

TEST REPORT

Reference No. : WTX20X07046849W-3
FCC ID..... : N3A-OTP02
Applicant..... : Netatmo
Address : 73 rue de Sevres - 92100 Boulogne-Billancourt FRANCE
Product Name : Netatmo modulating thermostat
Test Model..... : NTH01_OTH
Standards : FCC Part 15.249
Date of Receipt sample : Jul.18, 2020
Date of Test..... : Jul.18, 2020 to Dec .11, 2020
Date of Issue : Dec .11, 2020
Test Result : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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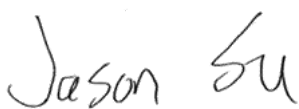
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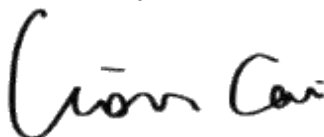
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Report version

Version No.	Date of issue	Description
Rev.00	Dec .11, 2020	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Netatmo
Address of applicant: 73 rue de Sevres - 92100 Boulogne-Billancourt FRANCE

Manufacturer: Netatmo
Address of manufacturer: 73 rue de Sevres - 92100 Boulogne-Billancourt FRANCE

General Description of EUT	
Product Name:	Netatmo modulating thermostat
Trade Name:	/
Model No.:	NTH01_OTH
Adding Model:	/
Rated Voltage:	AC100-240V 50/60Hz; USB DC5V
Battery capacity:	/
Power Adaptor:	/
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT	
Frequency Range:	916MHz, 916.8MHz
Max. Field Strength:	916MHz : 93.48dBuV/m 916.8MHz : 89.84dBuV/m
Modulation:	GFSK
Quantity of Channels:	2
Antenna Type:	Integral Antenna
Antenna Gain:	-3.7dBi

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.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

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:

Test Mode List		
Test Mode	Description	Remark
TM1	Transmitting	916MHz
TM2	Transmitting	916.8MHz

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	50~55 %.
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	0.5	Unshielded	Without Ferrite

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

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	TianYi 310-14ISK	/

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
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-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2020-04-28	2021-04-27
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2020-04-28	2021-04-27
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2020-04-28	2021-04-27
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2020-04-28	2021-04-27
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2020-04-28	2021-04-27
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2019-05-05	2021-05-04
SEMT-1042	Horn Antenna	ETS	3117	00086197	2019-05-05	2021-05-04
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2019-05-05	2021-05-04
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2019-05-05	2021-05-04
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2020-04-28	2021-04-27
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2020-04-28	2021-04-27
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2020-04-28	2021-04-27
SEMT-1168	Pre-amplifier	Direction Systems Inc.	PAP-0126	14141-12838	2020-04-28	2021-04-27
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2020-04-28	2021-04-27
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2020-04-28	2021-04-27
SEMT-1170	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2019-05-05	2021-05-04
SEMT-1166	Power Limiter	Agilent	N9356B	MY45450376	2020-04-28	2021-04-27
SEMT-1048	RF Limiter	ATTEN	AT-BSF-2400~2500	/	2020-04-28	2021-04-27
SEMT-1076	RF Switcher	Top Precision	RCS03-A2	/	2020-04-28	2021-04-27
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	2020-03-17	2021-03-16
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	2020-03-17	2021-03-16
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	2020-03-17	2021-03-16
SEMT-C004	Cable	Zheng DI	2M0RFC	/	2020-03-17	2021-03-16
SEMT-C005	Cable	Zheng DI	1M0RFC	/	2020-03-17	2021-03-16
SEMT-C006	Cable	Zheng DI	1M0RFC	/	2020-03-17	2021-03-16

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

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)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	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.

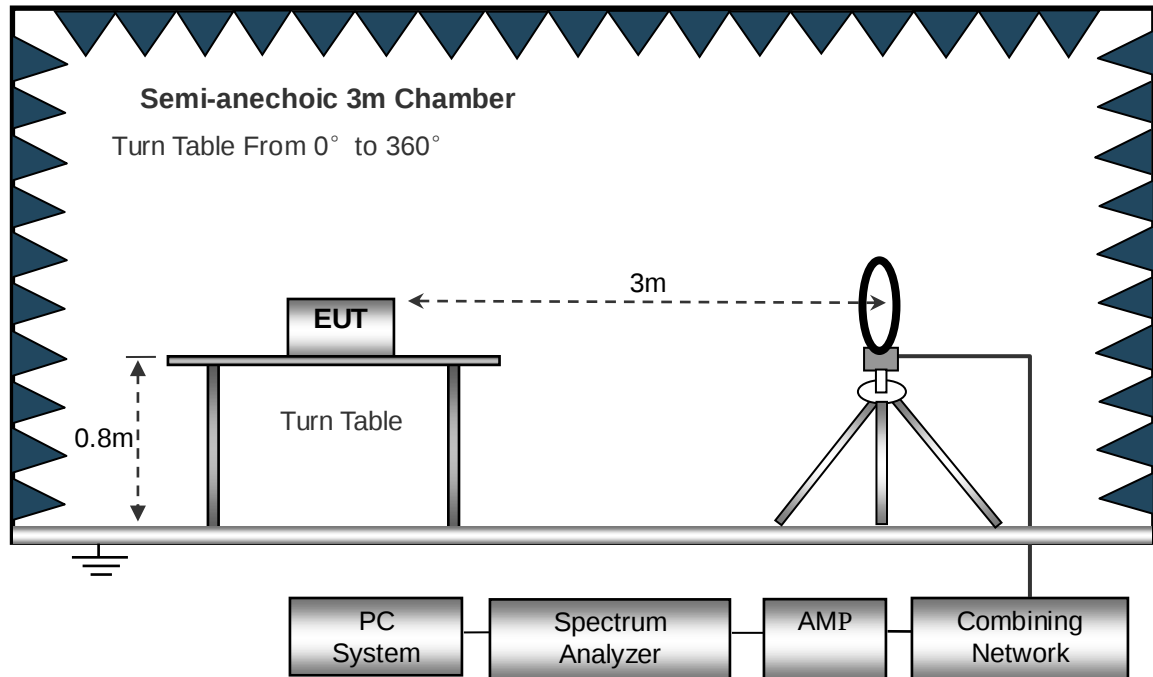
4.2 Test Procedure

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.

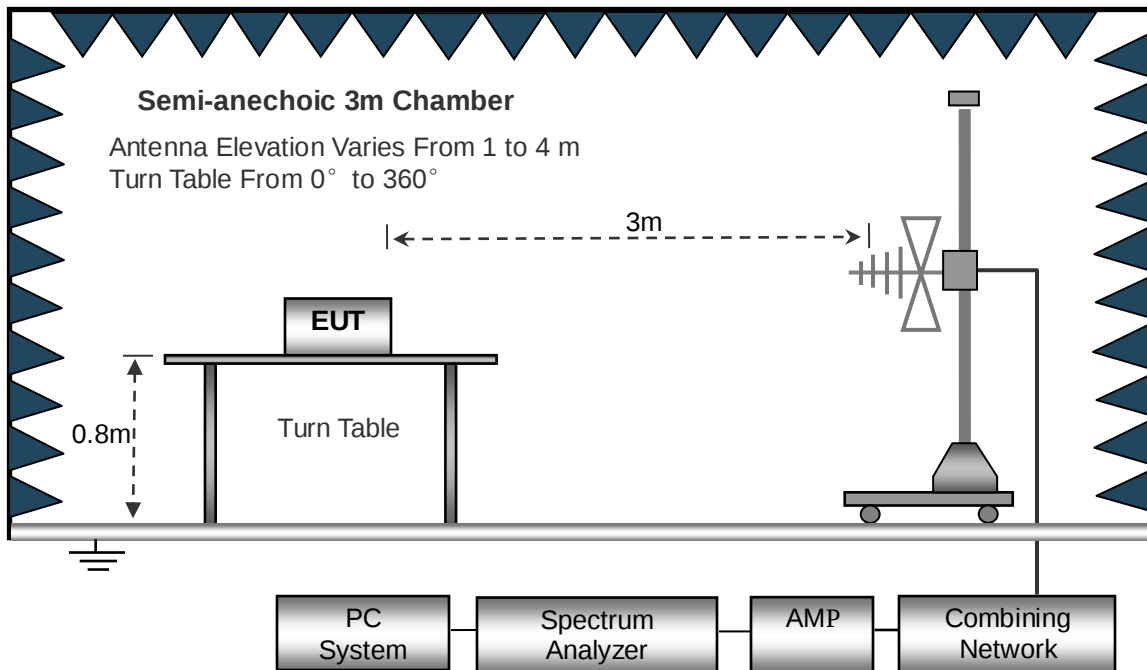
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

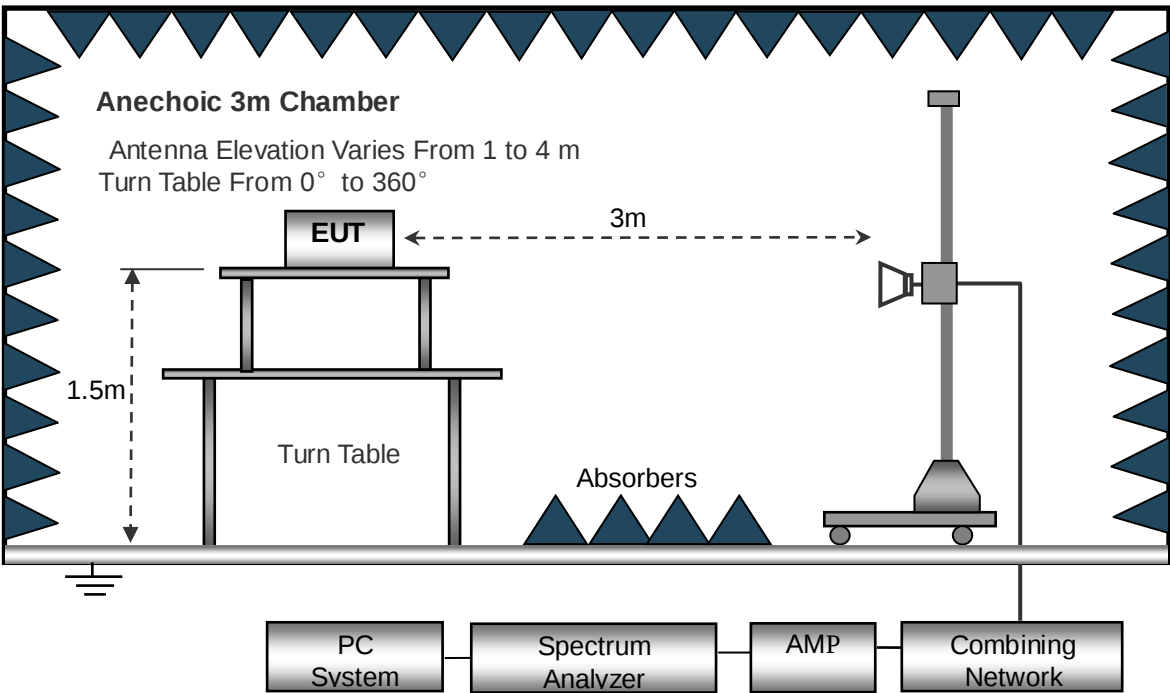
The test setup for emission measurement below 30MHz..



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



The test setup for emission measurement above 1 GHz.



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=1 MHz,

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:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

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

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15C Limit}$$

4.4 Summary of Test Results/Plots

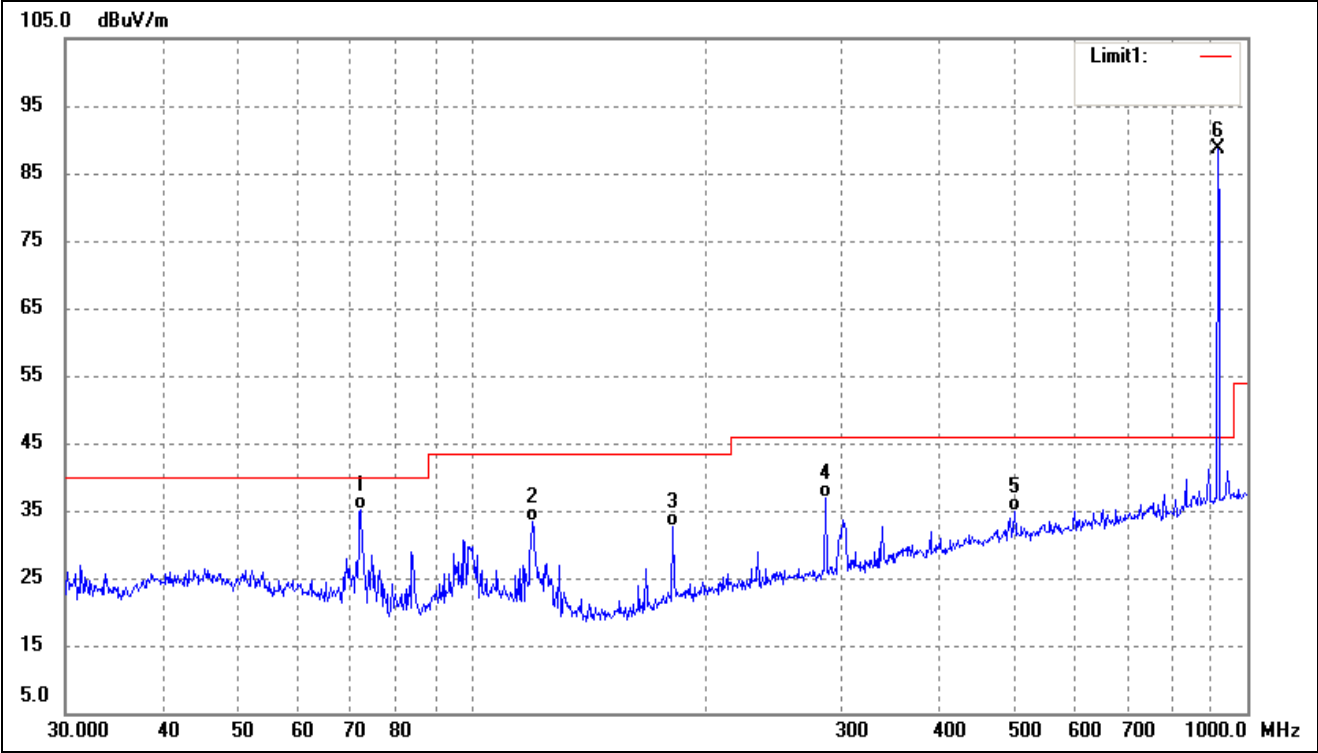
Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

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<http://www.semtest.com.cn>

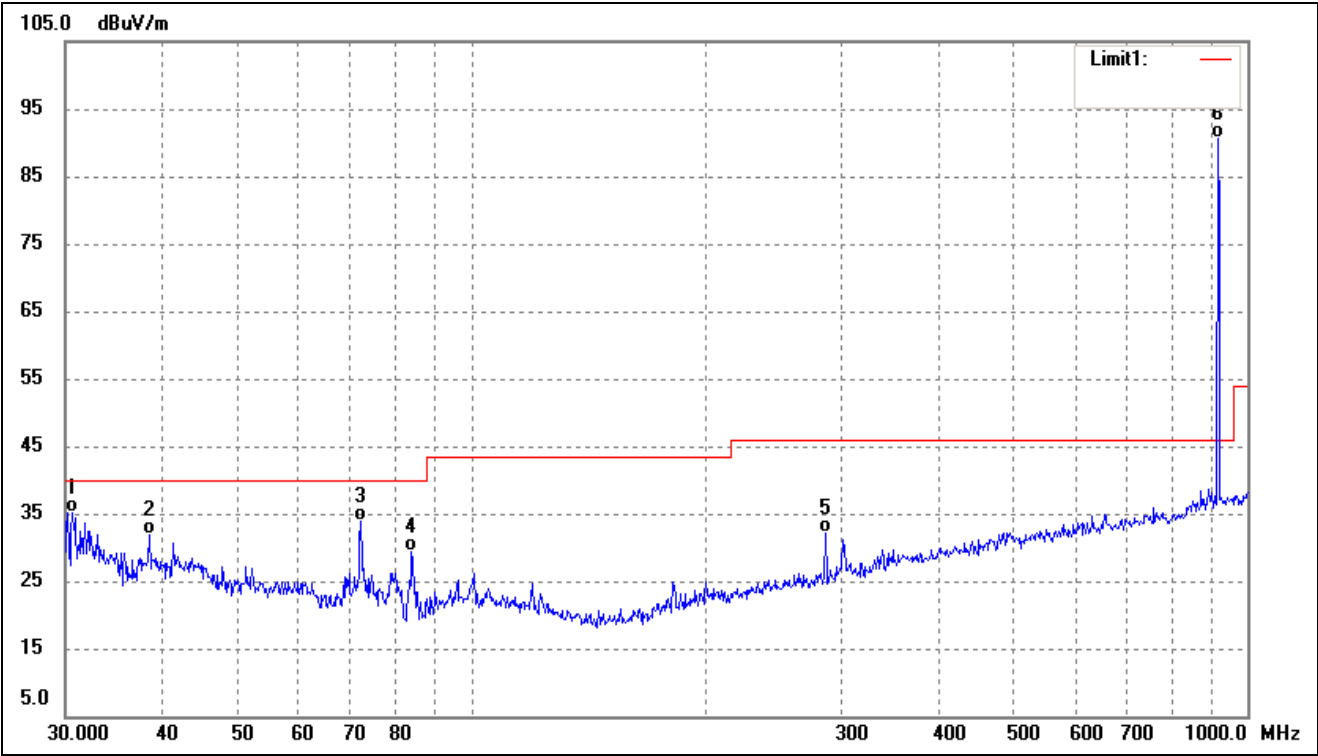
➤ Spurious Emissions Below 1GHz

Test Channel	916MHz	Polarity:	Horizontal
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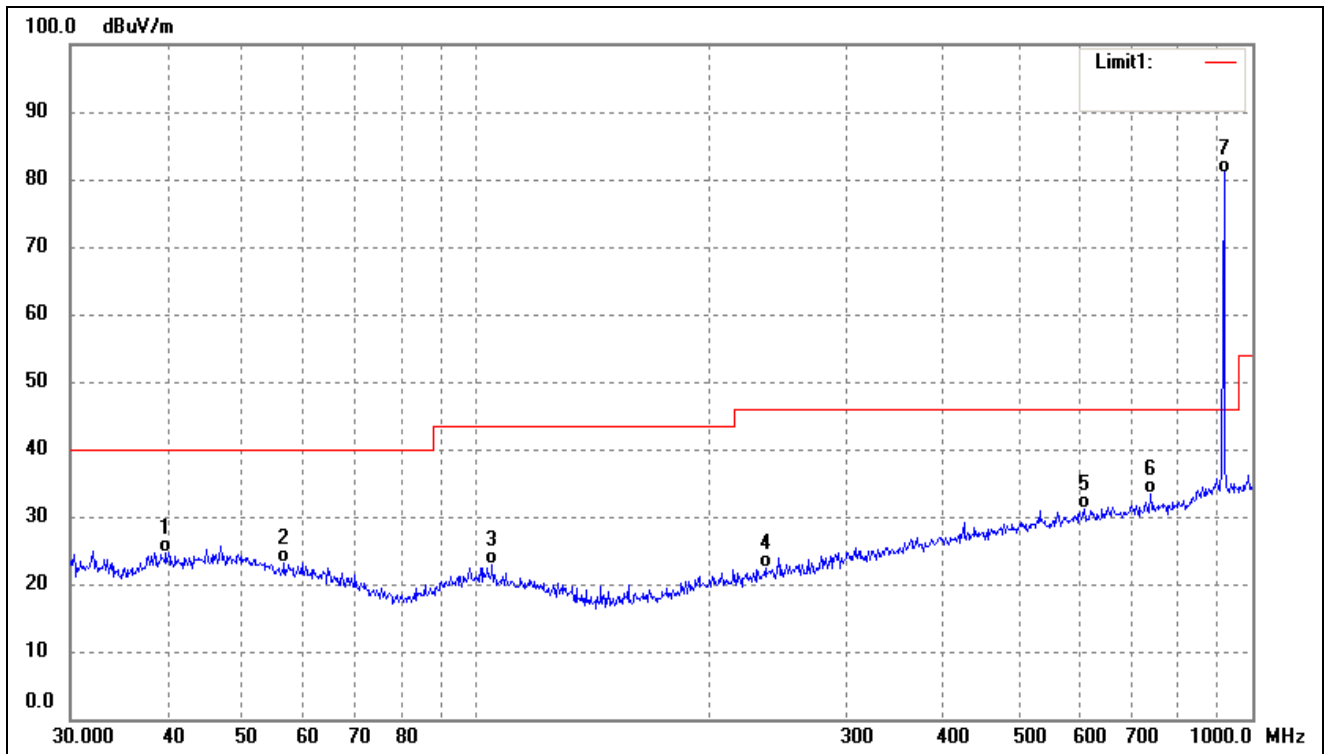
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	72.0843	50.36	-15.22	35.14	40.00	-4.86	-	-	QP
2	119.8556	47.54	-14.28	33.26	43.50	-10.24	-	-	QP
3	181.9202	46.61	-14.08	32.53	43.50	-10.97	-	-	QP
4	285.9778	46.78	-9.95	36.83	46.00	-9.17	-	-	QP
5	501.1790	38.94	-4.05	34.89	46.00	-11.11	-	-	QP
6	916.0687	86.95	1.75	88.70	94.00	-5.30	-	-	Fundamental

Test Channel	916MHz	Polarity:	Vertical
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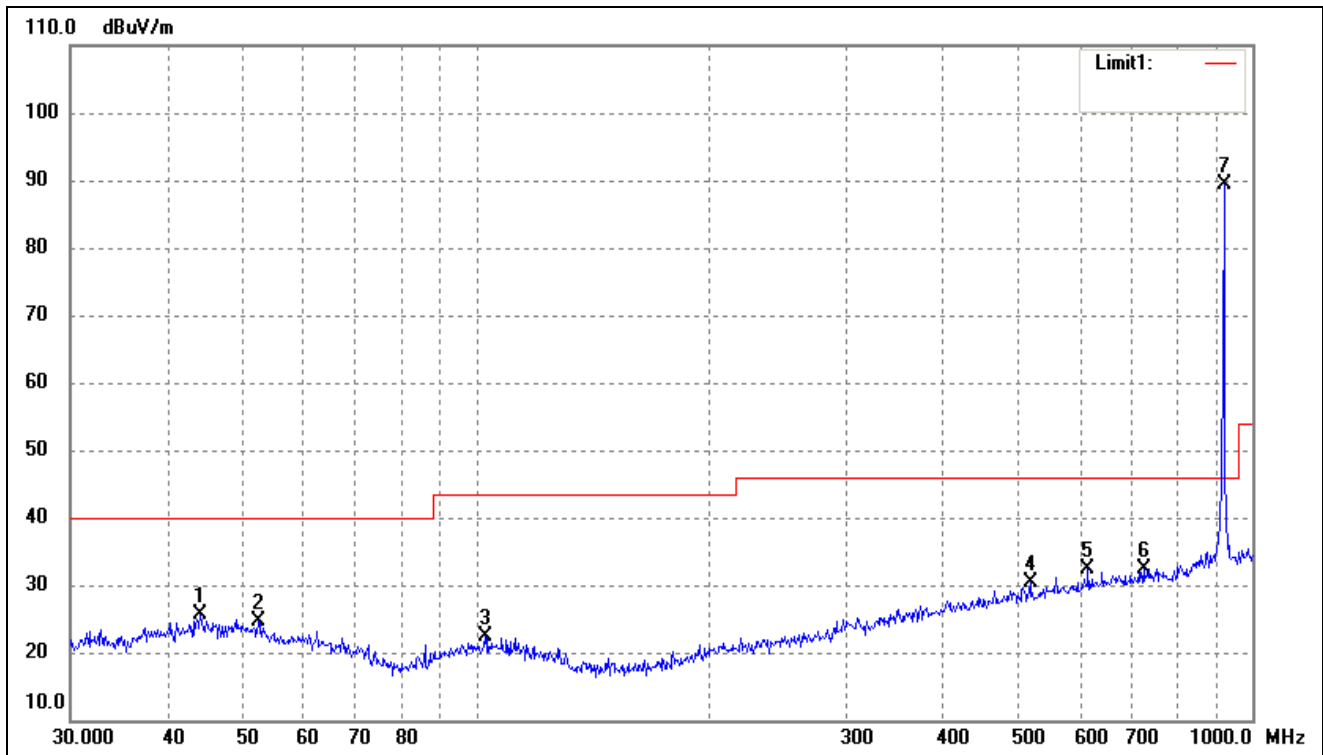
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	30.6379	49.35	-14.11	35.24	40.00	-4.76	-	-	QP
2	38.4809	44.36	-12.56	31.80	40.00	-8.20	-	-	QP
3	72.0843	49.09	-15.22	33.87	40.00	-6.13	-	-	QP
4	83.8156	45.67	-16.22	29.45	40.00	-10.55	-	-	QP
5	285.9778	42.02	-9.95	32.07	46.00	-13.93	-	-	QP
6	916.0687	88.76	1.75	90.51	94.00	-3.49	-	-	Fundamental

Test Channel	916.8MHz	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	39.8542	36.76	-12.03	24.73	40.00	-15.27	-	-	QP
2	56.5929	36.18	-12.95	23.23	40.00	-16.77	-	-	QP
3	104.9033	36.08	-13.32	22.76	43.50	-20.74	-	-	QP
4	235.8164	33.88	-11.62	22.26	46.00	-23.74	-	-	QP
5	607.7867	33.16	-2.00	31.16	46.00	-14.84	-	-	QP
6	739.6605	34.59	-1.17	33.42	46.00	-12.58	-	-	QP
7	919.2866	79.22	1.78	81.00	46.00	35.00	-	-	Fundamental

Test Channel	916.8MHz	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	44.1202	37.40	-11.84	25.56	40.00	-14.44	-	-	QP
2	52.3913	36.72	-12.20	24.52	40.00	-15.48	-	-	QP
3	102.7192	35.67	-13.32	22.35	43.50	-21.15	-	-	QP
4	517.2480	34.62	-4.14	30.48	46.00	-15.52	-	-	QP
5	614.2142	34.44	-2.05	32.39	46.00	-13.61	-	-	QP
6	724.2611	33.43	-1.01	32.42	46.00	-13.58	-	-	QP
7	919.2866	87.52	1.78	89.30	46.00	43.30	-	-	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 (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
916MHz							
1832	58.57	-9.15	49.42	74.00	-24.58	H	PK
1832	46.98	-9.15	37.83	54.00	-16.17	H	AV
2748	50.03	-8.97	41.06	74.00	-32.94	H	PK
2748	38.43	-8.97	29.46	54.00	-24.54	H	AV
3664	50.25	-7.05	43.20	74.00	-30.80	H	PK
3664	40.68	-7.05	33.63	54.00	-20.37	H	AV
1832	58.85	-9.16	49.69	74.00	-24.31	V	PK
1832	47.32	-9.15	38.17	54.00	-15.83	V	AV
2748	50.03	-8.97	41.06	74.00	-32.94	V	PK
2748	38.73	-8.97	29.76	54.00	-24.24	V	AV
3664	50.56	-7.05	43.51	74.00	-30.49	V	PK
3664	40.68	-7.05	33.63	54.00	-20.37	V	AV
916.8MHz							
1833.6	51.49	-9.15	42.34	74.00	-31.66	H	PK
1833.6	41.01	-9.15	31.86	54.00	-22.14	H	AV
2750.4	50.28	-8.97	41.31	74.00	-32.69	H	PK
2750.4	39.16	-8.97	30.19	54.00	-23.81	H	AV
3667.2	51.09	-7.05	44.04	74.00	-29.96	H	PK
3667.2	39.61	-7.05	32.56	54.00	-21.44	H	AV
1833.6	51.34	-9.15	42.19	74.00	-31.81	V	PK
1833.6	40.58	-9.15	31.43	54.00	-22.57	V	AV
2750.4	50.07	-8.97	41.10	74.00	-32.90	V	PK
2750.4	39.10	-8.97	30.13	54.00	-23.87	V	AV
3667.2	52.97	-7.05	45.92	74.00	-28.08	V	PK
3667.2	40.66	-7.05	33.61	54.00	-20.39	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 50 dB 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.

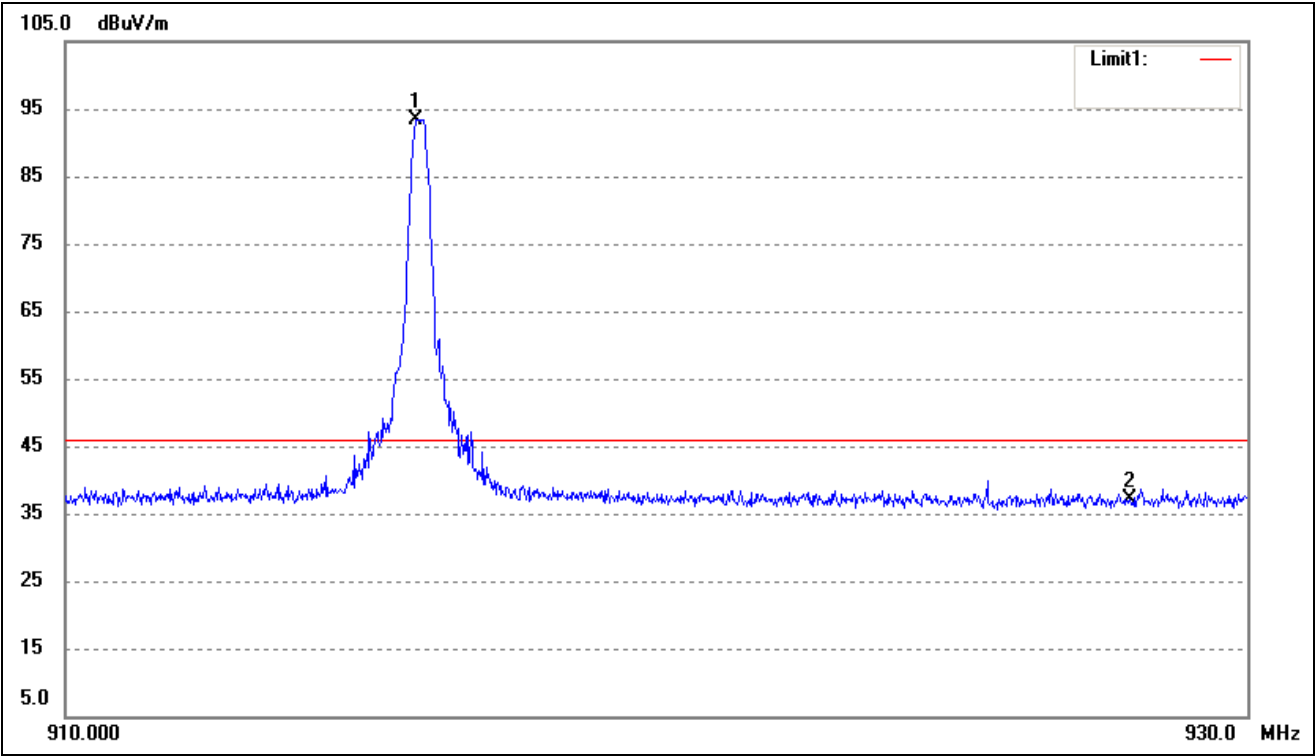
5.3 Summary of Test Results/Plots

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

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

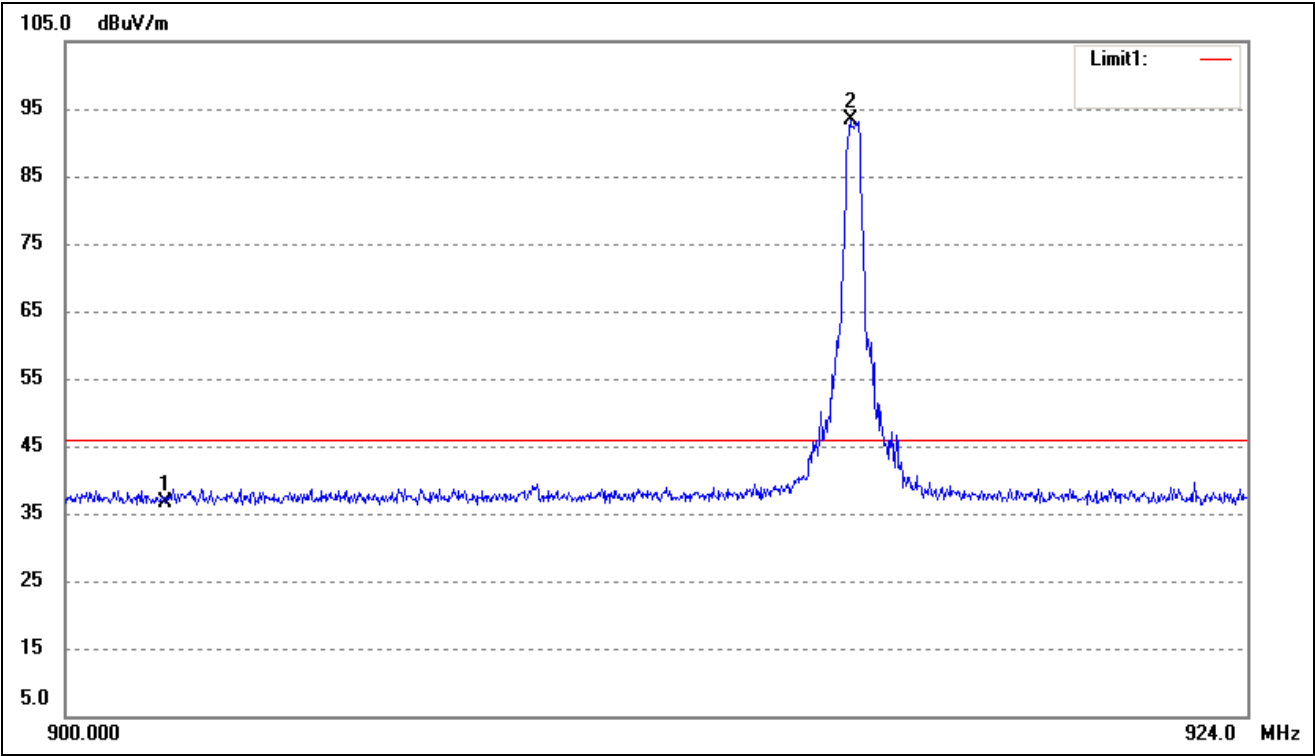
Please refer to the test plots as below.

Test Channel	916MHz-Left	Polarity:	Vertical(worst case)
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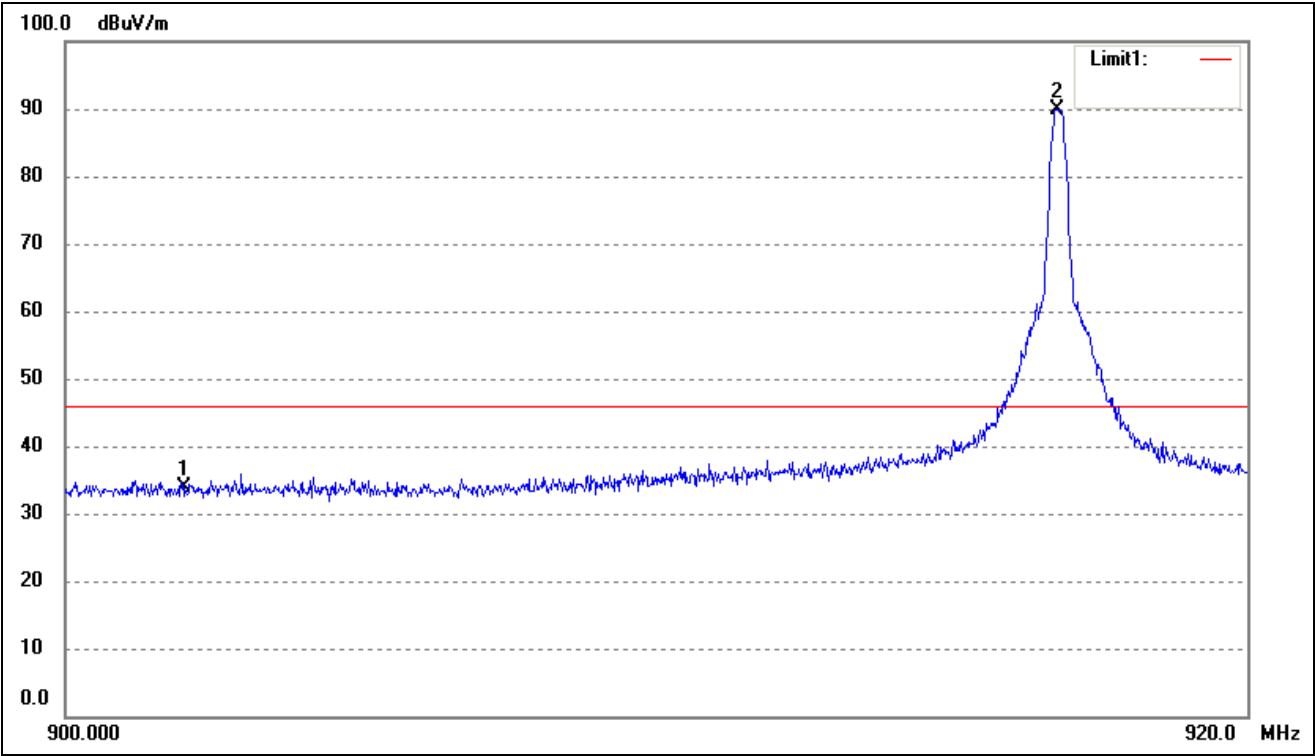
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	915.8947	91.74	1.74	93.48	/	/	Fundamental
2	928.0000	35.45	1.80	37.25	46.00	-8.75	Peak Detector

Test Channel	916MHz-Right	Polarity:	Vertical(worst case)
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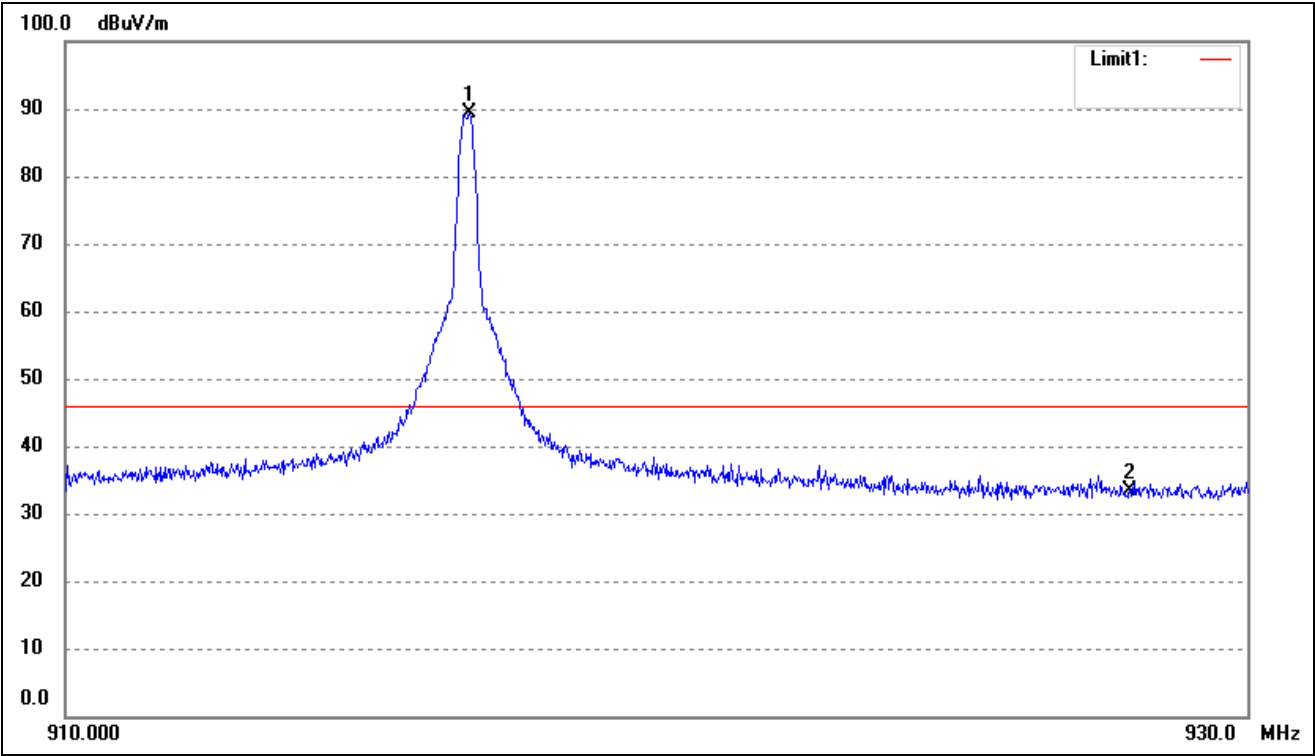
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	902.0000	35.03	1.57	36.60	46.00	-9.40	Peak Detector
2	915.8654	91.65	1.74	93.39	/	/	Fundamental

Test Channel	916.8MHz-Left	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	902.0000	32.20	1.57	33.77	46.00	-12.23	Peak Detector
2	916.7502	88.09	1.75	89.84	/	/	Fundamental

Test Channel	916.8MHz-Right	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	916.7911	87.52	1.75	89.27	/	/	Fundamental
2	928.0000	31.61	1.80	33.41	46.00	-12.59	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 = 1MHz, 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
1	916MHz	209.254
1	916.8MHz	207.001

Please refer to the following test plots

916MHz	Agilent R T Trace/View Ch Freq 916 MHz Trig Free Occupied Bandwidth Ref 20 dBm Atten 30 dB #Peak Log 10 dB/ Offset 1 dB Center 916 MHz Span 1 MHz #Res BW 10 kHz #VBW 30 kHz Sweep 10.36 ms (401 pts) Occupied Bandwidth 179.7286 kHz Occ BW % Pwr 99.00 % x dB -20.00 dB Transmit Freq Error 3.229 kHz x dB Bandwidth 209.254 kHz
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Trace 1 2 3

Clear Write

Max Hold

Min Hold

View

Blank

More 1 of 2

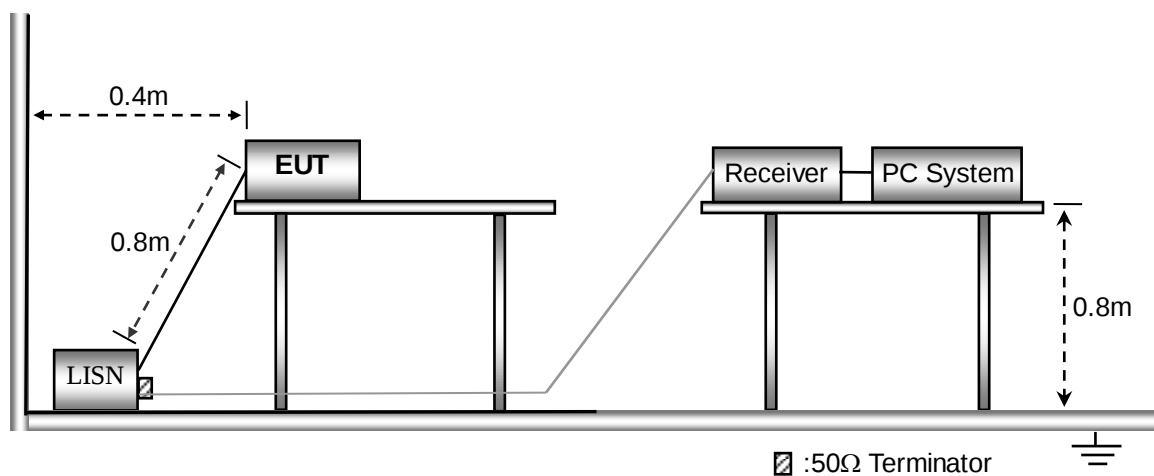
7. Conducted Emissions

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 40 cm long in the middle. The spacing between the peripherals was 10 cm.

7.2 Basic Test Setup Block Diagram



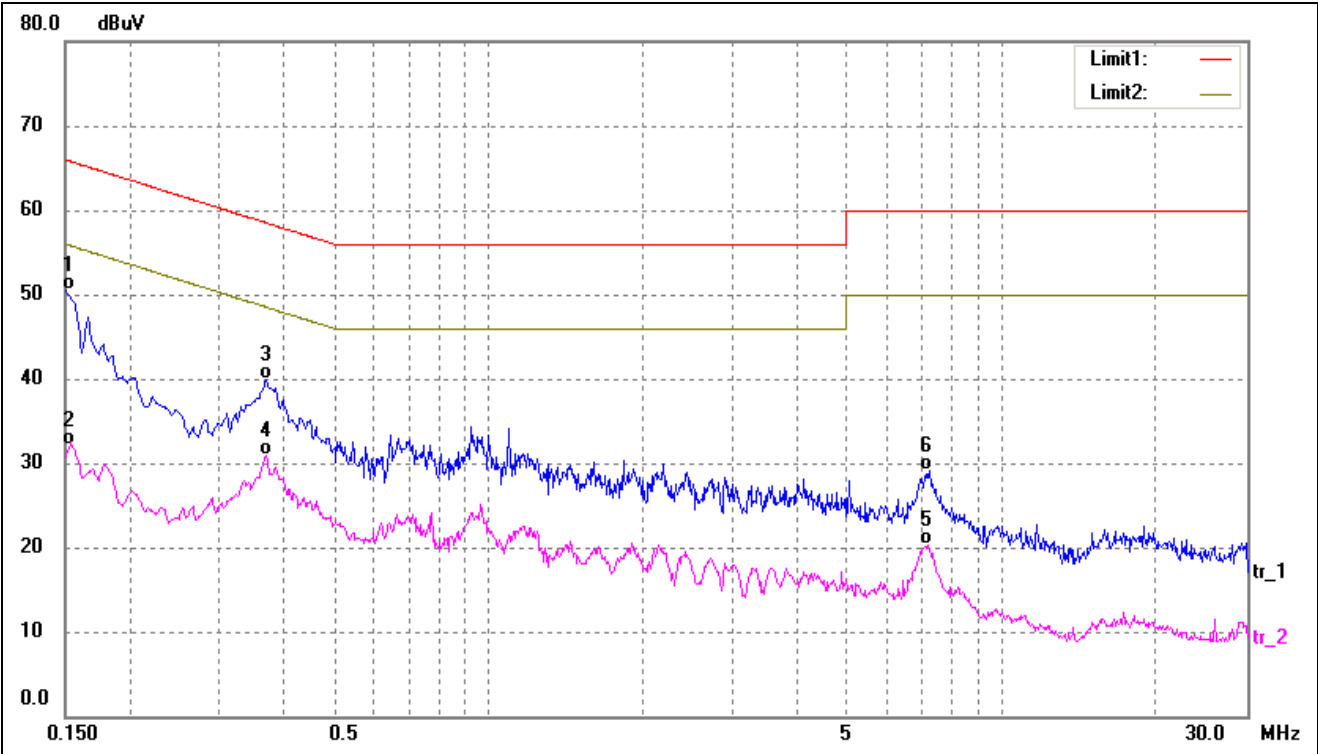
7.3 Test Receiver Setup

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

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

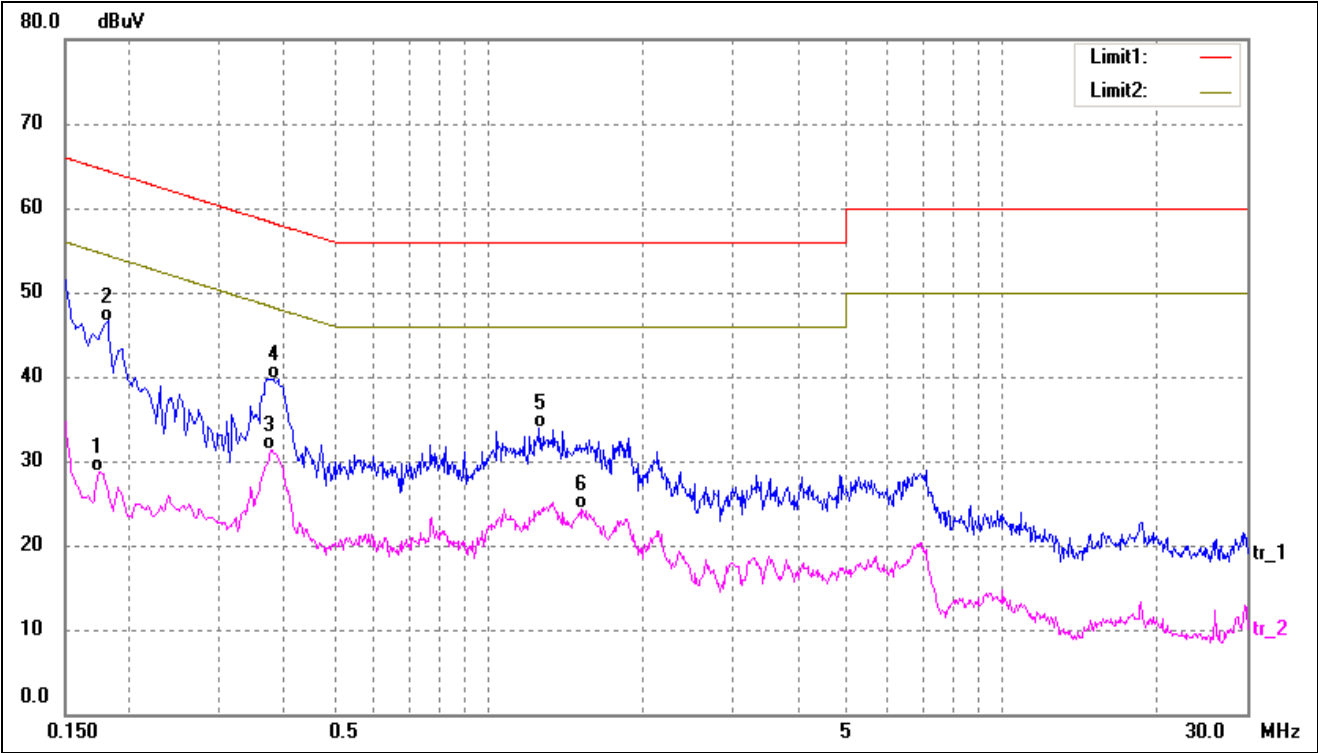
7.4 Summary of Test Results/Plots

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*	0.1500	40.19	10.25	50.44	66.00	-15.56	QP
2	0.1500	21.88	10.25	32.13	56.00	-23.87	AVG
3	0.3700	29.64	10.24	39.88	58.50	-18.62	QP
4	0.3700	20.64	10.24	30.88	48.50	-17.62	AVG
5	7.1820	10.12	10.25	20.37	50.00	-29.63	AVG
6	7.2460	18.76	10.25	29.01	60.00	-30.99	QP

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1740	18.47	10.25	28.72	54.77	-26.05	AVG
2	0.1820	36.34	10.26	46.60	64.39	-17.79	QP
3*	0.3780	21.09	10.24	31.33	48.32	-16.99	AVG
4	0.3900	29.55	10.24	39.79	58.06	-18.27	QP
5	1.2580	23.60	10.21	33.81	56.00	-22.19	QP
6	1.5220	14.16	10.23	24.39	46.00	-21.61	AVG

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