



Registration
No.788871

TEST REPORT FOR RF TESTING

Report No.: SRTC2018-9004(F)-18062601(C)

Product Name: Mobile Phone

Product Model: Hisense F15

Applicant: Hisense International Co., Ltd.

Manufacturer: Hisense Communications Co., Ltd.

Specification: FCC CFR47 PART 2, 22H, 24E, 27L

FCC ID: 2ADOBF15

The State Radio_monitoring_center Testing Center (SRTC)

15th Building, No.30, Shixing Street, Shijingshan District,

Beijing, P.R.China

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1. GENERAL INFORMATION

1.1 Notes of the test report

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The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company:	The State Radio_monitoring_center Testing Center (SRTC)
Address:	15th Building, No.30 Shixing Street, Shijingshan District, P.R.China
City:	Beijing
Country or Region:	P.R.China
Contacted person:	liujia
Tel:	+86 10 5799 6183
Fax:	+86 10 5799 6388
Email:	liujiaf@srtc.org.cn

1.3 Applicant's details

Company:	Hisense International Co., Ltd.
Address:	Floor 22, Hisense Tower, 17 Donghai Xi Road, Qingdao, 266071, China
City:	Qingdao
Country or Region:	China
Contacted person:	Geng Ruifeng
Tel:	+86-532-80877742
Fax:	---
Email:	gengruifeng@hisense.com

1.4 Manufacturer's details

Company:	Hisense Communications Co., Ltd.
Address:	218 Qianwangang Road, Qingdao Economic & Technological Development Zone, Qingdao, China
City:	Qingdao
Country or Region:	China
Contacted person:	Dai Qingtao
Tel:	+86-532-55753749
Fax:	---
Email:	daiqingtao@hisense.com



1.5 Test Environment

Date of Receipt of test sample at SRTC:	2018-06-26
Testing Start Date:	2018-06-26
Testing End Date:	2018-08-16

Environmental Data:	Temperature (°C)	Humidity (%)
Ambient	25	30
Maximum Extreme	55	---
Minimum Extreme	-20	---

Normal Supply Voltage (V d.c.):	3.80
Maximum Extreme Supply Voltage (V d.c.):	4.35
Minimum Extreme Supply Voltage (V d.c.):	3.40



2 DESCRIPTION OF THE EQUIPMENT UNDER TEST

2.1 Final Equipment Build Status

Frequency Range	LTE Band 2: Tx:1850~1910MHz Rx:1930~1990MHz LTE Band 4: Tx:1710~1755MHz Rx:2110~2155MHz LTE Band 5: Tx:824~849 MHz Rx:869 ~894MHz LTE Band 7: Tx:2500~2570MHz Rx:2620~2690MHz LTE Band 12: Tx:699~716 MHz Rx:729~746 MHz
Modulation Type	QPSK 16QAM
Duplex Mode	FDD/TDD
Antenna Type	Fixed Internal
Power Supply	Battery or Charger
HW Version	YK737_V0.2
SW Version	Hisense_F15_4G_10
IMEI	861854039418502

2.2 Summary table.

FCC Rule Part	Frequency Range(MHz)	EIRP/ERP(W)	Frequency Tolerance (ppm)	Emission Designator	Emission Bandwidth (MHz)	Measured 26dBC Bandwidth (MHz)	Communication Type
LTE BAND2							
24E	1850.7-1909.3	0.132	-0.009	1M11G7D	1.4M	1.301	QPSK
	1850.7-1909.3	0.105	-0.009	1M10D7W	1.4M	1.319	16QAM
	1851.5-1908.5	0.132	-0.009	2M74G7D	3M	2.996	QPSK
	1851.5-1908.5	0.107	-0.009	2M74D7W	3M	2.996	16QAM
	1852.5-1907.5	0.129	-0.006	4M54G7D	5M	4.988	QPSK
	1852.5-1907.5	0.105	-0.006	4M56D7W	5M	4.988	16QAM
	1855-1905	0.132	-0.006	9M1G7D	10M	4.903	QPSK
	1855-1905	0.110	-0.006	9M1D7W	10M	4.903	16QAM
	1857.5-1902.5	0.129	-0.006	13M6G7D	15M	14.978	QPSK
	1857.5-1902.5	0.112	-0.006	13M5D7W	15M	14.978	16QAM
	1860-1900	0.132	-0.008	18M0G7D	20M	19.537	QPSK
	1860-1900	0.112	-0.008	18M1D7W	20M	19.711	16QAM
LTE BAND4							
27L	1710.7-1754.3	0.132	-0.006	1M11G7D	1.4M	1.313	QPSK
	1710.7-1754.3	0.107	-0.006	1M10D7W	1.4M	1.313	16QAM
	1711.5-1753.5	0.126	-0.007	2M72G7D	3M	2.996	QPSK
	1711.5-1753.5	0.115	-0.007	2M74D7W	3M	2.996	16QAM
	1712.5-1752.5	0.126	-0.005	4M56G7D	5M	4.991	QPSK
	1712.5-1752.5	0.098	-0.005	4M54D7W	5M	4.991	16QAM
	1715-1750	0.126	-0.005	9M1G7D	10M	9.993	QPSK
	1715-1750	0.120	-0.005	9M1D7W	10M	9.993	16QAM
	1717.5-1747.5	0.123	-0.005	13M5G7D	15M	14.993	QPSK
	1717.5-1747.5	0.115	-0.005	13M6D7W	15M	14.993	16QAM
	1720-1745	0.135	-0.005	18M0G7D	20M	19.711	QPSK
	1720-1745	0.112	-0.005	18M0D7W	20M	19.624	16QAM
LTE BAND5							
22H	824.7-848.3	0.120	-0.014	1M11G7D	1.4M	1.319	QPSK
	824.7-848.3	0.095	-0.014	1M10D7W	1.4M	1.307	16QAM
	825.5-847.5	0.102	-0.011	2M74G7D	3M	2.996	QPSK
	825.5-847.5	0.085	-0.011	2M74D7W	3M	2.996	16QAM
	826.5-846.5	0.098	-0.011	4M56G7D	5M	4.996	QPSK
	826.5-846.5	0.078	-0.011	4M56D7W	5M	4.996	16QAM
	829-844	0.129	-0.013	9M2G7D	10M	9.993	QPSK
	829-844	0.107	-0.013	9M1D7W	10M	9.993	16QAM



LTE BAND7							
27M	2502.5-2567.5	0.087	-0.004	4M54G7D	5M	4.988	QPSK
	2502.5-2567.5	0.072	-0.004	4M54D7W	5M	4.988	16QAM
	2505-2565	0.091	-0.003	9M1G7D	10M	9.933	QPSK
	2505-2565	0.081	-0.003	9M1D7W	10M	9.933	16QAM
	2507.5-2562.5	0.091	-0.004	13M5G7D	15M	14.974	QPSK
	2507.5-2562.5	0.079	-0.004	13M5D7W	15M	14.974	16QAM
	2510-2560	0.098	-0.004	18M0G7D	20M	19.624	QPSK
	2510-2560	0.076	-0.004	18M0D7W	20M	19.624	16QAM
LTE BAND12							
27H	699.7-715.3	0.071	-0.014	1M10G7D	1.4M	1.301	QPSK
	699.7-715.3	0.054	-0.014	1M10D7W	1.4M	1.307	16QAM
	700.5-714.5	0.063	-0.015	2M74G7D	3M	2.996	QPSK
	700.5-714.5	0.054	-0.015	2M74D7W	3M	2.996	16QAM
	701.5-713.5	0.062	-0.014	4M54G7D	5M	4.993	QPSK
	701.5-713.5	0.048	-0.014	4M56D7W	5M	4.993	16QAM
	704-711	0.076	-0.015	9M1G7D	10M	9.920	QPSK
	704-711	0.065	-0.015	9M1D7W	10M	9.920	16QAM

2.3 Support Equipment

The following support equipment was used to exercise the DUT during testing:

Equipment	Charger
Manufacturer	Shenzhen Tianyin Electronics Co.,Ltd
Model Number	TPA-97050100UU
Serial Number	---

Equipment	Battery
Manufacturer	Guangdong Teamgiant New Energy Tech Co.,LTD
Model Number	LIW38210A
Serial Number	---

The products are different on the supplier of LCD/TP/Camera/Flash. There is no change in the RF module and antenna.

Main Supply

Part Name	Model Name	supplier
LCD	ST7701S	JIANGXI HOLITECH TECHNOLOGY CO., LTD
TP	FT6336U	Guizhou Yuye Opto-Electronic Co., Ltd
Camera	GC5025/GC8034	Shenzhen Chengxiangtong technology CO.,LTD
Flash	KMFN60012M-B214	SAMSUNG

Secondary Supply

Part Name	Model Name	supplier
LCD	ST7701S-G5	Shenzhen Digital Technology Co., LTD
TP	FT6336U	JIANGXI HOLITECH TECHNOLOGY CO., LTD
Camera	GC5025/GC8034	Shenzhen Union Image Co.,Ltd
Flash	08EMCP08-EL3DT227	KINGSTON



3 REFERENCE SPECIFICATION

The tests documented in this report were performed in accordance with ANSI C63.26:2015, FCC CFR 47 Part 2, FCC KDB 971168 D01 v02r02, KDB 971168 D02 v01, Part 22, Part 24, Part 27.

Specification	Version	Title
ANSI C63.26:2015	11 December 2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
FCC CFR 47 Part 2	2018	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS
FCC CFR 47 Part 22	2018	PUBLIC MOBILE SERVICES
FCC CFR 47 Part 24	2018	PERSONAL COMMUNICATIONS SERVICES
FCC CFR 47 Part 27	2018	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES
KDB 971168 D01	v03r01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS
KDB 971168 D02	v02r01	MISCELLANEOUS AND BASIC REVIEW AND APPROVAL ITEMS FOR TRANSMITTING EQUIPMENT USED IN LICENSED RADIO SERVICES
ANSI C63.26	2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
KDB 971168 D01	April 9, 2018	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS



4 KEY TO NOTES AND RESULT CODES

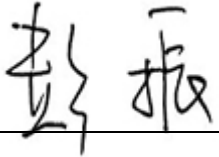
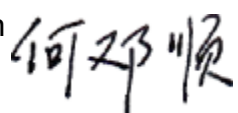
The following are the definition of the test result.

Code	Meaning
PASS	Test result shows that the requirements of the relevant specification have been met.
FAIL	Test result shows that the requirements of the relevant specification have not been met.
N/T	Test case is not tested.
NTNV	Nominal voltage, Normal Temperature
HV	High voltage, Normal Temperature
LV	Low voltage, Normal Temperature
HTHV	high voltage, High Temperature
LTHV	High voltage, Low Temperature
HTLV	Low voltage, High Temperature
LTLV	Low voltage, Low Temperature

5 RESULT SUMMARY

The following table summarizes the test results obtained.

No.	Test case	FCC reference	Verdict
1	RF Power Output	2.1046	Pass
2	Effective Radiated Power and Effective Isotropic Radiated Power	22.913, 24.232, 27.50	Pass
3	Occupied Bandwidth	2.1049	Pass
4	Peak-Average Ratio	22.913, 24.232, 27.50	Pass
5	Emission Bandwidth	2.1049	Pass
6	Spurious Emissions at antenna terminals	2.1051, 22.901, 22.917, 24.238, 27.53	Pass
7	Band Edges Compliance	2.1051, 22.359, 22.917, 24.238, 27.53	Pass
8	Frequency Stability	2.1055, 22.355, 24.235, 27.54	Pass
9	Radiated Spurious Emissions	2.1053, 22.917, 24.238, 27.53	Pass

This Test Report Is Issued by: Mr. Peng Zhen 	Checked by: Mr. Li Bin 
Tested by: Mr. He Dengshun 	Issued date: 20180823

6 TEST RESULT

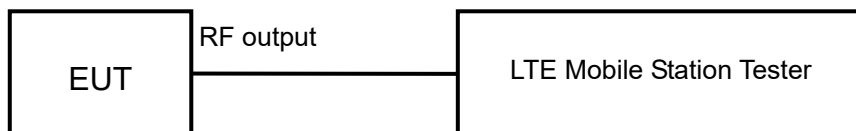
6.1 RF Power Output

Rule Part(s)
FCC: 2.1046

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. Then the test data can be read at the tester screen. The loss between RF output port of the EUT and the input port of the tester will be taken into consideration.

Limits	≤30dBm
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6.2 Effective Radiated Power

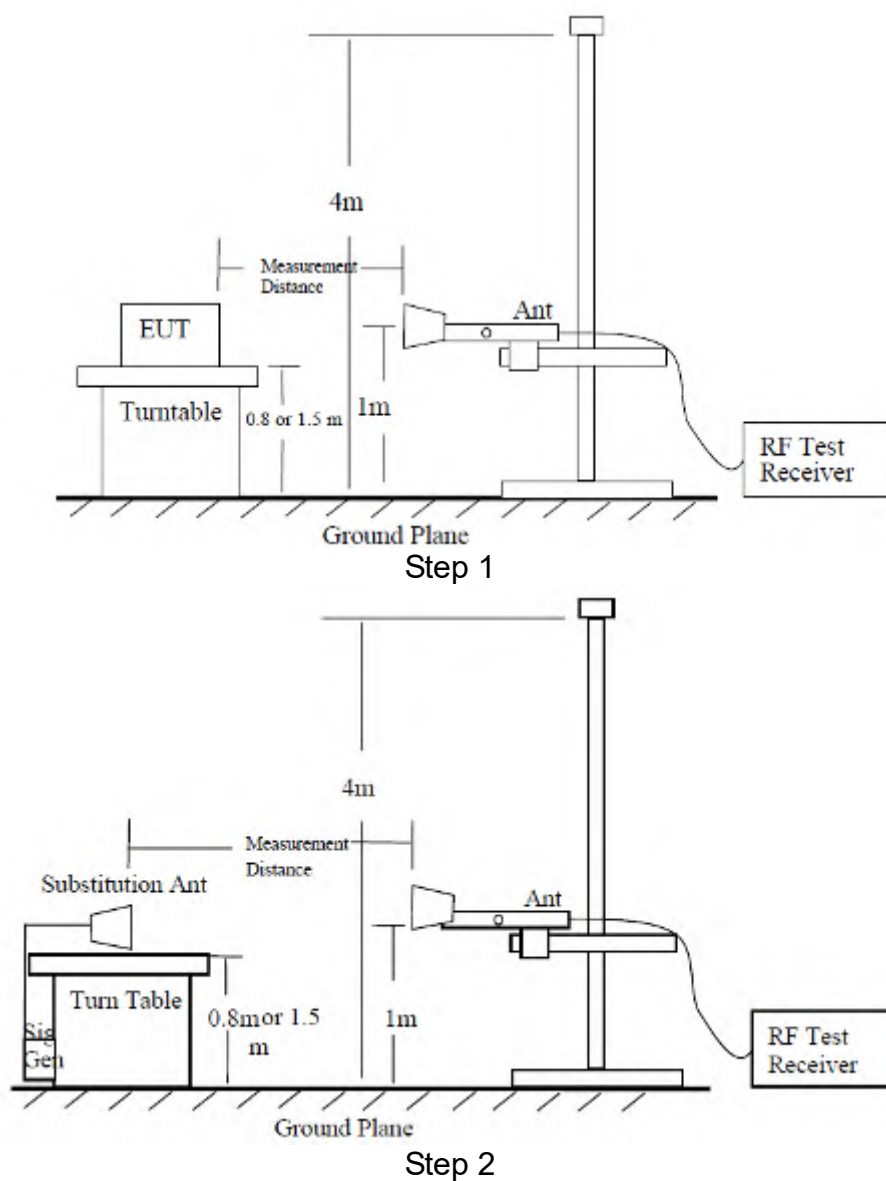
Rule Part(s)

FCC: 22.913, 24.232, 27.50

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	100.9kPa

Test setup:





Test procedure:

The measurements procedures in TIA-603C-2004 are used.

Step 1:

The measurement is carried out in the fully anechoic chamber. EUT was placed on a 2.4 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. The height of receiving antenna is 2.4m and varies in certain range to find the maximum power value. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used and RBW is set to 3MHz. Then the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum power value on spectrum analyzer or receiver. And the maximum value of the receiver should be recorded as (Pr).

Step 2:

A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator. To repeat the same procedure as step1 and the level of signal generator will be adjusted till the same power value on the spectrum analyzer or receiver. The ERP/EIRP of the EUT can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

A power (Pmea) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (Pmea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

A "reference path loss" should be calculated after test. The attenuation of "reference path loss" is the cable loss between the Signal Source with the Substitution Antenna (Pca) and the Substitution Antenna Gain (Ga).

The measurement results are obtained as described below:

Power (EIRP) = Pmea+ Pca+ Ga

ERP/EIRP LIMIT

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15 \text{ (dB)}$.

22.913(a) - The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7Watts.

24.232(c) - Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50 (c) (10) the following power and antenna height requirements apply to stations transmitting in the 698–746 MHz band, the portable stations (hand-held devices) are limited to 3 watts ERP.

27.50 (b)(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 758–763 MHz, 776–793 MHz, and 805–806 MHz bands are limited to 3 watts ERP.



27.50 (d)(4) The following power and antenna height requirements apply to stations transmitting in the 1710–1755 MHz and 2110–2155 MHz bands: Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP

27.50 (h) The following power limits shall apply in the BRS and EBS: (2) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

Antenna height (ATT) meters (feet)	Effective radiated power (watts) ^{1 2 4}
Above 1,372 (4,500)	65
Above 1,220 (4,000) to 1,372 (4,500)	70
Above 1,067 (3,500) to 1,220 (4,000)	75
Above 915 (3,000) to 1,067 (3,500)	100
Above 763 (2,500) to 915 (3,000)	140
Above 610 (2,000) to 763 (2,500)	200
Above 458 (1,500) to 610 (2,000)	350
Above 305 (1,000) to 458 (1,500)	600
Up to 305 (1,000)	³ 1,000

1Power is given in terms of effective radiated power (ERP).

2Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.

3Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).

4Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

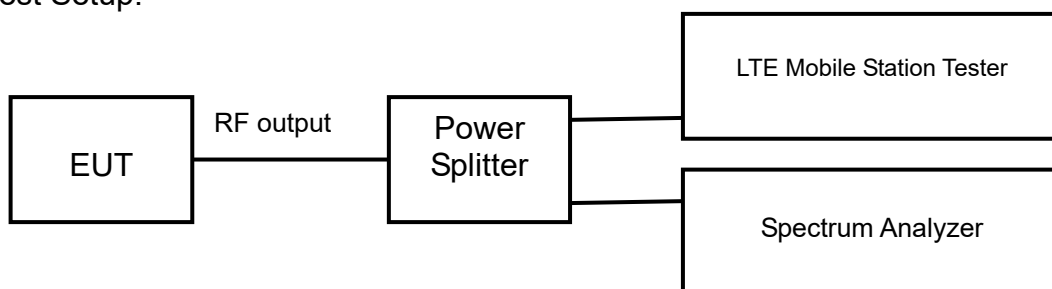
6.3 Occupied Bandwidth

Rule Part(s)
FCC: 2.1049

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. The occupied bandwidth is measured using spectrum analyzer. RBW is set to 30kHz on spectrum analyzer. The bandwidth of 99% power can be read on spectrum analyzer.

The measurement will be conducted at three channels (Bottom, middle and top channels of LTE band)

Limits: No specific occupied bandwidth requirements in part 2.1049

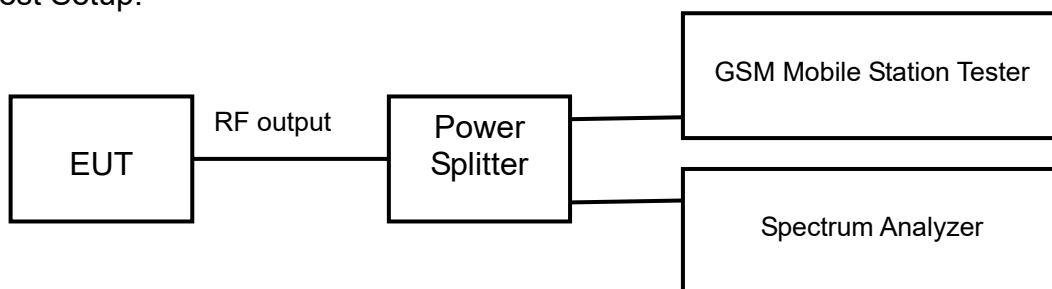
6.4 Emission Bandwidth

Rule Part(s)
FCC: 2.1049

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. The emission bandwidth is measured using spectrum analyzer. RBW is set to 3 kHz on spectrum analyzer. The bandwidth of -26dB transmitter power can be read on spectrum analyzer.

Limits: No specific emission bandwidth requirements in part 22.917(b)

6.5 Peak-Average Ratio

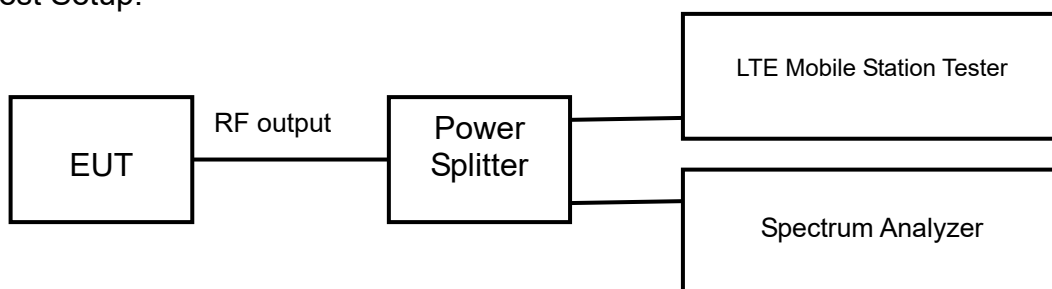
Rule Part(s)

FCC: 22.913, 24.232, 27.50

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. The Peak-Average Ratio is measured using spectrum analyzer. RBW is set to 30 kHz on spectrum analyzer. The Peak-Average Ratio can be read on spectrum analyzer.

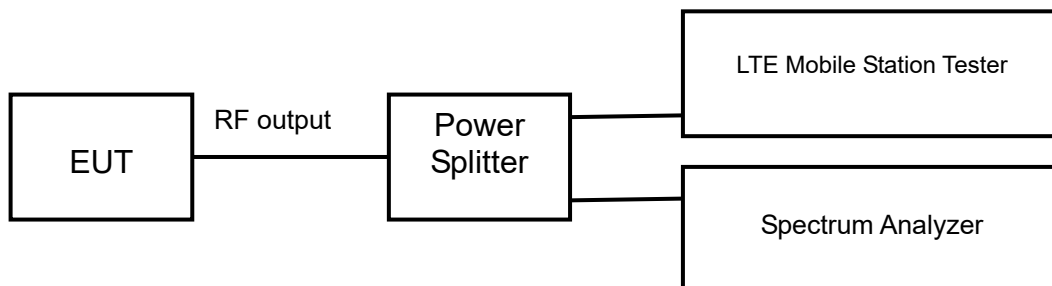
Limits	≤13dB
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6.6 Spurious Emissions at antenna terminal

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to 20GHz (higher than the 10th harmonic of the carrier). The peak detector is used and RBW is set to 1MHz on spectrum analyzer.

Limits	$\leq -13\text{dBm}$
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6.7 Band Edges Compliance

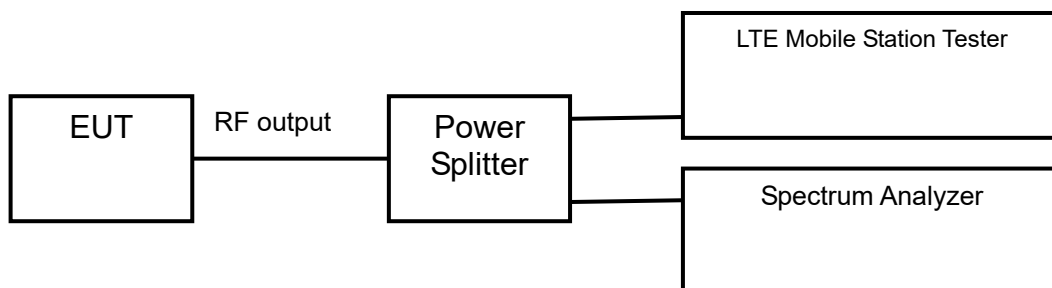
Rule Part(s)

FCC: 2.1051, 22.359, 22.917, 24.238, 27.53

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. The measurement is carried out using a spectrum analyzer. The peak detector is used and RBW is set to at least 1% of the emission bandwidth on spectrum analyzer.

Limits	$\leq -13\text{dBm}$
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6.8 Frequency Stability

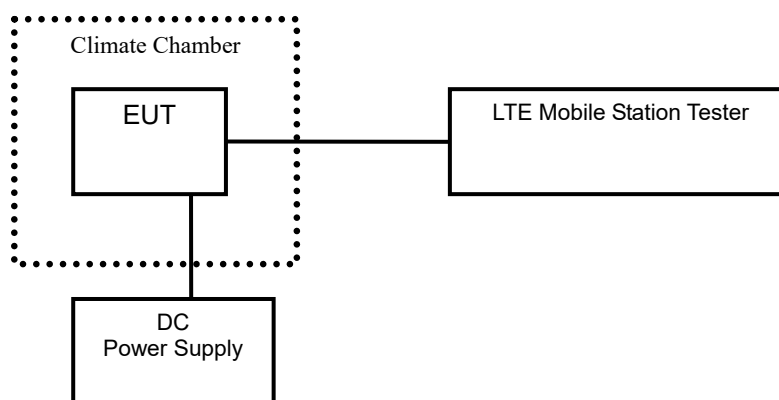
Rule Part(s)

FCC: 2.1055, 22.355, 24.235, 27.54

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test setup:



Test Procedure:

A radio link shall be established between EUT and Tester. The tester will sample the transmitter RF output signal and measure its frequency. The temperature inside the climate chamber is varied from -30 to +50°C in 10°C step size, and also the DC power supply voltage to the EUT is varied from LV to HV. The measurement will be conducted at three channels No18100, No18300 and No18500 (Bottom, middle and top channels of LTE band I).

Limits: No specific frequency stability requirements in part 2.1055 and part 22.355.

6.9 Radiated Spurious Emissions

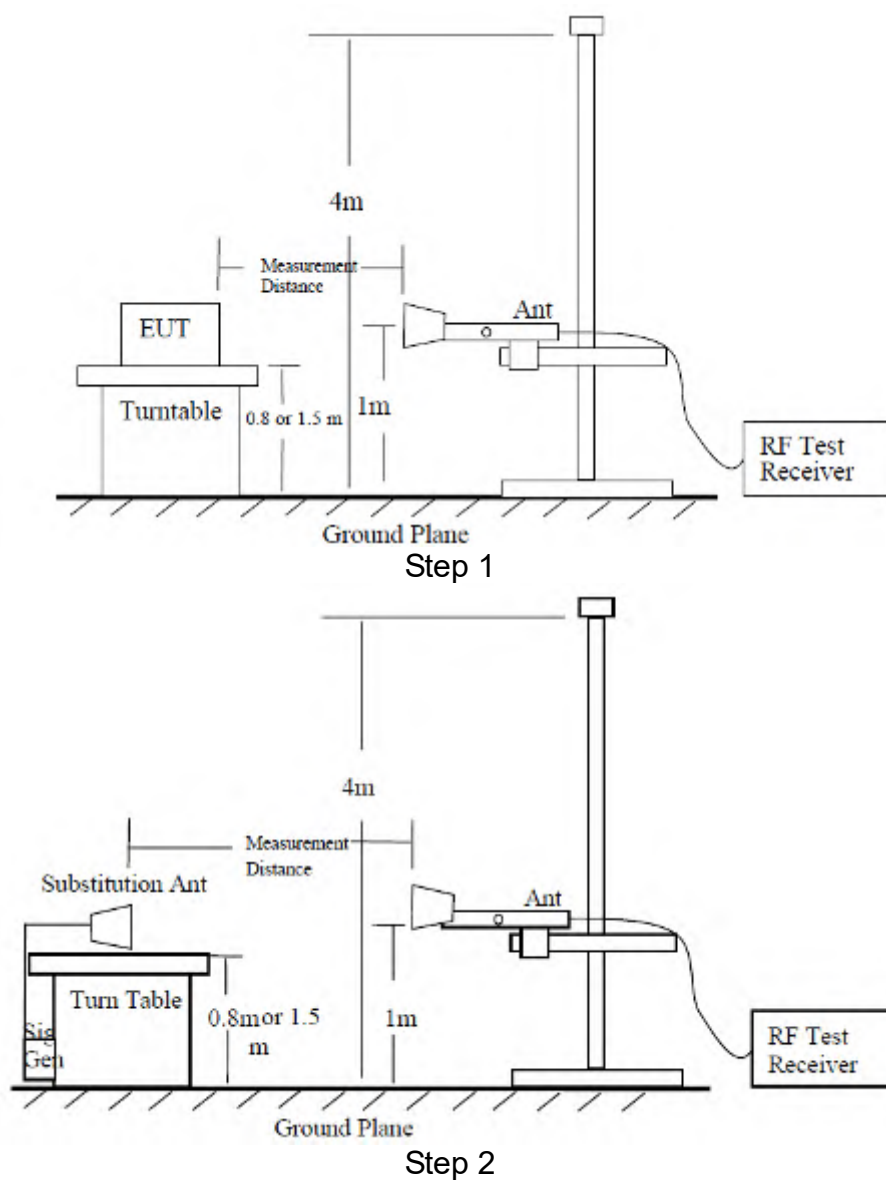
Rule Part(s)

FCC: 2.1053, 22.917, 24.238, 27.53

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	100.9kPa

Test Setup:



Test procedure:

The measurements procedures in TIA-603C-2004 are used.

The spectrum was scanned from 30MHz to the 10th harmonic of the highest frequency generated within the equipment.

Step 1:

The measurement is carried out in the fully anechoic chamber. EUT was placed on a 2.4 meter high non-conductive table at a 3 meter test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. The height of receiving antenna is 2.4m and varies in certain range to find the maximum power value. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. The measurement is carried out using a spectrum analyzer or receiver. The spectrum analyzer scans from 30MHz to 20GHz (higher than the 10th harmonic of the carrier). The peak detector is used and RBW is set to 1MHz on spectrum analyzer. Then the antenna height and turn table rotation is adjusted till the maximum power value is founded on spectrum analyzer or receiver. A notch filter is necessary in the band near to the carrier frequency. A high pass filter is needed to avoid the distortion of the testing equipment in the band above the carrier frequency.

Step 2:

A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

A power (P_{mea}) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

A "reference path loss" should be calculated after test. The attenuation of "reference path loss" is the cable loss between the Signal Source with the Substitution Antenna (P_{ca}) and the Substitution Antenna Gain (G_a).

Calculation procedure:

The data of cable loss and antenna gain has been calibrated in full testing frequency range before the testing.

The power of the Radiated Spurious Emissions is calculated by adding the cable loss and antenna gain. The basic equation with a sample calculation is as followed:

$$\text{Power(EIRP)} = P_{mea} + P_{ca} + G_a$$

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15 \text{ (dB)}$.



Assumed the power of signal source record is -20dBm. A cable loss of -30dB, and an antenna gain of 11dB are added.

$$P=P_{mea}+P_{ca}+G_a=(-20\text{dBm})+(-30\text{dB})+(11\text{dB})=-39\text{dBm}$$



7 MEASUREMENT UNCERTAINTIES

Items	Uncertainty	
RF Power Output	0.6 dB	
Occupied Bandwidth	3 kHz	
Spurious Emissions	30MHz~1GHz	2.83 dB
	1GHz~12.75GHz	2.50 dB
	12.75GHz~25GHz	2.75 dB
Band Edges Compliance	1.2dB	
Frequency Stability	4 Hz	

8 TEST EQUIPMENTS

No.	Name/Model	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
1	Mobile Station Tester	SP8010B	E0095	2018.03.01	2019.02.28
2	N9020A Spectrum Analyzer	Agilent	MY48010771	2017.08.20	2018.08.19
3	DC Power Supply E3645A	Agilent	MY43007648	2017.08.20	2018.08.19
4	Power Splitter 11850C	Agilent	19632	2017.08.20	2018.08.19
5	Temperature chamber SH241	ESPEC	92013758	2017.08.20	2018.08.19
6	12.65m×8.03m×7.50m Fully-Anechoic Chamber	FRANKONIA	-----	-----	-----
7	Turn table Diameter:1m	HD	-----	-----	-----
8	Antenna master FAC(MA4.0)	MATURO	-----	-----	-----
9	HF 906 Double-Ridged Waveguide Horn Antenna	R&S	100030	2017.08.20	2018.08.19
10	HL562 Ultra log antenna	R&S	100016	2017.08.20	2018.08.19
11	3160-09 Receive antenna	SCHWARZ-BECK	002058-002	2017.08.20	2018.08.19
12	ESI 40 EMI test receiver	R&S	100015	2017.08.20	2018.08.19
13	Radio tester	CMU 200	114667	2017.08.20	2018.08.19
14	Spectrum Analyzer	FSV40	101065	2017.08.20	2018.08.19
15	Mobile Station Tester MT8820C	Anritsu	6201300660	2017.08.20	2018.08.19

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Please refer to the attachment.

APPENDIX B – TEST DATA OF RADIATED EMISSION

Please refer to the attachment.

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

1 RF Power Output-FCC Part 2.1046

LTE band2

Antenna Gain: -1.6dBi

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1850.7	18607	1.4	1	0	22.2	21.5	20.6	19.9
				1	5	22.5	21.5	20.9	19.9
				3	2	22.5	21.7	20.9	20.1
				6	0	21.6	20.4	20.0	18.8

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1880	18900	1.4	1	0	22.5	21.6	20.9	20.0
				1	5	22.6	21.6	21.0	20.0
				3	2	22.7	21.5	21.1	19.9
				6	0	21.6	20.5	20.0	18.9

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1909.3	19193	1.4	1	0	22.7	21.7	21.1	20.1
				1	5	22.8	21.7	21.2	20.1
				3	2	22.7	21.8	21.1	20.2
				6	0	21.7	20.6	20.1	19.0

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1851.5	18615	3	1	0	22.7	21.9	21.1	20.3
				1	14	22.5	21.9	20.9	20.3
				8	4	21.5	20.7	19.9	19.1
				15	0	21.4	20.5	19.8	18.9

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1880	18900	3	1	0	22.6	21.7	21.0	20.1
				1	14	22.6	21.6	21.0	20.0
				8	4	21.5	20.5	19.9	18.9
				15	0	21.5	20.4	19.9	18.8

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1908.5	19185	3	1	0	22.8	21.7	21.2	20.1
				1	14	22.7	21.7	21.1	20.1
				8	4	21.7	20.7	20.1	19.1
				15	0	21.8	20.7	20.2	19.1

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1852.5	18625	5	1	0	22.5	21.3	20.9	19.7
				1	24	22.5	21.3	20.9	19.7
				12	6	21.4	20.4	19.8	18.8
				25	0	21.4	20.5	19.8	18.9

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1880	18900	5	1	0	22.5	21.7	20.9	20.1
				1	24	22.6	21.8	21.0	20.2
				12	6	21.5	20.6	19.9	19.0
				25	0	21.6	20.6	20.0	19.0

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1907.5	19175	5	1	0	22.6	21.6	21.0	20.0
				1	24	22.7	21.6	21.1	20.0
				12	6	21.6	20.6	20.0	19.0
				25	0	21.6	20.7	20.0	19.1

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1855	18650	10	1	0	22.6	21.9	21.0	20.3
				1	49	22.5	22.0	20.9	20.4
				24	12	21.5	20.6	19.9	19.0
				50	0	21.5	20.5	19.9	18.9

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1880	18900	10	1	0	22.6	21.7	21.0	20.1
				1	49	22.6	21.7	21.0	20.1
				24	12	21.5	20.6	19.9	19.0
				50	0	21.6	20.6	20.0	19.0

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1905	19150	10	1	0	22.7	21.6	21.1	20.0
				1	49	22.8	21.7	21.2	20.1
				24	12	21.6	20.6	20.0	19.0
				50	0	21.6	20.6	20.0	19.0

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1857.5	18675	15	1	0	22.6	21.9	21.0	20.3
				1	74	22.4	21.9	20.8	20.3
				40	18	21.6	20.6	20.0	19.0
				75	0	21.7	20.6	20.1	19.0

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1880	18900	15	1	0	22.6	21.7	21.0	20.1
				1	74	22.5	21.7	20.9	20.1
				40	18	21.6	20.6	20.0	19.0
				75	0	21.8	20.7	20.2	19.1

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1902.5	19125	15	1	0	22.6	22.0	21.0	20.4
				1	74	22.7	22.1	21.1	20.5
				40	18	21.6	20.5	20.0	18.9
				75	0	21.8	20.6	20.2	19.0

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1860	18700	20	1	0	22.8	21.9	21.2	20.3
				1	99	22.8	21.9	21.2	20.3
				50	25	22.0	21.1	20.4	19.5
				100	0	22.0	21.1	20.4	19.5

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1880	18900	20	1	0	22.9	21.9	21.3	20.3
				1	99	22.9	21.9	21.3	20.3
				50	25	22.1	21.1	20.5	19.5
				100	0	22.1	21.0	20.5	19.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
2	1900	19100	20	1	0	22.8	22.1	21.2	20.5
				1	99	22.8	22.0	21.2	20.4
				50	25	22.0	20.9	20.4	19.3
				100	0	22.1	21.1	20.5	19.5

LTE band4

Antenna Gain: -1.6dBi

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1710.7	19957	1.4	1	0	22.8	21.6	21.2	20.0
				1	5	22.6	21.7	21.0	20.1
				3	2	22.7	21.9	21.1	20.3
				6	0	21.7	20.7	20.1	19.1

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1732.5	20175	1.4	1	0	22.3	21.3	20.7	19.7
				1	5	22.2	21.3	20.6	19.7
				3	2	22.3	21.2	20.7	19.6
				6	0	21.3	20.3	19.7	18.7

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1754.3	20393	1.4	1	0	22.3	21.3	20.7	19.7
				1	5	22.3	21.4	20.7	19.8
				3	2	22.3	21.5	20.7	19.9
				6	0	21.2	20.1	19.6	18.5

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1711.5	19965	3	1	0	22.6	22.2	21.0	20.6
				1	14	22.5	22.2	20.9	20.6
				8	4	21.6	20.8	20.0	19.2
				15	0	21.6	20.7	20.0	19.1

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1732.5	20175	3	1	0	22.4	21.5	20.8	19.9
				1	14	22.3	21.4	20.7	19.8
				8	4	21.3	20.2	19.7	18.6
				15	0	21.2	20.2	19.6	18.6

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1753.5	20385	3	1	0	22.4	21.4	20.8	19.8
				1	14	22.3	21.4	20.7	19.8
				8	4	21.3	20.3	19.7	18.7
				15	0	21.3	20.4	19.7	18.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1712.5	19975	5	1	0	22.6	21.5	21.0	19.9
				1	24	22.5	21.5	20.9	19.9
				12	6	21.6	20.6	20.0	19.0
				25	0	21.6	20.7	20.0	19.1

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1732.5	20175	5	1	0	22.2	21.4	20.6	19.8
				1	24	22.2	21.4	20.6	19.8
				12	6	21.2	20.3	19.6	18.7
				25	0	21.3	20.2	19.7	18.6

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1752.5	20375	5	1	0	22.2	21.3	20.6	19.7
				1	24	22.3	21.3	20.7	19.7
				12	6	21.3	20.3	19.7	18.7
				25	0	21.3	20.4	19.7	18.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1715	20000	10	1	0	22.6	22.4	21.0	20.8
				1	49	22.5	22.1	20.9	20.5
				24	12	21.6	20.8	20.0	19.2
				50	0	21.7	20.6	20.1	19.0

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1732.5	20175	10	1	0	22.3	21.4	20.7	19.8
				1	49	22.2	21.3	20.6	19.7
				24	12	21.3	20.4	19.7	18.8
				50	0	21.3	20.3	19.7	18.7

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1750	20350	10	1	0	22.3	21.3	20.7	19.7
				1	49	22.4	21.4	20.8	19.8
				24	12	21.4	20.4	19.8	18.8
				50	0	21.3	20.4	19.7	18.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1717.5	20025	15	1	0	22.5	22.2	20.9	20.6
				1	74	22.3	21.9	20.7	20.3
				40	18	21.6	20.6	20.0	19.0
				75	0	21.6	20.6	20.0	19.0

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1732.5	20175	15	1	0	22.3	21.5	20.7	19.9
				1	74	22.2	21.3	20.6	19.7
				40	18	21.3	20.3	19.7	18.7
				75	0	21.3	20.3	19.7	18.7

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1747.5	20325	15	1	0	22.2	21.6	20.6	20.0
				1	74	22.3	21.8	20.7	20.2
				40	18	21.4	20.3	19.8	18.7
				75	0	21.4	20.3	19.8	18.7

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1720	20050	20	1	0	22.8	22.1	21.2	20.5
				1	99	22.6	21.8	21.0	20.2
				50	25	22.2	21.0	20.6	19.4
				100	0	22.2	21.0	20.6	19.4

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1732.5	20175	20	1	0	22.9	22.0	21.3	20.4
				1	99	22.9	21.9	21.3	20.3
				50	25	22.2	21.0	20.6	19.4
				100	0	22.0	21.0	20.4	19.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
4	1745	20300	20	1	0	22.8	22.1	21.2	20.5
				1	99	22.8	22.1	21.2	20.5
				50	25	22.1	21.2	20.5	19.6
				100	0	22.1	21.2	20.5	19.6

LTE band5

ERP=Conducted Power+ Antenna Gain- Ga Antenna Gain

Antenna Gain=-0.8dBi

Ga Antenna Gain=2.15dB

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	824.7	20407	1.4	1	0	21.6	20.5	18.7	17.6
				1	5	21.5	20.6	18.6	17.7
				3	2	20.6	20.7	17.7	17.8
				6	0	20.6	20.5	17.7	17.6

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	836.5	20525	1.4	1	0	20.6	19.5	17.7	16.6
				1	5	20.6	19.6	17.7	16.7
				3	2	20.6	19.5	17.7	16.6
				6	0	20.6	19.5	17.7	16.6

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	848.3	20643	1.4	1	0	20.8	19.7	17.9	16.8
				1	5	20.8	19.7	17.9	16.8
				3	2	20.7	19.7	17.8	16.8
				6	0	19.8	18.7	16.9	15.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	825.5	20415	3	1	0	20.6	20.1	17.7	17.2
				1	14	20.5	20.0	17.6	17.1
				8	4	19.5	18.7	16.6	15.8
				15	0	19.5	18.5	16.6	15.6

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	836.5	20525	3	1	0	20.7	19.6	17.8	16.7
				1	14	20.7	19.6	17.8	16.7
				8	4	19.6	18.5	16.7	15.6
				15	0	19.5	18.4	16.6	15.5

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	847.5	20635	3	1	0	20.8	19.7	17.9	16.8
				1	14	20.9	19.7	18.0	16.8
				8	4	19.8	18.6	16.9	15.7
				15	0	19.8	18.7	16.9	15.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	826.5	20425	5	1	0	20.5	19.3	17.6	16.4
				1	24	20.4	19.3	17.5	16.4
				12	6	19.5	18.4	16.6	15.5
				25	0	19.5	18.5	16.6	15.6

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	836.5	20525	5	1	0	20.5	19.6	17.6	16.7
				1	24	20.6	19.7	17.7	16.8
				12	6	19.5	18.5	16.6	15.6
				25	0	19.5	18.5	16.6	15.6

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	846.5	20625	5	1	0	20.6	19.5	17.7	16.6
				1	24	20.7	19.6	17.8	16.7
				12	6	19.7	18.6	16.8	15.7
				25	0	19.7	18.7	16.8	15.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	829	20450	10	1	0	21.6	21.1	18.7	18.2
				1	49	21.6	21.0	18.7	18.1
				24	12	20.6	19.6	17.7	16.7
				50	0	20.6	19.5	17.7	16.6

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	836.5	20525	10	1	0	21.7	20.6	18.8	17.7
				1	49	21.6	20.7	18.7	17.8
				24	12	20.6	19.5	17.7	16.6
				50	0	20.6	19.5	17.7	16.6

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
5	844	20600	10	1	0	21.9	20.6	19.0	17.7
				1	49	21.6	20.6	18.7	17.7
				24	12	20.7	19.6	17.8	16.7
				50	0	20.6	19.7	17.7	16.8

LTE band7

Antenna Gain: -1.7dBi

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2502.5	20775	5	1	0	21.1	20.2	19.4	18.5
				1	24	21.1	20.2	19.4	18.5
				12	6	20.3	19.3	18.6	17.6
				25	0	20.3	19.4	18.6	17.7

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2535	21100	5	1	0	21.1	20.3	19.4	18.6
				1	24	21.1	20.4	19.4	18.7
				12	6	20.2	19.3	18.5	17.6
				25	0	20.2	19.2	18.5	17.5

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2567.5	21425	5	1	0	21.0	20.0	19.3	18.3
				1	24	20.9	20.0	19.2	18.3
				12	6	20.0	18.9	18.3	17.2
				25	0	20.1	19.0	18.4	17.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2505	20800	10	1	0	21.3	20.8	19.6	19.1
				1	49	21.3	20.7	19.6	19.0
				24	12	20.5	19.5	18.8	17.8
				50	0	20.4	19.4	18.7	17.7

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2535	21100	10	1	0	21.3	20.2	19.6	18.5
				1	49	21.2	20.3	19.5	18.6
				24	12	20.2	19.3	18.5	17.6
				50	0	20.3	19.3	18.6	17.6

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2565	21400	10	1	0	21.1	20.1	19.4	18.4
				1	49	21.1	20.1	19.4	18.4
				24	12	20.1	19.0	18.4	17.3
				50	0	20.1	19.0	18.4	17.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2507.5	20825	15	1	0	21.3	20.7	19.6	19.0
				1	74	21.2	20.6	19.5	18.9
				40	18	20.4	19.5	18.7	17.8
				75	0	20.5	19.4	18.8	17.7

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2535	21100	15	1	0	21.2	20.2	19.5	18.5
				1	74	21.1	20.2	19.4	18.5
				40	18	20.2	19.3	18.5	17.6
				75	0	20.4	19.4	18.7	17.7

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2562.5	21375	15	1	0	21.1	20.5	19.4	18.8
				1	74	21.0	20.3	19.3	18.6
				40	18	20.1	19.1	18.4	17.4
				75	0	20.2	19.1	18.5	17.4

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2510	20850	20	1	0	21.5	20.3	19.8	18.6
				1	99	21.5	20.2	19.8	18.5
				50	25	20.6	19.4	18.9	17.7
				100	0	20.6	19.3	18.9	17.6

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2535	21100	20	1	0	21.6	20.5	19.9	18.8
				1	99	21.6	20.5	19.9	18.8
				50	25	20.7	19.8	19.0	18.1
				100	0	20.7	19.8	19.0	18.1

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		EIRP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
7	2560	21350	20	1	0	21.5	20.4	19.8	18.7
				1	99	21.5	20.3	19.8	18.6
				50	25	20.8	18.9	19.1	17.2
				100	0	20.8	19.0	19.1	17.3

LTE band12

ERP=Conducted Power+ Antenna Gain- Ga Antenna Gain

Antenna Gain=-0.7dBi

Ga Antenna Gain=2.15dB

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	699.7	23017	1.4	1	0	21.3	19.7	18.5	16.9
				1	5	20.8	19.7	18.0	16.9
				3	2	20.7	20.1	17.9	17.3
				6	0	19.8	18.8	17.0	16.0

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	707.5	23095	1.4	1	0	20.7	19.8	17.9	17.0
				1	5	20.8	19.8	18.0	17.0
				3	2	20.9	19.7	18.1	16.9
				6	0	19.8	18.9	17.0	16.1

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	715.3	23173	1.4	1	0	20.6	19.4	17.8	16.6
				1	5	20.7	19.2	17.9	16.4
				3	2	20.4	19.8	17.6	17.0
				6	0	19.8	18.7	17.0	15.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	700.5	23025	3	1	0	20.8	19.7	18.0	16.9
				1	14	20.2	20.1	17.4	17.3
				8	4	19.4	19.0	16.6	16.2
				15	0	19.8	18.9	17.0	16.1

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	707.5	23095	3	1	0	20.8	19.7	18.0	16.9
				1	14	20.7	19.9	17.9	17.1
				8	4	19.8	18.8	17.0	16.0
				15	0	19.8	18.9	17.0	16.1

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	714.5	23165	3	1	0	20.8	19.9	18.0	17.1
				1	14	20.3	19.3	17.5	16.5
				8	4	19.7	18.6	16.9	15.8
				15	0	19.6	18.7	16.8	15.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	701.5	23035	5	1	0	20.4	19.1	17.6	16.3
				1	24	20.2	19.2	17.4	16.4
				12	6	19.4	18.3	16.6	15.5
				25	0	19.3	18.4	16.5	15.6

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	707.5	23095	5	1	0	20.7	19.6	17.9	16.8
				1	24	20.2	19.5	17.4	16.7
				12	6	19.5	18.9	16.7	16.1
				25	0	19.7	18.8	16.9	16.0

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	713.5	23155	5	1	0	20.6	19.1	17.8	16.3
				1	24	20.3	19.1	17.5	16.3
				12	6	19.5	18.5	16.7	15.7
				25	0	19.3	18.9	16.5	16.1

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	704	23060	10	1	0	21.5	20.8	18.7	18.0
				1	49	21.5	20.9	18.7	18.1
				24	12	20.7	20.0	17.9	17.2
				50	0	20.7	19.9	17.9	17.1

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	707.5	23095	10	1	0	21.6	20.6	18.8	17.8
				1	49	21.6	20.4	18.8	17.6
				24	12	20.4	19.8	17.6	17.0
				50	0	20.4	19.9	17.6	17.1

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Average (dBm)		ERP Average(dBm)	
						QPSK	16-QAM	QPSK	16-QAM
12	711	23130	10	1	0	21.5	20.5	18.7	17.7
				1	49	21.5	20.5	18.7	17.7
				24	12	20.5	19.7	17.7	16.9
				50	0	20.5	19.8	17.7	17.0

2 Occupied Bandwidth-FCC Part 2.1049/27.53(h)(1)

Test result

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	699.7	23017	1.4	6	0	1.100	Fig.4	1.100	Fig.8



Fig.4

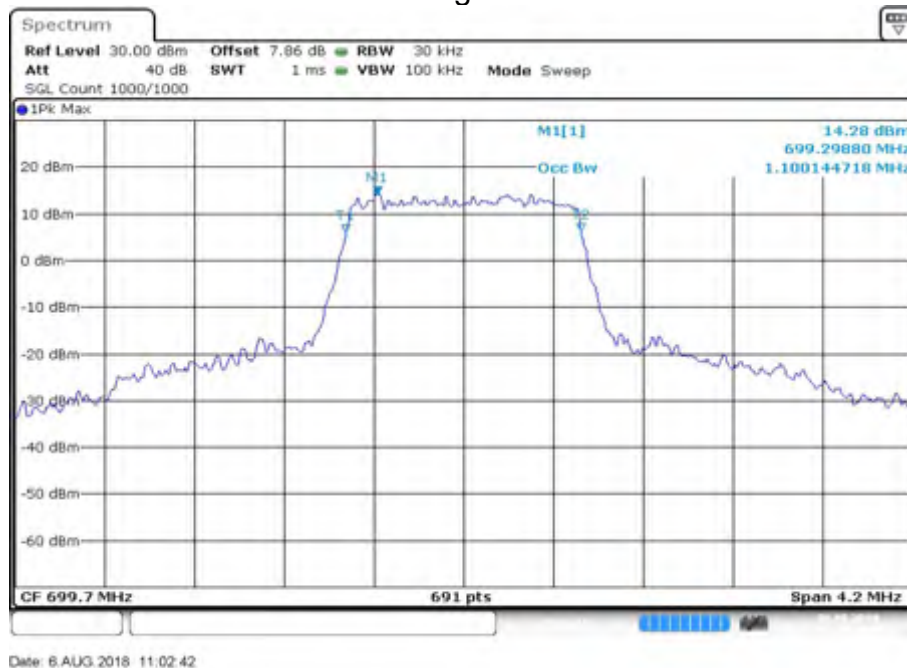


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	1.4	6	0	1.094	Fig.4	1.094	Fig.8



Fig.4

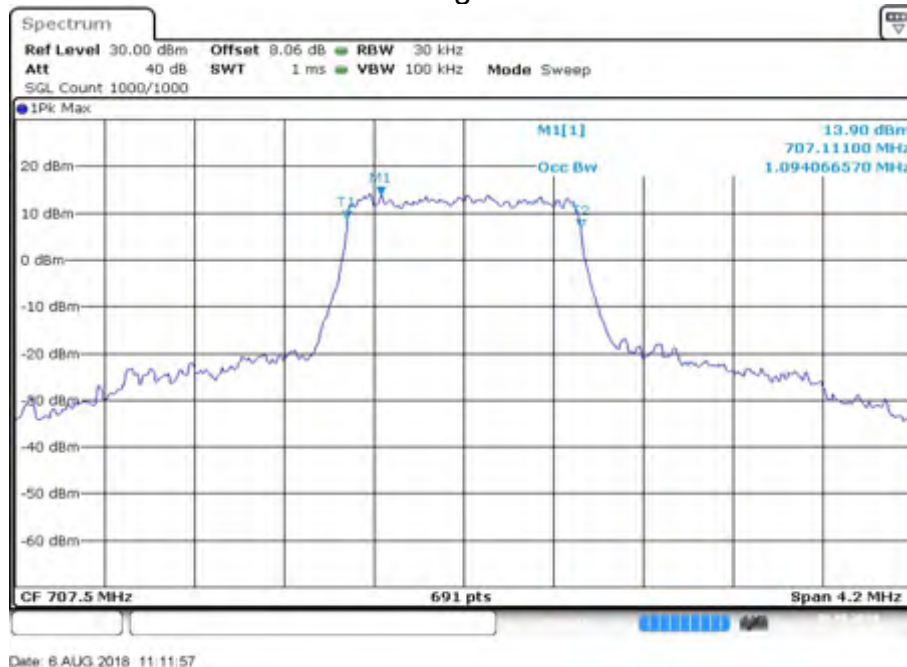


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	715.3	23173	1.4	6	0	1.100	Fig.4	1.094	Fig.8



Fig.4

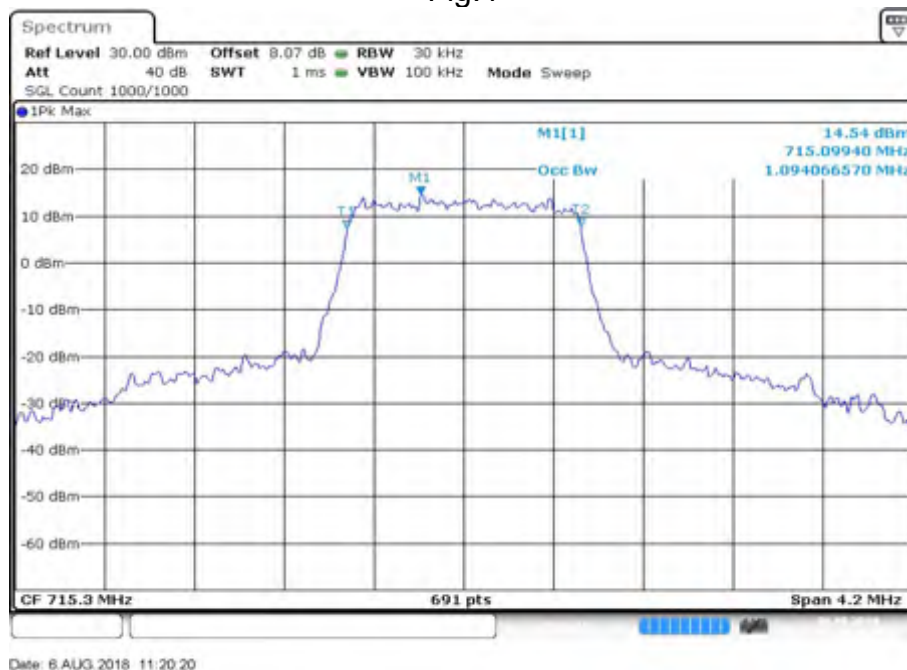


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	700.5	23025	3	15	0	2.722	Fig.4	2.722	Fig.8



Fig.4



Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	3	15	0	2.735	Fig.4	2.722	Fig.8

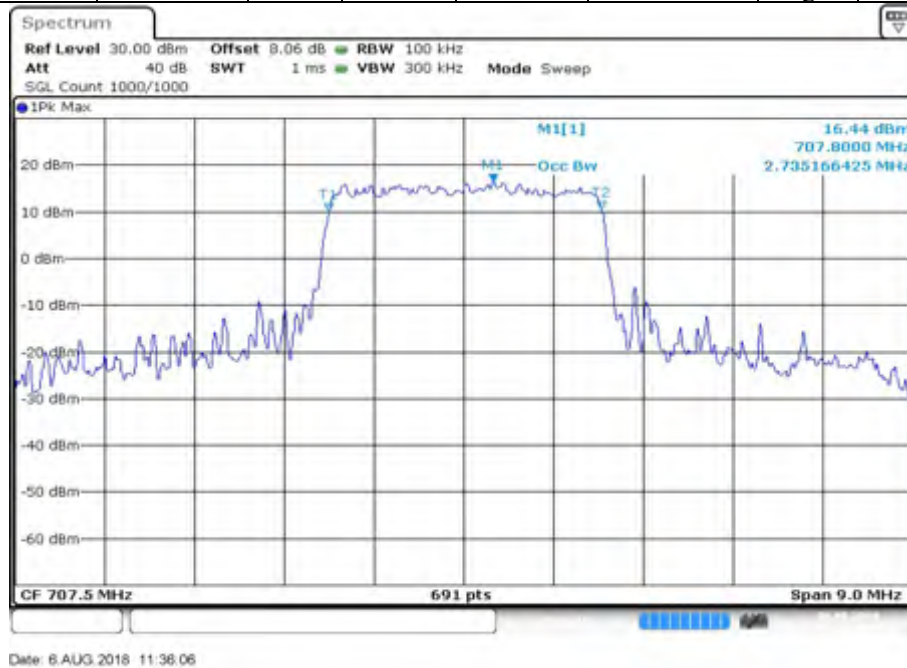


Fig.4

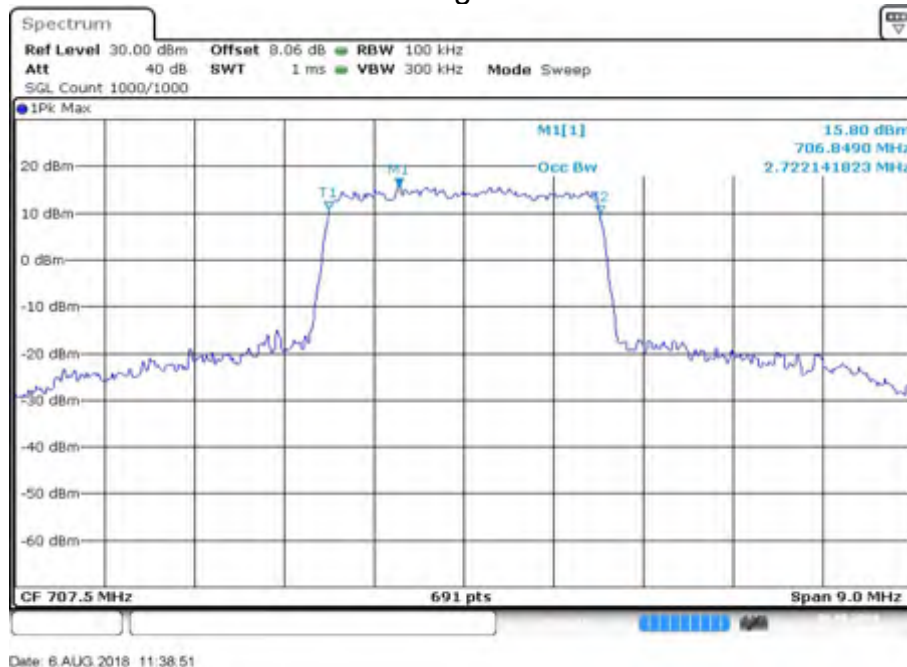


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	714.5	23165	3	15	0	2.735	Fig.4	2.735	Fig.8

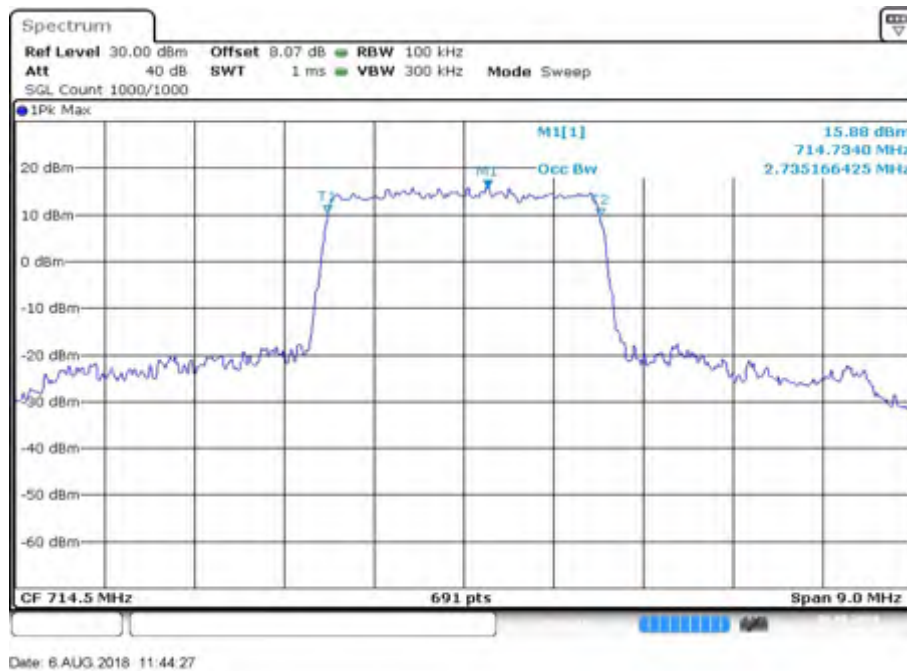


Fig.4

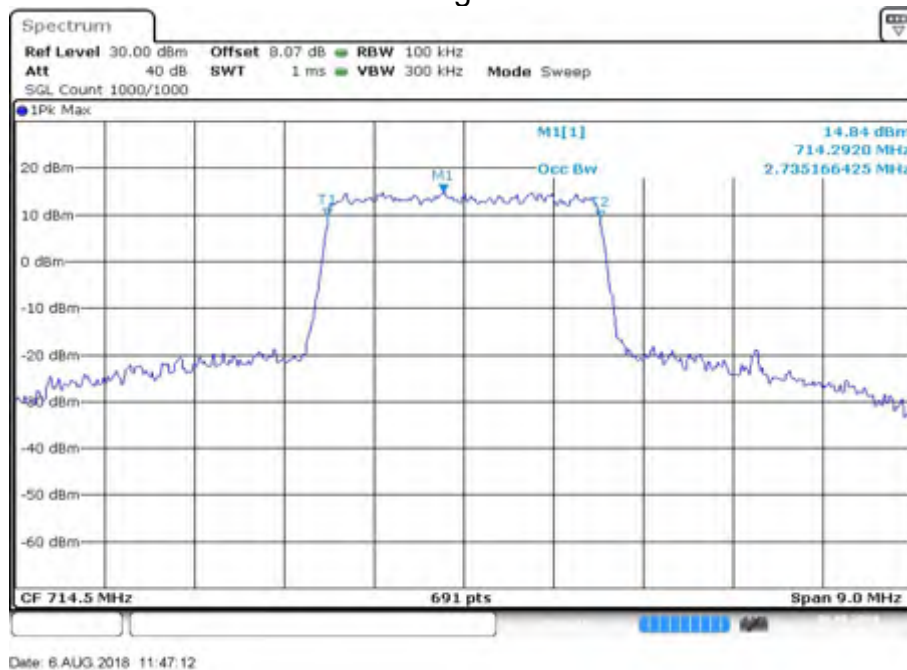


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	701.5	23035	5	25	0	4.537	Fig.4	4.515	Fig.8

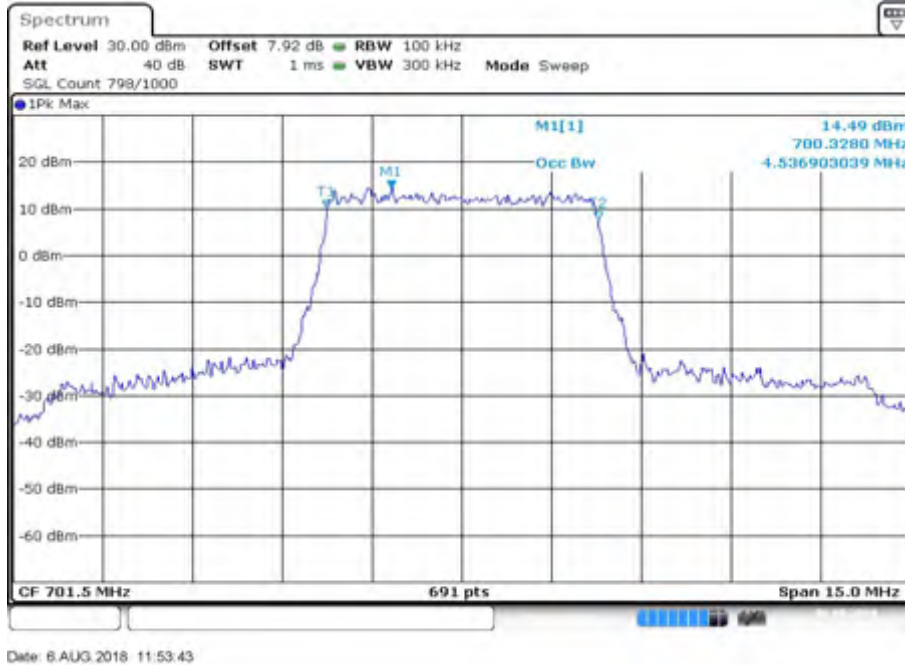
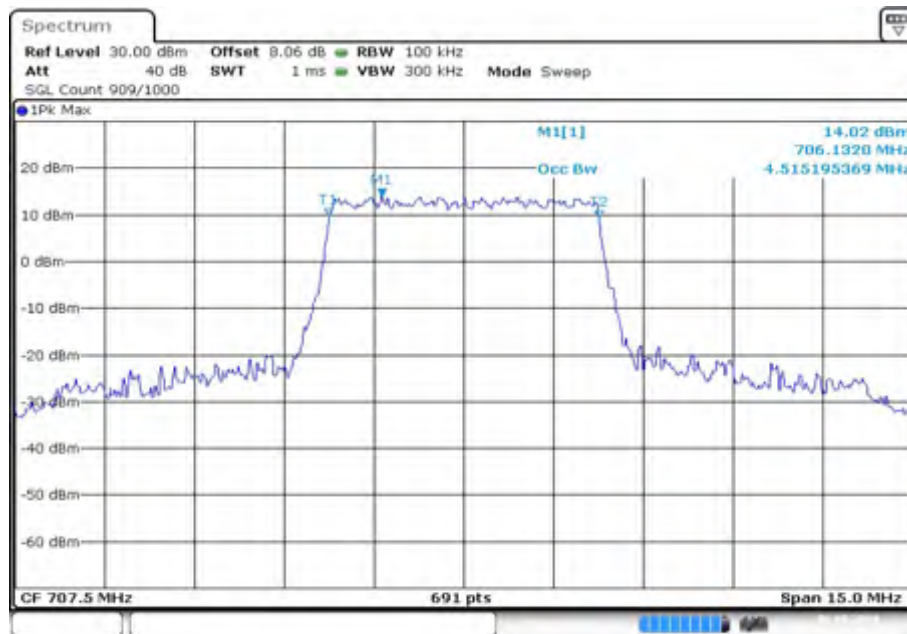


Fig.4



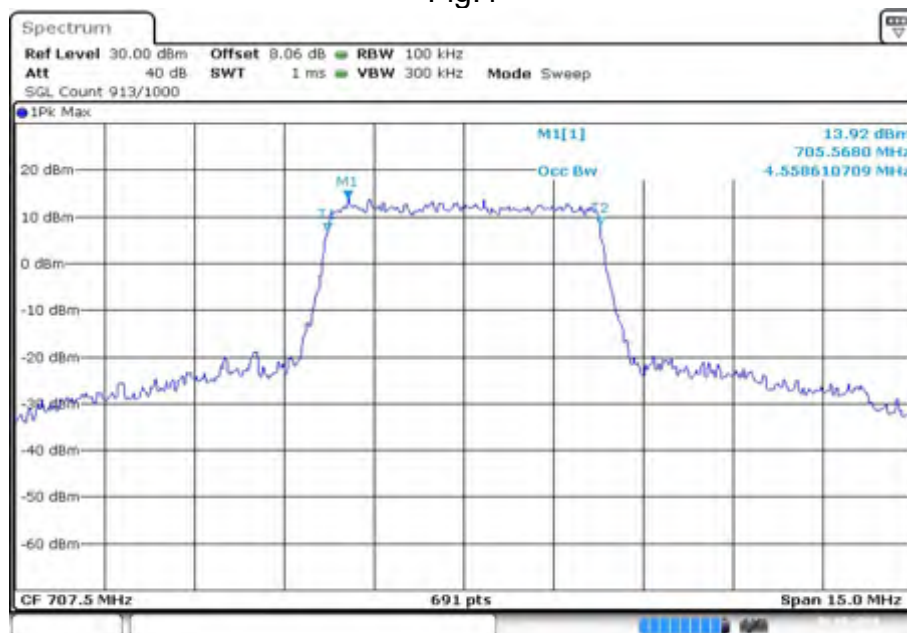
Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	5	25	0	4.515	Fig.4	4.559	Fig.8



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Fig.4



Date: 6.AUG.2018 12:05:59

Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	713.5	23155	5	25	0	4.515	Fig.4	4.559	Fig.8

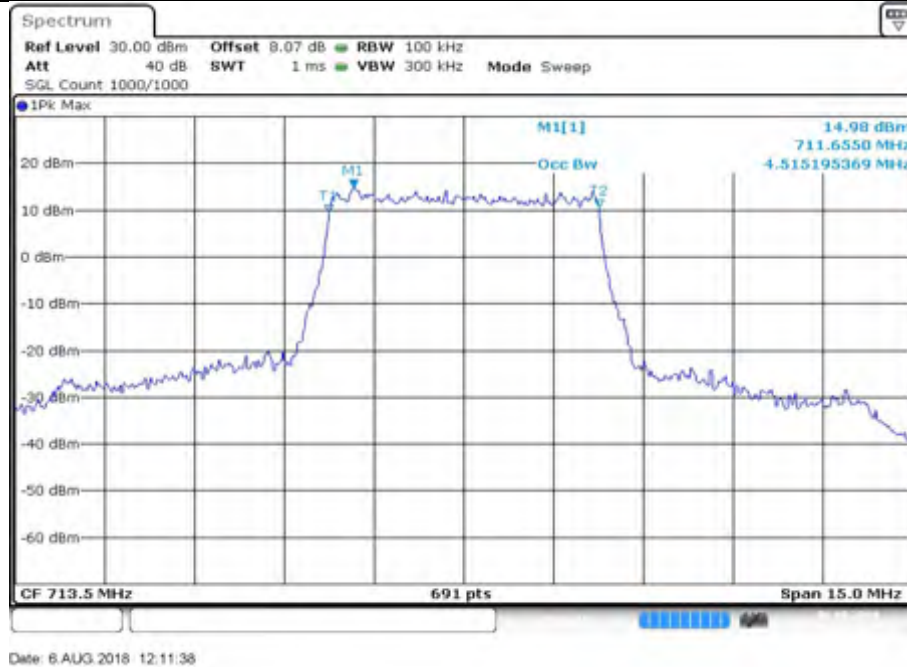


Fig.4

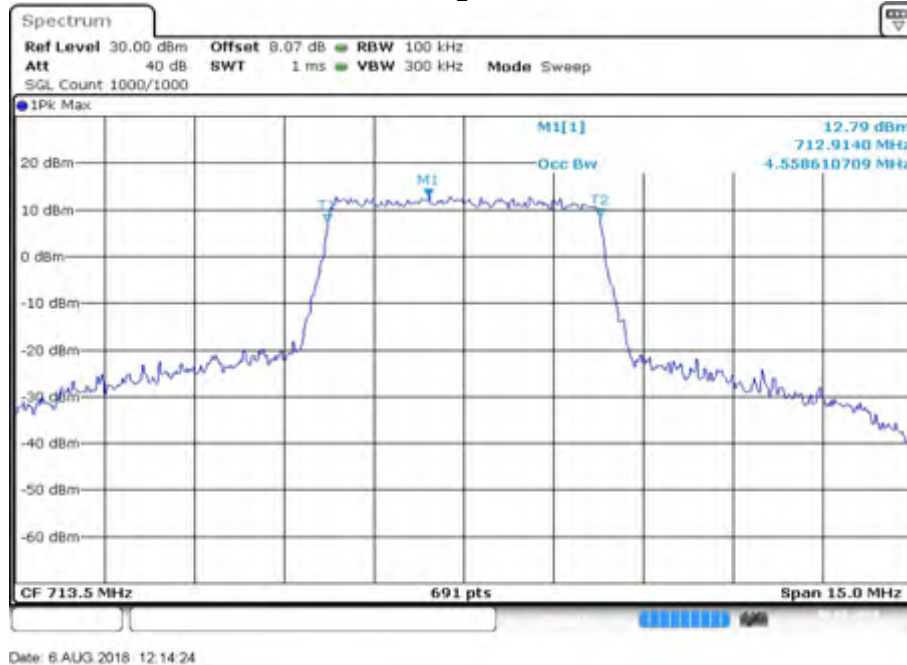


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	704	23060	10	50	0	9.074	Fig.4	9.074	Fig.8

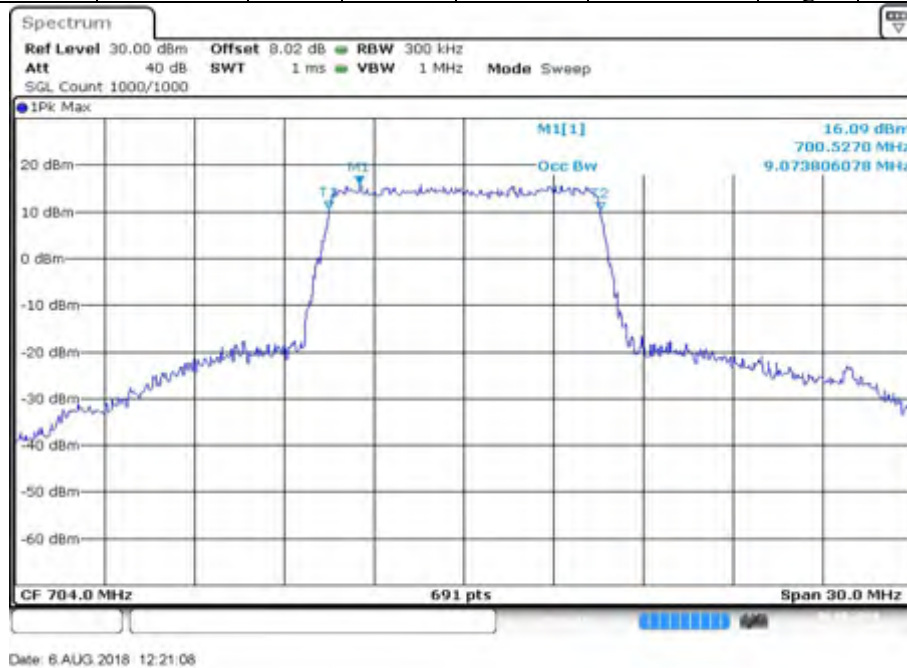


Fig.4



Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	10	50	0	9.074	Fig.4	9.074	Fig.8



Fig.4

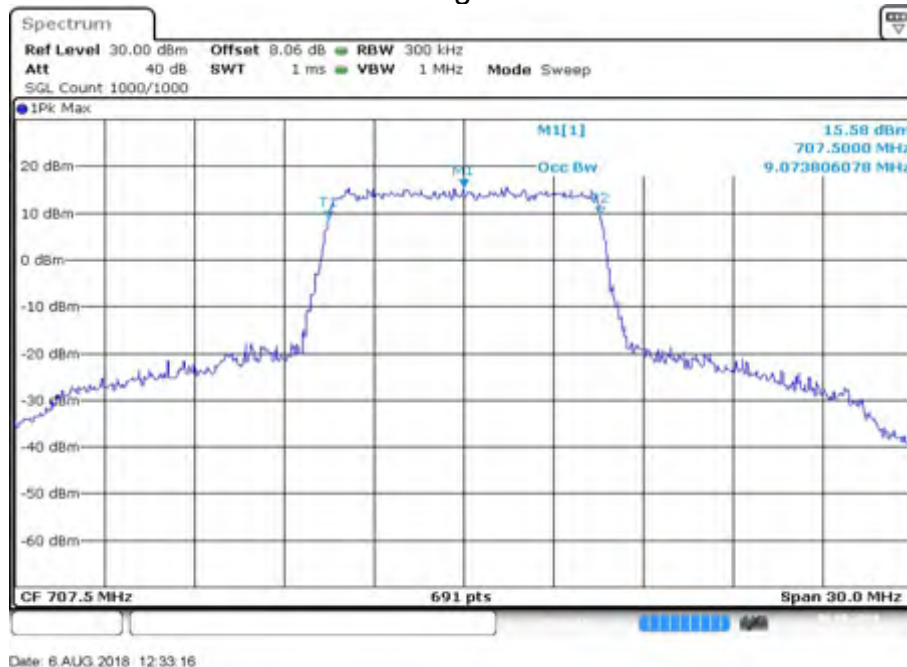


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
12	711	23130	10	50	0	9.117	Fig.4	9.074	Fig.8

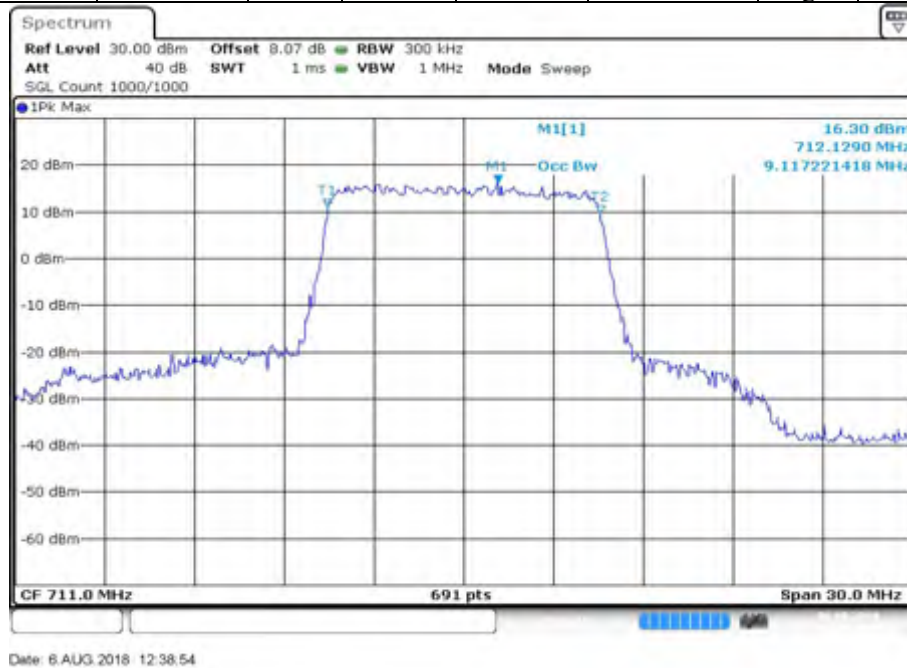


Fig.4

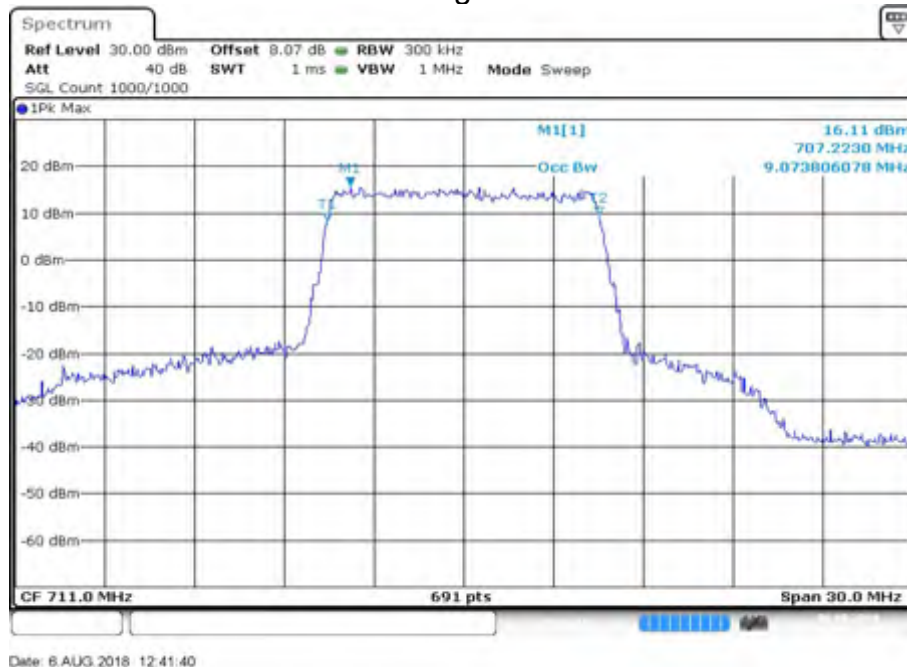


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1850.7	18607	1.4	6	0	1.100	Fig.4	1.100	Fig.8

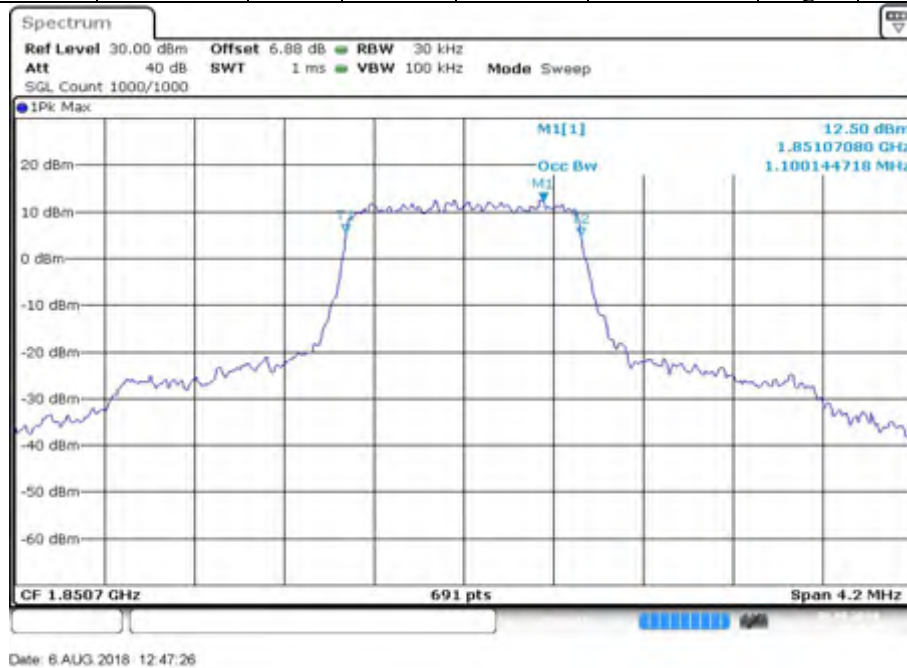


Fig.4

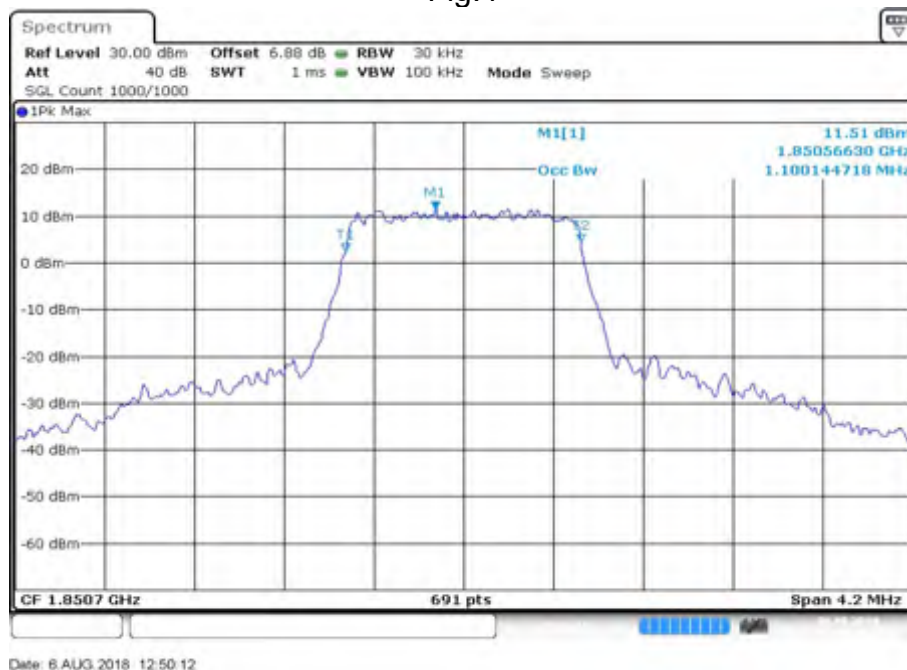


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	1.4	6	0	1.094	Fig.4	1.088	Fig.8

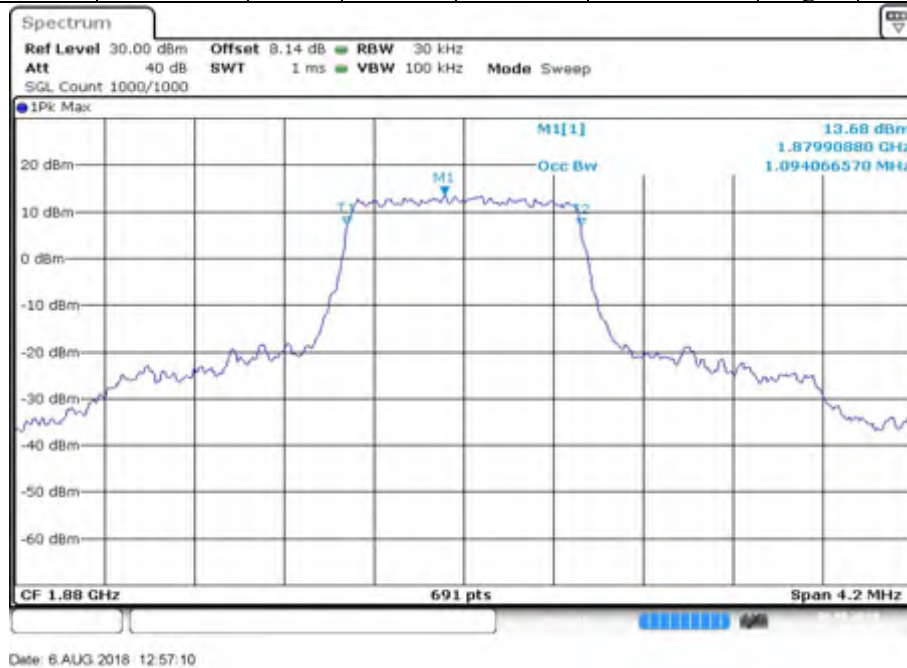


Fig.4

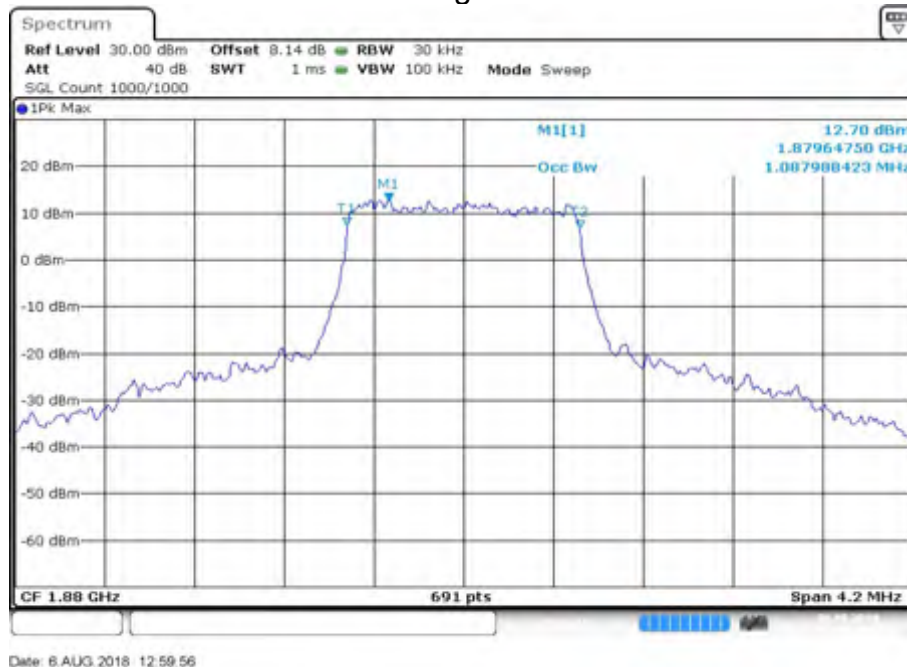


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1909.3	19193	1.4	6	0	1.106	Fig.4	1.094	Fig.8

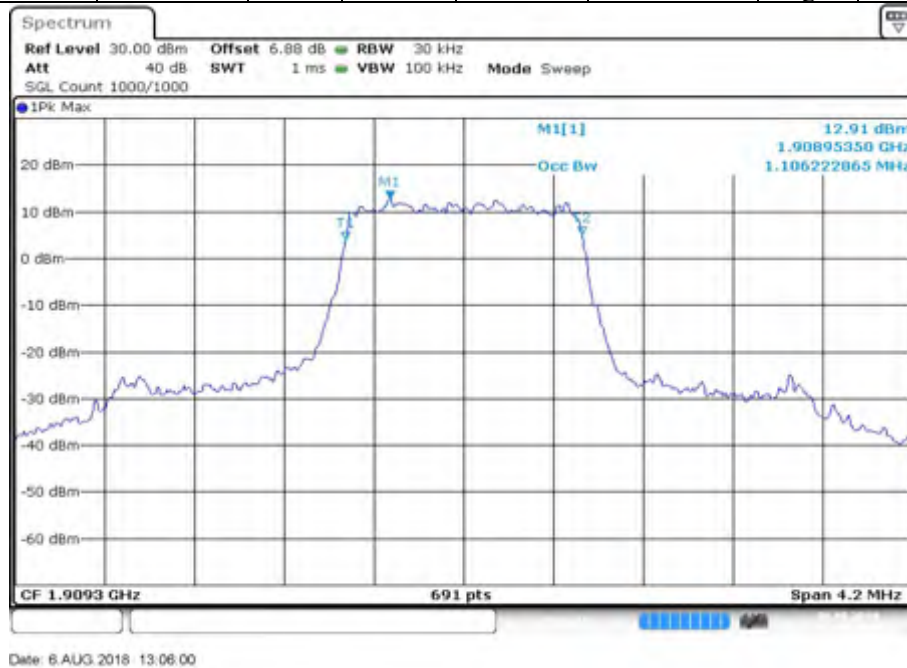


Fig.4

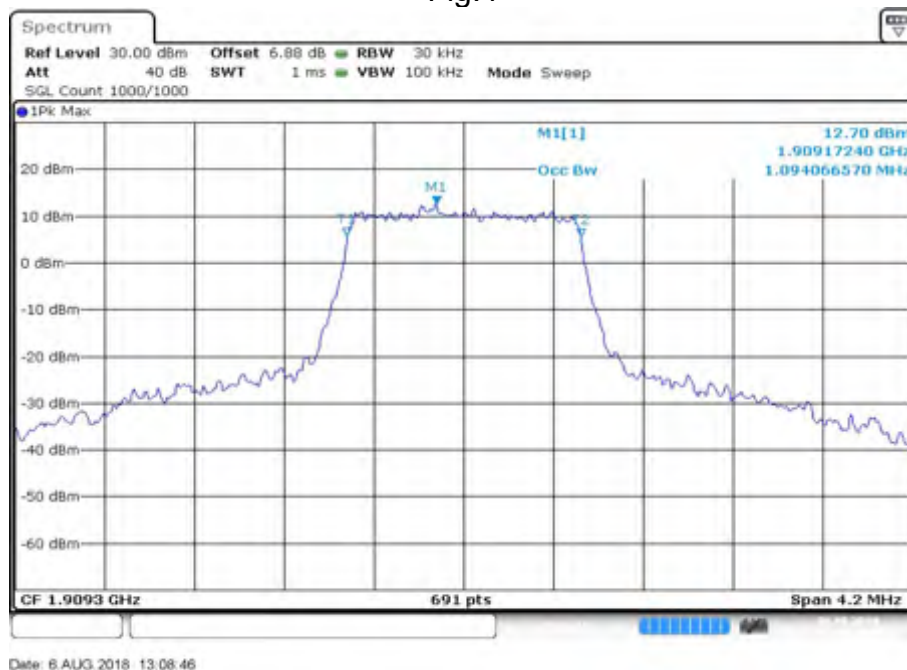


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1851.5	18615	3	15	0	2.722	Fig.4	2.735	Fig.8



Fig.4



Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	3	15	0	2.722	Fig.4	2.722	Fig.8

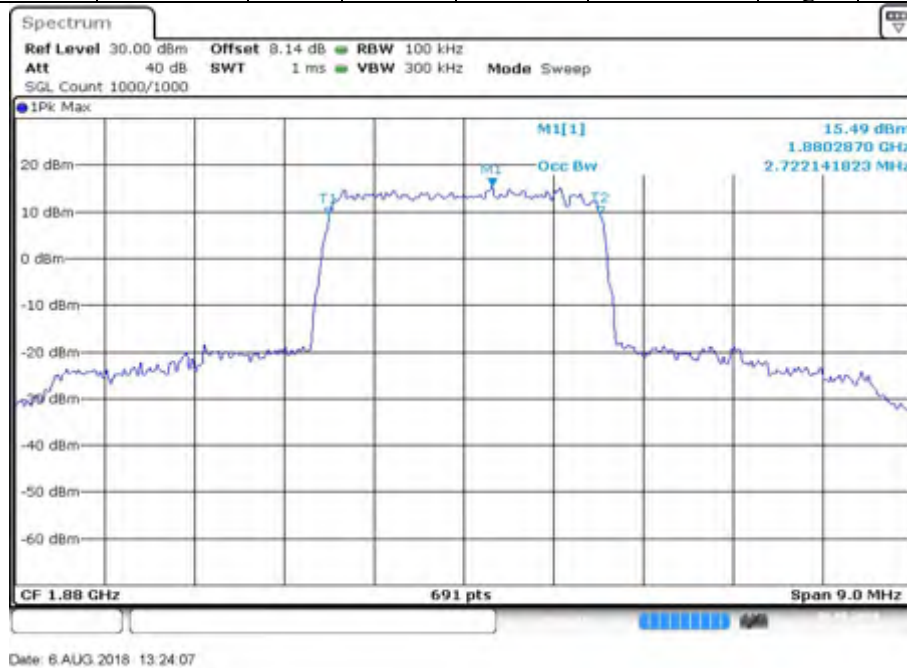


Fig.4

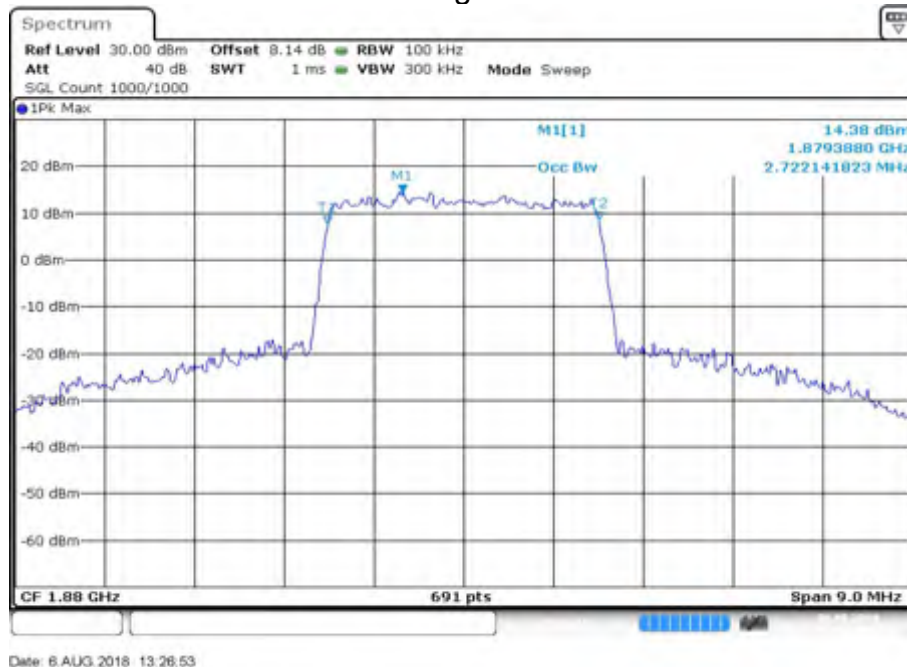


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1908.5	19185	3	15	0	2.735	Fig.4	2.709	Fig.8



Fig.4

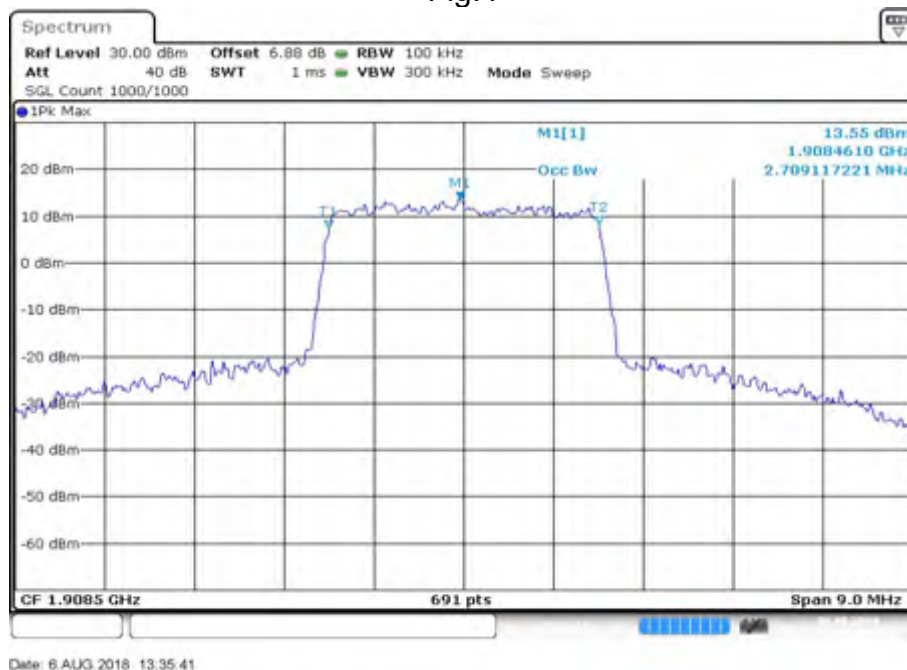


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1852.5	18625	5	25	0	4.537	Fig.4	4.537	Fig.8



Fig.4

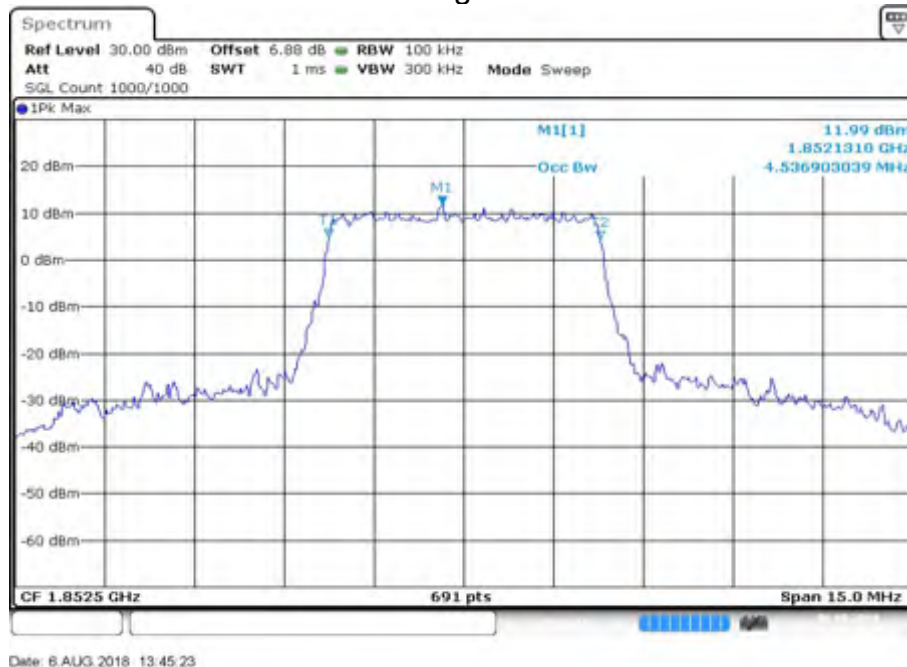


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	5	25	0	4.515	Fig.4	4.559	Fig.8

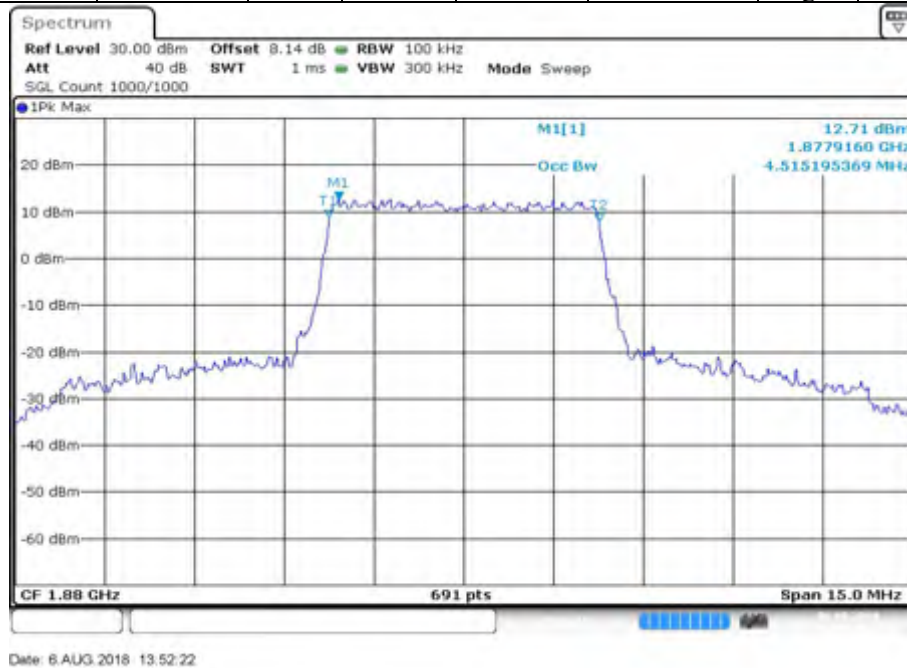


Fig.4



Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1907.5	19175	5	25	0	4.515	Fig.4	4.537	Fig.8



Fig.4

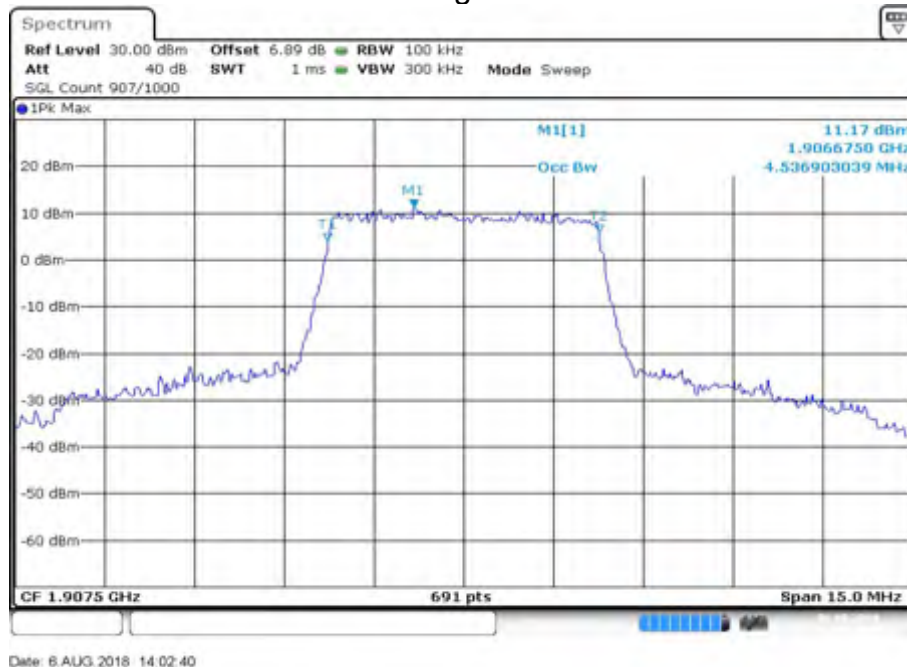


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1855	18650	10	50	0	9.117	Fig.4	9.074	Fig.8

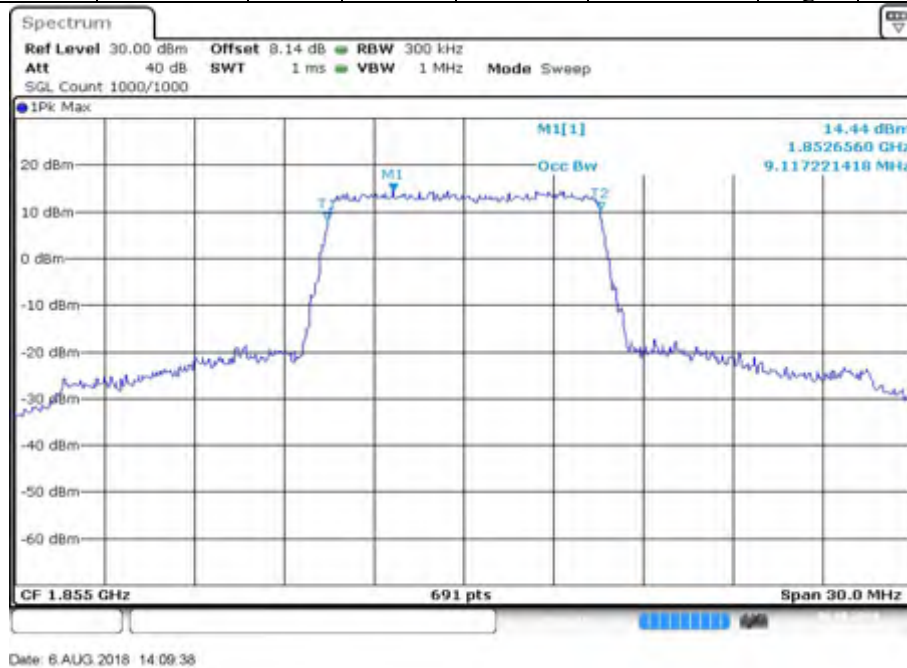


Fig.4

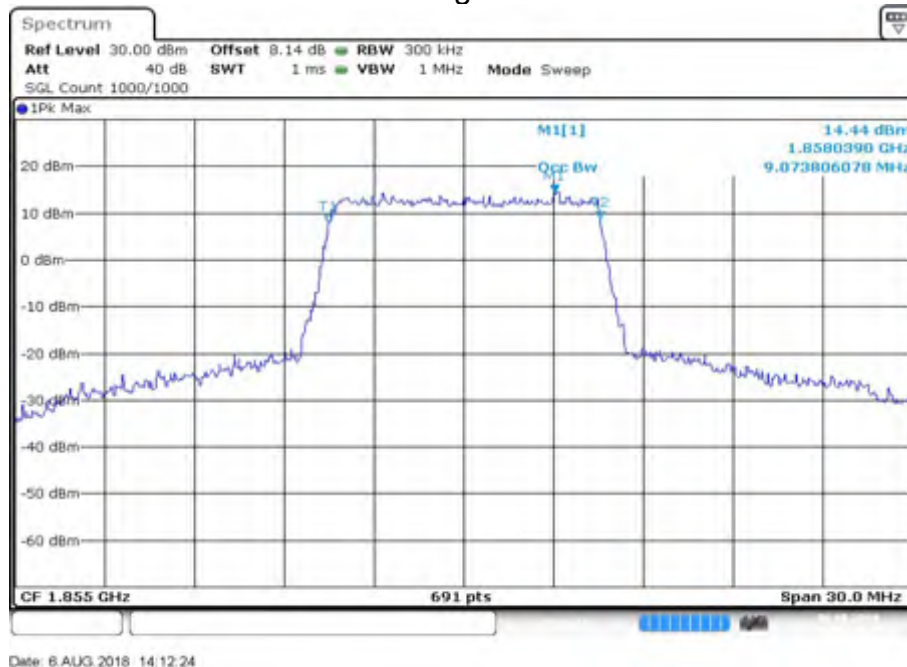
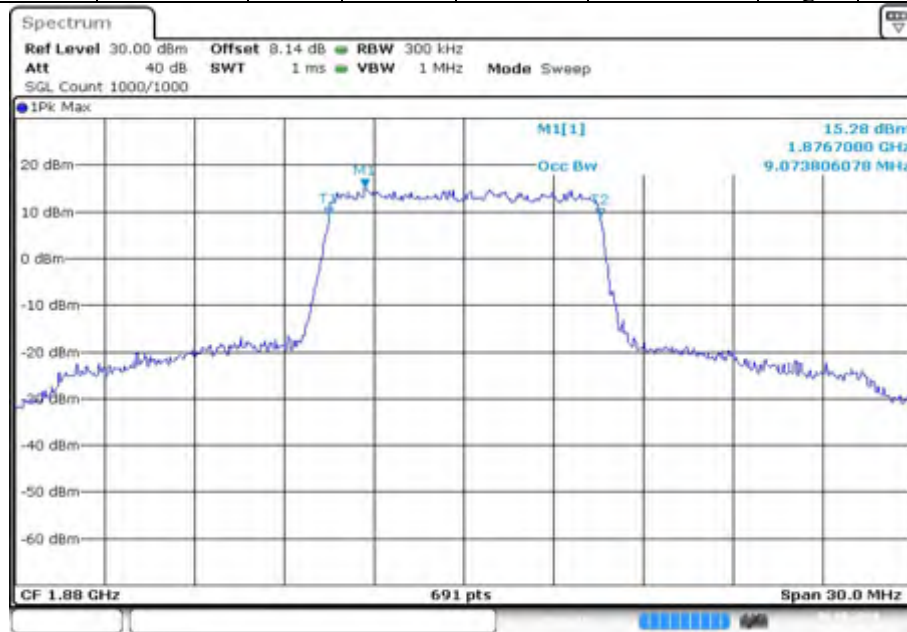


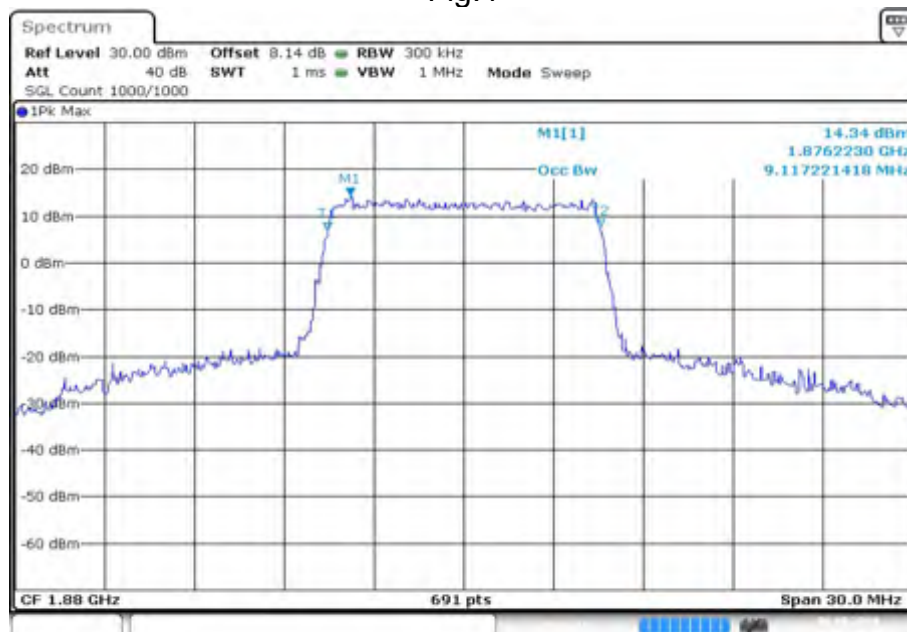
Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	10	50	0	9.074	Fig.4	9.117	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1905	19150	10	50	0	9.074	Fig.4	9.074	Fig.8

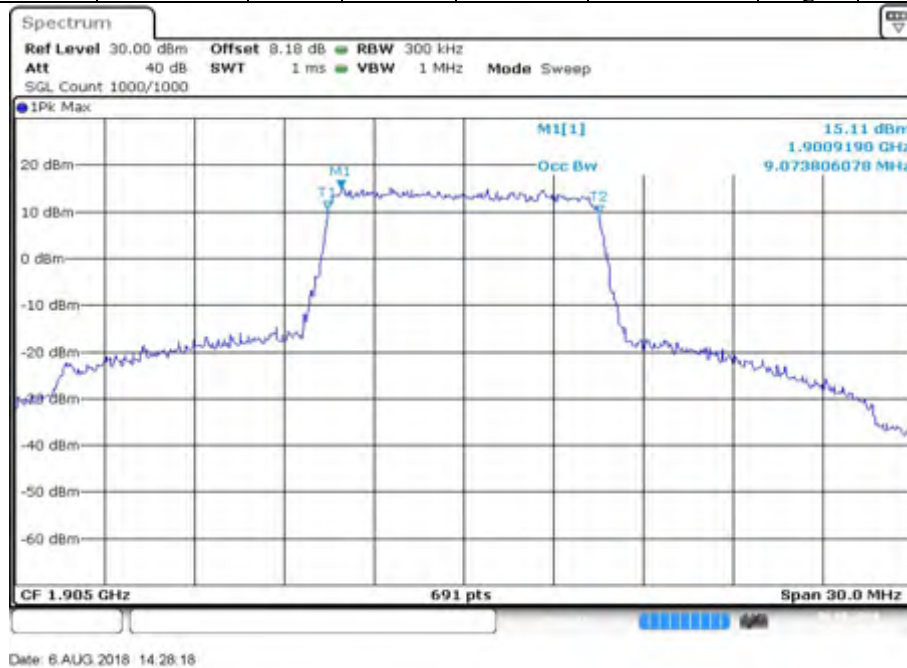


Fig.4

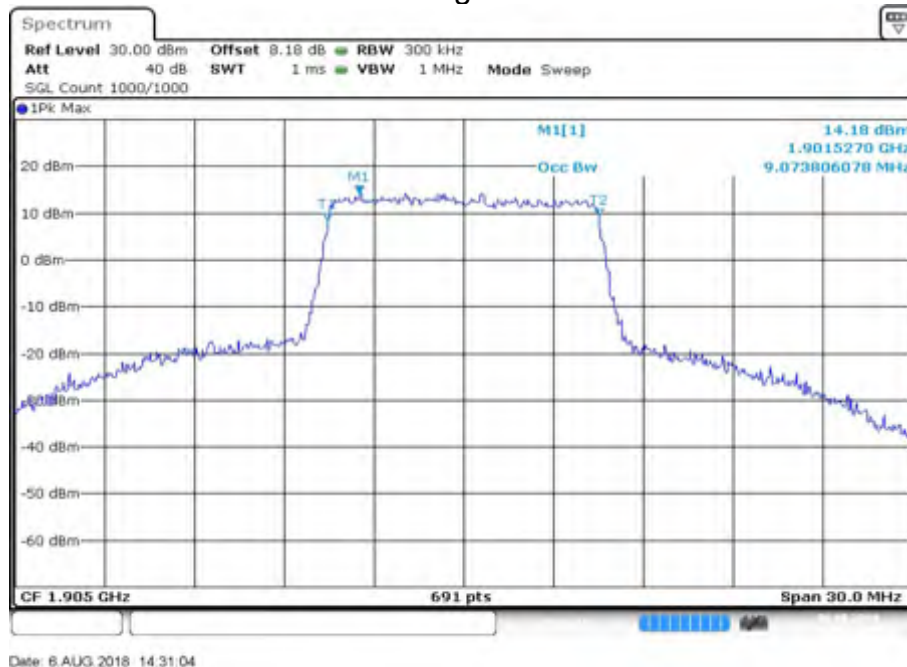


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1857.5	18675	15	75	0	13.611	Fig.4	13.546	Fig.8



Fig.4

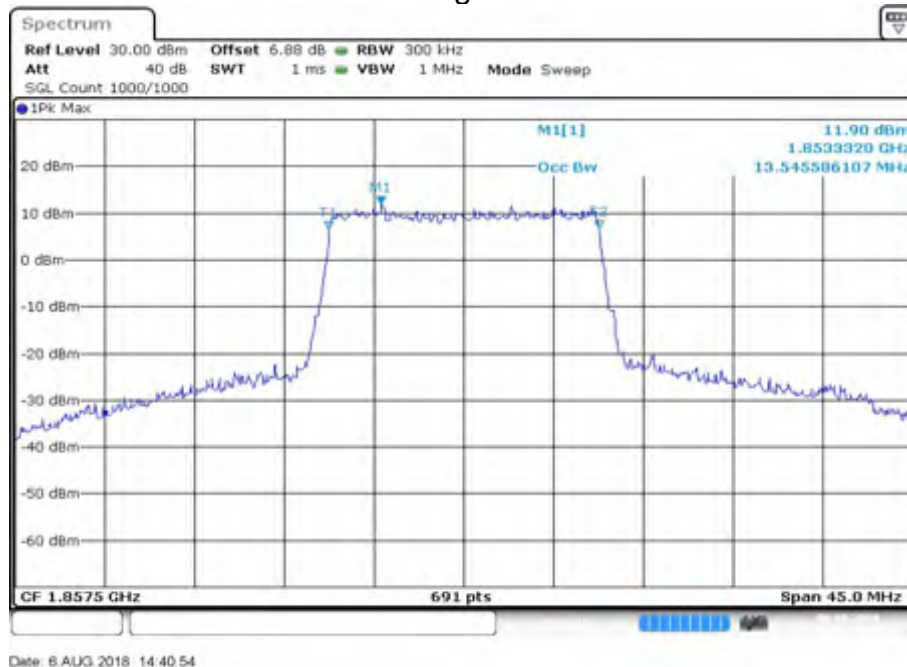
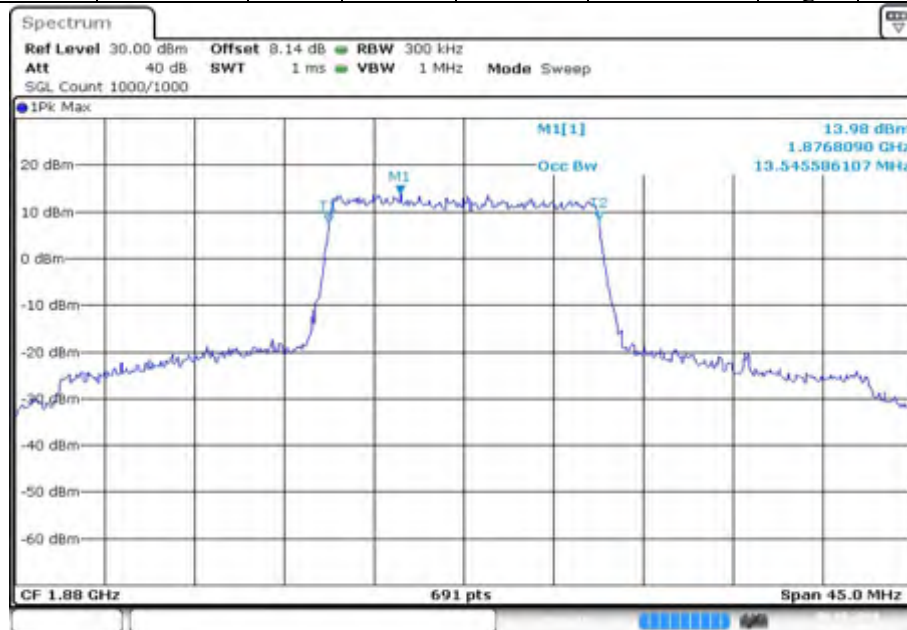


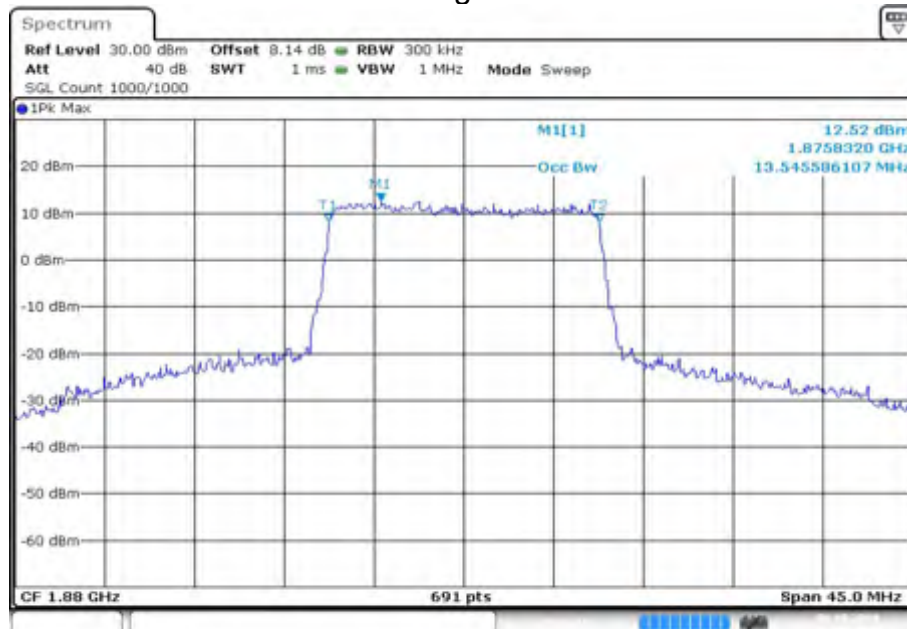
Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	15	75	0	13.546	Fig.4	13.546	Fig.8



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Fig.4



Date: 6.AUG.2018 14:50:39

Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1902.5	19125	15	75	0	13.546	Fig.4	13.546	Fig.8



Fig.4

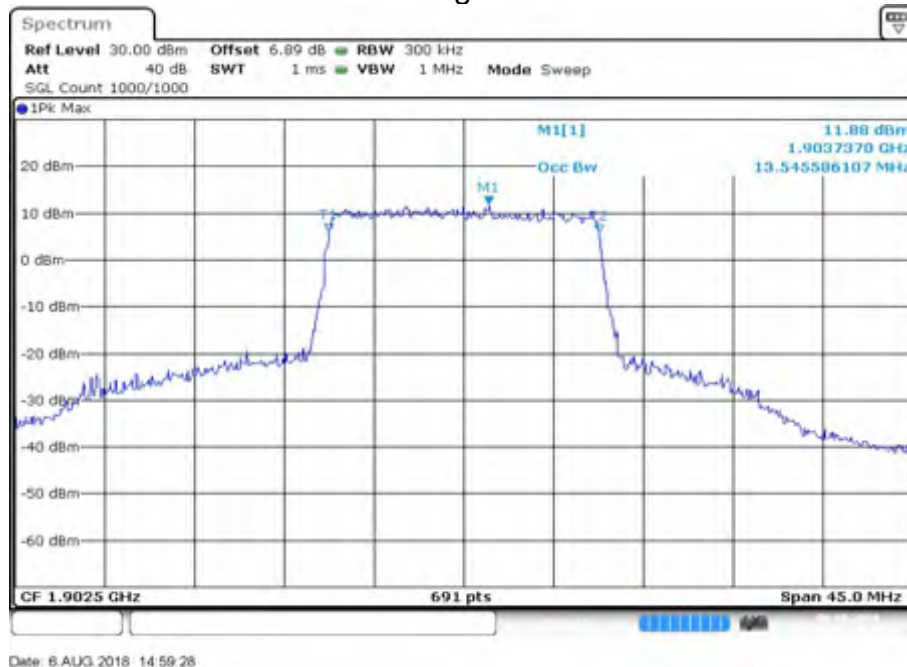
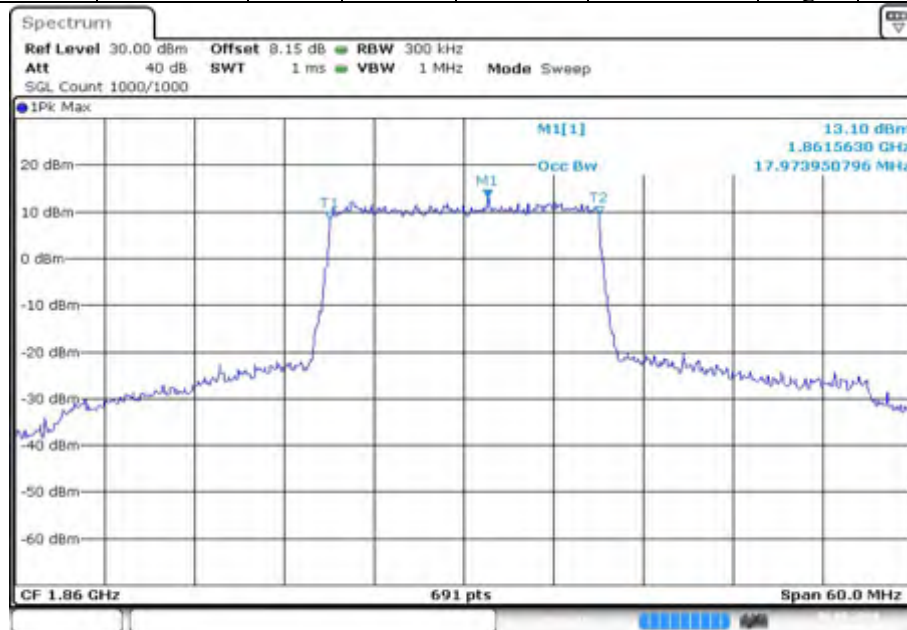


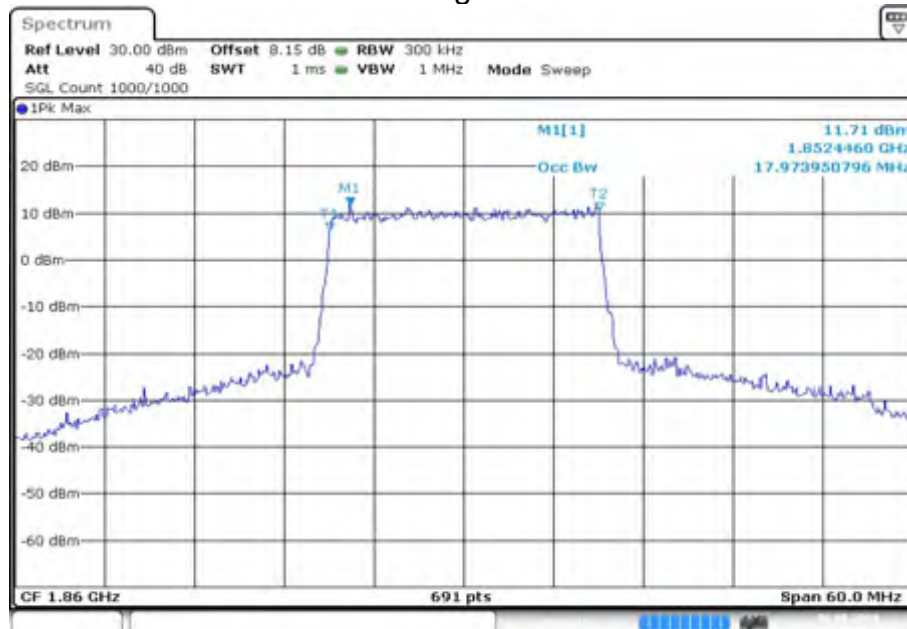
Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1860	18700	20	100	0	17.974	Fig.4	17.974	Fig.8



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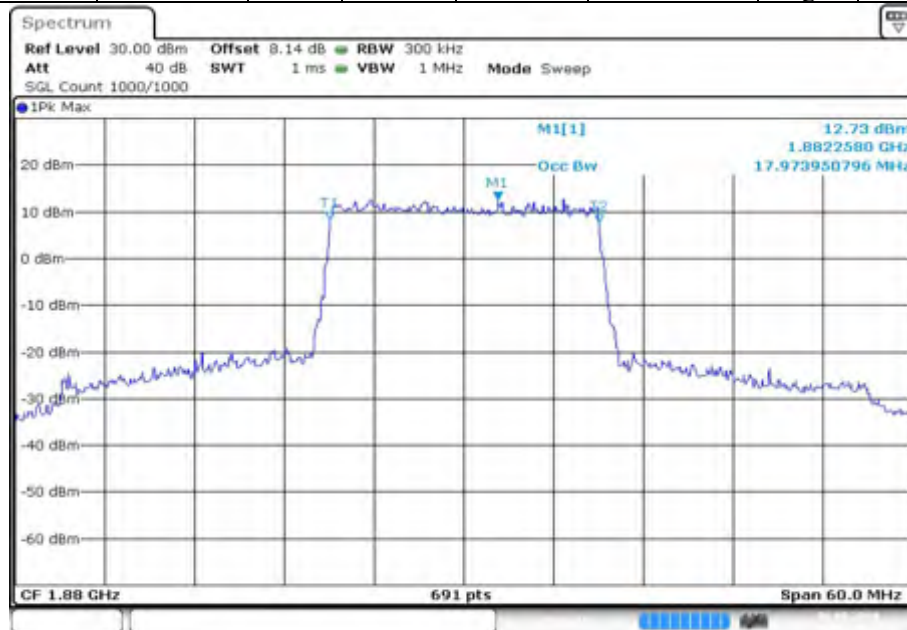
Fig.4



Date: 6.AUG.2018 15:09:13

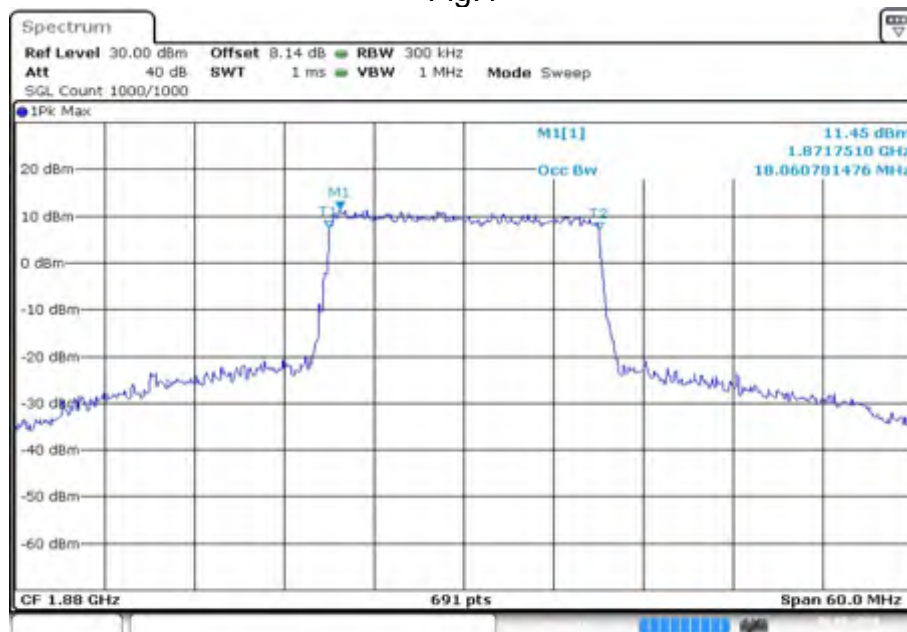
Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1880	18900	20	100	0	17.974	Fig.4	18.061	Fig.8



Date: 6.AUG.2018 15:16:12

Fig.4



Date: 6.AUG.2018 15:18:58

Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
2	1900	19100	20	100	0	17.887	Fig.4	17.974	Fig.8

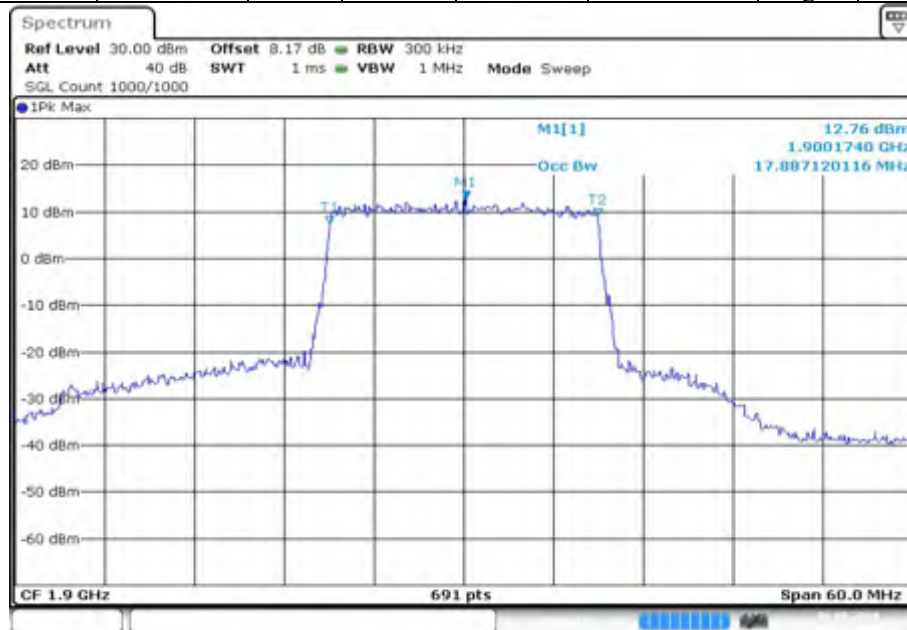


Fig.4

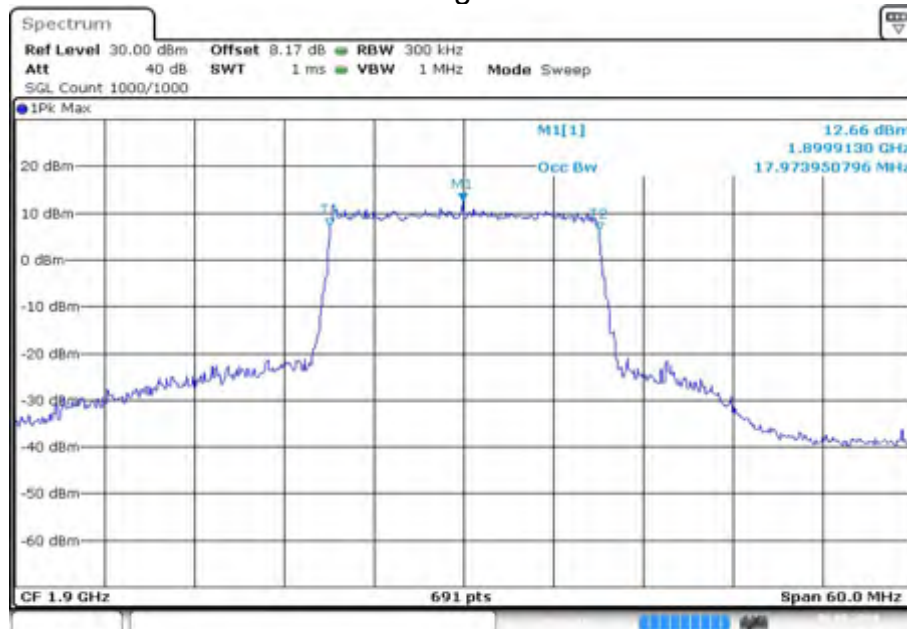


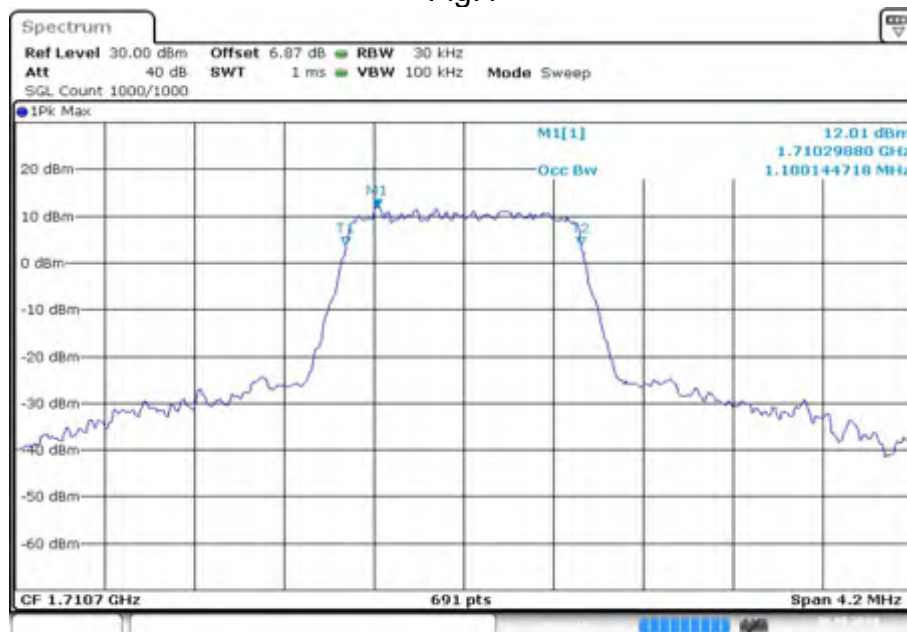
Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1710.7	19957	1.4	6	0	1.088	Fig.4	1.100	Fig.8



Date: 6.AUG.2018 15:33:26

Fig.4



Date: 6.AUG.2018 15:36:12

Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	1.4	6	0	1.100	Fig.4	1.088	Fig.8

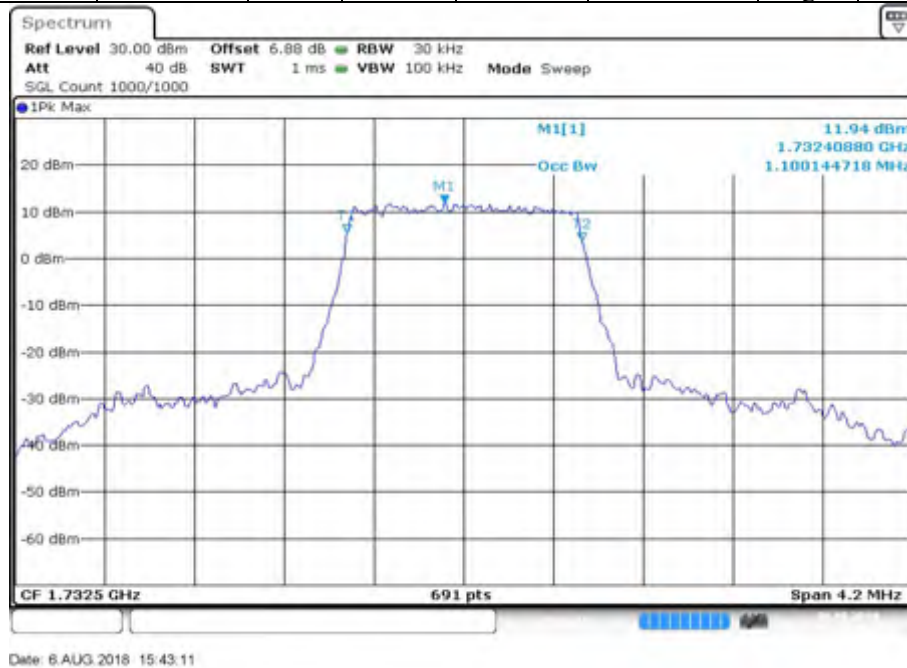


Fig.4

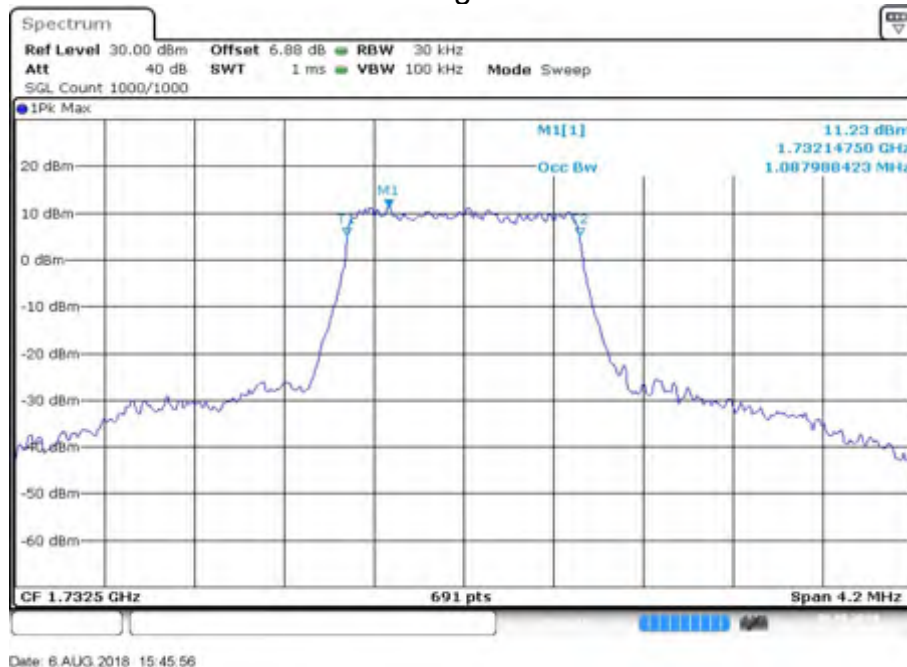


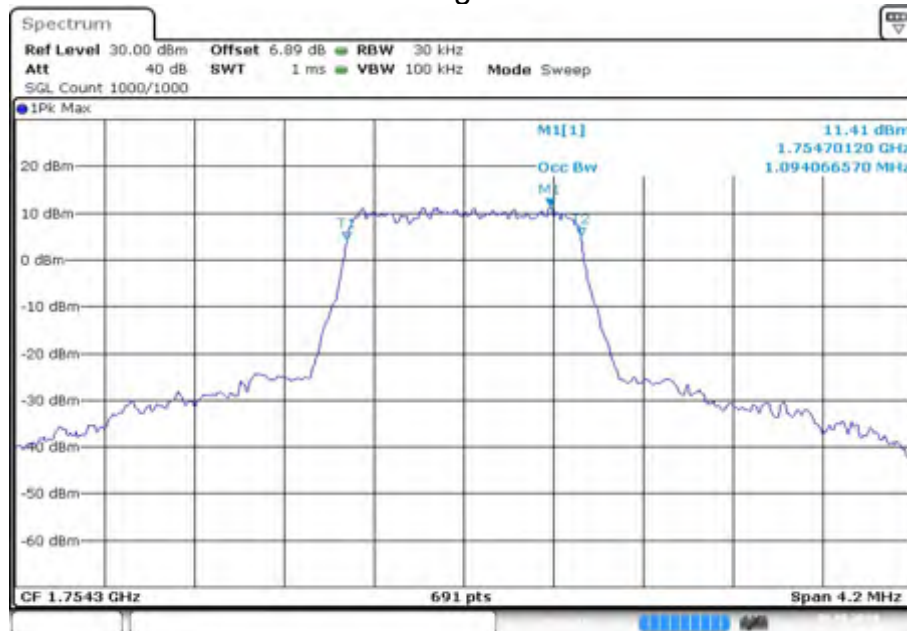
Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1754.3	20393	1.4	6	0	1.106	Fig.4	1.094	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1711.5	19965	3	15	0	2.722	Fig.4	2.722	Fig.8



Fig.4

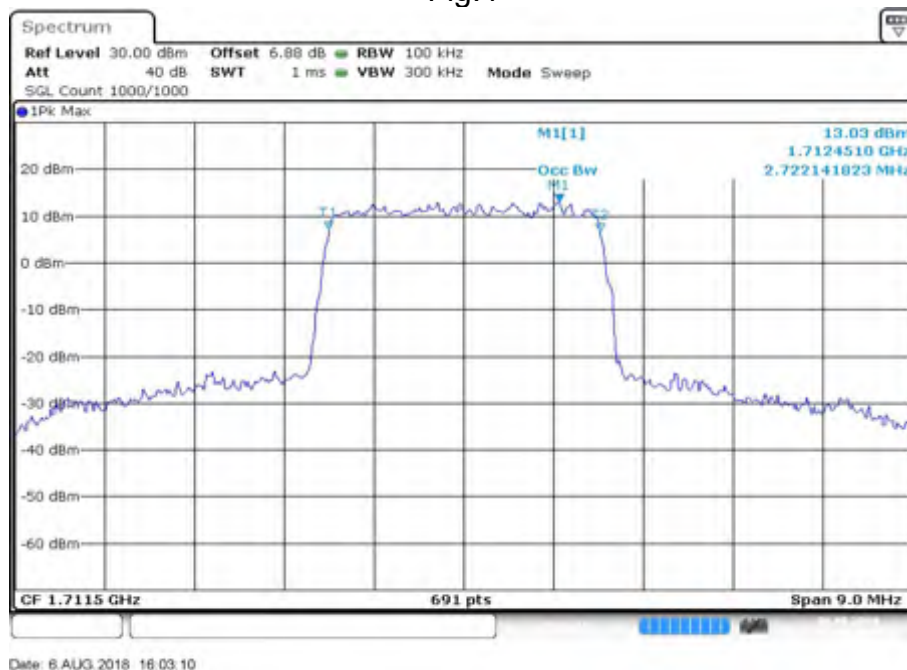


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	3	15	0	2.722	Fig.4	2.735	Fig.8

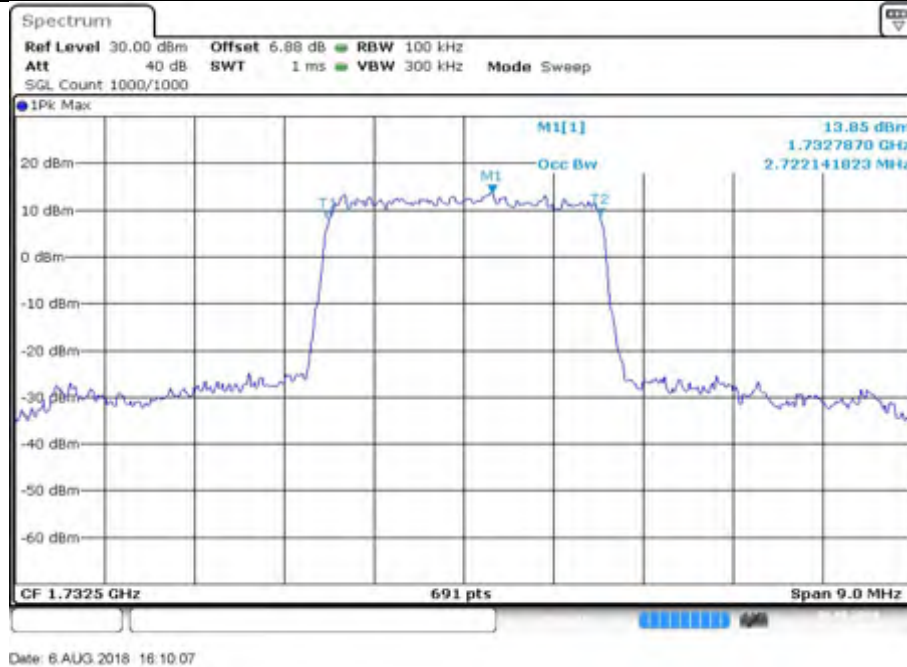


Fig.4

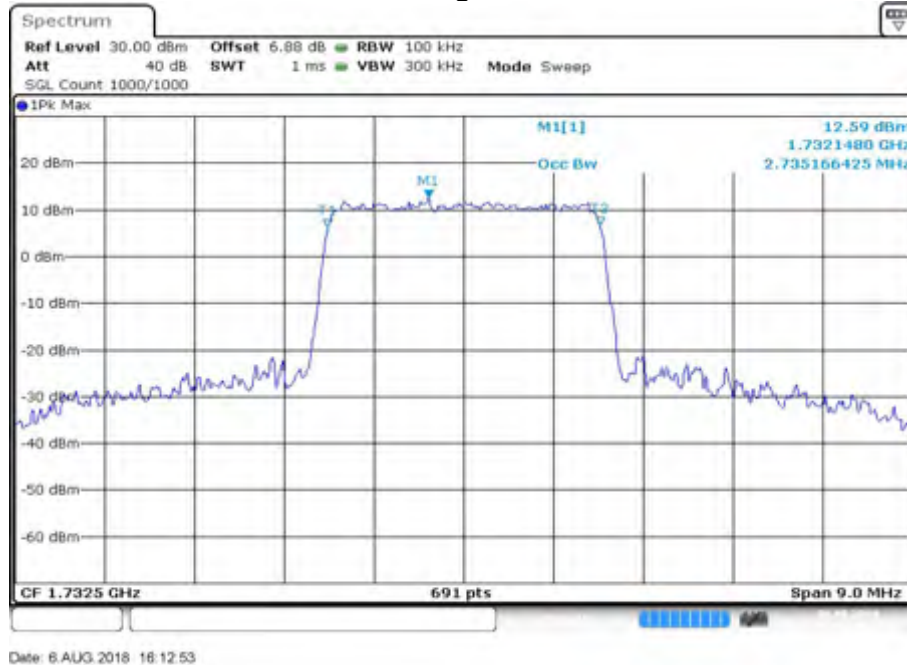


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1753.5	20385	3	15	0	2.722	Fig.4	2.722	Fig.8



Fig.4

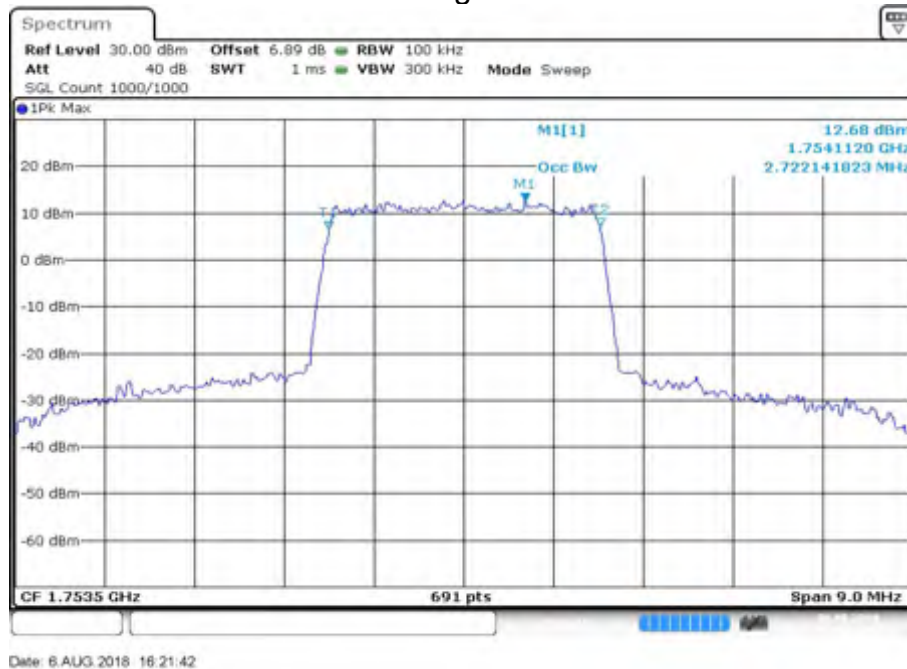
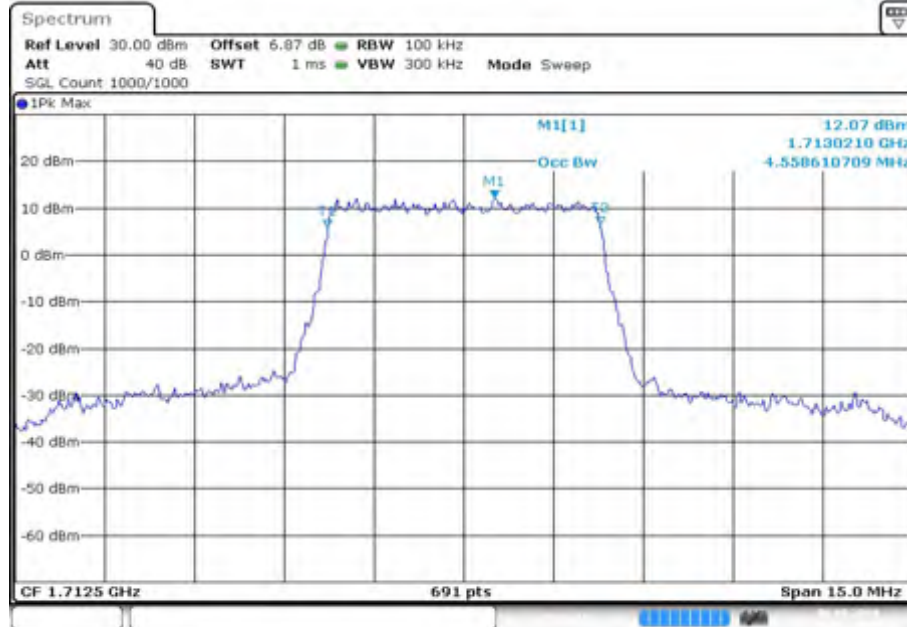


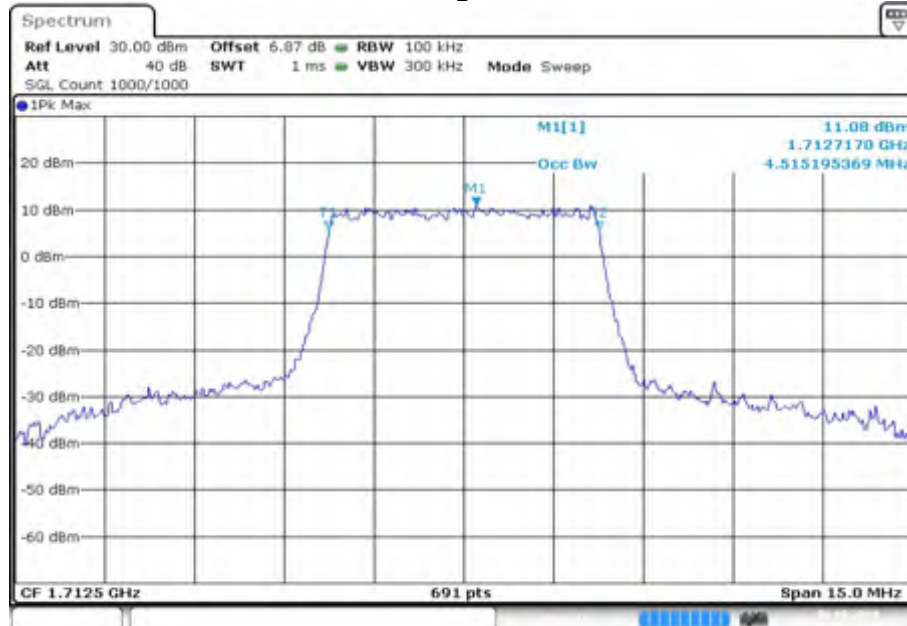
Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1712.5	19975	5	25	0	4.559	Fig.4	4.515	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	5	25	0	4.515	Fig.4	4.537	Fig.8

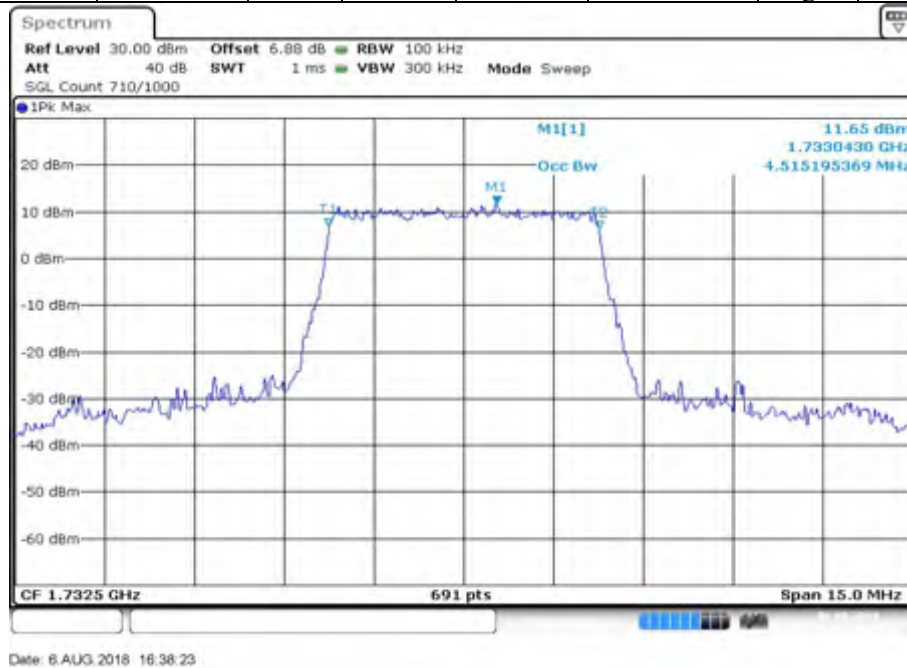


Fig.4

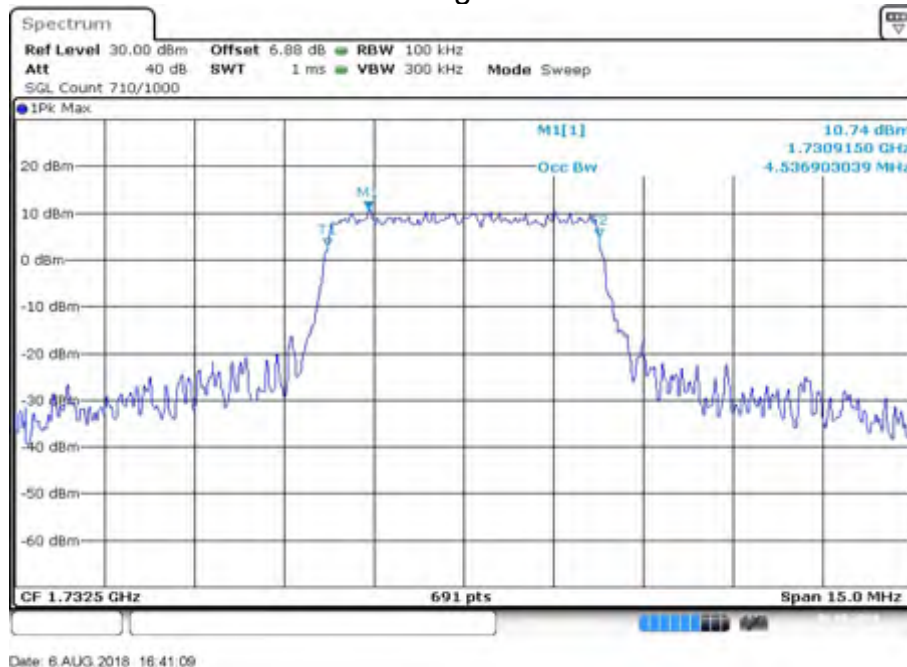


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1752.5	20375	5	25	0	4.515	Fig.4	4.537	Fig.8

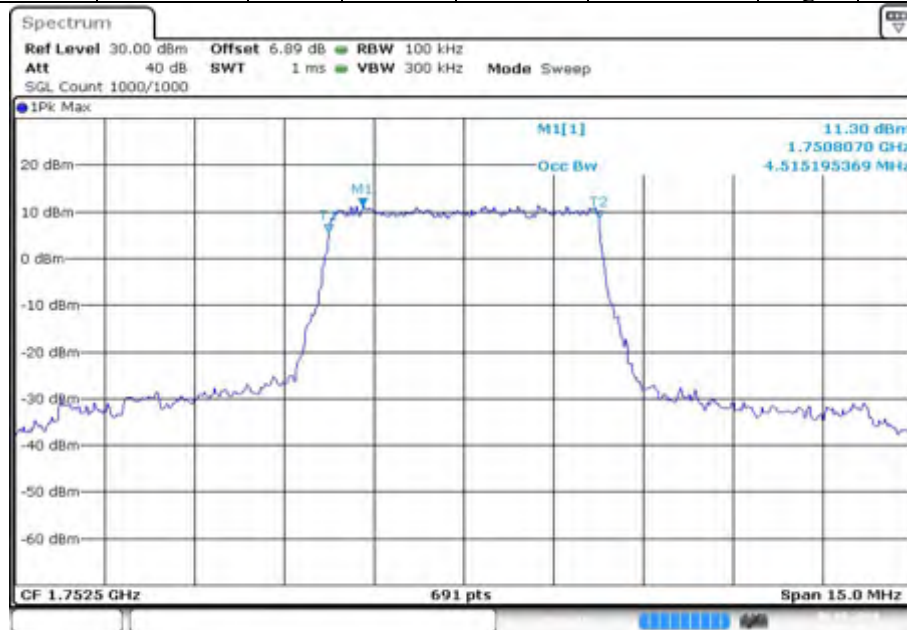


Fig.4

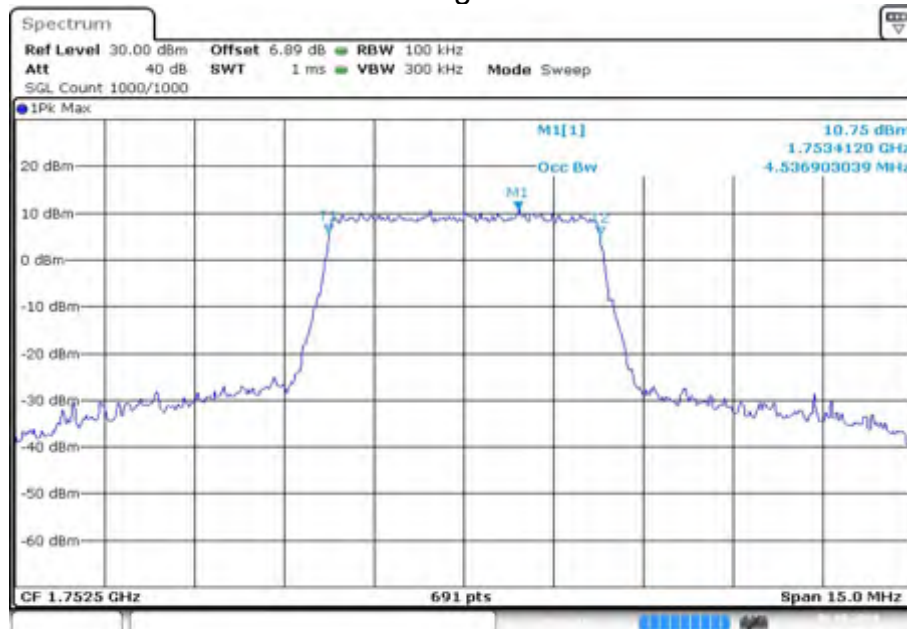


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1715	20000	10	50	0	9.117	Fig.4	9.117	Fig.8

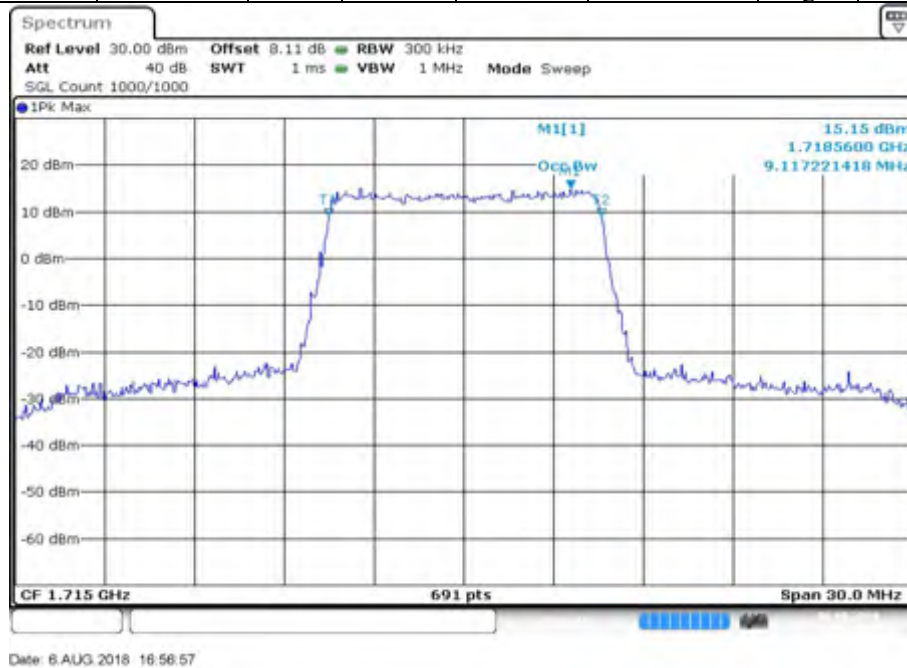


Fig.4

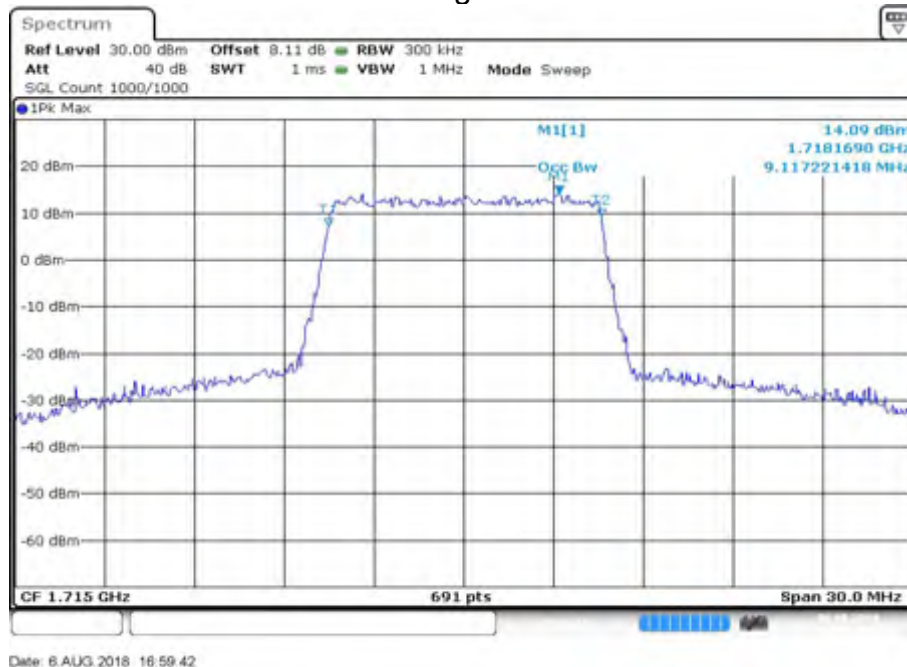


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	10	50	0	9.074	Fig.4	9.074	Fig.8



Fig.4

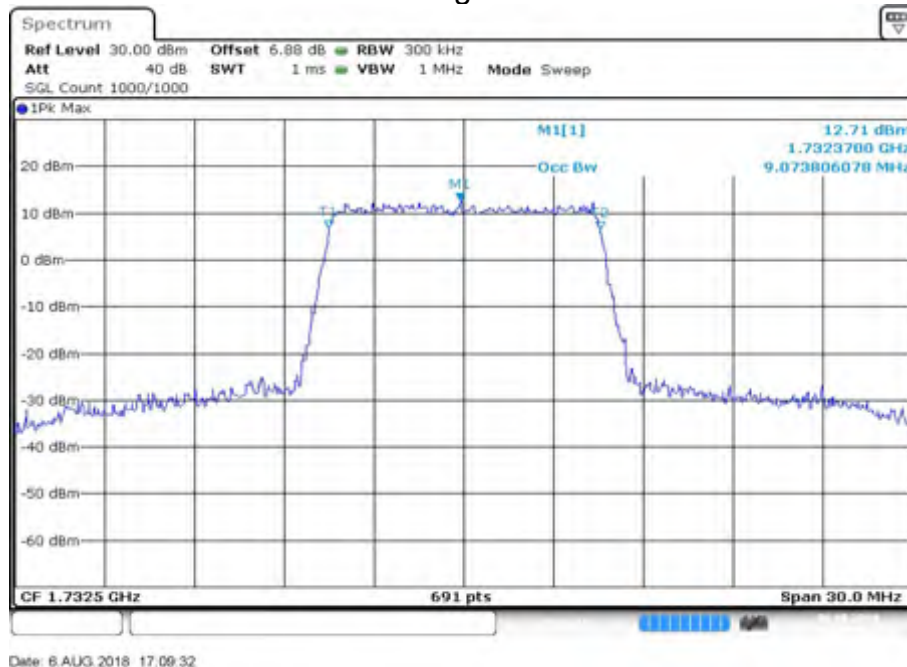


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1750	20350	10	50	0	9.074	Fig.4	9.117	Fig.8



Fig.4

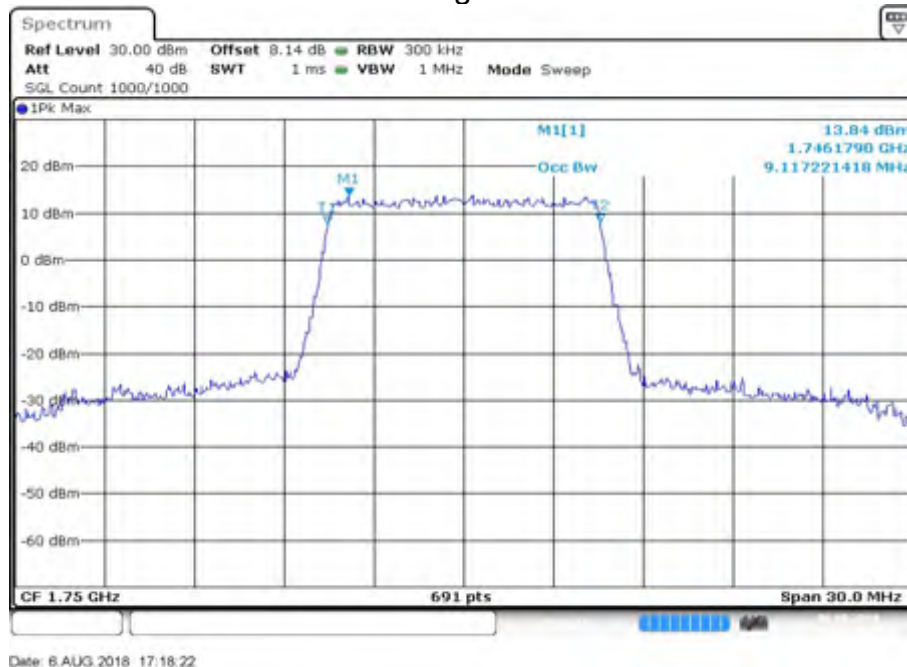
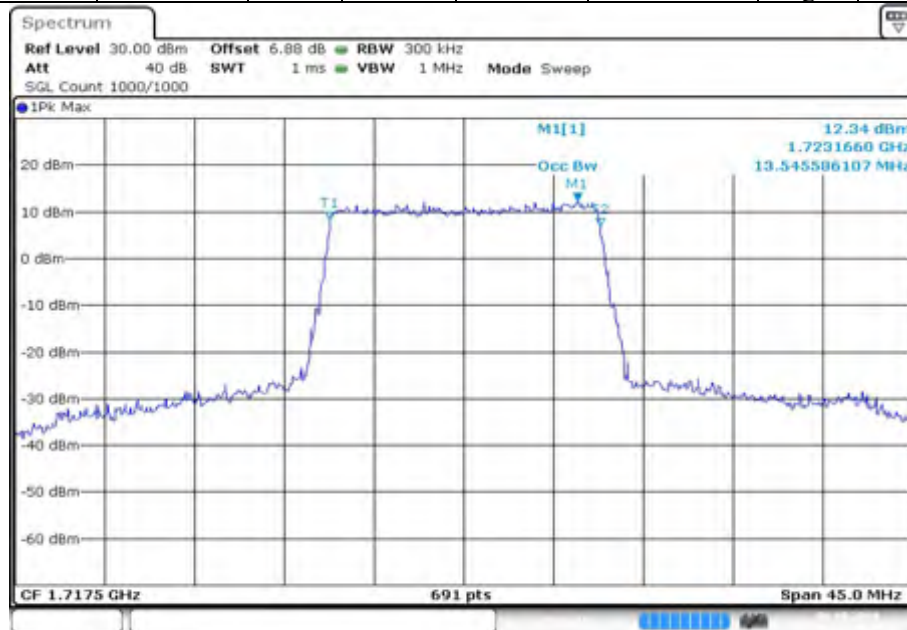


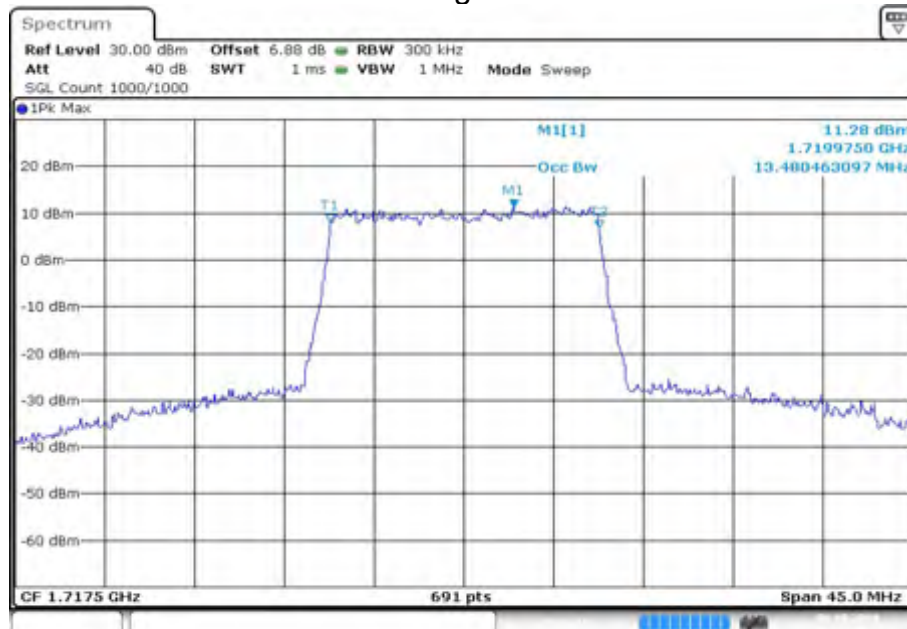
Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1717.5	20025	15	75	0	13.546	Fig.4	13.480	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	15	75	0	13.480	Fig.4	13.546	Fig.8

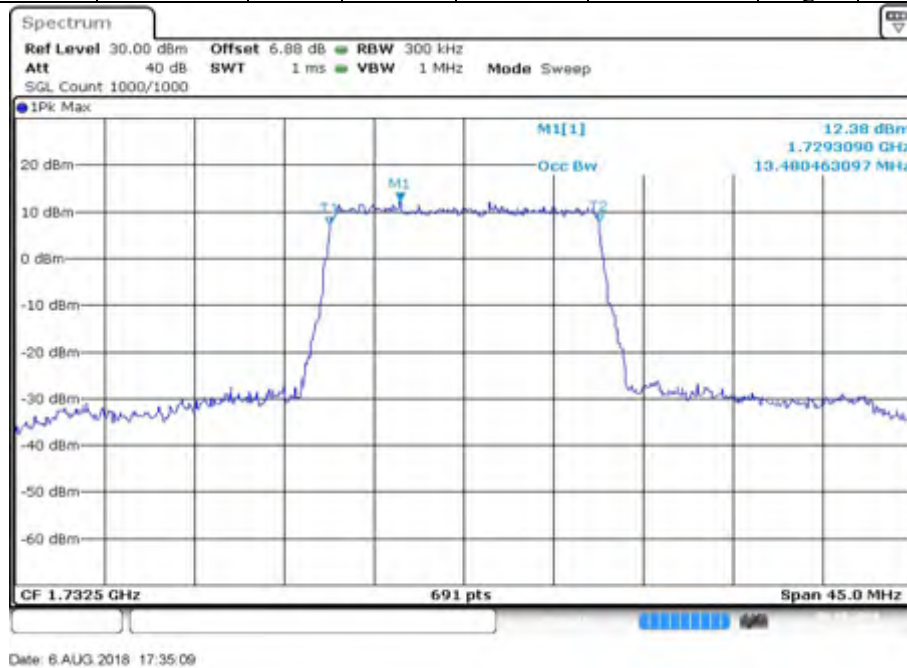


Fig.4

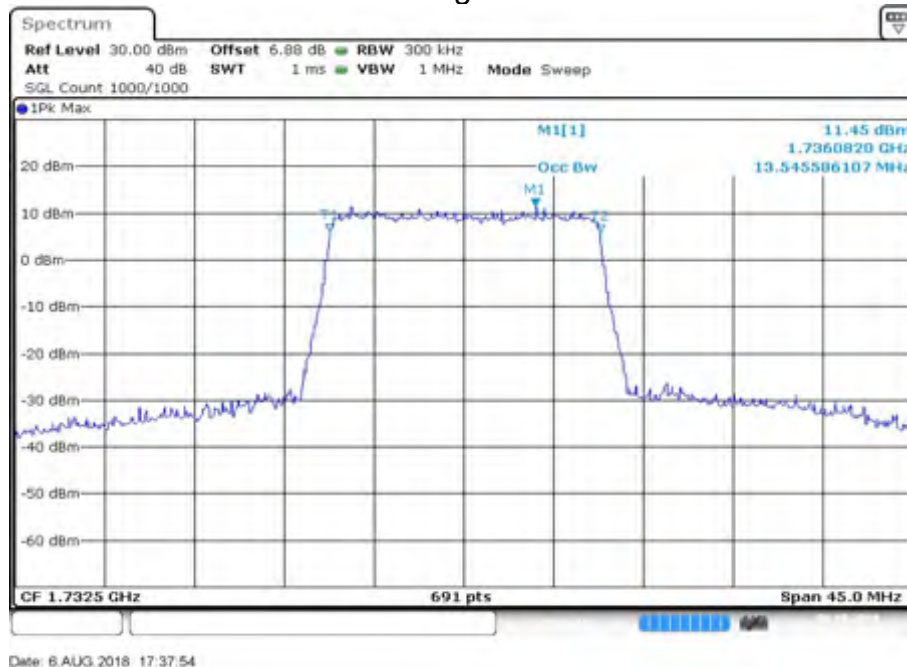


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1747.5	20325	15	75	0	13.546	Fig.4	13.611	Fig.8



Fig.4

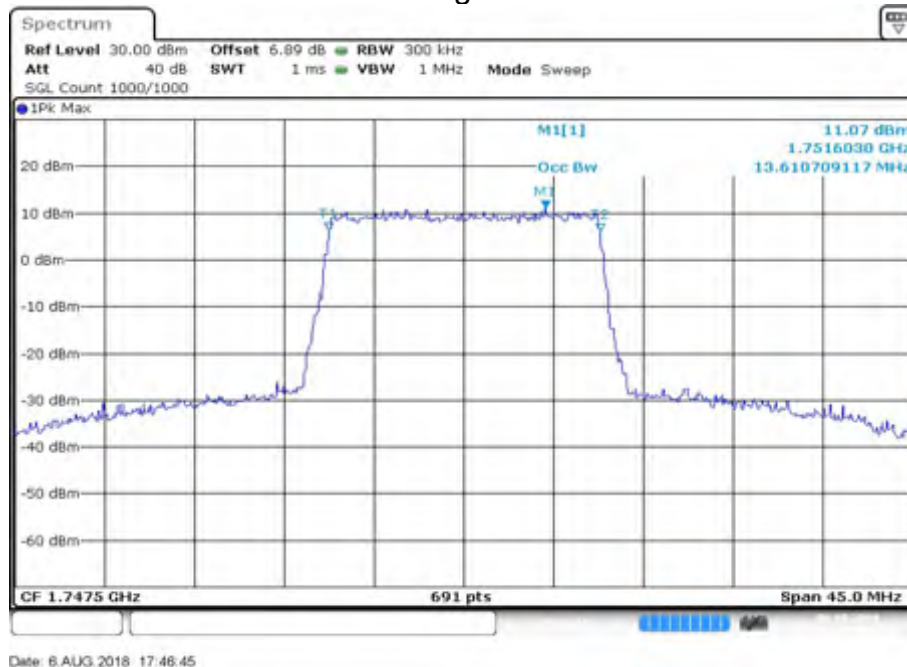
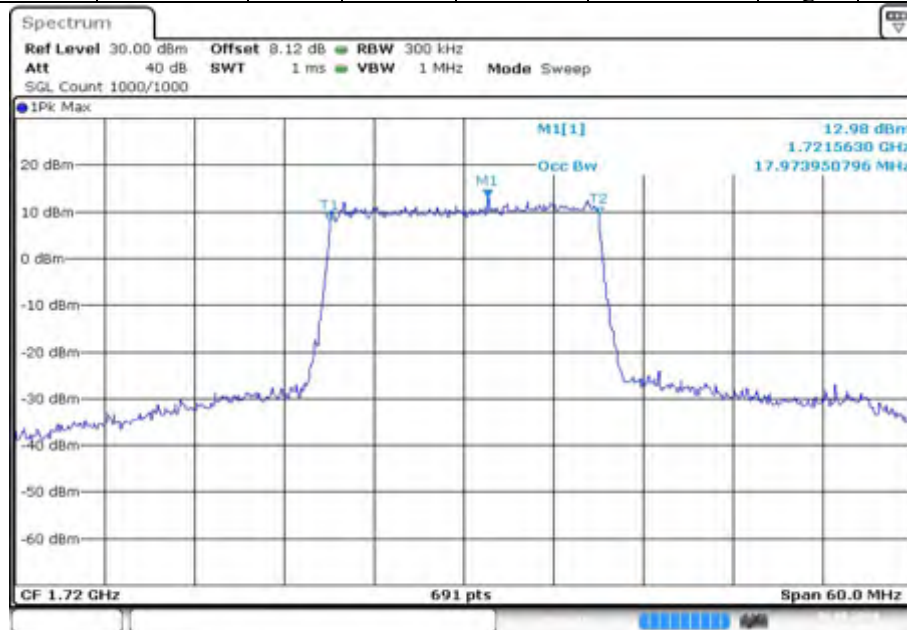


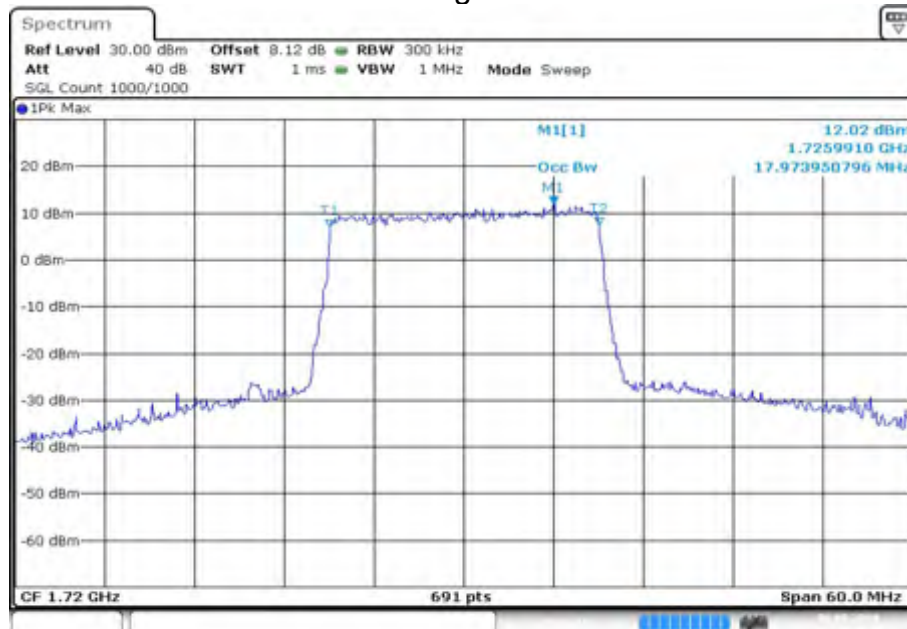
Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1720	20050	20	100	0	17.974	Fig.4	17.974	Fig.8



Date: 6.AUG.2018 17:53:43

Fig.4



Date: 6.AUG.2018 17:56:28

Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	20	100	0	17.974	Fig.4	17.974	Fig.8

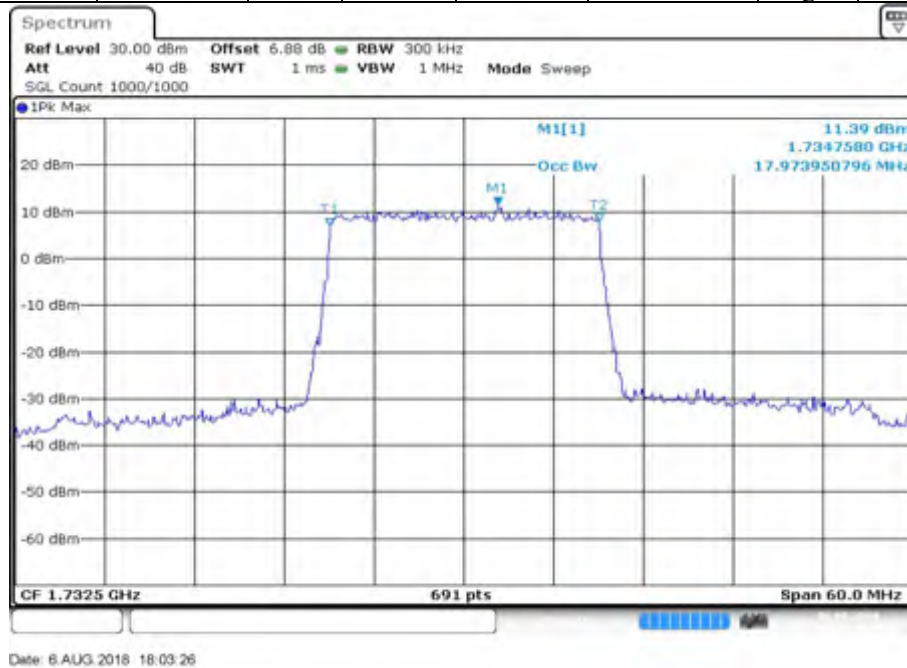


Fig.4

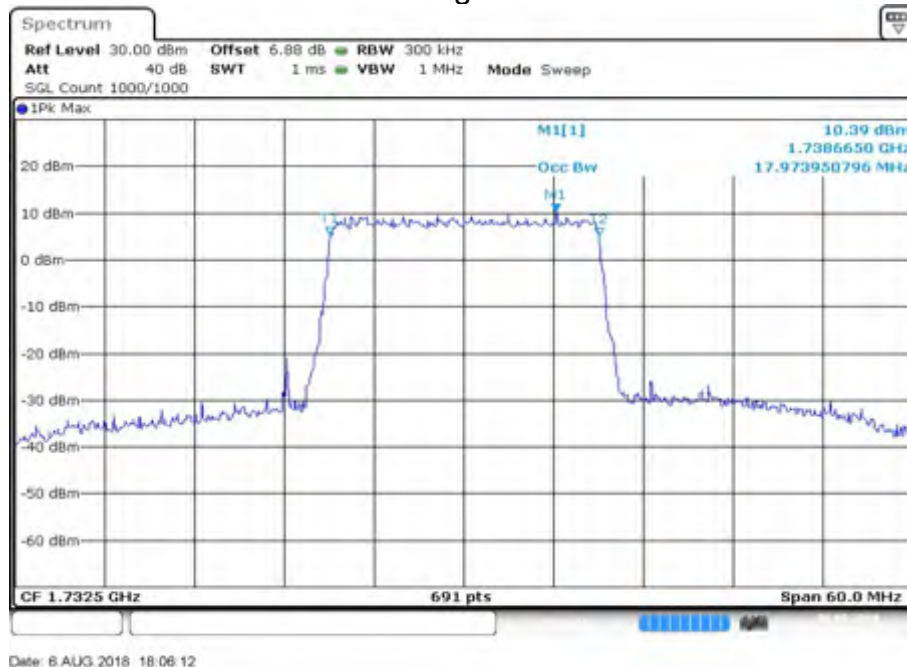


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
4	1745	20300	20	100	0	17.974	Fig.4	17.974	Fig.8

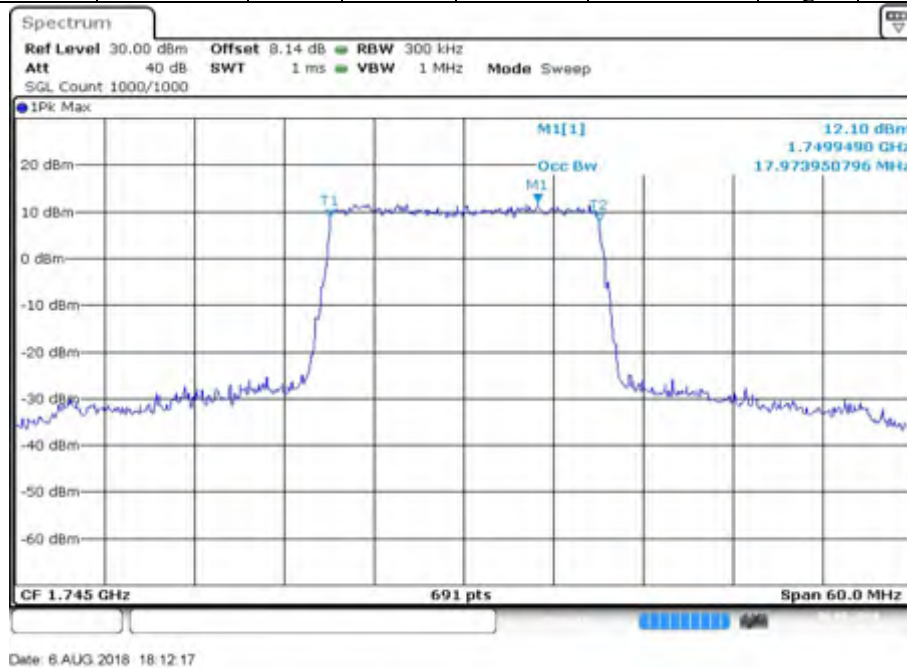


Fig.4

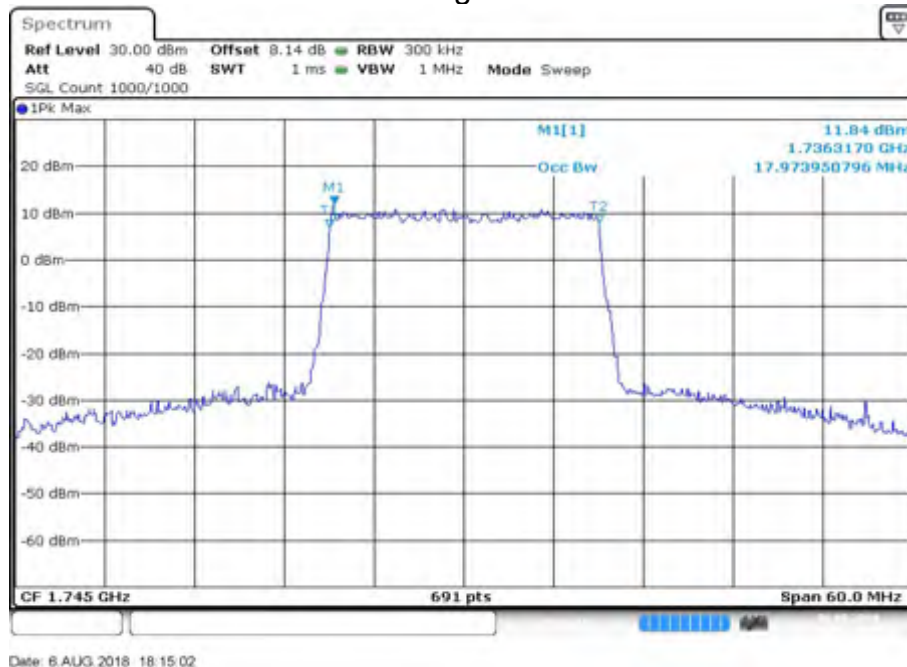


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	824.7	20407	1.4	6	0	1.094	Fig.4	1.100	Fig.8



Fig.4

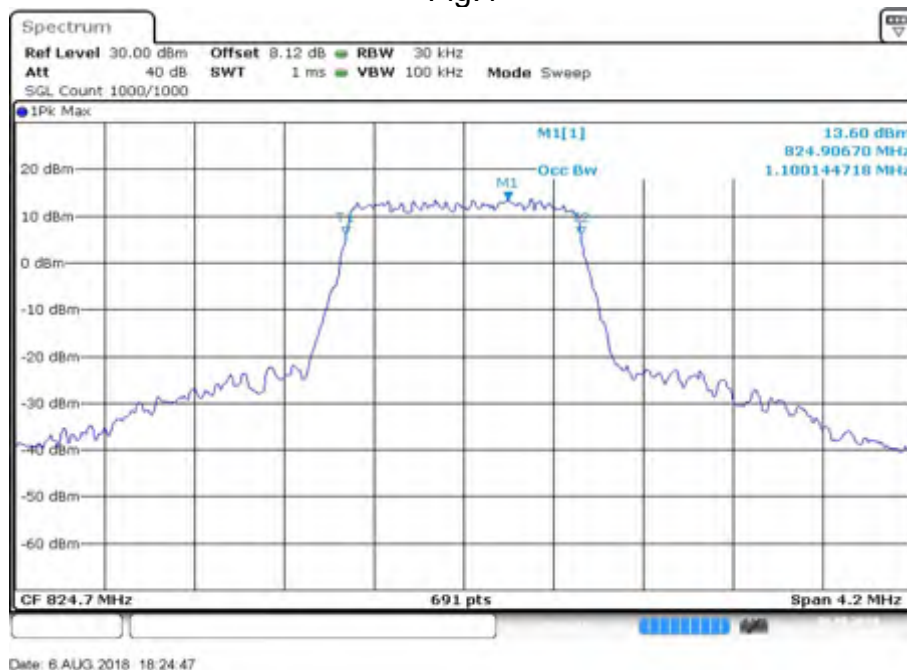


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	1.4	6	0	1.106	Fig.4	1.094	Fig.8

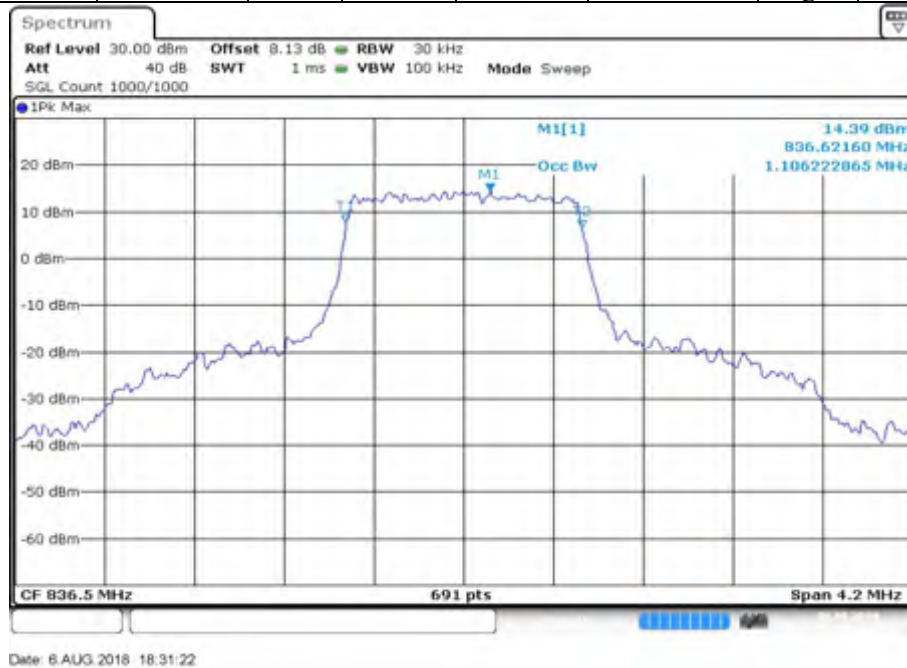


Fig.4

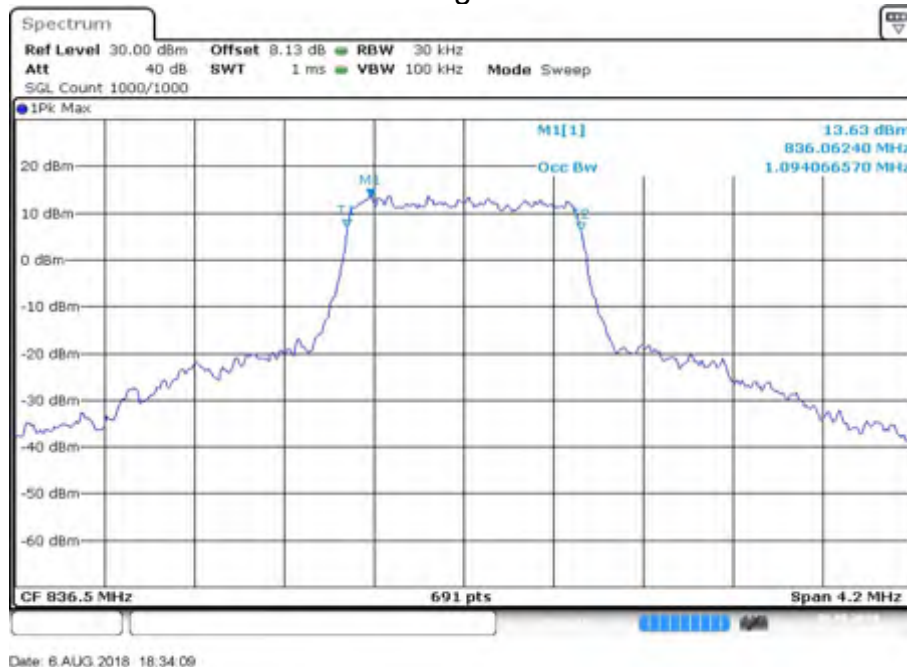


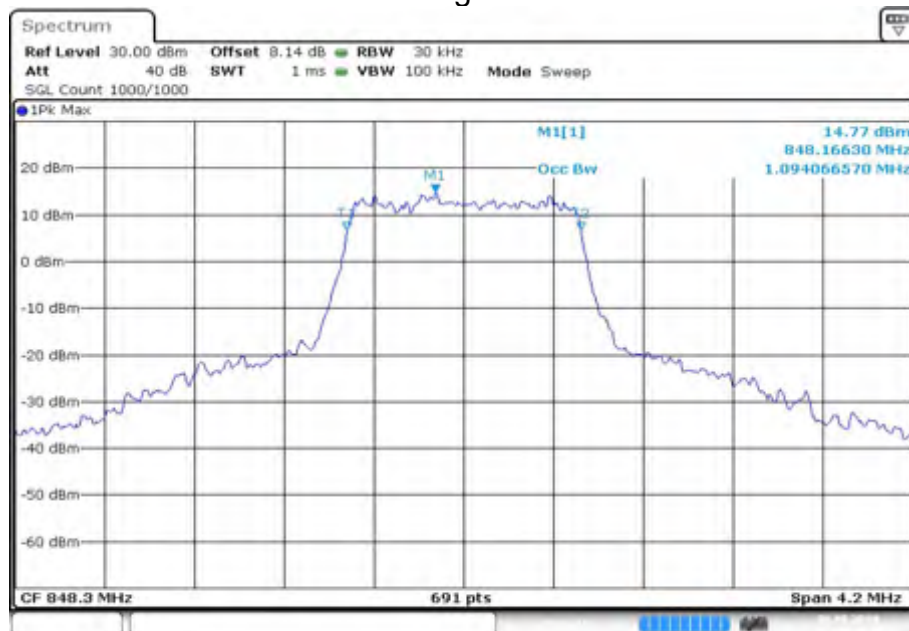
Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	848.3	20643	1.4	6	0	1.106	Fig.4	1.094	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	825.5	20415	3	15	0	2.735	Fig.4	2.709	Fig.8



Fig.4

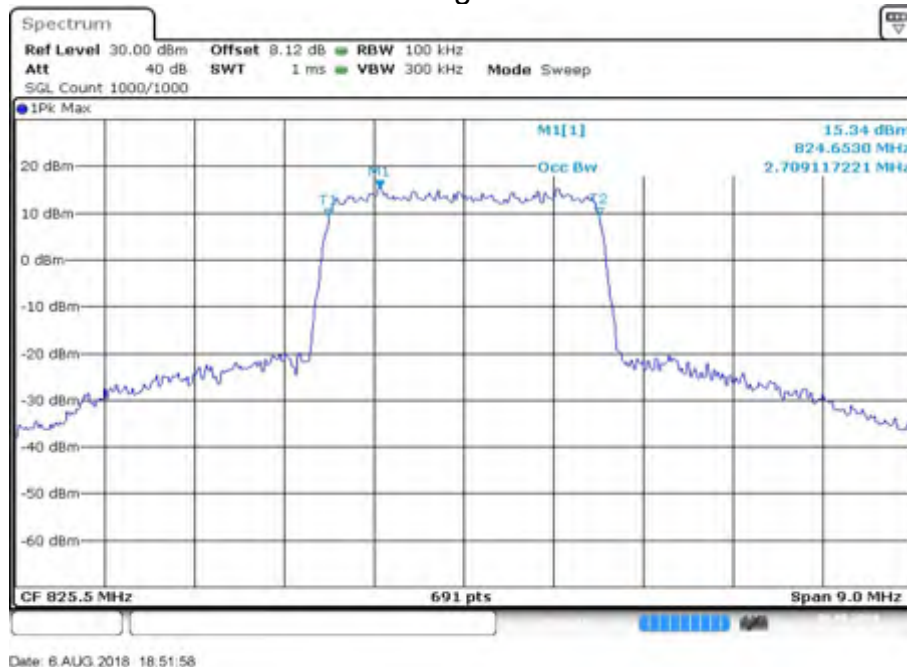


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	3	15	0	2.735	Fig.4	2.735	Fig.8



Fig.4

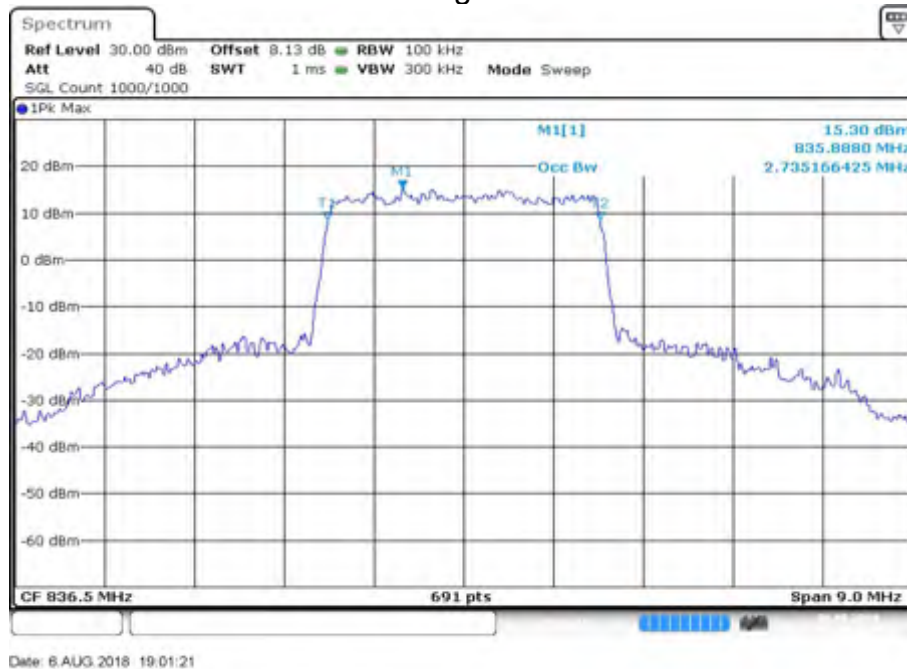


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	847.5	20635	3	15	0	2.735	Fig.4	2.722	Fig.8

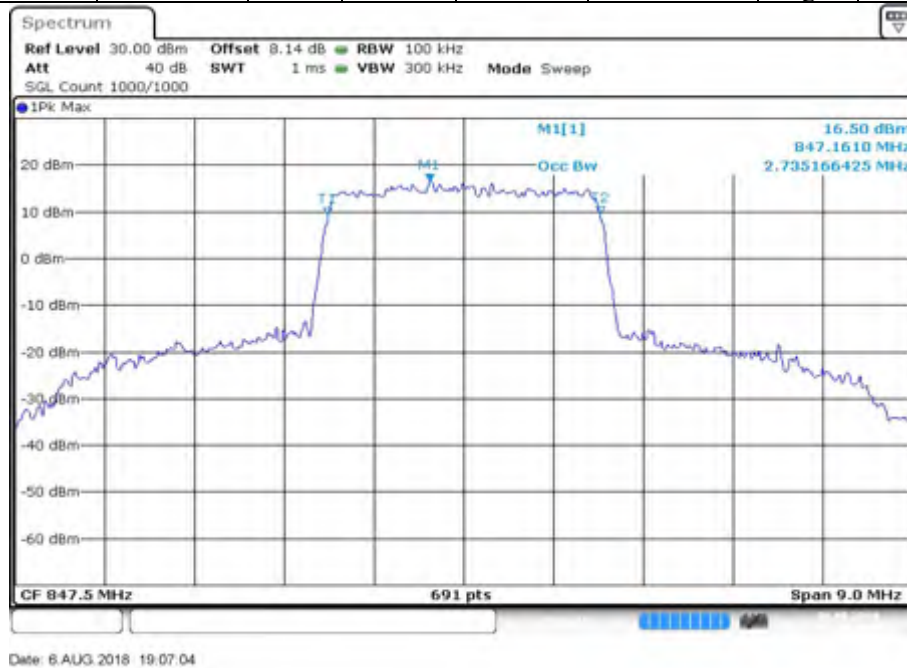


Fig.4

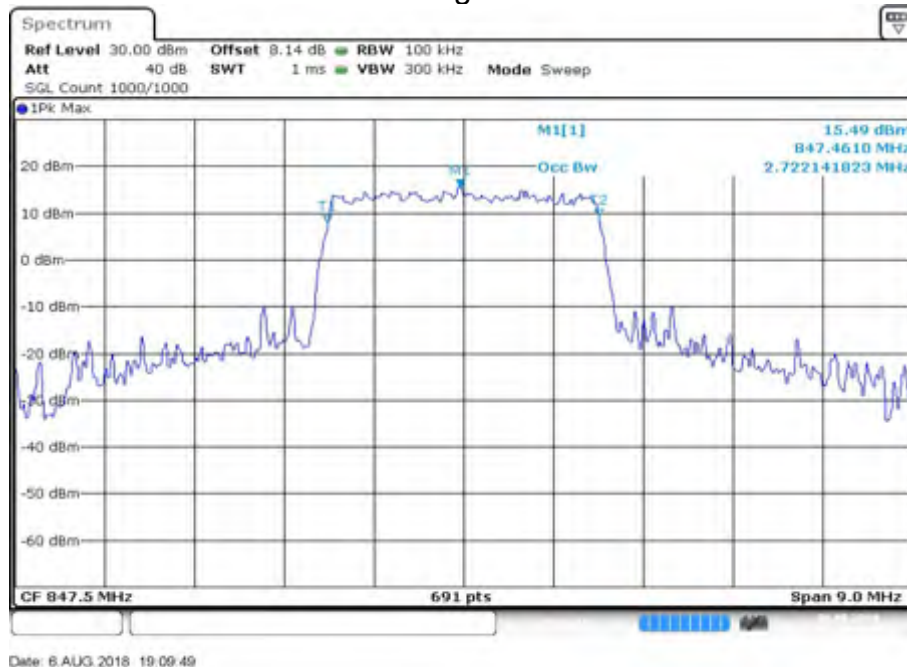


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	826.5	20425	5	25	0	4.559	Fig.4	4.515	Fig.8

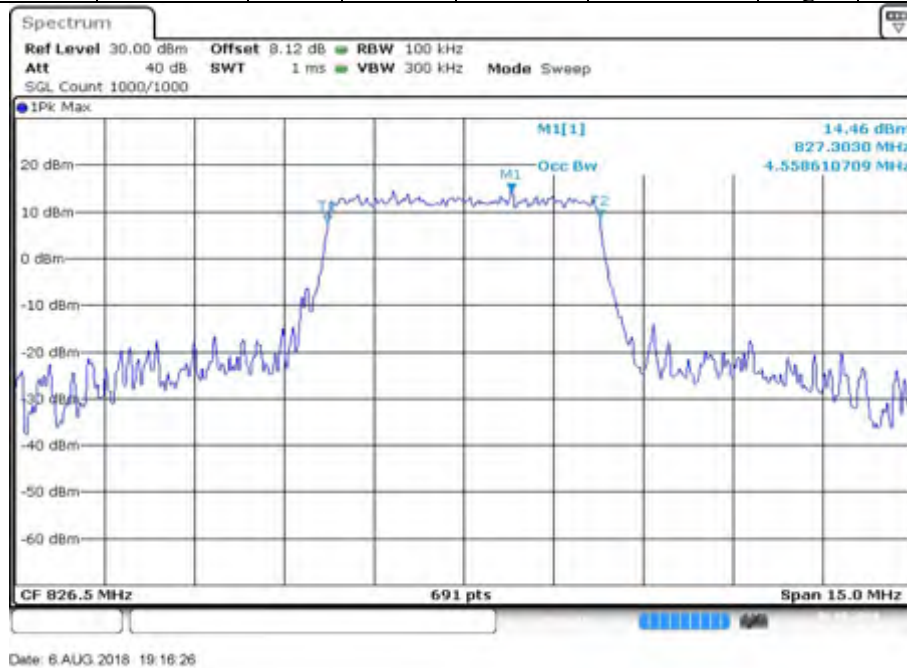


Fig.4

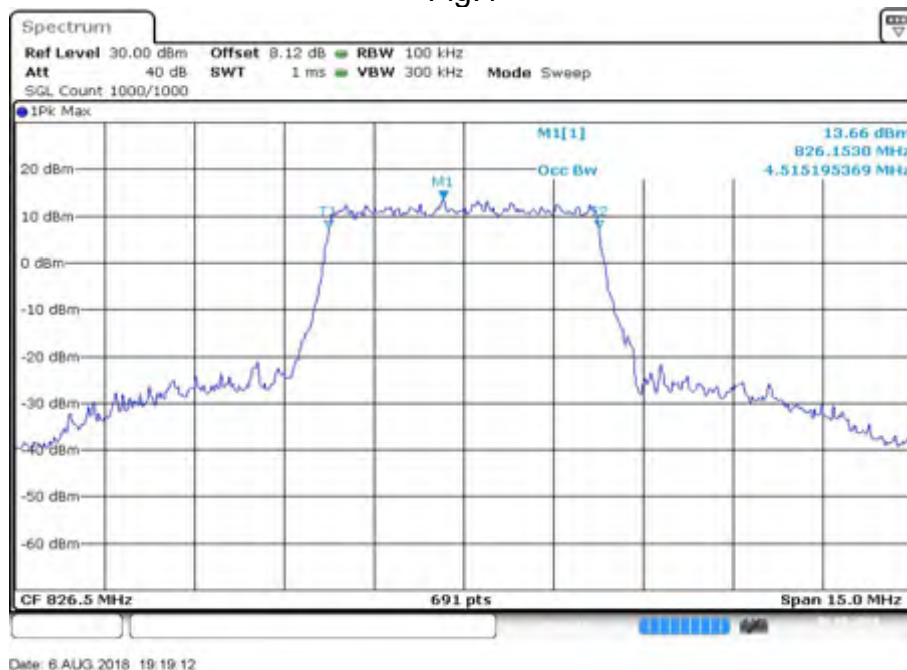


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	5	25	0	4.515	Fig.4	4.559	Fig.8



Fig.4

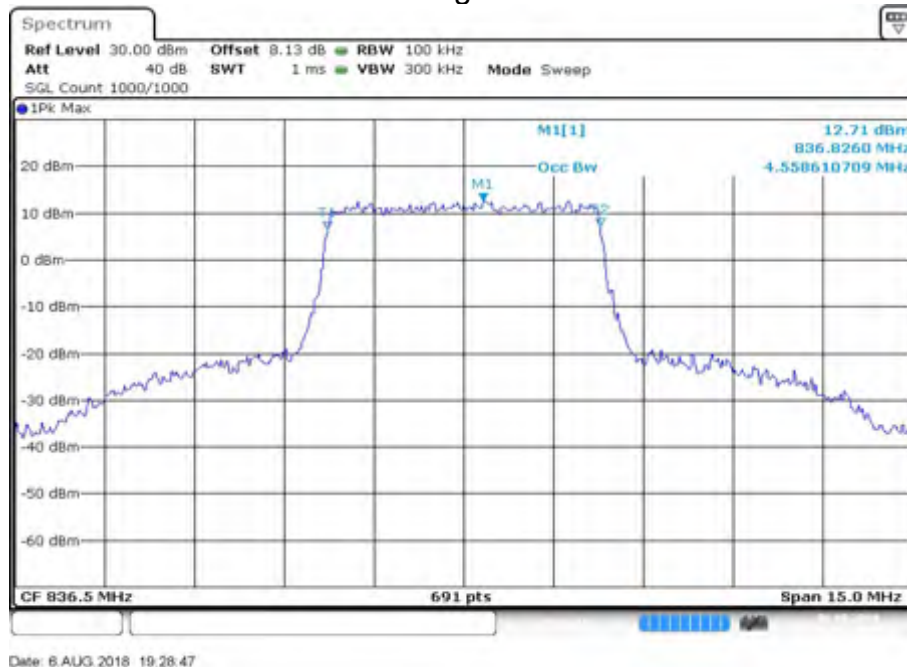
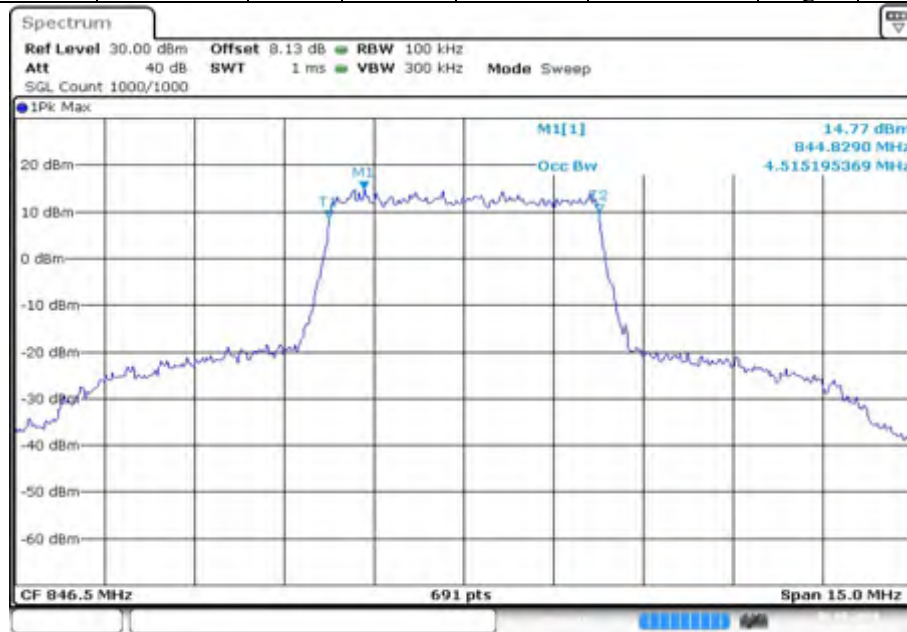


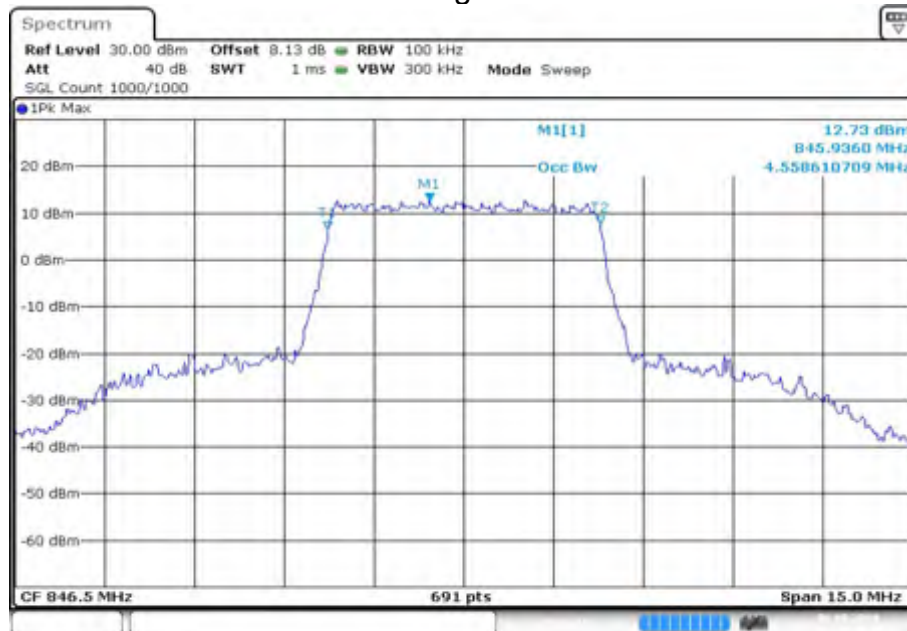
Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	846.5	20625	5	25	0	4.515	Fig.4	4.559	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	829	20450	10	50	0	9.161	Fig.4	9.074	Fig.8

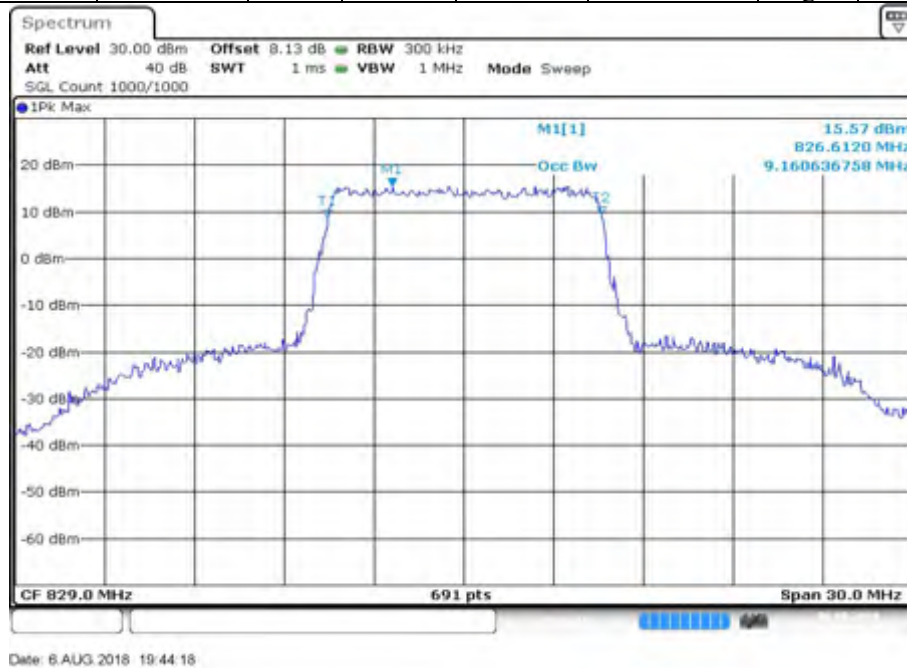


Fig.4

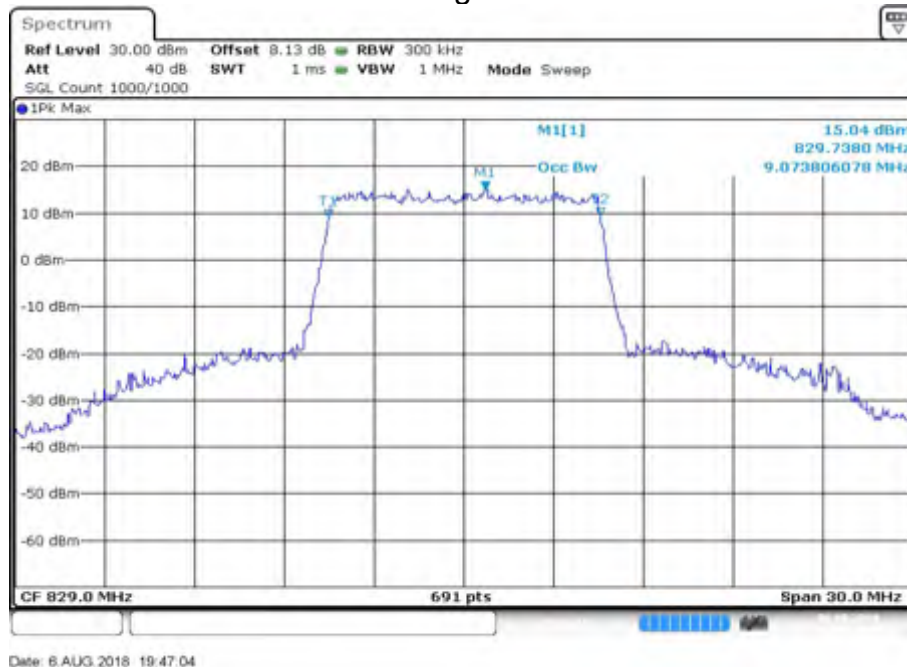


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	10	50	0	9.074	Fig.4	9.074	Fig.8

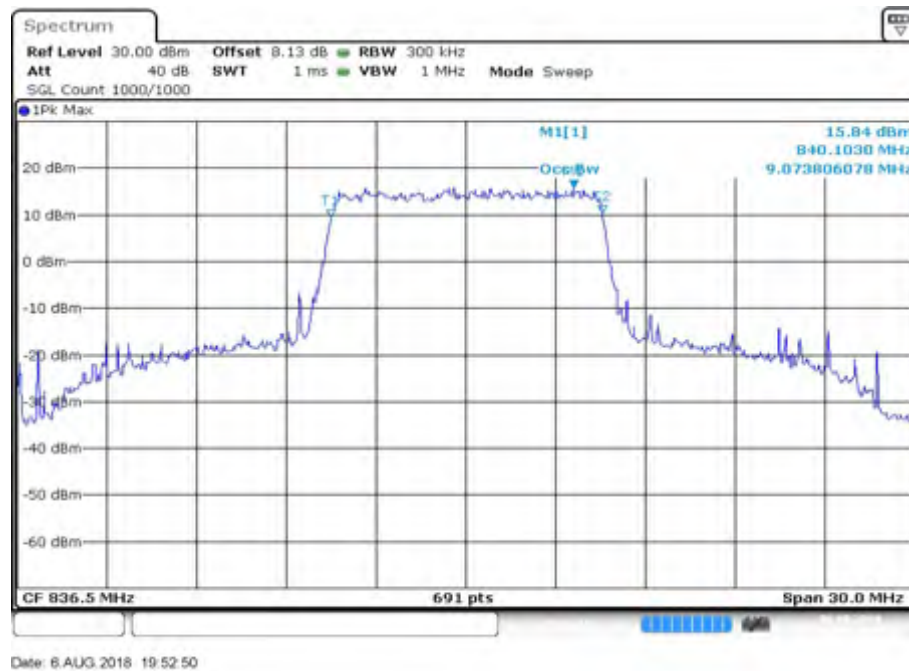


Fig.4

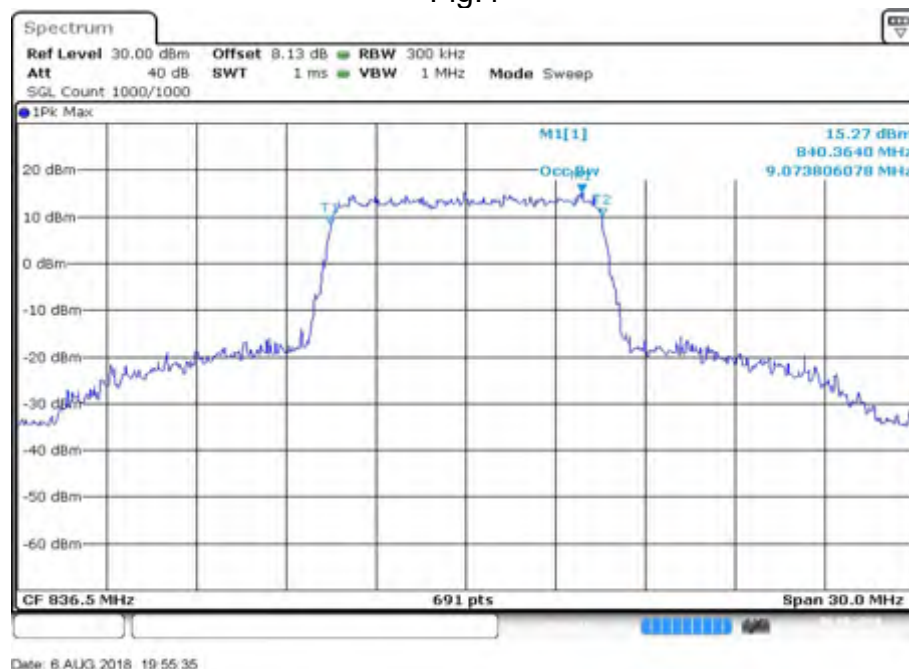


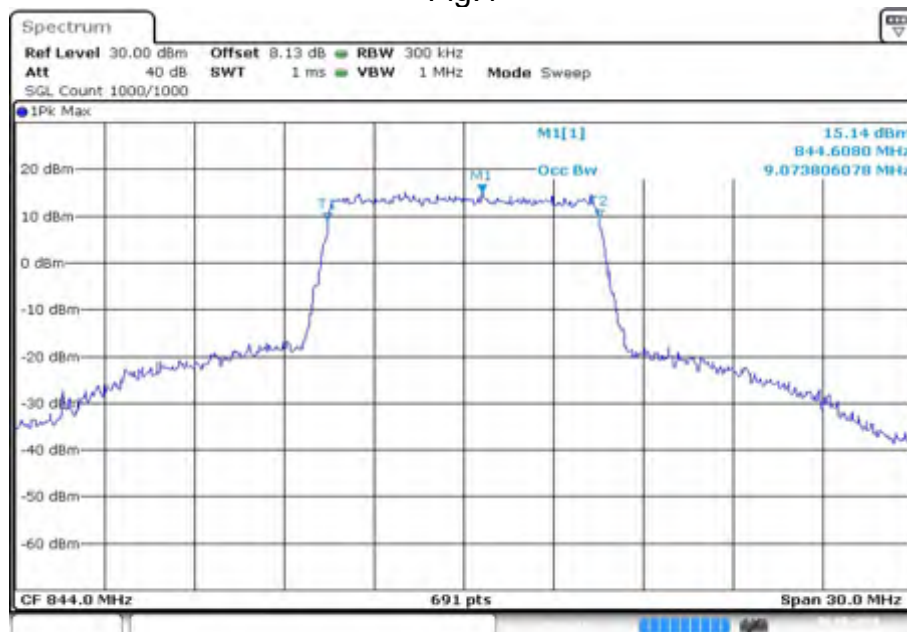
Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
5	844	20600	10	50	0	9.117	Fig.4	9.074	Fig.8



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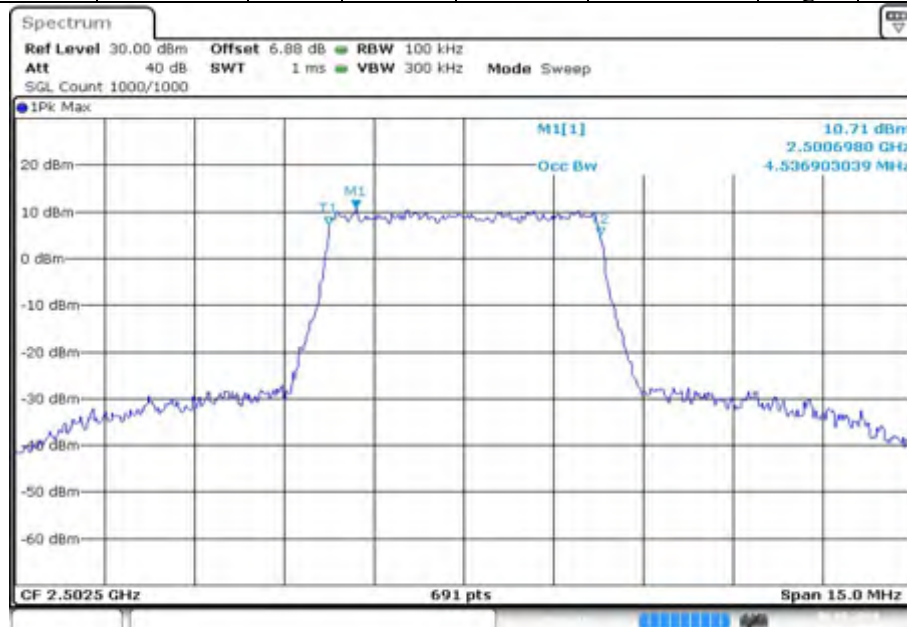
Fig.4



Date: 6.AUG.2018 20:04:04

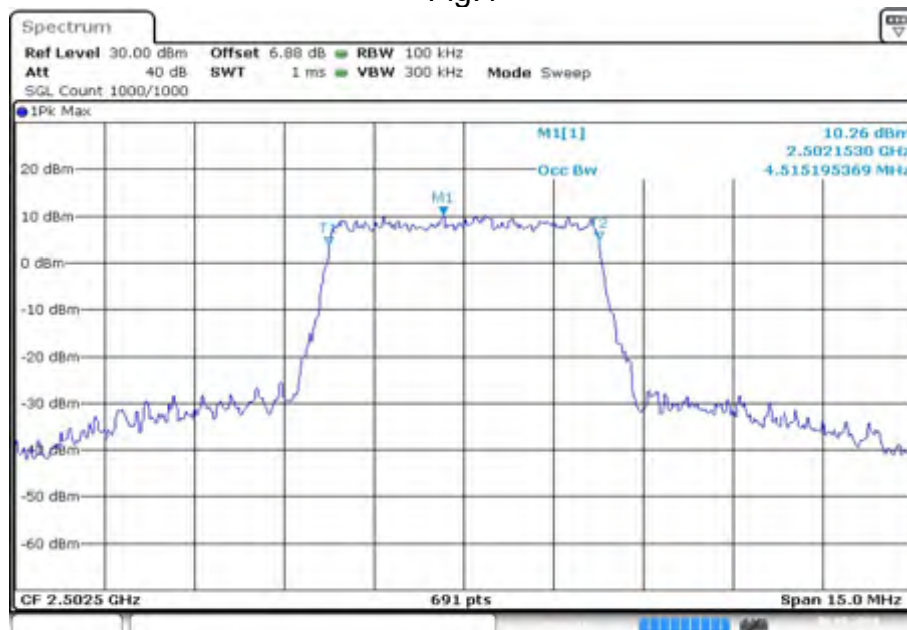
Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2502.5	20775	5	25	0	4.537	Fig.4	4.515	Fig.8



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Fig.4



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Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2535	21100	5	25	0	4.537	Fig.4	4.537	Fig.8

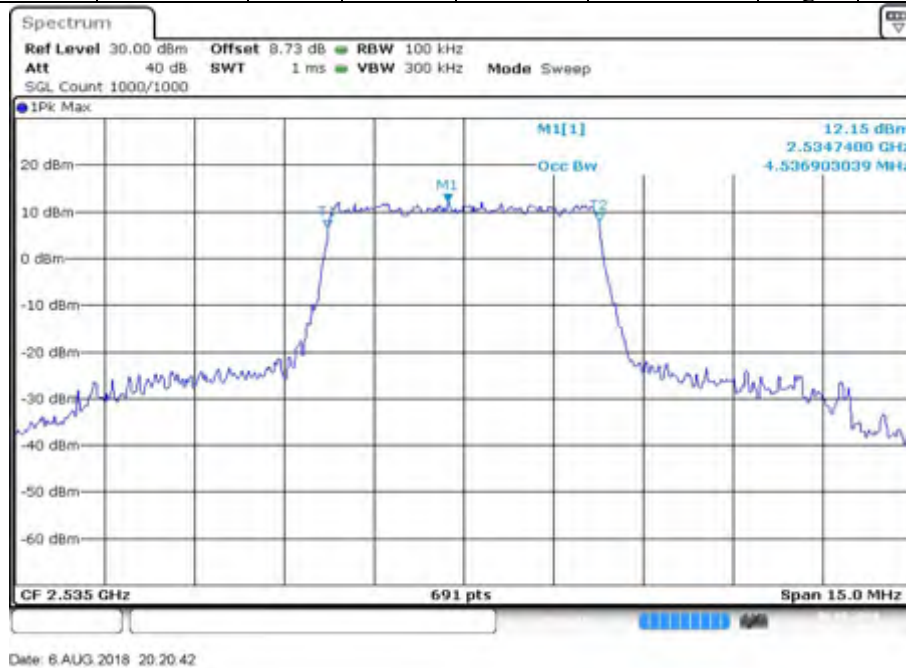


Fig.4

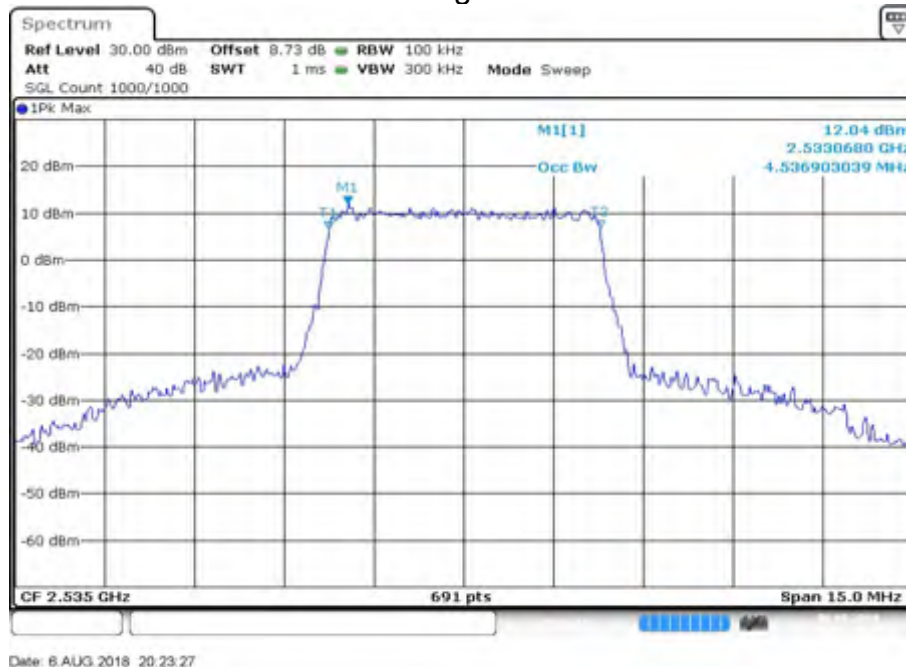


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2567.5	21425	5	25	0	4.515	Fig.4	4.537	Fig.8

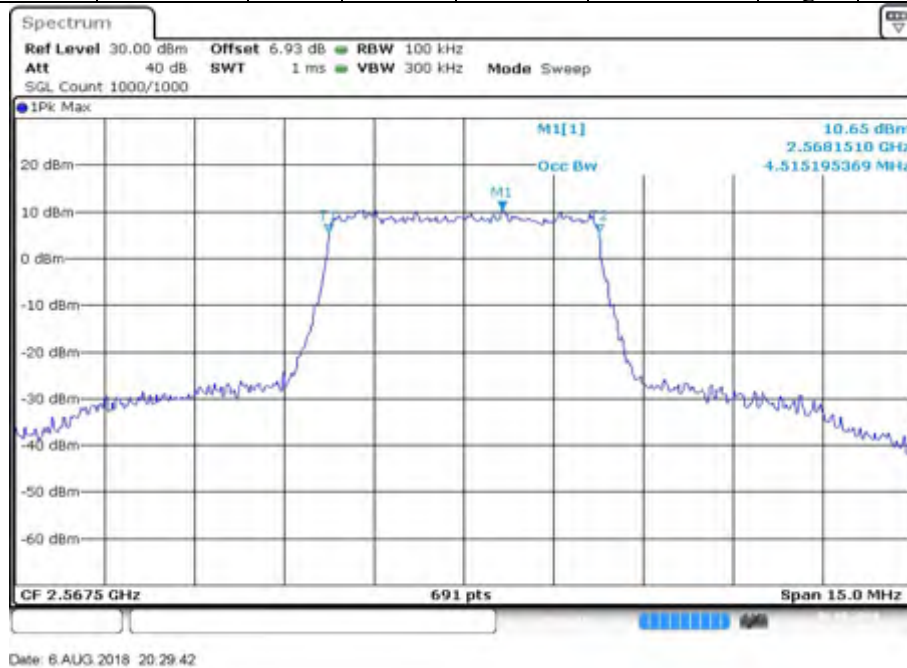


Fig.4



Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2505	20800	10	50	0	9.074	Fig.4	9.074	Fig.8

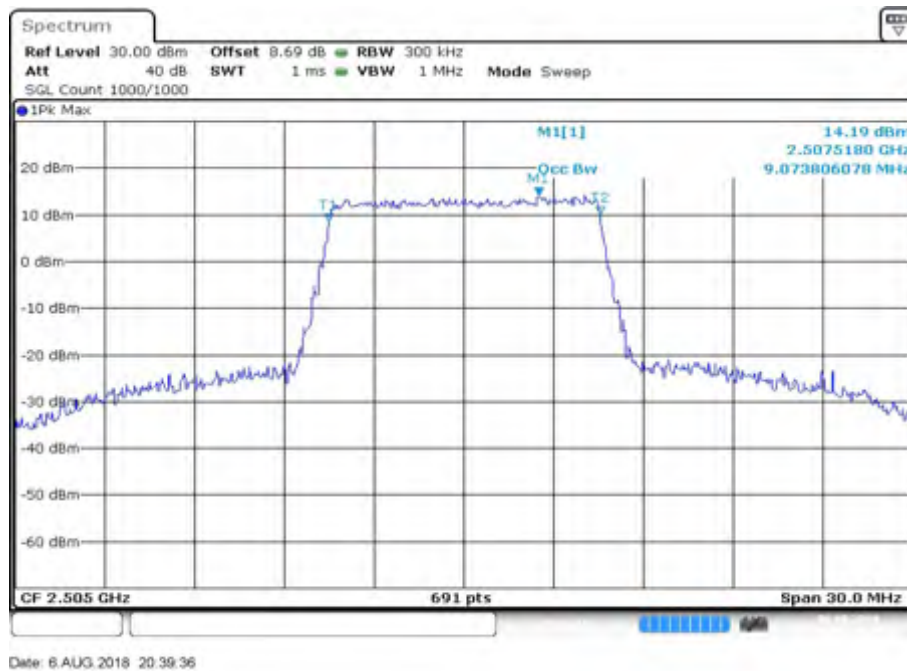


Fig.4

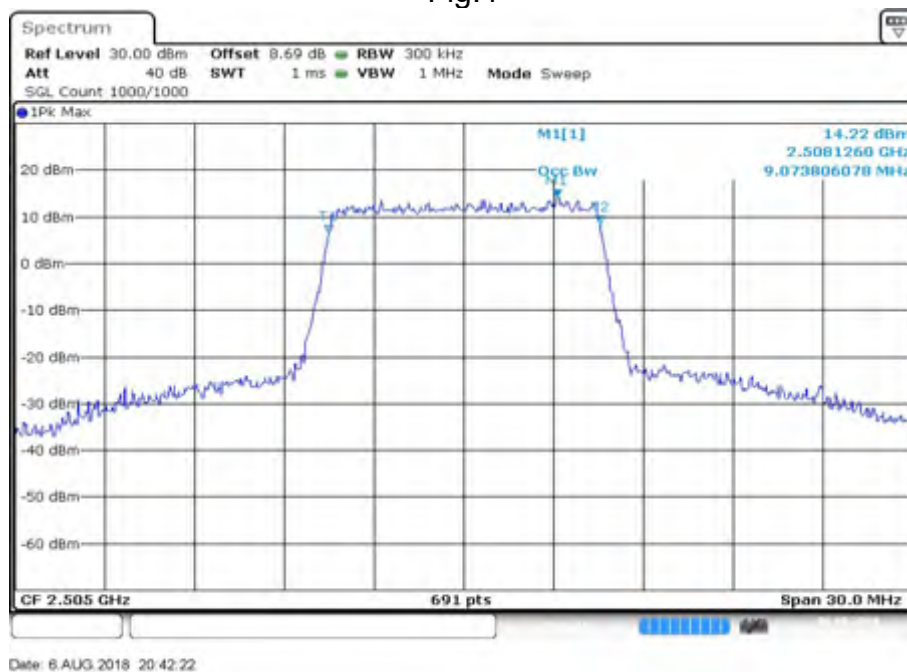


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2535	21100	10	50	0	9.074	Fig.4	9.074	Fig.8

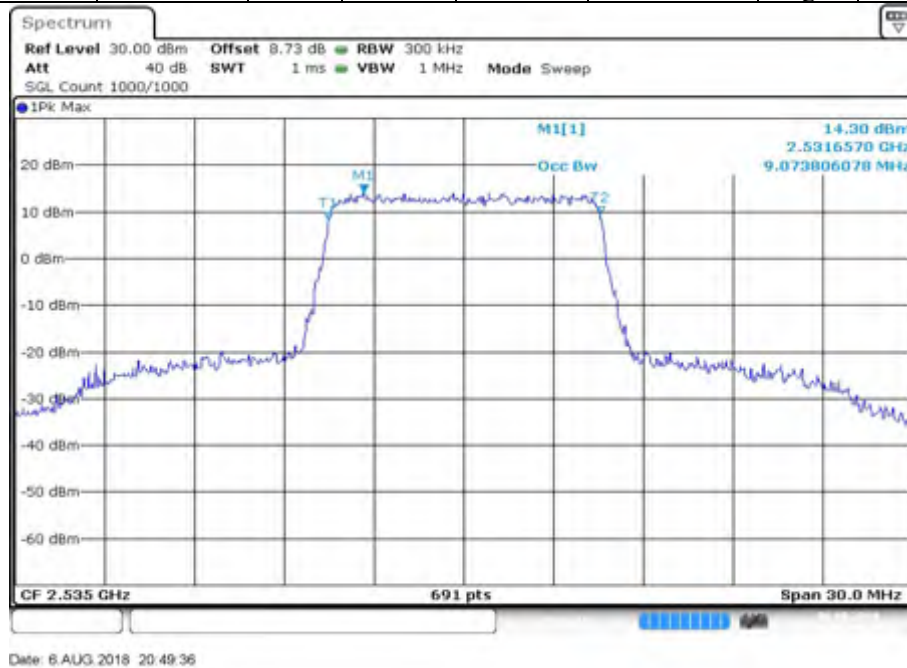


Fig.4

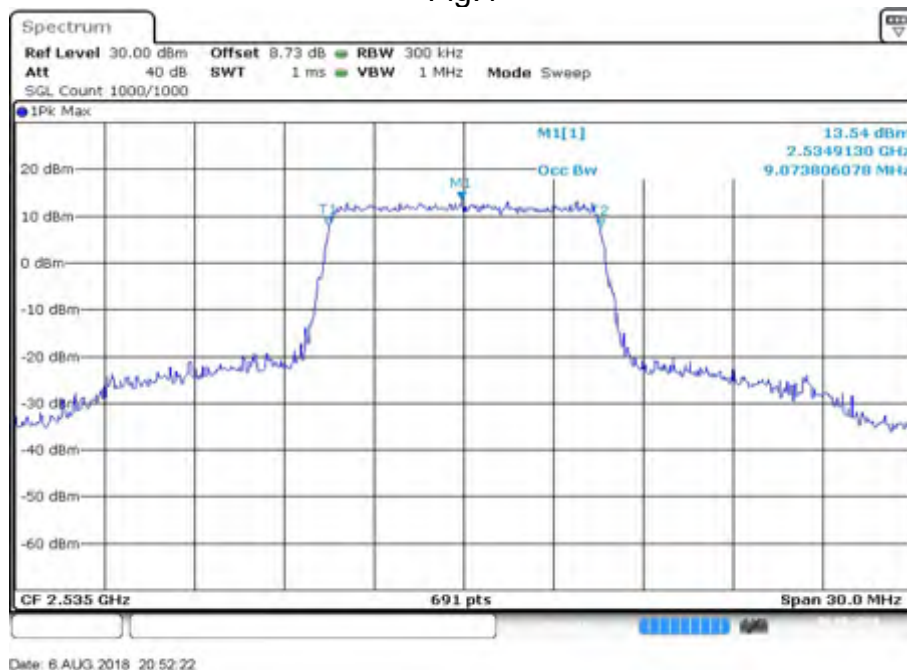


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2565	21400	10	50	0	9.117	Fig.4	9.117	Fig.8

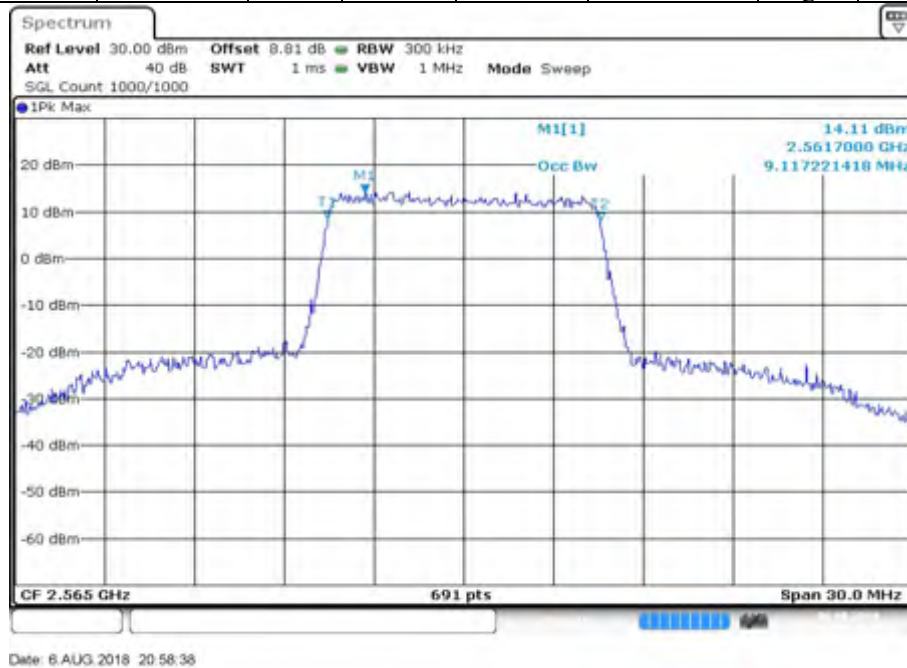


Fig.4

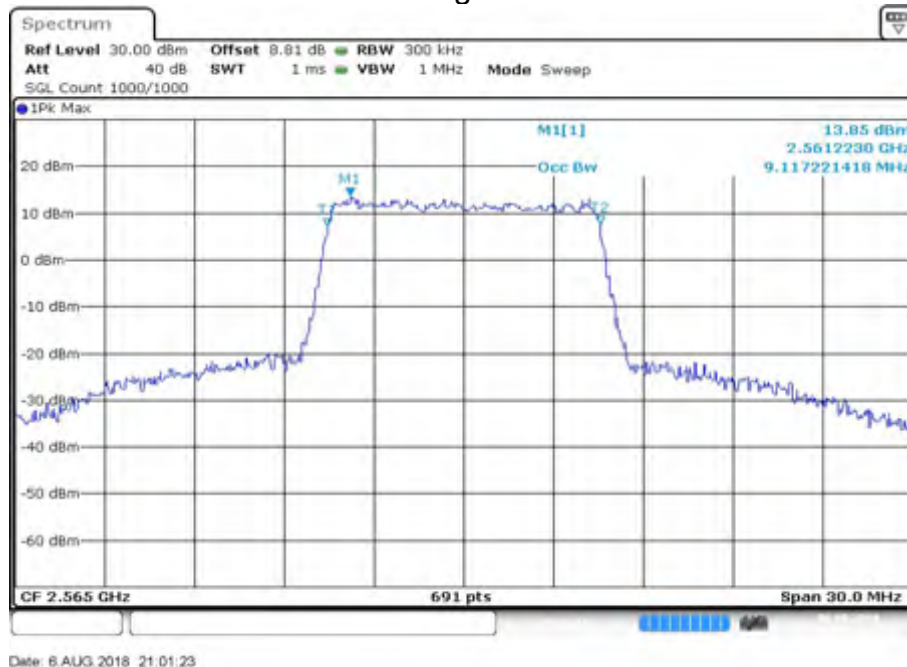


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2507.5	20825	15	75	0	13.546	Fig.4	13.480	Fig.8



Fig.4

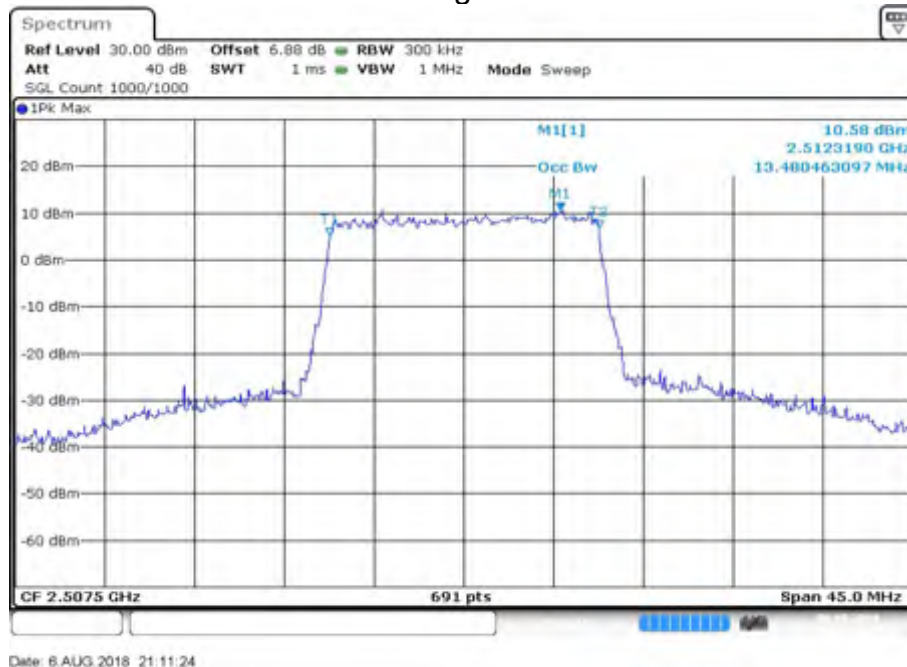


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2535	21100	15	75	0	13.480	Fig.4	13.546	Fig.8

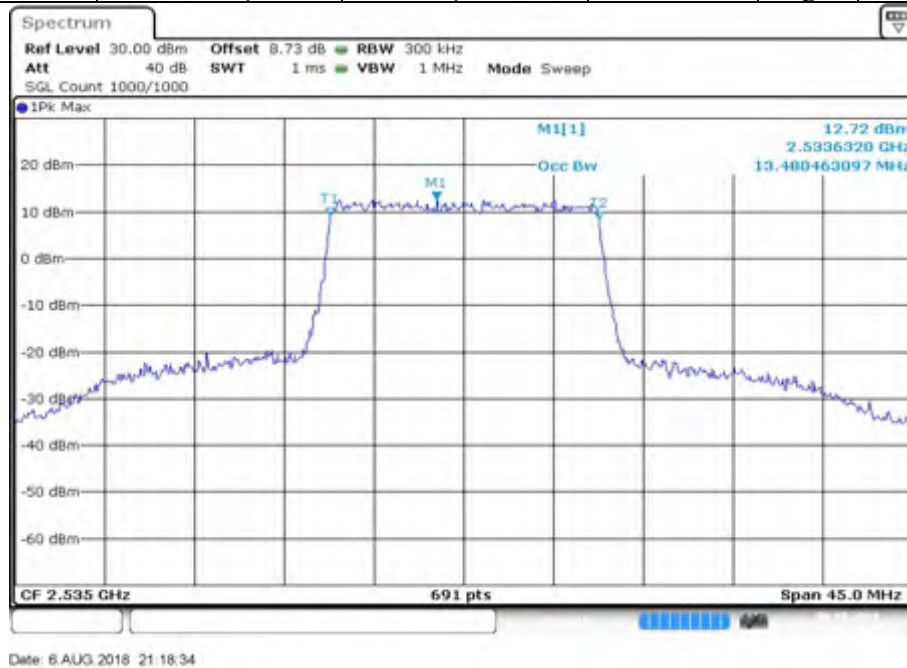


Fig.4

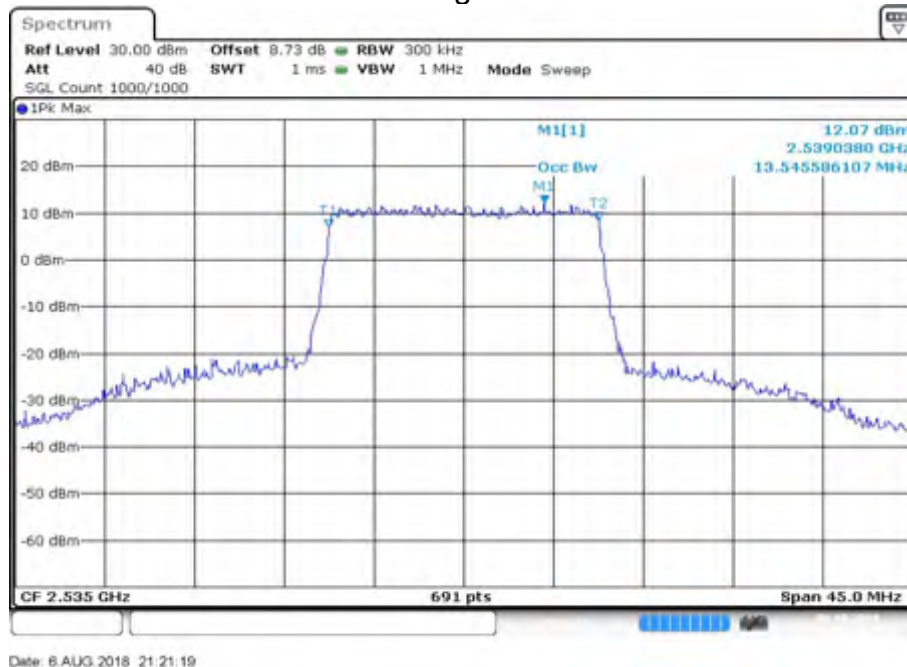


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2562.5	21375	15	75	0	13.546	Fig.4	13.546	Fig.8



Fig.4

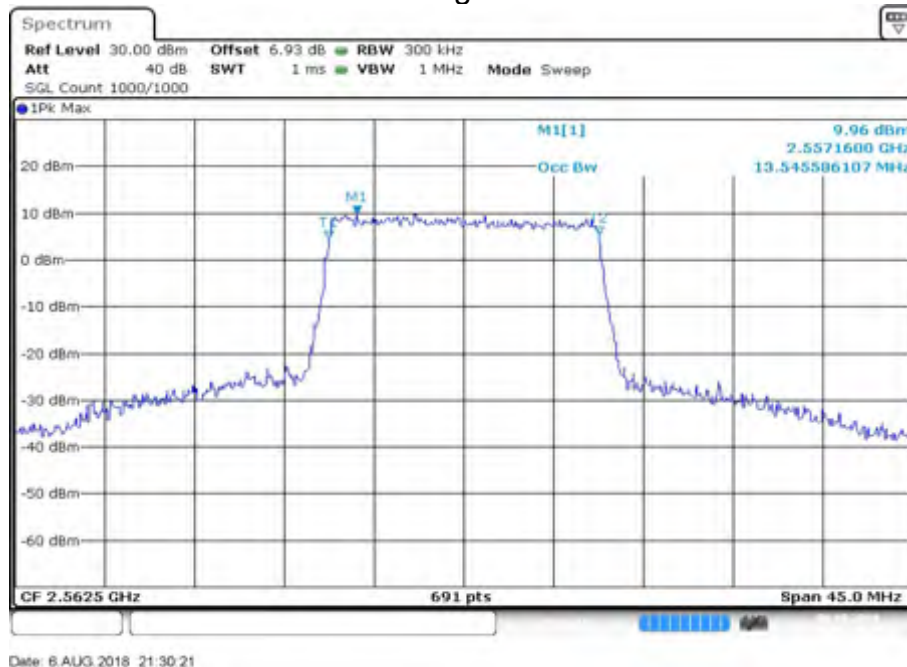


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2510	20850	20	100	0	17.887	Fig.4	17.887	Fig.8

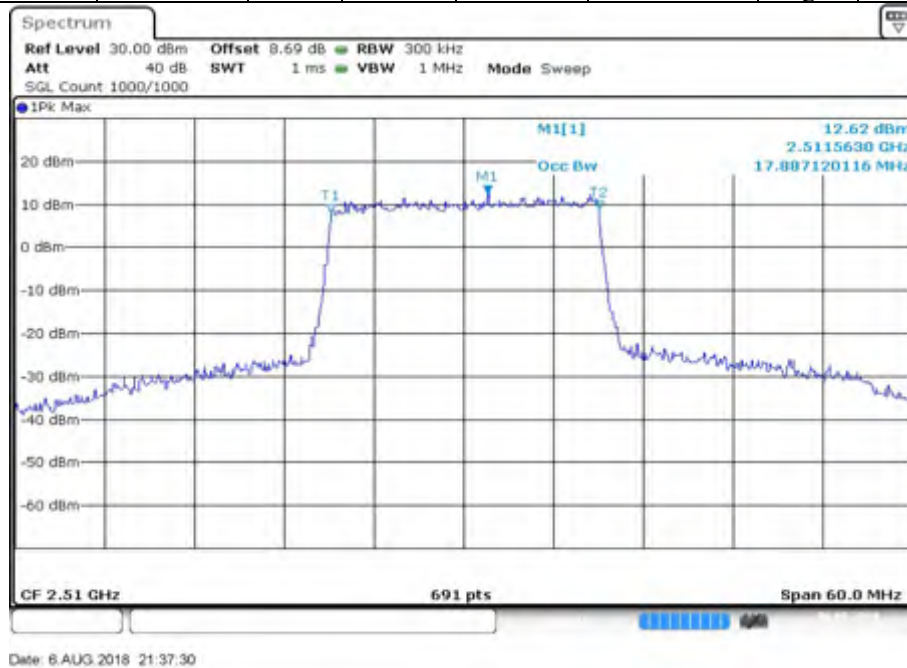


Fig.4

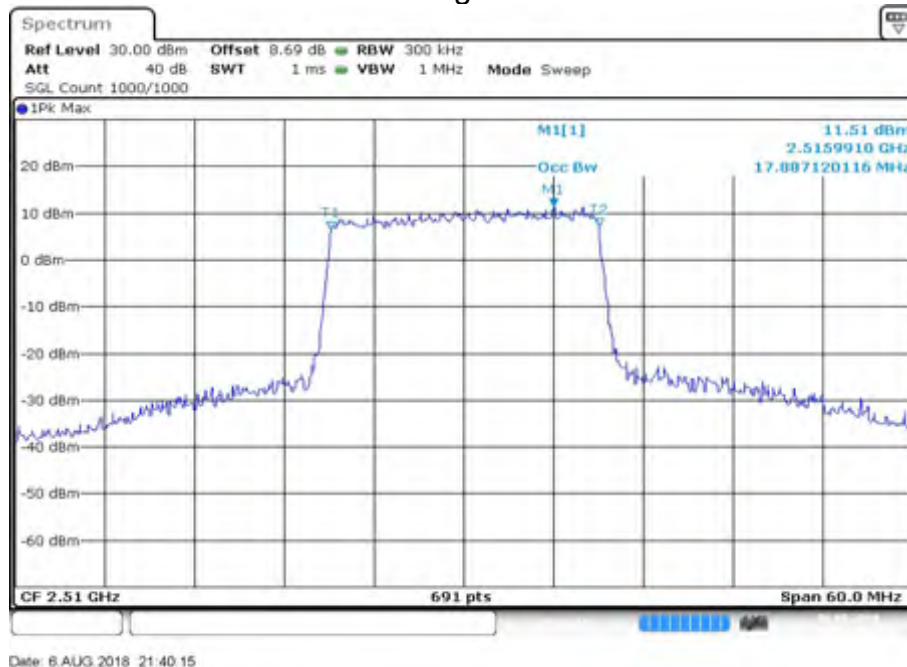


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2535	21100	20	100	0	17.974	Fig.4	17.974	Fig.8

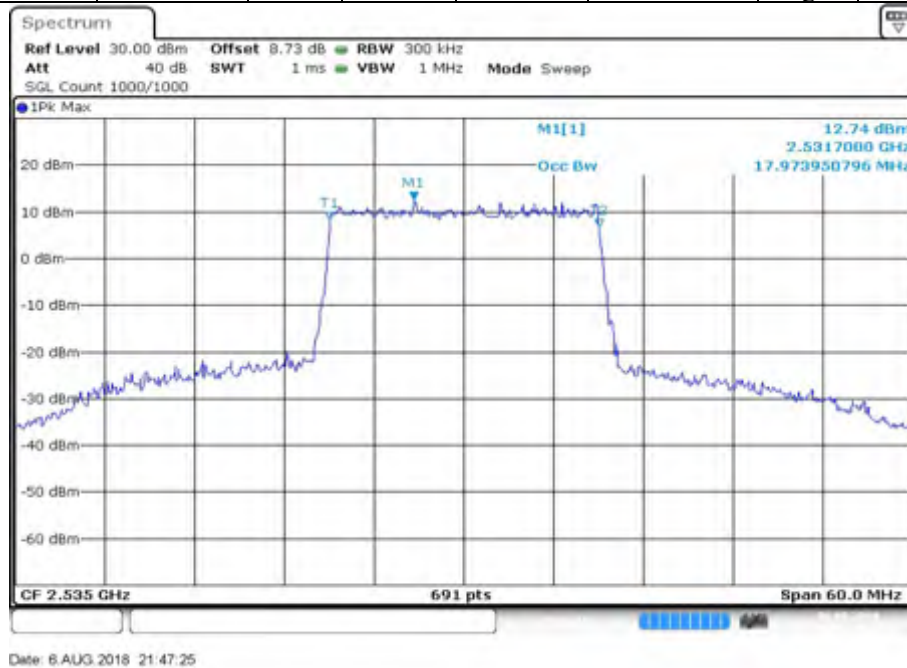


Fig.4

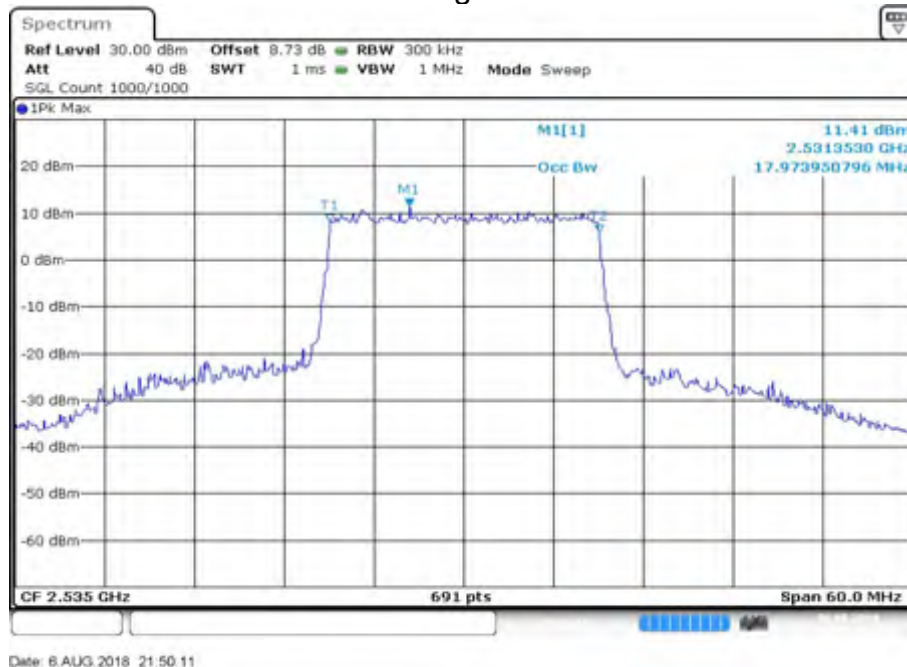


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)			
						QPSK		16-QAM	
7	2560	21350	20	100	0	17.974	Fig.4	17.974	Fig.8

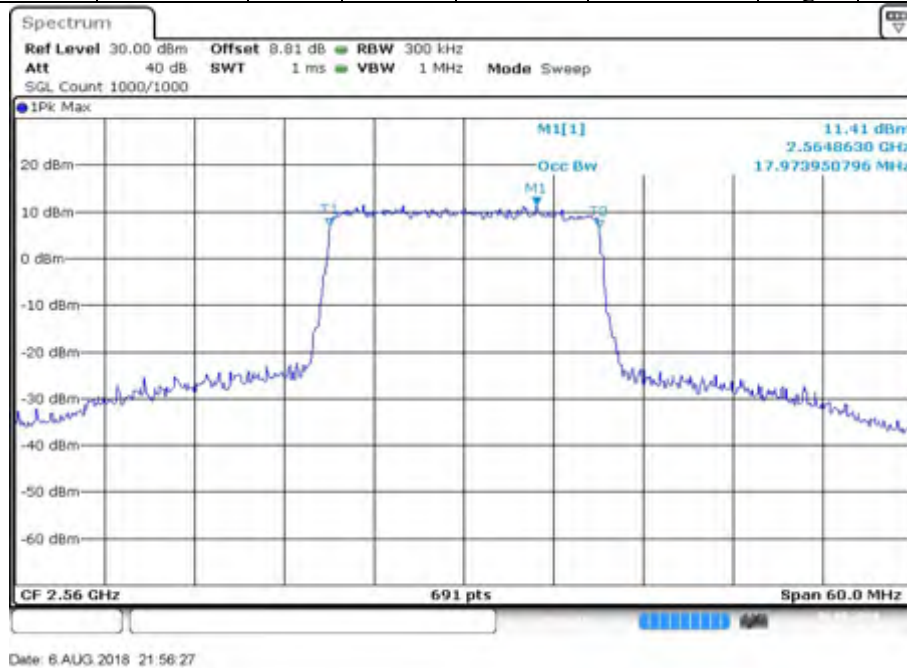


Fig.4

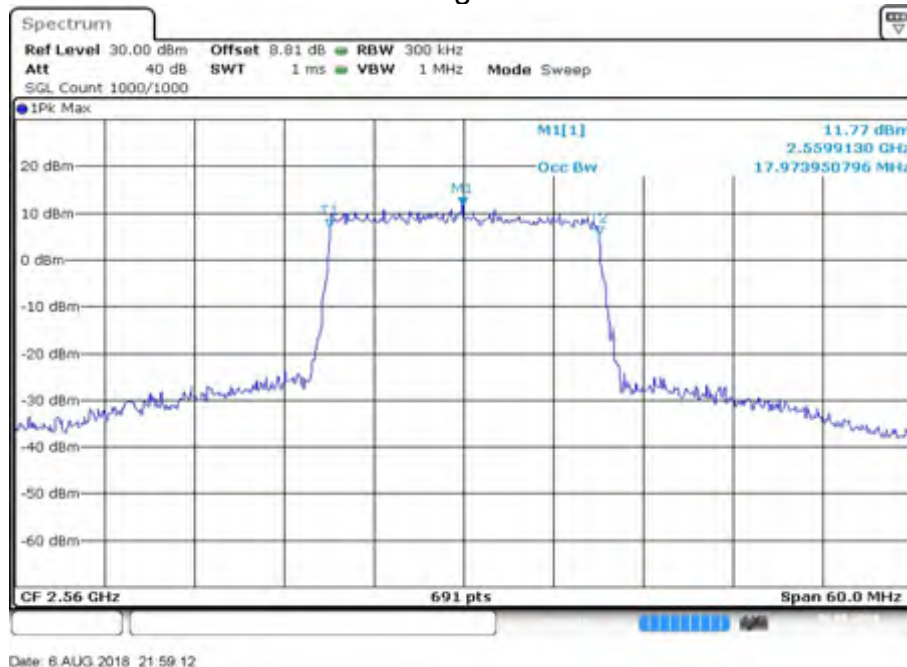


Fig.8

3 Emission Bandwidth-FCC Part22.917(b)

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	699.7	23017	1.4	6	0	1.289	Fig.4	1.307	Fig.8

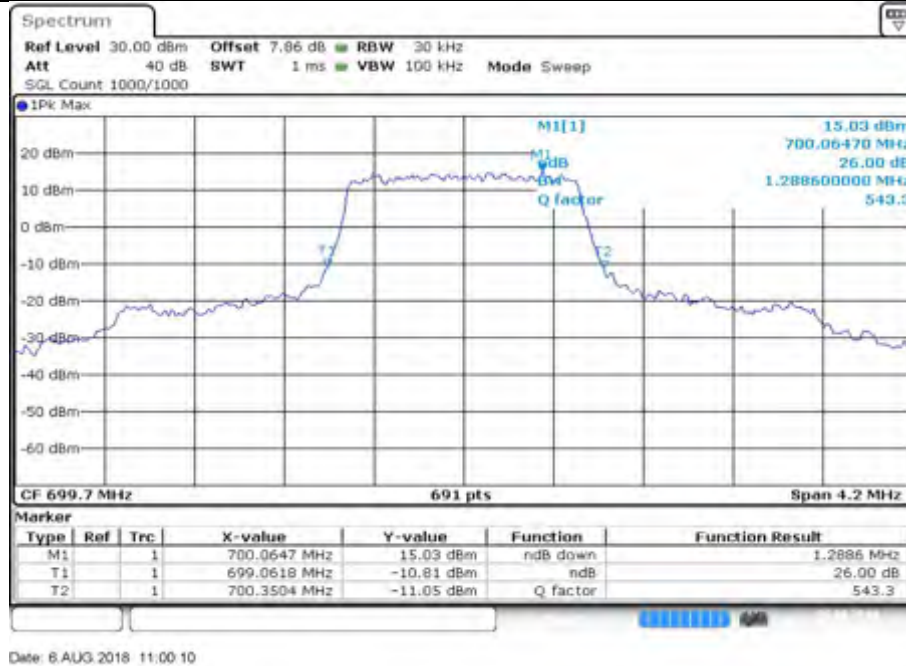


Fig.4

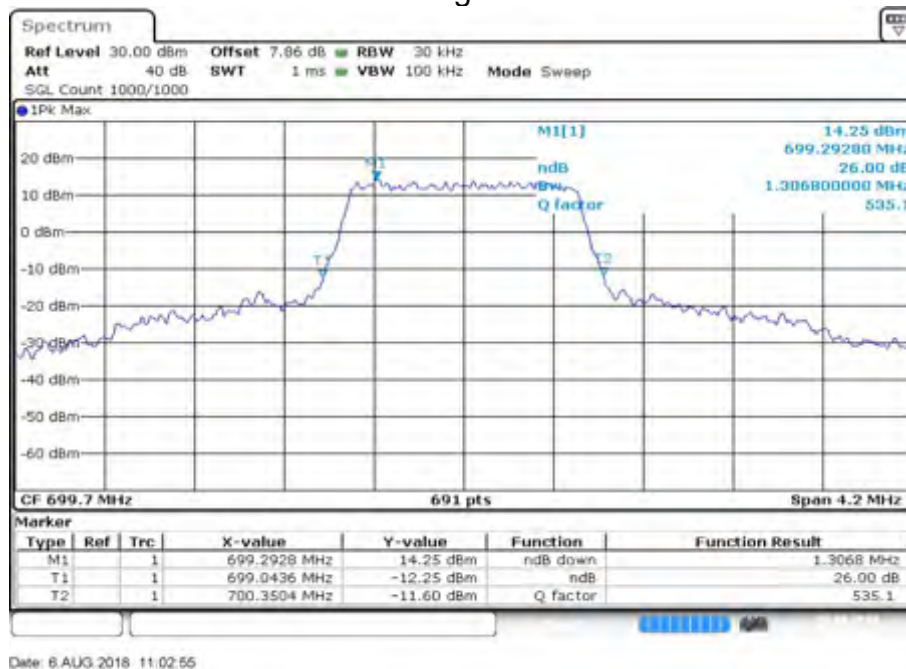


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	1.4	6	0	1.301	Fig.4	1.283	Fig.8

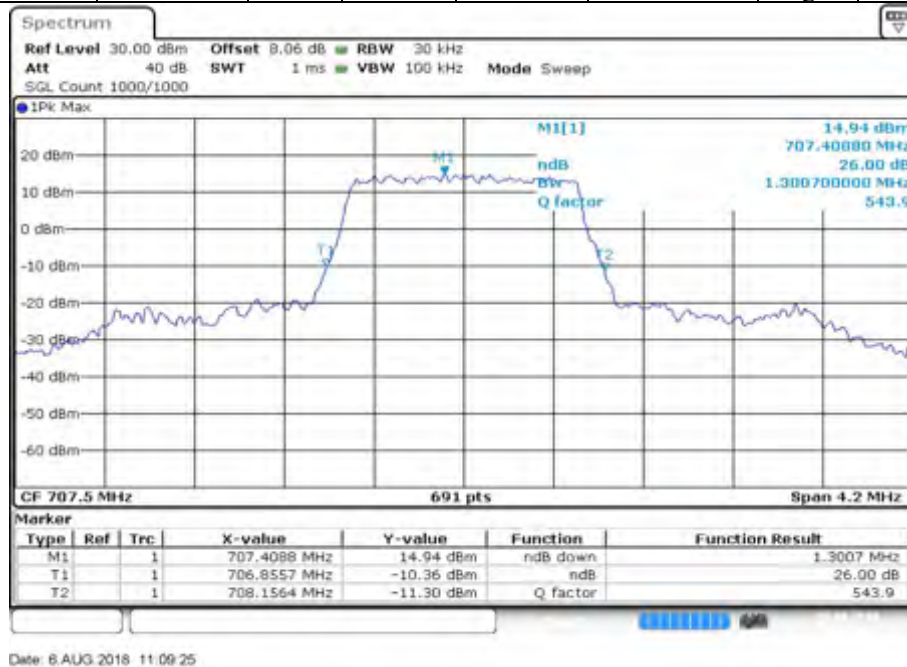


Fig.4

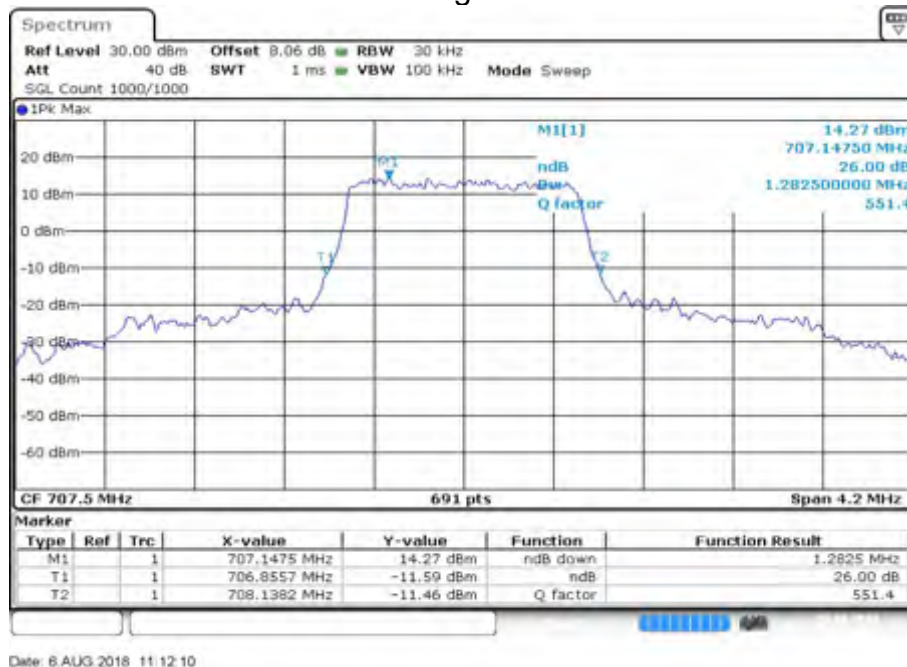


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	715.3	23173	1.4	6	0	1.289	Fig.4	1.289	Fig.8

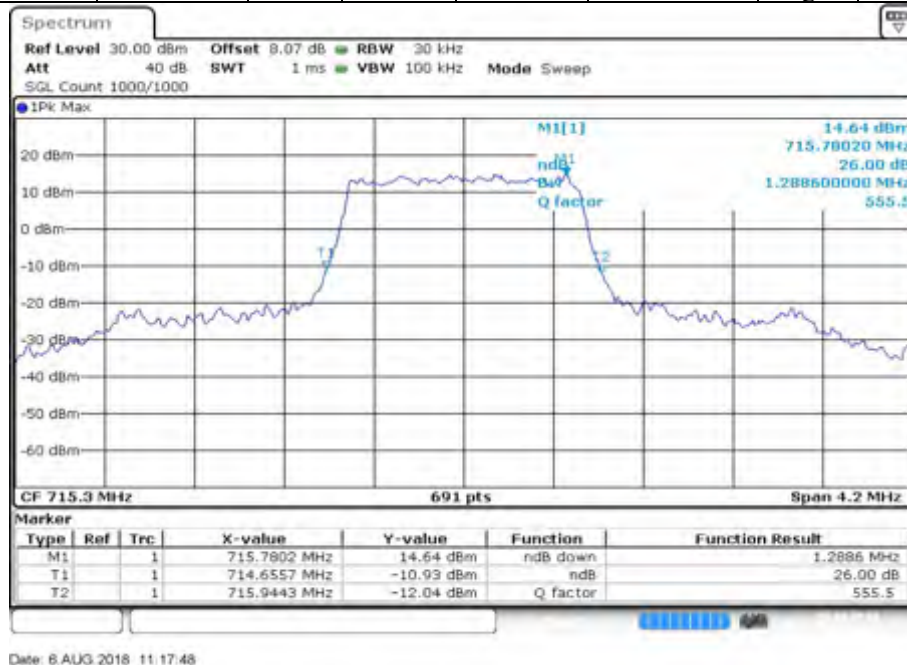


Fig.4

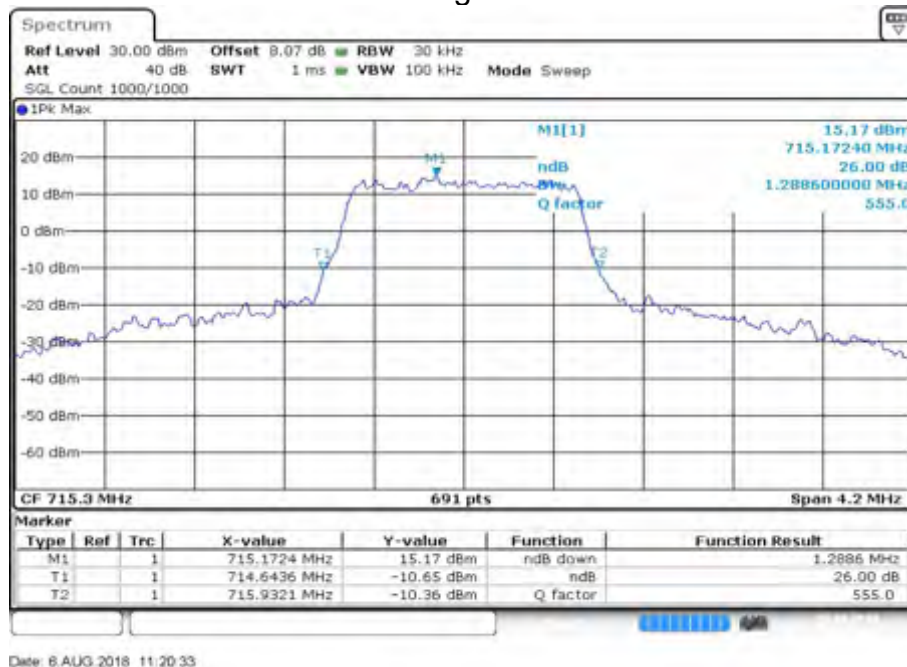


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	700.5	23025	3	15	0	2.983	Fig.4	2.983	Fig.8

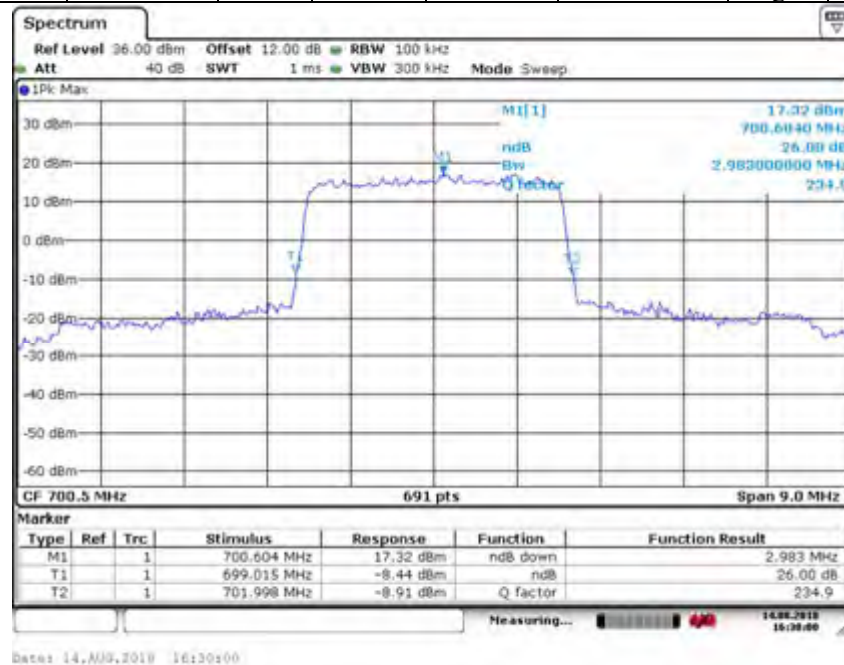


Fig.4

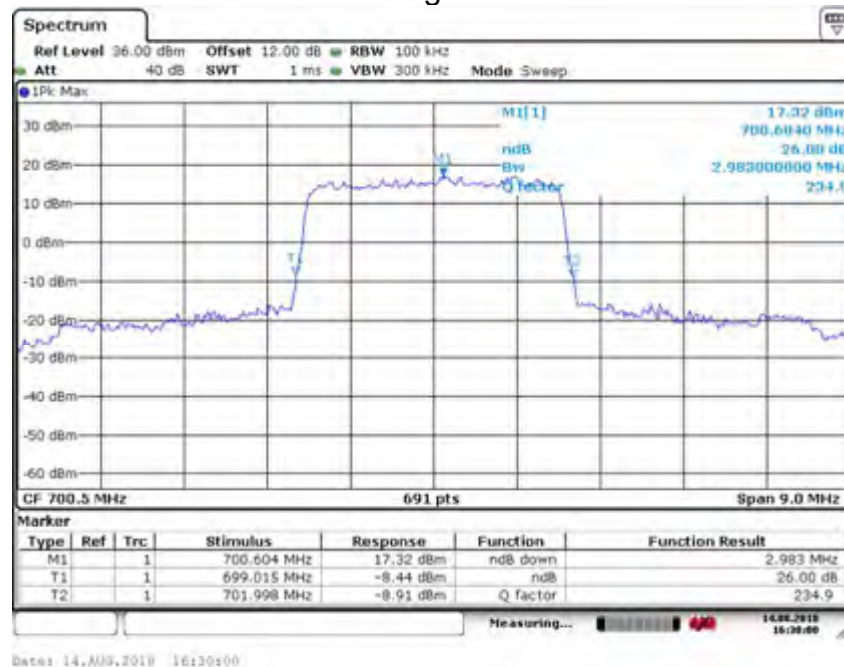


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	3	15	0	2.983	Fig.4	2.983	Fig.8

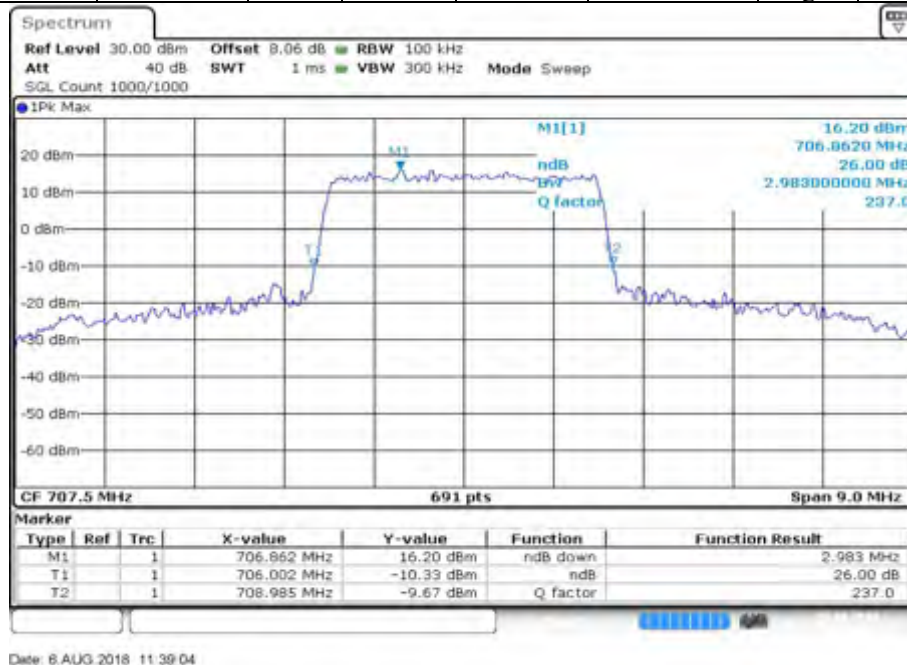


Fig.4

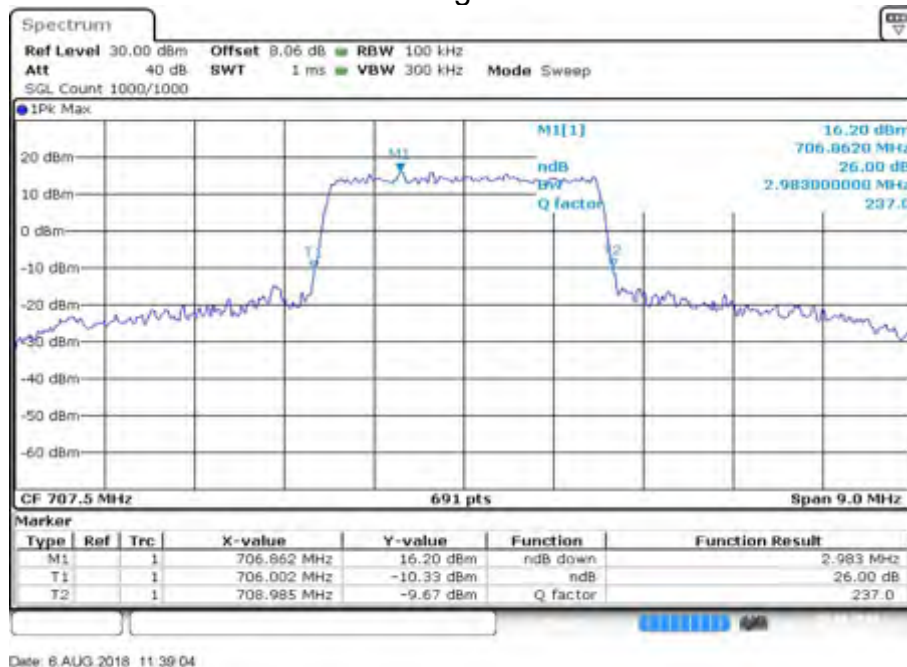


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	714.5	23165	3	15	0	2.996	Fig.4	2.996	Fig.8

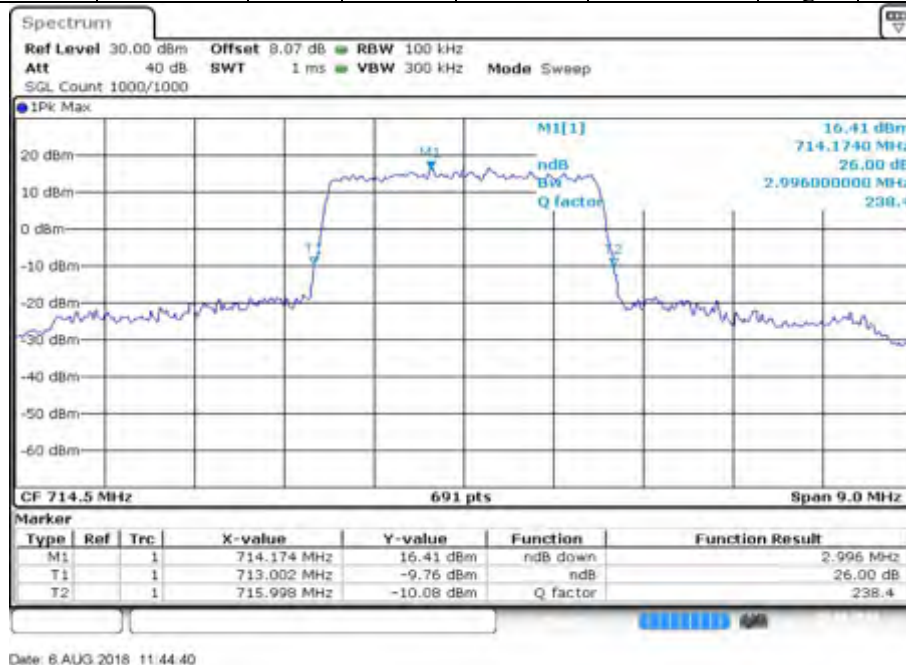


Fig.4

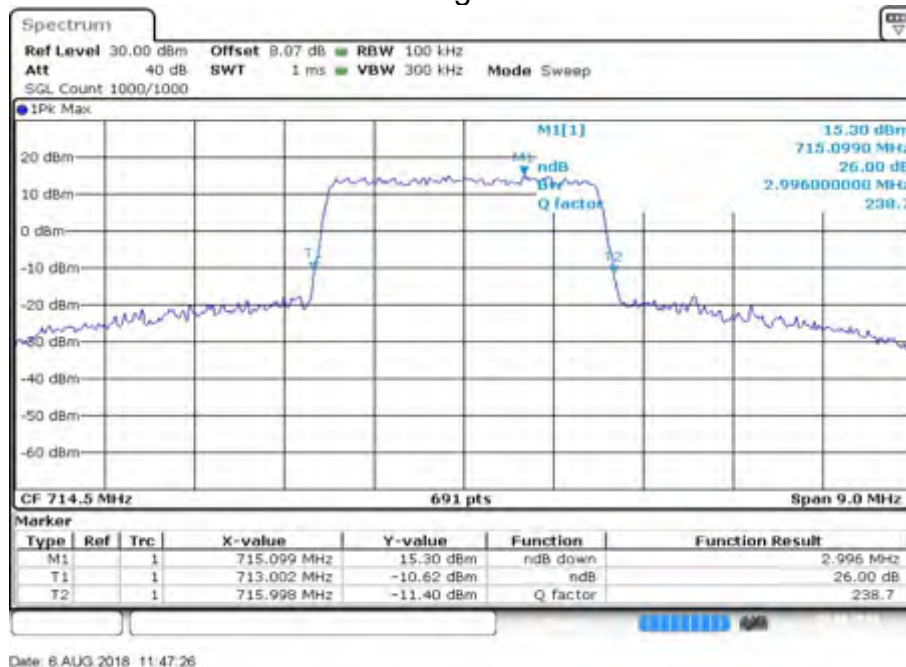


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	701.5	23035	5	25	0	4.993	Fig.4	4.993	Fig.8

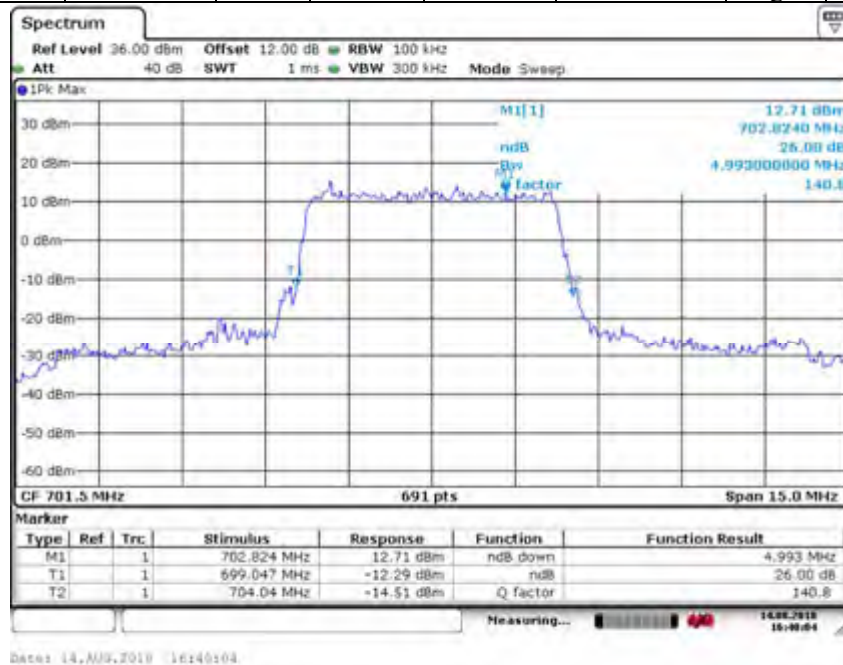


Fig.4

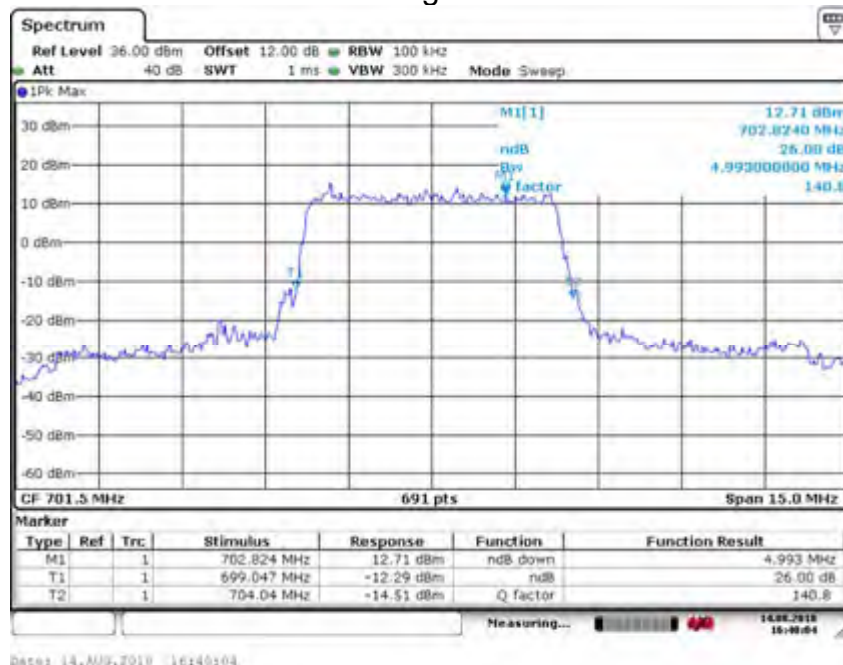


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	5	25	0	4.988	Fig.4	4.988	Fig.8

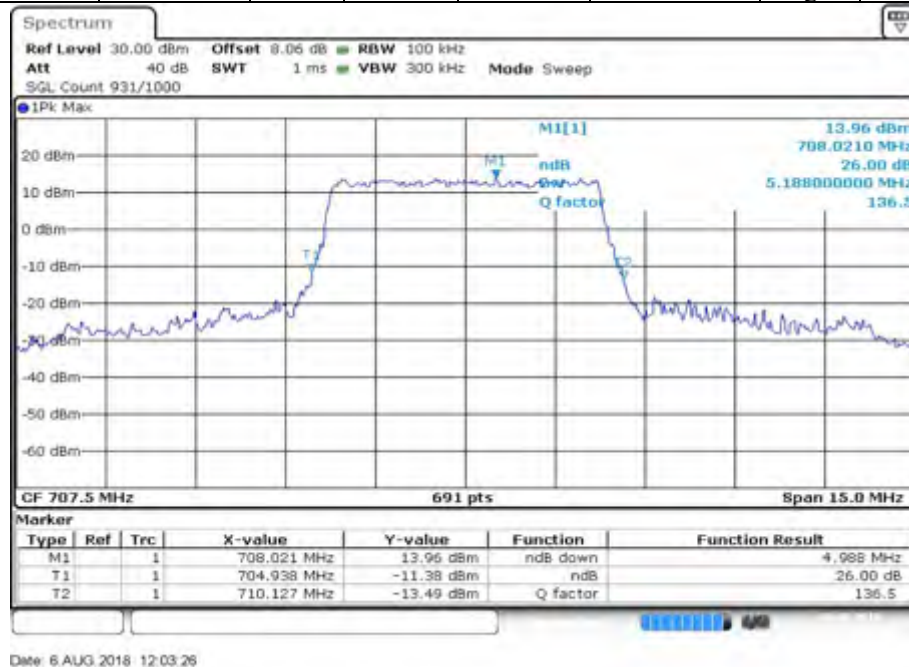


Fig.4

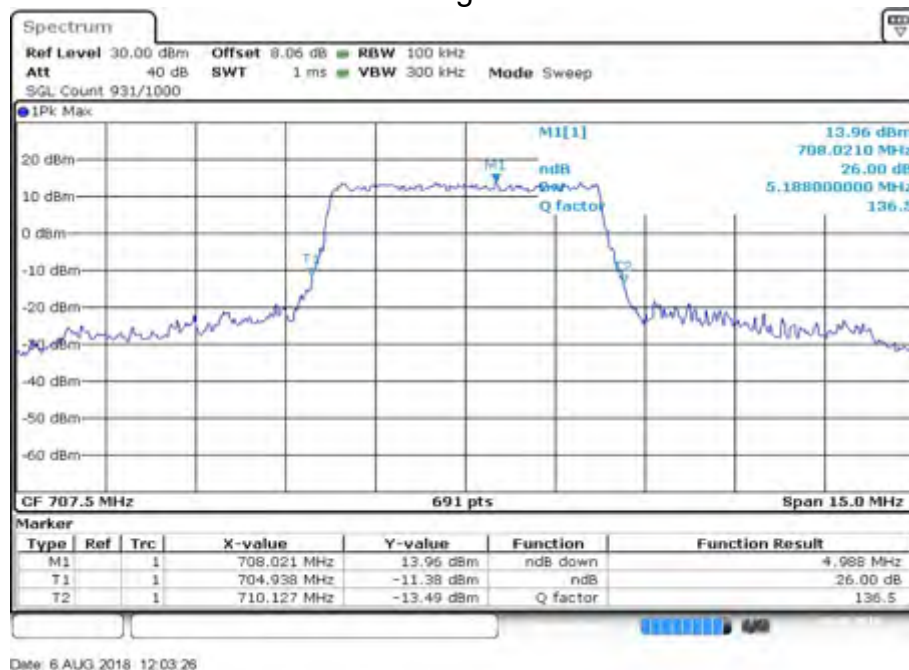


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	713.5	23155	5	25	0	4.966	Fig.4	4.966	Fig.8

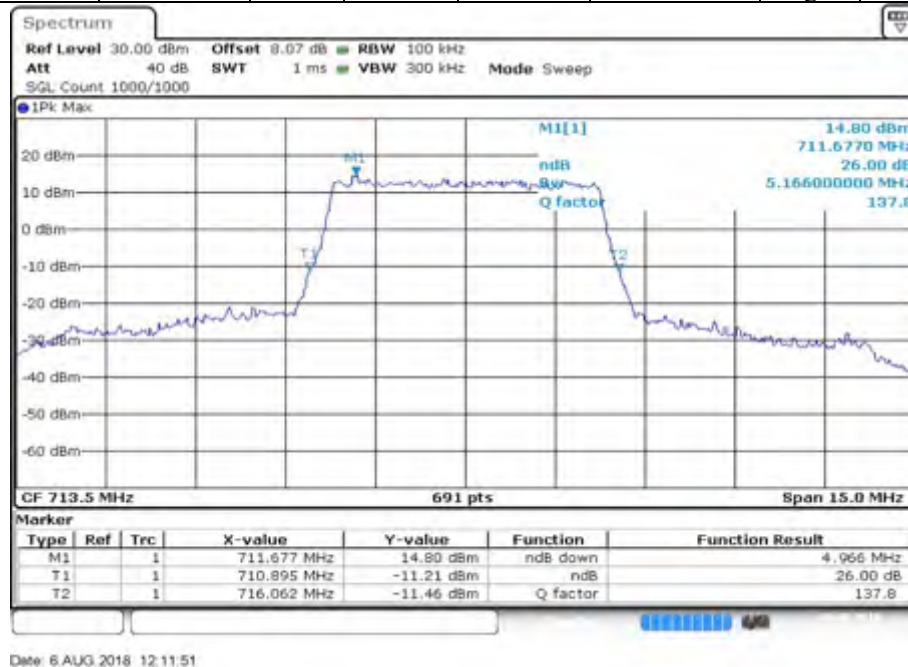


Fig.4

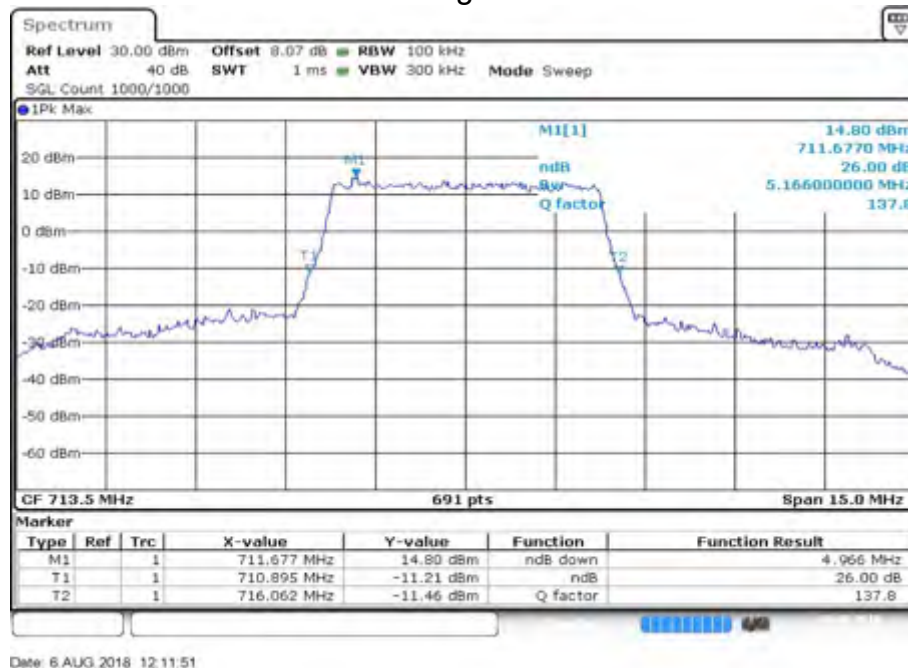


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	704	23060	10	50	0	9.920	Fig.4	9.920	Fig.8



Fig.4

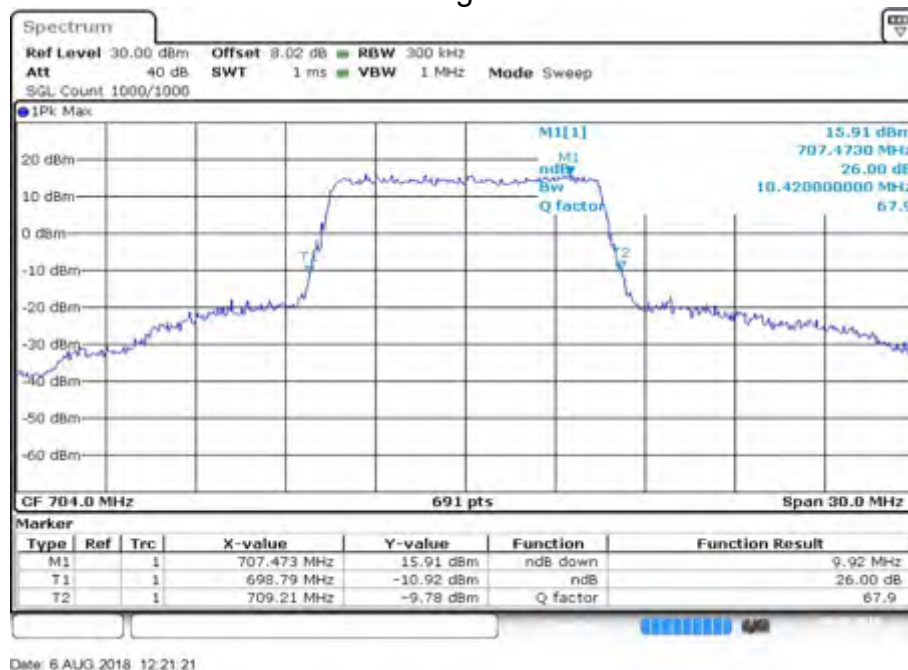


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	707.5	23095	10	50	0	9.989	Fig.4	9.989	Fig.8

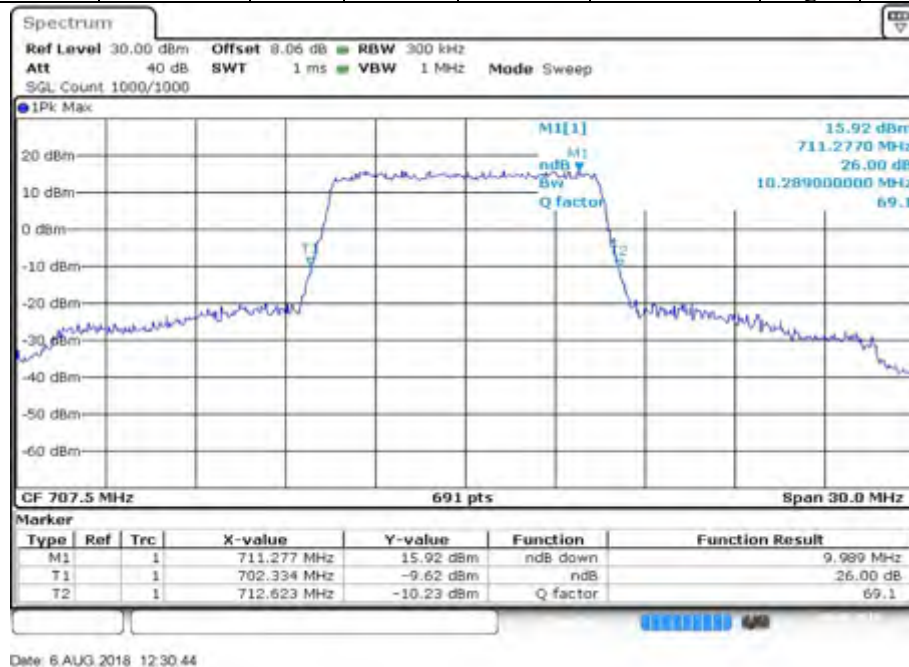


Fig.4

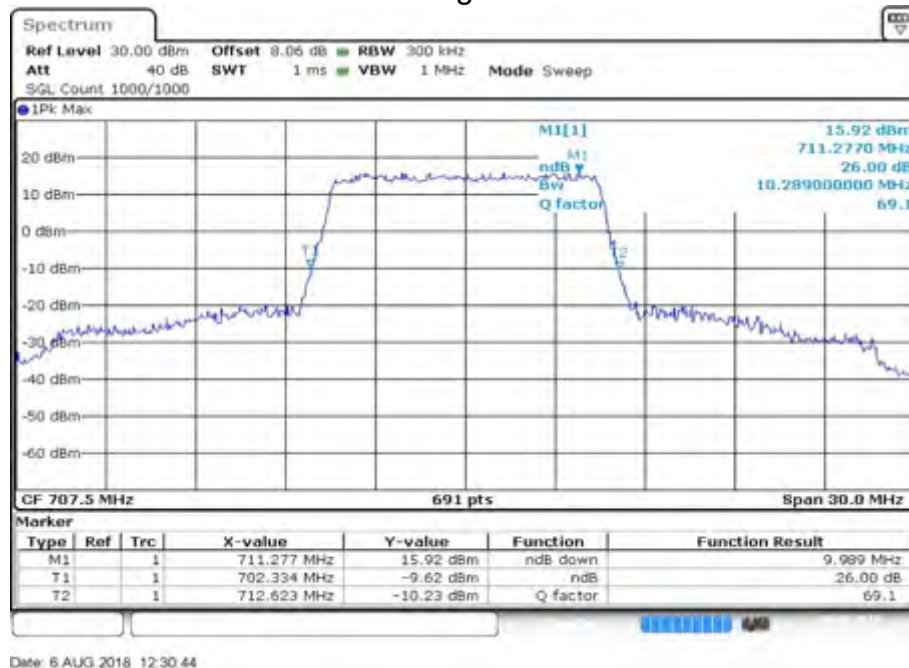


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
12	711	23130	10	50	0	9.989	Fig.4	9.989	Fig.8

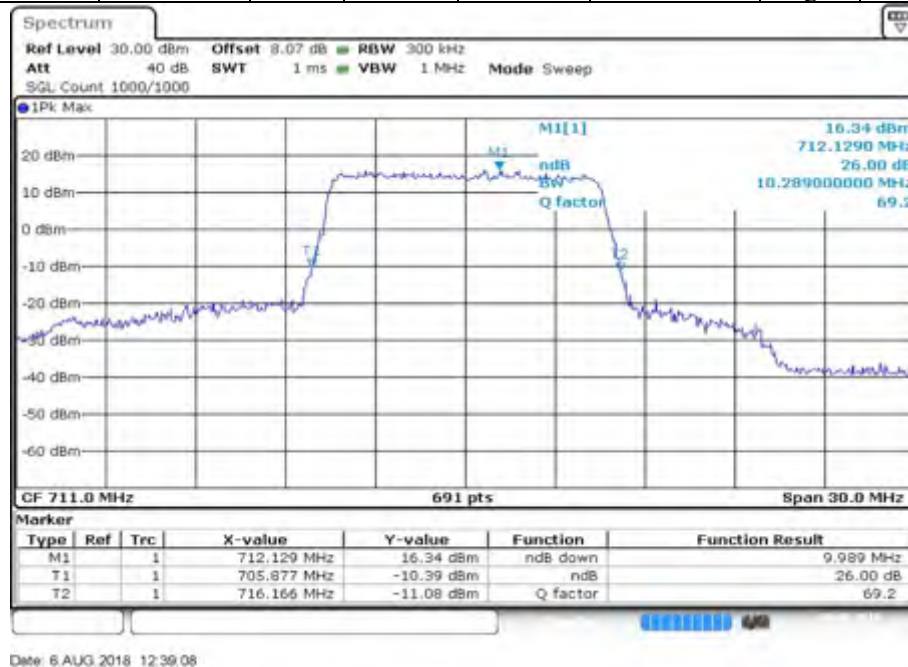


Fig.4

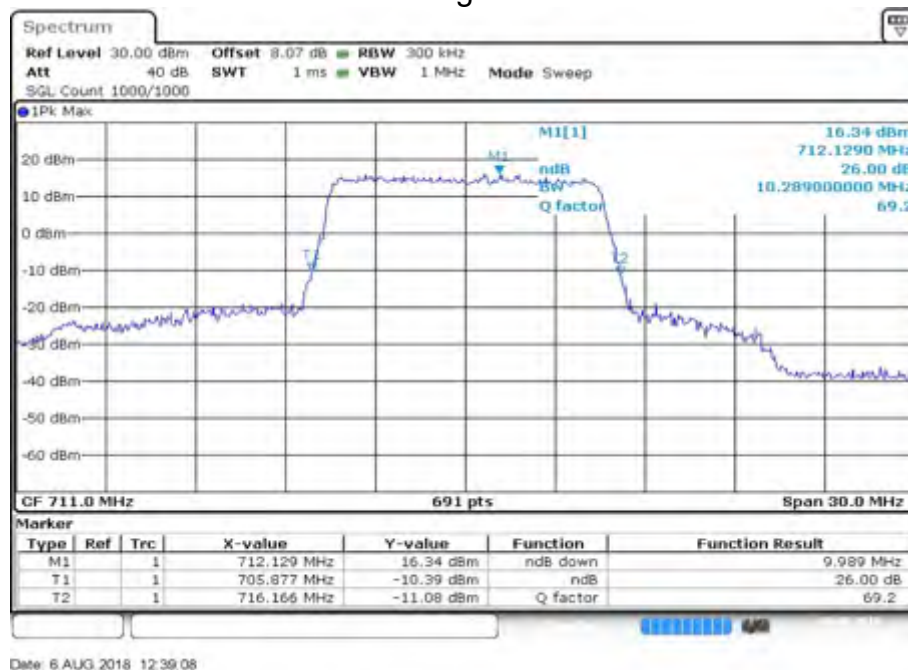


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1850.7	18607	1.4	6	0	1.295	Fig.4	1.319	Fig.8

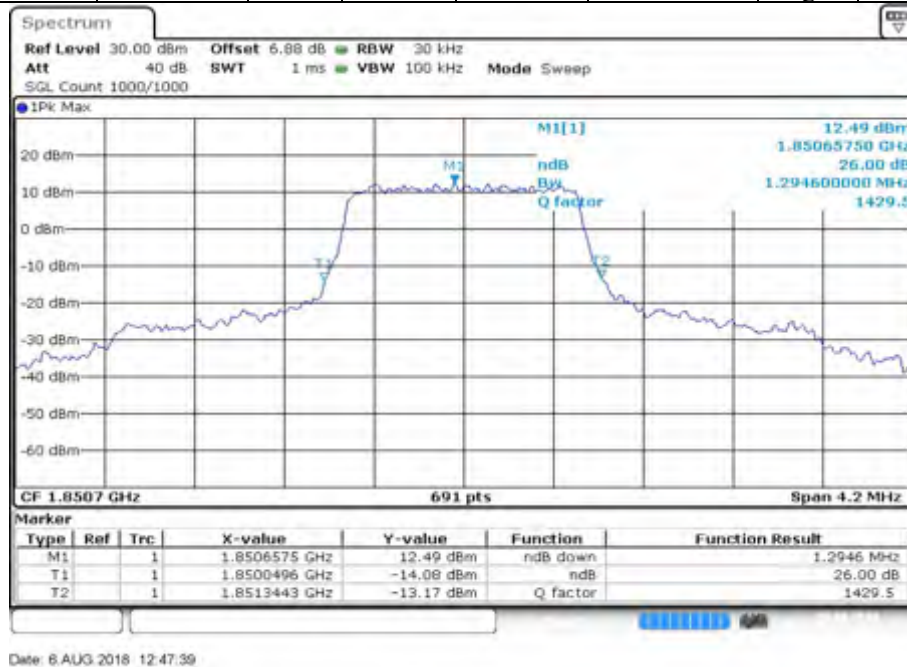


Fig.4

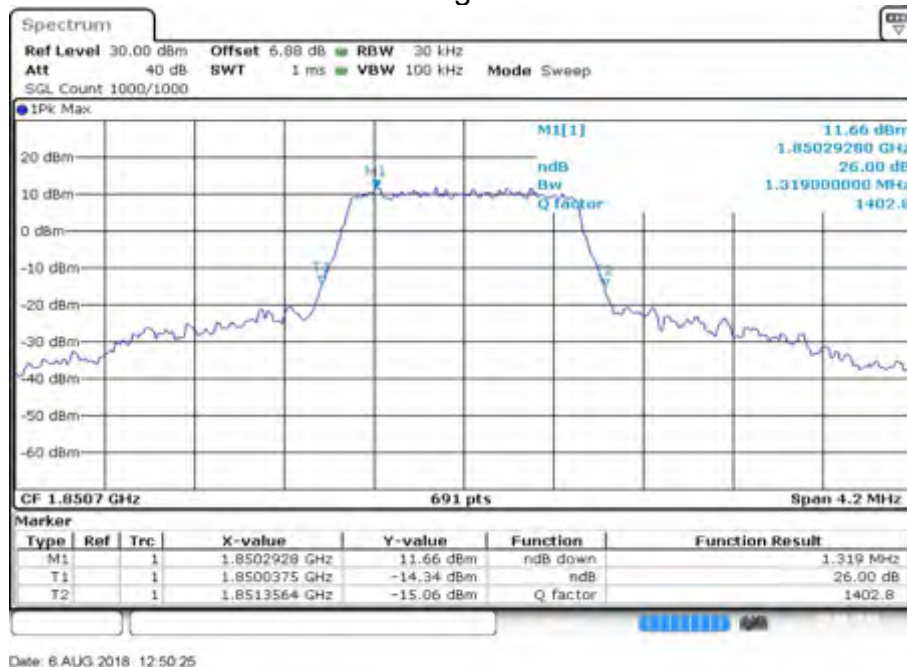


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1880	18900	1.4	6	0	1.301	Fig.4	1.283	Fig.8

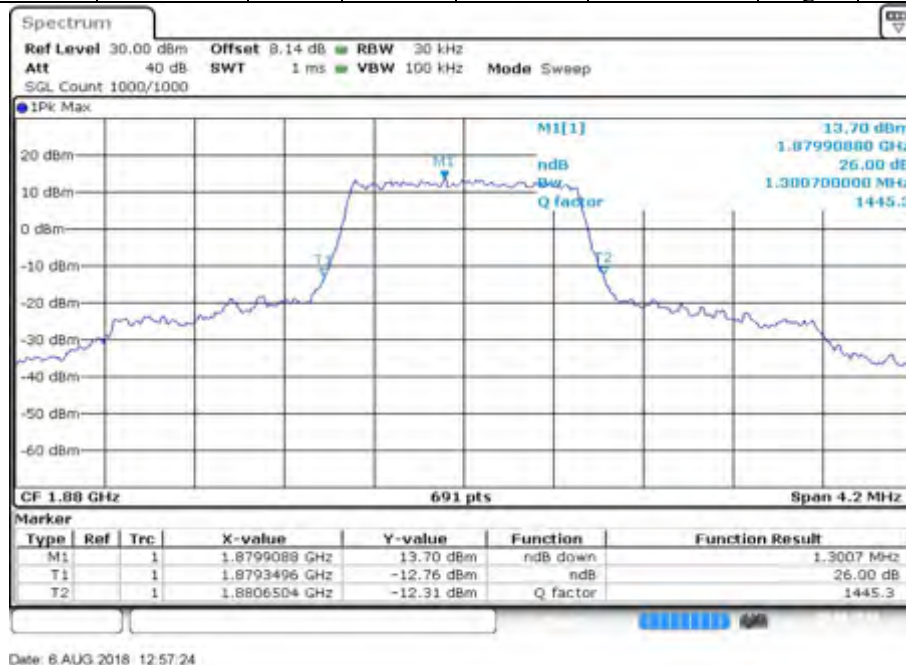


Fig.4

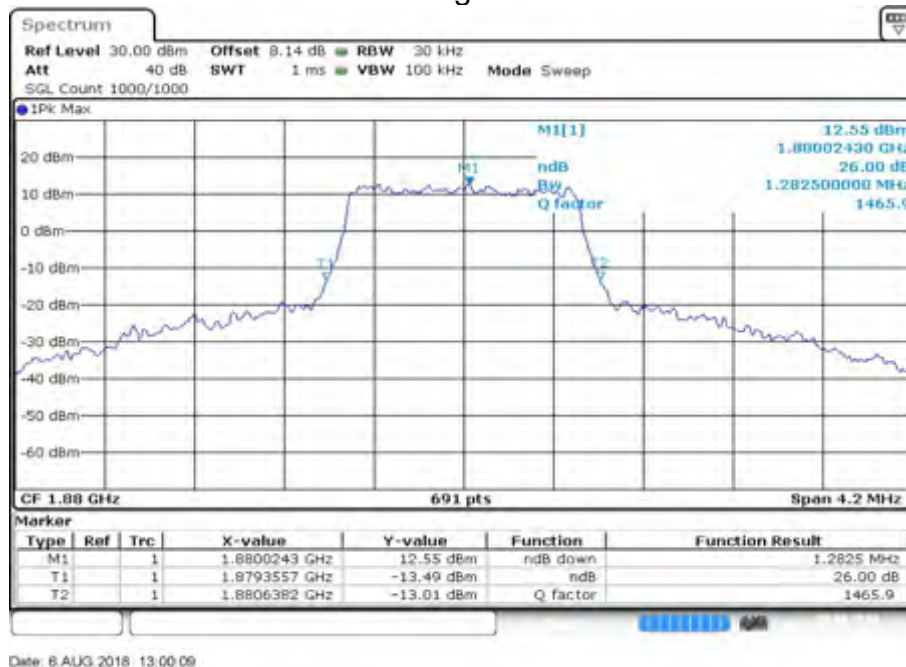


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1909.3	19193	1.4	6	0	1.283	Fig.4	1.283	Fig.8

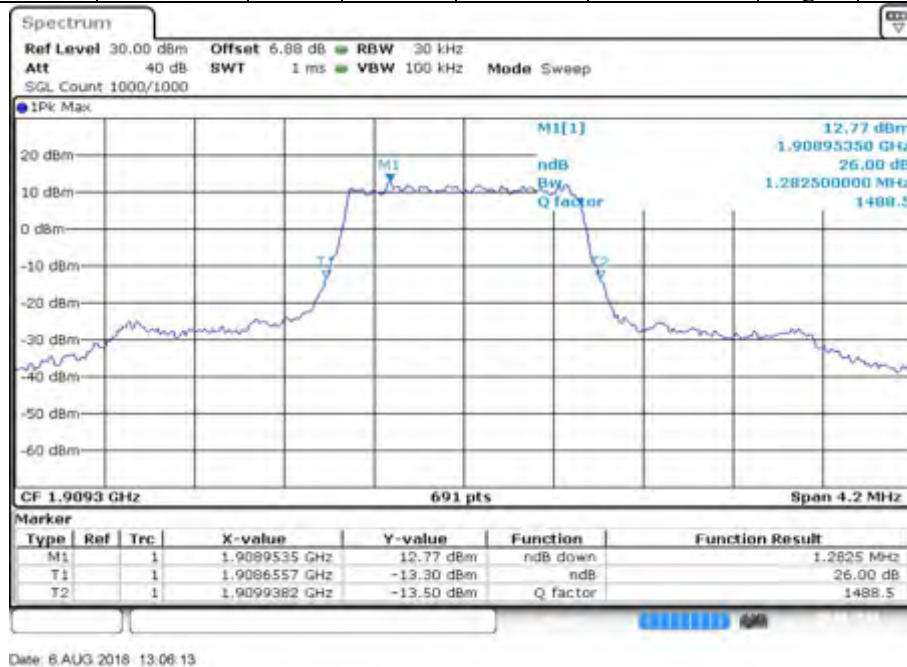


Fig.4

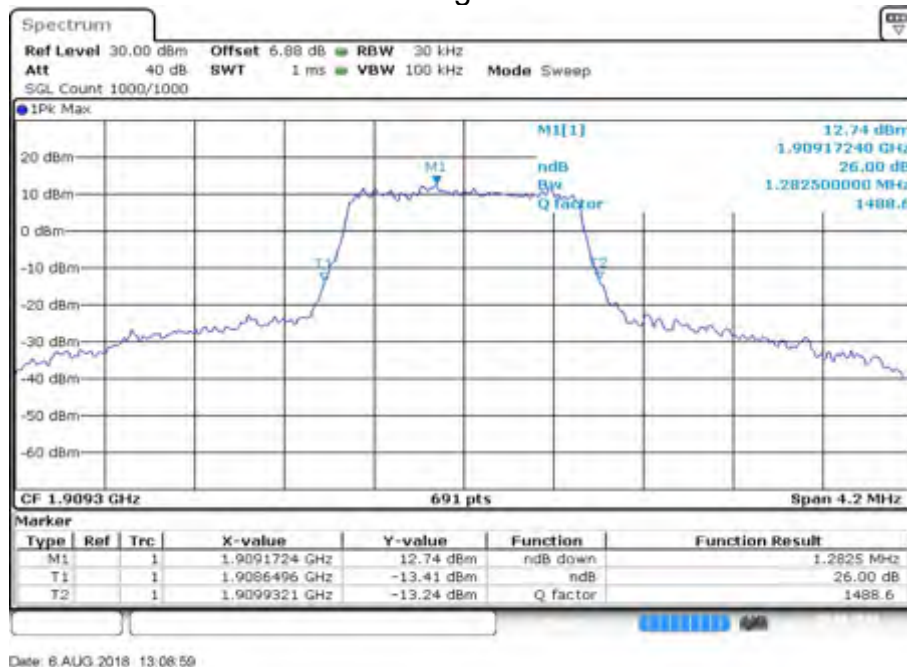


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1851.5	18615	3	15	0	2.996	Fig.4	2.970	Fig.8

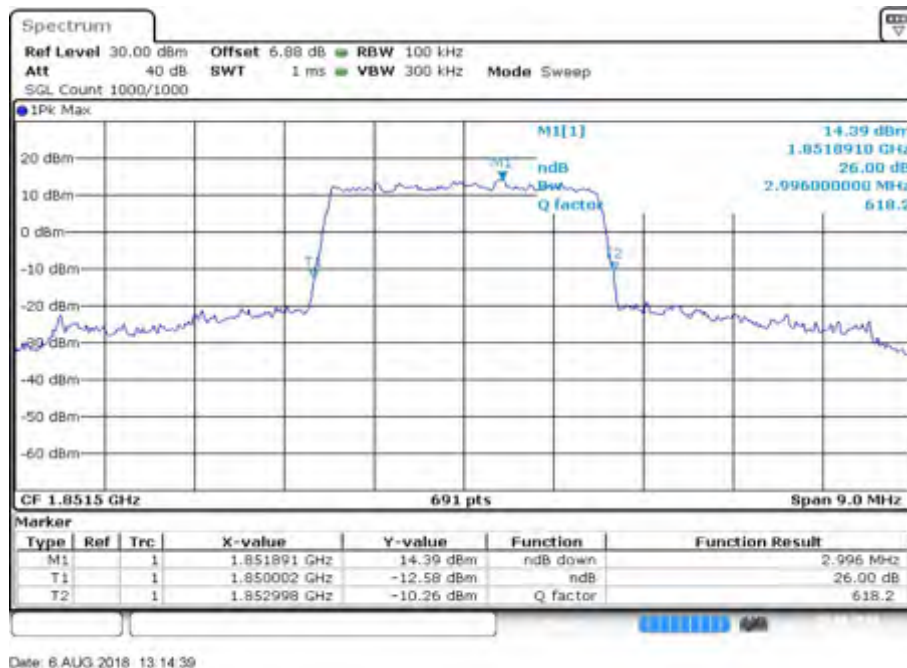


Fig.4

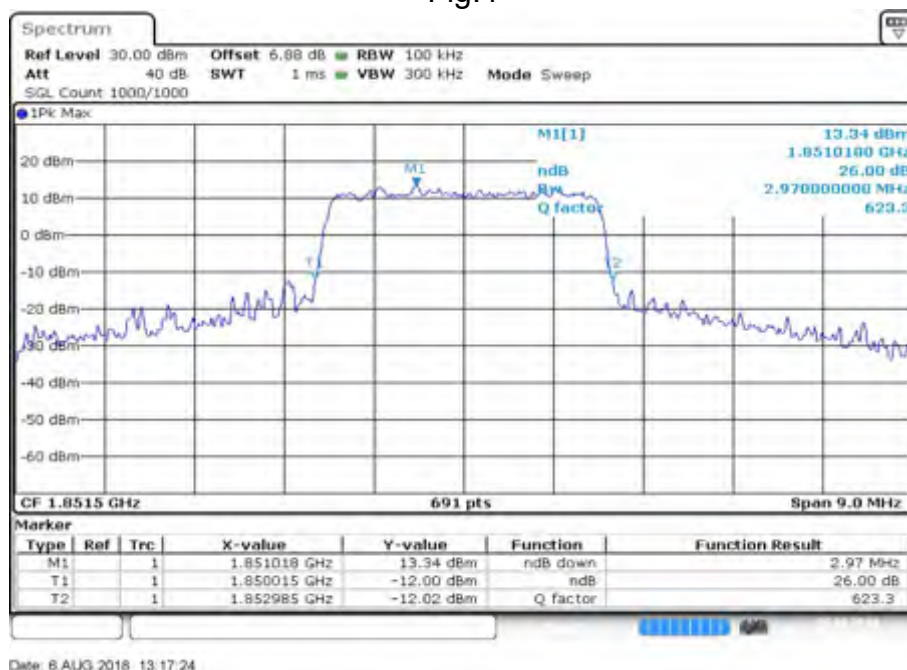


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1880	18900	3	15	0	2.983	Fig.4	2.996	Fig.8

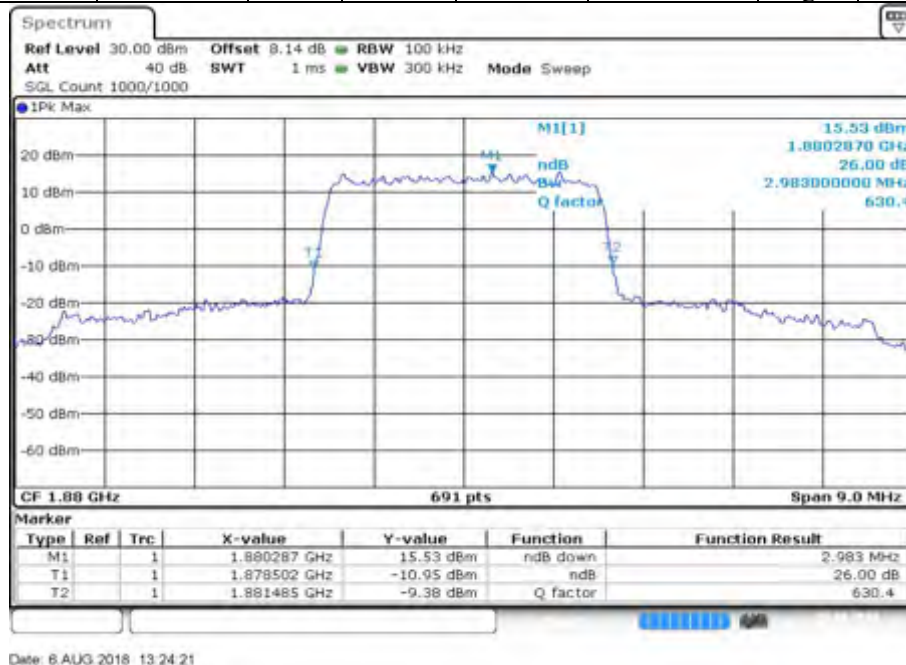


Fig.4

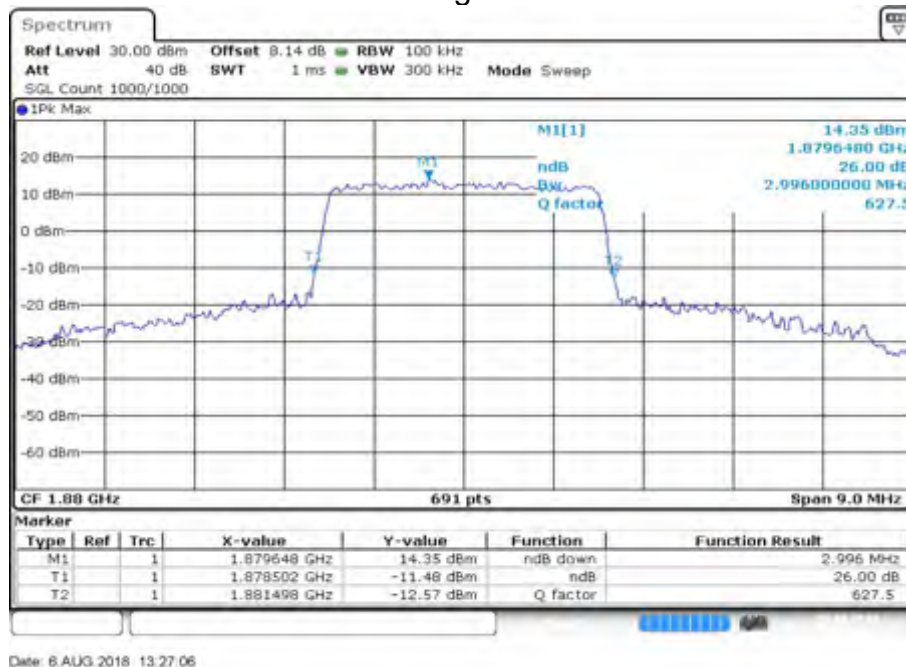


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1908.5	19185	3	15	0	2.996	Fig.4	2.983	Fig.8

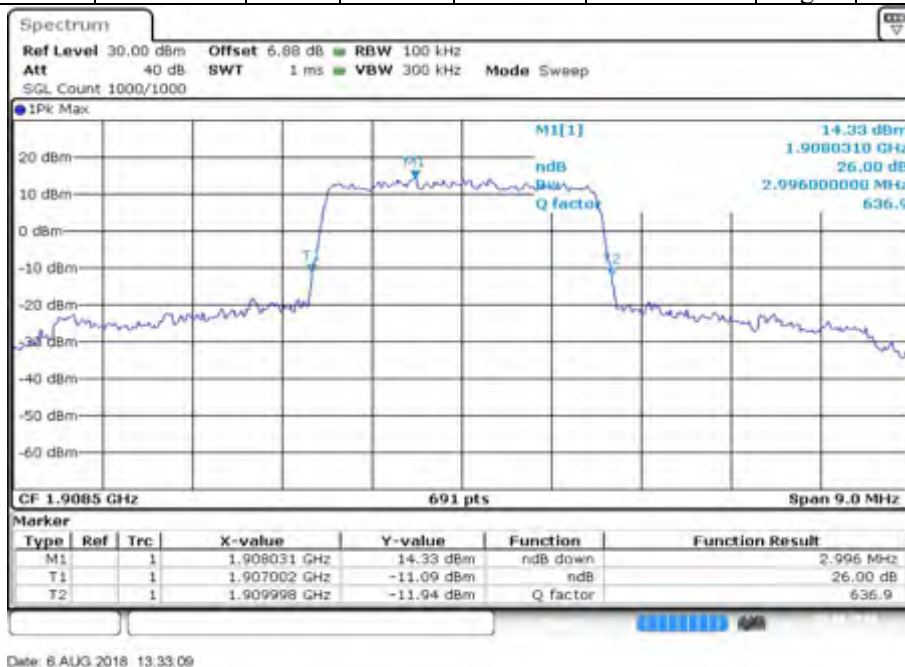


Fig.4

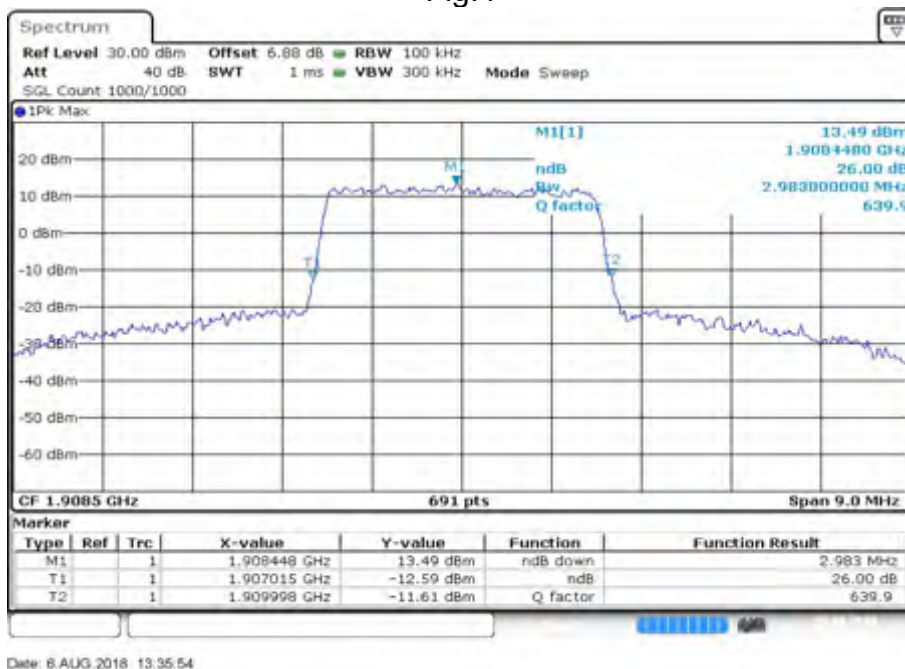


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1852.5	18625	5	25	0	4.988	Fig.4	4.988	Fig.8

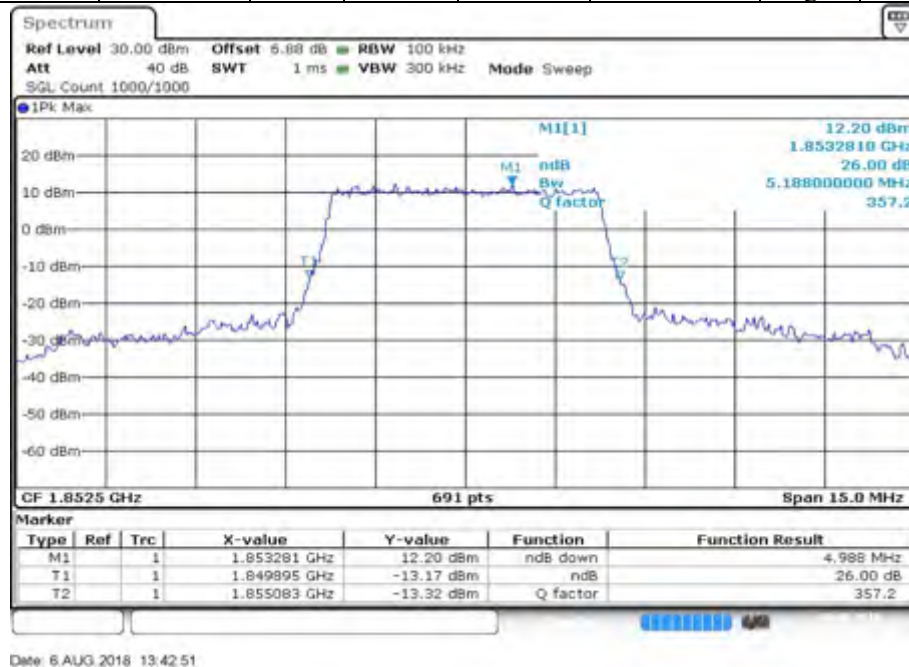


Fig.4

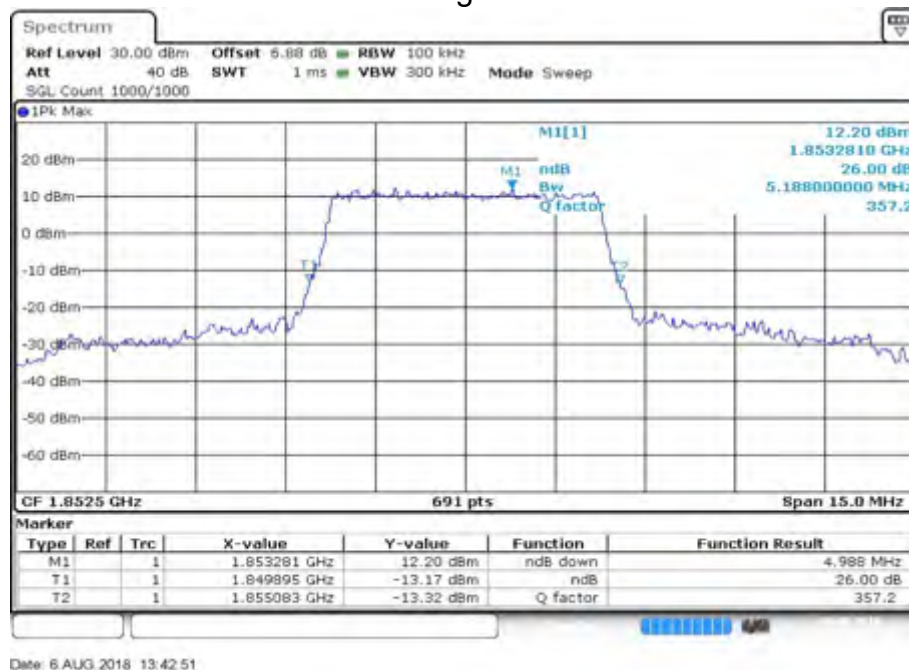


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1880	18900	5	25	0	4.966	Fig.4	4.966	Fig.8

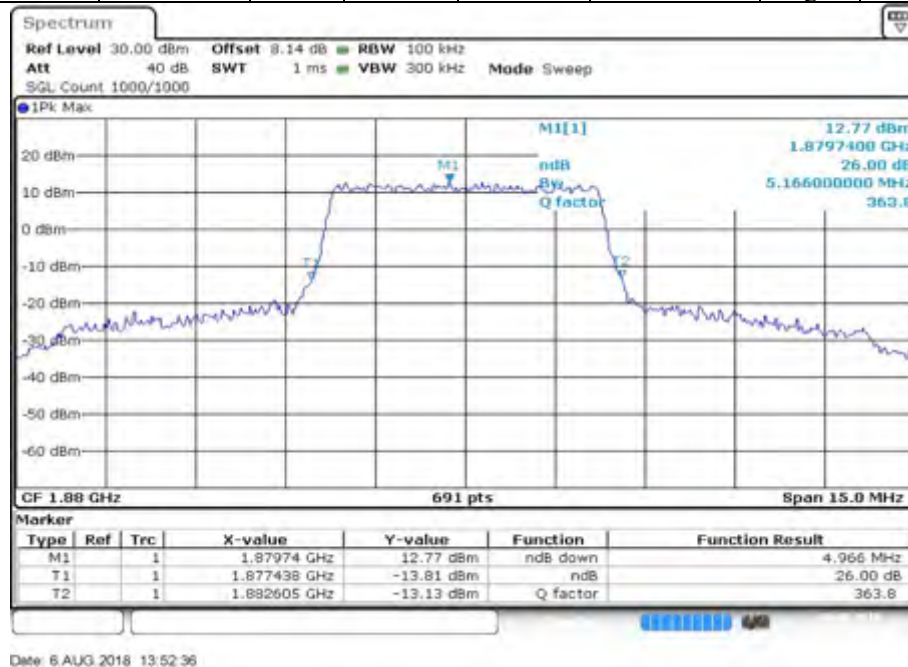


Fig.4

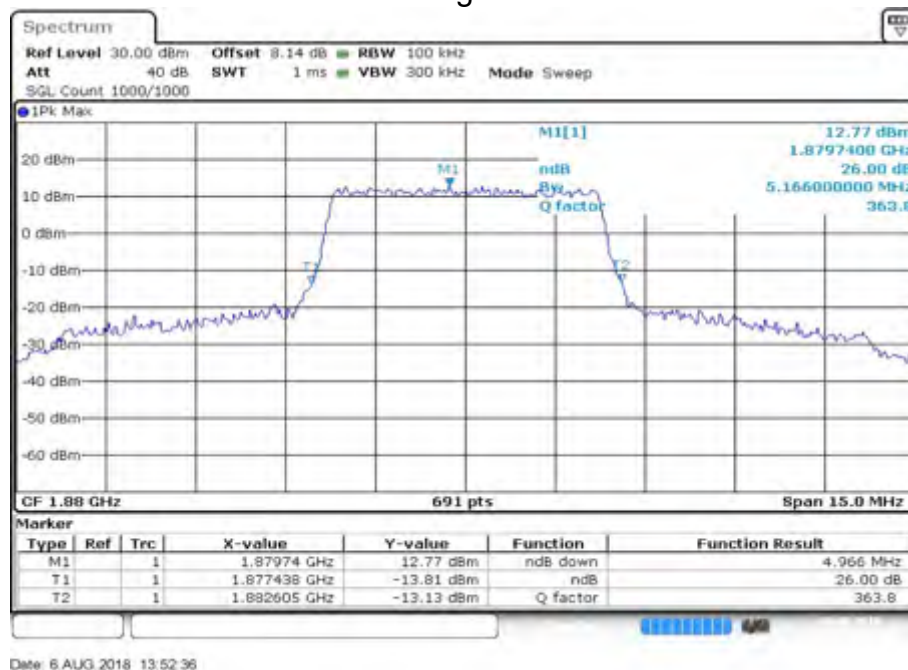


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1907.5	19175	5	25	0	4.966	Fig.4	4.966	Fig.8

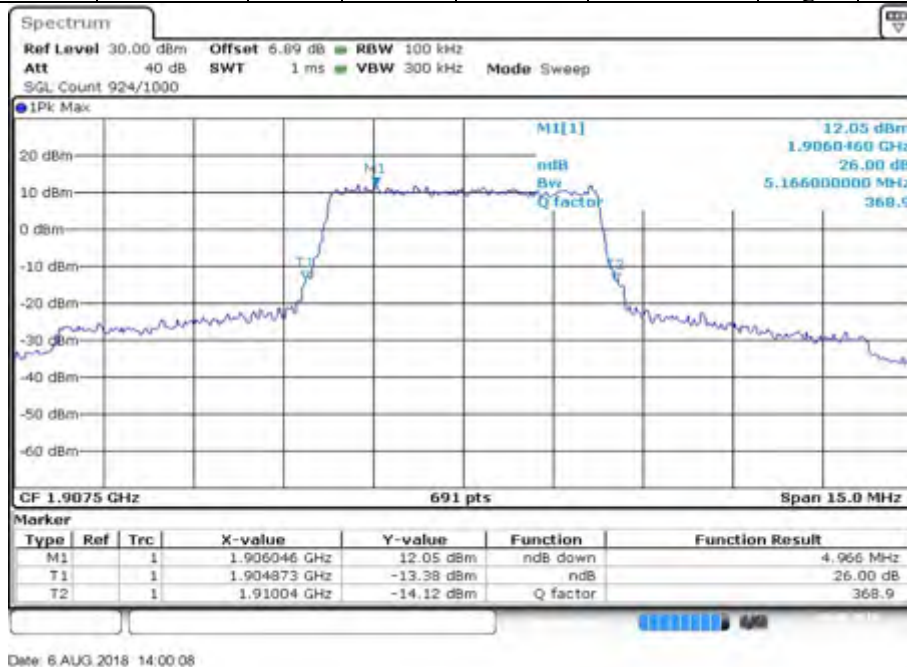


Fig.4

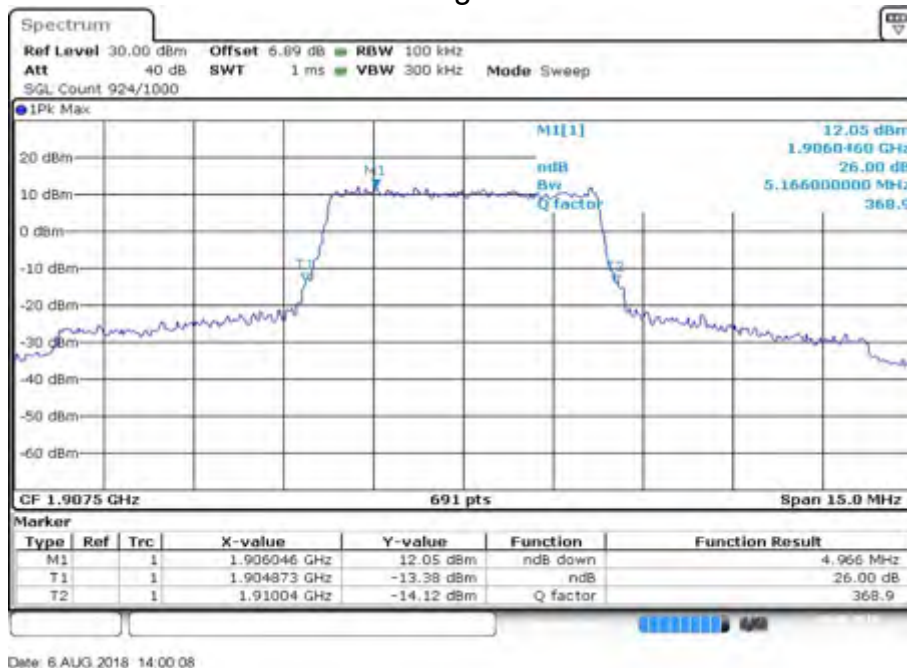


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1855	18650	10	50	0	9.989	Fig.4	9.989	Fig.8

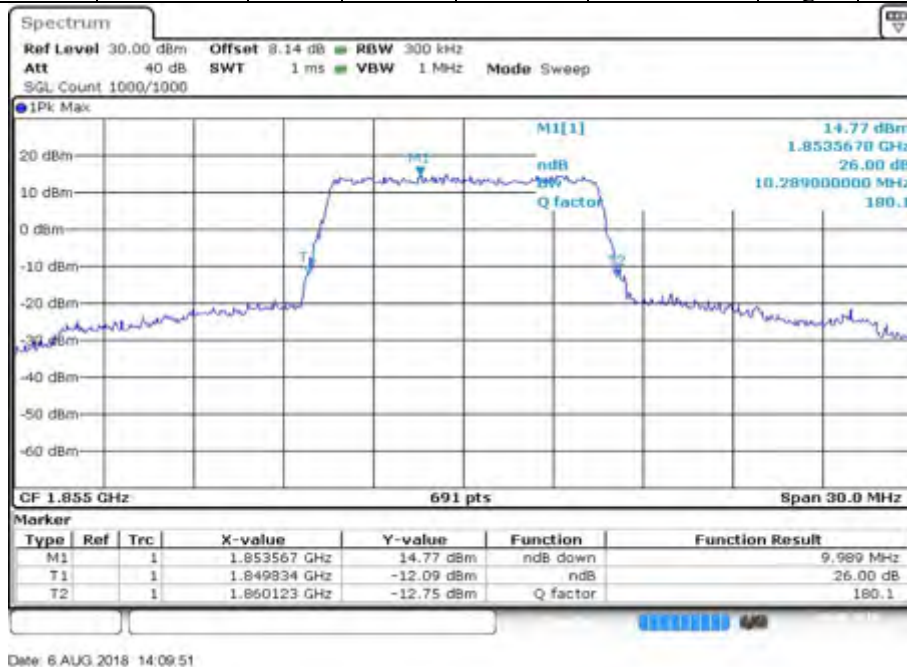


Fig.4

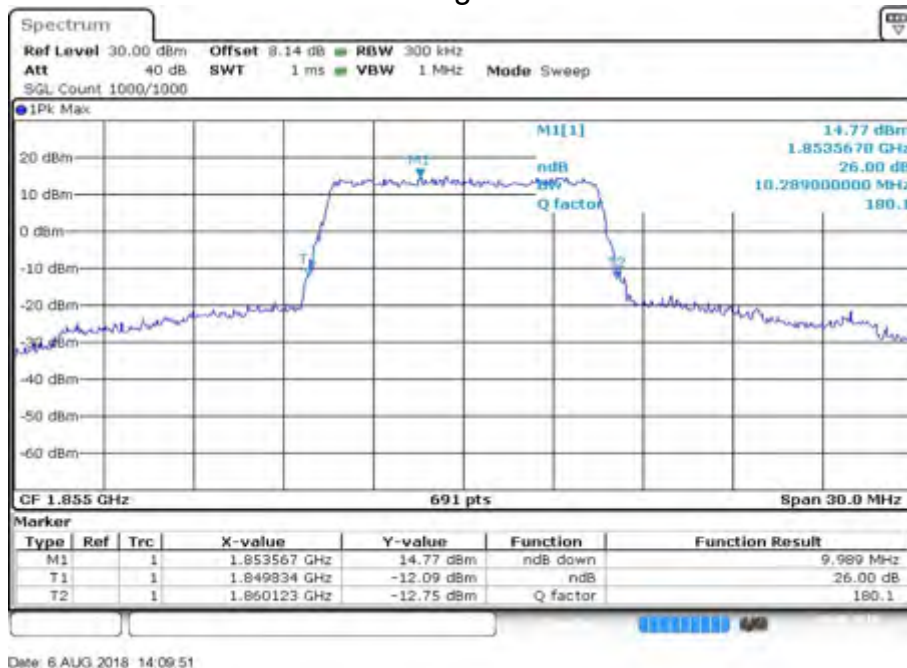


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1880	18900	10	50	0	9.989	Fig.4	9.989	Fig.8

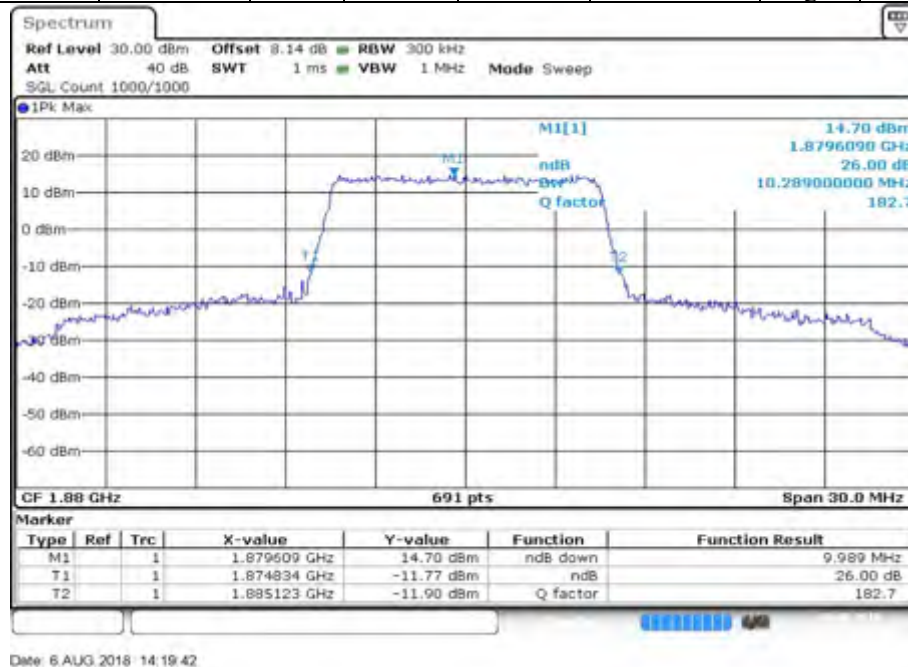


Fig.4

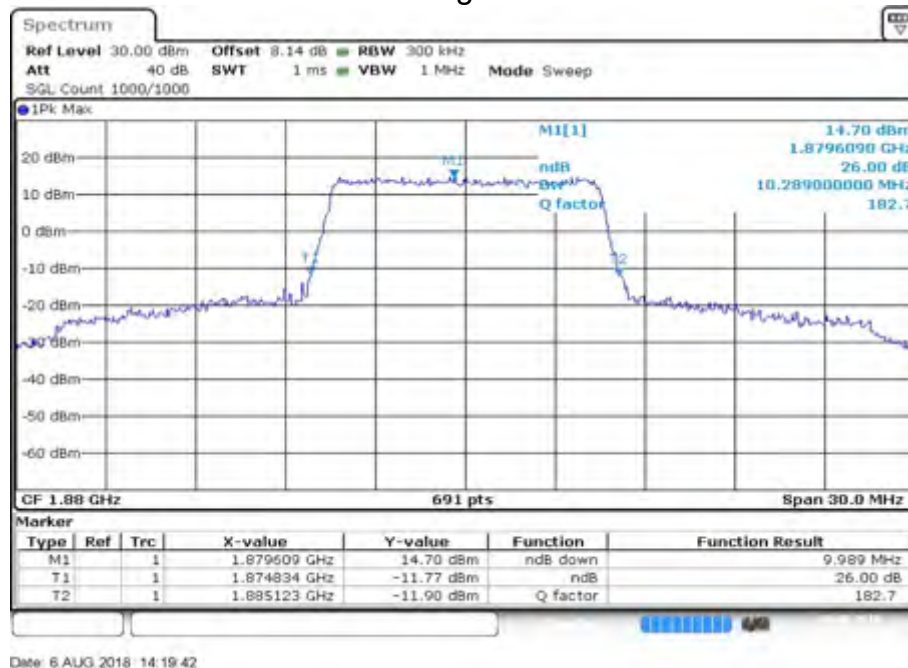


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1905	19150	10	50	0	9.903	Fig.4	9.903	Fig.8

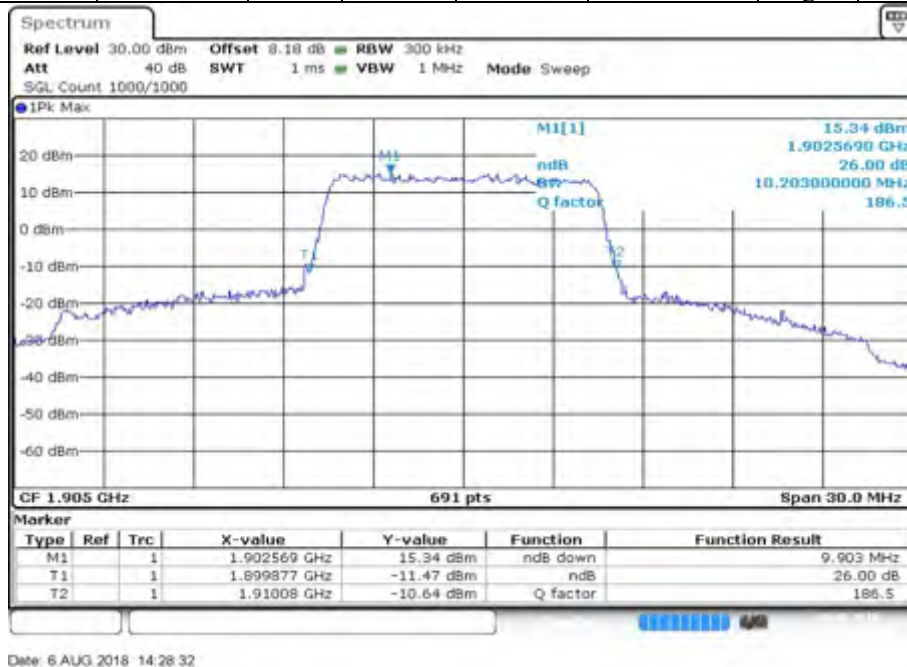


Fig.4

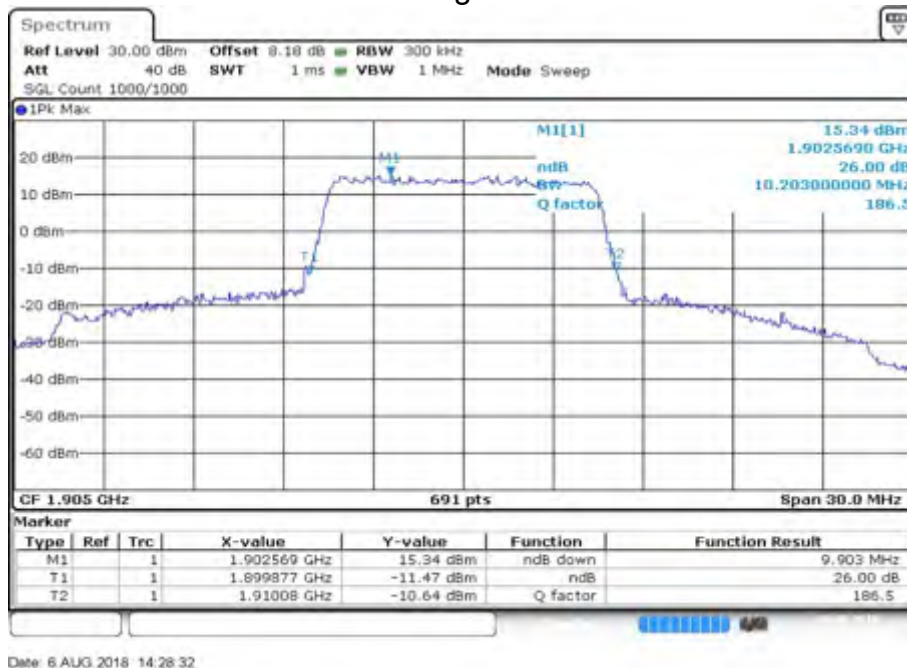


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1857.5	18675	15	75	0	14.978	Fig.4	14.978	Fig.8

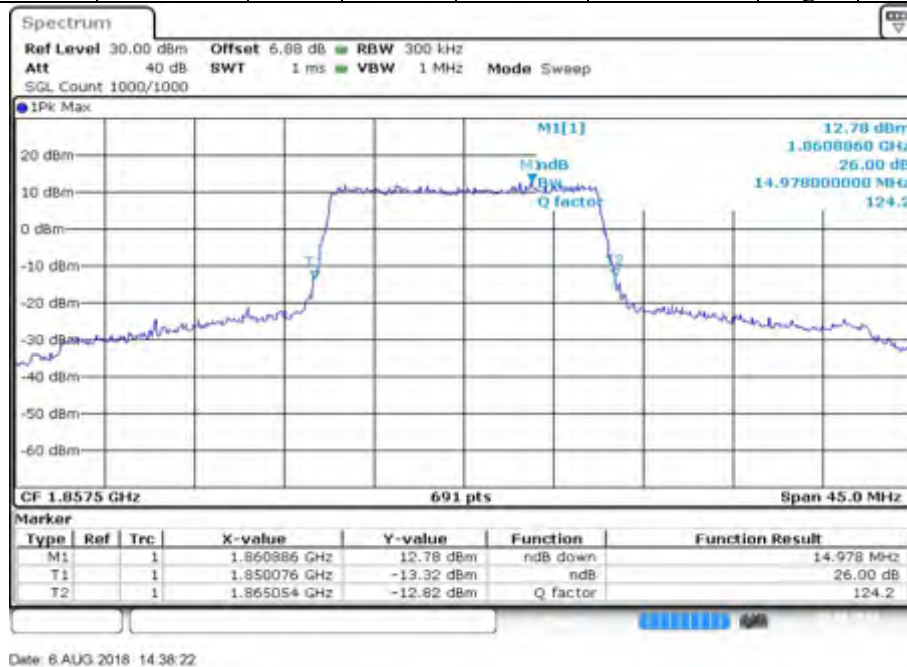


Fig.4

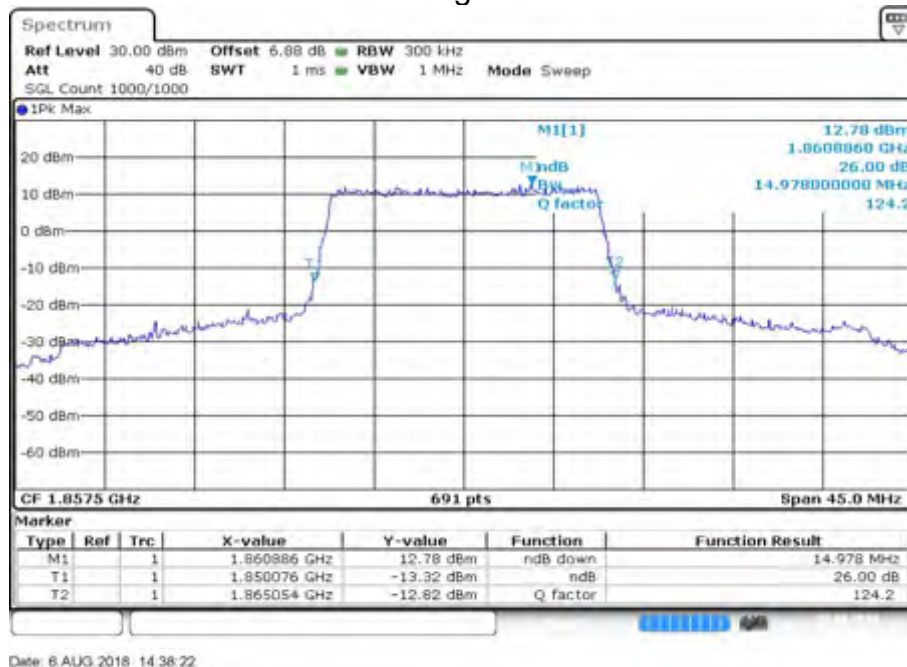


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1880	18900	15	75	0	14.943	Fig.4	14.943	Fig.8



Fig.4

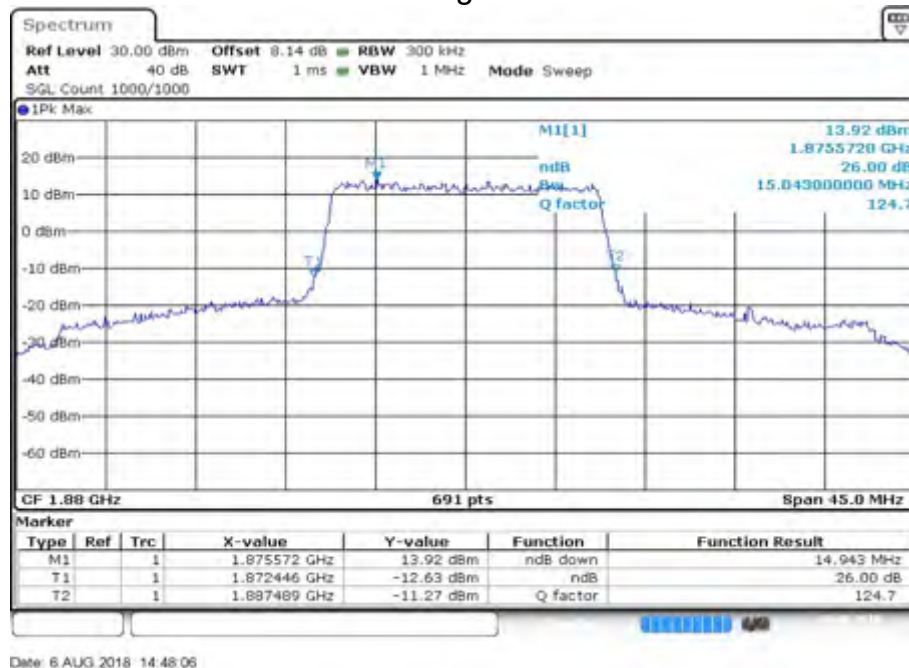


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1902.5	19125	15	75	0	14.943	Fig.4	14.943	Fig.8



Fig.4

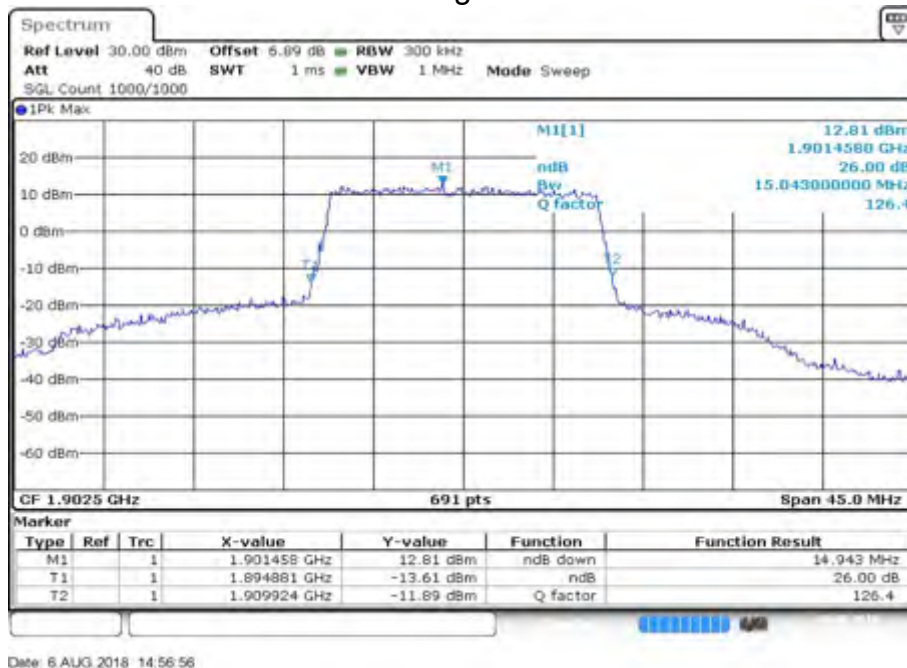


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1860	18700	20	100	0	19.450	Fig.4	19.450	Fig.8

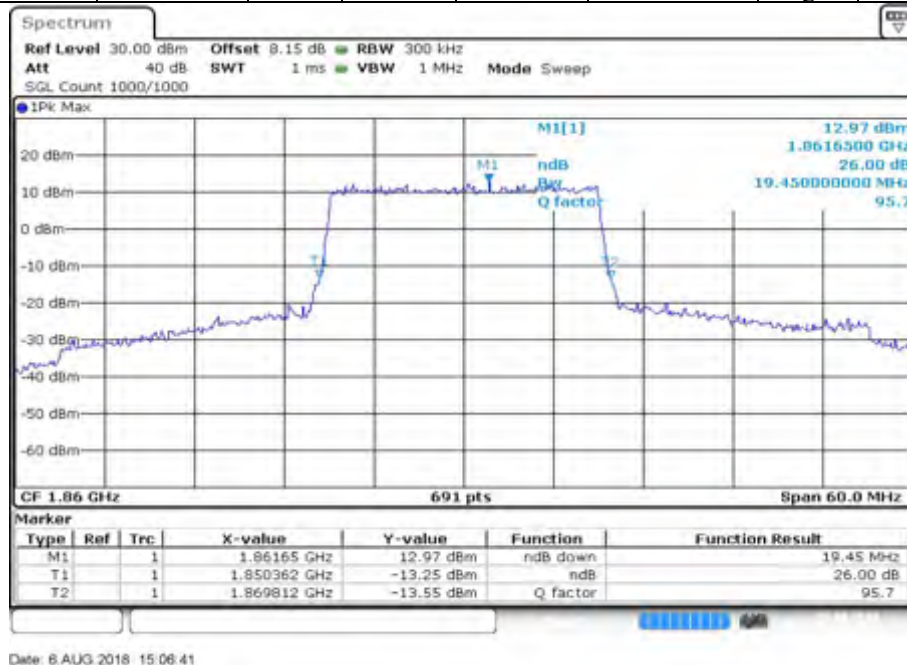


Fig.4

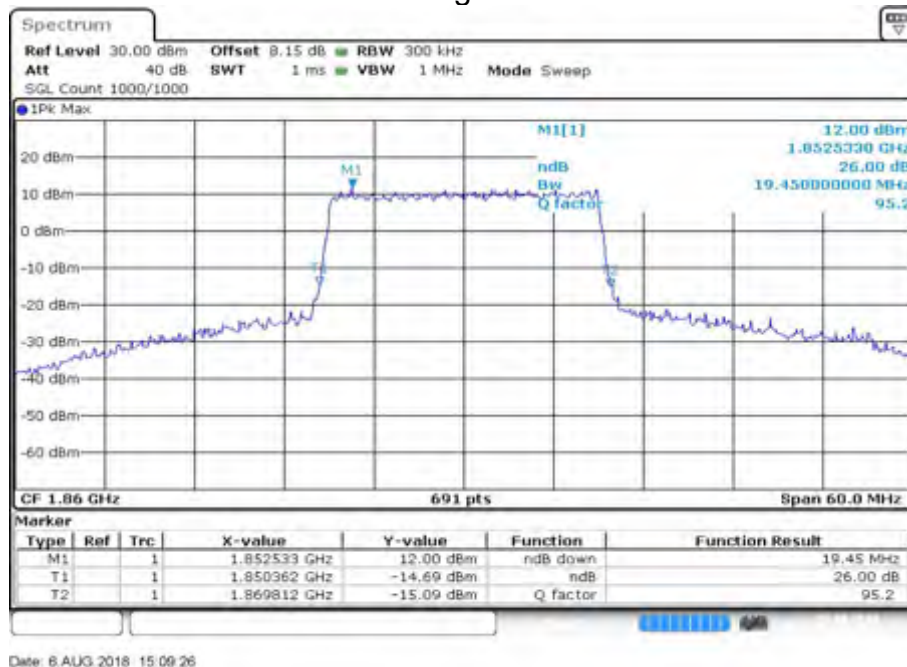


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1880	18900	20	100	0	19.537	Fig.4	19.711	Fig.8

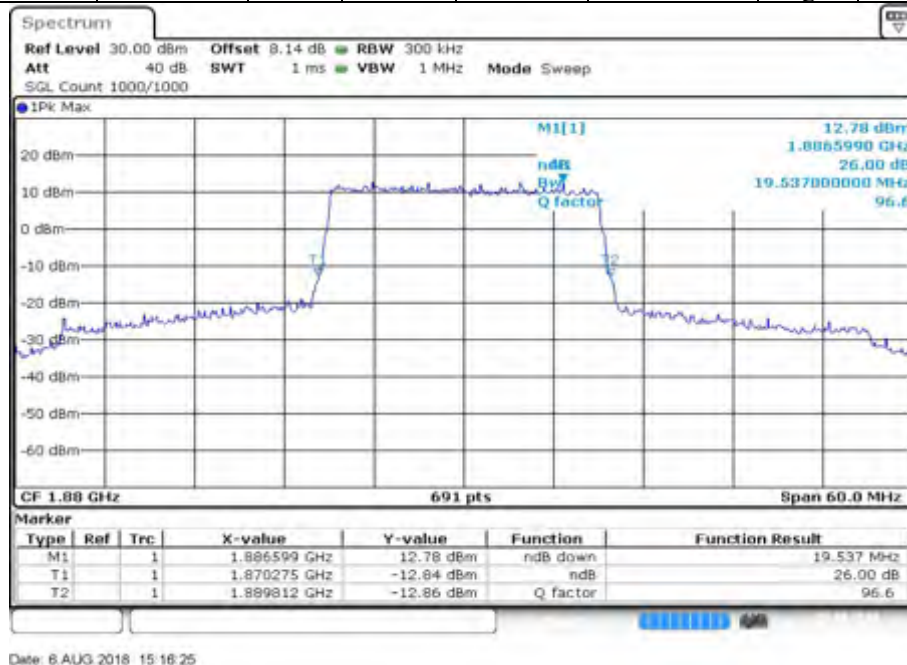


Fig.4

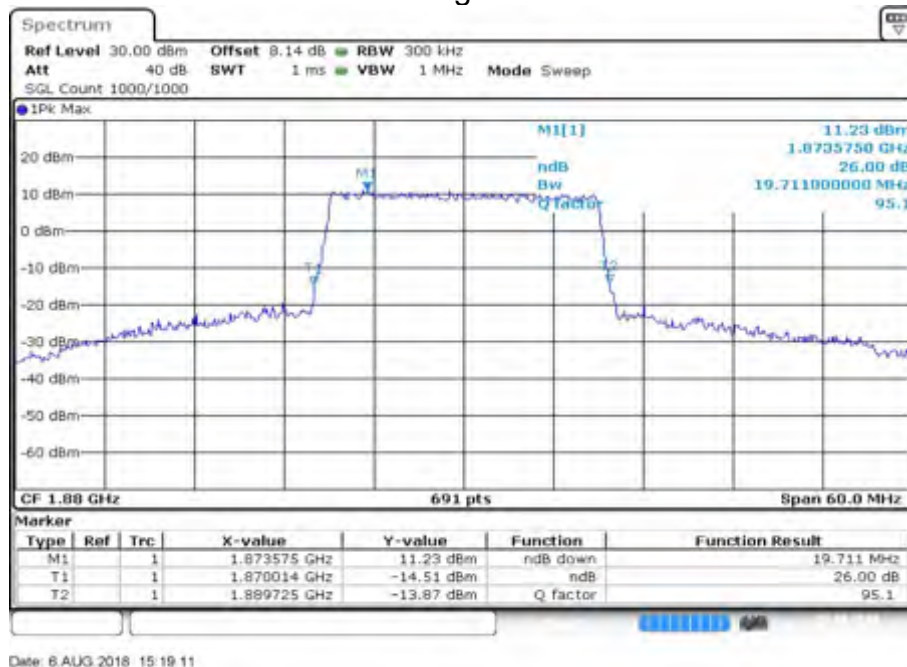


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
2	1900	19100	20	100	0	19.537	Fig.4	19.537	Fig.8

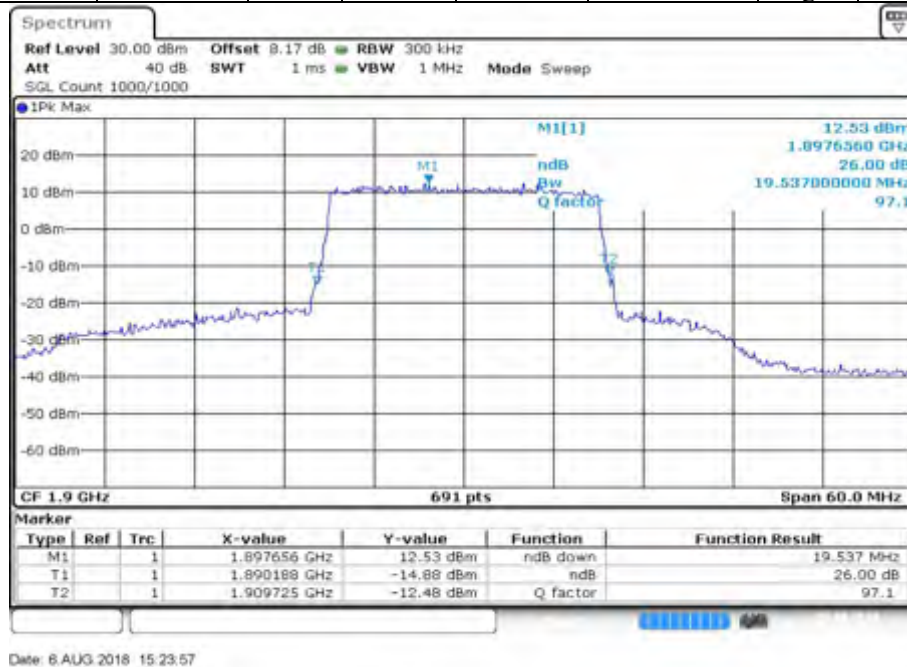


Fig.4

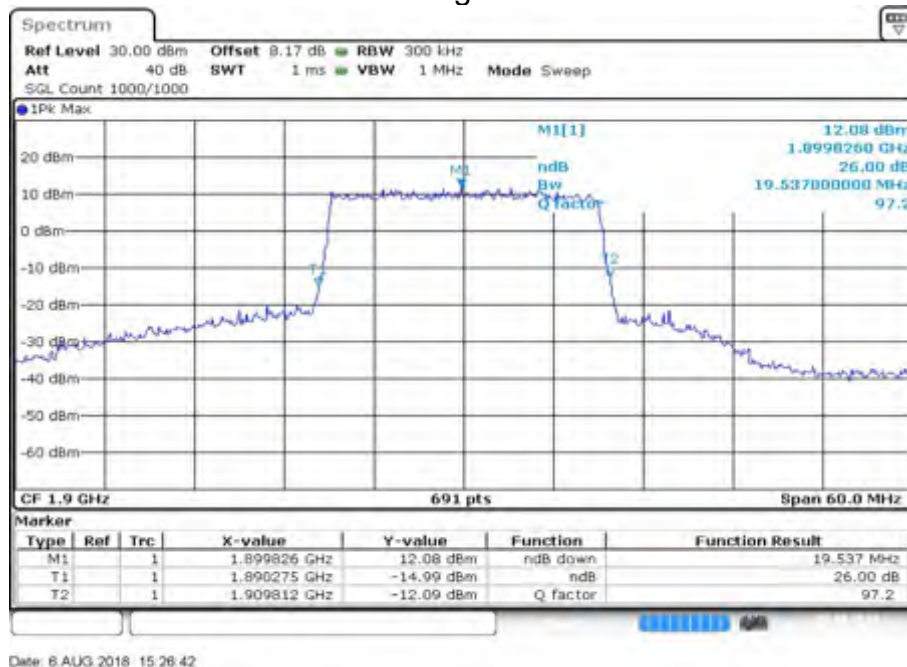


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1710.7	19957	1.4	6	0	1.283	Fig.4	1.313	Fig.8

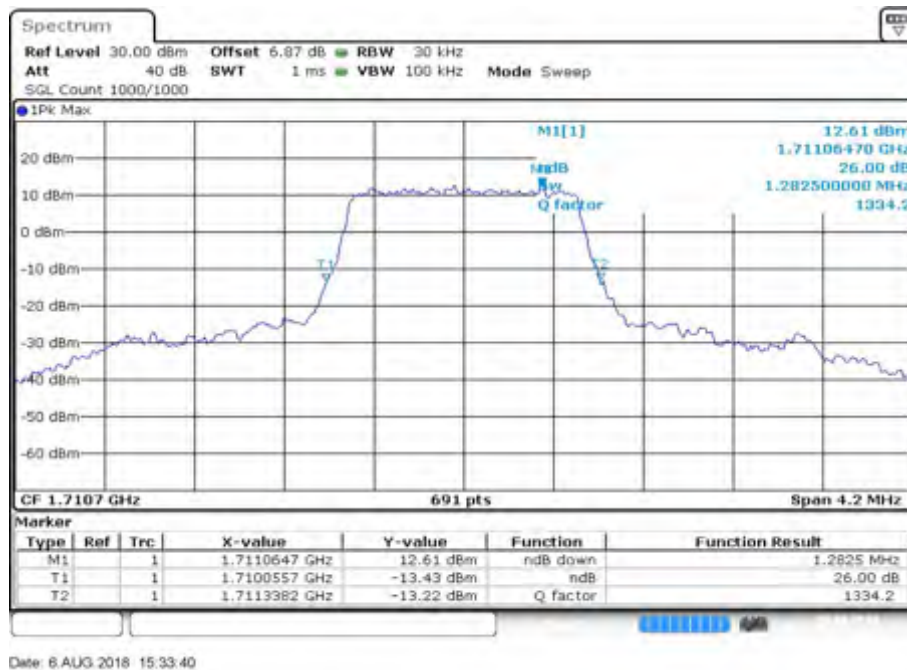


Fig.4

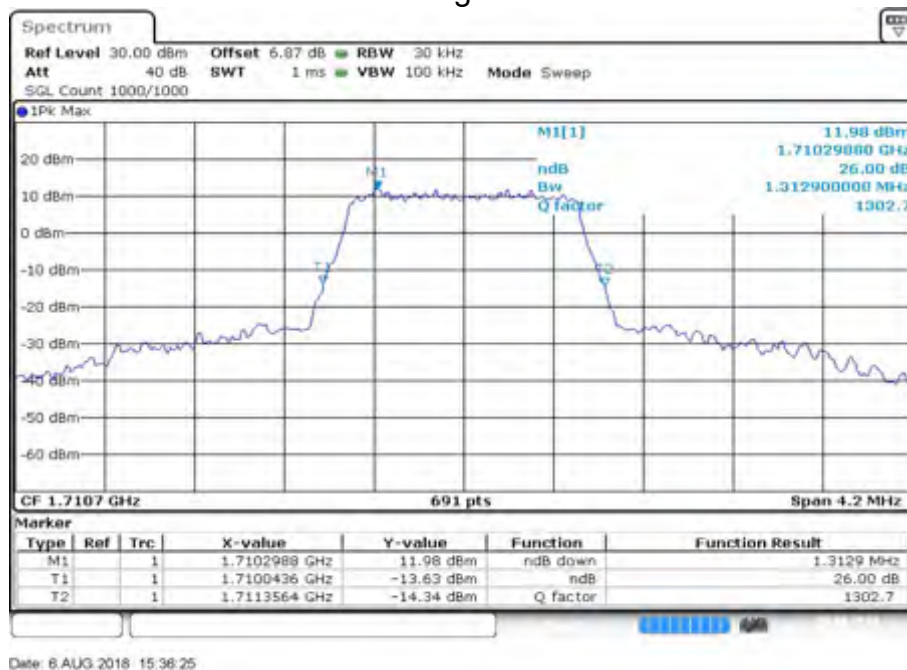


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	1.4	6	0	1.313	Fig.4	1.289	Fig.8

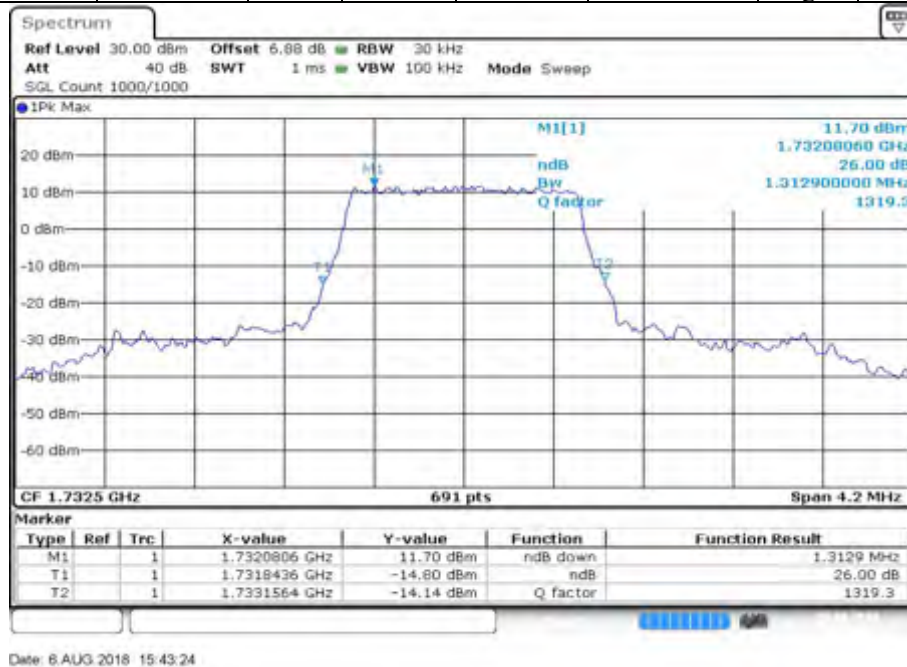


Fig.4

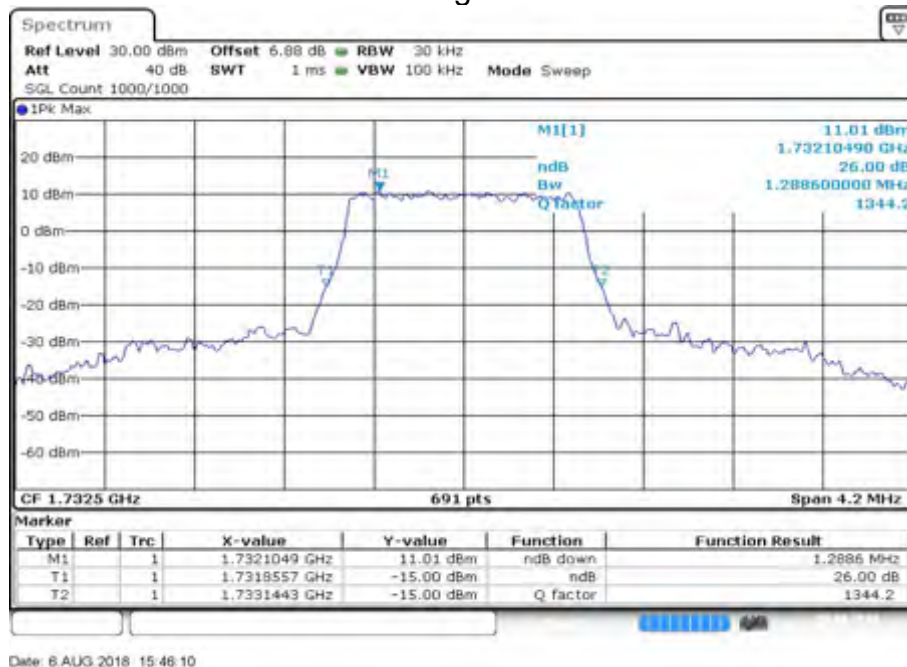


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1754.3	20393	1.4	6	0	1.283	Fig.4	1.313	Fig.8

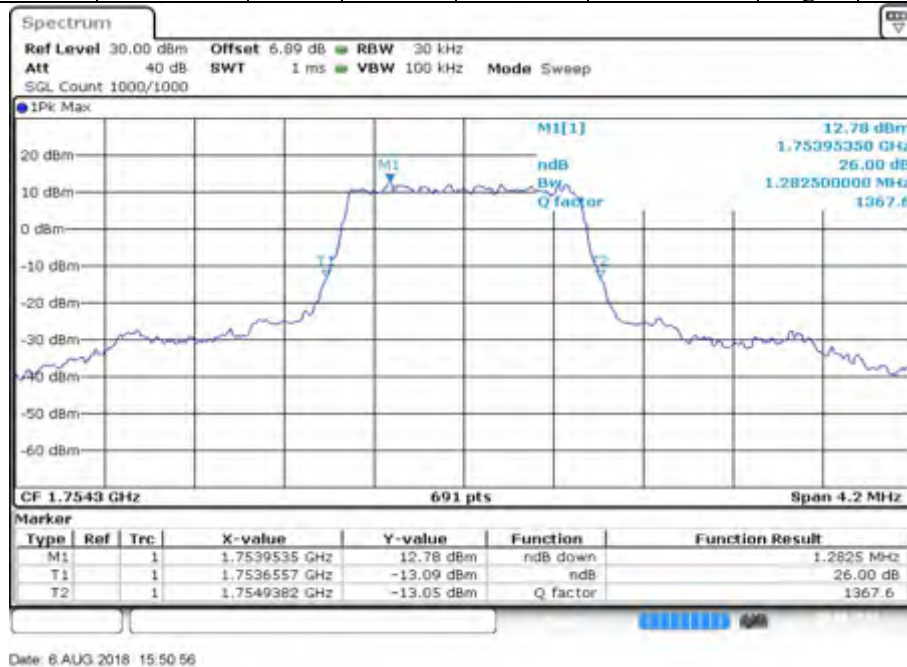


Fig.4

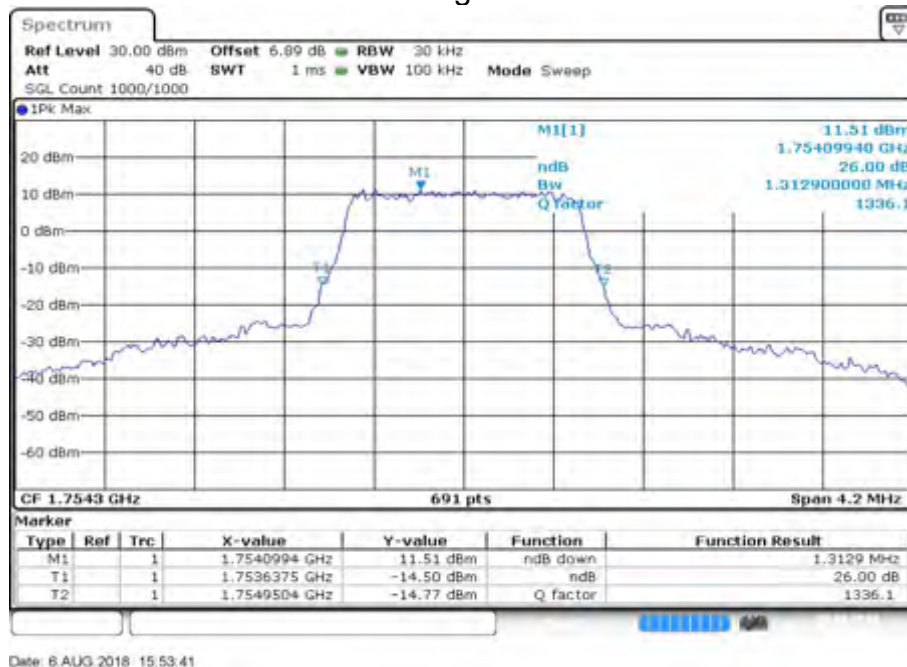


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1711.5	19965	3	15	0	2.983	Fig.4	2.983	Fig.8

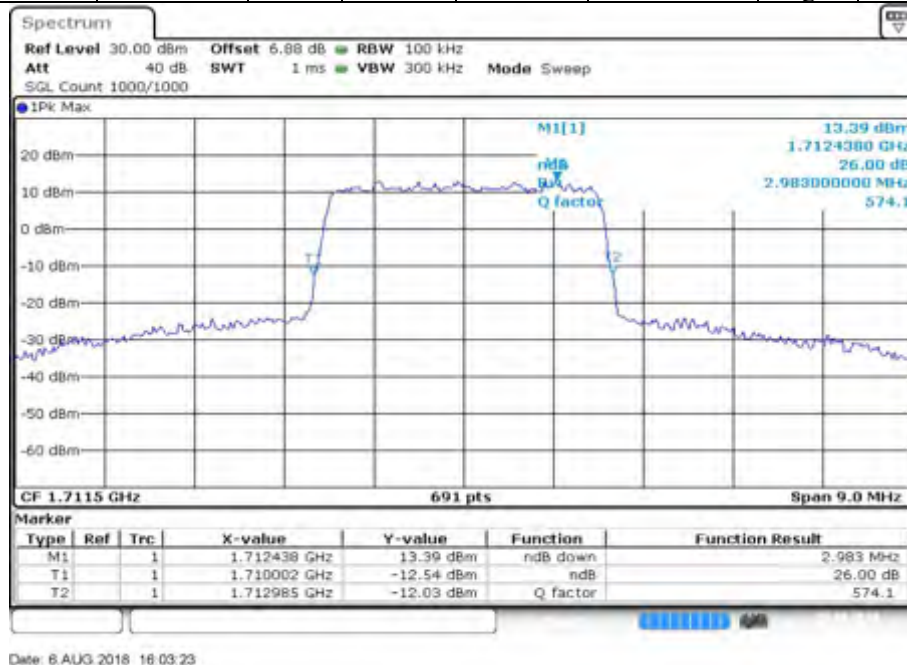


Fig.4

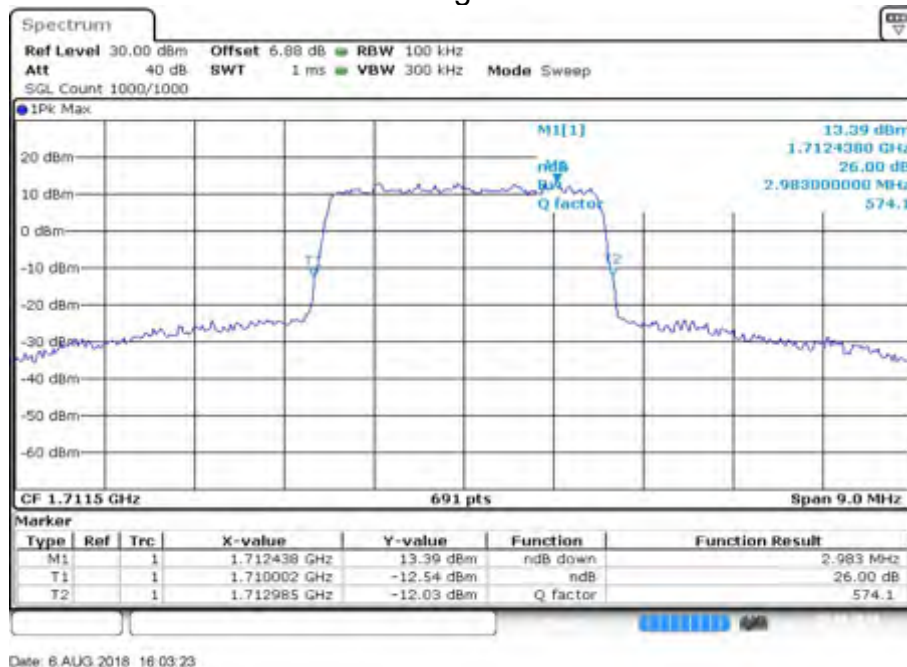


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	3	15	0	2.996	Fig.4	2.996	Fig.8

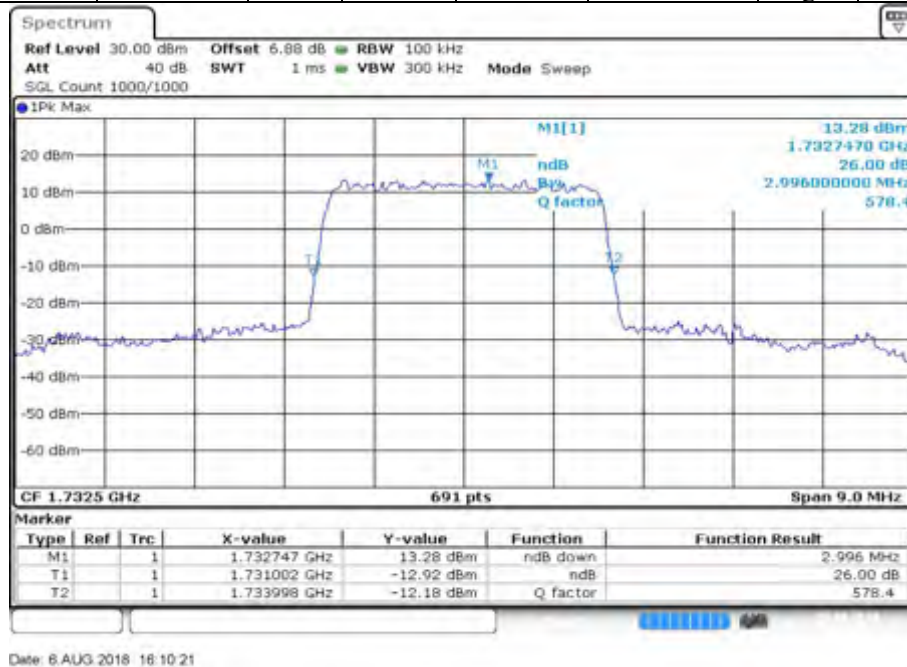


Fig.4

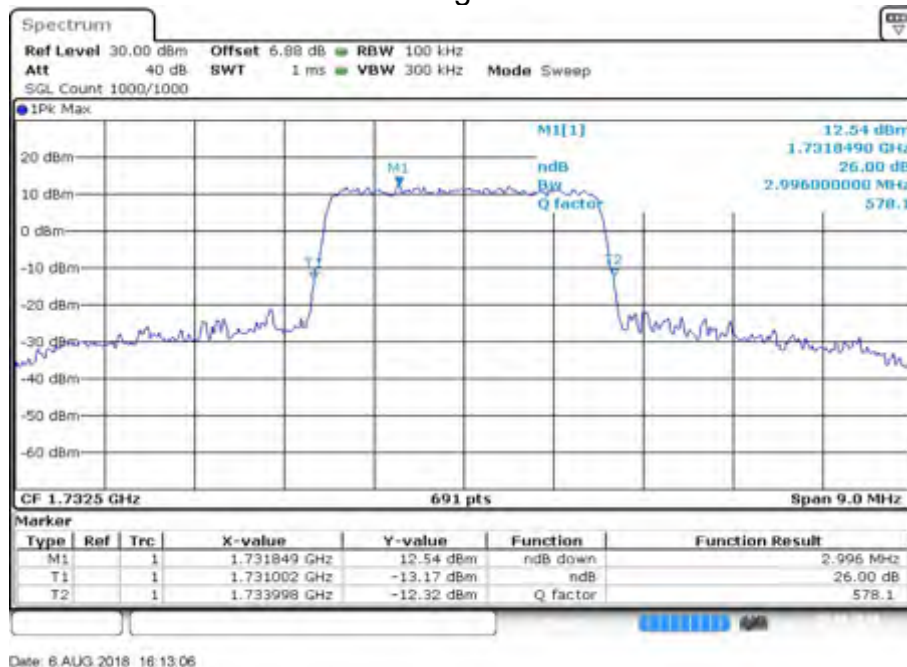


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1753.5	20385	3	15	0	2.996	Fig.4	2.996	Fig.8

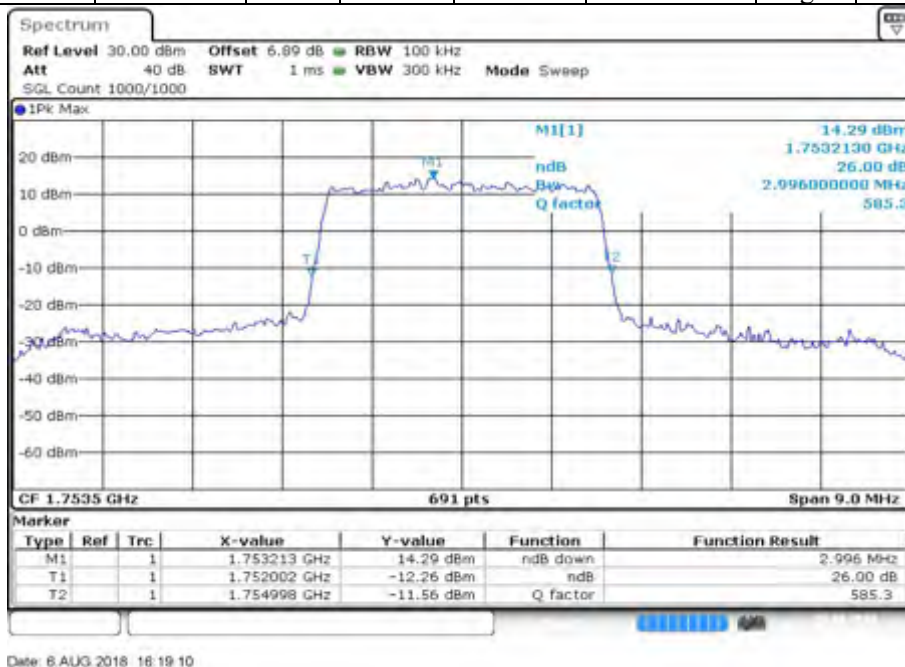


Fig.4

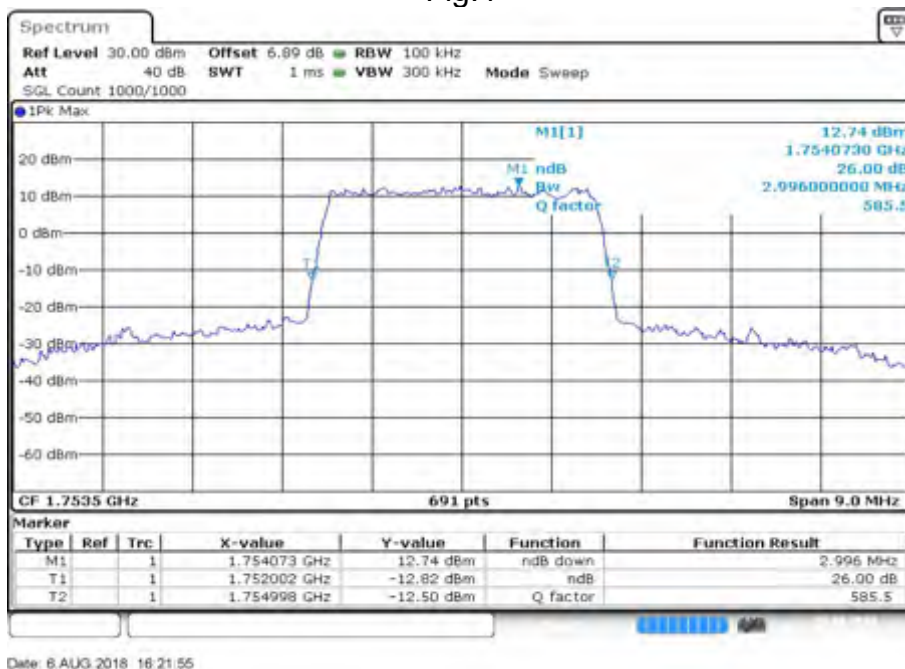


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1712.5	19975	5	25	0	4.966	Fig.4	4.966	Fig.8

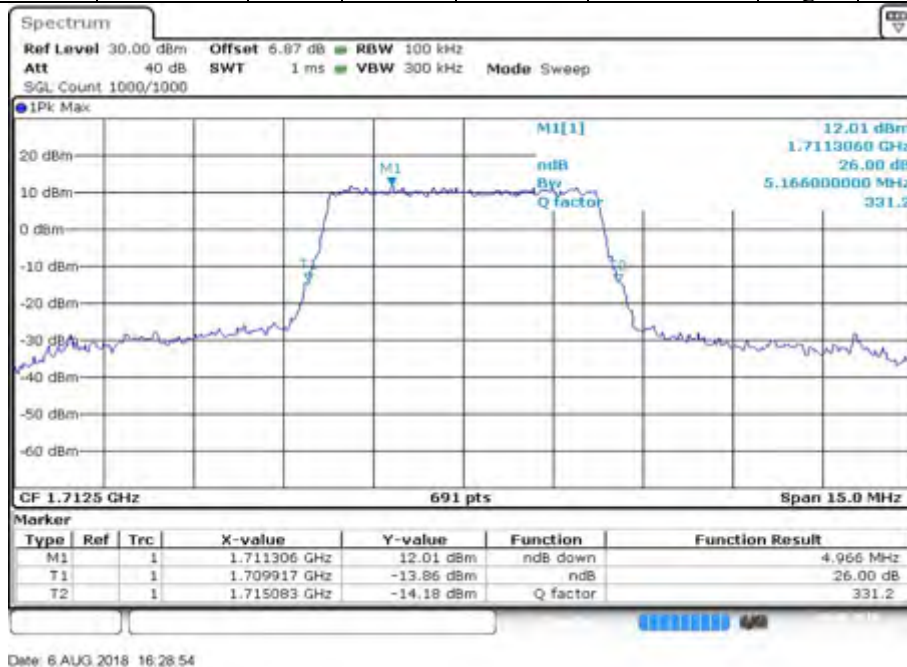


Fig.4

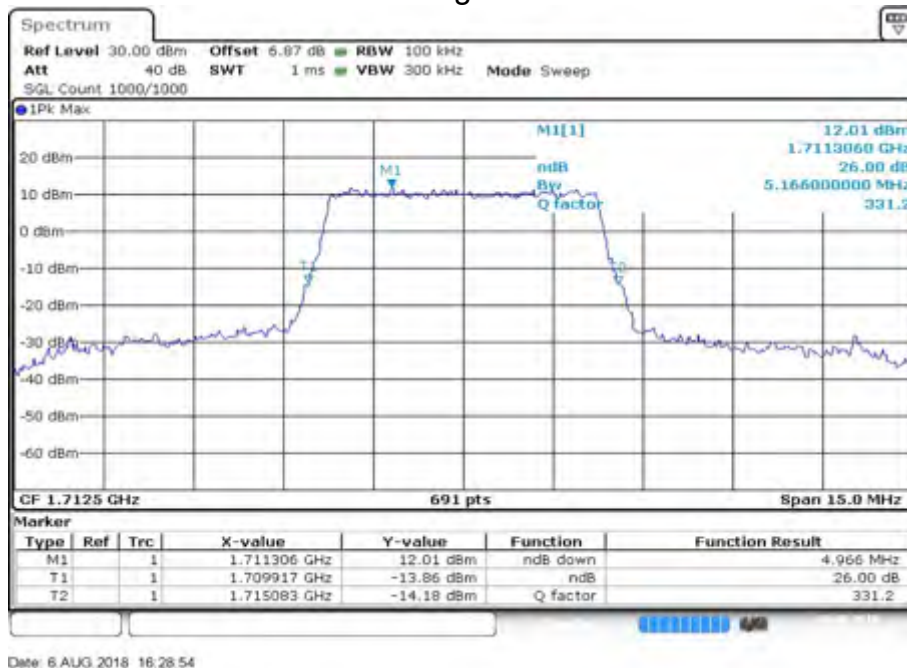


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	5	25	0	4.991	Fig.4	4.991	Fig.8

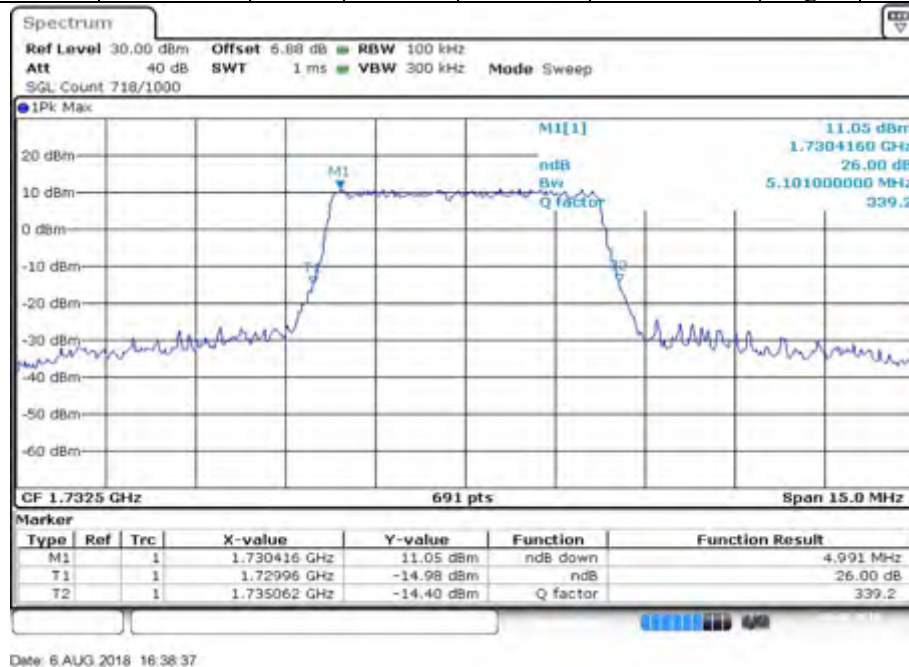


Fig.4

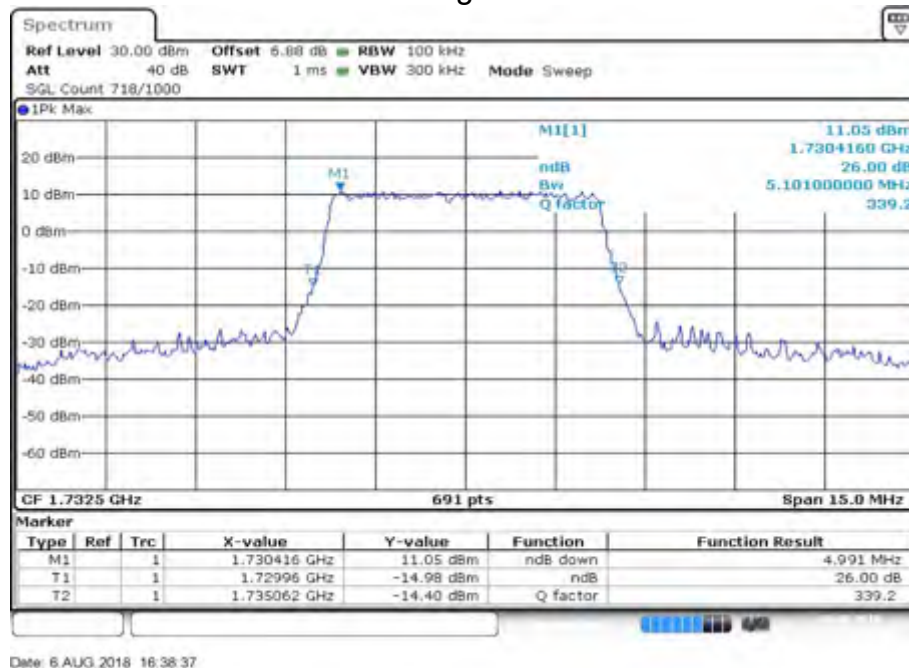


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1752.5	20375	5	25	0	4.991	Fig.4	4.991	Fig.8

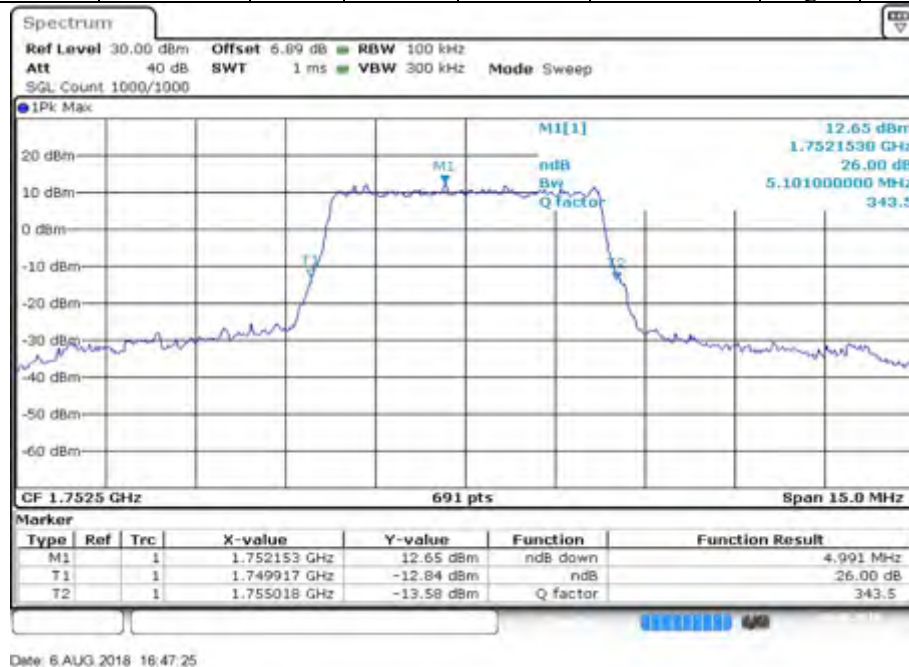


Fig.4

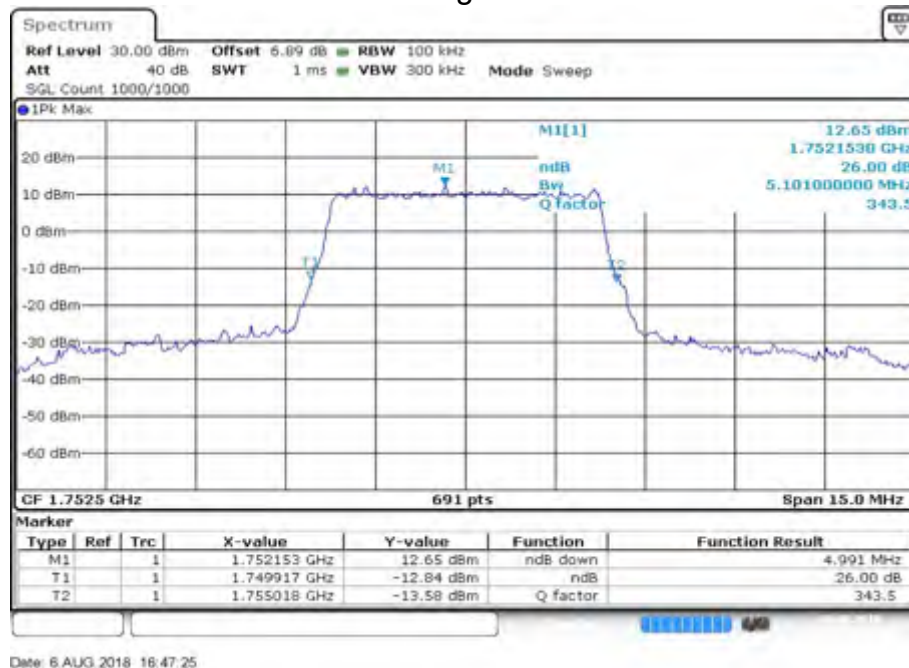


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1715	20000	10	50	0	9.993	Fig.4	9.993	Fig.8

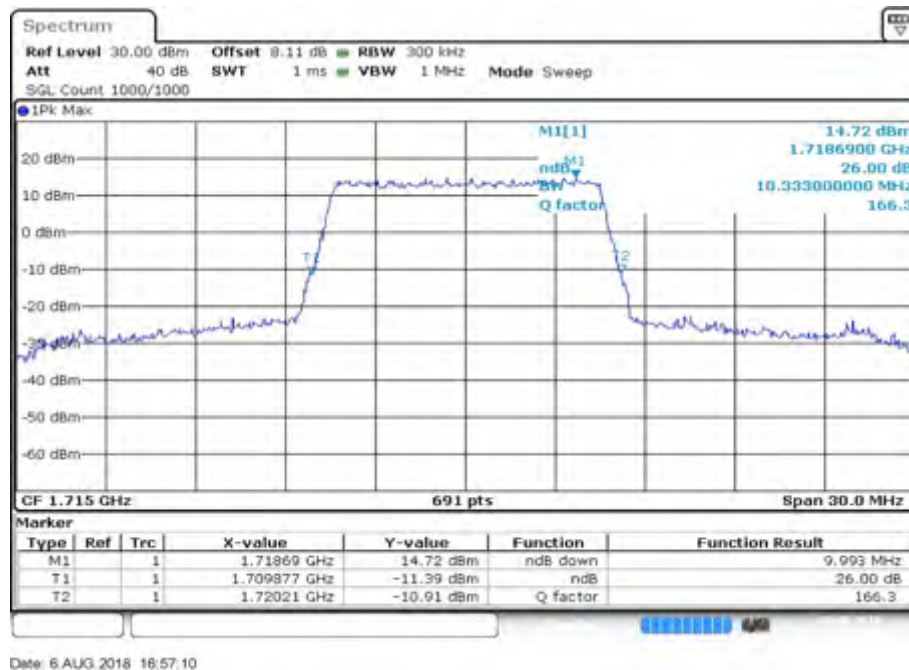


Fig.4

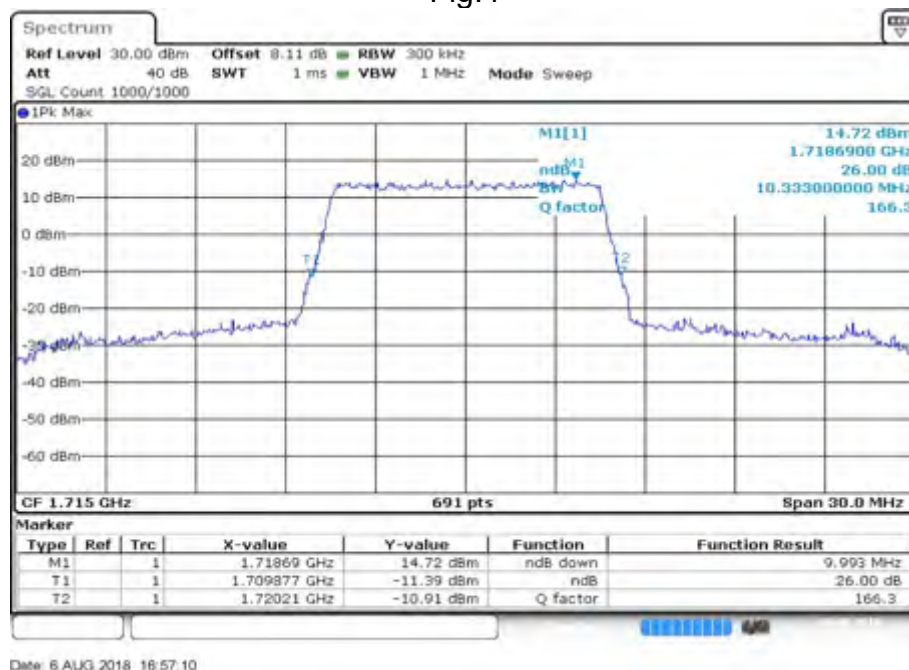


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1750	20350	10	50	0	9.989	Fig.4	9.989	Fig.8

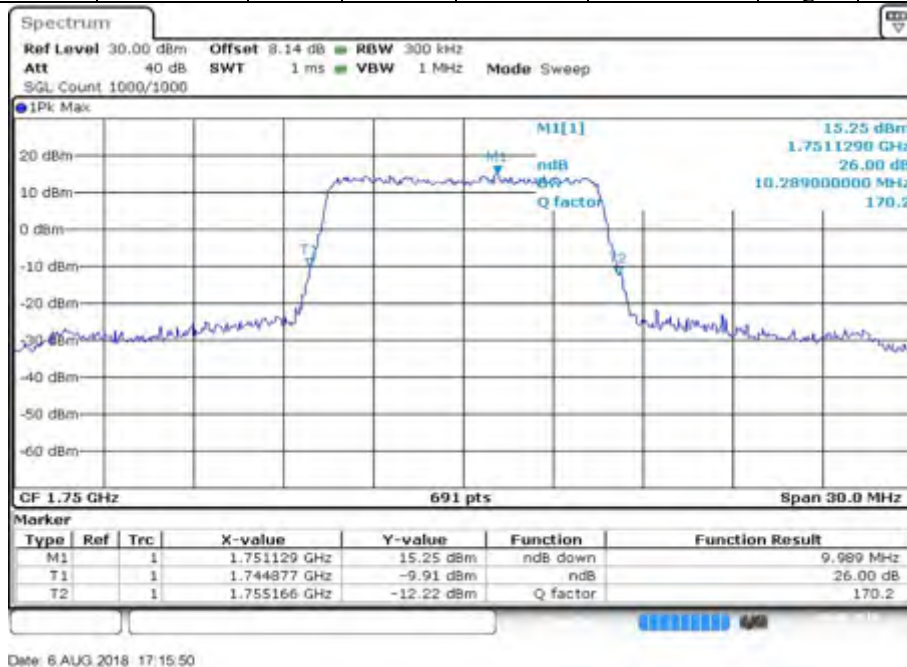


Fig.4

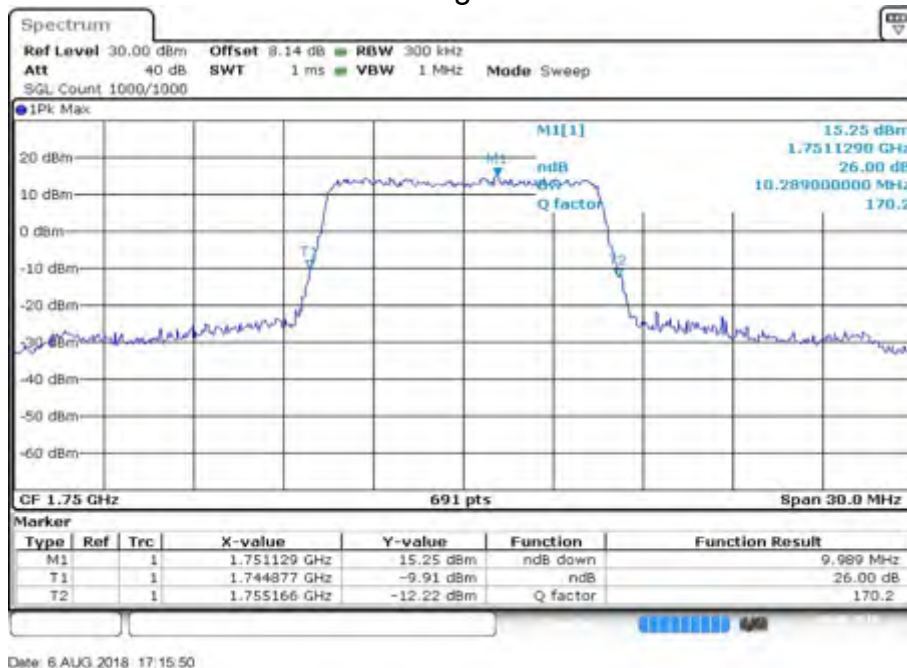


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1717.5	20025	15	75	0	14.993	Fig.4	14.993	Fig.8

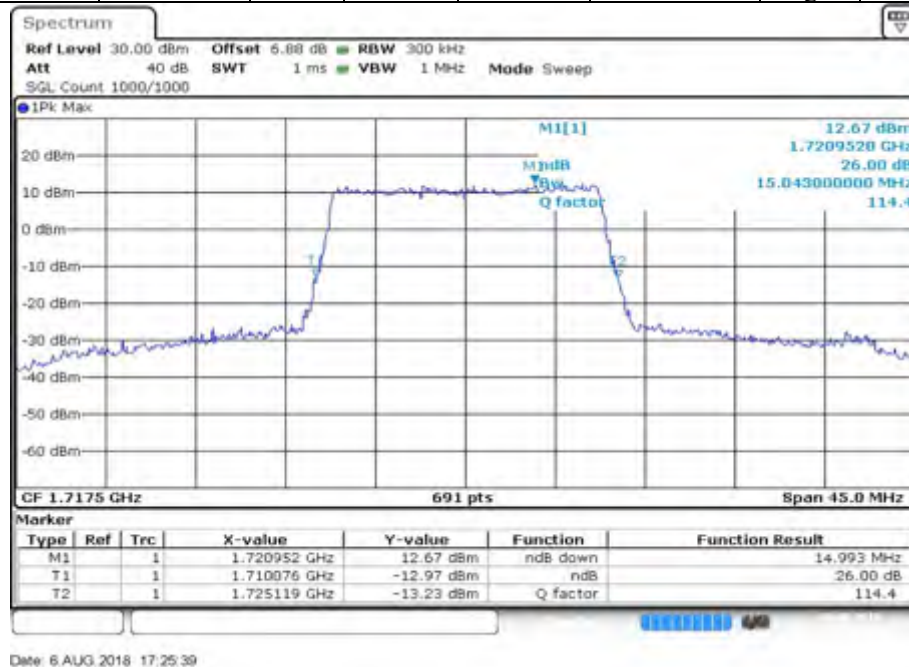


Fig.4

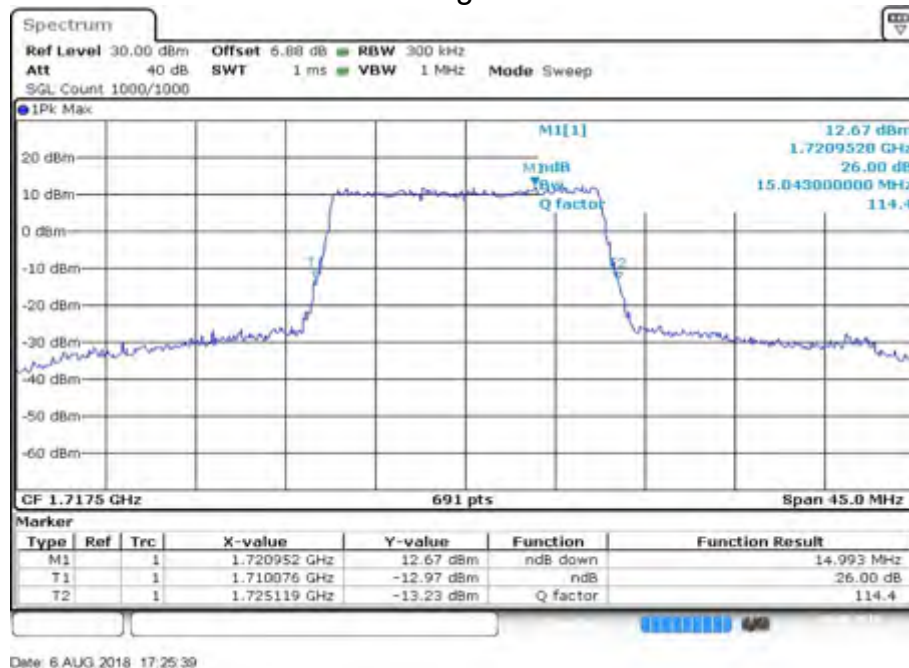


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	15	75	0	14.913	Fig.4	14.913	Fig.8

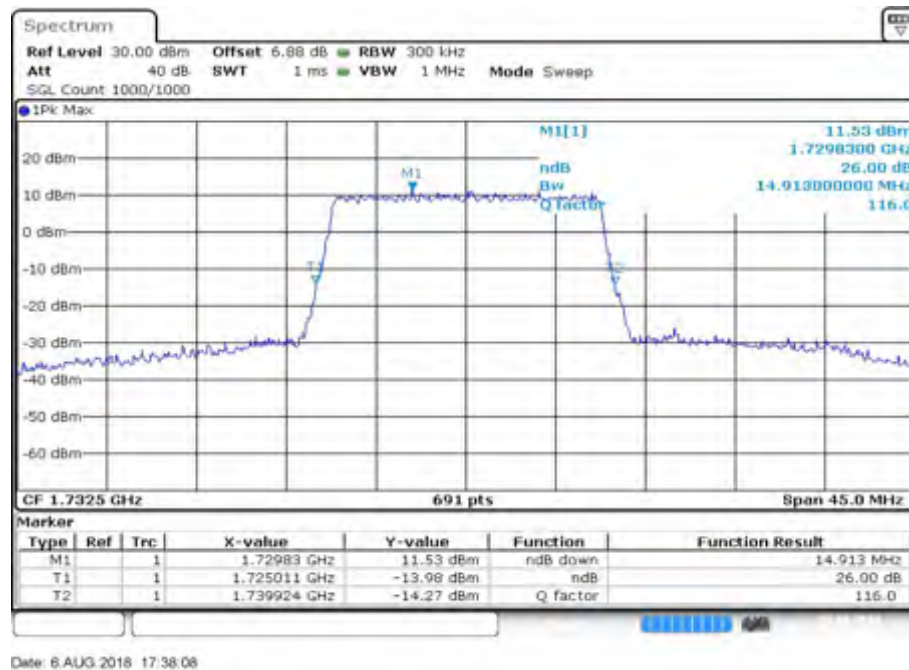


Fig.4

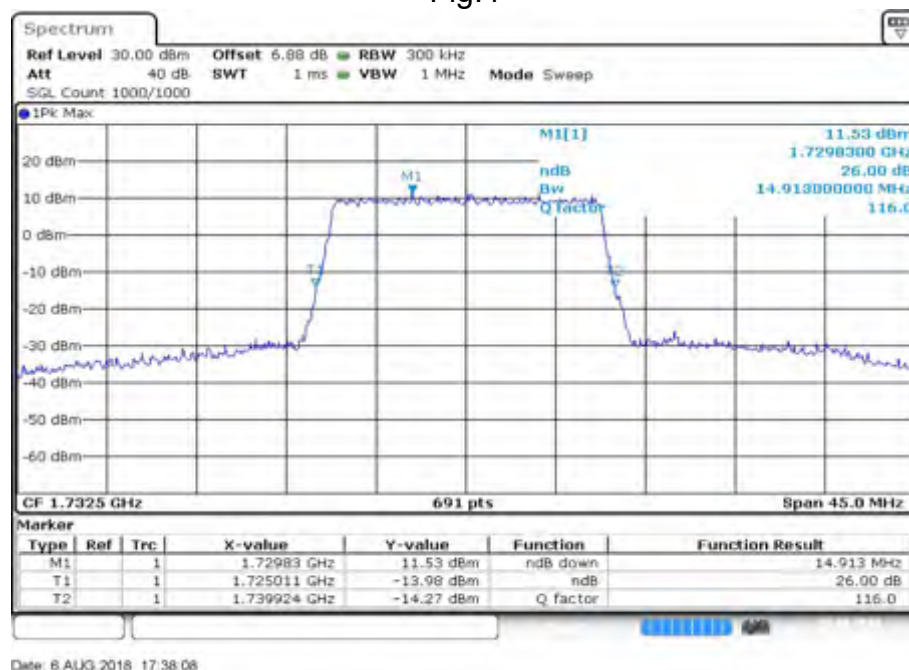


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1747.5	20325	15	75	0	14.913	Fig.4	14.913	Fig.8

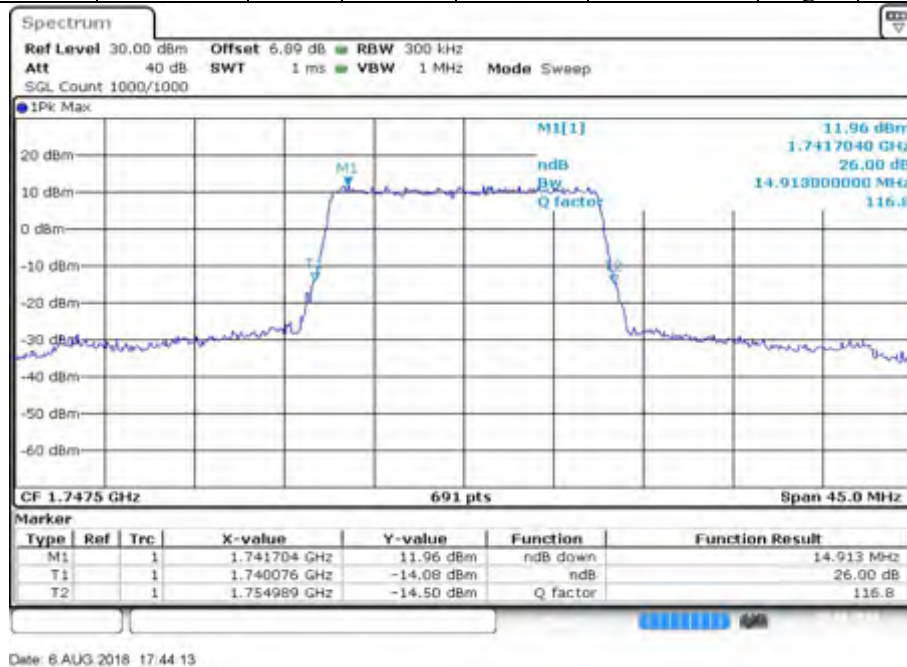


Fig.4

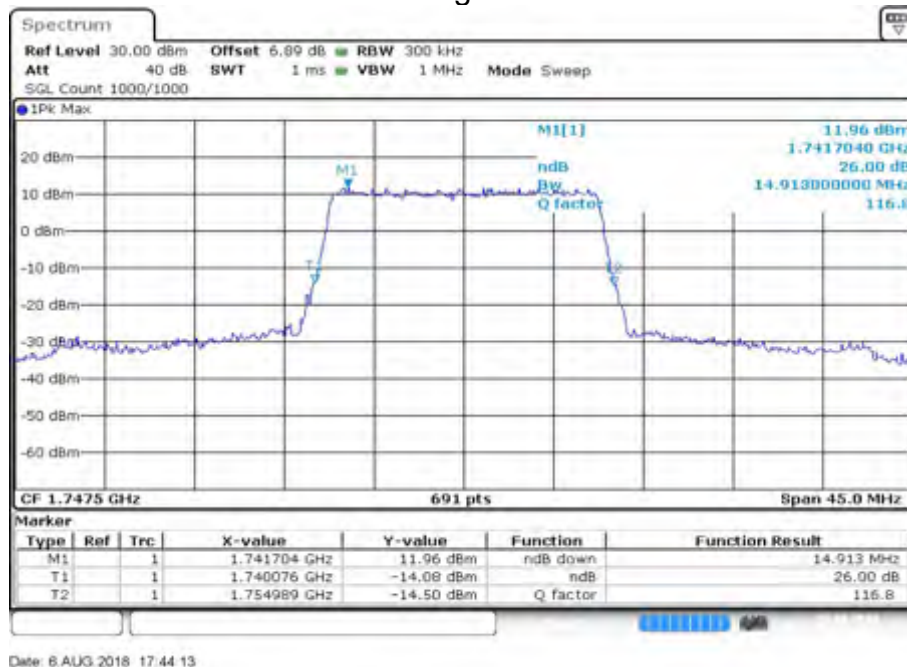


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1720	20050	20	100	0	19.537	Fig.4	19.537	Fig.8

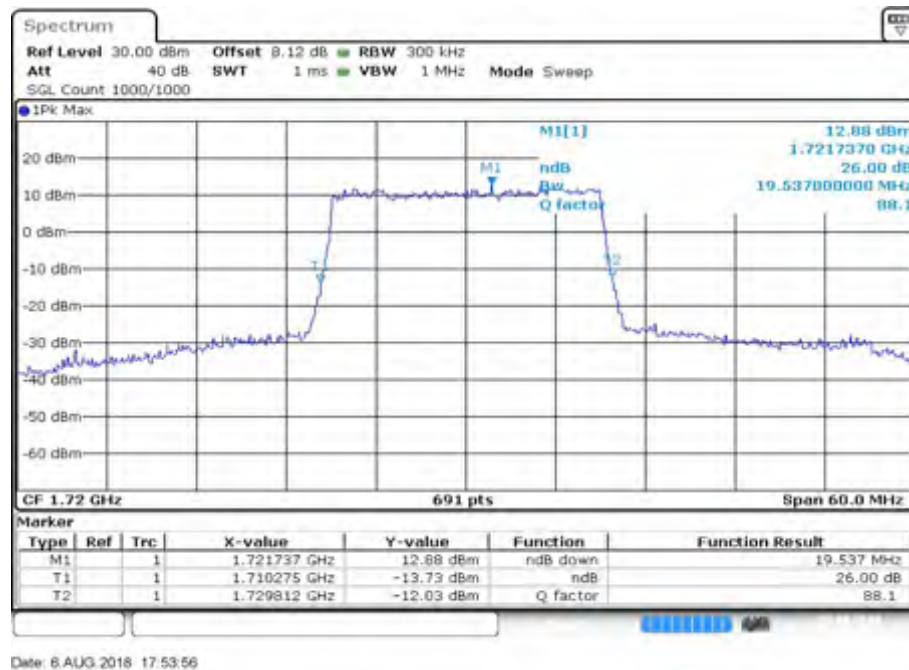


Fig.4

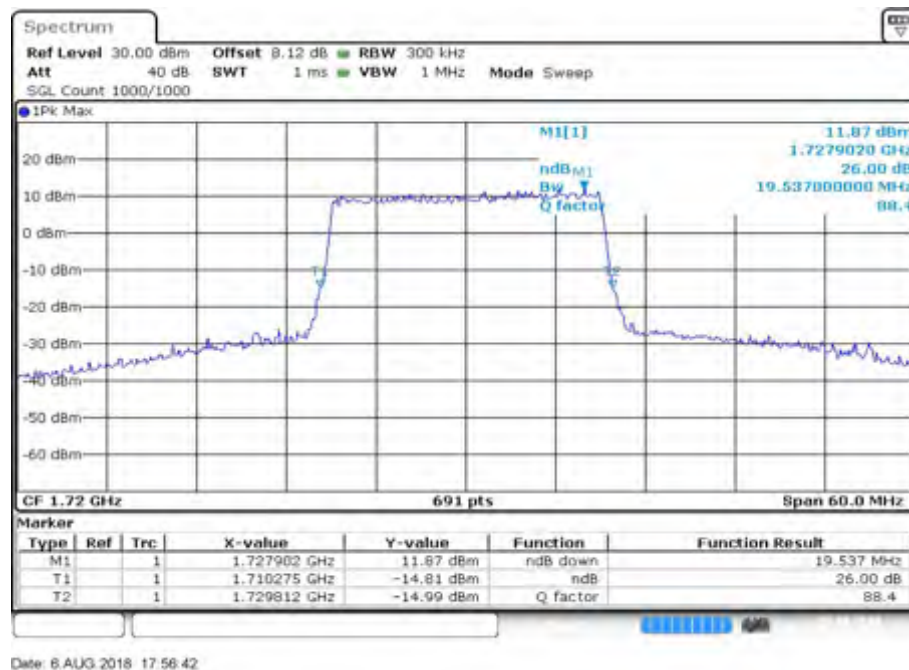


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1732.5	20175	20	100	0	19.450	Fig.4	19.624	Fig.8

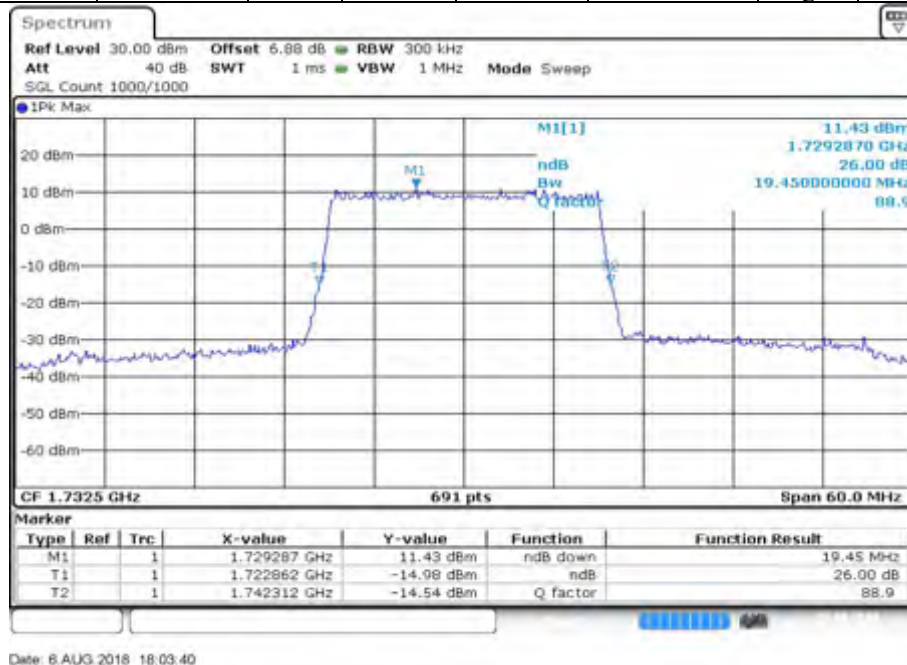


Fig.4

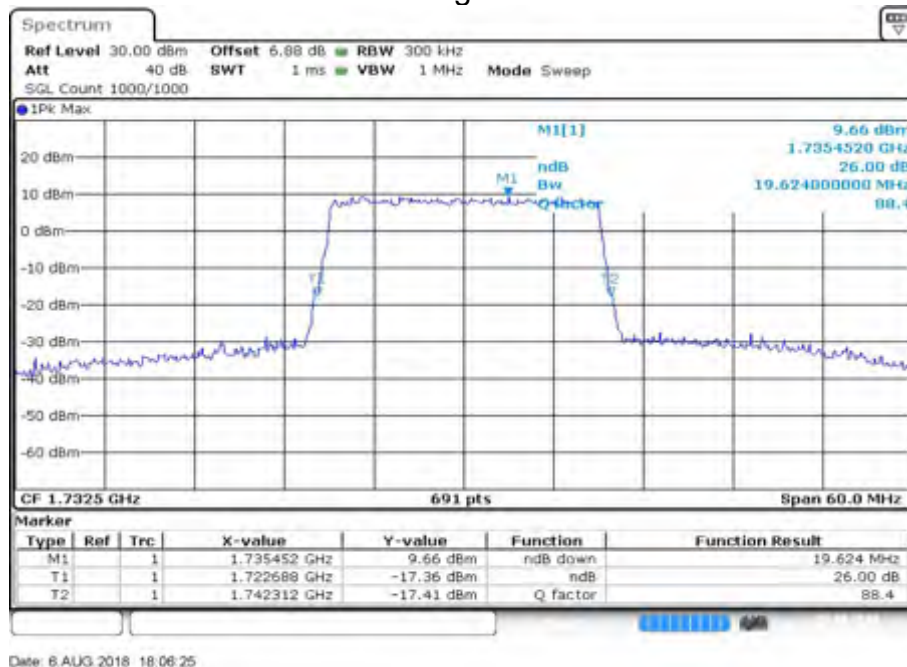


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
4	1745	20300	20	100	0	19.711	Fig.4	19.624	Fig.8

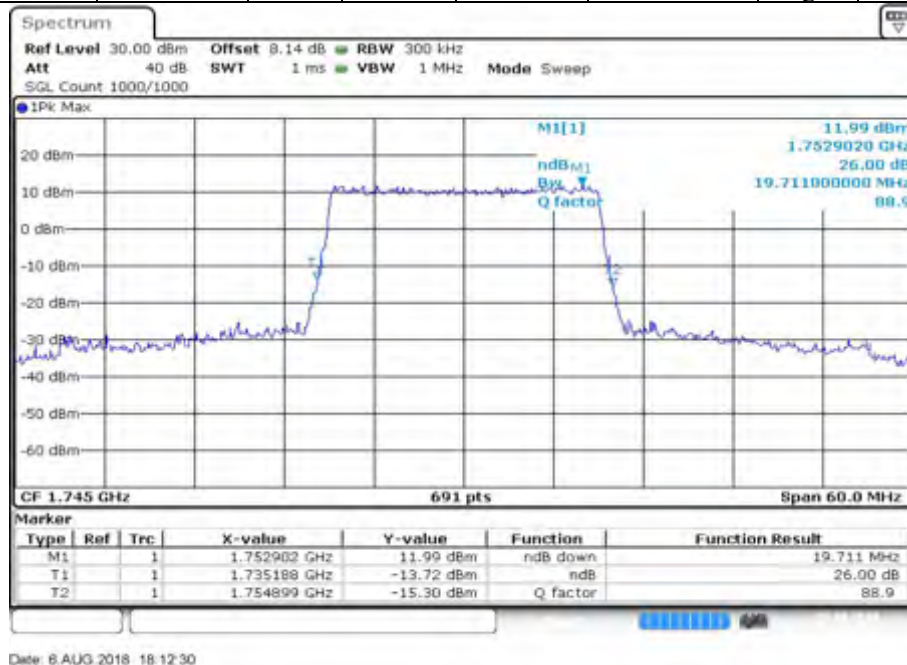


Fig.4

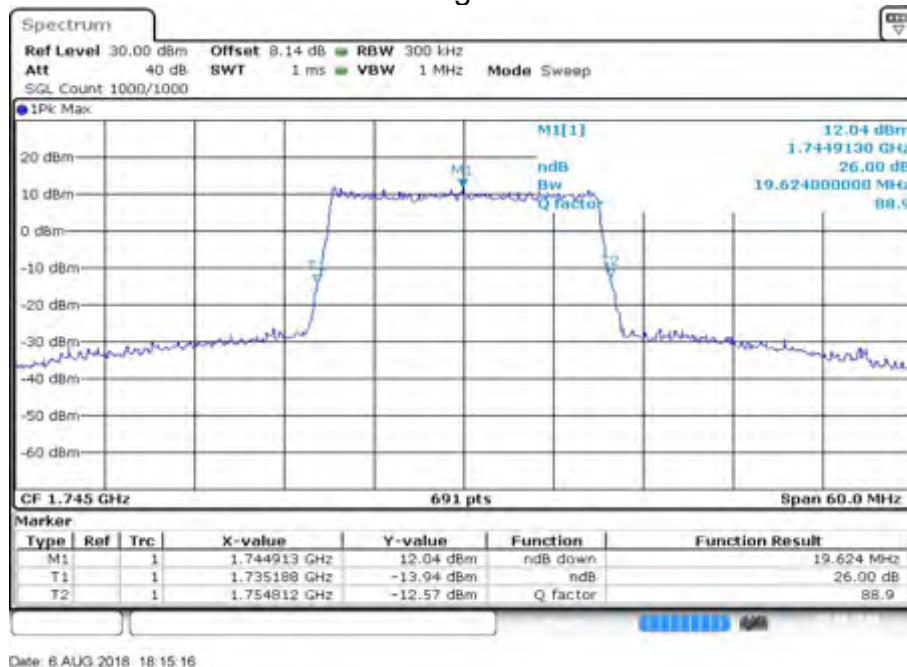


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	824.7	20407	1.4	6	0	1.301	Fig.4	1.307	Fig.8

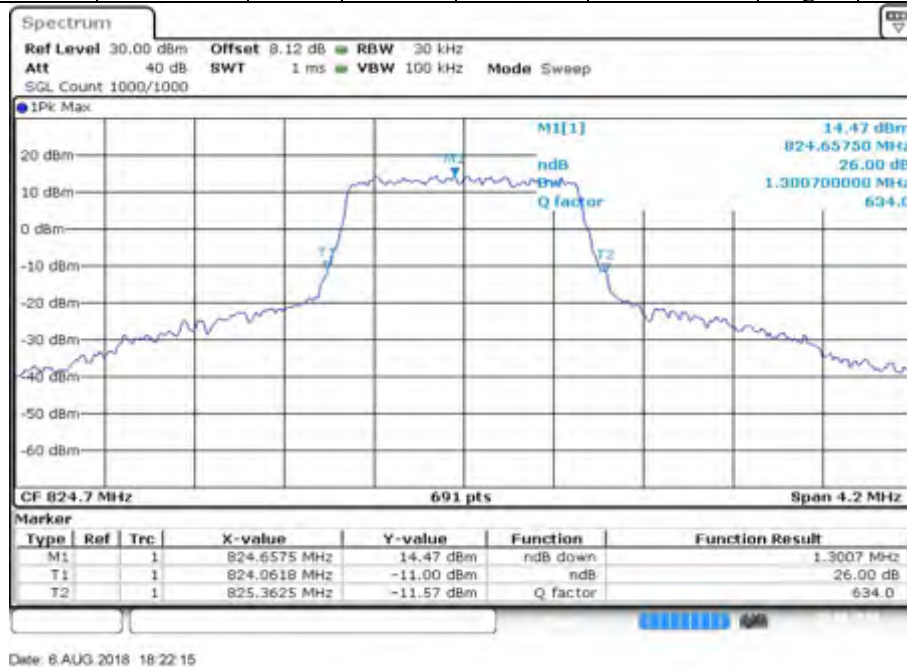


Fig.4

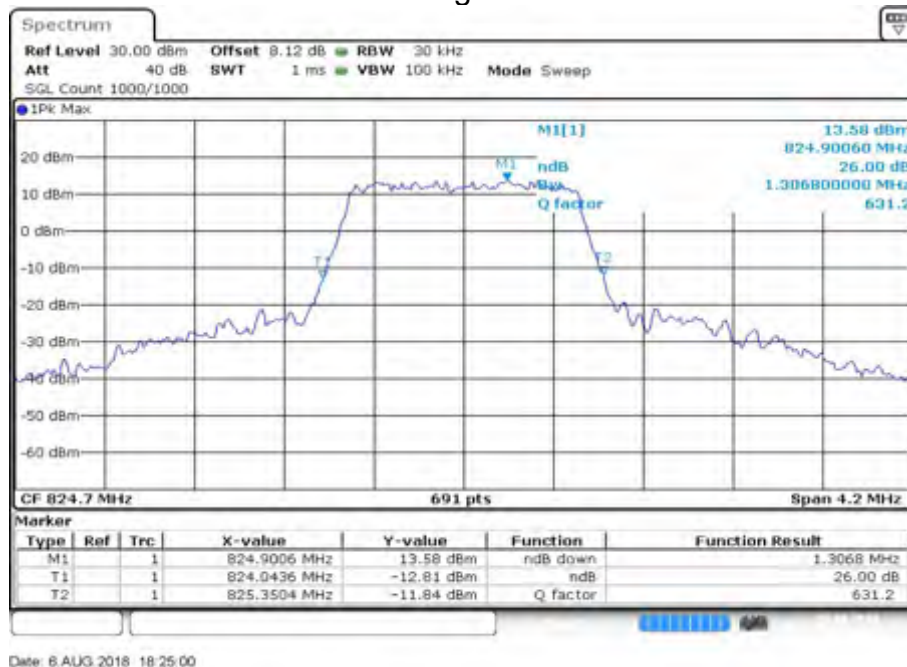


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	1.4	6	0	1.319	Fig.4	1.289	Fig.8

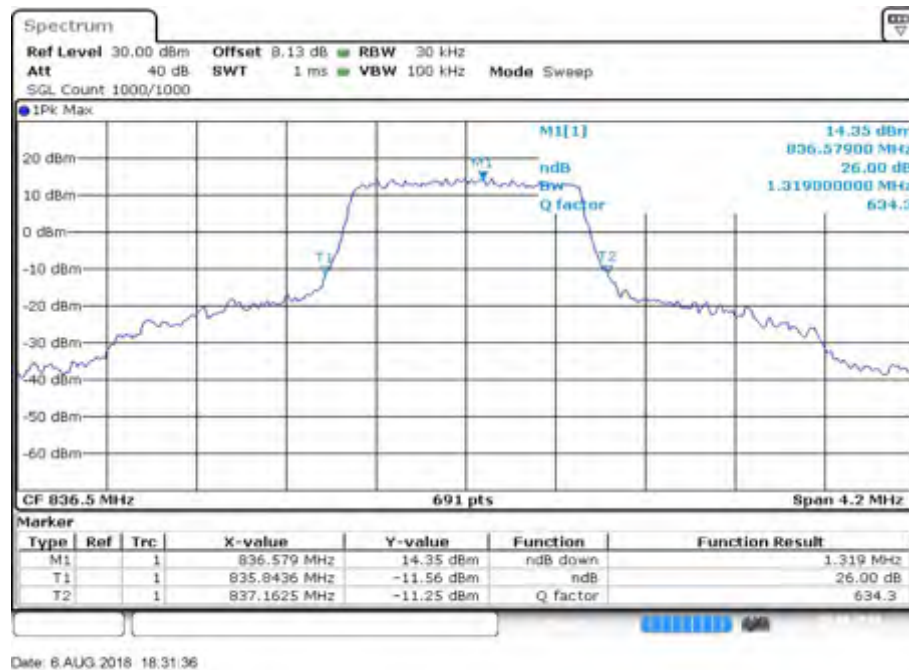


Fig.4

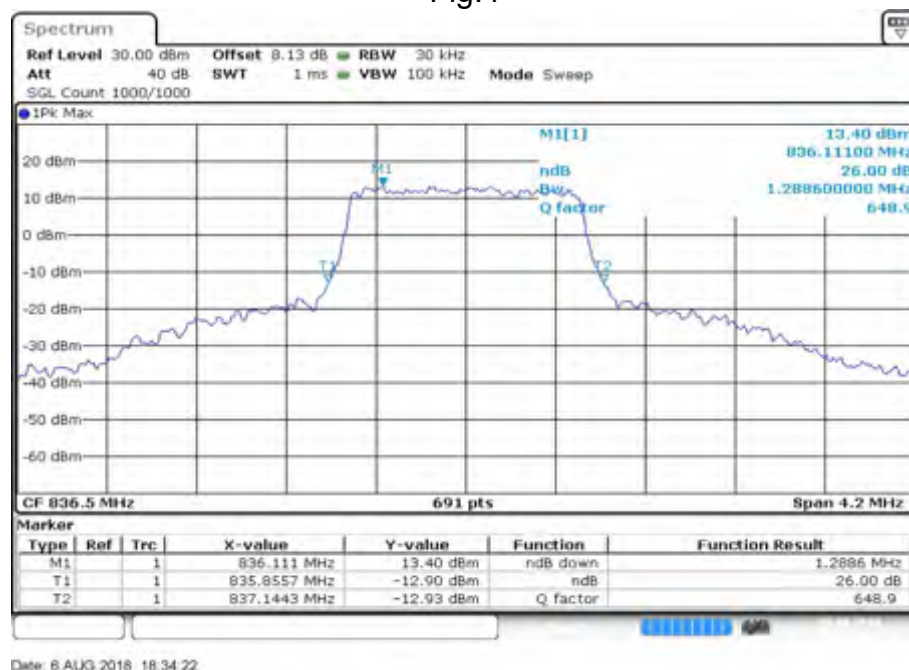


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	848.3	20643	1.4	6	0	1.295	Fig.4	1.289	Fig.8

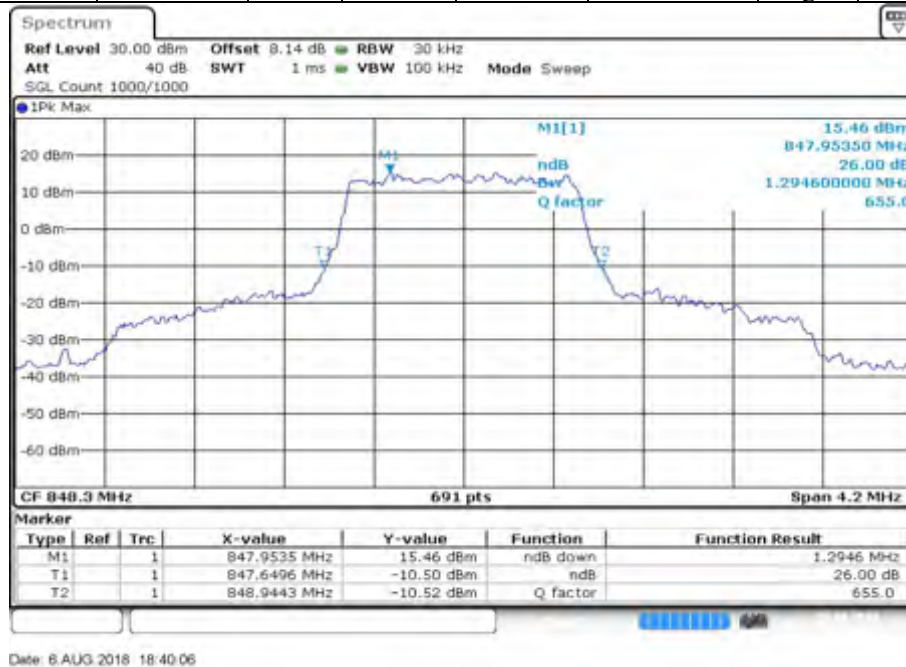


Fig.4

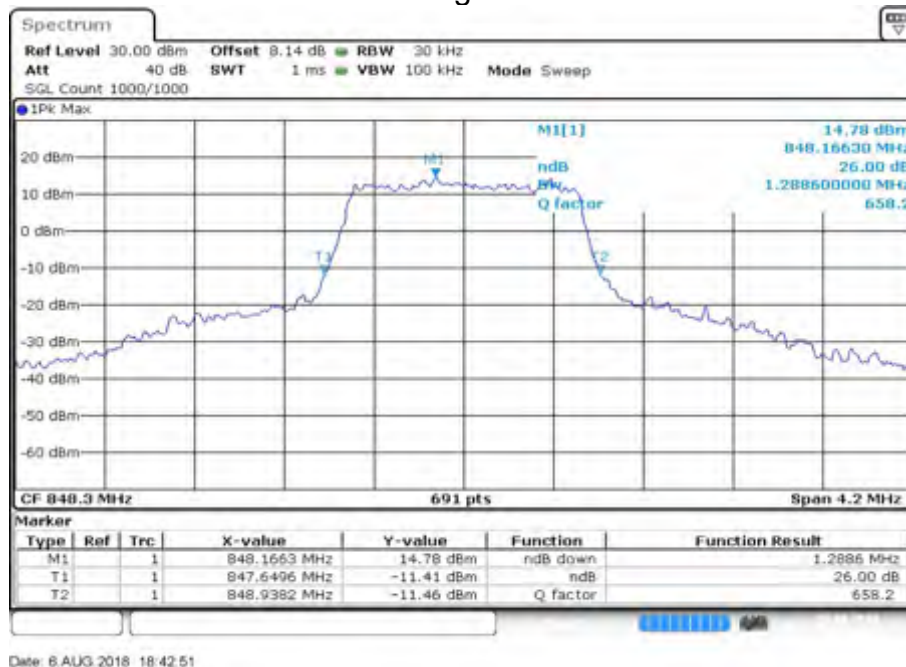


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	825.5	20415	3	15	0	2.996	Fig.4	2.996	Fig.8

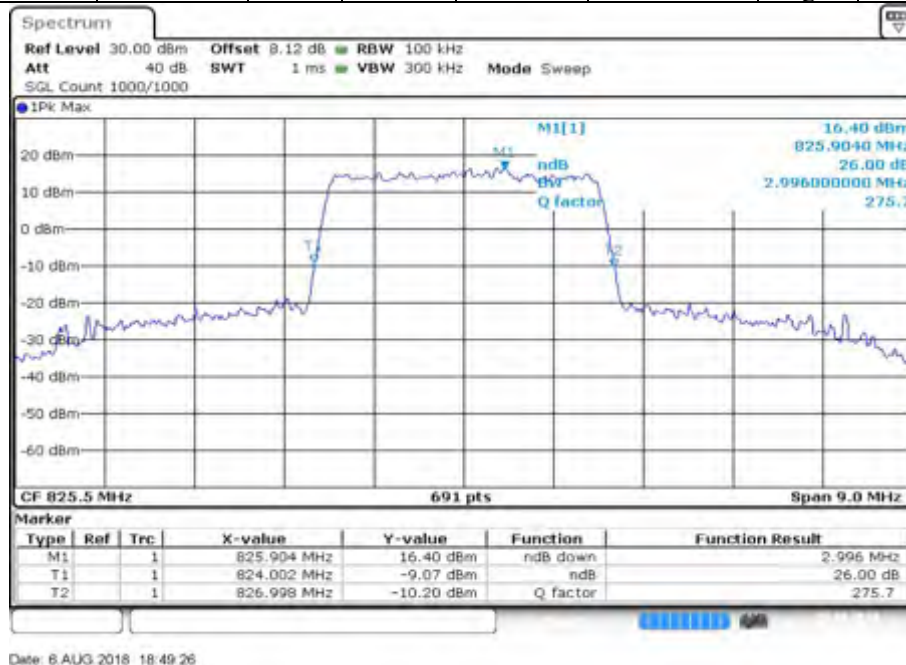


Fig.4

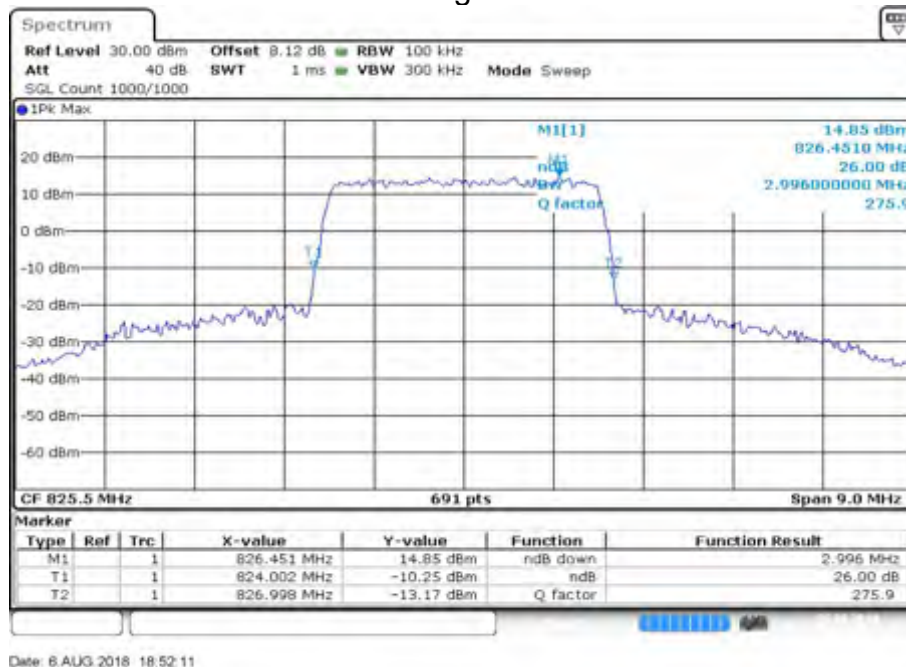


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	3	15	0	2.996	Fig.4	2.996	Fig.8

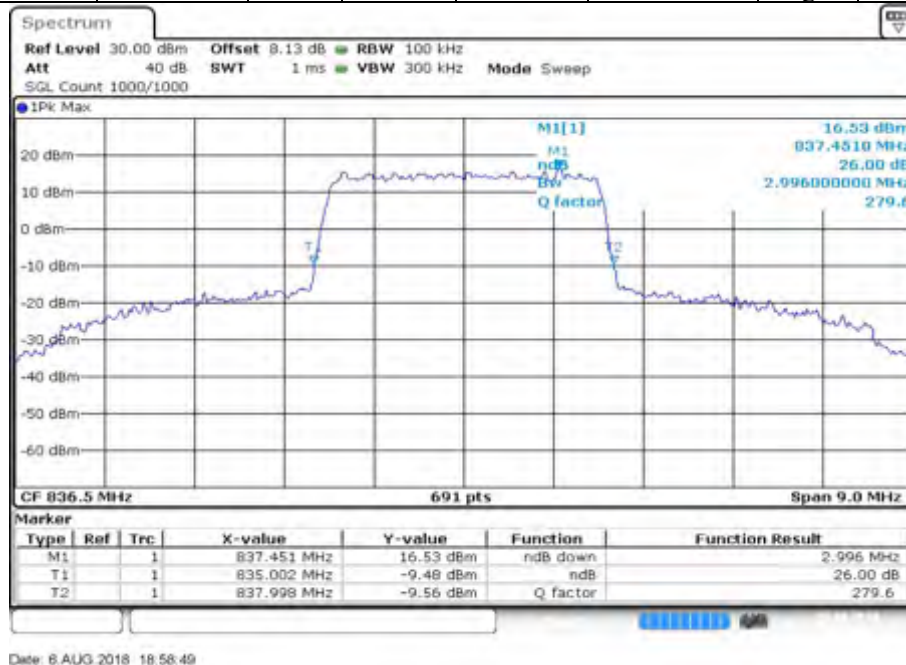


Fig.4

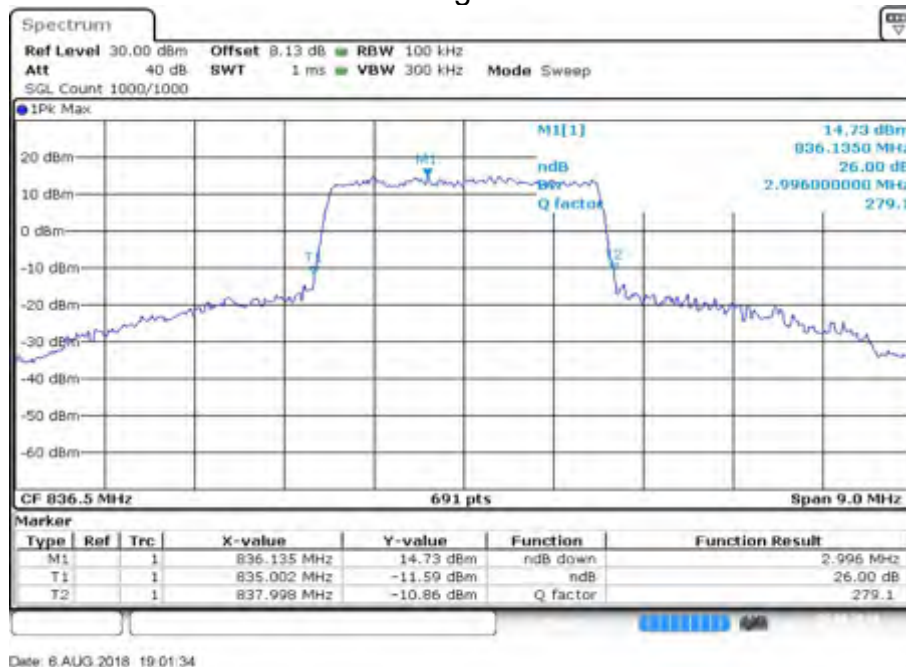


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	847.5	20635	3	15	0	2.996	Fig.4	2.996	Fig.8

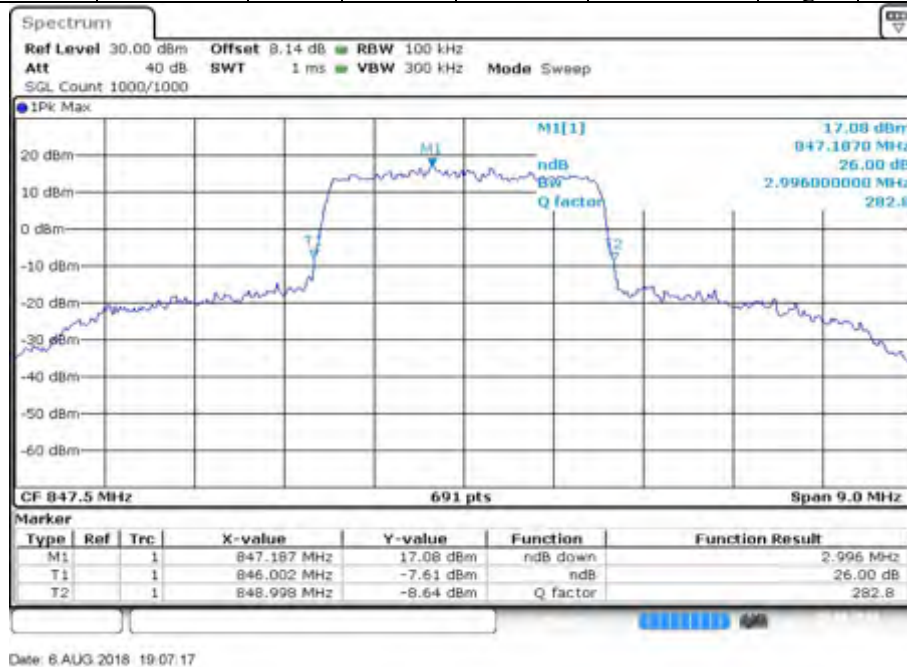


Fig.4

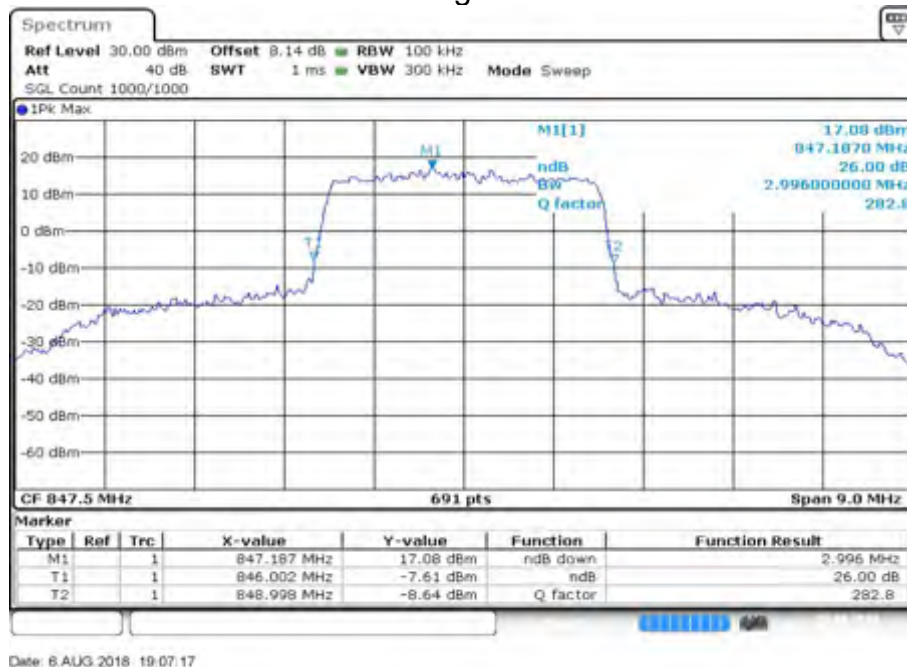


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	826.5	20425	5	25	0	4.910	Fig.4	4.910	Fig.8



Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	5	25	0	4.996	Fig.4	4.996	Fig.8

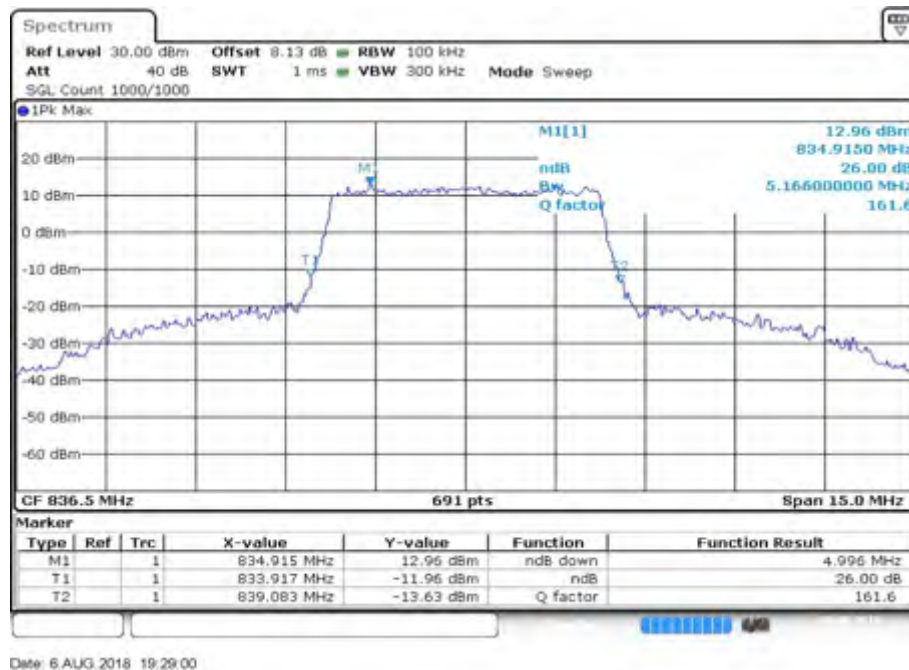


Fig.4

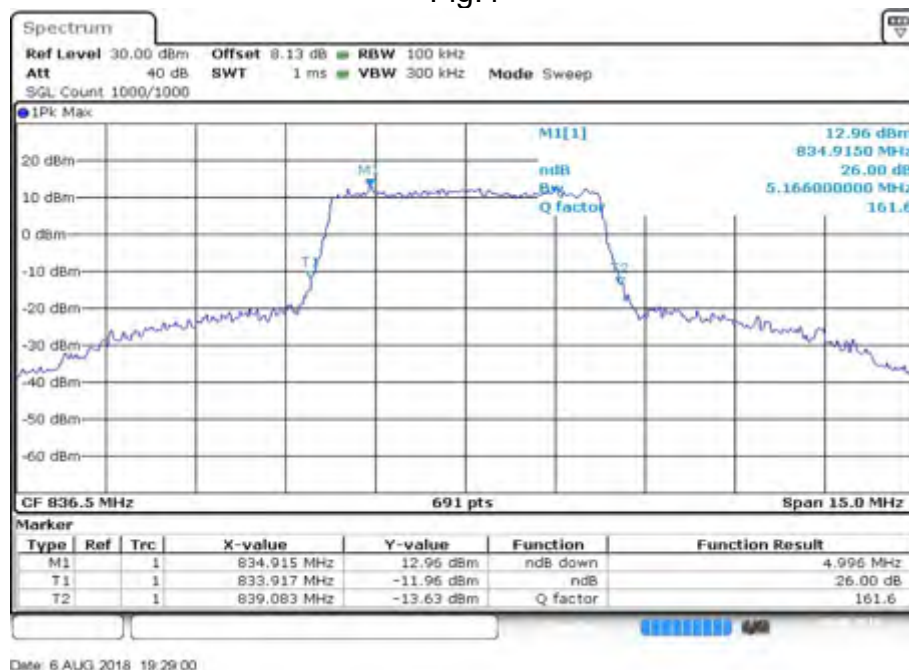


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	846.5	20625	5	25	0	4.995	Fig.4	4.995	Fig.8

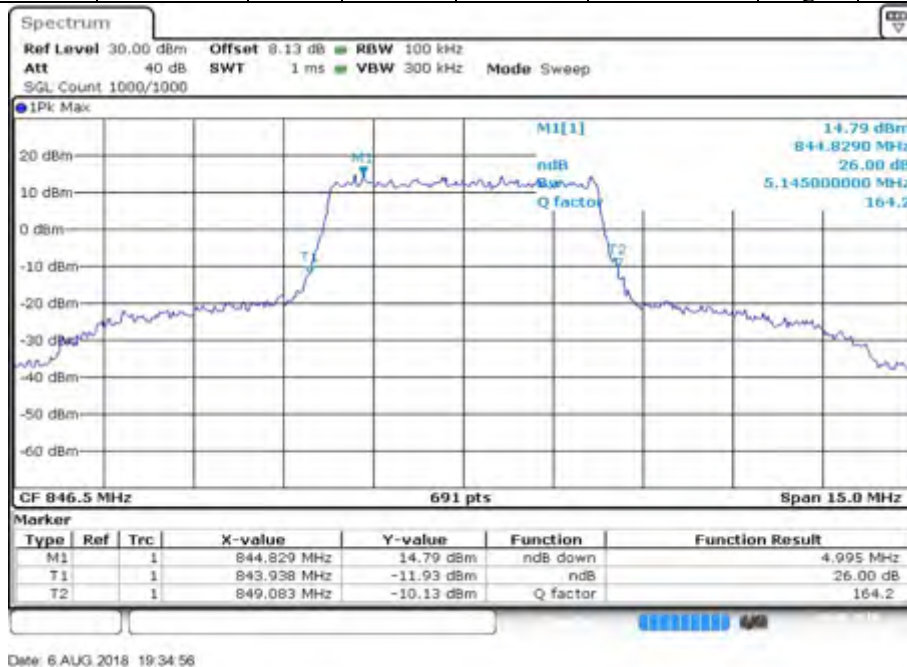


Fig.4

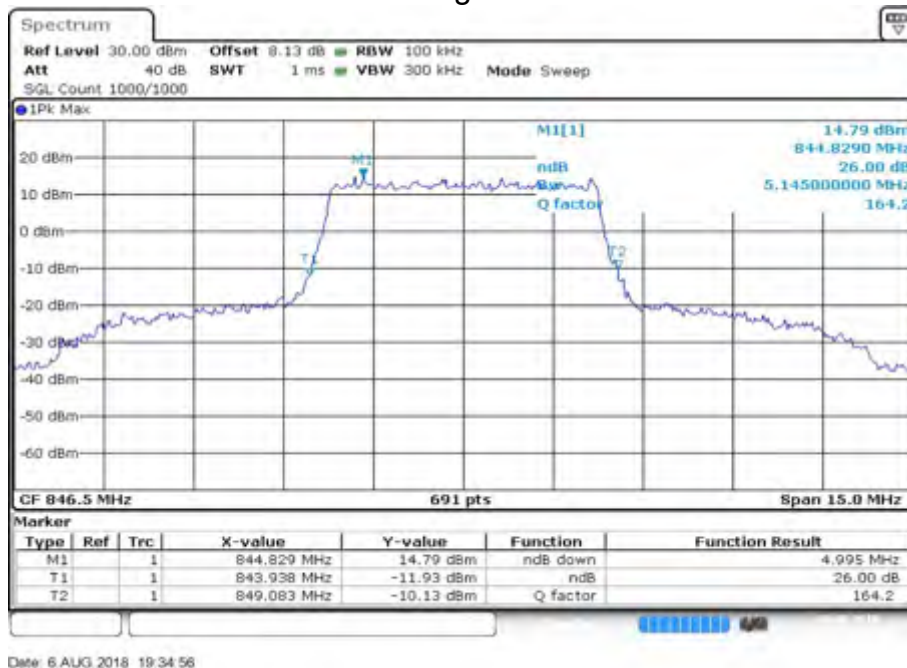


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	829	20450	10	50	0	9.993	Fig.4	9.993	Fig.8

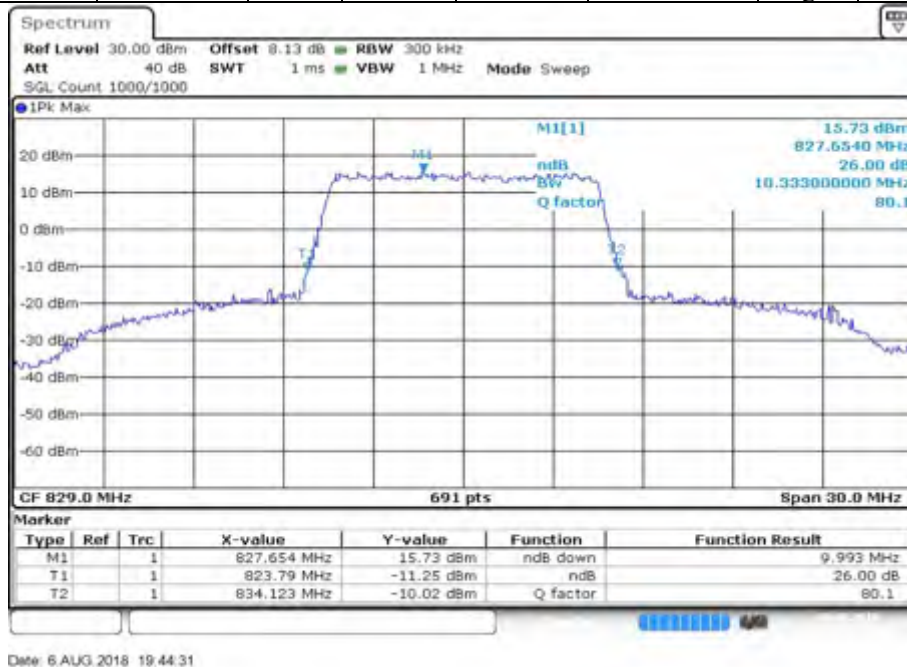


Fig.4

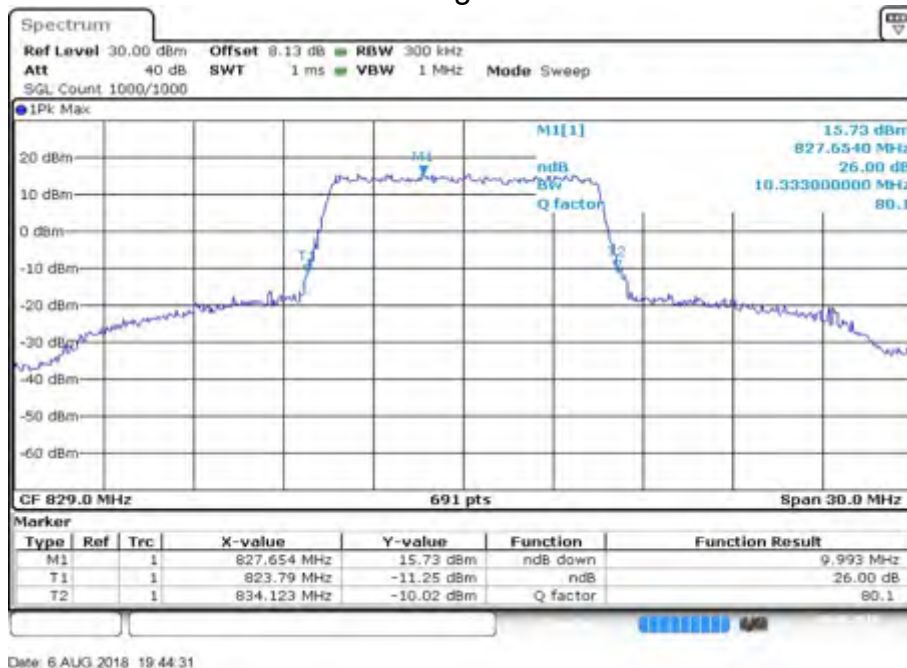


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	836.5	20525	10	50	0	9.946	Fig.4	9.946	Fig.8

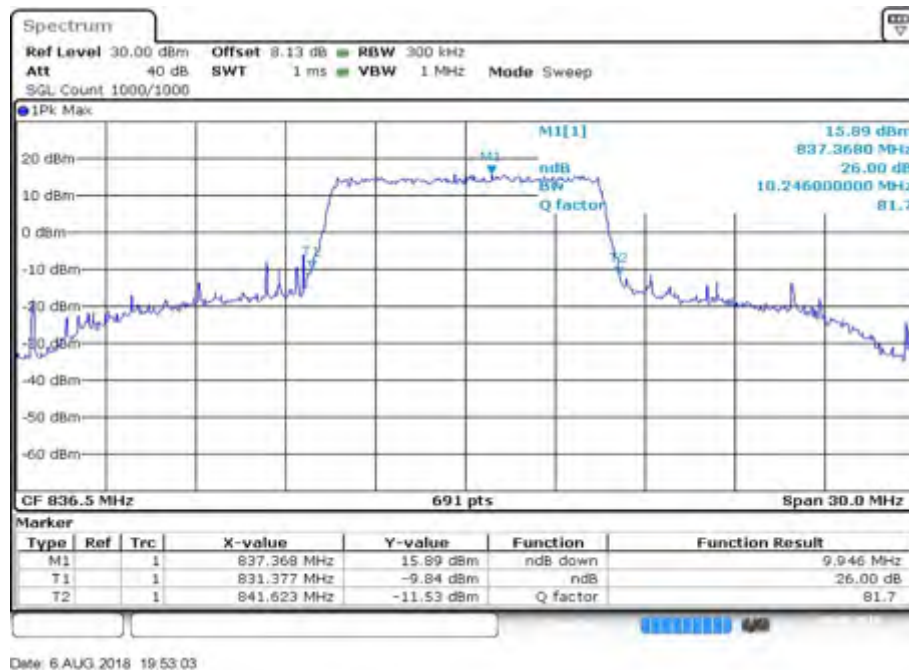


Fig.4

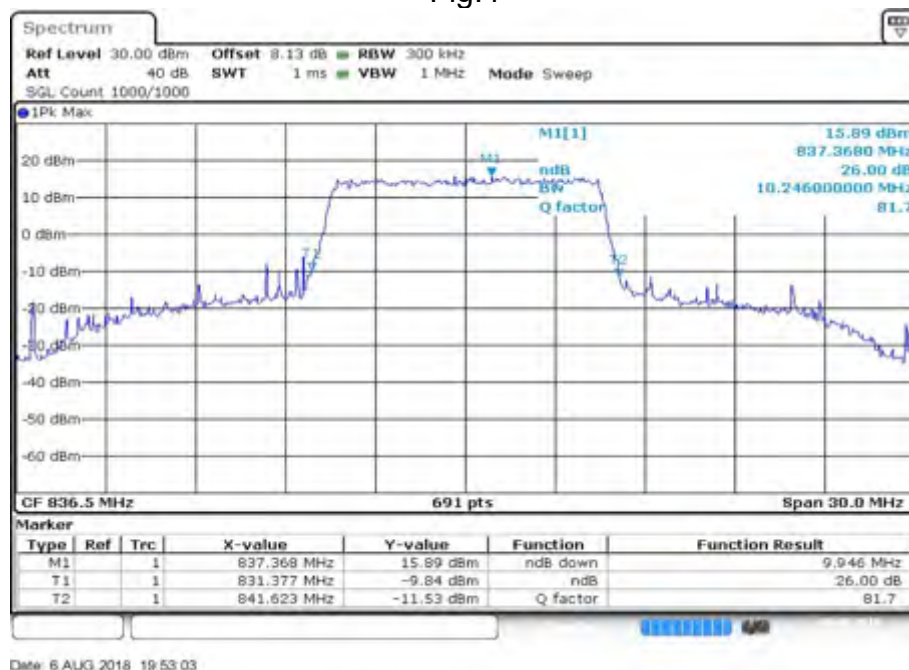


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
5	844	20600	10	50	0	9.920	Fig.4	9.920	Fig.8

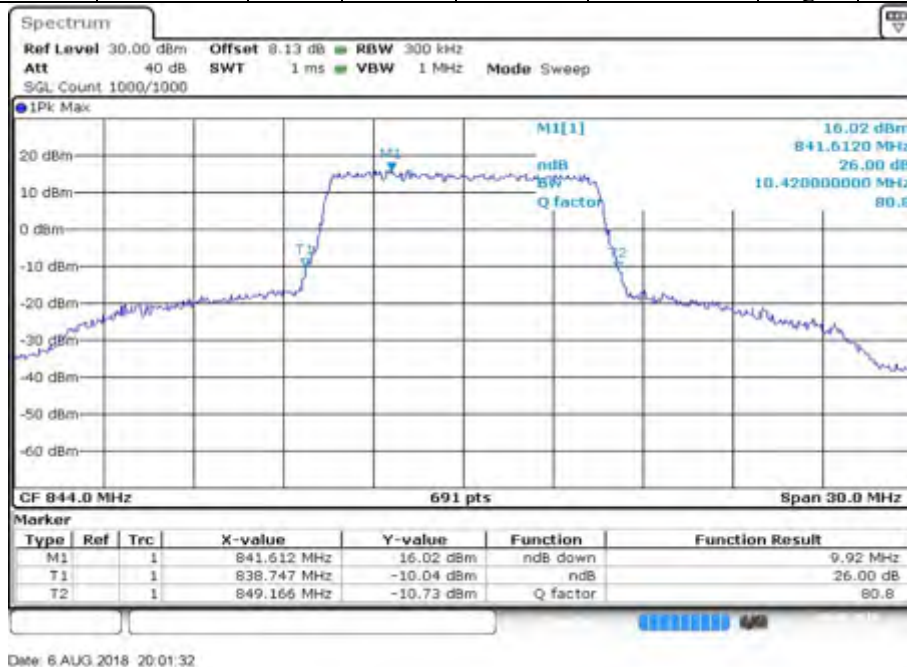


Fig.4

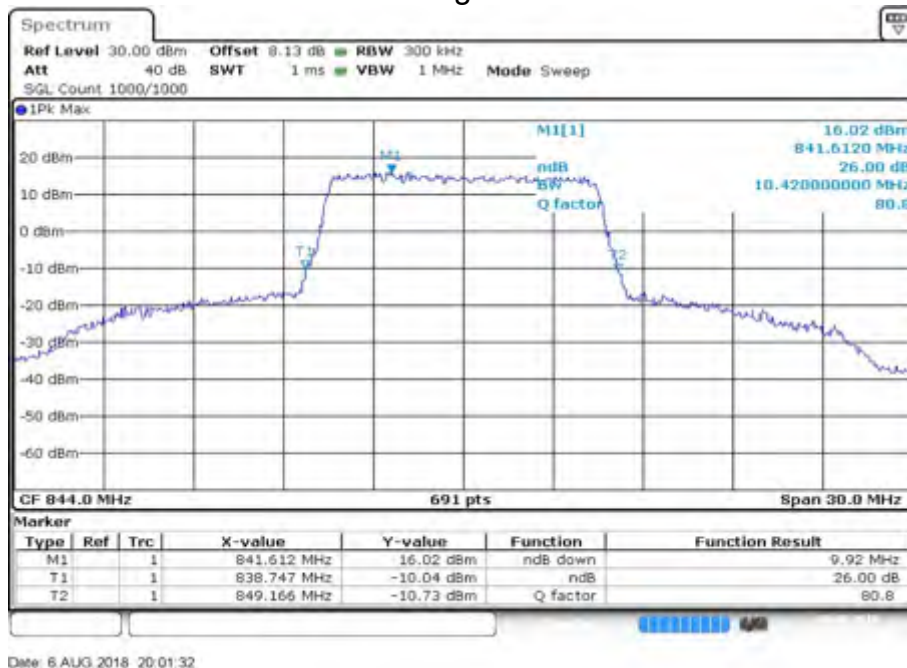


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2502.5	20775	5	25	0	4.988	Fig.4	4.988	Fig.8



Fig.4

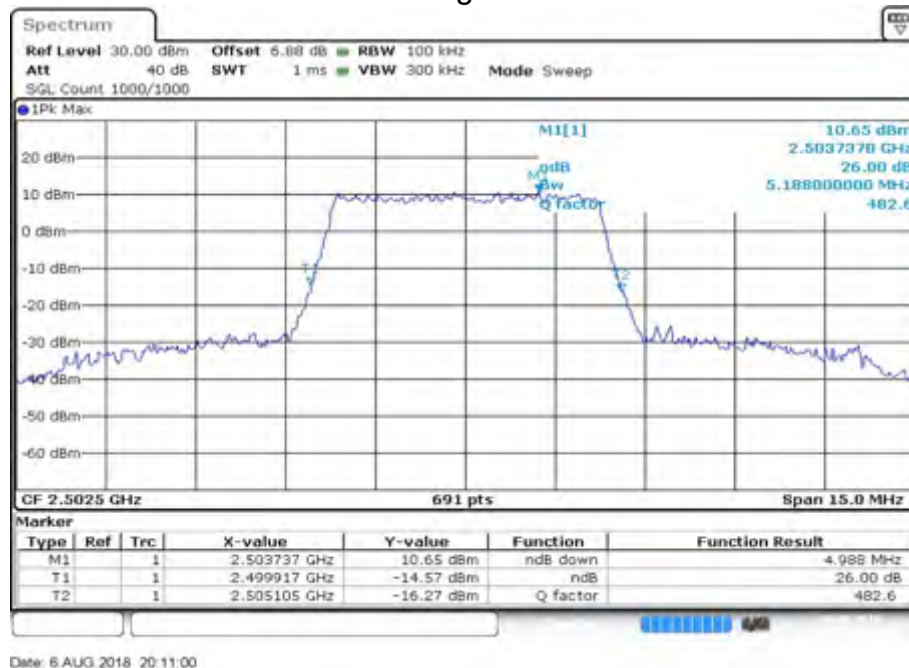


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2535	21100	5	25	0	4.945	Fig.4	4.945	Fig.8

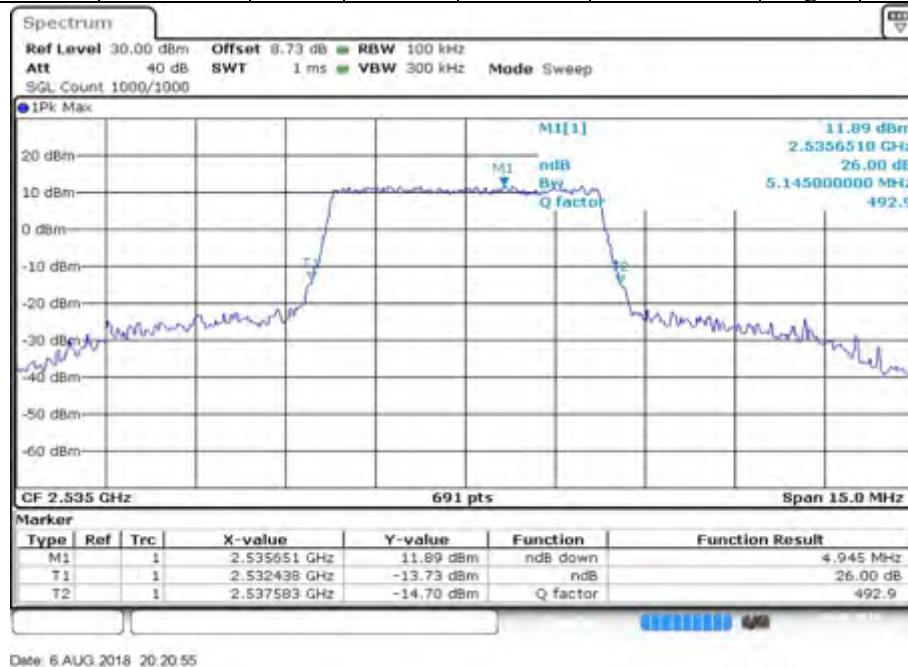


Fig.4

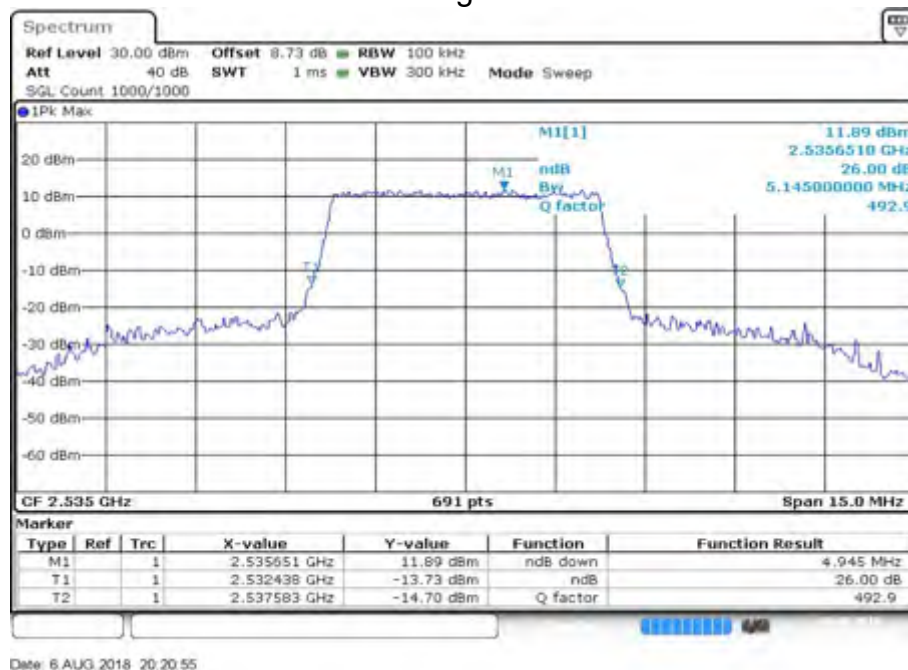


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2567.5	21425	5	25	0	4.945	Fig.4	4.945	Fig.8

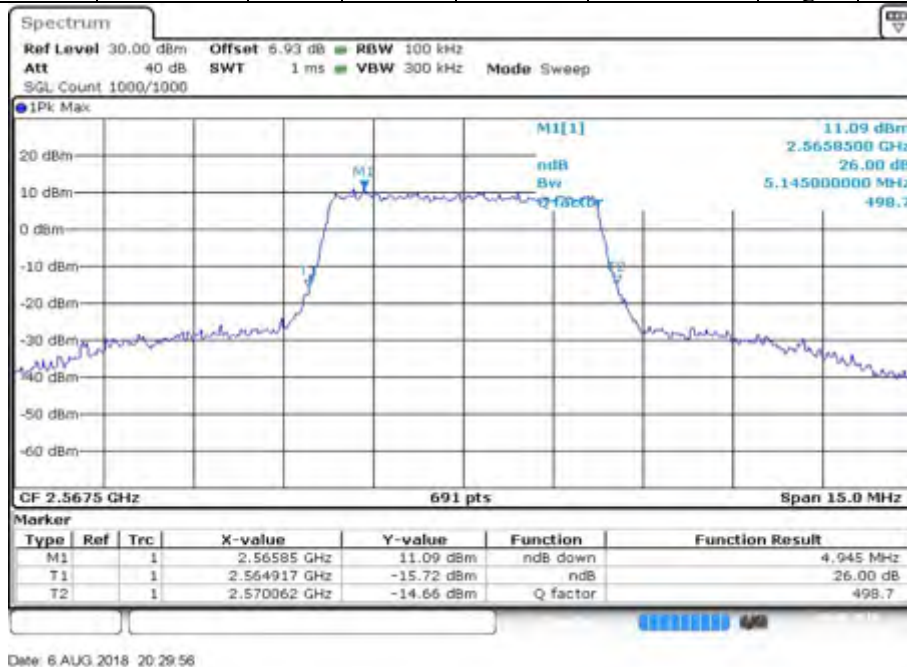


Fig.4

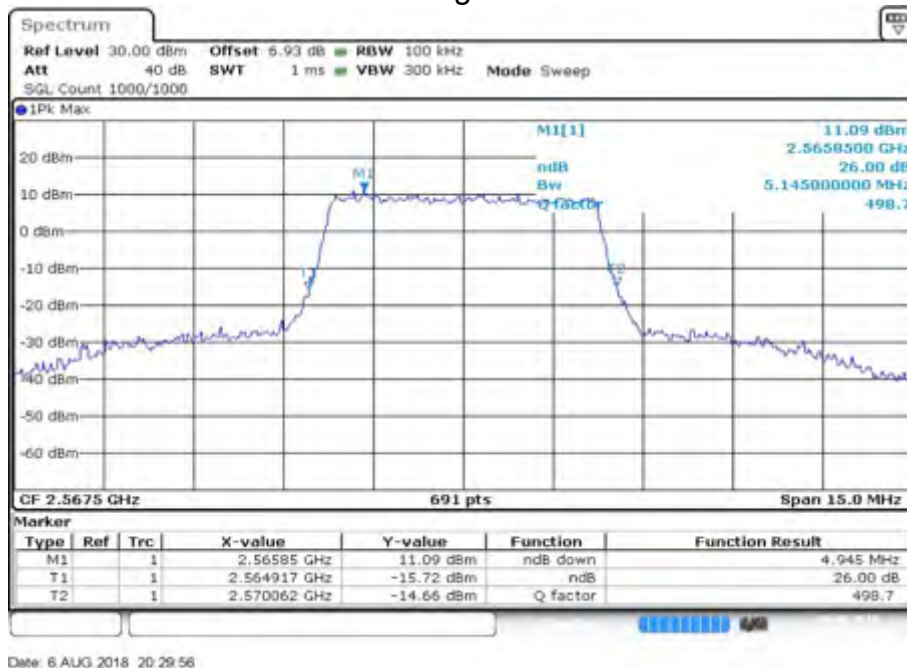


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2505	20800	10	50	0	9.920	Fig.4	9.920	Fig.8

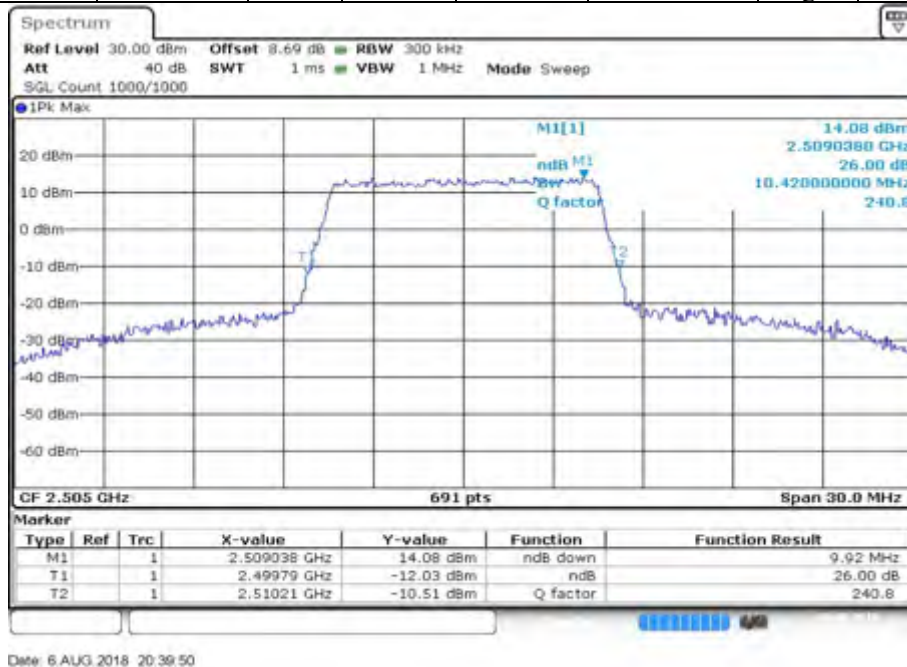


Fig.4

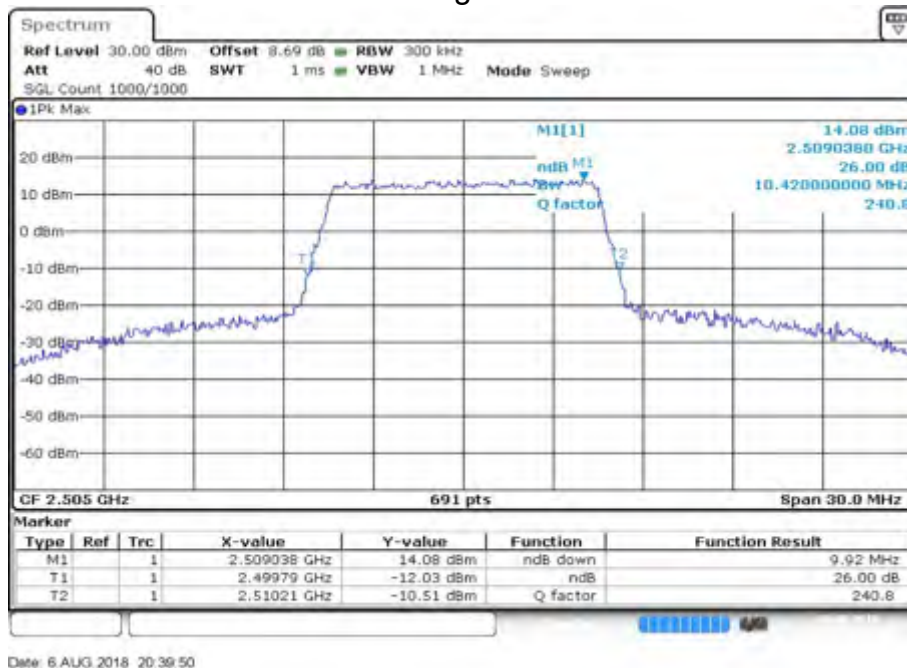


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2565	21400	10	50	0	9.933	Fig.4	9.933	Fig.8

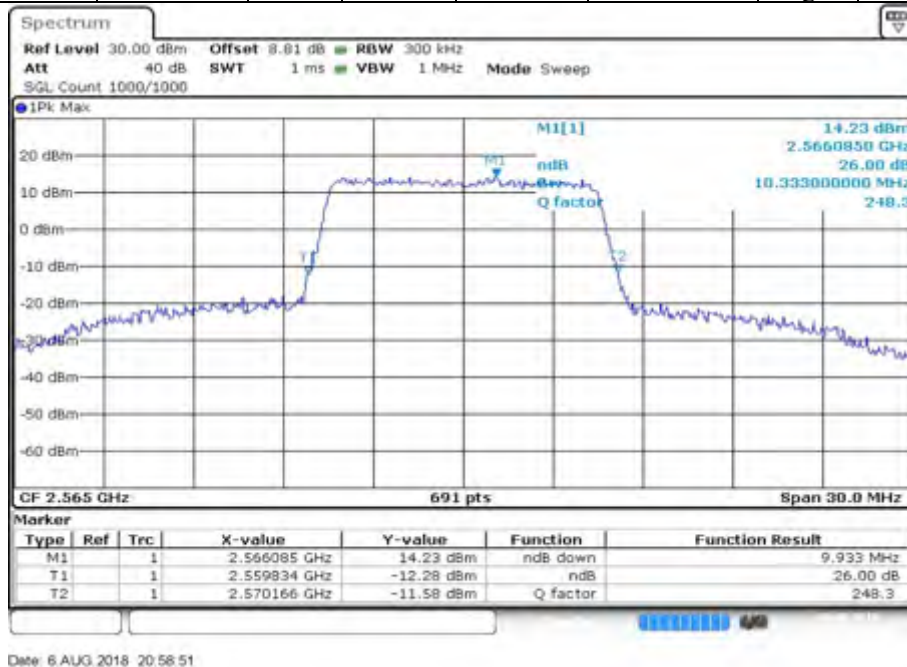


Fig.4

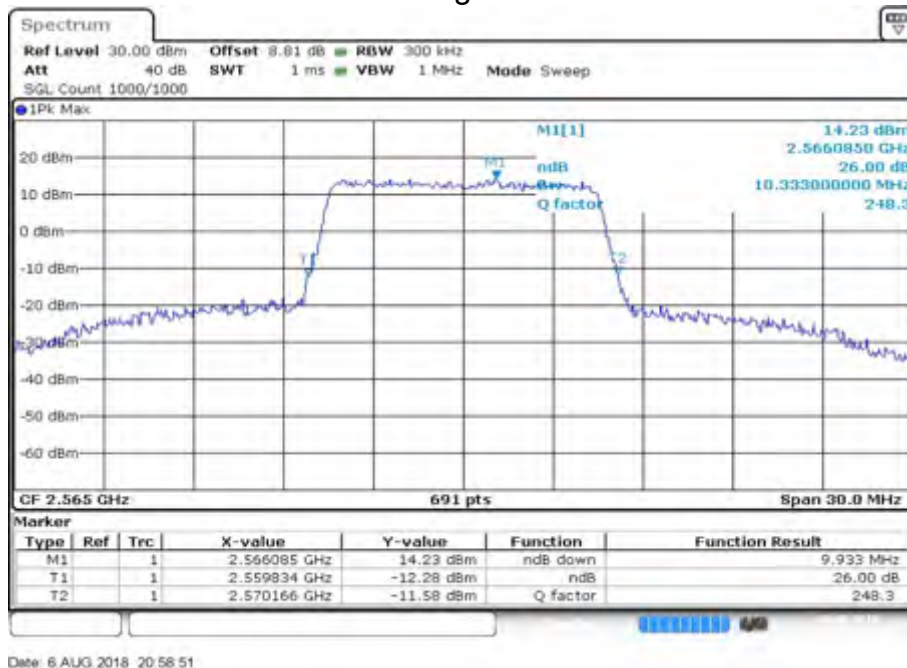


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2507.5	20825	15	75	0	14.943	Fig.4	14.943	Fig.8

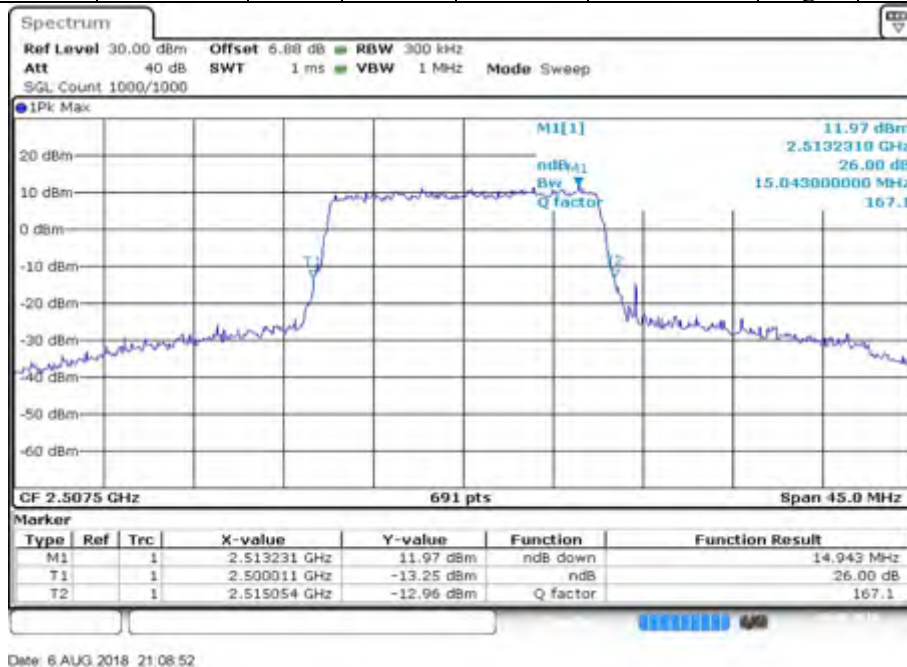


Fig.4

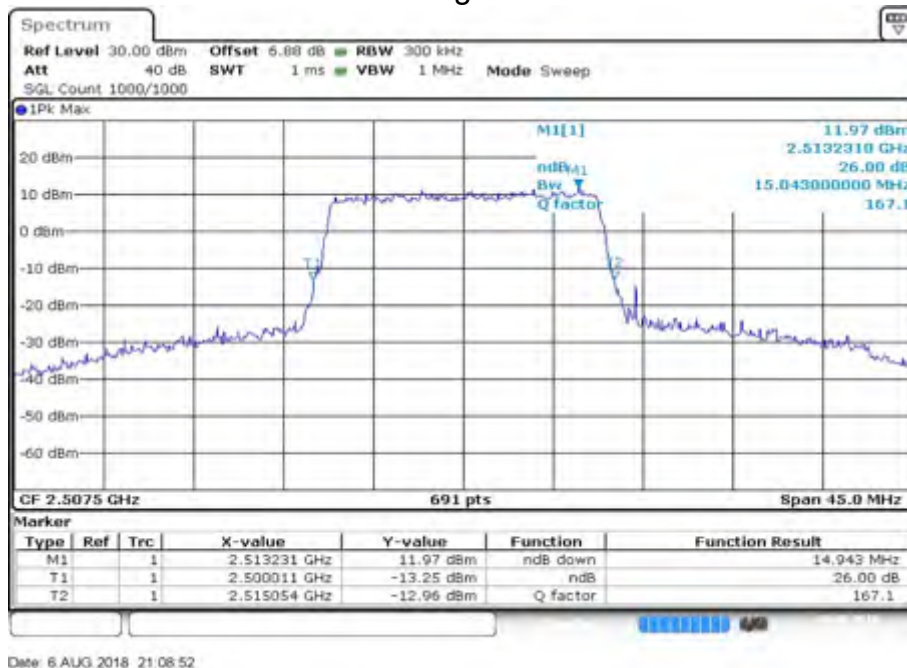


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2535	21100	15	75	0	14.909	Fig.4	14.909	Fig.8

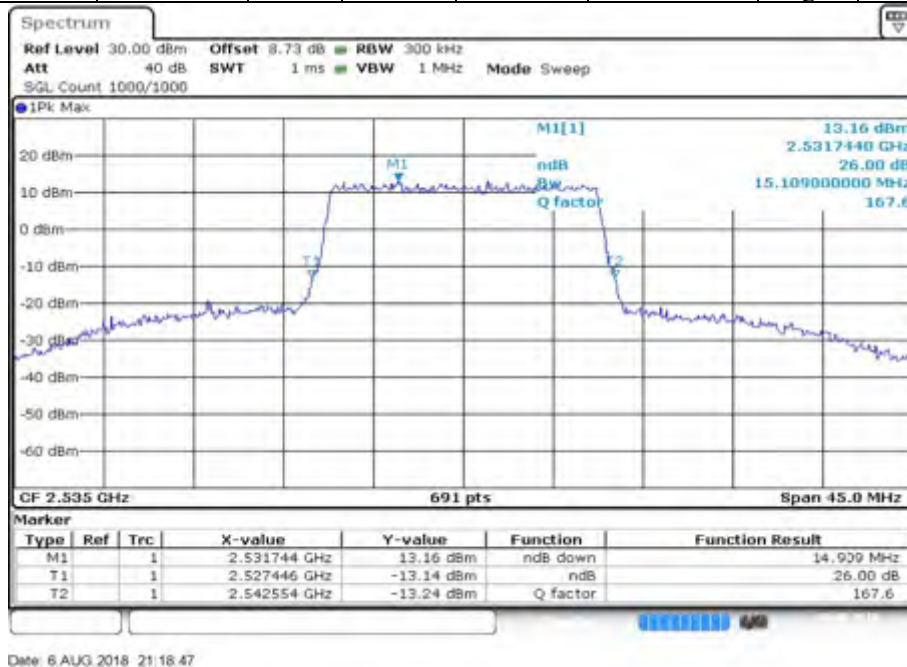


Fig.4

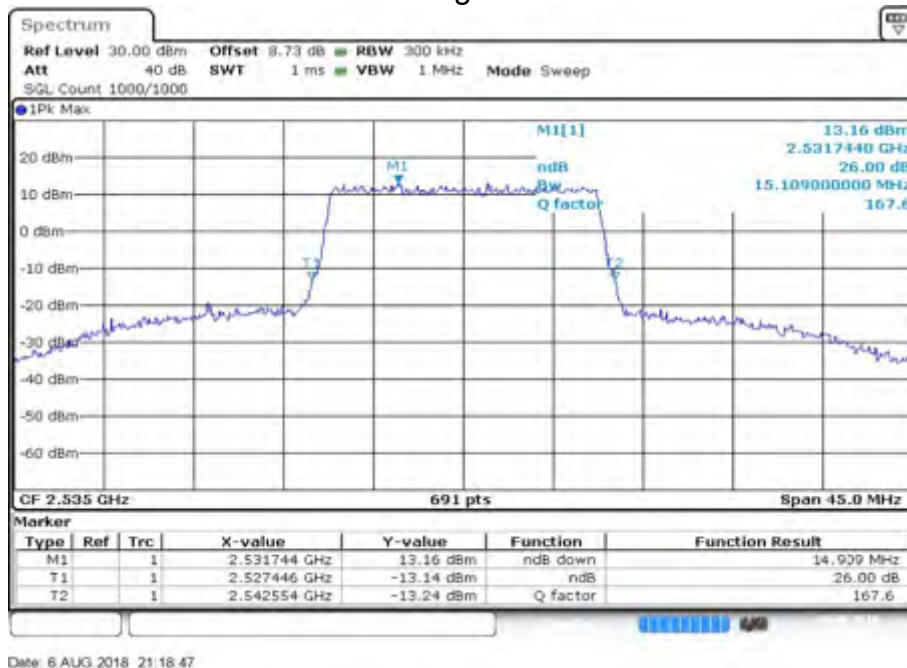


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2562.5	21375	15	75	0	14.974	Fig.4	14.974	Fig.8

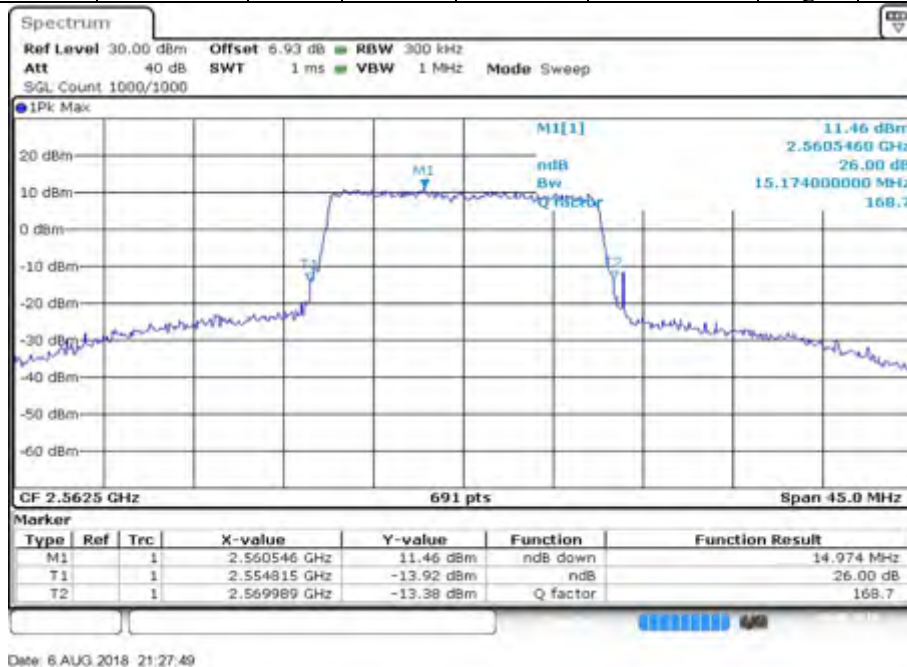


Fig.4

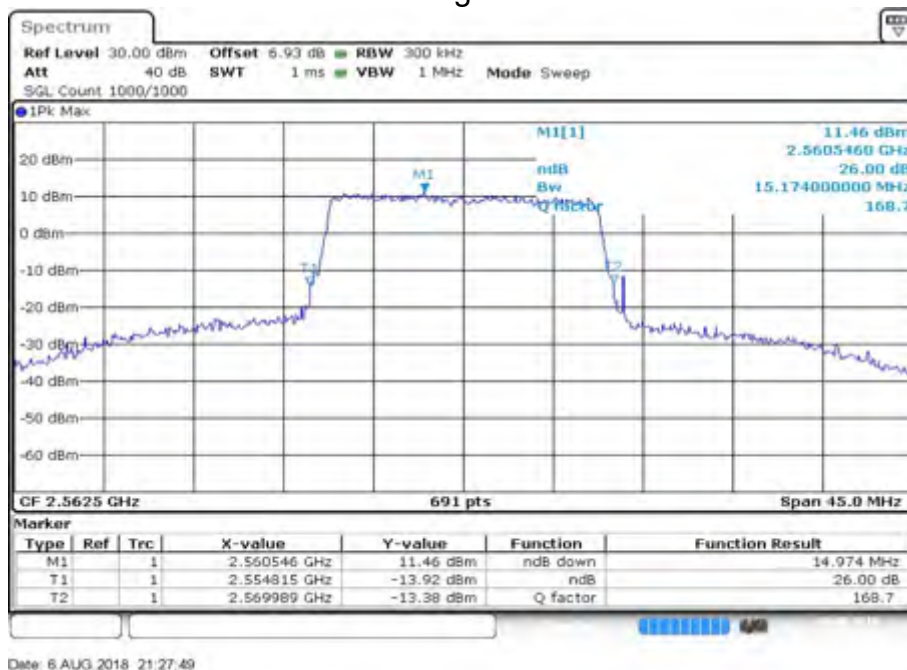


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2510	20850	20	100	0	19.450	Fig.4	19.450	Fig.8

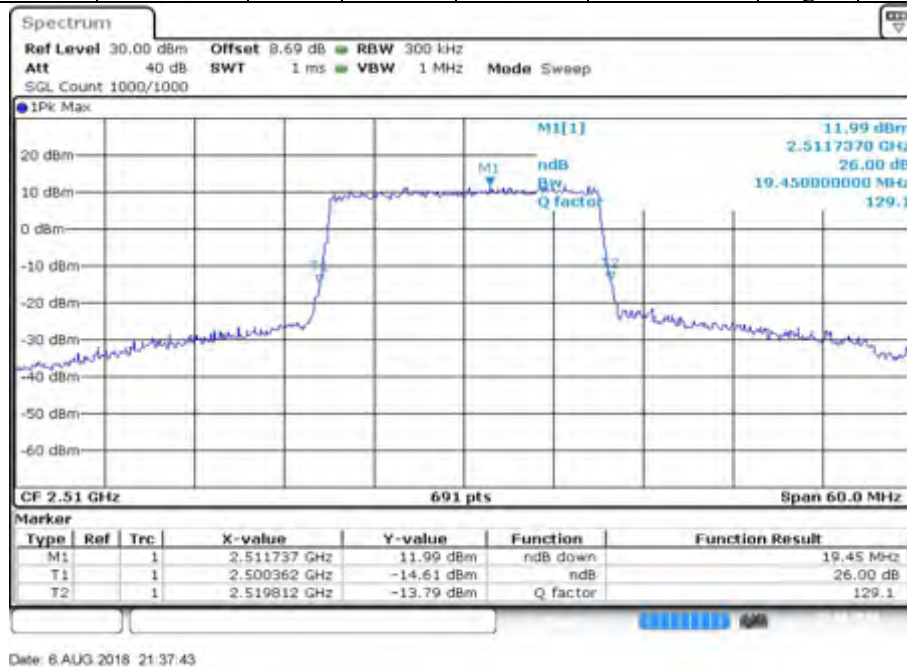


Fig.4

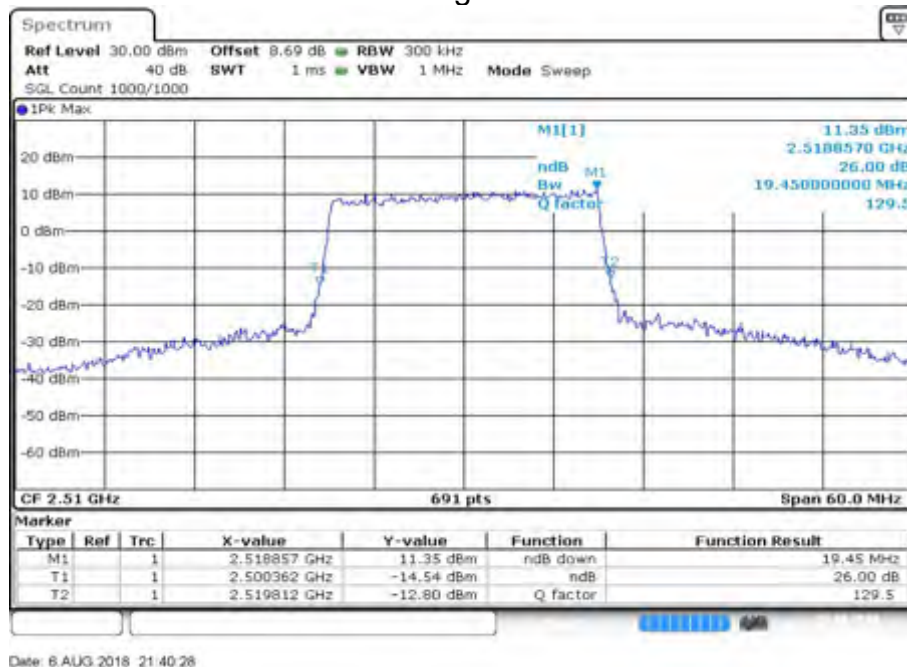


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2535	21100	20	100	0	19.537	Fig.4	19.624	Fig.8

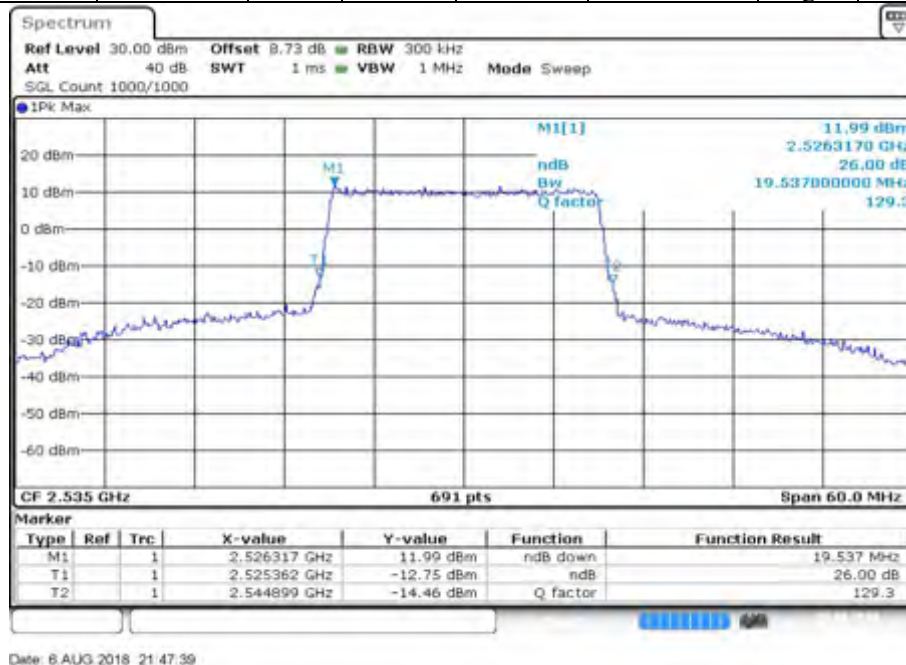


Fig.4

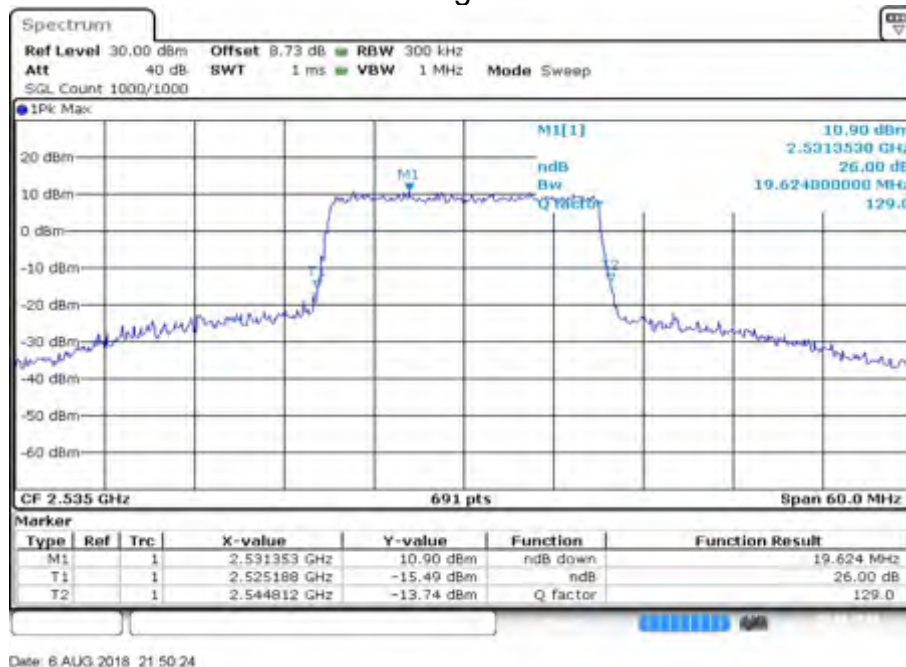


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK		16-QAM	
7	2560	21350	20	100	0	19.624	Fig.4	19.276	Fig.8

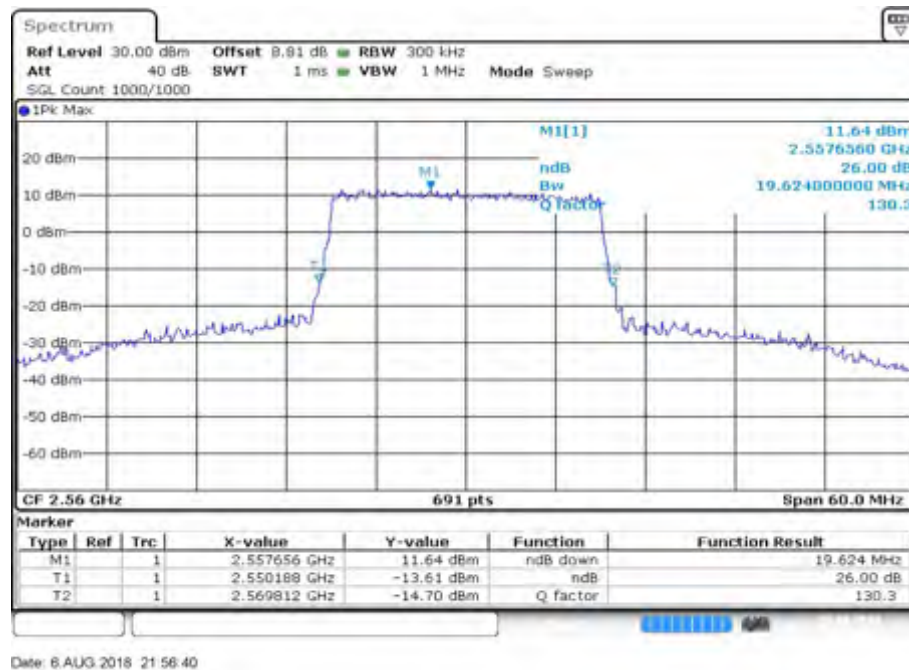


Fig.4

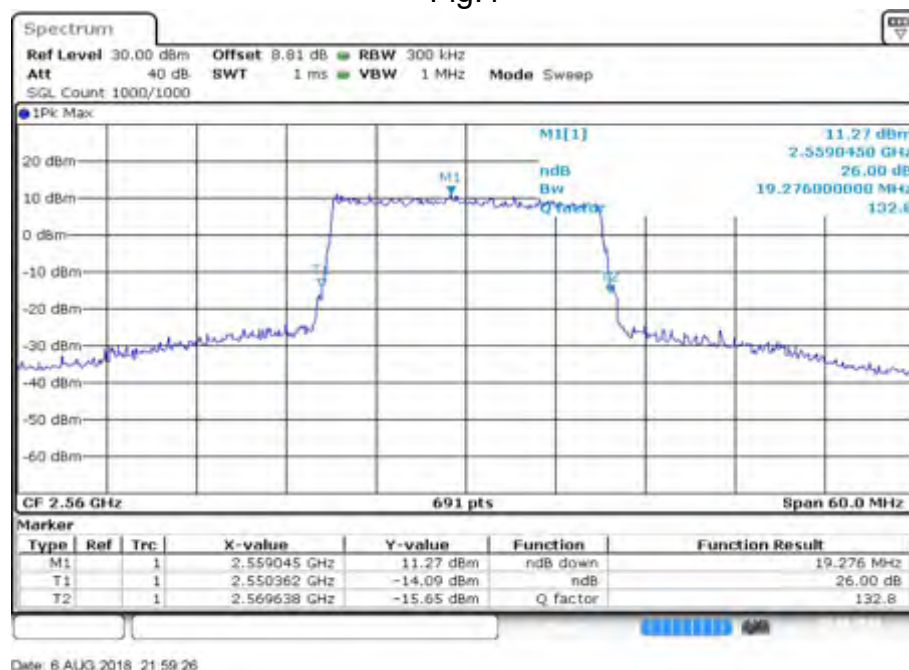
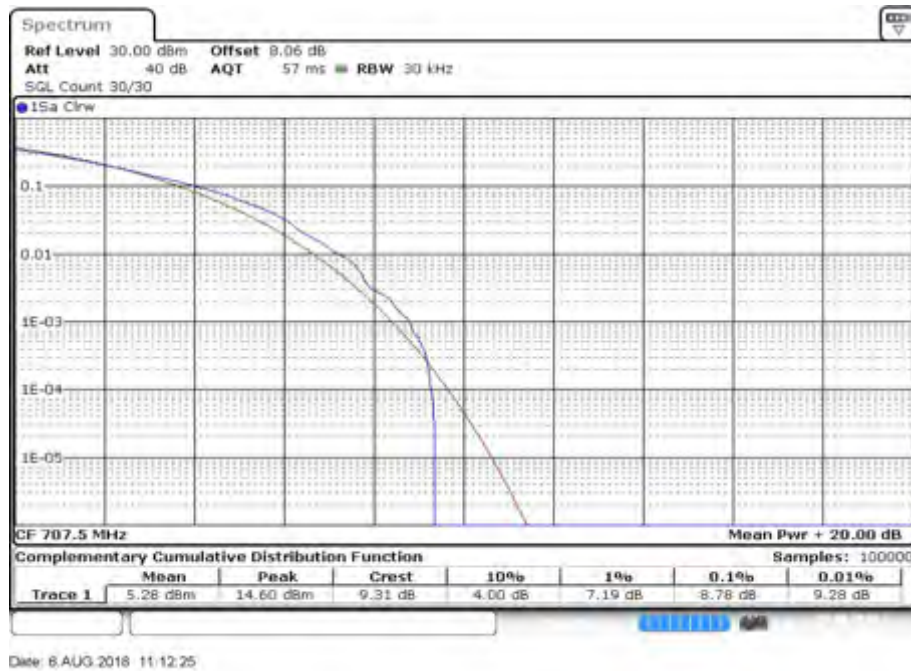


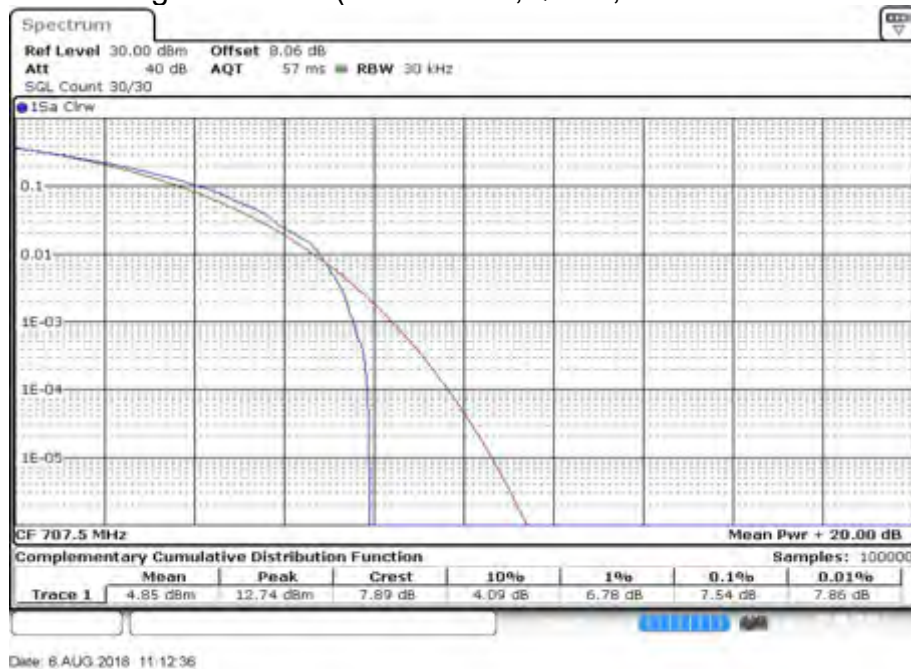
Fig.8

4 Peak-Average Ratio -FCC Part 27.50(d)(5)

Test result:



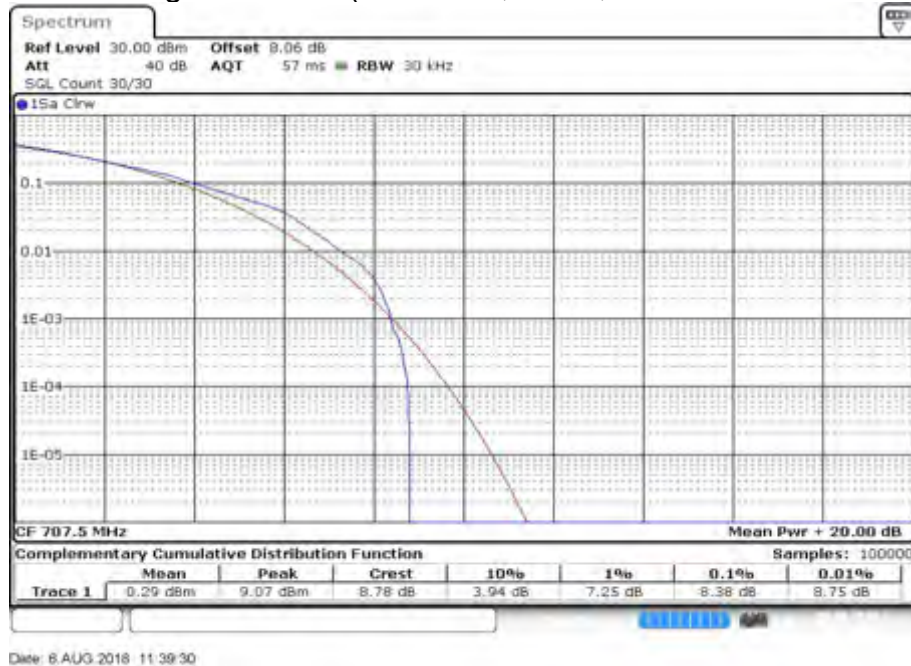
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 12-mid Channel)



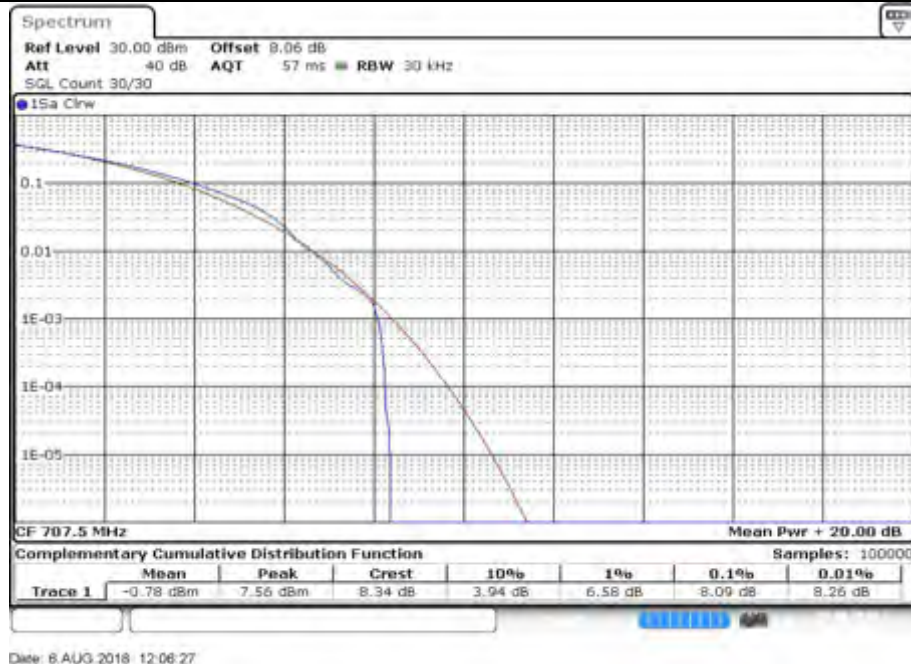
Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 12-mid Channel)



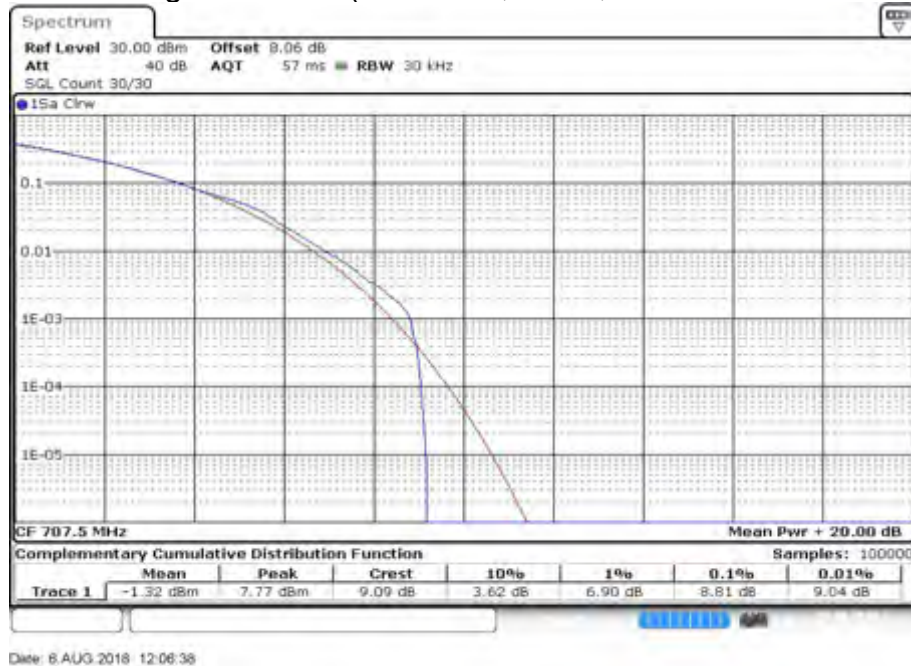
Peak-Average Ratio Plot(3MHz BW,QPSK,Band 12-mid Channel)



Peak-Average Ratio Plot(3MHz BW,16QAM,Band 12-mid Channel)



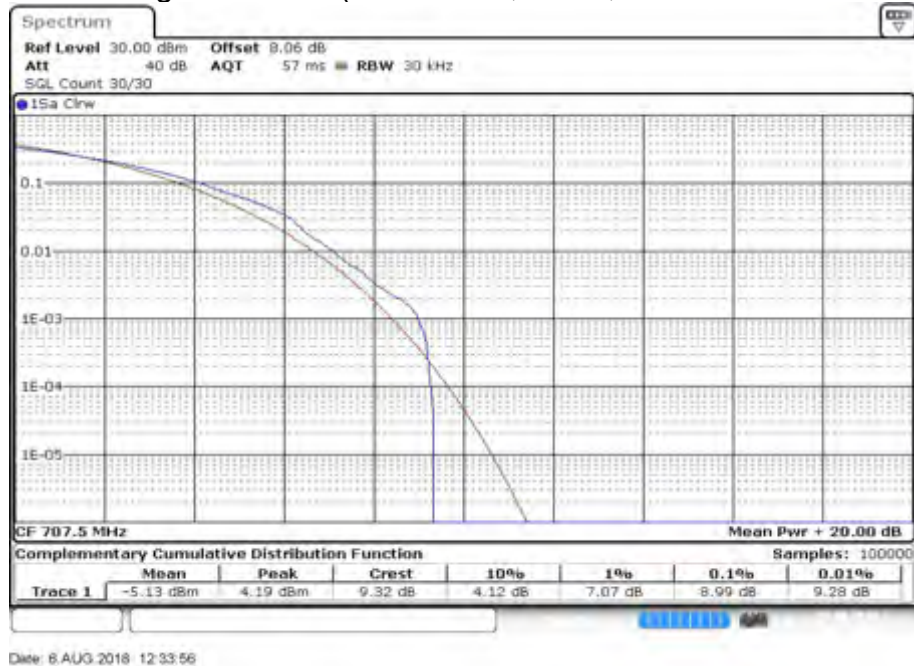
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 12-mid Channel)



Peak-Average Ratio Plot(5MHz BW,16QAM,Band 12-mid Channel)



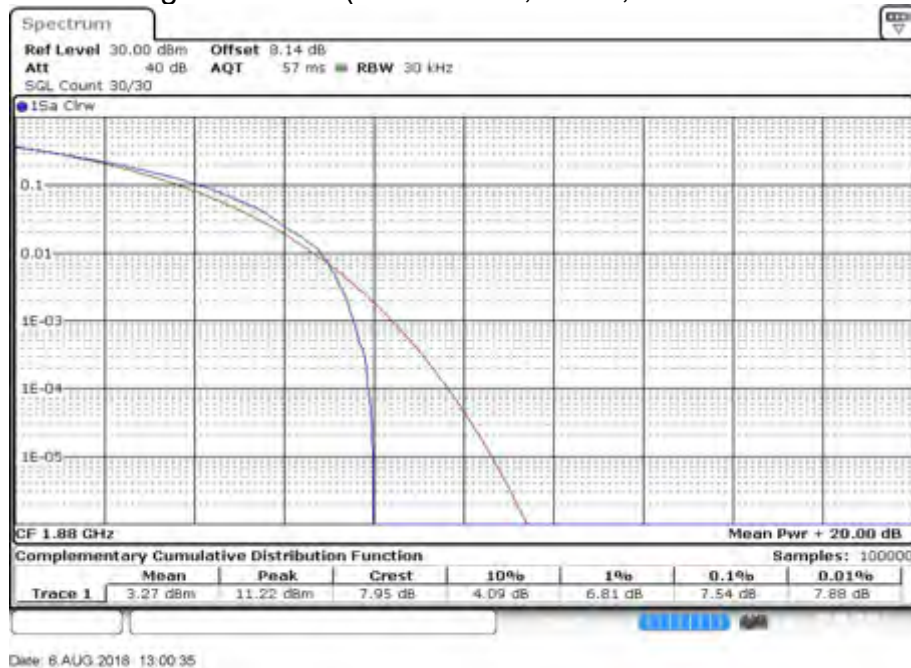
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 12-mid Channel)



Peak-Average Ratio Plot(10MHz BW,16QAM,Band 12-mid Channel)



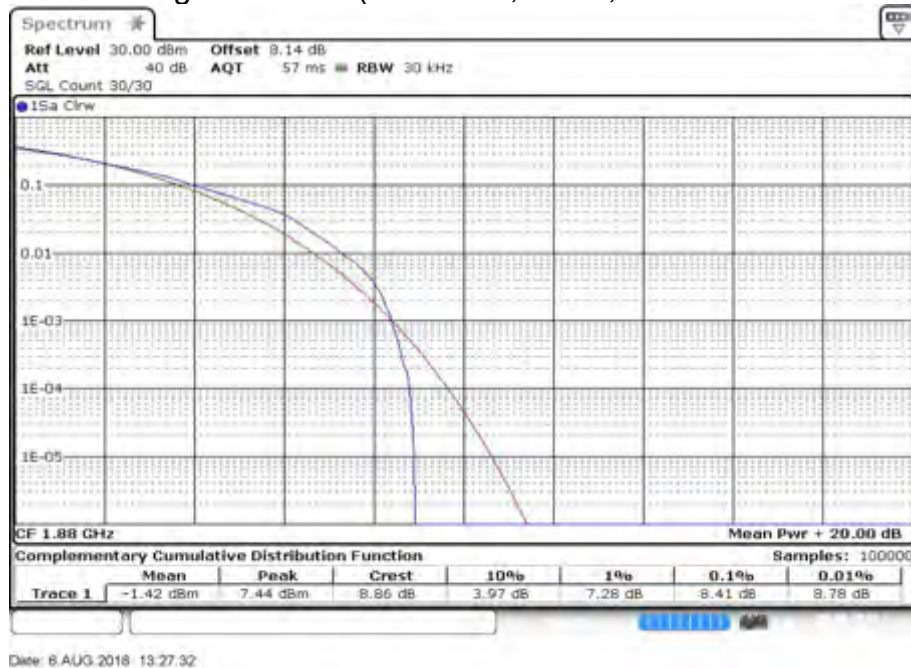
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 2-mid Channel)



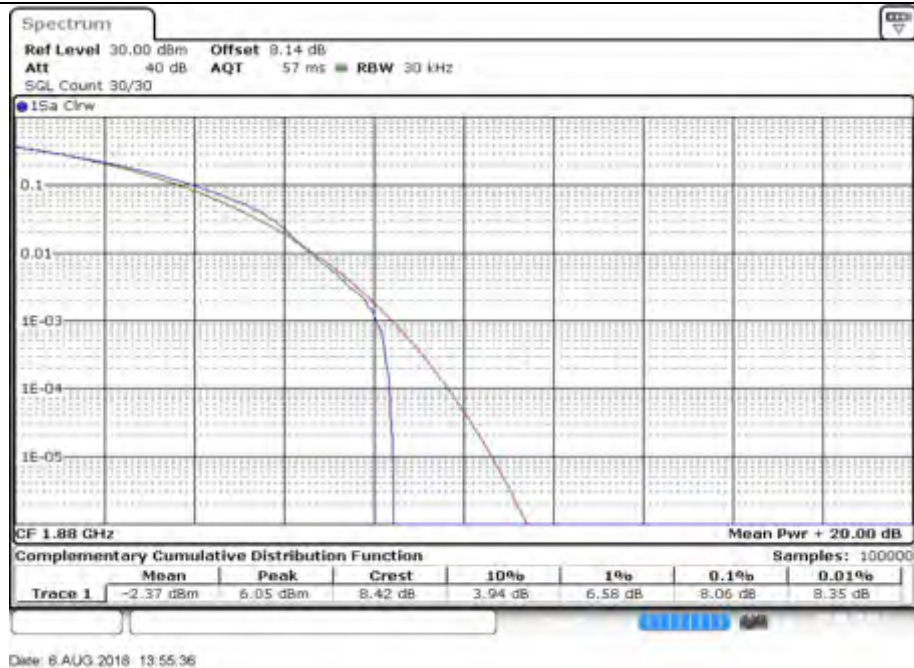
Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 2-mid Channel)



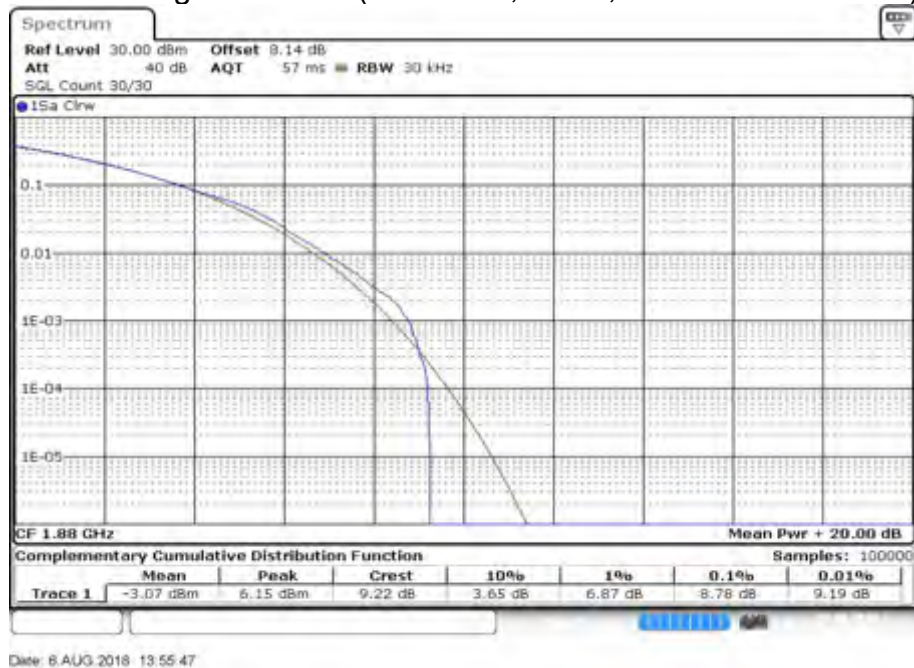
Peak-Average Ratio Plot(3MHz BW,QPSK,Band 2-mid Channel)



Peak-Average Ratio Plot(3MHz BW,16QAM,Band 2-mid Channel)



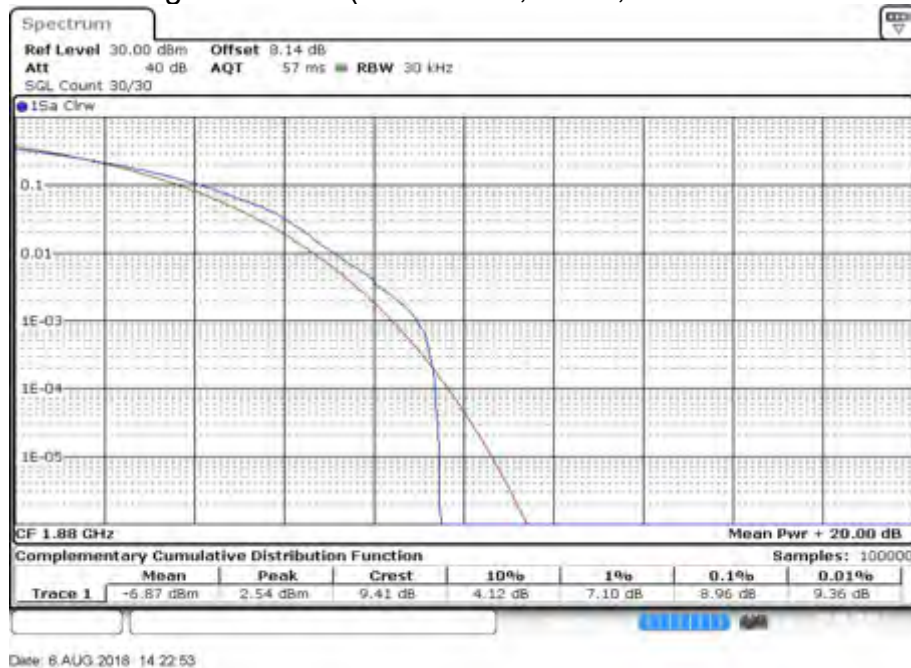
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 2-mid Channel)



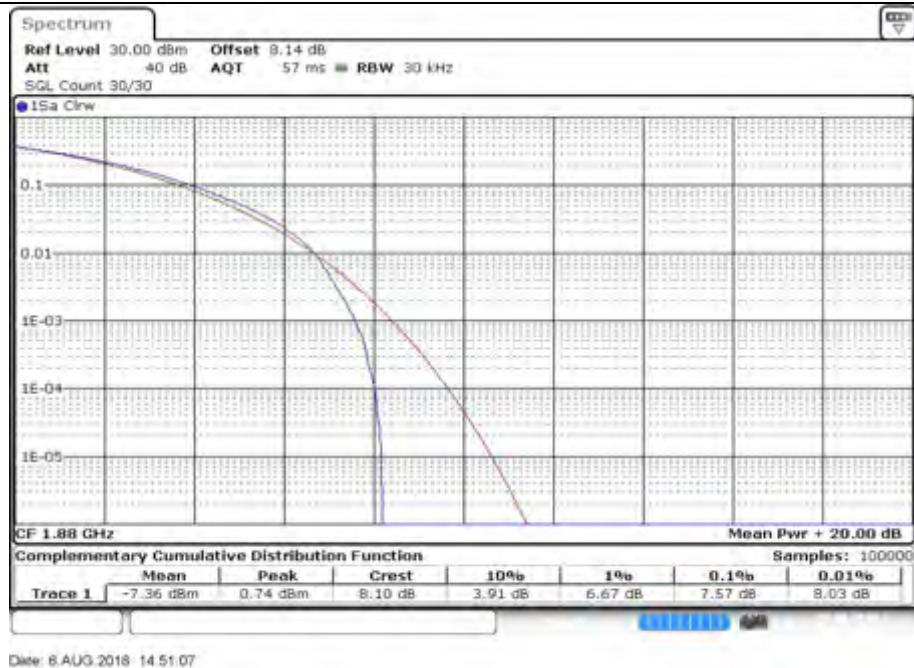
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 2-mid Channel)



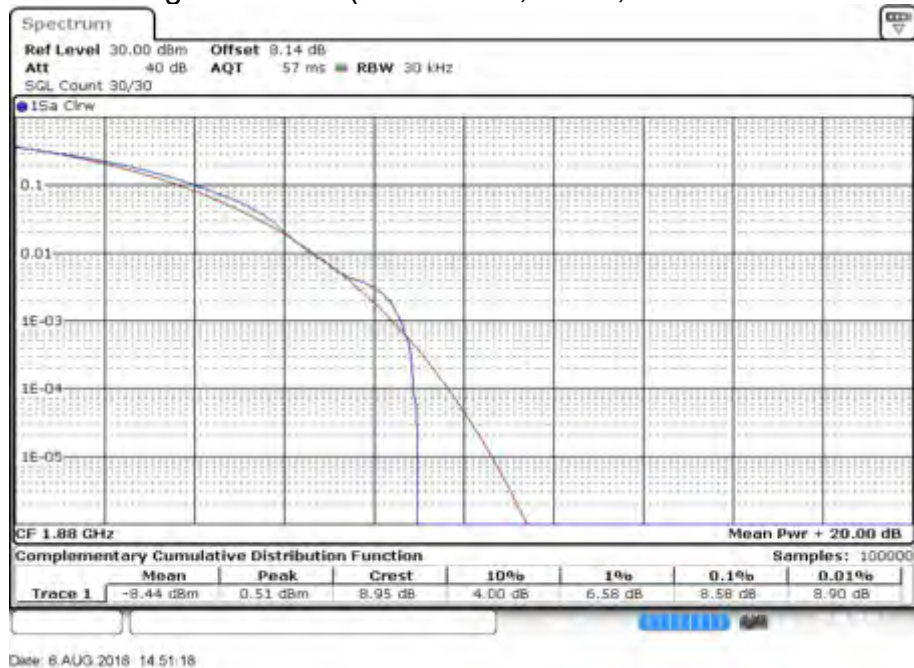
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 2-mid Channel)



Peak-Average Ratio Plot(10MHz BW,16QAM,Band 2-mid Channel)



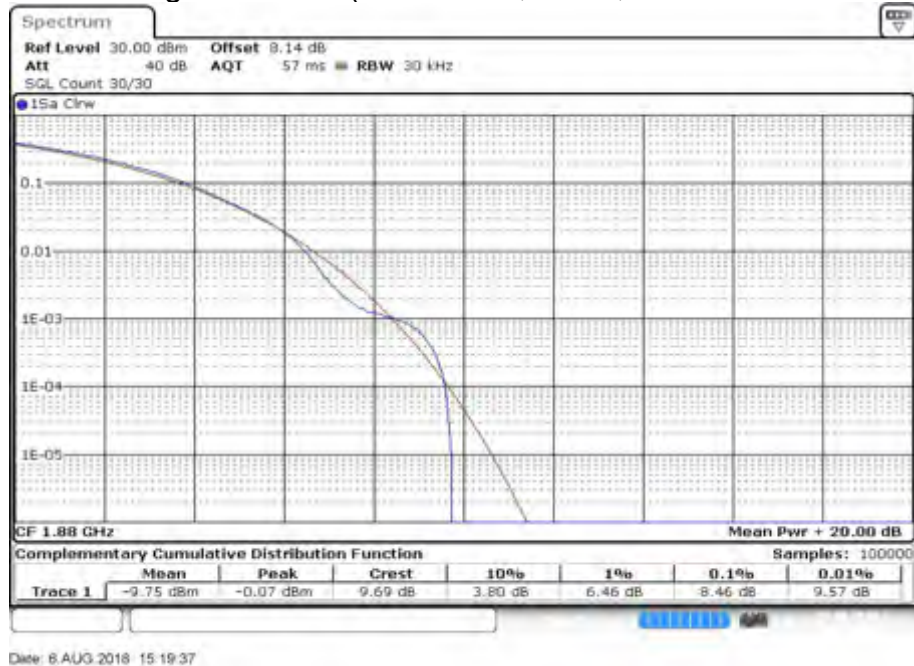
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 2-mid Channel)



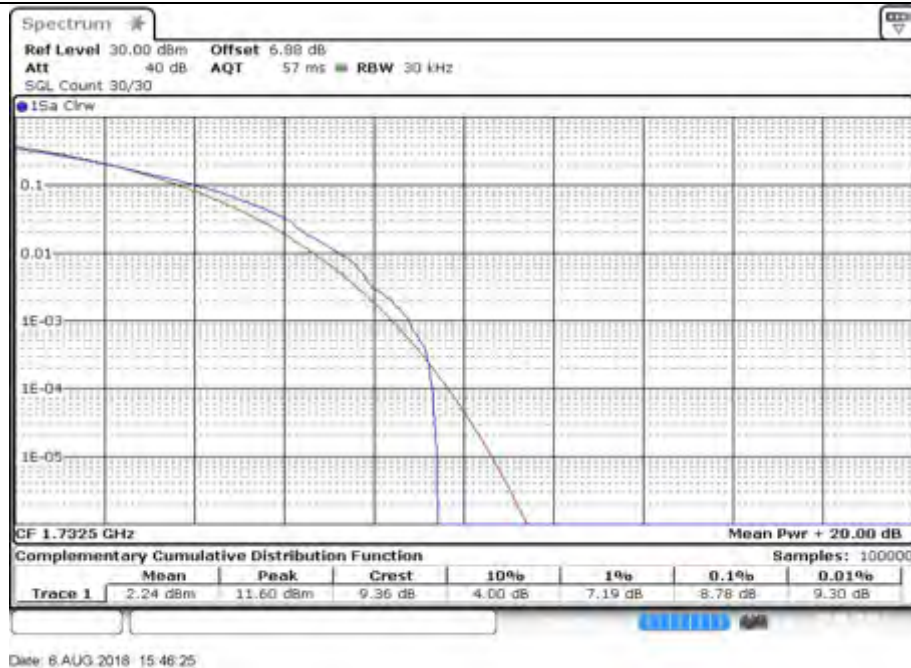
Peak-Average Ratio Plot(15MHz BW,16QAM,Band 2-mid Channel)



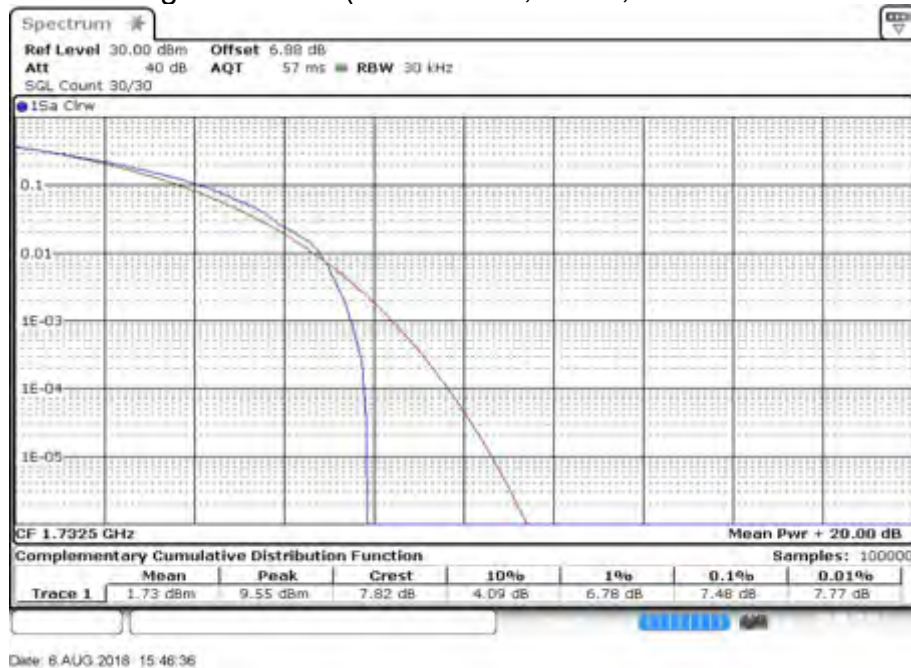
Peak-Average Ratio Plot(20MHz BW,QPSK,Band 2-mid Channel)



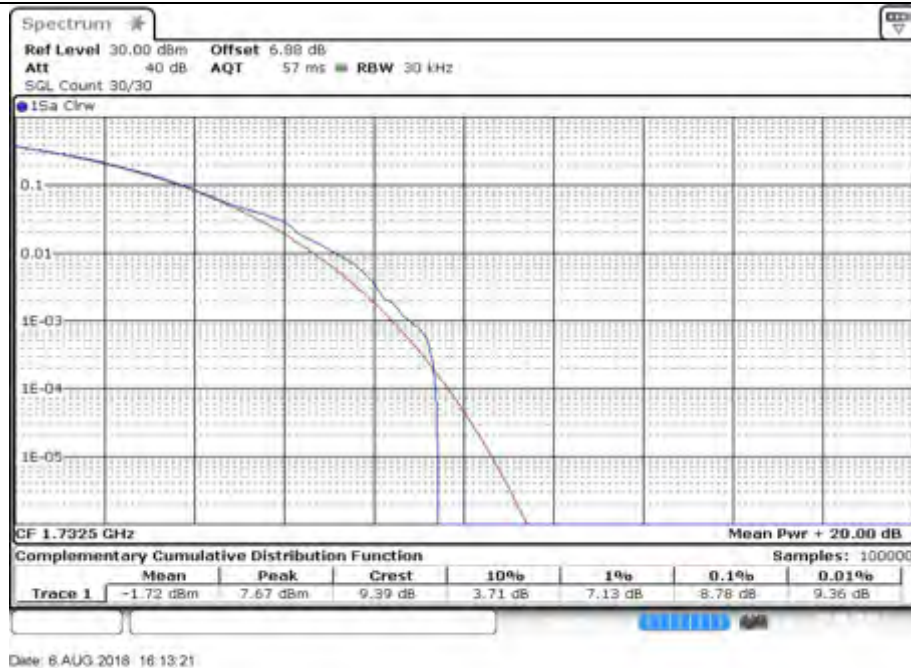
Peak-Average Ratio Plot(20MHz BW,16QAM,Band 2-mid Channel)



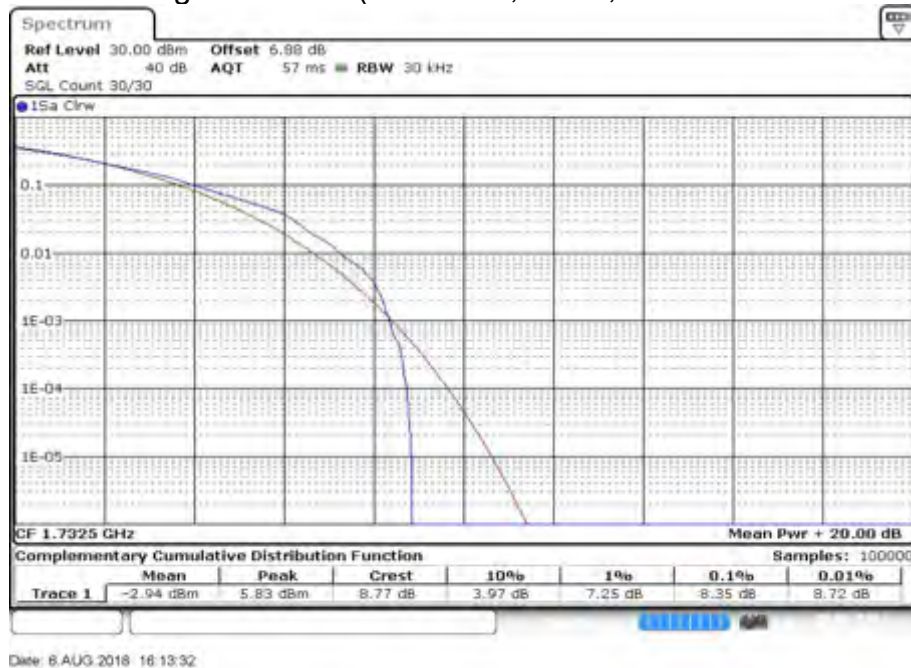
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 4-mid Channel)



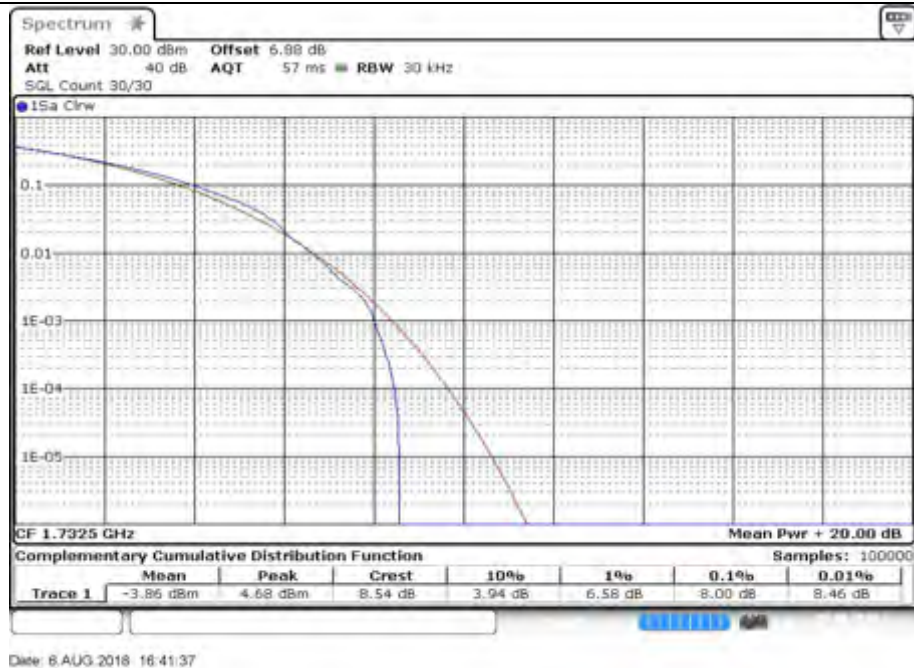
Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(3MHz BW,QPSK,Band 4-mid Channel)



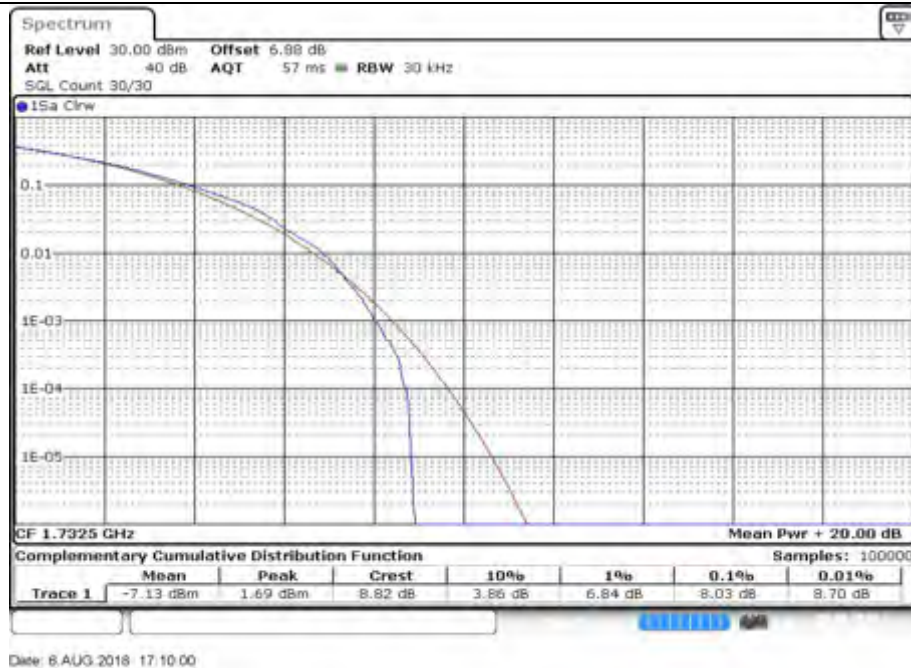
Peak-Average Ratio Plot(3MHz BW,16QAM,Band 4-mid Channel)



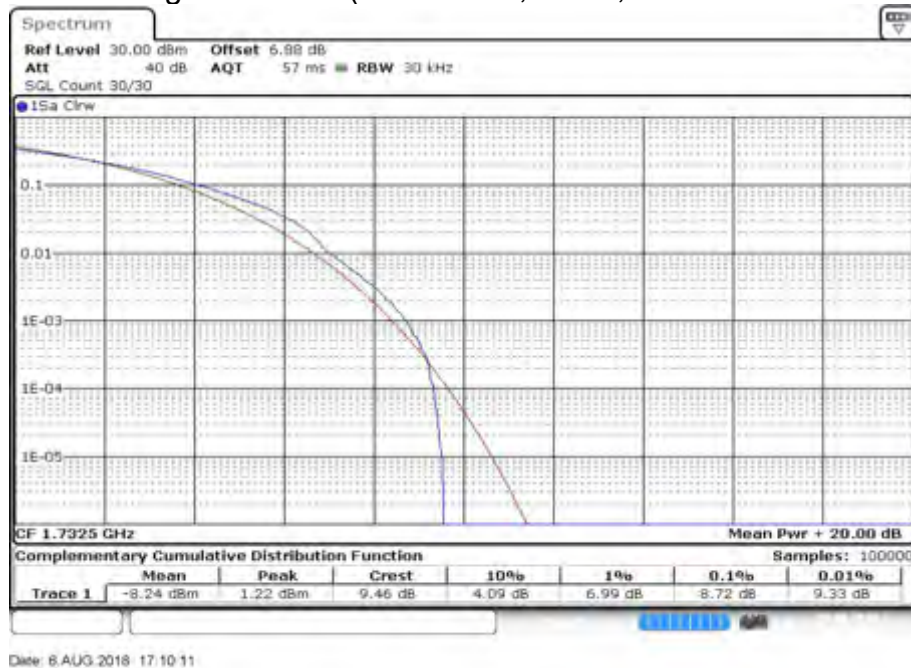
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 4-mid Channel)



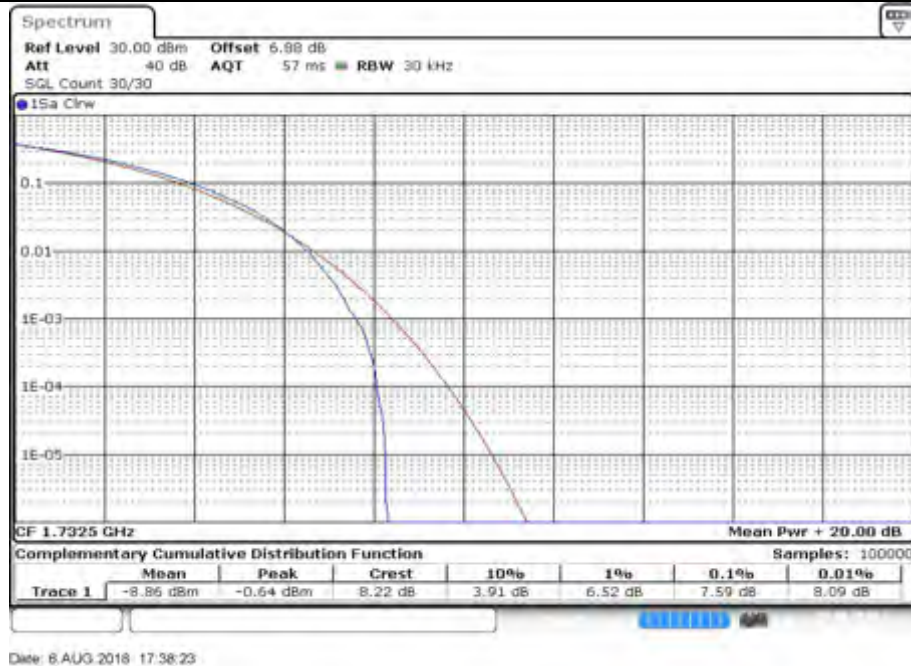
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 4-mid Channel)



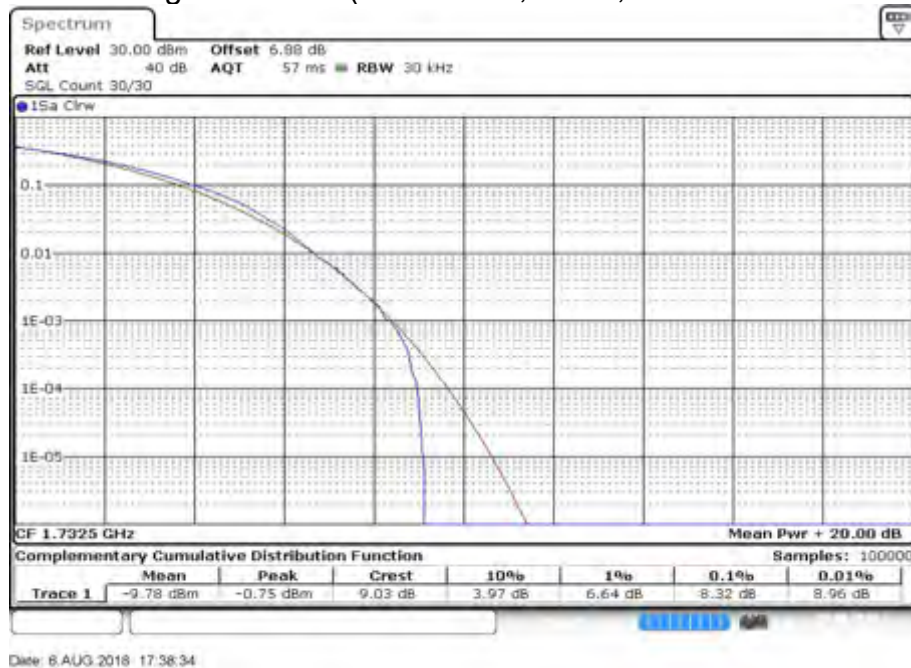
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 4-mid Channel)



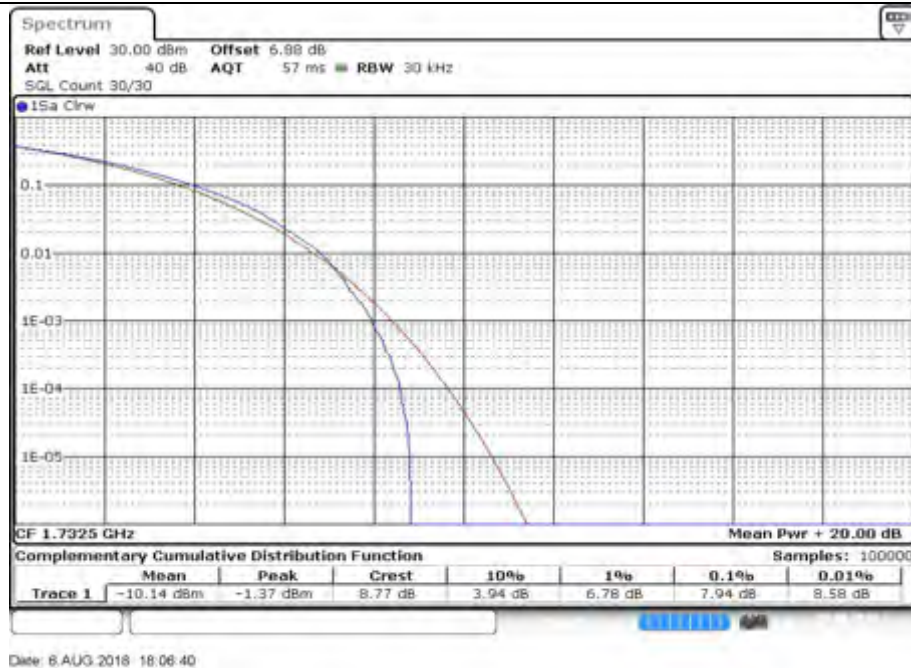
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 4-mid Channel)



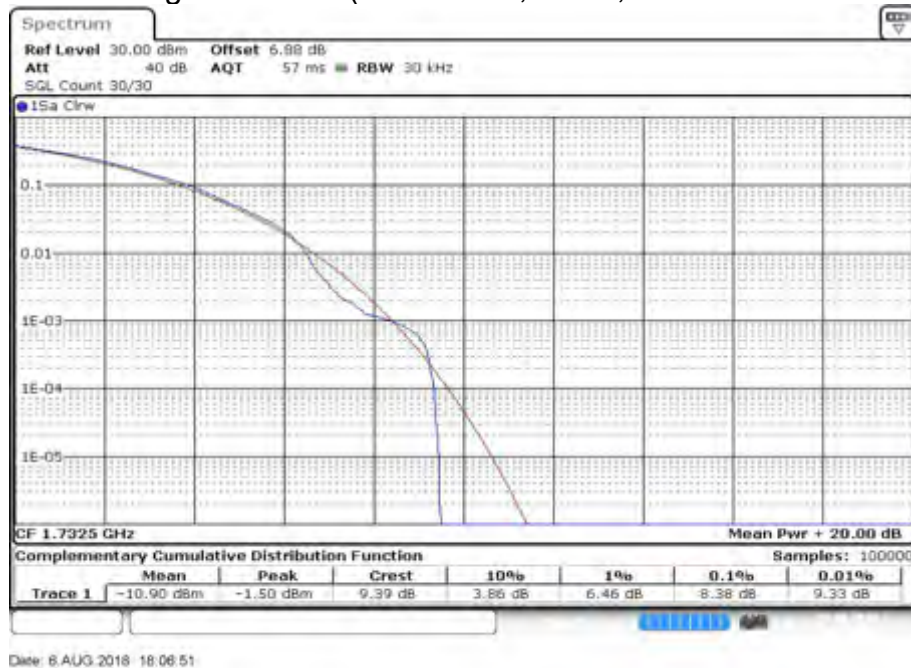
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 4-mid Channel)



Peak-Average Ratio Plot(15MHz BW,16QAM,Band 4-mid Channel)



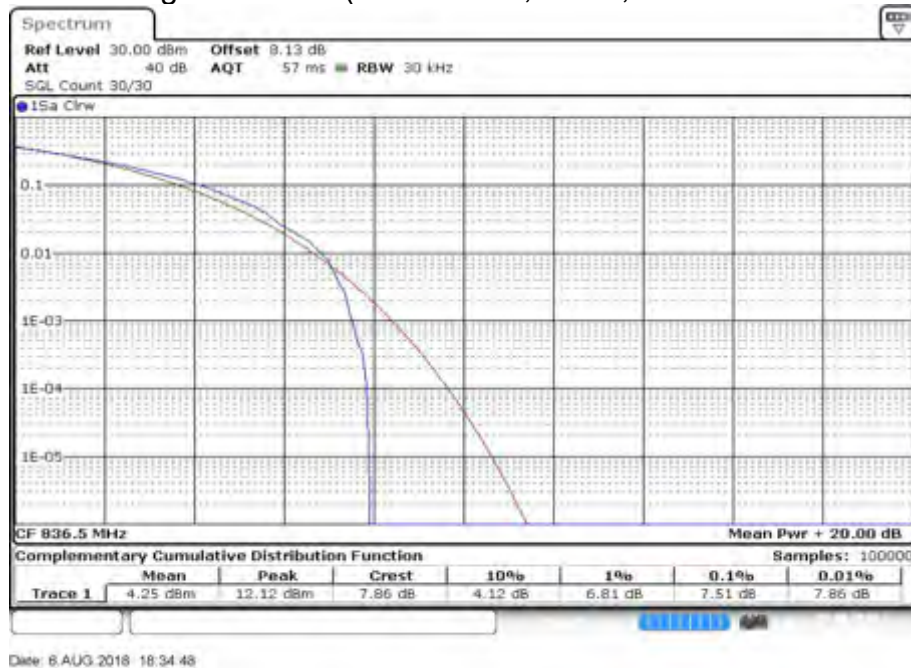
Peak-Average Ratio Plot(20MHz BW,QPSK,Band 4-mid Channel)



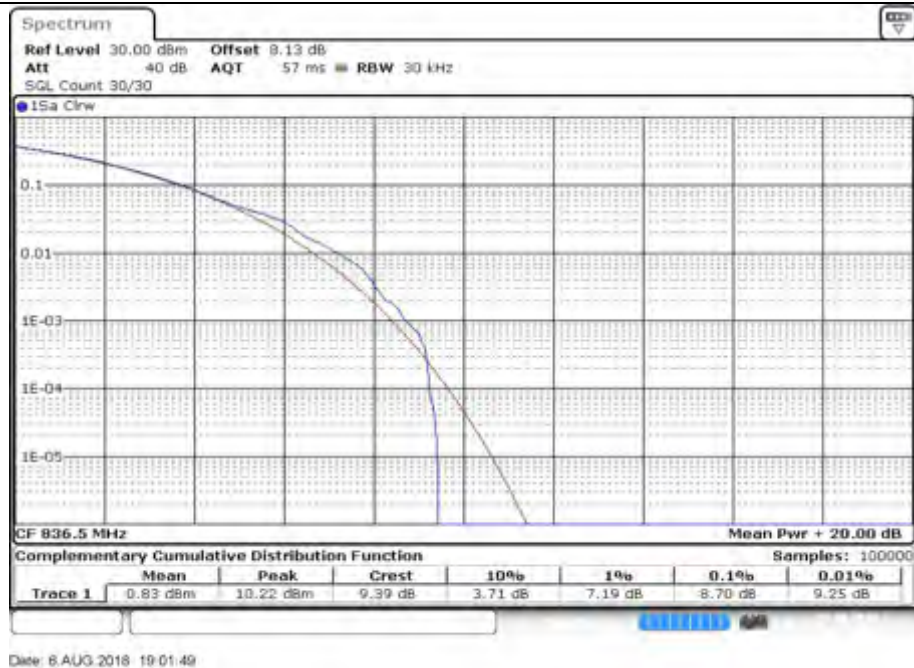
Peak-Average Ratio Plot(20MHz BW,16QAM,Band 4-mid Channel)



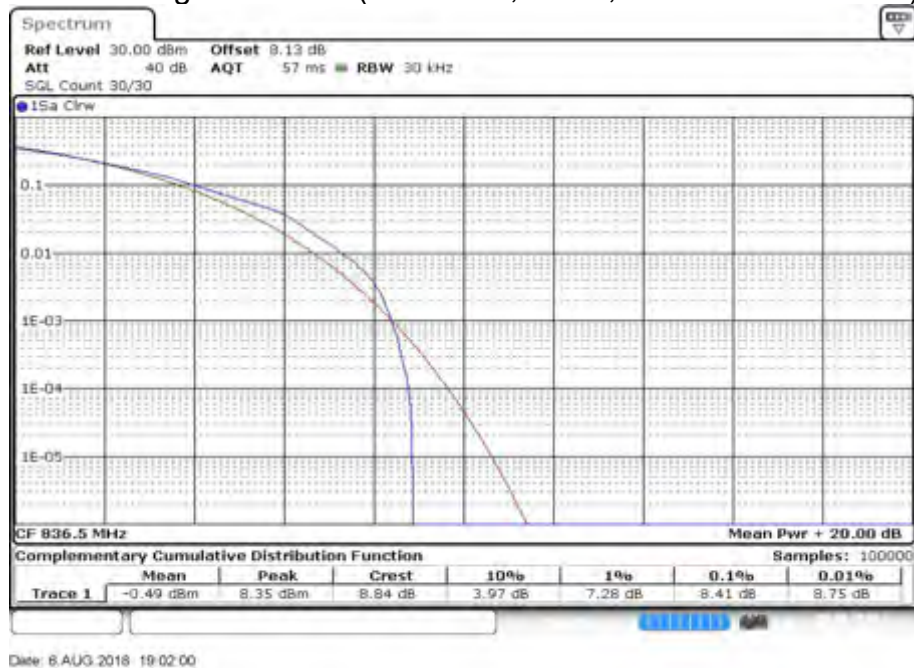
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 5-mid Channel)



Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 5-mid Channel)



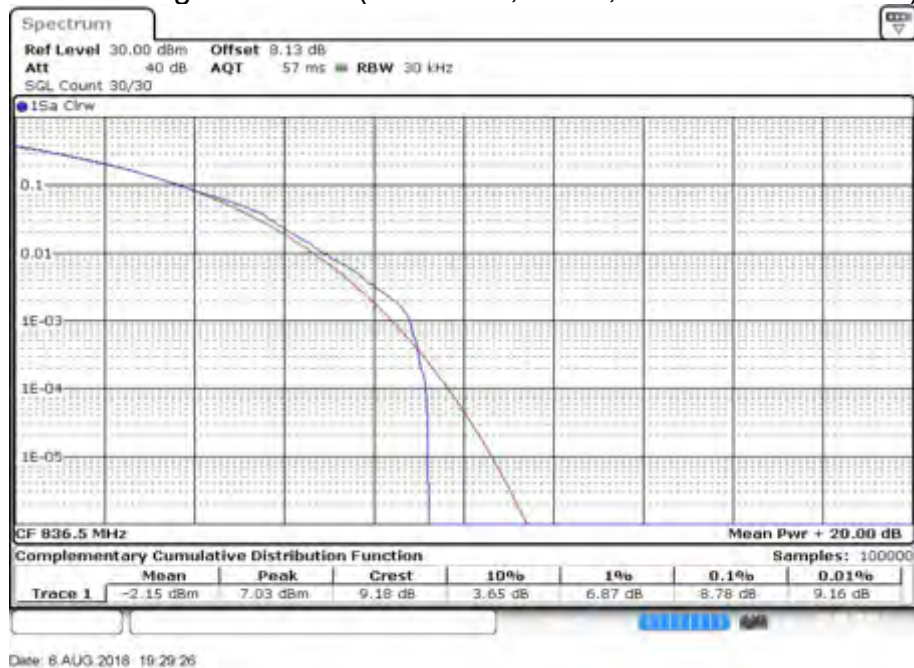
Peak-Average Ratio Plot(3MHz BW,QPSK,Band 5-mid Channel)



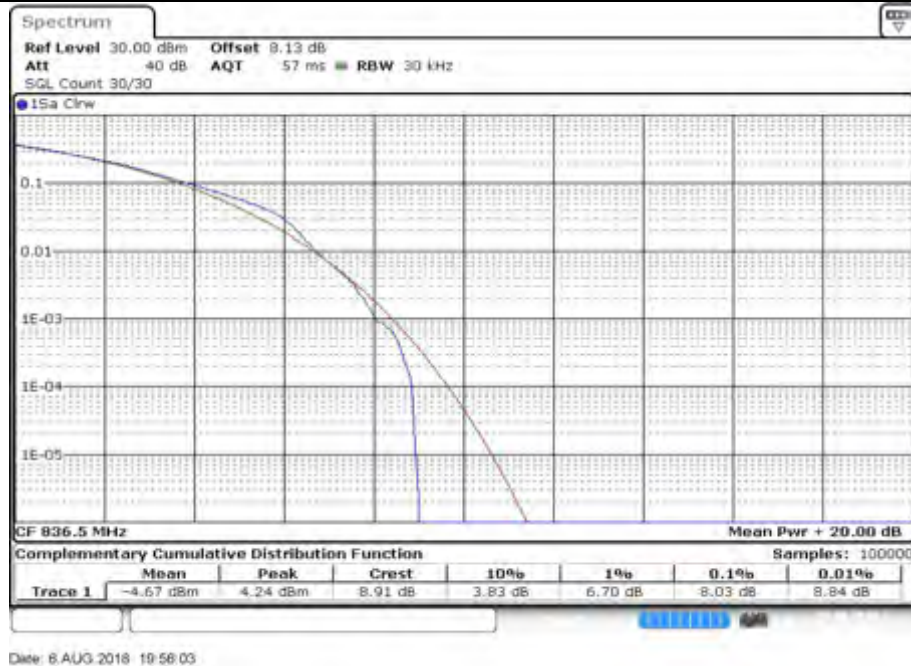
Peak-Average Ratio Plot(3MHz BW,16QAM,Band 5-mid Channel)



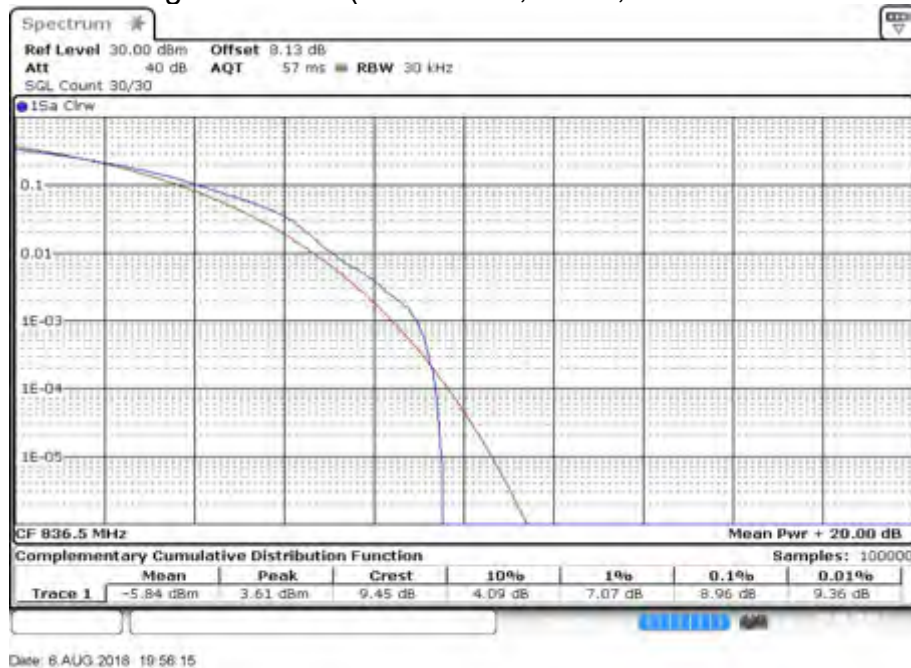
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 5-mid Channel)



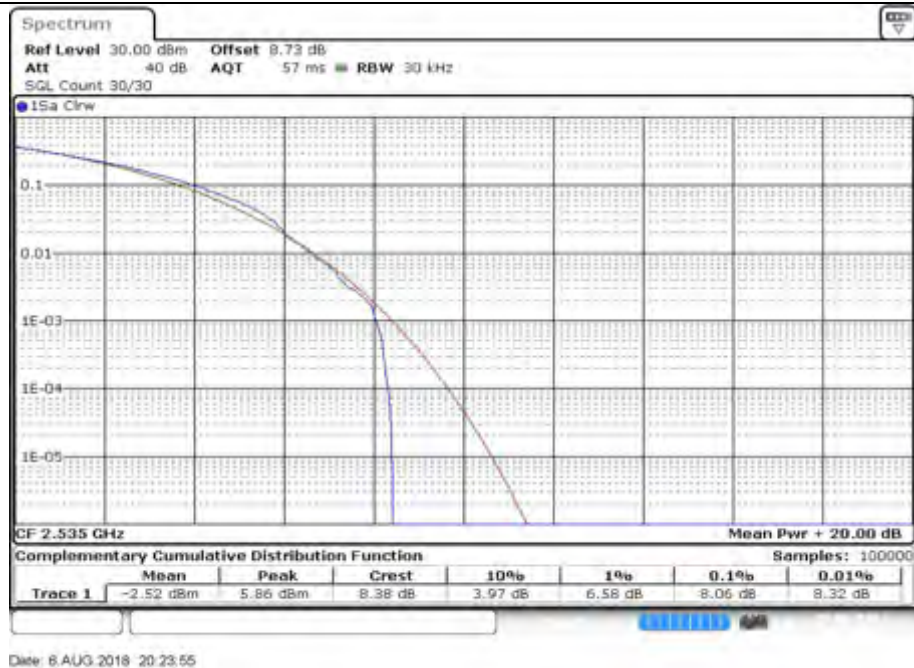
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 5-mid Channel)



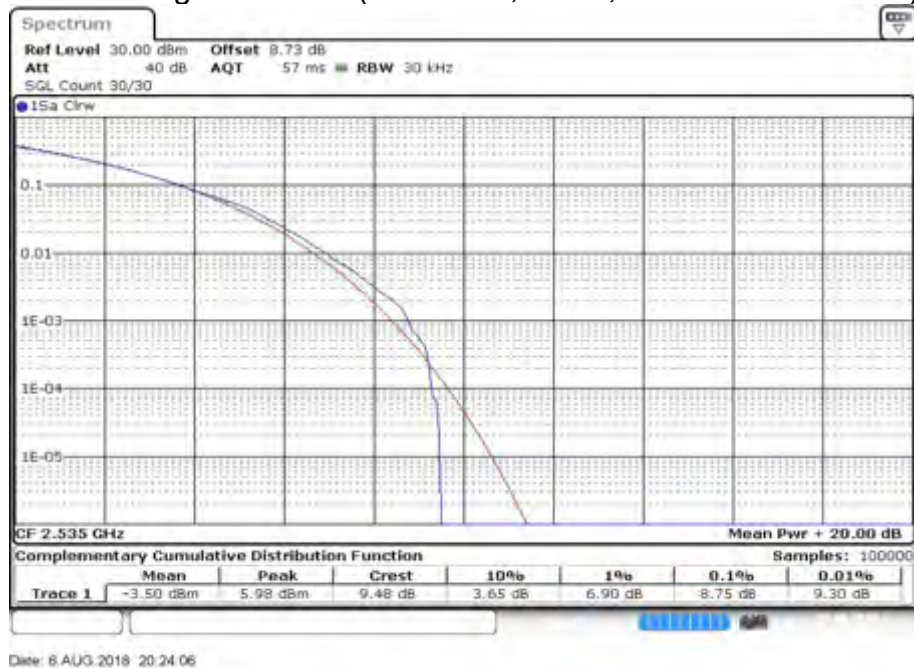
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 5-mid Channel)



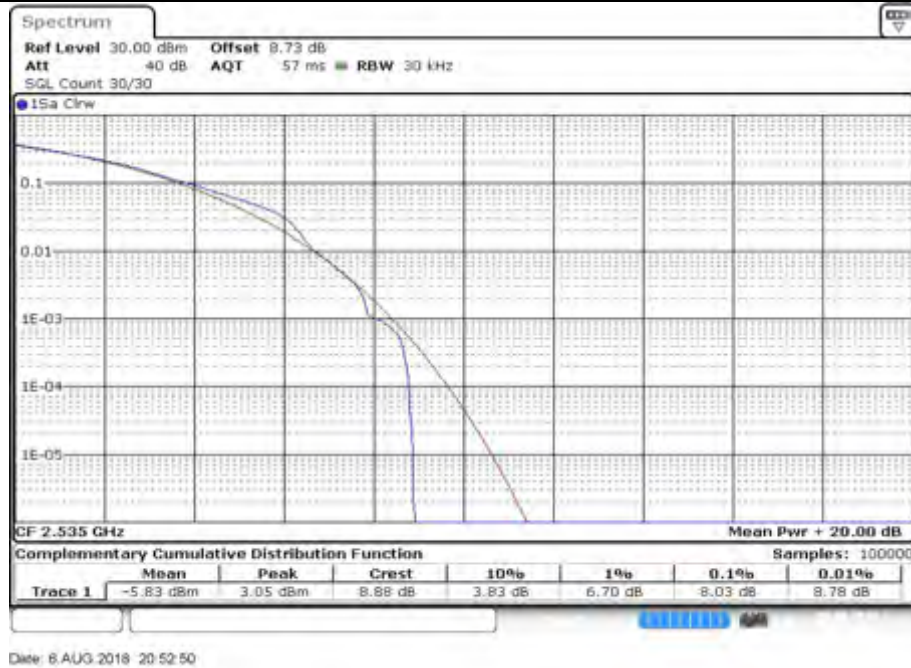
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 5-mid Channel)



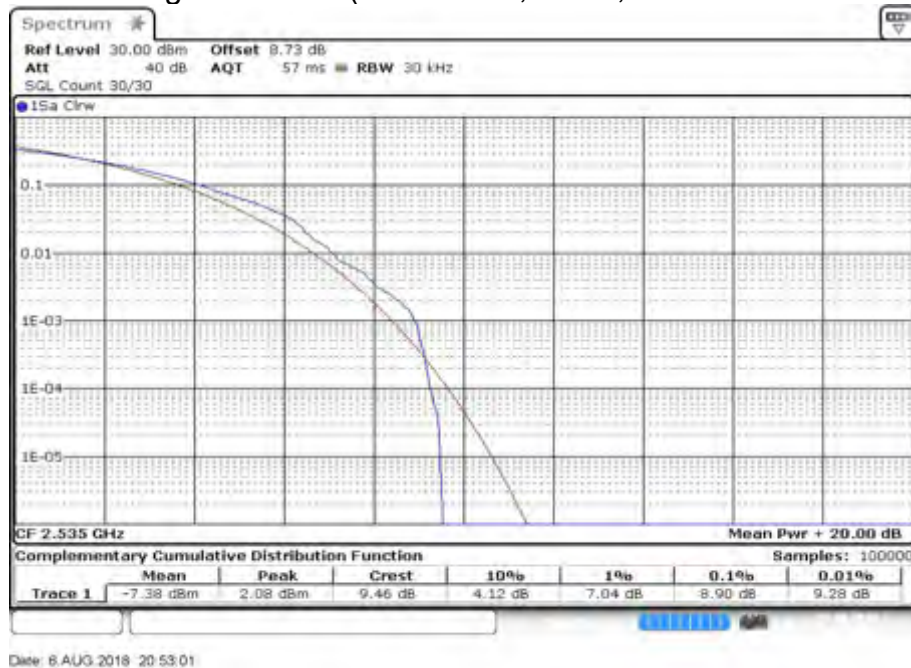
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 7-mid Channel)



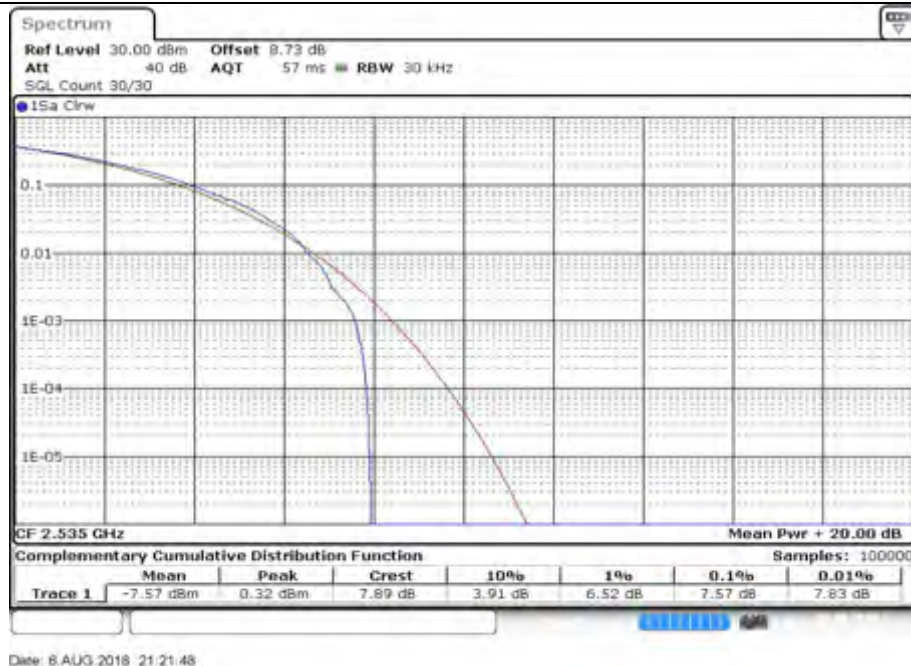
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 7-mid Channel)



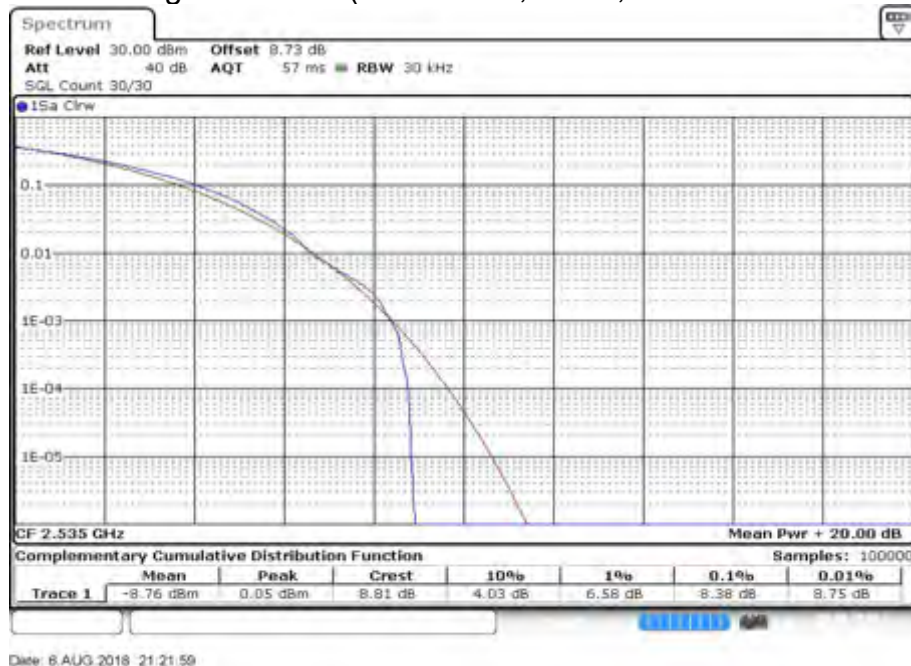
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 7-mid Channel)



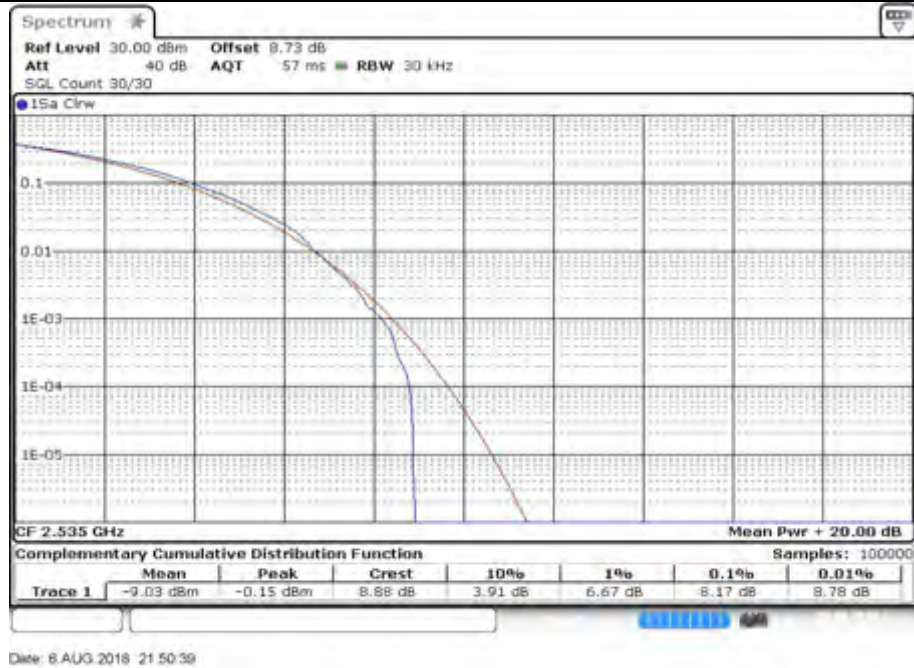
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 7-mid Channel)



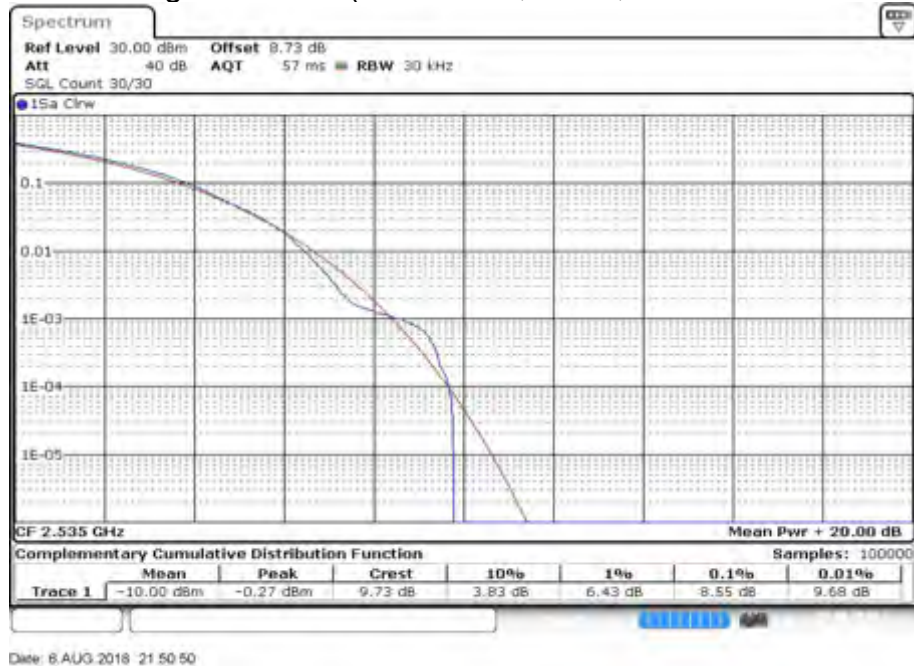
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 7-mid Channel)



Peak-Average Ratio Plot(15MHz BW,16QAM,Band 7-mid Channel)



Peak-Average Ratio Plot(20MHz BW,QPSK,Band 7-mid Channel)



Peak-Average Ratio Plot(20MHz BW,16QAM,Band 7-mid Channel)

5 Spurious Emissions at antenna terminal-FCC Part 2.1051/27.53(h)/22.53(m)

Test result

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	699.7	23017	1.4	1	0	Fig.4	Fig.8

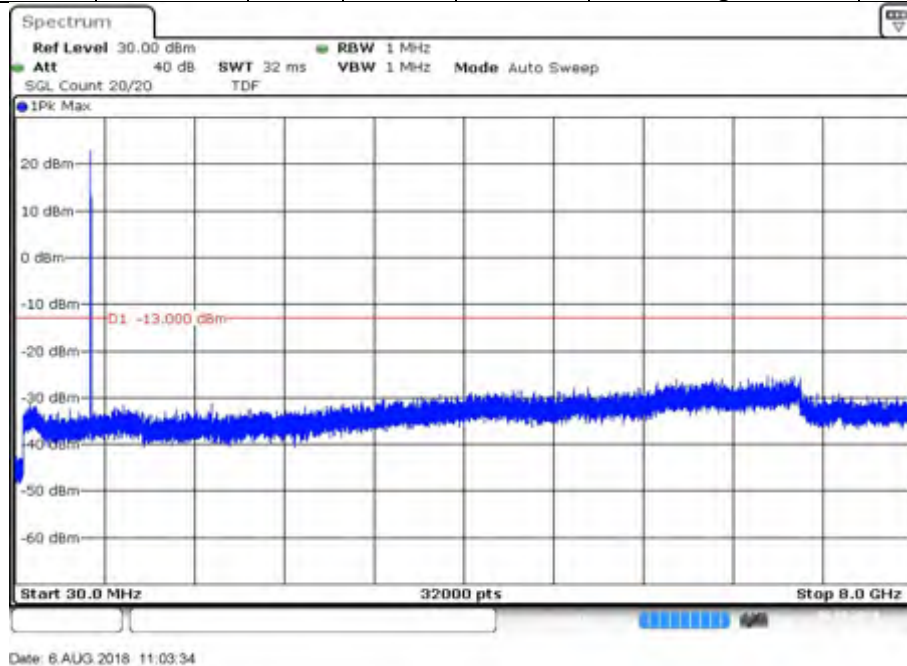


Fig.4

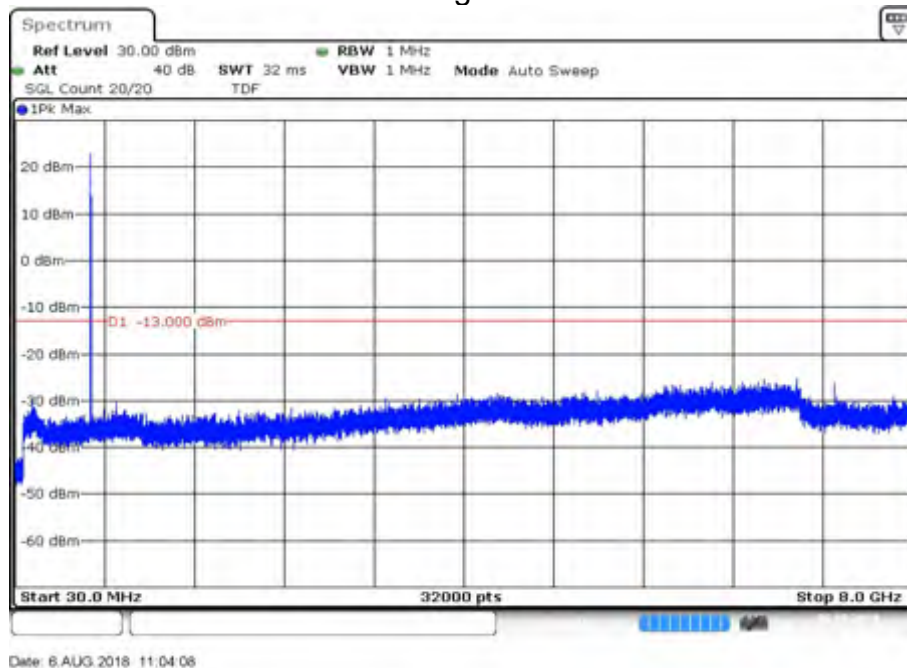


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	707.5	23095	1.4	1	0	Fig.4	Fig.8

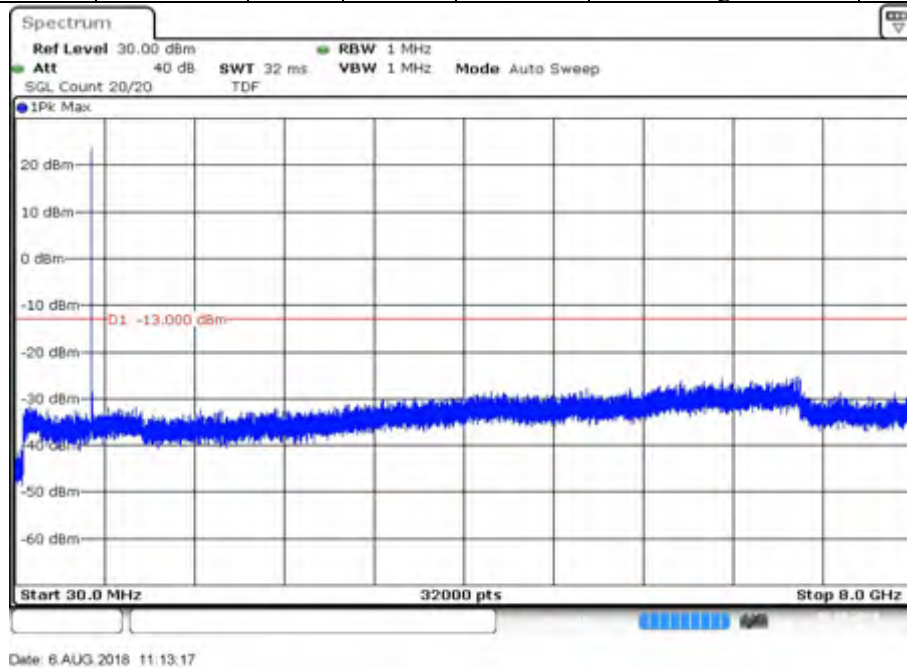


Fig.4

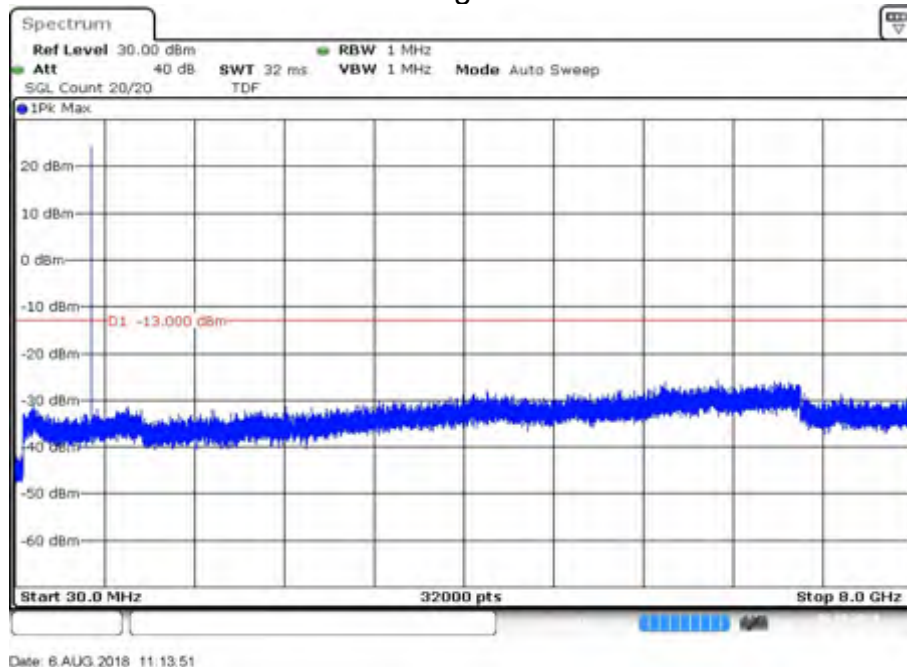


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	715.3	23173	1.4	1	0	Fig.4	Fig.8

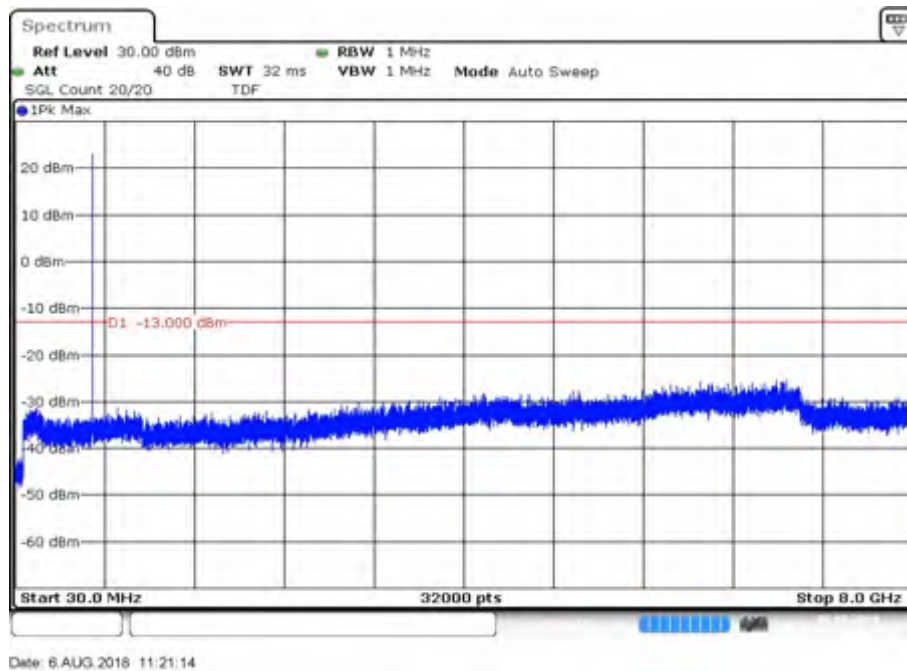


Fig.4

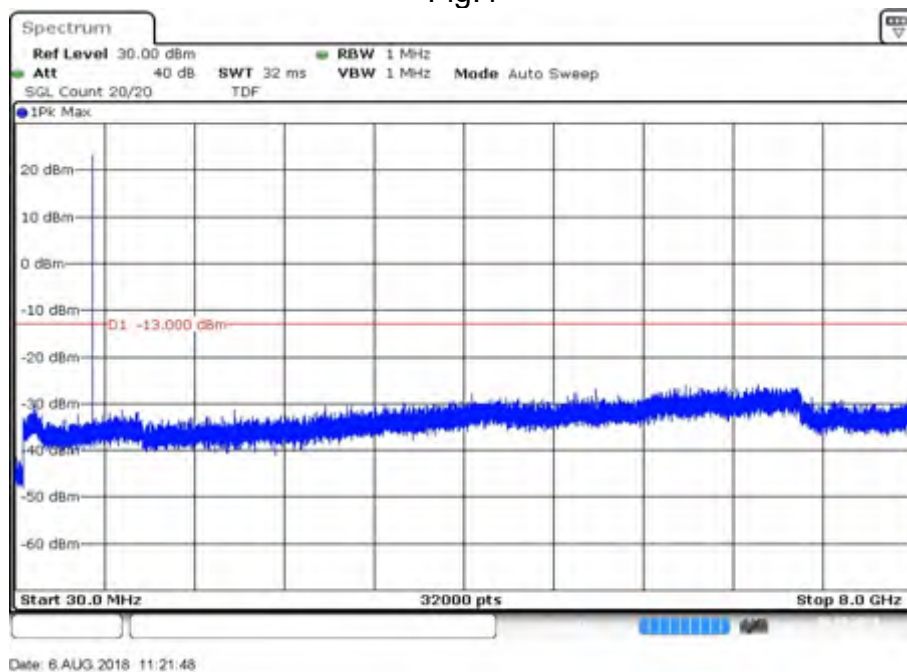


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	700.5	23025	3	1	0	Fig.4	Fig.8

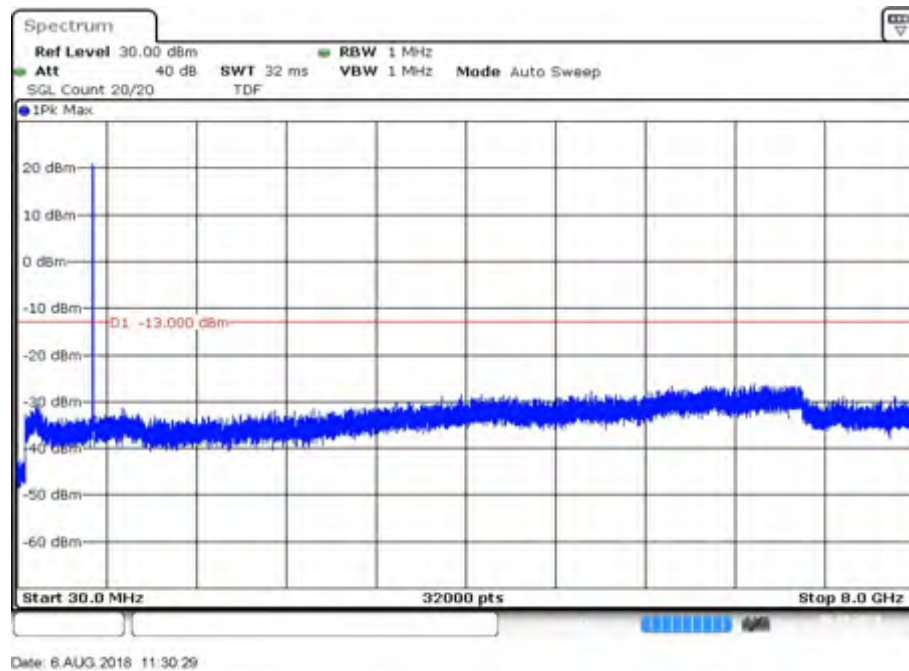


Fig.4

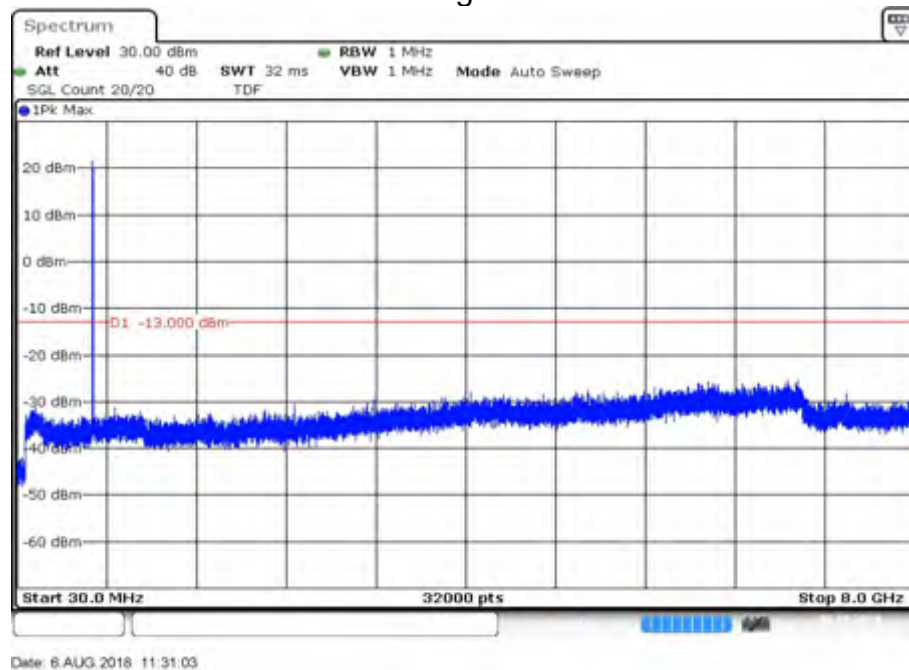


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	707.5	23095	3	1	0	Fig.4	Fig.8

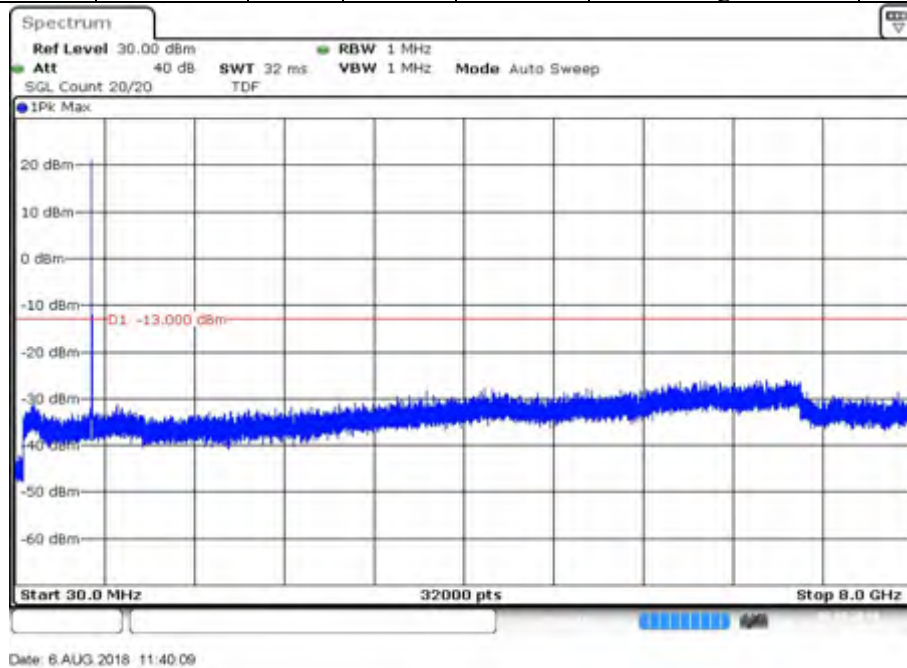


Fig.4

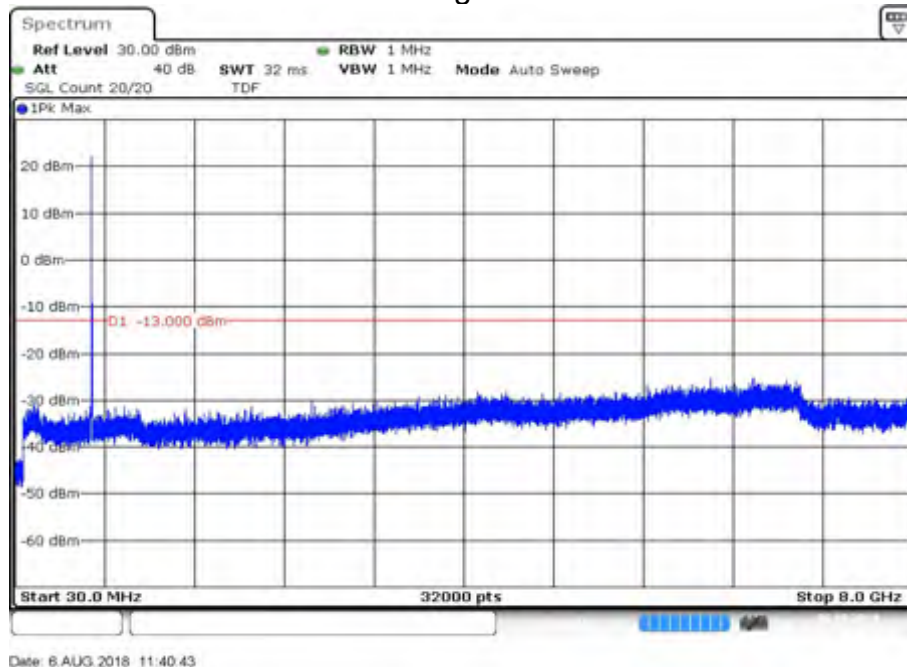


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	714.5	23165	3	1	0	Fig.4	Fig.8

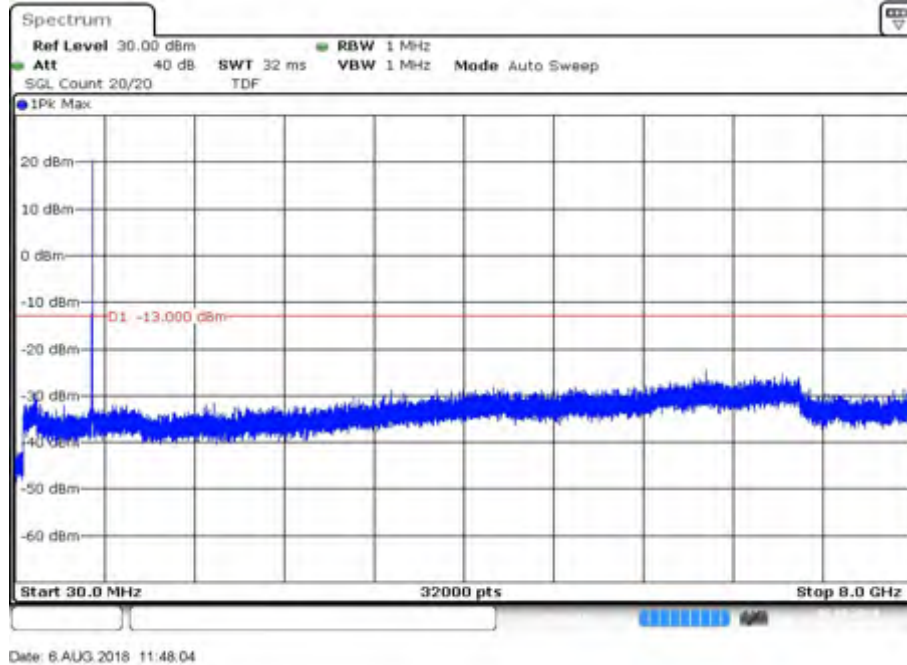


Fig.4

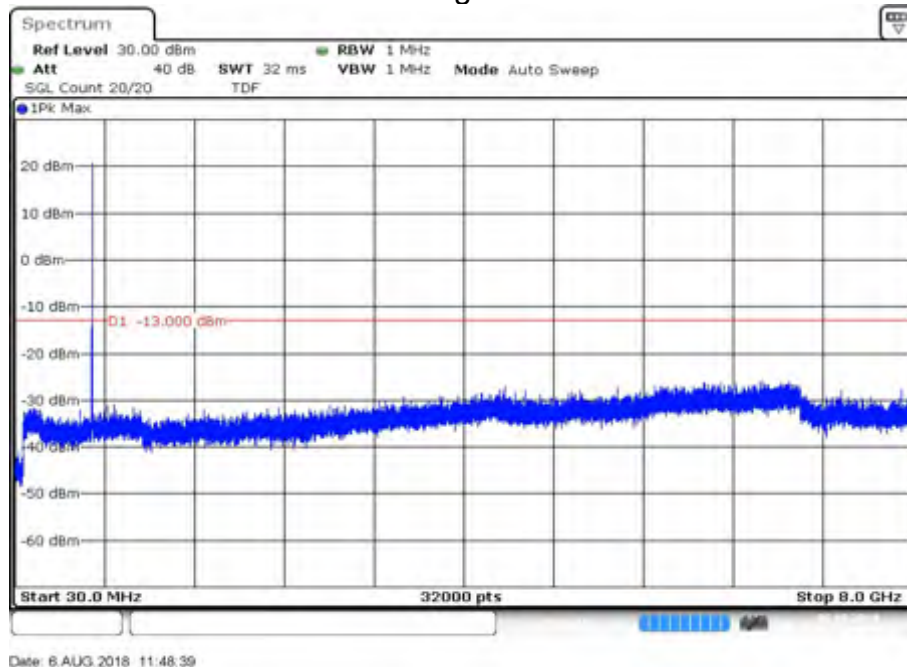


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	701.5	23035	5	1	0	Fig.4	Fig.8

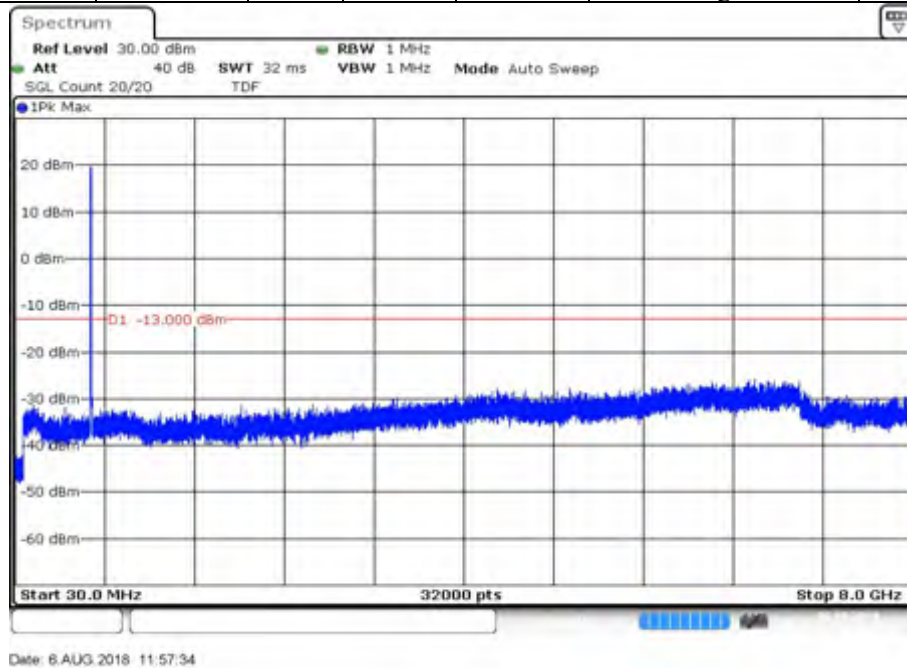


Fig.4

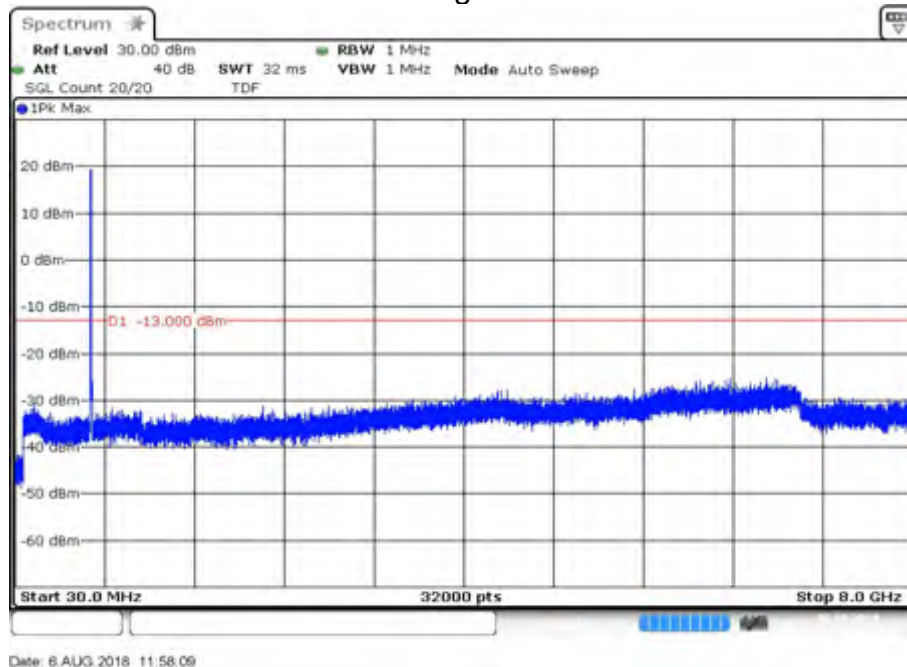


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	707.5	23095	5	1	0	Fig.4	Fig.8

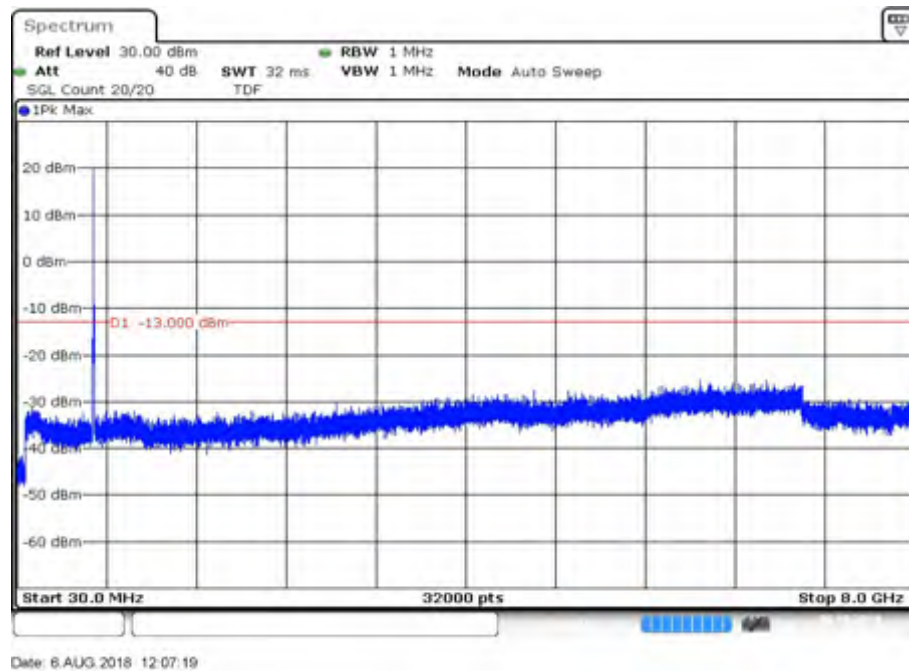


Fig.4

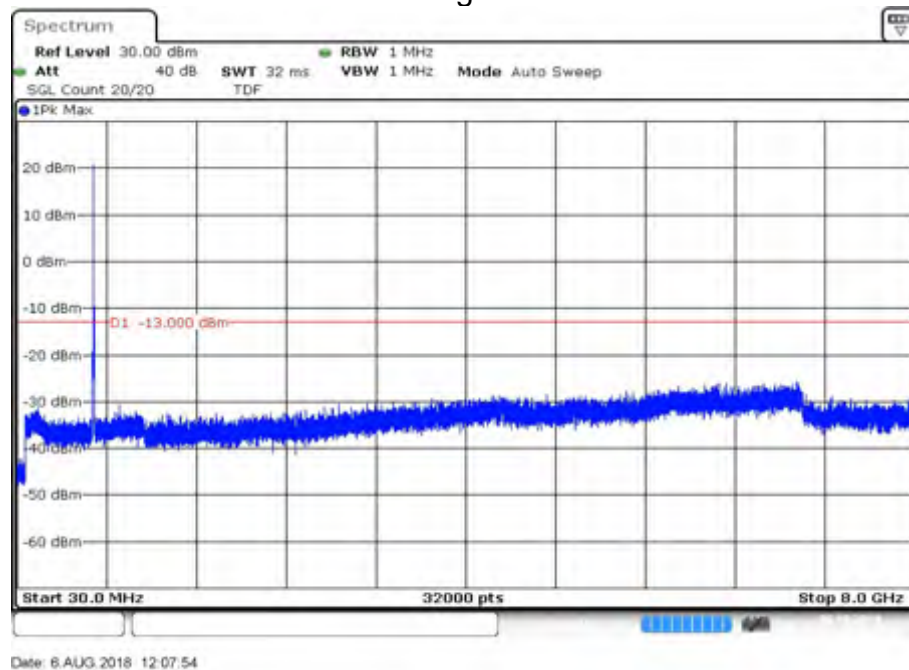


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	713.5	23155	5	1	0	Fig.4	Fig.8

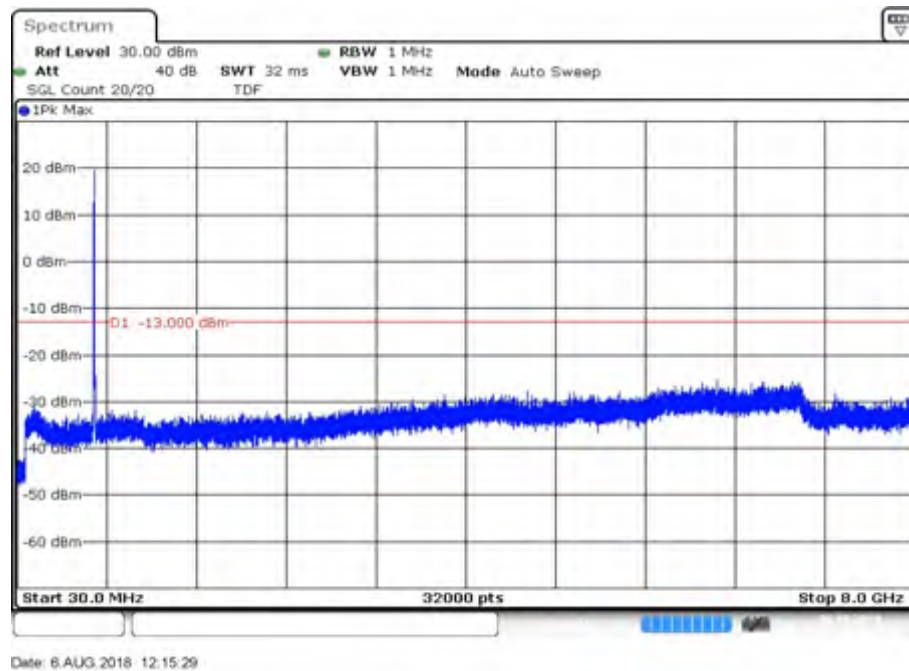


Fig.4

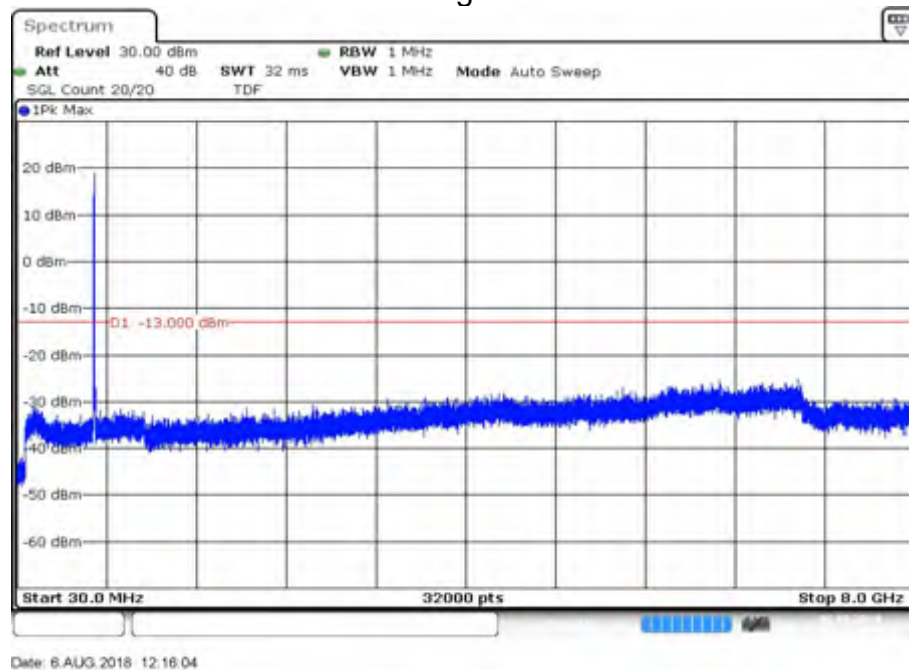


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	704	23060	10	1	0	Fig.4	Fig.8

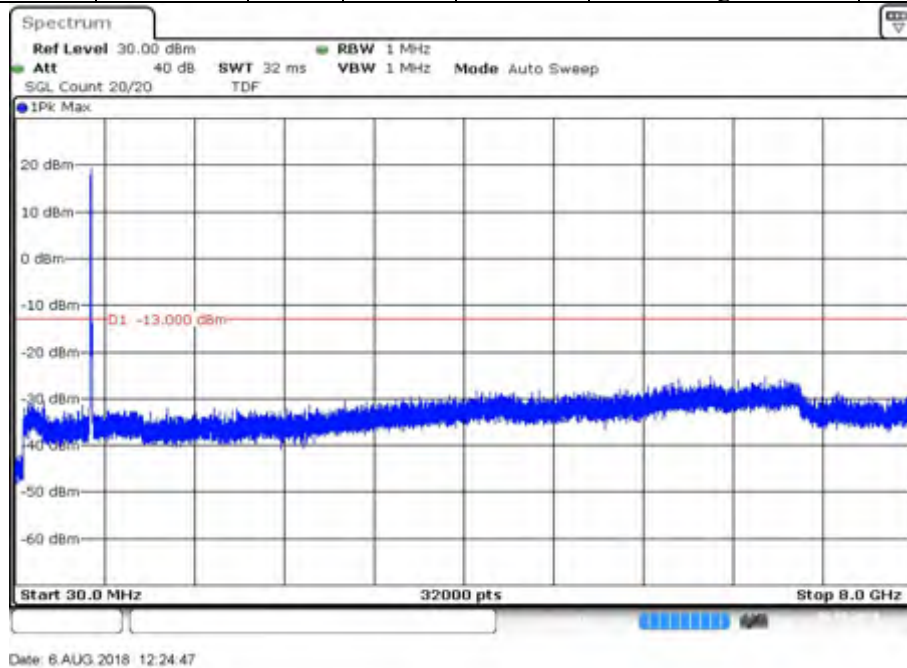


Fig.4

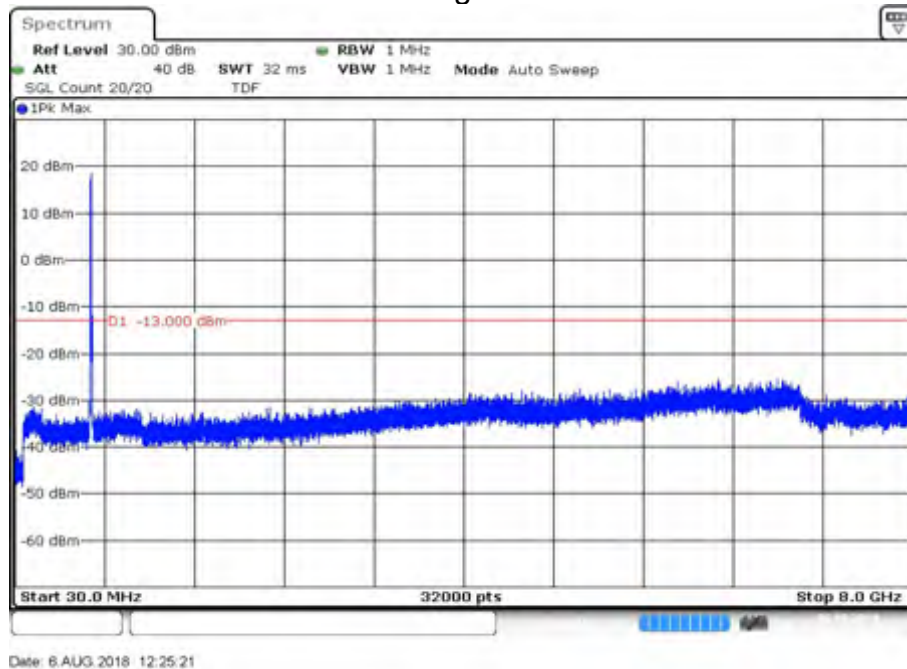


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	707.5	23095	10	1	0	Fig.4	Fig.8

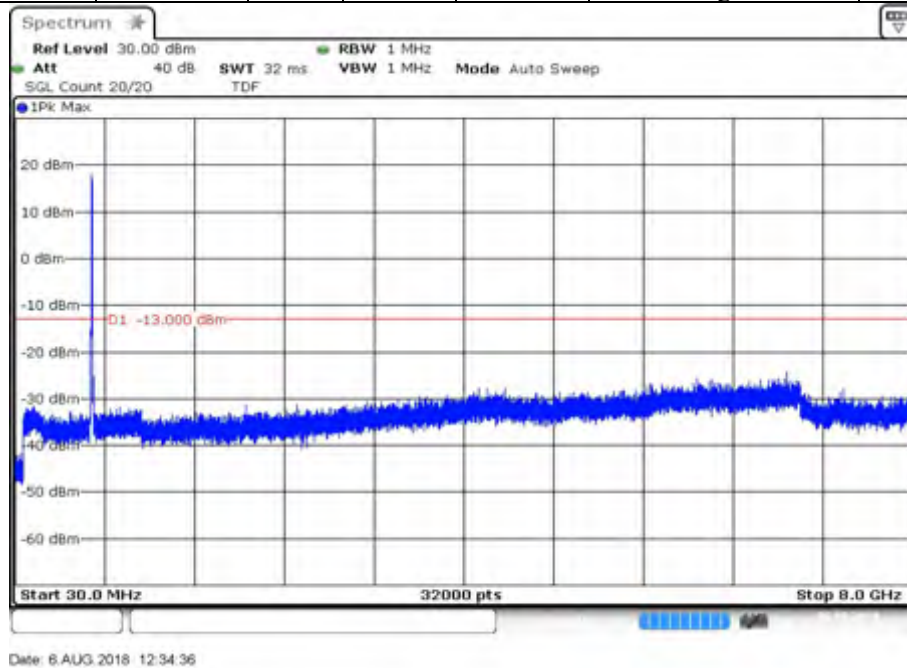


Fig.4

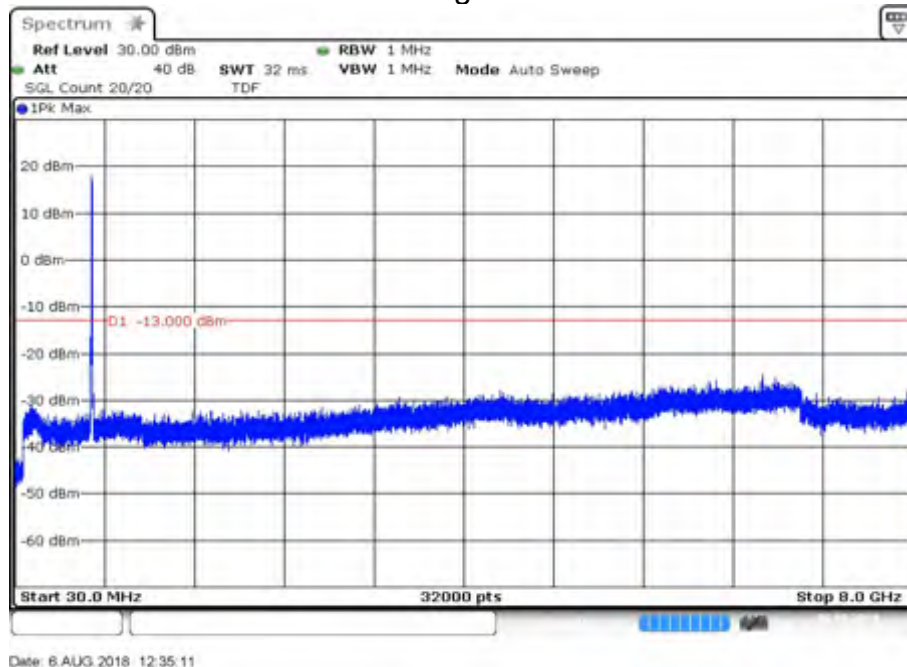


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
12	711	23130	10	1	0	Fig.4	Fig.8

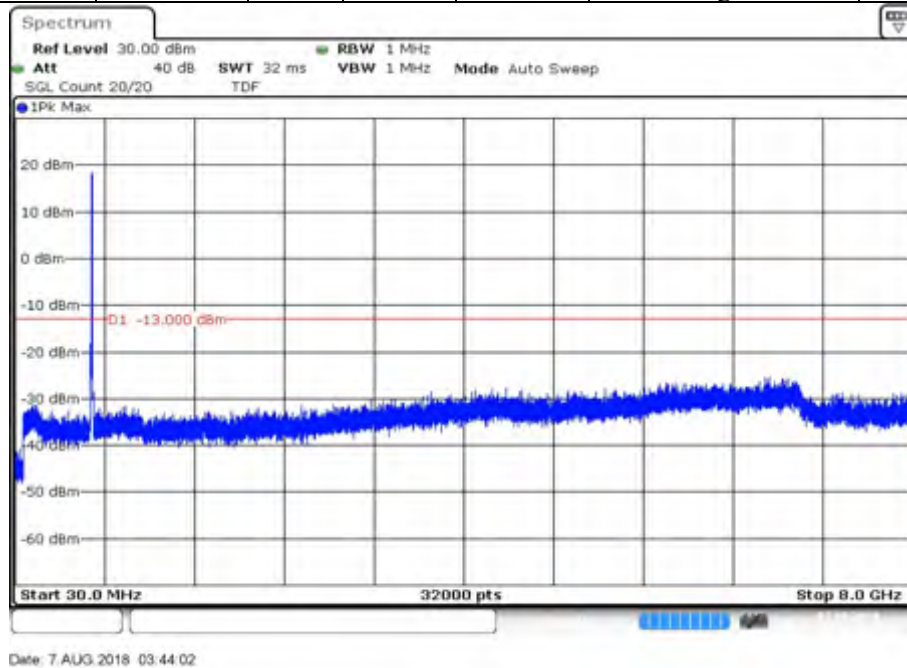


Fig.4

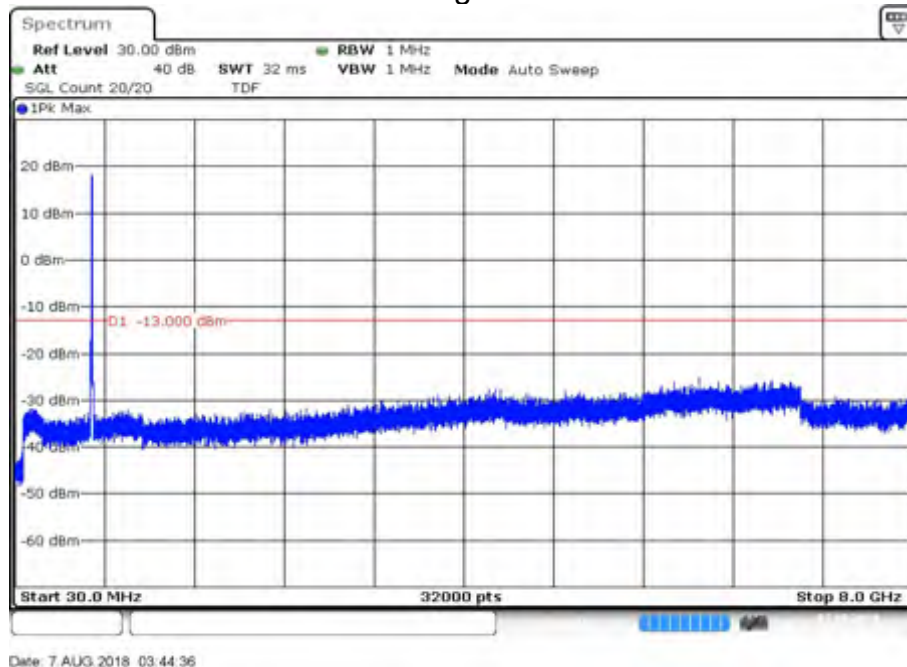


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
2	1850.7	18607	1.4	1	0	Fig.4	Fig.8

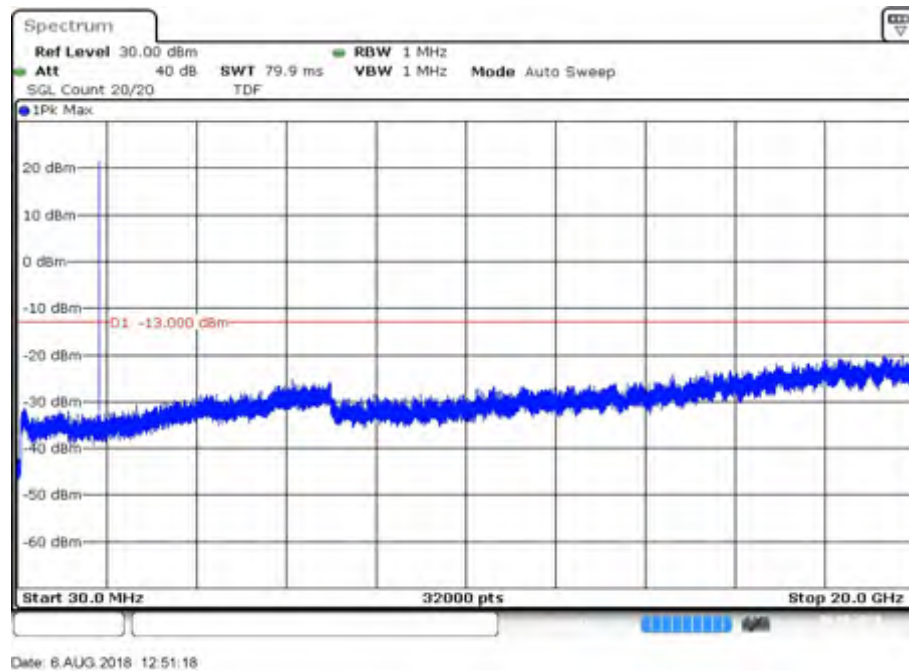


Fig.4

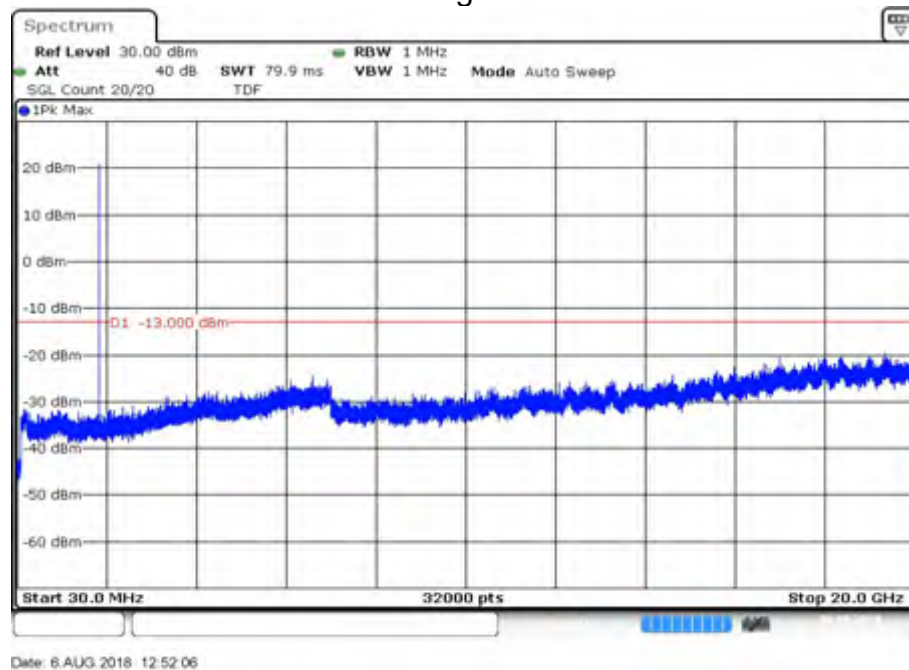


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
2	1880	18900	1.4	1	0	Fig.4	Fig.8

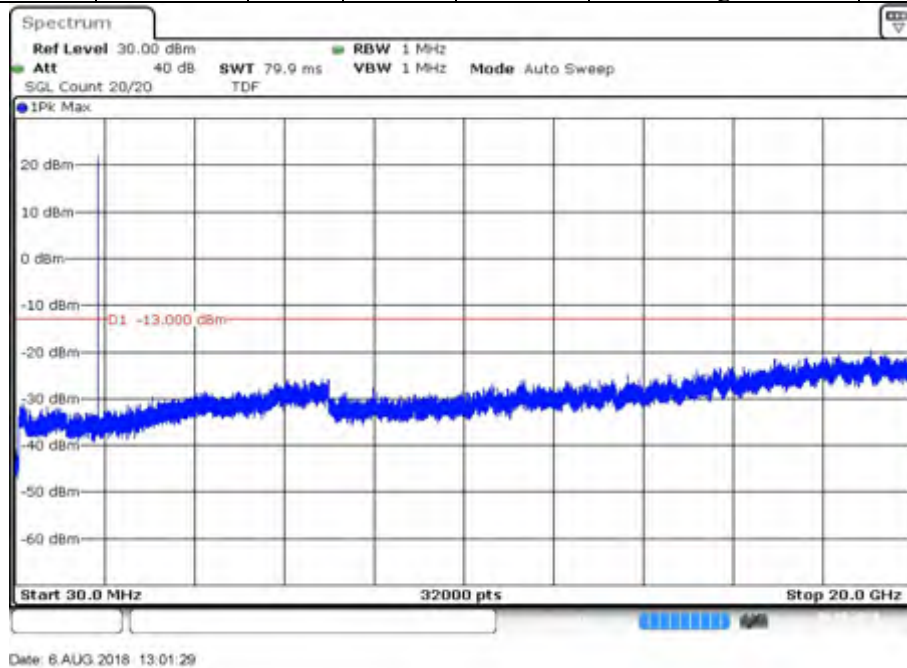


Fig.4、

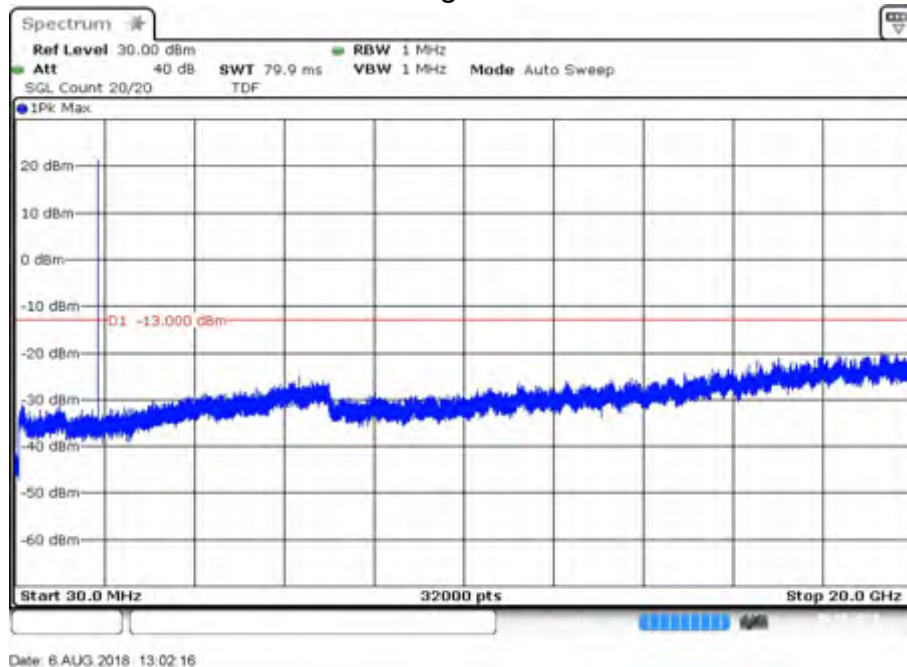


Fig.8

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
2	1909.3	19193	1.4	1	0	Fig.4	Fig.8

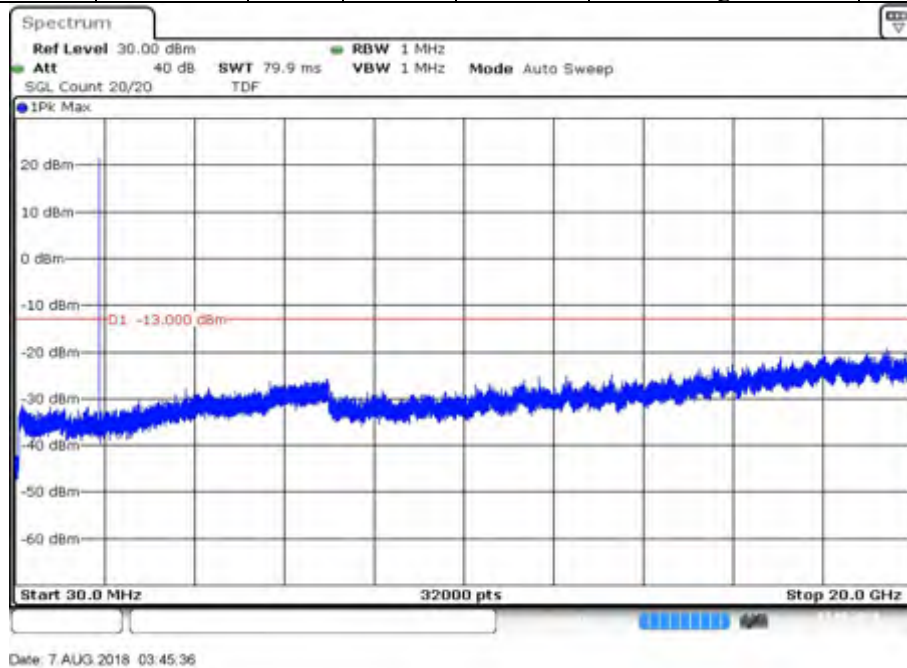


Fig.4

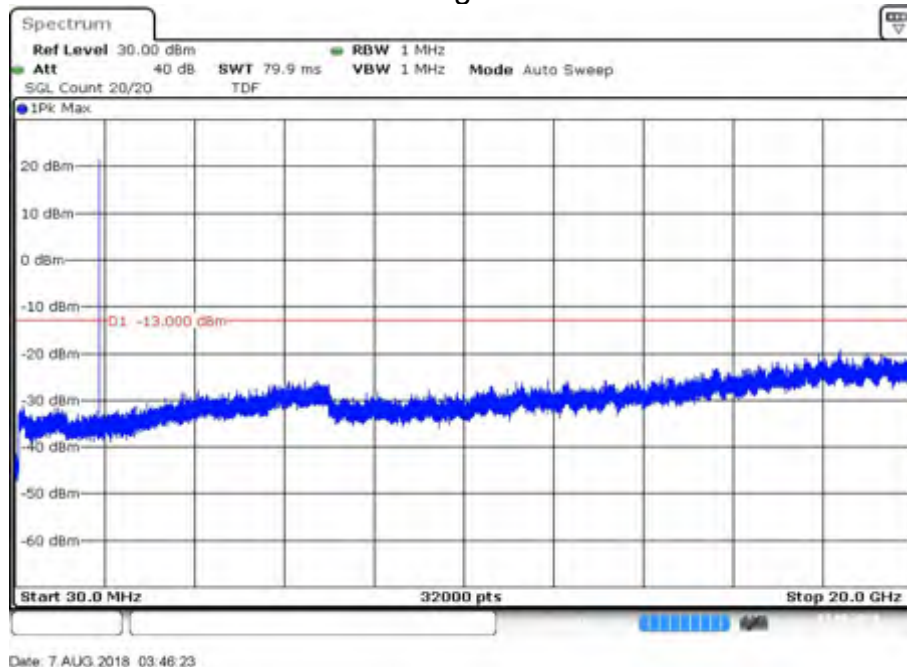


Fig.8

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
2	1851.5	18615	3	1	0	Fig.4	Fig.8

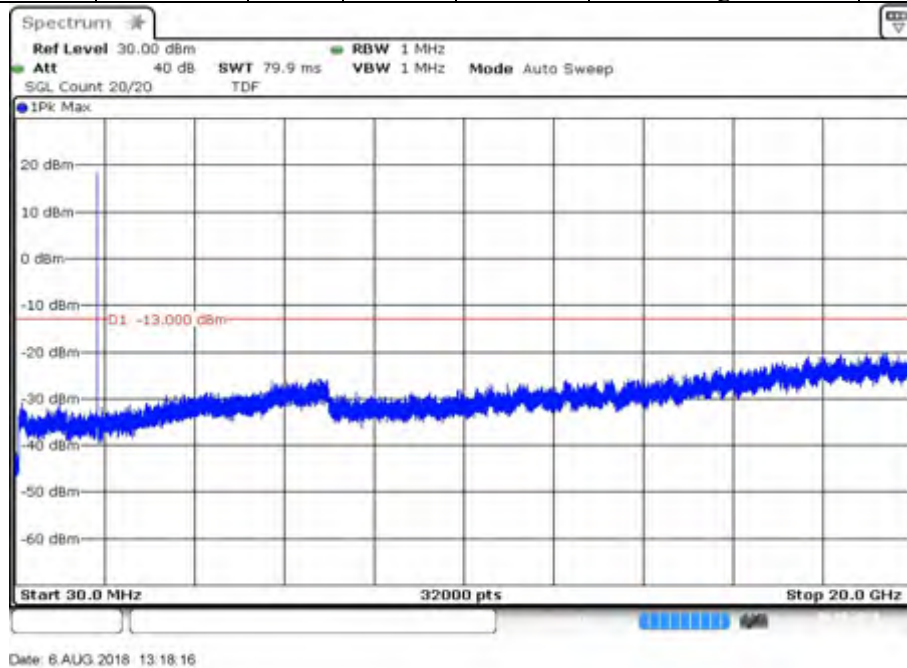


Fig.4

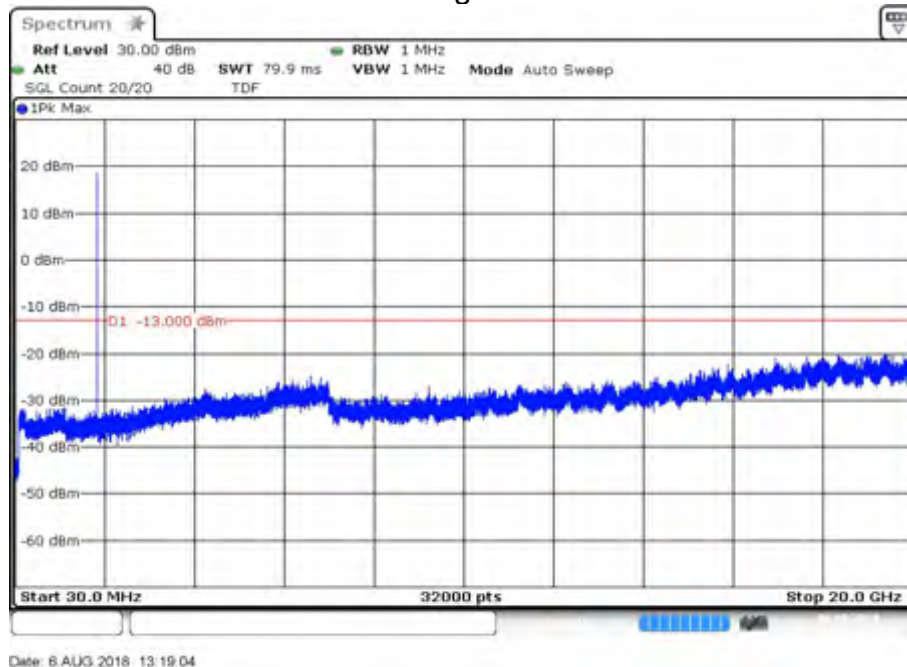


Fig.8

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot	
						QPSK	16-QAM
2	1880	18900	3	1	0	Fig.4	Fig.8

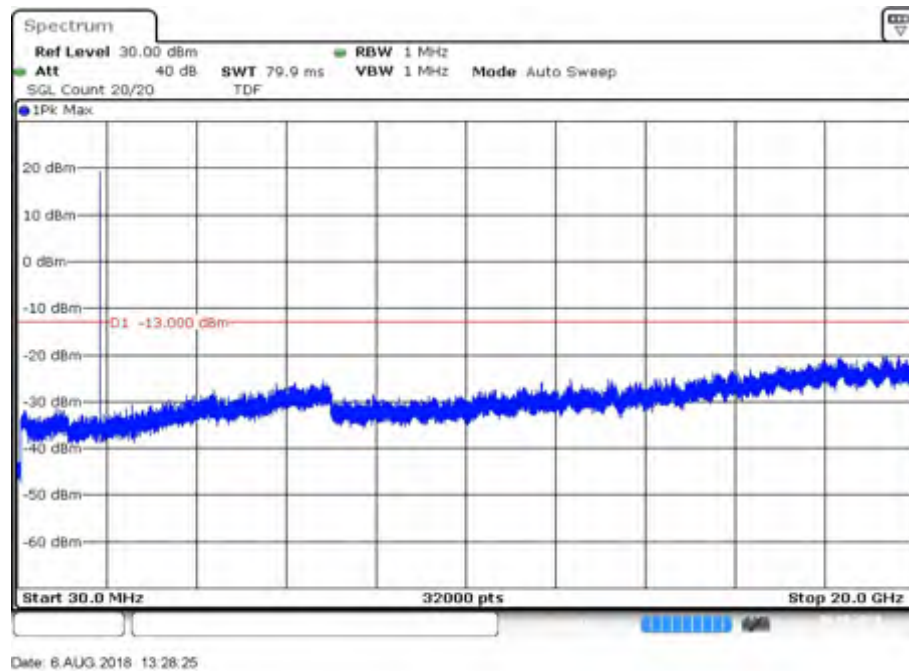


Fig.4

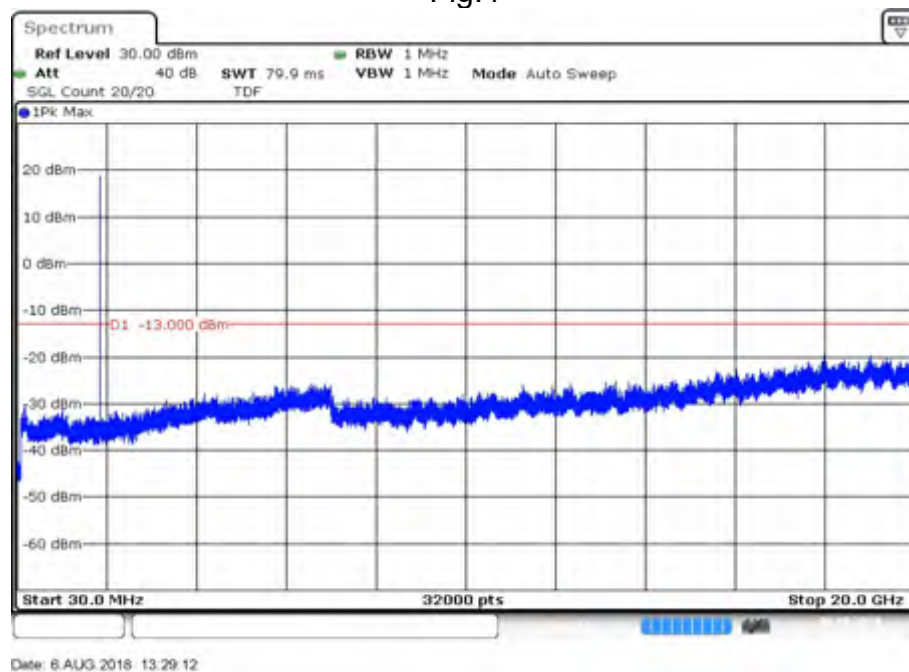


Fig.8