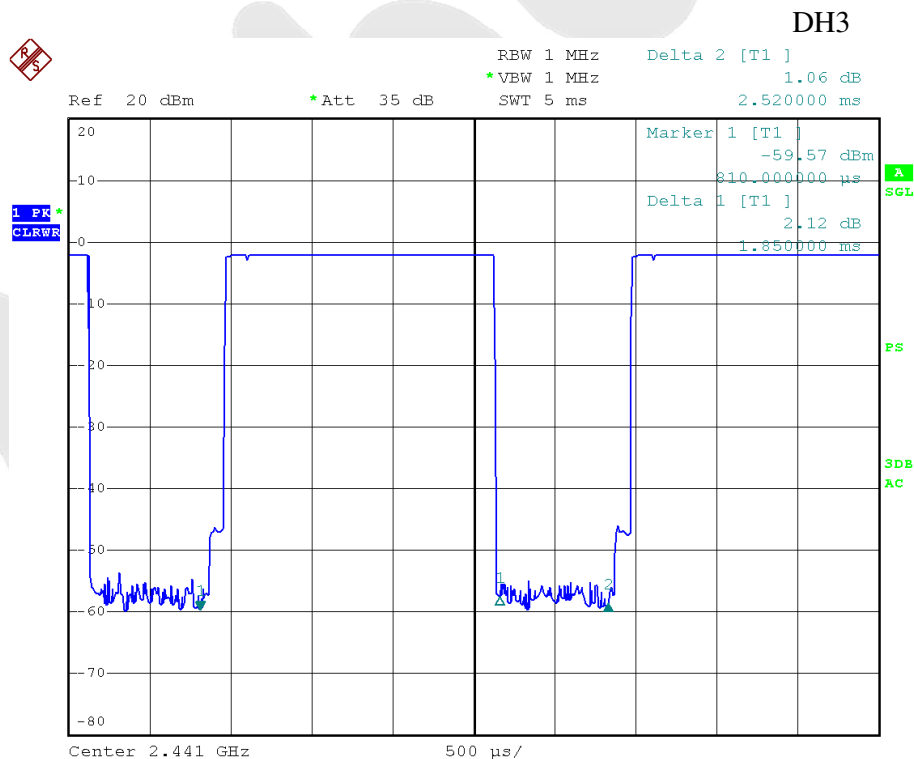
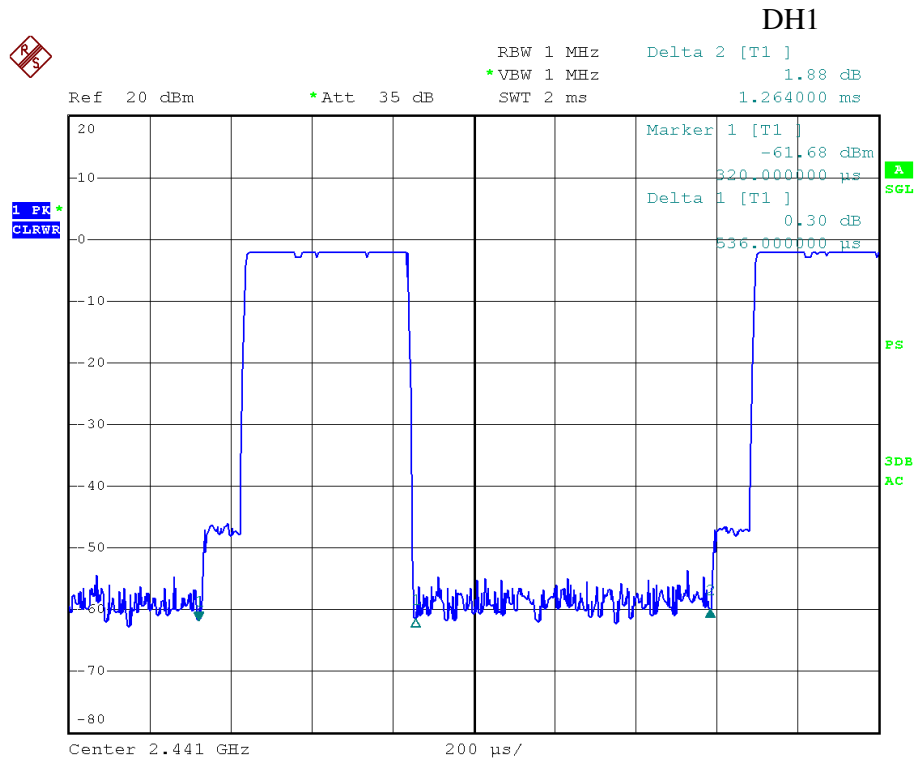
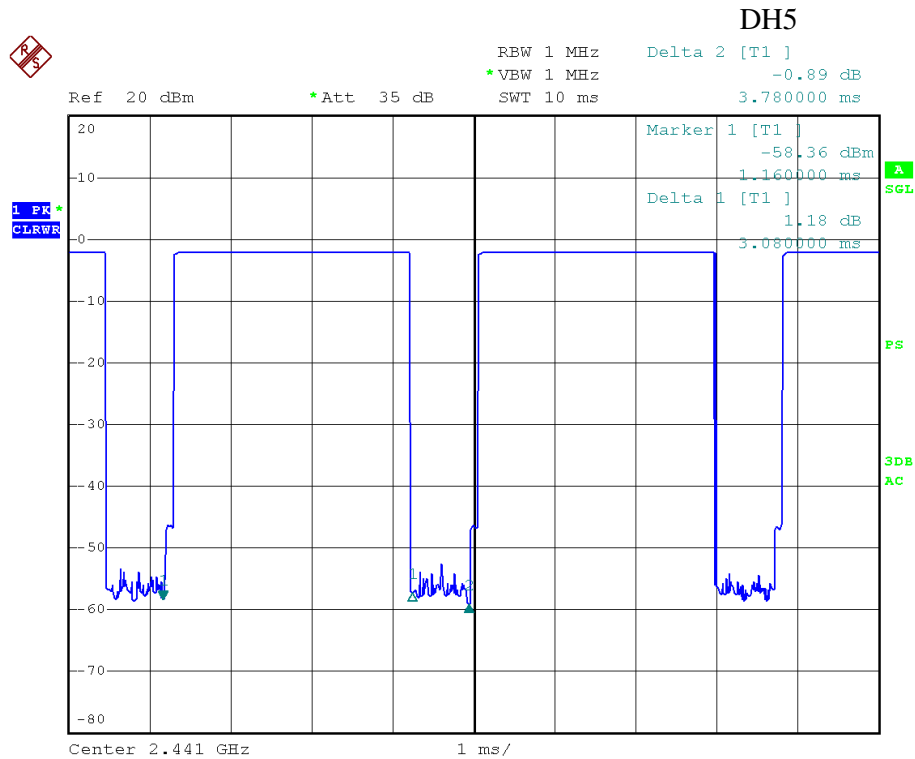






9. MAXIMUM PEAK OUTPUT POWER TEST

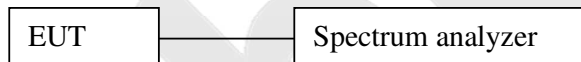
9.1 Measurement Procedure

- a. Check the calibration of the measuring instrument(SA) using either an internal calibrator or a known signal from an external generator.
- b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- c. The center frequency of the spectrum analyzer is set to the fundamental frequency and using proper RBW and VBW setting.
- d. Measure the captured power within the band and recording the plot.
- e. Repeat above procedures until all frequencies required were complete.

Using the following spectrum analyzer settings:

1. Span= approximately 5 times the 20dB bandwidth, centered on a hopping channel
2. Set the RBW = 3 MHz.
3. Set the VBW = 3 MHz.
4. Sweep time = auto couple.
5. Detector function = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.

9.2 Test SET-UP



9.3 Test Equipment

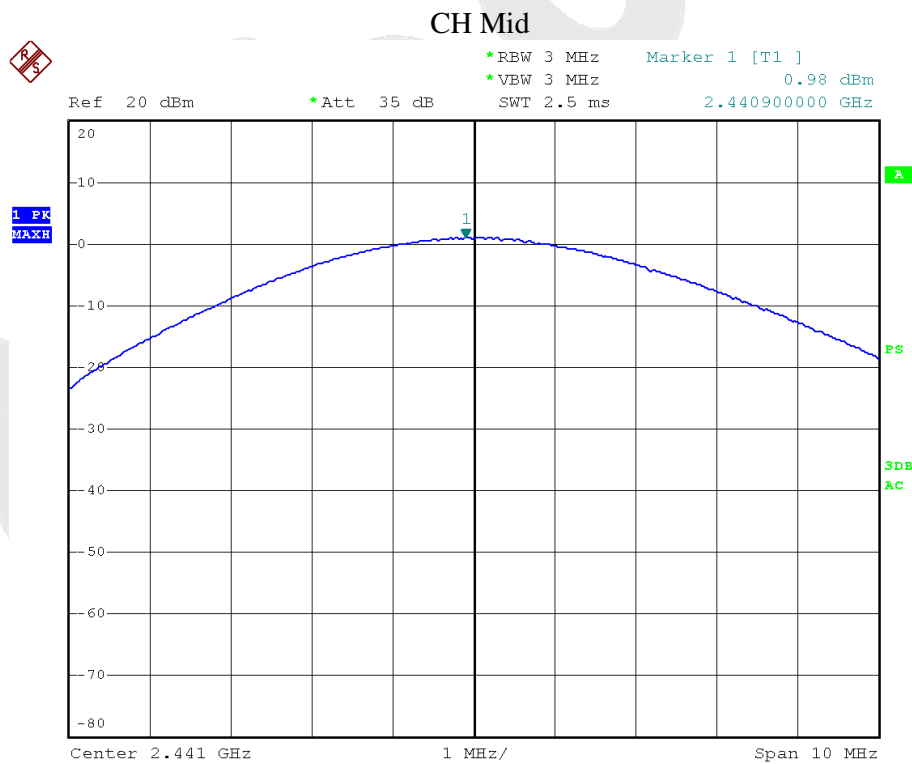
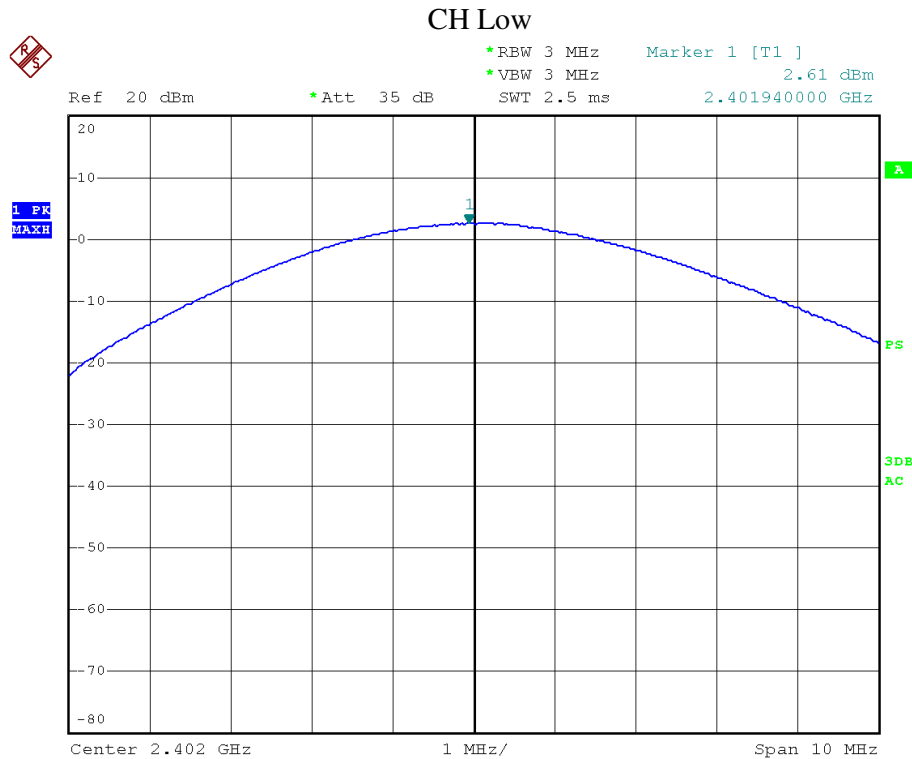
Same as the equipment listed in 5.3.

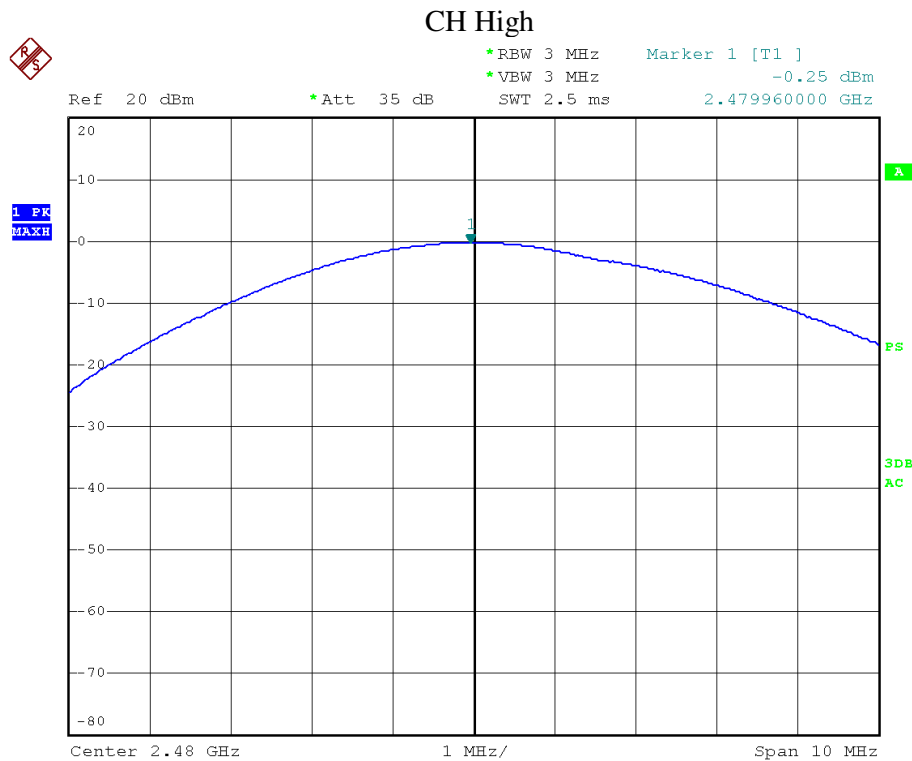
9.4 Test Results

Test Item : Max. peak output power Test Mode : CH Low ~ CH High
Test Voltage : DC 3.7V Temperature : 24°C
Test Result : PASS Humidity : 55%RH

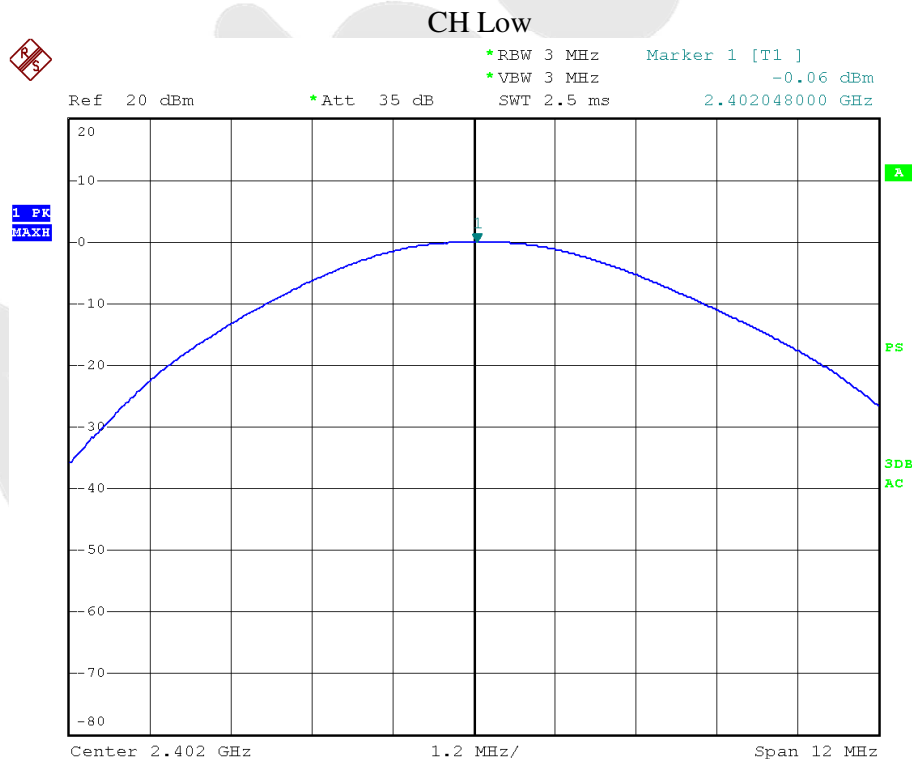
Channel Frequency (MHz)	Peak Power output(mW)	Peak Power output(dBm)	Peak Power Limit(mW)	Results	Mode
2402	1.82	2.61	1000	PASS	BDR
2441	1.25	0.98	1000	PASS	BDR
2480	0.94	-0.25	1000	PASS	BDR
2402	0.99	-0.06	125	PASS	EDR
2441	0.69	-1.59	125	PASS	EDR
2480	0.52	-2.86	125	PASS	EDR

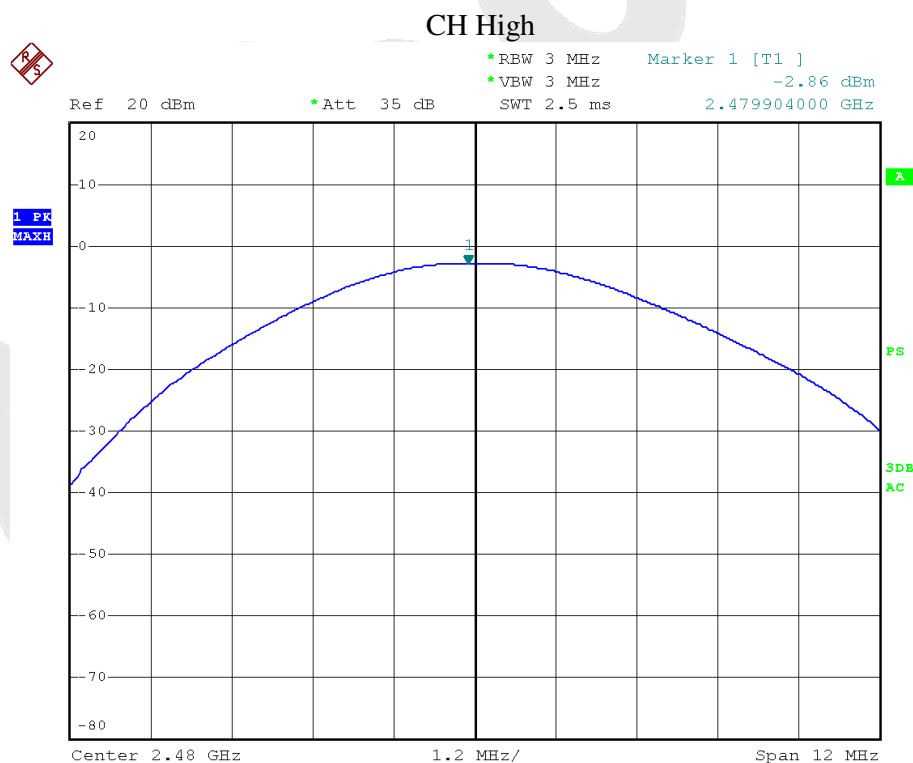
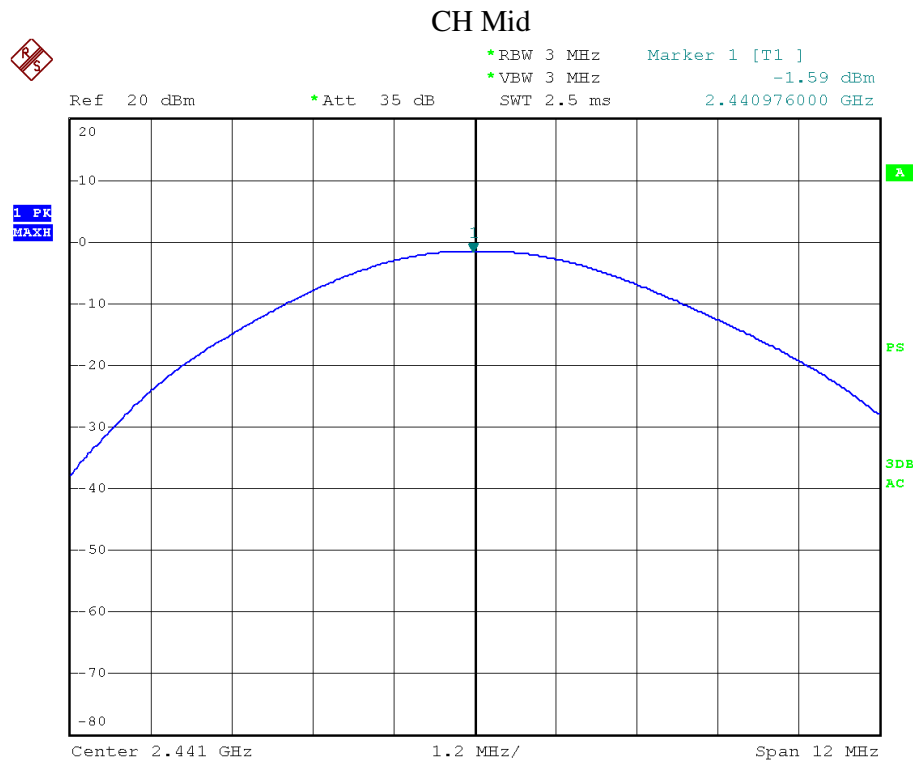
Mode: BDR





Mode: EDR



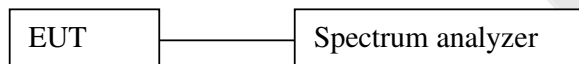


10. BAND EDGE TEST

10.1 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Put it on the Rotated table and turn on the EUT and make it operate in transmitting mode. Then set it to low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100kHz with a convenient frequency span including 100kHz bandwidth from band edge, for Radiated emissions restricted band RBW= 1 MHz, VBW= 3 MHz.
4. Measurement the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Report above procedures until all measured frequencies were complete.

10.2 Test SET-UP



10.3 Test Equipment

Same as the equipment listed in 5.3.

10.4 Test Results

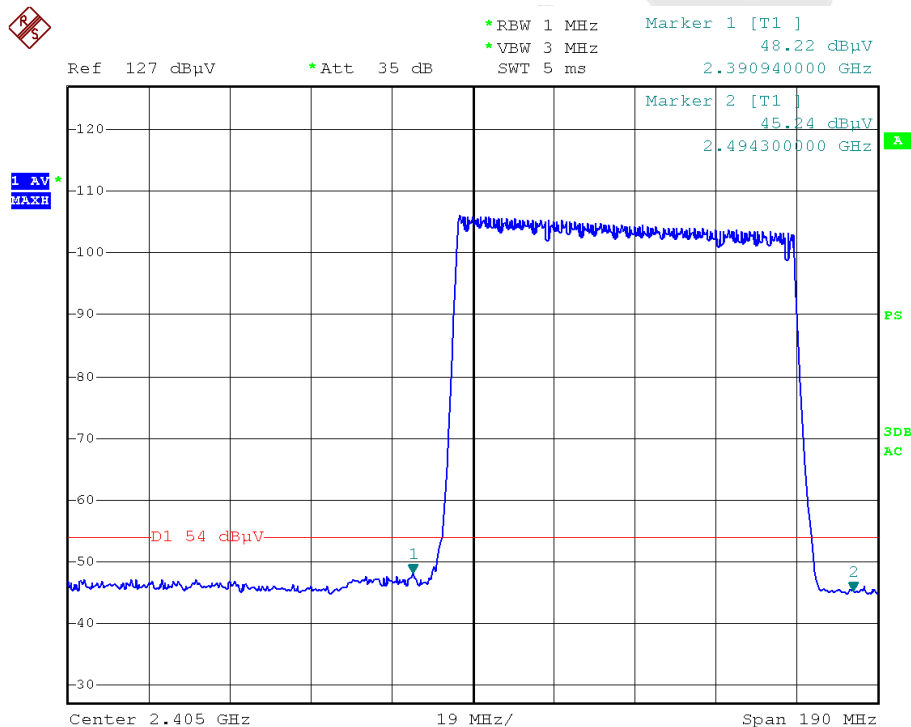
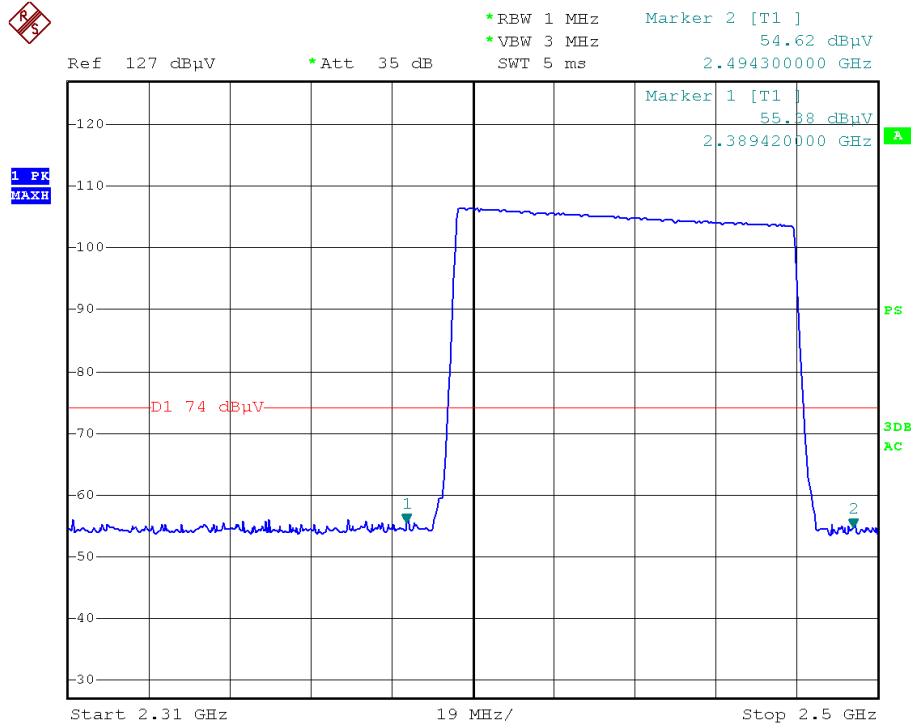
Pass.

Please refer the following data.

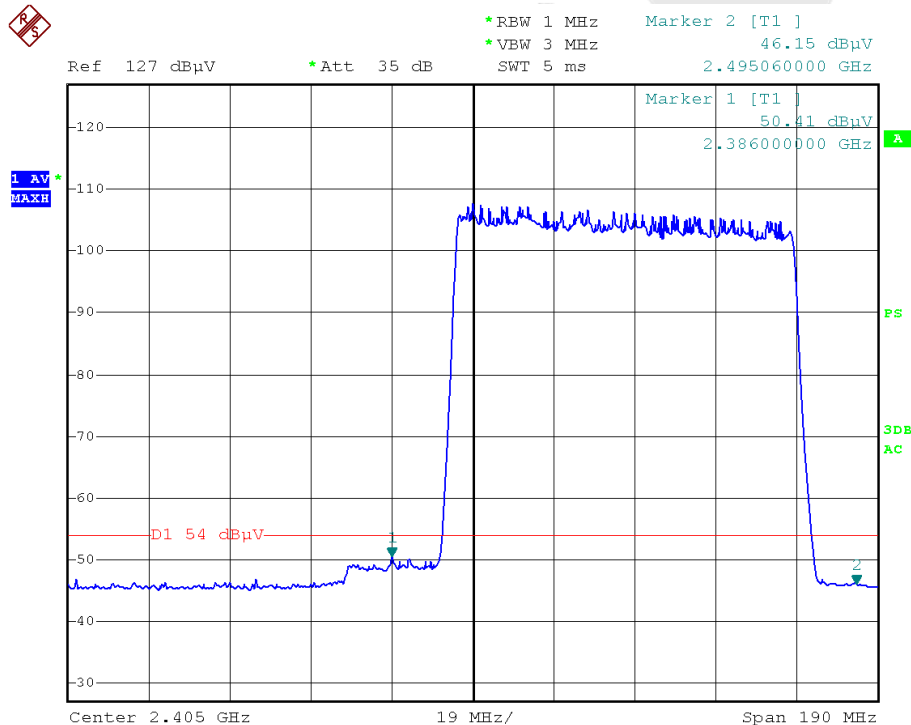
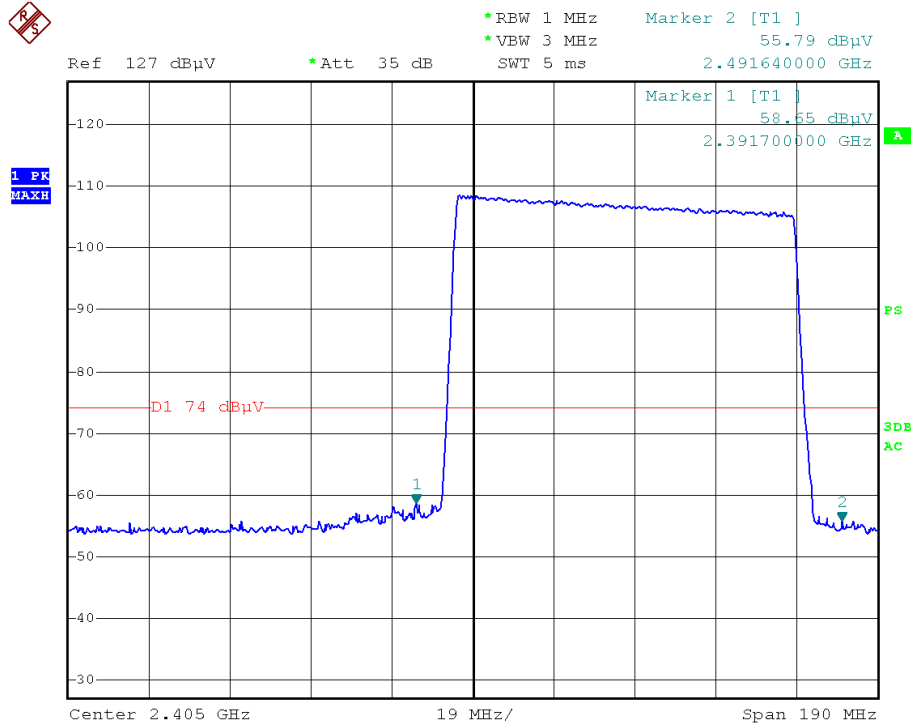
Test Item	: Band eadge	Test Mode	: CH Low ~ CH High
Test Voltage	: DC 3.7V	Temperature	: 24℃
Test Result	: PASS	Humidity	: 55%RH

For Hopping Mode:

Mode: BDR



Mode: EDR



Test Item : Band eadge	Test Mode : CH Low ~ CH High
Test Voltage : DC 3.7V	Temperature : 24℃
Test Result : PASS	Humidity : 55%RH

For Non-Hopping Mode:

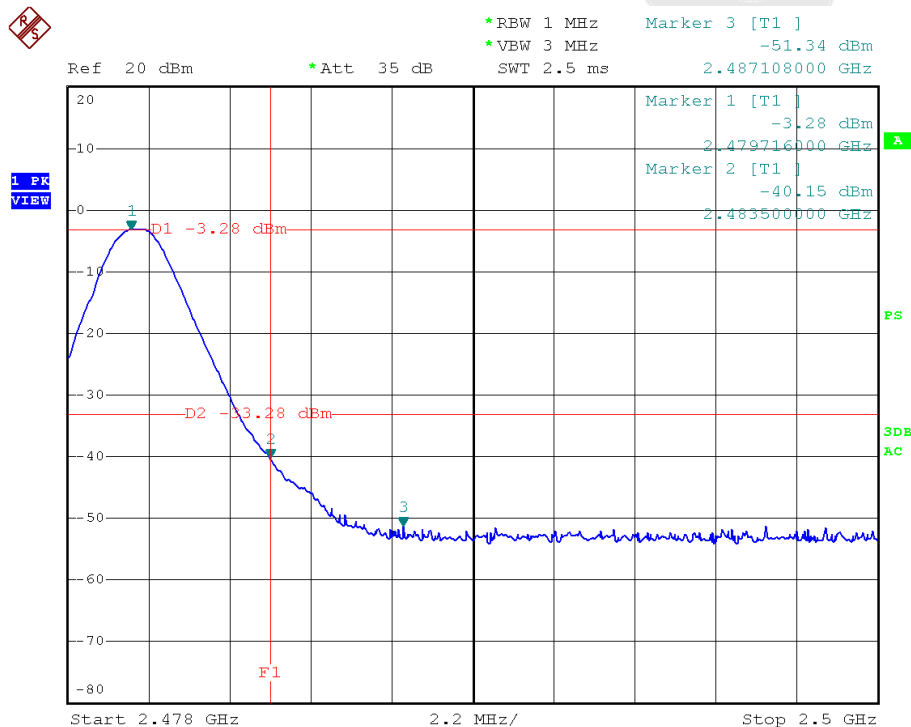
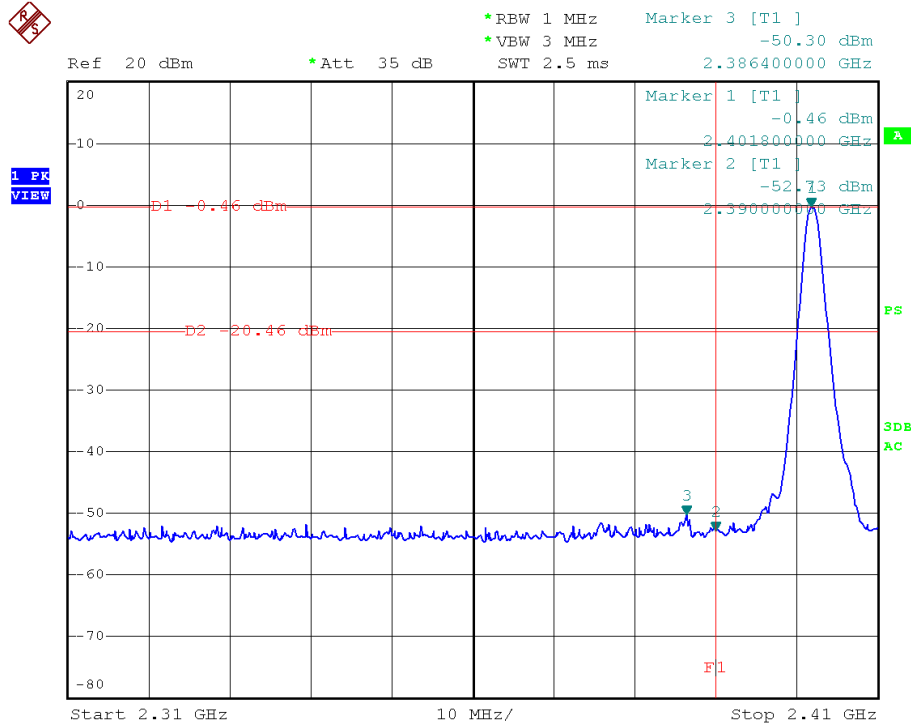
1. Conducted Test

Frequency (MHz)	Peak Power Output(dBm)	Emission read Value(dBm)	Result of Band edge(dBc)	Band edge Limit(dBc)	Mode
<2400	-0.46	-50.30	49.84	>20dBc	BDR
	1.70	-48.18	49.88	>20dBc	EDR
>2483.5	-3.28	-40.15	36.87	>20dBc	BDR
	-3.42	-42.36	38.94	>20dBc	EDR

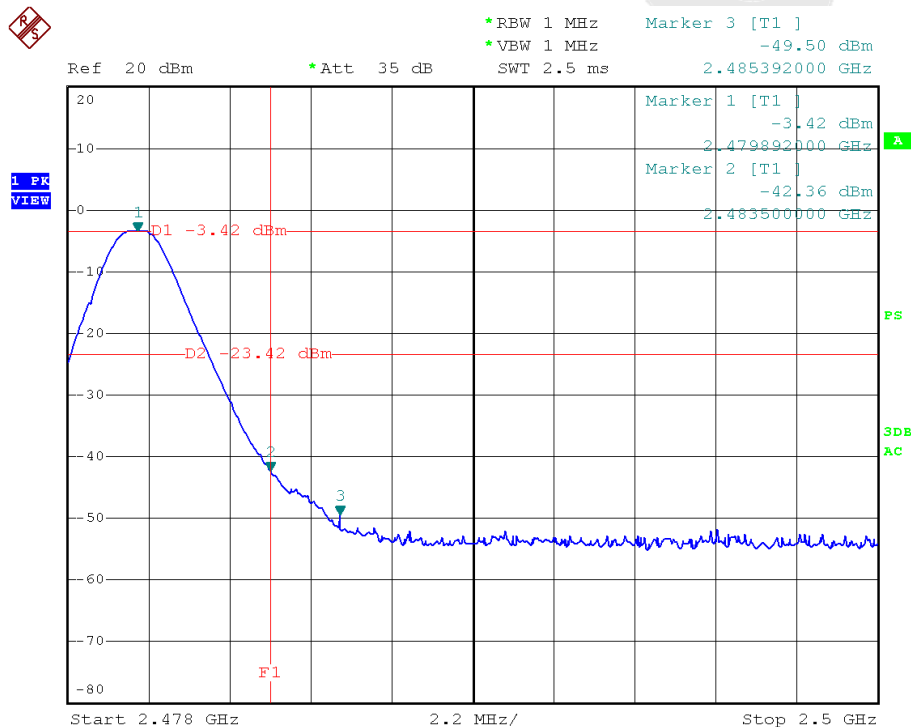
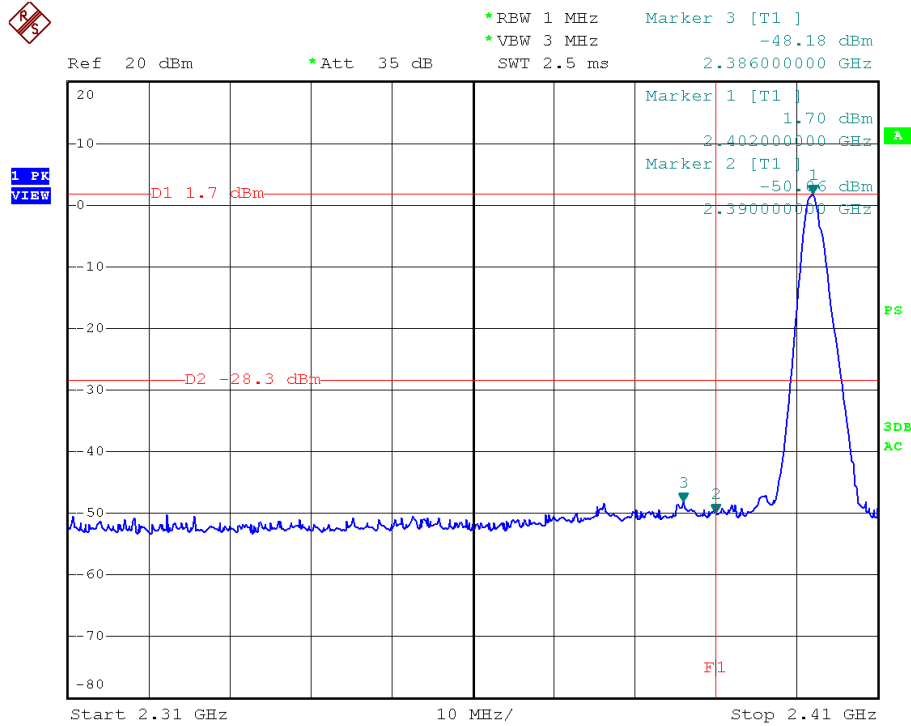
2. Radiated emission Test

Frequency (MHz)	Antenna polarization (H/V)	Emission (dBuV/m)		Band edge Limit (dBuV/m)		Mode
		PK	AV	PK	AV	
<2400	V	57.45	37.43	74.00	54.00	BDR
	V	56.51	38.69	74.00	54.00	EDR
>2483.5	V	54.03	36.41	74.00	54.00	BDR
	V	52.04	35.33	74.00	54.00	EDR

Mode: BDR



Mode: EDR



11. ANTENNA APPLICATION

11.1 Antenna requirement

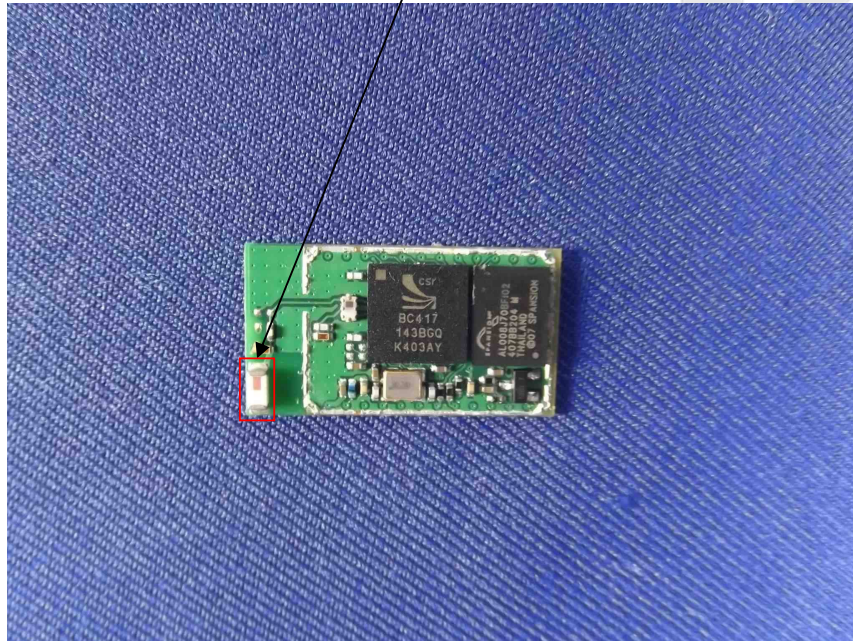
The EUT'S antenna is met the requirement of FCC part 15C section 15.203 and 15.247.

FCC part 15C section 15.247 requirements:

Systems operating in the 2402-2480MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

11.2 Result

The EUT's antenna used a chip antenna and integrated on PCB, the antenna's gain is 0.5dBi and meets the requirement.

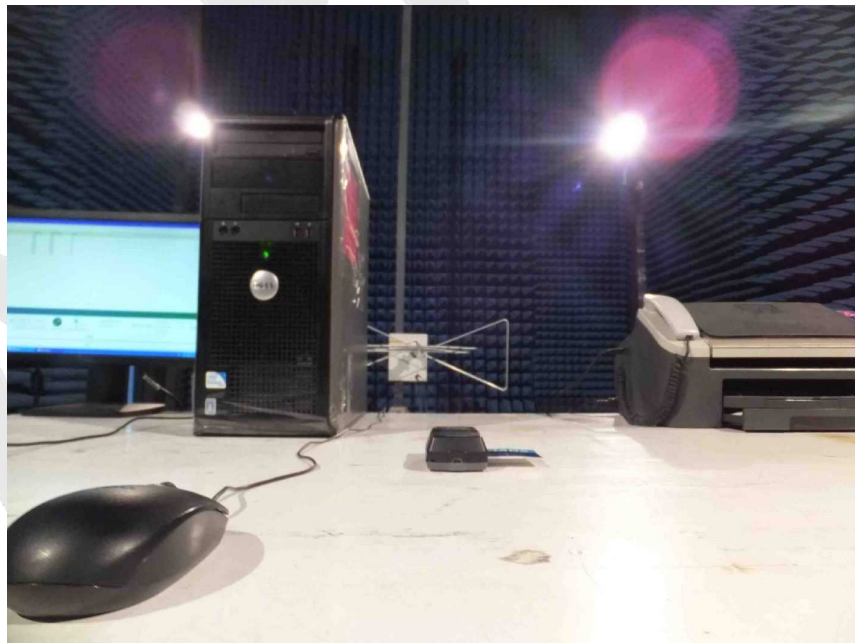


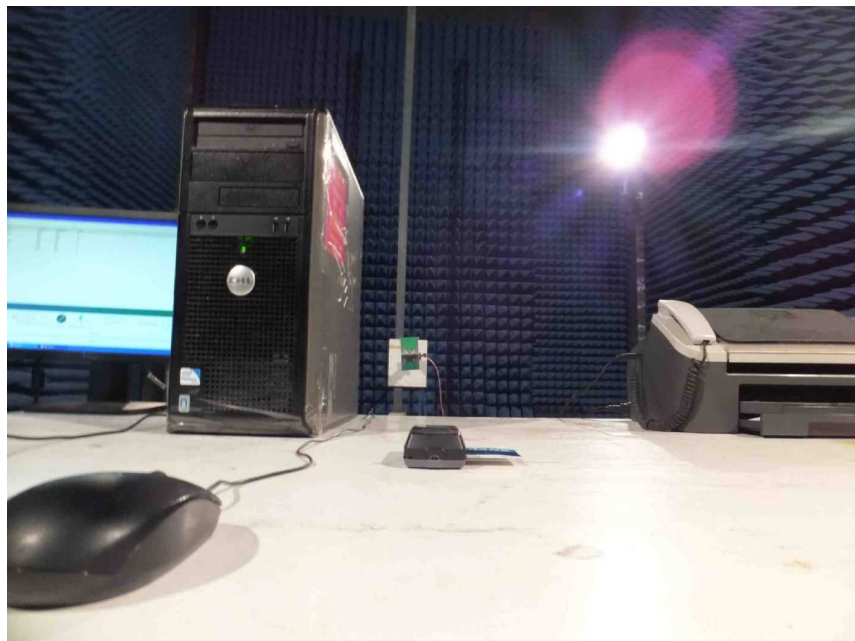
12. PHOTOGRAPH

12.1 Photo of Conducted Emission Test



12.2 Photo of Radiation Emission Test





APPENDIX I (EXTERNAL PHOTOS)

Figure 1
The EUT-Top View



Figure 2
The EUT-Bottom View

