

TEST REPORT

Application No.: GZEM2506003944HS
Applicant: Guangdong Galanz Enterprises Co., Ltd.
Address of Applicant: 25 Ronggui Nan.Rd., Shunde, Foshan, Guangdong., 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, HAMILTON BEACH, Professional Series, Vissani, MAYTAG
Standard(s) : 47 CFR Part 18
Date of Receipt: 2025-06-23
Date of Test: 2025-07-02 to 2025-07-08
Date of Issue: 2025-08-18

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

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

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

Model No.:

P11043(X)-(Y), P11043ALH-WG(L2), P11043(X)-(Y)(L2), HB8436127995-03, P11043AYLH-WE(L2), VSCMWE16S2SW-11, VSCMWE16S3SW-11, VSCMWE16S*SW-11*, GLCMWT16S1SB11

(Variable (X) may be L, P, SL, SP, AL, AP, ASL, ASP, EL, ESL, EP, ESP, ALH, APH, AYLH, ASPH, ASLH, AYHL;

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.

* could be from 0 to 9 or from A to Z or blank)

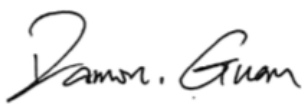
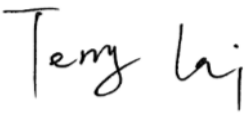
HB8436127995-08, HB**36127995-##(* & # could be from 0 to 9 or A to Z), PS-CMC498, VSCMWE16S2SW2112, VSCMWE16S3SW2112, P11043APH-PT(L2), MTCMPT16SS11 ♣

♣

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	GZEM240100049902	2024-01-26	Original
02	GZEM240100049904	2024-03-29	Amendment report: Updated the manufacturer's information and factory's information 1; Added new models and trademark; Added Variable (X)=AYHL for series model.
03	GZEM240100049906	2025-08-18	Amendment report: Deleted information of factory 2; Added new models and trademark.

Authorized for issue by:			
Tested By			
		Damon Guan/Project Engineer	
Approved By			
		Terry Lai/Reviewer	



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.

Remark for the report GZEM240100049902:
♣Declaration of EUT Family Grouping:

Model No.: P11043(X)-(Y), P11043ALH-WG(L2), P11043(X)-(Y)(L2), HB8436127995-03, P11043AYLH-WE(L2), VSCMWE16S2SW-11, VSCMWE16S3SW-11, VSCMWE16S*SW-11*, GLCMWT16S1SB11

Variable (X) may be L, P, SL, SP, AL, AP, ASL, ASP, EL, ESL, EP, ESP, ALH, APH, AYLH, ASPH, ASLH

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.

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

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 and model name.

Therefore, only one model P11043ALH-WG(L2) was tested in this report.

✦Remark for the report GZEM240100049904:

This report GZEM240100049904 was based on the report GZEM240100049902, with the following changes:

- 1 Updated the manufacturer's information and factory's information 1.
- 2 Added trademark Professional Series, Vissani.
- 3 Added new models: HB8436127995-08, HB**36127995-##(* & # could be from 0 to 9 or A to Z), PS-CMC498, VSCMWE16S2SW2112, VSCMWE16S3SW2112.

According to the declaration from the applicant, the models added in this report GZEM240100049904 and model in original report GZEM240100049902 are identical, with only difference being the model name.

- 4 Added Variable (X)=AYHL for all series models.

According to the declaration from the applicant, the models added in this report GZEM240100049903 and model in original report GZEM240100049901 are identical, with only difference being the outer appearance and model name.

According to FCC Part 2 section 2.1043(b)(1), it is ok to update test report by updated the manufacturer's information and factory's information 1; added new models and trademark; added Variable (X)=AYHL for Series 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.

All test results in report GZEM240100049902 were kept in this report GZEM240100049904.

Remark for the report GZEM240100049906:

This report GZEM240100049906 was based on the report GZEM240100049904, with the following changes:

1. Deleted information of factory 2.
2. Added trademark MAYTAG.
3. Added new models: P11043APH-PT(L2), MTCMPT16SS11.

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for the add new models all models P11043APH-PT(L2), MTCMPT16SS11 and the original model, with different on the PCB, outer appearance, model name and trademark.

Model P11043APH-PT(L2) is Galanz name.

Model MTCMPT16SS11 buyer name.

Considering to the difference above, new full tests were performed to model P11043APH-PT(L2) and recorded the new test results in this report GZEM240100049906.

Other tests please refer to original report GZEM240100049904 for details.



3 Contents

	Page
1 Cover Page	1
2 Test Summary	4
3 Contents	6
4 General Information	8
4.1 Details of E.U.T.	8
4.2 Description of Support Units	8
4.3 Measurement Uncertainty	8
4.4 Test Location	8
4.5 Test Facility	9
4.6 Deviation from Standards	9
4.7 Abnormalities from Standard Conditions	9
5 Equipment List	10
6 Emission Test Results	13
6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)	13
6.1.1 E.U.T. Operation	13
6.1.2 Test Mode Description	13
6.1.3 Test Setup Diagram	13
6.1.4 Measurement Procedure and Data	14
6.2 Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)	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 (30MHz-1GHz)	22
6.3.1 E.U.T. Operation	22
6.3.2 Test Mode Description	22
6.3.3 Test Setup Diagram	22
6.3.4 Measurement Procedure and Data	23
6.4 Radiated Emissions (above 1GHz)	25
6.4.1 E.U.T. Operation	25
6.4.2 Test Mode Description	25
6.4.3 Test Setup Diagram	25
6.4.4 Measurement Procedure and Data	26
6.5 Output Power Measurement	36
6.5.1 E.U.T. Operation	36
6.5.2 Test Mode Description	36
6.5.3 Measurement Procedure and Data	37
6.6 Operating Frequency Measurement	38
6.6.1 E.U.T. Operation	38
6.6.2 Test Mode Description	39
6.6.3 Measurement Procedure and Data	39
6.7 Radiation Hazard Test	41



6.7.1	E.U.T. Operation	41
6.7.2	Test Mode Description	41
6.7.3	Measurement Procedure and Data	41
7	Test Setup Photo	42
8	EUT Constructional Details (EUT Photos)	43



4 General Information

4.1 Details of E.U.T.

Power supply: 120V, 60Hz

Test voltage: AC 120V 60Hz

Microwave frequency: 2450MHz \pm 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

1100mL of water in the beaker for power output and frequency measurement.

One of 770 and the other of 330mL of water for second and third harmonic radiation measurement, just the worst case (770mL) was recorded in this report.

770mL of water for all other measurement

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at Mains Terminals (150kHz-30MHz)	3.22dB (150kHz to 30MHz)
Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)	\pm 3.12dB
Radiated Emissions (30MHz-1GHz)	5.14dB (30MHz-1GHz):3m; 4.90dB (30MHz-1GHz):10m
Radiated Emissions (above 1GHz)	4.88dB (1GHz-6GHz); 5.06dB (6GHz-18GHz)

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cisp} (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	2m	EMC0107	2023-08-24	2025-08-23
Shielding Room	ChangZhou ZhongYu	8m x 3m x 3.8m	EMC0306	2022-10-16	2025-10-15
Two-Line V-Network-GZ	Rohde & Schwarz	ENV216	EMC2135	2024-09-02	2025-09-01
EMI Test Receiver (9kHz-3.6GHz)	Rohde & Schwarz	ESR3	EMC2221	2024-12-04	2025-12-03
Test Software E3r	Audix	Ver.6.191211	GZE100-77	N/A	N/A
Artificial Mains Network (LISN)	AFJ Instruments	LT32C	EMC2046	2024-10-14	2025-10-13

Radiated Emissions (Magnetic field Strength)(9kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Amplifier(9k-1000MHz)	SONOMA	310	EMC2237	2024-12-03	2025-12-02
Active Loop Antenna-RED	ETS-Lindgren	6502	EMC2190	2024-04-08	2026-04-07
EMI Test Receiver (1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2229	2024-12-03	2025-12-02
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
966 Anechoic Chamber	Shenzhen C.R.T	CRTSGSSAC966	EMC2230	2025-03-22	2028-03-21
Coaxial Cable	Mirco-COAX UTIFLEX ve	LA2-C125-8000	EMC2239	2024-12-04	2026-12-03

Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
966 Anechoic Chamber	Shenzhen C.R.T	CRTSGSSAC966	EMC2230	2025-03-22	2028-03-21
EMI Test Receiver(1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2229	2024-12-03	2025-12-02
Amplifier(9k-1000MHz)	SONOMA	310	EMC2237	2024-12-03	2025-12-02
Trilog Broadband Antenna (25MHz-2GHz)	Schwarzbeck Mess-Elektronik	VULB 9168	EMC2238	2025-03-24	2027-03-23
Coaxial Cable	Mirco-COAX UTIFLEX ve	LA2-C125-8000	EMC2239	2024-12-04	2026-12-03
Test Software E3	Audix	Ver.6.191211	GZE100-81	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 (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

Radiated Emissions (above 1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
1-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2024-10-14	2025-10-13
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2024-09-02	2025-09-01
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	2024-10-14	2025-10-13
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2024-08-19	2025-08-18
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-20	2026-12-19
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	2024-12-04	2025-12-03
Programmable multifunctional ac/dc power source	EMTEST	NETWAVE 7-400	EMC2234	2024-12-04	2025-12-03
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	2024-09-02	2025-09-01
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	2023-12-20	2026-12-19
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

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



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 Services)
 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 2.0

Report No.: GZEM240100049906

Page: 12 of 43

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-TRF-01) EEC 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 Emission Test Results

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

Test Requirement:	47 CFR Part 18
Test Method:	FCC/OST MP-5:1986
Limit:	
Frequency Range:	150kHz to 30MHz
0.15 to 0.5 MHz:	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5 to 5 MHz:	56dB(μV) quasi-peak, 46dB(μV) average
5 to 30 MHz:	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

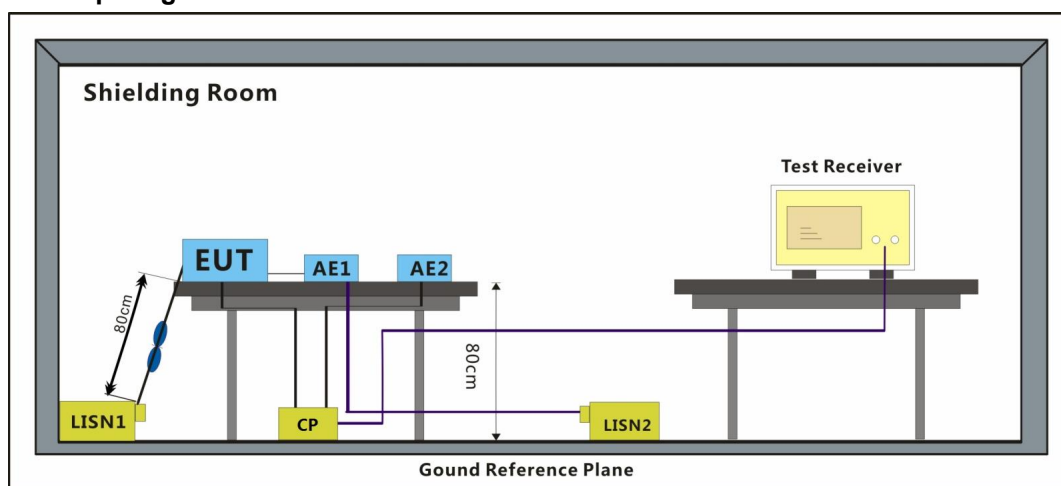
6.1.1 E.U.T. Operation

Operating Environment:			
Temperature:	21.9 °C	Humidity:	53.3 % RH
		Atmospheric Pressure:	1008 mbar

6.1.2 Test Mode Description

Pre-scan / Mode	Code	Description
Final test		
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.

6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

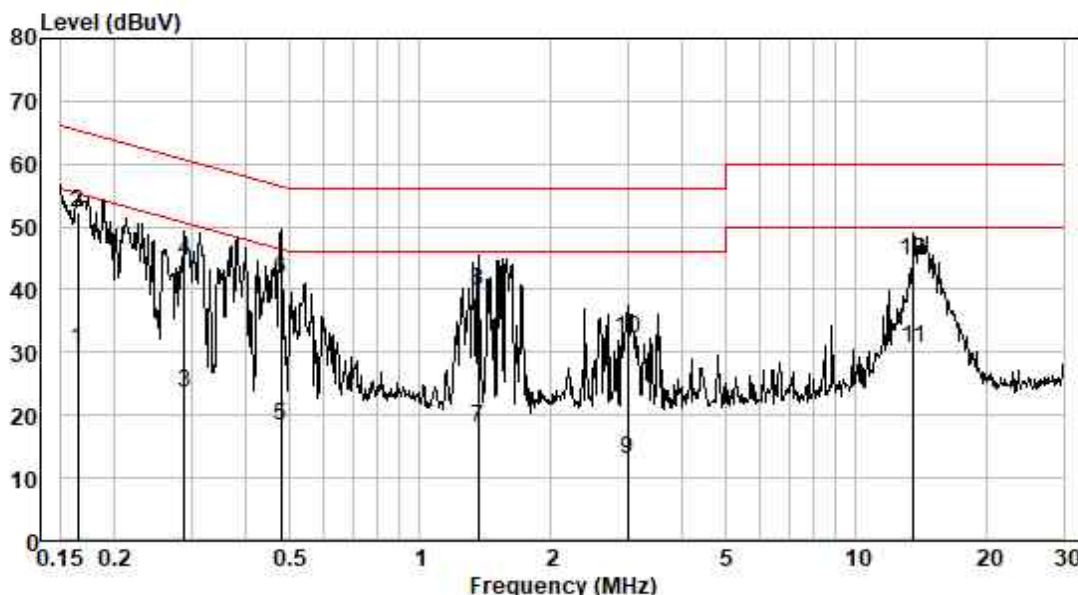
Frequency range: 150KHz-30MHz

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

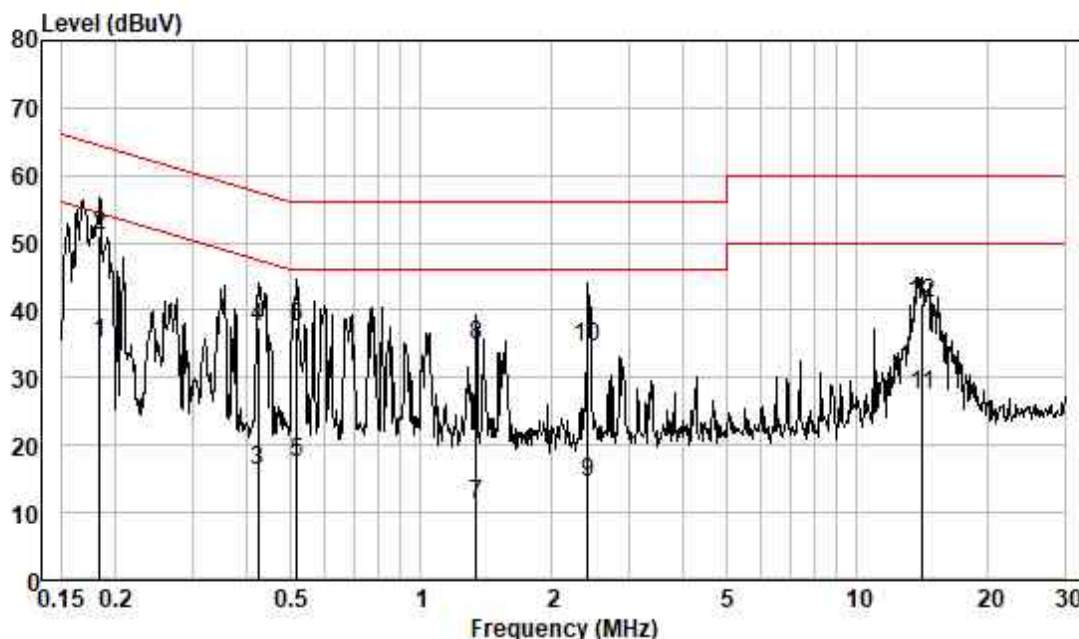


Pol : LINE
Mode :
Model :
Power :

	Frequency MHz	Read Level dBUV	Cable Loss dB	LISN Factor dB	Measured Level dBUV	Limit Line dBUV	Over Limit dB	Remark
1	0.164	20.90	0.04	9.55	30.49	55.25	-24.76	Average
2	0.164	42.79	0.04	9.55	52.38	65.25	-12.87	QP
3	0.288	13.90	0.04	9.55	23.49	50.59	-27.10	Average
4	0.288	35.06	0.04	9.55	44.65	60.59	-15.94	QP
5	0.481	8.66	0.05	9.58	18.29	46.32	-28.03	Average
6	0.481	32.02	0.05	9.58	41.65	56.32	-14.67	QP
7	1.359	8.45	0.09	9.57	18.11	46.00	-27.89	Average
8	1.359	30.24	0.09	9.57	39.90	56.00	-16.10	QP
9	2.993	3.42	0.16	9.55	13.13	46.00	-32.87	Average
10	2.993	22.36	0.16	9.55	32.07	56.00	-23.93	QP
11	13.551	20.59	0.31	9.81	30.71	50.00	-19.29	Average
12	13.551	34.39	0.31	9.81	44.51	60.00	-15.49	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	0.183	25.53	0.04	9.55	35.12	54.33	-19.21	Average
2	0.183	41.56	0.04	9.55	51.15	64.33	-13.18	QP
3	0.424	6.78	0.05	9.55	16.38	47.37	-30.99	Average
4	0.424	27.97	0.05	9.55	37.57	57.37	-19.80	QP
5	0.521	7.73	0.05	9.58	17.36	46.00	-28.64	Average
6	0.521	27.96	0.05	9.58	37.59	56.00	-18.41	QP
7	1.338	1.60	0.09	9.55	11.24	46.00	-34.76	Average
8	1.338	25.15	0.09	9.55	34.79	56.00	-21.21	QP
9	2.409	4.76	0.14	9.57	14.47	46.00	-31.53	Average
10	2.409	24.97	0.14	9.57	34.68	56.00	-21.32	QP
11	14.138	17.23	0.32	9.89	27.44	50.00	-22.56	Average
12	14.138	30.69	0.32	9.89	40.90	60.00	-19.10	QP



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

Test Requirement: 47 CFR Part 18
 Test Method: FCC/OST MP-5:1986
 Limit:
 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	1056.8	Limit=20lg(25*SQRT(1056.8/500))+20lg(300/3)= 71.21 dBuV/m @ 3m distance.

6.2.1 E.U.T. Operation

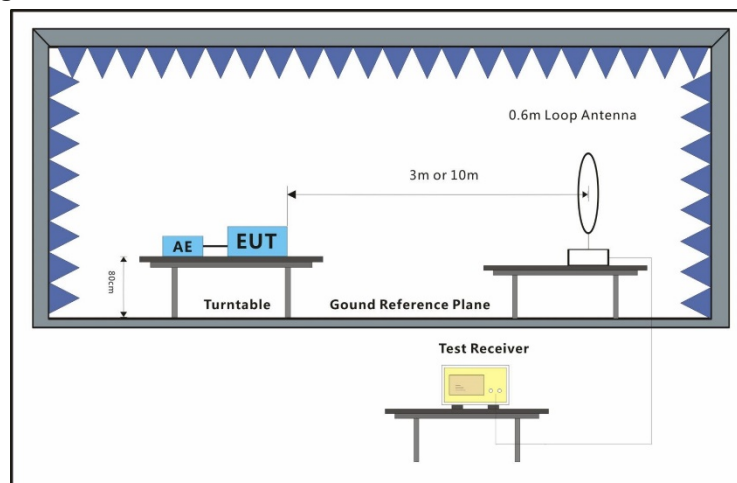
Operating Environment:
 Temperature: 23.3 °C Humidity: 56.4 % RH Atmospheric Pressure: 1008 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode 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.



6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

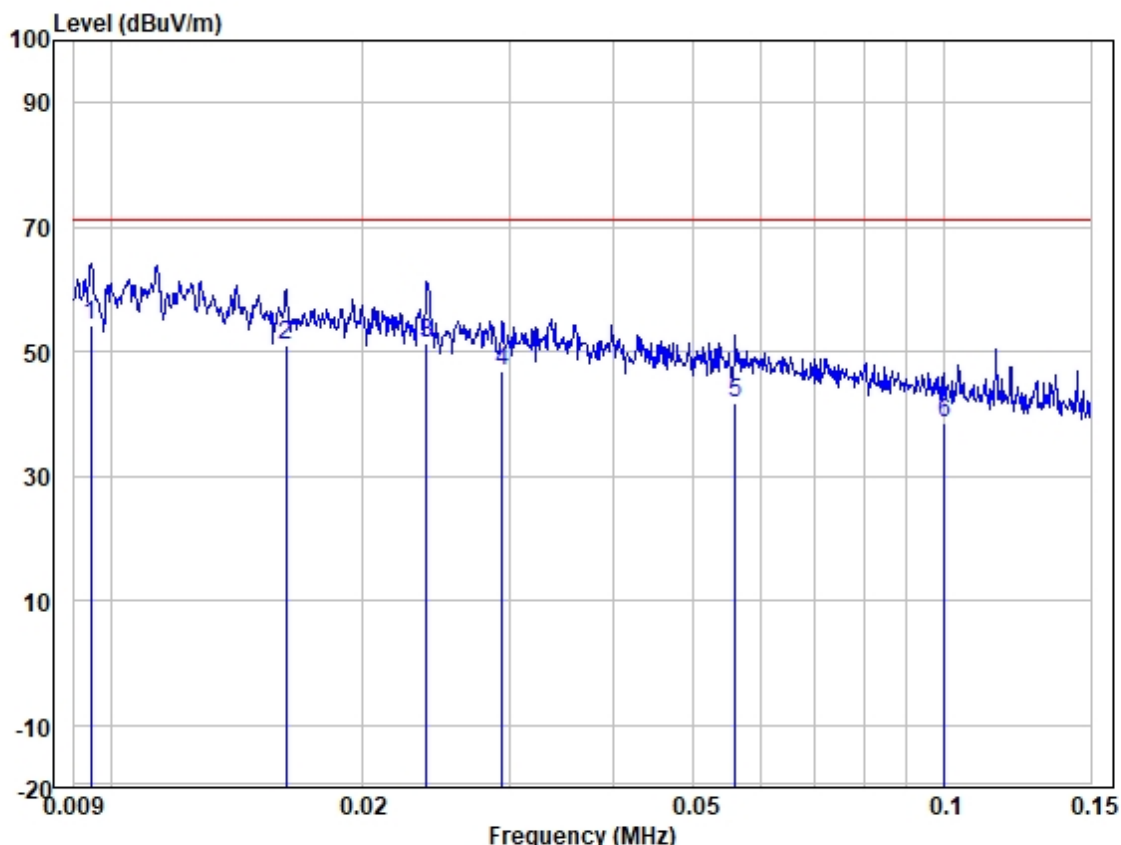
Frequency range: 9KHz-30MHz

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

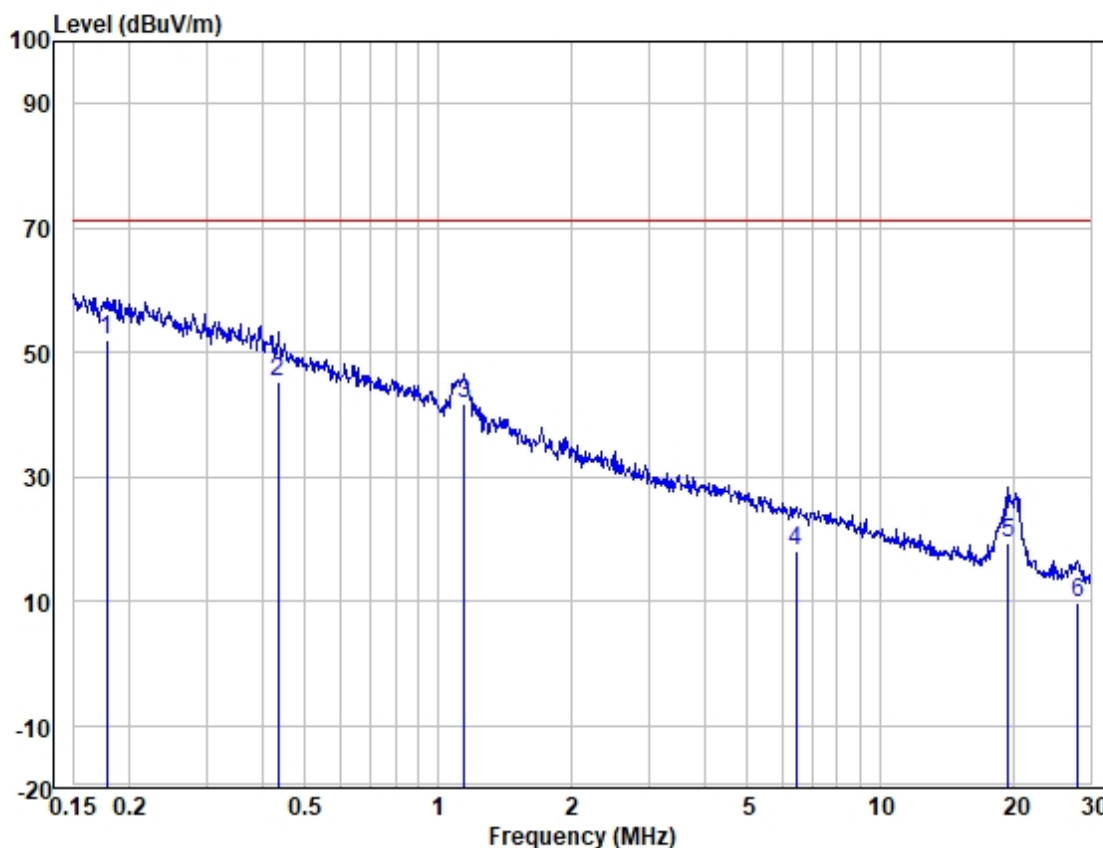


Site : 966 Chamber
Job :
Model :
Power :
Test Mode :

	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	0.009	65.10	21.71	0.01	32.72	54.10	71.21	-17.11	HORIZONTAL	Average
2	0.016	65.81	17.80	0.01	32.72	50.90	71.21	-20.31	HORIZONTAL	Average
3	0.024	67.62	16.50	0.01	32.72	51.41	71.21	-19.80	HORIZONTAL	Average
4	0.029	63.77	15.76	0.01	32.72	46.82	71.21	-24.39	HORIZONTAL	Average
5	0.056	59.59	14.86	0.01	32.72	41.74	71.21	-29.47	HORIZONTAL	Average
6	0.100	56.39	14.75	0.01	32.72	38.43	71.21	-32.78	HORIZONTAL	Average



Test Mode: 00; Polarity: Horizontal

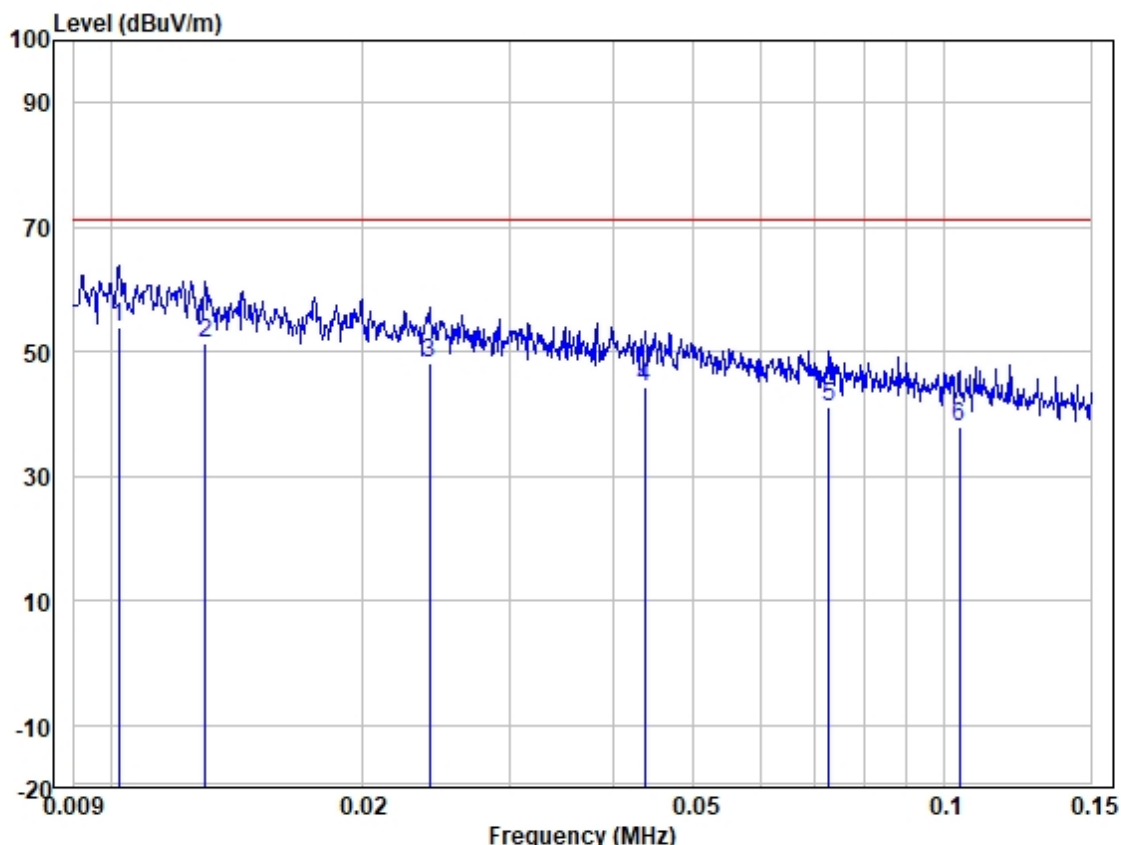


Site : 966 Chamber
 Job :
 Model :
 Power :
 Test Mode :

	Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier	Measured Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	0.178	69.88	14.68	0.01	32.72	51.85	71.21	-19.36	HORIZONTAL	Average
2	0.435	63.55	14.51	0.01	32.72	45.35	71.21	-25.86	HORIZONTAL	Average
3	1.147	60.93	13.39	0.05	32.70	41.67	71.21	-29.54	HORIZONTAL	Average
4	6.454	38.24	12.59	0.11	32.71	18.23	71.21	-52.98	HORIZONTAL	Average
5	19.532	42.25	9.46	0.24	32.72	19.23	71.21	-51.98	HORIZONTAL	Average
6	28.003	36.33	5.74	0.29	32.74	9.62	71.21	-61.59	HORIZONTAL	Average



Test Mode: 00; Polarity: Vertical

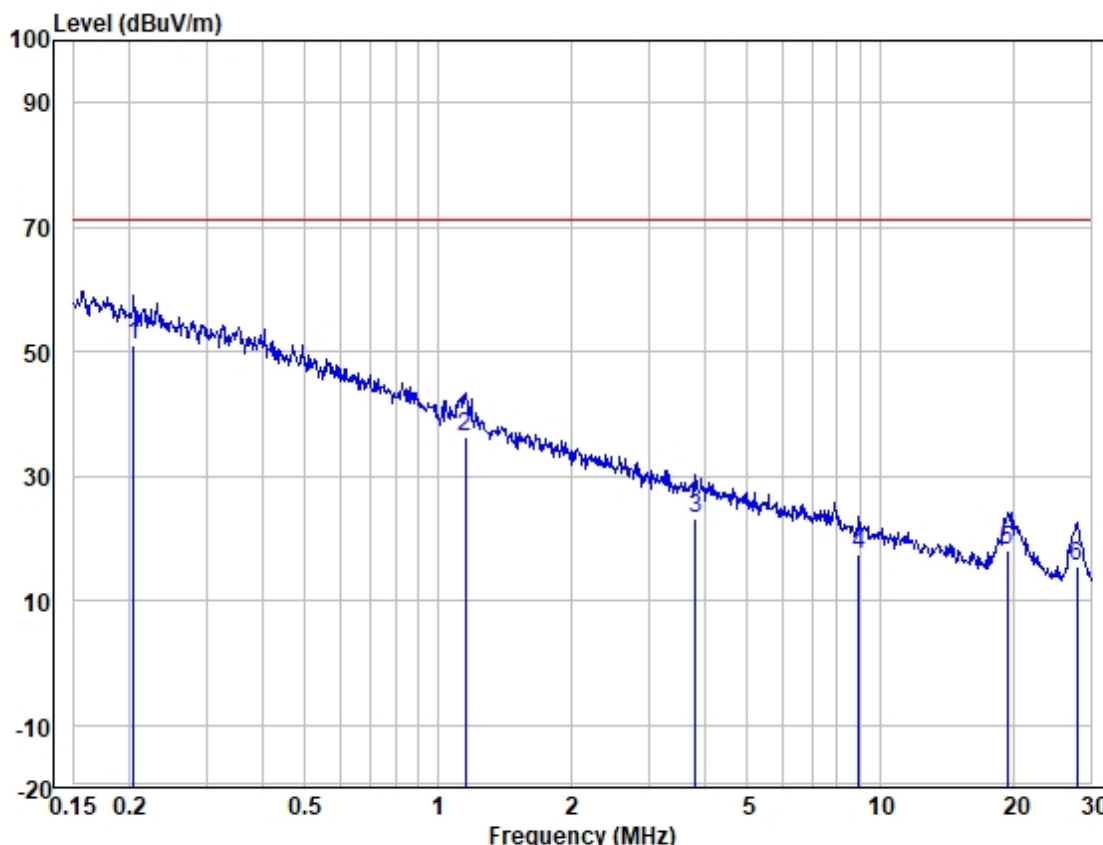


Site : 966 Chamber
Job :
Model :
Power :
Test Mode :

	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	0.010	65.21	21.46	0.01	32.72	53.96	71.21	-17.25	VERTICAL	Average
2	0.013	64.10	19.89	0.01	32.72	51.28	71.21	-19.93	VERTICAL	Average
3	0.024	64.31	16.46	0.01	32.72	48.06	71.21	-23.15	VERTICAL	Average
4	0.044	61.98	15.09	0.01	32.72	44.36	71.21	-26.85	VERTICAL	Average
5	0.073	58.99	14.82	0.01	32.72	41.10	71.21	-30.11	VERTICAL	Average
6	0.104	55.99	14.75	0.01	32.72	38.03	71.21	-33.18	VERTICAL	Average



Test Mode: 00; Polarity: Vertical



Site : 966 Chamber
Job :
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	0.205	69.19	14.67	0.01	32.72	51.15	71.21	-20.06	VERTICAL	Average
2	1.153	55.59	13.39	0.05	32.70	36.33	71.21	-34.88	VERTICAL	Average
3	3.820	42.77	13.16	0.08	32.70	23.31	71.21	-47.90	VERTICAL	Average
4	8.964	38.10	11.89	0.16	32.71	17.44	71.21	-53.77	VERTICAL	Average
5	19.428	41.16	9.48	0.23	32.72	18.15	71.21	-53.06	VERTICAL	Average
6	27.855	42.15	5.85	0.29	32.74	15.55	71.21	-55.66	VERTICAL	Average



6.3 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC/OST MP-5:1986
 Limit:
 Measurement Distance: 3 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	1056.8	Limit=20lg(25*SQRT(1056.8/500))+20lg(300/3)=71.21 dBuV/m @ 3m distance.

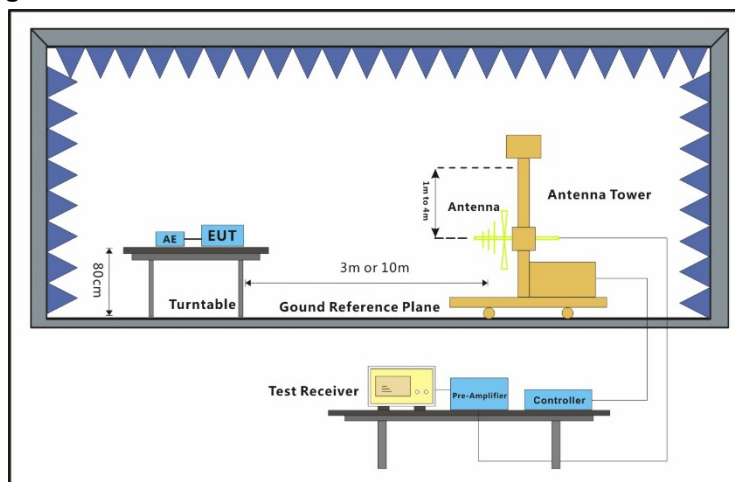
6.3.1 E.U.T. Operation

Operating Environment:
 Temperature: 23.3 °C Humidity: 56.4 % RH Atmospheric Pressure: 1008 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

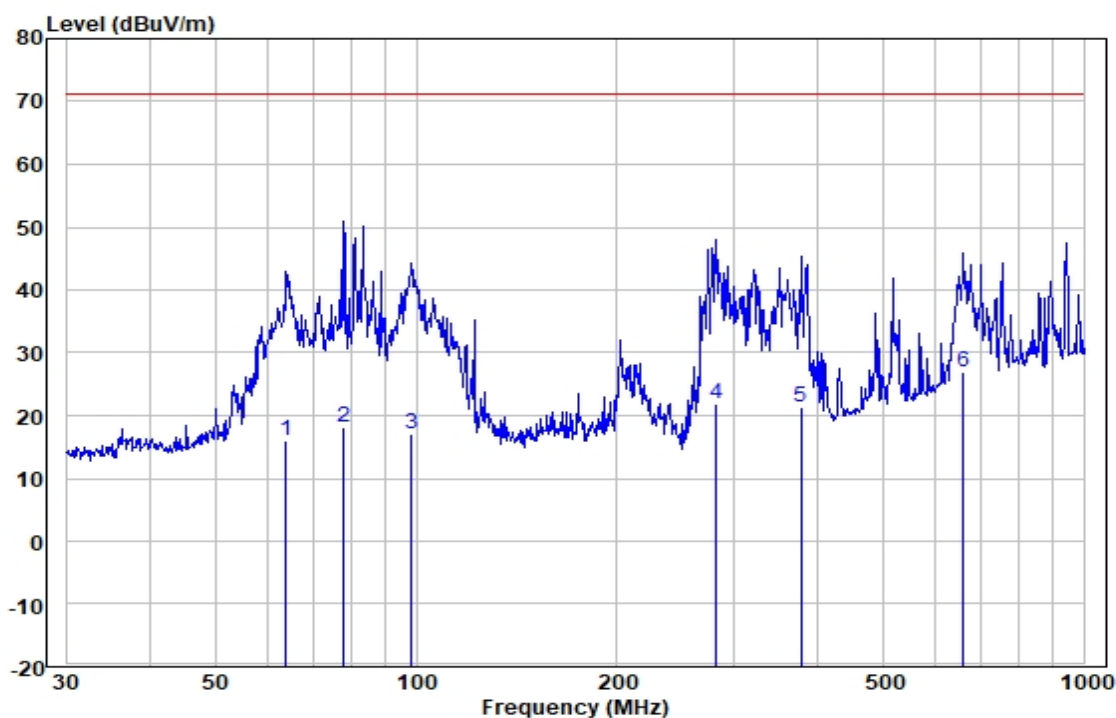
Frequency range: 30MHz-1GHz

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

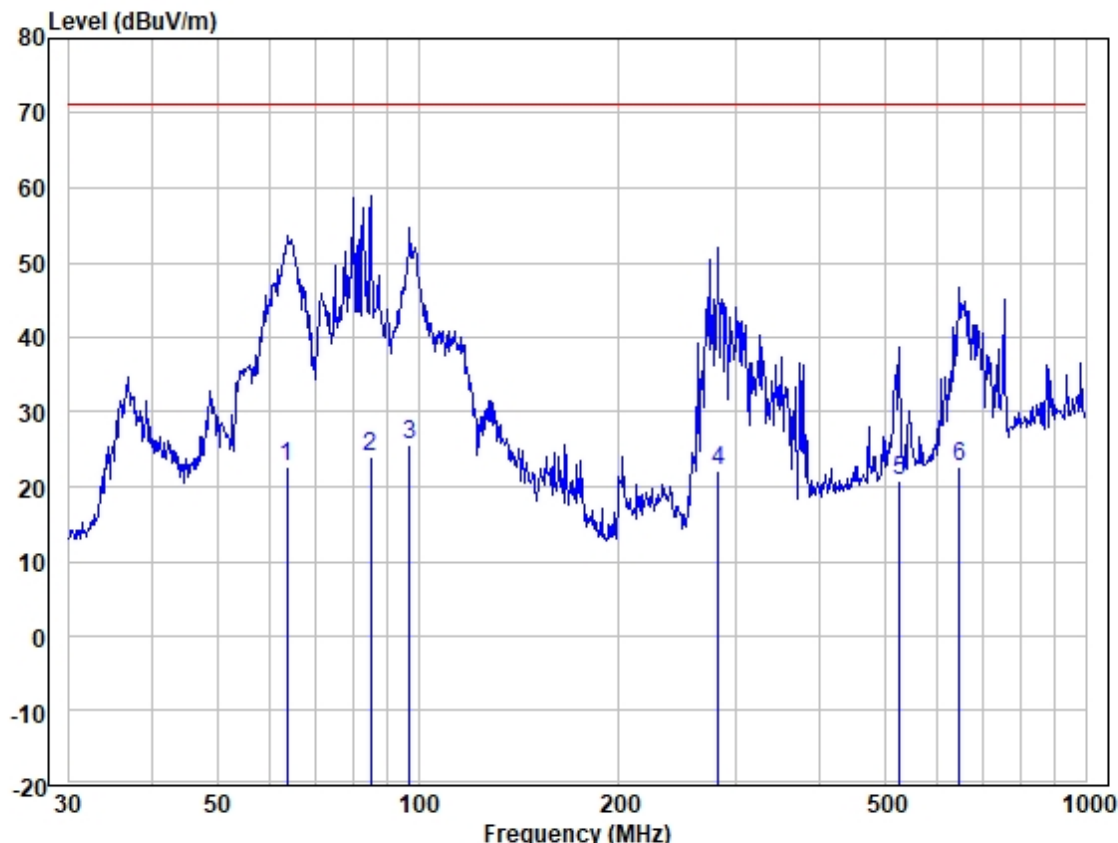


Site : 966 Chamber
Job :
Model :
Power :
Test Mode :

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 63.983	30.01	18.37	0.43	32.77	16.04	71.21	-55.17	HORIZONTAL	Average
2 77.865	34.65	15.61	0.49	32.74	18.01	71.21	-53.20	HORIZONTAL	Average
3 98.487	34.78	14.53	0.54	32.70	17.15	71.21	-54.06	HORIZONTAL	Average
4 281.995	34.99	18.80	0.96	32.86	21.89	71.21	-49.32	HORIZONTAL	Average
5 377.259	32.17	20.99	1.14	32.89	21.41	71.21	-49.80	HORIZONTAL	Average
6 658.836	31.11	26.43	1.50	32.12	26.92	71.21	-44.29	HORIZONTAL	Average



Test Mode: 00; Polarity: Vertical



Site : 966 Chamber
Job :
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	63.759	36.54	18.37	0.43	32.77	22.57	71.21	-48.64	VERTICAL	Average
2	84.999	42.16	13.97	0.51	32.72	23.92	71.21	-47.29	VERTICAL	Average
3	97.115	43.63	14.23	0.53	32.70	25.69	71.21	-45.52	VERTICAL	Average
4	281.995	35.17	18.80	0.96	32.86	22.07	71.21	-49.14	VERTICAL	Average
5	526.397	28.12	24.20	1.31	32.90	20.73	71.21	-50.48	VERTICAL	Average
6	647.386	27.23	26.18	1.48	32.34	22.55	71.21	-48.66	VERTICAL	Average



6.4 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC/OST MP-5:1986
 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	1056.8	Limit=20lg(25*SQRT(1056.8/500))+20lg(300/3)= 71.21 dBuV/m @ 3m distance.

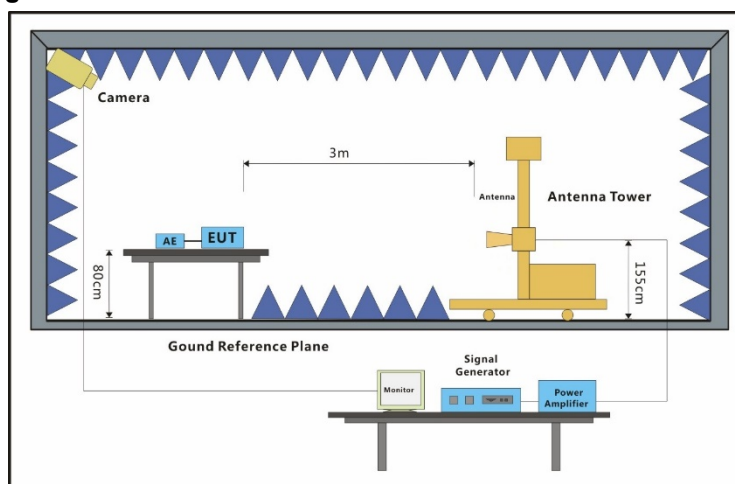
6.4.1 E.U.T. Operation

Operating Environment:
 Temperature: 25.8 °C Humidity: 49.1 % RH Atmospheric Pressure: 1008 mbar

6.4.2 Test Mode Description

Pre-scan / Final test	Mode 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

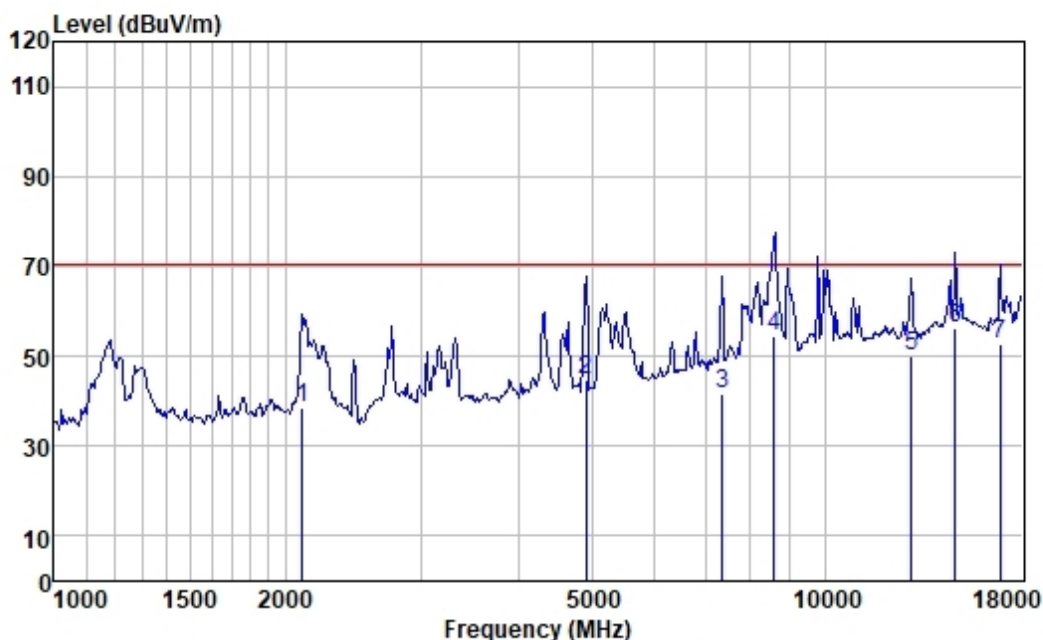
Frequency range: Above 1GHz

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

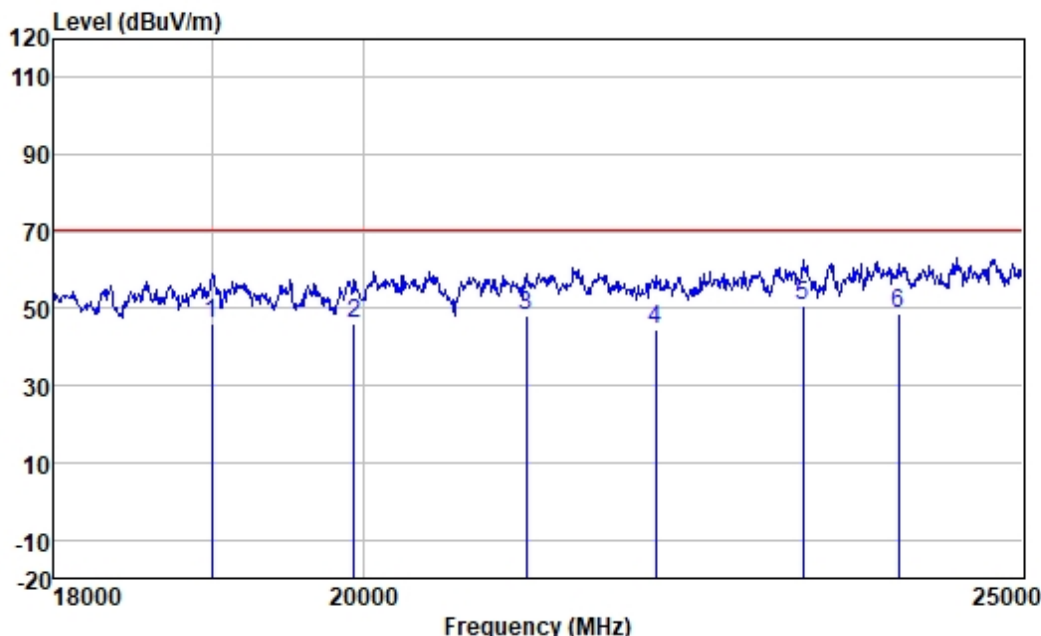
Test Mode: 00; Polarity: Vertical



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2101.866	46.36	26.81	3.17	37.79	38.55	70.21	-31.66	VERTICAL	Average
2	4896.010	45.56	31.67	4.86	37.35	44.74	70.21	-25.47	VERTICAL	Average
3	7368.741	36.47	36.41	6.00	37.18	41.70	70.21	-28.51	VERTICAL	Average
4	8595.815	48.05	36.93	6.49	37.18	54.29	70.21	-15.92	VERTICAL	Average
5	12947.070	39.17	39.78	8.11	36.83	50.23	70.21	-19.98	VERTICAL	Average
6	14788.150	41.61	42.17	8.79	36.51	56.06	70.21	-14.15	VERTICAL	Average
7	16891.040	38.17	41.36	9.41	36.42	52.52	70.21	-17.69	VERTICAL	Average



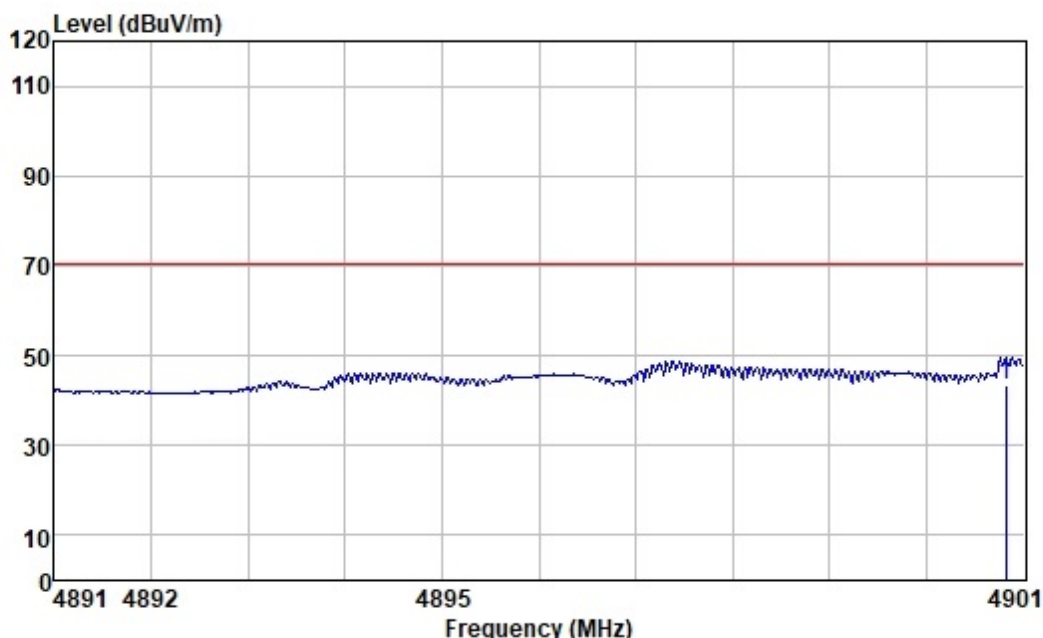
Test Mode: 00; Polarity: Vertical



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	18990.100	44.95	37.09	3.22	39.31	45.95	70.21	-24.26	VERTICAL	Average
2	19929.640	46.67	37.08	2.98	40.43	46.30	70.21	-23.91	VERTICAL	Average
3	21129.740	46.00	37.68	3.24	38.83	48.09	70.21	-22.12	VERTICAL	Average
4	22080.640	43.37	37.58	3.35	39.83	44.47	70.21	-25.74	VERTICAL	Average
5	23211.180	47.00	38.54	3.35	38.13	50.76	70.21	-19.45	VERTICAL	Average
6	23978.460	44.13	38.70	3.45	37.79	48.49	70.21	-21.72	VERTICAL	Average



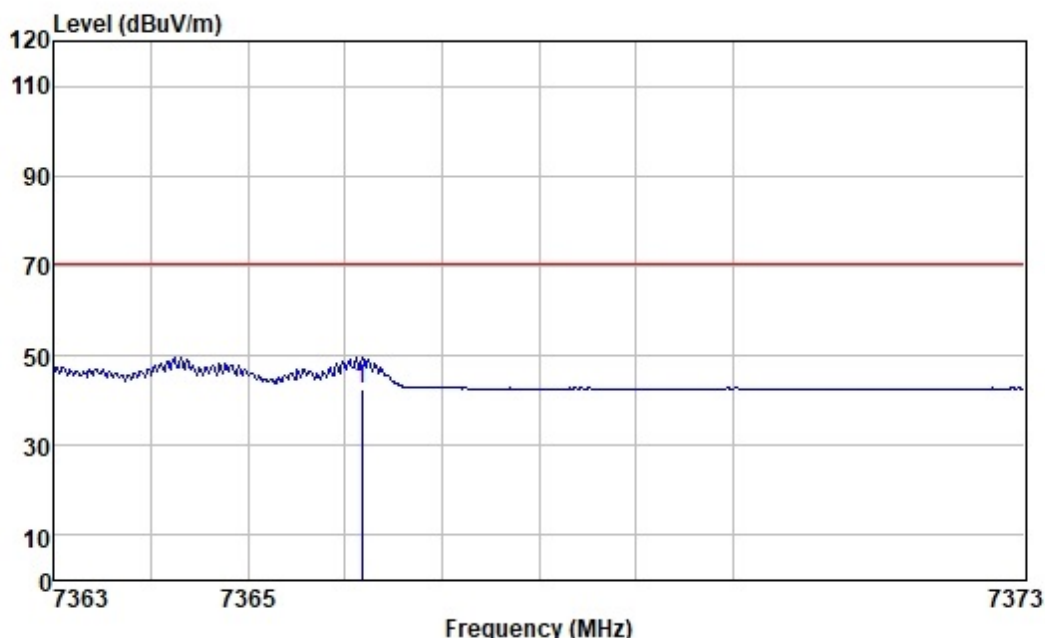
Test Mode: 00; Polarity: Vertical



	Freq	ReadAntenna	Cable	Preamp	Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	4900.820	44.15	31.67	4.86	37.35	43.33	70.21	-26.88	VERTICAL
									Average



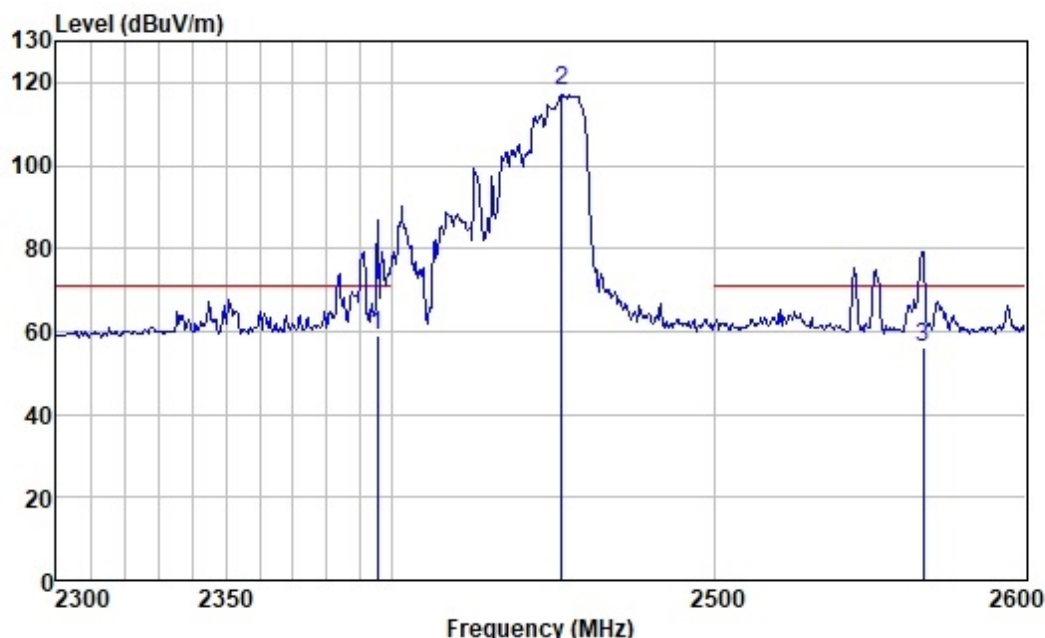
Test Mode: 00; Polarity: Vertical



	Freq	ReadAntenna	Cable	Preamp	Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	7366.168	37.80	36.41	6.00	37.18	43.03	70.21	-27.18	VERTICAL
									Average



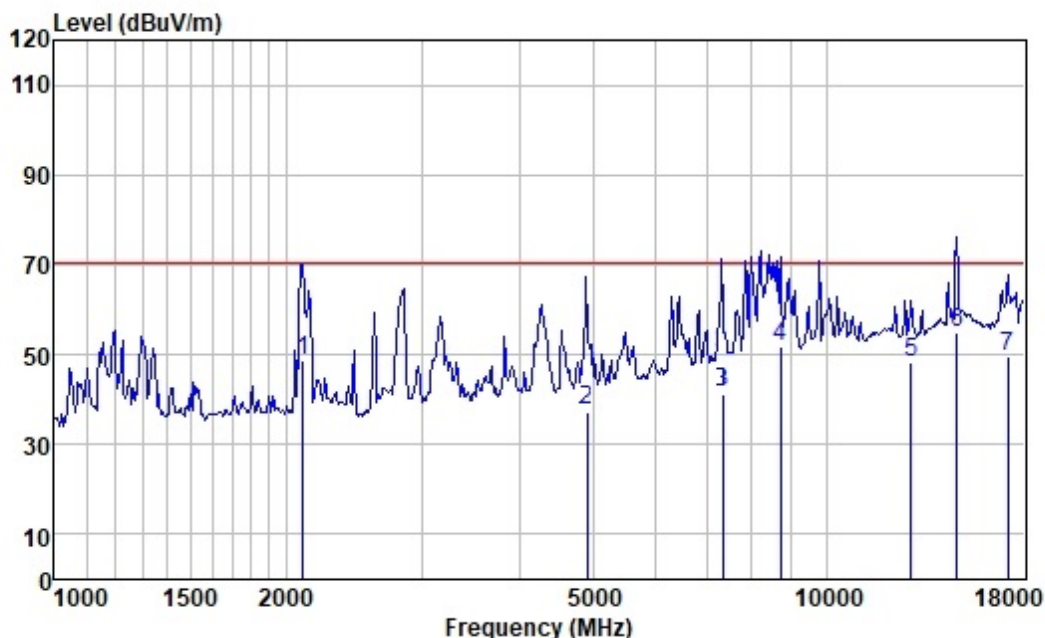
Test Mode: 00; Polarity: Vertical



	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
		Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2395.551	27.86	27.64	3.45	0.00	58.95	71.21	-12.26	VERTICAL	Average
2	2452.009	85.79	27.72	3.47	0.00	116.98	-----	-----	VERTICAL	peak
3	2567.059	24.79	27.85	3.52	0.00	56.16	71.21	-15.05	VERTICAL	Average



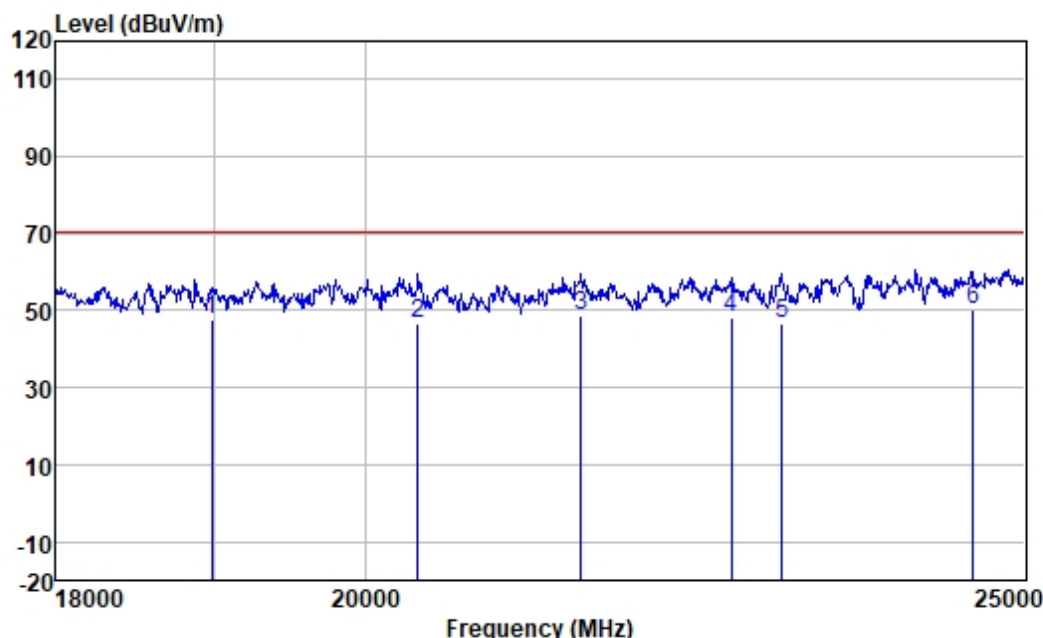
Test Mode: 00; Polarity: Horizontal



	ReadAntenna	Cable	Preamp		Limit	Over			
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2101.866	56.58	26.81	3.17	37.79	48.77	70.21	-21.44	HORIZONTAL Average
2	4910.595	36.20	31.69	4.87	37.34	35.42	70.21	-34.79	HORIZONTAL Average
3	7346.591	35.04	36.35	5.99	37.18	40.20	70.21	-30.01	HORIZONTAL Average
4	8713.630	45.12	37.14	6.51	37.17	51.60	70.21	-18.61	HORIZONTAL Average
5	12872.440	37.28	39.68	8.09	36.84	48.21	70.21	-22.00	HORIZONTAL Average
6	14788.150	40.67	42.17	8.79	36.51	55.12	70.21	-15.09	HORIZONTAL Average
7	17186.530	34.05	42.61	9.48	36.41	49.73	70.21	-20.48	HORIZONTAL Average



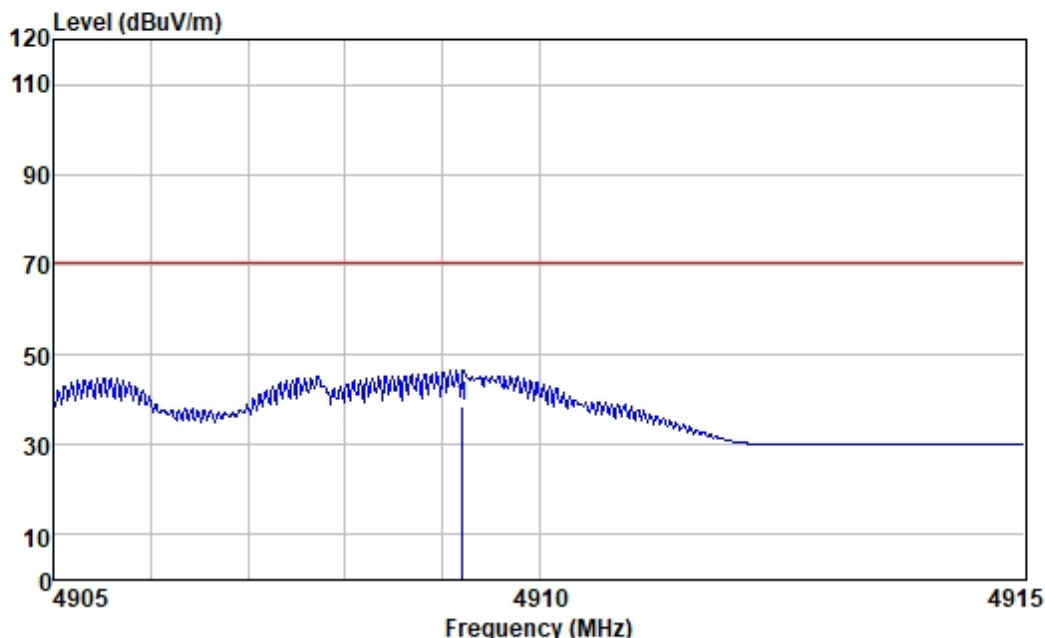
Test Mode: 00; Polarity: Horizontal



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	18977.630	46.74	37.09	3.22	39.31	47.74	70.21	-22.47	HORIZONTAL	Average
2	20353.080	46.20	37.25	3.07	39.97	46.55	70.21	-23.66	HORIZONTAL	Average
3	21514.980	47.21	37.60	3.28	39.37	48.72	70.21	-21.49	HORIZONTAL	Average
4	22638.850	45.44	38.21	3.34	38.67	48.32	70.21	-21.89	HORIZONTAL	Average
5	23028.900	43.00	38.50	3.33	38.17	46.66	70.21	-23.55	HORIZONTAL	Average
6	24576.570	47.36	38.76	3.41	39.27	50.26	70.21	-19.95	HORIZONTAL	Average



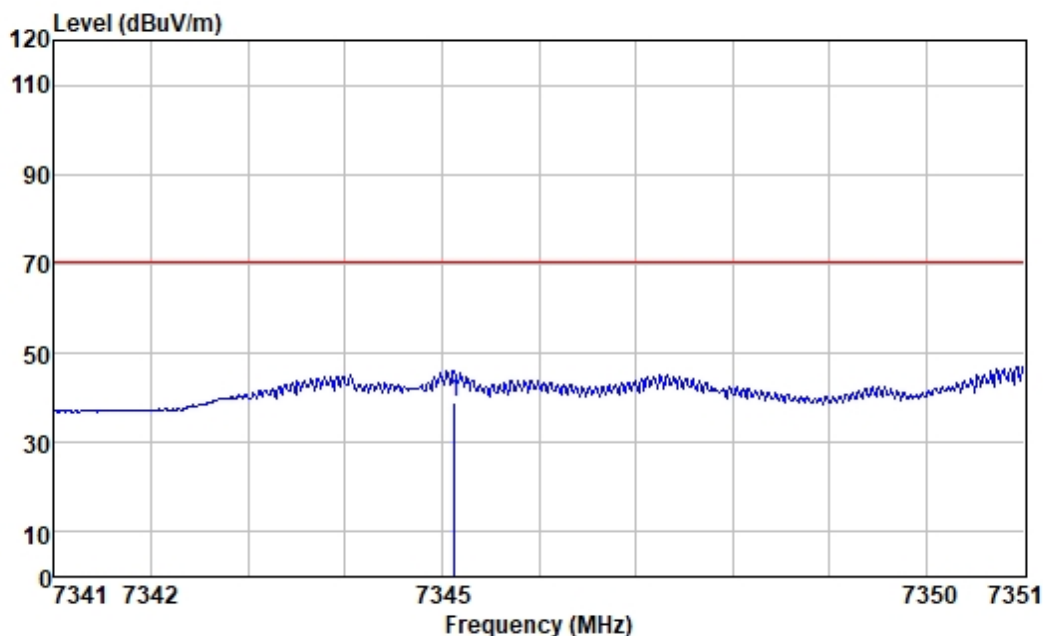
Test Mode: 00; Polarity: Horizontal



	Freq	ReadAntenna	Cable	Preamp	Limit	Over			
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	4909.208	39.45	31.67	4.86	37.34	38.64	70.21	-31.57	HORIZONTAL Average



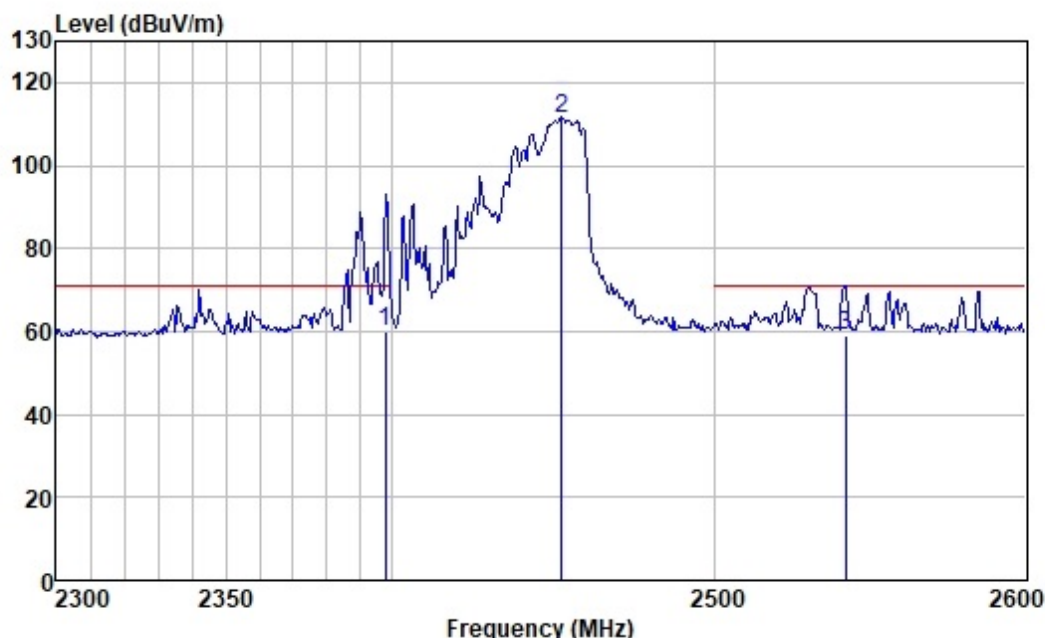
Test Mode: 00; Polarity: Horizontal



	Freq	ReadAntenna	Cable	Preamp	Level	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	7345.128	33.91	36.35	5.99	37.18	39.07	70.21	-31.14	HORIZONTAL Average



Test Mode: 00; Polarity: Horizontal



	Freq	ReadAntenna	Cable	Preamp		Limit	Over			
		Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2397.901	28.84	27.65	3.45	0.00	59.94	71.21	-11.27	HORIZONTAL	Average
2	2452.009	80.56	27.72	3.47	0.00	111.75	-----	-----	HORIZONTAL	peak
3	2541.692	27.54	27.82	3.51	0.00	58.87	71.21	-12.34	HORIZONTAL	Average



6.5 Output Power Measurement

Test Requirement: 47 CFR Part 18

Test Method: FCC OST/MP-5:1986

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: 25.8 °C

Humidity: 49.1 % RH

Atmospheric Pressure: 1008 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

Mass of water (g)	Mass of the container (g)	Ambient temperature (°C)	Initial temperature (°C)	Final temperature (°C)	Heating time (s)	Power output (W)
1101	658	20.1	10	20.3	45	1056.8

Input Voltage (V)	Input Current (A)	Power Factor	Measured input power (W)	Rated input power (W)
120.08	13.05	0.932	1460	1500



6.6 Operating Frequency Measurement

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 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 =1056.8 W according to clause 6.1.2

Limit=20lg(25*SQRT(power/500))+20lg(300/3)=71.21dBuV/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: 25.7 °C Humidity: 48.6 % RH Atmospheric Pressure: 1008 mbar

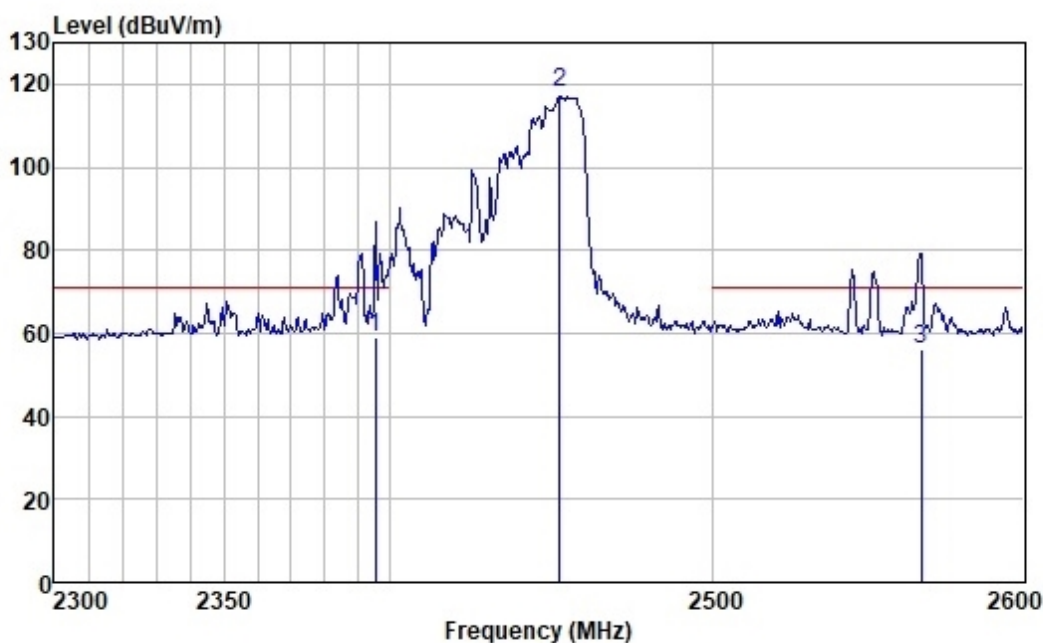


6.6.2 Test Mode Description

Pre-scan / Final test	Mode 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.

6.6.3 Measurement Procedure and Data

Test Mode: 00; The variation of frequency with time



	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	
1	2395.551	27.86	27.64	3.45	0.00	58.95	71.21 -12.26	VERTICAL Average
2	2452.009	85.79	27.72	3.47	0.00	116.98	-----	VERTICAL peak
3	2567.059	24.79	27.85	3.52	0.00	56.16	71.21 -15.05	VERTICAL Average

The variation of frequency with time

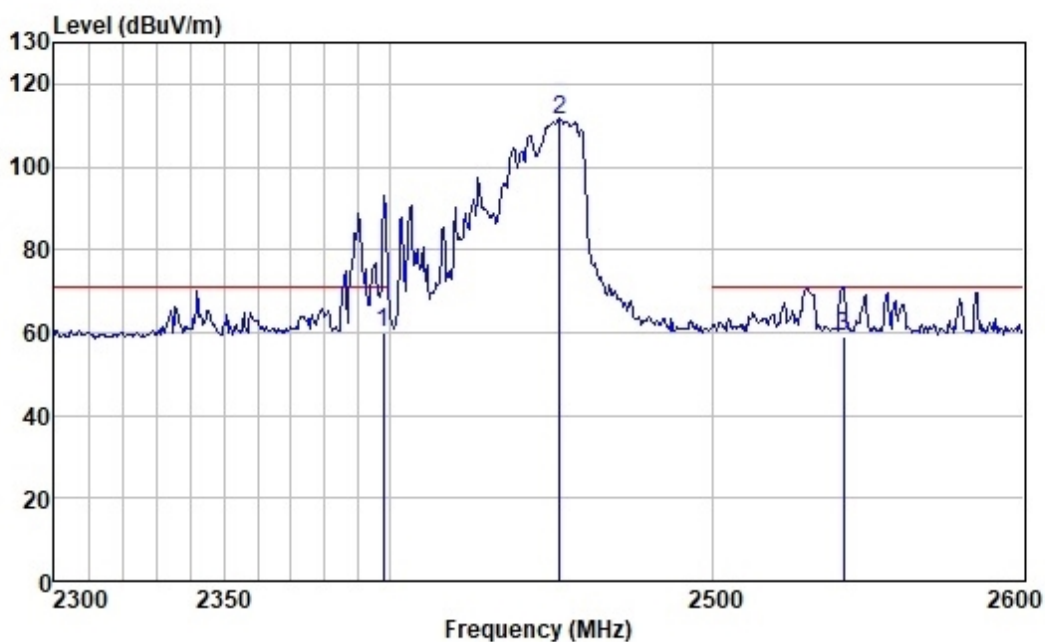
The operating frequency was measured using a spectrum analyzer, the supply voltage was setting at the rated AC voltage, measured was start with EUT at room temperature, the operating frequency was monitored until the water load was reduced to 20 percent of the original quantity.

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	2452.009



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



	Freq	ReadAntenna	Cable	Preamp	Limit	Over		
	MHz	Level	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2397.901	28.84	27.65	3.45	0.00	59.94	71.21	-11.27 HORIZONTAL Average
2	2452.009	80.56	27.72	3.47	0.00	111.75	-----	----- HORIZONTAL peak
3	2541.692	27.54	27.82	3.51	0.00	58.87	71.21	-12.34 HORIZONTAL Average

The variation of frequency with line voltage.

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	2452.009



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, Testing & Calibration 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

6.7.1 E.U.T. Operation

Operating Environment:
Temperature: 23.3 °C Humidity: 49.6 % RH Atmospheric Pressure: 1008 mbar

6.7.2 Test Mode Description

Pre-scan / Final test	Mode 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.

6.7.3 Measurement Procedure and Data

Maximum measure level (mW/cm ²)	Limit (mW/cm ²)	Test Result
0.046	1	Pass



7 Test Setup Photo

Refer to Appendix - Test Setup Photo for GZEM240100049906



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

8 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for GZEM2506003944HS

- End of the Report -

