

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. : C74E-AAAA02, C74E-AAAA03
Electrical Rating : AC 240V~ 60Hz, 7400W
FCC ID : ZFB- C74E-AAAA02

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:



***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: C74E-AAAA02, C74E-AAAA03.

We tested the Induction Cooktop, Model: C74E-AAAA02, C74E-AAAA03, to determine if they were in compliance with the relevant FCC rules as marked on the Test Results Summary. We found that the units 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 C74E-AAAA02, C74E-AAAA03 are Induction Hotplates for household use.

Model C74E-AAAA02, C74E-AAAA03 are the same except the model name.

According to above information, all the tests are performed on C74E-AAAA02.

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:	C74E-AAAA02
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

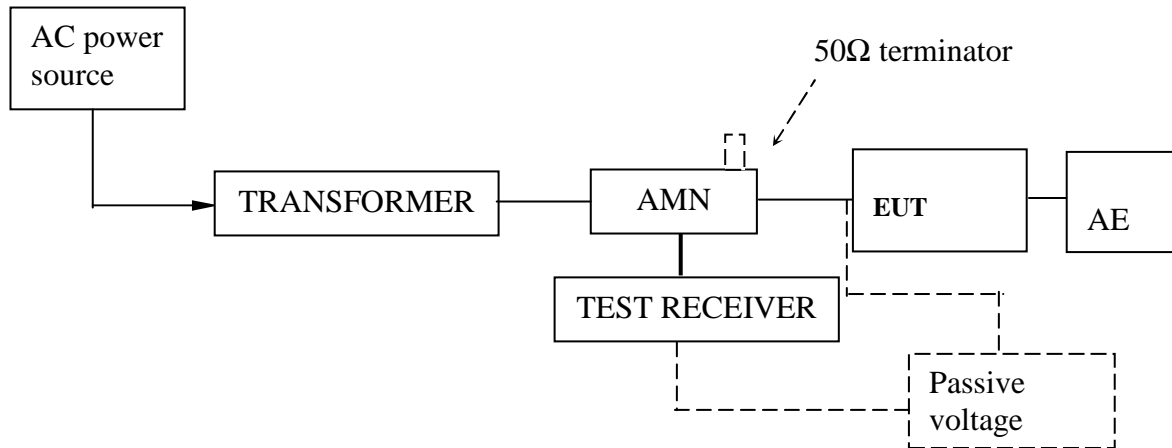
The middle power mode and the lowest power mode were conducted by below Equipment:

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 mode were conducted by 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.

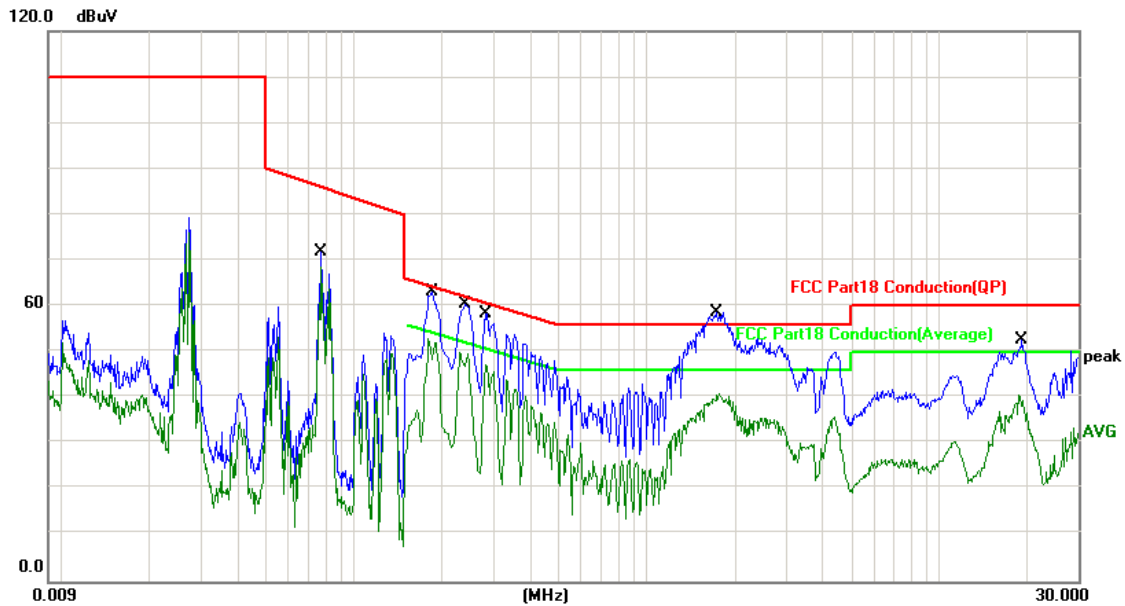
The bandwidth of test receiver was set at 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

5.1.4 Test Data & Curve

At main terminal: Pass

Tested Wire: Live

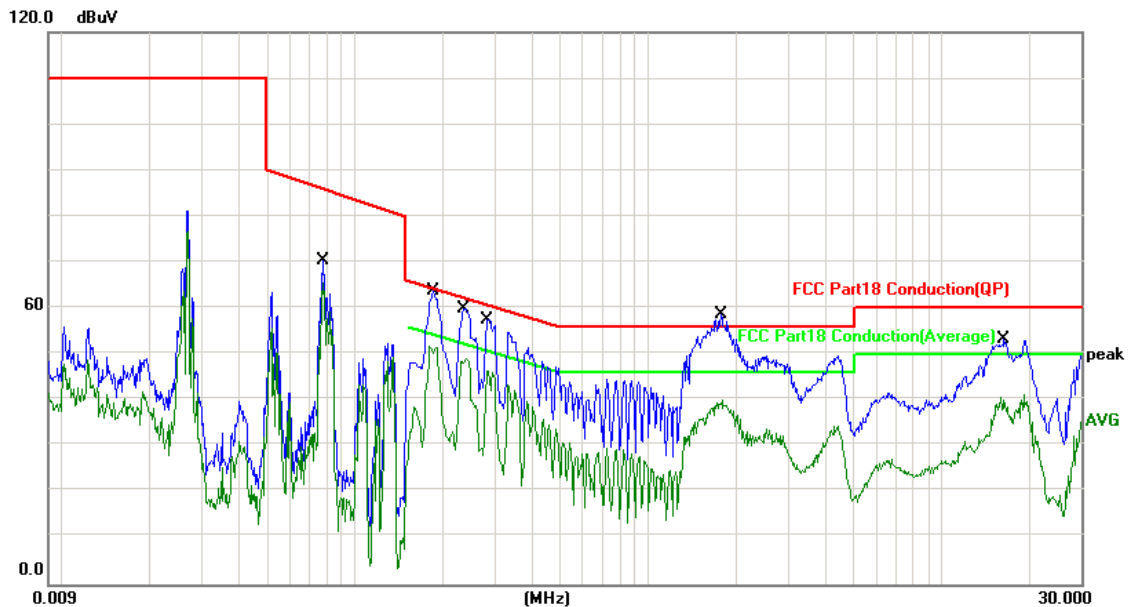
Operation Mode: the highest power



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.0774	9.99	47.50	57.49	86.02	-28.53	QP	P
2	0.1850	10.00	48.30	58.30	64.25	-5.95	QP	P
3	0.1850	10.00	37.90	47.90	54.25	-6.35	AVG	P
4	0.2400	10.01	47.40	57.41	62.09	-4.68	QP	P
5	0.2400	10.01	38.20	48.21	52.09	-3.88	AVG	P
6	0.2850	10.01	39.10	49.11	60.67	-11.56	QP	P
7	0.2850	10.01	27.30	37.31	50.67	-13.36	AVG	P
8	1.7400	10.05	43.40	53.45	56.00	-2.55	QP	P
9	1.7400	10.05	29.20	39.25	46.00	-6.75	AVG	P
10	19.2700	10.28	36.50	46.78	60.00	-13.22	QP	P
11	19.2700	10.28	26.70	36.98	50.00	-13.02	AVG	P

Tested Wire: Neutral

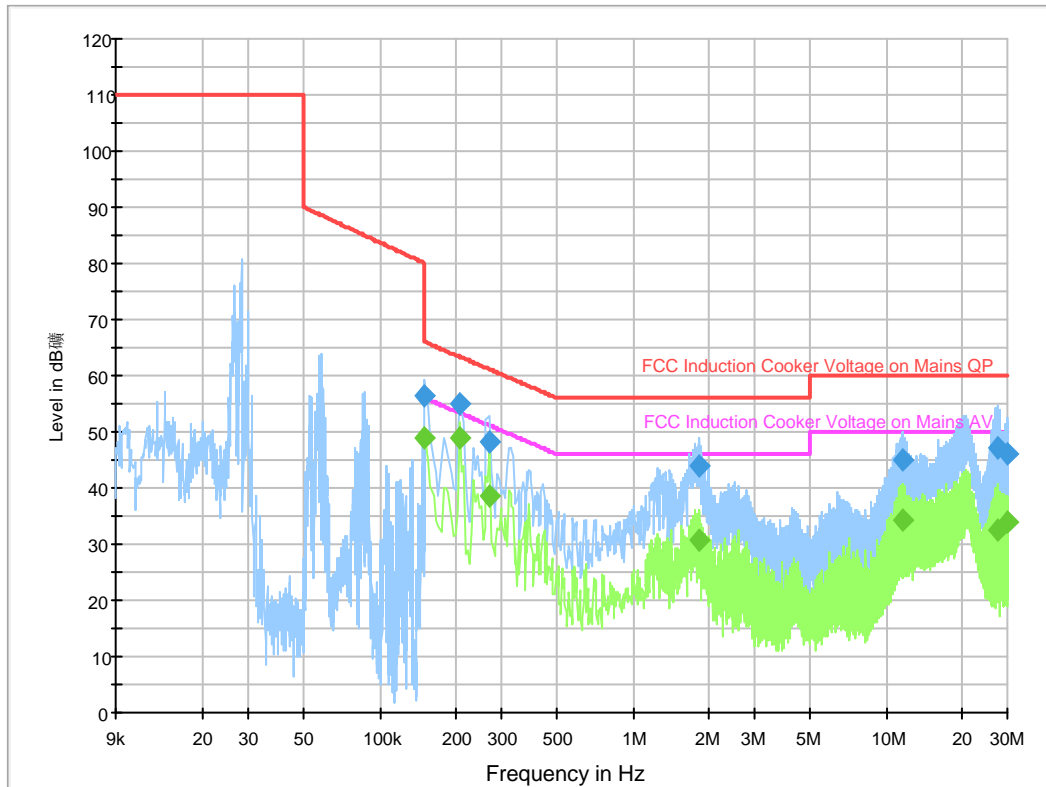
Operation Mode: the highest power



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.0779	9.99	59.40	69.39	85.96	-16.57	QP	P
2	0.1850	10.00	50.50	60.50	64.25	-3.75	QP	P
3	0.1850	10.00	40.80	50.80	54.25	-3.45	AVG	P
4	0.2350	10.01	47.30	57.31	62.27	-4.96	QP	P
5	0.2350	10.01	37.90	47.91	52.27	-4.36	AVG	P
6	0.2850	10.01	44.50	54.51	60.67	-6.16	QP	P
7	0.2850	10.01	36.50	46.51	50.67	-4.16	AVG	P
8	1.7750	10.06	42.70	52.76	56.00	-3.24	QP	P
9	1.7750	10.06	29.60	39.66	46.00	-6.34	AVG	P
10	16.3300	10.26	39.70	49.96	60.00	-10.04	QP	P
11	16.3300	10.26	29.30	39.56	50.00	-10.44	AVG	P

Tested Wire: Live

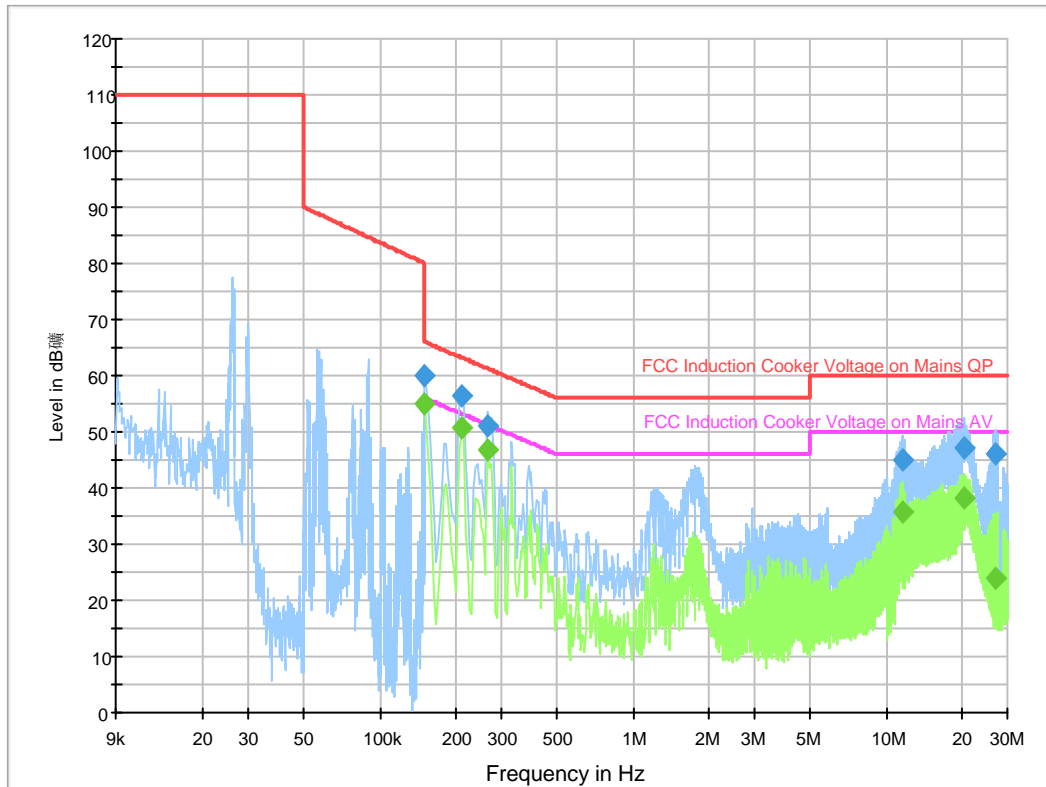
Operation Mode: Middle power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150	56.5	1000.	9.000	GND	L1	10.0	-9.5	66.0
0.206	55.1	1000.	9.000	GND	L1	10.0	-8.2	63.4
0.270	48.1	1000.	9.000	GND	L1	10.0	-13.0	61.1
1.826	43.8	1000.	9.000	GND	L1	10.0	-12.2	56.0
11.506	45.2	1000.	9.000	GND	L1	10.2	-14.8	60.0
27.254	47.2	1000.	9.000	GND	L1	10.4	-12.8	60.0
Frequency	Average	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.150	49.0	1000.	9.000	GND	L1	10.0	-7.0	56.0
0.206	48.9	1000.	9.000	GND	L1	10.0	-4.5	53.4
0.270	38.5	1000.	9.000	GND	L1	10.0	-12.6	51.1
1.826	30.8	1000.	9.000	GND	L1	10.0	-15.2	46.0
11.506	34.2	1000.	9.000	GND	L1	10.2	-15.8	50.0
27.254	32.4	1000.	9.000	GND	L1	10.4	-17.6	50.0

Tested Wire: Neutral

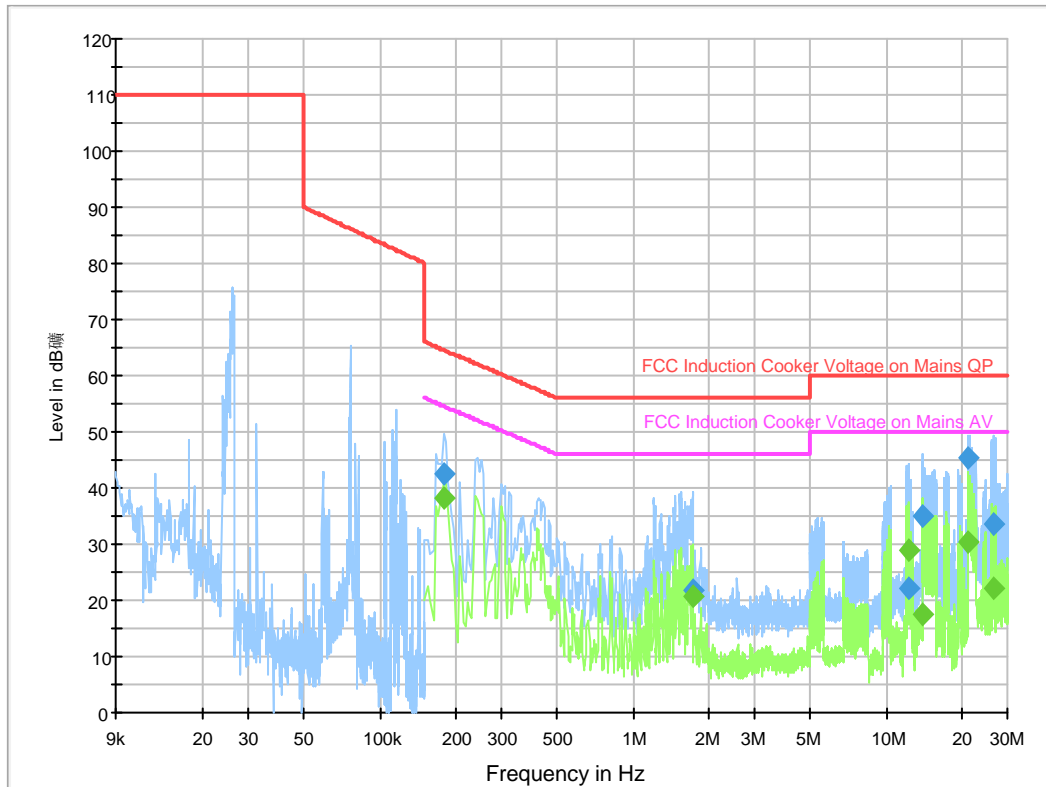
Operation Mode: Middle power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150	60.0	1000.	9.000	GND	N	10.0	-6.0	66.0
0.210	56.6	1000.	9.000	GND	N	10.0	-6.6	63.2
0.266	51.1	1000.	9.000	GND	N	10.0	-10.1	61.2
11.654	45.1	1000.	9.000	GND	N	10.2	-14.9	60.0
20.122	47.1	1000.	9.000	GND	N	10.4	-12.9	60.0
27.050	46.0	1000.	9.000	GND	N	10.4	-14.0	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.150	55.2	1000.	9.000	GND	N	10.0	-0.8	56.0
0.210	50.8	1000.	9.000	GND	N	10.0	-2.4	53.2
0.266	46.6	1000.	9.000	GND	N	10.0	-4.6	51.2
11.654	35.5	1000.	9.000	GND	N	10.2	-14.5	50.0
20.122	38.2	1000.	9.000	GND	N	10.4	-11.8	50.0
27.050	24.0	1000.	9.000	GND	N	10.4	-26.0	50.0

Tested Wire: Live

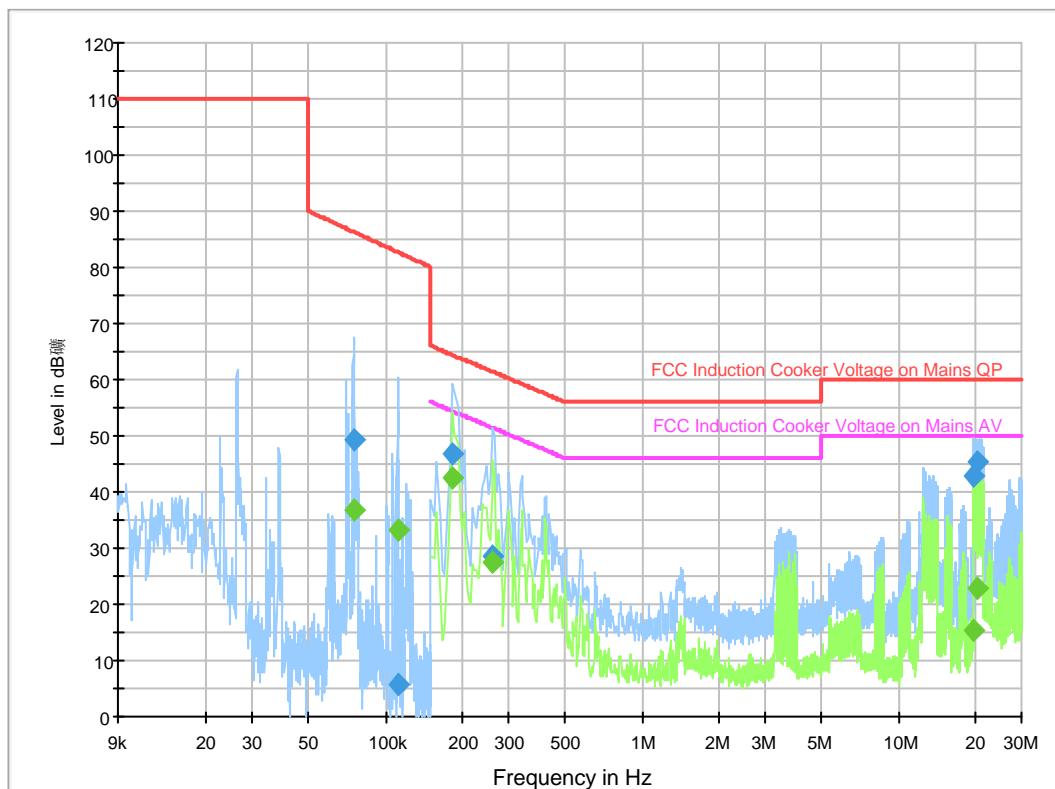
Operation Mode: the lowest power



Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.178	42.4	1000.	9.000	GND	L1	10.0	-22.2	64.6
1.710	21.7	1000.	9.000	GND	L1	10.0	-34.3	56.0
12.122	22.1	1000.	9.000	GND	L1	10.2	-37.9	60.0
13.814	35.2	1000.	9.000	GND	L1	10.3	-24.8	60.0
21.054	45.4	1000.	9.000	GND	L1	10.4	-14.6	60.0
26.382	33.6	1000.	9.000	GND	L1	10.4	-26.4	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.178	38.2	1000.	9.000	GND	L1	10.0	-16.3	54.6
1.710	20.9	1000.	9.000	GND	L1	10.0	-25.1	46.0
12.122	29.0	1000.	9.000	GND	L1	10.2	-21.0	50.0
13.814	17.5	1000.	9.000	GND	L1	10.3	-32.5	50.0
21.054	30.2	1000.	9.000	GND	L1	10.4	-19.8	50.0
26.382	22.1	1000.	9.000	GND	L1	10.4	-27.9	50.0

Tested Wire: Neutral

Operation Mode: the lowest power



Frequency (MHz)	QuasiPeak (dB)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dB)
0.075	49.2	1000.0	0.200	GND	N	10.0	-37.1	86.3
0.111	5.9	1000.0	0.200	GND	N	10.0	-76.9	82.7
0.182	46.8	1000.0	9.000	GND	N	10.0	-17.6	64.4
0.262	28.5	1000.0	9.000	GND	N	10.0	-32.9	61.4
19.466	43.0	1000.0	9.000	GND	N	10.3	-17.0	60.0
20.226	45.4	1000.0	9.000	GND	N	10.4	-14.6	60.0
Frequency	CAverage	Meas.	Bandwidth	PE	Line	Corr.	Margin	Limit
0.075	36.6	1000.0	0.200	GND	N	10.0	---	---
0.111	33.3	1000.0	0.200	GND	N	10.0	---	---
0.182	42.6	1000.0	9.000	GND	N	10.0	-11.7	54.4
0.262	27.5	1000.0	9.000	GND	N	10.0	-23.8	51.4
19.466	15.5	1000.0	9.000	GND	N	10.3	-34.5	50.0
20.226	22.8	1000.0	9.000	GND	N	10.4	-27.2	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%.

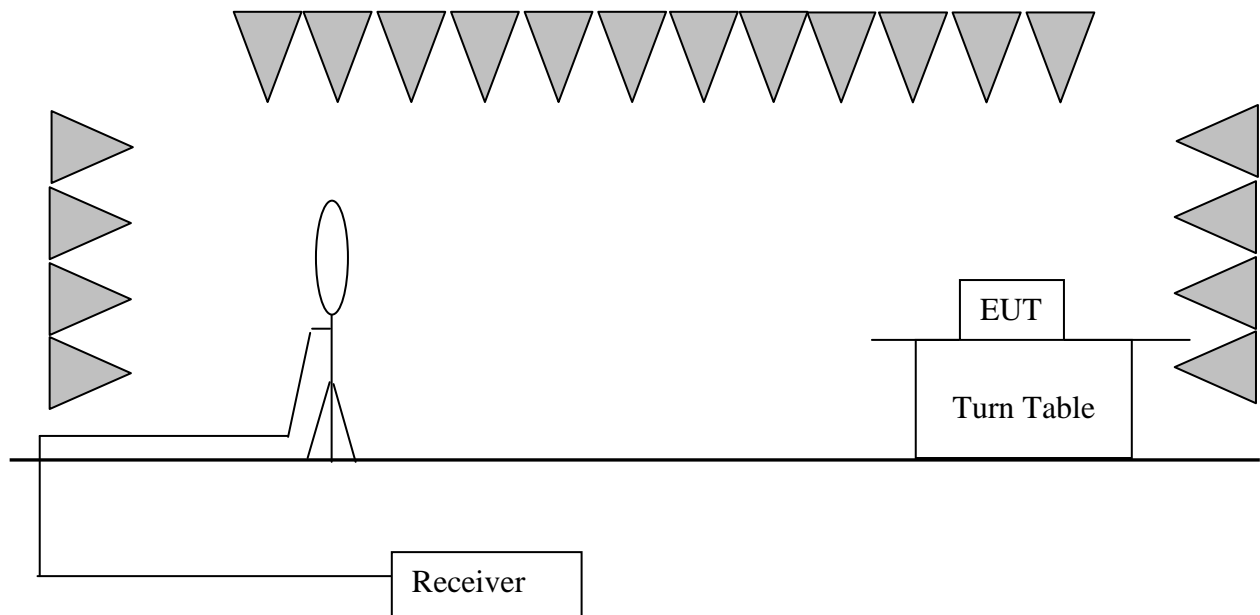
5.2 Radiated Emission(9kHz - 30 MHz)

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.

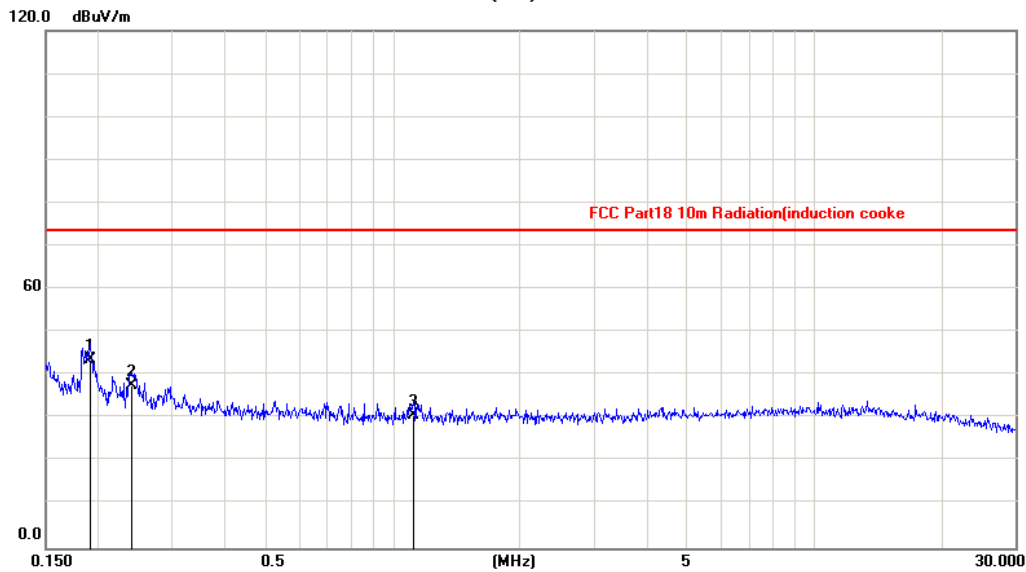
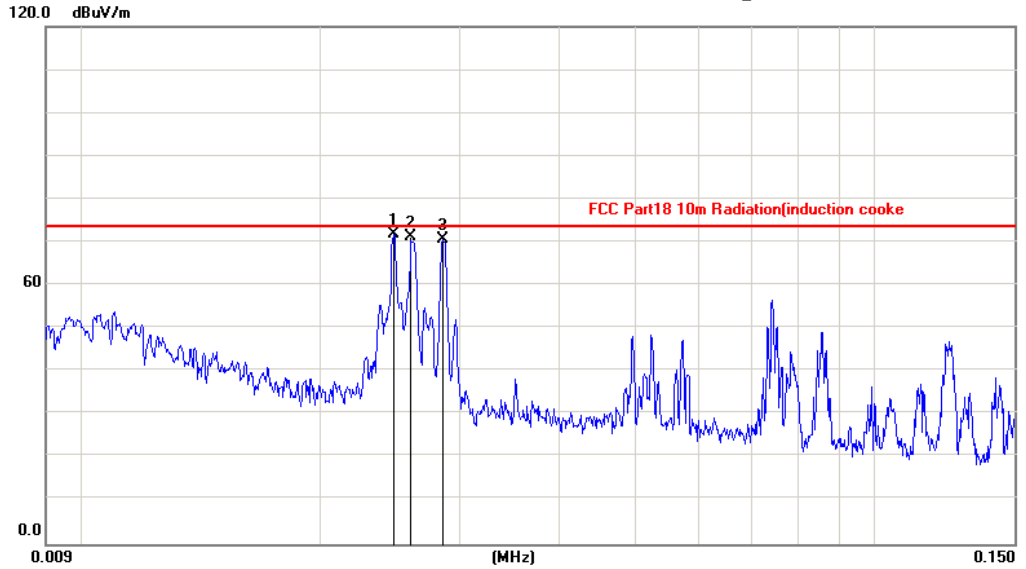
The bandwidth setting on Receiver was 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

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

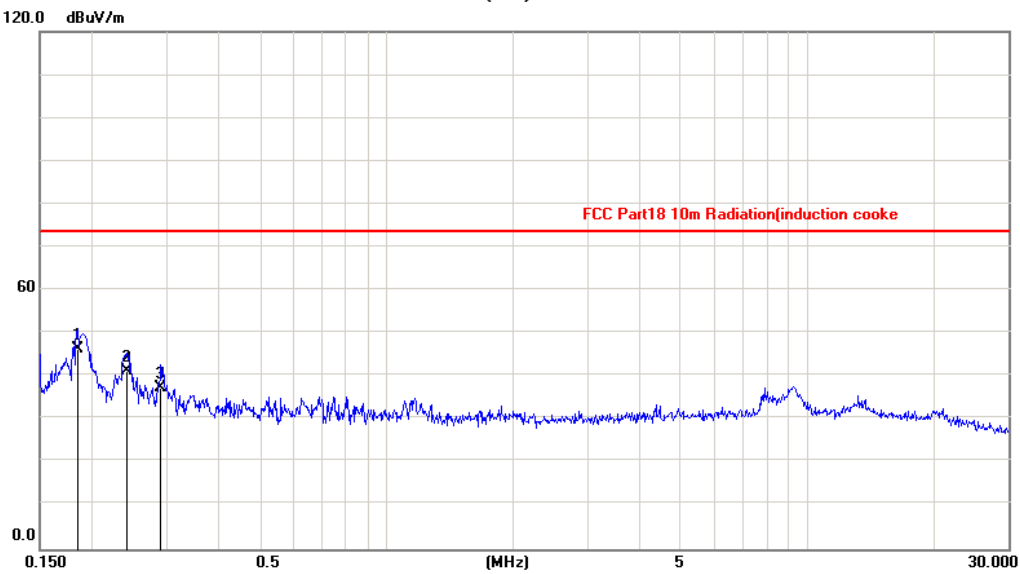
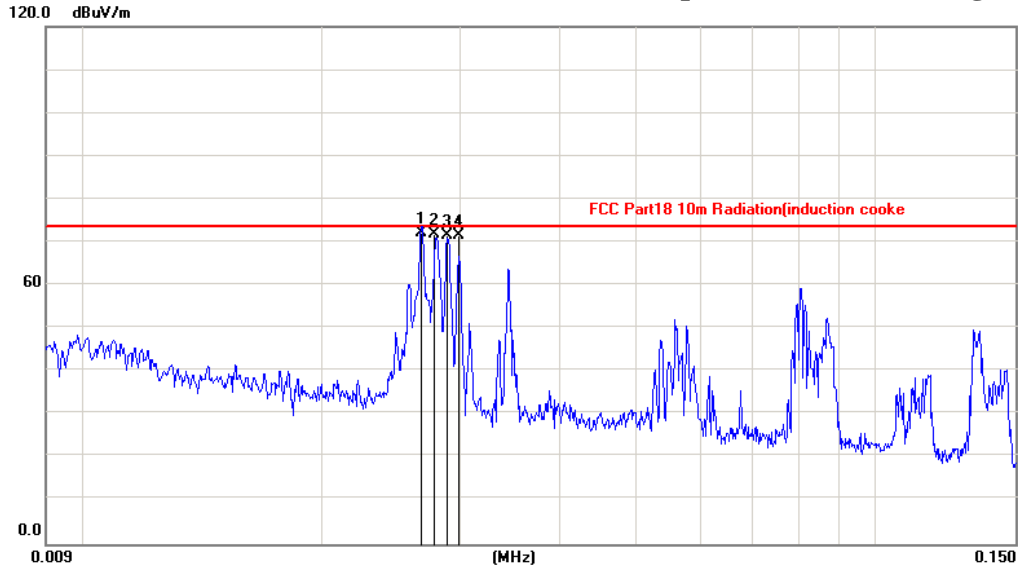


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0247	20.31	51.59	71.90	73.50	-1.60	AVG			P
2	0.0260	20.28	50.92	71.20	73.50	-2.30	AVG			P
3	0.0286	20.22	50.58	70.80	73.50	-2.70	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1914	20.37	23.23	43.60	73.50	-29.90	AVG			P
2	0.2391	20.51	17.09	37.60	73.50	-35.90	AVG			P
3	1.1173	20.00	10.60	30.60	73.50	-42.90	AVG			P

Tested Polarization: Horizontal

Operation Mode: the highest power

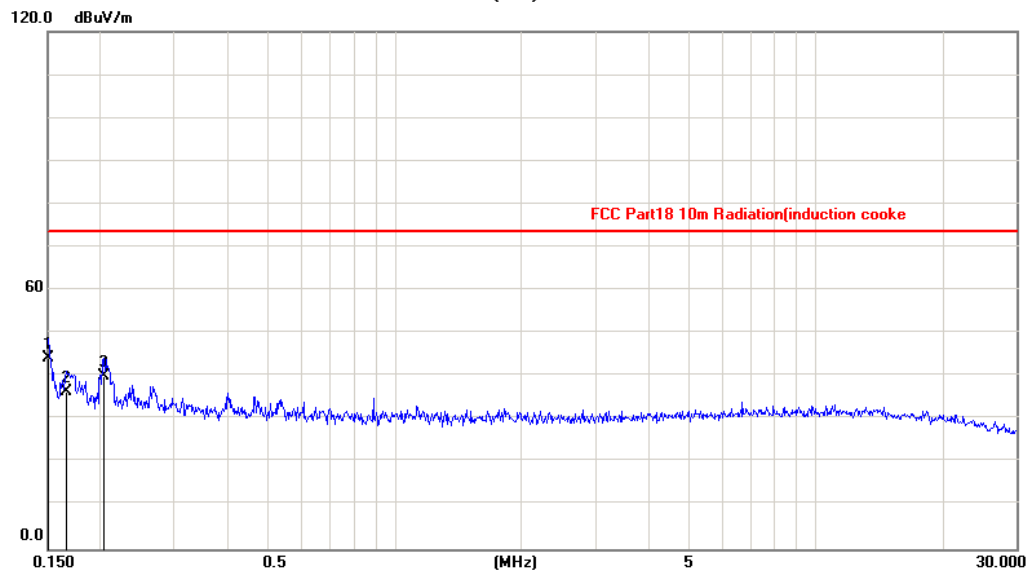
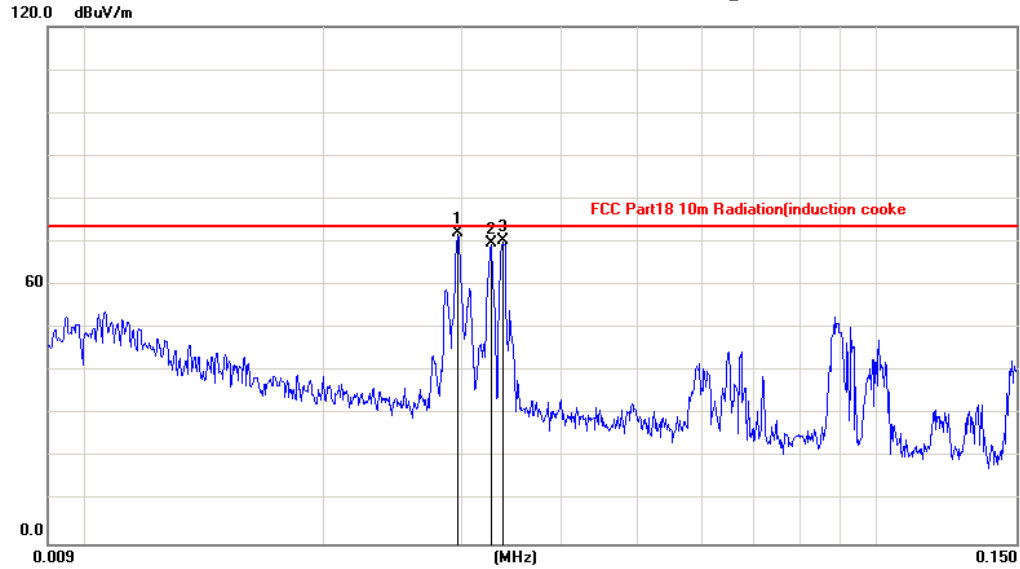


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0267	20.26	51.94	72.20	73.50	-1.30	AVG			P
2	0.0278	20.24	51.66	71.90	73.50	-1.60	AVG			P
3	0.0288	20.21	51.39	71.60	73.50	-1.90	AVG			P
4	0.0298	20.19	51.31	71.50	73.50	-2.00	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	0.1844	20.35	25.95	46.30	73.50	-27.20	AVG			P
2	0.2416	20.51	20.69	41.20	73.50	-32.30	AVG			P
3	0.2909	20.65	16.55	37.20	73.50	-36.30	AVG			P

Tested Polarization: Vertical

Operation Mode: Middle power

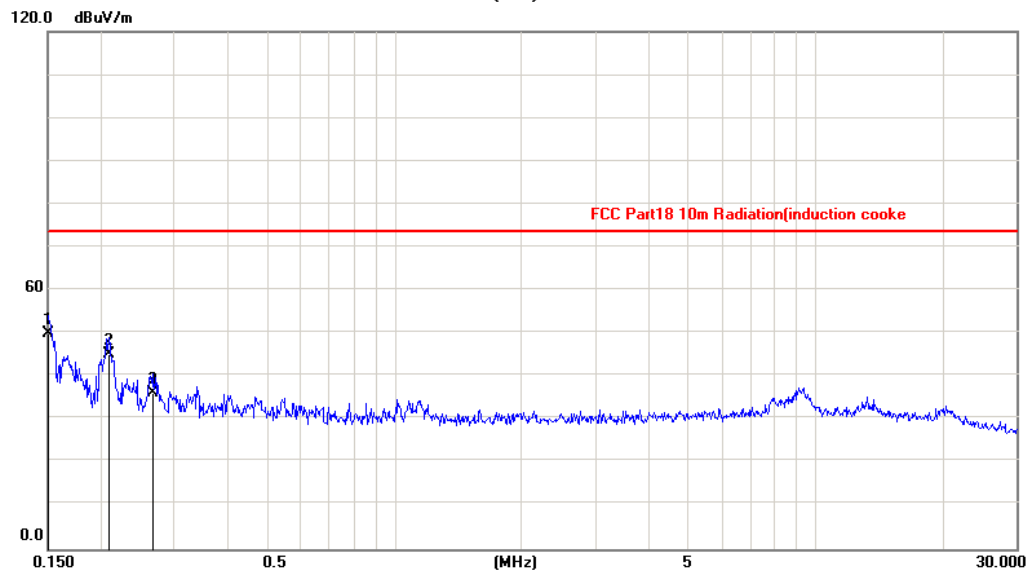
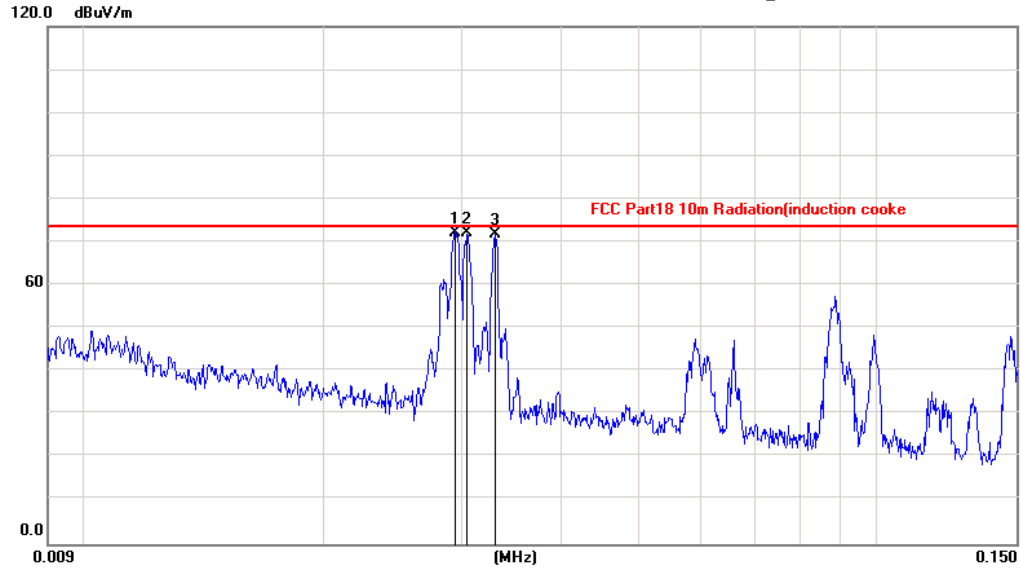


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0296	20.19	51.91	72.10	73.50	-1.40	AVG			P
2	0.0326	20.20	49.60	69.80	73.50	-3.70	AVG			P
3	0.0337	20.21	50.19	70.40	73.50	-3.10	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1500	20.26	23.94	44.20	73.50	-29.30	AVG			P
2	0.1659	20.30	16.20	36.50	73.50	-37.00	AVG			P
3	0.2040	20.41	19.69	40.10	73.50	-33.40	AVG			P

Tested Polarization: Horizontal

Operation Mode: Middle power

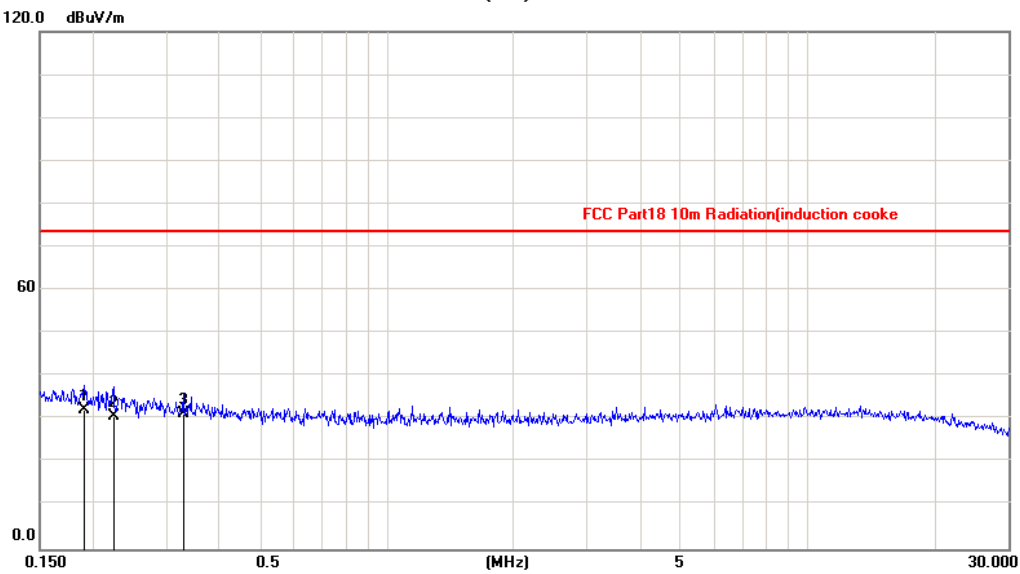
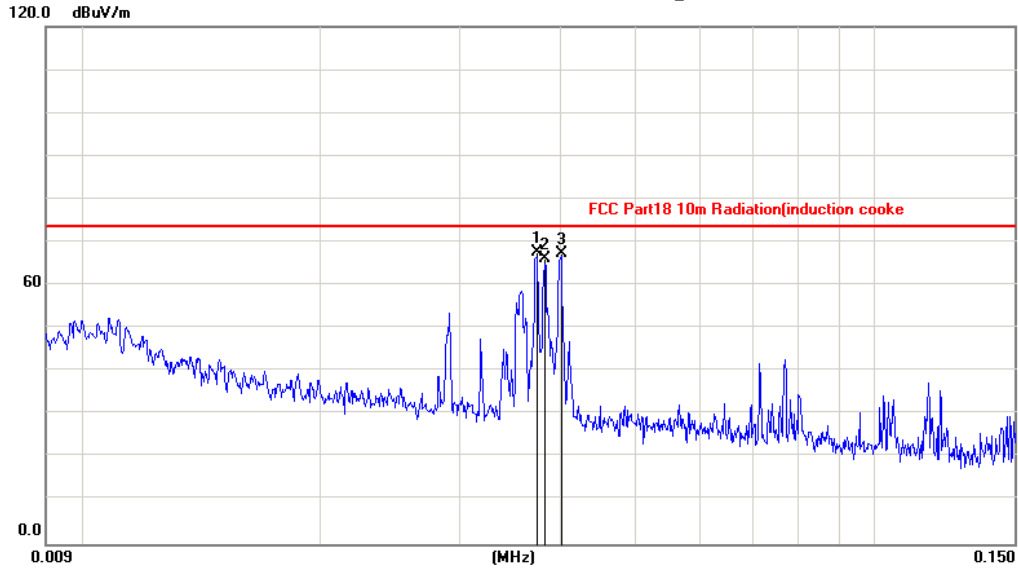


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0294	20.20	52.10	72.30	73.50	-1.20	AVG			P
2	0.0303	20.19	51.91	72.10	73.50	-1.40	AVG			P
3	0.0330	20.21	51.59	71.80	73.50	-1.70	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1500	20.26	29.84	50.10	73.50	-23.40	AVG			P
2	0.2094	20.43	24.77	45.20	73.50	-28.30	AVG			P
3	0.2658	20.58	15.62	36.20	73.50	-37.30	AVG			P

Tested Polarization: Vertical

Operation Mode: the lowest power

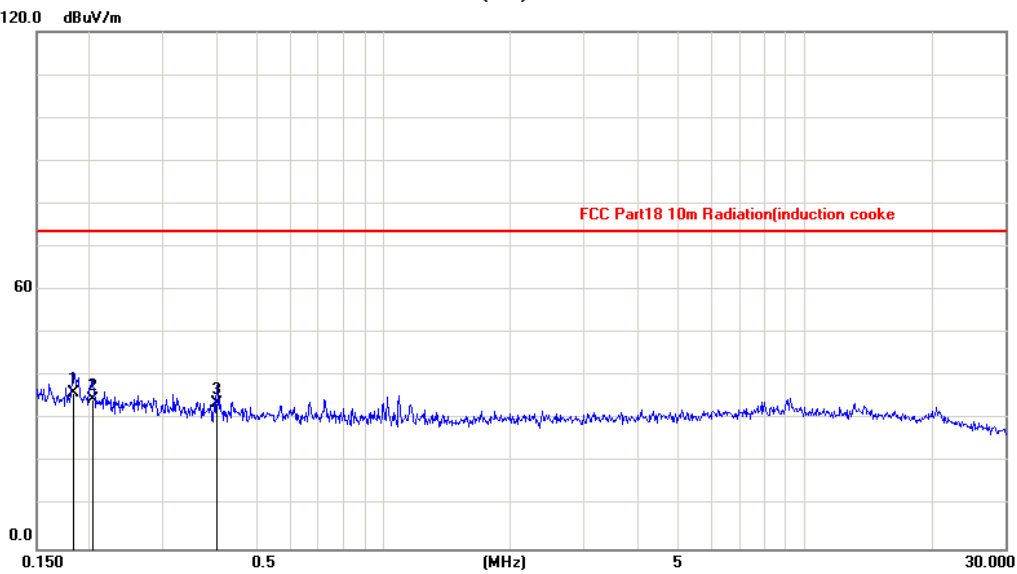
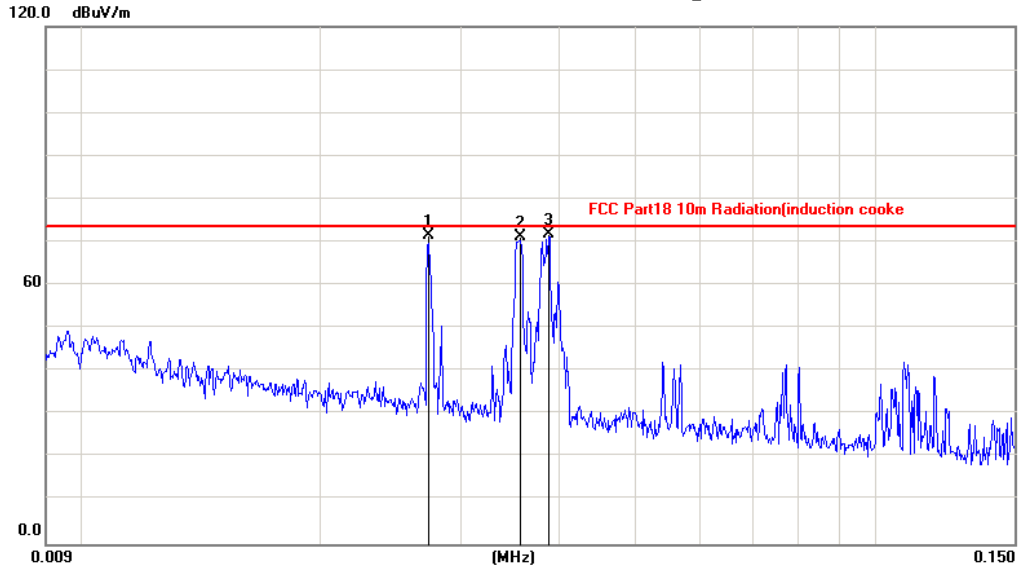


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0375	20.24	47.46	67.70	73.50	-5.80	AVG			P
2	0.0383	20.24	45.96	66.20	73.50	-7.30	AVG			P
3	0.0401	20.25	46.95	67.20	73.50	-6.30	AVG			P

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1914	20.37	11.73	32.10	73.50	-41.40	AVG			P
2	0.2244	20.47	10.33	30.80	73.50	-42.70	AVG			P
3	0.3286	20.61	10.89	31.50	73.50	-42.00	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	0.0273	20.25	51.35	71.60	73.50	-1.90	AVG			P
2	0.0357	20.23	51.07	71.30	73.50	-2.20	AVG			P
3	0.0388	20.24	51.56	71.80	73.50	-1.70	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	0.1835	20.35	15.85	36.20	73.50	-37.30	AVG			P
2	0.2040	20.41	14.19	34.60	73.50	-38.90	AVG			P
3	0.4019	20.48	13.32	33.80	73.50	-39.70	AVG			P

5.2.5 Measurement uncertainty

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

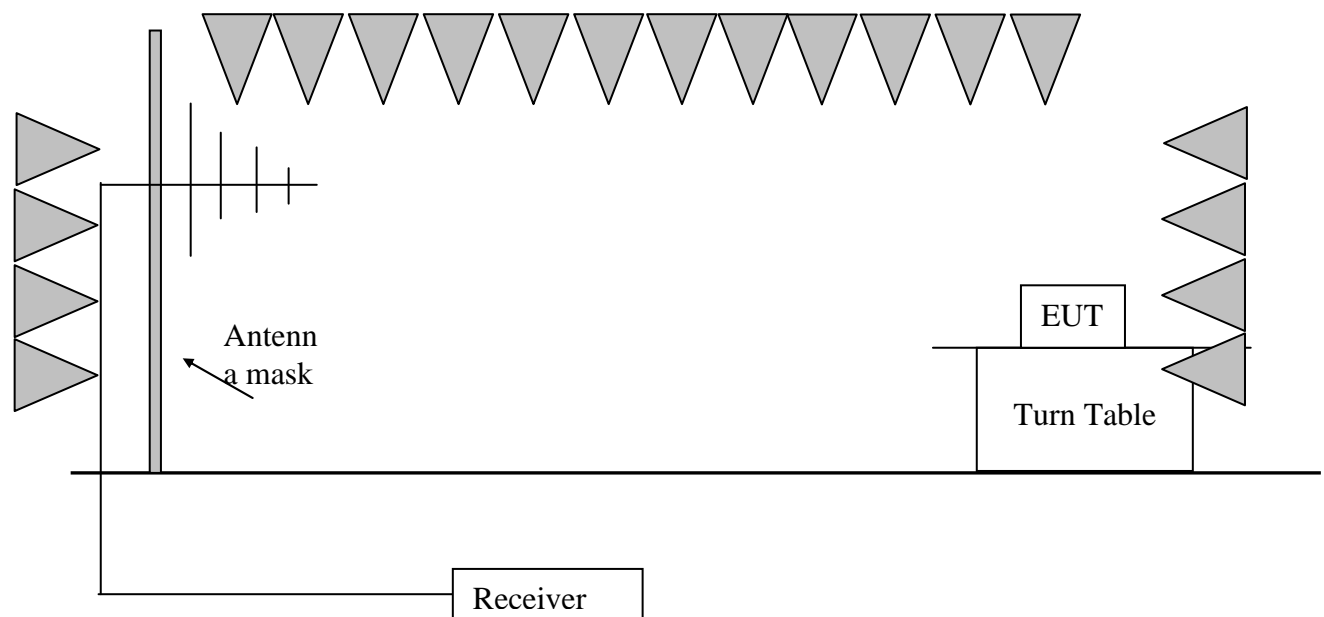
5.3 Radiated Emission (30 MHz- 1 GHz)

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.

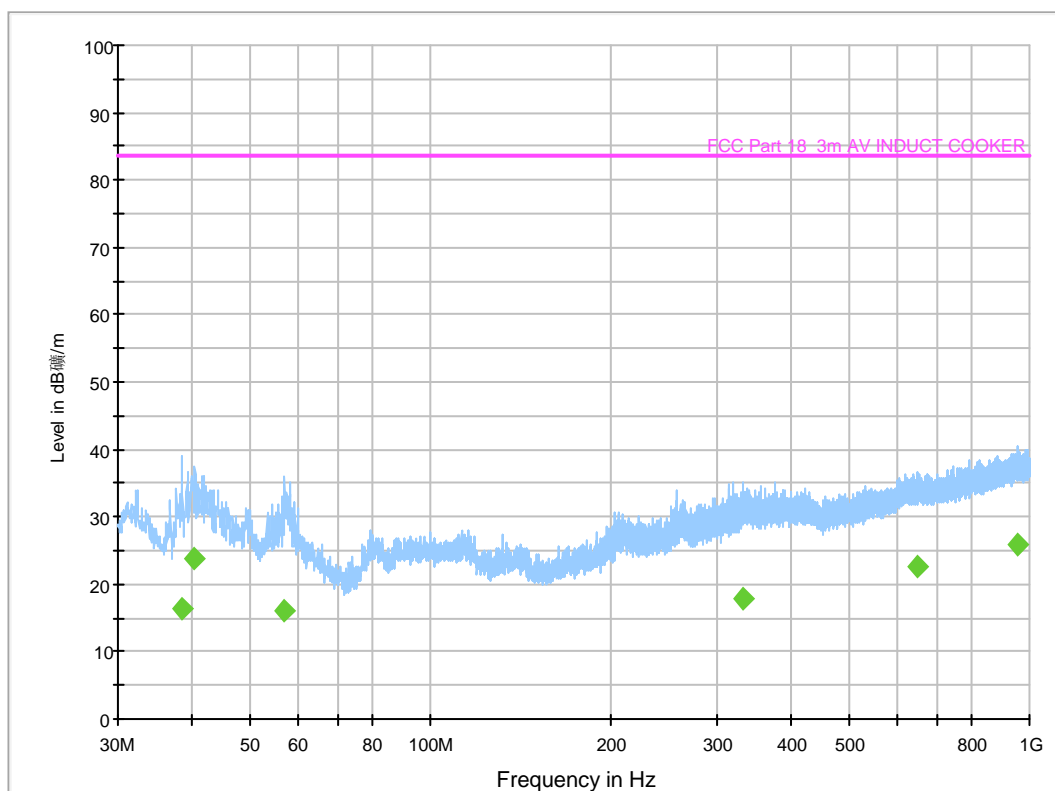
Broadband antenna was used as receiving antenna. Both horizontal and vertical polarization of the antenna was set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC OST/ MP-5:1986 requirement during radiated test. The bandwidth setting 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

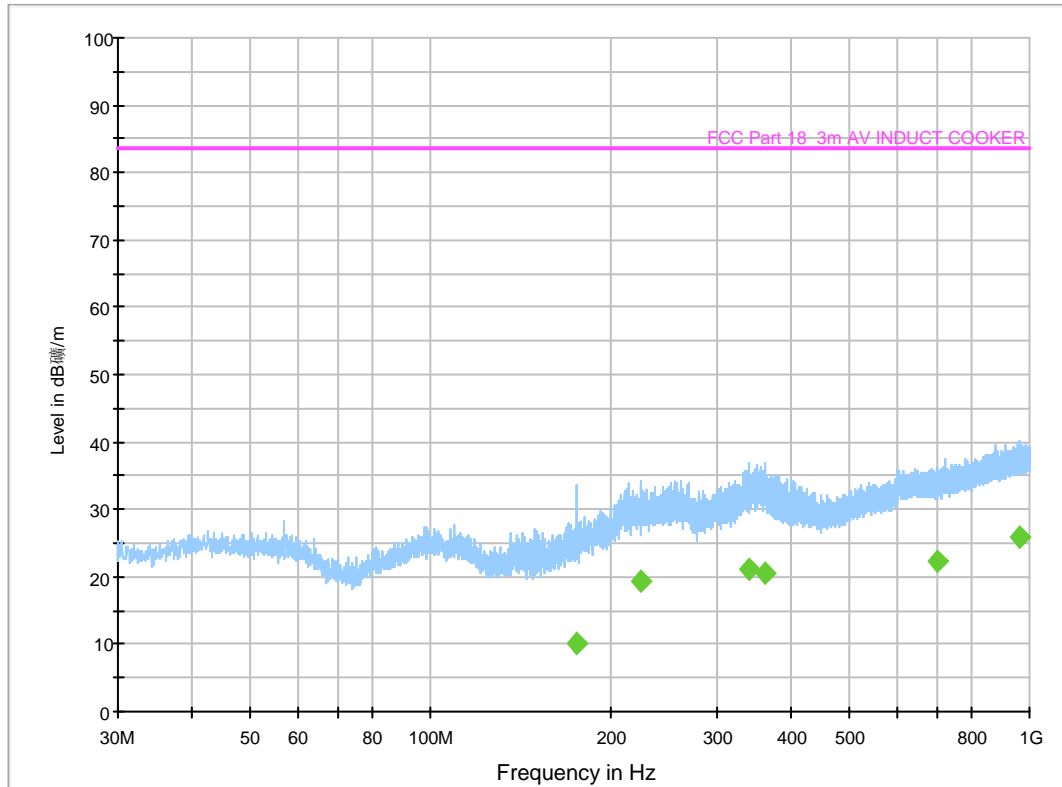
Operation Mode: the highest power



Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
38.342	16.2	1000.0	120.000	99.9	V	13.7	-67.3	83.5
40.331	23.8	1000.0	120.000	99.9	V	14.1	-59.7	83.5
57.063	16.1	1000.0	120.000	99.9	V	13.5	-67.4	83.5
332.543	17.8	1000.0	120.000	150.0	V	15.7	-65.7	83.5
651.867	22.5	1000.0	120.000	99.9	V	21.4	-61.0	83.5
952.616	25.8	1000.0	120.000	99.9	V	24.8	-57.7	83.5

Tested Polarization: Horizontal

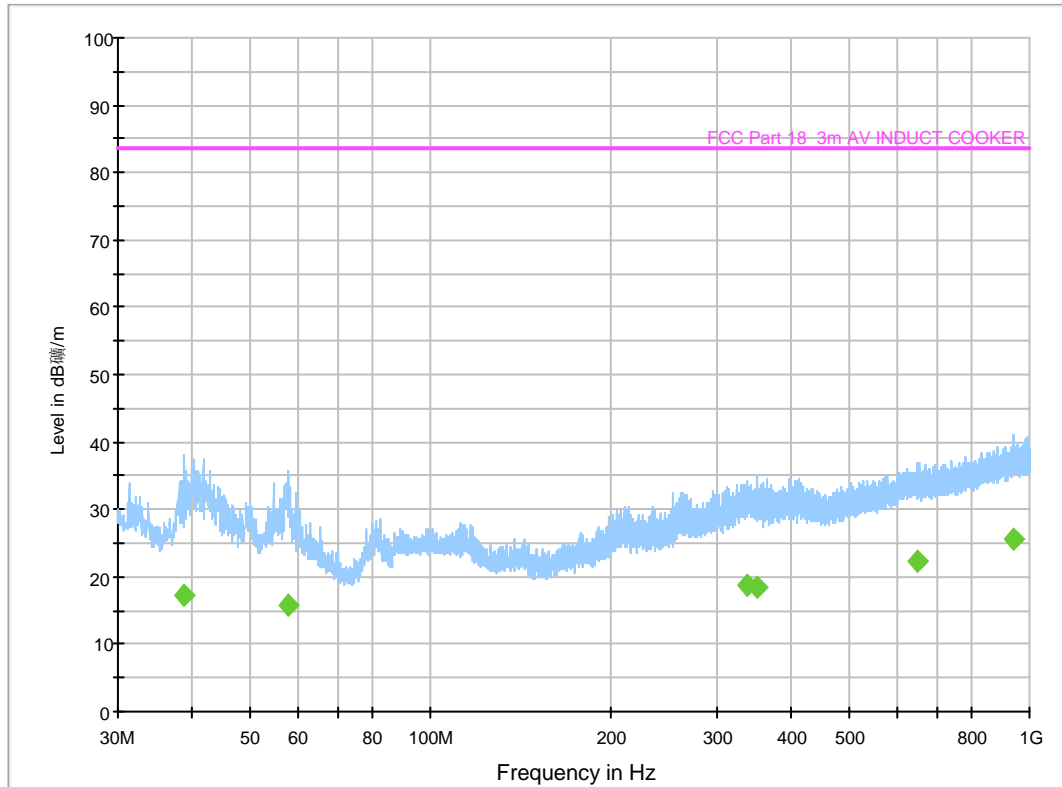
Operation Mode: the highest power



Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
174.870	10.0	1000.0	120.000	99.9	H	10.6	-73.5	83.5
223.952	19.4	1000.0	120.000	99.9	H	12.8	-64.1	83.5
339.430	21.1	1000.0	120.000	99.9	H	16.0	-62.4	83.5
361.449	20.6	1000.0	120.000	99.9	H	16.4	-62.9	83.5
701.434	22.5	1000.0	120.000	99.9	H	21.7	-61.0	83.5
962.025	25.7	1000.0	120.000	99.9	H	24.9	-57.8	83.5

Tested Polarization: Vertical

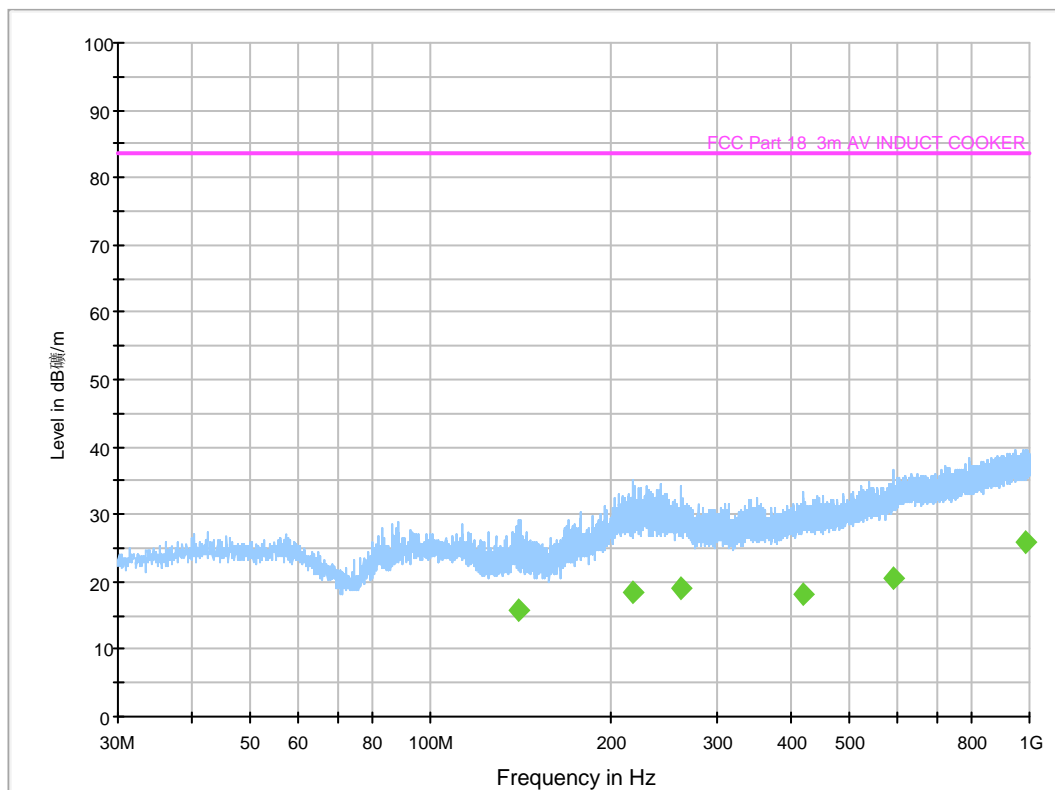
Operation Mode: Middle power



Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
38.827	17.2	1000.0	120.000	99.9	V	13.8	-66.3	83.5
57.597	15.6	1000.0	120.000	150.1	V	13.5	-67.9	83.5
337.102	18.7	1000.0	120.000	99.9	V	15.9	-64.8	83.5
349.906	18.4	1000.0	120.000	150.1	V	16.2	-65.1	83.5
651.431	22.5	1000.0	120.000	99.9	V	21.4	-61.0	83.5
939.812	25.5	1000.0	120.000	99.9	V	24.7	-58.0	83.5

Tested Polarization: Horizontal

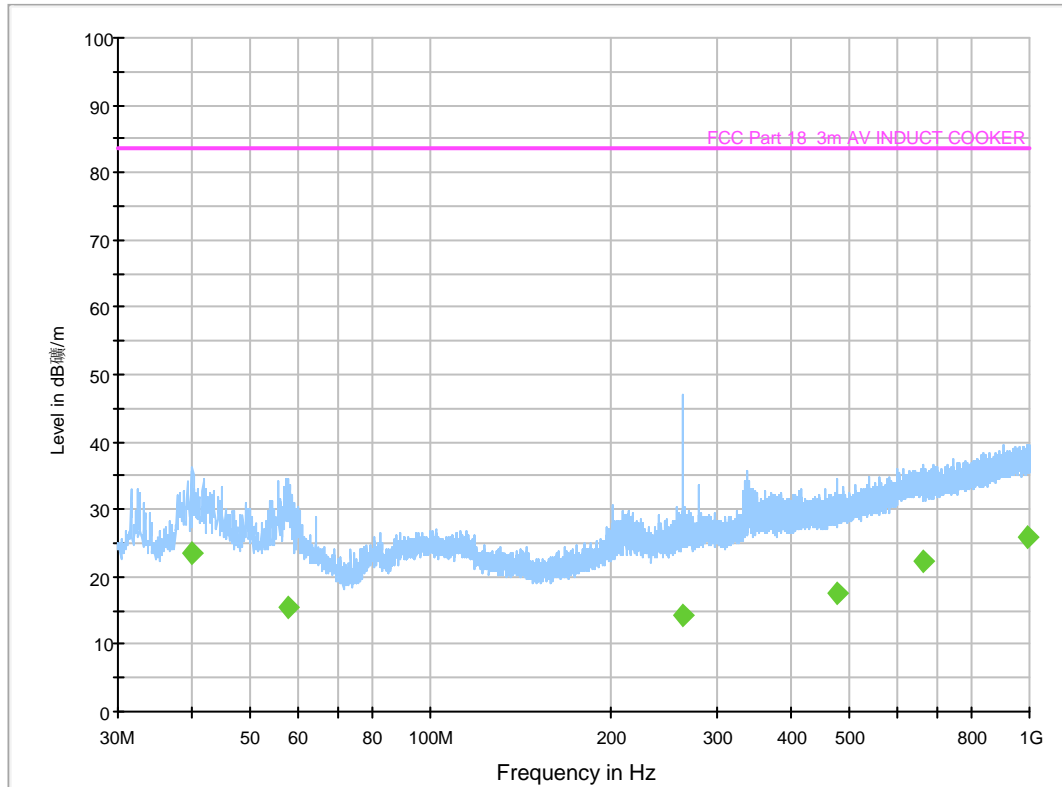
Operation Mode: Middle power



Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
140.241	15.8	1000.0	120.000	150.0	H	9.3	-67.7	83.5
217.210	18.4	1000.0	120.000	150.0	H	12.6	-65.1	83.5
261.636	19.0	1000.0	120.000	150.0	H	13.7	-64.5	83.5
417.224	18.3	1000.0	120.000	150.0	H	17.5	-65.2	83.5
591.533	20.5	1000.0	120.000	150.0	H	20.9	-63.0	83.5
986.663	26.0	1000.0	120.000	150.0	H	25.1	-57.5	83.5

Tested Polarization: Vertical

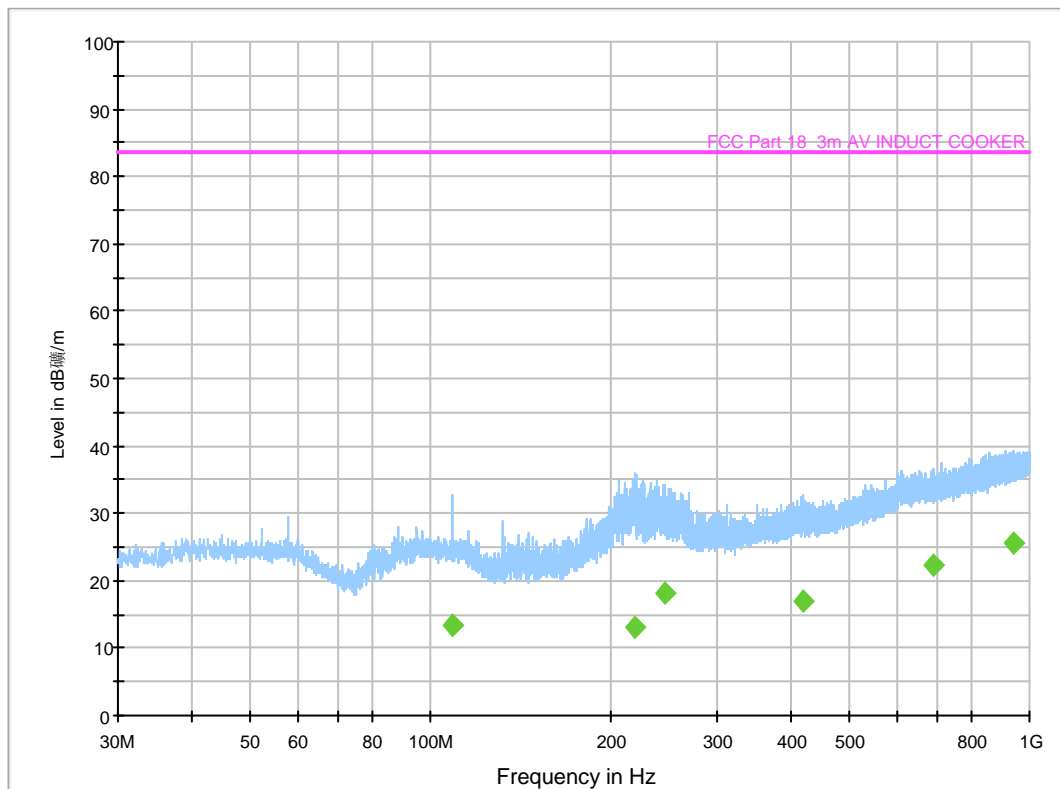
Operation Mode: the lowest power



Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
40.040	23.5	1000.0	120.000	100.0	V	14.1	-60.0	83.5
57.888	15.5	1000.0	120.000	150.0	V	13.4	-68.0	83.5
264.207	14.2	1000.0	120.000	100.0	V	13.8	-69.3	83.5
475.618	17.6	1000.0	120.000	150.0	V	18.2	-65.9	83.5
664.817	22.3	1000.0	120.000	100.0	V	21.4	-61.2	83.5
995.441	26.0	1000.0	120.000	100.0	V	25.1	-57.5	83.5

Tested Polarization: Horizontal

Operation Mode: the lowest power



Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
108.522	13.5	1000.0	120.000	150.0	H	13.4	-70.0	83.5
219.926	13.0	1000.0	120.000	150.0	H	12.7	-70.5	83.5
246.262	18.3	1000.0	120.000	150.0	H	13.6	-65.2	83.5
418.146	17.0	1000.0	120.000	150.0	H	17.6	-66.5	83.5
690.570	22.3	1000.0	120.000	150.0	H	21.6	-61.2	83.5
942.576	25.6	1000.0	120.000	150.0	H	24.8	-57.9	83.5

5.3.5 Measurement uncertainty

Uncertainty: 4.54 dB in the frequency range of 30-1000 MHz at a level of confidence of 95%