



# FCC RADIO TEST REPORT

## BLUETOOTH EDR

**FCC ID** : A4RGU0NP  
**Equipment** : Phone  
**Model Name** : GU0NP, GM66V  
**Applicant** : Google LLC  
1600 Amphitheatre Parkway,  
Mountain View, CA, 94043 USA  
**Standard** : FCC Part 15 Subpart C §15.247

The product was received on Feb. 27, 2025 and testing was performed from Mar. 06, 2025 to Apr. 25, 2025. We, Sporton International Inc. Wensan Laboratory, 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 from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

**Sportun International Inc. Wensan Laboratory**

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



## Table of Contents

<b>History of this test report.....</b>	<b>3</b>
<b>Summary of Test Result.....</b>	<b>4</b>
<b>1 General Description.....</b>	<b>5</b>
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT .....	6
1.3 Testing Location .....	7
1.4 Applicable Standards.....	7
<b>2 Test Configuration of Equipment Under Test.....</b>	<b>8</b>
2.1 Carrier Frequency Channel .....	8
2.2 Test Mode.....	9
2.3 Connection Diagram of Test System .....	10
2.4 Support Unit used in test configuration and system .....	11
2.5 EUT Operation Test Setup .....	11
2.6 Measurement Results Explanation Example.....	12
<b>3 Test Result.....</b>	<b>13</b>
3.1 6dB and 99% Bandwidth Measurement .....	13
3.2 Output Power Measurement.....	14
3.3 Power Spectral Density Measurement .....	15
3.4 Conducted Band Edges and Spurious Emission Measurement .....	16
3.5 Radiated Band Edges and Spurious Emission Measurement .....	17
3.6 AC Conducted Emission Measurement.....	21
3.7 Antenna Requirements.....	23
<b>4 List of Measuring Equipment .....</b>	<b>24</b>
<b>5 Measurement Uncertainty .....</b>	<b>26</b>
<b>Appendix A. Conducted Test Results</b>	
<b>Appendix B. AC Conducted Emission Test Result</b>	
<b>Appendix C. Radiated Spurious Emission Test Data</b>	
<b>Appendix D. Duty Cycle Plots</b>	
<b>Appendix E. Setup Photographs</b>	



## History of this test report



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(2)	6dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
3.2	15.247(b)(3) 15.247(b)(4)	Output Power	Pass	-
3.3	15.247(e)	Power Spectral Density	Pass	-
3.4	15.247(d)	Conducted Band Edges and Spurious Emission	Pass	-
3.5	15.247(d)	Radiated Band Edges and Spurious Emission	Pass	-
3.6	15.207	AC Conducted Emission	Pass	-
3.7	15.203	Antenna Requirement	Pass	-

**Conformity Assessment Condition:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

**Disclaimer:**

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: William Chen****Report Producer: Ming Chen**



## 1 General Description

### 1.1 Product Feature of Equipment Under Test

Product Feature	
<b>General Specs</b> GSM/WCDMA/LTE/5G NR/NTN , Bluetooth, BLE, BLE channel sounding, Thread, Wi-Fi 802.11be, NFC, WPC Rx, UWB and GNSS Rx.	
<b>Antenna Type</b> Bluetooth: <Ant. 4>: ILA Antenna <Ant. 3>: IFA Antenna	

EUT Information List	
S/N	Performed Test Item
52171FDG0005B	RF Conducted Measurement
52181FDG0008Q	Radiated Spurious Emission
52181FDG0008P	Conducted Emission

Antenna information (Open Mode)		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	Ant.4: -2.36 Ant.3: -2.55

Antenna information (Close Mode)		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	Ant.4: -2.26 Ant.3: -2.53

#### Remark:

1. MIMO Ant. 4+3 Directional Gain is a calculated result from MIMO Ant. 4 and MIMO Ant. 3. The formula used in calculation is documented in section 1.1.1.
2. Power of MIMO Ant. 4 + Ant. 3 is a calculated result from sum of the power MIMO Ant. 4 and MIMO Ant. 3.
3. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.



### 1.1.1 Antenna Directional Gain

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)ii)

Directional gain =  $G_{ANT}$  + Array Gain, where Array Gain is as follows:

$G_{ANT}$  is set equal to the gain of the antenna having the highest gain.

For the directional gain calculation.

$$Directional\ Gain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

$N_{SS}$  = the number of independent spatial streams of data;

$N_{ANT}$  = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$  if the  $k$ th antenna is being fed by spatial stream  $j$ , or zero if it is not;  
 $G_k$  is the gain in dBi of the  $k$ th antenna.

As minimum  $N_{SS}=1$  is supported by EUT, the formula can be simplified as:

Directional gain =  $10 \cdot \log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$  dBi

Where  $G1, G2, \dots, GN$  denote single antenna gain.

The directional gain “DG” is calculated as following table.

			DG for Power	DG for PSD	Power Limit	PSD Limit
	Ant 4 (dBi)	Ant 3 (dBi)	Power (dBi)	PSD (dBi)	Reduction (dB)	Reduction (dB)
Bluetooth	-2.26	-2.53	0.62	0.62	0.00	0.00

Calculation example:

If a device has two antenna,  $G_{ANT4} = -2.26$  dBi;  $G_{ANT3} = -2.53$  dBi

Directional gain derived from formula which is

$$10 \cdot \log \{ \{ [ 10^{\text{-}2.26 / 20} + 10^{\text{-}2.53 / 20} ]^2 \} / 2 \} = 0.62 \text{ dBi}$$

Power and PSD limit reduction = Composite gain – 6dBi, (min = 0)

**Note:** The antenna gain is from both open mode and close mode with highest number.

### 1.2 Modification of EUT

No modifications made to the EUT during the testing.



## 1.3 Testing Location

<b>Test Site</b>	Sportun International Inc. Wensan Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sportun Site No.</b> TH05-HY, CO07-HY, 03CH11-HY

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW3786

## 1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

**Remark:**

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.



## 2 Test Configuration of Equipment Under Test

### 2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	0	2402	27	2429	54	2456
	1	2403	28	2430	55	2457
	2	2404	29	2431	56	2458
	3	2405	30	2432	57	2459
	4	2406	31	2433	58	2460
	5	2407	32	2434	59	2461
	6	2408	33	2435	60	2462
	7	2409	34	2436	61	2463
	8	2410	35	2437	62	2464
	9	2411	36	2438	63	2465
	10	2412	37	2439	64	2466
	11	2413	38	2440	65	2467
	12	2414	39	2441	66	2468
	13	2415	40	2442	67	2469
	14	2416	41	2443	68	2470
	15	2417	42	2444	69	2471
	16	2418	43	2445	70	2472
	17	2419	44	2446	71	2473
	18	2420	45	2447	72	2474
	19	2421	46	2448	73	2475
	20	2422	47	2449	74	2476
	21	2423	48	2450	75	2477
	22	2424	49	2451	76	2478
	23	2425	50	2452	77	2479
	24	2426	51	2453	78	2480
	25	2427	52	2454	-	-
	26	2428	53	2455	-	-



## 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, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane (Open) with Adapter as worst plane.
- b. The SISO mode conducted power is covered by MIMO mode per chain, so only the MIMO mode is tested.
- c. AC power line Conducted Emission was tested under maximum output power.

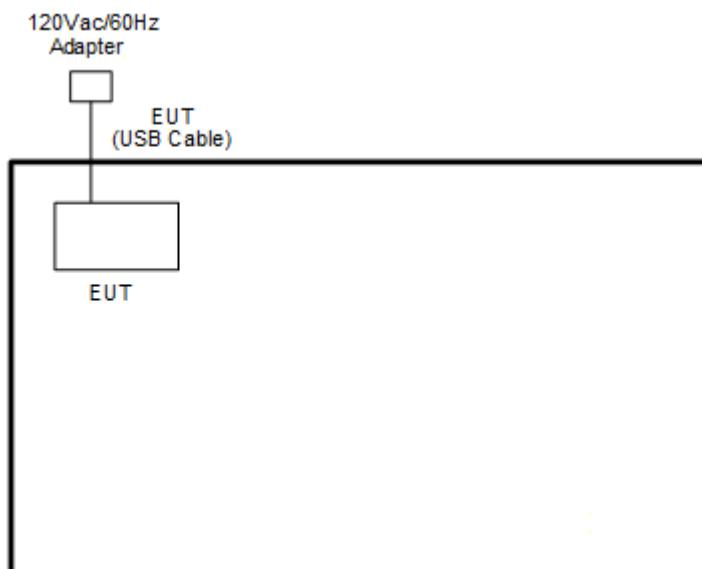
The following summary table is showing all test modes to demonstrate in compliance with the standard.

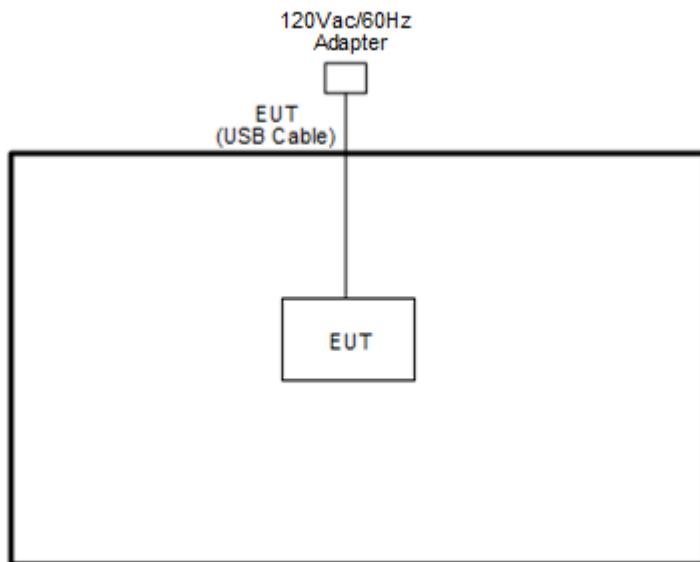
Summary table of Test Cases		
Test Item	Data Rate / Modulation	
Conducted Test Cases	Bluetooth EDR 2Mbps $\pi/4$ -DQPSK	Bluetooth EDR 3Mbps 8-DPSK
	Mode 1: CH00_2402 MHz	Mode 4: CH00_2402 MHz
	Mode 2: CH39_2441 MHz	Mode 5: CH39_2441 MHz
Radiated Test Cases	Mode 3: CH78_2480 MHz	
	Bluetooth EDR	
	Mode 1: Bluetooth Tx CH00_2402 MHz_2Mbps	
	Mode 2: Bluetooth Tx CH19_2441 MHz_2Mbps	
	Mode 3: Bluetooth Tx CH78_2480 MHz_2Mbps	
	Mode 4: Bluetooth Tx CH00_2402 MHz_3Mbps	
	Mode 5: Bluetooth Tx CH19_2441 MHz_3Mbps	
Mode 6: Bluetooth Tx CH78_2480 MHz_3Mbps		

Summary table of Test Cases	
Test Item	Data Rate / Modulation
<b>AC Conducted Emission</b>	Mode 1: Bluetooth BDR (1Mbps) Channel 39 Tx + USB Cable 1 (Charging from AC Adapter)
<b>Remark:</b>	
1. For Radiated Test Cases, the tests were performed with USB Cable 1. 2. During the preliminary test, both charging modes (Adapter mode and WPC Rx mode) were verified. It is determined that the adaptor mode is the worst case for official test. 3. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power. 4. The detailed Radiated test modes are shown in Appendix C.	

## 2.3 Connection Diagram of Test System

### <AC Conducted Emission Mode>



**<Bluetooth Tx Mode>****2.4 Support Unit used in test configuration and system**

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Adapter	N/A	GW8L7	N/A	N/A	N/A

**2.5 EUT Operation Test Setup**

The RF test items, utility “BT\_DUT\_Control\_GUI.exe (ver.03-11-24)” for DTS was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



## 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 and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

*Offset(dB) = RF cable loss(dB) + attenuator factor(dB).*

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$

### 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.

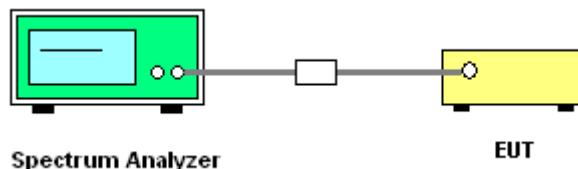
##### 3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

##### 3.1.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to 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 6dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW)  $\geq 3 * \text{RBW}$ .
6. Measure and record the results in the test report.

##### 3.1.4 Test Setup



##### 3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.

##### 3.1.6 Test Result of 99% Occupied Bandwidth

Please refer to Appendix A.

## 3.2 Output Power Measurement

### 3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5 MHz, the limit for output power is 30 dBm. If transmitting antenna of directional gain greater than 6 dBi 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 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

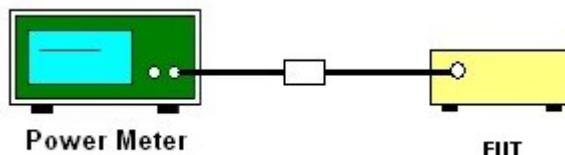
### 3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

### 3.2.3 Test Procedures

1. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
2. The RF output of EUT is connected to the power meter by RF cable and attenuator.
3. The path loss is compensated to the results for each measurement.
4. Set the maximum power setting and enable the EUT to transmit continuously.
5. Measure the conducted output power and record the results in the test report.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Average Output Power

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 8 dBm in any 3 kHz band at any time interval of continuous transmission.

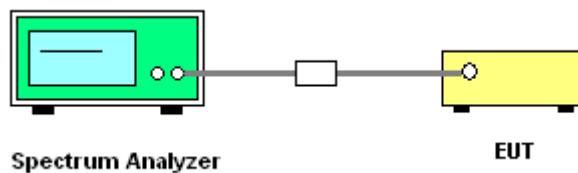
#### 3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

#### 3.3.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to 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. (6 dB 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)/ 100 kHz is a reference level and is used as 20 dBc 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.

## 3.4 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 30 dB down from the highest emission level within the authorized band.

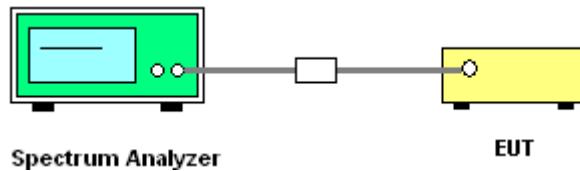
### 3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

### 3.4.3 Test Procedure

1. The testing follows the ANSI C63.10 Section 11.11.3 Emission level measurement.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to 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

Please refer to Appendix A.

### 3.4.6 Test Result of Conducted Spurious Emission Plots

Please refer to Appendix A.



## 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 transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required 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

Please refer to the measuring equipment list in this test report.



### 3.5.3 Test Procedures

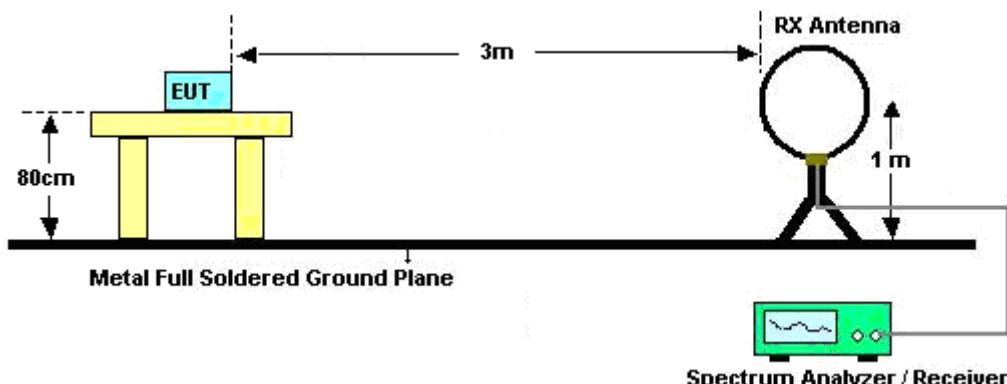
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.
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  $f < 1$  GHz; VBW  $\geq$  RBW; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW = 3 MHz for  $f \geq 1$  GHz for peak measurement.

For average measurement:

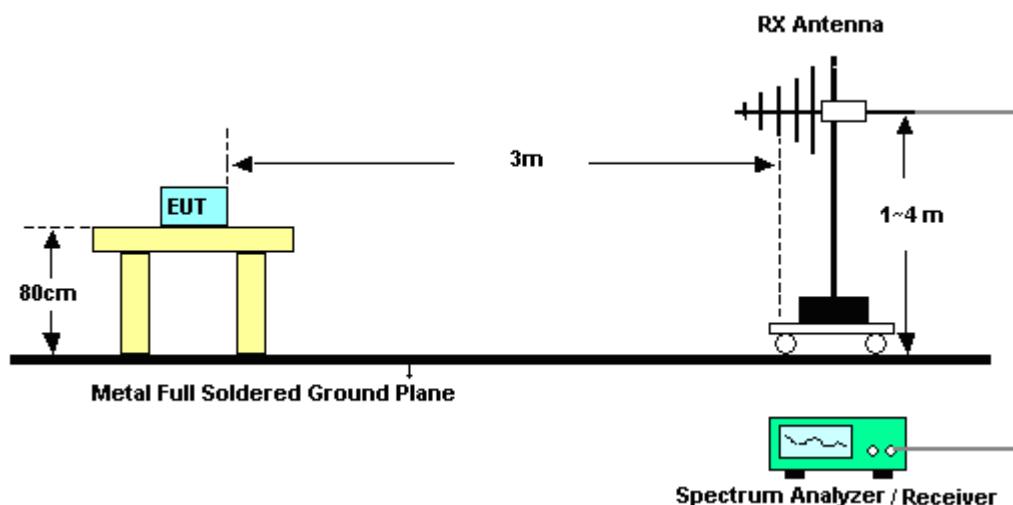
  - VBW = 10 Hz, when duty cycle is no less than 98 percent.
  - VBW  $\geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

### 3.5.4 Test Setup

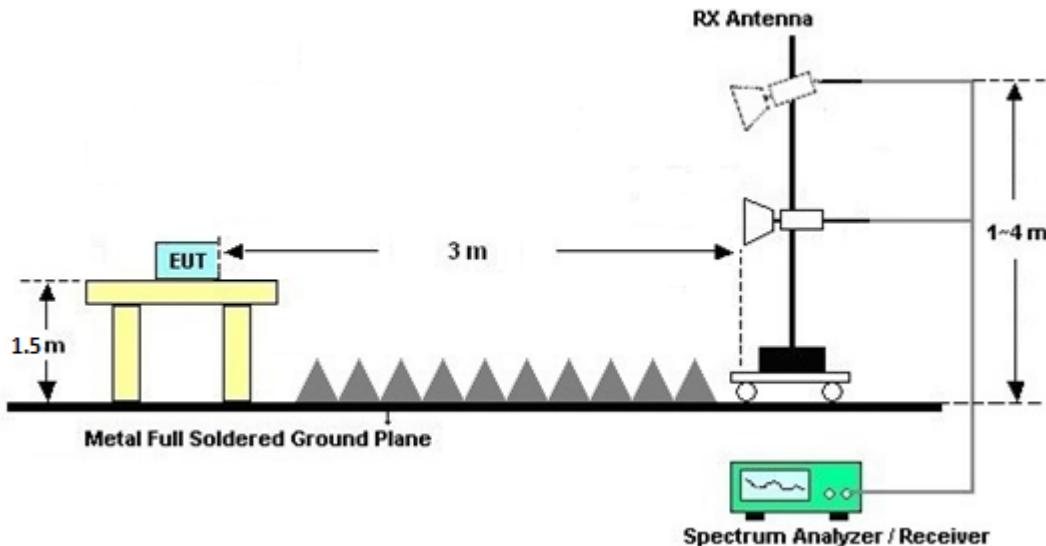
For radiated test below 30MHz



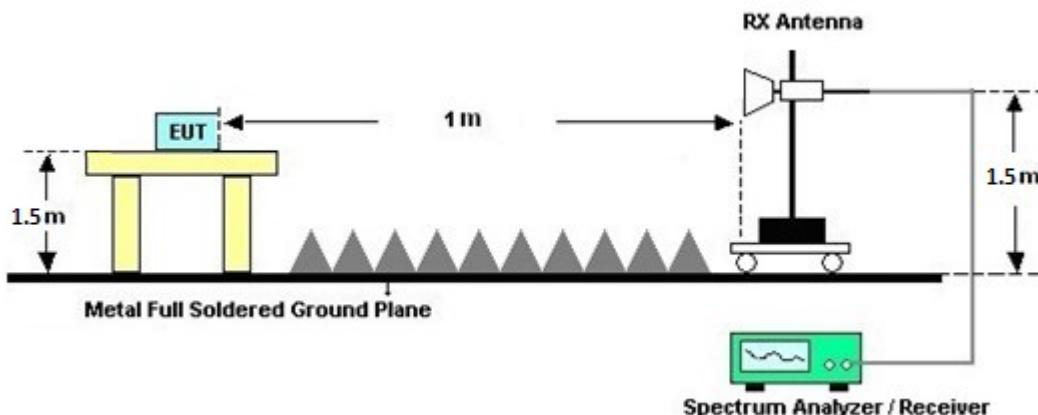
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result comes 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 (30 MHz ~ 10th Harmonic)

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 (dB $\mu$ V)	
	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.

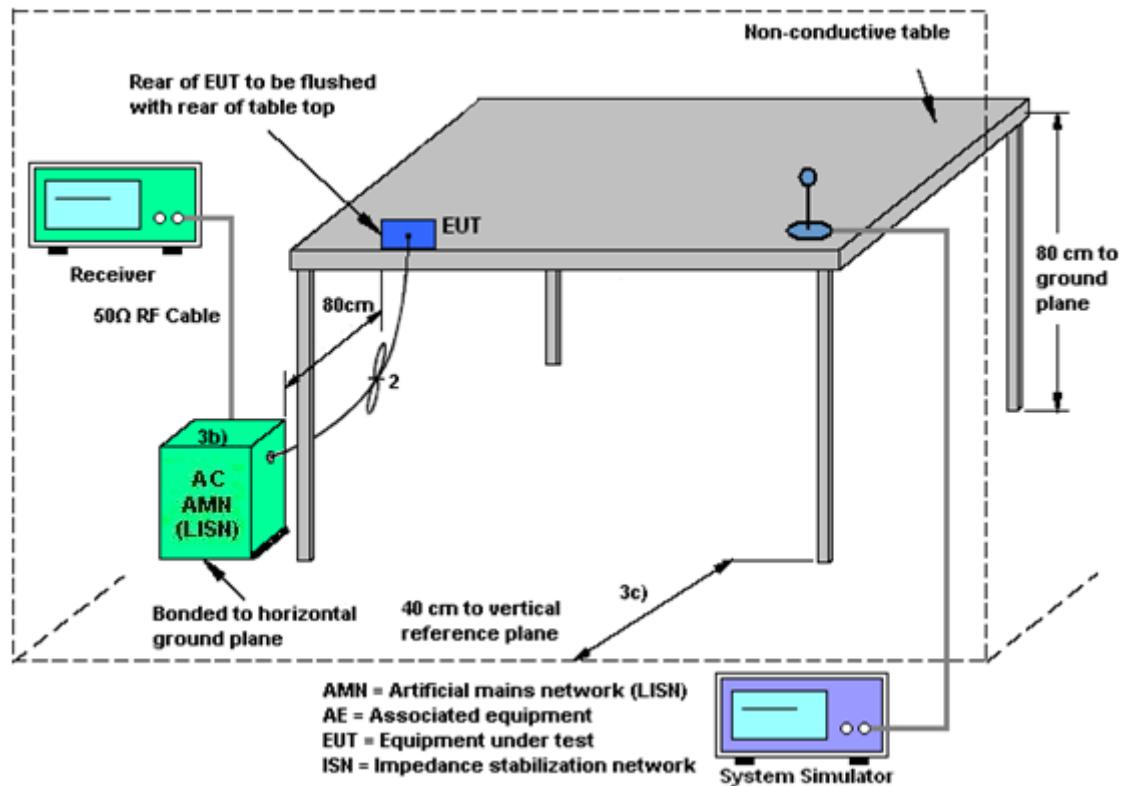
### 3.6.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

### 3.6.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is 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 shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9 kHz) 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

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

### 3.7.2 Antenna Anti-Replacement Construction

- b) Unique (non-standard) antenna connector.
- (3) Use of a standard connector is also allowed if the connector is within the transmitter enclosure and can only be accessed by disassembly of the transmitter, where such disassembly is not normally required. The user manual must not show that user has access to the connector.



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Nov. 27, 2024	Mar. 06, 2025~Apr. 22, 2025	Nov. 26, 2025	Radiation (03CH11-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9kHz~30MHz	Aug. 29, 2024	Mar. 06, 2025~Apr. 22, 2025	Aug. 28, 2025	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-01620	1GHz~18GHz	Aug. 28, 2024	Mar. 06, 2025~Apr. 22, 2025	Aug. 27, 2025	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz~40GHz	Jun. 24, 2024	Mar. 06, 2025~Apr. 22, 2025	Jun. 23, 2025	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 07, 2024	Mar. 06, 2025~Apr. 22, 2025	Dec. 06, 2025	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Mar. 25, 2024	Mar. 06, 2025~Mar. 23, 2025	Mar. 24, 2025	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Mar. 24, 2025	Mar. 24, 2025~Apr. 22, 2025	Mar. 23, 2026	Radiation (03CH11-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18 G-56-01-A70	EC1900249	1GHz~18GHz	Jan. 21, 2025	Mar. 06, 2025~Apr. 22, 2025	Jan. 20, 2026	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060871	18GHz~40GHz	Aug. 23, 2024	Mar. 06, 2025~Apr. 22, 2025	Aug. 22, 2025	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 14, 2024	Mar. 06, 2025~Apr. 22, 2025	Oct. 13, 2025	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	20MHz~8.4GHz	Jul. 19, 2024	Mar. 06, 2025~Apr. 22, 2025	Jul. 18, 2025	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Mar. 06, 2025~Apr. 22, 2025	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Mar. 06, 2025~Apr. 22, 2025	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Mar. 06, 2025~Apr. 22, 2025	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Mar. 06, 2025~Apr. 22, 2025	N/A	Radiation (03CH11-HY)
Hygrometer	TECPTEL	DTM-303B	TP200880	N/A	Aug. 29, 2024	Mar. 06, 2025~Apr. 22, 2025	Aug. 28, 2025	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804013/2	30M~40G	Mar. 05, 2025	Mar. 06, 2025~Apr. 22, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz~40GHz	Mar. 05, 2025	Mar. 06, 2025~Apr. 22, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9k~30M	Mar. 05, 2025	Mar. 06, 2025~Apr. 22, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	30M~40G	Mar. 05, 2025	Mar. 06, 2025~Apr. 22, 2025	Mar. 04, 2026	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN3	3GHz High Pass Filter	Sep. 10, 2024	Mar. 06, 2025~Apr. 22, 2025	Sep. 09, 2025	Radiation (03CH11-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40SS	SN3	6.75GHz High Pass Filter	Sep. 10, 2024	Mar. 06, 2025~Apr. 22, 2025	Sep. 09, 2025	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN11	1.53GHz Low Pass Filter	Sep. 10, 2024	Mar. 06, 2025~Apr. 22, 2025	Sep. 09, 2025	Radiation (03CH11-HY)
Attenuator	HONOVA	5910 SMA-50-005	0028	N/A	Sep. 10, 2024	Mar. 06, 2025~Apr. 22, 2025	Sep. 09, 2025	Radiation (03CH11-HY)
Filter	Wainwright	WLK10-4630-5093-11000-40SS	SN1	4.5GHz Low Pass Filter	Sep. 10, 2024	Mar. 06, 2025~Apr. 22, 2025	Sep. 09, 2025	Radiation (03CH11-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 01, 2024	Mar. 21, 2025~Apr. 02, 2025	Oct. 31, 2025	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	1036004	N/A	Jul. 04, 2024	Mar. 21, 2025~Apr. 02, 2025	Jul. 03, 2025	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Jul. 04, 2024	Mar. 21, 2025~Apr. 02, 2025	Jul. 03, 2025	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 23, 2024	Mar. 21, 2025~Apr. 02, 2025	Aug. 22, 2025	Conducted (TH05-HY)
Switch Control Mainframe	Burgeon	ETF-058	EC1300484 (BOX3)	N/A	May 20, 2024	Mar. 21, 2025~Apr. 02, 2025	May 19, 2025	Conducted (TH05-HY)
Software	Sportun	BTWIFI_Final_version_240513	N/A	Conducted Other Test Item	N/A	Mar. 21, 2025~Apr. 02, 2025	N/A	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Apr. 25, 2025	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 25, 2025	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-FN	9561-F N00373	9kHz-200MHz	Oct. 23, 2024	Apr. 25, 2025	Oct. 22, 2025	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 03, 2025	Apr. 25, 2025	Mar. 02, 2026	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 24, 2025	Apr. 25, 2025	Mar. 23, 2026	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 23, 2024	Apr. 25, 2025	Sep. 22, 2025	Conduction (CO07-HY)



## 5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.7 dB
--	--------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.4 dB
--	--------

### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1 dB
--	--------

### Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.3 dB
--	--------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.3 dB
--	--------

## Appendix A. Test Result of Conducted Test Items

Test Engineer:	Benny Ku/Junyu Jhou			Temperature:	21~25		°C
Test Date:	2025/3/24~2025/4/2			Relative Humidity:	51~54		%

<b>TEST RESULTS DATA</b> <u>6dB and 99% Occupied Bandwidth</u>											
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass /Fail	
					Ant3	Ant4	Ant3	Ant4			
2DH	2Mbps	2	0	2402	1.197	1.196	1.073	1.074	0.50	Pass	
2DH	2Mbps	2	39	2441	1.197	1.195	1.074	1.074	0.50	Pass	
2DH	2Mbps	2	78	2480	1.195	1.195	1.073	1.075	0.50	Pass	
3DH	3Mbps	2	0	2402	1.171	1.171	1.064	1.064	0.50	Pass	
3DH	3Mbps	2	39	2441	1.170	1.171	1.064	1.065	0.50	Pass	
3DH	3Mbps	2	78	2480	1.171	1.171	1.063	1.064	0.50	Pass	

<b>TEST RESULTS DATA</b> <u>Peak Power Table</u>												
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)	DG (dBi)	Total EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
					Ant3	Ant4	SUM					
2DH	2Mbps	2	0	2402	19.23	18.84	22.05	30.00	0.62	22.67	36.00	Pass
2DH	2Mbps	2	39	2441	18.61	18.81	21.72	30.00	0.62	22.34	36.00	Pass
2DH	2Mbps	2	78	2480	19.56	19.95	22.77	30.00	0.62	23.39	36.00	Pass
3DH	3Mbps	2	0	2402	19.70	19.37	22.55	30.00	0.62	23.17	36.00	Pass
3DH	3Mbps	2	39	2441	19.07	19.40	22.25	30.00	0.62	22.87	36.00	Pass
3DH	3Mbps	2	78	2480	20.11	20.23	23.18	30.00	0.62	23.80	36.00	Pass

<b>TEST RESULTS DATA</b> <u>Average Power Table</u> <u>(Reporting Only)</u>											
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Duty Factor (dB)			
					Ant3	Ant4	SUM				
2DH	2Mbps	2	0	2402	16.40	16.14	19.28	5.04			
2DH	2Mbps	2	39	2441	16.11	16.10	19.12	5.04			
2DH	2Mbps	2	78	2480	16.67	17.27	19.99	5.04			
3DH	3Mbps	2	0	2402	16.54	16.32	19.44	5.04			
3DH	3Mbps	2	39	2441	16.04	16.34	19.20	5.04			
3DH	3Mbps	2	78	2480	16.97	17.13	20.06	5.04			

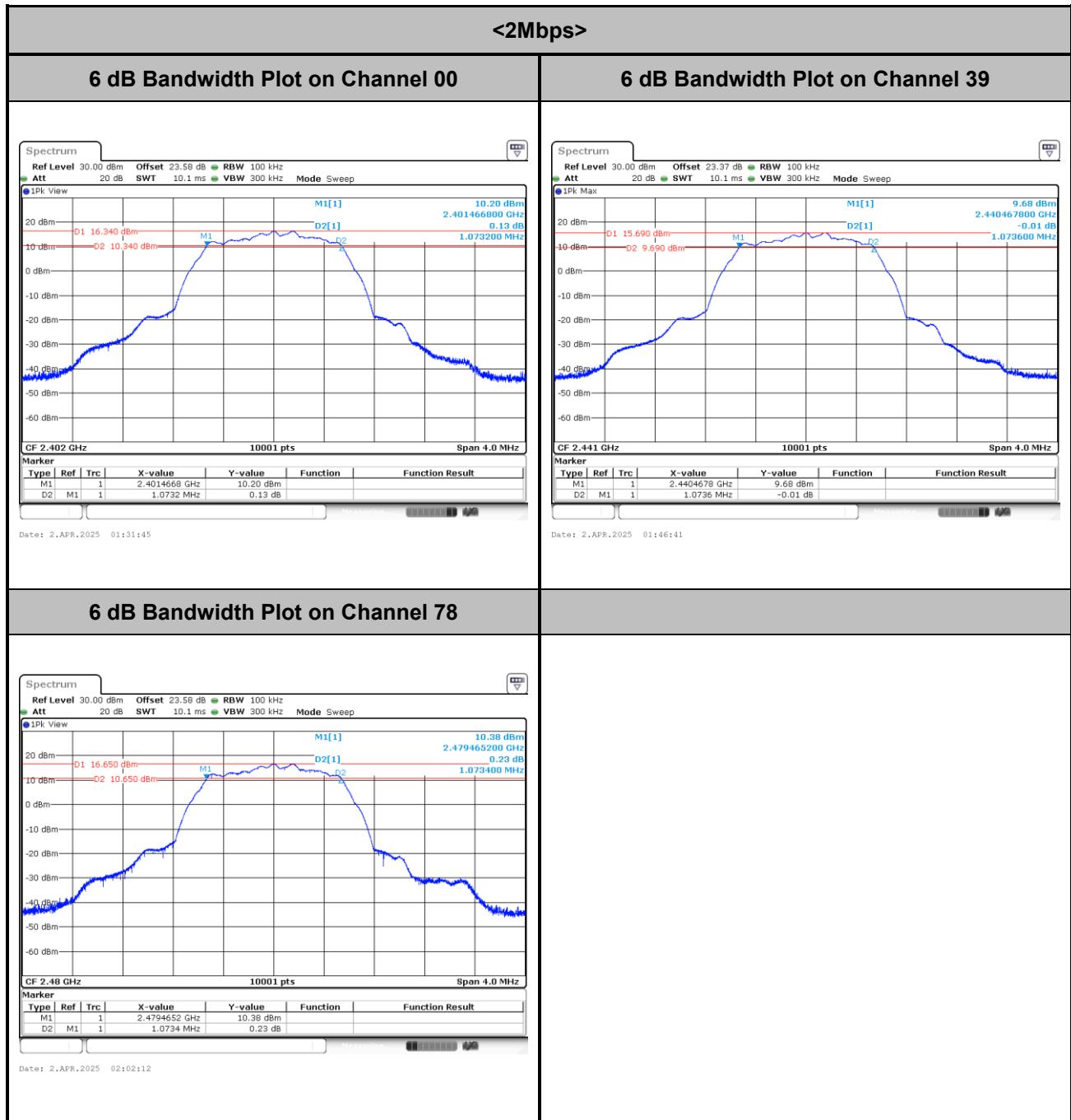
  

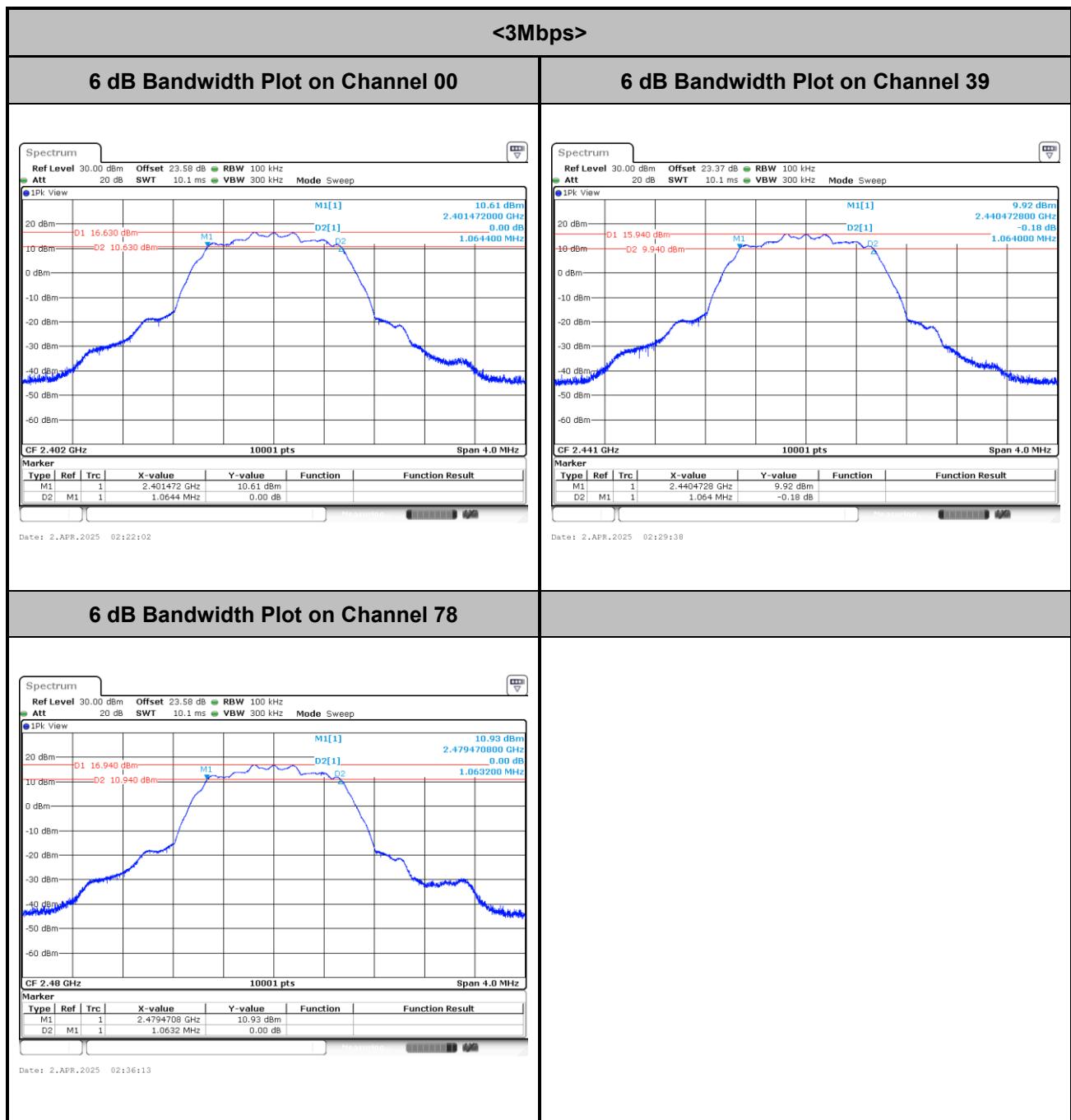
<b>TEST RESULTS DATA</b> <u>Peak Power Density</u>											
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	Peak PSD (dBm /100kHz)	Peak PSD (dBm /3kHz)	Peak PSD Worst +3.01 (dBm /3kHz)	DG (dBi)	Peak PSD Limit (dBm /3kHz)	Pass /Fail	
2DH	2Mbps	2	0	2402	16.36	2.68	5.69	0.62	8.00	Pass	
2DH	2Mbps	2	39	2441	15.72	1.98	4.99	0.62	8.00	Pass	
2DH	2Mbps	2	78	2480	17.06	3.24	6.25	0.62	8.00	Pass	
3DH	3Mbps	2	0	2402	16.61	3.06	6.07	0.62	8.00	Pass	
3DH	3Mbps	2	39	2441	15.97	2.40	5.41	0.62	8.00	Pass	
3DH	3Mbps	2	78	2480	17.29	3.67	6.68	0.62	8.00	Pass	

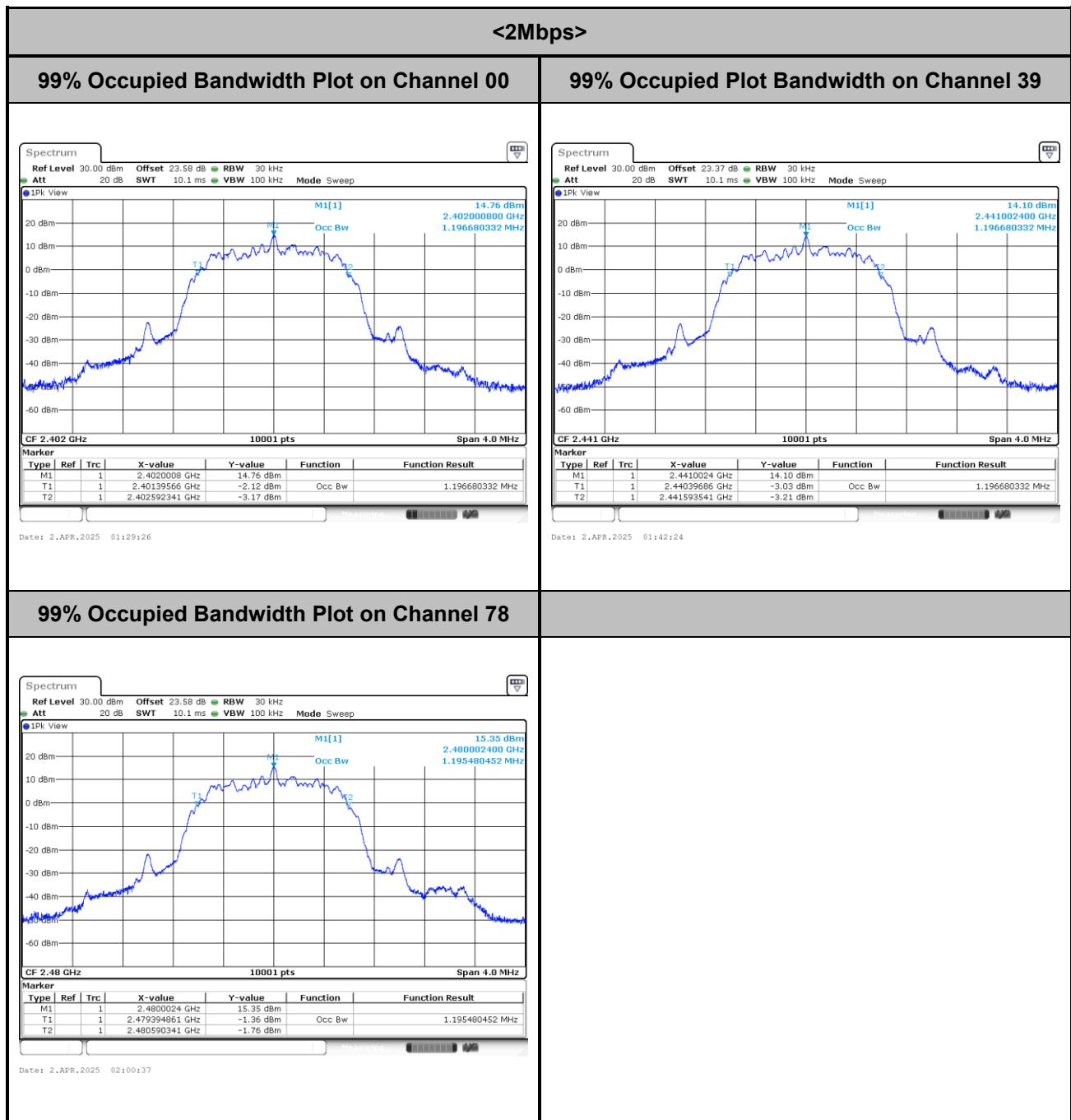
Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.



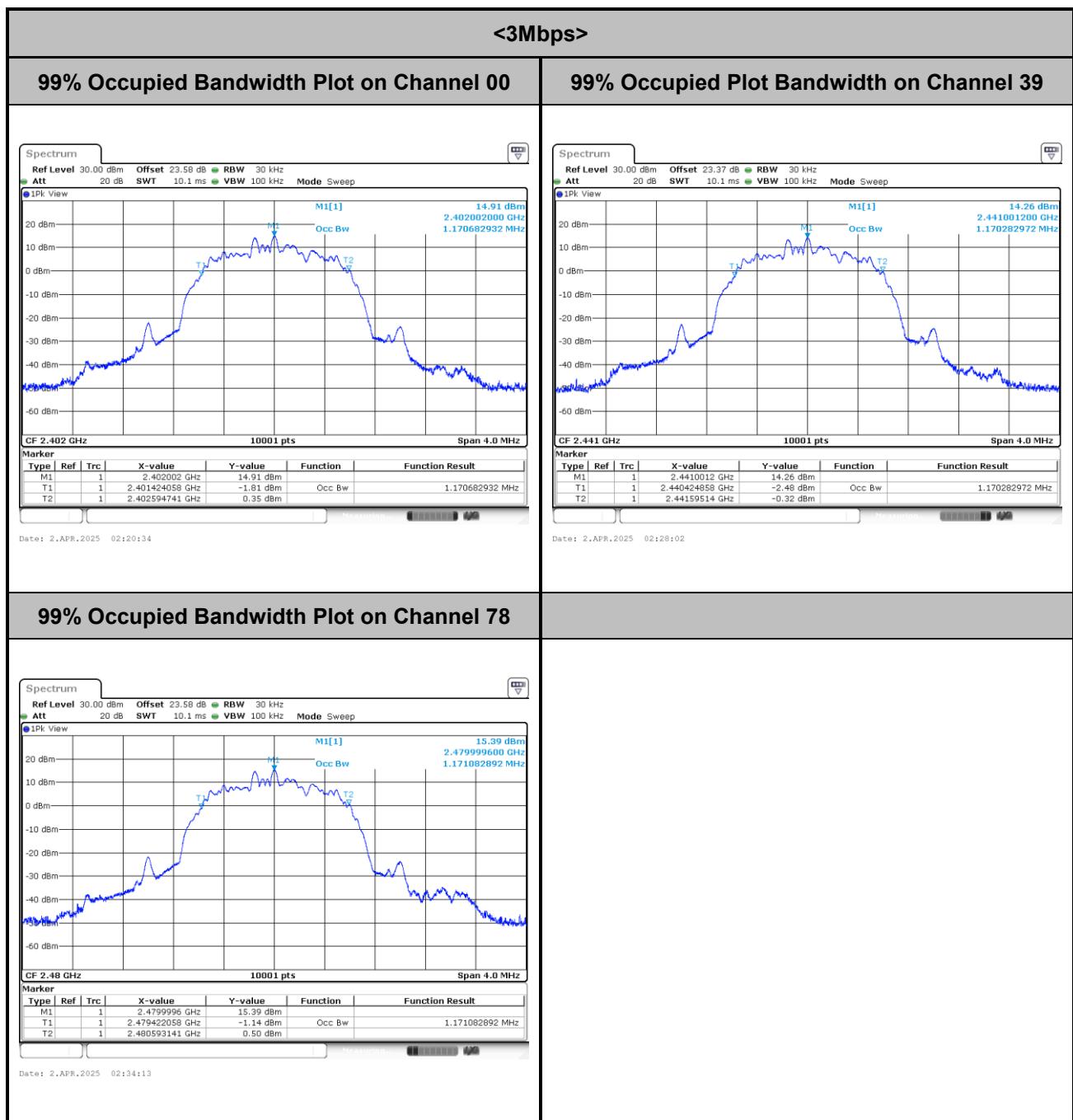
## MIMO &lt;Ant. 4&gt;

**6dB Bandwidth**



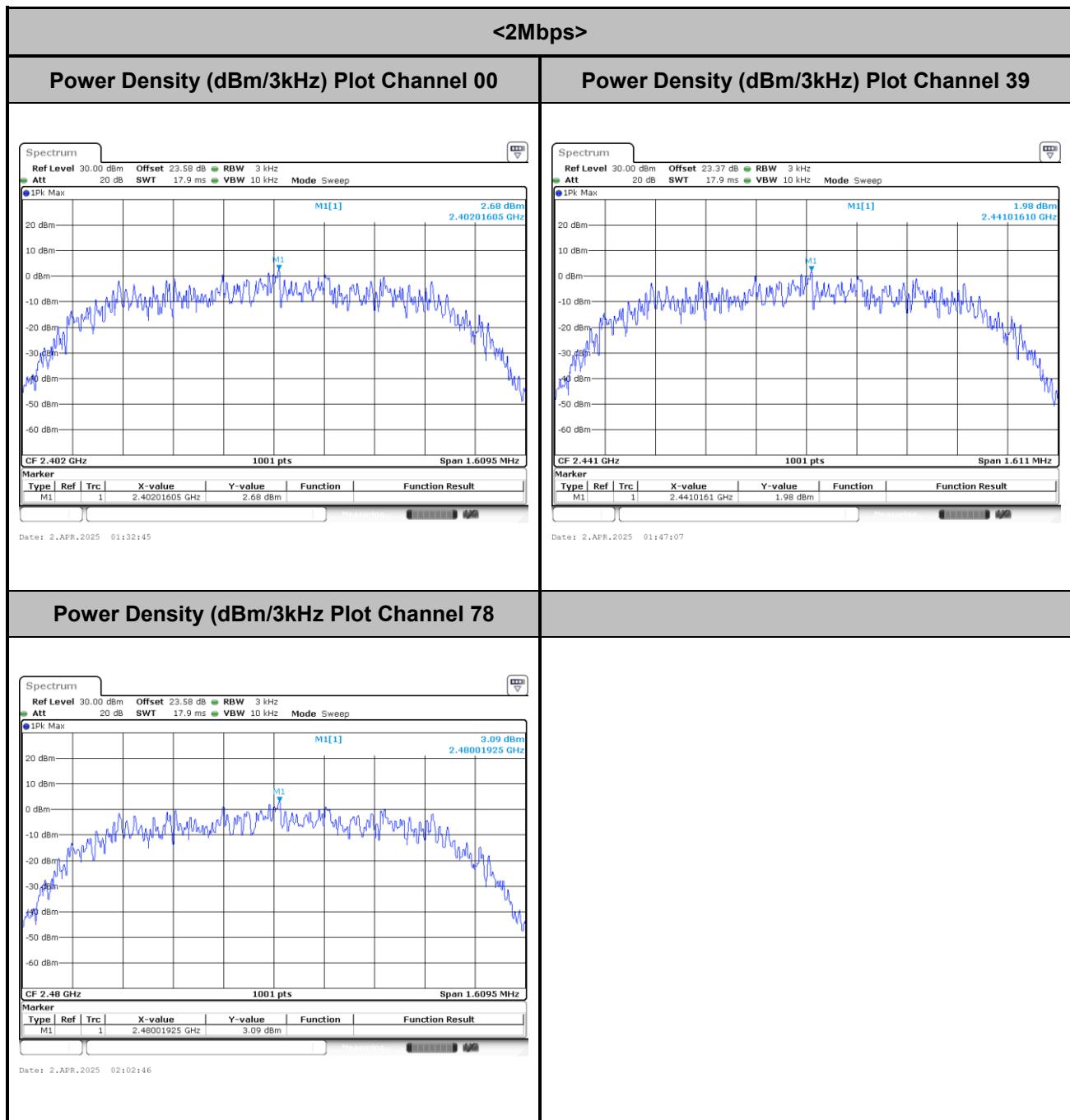
**99% Occupied Bandwidth**

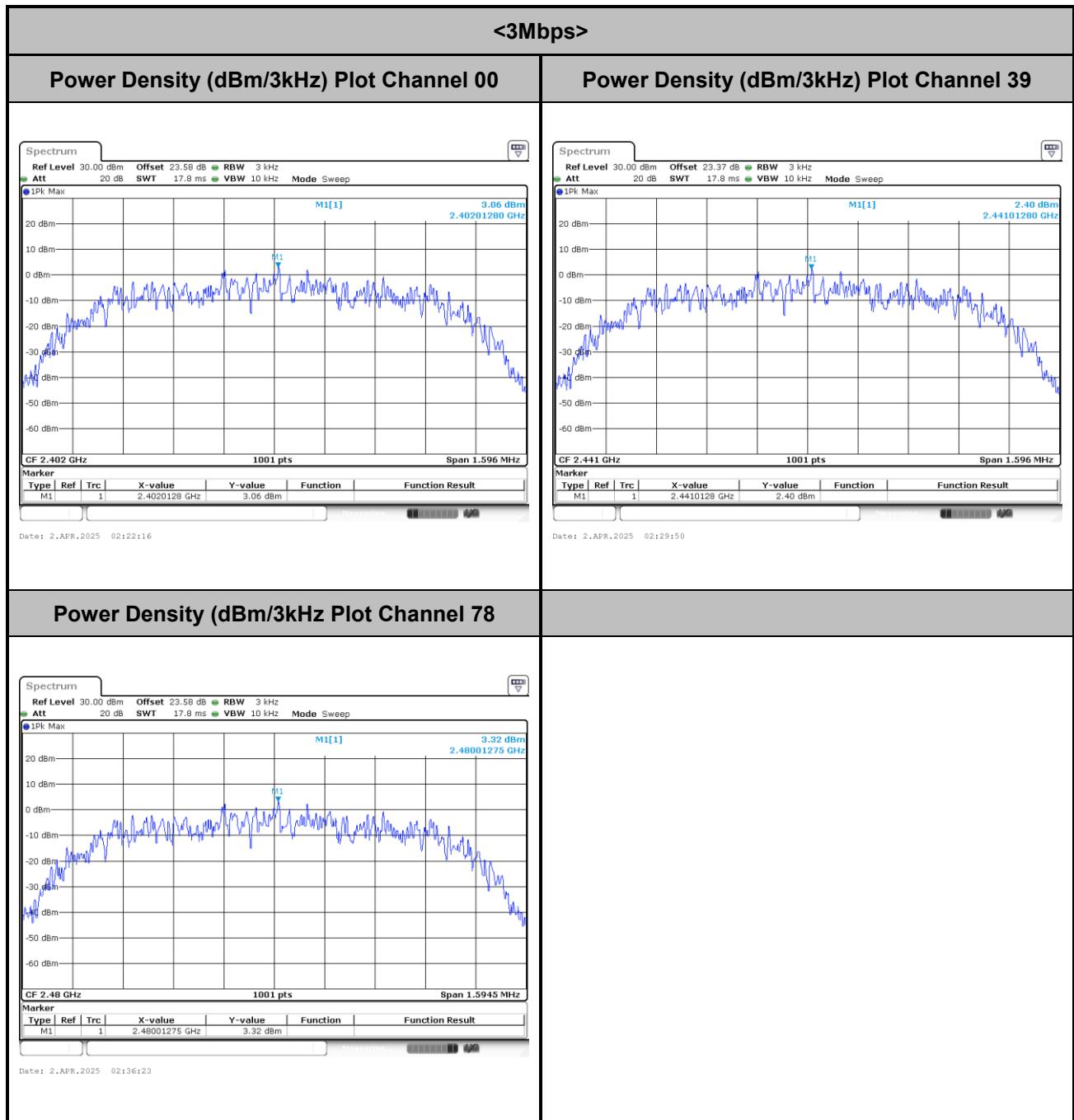
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.





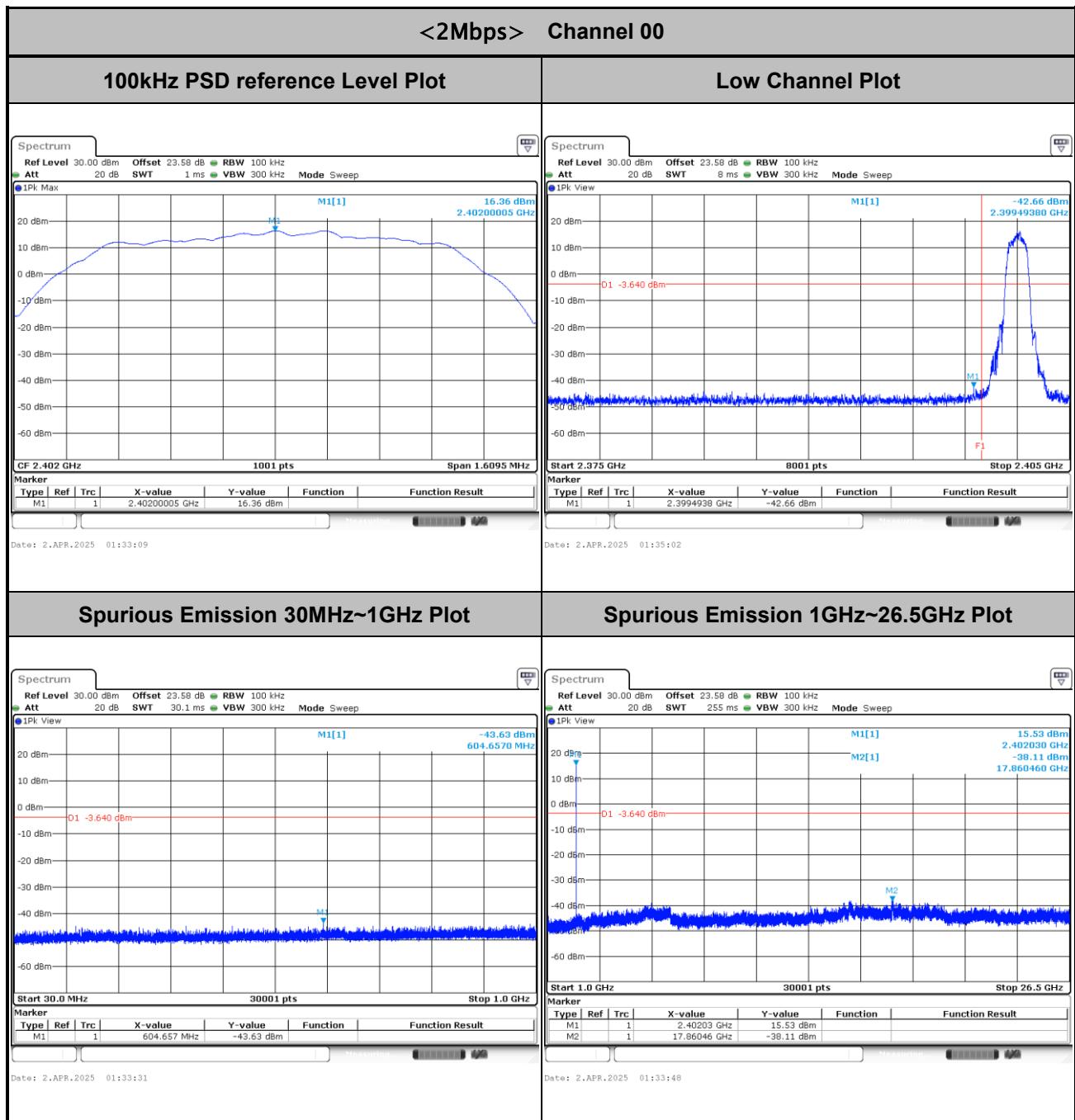
## Power Spectral Density (dBm/3kHz)

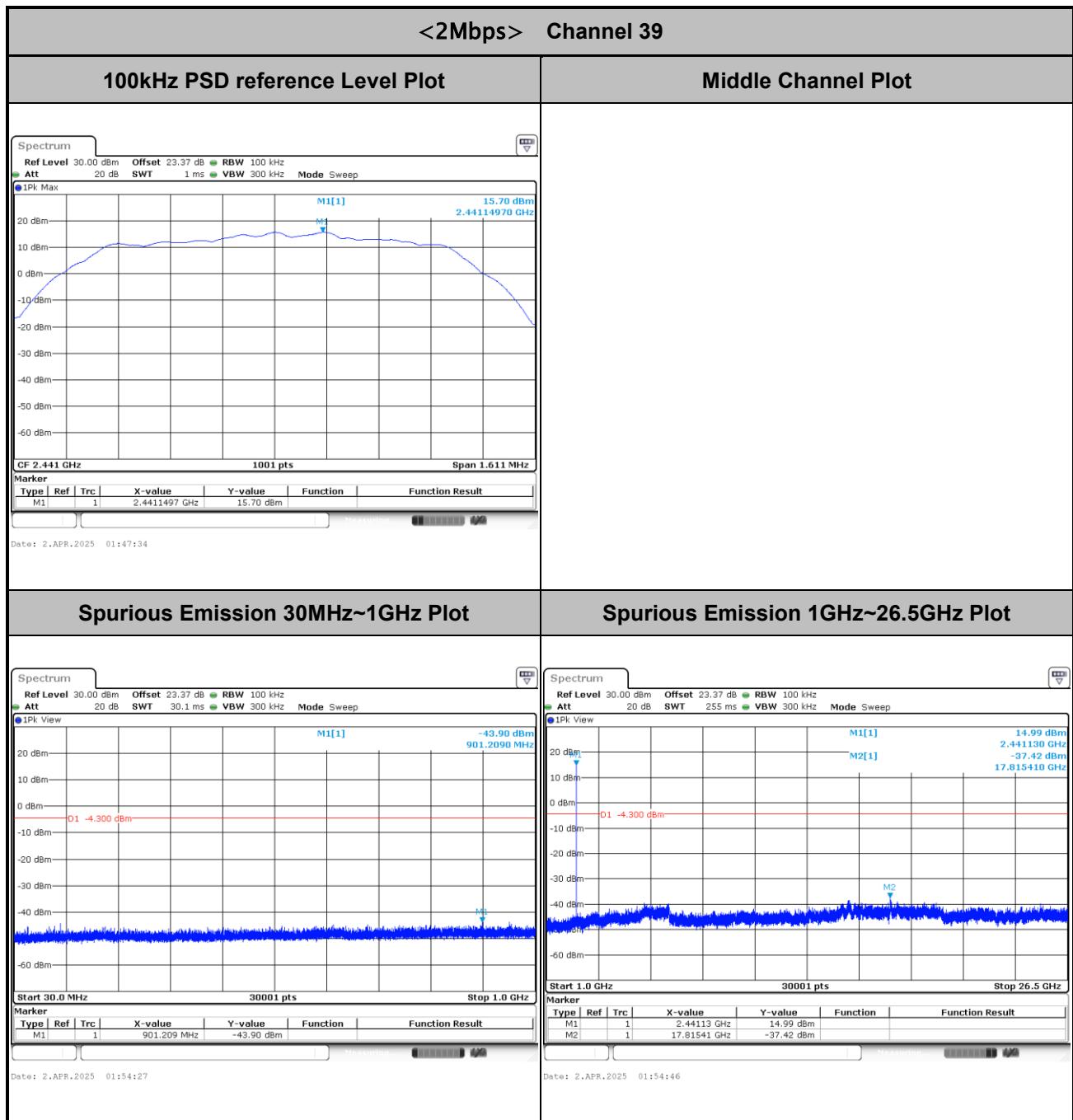


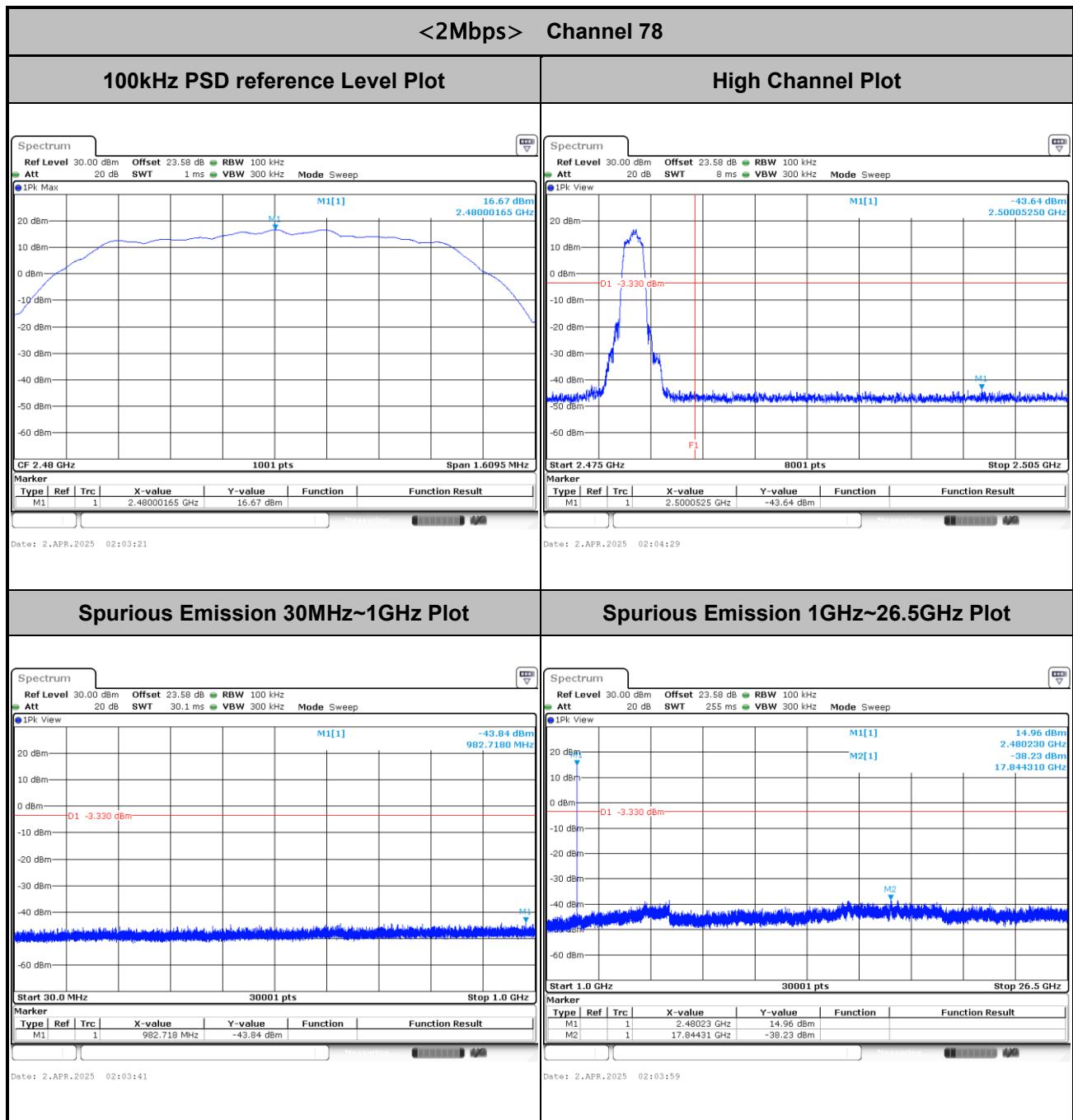


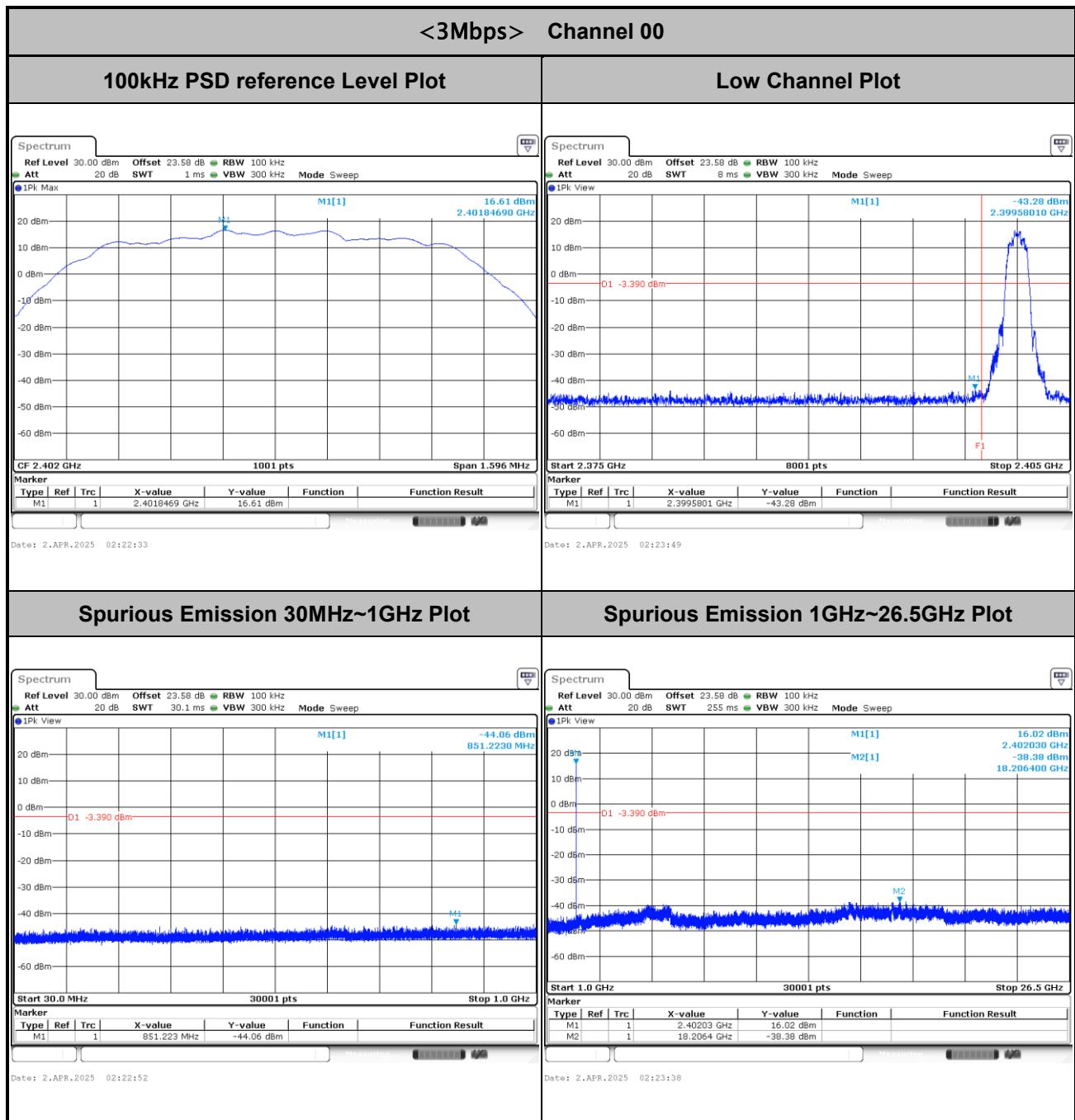


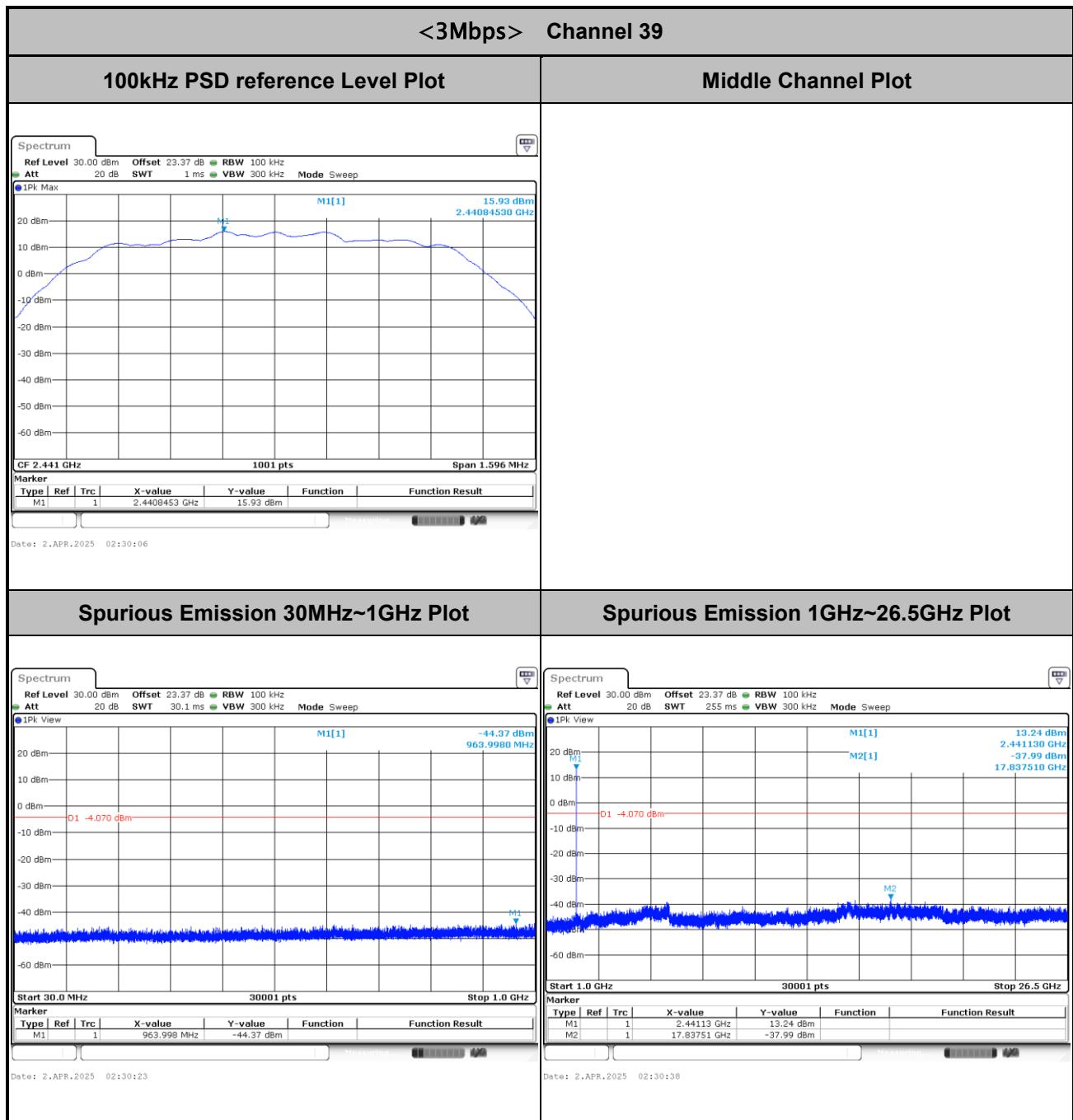
## Band Edge and Spurious Emission

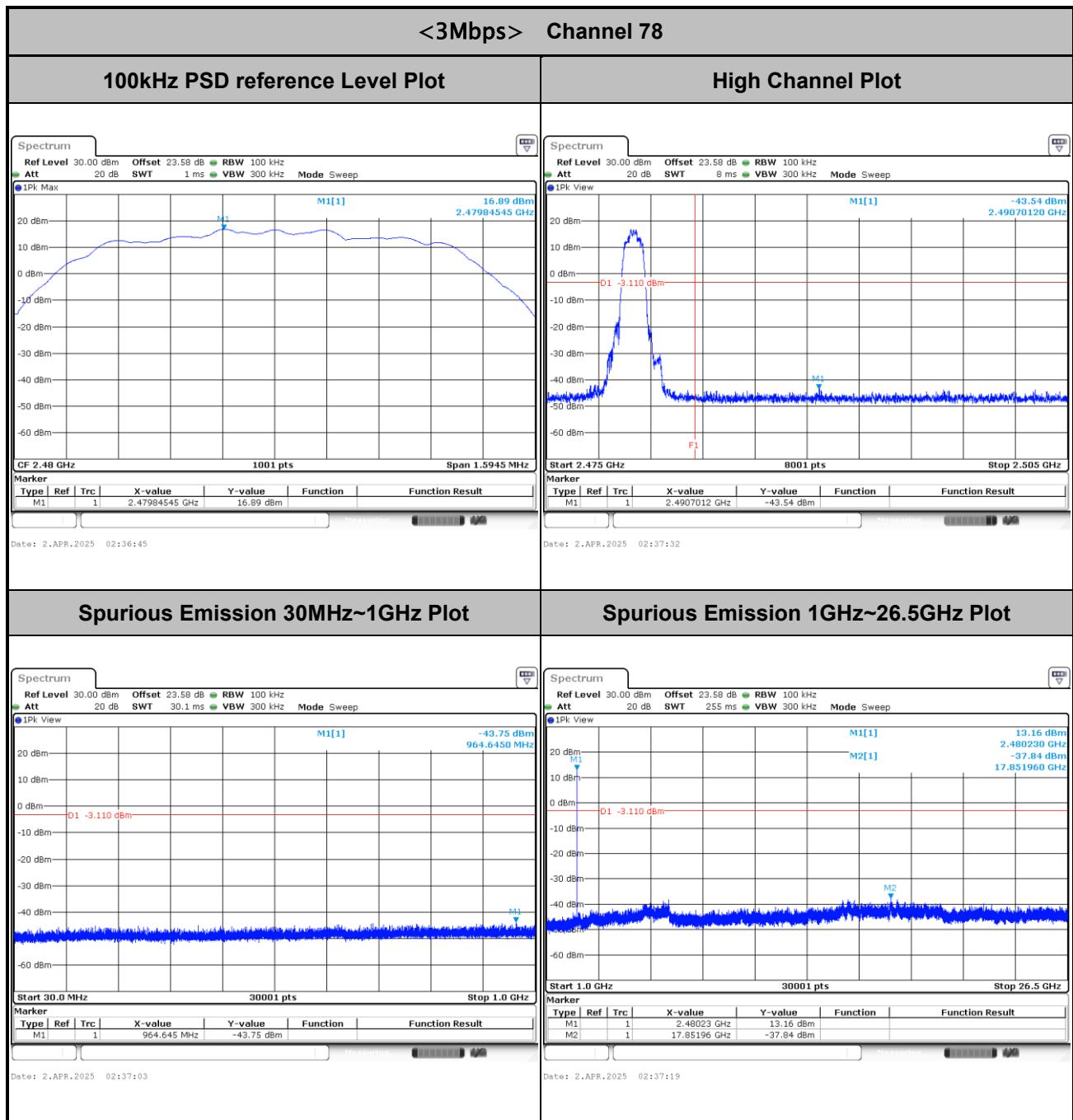










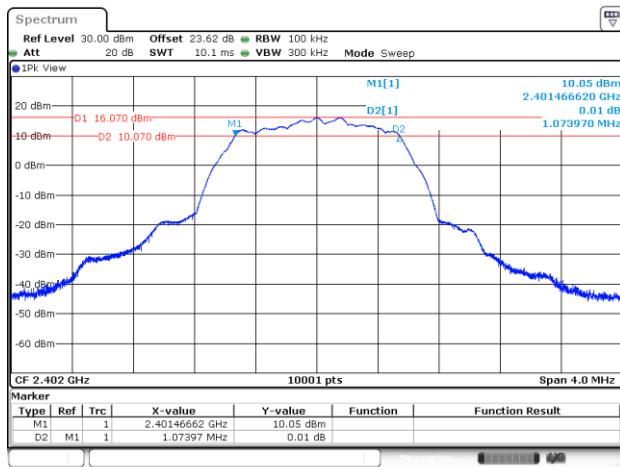
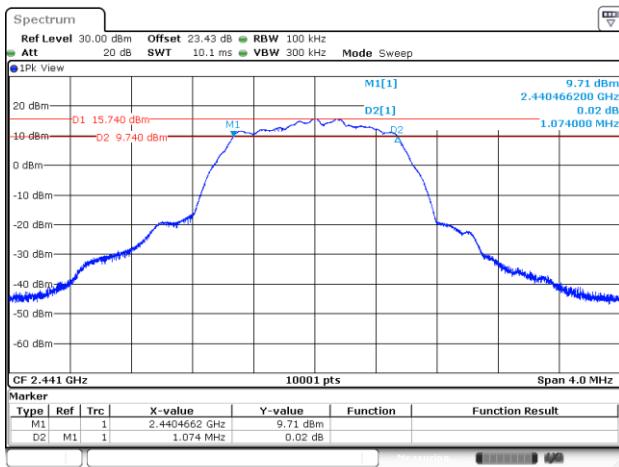
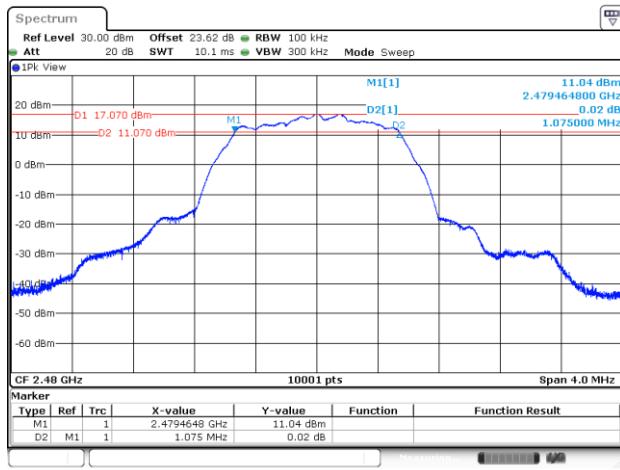


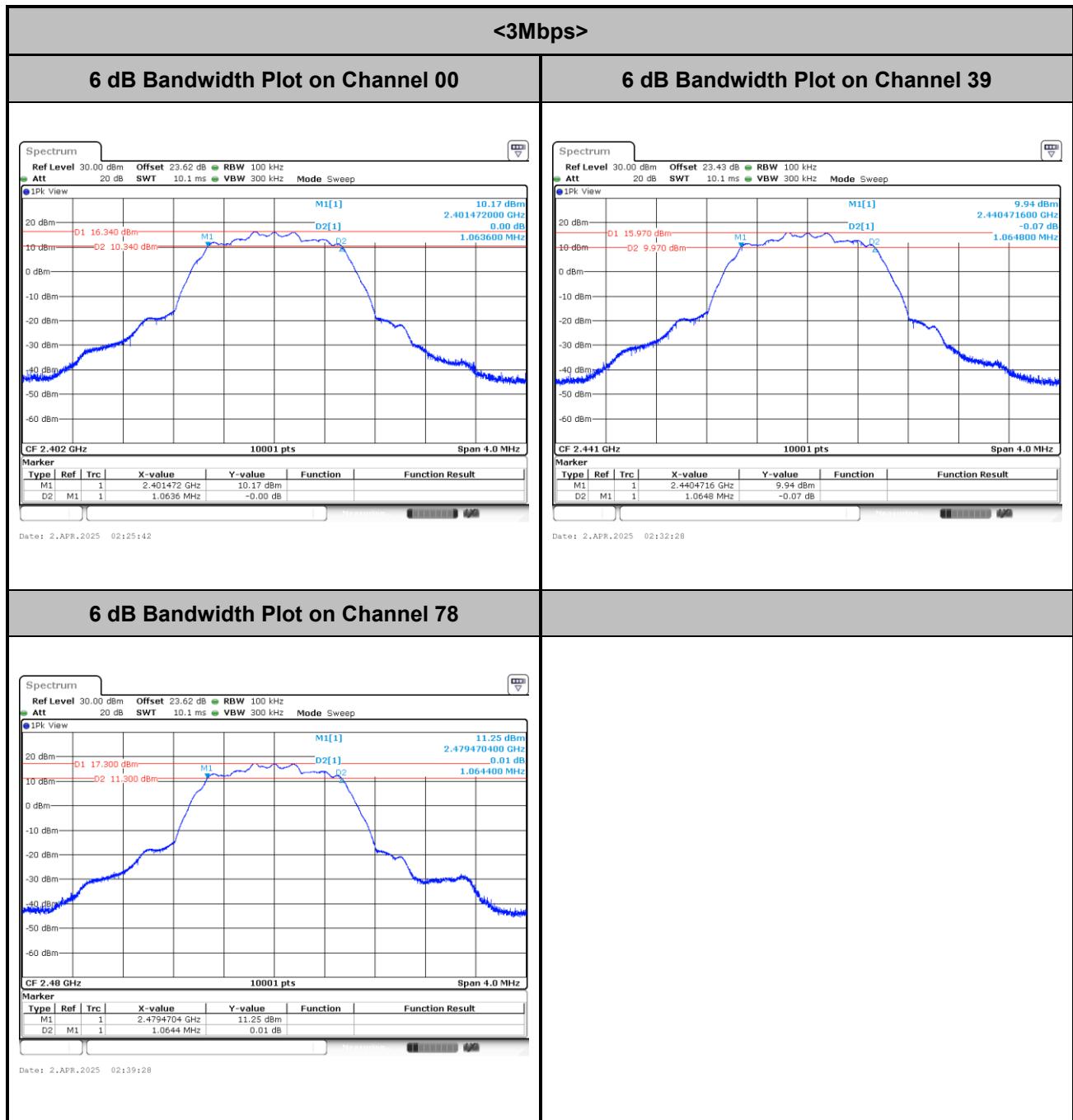


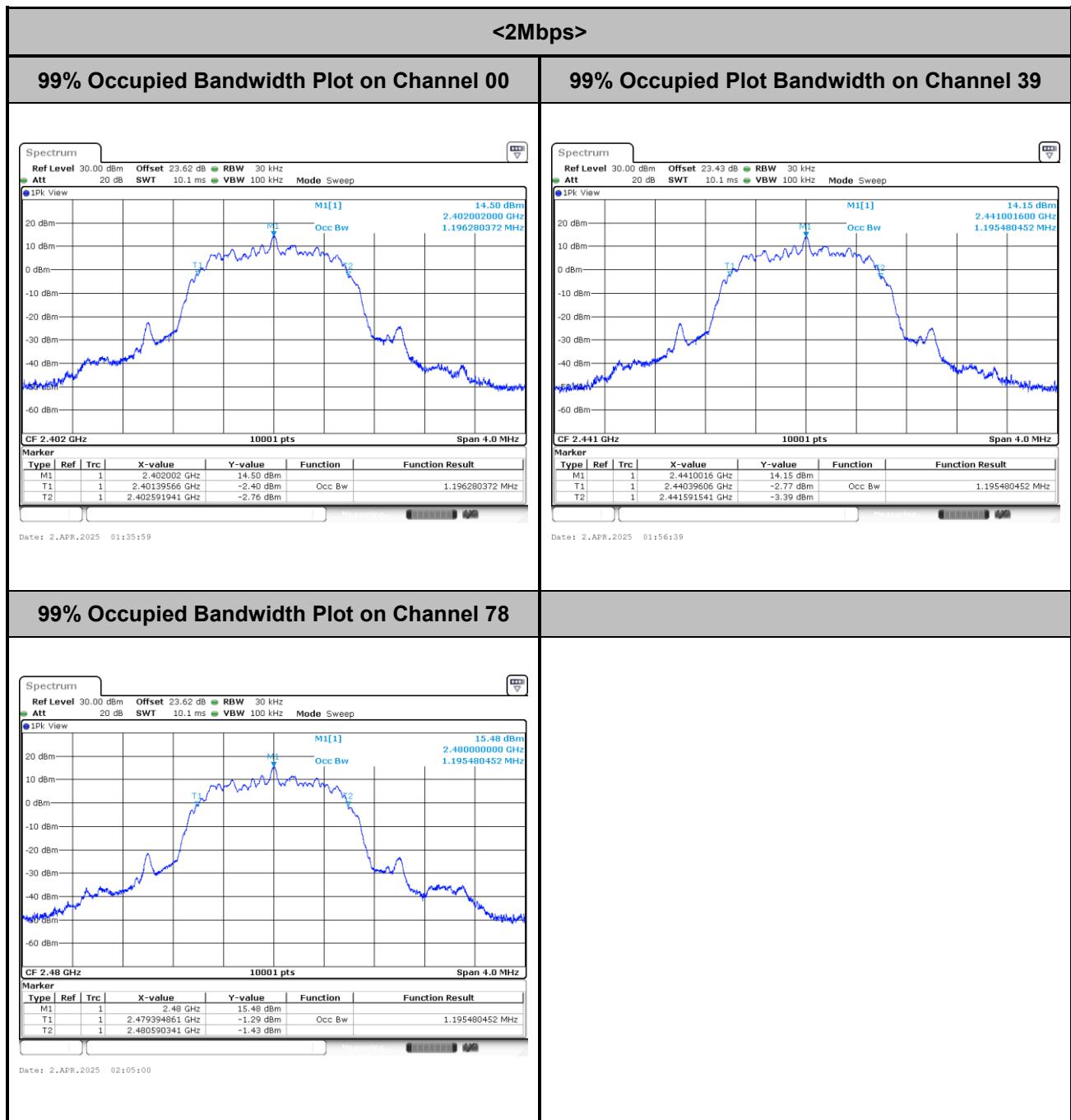
## MIMO &lt;Ant. 3&gt;

**6dB Bandwidth**

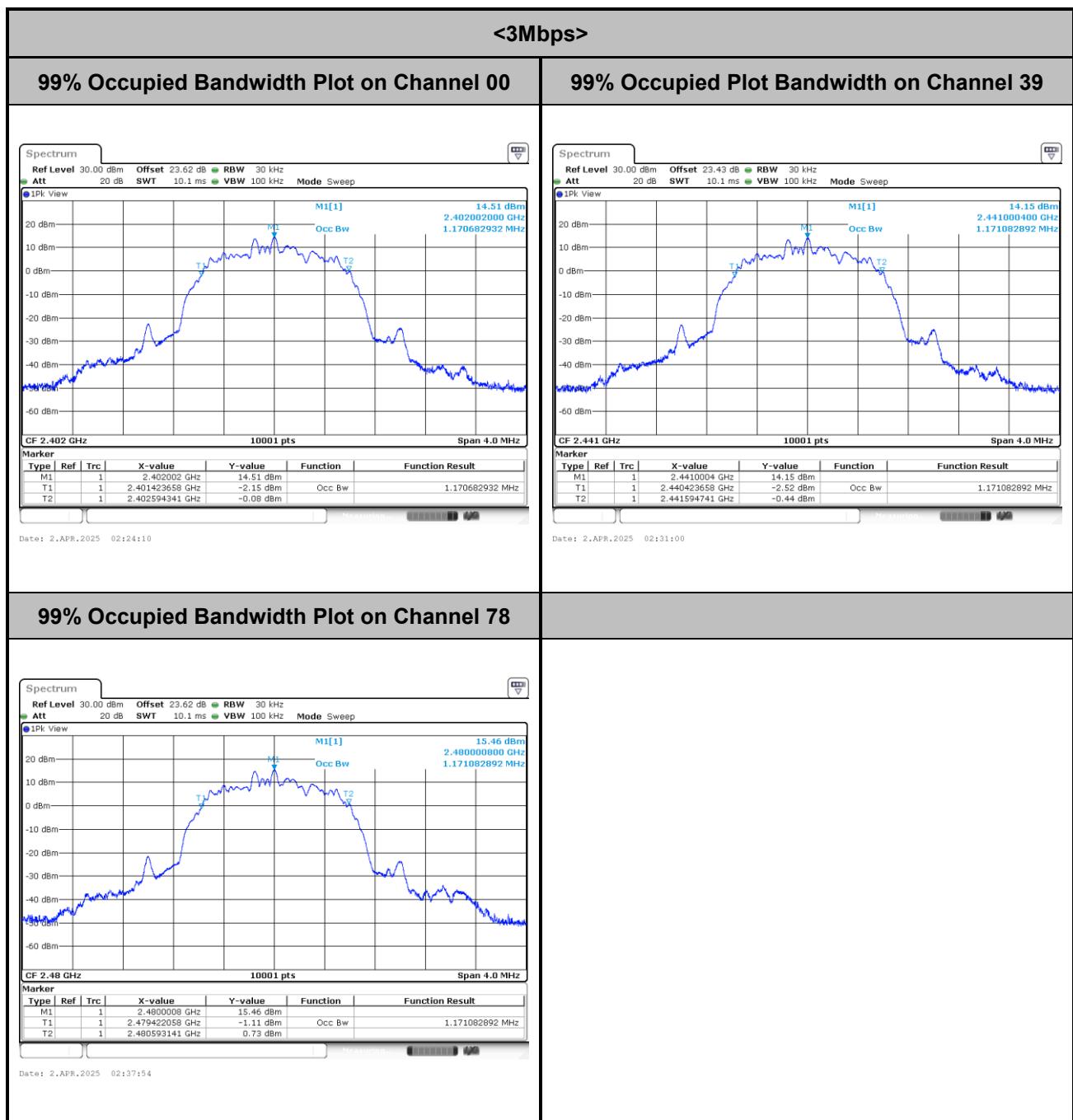
&lt;2Mbps&gt;

**6 dB Bandwidth Plot on Channel 00****6 dB Bandwidth Plot on Channel 39****6 dB Bandwidth Plot on Channel 78**



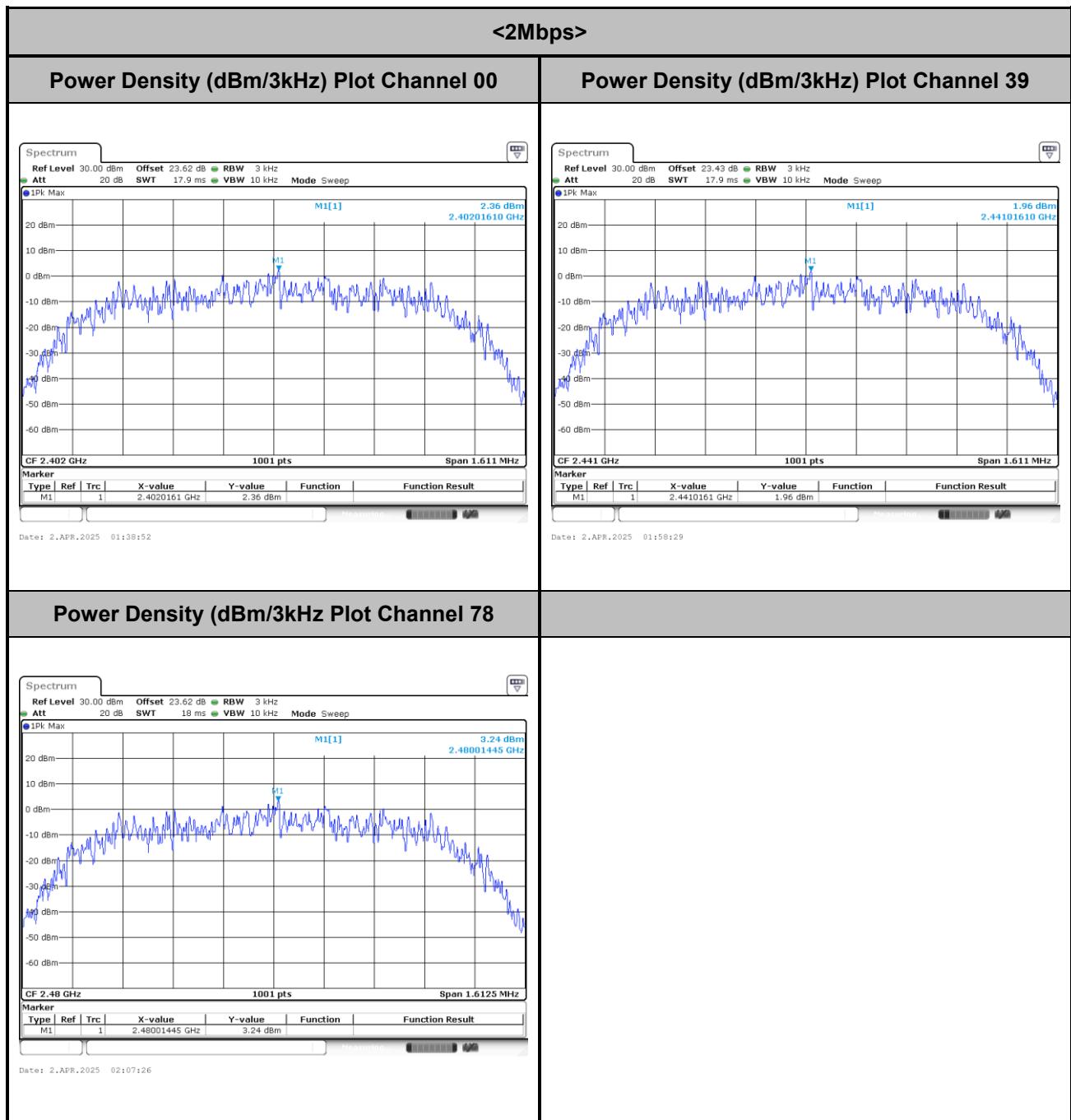
**99% Occupied Bandwidth**

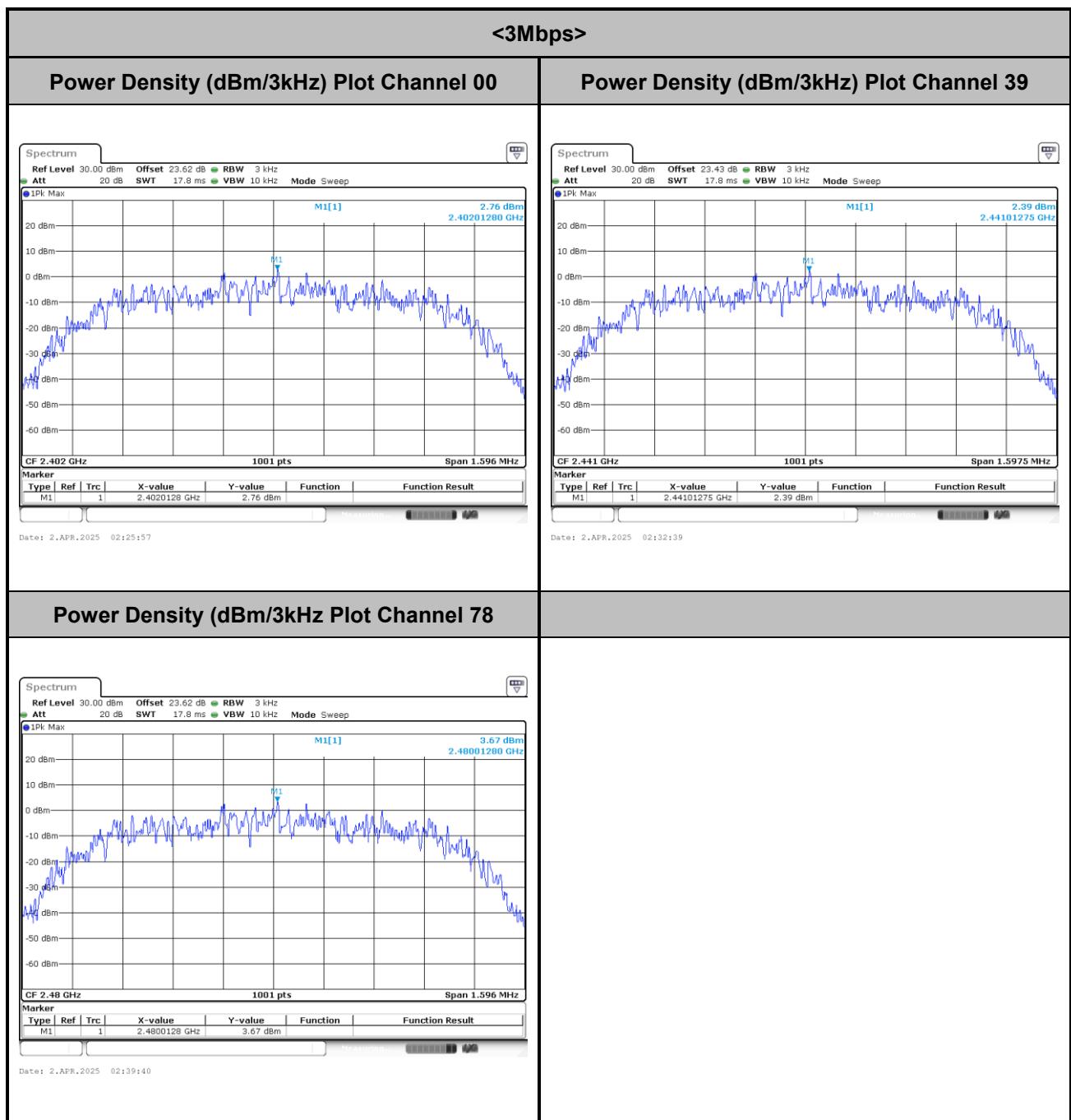
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.





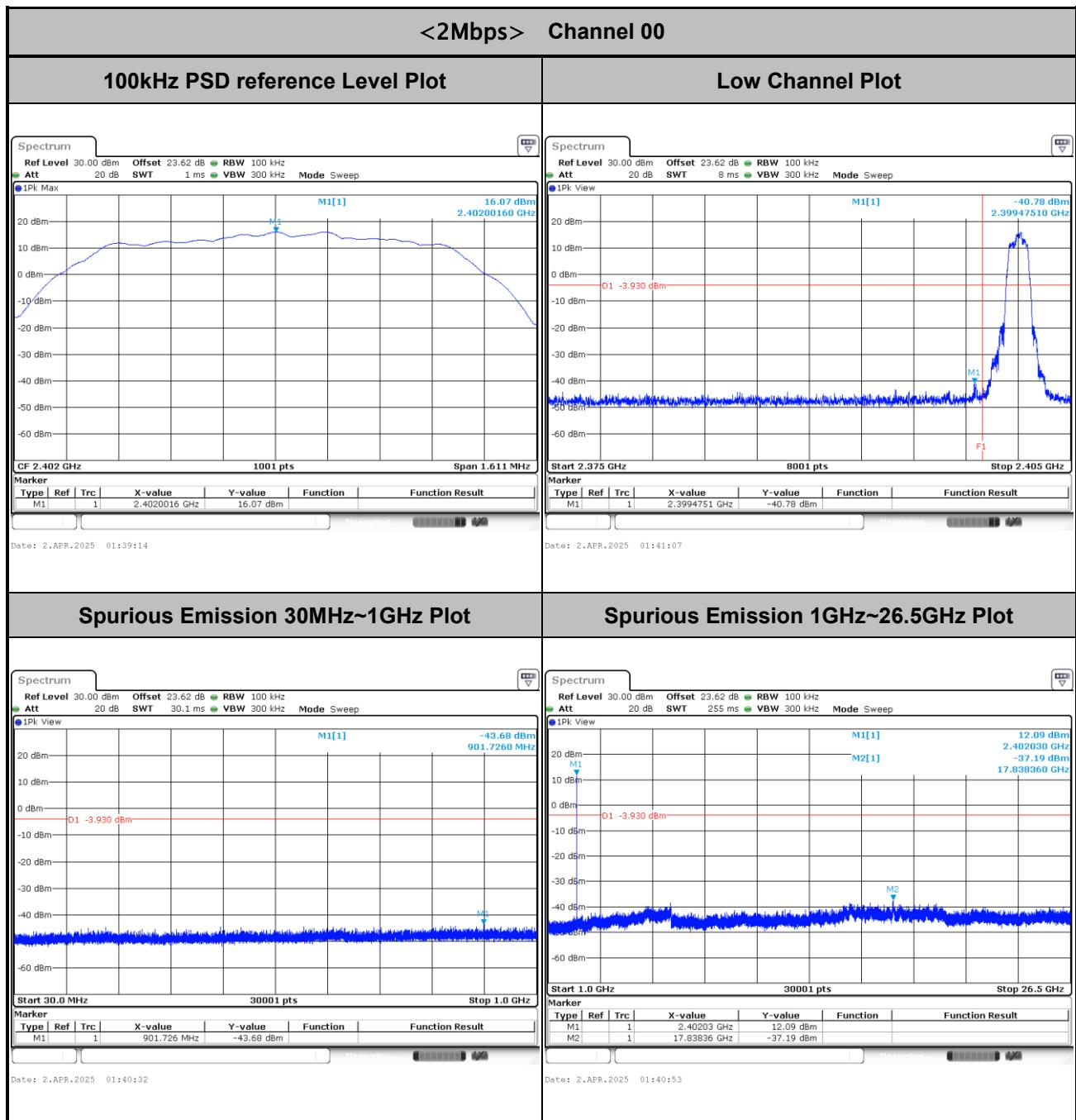
## Power Spectral Density (dBm/3kHz)

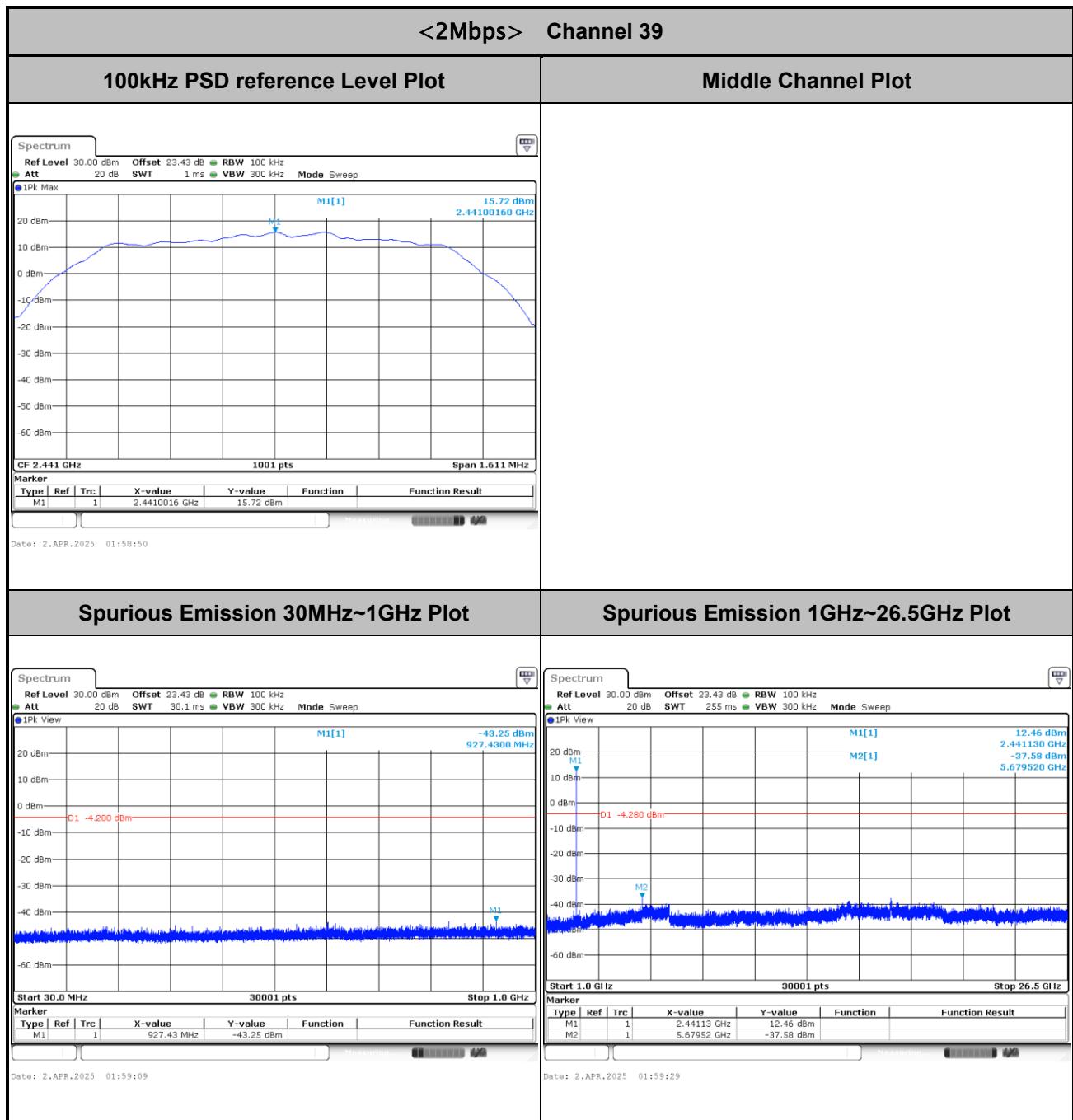


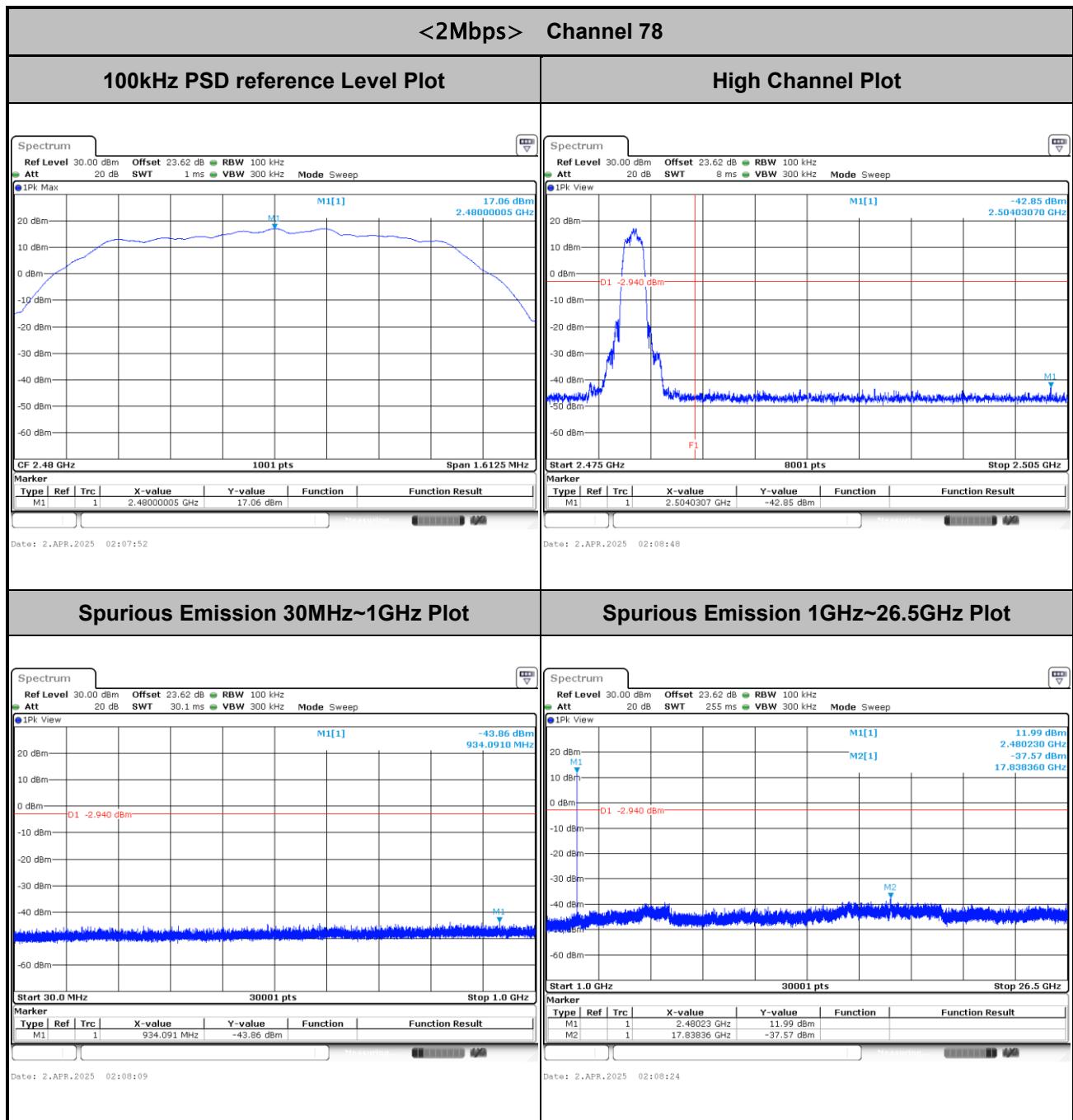


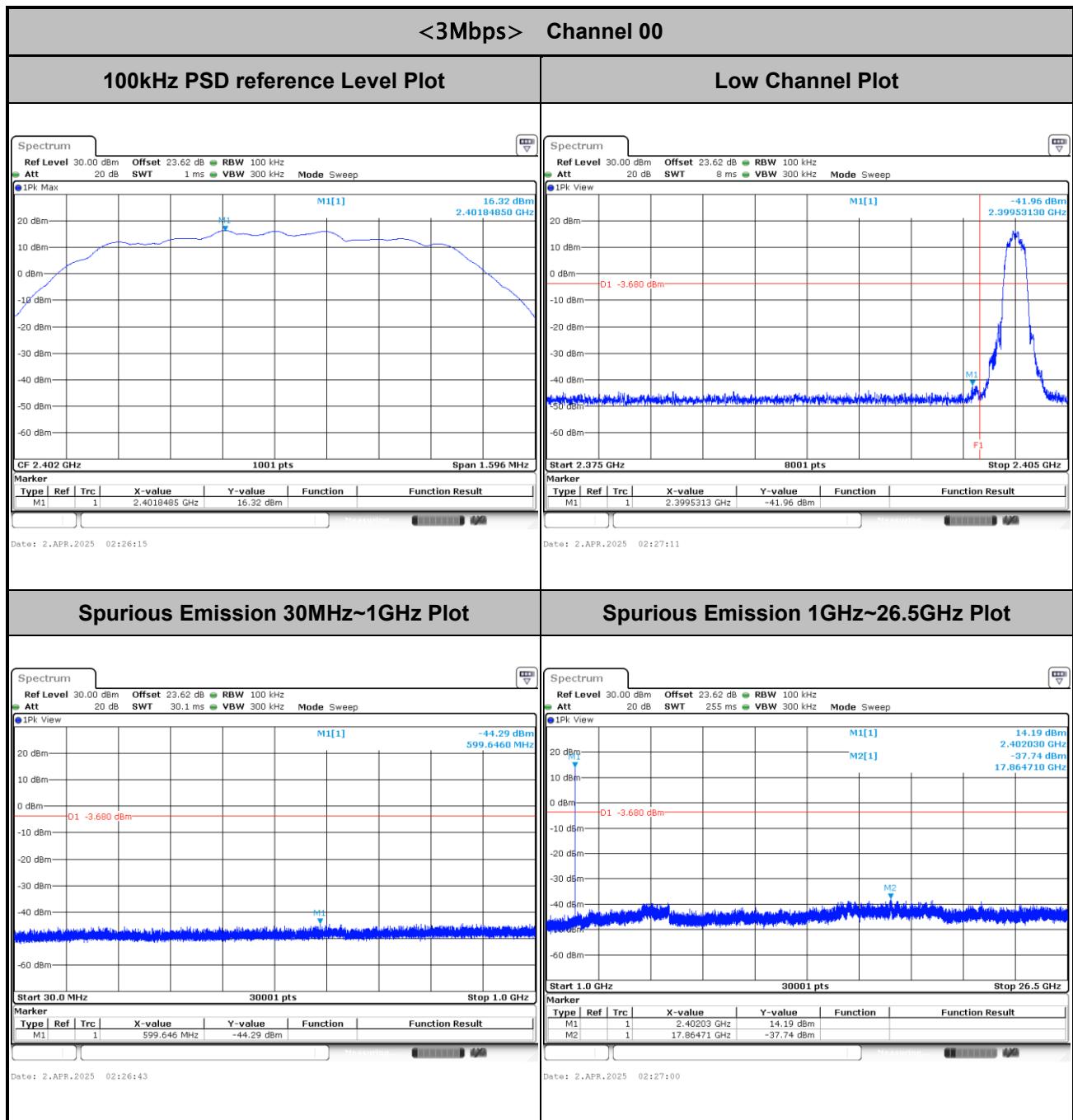


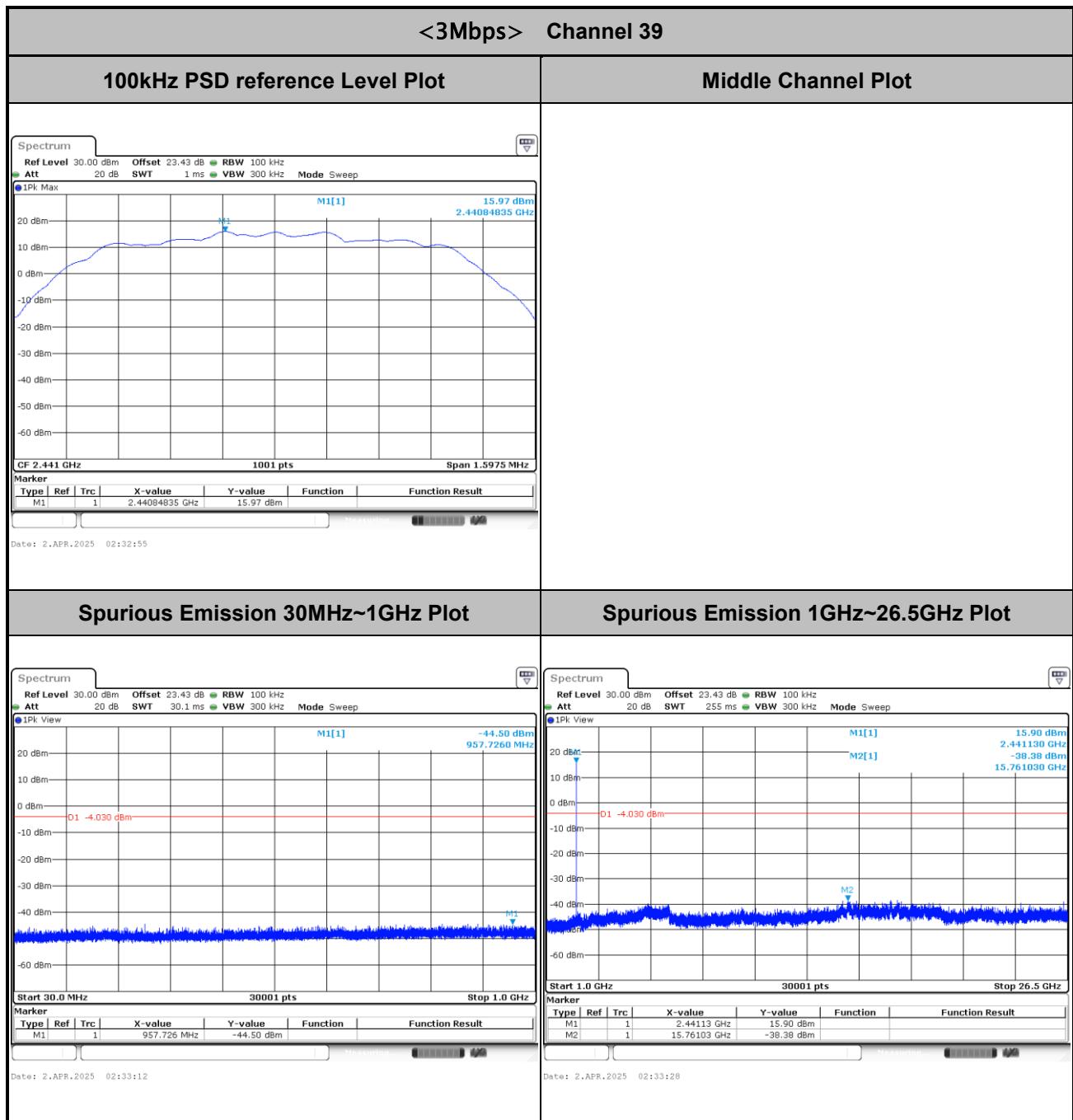
## Band Edge and Spurious Emission

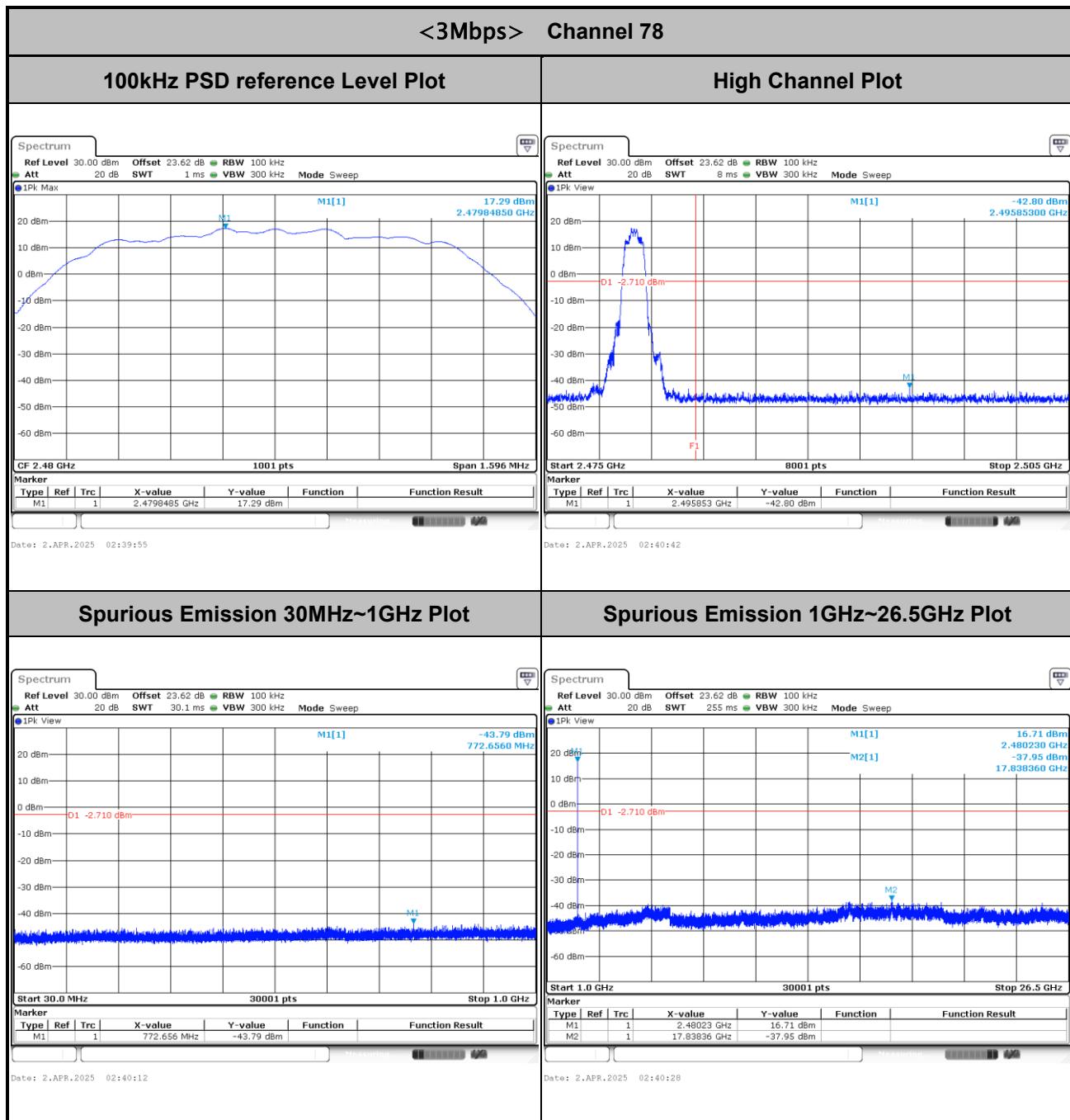














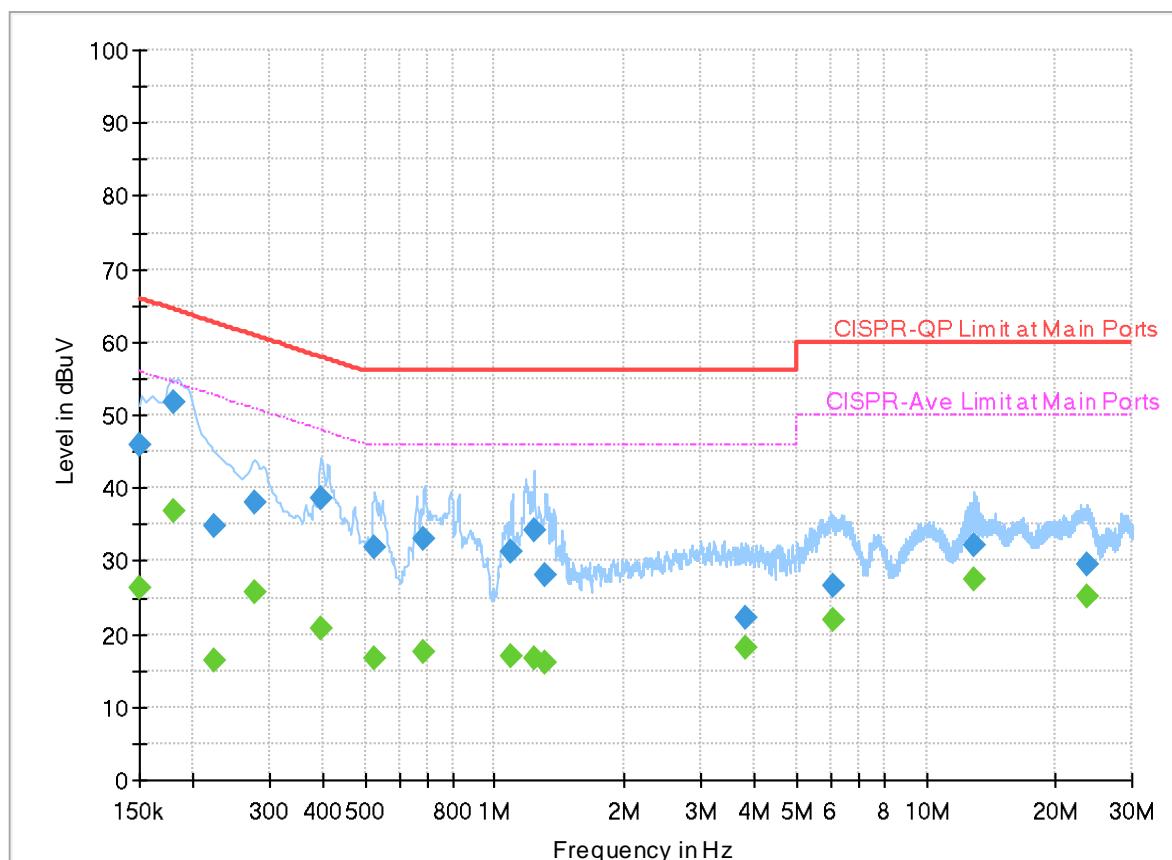
## Appendix B. AC Conducted Emission Test Results

<b>Test Engineer :</b>	Calvin Wang	<b>Temperature :</b>	23~26°C
		<b>Relative Humidity :</b>	45~55%

## EUT Information

Report NO : 4N0920  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Line

Full Spectrum



## Final Result

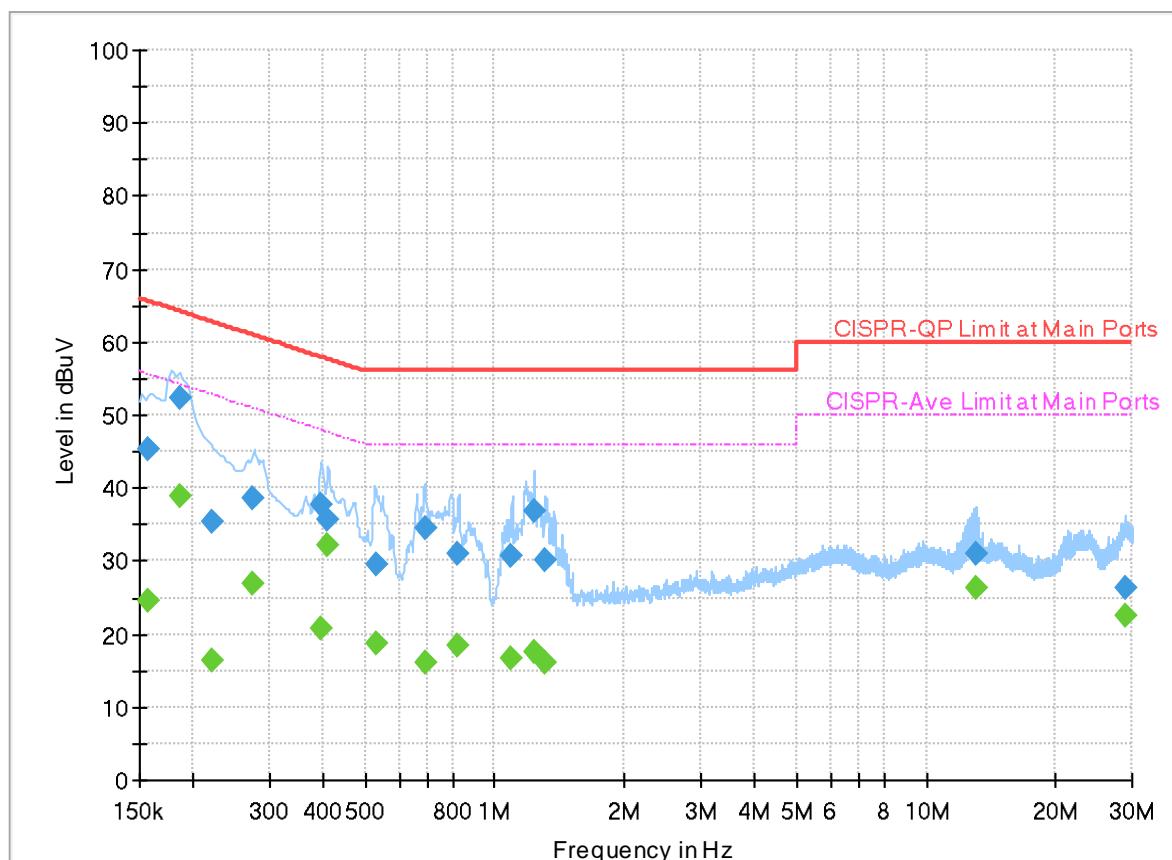
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	PE	Corr. (dB)
0.150810	---	26.22	55.96	29.74	L1	FLO	20.0
0.150810	46.02	---	65.96	19.94	L1	FLO	20.0
0.179970	---	36.78	54.49	17.71	L1	FLO	20.0
0.179970	51.80	---	64.49	12.69	L1	FLO	20.0
0.224430	---	16.43	52.65	36.22	L1	FLO	20.0
0.224430	34.73	---	62.65	27.92	L1	FLO	20.0
0.277980	---	25.68	50.88	25.20	L1	FLO	20.0
0.277980	37.92	---	60.88	22.96	L1	FLO	20.0
0.395790	---	20.66	47.94	27.28	L1	FLO	20.0
0.395790	38.46	---	57.94	19.48	L1	FLO	20.0
0.526650	---	16.77	46.00	29.23	L1	FLO	20.0
0.526650	31.87	---	56.00	24.13	L1	FLO	20.0
0.683520	---	17.53	46.00	28.47	L1	FLO	20.0
0.683520	33.01	---	56.00	22.99	L1	FLO	20.0
1.095000	---	17.02	46.00	28.98	L1	FLO	20.0
1.095000	31.21	---	56.00	24.79	L1	FLO	20.0
1.238820	---	16.68	46.00	29.32	L1	FLO	20.0
1.238820	34.14	---	56.00	21.86	L1	FLO	20.0
1.299750	---	16.11	46.00	29.89	L1	FLO	20.0

<b>1.299750</b>	<b>28.07</b>	---	<b>56.00</b>	<b>27.93</b>	<b>L1</b>	<b>FLO</b>	<b>20.0</b>
<b>3.828210</b>	---	<b>18.01</b>	<b>46.00</b>	<b>27.99</b>	<b>L1</b>	<b>FLO</b>	<b>20.1</b>
<b>3.828210</b>	<b>22.25</b>	---	<b>56.00</b>	<b>33.75</b>	<b>L1</b>	<b>FLO</b>	<b>20.1</b>
<b>6.108000</b>	---	<b>21.86</b>	<b>50.00</b>	<b>28.14</b>	<b>L1</b>	<b>FLO</b>	<b>20.2</b>
<b>6.108000</b>	<b>26.67</b>	---	<b>60.00</b>	<b>33.33</b>	<b>L1</b>	<b>FLO</b>	<b>20.2</b>
<b>12.947820</b>	---	<b>27.62</b>	<b>50.00</b>	<b>22.38</b>	<b>L1</b>	<b>FLO</b>	<b>20.5</b>
<b>12.947820</b>	<b>32.27</b>	---	<b>60.00</b>	<b>27.73</b>	<b>L1</b>	<b>FLO</b>	<b>20.5</b>
<b>23.700750</b>	---	<b>25.01</b>	<b>50.00</b>	<b>24.99</b>	<b>L1</b>	<b>FLO</b>	<b>20.9</b>
<b>23.700750</b>	<b>29.52</b>	---	<b>60.00</b>	<b>30.48</b>	<b>L1</b>	<b>FLO</b>	<b>20.9</b>

**EUT Information**

Report NO : 4N0920  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Neutral

Full Spectrum

**Final Result**

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	PE	Corr. (dB)
0.156750	---	24.62	55.63	31.01	N	FLO	20.0
0.156750	45.29	---	65.63	20.34	N	FLO	20.0
0.185460	---	38.94	54.24	15.30	N	FLO	20.0
0.185460	52.22	---	64.24	12.02	N	FLO	20.0
0.219750	---	16.41	52.83	36.42	N	FLO	20.0
0.219750	35.48	---	62.83	27.35	N	FLO	20.0
0.273750	---	26.84	51.00	24.16	N	FLO	20.0
0.273750	38.72	---	61.00	22.28	N	FLO	20.0
0.396870	---	20.62	47.92	27.30	N	FLO	20.0
0.396870	37.72	---	57.92	20.20	N	FLO	20.0
0.406590	---	32.08	47.72	15.64	N	FLO	20.0
0.406590	35.72	---	57.72	22.00	N	FLO	20.0
0.532500	---	18.79	46.00	27.21	N	FLO	20.0
0.532500	29.58	---	56.00	26.42	N	FLO	20.0
0.687210	---	16.11	46.00	29.89	N	FLO	20.0
0.687210	34.54	---	56.00	21.46	N	FLO	20.0
0.820500	---	18.54	46.00	27.46	N	FLO	20.0
0.820500	30.85	---	56.00	25.15	N	FLO	20.0
1.095000	---	16.63	46.00	29.37	N	FLO	20.0

<b>1.095000</b>	<b>30.63</b>	---	<b>56.00</b>	<b>25.37</b>	<b>N</b>	<b>FLO</b>	<b>20.0</b>
1.235940	---	<b>17.51</b>	<b>46.00</b>	<b>28.49</b>	<b>N</b>	<b>FLO</b>	<b>20.0</b>
<b>1.235940</b>	<b>36.79</b>	---	<b>56.00</b>	<b>19.21</b>	<b>N</b>	<b>FLO</b>	<b>20.0</b>
<b>1.312620</b>	---	<b>16.15</b>	<b>46.00</b>	<b>29.85</b>	<b>N</b>	<b>FLO</b>	<b>20.0</b>
<b>1.312620</b>	<b>30.06</b>	---	<b>56.00</b>	<b>25.94</b>	<b>N</b>	<b>FLO</b>	<b>20.0</b>
13.048710	---	<b>26.33</b>	<b>50.00</b>	<b>23.67</b>	<b>N</b>	<b>FLO</b>	<b>20.5</b>
13.048710	<b>30.91</b>	---	<b>60.00</b>	<b>29.09</b>	<b>N</b>	<b>FLO</b>	<b>20.5</b>
<b>28.970250</b>	---	<b>22.37</b>	<b>50.00</b>	<b>27.63</b>	<b>N</b>	<b>FLO</b>	<b>21.0</b>
<b>28.970250</b>	<b>26.25</b>	---	<b>60.00</b>	<b>33.75</b>	<b>N</b>	<b>FLO</b>	<b>21.0</b>



## Appendix C. Radiated Spurious Emission Test Data

Test Engineer :	Daniel Lee, Fu Chen and Troye Hsieh	Temperature :	19~22.5°C
		Relative Humidity :	50.1~65.7%

### Note symbol

-L	Low channel location
-R	High channel location

## C1. Radiated Spurious Emission Test Modes

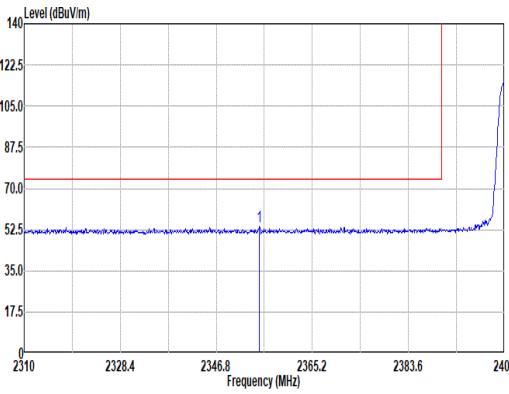
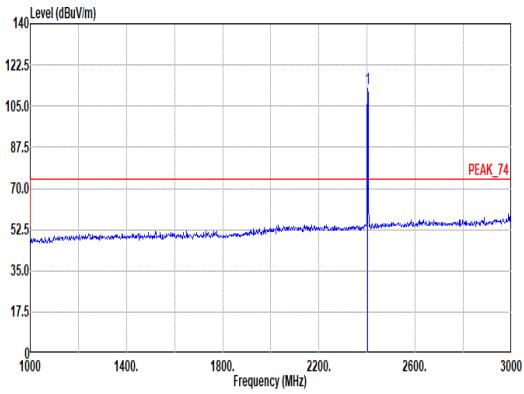
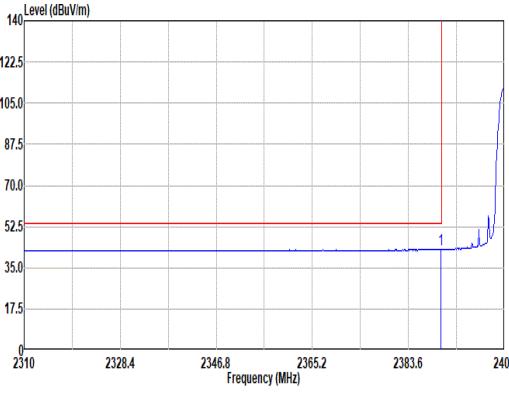
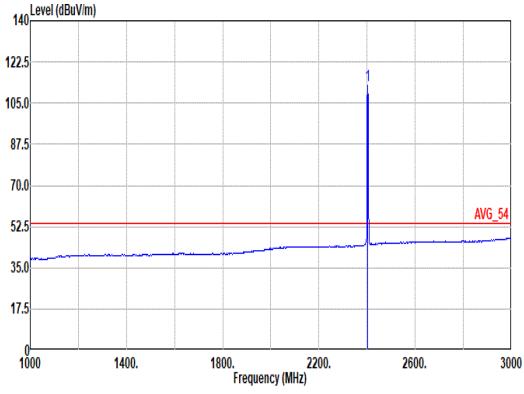
Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 4	2400-2483.5	4+3	Bluetooth BR_GFSK	00	2402	3Mbps	-	-
Mode 5	2400-2483.5	4+3	Bluetooth BR_GFSK	39	2441	3Mbps	-	-
Mode 6	2400-2483.5	4+3	Bluetooth BR_GFSK	78	2480	3Mbps	-	-
Mode 17	2400-2483.5	4+3	Bluetooth BR_GFSK	78	2480	3Mbps	-	SHF
Mode 18	2400-2483.5	4+3	Bluetooth BR_GFSK	78	2480	3Mbps	-	LF



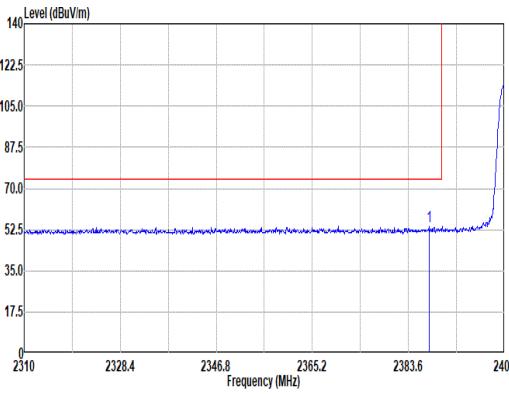
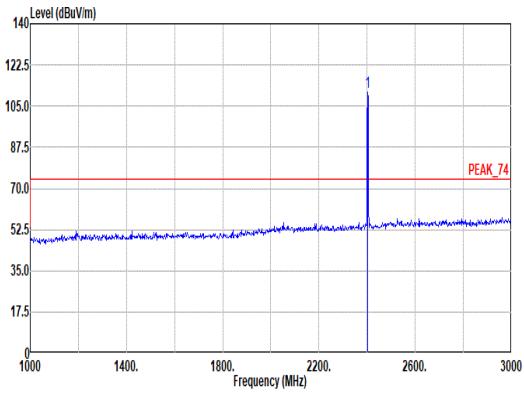
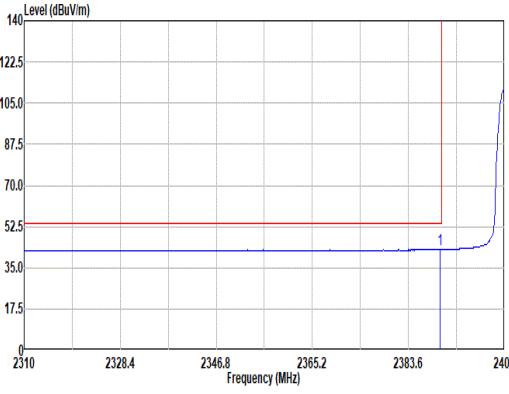
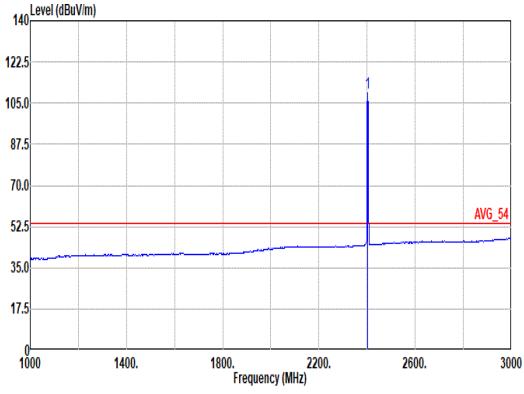
## C2. Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
4	Bluetooth BR_GFSK	00	2389.76	43.00	54.00	-11.00	H	Avg.	Pass	-	Band Edge
	Bluetooth BR_GFSK	00	4804.00	43.36	74.00	-30.64	V	Peak	Pass	-	Harmonic
5	Bluetooth BR_GFSK	39	2483.54	43.70	54.00	-10.30	H	Avg.	Pass	-	Band Edge
	Bluetooth BR_GFSK	39	7323.00	42.72	74.00	-31.28	H	Peak	Pass	-	Harmonic
6	Bluetooth BR_GFSK	78	2484.88	45.75	54.00	-8.25	V	Avg.	Pass	-	Band Edge
	Bluetooth BR_GFSK	78	7440.00	44.01	74.00	-29.99	H	Peak	Pass	-	Harmonic
17	SHF	78	24911.39	41.22	74	-32.78	H	Peak	Pass	-	SHF
18	LF	78	32.91	33.94	40	-6.06	V	Peak	Pass	-	LF



Mode	4																																																																																	
	Band Edge																																																																																	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz																																																																																	
ANT	4+3																																																																																	
Pol.	Horizontal	Fundamental																																																																																
Peak	<p>Level (dBuV/m)</p>  <p>Site : 03CH11-HY Condition: PEAK_BE_74_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2355.08</td><td>53.68</td><td>74.00</td><td>-20.32</td><td>42.55</td><td>27.20</td><td>7.14</td><td>33.23</td><td>10.02 195 156 PEAK</td></tr></tbody></table> <p>Level (dBuV/m)</p>  <p>Site : 03CH11-HY Condition: PEAK_74_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2402.00</td><td>112.50</td><td>-----</td><td>-----</td><td>101.06</td><td>27.40</td><td>7.20</td><td>33.19</td><td>10.03 195 156 PEAK</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2355.08	53.68	74.00	-20.32	42.55	27.20	7.14	33.23	10.02 195 156 PEAK		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2402.00	112.50	-----	-----	101.06	27.40	7.20	33.19	10.03 195 156 PEAK	Fundamental
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2355.08	53.68	74.00	-20.32	42.55	27.20	7.14	33.23	10.02 195 156 PEAK																																																																									
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2402.00	112.50	-----	-----	101.06	27.40	7.20	33.19	10.03 195 156 PEAK																																																																									
Avg	<p>Level (dBuV/m)</p>  <p>Site : 03CH11-HY Condition: AVG_BE_54_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2389.76</td><td>43.00</td><td>54.00</td><td>-11.00</td><td>31.68</td><td>27.30</td><td>7.19</td><td>33.20</td><td>10.03 195 156 AVERAGE</td></tr></tbody></table> <p>Level (dBuV/m)</p>  <p>Site : 03CH11-HY Condition: AVG_54_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2402.00</td><td>112.31</td><td>-----</td><td>-----</td><td>100.87</td><td>27.40</td><td>7.20</td><td>33.19</td><td>10.03 195 156 AVERAGE</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2389.76	43.00	54.00	-11.00	31.68	27.30	7.19	33.20	10.03 195 156 AVERAGE		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2402.00	112.31	-----	-----	100.87	27.40	7.20	33.19	10.03 195 156 AVERAGE	Fundamental
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2389.76	43.00	54.00	-11.00	31.68	27.30	7.19	33.20	10.03 195 156 AVERAGE																																																																									
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2402.00	112.31	-----	-----	100.87	27.40	7.20	33.19	10.03 195 156 AVERAGE																																																																									

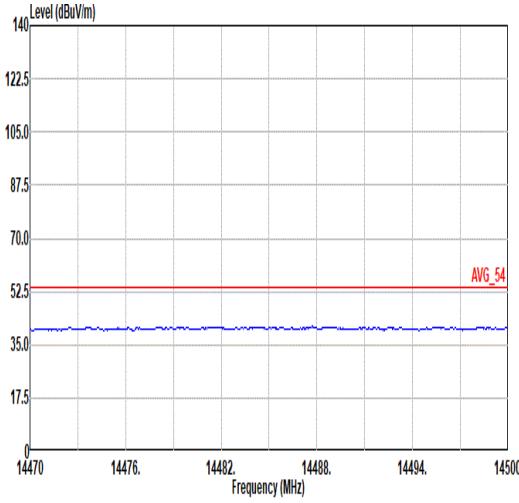
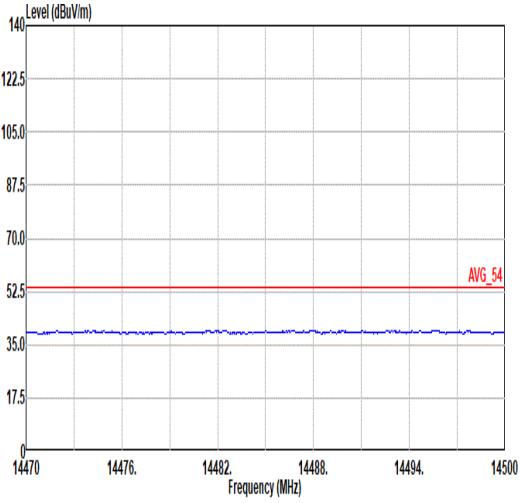
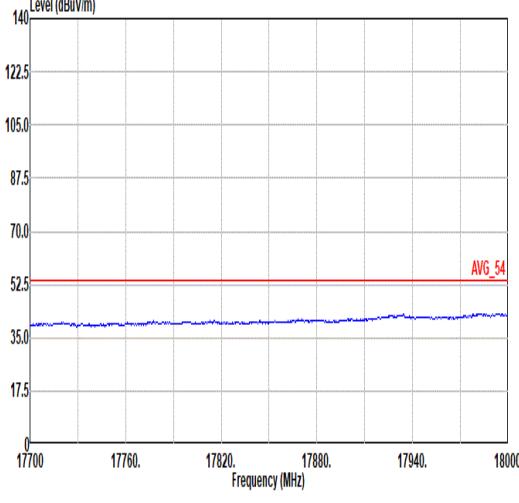
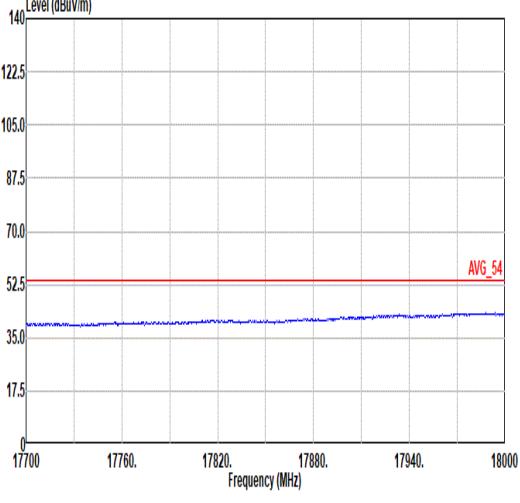


Mode	4																																																																																			
	Band Edge																																																																																			
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz																																																																																			
ANT	4+3																																																																																			
Pol.	Vertical	Fundamental																																																																																		
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74_3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></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>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2387.56</td><td>53.97</td><td>74.00</td><td>-20.03</td><td>42.68</td><td>27.28</td><td>7.18</td><td>33.20</td><td>10.03</td><td>400 46 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	2387.56	53.97	74.00	-20.03	42.68	27.28	7.18	33.20	10.03	400 46 PEAK	 <p>Site : 03CH11-HY Condition: PEAK_74_3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></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>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2402.00</td><td>110.97</td><td>-----</td><td>-----</td><td>99.53</td><td>27.40</td><td>7.20</td><td>33.19</td><td>10.03</td><td>400 46 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	2402.00	110.97	-----	-----	99.53	27.40	7.20	33.19	10.03	400 46 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	2387.56	53.97	74.00	-20.03	42.68	27.28	7.18	33.20	10.03	400 46 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	110.97	-----	-----	99.53	27.40	7.20	33.19	10.03	400 46 PEAK																																																																										
Avg	 <p>Site : 03CH11-HY Condition: AVG_BE_54_3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></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>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2389.67</td><td>42.96</td><td>54.00</td><td>-11.04</td><td>31.64</td><td>27.30</td><td>7.19</td><td>33.20</td><td>10.03</td><td>400 46 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	2389.67	42.96	54.00	-11.04	31.64	27.30	7.19	33.20	10.03	400 46 AVERAGE	 <p>Site : 03CH11-HY Condition: AVG_54_3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></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>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2402.00</td><td>109.29</td><td>-----</td><td>-----</td><td>97.85</td><td>27.40</td><td>7.20</td><td>33.19</td><td>10.03</td><td>400 46 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	2402.00	109.29	-----	-----	97.85	27.40	7.20	33.19	10.03	400 46 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	2389.67	42.96	54.00	-11.04	31.64	27.30	7.19	33.20	10.03	400 46 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	109.29	-----	-----	97.85	27.40	7.20	33.19	10.03	400 46 AVERAGE																																																																										

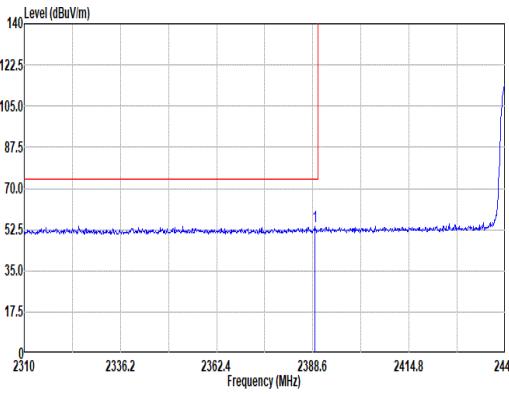
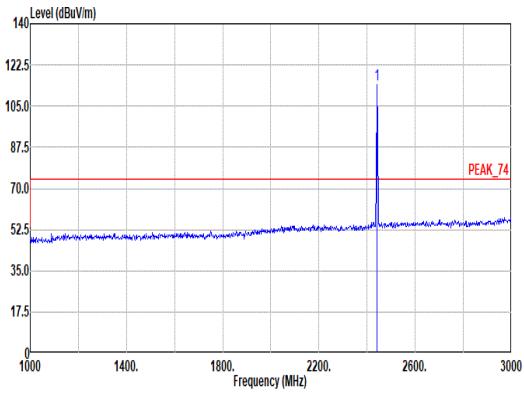
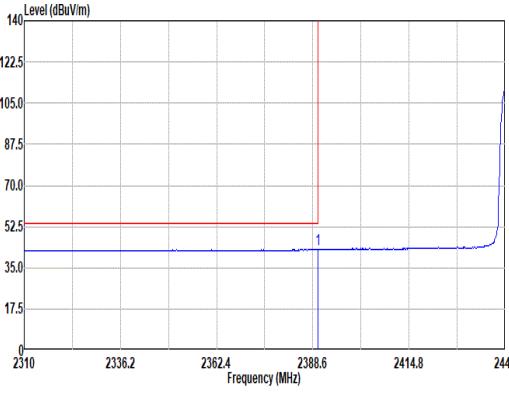
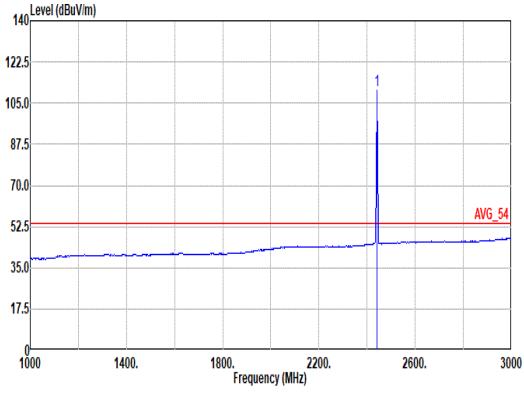


Mode	4																																																																																
	Harmonic																																																																																
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz																																																																																
ANT	4+3																																																																																
Pol.	<b>Horizontal</b>																																																																																
Peak																																																																																	
	<p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 HORIZONTAL</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>4804.00</td><td>40.68</td><td>74.00</td><td>-33.32</td><td>63.65</td><td>32.32</td><td>10.97</td><td>66.76</td><td>0.50</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></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			1	4804.00	40.68	74.00	-33.32	63.65	32.32	10.97	66.76	0.50										-- PEAK	<p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 VERTICAL</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>4804.00</td><td>43.36</td><td>74.00</td><td>-38.64</td><td>66.33</td><td>32.32</td><td>10.97</td><td>66.76</td><td>0.50</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></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			1	4804.00	43.36	74.00	-38.64	66.33	32.32	10.97	66.76	0.50									
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																								
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																										
1	4804.00	40.68	74.00	-33.32	63.65	32.32	10.97	66.76	0.50																																																																								
									-- PEAK																																																																								
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																								
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																										
1	4804.00	43.36	74.00	-38.64	66.33	32.32	10.97	66.76	0.50																																																																								
									-- PEAK																																																																								

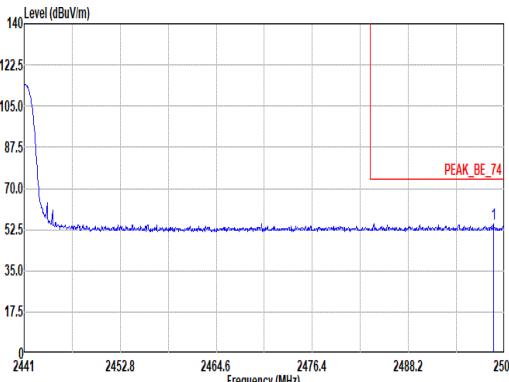
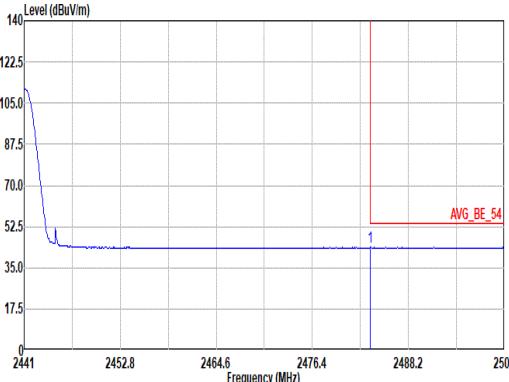


Mode	4	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	4+3	
Pol.	Horizontal	Vertical
14.47G		
~14.5G		
Avg	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL</p>
17.7G		
~18G		
Avg	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL</p>

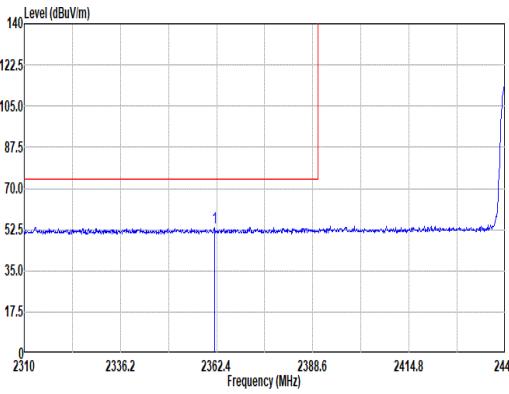
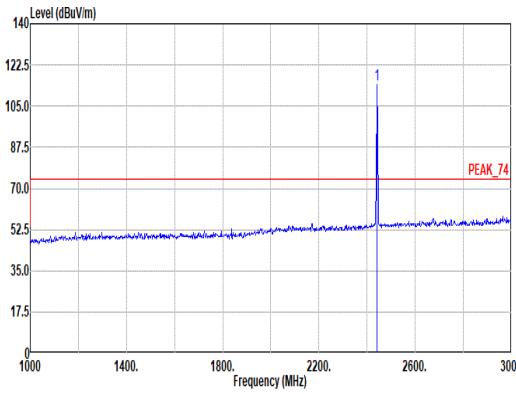
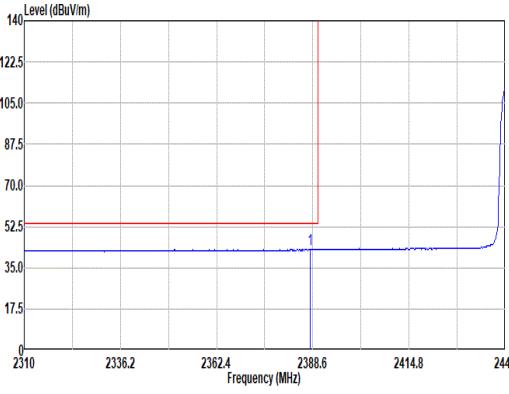
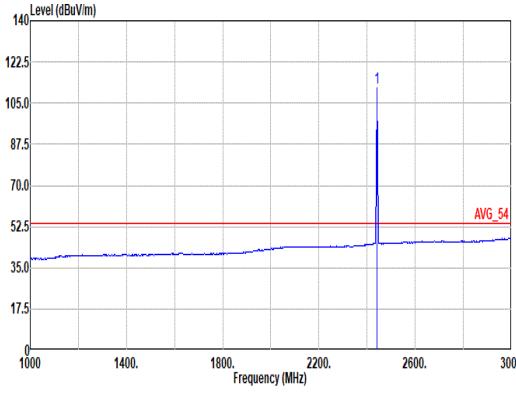


Mode	5																																																													
	Band Edge - L																																																													
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz																																																													
ANT	4+3																																																													
Pol.	Horizontal	Fundamental																																																												
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SNT:Auto</p> <table border="1"><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>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 deg</th></tr></thead><tbody><tr><td>1</td><td>2389.12</td><td>53.81</td><td>74.00</td><td>-20.19</td><td>42.50</td><td>27.29</td><td>7.19</td><td>33.20</td><td>10.03 189 154 PEAK</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg	1	2389.12	53.81	74.00	-20.19	42.50	27.29	7.19	33.20	10.03 189 154 PEAK	 <p>Site : 03CH11-HY Condition: PEAK_74_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SNT:Auto</p> <table border="1"><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>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 deg</th></tr></thead><tbody><tr><td>1</td><td>2441.00</td><td>114.31</td><td>-----</td><td>-----</td><td>102.57</td><td>27.60</td><td>7.26</td><td>33.15</td><td>10.03 189 154 PEAK</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg	1	2441.00	114.31	-----	-----	102.57	27.60	7.26	33.15	10.03 189 154 PEAK
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																					
Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg																																																					
1	2389.12	53.81	74.00	-20.19	42.50	27.29	7.19	33.20	10.03 189 154 PEAK																																																					
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																					
Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg																																																					
1	2441.00	114.31	-----	-----	102.57	27.60	7.26	33.15	10.03 189 154 PEAK																																																					
Avg	 <p>Site : 03CH11-HY Condition: AVG_BE_54_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SNT:Auto</p> <table border="1"><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>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 deg</th></tr></thead><tbody><tr><td>1</td><td>2389.91</td><td>42.80</td><td>54.00</td><td>-11.20</td><td>31.48</td><td>27.30</td><td>7.19</td><td>33.20</td><td>10.03 189 154 AVERAGE</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg	1	2389.91	42.80	54.00	-11.20	31.48	27.30	7.19	33.20	10.03 189 154 AVERAGE	 <p>Site : 03CH11-HY Condition: AVG_54_3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SNT:Auto</p> <table border="1"><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>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 deg</th></tr></thead><tbody><tr><td>1</td><td>2441.00</td><td>110.22</td><td>-----</td><td>-----</td><td>98.49</td><td>27.60</td><td>7.26</td><td>33.16</td><td>10.03 189 154 AVERAGE</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg	1	2441.00	110.22	-----	-----	98.49	27.60	7.26	33.16	10.03 189 154 AVERAGE
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																					
Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg																																																					
1	2389.91	42.80	54.00	-11.20	31.48	27.30	7.19	33.20	10.03 189 154 AVERAGE																																																					
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																					
Freq	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm deg																																																					
1	2441.00	110.22	-----	-----	98.49	27.60	7.26	33.16	10.03 189 154 AVERAGE																																																					

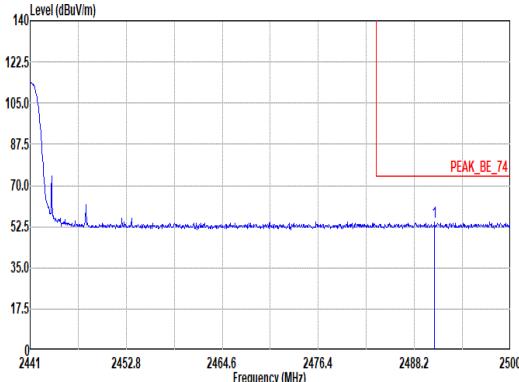
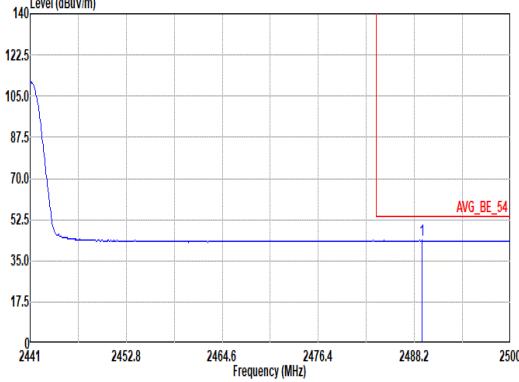


Mode	5																																									
	Band Edge - R																																									
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz																																									
ANT	4+3																																									
Pol.	Horizontal	Fundamental																																								
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74 3m 9120D_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2498.64</td><td>54.75</td><td>74.00</td><td>-19.25</td><td>42.58</td><td>27.90</td><td>7.34</td><td>33.10</td><td>10.03 189 154 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	dB	cm deg	1	2498.64	54.75	74.00	-19.25	42.58	27.90	7.34	33.10	10.03 189 154 PEAK	Blank
	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	dB	cm deg																																	
1	2498.64	54.75	74.00	-19.25	42.58	27.90	7.34	33.10	10.03 189 154 PEAK																																	
Avg	 <p>Site : 03CH11-HY Condition: AVG_BE_54 3m 9120D_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2483.54</td><td>43.70</td><td>54.00</td><td>-10.30</td><td>31.63</td><td>27.84</td><td>7.32</td><td>33.12</td><td>10.03 189 154 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	dB	cm deg	1	2483.54	43.70	54.00	-10.30	31.63	27.84	7.32	33.12	10.03 189 154 AVERAGE	Blank
	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	dB	cm deg																																	
1	2483.54	43.70	54.00	-10.30	31.63	27.84	7.32	33.12	10.03 189 154 AVERAGE																																	

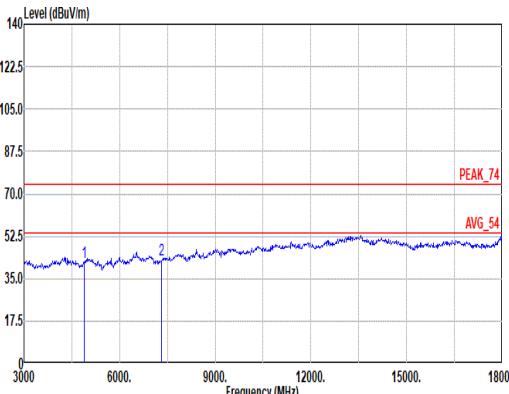
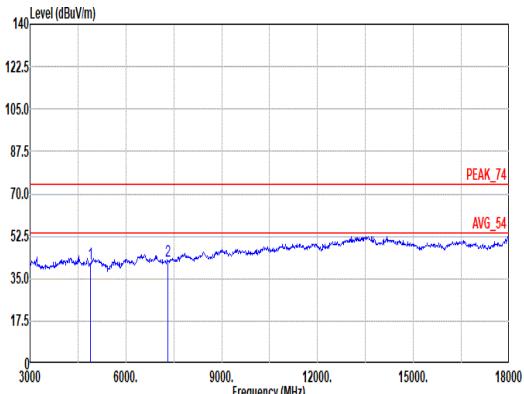


Mode	5																																																																																																					
	Band Edge - L																																																																																																					
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz																																																																																																					
ANT	4+3																																																																																																					
Pol.	Vertical	Fundamental																																																																																																				
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74_3m_91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dB</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>2361.88</td><td>53.38</td><td>74.00</td><td>-20.62</td><td>42.24</td><td>27.20</td><td>7.15</td><td>33.23</td><td>10.02</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>384</td><td>46 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	dB	dB/m	dB	dB	cm	deg	1	2361.88	53.38	74.00	-20.62	42.24	27.20	7.15	33.23	10.02									384	46 PEAK	 <p>Site : 03CH11-HY Condition: PEAK_74_3m_91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dB</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>2441.00</td><td>114.16</td><td>-----</td><td>-----</td><td>102.42</td><td>27.60</td><td>7.26</td><td>33.15</td><td>10.03</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>384</td><td>46 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	dB	dB/m	dB	dB	cm	deg	1	2441.00	114.16	-----	-----	102.42	27.60	7.26	33.15	10.03									384	46 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	dB	dB/m	dB	dB	cm	deg																																																																																													
1	2361.88	53.38	74.00	-20.62	42.24	27.20	7.15	33.23	10.02																																																																																													
								384	46 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	dB	dB/m	dB	dB	cm	deg																																																																																													
1	2441.00	114.16	-----	-----	102.42	27.60	7.26	33.15	10.03																																																																																													
								384	46 PEAK																																																																																													
Avg	 <p>Site : 03CH11-HY Condition: AVG_BE_54_3m_91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dB</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>2387.81</td><td>42.75</td><td>54.00</td><td>-11.25</td><td>31.46</td><td>27.28</td><td>7.18</td><td>33.20</td><td>10.03</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>384</td><td>46 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	dB	dB/m	dB	dB	cm	deg	1	2387.81	42.75	54.00	-11.25	31.46	27.28	7.18	33.20	10.03									384	46 AVERAGE	 <p>Site : 03CH11-HY Condition: AVG_54_3m_91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dB</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>2441.00</td><td>111.41</td><td>-----</td><td>-----</td><td>99.67</td><td>27.60</td><td>7.26</td><td>33.15</td><td>10.03</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>384</td><td>46 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	dB	dB/m	dB	dB	cm	deg	1	2441.00	111.41	-----	-----	99.67	27.60	7.26	33.15	10.03									384	46 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	dB	dB/m	dB	dB	cm	deg																																																																																													
1	2387.81	42.75	54.00	-11.25	31.46	27.28	7.18	33.20	10.03																																																																																													
								384	46 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	dB	dB/m	dB	dB	cm	deg																																																																																													
1	2441.00	111.41	-----	-----	99.67	27.60	7.26	33.15	10.03																																																																																													
								384	46 AVERAGE																																																																																													



Mode	5																																									
	Band Edge - R																																									
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz																																									
ANT	4+3																																									
Pol.	Vertical	Fundamental																																								
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74 3m 9120D_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>2490.68</td><td>54.60</td><td>74.00</td><td>-19.40</td><td>42.45</td><td>27.90</td><td>7.33</td><td>33.11</td><td>10.03</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>384 deg</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor			1	2490.68	54.60	74.00	-19.40	42.45	27.90	7.33	33.11	10.03										384 deg	Blank
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																	
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																			
1	2490.68	54.60	74.00	-19.40	42.45	27.90	7.33	33.11	10.03																																	
									384 deg																																	
Avg	 <p>Site : 03CH11-HY Condition: AVG_BE_54 3m 9120D_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>2489.14</td><td>43.61</td><td>54.00</td><td>-10.39</td><td>31.48</td><td>27.89</td><td>7.32</td><td>33.11</td><td>10.03</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>384 deg AVERAGE</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor			1	2489.14	43.61	54.00	-10.39	31.48	27.89	7.32	33.11	10.03										384 deg AVERAGE	Blank
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																	
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																			
1	2489.14	43.61	54.00	-10.39	31.48	27.89	7.32	33.11	10.03																																	
									384 deg AVERAGE																																	

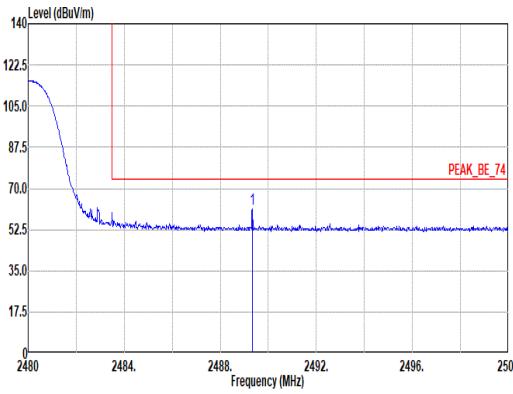
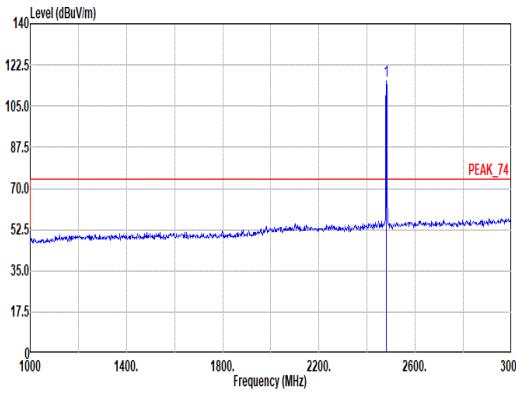
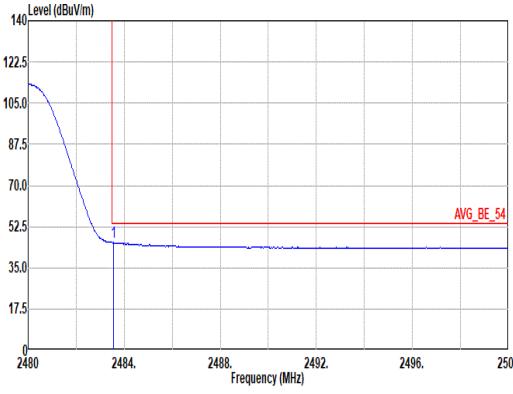
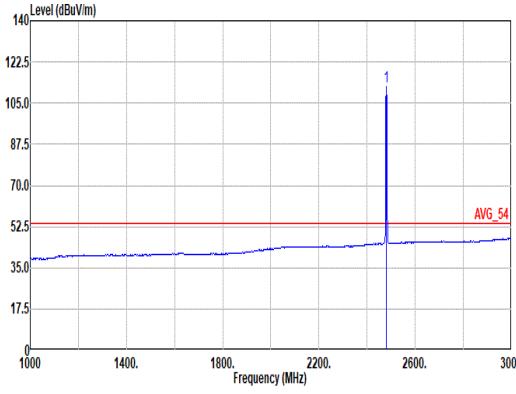


Mode	5																																																																																
	Harmonic																																																																																
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz																																																																																
ANT	4+3																																																																																
Pol.	Horizontal																																																																																
Peak																																																																																	
	<p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 HORIZONTAL</p> <table><thead><tr><th>Freq</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</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></th></tr></thead><tbody><tr><td>1</td><td>4882.00</td><td>41.75</td><td>74.00</td><td>-32.25</td><td>63.83</td><td>32.73</td><td>11.34</td><td>66.69</td><td>0.54</td></tr><tr><td>2</td><td>7323.00</td><td>42.72</td><td>74.00</td><td>-31.28</td><td>56.85</td><td>36.75</td><td>14.60</td><td>65.79</td><td>0.31</td></tr></tbody></table>	Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		1	4882.00	41.75	74.00	-32.25	63.83	32.73	11.34	66.69	0.54	2	7323.00	42.72	74.00	-31.28	56.85	36.75	14.60	65.79	0.31	<p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 VERTICAL</p> <table><thead><tr><th>Freq</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</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></th></tr></thead><tbody><tr><td>1</td><td>4882.00</td><td>41.28</td><td>74.00</td><td>-32.72</td><td>63.36</td><td>32.73</td><td>11.34</td><td>66.69</td><td>0.54</td></tr><tr><td>2</td><td>7323.00</td><td>42.33</td><td>74.00</td><td>-31.67</td><td>56.46</td><td>36.75</td><td>14.60</td><td>65.79</td><td>0.31</td></tr></tbody></table>	Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		1	4882.00	41.28	74.00	-32.72	63.36	32.73	11.34	66.69	0.54	2	7323.00	42.33	74.00	-31.67	56.46	36.75	14.60	65.79
Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																								
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																									
1	4882.00	41.75	74.00	-32.25	63.83	32.73	11.34	66.69	0.54																																																																								
2	7323.00	42.72	74.00	-31.28	56.85	36.75	14.60	65.79	0.31																																																																								
Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																								
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																									
1	4882.00	41.28	74.00	-32.72	63.36	32.73	11.34	66.69	0.54																																																																								
2	7323.00	42.33	74.00	-31.67	56.46	36.75	14.60	65.79	0.31																																																																								

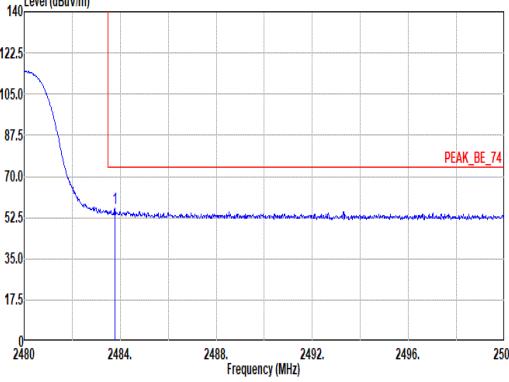
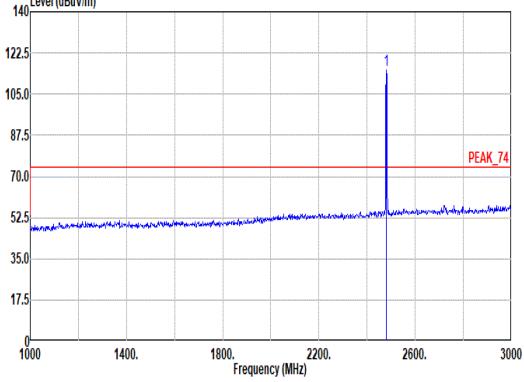
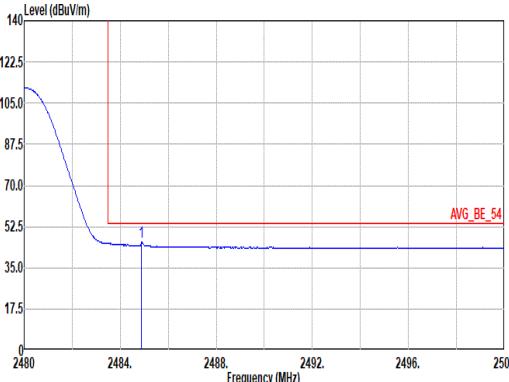
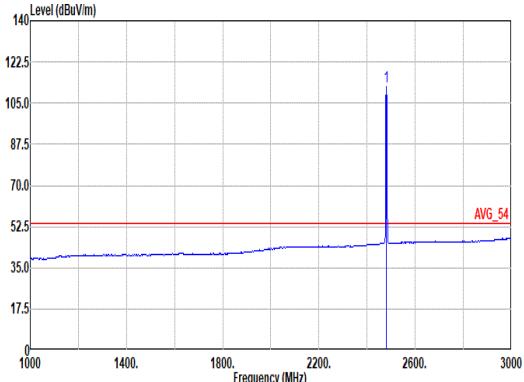


Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	4+3	
Pol.	<b>Horizontal</b>	
14.47G		
~14.5G		
Avg	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL</p>
17.7G		
~18G		
Avg	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL</p>

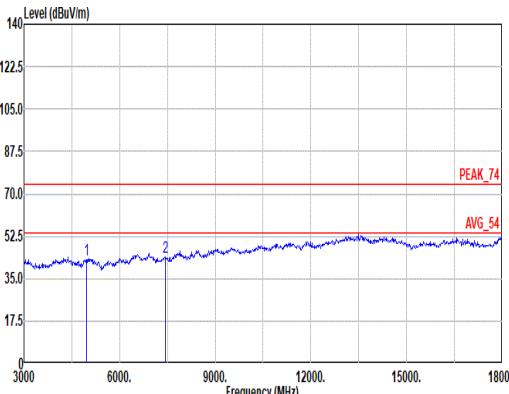
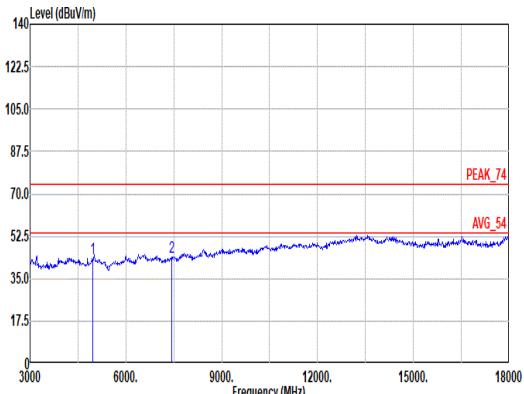


Mode	6																																																																																	
	Band Edge																																																																																	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz																																																																																	
ANT	4+3																																																																																	
Pol.	Horizontal	Fundamental																																																																																
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74 3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2489.34</td><td>61.16</td><td>74.00</td><td>-12.84</td><td>49.02</td><td>27.89</td><td>7.33</td><td>33.11</td><td>10.03 176 159 PEAK</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2489.34	61.16	74.00	-12.84	49.02	27.89	7.33	33.11	10.03 176 159 PEAK	 <p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2480.00</td><td>115.75</td><td>-----</td><td>-----</td><td>103.73</td><td>27.80</td><td>7.31</td><td>33.12</td><td>10.03 176 159 PEAK</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2480.00	115.75	-----	-----	103.73	27.80	7.31	33.12	10.03 176 159 PEAK
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2489.34	61.16	74.00	-12.84	49.02	27.89	7.33	33.11	10.03 176 159 PEAK																																																																									
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2480.00	115.75	-----	-----	103.73	27.80	7.31	33.12	10.03 176 159 PEAK																																																																									
Avg	 <p>Site : 03CH11-HY Condition: AVG_BE_54 3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2483.54</td><td>45.72</td><td>54.00</td><td>-8.28</td><td>33.65</td><td>27.84</td><td>7.32</td><td>33.12</td><td>10.03 176 159 AVERAGE</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2483.54	45.72	54.00	-8.28	33.65	27.84	7.32	33.12	10.03 176 159 AVERAGE	 <p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"><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 Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Factor</th><th></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 deg</th></tr></thead><tbody><tr><td>1</td><td>2480.00</td><td>111.91</td><td>-----</td><td>-----</td><td>99.89</td><td>27.80</td><td>7.31</td><td>33.12</td><td>10.03 176 159 AVERAGE</td></tr></tbody></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1	2480.00	111.91	-----	-----	99.89	27.80	7.31	33.12	10.03 176 159 AVERAGE
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2483.54	45.72	54.00	-8.28	33.65	27.84	7.32	33.12	10.03 176 159 AVERAGE																																																																									
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																									
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Factor																																																																										
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																									
1	2480.00	111.91	-----	-----	99.89	27.80	7.31	33.12	10.03 176 159 AVERAGE																																																																									

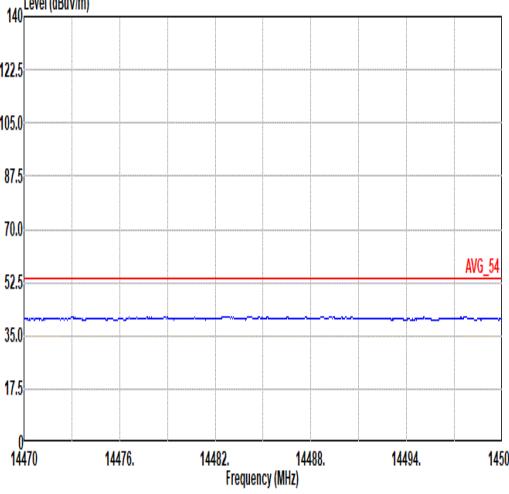
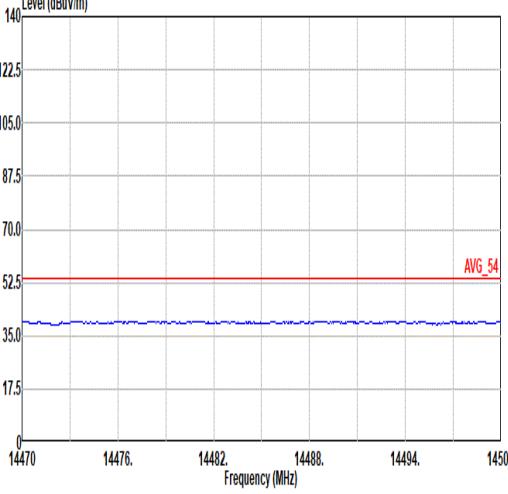
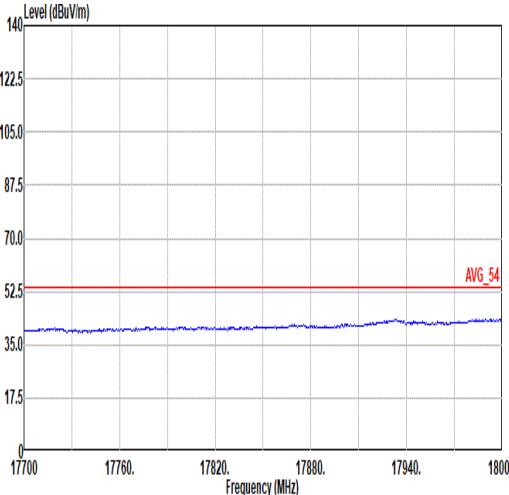
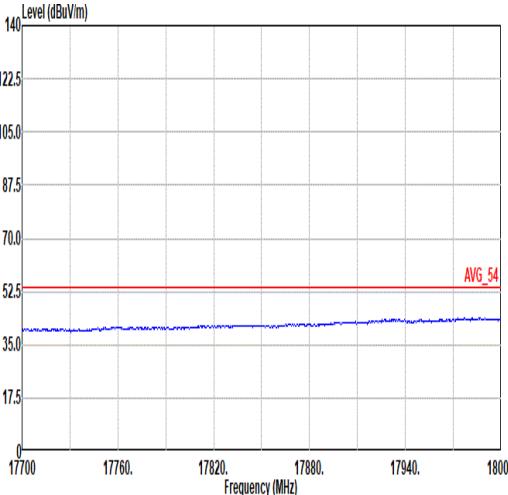


Mode	6																																																																																			
	Band Edge																																																																																			
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz																																																																																			
ANT	4+3																																																																																			
Pol.	Vertical	Fundamental																																																																																		
Peak	 <p>Site : 03CH11-HY Condition: PEAK_BE_74 3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"> <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 Margin</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Factor</th> <th>Factor</th> <th></th> <th></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>cm</th> <th>deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2483.78</td> <td>56.60</td> <td>74.00</td> <td>-17.48</td> <td>44.52</td> <td>27.84</td> <td>7.32</td> <td>33.11</td> <td>10.03</td> <td>365 43 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	2483.78	56.60	74.00	-17.48	44.52	27.84	7.32	33.11	10.03	365 43 PEAK	 <p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p> <table border="1"> <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 Margin</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Factor</th> <th>Factor</th> <th></th> <th></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>cm</th> <th>deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2480.00</td> <td>115.37</td> <td>-----</td> <td>-----</td> <td>103.35</td> <td>27.80</td> <td>7.31</td> <td>33.12</td> <td>10.03</td> <td>365 43 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	115.37	-----	-----	103.35	27.80	7.31	33.12	10.03	365 43 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	2483.78	56.60	74.00	-17.48	44.52	27.84	7.32	33.11	10.03	365 43 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	115.37	-----	-----	103.35	27.80	7.31	33.12	10.03	365 43 PEAK																																																																										
 <p>Site : 03CH11-HY Condition: AVG_BE_54 3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"> <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 Margin</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Factor</th> <th>Factor</th> <th></th> <th></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>cm</th> <th>deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2484.88</td> <td>45.75</td> <td>54.00</td> <td>-8.25</td> <td>33.66</td> <td>27.85</td> <td>7.32</td> <td>33.11</td> <td>10.03</td> <td>365 43 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	2484.88	45.75	54.00	-8.25	33.66	27.85	7.32	33.11	10.03	365 43 AVERAGE	 <p>Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL : RBW:1000.000kHz VBW:0.510kHz SWT:Auto</p> <table border="1"> <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 Margin</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Factor</th> <th>Factor</th> <th></th> <th></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>cm</th> <th>deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2480.00</td> <td>112.17</td> <td>-----</td> <td>-----</td> <td>100.15</td> <td>27.80</td> <td>7.31</td> <td>33.12</td> <td>10.03</td> <td>365 43 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	112.17	-----	-----	100.15	27.80	7.31	33.12	10.03	365 43 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	2484.88	45.75	54.00	-8.25	33.66	27.85	7.32	33.11	10.03	365 43 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	112.17	-----	-----	100.15	27.80	7.31	33.12	10.03	365 43 AVERAGE																																																																										

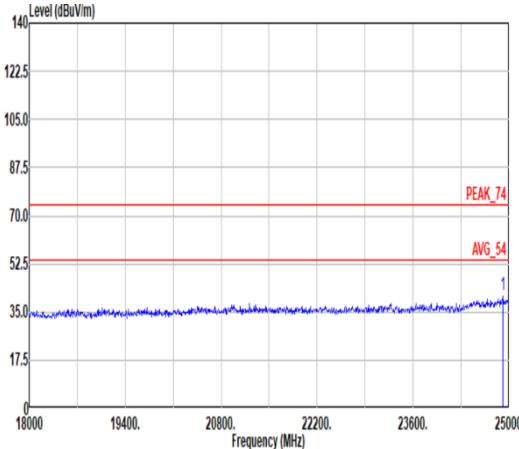
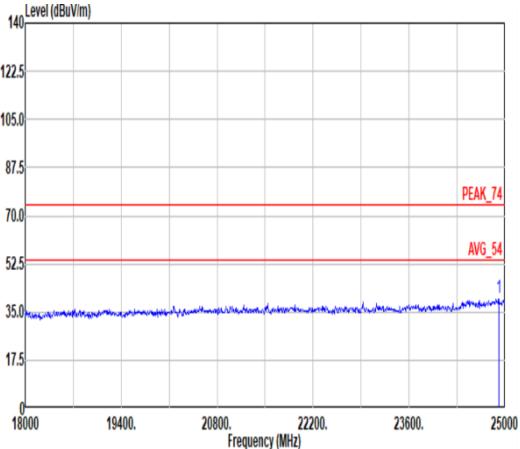


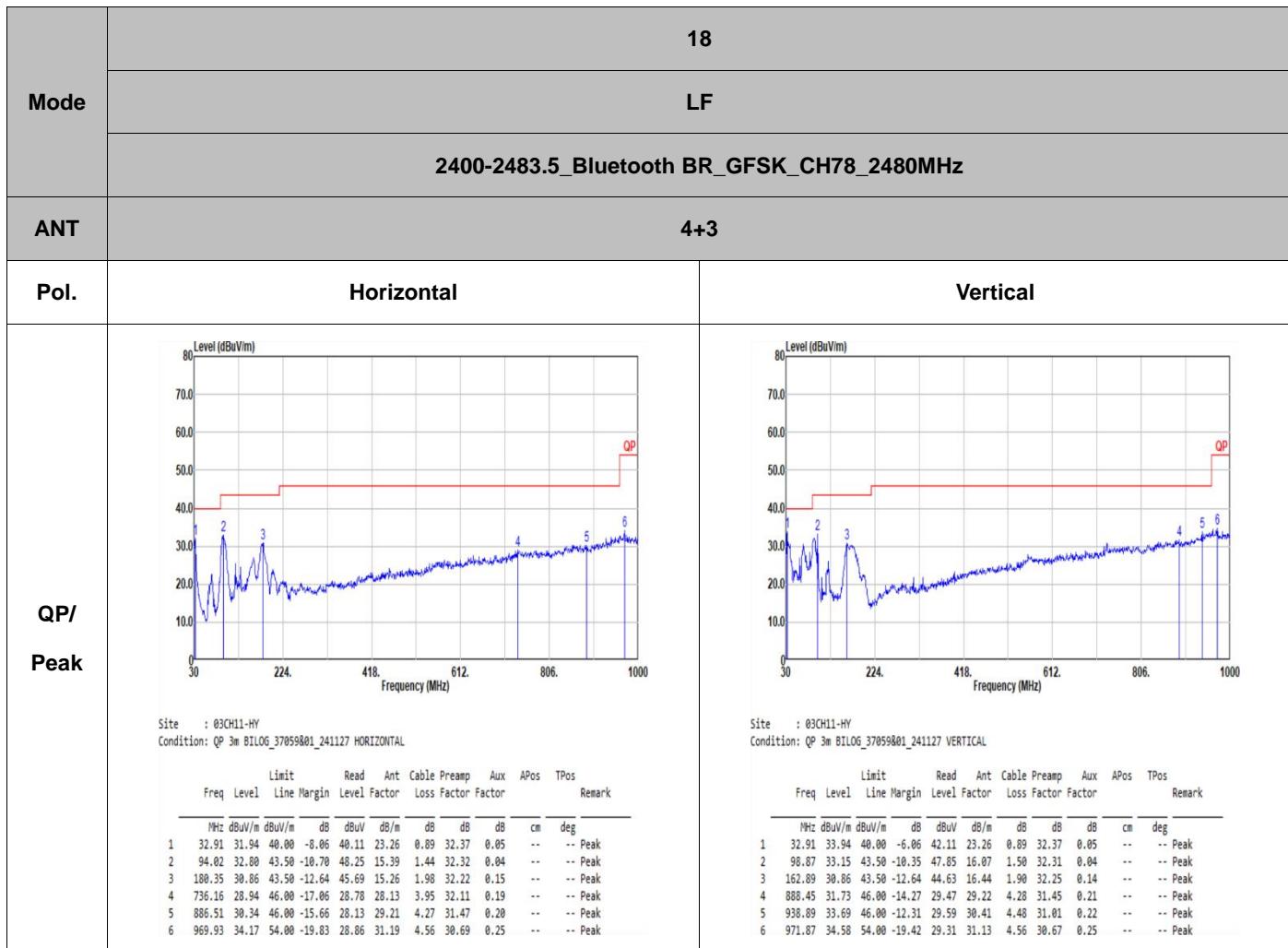
Mode	6																																																																																
	Harmonic																																																																																
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz																																																																																
ANT	4+3																																																																																
Pol.	Horizontal																																																																																
Peak																																																																																	
	<p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 HORIZONTAL</p> <table><thead><tr><th>Freq</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>Factor</th><th></th><th></th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>4960.00</td><td>42.97</td><td>74.00</td><td>-31.03</td><td>64.31</td><td>33.02</td><td>11.70</td><td>66.63</td><td>0.57</td></tr><tr><td>2</td><td>7440.00</td><td>44.01</td><td>74.00</td><td>-29.99</td><td>58.67</td><td>36.24</td><td>14.71</td><td>65.93</td><td>0.32</td></tr></tbody></table>	Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level Factor	Loss Factor	Factor					1	4960.00	42.97	74.00	-31.03	64.31	33.02	11.70	66.63	0.57	2	7440.00	44.01	74.00	-29.99	58.67	36.24	14.71	65.93	0.32	<p>Site : 03CH11-HY Condition: PEAK_74 3m 91200_01620_240828 VERTICAL</p> <table><thead><tr><th>Freq</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>Factor</th><th></th><th></th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>4960.00</td><td>43.18</td><td>74.00</td><td>-30.82</td><td>64.52</td><td>33.02</td><td>11.70</td><td>66.63</td><td>0.57</td></tr><tr><td>2</td><td>7440.00</td><td>43.91</td><td>74.00</td><td>-30.09</td><td>58.57</td><td>36.24</td><td>14.71</td><td>65.93</td><td>0.32</td></tr></tbody></table>	Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level Factor	Loss Factor	Factor					1	4960.00	43.18	74.00	-30.82	64.52	33.02	11.70	66.63	0.57	2	7440.00	43.91	74.00	-30.09	58.57	36.24	14.71	65.93
Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																								
Freq	Level	Line Margin	Level Factor	Loss Factor	Factor																																																																												
1	4960.00	42.97	74.00	-31.03	64.31	33.02	11.70	66.63	0.57																																																																								
2	7440.00	44.01	74.00	-29.99	58.67	36.24	14.71	65.93	0.32																																																																								
Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																								
Freq	Level	Line Margin	Level Factor	Loss Factor	Factor																																																																												
1	4960.00	43.18	74.00	-30.82	64.52	33.02	11.70	66.63	0.57																																																																								
2	7440.00	43.91	74.00	-30.09	58.57	36.24	14.71	65.93	0.32																																																																								



Mode	6	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	4+3	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL	 Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL
17.7G ~18G Avg	 Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 HORIZONTAL	 Site : 03CH11-HY Condition: AVG_54 3m 91200_01620_240828 VERTICAL



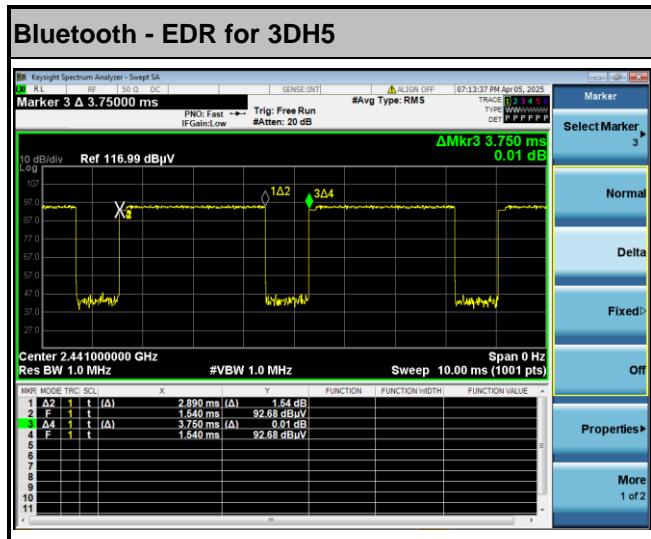
Mode	17																																																																																																					
	SHF																																																																																																					
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz																																																																																																					
ANT	4+3																																																																																																					
Pol.	<b>Horizontal</b>																																																																																																					
Peak	 <p>Site : 03CH11-HY Condition: PEAK_74 1m SHF_1224_248624 HORIZONTAL</p> <table><thead><tr><th>Freq</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</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th><th></th></tr></thead><tbody><tr><td>1</td><td>MHz</td><td>dBuV/m</td><td>dBuV/m</td><td>dB</td><td>dB</td><td>dB</td><td>cm</td><td>deg</td><td></td></tr><tr><td>1</td><td>24911.39</td><td>41.22</td><td>74.00</td><td>-32.78</td><td>36.41</td><td>39.30</td><td>28.30</td><td>53.25</td><td>-9.54</td></tr><tr><td></td><td></td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>-- PEAK</td></tr></tbody></table>	Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Remark		1	MHz	dBuV/m	dBuV/m	dB	dB	dB	cm	deg		1	24911.39	41.22	74.00	-32.78	36.41	39.30	28.30	53.25	-9.54			--	--	--	--	--	--	--	-- PEAK	 <p>Site : 03CH11-HY Condition: PEAK_74 1m SHF_1224_248624 VERTICAL</p> <table><thead><tr><th>Freq</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</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th><th></th></tr></thead><tbody><tr><td>1</td><td>MHz</td><td>dBuV/m</td><td>dBuV/m</td><td>dB</td><td>dB</td><td>dB</td><td>cm</td><td>deg</td><td></td></tr><tr><td>1</td><td>24909.43</td><td>40.15</td><td>74.00</td><td>-33.85</td><td>35.34</td><td>39.30</td><td>28.30</td><td>53.25</td><td>-9.54</td></tr><tr><td></td><td></td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>-- PEAK</td></tr></tbody></table>	Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Remark		1	MHz	dBuV/m	dBuV/m	dB	dB	dB	cm	deg		1	24909.43	40.15	74.00	-33.85	35.34	39.30	28.30	53.25	-9.54			--	--	--	--	--	--	--	-- PEAK
Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																													
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																														
1	MHz	dBuV/m	dBuV/m	dB	dB	dB	cm	deg																																																																																														
1	24911.39	41.22	74.00	-32.78	36.41	39.30	28.30	53.25	-9.54																																																																																													
		--	--	--	--	--	--	--	-- PEAK																																																																																													
Freq	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																													
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																														
1	MHz	dBuV/m	dBuV/m	dB	dB	dB	cm	deg																																																																																														
1	24909.43	40.15	74.00	-33.85	35.34	39.30	28.30	53.25	-9.54																																																																																													
		--	--	--	--	--	--	--	-- PEAK																																																																																													



## Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
4+3	Bluetooth - EDR for 3DH5	77.07	2890	0.346	0.51KHz

### MIMO <Ant. 4+3>



—————THE END—————