Report No.: 170214118GZU-001
Issued: 2017-3-7

TEST REPORT

Applicant Name & Address	:	Guangdong MD Consumer Electric Manufacturing Co., Ltd. 19 SANLE ROAD, BEIJIAO, SHUNDE,FOSHAN, GUANGDONG, CHINA
Manufacturing Site	:	Same as applicant
Sample Description		
Product	:	Induction cooker
Model No.	:	MC-RTW1505D
Electrical Rating	:	AC 120V~ 60Hz, 1500W
FCC ID	:	TAPMC-RTW1505D
Date Received	:	15 February 2017
Date Test Conducted	:	15 February 2017 – 3 March 2017
Test standards	:	**FCC Part 18: 2015**
Test Result	:	Pass
Conclusion	:	The submitted samples complied with the above rules/standards.
Remark	:	None.

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

Prepared and Checked By:

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Approved By:

Helen Ma ***Signature***

Helen Ma
Team Leader
Intertek Guangzhou
7 March 2017 Date

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

CONTENT

1 TEST RESULTS SUMMARY

Test Item	Standard	Result
Conducted Emission (9 kHz-30 MHz)	FCC Part 18: 2015	Pass
Radiated Emission (9 kHz-30 MHz)	FCC Part 18: 2015	Pass
Radiated Emission (30 MHz-1 GHz)	FCC Part 18: 2015	Pass
Radiated Emission (above 1 GHz)	FCC Part 18: 2015	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: MC-RTW1505D.

We tested the Induction Cooktop, Model: MC-RTW1505D, to determine if it was 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 sample MC-RTW1505D is Induction Hotplate for household use.

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:	MC-RTW1505D
Serial No.:	Not Labeled
Support Equipment:	N/A
Rated Voltage:	AC 120V~ 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 tests were performed at:
Intertek Testing Services Shenzhen Ltd.
Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD Guangzhou, 510663
This test facility and site measurement data have been fully placed on file with the FCC, test firm registration number is 549654

Except Radiated Emission (9 kHz-30 MHz) was 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

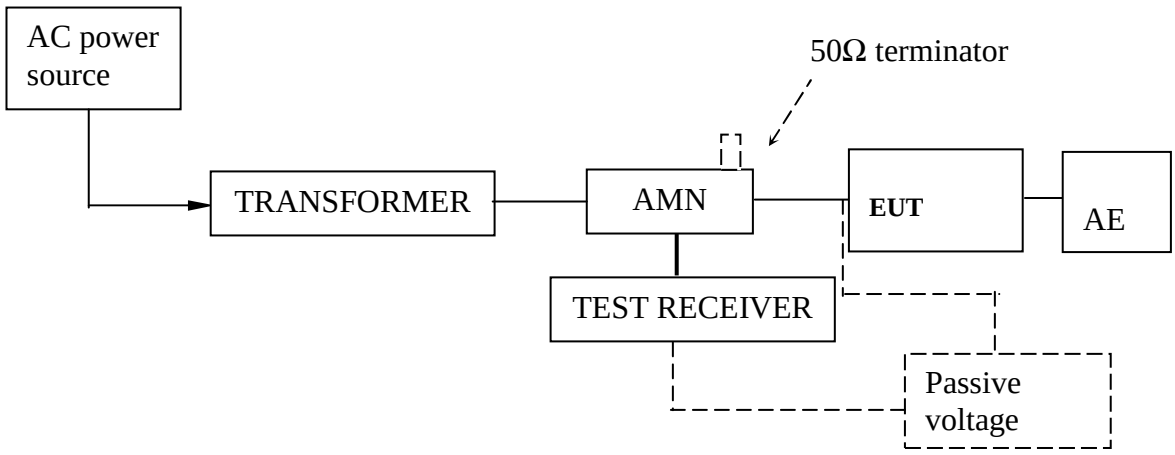
Test Result: Pass

5.1.1 Used Test Equipment

Conducted Disturbance-Mains Terminal(1)

Equipment No.	Equipment	Model	Manufacturer	Cal. Due date (MM-DD-YYYY)	Calibration Interval
EM080-05	EMI receiver	ESCI	R&S	2017/7/26	1Y
EM006-05	LISN	ENV216	R&S	2017/9/18	1Y
SA047-79	Digital Temperature-Humidity Recorder	RC-HT601A	HATAIKE	2017/6/8	1Y
EM004-04	EMC shield Room	8m×3m×3m	Zhongyu	2018/1/23	1Y

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.

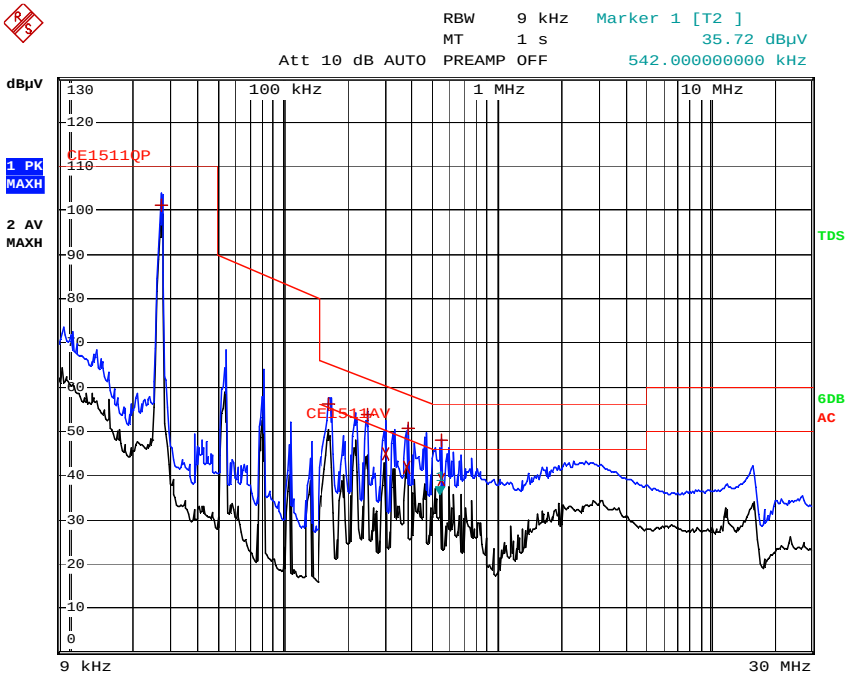
During the test, mains lead of EUT excess 0.8m was folded back and forth parallel to the lead so as to form a horizontal bundle with a length between 0.3m and 0.4m.

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

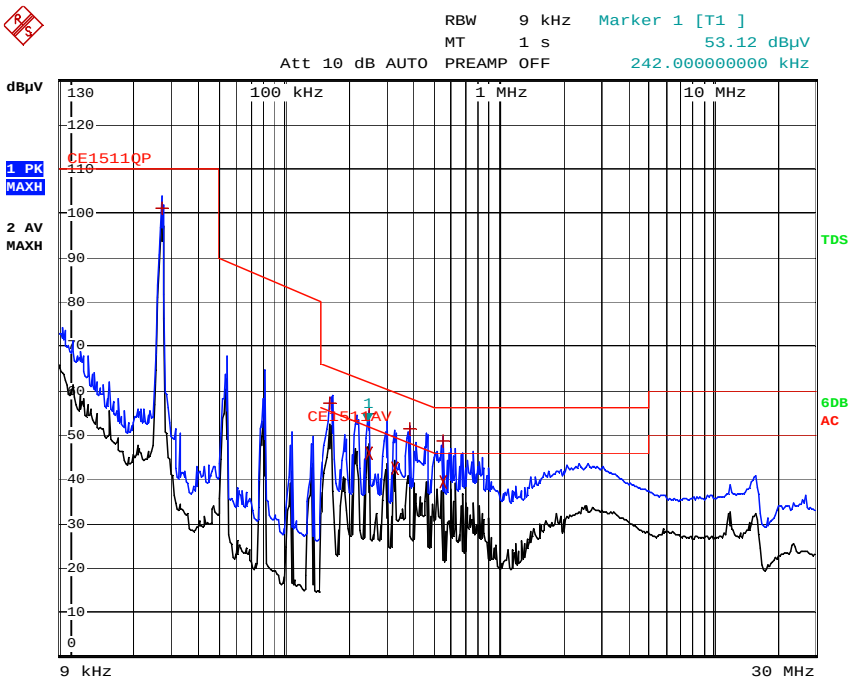
At main terminal: Pass

Tested Wire: Live **Operation Mode: the highest power**



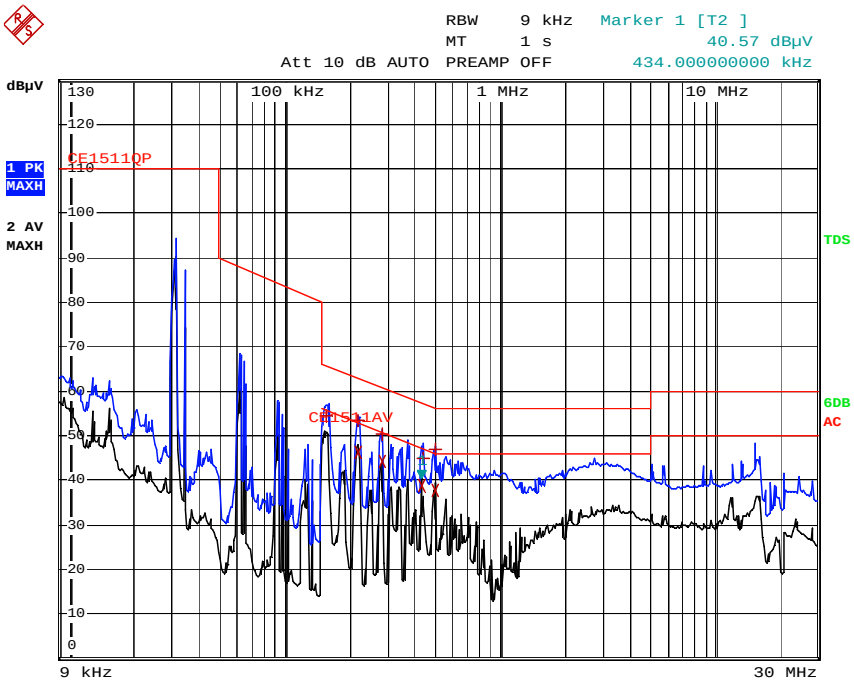
EDIT PEAK LIST (Final Measurement Results)			
Trace1:	CE1511QP		
Trace2:	CE1511AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	27.16 kHz	101.11 L1	-8.88
1 Quasi Peak	166 kHz	55.98 L1	-9.17
1 Quasi Peak	246 kHz	53.91 L1	-7.98
2 Average	298 kHz	44.74 L1	-5.55
2 Average	378 kHz	41.95 L1	-6.37
1 Quasi Peak	382 kHz	50.59 L1	-7.64
1 Quasi Peak	546 kHz	47.84 L1	-8.15
2 Average	546 kHz	39.07 L1	-6.92

Tested Wire: Neutral **Operation Mode: the highest power**



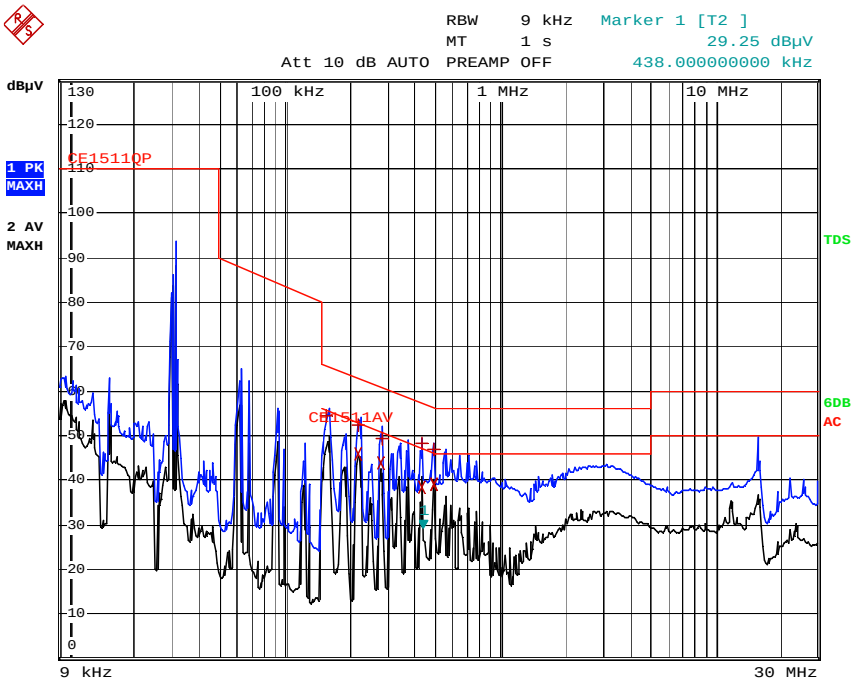
EDIT PEAK LIST (Final Measurement Results)			
Trace1:	CE1511QP		
Trace2:	CE1511AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	27.16 kHz	101.13 L1	-8.86
1 Quasi Peak	166 kHz	57.08 L1	-8.07
1 Quasi Peak	246 kHz	54.59 L1	-7.29
2 Average	246 kHz	45.96 L1	-5.92
2 Average	326 kHz	42.35 L1	-7.19
1 Quasi Peak	382 kHz	51.41 L1	-6.81
1 Quasi Peak	546 kHz	48.72 L1	-7.27
2 Average	546 kHz	39.50 L1	-6.49

Tested Wire: Live **Operation Mode: Middle power**



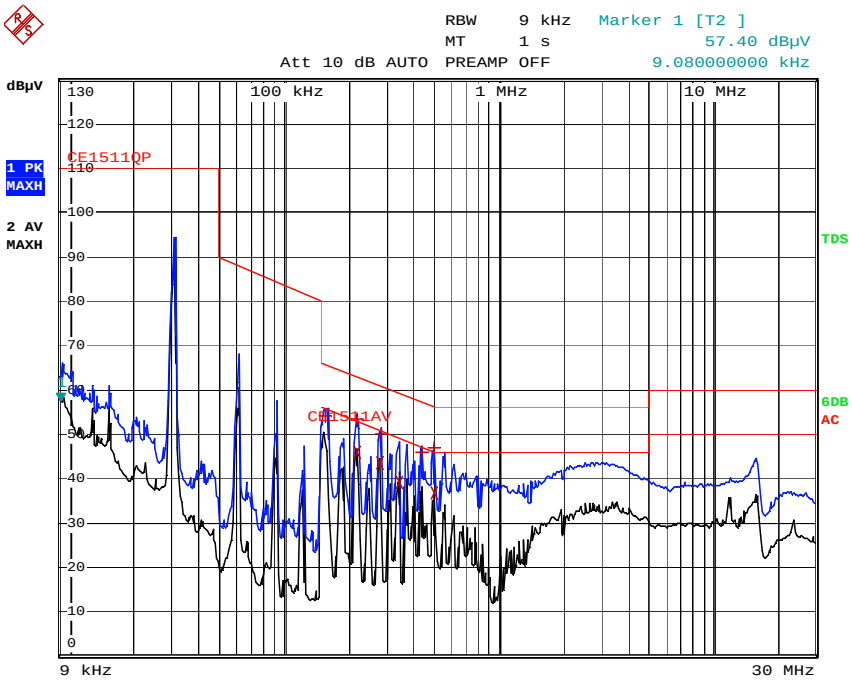
EDIT PEAK LIST (Final Measurement Results)			
Trace1:	CE1511QP		
Trace2:	CE1511AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	158 kHz	54.26 L1	-11.30
1 Quasi Peak	218 kHz	53.25 L1	-9.64
2 Average	218 kHz	46.38 L1	-6.50
1 Quasi Peak	282 kHz	50.25 L1	-10.50
2 Average	282 kHz	44.03 L1	-6.72
2 Average	434 kHz	38.69 L1	-8.48
1 Quasi Peak	438 kHz	44.93 L1	-12.16
1 Quasi Peak	498 kHz	46.91 L1	-9.12
2 Average	498 kHz	37.55 L1	-8.48

Tested Wire: Neutral **Operation Mode: Middle power**



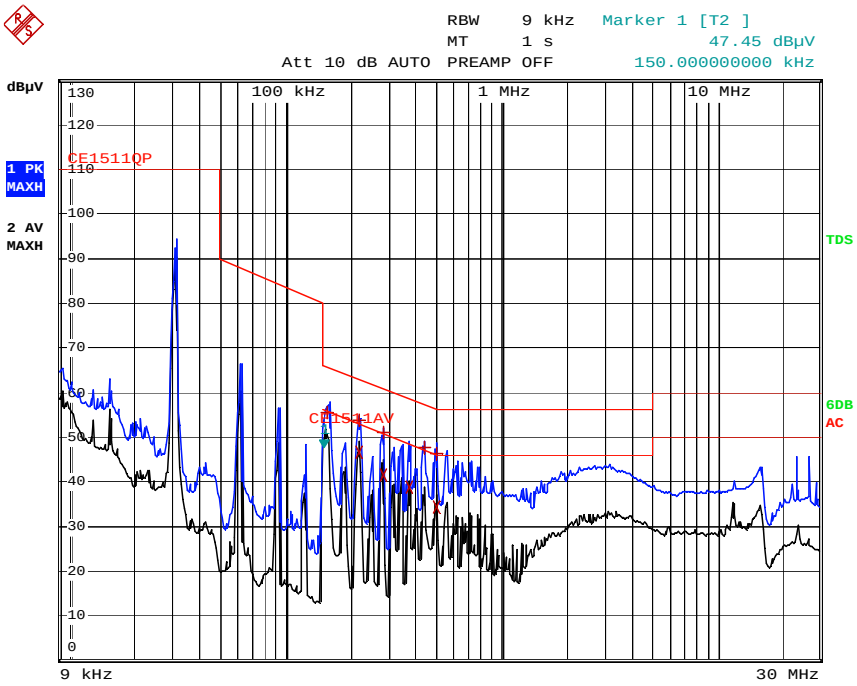
EDIT PEAK LIST (Final Measurement Results)			
Trace1:	CE1511QP		
Trace2:	CE1511AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	158 kHz	54.38 L1	-11.18
2 Average	218 kHz	46.04 L1	-6.85
1 Quasi Peak	222 kHz	52.42 L1	-10.31
2 Average	278 kHz	43.99 L1	-6.88
1 Quasi Peak	282 kHz	49.16 L1	-11.58
2 Average	430 kHz	38.52 L1	-8.72
1 Quasi Peak	434 kHz	48.12 L1	-9.05
1 Quasi Peak	494 kHz	47.03 L1	-9.06
2 Average	494 kHz	39.14 L1	-6.95

Tested Wire: Live **Operation Mode: the lowest power**



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	CE1511QP		
Trace2:	CE1511AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	158 kHz	54.15 L1	-11.41
1 Quasi Peak	218 kHz	53.45 L1	-9.44
2 Average	218 kHz	45.98 L1	-6.90
2 Average	278 kHz	43.58 L1	-7.29
1 Quasi Peak	282 kHz	49.95 L1	-10.79
2 Average	342 kHz	39.16 L1	-9.98
1 Quasi Peak	438 kHz	45.75 L1	-11.34
1 Quasi Peak	498 kHz	46.75 L1	-9.27
2 Average	498 kHz	36.79 L1	-9.24

Tested Wire: Neutral **Operation Mode: the lowest power**



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	CE1511QP		
Trace2:	CE1511AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	158 kHz	55.50 L1	-10.06
1 Quasi Peak	218 kHz	53.90 L1	-8.99
2 Average	218 kHz	46.71 L1	-6.17
1 Quasi Peak	282 kHz	50.94 L1	-9.81
2 Average	282 kHz	41.55 L1	-9.20
2 Average	374 kHz	38.68 L1	-9.73
1 Quasi Peak	438 kHz	47.66 L1	-9.43
1 Quasi Peak	502 kHz	46.27 L1	-9.72
2 Average	502 kHz	34.13 L1	-11.86

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%.

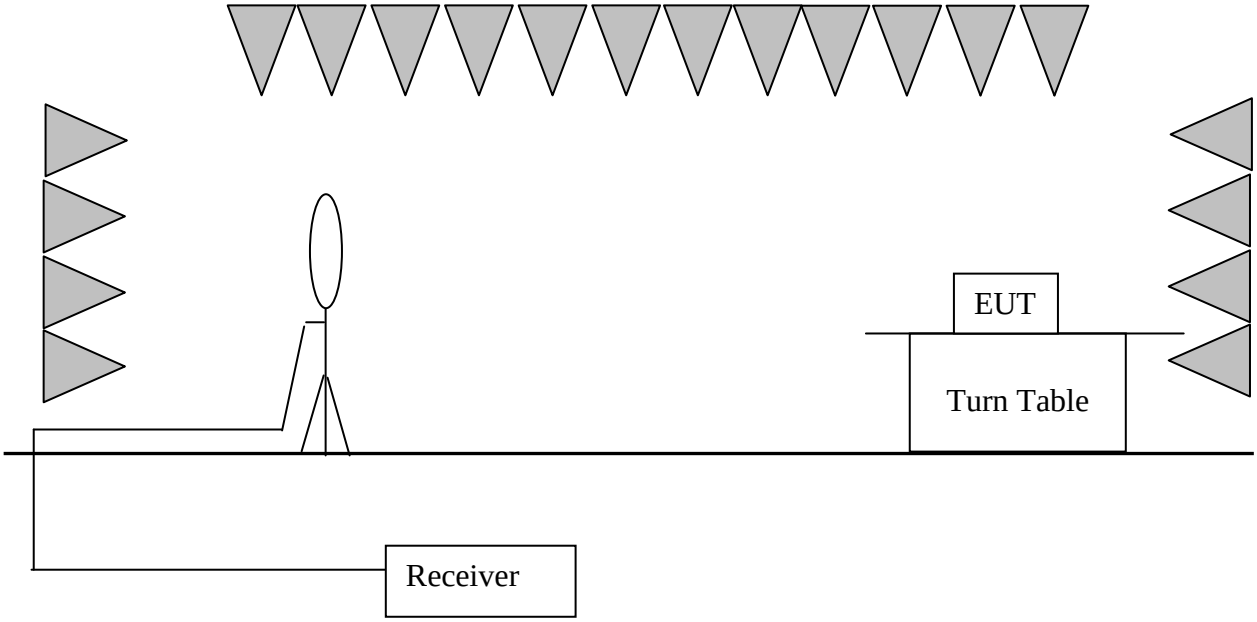
5.2 Radiated Emission(9kHz - 30 MHz)

Test Result: PASS

5.2.1 Used Test Equipment

NO.	Model No.	Manufacturer	Equipment	Serial No.	Cal. due date
SD00716	SAC10	Frankonia GabH	10m Semi-anechoic chamber	F069042	2017.08.14
201144CK0064	ESU40	ROHDE&SCHWARZ	EMI Test Receiver(20Hz-40GHz)	100298	2017.08.14
200744CP002-5	HLA6120	TESEQ	loop Antenna(φ0.6m ,9k Hz-30MHz)	25435	2018.01.12
SD00701	FC02	FRANKONIA	Turntable And Antenna Controller	N/A	N/A

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 10 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.

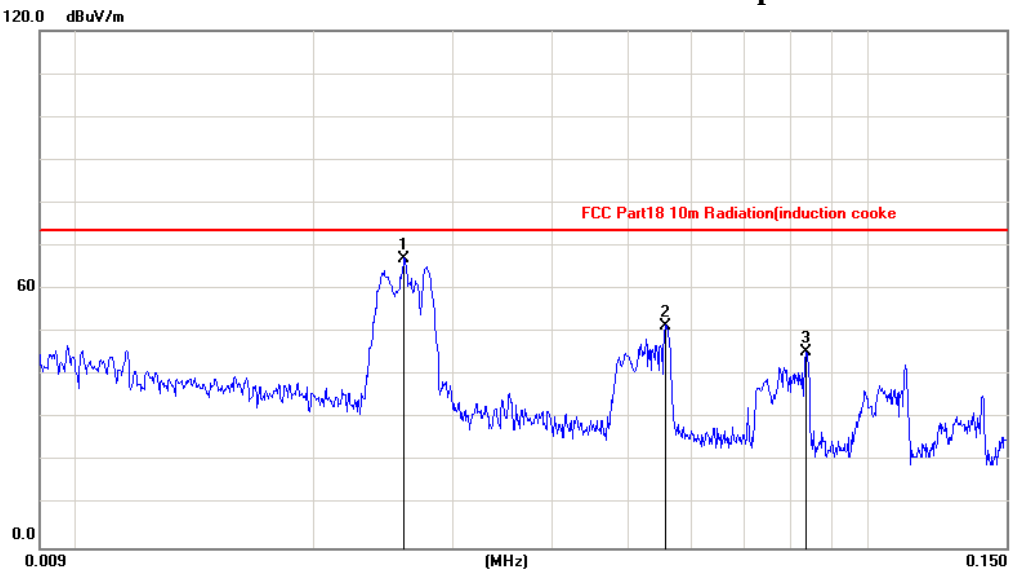
The bandwidth setting on Receiver was 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

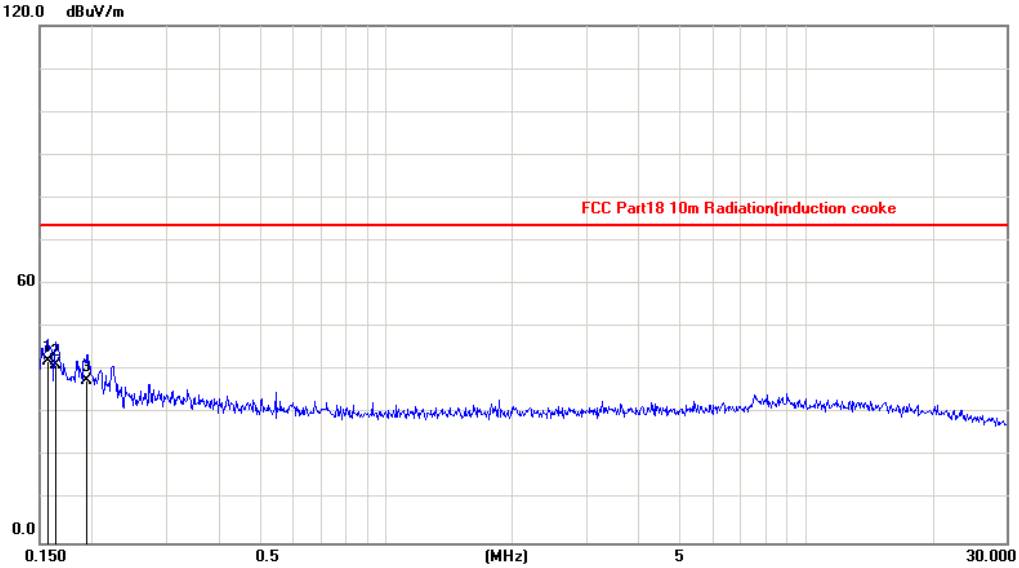
An initial pre-scan was performed in the 10m chamber using the spectrum analyzer in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by a 0.6m loop antenna.

The standard limit is at 30m but the test was conducted at 10 m. And the conversion equation is as below:
10m limit=30m limit +k
k=20log(d1/d2)=20log(30/10)

5.2.4 Test Data & Curve

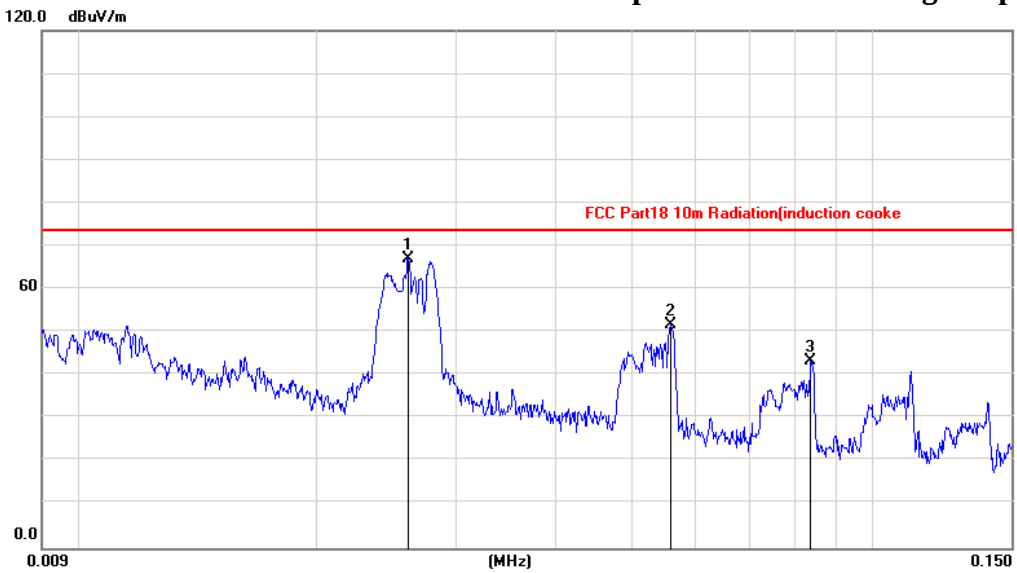
Tested Polarization: Horizontal **Operation Mode: the highest power**

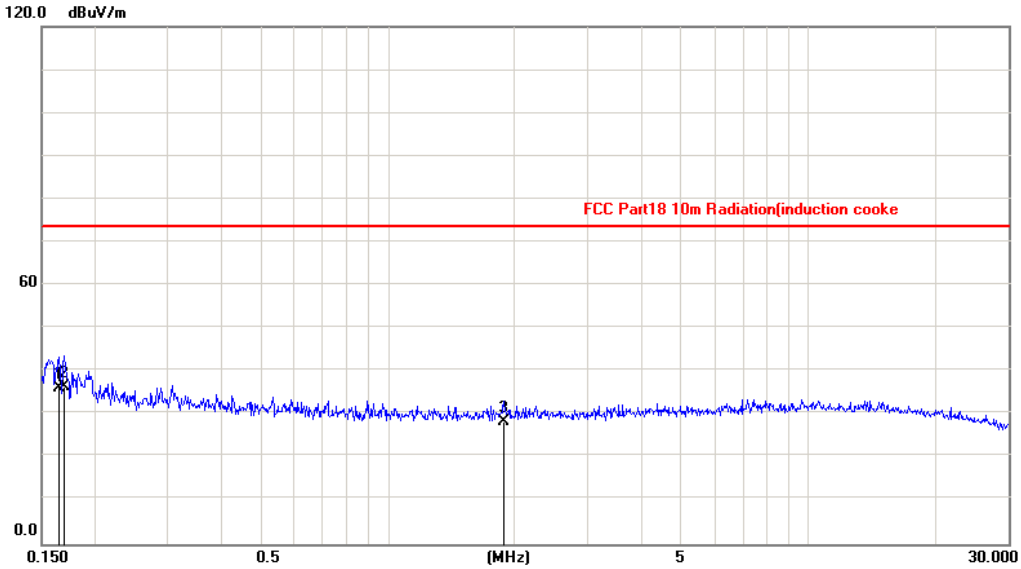




No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0260	20.28	46.62	66.90	73.50	-6.60	AVG			P
2	0.0555	20.32	31.28	51.60	73.50	-21.90	AVG			P
3	0.0834	20.33	25.07	45.40	73.50	-28.10	AVG			P
1	0.1565	20.28	21.82	42.10	73.50	-31.40	AVG			P
2	0.1633	20.30	21.00	41.30	73.50	-32.20	AVG			P
3	0.1945	20.38	17.22	37.60	73.50	-35.90	AVG			P

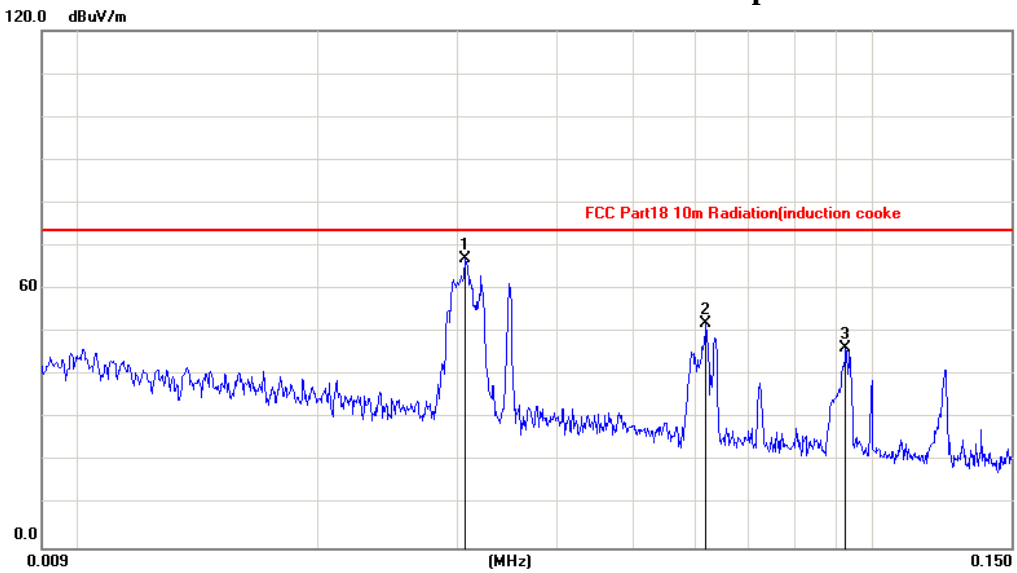
Tested Polarization: Vertical **Operation Mode: the highest power**

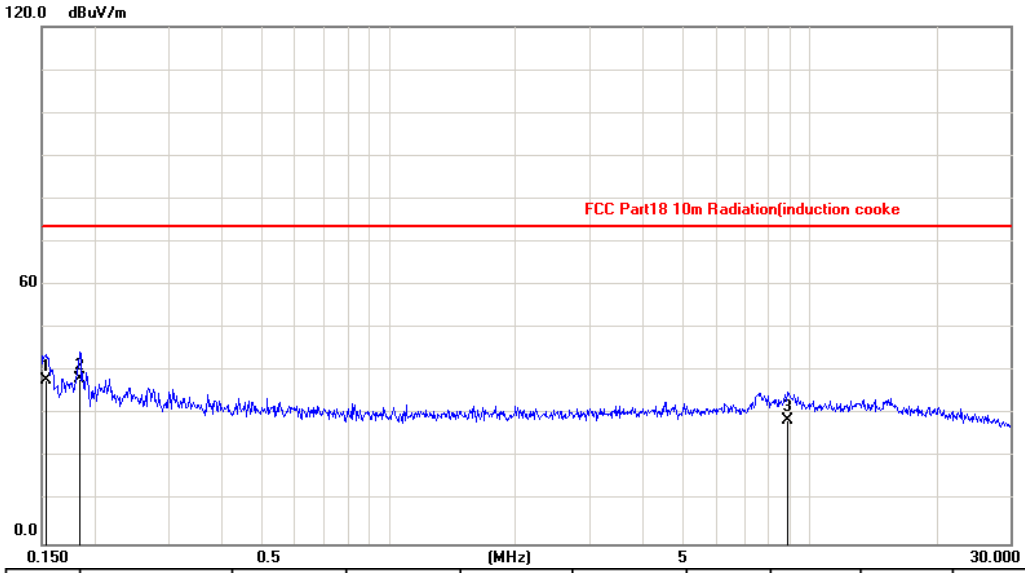




No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0261	20.28	46.62	66.90	73.50	-6.60	AVG			P
2	0.0558	20.32	31.48	51.80	73.50	-21.70	AVG			P
3	0.0834	20.33	23.07	43.40	73.50	-30.10	AVG			P
1	0.1650	20.30	15.90	36.20	73.50	-37.30	AVG			P
2	0.1694	20.31	16.09	36.40	73.50	-37.10	AVG			P
3	1.8879	20.05	8.25	28.30	73.50	-45.20	AVG			P

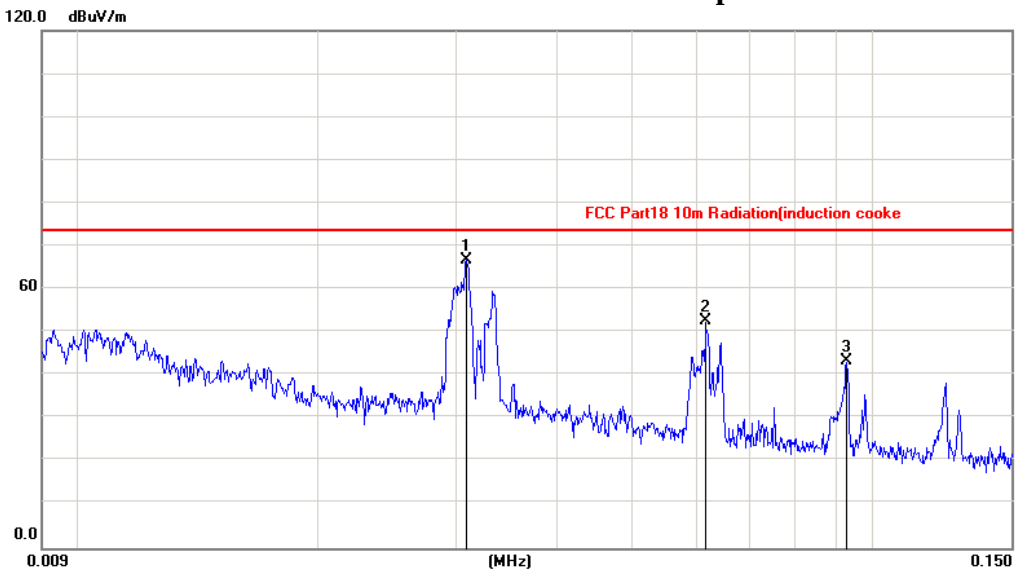
Tested Polarization: Horizontal **Operation Mode: Middle power**

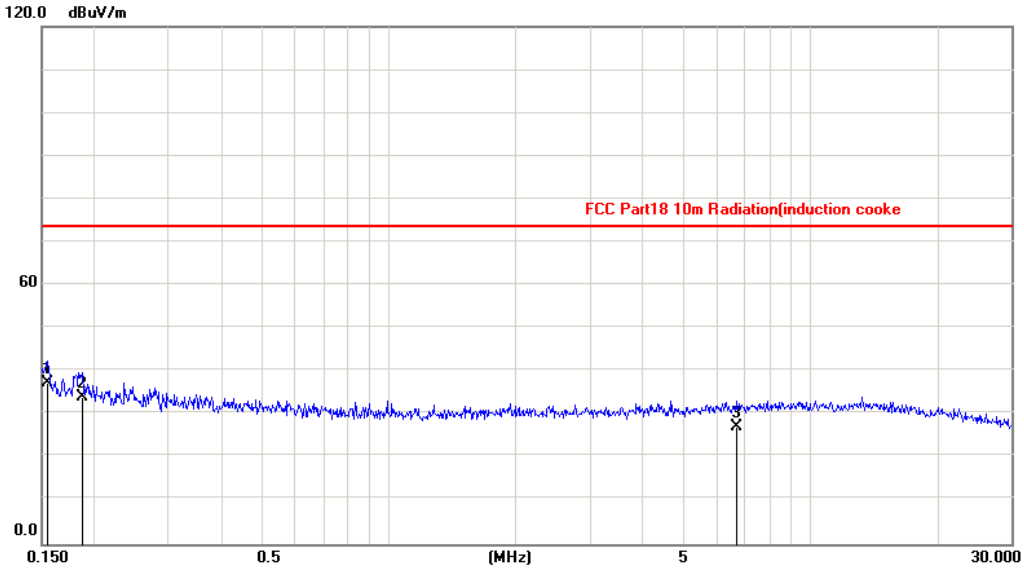




No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0308	20.19	46.91	67.10	73.50	-6.40	AVG			P
2	0.0618	20.32	31.63	51.95	73.50	-21.55	peak			P
3	0.0926	20.33	26.03	46.36	73.50	-27.14	peak			P
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.1539	20.27	17.63	37.90	73.50	-35.60	AVG			P
2	0.1844	20.35	17.95	38.30	73.50	-35.20	AVG			P
3	8.8692	20.89	7.71	28.60	73.50	-44.90	AVG			P

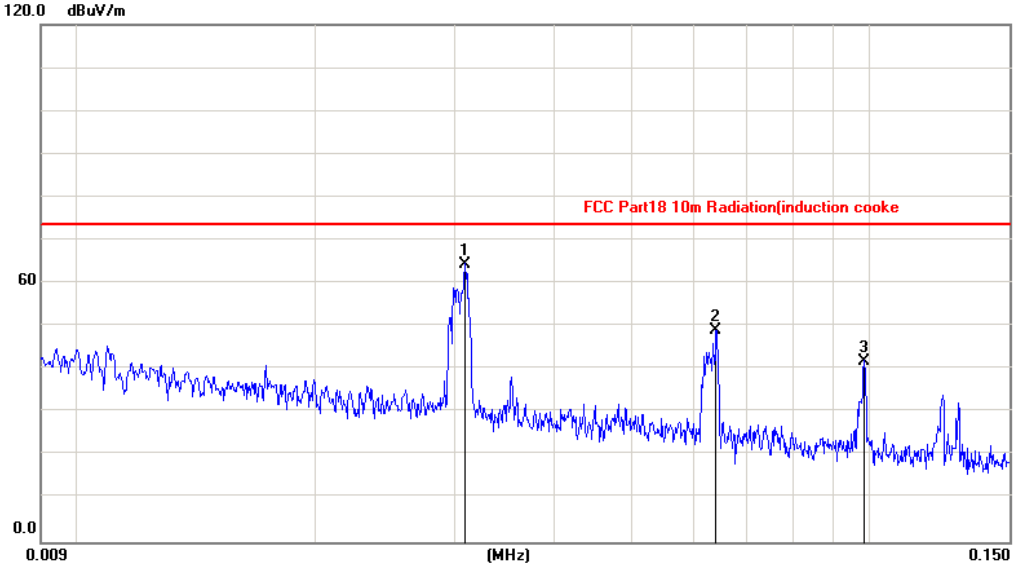
Tested Polarization: Vertical **Operation Mode: Middle power**

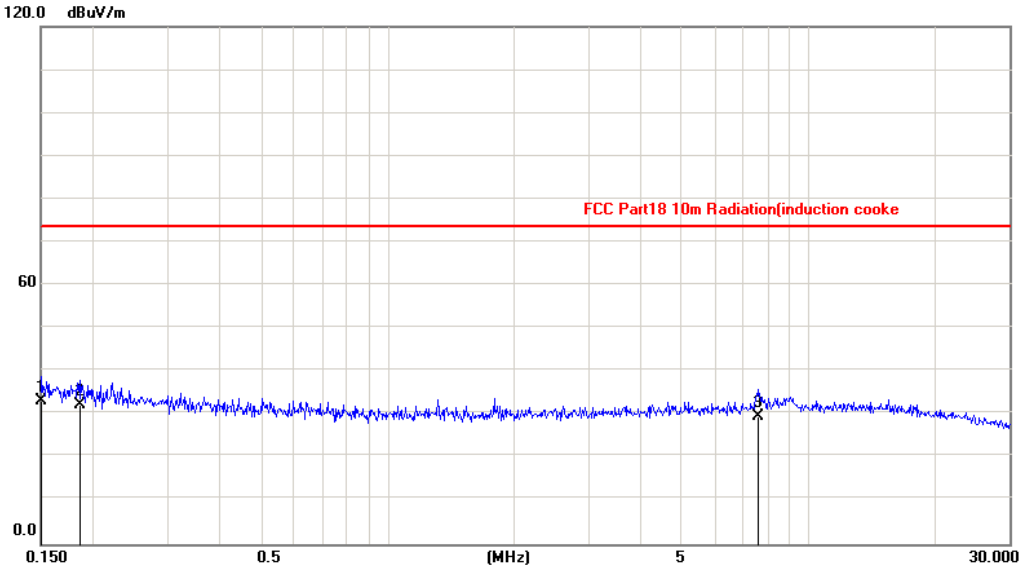




No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0309	20.20	46.50	66.70	73.50	-6.80	AVG			P
2	0.0618	20.32	32.28	52.60	73.50	-20.90	AVG			P
3	0.0930	20.33	22.87	43.20	73.50	-30.30	AVG			P
1	0.1548	20.27	17.13	37.40	73.50	-36.10	AVG			P
2	0.1874	20.36	13.74	34.10	73.50	-39.40	AVG			P
3	6.6624	20.64	6.66	27.30	73.50	-46.20	AVG			P

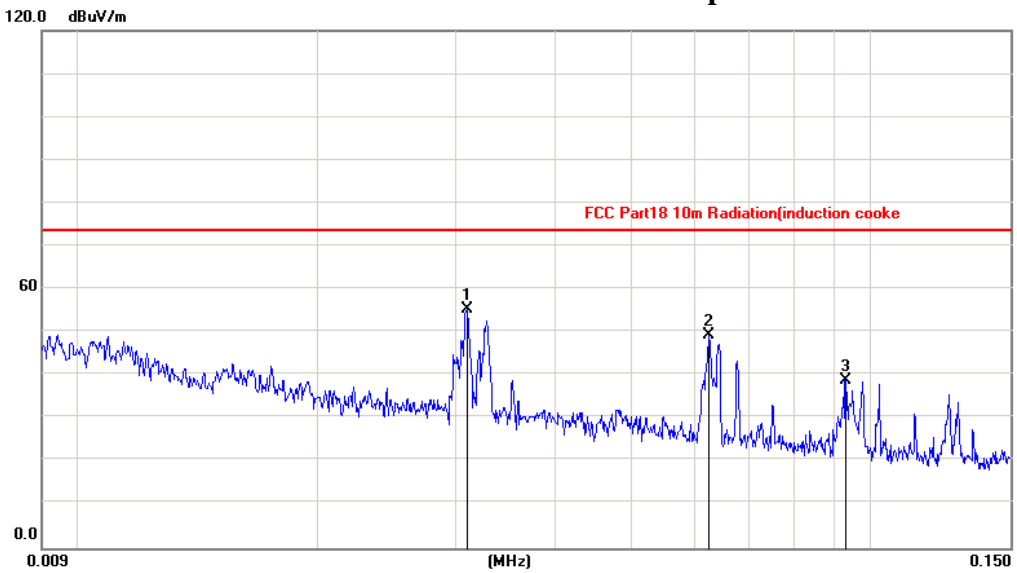
Tested Polarization: Horizontal **Operation Mode: the lowest power**

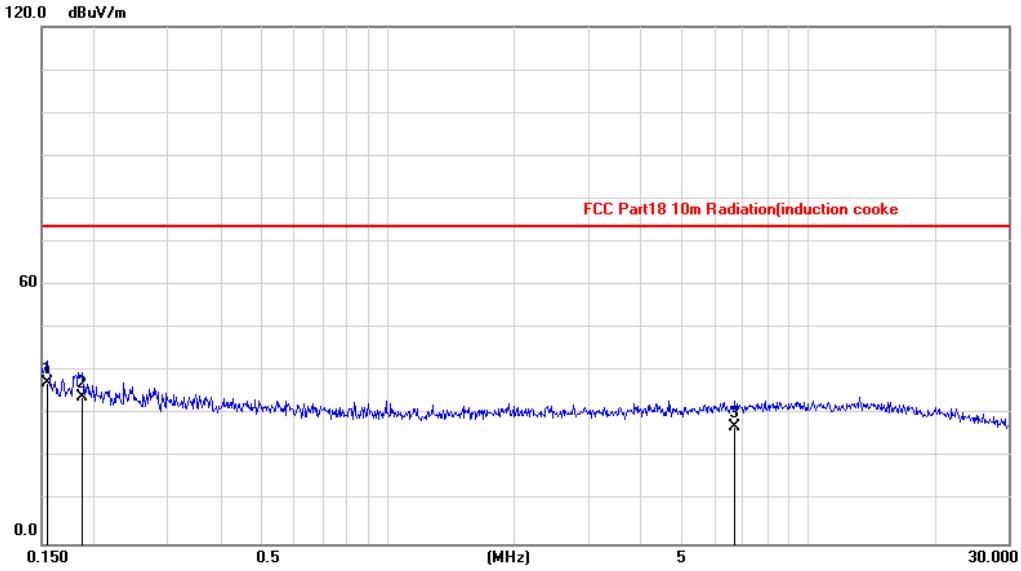




No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F
1	0.0309	20.20	44.10	64.30	73.50	-9.20	AVG			P
2	0.0640	20.32	28.68	49.00	73.50	-24.50	AVG			P
3	0.0984	20.33	21.67	42.00	73.50	-31.50	AVG			P

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	0.0309	20.19	35.01	55.20	73.50	-18.30	AVG			P
2	0.0624	20.32	28.98	49.30	73.50	-24.20	AVG			P
3	0.0930	20.33	18.57	38.90	73.50	-34.60	AVG			P
1	0.1548	20.27	17.13	37.40	73.50	-36.10	AVG			P
2	0.1874	20.36	13.74	34.10	73.50	-39.40	AVG			P
3	6.6624	20.64	6.66	27.30	73.50	-46.20	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)

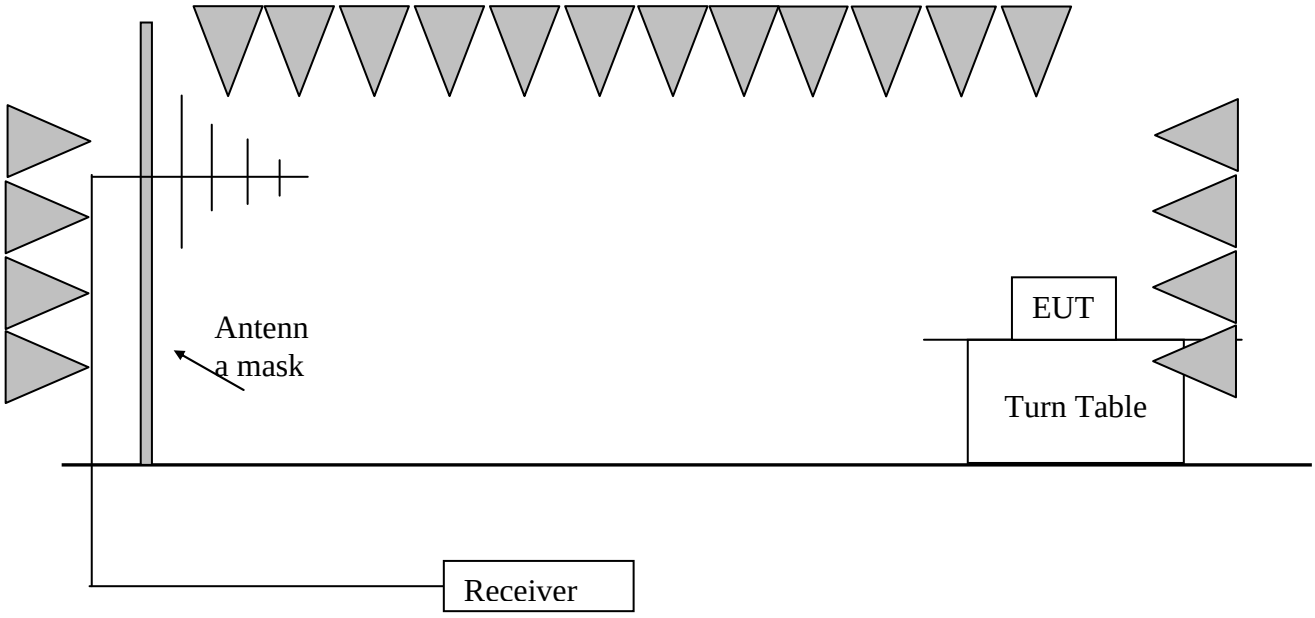
Test Result: Pass

5.3.1 Used Test Equipment

Radiated Disturbance（30 MHz-1 GHz）

Equipment No.	Equipment	Model	Manufacturer	Cal. Due date (MM-DD-YYYY)	Calibration Interval
EM030-04	3m Semi-Anechoic Chamber	9×6×6 m3	ETS-LINDGREN	2017/5/9	1Y
EM031-02	EMI Test Receiver (9 kHz~7 GHz)	R&S ESR7	R&S	2018/2/8	1Y
EM033-01	TRILOG Super Broadband test Antenna（30 MHz-3 GHz）	VULB 9163	SCHWARZBECK	2017/9/8	1Y
EM031-02-01	Coaxial cable	/	R&S	2017/5/30	1Y
SA047-118	Digital Temperature-Humidity Recorder	RS210	YIJIE	2017/7/29	1Y

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 1meter to 4 meters to find out the maximum emission level.

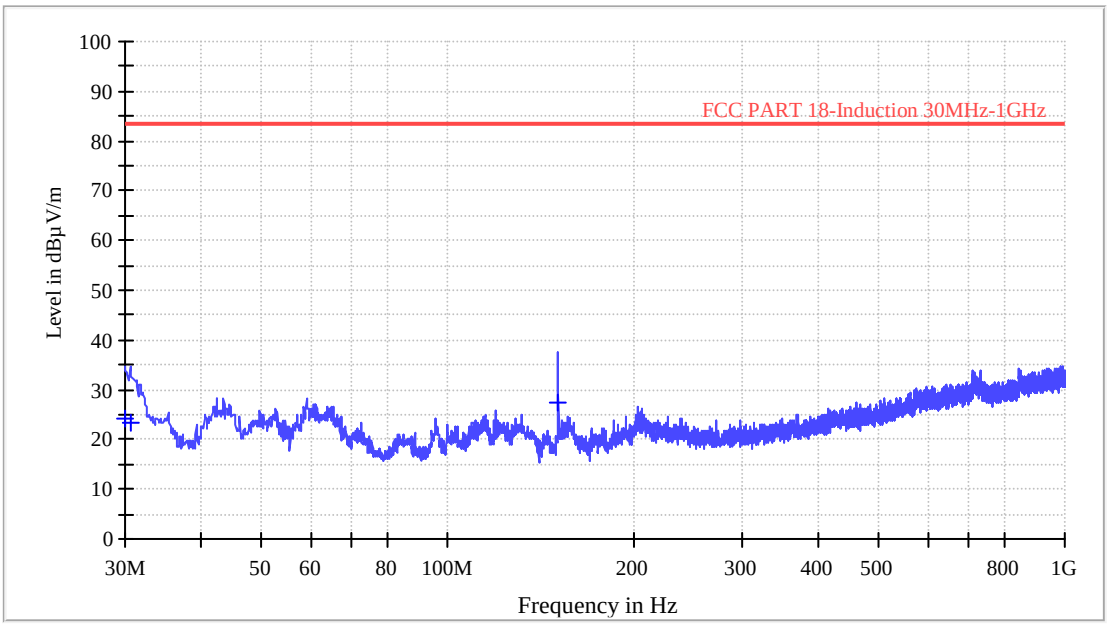
Broadband antenna was used as receiving antenna. Both horizontal and vertical polarization of the antenna was set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC OST/ MP-5:1986 requirement during radiated test. The bandwidth setting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

The standard limit is at 30m but the test was conducted at 3 m. And the conversion equation is as below:
3m limit=30m limit +k
k=20log(d1/d2)=20log(30/3)

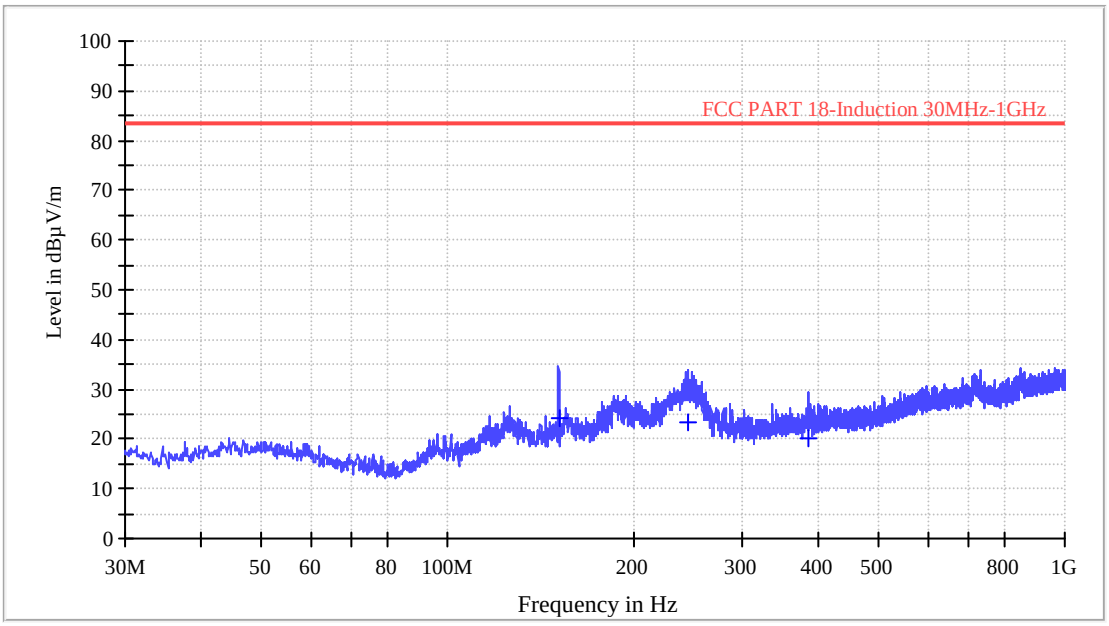
5.3.4 Test Data & Curve

Tested Polarization: Vertical **Operation Mode: the highest power**



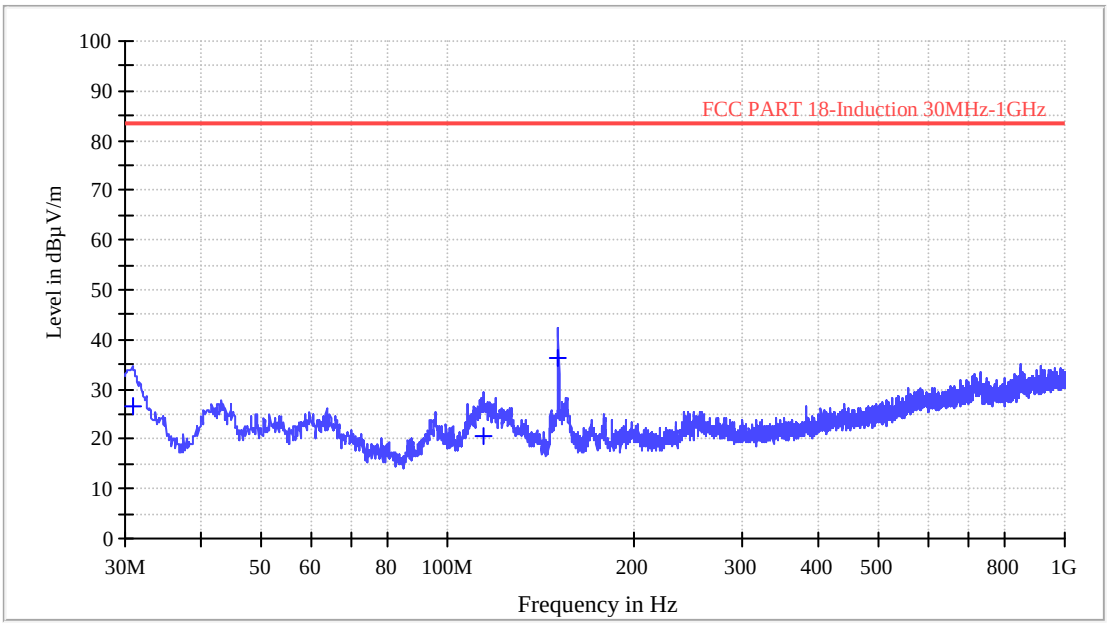
Frequency (MHz)	Average (dBµV/m)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
30.000000	24.4	120.000	V	11.2	59.1	83.5
30.600000	23.4	120.000	V	11.2	60.1	83.5
151.040000	27.3	120.000	V	9.2	56.2	83.5

Tested Polarization: Horizontal **Operation Mode: the highest power**



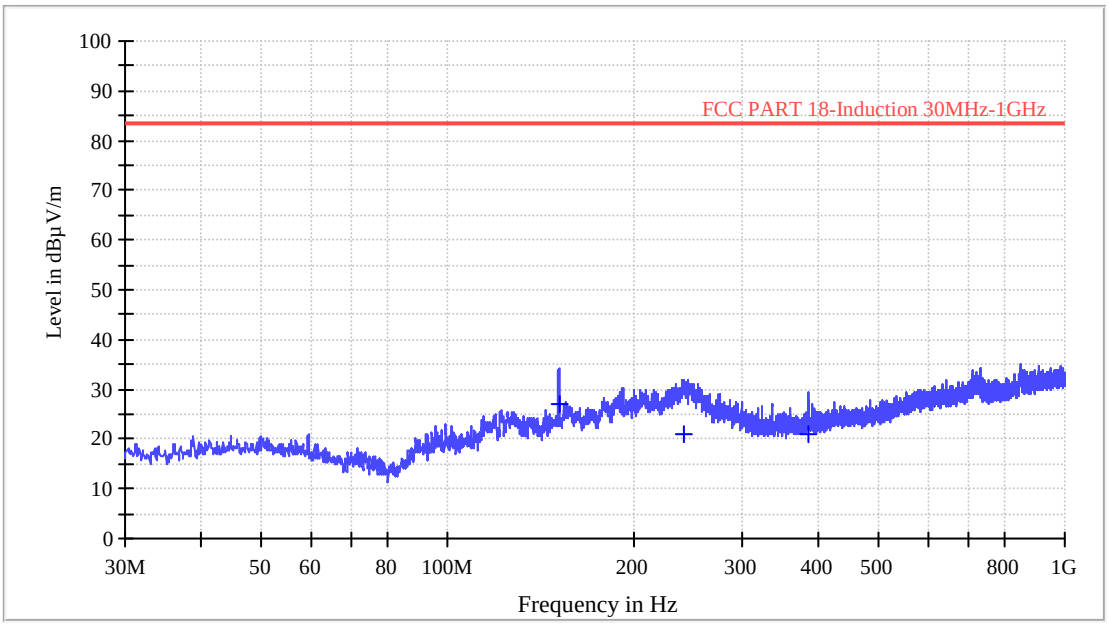
Frequency (MHz)	Average (dBµV/m)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
151.440000	24.2	120.000	H	9.2	59.3	83.5
244.600000	23.2	120.000	H	13.9	60.3	83.5
384.640000	20.2	120.000	H	17.3	63.3	83.5

Tested Polarization: Vertical **Operation Mode: Middle power**



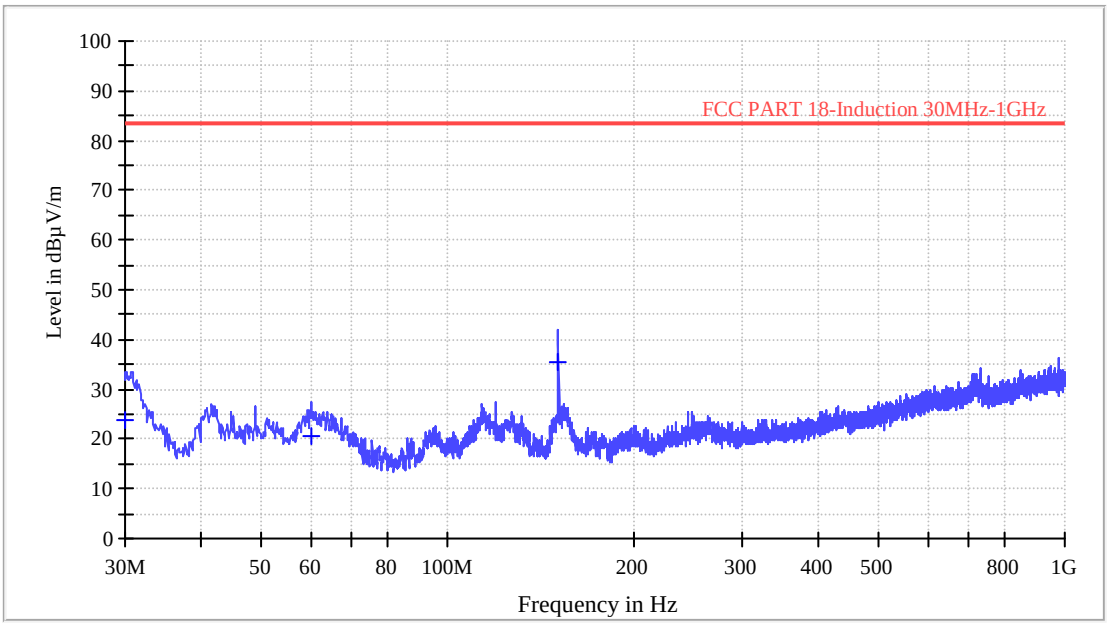
Frequency (MHz)	Average (dBµV/m)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
30.880000	26.5	120.000	V	11.2	57.0	83.5
114.440000	20.6	120.000	V	11.5	62.9	83.5
151.160000	36.4	120.000	V	9.2	47.1	83.5

Tested Polarization: Horizontal **Operation Mode: Middle power**



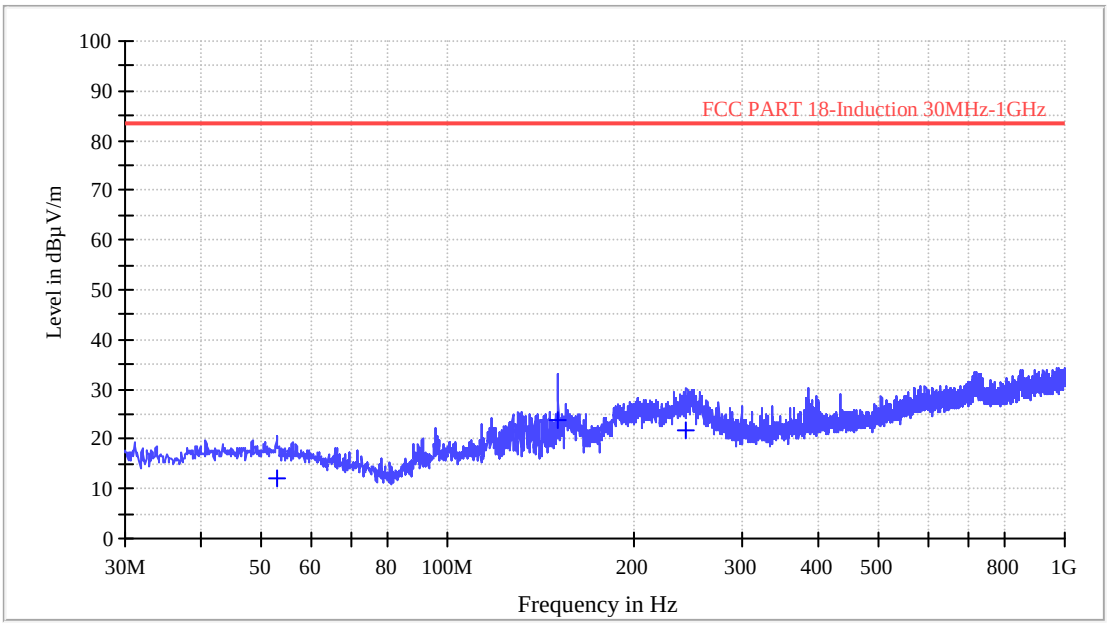
Frequency (MHz)	Average (dBµV/m)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
151.440000	26.8	120.000	H	9.2	56.7	83.5
241.920000	20.8	120.000	H	13.8	62.7	83.5
384.640000	21.0	120.000	H	17.3	62.5	83.5

Tested Polarization: Vertical **Operation Mode: the lowest power**



Frequency (MHz)	Average (dBµV/m)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
30.080000	23.7	120.000	V	11.2	59.8	83.5
60.080000	20.7	120.000	V	12.7	62.8	83.5
151.160000	35.4	120.000	V	9.2	48.1	83.5

Tested Polarization: Horizontal **Operation Mode: the lowest power**



Frequency (MHz)	Average (dBµV/m)	Bandwidth (kHz)	Pol	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
52.880000	11.9	120.000	H	13.7	71.6	83.5
151.040000	23.8	120.000	H	9.2	59.7	83.5
244.280000	21.8	120.000	H	13.9	61.7	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%