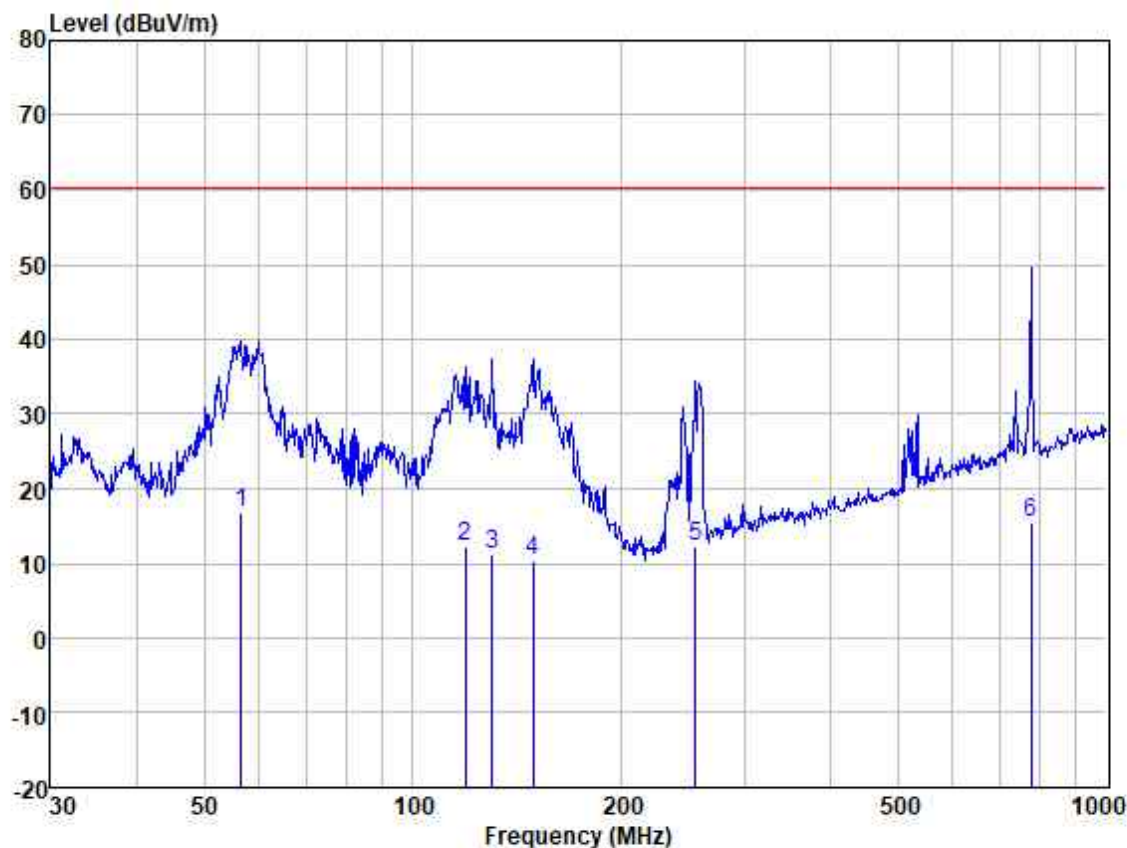


Site : SGS
t :
Model :
Power :
Test Mode :

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1 56.001	22.97	13.61	0.77	27.94	9.41	60.32	-50.91	HORIZONTAL	Average
2 116.950	23.15	11.12	0.89	27.78	7.38	60.32	-52.94	HORIZONTAL	Average
3 261.975	24.69	12.18	1.59	27.25	11.21	60.32	-49.11	HORIZONTAL	Average
4 531.964	23.96	18.59	1.94	28.49	16.00	60.32	-44.32	HORIZONTAL	Average
5 739.661	19.76	22.17	2.41	28.32	16.02	60.32	-44.30	HORIZONTAL	Average
6 779.607	20.86	22.35	2.50	28.30	17.41	60.32	-42.91	HORIZONTAL	Average



Test Mode: 00; Polarity: Vertical



Site : SGS
t :
Model :
Power :
Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	56.593	30.24	13.61	0.77	27.94	16.68	60.32	-43.64	VERTICAL	Average
2	119.018	27.95	11.28	0.89	27.78	12.34	60.32	-47.98	VERTICAL	Average
3	129.923	25.87	12.27	0.92	27.76	11.30	60.32	-49.02	VERTICAL	Average
4	148.963	23.66	13.42	0.98	27.73	10.33	60.32	-49.99	VERTICAL	Average
5	255.623	25.90	12.07	1.57	27.26	12.28	60.32	-48.04	VERTICAL	Average
6	779.607	18.96	22.35	2.50	28.30	15.51	60.32	-44.81	VERTICAL	Average



6.4 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC/OST MP-5:1986
 Test Engineer: Lily Kuang
 Limit:
 Measurement Distance: 3 m
 Frequency Range: Above 1GHz
 Detector: Peak for pre-scan, Average for the final result
 (1MHz Resolution Bandwidth for 1000MHz Above)

Equipment:	Operating frequency:	RF Power generated by equipment (watts):	Limit dB(uV/m) average:
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	957.6	Limit=20lg(25*SQRT(power/500))+20lg(300/3)= 70.78 dBuV/m @ 3m distance.

6.4.1 E.U.T. Operation

Operating Environment:

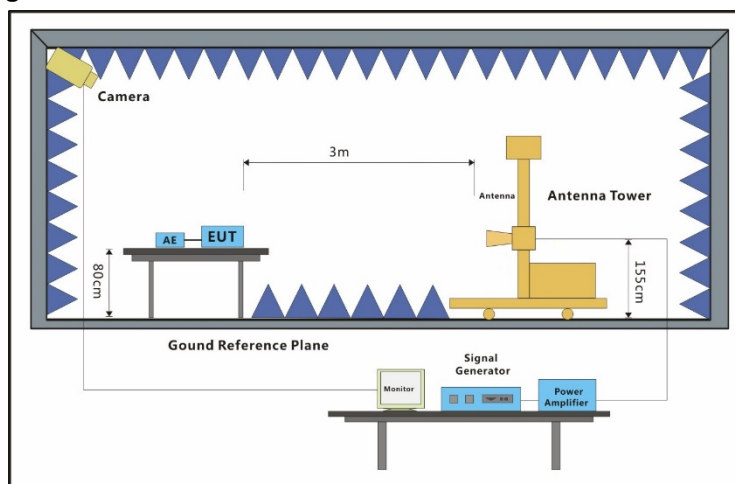
Temperature: 24.4 °C Humidity: 55.9 % RH Atmospheric Pressure: 1024 mbar

6.4.2 Test Mode Description

Pre-scan/ Mode	Final test Code	Description
Final test	00	Test the EUT in microwave mode with maximum power.
Pre-scan	01	Test the EUT in microwave mode with middle power.
Pre-scan	02	Test the EUT in microwave mode with lowest power.



6.4.3 Test Setup Diagram



6.4.4 Measurement Procedure and Data

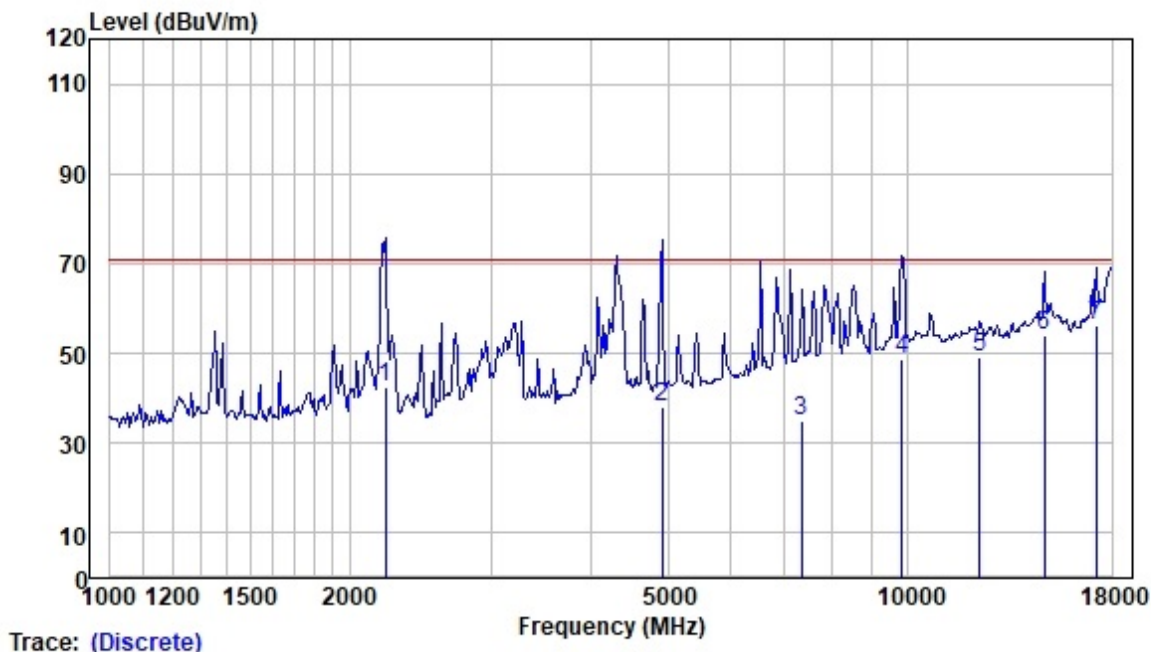
Frequency range: Above 1GHz

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.

The red line show in graphic is the limit in standard used in this section.

Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor

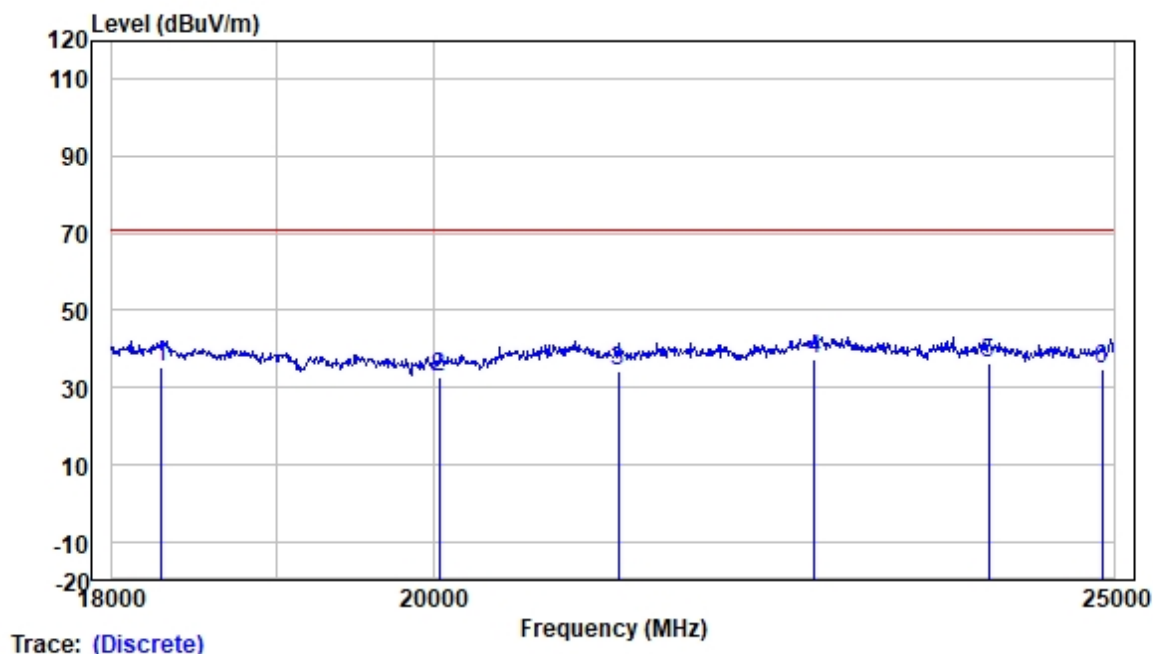
Test Mode: 00; Polarity: Vertical



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2214.11	50.02	27.12	3.27	37.79	42.62	70.78	-28.16	VERTICAL	Average
2	4916.49	38.95	31.69	4.87	37.34	38.17	70.78	-32.61	VERTICAL	Average
3	7356.36	32.34	34.28	5.67	37.12	35.17	70.78	-35.61	VERTICAL	Average
4	9809.92	39.53	38.95	7.14	37.10	48.52	70.78	-22.26	VERTICAL	Average
5	12290.70	38.64	39.39	7.86	36.88	49.01	70.78	-21.77	VERTICAL	Average
6	14788.15	39.56	42.17	8.79	36.51	54.01	70.78	-16.77	VERTICAL	Average
7	17186.53	40.36	42.61	9.48	36.41	56.04	70.78	-14.74	VERTICAL	Average

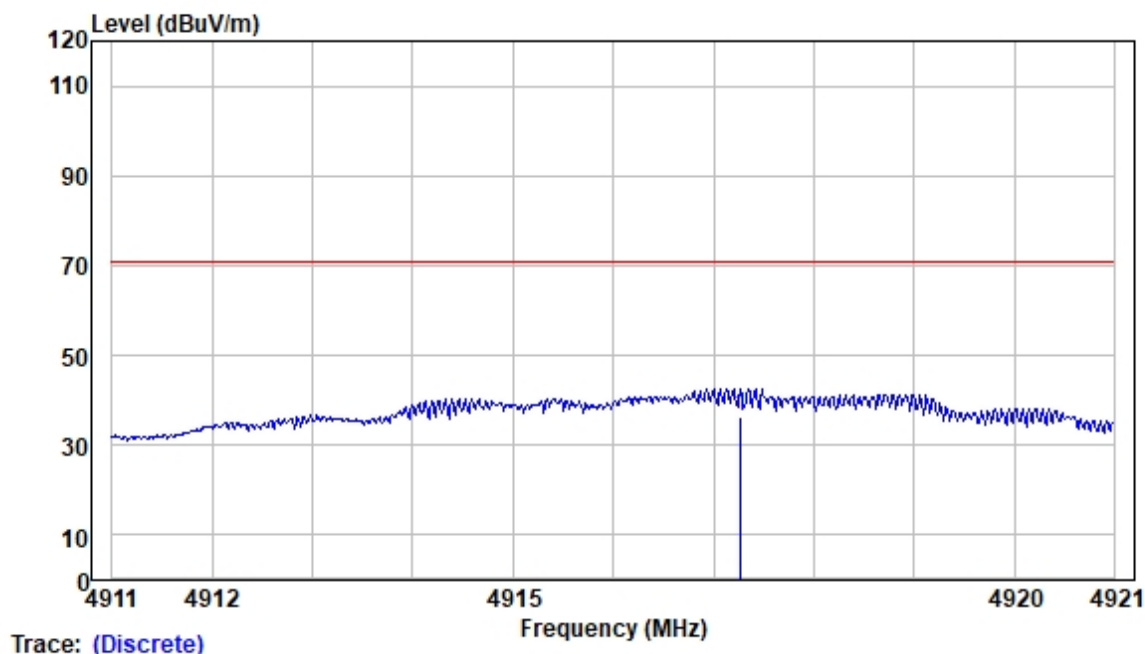


Test Mode: 00; Polarity: Vertical



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	18298.10	34.61	36.69	3.08	39.15	35.23	70.78	-35.55	VERTICAL	Average
2	20041.25	32.82	37.11	2.99	40.42	32.50	70.78	-38.28	VERTICAL	Average
3	21248.07	32.44	37.65	3.25	38.94	34.40	70.78	-36.38	VERTICAL	Average
4	22661.18	34.49	38.23	3.34	38.63	37.43	70.78	-33.35	VERTICAL	Average
5	23994.22	32.06	38.70	3.45	37.79	36.42	70.78	-34.36	VERTICAL	Average
6	24901.64	32.34	39.13	3.38	39.98	34.87	70.78	-35.91	VERTICAL	Average

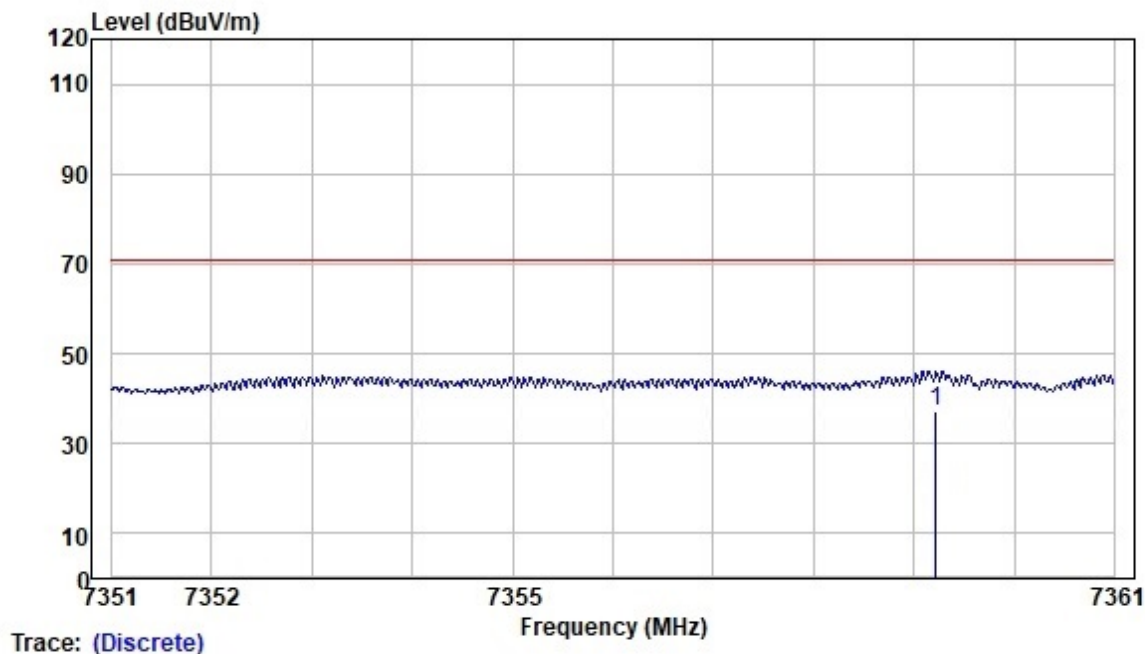
Test Mode: 00; Polarity: Vertical



	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4917.27	37.18	31.69	4.87	37.34	36.40	70.78	-34.38	VERTICAL	Average



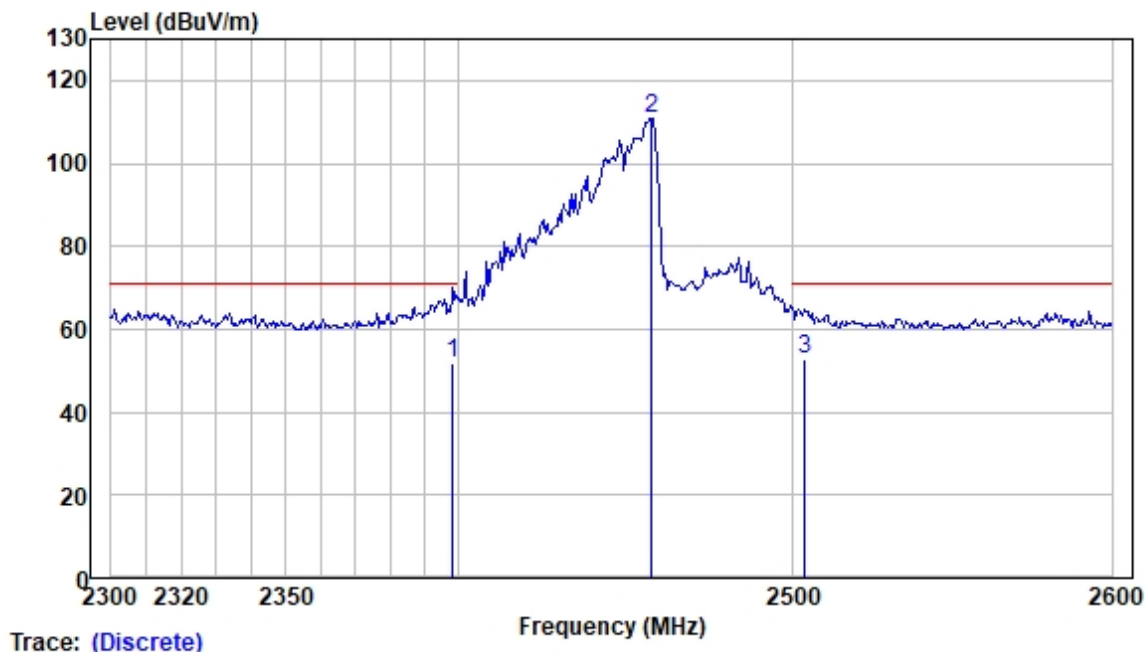
Test Mode: 00; Polarity: Vertical



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	7359.22	31.77	34.28	5.67	37.20	34.52	70.78	-36.26	VERTICAL	Average

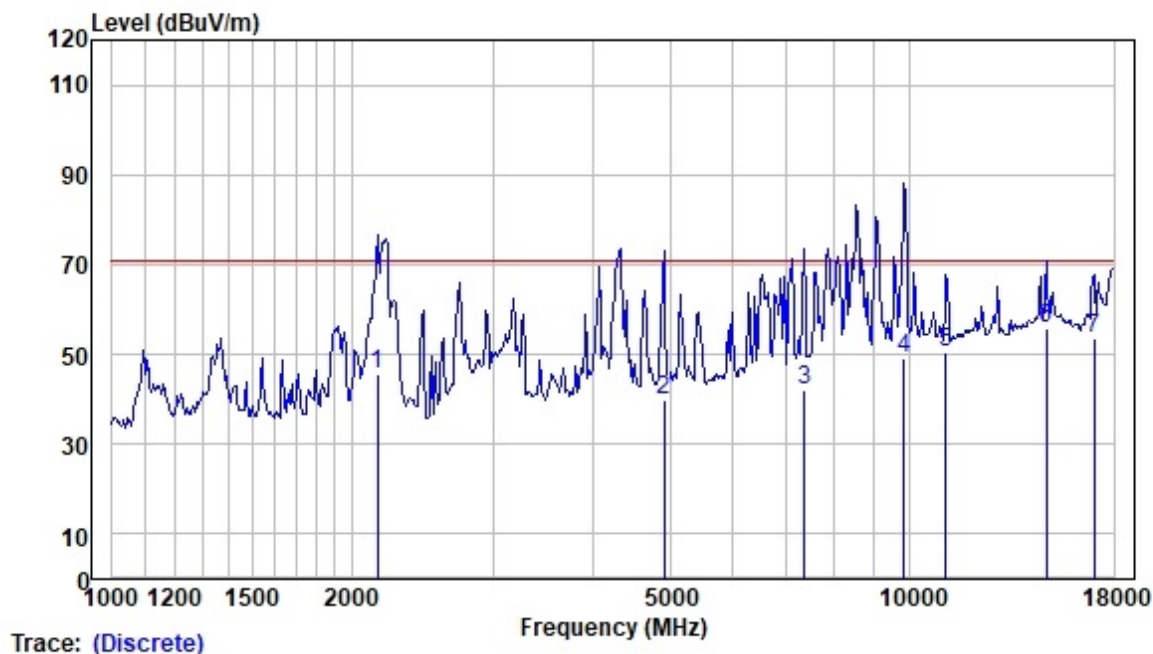


Test Mode: 00; Polarity: Vertical



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2398.49	20.93	27.65	3.45	0.00	52.03	70.78	-18.75	VERTICAL	Average
2	2457.43	79.62	27.72	3.47	0.00	110.81	----	----	VERTICAL	peak
3	2503.96	21.61	27.78	3.49	0.00	52.88	70.78	-17.90	VERTICAL	Average

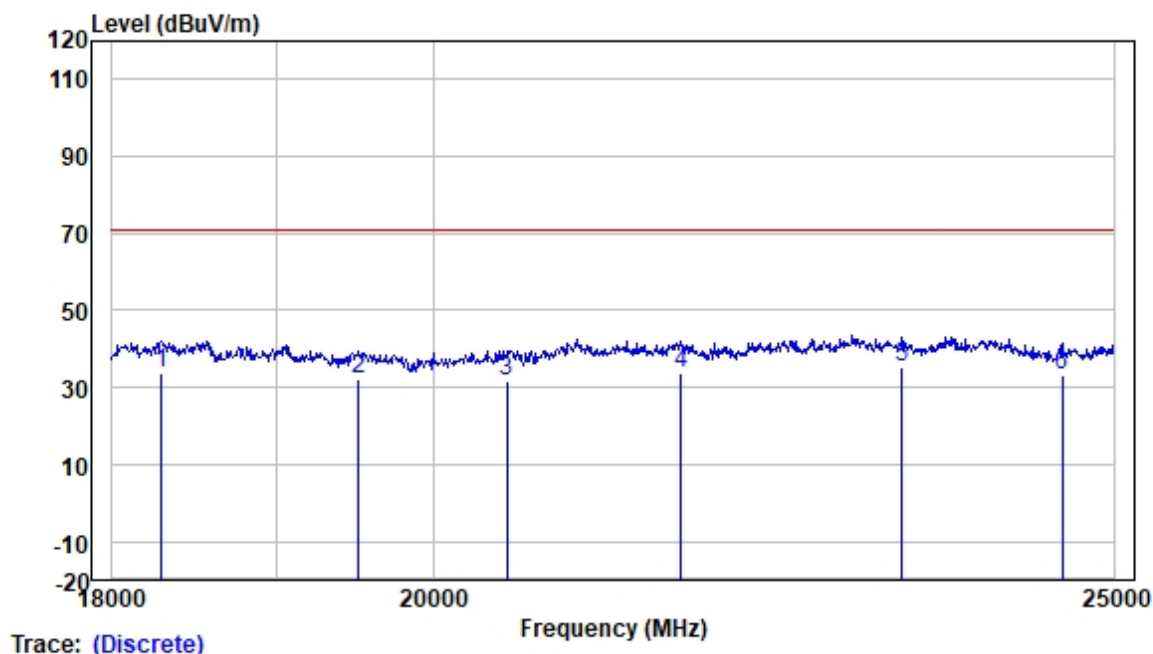
Test Mode: 00; Polarity: Horizontal



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2151.03	53.40	26.91	3.21	37.79	45.73	70.78	-25.05	HORIZONTAL	Average
2	4924.30	41.99	30.67	4.59	37.46	39.79	70.78	-30.99	HORIZONTAL	Average
3	7368.74	36.65	36.41	6.00	37.18	41.88	70.78	-28.90	HORIZONTAL	Average
4	9828.94	40.10	38.98	7.15	37.10	49.13	70.78	-21.65	HORIZONTAL	Average
5	11076.10	39.31	40.72	7.53	36.98	50.58	70.78	-20.20	HORIZONTAL	Average
6	14788.15	41.53	42.17	8.79	36.51	55.98	70.78	-14.80	HORIZONTAL	Average
7	16988.97	38.82	41.79	9.43	36.42	53.62	70.78	-17.16	HORIZONTAL	Average

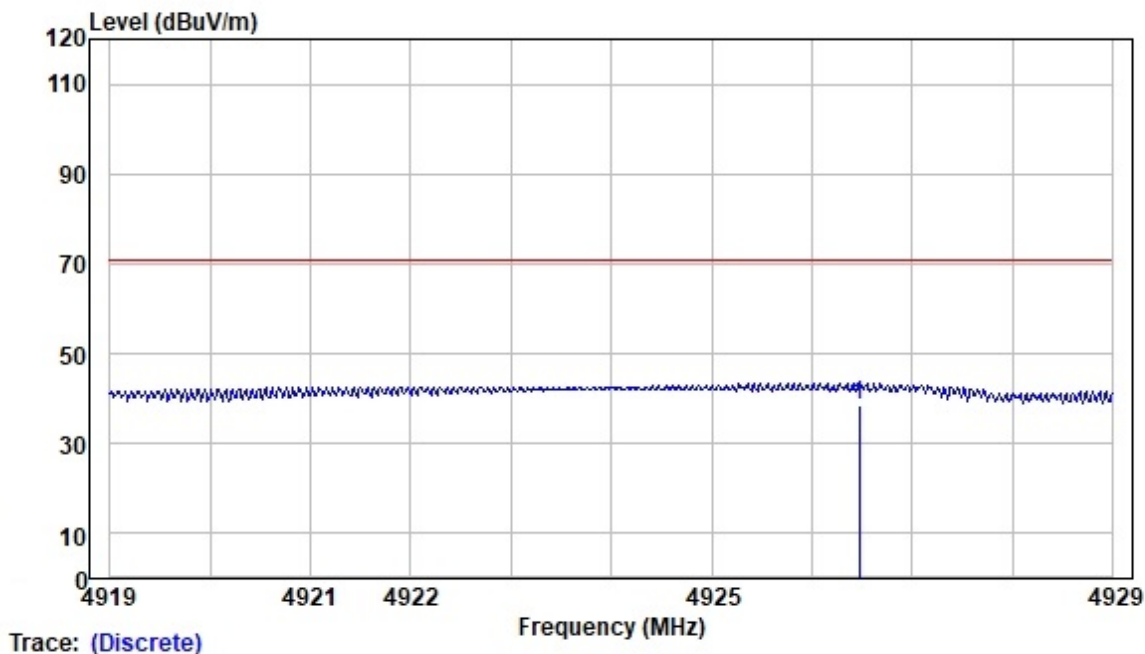


Test Mode: 00; Polarity: Horizontal



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	18298.10	33.36	36.69	3.08	39.15	33.98	70.78	-36.80	HORIZONTAL	Average
2	19515.01	32.27	36.91	3.10	39.93	32.35	70.78	-38.43	HORIZONTAL	Average
3	20487.24	30.76	37.30	3.12	39.60	31.58	70.78	-39.20	HORIZONTAL	Average
4	21692.40	32.63	37.56	3.31	39.67	33.83	70.78	-36.95	HORIZONTAL	Average
5	23318.17	31.36	38.57	3.37	38.09	35.21	70.78	-35.57	HORIZONTAL	Average
6	24576.57	30.36	38.76	3.41	39.27	33.26	70.78	-37.52	HORIZONTAL	Average

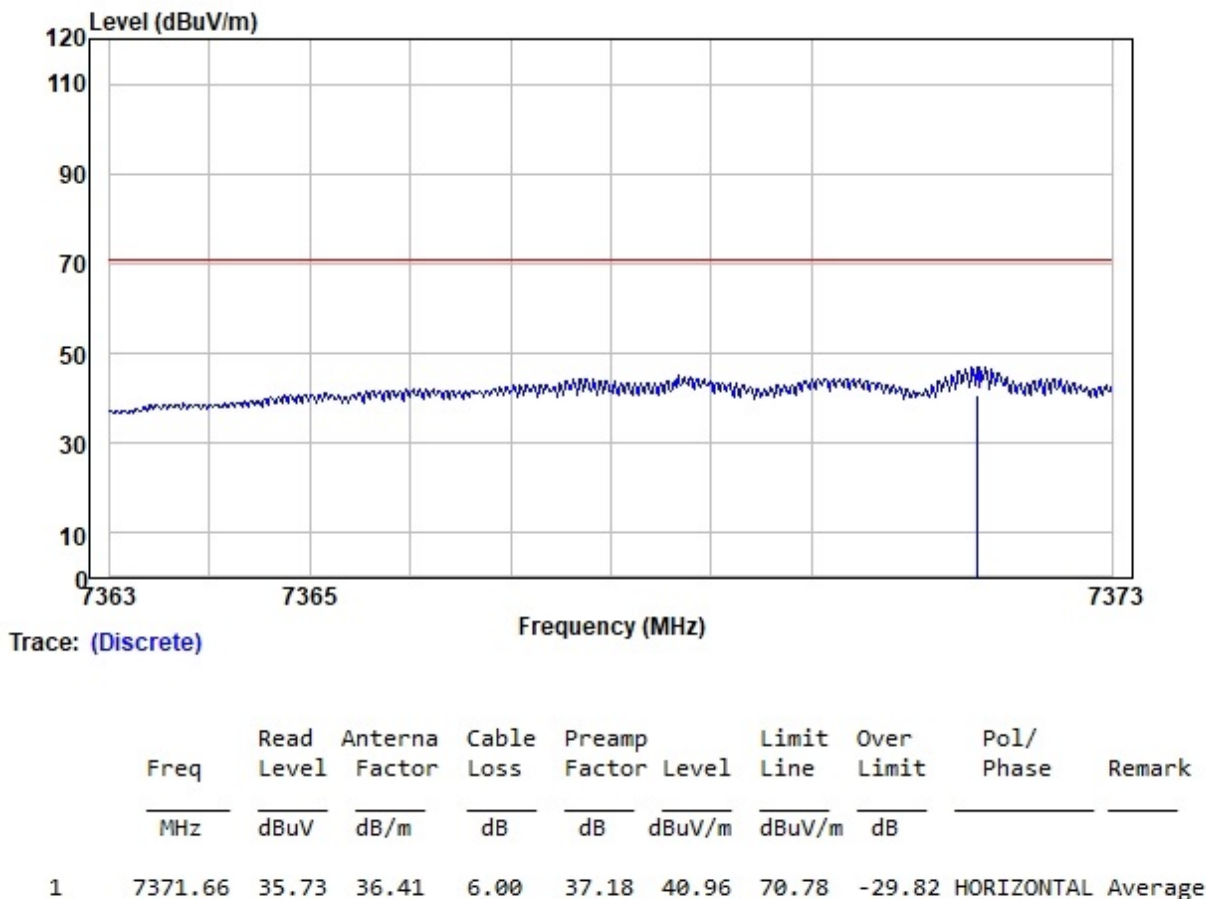
Test Mode: 00; Polarity: Horizontal



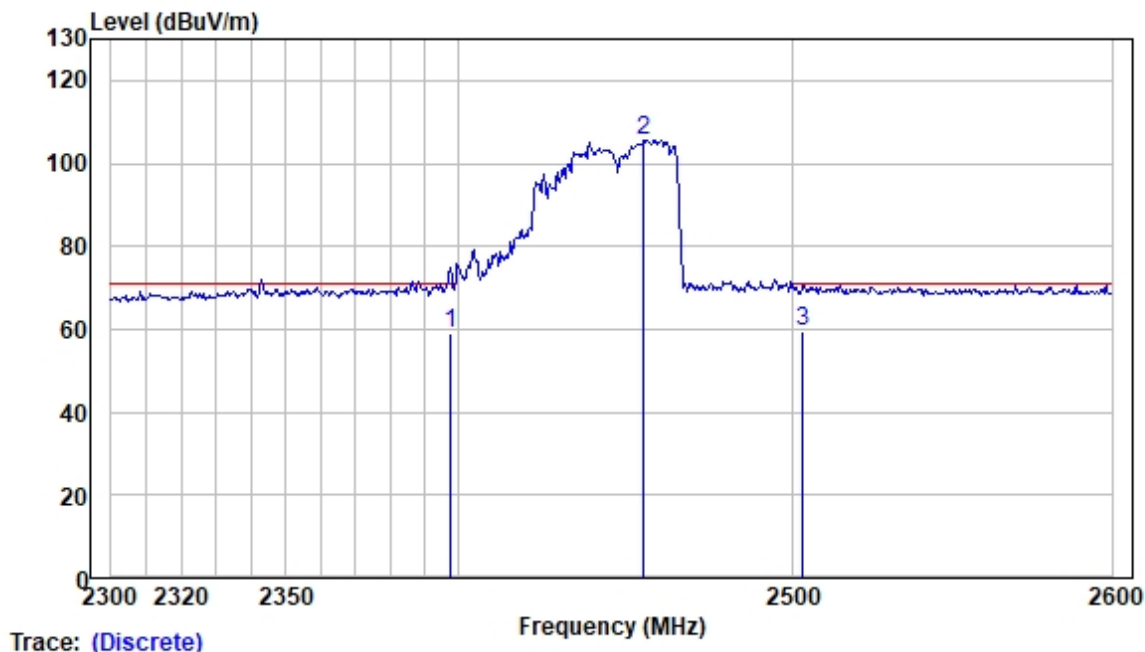
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4926.48	40.65	30.67	4.59	37.46	38.45	70.78	-32.33	HORIZONTAL	Average



Test Mode: 00; Polarity: Horizontal



Test Mode: 00; Polarity: Horizontal



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2397.90	27.71	27.65	3.45	0.00	58.81	70.78	-11.97	HORIZONTAL	Average
2	2455.02	74.33	27.72	3.47	0.00	105.52	----	----	HORIZONTAL	peak
3	2503.34	28.46	27.77	3.49	0.00	59.72	70.78	-11.06	HORIZONTAL	Average

6.5 Output Power Measurement

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 Test Engineer: Lily Kuang
 Limit:

Power output Measurement:

Formula:

$$P = \frac{4,187 \cdot m_w (T_2 - T_1) + 0,55 \cdot m_c (T_2 - T_0)}{t}$$

NOTE :

P is the microwave power output, in watts
 m_w is the mass of the water, in grams
 m_c is the mass of the container, in grams
 T₀ is the ambient temperature, in degrees Celsius
 T₁ is the initial temperature of the water, in degrees Celsius
 T₂ is the final temperature of the water, in degrees Celsius
 t is the heating time, in seconds, excluding the magnetron filament heating-up time.

Input Power Measurement:

The EUT was set up according to the MP-5 for input power measurement, the input power and current was measured using a power analyzer. Water load in a beaker was located in the center of the oven and the microwave oven was set to maximum power.

Base on the measured input power it was found that the microwave oven can operating as the user manual's specifications.

6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 24.2 °C Humidity: 55.7 % RH Atmospheric Pressure: 1024 mbar

6.5.2 Test Mode Description

Pre-scan/	Mode	Description
Final test	Code	
Final test	00	Test the EUT in microwave mode with maximum power.



6.5.3 Measurement Procedure and Data

Output Power Data

Mass of water (g)	Mass of the container (g)	Ambient temperature (°C)	Initial temperature (°C)	Final temperature (°C)	Heating time (s)	Power output (W)
1003	415	19.9	10.2	20.0	43	957.6

Input Power Data

Input Voltage (V)	Input Current (A)	Power Factor	Measured input power (W)	Rated input power (W)
119.98	12.87	0.94	1451	1500



6.6 Operating Frequency Measurement

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 Test Engineer: Lily Kuang
 Limit:
 Frequency Range: 2400-2500 MHz
 Detector: Average for the final result for outside ISM band(2450MHz±50MHz)
 Outside band limit: (a) ISM equipment operation on a frequency specified in §18.301 is permitted unlimited radiated energy in the band specified for that frequency.

(b) The field strength levels of emissions which lie outside the bands specified in §18.301, unless otherwise indicated, shall not exceed the following:

RF Power generated by equipment(watts)	Field strength Limit(uV/m) @300m
Below 500	25
500 or more	25*SQRT(power/500)

Power =891.1 W according to clause 6.1.2

Limit=20lg(25*SQRT(power/500))+20lg(300/3)=70.47dBuV/m @ 3m distance.

ISM band: ISM equipment may be operated on any frequency above 9 kHz.
 And the frequency band 2400-2500MHz is allocated for use by ISM equipment.

(§18.301)

ISM frequency	Tolerance
6.78MHz	±15.0kHz
13.56MHz	±7.0kHz
27.12MHz	±163.0kHz
40.68MHz	±20.0kHz
915MHz	±13.0MHz
2450MHz	±50.0MHz
5800MHz	±75.0MHz
24125MHz	±125.0MHz
61.25GHz	±250.0MHz
122.5GHz	±500.0MHz
245.00GHz	±1.0GHz



6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 24.4 °C Humidity: 55.9 % RH Atmospheric Pressure: 1024 mbar

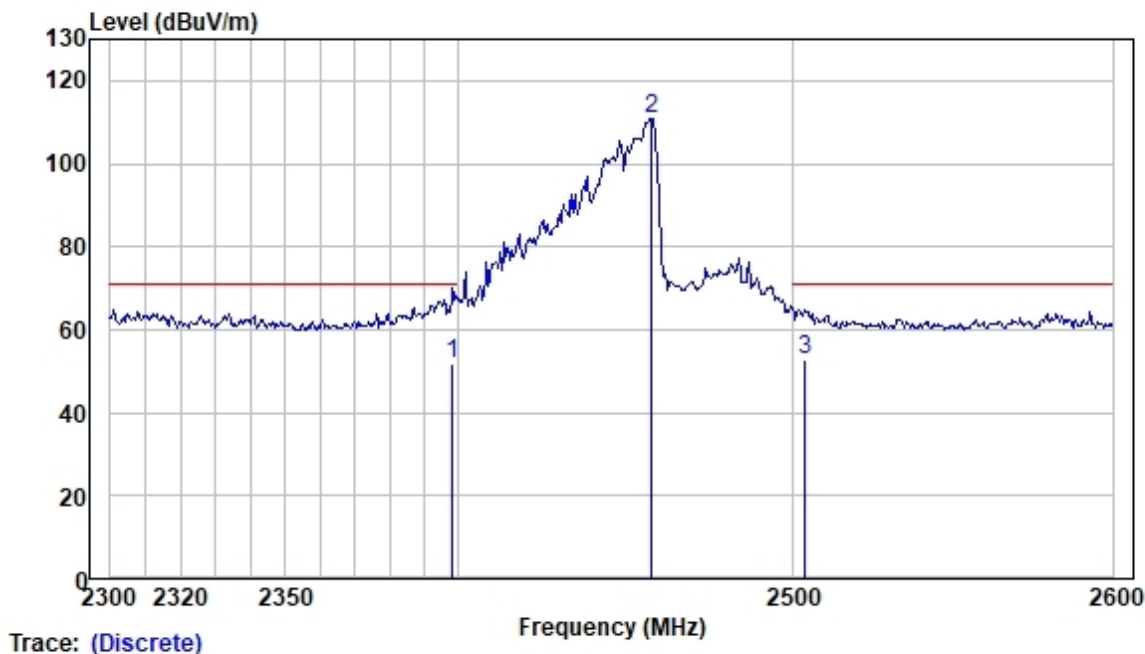
6.6.2 Test Mode Description

Pre-scan/	Mode	Description
Final test	Code	
Final test	00	Test the EUT in microwave mode with maximum power.
Pre-scan	01	Test the EUT in microwave mode with middle power.
Pre-scan	02	Test the EUT in microwave mode with lowest power.

6.6.3 Measurement Procedure and Data



Test Mode: 00; The variation of frequency with line voltage.



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2398.49	20.93	27.65	3.45	0.00	52.03	70.78	-18.75	VERTICAL	Average
2	2457.43	79.62	27.72	3.47	0.00	110.81	----	----	VERTICAL	peak
3	2503.96	21.61	27.78	3.49	0.00	52.88	70.78	-17.90	VERTICAL	Average

The operating frequency was measured using a spectrum analyzer, the supply voltage was setting at the rated AC voltage, measured was start with EUT at room temperature. The EUT was started to warm by at least 10 minutes, the operating frequency was monitored as the rated voltage was varied from 80% to 125%.

Test record was found the worst situation is when the line voltage is 125% of rated AC voltage.

ISM frequency(MHz)	Tolerance(MHz)	Measurement Data(MHz)
2450	±50	2457.43



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.

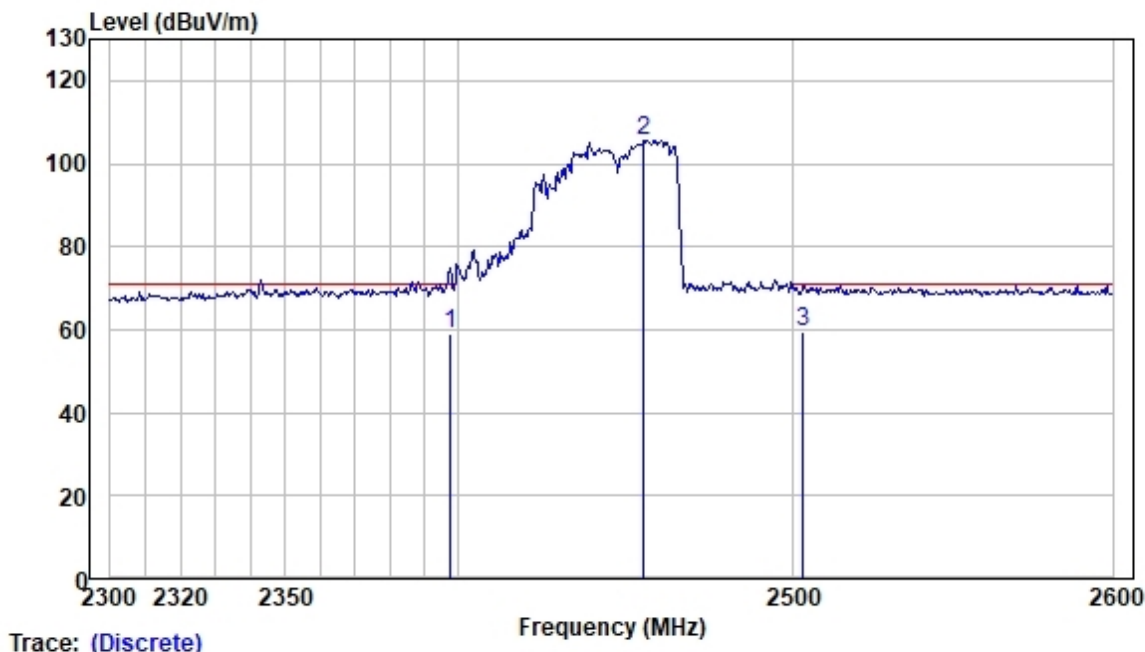
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 00; The variation of frequency with time



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2397.90	27.71	27.65	3.45	0.00	58.81	70.78	-11.97	HORIZONTAL	Average
2	2455.02	74.33	27.72	3.47	0.00	105.52	----	----	HORIZONTAL	peak
3	2503.34	28.46	27.77	3.49	0.00	59.72	70.78	-11.06	HORIZONTAL	Average

The operating frequency was measured using a spectrum analyzer, the supply voltage was setting at the rated AC voltage, measured was start with EUT at room temperature, the operating frequency was monitored until the water load was reduced to 20 percent of the original quantity.

Test record was found the worst situation is when the water load is reduced to 20 percent of the original quantity.

ISM frequency(MHz)	Tolerance(MHz)	Measurement Data(MHz)
2450	±50	2455.02



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 <https://www.sgs.com/en/Terms-and-Conditions>. 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.
Guangzhou Branch (EMC Laboratory)

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn
t (86-20) 82155555 sgs.china@sgs.com

6.7 Radiation Hazard Test

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 Test Engineer: Bob Qu

6.7.1 E.U.T. Operation

Operating Environment:
 Temperature: 22.0 °C Humidity: 54.6 % RH Atmospheric Pressure: 1024 mbar

6.7.2 Test Mode Description

Pre-scan/ Mode	Description
Final test Code	
Final test 00	Test the EUT in microwave mode with maximum power.
Pre-scan 01	Test the EUT in microwave mode with middle power.
Pre-scan 02	Test the EUT in microwave mode with lowest power.

6.7.3 Measurement Procedure and Data

Maximum measure level (mW/cm ²)	Limit (mW/cm ²)	Test Result
0.088	1	Pass



7 Test Setup Photo

Refer to Appendix - Test Setup Photo for GZEM200901528114



8 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZEM2602001052HS

- End of the Report -

