

TEST REPORT

Applicant Name & : Foshan Shunde YA-IN Electric Appliance Manufacture Co., Ltd
Address : 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-AAAAA01, C96E-AABBC01 and C96E-ABBCC01
Electrical Rating	: AC 240V~ 60Hz, 9600W
FCC ID	: ZFB-C96E-AABBC

Date Received : 10 December 2015

Date Test Conducted : 10 December 2015-25 April 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:



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11 May 2016 **Date**

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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-AAAAA01, C96E-AABBC01, C96E-ABBCC01.

We tested the Induction Cooktop, Model: C96E-AABBC01, 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-AAAAA01, C96E-AABBC01, C96E-ABBCC01 are Induction Hotplates for household use.

The power board and control board for the three models are exactly same, there're three burners called "A", "B", and "C" used in the three models, they are different size and power. The difference among the three models is the combination of the burner.

According to above information, all the tests are performed on C96E-AABBC01 respectively.

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-AABBC01**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:

Shenzhen EMTEK Co., Ltd.

Add: Bldg. 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China.

This test facility and site measurement data have been fully placed on file with the FCC, test firm registration number is 406365.

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

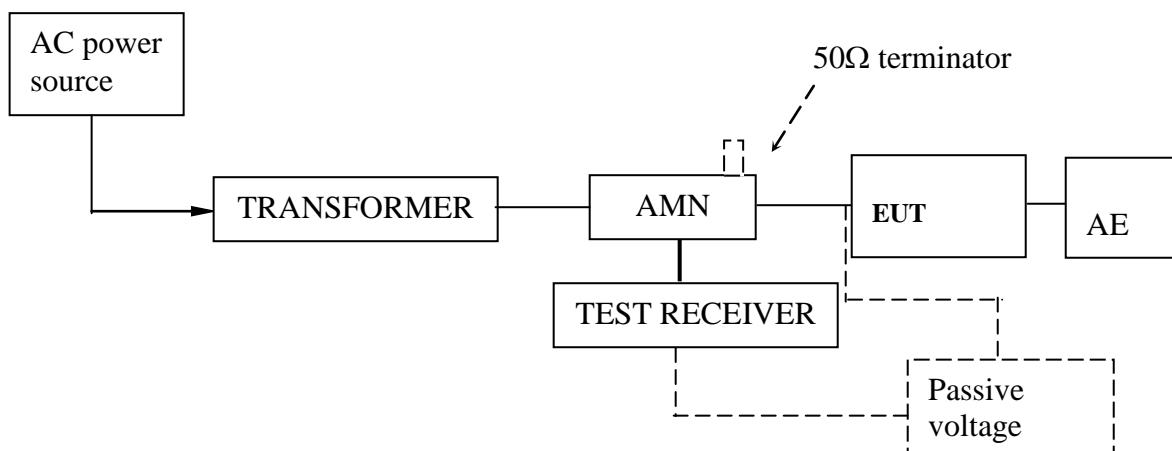
5.1 Conducted Emission Test

Test Result: Pass

5.1.1 Used Test Equipment

Equipment No.	Equipment	Model	Manufacturer	Last Cal.	Due Date
EE226	EMI Test Receiver	ESR3	Rohde & Schwarz	2015.5.17	2016.5.17
EE249	EMI Test Receiver	ESR3	Rohde & Schwarz	2015.5.17	2016.5.17
1029	Loop Antenna	PLA-1030/B	ARA	2015.5.29	2016.5.29

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.

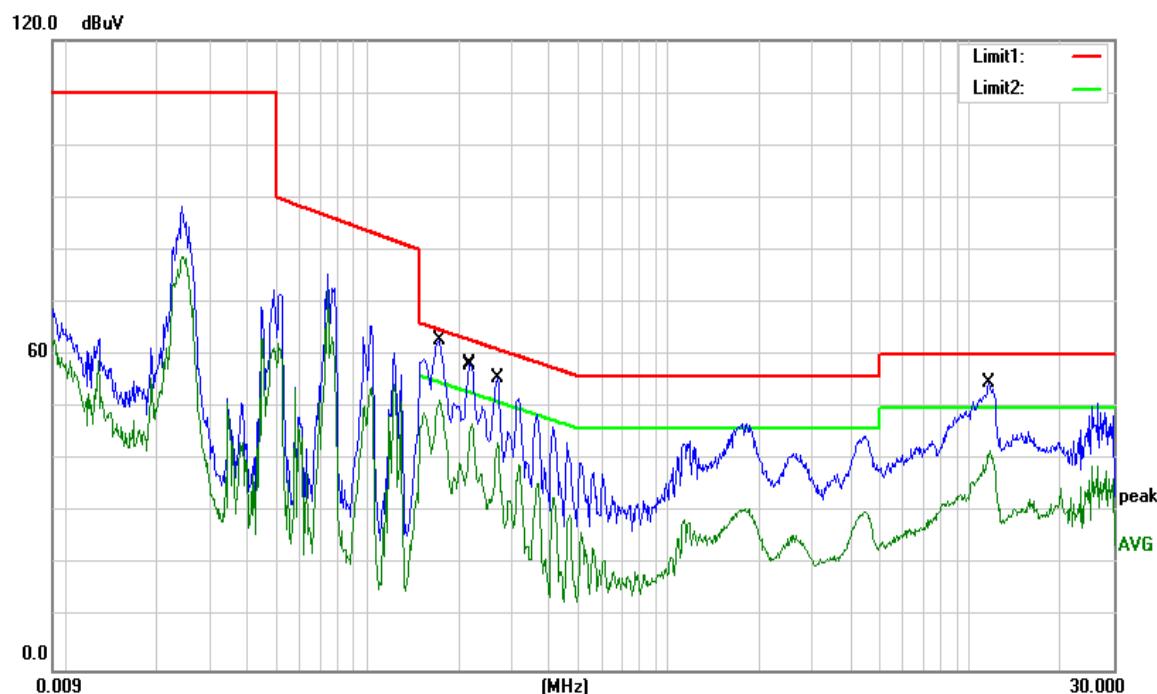
The bandwidth of test receiver was set at 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

5.1.4 Test Data & Curve

At main terminal: Pass

Tested Wire: Live

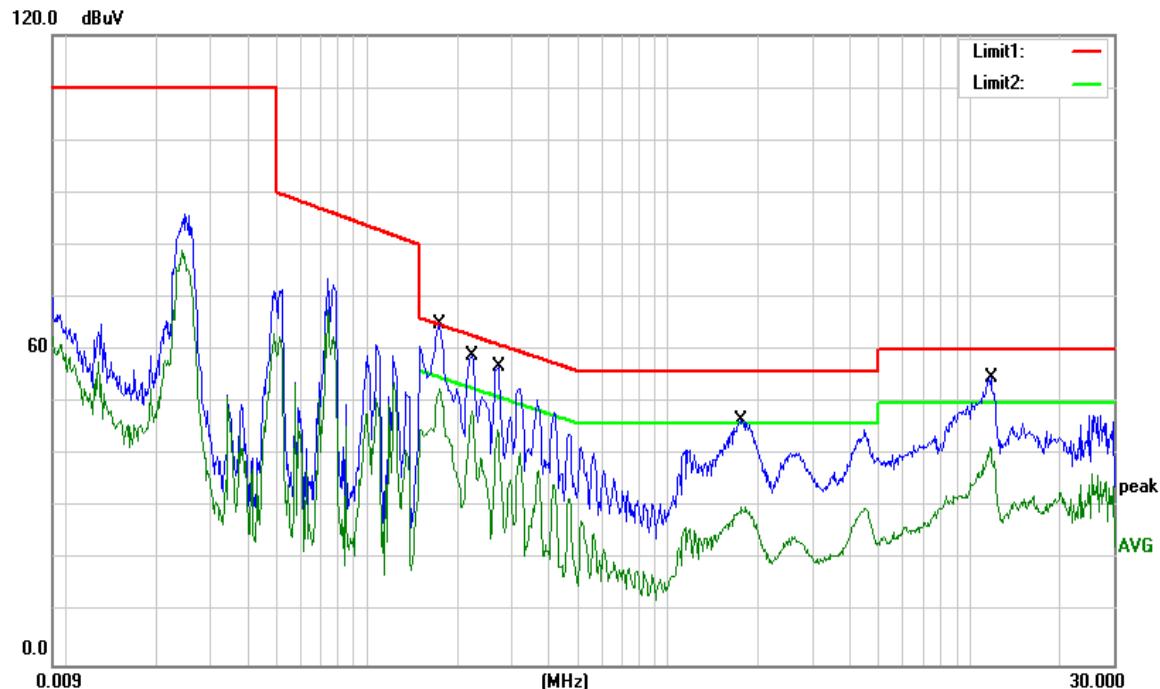
Operation Mode: the highest power



No.	Mk.	Reading MHz	Level dBuV	Correct Factor	Measure- ment dBuV	Limit dB	Over	Detector	Comment
1		0.1740	48.78	9.62	58.40	64.77	-6.37	QP	
2	*	0.1740	40.98	9.62	50.60	54.77	-4.17	AVG	
3		0.2180	45.86	9.64	55.50	62.89	-7.39	QP	
4		0.2220	36.66	9.64	46.30	52.74	-6.44	AVG	
5		0.2700	42.05	9.65	51.70	61.12	-9.42	QP	
6		0.2700	33.62	9.65	43.27	51.12	-7.85	AVG	
7		11.5540	38.69	12.31	51.00	60.00	-9.00	QP	
8		11.6980	29.62	12.34	41.96	50.00	-8.04	AVG	

Tested Wire: Neutral

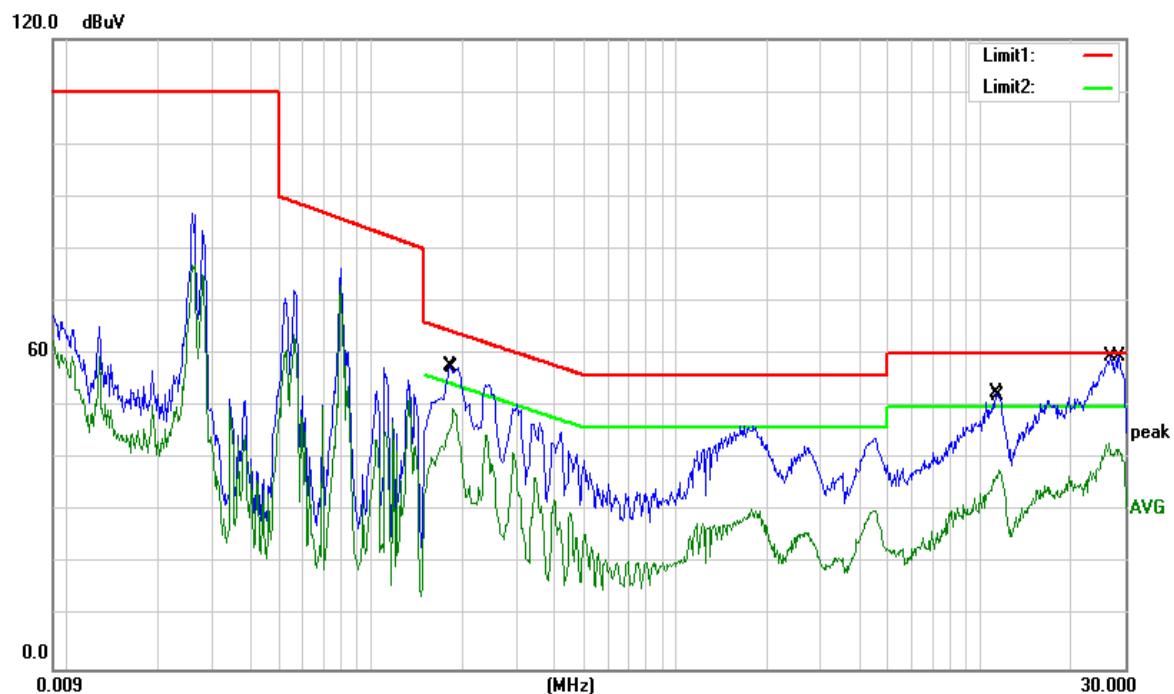
Operation Mode: the highest power



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dB	Over Detector	Comment
1		0.1740	51.08	9.62	60.70	64.77	-4.07	QP
2	*	0.1740	43.00	9.62	52.62	54.77	-2.15	Avg
3		0.2220	46.86	9.64	56.50	62.74	-6.24	QP
4		0.2220	38.86	9.64	48.50	52.74	-4.24	Avg
5		0.2700	35.18	9.65	44.83	51.12	-6.29	Avg
6		0.2740	41.65	9.65	51.30	61.00	-9.70	QP
7		1.7500	36.76	9.85	46.61	56.00	-9.39	QP
8		1.7500	20.17	9.85	30.02	46.00	-15.98	Avg
9		11.7020	29.06	12.34	41.40	50.00	-8.60	Avg
10		11.7780	37.64	12.36	50.00	60.00	-10.00	QP

Tested Wire: Live

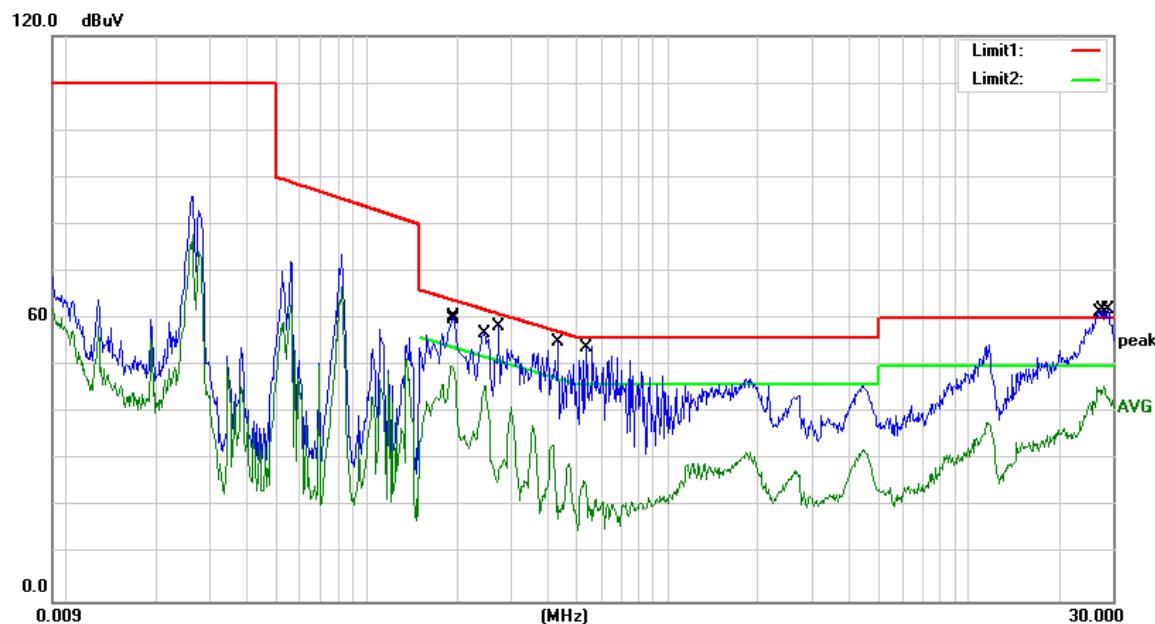
Operation Mode: Middle power



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1820	41.57	9.63	51.20	64.39	-13.19	QP	
2	*	0.1860	40.06	9.63	49.69	54.21	-4.52	AVG	
3		11.3300	33.53	12.27	45.80	60.00	-14.20	QP	
4		11.5980	25.71	12.32	38.03	50.00	-11.97	AVG	
5		26.6820	27.84	15.34	43.18	50.00	-6.82	AVG	
6		28.6020	35.28	15.72	51.00	60.00	-9.00	QP	

Tested Wire: Neutral

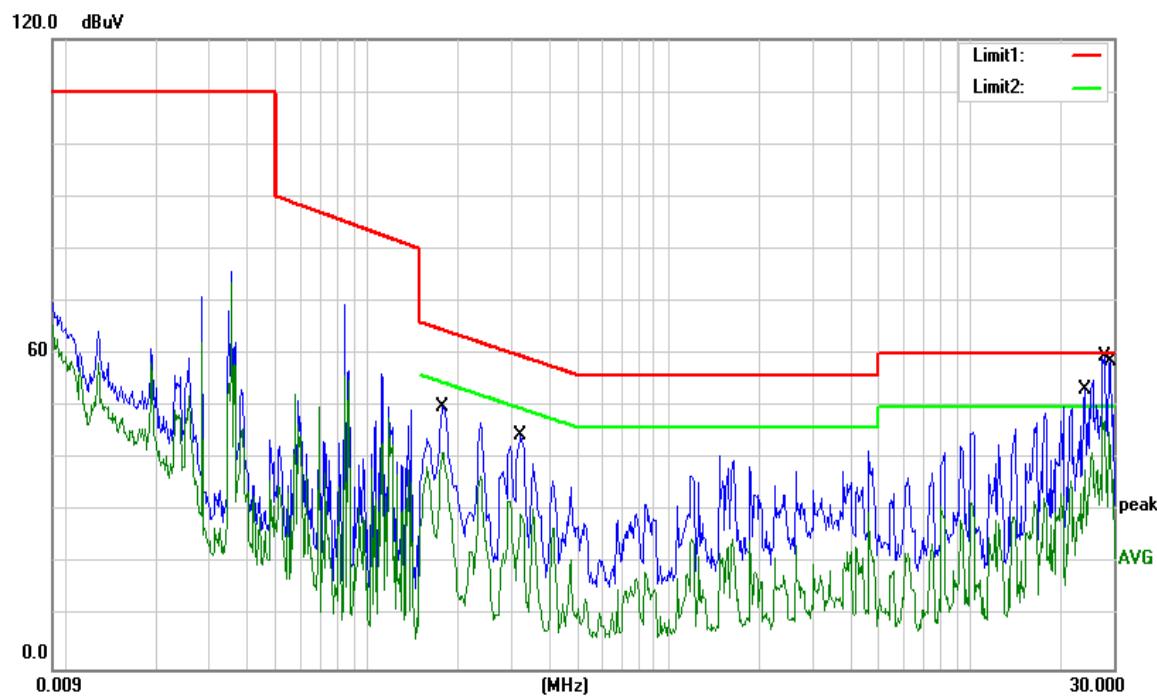
Operation Mode: Middle power



No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1	*	0.1900	40.34	9.63	49.97	54.04	-4.07	AVG	
2		0.1940	45.77	9.63	55.40	63.86	-8.46	QP	
3		0.2460	36.23	9.64	45.87	51.89	-6.02	AVG	
4		0.2740	28.85	9.65	38.50	61.00	-22.50	QP	
5		0.4340	20.30	9.70	30.00	57.18	-27.18	QP	
6		0.5340	21.28	9.72	31.00	56.00	-25.00	QP	
7		27.0660	38.99	15.41	54.40	60.00	-5.60	QP	
8		28.0420	30.09	15.61	45.70	50.00	-4.30	AVG	
9		29.0260	36.79	15.81	52.60	60.00	-7.40	QP	

Tested Wire: Live

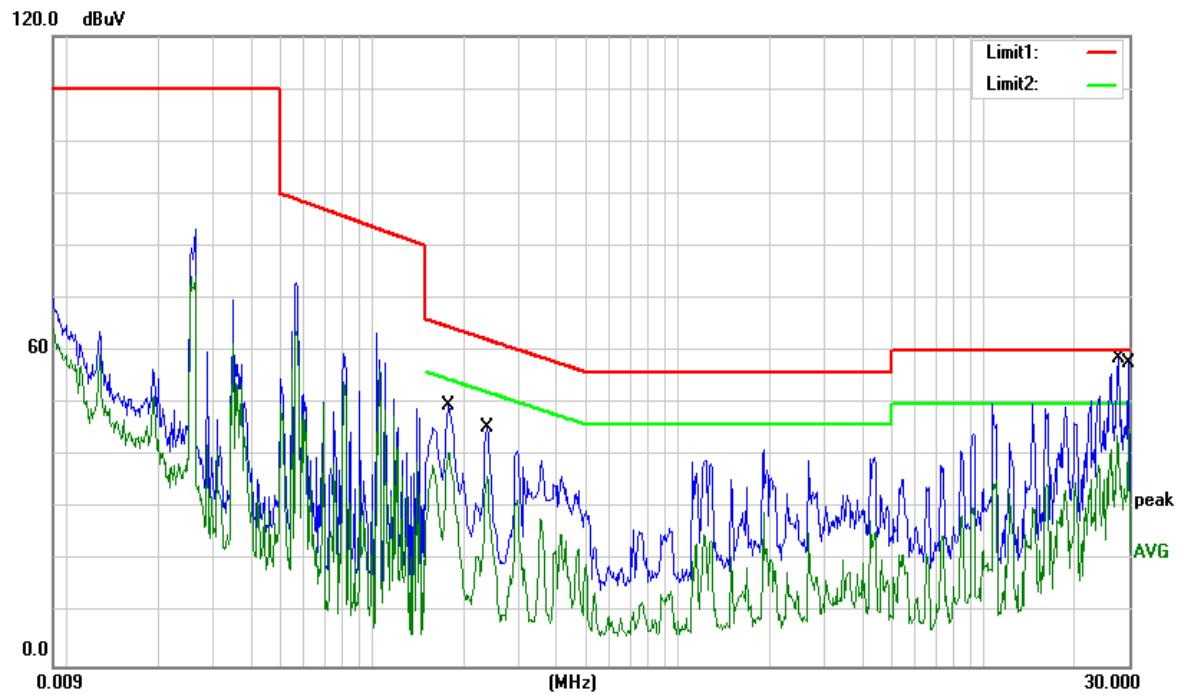
Operation Mode: the lowest power



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		0.1780	40.39	9.63	50.02	64.58	-14.56	QP	
2		0.1780	31.62	9.63	41.25	54.58	-13.33	AVG	
3		0.3220	34.77	9.67	44.44	59.66	-15.22	QP	
4		0.3220	20.01	9.67	29.68	49.66	-19.98	AVG	
5		24.0700	31.39	14.81	46.20	60.00	-13.80	QP	
6		24.0700	23.29	14.81	38.10	50.00	-11.90	AVG	
7		27.6620	21.07	15.53	36.60	50.00	-13.40	AVG	
8		27.9780	37.40	15.60	53.00	60.00	-7.00	QP	
9	*	28.9820	29.23	15.80	45.03	50.00	-4.97	AVG	

Tested Wire: Neutral

Operation Mode: the lowest power



No.	Mk.	Freq.	Reading Level MHz	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1780	39.92	9.63	49.55	64.58	-15.03	QP	
2		0.1780	30.96	9.63	40.59	54.58	-13.99	AVG	
3		0.2380	35.95	9.64	45.59	62.17	-16.58	QP	
4		0.2380	26.45	9.64	36.09	52.17	-16.08	AVG	
5		27.4460	21.31	15.49	36.80	50.00	-13.20	AVG	
6	*	27.8020	33.94	15.56	49.50	60.00	-10.50	QP	
7		29.7580	33.55	15.95	49.50	60.00	-10.50	QP	
8		29.7580	19.05	15.95	35.00	50.00	-15.00	AVG	

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%.

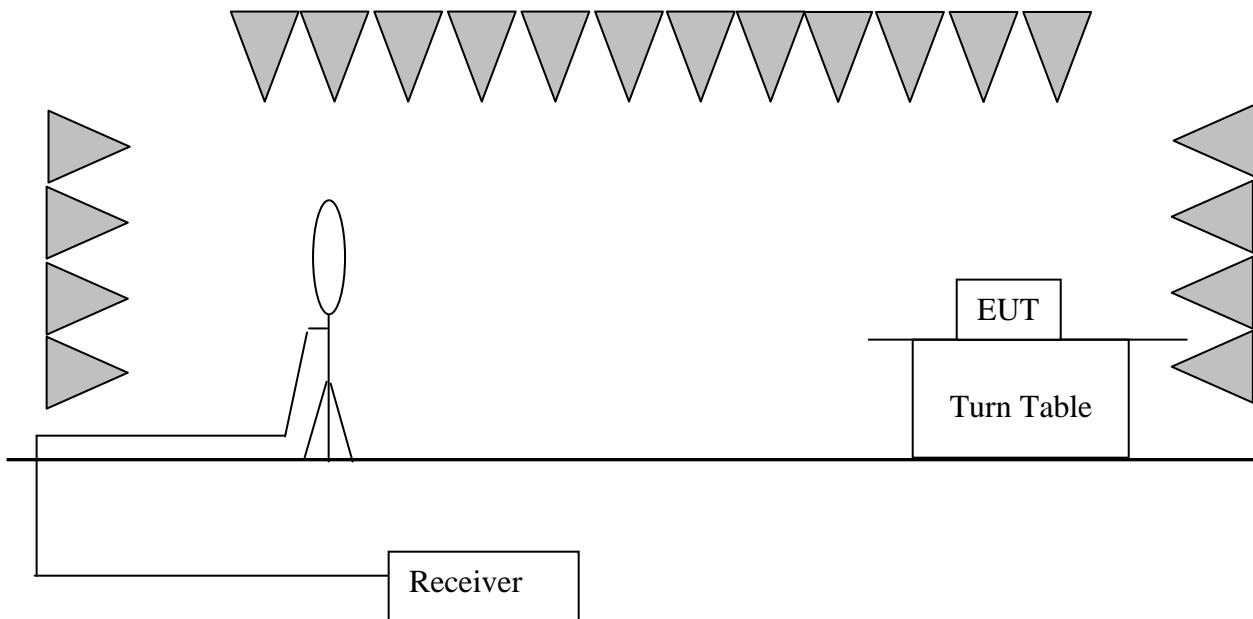
5.2 Radiated Emission(9kHz - 30 MHz)

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	2015.5.17	2016.5.17
EE249	EMI Test Receiver	ESR3	Rohde & Schwarz	2015.5.17	2016.5.17
1029	Loop Antenna	PLA-1030/B	ARA	2015.5.29	2016.5.29

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.

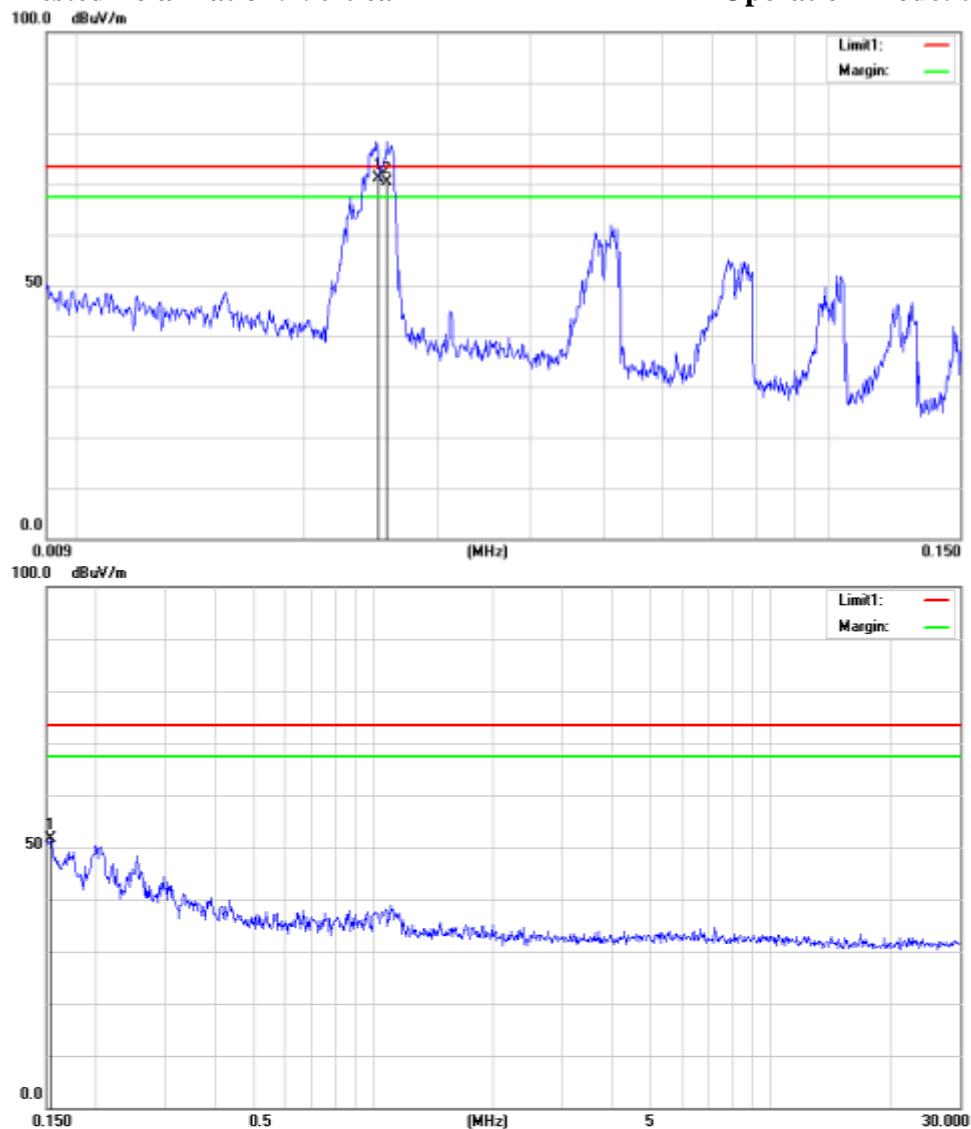
The bandwidth setting on Receiver was 9 kHz. The frequency range from 9 kHz to 30MHz was checked.

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

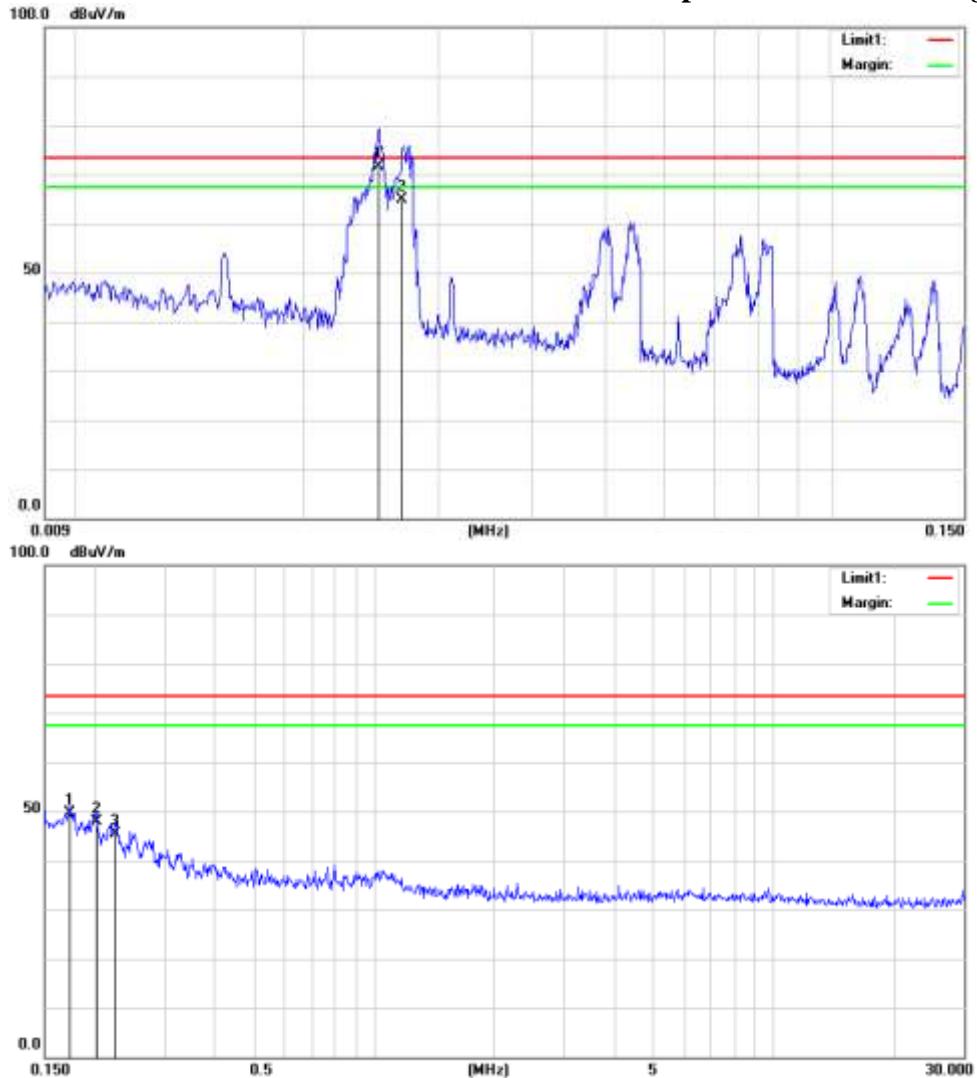
Operation Mode: the highest power



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	*	0.0250	50.29	20.91	71.20	73.50	-2.30	AVG
2		0.0257	49.58	20.92	70.50	73.50	-3.00	AVG
<hr/>								
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	*	0.1540	30.30	21.25	51.55	73.50	-21.95	AVG

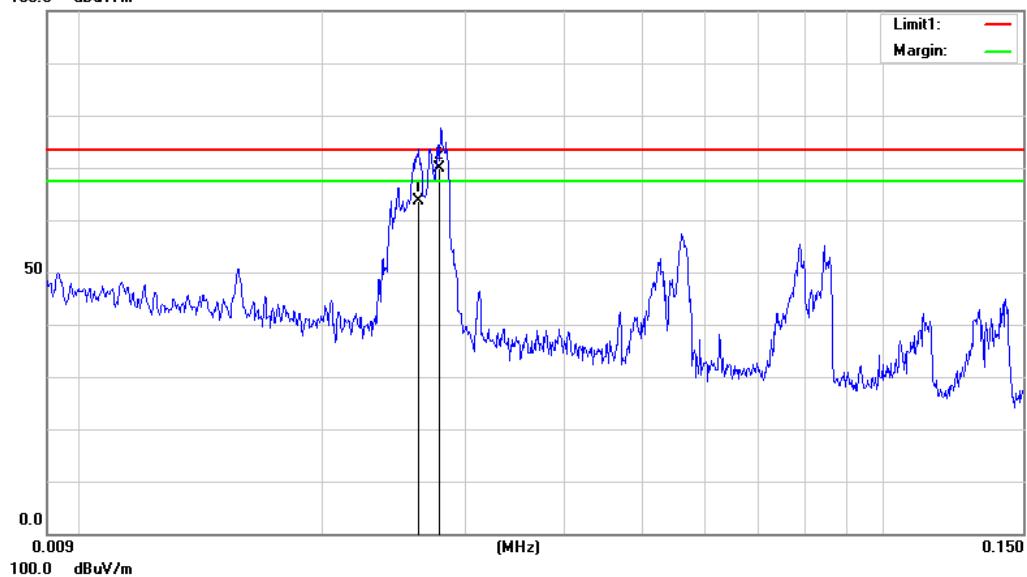
Tested Polarization: Horizontal

Operation Mode: the highest power

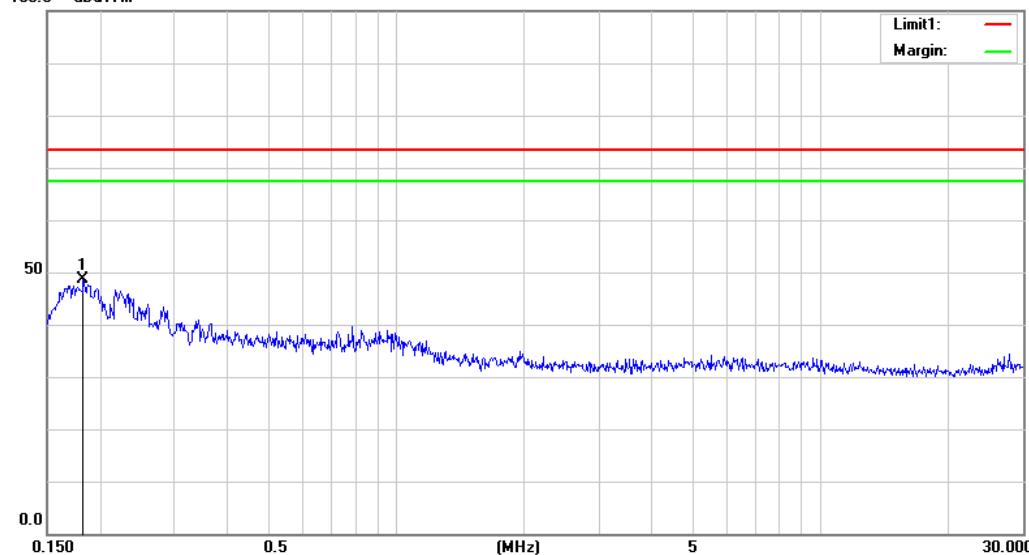


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	0.0250	50.79	20.91	71.70	73.50	-1.80	AVG
2		0.0270	44.05	20.95	65.00	73.50	-8.50	AVG
1	*	0.1731	28.41	21.29	49.70	73.50	-23.80	AVG
2		0.2017	26.45	21.35	47.80	73.50	-25.70	AVG
3		0.2256	23.90	21.40	45.30	73.50	-28.20	AVG

Tested Polarization: Vertical

100.0 dB_BuV/m

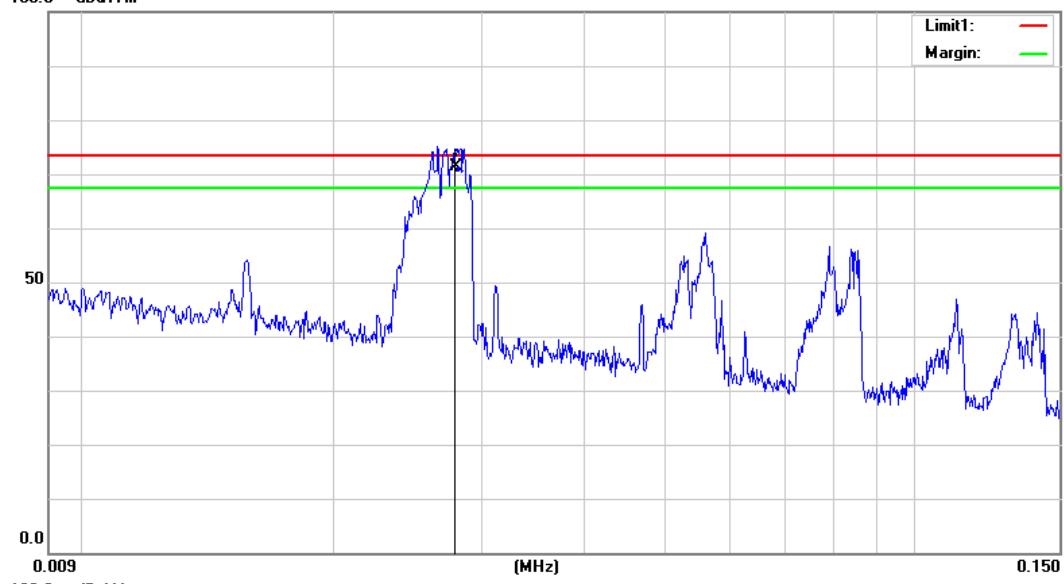
Operation Mode: Middle power



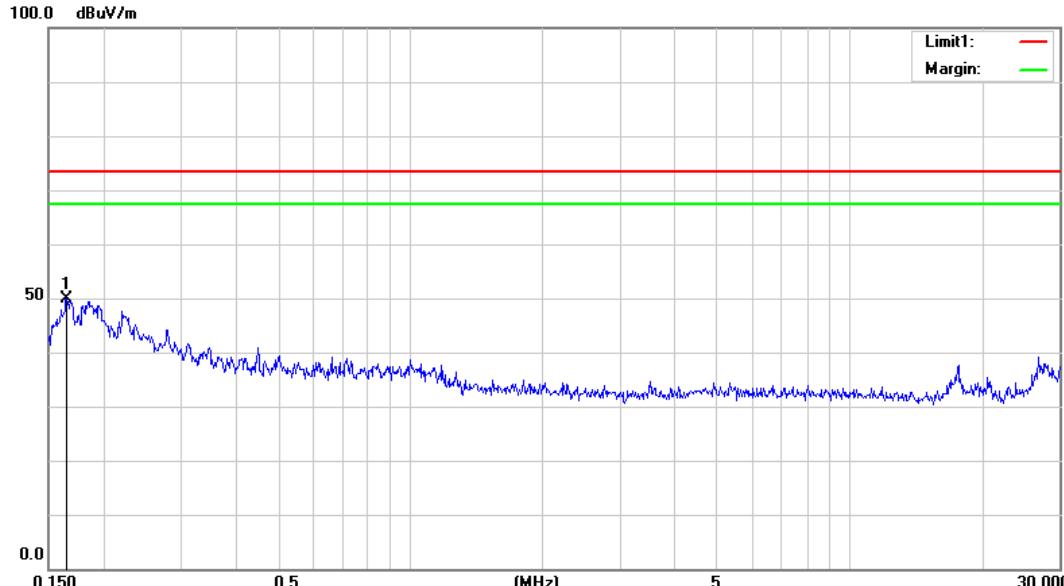
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over
			Level	Factor	ment		
		MHz	dB _B uV	dB	dB _B uV/m	dB	Detector
1		0.0263	42.76	20.94	63.70	73.50	-9.80
2	*	0.0280	48.84	20.96	69.80	73.50	-3.70
1	*	0.1824	27.31	21.30	48.61	73.50	-24.89

Tested Polarization: Horizontal

100.0 dBuV/m



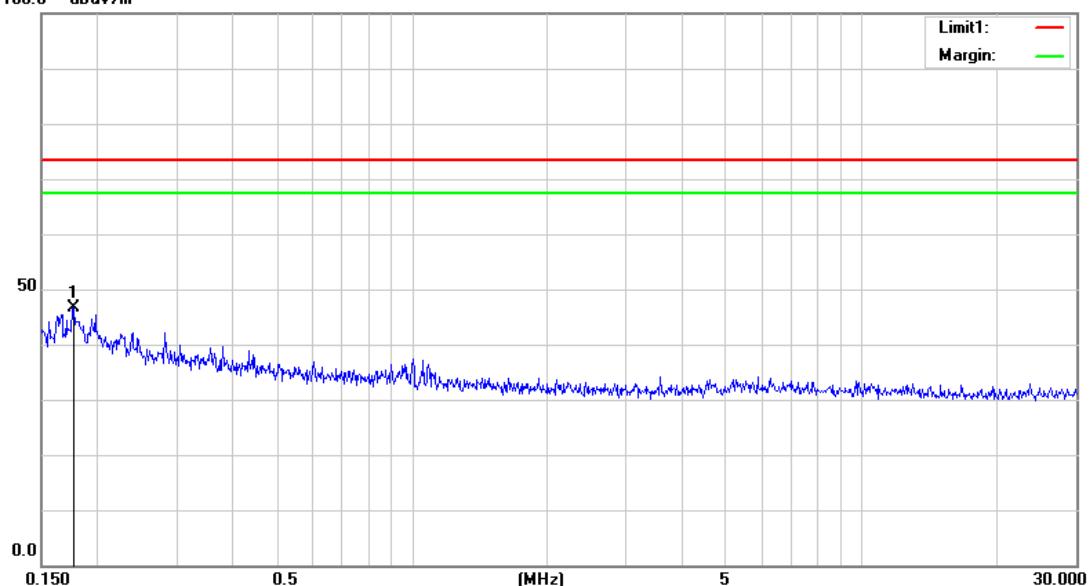
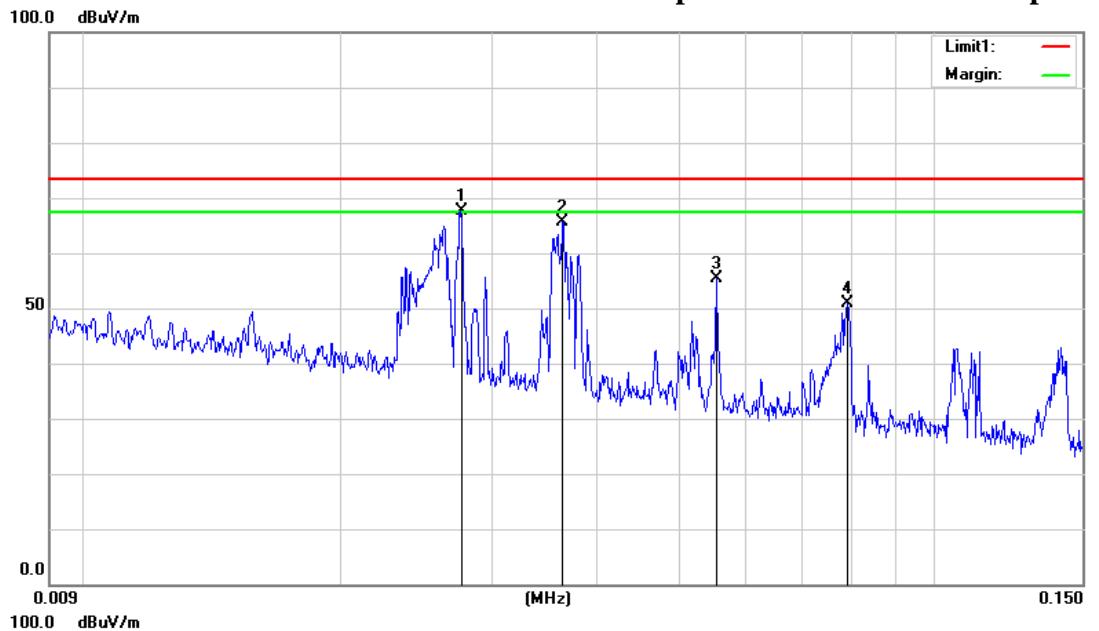
Operation Mode: Middle power



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	0.0280	54.76	20.96	75.72	73.50	-2.22	AVG
1	*	0.1650	28.69	21.27	49.96	73.50	-23.54	AVG

Tested Polarization: Vertical

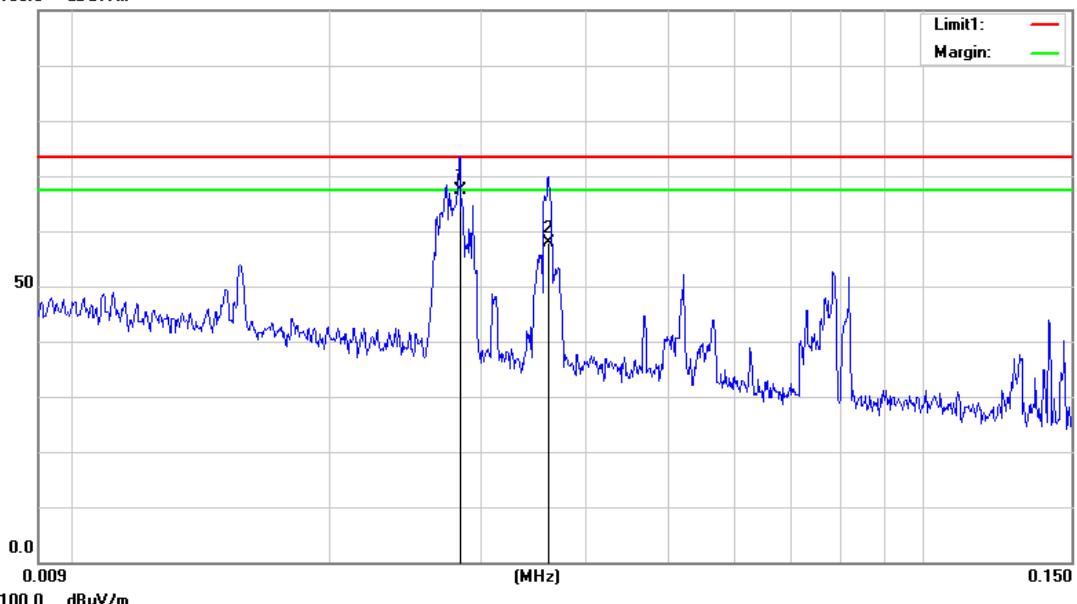
Operation Mode: the lowest power



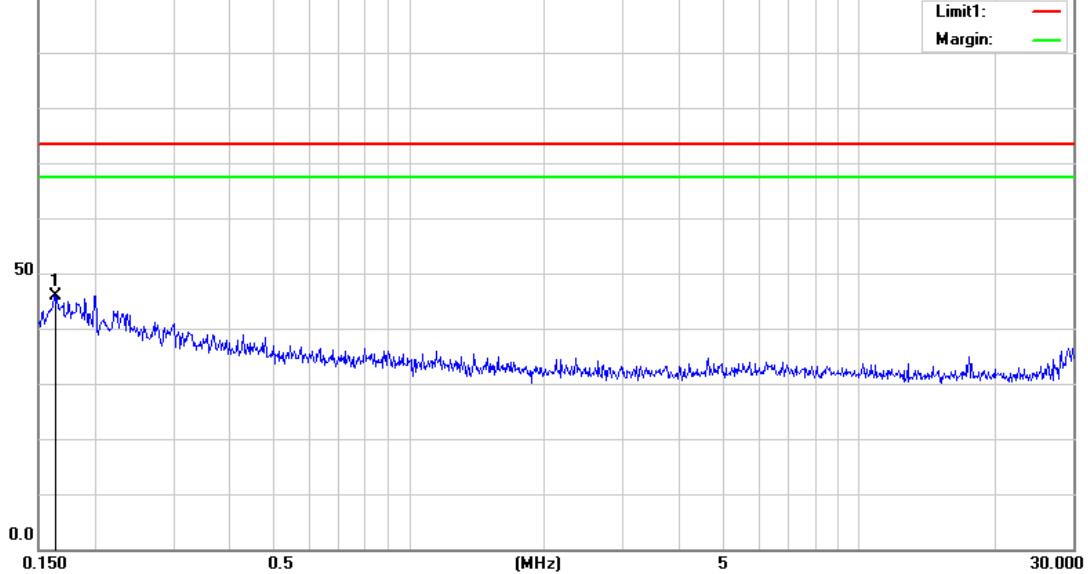
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over
			Level	Factor	ment		
		MHz	dBuV	dB	dBuV/m	dB	Detector
1	*	0.0276	46.63	20.96	67.59	73.50	-5.91
2		0.0364	44.42	21.12	65.54	73.50	-7.96
3		0.0554	34.27	21.21	55.48	73.50	-18.02
4		0.0792	30.29	20.70	50.99	73.50	-22.51
1	*	0.1768	25.41	21.29	46.70	73.50	-26.80

Tested Polarization: Horizontal

100.0 dBuV/m

**Operation Mode: the lowest power**

100.0 dBuV/m



No.	Mk.	Reading		Correct Factor	Measure- ment	Limit	Over
		Freq. MHz	Level dBuV				
1	*	0.0284	46.53	20.97	67.50	73.50	-6.00
2		0.0361	36.78	21.12	57.90	73.50	-15.60
1	*	0.1633	24.56	21.27	45.83	73.50	-27.67

5.2.5 Measurement uncertainty

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

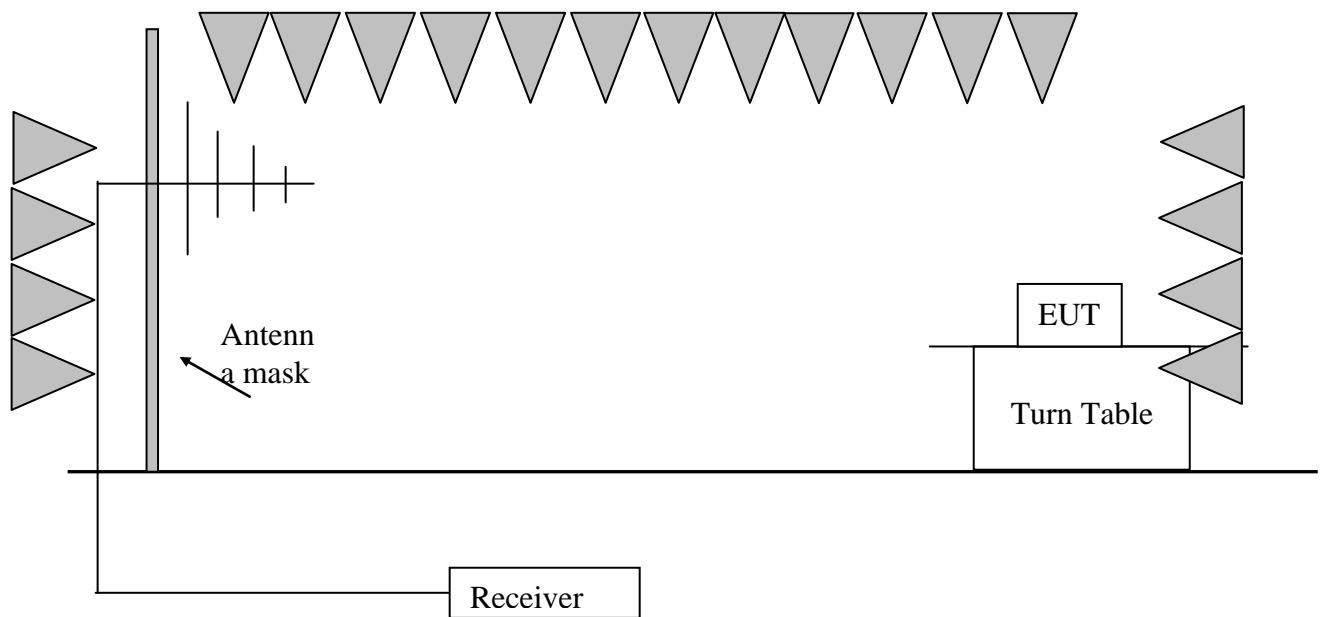
5.3 Radiated Emission (30 MHz- 1 GHz)

Test Result: Pass

5.3.1 Used Test Equipment

Equip. No.	Equipment	Model	Manufacturer	Last Cal.	Due Date
EE226	EMI Test Receiver	ESR3	Rohde & Schwarz	2015.5.17	2016.5.17
EE249	EMI Test Receiver	ESR3	Rohde & Schwarz	2015.5.17	2016.5.17
EE264	Pre-Amplifier	LNA10M1G-40	Lunar EM	2015.5.29	2016.5.29
EE263	Pre-Amplifier	LNA10M1G-40	Lunar EM	2015.5.17	2016.5.17
EE231	Bilog Antenna	VULB9163	Schwarzbeck	2015.5.29	2016.5.29
EE246	Bilog Antenna	VULB9163	Schwarzbeck	2015.5.17	2016.5.17

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

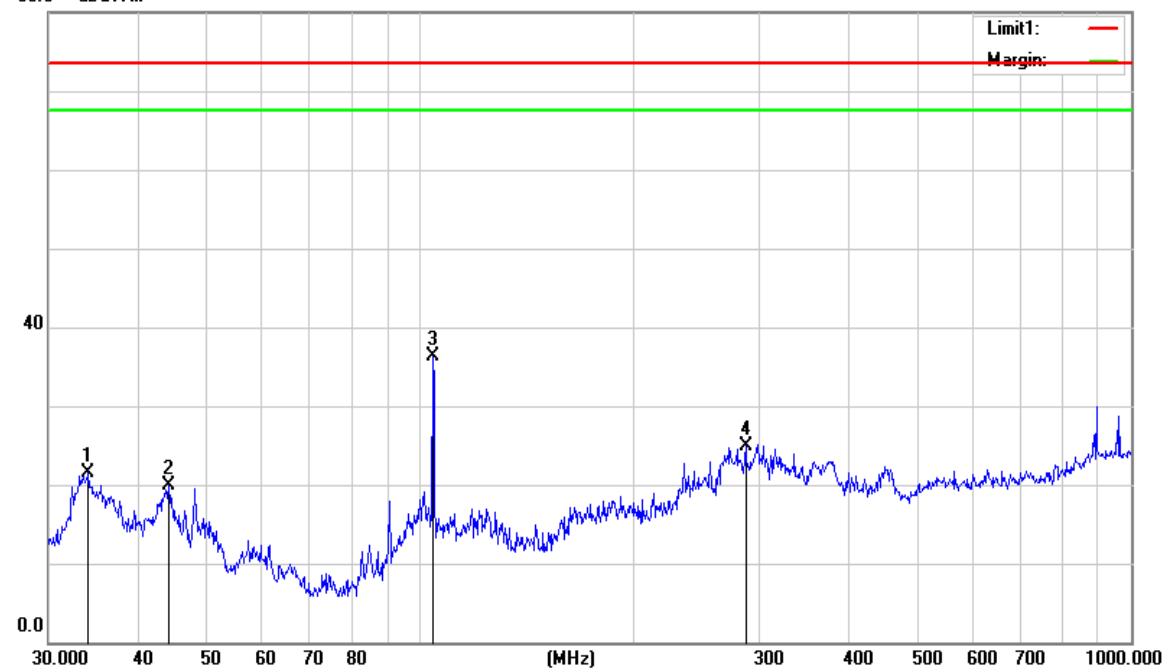
Broadband antenna was used as receiving antenna. Both horizontal and vertical polarization of the antenna was set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC OST/ MP-5:1986 requirement during radiated test. The bandwidth setting 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 10m 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

80.0 dBuV/m

Operation Mode: the highest power

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		34.1561	52.29	-30.79	21.50	73.50	-52.00	AVG
2		44.2752	49.25	-29.41	19.84	73.50	-53.66	AVG
3	*	104.1701	67.00	-30.77	36.23	73.50	-37.27	AVG
4		286.9823	52.05	-27.20	24.85	73.50	-48.65	AVG

Tested Polarization: Horizontal

80.0 dBuV/m



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over
			Level	Factor	ment		
		MHz	dBuV	dB	dBuV/m	dB	Detector
1	*	33.2112	61.42	-31.10	30.32	73.50	-43.18
2		48.1626	57.69	-28.95	28.74	73.50	-44.76
3		104.1701	57.37	-30.24	27.13	73.50	-46.37
4		234.1684	51.68	-28.25	23.43	73.50	-50.07

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

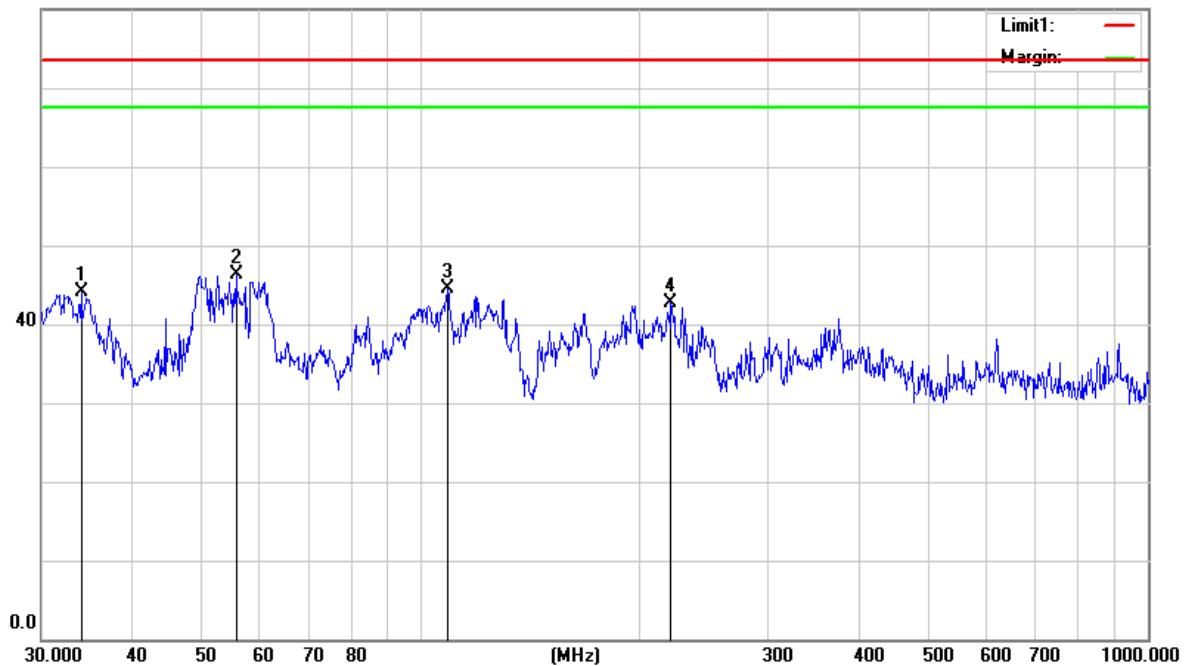
80.0 dBuV/m



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over
			Level	Factor	ment		
		MHz	dBuV	dB	dBuV/m	dB	Detector
1		57.7962	79.92	-30.35	49.57	73.50	-23.93
2	*	124.5690	89.12	-33.23	55.89	73.50	-17.61
3		164.9075	87.22	-33.14	54.08	73.50	-19.42
4		515.4374	67.99	-21.33	46.66	73.50	-26.84

Tested Polarization: Horizontal

80.0 dBuV/m

**Operation Mode: Middle power**

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over
		MHz	dBuV	dB	dBuV/m	dB	Detector
1	34.0365	75.11	-30.95	44.16	73.50	-29.34	Avg
2	*	55.6094	75.50	-29.28	46.22	73.50	-27.28
3	108.6470	74.59	-30.15	44.44	73.50	-29.06	Avg
4	220.6171	71.42	-28.69	42.73	73.50	-30.77	Avg

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

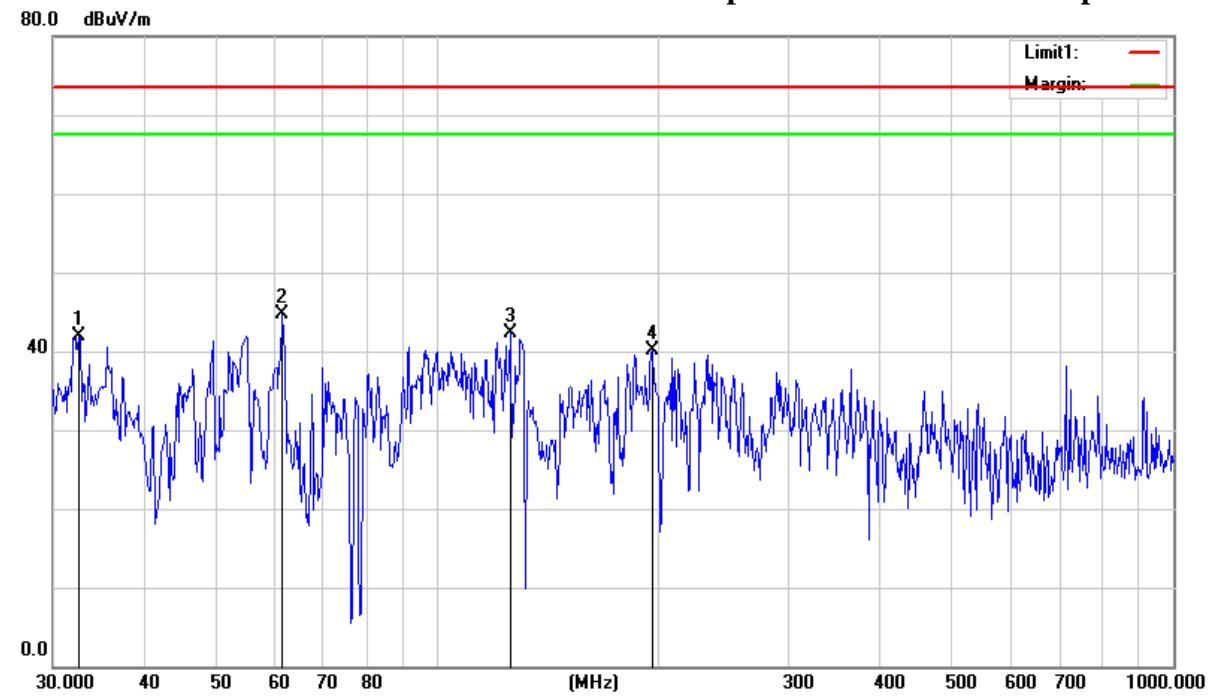
80.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Over Detector
1		60.0691	78.10	-30.80	47.30	73.50	-26.20	AVG
2		121.1231	85.72	-32.80	52.92	73.50	-20.58	AVG
3	*	187.0958	85.31	-31.88	53.43	73.50	-20.07	AVG
4		497.6765	65.55	-21.90	43.65	73.50	-29.85	AVG

Tested Polarization: Horizontal

Operation Mode: the lowest power



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Over Detector
1		32.5198	73.23	-31.24	41.99	73.50	-31.51	AVG
2	*	61.3463	74.70	-30.08	44.62	73.50	-28.88	AVG
3		125.4457	74.79	-32.49	42.30	73.50	-31.20	AVG
4		195.8220	69.86	-29.79	40.07	73.50	-33.43	AVG

5.3.5 Measurement uncertainty

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