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Report No.: GZEM150700341001  
Page: 1 of 32  
FCC ID: 2AAODBMO625

## **TEST REPORT**

The following sample(s) was/were submitted and identified on behalf of the client as:

<b>Application No.:</b>	GZEM1507003410HS
<b>Applicant:</b>	Breville Pty Ltd
<b>FCC ID:</b>	2AAODBMO625
<b>Product Description:</b>	Microwave Oven
<b>Model No.:</b>	BM0625
<b>Trade Mark:</b>	Breville
<b>Standards:</b>	FCC CFR 47 PART 18: 2014
<b>Date of Receipt:</b>	2015-07-14
<b>Date of Test:</b>	2015-07-18 to 2015-08-13
<b>Date of Issue:</b>	2015-09-02
<b>Test Result :</b>	<b>Pass*</b>

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

Authorized Signature:  
  
**Kobe Jian**  
**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.


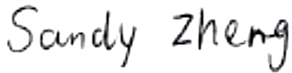

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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## 2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2015-09-02		Original

Authorized for issue by:			
Tested By			2015-07-18 to 2015-08-13
	(Simon Cai) / Project Engineer		Date
Prepared By			2015-08-25
	(Sandy Zheng) / Clerk		Date
Checked By			2015-08-26
	(Crystal Wang) / Reviewer		Date



### 3 Test Summary

Electromagnetic Interference (EMI)				
Test	Test Requirement	Test Method	Class / Severity	Result
Operating Frequency	FCC CFR 47 PART 18: 2014	FCC OST/ MP-5:1986	18.301	PASS
Conducted Emission (150 kHz to 30 MHz)	FCC CFR 47 PART 18: 2014	FCC OST/ MP-5:1986	18.307(b)	PASS
Radiated Emission (9 kHz to 30 MHz)	FCC CFR 47 PART 18: 2014	FCC OST/ MP-5:1986	18.305(b)	PASS
Radiated Emission (30 MHz to 1 GHz)	FCC CFR 47 PART 18: 2014	FCC OST/ MP-5:1986	18.305(b)	PASS
Radiated Emission (1 GHz to 25 GHz)	FCC CFR 47 PART 18: 2014	FCC OST/ MP-5:1986	18.305(b)	PASS
<b>Remark :</b> <b>EUT:</b> In this whole report EUT means Equipment Under Test.				



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## 5 General Information

### 5.1 Client Information

Applicant: Breville Pty Ltd  
Address of Applicant: 170-180 Bourke Road, Alexandria, NSW 2015 Australia

### 5.2 General Description of E.U.T.

Product Description: Microwave Oven  
Model No.: BM0625

### 5.3 Details of E.U.T.

Rated Supply (Voltage): AC 120V 60Hz 1500W  
Power Cable: 1.5m x 3 wires unscreened AC mains cable.

### 5.4 Description of Support Units

The EUT has been tested with water.  
Load for power output measurement :1500 milliliters of water in the beaker located in the centre of the oven  
Load for frequency measurement :1500 milliliters of water in the beaker located in the centre of the oven  
Load for measurement of radiation on second and third harmonic: two loads, one of 1050 and the other of 450 milliliters, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.  
Load for conducted and radiated emission measurement :1050 milliliters of water in the beaker located in the centre of the oven

### 5.5 Deviation from Standards

None.

### 5.6 General Test Climate During Testing

Temperature: 15-30 °C Humidity: 30~70 %RH Atmospheric Pressure: 860-1060 mbar

### 5.7 Abnormalities from Standard Conditions

None.

### 5.8 Test Location

All tests were performed at:  
SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,  
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,  
Guangzhou, China 510663  
Tel: +86 20 82155555 Fax: +86 20 82075059  
No tests were sub-contracted.



## 5.9 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 (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.

- **Industry Canada (Registration No.: 4620B-1)**

The 3m/10m Alternate Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Certification and Engineering of Industry Canada for radio equipment testing with Registration No. 4620B-1.

- **VCCI (Registration No.: R-2460, C-2584, G-449 and T-1179)**

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-2460, C-2584, G-449 and T-1179 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, IEC 61010-1:2006-10 and Rules of procedure IEC 61010-1:2006-10, and the relevant IEC 61010-1:2006-10 Scheme Operational documents.



## 6 Equipment List

Conducted Emission						
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. date	Cal. Due date
					(YYYY-MM-DD)	(YYYY-MM-DD)
EMC0306	Shielding Room	Zhong Yu	8 x 3 x 3.8 m <sup>3</sup>	N/A	N/A	N/A
EMC0118	Two-line v-netwok	R&S	ENV216	100359	2015-03-02	2016-03-02
EMC0102	LISN	SCHAFFNER CHASE	MN2050D/1	1421	2014-09-14	2015-09-14
EMC0506	EMI Test Receiver	Rohde & Schwarz	ESCS30	100085	2015-03-02	2016-03-02
EMC0107	Coaxial Cable	SGS	2m	N/A	2014-07-25	2016-07-25
EMC0106	Voltage Probe	SGS	N/A	N/A	2014-04-19	2016-04-19
EMC0120	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	20550	2014-08-30	2015-08-30
EMC0121	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	20549	2014-08-30	2015-08-30
EMC0122	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	20548	2014-08-30	2015-08-30
EMC2047	CDN	Elektronik- Feinmechanik	L-801:AF2	2793	2012-09-23	2015-09-23
EMC2048	CDN	Elektronik- Feinmechanik	L-801:M2/M3	2738	2012-09-23	2015-09-23
EMC2062	6dB Attenuator	HP	8491A	24487	2014-04-19	2016-04-19
EMC167	Conical metal housing	SGS-EMC	N/A	N/A	2014-02-16	2016-02-16



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

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RE in Chamber						
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. date	Cal. Due date
					(YYYY-MM-DD)	(YYYY-MM-DD)
EMC0525	Compact Semi-Anechoic Chamber	ChangZhou ZhongYu	N/A	N/A	2014-12-05	2015-12-05
EMC0522	EMI Test Receiver	Rohde & Schwarz	ESIB26	100283	2015-03-02	2016-03-02
EMC0056	EMI Test Receiver	Rohde & Schwarz	ESCI	100236	2015-04-07	2016-04-07
EMC0528	RI High frequency Cable	SGS	20 m	N/A	2014-04-19	2016-04-19
EMC2025	Trilog Broadband Antenna 30-1000MHz	SCHWARZBECK MESS-ELEKTRONIK	VULB 9160	9160-3372	2014-07-14	2017-07-14
EMC0524	Bi-log Type Antenna	Schaffner -Chase	CBL6112B	2966	2013-08-31	2016-08-31
EMC0519	Bilog Type Antenna	Schaffner -Chase	CBL6143	5070	2014-05-04	2017-05-04
EMC2026	Horn Antenna 1-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	9120D-841	2013-08-31	2016-08-31
EMC0521	1-26.5 GHz Pre-Amplifier	Agilent	8449B	3008A01649	2015-03-02	2016-03-02
EMC2065	Amplifier	HP	8447F	N/A	2014-08-25	2015-08-25
EMC0075	310N Amplifier	Sonama	310N	272683	2015-03-02	2016-03-02
EMC0523	Active Loop Antenna	EMCO	6502	42963	2014-03-03	2016-03-03
EMC2041	Broad-Band Horn Antenna (14)15-26.5(40)GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9170	9170-375	2014-05-26	2017-05-26
EMC2079	High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	009	2015-03-02	2016-03-02
EMC2069	2.4GHz filter	Micro-Tronics	BRM 50702	149	2015-03-02	2016-03-02
EMC0530	10m Semi-Anechoic Chamber	ETS	N/A	N/A	2014-05-03	2016-05-03

General used equipment						
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. date	Cal. Due date
					(YYYY-MM-DD)	(YYYY-MM-DD)
EMC0006	DMM	Fluke	73	70681569	2014-09-15	2015-09-15
EMC0007	DMM	Fluke	73	70671122	2014-09-15	2015-09-15





## 7 Emission Test Results

### 7.1 Operating Frequency

Test Requirement: FCC Part 18  
 Test Method: FCC OST/ MP-5  
 Test Date: 2015-08-13  
 Power Supply: AC 120V 60Hz  
 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
6.78 MHz .....	±15.0 kHz
13.56 MHz .....	±7.0 kHz
27.12 MHz .....	±163.0 kHz
40.68 MHz .....	±20.0 kHz
915 MHz .....	±13.0 MHz
2,450 MHz .....	±50.0 MHz
5,800 MHz .....	±75.0 MHz
24,125 MHz .....	±125.0 MHz
61.25 GHz .....	±250.0 MHz
122.50 GHz .....	±500.0 MHz
245.00 GHz .....	±1.0 GHz

#### 7.1.1 E.U.T. Operation

Test the EUT in microwave mode with full power.

#### 7.1.2 Measurement Data

Operating Frequency	Test Result	Tolerance
(MHz)	(MHz)	(MHz)
2450	2471	±50



## 7.2 RF Output Power Measurement

Test Requirement:	FCC Part 18
Test Method:	FCC OST/ MP-5
Test Date:	2015-09-12
Power Supply:	AC 120V 60Hz

### 7.2.1 E.U.T. Operation

Test the EUT in microwave mode with full power.

### 7.2.2 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)
1500	368	21.1	18.2	45.8	125	1456.5

Formula :

$$P = \frac{4.2 \times m_w (T_2 - T_1) + 0.9 \times m_c (T_2 - T_0)}{t}$$

**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.



### 7.3 Conducted Emissions, 150 kHz to 30 MHz

Test Requirement: FCC Part 18  
Test Method: FCC OST/ MP-5  
Test Date: 2015-07-18  
Power Supply: AC 120V 60Hz  
Frequency Range: 150 kHz to 30 MHz  
Detector: Peak for pre-scan, Quasi-Peak and Average for the final result.  
(9 kHz Resolution Bandwidth for 150 kHz to 30 MHz)

Limit:

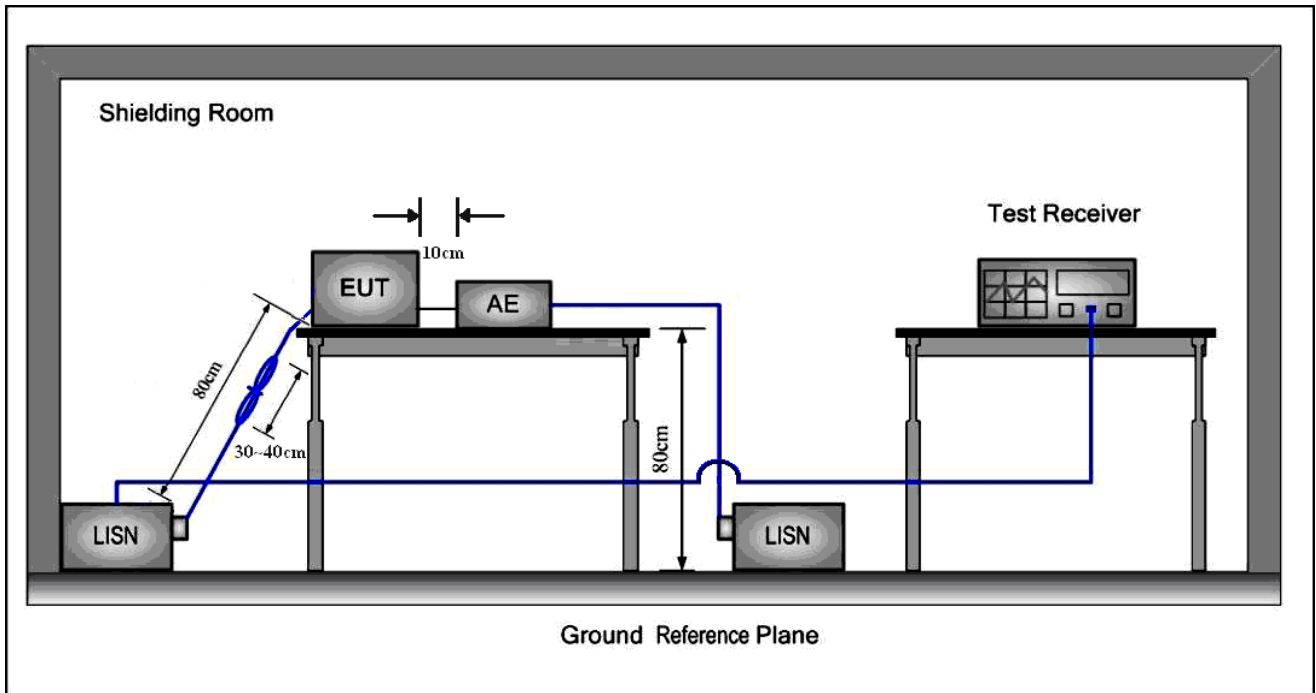
Frequency range MHz	AC mains terminals dB ( $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50

Note1: The limit decreases linearly with the logarithm of the frequency in the range 0.05 MHz to 0.5 MHz.  
Note2: The lower limit is applicable at the transition frequency.

#### 7.3.1 E.U.T. Operation

Test the EUT in microwave mode with full power.

### 7.3.2 Test Setup and Procedure



1. The mains terminal disturbance voltage test was conducted in a shielded room.
2. The EUT was connected to nominal power supply through a LISN 1 (Line Impedance Stabilization Network) which provides a  $50\Omega/50\mu\text{H} + 5\Omega$  linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3. The tabletop EUT was placed upon a non-metallic table 1 m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.



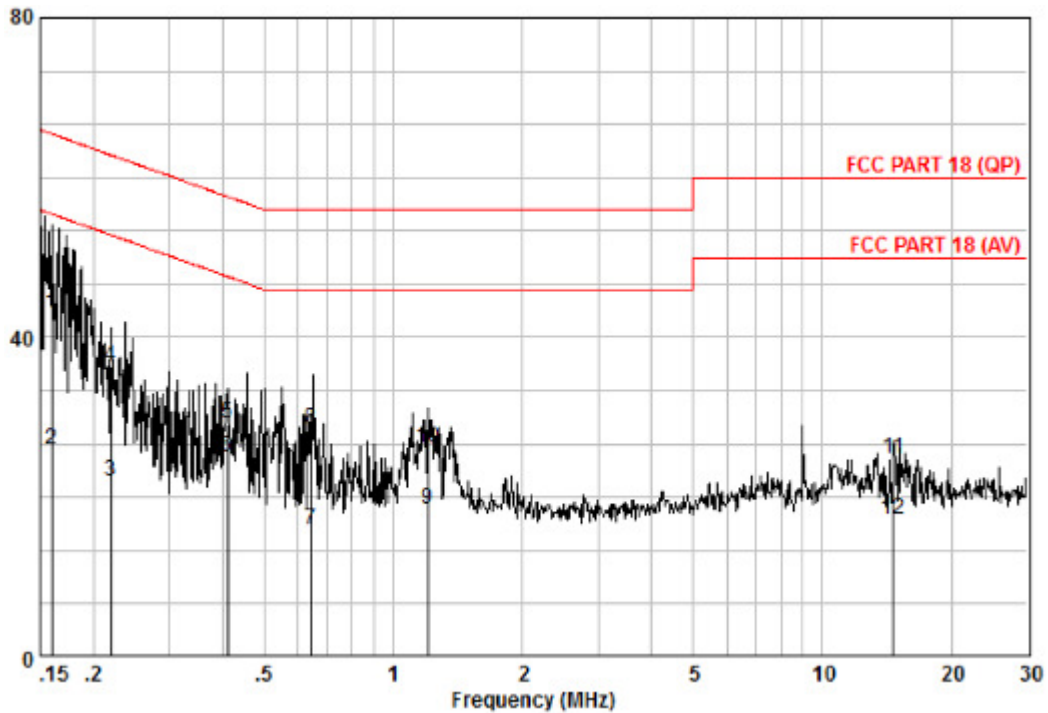
### 7.3.3 Measurement Data

Pre-scan was performed with peak detected on both live and neutral cable. Quasi-peak & average measurements were performed at the frequencies which maximum peak emission level was detected.

Please see the attached Quasi-peak and Average test results.

Live line:

Peak Scan



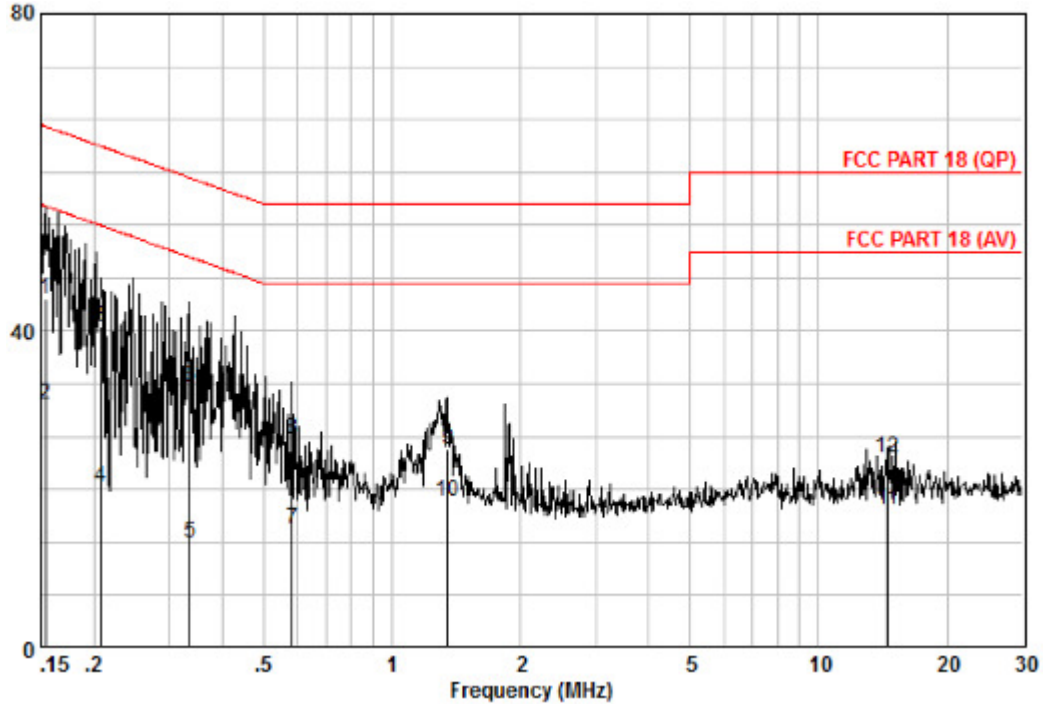
Quasi-peak and Average measurement:

Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0,160	33,29	0,10	9,60	42,99	65,47	-22,49	QP
0,160	16,28	0,10	9,60	25,98	55,47	-29,50	AVERAGE
0,220	12,34	0,08	9,60	22,02	52,83	-30,81	AVERAGE
0,220	26,80	0,08	9,60	36,48	62,83	-26,35	QP
0,410	19,63	0,05	9,61	29,29	57,64	-28,35	QP
0,410	15,39	0,05	9,61	25,05	47,64	-22,59	AVERAGE
0,644	6,21	0,02	9,70	15,93	46,00	-30,07	AVERAGE
0,644	18,90	0,02	9,70	28,62	56,00	-27,38	QP
1,203	8,75	0,02	9,70	18,47	46,00	-27,53	AVERAGE
1,203	16,47	0,02	9,70	26,19	56,00	-29,81	QP
14,672	14,65	0,36	9,89	24,90	60,00	-35,10	QP
14,672	7,02	0,36	9,89	17,27	50,00	-32,73	AVERAGE



Neutral line:

Peak Scan



Quasi-peak and Average measurement:

Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.154	34.28	0.10	9.66	44.04	65.78	-21.74	QP
0.154	21.02	0.10	9.66	30.78	55.78	-25.00	AVERAGE
0.207	30.89	0.08	9.66	40.63	63.32	-22.68	QP
0.207	10.58	0.08	9.66	20.32	53.32	-32.99	AVERAGE
0.336	3.55	0.06	9.66	13.27	49.31	-36.04	AVERAGE
0.336	23.24	0.06	9.66	32.96	59.31	-26.35	QP
0.582	5.33	0.03	9.67	15.03	46.00	-30.97	AVERAGE
0.582	16.58	0.03	9.67	26.28	56.00	-29.72	QP
1.352	15.40	0.04	9.68	25.12	56.00	-30.88	QP
1.352	8.83	0.04	9.68	18.55	46.00	-27.45	AVERAGE
14.517	7.02	0.35	10.00	17.37	50.00	-32.63	AVERAGE
14.517	13.73	0.35	10.00	24.08	60.00	-35.92	QP



## 7.4 Radiated Emissions, 9 KHz to 25 GHz

Test Requirement: FCC Part 18  
 Test Method: FCC OST/ MP-5  
 Power Supply: AC 120V 60Hz  
 Test Date: 2015-08-13  
 Frequency Range: 9 KHz to 25 GHz  
 Measurement Distance: 3m  
 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  
 100 kHz Resolution Bandwidth for 30MHz to 1,000MHz  
 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(dBuV/m) @300m
Below 500	25
500 or more	25*SQRT(power/500)

Power =1456.5 W according to cluse7.2.2

Limit= $20\lg(25*\sqrt{\text{power}/500})+20\lg(300/3)=32.60+40=72.60\text{dBuV/m @ 3m distance.}$

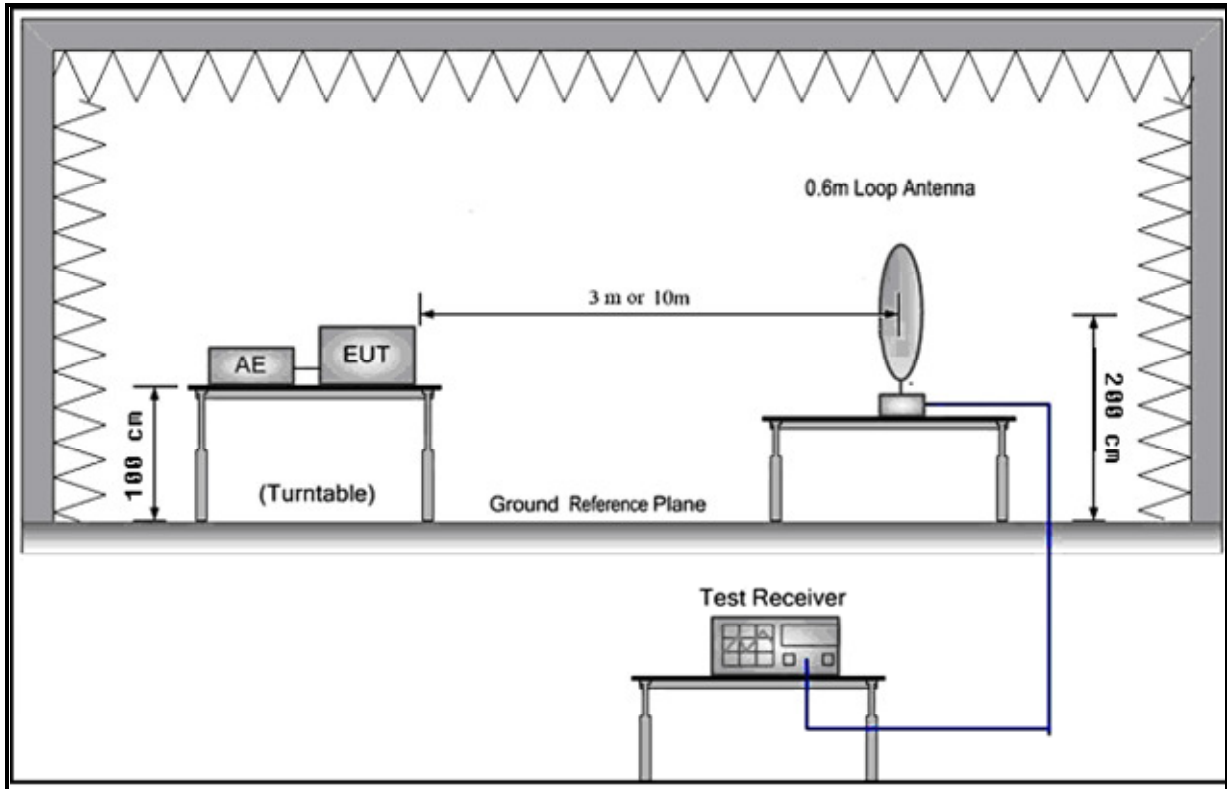
### 7.4.1 E.U.T. Operation

Test the EUT in microwave mode with full power.



## 7.4.2 Test Setup and Procedure

9 KHz to 30 MHz

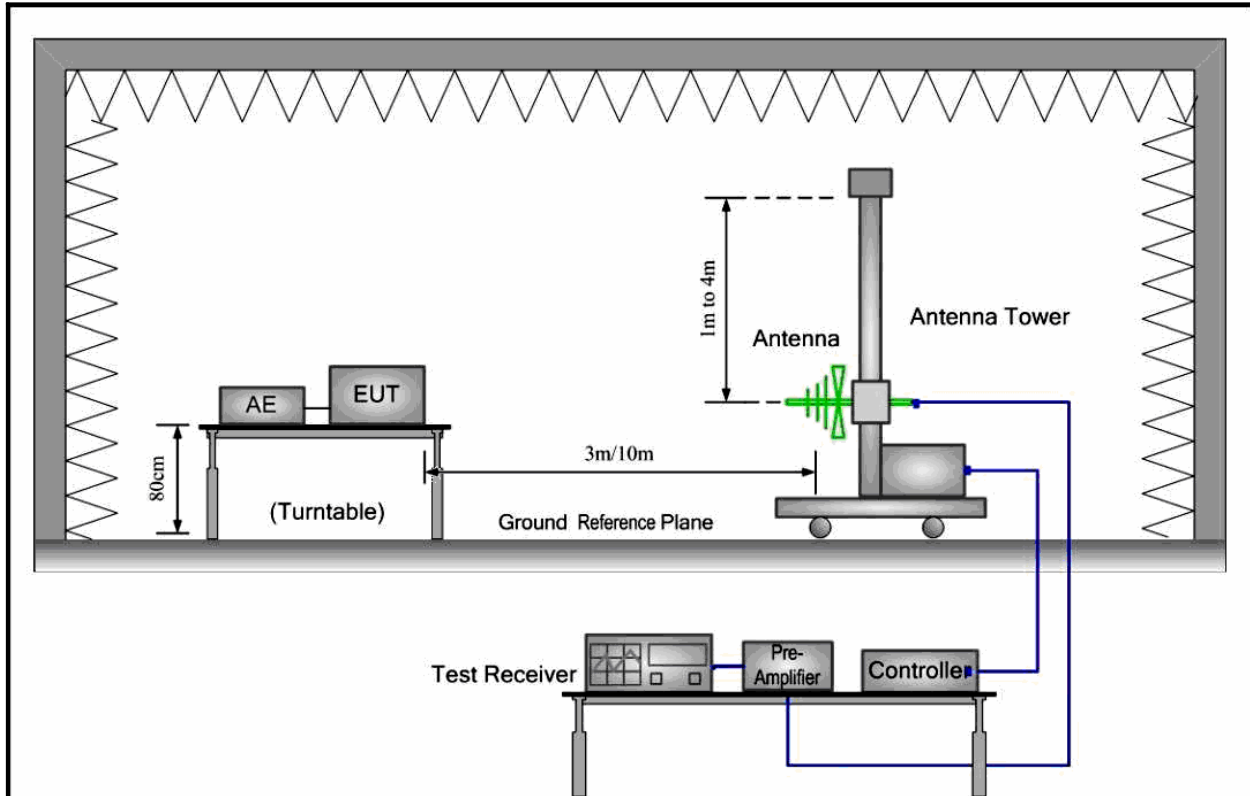


1. The magnetic emissions test was conducted in a semi-anechoic chamber.
2. The EUT was connected to AC power source through a mains power outlet which was bonded to the ground reference plane; The mains cables shall drape to the ground reference plane.
3. The tabletop EUT was placed upon a non-metallic table 1 m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. Before final measurements of magnetic emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emission spectrum signature data plots of the EUT.

The frequencies of maximum emission were determined in the final magnetic emissions measurement, The physical arrangement of the test system and associated cabling was varied in order to determine the effect on the EUT's emissions in amplitude, direction and frequency. At each frequency, the EUT was rotated 360°, the antenna was supported in the vertical plane and be rotatable about a vertical axis. The antenna height was set at around 2 m above the ground reference plane.



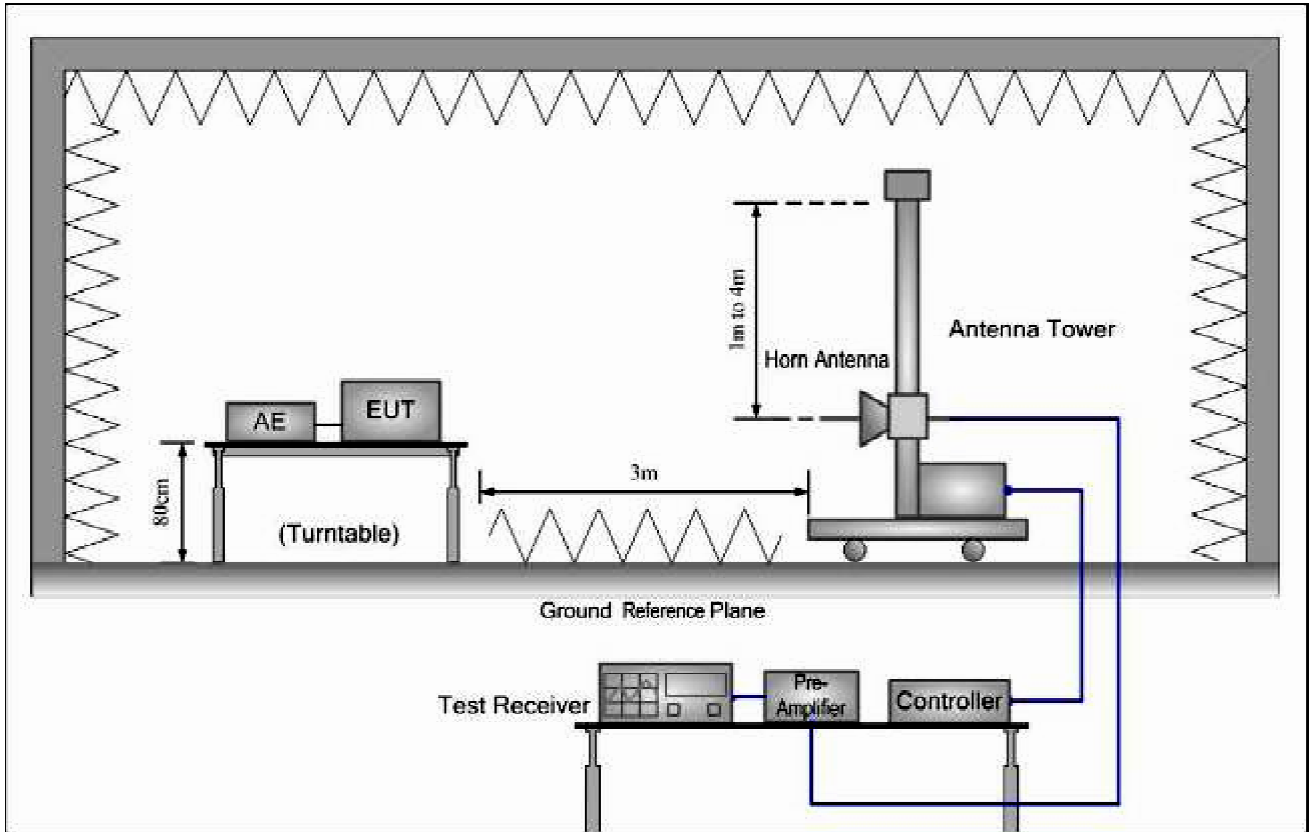
30MHz to 1 GHz:



1. The radiated emissions test was conducted in a semi-anechoic chamber.
2. Biconical and log periodic antenna was used for the frequency range from 30MHz to 1GHz
3. The EUT was connected to nominal power supply through a mains power outlet which was bonded to the ground reference plane; The mains cables were draped to the ground reference plane. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.

The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

Above 1 GHz:



1. The radiated emissions test was conducted in a fully-anechoic chamber.
2. Horn antenna was used for the frequency above 1GHz
3. The EUT was connected to nominal power supply through a mains power outlet which was bonded to the ground reference plane; The mains cables were draped to the ground reference plane. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emission spectrum plots of the EUT.
5. The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.



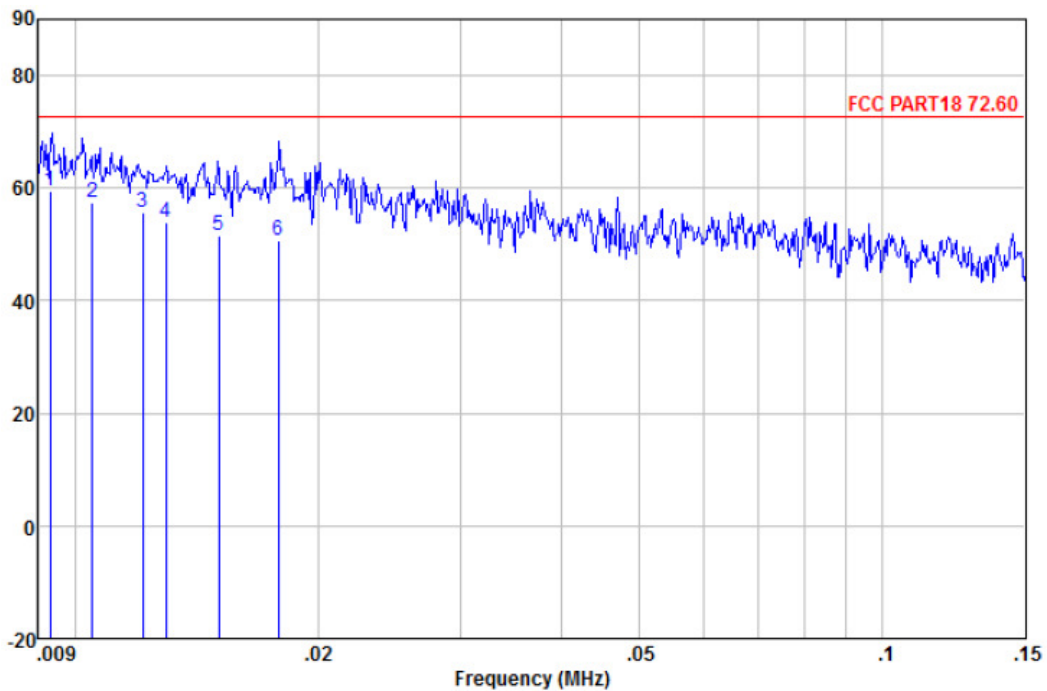
### 7.4.3 Measurement Data

9 KHz to 0.15 MHz:

**Vertical:**

Peak scan

Level (dB $\mu$ V/m)



Average measurement

Freq	ReadAntenna	Cable	Preamp	Limit	Over	Remark	
MHz	Level	Factor	Loss	Factor	Line	Limit	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
0.009	68.98	21.80	0.00	31.30	59.48	72.60	-13.12 Average
0.011	67.22	21.62	0.00	31.32	57.52	72.60	-15.08 Average
0.012	65.99	20.91	0.00	31.34	55.56	72.60	-17.04 Average
0.013	64.76	20.44	0.00	31.35	53.85	72.60	-18.75 Average
0.015	64.32	18.56	0.00	31.37	51.51	72.60	-21.09 Average
0.018	64.64	17.37	0.00	31.40	50.61	72.60	-21.99 Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

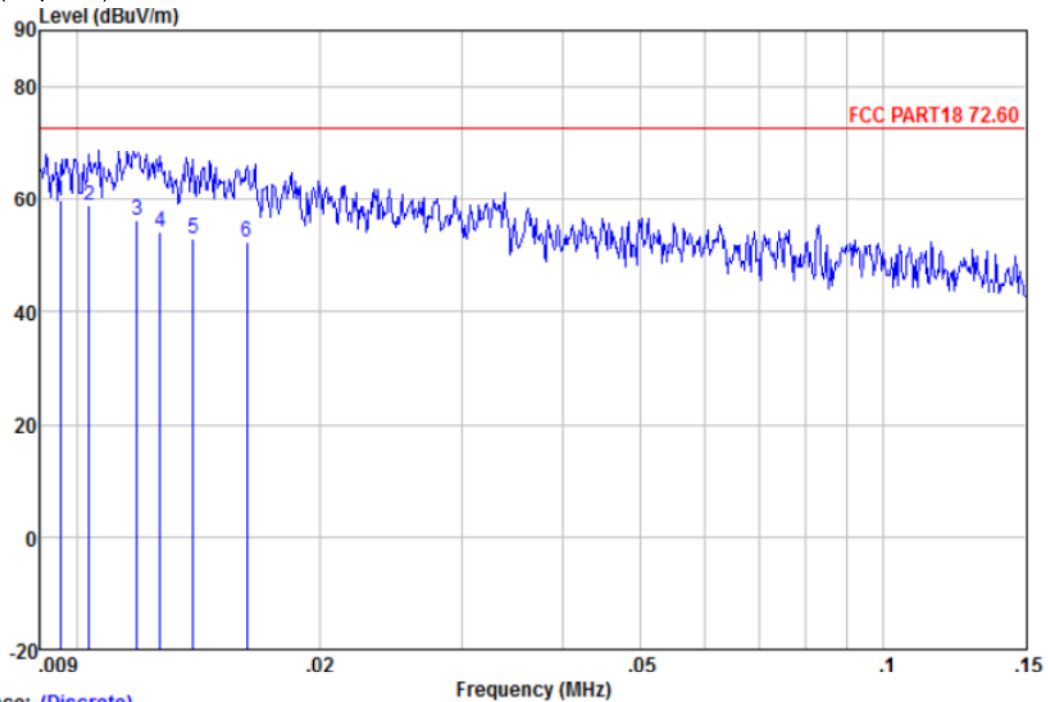


9 KHz to 0.15MHz:

**Horizontal:**

Peak scan

Level (dBuV/m)



Trace: (Discrete)

Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
0.010	69.23	21.80	0.00	31.31	59.72	72.60	-12.88	Average
0.010	68.45	21.68	0.00	31.32	58.81	72.60	-13.79	Average
0.012	66.67	21.06	0.00	31.33	56.40	72.60	-16.20	Average
0.013	64.96	20.64	0.00	31.34	54.26	72.60	-18.34	Average
0.014	64.83	19.62	0.00	31.36	53.09	72.60	-19.51	Average
0.016	66.09	17.87	0.00	31.39	52.57	72.60	-20.03	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

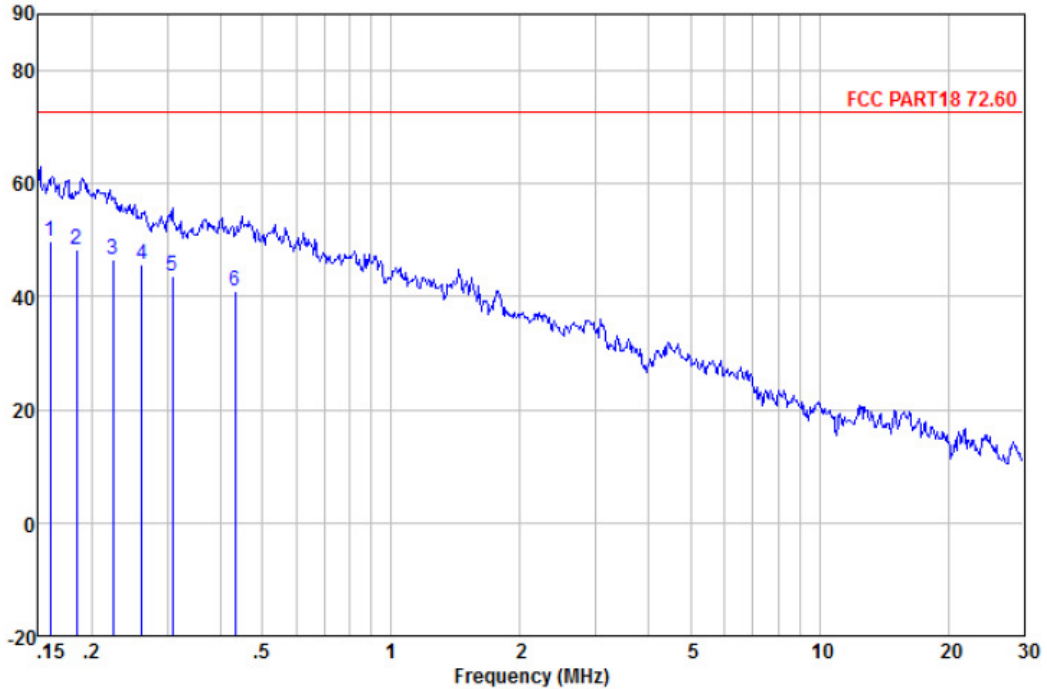


0.15MHz to 30MHz:

**Vertical:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
MHz	dBμV	dB/m	dB	dB	dBμV/m	dBμV/m	dB	
0.160	68.94	12.80	0.07	32.01	49.80	72.60	-22.80	Average
0.184	67.47	12.80	0.11	32.02	48.36	72.60	-24.24	Average
0.224	65.69	12.80	0.12	32.03	46.58	72.60	-26.02	Average
0.262	64.93	12.79	0.09	32.03	45.78	72.60	-26.82	Average
0.308	62.84	12.74	0.08	32.04	43.62	72.60	-28.98	Average
0.433	60.49	12.54	0.04	32.06	41.01	72.60	-31.59	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

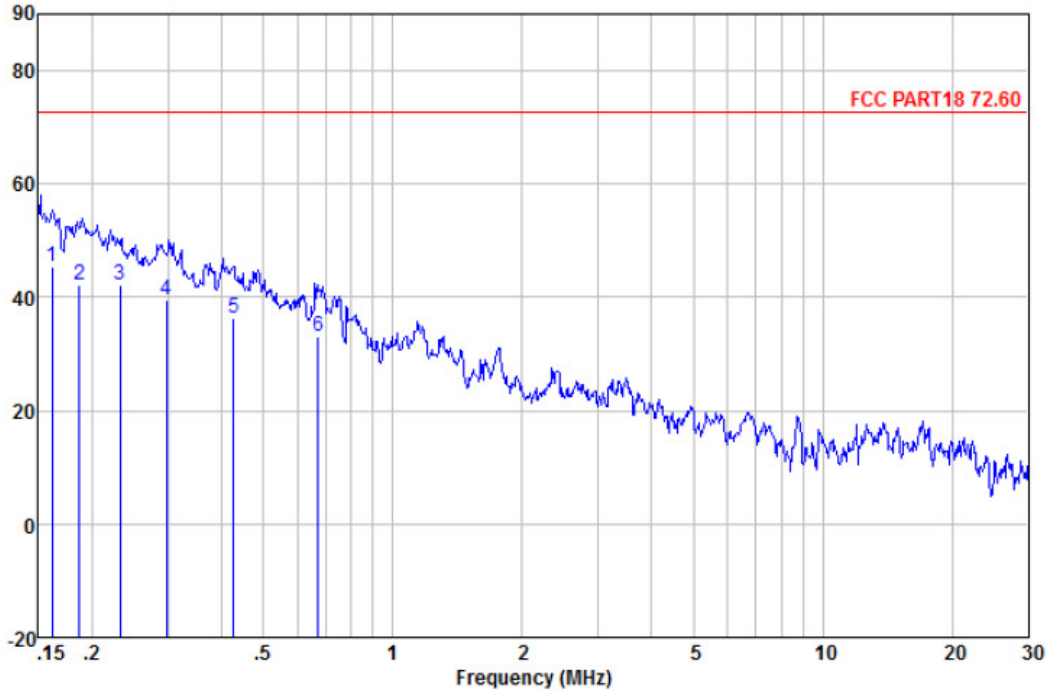


0.15 MHz to 30 MHz:

**Horizontal:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
0.162	64.48	12.80	0.07	32.01	45.34	72.60	-27.26	Average
0.186	61.36	12.80	0.12	32.02	42.26	72.60	-30.34	Average
0.232	61.22	12.80	0.12	32.03	42.11	72.60	-30.49	Average
0.297	58.79	12.75	0.08	32.04	39.58	72.60	-33.02	Average
0.426	55.82	12.54	0.04	32.06	36.34	72.60	-36.26	Average
0.672	52.62	12.58	0.04	32.10	33.14	72.60	-39.46	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**



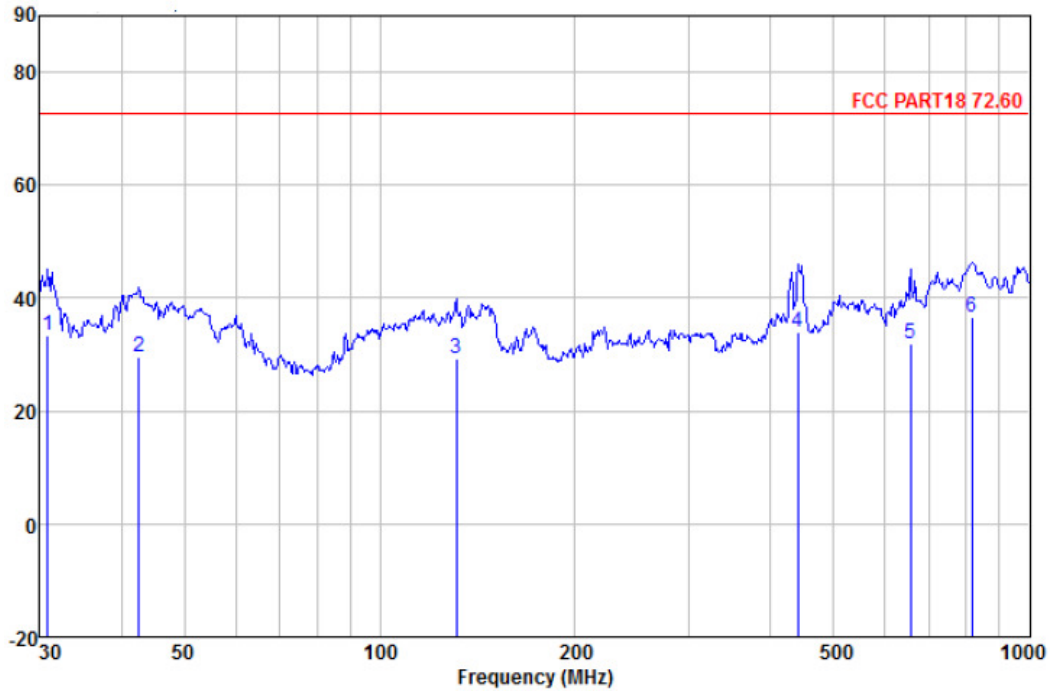


30 MHz to 1 GHz:

**Vertical:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
MHz	dBμV	dB/m	dB	dB	dBμV/m	dBμV/m	dB	
30.853	48.06	17.01	0.82	32.40	33.49	72.60	-39.11	Average
42.600	41.81	19.08	1.02	32.40	29.51	72.60	-43.09	Average
131.297	46.67	13.55	1.50	32.40	29.32	72.60	-43.28	Average
440.196	47.95	15.47	2.89	32.44	33.87	72.60	-38.73	Average
656.530	43.03	17.97	3.39	32.60	31.79	72.60	-40.81	Average
815.968	45.05	20.00	3.82	32.36	36.51	72.60	-36.09	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

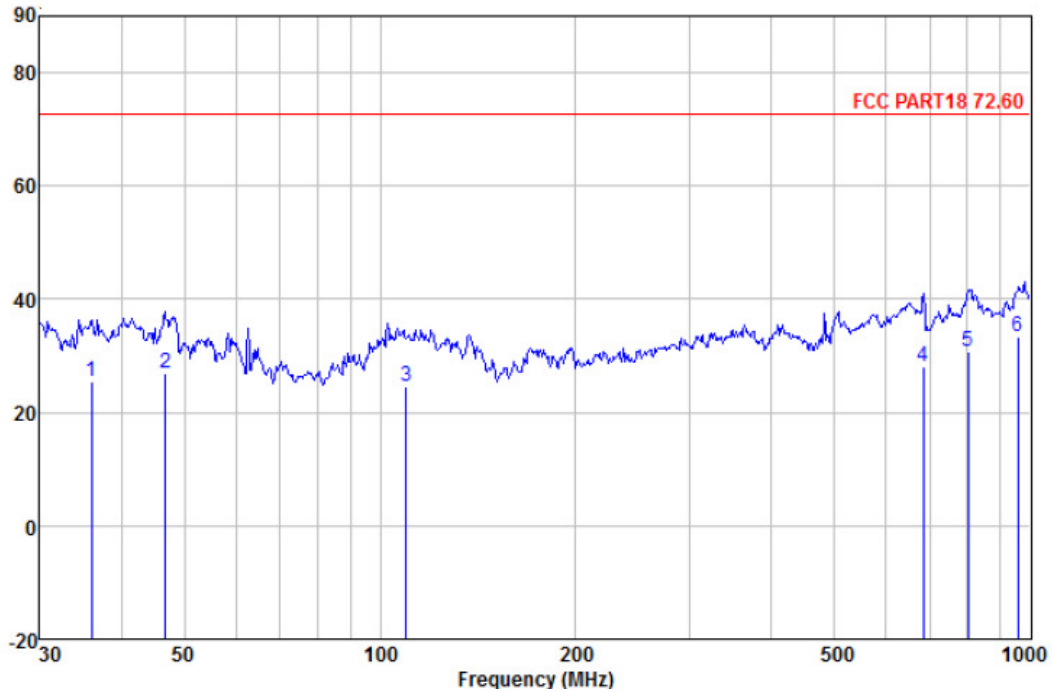


30MHz to 1 GHz:

**Horizontal:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
36.001	38.90	18.10	0.92	32.40	25.52	72.60	-47.08	Average
46.830	39.43	18.71	1.06	32.40	26.80	72.60	-45.80	Average
109.796	40.19	15.50	1.42	32.40	24.71	72.60	-47.89	Average
684.745	39.88	17.47	3.47	32.60	28.22	72.60	-44.38	Average
801.786	39.62	19.70	3.80	32.40	30.72	72.60	-41.88	Average
955.438	40.32	20.43	4.13	31.50	33.38	72.60	-39.22	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**



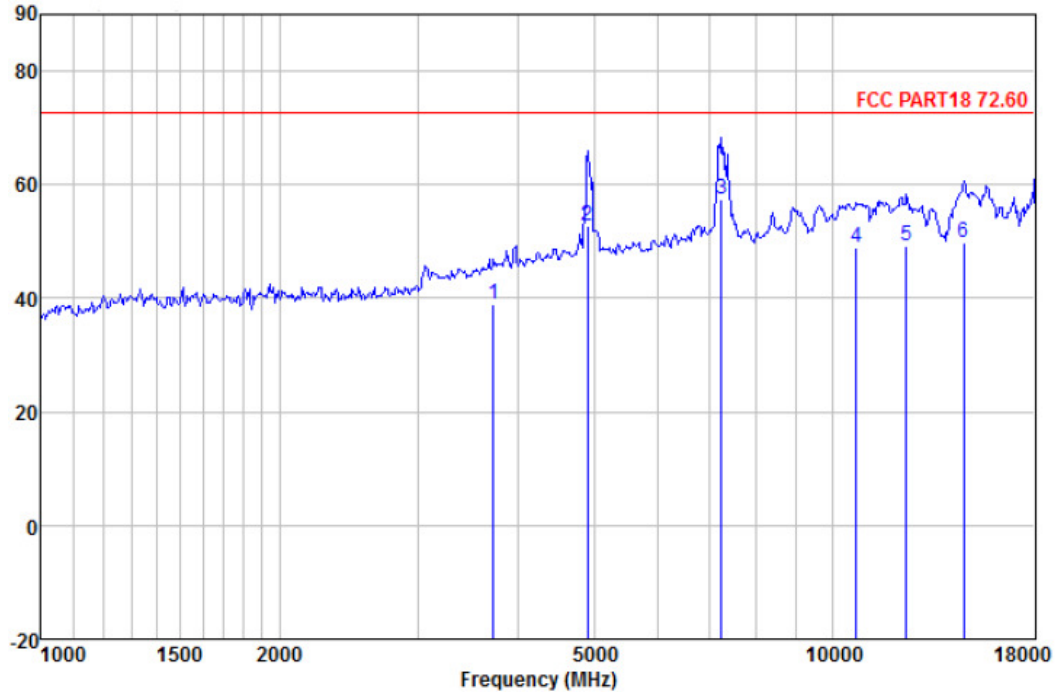


1000MHz to 18000MHz:

**Vertical:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	ReadAntenna	Cable	Preamp	Limit	Over	Remark		
MHz	Level	Factor	Loss	Factor	Line	Limit		
	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
3730.418	38.23	29.34	9.92	38.57	38.92	72.60	-33.68	Average
4904.360	48.49	31.59	11.29	38.56	52.81	72.60	-19.79	Average
7239.909	46.66	36.48	13.03	38.86	57.31	72.60	-15.29	Average
10722.150	33.82	39.76	14.81	39.48	48.91	72.60	-23.69	Average
12393.360	31.53	38.73	17.71	38.64	49.33	72.60	-23.27	Average
14651.500	27.09	42.34	19.27	38.97	49.73	72.60	-22.87	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

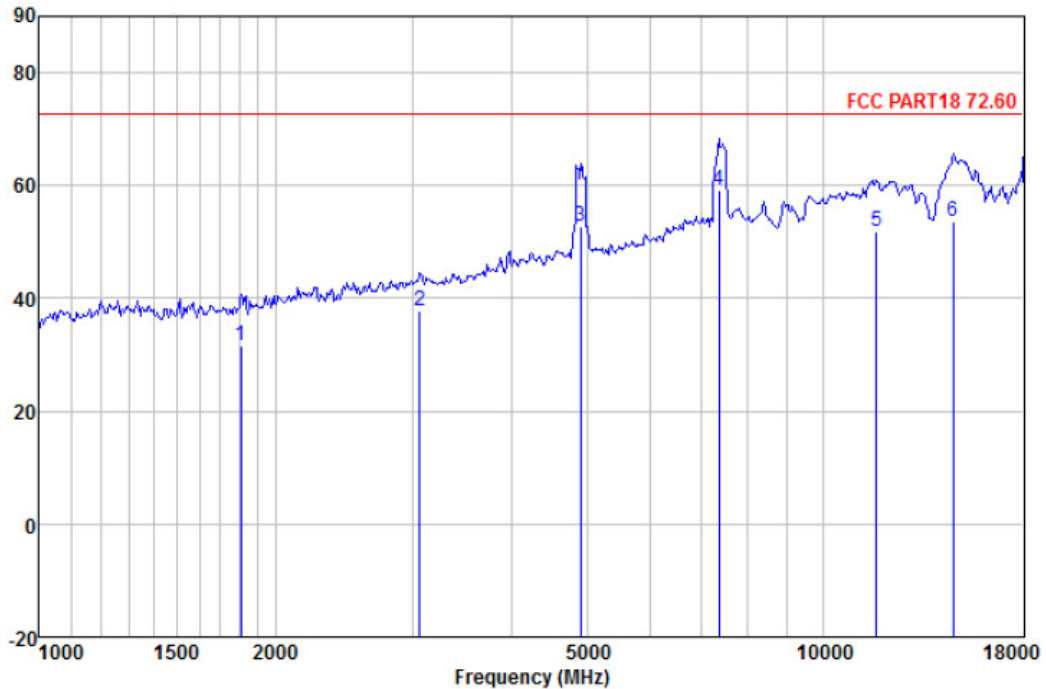


1000MHZ to 18000MHz:

**Horizontal:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1808.094	38.49	25.32	6.02	38.23	31.60	72.60	-41.00	Average
3055.520	39.44	28.60	8.03	38.42	37.65	72.60	-34.95	Average
4904.360	48.49	31.59	11.29	38.56	52.81	72.60	-19.79	Average
7357.374	48.25	36.52	13.34	38.89	59.22	72.60	-13.38	Average
11695.700	34.53	39.68	16.45	38.70	51.96	72.60	-20.64	Average
14651.500	31.09	42.34	19.27	38.97	53.73	72.60	-18.87	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

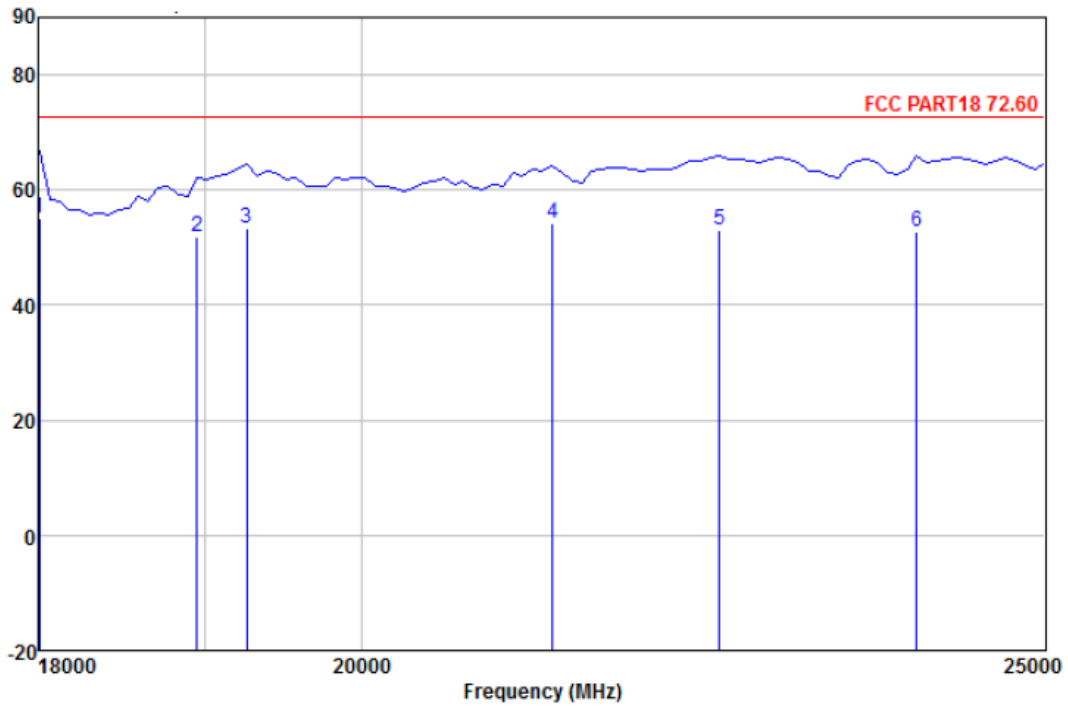


18000MHZ to 25000MHZ:

**Vertical:**

Peak scan

Level (dBµV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
18003.220	29.35	37.70	26.52	38.60	54.97	72.60	-17.63	Average
18954.710	28.87	37.89	23.94	38.69	52.01	72.60	-20.59	Average
19262.240	30.88	37.90	23.41	38.74	53.45	72.60	-19.15	Average
21283.500	32.02	38.22	22.61	38.65	54.20	72.60	-18.40	Average
22480.610	29.84	38.39	23.38	38.57	53.04	72.60	-19.56	Average
23975.450	25.87	38.80	26.59	38.40	52.86	72.60	-19.74	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

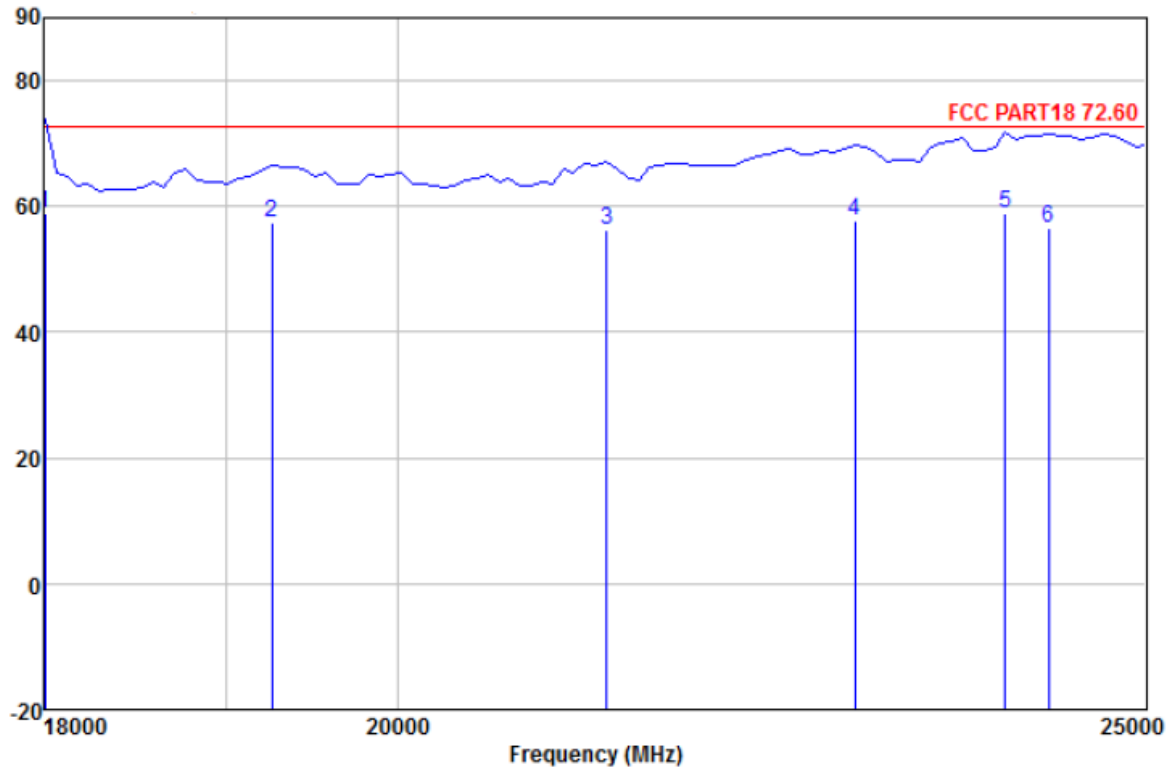


18000MHZ to 25000MHZ:

**Horizontal:**

Peak scan

Level (dBμV/m)



Average measurement

Read Freq	Antenna Level	Factor	Cable Loss	Preamp Factor	Limit Level	Over Line	Limit	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
18003.220	33.35	37.70	26.52	38.60	58.97	72.60	-13.63	Average	
19262.240	34.88	37.90	23.41	38.74	57.45	72.60	-15.15	Average	
21283.500	34.02	38.22	22.61	38.65	56.20	72.60	-16.40	Average	
22919.000	33.13	38.67	24.50	38.52	57.78	72.60	-14.82	Average	
23975.450	31.87	38.80	26.59	38.40	58.86	72.60	-13.74	Average	
24286.140	29.63	38.86	26.56	38.45	56.60	72.60	-16.00	Average	

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

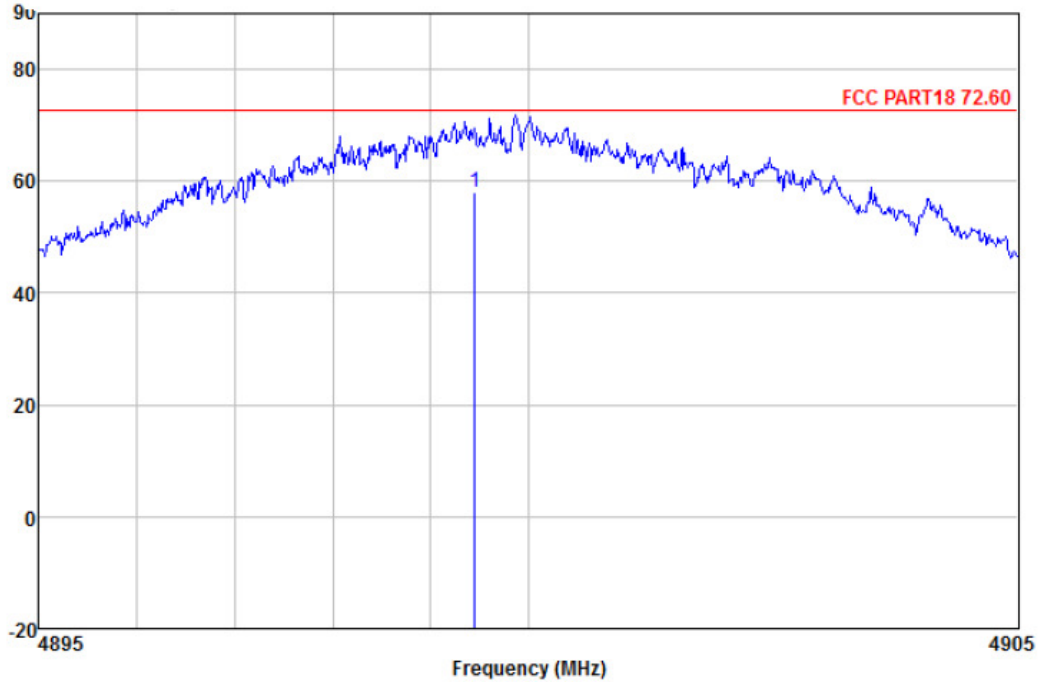


2<sup>nd</sup> Harmonics:

**Vertical:**

Peak scan

Level (dB $\mu$ V/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dB $\mu$ V	dB/m	dB	dB	dB $\mu$ V/m	dB $\mu$ V/m	dB	
4899.447	53.76	31.59	11.29	38.56	58.08	72.60	-14.52	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

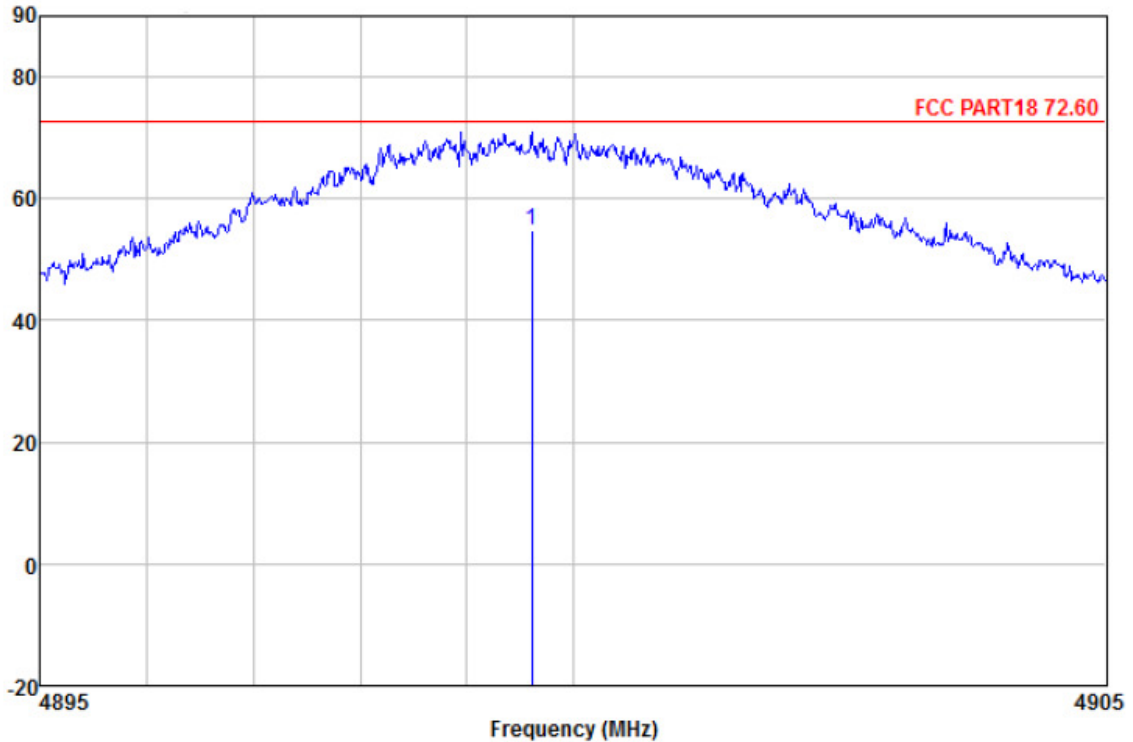


2<sup>nd</sup> Harmonics:

**Horizontal:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4899.607	50.61	31.59	11.29	38.56	54.93	72.60	-17.67	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**



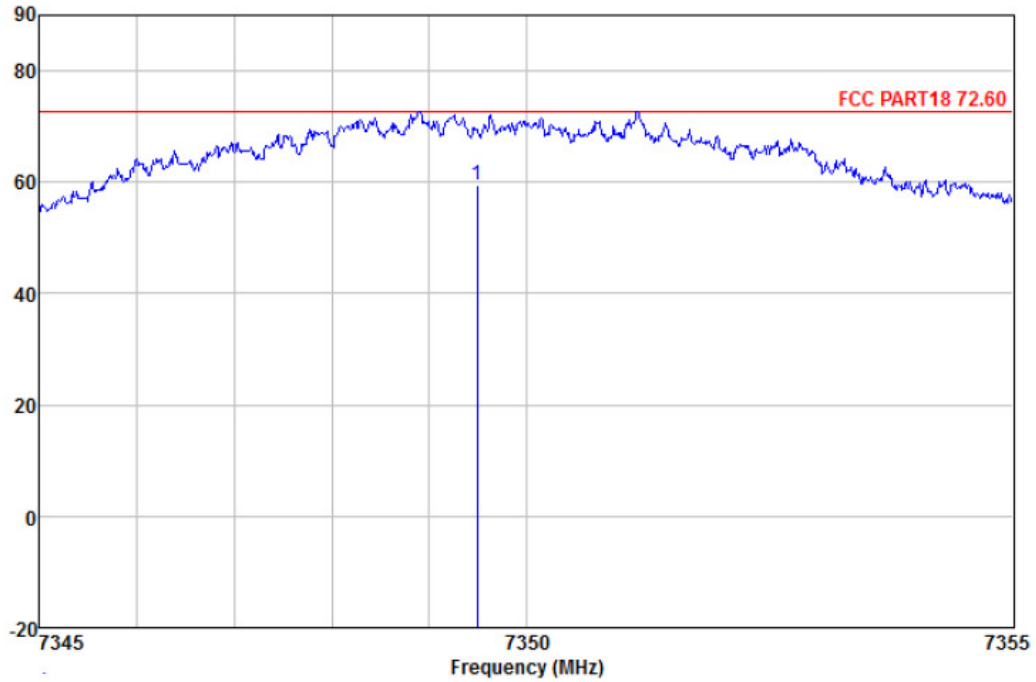


3<sup>rd</sup> Harmonics:

**Vertical:**

Peak scan

Level (dBμV/m)



Average measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
7349.488	48.50	36.52	13.34	38.89	59.47	72.60	-13.13	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

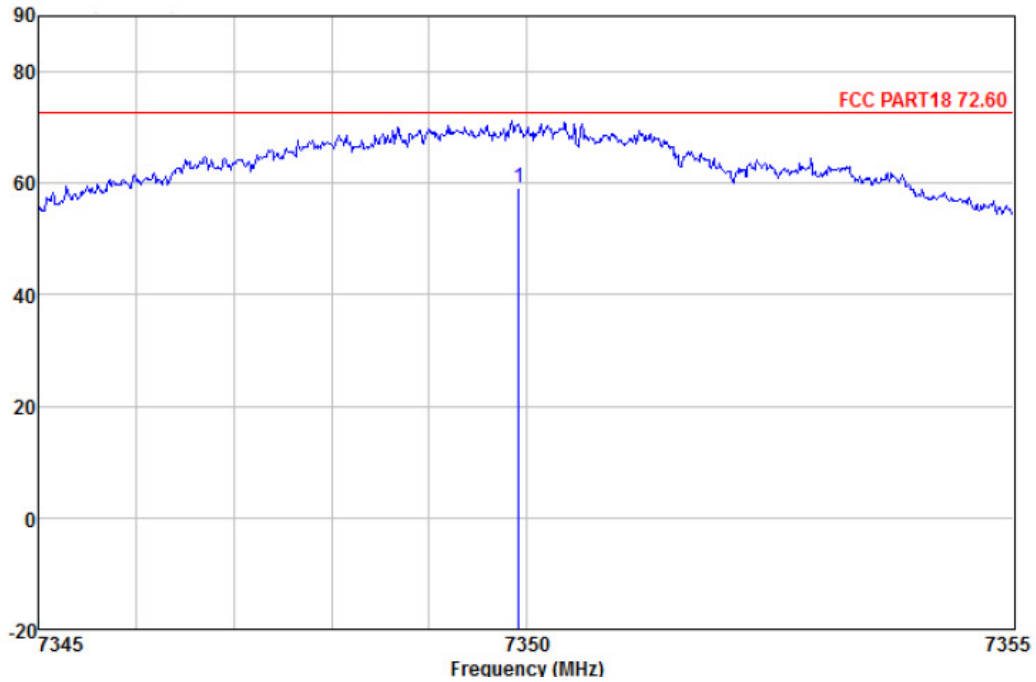


3<sup>rd</sup> Harmonics:

**Horizontal:**

Peak scan

Level (dBµV/m)



Average measurement

Freq	ReadAntenna	Cable	Preamp	Limit	Over	Remark
MHz	Level	Factor	Loss	Line	Limit	
	dBµV	dB/m	dB	dB	dBµV/m	dB
7349.918	48.27	36.52	13.34	38.89	59.24	72.60 -13.36 Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**

**--End of Report--**