



**FCC PART 15C  
TEST REPORT  
No. I18N00901-BLE**

**for**

**Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd**

**Feature phone**

**3311A**

**with**

**Hardware Version: V1**

**Software Version: 8.1.3311A.TMO.180830.05**

**FCC ID: R38YL3311A**

**Issued Date: 2018-09-06**

**Designation Number: CN1210**

**ISED Assigned Code: 23289**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

**Test Laboratory:**

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I18N00901-BLE	Rev.0	1st edition	2018-09-06

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## **1. Test Laboratory**

### **1.1. Testing Location**

Location: Shenzhen Academy of Information and Communications Technology  
Address: Building G, Shenzhen International Innovation Center, No.1006  
Shennan Road, Futian District, Shenzhen, Guangdong Province ,China  
Postal Code: 518026  
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### **1.2. Testing Environment**

Normal Temperature: 15-30℃  
Relative Humidity: 35-60%

### **1.3. Project data**

Testing Start Date: 2018-07-31  
Testing End Date: 2018-08-22

### **1.4. Signature**



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An Ran

(Prepared this test report)



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Tang Weisheng

(Reviewed this test report)



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Zhang Bojun

(Approved this test report)

## **2. Client Information**

### **2.1. Applicant Information**

Company Name: Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd  
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### **2.2. Manufacturer Information**

Company Name: Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd  
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### **3. Equipment Under Test (EUT) and Ancillary Equipment (AE)**

#### **3.1. About EUT**

Description	Feature phone
Model Name	3311A
Market Name	Coolpad Snap
Frequency Range	2400MHz~2483.5MHz
Type of Modulation	GFSK
Number of Channels	40
Antenna Type	Integrated
Antenna Gain	2.5dBi
Power Supply	3.7V DC by Battery
FCC ID	R38YL3311A
Condition of EUT as received	No abnormality in appearance (eg.)

Note: Components list, please refer to documents of the manufacturer.

#### **3.2. Internal Identification of EUT**

EUT ID*	IMEI	HW Version	SW Version	Receive Date
EUT1	86271804 0006938	V1	8.1.3311A.TMO.180830.05	2018-07-30

\*EUT ID: is used to identify the test sample in the lab internally.

#### **3.3. Internal Identification of AE**

AE ID*	Description	Model	Manufacturer
AE1	Switching Adapter	RD0501000-USBA-18 MG	SHENZHEN RUIDE ELECTRONIC INDUSTRIAL CO.,LTD

\*AE ID: is used to identify the test sample in the lab internally.

#### **3.4. General Description**

The Equipment Under Test (EUT) is a model of Mobile Phone with integrated antenna.

It consists of normal options: travel charger, USB cable.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

## **4. Reference Documents**

### **4.1. Documents supplied by applicant**

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

### **4.2. Reference Documents for testing**

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz	2017
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013

## 5. Test Results

### 5.1. Summary of Test Results

No	Test cases	Sub-clause of Part 15C	Sub-clause of IC	Verdict
0	Antenna Requirement	15.203	/	<b>P</b>
1	Maximum Peak Output Power	15.247 (b)	RSS-247 section 5.4	<b>P</b>
2	Peak Power Spectral Density	15.247 (e)	RSS-247 section 5.2	<b>P</b>
3	Occupied 6dB Bandwidth	15.247 (a)	RSS-247 section 5.2	<b>P</b>
4	Band Edges Compliance	15.247 (d)	RSS-247 section 5.5	<b>P</b>
5	Transmitter Spurious Emission - Conducted	15.247 (d)	RSS-247 section 5.5/ RSS-Gen section 6.13	<b>P</b>
6	Transmitter Spurious Emission - Radiated	15.247, 15.205, 15.209	RSS-247 section 5.5/ RSS-Gen section 6.13	<b>P</b>
7	AC Power line Conducted Emission	15.107, 15.207	RSS-Gen section 8.8	<b>P</b>

See **ANNEX A** for details.

### 5.2. Statements

SAICT has evaluated the test cases requested by the applicant/manufacture as listed in section 5.1 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.

### 5.3. Terms used in the result table

Terms used in Verdict column

P	Pass
NA	Not Available
F	Fail

Abbreviations

AC	Alternating Current
AFH	Adaptive Frequency Hopping
BW	Band Width
E.I.R.P.	equivalent isotropic radiated power
ISM	Industrial, Scientific and Medical
R&TTE	Radio and Telecommunications Terminal Equipment
RF	Radio Frequency
Tx	Transmitter



#### 5.4. Laboratory Environment

**Semi-anechoic chamber** did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3 m distance, from 30 to 1000 MHz

**Shielded room** did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. =20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-10000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω

**Fully-anechoic chamber** did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

## 6. Test Facilities Utilized

### Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Vector Signal Analyzer	FSV40	100903	Rohde & Schwarz	2019.01.17	1 year
2	Test Receiver	ESCI	100702	Rohde & Schwarz	2019.06.20	1 year
3	LISN	ENV216	102067	Rohde & Schwarz	2019-07-18	1 year

### Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1	Chamber	FACT3-2.0	1285	ETS-Lindgren	2020.07.20	3 years
2	Test Receiver	ESR7	101676	Rohde & Schwarz	2018.11.29	1 year
3	Spectrum Analyser	FSV40	101192	Rohde & Schwarz	2019.05.21	1 year
4	BiLog Antenna	3142E	00224831	ETS	2021.05.17	3 years
5	Horn Antenna	3117	00066577	ETS-Lindgren	2019.04.05	3 years
6	Loop Antenna	HLA6120	35779	TESEQ	2019.05.02	3 years
7	Antenna	QSH-SL-18-26-S-20	17013	Q-par	2020.01.15	3 years

### Test software

No.	Equipment	Manufacturer	Version
1	TechMgr Software	CAICT	2.1.1
2	EMC32	Rohde & Schwarz	8.53.0
3	EMC32	Rohde & Schwarz	10.01.00

EUT is engineering software provided by the customer to control the transmitting signal. The EUT was programmed to be in continuously transmitting mode.

### Anechoic chamber

Fully anechoic chamber by ETS-Lindgren

## 7. Measurement Uncertainty

Test Name	Uncertainty	
1. RF Output Power - Conducted	$\pm 1.32\text{dB}$	
2. Power Spectral Density - Conducted	$\pm 2.32\text{dB}$	
3. Occupied channel bandwidth - Conducted	$\pm 66\text{Hz}$	
4 Transmitter Spurious Emission - Conducted	$30\text{MHz} \leq f \leq 1\text{GHz}$	$\pm 1.41\text{dB}$
	$1\text{GHz} \leq f \leq 7\text{GHz}$	$\pm 1.92\text{dB}$
	$7\text{GHz} \leq f \leq 13\text{GHz}$	$\pm 2.31\text{dB}$
	$13\text{GHz} \leq f \leq 26\text{GHz}$	$\pm 2.61\text{dB}$
5. Transmitter Spurious Emission - Radiated	$9\text{kHz} \leq f \leq 30\text{MHz}$	$\pm 1.84\text{dB}$
	$30\text{MHz} \leq f \leq 1\text{GHz}$	$\pm 4.90\text{dB}$
	$1\text{GHz} \leq f \leq 18\text{GHz}$	$\pm 5.12\text{dB}$
	$18\text{GHz} \leq f \leq 40\text{GHz}$	$\pm 4.66\text{dB}$
6. AC Power line Conducted Emission	$150\text{kHz} \leq f \leq 30\text{MHz}$	$\pm 3.10\text{dB}$

## **ANNEX A: Detailed Test Results**

### **A.0 Antenna requirement**

#### **Measurement Limit:**

Standard	Requirement
FCC CRF 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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

**Conclusion: The Directional gains of antenna used for transmitting is 2.5 dBi.  
The RF transmitter uses an integrate antenna without connector.**

## A.1 Maximum Peak Output Power

### Method of Measurement: See ANSI C63.10-clause 11.9.1.1

Use the following spectrum analyzer settings:

- a) Set the RBW = 1 MHz.
- b) Set VBW = 3 MHz.
- c) Set span = 3 MHz.
- d) Sweep time = auto couple.
- e) Detector = peak.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use peak marker function to determine the peak amplitude level.

### Measurement Limit:

Standard	Limit (dBm)
FCC 47 CRF Part 15.247(b) & RSS-247 section 5.4	< 30

### Measurement Results:

Mode	Frequency (MHz)	Peak Conducted Output Power (dBm)	Conclusion
GFSK	2402(CH0)	-1.17	P
	2440(CH19)	-1.17	P
	2480(CH39)	-1.20	P

**Conclusion: Pass**

## A.2 Peak Power Spectral Density

Method of Measurement: See ANSI C63.10-clause 11.10.2

Measurement Limit:

Standard	Limit
FCC 47 CRF Part 15.247(e) & RSS-247 section 5.2	< 8 dBm/3 kHz

Measurement Results:

Mode	Frequency (MHz)	Peak Power Spectral Density (dBm)		Conclusion
GFSK	2402(CH0)	Fig.1	-16.24	P
	2440(CH19)	Fig.2	-16.24	P
	2480(CH39)	Fig.3	-16.27	P

See below for test graphs.

Conclusion: PASS

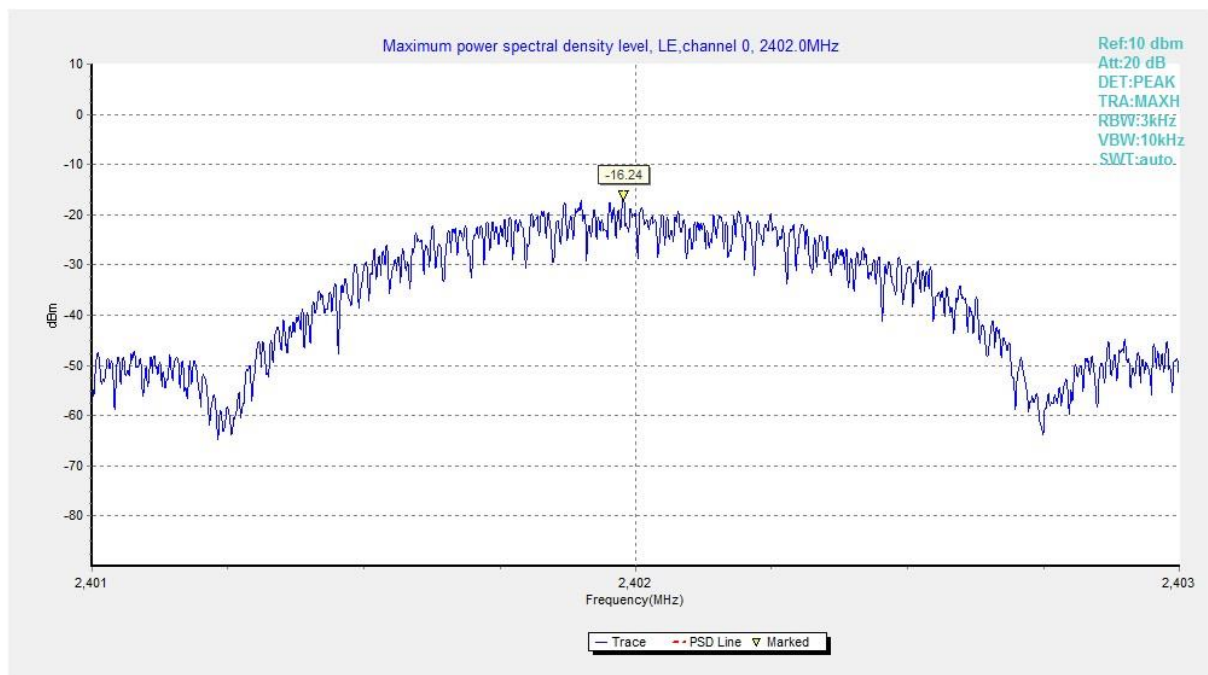
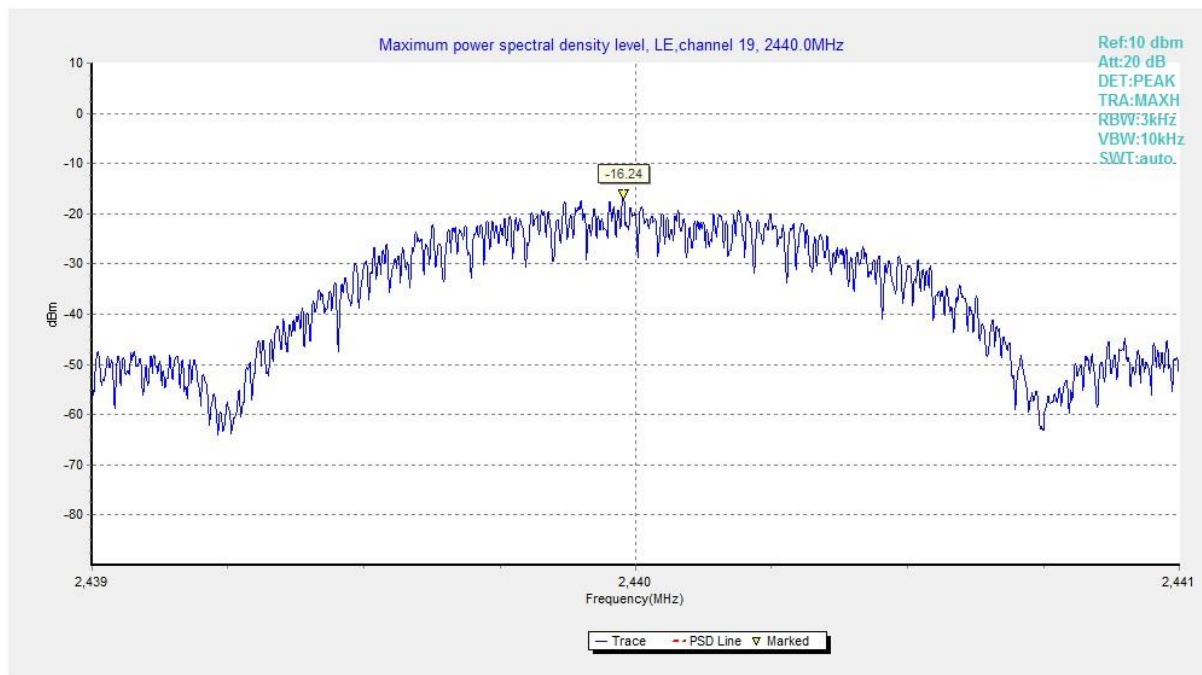
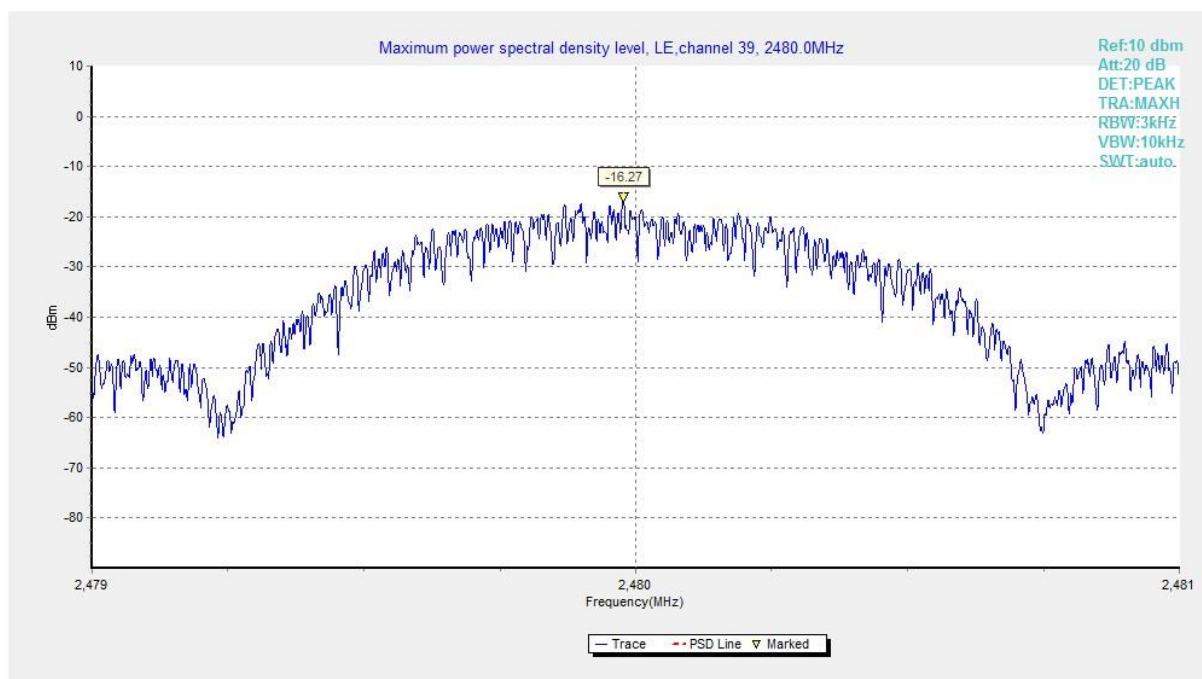


Fig.1 Power Spectral Density (Ch 0)



**Fig.2 Power Spectral Density (Ch 19)**



**Fig.3 Power Spectral Density (Ch 39)**

### A.3 6dB Bandwidth

#### Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.247 (a) & RSS-247 section 5.2	≥ 500

#### Measurement Result:

Mode	Frequency (MHz)	Test Results ( kHz)		Conclusion
GFSK	2402(CH0)	Fig.4	708.00	<b>P</b>
	2440(CH19)	Fig.5	704.00	<b>P</b>
	2480(CH39)	Fig.6	706.50	<b>P</b>

See below for test graphs.

**Conclusion: PASS**

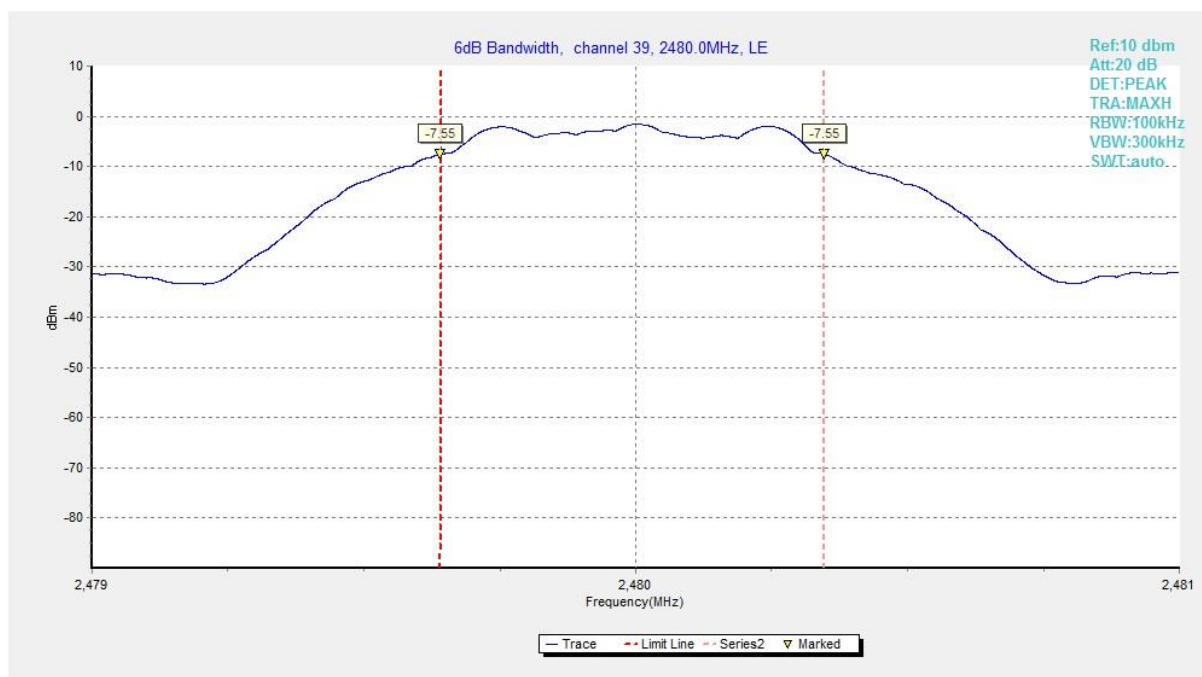


**Fig.4 6dB Bandwidth (Ch 0)**





**Fig.5 6dB Bandwidth (Ch 19)**



**Fig.6 6dB Bandwidth (Ch 39)**

#### A.4 Band Edges Compliance

##### Measurement Limit:

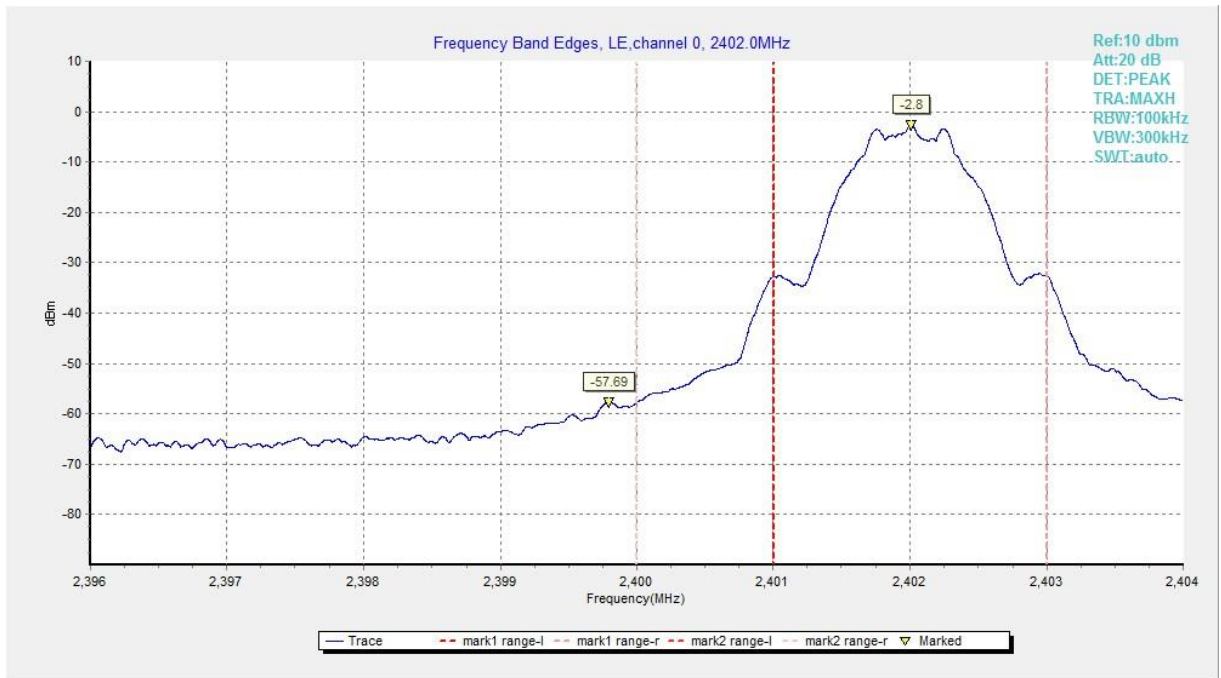
Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d) & RSS-247 section 5.5	> 20

##### Measurement Result:

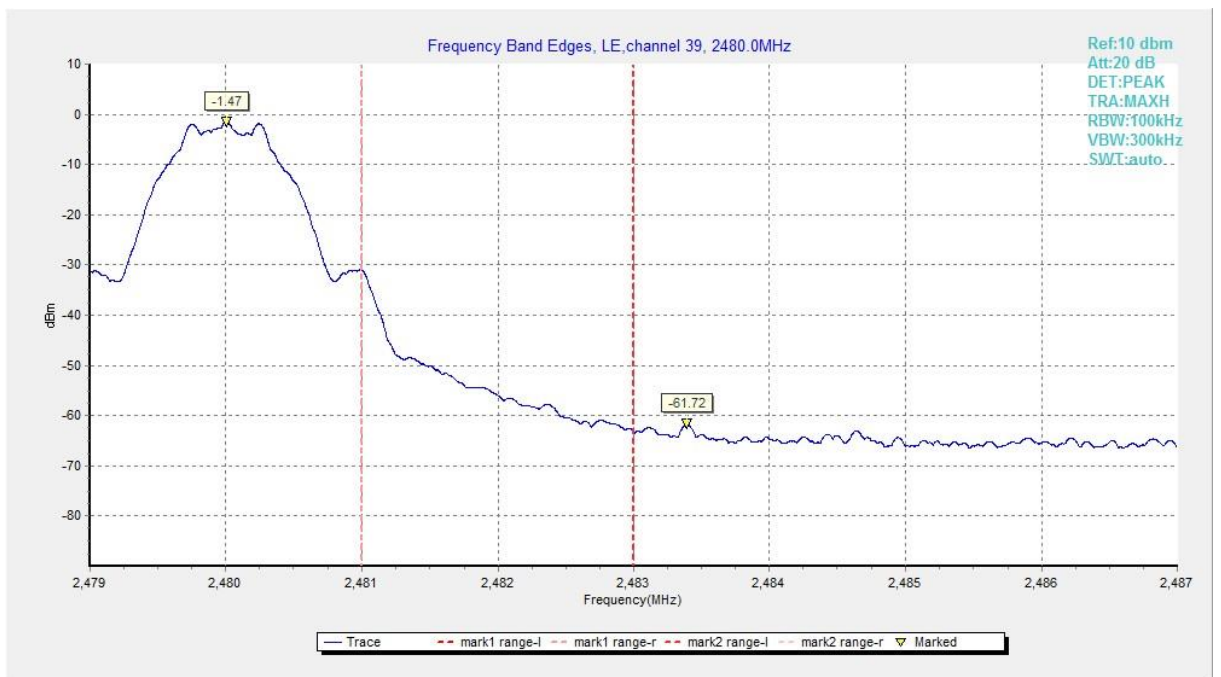
Mode	Frequency (MHz)	Test Results		Conclusion
GFSK	2402(CH0)	Fig.7	-57.69	P
	2480(CH39)	Fig.8	-61.72	P

See below for test graphs.

Conclusion: Pass



**Fig.7 Band Edges (Ch 0)**



**Fig.8 Band Edges (Ch 39)**

## A.5 Transmitter Spurious Emission - Conducted

### Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d) & RSS-247 5.5/RSS-Gen section 6.13	20dB below peak output power in 100 kHz bandwidth

### Measurement Results:

MODE	Channel	Frequency Range	Test Results	Conclusion
GFSK	0	2.402 GHz	Fig.9	<b>P</b>
		1GHz -3GHz	Fig.10	<b>P</b>
		3GHz-10GHz	Fig.11	<b>P</b>
	19	2.440 GHz	Fig.12	<b>P</b>
		1GHz -3GHz	Fig.13	<b>P</b>
		3GHz-10GHz	Fig.14	<b>P</b>
	39	2.480 GHz	Fig.15	<b>P</b>
		1GHz -3GHz	Fig.16	<b>P</b>
		3GHz-10GHz	Fig.17	<b>P</b>
	All channels	30MHz-1GHz	Fig.18	<b>P</b>
		10GHz-26GHz	Fig.19	<b>P</b>

See below for test graphs.

Conclusion: Pass

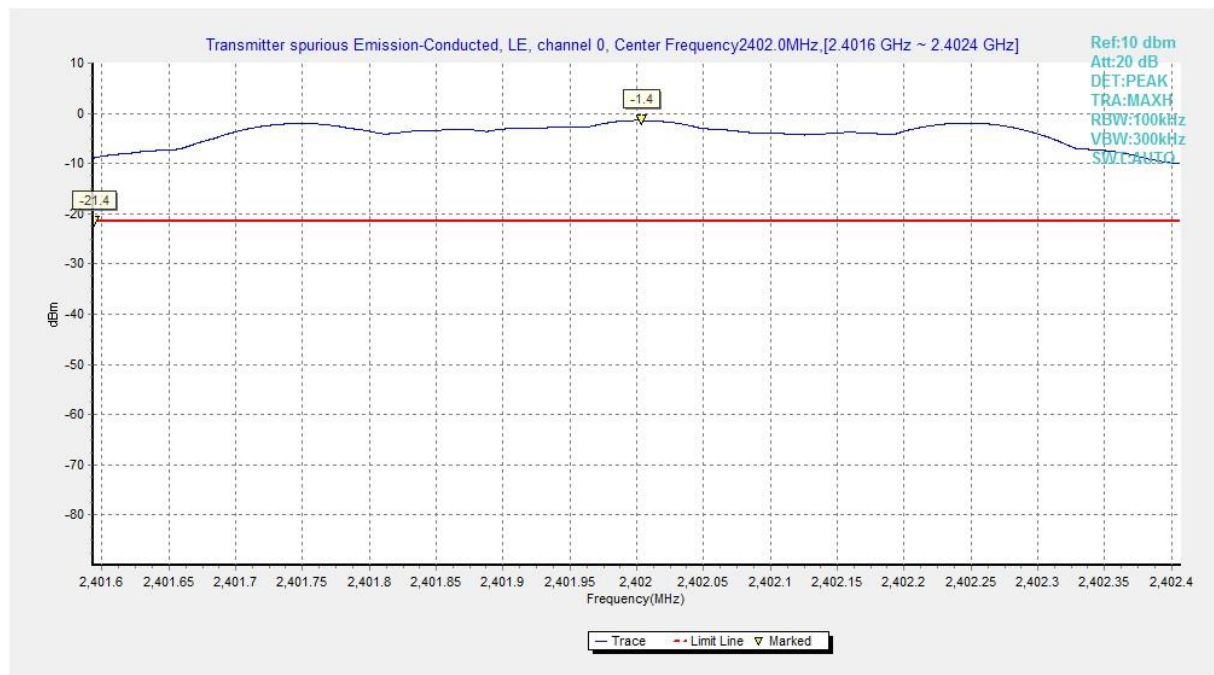
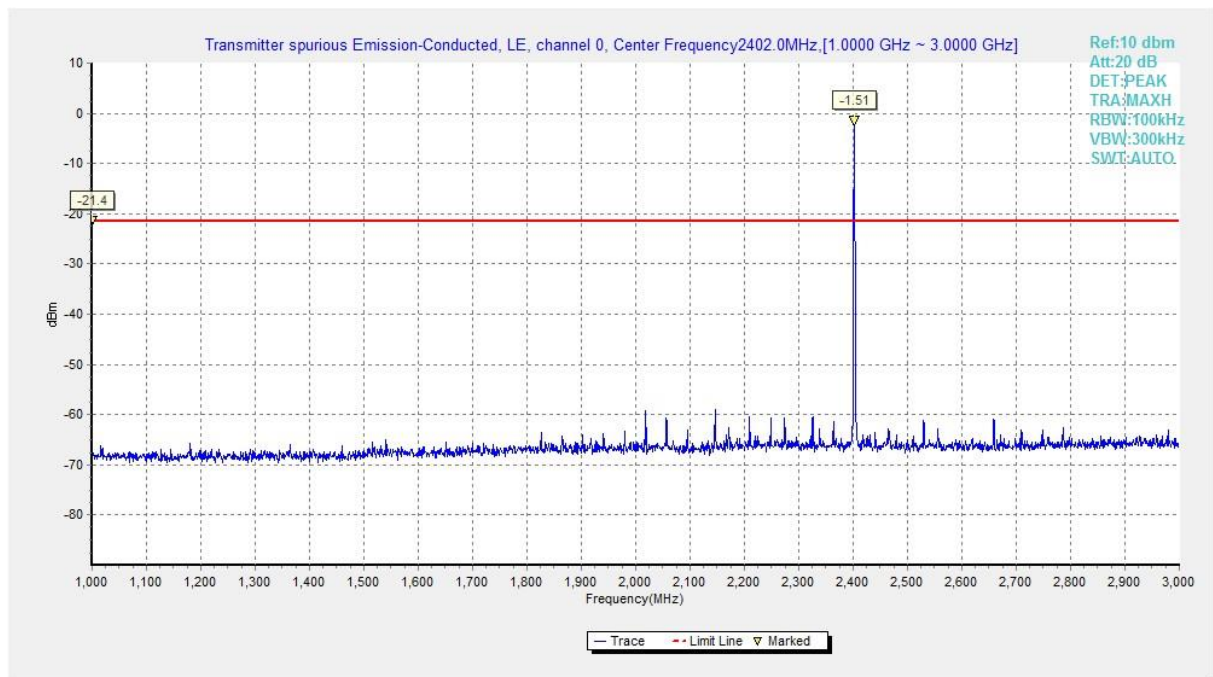
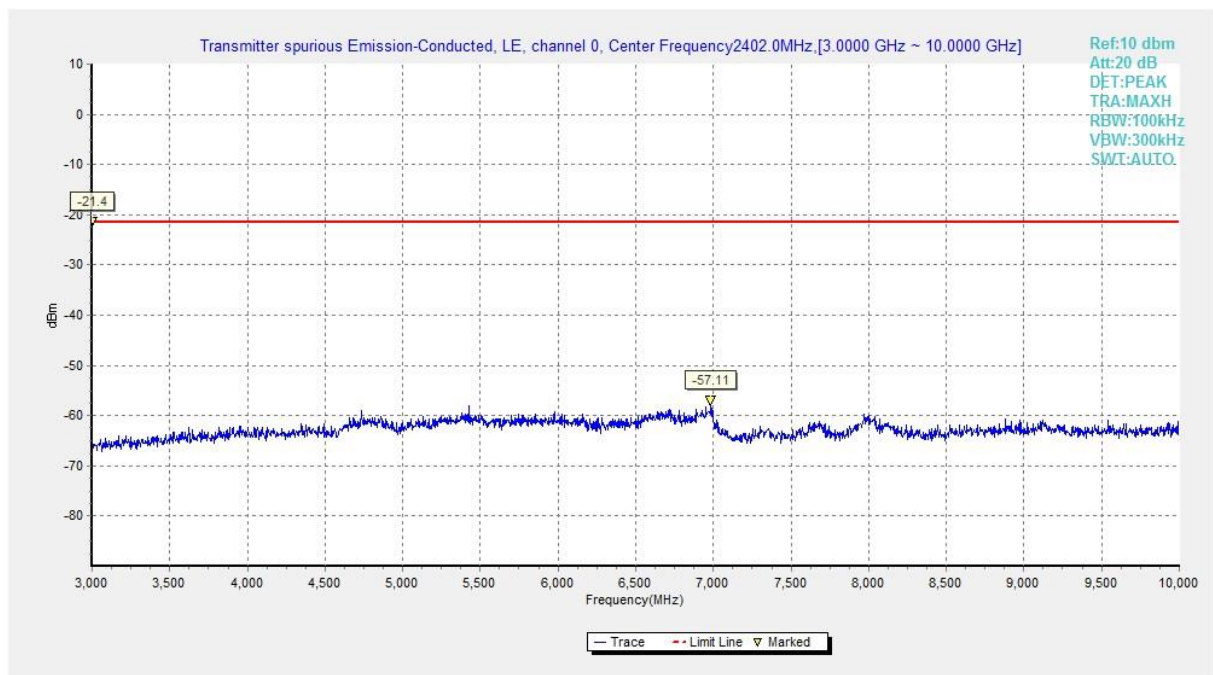


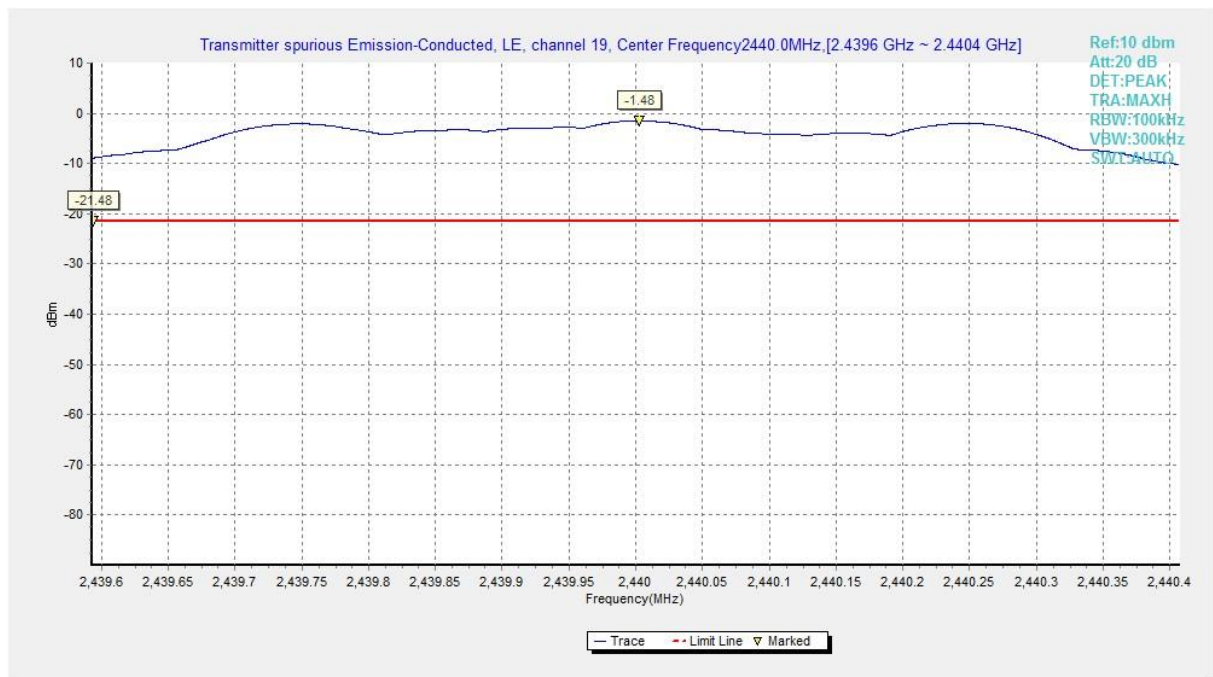
Fig.9 Conducted Spurious Emission (Ch0, Center Frequency)



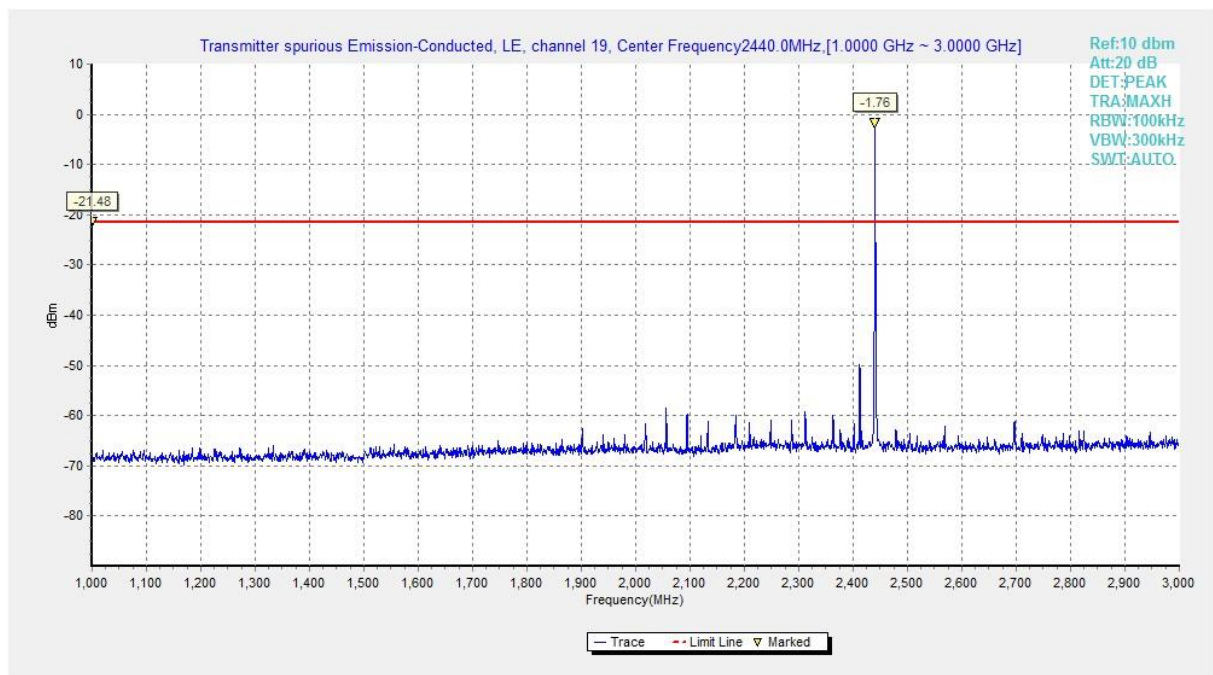
**Fig.10 Conducted Spurious Emission (Ch0, 1 GHz-3 GHz)**



**Fig.11 Conducted Spurious Emission (Ch0, 3 GHz-10 GHz)**

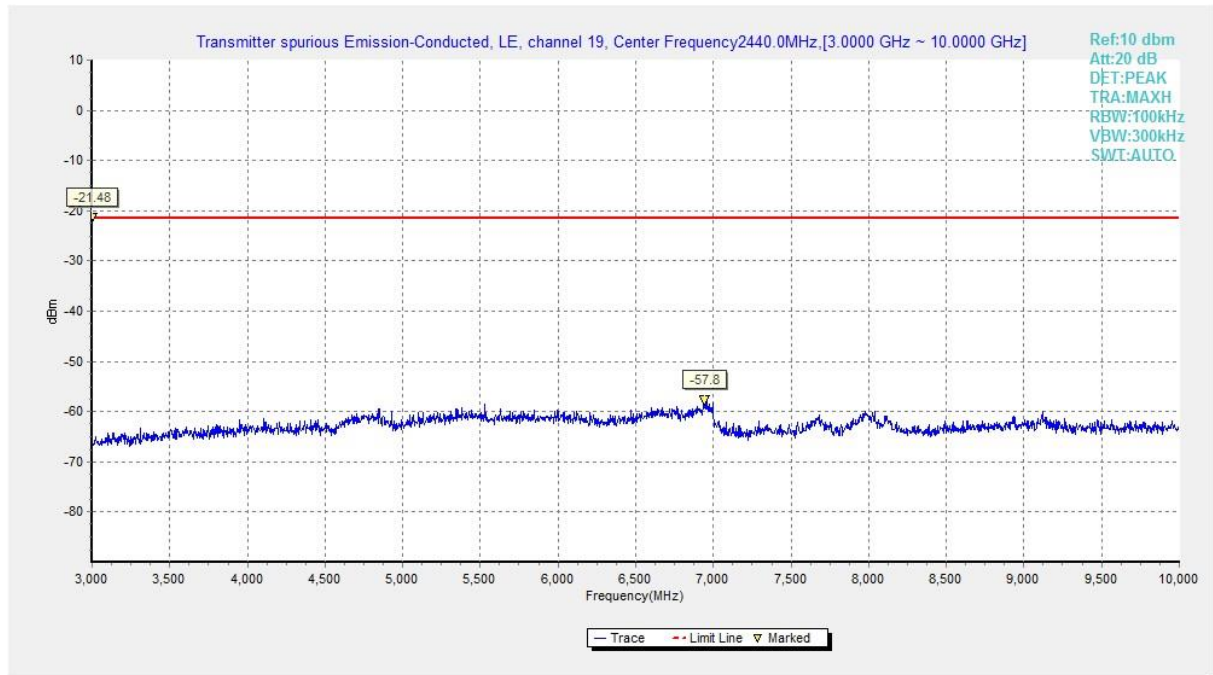


**Fig.12 Conducted Spurious Emission (Ch19, Center Frequency)**

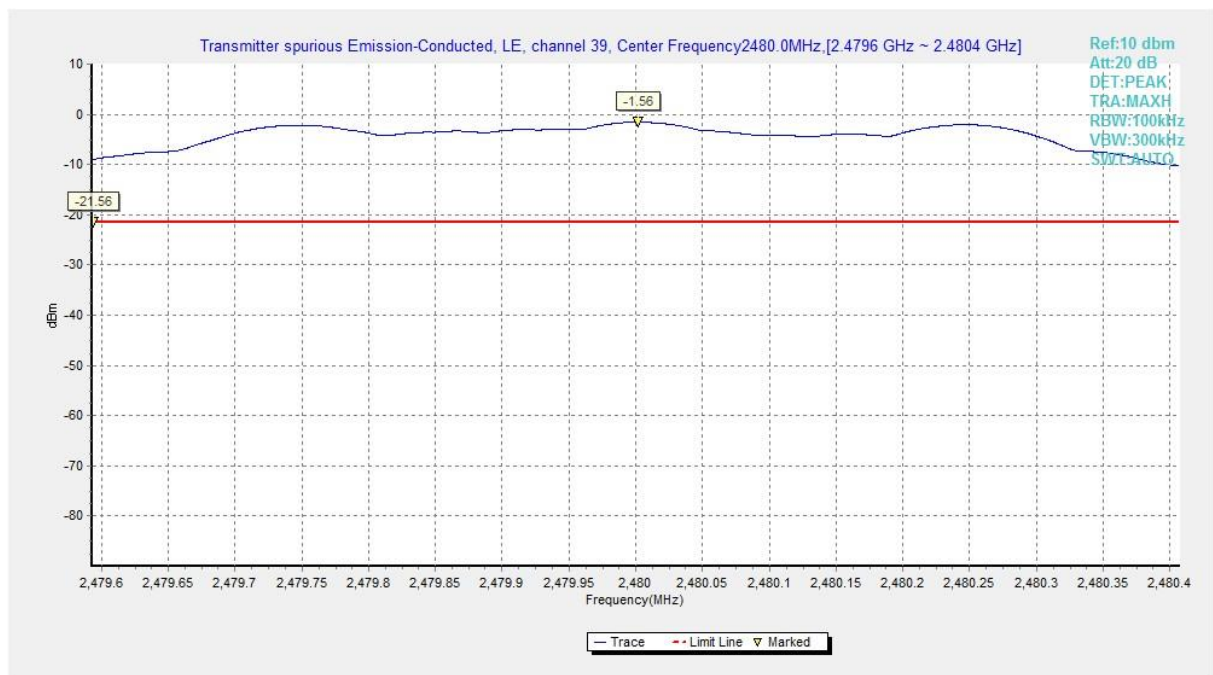


**Fig.13 Conducted Spurious Emission (Ch19, 1 GHz-3 GHz)**

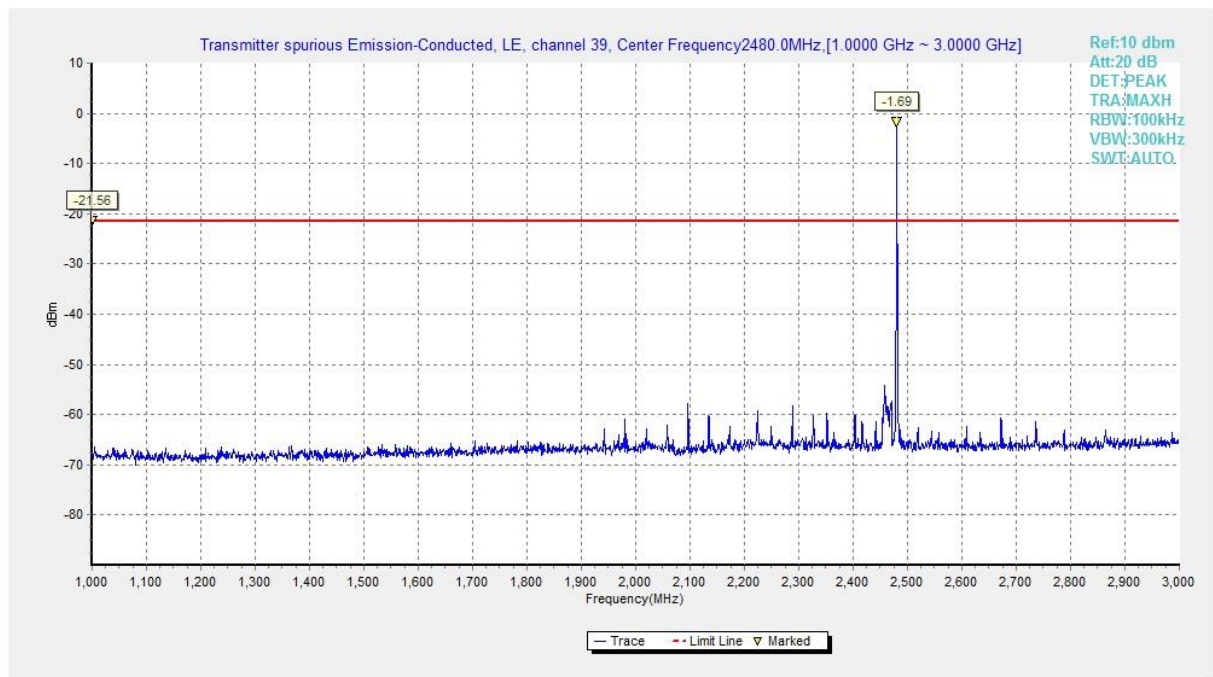




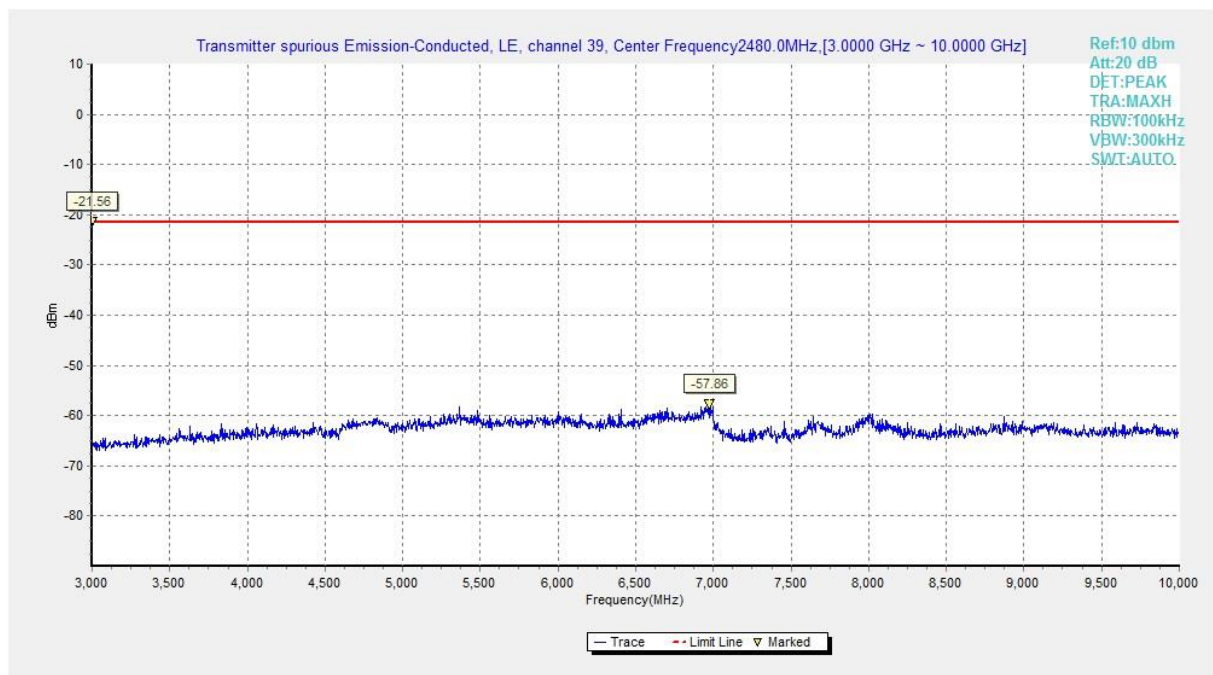
**Fig.14 Conducted Spurious Emission (Ch19, 3 GHz-10 GHz)**



**Fig.15 Conducted Spurious Emission (Ch39, Center Frequency)**

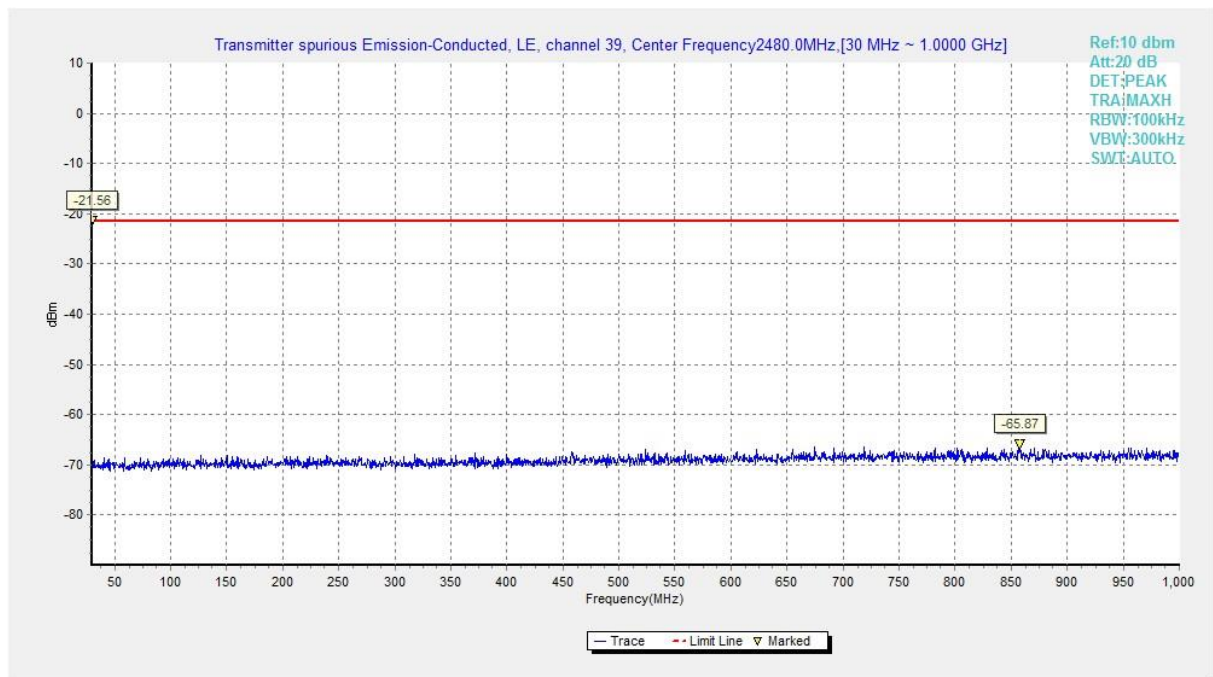


**Fig.16 Conducted Spurious Emission (Ch39, 1 GHz-3 GHz)**

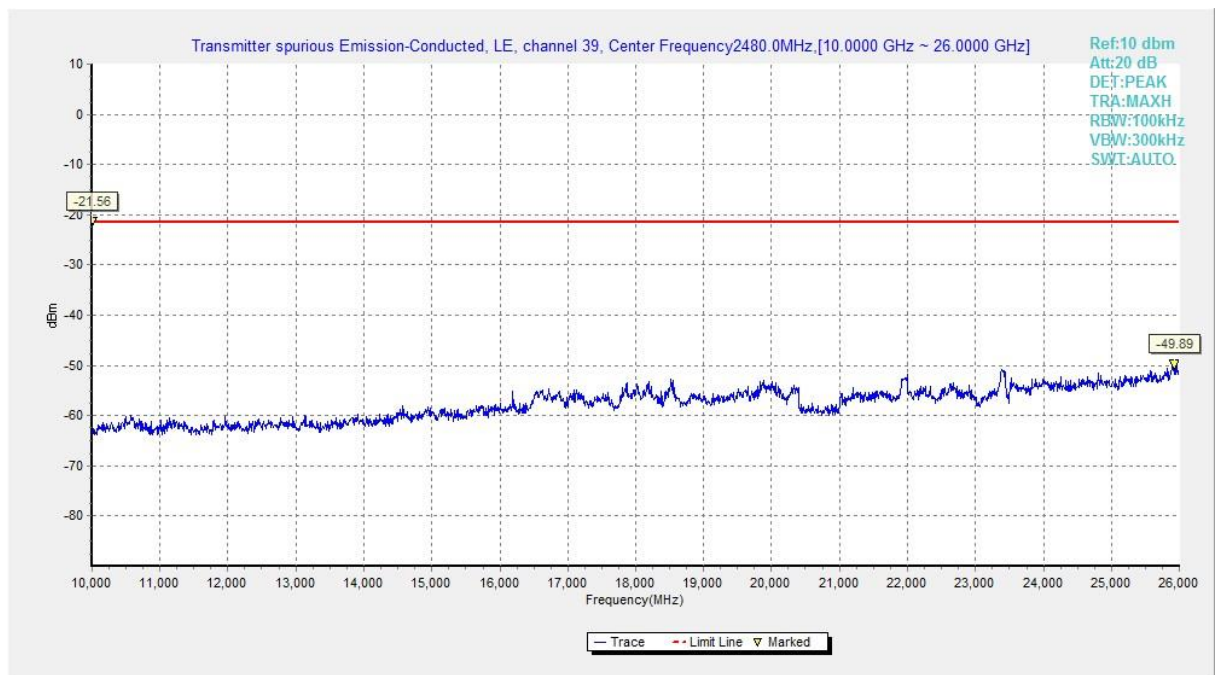


**Fig.17 Conducted Spurious Emission (Ch39, 3 GHz-10 GHz)**





**Fig.18 Conducted Spurious Emission (All channels, 30 MHz-1 GHz)**



**Fig.19 Conducted Spurious Emission (All channels, 10 GHz-26 GHz)**

## A.6 Transmitter Spurious Emission - Radiated

### Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209 & RSS-247 section 5.5/RSS-Gen section 6.13	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

### Limit in restricted band:

Frequency of emission (MHz)	Field strength( $\mu$ V/m)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

### Test Condition:

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

**Note:** According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band from 9kHz to 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic. The measurement results include the horizontal polarization and vertical polarization measurements.

**Measurement Results:**

GFSK	0	1 GHz ~18 GHz	Fig.20	P
	19	9 kHz ~30 MHz	Fig.21	P
		30 MHz ~1 GHz	Fig.22	P
		1 GHz ~18 GHz	Fig.23	P
		18 GHz~ 26.5 GHz	Fig.24	P
	39	1 GHz ~18 GHz	Fig.25	P
	Restricted Band(CH0)	2.38 GHz ~ 2.45 GHz	Fig.26	P
	Restricted Band(CH39)	2.45 GHz ~ 2.5 GHz	Fig.27	P

**GFSK CH0 (1-18GHz)**

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
14006.500000	56.30	74.00	17.70	H	19.5
14559.500000	56.74	74.00	17.26	H	20.4
15574.500000	57.25	74.00	16.75	H	21.0
16212.500000	57.68	74.00	16.32	H	22.5
16777.500000	58.57	74.00	15.43	H	22.0
17704.500000	57.48	74.00	16.52	H	22.9

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13998.000000	44.95	54.00	9.05	H	19.6
14689.500000	45.82	54.00	8.18	H	20.7
15575.500000	45.85	54.00	8.15	H	21.0
15651.500000	46.93	54.00	7.07	H	21.3
16639.000000	46.83	54.00	7.17	H	22.5
17886.000000	45.99	54.00	8.01	H	23.8

**GFSK CH19 (1-18GHz)**

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
14030.500000	56.59	74.00	17.41	H	19.4
14679.500000	58.11	74.00	15.89	H	20.7
15529.500000	57.10	74.00	16.90	H	20.6
15723.500000	58.59	74.00	15.41	H	21.1
16998.500000	58.19	74.00	15.81	H	22.9
17517.000000	57.48	74.00	16.52	H	22.1

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13911.000000	13959.000000	44.90	54.00	9.10	H
14688.500000	14557.000000	46.09	54.00	7.91	H
15575.000000	15576.000000	46.05	54.00	7.95	H
15968.000000	15656.000000	47.22	54.00	6.78	H
16585.000000	16591.000000	47.06	54.00	6.94	H
17706.000000	17698.000000	46.05	54.00	7.95	H

**GFSK CH39 (1-18GHz)**

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13867.000000	14004.000000	55.91	74.00	18.09	H
14685.000000	14656.000000	56.60	74.00	17.40	H
15312.500000	15575.000000	56.90	74.00	17.10	H
15604.000000	16038.500000	58.81	74.00	15.19	H
16575.500000	17076.000000	58.73	74.00	15.27	H
17706.000000	17726.000000	57.31	74.00	16.69	H

Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Corr. (dB)
13910.500000	14001.000000	44.96	54.00	9.04	H
14695.500000	14674.000000	45.72	54.00	8.28	H
15572.000000	15567.500000	45.67	54.00	8.33	H
15940.000000	15651.500000	47.03	54.00	6.97	H
16593.500000	16611.000000	47.04	54.00	6.96	H
17707.500000	17700.000000	46.20	54.00	7.80	H

**Note:**

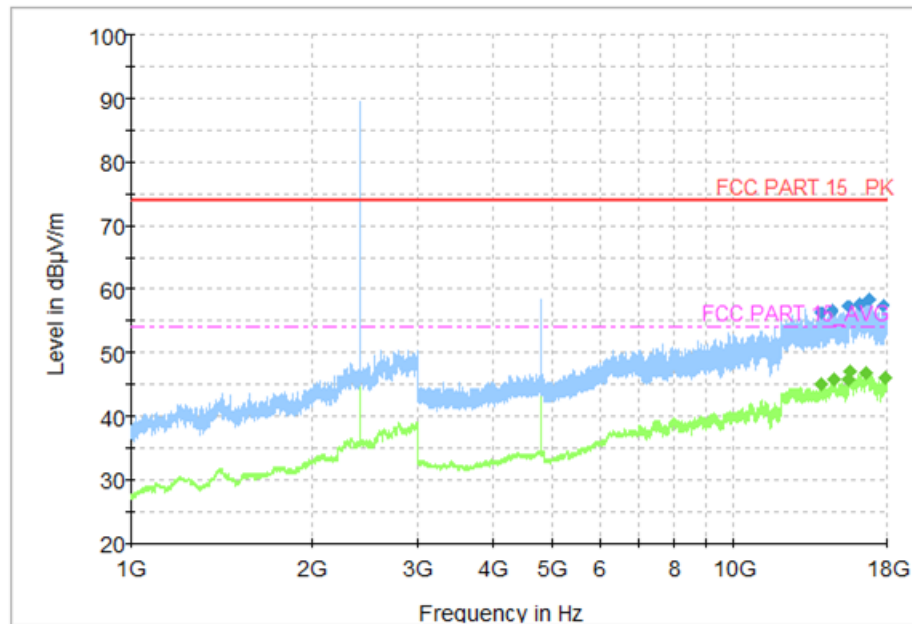
A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss", and Antenna Factor, the gain of the preamplifier, the cable loss.  $P_{Mea}$  is the field strength recorded from the instrument.

The measurement results are obtained as described below:

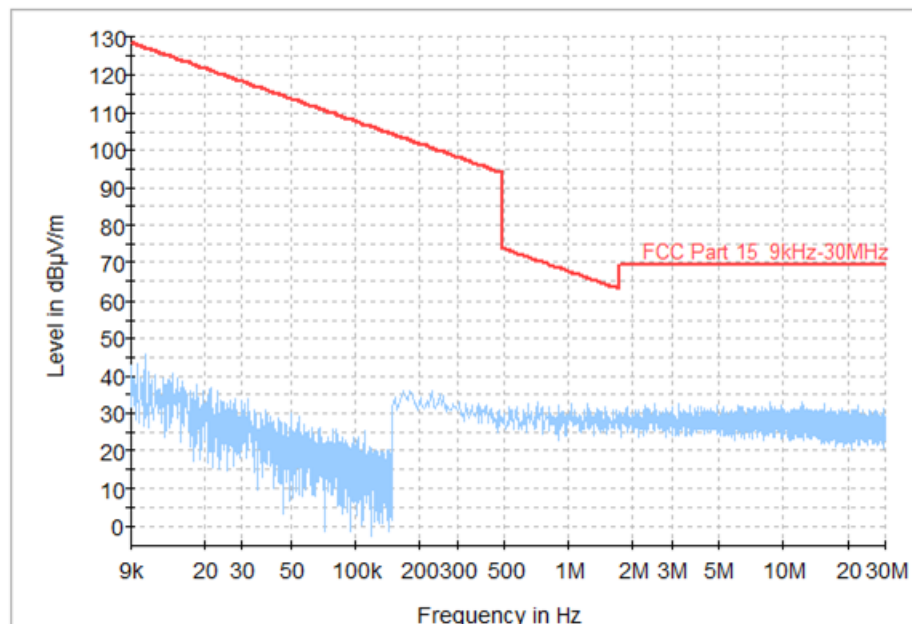
Result=  $P_{Mea}$  +Cable Loss +Antenna Factor-Gain of the preamplifier.

**See below for test graphs.**

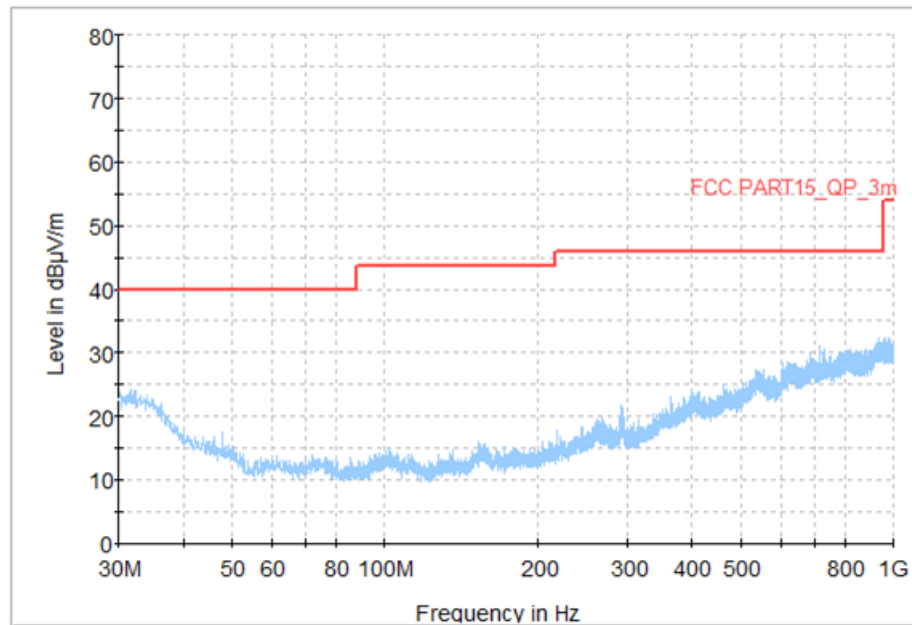
**Conclusion: Pass**



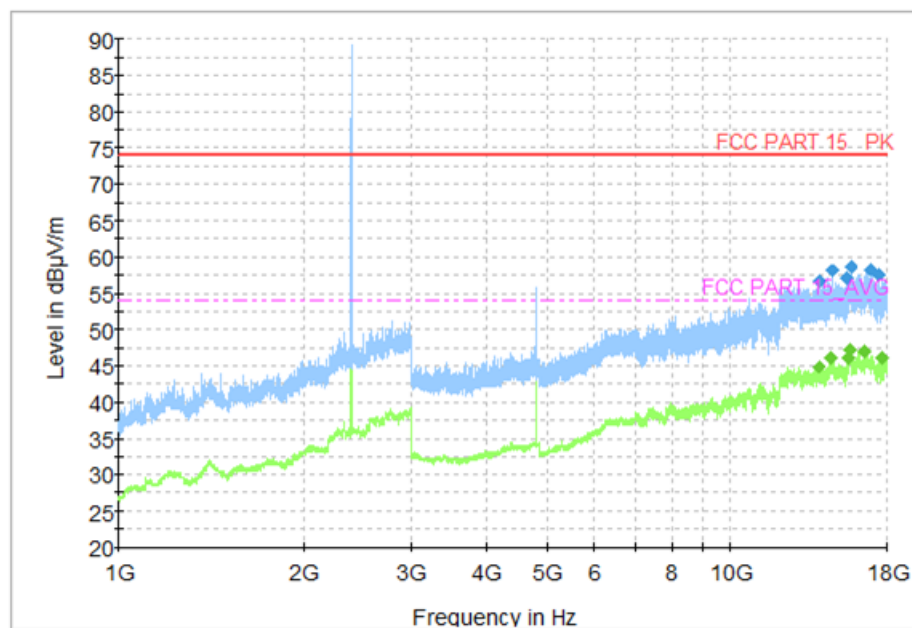
**Fig.20 Radiated Spurious Emission (GFSK, Ch0, 1 GHz ~18 GHz)**



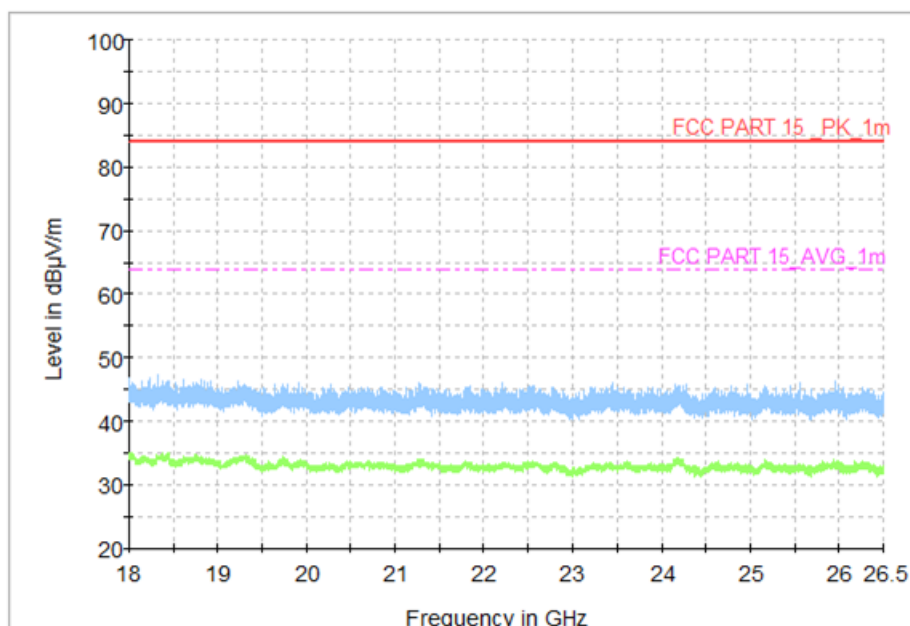
**Fig.21 Radiated Spurious Emission (Ch19, 9 kHz-30 MHz)**



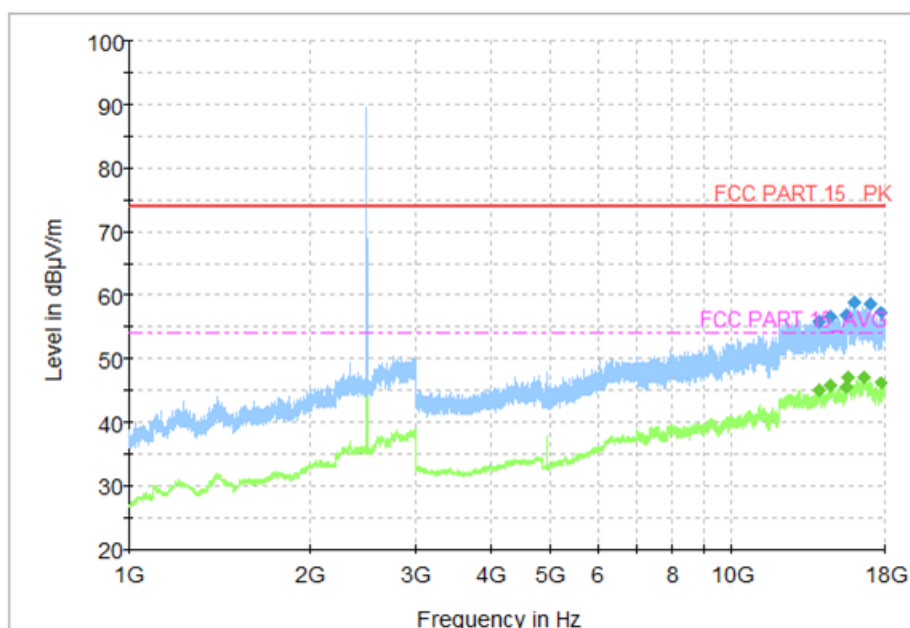
**Fig.22 Radiated Spurious Emission (Ch19, 30 MHz-1 GHz)**



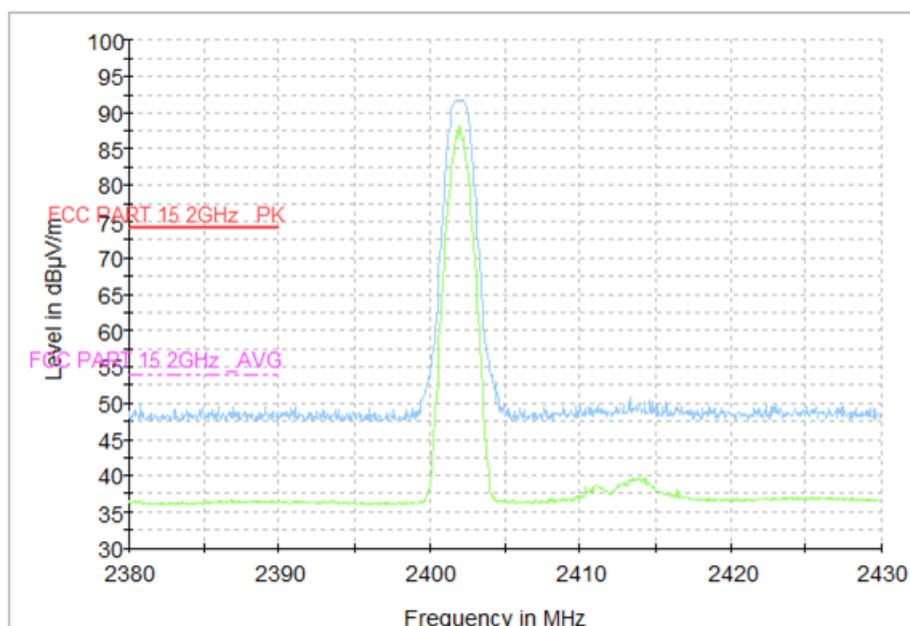
**Fig.23 Radiated Spurious Emission (Ch19, 1 GHz- 18 GHz)**



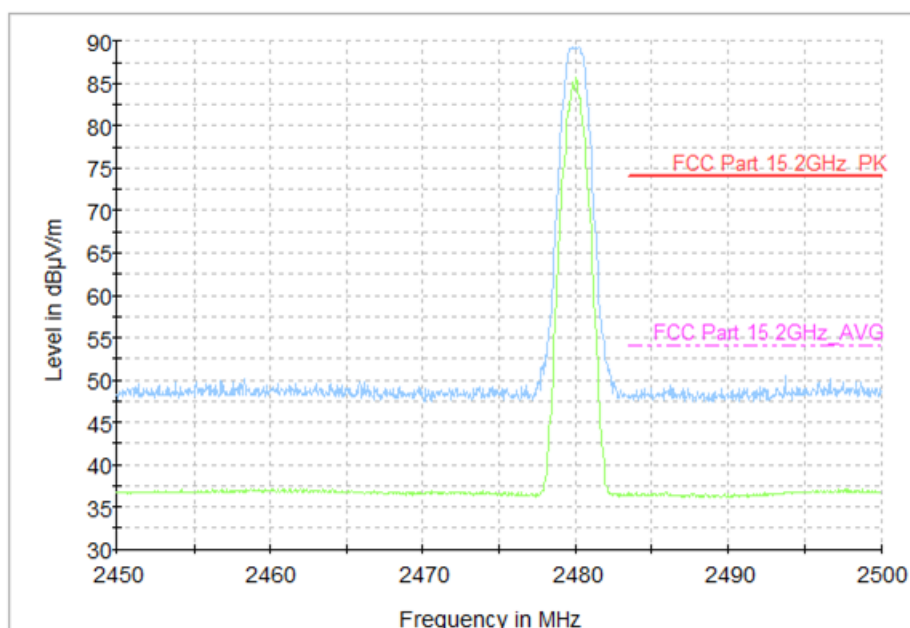
**Fig.24 Radiated Spurious Emission (Ch19, 18 GHz-26.5 GHz)**



**Fig.25 Radiated Spurious Emission (Ch39, 1 GHz-18 GHz)**



**Fig.26 Radiated Band Edges (GFSK, Ch0, 2380GHz~2450GHz)**



**Fig.27 Radiated Band Edges (GFSK, Ch39, 2450GHz~2500GHz)**



## A.7 AC Power line Conducted Emission

### Test Condition:

Voltage (V)	Frequency (Hz)
120	60

### Measurement Result and limit:

BLE (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.28	Fig.29	<b>P</b>
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

BLE (Average Limit)

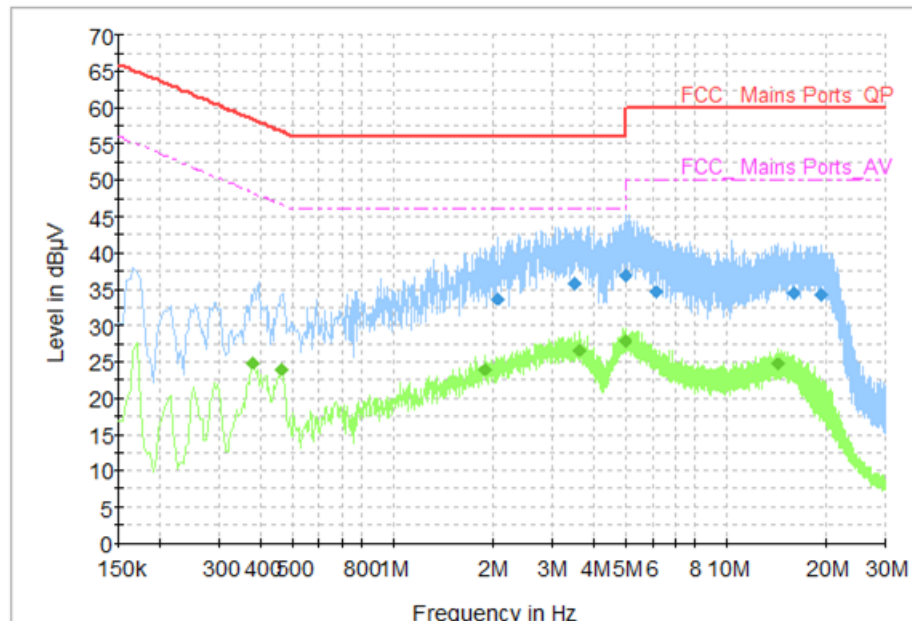
Frequency range (MHz)	Average-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig 28	Fig 29	<b>P</b>
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

**Note:** The measurement results include the L1 and N measurements.

**See below for test graphs.**

**Conclusion: Pass**



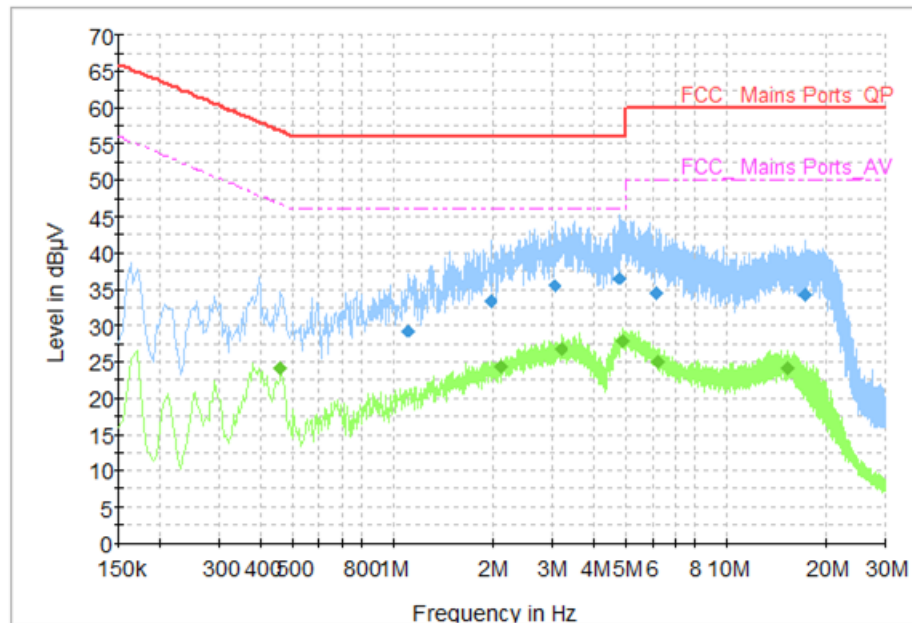
**Fig.28 AC Power line Conducted Emission (Traffic)**

**Measurement Results: Quasi Peak**

Frequency (MHz)	Quasi Peak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
2.058000	33.63	56.00	22.37	L1	ON	9.7
3.514000	35.82	56.00	20.18	N	ON	9.7
4.974000	36.83	56.00	19.17	L1	ON	9.8
6.166000	34.56	60.00	25.44	L1	ON	9.8
15.922000	34.34	60.00	25.66	L1	ON	10.1
19.182000	34.24	60.00	25.76	L1	ON	10.2

**Measurement Results : Average**

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.378000	24.84	48.32	23.49	N	ON	9.6
0.462000	24.02	46.66	22.63	N	ON	9.7
1.898000	23.94	46.00	22.06	L1	ON	9.7
3.602000	26.66	46.00	19.34	L1	ON	9.7
4.986000	27.83	46.00	18.17	L1	ON	9.8
14.258000	24.60	50.00	25.40	L1	ON	10.1



**Fig.29 AC Power line Conducted Emission (Idle)**

**Measurement Results: Quasi Peak**

Frequency (MHz)	Quasi Peak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
1.114000	29.19	56.00	26.81	N	ON	9.7
1.962000	33.37	56.00	22.63	L1	ON	9.7
3.058000	35.40	56.00	20.60	N	ON	9.7
4.814000	36.43	56.00	19.57	N	ON	9.7
6.142000	34.47	60.00	25.53	L1	ON	9.8
17.154000	34.28	60.00	25.72	L1	ON	10.2

**Measurement Results : Average**

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Filter	Corr. (dB)
0.458000	24.10	46.73	22.63	N	ON	9.6
2.110000	24.42	46.00	21.58	L1	ON	9.7
3.202000	26.75	46.00	19.25	L1	ON	9.7
4.866000	27.80	46.00	18.20	L1	ON	9.8
6.198000	25.02	50.00	24.98	L1	ON	9.8
15.326000	24.22	50.00	25.78	L1	ON	10.1

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