



# FCC RF Test Report

**APPLICANT** : Shanghai Amphenol Airwave  
Communication Electronics Co., Ltd  
**EQUIPMENT** : Bluetooth module  
**BRAND NAME** : Amphenol  
**MODEL NAME** : B102C  
**FCC ID** : 2BAG9-B102C00101  
**STANDARD** : FCC Part 15 Subpart C §15.247  
**CLASSIFICATION** : (DTS) Digital Transmission System  
**TEST DATE(S)** : Mar. 22, 2023 ~ Apr. 04, 2023

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



**Sporton International Inc. (Kunshan)**

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China



## TABLE OF CONTENTS

<b>REVISION HISTORY.....</b>	<b>3</b>
<b>SUMMARY OF TEST RESULT .....</b>	<b>4</b>
<b>1 GENERAL DESCRIPTION.....</b>	<b>5</b>
1.1 Applicant.....	5
1.2 Manufacturer.....	5
1.3 Product Feature of Equipment Under Test.....	5
1.4 Product Specification of Equipment Under Test.....	5
1.5 Modification of EUT .....	5
1.6 Testing Location .....	6
1.7 Test Software.....	6
1.8 Applicable Standards.....	6
<b>2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST.....</b>	<b>7</b>
2.1 Carrier Frequency Channel .....	7
2.2 Test Mode.....	8
2.3 Connection Diagram of Test System.....	9
2.4 Support Unit used in test configuration and system .....	10
2.5 EUT Operation Test Setup .....	11
2.6 Measurement Results Explanation Example.....	11
<b>3 TEST RESULT .....</b>	<b>12</b>
3.1 6dB and 99% Bandwidth Measurement .....	12
3.2 Output Power Measurement.....	21
3.3 Power Spectral Density Measurement .....	22
3.4 Conducted Band Edges and Spurious Emission Measurement .....	29
3.5 Radiated Band Edges and Spurious Emission Measurement .....	38
3.6 AC Conducted Emission Measurement.....	42
3.7 Antenna Requirements.....	44
<b>4 LIST OF MEASURING EQUIPMENT.....</b>	<b>45</b>
<b>5 UNCERTAINTY OF EVALUATION.....</b>	<b>46</b>
<b>APPENDIX A. CONDUCTED TEST RESULTS</b>	
<b>APPENDIX B. AC CONDUCTED EMISSION TEST RESULT</b>	
<b>APPENDIX C. RADIATED SPURIOUS EMISSION</b>	
<b>APPENDIX D. DUTY CYCLE PLOTS</b>	
<b>APPENDIX E. SETUP PHOTOGRAPHS</b>	



## REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR311316	Rev. 01	Initial issue of report	Apr. 26, 2023

## SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	-
3.1	-	99% Bandwidth	-	Report only	-
3.2	15.247(b)(3)	Peak Output Power	$\leq 30\text{dBm}$	Pass	-
3.3	15.247(e)	Power Spectral Density	$\leq 8\text{dBm}/3\text{kHz}$	Pass	-
3.4	15.247(d)	Conducted Band Edges and Spurious Emission	$\leq 20\text{dBc}$	Pass	-
3.5	15.247(d)	Radiated Band Edges and Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 6.36 dB at 4960 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 7.63 dB at 0.165 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	15.203 & 15.247(b)	Pass	-

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



# 1 General Description

## 1.1 Applicant

Shanghai Amphenol Airwave Communication Electronics Co., Ltd  
No.689 Shen Nan Road, Xin Zhuang Industry Park, Shanghai, PR China

## 1.2 Manufacturer

Sichuan AI-Link Technology Co., Ltd.  
Anzhou Industrial Park, Mianyang, Sichuan, P.R.C

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Bluetooth module
Brand Name	Amphenol
Model Name	B102C
FCC ID	2BAG9-B102C00101
HW Version	V1.0.0.0
SW Version	B102C_b0101v01
EUT Stage	Identical Prototype

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	2402 MHz ~ 2480 MHz
Number of Channels	40
Carrier Frequency of Each Channel	40 Channel(37 hopping + 3 advertising channel)
Maximum Output Power to Antenna	BLE 1Mbps: 5.04 dBm (0.0032 W) BLE 2Mbps: 4.72 dBm (0.0030 W)
99% Occupied Bandwidth	BLE 1Mbps: 1.045MHz BLE 2Mbps: 2.062MHz
Antenna Type / Gain	On-Board PCB Antenna with gain 1.4 dBi
Type of Modulation	Bluetooth LE : GFSK

## 1.5 Modification of EUT

No modifications are made to the EUT during all test items.

## 1.6 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

<b>Test Firm</b>	Sporton International Inc. (Kunshan)		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	CO01-KS 03CH06-KS TH01-KS	CN1257	314309

## 1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH06-KS	AUDIX	E3	6.2009-8-24a1
2.	CO01-KS	AUDIX	E3	6.2009-8-24

## 1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart C §15.247
- FCC KDB 558074 D01 15.247 Meas Guidance v05r02
- ANSI C63.10-2013

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.



## 2 Test Configuration of Equipment Under Test

### 2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	0	2402	21	2444
	1	2404	22	2446
	2	2406	23	2448
	3	2408	24	2450
	4	2410	25	2452
	5	2412	26	2454
	6	2414	27	2456
	7	2416	28	2458
	8	2418	29	2460
	9	2420	30	2462
	10	2422	31	2464
	11	2424	32	2466
	12	2426	33	2468
	13	2428	34	2470
	14	2430	35	2472
	15	2432	36	2474
	16	2434	37	2476
	17	2436	38	2478
	18	2438	39	2480
	19	2440	-	-
	20	2442	-	-

## 2.2 Test Mode

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

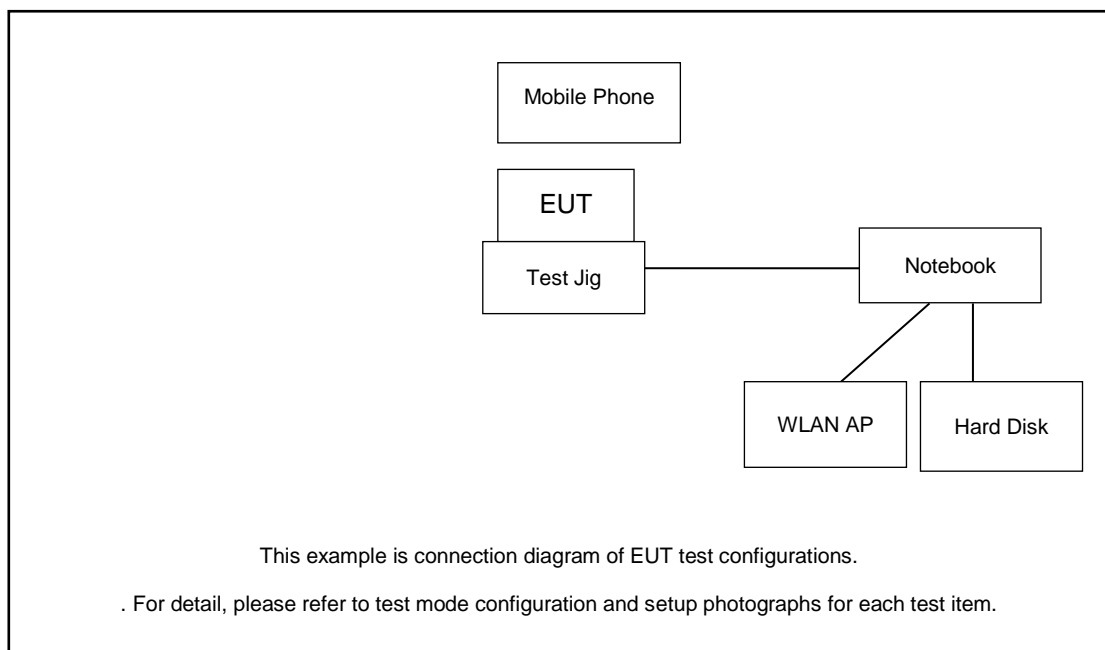
The following summary table is showing all test modes to demonstrate in compliance with the standard.

Summary table of Test Cases	
Test Item	Data Rate / Modulation
	Bluetooth – LE / GFSK
Conducted TCs	Mode 1: Bluetooth Tx CH00_2402 MHz Mode 2: Bluetooth Tx CH19_2440 MHz Mode 3: Bluetooth Tx CH39_2480 MHz
Radiated TCs	Mode 1: Bluetooth Tx CH00_2402 MHz Mode 2: Bluetooth Tx CH19_2440 MHz Mode 3: Bluetooth Tx CH39_2480 MHz
AC Conducted Emission	Mode 1: BLE Tx + Powered by test Jig from Notebook charging
<b>Remark:</b> For Radiated Test Cases, The tests were performed with Test Jig and Notebook	

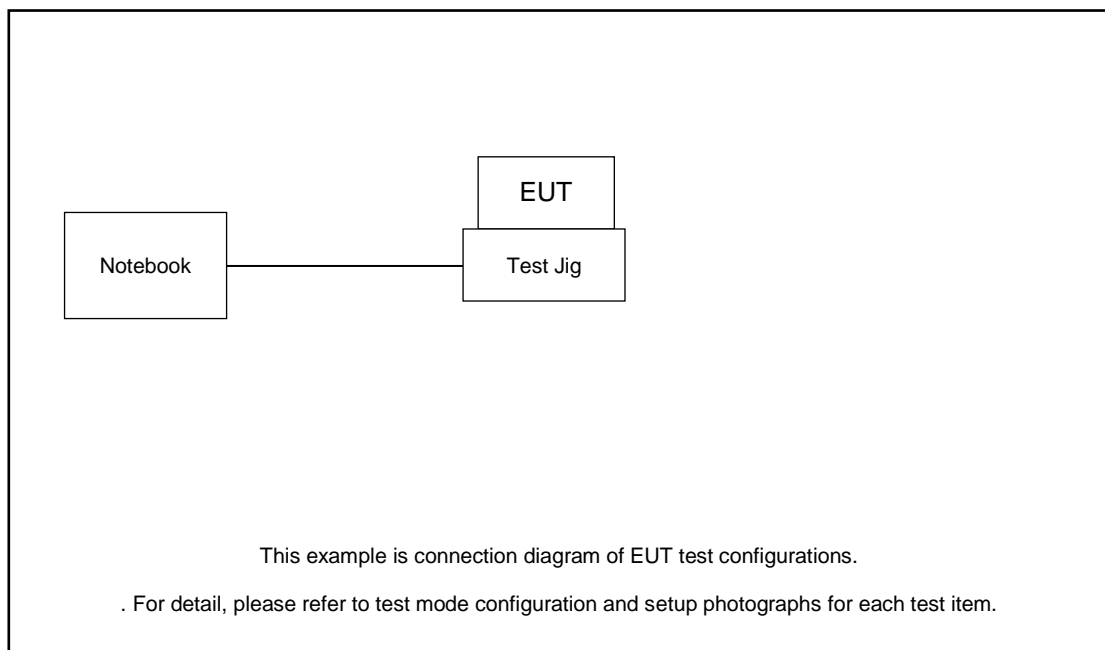


## 2.3 Connection Diagram of Test System

AC Conducted Emission:



Radiated Emission:





## 2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Lenovo	V130-14IKB004	N/A	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
2.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded, 1.8m
3.	Hard Disk	Lenovo	F310	DoC	Shielded, 1.2m	N/A
4.	Mobile phone	OPPO	R17	N/A	N/A	N/A
5.	Test Jig	Amphenol	W106C_EVB	N/A	N/A	N/A

## 2.5 EUT Operation Test Setup

For BLE function, the engineering test program was provided and enabled to make EUT continuous transmit.

For AC power line conducted emissions, the EUT was set to connect with the Mobile Phone under large package sizes transmission.

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss

*Offset = RF cable loss .*

Following shows an offset computation example with cable loss 5.60 dB

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} \\ &= 5.60 \text{ (dB)}\end{aligned}$$

### 3 Test Result

#### 3.1 6dB and 99% Bandwidth Measurement

##### 3.1.1 Limit of 6dB and 99% Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

##### 3.1.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

##### 3.1.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 11.8
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1% to 5% of the 99% OBW and the VBW is set to 3 times of the RBW.
6. Measure and record the results in the test report.

##### 3.1.4 Test Setup

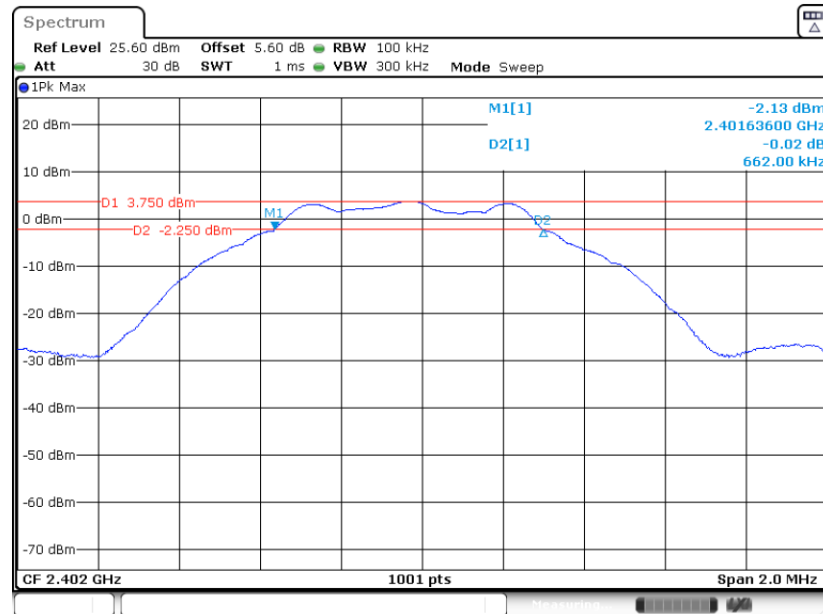




### 3.1.5 Test Result of 6dB Bandwidth

BLE 1Mbps

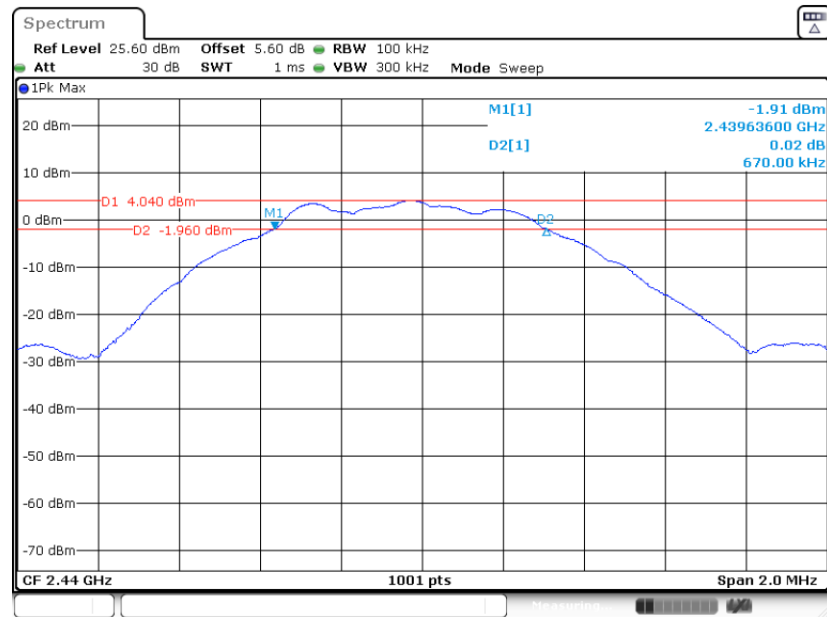
6 dB Bandwidth Plot on Channel 00



Date: 22.MAR.2023 09:03:58

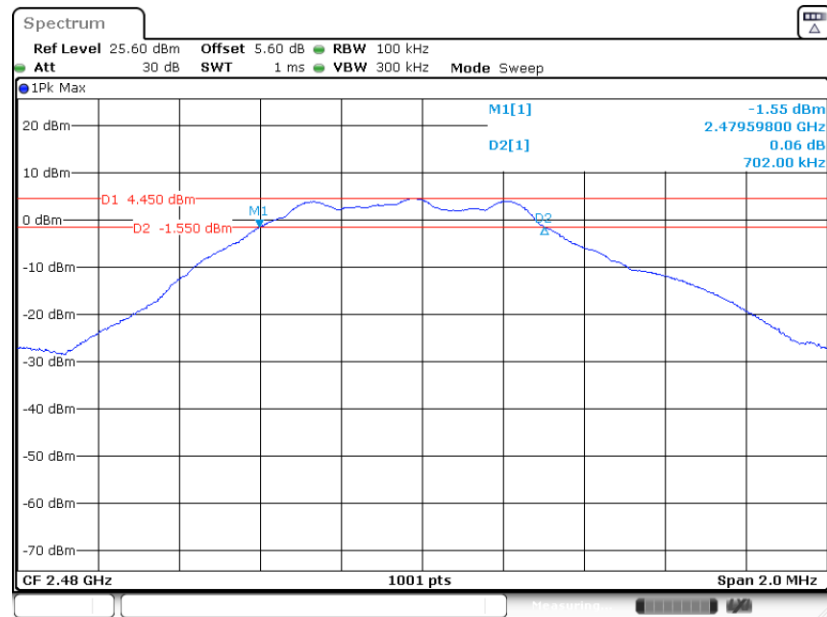


6 dB Bandwidth Plot on Channel 19



Date: 22.MAR.2023 09:07:08

6 dB Bandwidth Plot on Channel 39

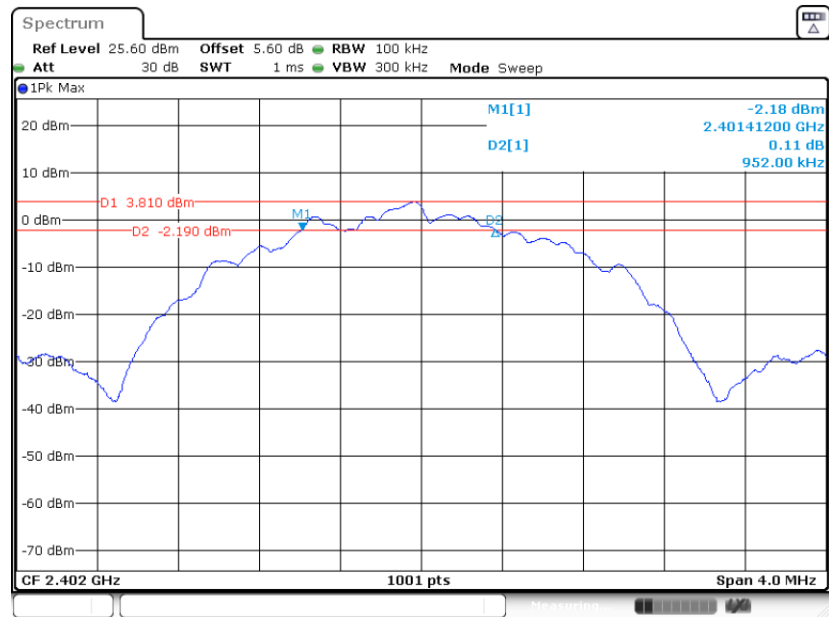


Date: 22.MAR.2023 09:09:22



BLE 2Mbps

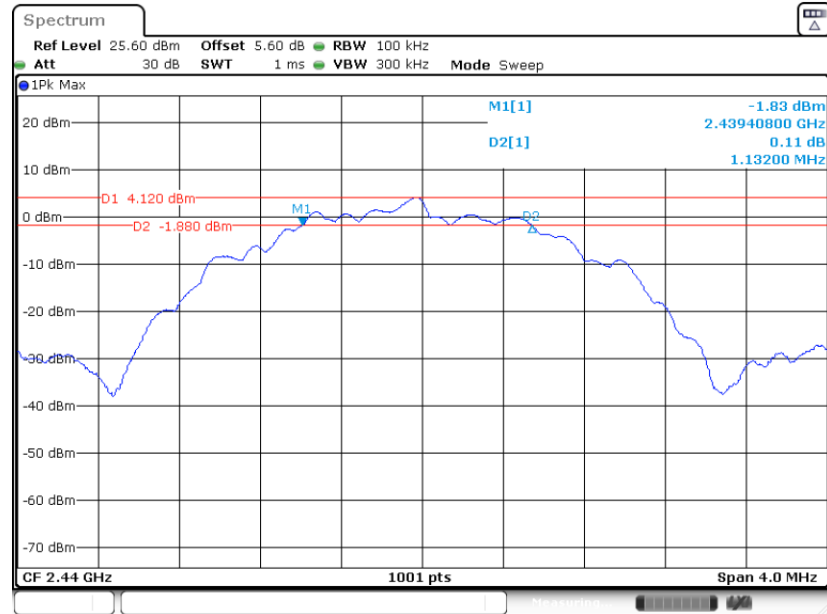
6 dB Bandwidth Plot on Channel 00



Date: 22.MAR.2023 09:14:13

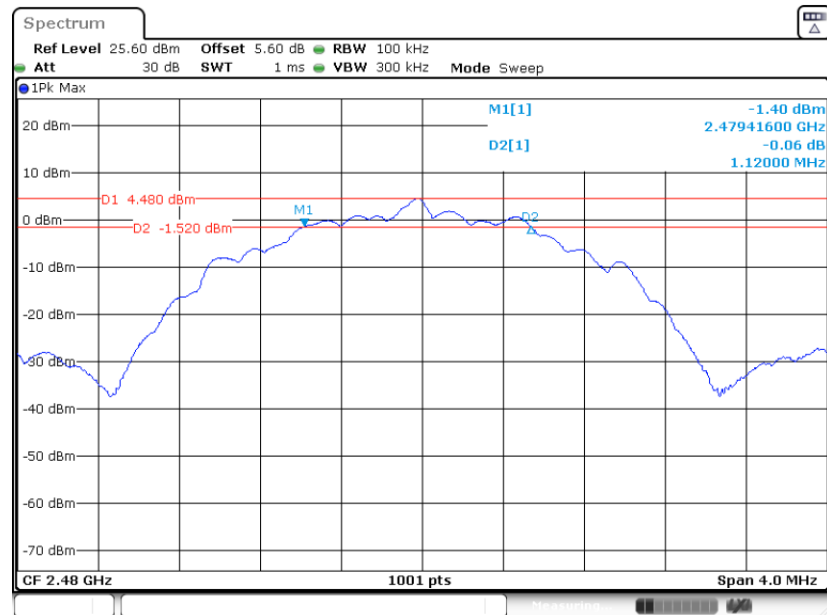


### 6 dB Bandwidth Plot on Channel 19



Date: 22.MAR.2023 09:16:34

### 6 dB Bandwidth Plot on Channel 39



Date: 22.MAR.2023 09:18:41

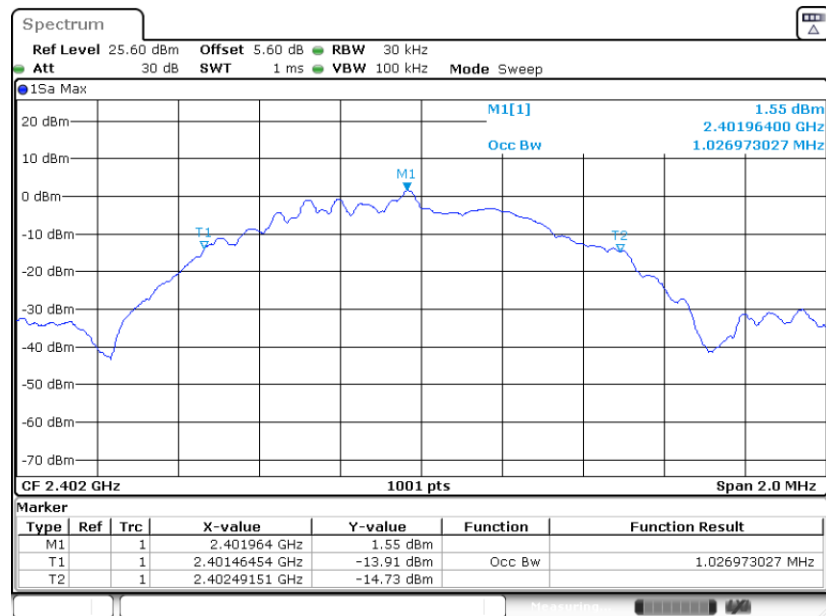




## 3.1.6 Test Result of 99% Occupied Bandwidth

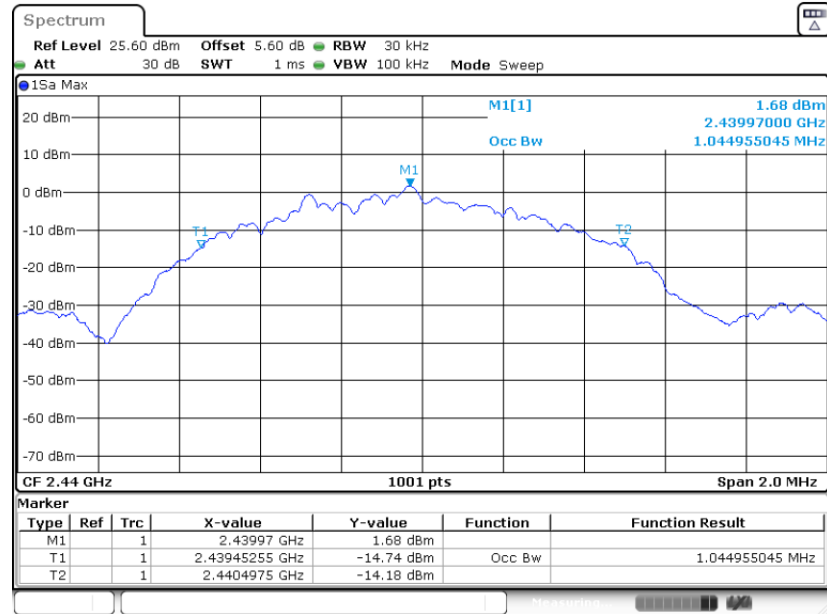
BLE 1Mbps

## 99% Occupied Bandwidth Plot on Channel 00



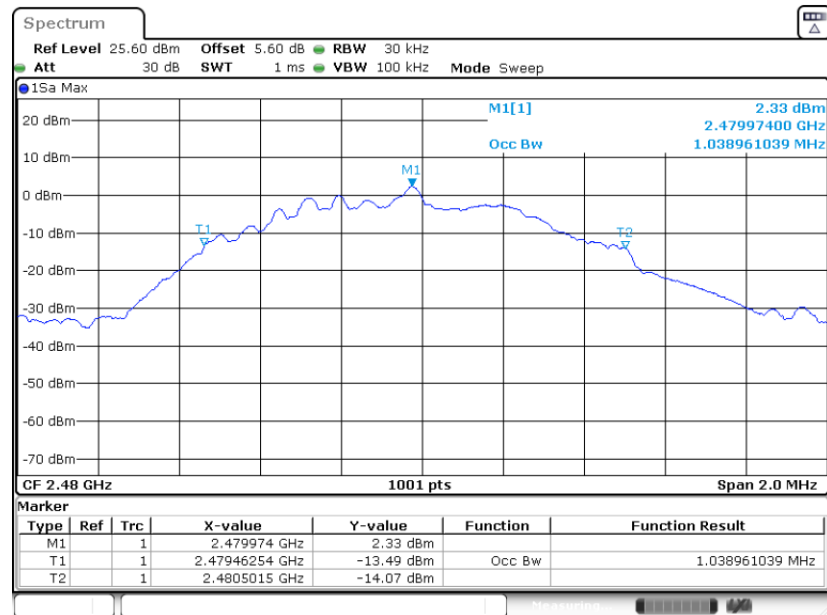


### 99% Occupied Bandwidth Plot on Channel 19



Date: 22.MAR.2023 09:08:35

### 99% Occupied Bandwidth Plot on Channel 39

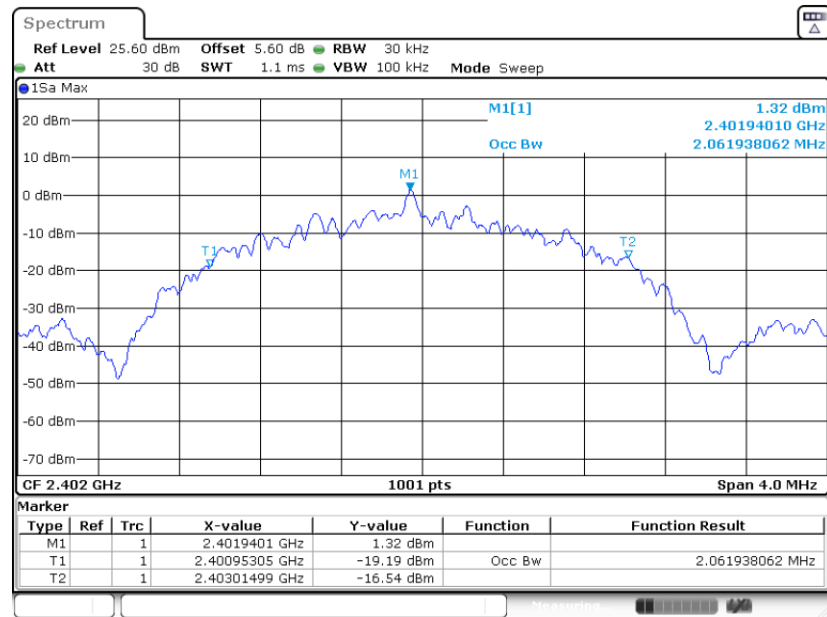


Date: 22.MAR.2023 09:11:09



BLE 2Mbps

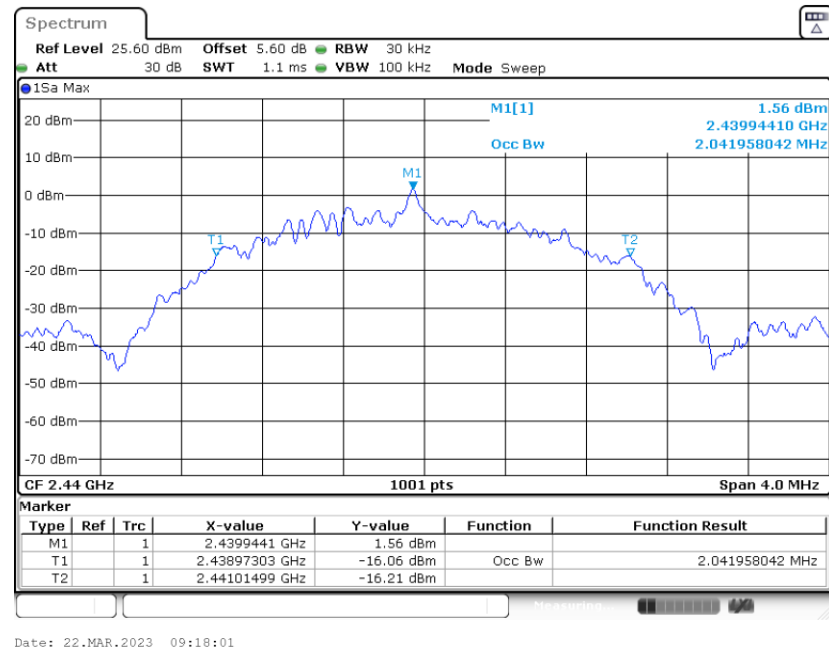
99% Occupied Bandwidth Plot on Channel 00



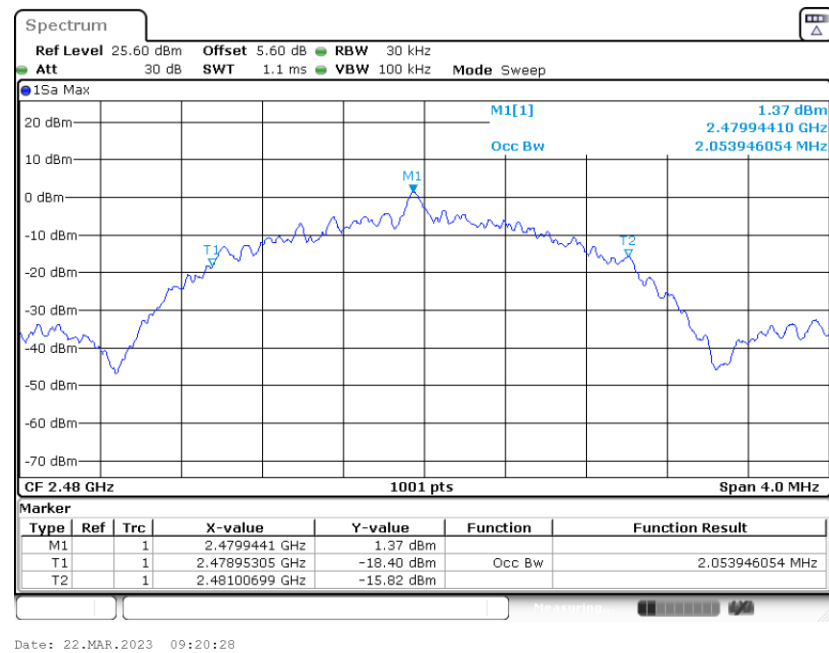
Date: 22.MAR.2023 09:15:59



### 99% Occupied Bandwidth Plot on Channel 19



### 99% Occupied Bandwidth Plot on Channel 39



Note : The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

## 3.2 Output Power Measurement

### 3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

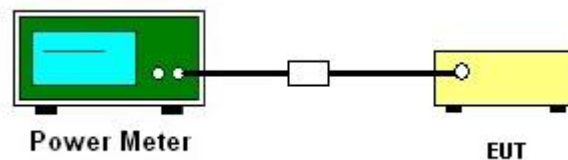
### 3.2.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

### 3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of ANSI C63.10-2013 clause 11.9.1.3 PKPM1 Peak power meter or ANSI C63.10-2013 clause 11.9.2.3.1 Method AVGPM method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Peak Output Power

Please refer to Appendix A.

### 3.2.6 Test Result of Average Output Power (Reporting Only)

Please refer to Appendix A.

### 3.3 Power Spectral Density Measurement

#### 3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

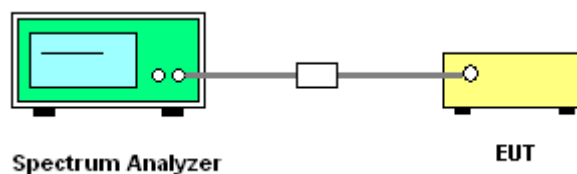
#### 3.3.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

#### 3.3.3 Test Procedures

1. The testing follows Measurement Procedure of ANSI C63.10-2013 clause 11.10.2 Method PKPSD.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.
7. The Measured power density (dBm)/ 100kHz is a reference level and used as 20dBc down limit line for Conducted Band Edges and Conducted Spurious Emission.

#### 3.3.4 Test Setup



#### 3.3.5 Test Result of Power Spectral Density

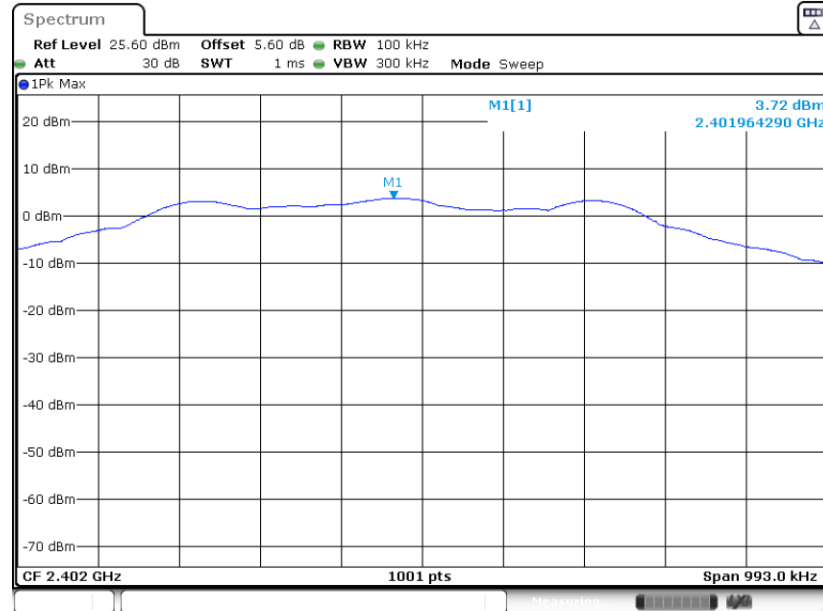
Please refer to Appendix A.



### 3.3.6 Test Result of Power Spectral Density Plots (100kHz)

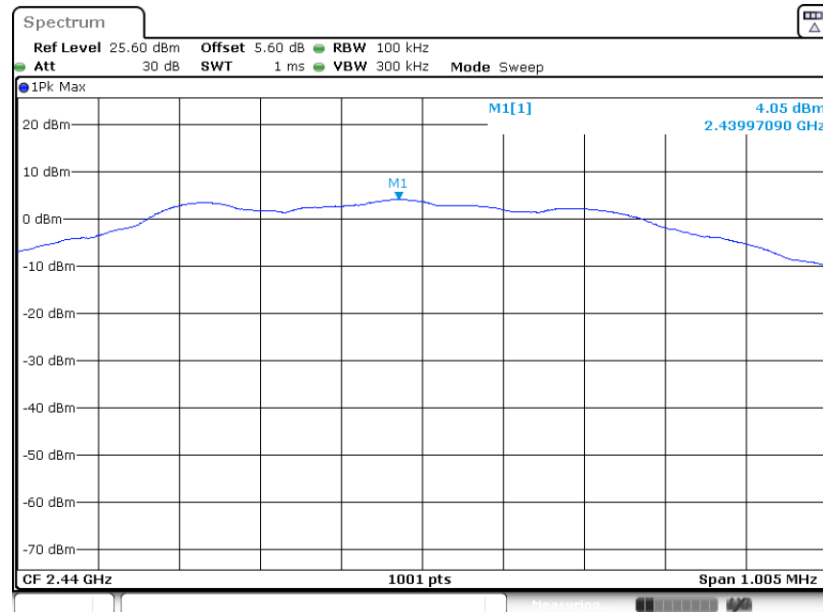
#### BLE 1Mbps

##### PSD 100kHz Plot on Channel 00



Date: 22.MAR.2023 09:04:36

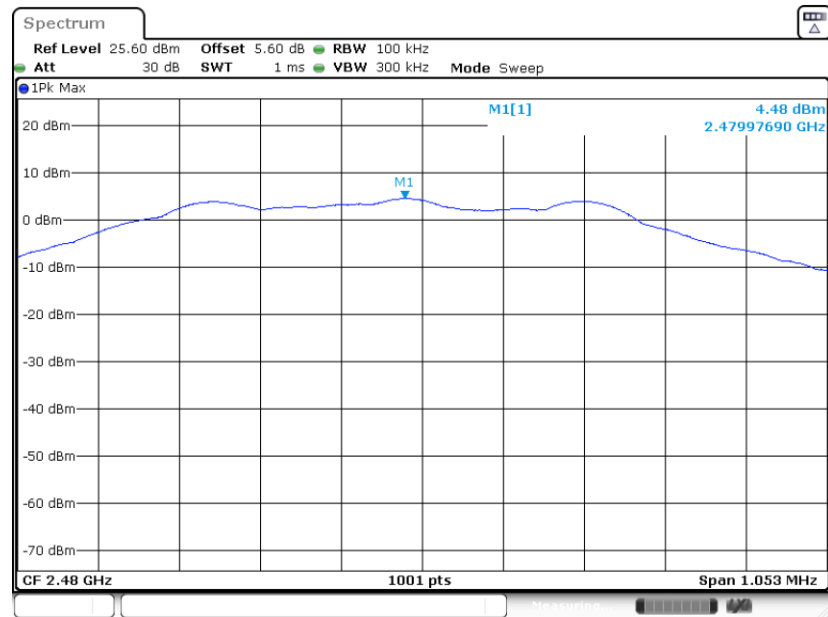
##### PSD 100kHz Plot on Channel 19



Date: 22.MAR.2023 09:07:45



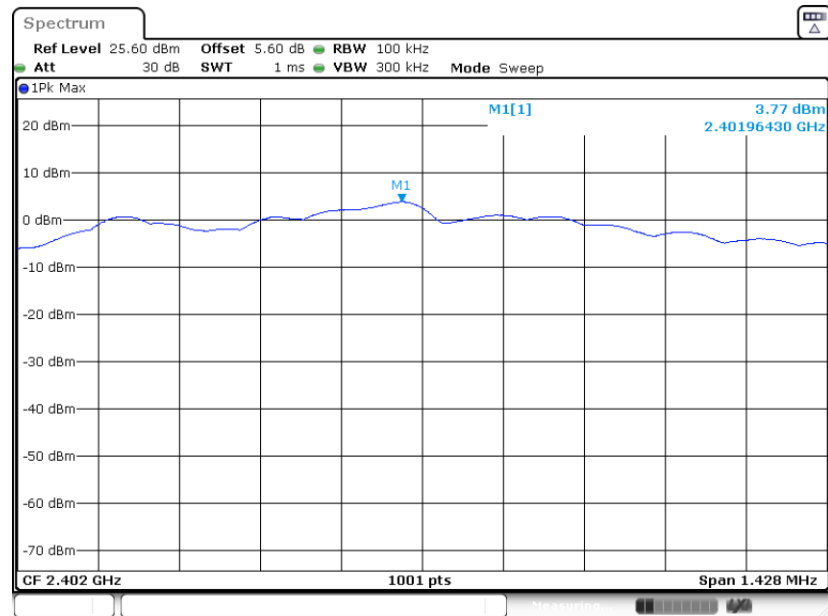
### PSD 100kHz Plot on Channel 39



Date: 22.MAR.2023 09:10:00

### BLE 2Mbps

### PSD 100kHz Plot on Channel 00

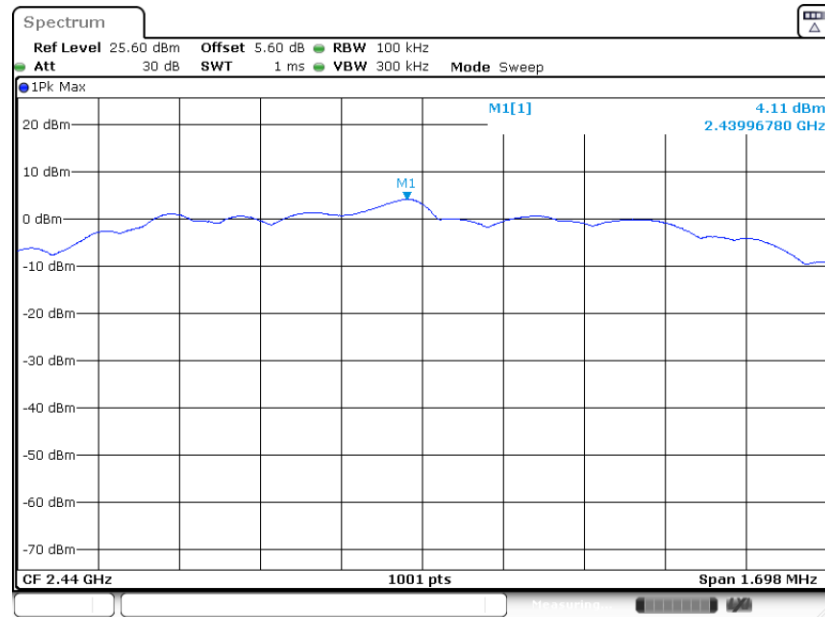


Date: 22.MAR.2023 09:14:50



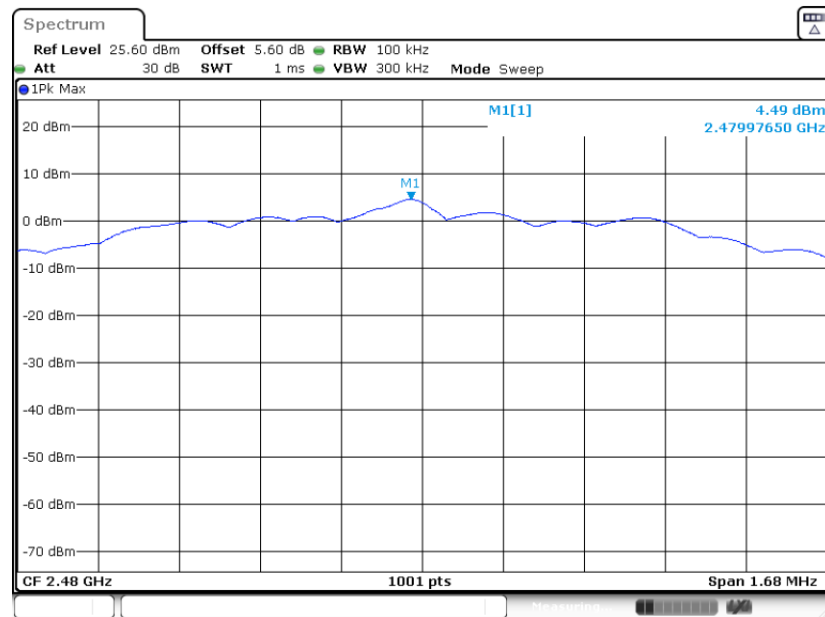


PSD 100kHz Plot on Channel 19



Date: 22.MAR.2023 09:17:12

PSD 100kHz Plot on Channel 39



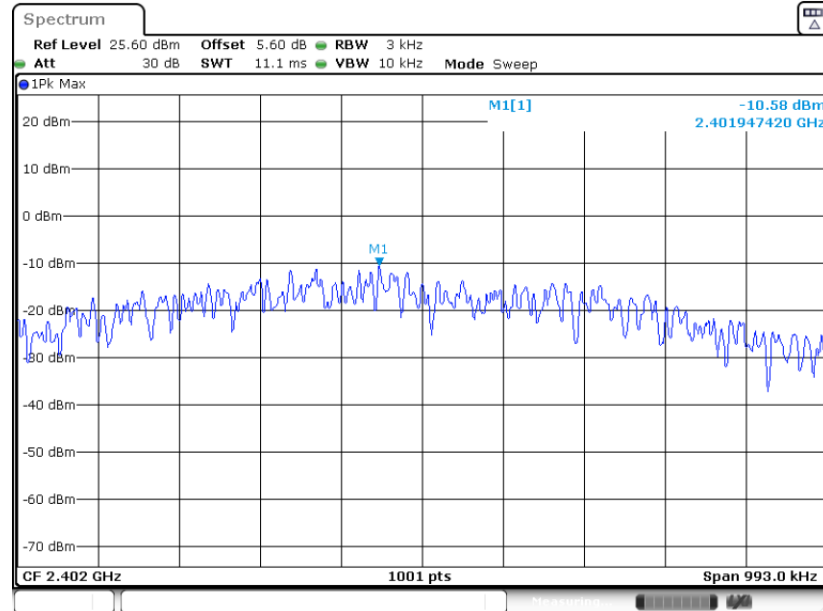
Date: 22.MAR.2023 09:19:19



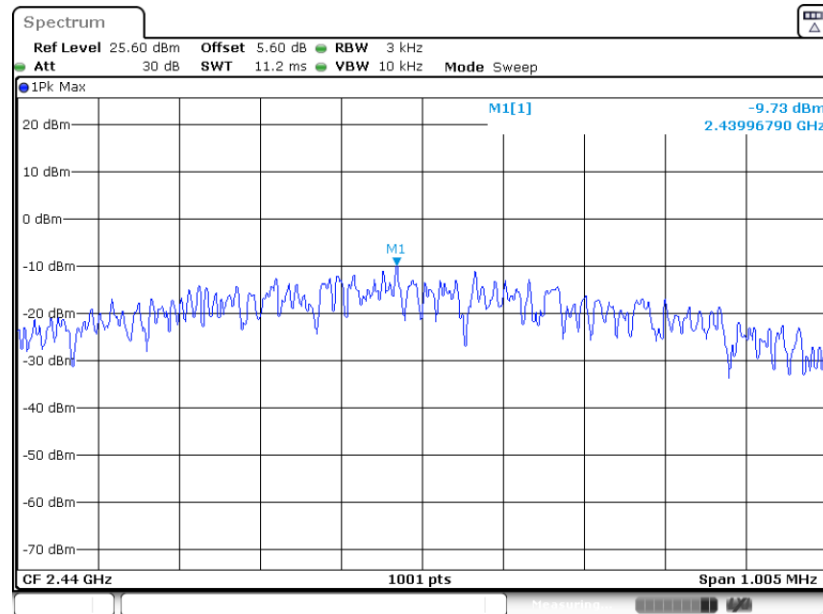
### 3.3.7 Test Result of Power Spectral Density Plots (3kHz)

#### BLE 1Mbps

##### PSD 3kHz Plot on Channel 00

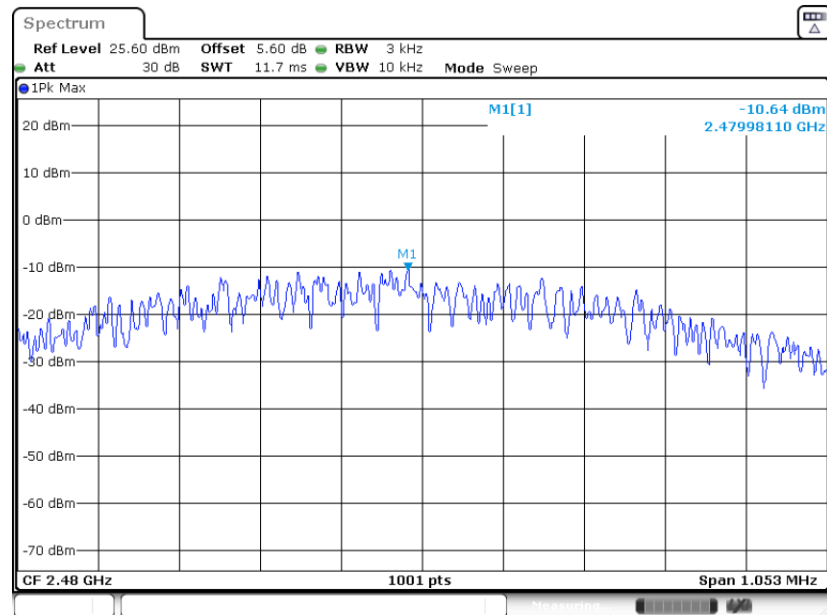


##### PSD 3kHz Plot on Channel 19





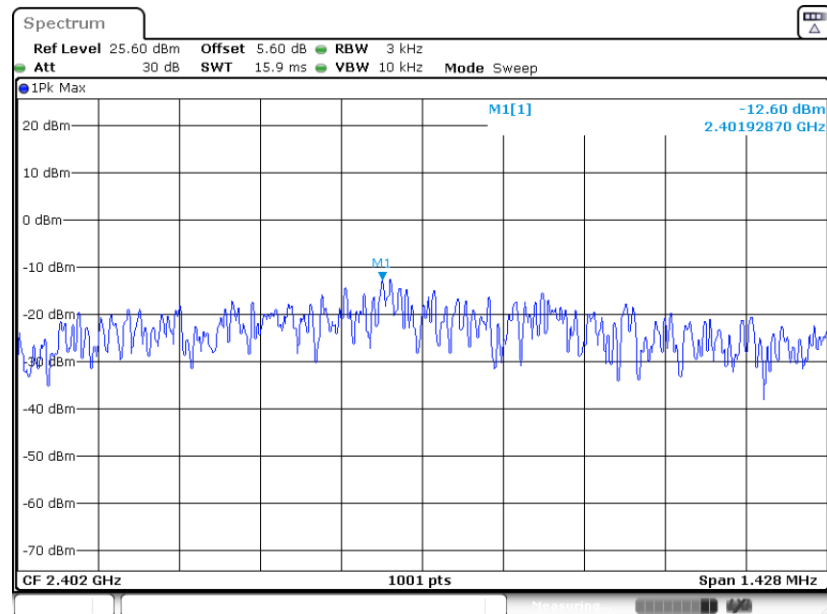
### PSD 3kHz Plot on Channel 39



Date: 22.MAR.2023 09:09:41

### BLE 2Mbps

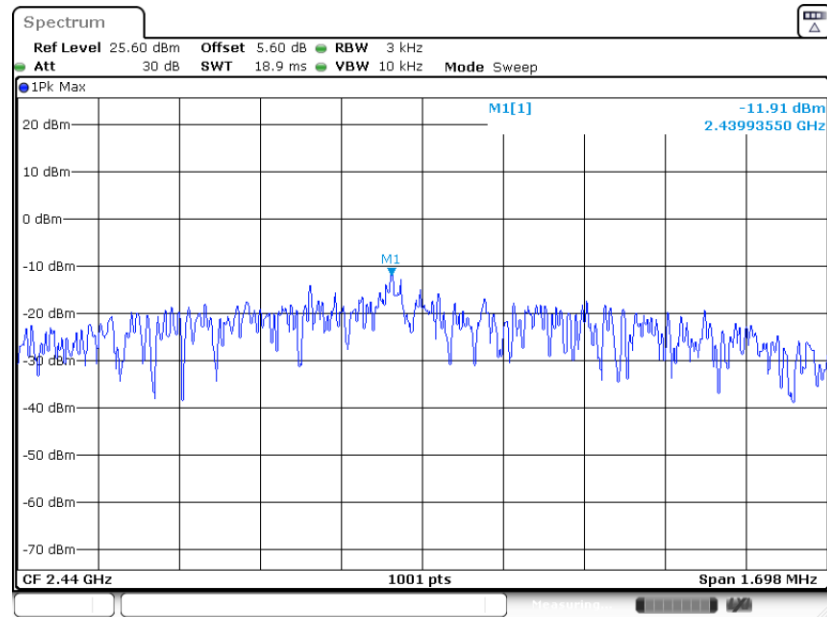
### PSD 3kHz Plot on Channel 00



Date: 22.MAR.2023 09:14:31

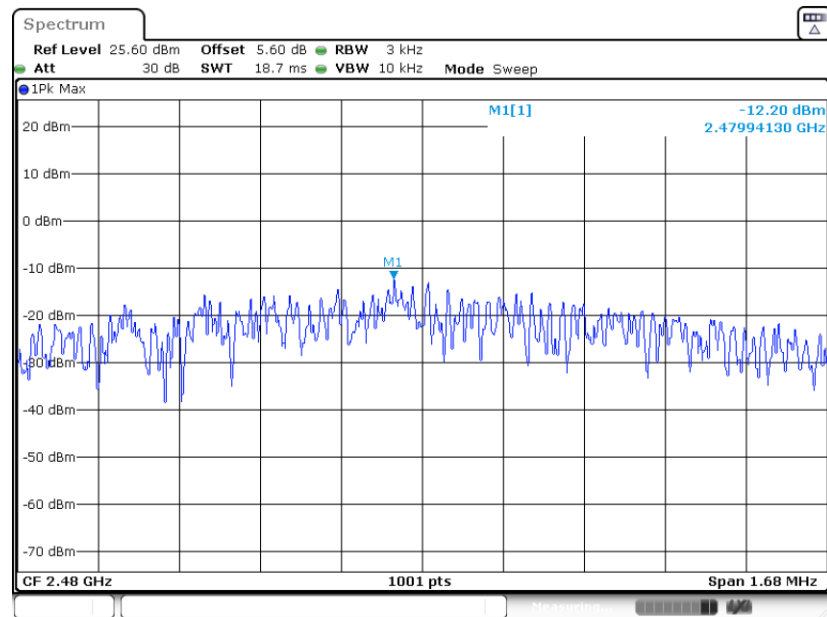


PSD 3kHz Plot on Channel 19



Date: 22.MAR.2023 09:16:53

PSD 3kHz Plot on Channel 39



Date: 22.MAR.2023 09:19:00

## 3.4 Conducted Band Edges and Spurious Emission Measurement

### 3.4.1 Limit of Conducted Band Edges and Spurious Emission

All harmonics/spurious must be at least 20 dB down from the highest emission level within the authorized band.

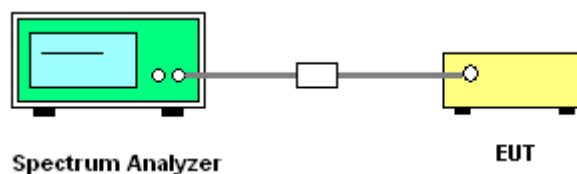
### 3.4.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

### 3.4.3 Test Procedure

1. The testing follows ANSI C63.10-2013 clause 11.13
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 3.4.4 Test Setup

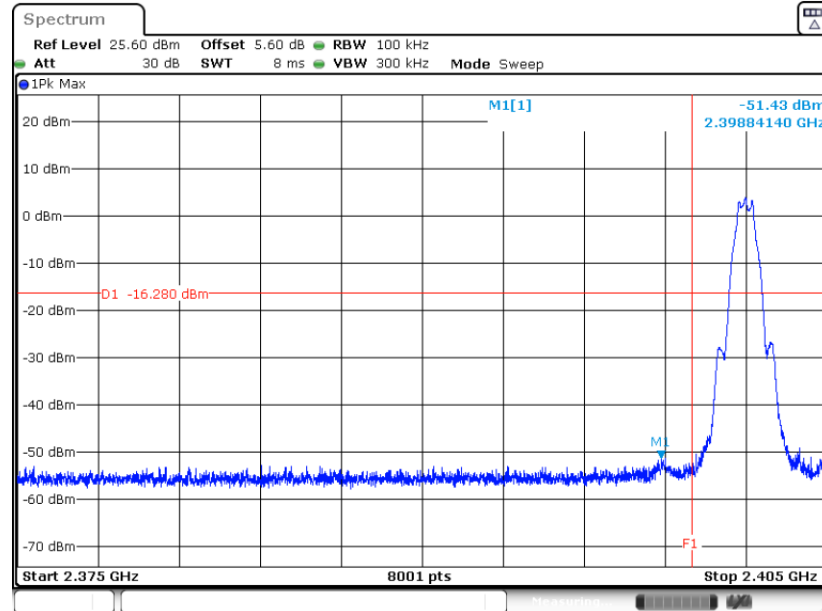




### 3.4.5 Test Result of Conducted Band Edges Plots

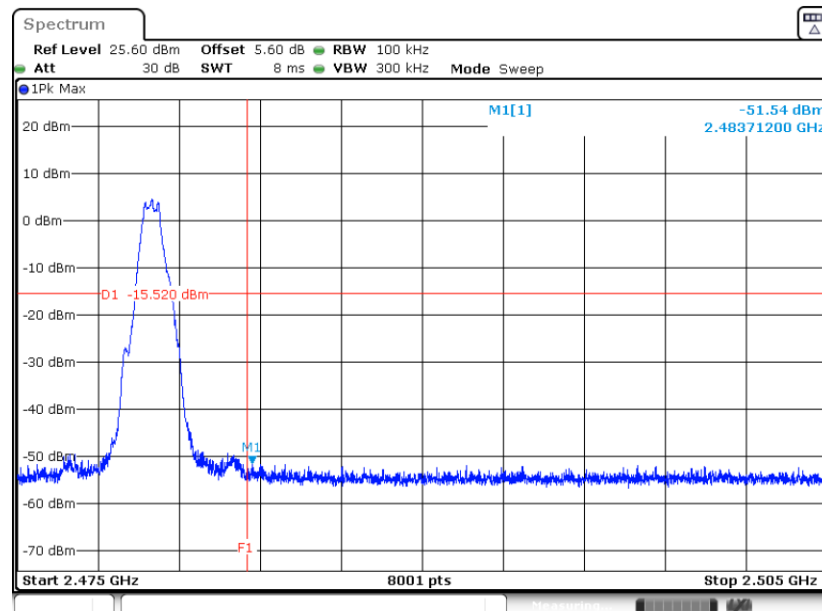
#### BLE 1Mbps

##### Low Band Edge Plot on Channel 00



Date: 22.MAR.2023 09:04:55

##### High Band Edge Plot on Channel 39

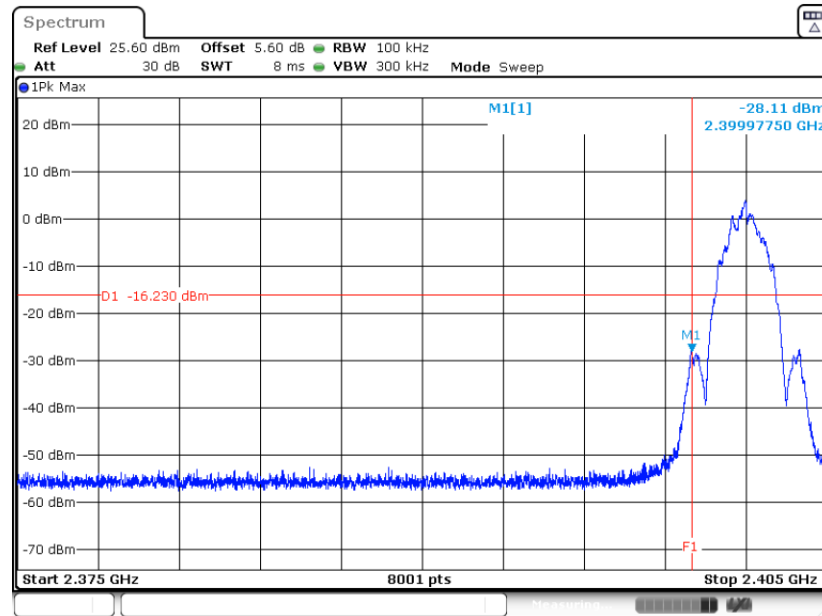


Date: 22.MAR.2023 09:10:19



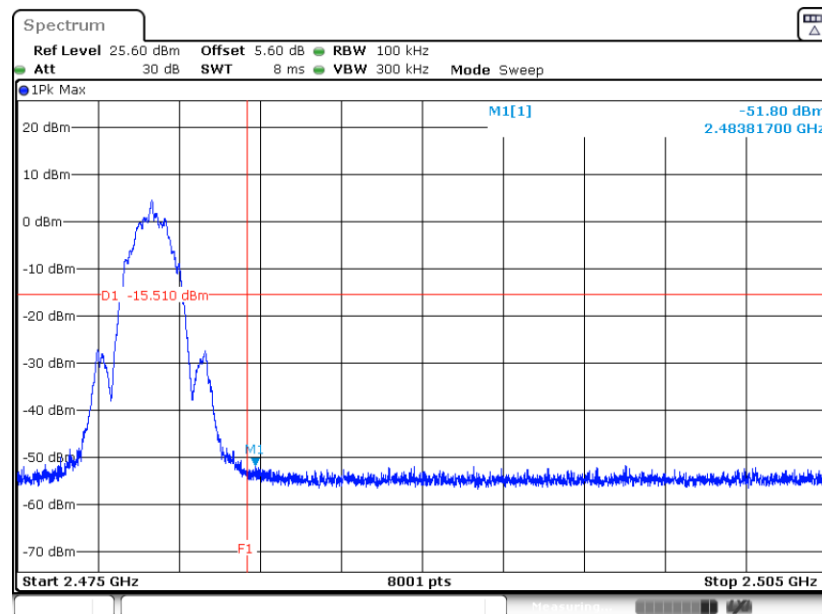
## BLE 2Mbps

### Low Band Edge Plot on Channel 00



Date: 22.MAR.2023 09:15:09

### High Band Edge Plot on Channel 39



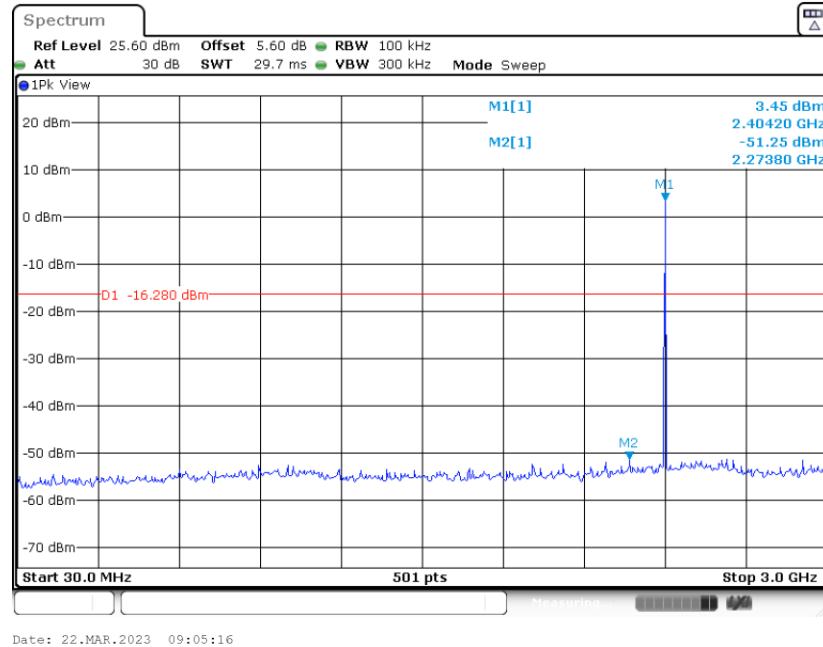
Date: 22.MAR.2023 09:19:38

### 3.4.6 Test Result of Conducted Spurious Emission Plots

#### BLE 1Mbps

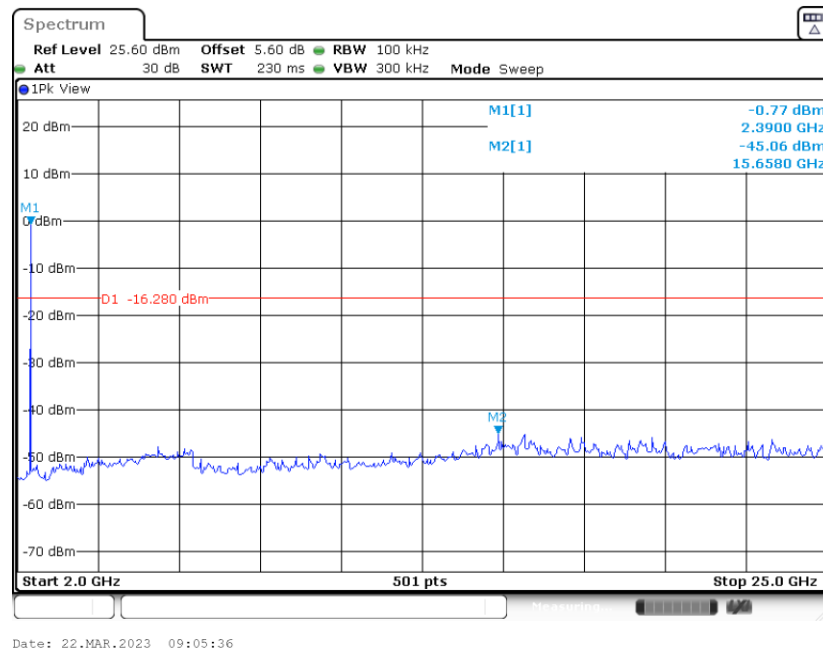
#### Conducted Spurious Emission Plot on Bluetooth LE 1Mbps

#### GFSK Channel 00



#### Conducted Spurious Emission Plot on Bluetooth LE 1Mbps

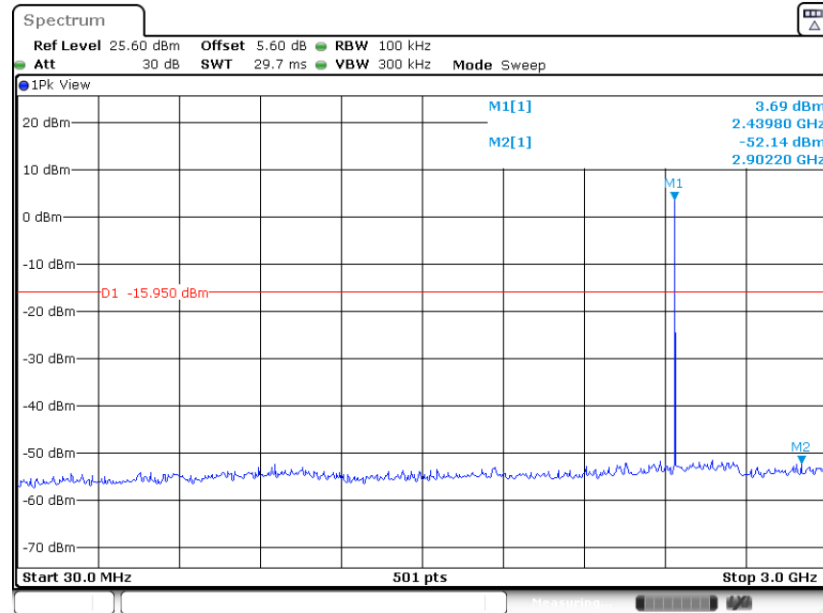
#### GFSK Channel 00





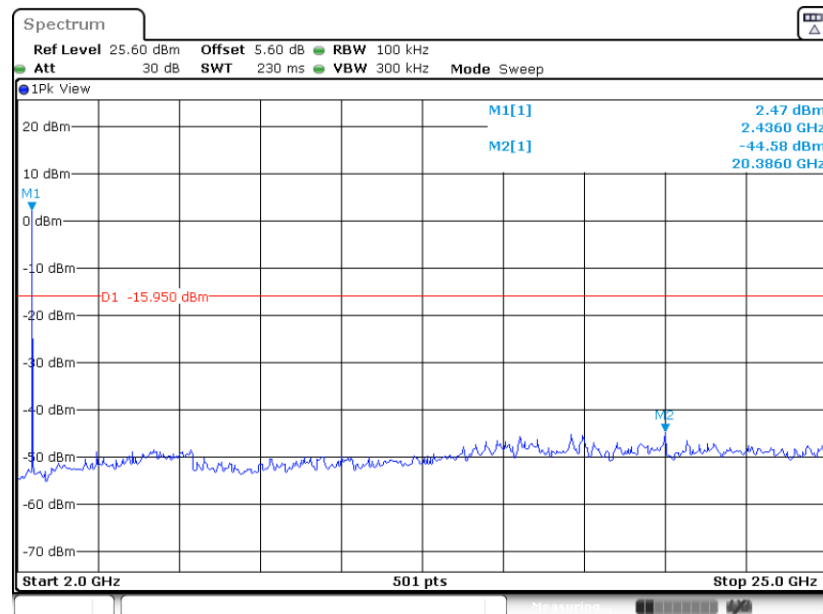


Conducted Spurious Emission Plot on Bluetooth LE 1Mbps  
GFSK Channel 19



Date: 22.MAR.2023 09:08:06

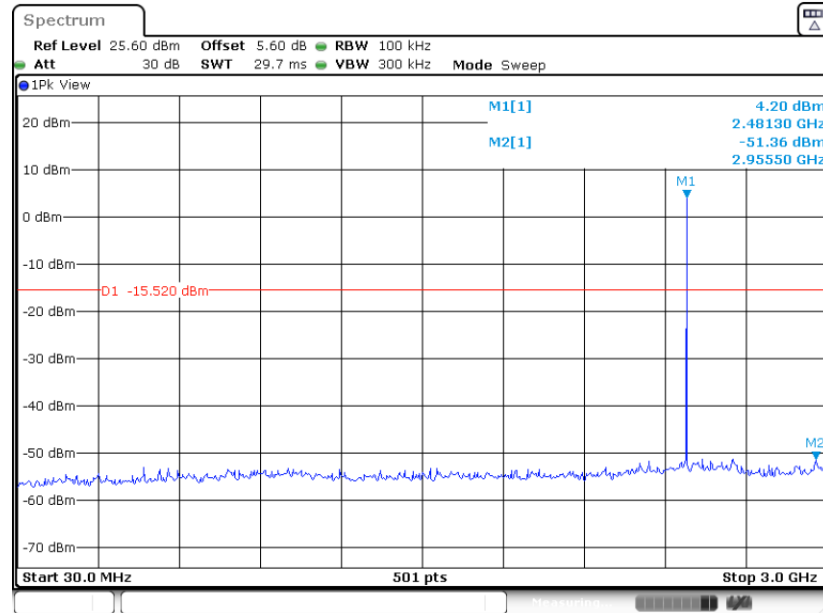
Conducted Spurious Emission Plot on Bluetooth LE 1Mbps  
GFSK Channel 19



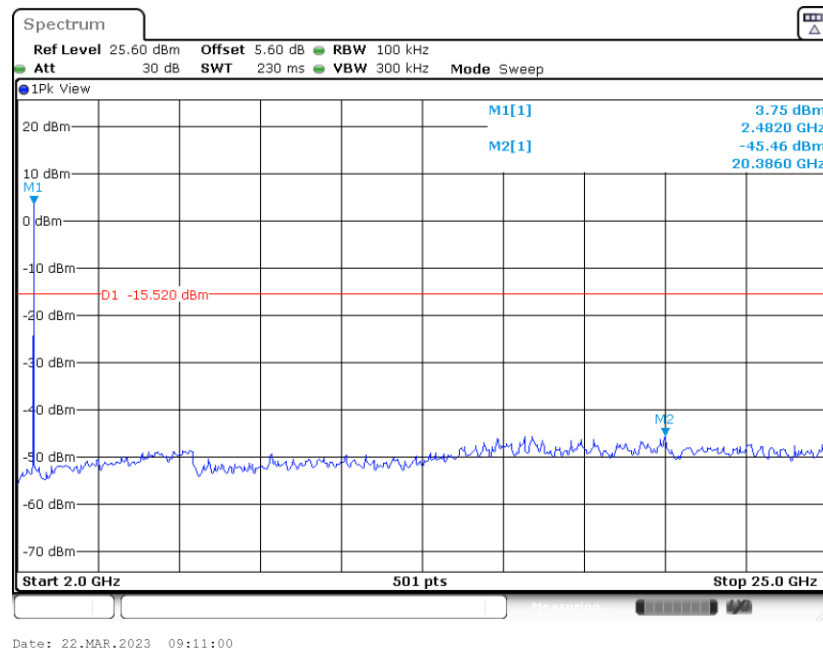
Date: 22.MAR.2023 09:08:26



Conducted Spurious Emission Plot on Bluetooth LE 1Mbps  
GFSK Channel 39



Conducted Spurious Emission Plot on Bluetooth LE 1Mbps  
GFSK Channel 39

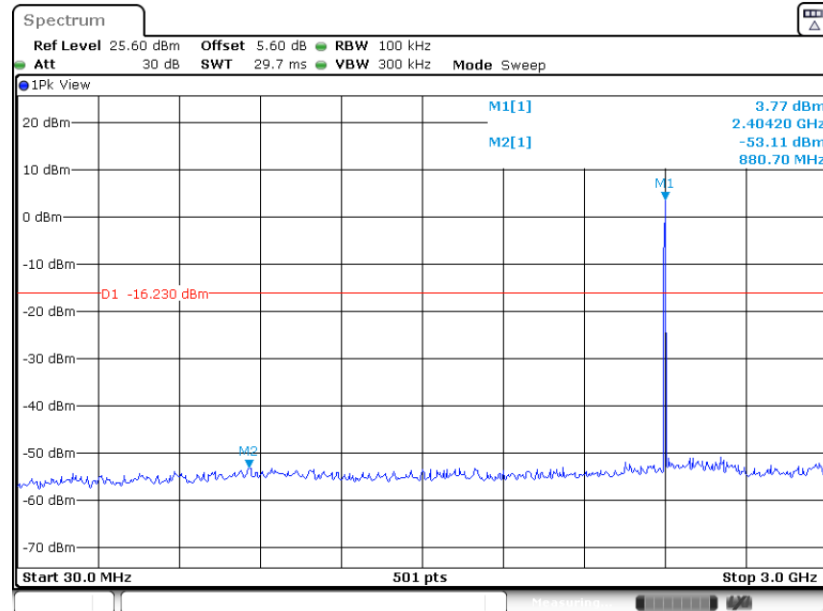




## BLE 2Mbps

### Conducted Spurious Emission Plot on Bluetooth LE 2Mbps

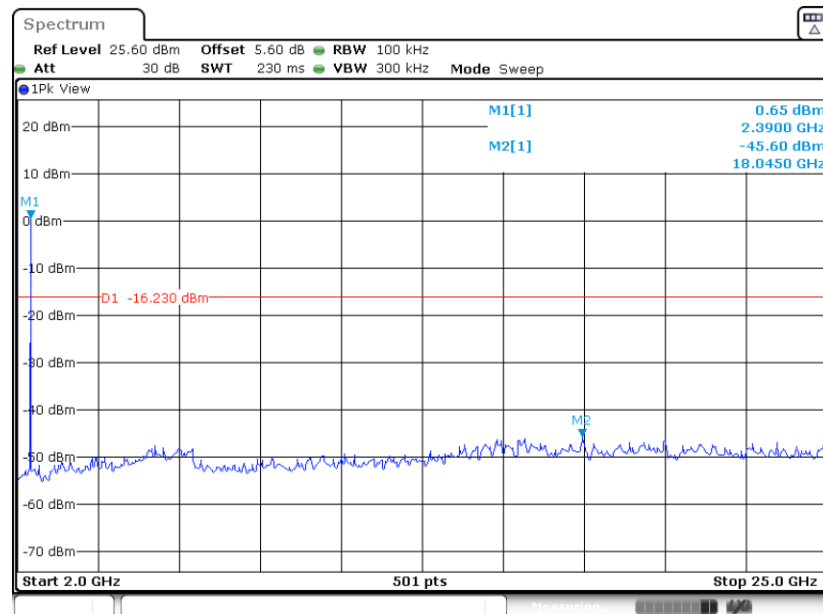
#### GFSK Channel 00



Date: 22.MAR.2023 09:15:30

### Conducted Spurious Emission Plot on Bluetooth LE 2Mbps

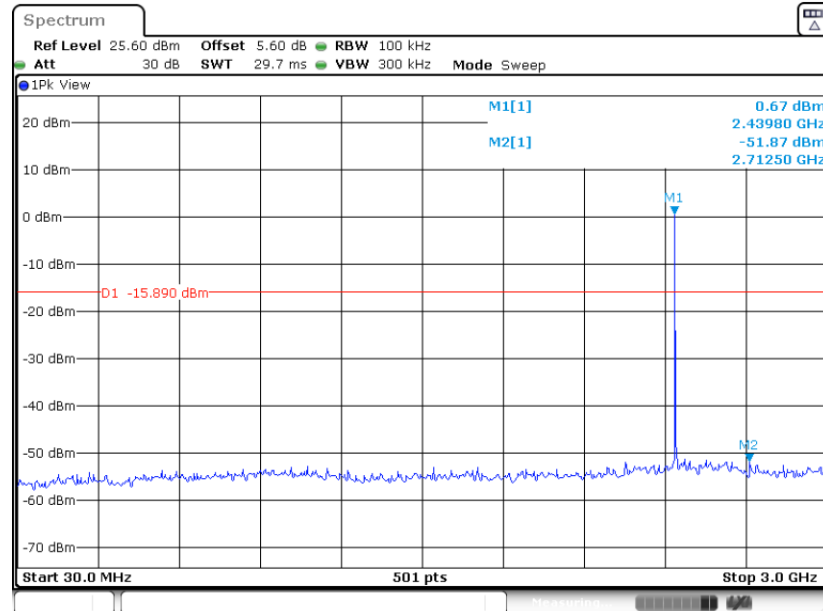
#### GFSK Channel 00



Date: 22.MAR.2023 09:15:50

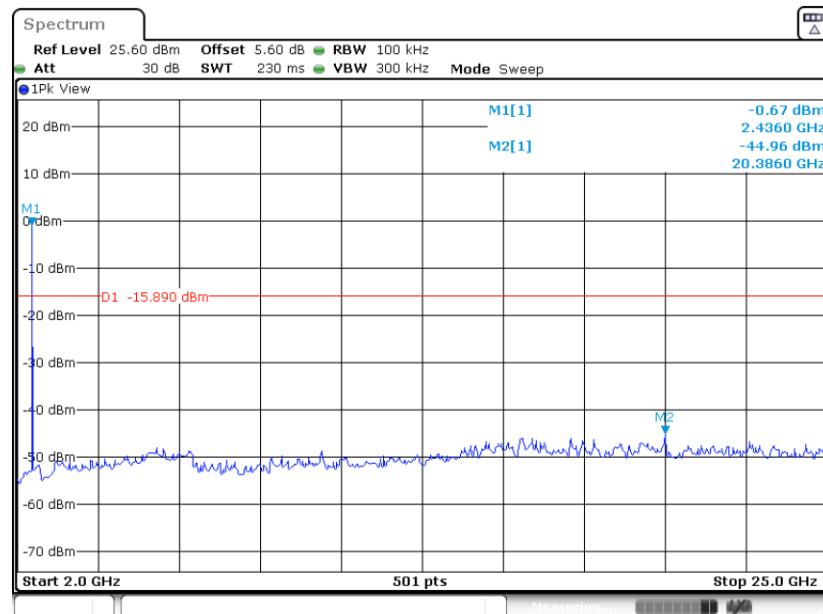


### Conducted Spurious Emission Plot on Bluetooth LE 2Mbps GFSK Channel 19



Date: 22.MAR.2023 09:17:32

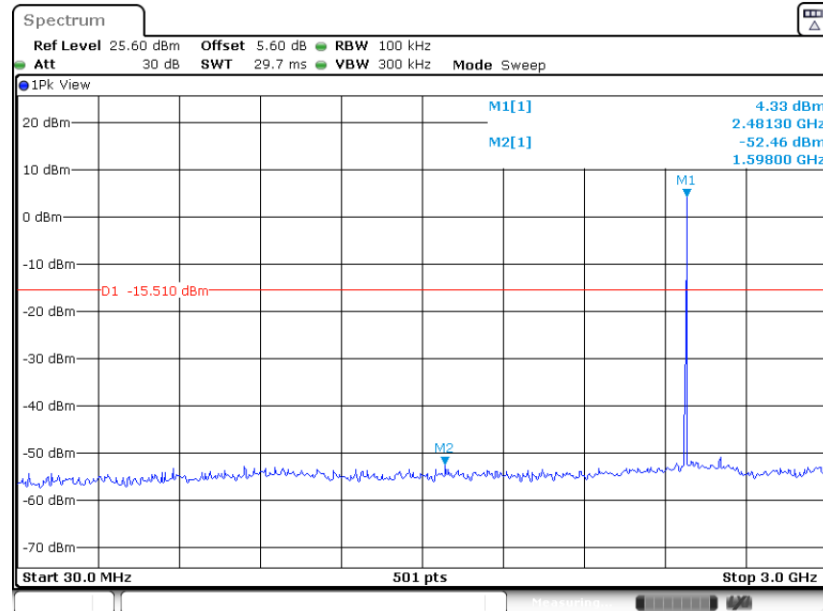
### Conducted Spurious Emission Plot on Bluetooth LE 2Mbps GFSK Channel 19



Date: 22.MAR.2023 09:17:52

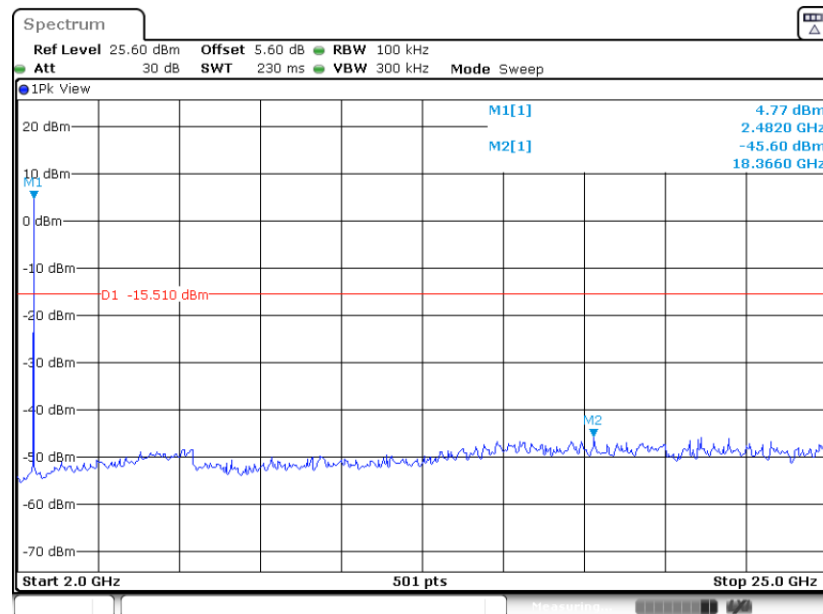


Conducted Spurious Emission Plot on Bluetooth LE 2Mbps  
GFSK Channel 39



Date: 22.MAR.2023 09:19:59

Conducted Spurious Emission Plot on Bluetooth LE 2Mbps  
GFSK Channel 39



Date: 22.MAR.2023 09:20:19

### 3.5 Radiated Band Edges and Spurious Emission Measurement

#### 3.5.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	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

#### 3.5.2 Measuring Instruments

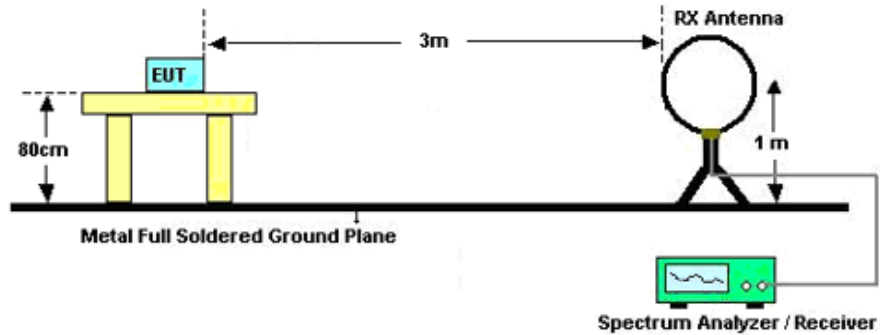
The section 4.0 of List of Measuring Equipment of this test report is used for test.

### 3.5.3 Test Procedures

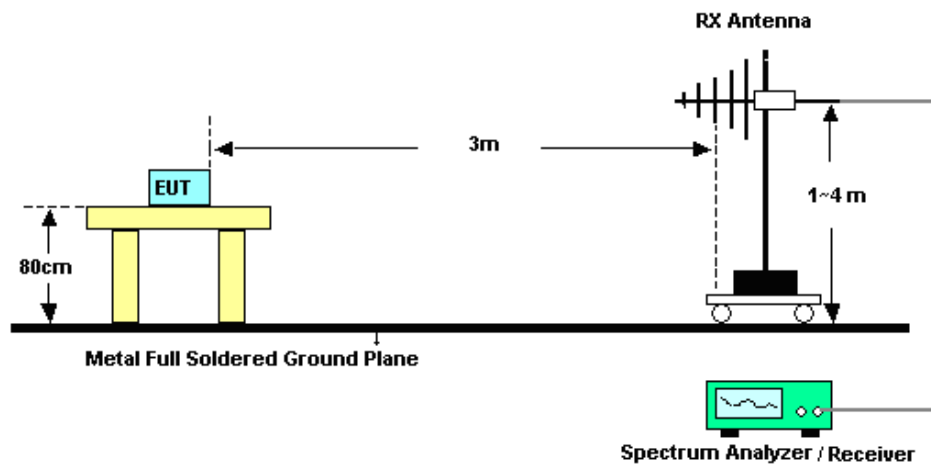
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for  $f < 1 \text{ GHz}$ ;  $\text{VBW} \geq \text{RBW}$ ; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW= 3MHz for  $f \geq 1 \text{ GHz}$  for peak measurement.  
For average measurement:
    - $\text{VBW} = 10 \text{ Hz}$ , when duty cycle is no less than 98 percent.
    - $\text{VBW} \geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

### 3.5.4 Test Setup

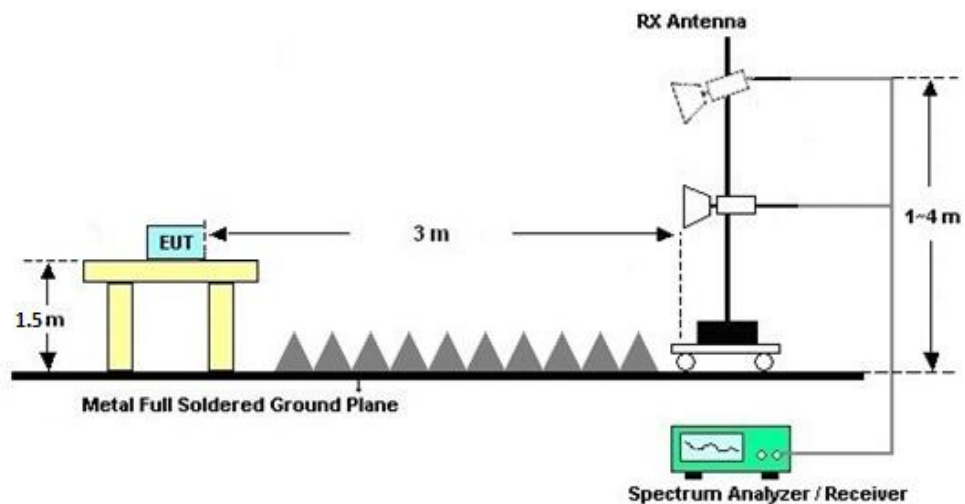
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz







### **3.5.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

### **3.5.6 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix C

### **3.5.7 Duty Cycle**

Please refer to Appendix D

### **3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)**

Please refer to Appendix C.

### 3.6 AC Conducted Emission Measurement

#### 3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

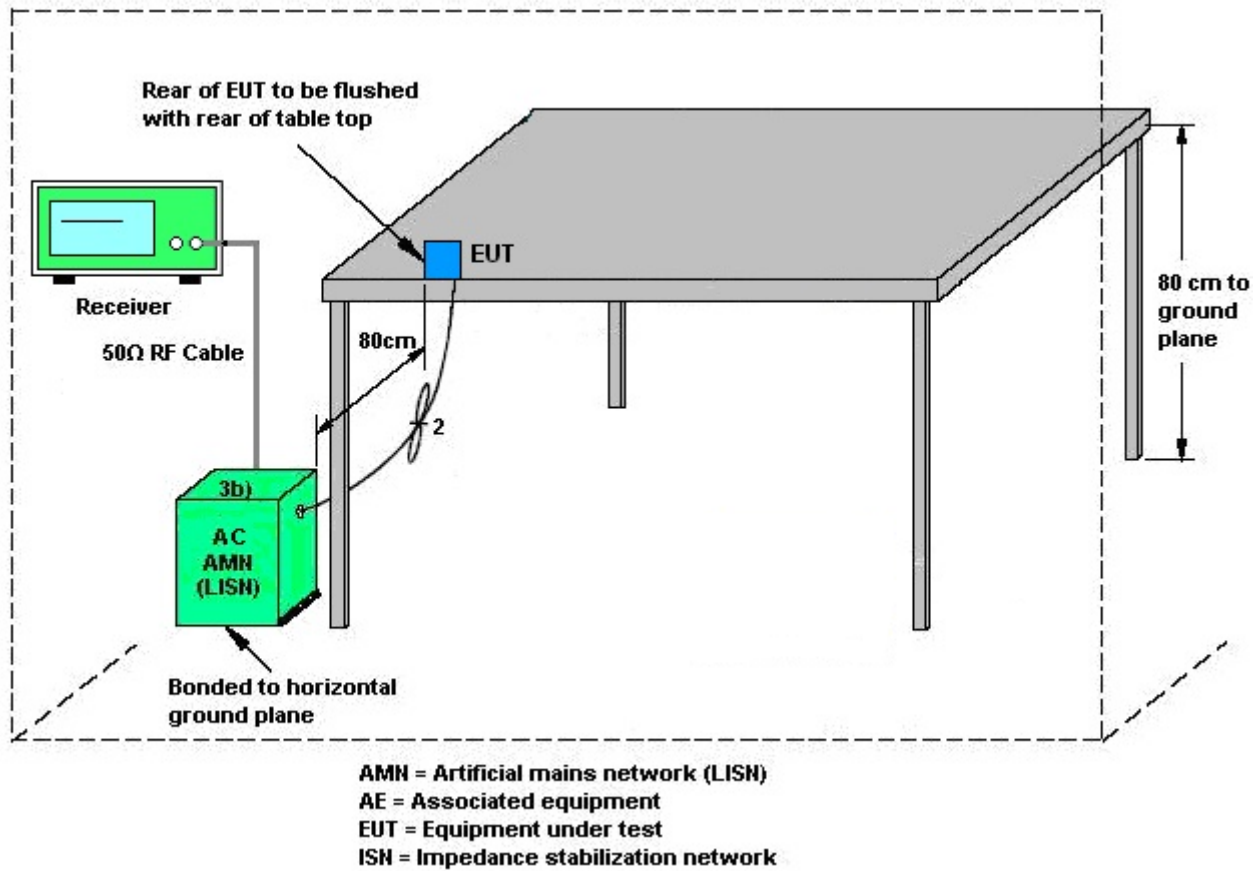
#### 3.6.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

#### 3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

### 3.6.4 Test Setup



### 3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



## **3.7 Antenna Requirements**

### **3.7.1 Standard Applicable**

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. 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 rule.

### **3.7.2 Antenna Anti-Replacement Construction**

Non-standard antenna connector is used.

### **3.7.3 Antenna Gain**

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	May 24, 2022	Mar. 30, 2023	May 23, 2023	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2022	Mar. 30, 2023	Oct. 12, 2023	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	May 24, 2022	Mar. 30, 2023	May 23, 2023	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000 0811	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2022	Mar. 30, 2023	Oct. 11, 2023	Conduction (CO01-KS)
EMI Test Receiver	Keysight	N9038A	MY564000 04	3Hz~8.5GHz;M ax 30dBm	Oct. 13, 2022	Mar. 31, 2023~ Apr. 04, 2023	Oct. 12, 2023	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY602421 26	10Hz~44GHz	Oct. 13, 2022	Mar. 31, 2023~ Apr. 04, 2023	Oct. 12, 2023	Radiation (03CH06-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 16, 2022	Mar. 31, 2023~ Apr. 04, 2023	Oct. 15, 2023	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	49921	30MHz~1GHz	May 24, 2022	Mar. 31, 2023~ Apr. 04, 2023	May 23, 2023	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 18, 2022	Mar. 31, 2023~ Apr. 04, 2023	Apr. 17, 2023	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101093	18GHz~40GHz	Jan. 08, 2023	Mar. 31, 2023~ Apr. 04, 2023	Jan. 07, 2024	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	380827	9KHz ~1GHZ	Jul. 11, 2022	Mar. 31, 2023~ Apr. 04, 2023	Jul. 10, 2023	Radiation (03CH06-KS)
Amplifier	MITEQ	EM18G40GG A	060728	18~40GHz	Jan. 05, 2023	Mar. 31, 2023~ Apr. 04, 2023	Jan. 04, 2024	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2082395	1Ghz-18Ghz	Jan. 05, 2023	Mar. 31, 2023~ Apr. 04, 2023	Jan. 04, 2024	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY532703 19	500MHz~26.5G Hz	Oct. 12, 2022	Mar. 31, 2023~ Apr. 04, 2023	Oct. 11, 2023	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F1040900 04	N/A	NCR	Mar. 31, 2023~ Apr. 04, 2023	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 31, 2023~ Apr. 04, 2023	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 31, 2023~ Apr. 04, 2023	NCR	Radiation (03CH06-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 12, 2022	Mar. 22, 2023	Oct. 11, 2023	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GH z	Jan. 05, 2023	Mar. 22, 2023	Jan. 04, 2024	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 05, 2023	Mar. 22, 2023	Jan. 04, 2024	Conducted (TH01-KS)

NCR: No Calibration Required

## 5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage  $K=2$  to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

### Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	$\pm 0.46$ dB
Conducted Emissions	$\pm 0.48$ dB
Occupied Channel Bandwidth	$\pm 0.001$ %
Conducted Power Spectral Density	$\pm 0.40$ dB

### Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.78 dB
---	---------

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.0 dB
---	--------

### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.0 dB
---	--------

### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.0 dB
---	--------

----- THE END -----



## **Appendix A. Conducted Test Results**

Bluetooth Low Energy

Test Engineer:	Albert shi	Temperature:	20~26	°C
Test Date:	2023/3/22	Relative Humidity:	40~51	%

TEST RESULTS DATA  
6dB and 99% Occupied Bandwidth

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
BLE	1Mbps	1	0	2402	1.03	0.66	0.50	Pass
BLE	1Mbps	1	19	2440	1.04	0.67	0.50	Pass
BLE	1Mbps	1	39	2480	1.04	0.70	0.50	Pass

TEST RESULTS DATA  
Peak Power Table

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)	DG (dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
BLE	1Mbps	1	0	2402	4.41	30.00	1.40	5.81	36.00	Pass
BLE	1Mbps	1	19	2440	4.64	30.00	1.40	6.04	36.00	Pass
BLE	1Mbps	1	39	2480	5.04	30.00	1.40	6.44	36.00	Pass

TEST RESULTS DATA  
Average Power Table  
(Reporting Only)

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
BLE	1Mbps	1	0	2402	1.87	4.11
BLE	1Mbps	1	19	2440	1.87	4.36
BLE	1Mbps	1	39	2480	1.87	4.76

TEST RESULTS DATA  
Peak Power Density

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
BLE	1Mbps	1	0	2402	3.72	-10.58	1.40	8.00	Pass
BLE	1Mbps	1	19	2440	4.05	-9.73	1.40	8.00	Pass
BLE	1Mbps	1	39	2480	4.48	-10.64	1.40	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.



**TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)	6dB BW (MHz)	6dB BW Limit (MHz)	Pass/Fail
BLE	2Mbps	1	0	2402	2.06	0.95	0.50	Pass
BLE	2Mbps	1	19	2440	2.04	1.13	0.50	Pass
BLE	2Mbps	1	39	2480	2.05	1.12	0.50	Pass

**TEST RESULTS DATA**  
**Peak Power Table**

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)	DG (dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
BLE	2Mbps	1	0	2402	4.34	30.00	1.40	5.74	36.00	Pass
BLE	2Mbps	1	19	2440	4.62	30.00	1.40	6.02	36.00	Pass
BLE	2Mbps	1	39	2480	4.72	30.00	1.40	6.12	36.00	Pass

**TEST RESULTS DATA**  
**Average Power Table**  
**(Reporting Only)**

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
BLE	2Mbps	1	0	2402	4.44	4.06
BLE	2Mbps	1	19	2440	4.44	4.35
BLE	2Mbps	1	39	2480	4.44	4.49

**TEST RESULTS DATA**  
**Peak Power Density**

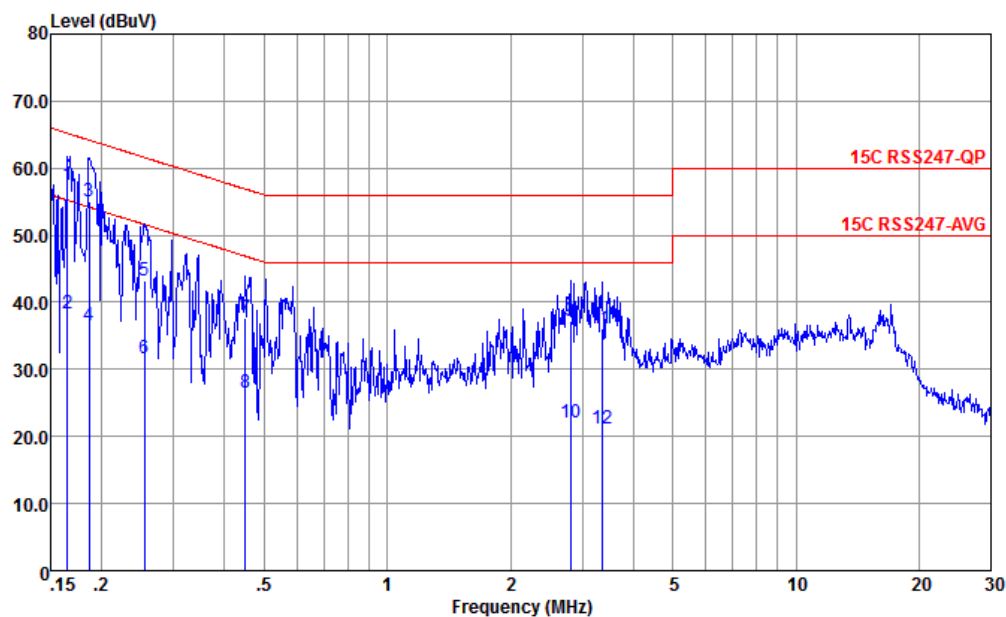
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass/Fail
BLE	2Mbps	1	0	2402	3.77	-12.60	1.40	8.00	Pass
BLE	2Mbps	1	19	2440	4.11	-11.91	1.40	8.00	Pass
BLE	2Mbps	1	39	2480	4.49	-12.20	1.40	8.00	Pass

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.



## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

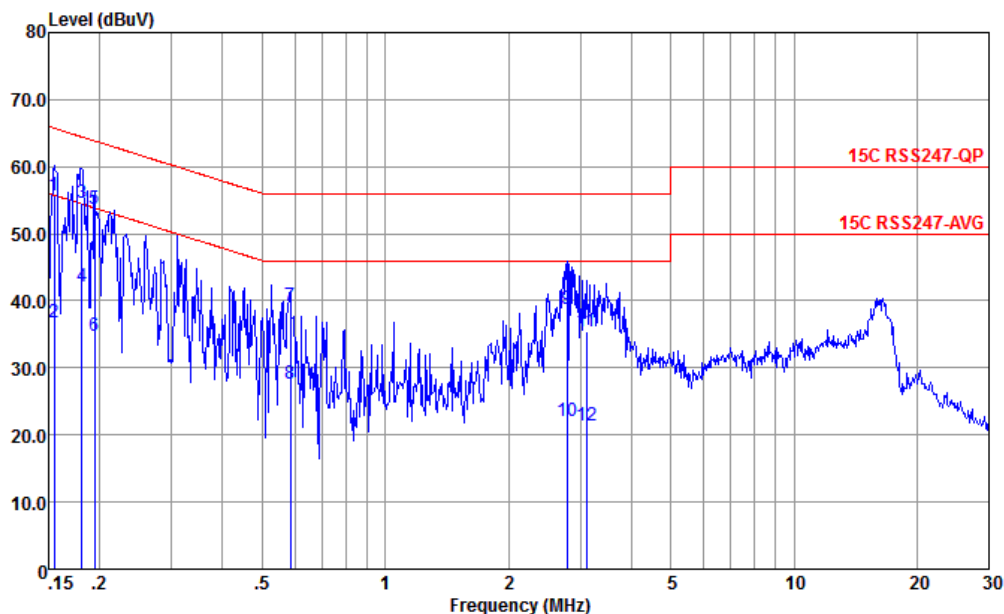


Site : CO01-KS  
Condition : 15C RSS247-QP LISN-060105-LINE LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1 *	0.165	57.58	-7.63	65.21	47.10	0.05	10.43	QP
2	0.165	38.28	-16.93	55.21	27.80	0.05	10.43	Average
3	0.186	54.95	-9.25	64.20	44.50	0.03	10.42	QP
4	0.186	36.65	-17.55	54.20	26.20	0.03	10.42	Average
5	0.255	43.22	-18.38	61.60	32.80	0.04	10.38	QP
6	0.255	31.62	-19.98	51.60	21.20	0.04	10.38	Average
7	0.449	37.74	-19.15	56.89	27.50	-0.01	10.25	QP
8	0.449	26.44	-20.45	46.89	16.20	-0.01	10.25	Average
9	2.809	37.16	-18.84	56.00	27.20	-0.10	10.06	QP
10	2.809	22.16	-23.84	46.00	12.20	-0.10	10.06	Average
11	3.346	36.15	-19.85	56.00	26.20	-0.11	10.06	QP
12	3.346	21.25	-24.75	46.00	11.30	-0.11	10.06	Average



Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS  
Condition : 15C RSS247-QP LISN-060105-NEUTRAL NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.155	55.66	-10.08	65.74	45.20	0.03	10.43	QP
2	0.155	36.76	-18.98	55.74	26.30	0.03	10.43	Average
3 *	0.181	54.67	-9.79	64.46	44.21	0.04	10.42	QP
4	0.181	42.07	-12.39	54.46	31.61	0.04	10.42	Average
5	0.194	53.77	-10.07	63.84	43.30	0.05	10.42	QP
6	0.194	34.77	-19.07	53.84	24.30	0.05	10.42	Average
7	0.585	39.30	-16.70	56.00	29.19	-0.08	10.19	QP
8	0.585	27.60	-18.40	46.00	17.49	-0.08	10.19	Average
9	2.779	38.83	-17.17	56.00	28.90	-0.13	10.06	QP
10	2.779	22.13	-23.87	46.00	12.20	-0.13	10.06	Average
11	3.107	35.53	-20.47	56.00	25.60	-0.13	10.06	QP
12	3.107	21.43	-24.57	46.00	11.50	-0.13	10.06	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

## Appendix C. Radiated Spurious Emission Test Data

Mode	Band (MHz)	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	Bluetooth-LE_GSKF	00	2402	1Mbps	-	-
Mode 2	2400-2483.5	Bluetooth-LE_GSKF	19	2440	1Mbps	-	-
Mode 3	2400-2483.5	Bluetooth-LE_GSKF	39	2480	1Mbps	-	-
Mode 4	2400-2483.5	Bluetooth-LE_GSKF	00	2402	2Mbps	-	-
Mode 5	2400-2483.5	Bluetooth-LE_GSKF	19	2440	2Mbps	-	-
Mode 6	2400-2483.5	Bluetooth-LE_GSKF	39	2480	2Mbps	-	-



## Summary of each worse mode

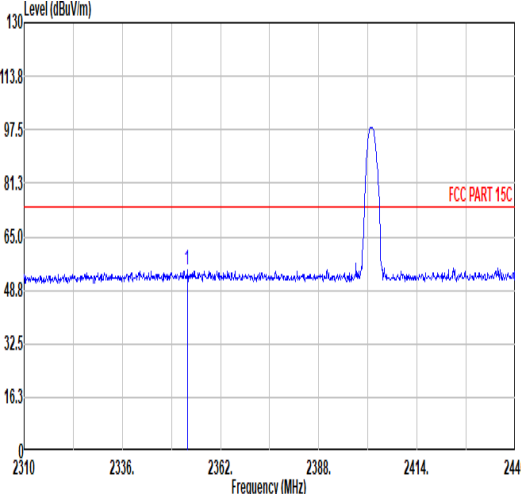
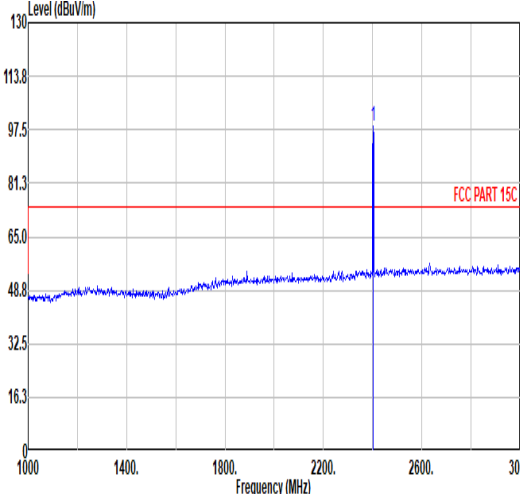
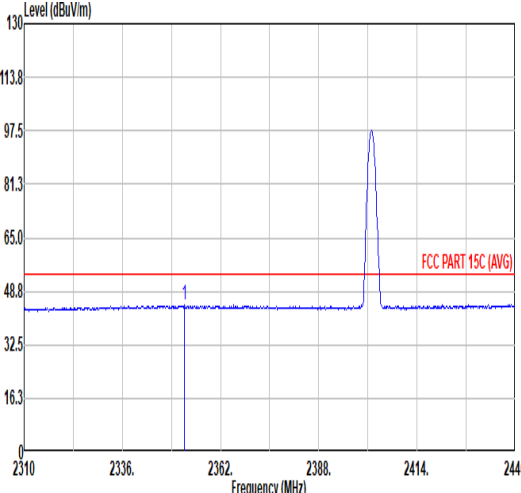
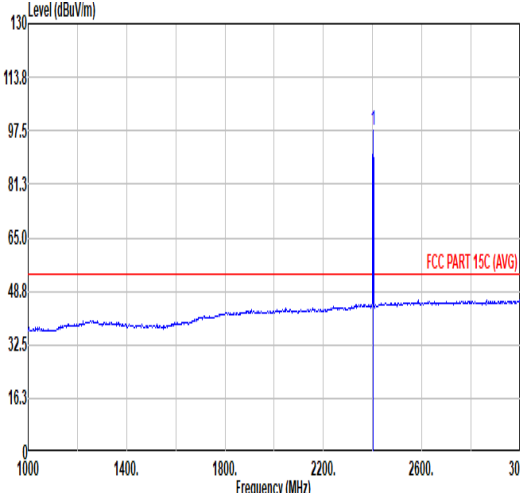
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
1	Bluetooth-LE_GSKF	00	2352.51	44.43	54.00	-9.57	H	AVERAGE	Pass	Band Edge
	Bluetooth-LE_GSKF	00	4804.00	45.22	54.00	-8.78	H	AVERAGE	Pass	Harmonic
2	Bluetooth-LE_GSKF	19	-	-	-	-	-	-	-	Band Edge
	Bluetooth-LE_GSKF	19	7320.00	43.75	74.00	-30.25	H	PEAK	Pass	Harmonic
3	Bluetooth-LE_GSKF	39	2490.70	45.05	54.00	-8.95	H	AVERAGE	Pass	Band Edge
	Bluetooth-LE_GSKF	39	4960.00	46.48	54.00	-7.52	H	AVERAGE	Pass	Harmonic
4	Bluetooth-LE_GSKF	00	2355.37	45.10	54.00	-8.90	H	AVERAGE	Pass	Band Edge
	Bluetooth-LE_GSKF	00	4804.00	42.00	74.00	-32.00	V	PEAK	Pass	Harmonic
5	Bluetooth-LE_GSKF	19	-	-	-	-	-	-	-	Band Edge
	Bluetooth-LE_GSKF	19	4880.00	45.41	54.00	-8.59	H	AVERAGE	Pass	Harmonic
6	Bluetooth-LE_GSKF	39	2497.78	45.78	54.00	-8.22	V	AVERAGE	Pass	Band Edge



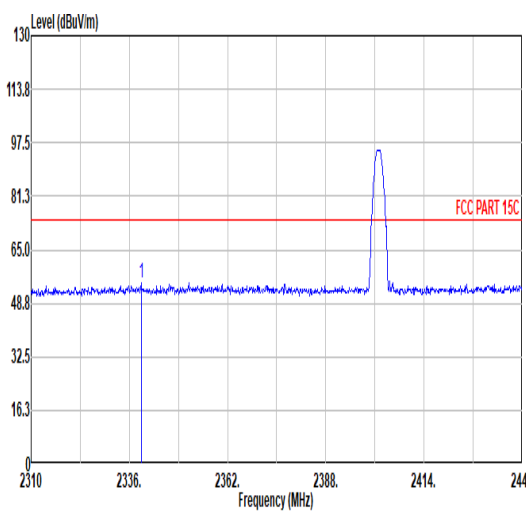
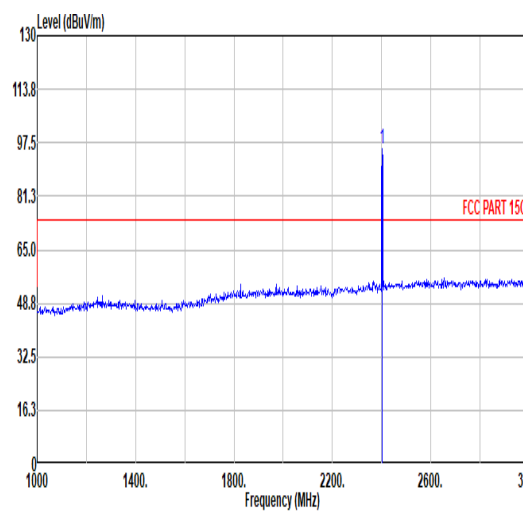
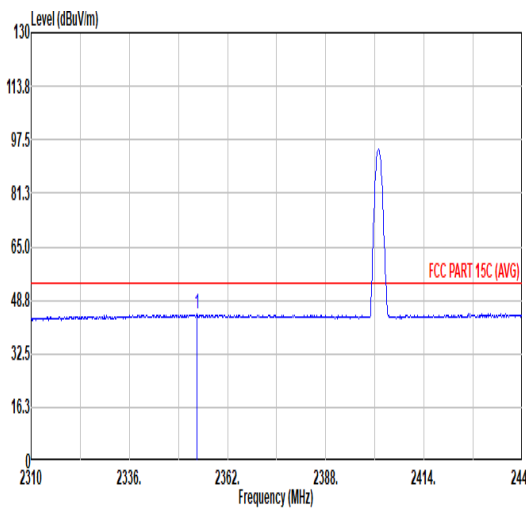
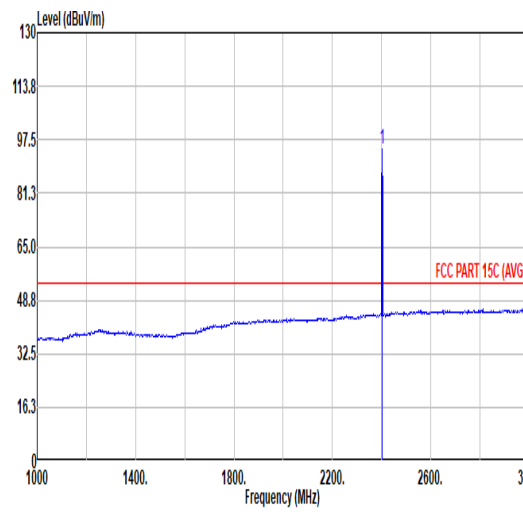
## Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
6	Bluetooth-LE_GSKF	39	4960.00	47.64	54.00	-6.36	H	AVERAGE	Pass	Harmonic
6	Bluetooth-LE_GSKF	39	471.35	33.29	46.00	-12.71	V	PEAK	Pass	LF



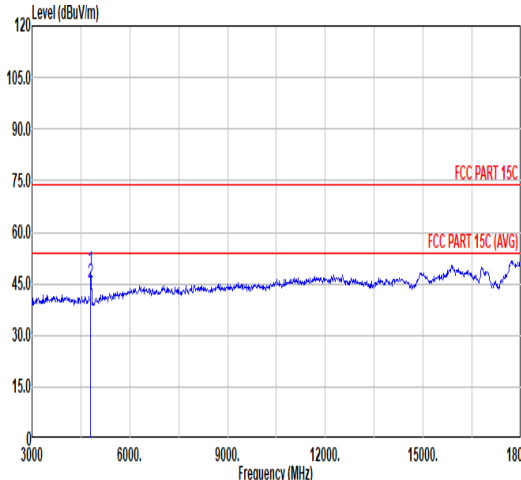
Mode	1																																																						
	Band Edge																																																						
	2400-2483.5_Bluetooth-LE_GSKF_CH00_2402MHz																																																						
Pol.	Horizontal						Fundamental																																																
Peak																																																							
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2352.16</td><td>54.88</td><td>74.00</td><td>-19.12</td><td>42.69</td><td>32.56</td><td>6.55</td><td>32.92</td><td>6.00</td><td>138</td><td>196</td><td>PEAK</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2352.16	54.88	74.00	-19.12	42.69	32.56	6.55	32.92	6.00	138	196
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																														
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2352.16	54.88	74.00	-19.12	42.69	32.56	6.55	32.92	6.00	138	196	PEAK																																											
Fundamental																																																							
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2402.00</td><td>98.40</td><td>-----</td><td>-----</td><td>86.60</td><td>32.02</td><td>6.62</td><td>32.84</td><td>6.00</td><td>138</td><td>196</td><td>PEAK</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2402.00	98.40	-----	-----	86.60	32.02	6.62	32.84	6.00	138	196
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																														
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2402.00	98.40	-----	-----	86.60	32.02	6.62	32.84	6.00	138	196	PEAK																																											
Avg																																																							
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2352.51</td><td>44.43</td><td>54.00</td><td>-9.57</td><td>32.23</td><td>32.57</td><td>6.55</td><td>32.92</td><td>6.00</td><td>138</td><td>196</td><td>AVERAGE</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2352.51	44.43	54.00	-9.57	32.23	32.57	6.55	32.92	6.00	138	196
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																														
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2352.51	44.43	54.00	-9.57	32.23	32.57	6.55	32.92	6.00	138	196	AVERAGE																																											
Fundamental																																																							
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2402.00</td><td>97.51</td><td>-----</td><td>-----</td><td>85.71</td><td>32.02</td><td>6.62</td><td>32.84</td><td>6.00</td><td>138</td><td>196</td><td>AVERAGE</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2402.00	97.51	-----	-----	85.71	32.02	6.62	32.84	6.00	138	196
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																														
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2402.00	97.51	-----	-----	85.71	32.02	6.62	32.84	6.00	138	196	AVERAGE																																											



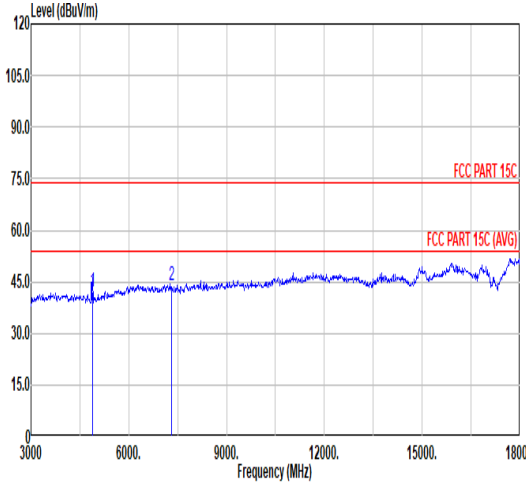
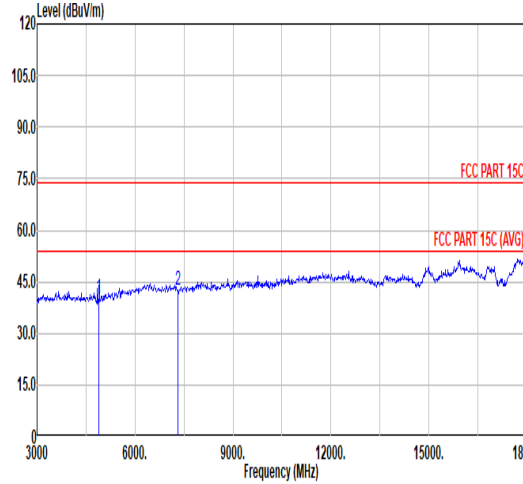
Mode	1																																																																																																		
	Band Edge																																																																																																		
	2400-2483.5_Bluetooth-LE_GSKF_CH00_2402MHz																																																																																																		
Pol.	Vertical						Fundamental																																																																																												
Peak																																																																																																			
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2339.12</td><td>55.06</td><td>74.00</td><td>-18.94</td><td>43.08</td><td>32.40</td><td>6.52</td><td>32.94</td><td>6.00</td><td>296</td><td>255</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2339.12	55.06	74.00	-18.94	43.08	32.40	6.52	32.94	6.00	296	255	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2402.00</td><td>95.47</td><td>-----</td><td>-----</td><td>83.67</td><td>32.02</td><td>6.62</td><td>32.84</td><td>6.00</td><td>296</td><td>255</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2402.00	95.47	-----	-----	83.67	32.02	6.62	32.84	6.00	296	255
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2339.12	55.06	74.00	-18.94	43.08	32.40	6.52	32.94	6.00	296	255	PEAK																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2402.00	95.47	-----	-----	83.67	32.02	6.62	32.84	6.00	296	255	PEAK																																																																																							
Avg																																																																																																			
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2353.81</td><td>44.40</td><td>54.00</td><td>-9.60</td><td>32.22</td><td>32.55</td><td>6.55</td><td>32.92</td><td>6.00</td><td>296</td><td>255</td><td>AVERAGE</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2353.81	44.40	54.00	-9.60	32.22	32.55	6.55	32.92	6.00	296	255	AVERAGE	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2402.00</td><td>94.63</td><td>-----</td><td>-----</td><td>82.83</td><td>32.02</td><td>6.62</td><td>32.84</td><td>6.00</td><td>296</td><td>255</td><td>AVERAGE</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2402.00	94.63	-----	-----	82.83	32.02	6.62	32.84	6.00	296	255
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2353.81	44.40	54.00	-9.60	32.22	32.55	6.55	32.92	6.00	296	255	AVERAGE																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2402.00	94.63	-----	-----	82.83	32.02	6.62	32.84	6.00	296	255	AVERAGE																																																																																							



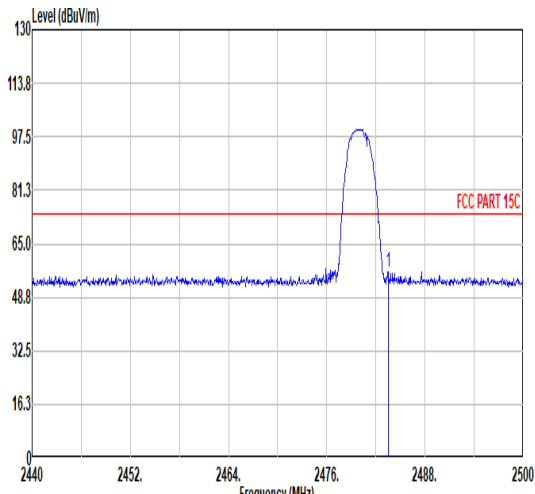
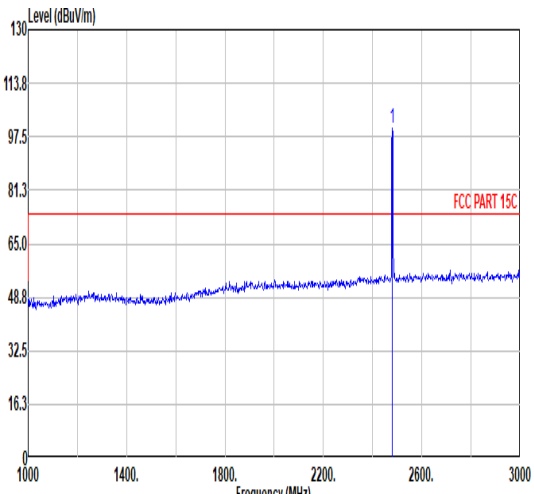
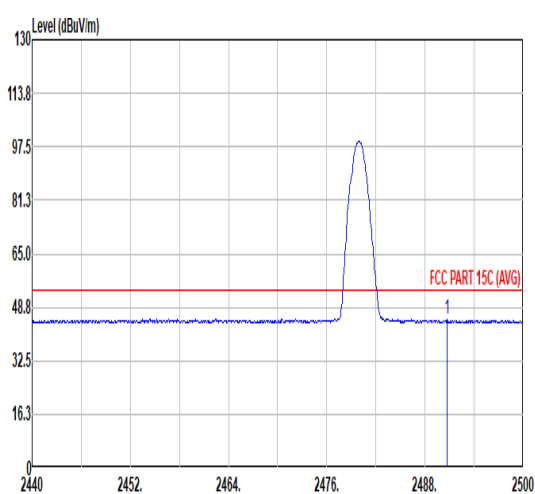
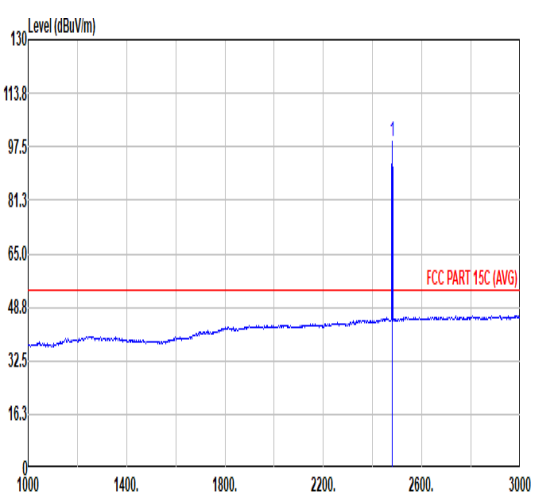


Mode	1																																																																					
	Harmonic																																																																					
	2400-2483.5_Bluetooth-LE_GSKF_CH00_2402MHz																																																																					
Pol.	Horizontal																																																																					
Peak  Avg																																																																						
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th></th><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4804.00</td><td>48.96</td><td>74.00</td><td>-25.04</td><td>67.15</td><td>34.19</td><td>9.44</td><td>61.82</td><td>0.00</td><td>100</td><td>281</td><td>PEAK</td></tr><tr><td>2</td><td>4804.00</td><td>45.22</td><td>54.00</td><td>-8.78</td><td>63.41</td><td>34.19</td><td>9.44</td><td>61.82</td><td>0.00</td><td>100</td><td>281</td><td>AVERAGE</td></tr></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos			Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4804.00	48.96	74.00	-25.04	67.15	34.19	9.44	61.82	0.00	100	281	PEAK	2	4804.00	45.22	54.00	-8.78	63.41	34.19	9.44	61.82	0.00	100	281	AVERAGE
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																													
	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																												
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																											
1	4804.00	48.96	74.00	-25.04	67.15	34.19	9.44	61.82	0.00	100	281	PEAK																																																										
2	4804.00	45.22	54.00	-8.78	63.41	34.19	9.44	61.82	0.00	100	281	AVERAGE																																																										
<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th></th><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4804.00</td><td>41.63</td><td>74.00</td><td>-32.37</td><td>59.82</td><td>34.19</td><td>9.44</td><td>61.82</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos			Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4804.00	41.63	74.00	-32.37	59.82	34.19	9.44	61.82	0.00	---	---	PEAK														
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																														
	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																												
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																											
1	4804.00	41.63	74.00	-32.37	59.82	34.19	9.44	61.82	0.00	---	---	PEAK																																																										



Mode	2																																																																																																																														
	Harmonic																																																																																																																														
	2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																																																																																														
Pol.	Horizontal						Vertical																																																																																																																								
Peak  Avg																																																																																																																															
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4880.00</td><td>42.14</td><td>74.00</td><td>-31.86</td><td>60.34</td><td>34.04</td><td>9.53</td><td>61.77</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr><tr><td>2</td><td>7320.00</td><td>43.75</td><td>74.00</td><td>-30.25</td><td>58.28</td><td>35.84</td><td>11.69</td><td>62.06</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	4880.00	42.14	74.00	-31.86	60.34	34.04	9.53	61.77	0.00	---	---	PEAK	2	7320.00	43.75	74.00	-30.25	58.28	35.84	11.69	62.06	0.00	---	---	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4880.00</td><td>40.48</td><td>74.00</td><td>-33.52</td><td>58.68</td><td>34.04</td><td>9.53</td><td>61.77</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr><tr><td>2</td><td>7320.00</td><td>42.75</td><td>74.00</td><td>-31.25</td><td>57.28</td><td>35.84</td><td>11.69</td><td>62.06</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4880.00	40.48	74.00	-33.52	58.68	34.04	9.53	61.77	0.00	---	---	PEAK	2	7320.00	42.75	74.00	-31.25	57.28	35.84	11.69	62.06	0.00	---	---	PEAK
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																						
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																																					
1	4880.00	42.14	74.00	-31.86	60.34	34.04	9.53	61.77	0.00	---	---	PEAK																																																																																																																			
2	7320.00	43.75	74.00	-30.25	58.28	35.84	11.69	62.06	0.00	---	---	PEAK																																																																																																																			
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																							
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																																																																																				
1	4880.00	40.48	74.00	-33.52	58.68	34.04	9.53	61.77	0.00	---	---	PEAK																																																																																																																			
2	7320.00	42.75	74.00	-31.25	57.28	35.84	11.69	62.06	0.00	---	---	PEAK																																																																																																																			

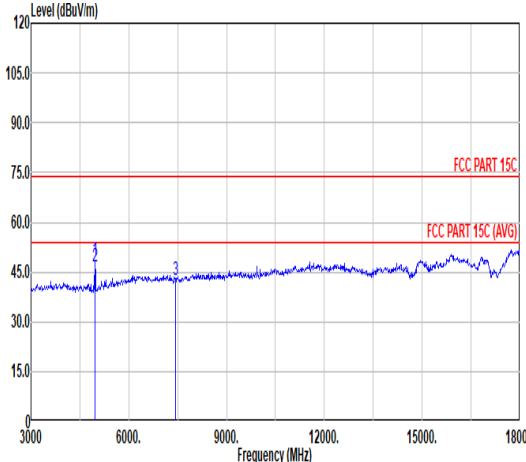
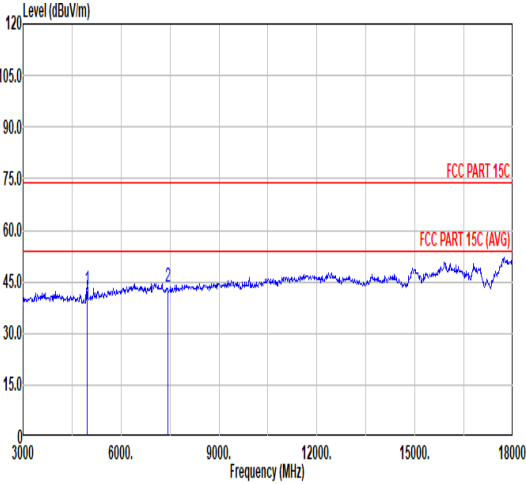


Mode	3																																																																																																														
	Band Edge																																																																																																														
	2400-2483.5_Bluetooth-LE_GSKF_CH39_2480MHz																																																																																																														
Pol.	Horizontal						Fundamental																																																																																																								
Peak																																																																																																															
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2483.50</td><td>56.38</td><td>74.00</td><td>-17.62</td><td>43.95</td><td>32.33</td><td>6.73</td><td>32.63</td><td>6.00</td><td>130</td><td>198</td><td>PEAK</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2483.50	56.38	74.00	-17.62	43.95	32.33	6.73	32.63	6.00	130	198	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2480.00</td><td>99.96</td><td>-----</td><td>-----</td><td>87.50</td><td>32.36</td><td>6.73</td><td>32.63</td><td>6.00</td><td>130</td><td>198</td><td>PEAK</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2480.00	99.96	-----	-----	87.50	32.36	6.73	32.63	6.00	130	198
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																																						
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																																							
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	2483.50	56.38	74.00	-17.62	43.95	32.33	6.73	32.63	6.00	130	198	PEAK																																																																																																			
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																																						
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																																							
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	2480.00	99.96	-----	-----	87.50	32.36	6.73	32.63	6.00	130	198	PEAK																																																																																																			
Avg																																																																																																															
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2490.70</td><td>45.05</td><td>54.00</td><td>-8.95</td><td>32.65</td><td>32.27</td><td>6.74</td><td>32.61</td><td>6.00</td><td>130</td><td>198</td><td>AVERAGE</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2490.70	45.05	54.00	-8.95	32.65	32.27	6.74	32.61	6.00	130	198	AVERAGE	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2480.00</td><td>99.02</td><td>-----</td><td>-----</td><td>86.56</td><td>32.36</td><td>6.73</td><td>32.63</td><td>6.00</td><td>130</td><td>198</td><td>AVERAGE</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2480.00	99.02	-----	-----	86.56	32.36	6.73	32.63	6.00	130	198
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																																						
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																																							
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	2490.70	45.05	54.00	-8.95	32.65	32.27	6.74	32.61	6.00	130	198	AVERAGE																																																																																																			
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																																						
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																																							
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	2480.00	99.02	-----	-----	86.56	32.36	6.73	32.63	6.00	130	198	AVERAGE																																																																																																			



Mode	3																																																																																																		
	Band Edge																																																																																																		
	2400-2483.5_Bluetooth-LE_GSKF_CH39_2480MHz																																																																																																		
Pol.	Vertical						Fundamental																																																																																												
Peak																																																																																																			
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2486.02</td><td>55.30</td><td>74.00</td><td>-18.70</td><td>42.87</td><td>32.31</td><td>6.74</td><td>32.62</td><td>6.00</td><td>318</td><td>264</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2486.02	55.30	74.00	-18.70	42.87	32.31	6.74	32.62	6.00	318	264	PEAK	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2480.00</td><td>96.88</td><td>-----</td><td>-----</td><td>84.42</td><td>32.36</td><td>6.73</td><td>32.63</td><td>6.00</td><td>318</td><td>264</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2480.00	96.88	-----	-----	84.42	32.36	6.73	32.63	6.00	318	264
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2486.02	55.30	74.00	-18.70	42.87	32.31	6.74	32.62	6.00	318	264	PEAK																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2480.00	96.88	-----	-----	84.42	32.36	6.73	32.63	6.00	318	264	PEAK																																																																																							
Avg																																																																																																			
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2486.08</td><td>44.97</td><td>54.00</td><td>-9.03</td><td>32.54</td><td>32.31</td><td>6.74</td><td>32.62</td><td>6.00</td><td>318</td><td>264</td><td>AVERAGE</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2486.08	44.97	54.00	-9.03	32.54	32.31	6.74	32.62	6.00	318	264	AVERAGE	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2480.00</td><td>96.00</td><td>-----</td><td>-----</td><td>83.54</td><td>32.36</td><td>6.73</td><td>32.63</td><td>6.00</td><td>318</td><td>264</td><td>AVERAGE</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2480.00	96.00	-----	-----	83.54	32.36	6.73	32.63	6.00	318	264
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2486.08	44.97	54.00	-9.03	32.54	32.31	6.74	32.62	6.00	318	264	AVERAGE																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2480.00	96.00	-----	-----	83.54	32.36	6.73	32.63	6.00	318	264	AVERAGE																																																																																							



Mode	3																																																																																																																																										
	Harmonic																																																																																																																																										
	2400-2483.5_Bluetooth-LE_GSKF_CH39_2480MHz																																																																																																																																										
Pol.	Horizontal						Vertical																																																																																																																																				
Peak  Avg																																																																																																																																											
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4960.00</td><td>48.65</td><td>74.00</td><td>-25.35</td><td>66.75</td><td>34.00</td><td>9.61</td><td>61.71</td><td>0.00</td><td>126</td><td>127</td><td>PEAK</td></tr><tr><td>2</td><td>4960.00</td><td>46.48</td><td>54.00</td><td>-7.52</td><td>64.58</td><td>34.00</td><td>9.61</td><td>61.71</td><td>0.00</td><td>126</td><td>127</td><td>AVERAGE</td></tr><tr><td>3</td><td>7440.00</td><td>42.75</td><td>74.00</td><td>-31.25</td><td>57.13</td><td>35.92</td><td>11.77</td><td>62.07</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4960.00	48.65	74.00	-25.35	66.75	34.00	9.61	61.71	0.00	126	127	PEAK	2	4960.00	46.48	54.00	-7.52	64.58	34.00	9.61	61.71	0.00	126	127	AVERAGE	3	7440.00	42.75	74.00	-31.25	57.13	35.92	11.77	62.07	0.00	---	---	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4960.00</td><td>42.67</td><td>74.00</td><td>-31.33</td><td>60.77</td><td>34.00</td><td>9.61</td><td>61.71</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr><tr><td>2</td><td>7440.00</td><td>43.31</td><td>74.00</td><td>-30.69</td><td>57.69</td><td>35.92</td><td>11.77</td><td>62.07</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4960.00	42.67	74.00	-31.33	60.77	34.00	9.61	61.71	0.00	---	---	PEAK	2	7440.00	43.31	74.00	-30.69	57.69	35.92	11.77	62.07	0.00	---	---	PEAK
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																																		
	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																																	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																																																																																																	
1	4960.00	48.65	74.00	-25.35	66.75	34.00	9.61	61.71	0.00	126	127	PEAK																																																																																																																															
2	4960.00	46.48	54.00	-7.52	64.58	34.00	9.61	61.71	0.00	126	127	AVERAGE																																																																																																																															
3	7440.00	42.75	74.00	-31.25	57.13	35.92	11.77	62.07	0.00	---	---	PEAK																																																																																																																															
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																																			
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																																		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																																																																																																	
1	4960.00	42.67	74.00	-31.33	60.77	34.00	9.61	61.71	0.00	---	---	PEAK																																																																																																																															
2	7440.00	43.31	74.00	-30.69	57.69	35.92	11.77	62.07	0.00	---	---	PEAK																																																																																																																															



4

Mode

Band Edge

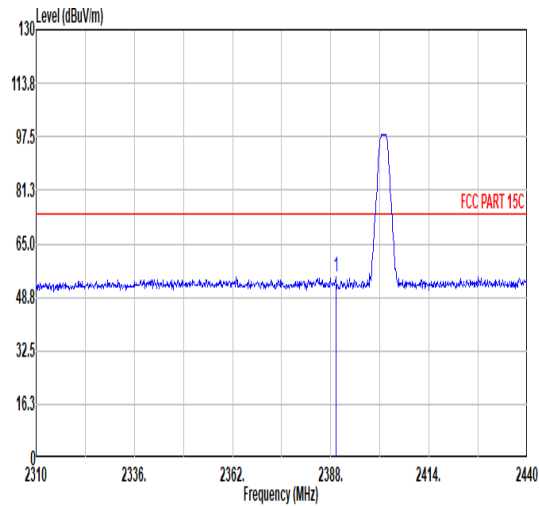
2400-2483.5\_Bluetooth-LE\_GSKF\_CH00\_2402MHz

Pol.

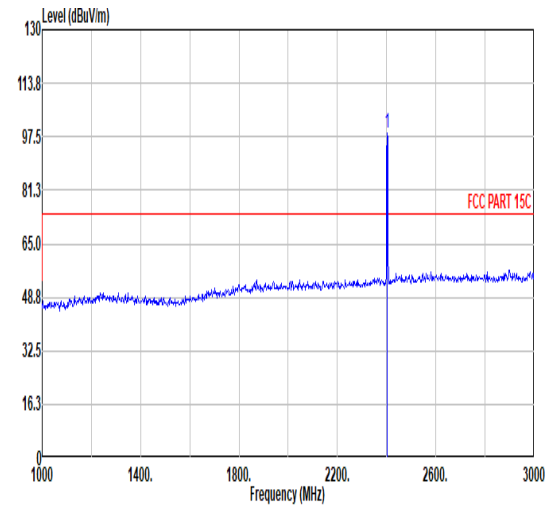
Horizontal

Fundamental

Peak

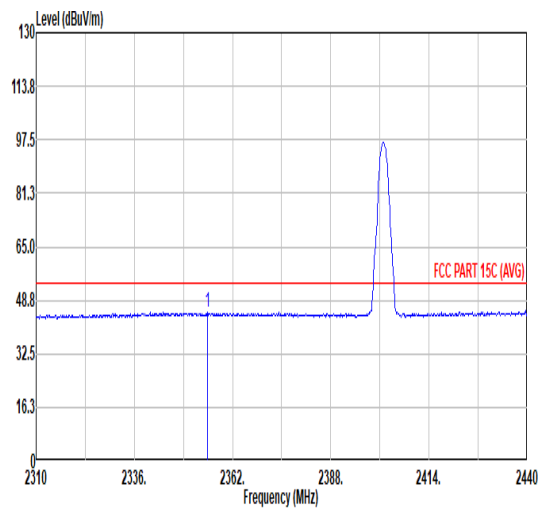


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2389.30	55.04	74.00	-18.96	43.17	32.13	6.60	32.86	6.00	136 196 PEAK

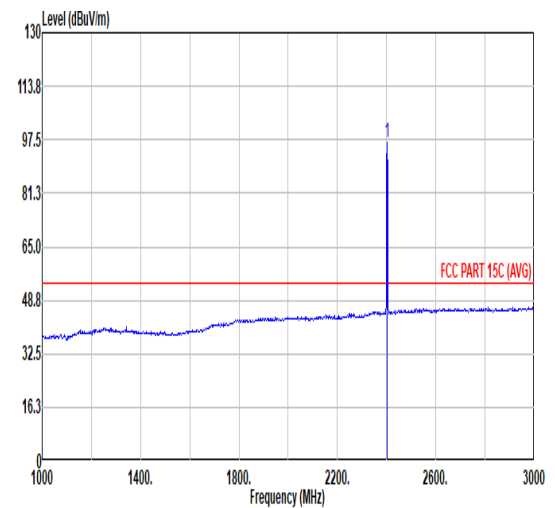


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2402.00	98.36	-----	-----	86.56	32.02	6.62	32.84	6.00	136 196 PEAK

Avg



Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2355.37	45.10	54.00	-8.90	32.93	32.54	6.55	32.92	6.00	136 196 AVERAGE

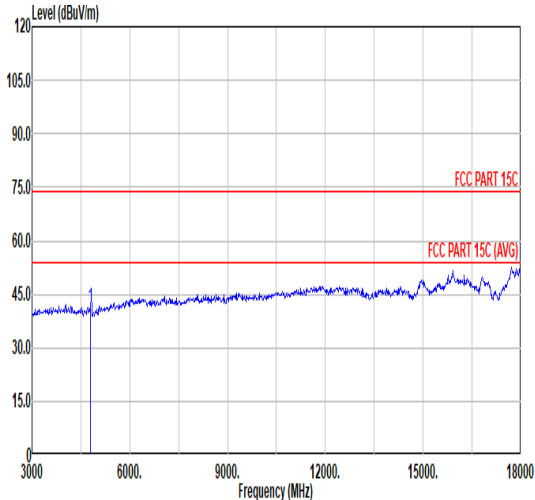
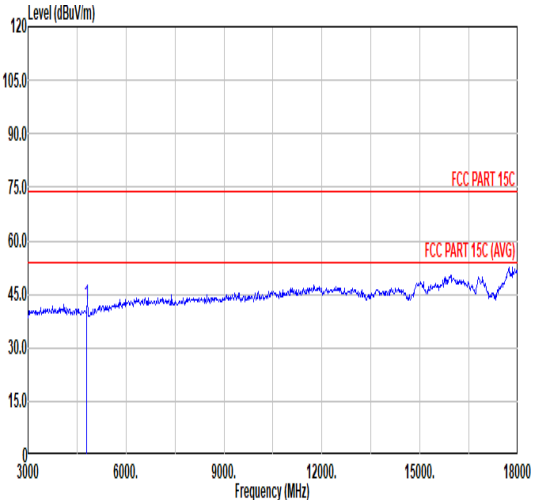


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2402.00	96.83	-----	-----	85.03	32.02	6.62	32.84	6.00	136 196 AVERAGE



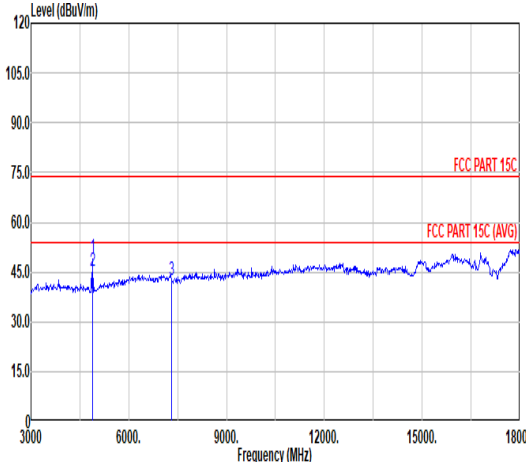
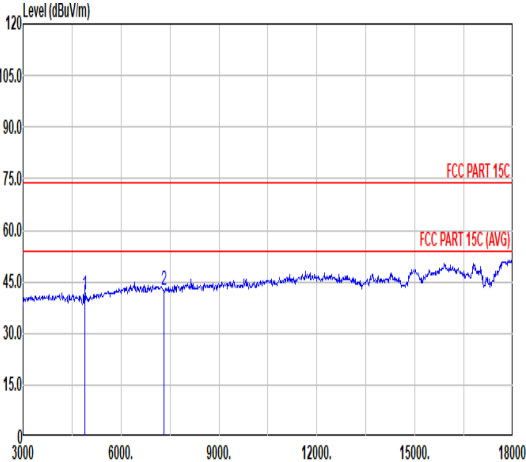
		4																																																			
Mode		Band Edge																																																			
		2400-2483.5_Bluetooth-LE_GSKF_CH00_2402MHz																																																			
Pol.		Vertical					Fundamental																																														
Peak																																																					
		<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level Factor</th><th>Loss Factor</th><th>Loss Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2347.83</td><td>55.69</td><td>74.00</td><td>-18.31</td><td>43.52</td><td>32.56</td><td>6.54</td><td>32.93</td><td>6.00</td><td>300</td><td>257 PEAK</td></tr></table>											Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2347.83	55.69	74.00	-18.31	43.52	32.56	6.54	32.93	6.00	300
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																												
Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																											
1	2347.83	55.69	74.00	-18.31	43.52	32.56	6.54	32.93	6.00	300	257 PEAK																																										
Avg																																																					
		<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level Factor</th><th>Loss Factor</th><th>Loss Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2378.12</td><td>45.09</td><td>54.00</td><td>-8.91</td><td>33.12</td><td>32.26</td><td>6.59</td><td>32.88</td><td>6.00</td><td>300</td><td>257 AVERAGE</td></tr></table>											Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2378.12	45.09	54.00	-8.91	33.12	32.26	6.59	32.88	6.00	300
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																												
Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																											
1	2378.12	45.09	54.00	-8.91	33.12	32.26	6.59	32.88	6.00	300	257 AVERAGE																																										
		<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level Factor</th><th>Loss Factor</th><th>Loss Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2402.00</td><td>94.92</td><td>-----</td><td>-----</td><td>83.12</td><td>32.02</td><td>6.62</td><td>32.84</td><td>6.00</td><td>300</td><td>257 PEAK</td></tr></table>											Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2402.00	94.92	-----	-----	83.12	32.02	6.62	32.84	6.00	300
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																												
Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																											
1	2402.00	94.92	-----	-----	83.12	32.02	6.62	32.84	6.00	300	257 PEAK																																										
		<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level Factor</th><th>Loss Factor</th><th>Loss Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2402.00</td><td>93.27</td><td>-----</td><td>-----</td><td>81.47</td><td>32.02</td><td>6.62</td><td>32.84</td><td>6.00</td><td>300</td><td>257 AVERAGE</td></tr></table>											Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2402.00	93.27	-----	-----	81.47	32.02	6.62	32.84	6.00	300
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																												
Freq	Level	Line Margin	Level Factor	Loss Factor	Loss Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																											
1	2402.00	93.27	-----	-----	81.47	32.02	6.62	32.84	6.00	300	257 AVERAGE																																										



Mode	4																																																																																																		
	Harmonic																																																																																																		
	2400-2483.5_Bluetooth-LE_GSKF_CH00_2402MHz																																																																																																		
Pol.	Horizontal						Vertical																																																																																												
Peak  Avg	 <p>Horizontal Spectrum Plot showing Level (dBuV/m) vs Frequency (MHz). The plot includes a blue signal line, a red limit line at 75.0 dBuV/m, and a red average limit line at 60.0 dBuV/m. The signal level is approximately 45 dBuV/m.</p>						 <p>Vertical Spectrum Plot showing Level (dBuV/m) vs Frequency (MHz). The plot includes a blue signal line, a red limit line at 75.0 dBuV/m, and a red average limit line at 60.0 dBuV/m. The signal level is approximately 45 dBuV/m.</p>																																																																																												
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>4804.00</td><td>41.04</td><td>74.00</td><td>-32.96</td><td>59.23</td><td>34.19</td><td>9.44</td><td>61.82</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	4804.00	41.04	74.00	-32.96	59.23	34.19	9.44	61.82	0.00	---	---	PEAK	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>4804.00</td><td>42.00</td><td>74.00</td><td>-32.00</td><td>60.19</td><td>34.19</td><td>9.44</td><td>61.82</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	4804.00	42.00	74.00	-32.00	60.19	34.19	9.44	61.82	0.00	---	---
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	4804.00	41.04	74.00	-32.96	59.23	34.19	9.44	61.82	0.00	---	---	PEAK																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	4804.00	42.00	74.00	-32.00	60.19	34.19	9.44	61.82	0.00	---	---	PEAK																																																																																							





		5																																																																																																																																										
Mode		Harmonic																																																																																																																																										
		2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																																																																																																										
Pol.		Horizontal						Vertical																																																																																																																																				
Peak  Avg																																																																																																																																												
		<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4880.00</td><td>49.52</td><td>74.00</td><td>-24.48</td><td>67.72</td><td>34.04</td><td>9.53</td><td>61.77</td><td>0.00</td><td>113</td><td>253</td><td>PEAK</td></tr><tr><td>2</td><td>4880.00</td><td>45.41</td><td>54.00</td><td>-8.59</td><td>63.61</td><td>34.04</td><td>9.53</td><td>61.77</td><td>0.00</td><td>113</td><td>253</td><td>AVERAGE</td></tr><tr><td>3</td><td>7320.00</td><td>42.58</td><td>74.00</td><td>-31.42</td><td>57.11</td><td>35.84</td><td>11.69</td><td>62.06</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	4880.00	49.52	74.00	-24.48	67.72	34.04	9.53	61.77	0.00	113	253	PEAK	2	4880.00	45.41	54.00	-8.59	63.61	34.04	9.53	61.77	0.00	113	253	AVERAGE	3	7320.00	42.58	74.00	-31.42	57.11	35.84	11.69	62.06	0.00	---	---	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4880.00</td><td>41.13</td><td>74.00</td><td>-32.87</td><td>59.33</td><td>34.04</td><td>9.53</td><td>61.77</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr><tr><td>2</td><td>7320.00</td><td>42.79</td><td>74.00</td><td>-31.21</td><td>57.32</td><td>35.84</td><td>11.69</td><td>62.06</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	4880.00	41.13	74.00	-32.87	59.33	34.04	9.53	61.77	0.00	---	---	PEAK	2	7320.00	42.79	74.00	-31.21	57.32	35.84	11.69	62.06	0.00	---	---	PEAK
			Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																																		
		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																																	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																																																		
1	4880.00	49.52	74.00	-24.48	67.72	34.04	9.53	61.77	0.00	113	253	PEAK																																																																																																																																
2	4880.00	45.41	54.00	-8.59	63.61	34.04	9.53	61.77	0.00	113	253	AVERAGE																																																																																																																																
3	7320.00	42.58	74.00	-31.42	57.11	35.84	11.69	62.06	0.00	---	---	PEAK																																																																																																																																
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																																				
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																																			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																																																		
1	4880.00	41.13	74.00	-32.87	59.33	34.04	9.53	61.77	0.00	---	---	PEAK																																																																																																																																
2	7320.00	42.79	74.00	-31.21	57.32	35.84	11.69	62.06	0.00	---	---	PEAK																																																																																																																																



6

Mode

Band Edge

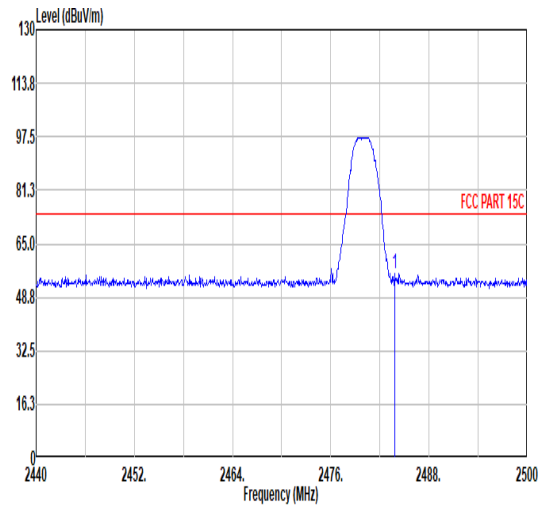
2400-2483.5\_Bluetooth-LE\_GSKF\_CH39\_2480MHz

Pol.

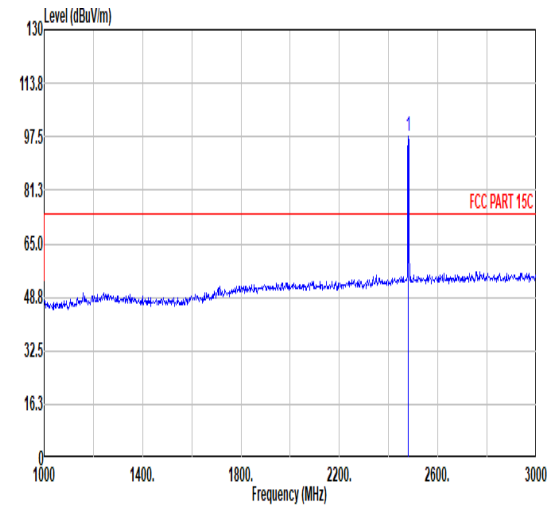
Horizontal

Fundamental

Peak

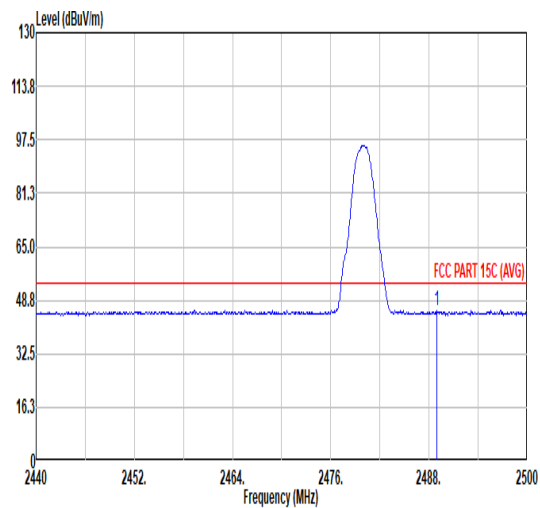


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2483.80	56.14	74.00	-17.86	43.70	32.33	6.73	32.62	6.00	100
										148 PEAK

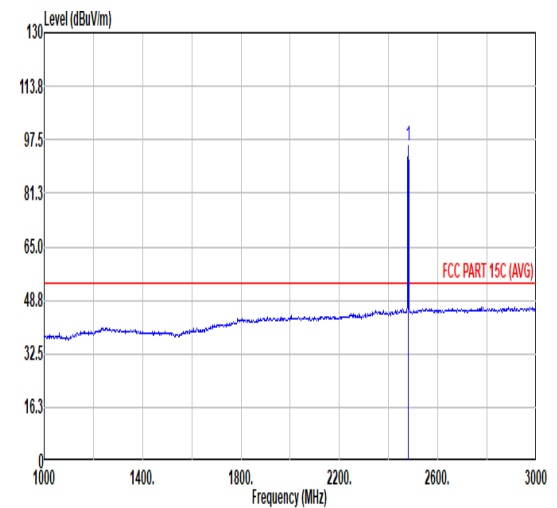


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2480.00	97.52	-----	-----	85.06	32.36	6.73	32.63	6.00	100
										148 PEAK

Avg



Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2488.96	45.69	54.00	-8.31	33.27	32.29	6.74	32.61	6.00	100
										148 AVERAGE



Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2480.00	95.73	-----	-----	83.27	32.36	6.73	32.63	6.00	100
										148 AVERAGE



6

Mode

Band Edge

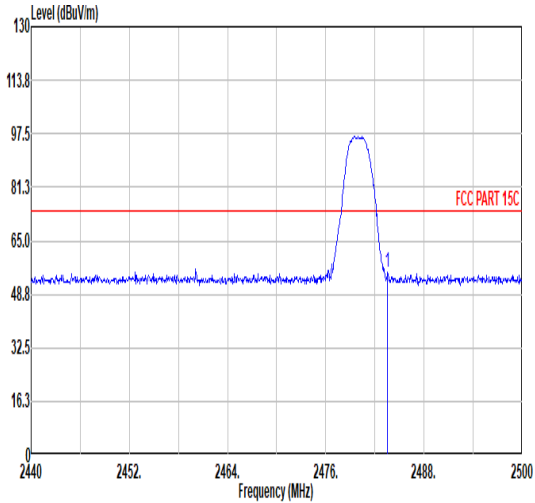
2400-2483.5\_Bluetooth-LE\_GSKF\_CH39\_2480MHz

Pol.

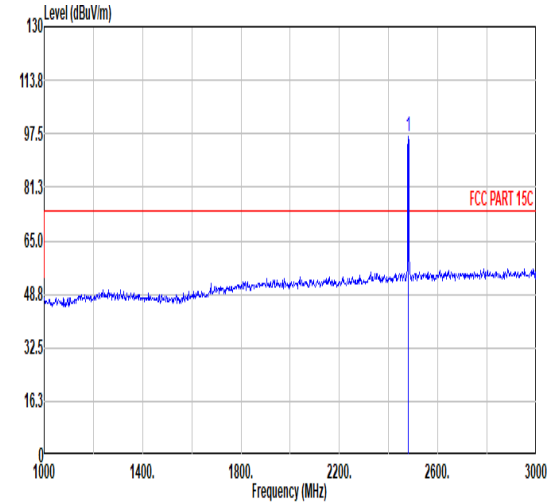
Vertical

Fundamental

Peak

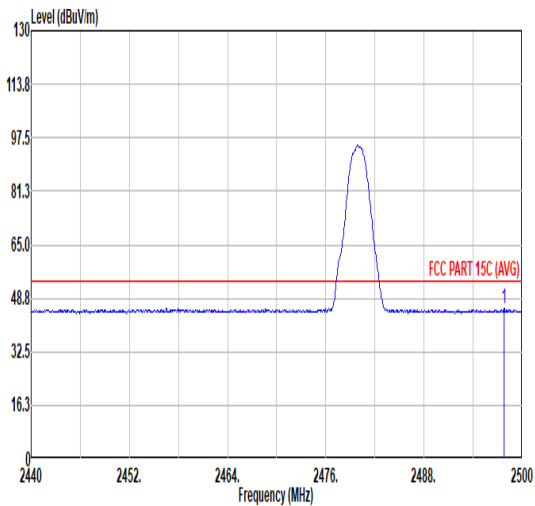


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
1	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2483.56	55.36	74.00	-18.64	42.93	32.33	6.73	32.63	6.00	317 250 PEAK

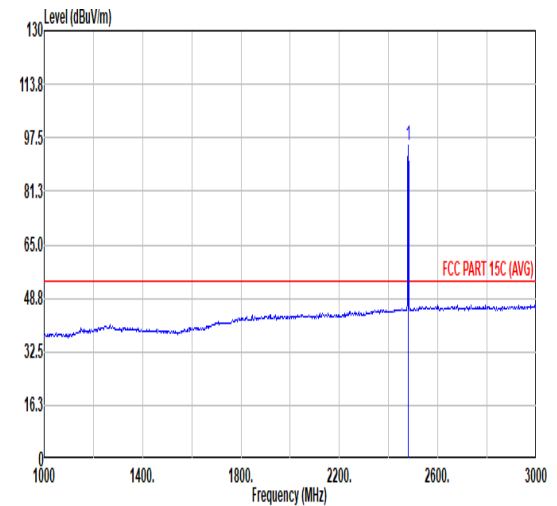


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
1	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2480.00	96.68	-----	-----	84.22	32.36	6.73	32.63	6.00	317 250 PEAK

Avg

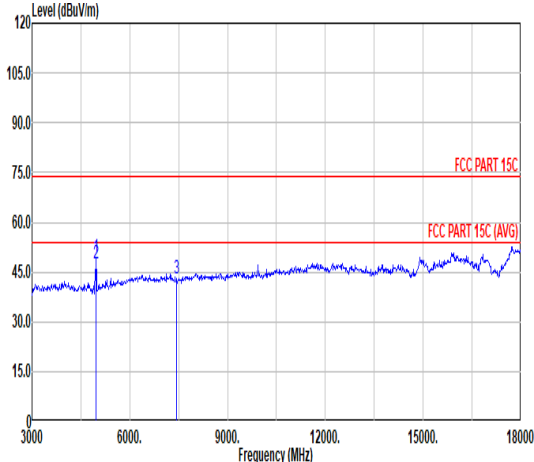
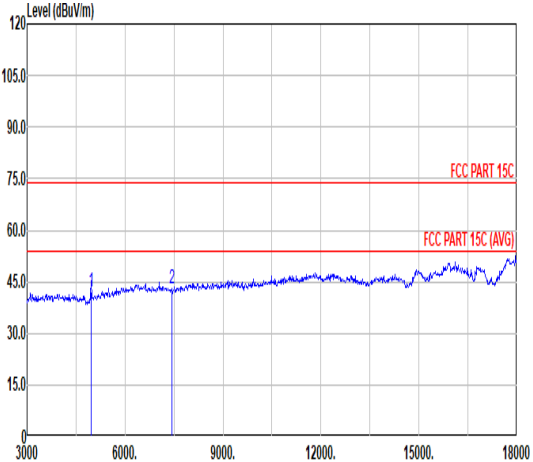
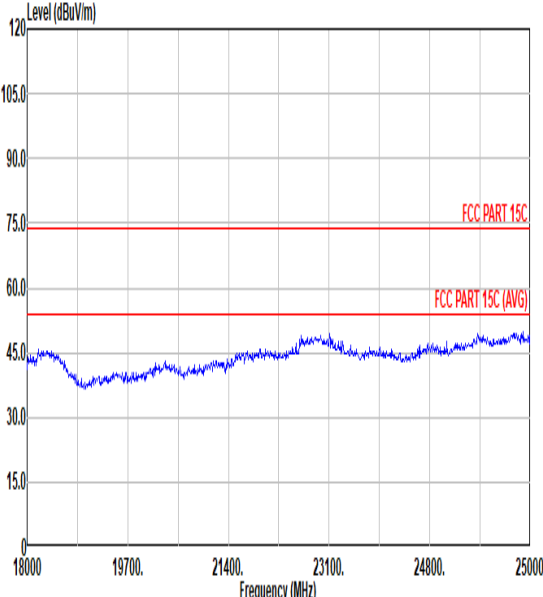
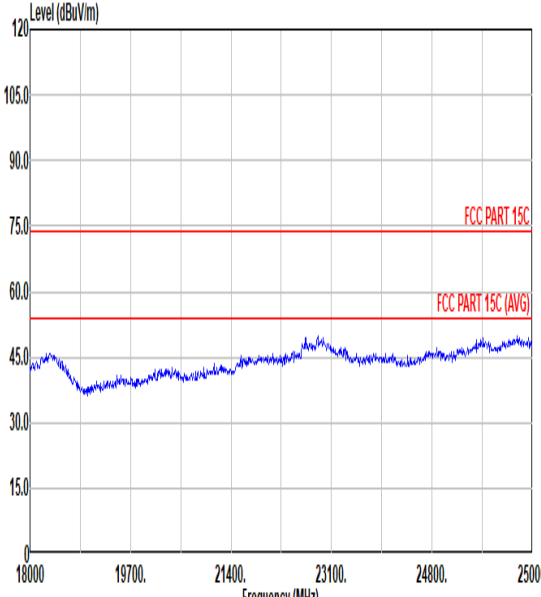


Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
1	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2497.78	45.78	54.00	-8.22	33.40	32.22	6.75	32.59	6.00	317 250 AVERAGE



Freq	Limit		Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark
	Level	Line Margin	Level	Factor	Loss	Factor	Factor			
1	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg
1	2480.00	94.95	-----	-----	82.49	32.36	6.73	32.63	6.00	317 250 AVERAGE



Mode	6																																																																																																																																										
	Harmonic																																																																																																																																										
	2400-2483.5_Bluetooth-LE_GSKF_CH39_2480MHz																																																																																																																																										
Pol.	Horizontal						Vertical																																																																																																																																				
Peak Avg																																																																																																																																											
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4960.00</td><td>49.51</td><td>74.00</td><td>-24.49</td><td>67.61</td><td>34.00</td><td>9.61</td><td>61.71</td><td>0.00</td><td>100</td><td>136</td><td>PEAK</td></tr><tr><td>2</td><td>4960.00</td><td>47.64</td><td>54.00</td><td>-6.36</td><td>65.74</td><td>34.00</td><td>9.61</td><td>61.71</td><td>0.00</td><td>100</td><td>136</td><td>AVERAGE</td></tr><tr><td>3</td><td>7440.00</td><td>42.88</td><td>74.00</td><td>-31.12</td><td>57.26</td><td>35.92</td><td>11.77</td><td>62.07</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4960.00	49.51	74.00	-24.49	67.61	34.00	9.61	61.71	0.00	100	136	PEAK	2	4960.00	47.64	54.00	-6.36	65.74	34.00	9.61	61.71	0.00	100	136	AVERAGE	3	7440.00	42.88	74.00	-31.12	57.26	35.92	11.77	62.07	0.00	---	---	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4960.00</td><td>42.08</td><td>74.00</td><td>-31.92</td><td>60.18</td><td>34.00</td><td>9.61</td><td>61.71</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr><tr><td>2</td><td>7440.00</td><td>43.22</td><td>74.00</td><td>-30.78</td><td>57.60</td><td>35.92</td><td>11.77</td><td>62.07</td><td>0.00</td><td>---</td><td>---</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4960.00	42.08	74.00	-31.92	60.18	34.00	9.61	61.71	0.00	---	---	PEAK	2	7440.00	43.22	74.00	-30.78	57.60	35.92	11.77	62.07	0.00	---	---	PEAK
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																																		
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																																		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																																																																																																	
1	4960.00	49.51	74.00	-24.49	67.61	34.00	9.61	61.71	0.00	100	136	PEAK																																																																																																																															
2	4960.00	47.64	54.00	-6.36	65.74	34.00	9.61	61.71	0.00	100	136	AVERAGE																																																																																																																															
3	7440.00	42.88	74.00	-31.12	57.26	35.92	11.77	62.07	0.00	---	---	PEAK																																																																																																																															
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																																																			
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																																																		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																																																																																																	
1	4960.00	42.08	74.00	-31.92	60.18	34.00	9.61	61.71	0.00	---	---	PEAK																																																																																																																															
2	7440.00	43.22	74.00	-30.78	57.60	35.92	11.77	62.07	0.00	---	---	PEAK																																																																																																																															
Peak Avg																																																																																																																																											

Mode

6



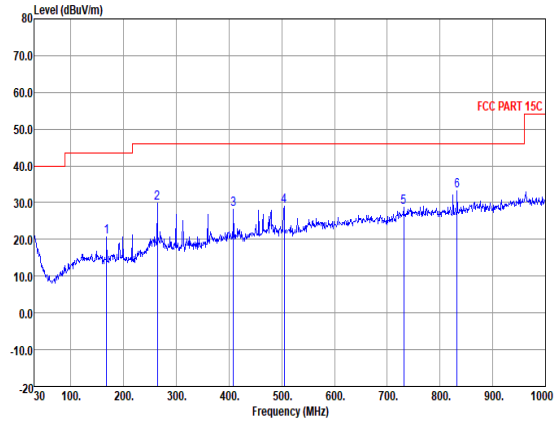
LF

2400-2483.5\_Bluetooth-LE\_GSKF\_CH39\_2480MHz

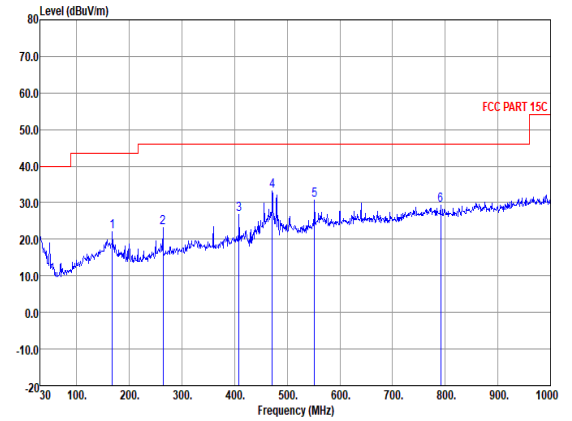
Pol.

Horizontal

Vertical

Peak  
QP

Site	: 03CH06-KS													
Condition	: FCC PART 15C 3m LF 6111D SN44483 HORIZONTAL													
Project	: 311316													
mode														
IMEI														
		Over	Limit	ReadAntenna	Cable Preamp	A/Pos	T/Pos							
		Limit	Line	Level Factor	Loss Factor									
Freq	Level							Remark	Pol/Phas					
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg					
1	167.74	20.79	-22.71	43.50	35.37	15.86	1.73	32.17	---	Peak	HORIZONTAL			
2	263.77	29.73	-16.27	46.00	39.58	20.13	2.19	32.17	---	Peak	HORIZONTAL			
3	408.30	28.31	-17.69	46.00	35.76	22.11	2.73	32.29	---	Peak	HORIZONTAL			
4	504.33	28.97	-17.03	46.00	34.43	24.11	3.03	32.60	---	Peak	HORIZONTAL			
5	731.31	28.62	-17.38	46.00	29.52	27.64	3.66	32.20	---	Peak	HORIZONTAL			
6	832.19	33.14	-12.86	46.00	32.23	28.91	3.89	31.89	---	Peak	HORIZONTAL			

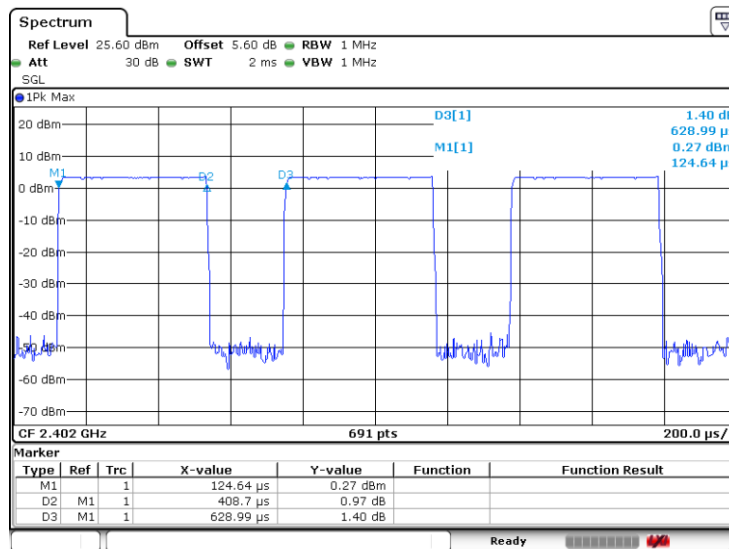


Site	: 03CH06-KS													
Condition	: FCC PART 15C 3m LF 6111D SN44483 VERTICAL													
Project	: 311316													
mode														
IMEI														
		Over	Limit	ReadAntenna	Cable Preamp	A/Pos	T/Pos							
		Limit	Line	Level Factor	Loss Factor									
Freq	Level							Remark	Pol/Phas					
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg					
1	167.74	22.07	-21.43	43.50	36.65	15.86	1.73	32.17	---	Peak	VERTICAL			
2	263.77	23.13	-22.87	46.00	32.98	20.13	2.19	32.17	---	Peak	VERTICAL			
3	408.30	26.81	-19.19	46.00	34.26	22.11	2.73	32.29	---	Peak	VERTICAL			
4	471.35	33.29	-12.71	46.00	39.49	23.48	2.93	32.61	---	Peak	VERTICAL			
5	551.86	30.59	-15.41	46.00	34.49	25.42	3.17	32.49	---	Peak	VERTICAL			
6	791.45	29.32	-16.68	46.00	29.41	28.20	3.80	32.09	---	Peak	VERTICAL			

## Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
Bluetooth LE 1Mbps	64.98	0.409	2.447	2.7KHz
Bluetooth LE 2Mbps	35.94	0.226	4.423	5.1KHz

### Bluetooth LE 1Mbps



### Bluetooth LE 2Mbps

