TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart C (Section 15.247)**
Report No.:	RFBCKS-WTW-P22051021-2
FCC ID:	TVE-3918T05646
Product:	Secured Wireless Access Point
Brand:	FORTINET
Model No.:	FAP-431G, FAP-433G
Variant Model:	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx, FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)
Received Date:	2022/5/31
Test Date:	2022/8/11 ~ 2022/11/2
Issued Date:	2022/11/14
Applicant:	Fortinet, Inc.
Address:	899 Kifer Rd. Sunnyvale CA. 94086 United States
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location (1):	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
Test Location (2):	No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
FCC Registration / Designation Number(1):	788550 / TW0003
FCC Registration / Designation Number(2):	281270 / TW0032

Approved by: Jeremy Lin , **Date:** **2022/11/14**

Jeremy Lin / Project Engineer

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Prepared by : Pettie Chen / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P22051021-2	Original release.	2022/11/14

1 Certificate

Product:	Secured Wireless Access Point
Brand:	FORTINET
Test Model:	FAP-431G, FAP-433G
Variant Model:	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx, FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)
Sample Status:	Engineering sample
Applicant:	Fortinet, Inc.
Test Date:	2022/8/11 ~ 2022/11/2
Standard:	47 CFR FCC Part 15, Subpart C (Section 15.247)
Measurement procedure:	ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02 KDB 662911 D01 Multiple Transmitter Output v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Standard / Clause	Test Item	Result	Remark
15.247(b)	RF Output Power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.247(a)(2)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -5.48 dB at 0.59000 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.1 dB at 60.93 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.2 dB at 2390.00 MHz
15.203	Antenna Requirement	Pass	For internal antenna: Antenna connector is ipex(MHF) not a standard connector. For external antenna: Antenna connector is R-SMA(ANT0 ~ ANT3) & ipex (ANT4 ~ ANT7) not a standard connector.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.79 dB
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.99 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description

Product	Secured Wireless Access Point
Brand	FORTINET
Test Model	FAP-431G, FAP-433G
Variant Model	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx, FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)
Model Difference	Refer to note
Status of EUT	Engineering sample
Power Supply Rating	12Vdc from Adapter 55Vdc from PoE
Modulation Type	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/40): up to 600Mbps VHT20/40: up to 800Mbps 802.11ax: up to 1147.1Mbps
Operating Frequency	2.412 GHz ~ 2.462 GHz
Number of Channel	802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20): 13 802.11n (HT40), VHT40, 802.11ax (HE40): 9
Output Power	Model: FAP-431G: Radio 1: CDD: 975.407 mW (29.89 dBm) Beamforming: 917.258 mW (29.62 dBm) Radio 3_Scanning Radio: CDD: 169.078 mW (22.28 dBm) Model: FAP-433G: Radio 1: CDD: 861.933 mW (29.35 dBm) Beamforming: 816.509 mW (29.12 dBm) Radio 3_Scanning Radio: CDD: 229.132 mW (23.60 dBm)

Note:

1. The following models are provided to this EUT. The model FAP-431G, FAP-433G were chosen for final test.

Brand	Test Model	Series Model	Difference
Fortinet	FAP-431G	FortiAP 431Gxxxxxx, FAP-431Gxxxxxx, FORTIAP-431Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	internal antenna
	FAP-433G	FortiAP 433Gxxxxxx, FAP-433Gxxxxxx, FORTIAP-433Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	external antenna

2. The EUT consumes power from the following adapter and POE.

Adapter (support units only)	
Brand	Asian Power Devices Inc.
Model	WA-48A12R
Input Power	100-240Vac~50-60Hz, 1.5A Max
Output Power	12.0Vdc, 4.0A, 48.0W
Power Line	1.47m cable without core attached on adapter

POE (support units only)	
Brand	Microsemi
Model	PD-9501-10GC/AC
Input Power	100-240Vac~50-60Hz, 1.5A Max
Output Power	55Vdc, 1.1A

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.
4. Radio 1, Radio 2, Radio 4 and (Radio 3 or Radio 3_Scanning Radio) can transmit simultaneously.
   But Radio 1 (2.4G) and Radio 3_Scanning Radio (2.4G) cannot transmit simultaneously.
   Radio 2 (5G), Radio 3 (5G) and Radio 3_Scanning Radio (5G) cannot transmit in the same band simultaneously.
   Radio 3 (6G) and Radio 3_Scanning Radio (6G) cannot transmit in the same band simultaneously.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Model	Radio	Chip	Mode	Antennas	Ant. Type	Bands Supported
FAP-433G	Radio 1	QCN-5124	4x4 MIMO	ANT 0/1/2/3	External	2.4GHz WLAN
	Radio 2	QCN-5154	4x4 MIMO	ANT 0/1/2/3	External	NII-1, 3 WLAN up to 80 MHz
	Radio 3_6G	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated (Non-detachable external antenna)	6GHz WLAN
	Radio 3_5GH	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated (Non-detachable external antenna)	NII-3 WLAN up to 80 MHz NII-4 WLAN up to 160 MHz
	Radio 3 _Scanning	QCN-9074	2x2 MIMO	ANT 4/6	Integrated (Non-detachable external antenna)	2.4 GHz WLAN, NII-1, 3, 4 WLAN, 6GHz WLAN
	Radio 4	EFR32MG21	-	ANT 8	Integrated	BT / Zigbee
FAP-431G	Radio 1	QCN-5124	4x4 MIMO	ANT 0/1/2/3	Integrated	2.4GHz WLAN
	Radio 2	QCN-5154	4x4 MIMO	ANT 0/1/2/3	Integrated	NII-1, 3, 4 WLAN up to 80 MHz
	Radio 3_6G	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated	6GHz WLAN
	Radio 3_5GH	QCN-9074	4x4 MIMO	ANT 4/5/6/7	Integrated	NII-3 WLAN up to 80 MHz NII-4 WLAN up to 160 MHz
	Radio 3 _Scanning	QCN-9074	2x2 MIMO	ANT 4/6	Integrated	2.4 GHz WLAN, NII-1, 3, 4 WLAN, 6GHz WLAN
	Radio 4	EFR32MG21	-	ANT 8	Integrated	BT / Zigbee

Model: FAP-431G

Antenna Type		PIFA			
Connector Type		ipex(MHF)			
Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT0(DB4)	Rdaio1 2G CH0 Rdaio2 5G CH0 Rdaio2 5GL CH0	WNC	FortiAP-431G	1.41	2.4~2.4835GHz
				4.62	5.15~5.25GHz
				4.62	5.25~5.35GHz
				4.35	5.47~5.725GHz
				3.91	5.725~5.85GHz
				3.91	5.85~5.895GHz
ANT1(DB3)	Rdaio1 2G CH1 Rdaio2 5G CH1 Rdaio2 5GL CH1	WNC	FortiAP-431G	1.72	2.4~2.4835GHz
				3.38	5.15~5.25GHz
				3.61	5.25~5.35GHz
				3.72	5.47~5.725GHz
				3.72	5.725~5.85GHz
				3.72	5.85~5.895GHz
ANT2(DB1)	Rdaio1 2G CH2 Rdaio2 5G CH2 Rdaio2 5GL CH2	WNC	FortiAP-431G	1.54	2.4~2.4835GHz
				4.85	5.15~5.25GHz
				4.85	5.25~5.35GHz
				4.51	5.47~5.725GHz
				4.30	5.725~5.85GHz
				4.30	5.85~5.895GHz

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT3(DB2)	Rdaio1 2G CH3 Rdaio2 5G CH3 Rdaio2 5GL CH3	WNC	FortiAP-431G	2.38	2.4~2.4835GHz
				3.48	5.15~5.25GHz
				3.52	5.25~5.35GHz
				3.58	5.47~5.725GHz
				3.55	5.725~5.85GHz
				3.55	5.85~5.895GHz
ANT4(TB4)	Rdaio3 5GH CH0 Rdaio3 6G CH0 Rdaio3 Scanning (2/5/6G) CH0	WNC	FortiAP-431G	3.50	2.4~2.4835GHz
				4.98	5.15~5.25GHz
				4.98	5.25~5.35GHz
				4.98	5.47~5.725GHz
				4.50	5.725~5.85GHz
				4.50	5.85~5.895GHz
				4.80	5.925~6.425GHz
				4.80	6.425~6.525GHz
				5.50	6.525~6.875GHz
				5.50	6.875~7.125GHz
ANT5(TB1)	Rdaio3 5GH CH1 Rdaio3 6G CH1	WNC	FortiAP-431G	4.76	5.47~5.725GHz
				4.38	5.725~5.85GHz
				4.38	5.85~5.895GHz
				4.32	5.925~6.425GHz
				4.32	6.425~6.525GHz
				4.84	6.525~6.875GHz
				4.84	6.875~7.125GHz
ANT6(TB2)	Rdaio3 5GH CH2 Rdaio3 6G CH2 Rdaio3 Scanning (2/5/6G) CH1	WNC	FortiAP-431G	2.58	2.4~2.4835GHz
				4.47	5.15~5.25GHz
				4.81	5.25~5.35GHz
				5.30	5.47~5.725GHz
				5.30	5.725~5.85GHz
				5.30	5.85~5.895GHz
				4.60	5.925~6.425GHz
				4.60	6.425~6.525GHz
				5.20	6.525~6.875GHz
				5.20	6.875~7.125GHz
ANT7(TB3)	Rdaio3 5GH CH3 Rdaio3 6G CH3	WNC	FortiAP-431G	5.09	5.47~5.725GHz
				5.09	5.725~5.85GHz
				5.09	5.85~5.895GHz
				4.20	5.925~6.425GHz
				3.94	6.425~6.525GHz
				4.50	6.525~6.875GHz
				4.50	6.875~7.125GHz

Radio 1

Frequency Range	Directional Gain (dBi)
2400~2483.5MHz	6.37

Radio 2

Frequency Range	Directional Gain (dBi)
5150~5250MHz	6.94
5250~5350MHz	6.98
5470~5725MHz	6.06
5725~5850MHz	6.31
5850~5895MHz	6.03

Radio 3

Frequency Range	Directional Gain (dBi)
5470~5725MHz	7.11
5725~5850MHz	6.91
5850~5895MHz	6.61
5925~6425MHz	6.37
6425~6525MHz	6.98
6525~6875MHz	7.11
6875~7125MHz	7.62

Scanning Radio

Frequency Range	Directional Gain (dBi)
2400~2483.5MHz	0.84
5150~5250MHz	1.87
5250~5350MHz	1.82
5470~5725MHz	2.10
5725~5850MHz	1.57
5850~5895MHz	1.49
5925~6425MHz	4.51
6425~6525MHz	4.57
6525~6875MHz	5.03
6875~7125MHz	5.12

Model: FAP-433G

Antenna Type		Dipole			
Connector Type		R-SMA (ANT0 ~ ANT3); ipex (ANT4 ~ ANT7)			
Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT0	Radio 1 2G CH0 Radio 2 5G CH0 Radio 2 5GL CH0	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT1	Radio 1 2G CH1 Radio 2 5G CH1 Radio 2 5GL CH1	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT2	Radio 1 2G CH2 Radio 2 5G CH2 Radio 2 5GL CH2	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT3	Radio 1 2G CH3 Radio 2 5G CH3 Radio 2 5GL CH3	MAGLAYERS	EDA-1410-6G0R2-A3	5.65	2.4~2.4835GHz
				5.31	5.15~5.25GHz
				5.37	5.25~5.35GHz
				5.94	5.47~5.725GHz
				5.45	5.725~5.85GHz
ANT4	Radio 3 5GH CH0 Radio 3 6G CH0 Scanning Radio (2/5/6G) CH0	MAGLAYERS	BTEAWT14136G0C1A02	3.11	2.4~2.4835GHz
				2.27	5.15~5.25GHz
				2.27	5.25~5.35GHz
				2.81	5.47~5.725GHz
				2.81	5.725~5.85GHz
				2.81	5.85~5.895GHz
				2.55	5.925~6.425GHz
				2.55	6.425~6.525GHz
				2.74	6.525~6.875GHz
				2.74	6.875~7.125GHz

Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency range
ANT5	Radio 3 5GH CH1 Radio 3 6G CH1	MAGLAYERS	BTEAWT14136G0C1A02	2.81	5.47~5.725GHz
				2.81	5.725~5.85GHz
				2.81	5.85~5.895GHz
				2.55	5.925~6.425GHz
				2.55	6.425~6.525GHz
				2.74	6.525~6.875GHz
				2.74	6.875~7.125GHz
ANT6	Radio 3 5GH CH2 Radio 3 6G CH2 Scanning Radio (2/5/6G) CH1	MAGLAYERS	BTEAWT14136G0C1A01	2.81	2.4~2.4835GHz
				2.39	5.15~5.25GHz
				2.39	5.25~5.35GHz
				2.39	5.47~5.725GHz
				2.39	5.725~5.85GHz
				2.21	5.85~5.895GHz
				2.71	5.925~6.425GHz
				2.71	6.425~6.525GHz
				2.61	6.525~6.875GHz
				2.61	6.875~7.125GHz
ANT7	Radio 3 5GH CH3 Radio 3 6G CH3	MAGLAYERS	BTEAWT14136G0C1A01	2.39	5.47~5.725GHz
				2.39	5.725~5.85GHz
				2.21	5.85~5.895GHz
				2.71	5.925~6.425GHz
				2.71	6.425~6.525GHz
				2.61	6.525~6.875GHz
				2.61	6.875~7.125GHz

Radio 1

Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	6.59

Radio 2

Antenna Gain	Directional Gain (dBi)
5150~5250MHz	7.06
5250~5350MHz	7.16
5470~5725MHz	7.52
5725~5850MHz	7.16

Radio 3

Antenna Gain	Directional Gain (dBi)
5470~5725MHz	8.35
5725~5850MHz	8.26
5850~5895MHz	8.10
5925~6425MHz	7.12
6425~6525MHz	7.29
6525~6875MHz	7.33
6875~7125MHz	7.43

Scanning Radio

Antenna Gain	Directional Gain (dBi)
2400~2483.5MHz	1.41
5150~5250MHz	2.04
5250~5350MHz	2.09
5470~5725MHz	2.51
5725~5850MHz	2.30
5850~5895MHz	2.10
5925~6425MHz	4.48
6425~6525MHz	4.28
6525~6875MHz	4.76
6875~7125MHz	4.17

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a MIMO function:

2.4 GHz Band		
Radio 1		
Modulation Mode	TX & RX Configuration	
802.11b	4TX	4RX
802.11g	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
VHT20	4TX	4RX
VHT40	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
Note: 1. All of modulation mode support beamforming function except 802.11b/g modulation mode. 2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.		

Radio 3_Scanning Radio		
Modulation Mode	TX & RX Configuration	
802.11b	2TX	2RX
802.11g	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
VHT20	2TX	2RX
VHT40	2TX	2RX
802.11ax (HE20)	2TX	2RX
802.11ax (HE40)	2TX	2RX

3.3 Channel List

11 channels are provided for 802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n (HT40), VHT40, 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
3	2422 MHz	7	2442 MHz
4	2427 MHz	8	2447 MHz
5	2432 MHz	9	2452 MHz
6	2437 MHz		

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	EUT can be used in the following ways: X-axis / Y-axis / Z-axis. Pre-scan in these ways and find the worst case as a representative test condition.
Worst Case:	Worst Condition: Y-axis (For Model: FAP-431G Radio 1), X-axis (For Model: FAP-431G Radio 3_Scanning Radio), X-axis (For Model: FAP-433G Radio 1), X-axis (For Model: FAP-433G Radio 3_Scanning Radio)

Following channel(s) was (were) selected for the final test as listed below:

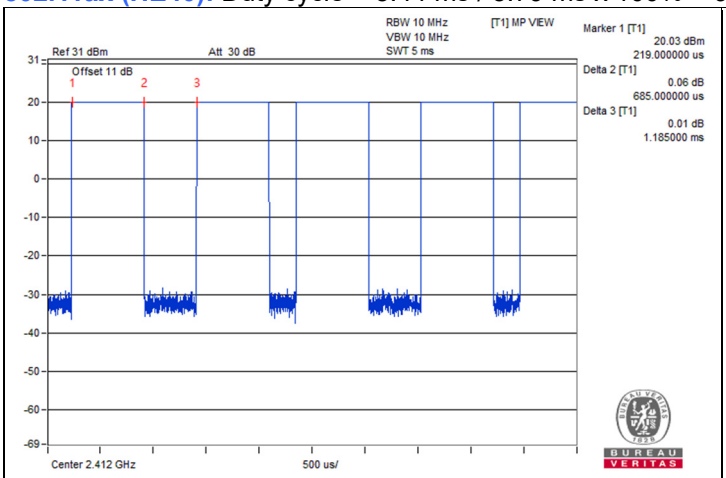
Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	A, E	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
		802.11g	CDD	1, 6, 11	BPSK	6Mb/s
		802.11n (HT20)	CDD & Beamforming	1, 6, 11	BPSK	MCS0
		802.11n (HT40)	CDD & Beamforming	3, 6, 9	BPSK	MCS0
		VHT20	CDD & Beamforming	1, 6, 11	BPSK	MCS0
		VHT40	CDD & Beamforming	3, 6, 9	BPSK	MCS0
		802.11ax (HE20)	CDD & Beamforming	1, 6, 11	BPSK	MCS0
		802.11ax (HE40)	CDD & Beamforming	3, 6, 9	BPSK	MCS0
	C, G	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
		802.11g	CDD	1, 6, 11	BPSK	6Mb/s
		802.11n (HT20)	CDD	1, 6, 11	BPSK	MCS0
		802.11n (HT40)	CDD	3, 6, 9	BPSK	MCS0
		VHT20	CDD	1, 6, 11	BPSK	MCS0
		VHT40	CDD	3, 6, 9	BPSK	MCS0
		802.11ax (HE20)	CDD	1, 6, 11	BPSK	MCS0
		802.11ax (HE40)	CDD	3, 6, 9	BPSK	MCS0
Power Spectral Density / 6 dB Bandwidth / Conducted Out of Band Emissions	A, C, E, G	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
		802.11g	CDD	1, 6, 11	BPSK	6Mb/s
		802.11ax (HE20)	CDD	1, 6, 11	BPSK	MCS0
		802.11ax (HE40)	CDD	3, 6, 9	BPSK	MCS0
AC Power Conducted Emissions	A, B	802.11b	CDD	6	DBPSK	1Mb/s
	C, D	802.11ax (HE20)	CDD	6	BPSK	MCS0
	E, F	802.11b	CDD	1	DBPSK	1Mb/s
	G, H	802.11ax (HE40)	CDD	3	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11b	CDD	6	DBPSK	1Mb/s
	C, D	802.11ax (HE20)	CDD	6	BPSK	MCS0
	E, F	802.11b	CDD	1	DBPSK	1Mb/s
	G, H	802.11ax (HE40)	CDD	3	BPSK	MCS0
Unwanted Emissions above 1 GHz	A, C, E, G	802.11b	CDD	1, 6, 11	DBPSK	1Mb/s
		802.11g	CDD	1, 6, 11	BPSK	6Mb/s
		802.11ax (HE20)	CDD	1, 6, 11	BPSK	MCS0
		802.11ax (HE40)	CDD	3, 6, 9	BPSK	MCS0

	Mode	EUT Model / Radio	Power
EUT Configure Mode	A	FAP-431G / Radio1	Power from adapter
	B		Power from PoE
	C	FAP-431G / Radio3_Scanning Radio	Power from adapter
	D		Power from PoE
	E	FAP-433G / Radio1	Power from adapter
	F		Power from PoE
	G	FAP-433G / Radio3_Scanning Radio	Power from adapter
	H		Power from PoE
Note: Raido 3 does not support Beamformig mode.			

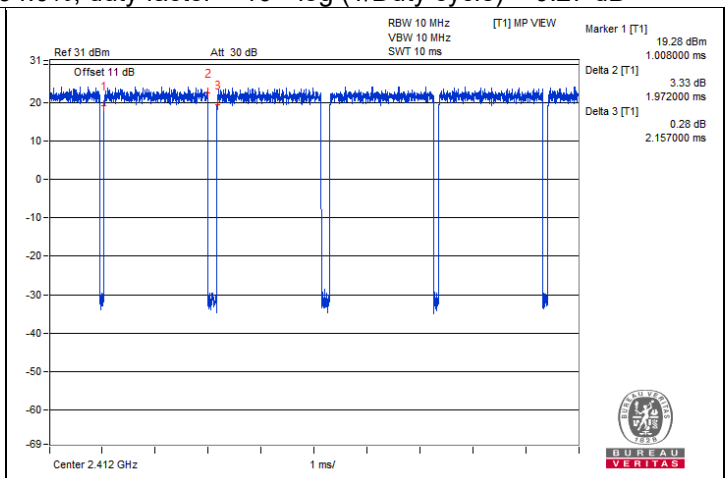
3.5 Duty Cycle of Test Signal

Test Mode A

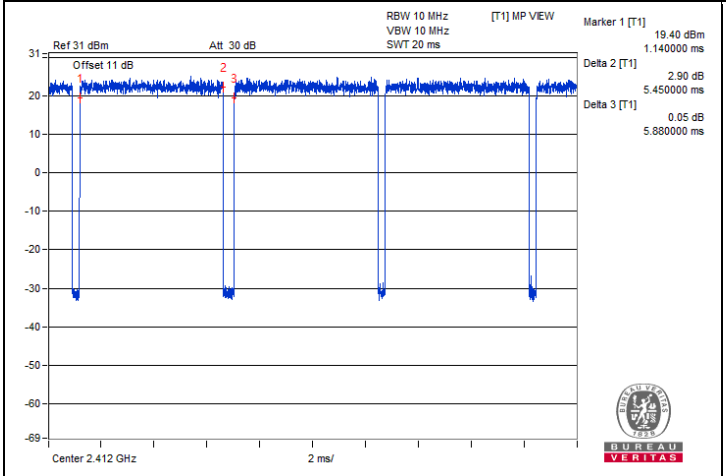
802.11b: Duty cycle = 0.685 ms / 1.185 ms x 100% = 57.8%, duty factor = 10 * log (1/Duty cycle) = 2.38 dB
802.11g: Duty cycle = 1.972 ms / 2.157 ms x 100% = 91.4%, duty factor = 10 * log (1/Duty cycle) = 0.39 dB
802.11ax (HE20): Duty cycle = 5.45 ms / 5.88 ms x 100% = 92.7%, duty factor = 10 * log (1/Duty cycle) = 0.33 dB
802.11ax (HE40): Duty cycle = 5.44 ms / 5.79 ms x 100% = 94.0%, duty factor = 10 * log (1/Duty cycle) = 0.27 dB



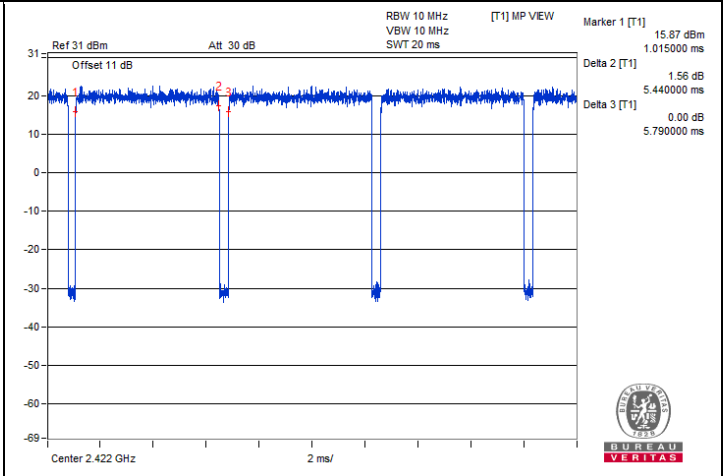
802.11b



802.11g



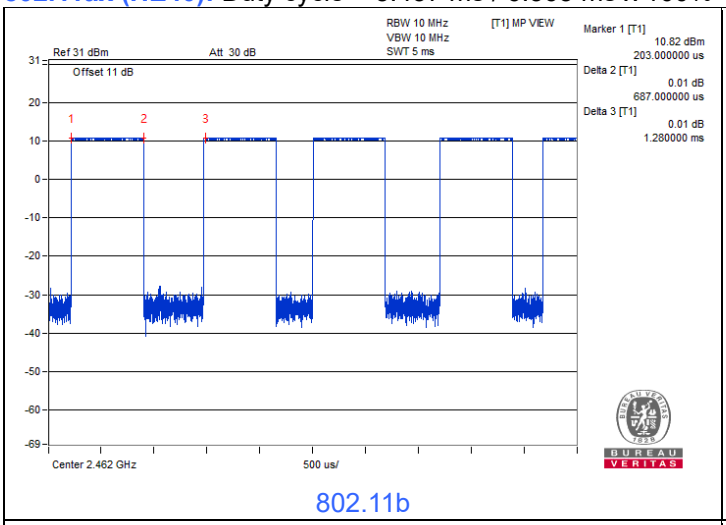
802.11ax (HE20)



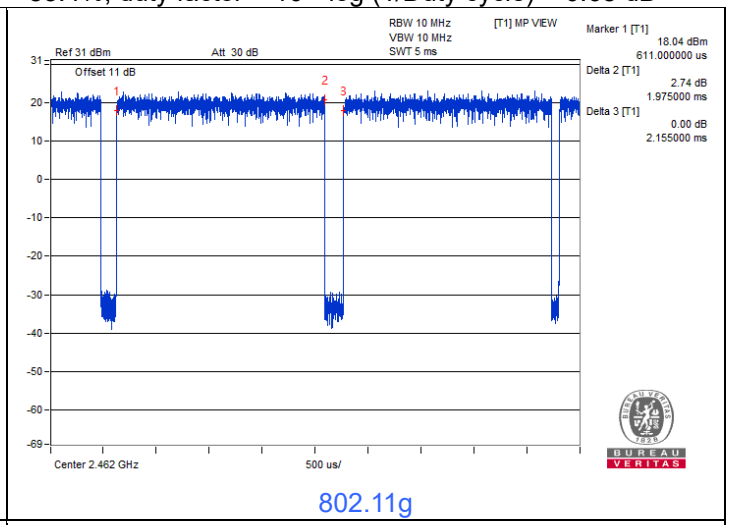
802.11ax (HE40)

Test Mode C

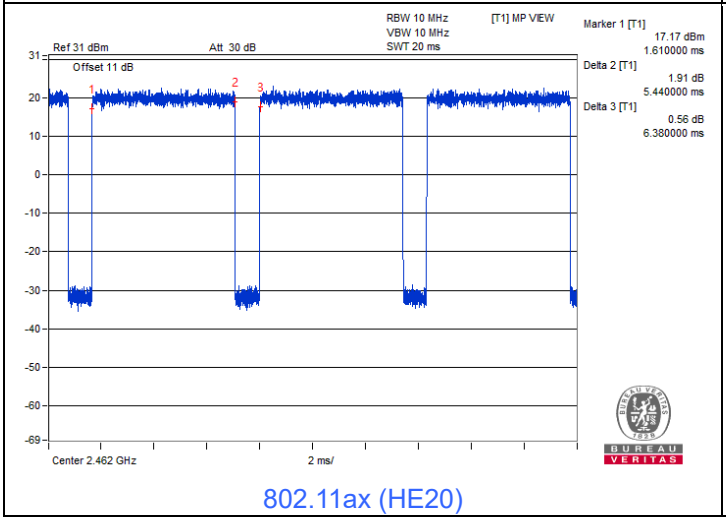
802.11b: Duty cycle = 0.687 ms / 1.28 ms x 100% = 53.7%, duty factor = 10 * log (1/Duty cycle) = 2.70 dB
802.11g: Duty cycle = 1.975 ms / 2.155 ms x 100% = 91.6%, duty factor = 10 * log (1/Duty cycle) = 0.38 dB
802.11ax (HE20): Duty cycle = 5.44 ms / 6.38 ms x 100% = 85.3%, duty factor = 10 * log (1/Duty cycle) = 0.69 dB
802.11ax (HE40): Duty cycle = 5.437 ms / 6.365 ms x 100% = 85.4%, duty factor = 10 * log (1/Duty cycle) = 0.68 dB



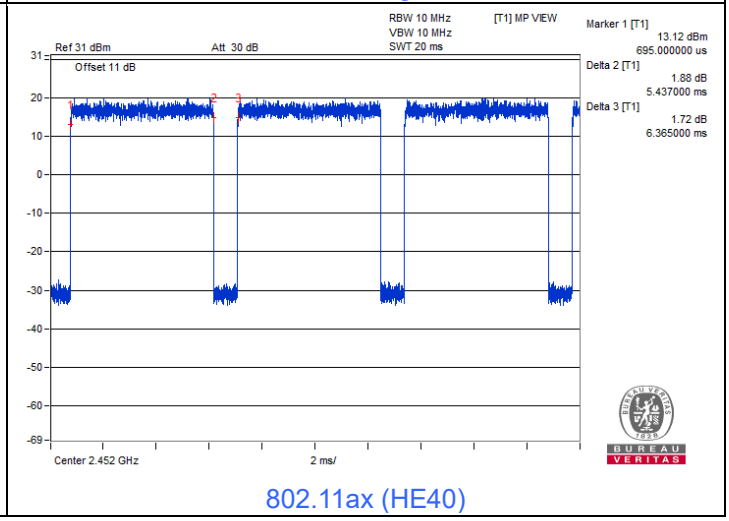
802.11b



802.11g



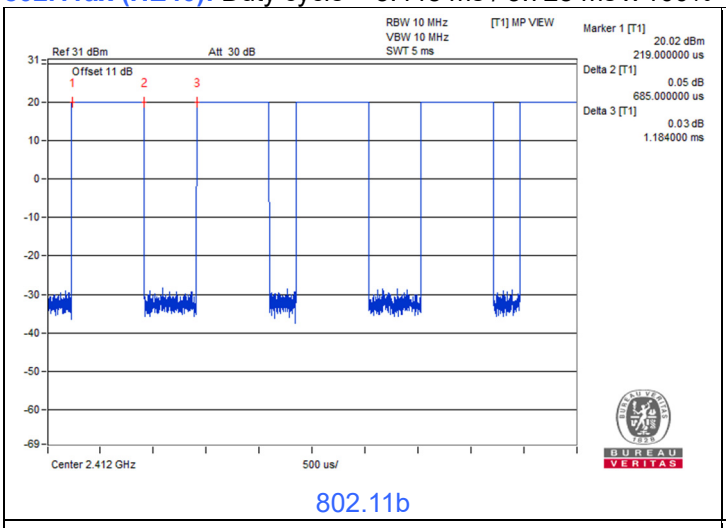
802.11ax (HE20)



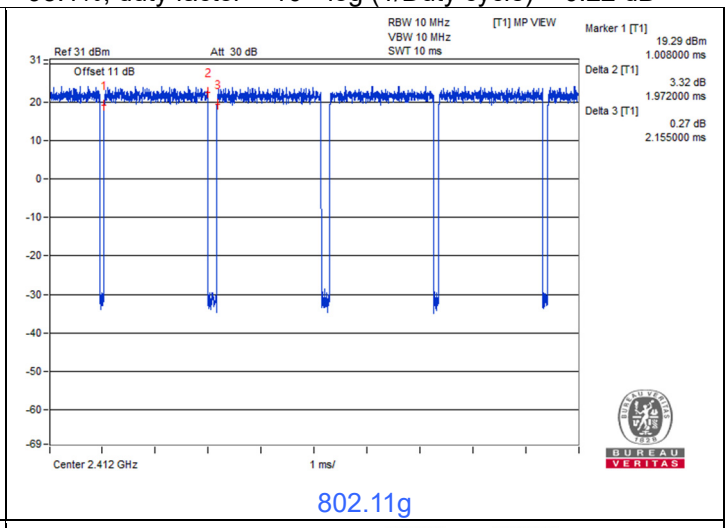
802.11ax (HE40)

Test Mode E

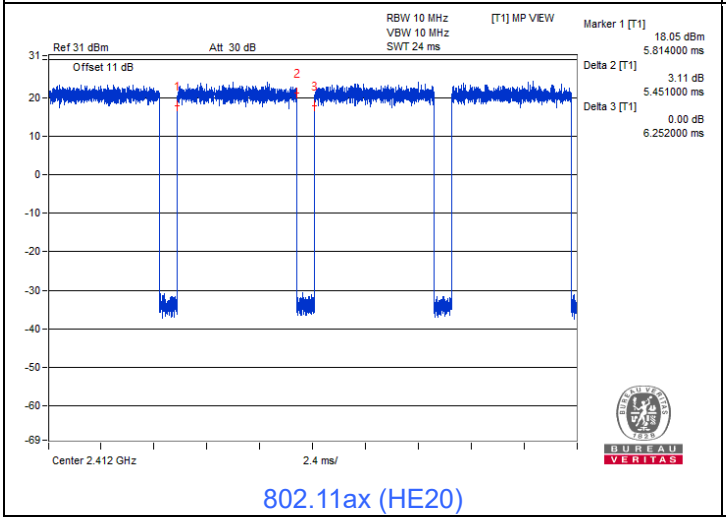
802.11b: Duty cycle = 0.685 ms / 1.184 ms x 100% = 57.9%, duty factor = 10 * log (1/Duty cycle) = 2.38 dB
802.11g: Duty cycle = 1.972 ms / 2.155 ms x 100% = 91.5%, duty factor = 10 * log (1/Duty cycle) = 0.39 dB
802.11ax (HE20): Duty cycle = 5.451 ms / 6.252 ms x 100% = 87.2%, duty factor = 10 * log (1/Duty cycle) = 0.60 dB
802.11ax (HE40): Duty cycle = 5.448 ms / 5.728 ms x 100% = 95.1%, duty factor = 10 * log (1/Duty cycle) = 0.22 dB



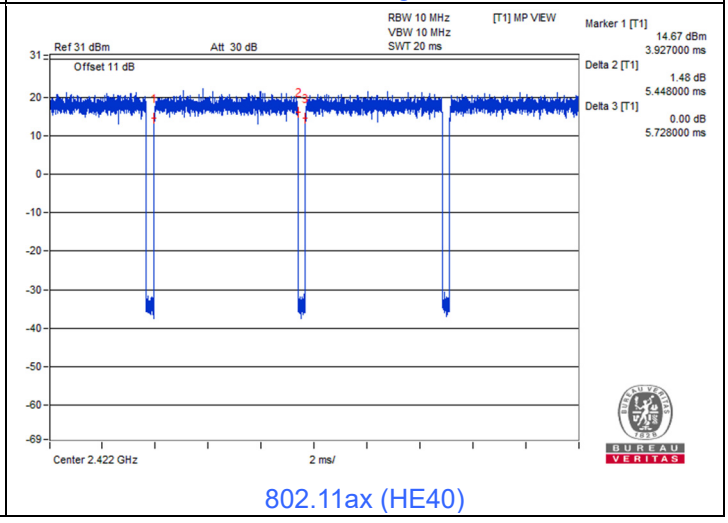
802.11b



802.11g



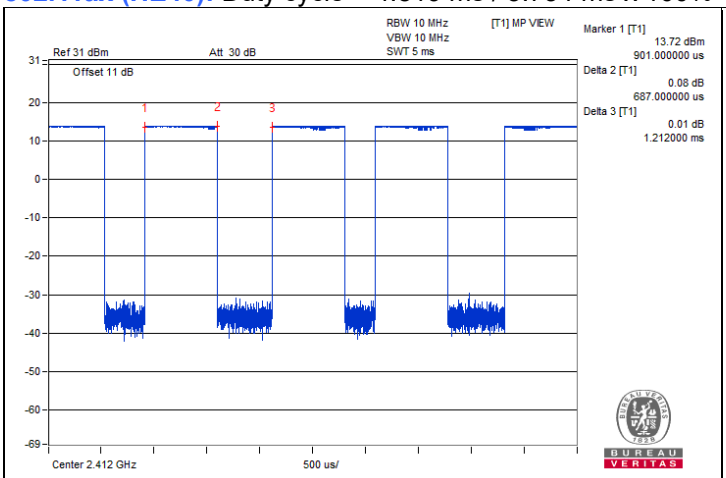
802.11ax (HE20)



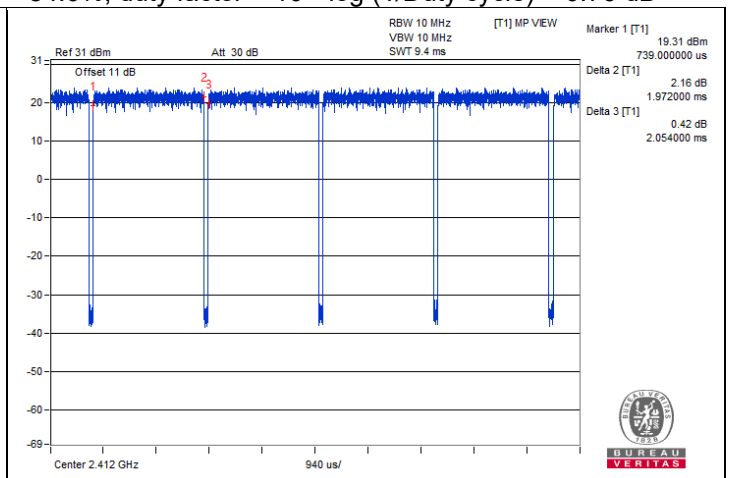
802.11ax (HE40)

Test Mode G

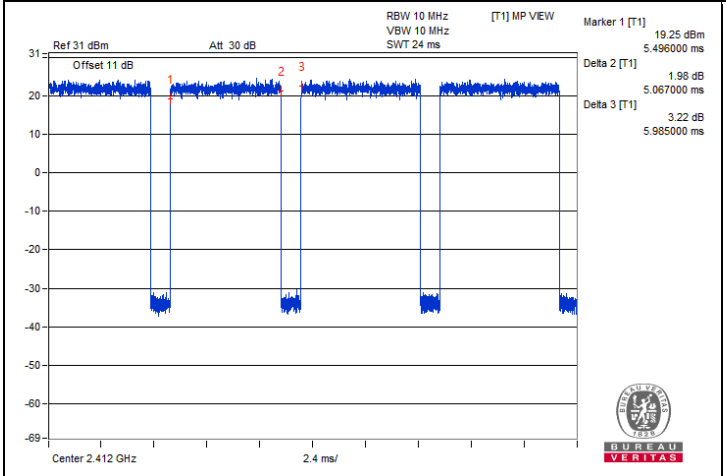
802.11b: Duty cycle = 0.687 ms / 1.212 ms x 100% = 56.7%, duty factor = 10 * log (1/Duty cycle) = 2.47 dB
802.11g: Duty cycle = 1.972 ms / 2.054 ms x 100% = 96.0%, duty factor = 10 * log (1/Duty cycle) = 0.18 dB
802.11ax (HE20): Duty cycle = 5.067 ms / 5.985 ms x 100% = 84.7%, duty factor = 10 * log (1/Duty cycle) = 0.72 dB
802.11ax (HE40): Duty cycle = 4.819 ms / 5.734 ms x 100% = 84.0%, duty factor = 10 * log (1/Duty cycle) = 0.76 dB



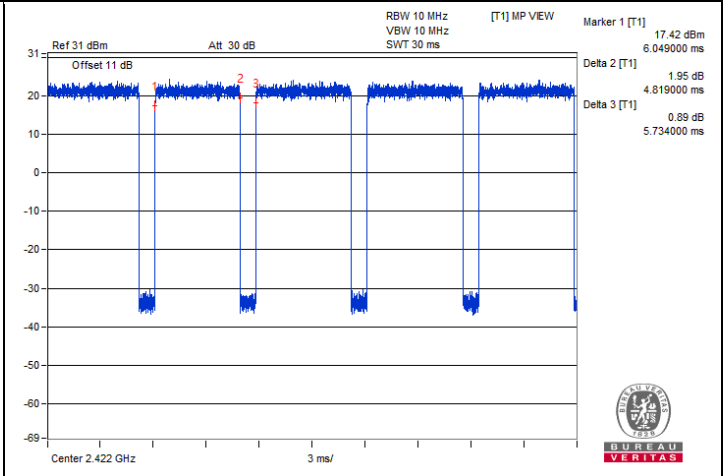
802.11b



802.11g



802.11ax (HE20)



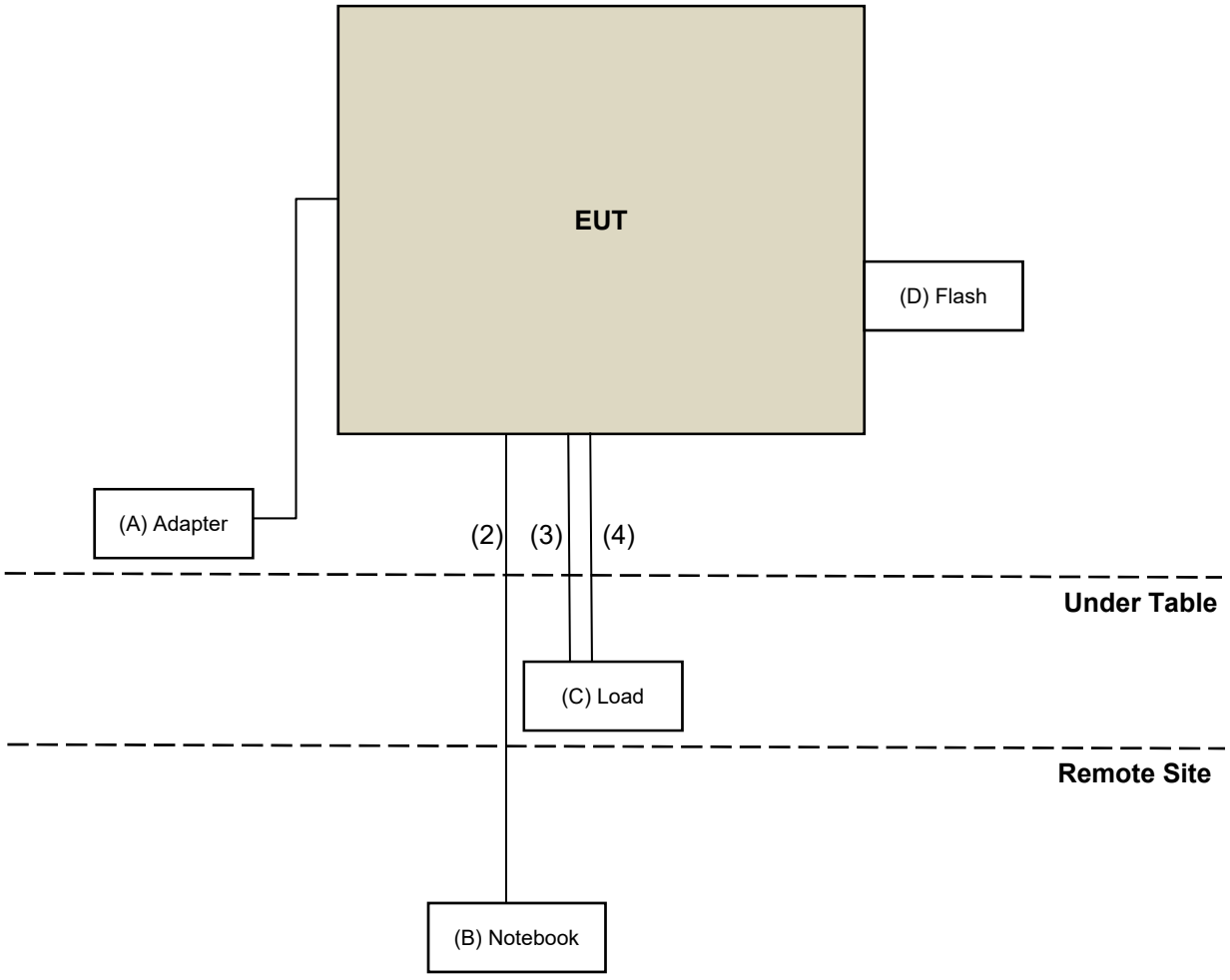
802.11ax (HE40)

3.6 Test Program Used and Operation Descriptions

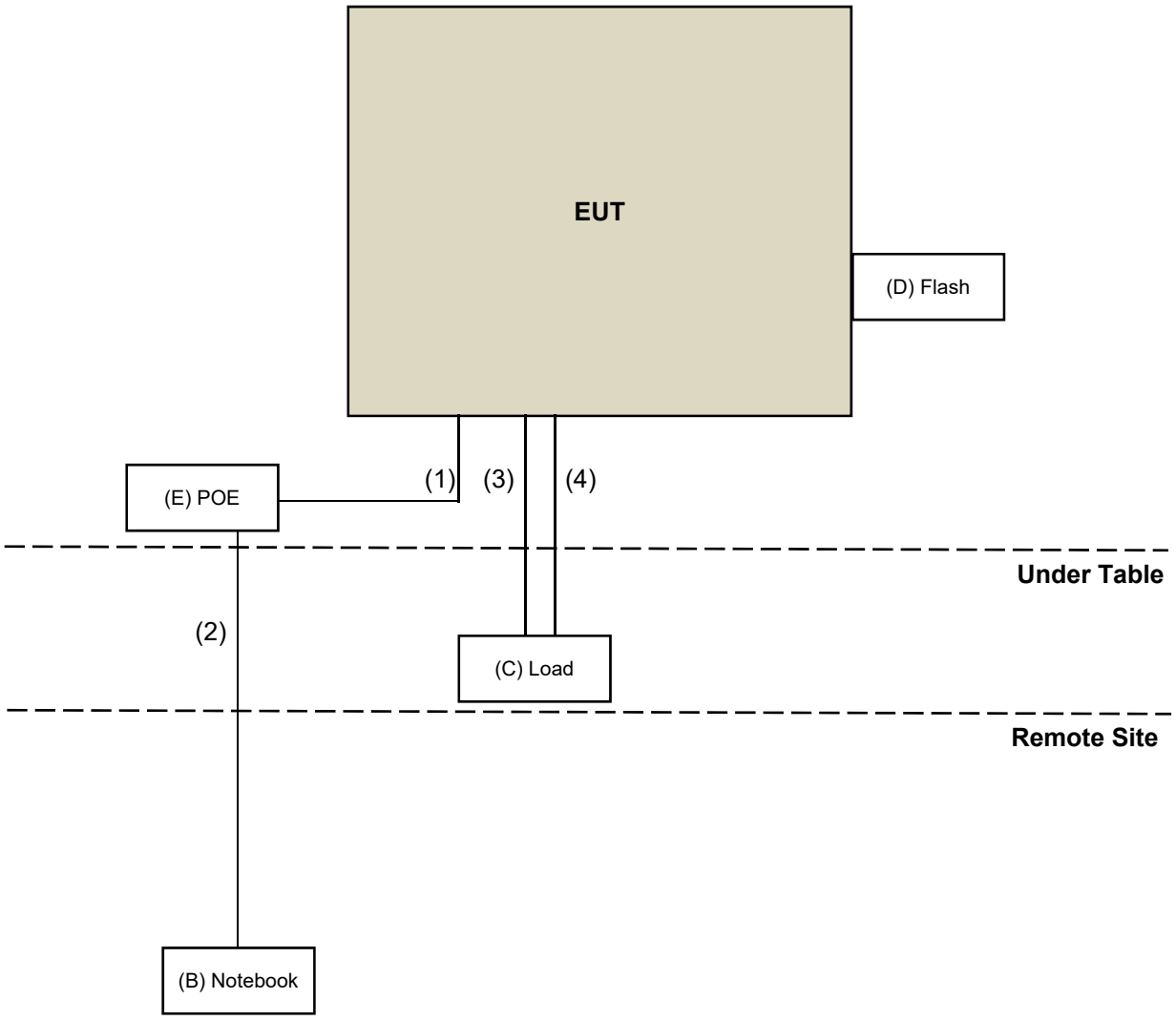
Controlling software (QSPR 5.0-00199) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Mode A, C, E, G



Mode B, D, F, H



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Adapter	Asian Power Devices Inc.	WA-48A12R	NA	NA	Provided by client
B.	Notebook	Lenovo	20J4 MD A003TW	PF-11H9AK	FCC DoC Approved	-
C.	Load	NA	NA	NA	NA	-
D.	USB Flash	SanDisk	NA	NA	NA	-
E.	PoE	Microsemi	PD-9501-10GC/AC	NA	NA	Provided by client

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN cable	1	1.5	N	0	RJ45, Cat5e
2.	LAN cable	1	10	N	0	RJ45, Cat5e
3.	LAN cable	1	1.5	N	0	RJ45, Cat5e
4.	LAN cable	1	1.5	N	0	RJ45, Cat5e

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	2022/1/18	2023/1/17
Power sensor Keysight	U2021XA	MY55380009	2022/3/23	2023/3/22
Wideband Power Sensor(N1923A) KEYSIGHT	N1923A	MY58020002	2022/1/17	2023/1/16

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/9/12 ~ 2022/10/29

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	100979	2022/3/25	2023/3/24

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2022/9/12 ~ 2022/10/29

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
DC-LISN SCHWARZBECK MESS-ELETRONIK	NNBM 8126G	8126G-069	2021/11/10	2022/11/9
LISN R&S	ESH3-Z5	100311	2022/9/12	2023/9/11
LISN ROHDE & SCHWARZ	ENV216	101826	2022/3/14	2023/3/13
RF Coaxial Cable WOKEN	5D-FB	Cable-cond1-01	2022/1/15	2023/1/14
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
Test Receiver Rohde&Schwarz	ESCI	100613	2021/12/3	2022/12/2
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2022/8/31	2023/8/30

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2022/9/21 ~ 2022/11/1

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A
Test Receiver R&S	ESR3	102579	2022/7/1	2023/6/30
MXA Signal Analyzer KEYSIGHT	N9020B	MY60110462	2021/12/21	2022/12/20
Pre-amplifier EMCI	EMC330N	980783	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-995	2021/10/28	2022/10/27
			2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201252	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201250	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201245	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2022/9/14 ~ 2022/11/2

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A
Test Receiver R&S	ESR3+	102782	2021/12/10	2022/12/9
Spectrum Analyzer R&S	FSW43	101866	2022/1/14	2023/1/13
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Pre_Amplifier EMCI	EMC330N	980782	2022/1/17	2023/1/16
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-1213	2021/10/27 2022/10/20	2022/10/26 2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201235	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201236	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2022/9/14 ~ 2022/11/2

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Antenna Tower KaiTuo	N/A	N/A	N/A	N/A
Antenna Tower Controller KaiTuo	KT-2000	N/A	N/A	N/A
Turn Table Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208675	N/A	N/A
Test Receiver R&S	ESR3	102579	2022/7/1	2023/6/30
MXA Signal Analyzer KEYSIGHT	N9020B	MY60110462	2021/12/21	2022/12/20
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Pre_Amplifier EMCI	EMC330N	980783	2022/1/17	2023/1/16
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-995	2021/10/28	2022/10/27
			2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201252	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201250	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201245	2022/1/17	2023/1/16
Horn Antenna RFSPIN	DRH18-E	210104A18E	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC118A45SE	980810	2021/12/30	2022/12/29
RF Coaxial Cable EMCI	EMC104-SM-SM-9000	201230	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-3000	201242	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-1000	210101	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 7.
2. Tested Date: 2022/8/11 ~ 2022/9/7

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFT-151SS-0.5T	NA	NA	NA
Turn Table Max-Full	MF-7802BS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208674	NA	NA
Test Receiver R&S	ESR3+	102782	2021/12/10	2022/12/9
Spectrum Analyzer R&S	FSW43	101866	2022/1/14	2023/1/13
Pre-amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2022/1/15	2023/1/14
Pre_Amplifier EMCI	EMC330N	980782	2022/1/17	2023/1/16
Bi-log Broadband Antenna Schwarzbeck	VULB9168	9168-1213	2021/10/27	2022/10/26
			2022/10/20	2023/10/19
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-3000	201235	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-9000	201236	2022/1/17	2023/1/16
Horn Antenna RFSPIN	DRH18-E	210103A18E	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC118A45SE	980808	2021/12/30	2022/12/29
RF Coaxial Cable EMCI	EMC104-SM-SM-1000	210102	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-3000	201231	2022/1/17	2023/1/16
RF Coaxial Cable EMCI	EMC104-SM-SM-9000	201243	2022/1/17	2023/1/16

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2022/8/11 ~ 2022/9/7

5 Limits of Test Items

5.1 RF Output Power

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30 dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

5.2 Power Spectral Density

The Maximum of Power Spectral Density Measurement is 8 dBm in any 3 kHz.

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

Below 30 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

5.5 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.6 Unwanted Emissions below 1 GHz

Radiated emissions up to 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30 dB below the highest level of the desired power:

Frequencies (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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.7 Unwanted Emissions above 1 GHz

Radiated emissions above 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

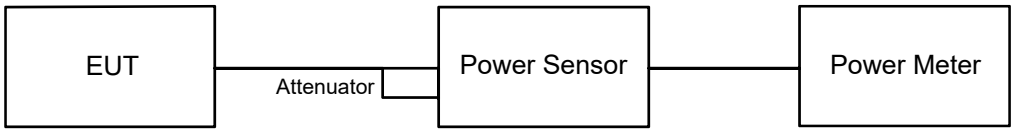
Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup

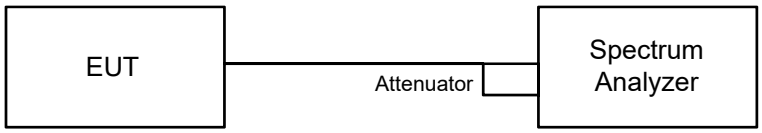


6.1.2 Test Procedure

Average Power:
Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

6.2 Power Spectral Density

6.2.1 Test Setup



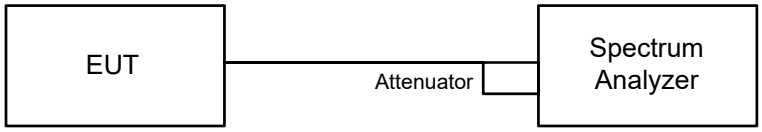
6.2.2 Test Procedure

a. Measure the duty cycle (x).
b. Set instrument center frequency to DTS channel center frequency.
c. Set span to at least 1.5 times the OBW.
d. Set RBW to: 3 kHz.
e. Set VBW ≥3 x RBW.
f. Detector = power averaging (RMS) or sample detector (when RMS not available).
g. Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
h. Sweep time = auto couple.
i. Do not use sweep triggering. Allow sweep to “free run”.
j. Employ trace averaging (RMS) mode over a minimum of 100 traces.
k. Use the peak marker function to determine the maximum amplitude level.

Note: If Duty cycle < 98%, Add 10 log (1/x), where x is the duty cycle measured in step (a, to the measured PSD to compute the average PSD during the actual transmission time.

6.3 6 dB Bandwidth

6.3.1 Test Setup

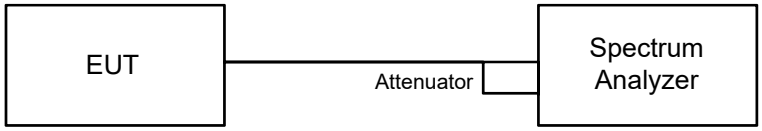


6.3.2 Test Procedure

a. Set resolution bandwidth (RBW) = 100 kHz.
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

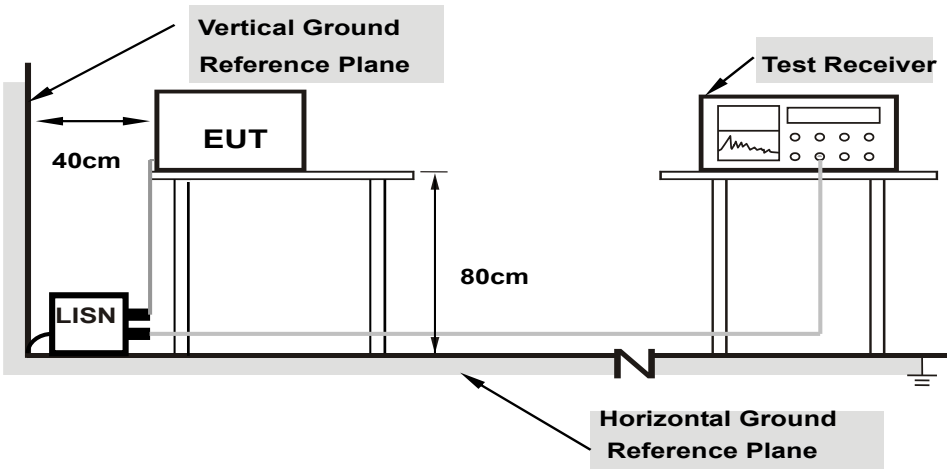
a. Set the RBW = 100 kHz.
b. Set the VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep time = auto couple.
e. Trace mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

a. Set RBW = 100 kHz.
b. Set VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep = auto couple.
e. Trace Mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum amplitude level.

6.5 AC Power Conducted Emissions

6.5.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.5.2 Test Procedure

a. The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

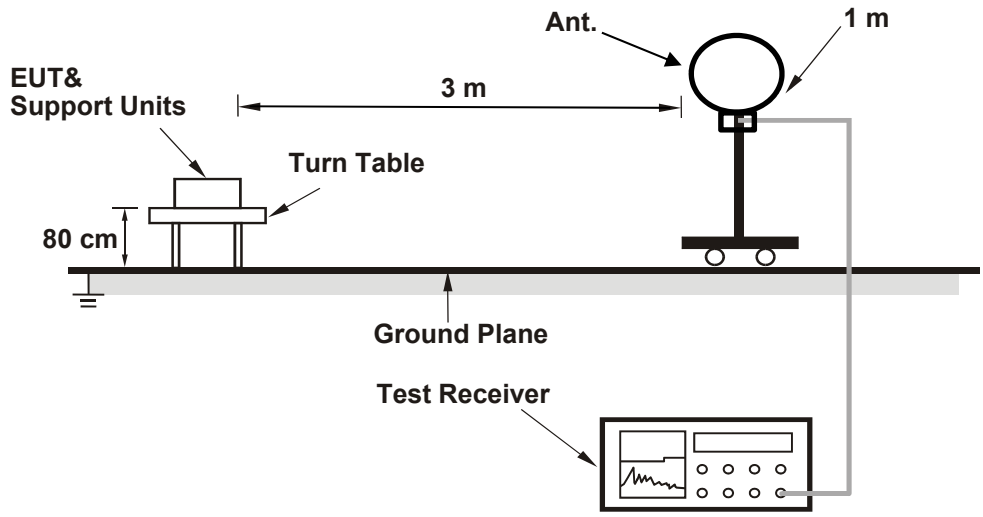
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

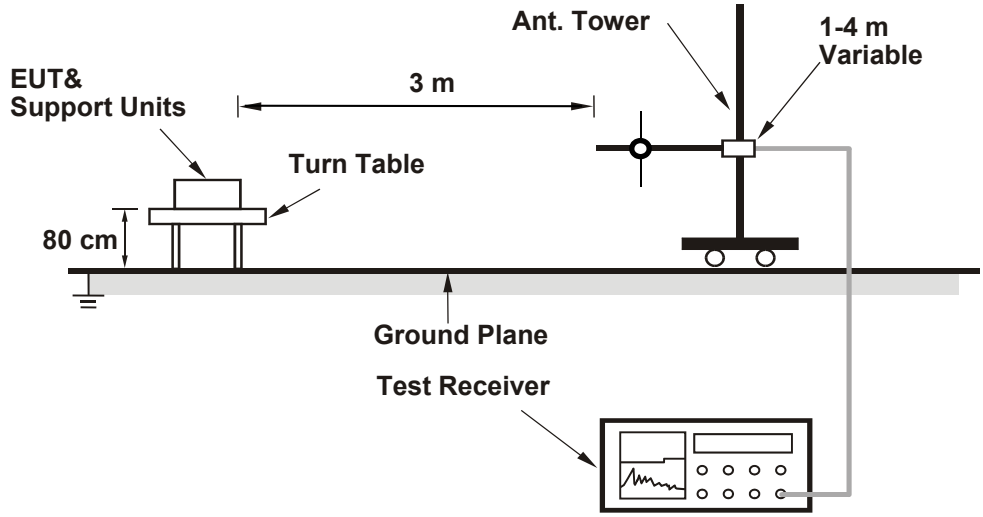
6.6 Unwanted Emissions below 1 GHz

6.6.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.6.2 Test Procedure

For Radiated emission below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

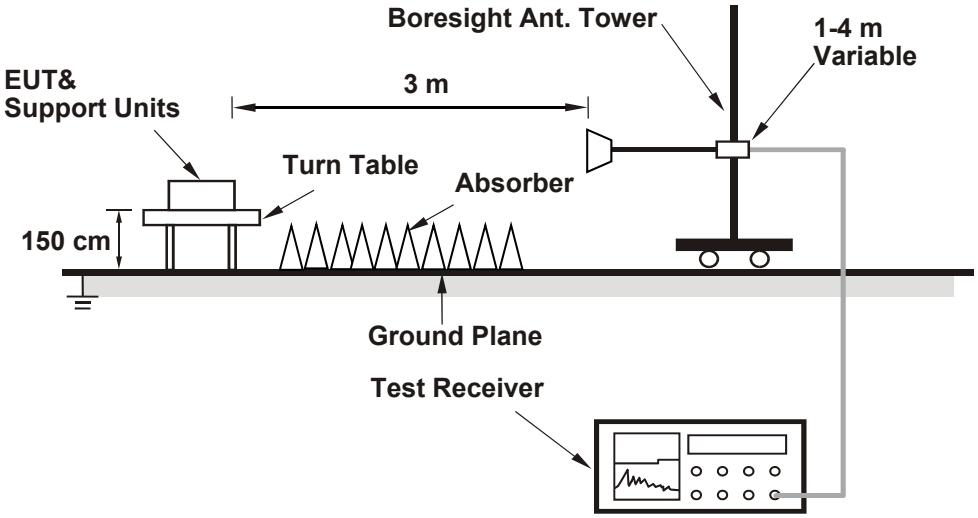
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 RF Output Power

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin

Test Mode A

802.11b CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	23.54	23.89	24.33	23.23	952.247	29.79	30	Pass
6	2437	23.70	23.94	24.61	23.10	975.407	29.89	30	Pass
11	2462	22.04	22.26	22.94	21.62	670.223	28.26	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.63	20.93	21.08	21.11	496.846	26.96	30	Pass
6	2437	22.70	23.28	23.74	22.87	829.257	29.19	30	Pass
11	2462	14.66	14.98	15.38	14.67	124.542	20.95	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.10	20.38	20.46	20.49	434.59	26.38	30	Pass
6	2437	23.28	23.35	23.65	23.17	868.317	29.39	30	Pass
11	2462	12.64	12.82	13.49	12.56	77.874	18.91	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.20	20.48	20.43	20.32	434.454	26.38	30	Pass
6	2437	17.90	18.38	18.30	18.21	264.355	24.22	30	Pass
9	2452	12.85	13.31	13.50	13.17	83.841	19.23	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.21	20.50	20.59	20.62	447.053	26.50	30	Pass
6	2437	23.40	23.47	23.78	23.28	892.702	29.51	30	Pass
11	2462	12.75	12.94	13.62	12.66	79.98	19.03	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT40 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.31	20.60	20.56	20.43	446.385	26.50	30	Pass
6	2437	18.02	18.50	18.41	18.32	271.444	24.34	30	Pass
9	2452	12.96	13.43	13.61	13.28	86.042	19.35	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.32	20.62	20.71	20.73	459.057	26.62	30	Pass
6	2437	23.51	23.59	23.91	23.39	917.258	29.62	30	Pass
11	2462	12.86	13.06	13.74	12.77	82.133	19.15	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.43	20.71	20.68	20.56	458.881	26.62	30	Pass
6	2437	18.13	18.31	18.52	18.44	273.722	24.37	30	Pass
9	2452	13.08	13.54	13.74	13.39	88.404	19.46	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 2.38 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.10	20.38	20.46	20.49	434.59	26.38	29.63	Pass
6	2437	23.28	23.35	23.65	23.17	868.317	29.39	29.63	Pass
11	2462	12.64	12.82	13.49	12.56	77.874	18.91	29.63	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.37 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.37-6) = 29.63 dBm.

802.11n (HT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.20	20.48	20.43	20.32	434.454	26.38	29.63	Pass
6	2437	17.90	18.38	18.30	18.21	264.355	24.22	29.63	Pass
9	2452	12.85	13.31	13.50	13.17	83.841	19.23	29.63	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.37 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.37-6) = 29.63 dBm.

VHT20 Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.21	20.50	20.59	20.62	447.053	26.50	29.63	Pass
6	2437	23.40	23.47	23.78	23.28	892.702	29.51	29.63	Pass
11	2462	12.75	12.94	13.62	12.66	79.98	19.03	29.63	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.37 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.37-6) = 29.63 dBm.

VHT40 Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.31	20.60	20.56	20.43	446.385	26.50	29.63	Pass
6	2437	18.02	18.50	18.41	18.32	271.444	24.34	29.63	Pass
9	2452	12.96	13.43	13.61	13.28	86.042	19.35	29.63	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.37 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.37-6) = 29.63 dBm.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.32	20.62	20.71	20.73	459.057	26.62	29.63	Pass
6	2437	23.51	23.59	23.91	23.39	917.258	29.62	29.63	Pass
11	2462	12.86	13.06	13.74	12.77	82.133	19.15	29.63	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.37 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.37-6) = 29.63 dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.43	20.71	20.68	20.56	458.881	26.62	29.63	Pass
6	2437	18.13	18.31	18.52	18.44	273.722	24.37	29.63	Pass
9	2452	13.08	13.54	13.74	13.39	88.404	19.46	29.63	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.37 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.37-6) = 29.63 dBm.

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin

Test Mode C

802.11b CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	8.56	8.74	14.66	11.66	30	Pass
6	2437	8.11	8.13	12.973	11.13	30	Pass
11	2462	9.25	9.35	17.024	12.31	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	18.64	18.82	149.322	21.74	30	Pass
6	2437	18.37	18.53	139.992	21.46	30	Pass
11	2462	18.50	18.61	143.405	21.57	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	17.38	17.51	111.065	20.46	30	Pass
6	2437	18.98	19.10	160.351	22.05	30	Pass
11	2462	17.61	17.70	116.561	20.67	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	18.89	18.90	155.071	21.91	30	Pass
6	2437	18.30	18.69	141.569	21.51	30	Pass
9	2452	16.42	16.54	88.935	19.49	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	17.50	17.64	114.311	20.58	30	Pass
6	2437	19.09	19.22	164.656	22.17	30	Pass
11	2462	17.72	17.83	119.83	20.79	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT40 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	19.01	19.03	159.599	22.03	30	Pass
6	2437	18.41	18.81	145.375	21.62	30	Pass
9	2452	16.54	16.67	91.533	19.62	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	17.62	17.77	117.651	20.71	30	Pass
6	2437	19.20	19.34	169.078	22.28	30	Pass
11	2462	17.84	17.96	123.331	20.91	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	19.13	19.16	164.26	22.16	30	Pass
6	2437	18.52	18.94	149.464	21.75	30	Pass
9	2452	16.67	16.79	94.204	19.74	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Gary Lin

Test Mode E

802.11b CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	22.78	23.85	23.61	23.01	861.933	29.35	30	Pass
6	2437	22.79	23.74	23.58	22.92	850.618	29.30	30	Pass
11	2462	22.21	22.12	22.07	21.35	626.794	27.97	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.16	20.49	20.33	19.90	421.315	26.25	30	Pass
6	2437	23.29	23.47	23.36	22.83	844.273	29.26	30	Pass
11	2462	16.72	16.99	17.04	16.42	191.428	22.82	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.20	20.32	20.25	19.87	415.336	26.18	30	Pass
6	2437	22.81	23.18	22.92	22.54	774.313	28.89	30	Pass
11	2462	13.62	14.03	13.77	13.41	94.059	19.73	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.51	20.80	20.74	20.29	458.169	26.61	30	Pass
6	2437	17.40	17.47	17.38	16.74	212.709	23.28	30	Pass
9	2452	13.52	13.86	13.79	13.39	92.573	19.66	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.32	20.45	20.37	19.97	426.769	26.30	30	Pass
6	2437	22.92	23.30	23.04	22.65	795.13	29.00	30	Pass
11	2462	13.73	14.15	13.90	13.51	96.592	19.85	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT40 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.63	20.93	20.86	20.40	471.038	26.73	30	Pass
6	2437	17.51	17.59	17.50	16.85	218.427	23.39	30	Pass
9	2452	13.67	13.99	13.90	13.50	95.276	19.79	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.43	20.57	20.48	20.08	437.978	26.41	30	Pass
6	2437	23.03	23.42	23.16	22.76	816.509	29.12	30	Pass
11	2462	13.84	14.27	14.02	13.62	99.19	19.96	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.74	21.05	20.99	20.52	484.25	26.85	30	Pass
6	2437	17.62	17.72	17.62	16.96	224.435	23.51	30	Pass
9	2452	13.78	14.12	14.02	13.61	97.897	19.91	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 5.65 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.20	20.32	20.25	19.87	415.336	26.18	29.41	Pass
6	2437	22.81	23.18	22.92	22.54	774.313	28.89	29.41	Pass
11	2462	13.62	14.03	13.77	13.41	94.059	19.73	29.41	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.59 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.59-6) = 29.41 dBm.

802.11n (HT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.51	20.80	20.74	20.29	458.169	26.61	29.41	Pass
6	2437	17.40	17.47	17.38	16.74	212.709	23.28	29.41	Pass
9	2452	13.52	13.86	13.79	13.39	92.573	19.66	29.41	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.59 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.59-6) = 29.41 dBm.

VHT20 Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.32	20.45	20.37	19.97	426.769	26.30	29.41	Pass
6	2437	22.92	23.30	23.04	22.65	795.13	29.00	29.41	Pass
11	2462	13.73	14.15	13.90	13.51	96.592	19.85	29.41	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.59 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.59-6) = 29.41 dBm.

VHT40 Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.63	20.93	20.86	20.40	471.038	26.73	29.41	Pass
6	2437	17.51	17.59	17.50	16.85	218.427	23.39	29.41	Pass
9	2452	13.67	13.99	13.90	13.50	95.276	19.79	29.41	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.59 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.59-6) = 29.41 dBm.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.43	20.57	20.48	20.08	437.978	26.41	29.41	Pass
6	2437	23.03	23.42	23.16	22.76	816.509	29.12	29.41	Pass
11	2462	13.84	14.27	14.02	13.62	99.19	19.96	29.41	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.59 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.59-6) = 29.41 dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	20.74	21.05	20.99	20.52	484.25	26.85	29.41	Pass
6	2437	17.62	17.72	17.62	16.96	224.435	23.51	29.41	Pass
9	2452	13.78	14.12	14.02	13.61	97.897	19.91	29.41	Pass

Notes:

1. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
2. The directional gain is 6.59 dBi > 6 dBi, so the output power limit shall be reduced to 30-(6.59-6) = 29.41 dBm.

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G

802.11b CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	11.36	11.28	27.105	14.33	30	Pass
6	2437	10.33	10.21	21.285	13.28	30	Pass
11	2462	10.63	10.41	22.551	13.53	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11g CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	19.41	19.36	173.595	22.40	30	Pass
6	2437	19.71	19.41	180.838	22.57	30	Pass
11	2462	17.54	17.63	114.697	20.60	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	19.37	19.39	173.393	22.39	30	Pass
6	2437	19.64	19.56	182.41	22.61	30	Pass
11	2462	17.55	17.51	113.249	20.54	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11n (HT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	20.44	20.43	220.834	23.44	30	Pass
6	2437	16.69	16.55	91.918	19.63	30	Pass
9	2452	14.61	14.43	56.655	17.53	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT20 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	19.51	19.42	176.829	22.48	30	Pass
6	2437	19.64	19.65	184.302	22.66	30	Pass
11	2462	17.58	17.54	114.034	20.57	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

VHT40 CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	20.52	20.50	224.922	23.52	30	Pass
6	2437	16.72	16.62	92.909	19.68	30	Pass
9	2452	14.64	14.47	57.097	17.57	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
1	2412	19.52	19.48	178.252	22.51	30	Pass
6	2437	19.71	19.69	186.651	22.71	30	Pass
11	2462	17.63	17.55	114.828	20.60	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
3	2422	20.66	20.52	229.132	23.60	30	Pass
6	2437	16.77	16.63	93.559	19.71	30	Pass
9	2452	14.64	14.52	57.421	17.59	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 3.11 dBi < 6 dBi, so the output power limit shall not be reduced.

7.2 Power Spectral Density

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin

Test Mode A

802.11b

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	-11.76	-11.35	-10.81	-12.00	2.38	-3.06	7.63	Pass
6	2437	-11.45	-11.39	-10.64	-12.03	2.38	-2.95	7.63	Pass
11	2462	-13.30	-13.19	-12.48	-13.63	2.38	-4.73	7.63	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.37 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.37-6) = 7.63 dBm/3kHz.

802.11g

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	-12.67	-12.40	-12.21	-12.27	0.39	-5.97	7.63	Pass
6	2437	-10.60	-9.99	-9.56	-10.55	0.39	-3.74	7.63	Pass
11	2462	-18.64	-18.28	-17.88	-18.62	0.39	-11.93	7.63	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.37 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.37-6) = 7.63 dBm/3kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	-16.66	-16.40	-16.34	-16.35	0.33	-10.09	7.63	Pass
6	2437	-13.42	-13.50	-13.20	-13.72	0.33	-7.11	7.63	Pass
11	2462	-24.14	-23.96	-23.24	-24.27	0.33	-17.53	7.63	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.37 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.37-6) = 7.63 dBm/3kHz.

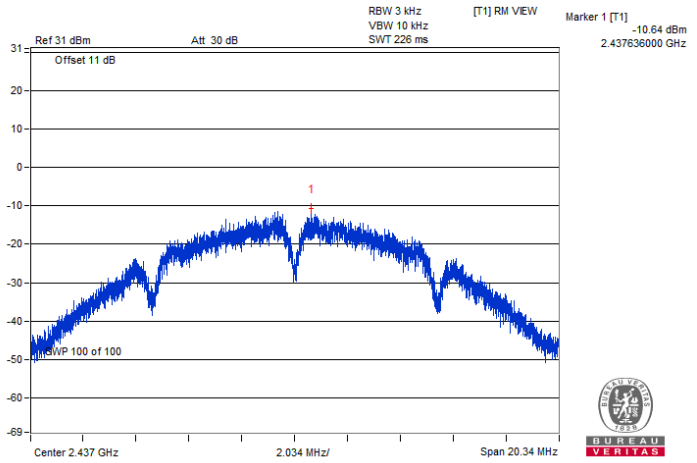
802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	-18.81	-18.53	-18.57	-18.67	0.27	-12.35	7.63	Pass
6	2437	-21.09	-20.49	-20.64	-20.74	0.27	-14.44	7.63	Pass
9	2452	-26.04	-25.71	-25.42	-25.78	0.27	-19.44	7.63	Pass

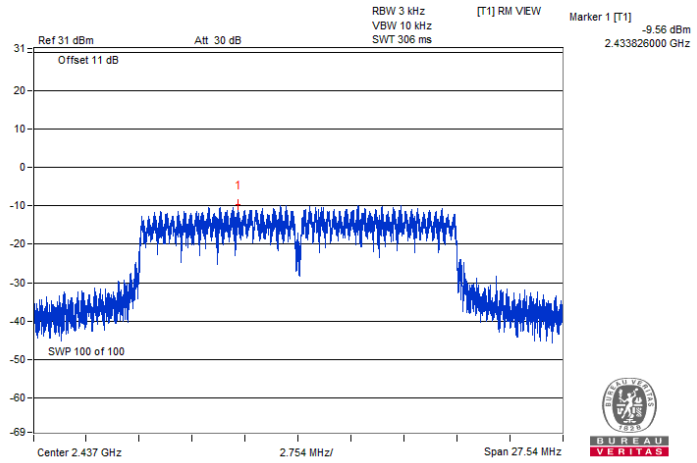
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.37 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.37-6) = 7.63 dBm/3kHz.

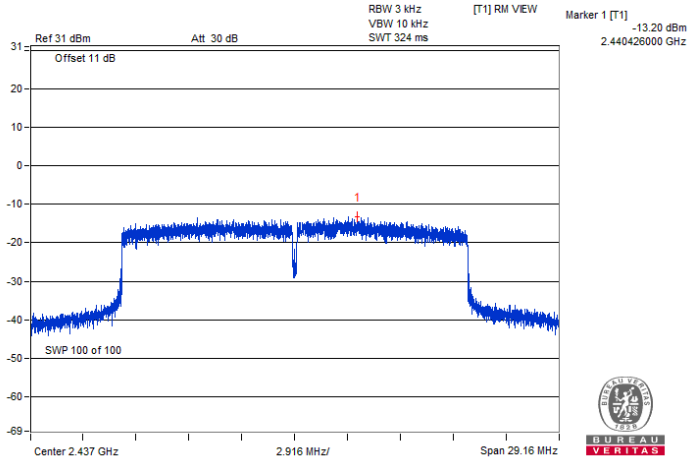
Spectrum Plot of Maximum Value



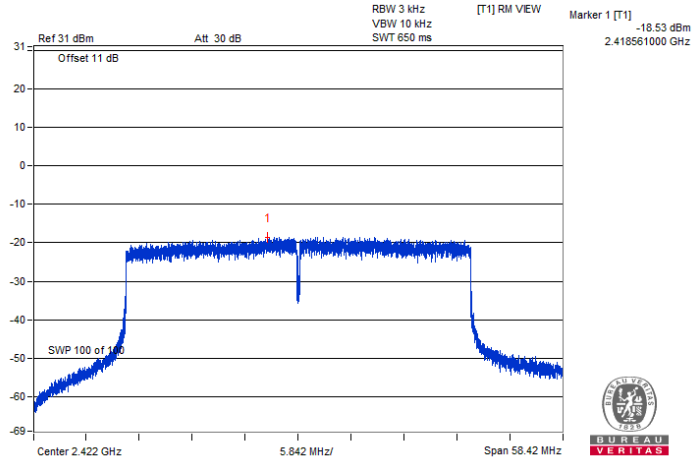
802.11b / Chain 2 : CH 6



802.11g / Chain 2 : CH 6



802.11ax (HE20) / Chain 2 : CH 6



802.11ax (HE40) / Chain 1 : CH 3

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin

Test Mode C

802.11b

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-27.99	-27.76	2.70	-22.16	8.00	Pass
6	2437	-28.37	-28.25	2.70	-22.60	8.00	Pass
11	2462	-27.32	-27.09	2.70	-21.49	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 0.84 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-15.70	-15.60	0.38	-12.26	8.00	Pass
6	2437	-15.93	-15.76	0.38	-12.45	8.00	Pass
11	2462	-15.79	-15.70	0.38	-12.36	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 0.84 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-20.87	-20.62	0.69	-17.04	8.00	Pass
6	2437	-19.41	-19.28	0.69	-15.64	8.00	Pass
11	2462	-20.66	-20.52	0.69	-16.89	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 0.84 dBi < 6 dBi, so the power density limit shall not be reduced.

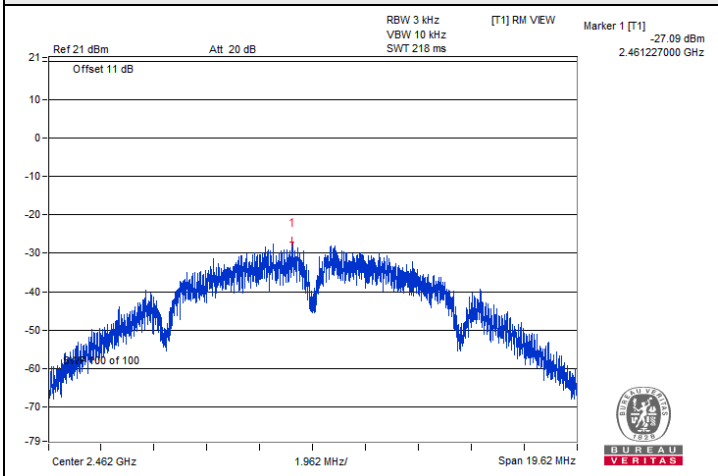
802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
3	2422	-21.21	-21.24	0.68	-17.53	8.00	Pass
6	2437	-21.73	-21.38	0.68	-17.86	8.00	Pass
9	2452	-23.69	-23.58	0.68	-19.94	8.00	Pass

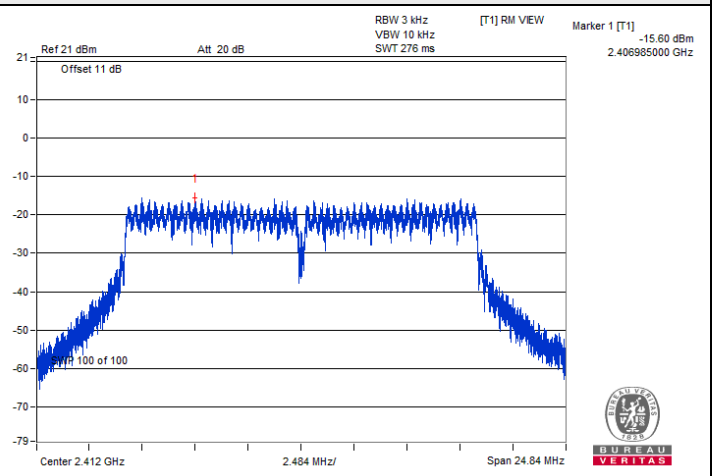
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 0.84 dBi < 6 dBi, so the power density limit shall not be reduced.

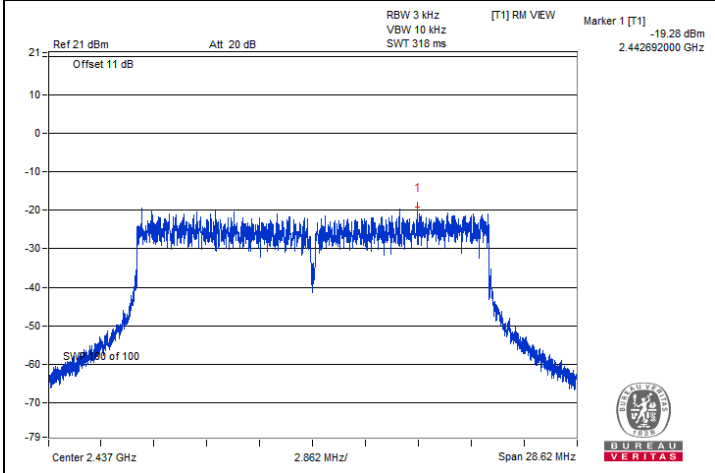
Spectrum Plot of Maximum Value



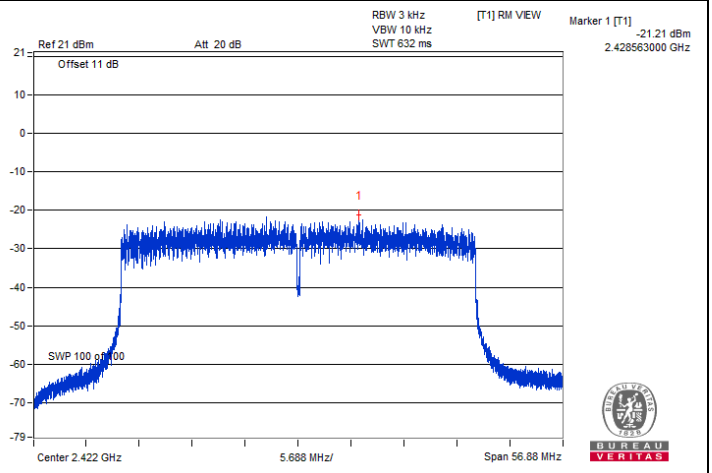
802.11b / Chain 1 : CH 11



802.11g / Chain 1 : CH 1



802.11ax (HE20) / Chain 1 : CH 6



802.11ax (HE40) / Chain 0 : CH 3

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Gary Lin

Test Mode E

802.11b

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	-10.91	-9.79	-9.90	-10.63	2.38	-1.88	7.41	Pass
6	2437	-10.93	-9.93	-10.06	-10.71	2.38	-1.99	7.41	Pass
11	2462	-11.55	-11.52	-11.53	-12.17	2.38	-3.29	7.41	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.59 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.59-6) = 7.41 dBm/3kHz.

802.11g

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	-13.08	-12.73	-12.89	-13.30	0.39	-6.59	7.41	Pass
6	2437	-9.96	-9.78	-9.80	-10.39	0.39	-3.57	7.41	Pass
11	2462	-16.46	-16.57	-16.03	-17.03	0.39	-10.10	7.41	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.59 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.59-6) = 7.41 dBm/3kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	-15.68	-15.58	-15.70	-16.11	0.60	-9.15	7.41	Pass
6	2437	-13.09	-12.68	-12.98	-13.31	0.60	-6.39	7.41	Pass
11	2462	-22.31	-21.87	-22.30	-22.19	0.60	-15.55	7.41	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.59 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.59-6) = 7.41 dBm/3kHz.

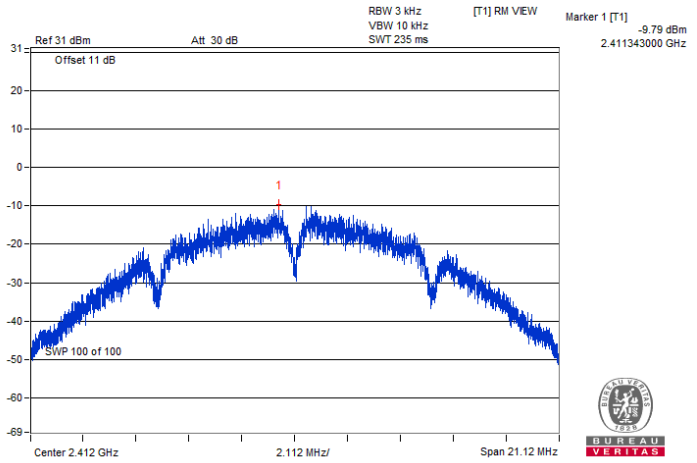
802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)				Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	-19.05	-18.76	-18.86	-19.28	0.22	-12.74	7.41	Pass
6	2437	-22.21	-21.74	-21.84	-22.57	0.22	-15.84	7.41	Pass
9	2452	-26.01	-25.41	-25.53	-25.92	0.22	-19.47	7.41	Pass

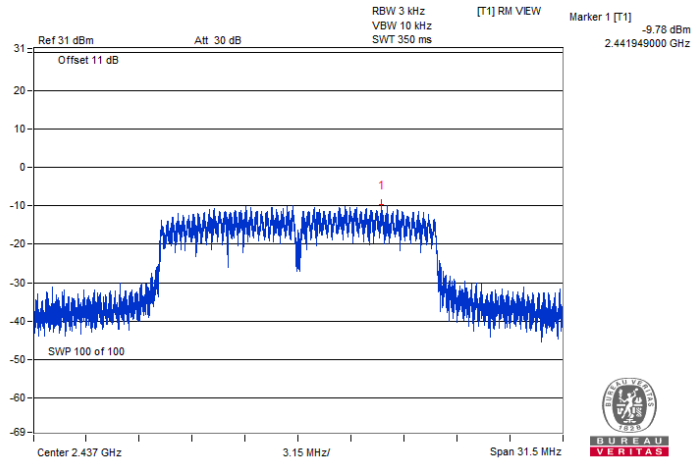
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 6.59 dBi > 6 dBi, so the power density limit shall be reduced to 8-(6.59-6) = 7.41 dBm/3kHz.

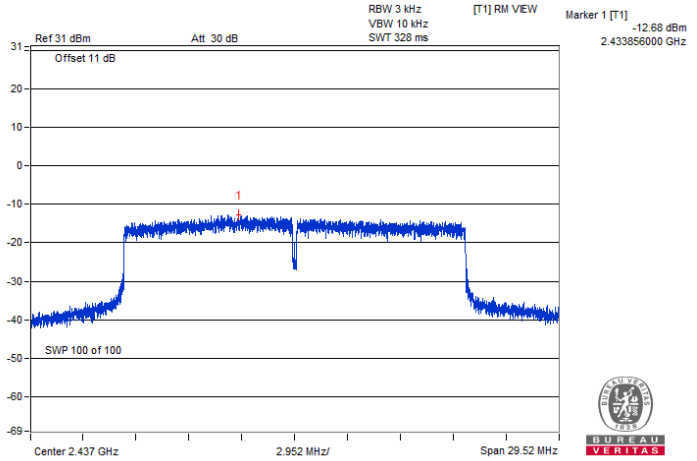
Spectrum Plot of Maximum Value



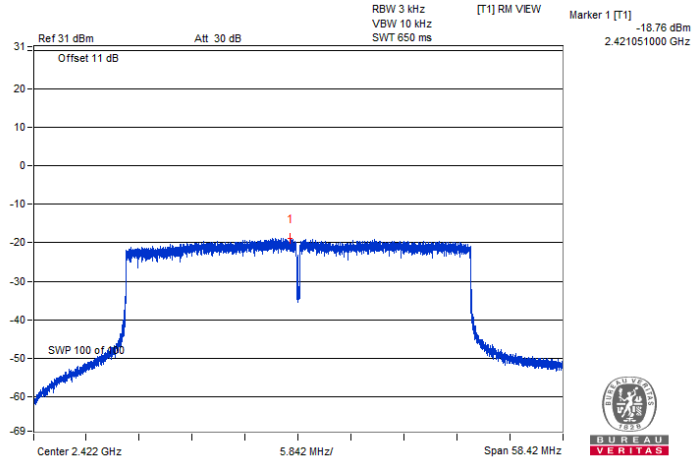
802.11b / Chain 1 : CH 1



802.11g / Chain 1 : CH 6



802.11ax (HE20) / Chain 1 : CH 6



802.11ax (HE40) / Chain 1 : CH 3

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G

802.11b

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-25.13	-25.24	2.47	-19.71	8.00	Pass
6	2437	-26.35	-26.73	2.47	-21.06	8.00	Pass
11	2462	-26.04	-26.24	2.47	-20.66	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 1.41 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11g

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-14.10	-14.27	0.18	-11.00	8.00	Pass
6	2437	-13.92	-14.12	0.18	-10.83	8.00	Pass
11	2462	-16.05	-16.35	0.18	-13.01	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 1.41 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
1	2412	-18.95	-18.92	0.72	-15.20	8.00	Pass
6	2437	-18.89	-18.67	0.72	-15.04	8.00	Pass
11	2462	-20.84	-20.71	0.72	-17.04	8.00	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 1.41 dBi < 6 dBi, so the power density limit shall not be reduced.

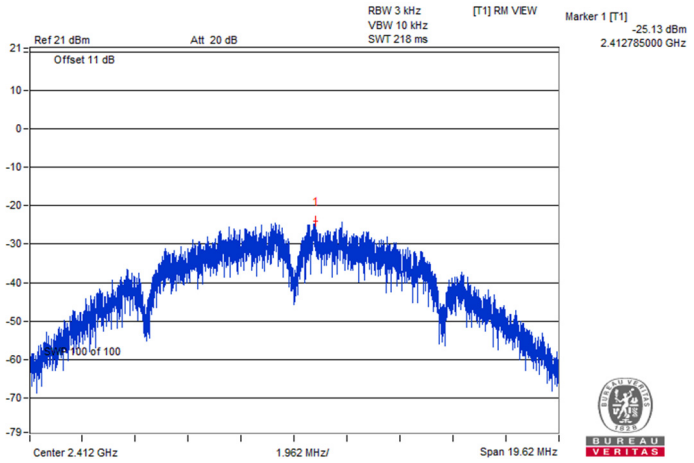
802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/3kHz)		Duty Factor (dB)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
		Chain 0	Chain 1				
3	2422	-19.00	-19.15	0.76	-15.31	8.00	Pass
6	2437	-22.83	-23.14	0.76	-19.22	8.00	Pass
9	2452	-25.03	-25.18	0.76	-21.34	8.00	Pass

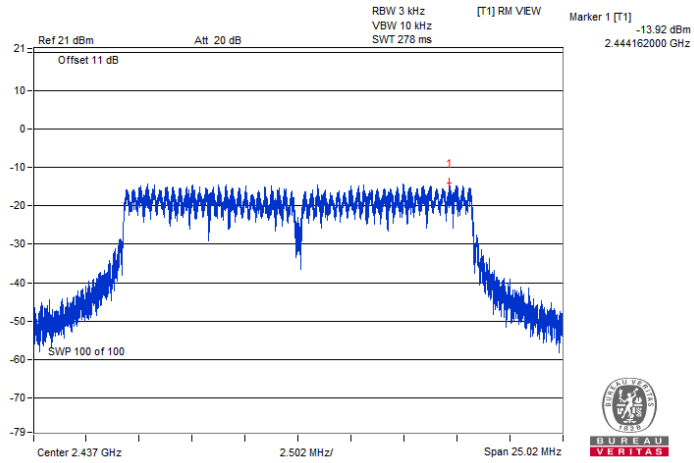
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain is the measured value according to KDB 662911 D03 Method of MIMO Antenna Gain Measurement.
3. The directional gain is 1.41 dBi < 6 dBi, so the power density limit shall not be reduced.

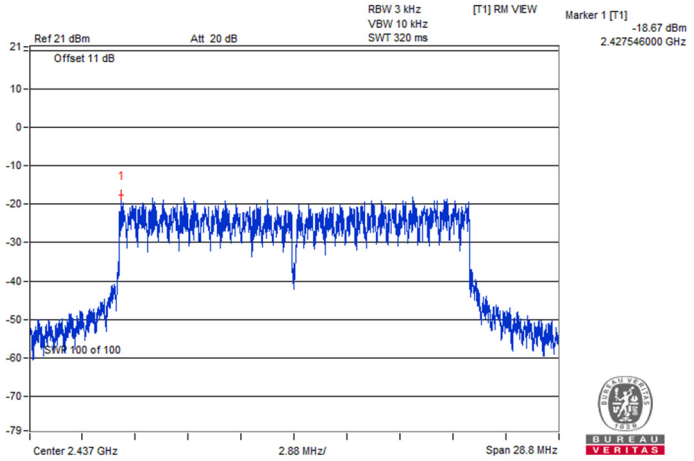
Spectrum Plot of Maximum Value



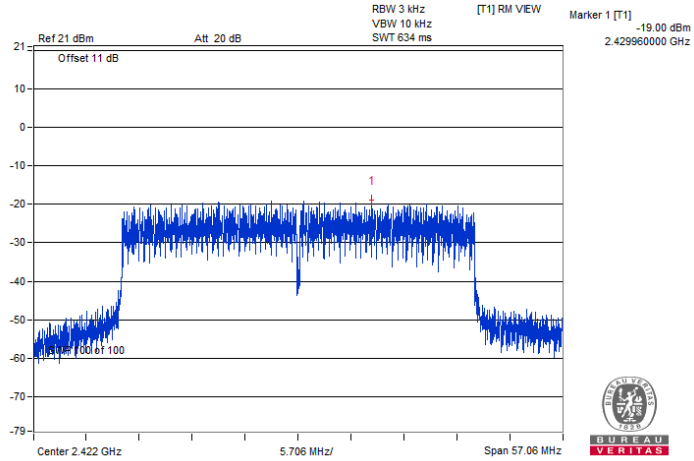
802.11b / Chain 0 : CH 1



802.11g / Chain 0 : CH 6



802.11ax (HE20) / Chain 1 : CH 6



802.11ax (HE40) / Chain 0 : CH 3

7.3 6 dB Bandwidth

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin

Test Mode A

802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	7.60	8.10	7.62	7.59	0.5	Pass
6	2437	8.06	8.07	7.63	8.10	0.5	Pass
11	2462	7.56	8.08	8.12	8.06	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	16.00	15.74	16.11	16.35	0.5	Pass
6	2437	15.59	15.64	16.10	16.33	0.5	Pass
11	2462	16.39	16.37	15.77	15.76	0.5	Pass

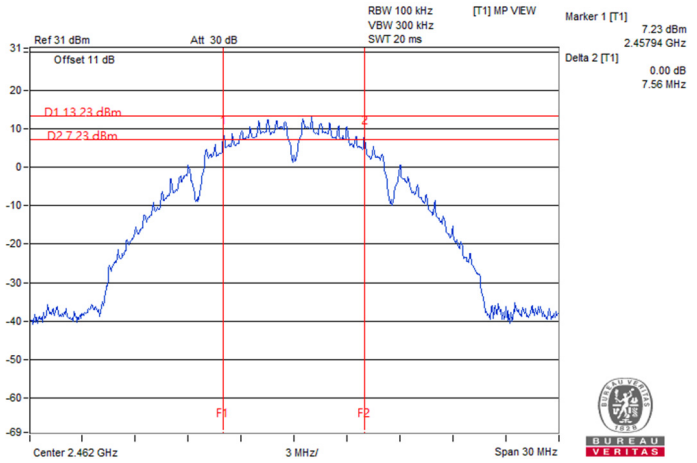
802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	18.75	18.86	18.84	18.92	0.5	Pass
6	2437	18.63	18.83	18.75	18.88	0.5	Pass
11	2462	18.89	18.70	18.94	18.91	0.5	Pass

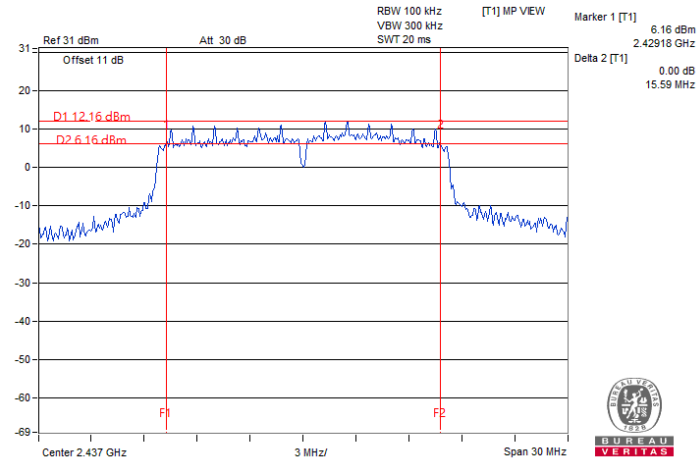
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
3	2422	37.98	37.90	38.06	38.14	0.5	Pass
6	2437	37.97	38.00	37.93	37.90	0.5	Pass
9	2452	37.90	38.05	37.94	38.20	0.5	Pass

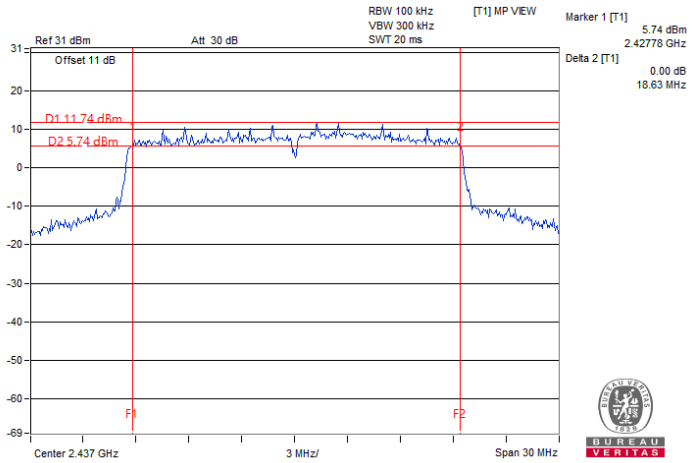
Spectrum Plot of Minimum Value



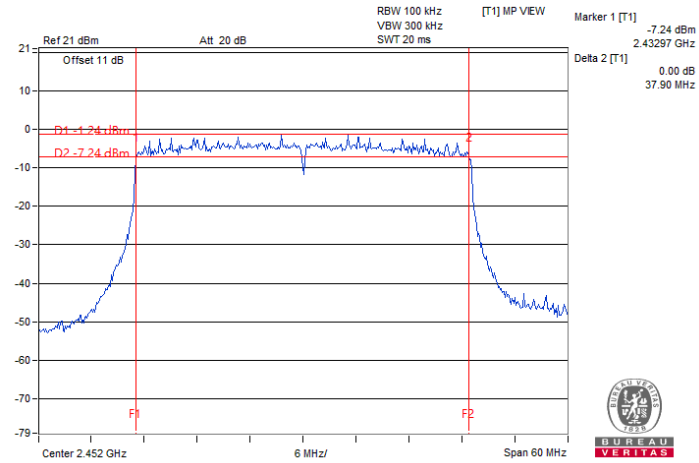
802.11b / Chain 0 : CH 11



802.11g / Chain 0 : CH 6



802.11ax (HE20) / Chain 0 : CH 6



802.11ax (HE40) / Chain 0 : CH 9

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin

Test Mode C

802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	8.09	8.07	0.5	Pass
6	2437	8.13	8.03	0.5	Pass
11	2462	8.07	8.09	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	16.39	16.41	0.5	Pass
6	2437	16.39	16.41	0.5	Pass
11	2462	16.40	16.44	0.5	Pass

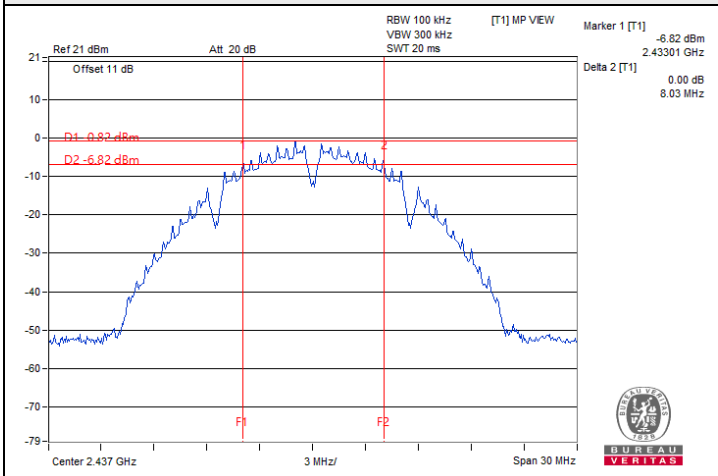
802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	19.14	19.10	0.5	Pass
6	2437	19.13	19.14	0.5	Pass
11	2462	19.10	19.14	0.5	Pass

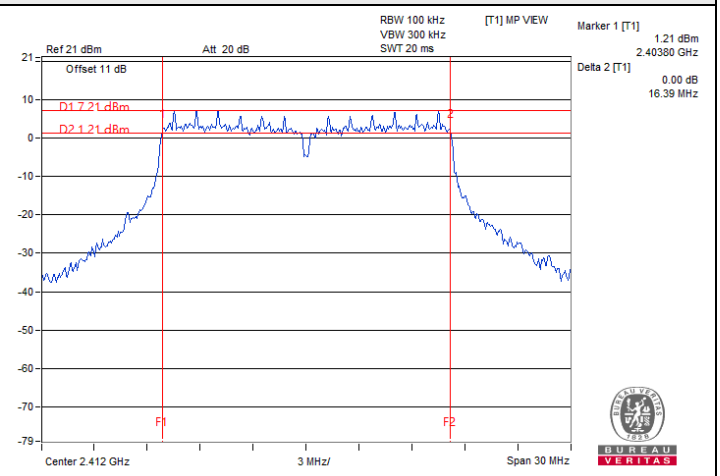
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	37.47	37.30	0.5	Pass
6	2437	37.05	37.94	0.5	Pass
9	2452	37.18	37.69	0.5	Pass

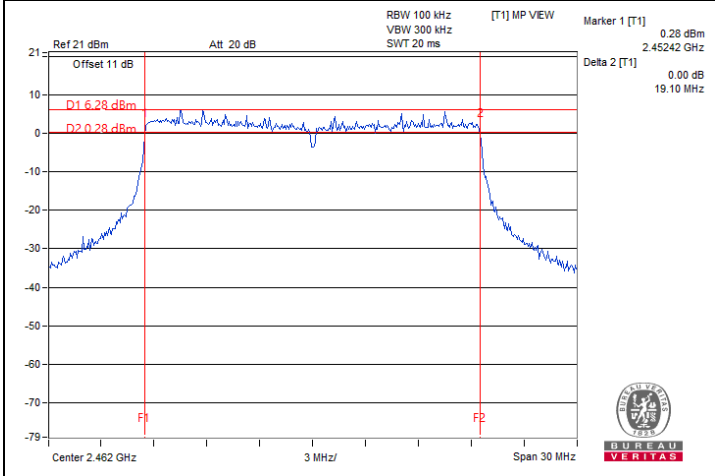
Spectrum Plot of Minimum Value



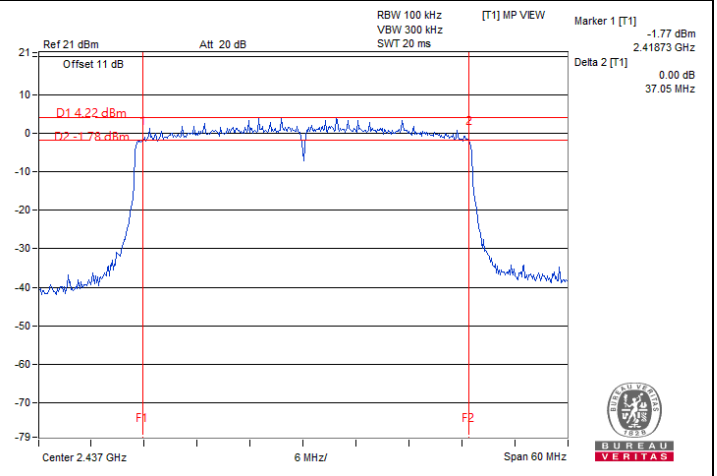
802.11b / Chain 1 : CH 6



802.11g / Chain 0 : CH 1



802.11ax (HE20) / Chain 0 : CH 11



802.11ax (HE40) / Chain 0 : CH 6

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Gary Lin

Test Mode E

802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	8.08	7.61	8.13	8.06	0.5	Pass
6	2437	7.13	8.08	7.62	8.06	0.5	Pass
11	2462	8.02	8.04	8.09	8.08	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	16.08	15.70	16.11	16.36	0.5	Pass
6	2437	15.57	15.37	16.34	16.09	0.5	Pass
11	2462	15.96	15.73	16.37	16.38	0.5	Pass

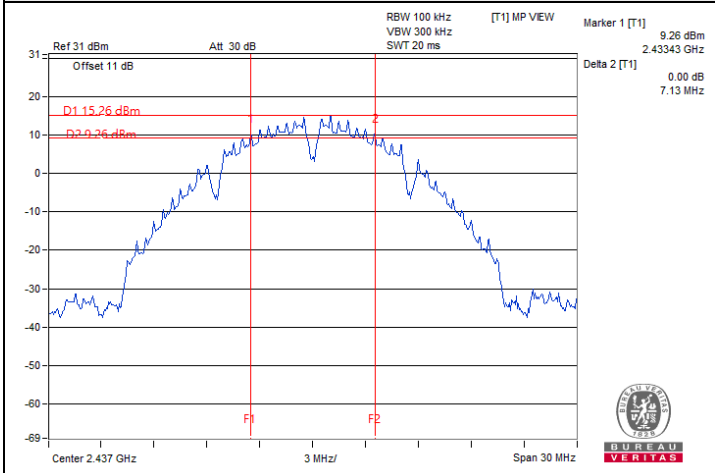
802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	18.91	18.88	18.58	18.86	0.5	Pass
6	2437	18.94	18.77	18.68	18.83	0.5	Pass
11	2462	19.02	18.90	18.75	19.01	0.5	Pass

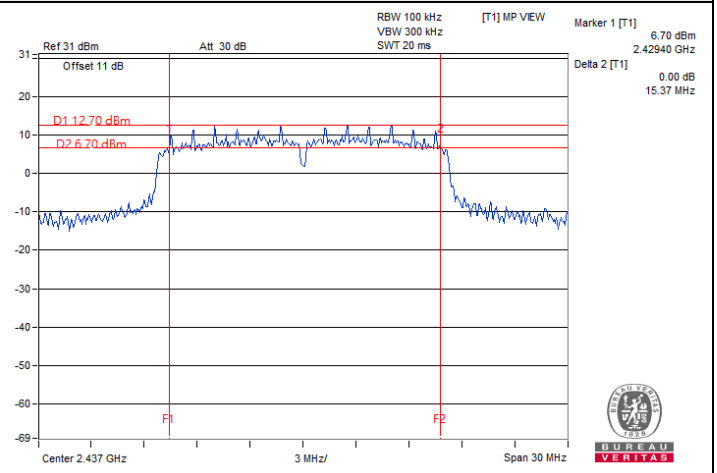
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
3	2422	38.02	38.14	38.03	38.01	0.5	Pass
6	2437	37.93	38.12	38.11	37.88	0.5	Pass
9	2452	37.81	38.01	37.99	37.88	0.5	Pass

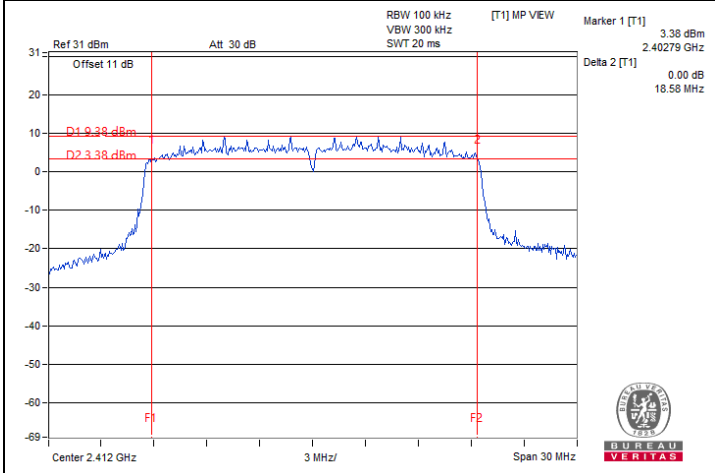
Spectrum Plot of Minimum Value



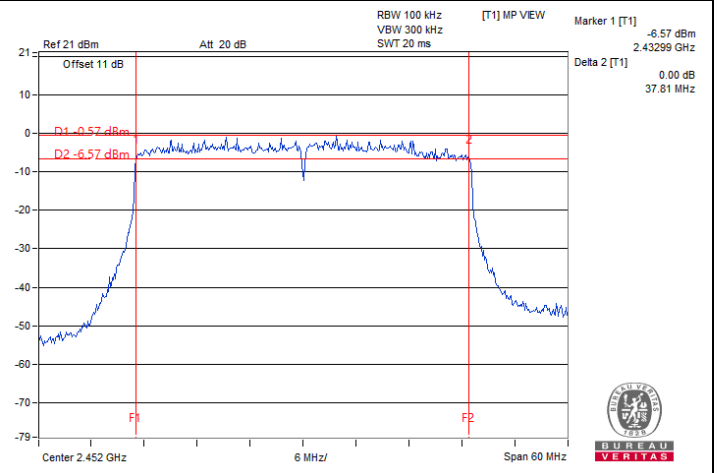
802.11b / Chain 0 : CH 6



802.11g / Chain 1 : CH 6



802.11ax (HE20) / Chain 2 : CH 1



802.11ax (HE40) / Chain 0 : CH 9

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu

Test Mode G

802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	8.09	8.09	0.5	Pass
6	2437	8.09	7.61	0.5	Pass
11	2462	7.65	8.11	0.5	Pass

802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	16.41	16.43	0.5	Pass
6	2437	16.38	16.41	0.5	Pass
11	2462	16.41	16.44	0.5	Pass

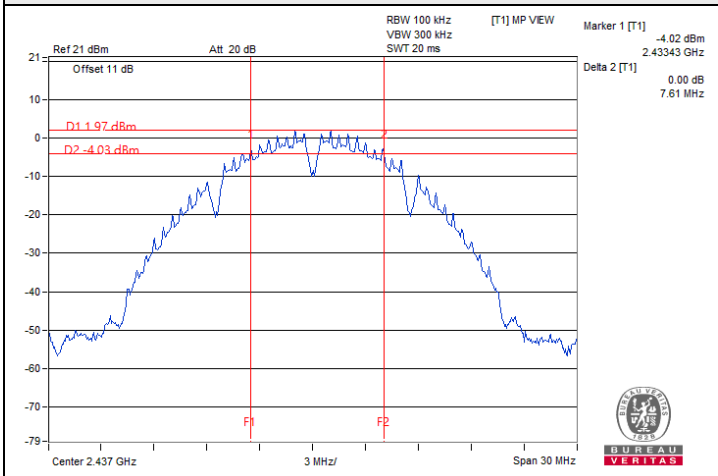
802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	2412	19.13	19.13	0.5	Pass
6	2437	19.16	19.14	0.5	Pass
11	2462	19.12	19.18	0.5	Pass

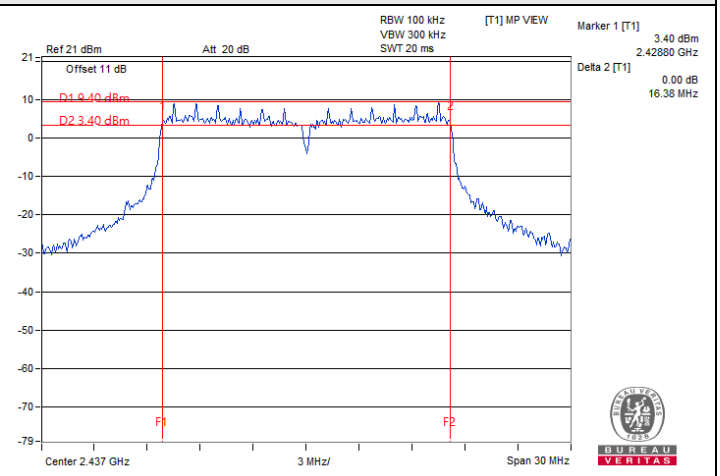
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	2422	37.95	37.73	0.5	Pass
6	2437	37.41	37.92	0.5	Pass
9	2452	36.48	37.63	0.5	Pass

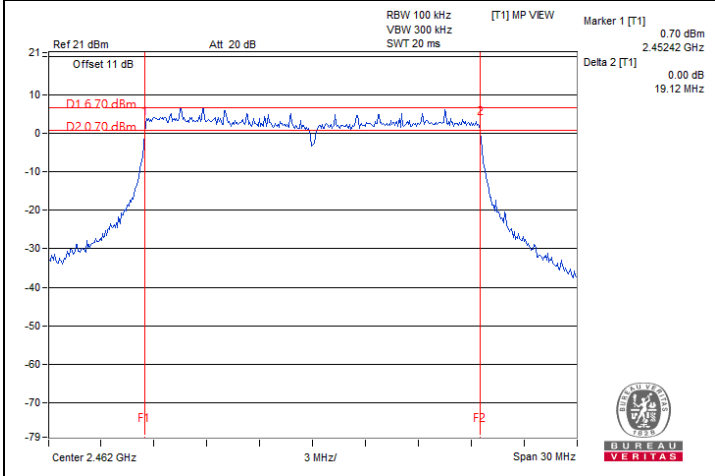
Spectrum Plot of Minimum Value



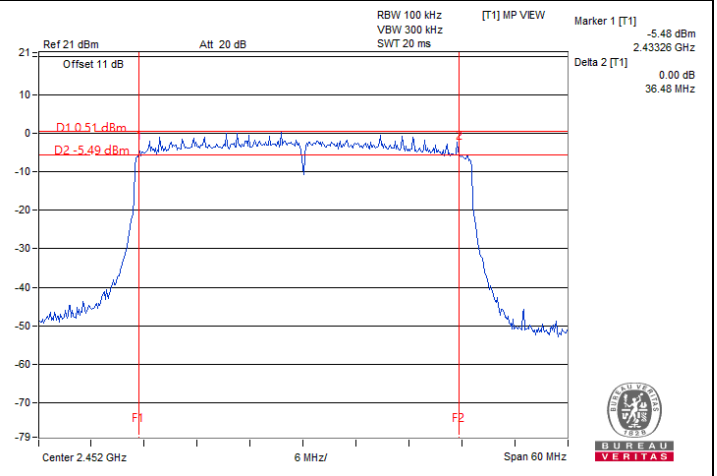
802.11b / Chain 1 : CH 6



802.11g / Chain 0 : CH 6



802.11ax (HE20) / Chain 0 : CH 11



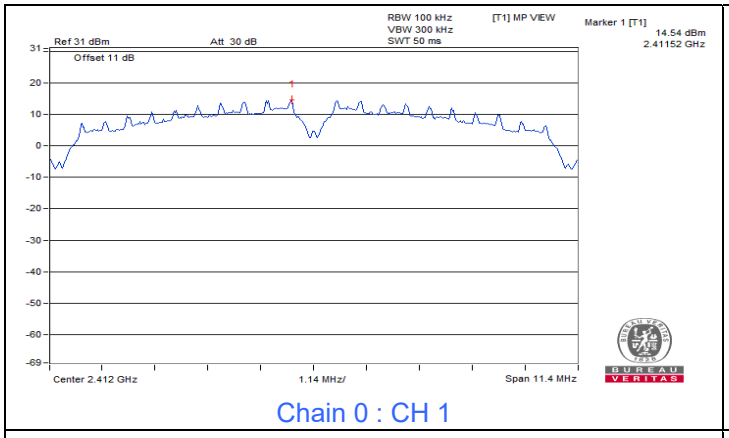
802.11ax (HE40) / Chain 0 : CH 9

7.4 Conducted Out of Band Emissions

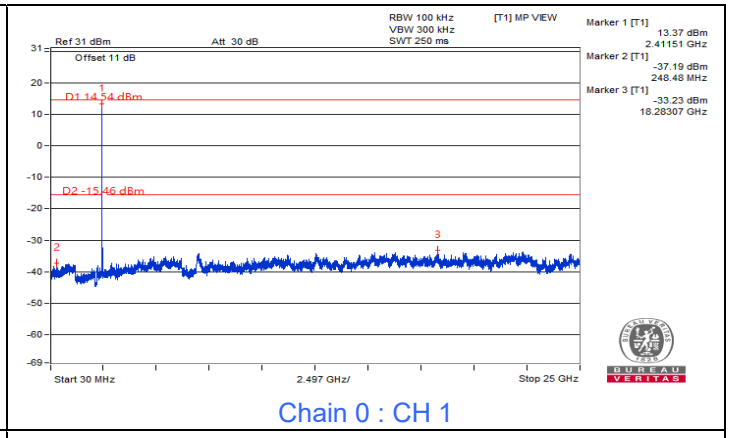
Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chun Wu / Gary Lin

Test Mode A

802.11b



Chain 0 : CH 1



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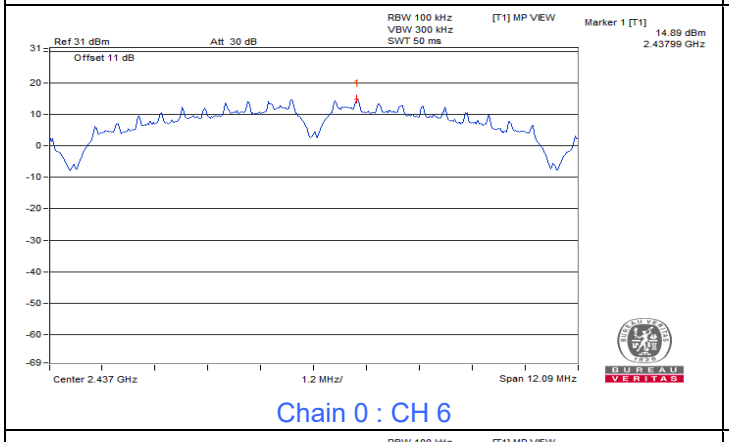
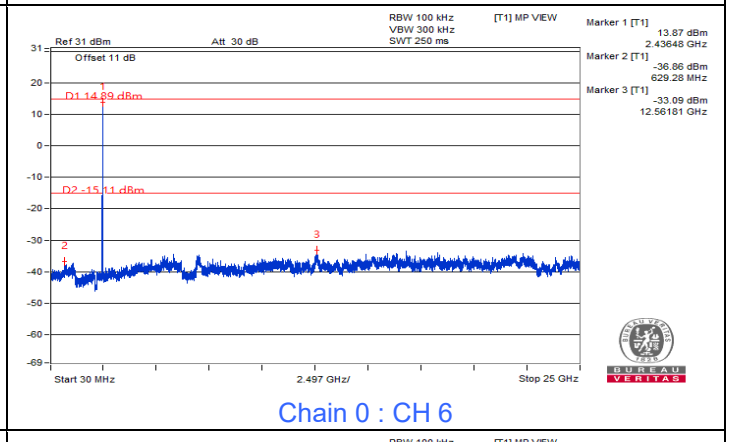


Chain 0 : CH 6



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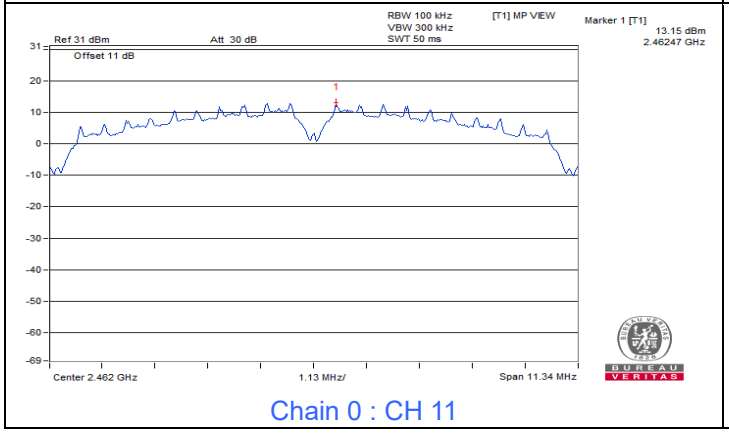

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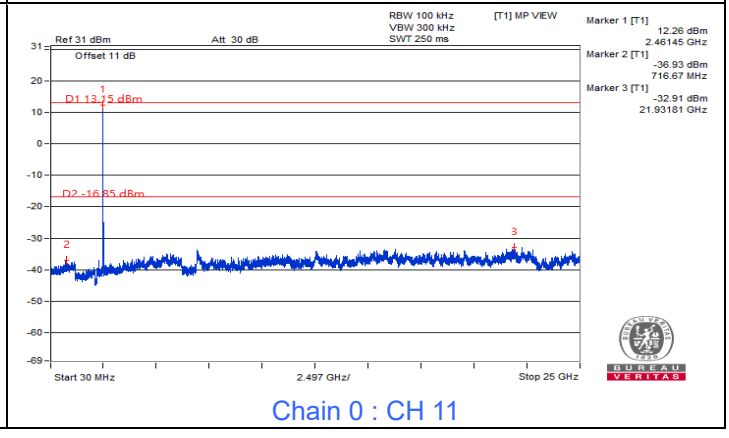

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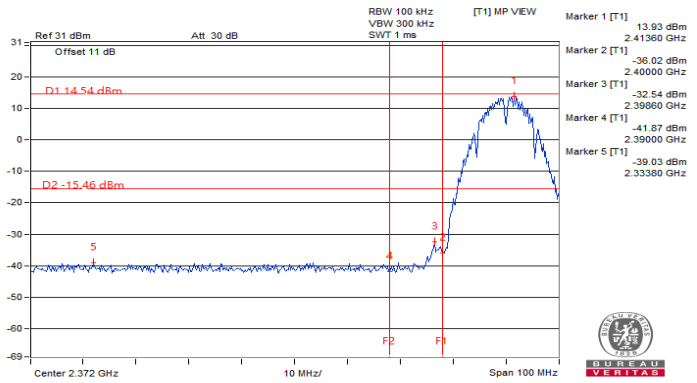
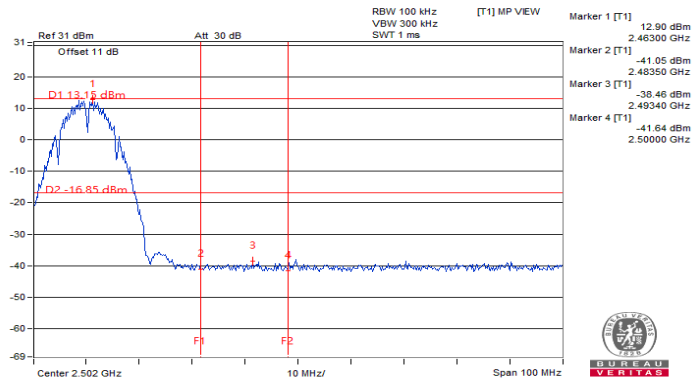
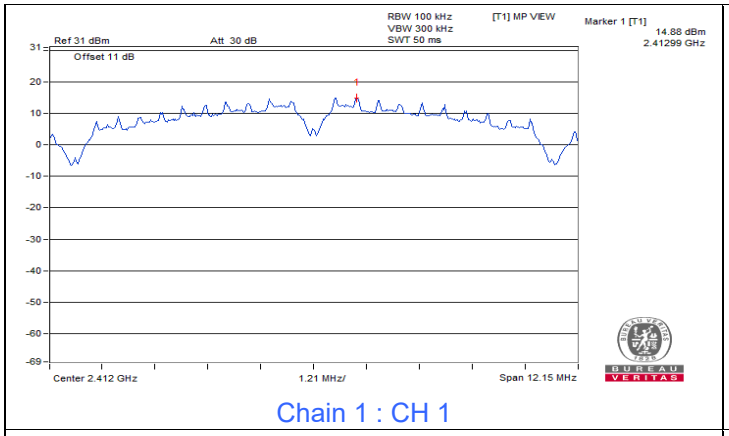


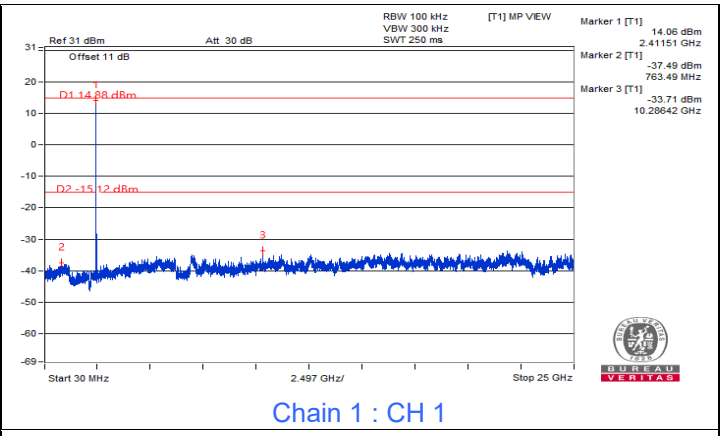
Chain 0 : CH 1 Band edge



Chain 0 : CH 11 Band edge



Chain 1 : CH 1



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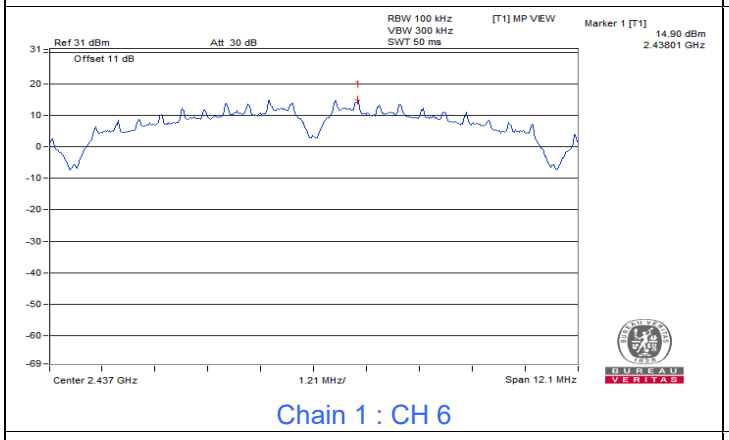

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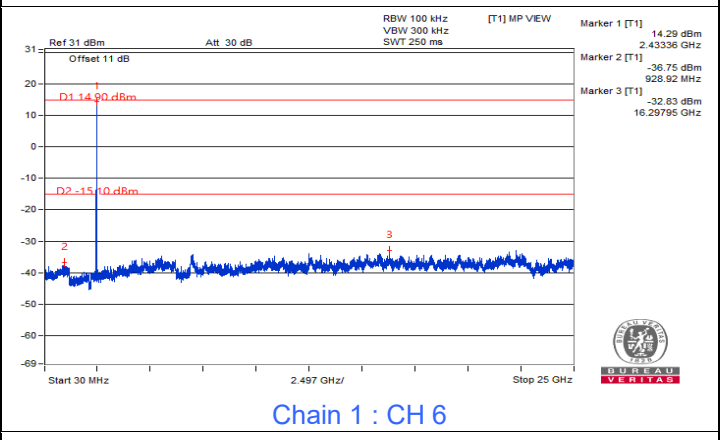

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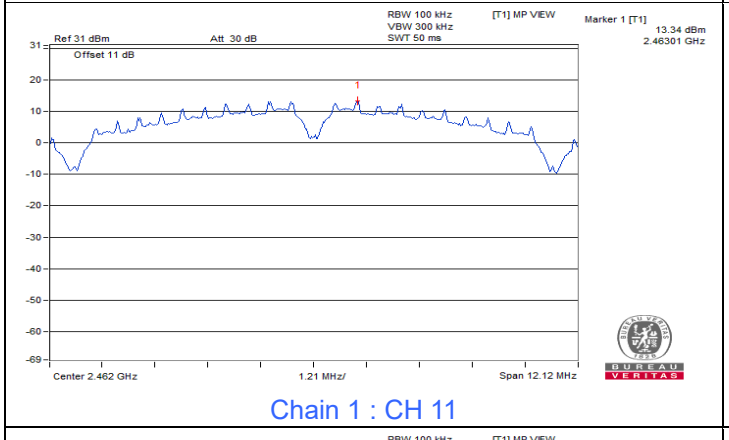

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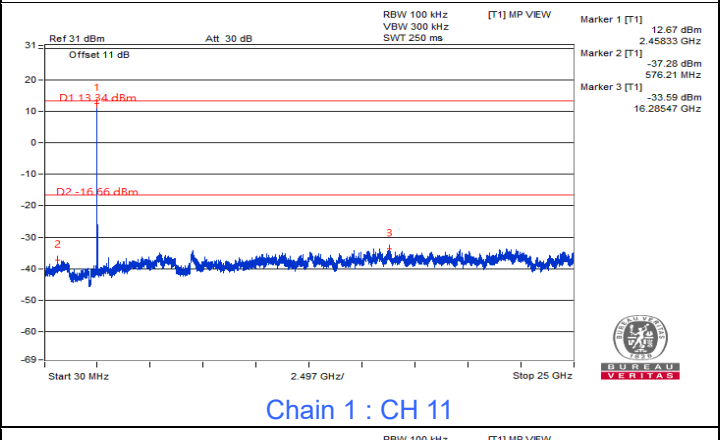

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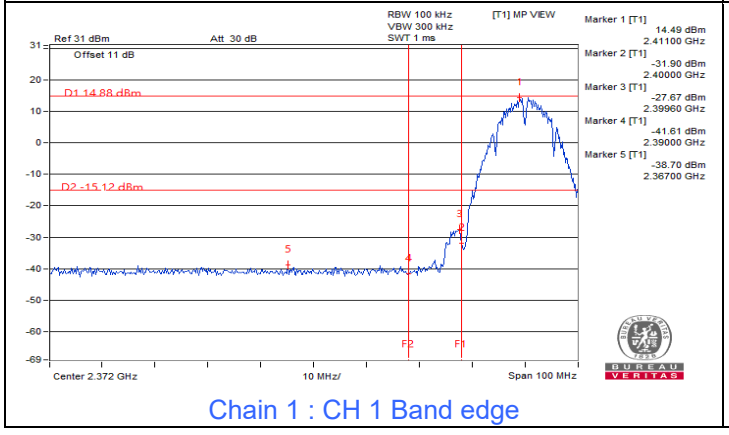
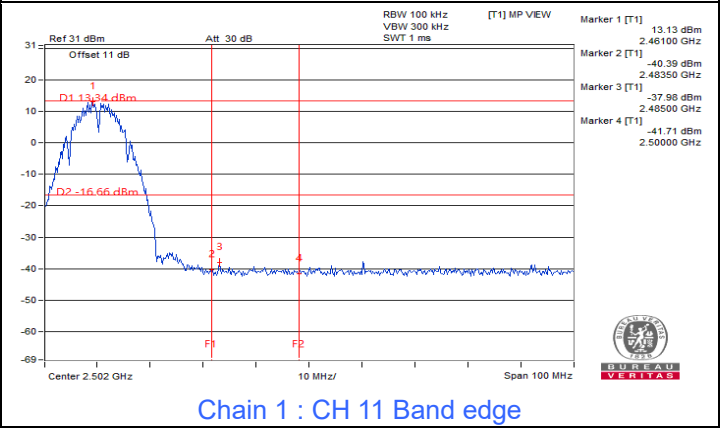
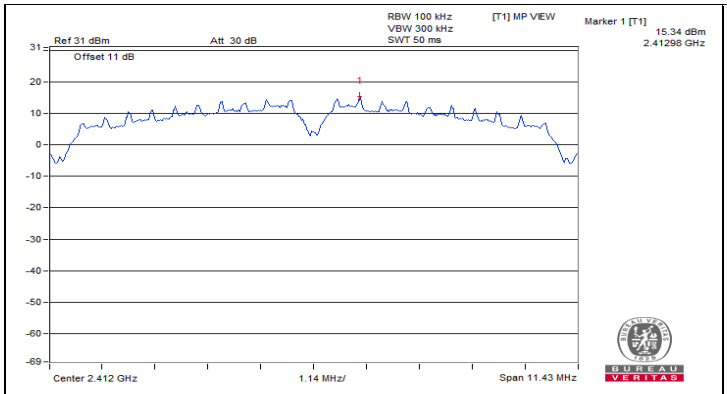


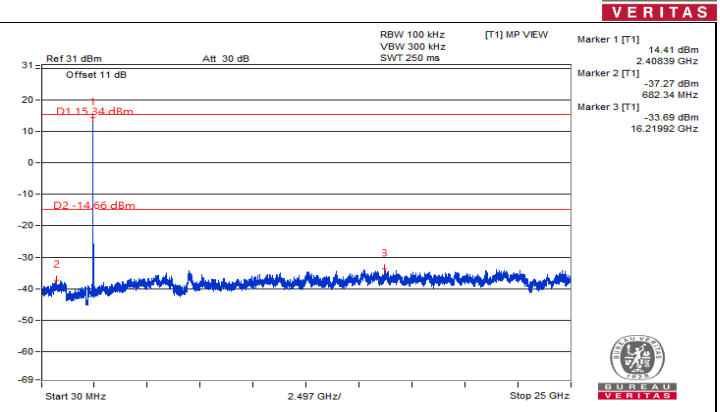
Chain 1 : CH 1 Band edge



Chain 1 : CH 11 Band edge



Chain 2 : CH 1



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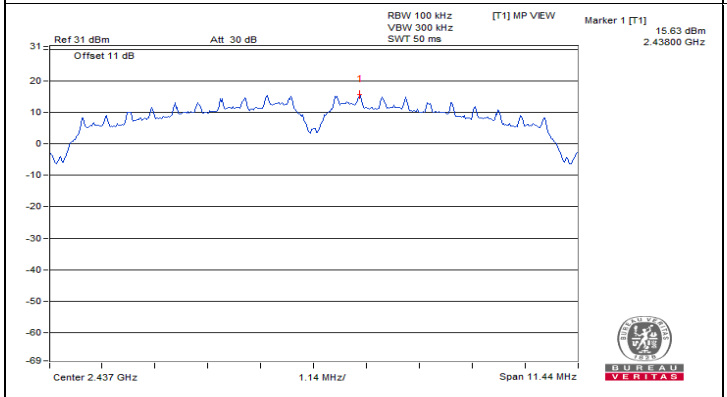

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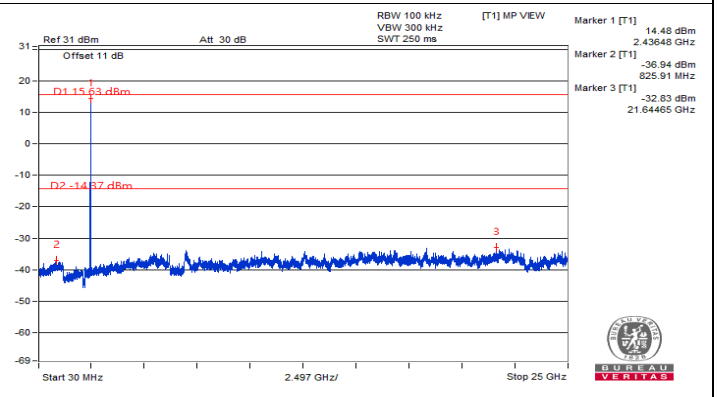

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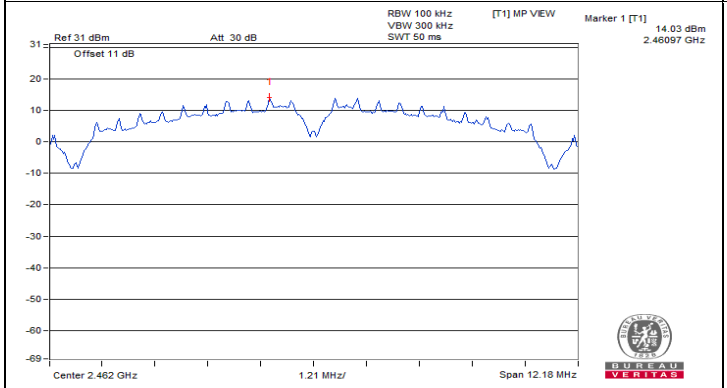

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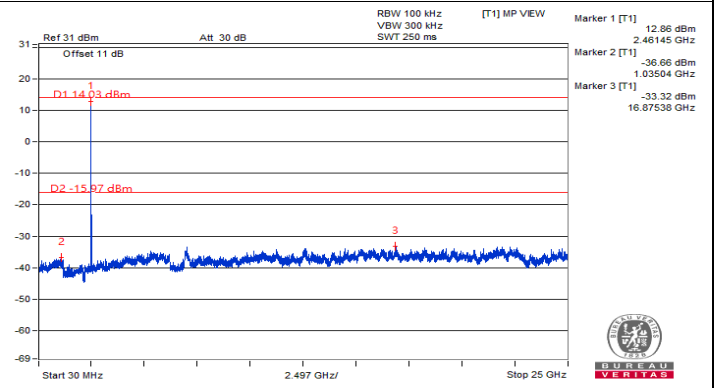
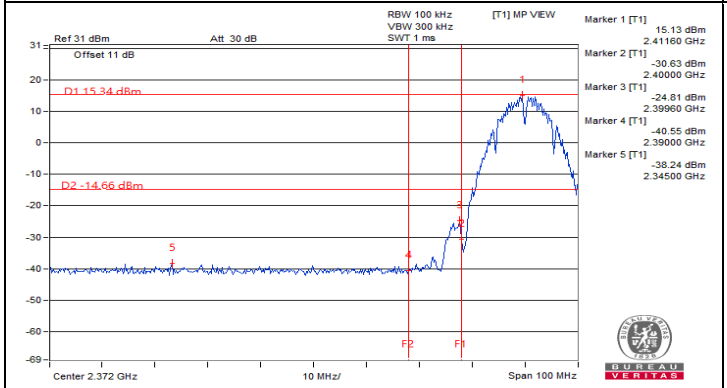
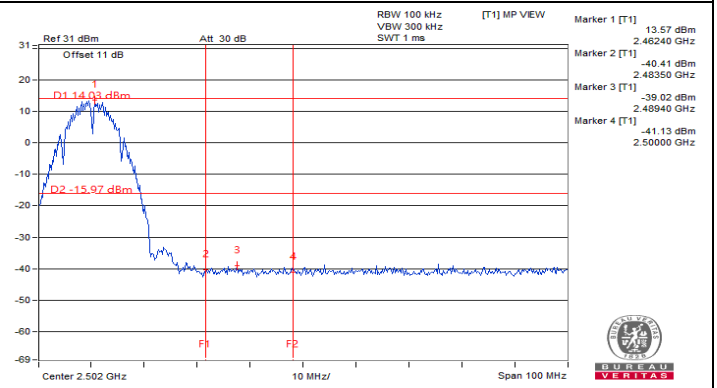


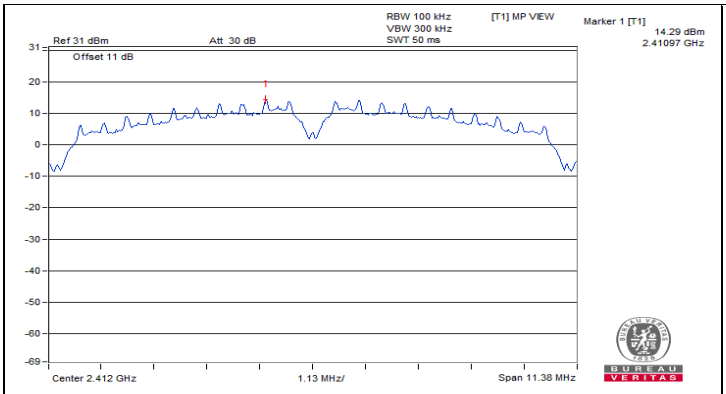
Chain 2 : CH 11



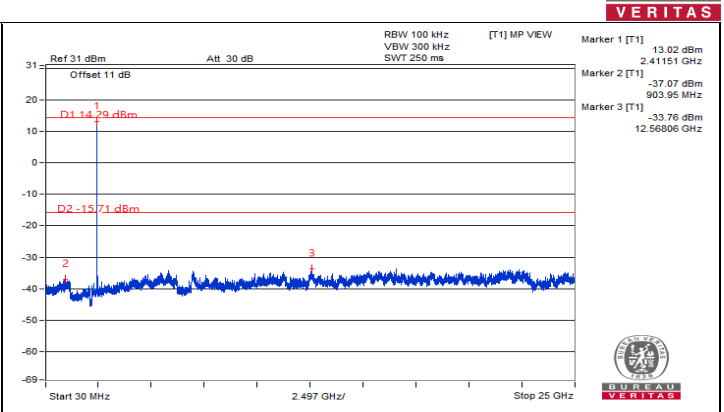
Chain 2 : CH 1 Band edge



Chain 2 : CH 11 Band edge



Chain 3 : CH 1



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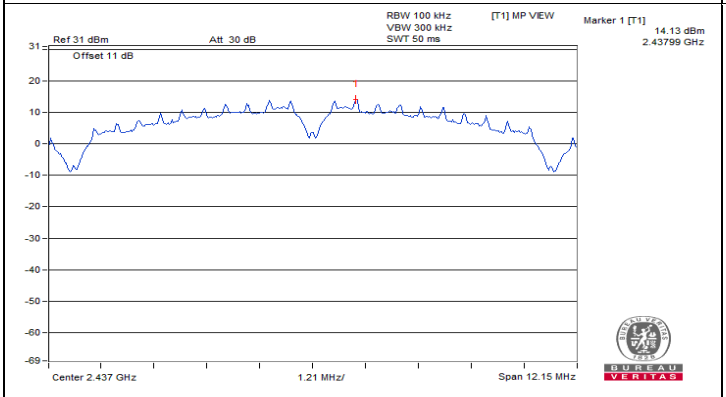

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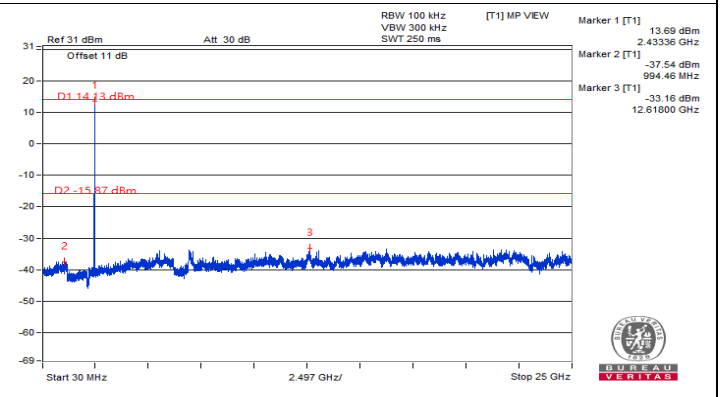
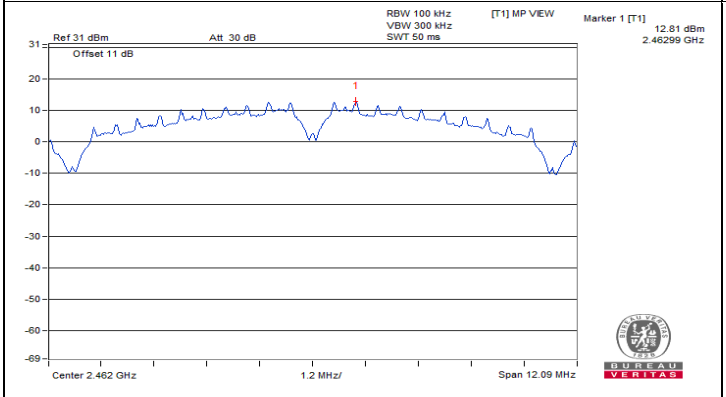
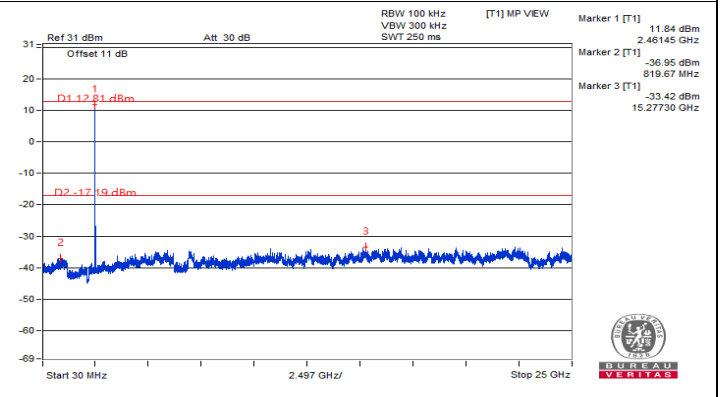


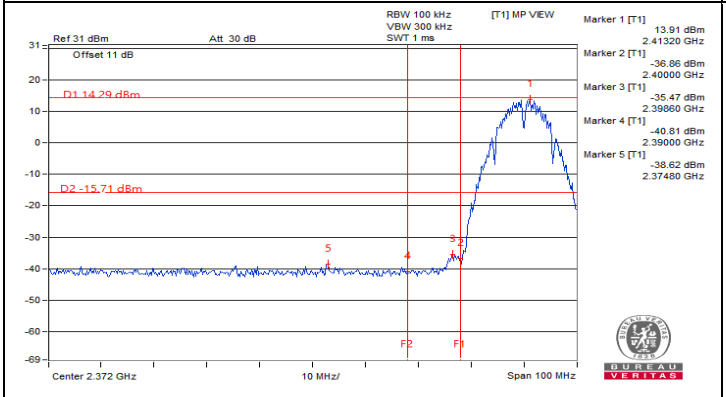
Chain 3 : CH 6



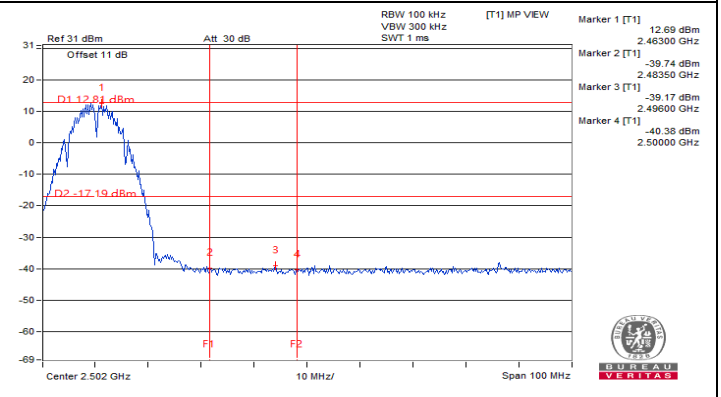
Chain 3 : CH 11



Chain 3 : CH 11

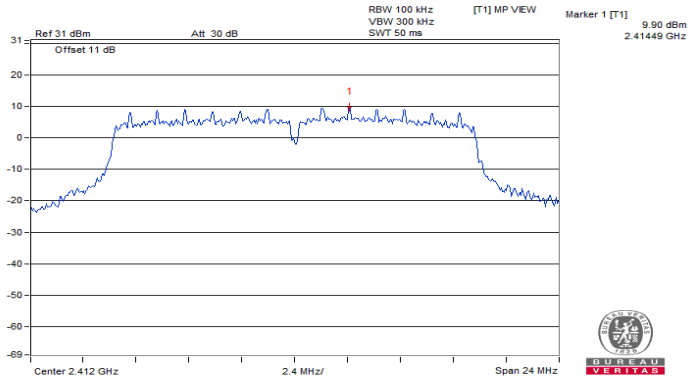


Chain 3 : CH 1 Band edge

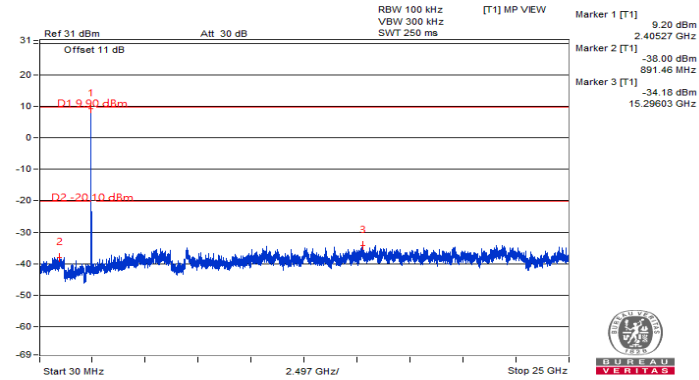


Chain 3 : CH 11 Band edge

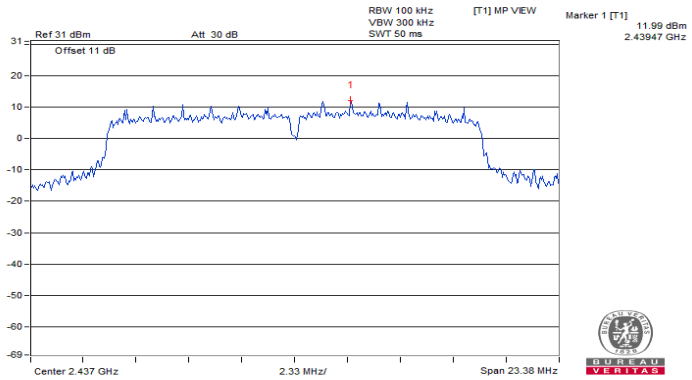
802.11g



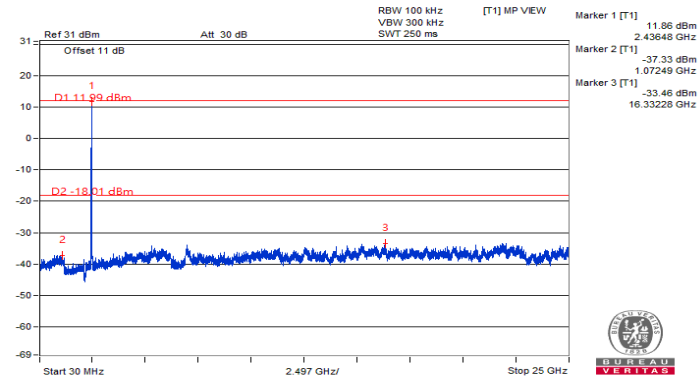
Chain 0 : CH 1



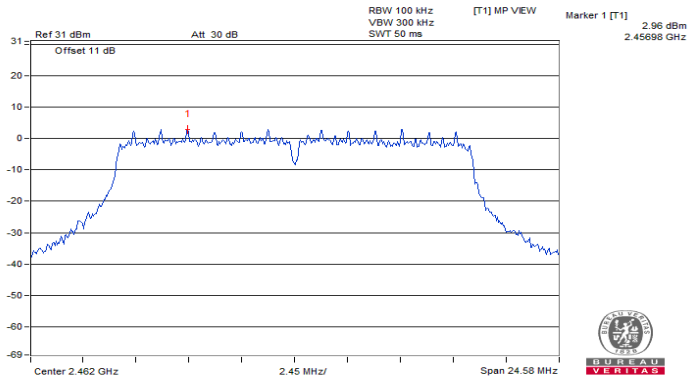
Chain 0 : CH 1



Chain 0 : CH 6



Chain 0 : CH 6



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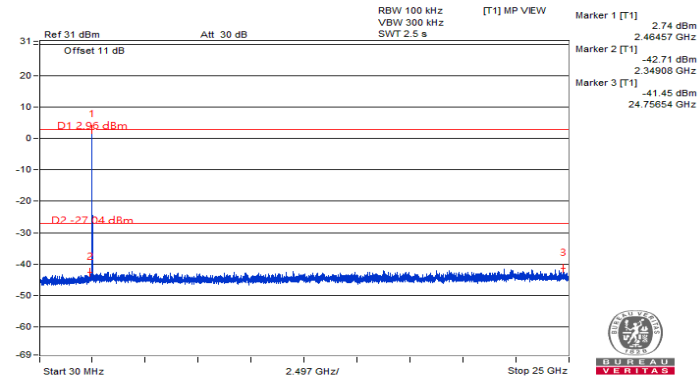

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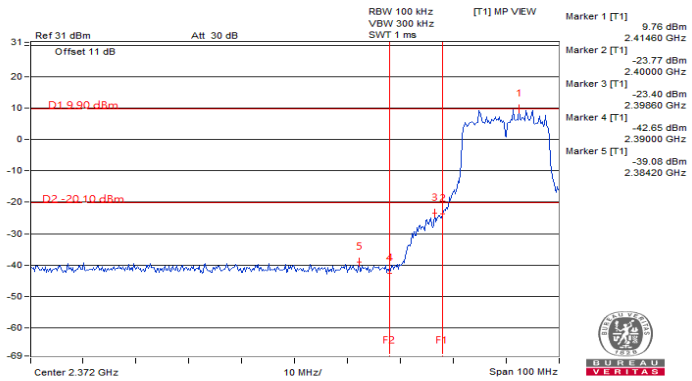
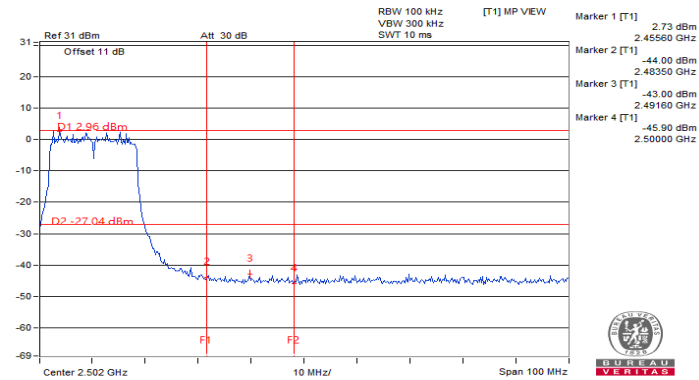
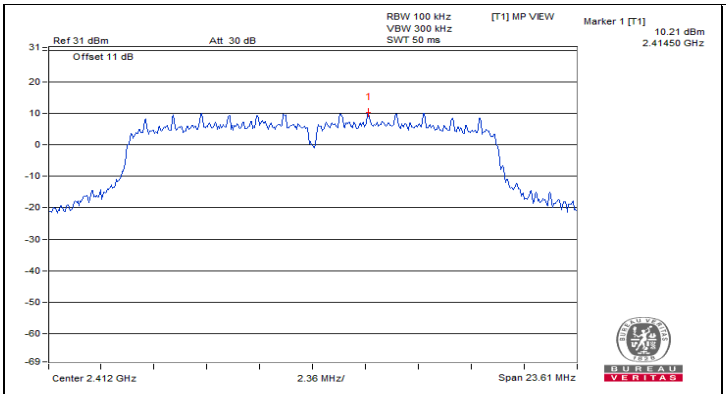


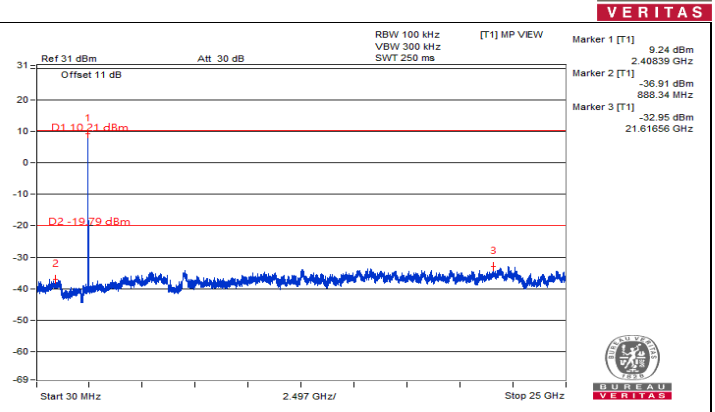
Chain 0 : CH 1 Band edge



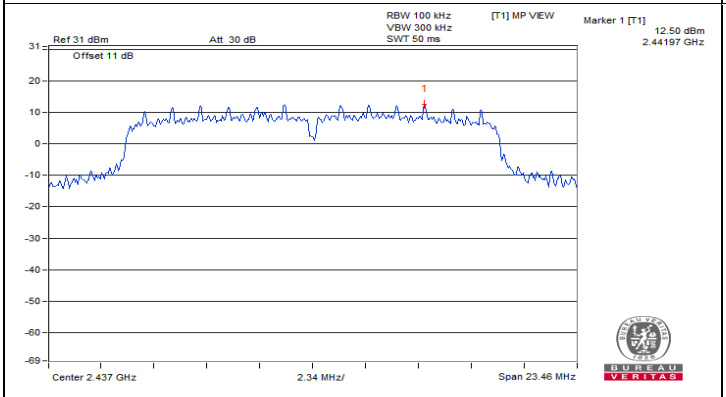
Chain 0 : CH 11 Band edge



Chain 1 : CH 1



Chain 1 : CH 1



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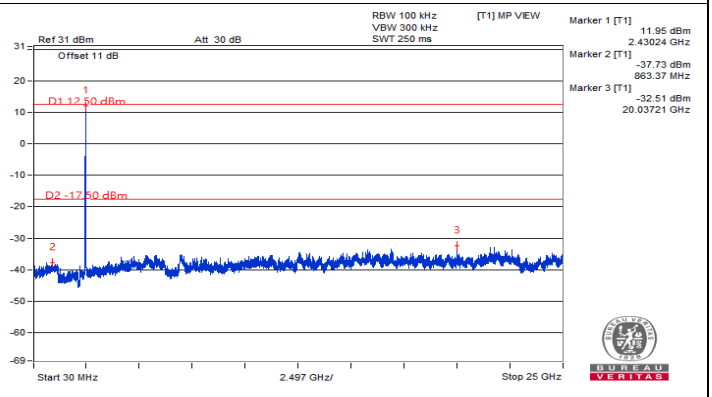
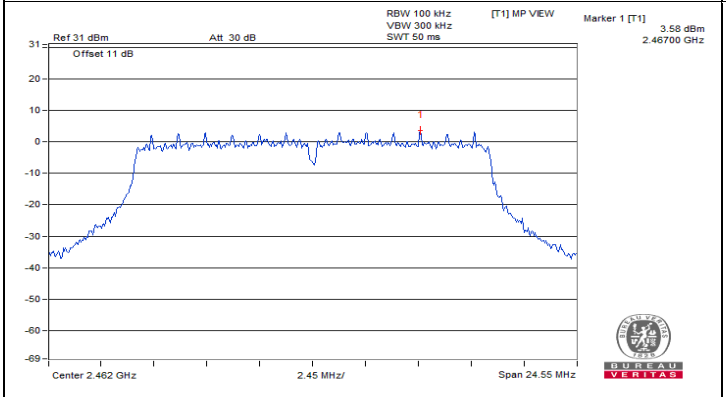
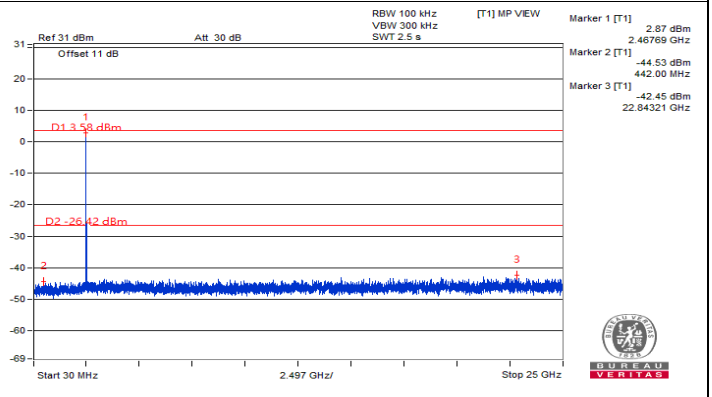


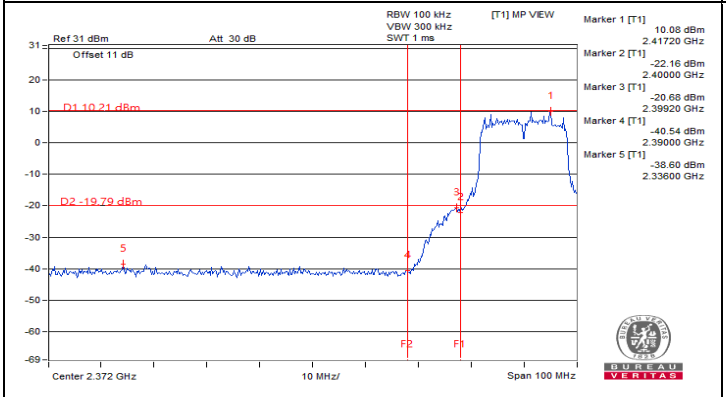
Chain 1 : CH 6



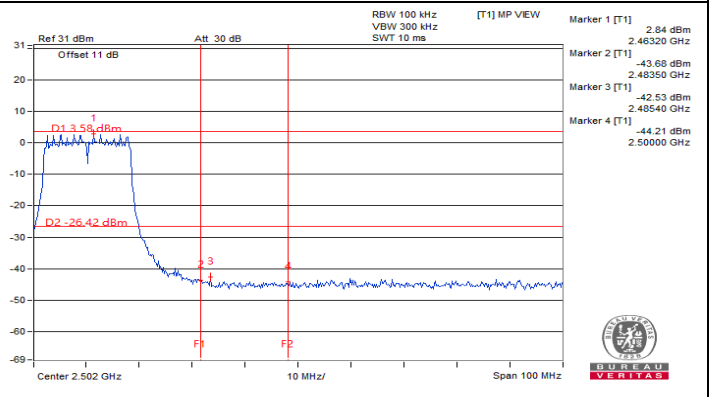
Chain 1 : CH 11



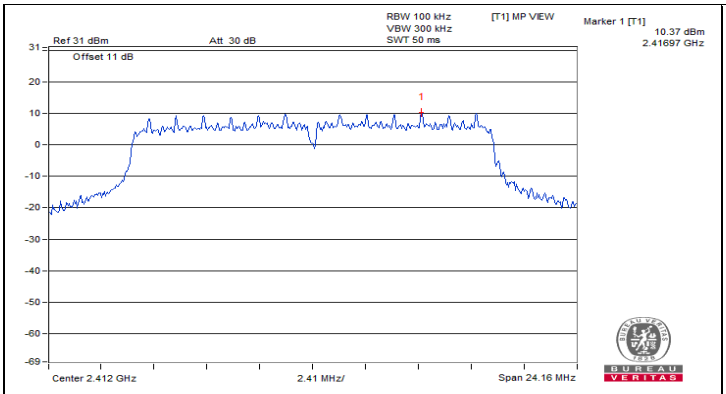
Chain 1 : CH 11



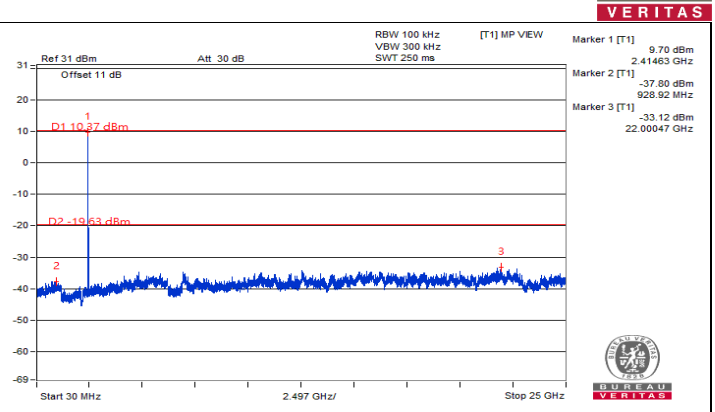
Chain 1 : CH 1 Band edge



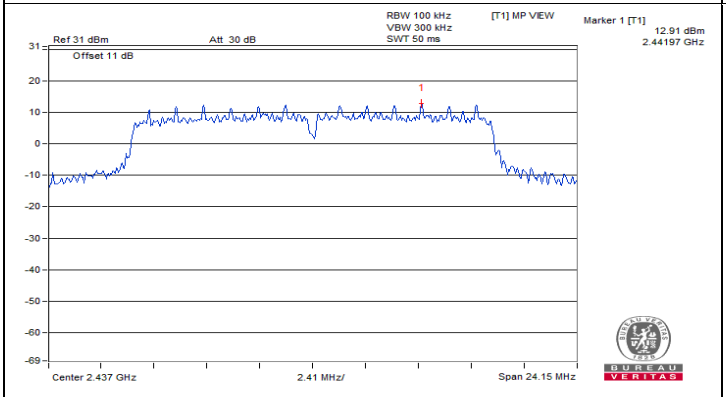
Chain 1 : CH 11 Band edge



Chain 2 : CH 1



Chain 2 : CH 1



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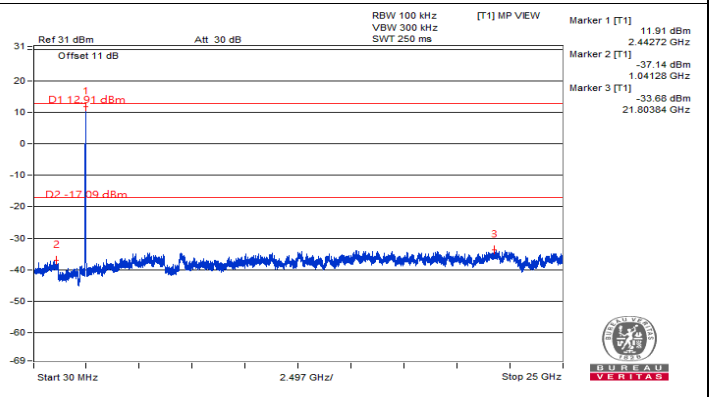
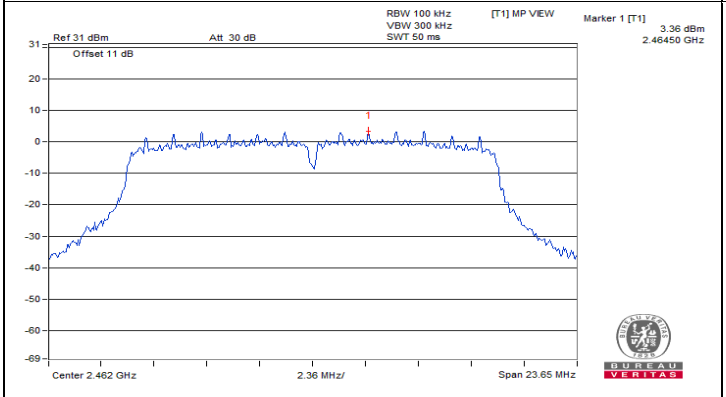
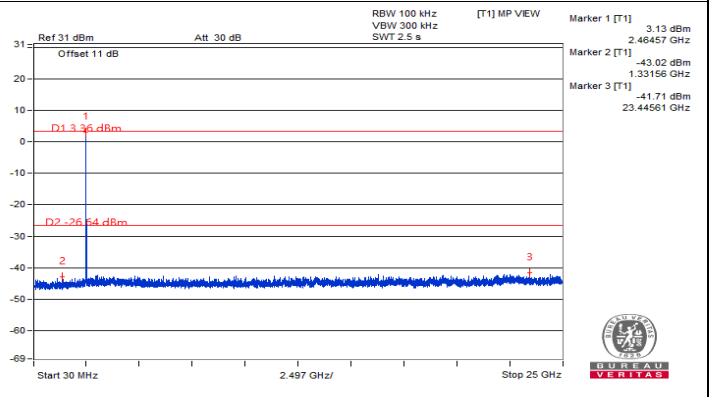


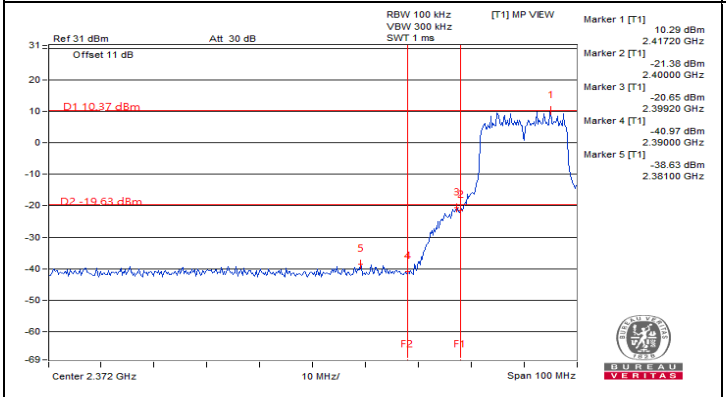
Chain 2 : CH 6



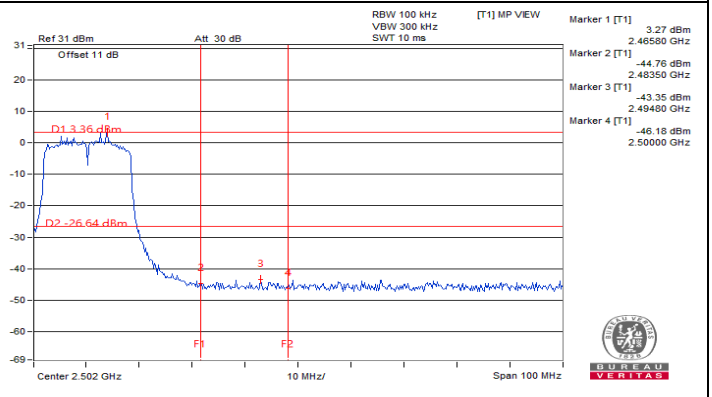
Chain 2 : CH 11



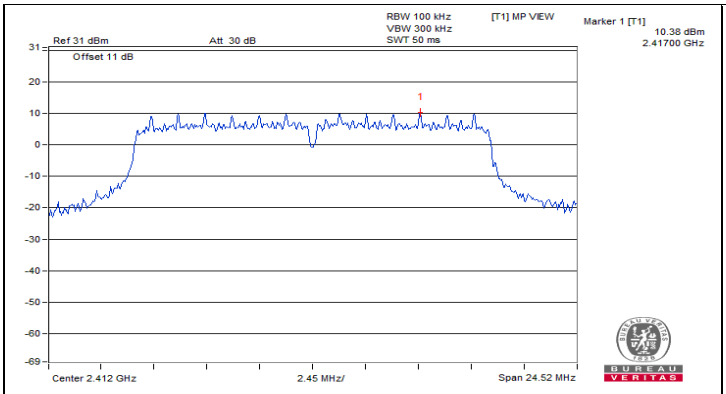
Chain 2 : CH 11



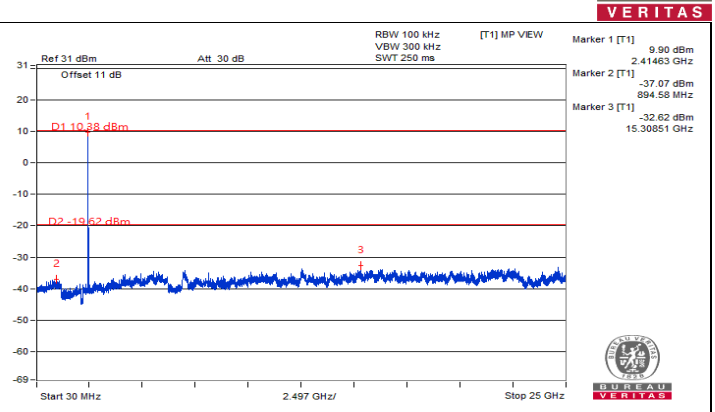
Chain 2 : CH 1 Band edge



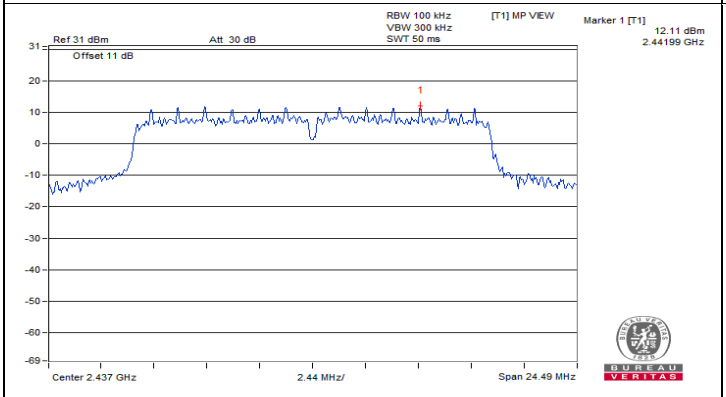
Chain 2 : CH 11 Band edge



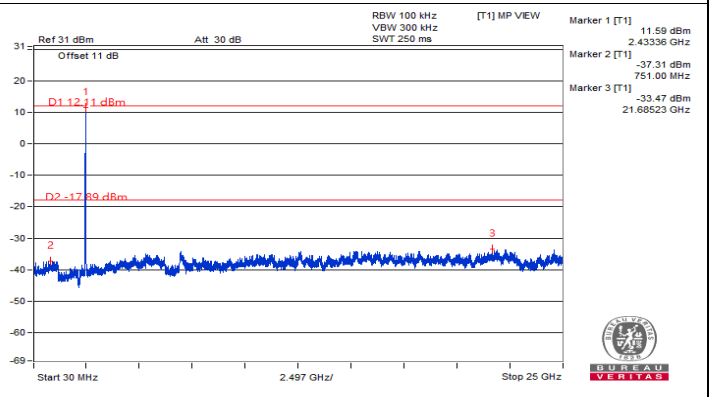
Chain 3 : CH 1



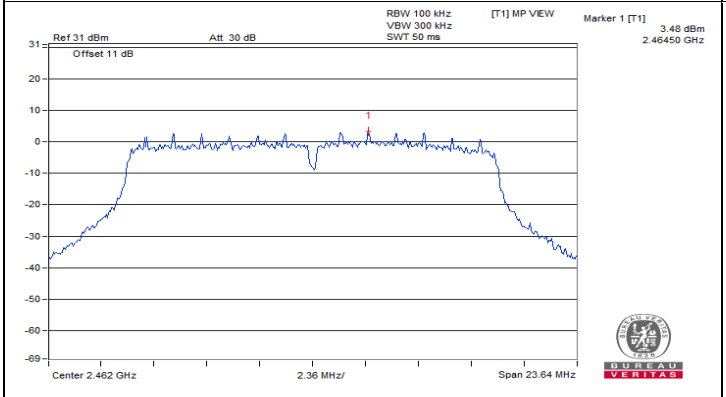
Chain 3 : CH 1



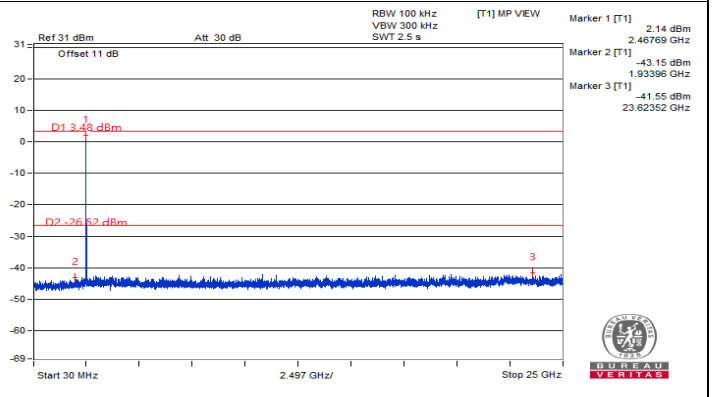
Chain 3 : CH 6



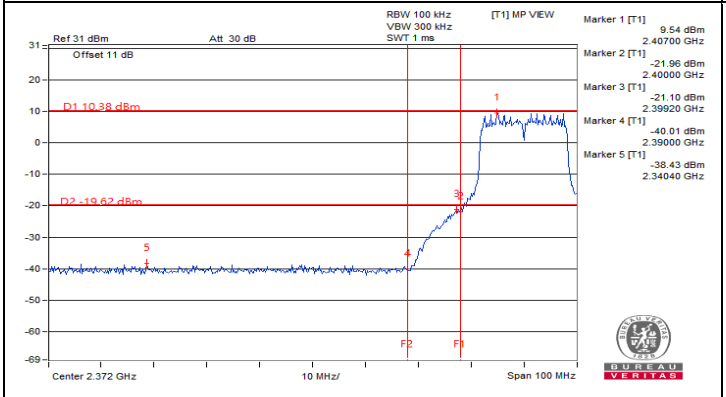
Chain 3 : CH 6



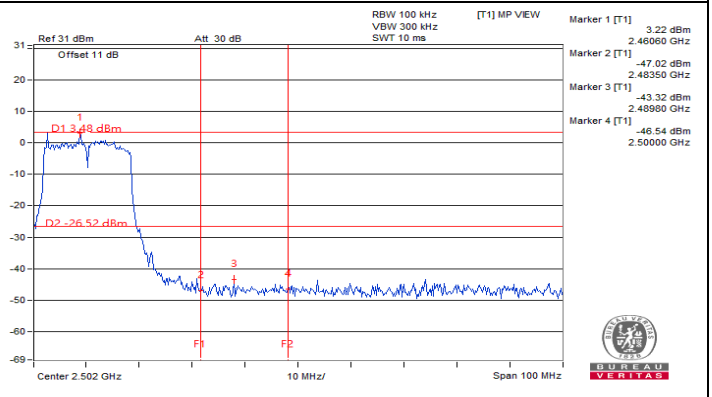
Chain 3 : CH 11



Chain 3 : CH 11

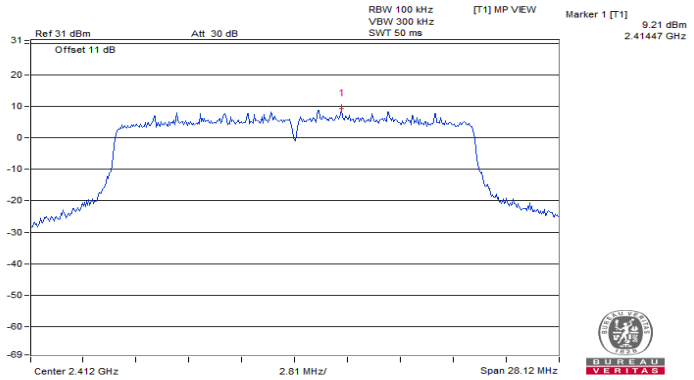


Chain 3 : CH 1 Band edge

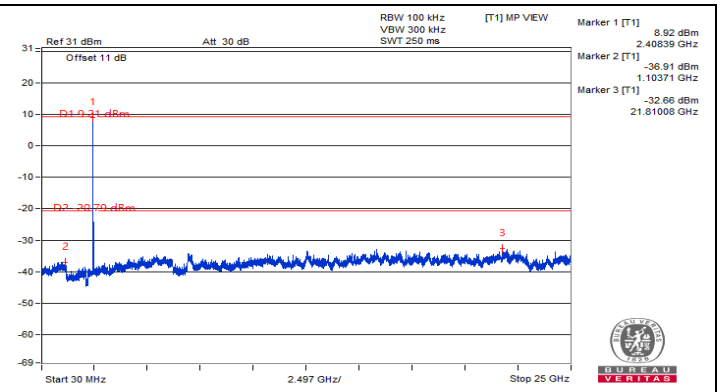


Chain 3 : CH 11 Band edge

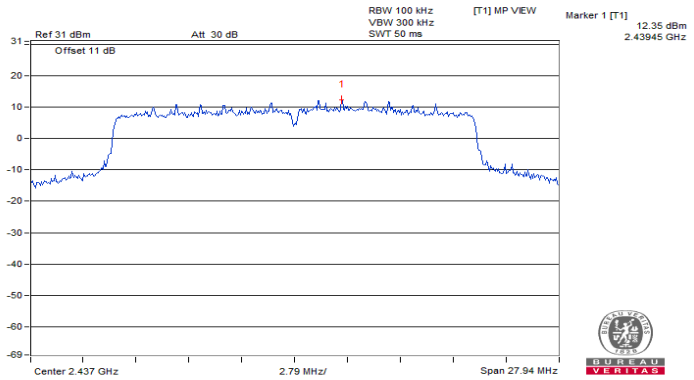
802.11ax (HE20)



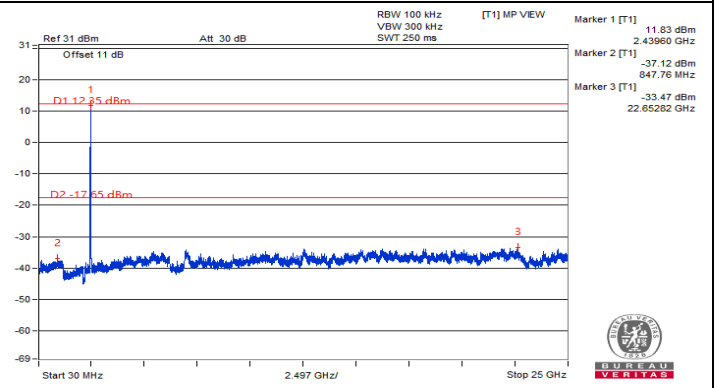
Chain 0 : CH 1



Chain 0 : CH 1



Chain 0 : CH 6



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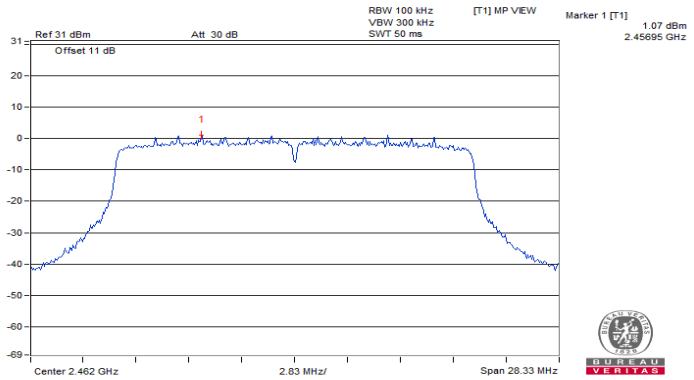
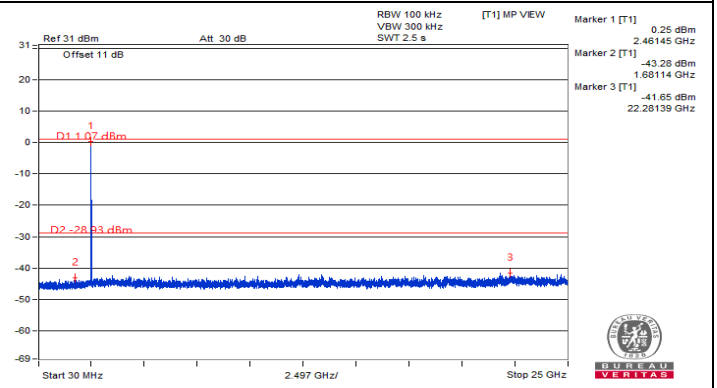
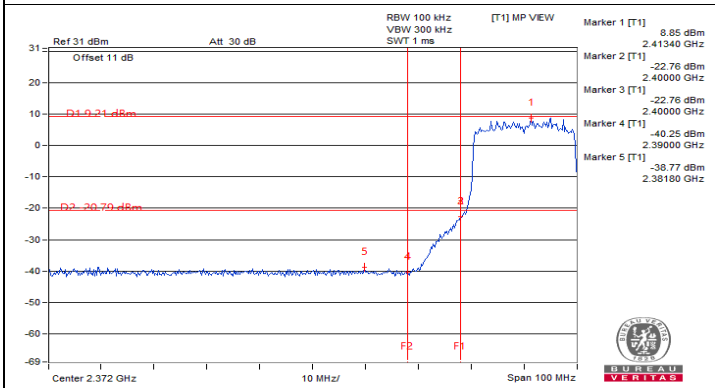


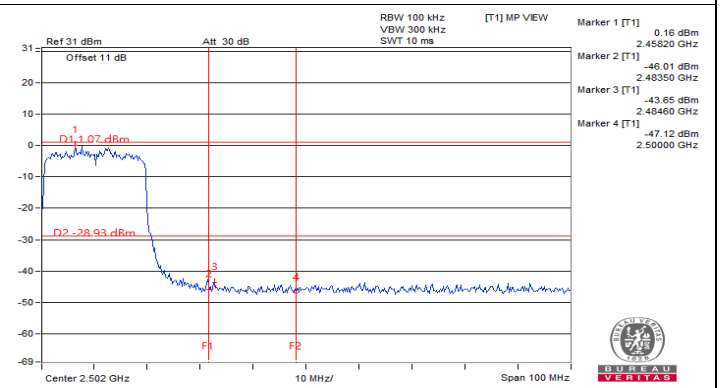
Chain 0 : CH 11



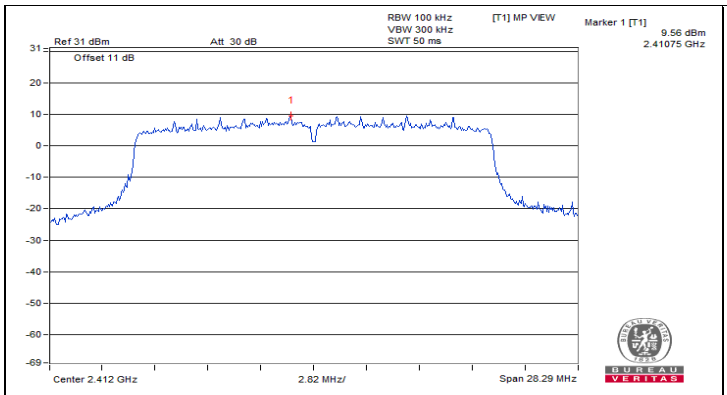
Chain 0 : CH 11



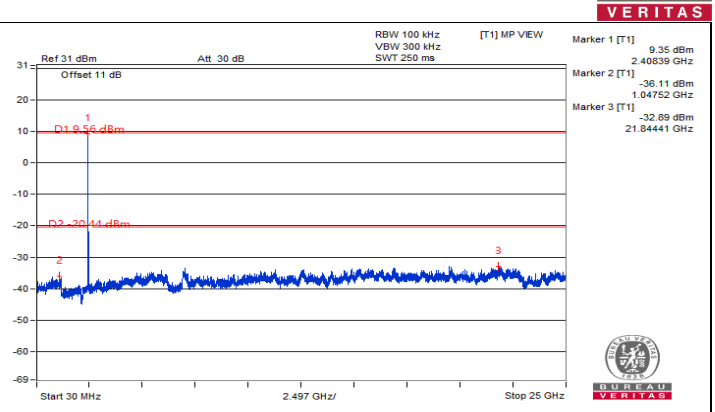
Chain 0 : CH 1 Band edge



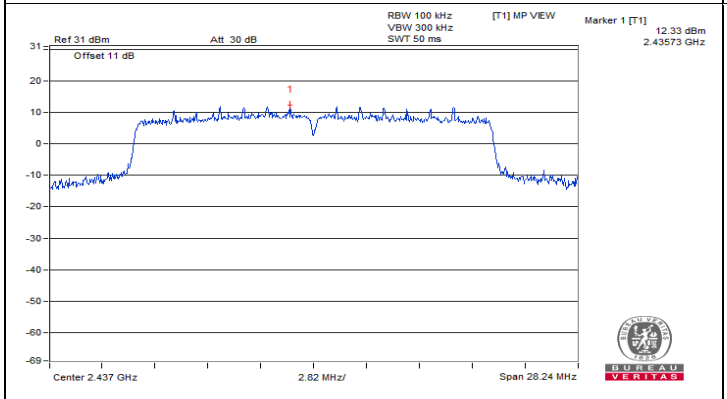
Chain 0 : CH 11 Band edge



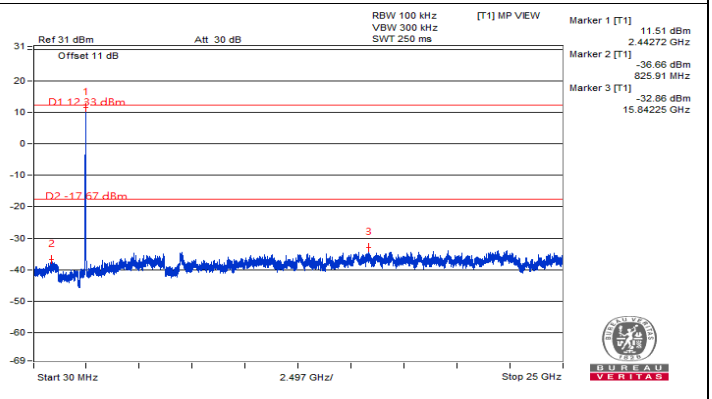
Chain 1 : CH 1



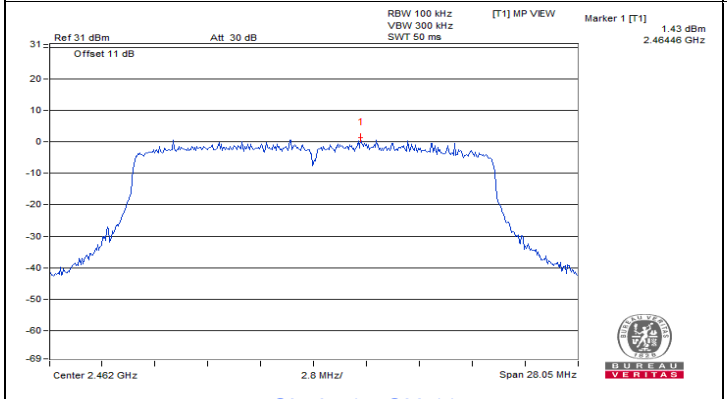
Chain 1 : CH 1



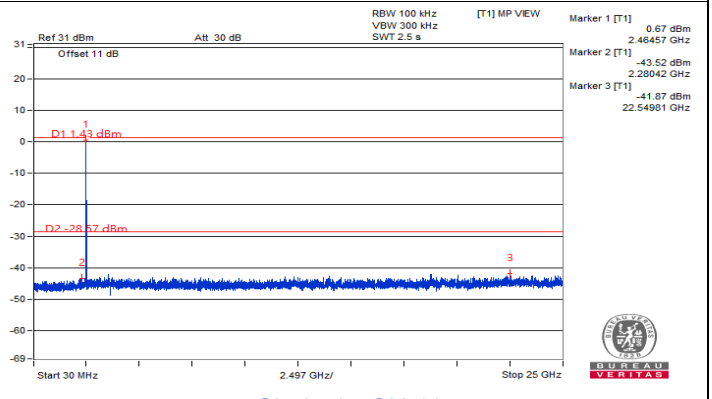
Chain 1 : CH 6



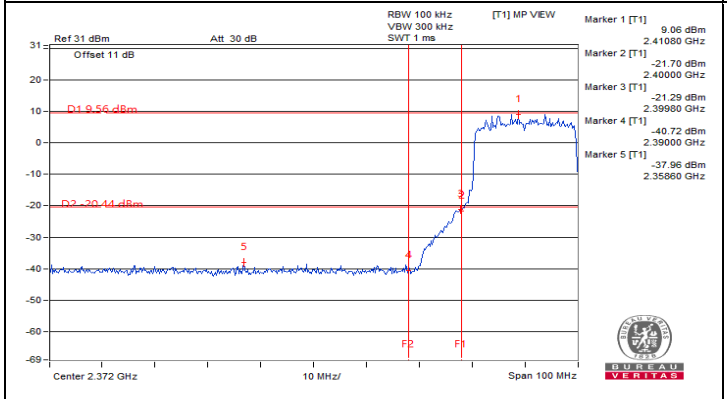
Chain 1 : CH 6



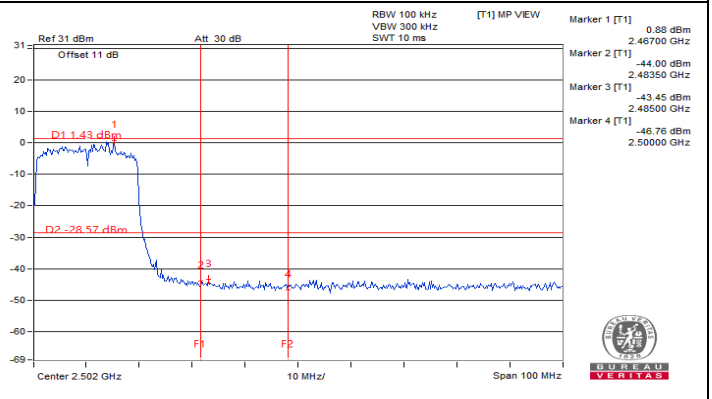
Chain 1 : CH 11



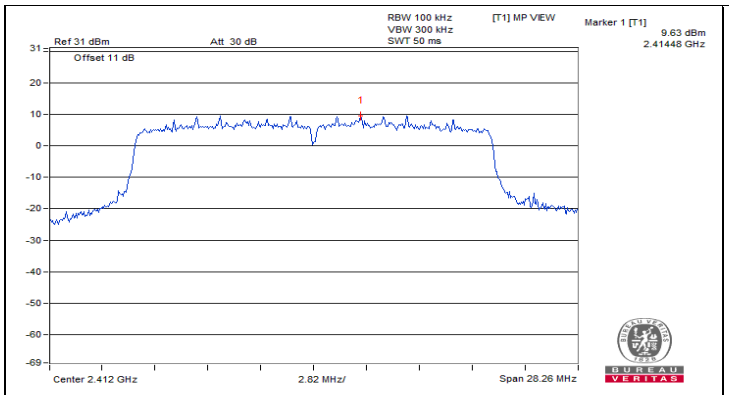
Chain 1 : CH 11



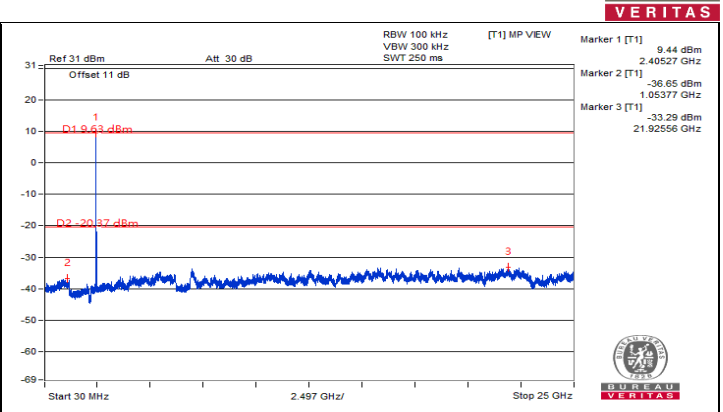
Chain 1 : CH 1 Band edge



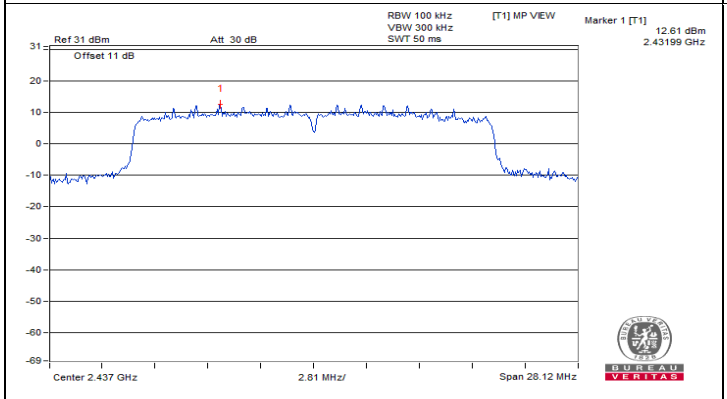
Chain 1 : CH 11 Band edge



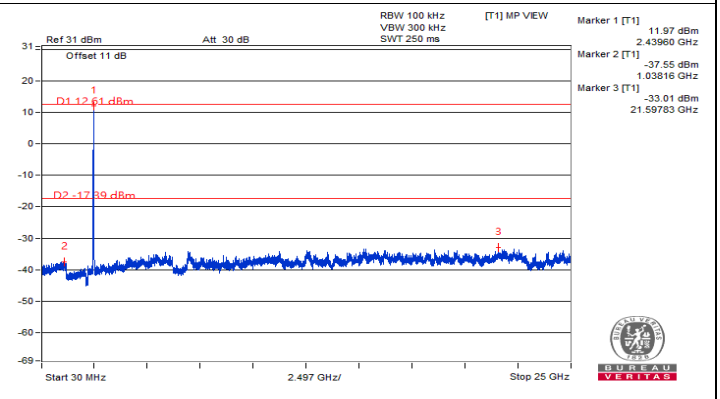
Chain 2 : CH 1



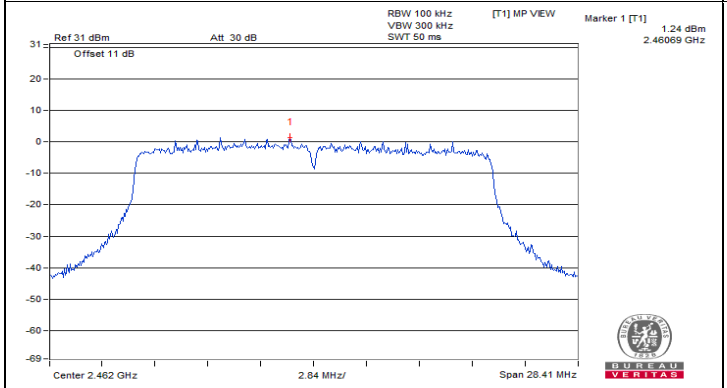
Chain 2 : CH 1



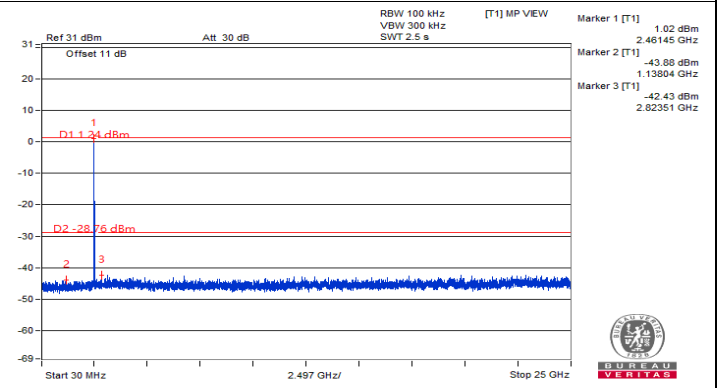
Chain 2 : CH 6



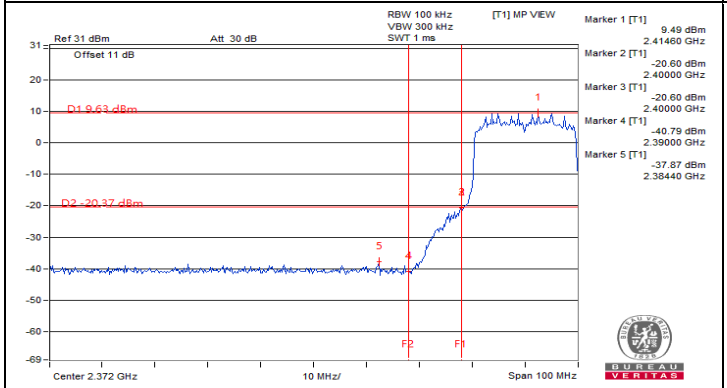
Chain 2 : CH 6



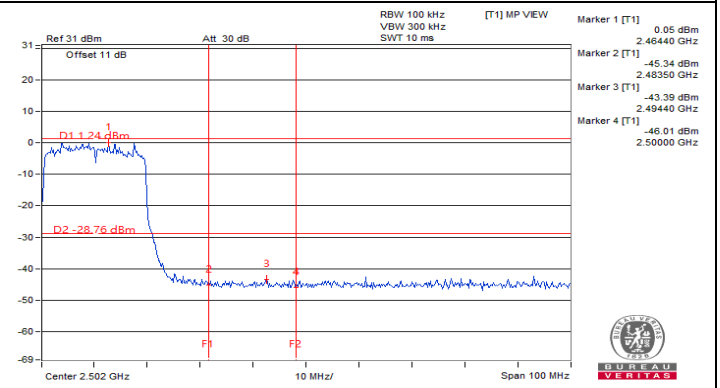
Chain 2 : CH 11



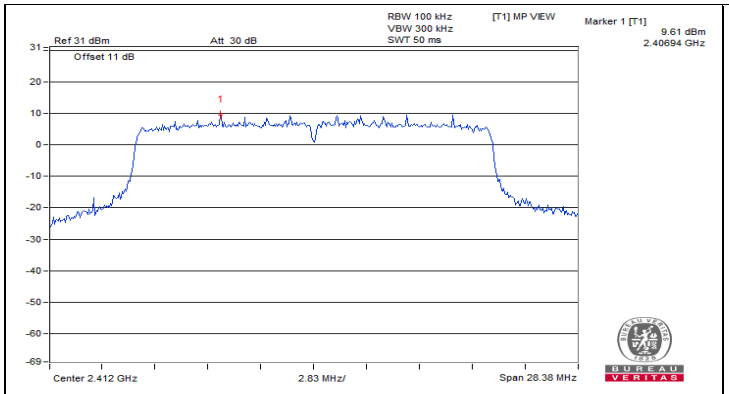
Chain 2 : CH 11



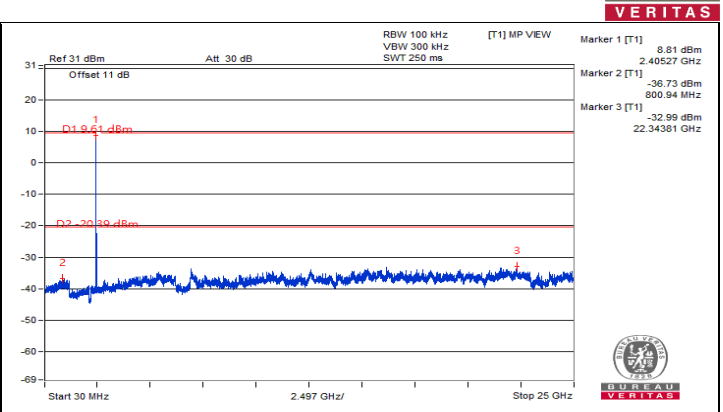
Chain 2 : CH 1 Band edge



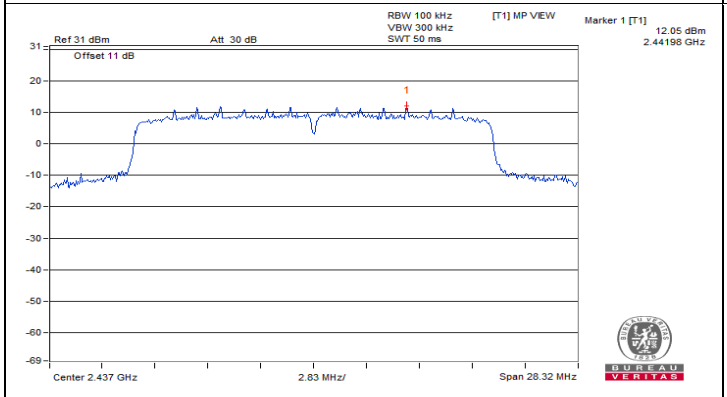
Chain 2 : CH 11 Band edge



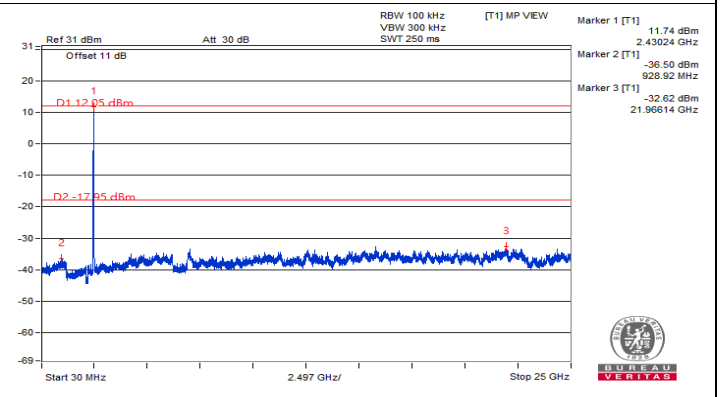
Chain 3 : CH 1



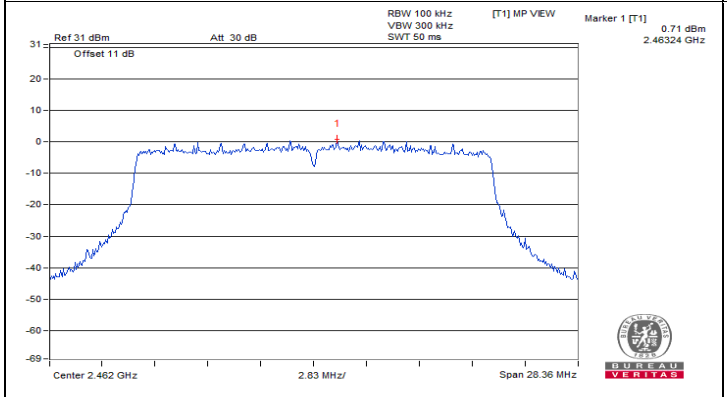
Chain 3 : CH 1



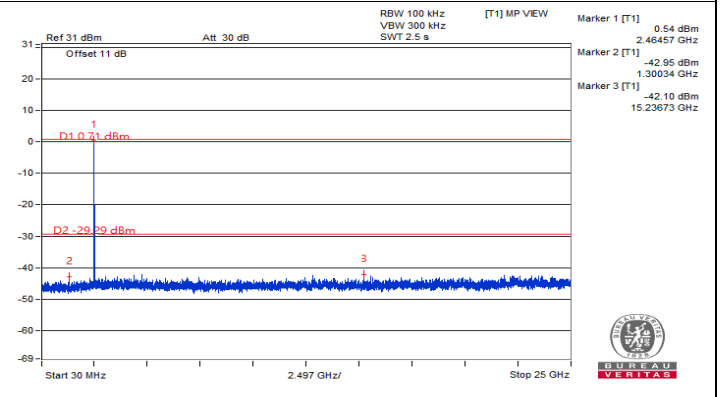
Chain 3 : CH 6



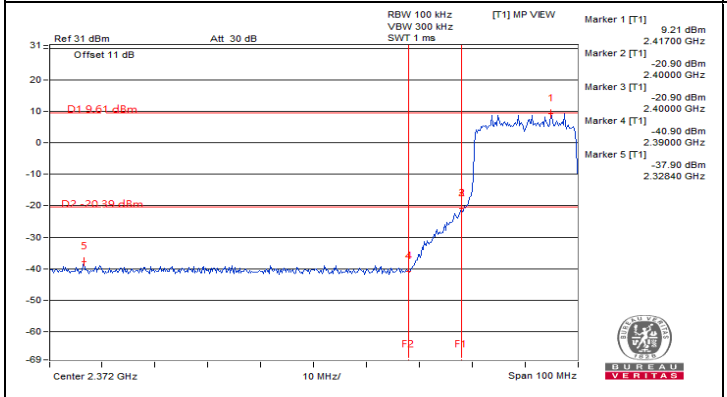
Chain 3 : CH 6



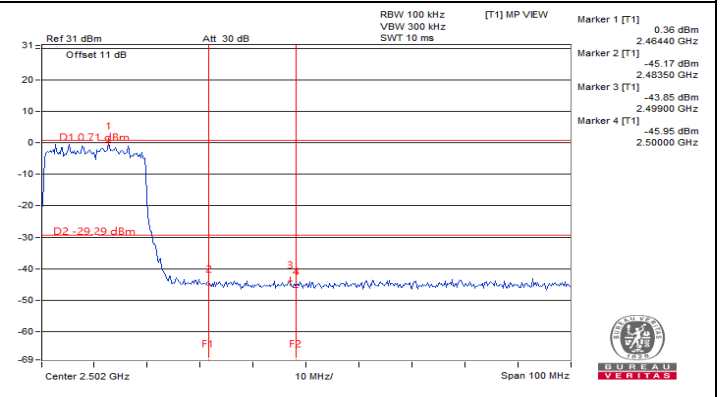
Chain 3 : CH 11



Chain 3 : CH 11

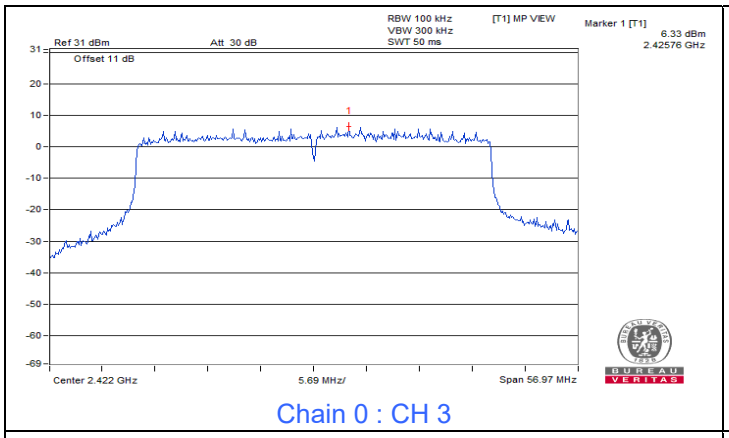


Chain 3 : CH 1 Band edge

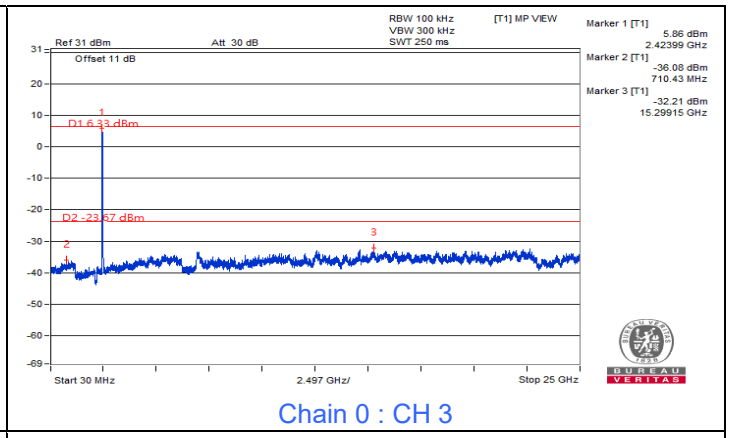


Chain 3 : CH 11 Band edge

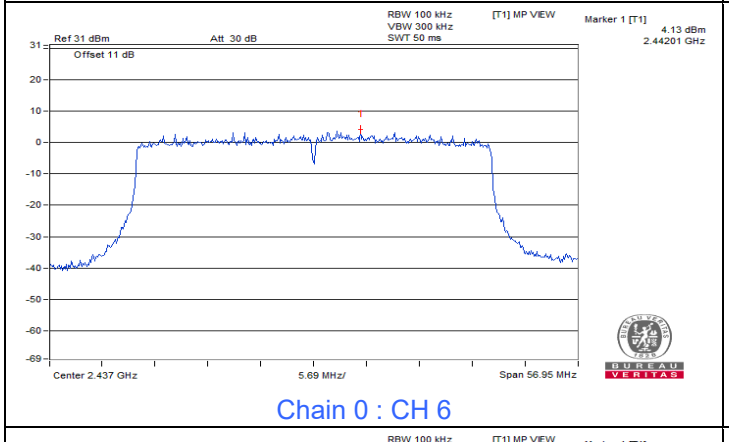
802.11ax (HE40)



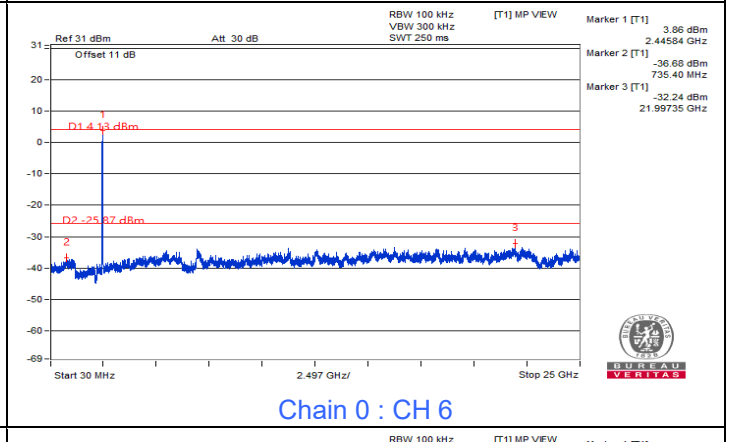
Chain 0 : CH 3



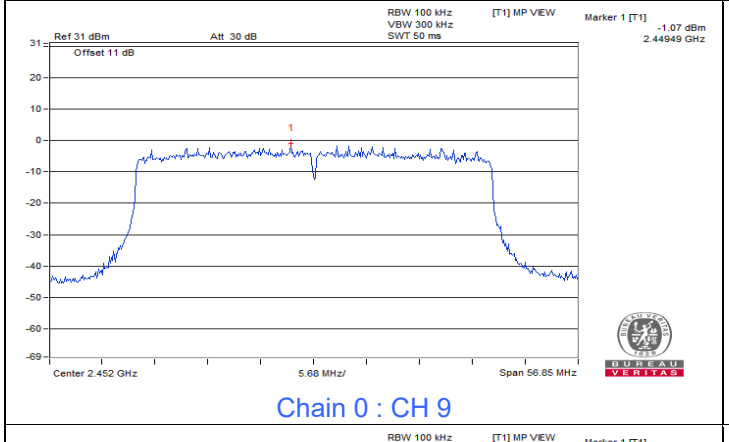
Chain 0 : CH 3



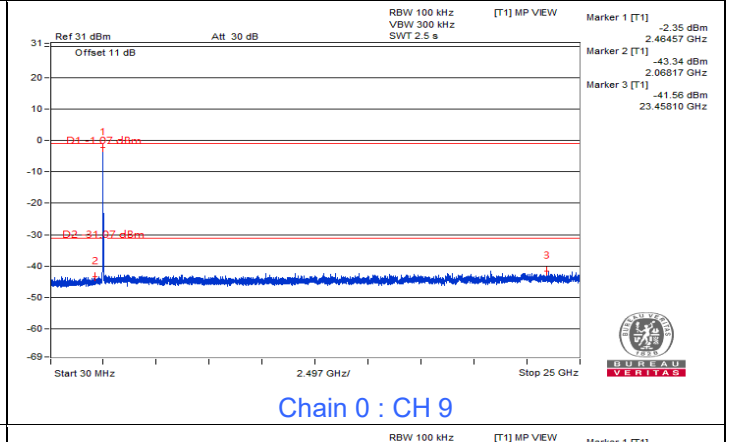
Chain 0 : CH 6



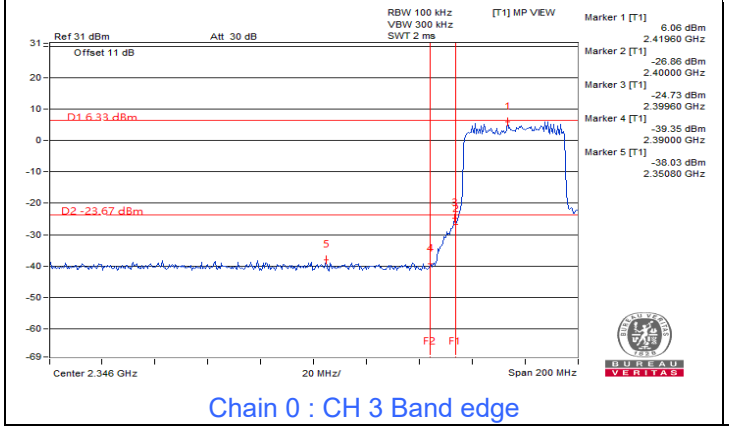
Chain 0 : CH 6



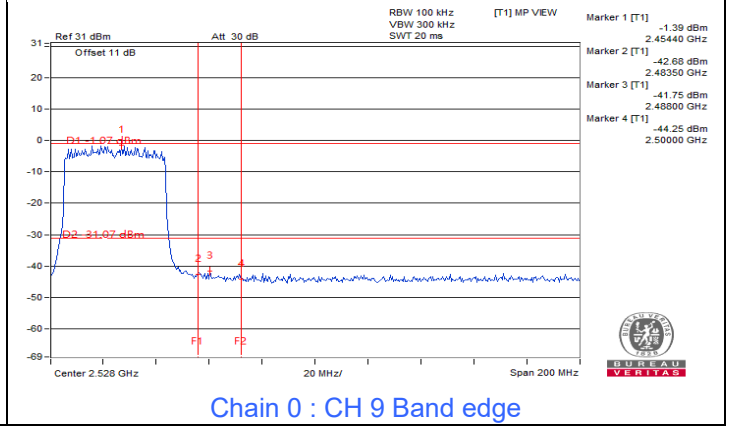
Chain 0 : CH 9



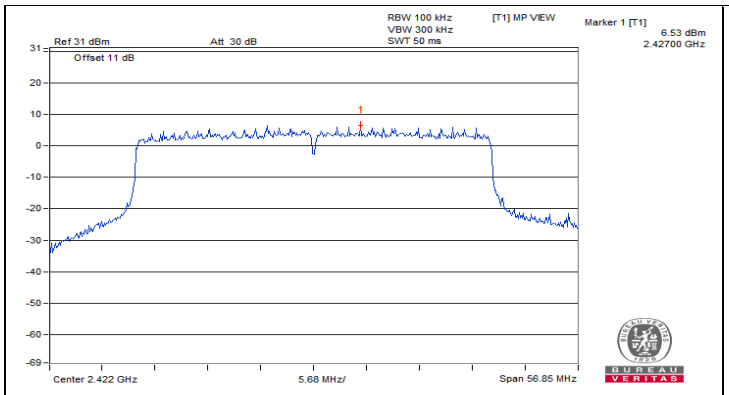
Chain 0 : CH 9



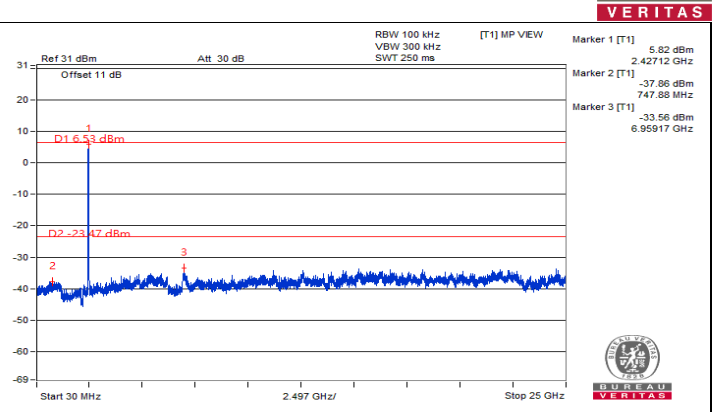
Chain 0 : CH 3 Band edge



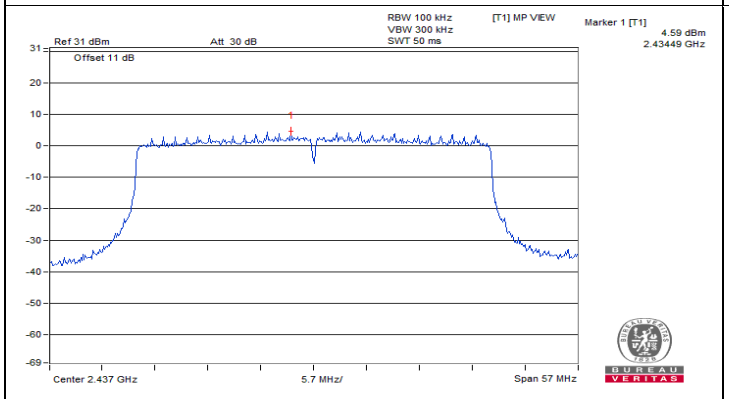
Chain 0 : CH 9 Band edge



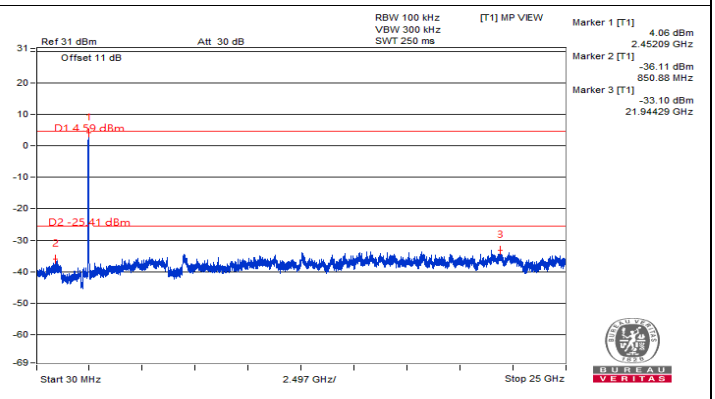
Chain 1 : CH 3



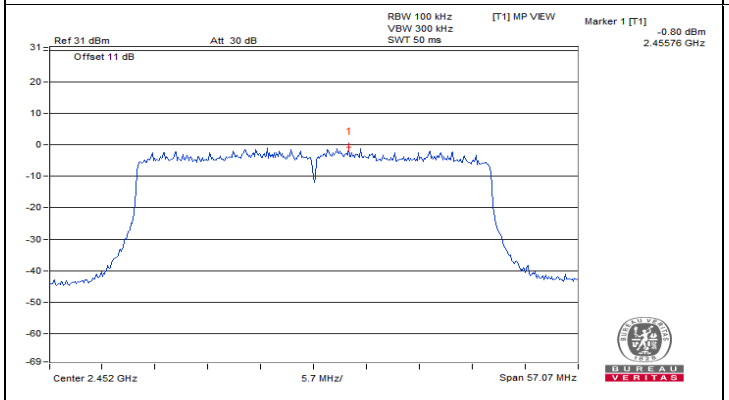
Chain 1 : CH 3



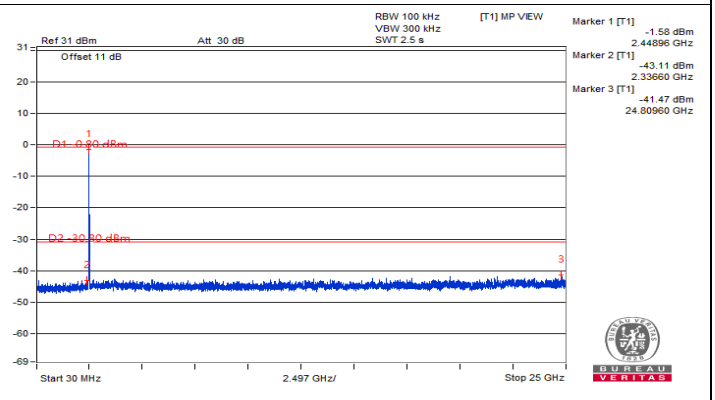
Chain 1 : CH 6



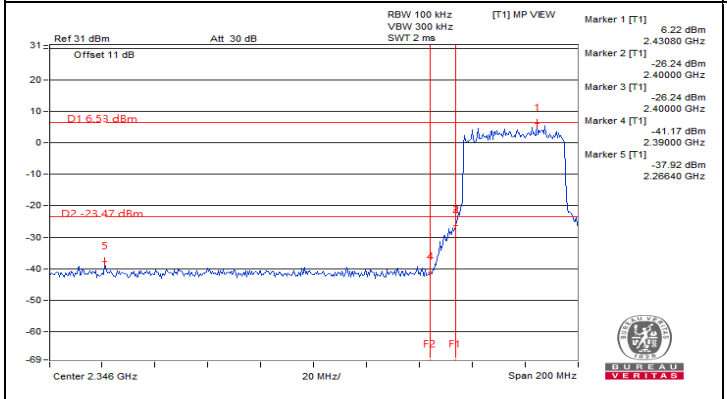
Chain 1 : CH 6



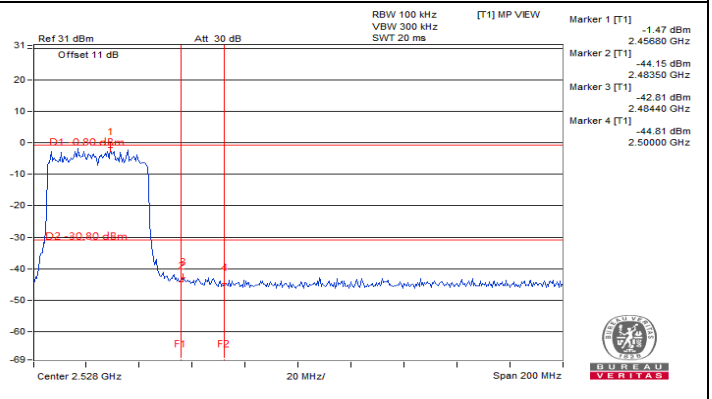
Chain 1 : CH 9



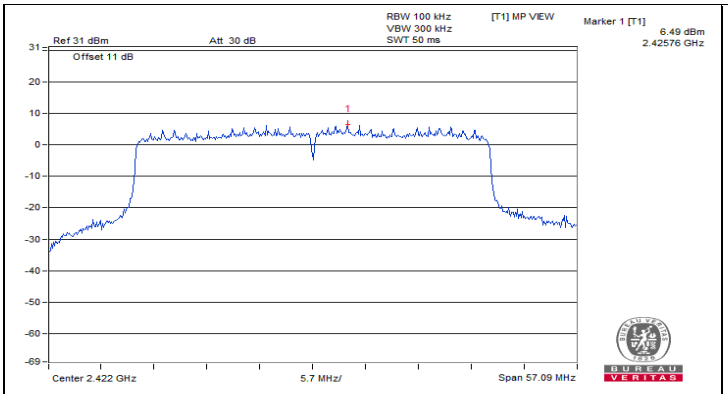
Chain 1 : CH 9



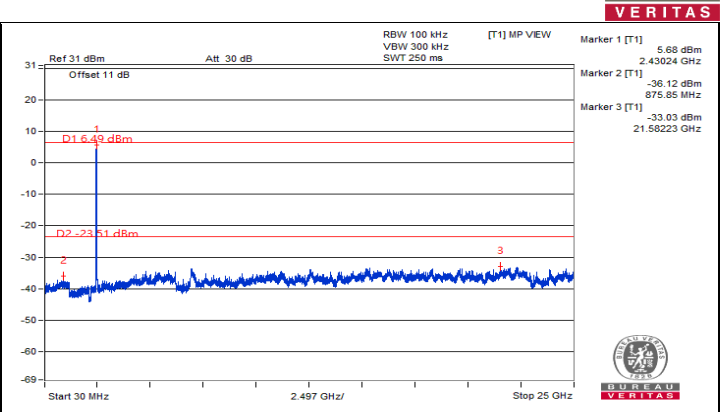
Chain 1 : CH 3 Band edge



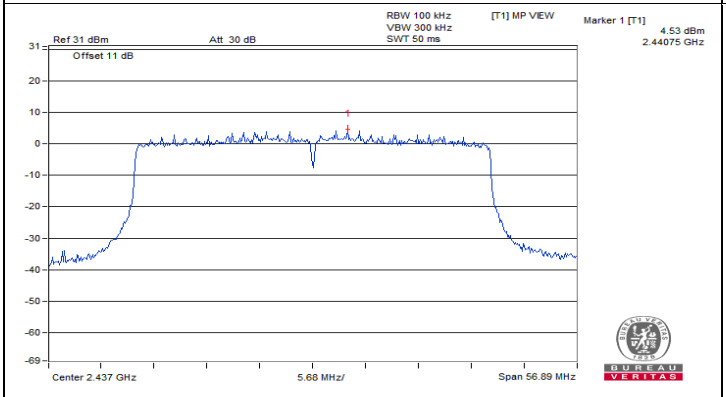
Chain 1 : CH 9 Band edge



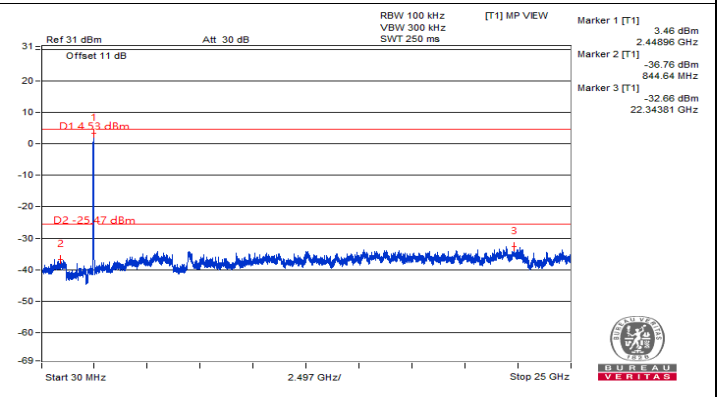
Chain 2 : CH 3



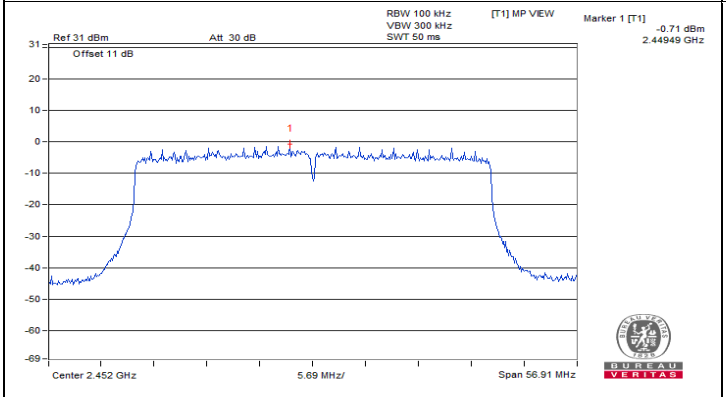
Chain 2 : CH 3



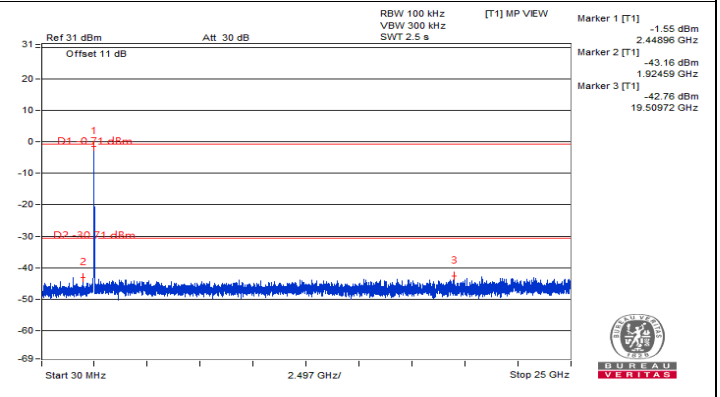
Chain 2 : CH 6



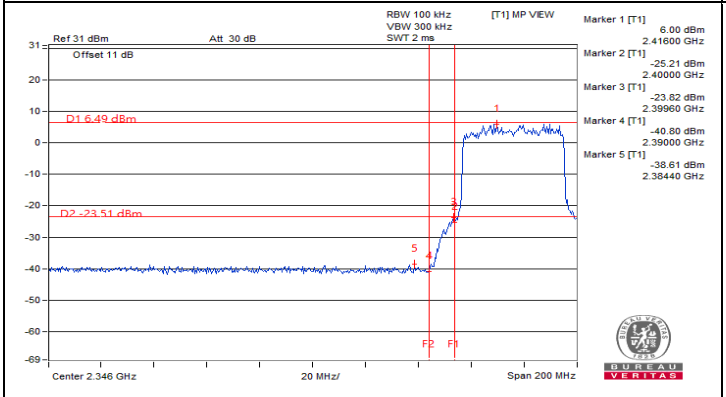
Chain 2 : CH 6



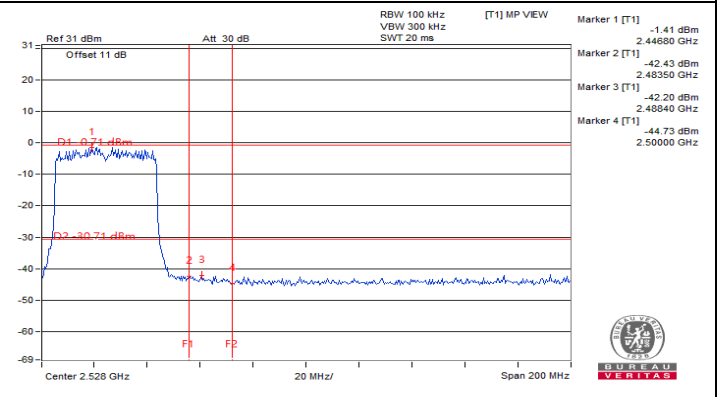
Chain 2 : CH 9



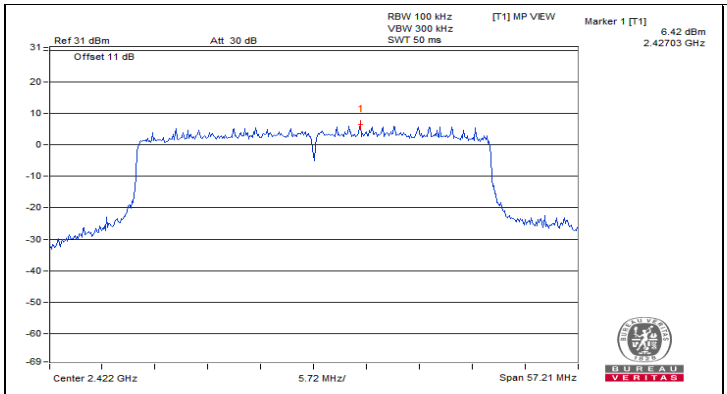
Chain 2 : CH 9



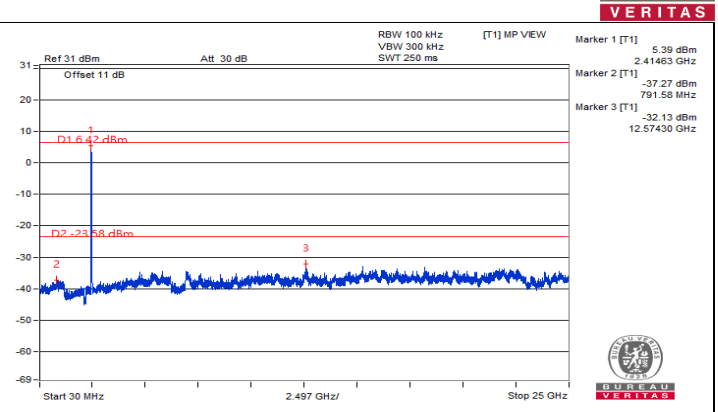
Chain 2 : CH 3 Band edge



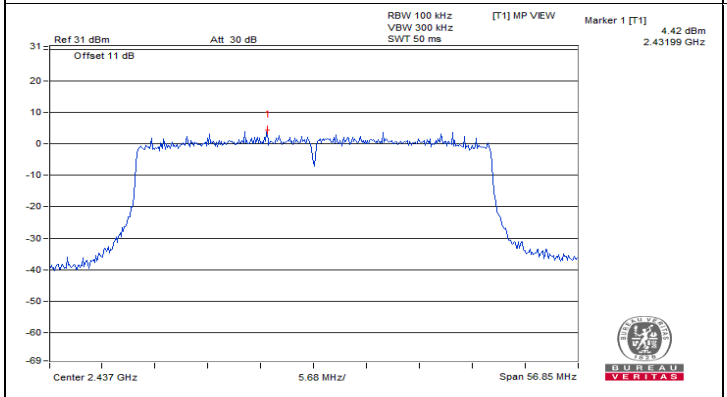
Chain 2 : CH 9 Band edge



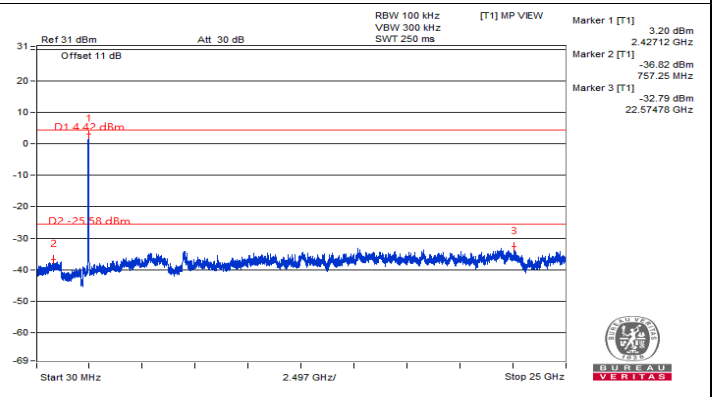
Chain 3 : CH 3



Chain 3 : CH 3



Chain 3 : CH 6



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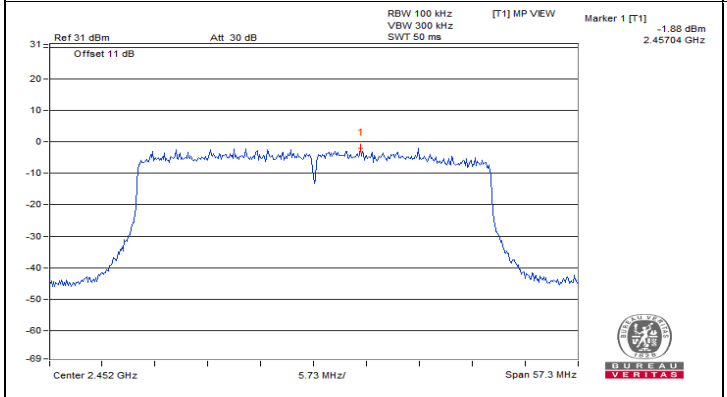

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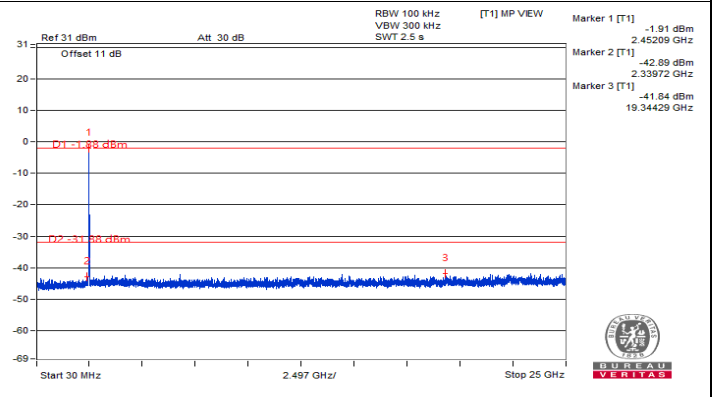
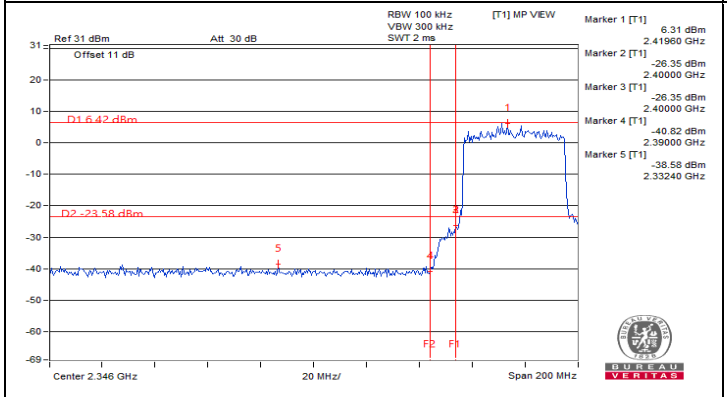
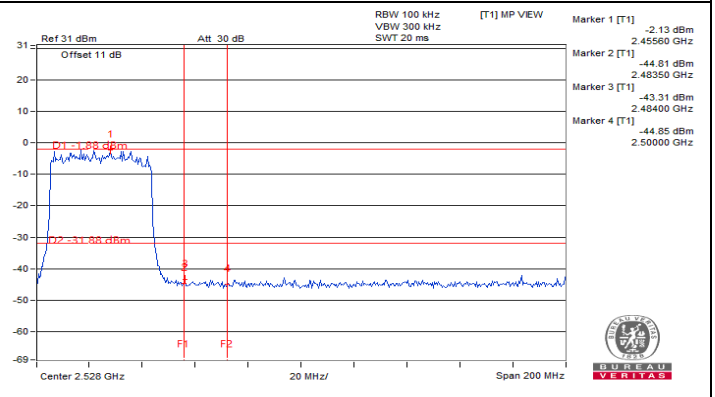


Chain 3 : CH 9



Chain 3 : CH 3 Band edge

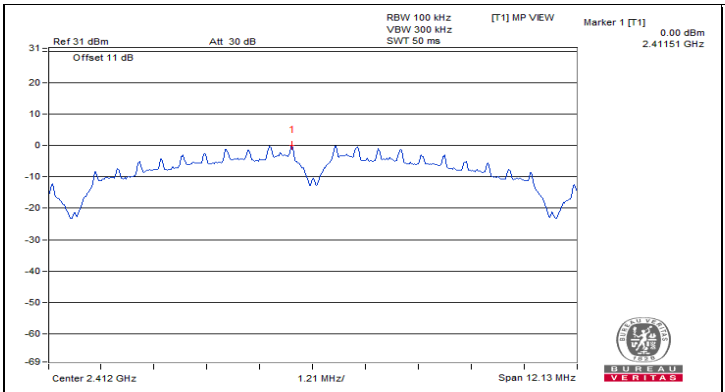


Chain 3 : CH 9 Band edge

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin

Test Mode C

802.11b



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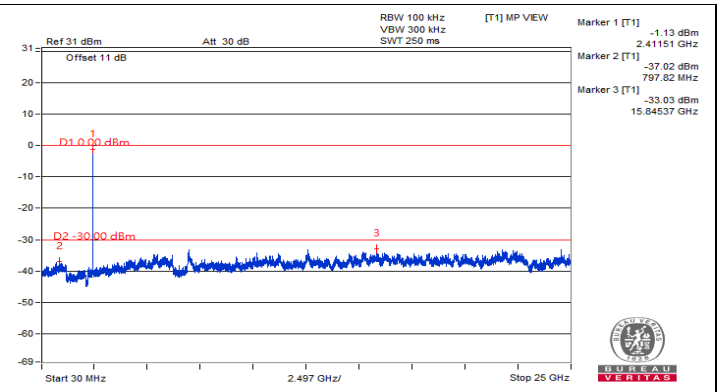

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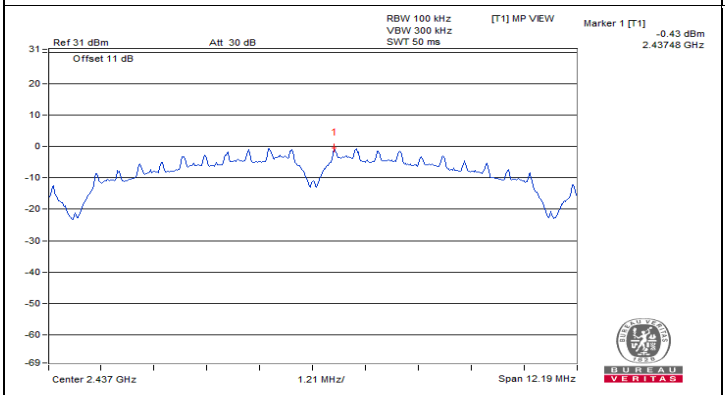
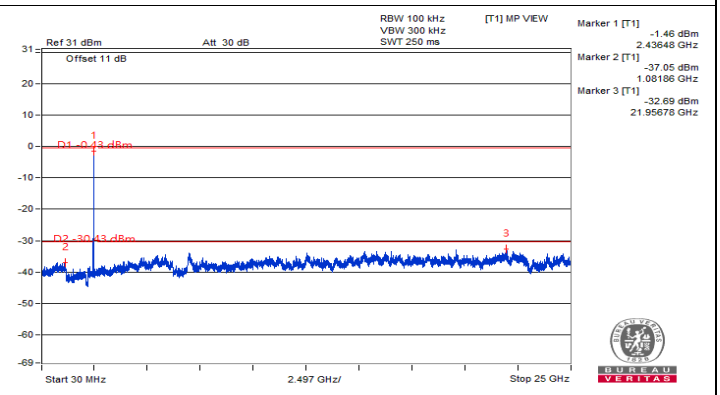


Chain 0 : CH 6



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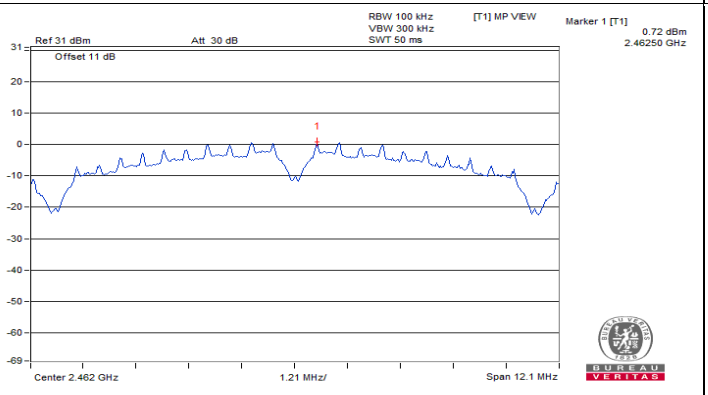

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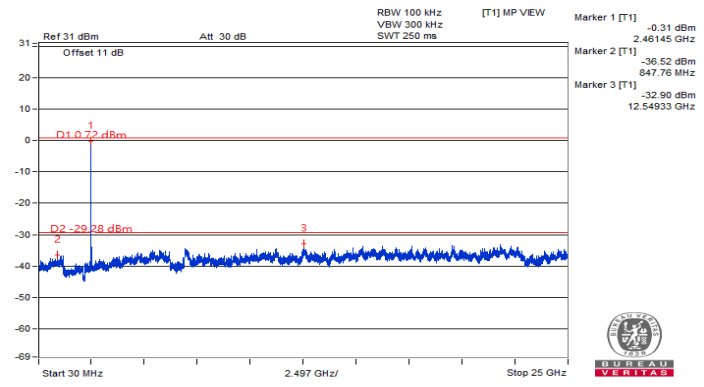
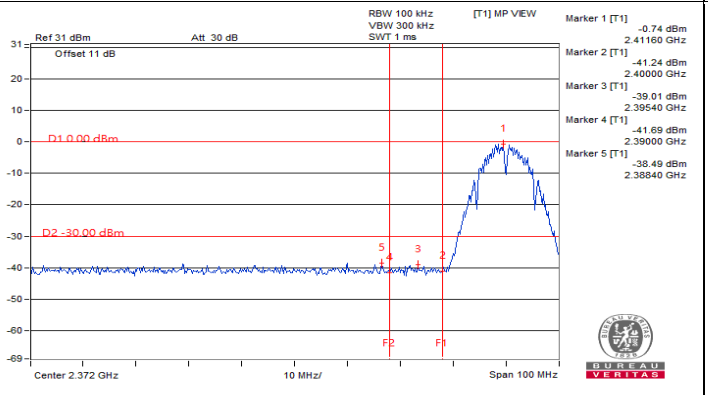
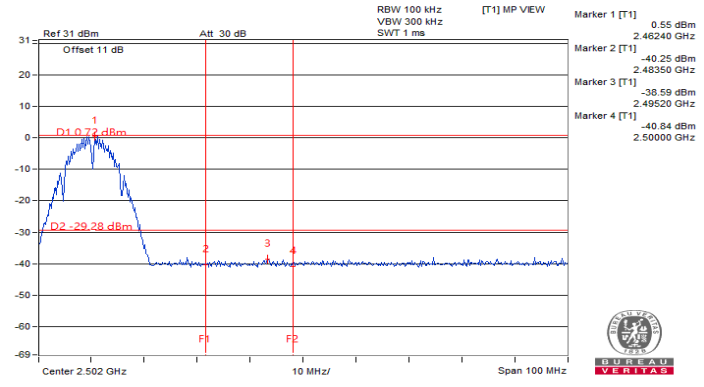


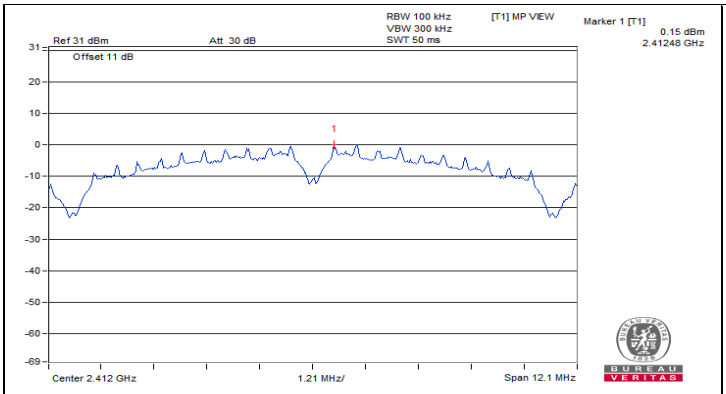
Chain 0 : CH 11



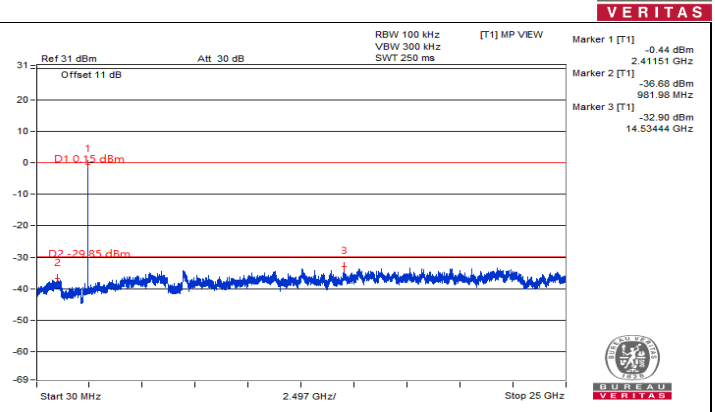
Chain 0 : CH 1 Band edge



Chain 0 : CH 11 Band edge



Chain 1 : CH 1



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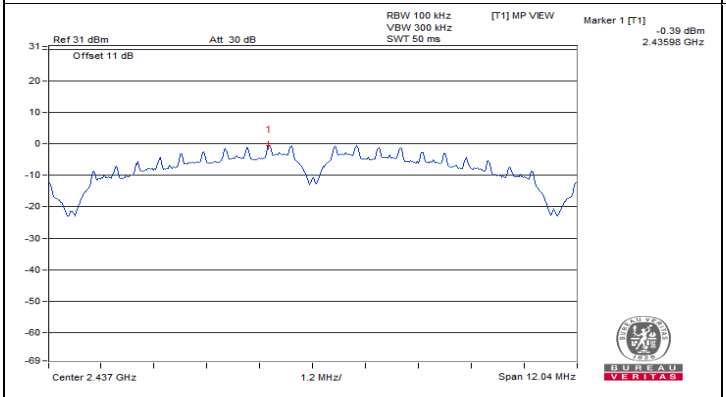
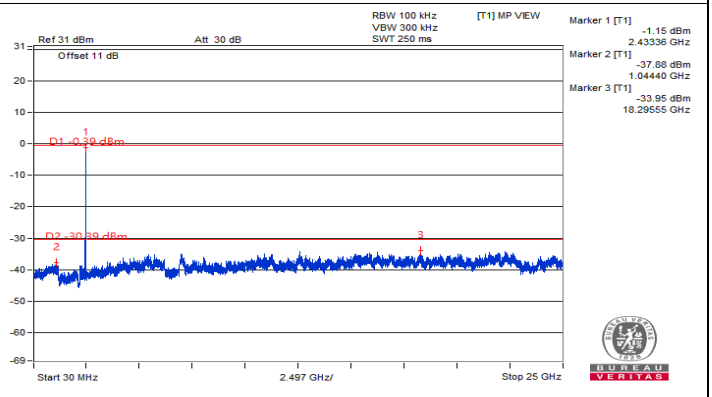


Chain 1 : CH 6



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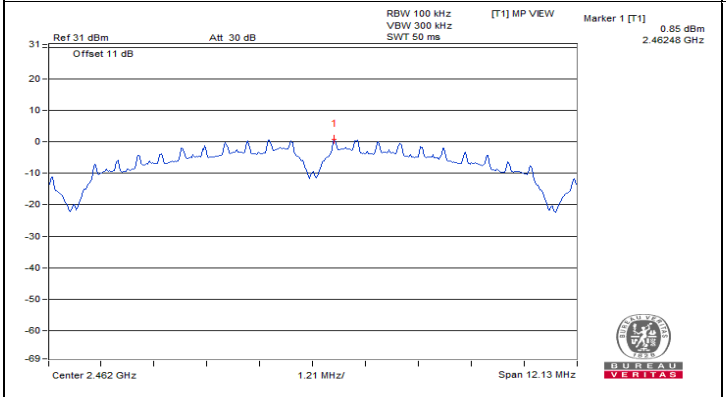

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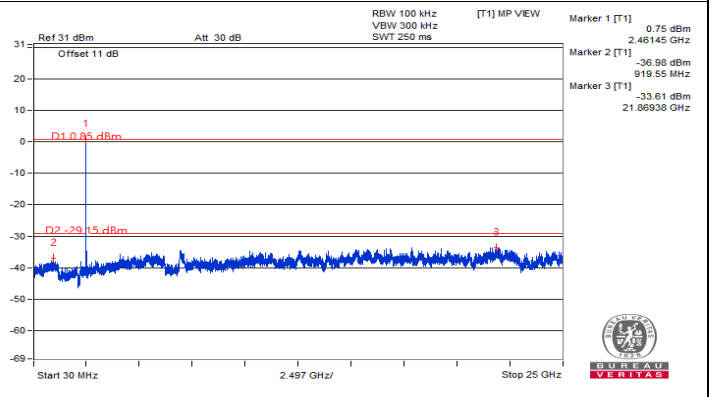
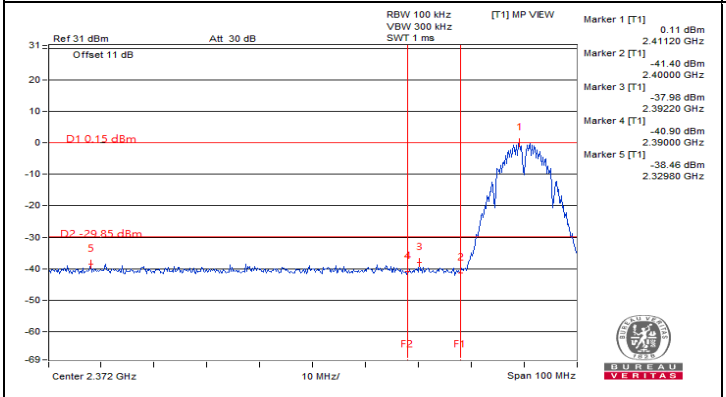
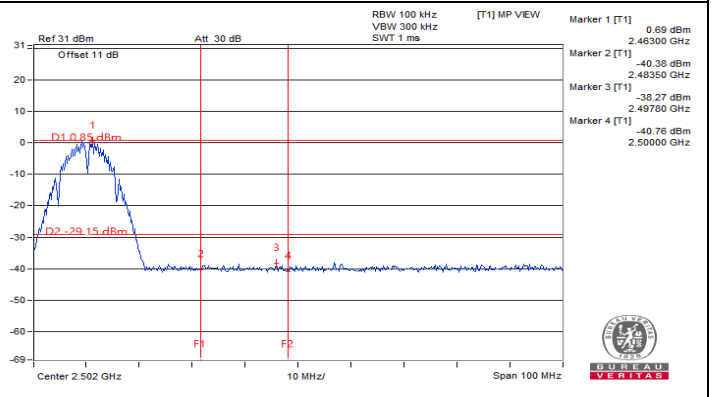


Chain 1 : CH 11

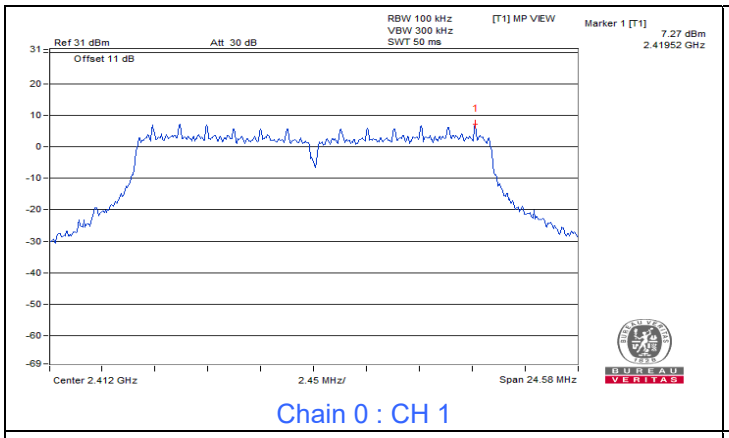


Chain 1 : CH 1 Band edge

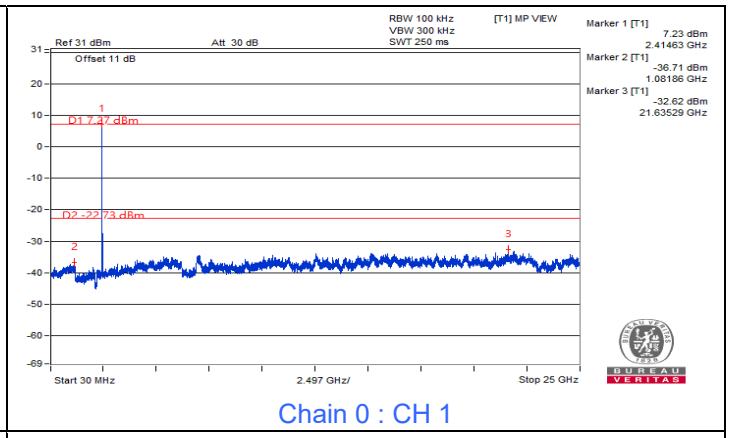


Chain 1 : CH 11 Band edge

802.11g



Chain 0 : CH 1



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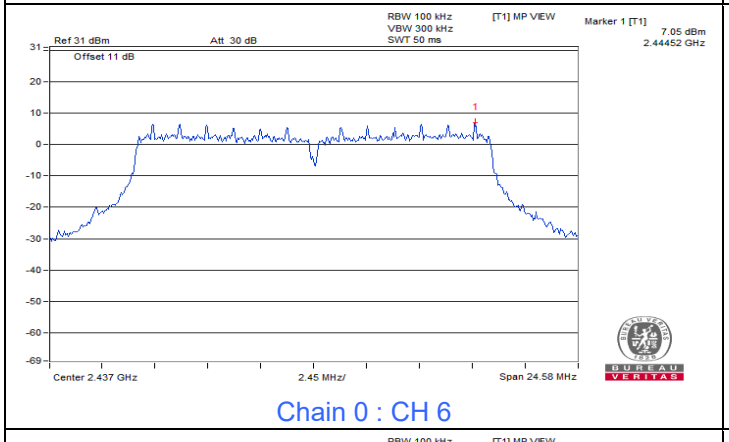

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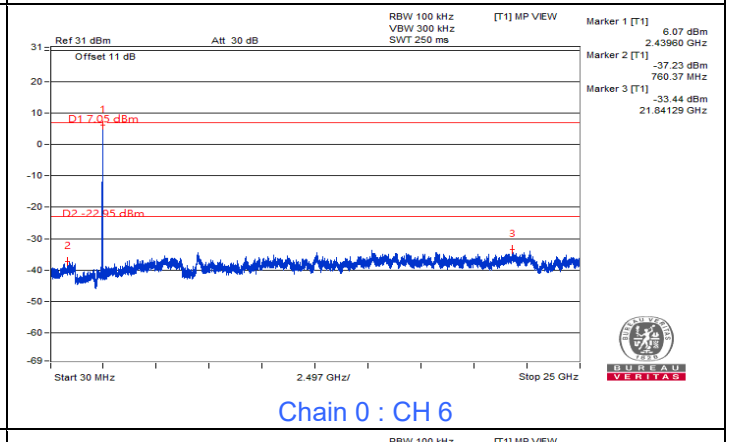

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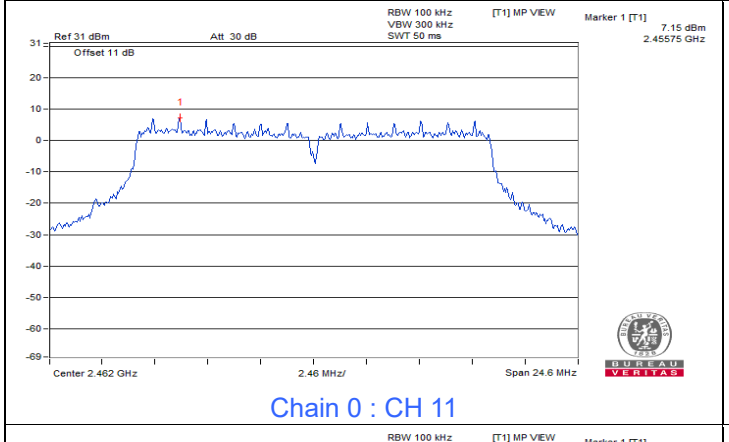

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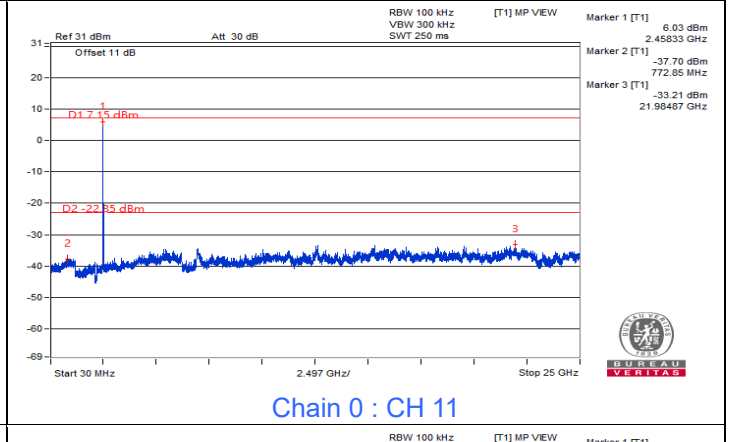
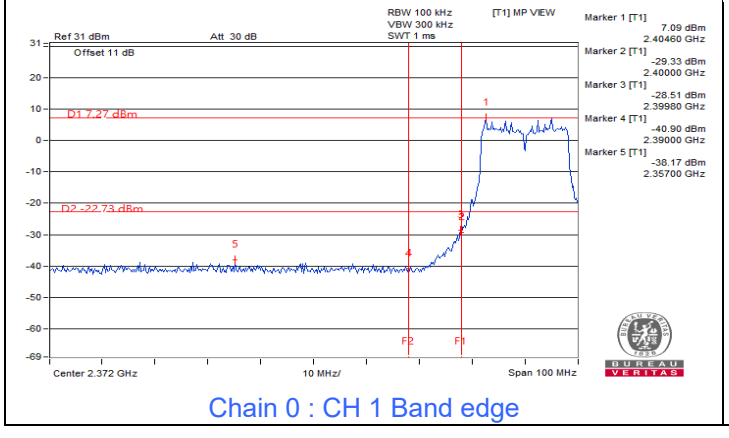
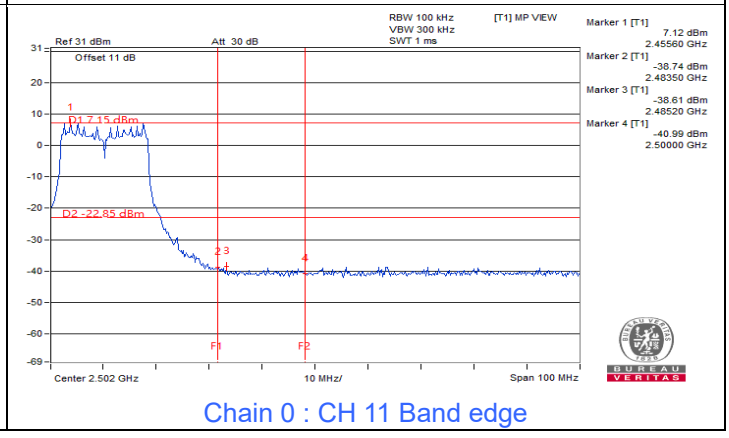


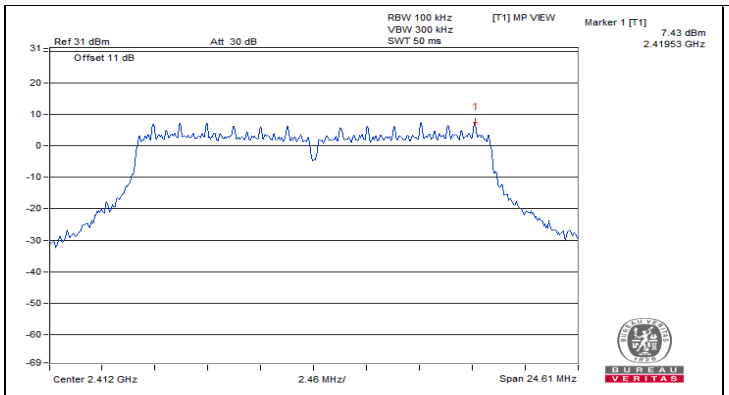
Chain 0 : CH 11



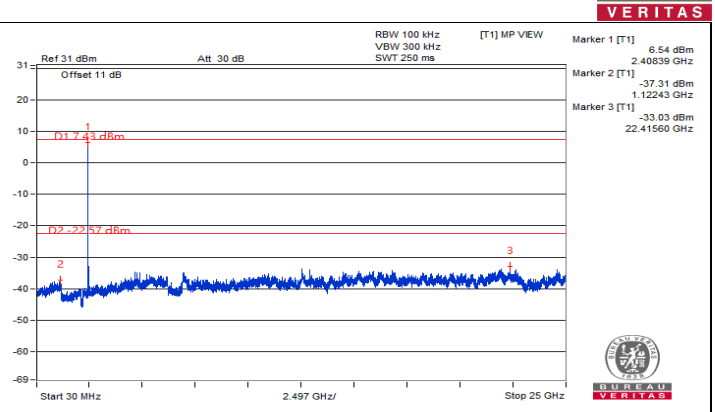
Chain 0 : CH 1 Band edge



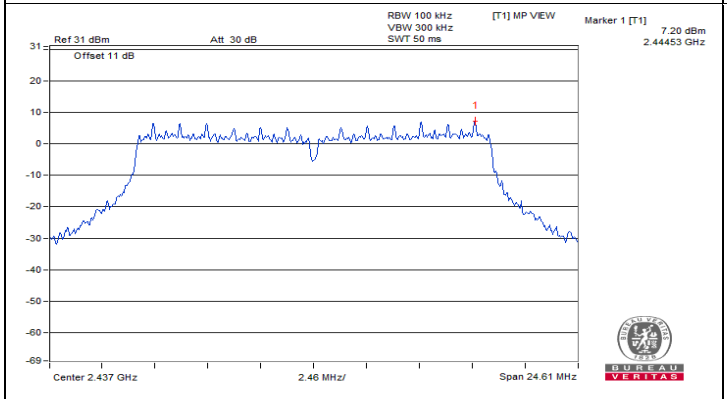
Chain 0 : CH 11 Band edge



Chain 1 : CH 1



Chain 1 : CH 1



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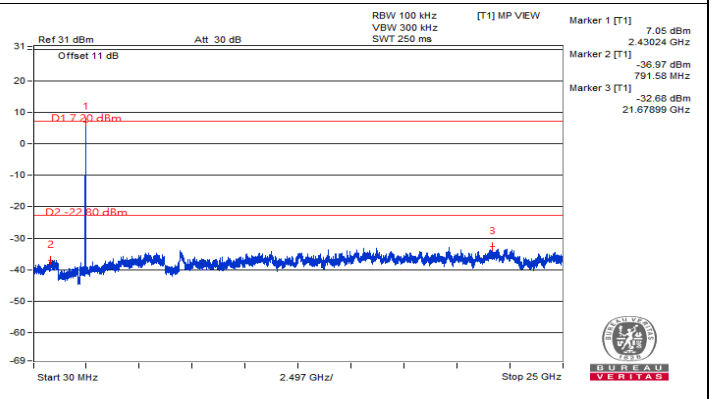
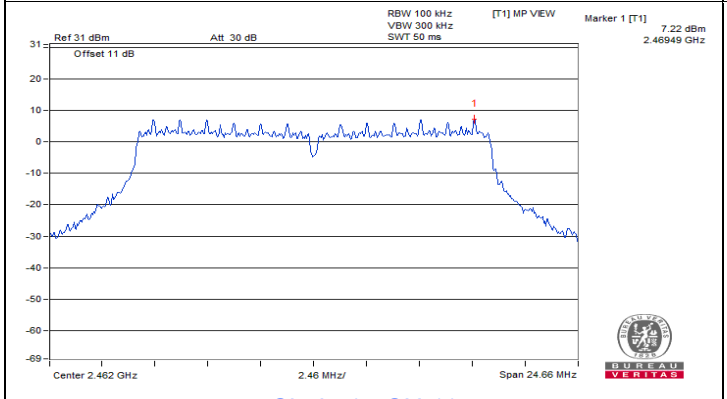
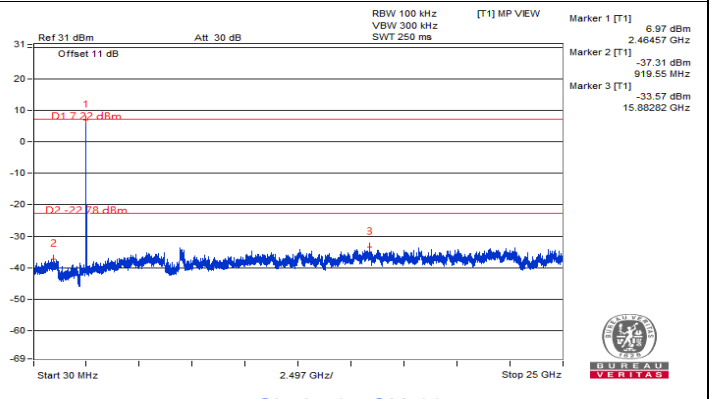


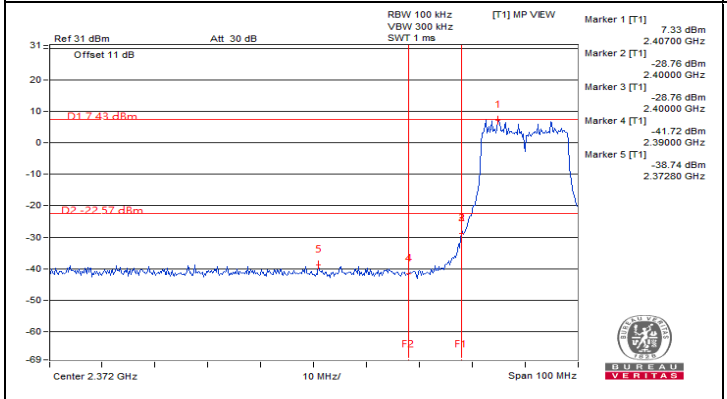
Chain 1 : CH 6



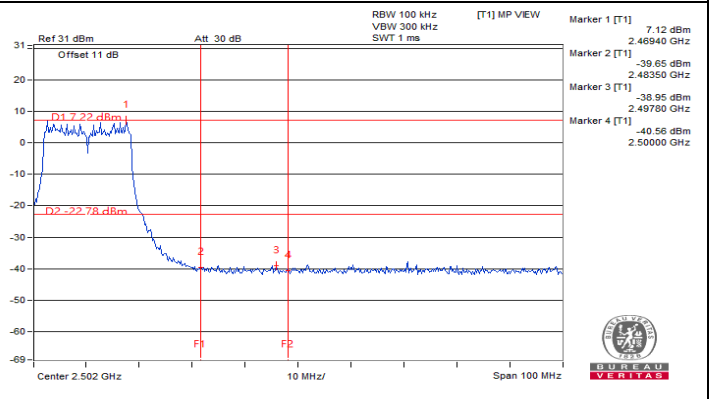
Chain 1 : CH 11



Chain 1 : CH 11

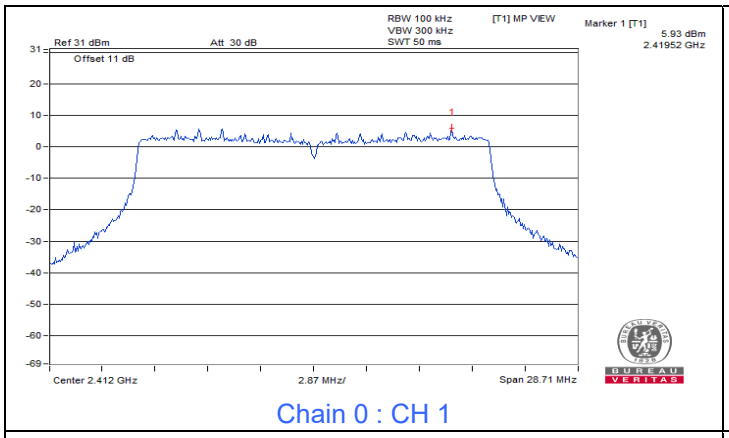


Chain 1 : CH 1 Band edge

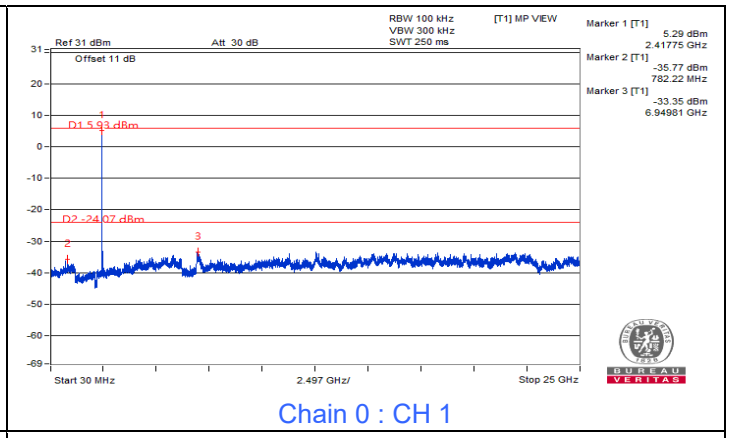


Chain 1 : CH 11 Band edge

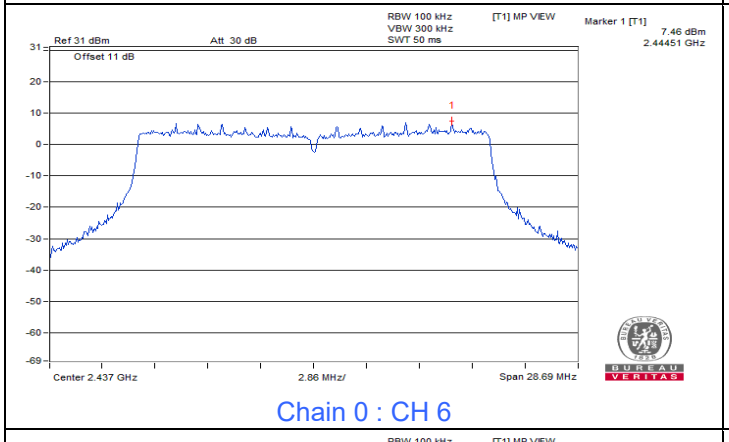
802.11ax (HE20)



Chain 0 : CH 1



Chain 0 : CH 1



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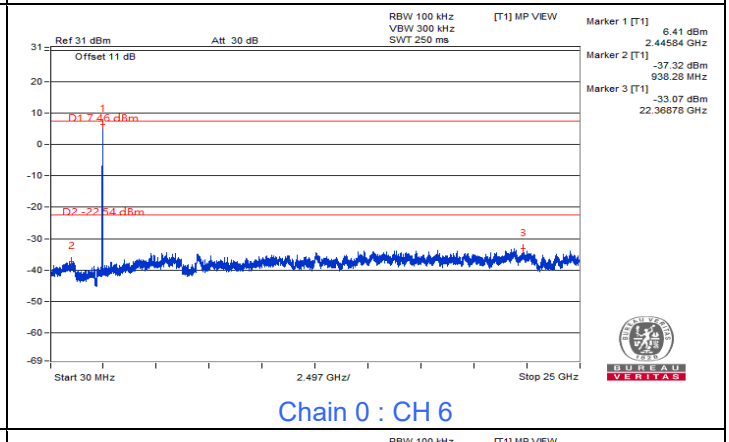
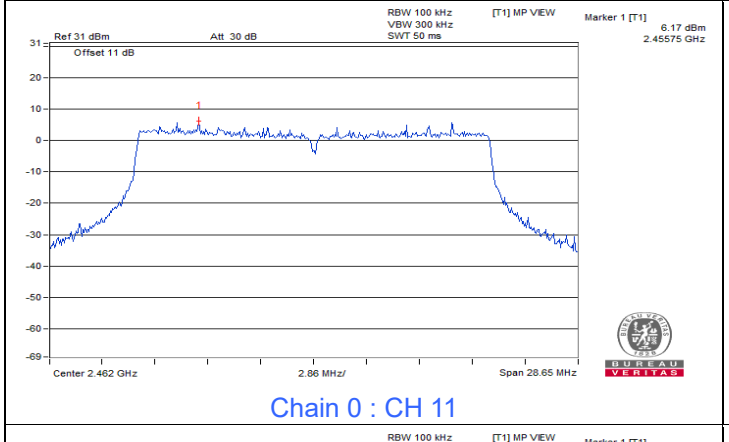


Chain 0 : CH 6



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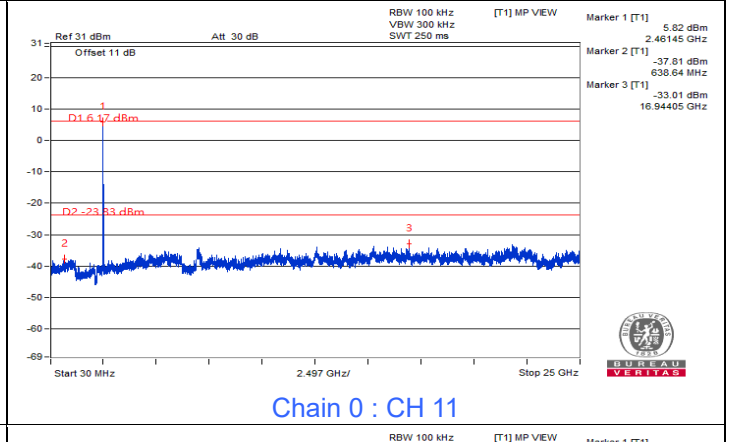
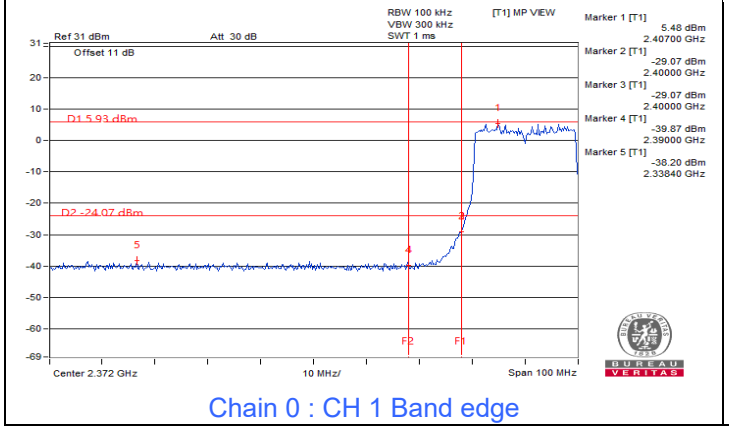
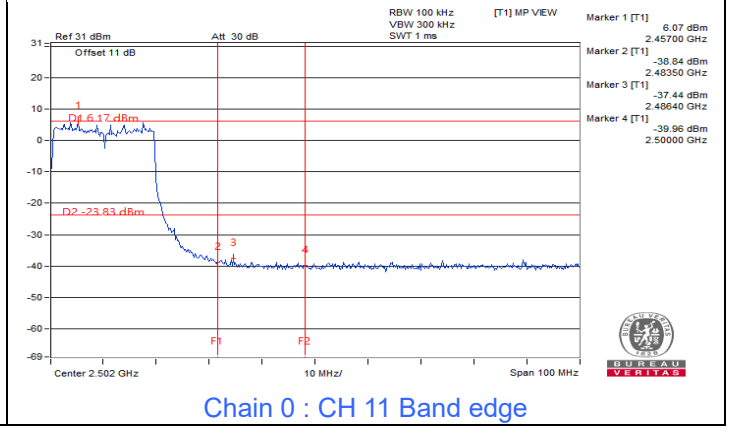


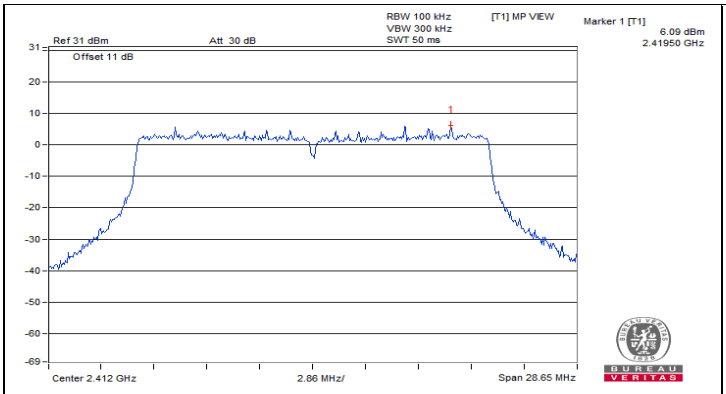
Chain 0 : CH 11



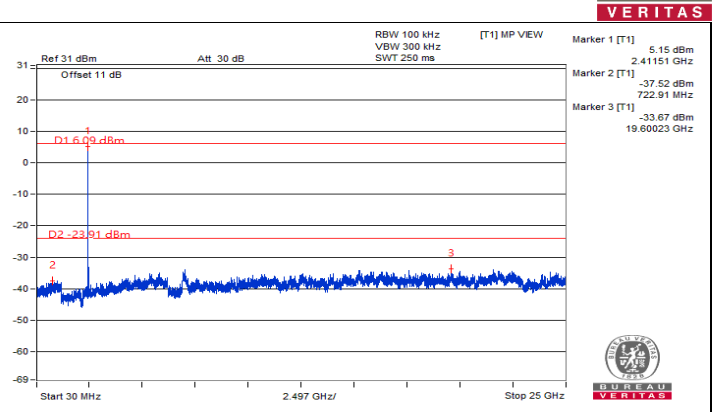
Chain 0 : CH 1 Band edge



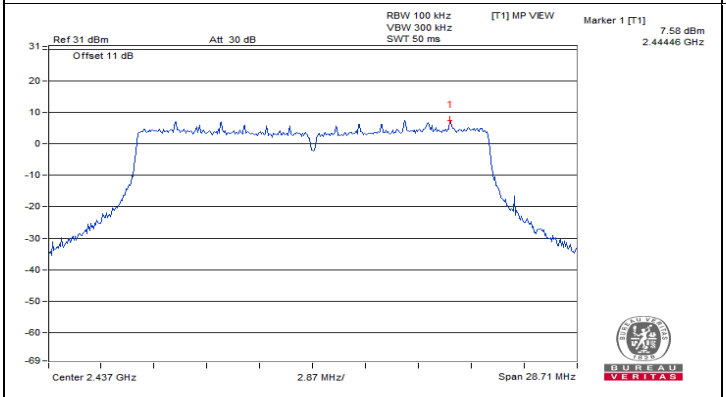
Chain 0 : CH 11 Band edge



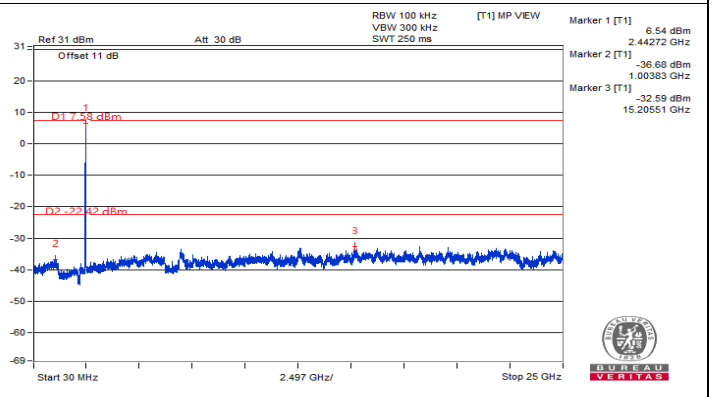
Chain 1 : CH 1



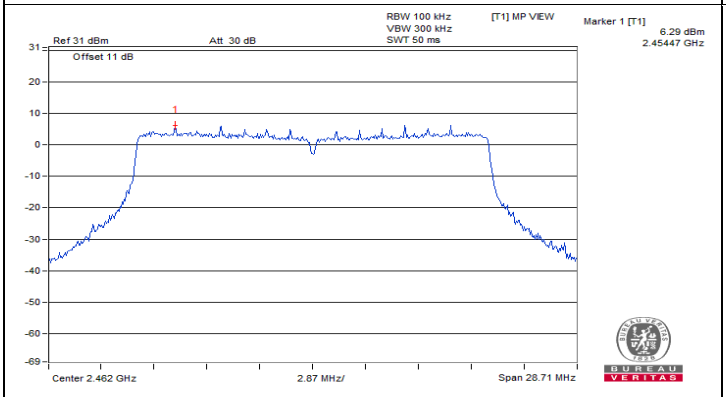
Chain 1 : CH 1



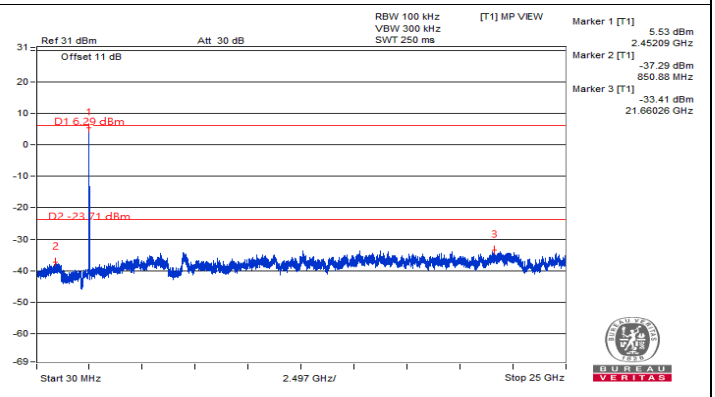
Chain 1 : CH 6



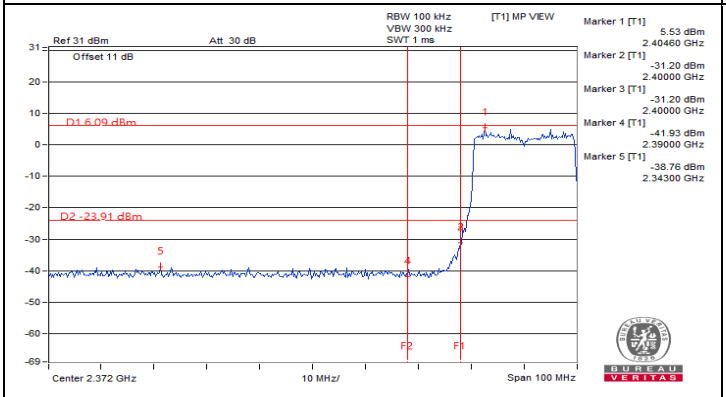
Chain 1 : CH 6



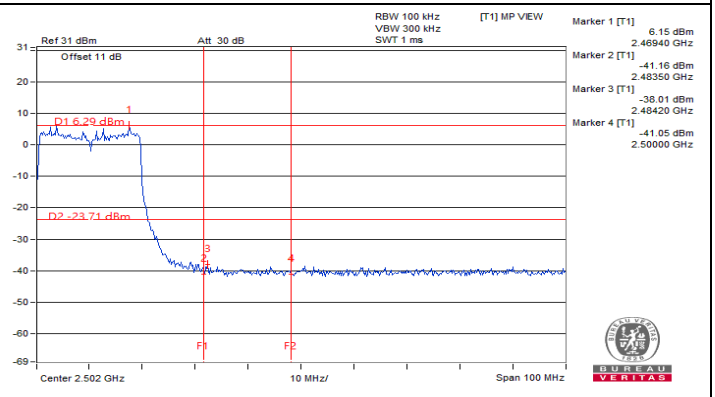
Chain 1 : CH 11



Chain 1 : CH 11

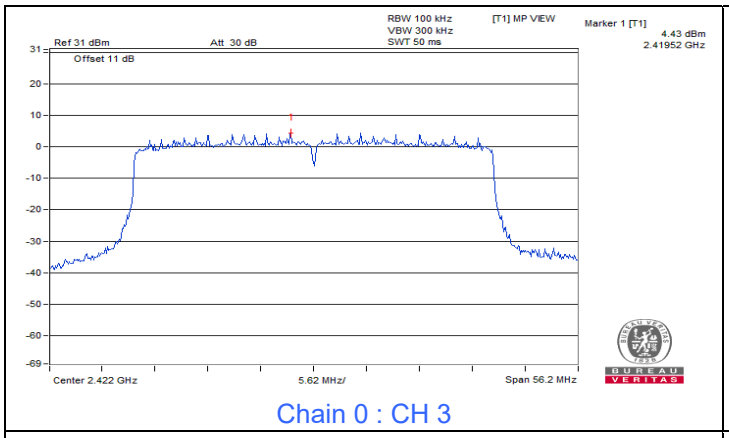


Chain 1 : CH 1 Band edge

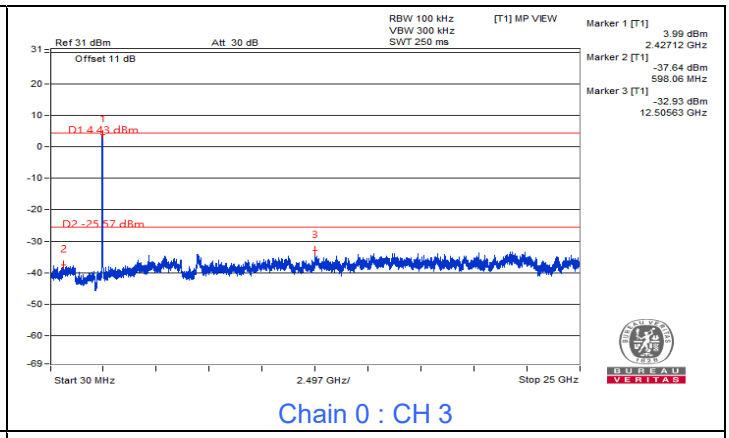


Chain 1 : CH 11 Band edge

802.11ax (HE40)



Chain 0 : CH 3



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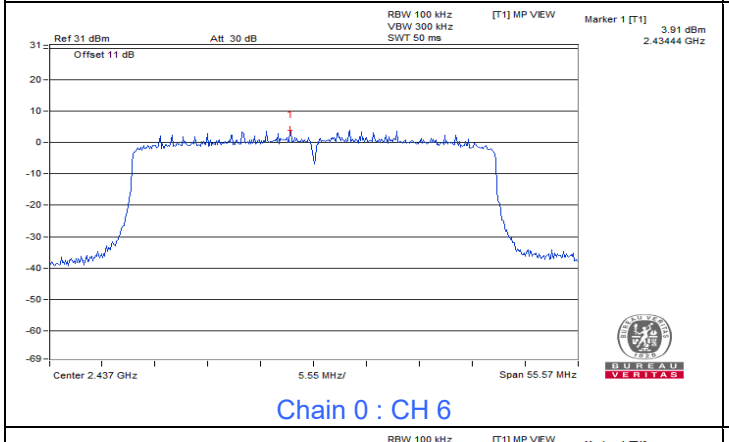

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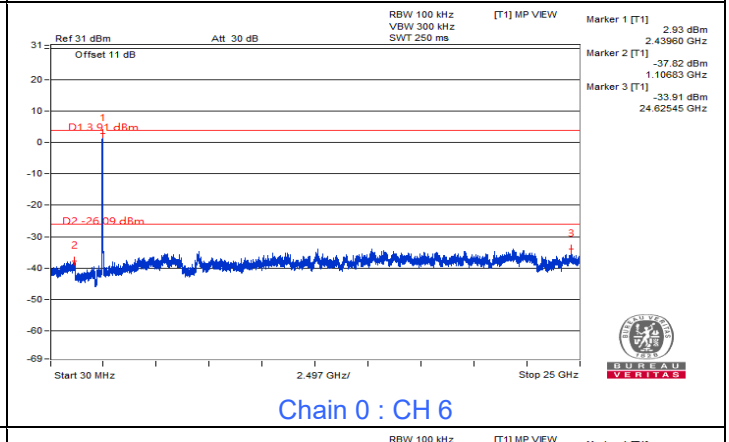

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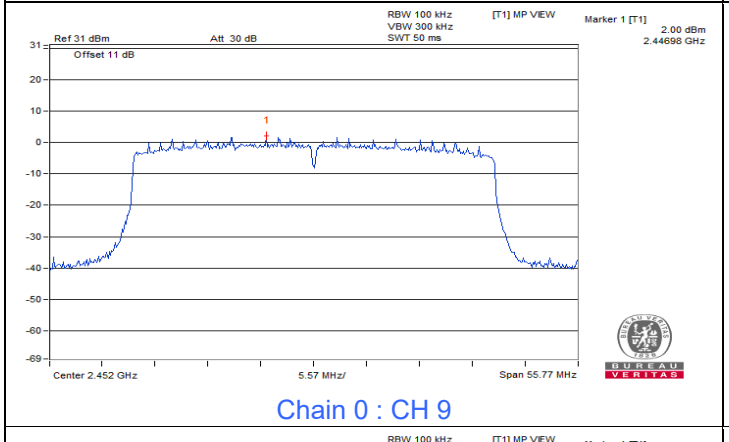

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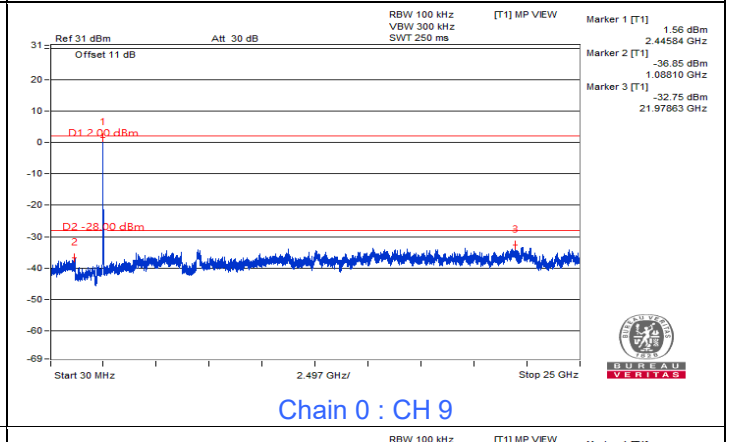
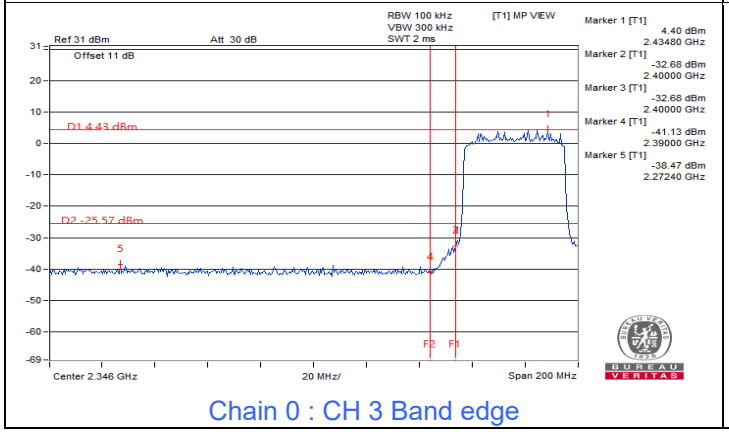
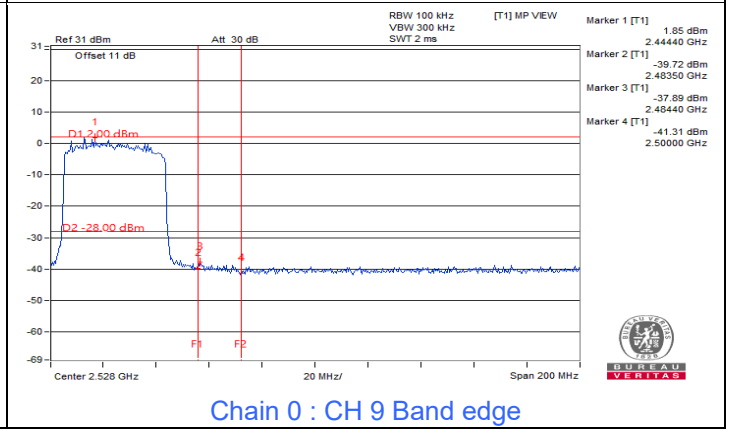


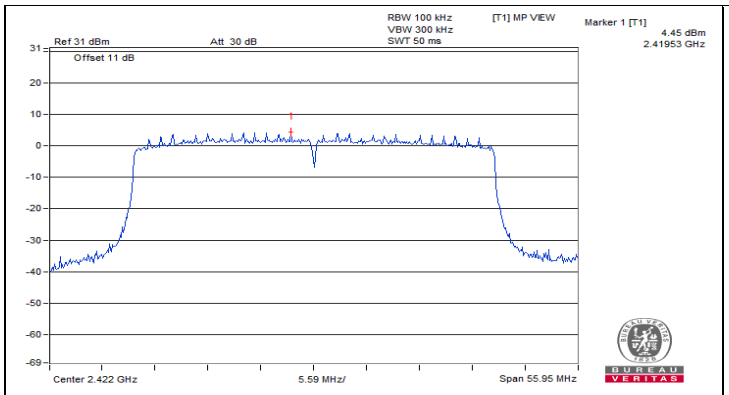
Chain 0 : CH 9



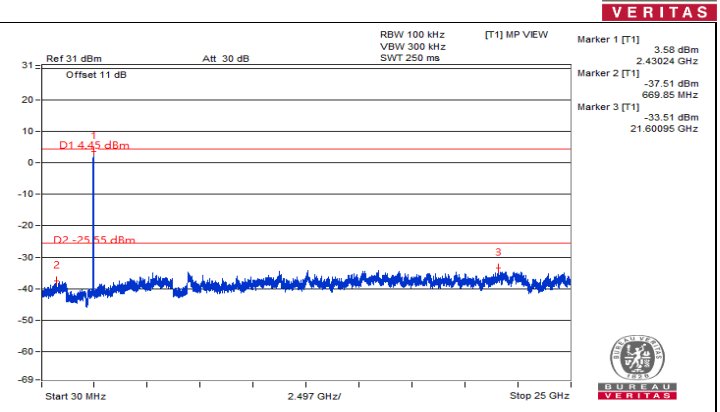
Chain 0 : CH 3 Band edge



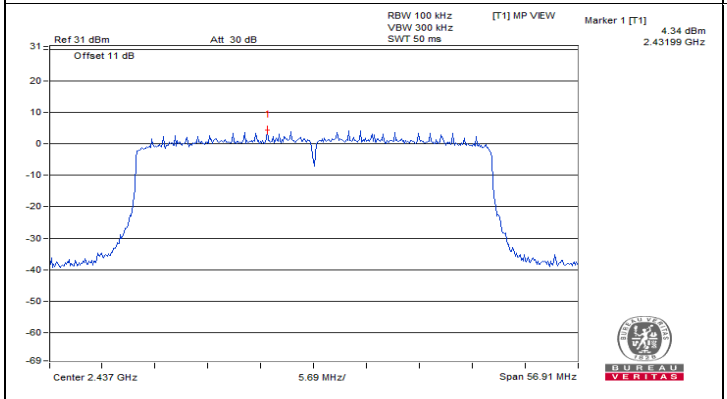
Chain 0 : CH 9 Band edge



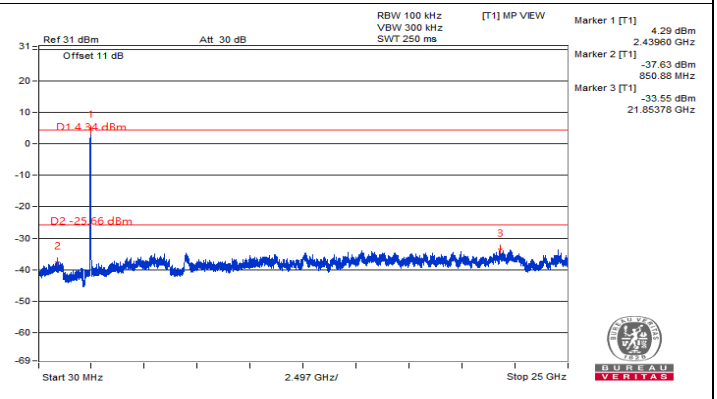
Chain 1 : CH 3



Chain 1 : CH 3



Chain 1 : CH 6



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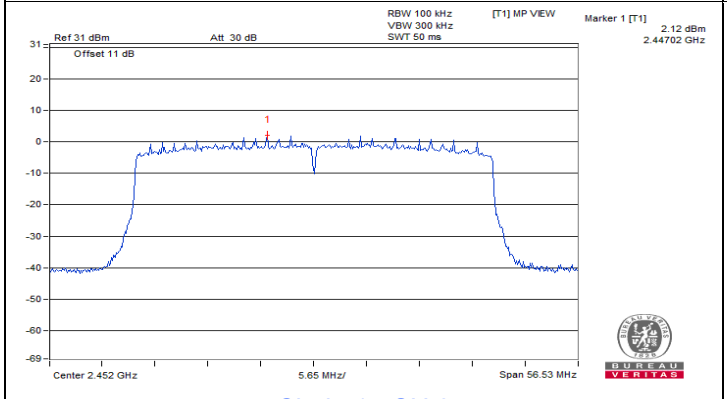
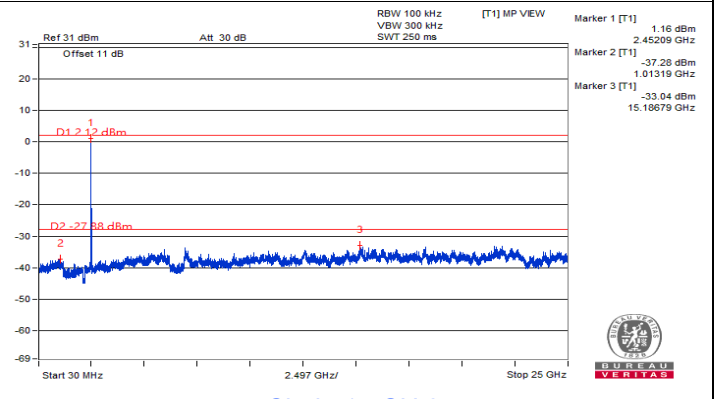
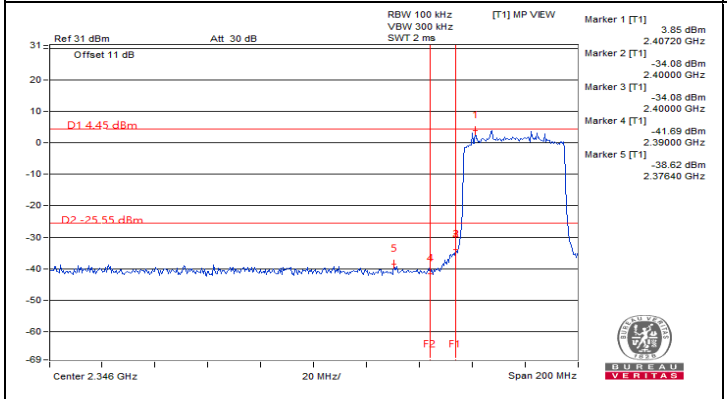


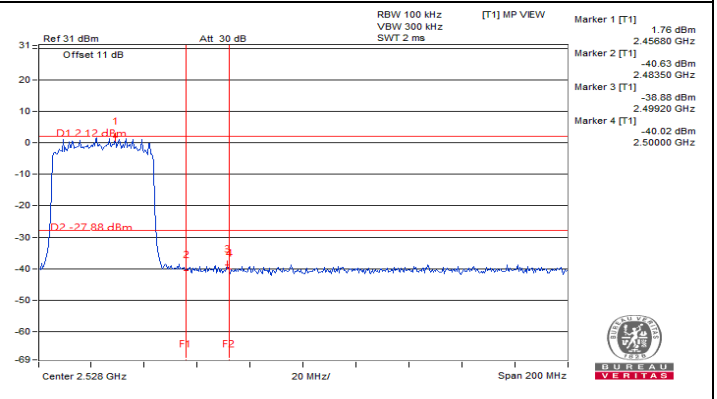
Chain 1 : CH 9



Chain 1 : CH 9



Chain 1 : CH 3 Band edge

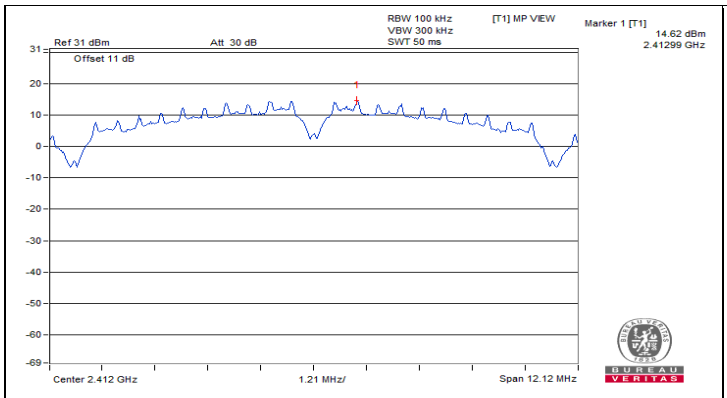


Chain 1 : CH 9 Band edge

Input Power:	120Vac, 60Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Frank Liu / Gary Lin

Test Mode E

802.11b



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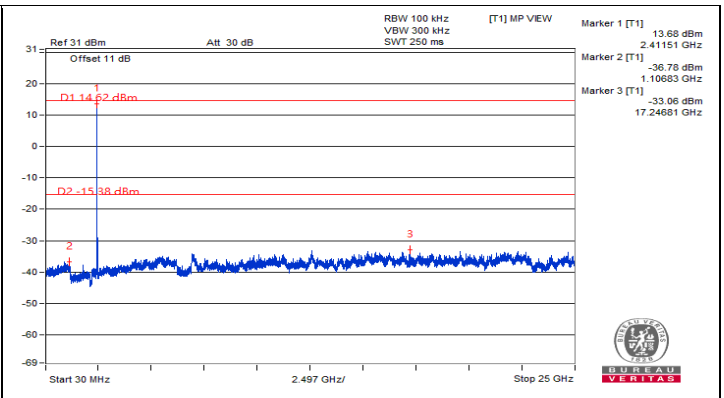

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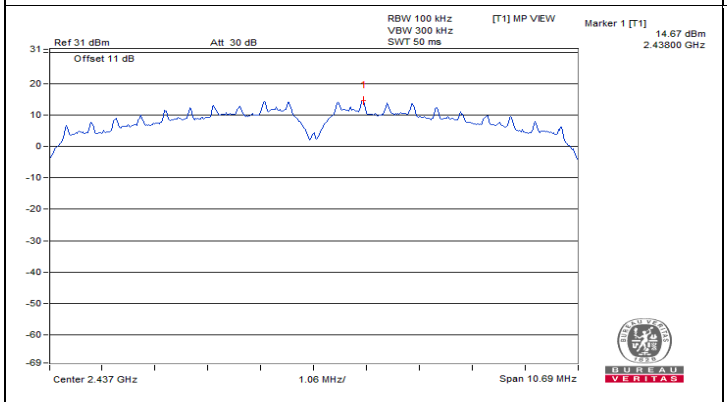
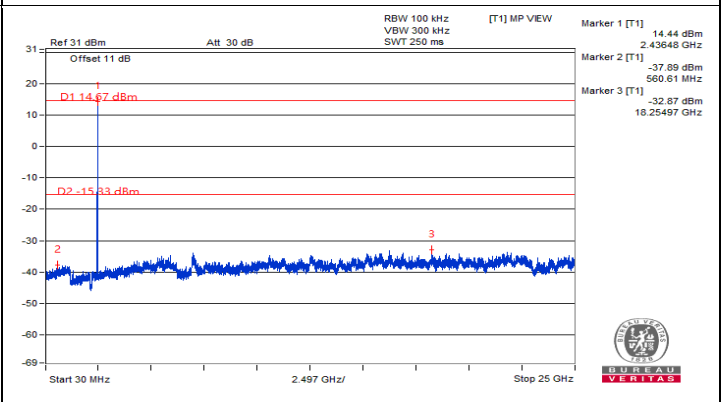


Chain 0 : CH 6



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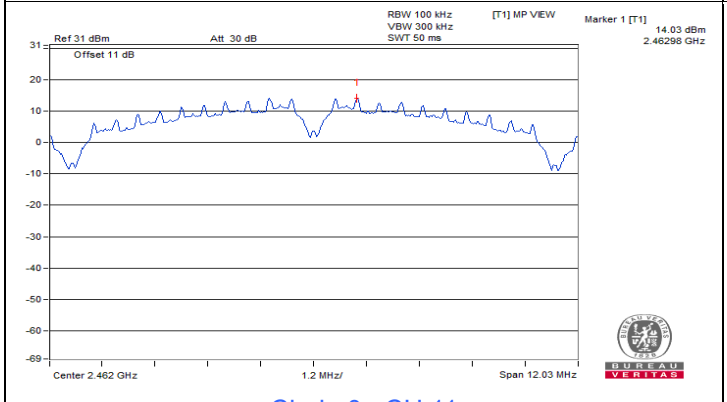
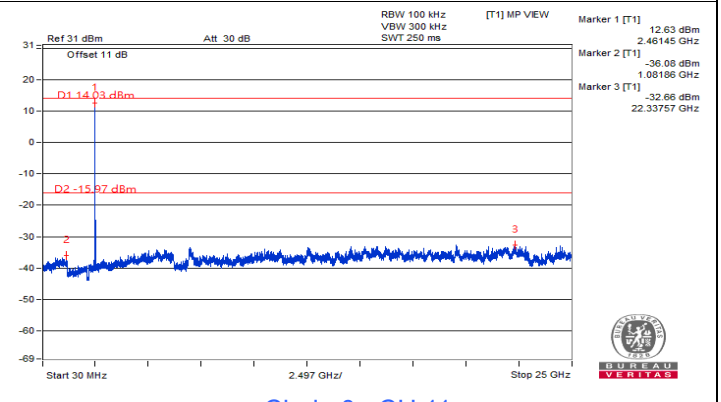
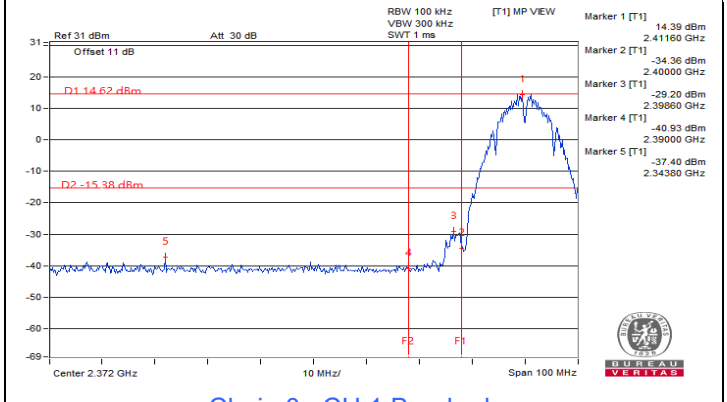


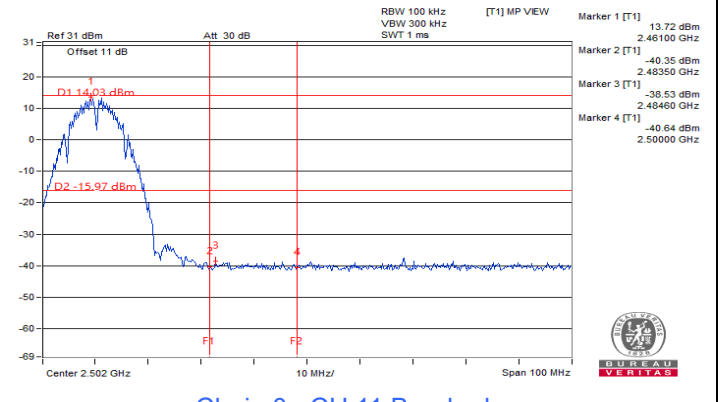
Chain 0 : CH 11



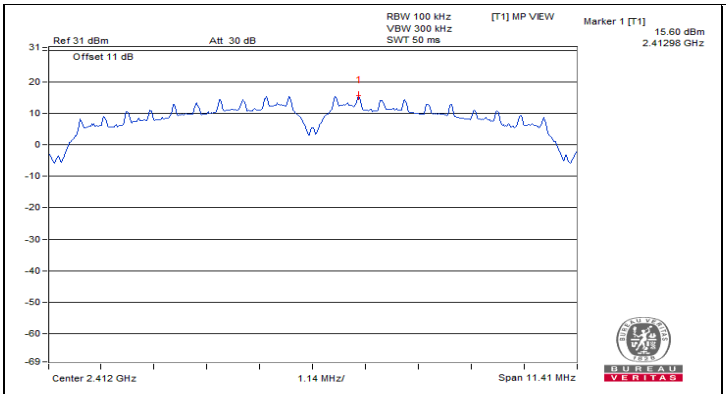
Chain 0 : CH 11



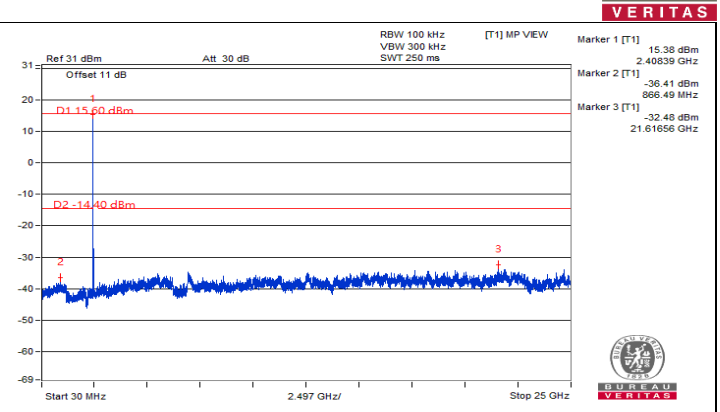
Chain 0 : CH 1 Band edge



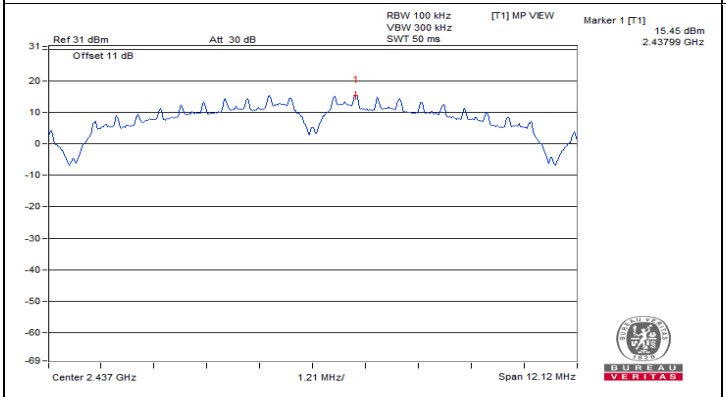
Chain 0 : CH 11 Band edge



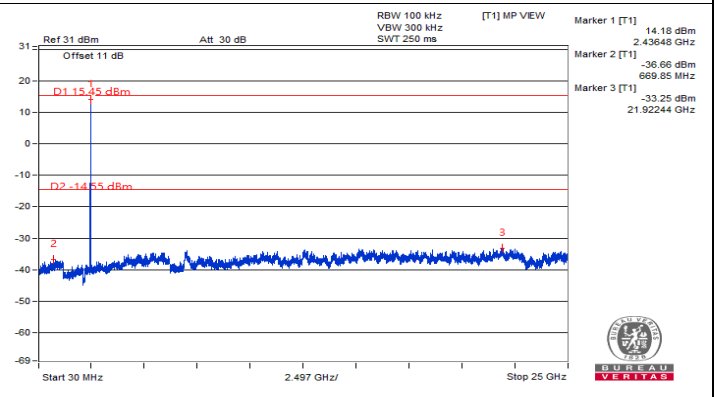
Chain 1 : CH 1



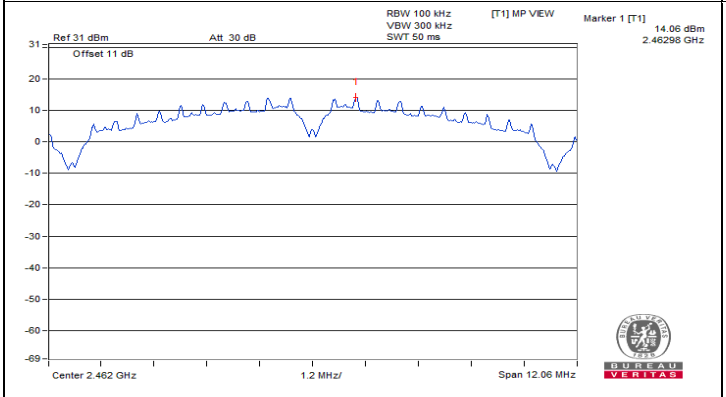
Chain 1 : CH 1



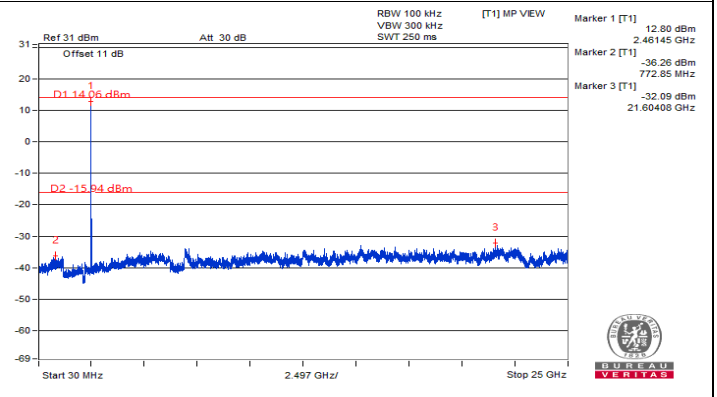
Chain 1 : CH 6



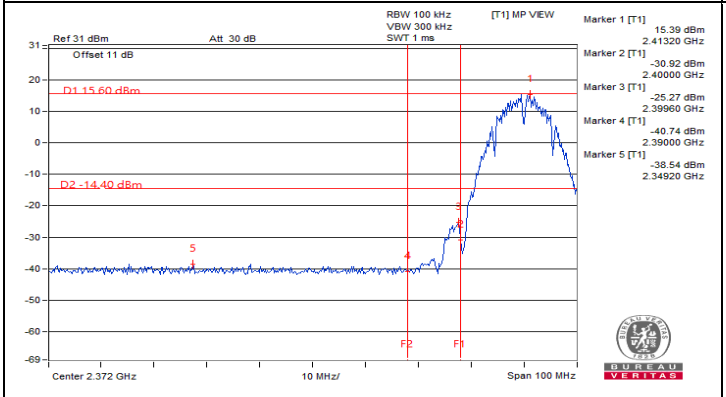
Chain 1 : CH 6



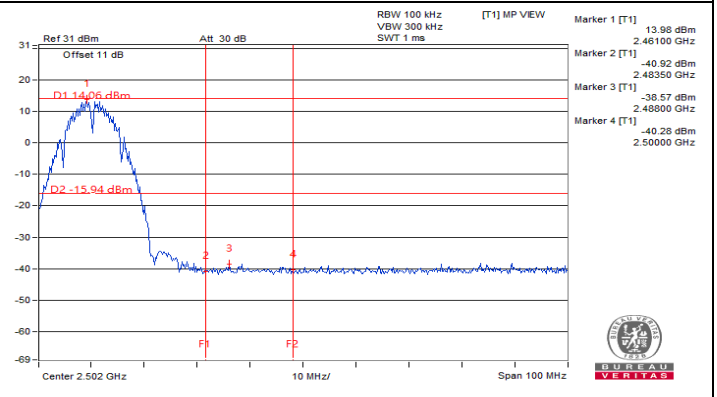
Chain 1 : CH 11



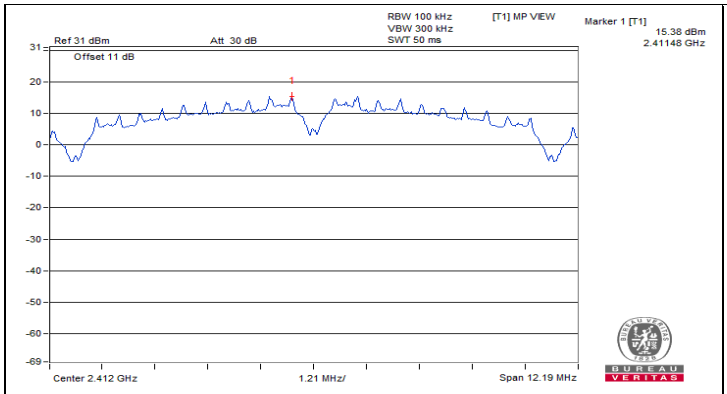
Chain 1 : CH 11



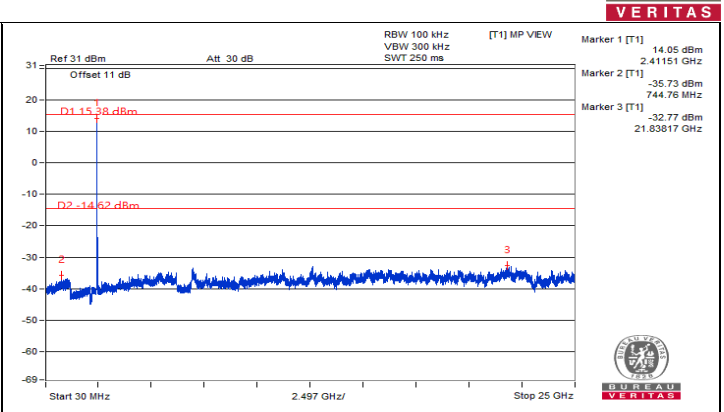
Chain 1 : CH 1 Band edge



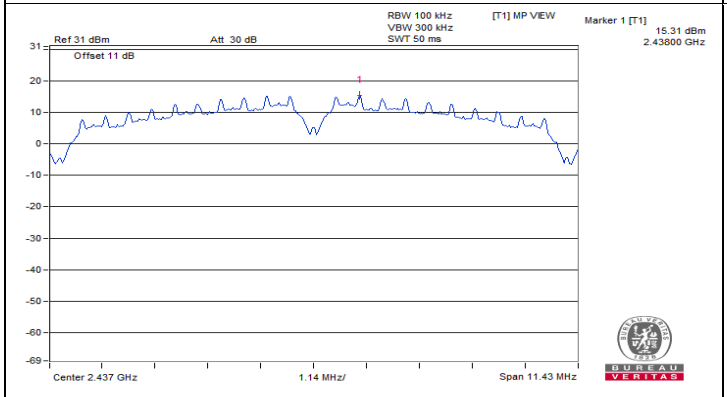
Chain 1 : CH 11 Band edge



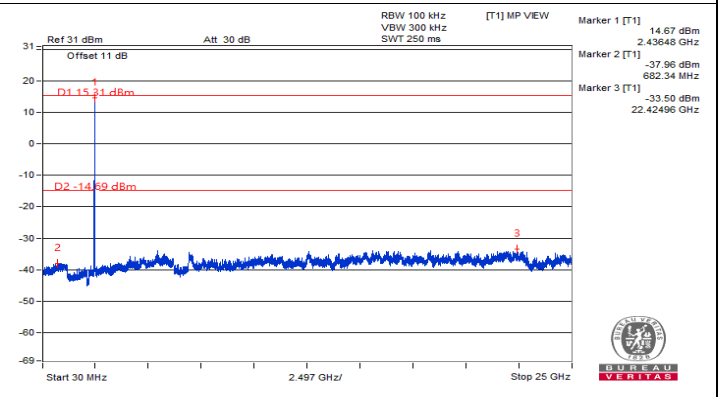
Chain 2 : CH 1



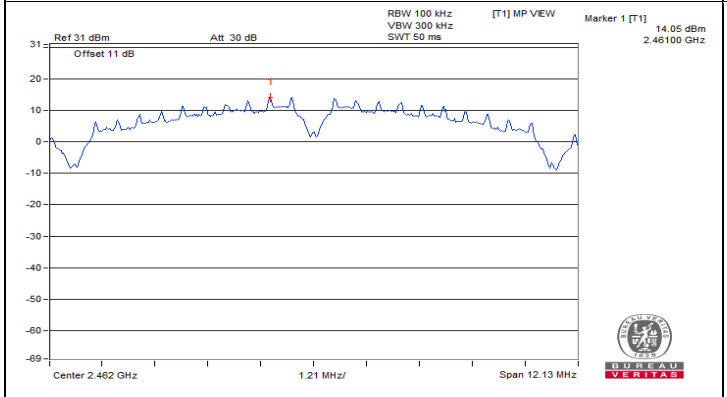
Chain 2 : CH 1



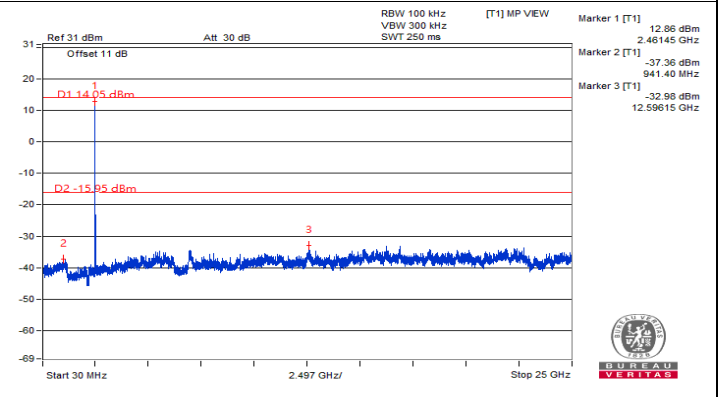
Chain 2 : CH 6



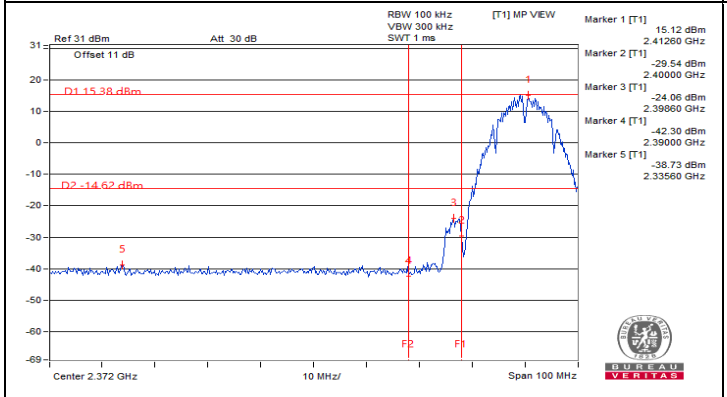
Chain 2 : CH 6



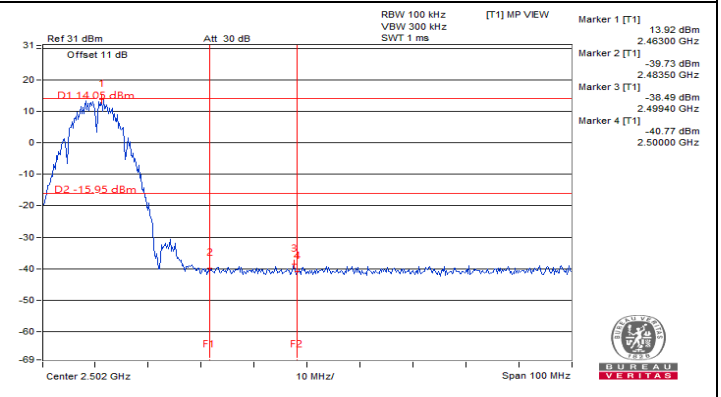
Chain 2 : CH 11



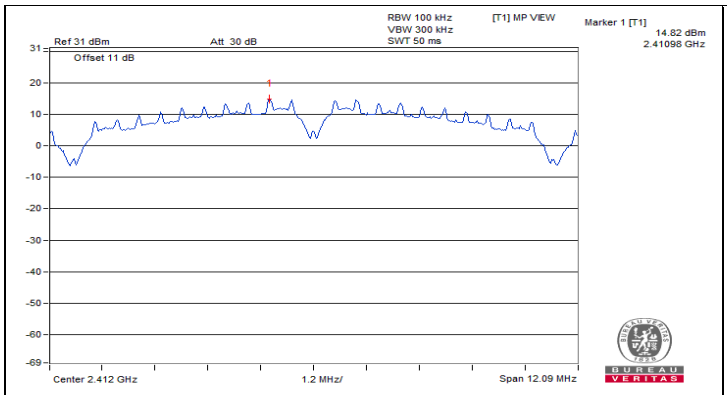
Chain 2 : CH 11



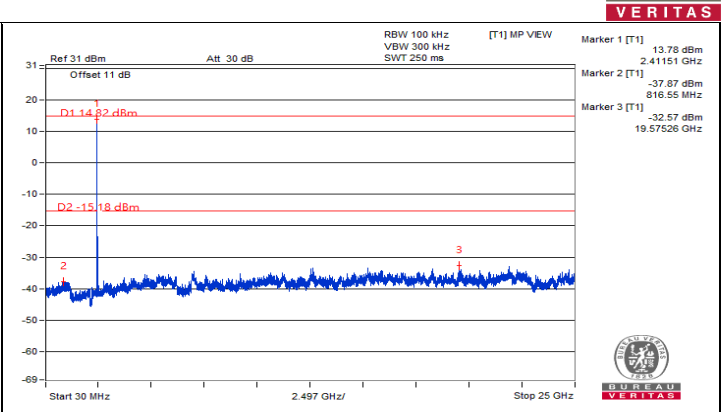
Chain 2 : CH 1 Band edge



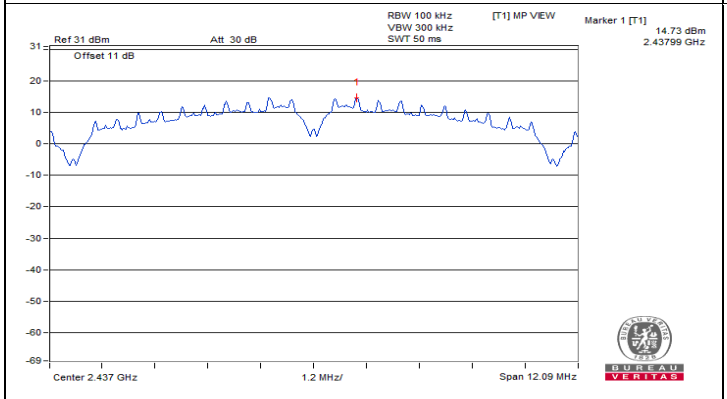
Chain 2 : CH 11 Band edge



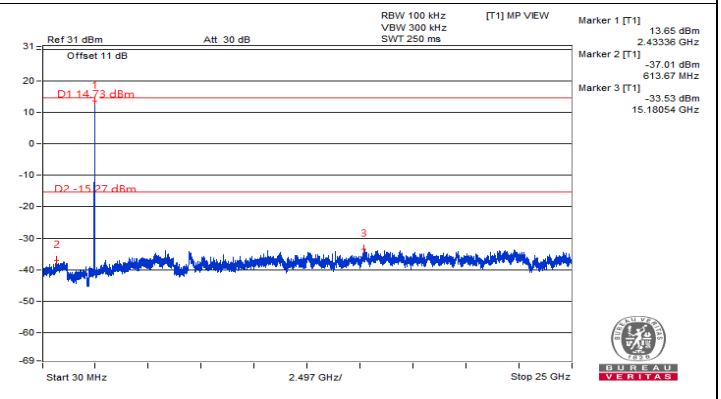
Chain 3 : CH 1



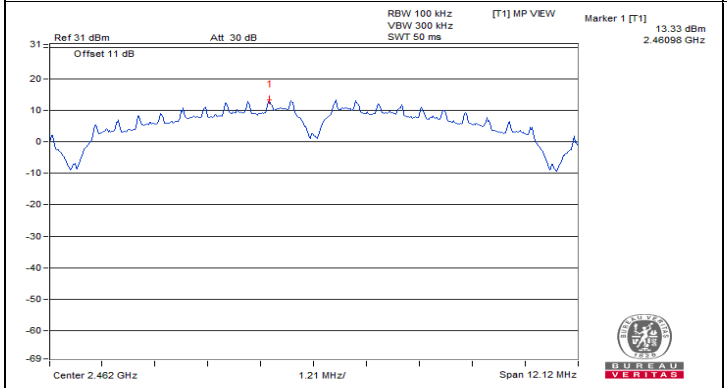
Chain 3 : CH 1



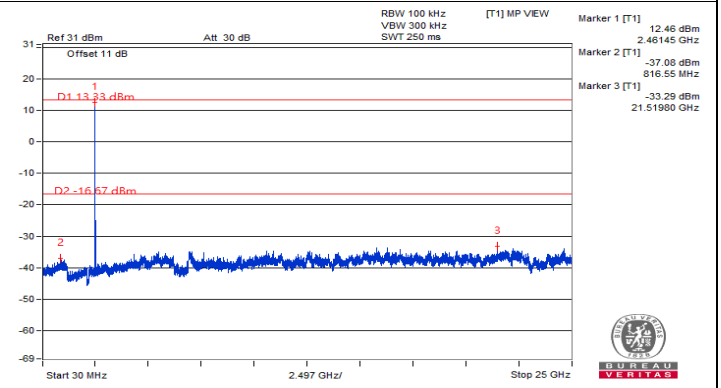
Chain 3 : CH 6



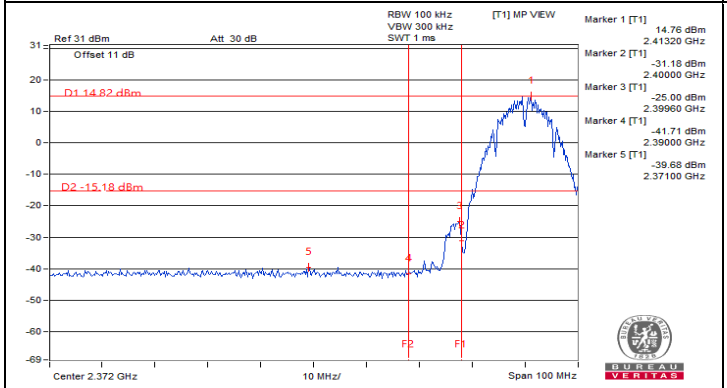
Chain 3 : CH 6



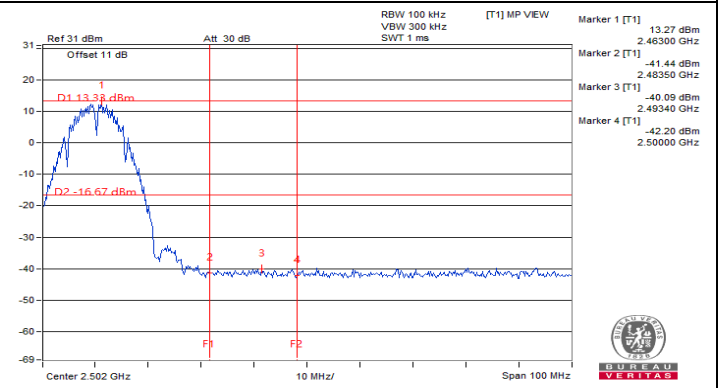
Chain 3 : CH 11



Chain 3 : CH 11

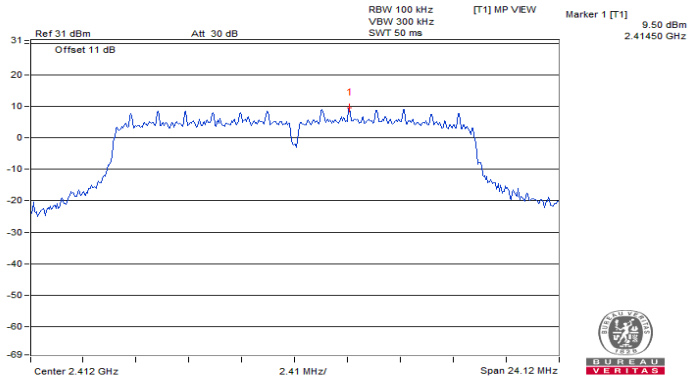


Chain 3 : CH 1 Band edge

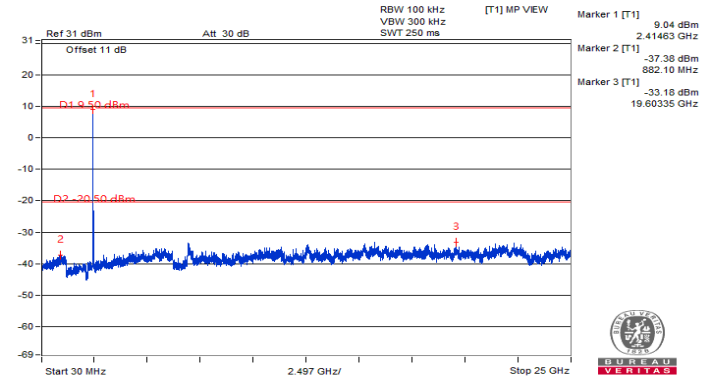


Chain 3 : CH 11 Band edge

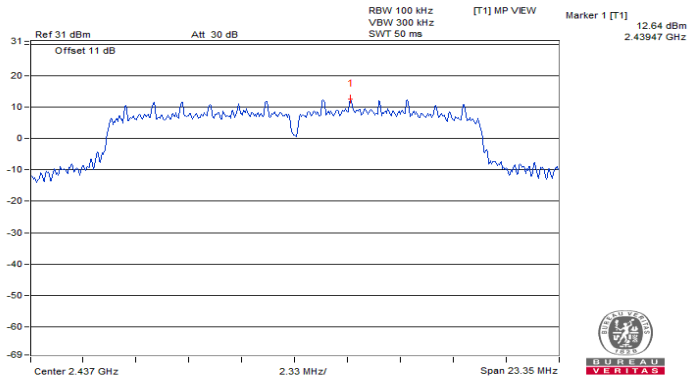
802.11g



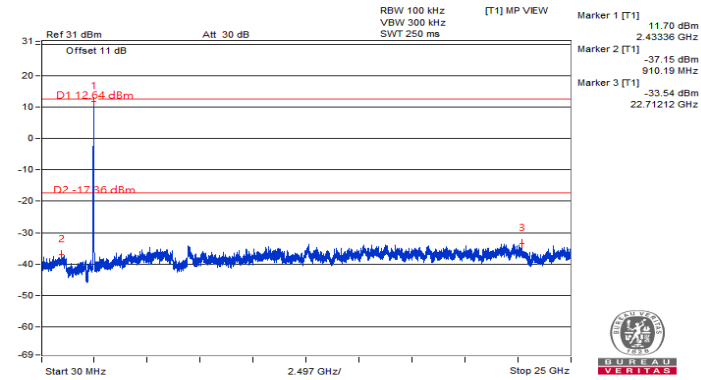
Chain 0 : CH 1



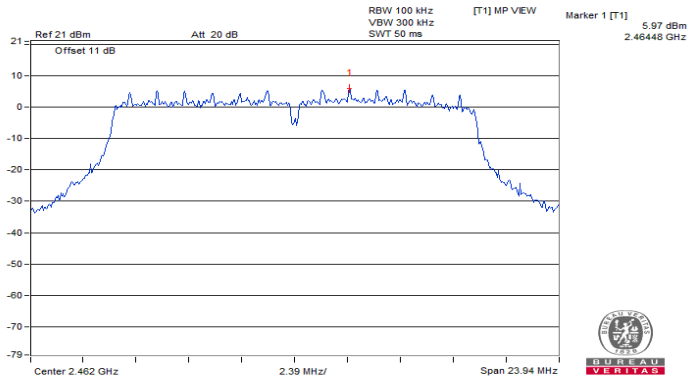
Chain 0 : CH 1



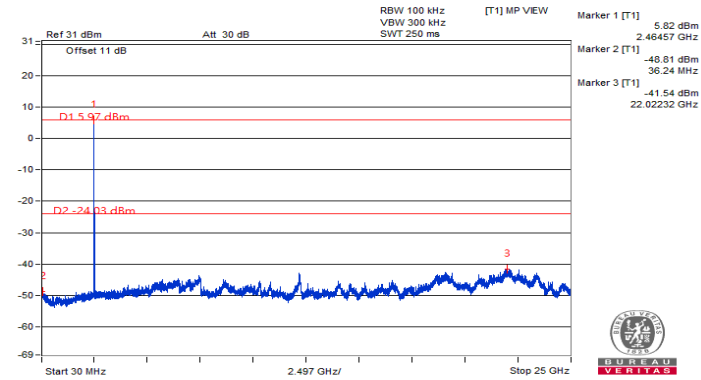
Chain 0 : CH 6



Chain 0 : CH 6



Chain 0 : CH 11



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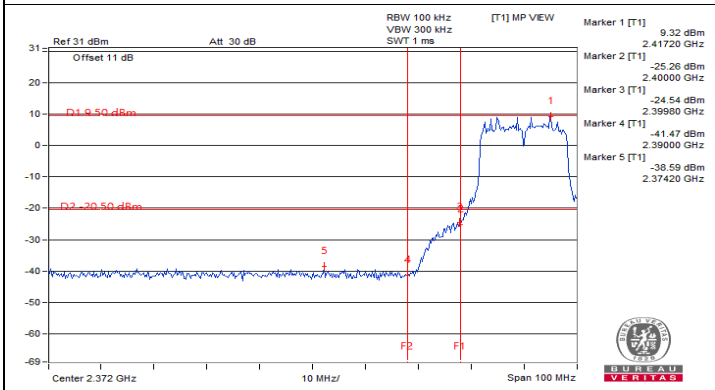
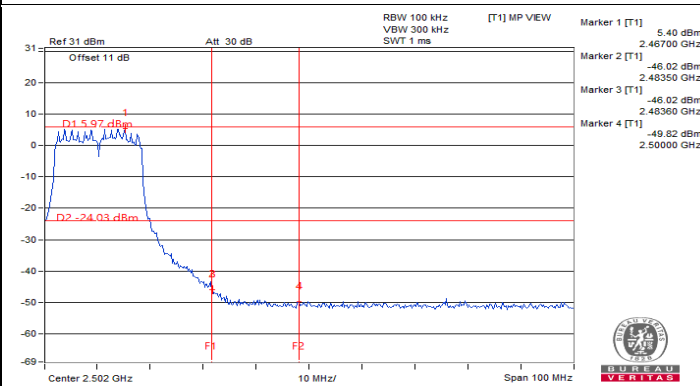


Chain 0 : CH 1 Band edge



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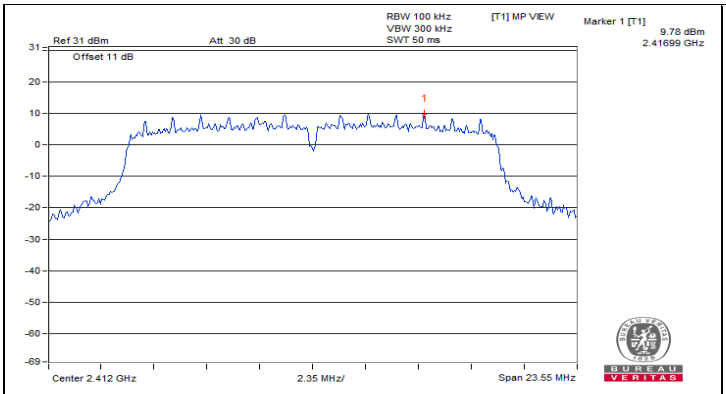
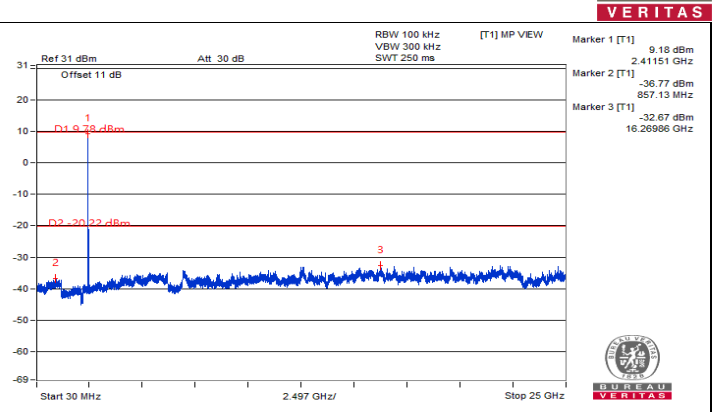


Chain 1 : CH 1



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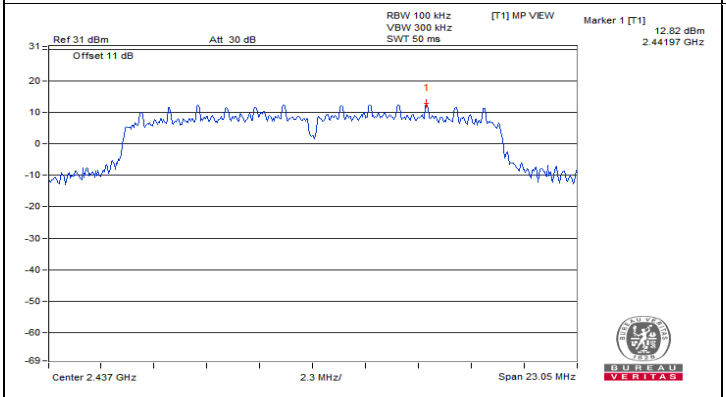

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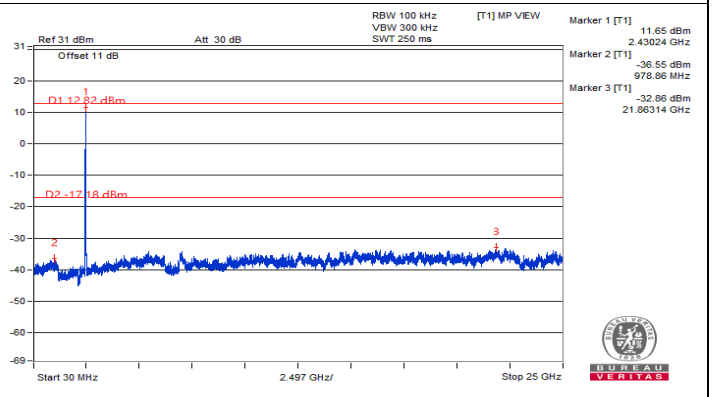

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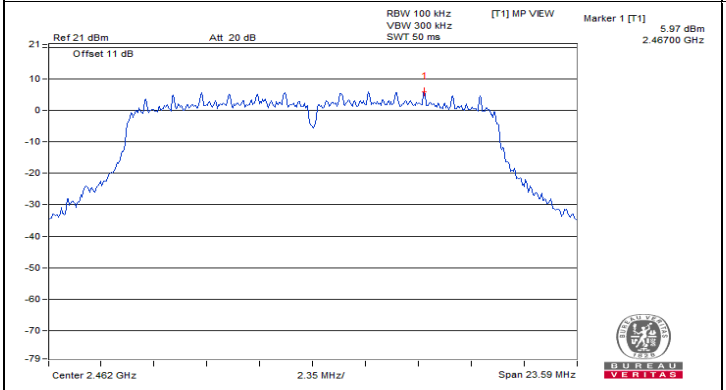

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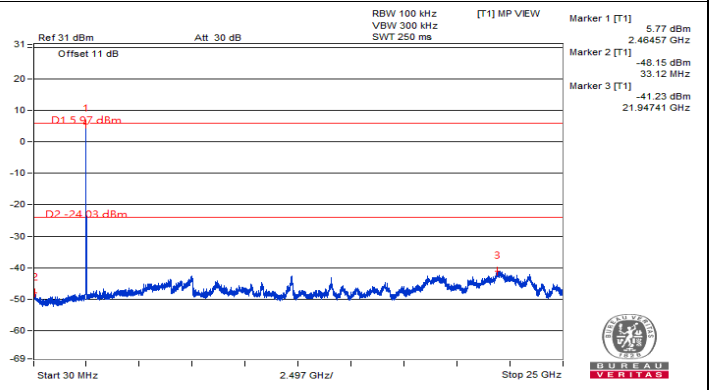

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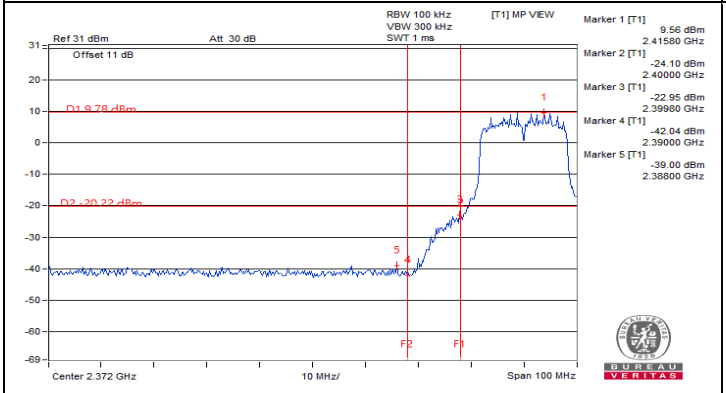
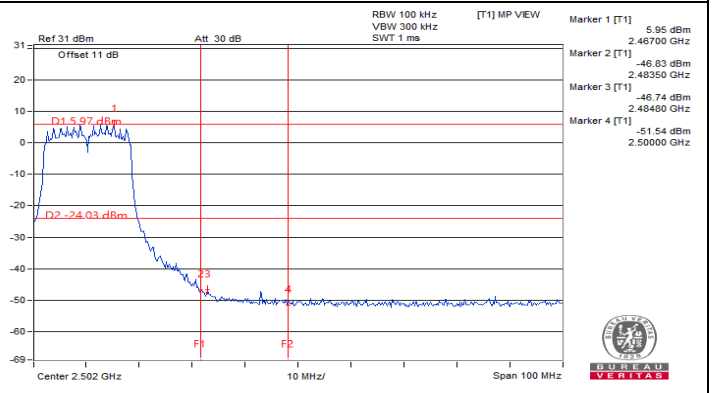
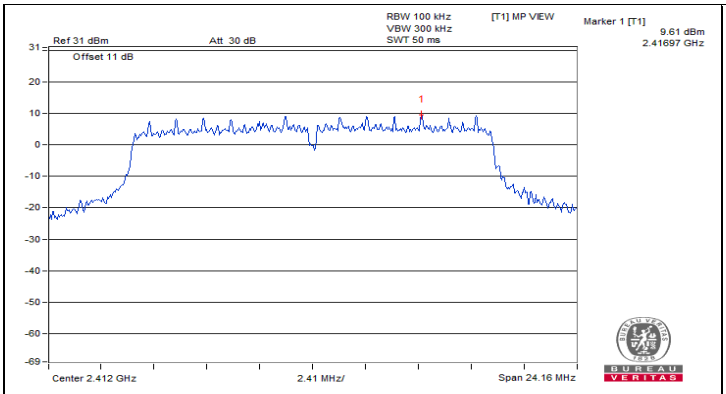


Chain 1 : CH 1 Band edge



Chain 1 : CH 11 Band edge



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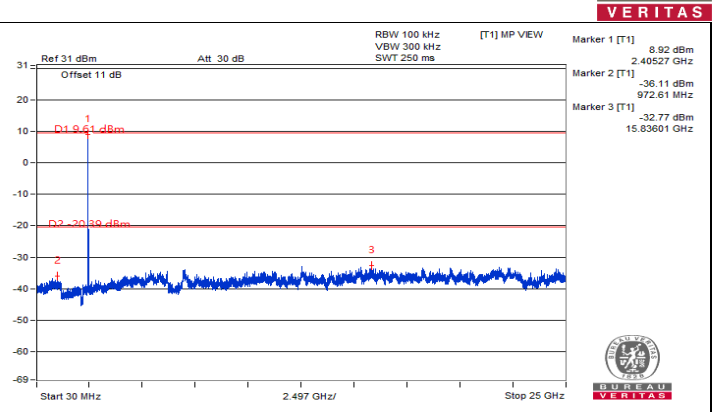

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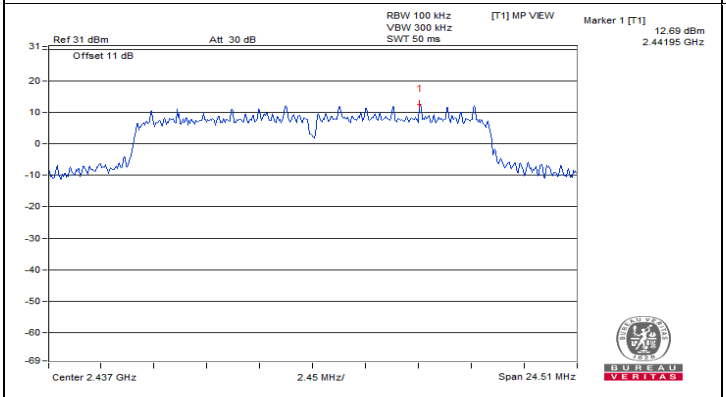

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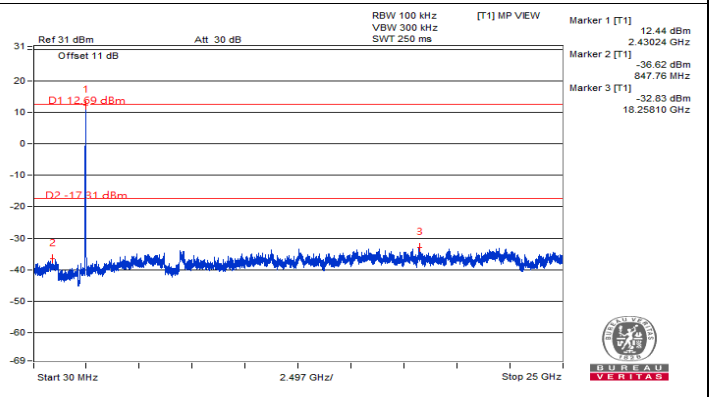

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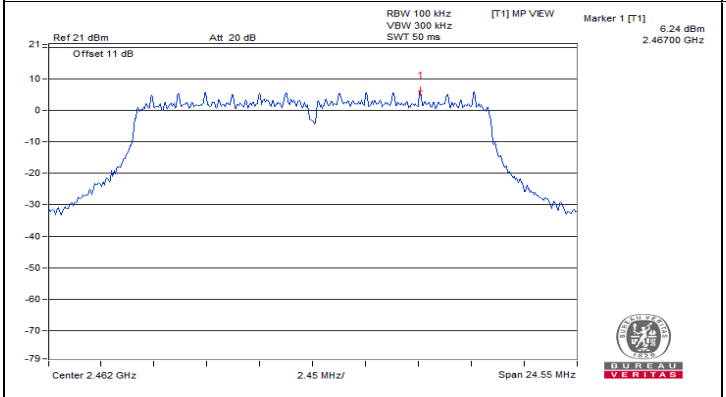

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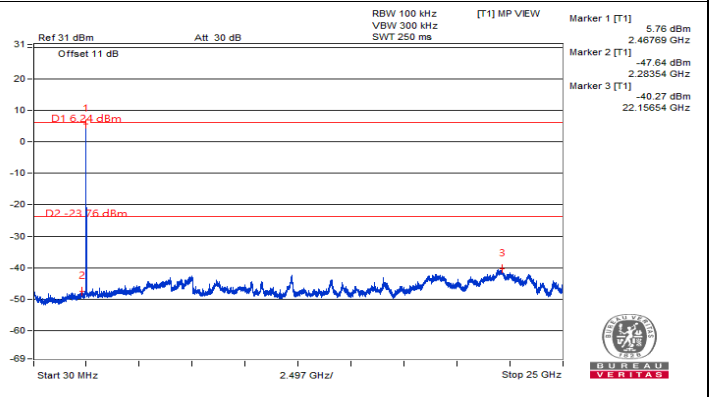

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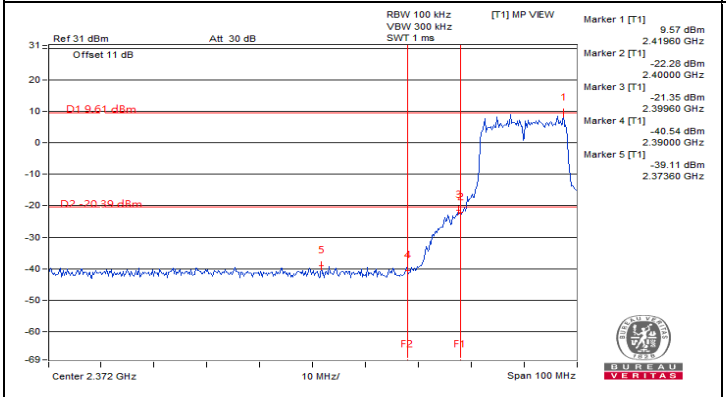
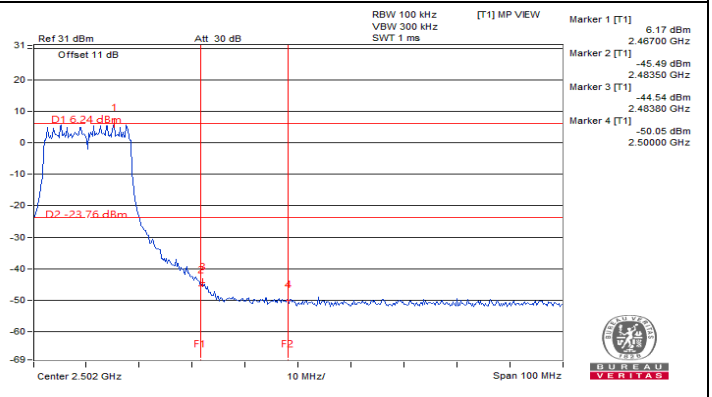
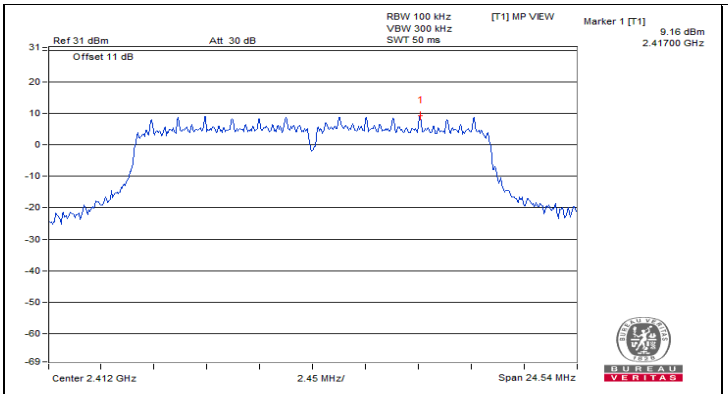


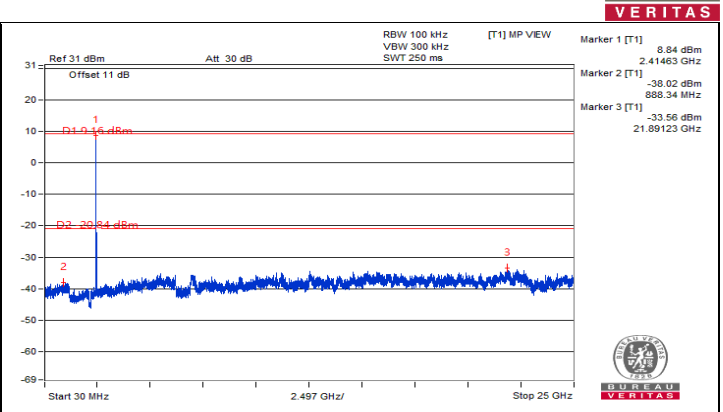
Chain 2 : CH 1 Band edge



Chain 2 : CH 11 Band edge



Chain 3 : CH 1



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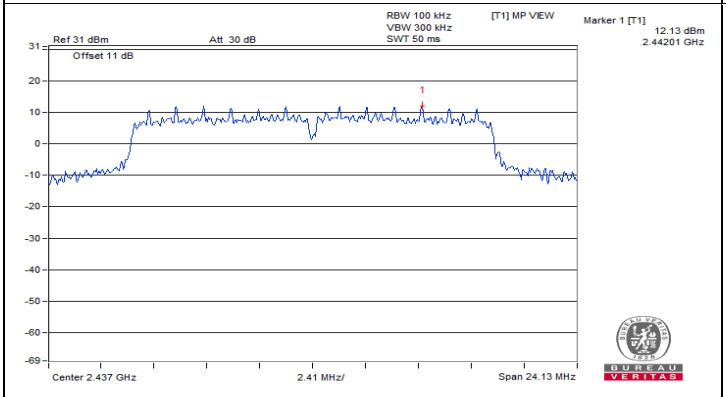

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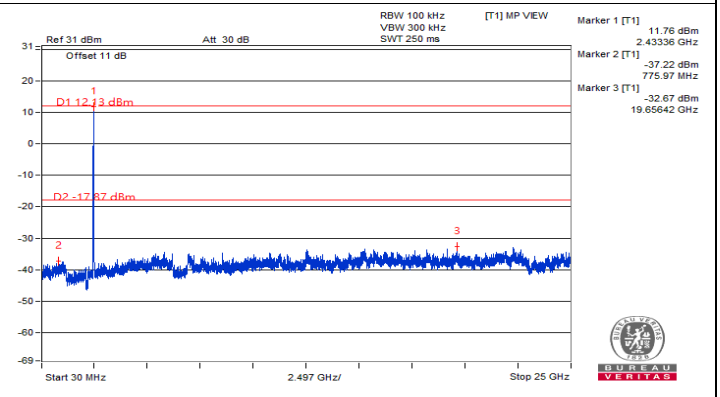

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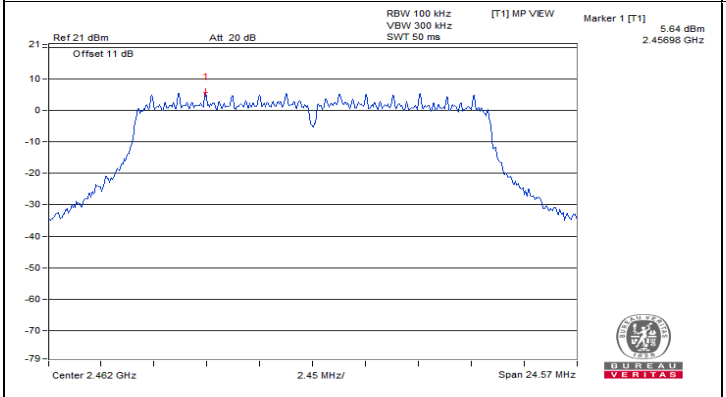

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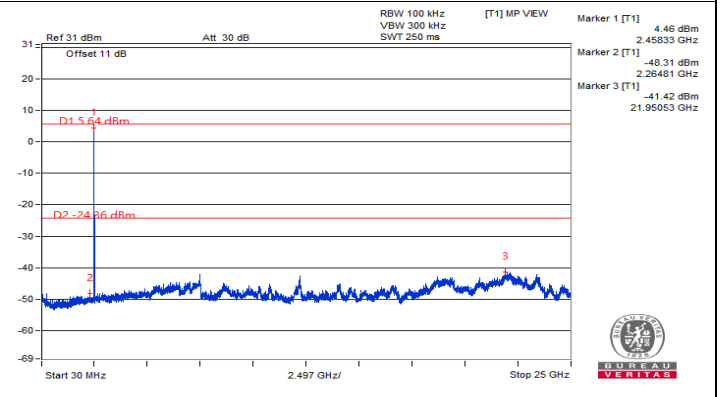
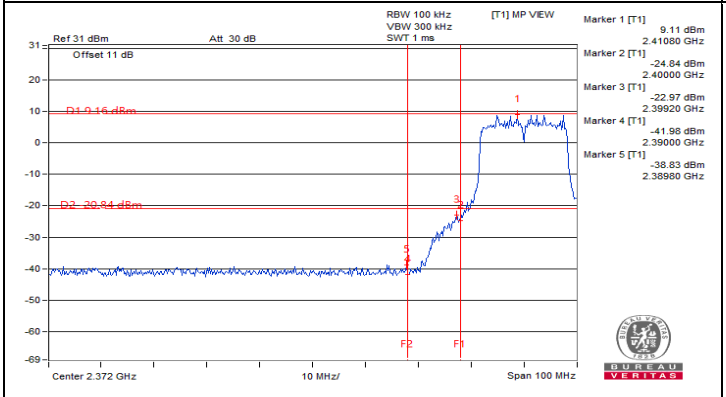
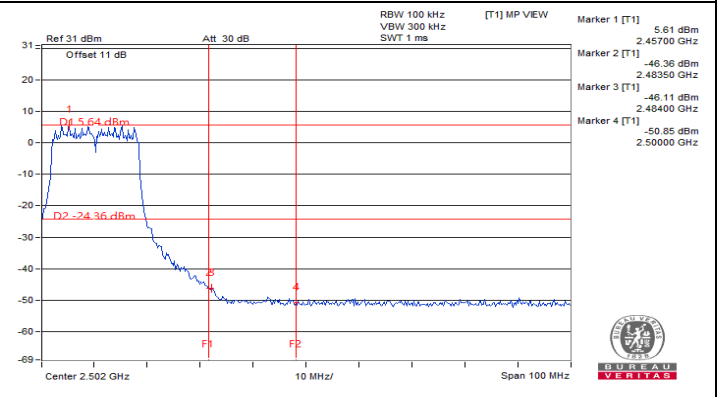


Chain 3 : CH 11



Chain 3 : CH 1 Band edge



Chain 3 : CH 11 Band edge

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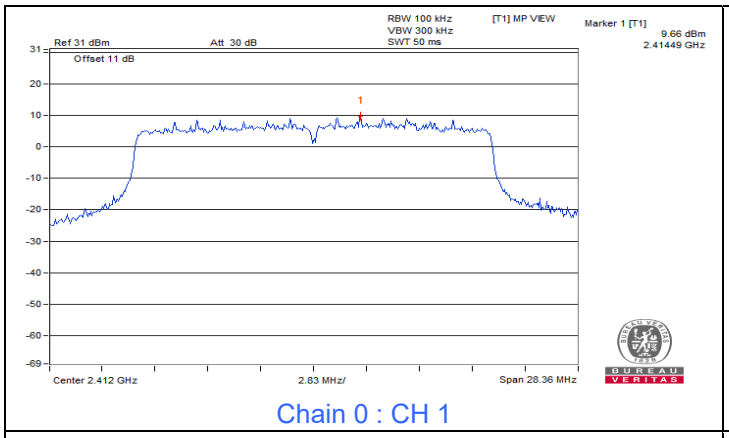
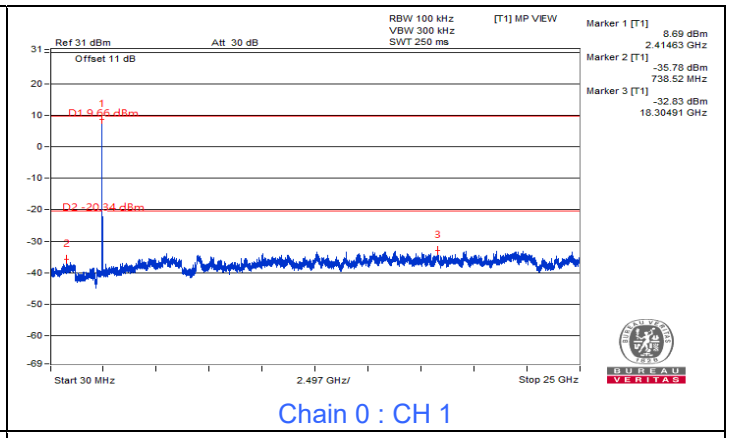
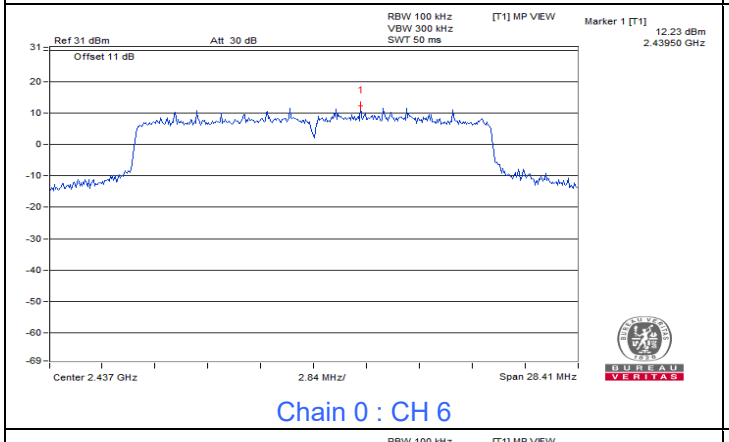


Chain 0 : CH 1



Chain 0 : CH 1



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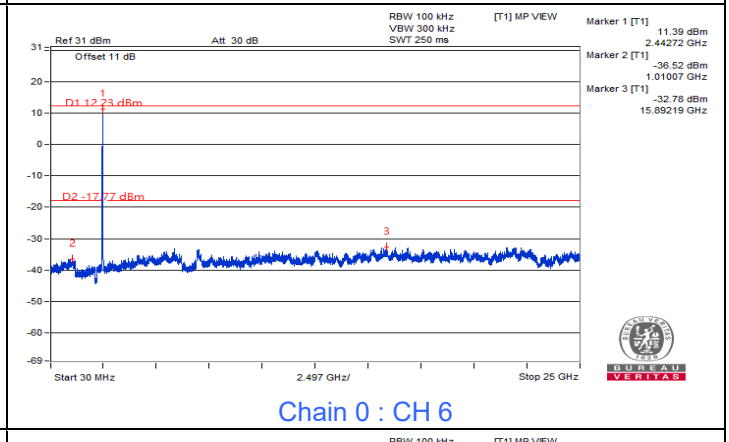

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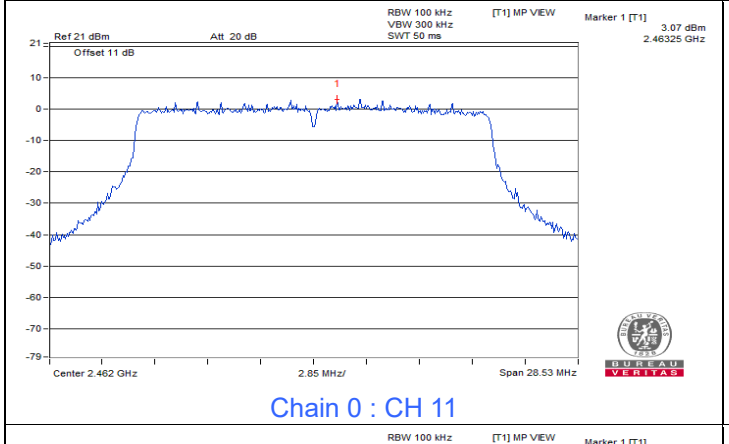

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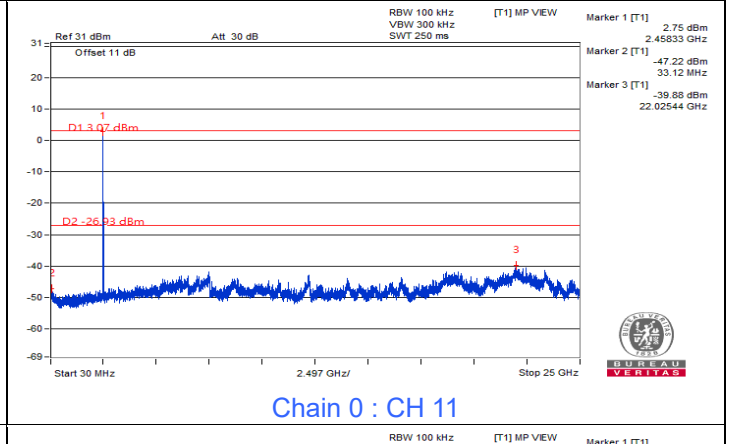

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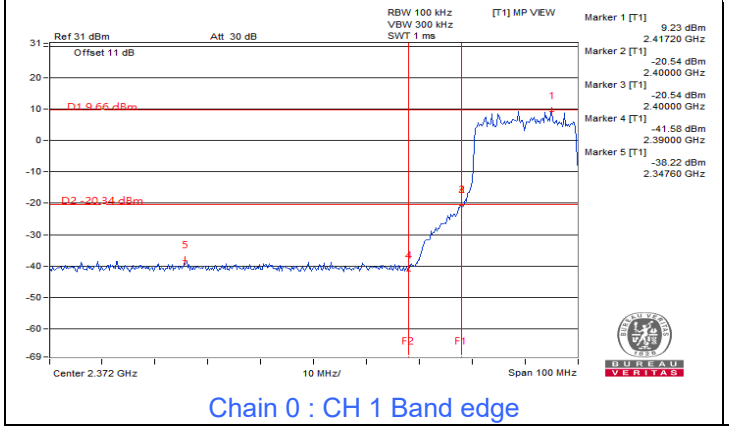
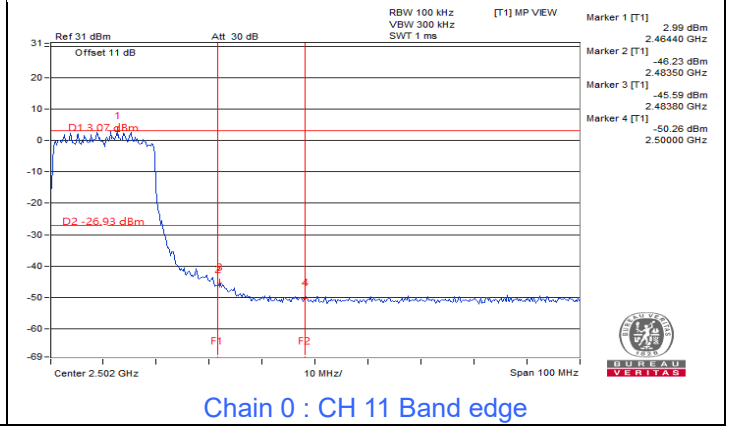
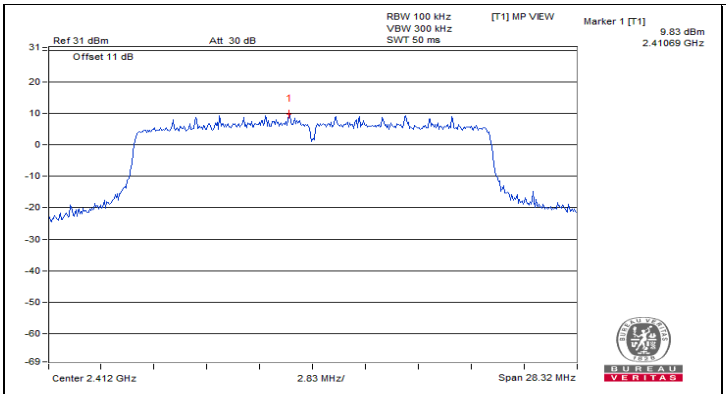


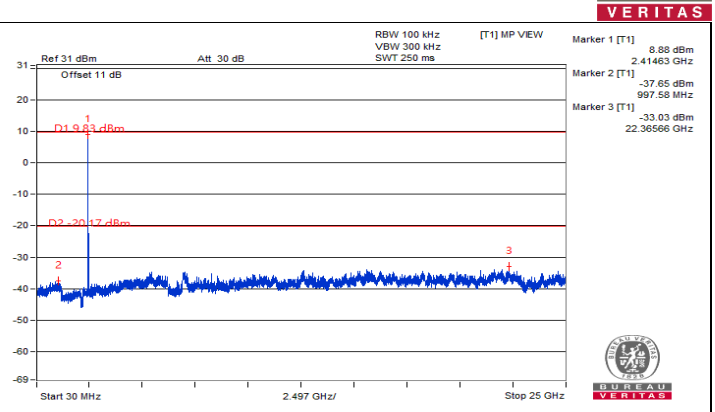
Chain 0 : CH 1 Band edge



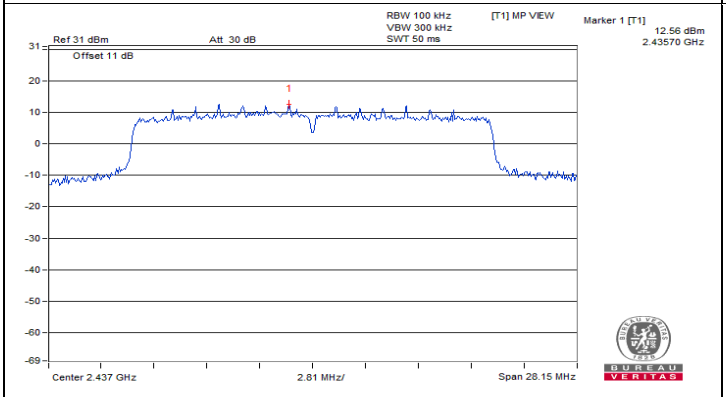
Chain 0 : CH 11 Band edge



Chain 1 : CH 1



Chain 1 : CH 1



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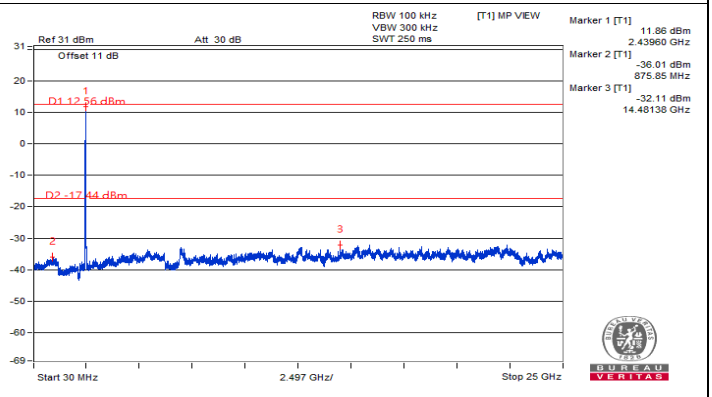
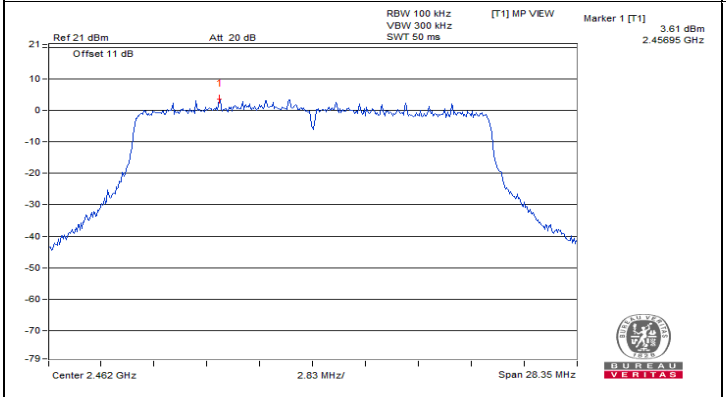
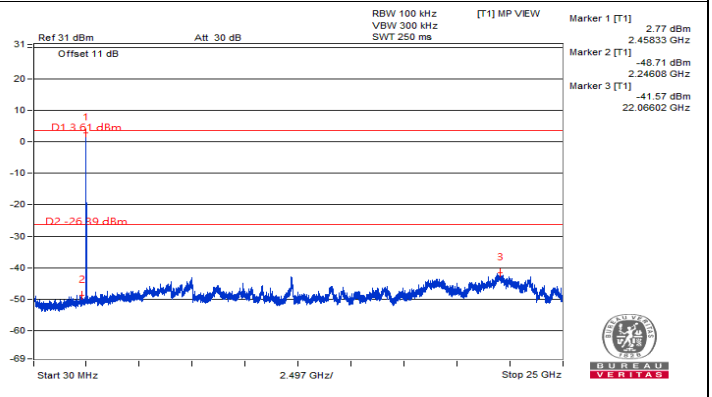


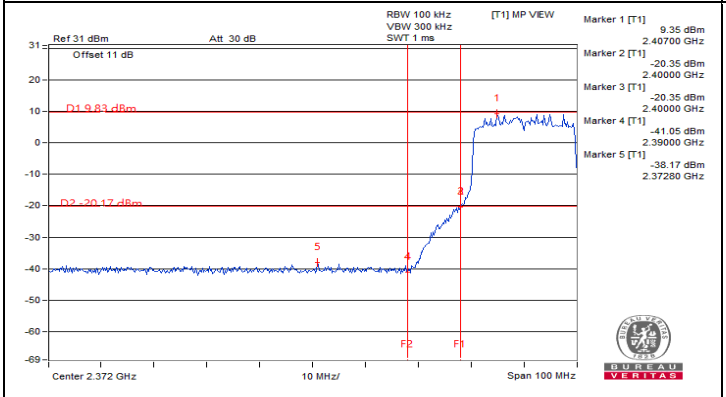
Chain 1 : CH 6



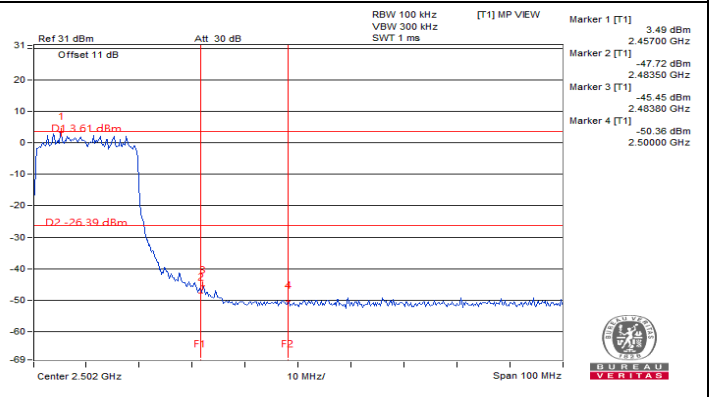
Chain 1 : CH 11



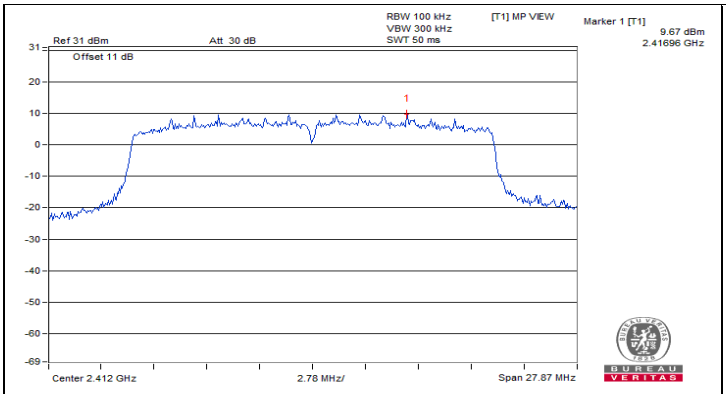
Chain 1 : CH 11



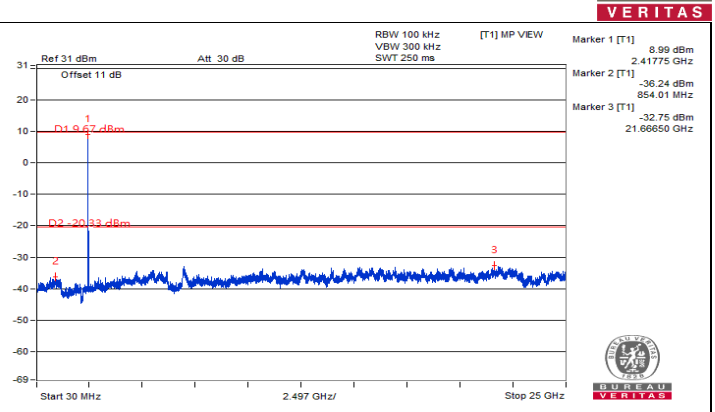
Chain 1 : CH 1 Band edge



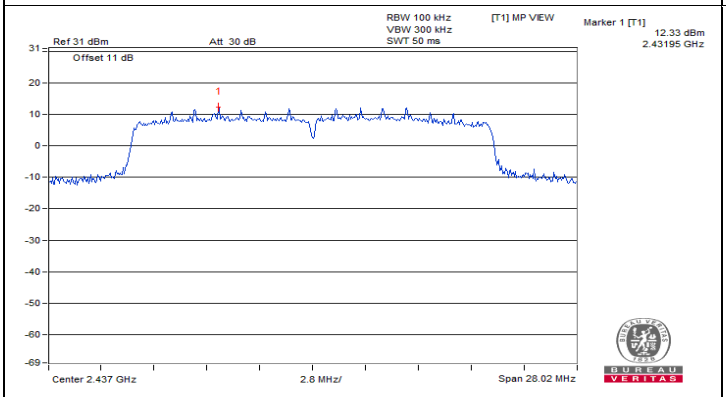
Chain 1 : CH 11 Band edge



Chain 2 : CH 1



Chain 2 : CH 1



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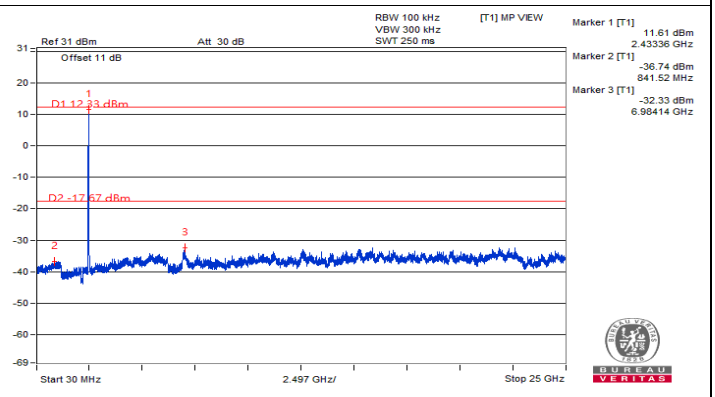
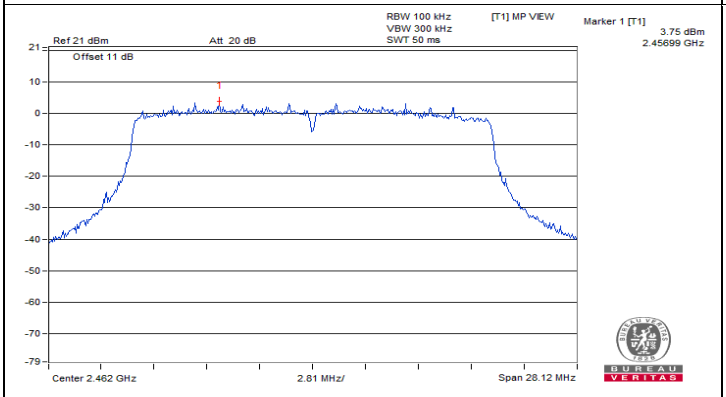
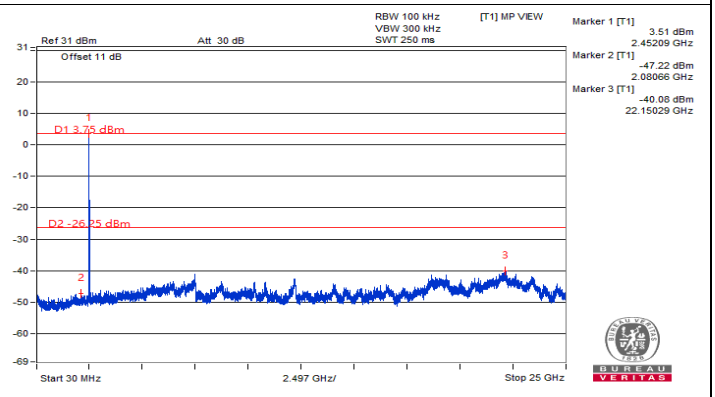


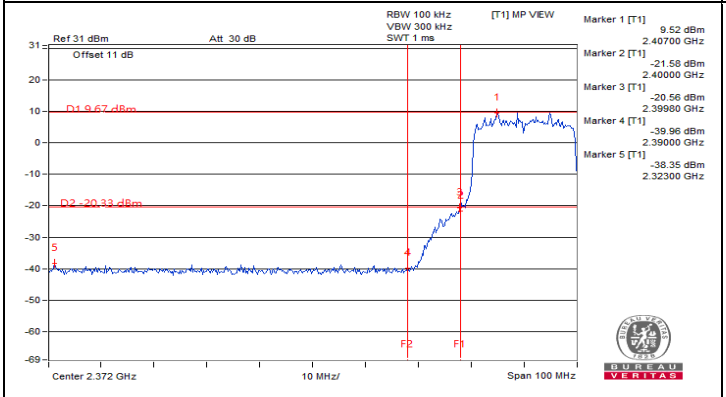
Chain 2 : CH 6



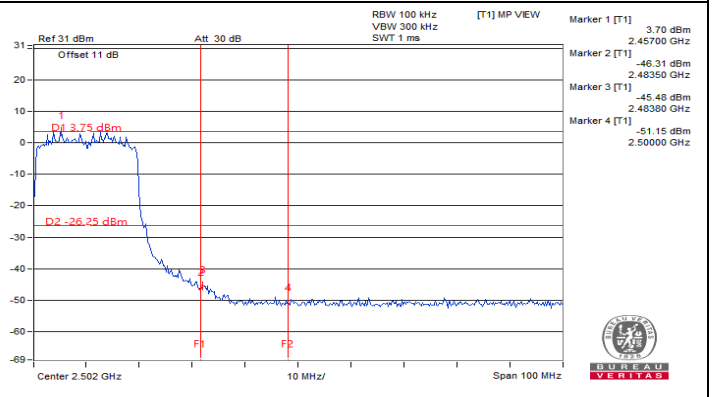
Chain 2 : CH 11



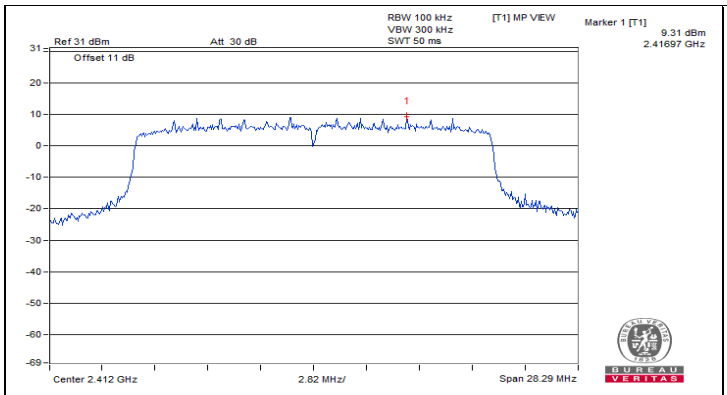
Chain 2 : CH 11



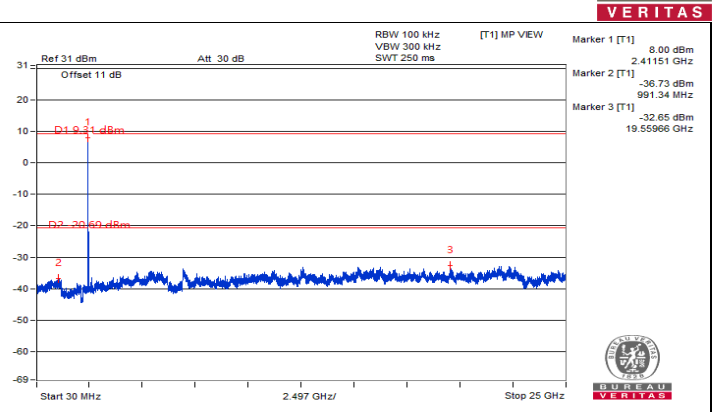
Chain 2 : CH 1 Band edge



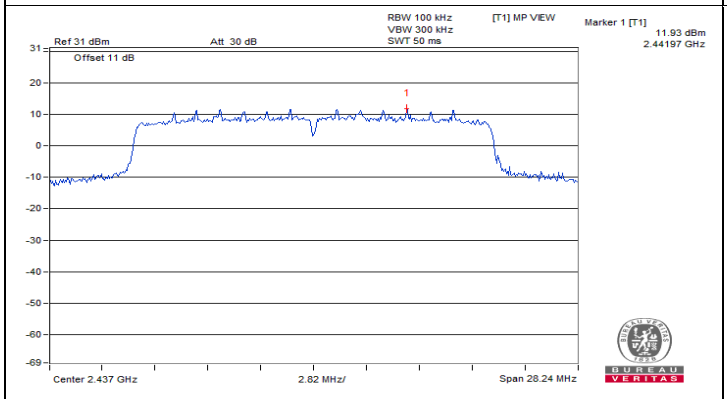
Chain 2 : CH 11 Band edge



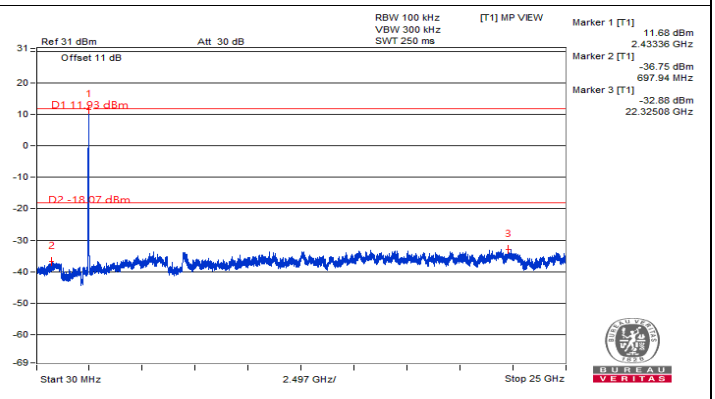
Chain 3 : CH 1



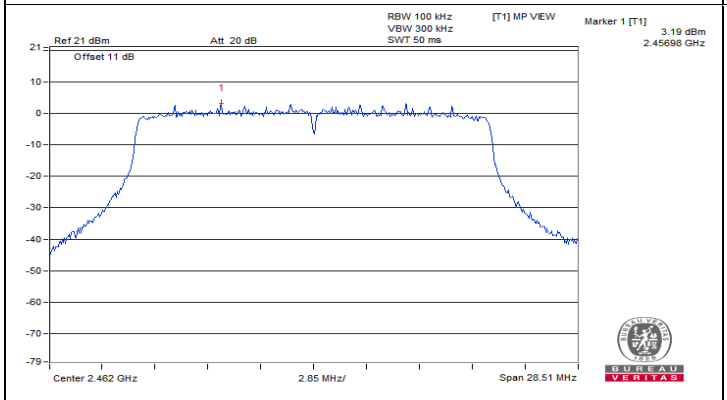
Chain 3 : CH 1



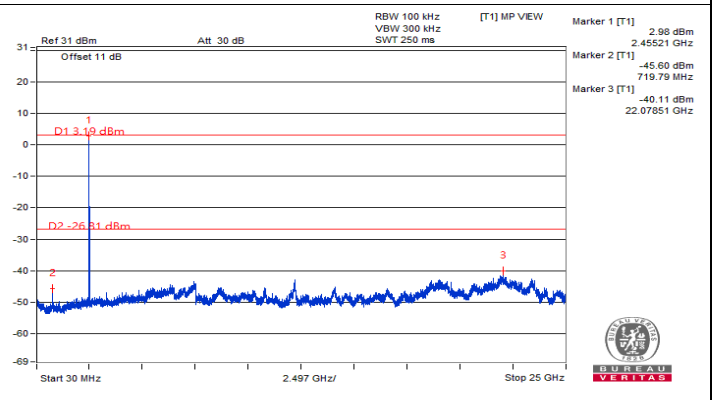
Chain 3 : CH 6



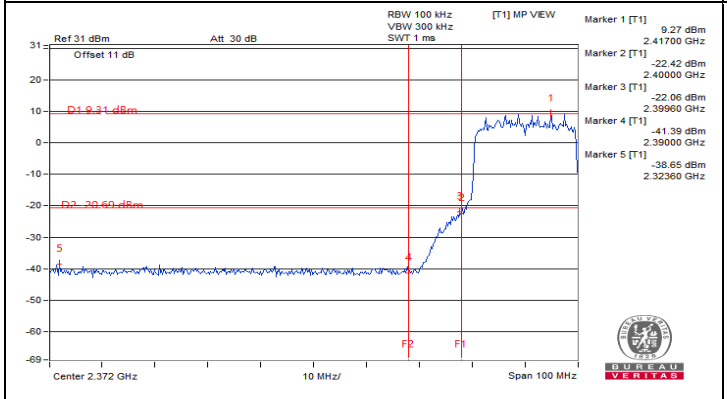
Chain 3 : CH 6



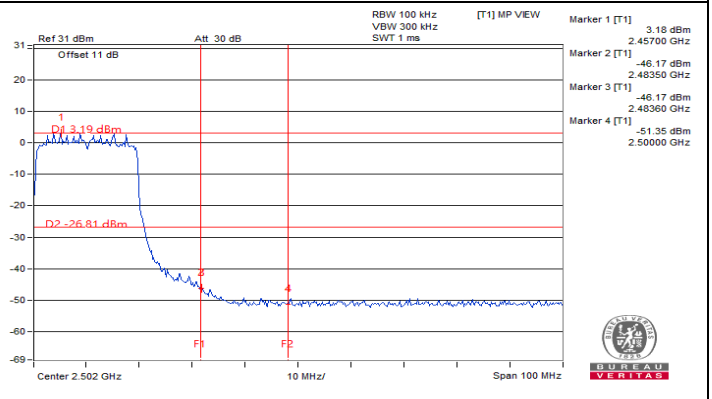
Chain 3 : CH 11



Chain 3 : CH 11

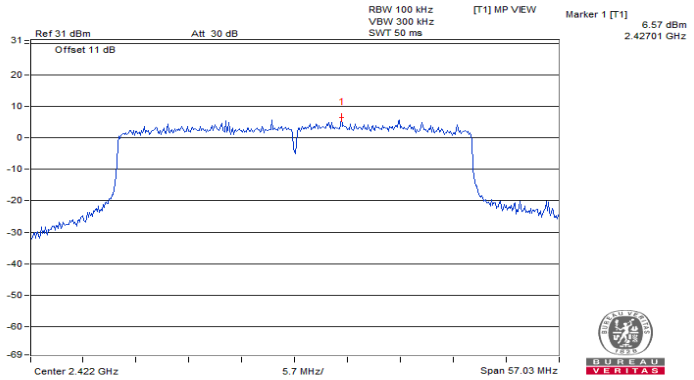


Chain 3 : CH 1 Band edge

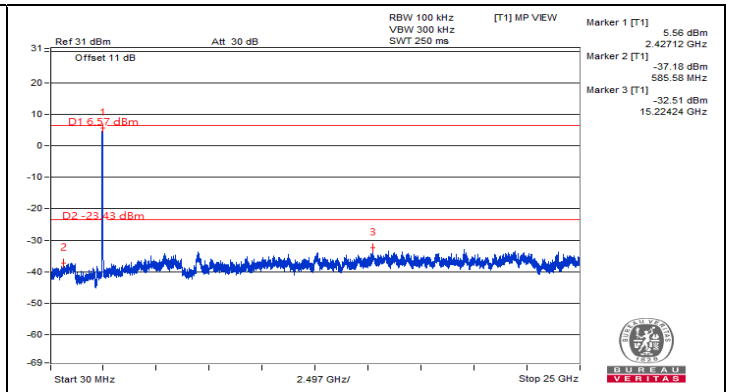


Chain 3 : CH 11 Band edge

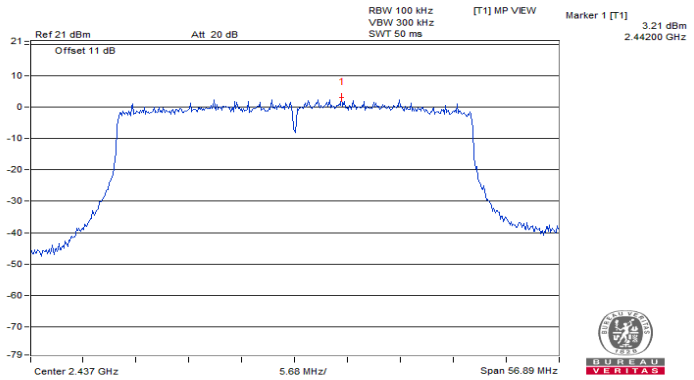
802.11ax (HE40)



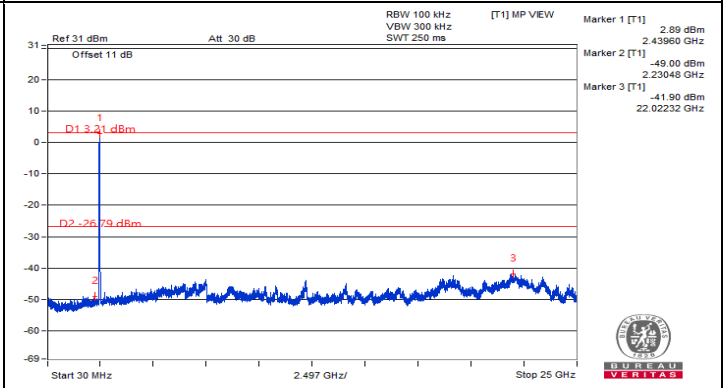
Chain 0 : CH 3



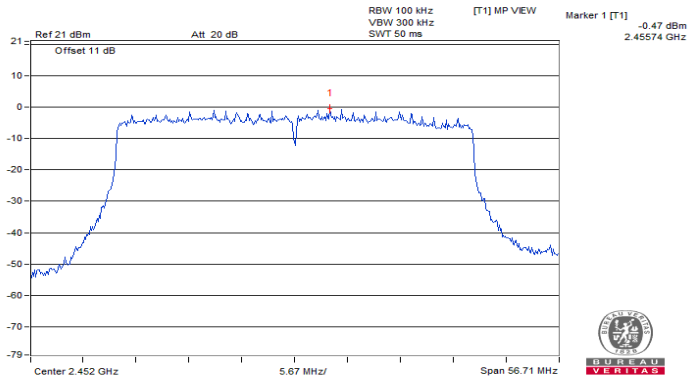
Chain 0 : CH 3



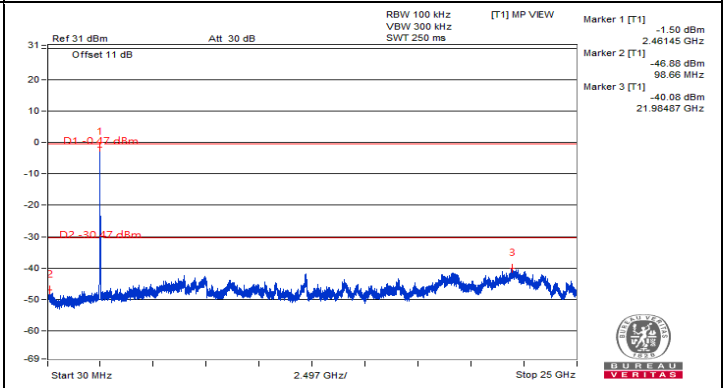
Chain 0 : CH 6



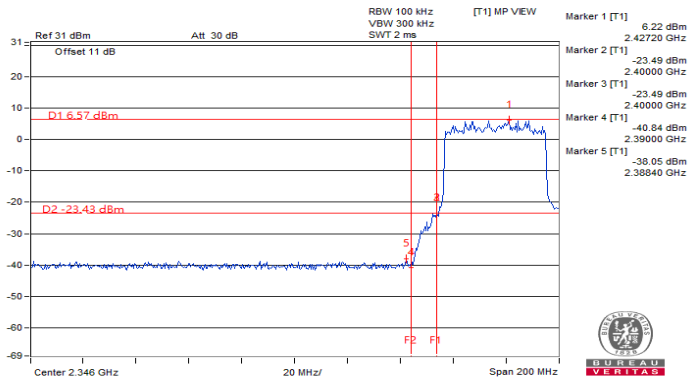
Chain 0 : CH 6



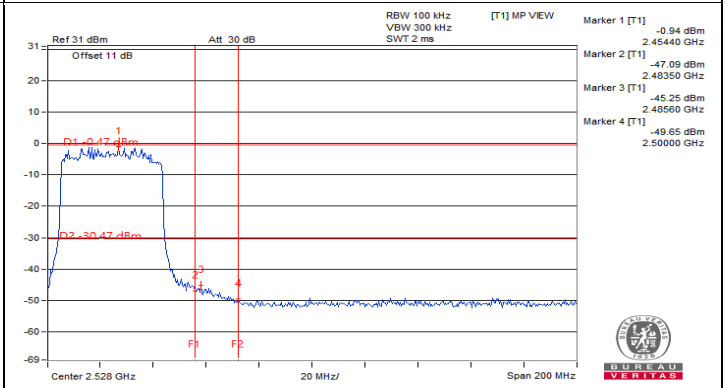
Chain 0 : CH 9



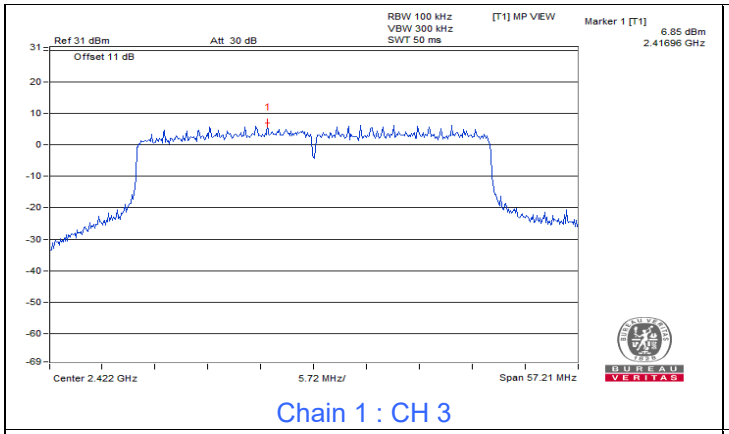
Chain 0 : CH 9



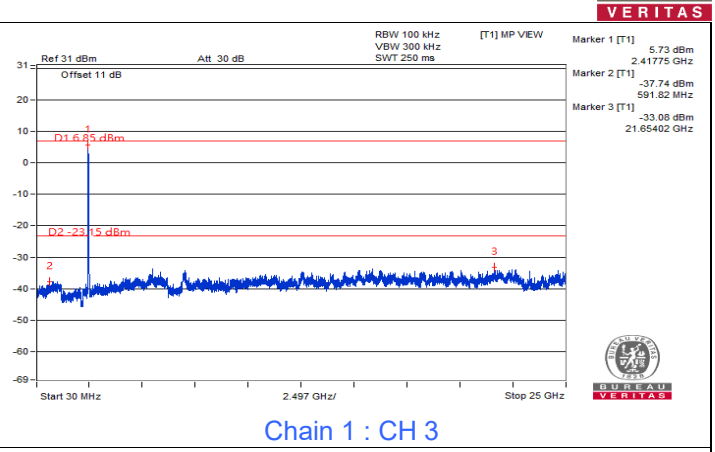
Chain 0 : CH 3 Band edge



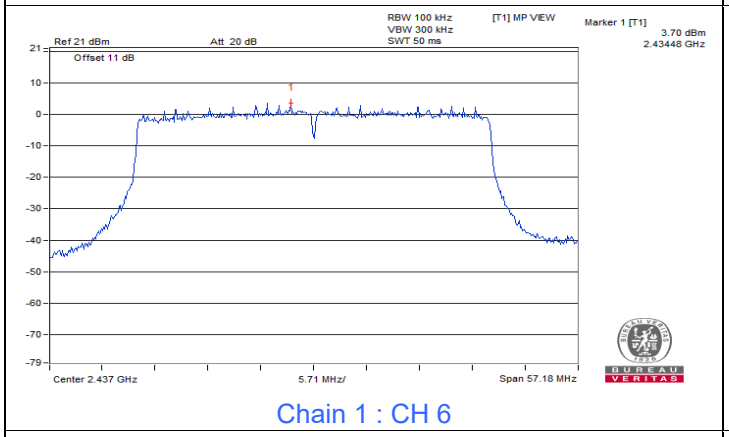
Chain 0 : CH 9 Band edge



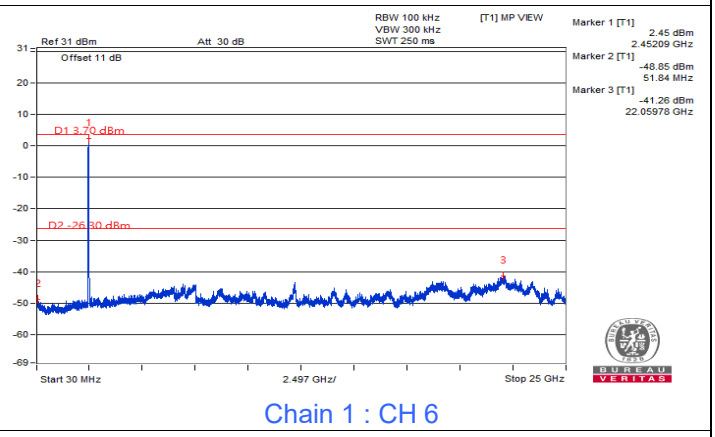
Chain 1 : CH 3



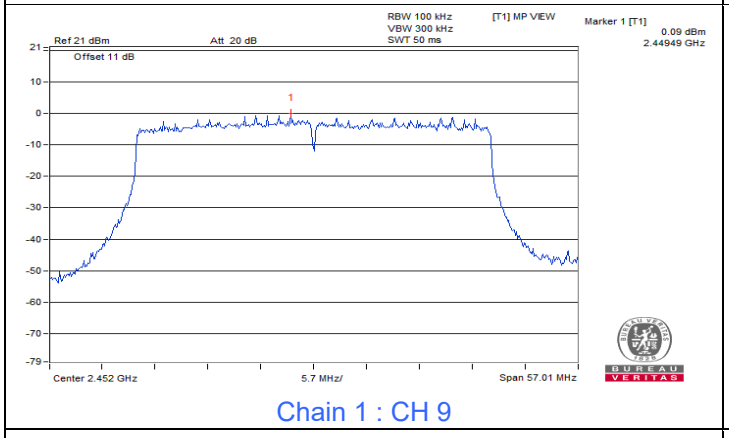
Chain 1 : CH 3



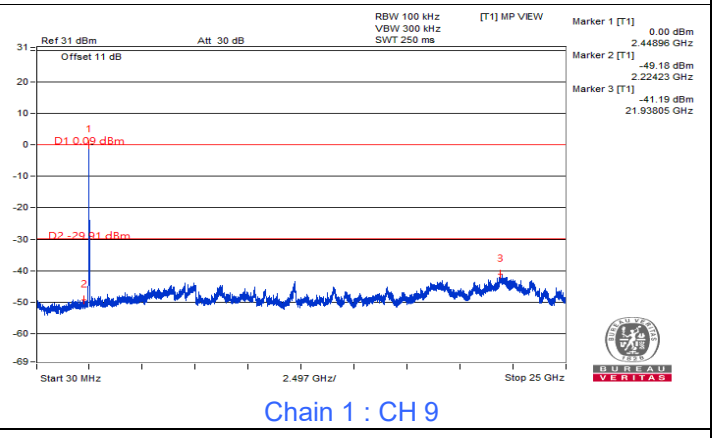
Chain 1 : CH 6



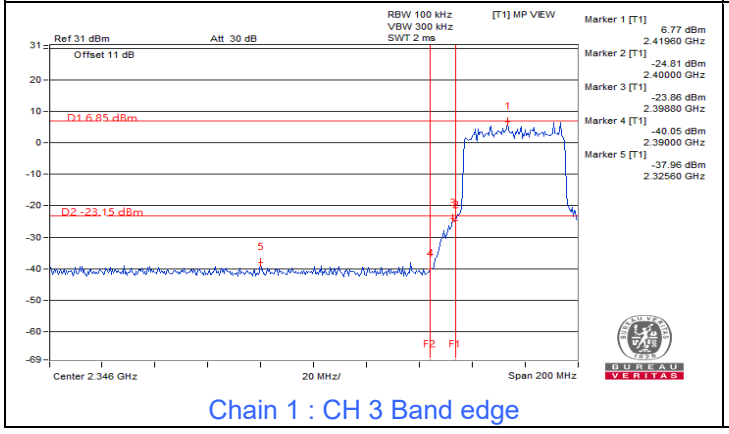
Chain 1 : CH 6



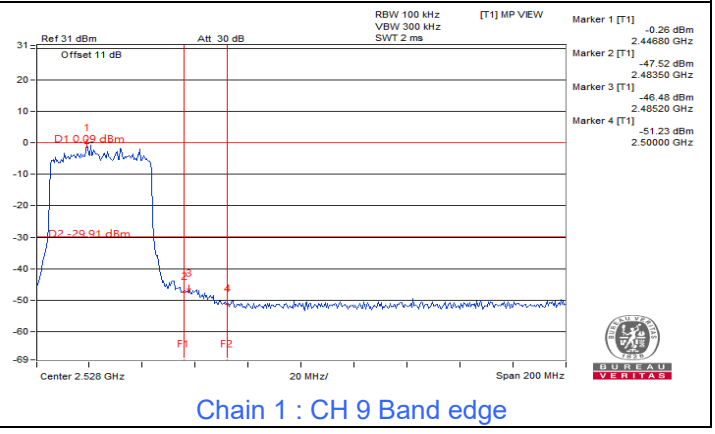
Chain 1 : CH 9



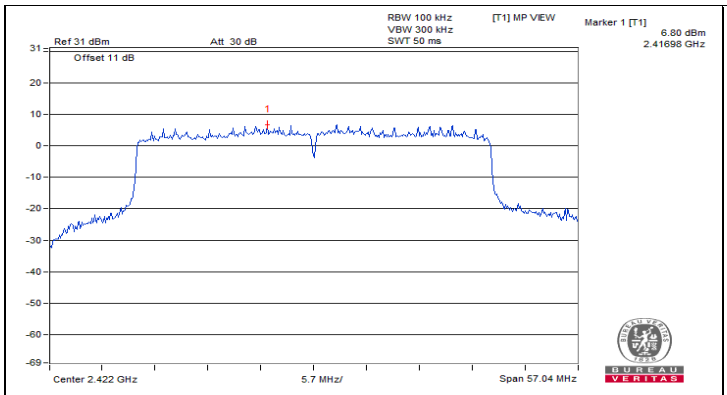
Chain 1 : CH 9



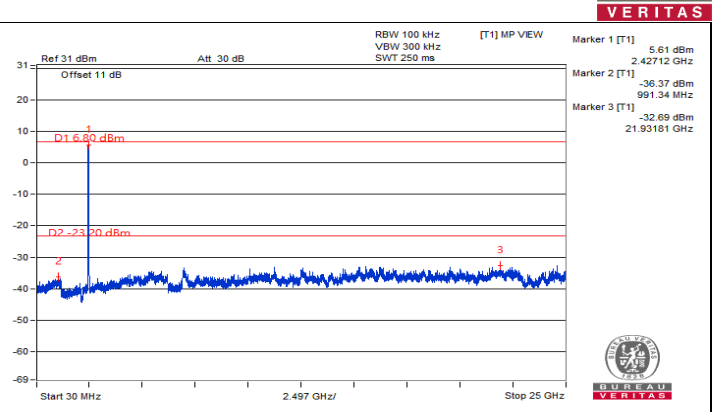
Chain 1 : CH 3 Band edge



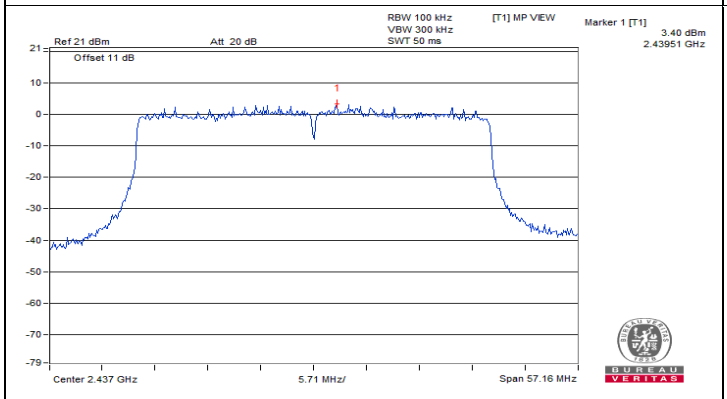
Chain 1 : CH 9 Band edge



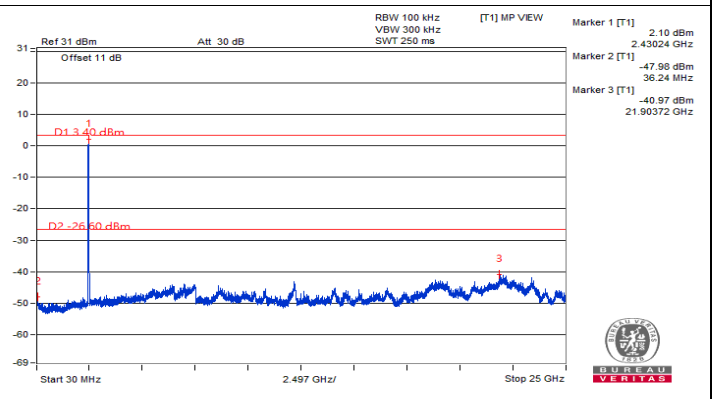
Chain 2 : CH 3



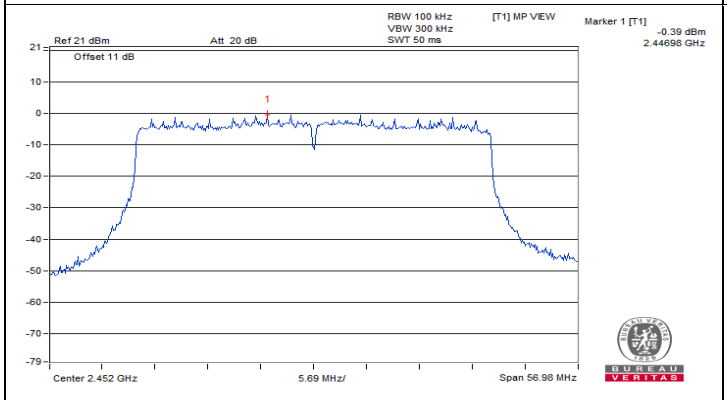
Chain 2 : CH 3



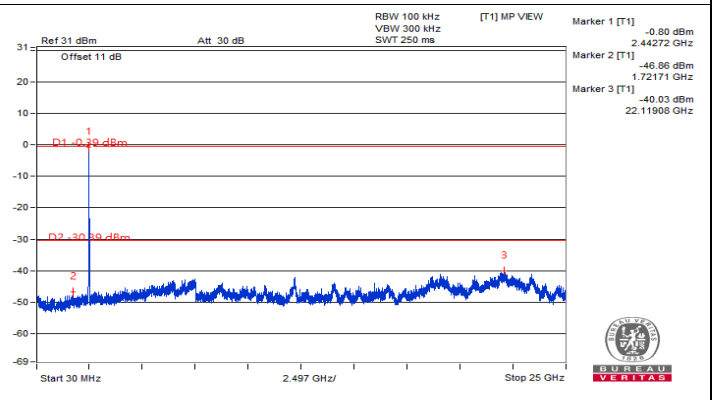
Chain 2 : CH 6



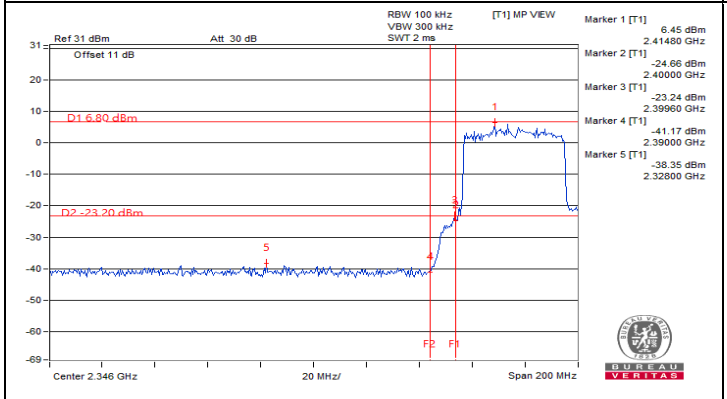
Chain 2 : CH 6



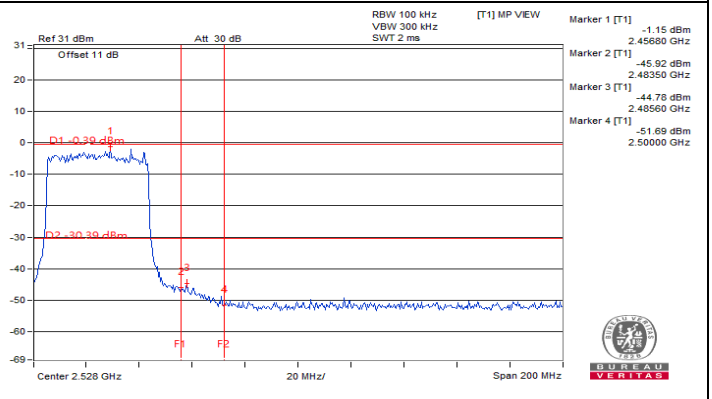
Chain 2 : CH 9



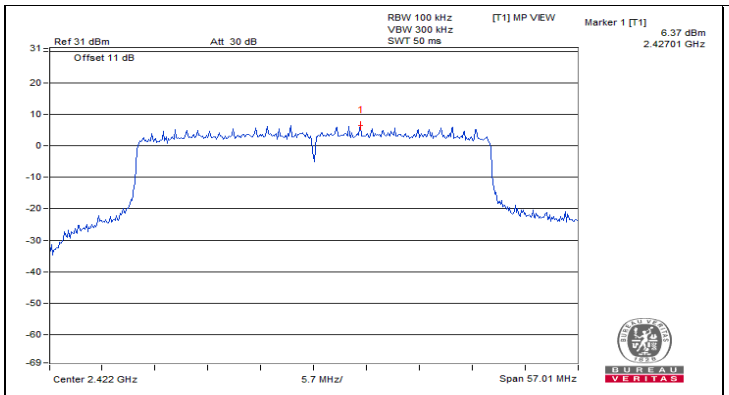
Chain 2 : CH 9



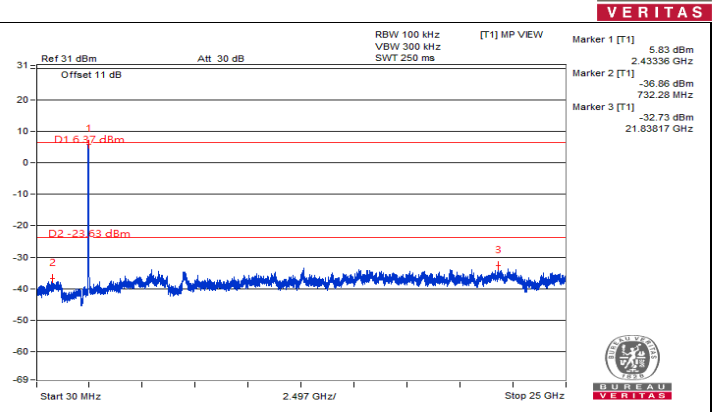
Chain 2 : CH 3 Band edge



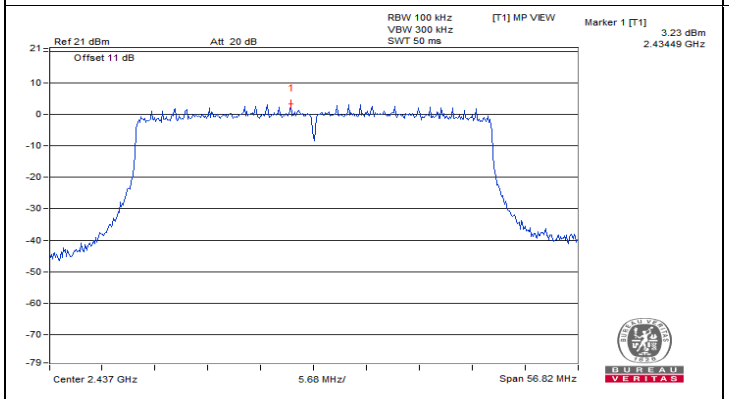
Chain 2 : CH 9 Band edge



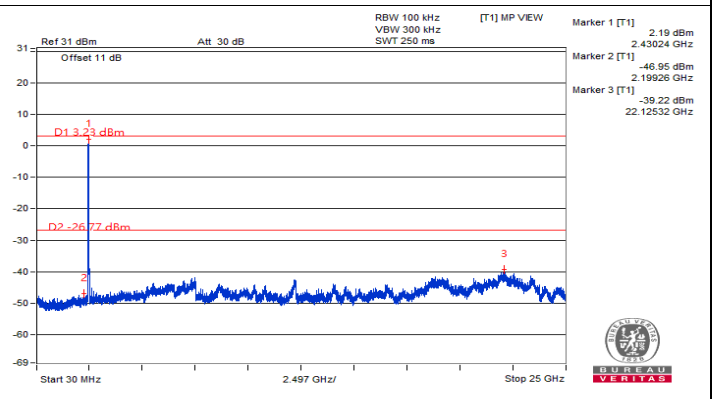
Chain 3 : CH 3



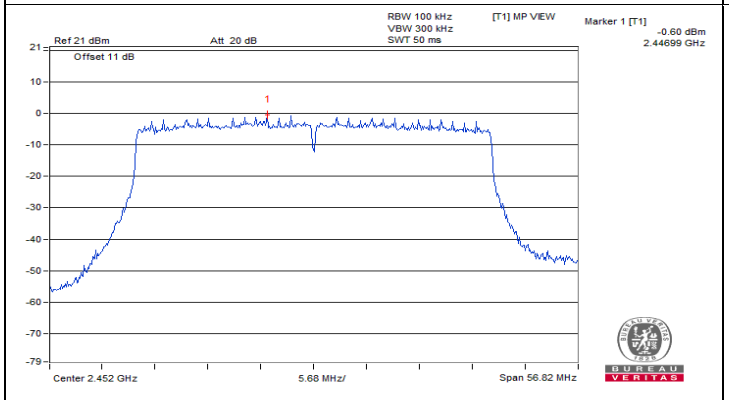
Chain 3 : CH 3



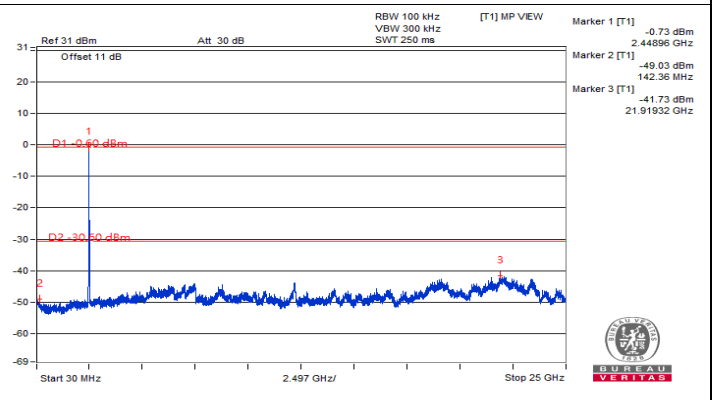
Chain 3 : CH 6



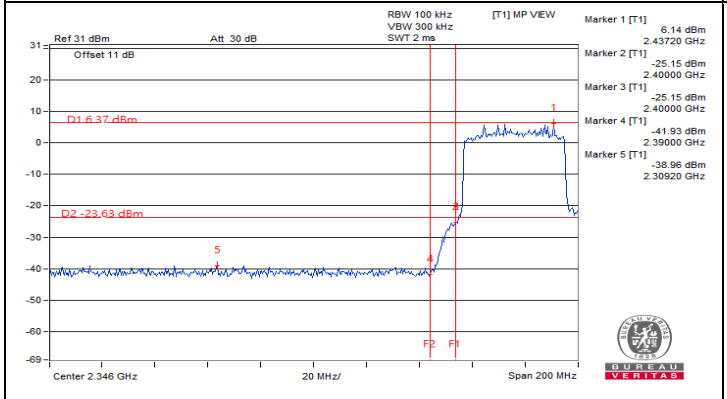
Chain 3 : CH 6



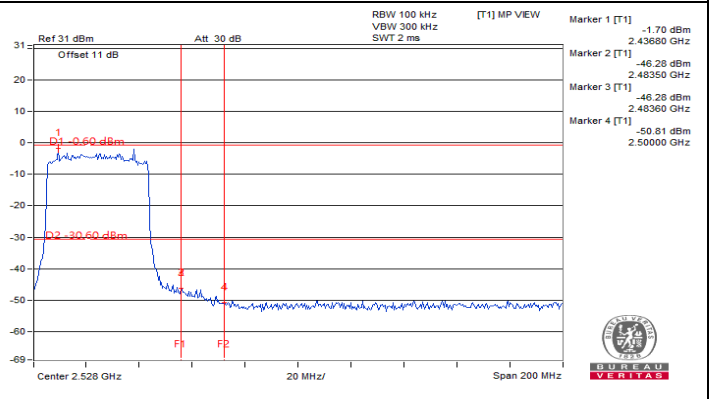
Chain 3 : CH 9



Chain 3 : CH 9



Chain 3 : CH 3 Band edge



Chain 3 : CH 9 Band edge