

TEST REPORT

Applicant Name & Address : Foshan Shunde YA-IN Electric Appliance Manufacture Co., Ltd
No. 8 Longxiao Road. Longyongkou, Ronggui Town, Shunde, Foshan
Guangdong 528305 China

Manufacturing Site : Same as applicant

Sample Description

Product : Induction Cooktop
Model No. : C96E-AABBB01, C96E-AABBB02
Electrical Rating : AC 240V~ 60Hz, 9600W
FCC ID : ZFB- C96E-AABBB01

Date Received : 7 August 2016

Date Test Conducted : 7 August 2016 – 20 September 2016

Test standards : **FCC Part 18: 2014**


Test Result : Pass

Conclusion : The submitted samples complied with the above rules/standards.


Remark : None.

*****End of Page*****

Prepared and Checked By:


Leo Luo
Engineer
Intertek Guangzhou

Approved By:

 **Signature**
Helen Ma
Team Leader
Intertek Guangzhou
29 September 2016 **Date**

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. The test report only allows to be revised within three years from its original issued date unless further standard or the requirement was noticed.

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD Guangzhou, China
Tel / Fax: 86-20-8213 9688/86-20-3205 7538
© 2016 Intertek

CONTENT

TEST REPORT	1
CONTENT	2
1 TEST RESULTS SUMMARY	3
2 TEST RESULTS CONCLUSION	4
3 LABORATORY MEASUREMENTS	5
4 TEST CONFIGURATION.....	6
5 TEST RESULTS	6
5.1 CONDUCTED EMISSION TEST	6
5.1.1 Used Test Equipment	6
5.1.2 Block Diagram of Test Setup	7
5.1.3 Test Setup and Procedure	7
5.1.4 Test Data & Curve.....	8
5.1.5 Measurement Uncertainty	14
5.2 RADIATED EMISSION(9KHZ - 30 MHz).....	14
5.2.1 Used Test Equipment	14
5.2.2 Block Diagram of Test Setup	14
5.2.3 Test Setup and Procedure	15
5.2.4 Test Data & Curve.....	16
5.2.5 Measurement uncertainty	22
5.3 RADIATED EMISSION (30 MHZ- 1 GHz)	22
5.3.1 Used Test Equipment	22
5.3.2 Block Diagram of Test Setup	23
5.3.3 Test Setup and Procedure	23
5.3.4 Test Data & Curve.....	24
5.3.5 Measurement uncertainty	29

1

TEST RESULTS SUMMARY

Test Item	Standard	Result
Conducted Emission (9 kHz-30 MHz)	FCC Part 18: 2014	Pass
Radiated Emission (9 kHz-30 MHz)	FCC Part 18: 2014	Pass
Radiated Emission (30 MHz-1 GHz)	FCC Part 18: 2014	Pass
Radiated Emission (above 1 GHz)	FCC Part 18: 2014	N/A

Remark: 1. The symbol “N/A” in above table means Not Applicable.

2. When determining the test results, measurement uncertainty of tests has been considered.

2

Test Results Conclusion (with Justification)

RE: EMC Testing Pursuant to FCC Part 18 performed on the Induction Cooktop, Models: C96E-AABBB01, C96E-AABBB02.

We tested the Induction Cooktop, Model: C96E-AABBB01, C96E-AABBB02, to determine if it was in compliance with the relevant FCC rules as marked on the Test Results Summary. We found that the unit met the requirement of FCC Part 18 when tested as received. The worst case's test data was presented in this test report.

The submitted samples C96E-AABBB01, C96E-AABBB02 are Induction Hotplates for household use.

Model C96E-AABBB01, C96E-AABBB02 are the same except the model name.

According to above information, all the tests are performed on C96E-AABBB01.

Conclusion:

The sample as received complied with the FCC Part 18 requirement.

The production units are required to conform to the initial sample as received when the units are placed on the market.



3

LABORATORY MEASUREMENTS

Configuration Information

Equipment Under Test (EUT):	Induction Cooktop
Model:	C96E-AABBB01
Serial No.:	Not Labeled
Support Equipment:	N/A
Rated Voltage:	AC 240V~ 60Hz,
Condition of Environment:	Temperature : 22~28°C Relative Humidity: 35~60% Atmosphere Pressure 86~106kPa

Notes:

1. The EMI measurements had been made in the operating mode producing the largest emission in the frequency band being investigated consistent with normal applications.

An attempt had been made to maximize the emission by varying the configuration of the EUT.

2. Test Sites:

All of the tests are performed at:

Guangdong CIQ Technology Center.

No.3, Desheng East Road, Shunde Daliang, Foshan, Guangdong, China.

This test facility and site measurement data have been fully placed on file with the FCC, test firm registration number is 756674.

4 Test Configuration

Cooking Vessel (provided by manufacturer):
Fill container with 80% of water.
Material: stainless steel
Contact surface diameter 18cm, Top surface diameter 23cm

The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Test the EUT in the lowest power level, middle level and the highest power level, the worst test data was presented in the report.

5 TEST RESULTS

5.1 Conducted Emission Test

Test Result: Pass

5.1.1 Used Test Equipment

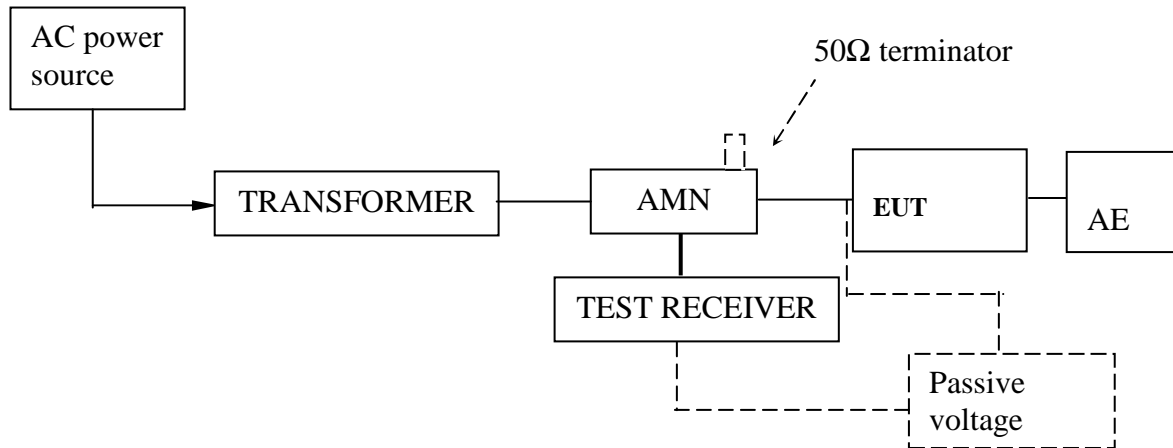
The middle power mode and the lowest power were conducted on below Equipment:

Equipment No.	Equipment	Model	Manufacturer	Last Cal.	Due Date
CQCSC-EMC-001	Shielded Room	TDK	8*6*4	2016/03/17	2019/03/17
CQCSC-EMC-002	EMI Test receiver	R&S	ESU8	2016/03/17	2017/03/17
CQCSC-EMC-007	LISN	R&S	ESH2-Z5	2016/03/17	2017/03/17
CQCSC-EMC-010	Shielded Room	TDK	8*6*4	2016/03/17	2019/03/17
CQCSC-EMC-052	LISN	R&S	ENV216	2015/12/11	2016/12/11

The highest power were conducted on below Equipment:

Equipment No.	Equipment	Model	Manufacturer	Last Cal.	Due Date
SD00781	EMI receiver	SMR4503	SCHAFNER	2016.8.31	2017.8.30
201044CK0121	LISN	ESH2-Z5	Rohde & Schwarz	2016.8.31	2017.8.30
1244BK0003SD	10dB Pulse Limiter	PLA-10N	Compliance Direction Systems Inc.	2016.8.31	2017.8.30
201044CK0128-1	shielding room	NP-HJ2	Changzhou Nanping	2016.1.12	2017.1.11

5.1.2 Block Diagram of Test Setup



5.1.3 Test Setup and Procedure

Test was performed according to FCC OST/ MP-5:1986. The EUT was set to achieve the maximum emission level. The mains terminal disturbance voltage was measured with the EUT in a shielded room. The EUT was connected to AC power source through an Artificial Mains Network which provides a 50Ω linear impedance. Artificial hand is used if appropriate (for handheld apparatus). The load/control terminal disturbance voltage was measured with passive voltage probe if appropriate.

The table-top EUT was placed on a 0.8m high non-metallic table above earthed ground plane (Ground Reference Plane). And for floor standing EUT, was placed on a 0.1m high non-metallic supported on GRP. The EUT keeps a distance of at least 0.8m from any other of the metallic surface. The Artificial Mains Network is situated at a distance of 0.8m from the EUT.

During the test, mains lead of EUT excess 0.8m was folded back and forth parallel to the lead so as to form a horizontal bundle with a length between 0.3m and 0.4m.

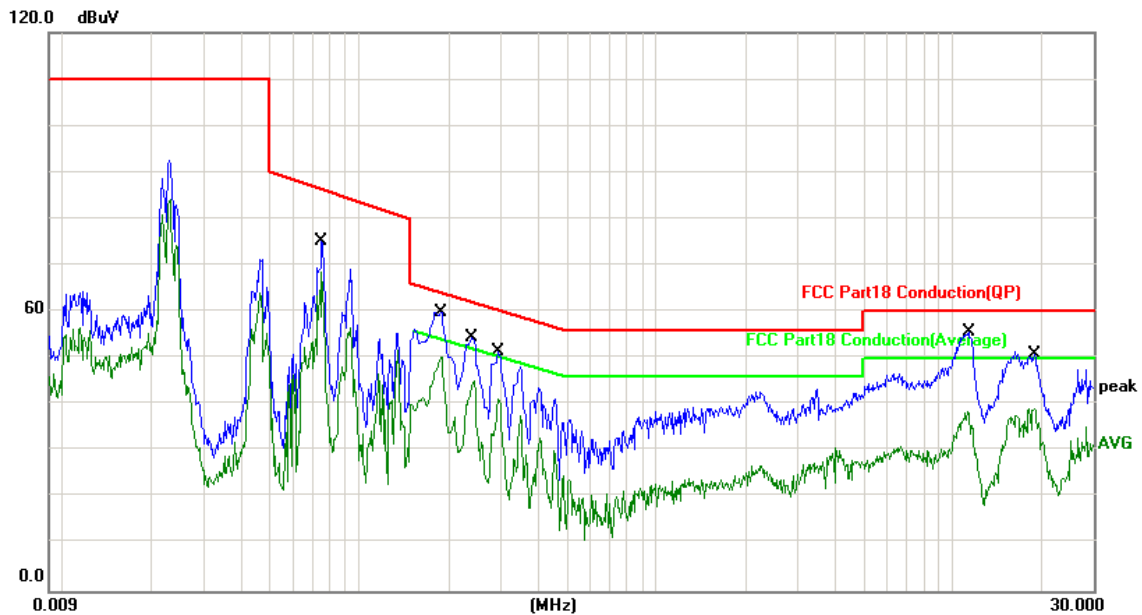
The bandwidth of test receiver was set at 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

5.1.4 Test Data & Curve

At main terminal: Pass

Tested Wire: Live

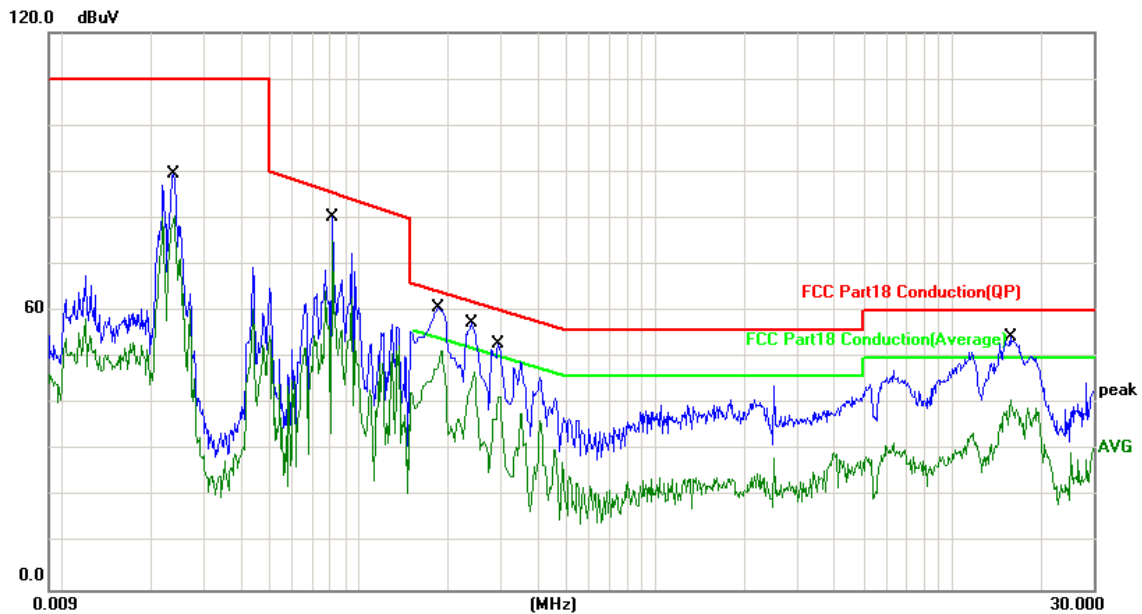
Operation Mode: the highest power



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.0752	9.99	49.70	59.69	86.28	-26.59	QP	P
2	0.1900	10.00	48.50	58.50	64.03	-5.53	QP	P
3	0.1900	10.00	41.40	51.40	54.03	-2.63	AVG	P
4	0.2400	10.01	43.30	53.31	62.09	-8.78	QP	P
5	0.2400	10.01	33.40	43.41	52.09	-8.68	AVG	P
6	0.2949	10.01	39.80	49.81	60.38	-10.57	QP	P
7	0.2949	10.01	31.10	41.11	50.38	-9.27	AVG	P
8	11.4050	10.19	39.50	49.69	60.00	-10.31	QP	P
9	11.4050	10.19	26.60	36.79	50.00	-13.21	AVG	P
10	18.9850	10.28	36.60	46.88	60.00	-13.12	QP	P
11	18.9850	10.28	27.40	37.68	50.00	-12.32	AVG	P

Tested Wire: Neutral

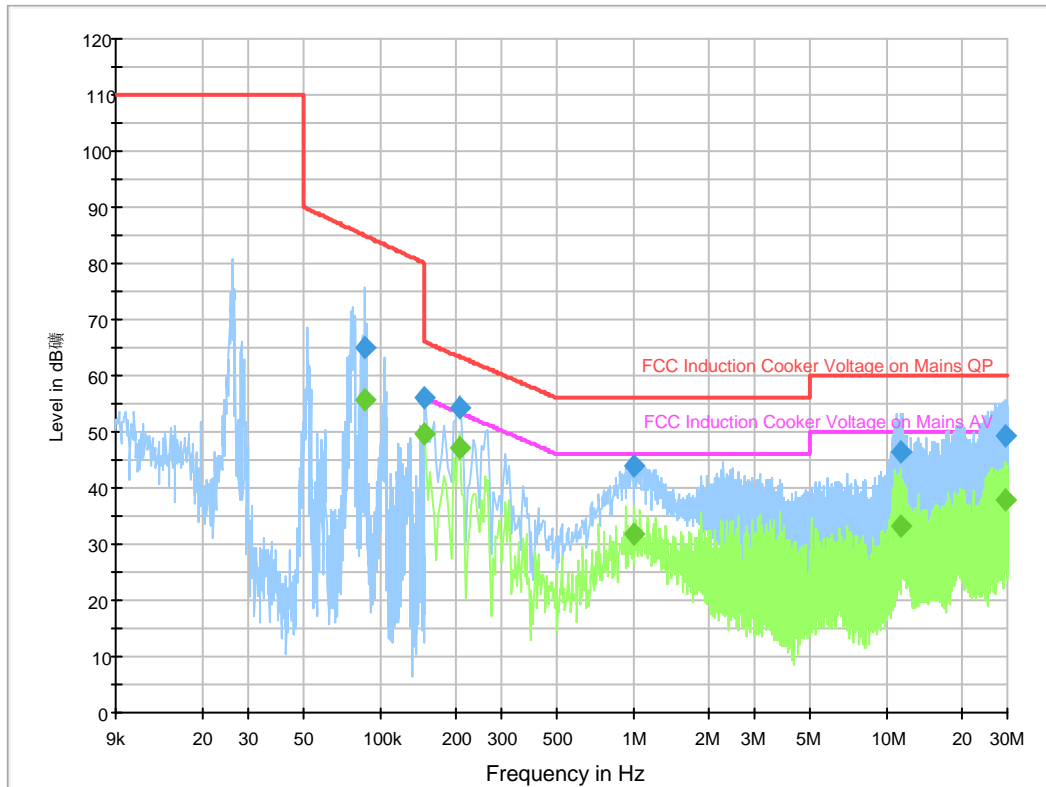
Operation Mode: the highest power



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.0752	9.99	49.70	59.69	86.28	-26.59	QP	P
2	0.1900	10.00	48.50	58.50	64.03	-5.53	QP	P
3	0.1900	10.00	41.40	51.40	54.03	-2.63	AVG	P
4	0.2400	10.01	43.30	53.31	62.09	-8.78	QP	P
5	0.2400	10.01	33.40	43.41	52.09	-8.68	AVG	P
6	0.2949	10.01	39.80	49.81	60.38	-10.57	QP	P
7	0.2949	10.01	31.10	41.11	50.38	-9.27	AVG	P
8	11.4050	10.19	39.50	49.69	60.00	-10.31	QP	P
9	11.4050	10.19	26.60	36.79	50.00	-13.21	AVG	P
10	18.9850	10.28	36.60	46.88	60.00	-13.12	QP	P
11	18.9850	10.28	27.40	37.68	50.00	-12.32	AVG	P

Tested Wire: Live

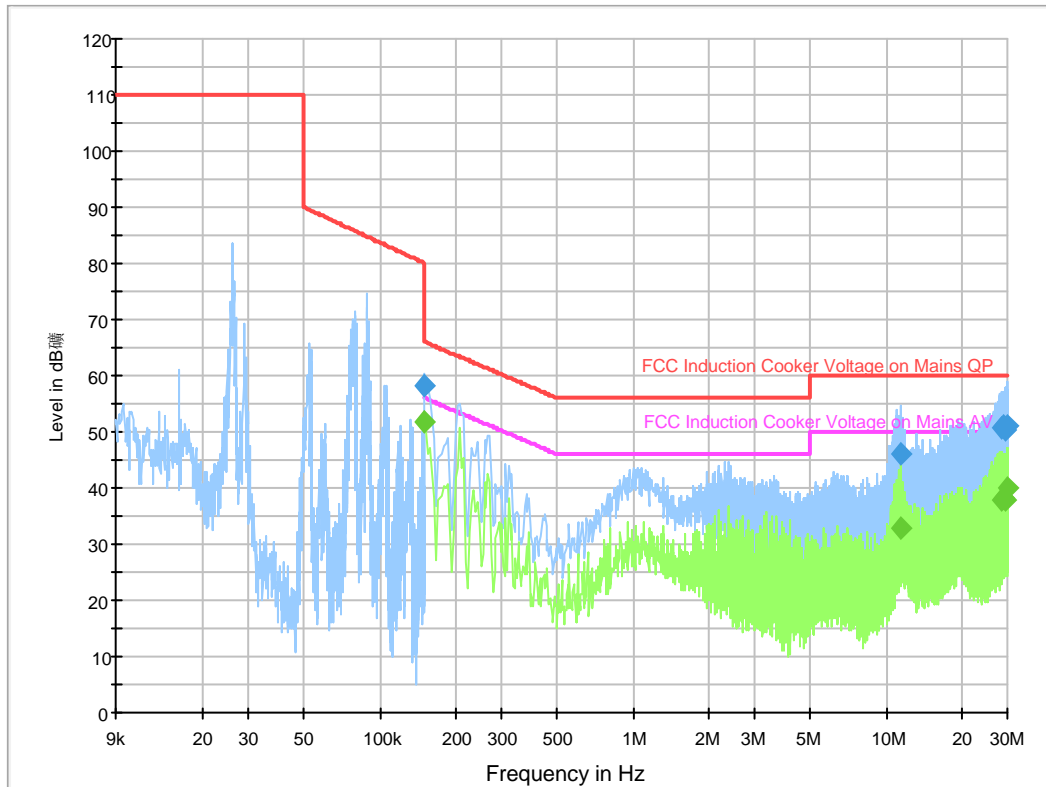
Operation Mode: Middle power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.086	64.9	1000.	0.200	GN	L1	10.0	-20.1	85.0
0.150	56.2	1000.	9.000	GN	L1	10.0	-9.8	66.0
0.206	54.3	1000.	9.000	GN	L1	10.0	-9.1	63.4
1.010	43.9	1000.	9.000	GN	L1	10.0	-12.1	56.0
11.302	46.3	1000.	9.000	GN	L1	10.2	-13.7	60.0
29.238	49.4	1000.	9.000	GN	L1	10.4	-10.6	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.086	55.8	1000.	0.200	GN	L1	10.0	---	---
0.150	49.6	1000.	9.000	GN	L1	10.0	-6.4	56.0
0.206	47.1	1000.	9.000	GN	L1	10.0	-6.2	53.4
1.010	31.7	1000.	9.000	GN	L1	10.0	-14.3	46.0
11.302	33.2	1000.	9.000	GN	L1	10.2	-16.8	50.0
29.238	38.0	1000.	9.000	GN	L1	10.4	-12.0	50.0

Tested Wire: Neutral

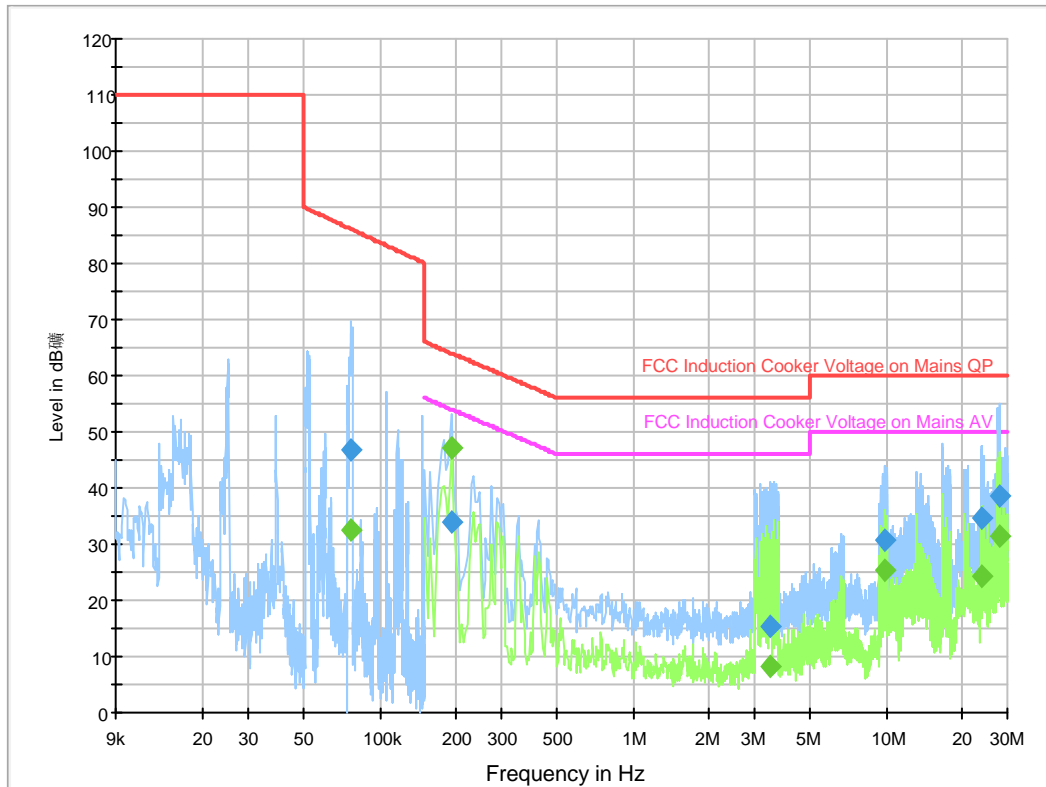
Operation Mode: Middle power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150	58.2	1000.	9.000	GN	N	10.0	-7.8	66.0
11.422	46.1	1000.	9.000	GN	N	10.2	-13.9	60.0
28.630	50.9	1000.	9.000	GN	N	10.4	-9.1	60.0
29.054	51.1	1000.	9.000	GN	N	10.4	-8.9	60.0
29.542	50.4	1000.	9.000	GN	N	10.4	-9.6	60.0
29.894	51.1	1000.	9.000	GN	N	10.4	-8.9	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.150	51.9	1000.	9.000	GN	N	10.0	-4.1	56.0
11.422	32.8	1000.	9.000	GN	N	10.2	-17.2	50.0
28.630	37.7	1000.	9.000	GN	N	10.4	-12.3	50.0
29.054	38.3	1000.	9.000	GN	N	10.4	-11.7	50.0
29.542	37.8	1000.	9.000	GN	N	10.4	-12.2	50.0
29.894	39.8	1000.	9.000	GN	N	10.4	-10.2	50.0

Tested Wire: Live

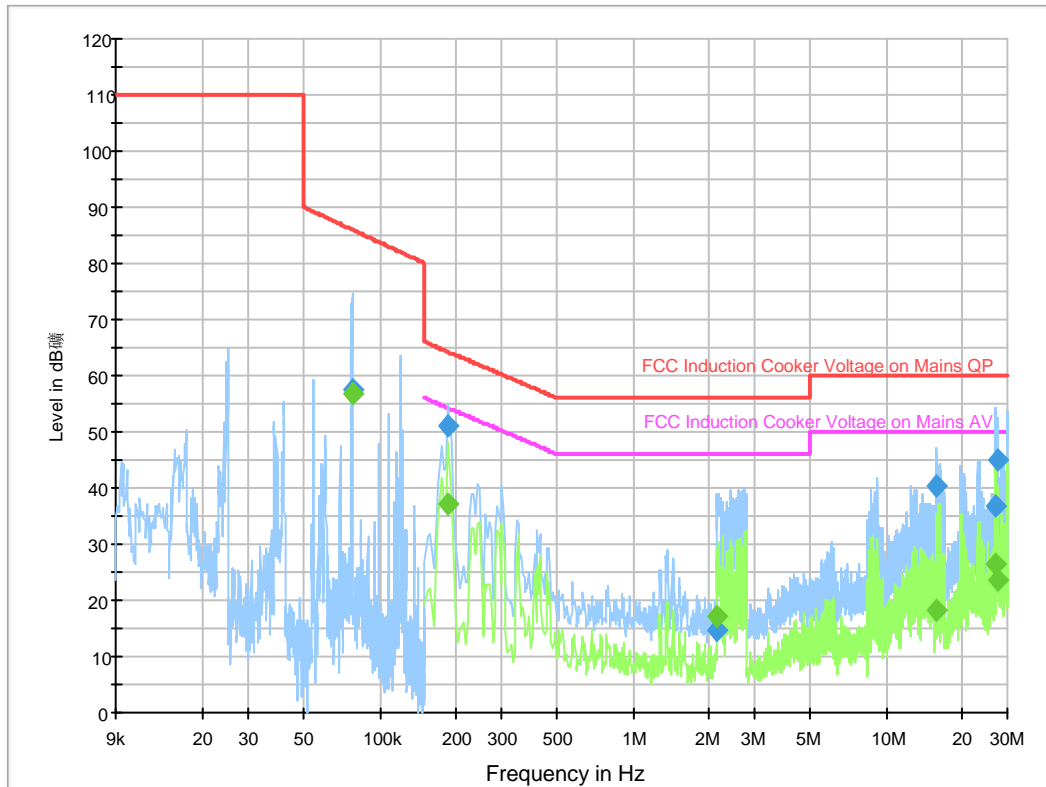
Operation Mode: the lowest power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.077	46.8	1000.	0.200	GN	L1	10.0	-39.2	86.1
0.190	34.0	1000.	9.000	GN	L1	10.0	-30.0	64.0
3.462	15.5	1000.	9.000	GN	L1	10.1	-40.5	56.0
9.906	30.6	1000.	9.000	GN	L1	10.2	-29.4	60.0
23.642	34.6	1000.	9.000	GN	L1	10.4	-25.4	60.0
28.034	38.7	1000.	9.000	GN	L1	10.4	-21.3	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.077	32.5	1000.	0.200	GN	L1	10.0	---	---
0.190	47.2	1000.	9.000	GN	L1	10.0	-6.8	54.0
3.462	8.3	1000.	9.000	GN	L1	10.1	-37.7	46.0
9.906	25.4	1000.	9.000	GN	L1	10.2	-24.6	50.0
23.642	24.1	1000.	9.000	GN	L1	10.4	-25.9	50.0
28.034	31.3	1000.	9.000	GN	L1	10.4	-18.7	50.0

Tested Wire: Neutral

Operation Mode: the lowest power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.078	57.5	1000.	0.200	GN	N	10.0	-28.5	86.0
0.186	51.1	1000.	9.000	GN	N	10.0	-13.1	64.2
2.138	14.7	1000.	9.000	GN	N	10.0	-41.3	56.0
15.634	40.3	1000.	9.000	GN	N	10.3	-19.7	60.0
26.838	36.8	1000.	9.000	GN	N	10.4	-23.2	60.0
27.434	45.0	1000.	9.000	GN	N	10.4	-15.0	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.078	56.9	1000.	0.200	GN	N	10.0	---	---
0.186	37.1	1000.	9.000	GN	N	10.0	-17.1	54.2
2.138	17.0	1000.	9.000	GN	N	10.0	-29.0	46.0
15.634	18.4	1000.	9.000	GN	N	10.3	-31.6	50.0
26.838	26.5	1000.	9.000	GN	N	10.4	-23.5	50.0
27.434	23.6	1000.	9.000	GN	N	10.4	-26.4	50.0

5.1.5 Measurement Uncertainty

Uncertainty: 2.61 dB for frequency rang 9 kHz-150 kHz and 2.58 dB for frequency rang 150 kHz-30 MHz at a level of confidence of 95%.

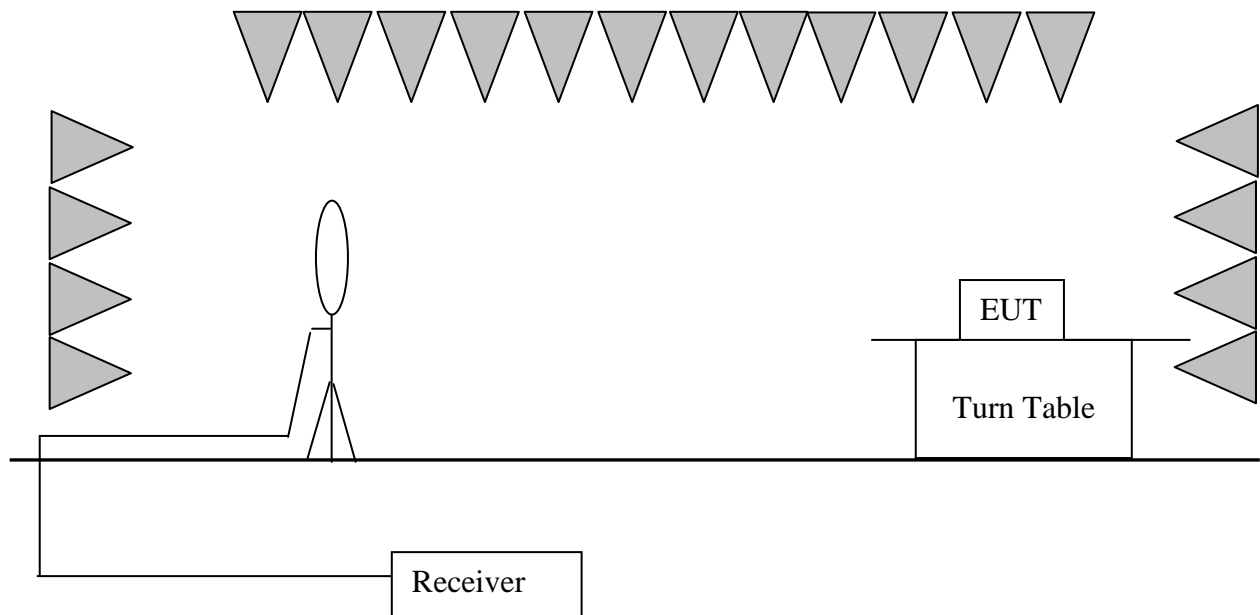
5.2 Radiated Emission(9kHz - 30 MHz)

Test Result: PASS

5.2.1 Used Test Equipment

Equipment No.	Equipment	Model	Manufacturer	Last Cal.	Due Date
EE226	EMI Test Receiver	ESR3	Rohde & Schwarz	2016.5.17	2017.5.17
EE249	EMI Test Receiver	ESR3	Rohde & Schwarz	2016.5.17	2017.5.17
1029	Loop Antenna	PLA-1030/B	ARA	2016.5.29	2017.5.29

5.2.2 Block Diagram of Test Setup



5.2.3 Test Setup and Procedure

The measurement was applied in a semi-anechoic chamber. The EUT were placed on a 1 m high wooden turntable above the horizontal metal ground plane. The turn table rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna tripod.

Loop antenna was used as receiving antenna. The antenna was supported in the vertical plane and was rotatable about a vertical axis to obtain the maximum emission. The antenna height of was set at 2 m above ground level.

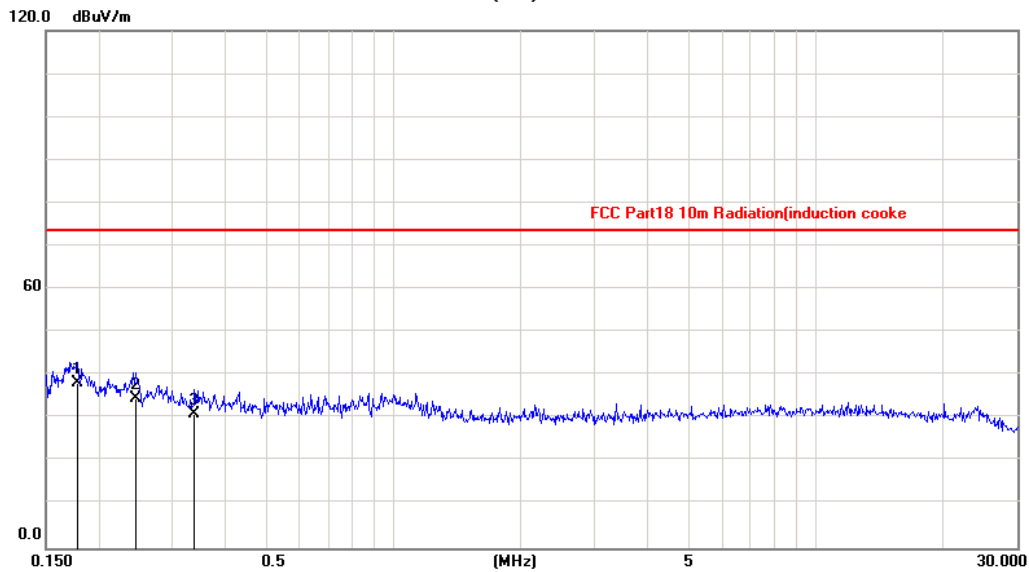
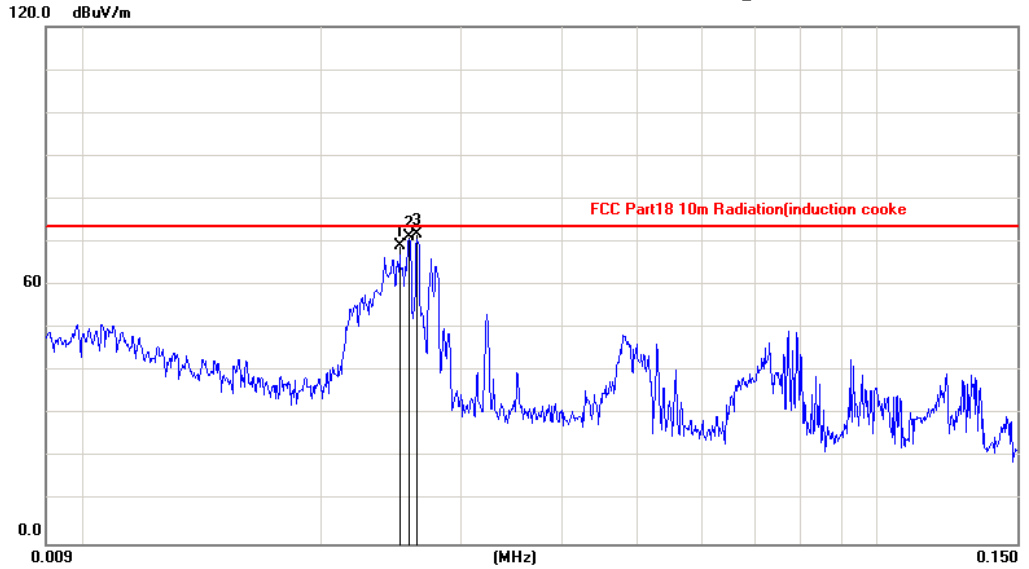
The bandwidth setting on Receiver was 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

An initial pre-scan was performed in the 10m chamber using the spectrum analyzer in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by a 0.6m loop antenna.

5.2.4 Test Data & Curve

Tested Polarization: Vertical

Operation Mode: the highest power

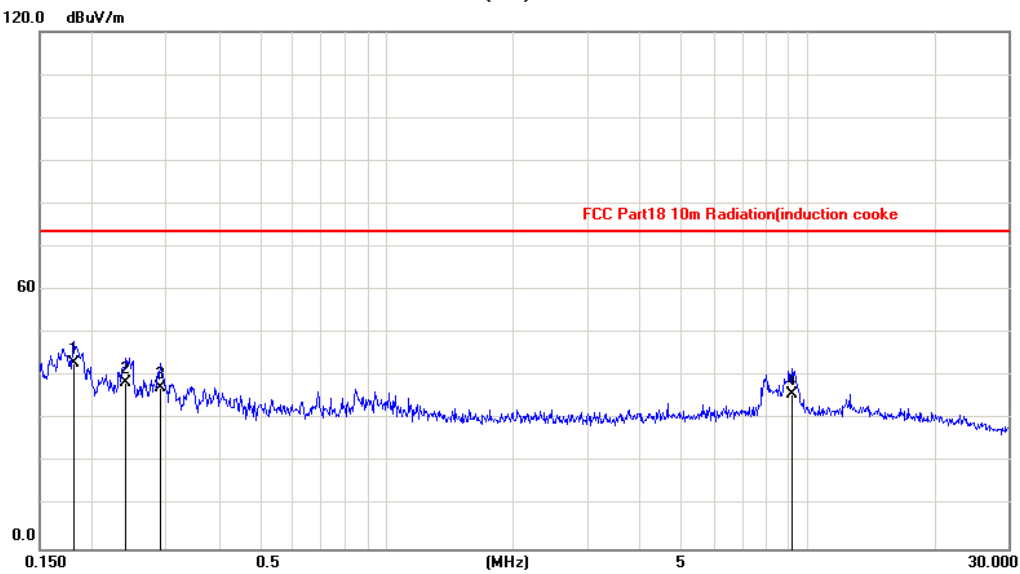
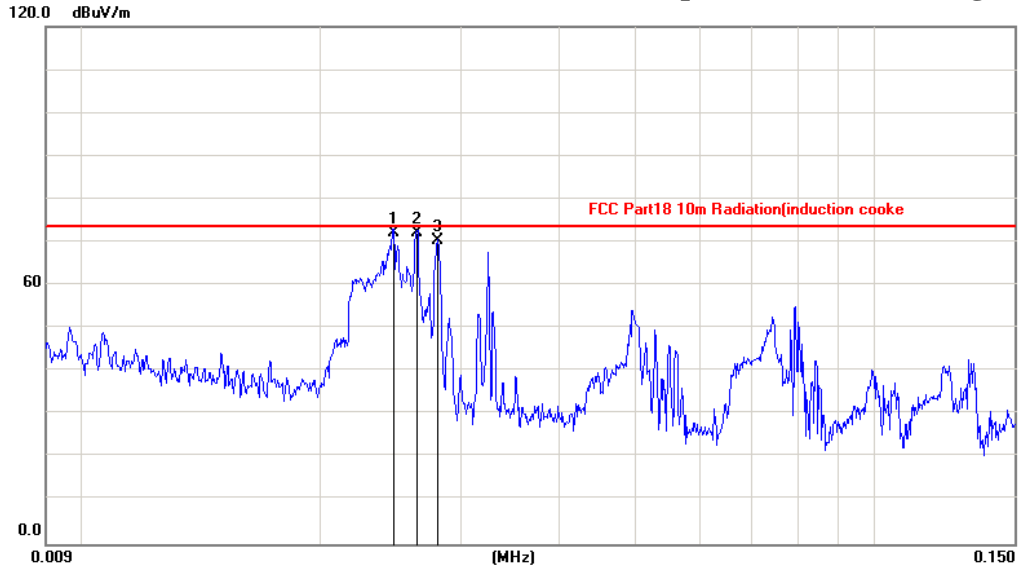


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0251	20.30	49.00	69.30	73.50	-4.20	AVG			P
2	0.0258	20.29	50.91	71.20	73.50	-2.30	AVG			P
3	0.0264	20.27	51.43	71.70	73.50	-1.80	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1787	20.34	17.96	38.30	73.50	-35.20	AVG			P
2	0.2455	20.53	14.07	34.60	73.50	-38.90	AVG			P
3	0.3373	20.60	10.60	31.20	73.50	-42.30	AVG			P

Tested Polarization: Horizontal

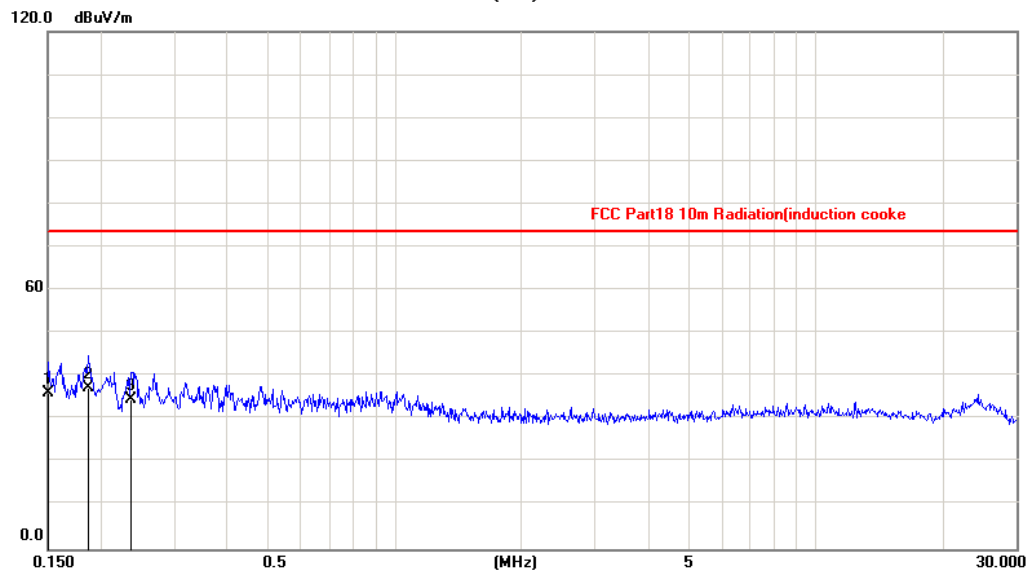
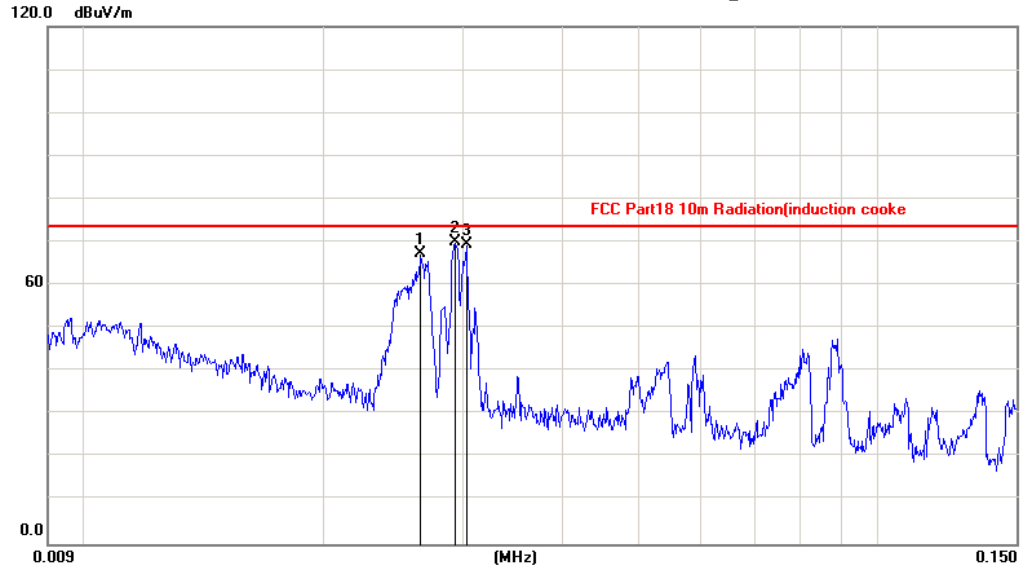
Operation Mode: the highest power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0247	20.31	51.79	72.10	73.50	-1.40	AVG			P
2	0.0264	20.27	52.03	72.30	73.50	-1.20	AVG			P
3	0.0280	20.23	49.97	70.20	73.50	-3.30	AVG			P
1	0.1806	20.34	22.76	43.10	73.50	-30.40	AVG			P
2	0.2404	20.51	18.09	38.60	73.50	-34.90	AVG			P
3	0.2893	20.64	16.56	37.20	73.50	-36.30	AVG			P
4	9.2043	20.91	14.79	35.70	73.50	-37.80	AVG			P

Tested Polarization: Vertical

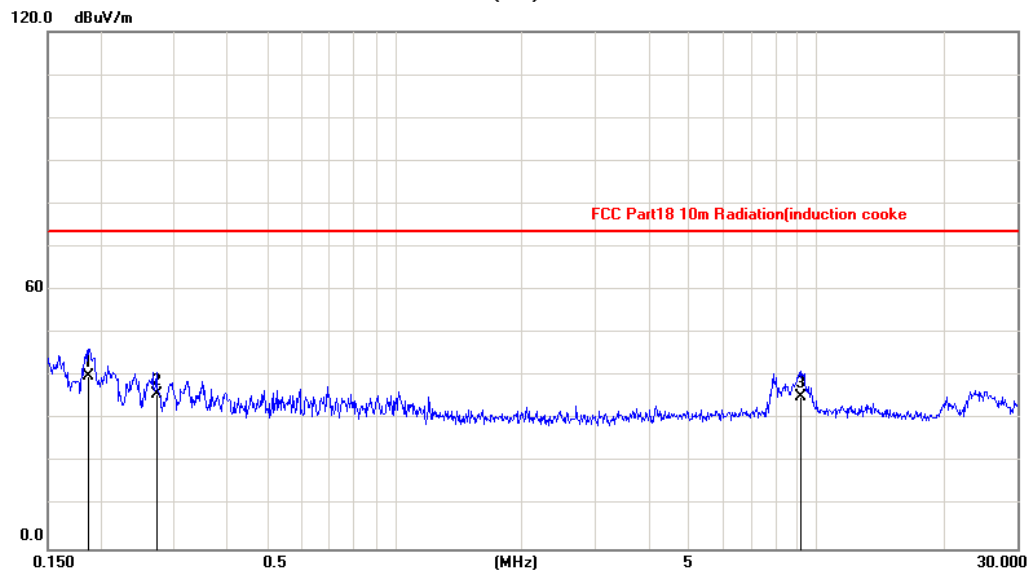
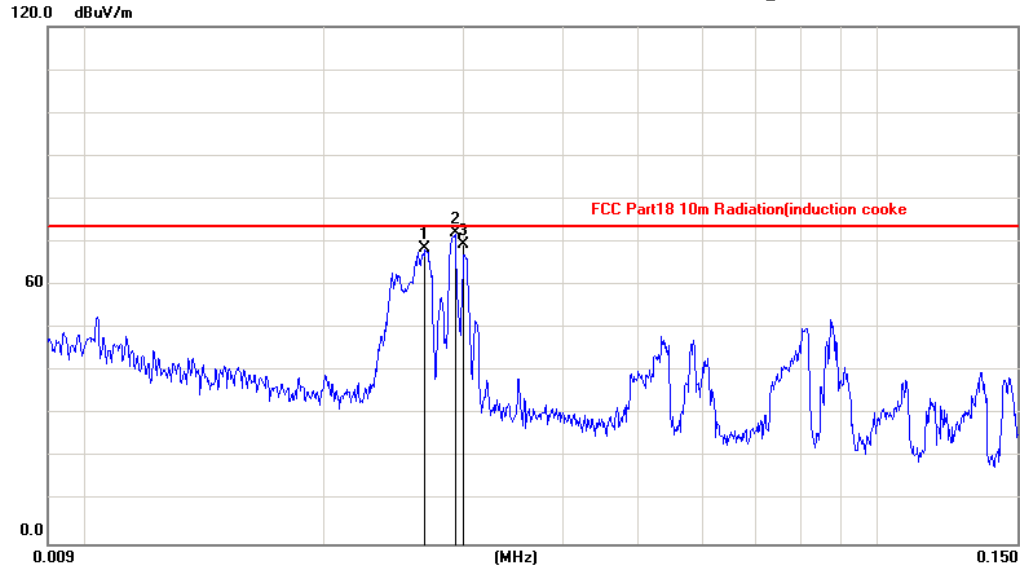
Operation Mode: Middle power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0265	20.27	47.03	67.30	73.50	-6.20	AVG			P
2	0.0294	20.20	49.80	70.00	73.50	-3.50	AVG			P
3	0.0303	20.19	49.31	69.50	73.50	-4.00	AVG			P
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1508	20.26	15.94	36.20	73.50	-37.30	AVG			P
2	0.1874	20.36	16.94	37.30	73.50	-36.20	AVG			P
3	0.2366	20.50	14.20	34.70	73.50	-38.80	AVG			P

Tested Polarization: Horizontal

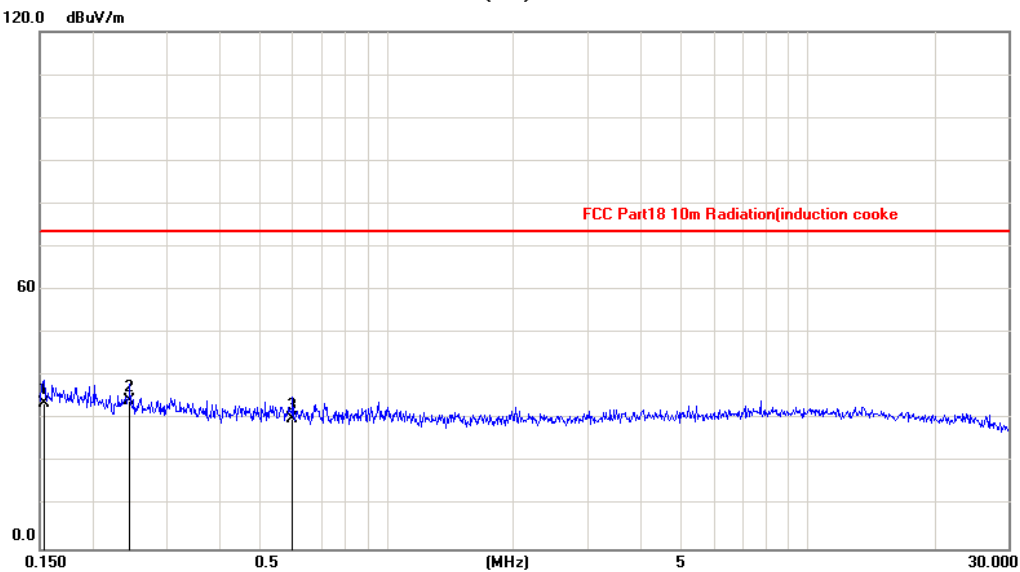
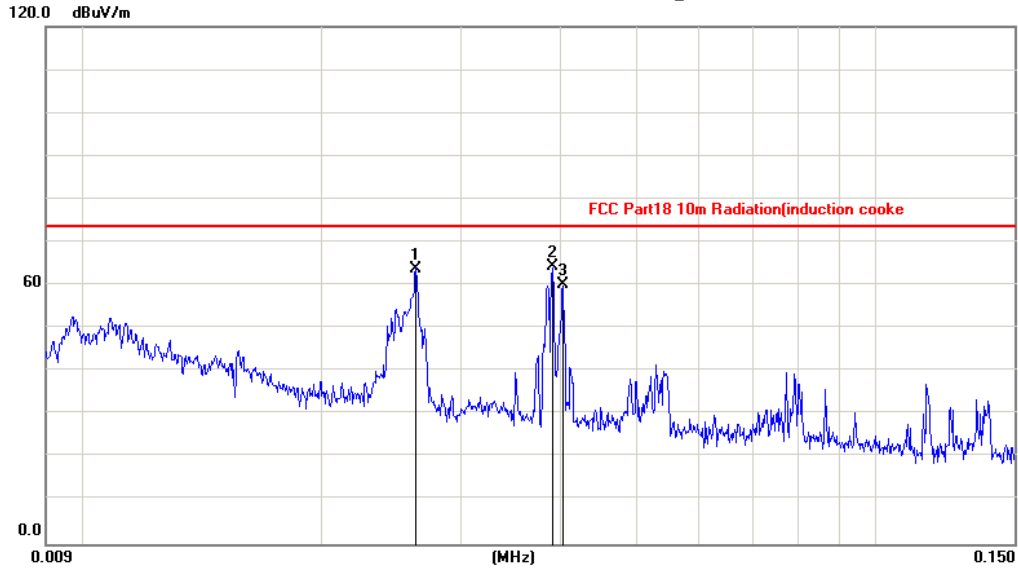
Operation Mode: Middle power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0269	20.26	48.34	68.60	73.50	-4.90	AVG			P
2	0.0293	20.20	52.10	72.30	73.50	-1.20	AVG			P
3	0.0301	20.19	49.41	69.60	73.50	-3.90	AVG			P
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1874	20.36	19.74	40.10	73.50	-33.40	AVG			P
2	0.2714	20.59	15.11	35.70	73.50	-37.80	AVG			P
3	9.2043	20.91	14.29	35.20	73.50	-38.30	AVG			P

Tested Polarization: Vertical

Operation Mode: the lowest power

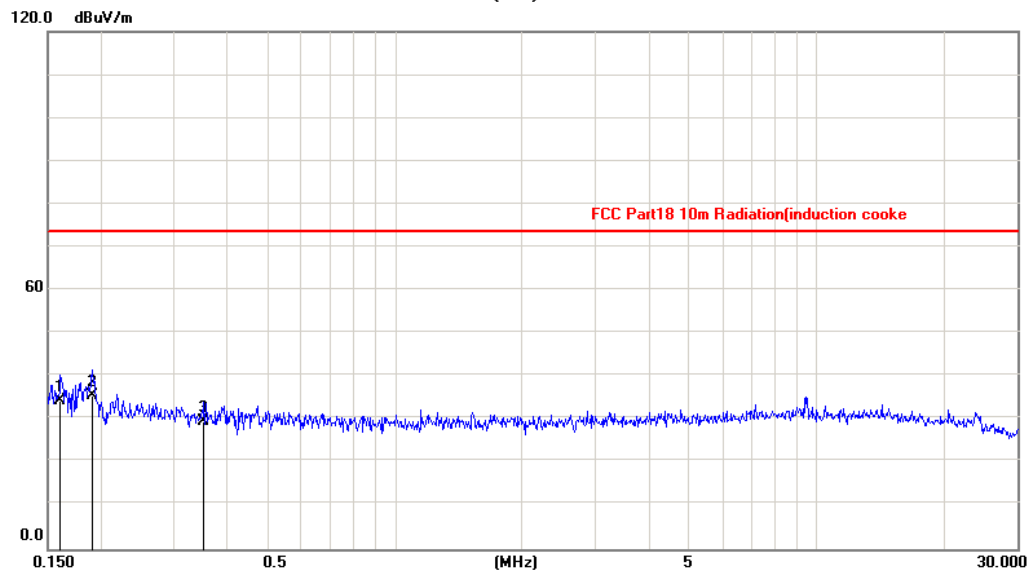
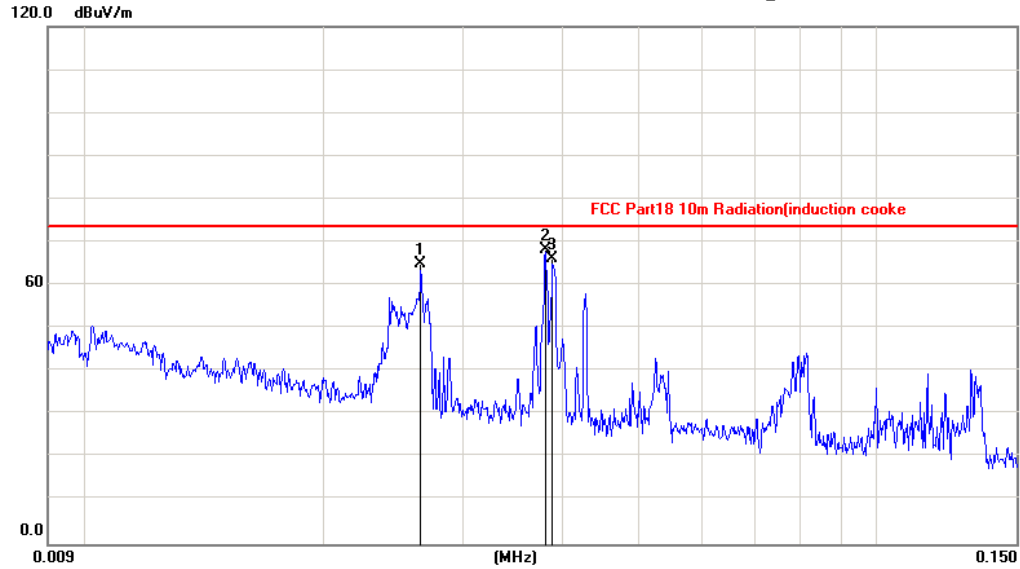


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0264	20.27	43.63	63.90	73.50	-9.60	AVG			P
2	0.0392	20.25	43.95	64.20	73.50	-9.30	AVG			P
3	0.0404	20.25	39.95	60.20	73.50	-13.30	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1539	20.27	13.33	33.60	73.50	-39.90	AVG			P
2	0.2455	20.53	13.67	34.20	73.50	-39.30	AVG			P
3	0.5979	20.19	10.11	30.30	73.50	-43.20	AVG			P

Tested Polarization: Horizontal

Operation Mode: the lowest power



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0266	20.27	44.83	65.10	73.50	-8.40	AVG			P
2	0.0382	20.24	48.06	68.30	73.50	-5.20	AVG			P
3	0.0390	20.25	45.95	66.20	73.50	-7.30	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1607	20.29	13.91	34.20	73.50	-39.30	AVG			P
2	0.1914	20.37	15.23	35.60	73.50	-37.90	AVG			P
3	0.3520	20.57	8.93	29.50	73.50	-44.00	AVG			P

5.2.5 Measurement uncertainty

The measurement uncertainty for magnetic field radiated emission test is under consideration.

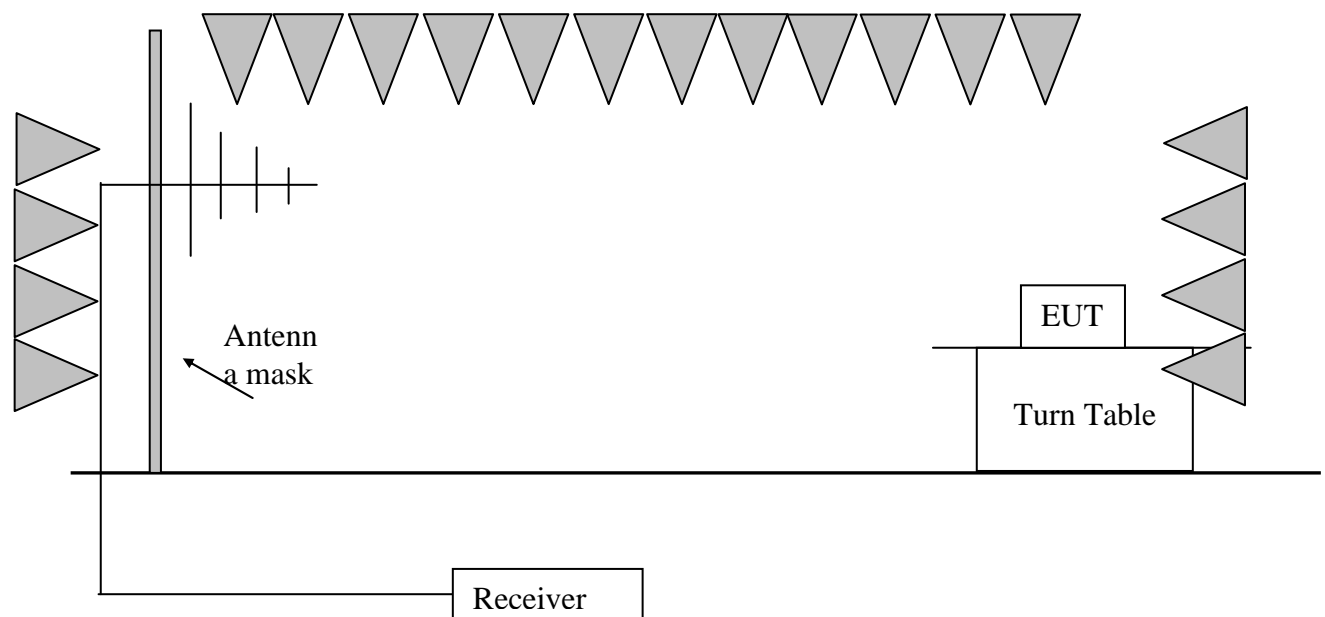
5.3 Radiated Emission (30 MHz- 1 GHz)

Test Result: Pass

5.3.1 Used Test Equipment

Equip. No.	Equipment	Model	Manufacturer	Last Cal.	Due Date
CQCSC-EMC-001	Shielded Room	TDK	8*6*4	2016/03/17	2019/03/17
CQCSC-EMC-002	EMI Test receiver	R&S	ESU8	2016/03/17	2017/03/17
CQCSC-EMC-003	Biconical Broad Band Antenna	Schwarzbeck	SWB-VULB9163	2016/03/12	2019/03/12
CQCSC-EMC-005	Horn Antenna	R&S	HF907	2016/03/12	2019/03/12
CQCSC-EMC-006	Preamplifier	R&S	SCU-18	2016/03/17	2017/03/17
CQCSC-EMC-010	Shielded Room	TDK	8*6*4	2016/03/17	2019/03/17
CQCSC-EMC-011	Chamber	TDK	9*6*6	2016/03/17	2019/03/17

5.3.2 Block Diagram of Test Setup



5.3.3 Test Setup and Procedure

The measurement was applied in a 3 m semi-anechoic chamber. The EUT and simulators were placed on a 1 m high wooden turntable above the horizontal metal ground plane. The turn table rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna mask. The antenna moved up and down between from 1 meter to 4 meters to find out the maximum emission level.

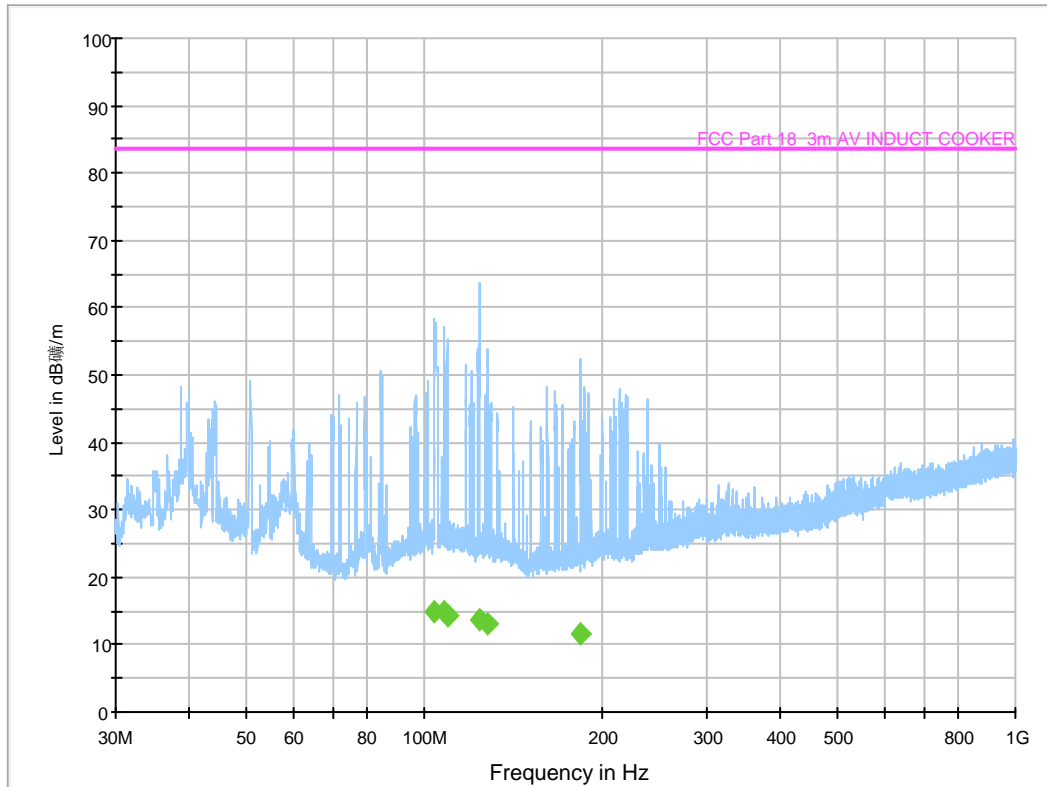
Broadband antenna was used as receiving antenna. Both horizontal and vertical polarization of the antenna was set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC OST/ MP-5:1986 requirement during radiated test. The bandwidth setting on Test Receiver was 120 kHz. The frequency range from 30 MHz to 1 GHz was checked.

An initial pre-scan was performed in the 3m chamber using the spectrum analyzer in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph.

5.3.4 Test Data & Curve

Tested Polarization: Vertical

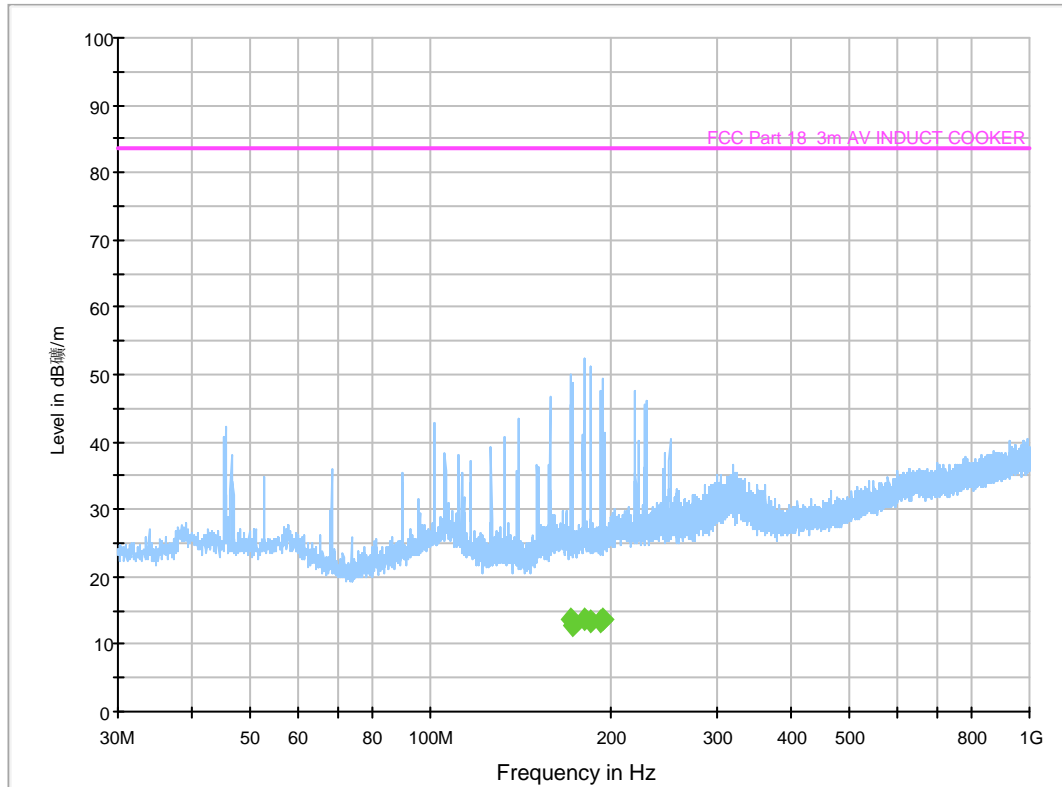
Operation Mode: the highest power



Frequency (MHz)	CAverage (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
104.011	14.8	1000.	120.000	100.1	V	13.7	-68.7	83.5
107.891	14.9	1000.	120.000	150.0	V	13.4	-68.6	83.5
109.104	14.3	1000.	120.000	100.1	V	13.3	-69.2	83.5
123.605	13.8	1000.	120.000	100.1	V	11.0	-69.7	83.5
127.873	13.2	1000.	120.000	100.1	V	10.4	-70.3	83.5
183.600	11.7	1000.	120.000	100.1	V	11.3	-71.8	83.5

Tested Polarization: Horizontal

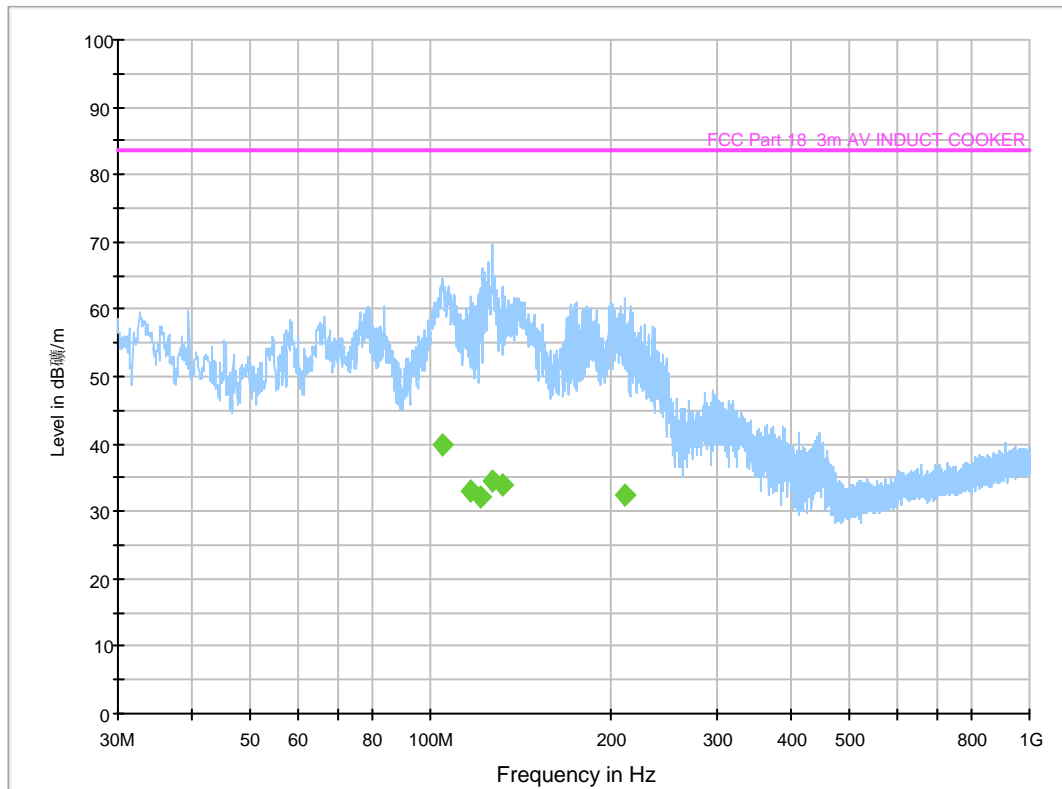
Operation Mode: the highest power



Frequency (MHz)	CAverage (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
171.232	13.6	1000.0	120.000	150.0	H	10.3	-69.9	83.5
171.960	12.7	1000.0	120.000	100.0	H	10.4	-70.8	83.5
180.253	13.7	1000.0	120.000	150.0	H	11.0	-69.8	83.5
184.618	13.5	1000.0	120.000	100.0	H	11.4	-70.0	83.5
192.378	13.4	1000.0	120.000	150.0	H	11.9	-70.1	83.5
194.027	13.7	1000.0	120.000	150.0	H	11.9	-69.8	83.5

Tested Polarization: Vertical

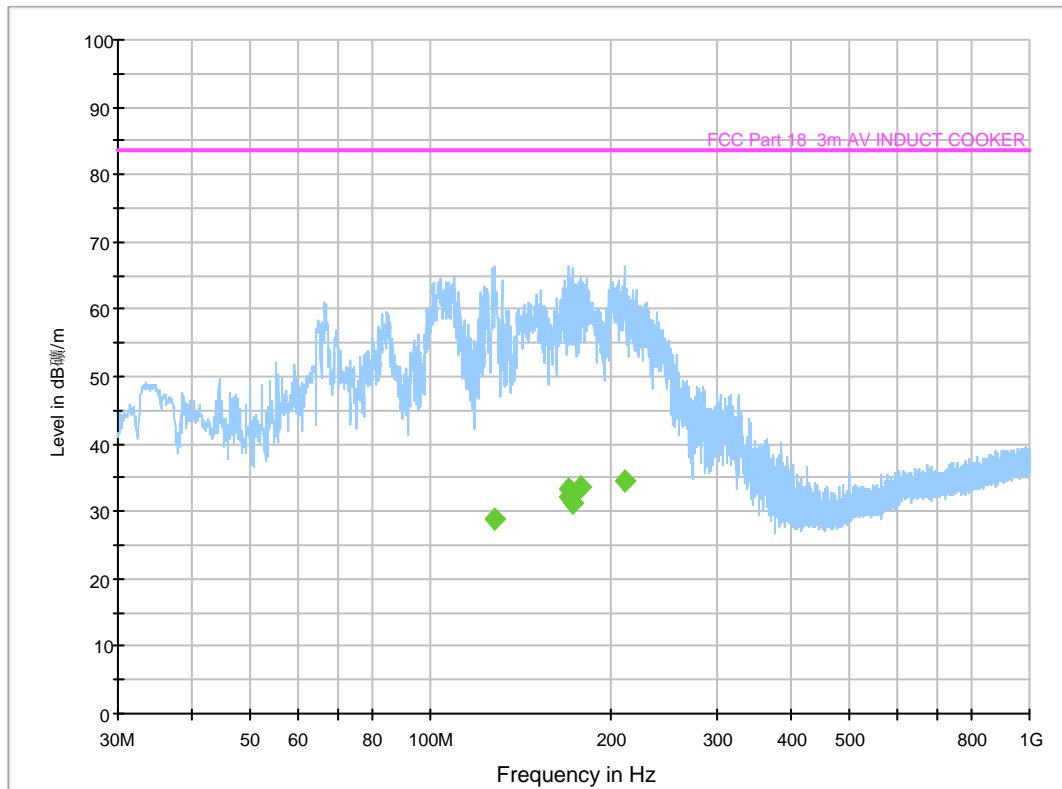
Operation Mode: Middle power



Frequency (MHz)	CAverage (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
104.399	39.7	1000.0	120.000	99.9	V	13.7	-43.8	83.5
116.427	33.2	1000.0	120.000	99.9	V	12.1	-50.3	83.5
120.647	32.1	1000.0	120.000	99.9	V	11.4	-51.4	83.5
126.709	34.6	1000.0	120.000	150.0	V	10.5	-48.9	83.5
131.608	33.8	1000.0	120.000	99.9	V	9.9	-49.7	83.5
210.226	32.5	1000.0	120.000	150.0	V	12.3	-51.0	83.5

Tested Polarization: Horizontal

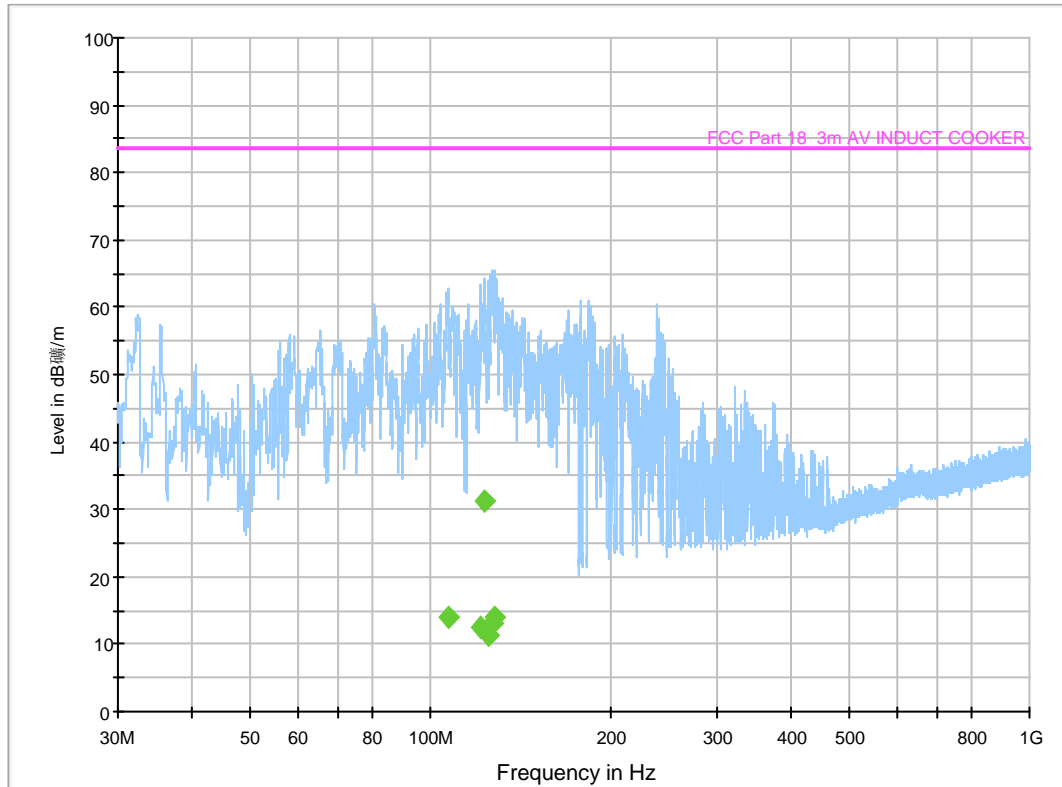
Operation Mode: Middle power



Frequency (MHz)	CAverage (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
127.825	28.8	1000.0	120.000	150.0	H	10.4	-54.7	83.5
169.971	32.2	1000.0	120.000	150.0	H	10.2	-51.3	83.5
170.553	33.5	1000.0	120.000	150.0	H	10.3	-50.0	83.5
172.154	31.3	1000.0	120.000	150.0	H	10.4	-52.2	83.5
178.119	33.6	1000.0	120.000	150.0	H	10.8	-49.9	83.5
211.342	34.5	1000.0	120.000	150.0	H	12.4	-49.0	83.5

Tested Polarization: Vertical

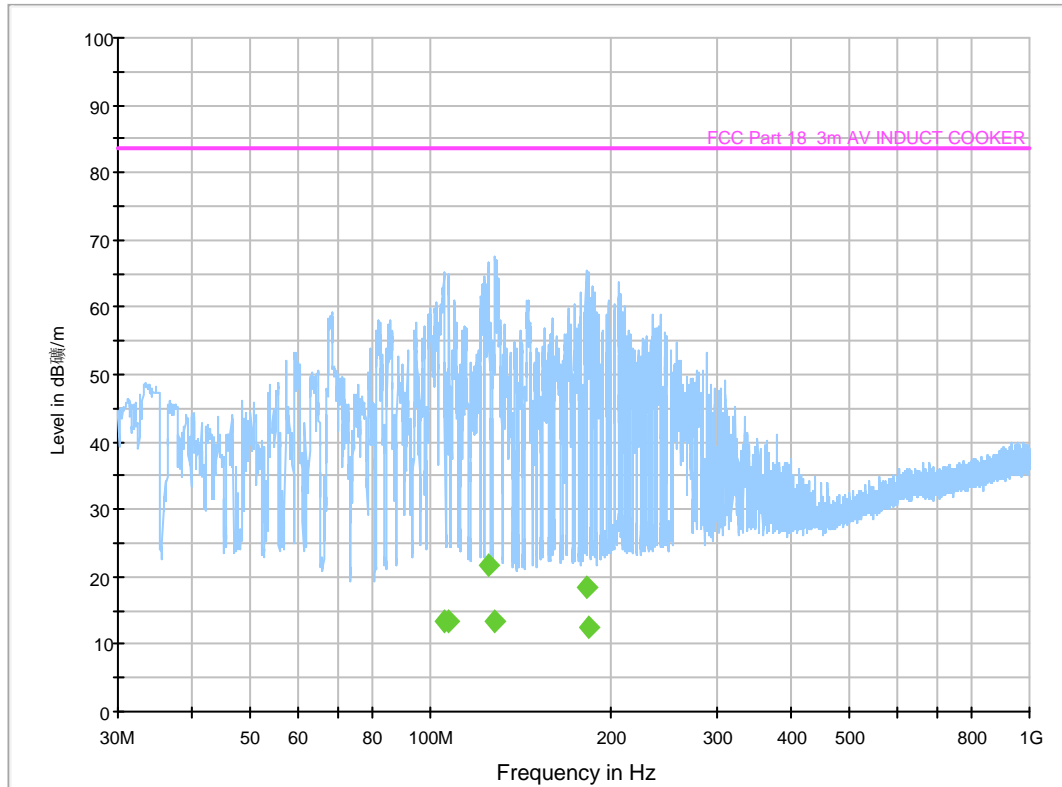
Operation Mode: the lowest power



Frequency (MHz)	CAverage (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
106.630	13.9	1000.0	120.000	99.9	V	13.5	-69.6	83.5
120.744	12.5	1000.0	120.000	99.9	V	11.4	-71.0	83.5
123.314	31.4	1000.0	120.000	99.9	V	11.0	-52.1	83.5
124.381	11.3	1000.0	120.000	99.9	V	10.8	-72.2	83.5
126.612	13.0	1000.0	120.000	99.9	V	10.5	-70.5	83.5
128.116	14.1	1000.0	120.000	99.9	V	10.3	-69.4	83.5

Tested Polarization: Horizontal

Operation Mode: the lowest power



Frequency (MHz)	CAverage (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
105.127	13.5	1000.0	120.000	150.0	H	13.6	-70.0	83.5
107.212	13.5	1000.0	120.000	150.0	H	13.4	-70.0	83.5
124.721	21.7	1000.0	120.000	150.0	H	10.8	-61.8	83.5
128.213	13.3	1000.0	120.000	150.0	H	10.3	-70.2	83.5
181.417	18.4	1000.0	120.000	99.9	H	11.1	-65.1	83.5
183.260	12.6	1000.0	120.000	99.9	H	11.3	-70.9	83.5

5.3.5 Measurement uncertainty

Uncertainty: 4.87 dB in the frequency range of 30-1000 MHz at a level of confidence of 95%