Supplemental “CA Mode” Test Report

Report No.:	RFBEOO-WTW-P21020574-2
FCC ID:	MADG060708-50-01B
Test Model:	G060708-50-01B
Received Date:	Feb. 26, 2021
Test Date:	Mar. 31 to May 23, 2021
Issued Date:	July 13, 2021
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

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RFBEOO-WTW-P21020574-2	Original release.	July 13, 2021

1 Certificate of Conformity

Product:	Triple Low Band RU
Brand:	MTI
Test Model:	G060708-50-01B
Sample Status:	Engineering sample
Applicant:	Microelectronics Technology Inc.
Test Date:	Mar. 31 to May 23, 2021
Standards:	FCC Part 27, Subpart N / H FCC Part 90, Subpart S FCC Part 2

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 : _____ , **Date:** July 13, 2021

Claire Kuan / Specialist

Approved by : _____ , **Date:** July 13, 2021

Clark Lin / Technical Manager

2 Summary of Test Results

Applied Standard: FCC Part 27, FCC Part 90S			
FCC Clause	Test Item	Result	Remarks
2.1046 27.50(c)(3) 90.635 (a)	Effective radiated power	PASS	Meet the requirement of limit.
2.1053 27.53 90.691	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -47.55 dB at 3556.5 MHz.
2.1049 27.53 90.209	Occupied Bandwidth	PASS	Meet the requirement of limit.

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) (±)
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 06, 2020	July 05, 2021
Pre-Amplifier EMCI	EMC001340	980142	May 25, 2020	May 24, 2021
Loop Antenna Electro-Metrics	EM-6879	264	Mar. 05, 2021	Mar. 04, 2022
RF Cable	5D-FB	LOOPCAB-001	Jan. 07, 2021	Jan. 06, 2022
RF Cable	5D-FB	LOOPCAB-002	Jan. 07, 2021	Jan. 06, 2022
Pre-Amplifier Mini-Circuits	ZFL-1000VH2	QA0838008	Oct. 20, 2020	Oct. 19, 2021
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 05, 2020	Nov. 04, 2021
RF Cable	8D	966-3-1	Mar. 16, 2021	Mar. 15, 2022
RF Cable	8D	966-3-2	Mar. 16, 2021	Mar. 15, 2022
RF Cable	8D	966-3-3	Mar. 16, 2021	Mar. 15, 2022
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Sep. 24, 2020	Sep. 23, 2021
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 22, 2020	Nov. 21, 2021
Pre-Amplifier EMCI	EMC12630SE	980384	Jan. 11, 2021	Jan. 10, 2022
RF Cable	EMC104-SM-SM-1500	180504	Apr. 26, 2021	Apr. 25, 2022
RF Cable	EMC104-SM-SM-2000	180601	June 09, 2020	June 08, 2021
RF Cable	EMC104-SM-SM-6000	210201	May 13, 2021	May 12, 2022
Spectrum Analyzer Keysight	N9030A	MY54490679	July 13, 2020	July 12, 2021
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 11, 2021	Jan. 10, 2022
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 22, 2020	Nov. 21, 2021
RF Cable	EMC102-KM-KM-1200	160924	Jan. 11, 2021	Jan. 10, 2022
RF Cable	EMC-KM-KM-4000	200214	Mar. 10, 2021	Mar. 09, 2022
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. Tested Date: May 23, 2021

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Keysight	N9030B	MY57142938	Apr. 28, 2020	Apr. 27, 2021
18GHz 30dB 100W Fixed Attenuator Woken(*)	WATT-10018FS-30	N/A	May. 15, 2020	May. 14, 2022

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: Mar. 31, 2021

3 General Information

3.1 General Description of EUT

Product	Triple Low Band RU			
Brand	MTI			
Test Model	G060708-50-01B			
Status of EUT	Engineering sample			
Power Supply Rating	DC -40.5V~-58.5V			
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM			
Modulation Technology	5G NR FDD			
Operating Frequency	Band n26	ANT2	Channel Bandwidth: 5MHz	866.5MHz
		ANT3		
	Band n29	ANT0	Channel Bandwidth: 5MHz	719.5MHz ~725.5MHz
		ANT1		
		ANT0	Channel Bandwidth: 10MHz	722MHz ~723MHz
		ANT1		
	Band n71	ANT0	Channel Bandwidth: 5MHz	619.5MHz ~649.5MHz
		ANT1		
		ANT2		
		ANT3		
		ANT0	Channel Bandwidth: 10MHz	622MHz ~647MHz
		ANT1		
		ANT2		
		ANT3		
		ANT0	Channel Bandwidth: 15MHz	624.5MHz ~644.5MHz
		ANT1		
		ANT2		
		ANT3		
		ANT0	Channel Bandwidth: 20MHz	627MHz ~642MHz
		ANT1		
		ANT2		
		ANT3		
Antenna Type	Directional Cross-Polarized Sector antenna with : Band 26 Gain = 16 dBi Band 29 Gain = 18 dBi Band 71 Gain = 18 dBi			
Antenna Connector	4x4.3-10 Female			
Accessory Device	NA			
Data Cable Supplied	NA			

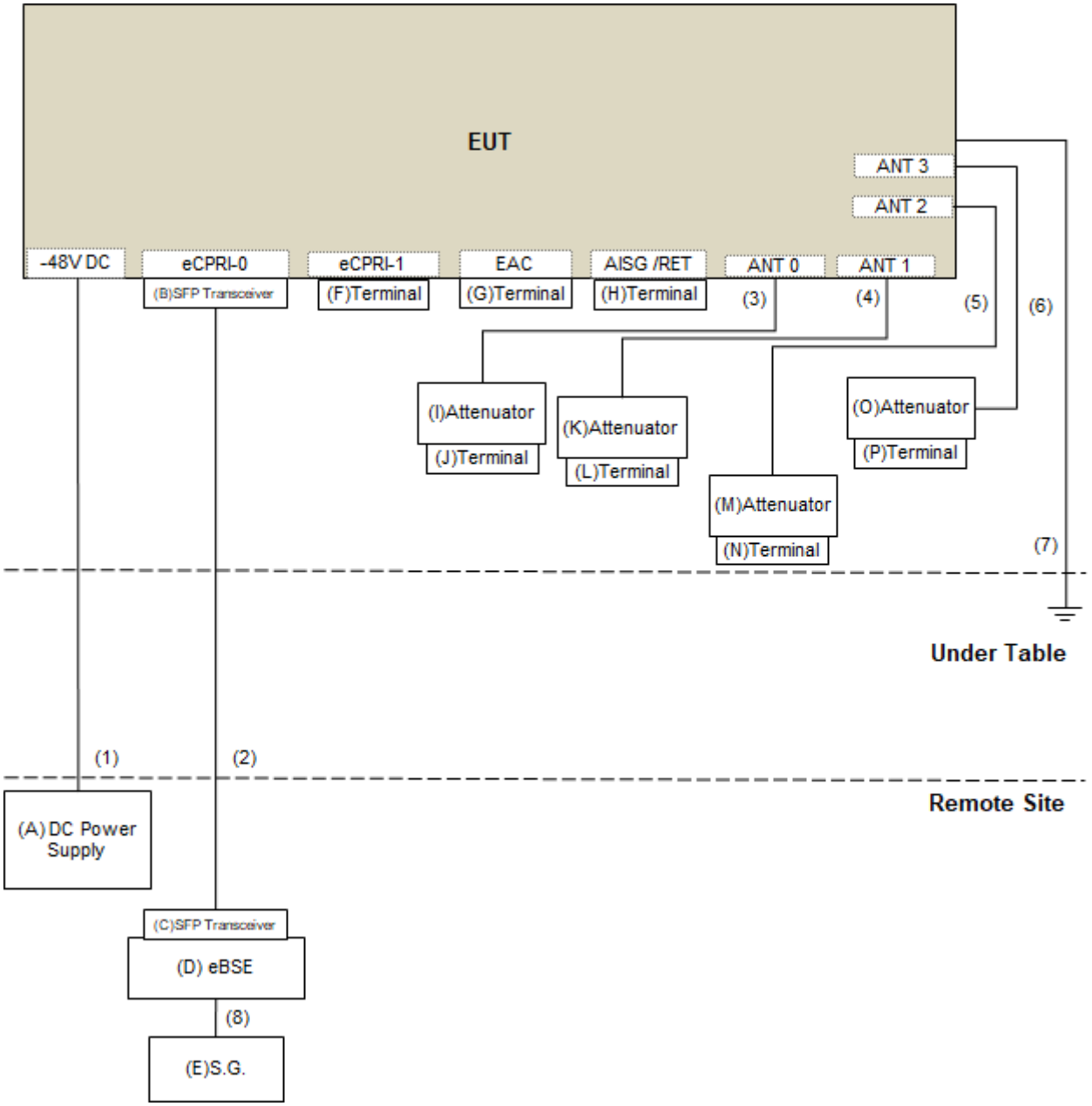
Note:

1. The EUT incorporates a MIMO function.

Band n26			
Channel Bandwidth	Modulation	TX & RX configuration	
5MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	4RX
Band n29			
Channel Bandwidth	Modulation	TX Only configuration	
5MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	NA
10MHz	QPSK, 16QAM, 64QAM, 256QAM	2TX	NA
Band n71			
Channel Bandwidth	Modulation	TX & RX configuration	
5MHz	QPSK, 16QAM, 64QAM, 256QAM	4TX	4RX
10MHz	QPSK, 16QAM, 64QAM, 256QAM	4TX	4RX
15MHz	QPSK, 16QAM, 64QAM, 256QAM	4TX	4RX
20MHz	QPSK, 16QAM, 64QAM, 256QAM	4TX	4RX

2. 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. The above antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
4. Based on the maximum RF power (conducted & EIRP) listed in this report, considerations pertaining to the maximum allowed EIRP (conducted power level), signal type and antenna gain should be considered for each installation.

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	eBSE (Note 2)	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
M	Attenuator	NA	NA	NA	NA	Supplied by client
N	Terminal	NA	NA	NA	NA	Supplied by client
O	Attenuator	NA	NA	NA	NA	Supplied by client
P	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. eBSE: evolved Based Station Emulator which is to transmit/receive the waveform

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
7	GND Cable	1	3	No	0	Provided by Lab
8	RF Cable	1	3	No	0	Supplied by client

3.3 Test Mode Applicability and Tested Channel Detail

Test modes are presented in the report as below, detailed test mode.

Test Mode	Description
1	Multi Band Singel Carrier: Band n26 5MHz_866.5MHz + Band n29 5MHz_725.5MHz + Band n71 5MHz_619.5MHz
2	Multi Band CA-Contiguous: Band n26 5MHz (866.5MHz) + Band n29 5+5MHz (720.5+725.5MHz) + Band n71 5MHz +5MHz (619.5+624.5MHz)
3	Multi Band CA-Non Contiguous: Band n26 5MHz (866.5MHz) + Band n29 5+5MHz (719.5+725.5MHz) + Band n71 5MHz +5MHz (619.5+649.5MHz)
4	Multi Band Singel Carrier: Band n26 5MHz_866.5MHz + Band n29 10MHz_723.0MHz + Band n71 20MHz_627.0MHz
5	Multi Band CA-Contiguous: Band n26 5MHz (866.5MHz) + Band n29 5+5MHz (720.5+725.5MHz) + Band n71 15MHz +20MHz (624.5+642.0MHz)

Test Condition:

Test Item	Environmental Conditions	Input Power (System)	Tested By
ERP	25deg. C, 63%RH	120Vac, 60Hz	Charlie Yang
Radiated Emission	25deg. C, 75%RH	120Vac, 60Hz	Tom Yang
Occupied Bandwidth	25deg. C, 63%RH	120Vac, 60Hz	Charlie Yang

3.4 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:

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 27, Subpart N / H

FCC 47 CFR Part 90S

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

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

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

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

For FCC Part 27:
The radiated peak output power shall be according to the specific rule Part 27.50(c)(3) that are limited to ERP of 1000 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

For FCC Part 90S:
According to 90.635 (a), the effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

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:

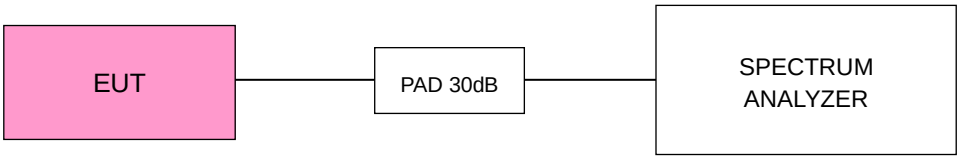
   EIRP = PMeas + GT
   ERP = PMeas + GT- 2.15

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

   PMeas : 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 (Mode 1)

Band n26_5MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm)			Directional Gain (dBi)	ERP(dBm)	ERP(W)	Limit(W)	
		ANT2	ANT3	Total					
173300	866.5	42.54	42.49	45.53	16.00	59.38	866.96	1000.00	PASS

Band n29_5MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm/MHz)			Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
		ANT0	ANT1	Total					
145100	725.5	40.54	40.48	43.52	18.00	56.36	864.97	1000.00	PASS

Band n71_5MHz

Channel Number	Freq. (MHz)	Output Average Power									PASS /FAIL
		Conducted Average Power(dBm/MHz)					Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
		ANT0	ANT1	ANT2	ANT3	Total					
123900	619.5	37.60	37.64	37.63	37.71	43.67	18.00	59.52	894.50	1000.00	PASS

4.1.5 Test Results (Mode 2)

Band n26_5MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm)			Directional Gain (dBi)	ERP(dBm)	ERP(W)	Limit(W)	
		ANT2	ANT3	Total					
173300	866.5	42.49	42.43	45.47	16.00	59.32	855.07	1000.00	PASS

Band n29_5MHz+5MHz

Channel Number	Freq. (MHz)	Carrier	Output Average Power							PASS /FAIL
			Conducted Average Power(dBm/MHz)			Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
			ANT0	ANT1	Total					
144100 + 145100	720.5 + 725.5	Carrier 0	37.45	37.40	40.58	18.00	56.43	439.07	1000.00	PASS
		Carrier 1	37.57	37.56						

Band n71_5MHz+5MHz

Channel Number	Freq. (MHz)	Carrier	Output Average Power								PASS /FAIL
			Conducted Average Power(dBm/MHz)					Directiona Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
			ANT0	ANT1	ANT2	ANT3	Total					
123900 + 124900	619.5 + 624.5	Carrier 0	34.27	34.23	34.29	34.33	40.30	18.00	56.15	412.17	1000.00	PASS
		Carrier 1	33.96	34.03	34.07	34.13						

4.1.6 Test Results (Mode 3)

Band n26_5MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm)			Directional Gain (dBi)	ERP(dBm)	ERP(W)	Limit(W)	
		ANT2	ANT3	Total					
173300	866.5	42.46	42.41	45.45	16.00	59.30	851.14	1000.00	PASS

Band n29_5MHz+5MHz

Channel Number	Freq. (MHz)	Carrier	Output Average Power							PASS /FAIL
			Conducted Average Power(dBm/MHz)			Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
			ANT0	ANT1	Total					
143900 + 145100	719.5 + 725.5	Carrier 0	37.44	37.30	40.38	18.00	56.23	419.84	1000.00	PASS
		Carrier 1	37.29	37.28						

Band n71_5MHz+5MHz

Channel Number	Freq. (MHz)	Carrier	Output Average Power									PASS /FAIL
			Conducted Average Power(dBm/MHz)					Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
			ANT0	ANT1	ANT2	ANT3	Total					
123900 + 129900	619.5 + 649.5	Carrier 0	34.27	34.33	34.25	34.24	40.29	18.00	56.14	411.46	1000.00	PASS
		Carrier 1	33.33	33.30	33.25	33.25						

4.1.7 Test Results (Mode 4)

Band n26_5MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm)			Directional Gain (dBi)	ERP(dBm)	ERP(W)	Limit(W)	
		ANT2	ANT3	Total					
173300	866.5	42.49	42.46	45.49	16.00	59.34	859.01	1000.00	866.96

Band n29_10MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm/MHz)			Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
		ANT0	ANT1	Total					
144600	723	37.63	37.52	40.59	18.00	56.44	440.55	1000.00	PASS

Band n71_20MHz

Channel Number	Freq. (MHz)	Output Average Power									PASS /FAIL
		Conducted Average Power(dBm/MHz)					Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
		ANT0	ANT1	ANT2	ANT3	Total					
125400	627	31.68	31.61	31.61	31.63	37.65	18.00	53.50	224.04	1000.00	PASS

4.1.8 Test Results (Mode 5)

Band n26_5MHz

Channel Number	Freq. (MHz)	Output Average Power							PASS /FAIL
		Conducted Average Power(dBm)			Directional Gain (dBi)	ERP(dBm)	ERP(W)	Limit(W)	
		ANT2	ANT3	Total					
173300	866.5	42.49	42.43	45.47	16.00	59.32	855.07	1000.00	PASS

Band n29_5MHz+5MHz

Channel Number	Freq. (MHz)	Carrier	Output Average Power							PASS /FAIL
			Conducted Average Power(dBm/MHz)			Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
			ANT0	ANT1	Total					
144100 + 145100	720.5 + 725.5	Carrier 0	37.42	37.38	40.52	18.00	56.37	433.55	1000.00	PASS
		Carrier 1	37.54	37.48						

Band n71_15MHz+20MHz

Channel Number	Freq. (MHz)	Carrier	Output Average Power									PASS /FAIL
			Conducted Average Power(dBm/MHz)					Directional Gain (dBi)	ERP (dBm/MHz)	ERP (W/MHz)	Limit (W/MHz)	
			ANT0	ANT1	ANT2	ANT3	Total					
124900 + 128400	624.5 + 642	Carrier 0	29.46	29.49	29.15	29.45	35.41	18.00	51.26	133.67	1000.00	PASS
		Carrier 1	29.25	29.28	29.06	29.23						

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

For FCC Part 27:

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

For FCC Part 90S:

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

4.2.2 Test Procedure

a. The field strength was measured with Spectrum Analyzer.

b. Measurement in the semi-anechoic chamber, EUT placed on the 0.8m/1.5m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor.

c. Perform a field strength measurement and then mathematically convert the measured field strength level to EIRP level.

d. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = Read Value (dBμV/m) + Correction Factor @ 3m

Correction Factor (dB) @ 3m = 20log(D) − 104.8; where D is the measurement distance @3m =-95.26dB

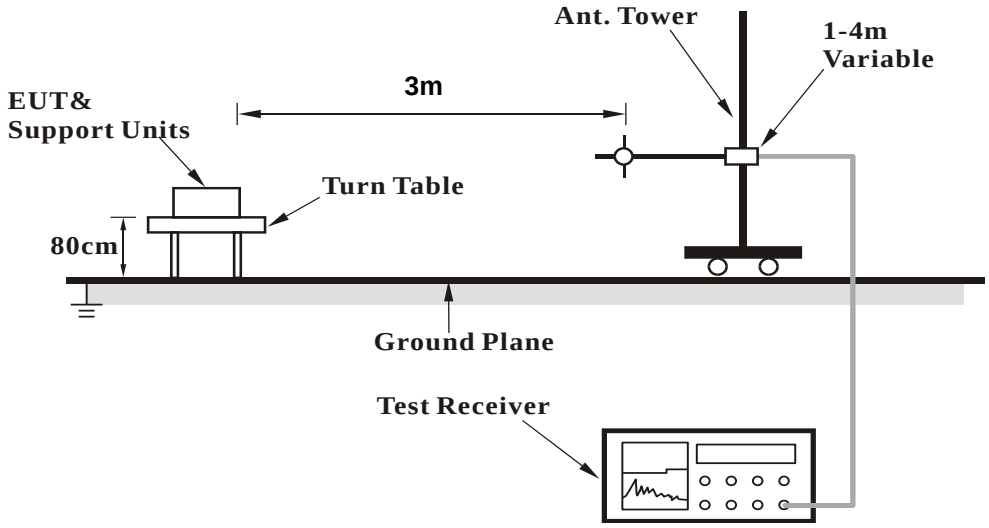
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.2.3 Deviation from Test Standard

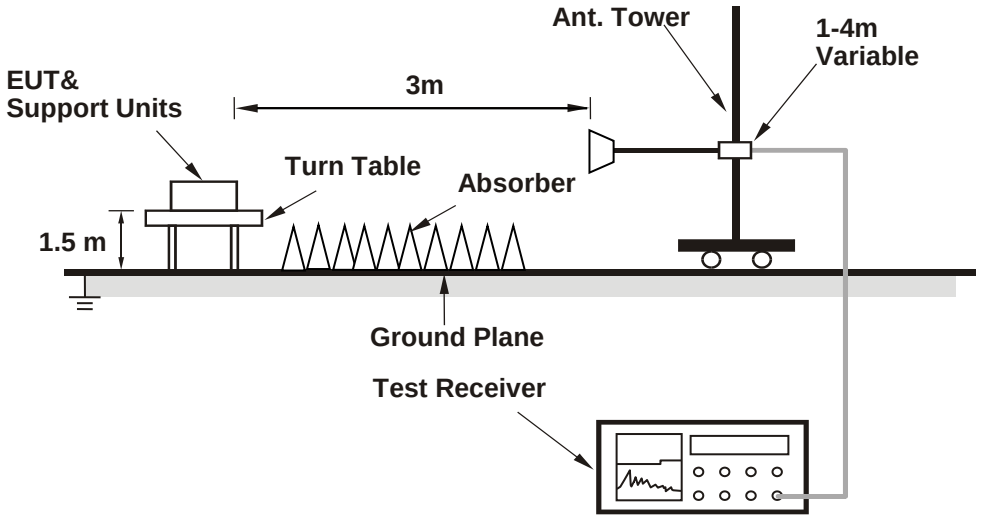
No deviation.

4.2.4 Test Setup

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.2.5 Test Results (Mode 1)

Below 1GHz

Test Frequency	TX Channel 173300+145100+123900	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.92	29.27	-95.26	-65.99	-13	-52.99
2	109.38	23.13	-95.26	-72.13	-13	-59.13
3	148.87	23.85	-95.26	-71.41	-13	-58.41
4	197.34	26.16	-95.26	-69.10	-13	-56.10
5	310.14	23.01	-95.26	-72.25	-13	-59.25
6	485.24	27.65	-95.26	-67.61	-13	-54.61
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.8	32.3	-95.26	-62.96	-13	-49.96
2	47.61	29.23	-95.26	-66.03	-13	-53.03
3	105.44	25.27	-95.26	-69.99	-13	-56.99
4	158.88	25.78	-95.26	-69.48	-13	-56.48
5	197.92	22.11	-95.26	-73.15	-13	-60.15
6	379.43	25.18	-95.26	-70.08	-13	-57.08

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Above 1GHz

Test Frequency	TX Channel 173300_145100_123900	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1474.33	31.35	-95.26	-63.91	-13	-50.91
2	2211.50	32.21	-95.26	-63.05	-13	-50.05
3	2948.67	32.55	-95.26	-62.71	-13	-49.71
4	3685.83	34.37	-95.26	-60.89	-13	-47.89
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1474.33	31.22	-95.26	-64.04	-13	-51.04
2	2211.50	31.77	-95.26	-63.49	-13	-50.49
3	2948.67	33.82	-95.26	-61.44	-13	-48.44
4	3685.83	34.22	-95.26	-61.04	-13	-48.04

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

4.2.6 Test Results (Mode 2)

Below 1GHz

Test Frequency	TX Channel 173300_144100+145100_ 123900+124900	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.88	29.73	-95.26	-65.53	-13	-52.53
2	109.42	23.03	-95.26	-72.23	-13	-59.23
3	149.08	23.36	-95.26	-71.90	-13	-58.90
4	197.31	26.34	-95.26	-68.92	-13	-55.92
5	310.77	23.66	-95.26	-71.60	-13	-58.60
6	484.79	28.19	-95.26	-67.07	-13	-54.07
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.89	33.02	-95.26	-62.24	-13	-49.24
2	47.93	28.91	-95.26	-66.35	-13	-53.35
3	105.11	24.67	-95.26	-70.59	-13	-57.59
4	159.43	24.93	-95.26	-70.33	-13	-57.33
5	197.96	22.32	-95.26	-72.94	-13	-59.94
6	379.49	25.15	-95.26	-70.11	-13	-57.11

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Above 1GHz

Test Frequency	TX Channel 173300_144100+145100_ 123900+124900	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1422.6	31.16	-95.26	-64.10	-13	-51.10
2	2133.9	31.88	-95.26	-63.38	-13	-50.38
3	2845.2	32.29	-95.26	-62.97	-13	-49.97
4	**3556.5**	**34.71**	**-95.26**	**-60.55**	**-13**	**-47.55**
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1422.6	31.1	-95.26	-64.16	-13	-51.16
2	2133.9	31.82	-95.26	-63.44	-13	-50.44
3	2845.2	33.87	-95.26	-61.39	-13	-48.39
4	3556.5	34.27	-95.26	-60.99	-13	-47.99

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

4.2.7 Test Results (Mode 3)

Below 1GHz

Test Frequency	TX Channel 173300_143900+145100_ 123900+129900	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.84	29.56	-95.26	-65.70	-13	-52.70
2	108.66	22.5	-95.26	-72.76	-13	-59.76
3	148.92	22.94	-95.26	-72.32	-13	-59.32
4	196.68	26.84	-95.26	-68.42	-13	-55.42
5	310.58	23.35	-95.26	-71.91	-13	-58.91
6	485.64	28.03	-95.26	-67.23	-13	-54.23
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.77	32.8	-95.26	-62.46	-13	-49.46
2	47.57	29.66	-95.26	-65.60	-13	-52.60
3	104.96	24.86	-95.26	-70.40	-13	-57.40
4	159.2	24.83	-95.26	-70.43	-13	-57.43
5	197.99	21.99	-95.26	-73.27	-13	-60.27
6	379.4	25.49	-95.26	-69.77	-13	-56.77

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Above 1GHz

Test Frequency	TX Channel 173300_143900+145100_ 123900+129900	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1422.6	31.21	-95.26	-64.05	-13	-51.05
2	2133.9	32.11	-95.26	-63.15	-13	-50.15
3	2845.2	31.66	-95.26	-63.60	-13	-50.60
4	3556.5	34.5	-95.26	-60.76	-13	-47.76
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1422.6	31.05	-95.26	-64.21	-13	-51.21
2	2133.9	31.97	-95.26	-63.29	-13	-50.29
3	2845.2	33.67	-95.26	-61.59	-13	-48.59
4	3556.5	34.14	-95.26	-61.12	-13	-48.12

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

4.2.8 Test Results (Mode 4)

Below 1GHz

Test Frequency	TX Channel 173300+144600+125400	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.45	29.72	-95.26	-65.54	-13	-52.54
2	109.39	22.59	-95.26	-72.67	-13	-59.67
3	149.06	23.55	-95.26	-71.71	-13	-58.71
4	196.3	27.1	-95.26	-68.16	-13	-55.16
5	310.82	22.93	-95.26	-72.33	-13	-59.33
6	484.58	28.29	-95.26	-66.97	-13	-53.97
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.15	32.78	-95.26	-62.48	-13	-49.48
2	47.25	29.21	-95.26	-66.05	-13	-53.05
3	105.42	25.43	-95.26	-69.83	-13	-56.83
4	158.06	26.42	-95.26	-68.84	-13	-55.84
5	197.85	22.32	-95.26	-72.94	-13	-59.94
6	379.31	25.34	-95.26	-69.92	-13	-56.92

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Above 1GHz

Test Frequency	TX Channel 173300+144600+125400	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1477.33	31.07	-95.26	-64.19	-13	-51.19
2	2216.00	31.31	-95.26	-63.95	-13	-50.95
3	2954.67	33.23	-95.26	-62.03	-13	-49.03
4	3693.33	33.93	-95.26	-61.33	-13	-48.33
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1477.33	31.05	-95.26	-64.21	-13	-51.21
2	2216.00	31.82	-95.26	-63.44	-13	-50.44
3	2954.67	33.41	-95.26	-61.85	-13	-48.85
4	3693.33	34.38	-95.26	-60.88	-13	-47.88

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

4.2.9 Test Results (Mode 5)

Below 1GHz

Test Frequency	TX Channel 173300_144100+145100_ 124900+128400	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.43	29.08	-95.26	-66.18	-13	-53.18
2	109.22	22.64	-95.26	-72.62	-13	-59.62
3	148.76	23.28	-95.26	-71.98	-13	-58.98
4	196.41	27.1	-95.26	-68.16	-13	-55.16
5	310.92	22.64	-95.26	-72.62	-13	-59.62
6	484.8	28.28	-95.26	-66.98	-13	-53.98
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	31.21	33.09	-95.26	-62.17	-13	-49.17
2	47.36	29.49	-95.26	-65.77	-13	-52.77
3	105.55	25.2	-95.26	-70.06	-13	-57.06
4	158.69	25.79	-95.26	-69.47	-13	-56.47
5	197.62	22.39	-95.26	-72.87	-13	-59.87
6	378.79	25.08	-95.26	-70.18	-13	-57.18

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

Above 1GHz

Test Frequency	TX Channel 173300_144100+145100_ 124900+128400	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1431.6	30.98	-95.26	-64.28	-13	-51.28
2	2147.4	31.32	-95.26	-63.94	-13	-50.94
3	2863.2	32.9	-95.26	-62.36	-13	-49.36
4	3579	33.63	-95.26	-61.63	-13	-48.63
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1431.6	31.11	-95.26	-64.15	-13	-51.15
2	2147.4	31.87	-95.26	-63.39	-13	-50.39
3	2863.2	33.26	-95.26	-62.00	-13	-49.00
4	3579	34.37	-95.26	-60.89	-13	-47.89

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), EIRP Value (dBm) = E (dB μ V/m) - Correction Factor @ 3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @ 3m.

4.3 Occupied Bandwidth Measurement

4.3.1 Limits of Occupied Bandwidth Measurement

The frequency shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

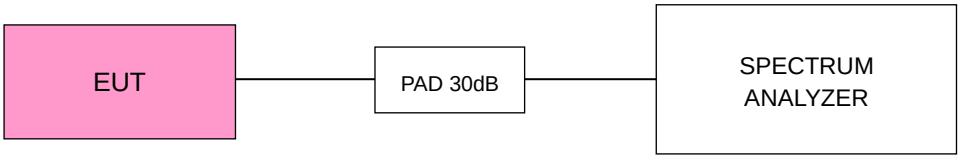
4.3.2 Test Procedure

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≥1% x OBW and VBW≥3 x VBW.

26 dB Bandwidth Measurement:
The 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 emission are attenuated at least 26dB below the transmitter power.

Occupied Bandwdith Measurement:
Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.3.3 Test Setup



4.3.4 Test Result (-26dB Bandwidth)

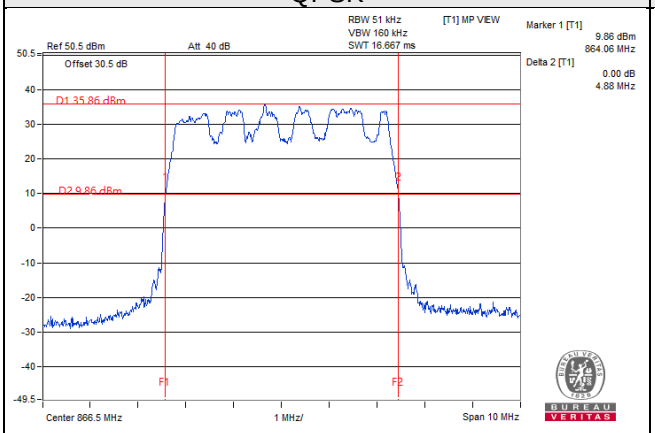
Band n26_5MHz & n29_10MHz & n71_20MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)															
		ANT 0				ANT 1				ANT 2				ANT 3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
172700	866.5	NA	NA	NA	NA	NA	NA	NA	NA	4.88	4.87	4.89	4.90	4.89	4.85	4.87	4.90
144600	723	9.73	9.78	9.83	9.85	9.75	9.81	9.83	9.86	NA	NA	NA	NA	NA	NA	NA	NA
125400	627	19.73	19.72	19.78	19.82	19.69	19.72	19.76	19.81	19.71	19.70	19.81	19.80	19.70	19.71	19.79	19.79
Total		29.46	29.50	29.61	29.67	29.44	29.53	29.59	29.67	24.59	24.57	24.70	24.70	24.59	24.56	24.66	24.69

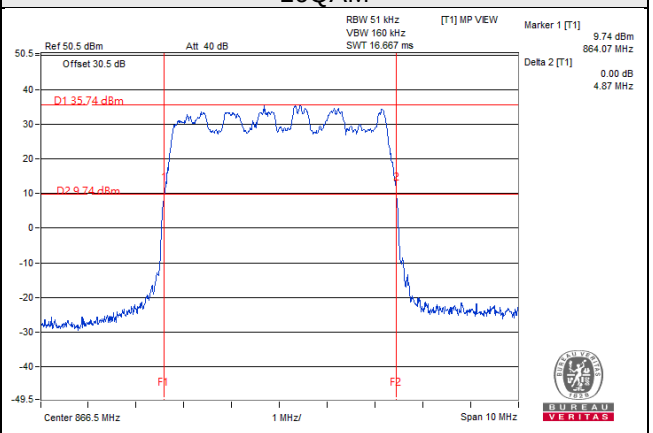
Band n26_5MHz
ANT2

Spectrum Plot of Worst Value

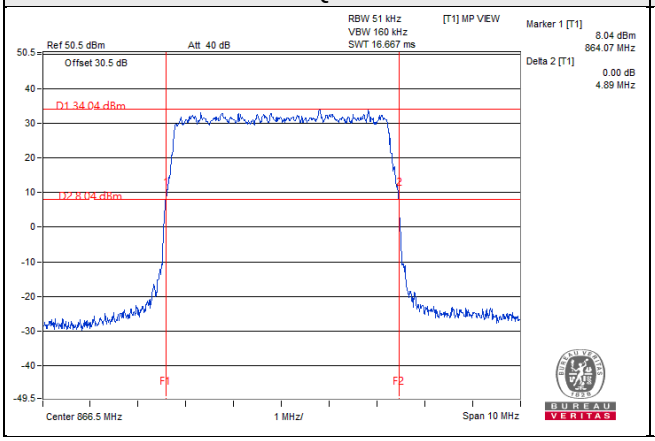
QPSK



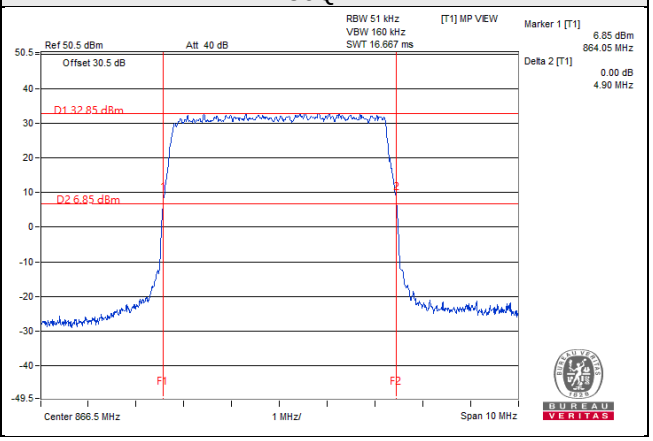
16QAM



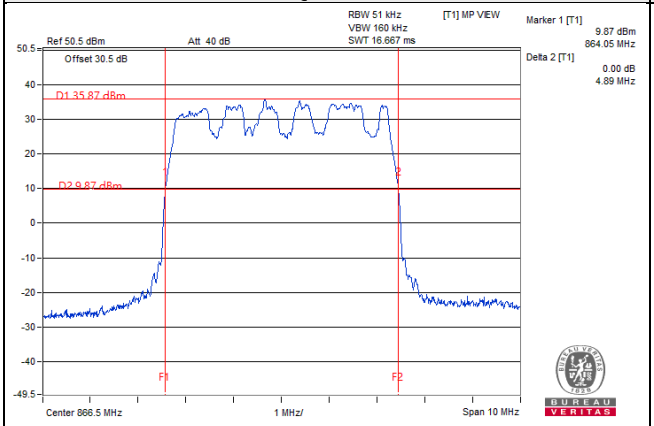
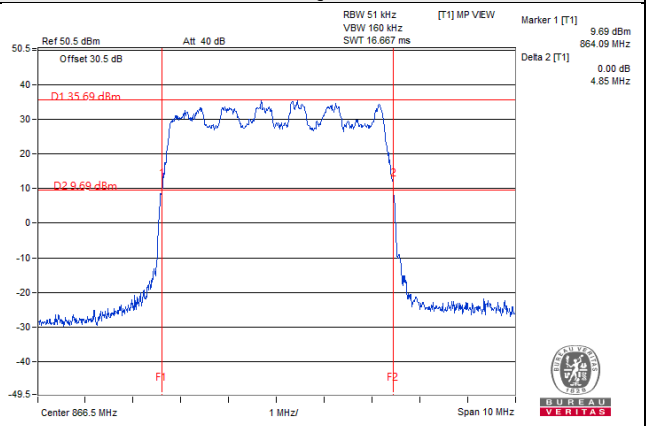
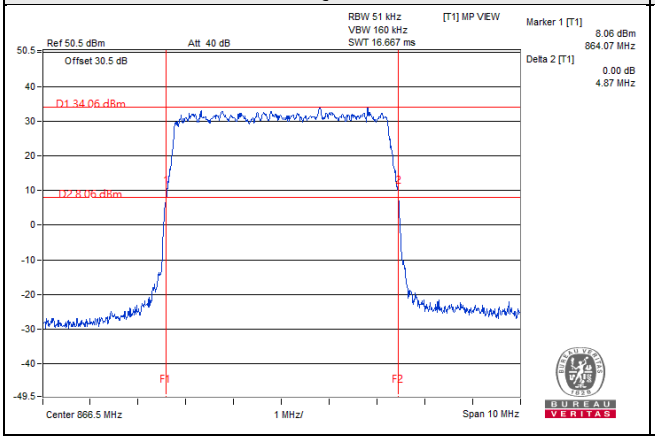
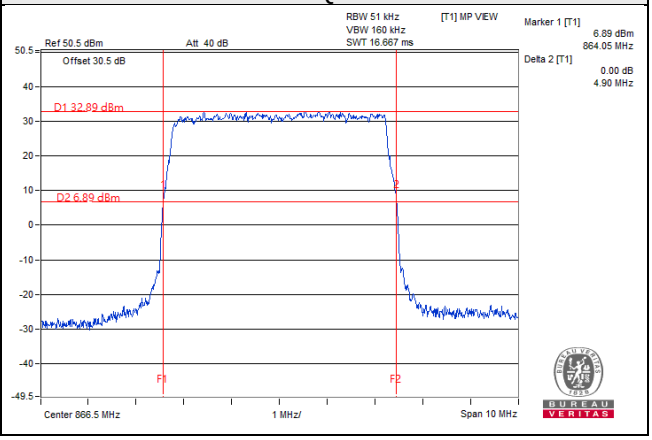
64QAM



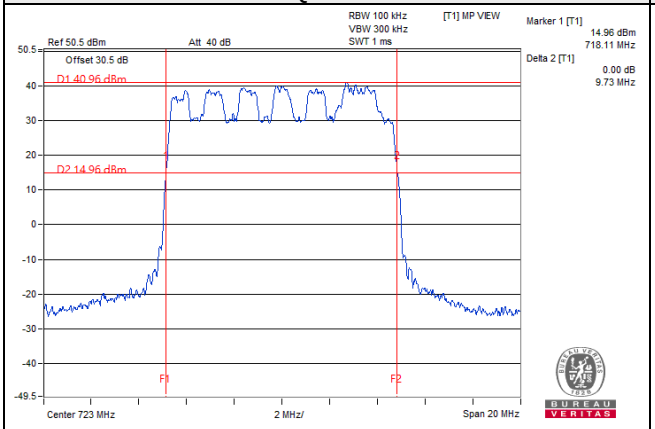
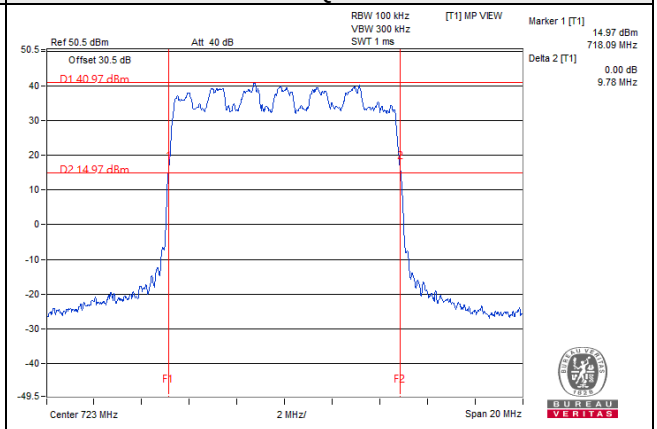
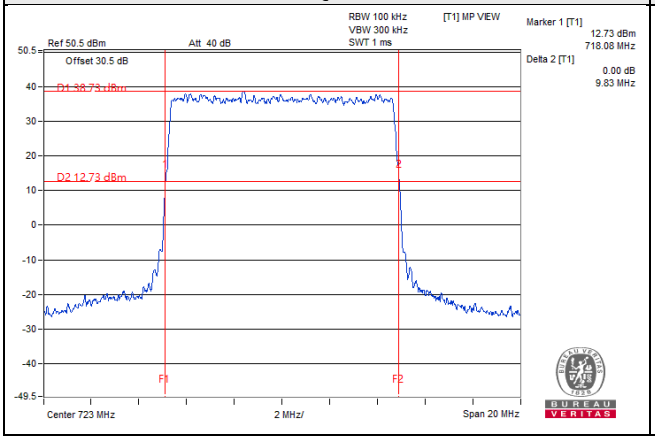
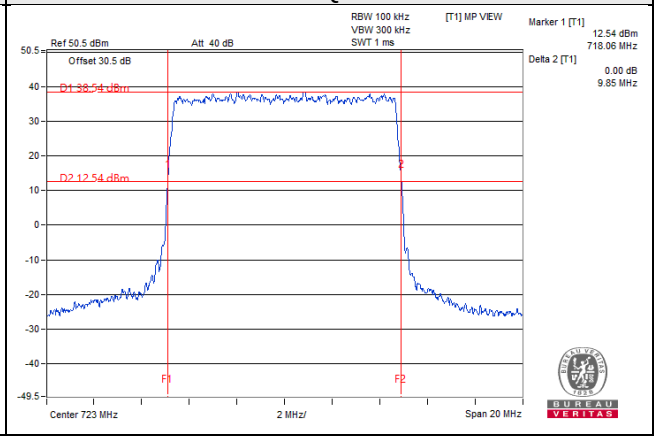
256QAM



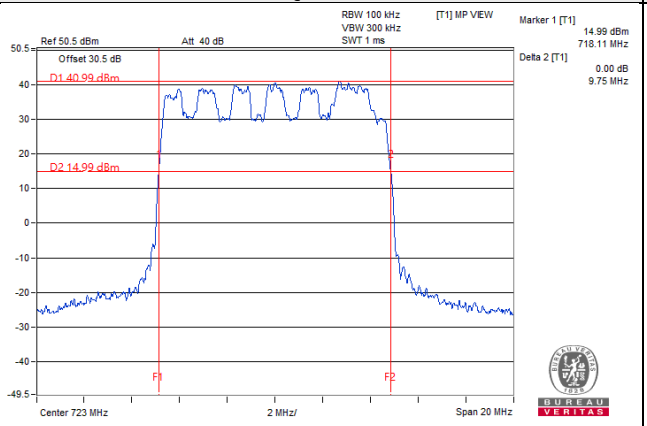
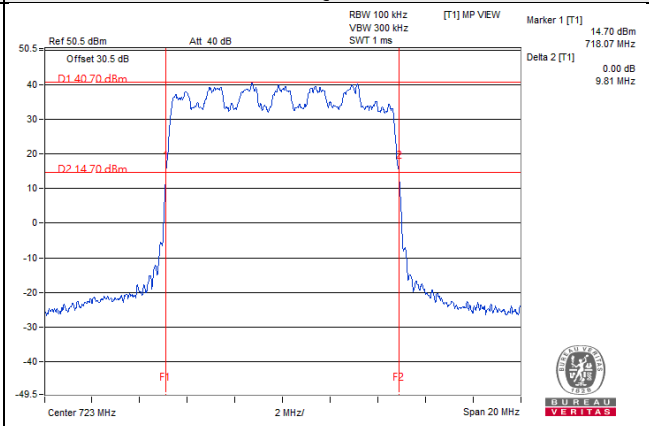
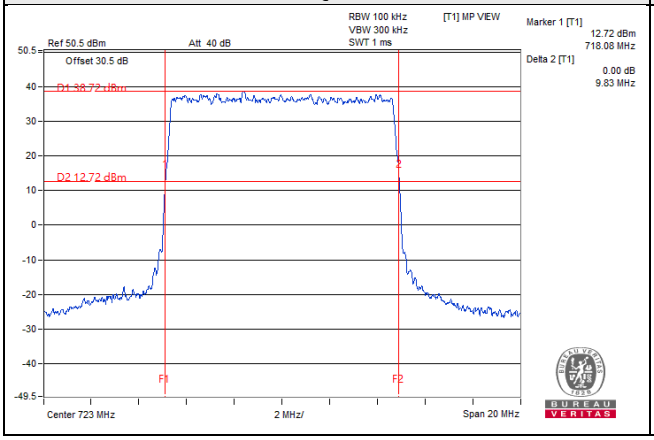
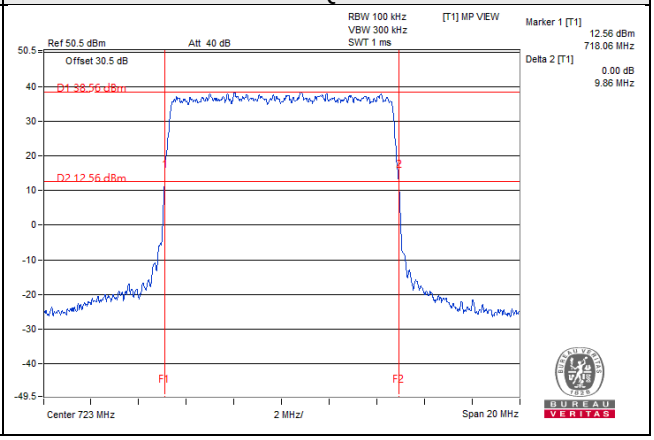
ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

Band n29_10MHz
ANT0

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

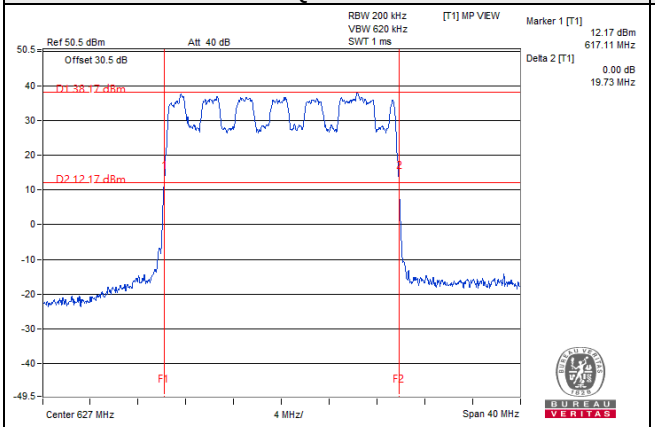
ANT1

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

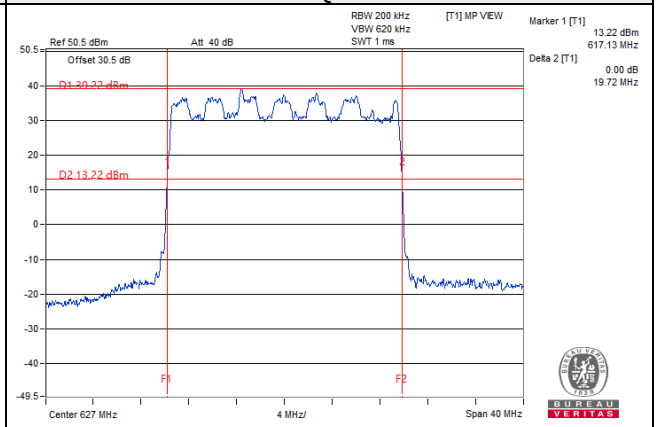
Band n71_20MHz
ANT0

Spectrum Plot of Worst Value

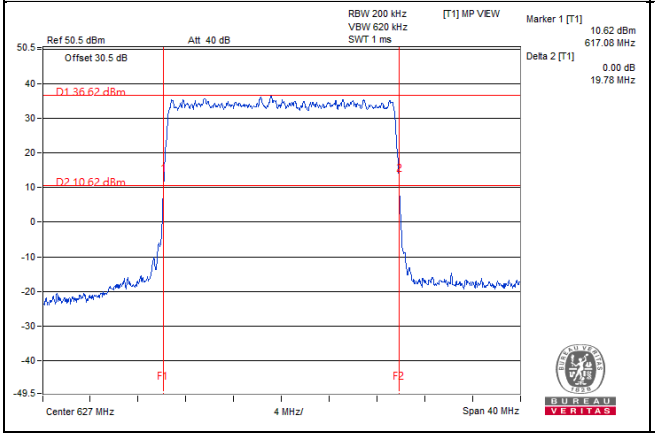
QPSK



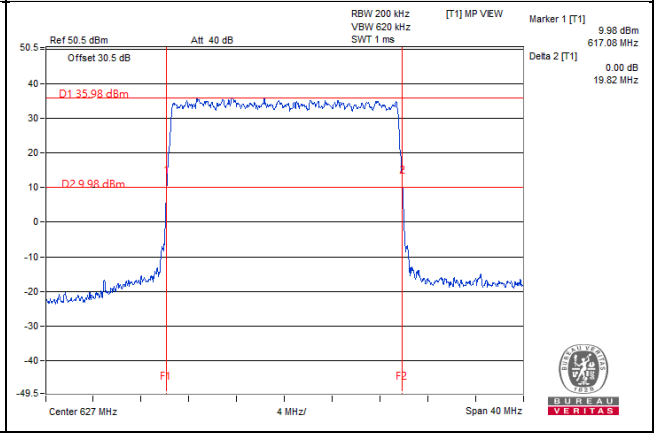
16QAM



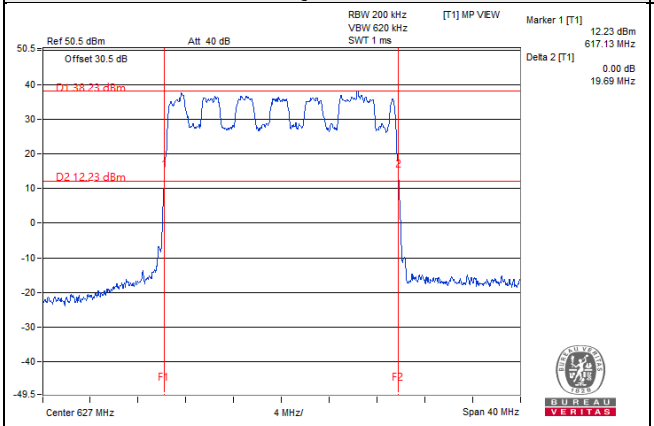
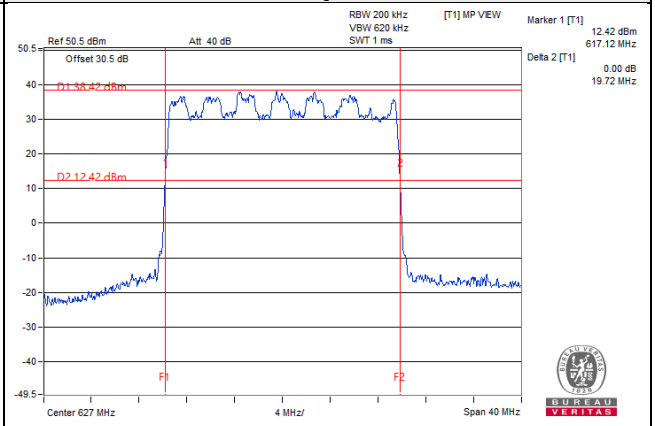
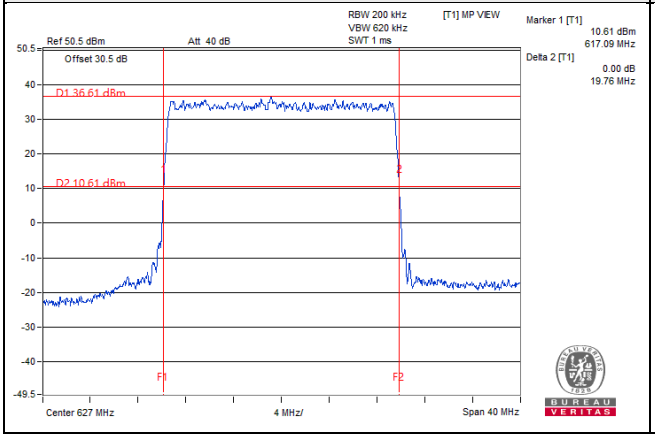
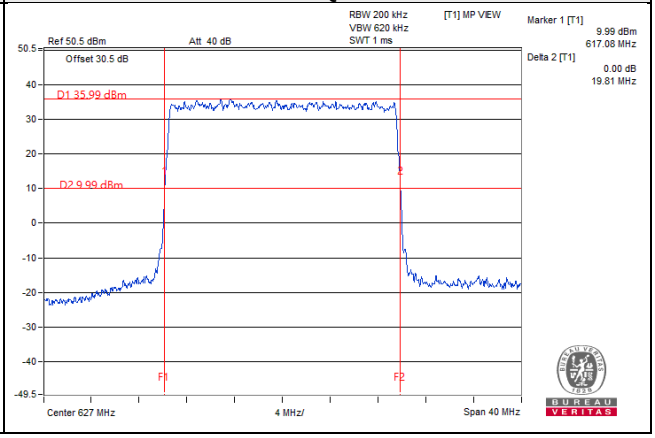
64QAM



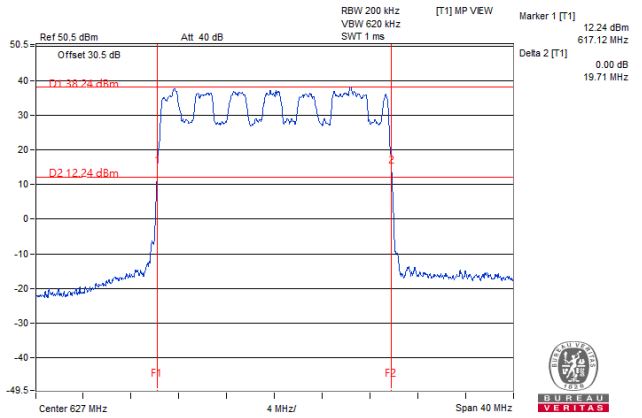
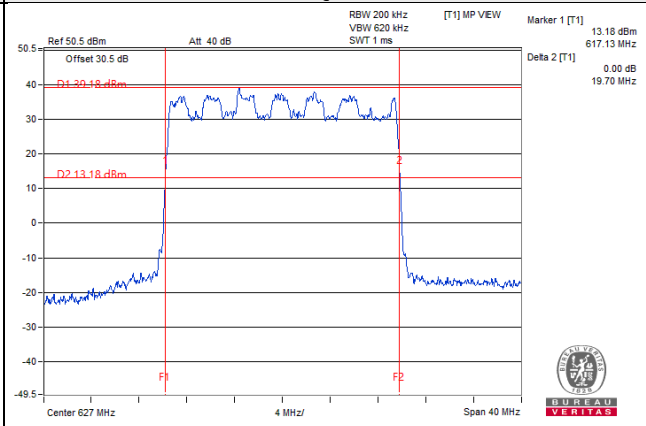
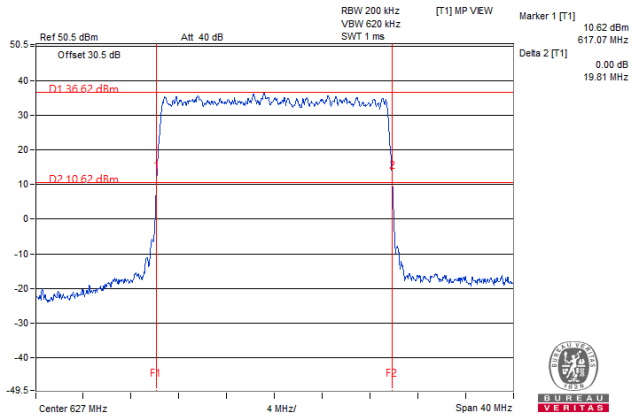
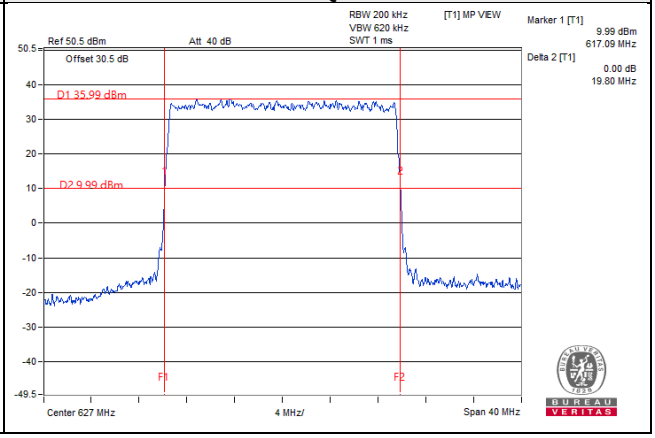
256QAM



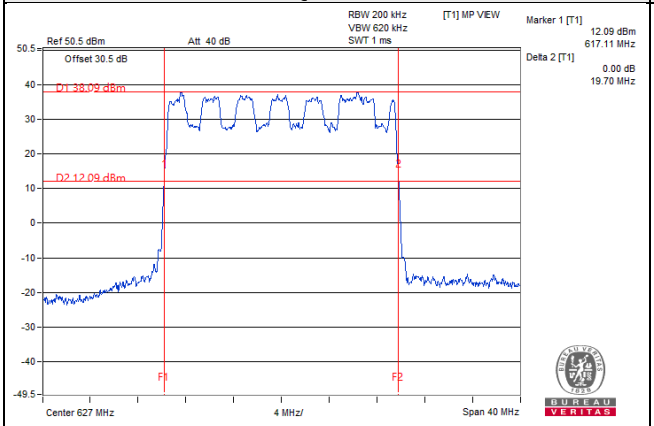
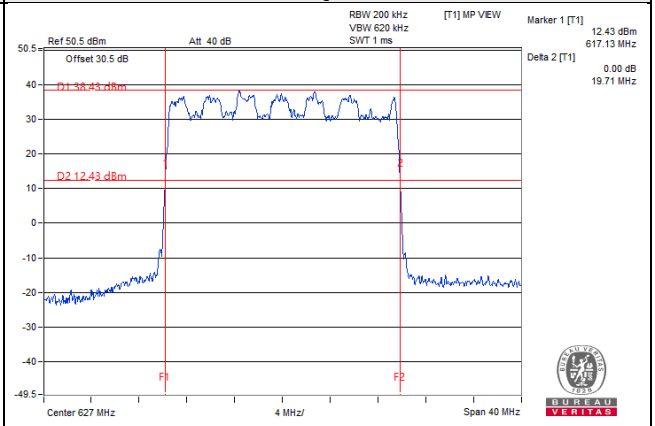
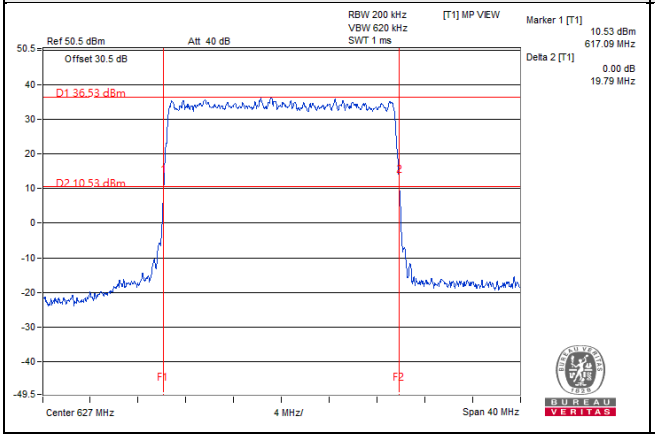
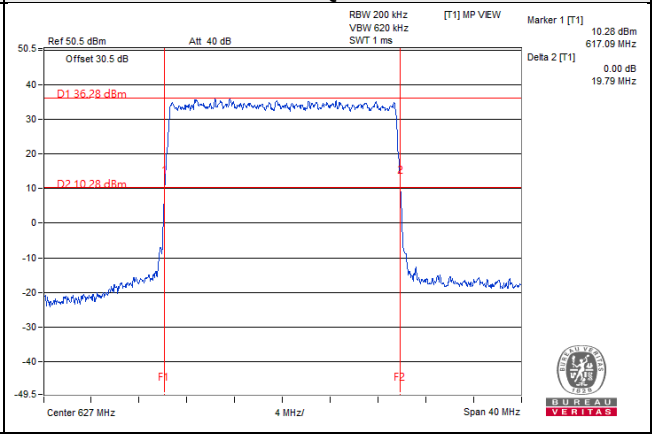
ANT1

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

ANT2

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

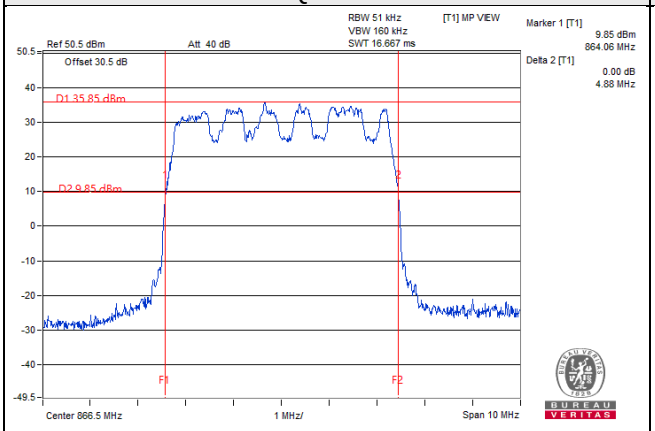
Band n26_5MHz & n29_5MHz+5MHz & n71_15MHz+20MHz

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)															
		Ant 0				Ant 1				Ant 2				Ant 3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
173300	866.5	NA	NA	NA	NA	NA	NA	NA	NA	4.88	4.87	4.88	4.90	4.88	4.86	4.89	4.88
144100 + 145100	720.5 + 725.5	9.96	9.96	9.95	9.96	9.96	9.95	9.94	9.95	NA	NA	NA	NA	NA	NA	NA	NA
124900 + 128400	624.5 + 642	34.99	34.90	34.97	34.97	34.90	34.97	34.98	34.96	34.94	34.94	34.95	34.97	34.90	34.96	34.97	34.94
Total		44.95	44.86	44.92	44.93	44.86	44.92	44.92	44.91	39.82	39.81	39.83	39.87	39.78	39.82	39.86	39.82

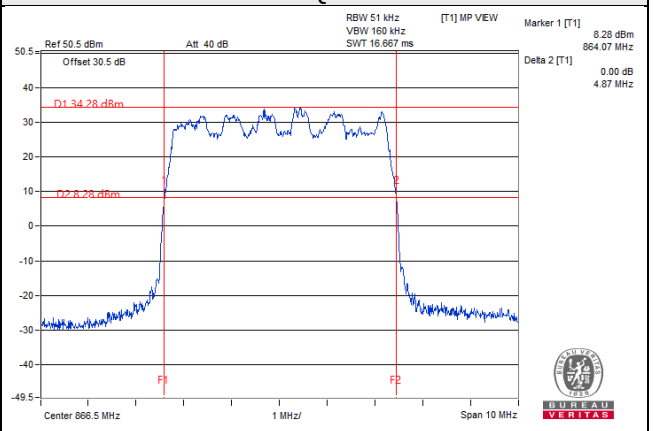
Band n26_5MHz
ANT2

Spectrum Plot of Worst Value

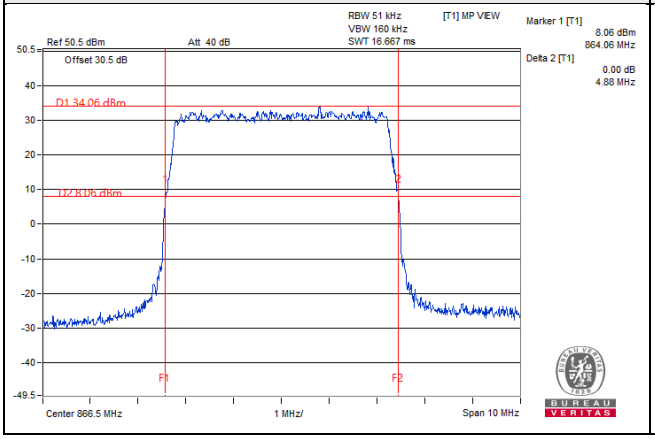
QPSK



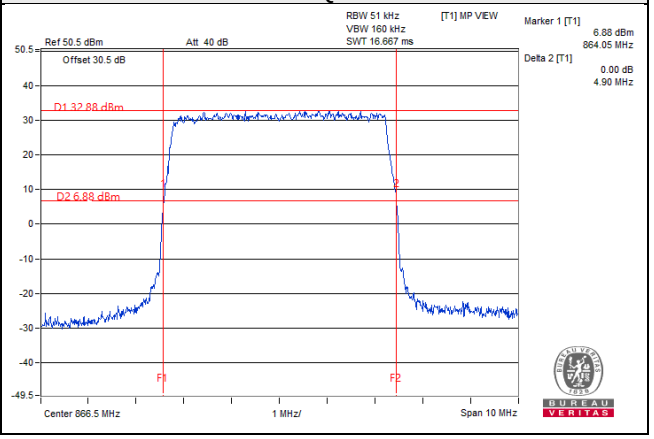
16QAM



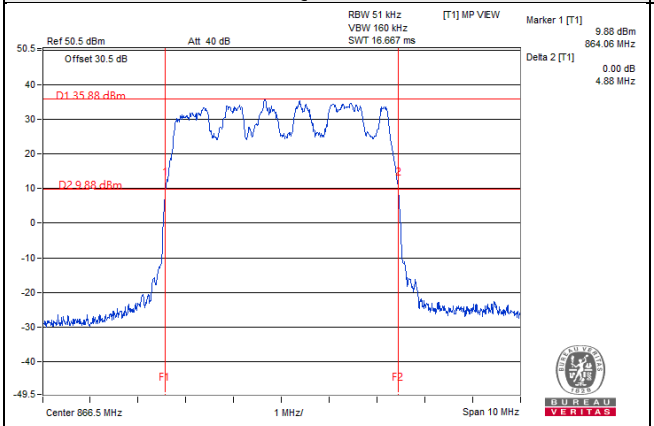
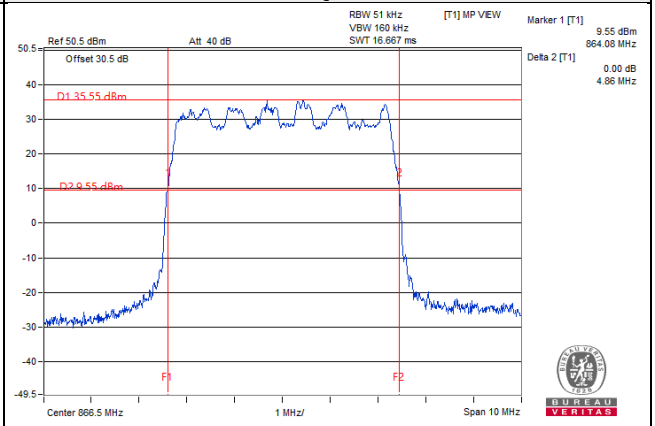
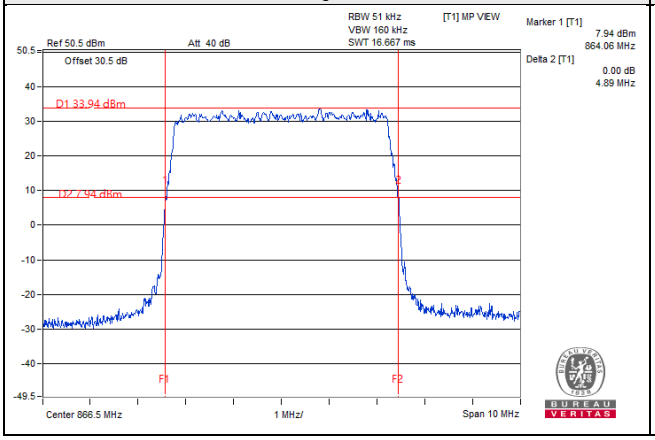
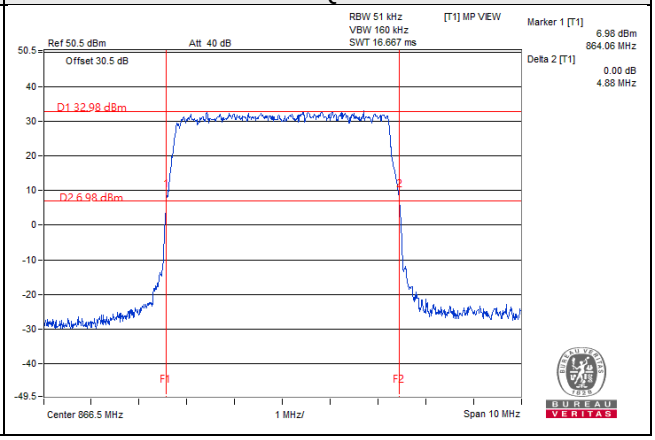
64QAM



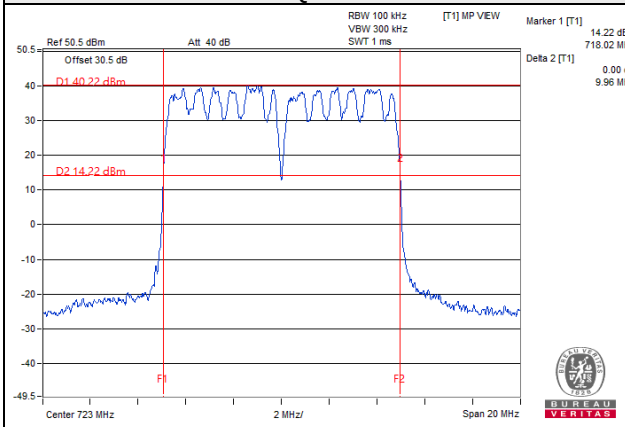
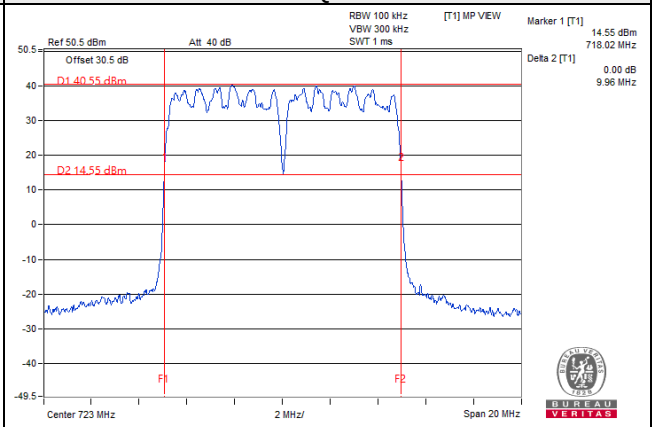
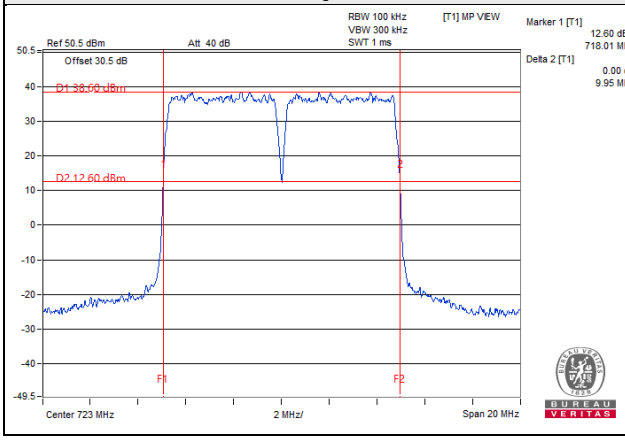
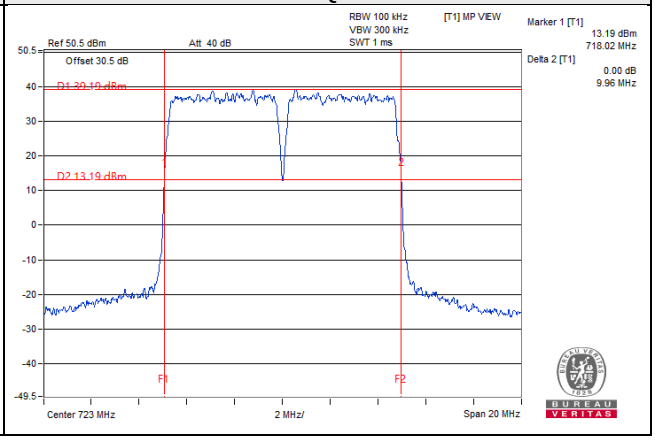
256QAM



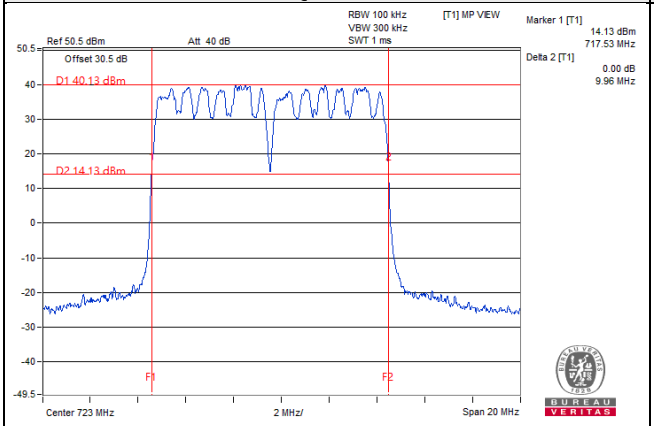
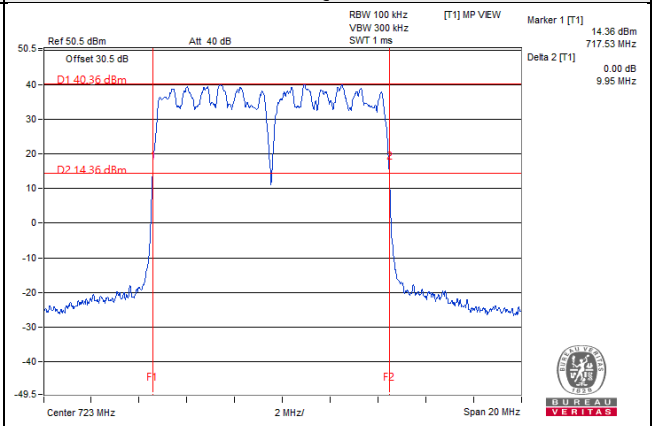
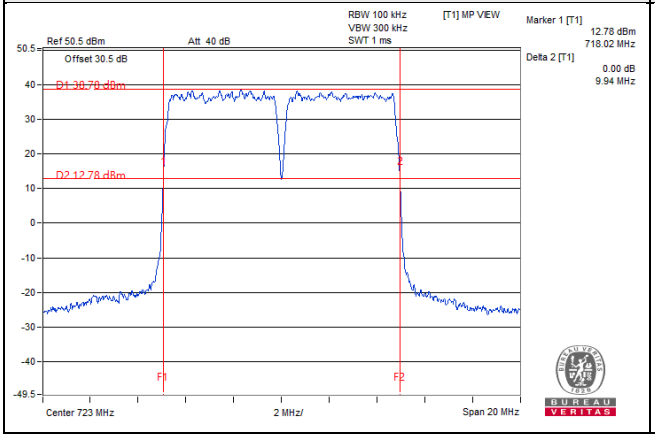
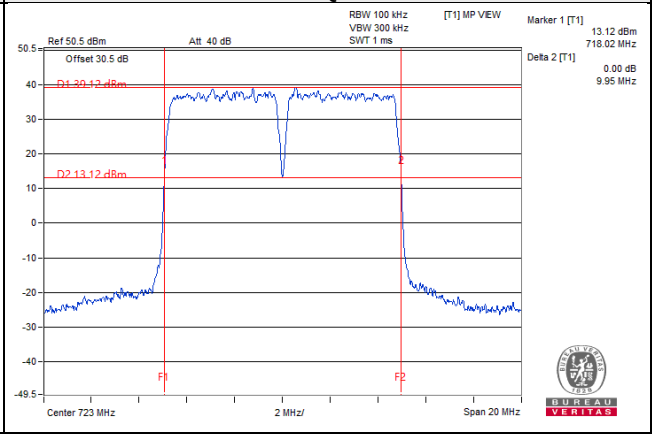
ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

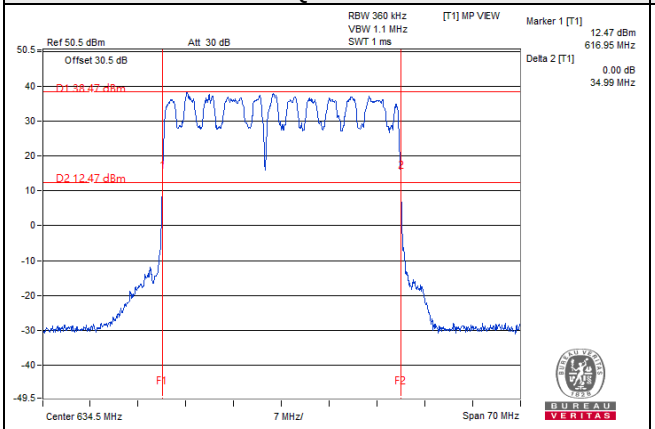
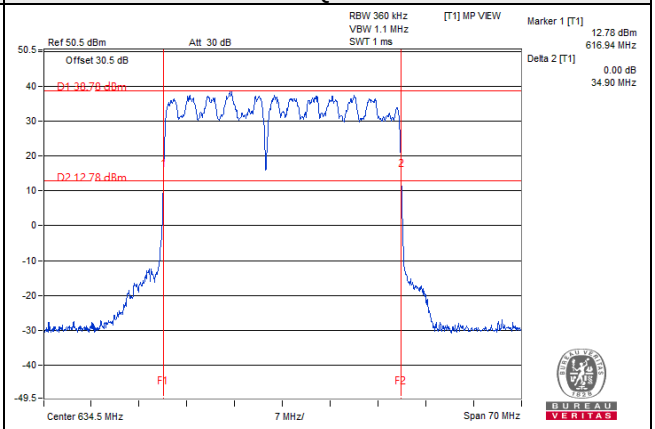
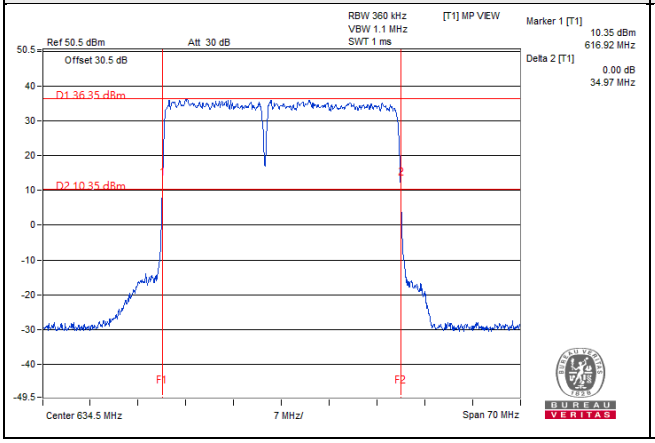
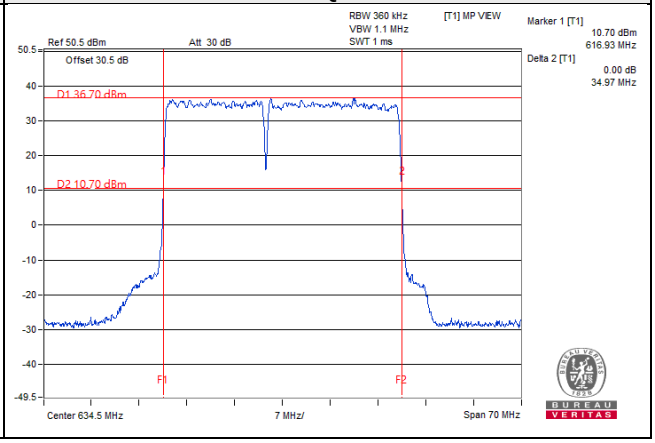
Band n29_5MHz+5MHz
ANT0

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

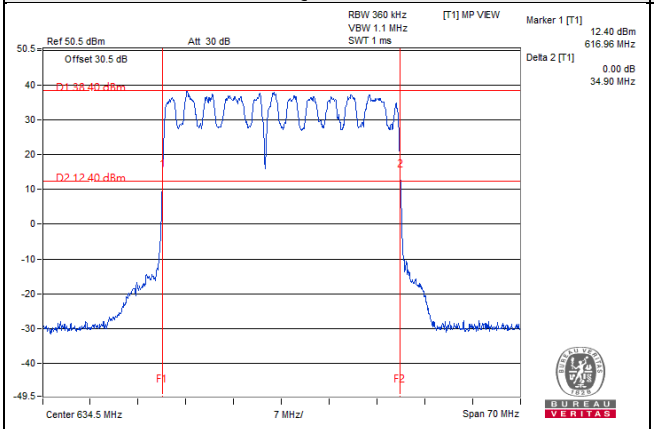
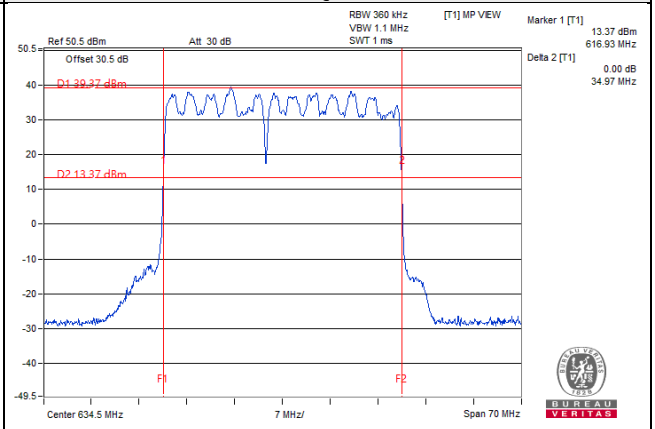
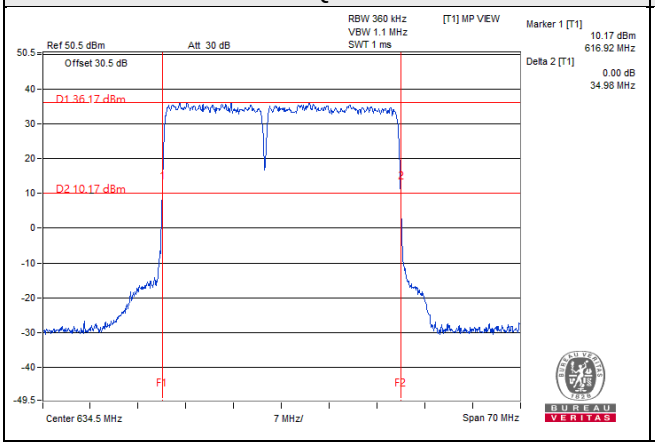
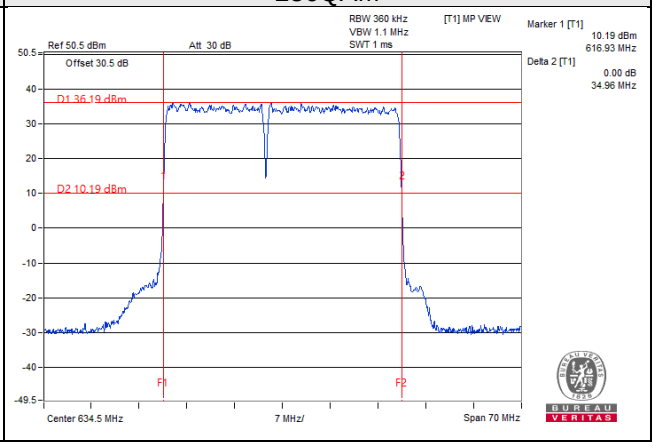
ANT1

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

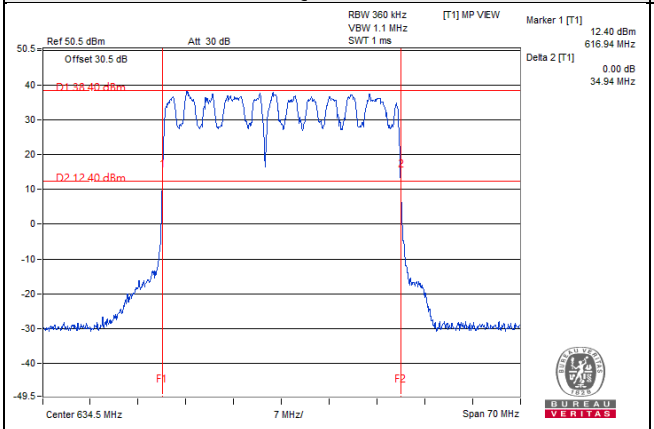
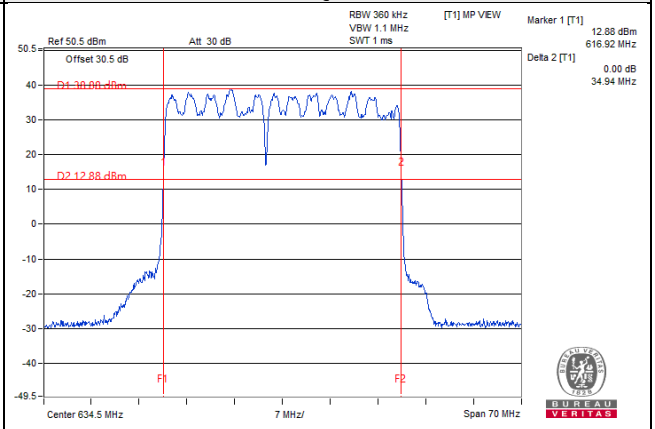
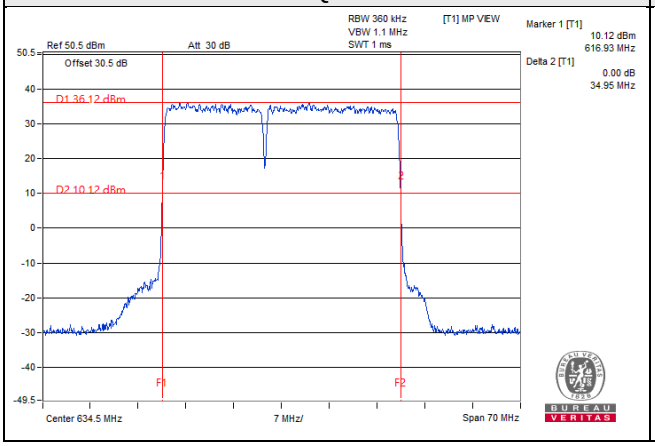
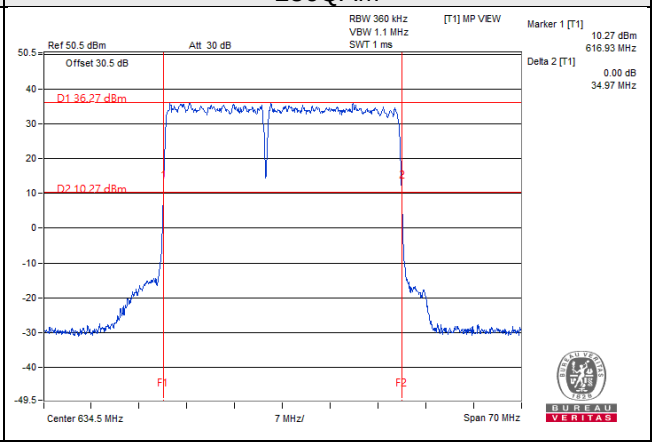
Band n71_15MHz+20MHz
ANT0

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

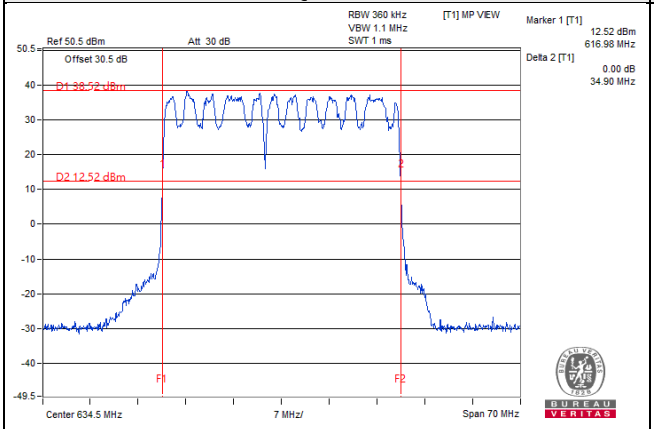
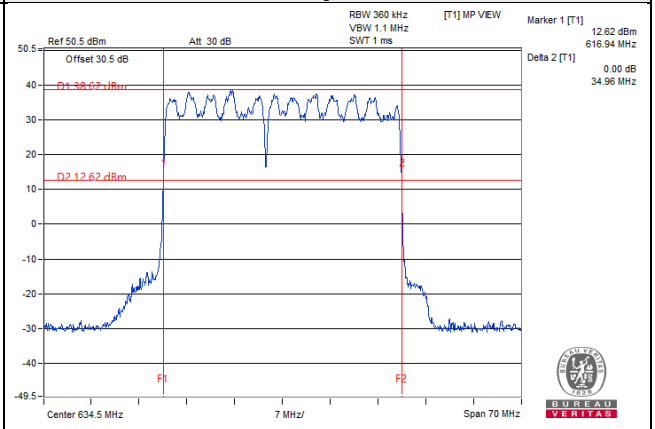
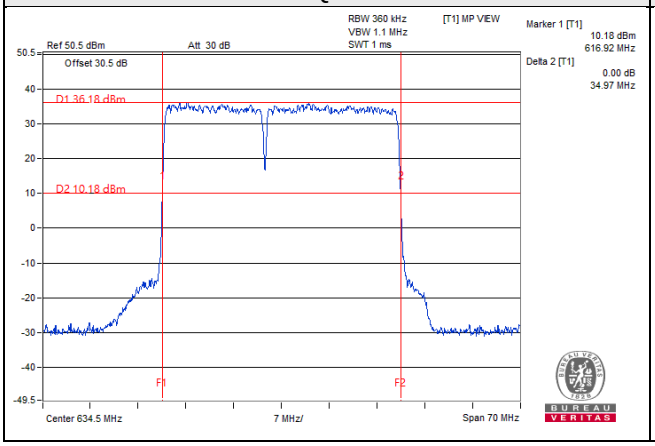
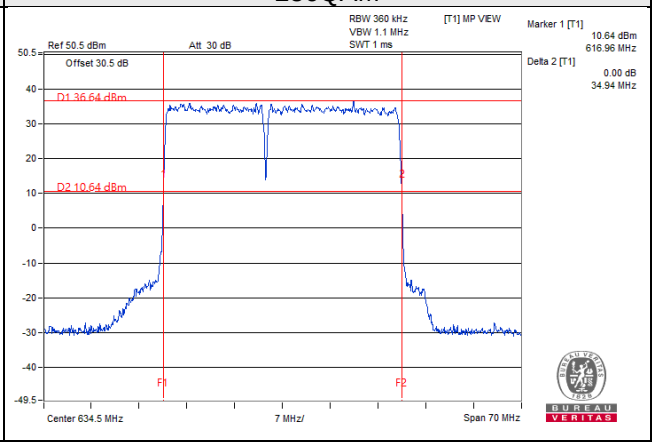
ANT1

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

ANT2

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

4.3.5 Test Result (Occupied Bandwidth)

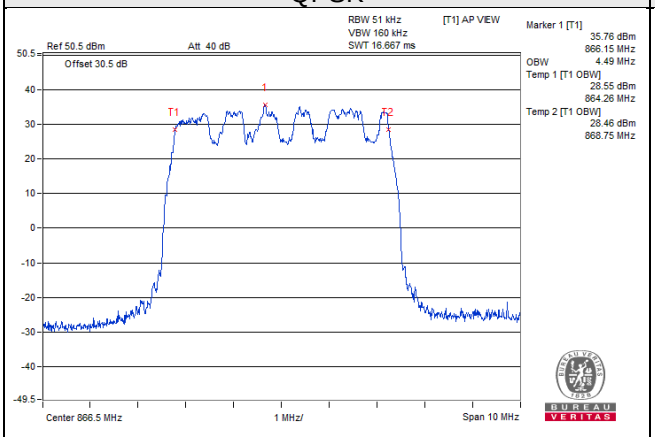
Band n26_5MHz & n29_10MHz & n71_20MHz

Channel Number	Freq. (MHz)	OCP 99 BAND WIDTH (MHz)															
		Ant 0				Ant 1				Ant 2				Ant 3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
173300	866.5	NA	NA	NA	NA	NA	NA	NA	NA	4.49	4.49	4.48	4.47	4.49	4.50	4.48	4.47
144600	723	9.12	9.22	9.30	9.30	9.14	9.24	9.30	9.30	NA	NA	NA	NA	NA	NA	NA	NA
125400	627	18.96	18.96	18.92	18.92	18.96	19.00	18.92	18.96	18.96	19.00	18.92	18.92	18.96	18.96	18.92	18.92
Total		28.08	28.18	28.22	28.22	28.10	28.24	28.22	28.26	23.45	23.49	23.40	23.39	23.45	23.46	23.40	23.39

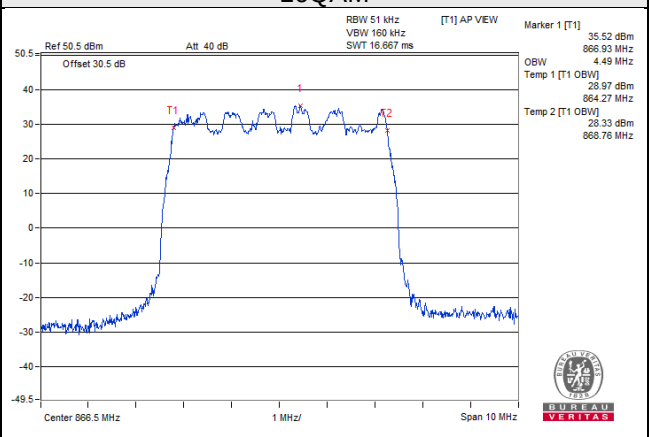
Band n26_5MHz
ANT2

Spectrum Plot of Worst Value

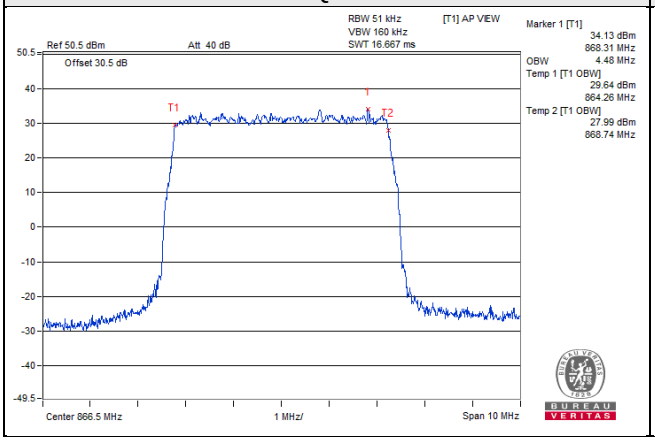
QPSK



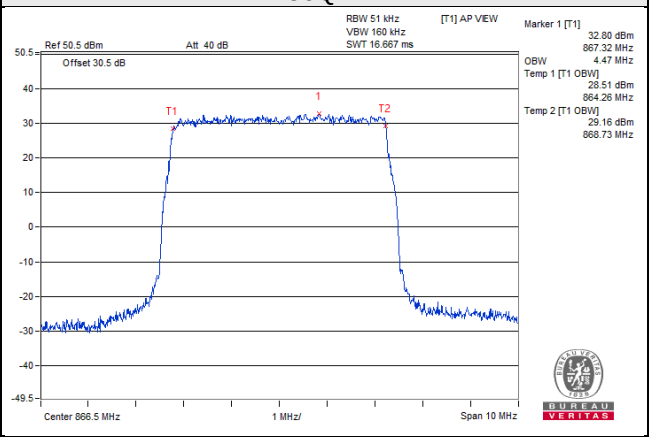
16QAM



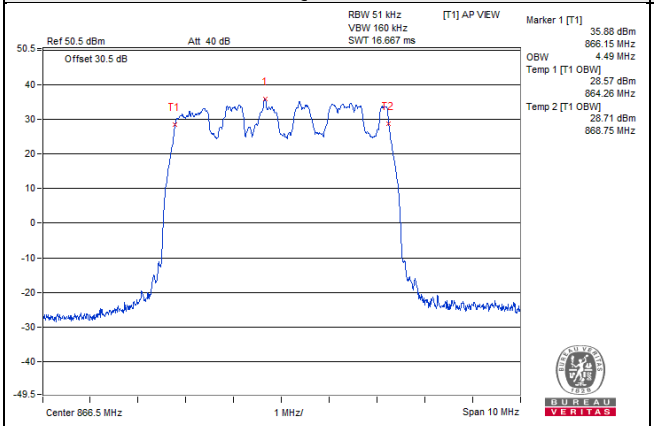
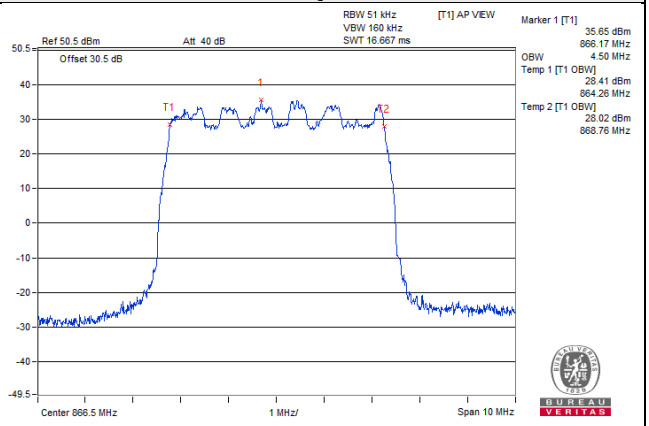
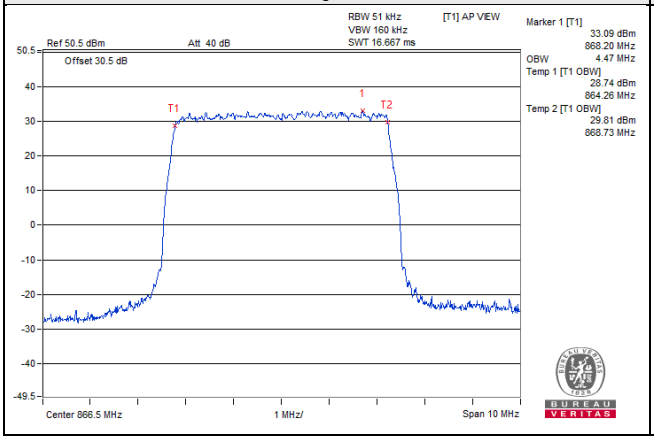
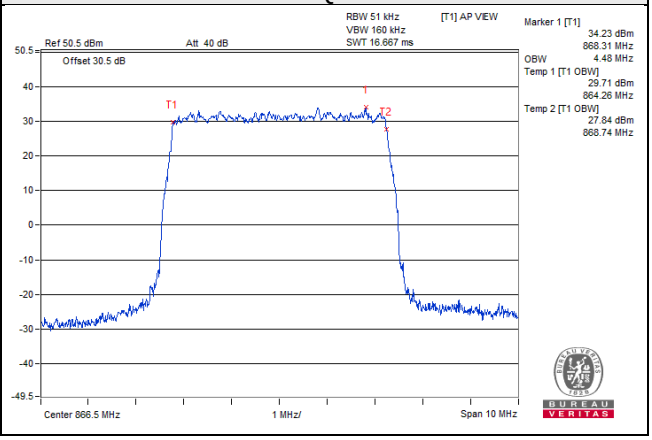
64QAM



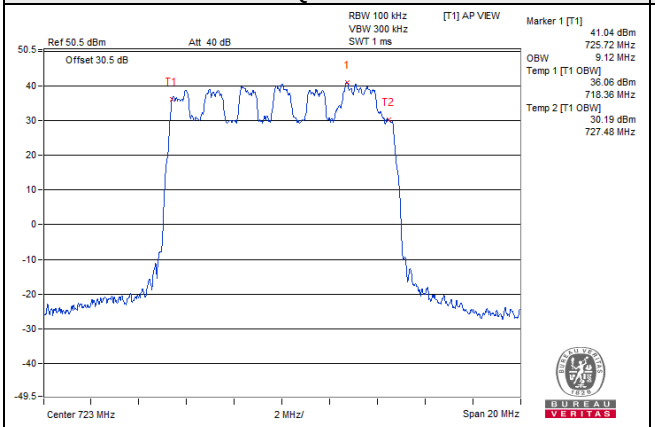
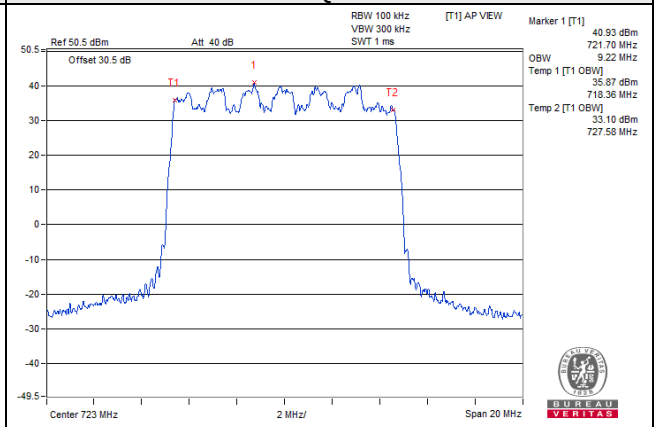
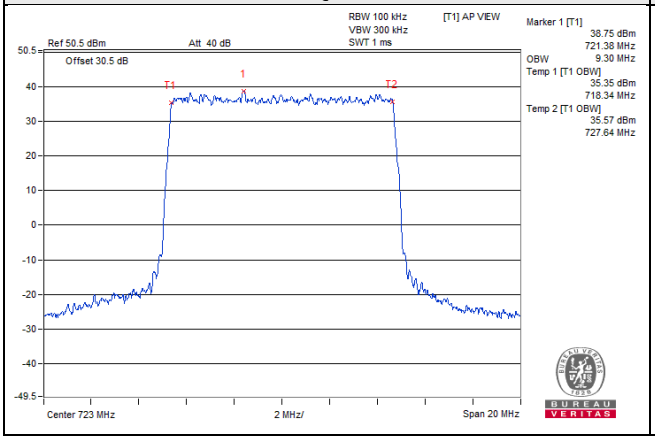
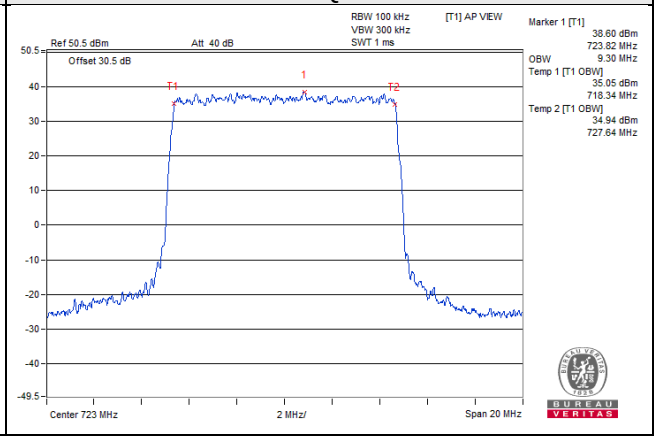
256QAM



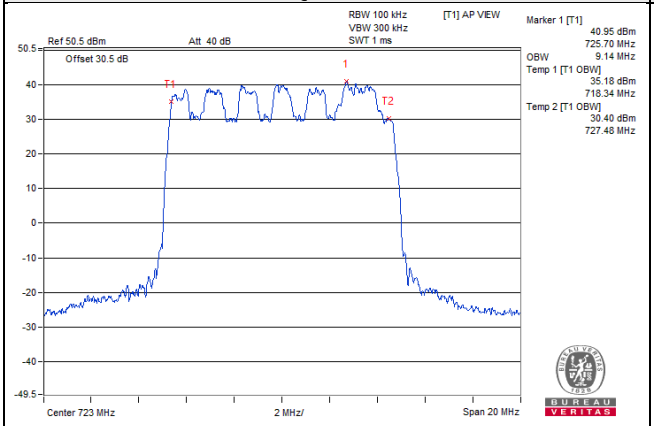
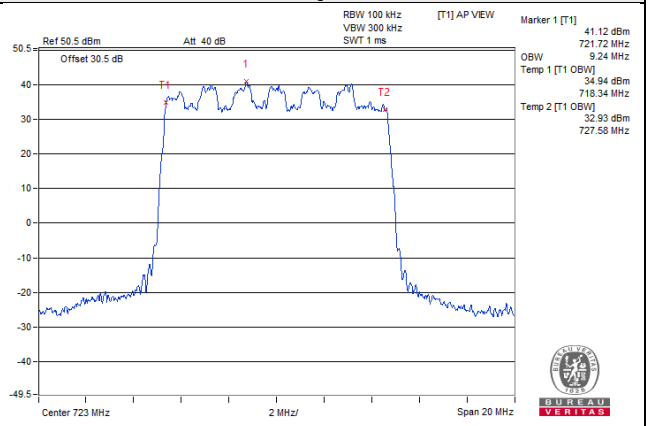
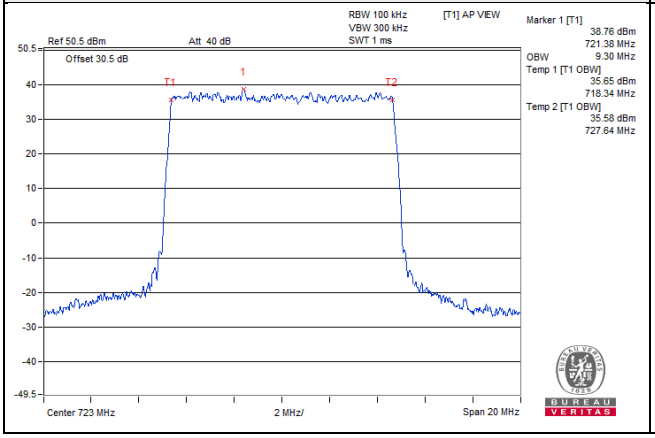
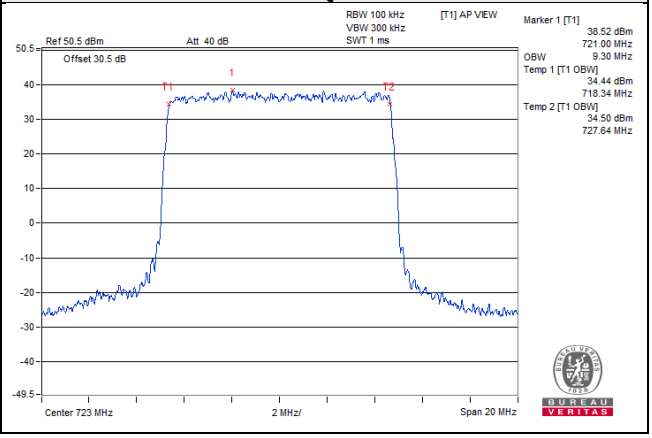
ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

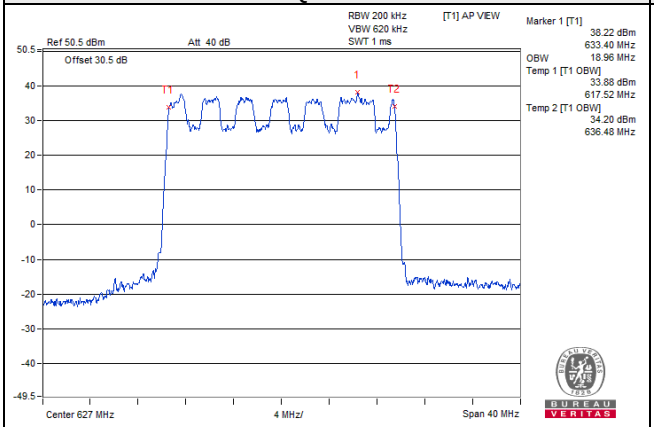
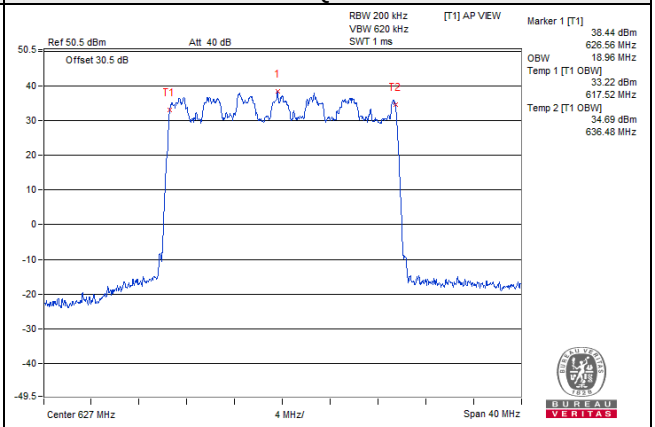
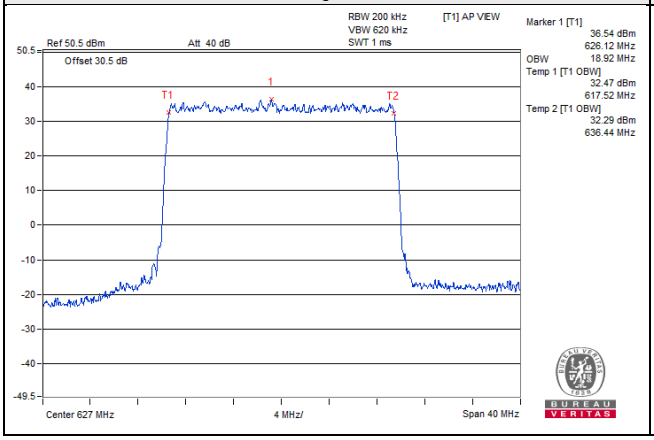
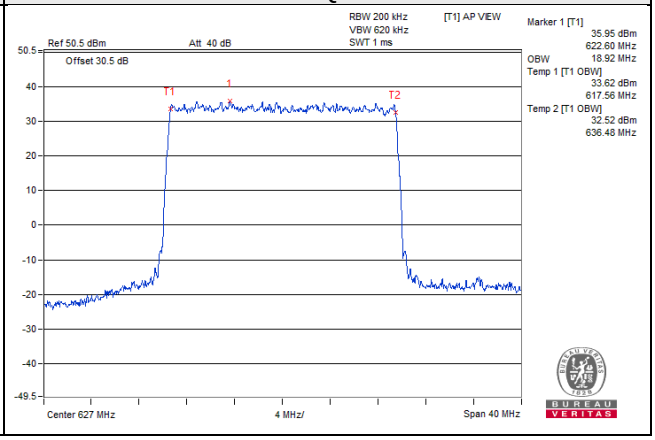
Band n29_10MHz
ANT0

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

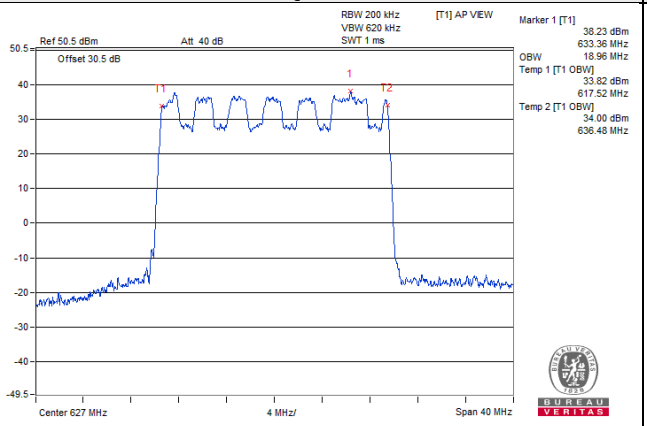
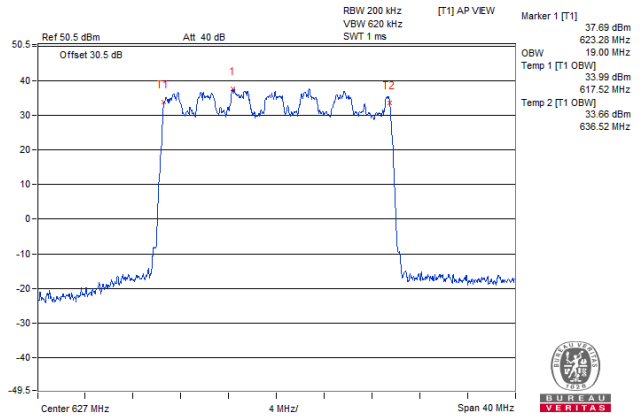
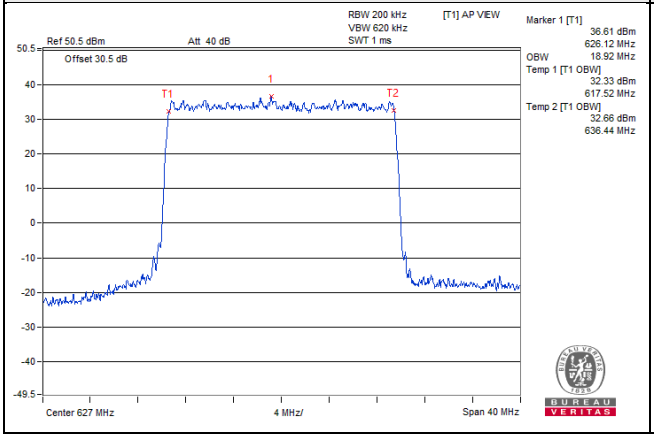
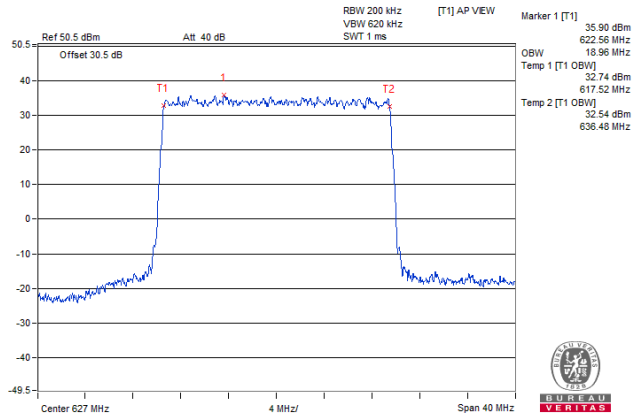
ANT1

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

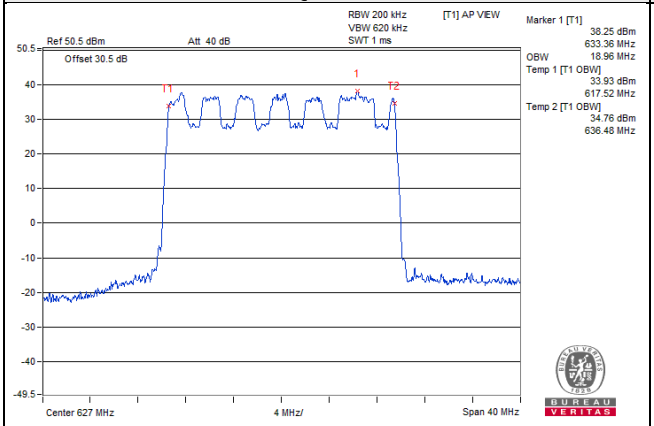
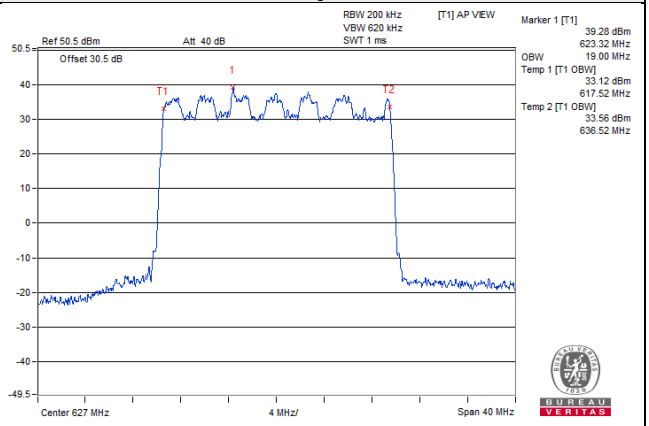
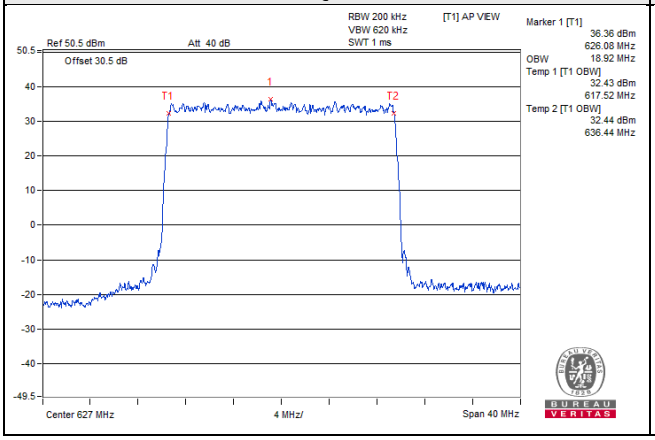
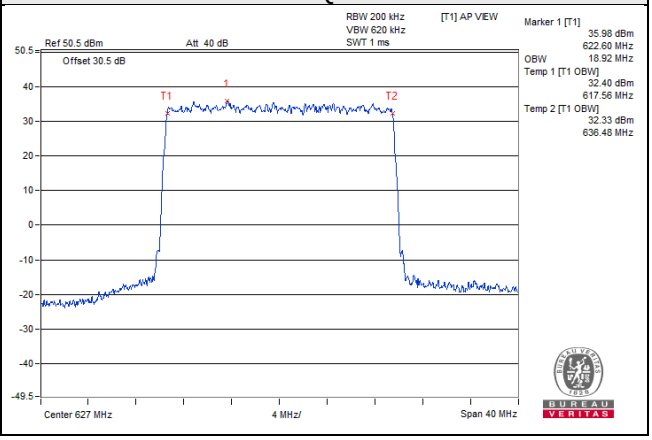
Band n71_20MHz
ANT0

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

ANT1

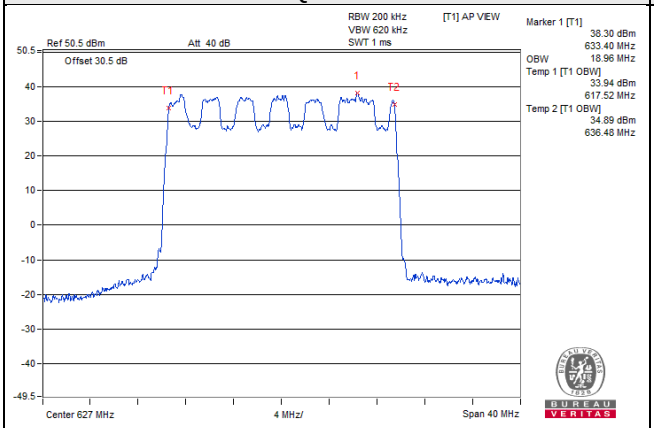
Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

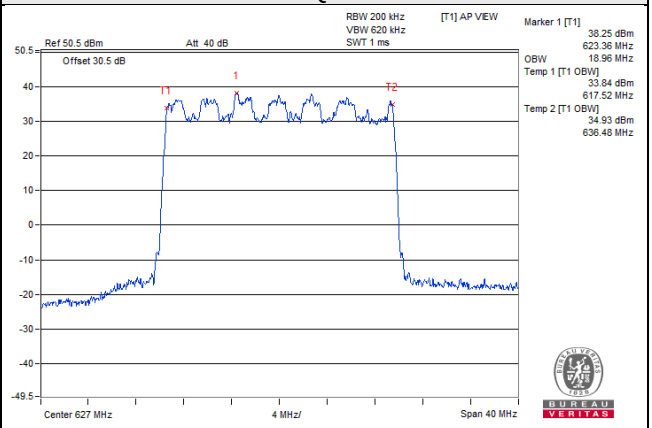
ANT2

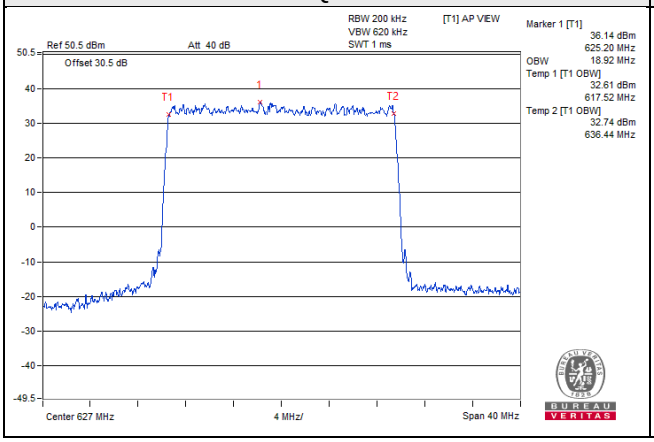
Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

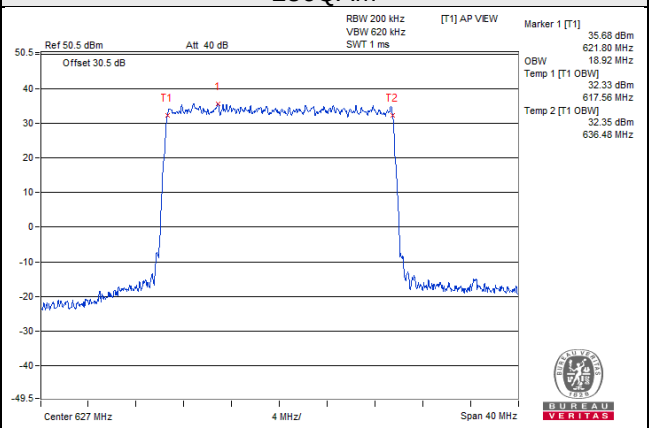
ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
64QAM	256QAM









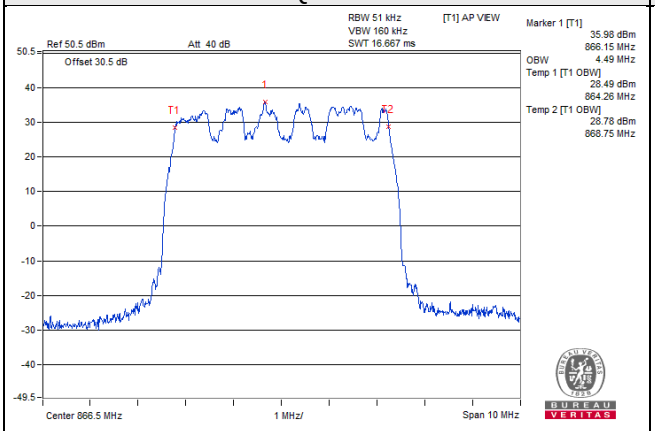
Band n26_5MHz & n29_5MHz+5MHz & n71_15MHz+20MHz

Channel Number	Freq. (MHz)	OCP 99 BAND WIDTH (MHz)															
		Ant 0				Ant 1				Ant 2				Ant 3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
173300	866.5	NA	NA	NA	NA	NA	NA	NA	NA	4.49	4.49	4.48	4.47	4.49	4.50	4.48	4.47
144100 + 145100	720.5 + 725.5	9.46	9.46	9.46	9.40	9.46	9.46	9.44	9.42	NA	NA	NA	NA	NA	NA	NA	NA
124900 + 128400	624.5 + 642	33.95	33.95	33.81	33.88	33.95	33.95	33.81	33.88	33.95	33.95	33.74	33.81	33.95	33.95	33.74	33.88
Total		43.41	43.41	43.27	43.28	43.41	43.41	43.25	43.30	38.44	38.44	38.22	38.28	38.44	38.44	38.22	38.35

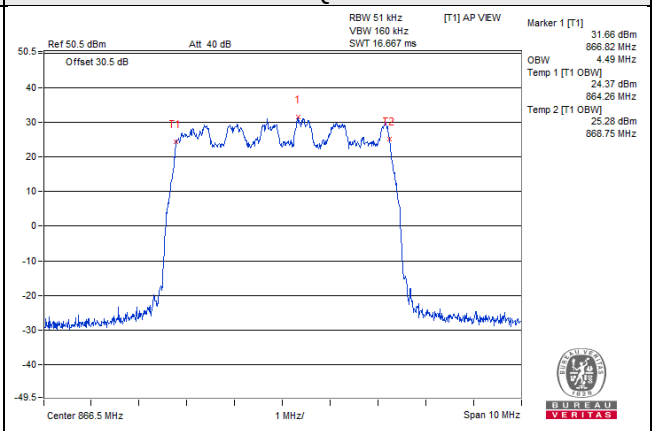
Band n26_5MHz
ANT2

Spectrum Plot of Worst Value

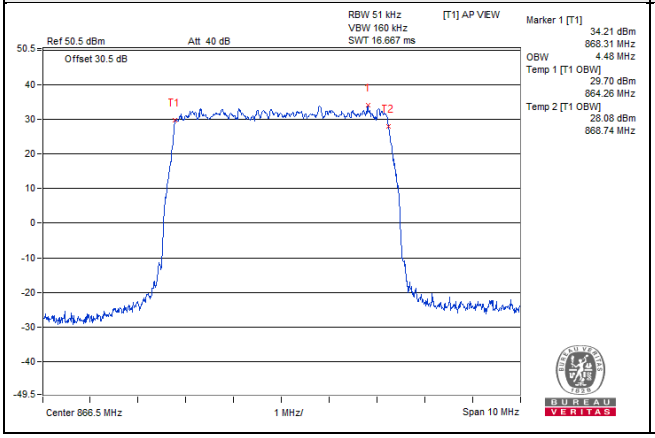
QPSK



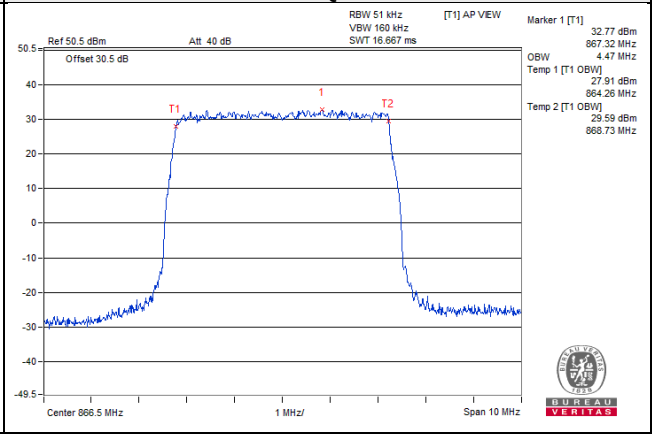
16QAM



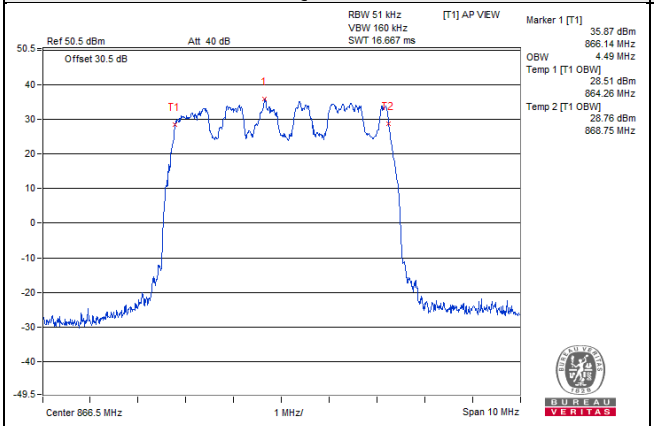
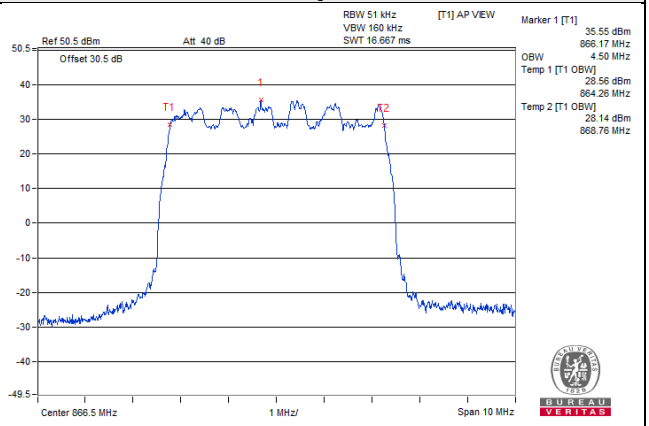
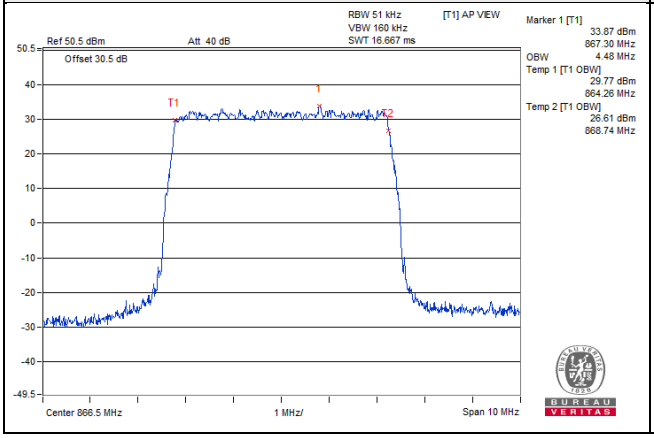
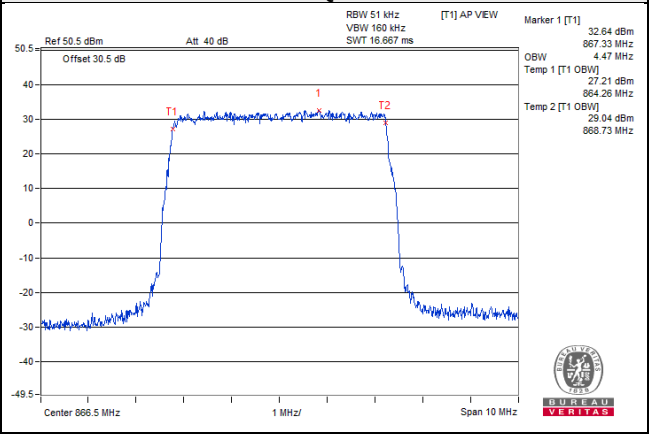
64QAM



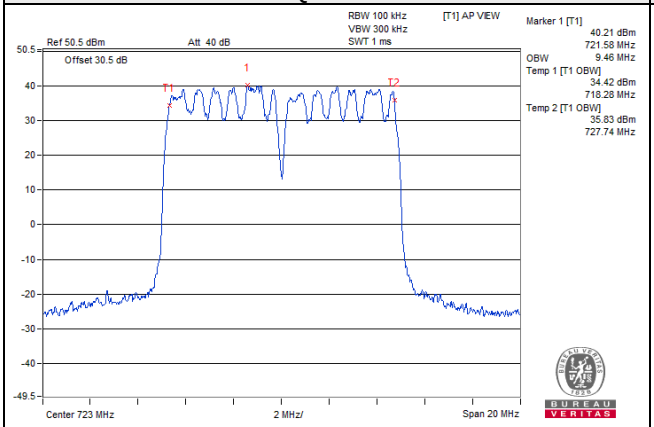
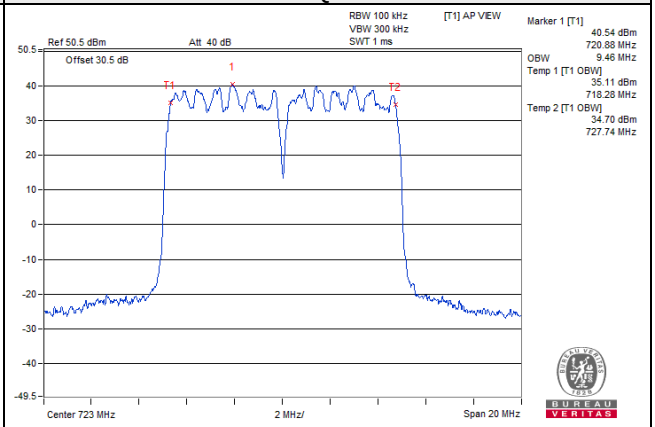
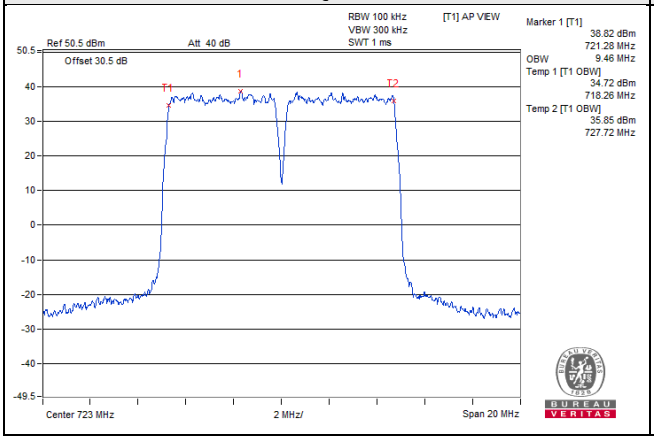
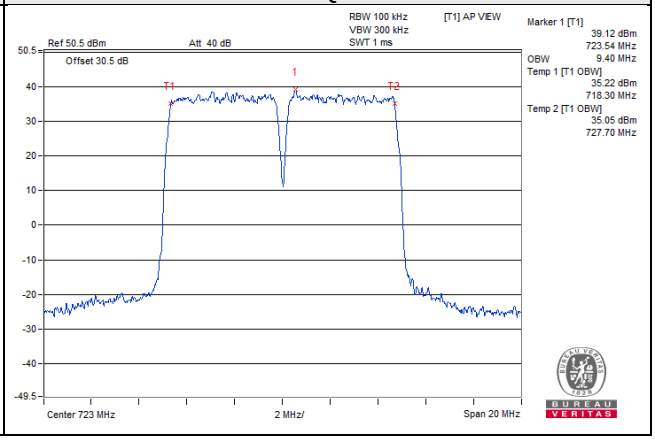
256QAM



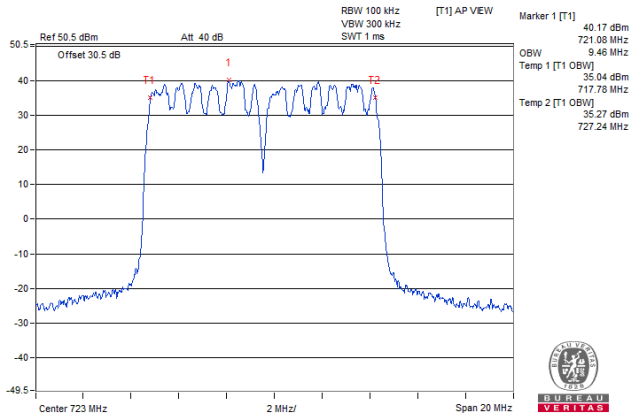
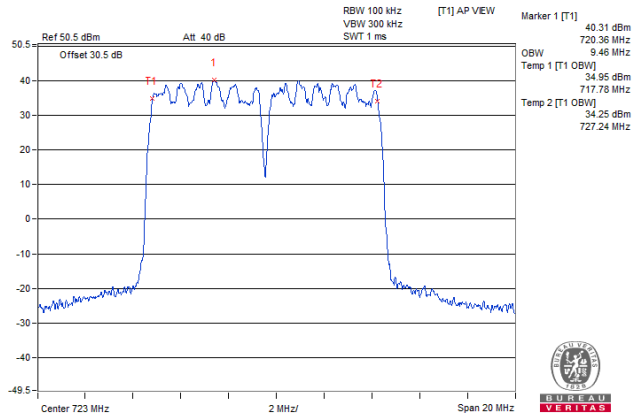
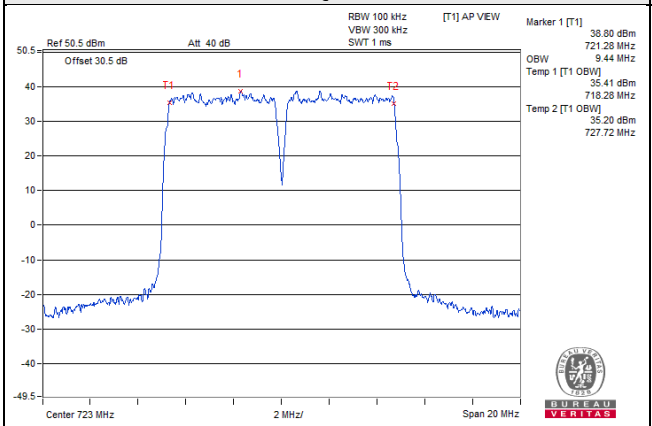
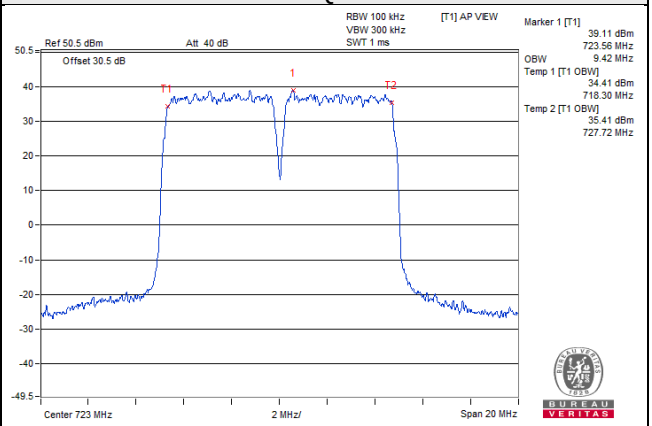
ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

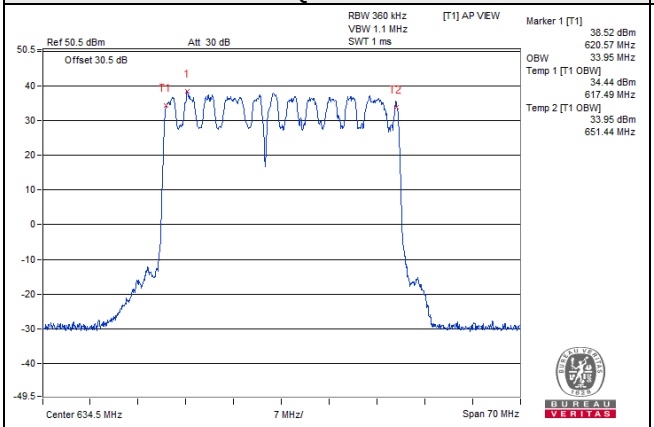
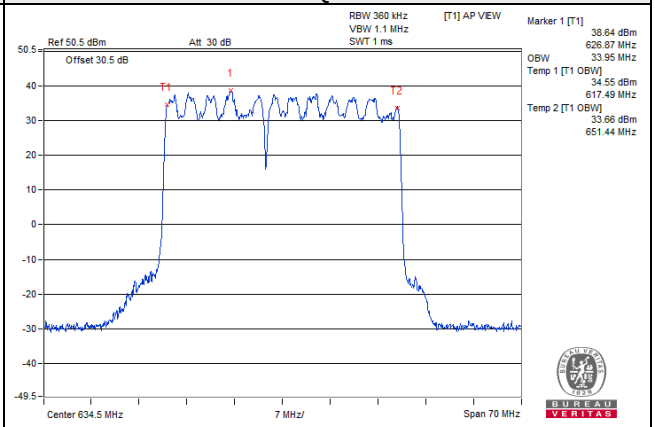
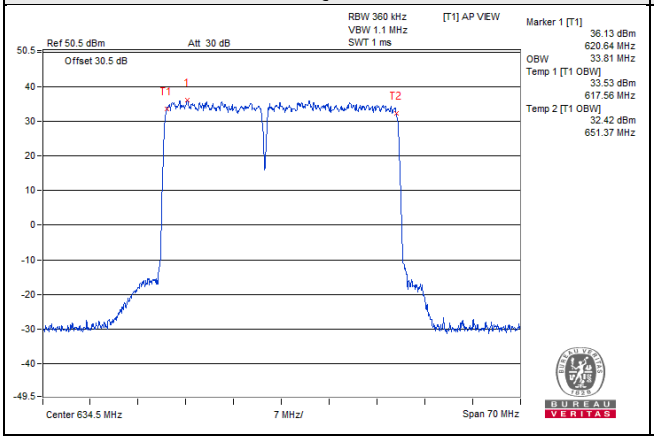
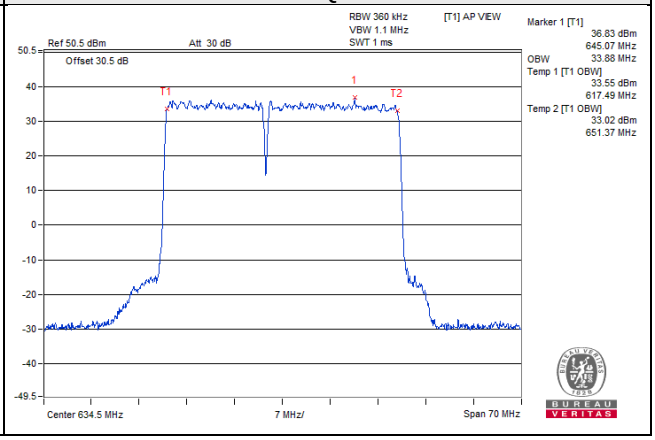
Band n29_5MHz+5MHz
ANT0

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

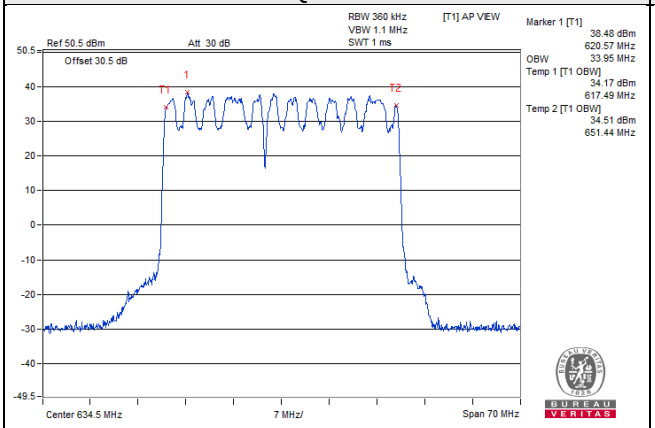
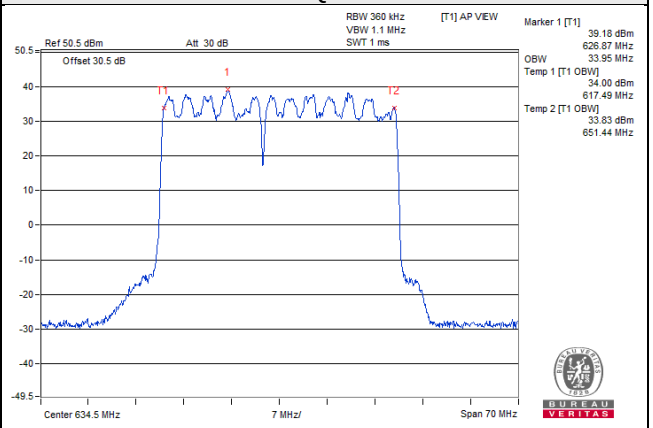
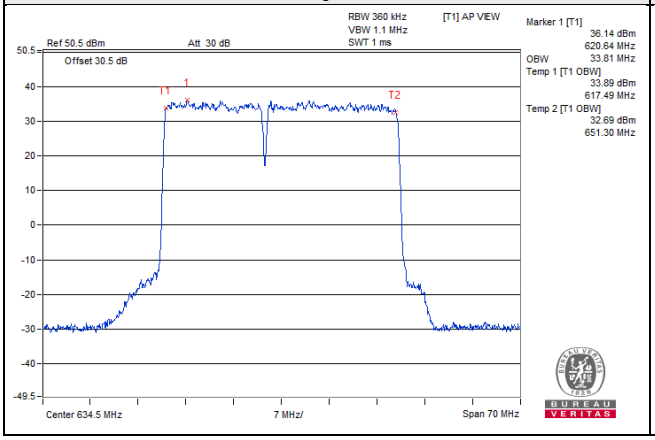
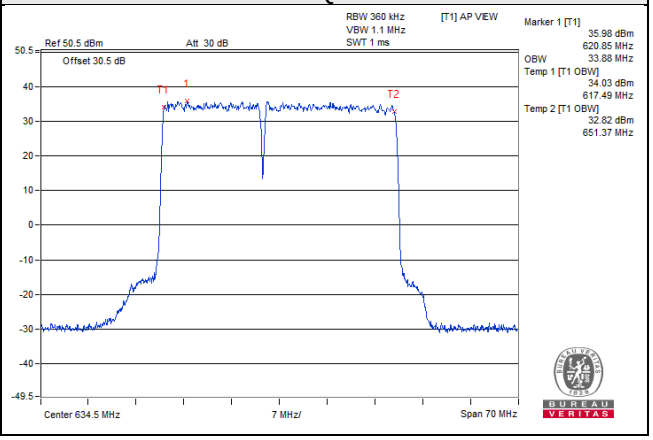
ANT1

Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

Band n71_15MHz+20MHz
ANT0

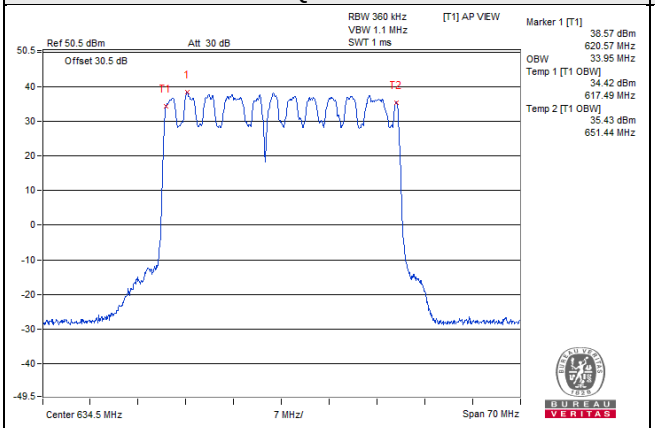
Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

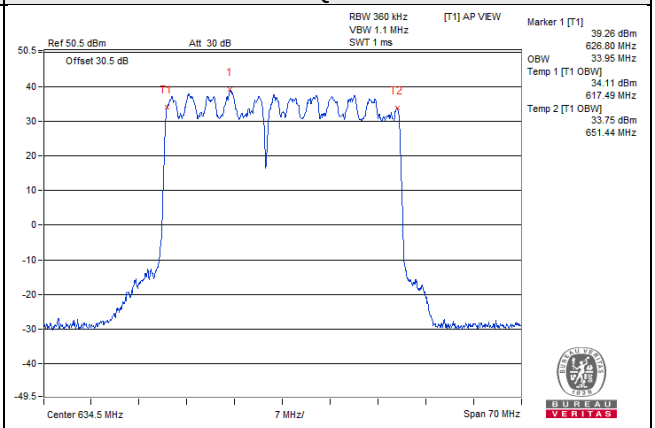
ANT1

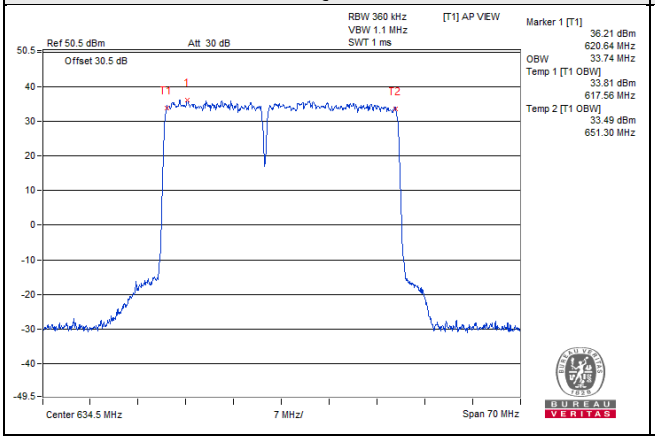
Spectrum Plot of Worst Value	
QPSK	16QAM
	
64QAM	256QAM
	

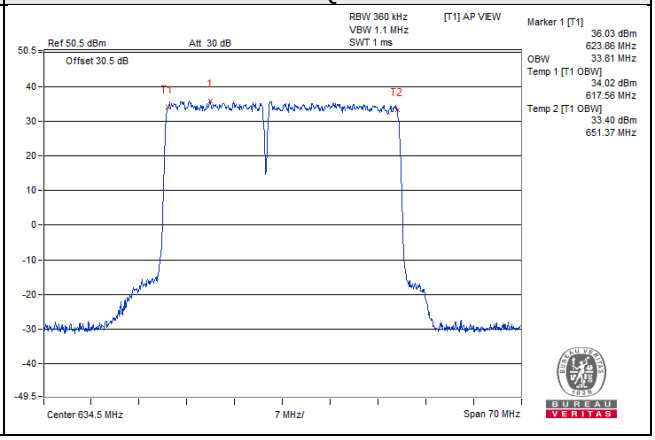
ANT2

Spectrum Plot of Worst Value	
QPSK	16QAM
64QAM	256QAM



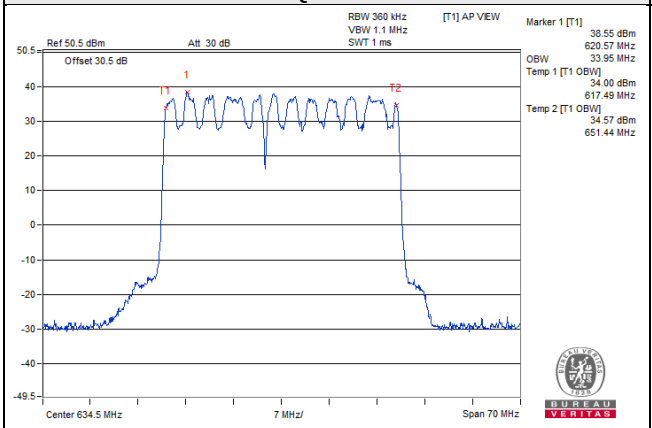


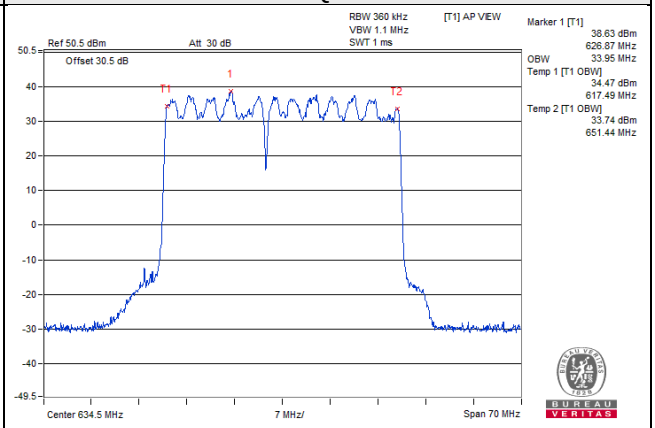


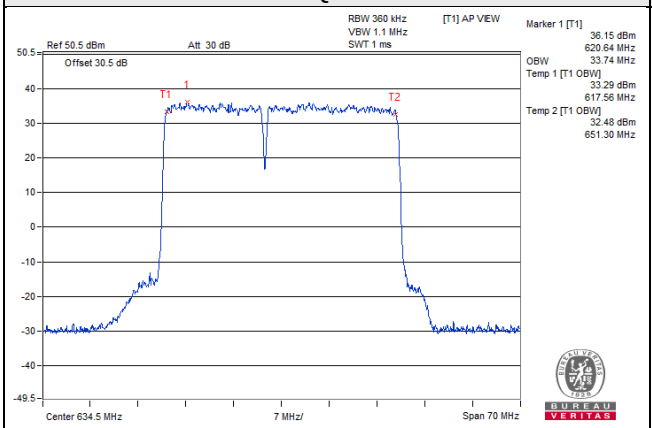


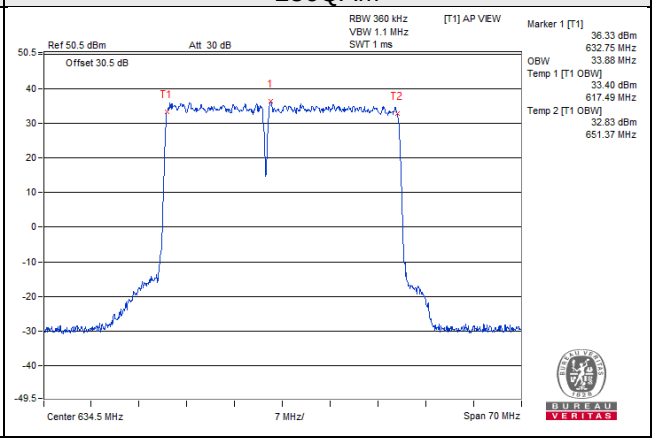
ANT3

Spectrum Plot of Worst Value	
QPSK	16QAM
64QAM	256QAM









5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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