

TEST REPORT

Reference No..... : WTX22X02010154W-1
FCC ID : 2A4GPVT-FF005
Applicant : LETUO E-COMMERCE (DONGGUAN) CO., LTD.
Address..... : Dahegu Cultural Industry Park, No.1,Wangao Rd., Wanjiang St., Dongguan
Product Name : Fish Finder
Test Model. : VT-FF005
Standards : FCC Part 15.249
Date of Receipt sample : February 10, 2022
Date of Test..... : February 10, 2022 to February 14, 2022
Date of Issue : February 14, 2022
Test Result..... : **Pass**

Remarks:

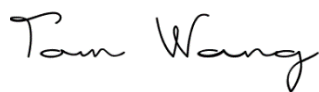
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Prepared By:

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Report version

Version No.	Date of issue	Description
Rev.00	February 14, 2022	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: LETUO E-COMMERCE (DONGGUAN) CO., LTD.
Address of applicant: Dahegu Cultural Industry Park, No.1,Wangao Rd., Wanjiang St., Dongguan

Manufacturer: LETUO E-COMMERCE (DONGGUAN) CO., LTD.
Address of manufacturer: Dahegu Cultural Industry Park, No.1,Wangao Rd., Wanjiang St., Dongguan

General Description of EUT	
Product Name:	Fish Finder
Trade Name:	Venterior
Model No.:	VT-FF005
Adding Model:	VT-FF005B, VT-FF005BK, VT-FF005R, VT-FF005Y, VT-FF005G, VT-FF005C, XF06E, XF88B
Rated Voltage:	DC 3.7V from Battery
Battery capacity:	1000mAh
Power Adaptor:	/
Serial Number:	56LE1706
<i>Note: The test data is gathered from a production sample provided by the manufacturer. provided by the manufacturer. The appearance of others models listed in the report is different from main-test model VT-FF005, but the circuit and the electronic construction do not change, declared by the manufacturer.</i>	

Technical Characteristics of EUT	
Frequency Range:	920.625MHz-924.375MHz
Max. Field Strength:	90.68 dBuV/m
Modulation:	MSK
Quantity of Channels:	16
Antenna Type:	Integral
Antenna Gain:	1dBi
<i>Note: The Antenna Gain is provided by the customer and can affect the validity of results.</i>	

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.249: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5875 MHz, and 24.0-24.25 GHz.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Channel list as follow:							
channel	Frequency (MHz)	channel	Frequency (MHz)	channel	Frequency (MHz)	channel	Frequency (MHz)
01	920.625	05	921.625	09	922.625	13	923.625
02	920.875	06	921.875	10	922.875	14	923.875
03	921.125	07	922.125	11	923.125	15	924.125
04	921.375	08	922.375	12	923.375	16	924.375

Test Mode List		
Test Mode	Description	Remark
TM1	Low Channel	920.625MHz
TM2	Middle Channel	922.125MHz
TM3	High Channel	924.375MHz

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	45~55 %
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	1.0	Shielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	1.0	Shielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	± 0.42dB
Occupied Bandwidth	Conducted	± 1.5%

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Conducted Spurious Emission	Conducted	$\pm 2.17\text{dB}$
Conducted Emissions	Conducted	9-150kHz $\pm 3.74\text{dB}$
		0.15-30MHz $\pm 3.34\text{dB}$
Transmitter Spurious Emissions	Radiated	30-200MHz $\pm 4.52\text{dB}$
		0.2-1GHz $\pm 5.56\text{dB}$
		1-6GHz $\pm 3.84\text{dB}$
		6-18GHz $\pm 3.92\text{dB}$

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
SEMT-1075	Communication Tester	Rohde & Schwarz	CMW500	148650	2021-03-27	2022-03-26
SEMT-1063	GSM Tester	Rohde & Schwarz	CMU200	114403	2021-03-27	2022-03-26
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2021-03-27	2022-03-26
SEMT-1079	Spectrum Analyzer	Agilent	N9020A	US47140102	2021-03-27	2022-03-26
SEMT-1080	Signal Generator	Agilent	83752A	3610A01453	2021-03-27	2022-03-26
SEMT-1081	Vector Signal Generator	Agilent	N5182A	MY47070202	2021-03-27	2022-03-26
SEMT-1028	Power Divider	Weinschel	1506A	PM204	2021-03-27	2022-03-26
SEMT-1082	Power Divider	RF-Lambda	RFLT4W5M18G	14110400027	2021-03-27	2022-03-26
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	/	/
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	/	/
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	/	/
SEMT-C004	Cable	Zheng DI	2M0RFC	/	/	/
SEMT-C005	Cable	Zheng DI	1M0RFC	/	/	/
SEMT-C006	Cable	Zheng DI	1M0RFC	/	/	/
☒ Chamber A: Below 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2021-03-27	2022-03-26
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-03-27	2022-03-26
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2021-04-12	2022-04-11
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-19	2023-03-18
SEMT-1068	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-19	2023-03-18
☒ Chamber A: Above 1GHz						

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SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2021-03-27	2022-03-26
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-03-27	2022-03-26
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2021-04-12	2022-04-11
SEMT-1042	Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA91705 82	2021-04-27	2023-04-26
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-1415 3	2021-04-27	2022-04-26
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2021-03-27	2022-03-26
SEMT-1166	Power Limiter	Agilent	N9356B	MY4545037 6	2021-03-27	2022-03-26
☐ Chamber B: Below 1GHz						
SEMT-1068	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
SEMT-1067	Amplifier	Agilent	8447D	2944A10179	2021-04-12	2022-04-11
SEMT-1066	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2021-05-06	2022-05-05
☐ Chamber C: Below 1GHz						
SEMT-1319	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2021-12-03	2022-12-02
SEMT-1343	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
SEMT-1333	Amplifier	HP	8447F	2944A03869	2021-04-15	2022-04-14
☒ Conducted Room 1#						
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2021-04-12	2022-04-11
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2021-04-15	2022-04-14
SEMT-1003	AC LISN	Schwarz beck	NSLK8126	8126-224	2021-04-12	2022-04-11

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission)*	Farad	EZ-EMC	RA-03A1

*Remark: indicates software version used in the compliance certification testing.

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2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§15.203	Antenna Requirement	Compliant
§15.205	Restricted Band of Operation	Compliant
§15.207(a)	Conducted Emission	Compliant
§15.209(a)(f)	Radiated Spurious Emissions	Compliant
§15.249(a)	Field Strength of Emissions	Compliant
§15.249(d)	Out of Band Emission	Compliant
§15.215(c)	Emission Bandwidth	Compliant

N/A: Not applicable.

3. Antenna Requirements

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Test Result

This product has an integral antenna, fulfill the requirement of this section.

4. Radiated Emissions

4.1 Standard Applicable

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field strength of fundamental (milli-volts/meter)	Field strength of Harmonics (micro-volts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

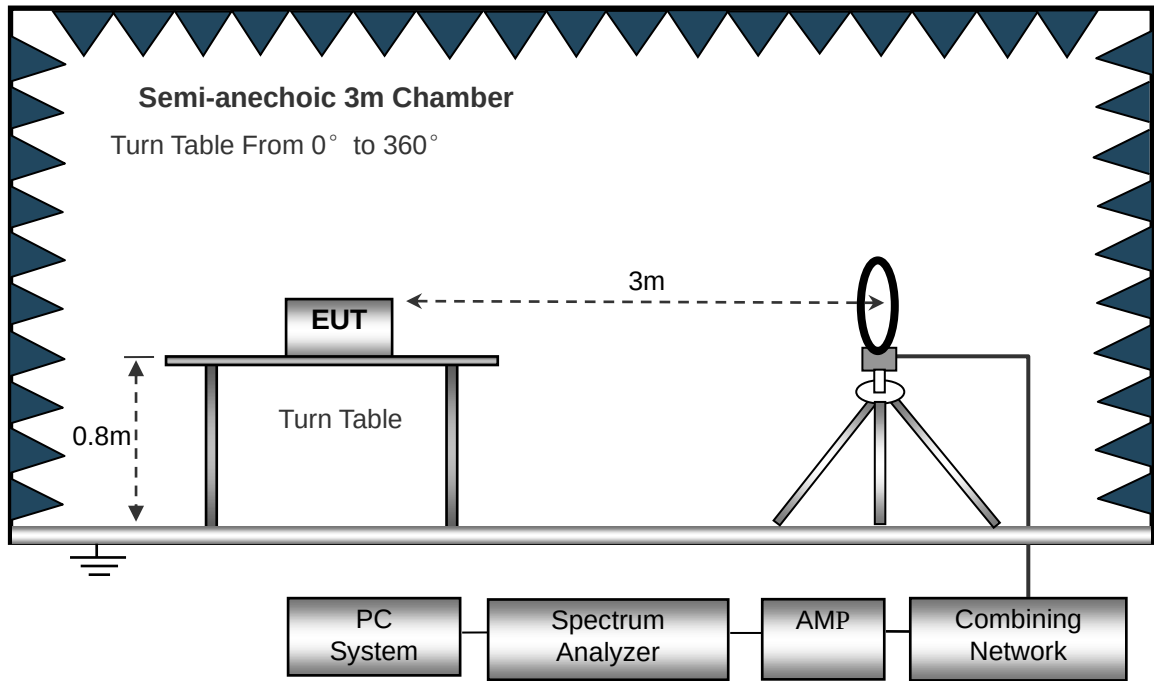
4.2 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.249(a) and FCC Part 15.209 Limit.

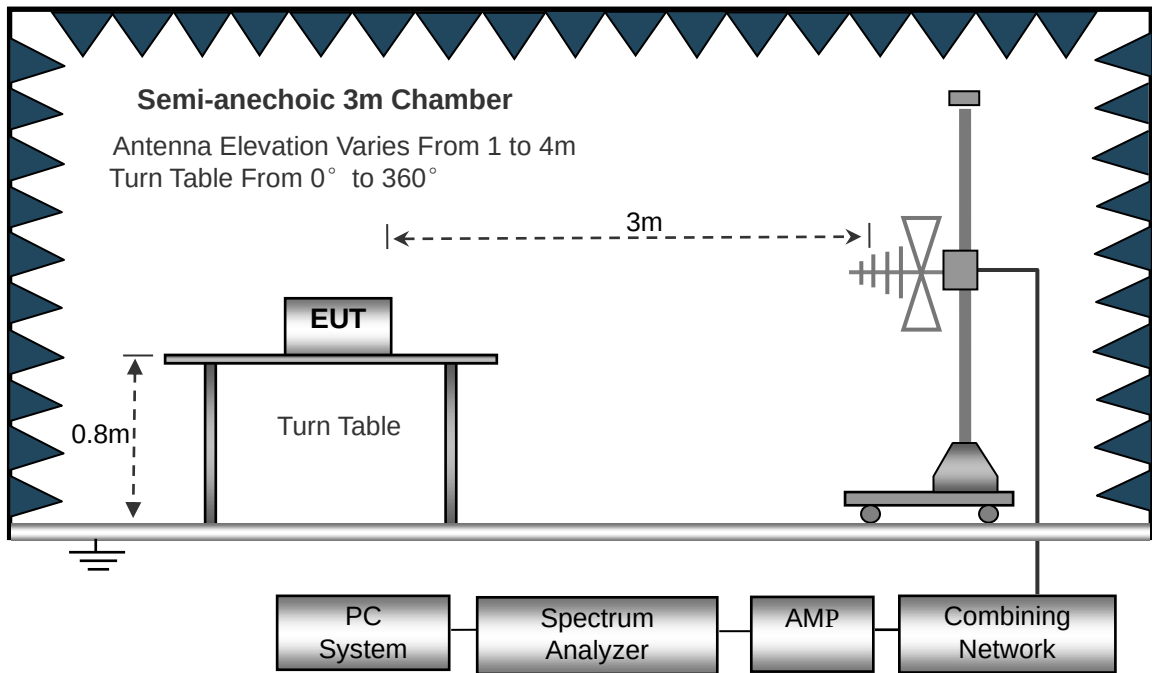
The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle.

The spacing between the peripherals was 10cm.

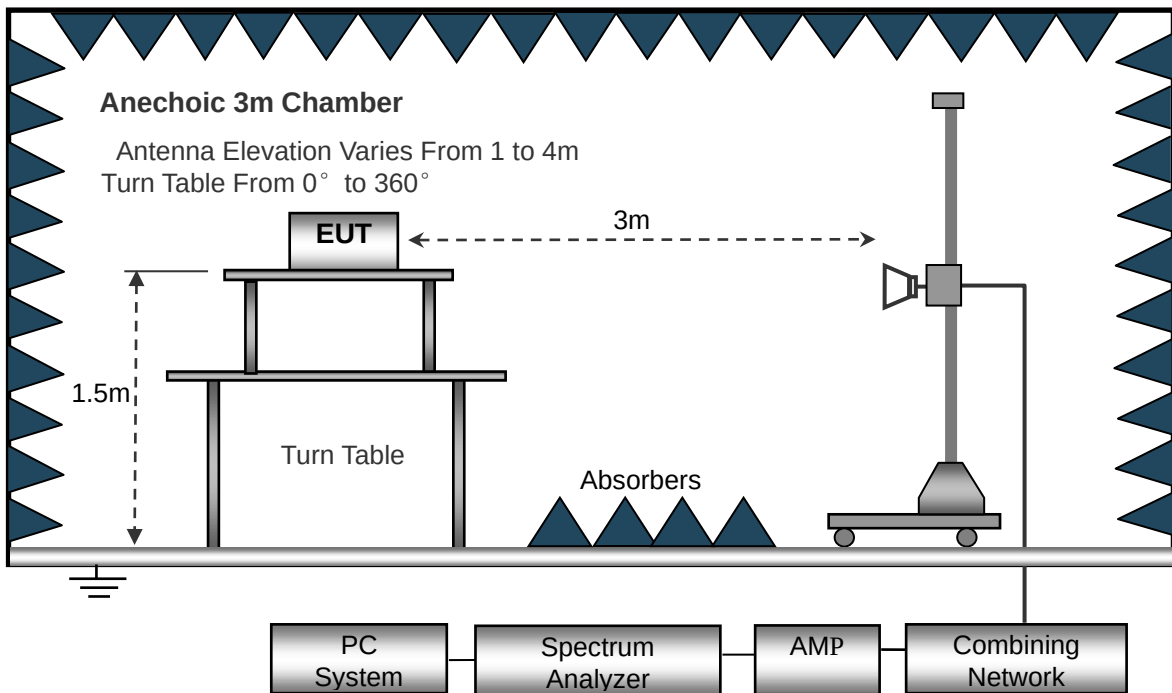
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30MHz to 1GHz.



The test setup for emission measurement above 1GHz.



Frequency :9kHz-30MHz
 RBW=10KHz,
 VBW =30KHz
 Sweep time= Auto
 Trace = max hold
 Detector function = peak

Frequency :30MHz-1GHz
 RBW=120KHz,
 VBW=300KHz
 Sweep time= Auto
 Trace = max hold
 Detector function = peak, QP

Frequency :Above 1GHz
 RBW=1MHz,
 VBW=3MHz(Peak), 10Hz(AV)
 Sweep time= Auto
 Trace = max hold
 Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\begin{aligned}\text{Result} &= \text{Indicated Reading} + \text{Correct} \\ \text{Correct} &= \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}\end{aligned}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB μ V means the emission is 6dB μ V below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Result} - \text{FCC Part 15C Limit}$$

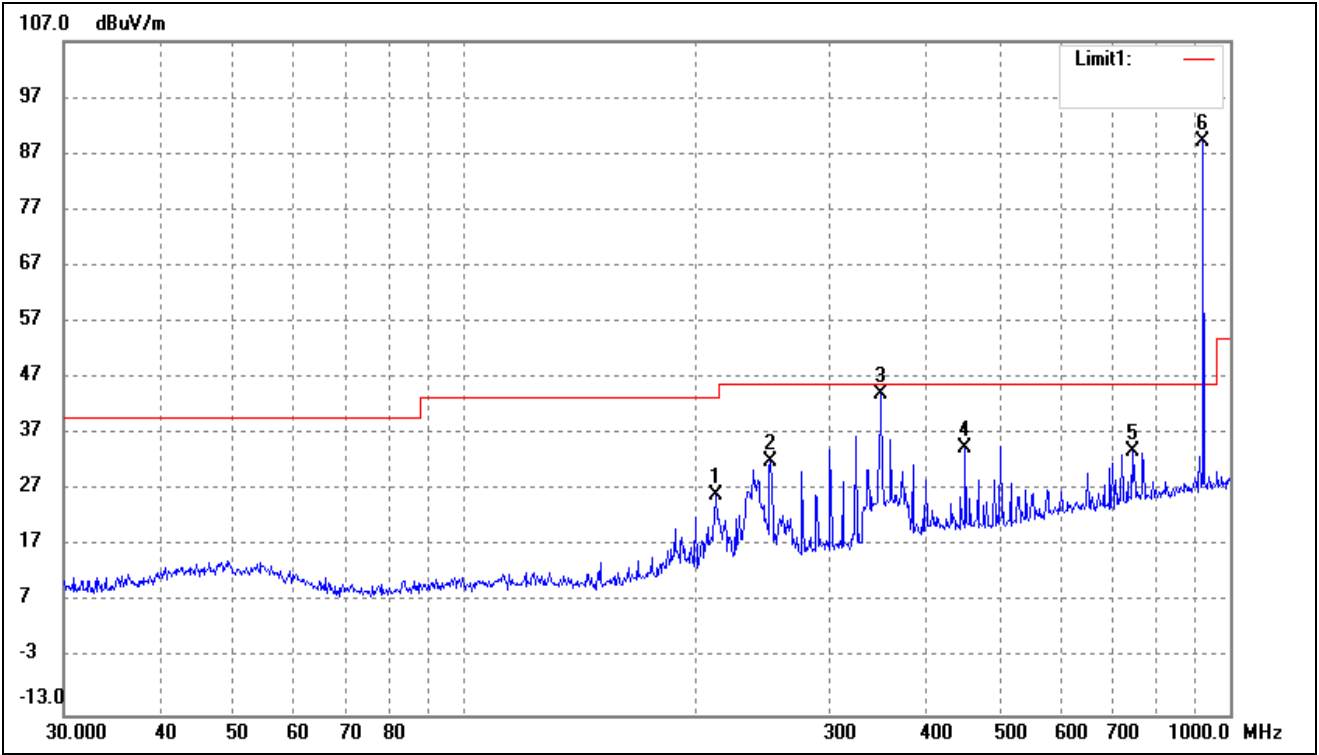
4.4 Summary of Test Results/Plots

Note: 1. this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

2.

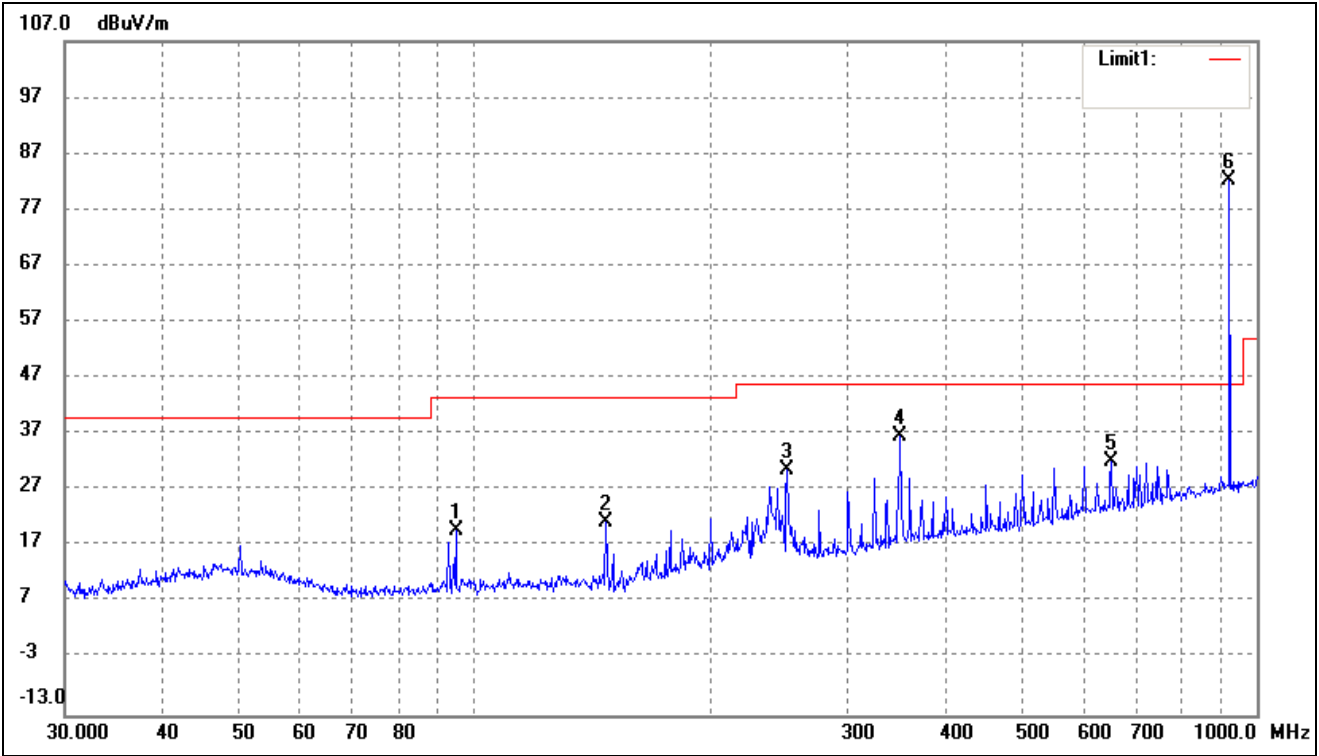
➤ Spurious Emissions Below 1GHz

Test Channel	Low	Polarity:	Horizontal
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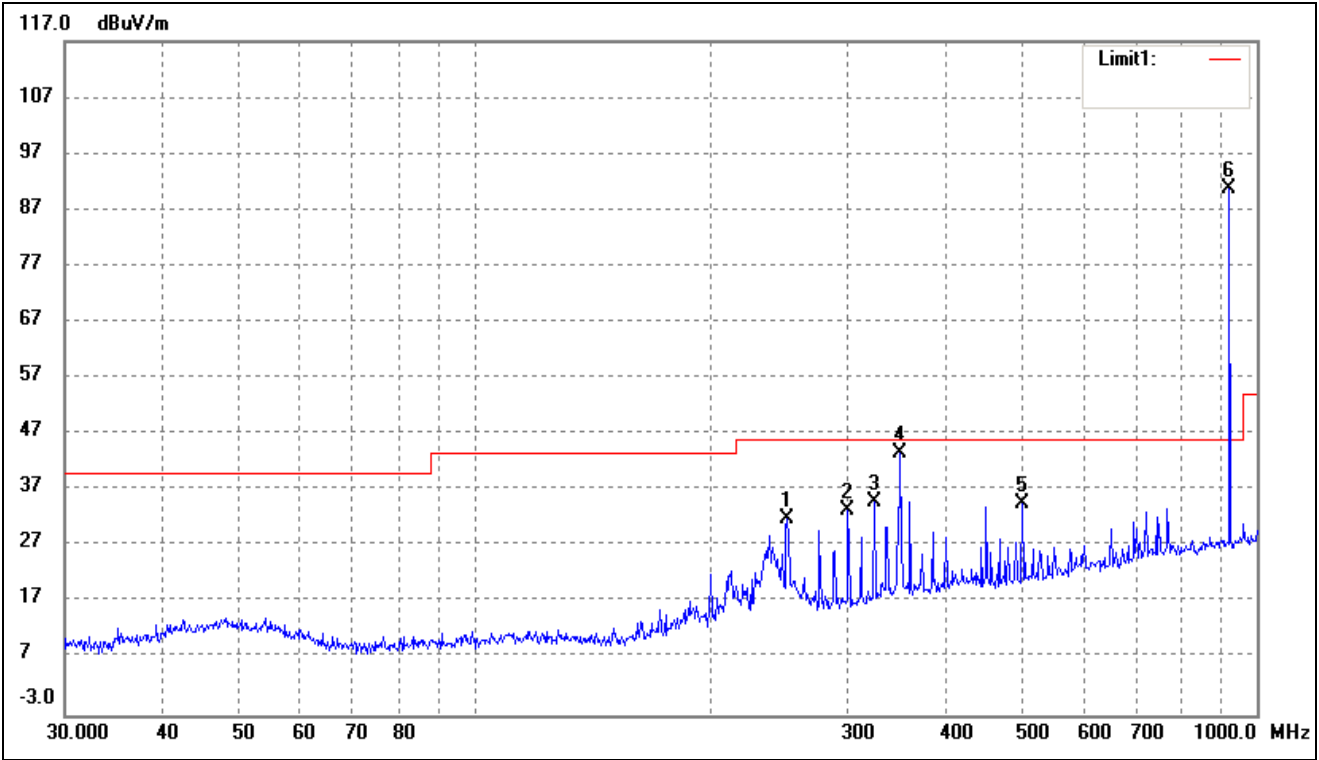
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	212.992	33.85	-7.69	26.16	43.50	-17.34	-	-	peak
2	251.1573	38.39	-6.16	32.23	46.00	-13.77	-	-	peak
3	350.4537	47.34	-3.13	44.21	46.00	-1.79	-	-	peak
4	451.1119	36.19	-1.59	34.60	46.00	-11.40	-	-	peak
5	744.843	30.07	3.73	33.80	46.00	-12.20	-	-	peak
6	920.6019	83.48	5.77	89.25	94.00	-4.75	-	-	Fundamental

Test Channel	Low	Polarity:	Vertical
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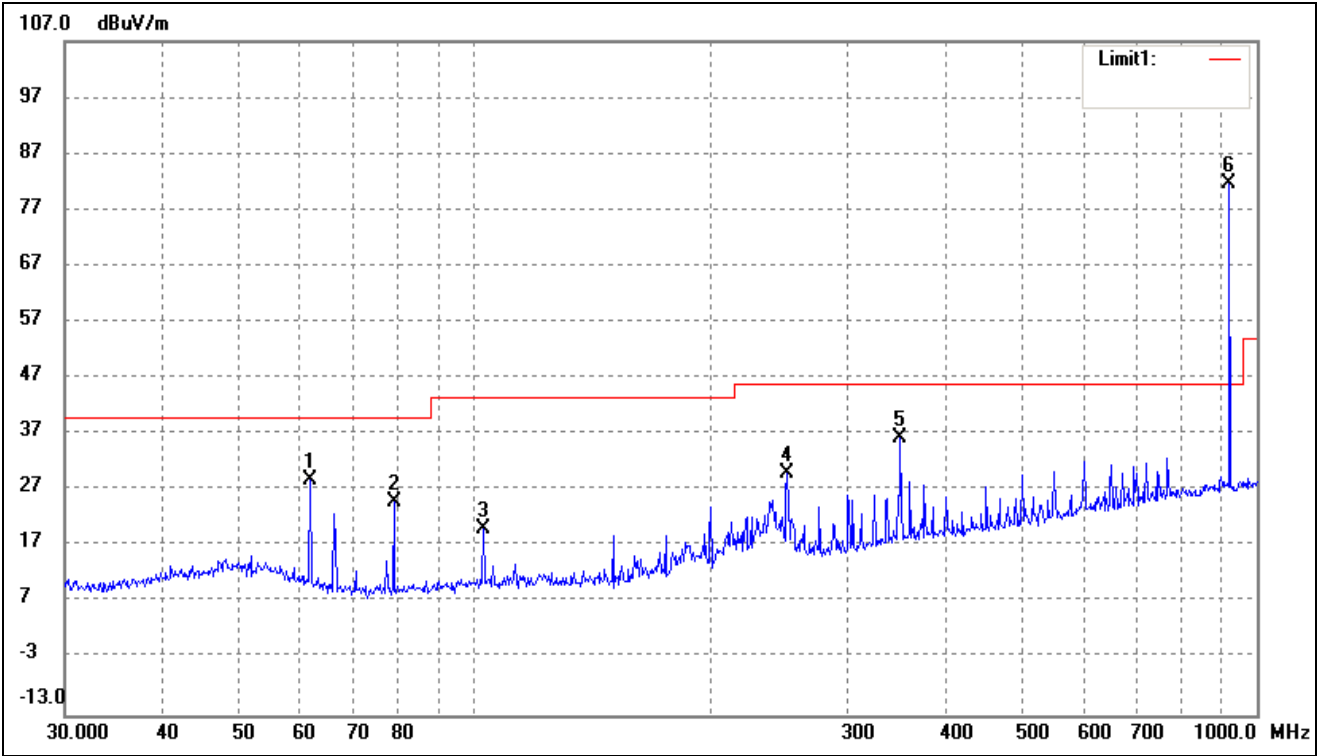
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	94.737	31.35	-11.65	19.70	43.50	-23.80	-	-	peak
2	147.3805	32.47	-11.02	21.45	43.50	-22.05	-	-	peak
3	251.1573	36.70	-6.16	30.54	46.00	-15.46	-	-	peak
4	350.4537	39.72	-3.13	36.59	46.00	-9.41	-	-	peak
5	651.9186	29.82	2.25	32.07	46.00	-13.93	-	-	peak
6	920.6019	76.51	5.77	82.28	94.00	-11.72	-	-	Fundamental

Test Channel	Middle	Polarity:	Horizontal
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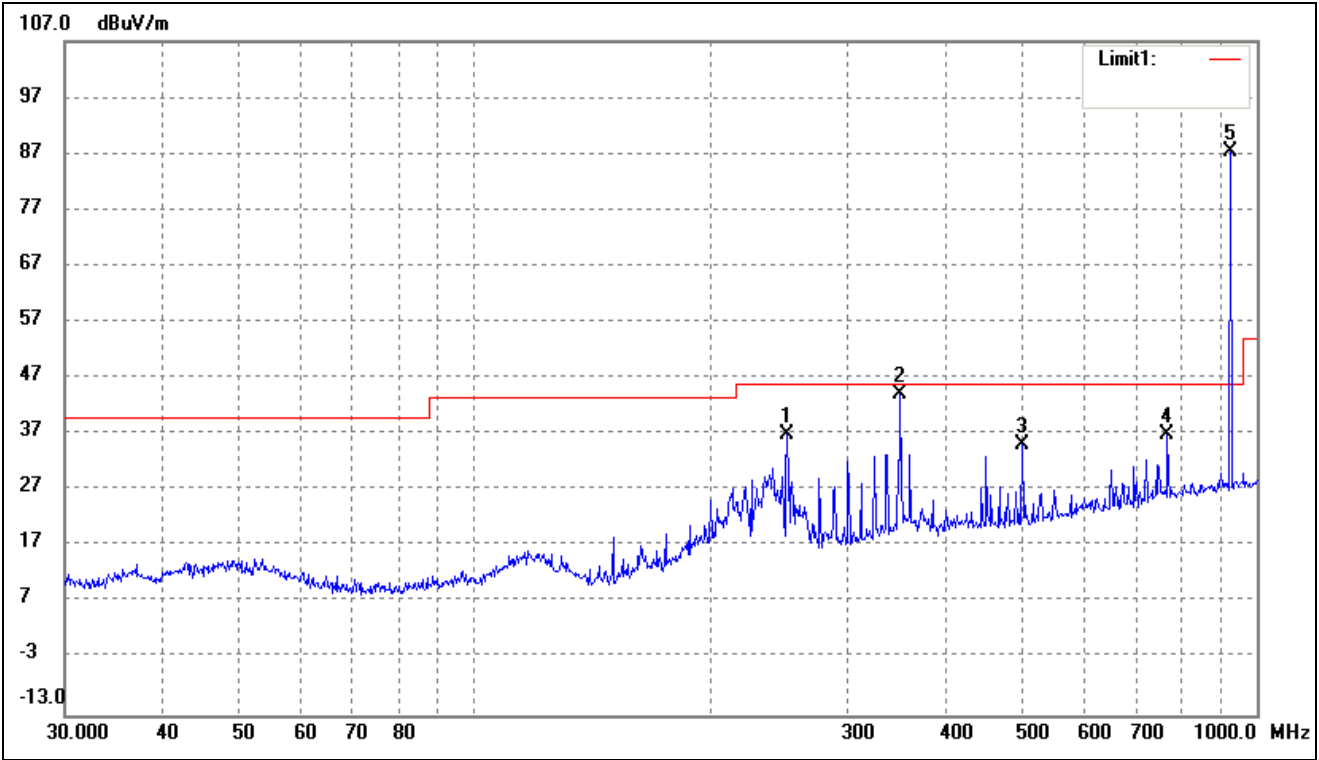
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	251.1573	37.96	-6.16	31.80	46.00	-14.20	-	-	peak
2	300.3442	38.46	-5.00	33.46	46.00	-12.54	-	-	peak
3	324.433	39.26	-4.26	35.00	46.00	-11.00	-	-	peak
4	350.4537	46.74	-3.13	43.61	46.00	-2.39	-	-	peak
5	501.1559	35.17	-0.62	34.55	46.00	-11.45	-	-	peak
6	922.1019	84.91	5.77	90.68	94.00	-3.32	-	-	Fundamental

Test Channel	Middle	Polarity:	Vertical
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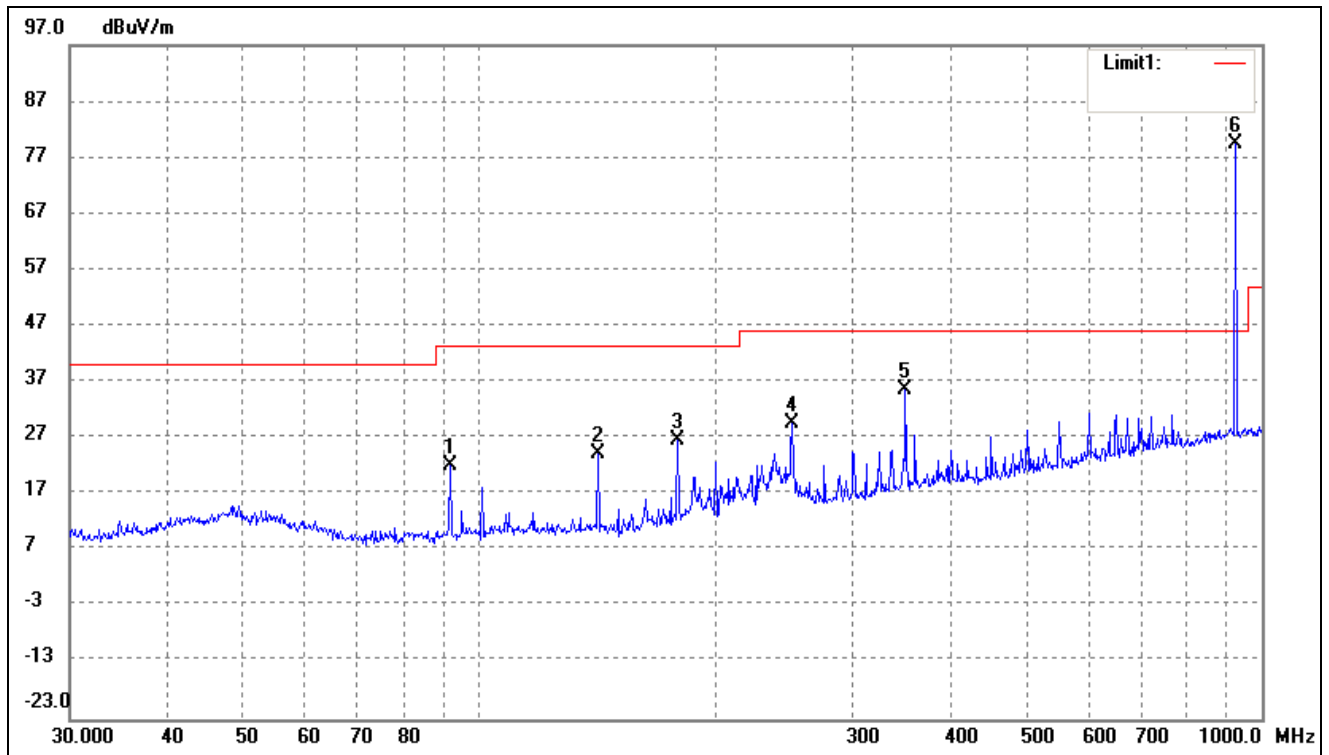
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	61.755	39.29	-10.84	28.45	40.00	-11.55	-	-	peak
2	78.9421	36.79	-12.32	24.47	40.00	-15.53	-	-	peak
3	102.6961	30.73	-11.03	19.70	43.50	-23.80	-	-	peak
4	251.1573	35.83	-6.16	29.67	46.00	-16.33	-	-	peak
5	350.4537	38.90	-3.13	35.77	46.00	-10.23	-	-	peak
6	922.1019	75.42	5.77	81.19	94.00	-12.81	-	-	Fundamental

Test Channel	High	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	251.1573	43.01	-6.16	36.85	46.00	-9.15	-	-	peak
2	350.4537	47.32	-3.13	44.19	46.00	-1.81	-	-	peak
3	501.1559	35.66	-0.62	35.04	46.00	-10.96	-	-	peak
4	768.7251	32.81	4.04	36.85	46.00	-9.15	-	-	peak
5	924.3519	81.60	5.78	87.38	94.00	-6.62	-	-	Fundamental

Test Channel	High	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	91.7932	34.02	-11.88	22.14	43.50	-21.36	-	-	peak
2	141.8031	35.03	-10.93	24.10	43.50	-19.40	-	-	peak
3	179.3633	35.88	-9.33	26.55	43.50	-16.95	-	-	peak
4	251.1573	35.77	-6.16	29.61	46.00	-16.39	-	-	peak
5	350.4537	38.69	-3.13	35.56	46.00	-10.44	-	-	peak
6	924.3519	73.71	5.78	79.49	94.00	-14.51	-	-	Fundamental

Remark: '-' Means the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

➤ Spurious Emissions Above 1GHz

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-920.625MHz							
1841.25	34.29	10.28	44.57	74	-29.43	H	PK
1841.25	20.89	10.28	31.17	54	-22.83	H	AV
1841.25	36.17	10.28	46.45	74	-27.55	V	PK
1841.25	25.45	10.28	35.73	54	-18.27	V	AV
Middle Channel-922.125MHz							
1844.25	34.97	10.29	45.26	74	-28.74	H	PK
1844.25	19.45	10.29	29.74	54	-24.26	H	AV
1844.25	34.97	10.29	45.26	74	-28.74	V	PK
1844.25	20.33	10.29	30.62	54	-23.38	V	AV
High Channel-924.375MHz							
1848.75	33.93	10.3	44.23	74	-29.77	H	PK
1848.75	21.02	10.3	31.32	54	-22.68	H	AV
1848.75	36.12	10.3	46.42	74	-27.58	V	PK
1848.75	22.5	10.3	32.8	54	-21.2	V	AV

*Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 3th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
The measurements greater than 20dB below the limit from 9kHz to 30MHz.*

5. Out of Band Emissions

5.1 Standard Applicable

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

5.2 Test Procedure

As the radiation test, set the Lowest and Highest Transmitting Channel, observed the outside band of 902MHz to 928MHz, than mark the higher-level emission for comparing with the FCC rules.

5.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Result} = \text{Indicated Reading} + \text{Correct}$$

$$\text{Correct} = \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB μ V means the emission is 6dB μ V below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Result} - \text{FCC Part 15C Limit}$$

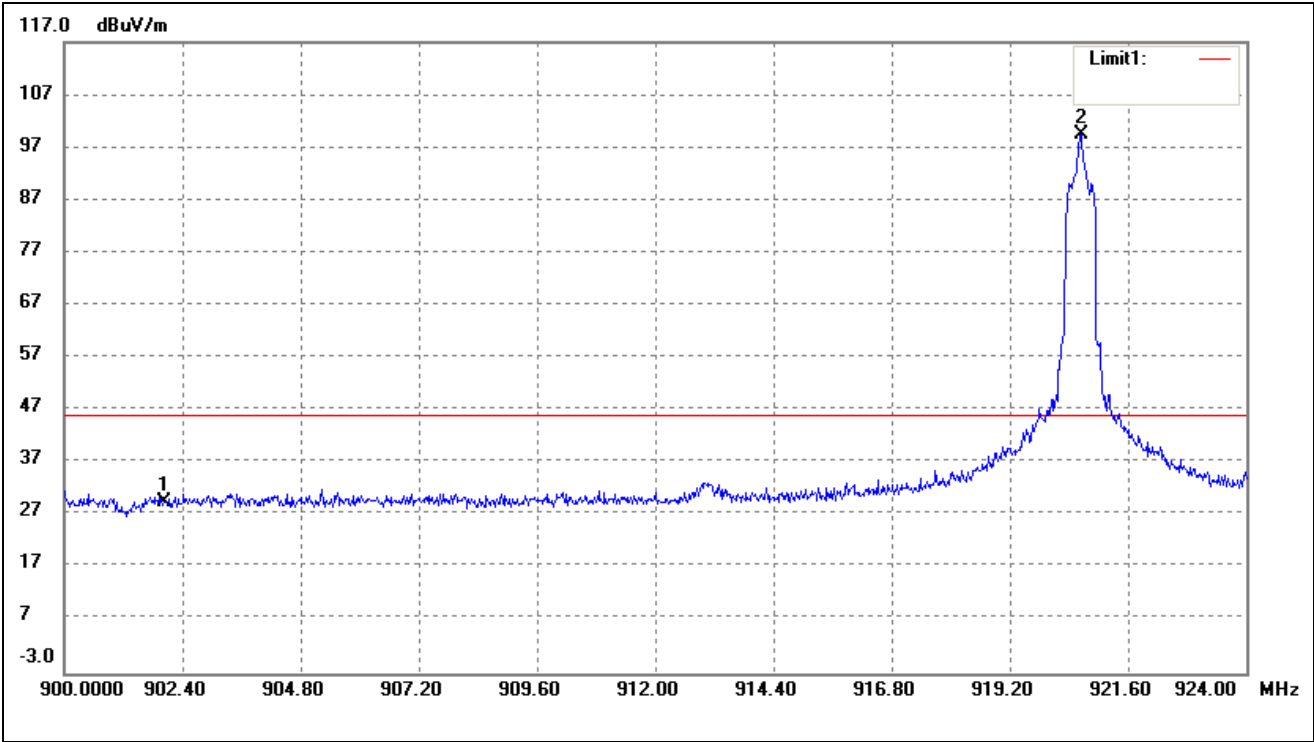
5.4 Summary of Test Results/Plots

Test mode	Frequency	Limit	Result
	MHz	dBuV / dBc	
Lowest	902.00	<46dBuV	Pass
Highest	928.00	<46dBuV	Pass

The edge emissions are below the FCC 15.209 Limits or complies with the 15.249 requirements.

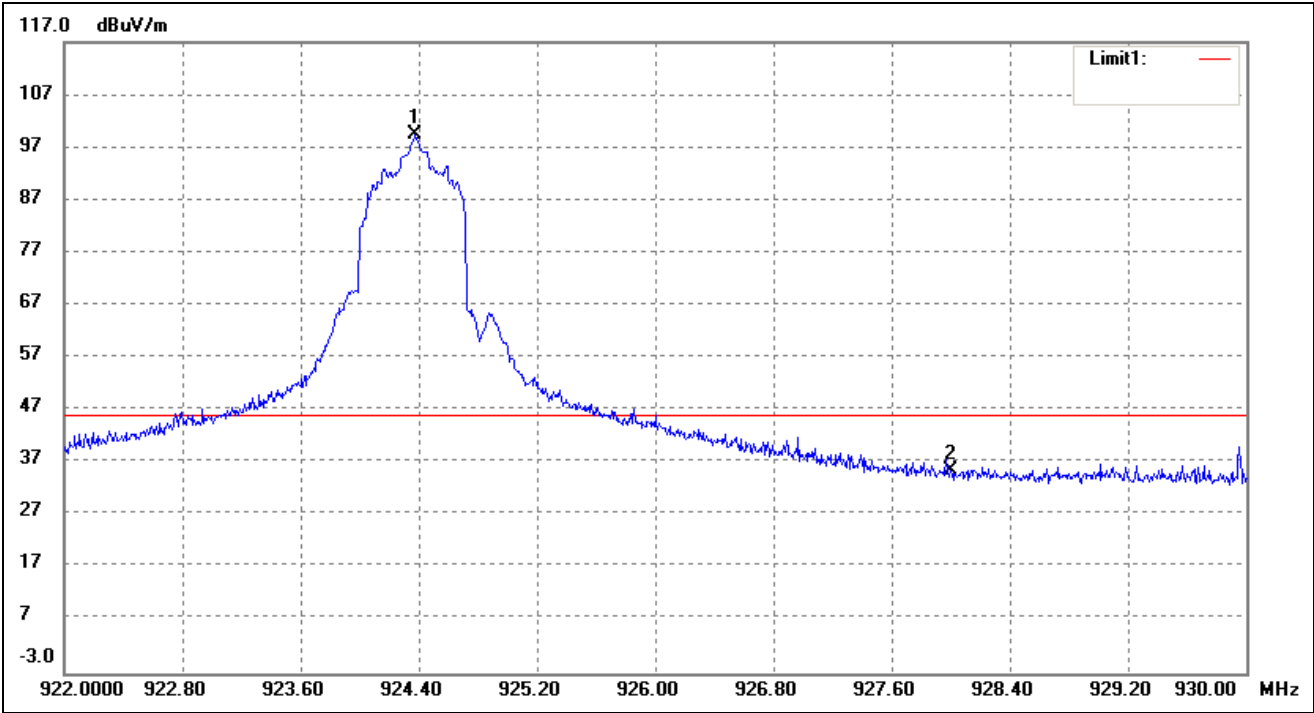
Please refer to the test plots as below.

Test Channel	Low	Polarity:	Vertical(worst case)
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	902.0000	23.82	5.65	29.47	46	-16.53	Peak Detector
2	920.6400	93.75	5.76	99.51	/	/	Fundamental

Test Channel	High	Polarity:	Vertical(worst case)
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	924.3760	93.71	5.78	99.49	/	/	Fundamental
2	928.0000	29.72	5.8	35.52	46	-10.48	Peak Detector

6. Emission Bandwidth

6.1 Standard Applicable

According to 15.215(c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

6.2 Test Procedure

According to the ANSI 63.10-2013, the emission bandwidth test method as follows.

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

Set span = 3MHz, centered on a transmitting channel

RBW $\geq$ 1% 20dB Bandwidth, VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

All the trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission, use the marker-delta function to measure and record the 20dB down and 99% bandwidth of the emission.

6.3 Summary of Test Results/Plots

Channel	Frequency MHz	20dB Bandwidth kHz
Low Channel	920.625	353.913
Middle Channel	922.125	359.701
High Channel	924.375	359.395

Please refer to the following test plots:

Channel	Agilent Spectrum Analyzer Readings
Low Channel	Agilent Ch Freq 920.625 MHz Trig Free Occupied Bandwidth Center 920.625000 MHz Ref 40 dBm Atten 50 dB #Peak Log 10 dB/ Center 920.6 MHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts) Occupied Bandwidth 314.7761 kHz Occ BW % Pwr 99.00 % x dB -20.00 dB Transmit Freq Error -437.104 Hz x dB Bandwidth 353.913 kHz Freq/Channel Center Freq 920.625000 MHz Start Freq 919.125000 MHz Stop Freq 922.125000 MHz CF Step 300.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off Scale Type Log Lin
Middle Channel	Agilent Ch Freq 922.125 MHz Trig Free Occupied Bandwidth Center 922.125000 MHz Ref 40 dBm Atten 50 dB #Peak Log 10 dB/ Center 922.1 MHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts) Occupied Bandwidth 318.7859 kHz Occ BW % Pwr 99.00 % x dB -20.00 dB Transmit Freq Error -987.534 Hz x dB Bandwidth 359.701 kHz Trace/View Trace 1 2 3 Clear Write Max Hold Min Hold View Blank More 1 of 2
High Channel	Agilent Ch Freq 924.375 MHz Trig Free Occupied Bandwidth Center 924.375000 MHz Ref 40 dBm Atten 50 dB #Peak Log 10 dB/ Center 924.4 MHz Span 3 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 5 ms (401 pts) Occupied Bandwidth 318.9337 kHz Occ BW % Pwr 99.00 % x dB -20.00 dB Transmit Freq Error -817.306 Hz x dB Bandwidth 359.395 kHz Freq/Channel Center Freq 924.375000 MHz Start Freq 922.875000 MHz Stop Freq 925.875000 MHz CF Step 300.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off Scale Type Log Lin

7. Conducted Emissions

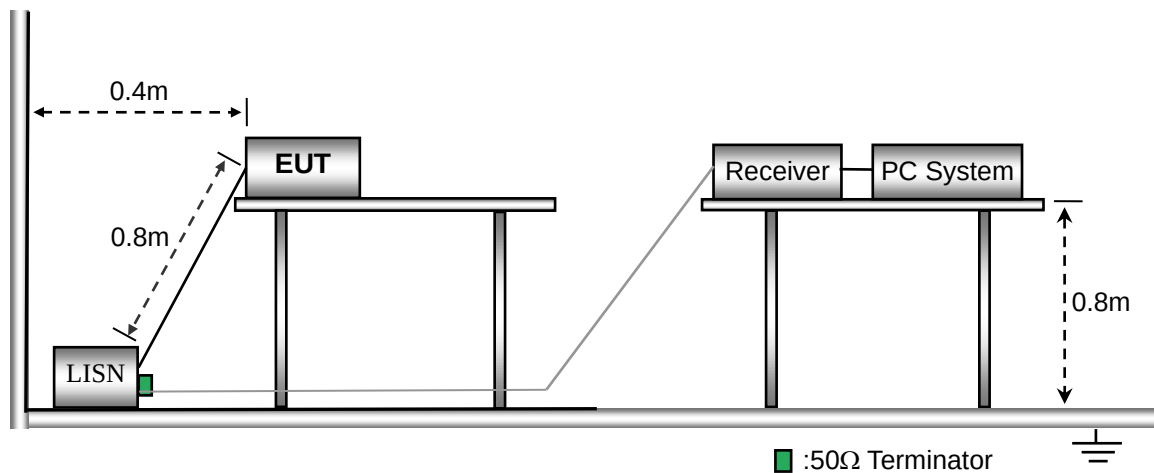
7.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle.

The spacing between the peripherals was 10cm.

7.2 Basic Test Setup Block Diagram



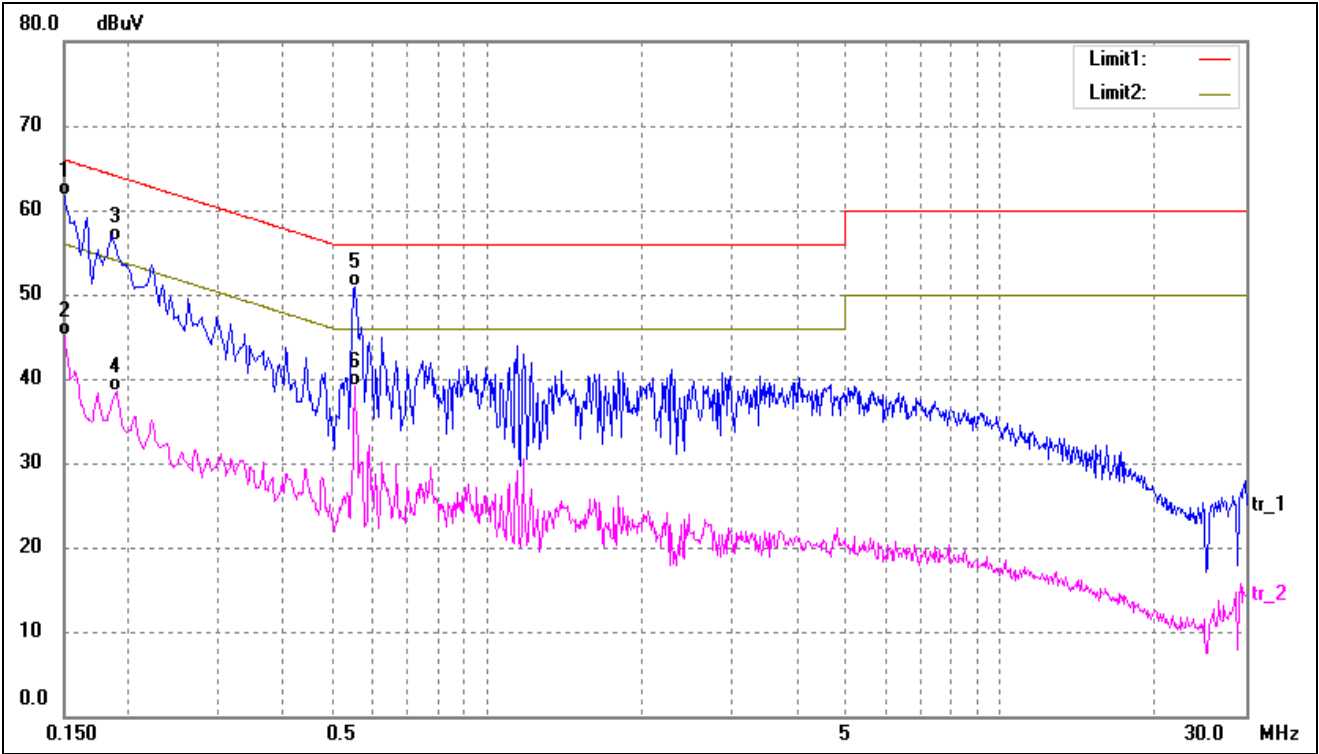
7.3 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency	150kHz
Stop Frequency	30MHz
Sweep Speed	Auto
IF Bandwidth.....	10kHz
Quasi-Peak Adapter Bandwidth	9kHz
Quasi-Peak Adapter Mode	Normal

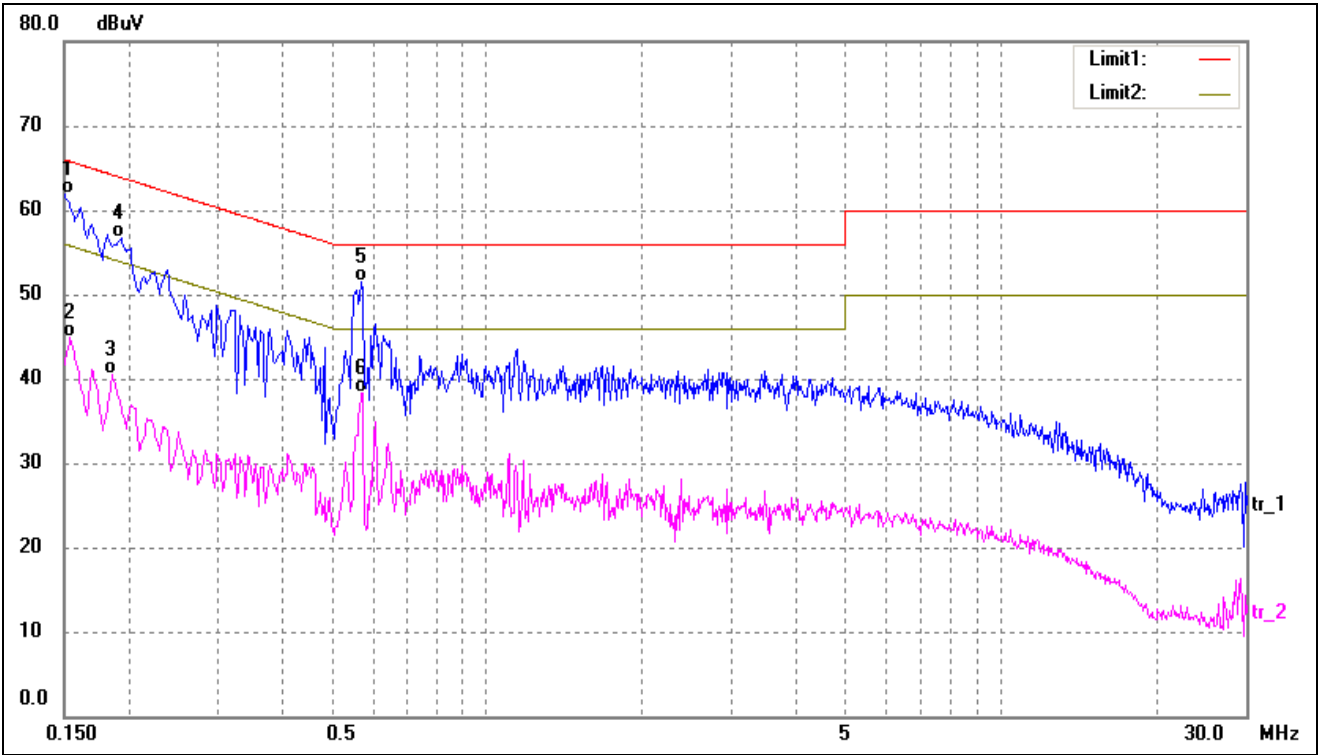
7.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.16	51.76	9.86	61.62	66	-4.38	QP
2	0.16	35.31	9.86	45.17	56	-10.83	AVG
3	0.1974	46.4	9.82	56.22	64.15	-7.93	QP
4	0.2	28.7	9.82	38.52	54.04	-15.52	AVG
5	0.564	41.15	9.81	50.96	56	-5.04	QP
6	0.564	29.28	9.81	39.09	46	-6.91	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.16	52.09	9.86	61.95	66	-4.05	QP
2	0.164	35	9.86	44.86	55.78	-10.92	AVG
3	0.196	30.73	9.82	40.55	54.21	-13.66	AVG
4	0.204	46.81	9.82	56.63	63.86	-7.23	QP
5	0.58	41.63	9.8	51.43	56	-4.57	QP
6	0.58	28.59	9.8	38.39	46	-7.61	AVG

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

******* END OF REPORT *******