FCC Test Report (PART 22)

Report No.:	RF200417E02
FCC ID:	MAD-G08RRH-46-06B
Test Model:	G08RRH-46-06B
Received Date:	Apr. 17, 2020
Test Date:	May 23 to 25, 2020
Issued Date:	June 18, 2020
Applicant:	Microelectronics Technology Inc.
Address:	No. 1, Innovation Road II, Hsinchu Science Park, Hsinchu 300, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
RF200417E02	Original release.	June 18, 2020

1 Certificate of Conformity

Product:	LionHead 2x40W B5 RRH
Brand:	MTI
Test Model:	G08RRH-46-06B
Sample Status:	ENGINEERING SAMPLE
Applicant:	Microelectronics Technology Inc.
Test Date:	May 23 to 25, 2020
Standards:	FCC Part 22, Subpart H

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 EMC characteristics under the conditions specified in this report.

Prepared by : Vivian Huang , **Date:** June 18, 2020

Vivian Huang / Specialist

Approved by : , **Date:** June 18, 2020

Clark Lin / Technical Manager

2 Summary of Test Results

Applied Standard: FCC Part 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective radiated power	PASS	Meet the requirement of limit.
22.913(d)	Peak to Average Ratio	PASS	Meet the requirement of limit.
2.1047	Modulation characteristics	PASS	Meet the requirement
2.1055 22.355	Frequency Stability	PASS	Meet the requirement of limit.
2.1049	Occupied Bandwidth	PASS	Meet the requirement of limit.
22.917	Band Edge Measurements	PASS	Meet the requirement
2.1051 22.917	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 22.917	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -35.06dB at 398.18MHz.

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	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.9 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.1 dB
	30MHz ~ 1GHz	5.4 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.3 dB

2.2 Test Site and Instruments

For radiated spurious emissions test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 03, 2019	July 02, 2020
Pre-Amplifier EMCI	EMC001340	980142	May 30, 2019	May 29, 2020
Loop Antenna Electro-Metrics	EM-6879	264	Feb. 18, 2020	Feb. 17, 2021
RF Cable	NA	LOOPCAB-001	Jan. 08, 2020	Jan. 07, 2021
RF Cable	NA	LOOPCAB-002	Jan. 08, 2020	Jan. 07, 2021
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	Apr. 28, 2020	Apr. 27, 2021
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 11, 2019	Nov. 10, 2020
RF Cable	8D	966-3-1	Mar. 17, 2020	Mar. 16, 2021
RF Cable	8D	966-3-2	Mar. 17, 2020	Mar. 16, 2021
RF Cable	8D	966-3-3	Mar. 17, 2020	Mar. 16, 2021
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Sep. 26, 2019	Sep. 25, 2020
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 24, 2019	Nov. 23, 2020
Pre-Amplifier EMCI	EMC12630SE	980384	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC104-SM-SM-1200	160922	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC104-SM-SM-2000	180601	June 10, 2019	June 09, 2020
RF Cable	EMC104-SM-SM-6000	180602	June 10, 2019	June 09, 2020
Spectrum Analyzer Keysight	N9030A	MY54490679	July 17, 2019	July 16, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 15, 2020	Jan. 14, 2021
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 24, 2019	Nov. 23, 2020
RF Cable	EMC102-KM-KM-1200	160924	Jan. 15, 2020	Jan. 14, 2021
RF Cable	EMC-KM-KM-4000	200214	Mar. 11, 2020	Mar. 10, 2021
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: May 25, 2020

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Keysight	N9030A	MY55410176	Jul 03, 2019	Jul 02, 2020
18GHz 30dB 100W Fixed Attenuator(*) woken	WATT-10018FS-30	N/A	May. 15, 2020	May. 14, 2022
DC Power Supply Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 16, 2020	Jan. 15, 2021
True RMS Clamp Meter FLUKE	179	89610322	Sep. 25, 2019	Sep. 24, 2020
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA

NOTE: 1. The test was performed in Oven room 2.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. (*)The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
4. Tested Date: May 23, 2020

3 General Information

3.1 General Description of EUT

Product	LionHead 2x40W B5 RRH		
Brand	MTI		
Test Model	G08RRH-46-06B		
Status of EUT	ENGINEERING SAMPLE		
Power Supply Rating	DC 40.5 to 57 V (Nominal 48Vdc)		
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM		
Modulation Technology	LTE FDD		
Operating Frequency	Band 5	Channel Bandwidth: 5MHz	871.5MHz ~891.5MHz
		Channel Bandwidth: 10MHz	874MHz ~889MHz
		Channel Bandwidth: 15MHz	876.5MHz ~886.5MHz
		Channel Bandwidth: 20MHz	879MHz ~884MHz
Max. ERP Power	Channel Bandwidth: 5MHz		314774.83mW (QPSK)
	Channel Bandwidth: 10MHz		156675.11mW (QPSK)
	Channel Bandwidth: 15MHz		104231.74mW (QPSK)
	Channel Bandwidth: 20MHz		78162.78mW (QPSK)
	Channel Bandwidth: 5MHz+5MHz CA Contiguous		156314.76mW (QPSK, 64QAM)
	Channel Bandwidth: 5MHz+10MHz CA Contiguous		104231.74mW (QPSK)
	Channel Bandwidth: 5MHz+15MHz CA Contiguous		78342.96mW (QPSK)
	Channel Bandwidth: 5MHz+20MHz CA Contiguous		63826.35mW (QPSK)
	Channel Bandwidth: 10MHz+10MHz CA Contiguous		77446.18mW (64QAM)
	Channel Bandwidth: 10MHz+15MHz CA Contiguous		63386.97mW (QPSK)
	Channel Bandwidth: 5MHz+5MHz CA-NC Non-Contiguous		290402.27mW (16QAM)
	Channel Bandwidth: 5MHz+10MHz CA-NC Non-Contiguous		218776.16mW (256QAM)
	Channel Bandwidth: 5MHz+15MHz CA-NC Non-Contiguous		193642.20mW (16QAM)
	Channel Bandwidth: 10MHz+10MHz CA-NC Non-Contiguous		148936.11mW (QPSK)

Emission Designator	Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M50D7W
		64QAM: 4M50D7W
		256QAM: 4M49D7W
	Channel Bandwidth: 10MHz	QPSK: 9M00G7D
		16QAM: 9M06D7W
		64QAM: 9M02D7W
		256QAM: 9M00D7W
	Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5D7W
		64QAM: 13M5D7W
		256QAM: 13M5D7W
	Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M1D7W
		64QAM: 18M1D7W
		256QAM: 18M1D7W
	Channel Bandwidth: 5MHz+20MHz CA Contiguous	QPSK: 23M7G7D
		16QAM: 23M7D7W
		64QAM: 23M7D7W
		256QAM: 23M7D7W
	Channel Bandwidth: 10MHz+10MHz CA-NC Non-Contiguous	QPSK: 18M0G7D
		16QAM: 18M0D7W
		64QAM: 18M0D7W
		256QAM: 18M0D7W
Antenna Type	Refer to note as below	
Antenna Connector	Refer to user's manual	
Accessory Device	NA	
Data Cable Supplied	NA	

Note:

1. There is LTE technology used for the EUT, which supports 871.5~891.5MHz frequency band.
2. The EUT incorporates a MIMO function for LTE mode

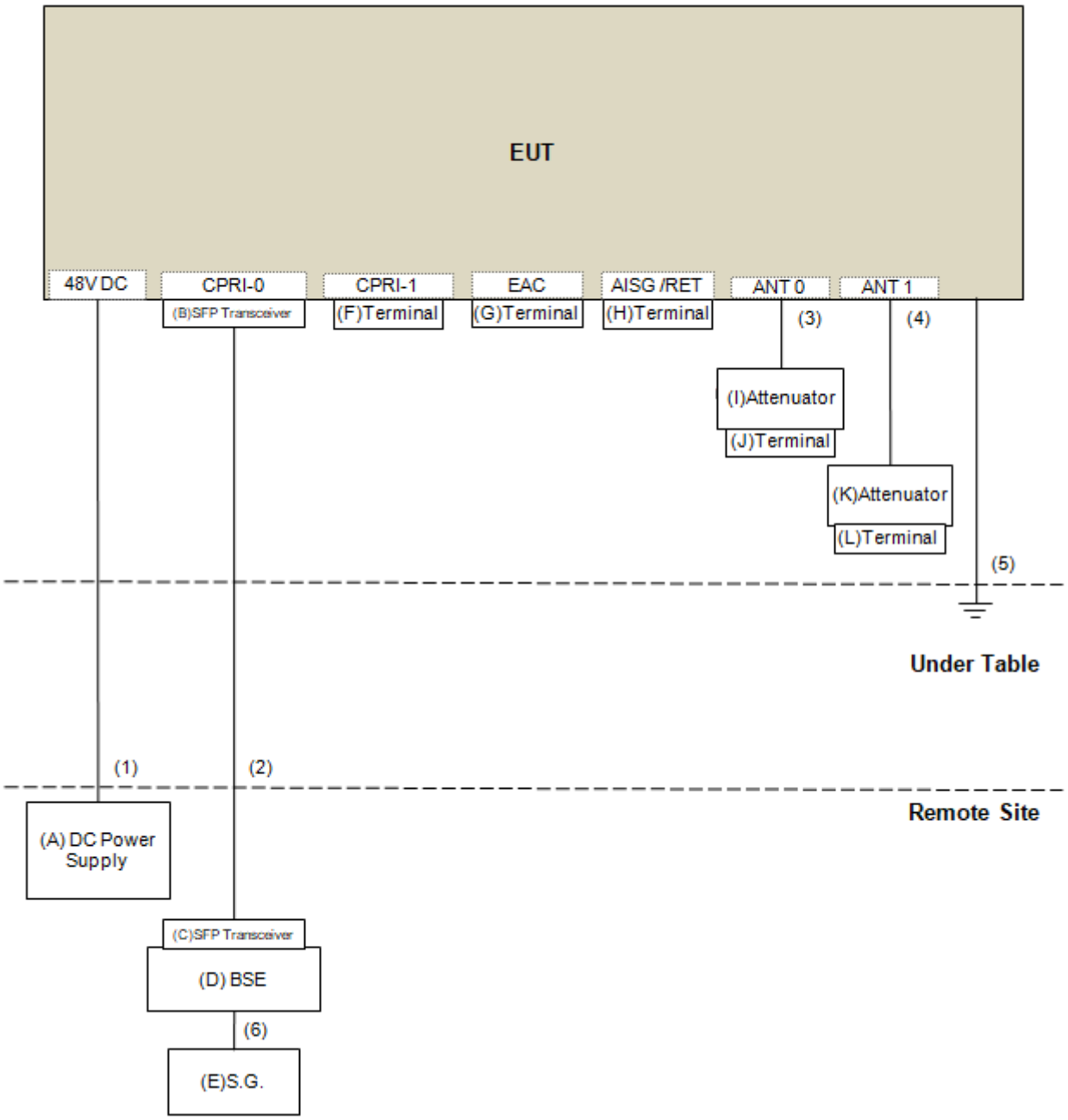
Channel Bandwidth	Modulation	TX & RX configuration	
5MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	2RX
10MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	2RX
15MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	2RX
20MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	2RX

3. The antennas provided to the EUT, please refer to the following table:

Antenna Gain (dBi)	Frequency range(MHz)	Antenna Type	Connector Type
18	806-894	Sector	4×4.3-10 Female

4. 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.

3.2 Configuration of System under Test



3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID	Remark
A	DC Power Supply	NA	NA	NA	NA	Supplied by client
B	SFP Transceiver	NA	NA	NA	NA	Supplied by client
C	SFP Transceiver	NA	NA	NA	NA	Supplied by client
D	BSE	NA	NA	NA	NA	Supplied by client
E	S.G	Agilent	E4438C	NA	NA	Provided by Lab
F	Terminal	NA	NA	NA	NA	Supplied by client
G	Terminal	NA	NA	NA	NA	Supplied by client
H	Terminal	NA	NA	NA	NA	Supplied by client
I	Attenuator	NA	NA	NA	NA	Supplied by client
J	Terminal	NA	NA	NA	NA	Supplied by client
K	Attenuator	NA	NA	NA	NA	Supplied by client
L	Terminal	NA	NA	NA	NA	Supplied by client

NOTE:

1. All power cords of the above support units are non-shielded (1.8 m).
2. BSE: Based Station Emulator which is to transmit/receive the waveform.
3. Items B-C acted as communication partners to transfer data.

No.	Cable	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Number)	Remark
1	DC Power Cable	1	10	Yes	0	Supplied by client
2	Coaxial Cable	1	10	Yes	0	Supplied by client
3	RF Cable	1	1.5	Yes	0	Supplied by client
4	RF Cable	1	1.5	Yes	0	Supplied by client
5	GND Cable	1	3	No	0	Provided by Lab
6	RF Cable	1	3	No	0	Supplied by client

3.3 Test Mode Applicability and Tested Channel Detail

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

Test Item	Available Frequency (MHz)	Tested Frequency (MHz)	Channel Bandwidth	Modulation
Output Power	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		874, 881.5, 889	10MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		879, 881.5, 884	20MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+876.5, 879+884, 886.5+891.5	5MHz+5MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+879, 876.5+884, 884+891.5	5MHz+10MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+881.5, 874+884, 881.5+891.5	5MHz+15MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+884	5MHz+20MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		874+884, 876.5+886.5, 879+889	10MHz+10MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		874+886.5	10MHz+15MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+891.5	5MHz+5MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+889	5MHz+10MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+886.5	5MHz+15MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM

Frequency Stability	871.5 to 891.5	881.5	5MHz Single Carrier	QPSK
		881.5	10MHz Single Carrier	QPSK
		881.5	15MHz Single Carrier	QPSK
		881.5	20MHz Single Carrier	QPSK
		871.5+884	5MHz+20MHz CA Contiguous	QPSK
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK
Emission Bandwidth	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		874, 881.5, 889	10MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		879, 881.5, 884	20MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+876.5, 879+884, 886.5+891.5	5MHz+5MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+884	5MHz+20MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+891.5	5MHz+5MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
Channel Edge	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK
		874, 881.5, 889	10MHz Single Carrier	QPSK
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK
		879, 881.5, 884	20MHz Single Carrier	QPSK
		871.5+884	5MHz+20MHz CA Contiguous	QPSK
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK
Peak To Average Ratio	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		874, 881.5, 889	10MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		879, 881.5, 884	20MHz Single Carrier	QPSK, 16QAM, 64QAM, , 256QAM
		871.5+884	5MHz+20MHz CA Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK, 16QAM, 64QAM, , 256QAM
Conducted Emission	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK
		874, 881.5, 889	10MHz Single Carrier	QPSK
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK
		879, 881.5, 884	20MHz Single Carrier	QPSK
		871.5+884	5MHz+20MHz CA Contiguous	QPSK
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK

Test Item	Available Frequency (MHz)	Tested Frequency (MHz)	Channel Bandwidth	Modulation
Radiated Emission Below 1GHz	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK
		874, 881.5, 889	10MHz Single Carrier	QPSK
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK
		879, 881.5, 884	20MHz Single Carrier	QPSK
		871.5+884	5MHz+20MHz CA Contiguous	QPSK
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK
Radiated Emission Above 1GHz	871.5 to 891.5	871.5, 881.5, 891.5	5MHz Single Carrier	QPSK
		874, 881.5, 889	10MHz Single Carrier	QPSK
		876.5, 881.5, 886.5	15MHz Single Carrier	QPSK
		879, 881.5, 884	20MHz Single Carrier	QPSK
		871.5+884	5MHz+20MHz CA Contiguous	QPSK
		874+889	10MHz+10MHz CA-NC Non-Contiguous	QPSK

NOTE:

1. The conducted output power for QPSK and 16QAM, measured value of QPSK is higher than 16QAM mode. Therefore, the Frequency Stability and Radiated Emission were performed under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power (System)	Tested By
Output Power	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Modulation characteristics	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Frequency Stability	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Emission Bandwidth	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Band Edge	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Peak To Average Ratio	25deg. C, 63%RH	120Vac, 60Hz	Allen Chuang
Conducted Emission	25deg. C, 75%RH	120Vac, 60Hz	Nelson Teng
Radiated Emission	25deg. C, 75%RH	120Vac, 60Hz	Nelson Teng

Note: Above input power with the AC/DC PSU used during testing.

3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

FCC 47 CFR Part 2

FCC 47 CFR Part 22, Subpart H

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

All test items have been performed and recorded as per the above standards and KDB test guidance.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

The ERP of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.
(i) 500 watts per emission; or
(ii) 400 watts/MHz (PSD) per sector.

4.1.2 Test Procedures

EIRP / ERP Measurement:

Conducted Power Measurement:

a. A spectrum analyzer was used on the output port of the EUT and recorded output power from the spectrum analyzer.
b. The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

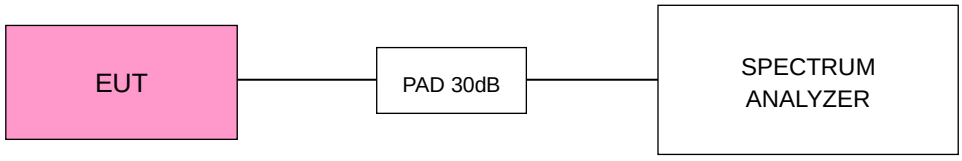
   ERP or EIRP = P_{Meas} + GT

   Where ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

   P_{Meas}: measured transmitter output power or PSD, in dBm or dBW
   GT: gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

4.1.3 Test Setup

CONDUCTED POWER MEASUREMENT:



4.1.4 Test Results

Single Carrier

5MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425	871.5	39.04	38.95	18.00	54.89	54.80	308318.80	301995.17	56.02	PASS	46
2525	881.5	39.13	39.11	18.00	54.98	54.96	314774.83	313328.57	56.02	PASS	46
2625	891.5	39.06	39.01	18.00	54.91	54.86	309741.93	306196.34	56.02	PASS	46

10MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450	874	35.97	35.94	18.00	51.82	51.79	152054.75	151008.02	56.02	PASS	46
2525	881.5	36.10	36.05	18.00	51.95	51.90	156675.11	154881.66	56.02	PASS	46
2600	889	35.95	35.99	18.00	51.80	51.84	151356.12	152756.61	56.02	PASS	46

15MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2475	876.5	34.20	34.23	18.00	50.05	50.08	101157.95	101859.14	56.02	PASS	46
2525	881.5	34.15	34.20	18.00	50.00	50.05	100000.00	101157.95	56.02	PASS	46
2575	886.5	34.33	34.30	18.00	50.18	50.15	104231.74	103514.22	56.02	PASS	46

20MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2500	879	32.94	33.06	18.00	48.79	48.91	75683.29	77803.66	56.02	PASS	46
2525	881.5	32.96	32.95	18.00	48.81	48.80	76032.63	75857.76	56.02	PASS	46
2550	884	33.08	32.96	18.00	48.93	48.81	78162.78	76032.63	56.02	PASS	46

5MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425	871.5	38.95	38.81	18.00	54.80	54.66	301995.17	292415.24	56.02	PASS	46
2525	881.5	39.02	39.02	18.00	54.87	54.87	306902.20	306902.20	56.02	PASS	46
2625	891.5	39.09	39.01	18.00	54.94	54.86	311888.96	306196.34	56.02	PASS	46

10MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450	874	35.94	36.03	18.00	51.79	51.88	151008.02	154170.05	56.02	PASS	46
2525	881.5	35.97	36.01	18.00	51.82	51.86	152054.75	153461.70	56.02	PASS	46
2600	889	36.01	35.93	18.00	51.86	51.78	153461.70	150660.71	56.02	PASS	46

15MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2475	876.5	34.21	34.21	18.00	50.06	50.06	101391.14	101391.14	56.02	PASS	46
2525	881.5	34.12	34.20	18.00	49.97	50.05	99311.60	101157.95	56.02	PASS	46
2575	886.5	34.30	34.25	18.00	50.15	50.10	103514.22	102329.30	56.02	PASS	46

20MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2500	879	32.98	33.02	18.00	48.83	48.87	76383.58	77090.35	56.02	PASS	46
2525	881.5	32.93	32.93	18.00	48.78	48.78	75509.22	75509.22	56.02	PASS	46
2550	884	32.99	32.99	18.00	48.84	48.84	76559.66	76559.66	56.02	PASS	46

5MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425	871.5	38.93	38.90	18.00	54.78	54.75	300607.63	298538.26	56.02	PASS	46
2525	881.5	39.00	39.04	18.00	54.85	54.89	305492.11	308318.80	56.02	PASS	46
2625	891.5	39.00	39.06	18.00	54.85	54.91	305492.11	309741.93	56.02	PASS	46

10MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450	874	35.97	35.98	18.00	51.82	51.83	152054.75	152405.28	56.02	PASS	46
2525	881.5	35.95	36.01	18.00	51.80	51.86	151356.12	153461.70	56.02	PASS	46
2600	889	36.08	36.03	18.00	51.93	51.88	155955.25	154170.05	56.02	PASS	46

15MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2475	876.5	34.25	34.26	18.00	50.10	50.11	102329.30	102565.19	56.02	PASS	46
2525	881.5	34.21	34.19	18.00	50.06	50.04	101391.14	100925.29	56.02	PASS	46
2575	886.5	34.28	34.23	18.00	50.13	50.08	103038.61	101859.14	56.02	PASS	46

20MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2500	879	32.97	32.96	18.00	48.82	48.81	76207.90	76032.63	56.02	PASS	46
2525	881.5	32.93	32.94	18.00	48.78	48.79	75509.22	75683.29	56.02	PASS	46
2550	884	33.01	32.98	18.00	48.86	48.83	76913.04	76383.58	56.02	PASS	46

5MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425	871.5	38.95	38.90	18.00	54.80	54.75	301995.17	298538.26	56.02	PASS	46
2525	881.5	39.01	39.01	18.00	54.86	54.86	306196.34	306196.34	56.02	PASS	46
2625	891.5	39.09	38.99	18.00	54.94	54.84	311888.96	304789.50	56.02	PASS	46

10MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450	874	36.05	35.98	18.00	51.90	51.83	154881.66	152405.28	56.02	PASS	46
2525	881.5	36.00	35.95	18.00	51.85	51.80	153108.75	151356.12	56.02	PASS	46
2600	889	36.08	35.98	18.00	51.93	51.83	155955.25	152405.28	56.02	PASS	46

15MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2475	876.5	34.31	34.26	18.00	50.16	50.11	103752.84	102565.19	56.02	PASS	46
2525	881.5	34.18	34.19	18.00	50.03	50.04	100693.17	100925.29	56.02	PASS	46
2575	886.5	34.25	34.22	18.00	50.10	50.07	102329.30	101624.87	56.02	PASS	46

20MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2500	879	32.96	32.98	18.00	48.81	48.83	76032.63	76383.58	56.02	PASS	46
2525	881.5	32.97	32.89	18.00	48.82	48.74	76207.90	74816.95	56.02	PASS	46
2550	884	33.06	32.95	18.00	48.91	48.80	77803.66	75857.76	56.02	PASS	46

CA Contiguous

5MHz+5MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2475	871.5+876.5	36.01	35.95	18.00	51.86	51.80	153461.70	151356.12	56.02	PASS	43
2500+2550	879+884	35.98	35.99	18.00	51.83	51.84	152405.28	152756.61	56.02	PASS	43
2575+2625	886.5+891.5	36.09	35.99	18.00	51.94	51.84	156314.76	152756.61	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2500	871.5+879	34.25	34.22	18.00	50.10	50.07	102329.30	101624.87	56.02	PASS	43
2475+2550	876.5+884	34.24	34.21	18.00	50.09	50.06	102093.95	101391.14	56.02	PASS	43
2550+2625	884+891.5	34.33	34.25	18.00	50.18	50.10	104231.74	102329.30	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2525	871.5+881.5	32.99	32.93	18.00	48.84	48.78	76559.66	75509.22	56.02	PASS	43
2450+2550	874+884	32.99	32.89	18.00	48.84	48.74	76559.66	74816.95	56.02	PASS	43
2525+2625	881.5+891.5	33.09	33.03	18.00	48.94	48.88	78342.96	77268.06	56.02	PASS	43

5MHz+20MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2550	871.5+884	32.20	32.13	18.00	48.05	47.98	63826.35	62805.84	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2550	874+884	32.98	32.98	18.00	48.83	48.83	76383.58	76383.58	56.02	PASS	43
2475+2575	876.5+886.5	32.99	32.96	18.00	48.84	48.81	76559.66	76032.63	56.02	PASS	43
2500+2600	879+889	33.00	33.00	18.00	48.85	48.85	76736.15	76736.15	56.02	PASS	43

10MHz+15MHz

Channel Number	Freq. (MHz)	QPSK								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2575	874+886.5	32.17	32.12	18.00	48.02	47.97	63386.97	62661.39	56.02	PASS	43

5MHz+5MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2475	871.5+876.5	35.95	35.96	18.00	51.80	51.81	151356.12	151705.04	56.02	PASS	43
2500+2550	879+884	35.91	35.93	18.00	51.76	51.78	149968.48	150660.71	56.02	PASS	43
2575+2625	886.5+891.5	36.00	35.95	18.00	51.85	51.80	153108.75	151356.12	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2500	871.5+879	34.21	34.19	18.00	50.06	50.04	101391.14	100925.29	56.02	PASS	43
2475+2550	876.5+884	34.15	34.15	18.00	50.00	50.00	100000.00	100000.00	56.02	PASS	43
2550+2625	884+891.5	34.26	34.17	18.00	50.11	50.02	102565.19	100461.58	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2525	871.5+881.5	32.91	32.90	18.00	48.76	48.75	75162.29	74989.42	56.02	PASS	43
2450+2550	874+884	32.89	32.84	18.00	48.74	48.69	74816.95	73960.53	56.02	PASS	43
2525+2625	881.5+891.5	32.99	32.94	18.00	48.84	48.79	76559.66	75683.29	56.02	PASS	43

5MHz+20MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2550	871.5+884	31.89	31.69	18.00	47.74	47.54	59429.22	56754.46	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2550	874+884	32.99	32.94	18.00	48.84	48.79	76559.66	75683.29	56.02	PASS	43
2475+2575	876.5+886.5	32.91	32.90	18.00	48.76	48.75	75162.29	74989.42	56.02	PASS	43
2500+2600	879+889	33.01	32.96	18.00	48.86	48.81	76913.04	76032.63	56.02	PASS	43

10MHz+15MHz

Channel Number	Freq. (MHz)	16QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2575	874+886.5	31.97	31.91	18.00	47.82	47.76	60534.09	59703.53	56.02	PASS	43

5MHz+5MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2475	871.5+876.5	36.00	35.95	18.00	51.85	51.80	153108.75	151356.12	56.02	PASS	43
2500+2550	879+884	35.99	35.96	18.00	51.84	51.81	152756.61	151705.04	56.02	PASS	43
2575+2625	886.5+891.5	36.09	35.96	18.00	51.94	51.81	156314.76	151705.04	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2500	871.5+879	34.24	34.19	18.00	50.09	50.04	102093.95	100925.29	56.02	PASS	43
2475+2550	876.5+884	34.19	34.10	18.00	50.04	49.95	100925.29	98855.31	56.02	PASS	43
2550+2625	884+891.5	34.28	34.23	18.00	50.13	50.08	103038.61	101859.14	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2525	871.5+881.5	32.91	32.86	18.00	48.76	48.71	75162.29	74301.91	56.02	PASS	43
2450+2550	874+884	32.88	32.88	18.00	48.73	48.73	74644.88	74644.88	56.02	PASS	43
2525+2625	881.5+891.5	32.99	32.96	18.00	48.84	48.81	76559.66	76032.63	56.02	PASS	43

5MHz+20MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2550	871.5+884	31.84	31.85	18.00	47.69	47.70	58748.94	58884.37	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2550	874+884	33.00	33.02	18.00	48.85	48.87	76736.15	77090.35	56.02	PASS	43
2475+2575	876.5+886.5	33.00	32.99	18.00	48.85	48.84	76736.15	76559.66	56.02	PASS	43
2500+2600	879+889	33.04	32.99	18.00	48.89	48.84	77446.18	76559.66	56.02	PASS	43

10MHz+15MHz

Channel Number	Freq. (MHz)	64QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2575	874+886.5	31.92	31.99	18.00	47.77	47.84	59841.16	60813.50	56.02	PASS	43

5MHz+5MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2475	871.5+876.5	36.02	35.95	18.00	51.87	51.80	153815.46	151356.12	56.02	PASS	43
2500+2550	879+884	35.98	35.94	18.00	51.83	51.79	152405.28	151008.02	56.02	PASS	43
2575+2625	886.5+891.5	36.07	35.93	18.00	51.92	51.78	155596.56	150660.71	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2500	871.5+879	34.18	34.17	18.00	50.03	50.02	100693.17	100461.58	56.02	PASS	43
2475+2550	876.5+884	34.12	34.18	18.00	49.97	50.03	99311.60	100693.17	56.02	PASS	43
2550+2625	884+891.5	34.24	34.22	18.00	50.09	50.07	102093.95	101624.87	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2525	871.5+881.5	32.91	32.86	18.00	48.76	48.71	75162.29	74301.91	56.02	PASS	43
2450+2550	874+884	32.90	32.88	18.00	48.75	48.73	74989.42	74644.88	56.02	PASS	43
2525+2625	881.5+891.5	32.96	32.93	18.00	48.81	48.78	76032.63	75509.22	56.02	PASS	43

5MHz+20MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2550	871.5+884	31.70	31.81	18.00	47.55	47.66	56885.29	58344.51	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2550	874+884	32.98	32.97	18.00	48.83	48.82	76383.58	76207.90	56.02	PASS	43
2475+2575	876.5+886.5	32.99	32.95	18.00	48.84	48.80	76559.66	75857.76	56.02	PASS	43
2500+2600	879+889	32.99	32.97	18.00	48.84	48.82	76559.66	76207.90	56.02	PASS	43

10MHz+15MHz

Channel Number	Freq. (MHz)	256QAM								PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)		Gain	ERP (dBm/MHz)		ERP (mW/MHz)		Limit (dBm/MHz)		
		CHAIN0	CHAIN1		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2575	874+886.5	31.91	31.93	18.00	47.76	47.78	59703.53	59979.11	56.02	PASS	43

CA-NC Non-Contiguous

5MHz+5MHz

Channel Number	Freq. (MHz)	QPSK						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2625	871.5+891.5	35.63	35.82	35.53	35.83	38.74	38.69	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2625	871.5+891.5	54.59	54.54	287739.84	284446.11	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	QPSK						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2600	871.5+889	35.62	32.88	35.53	32.86	37.47	37.41	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2600	871.5+889	53.32	53.26	214783.05	211836.11	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	QPSK						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2575	871.5+886.5	35.63	31.20	35.54	31.17	36.97	36.89	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2575	871.5+886.5	52.82	52.74	191425.59	187931.68	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	QPSK						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2450+2600	874+889	32.78	32.95	32.76	32.93	35.88	35.86	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2600	874+889	51.73	51.71	148936.11	148251.81	56.02	PASS	43

5MHz+5MHz

Channel Number	Freq. (MHz)	16QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2625	871.5+891.5	35.66	35.88	35.55	35.84	38.78	38.71	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2625	871.5+891.5	54.63	54.56	290402.27	285759.05	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	16QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2600	871.5+889	35.64	32.90	35.57	32.82	37.49	37.42	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2600	871.5+889	53.34	53.27	215774.44	212324.45	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	16QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2575	871.5+886.5	35.70	31.20	35.54	31.13	37.02	36.88	18.00

Channel Number	Freq. (MHz)	ERP(dBm)		ERP(mW)		Limit(dBm)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2575	871.5+886.5	52.87	52.73	193642.20	187499.45	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	16QAM							PASS /FAIL	Setting
		Conducted Average Power (dBm/MHz)						Gain		
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total			
2450+2600	874+889	32.69	32.83	32.68	32.80	35.77	35.75	18.00	PASS	43

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2600	874+889	51.62	51.60	145211.16	144543.98	56.02	PASS	43

5MHz+5MHz

Channel Number	Freq. (MHz)	64QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2625	871.5+891.5	35.63	35.85	35.56	35.85	38.75	38.72	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2625	871.5+891.5	54.60	54.57	288403.15	286417.80	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	64QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2600	871.5+889	35.66	32.86	35.55	32.87	37.49	37.42	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2600	871.5+889	53.34	53.27	215774.44	212324.45	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	64QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2575	871.5+886.5	35.64	31.22	35.57	31.20	36.98	36.92	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2575	871.5+886.5	52.83	52.77	191866.87	189234.36	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	64QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2450+2600	874+889	32.77	32.92	32.67	32.91	35.86	35.80	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2600	874+889	51.71	51.65	148251.81	146217.72	56.02	PASS	43

5MHz+5MHz

Channel Number	Freq. (MHz)	256QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2625	871.5+891.5	35.66	35.81	35.61	35.87	38.75	38.75	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2625	871.5+891.5	54.60	54.60	288403.15	288403.15	56.02	PASS	43

5MHz+10MHz

Channel Number	Freq. (MHz)	256QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2600	871.5+889	35.72	32.92	35.58	32.87	37.55	37.44	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2600	871.5+889	53.40	53.29	218776.16	213304.49	56.02	PASS	43

5MHz+15MHz

Channel Number	Freq. (MHz)	256QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2425+2575	871.5+886.5	35.68	31.19	35.53	31.20	37.00	36.89	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2425+2575	871.5+886.5	52.85	52.74	192752.49	187931.68	56.02	PASS	43

10MHz+10MHz

Channel Number	Freq. (MHz)	256QAM						
		Conducted Average Power (dBm/MHz)						Gain
		CHAIN0		CHAIN1		CHAIN 0 Total	CHAIN 1 Total	
2450+2600	874+889	32.74	32.92	32.74	32.92	35.84	35.84	18.00

Channel Number	Freq. (MHz)	ERP(dBm/MHz)		ERP(mW/MHz)		Limit(dBm/MHz)	PASS /FAIL	Setting
		CHAIN0	CHAIN1	CHAIN0	CHAIN1	Maximum		
2450+2600	874+889	51.69	51.69	147570.65	147570.65	56.02	PASS	43

4.2 Modulation characteristics Measurement

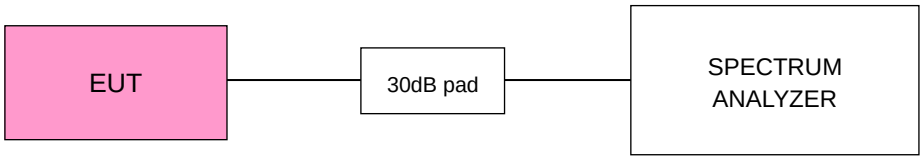
4.2.1 Limits of Modulation characteristics

N/A

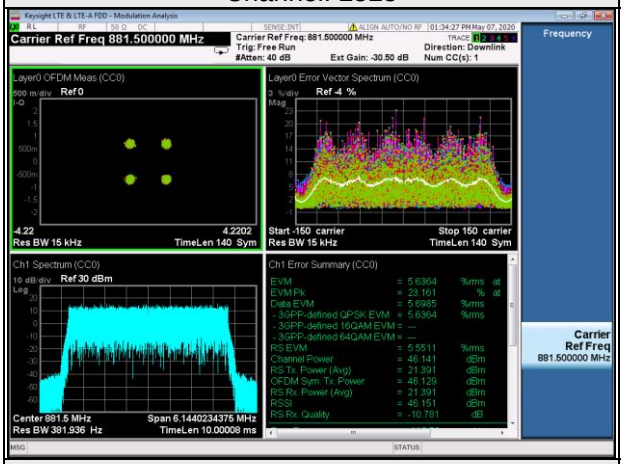
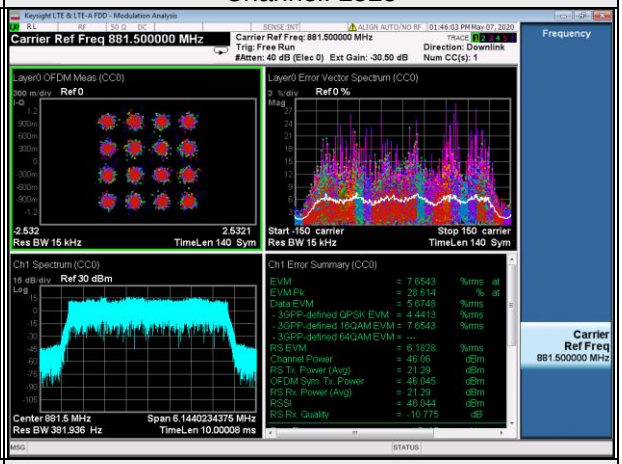
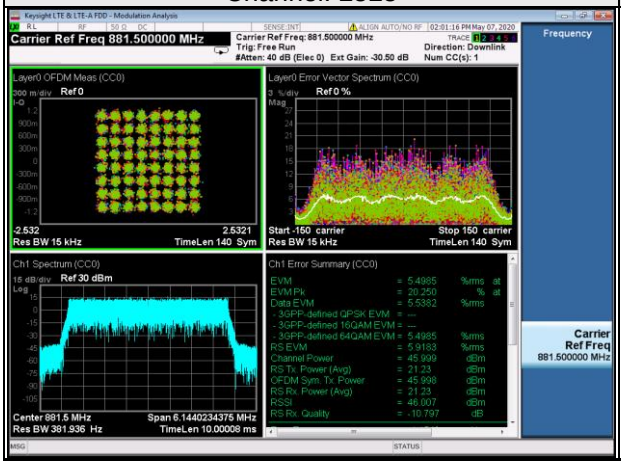
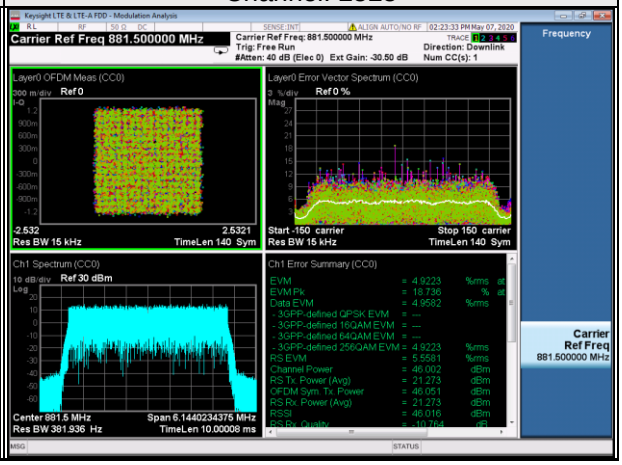
4.2.2 Test Procedure

Connect the EUT to spectrum analyzer. The frequency band is set as EUT supported modulation and channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

4.2.3 Test Setup



4.2.4 Test Results

Spectrum Plot of Measurement Value	
QPSK	16QAM
Channel: 2525	Channel: 2525
	
64QAM	256QAM
Channel: 2525	Channel: 2525
	

4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

According to the FCC part 22.355. The rule is defined that" The frequency stability shall be 1.5 ppm for base and fixed station." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -40℃ ~ 55℃.

4.3.2 Test Procedure

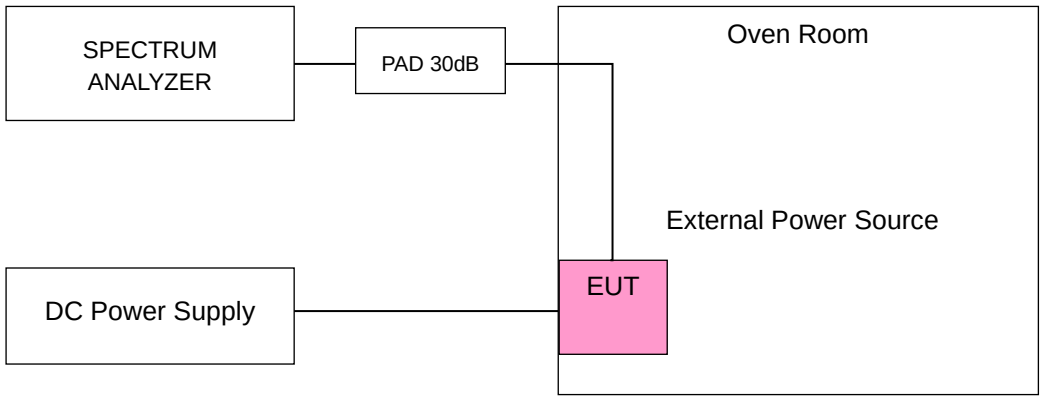
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5 ℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded from the spectrum analyzer.

4.3.3 Test Setup



4.3.4 Test Results

SC Mode- Chain 0

FREQUENCY ERROR vs. VOLTAGE					Limit (ppm)	PASS/FAIL
Voltage (Volts)	Test result (ppm)					
	5MHz	10MHz	15MHz	20MHz		
40.8	-0.0212	-0.0217	-0.0230	-0.0237	±1.5	PASS
55.2	-0.0229	-0.0243	-0.0033	-0.0229	±1.5	PASS

FREQUENCY ERROR vs. Temperature					Limit (MHz)	PASS/FAIL
Temp. (℃)	Test result (MHz)					
	5MHz	10MHz	15MHz	20MHz		
55	-0.0235	-0.0232	-0.0222	-0.0229	±1.5	PASS
50	-0.0229	-0.0222	-0.0228	-0.0224	±1.5	PASS
40	-0.0244	-0.0235	-0.0221	-0.0260	±1.5	PASS
30	-0.0243	-0.0215	-0.0201	-0.0244	±1.5	PASS
20	-0.0225	-0.0204	-0.0262	-0.0241	±1.5	PASS
10	-0.0239	-0.0241	-0.0224	-0.0216	±1.5	PASS
0	-0.0224	-0.0217	-0.0222	-0.0249	±1.5	PASS
-10	-0.0246	-0.0234	-0.0204	-0.0228	±1.5	PASS
-20	-0.0234	-0.0236	-0.0208	-0.0271	±1.5	PASS
-30	-0.0246	-0.0230	-0.0237	-0.0235	±1.5	PASS
-40	-0.0224	-0.0219	-0.0210	-0.0213	±1.5	PASS

SC Mode- Chain 1

FREQUENCY ERROR vs. VOLTAGE					Limit (ppm)	PASS/FAIL
Voltage (Volts)	Test result (ppm)					
	5MHz	10MHz	15MHz	20MHz		
40.8	-0.0027	-0.0037	-0.0041	-0.0049	±1.5	PASS
55.2	-0.0047	-0.0023	-0.0028	-0.0053	±1.5	PASS

FREQUENCY ERROR vs. Temperature					Limit (MHz)	PASS/FAIL
Temp. (℃)	Test result (MHz)					
	5MHz	10MHz	15MHz	20MHz		
55	-0.0013	-0.0020	-0.0010	-0.0017	±1.5	PASS
50	-0.0010	-0.0034	-0.0023	-0.0006	±1.5	PASS
40	-0.0017	-0.0009	-0.0017	-0.0040	±1.5	PASS
30	-0.0026	-0.0018	-0.0022	-0.0058	±1.5	PASS
20	-0.0034	-0.0009	-0.0055	-0.0010	±1.5	PASS
10	-0.0011	-0.0043	-0.0017	-0.0030	±1.5	PASS
0	-0.0016	-0.0053	-0.0028	-0.0008	±1.5	PASS
-10	-0.0037	-0.0052	-0.0009	-0.0031	±1.5	PASS
-20	-0.0030	-0.0018	-0.0004	-0.0018	±1.5	PASS
-30	-0.0024	-0.0041	-0.0003	-0.0034	±1.5	PASS
-40	-0.0020	-0.0038	-0.0045	-0.0018	±1.5	PASS

CA Mode- Non Contiguous

FREQUENCY ERROR vs. VOLTAGE					Limit (ppm)	PASS/FAIL
Voltage (Volts)	Test result (ppm)					
	10MHz+10MHz					
	CC0	CC1	CC0	CC1		
40.8	0.0144	0.0075	0.0086	0.0086	±1.5	PASS
55.2	0.0114	0.0104	0.0102	0.0154	±1.5	PASS

FREQUENCY ERROR vs. Temperature					Limit (MHz)	PASS/FAIL
Temp. (℃)	Test result (MHz)					
	10MHz+10MHz					
	CC0	CC1	CC0	CC1		
55	0.0052	0.0105	0.0107	0.0066	±1.5	PASS
50	0.0124	0.0129	0.0136	0.0070	±1.5	PASS
40	0.0107	0.0076	0.0107	0.0067	±1.5	PASS
30	0.0102	0.0083	0.0095	0.0102	±1.5	PASS
20	0.0068	0.0083	0.0101	0.0100	±1.5	PASS
10	0.0089	0.0102	0.0055	0.0134	±1.5	PASS
0	0.0092	0.0134	0.0118	0.0101	±1.5	PASS
-10	0.0061	0.0110	0.0098	0.0104	±1.5	PASS
-20	0.0058	0.0107	0.0111	0.0081	±1.5	PASS
-30	0.0087	0.0083	0.0122	0.0071	±1.5	PASS
-40	0.0116	0.0087	0.0117	0.0078	±1.5	PASS

CA Mode- Contiguous

FREQUENCY ERROR vs. VOLTAGE					Limit (ppm)	PASS/FAIL
Voltage (Volts)	Test result (ppm)					
	5MHz+20MHz					
	CC0	CC1	CC0	CC1		
40.8	0.0143	0.0083	0.0091	0.0087	±1.5	PASS
55.2	0.0109	0.0101	0.0085	0.0113	±1.5	PASS

FREQUENCY ERROR vs. Temperature					Limit (MHz)	PASS/FAIL
Temp. (℃)	Test result (MHz)					
	5MHz+20MHz					
	CC0	CC1	CC0	CC1		
55	0.0090	0.0093	0.0116	0.0091	±1.5	PASS
50	0.0094	0.0057	0.0092	0.0081	±1.5	PASS
40	0.0088	0.0093	0.0082	0.0077	±1.5	PASS
30	0.0109	0.0103	0.0118	0.0084	±1.5	PASS
20	0.0110	0.0086	0.0084	0.0079	±1.5	PASS
10	0.0112	0.0091	0.0109	0.0111	±1.5	PASS
0	0.0086	0.0113	0.0084	0.0060	±1.5	PASS
-10	0.0083	0.0104	0.0120	0.0077	±1.5	PASS
-20	0.0047	0.0094	0.0073	0.0091	±1.5	PASS
-30	0.0078	0.0092	0.0094	0.0060	±1.5	PASS
-40	0.0085	0.0063	0.0061	0.0072	±1.5	PASS

4.4 Emission Bandwidth Measurement

4.4.1 Limits of Emission Bandwidth Measurement

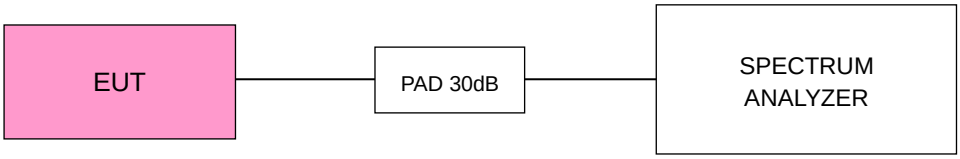
-26dBc Bandwidth
That emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

Occupied Bandwidth
All measurements were done at low, middle and high operational frequency range. EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.4.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW = 100kHz and VBW = 300kHz (Channel Bandwidth: 5MHz), RBW = 200kHz and VBW = 620kHz (Channel Bandwidth: 10MHz), RBW = 300kHz and VBW = 1MHz (Channel Bandwidth: 15MHz), RBW = 510kHz and VBW = 1.8MHz (Channel Bandwidth: 20MHz). The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

4.4.3 Test Setup



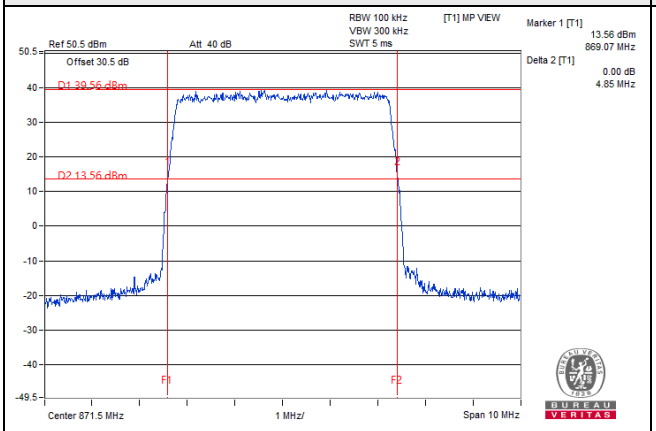
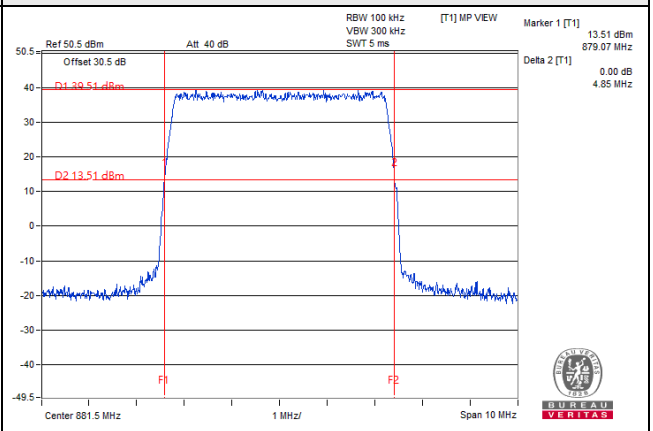
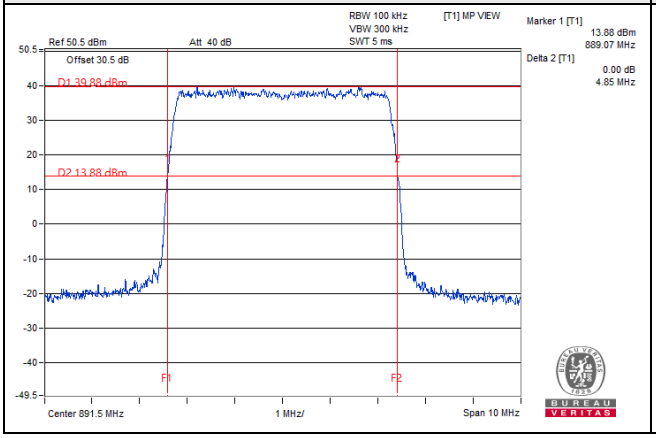
4.4.4 Test Results (-26dBc Bandwidth)

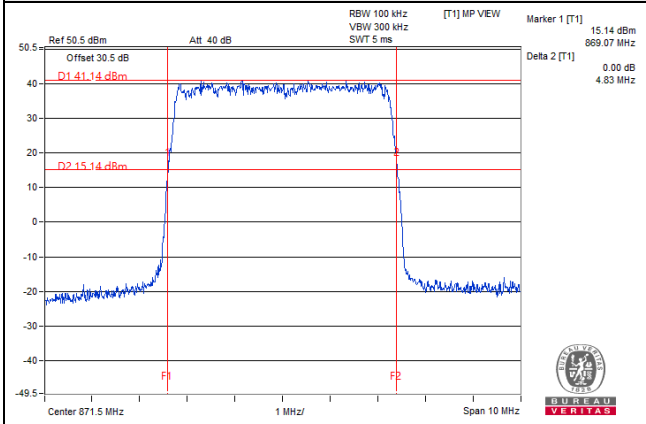
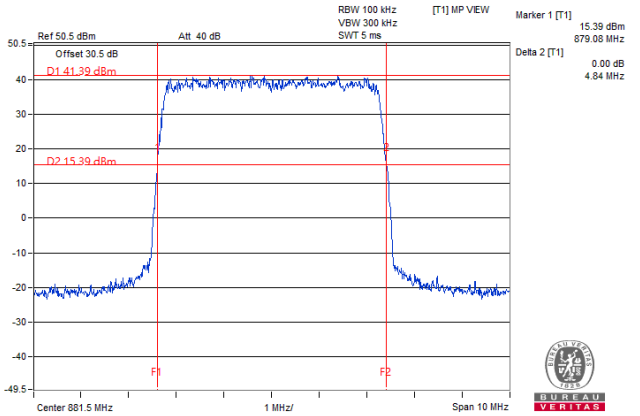
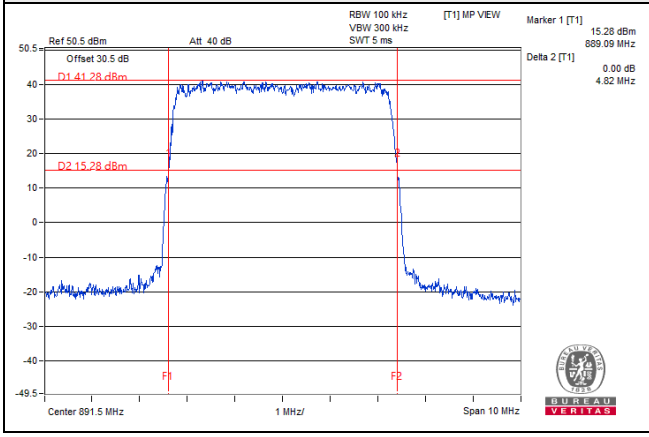
Single Carrier

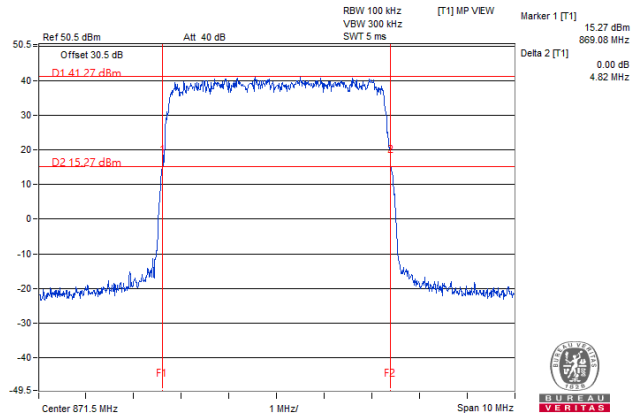
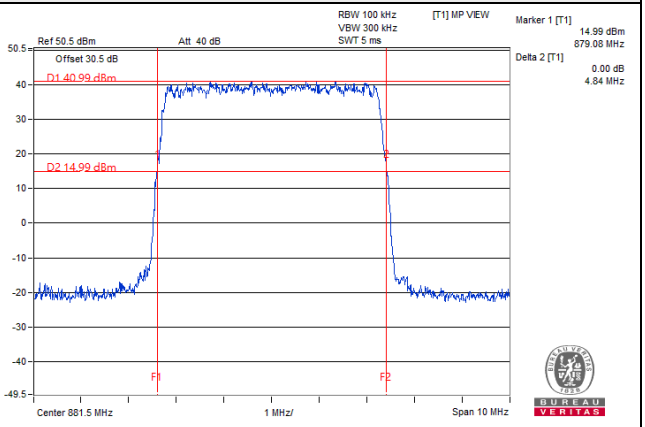
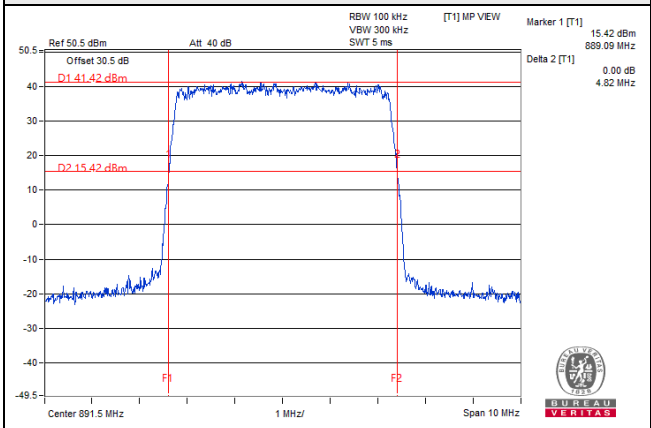
5MHz

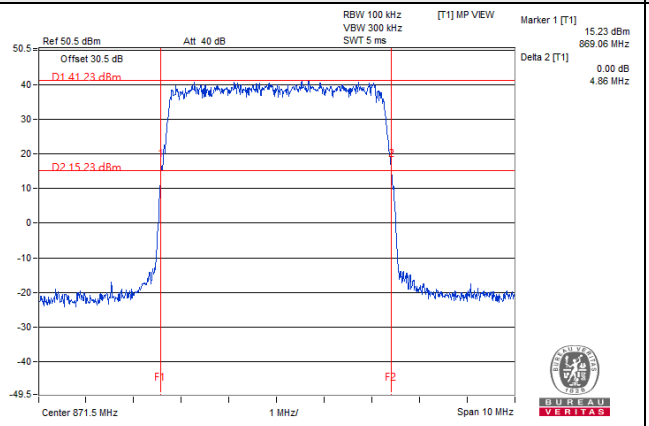
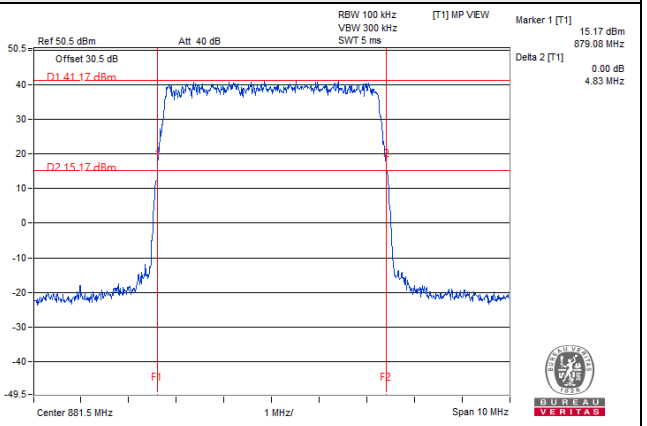
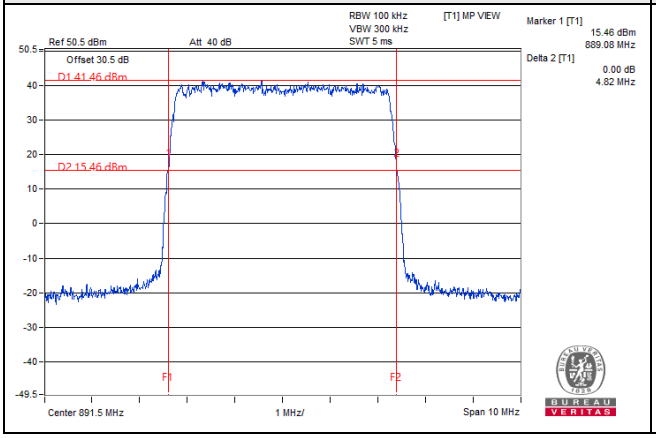
Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2425	871.5	4.85	4.83	4.82	4.86	4.85	4.84	4.82	4.84
2525	881.5	4.85	4.84	4.84	4.83	4.87	4.86	4.83	4.83
2625	891.5	4.85	4.82	4.82	4.82	4.85	4.82	4.86	4.86

Chain 0

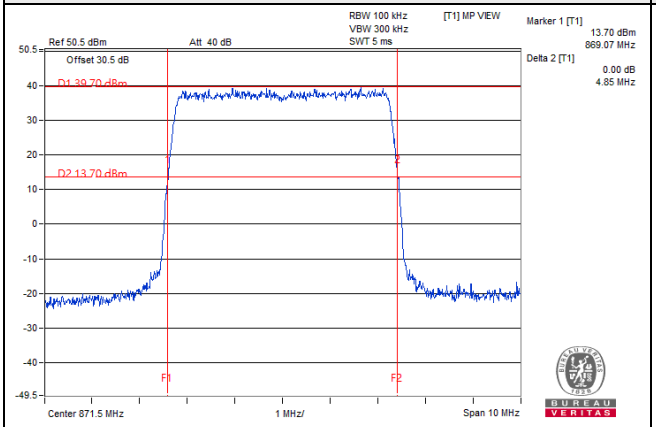
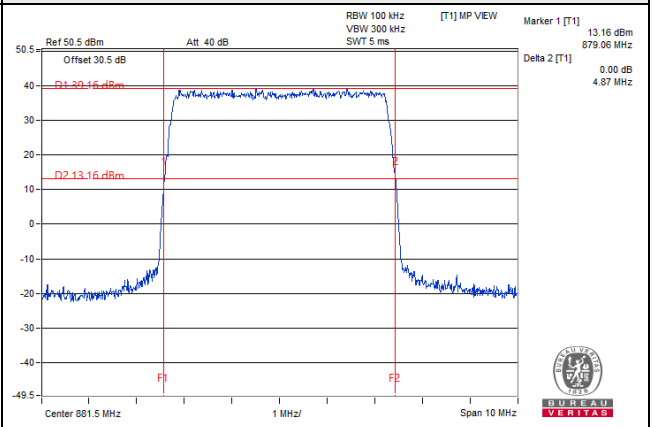
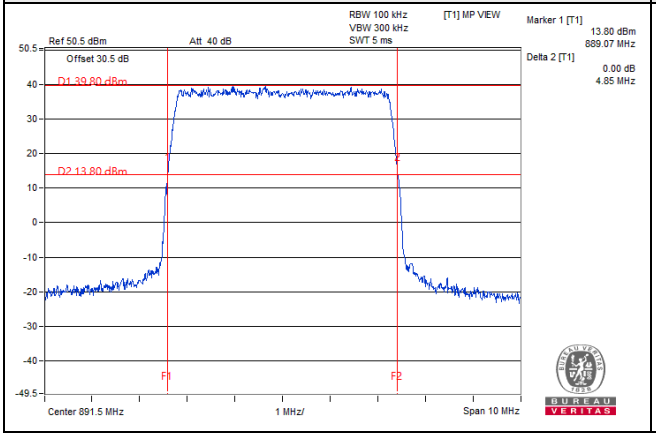
Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

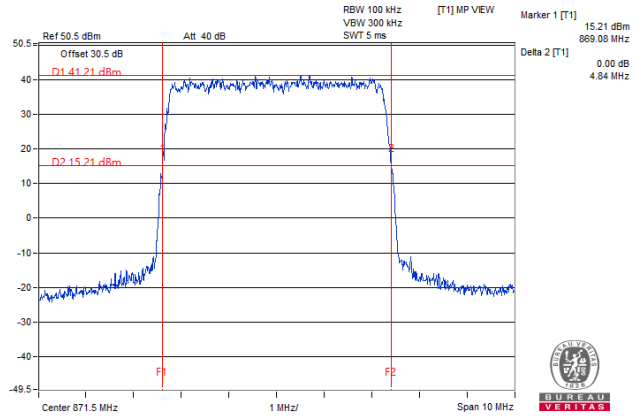
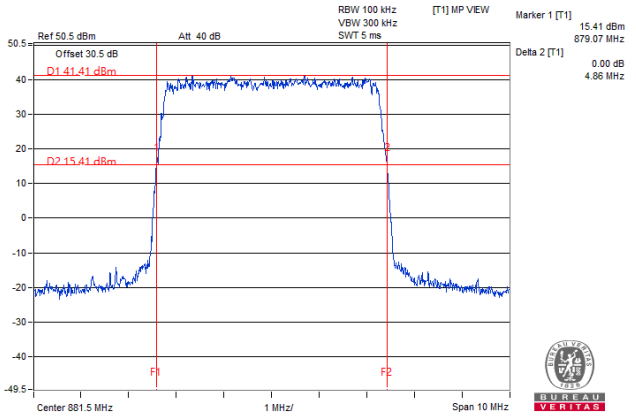
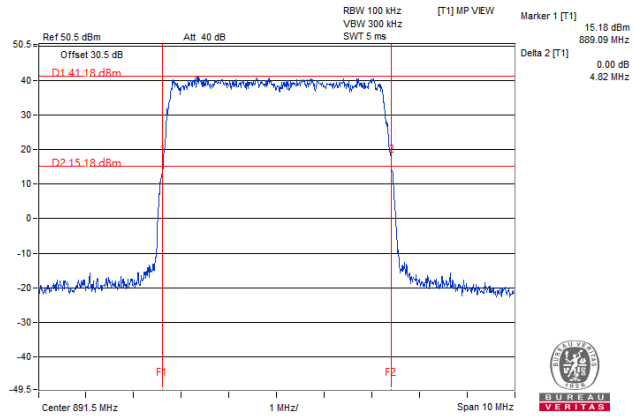
16QAM	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

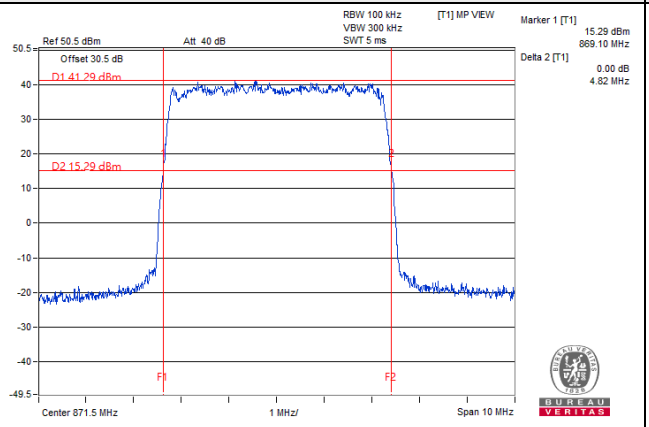
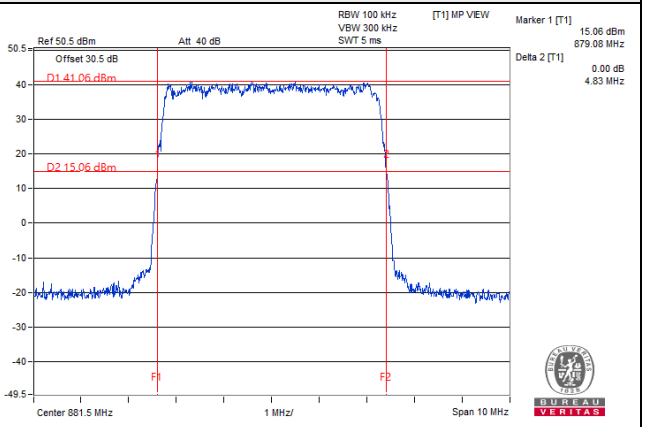
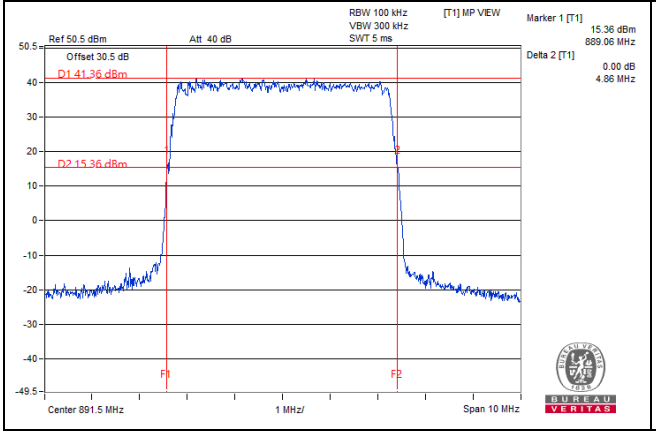
64QAM	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

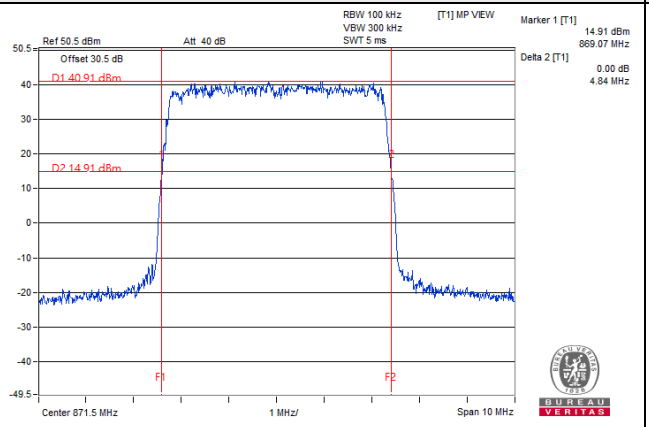
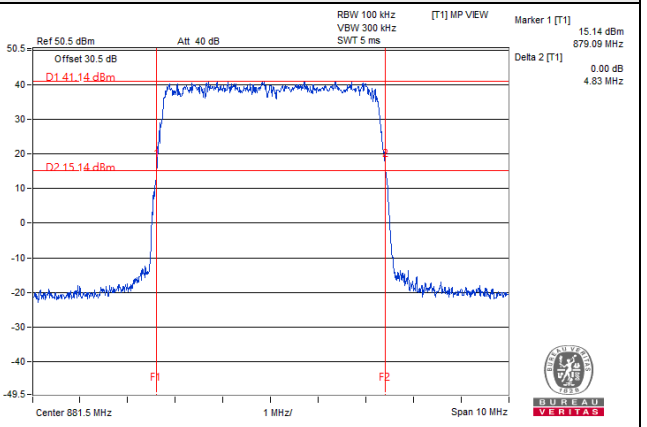
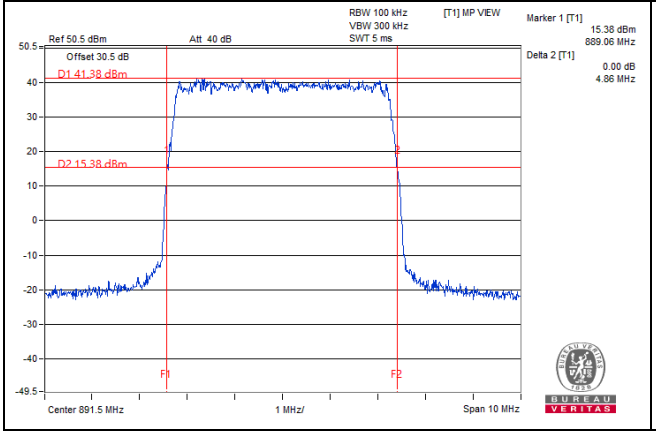
256QAM	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

Chain 1

Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

16QAM	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

64QAM	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

256QAM	
Channel: 2425	Channel: 2545
	
Channel: 2625	
	

10MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2450	874	9.70	9.73	9.73	9.71	9.67	9.65	9.71	9.70
2525	881.5	9.72	9.66	9.71	9.71	9.68	9.71	9.71	9.69
2600	889	9.71	9.66	9.76	9.69	9.69	9.67	9.73	9.68

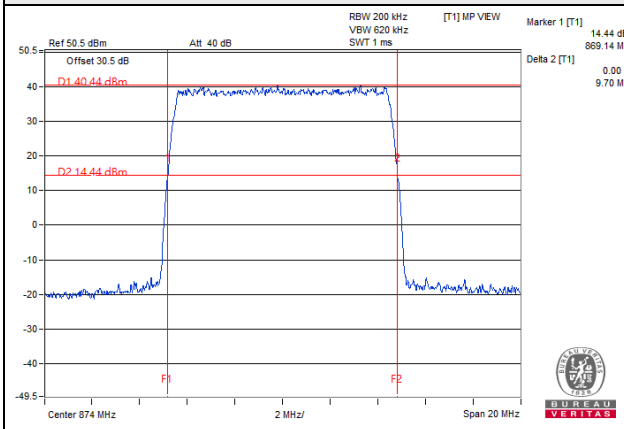
Chain 0

Spectrum Plot of Worst Value

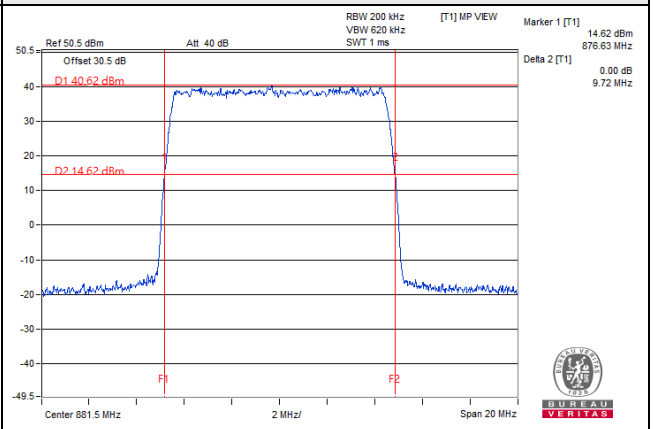
-26dBc Bandwidth

QPSK

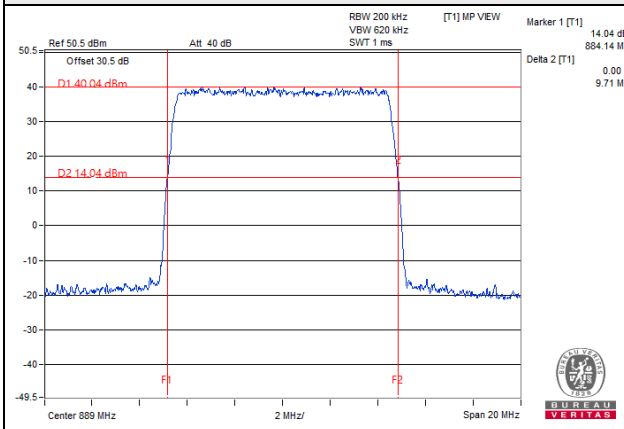
Channel: 2450

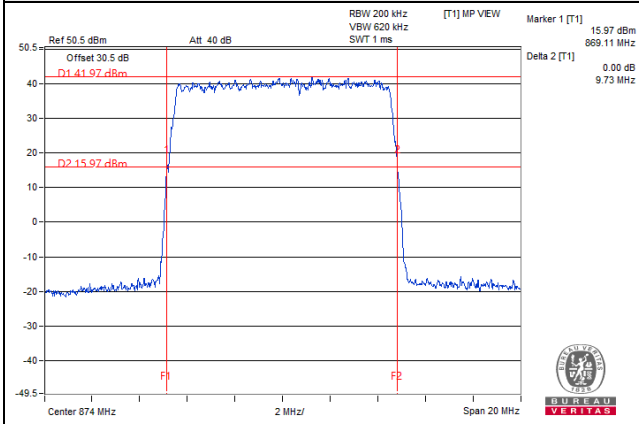
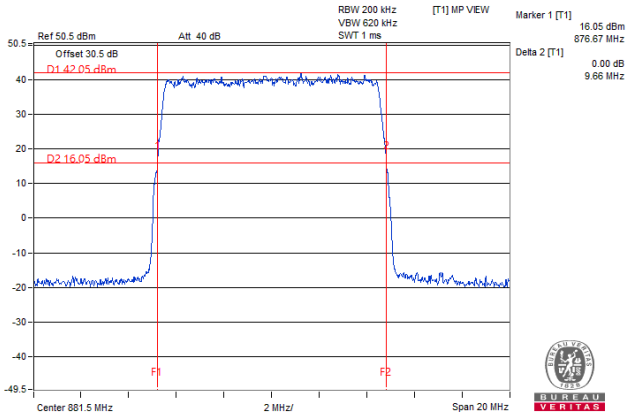
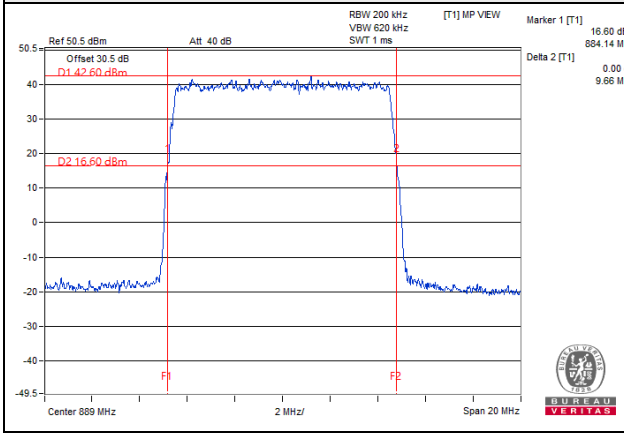


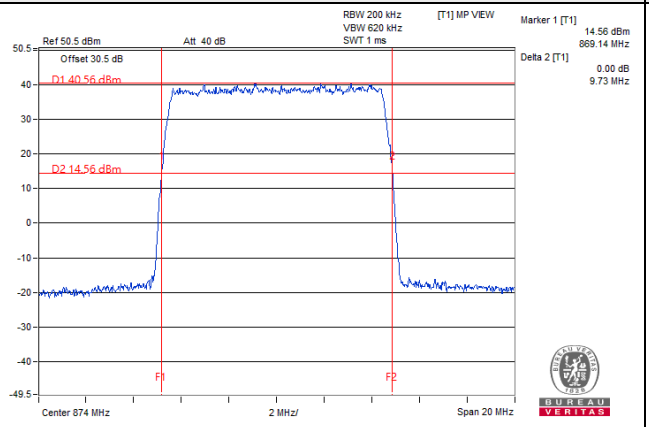
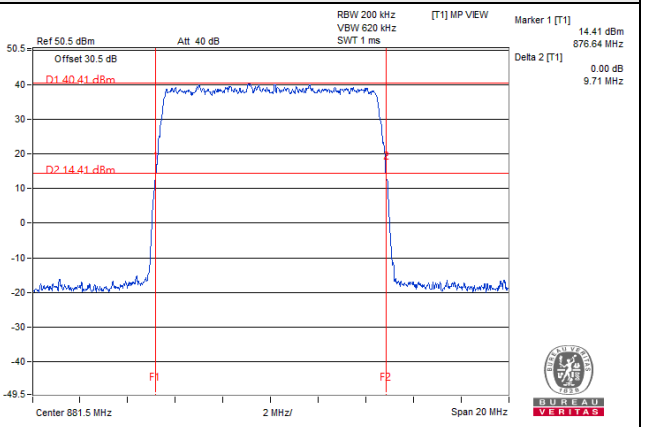
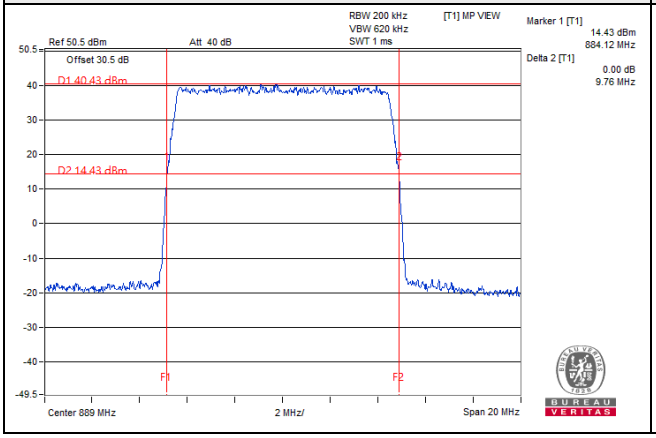
Channel: 2525

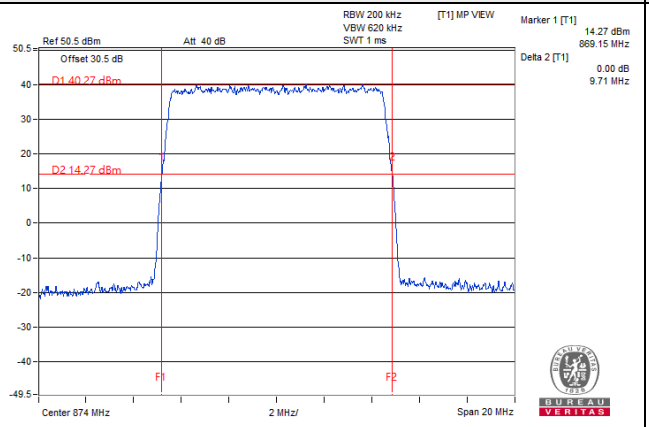
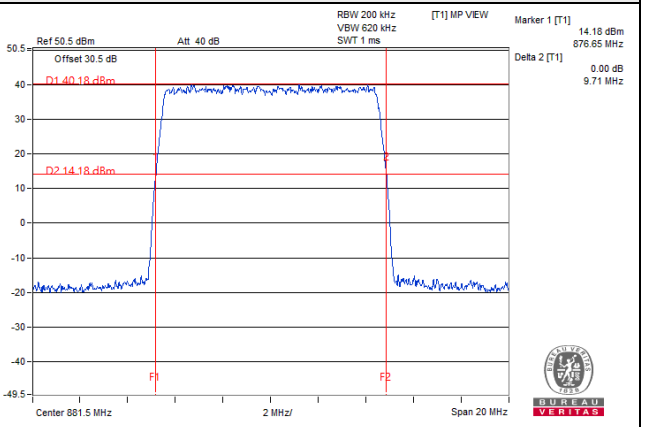
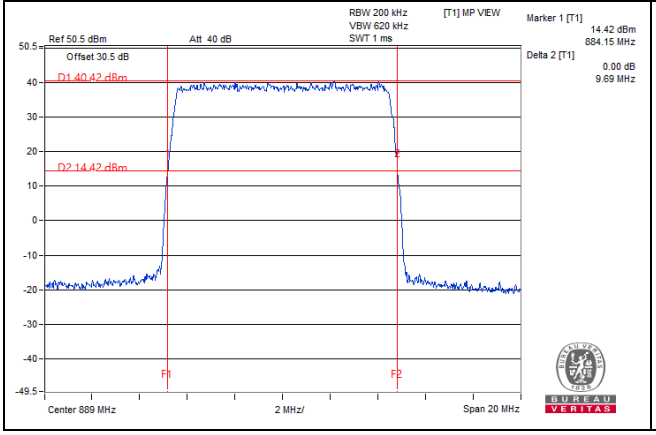


Channel: 2600

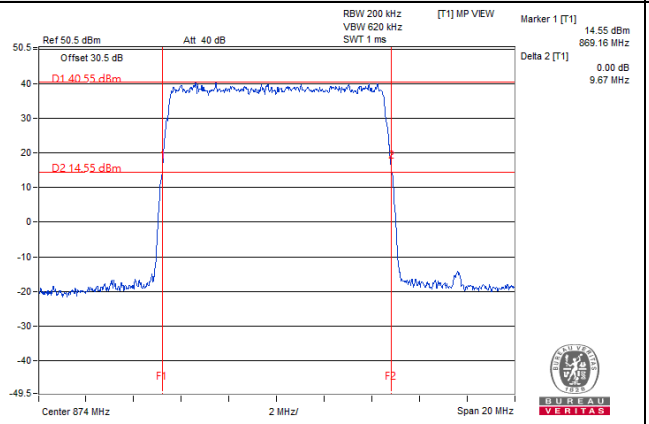
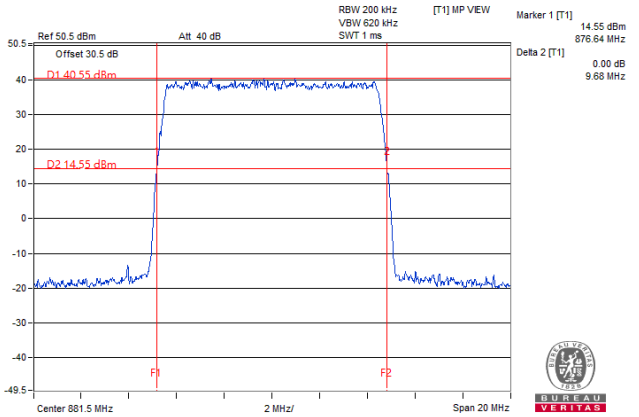
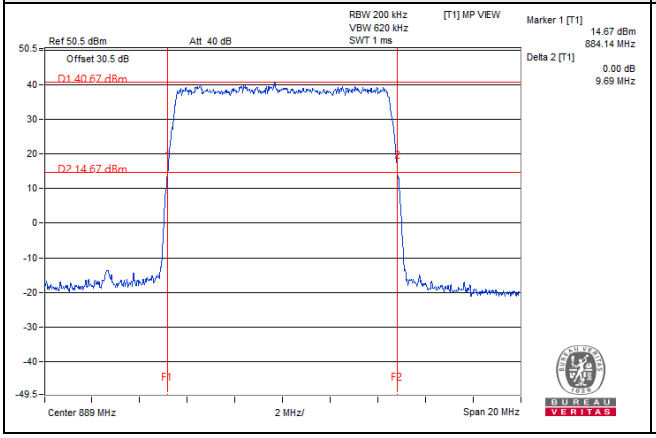


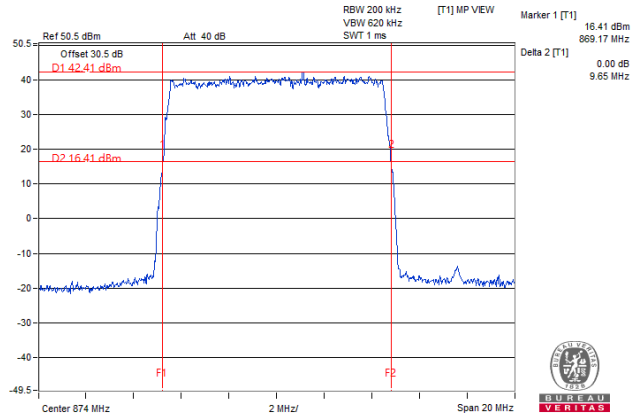
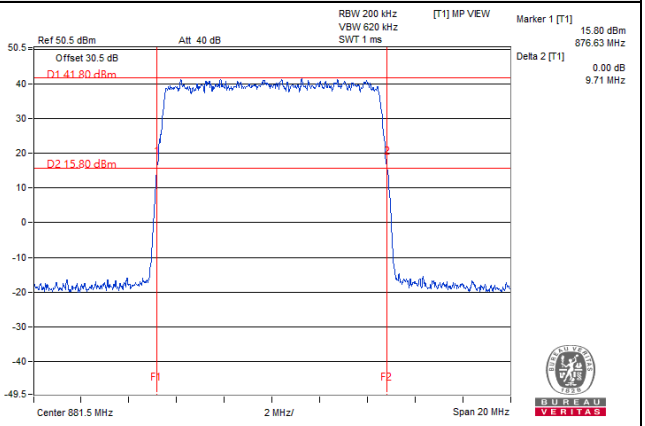
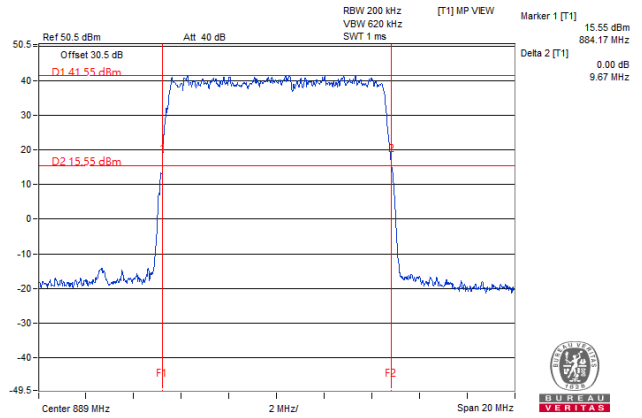
16QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

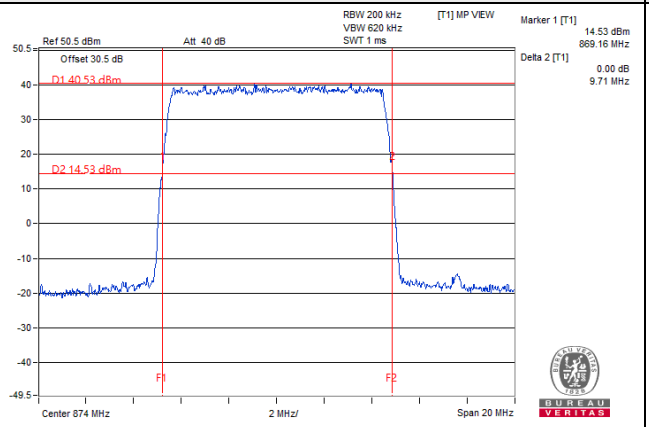
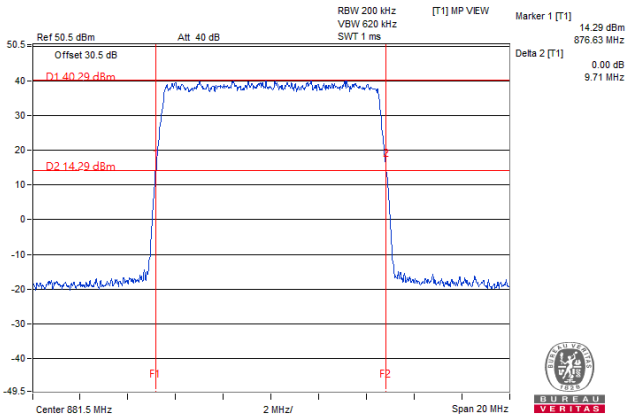
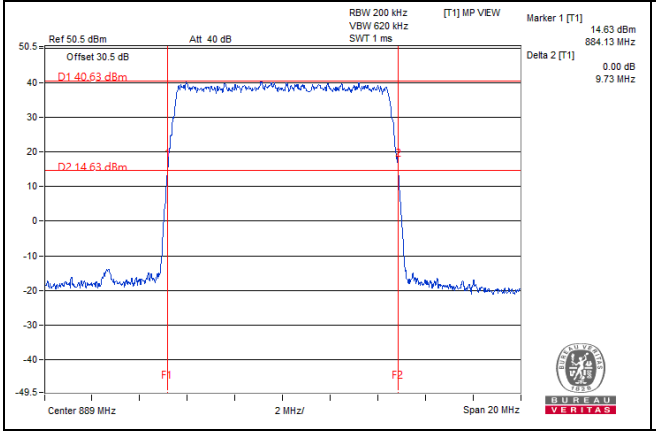
64QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

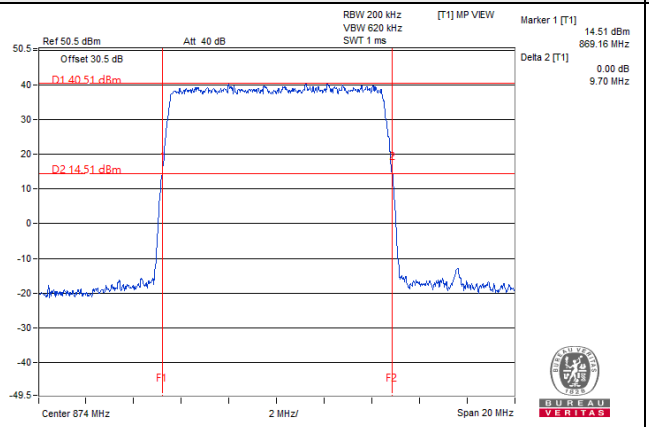
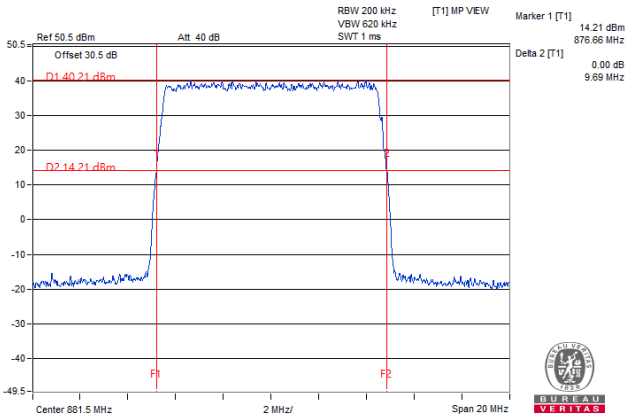
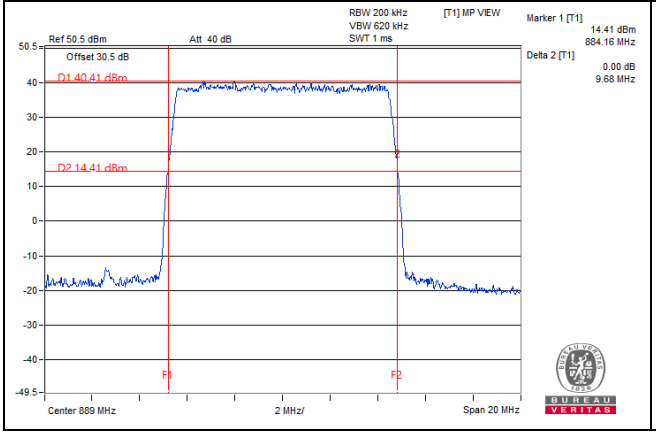
256QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

Chain 1

Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	
Channel: 2450	Channel: 2525
	
Channel:2600	
	

16QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

64QAM	
Channel: 2450	Channel: 2525
	
Channel:2600	
	

256QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

15MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2475	876.5	14.47	14.46	14.43	14.37	14.49	14.39	14.45	14.48
2525	881.5	14.48	14.44	14.41	14.52	14.49	14.48	14.43	14.54
2575	886.5	14.49	14.45	14.44	14.37	14.50	14.52	14.46	14.37

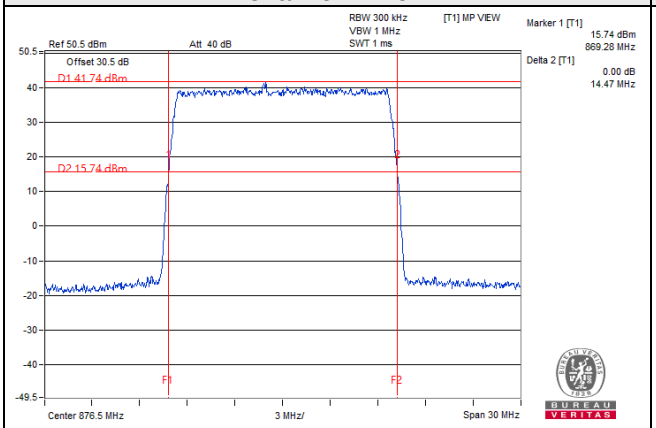
Chain 0

Spectrum Plot of Worst Value

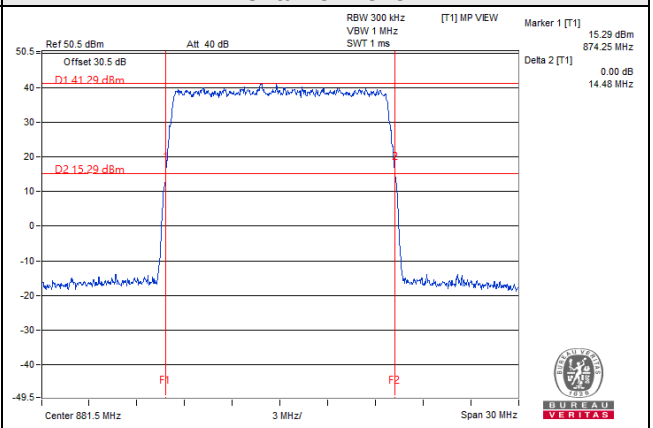
-26dBc Bandwidth

QPSK

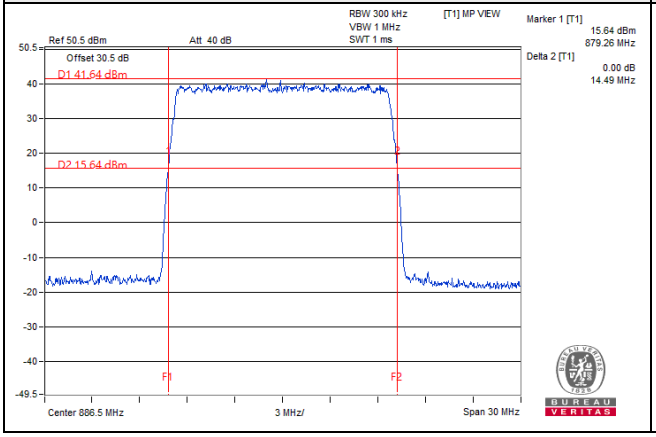
Channel: 2475

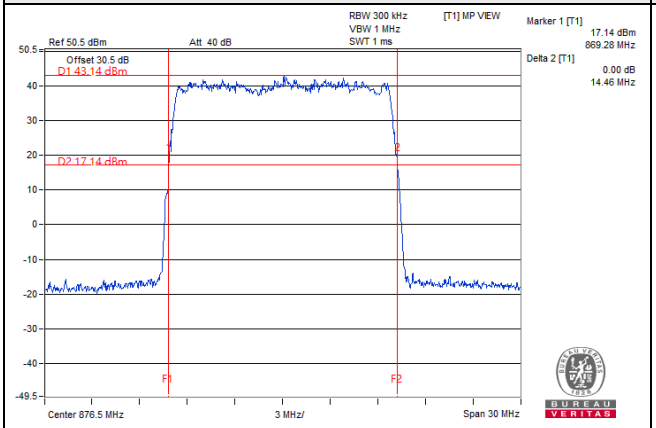
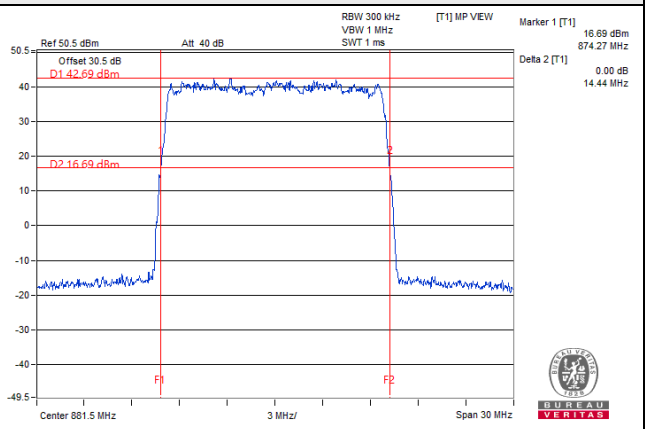
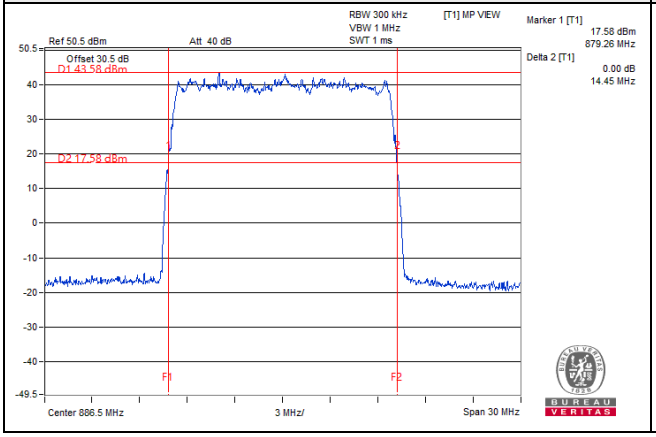


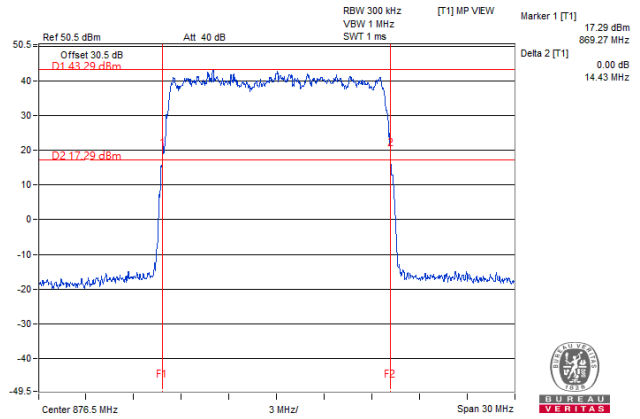
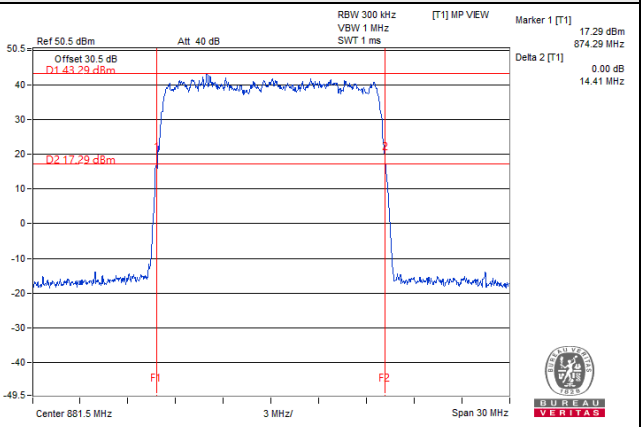
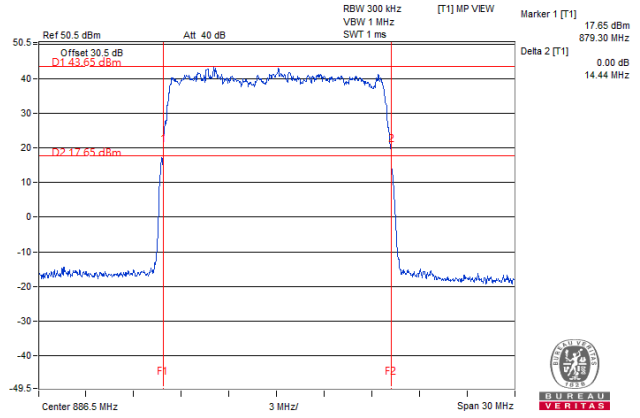
Channel: 2525

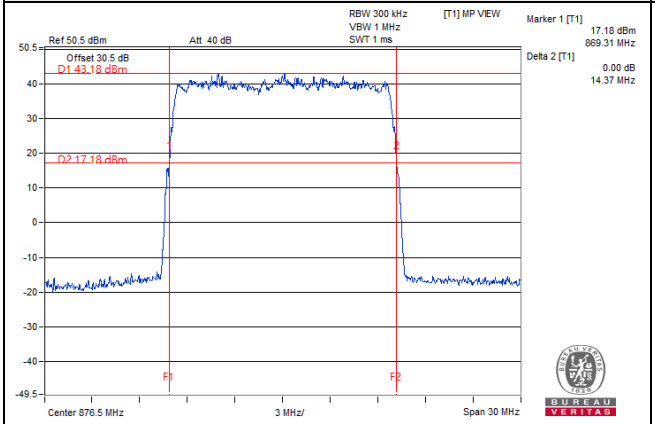
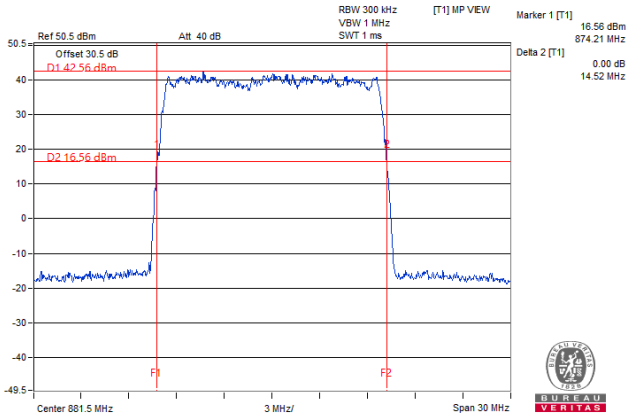
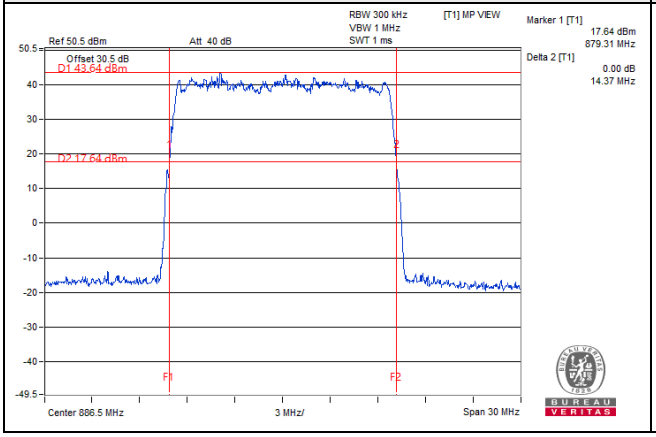


Channel: 2575

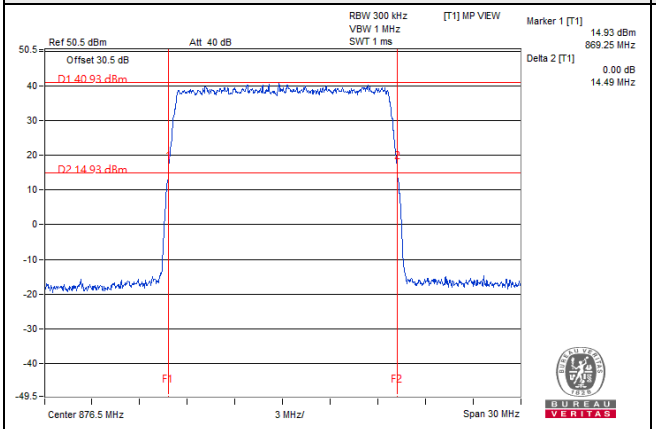
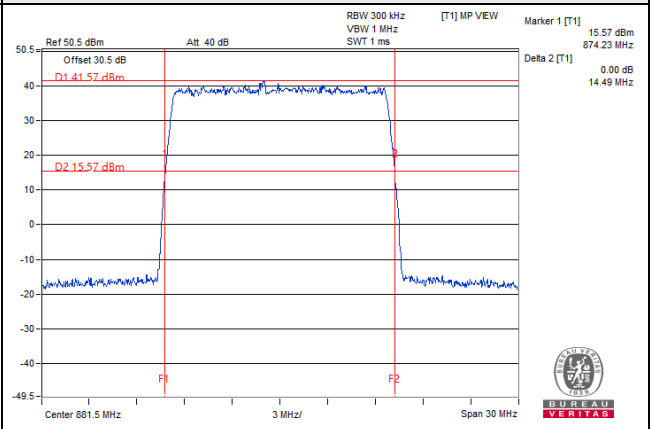
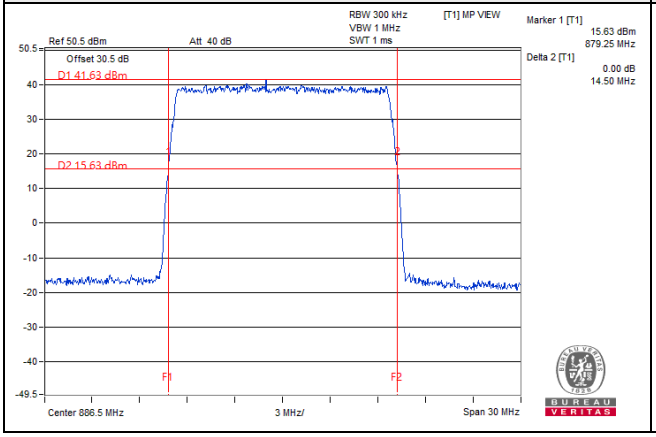


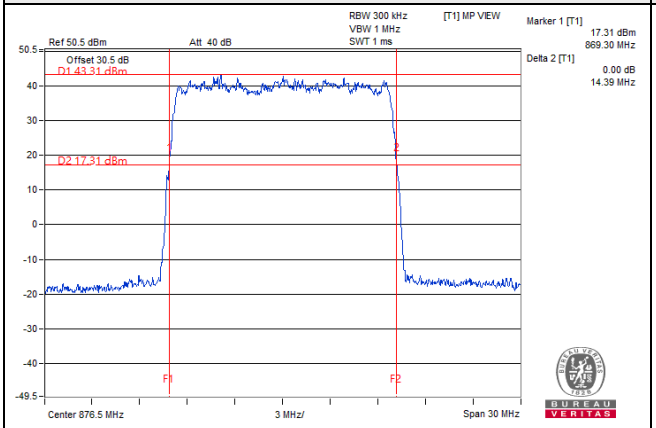
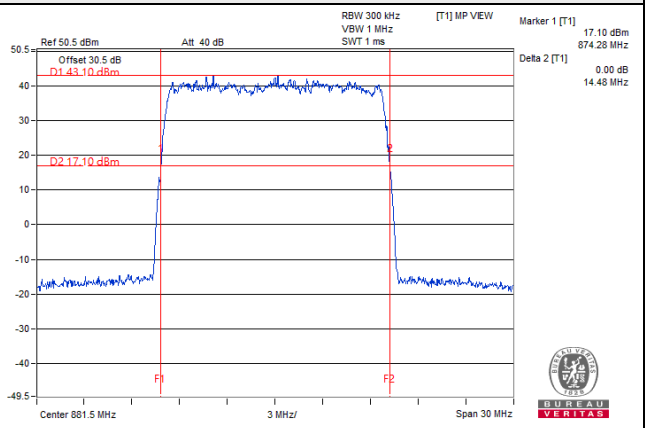
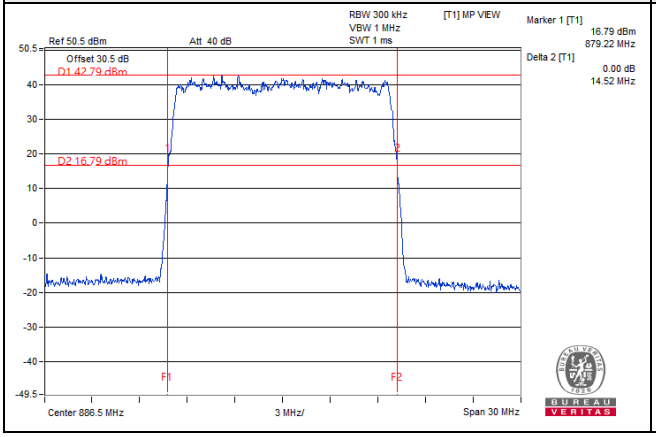
16QAM	
Channel: 2475	Channel: 2525
	
Channel:2575	
	

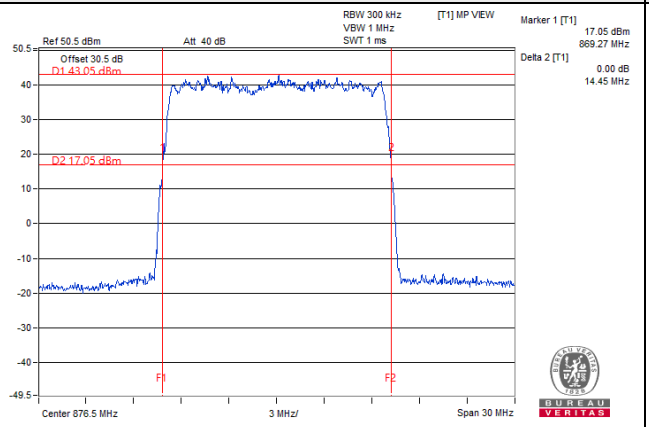
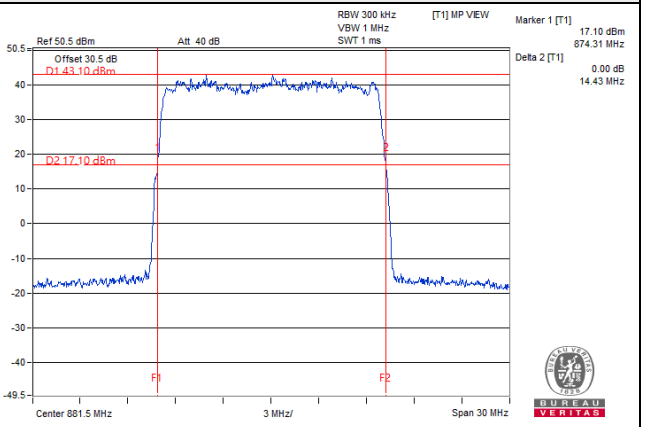
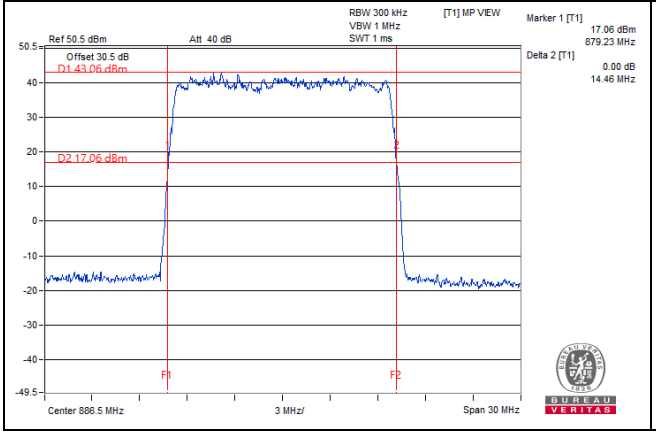
64QAM	
Channel: 2475	Channel: 2525
	
Channel: 2575	
	

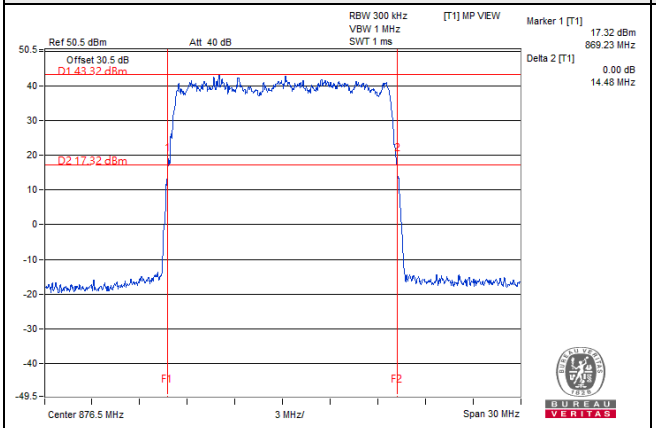
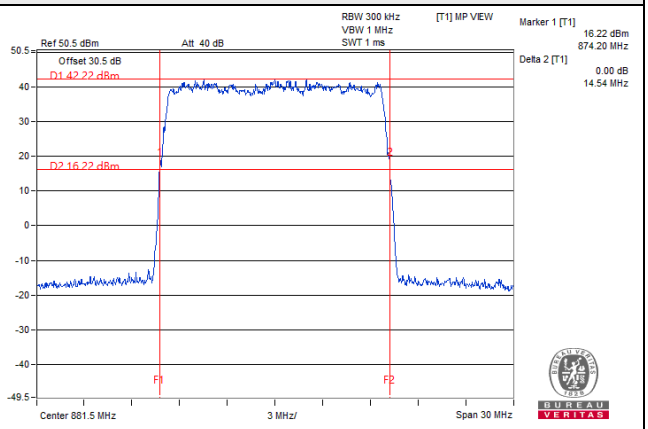
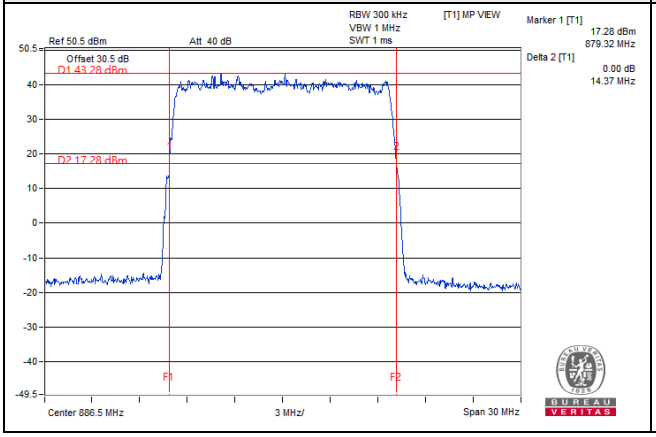
256QAM	
Channel: 2475	Channel: 2525
	
Channel: 2575	
	

Chain 1

Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	
Channel: 2475	Channel: 2525
	
Channel: 2575	
	

16QAM	
Channel: 2475	Channel: 2525
	
Channel: 2575	
	

64QAM	
Channel: 2475	Channel: 2525
	
Channel: 2575	
	

256QAM	
Channel: 2475	Channel: 2525
	
Channel: 2575	
	

20MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2500	879	19.45	19.41	19.57	19.37	19.50	19.50	19.34	19.39
2525	881.5	19.47	19.44	19.39	19.47	19.53	19.54	19.46	19.51
2550	884	19.43	19.54	19.33	19.33	19.59	19.44	19.34	19.37

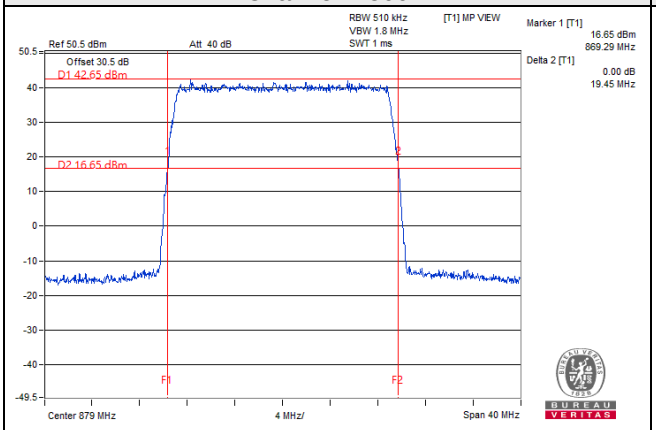
Chain 0

Spectrum Plot of Worst Value

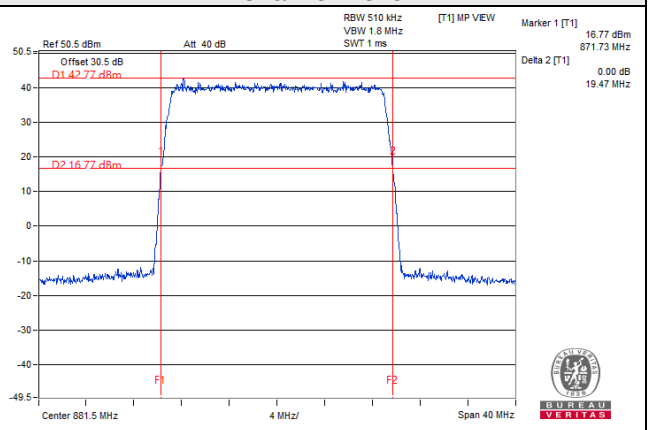
-26dBc Bandwidth

QPSK

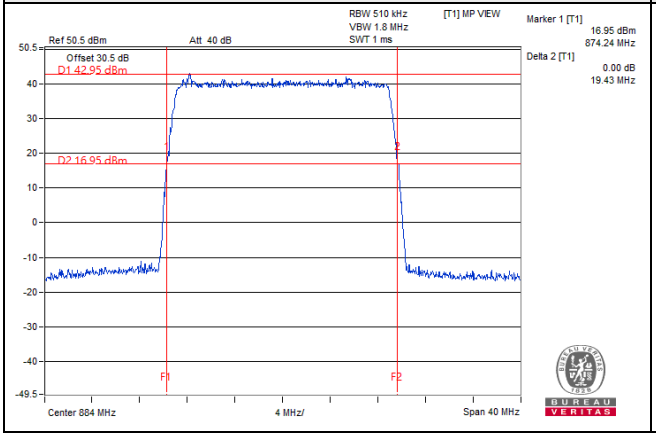
Channel: 2500

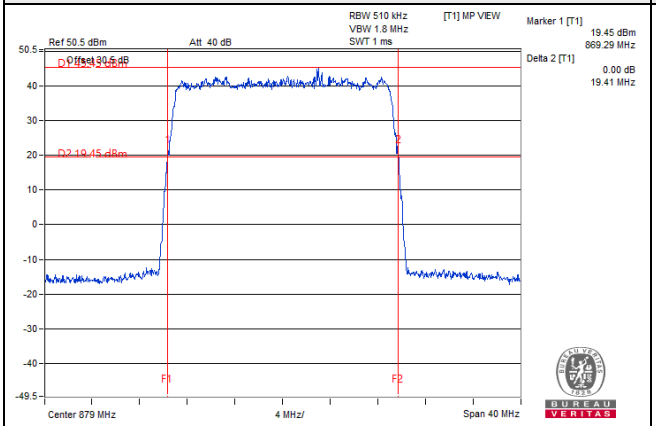
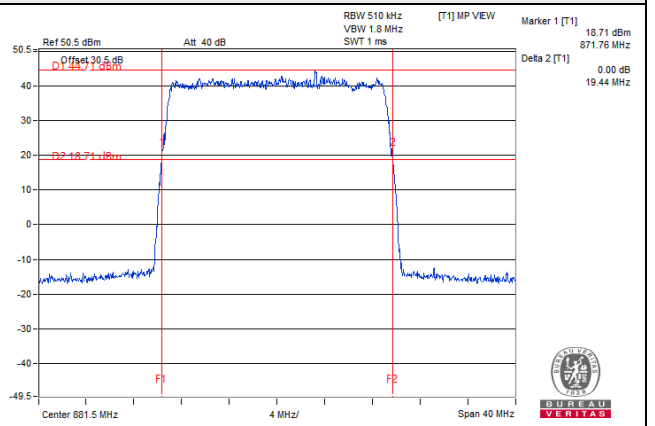
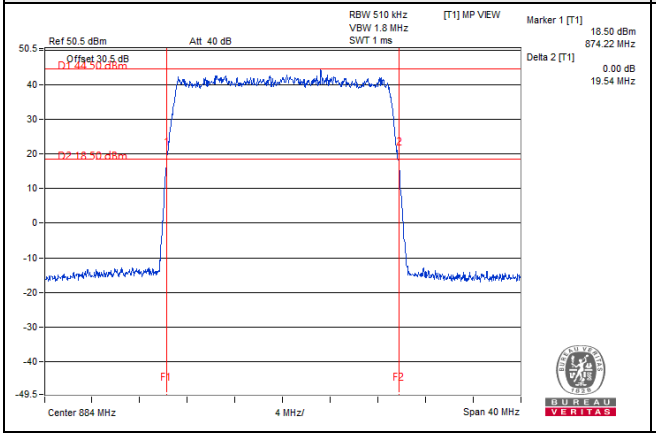


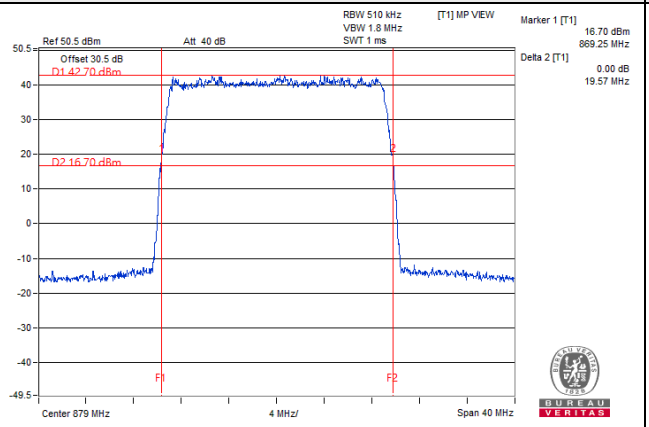
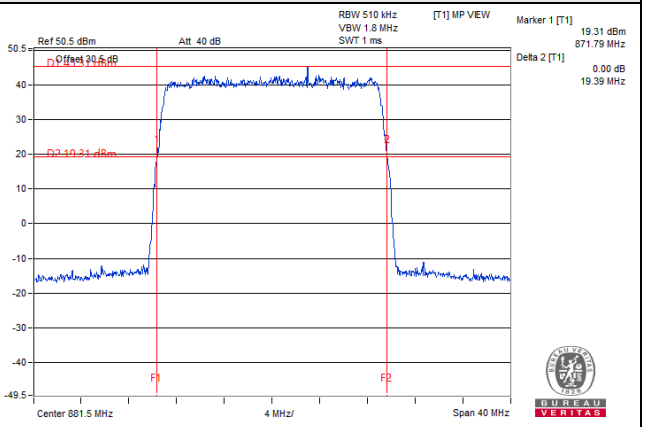
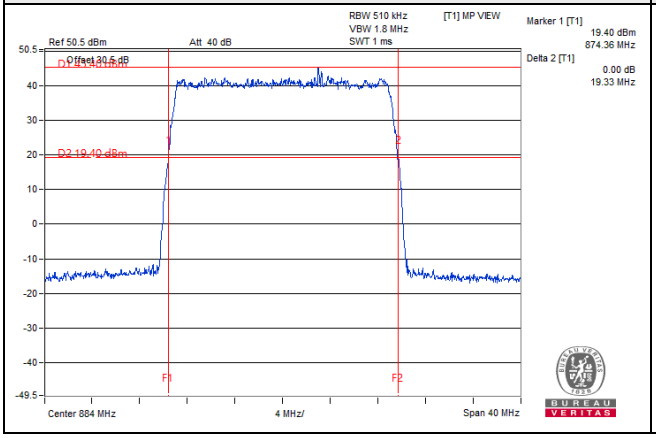
Channel: 2525

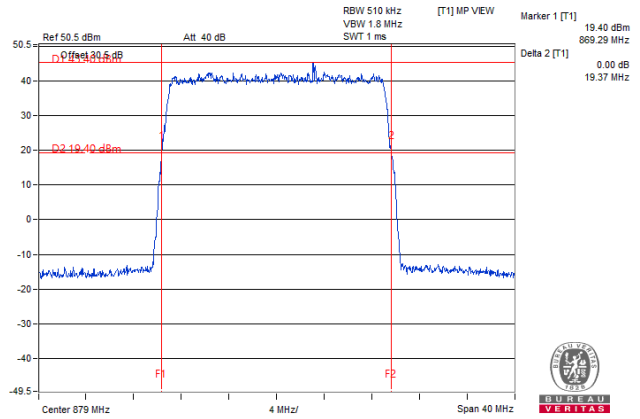
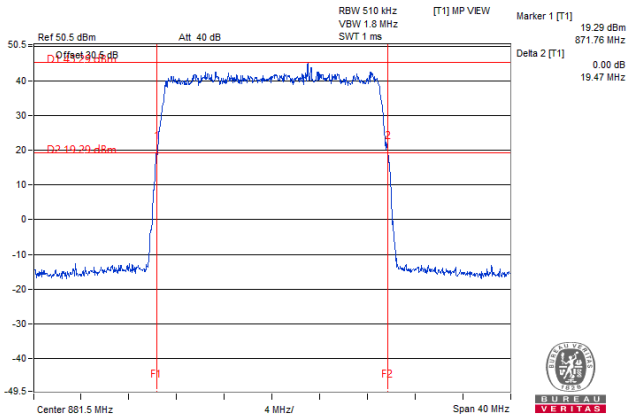
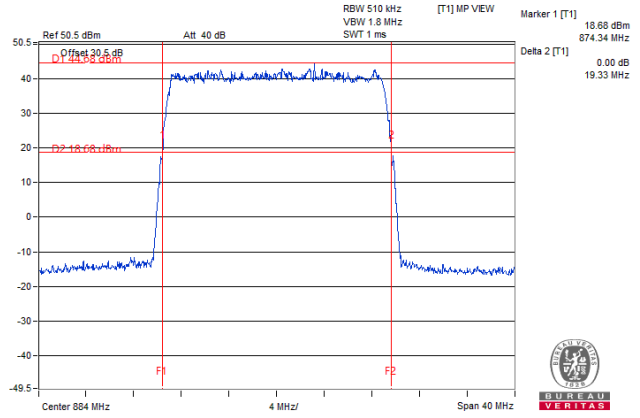


Channel: 2550

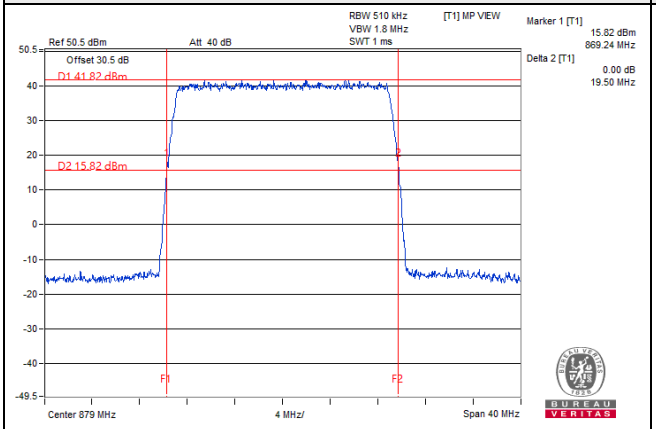
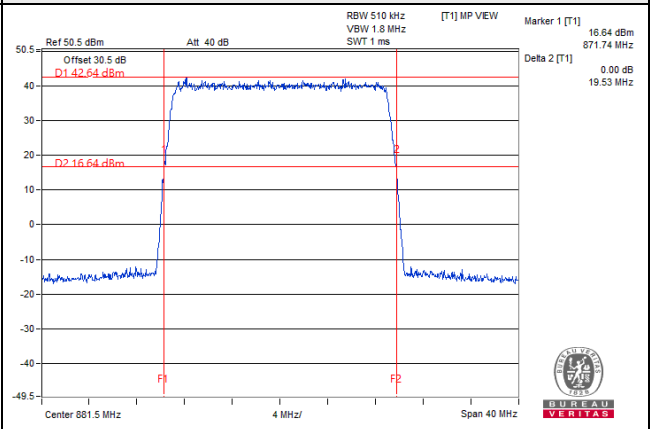
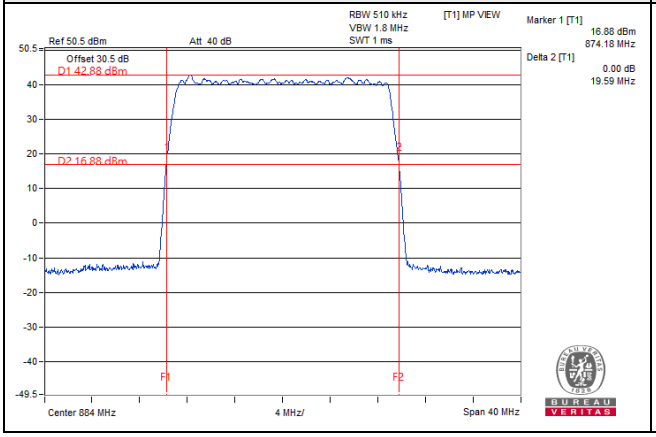


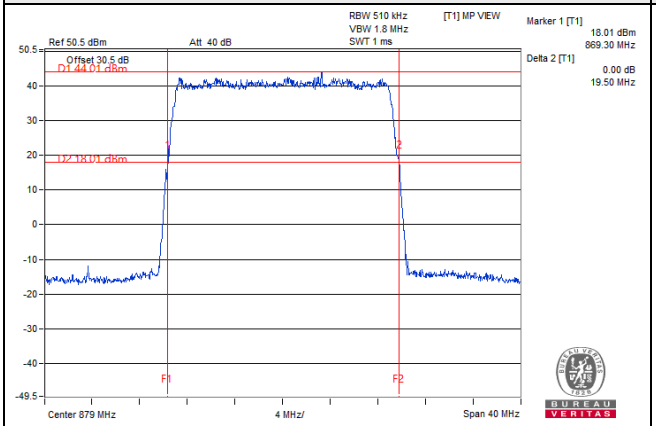
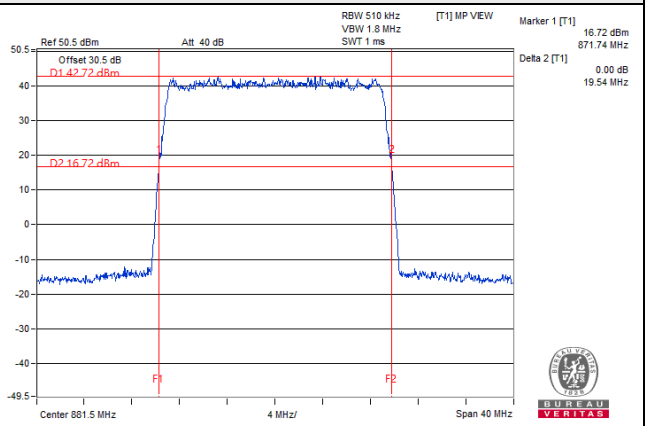
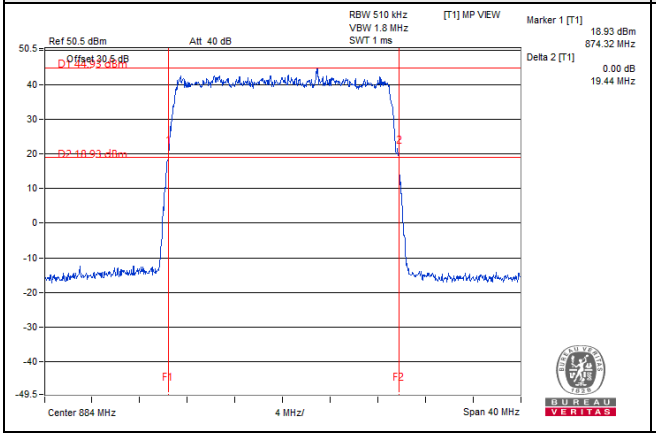
16QAM	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

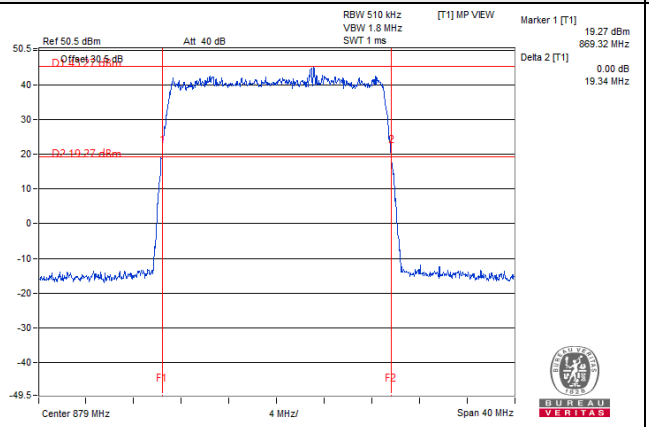
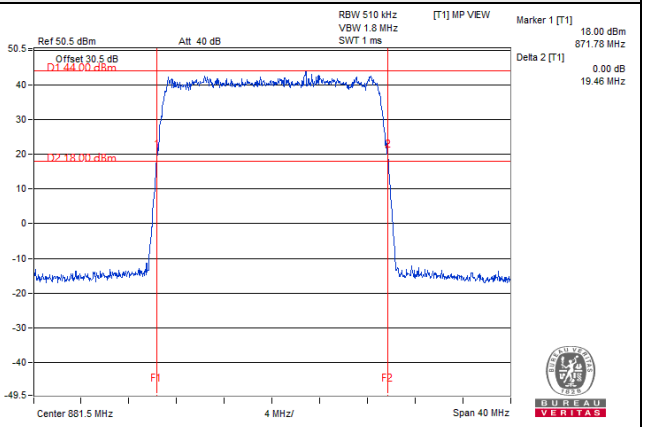
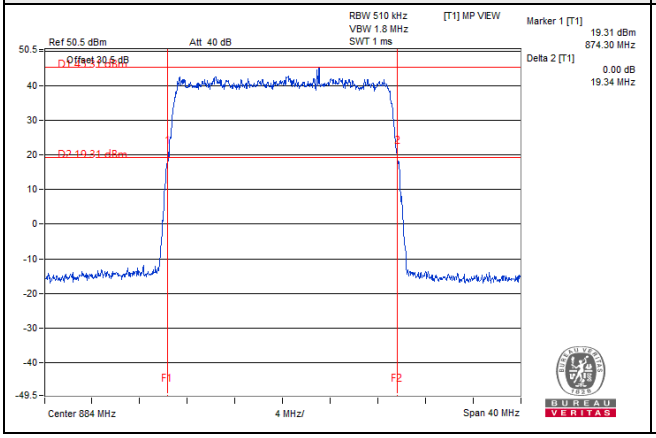
64QAM	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

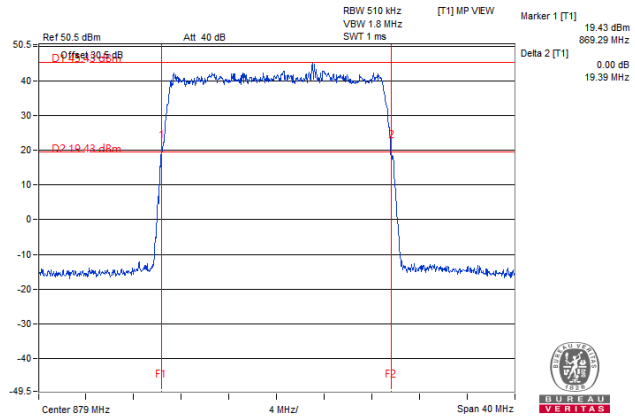
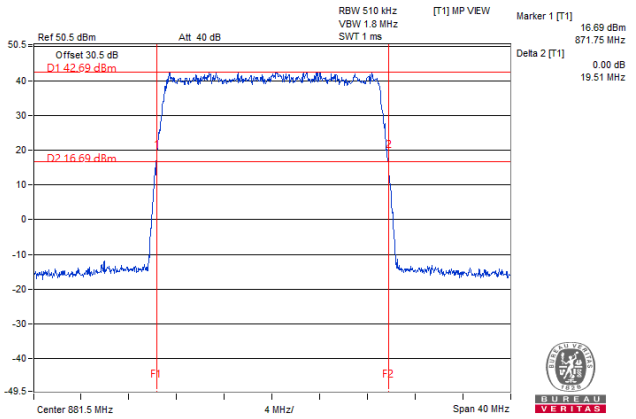
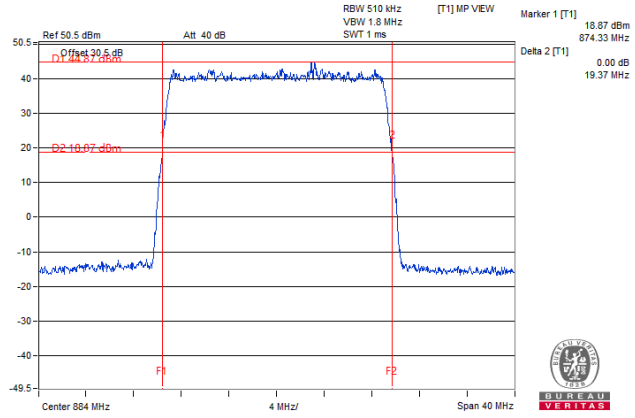
256QAM	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

Chain 1

Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

16QAM	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

64QAM	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

256QAM	
Channel: 2500	Channel: 2525
	
Channel: 2550	
	

CA Contiguous

5MHz+5MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2425+2475	871.5+876.5	10.03	10.01	10.05	10.03	10.02	9.99	10.04	10.05
2500+2550	879+884	10.03	10.01	10.06	10.05	10.03	10.00	10.05	10.06
2575+2625	886.5+891.5	10.03	10.01	10.04	10.04	10.02	10.02	10.06	10.04

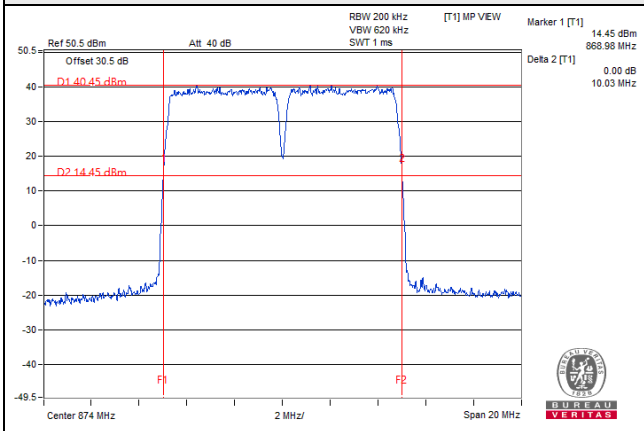
Chain 0

Spectrum Plot of Worst Value

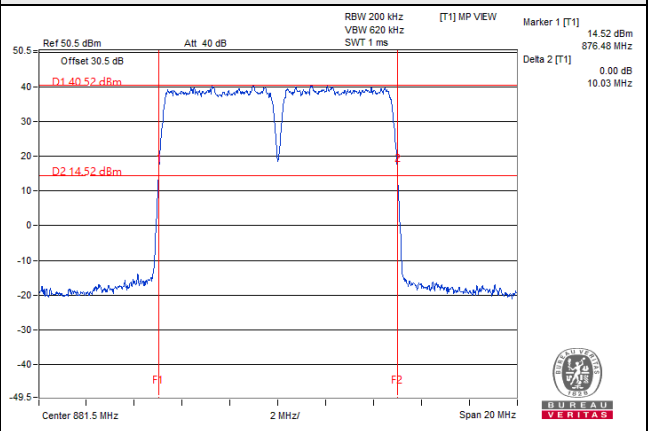
-26dBc Bandwidth

QPSK

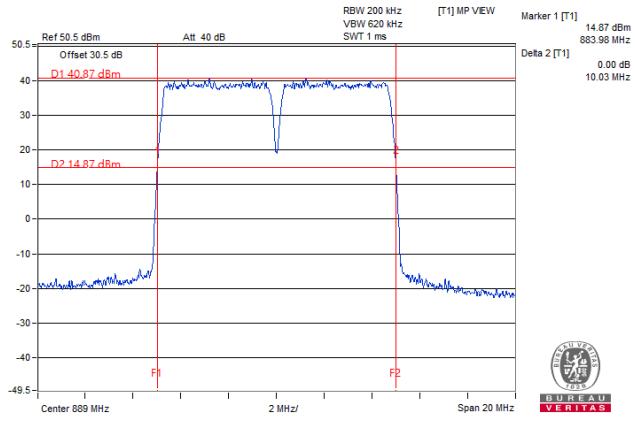
Channel: 2425+2475

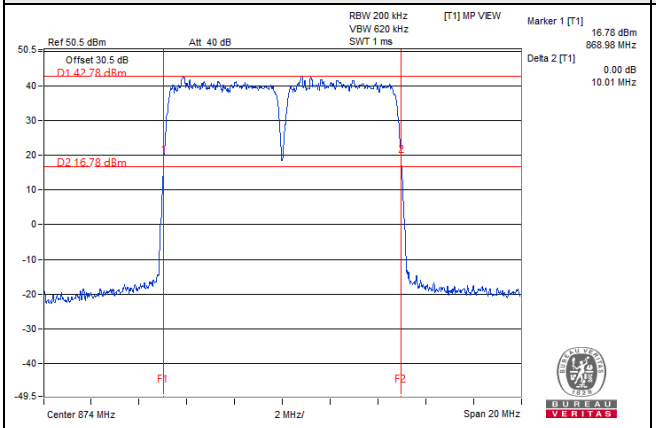
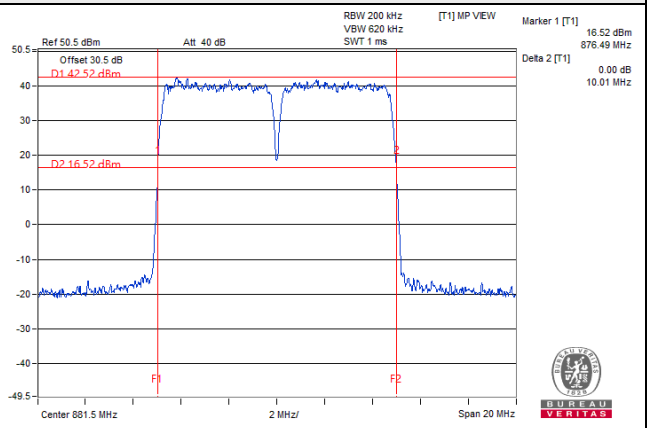
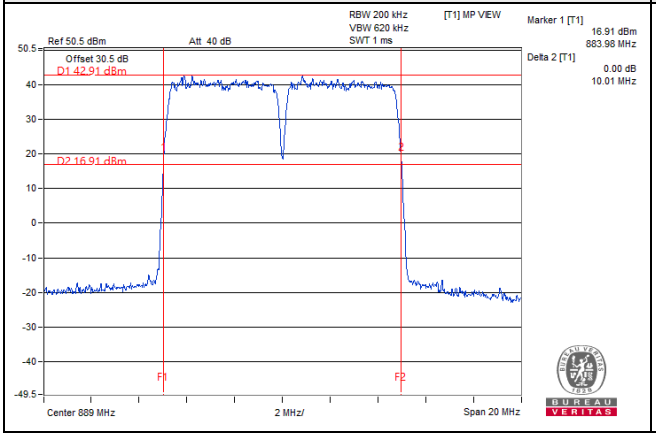


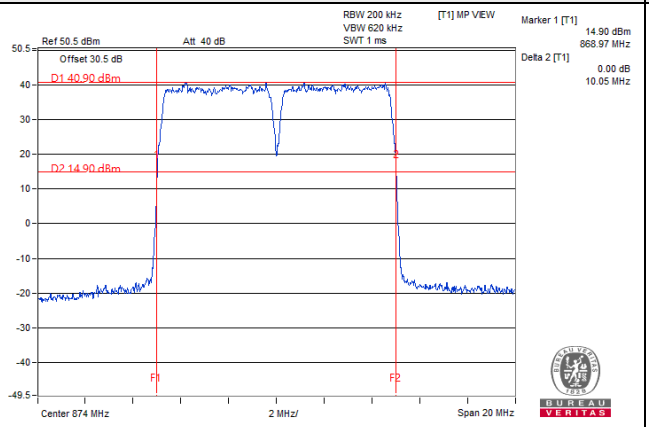
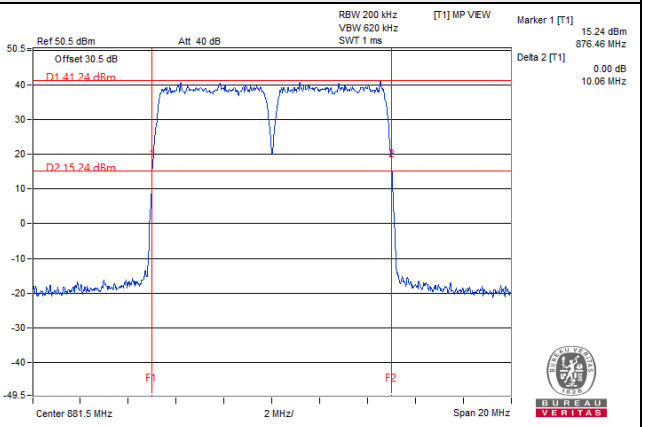
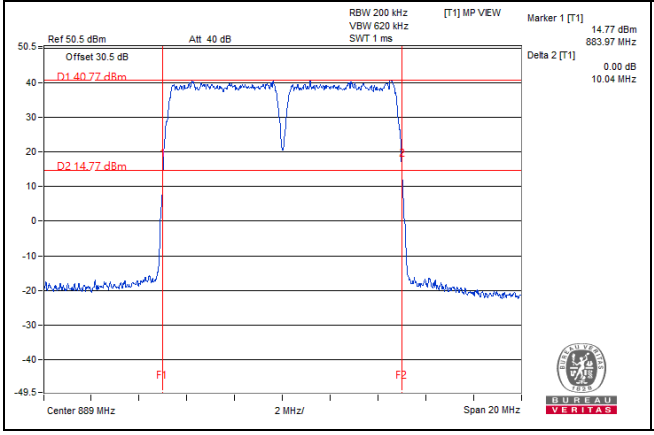
Channel: 2500+2550

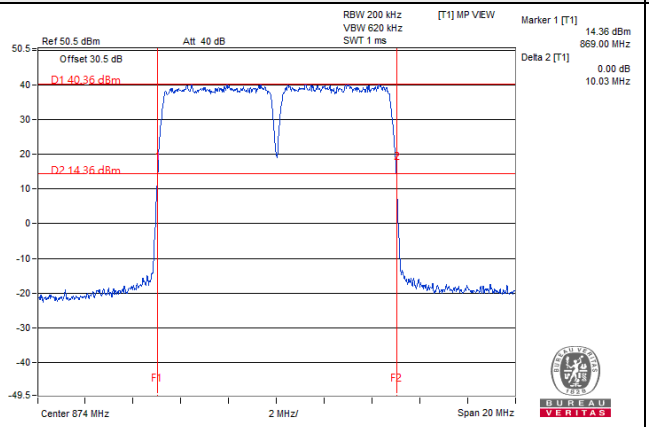
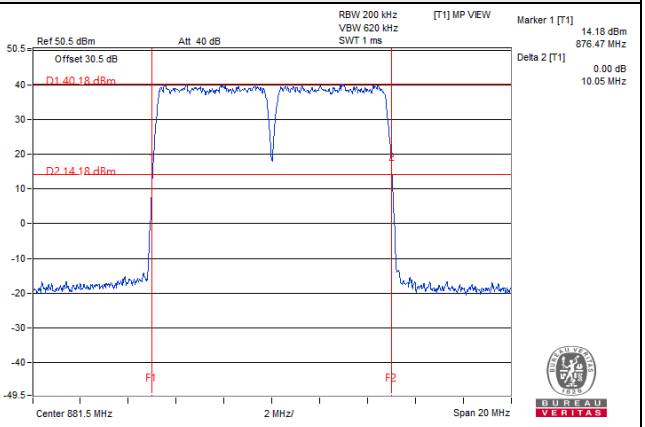
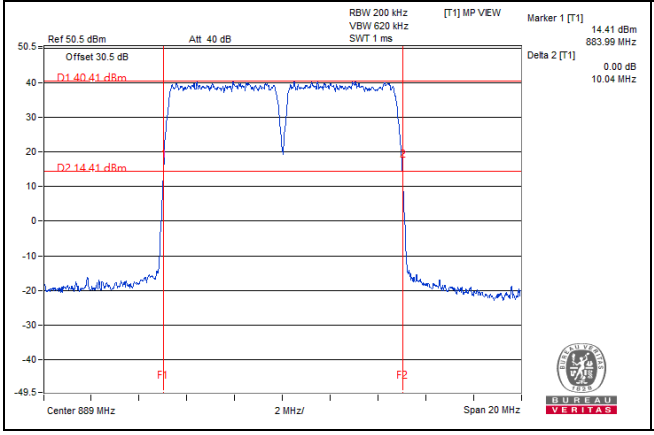


Channel: 2575+2625

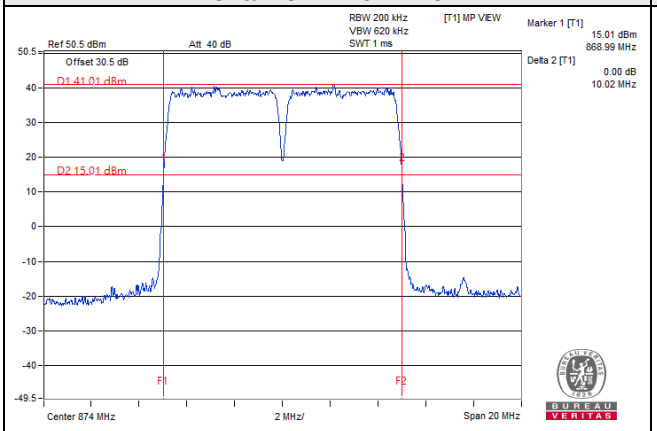
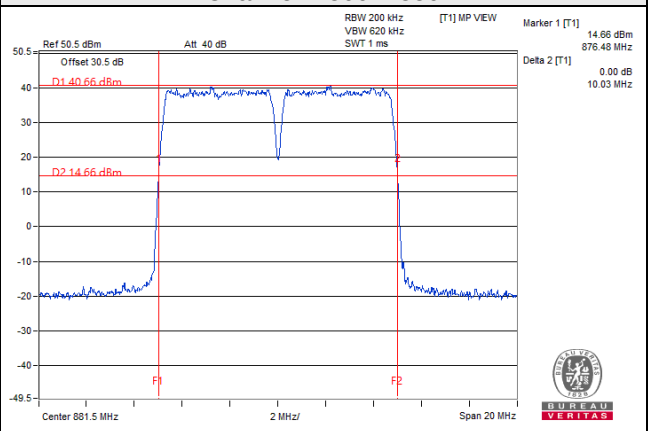
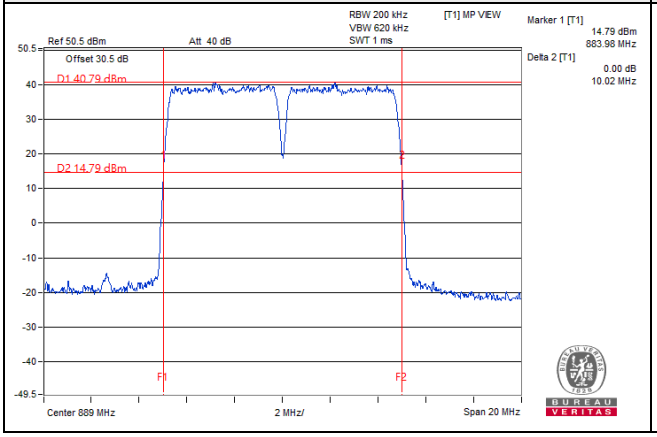


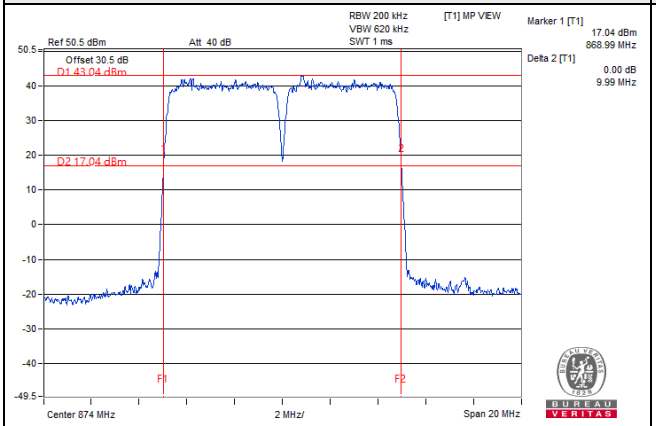
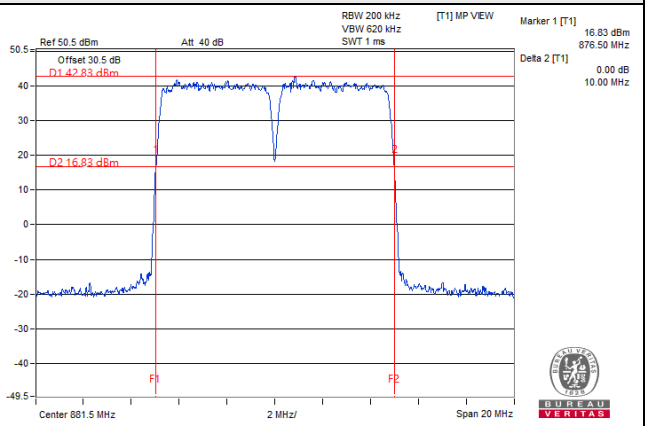
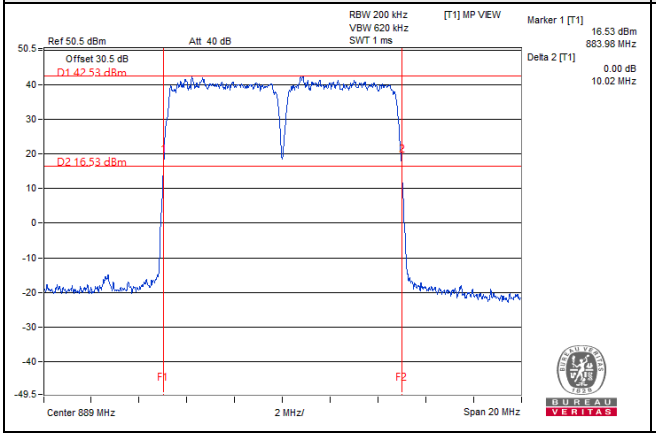
16QAM	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

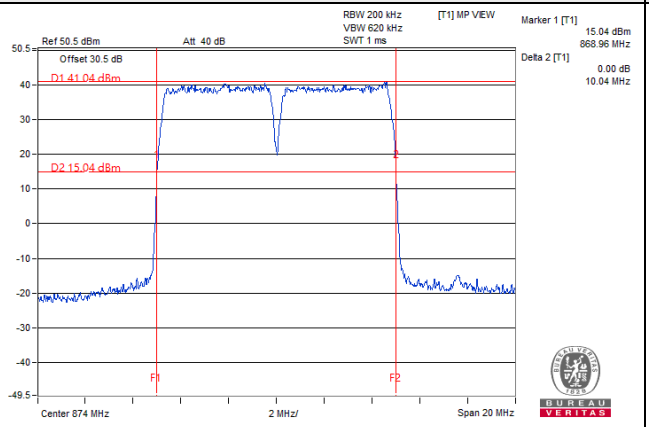
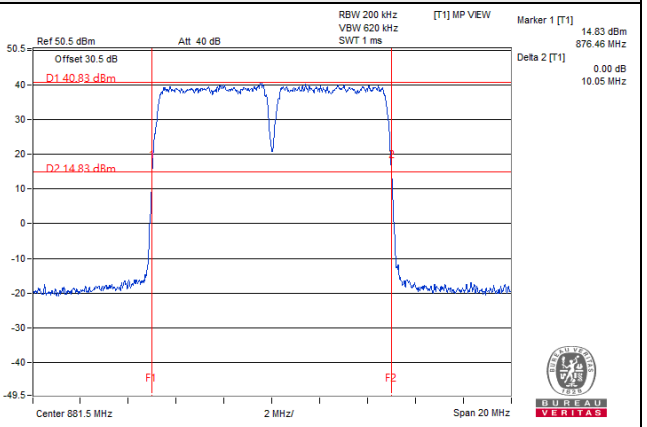
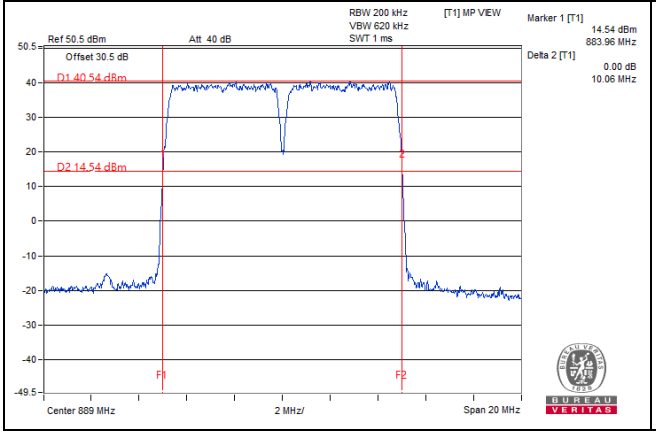
64QAM	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

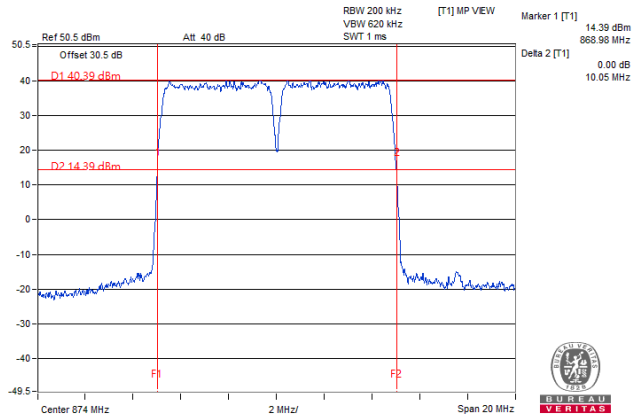
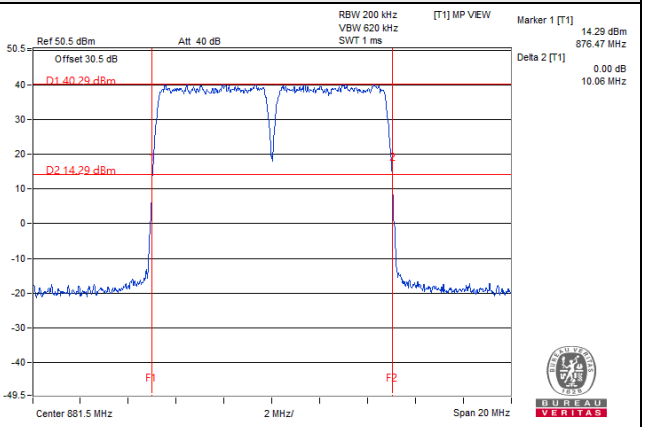
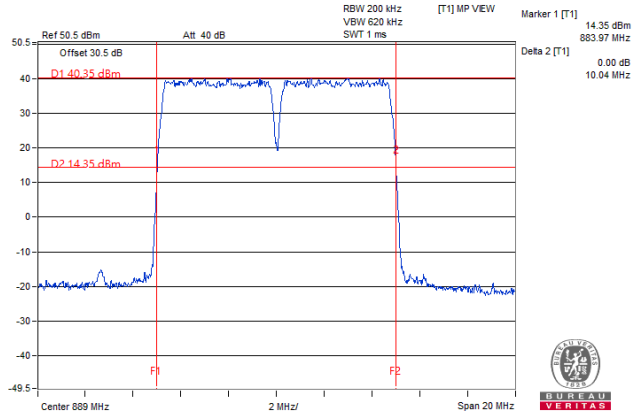
256QAM	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

Chain 1

Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

16QAM	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

64QAM	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

256QAM	
Channel: 2425+2475	Channel: 2500+2550
	
Channel: 2575+2625	
	

5MHz+20MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2425+2550	871.5+884	24.91	25.00	25.00	25.02	25.03	24.99	25.01	25.03

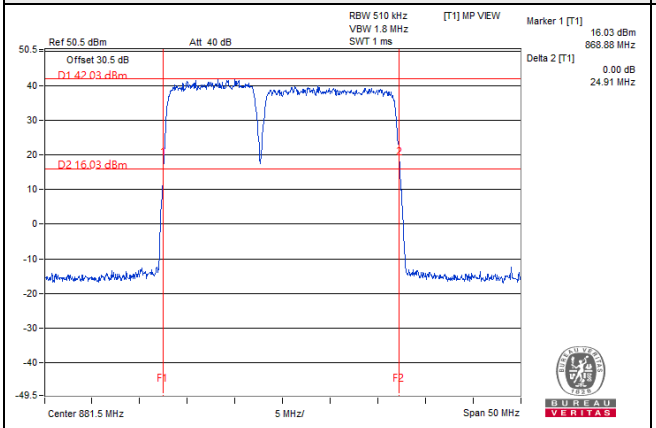
Chain 0

Spectrum Plot of Worst Value

-26dBc Bandwidth

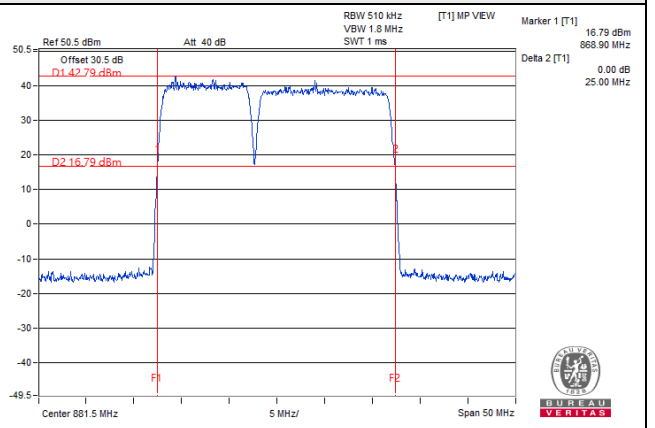
QPSK

Channel: 2425+2550



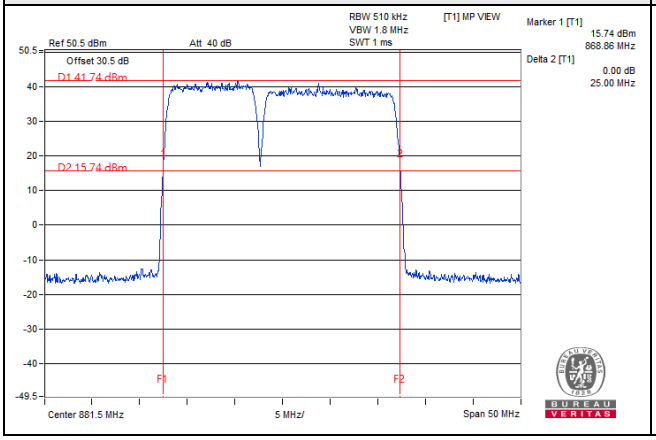
16QAM

Channel: 2425+2550



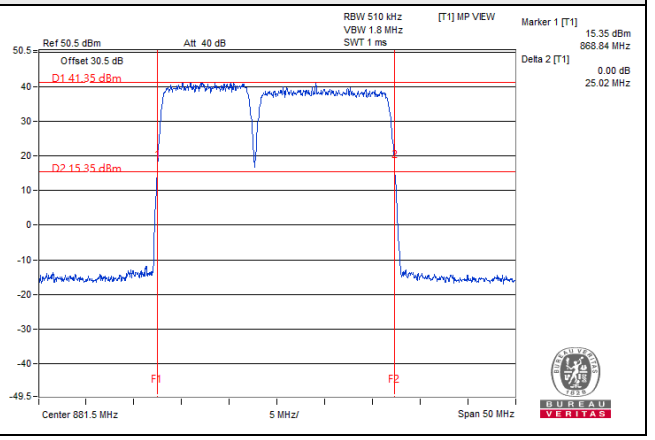
64QAM

Channel: 2425+2550

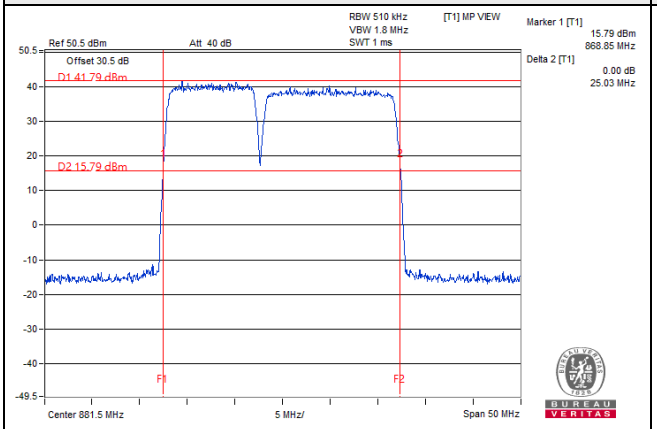
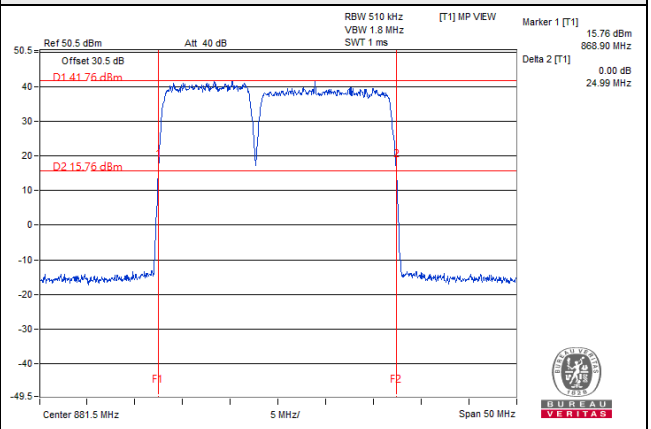
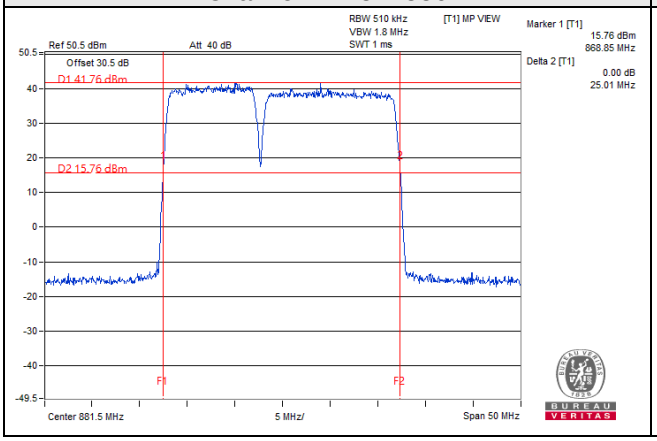
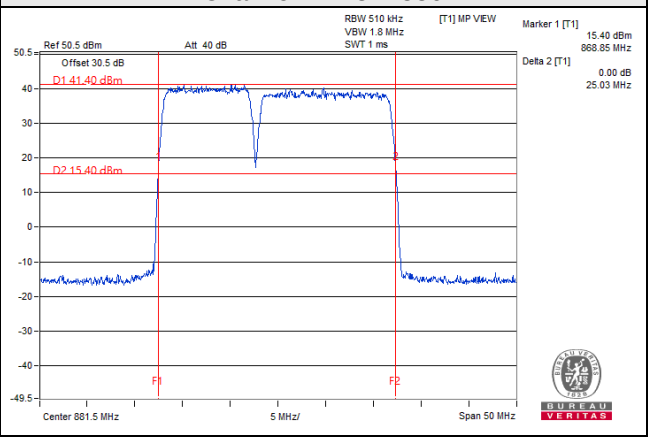


256QAM

Channel: 2425+2550



Chain 1

Spectrum Plot of Worst Value	
-26dBc Bandwidth	
QPSK	16QAM
Channel: 2425+2550	Channel: 2425+2550
	
64QAM	256QAM
Channel: 2425+2550	Channel: 2425+2550
	

CA-NC Non-Contiguous

5MHz+5MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0							
		CC0				CC1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2425+2625	871.5+891.5	4.88	4.82	4.84	4.85	4.88	4.84	4.89	4.86

Channel Number	Freq. (MHz)	CC0+CC1 Total			
		QPSK	16QAM	64QAM	256QAM
2425+2625	871.5+891.5	9.76	9.66	9.73	9.71

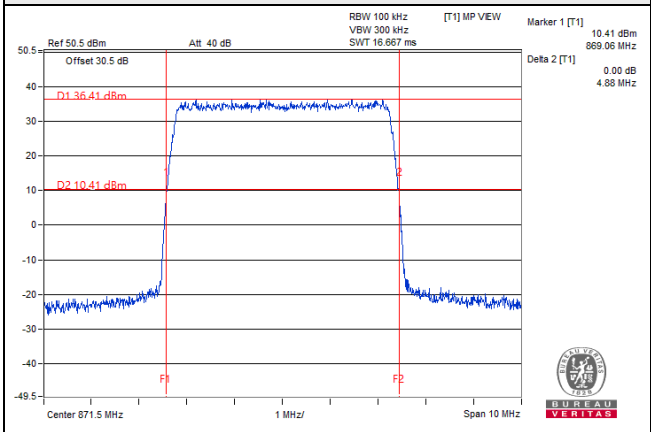
Chain 0

Spectrum Plot of Worst Value

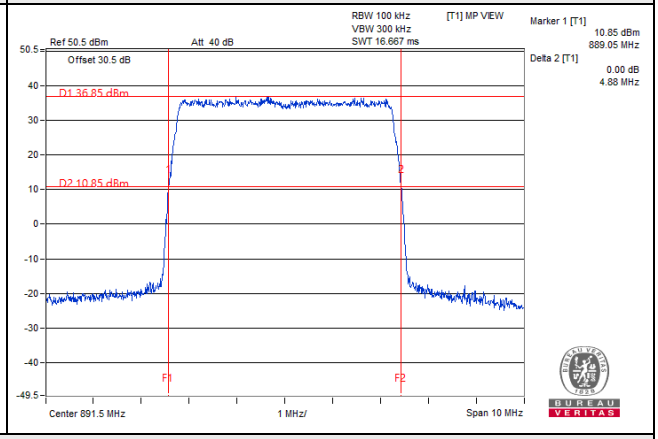
-26dBc Bandwidth

QPSK

Channel: 2425+2625

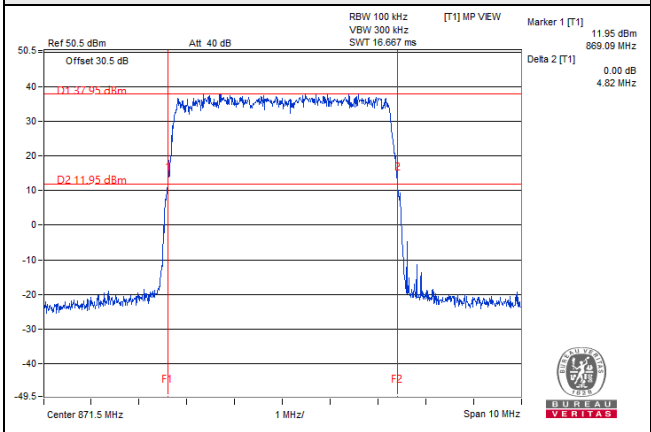


Channel: 2425+2625

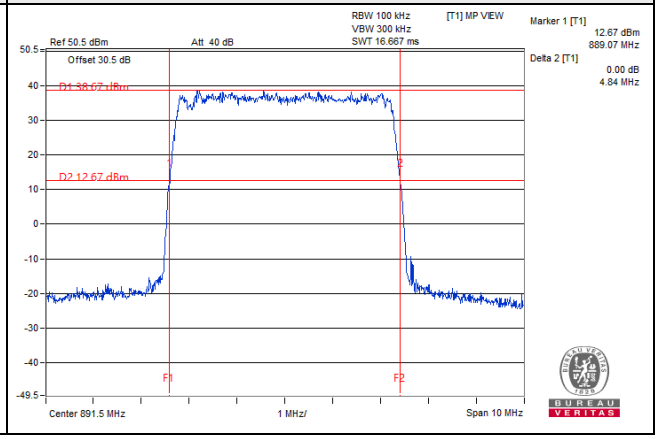


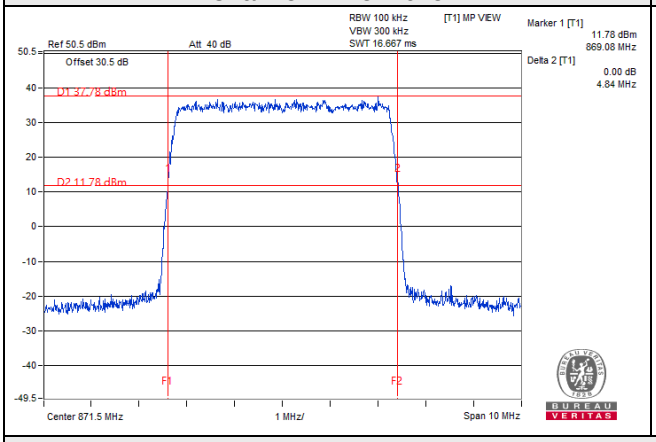
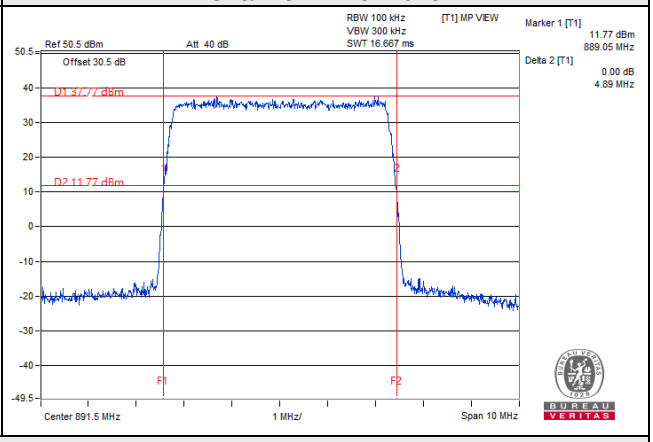
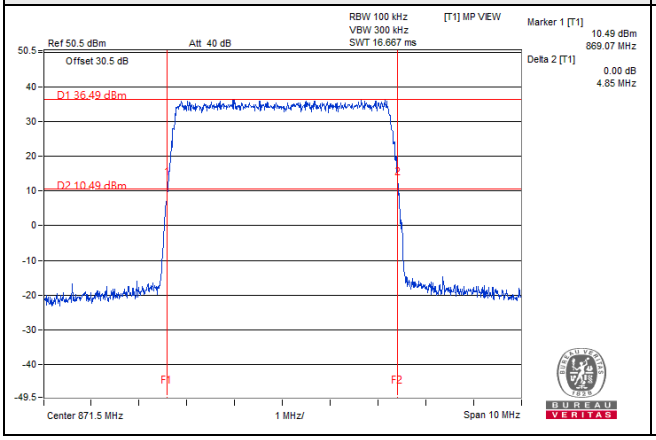
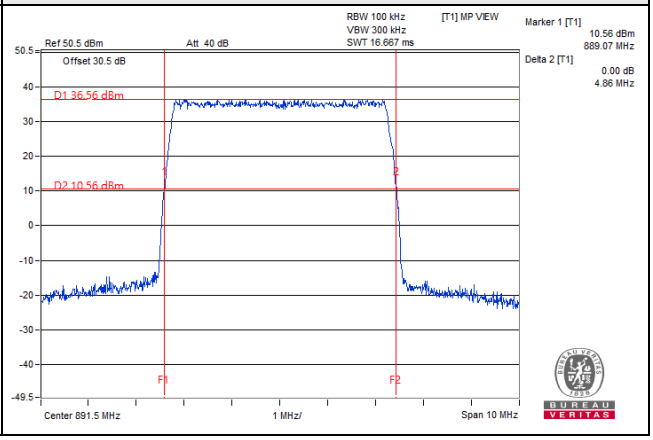
16QAM

Channel: 2425+2625



Channel: 2425+2625



64QAM	
Channel: 2425+2625	Channel: 2425+2625
	
256QAM	
Channel: 2425+2625	Channel: 2425+2625
	

5MHz+5MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain1							
		CC0				CC1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2425+2625	871.5+891.5	4.86	4.83	4.88	4.88	4.89	4.84	4.87	4.89

Channel Number	Freq. (MHz)	CC0+CC1 Total			
		QPSK	16QAM	64QAM	256QAM
2425+2625	871.5+891.5	9.75	9.67	9.75	9.77

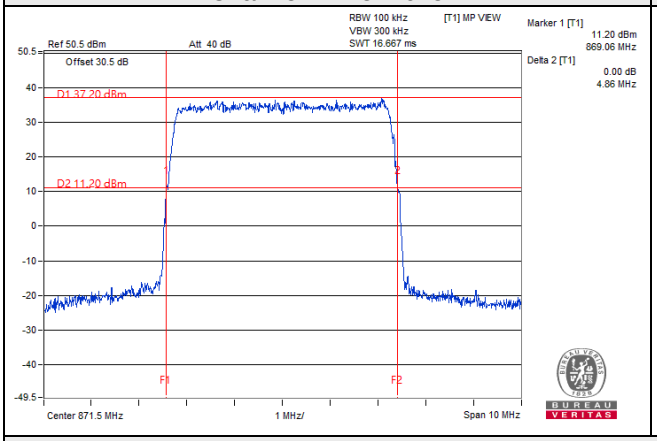
Chain 1

Spectrum Plot of Worst Value

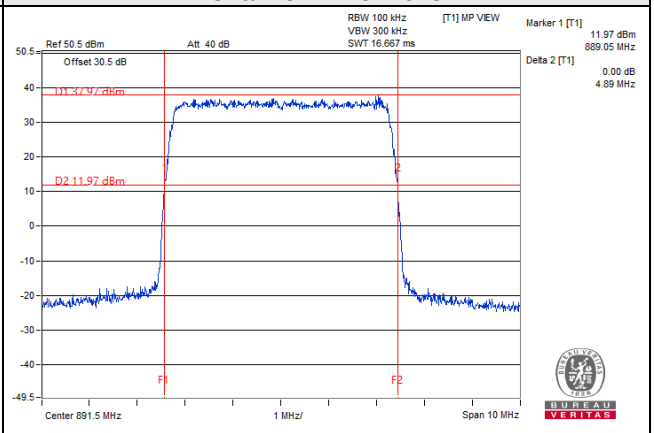
-26dBc Bandwidth

QPSK

Channel: 2425+2625

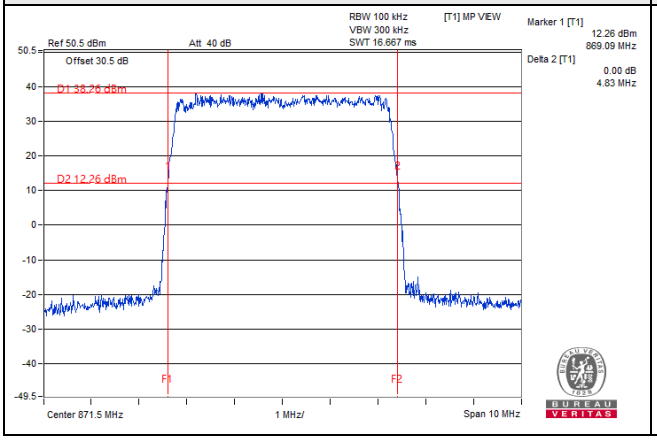


Channel: 2425+2625

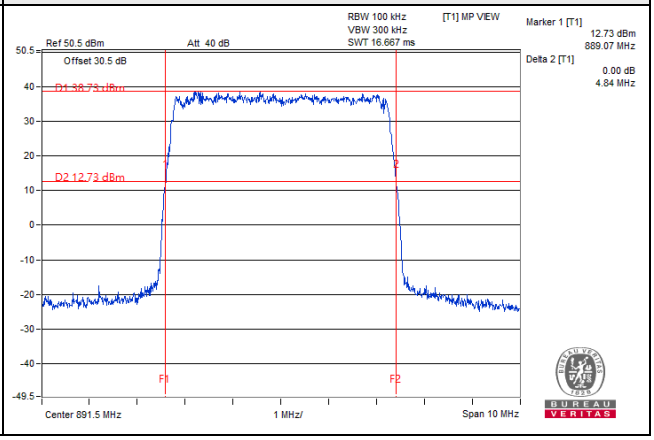


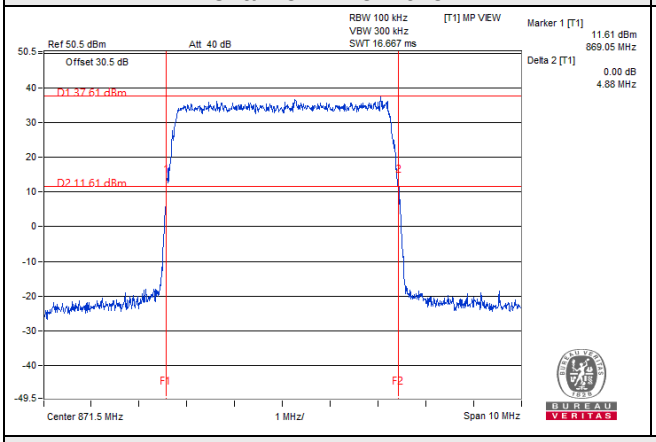
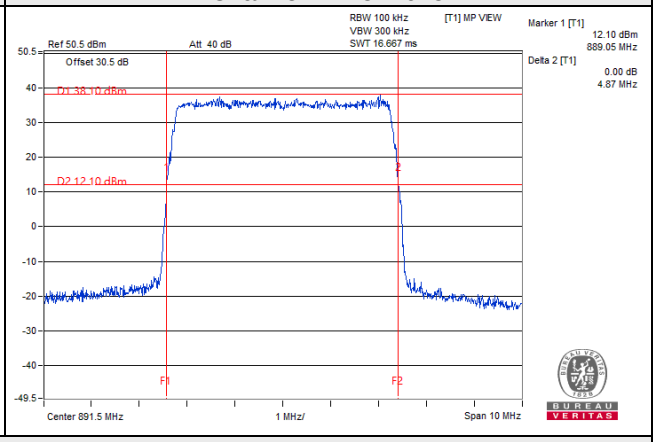
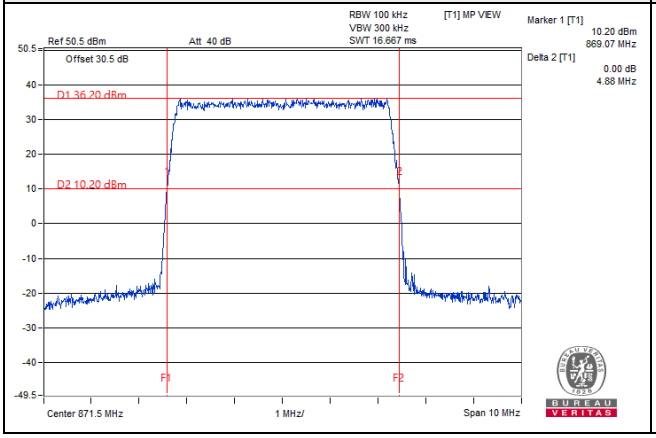
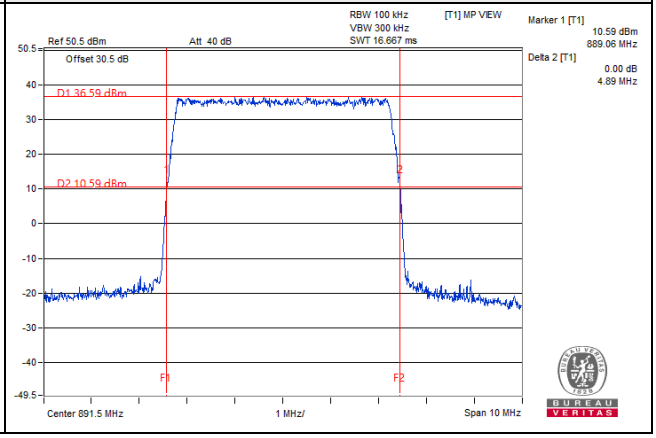
16QAM

Channel: 2425+2625



Channel: 2425+2625



64QAM	
Channel: 2425+2625	Channel: 2425+2625
	
256QAM	
Channel: 2425+2625	Channel: 2425+2625
	

10MHz+10MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain0							
		CC0				CC1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2450+2600	874+889	9.70	9.72	9.69	9.68	9.71	9.71	9.68	6.97

Channel Number	Freq. (MHz)	CC0+CC1 Total			
		QPSK	16QAM	64QAM	256QAM
2450+2600	874+889	19.41	19.43	19.37	16.65

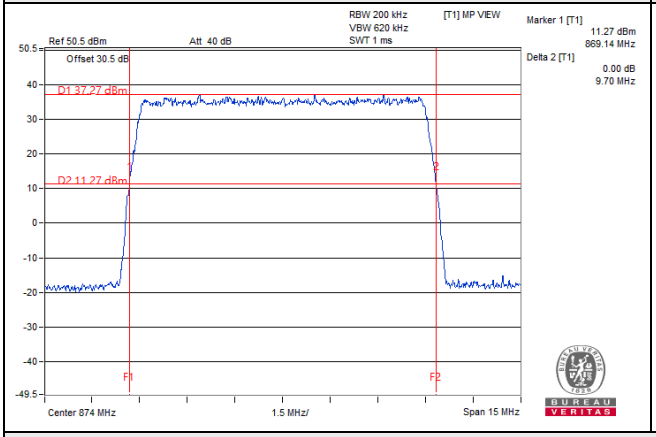
Chain 0

Spectrum Plot of Worst Value

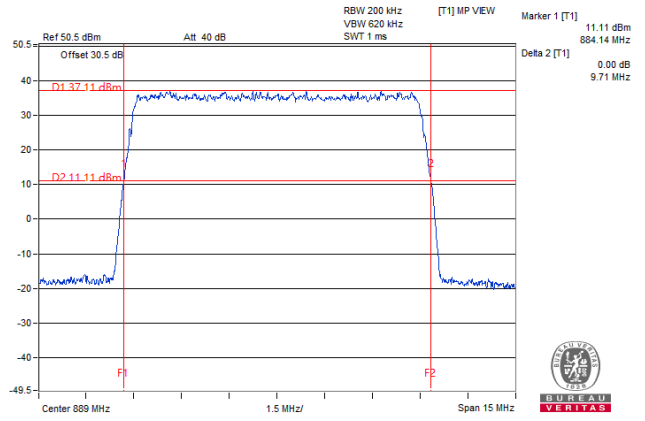
-26dBc Bandwidth

QPSK

Channel: 2450+2600

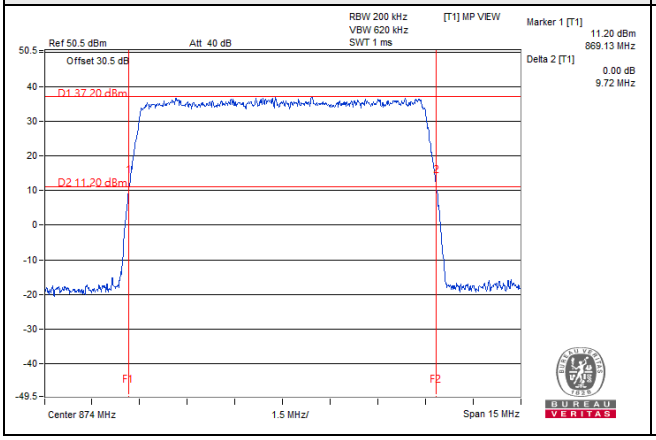


Channel: 2450+2600

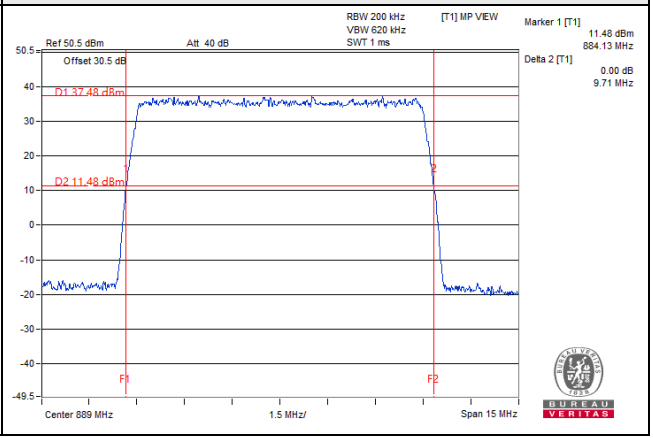


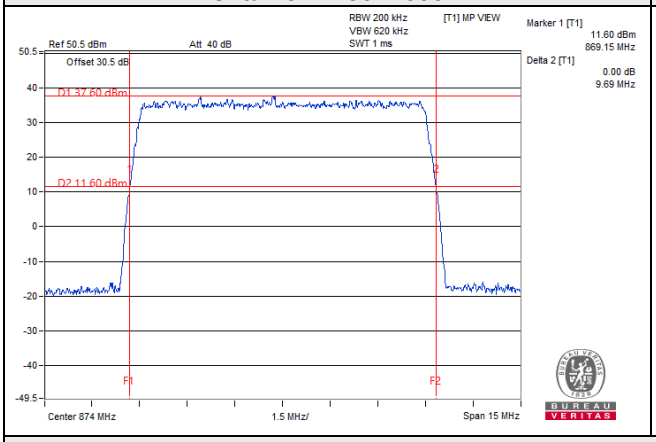
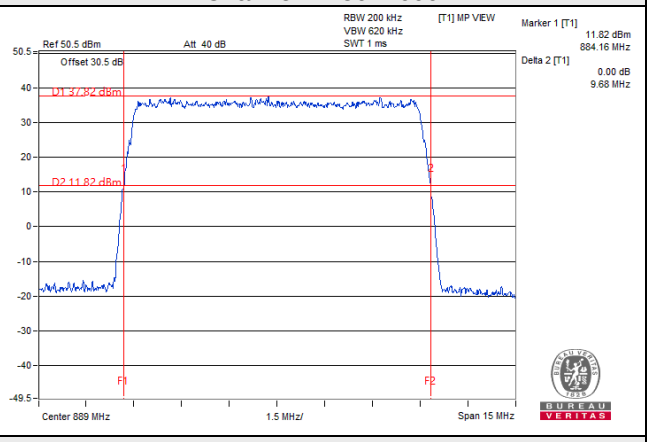
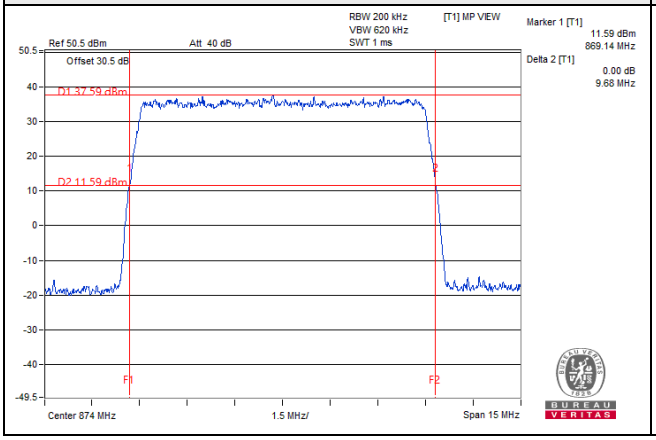
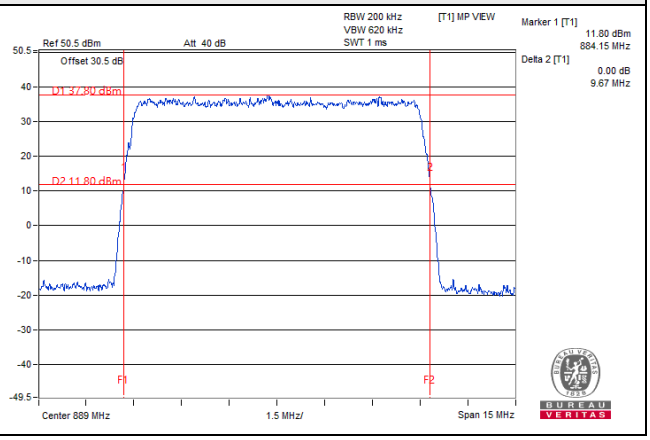
16QAM

Channel: 2450+2600



Channel: 2450+2600



64QAM	
Channel: 2450+2600	Channel: 2450+2600
	
256QAM	
Channel: 2450+2600	Channel: 2450+2600
	

10MHz+10MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)							
		Chain1							
		CC0				CC1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2450+2600	874+889	9.67	9.72	9.70	9.72	9.69	9.71	9.69	9.72

Channel Number	Freq. (MHz)	CC0+CC1 Total			
		QPSK	16QAM	64QAM	256QAM
2450+2600	874+889	19.36	19.43	19.39	19.44

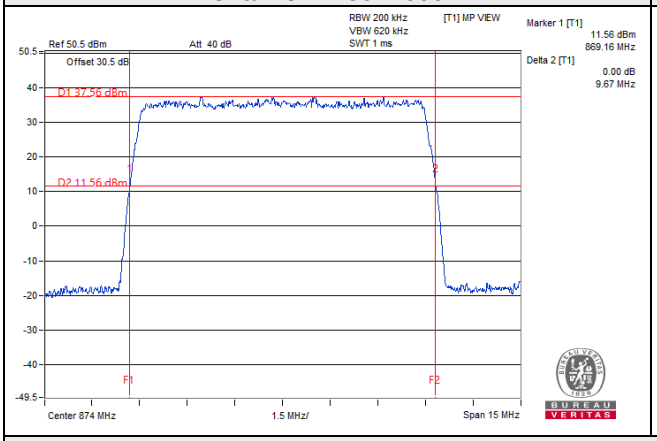
Chain 1

Spectrum Plot of Worst Value

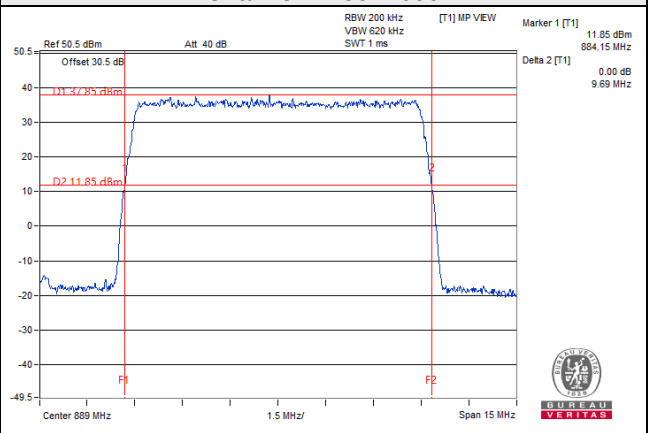
-26dBc Bandwidth

QPSK

Channel: 2450+2600

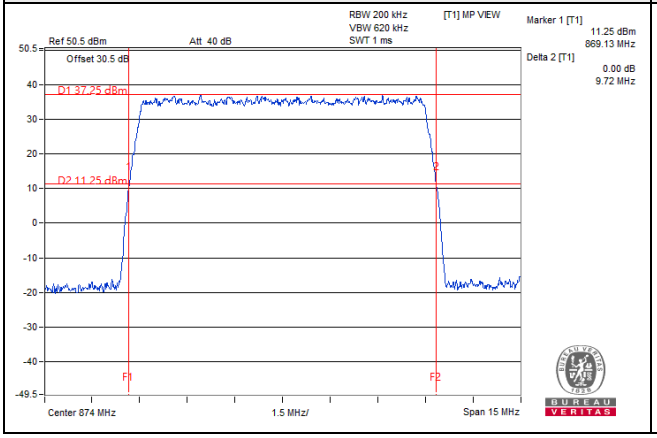


Channel: 2450+2600

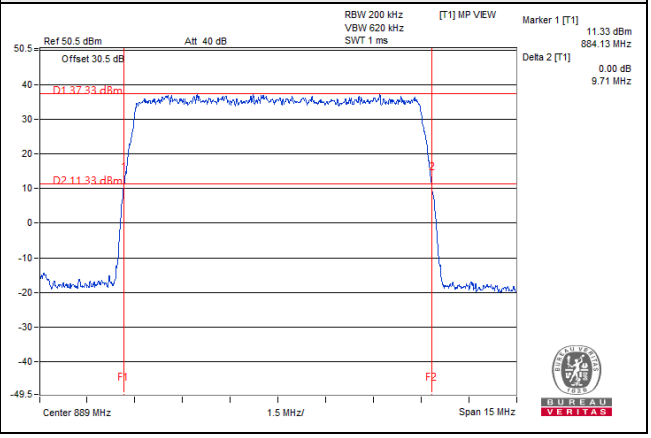


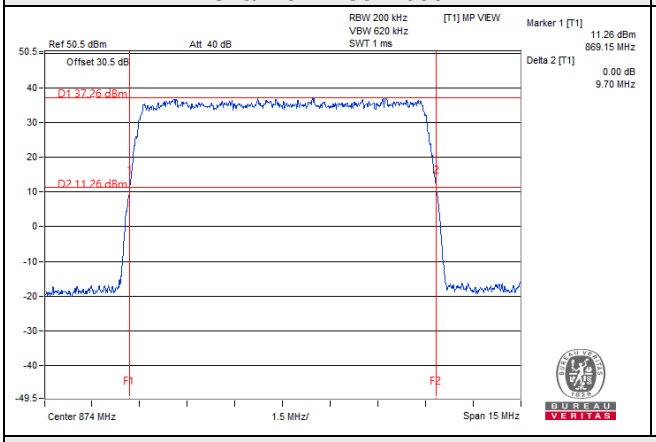
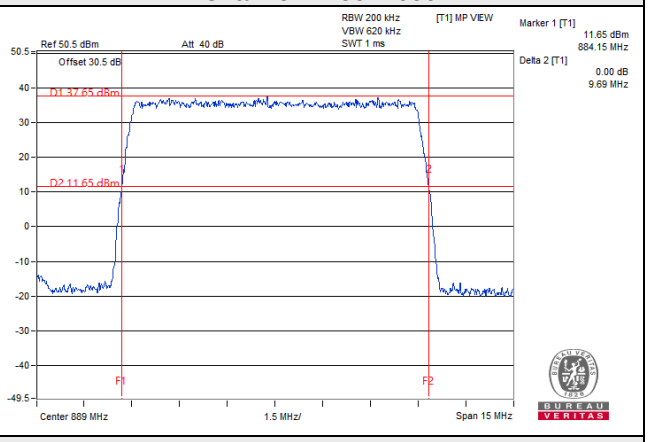
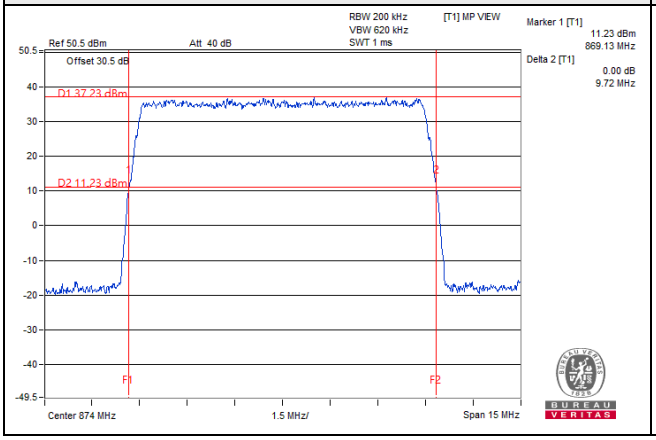
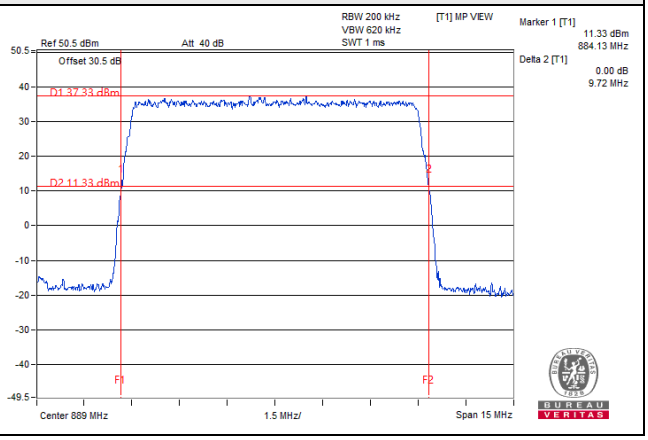
16QAM

Channel: 2450+2600



Channel: 2450+2600



64QAM	
Channel: 2450+2600	Channel: 2450+2600
	
256QAM	
Channel: 2450+2600	Channel: 2450+2600
	

4.4.5 Test Results (Occupied Bandwidth)

Single Carrier

5MHz

Channel Number	Freq. (MHz)	OCP 99 BAND WIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2425	871.5	4.50	4.49	4.49	4.49	4.50	4.48	4.48	4.49
2525	881.5	4.50	4.48	4.49	4.49	4.50	4.49	4.48	4.49
2625	891.5	4.50	4.50	4.49	4.48	4.50	4.49	4.50	4.49

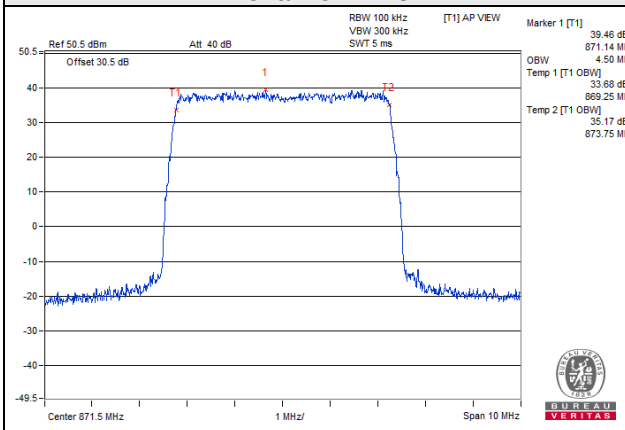
Chain 0

Spectrum Plot of Worst Value

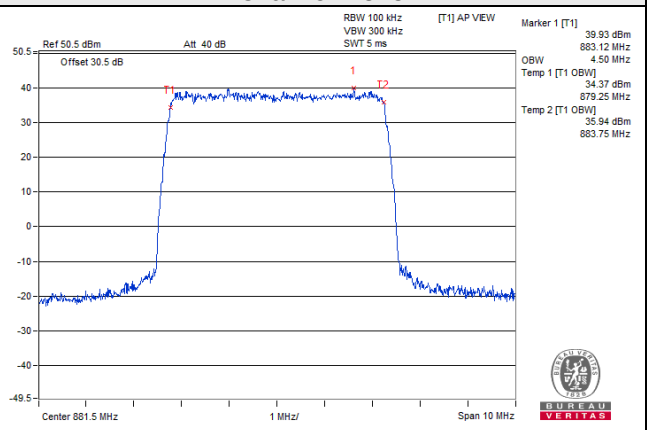
Occupied Bandwidth

QPSK

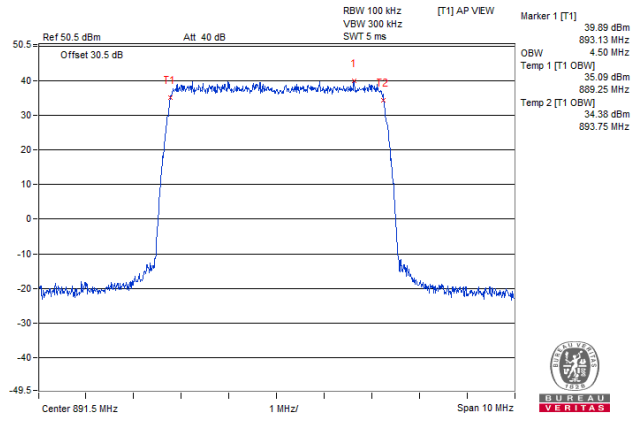
Channel: 2425

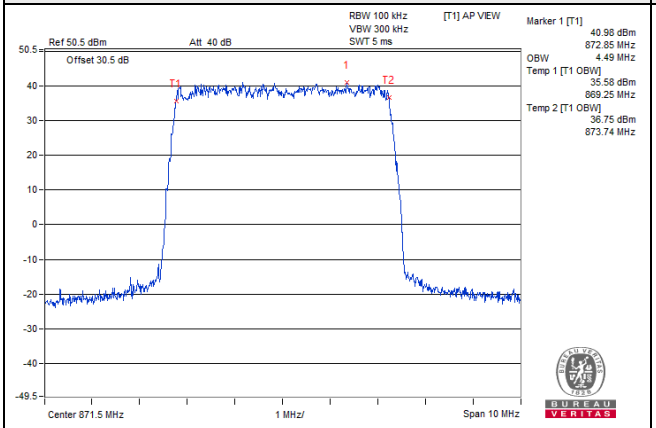
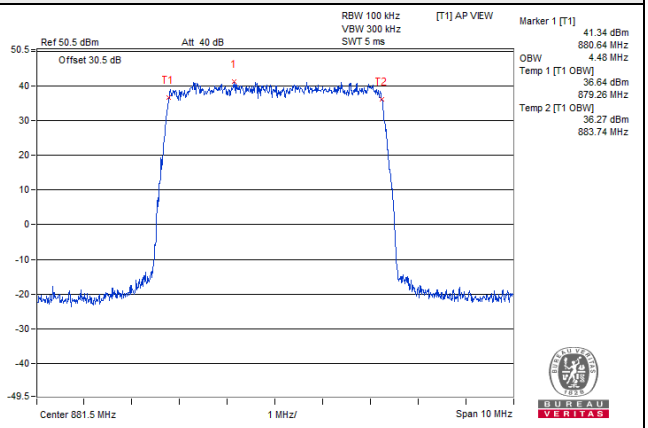
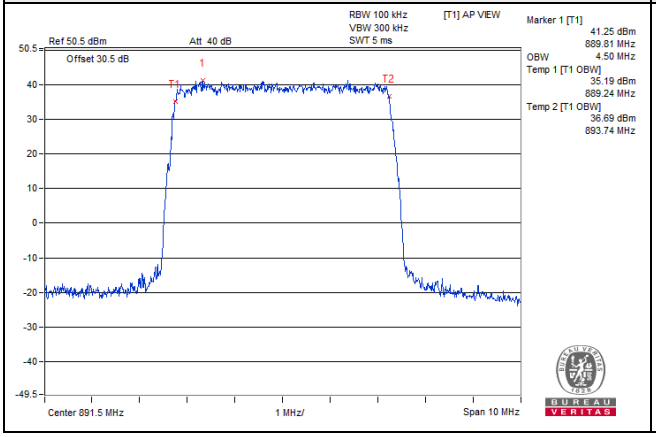


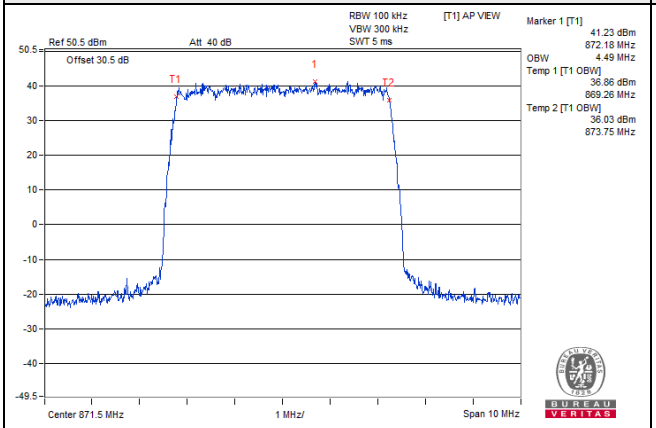
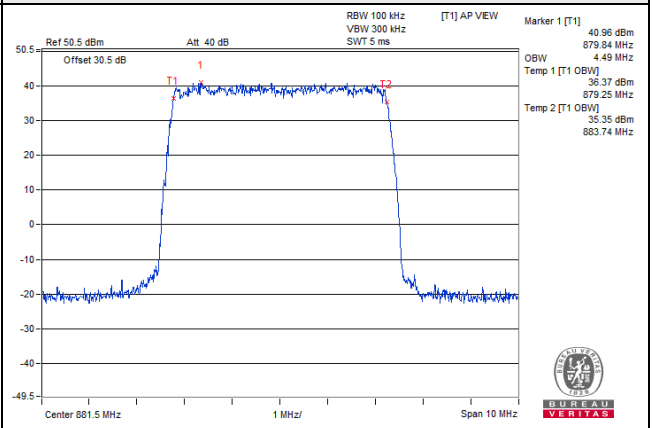
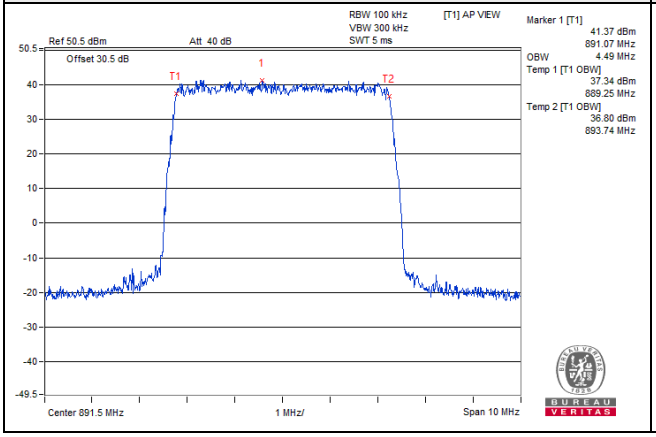
Channel: 2525

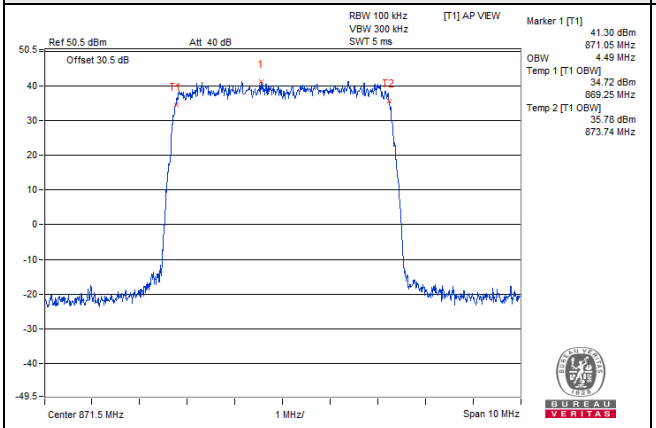
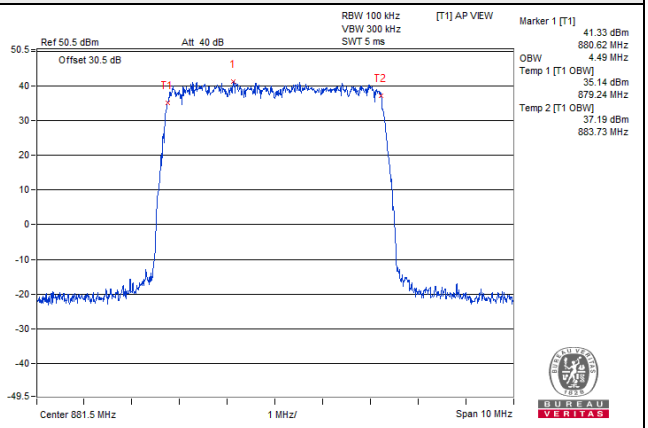
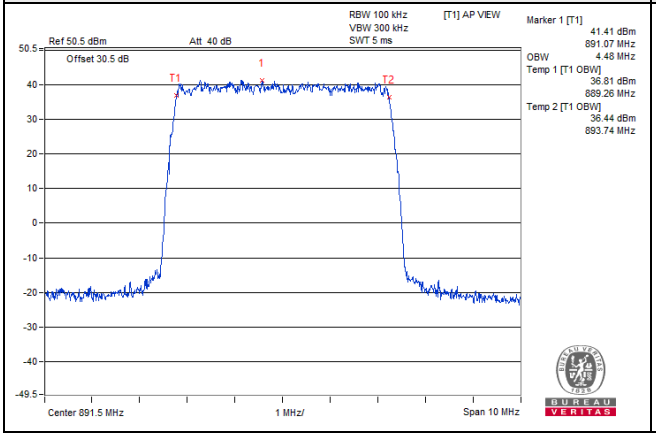


Channel: 2625

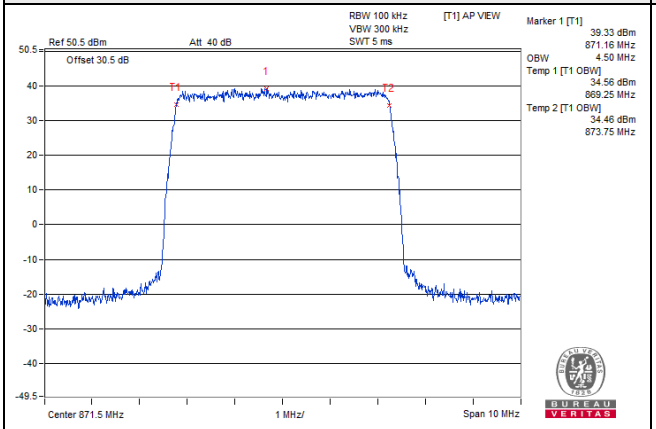
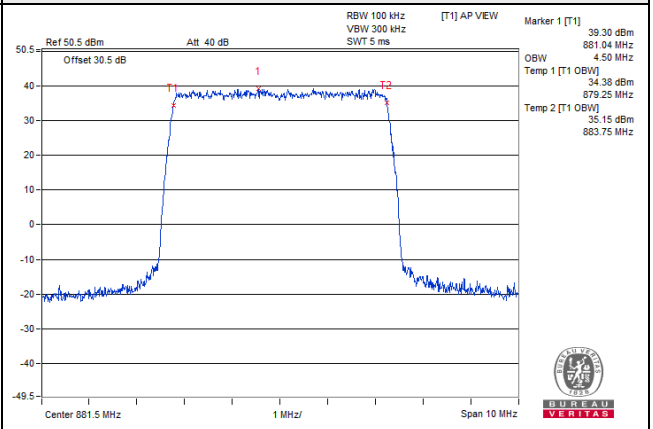
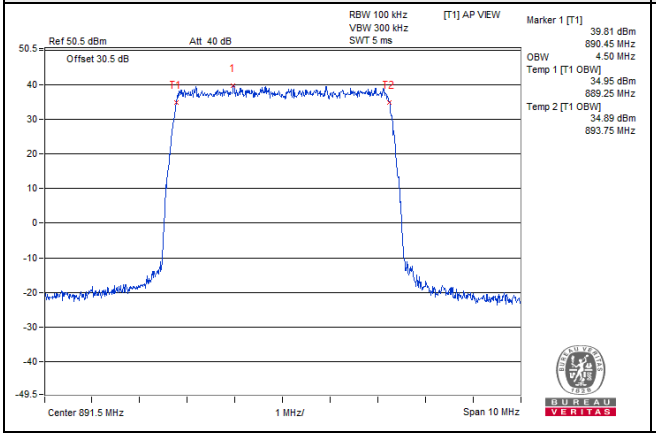


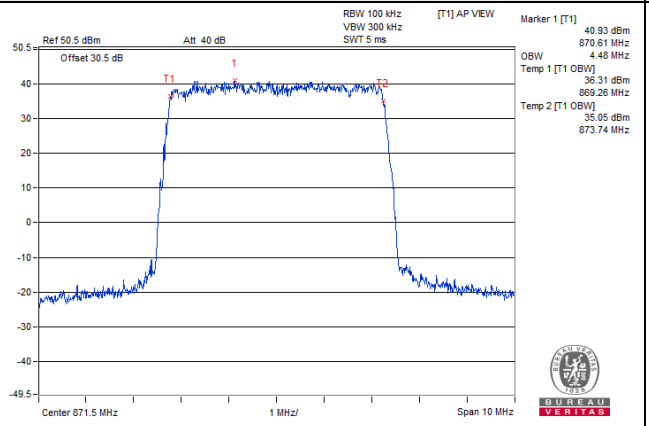
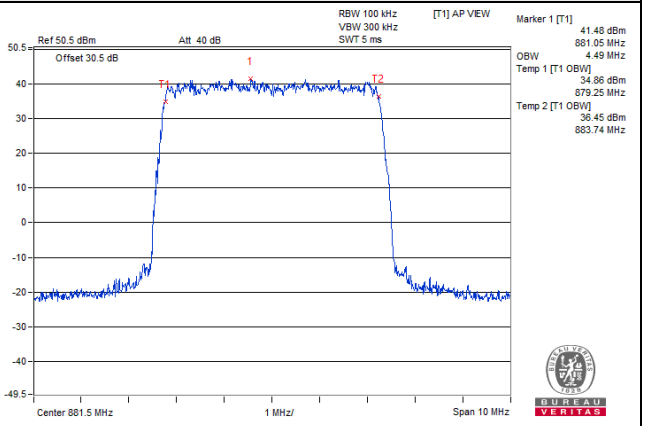
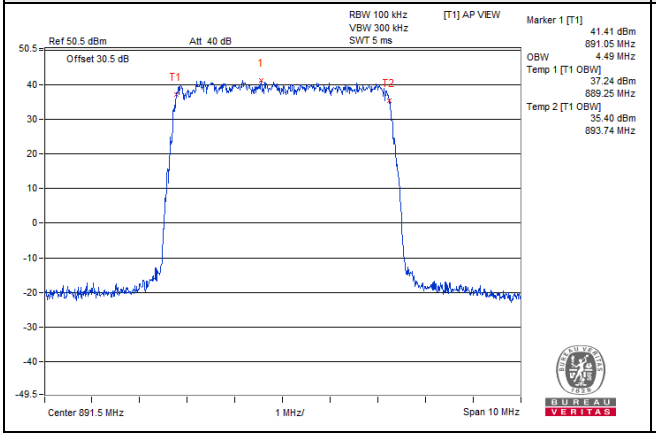
16QAM	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

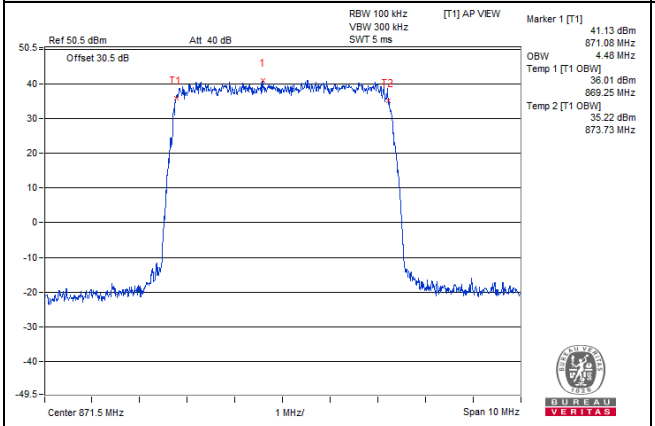
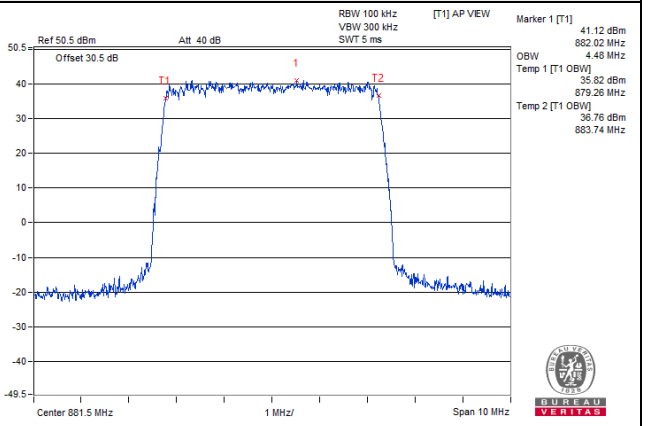
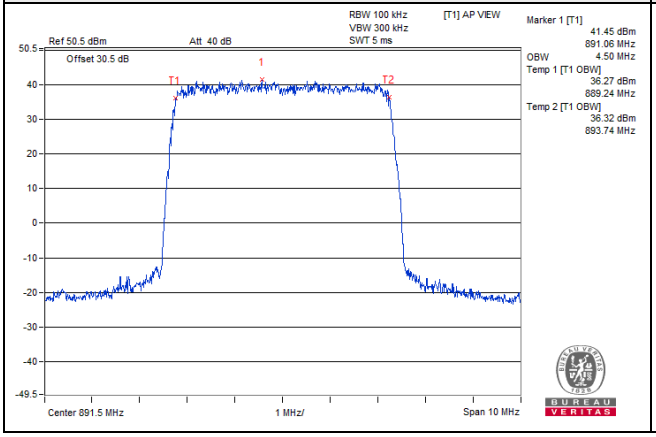
64QAM	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

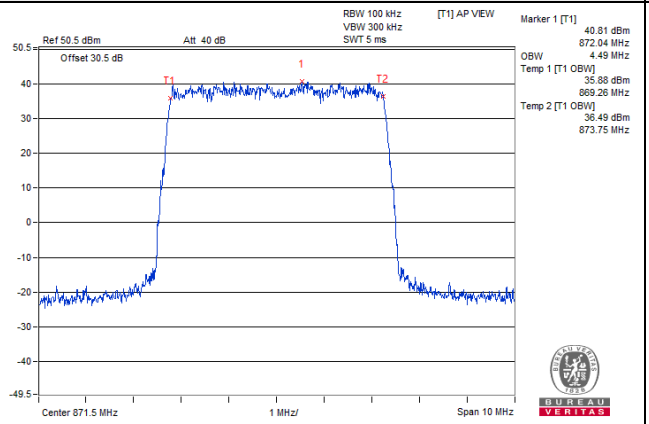
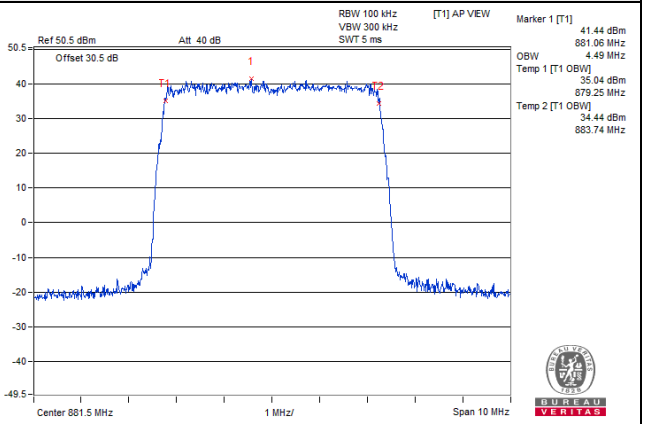
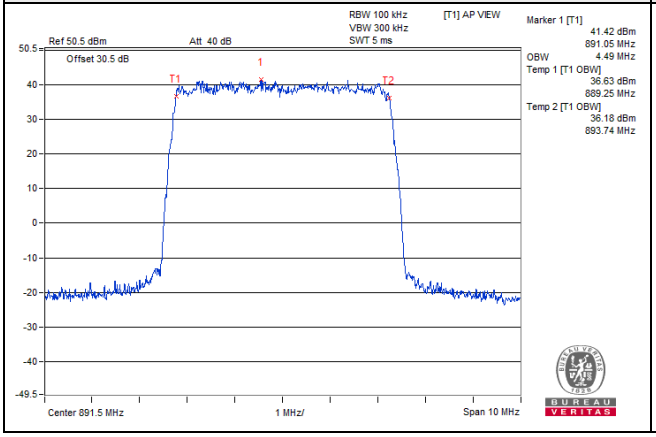
256QAM	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

Chain 1

Spectrum Plot of Worst Value	
Occupied Bandwidth	
QPSK	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

16QAM	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

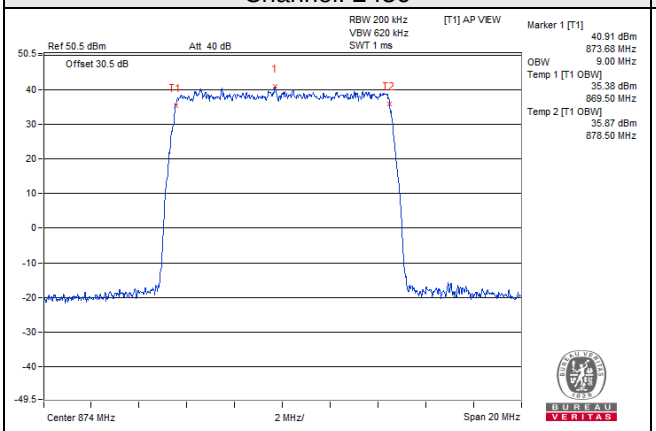
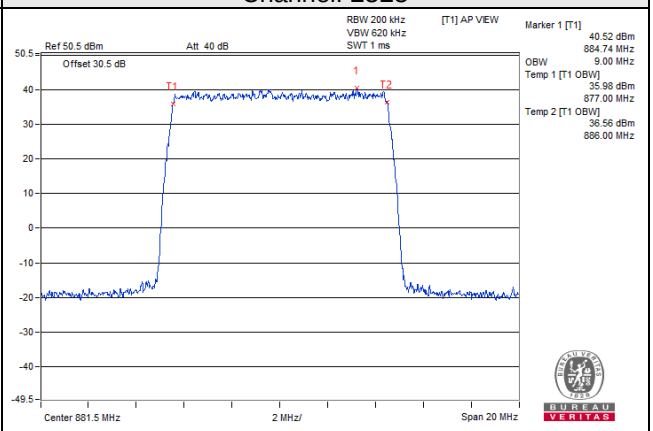
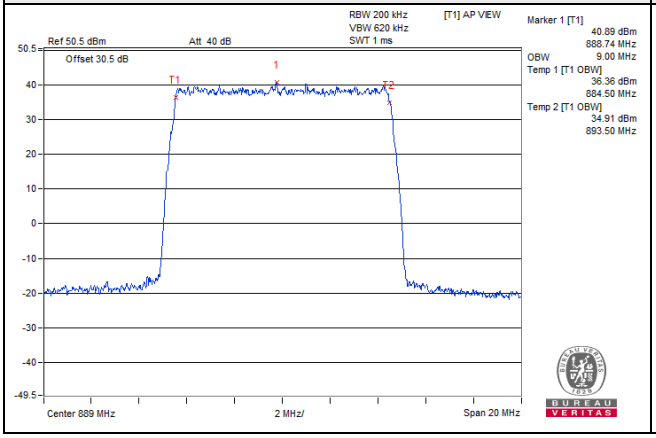
64QAM	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

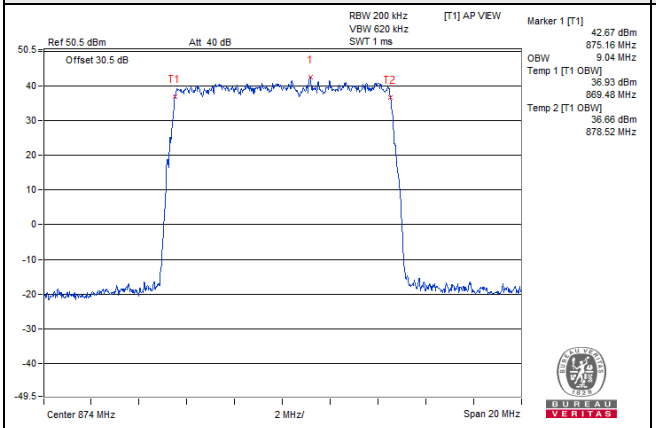
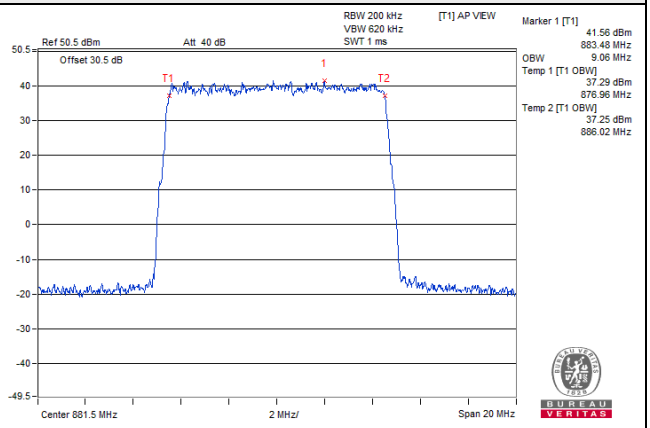
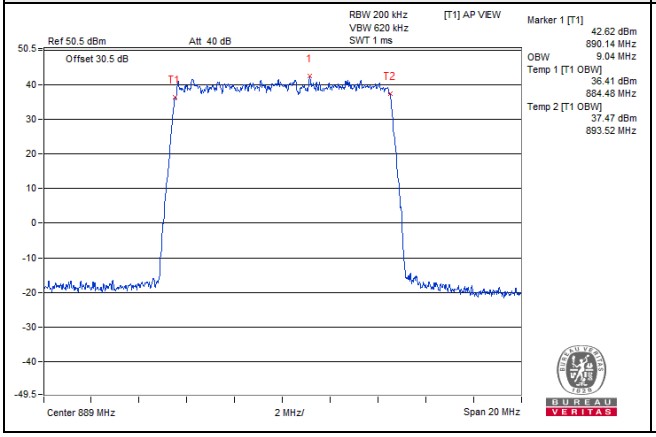
256QAM	
Channel: 2425	Channel: 2525
	
Channel: 2625	
	

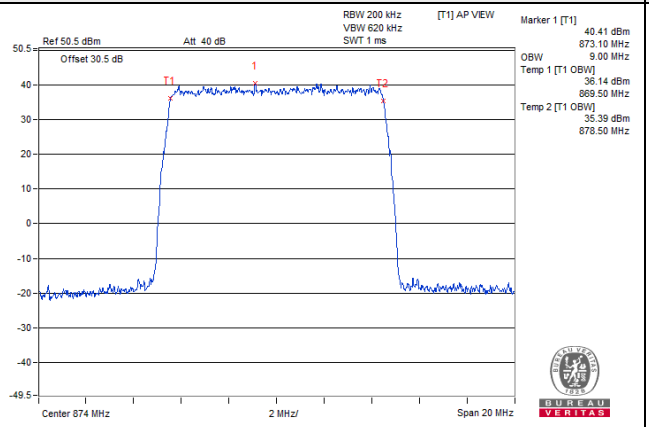
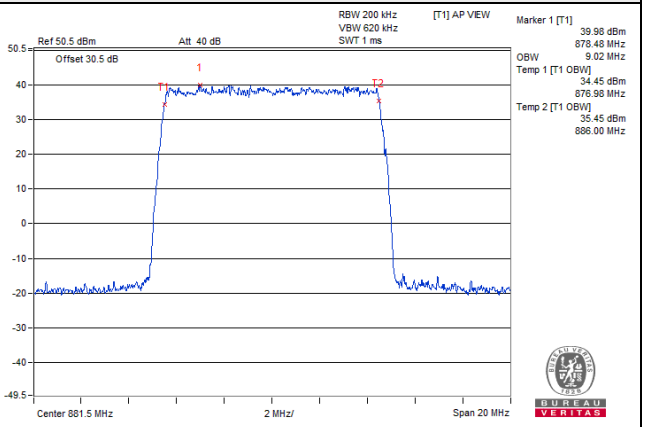
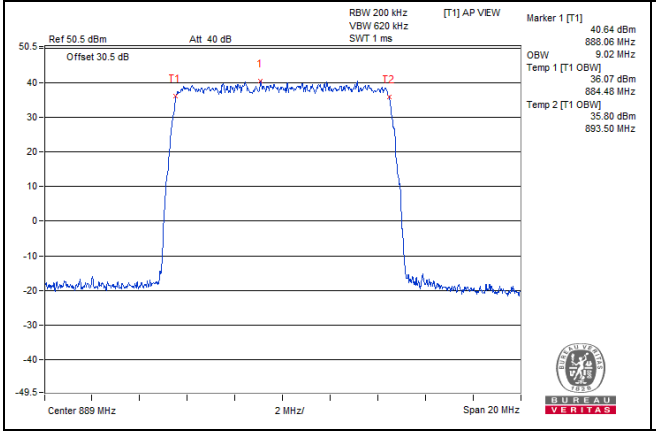
10MHz

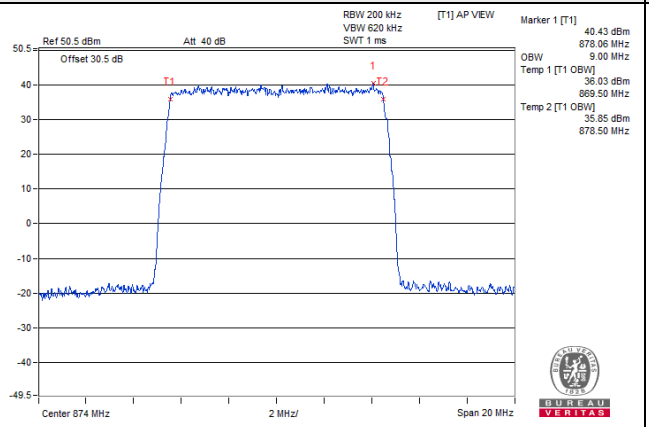
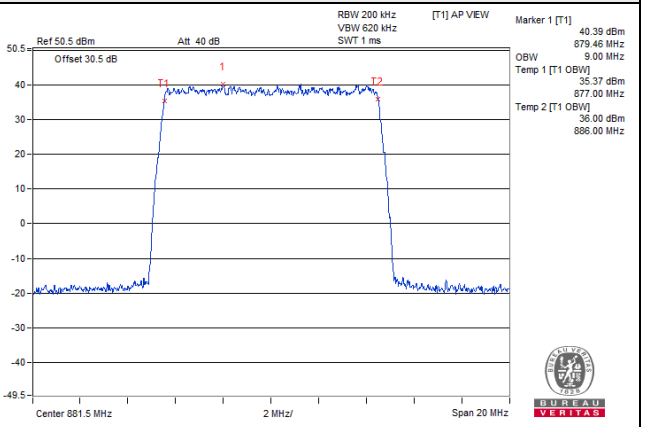
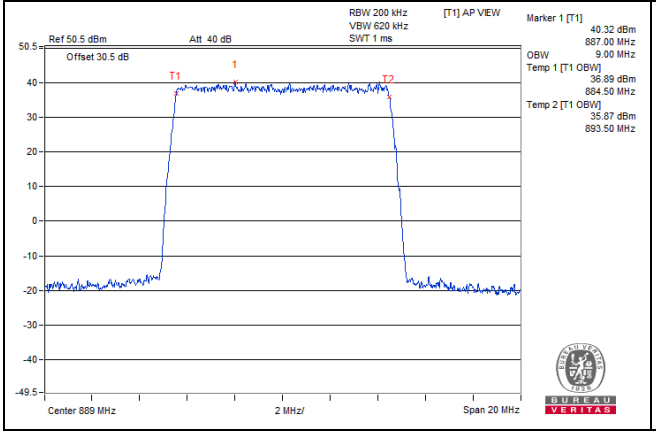
Channel Number	Freq. (MHz)	OCP 99 BAND WIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2450	874	9.00	9.04	9.00	9.00	8.98	9.04	9.00	9.00
2525	881.5	9.00	9.06	9.02	9.00	9.00	9.04	9.00	9.00
2600	889	9.00	9.04	9.02	9.00	8.98	9.02	9.02	9.00

Chain 0

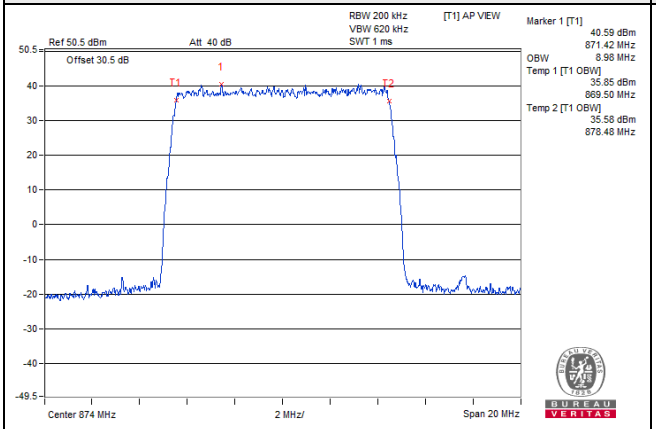
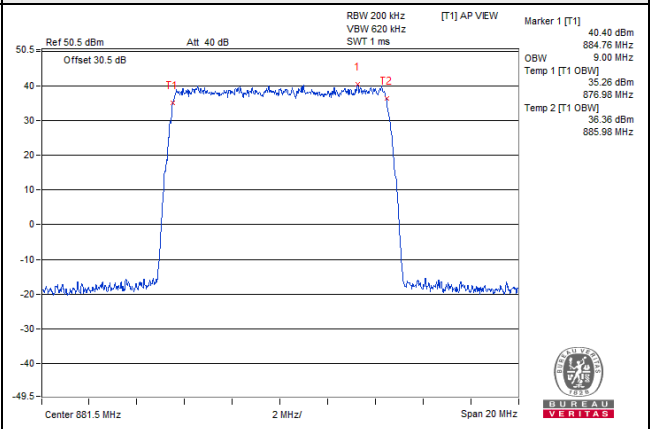
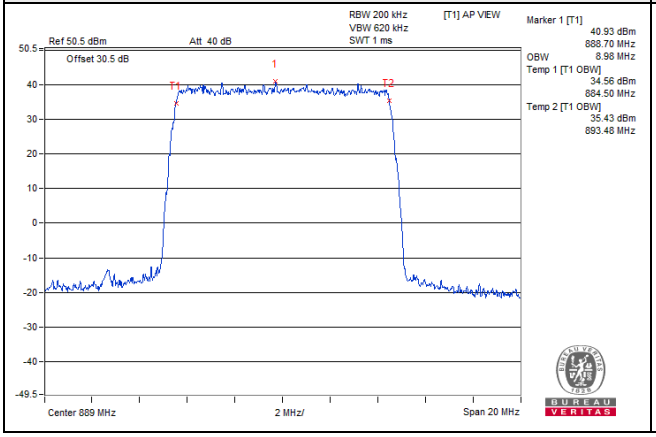
Spectrum Plot of Worst Value	
Occupied Bandwidth	
QPSK	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

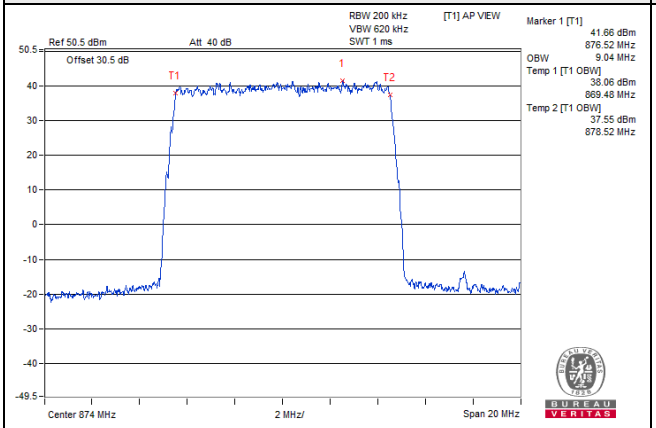
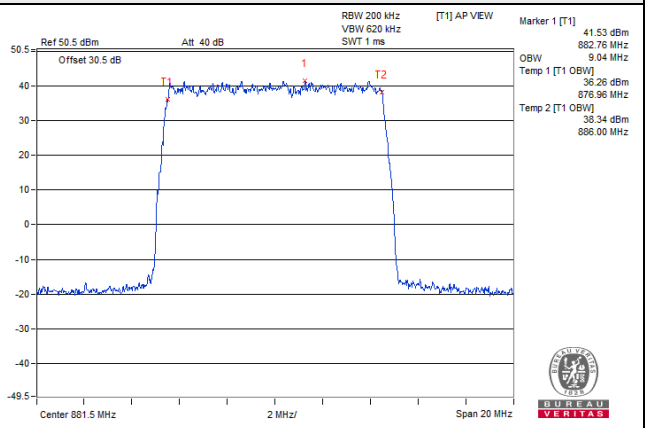
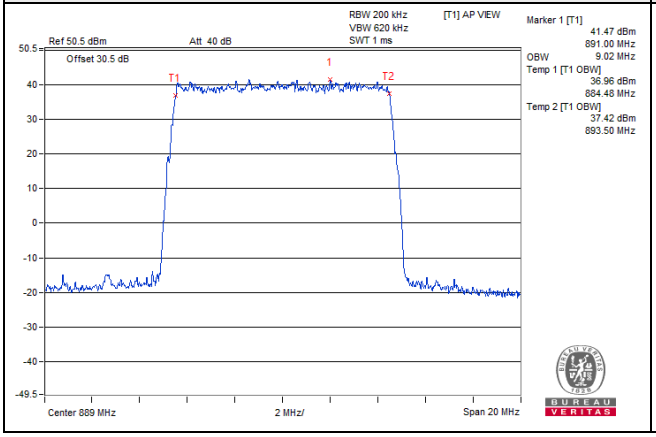
16QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

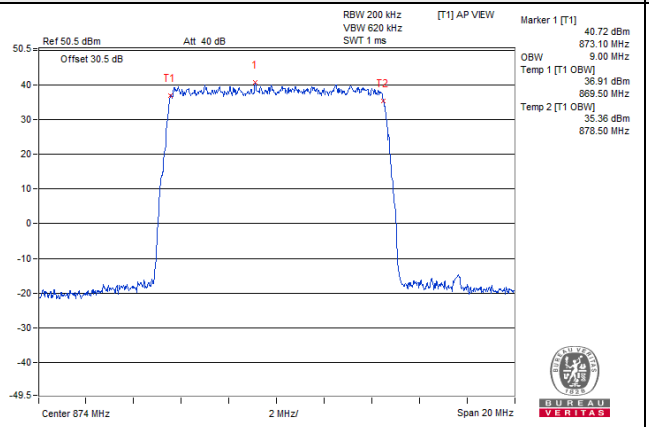
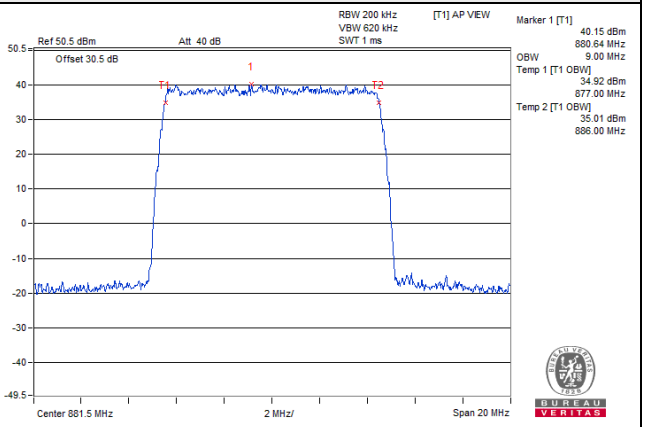
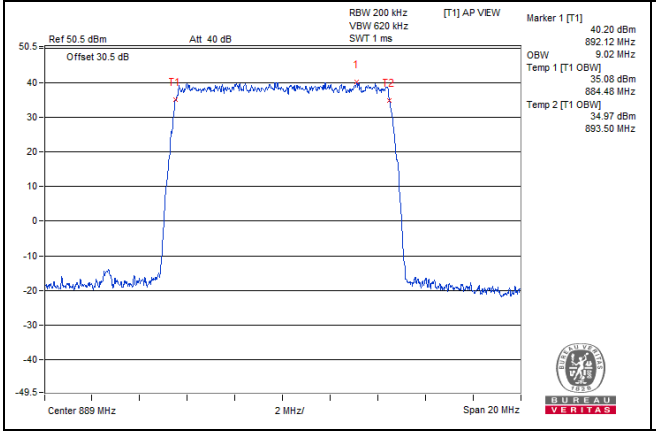
64QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

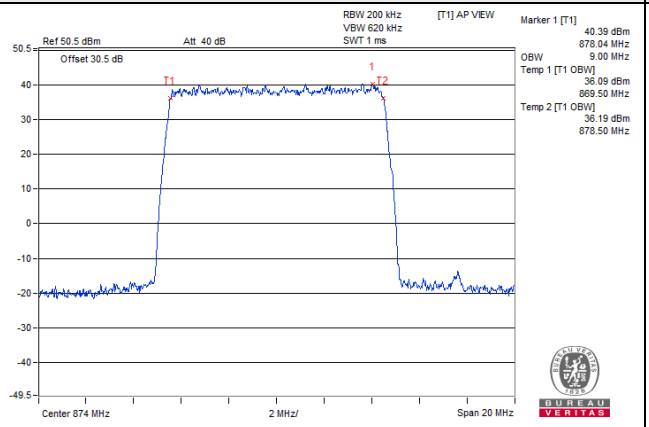
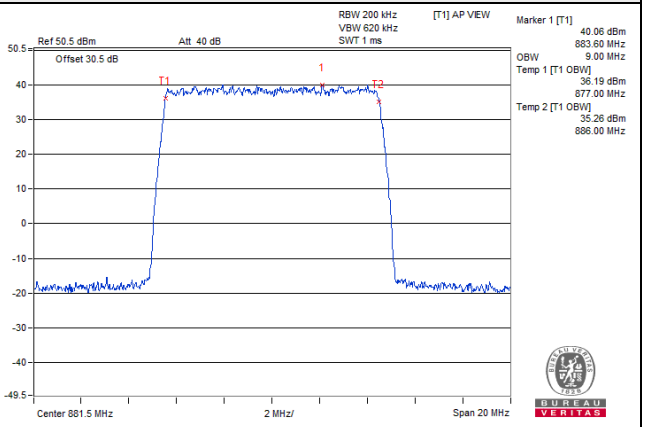
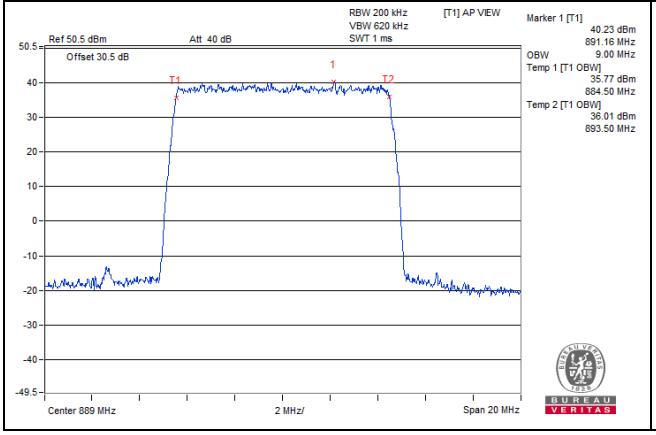
256QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

Chain 1

Spectrum Plot of Worst Value	
Occupied Bandwidth	
QPSK	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

16QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

64QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

256QAM	
Channel: 2450	Channel: 2525
	
Channel: 2600	
	

15MHz

Channel Number	Freq. (MHz)	OCP 99 BAND WIDTH (MHz)							
		Chain0				Chain1			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
2475	876.5	13.47	13.47	13.53	13.50	13.47	13.47	13.53	13.50
2525	881.5	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
2575	886.5	13.53	13.50	13.50	13.50	13.47	13.50	13.50	13.50

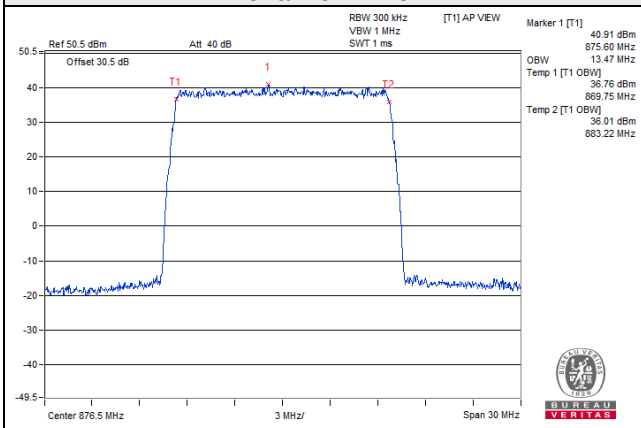
Chain 0

Spectrum Plot of Worst Value

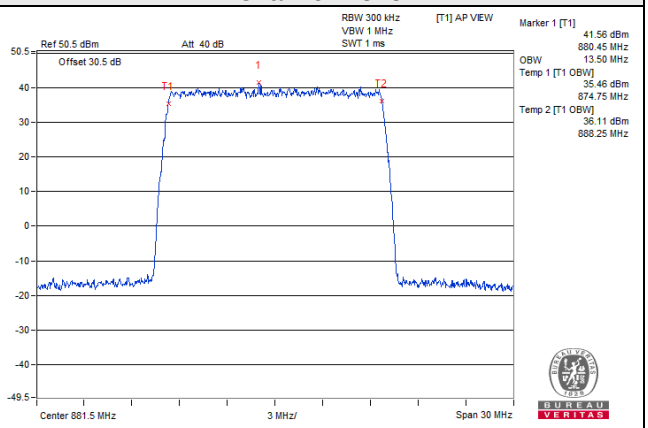
Occupied Bandwidth

QPSK

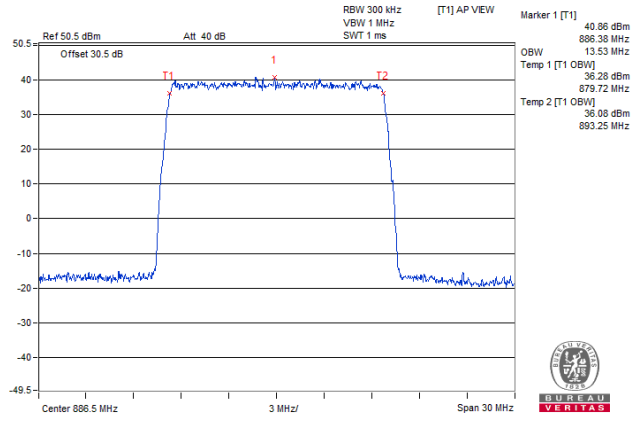
Channel: 2475

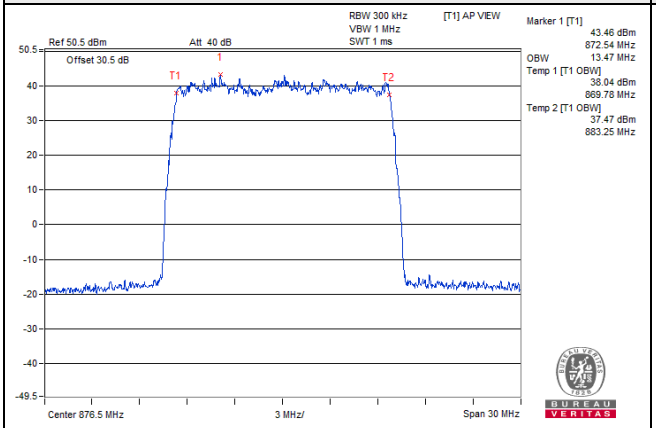
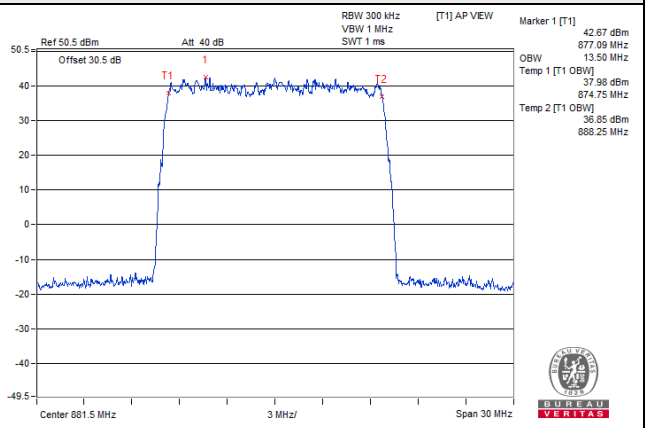
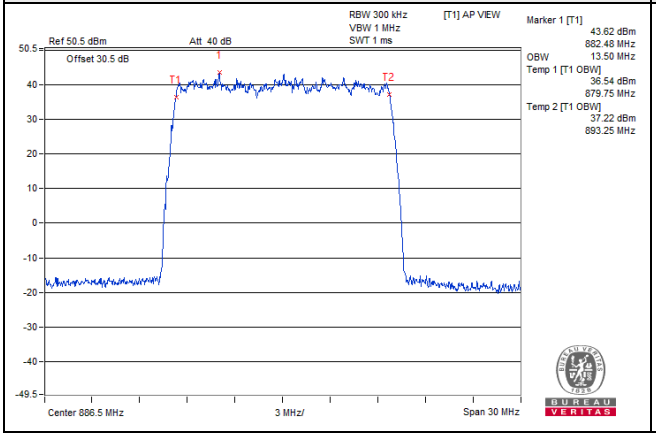


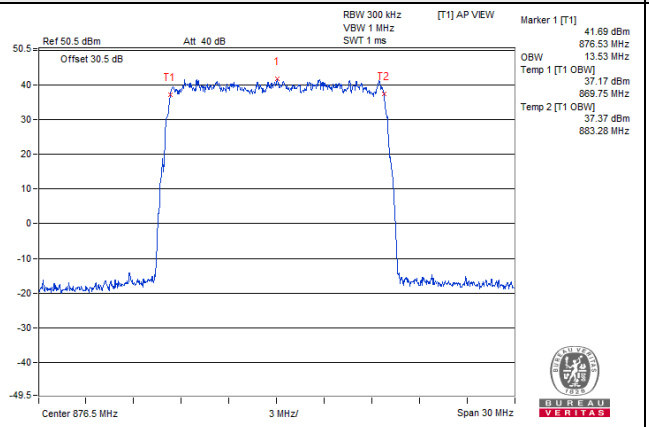
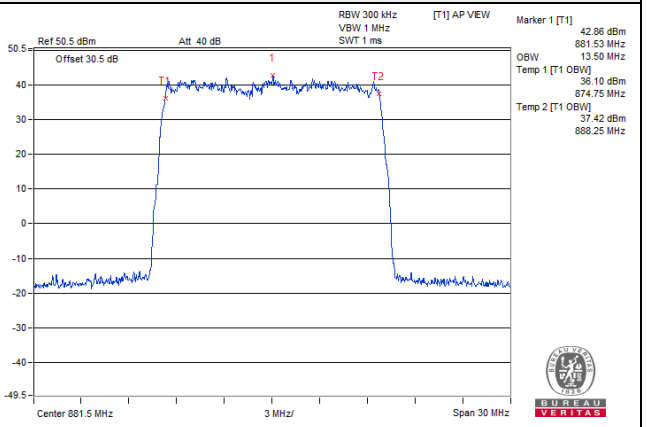
Channel: 2525



Channel:2575



16QAM	
Channel: 2475	Channel: 2525
	
Channel:2575	
	

64QAM	
Channel: 2475	Channel: 2525
	
Channel:2575