



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

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Report No.: GZEM190101027201  
Page: 1 of 37  
FCC ID: UHW11043012

## TEST REPORT

<b>Application No.:</b>	GZEM1901010272HS
<b>Applicant:</b>	Guangdong Galanz Enterprises Co., Ltd.
<b>Address of Applicant:</b>	25 Ronggui Nan Road, Shunde, Foshan, Guangdong, China
<b>Manufacturer:</b>	Guangdong Galanz Microwave Electrical Appliances Manufacturing Co., Ltd.
<b>Address of Manufacturer:</b>	3 Xingpu Avenue, Huangpu, Zhongshan, Guangdong, China.
<b>Factory:</b>	Guangdong Galanz Microwave Electrical Appliances Manufacturing Co., Ltd.
<b>Address of Factory:</b>	3 Xingpu Avenue, Huangpu, Zhongshan, Guangdong, China.
<b>Equipment Under Test (EUT):</b>	
<b>FCC ID:</b>	UHW11043012
<b>EUT Name:</b>	Microwave oven
<b>Model No.:</b>	P11043 (X) V-(Y)-FR01, P11043 (X) V-(Y)
<input checked="" type="checkbox"/> <b>Test Result:</b>	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
<b>Trade Mark:</b>	Galanz
<b>Standard(s) :</b>	47 CFR Part 18
<b>Date of Receipt:</b>	2019-01-15
<b>Date of Test:</b>	2019-01-22 to 2019-05-15
<b>Date of Issue:</b>	2019-05-31

<b>Test Result:</b>	<b>Pass*</b>
---------------------	--------------

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



Kobe Jian  
Lab Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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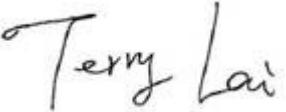
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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2019-05-31		Original

Authorized for issue by:			
Tested By	 Damon_Guan /Project Engineer		2019-01-22 to 2019-05-15
Checked By	 Terry_Lai /Reviewer		Date
			2019-05-31
			Date



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## 2 Test Summary

<b>Emission Part</b>				
<b>Item</b>	<b>Standard</b>	<b>Method</b>	<b>Requirement</b>	<b>Result</b>
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 18	FCC OST/MP-5:1986	N/A	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 18	FCC OST/MP-5:1986	N/A	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 18	FCC OST/MP-5:1986	N/A	Pass
Radiated Emissions (Magnetic field Strength) (9kHz-30MHz)	47 CFR Part 18	FCC OST/MP-5:1986	N/A	Pass
Operating Frequency	47 CFR Part 18	FCC OST/MP-5:1986	N/A	Pass

N/A: Not Applicable

▣ Declaration of EUT Family Grouping:

**Model No.:** P11043 (X) V-(Y)-FR01, P11043 (X) V-(Y)

P: with microwave function only

110: denote the output power is 1100W

43: denote different cavity in 43 liters.

Variable (X) may be

AL, AP, APH, ASL, ASP, ATL, ATP, EL, EP, ESL, ESP, ETL, ETP, ML, MP, MSL, MSP, MTL, MTP, MYL.

"L" is pull-out type door, P is push-button type door. When there is "A", "E", "M", "MY" denote the electrical control model. "S" denotes stainless steel cavity; "T" denotes the painted cavity; When there is neither "S" nor "T" before "L", "P" denotes the epoxy painted cavity, "H" denotes the humidity sensor.

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.

Therefore only one model **P11043APHV-B9-FR01** was tested in this report.

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## 4 General Information

### 4.1 Details of E.U.T.

Power Supply: AC 120V 60Hz  
Test Voltage: AC 120V 60Hz  
Cable: About 1.0m x 3 wires unscreened AC mains cable.

### 4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
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

EMC

No.	Item	Measurement Uncertainty
1	Conducted Disturbance Voltage at Mains Terminals	±3.63dB (9kHz to 150kHz)
		±3.22dB (150kHz to 30MHz)
2	Disturbance Power	±3.78dB
3	Radiated Emissions	±5.0dB (30MHz-1GHz)
		±5.0dB (1GHz-6GHz)
4	Temperature	±0.4°C
5	Humidity	±1.3%
6	DC power	±0.5 %

### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,  
198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District,  
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No tests were sub-contracted.

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## 4.5 Test Facility

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

### ● NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

### ● ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

### ● 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.

### ● CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to

ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

### ● FCC Recognized 2.948 Listed Test Firm(Registration No.: 282399)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 282399, May 31, 2002.

### ● 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, Jul 13, 2017.

### ● Industry Canada (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-10449 and T-11179)

The 10m Semi-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-10449 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 17025:2005, the Basic Rules, IEC60068-2-27 and Rules of procedure IEC60068-2-27, and the relevant IEC60068-2-27 CB-Scheme Operational documents.



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## 4.6 Deviation from Standards

None

## 4.7 Abnormalities from Standard Conditions

None



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## 5 Equipment List

<b>Conducted Emissions at Mains Terminals (150kHz-30MHz)</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
Shielding Room	Zhong Yu	8m x 3m x 3.8m	EMC0306	N/A	N/A
Two-Line V-Netwok	R&S	ENV216	EMC0118	2019-01-11	2020-01-10
LISN	R&S	ENV216	EMC2135	2018-09-21	2019-09-20
EMI Test Receiver	Rohde & Schwarz	ESCS30	EMC0506	2018-11-19	2019-11-18
Coaxial Cable	HangTianXing	2m	EMC0107	2017-07-23	2019-07-22
Voltage Probe	SGS	N/A	EMC0106	2018-04-04	2020-04-03
Conical Metal Housing	SGS-EMC	N/A	EMC0167	2018-04-19	2020-04-18
Test Software E3c	Audix	Ver. 5.4.1221b	GZE100-62	N/A	N/A

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Guangzhou Branch**

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Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2019-01-20	2020-01-19
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2019-01-20	2020-01-19
Chamber cable	HangTianXing	N/A	EMC0542	2017-06-30	2019-06-30
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9160	EMC2025	2016-09-08	2019-09-07
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	SEM003-18	2016-06-29	2019-06-28
Bi-log Type Antenna	Schaffner -Chase	CBL6112B	EMC0524	2016-09-08	2019-09-07
Bi-log Type Antenna	Schaffner -Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna 1GHz-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2016-09-09	2019-09-08
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2019-01-11	2020-01-10
Amplifier	HP	8447F	EMC2065	2018-06-01	2019-05-31
Pre-Amplifier MH648A	ANRITSU CORP	MH648A	EMC2086	2018-11-19	2019-11-18
Active Loop Antenna	EMCO	6502	EMC0523	2018-03-05	2020-03-04
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2019-01-11	2020-01-10
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2019-01-11	2020-01-10
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2017-06-18	2019-06-18
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2017-12-19	2019-12-18
MXE EMI Receiver	Keysight	N9038A	EMC2139	2018-11-19	2019-11-18
EXA Signal Analyzer	Keysight	N9010A	EMC2138	2018-11-19	2019-11-18
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

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

Report No.: GZEM190101027201  
Page: 10 of 37

Radiated Emissions (above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2019-01-20	2020-01-19
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2019-01-20	2020-01-19
Chamber cable	HangTianXing	N/A	EMC0542	2017-06-30	2019-06-30
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9160	EMC2025	2016-09-08	2019-09-07
Bi-log Type Antenna	Schaffner -Chase	CBL6112B	EMC0524	2016-09-08	2019-09-07
Bi-log Type Antenna	Schaffner -Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna 1GHz-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2016-09-09	2019-09-08
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2019-01-07	2020-01-08
Amplifier	HP	8447F	EMC2065	2018-06-01	2019-05-31
Pre-Amplifier MH648A	ANRITSU CORP	MH648A	EMC2086	2018-11-19	2019-11-18
Active Loop Antenna	EMCO	6502	EMC0523	2018-02-24	2019-02-23
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2019-01-11	2020-01-10
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2019-01-11	2020-01-10
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2017-06-18	2019-06-18
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2017-12-19	2019-12-18
MXE EMI Receiver	Keysight	N9038A	EMC2139	2018-11-19	2019-11-18
EXA Signal Analyzer	Keysight	N9010A	EMC2138	2018-11-19	2019-11-18
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	SEM003-18	2016-06-29	2019-06-28
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

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

Report No.: GZEM190101027201  
Page: 11 of 37

Radiated Emissions (Magnetic field Strength) (9kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2019-01-20	2020-01-19
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2019-01-20	2020-01-19
Chamber cable	HangTianXing	N/A	EMC0542	2017-06-30	2019-06-30
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9160	EMC2025	2016-09-08	2019-09-07
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	SEM003-18	2016-06-29	2019-06-28
Bi-log Type Antenna	Schaffner -Chase	CBL6112B	EMC0524	2016-09-08	2019-09-07
Bi-log Type Antenna	Schaffner -Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna 1GHz-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2016-09-09	2019-09-08
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2019-01-11	2020-01-10
Amplifier	HP	8447F	EMC2065	2018-06-01	2019-05-31
Pre-Amplifier MH648A	ANRITSU CORP	MH648A	EMC2086	2018-11-19	2019-11-18
Active Loop Antenna	EMCO	6502	EMC0523	2018-03-05	2020-03-04
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2019-01-11	2020-01-10
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2019-01-11	2020-01-10
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2017-06-18	2019-06-18
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2017-12-19	2019-12-18
MXE EMI Receiver	Keysight	N9038A	EMC2139	2018-11-19	2019-11-18
EXA Signal Analyzer	Keysight	N9010A	EMC2138	2018-11-19	2019-11-18
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2018-07-20	2019-07-19
DMM	Fluke	73	EMC0007	2018-07-19	2019-07-18

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## 6 Emission Test Results

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

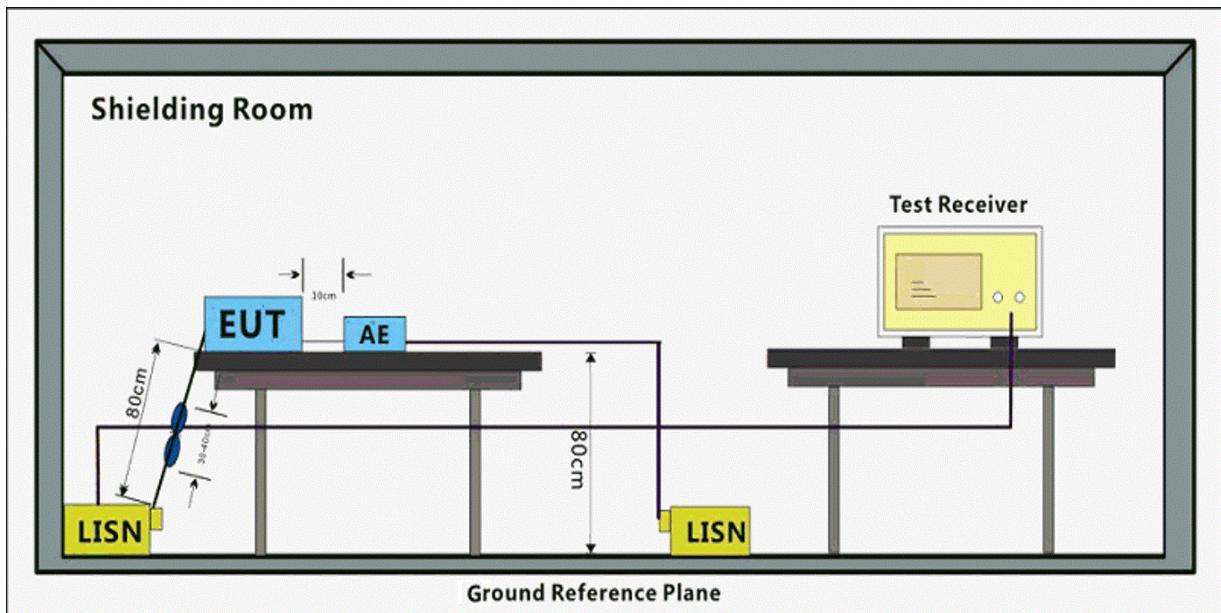
Test Requirement:	47 CFR Part 18
Test Method:	FCC OST/MP-5:1986
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz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

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.9 °C      Humidity: 51.5 % RH      Atmospheric Pressure: 1020 mbar  
Test mode      a: Test the EUT in microwave mode with maximum power.

#### 6.1.2 Test Setup Diagram



#### 6.1.3 Measurement Data

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

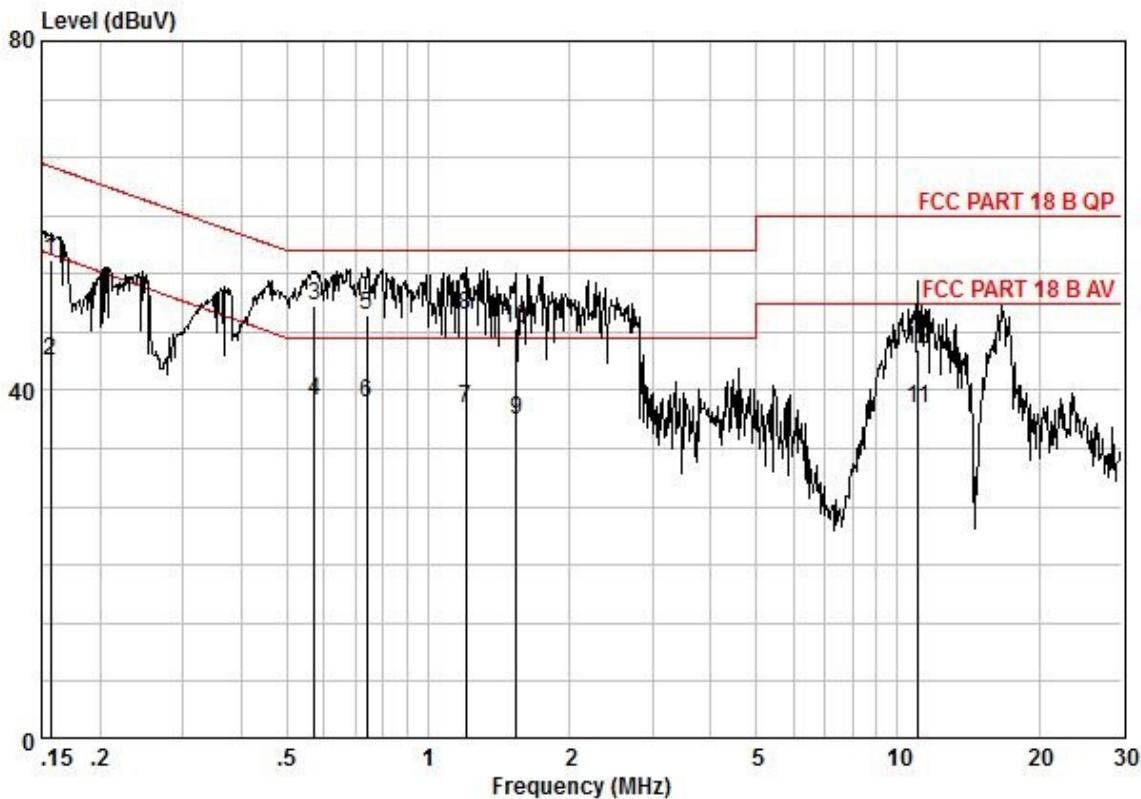
Measured Level = Read level + Cable Loss + LISN Factor



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Mode:a; Line:Live Line


 Pol  
No  
Model

Frequency MHz	read level dBuV	Cable Loss dB	LISN Factor dB	Measured level dBuV	Limit Line dBuV	Over limit dB	Remark
0.16	45.49	0.10	9.41	55.00	65.65	-10.65	QP
0.16	33.82	0.10	9.41	43.33	55.65	-12.32	AVERAGE
0.57	39.93	0.22	9.57	49.72	56.00	-6.28	QP
0.57	28.99	0.22	9.57	38.78	46.00	-7.22	AVERAGE
0.74	38.66	0.26	9.59	48.51	56.00	-7.49	QP
0.74	28.65	0.26	9.59	38.50	46.00	-7.50	AVERAGE
1.20	28.12	0.30	9.57	37.99	46.00	-8.01	AVERAGE
1.20	38.81	0.30	9.57	48.68	56.00	-7.32	QP
1.54	26.83	0.31	9.55	36.68	46.00	-9.32	AVERAGE
1.54	37.27	0.31	9.55	47.12	56.00	-8.88	QP
11.08	27.56	0.65	9.63	37.85	50.00	-12.15	AVERAGE
11.08	34.38	0.65	9.63	44.67	60.00	-15.33	QP

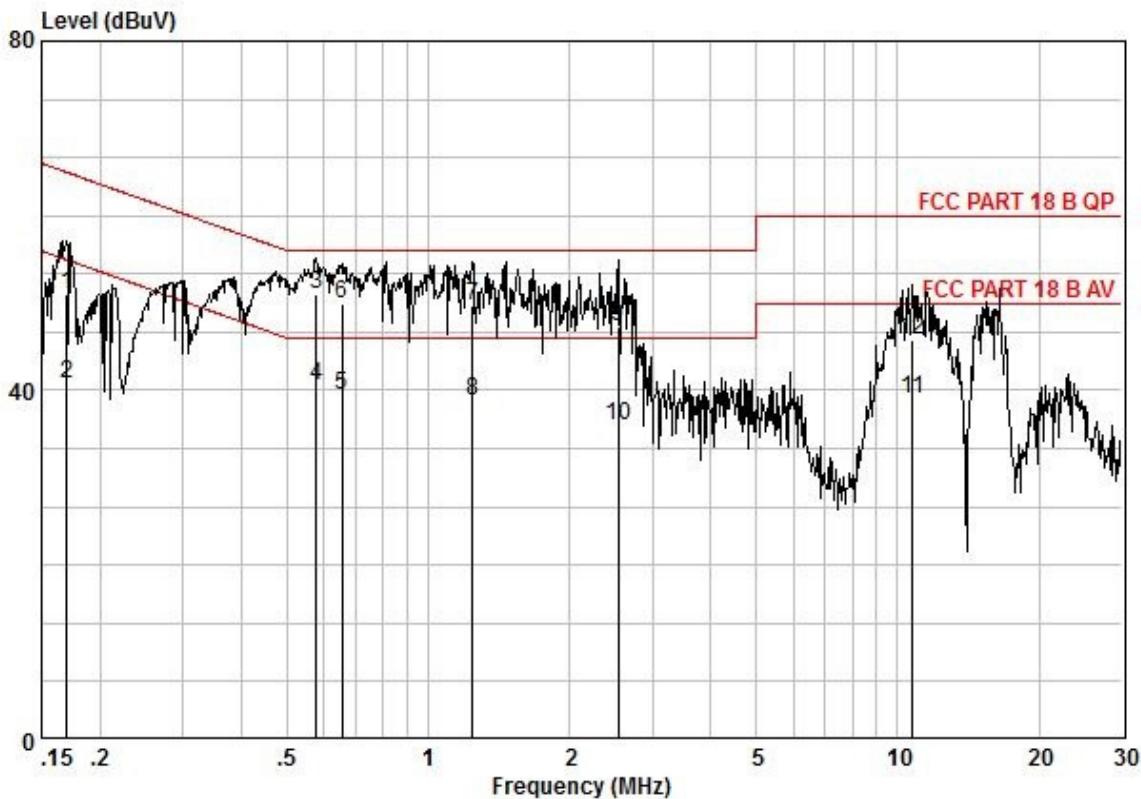
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Mode:a; Line:Neutral Line


 Pol  
No  
Model

Frequency MHz	read level dBuV	Cable Loss dB	LISN Factor dB	Measured level dBuV	Limit Line dBuV	Over limit dB	Remark
0.17	41.47	0.10	9.53	51.10	64.99	-13.89	QP
0.17	31.10	0.10	9.53	40.73	54.99	-14.26	AVERAGE
0.58	41.25	0.22	9.63	51.10	56.00	-4.90	QP
0.58	30.80	0.22	9.63	40.65	46.00	-5.35	AVERAGE
0.65	29.62	0.24	9.62	39.48	46.00	-6.52	AVERAGE
0.65	40.00	0.24	9.62	49.86	56.00	-6.14	QP
1.24	39.80	0.30	9.62	49.72	56.00	-6.28	QP
1.24	28.79	0.30	9.62	38.71	46.00	-7.29	AVERAGE
2.54	37.18	0.48	9.62	47.27	56.00	-8.73	QP
2.54	25.89	0.48	9.62	35.98	46.00	-10.02	AVERAGE
10.73	28.79	0.64	9.67	39.09	50.00	-10.91	AVERAGE
10.73	35.42	0.64	9.67	45.72	60.00	-14.28	QP

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## 6.2 Operating Frequency

Test Requirement: 47 CFR Part 18  
Test Method: FCC OST/MP-5:1986  
Frequency Range: 2400-2500 MHz  
Detector: Peak  
Limit:

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

### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.7 °C      Humidity: 54.9 % RH      Atmospheric Pressure: 1020 mbar  
Test mode a: Test the EUT in microwave mode with maximum power.

### 6.2.2 Measurement Data

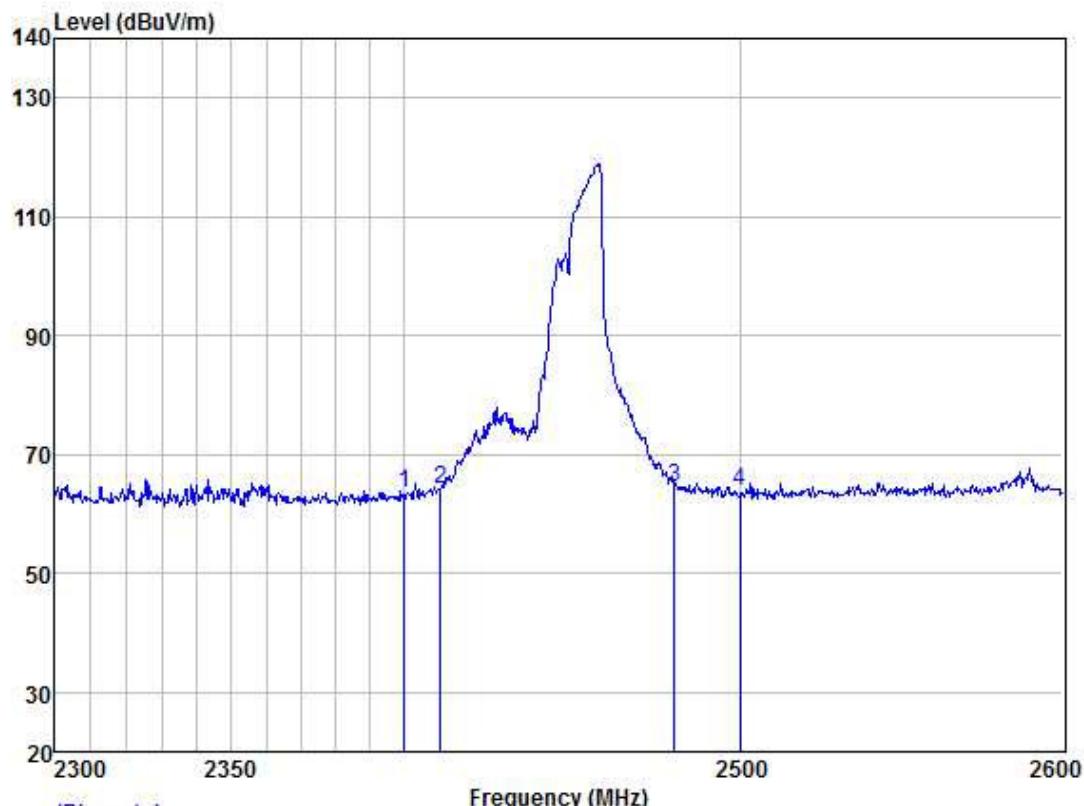
Polarization	ISM frequency(MHz)	Tolerance(MHz)	Measurement Data(MHz)
Horizontal	2450	±50	2410.6-2480.1
Vertical	2450	±50	2413.2-2475



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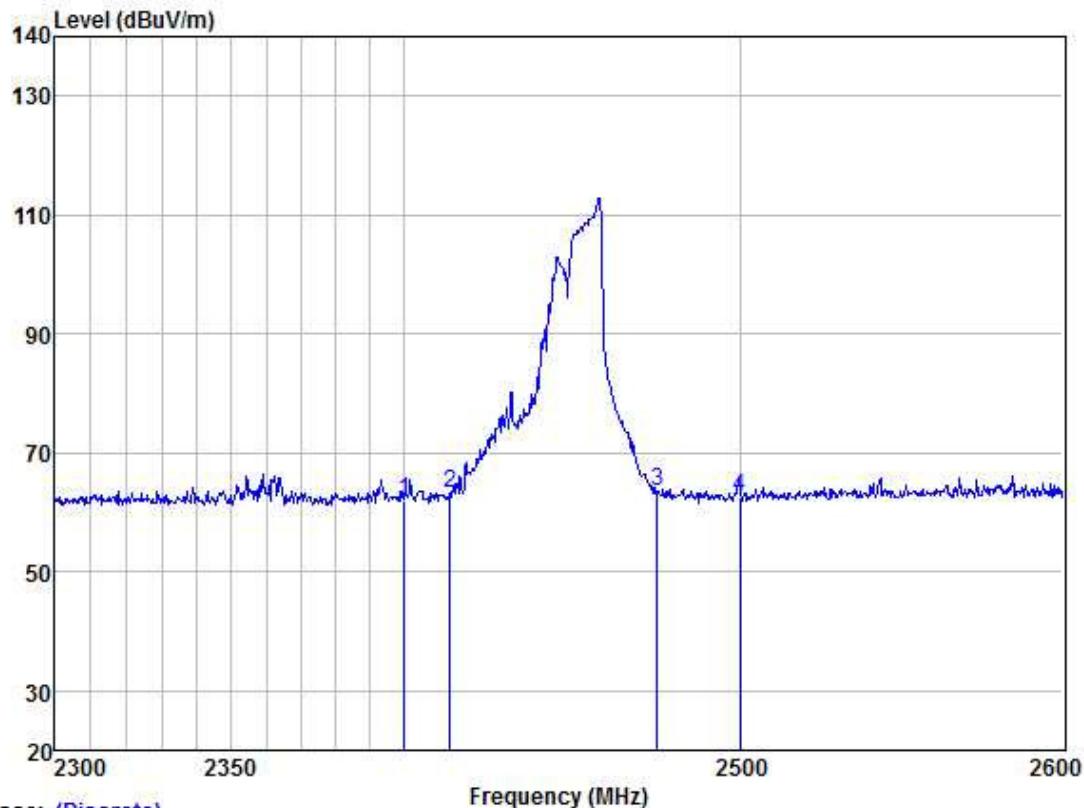
Mode:a; Polarization:Horizontal



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Mode:a; Polarization:Vertical



Race: (Discrete)	ReadAntenna		Cable		Preamp		Limit Line	Over Limit	Over Pol/Phase	Remark
	Freq	Level Factor	Loss Factor	Level	dB	dBuV/m				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2400.000	30.49	26.45	4.86	0.00	61.80	-----	-----	VERTICAL	Peak
2	2413.238	31.79	26.48	4.95	0.00	63.22	-----	-----	VERTICAL	Peak
3	2474.963	31.58	26.57	5.37	0.00	63.52	-----	-----	VERTICAL	Peak
4	2500.000	31.04	26.60	4.95	0.00	62.59	-----	-----	VERTICAL	Peak

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### 6.3 RF Output Power Measurement

Test Requirement: 47 CFR Part 18

Test Method: FCC OST/MP-5:1986

#### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.7 °C      Humidity: 54.9 % RH      Atmospheric Pressure: 1020 mbar

Test mode a: Test the EUT in microwave mode with maximum power.

#### 6.3.2 Measurement Data

Mass of water (g)	Mass of the container (g)	Ambient temperature (°C)	Initial temperature (°C)	Final temperature (°C)	Heating time(S)	Power output (watts)
1000	368	19.4	19.8	47.4	125	1065.4

**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<sub>w</sub> is the mass of the water, in grams

m<sub>c</sub> is the mass of the container, in grams

T<sub>0</sub> is the ambient temperature, in degrees Celsius

T<sub>1</sub> is the initial temperature of the water, in degrees Celsius

T<sub>2</sub> is the final temperature of the water, in degrees Celsius

t is the heating time, in seconds, excluding the magnetron filament heating-up time.

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## 6.4 Radiated Emissions (30MHz-1GHz)

- Test Requirement: 47 CFR Part 18  
Test Method: FCC OST/MP-5:1986  
Frequency Range: 30MHz to 1GHz  
Measurement Distance: 3m  
Detector: Peak for pre-scan, Average for the final result  
( 100 kHz Resolution Bandwidth for 30MHz to 1,000MHz)  
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 =1065.4W according to clause 6.3.2

Limit=20lg(25\*SQRT(power/500))+20lg(300/3)=31.24+40=71.24dBuV/m  
@ 3m distance.

### 6.4.1 E.U.T. Operation

Operating Environment:

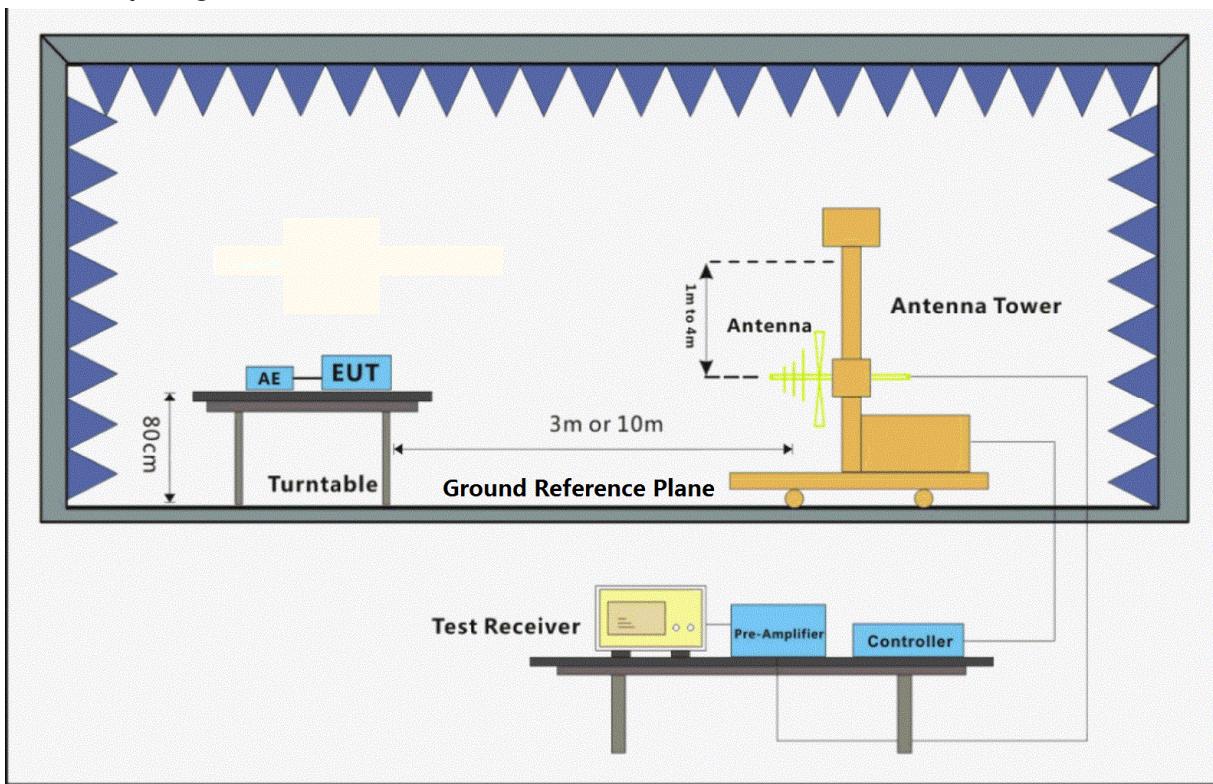
Temperature: 22.8 °C      Humidity: 56.6 % RH      Atmospheric Pressure: 1020 mbar  
Test mode      a: Test the EUT in microwave mode with maximum power.



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**6.4.2 Test Setup Diagram****6.4.3 Measurement Data**

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

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

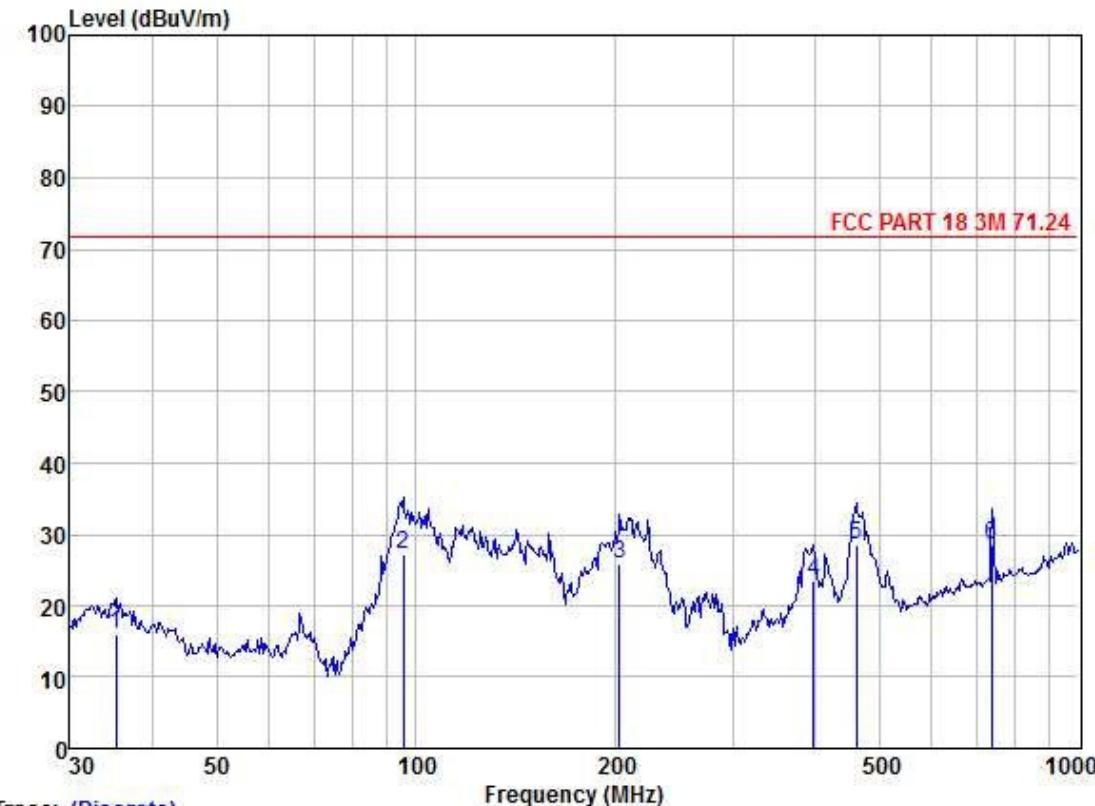
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Mode:a; Polarization:Horizontal



Trace: (Discrete)

Freq	ReadAntenna	Cable	Preamp	Limit	Over	Pol/Phase	Remark
	Freq	Level Factor	Loss Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 35.251	28.64	13.41	0.60	26.53	16.12	71.24	-55.12 HORIZONTAL Average
2 95.762	42.47	9.90	1.10	26.40	27.07	71.24	-44.17 HORIZONTAL Average
3 202.810	40.76	9.94	1.51	26.45	25.76	71.24	-45.48 HORIZONTAL Average
4 397.633	33.87	14.70	2.20	27.34	23.43	71.24	-47.81 HORIZONTAL Average
5 462.346	37.44	16.09	2.32	27.44	28.41	71.24	-42.83 HORIZONTAL Average
6 739.661	32.73	20.16	2.90	27.31	28.48	71.24	-42.76 HORIZONTAL Average

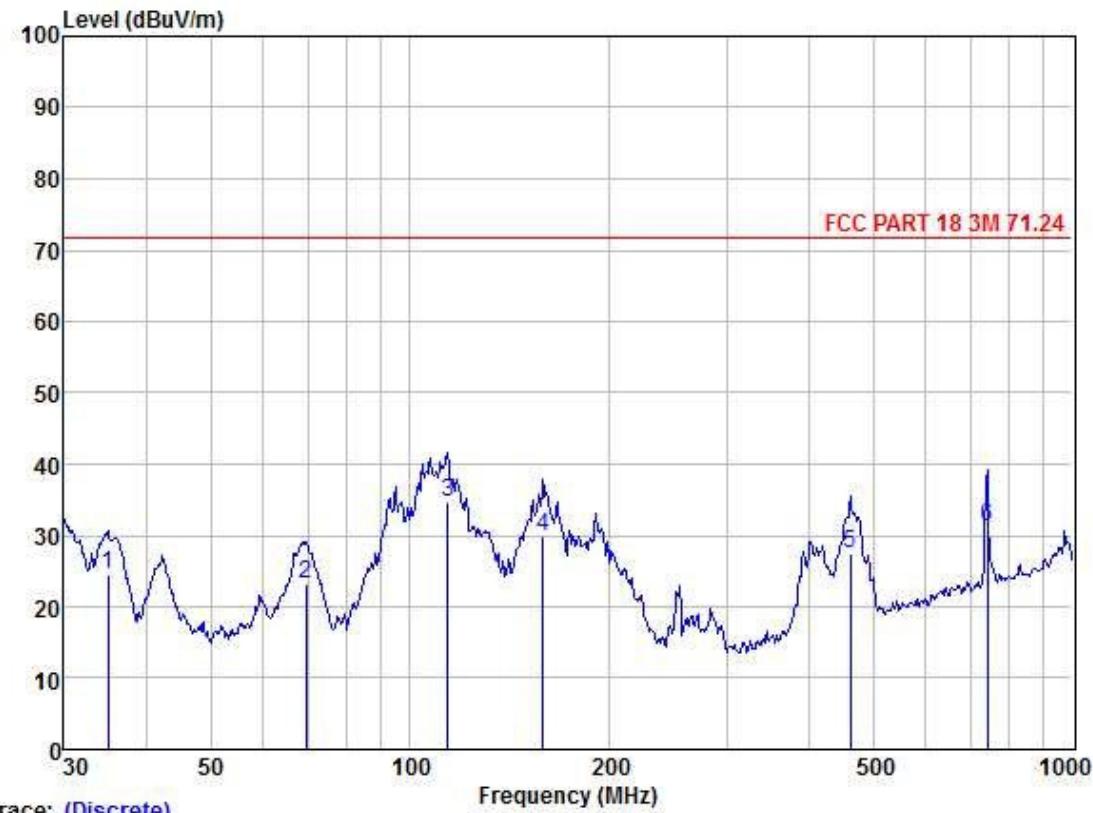
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Mode:a; Polarization:Vertical



	Freq	ReadAntenna Level	Cable Factor	Preamp Loss	Limit Factor	Over Line Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	35.005	37.11	13.39	0.60	26.53	24.57	71.24	-46.67	VERTICAL
2	69.600	37.88	10.87	0.90	26.46	23.19	71.24	-48.05	VERTICAL
3	114.114	48.22	11.56	1.17	26.40	34.55	71.24	-36.69	VERTICAL
4	158.668	40.86	14.14	1.33	26.44	29.89	71.24	-41.35	VERTICAL
5	462.346	36.51	16.09	2.32	27.44	27.48	71.24	-43.76	VERTICAL
6	744.866	35.26	20.22	2.90	27.30	31.08	71.24	-40.16	VERTICAL

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## 6.5 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 18  
 Test Method: FCC OST/MP-5:1986  
 Frequency Range: Above 1GHz  
 Measurement Distance: 3m  
 Detector: Peak for pre-scan, Average for the final result  
 (1 MHz Resolution Bandwidth for 1,000MHz to 25,000MHz)  
 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)

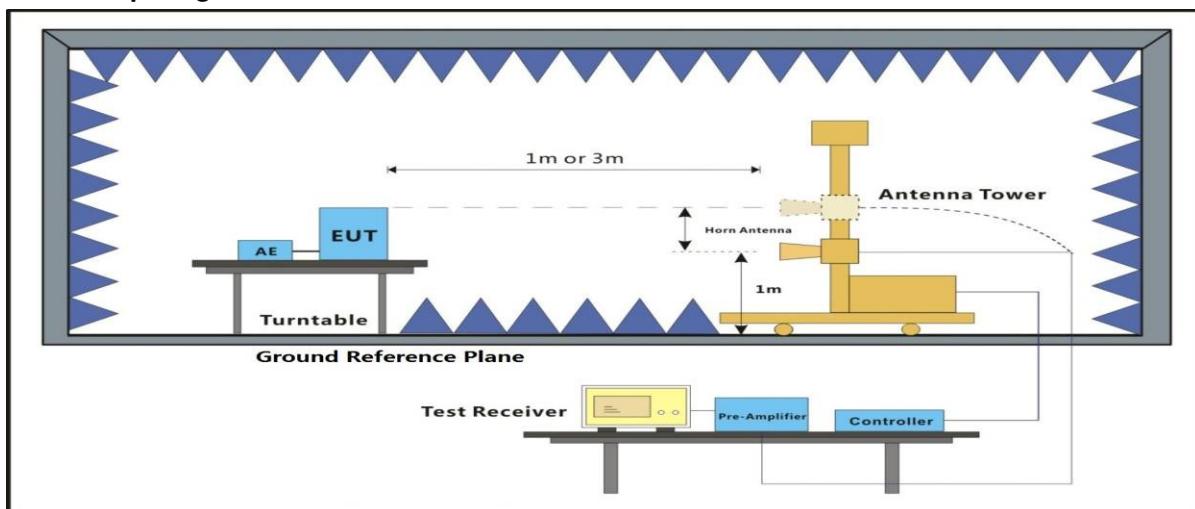
Power =1065.4W according to clause 6.3.2

Limit=20lg(25\*SQRT(power/500))+20lg(300/3)=31.24+40=71.24dBuV/m  
@ 3m distance.

### 6.5.1 E.U.T. Operation

Operating Environment:  
 Temperature: 22.8 °C      Humidity: 56.6 % RH      Atmospheric Pressure: 1020 mbar  
 Test mode      a: Test the EUT in microwave mode with maximum power.

### 6.5.2 Test Setup Diagram



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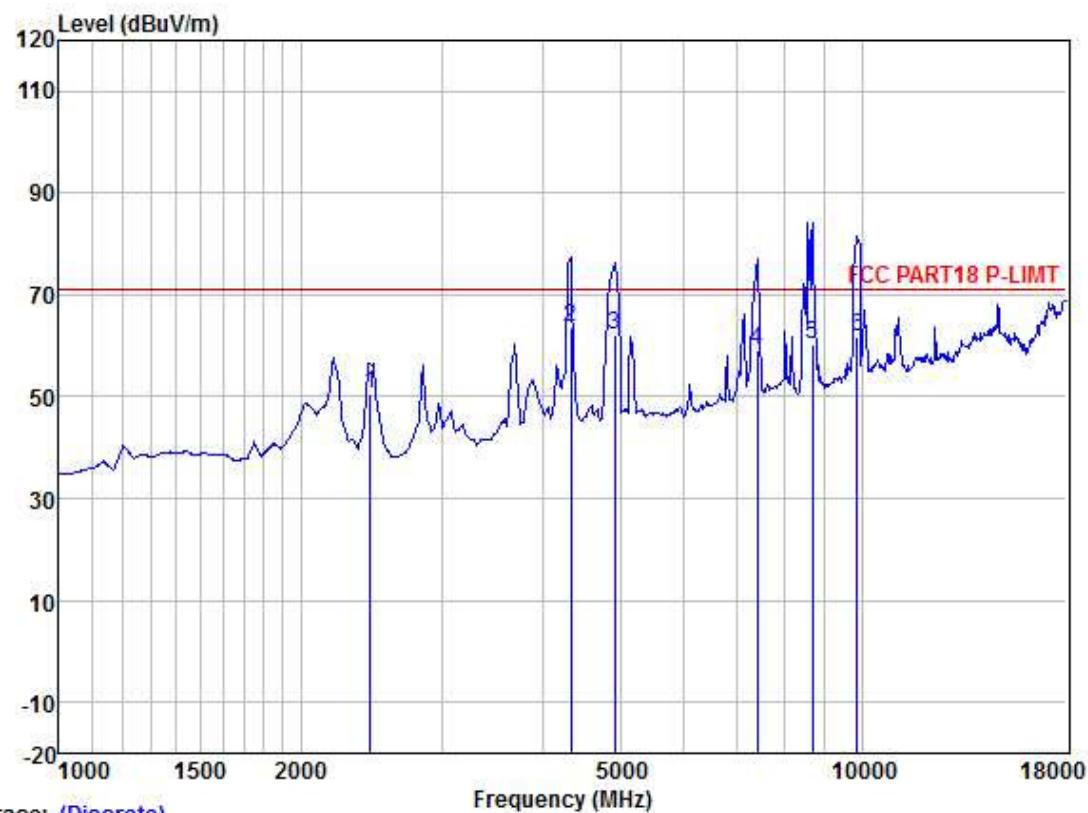
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### 6.5.3 Measurement Data

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

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

Mode:a; Polarization:Horizontal



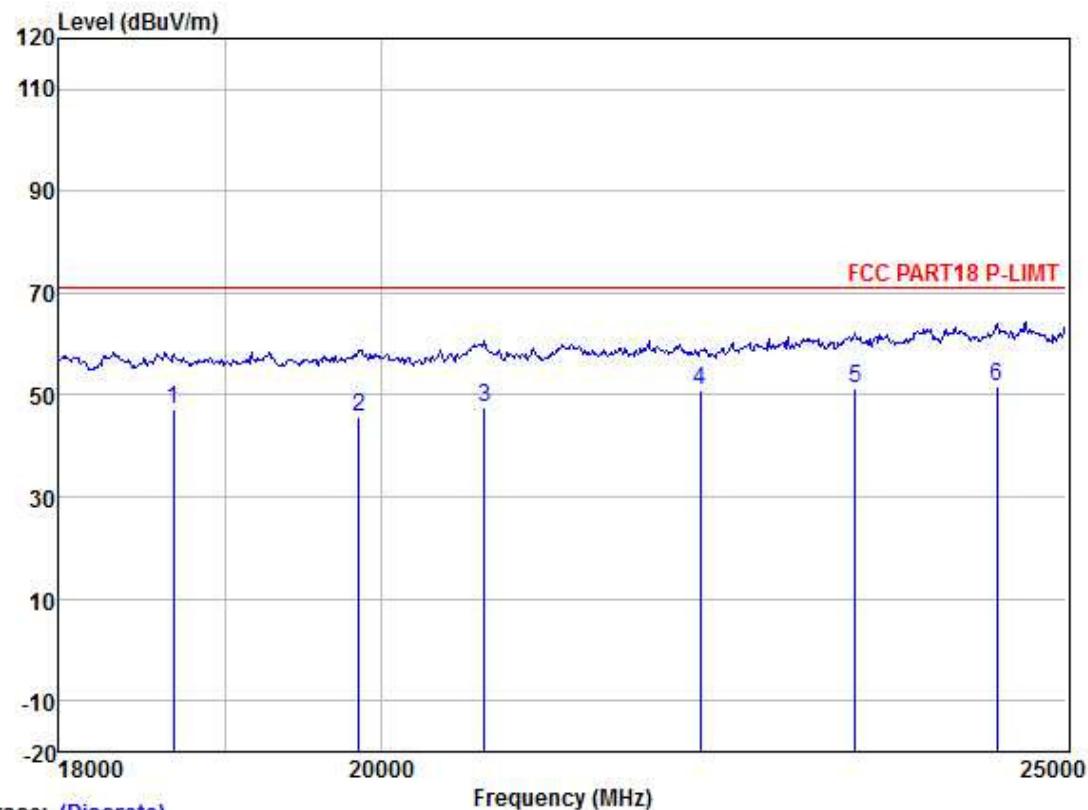
Index	Frequency (MHz)	Read Level		Antenna Factor		Cable Loss		Preamp Factor		Limit Level		Over Line Limit	Over Pol/Phase	Remark
		Freq	MHz	Antenna	dBuV	Factor	dB	Cable	dB	Preamp	dBuV/m	Line	dB	
1	2442.751	55.91	26.52	5.13	36.91	50.65	71.24	-20.59	HORIZONTAL	Average				
2	4341.886	63.80	29.96	6.22	36.42	63.56	71.24	-7.68	HORIZONTAL	Average				
3	4917.535	60.41	30.99	7.29	36.50	62.19	71.24	-9.05	HORIZONTAL	Average				
4	7411.100	52.69	35.89	7.42	36.77	59.23	71.24	-12.01	HORIZONTAL	Average				
5	8688.480	52.68	36.25	7.94	36.65	60.22	71.24	-11.02	HORIZONTAL	Average				
6	9866.789	51.61	37.86	8.52	36.32	61.67	71.24	-9.57	HORIZONTAL	Average				

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Mode:a; Polarization:Horizontal



Trace: (Discrete)	Freq	ReadAntenna		Cable		Preamp Loss Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
		Level	Factor	dB	dBuV/m						
	MHz	dBuV	dB/m								
1	18686.870	27.86	37.98	16.81	35.60	47.05	71.24	-24.19	HORIZONTAL	Average	
2	19851.230	26.22	38.00	17.27	35.60	45.89	71.24	-25.35	HORIZONTAL	Average	
3	20676.550	27.20	37.92	17.85	35.51	47.46	71.24	-23.78	HORIZONTAL	Average	
4	22182.430	29.19	38.39	18.68	35.37	50.89	71.24	-20.35	HORIZONTAL	Average	
5	23333.500	27.96	39.60	19.51	35.89	51.18	71.24	-20.06	HORIZONTAL	Average	
6	24439.710	27.79	39.47	20.72	36.12	51.86	71.24	-19.38	HORIZONTAL	Average	

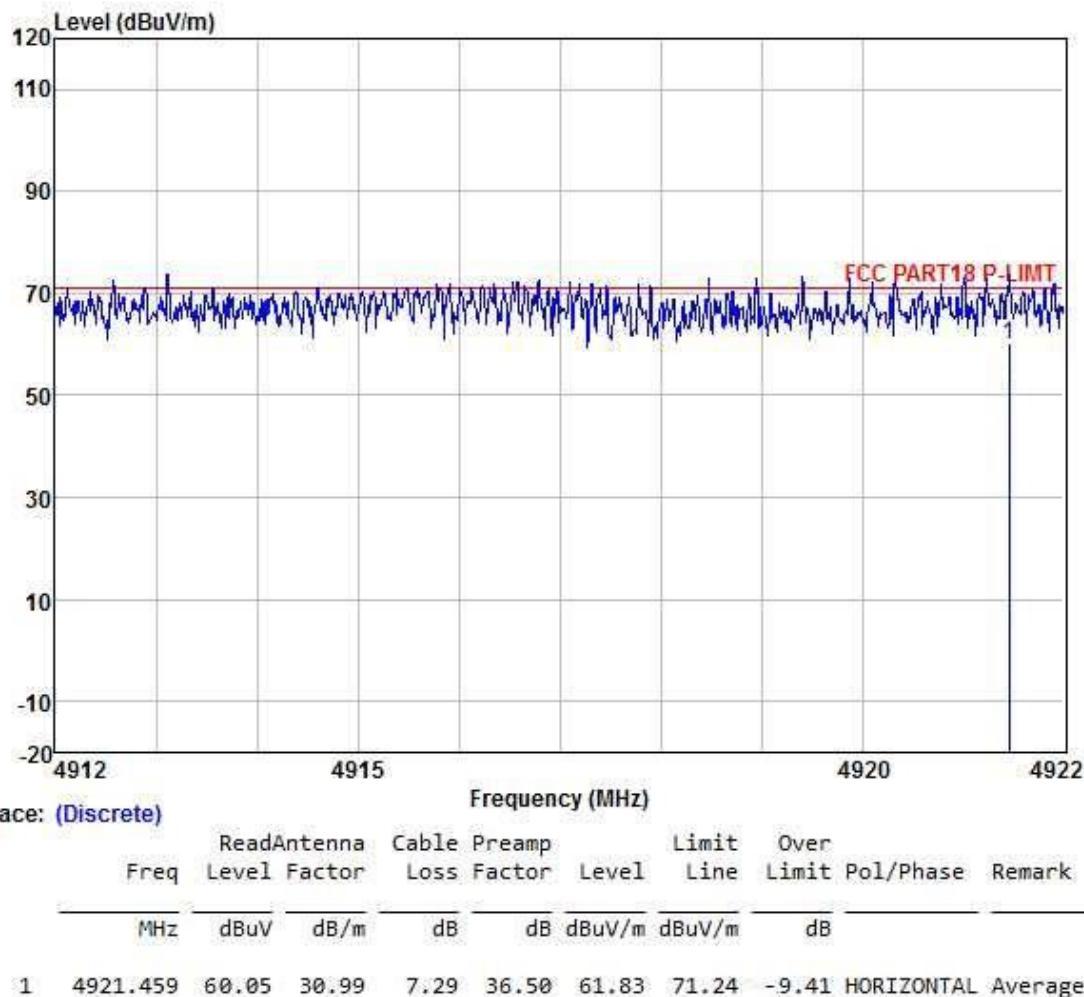
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Mode:a; Polarization:Horizontal



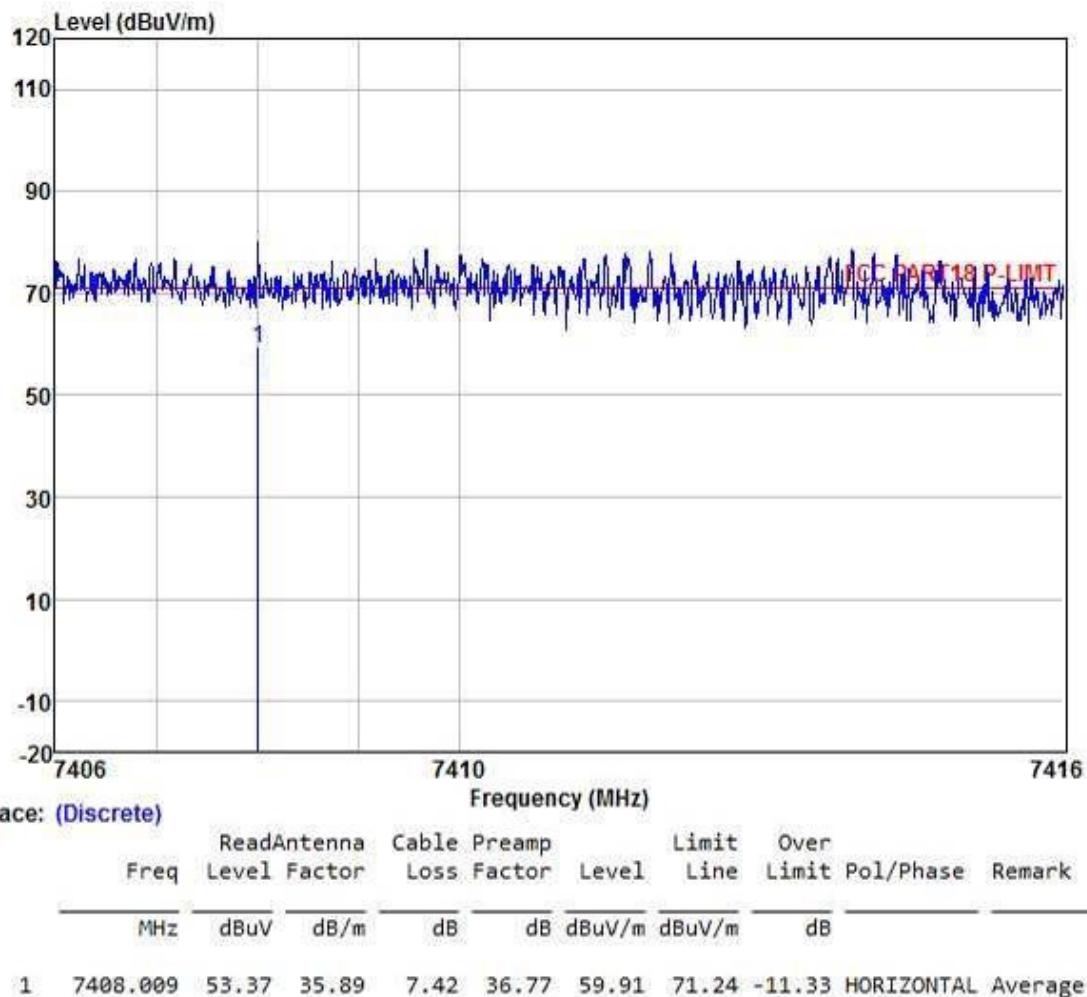
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Mode:a; Polarization:Horizontal



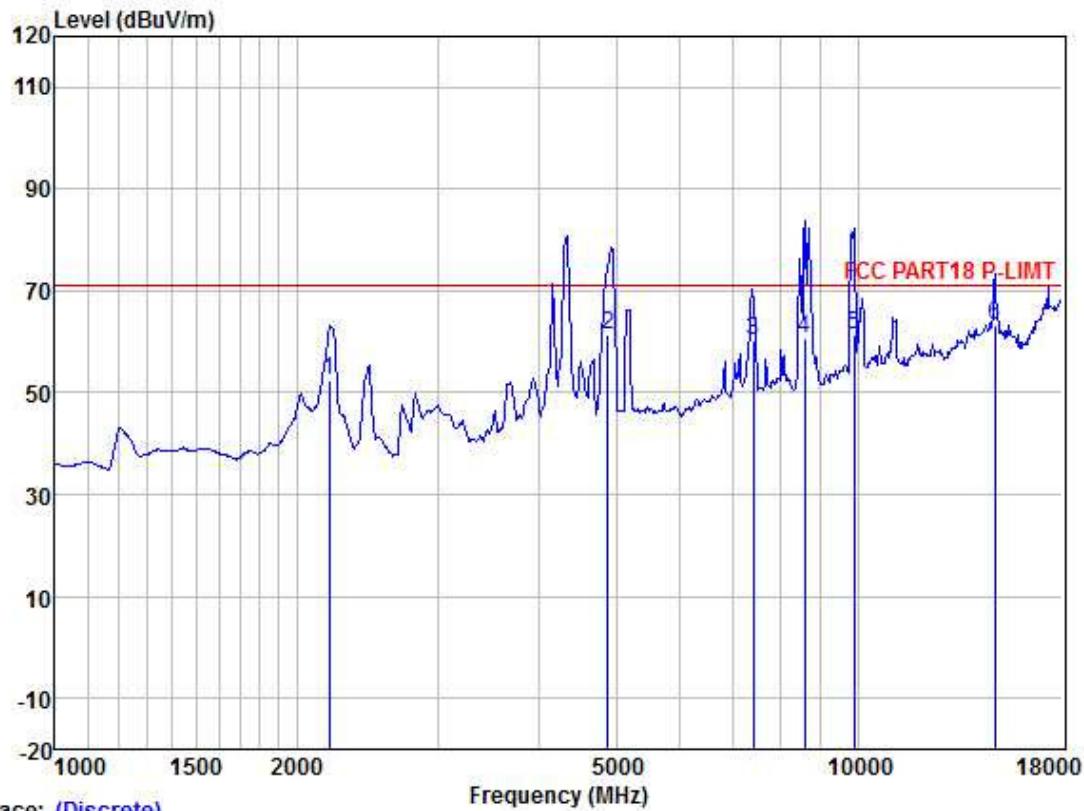
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Mode:a; Polarization:Vertical



Trace: (Discrete)	ReadAntenna		Cable		Preamp		Limit	Over	Over	Pol/Phase	Remark
	Freq	Level	Factor	Loss	Factor	Level					
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB			
1	2194.998	56.12	25.69	7.40	36.97	52.24	71.24	-19.00	VERTICAL	Average	
2	4877.623	60.28	30.93	6.66	36.49	61.38	71.24	-9.86	VERTICAL	Average	
3	7416.597	53.83	35.89	7.42	36.77	60.37	71.24	-10.87	VERTICAL	Average	
4	8588.607	53.32	36.16	7.98	36.68	60.78	71.24	-10.46	VERTICAL	Average	
5	9895.349	51.28	37.89	8.57	36.32	61.42	71.24	-9.82	VERTICAL	Average	
6	14830.960	44.86	40.78	13.35	35.57	63.42	71.24	-7.82	VERTICAL	Average	

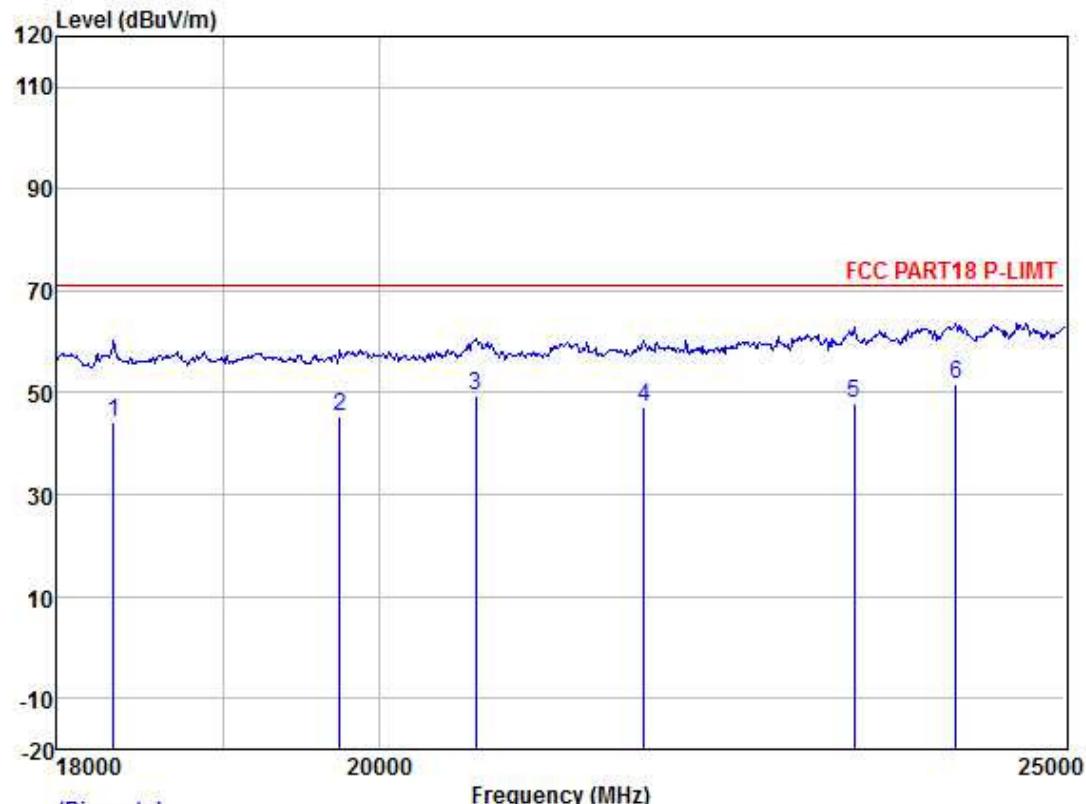
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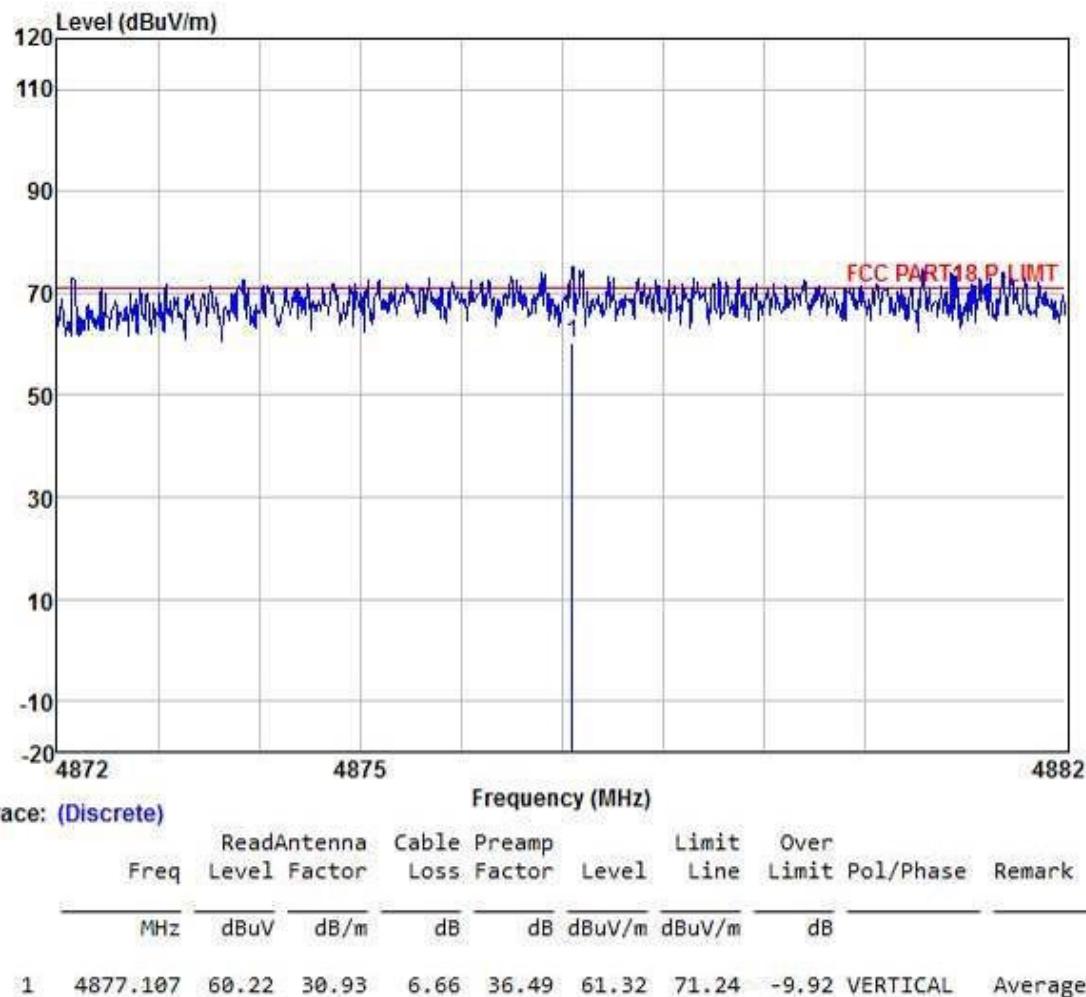
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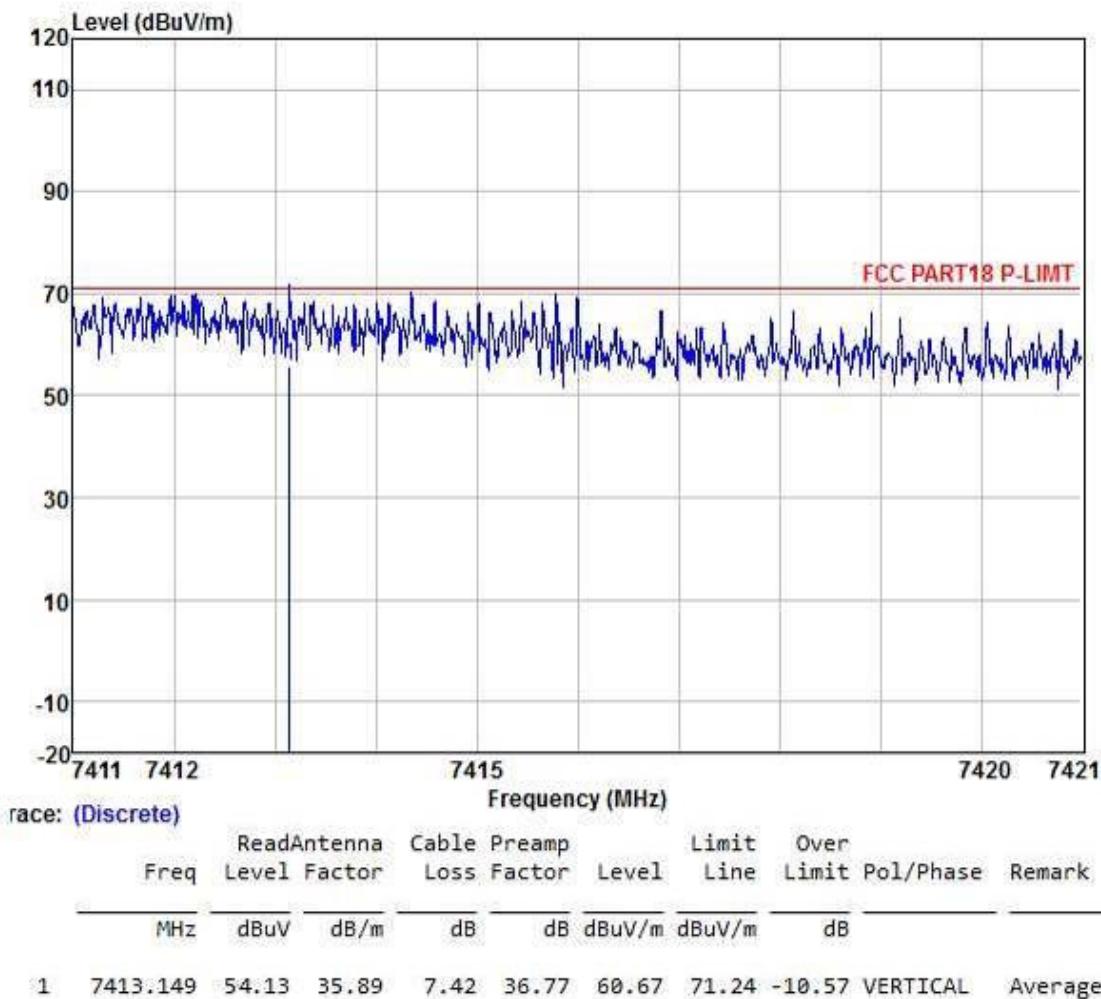
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## 6.6 Radiated Emissions (Magnetic field Strength) (9kHz-30MHz)

- Test Requirement: 47 CFR Part 18  
Test Method: FCC OST/MP-5:1986  
Frequency Range: 9kHz to 30MHz  
Measurement Distance: 10m  
Detector: Peak for pre-scan, Average for the final result  
(200 Hz Resolution Bandwidth for 9 kHz to 150 kHz  
9 kHz Resolution Bandwidth for 150 kHz to 30 MHz )  
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 =1065.4W according to clause 6.3.2

Limit=20lg(25\*SQRT(power/500))+20lg(300/10)=31.244+29.542=60.79dB uV/m @ 10m distance.

### 6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C Humidity: 56.6 % RH Atmospheric Pressure: 1020 mbar

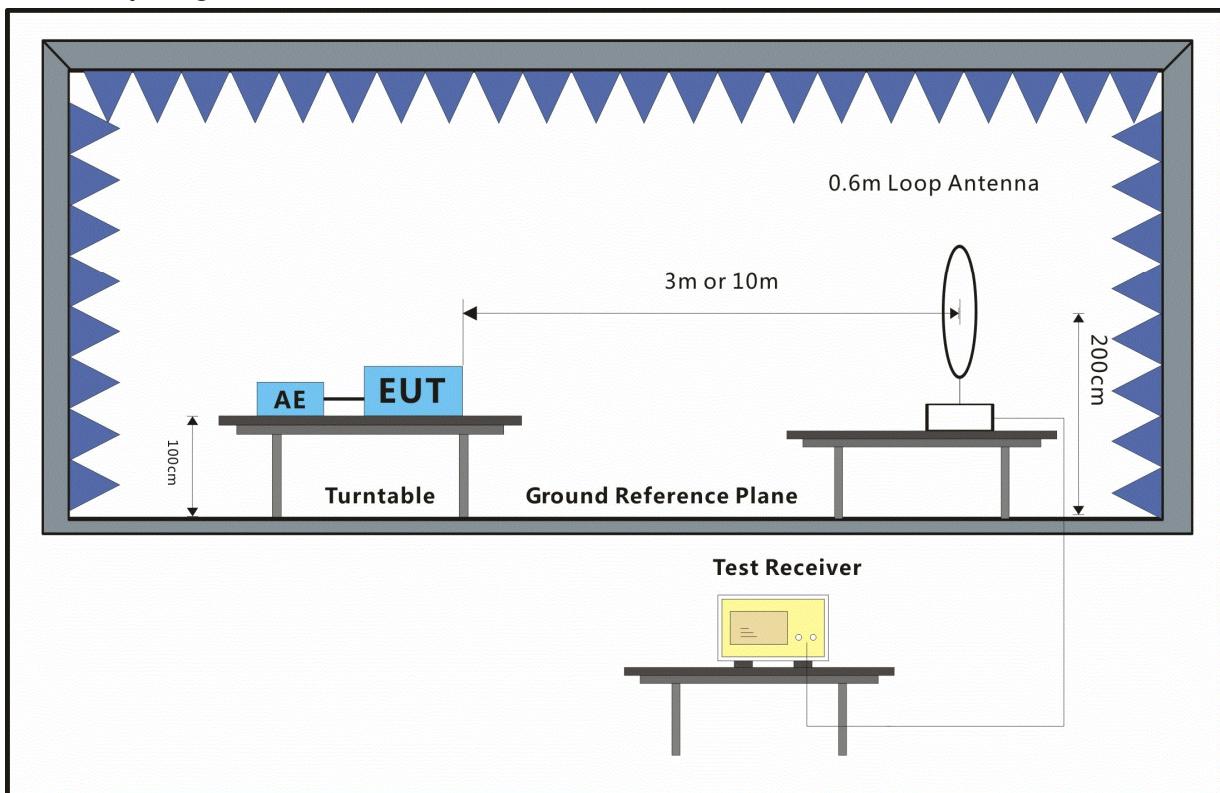
Test mode a: Test the EUT in microwave mode with maximum power.



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**6.6.2 Test Setup Diagram****6.6.3 Measurement Data**

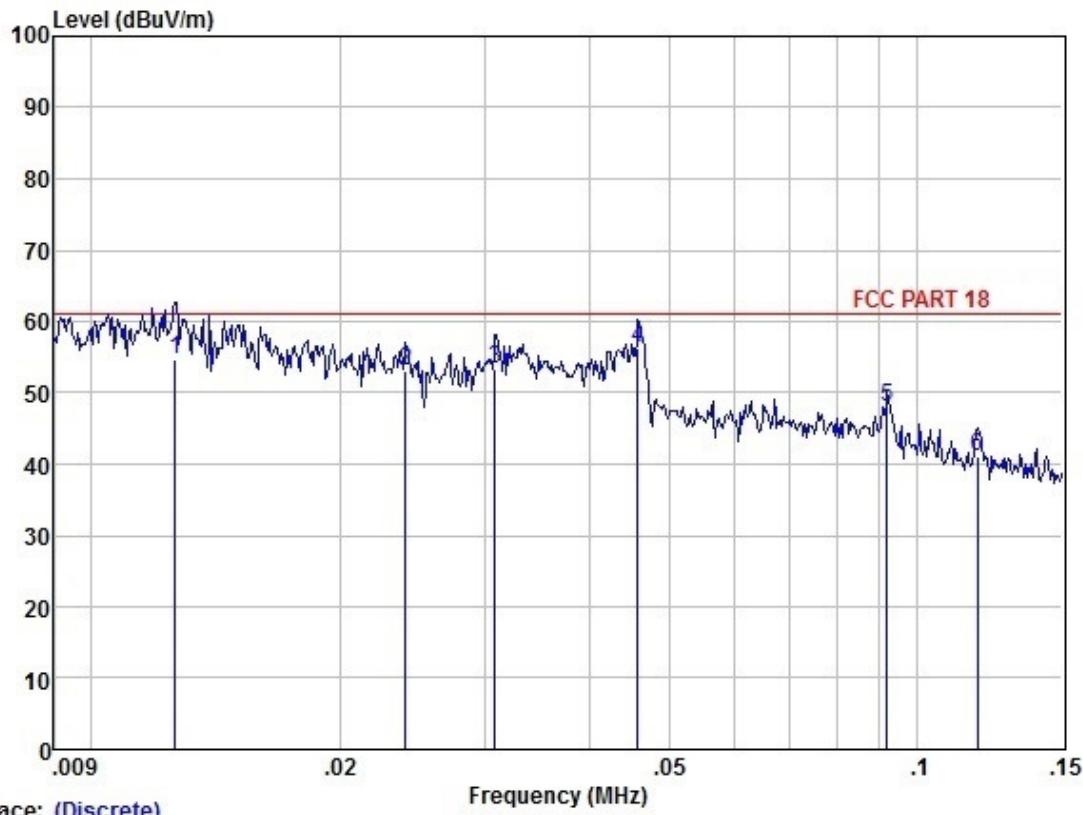
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

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

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Trace: (Discrete)

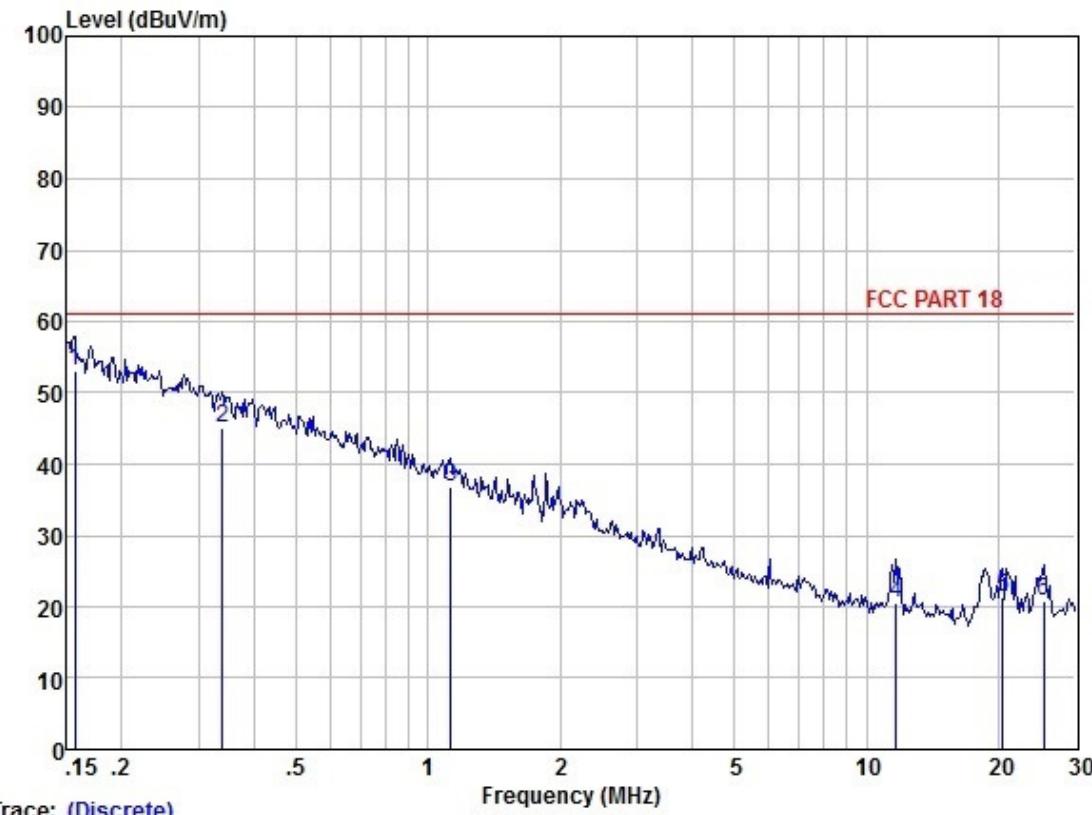
Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line Limit	Over Pol/Phase	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	0.013	63.90	20.32	0.00	29.50	54.72	60.79	-6.07 HORIZONTAL Average
2	0.024	66.70	15.78	0.00	29.48	53.00	60.79	-7.79 HORIZONTAL Average
3	0.031	68.16	14.53	0.00	29.46	53.23	60.79	-7.56 HORIZONTAL Average
4	0.046	72.91	12.66	0.00	29.43	56.14	60.79	-4.65 HORIZONTAL Average
5	0.092	65.07	12.40	0.00	29.42	48.05	60.79	-12.74 HORIZONTAL Average
6	0.118	58.00	12.40	0.00	29.43	40.97	60.79	-19.82 HORIZONTAL Average



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	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
	Freq	Read	Antenna	Cable	Preamp	Limit	Over	Limit	Remark
1	0.156	70.04	12.40	0.00	29.48	52.96	60.79	-7.83	HORIZONTAL Average
2	0.339	62.15	12.22	0.10	29.40	45.07	60.79	-15.72	HORIZONTAL Average
3	1.129	53.69	12.33	0.10	29.30	36.82	60.79	-23.97	HORIZONTAL Average
4	11.683	38.60	10.64	0.37	29.06	20.55	60.79	-40.24	HORIZONTAL Average
5	20.486	39.35	10.32	0.50	28.93	21.24	60.79	-39.55	HORIZONTAL Average
6	25.321	38.62	10.56	0.50	28.84	20.84	60.79	-39.95	HORIZONTAL Average

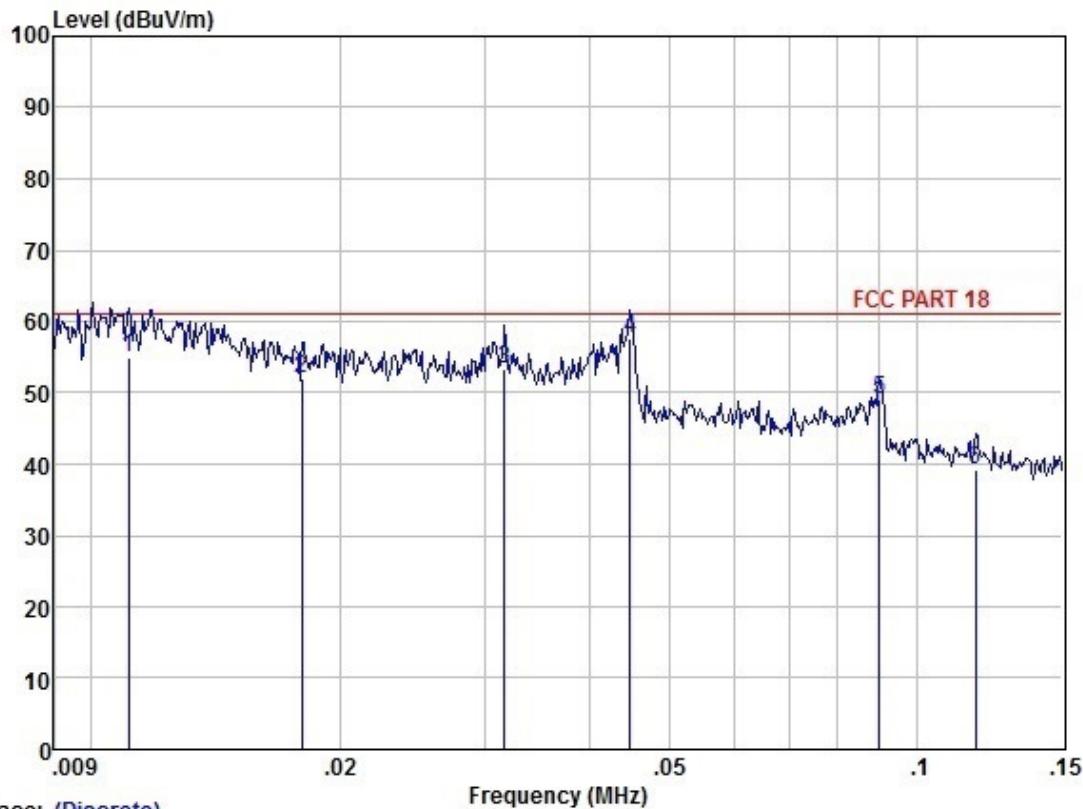
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	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	0.011	63.31	21.14	0.00	29.50	54.95	60.79	-5.84	VERTICAL Average
2	0.018	64.83	16.67	0.00	29.49	52.01	60.79	-8.78	VERTICAL Average
3	0.032	68.56	14.26	0.00	29.45	53.37	60.79	-7.42	VERTICAL Average
4	0.045	74.32	12.71	0.00	29.43	57.60	60.79	-3.19	VERTICAL Average
5	0.090	66.01	12.40	0.00	29.42	48.99	60.79	-11.80	VERTICAL Average
6	0.118	56.26	12.40	0.00	29.43	39.23	60.79	-21.56	VERTICAL Average

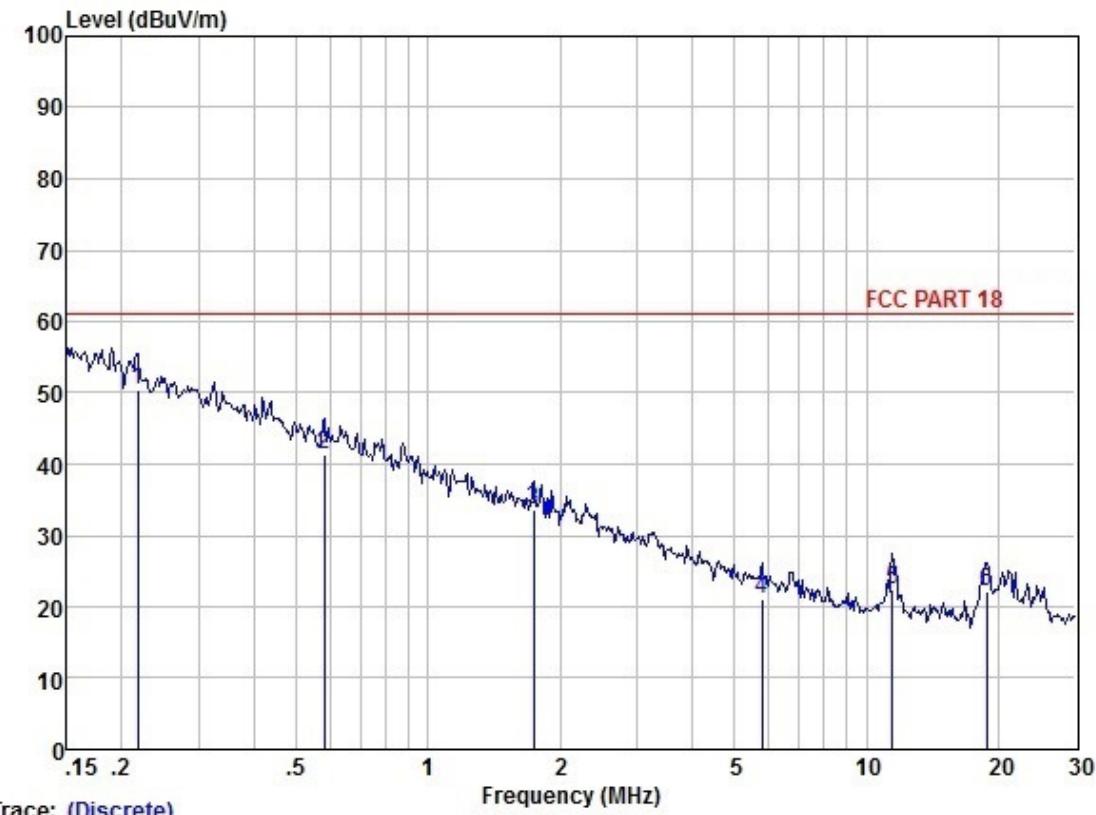
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Mode:a; Polarization:Vertical



Trace: (Discrete)

Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line Limit	Over Pol/Phase	Remark
	Freq	Level	Factor	Loss				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	0.217	67.59	12.32	0.04	29.49	50.46	60.79	-10.33 VERTICAL Average
2	0.579	58.47	12.13	0.10	29.34	41.36	60.79	-19.43 VERTICAL Average
3	1.744	50.14	12.56	0.10	29.29	33.51	60.79	-27.28 VERTICAL Average
4	5.774	38.97	11.14	0.28	29.21	21.18	60.79	-39.61 VERTICAL Average
5	11.438	40.56	10.65	0.34	29.06	22.49	60.79	-38.30 VERTICAL Average
6	18.820	40.34	10.33	0.48	28.95	22.20	60.79	-38.59 VERTICAL Average

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