

## FCC Test Report

**Application Purpose** : Original grant

**Applicant Name:** : TECNO MOBILE LIMITED

**FCC ID** : 2ADYY-W5A

**Equipment Type** : Mobile phone

**Model Name** : W5

**Report Number** : FCC16104036A-5

**Standard(S)** : FCC Part 22H&24E&27 Rules

**Date Of Receipt** : October 09, 2016

**Date Of Issue** : October 27, 2016

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**Reviewed By** : 

(Sol Qin)

**Authorized by** : 

(Michal Ling)

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**Registration Number: 588523**

**REPORT REVISE RECORD**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	October 27, 2016	Valid	Original Report
V1.1	/	November 18, 2016	Valid	Original Report

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## 1 OCCUPIED BANDWIDTH & Emission Bandwidth

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

- (a) Radiotelegraph transmitters for manual operation when keyed at 16 dots per second.
- (b) Other keyed transmitters—when keyed at the maximum machine speed.
- (c) Radiotelephone transmitters equipped with a device to limit modulation or peak envelope power shall be modulated as follows. For single sideband and independent sideband transmitters, the input level of the modulating signal shall be 10 dB greater than that necessary to produce rated peak envelope power.
  - (1) Other than single sideband or independent sideband transmitters—when modulated by a 2500 Hz tone at an input level 16 dB greater than that necessary to produce 50 percent modulation. The input level shall be established at the frequency of maximum response of the audio modulating circuit.
  - (2) Single sideband transmitters in A3A or A3J emission modes—when modulated by two tones at frequencies of 400 Hz and 1800 Hz (for 3.0 kHz authorized bandwidth), or 500 Hz and 2100 Hz (for 3.5 kHz authorized bandwidth), or 500 Hz and 2400 Hz (for 4.0 kHz authorized bandwidth), applied simultaneously. The input levels of the tones shall be so adjusted that the two principal frequency components of the radio frequency signal produced are equal in magnitude.
  - (3) Single sideband transmitters in the A3H emission mode—when modulated by one tone at a frequency of 1500 Hz (for 3.0 kHz authorized bandwidth), or 1700 Hz (for 3.5 kHz authorized bandwidth), or 1900 Hz (for 4.0 kHz authorized bandwidth), the level of which is adjusted to produce a radio frequency signal component equal in magnitude to the magnitude of the carrier in this mode.
  - (4) As an alternative to paragraphs (c) (2) and (3) of this section, other tones besides those specified may be used as modulating frequencies, upon a sufficient showing of need. However, any tones so chosen must not be harmonically related, the third and fifth order intermodulation products which occur must fall within the -25 dB step of the emission bandwidth limitation curve, the seventh and ninth order products must fall within the -35 dB step of the referenced curve and the eleventh and all higher order products must fall beyond the -35 dB step of the referenced curve.
  - (5) Independent sideband transmitters having two channels—when modulated by 1700 Hz tones applied simultaneously to both channels. The input levels of the tones shall be so adjusted that the two principal frequency components of the radio frequency signal produced are equal in magnitude.
- (d) Radiotelephone transmitters without a device to limit modulation or peak envelope power shall be modulated as follows. For single sideband and independent sideband transmitters, the input level of the modulating signal should be that necessary to produce rated peak envelope power.

- (1) Other than single sideband or independent sideband transmitters—when modulated by a 2500 Hz tone of sufficient level to produce at least 85 percent modulation. If 85 percent modulation is unattainable, the highest percentage modulation shall be used.
- (2) Single sideband transmitters in A3A or A3J emission modes—when modulated by two tones at frequencies of 400 Hz and 1800 Hz (for 3.0 kHz authorized bandwidth), or 500 Hz and 2100 Hz (for 3.5 kHz authorized bandwidth), or 500 Hz and 2400 Hz (for 4.0 kHz authorized bandwidth), applied simultaneously. The input levels of the tones shall be so adjusted that the two principal frequency components of the radio frequency signal produced are equal in magnitude.
- (3) Single sideband transmitters in the A3H emission mode—when modulated by one tone at a frequency of 1500 Hz (for 3.0 kHz authorized bandwidth), or 1700 Hz (for 3.5 kHz authorized bandwidth), or 1900 Hz (for 4.0 kHz authorized bandwidth), the level of which is adjusted to produce a radio frequency signal component equal in magnitude to the magnitude of the carrier in this mode.
- (4) As an alternative to paragraphs (d) (2) and (3) of this section, other tones besides those specified may be used as modulating frequencies, upon a sufficient showing of need. However any tones so chosen must not be harmonically related, the third and fifth order intermodulation products which occur must fall within the -25 dB step of the emission bandwidth limitation curve, the seventh and ninth order products must fall within the -35 dB step of the referenced curve and the eleventh and all higher order products must fall beyond the -35 dB step of the referenced curve.
- (5) Independent sideband transmitters having two channels—when modulated by 1700 Hz tones applied simultaneously to both channels. The input levels of the tones shall be so adjusted that the two principal frequency components of the radio frequency signal produced are equal in magnitude.
- (e) Transmitters for use in the Radio Broadcast Services:
- (1) AM broadcast transmitters for monaural operation—when amplitude modulated 85% by a 7,500 Hz input signal.
- (2) AM broadcast stereophonic operation—when the transmitter operated under any stereophonic modulation condition not exceeding 100% on negative peaks and tested under the conditions specified in §73.128 in part 73 of the FCC rules for AM broadcast stations.
- (3) FM broadcast transmitter not used for multiplex operation—when modulated 85 percent by a 15 kHz input signal.
- (4) FM broadcast transmitters for multiplex operation under Subsidiary Communication Authorization (SCA)—when carrier is modulated 70 percent by a 15 kHz main channel input signal, and modulated an additional 15 percent simultaneously by a 67 kHz subcarrier (unmodulated).

(5) FM broadcast transmitter for stereophonic operation—when modulated by a 15 kHz input signal to the main channel, a 15 kHz input signal to the stereophonic subchannel, and the pilot subcarrier simultaneously. The input signals to the main channel and stereophonic subchannel each shall produce 38 percent modulation of the carrier. The pilot subcarrier should produce 9 percent modulation of the carrier.

(6) Television broadcast monaural transmitters—when modulated 85% by a 15 kHz input signal.

(7) Television broadcast stereophonic sound transmitters—when the transmitter is modulated with a 15 kHz input signal to the main channel and the stereophonic subchannel, any pilot subcarrier(s) and any unmodulated auxiliary subcarrier(s) which may be provided. The signals to the main channel and the stereophonic subchannel must be representative of the system being tested and when combined with any pilot subcarrier(s) or other auxiliary subcarriers shall result in 85% deviation of the maximum specified aural carrier deviation.

(f) Transmitters for which peak frequency deviation (D) is determined in accordance with §2.202(f), and in which the modulating baseband comprises more than 3 independent speech channels—when modulated by a test signal determined in accordance with the following:

(1) A modulation reference level is established for the characteristic baseband frequency. (Modulation reference level is defined as the average power level of a sinusoidal test signal delivered to the modulator input which provides the specified value of per-channel deviation.)

(2) Modulation reference level being established, the total rms deviation of the transmitter is measured when a test signal consisting of a band of random noise extending from below 20 kHz to the highest frequency in the baseband, is applied to the modulator input through any preemphasis networks used in normal service. The average power level of the test signal shall exceed the modulation reference level by the number of decibels determined using the appropriate formula in the following table:

<b>Number of message circuits that modulate the transmitter</b>	<b>Number of dB by which the average power (<math>P_{avg}</math>) level test signal shall exceed the modulation reference level</b>	<b>Limits of <math>P_{avg}</math> (dBm0)</b>
More than 3, but less than 12	To be specified by the equipment manufacturer subject to FCC approval	
At least 12, but less than 60	$X + 2 \log_{10} N_c$	X: -2 to + 2.6
At least 60, but less than 240	$X + 4 \log_{10} N_c$	X: -5.6 to -1.0
240 or more	$X + 10 \log_{10} N_c$	X: -19.6 to -15.0

Where X represents the average power in a message circuit in dBm0; Nc is the number of circuits in the multiplexed message load. Pavg shall be selected by the transmitter manufacturer and included with the technical data submitted with the application for type acceptance. (See §2.202(e) in this chapter.)

(g) Transmitters in which the modulating baseband comprises not more than three independent channels—when modulated by the full complement of signals for which the transmitter is rated. The level of modulation for each channel should be set to that prescribed in rule parts applicable to the services for which

the transmitter is intended. If specific modulation levels are not set forth in the rules, the tests should provide the manufacturer's maximum rated condition.

(h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user.

(i) Transmitters designed for other types of modulation—when modulated by an appropriate signal of sufficient amplitude to be representative of the type of service in which used. A description of the input signal should be supplied.

## 1.1 Measurement Result

### GSM850:

Frequency	OBW(99%)	26dB BW
824.2	246.79KHz	310.89KHz
836.6	246.79KHz	310.89KHz
848.8	245.19KHz	312.50KHz

### PCS1900:

Frequency	OBW(99%)	26dB BW
1850.2	246.79KHz	310.89KHz
1880	243.58KHz	309.29KHz
1909.8	243.58KHz	314.10KHz

### GPRS850:

Frequency	OBW(99%)	26dB BW
824.2	246.79KHz	314.10KHz
836.6	245.19KHz	315.70KHz
848.8	248.39KHz	309.29KHz

**GPRS 1900:**

Frequency	OBW(99%)	26dB BW
1850.2	250.00KHz	312.50KHz
1880	245.19KHz	315.70KHz
1909.8	245.19KHz	320.51KHz

**EGPRS 850:**

Frequency	OBW(99%)	26dB BW
824.2	253.20KHz	302.88KHz
836.6	248.39KHz	307.69KHz
848.8	246.79KHz	307.69KHz

**EGPRS 1900:**

Frequency	OBW(99%)	26dB BW
1850.2	248.39KHz	306.08KHz
1880	240.38KHz	285.25KHz
1909.8	243.58KHz	294.87KHz

**UTRA BANDS****BAND 2:**

Frequency	OBW(99%)	26dB BW
1852.4	4.230MHz	4.903MHz
1880	4.214MHz	4.887MHz
1907.6	4.230MHz	4.871MHz

**BAND 4:**

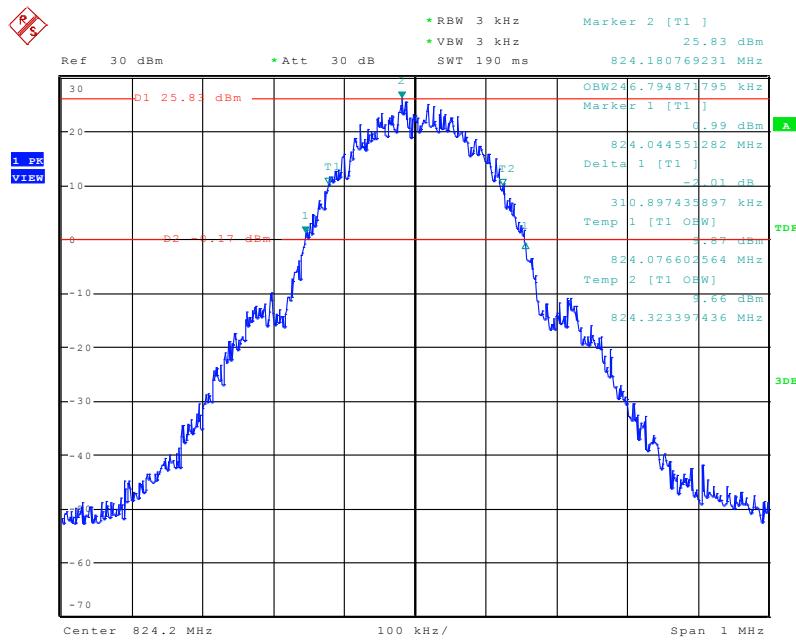
Frequency	OBW(99%)	26dB BW
1712.4	4.214MHz	4.887MHz
1732.6	4.230MHz	4.903MHz
1752.6	4.246MHz	4.919MHz

**BAND 5:**

Frequency	OBW(99%)	26dB BW
826.4	4.214MHz	4.903MHz
836.4	4.214MHz	4.839MHz
846.6	4.230MHz	4.855MHz

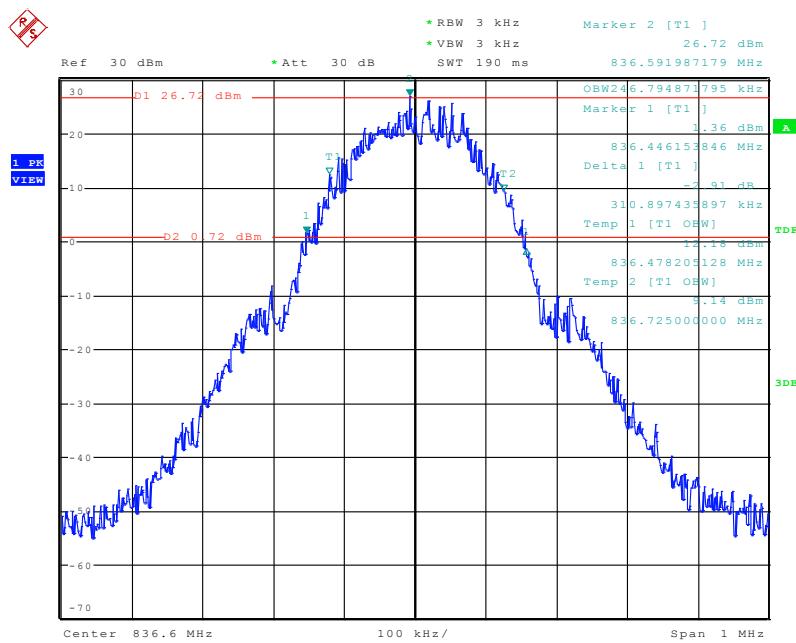
## 1.2 Test Plot(s)

Occupied Bandwidth (99% and -26dBc) GSM 850 BAND CH 128



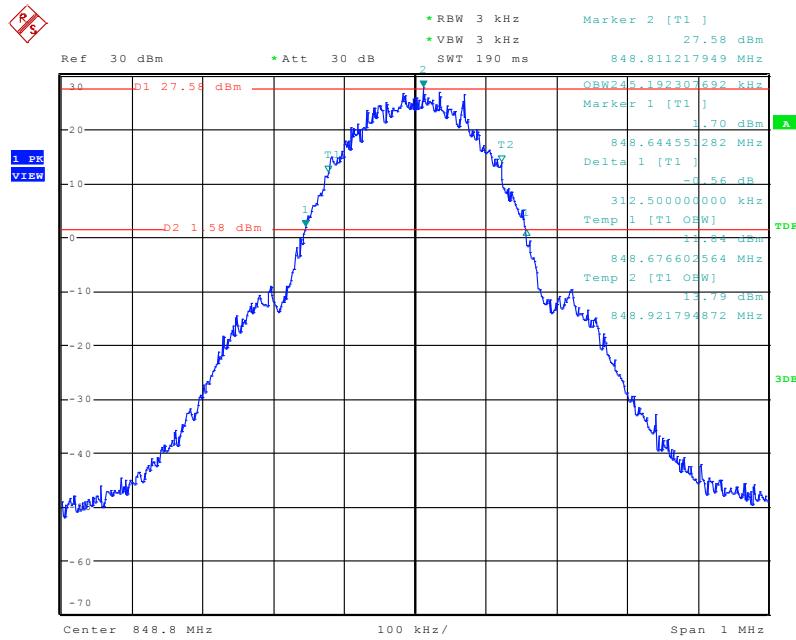
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### Occupied Bandwidth (99% and -26dBc) GSM 850 BAND CH 190



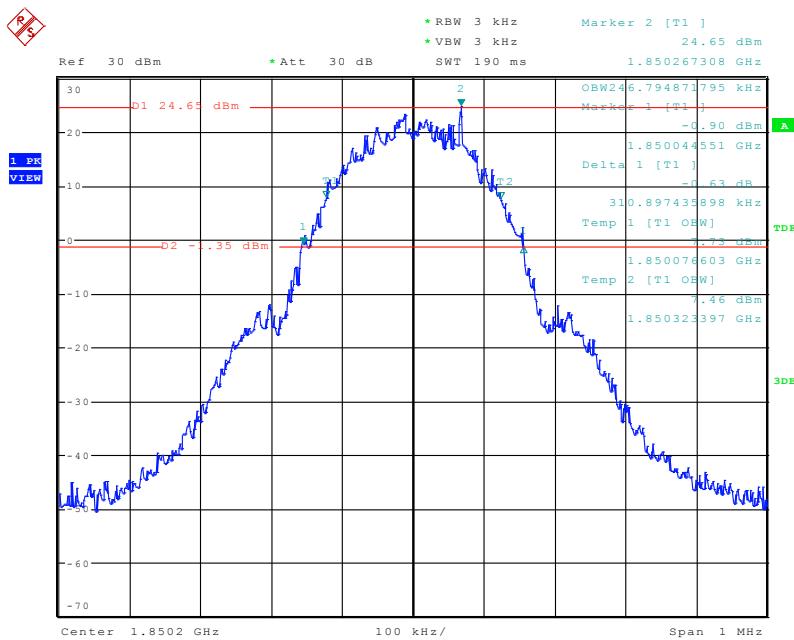
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### Occupied Bandwidth (99% and -26dBc) GSM 850 BAND CH 251



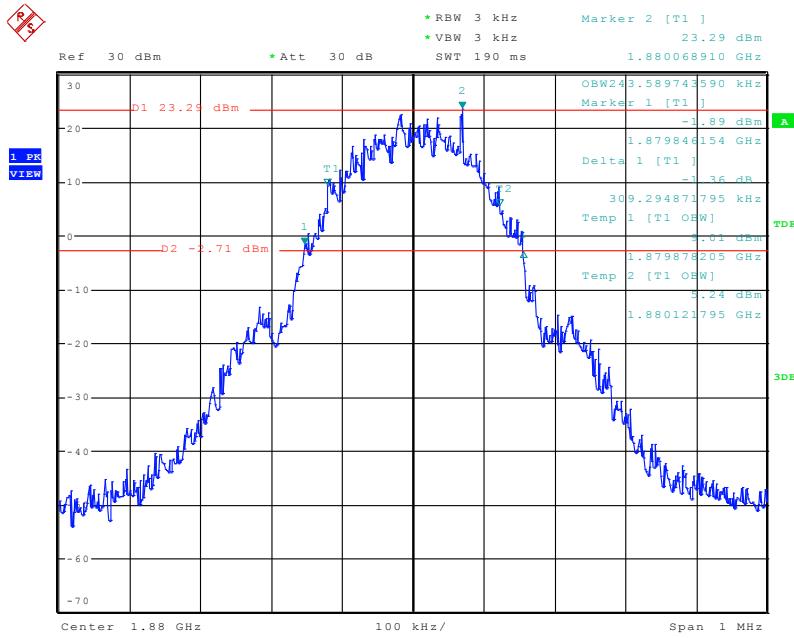
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## Occupied Bandwidth (99% and -26dBc) GSM 1900 BAND CH 512



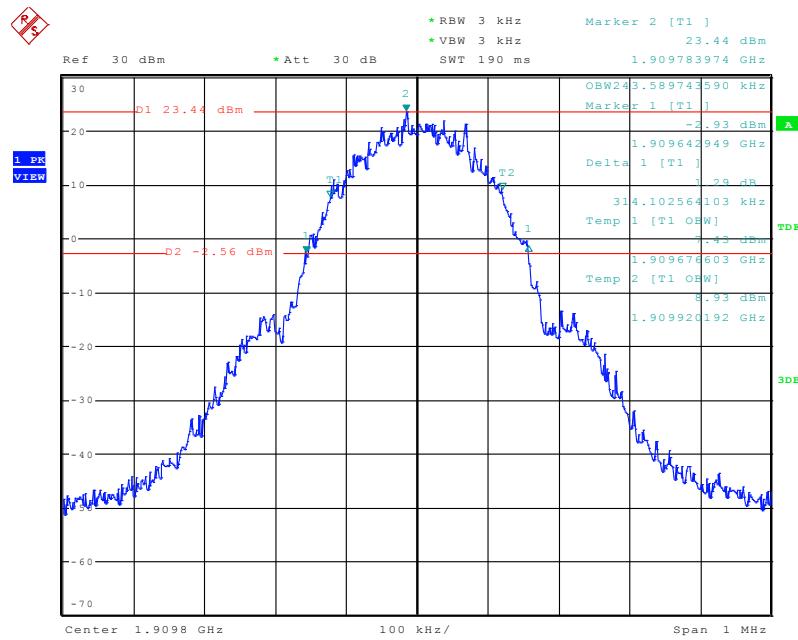
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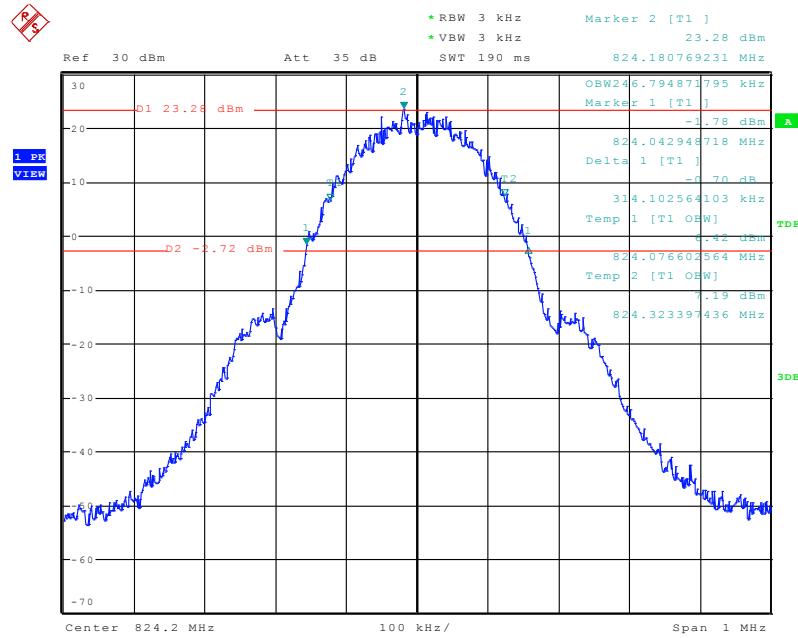
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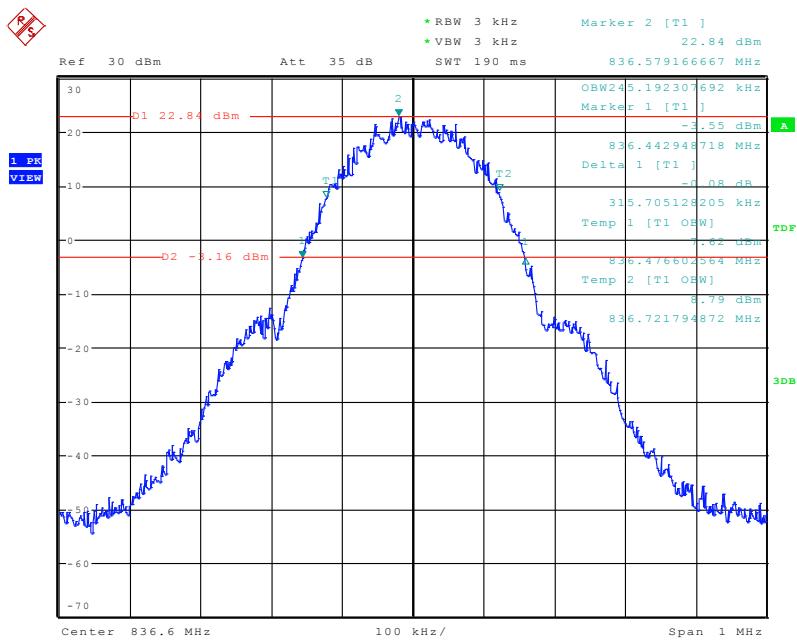
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## Occupied Bandwidth (99% and -26dBc) GPRS 850 BAND CH 128



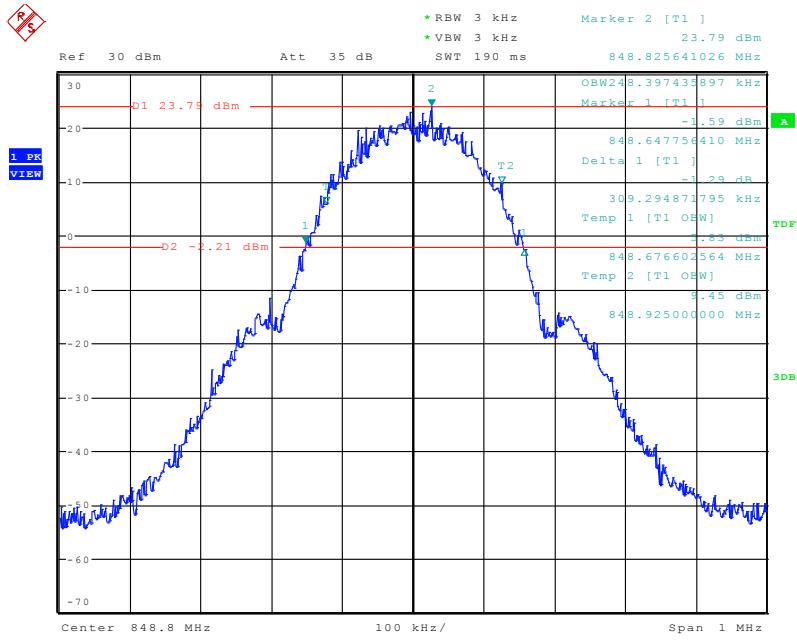
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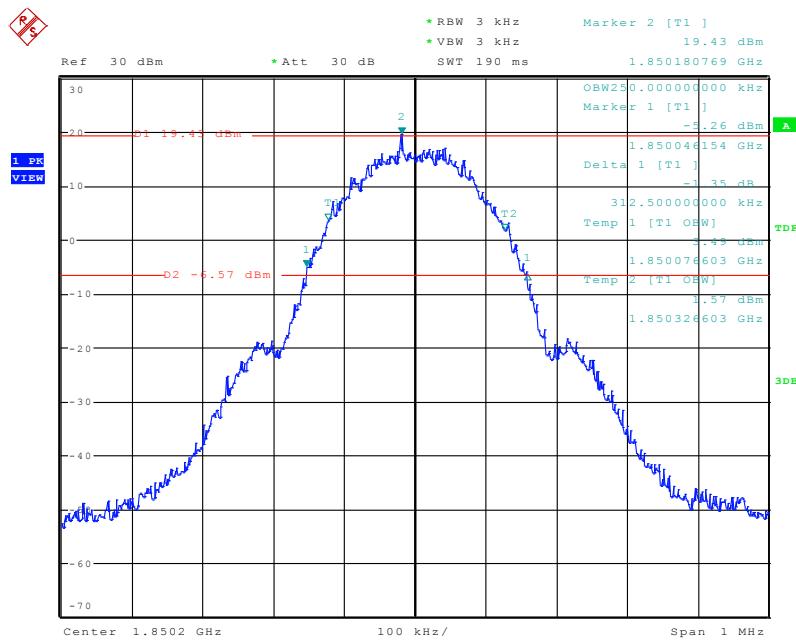
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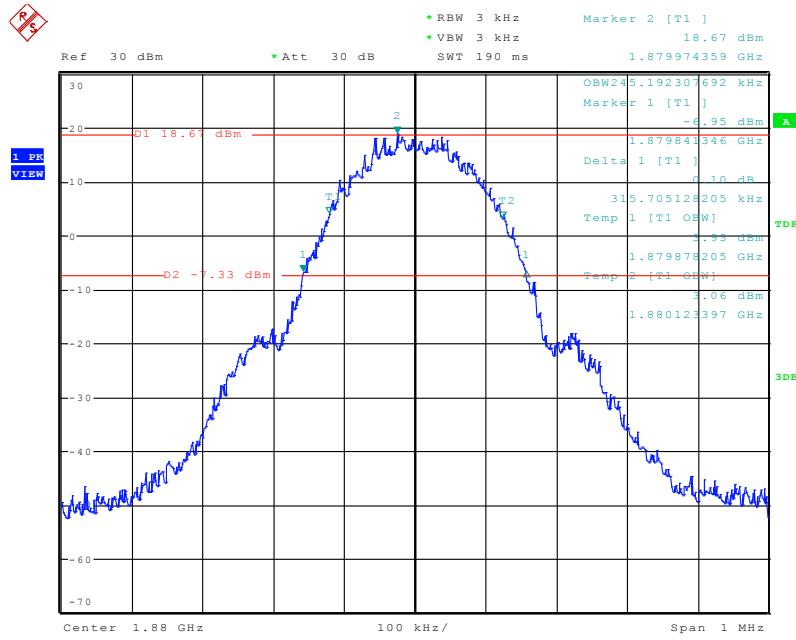
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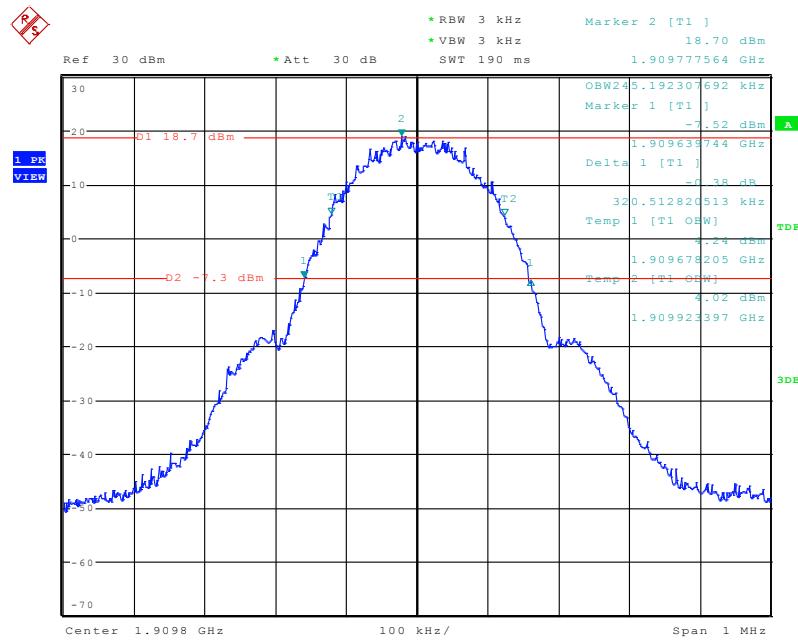
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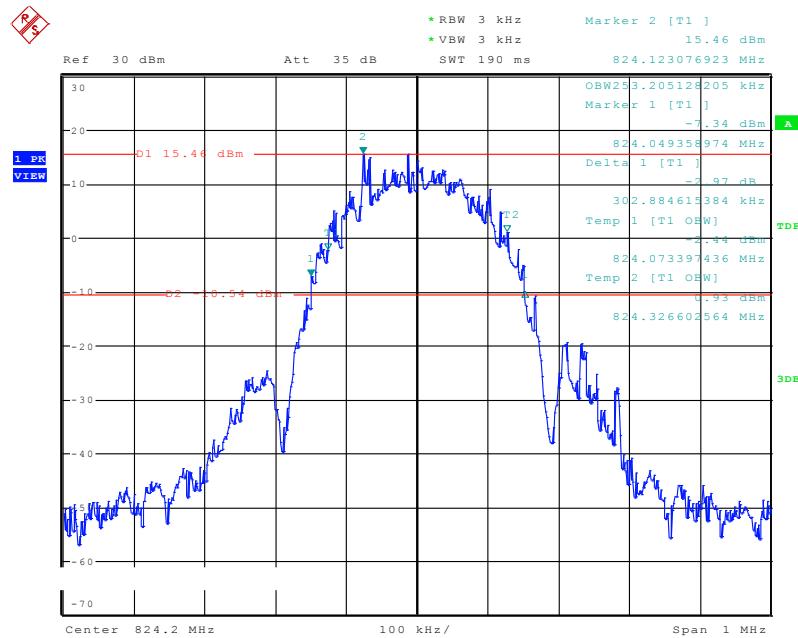
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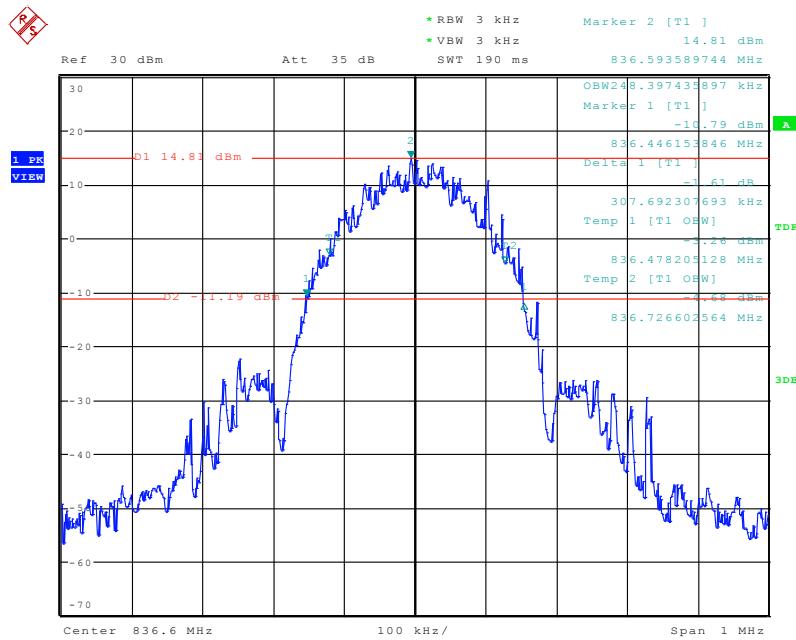
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## Occupied Bandwidth (99% and -26dBc) EGPRS 850 BAND CH 128



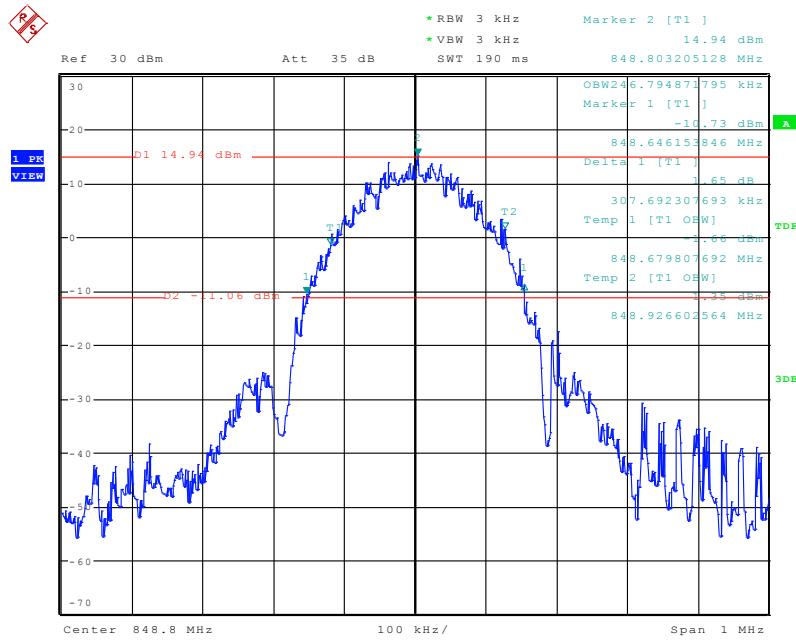
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### Occupied Bandwidth (99% and -26dBc) EGPRS 850 BAND CH 190



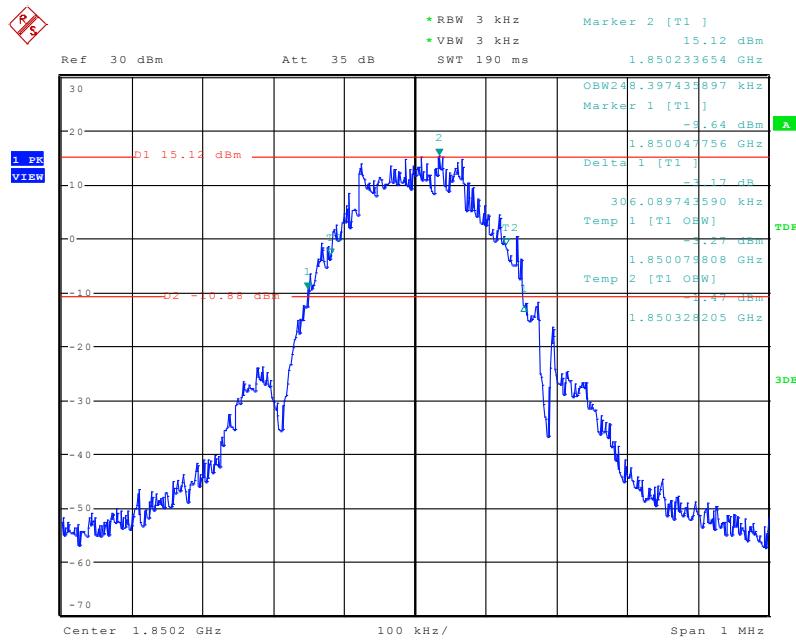
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### Occupied Bandwidth (99% and -26dBc) EGPRS 850 BAND CH 251



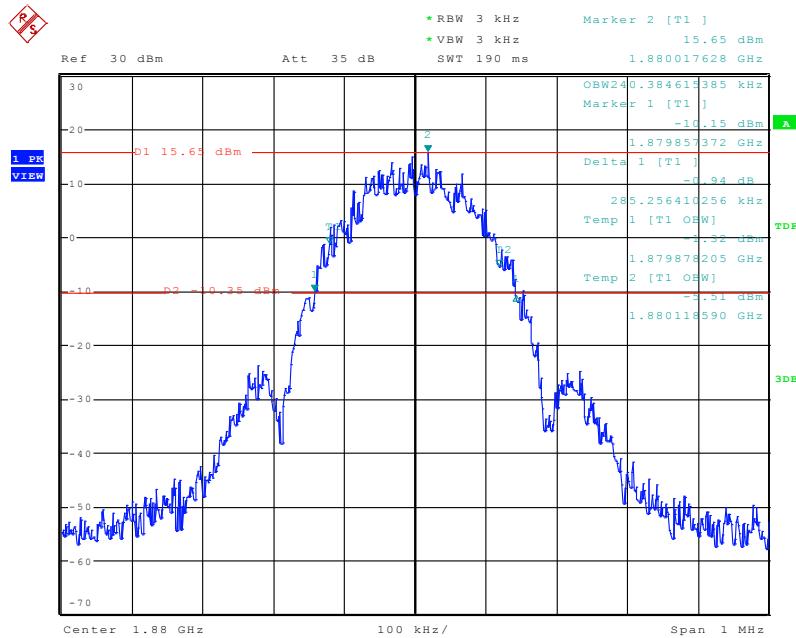
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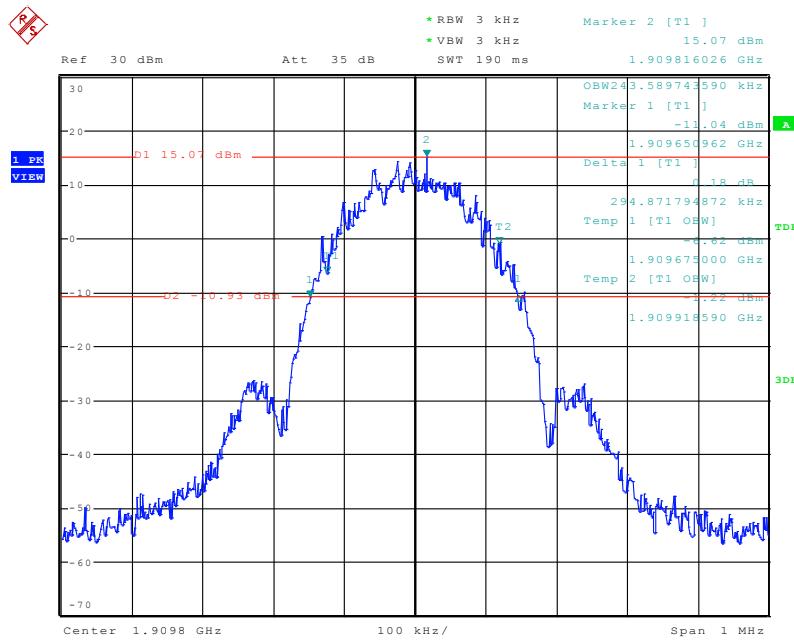
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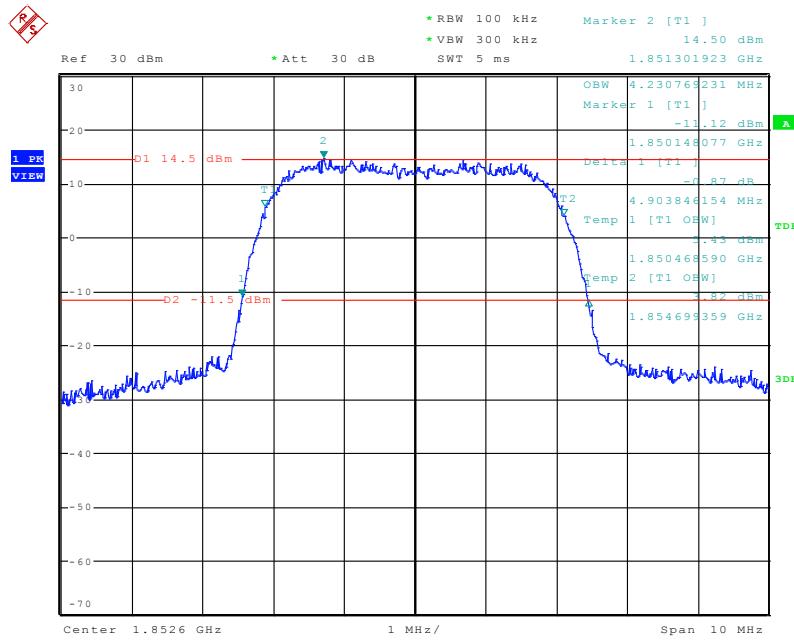
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### Occupied Bandwidth (99% and -26dBc) EGPRS 1900 BAND CH 810



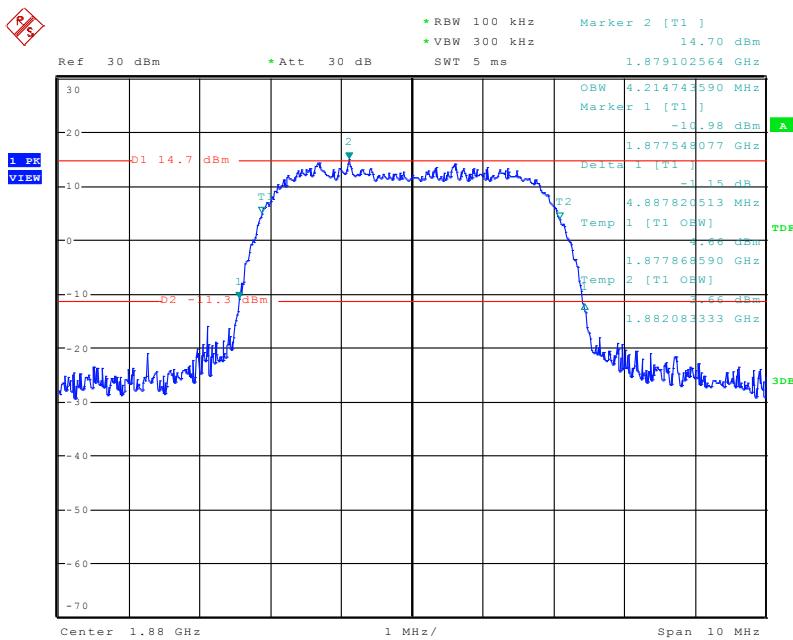
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### UTRA BANDS Occupied Bandwidth (99% and -26dBc) WCDMA BAND II CH 9262



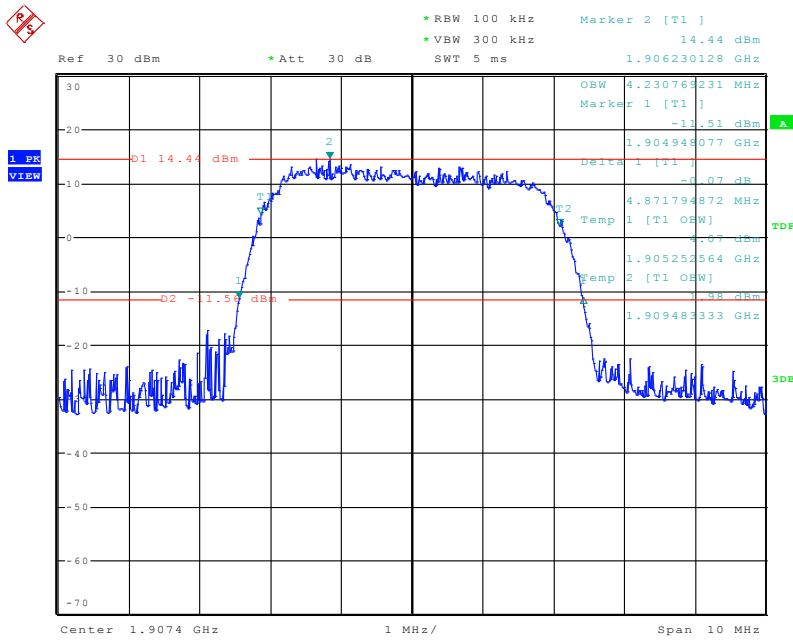
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## Occupied Bandwidth (99%and-26dBc) WCDMA BAND II CH 9400



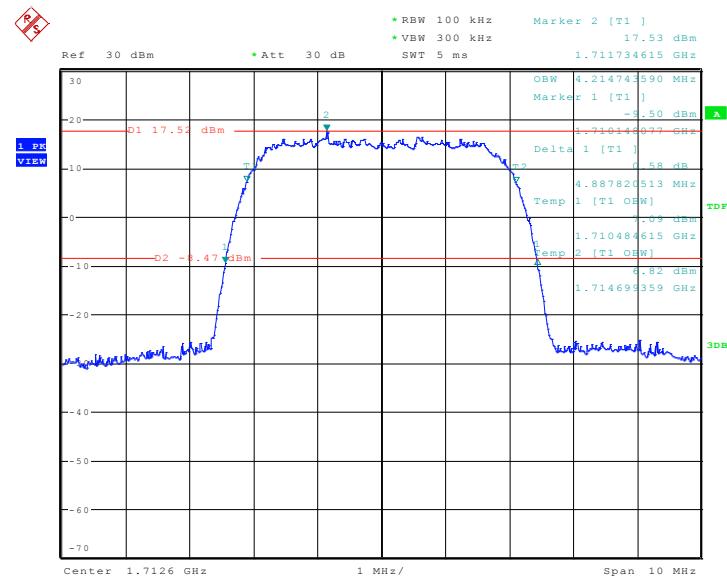
Date: 21.OCT.2016 10:36:25

## Occupied Bandwidth (99%and-26dBc) WCDMA BAND II CH 9538



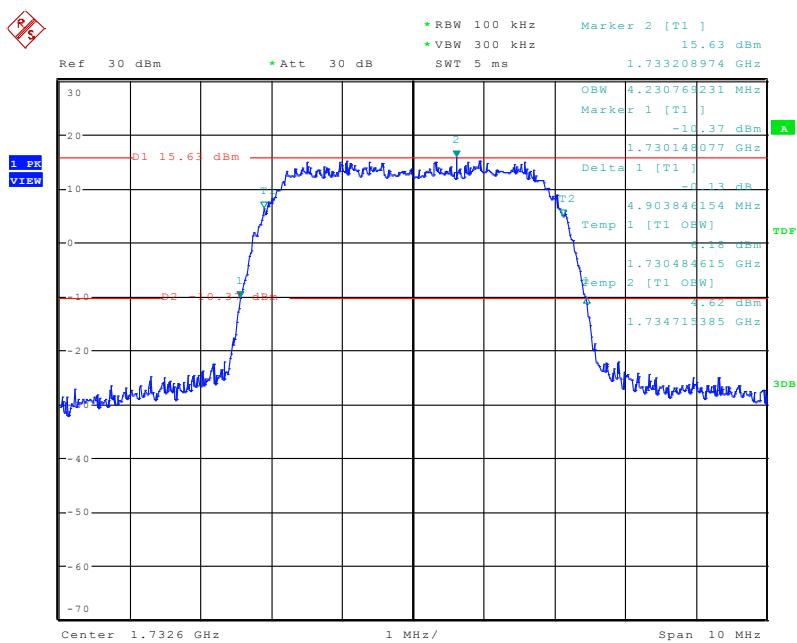
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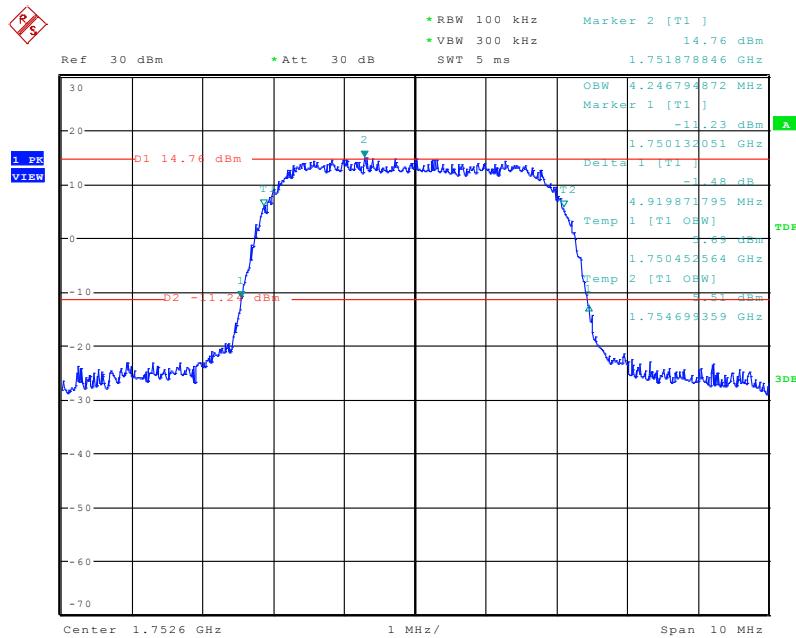
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## Occupied Bandwidth (99% and -26dBc) WCDMA BAND IV CH 1413



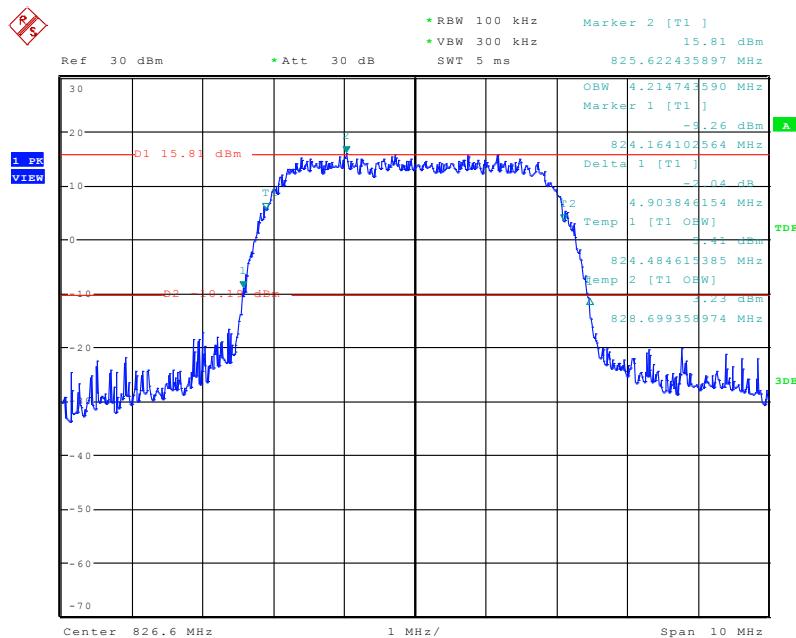
Date: 27.OCT.2016 11:24:02

## Occupied Bandwidth (99% and -26dBc) WCDMA BAND IV CH 1513



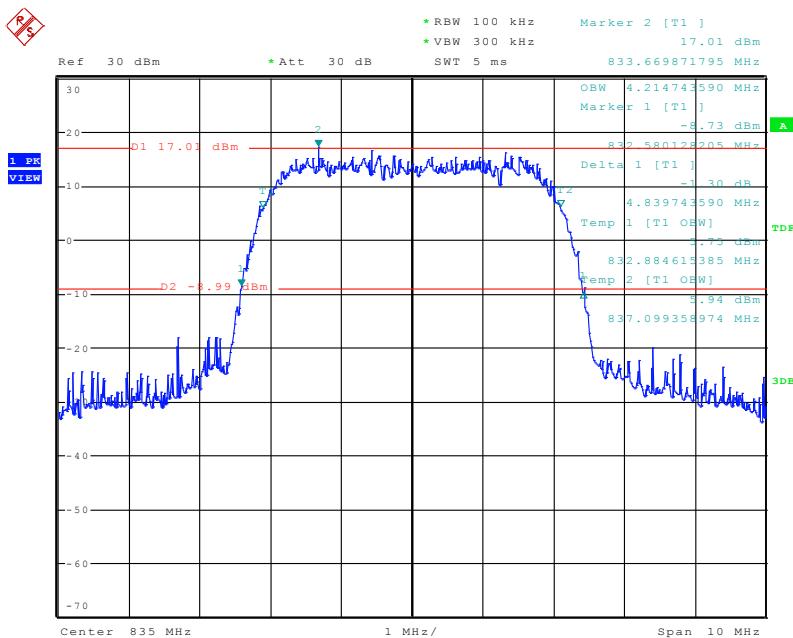
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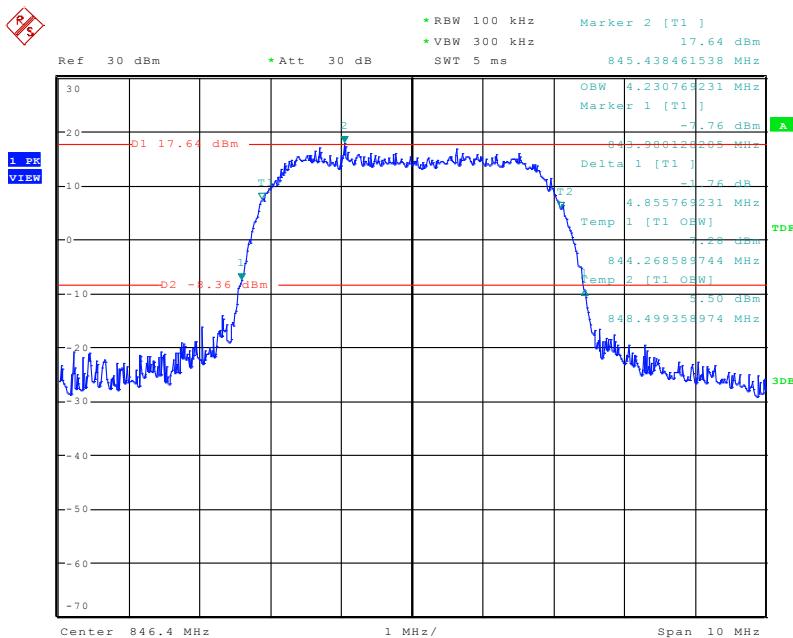
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## Occupied Bandwidth (99%and-26dBc) WCDMA BAND V CH 4182



Date: 21.OCT.2016 10:42:24

## Occupied Bandwidth (99%and-26dBc) WCDMA BAND V CH 4233

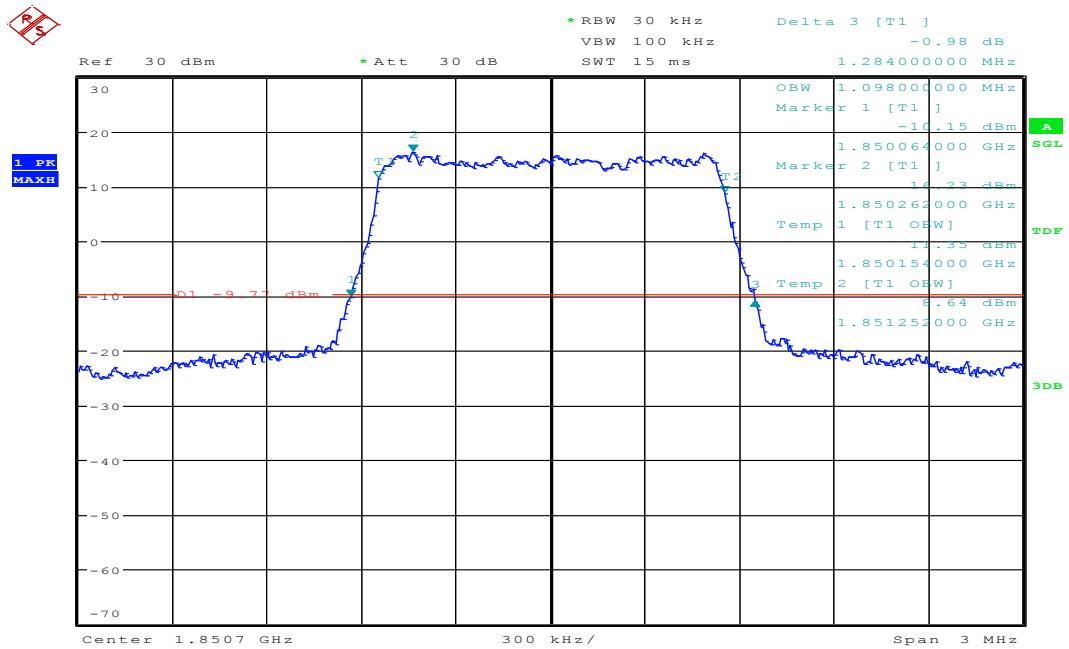


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## E-UTRA BANDS

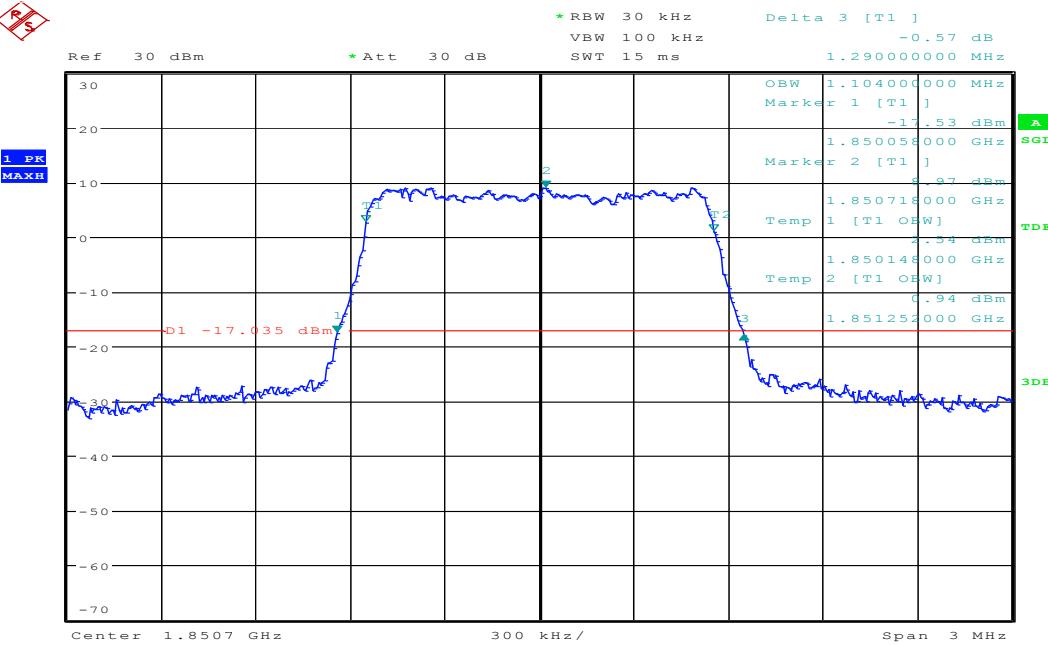
## BAND 2@Bandwidth

*BW1.4MHz-1850.7MHz,Q16-6RB\_LOW@OBW\_1.098MHz@26dB\_1.284MHz*



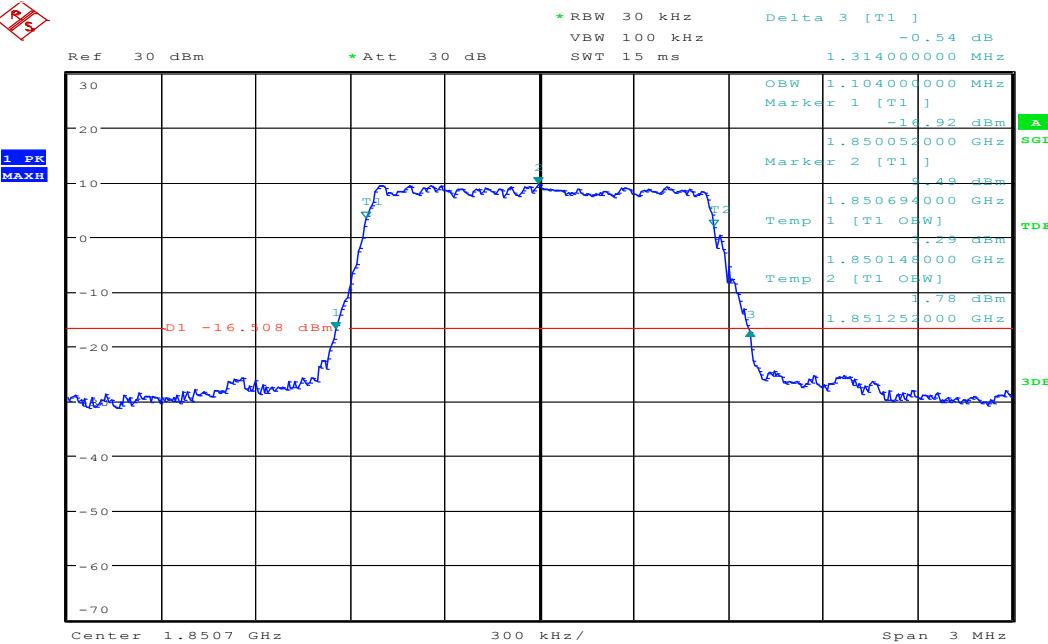
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## BW1.4MHz-1850.7MHz,Q16-6RB\_LOW@OBW\_1.104MHz@26dB\_1.29MHz

~~FS~~

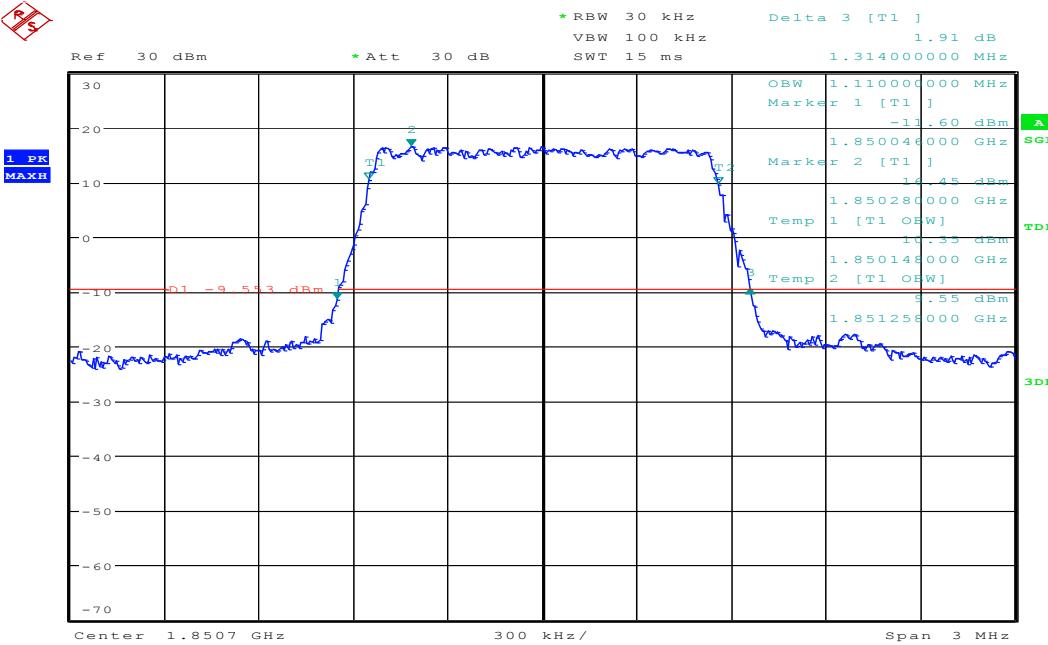
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## BW1.4MHz-1850.7MHz,QPSK-6RB\_LOW@OBW\_1.104MHz@26dB\_1.314MHz

~~FS~~

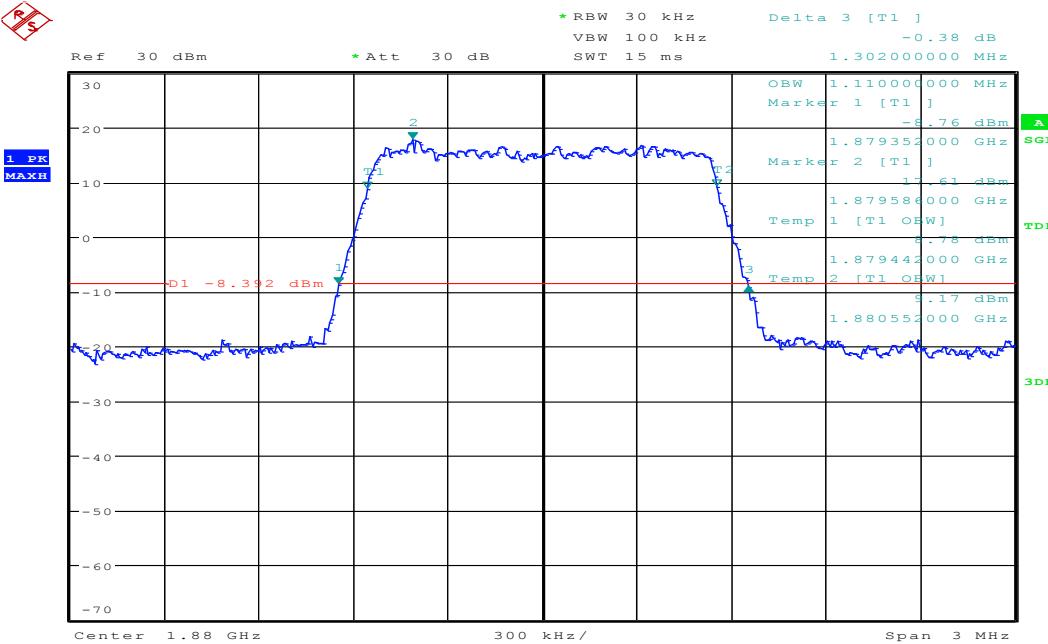
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~~FS~~

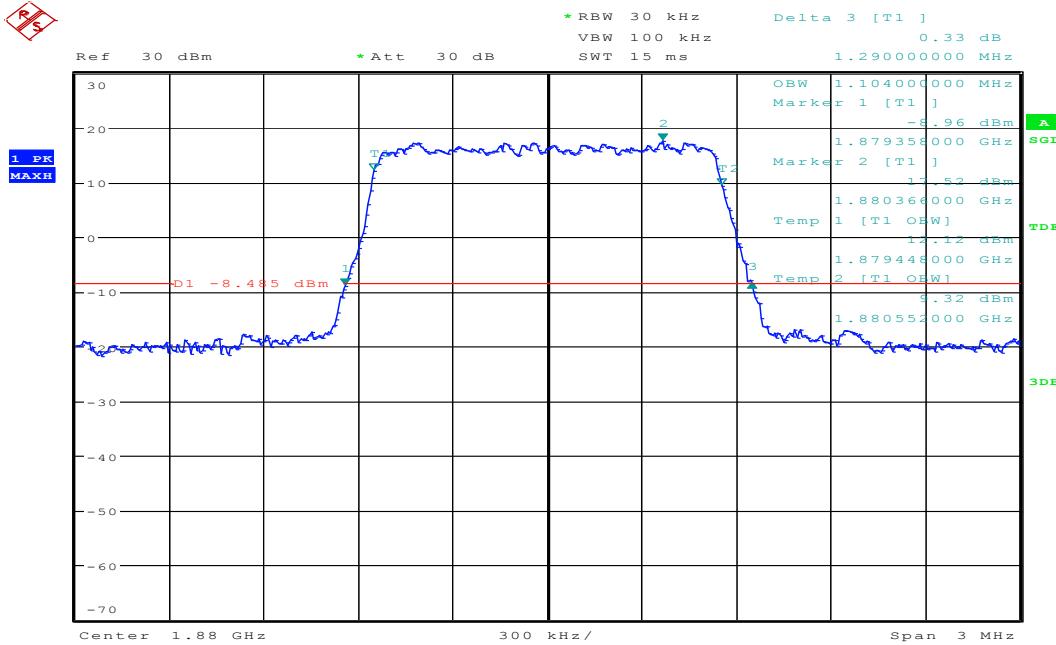
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## BW1.4MHz-1880MHz,Q16-6RB\_LOW@OBW\_1.11MHz@26dB\_1.302MHz

~~FS~~

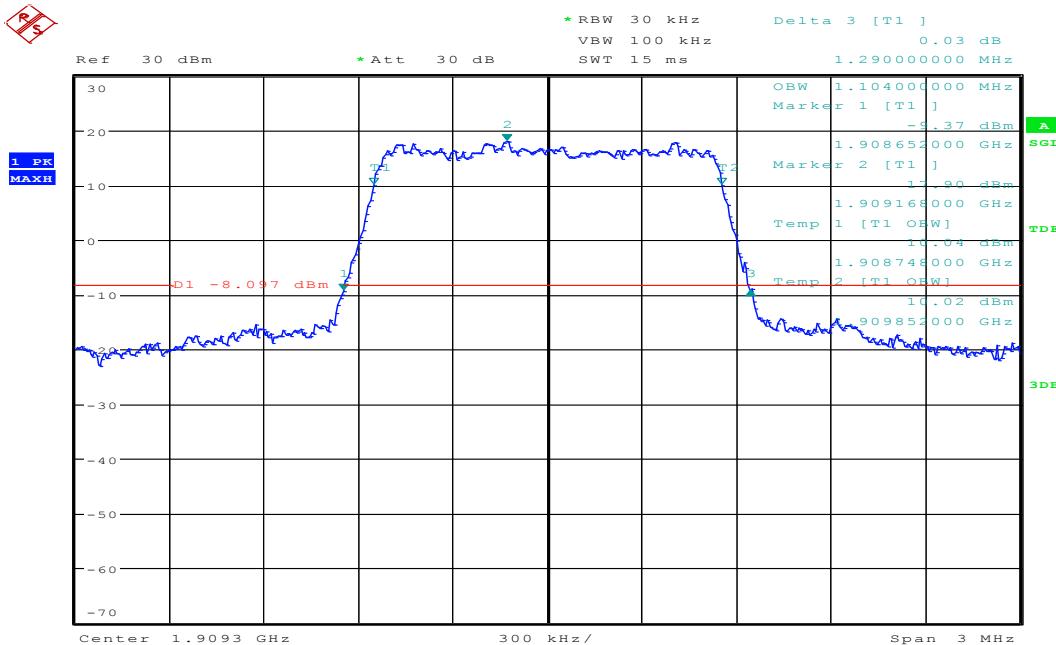
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~~FS~~

Date: 22.OCT.2016 12:25:49

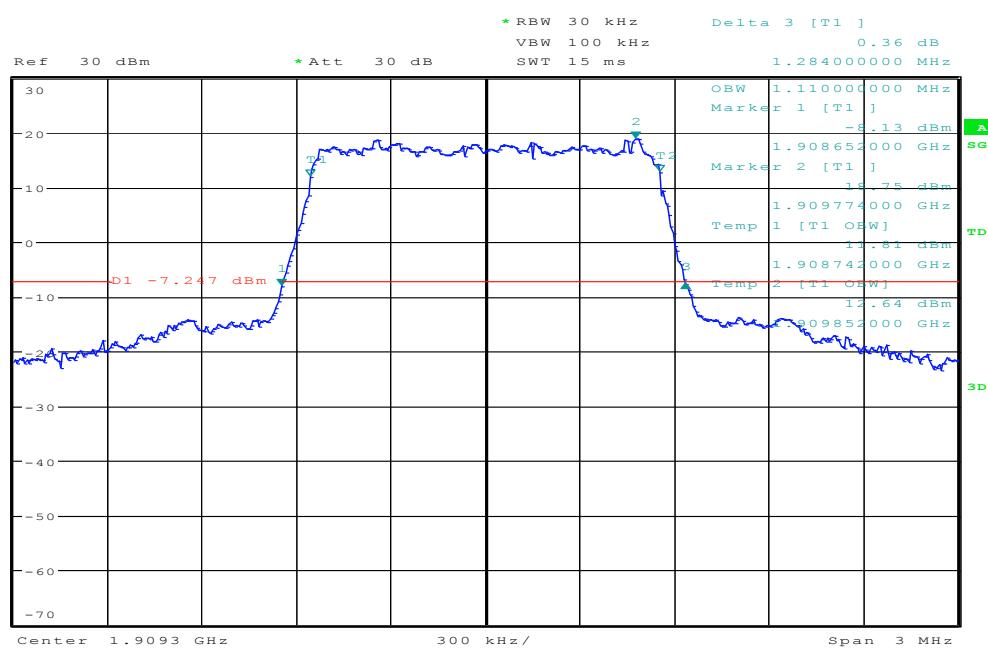
## BW1.4MHz-1909.3MHz,Q16-6RB\_LOW@OBW\_1.104MHz@26dB\_1.29MHz

~~FS~~

Date: 22.OCT.2016 12:25:19

## BW1.4MHz-1909.3MHz, QPSK-6RB\_LOW@OBW\_1.11MHz@26dB\_1.284MHz

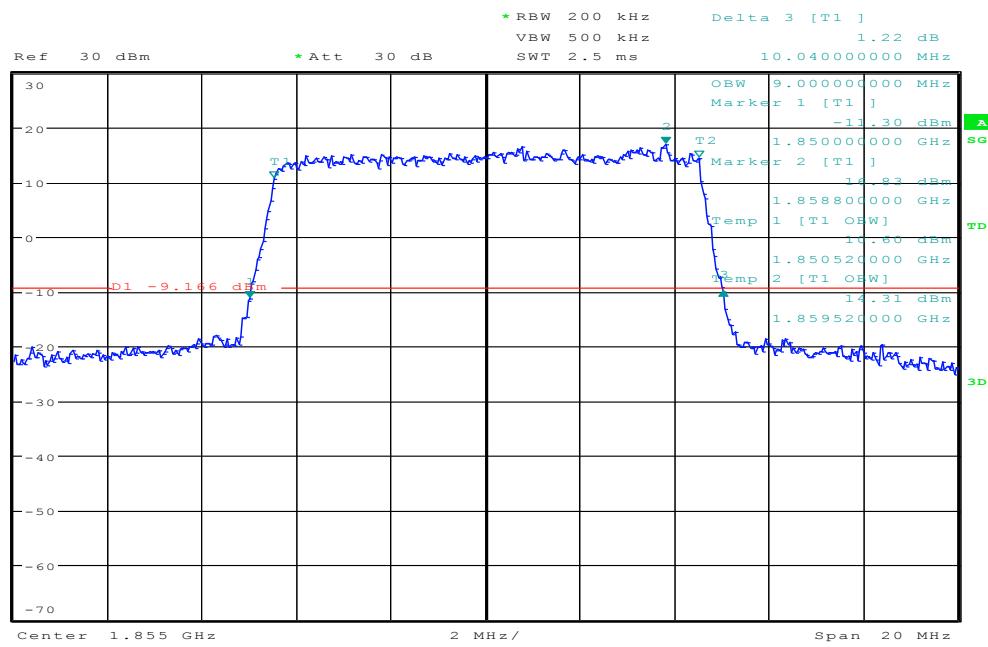
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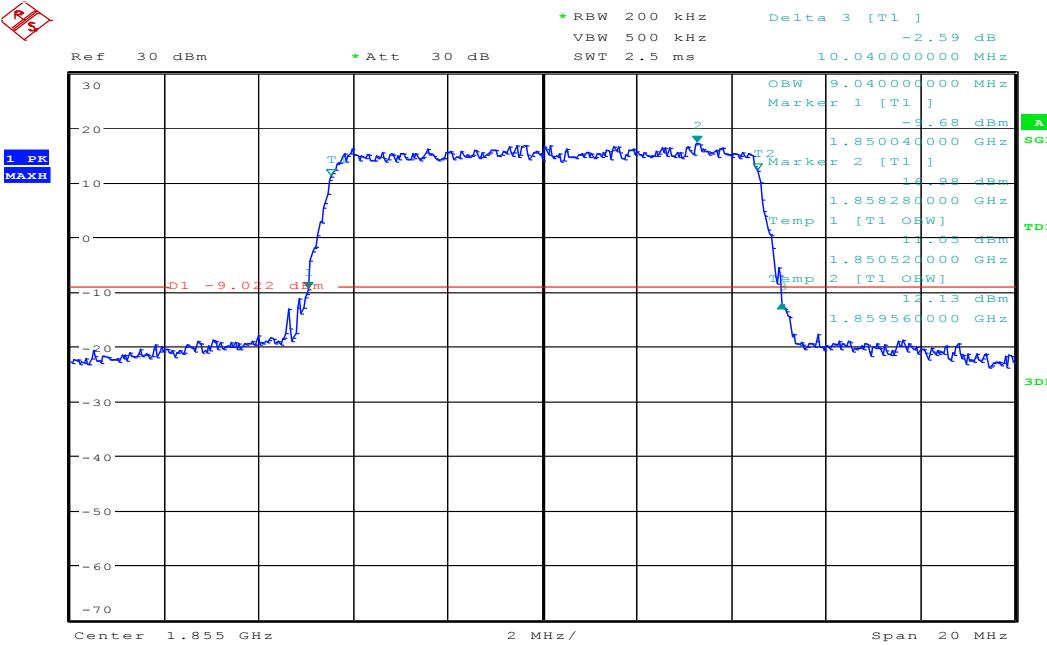
## BW10MHz-1855MHz, Q16-50RB\_LOW@OBW\_9.MHz@26dB\_10.04MHz

REF



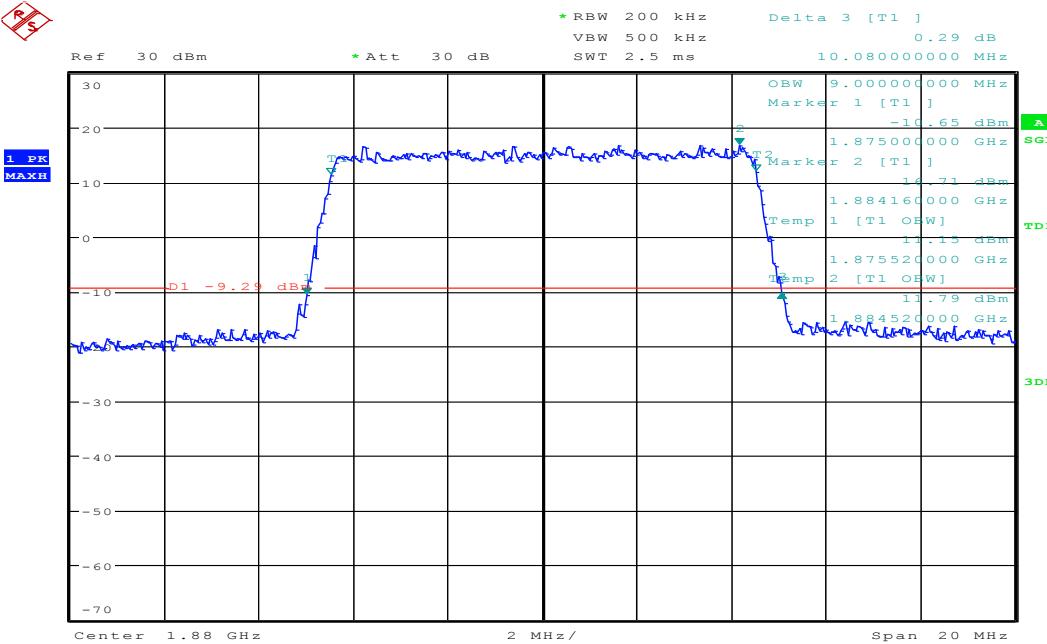
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## BW10MHz-1855MHz,QPSK-50RB\_LOW@OBW\_9.04MHz@26dB\_10.04MHz

~~FS~~

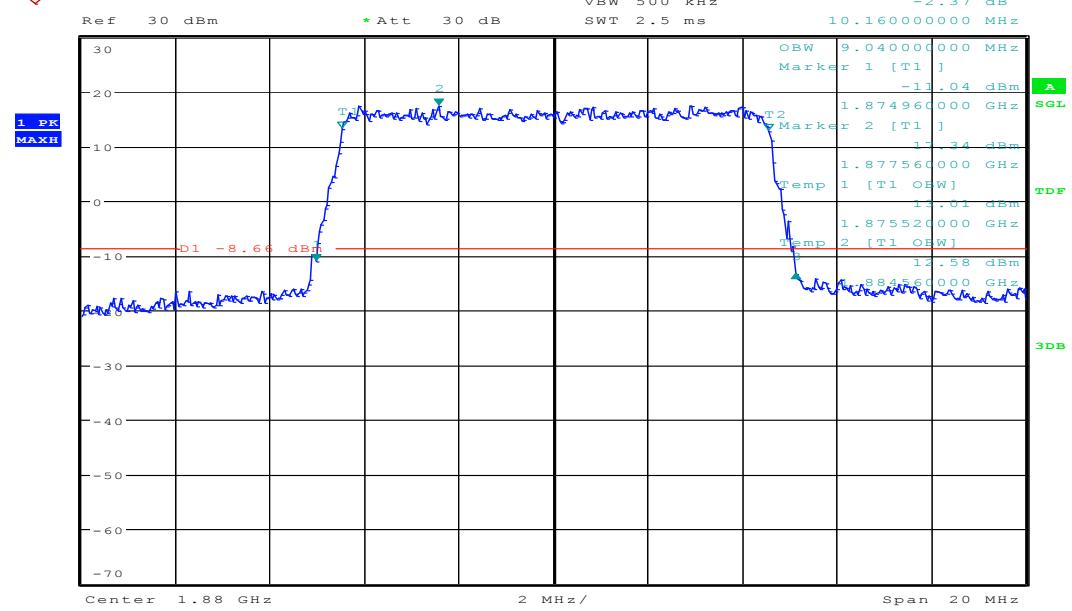
Date: 22.OCT.2016 12:31:51

## BW10MHz-1880MHz,Q16-50RB\_LOW@OBW\_9.MHz@26dB\_10.08MHz

~~FS~~

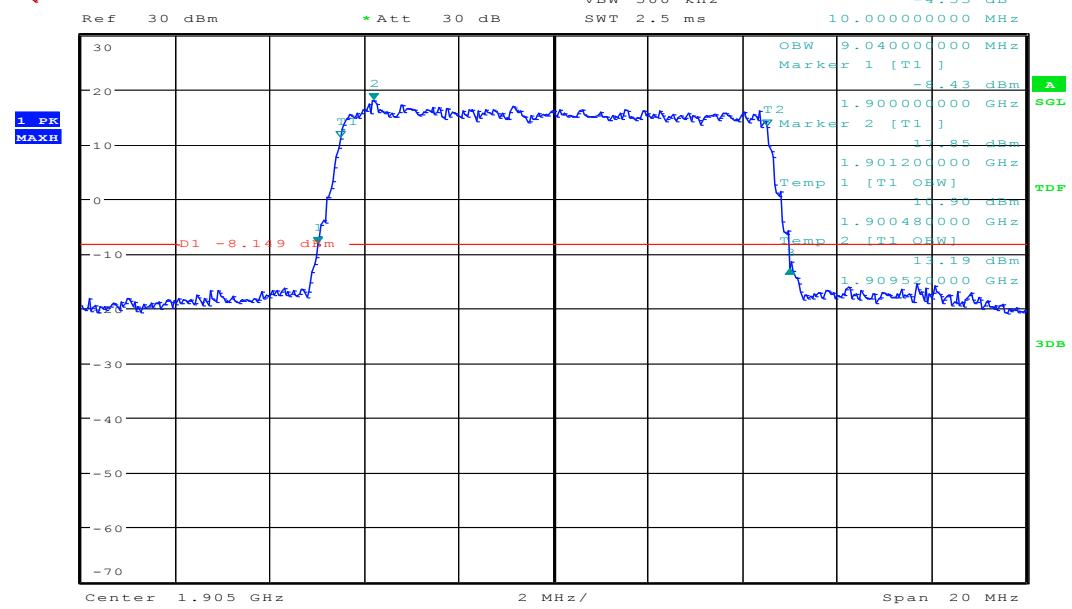
Date: 22.OCT.2016 12:33:13

## BW10MHz-1880MHz,QPSK-50RB\_LOW@OBW\_9.04MHz@26dB\_10.16MHz

~~FS~~

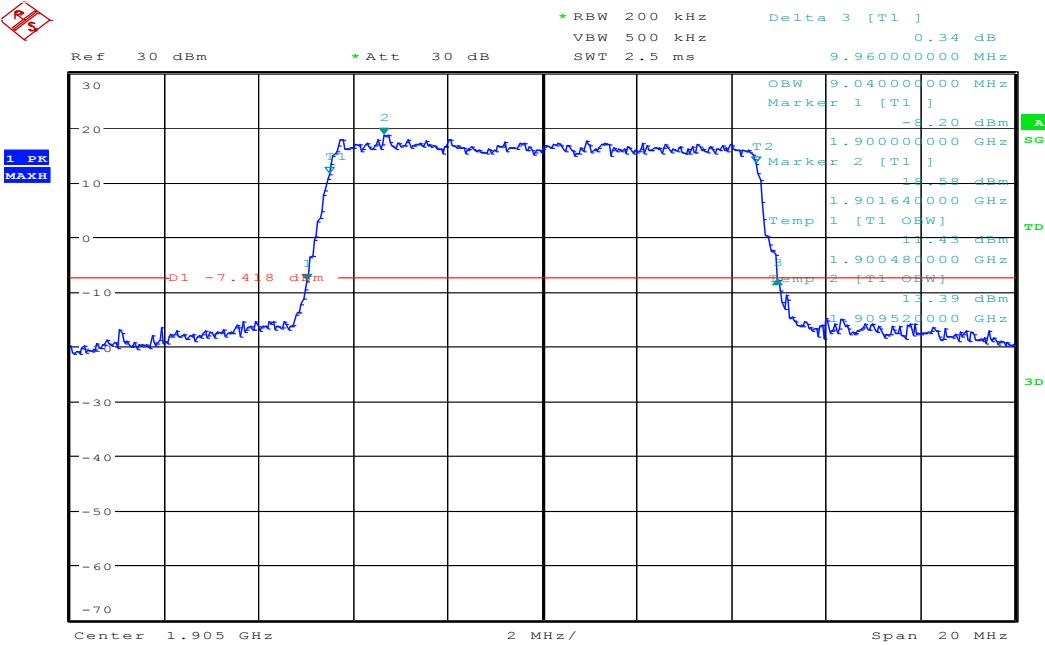
Date: 22.OCT.2016 12:32:57

## BW10MHz-1905MHz,Q16-50RB\_LOW@OBW\_9.04MHz@26dB\_10.MHz

~~FS~~

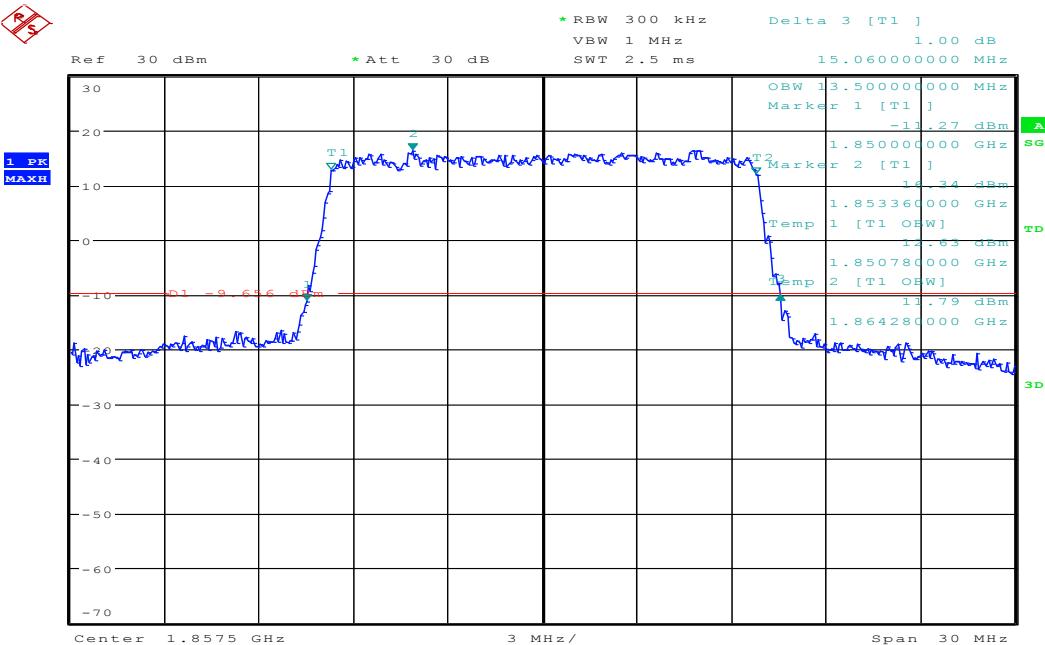
Date: 22.OCT.2016 12:32:40

## BW10MHz-1905MHz,QPSK-50RB\_LOW@OBW\_9.04MHz@26dB\_9.96MHz

~~FS~~

Date: 22.OCT.2016 12:32:24

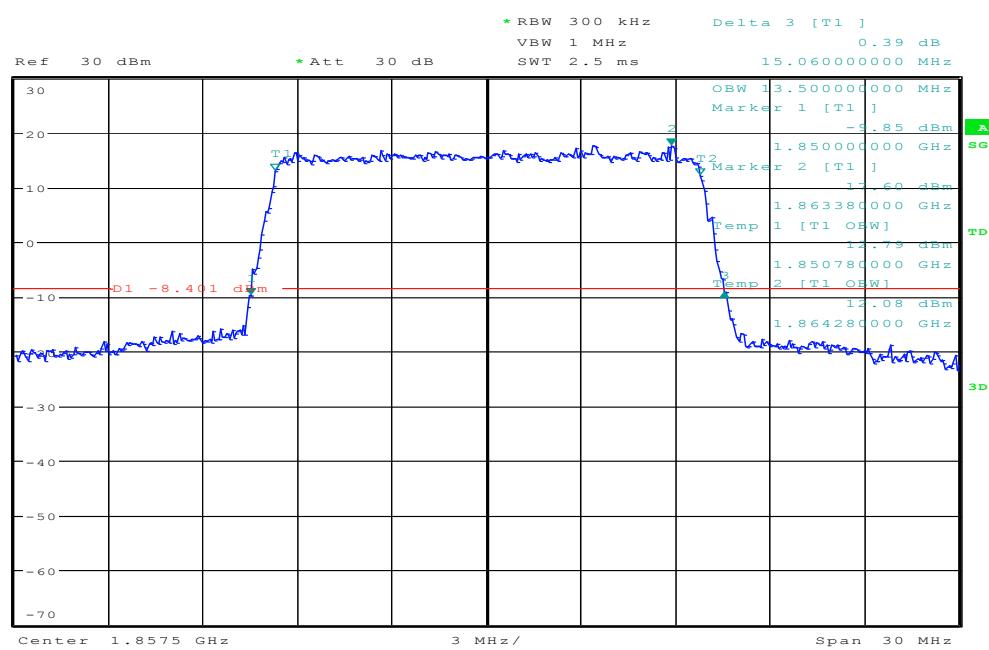
## BW15MHz-1857.5MHz,Q16-75RB\_LOW@OBW\_13.5MHz@26dB\_15.06MHz

~~FS~~

Date: 22.OCT.2016 12:33:52

**BW15MHz-1857.5MHz,QPSK-75RB\_LOW@OBW\_13.5MHz@26dB\_15.06MHz**

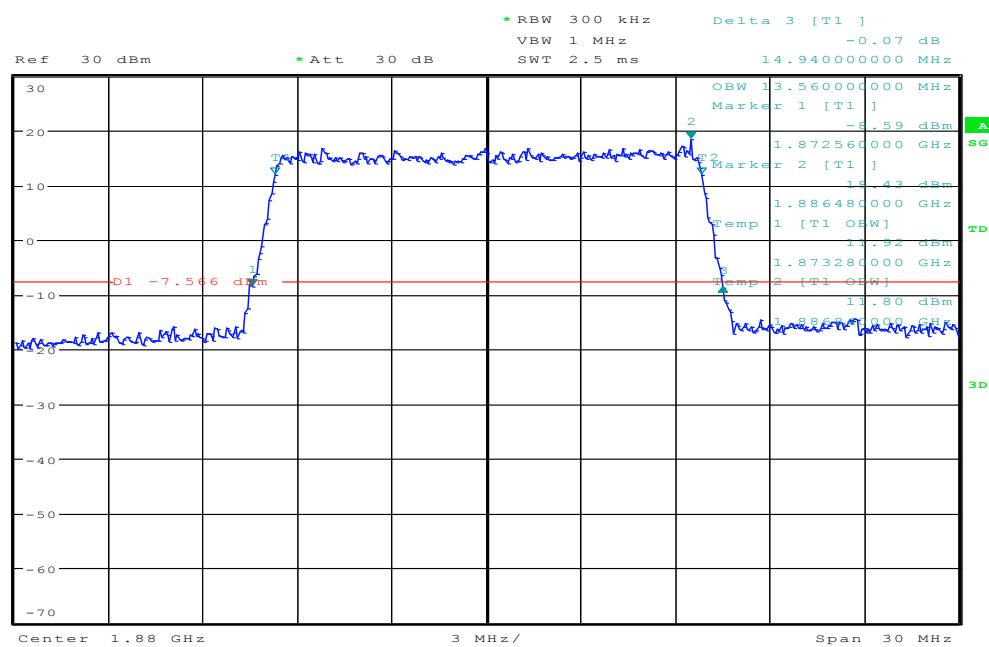
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Date: 22.OCT.2016 12:33:34

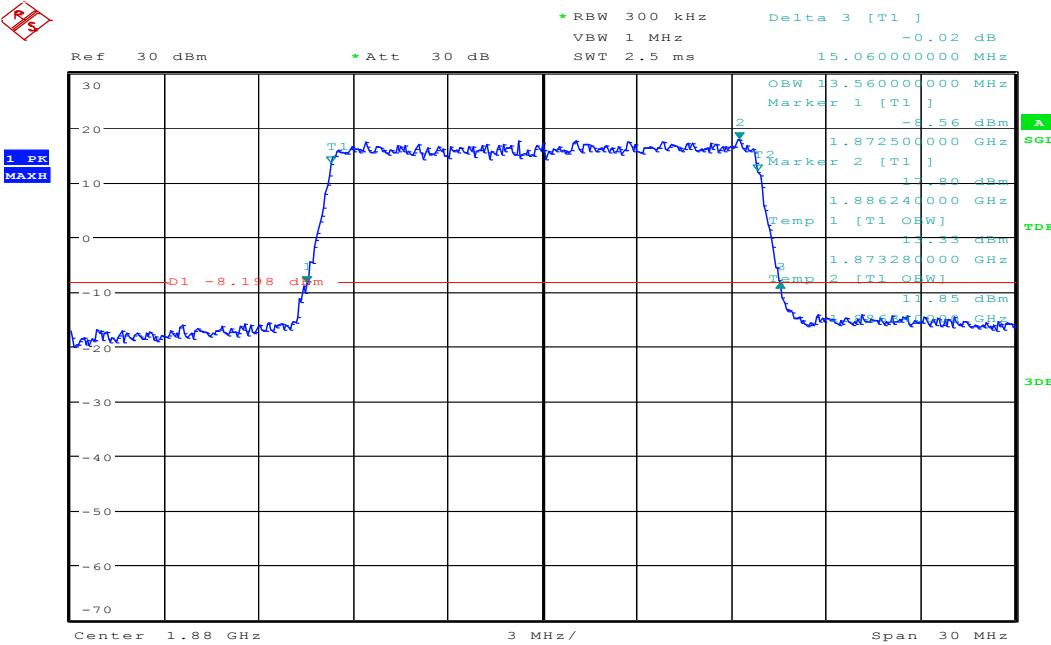
**BW15MHz-1880MHz,Q16-75RB\_LOW@OBW\_13.56MHz@26dB\_14.94MHz**

REF



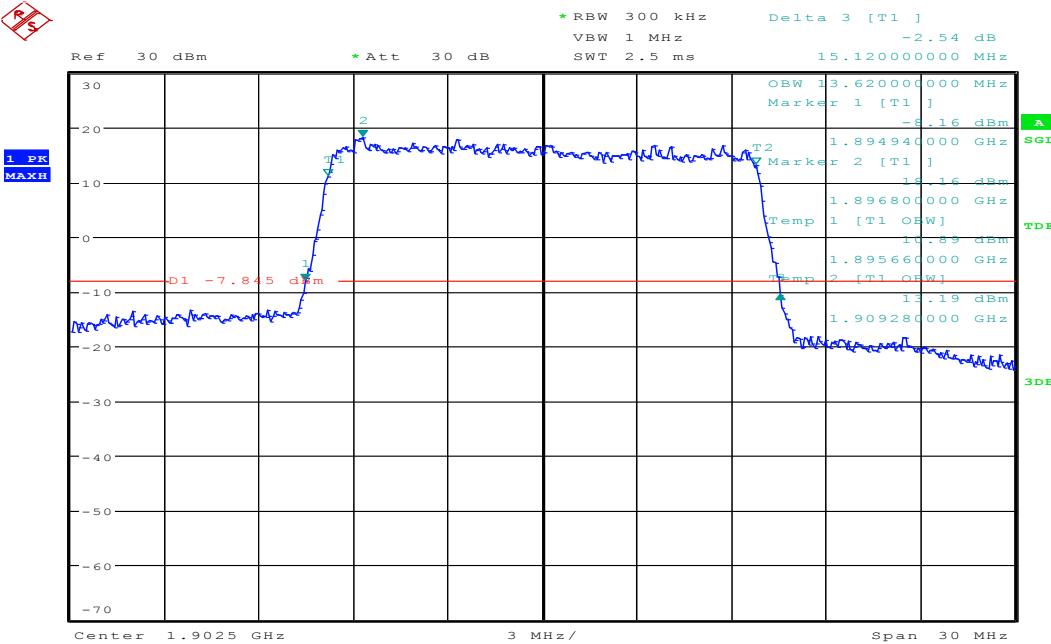
Date: 22.OCT.2016 12:35:07

## BW15MHz-1880MHz,QPSK-75RB\_LOW@OBW\_13.56MHz@26dB\_15.06MHz

~~FS~~

Date: 22.OCT.2016 12:34:48

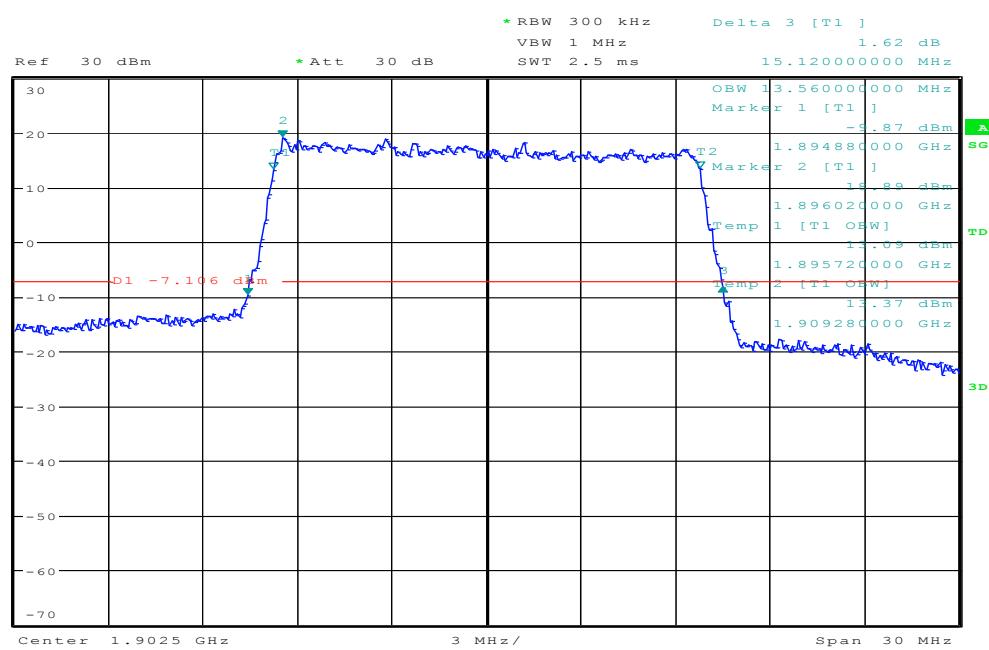
## BW15MHz-1902.5MHz,Q16-75RB\_LOW@OBW\_13.62MHz@26dB\_15.12MHz

~~FS~~

Date: 22.OCT.2016 12:34:29

## BW15MHz-1902.5MHz,QPSK-75RB\_LOW@OBW\_13.56MHz@26dB\_15.12MHz

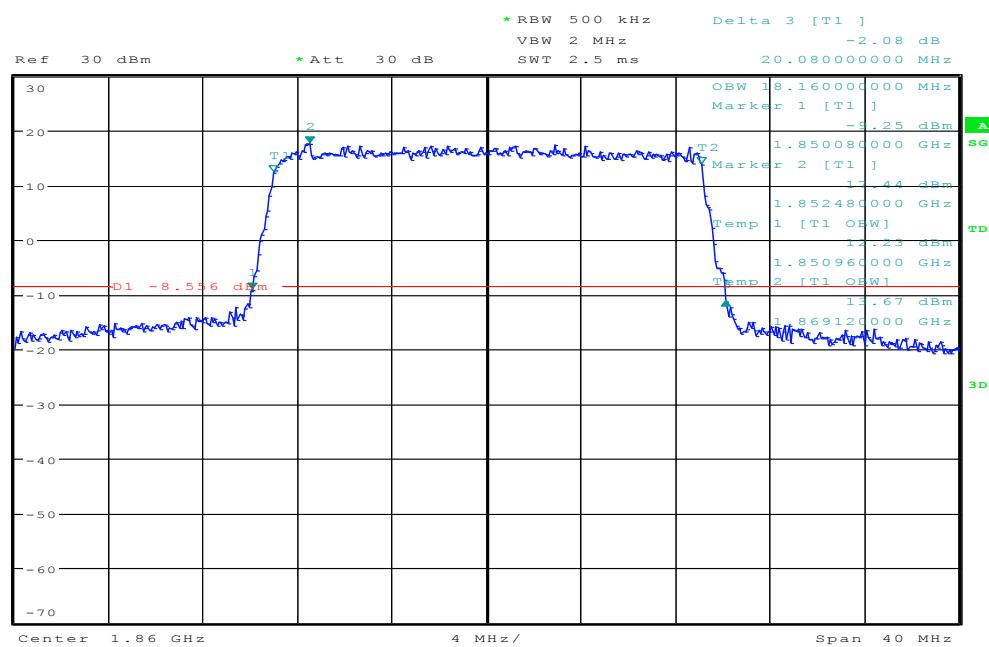
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Date: 22.OCT.2016 12:34:11

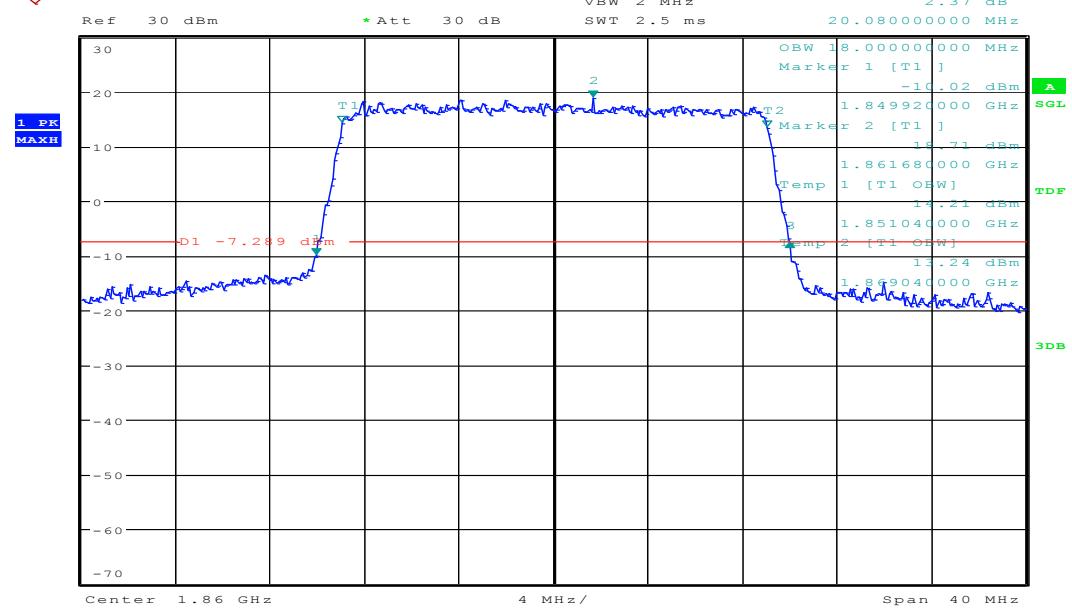
## BW20MHz-1860MHz,Q16-100RB\_LOW@OBW\_18.16MHz@26dB\_20.08MHz

REF



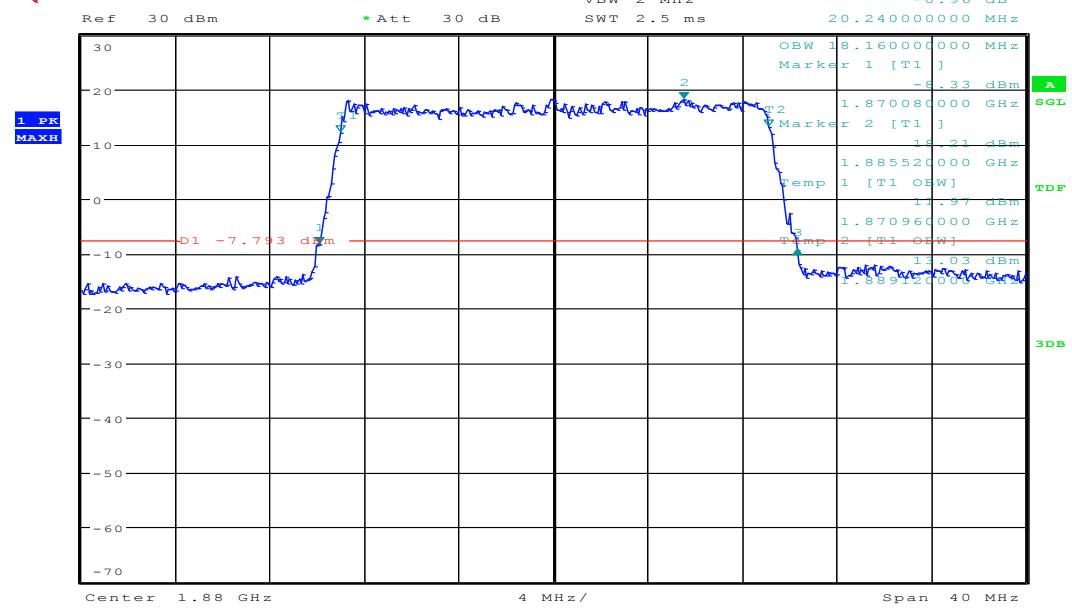
Date: 22.OCT.2016 12:35:47

## BW20MHz-1860MHz,QPSK-100RB\_LOW@OBW\_18MHz@26dB\_20.08MHz

~~FS~~

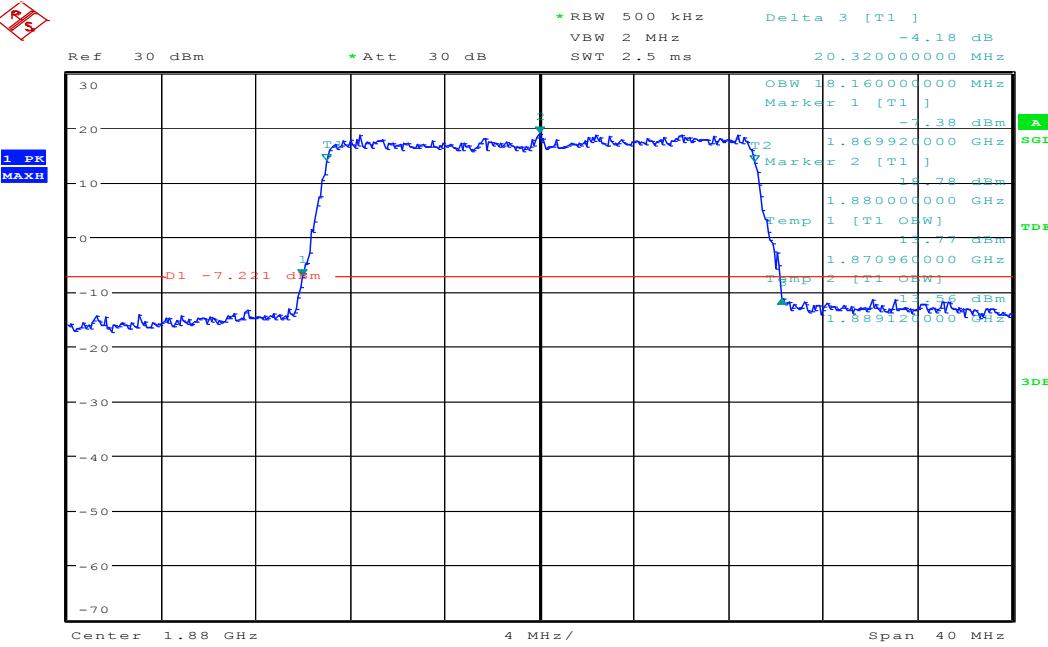
Date: 22.OCT.2016 12:35:28

## BW20MHz-1880MHz,Q16-100RB\_LOW@OBW\_18.16MHz@26dB\_20.24MHz

~~FS~~

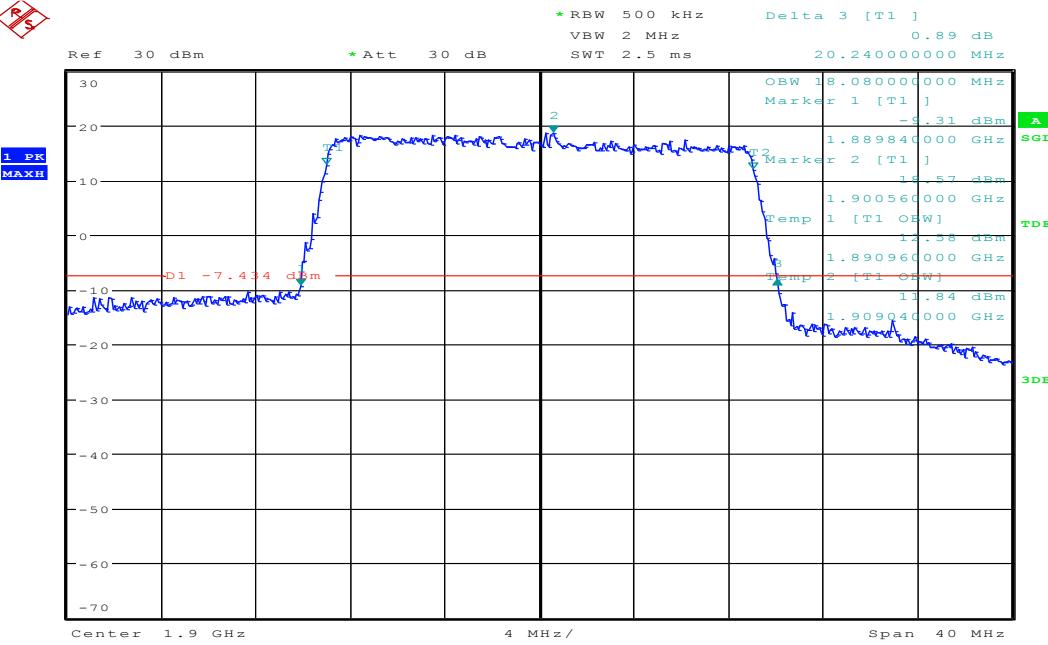
Date: 22.OCT.2016 12:37:02

## BW20MHz-1880MHz,QPSK-100RB\_LOW@OBW\_18.16MHz@26dB\_20.32MHz

~~FS~~

Date: 22.OCT.2016 12:36:44

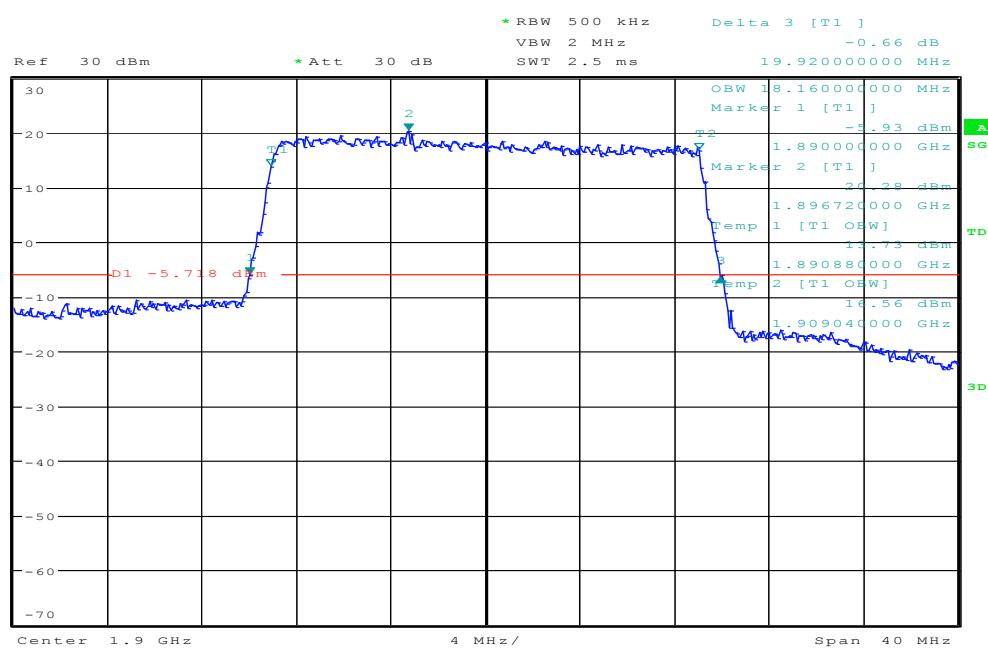
## BW20MHz-1900MHz,Q16-100RB\_LOW@OBW\_18.08MHz@26dB\_20.24MHz

~~FS~~

Date: 22.OCT.2016 12:36:24

*BW20MHz-1900MHz,QPSK-100RB\_LOW@OBW\_18.16MHz@26dB\_19.92MHz*

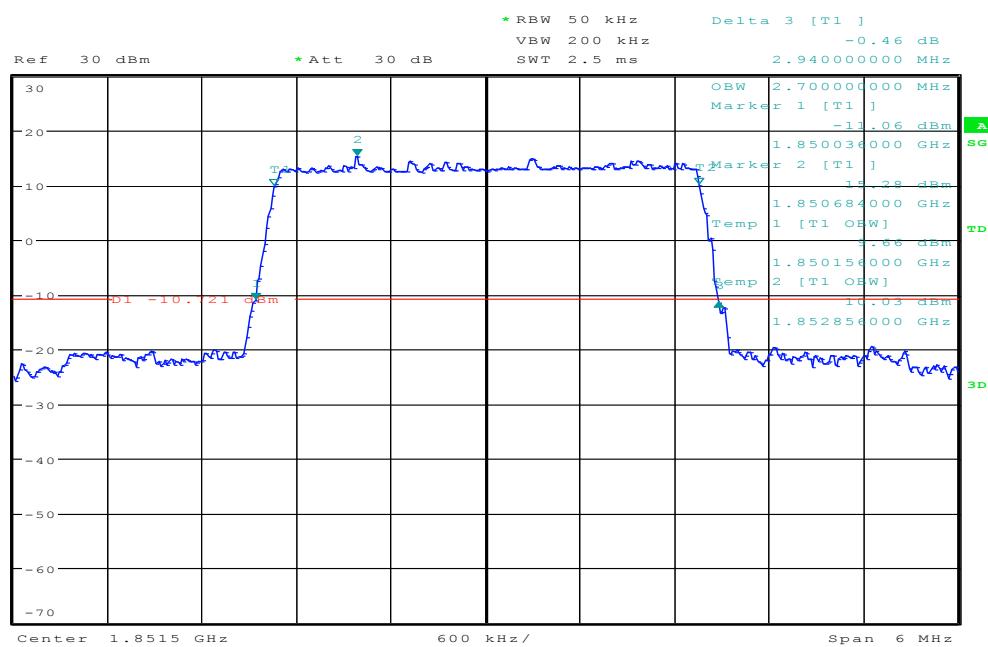
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Date: 22.OCT.2016 12:36:06

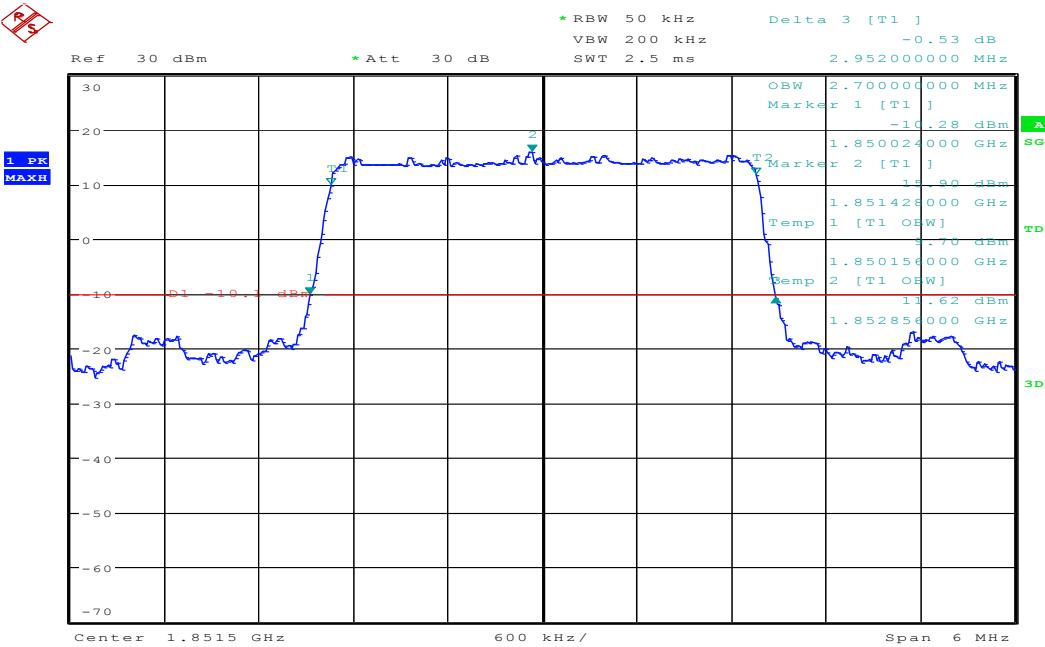
*BW3MHz-1851.5MHz,Q16-15RB\_LOW@OBW\_2.7MHz@26dB\_2.94MHz*

REF



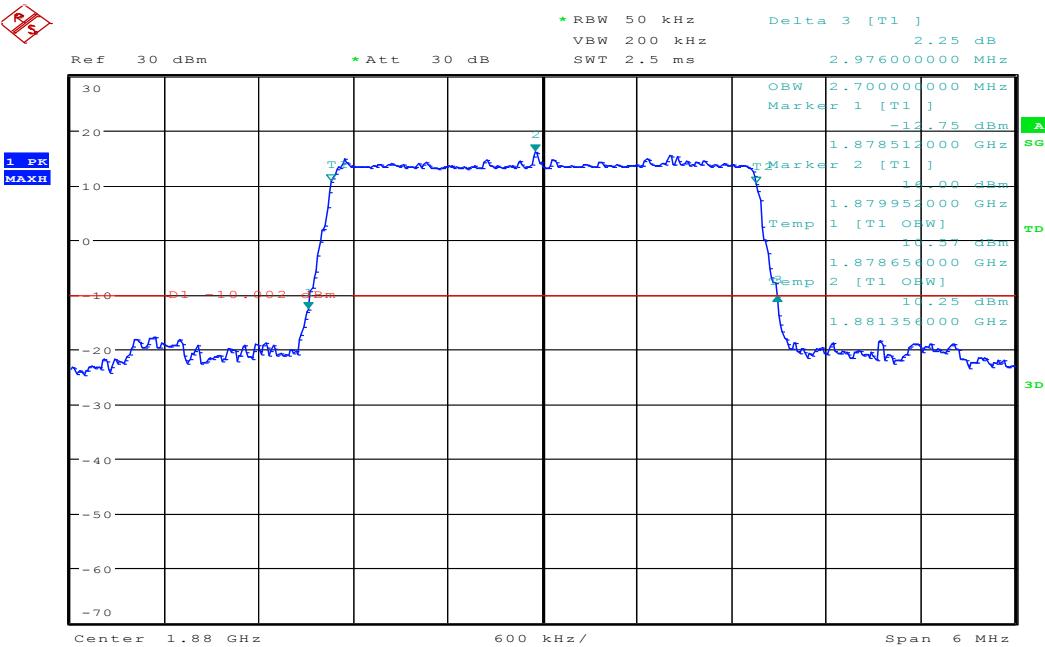
Date: 22.OCT.2016 12:27:05

## BW3MHz-1851.5MHz,QPSK-15RB\_LOW@OBW\_2.7MHz@26dB\_2.952MHz

~~FS~~

Date: 22.OCT.2016 12:26:43

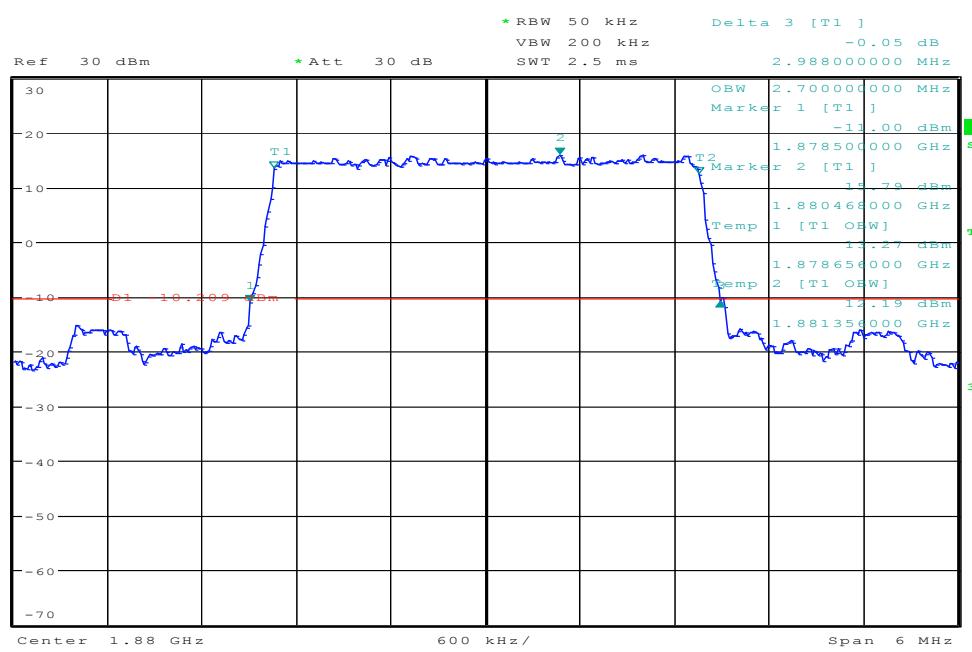
## BW3MHz-1880MHz,Q16-15RB\_LOW@OBW\_2.7MHz@26dB\_2.976MHz

~~FS~~

Date: 22.OCT.2016 12:28:52

*BW3MHz-1880MHz,QPSK-15RB\_LOW@OBW\_2.7MHz@26dB\_2.988MHz*

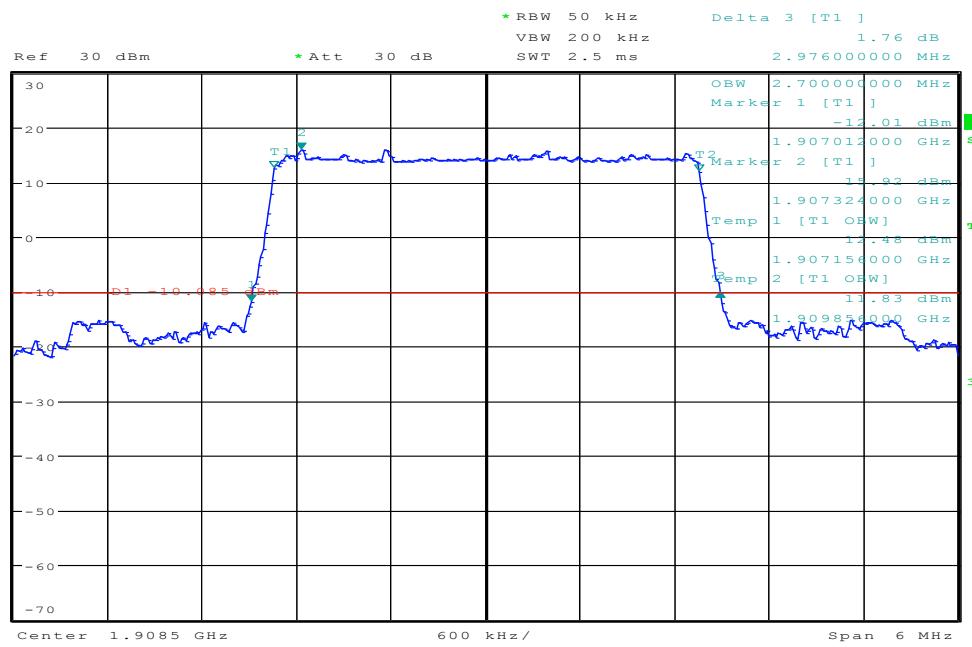
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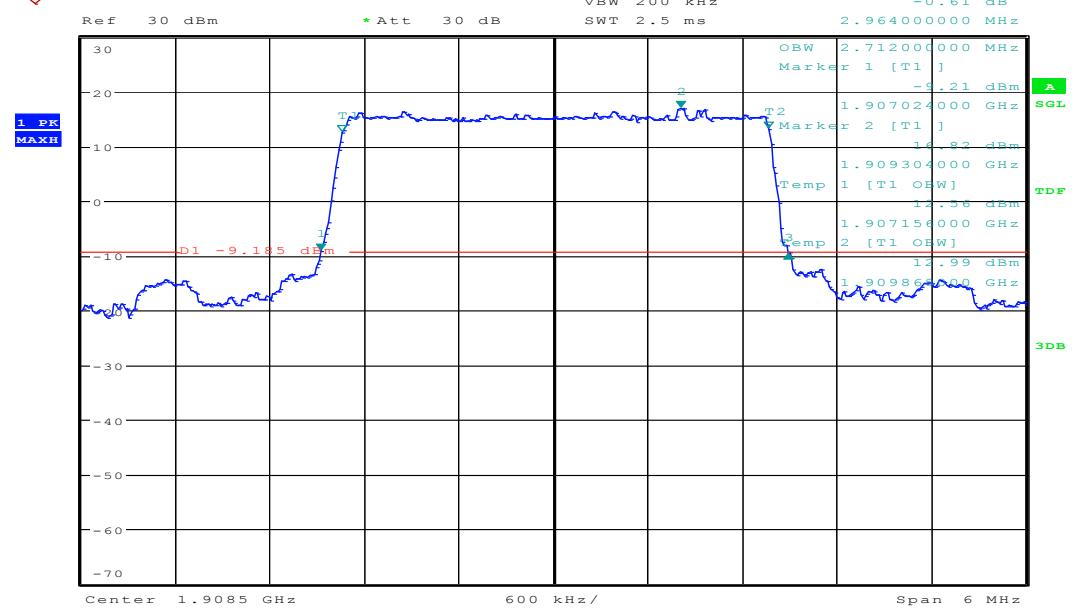
Date: 22.OCT.2016 12:28:31

*BW3MHz-1908.5MHz,Q16-15RB\_LOW@OBW\_2.7MHz@26dB\_2.976MHz*

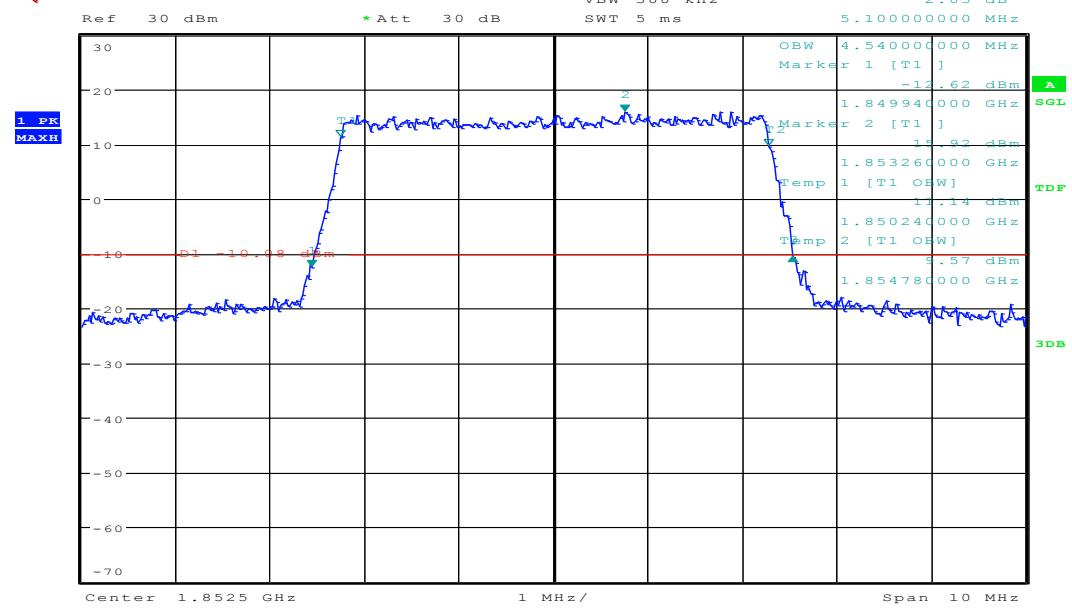
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Date: 22.OCT.2016 12:28:09

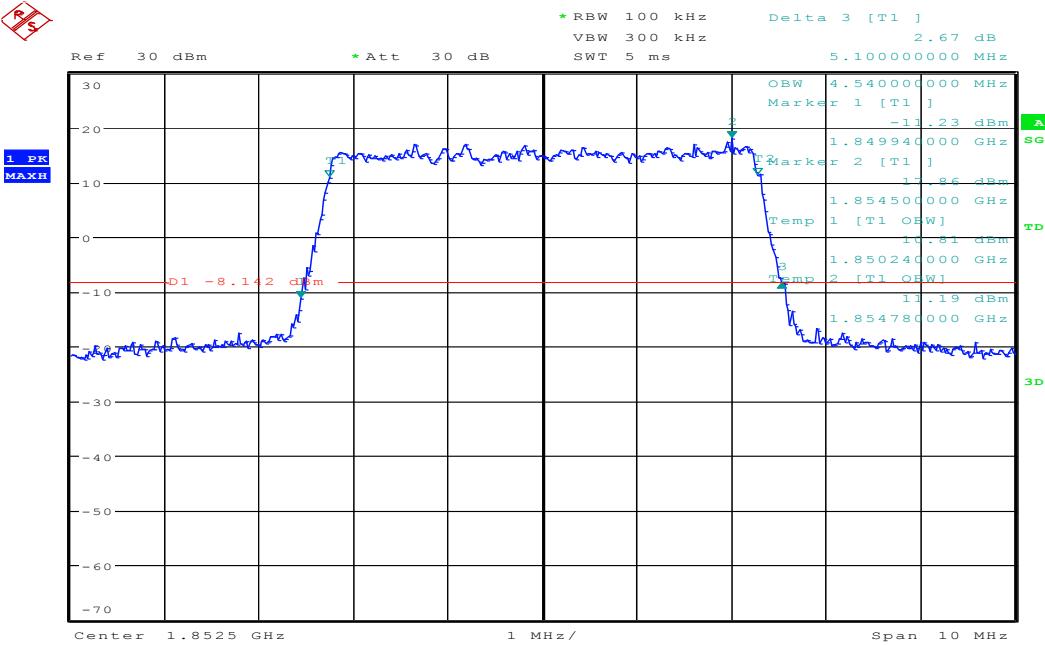
**BW3MHz-1908.5MHz,QPSK-15RB\_LOW@OBW\_2.712MHz@26dB\_2.964MHz****FS**

Date: 22.OCT.2016 12:27:38

**BW5MHz-1852.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.1MHz****FS**

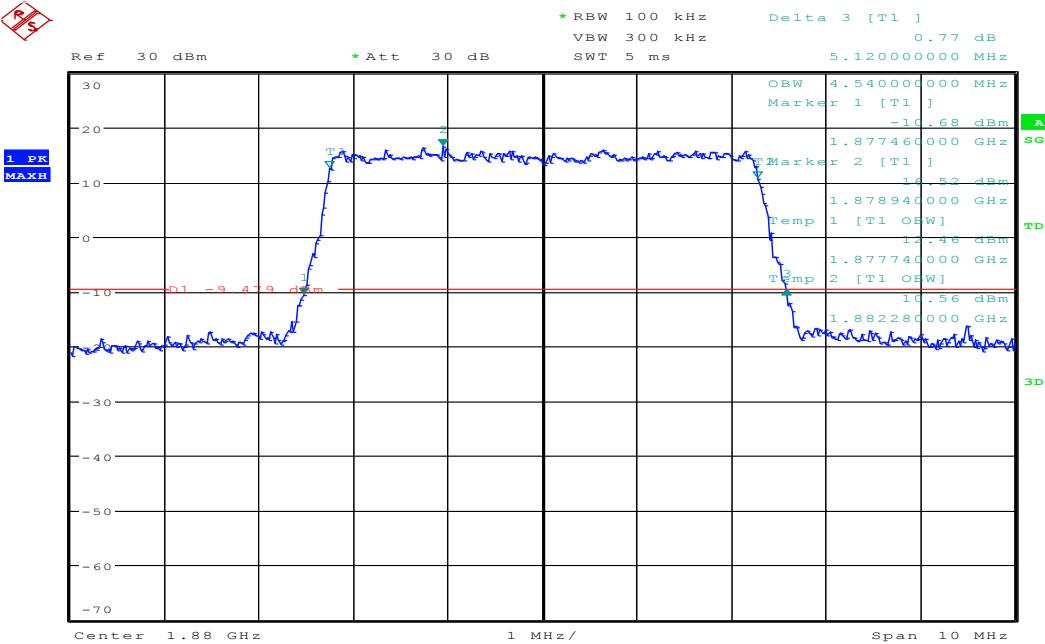
Date: 22.OCT.2016 12:29:45

## BW5MHz-1852.5MHz,QPSK-25RB\_LOW@OBW\_4.54MHz@26dB\_5.1MHz

~~FS~~

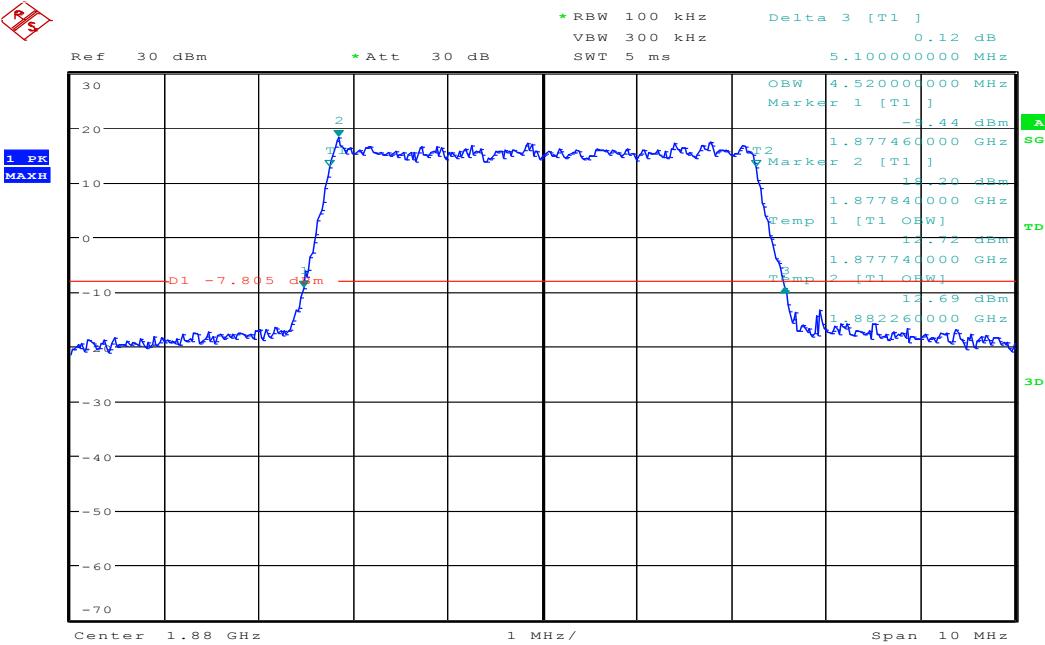
Date: 22.OCT.2016 12:29:20

## BW5MHz-1880MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.12MHz

~~FS~~

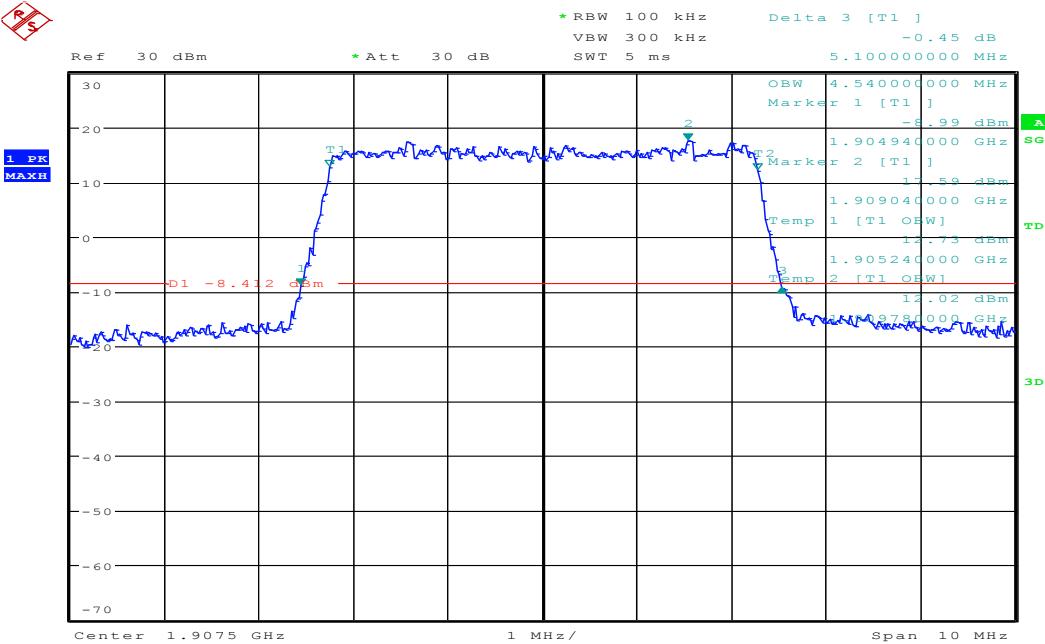
Date: 22.OCT.2016 12:31:32

## BW5MHz-1880MHz,QPSK-25RB\_LOW@OBW\_4.52MHz@26dB\_5.1MHz

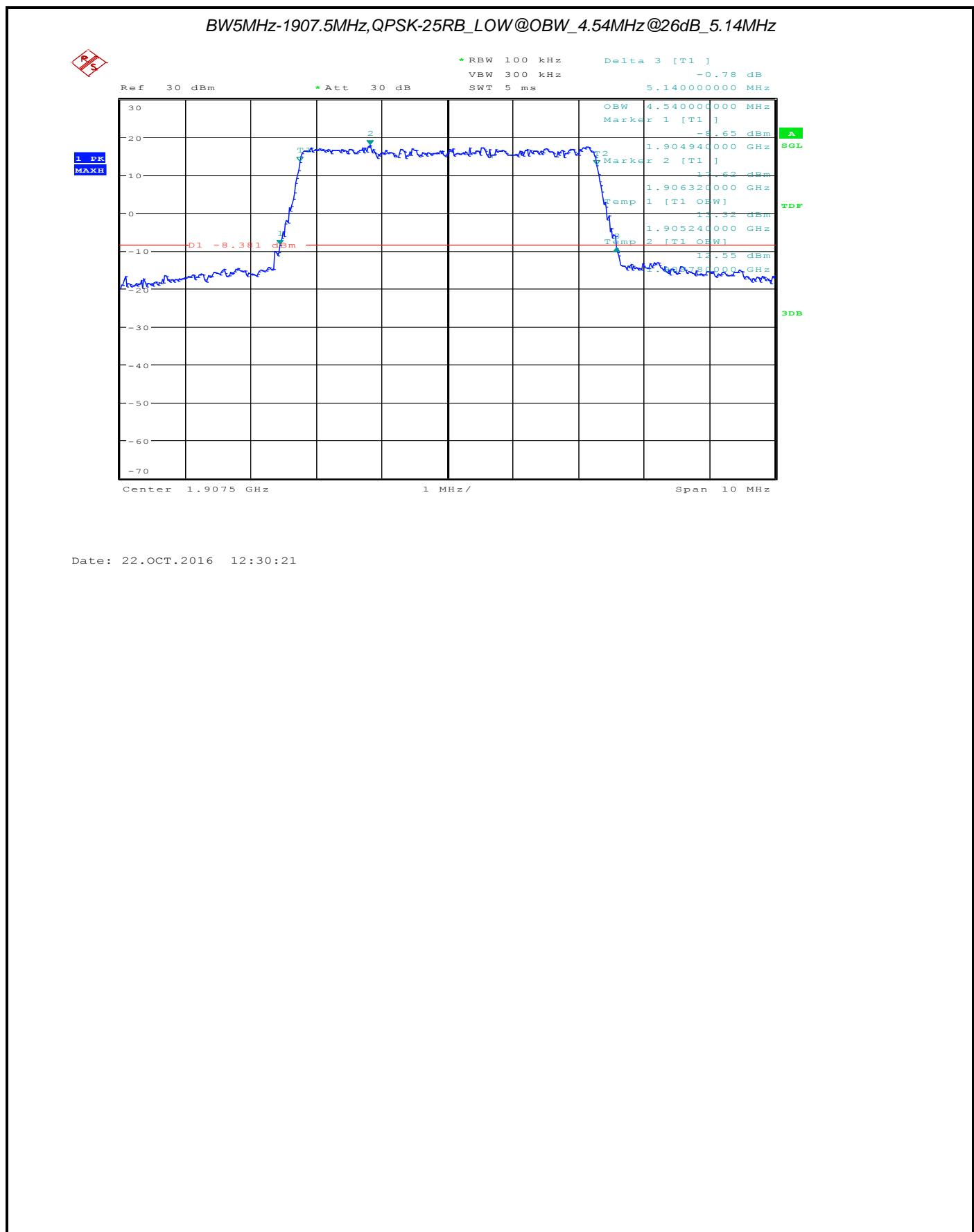
~~FS~~

Date: 22.OCT.2016 12:31:15

## BW5MHz-1907.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.1MHz

~~FS~~

Date: 22.OCT.2016 12:30:57



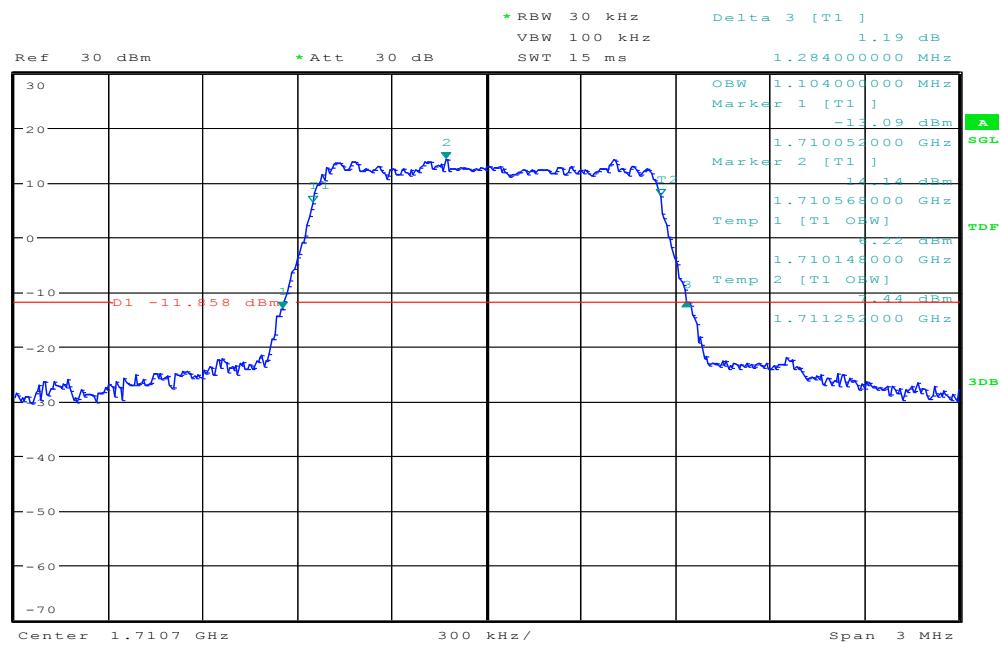
Report No.: FCC16104036A-5

## BAND 4@Bandwidth Bandwidth

*BW1.4MHz-1710.7MHz,Q16-6RB\_LOW@OBW\_1.104MHz@26dB\_1.284MHz*

~~REF~~

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MAXH



A

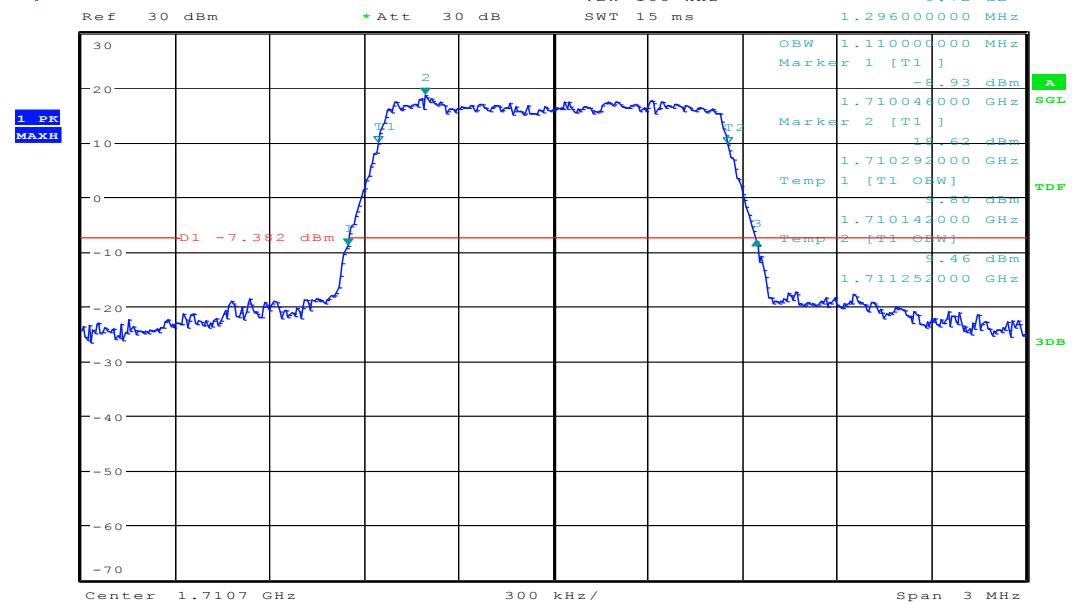
SGL

TDF

3dB

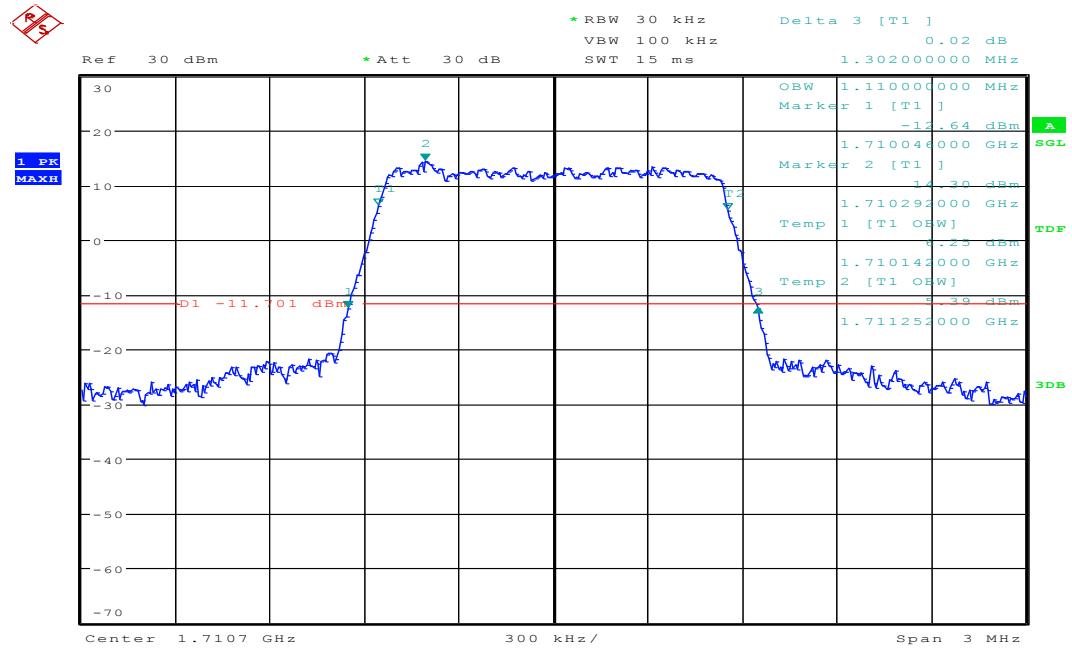
Date: 22.OCT.2016 15:11:35

## BW1.4MHz-1710.7MHz,Q16-6RB\_LOW@OBW\_1.11MHz@26dB\_1.296MHz

~~FS~~

Date: 22.OCT.2016 15:08:21

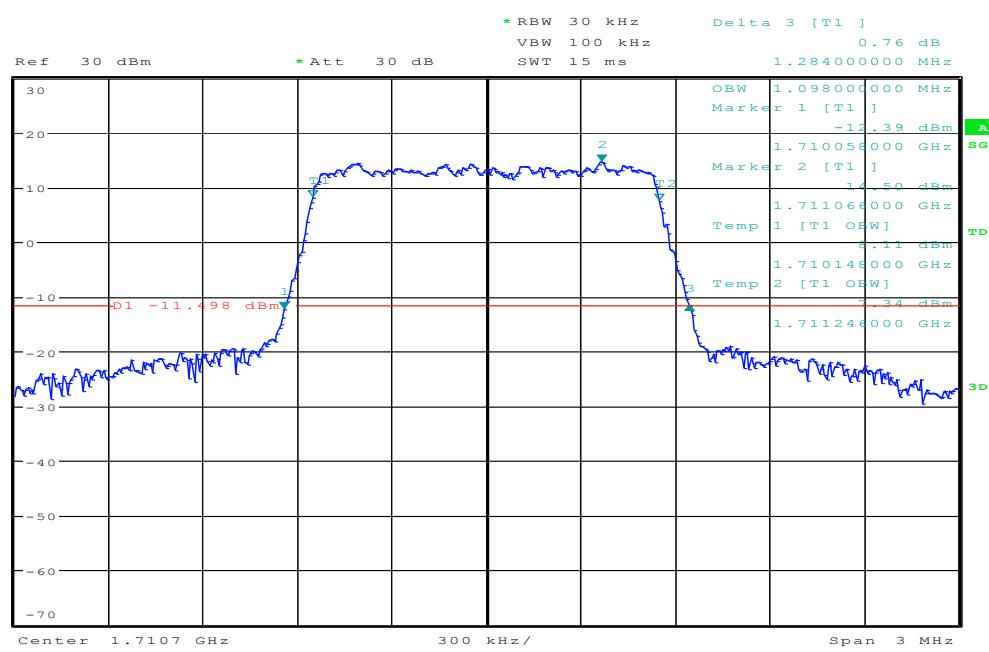
## BW1.4MHz-1710.7MHz,Q16-6RB\_LOW@OBW\_1.11MHz@26dB\_1.302MHz

~~FS~~

Date: 22.OCT.2016 15:29:07

*BW1.4MHz-1710.7MHz,QPSK-6RB\_LOW@OBW\_1.098MHz@26dB\_1.284MHz*

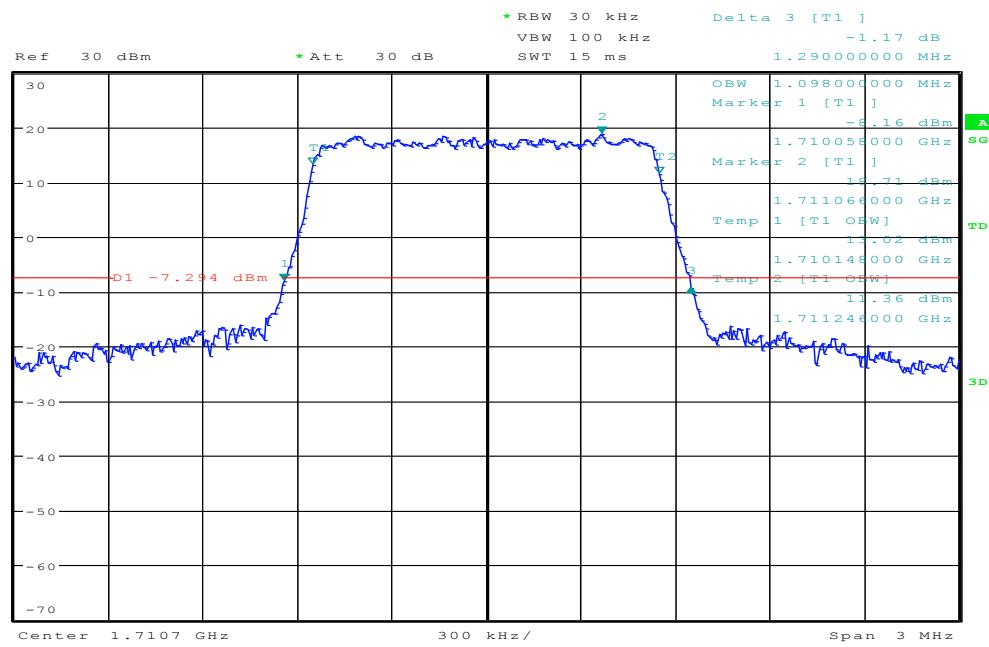
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Date: 22.OCT.2016 15:28:32

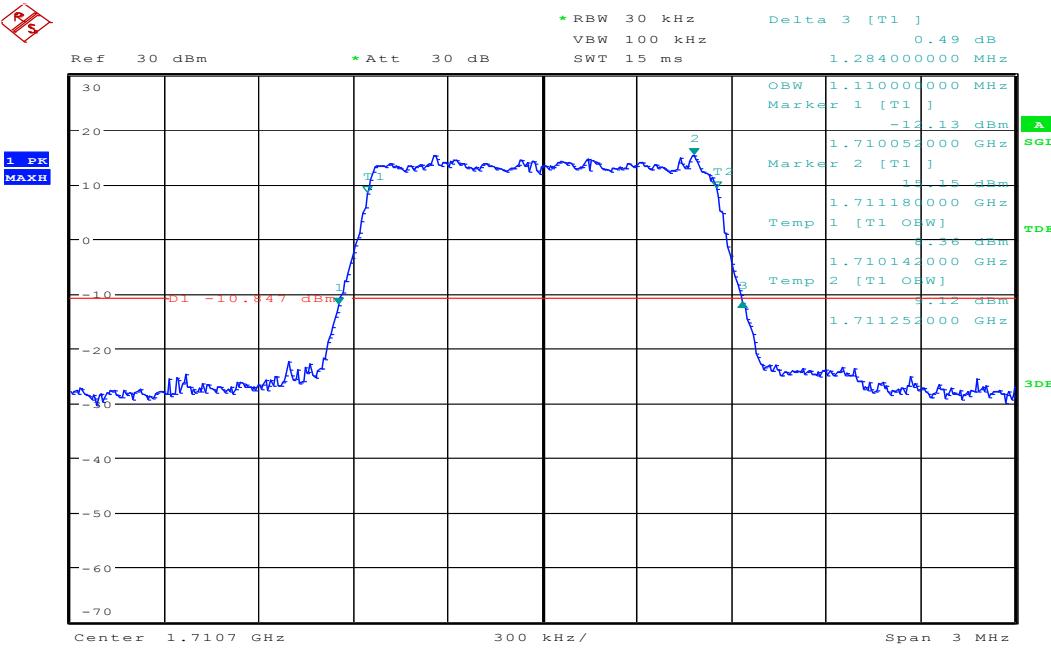
*BW1.4MHz-1710.7MHz,QPSK-6RB\_LOW@OBW\_1.098MHz@26dB\_1.29MHz*

REF



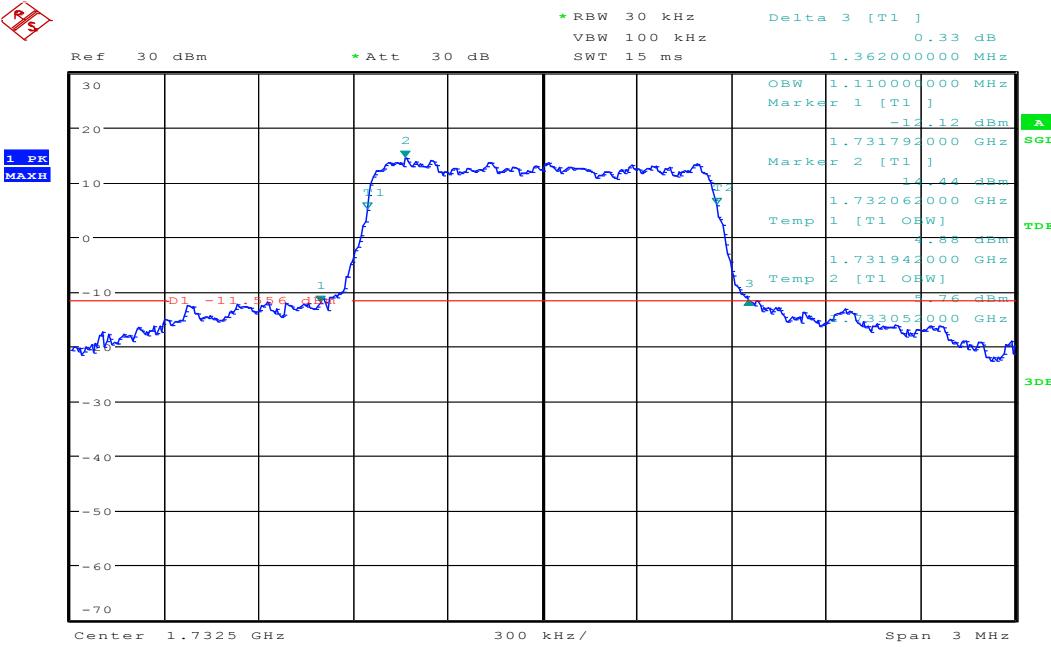
Date: 22.OCT.2016 15:07:45

## BW1.4MHz-1710.7MHz,QPSK-6RB\_LOW@OBW\_1.11MHz@26dB\_1.284MHz

~~FS~~

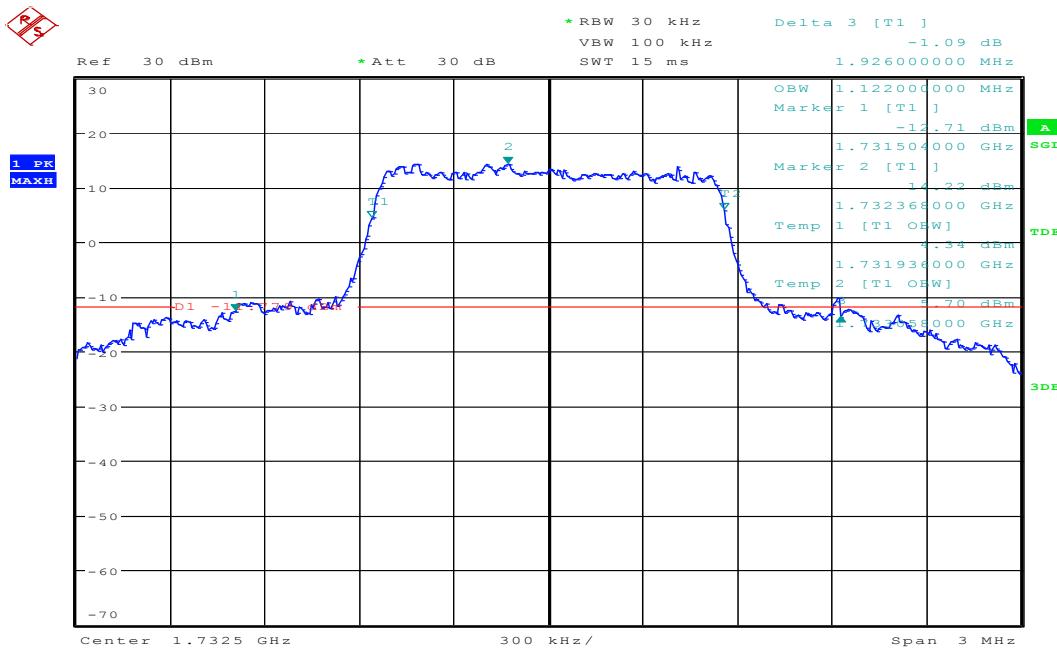
Date: 22.OCT.2016 15:11:00

## BW1.4MHz-1732.5MHz,Q16-6RB\_LOW@OBW\_1.11MHz@26dB\_1.362MHz

~~FS~~

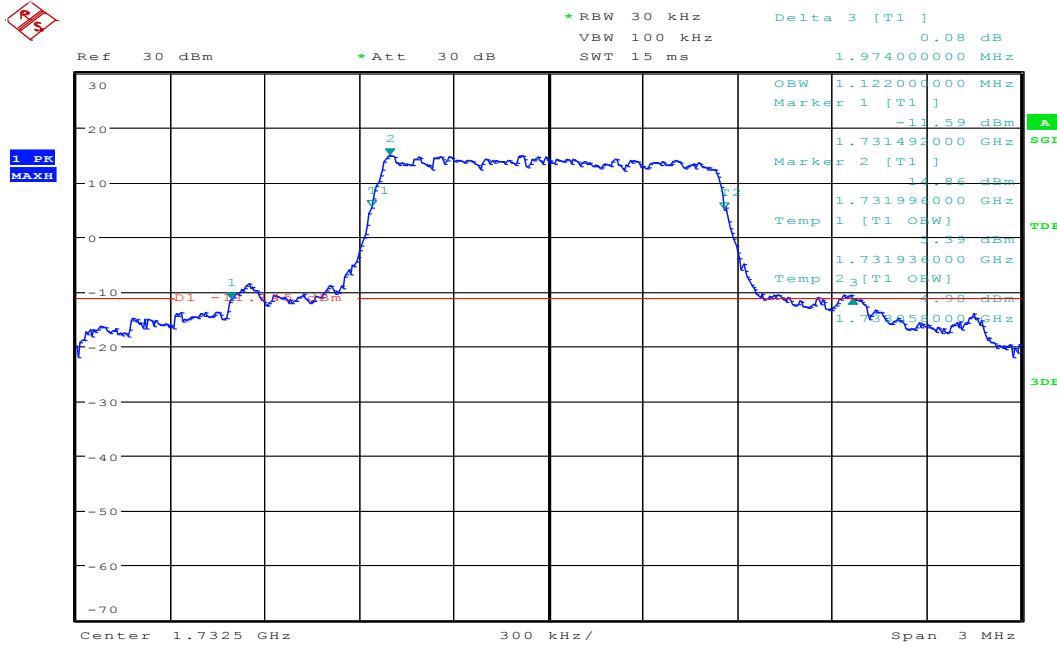
Date: 22.OCT.2016 15:13:30

## BW1.4MHz-1732.5MHz,Q16-6RB\_LOW@OBW\_1.122MHz@26dB\_1.926MHz

~~FS~~

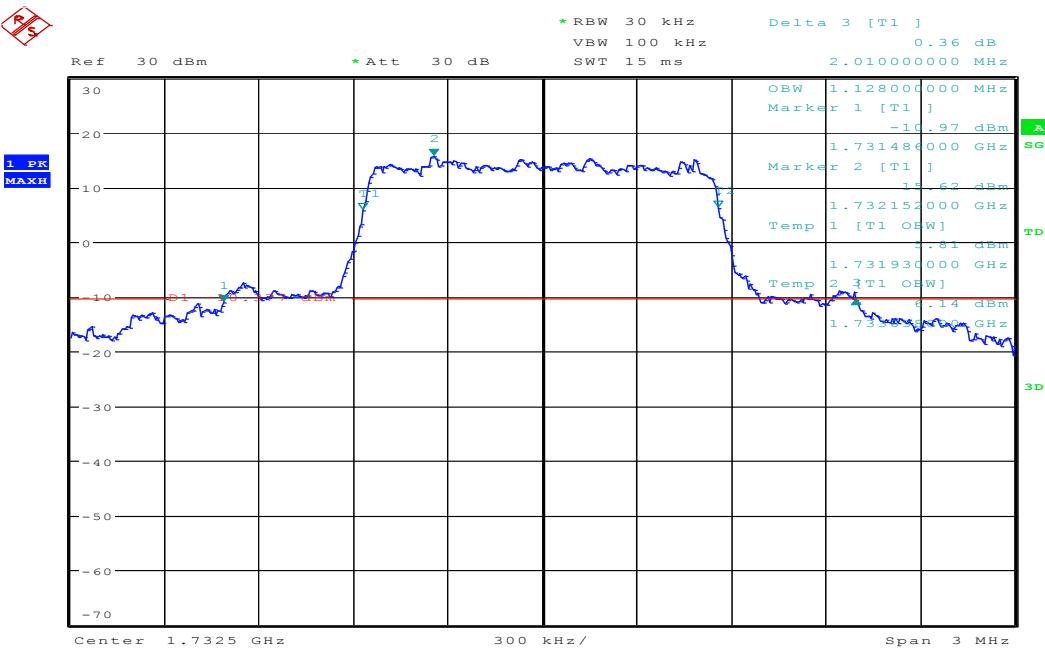
Date: 22.OCT.2016 15:31:02

## BW1.4MHz-1732.5MHz,QPSK-6RB\_LOW@OBW\_1.122MHz@26dB\_1.974MHz

~~FS~~

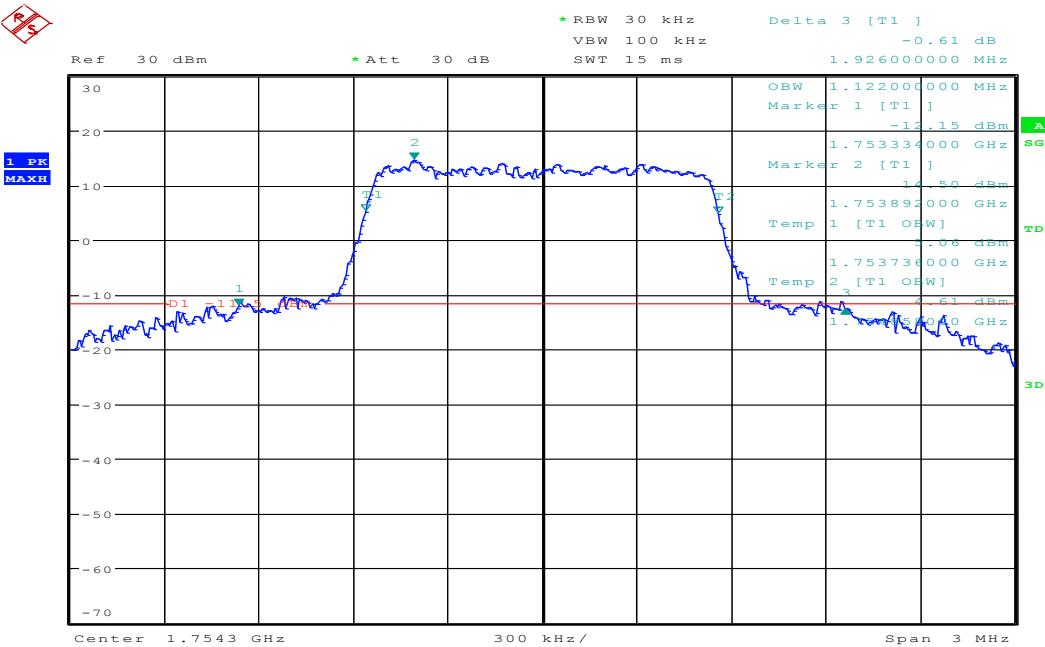
Date: 22.OCT.2016 15:13:01

## BW1.4MHz-1732.5MHz,QPSK-6RB\_LOW@OBW\_1.128MHz@26dB\_2.01MHz

~~FS~~

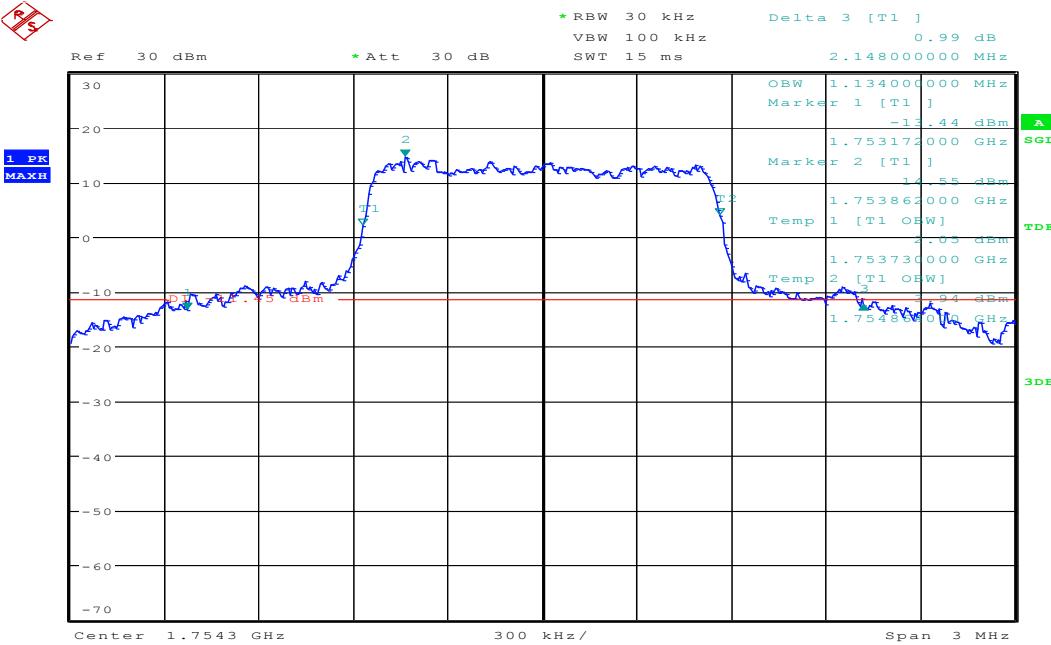
Date: 22.OCT.2016 15:30:34

## BW1.4MHz-1754.3MHz,Q16-6RB\_LOW@OBW\_1.122MHz@26dB\_1.926MHz

~~FS~~

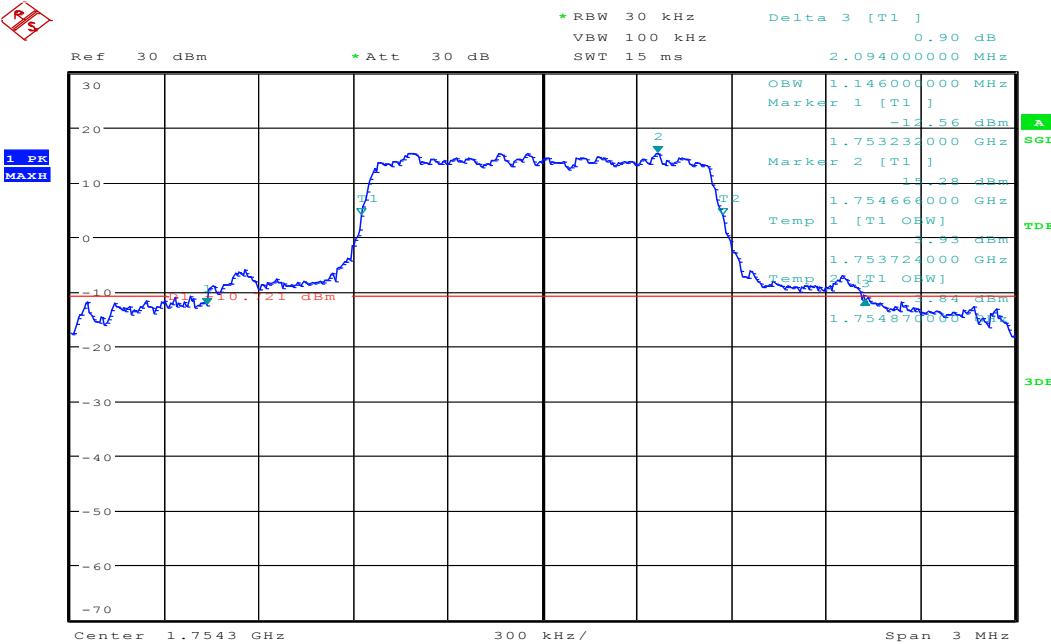
Date: 22.OCT.2016 15:12:32

## BW1.4MHz-1754.3MHz,Q16-6RB\_LOW@OBW\_1.134MHz@26dB\_2.148MHz

~~FS~~

Date: 22.OCT.2016 15:30:05

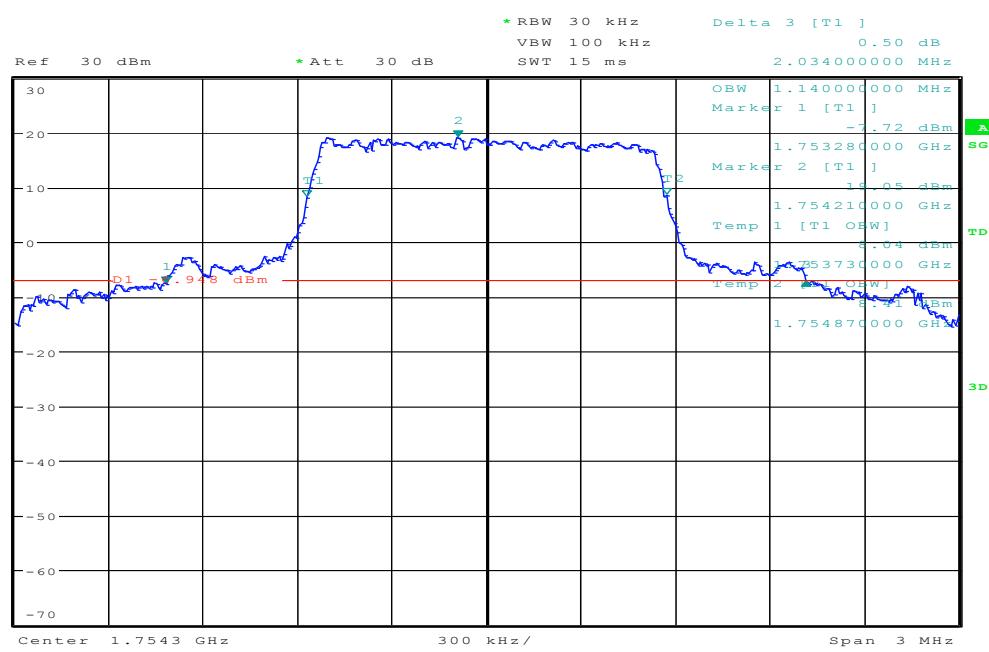
## BW1.4MHz-1754.3MHz,QPSK-6RB\_LOW@OBW\_1.146MHz@26dB\_2.094MHz

~~FS~~

Date: 22.OCT.2016 15:12:04

## BW1.4MHz-1754.3MHz,QPSK-6RB\_LOW@OBW\_1.14MHz@26dB\_2.034MHz

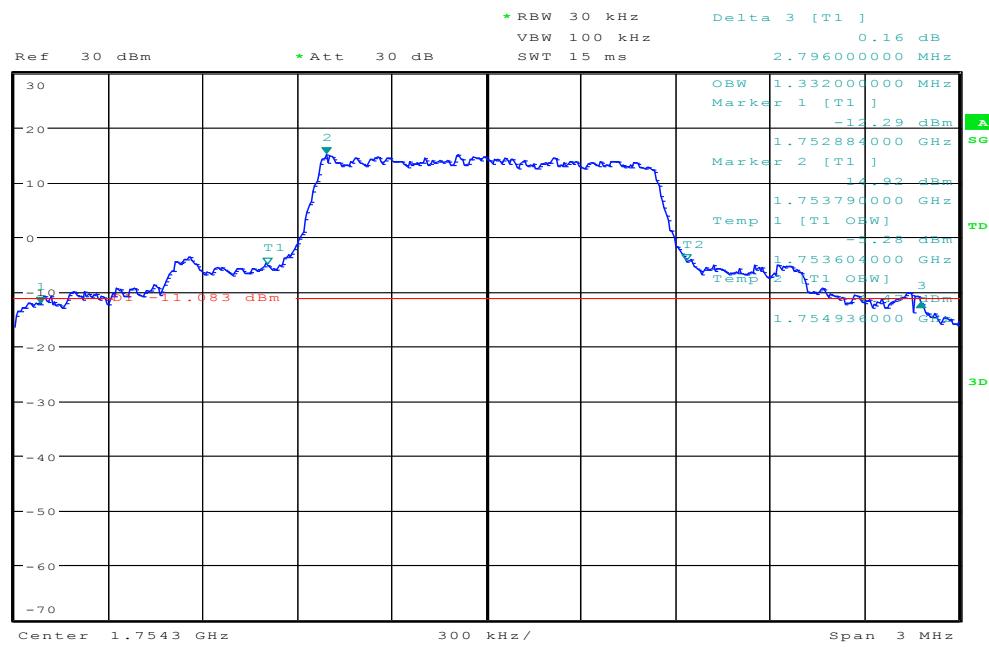
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Date: 22.OCT.2016 15:08:50

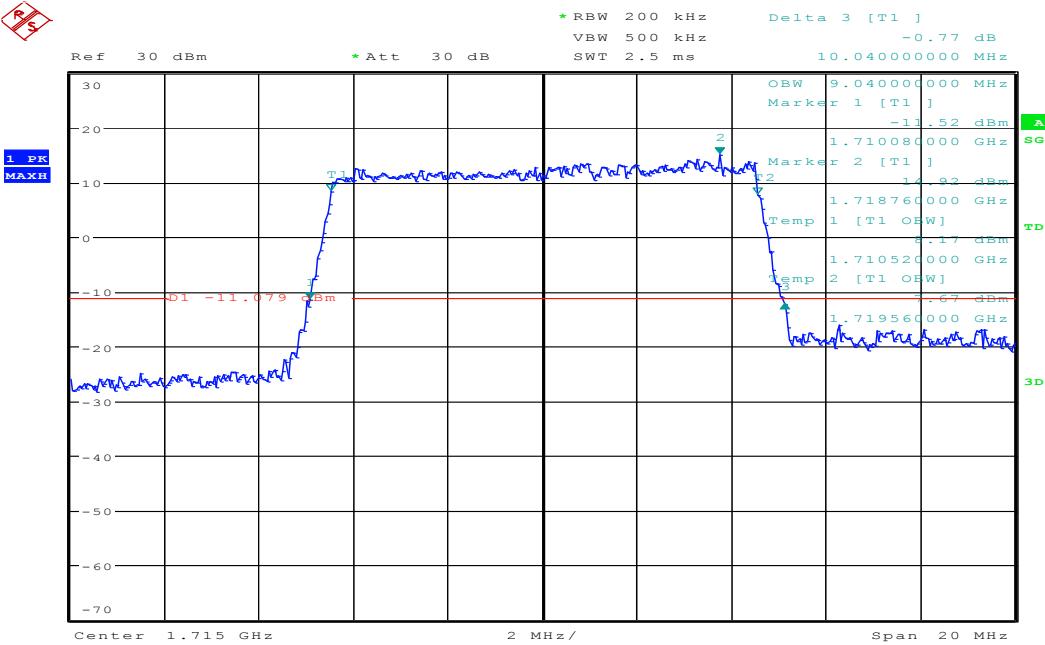
## BW1.4MHz-1754.3MHz,QPSK-6RB\_LOW@OBW\_1.332MHz@26dB\_2.796MHz

REF



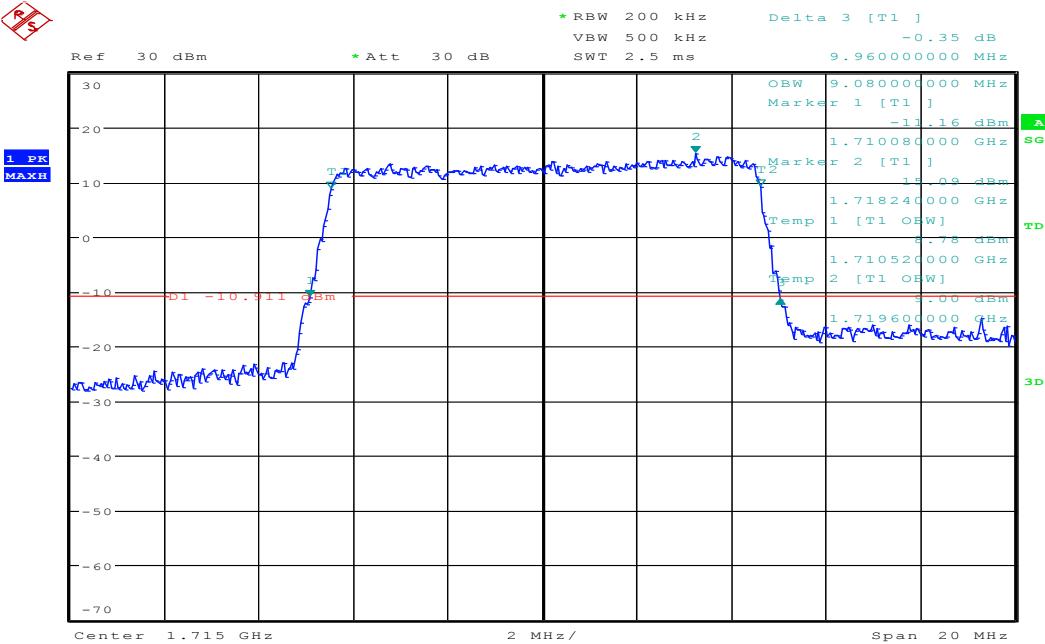
Date: 22.OCT.2016 15:29:36

## BW10MHz-1715MHz,Q16-50RB\_LOW@OBW\_9.04MHz@26dB\_10.04MHz

~~FS~~

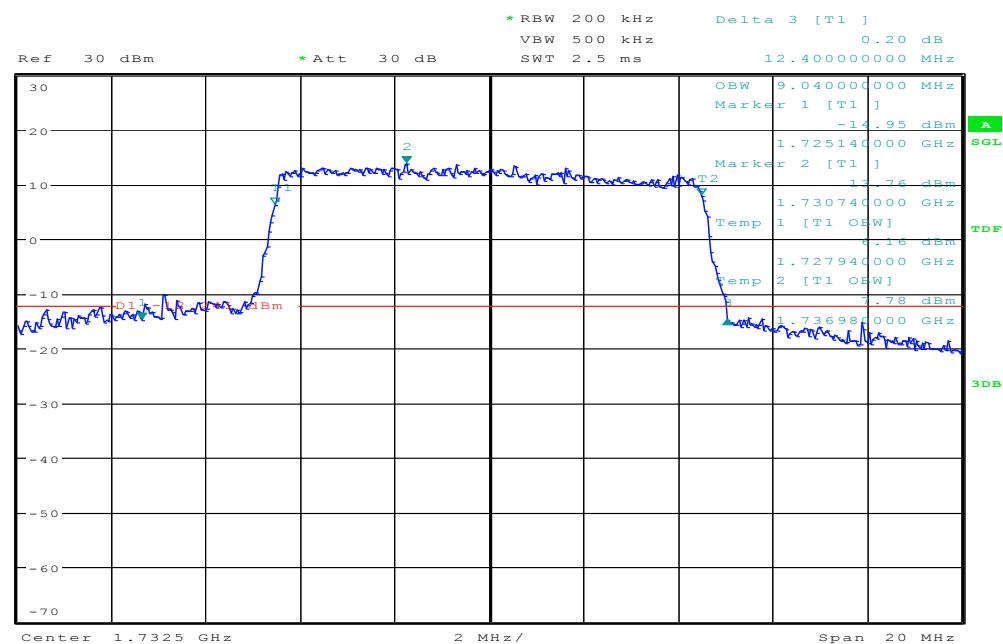
Date: 22.OCT.2016 15:19:23

## BW10MHz-1715MHz,QPSK-50RB\_LOW@OBW\_9.08MHz@26dB\_9.96MHz

~~FS~~

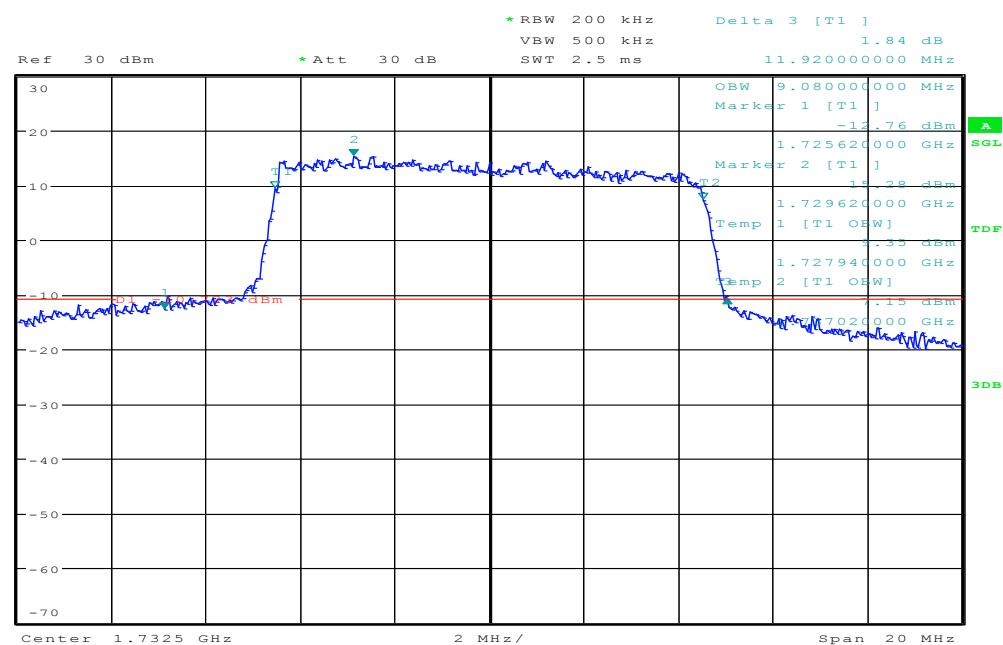
Date: 22.OCT.2016 15:19:02

## BW10MHz-1732.5MHz,Q16-50RB\_LOW@OBW\_9.04MHz@26dB\_12.4MHz

~~FS~~

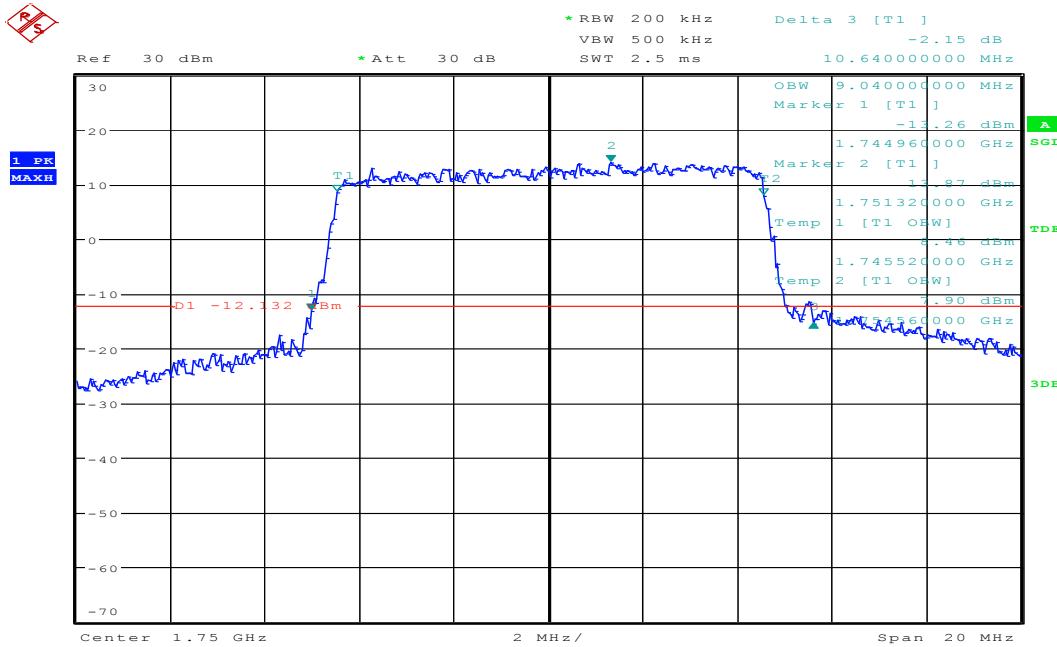
Date: 22.OCT.2016 15:20:29

## BW10MHz-1732.5MHz,QPSK-50RB\_LOW@OBW\_9.08MHz@26dB\_11.92MHz

~~FS~~

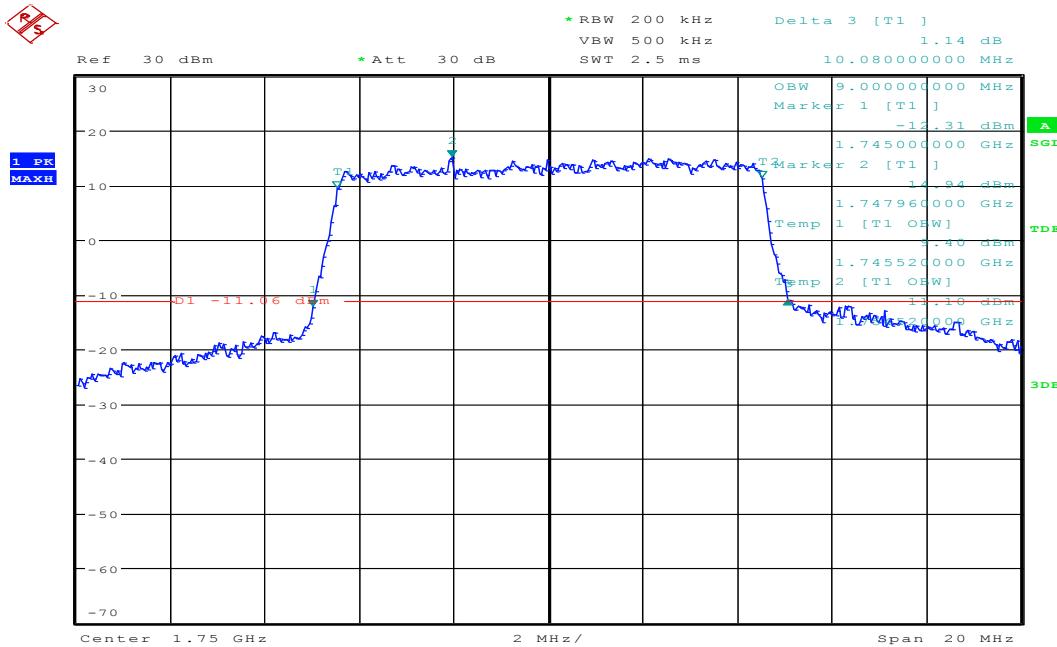
Date: 22.OCT.2016 15:20:13

## BW10MHz-1750MHz,Q16-50RB\_LOW@OBW\_9.04MHz@26dB\_10.64MHz

~~FS~~

Date: 22.OCT.2016 15:19:56

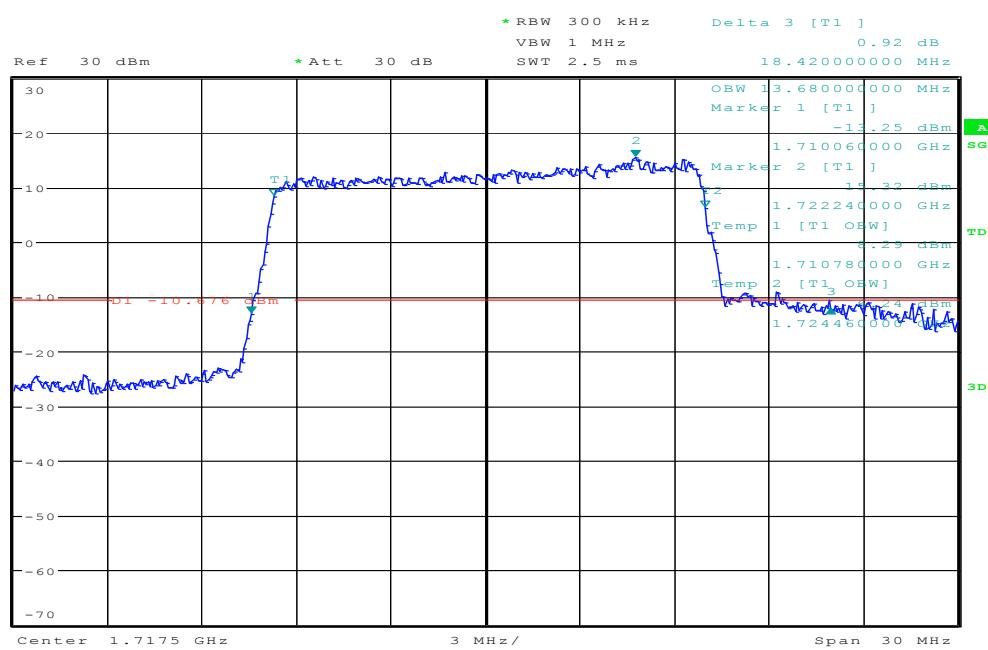
## BW10MHz-1750MHz,QPSK-50RB\_LOW@OBW\_9.MHz@26dB\_10.08MHz

~~FS~~

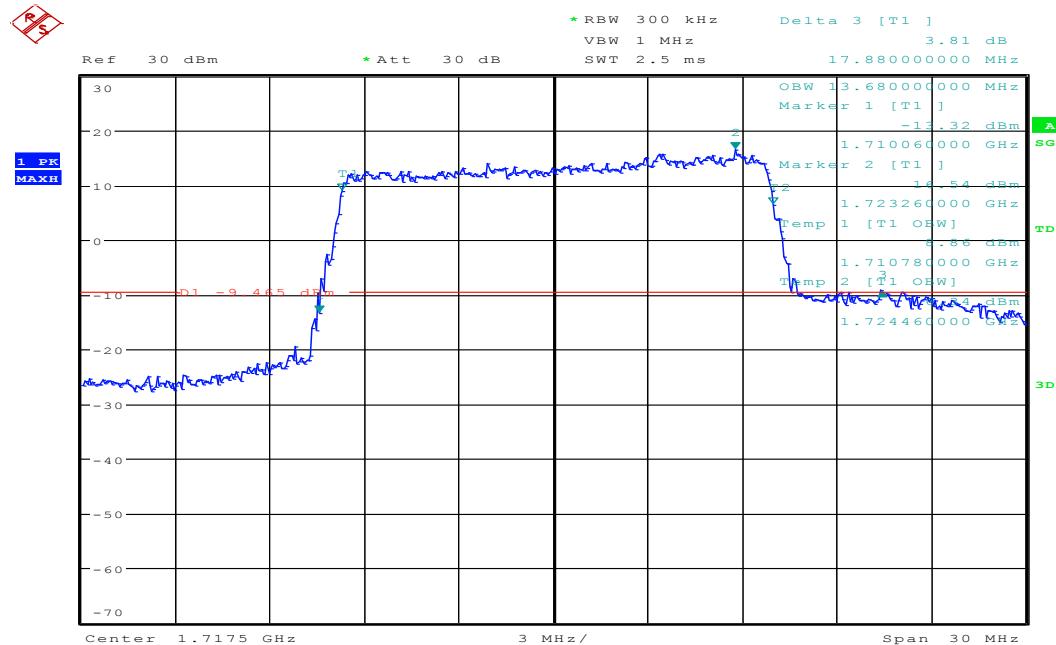
Date: 22.OCT.2016 15:19:40

## BW15MHz-1717.5MHz,Q16-75RB\_LOW@OBW\_13.68MHz@26dB\_18.42MHz

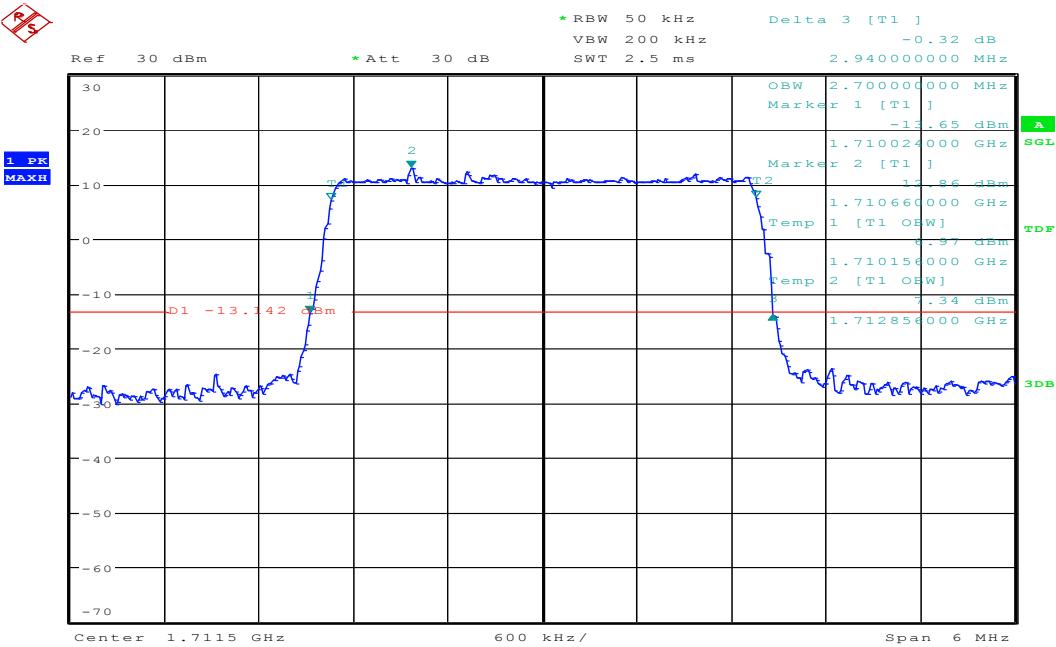
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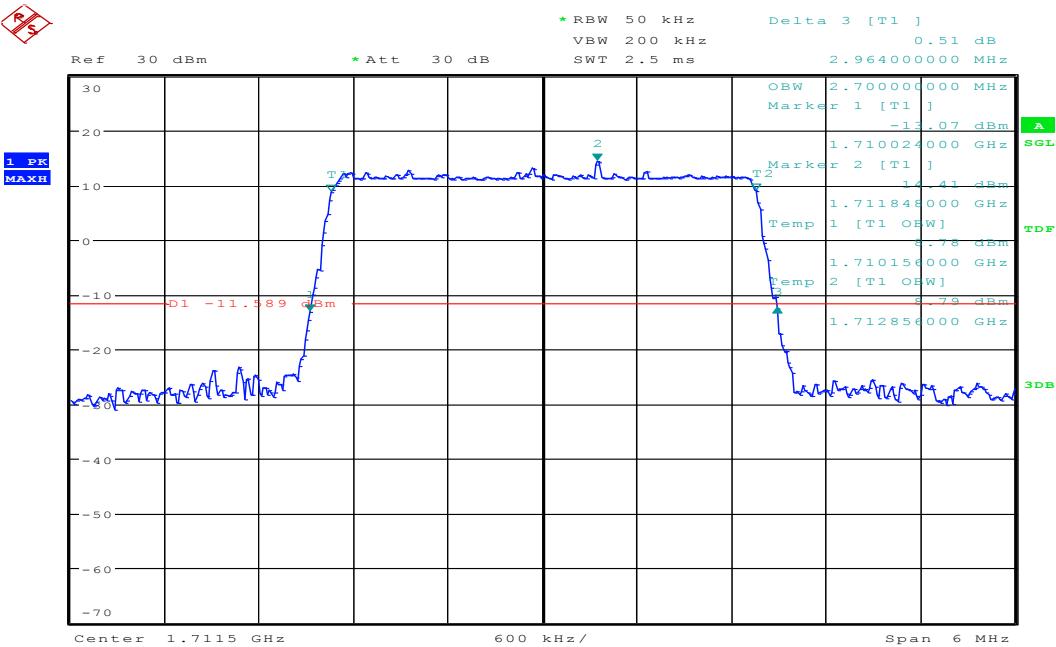


## BW3MHz-1711.5MHz,Q16-15RB\_LOW@OBW\_2.7MHz@26dB\_2.94MHz

~~FS~~

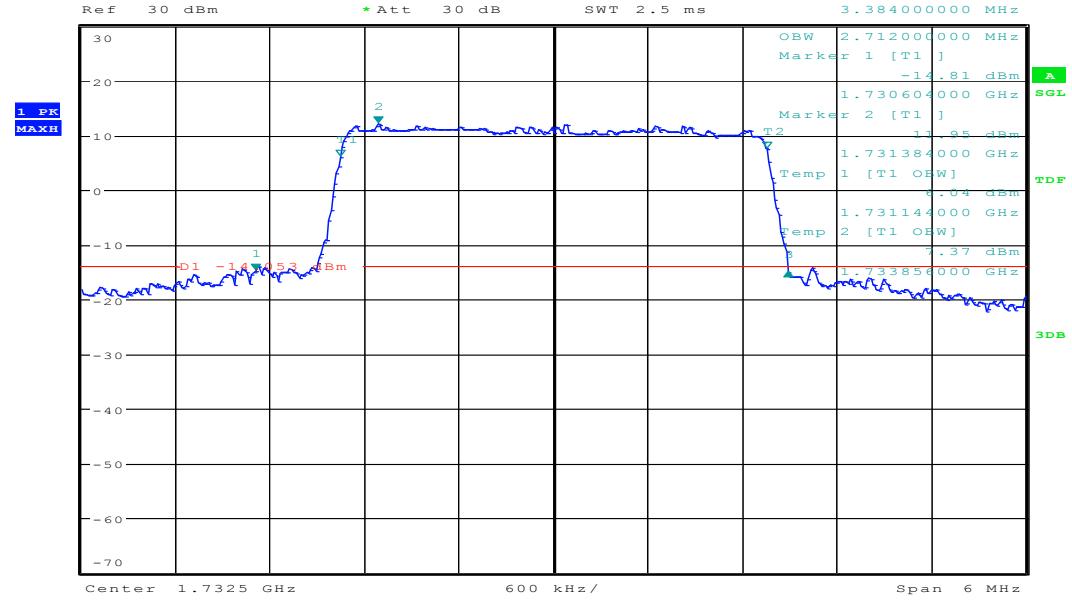
Date: 22.OCT.2016 15:14:32

## BW3MHz-1711.5MHz,QPSK-15RB\_LOW@OBW\_2.7MHz@26dB\_2.964MHz

~~FS~~

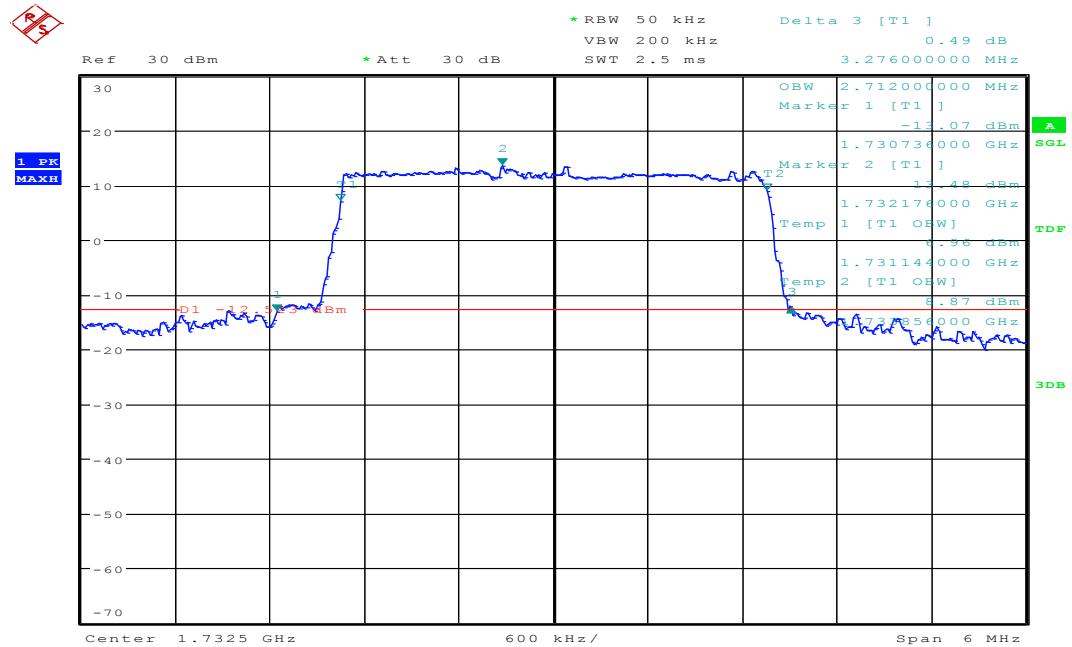
Date: 22.OCT.2016 15:31:36

## BW3MHz-1732.5MHz,Q16-15RB\_LOW@OBW\_2.712MHz@26dB\_3.384MHz

~~FS~~

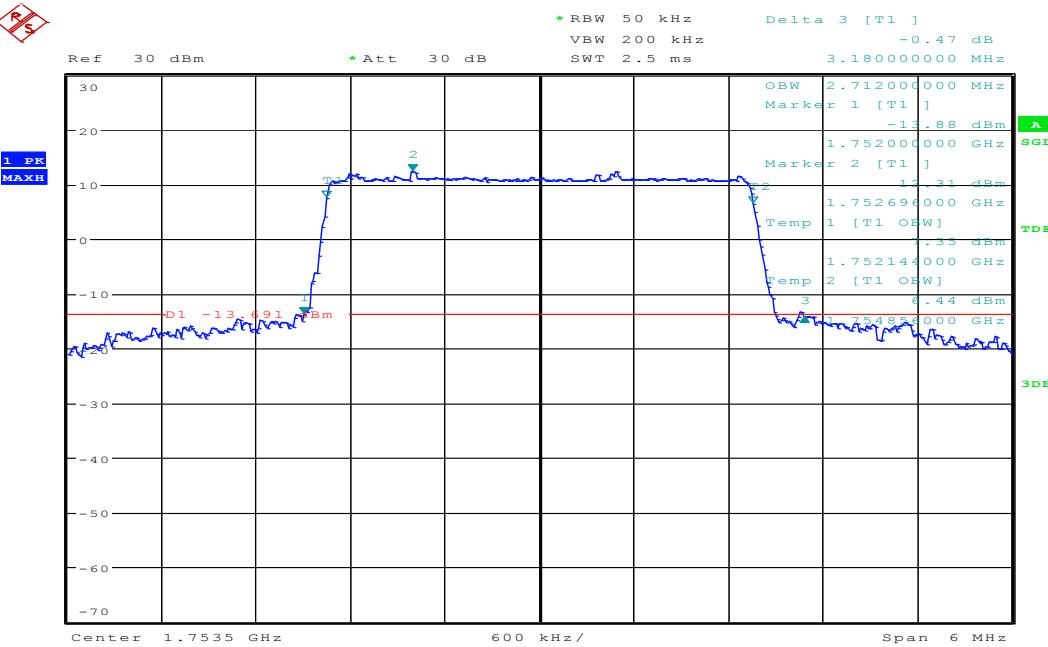
Date: 22.OCT.2016 15:15:55

## BW3MHz-1732.5MHz,QPSK-15RB\_LOW@OBW\_2.712MHz@26dB\_3.276MHz

~~FS~~

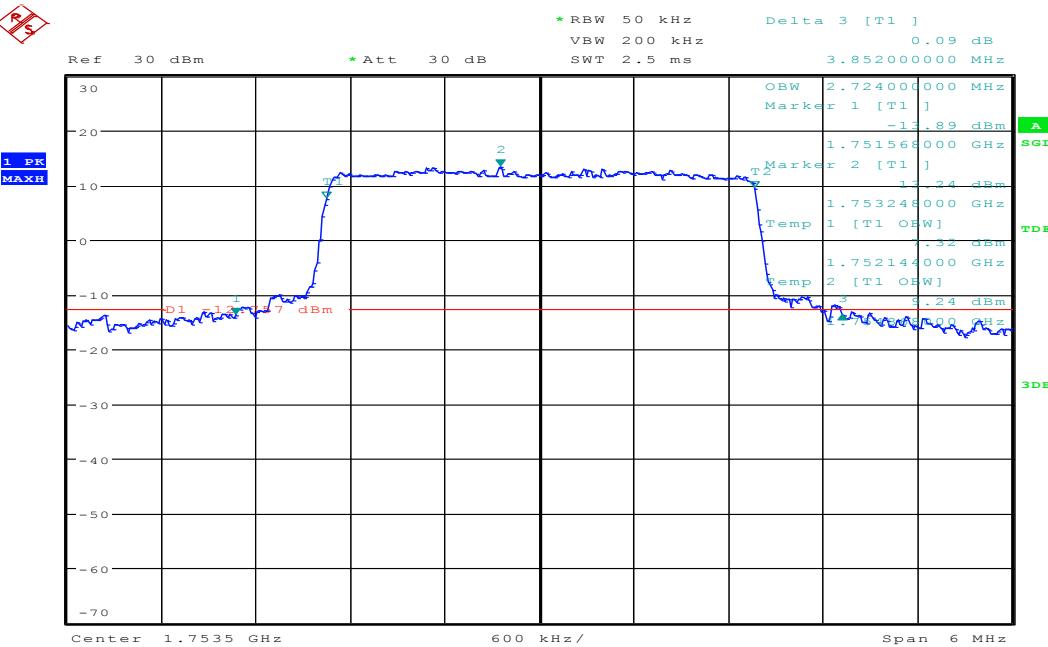
Date: 22.OCT.2016 15:15:35

## BW3MHz-1753.5MHz,Q16-15RB\_LOW@OBW\_2.712MHz@26dB\_3.18MHz

~~FS~~

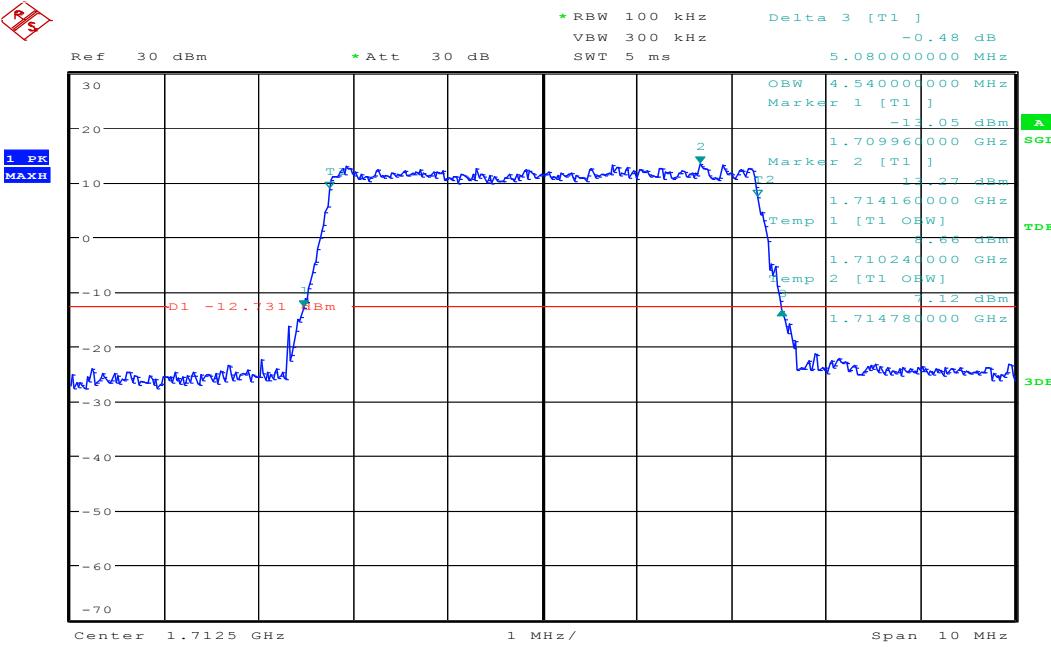
Date: 22.OCT.2016 15:15:14

## BW3MHz-1753.5MHz,QPSK-15RB\_LOW@OBW\_2.724MHz@26dB\_3.852MHz

~~FS~~

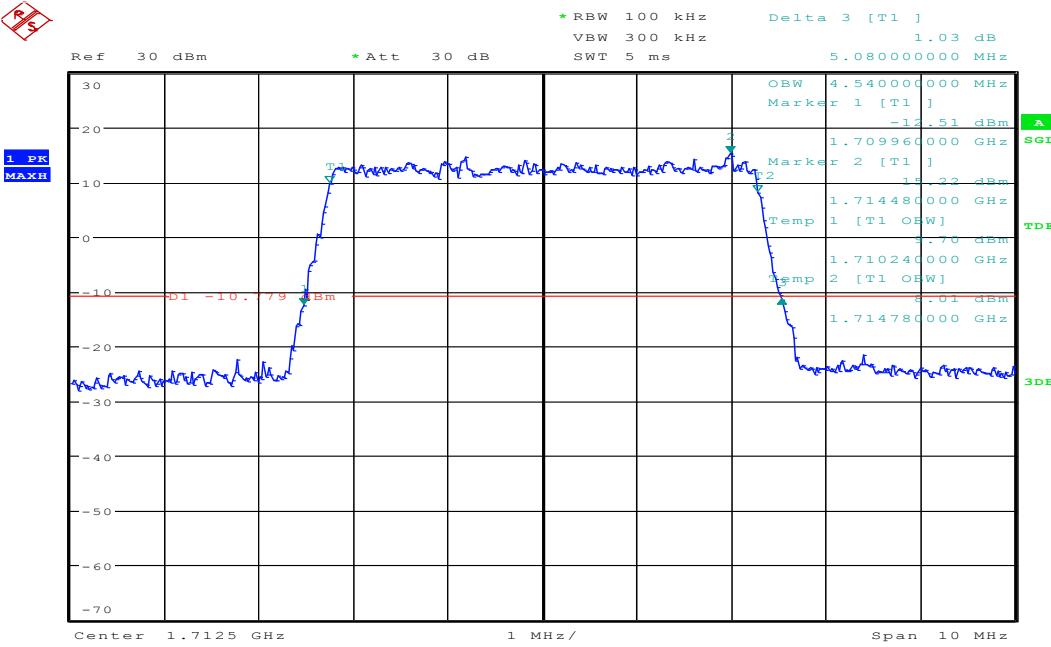
Date: 22.OCT.2016 15:14:54

## BW5MHz-1712.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.08MHz

~~FS~~

Date: 22.OCT.2016 15:17:01

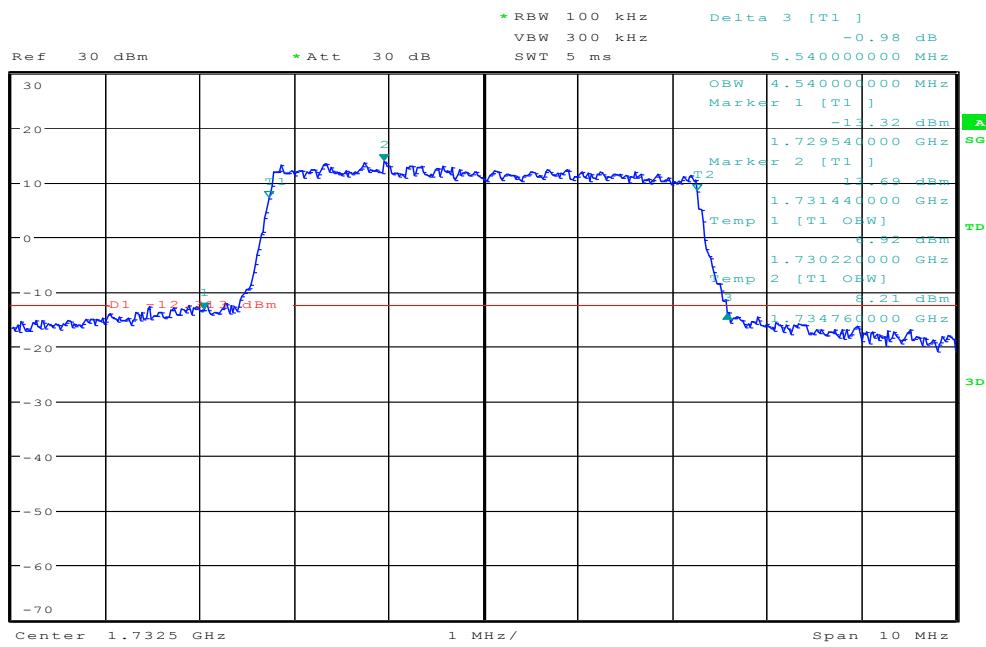
## BW5MHz-1712.5MHz,QPSK-25RB\_LOW@OBW\_4.54MHz@26dB\_5.08MHz

~~FS~~

Date: 22.OCT.2016 15:16:30

## BW5MHz-1732.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.54MHz

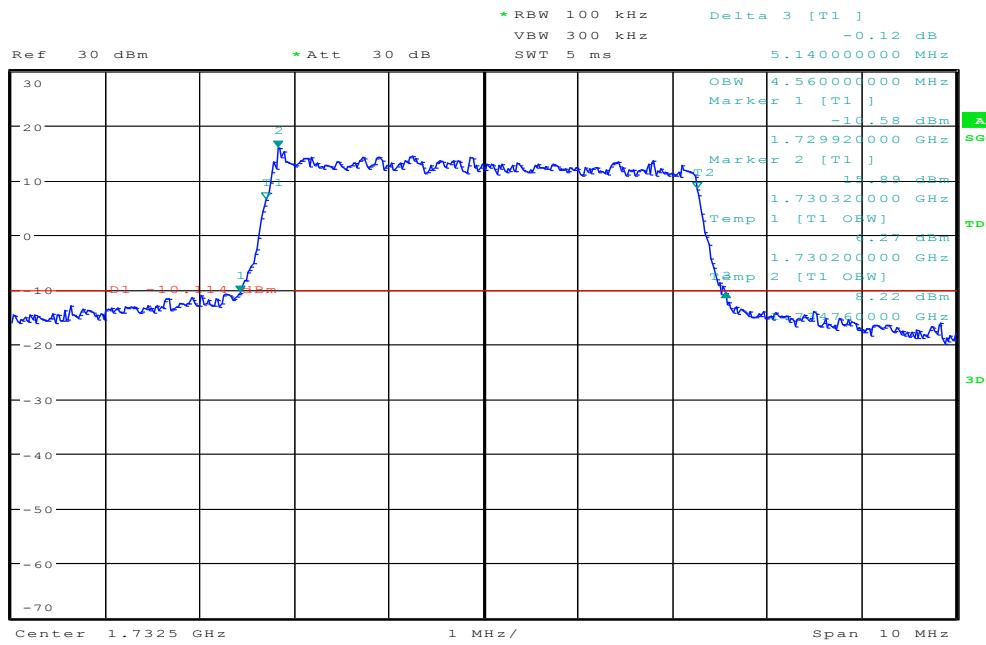
REF



Date: 22.OCT.2016 15:18:38

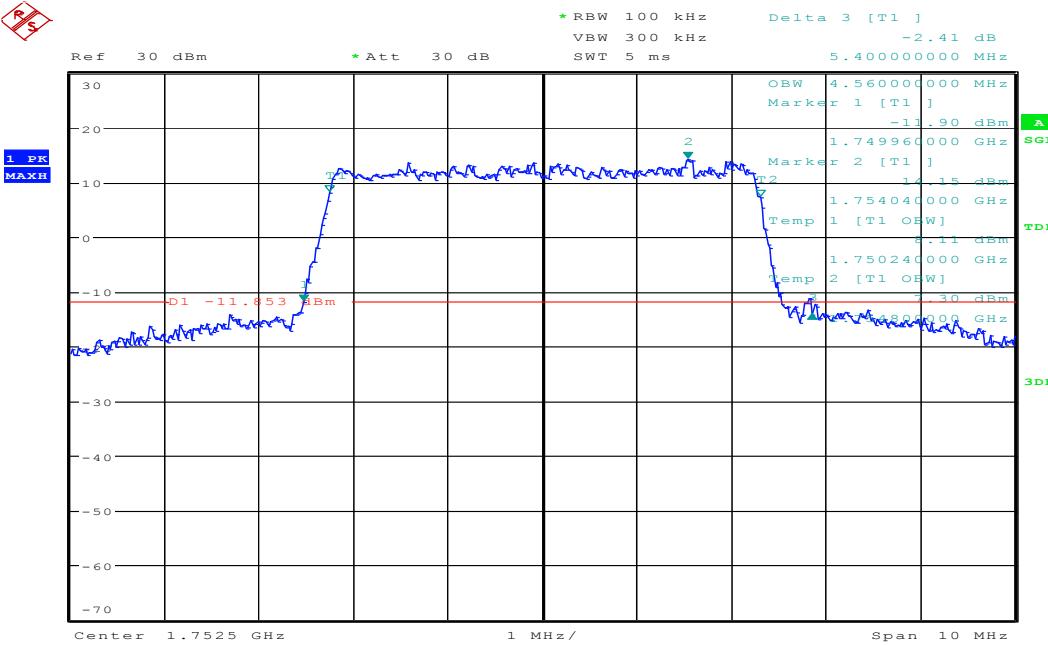
## BW5MHz-1732.5MHz,QPSK-25RB\_LOW@OBW\_4.56MHz@26dB\_5.14MHz

REF



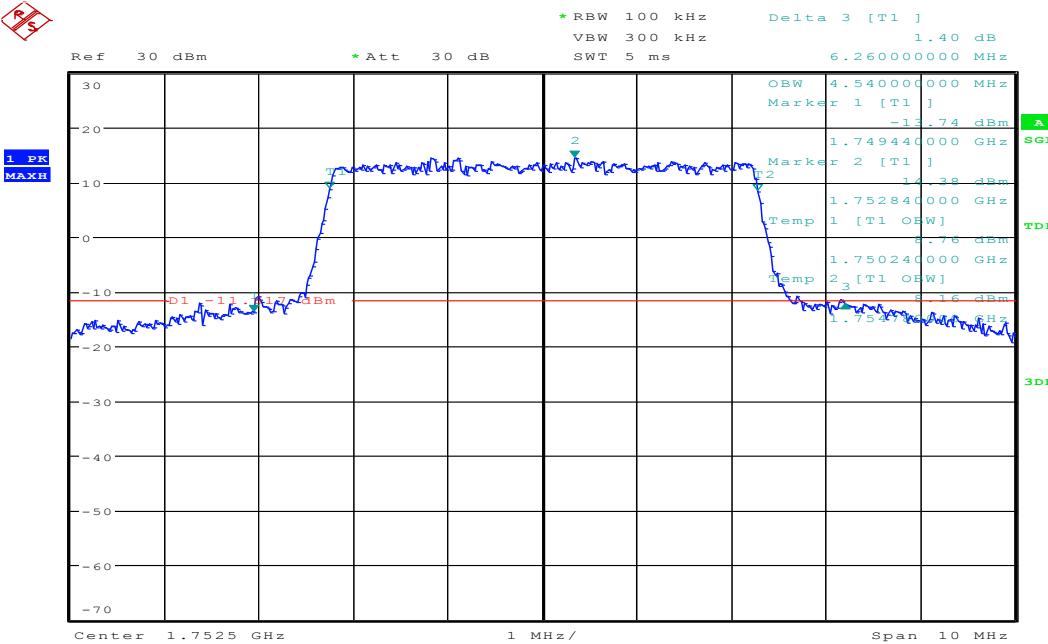
Date: 22.OCT.2016 15:18:16

## BW5MHz-1752.5MHz,Q16-25RB\_LOW@OBW\_4.56MHz@26dB\_5.4MHz

~~FS~~

Date: 22.OCT.2016 15:17:53

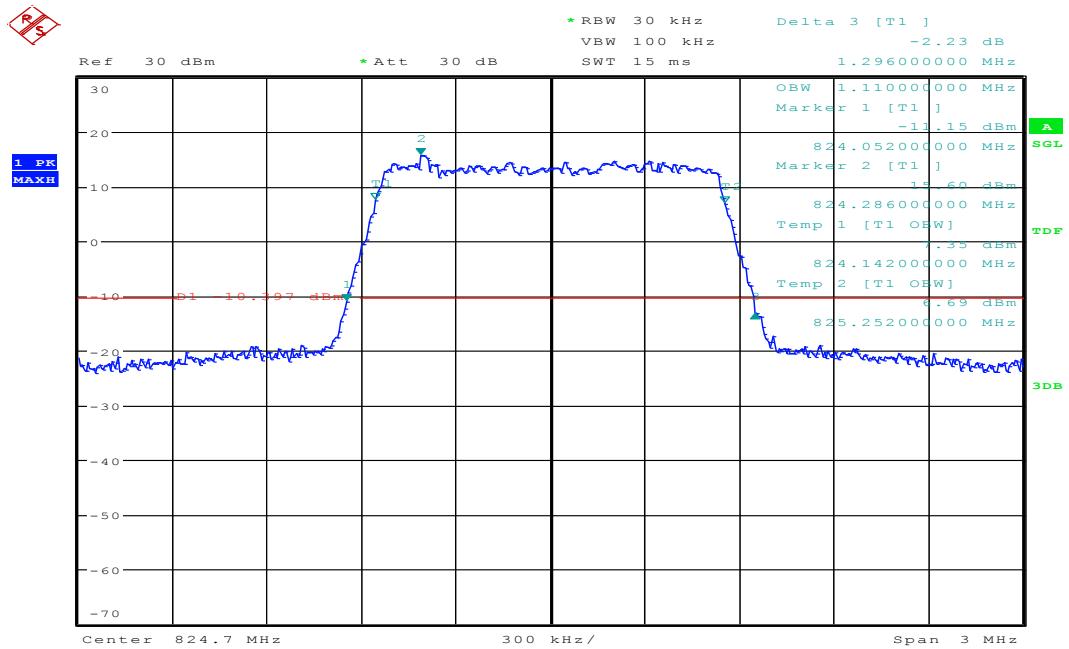
## BW5MHz-1752.5MHz,QPSK-25RB\_LOW@OBW\_4.54MHz@26dB\_6.26MHz

~~FS~~

Date: 22.OCT.2016 15:17:28

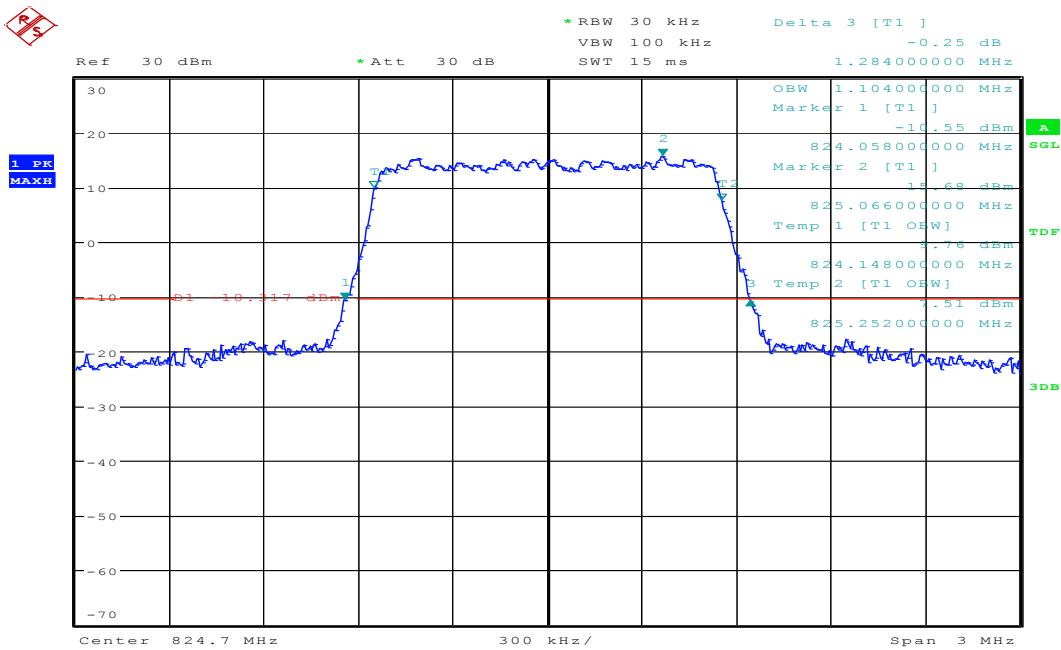
## BAND 5 @Bandwidth

*BW1.4MHz-824.7MHz,Q16-6RB\_LOW@OBW\_1.11MHz@26dB\_1.296MHz*



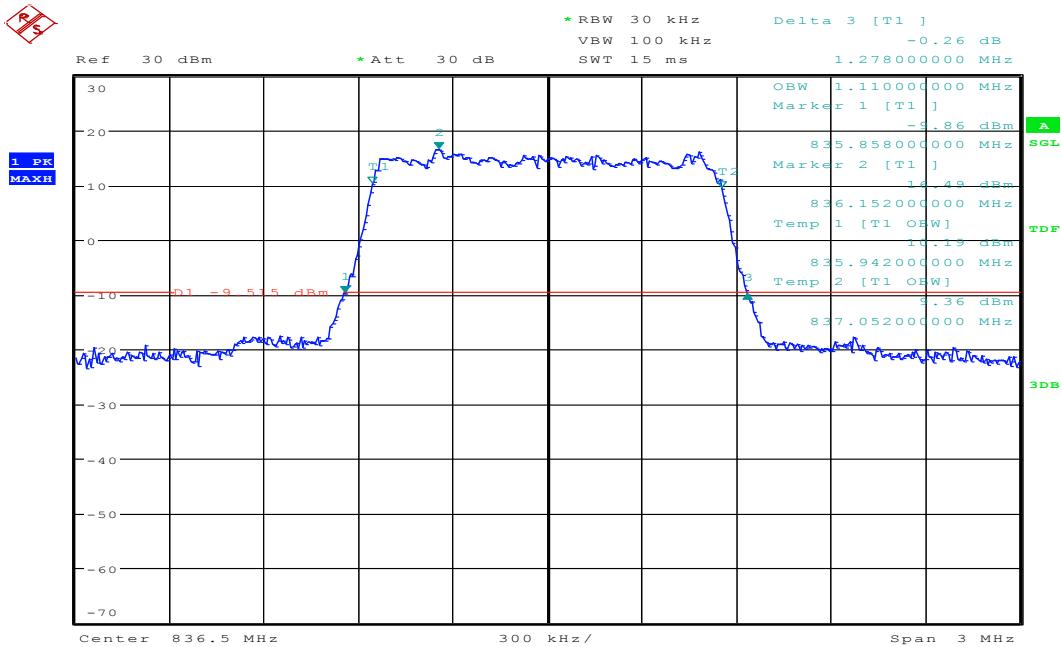
Date: 22.OCT.2016 17:23:14

## BW1.4MHz-824.7MHz,QPSK-6RB\_LOW@OBW\_1.104MHz@26dB\_1.284MHz

~~FS~~

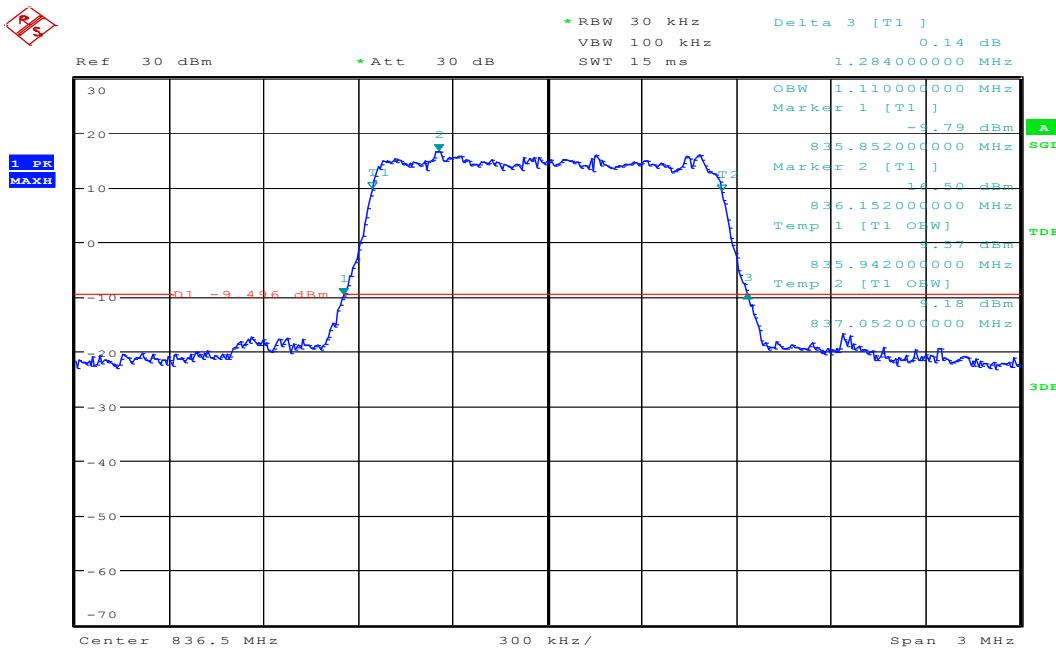
Date: 22.OCT.2016 17:22:46

## BW1.4MHz-836.5MHz,QPSK-6RB\_LOW@OBW\_1.11MHz@26dB\_1.278MHz

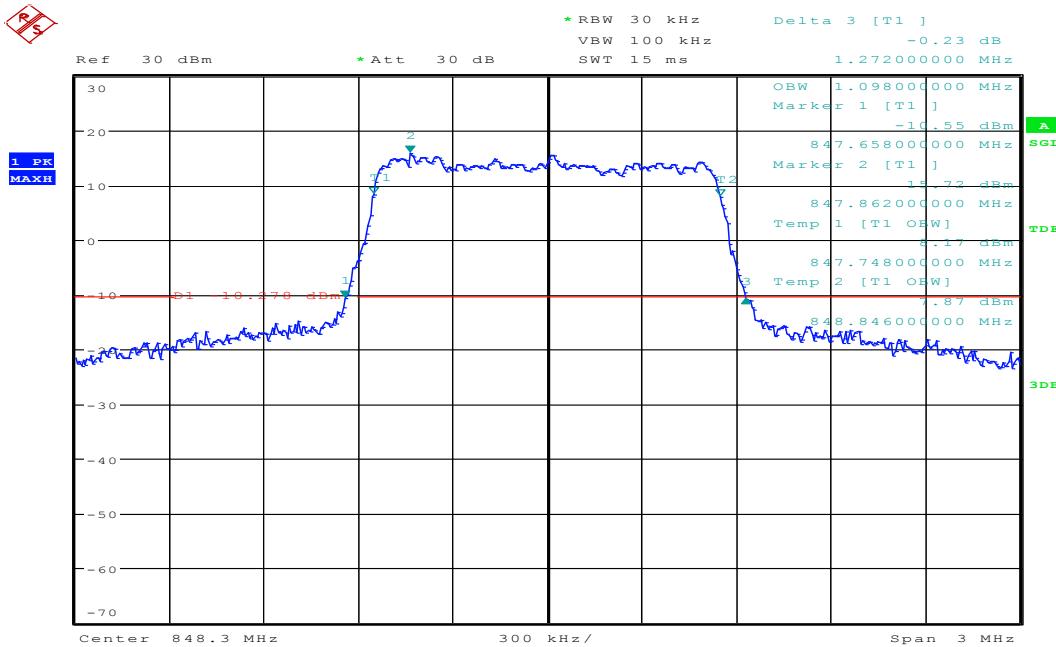
~~FS~~

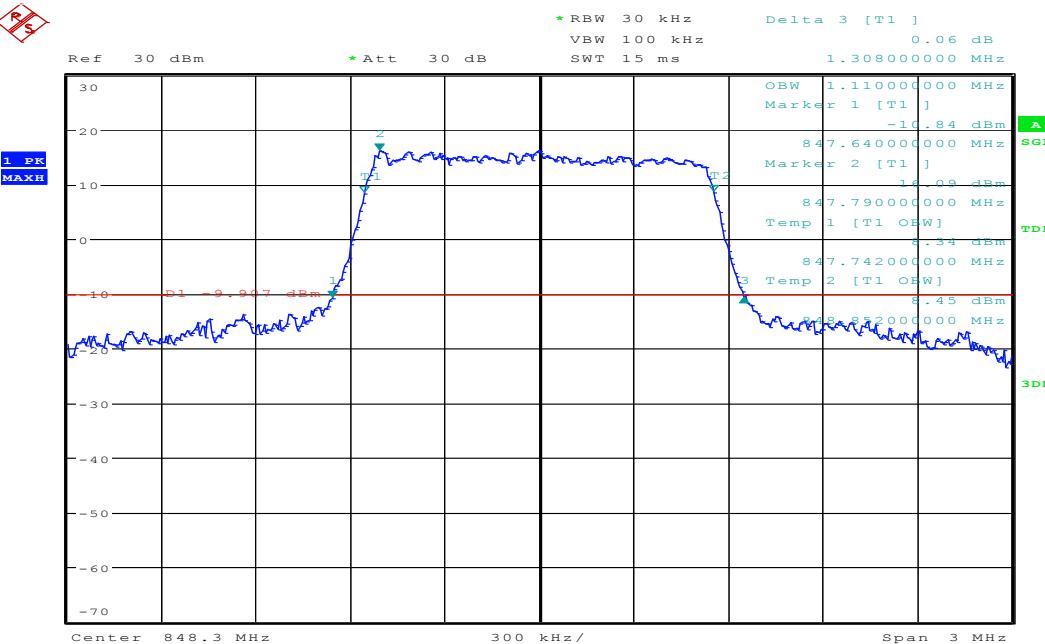
Date: 22.OCT.2016 17:24:52

## BW1.4MHz-836.5MHz,QPSK-6RB\_LOW@OBW\_1.11MHz@26dB\_1.284MHz

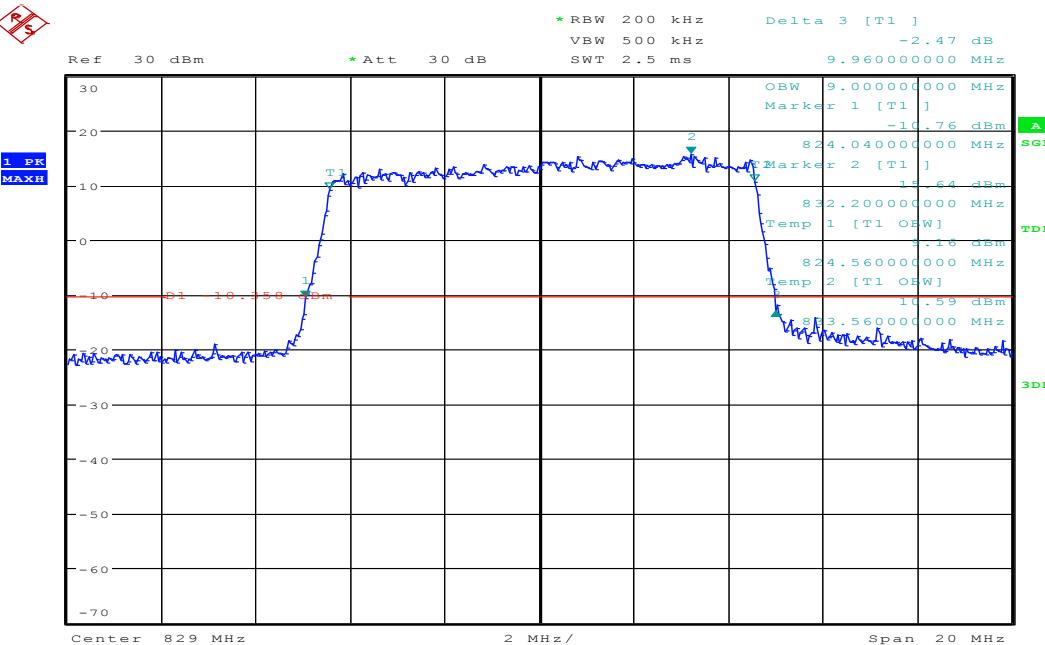
~~FS~~

## BW1.4MHz-848.3MHz,Q16-6RB\_LOW@OBW\_1.098MHz@26dB\_1.272MHz

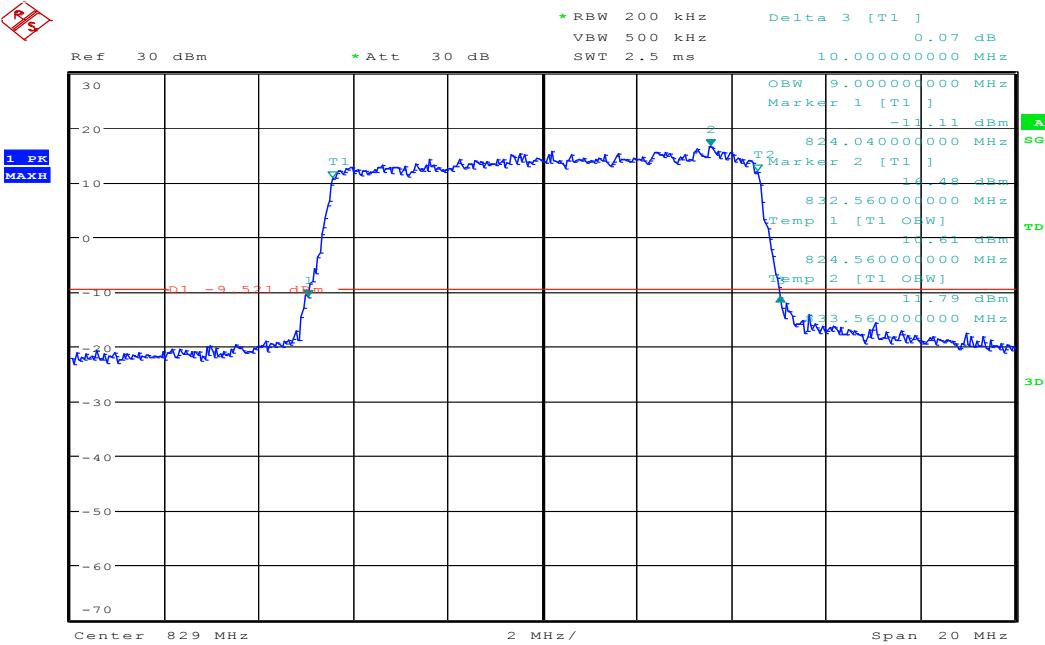
~~FS~~

**BW1.4MHz-848.3MHz,QPSK-6RB\_LOW@OBW\_1.11MHz@26dB\_1.308MHz****FS**

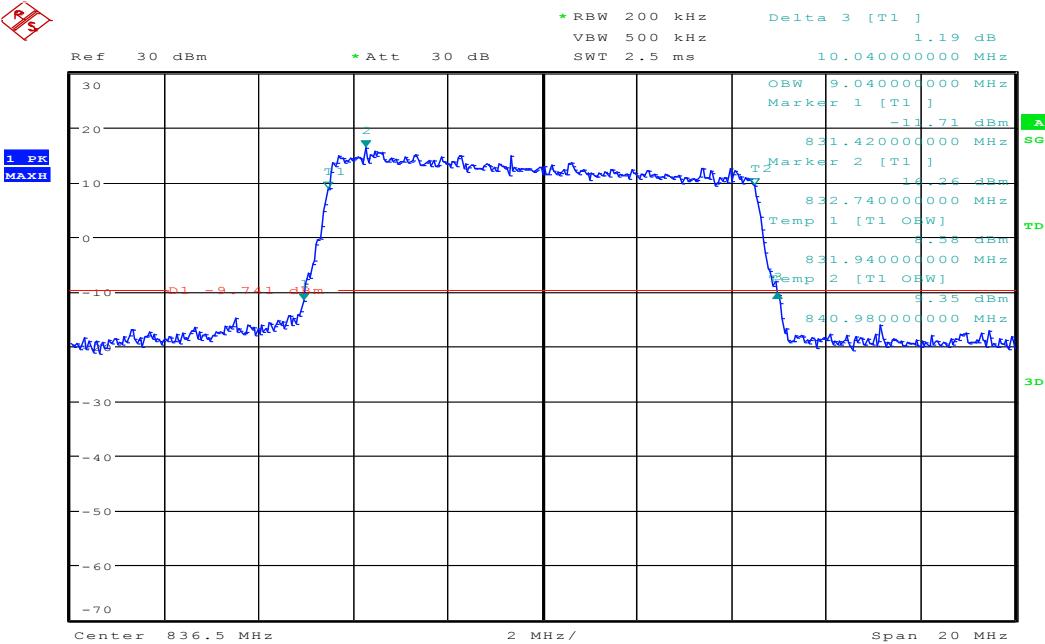
Date: 22.OCT.2016 17:23:43

**BW10MHz-829MHz,Q16-50RB\_LOW@OBW\_9.MHz@26dB\_9.96MHz****FS**

Date: 22.OCT.2016 17:32:29

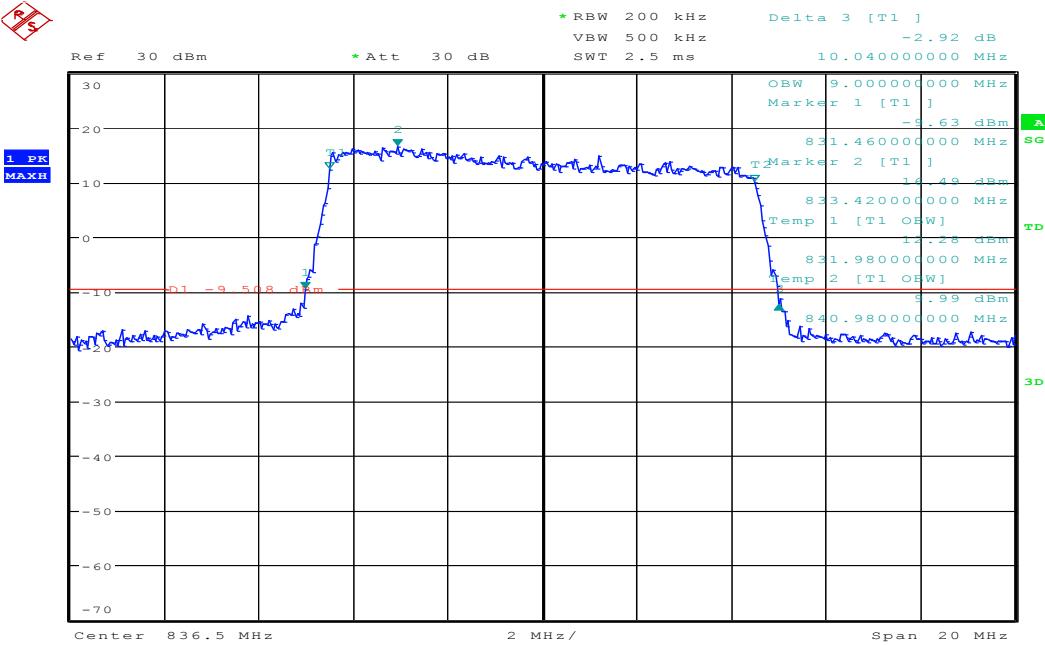
**BW10MHz-829MHz,QPSK-50RB\_LOW@OBW\_9MHz@26dB\_10MHz****FS**

Date: 22.OCT.2016 17:32:08

**BW10MHz-836.5MHz,Q16-50RB\_LOW@OBW\_9.04MHz@26dB\_10.04MHz****FS**

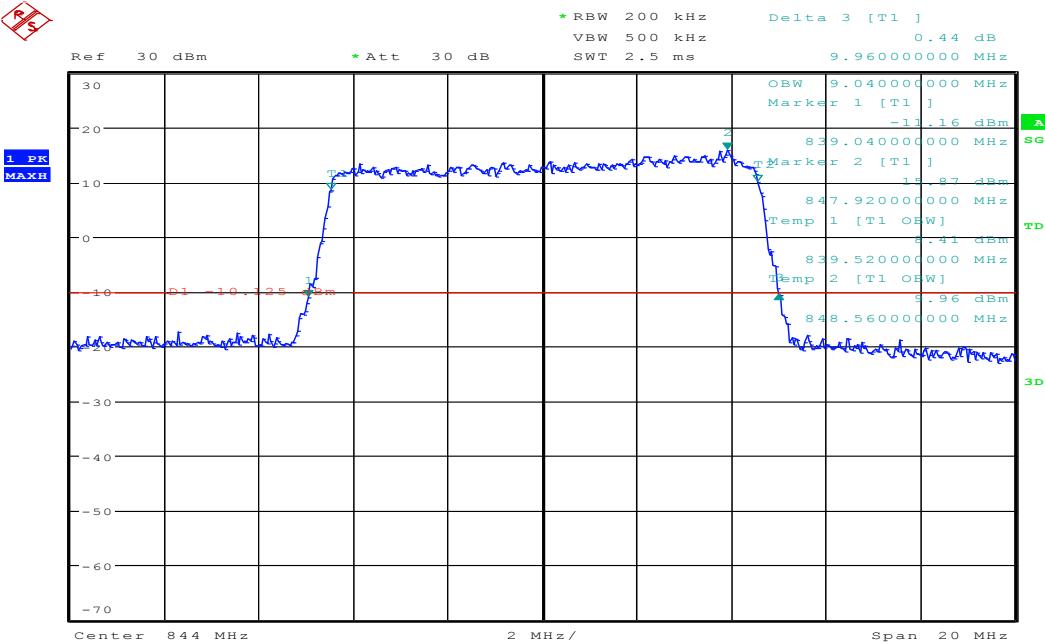
Date: 22.OCT.2016 17:33:54

## BW10MHz-836.5MHz,QPSK-50RB\_LOW@OBW\_9MHz@26dB\_10.04MHz

~~FS~~

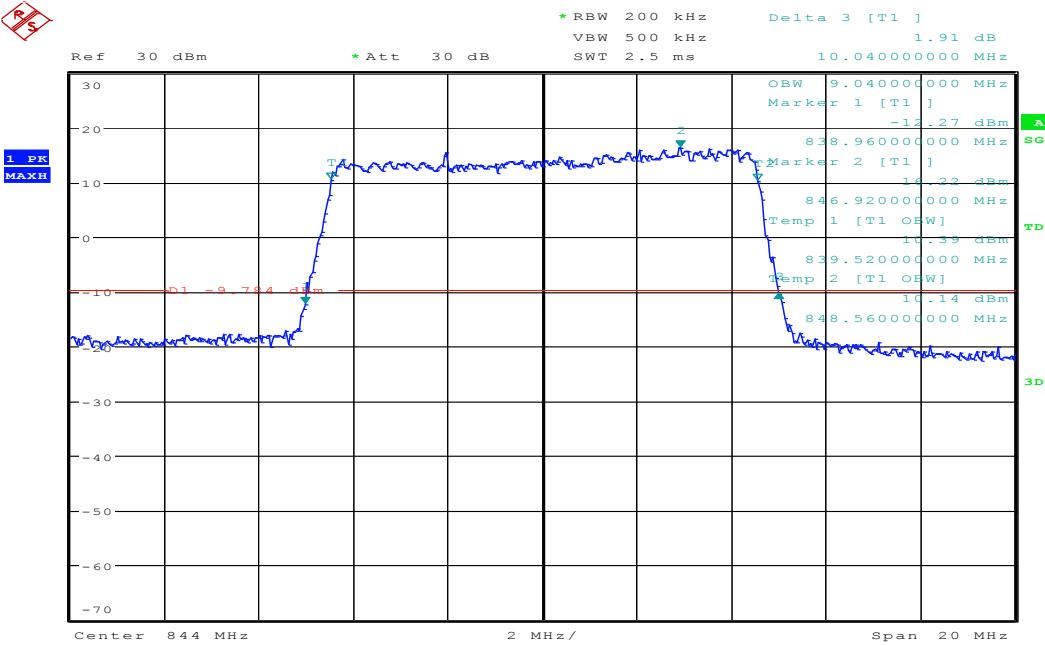
Date: 22.OCT.2016 17:33:33

## BW10MHz-844MHz,Q16-50RB\_LOW@OBW\_9.04MHz@26dB\_9.96MHz

~~FS~~

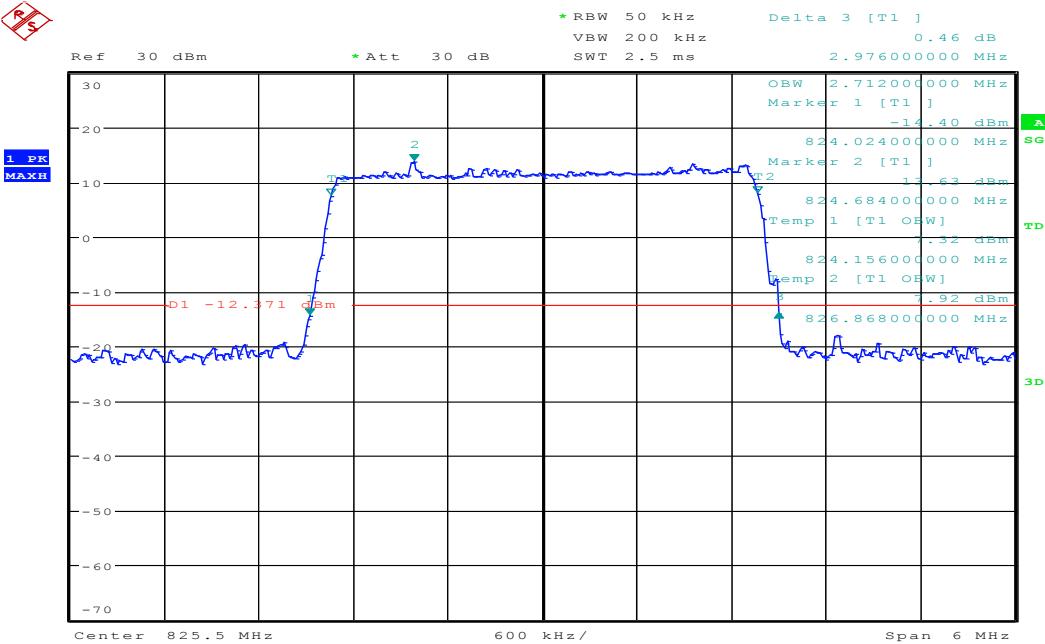
Date: 22.OCT.2016 17:33:12

## BW10MHz-844MHz,QPSK-50RB\_LOW@OBW\_9.04MHz@26dB\_10.04MHz

~~FS~~

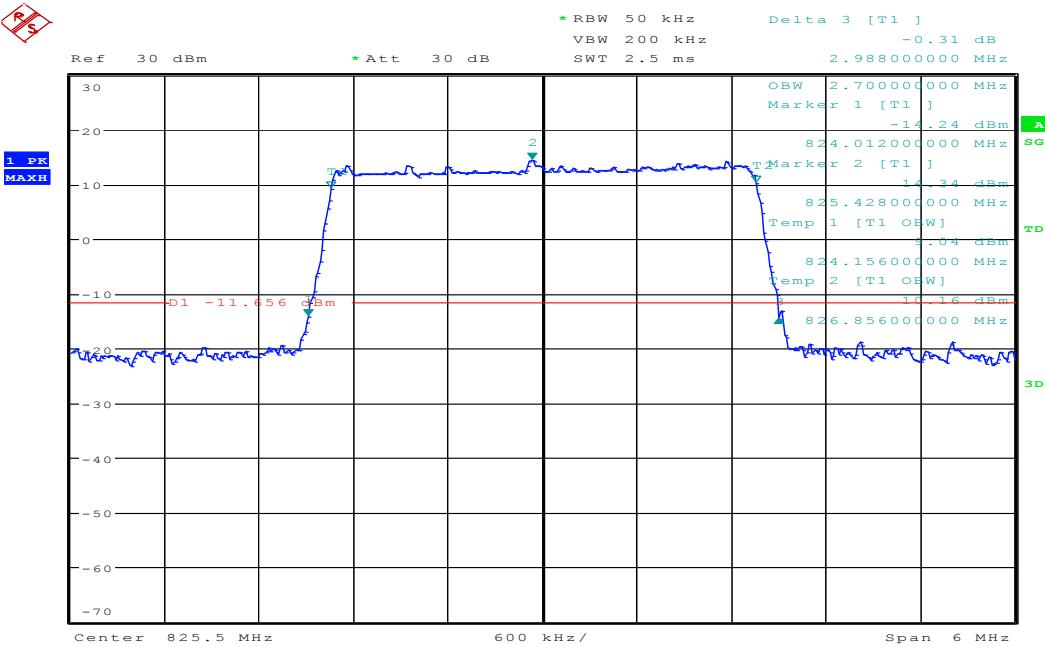
Date: 22.OCT.2016 17:32:51

## BW3MHz-825.5MHz,Q16-15RB\_LOW@OBW\_2.712MHz@26dB\_2.976MHz

~~FS~~

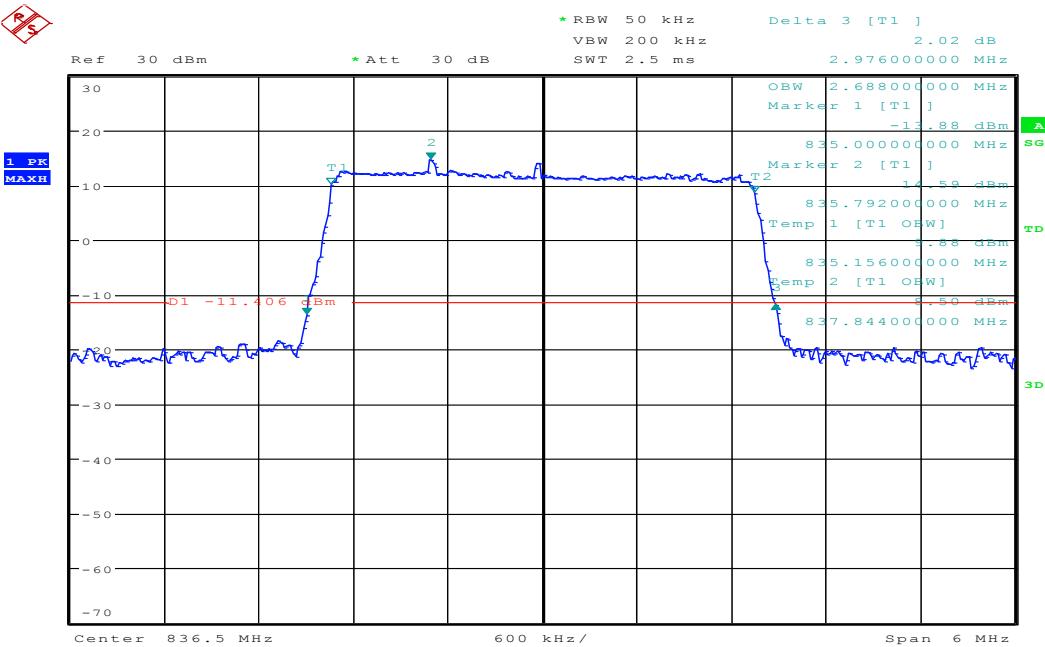
Date: 22.OCT.2016 17:26:19

## BW3MHz-825.5MHz,QPSK-15RB\_LOW@OBW\_2.7MHz@26dB\_2.988MHz

~~FS~~

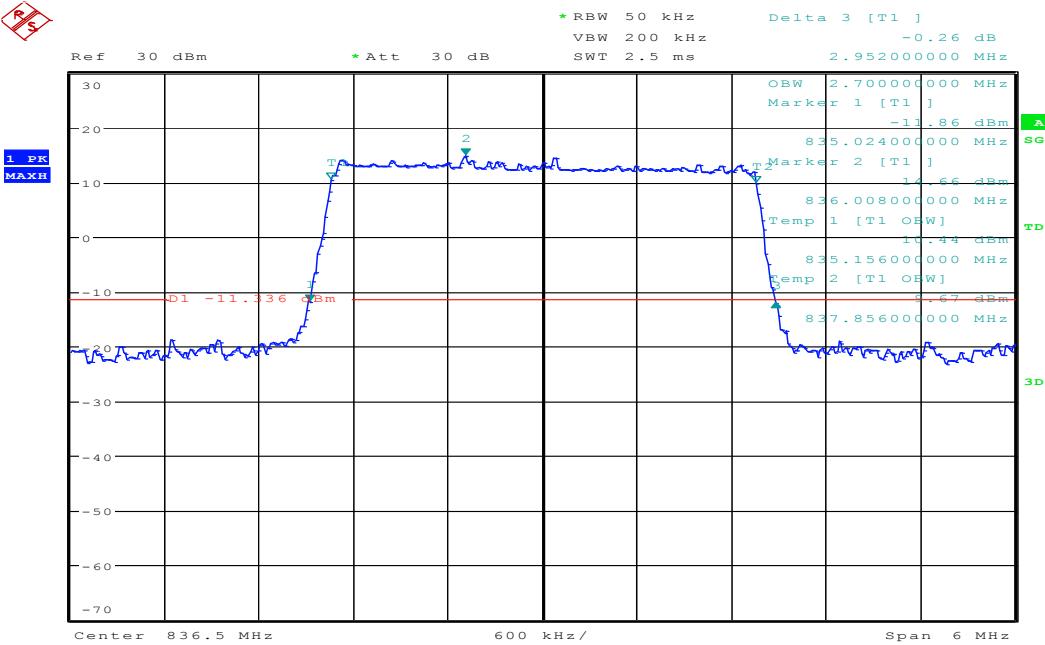
Date: 22.OCT.2016 17:25:57

## BW3MHz-836.5MHz,Q16-15RB\_LOW@OBW\_2.688MHz@26dB\_2.976MHz

~~FS~~

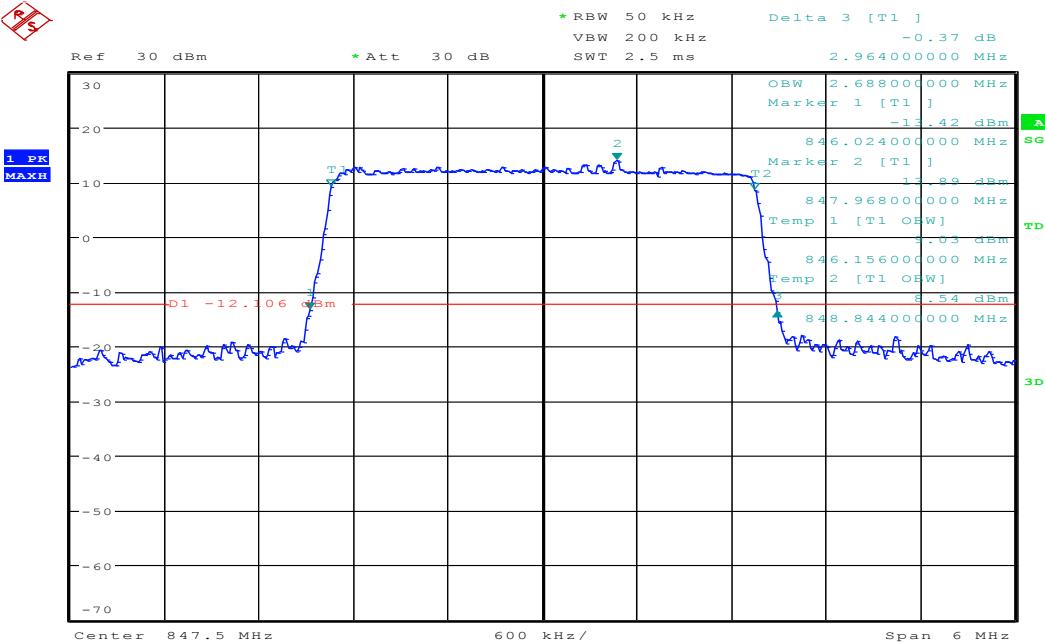
Date: 22.OCT.2016 17:28:17

## BW3MHz-836.5MHz,QPSK-15RB\_LOW@OBW\_2.7MHz@26dB\_2.952MHz

~~FS~~

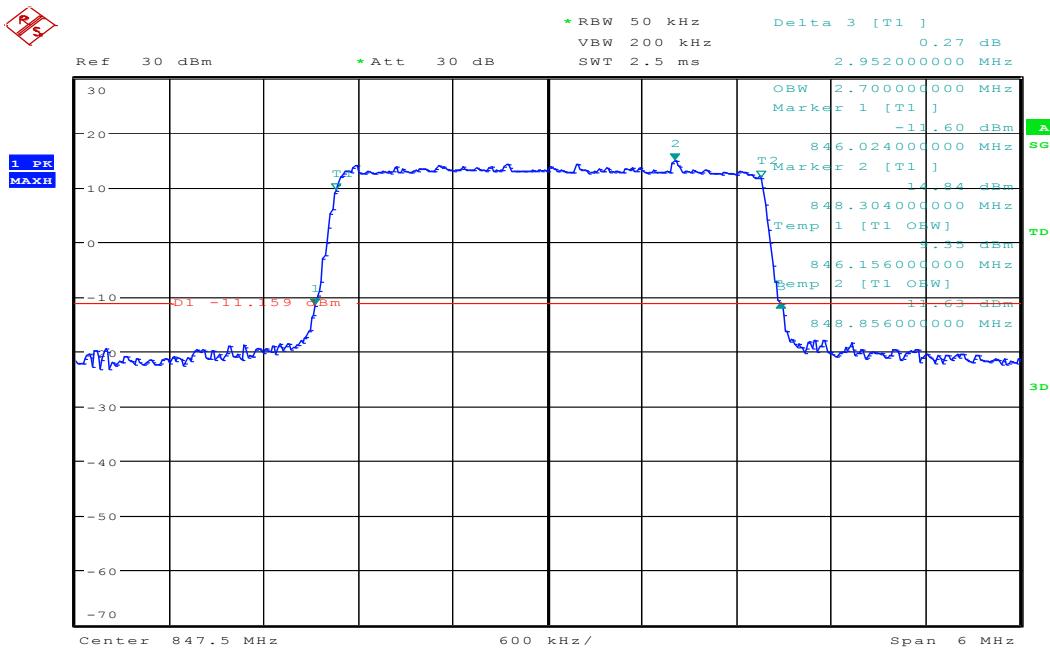
Date: 22.OCT.2016 17:27:44

## BW3MHz-847.5MHz,Q16-15RB\_LOW@OBW\_2.688MHz@26dB\_2.964MHz

~~FS~~

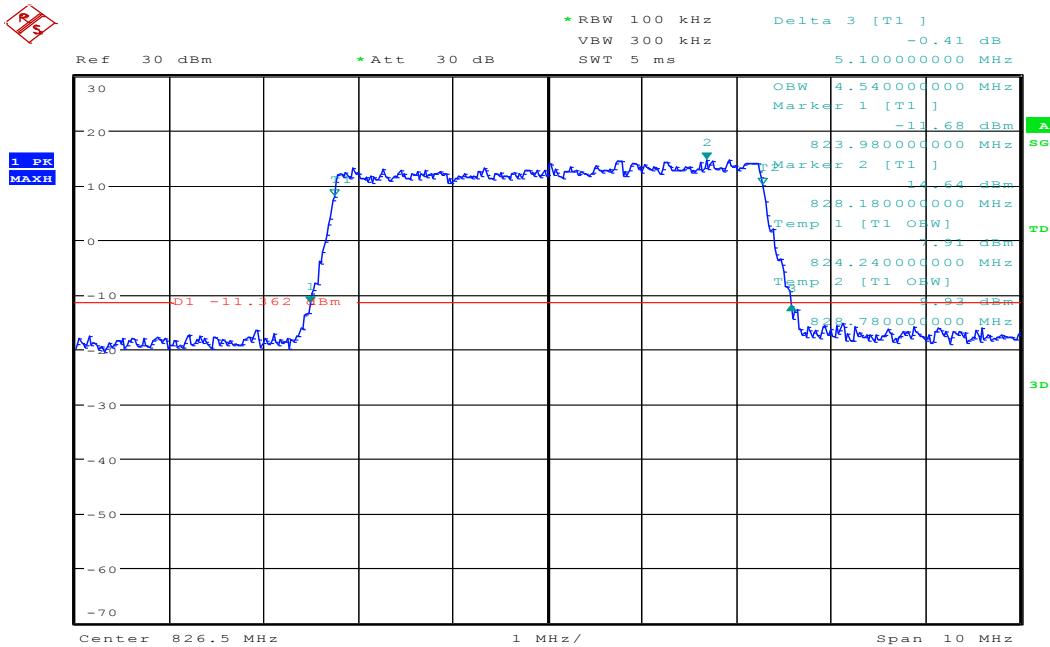
Date: 22.OCT.2016 17:27:11

## BW3MHz-847.5MHz,QPSK-15RB\_LOW@OBW\_2.7MHz@26dB\_2.952MHz

~~FS~~

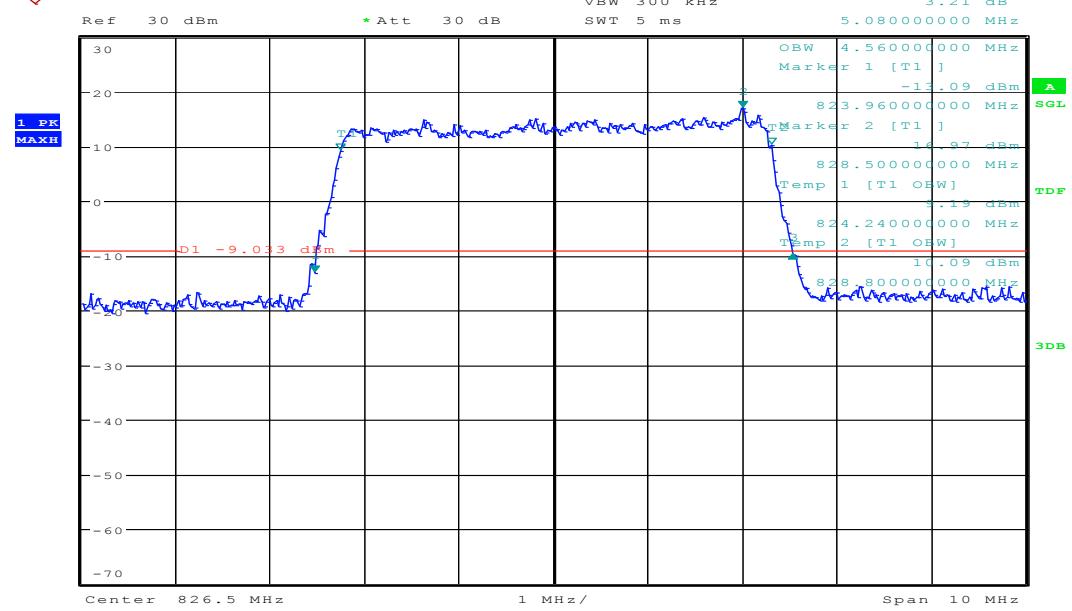
Date: 22.OCT.2016 17:26:45

## BW5MHz-826.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.1MHz

~~FS~~

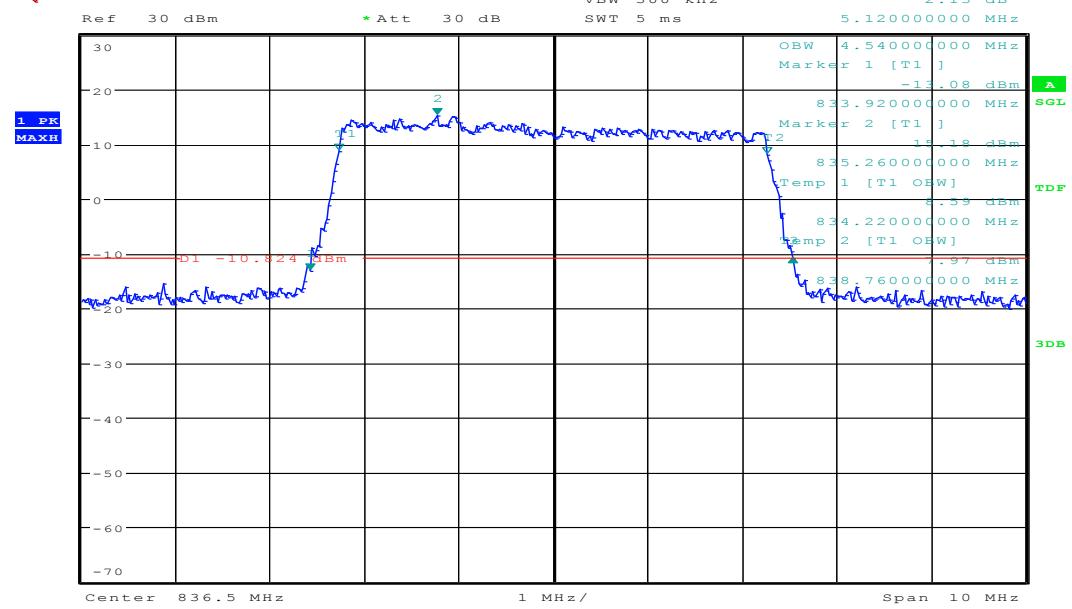
Date: 22.OCT.2016 17:29:14

## BW5MHz-826.5MHz,QPSK-25RB\_LOW@OBW\_4.56MHz@26dB\_5.08MHz

~~FS~~

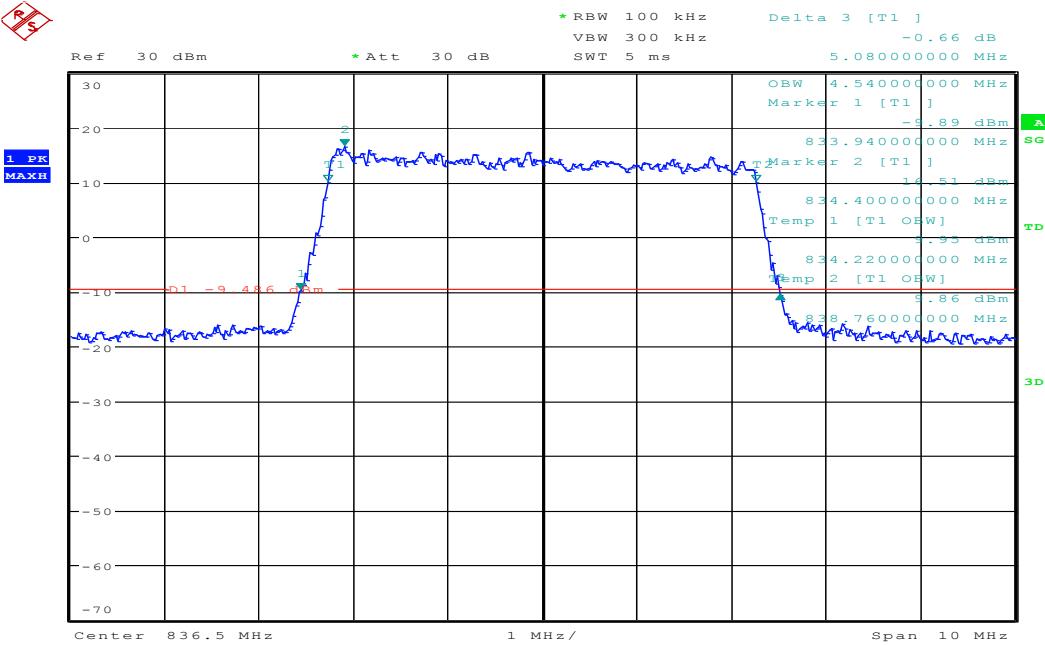
Date: 22.OCT.2016 17:28:47

## BW5MHz-836.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.12MHz

~~FS~~

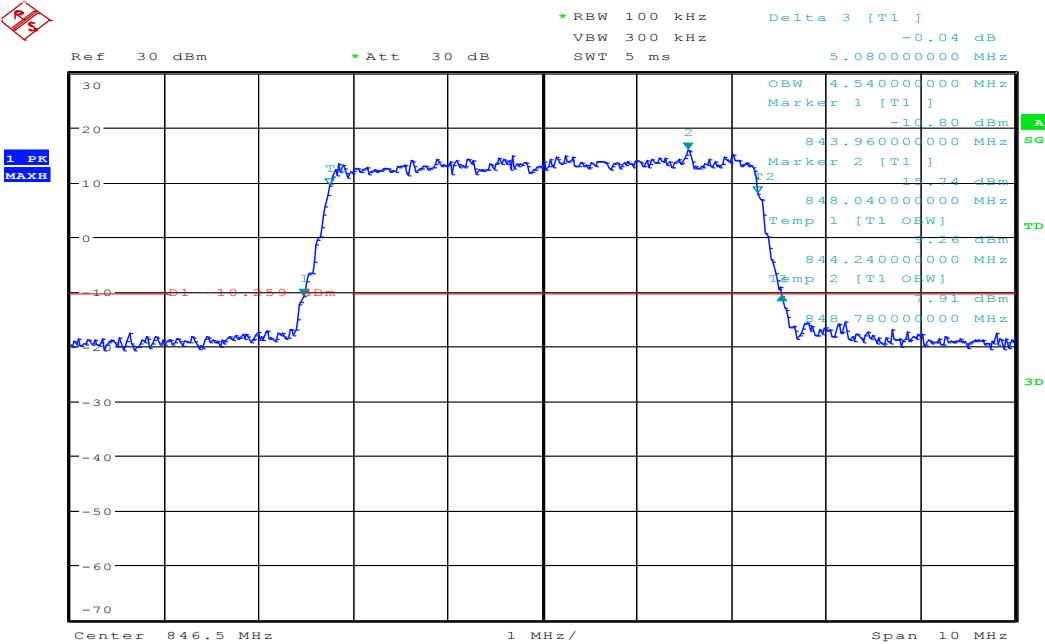
Date: 22.OCT.2016 17:31:44

## BW5MHz-836.5MHz,QPSK-25RB\_LOW@OBW\_4.54MHz@26dB\_5.08MHz

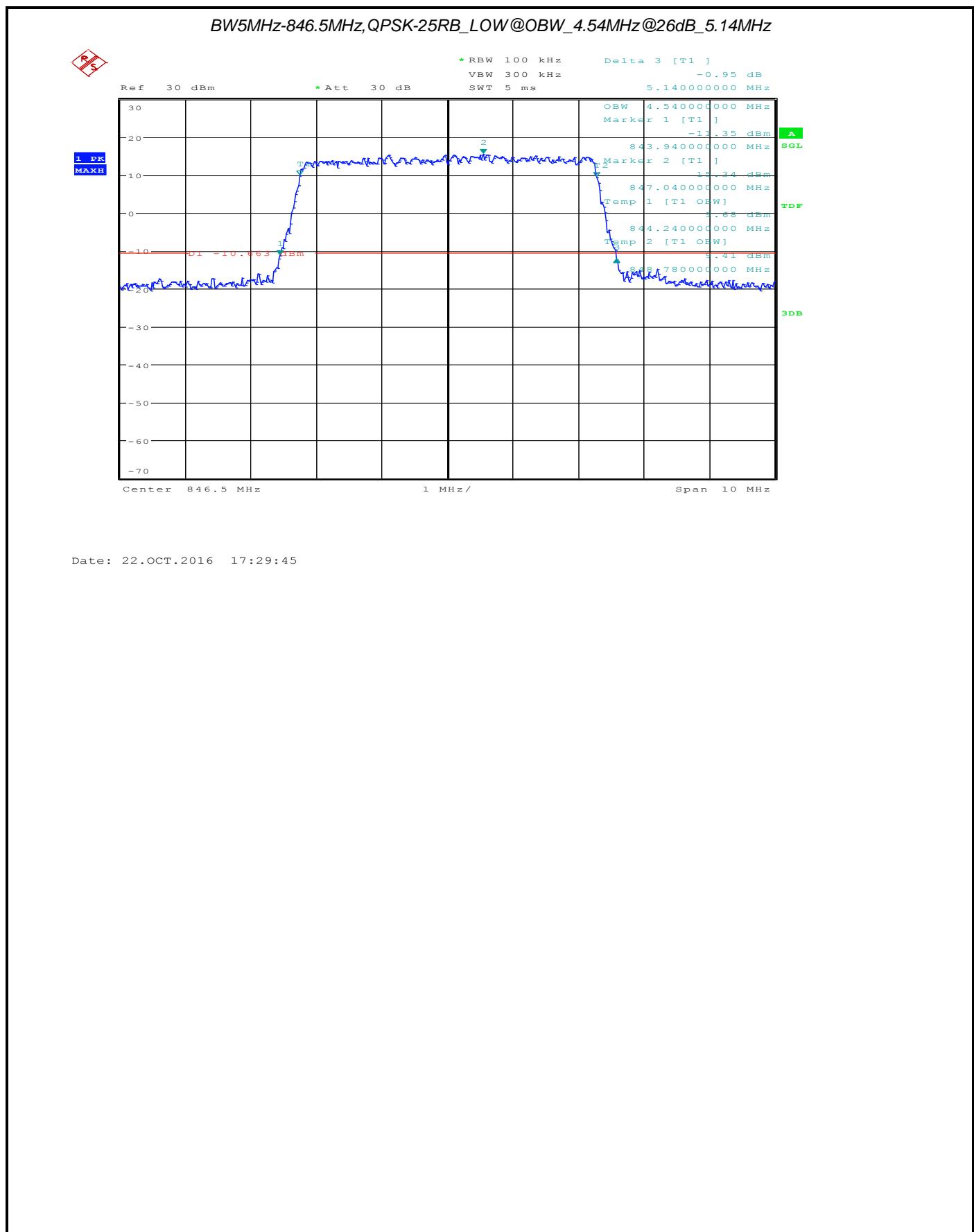
~~FS~~

Date: 22.OCT.2016 17:30:59

## BW5MHz-846.5MHz,Q16-25RB\_LOW@OBW\_4.54MHz@26dB\_5.08MHz

~~FS~~

Date: 22.OCT.2016 17:30:15



Report No.: FCC16104036A-5

## 2 BAND EDGE

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

### 2.1 Measurement Result

#### GSM850:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgement
Low Range	0.2	128	824.2	Pass
High Range	0.2	251	848.8	Pass

#### PCS 1900:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgement
Low Range	0.2	512	1850.2	Pass
High Range	0.2	810	1909.8	Pass

#### UTRA BANDS

#### BAND 2:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgement
Low Range	5	9262	1852.4	Pass
High Range	5	9538	1907.6	Pass

#### BAND 4:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgement
Low Range	5	1312	1712.4	Pass
High Range	5	1513	1752.6	Pass

#### BAND 5:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgement
Low Range	5	4132	826.4	Pass
High Range	5	4233	846.6	Pass

**E-UTRA****BAND 2:**

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1.4	18607	1850.7	QPSK	6	LOW	Pass
1.4	18607	1850.7	Q16	6	LOW	Pass
1.4	19193	1909.3	QPSK	6	LOW	Pass
1.4	19193	1909.3	Q16	6	LOW	Pass
3	18615	1851.5	QPSK	15	LOW	Pass
3	18615	1851.5	Q16	15	LOW	Pass
3	19185	1908.5	QPSK	15	LOW	Pass
3	19185	1908.5	Q16	15	LOW	Pass
5	18625	1852.5	QPSK	25	LOW	Pass
5	18625	1852.5	Q16	25	LOW	Pass
5	19175	1907.5	QPSK	25	LOW	Pass
5	19175	1907.5	Q16	25	LOW	Pass
10	18650	1855	QPSK	50	LOW	Pass
10	18650	1855	Q16	50	LOW	Pass
10	19150	1905	QPSK	50	LOW	Pass
10	19150	1905	Q16	50	LOW	Pass
15	18675	1857.5	QPSK	75	LOW	Pass
15	18675	1857.5	Q16	75	LOW	Pass
15	19125	1902.5	QPSK	75	LOW	Pass
15	19125	1902.5	Q16	75	LOW	Pass
20	18700	1860	QPSK	100	LOW	Pass
20	18700	1860	Q16	100	LOW	Pass
20	19100	1900	QPSK	100	LOW	Pass
20	19100	1900	Q16	100	LOW	Pass

**BAND 4:**

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1.4	18607	1850.7	QPSK	6	LOW	Pass
1.4	18607	1850.7	Q16	6	LOW	Pass
1.4	19193	1909.3	QPSK	6	LOW	Pass
1.4	19193	1909.3	Q16	6	LOW	Pass
3	18615	1851.5	QPSK	15	LOW	Pass
3	18615	1851.5	Q16	15	LOW	Pass
3	19185	1908.5	QPSK	15	LOW	Pass
3	19185	1908.5	Q16	15	LOW	Pass
5	18625	1852.5	QPSK	25	LOW	Pass
5	18625	1852.5	Q16	25	LOW	Pass

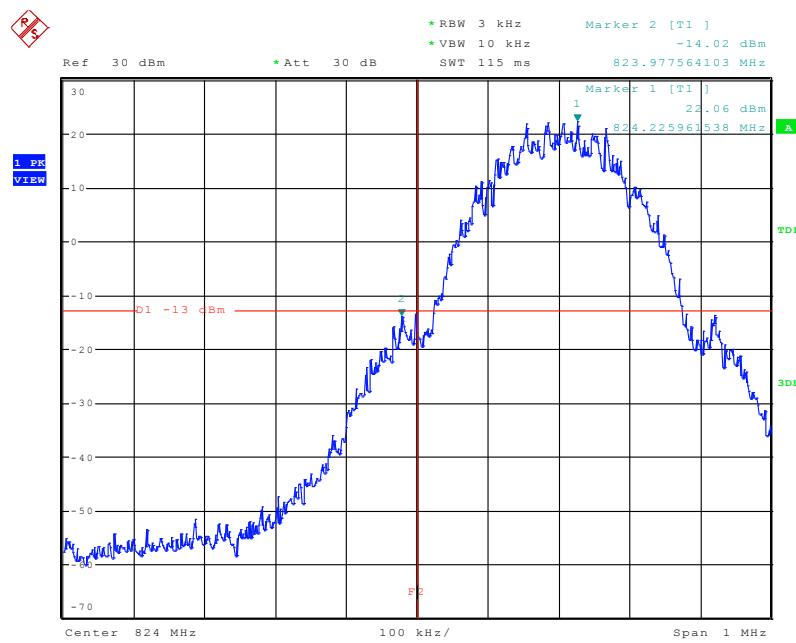
Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
5	19175	1907.5	QPSK	25	LOW	Pass
5	19175	1907.5	Q16	25	LOW	Pass
10	18650	1855	QPSK	50	LOW	Pass
10	18650	1855	Q16	50	LOW	Pass
10	19150	1905	QPSK	50	LOW	Pass
10	19150	1905	Q16	50	LOW	Pass
15	18675	1857.5	QPSK	75	LOW	Pass
15	18675	1857.5	Q16	75	LOW	Pass
15	19125	1902.5	QPSK	75	LOW	Pass
15	19125	1902.5	Q16	75	LOW	Pass
20	18700	1860	QPSK	100	LOW	Pass
20	18700	1860	Q16	100	LOW	Pass
20	19100	1900	QPSK	100	LOW	Pass
20	19100	1900	Q16	100	LOW	Pass

**BAND 5:**

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Judgement
1.4	20470	824.7	QPSK	6	LOW	Pass
1.4	20470	1824.7	Q16	6	LOW	Pass
1.4	20643	848.3	QPSK	6	LOW	Pass
1.4	20643	848.3	Q16	6	LOW	Pass
3	20415	825.5	QPSK	15	LOW	Pass
3	20415	825.5	Q16	15	LOW	Pass
3	20635	847.5	QPSK	15	LOW	Pass
3	20635	847.5	Q16	15	LOW	Pass
5	20425	826.5	QPSK	25	LOW	Pass
5	20425	826.5	Q16	25	LOW	Pass
5	20625	846.5	QPSK	25	LOW	Pass
5	20625	846.5	Q16	25	LOW	Pass
10	20450	829	QPSK	50	LOW	Pass
10	20450	829	Q16	50	LOW	Pass
10	20600	844	QPSK	50	LOW	Pass
10	20600	844	Q16	50	LOW	Pass

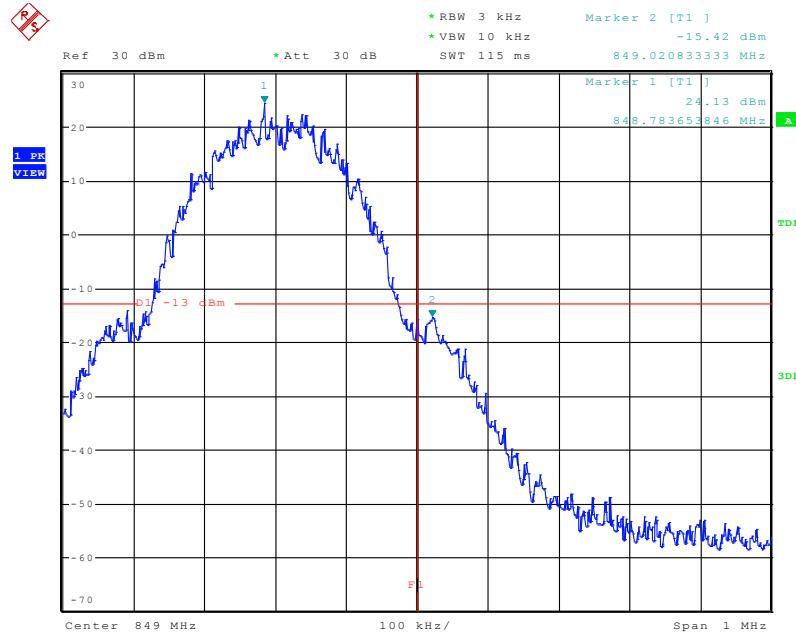
## 2.2 Test Plot(s)

### Low Band Edge GSM 850 BAND CH 128



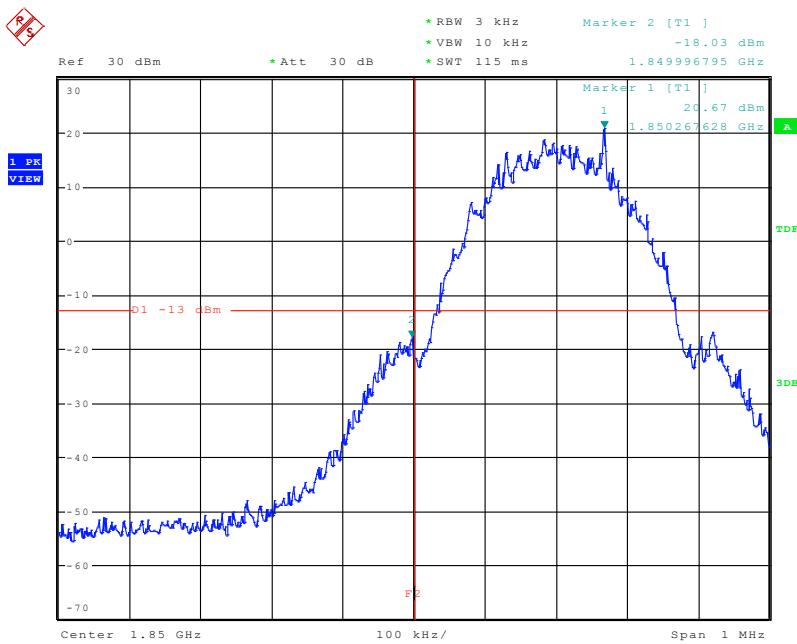
Date: 26.OCT.2016 11:40:40

### High Band Edge GSM 850 BAND CH 251



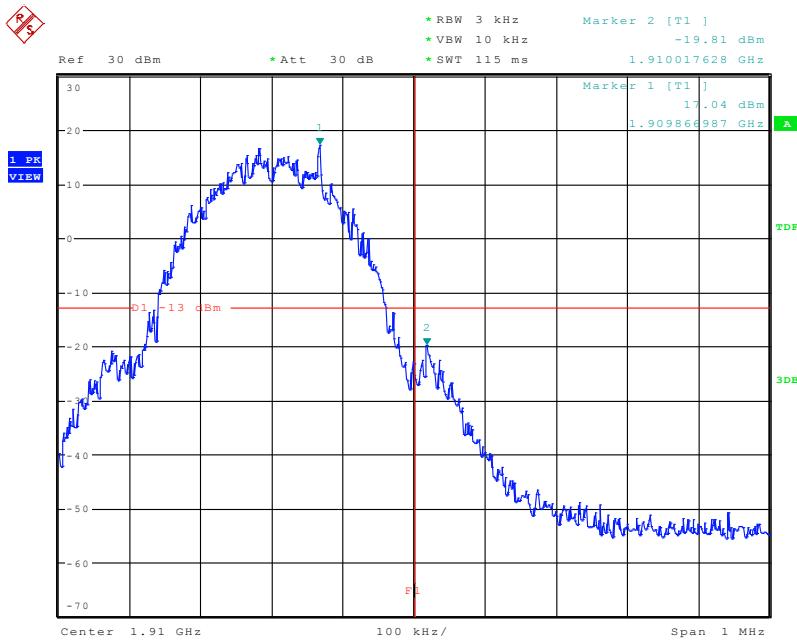
Date: 26.OCT.2016 11:41:43

## Low Band Edge PCS 1900 BAND CH 512



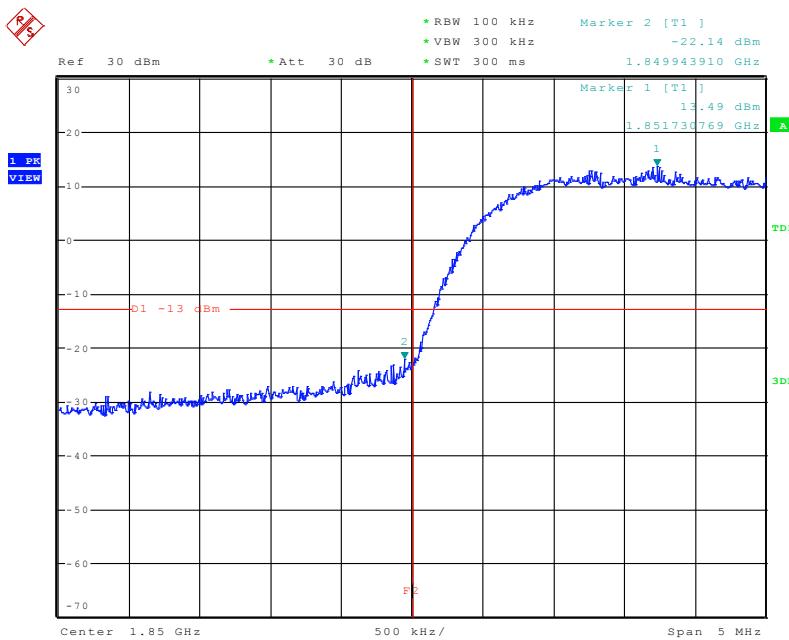
Date: 20.SEP.2016 14:21:43

## High Band Edge PCS 1900 BAND CH 810



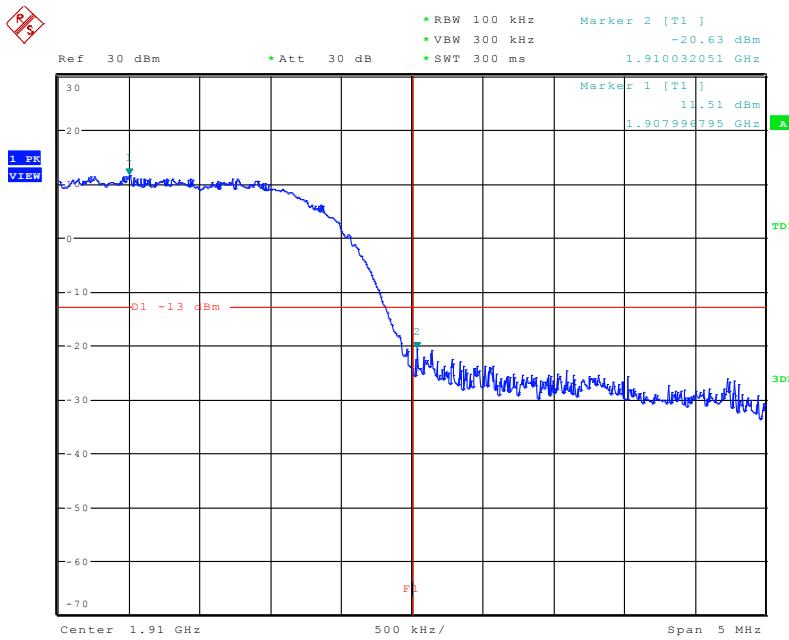
Date: 20.SEP.2016 14:23:19

### Low Band Edge WCDMA BAND II CH 9262



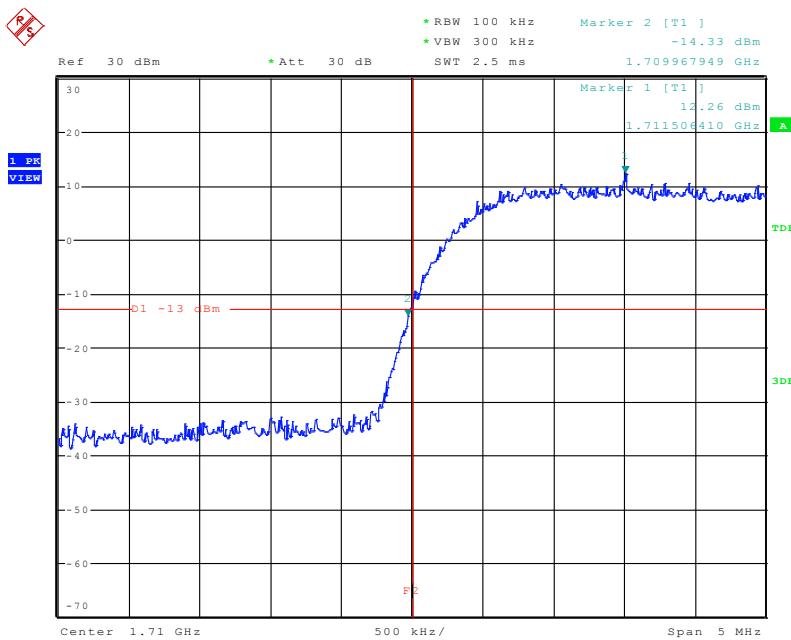
Date: 21.OCT.2016 10:48:36

### High Band Edge WCDMA BAND II CH 9538



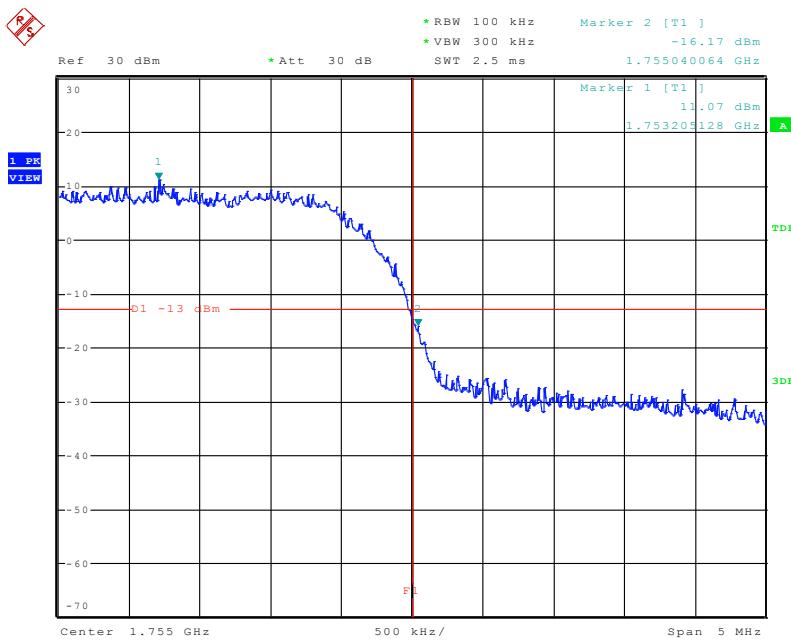
Date: 21.OCT.2016 10:49:28

## Low Band Edge WCDMA BAND IV CH 1312



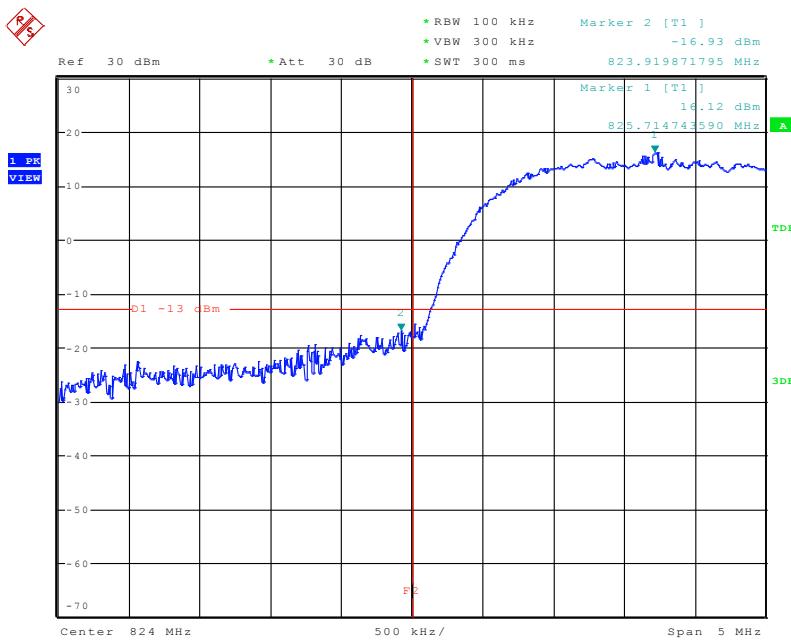
Date: 27.OCT.2016 11:39:16

## Low Band Edge WCDMA BAND IV CH 1513



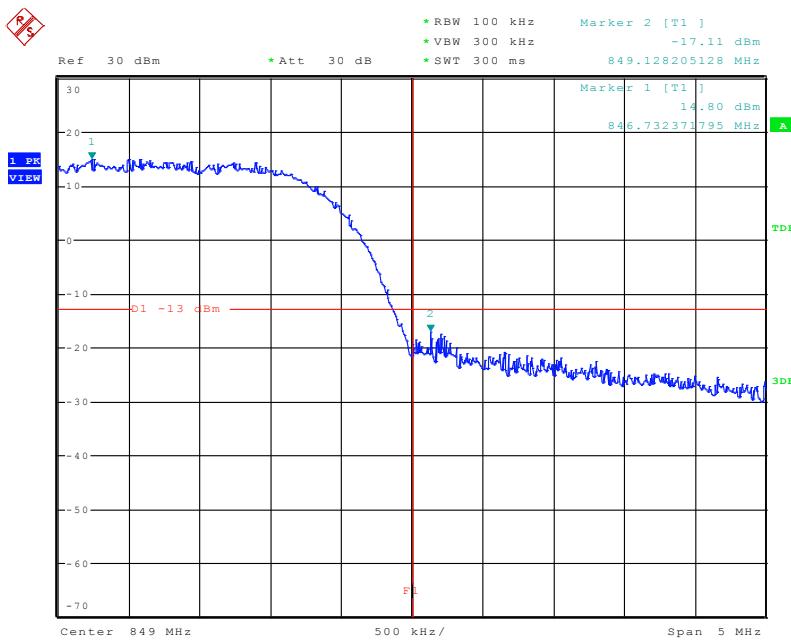
Date: 27.OCT.2016 11:37:48

## Low Band Edge WCDMA BAND V CH 4132



Date: 21.OCT.2016 10:45:58

## High Band Edge WCDMA BAND V CH 4233

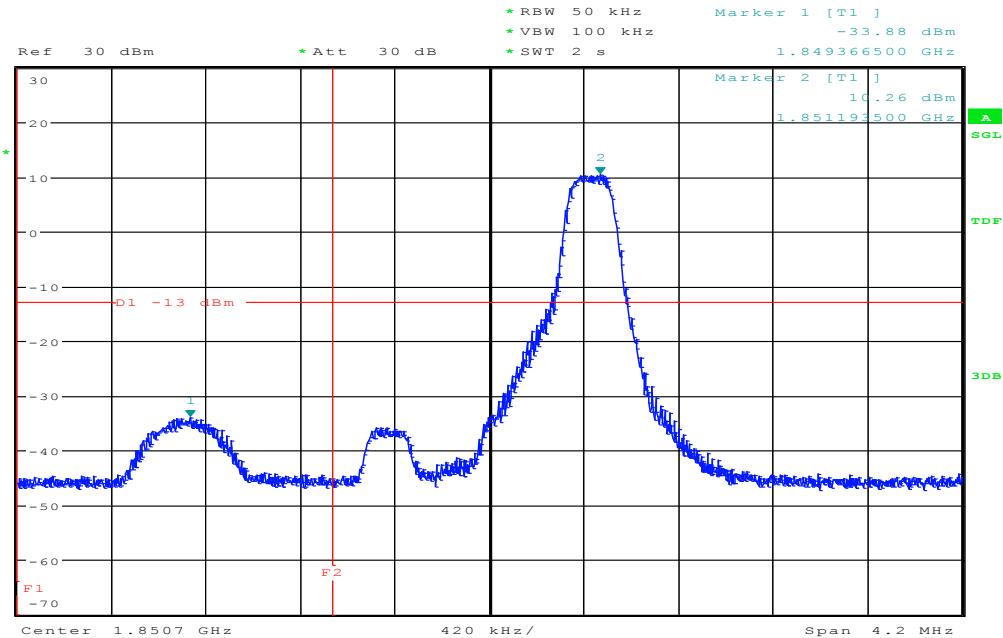


Date: 21.OCT.2016 10:46:49

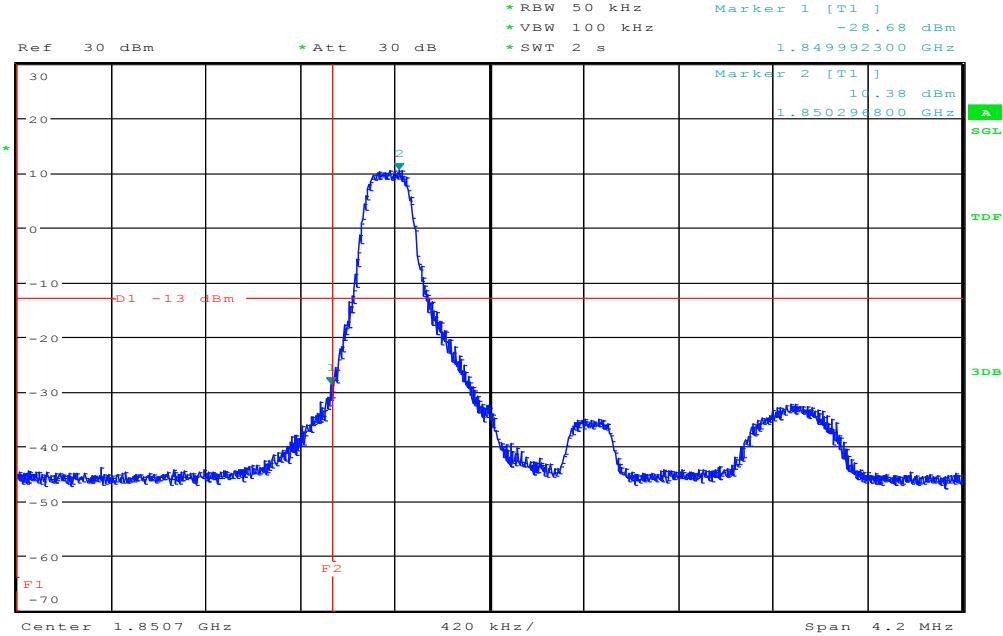
## E-UTRA BANDS

**BAND 2@Band Edge**

BAND2-1850.7MHz,Q16-1RB\_HIGH@Pass

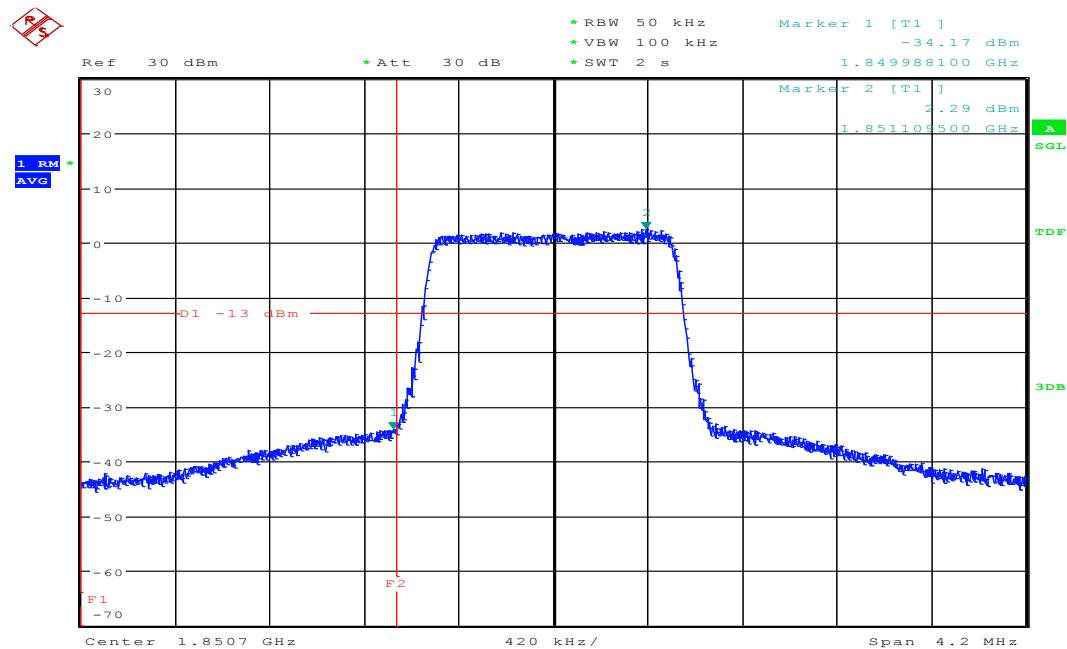


Date: 22.OCT.2016 10:20:42

**BAND2-1850.7MHz,Q16-1RB\_LOW@Pass**

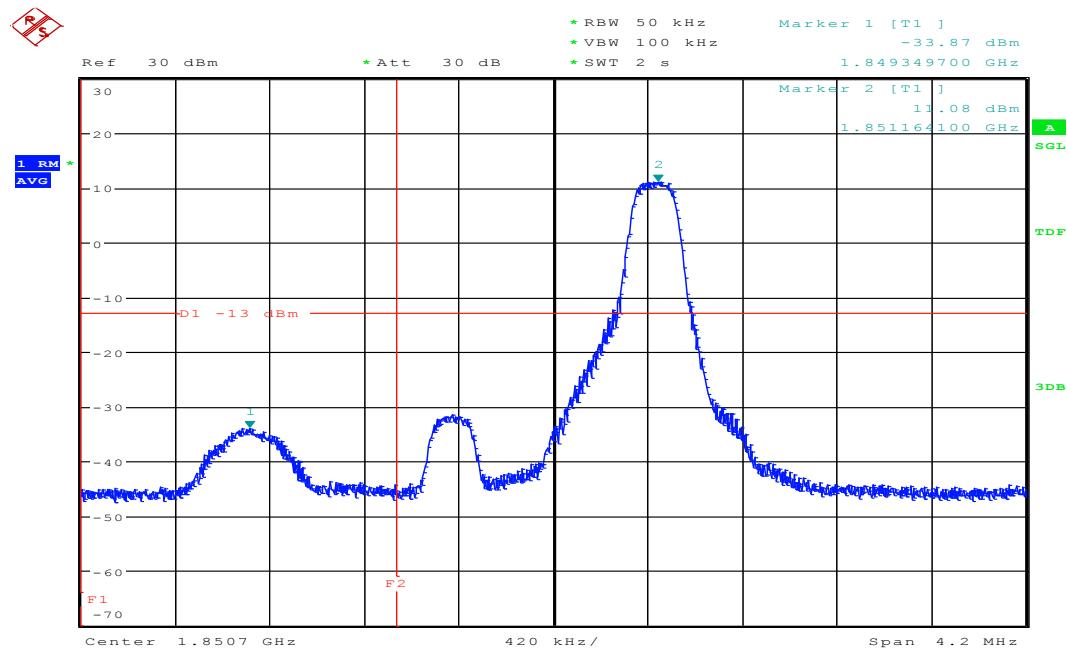
Date: 22.OCT.2016 10:20:31

## BAND2-1850.7MHz,Q16-6RB\_LOW@Pass



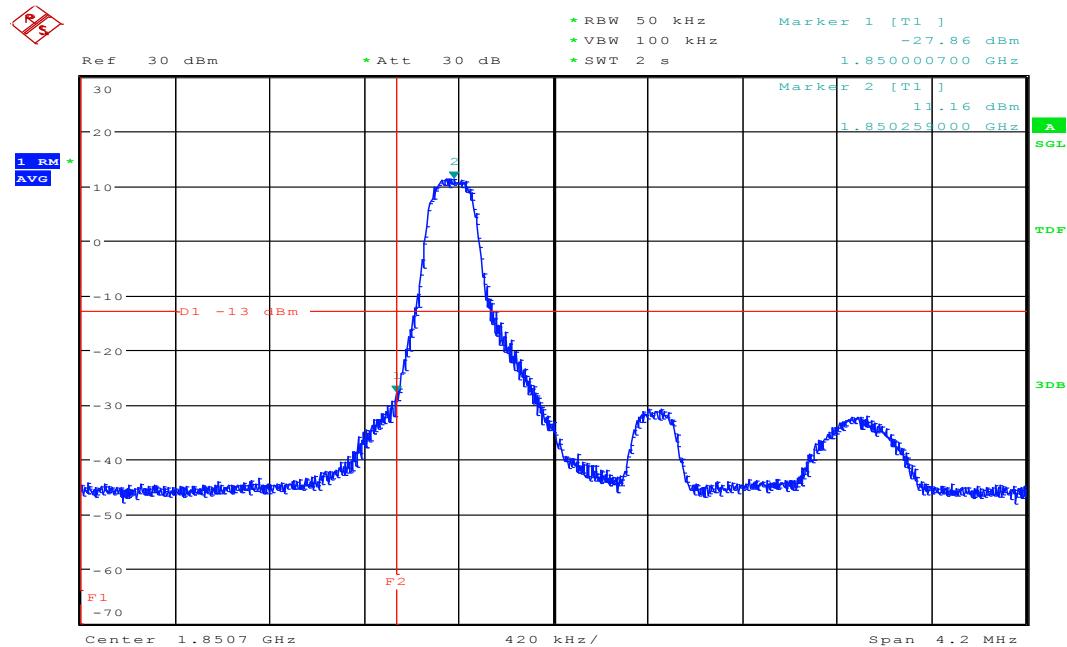
Date: 22.OCT.2016 10:20:54

## BAND2-1850.7MHz,QPSK-1RB\_HIGH@Pass



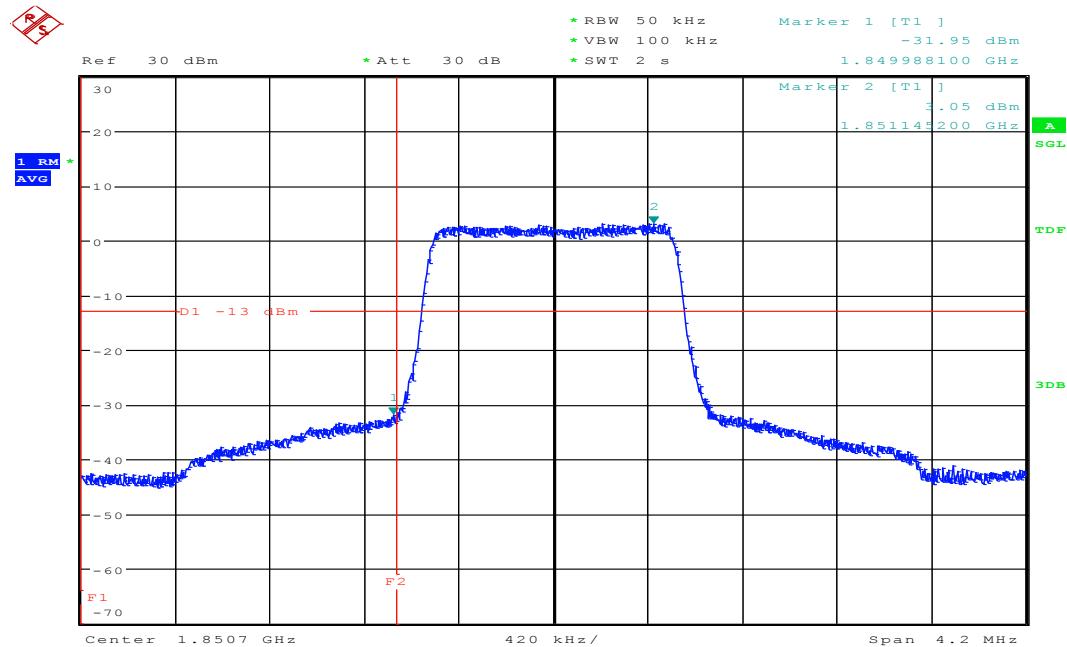
Date: 22.OCT.2016 10:20:07

## BAND2-1850.7MHz,QPSK-1RB\_LOW@Pass



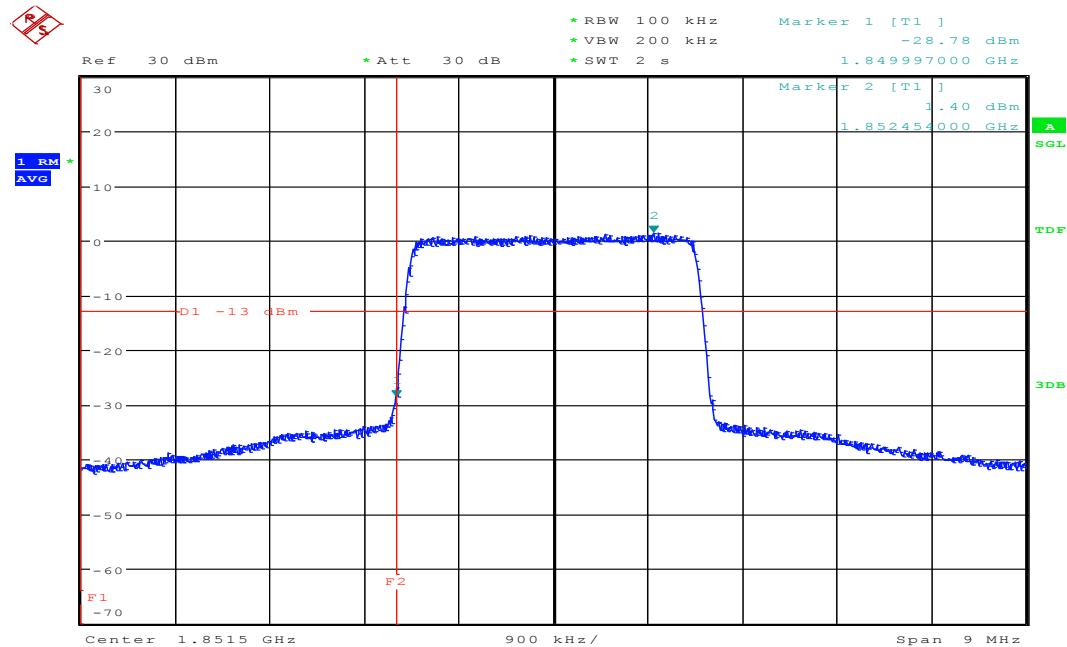
Date: 22.OCT.2016 10:19:56

## BAND2-1850.7MHz,QPSK-6RB\_LOW@Pass



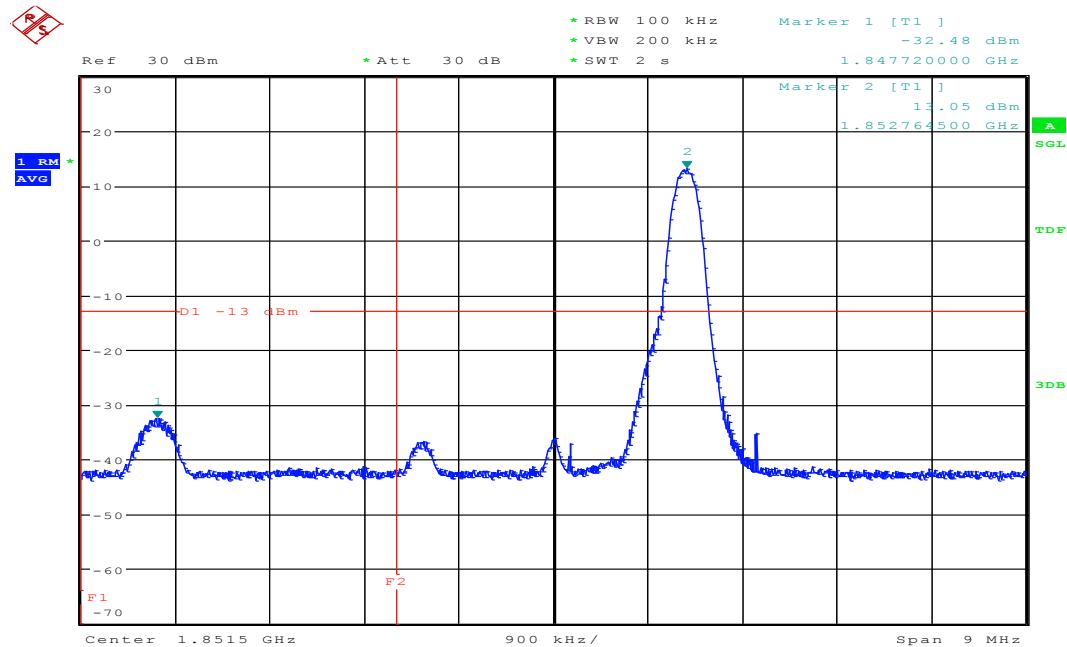
Date: 22.OCT.2016 10:20:19

## BAND2-1851.5MHz,Q16-15RB\_LOW@Pass



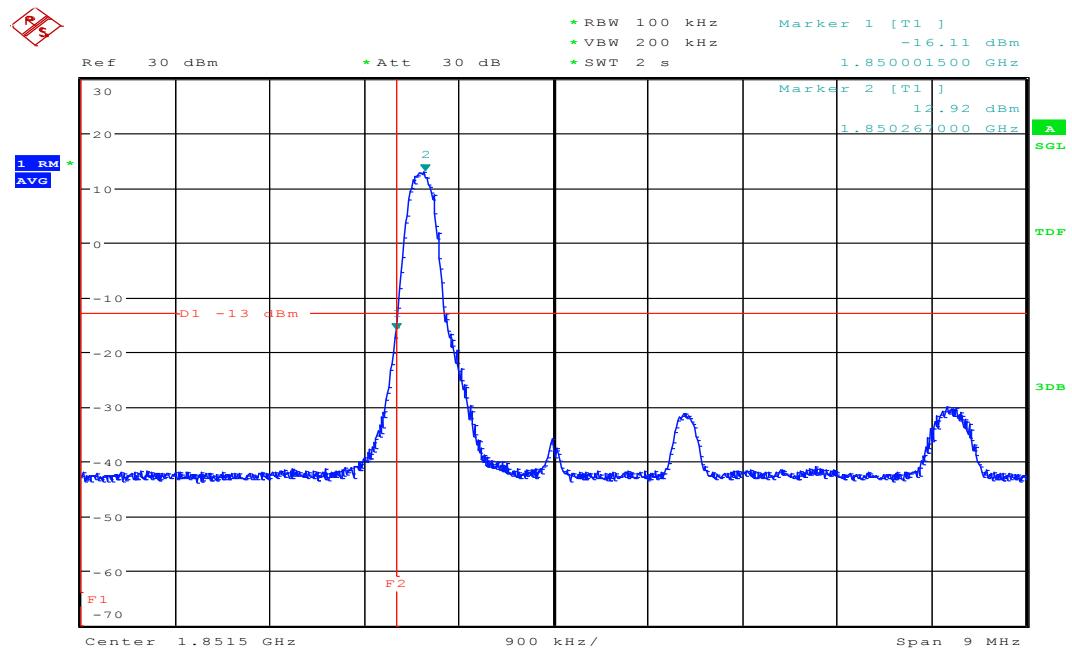
Date: 22.OCT.2016 10:23:16

## BAND2-1851.5MHz,Q16-1RB\_HIGH@Pass



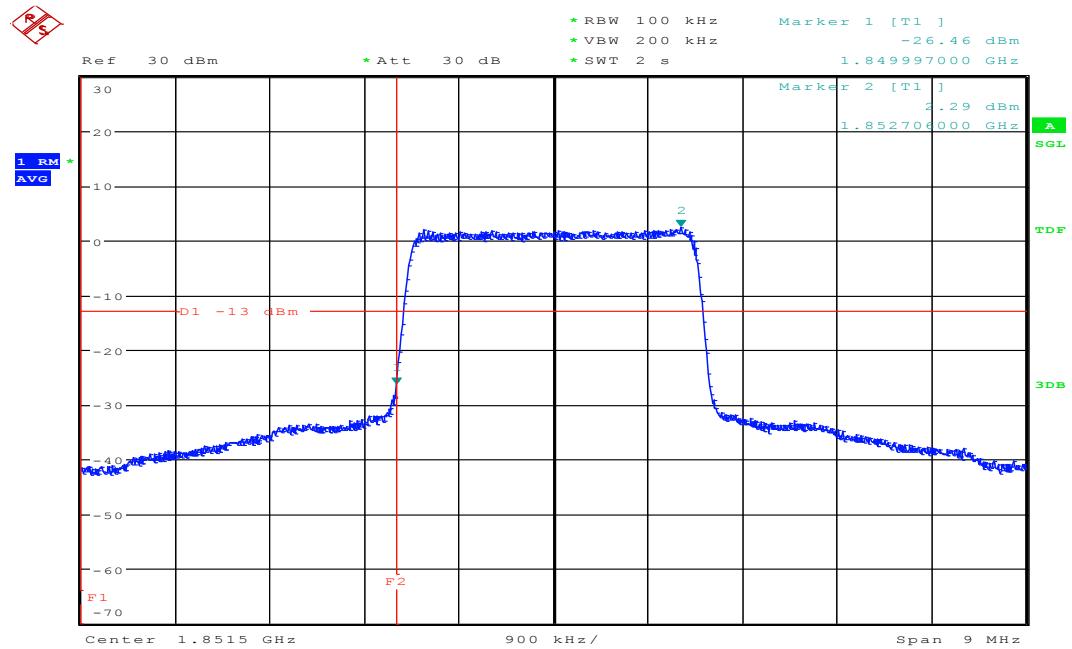
Date: 22.OCT.2016 10:23:04

## BAND2-1851.5MHz,Q16-1RB\_LOW@Pass



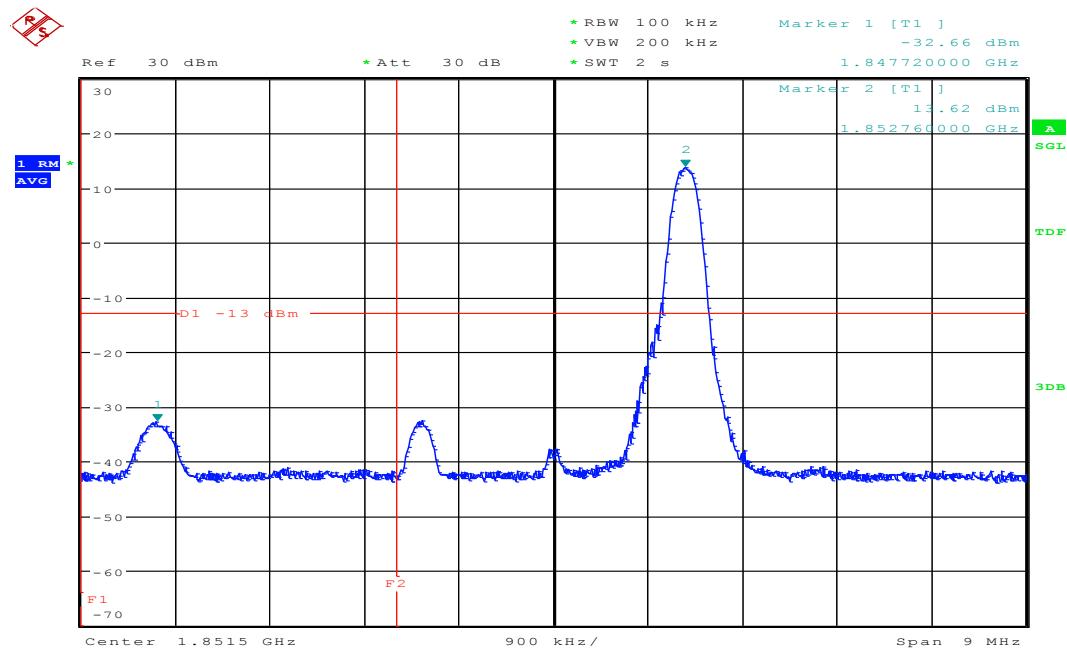
Date: 22.OCT.2016 10:22:53

## BAND2-1851.5MHz,QPSK-15RB\_LOW@Pass



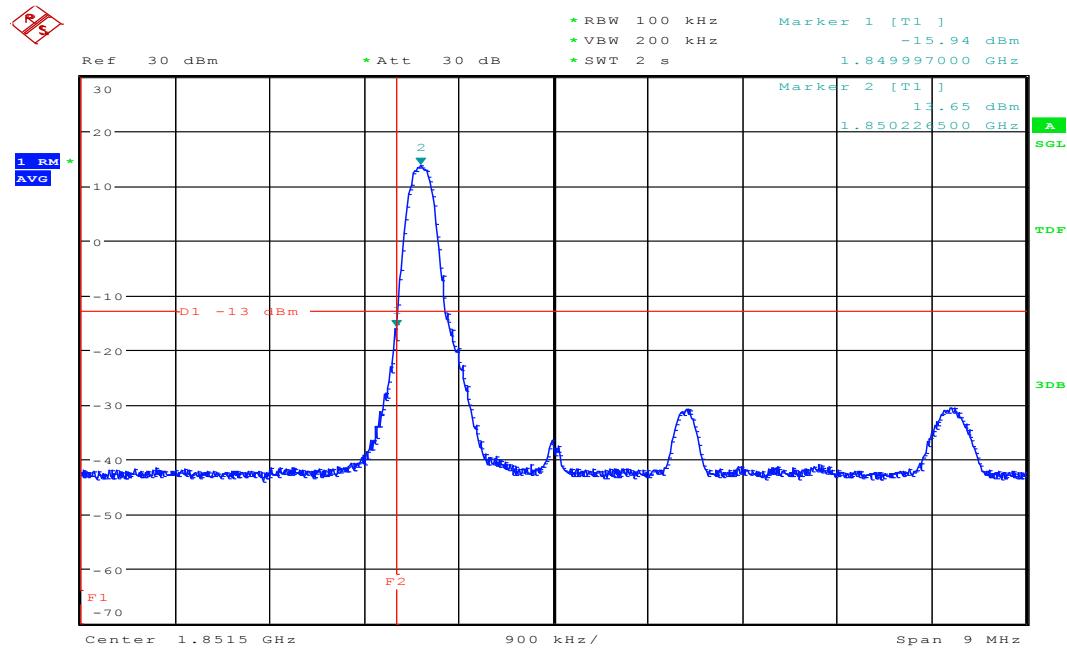
Date: 22.OCT.2016 10:22:41

## BAND2-1851.5MHz,QPSK-1RB\_HIGH@Pass



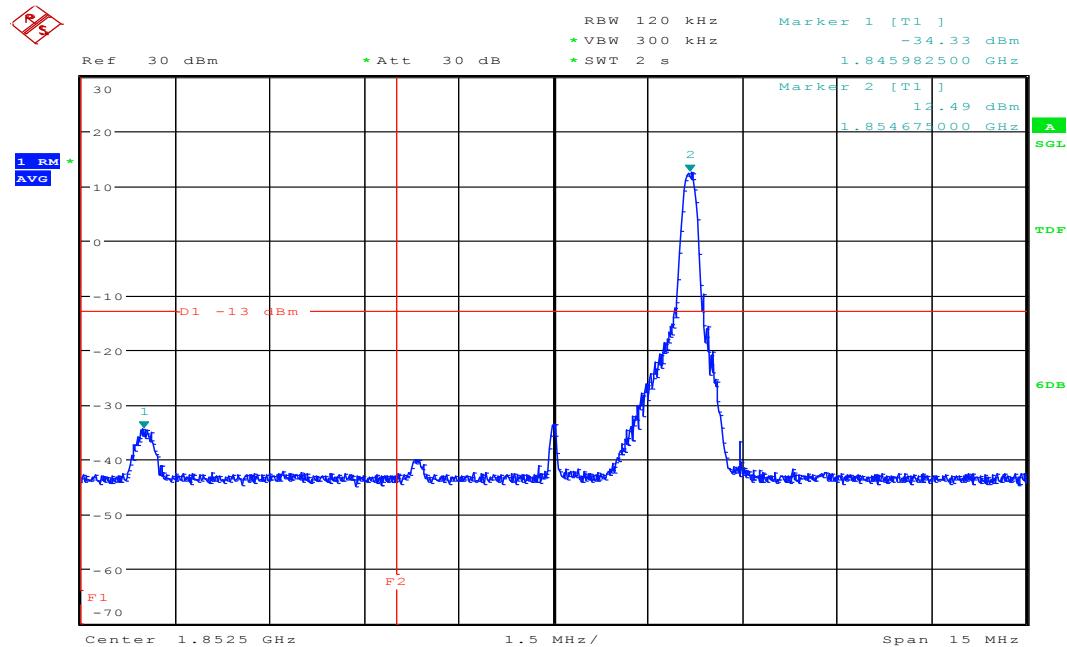
Date: 22.OCT.2016 10:22:30

## BAND2-1851.5MHz,QPSK-1RB\_LOW@Pass



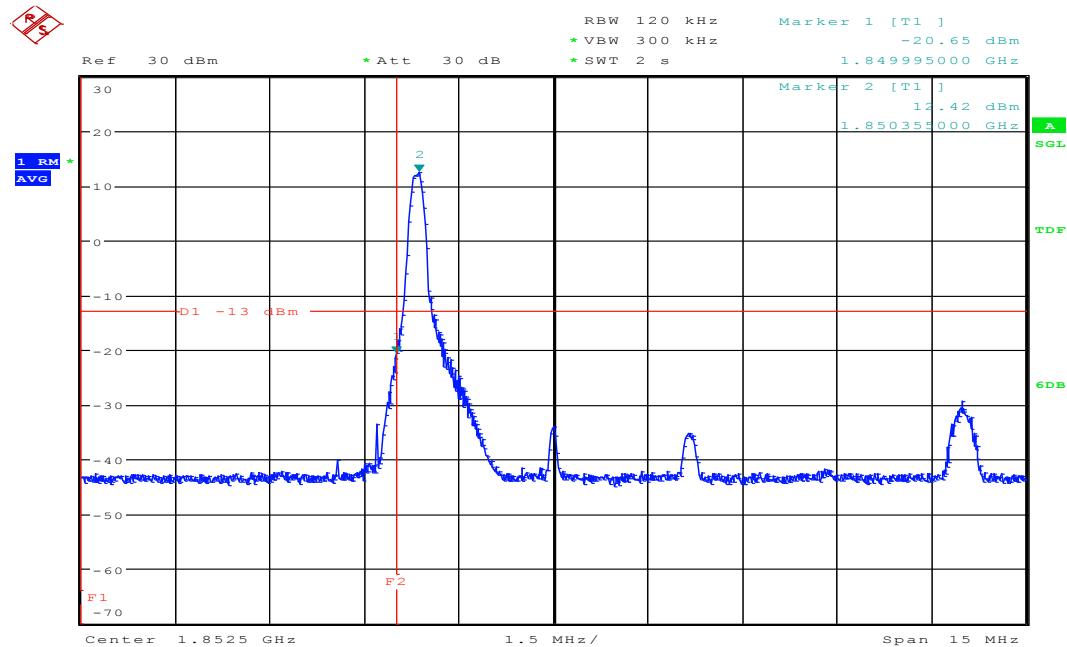
Date: 22.OCT.2016 10:22:18

## BAND2-1852.5MHz,Q16-1RB\_HIGH@Pass



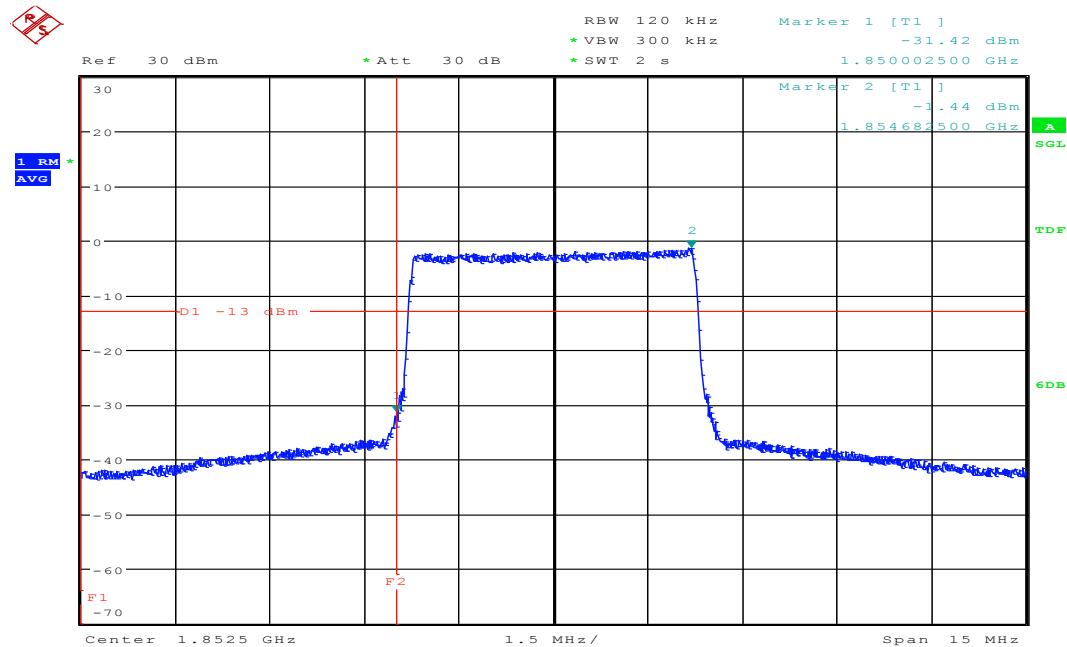
Date: 22.OCT.2016 10:25:28

## BAND2-1852.5MHz,Q16-1RB\_LOW@Pass



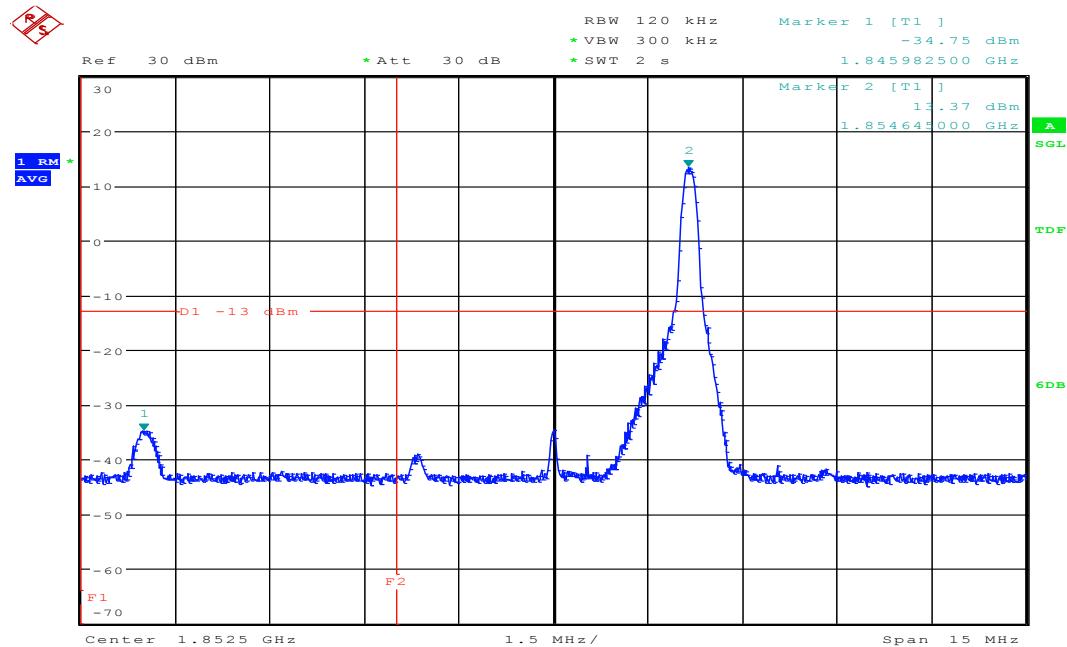
Date: 22.OCT.2016 10:25:17

## BAND2-1852.5MHz,Q16-25RB\_LOW@Pass



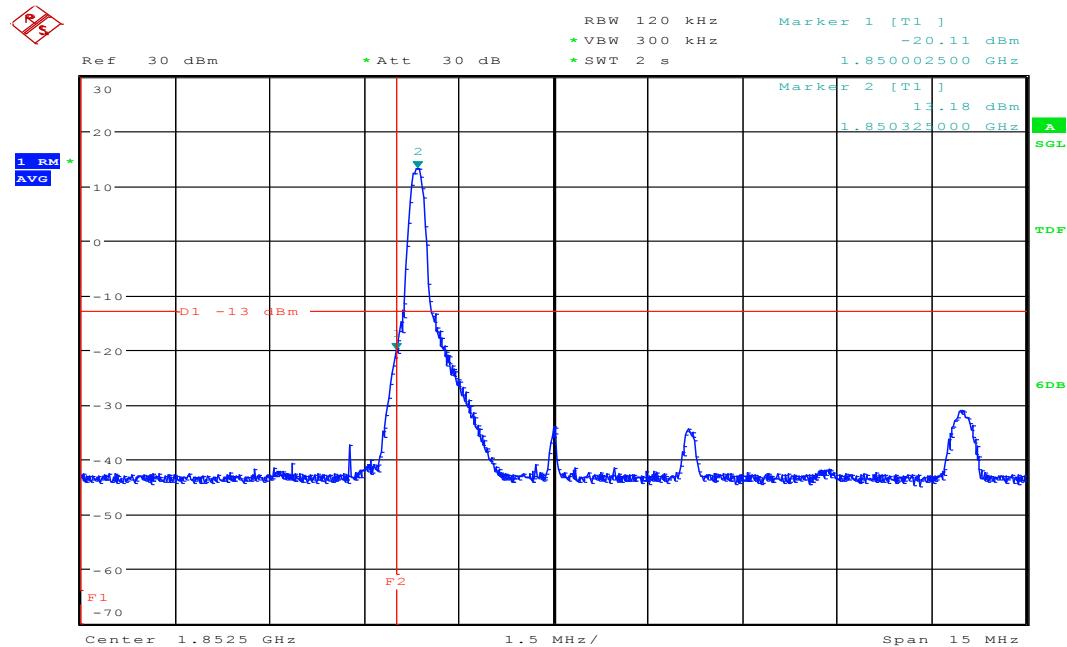
Date: 22.OCT.2016 10:25:40

## BAND2-1852.5MHz,QPSK-1RB\_HIGH@Pass



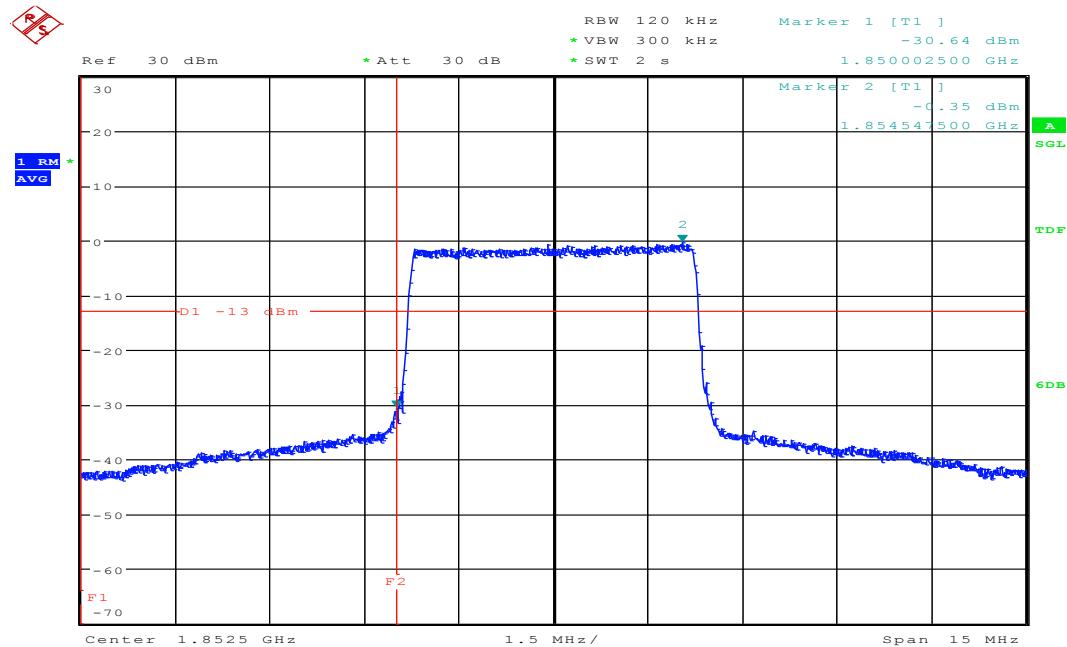
Date: 22.OCT.2016 10:24:52

## BAND2-1852.5MHz,QPSK-1RB\_LOW@Pass



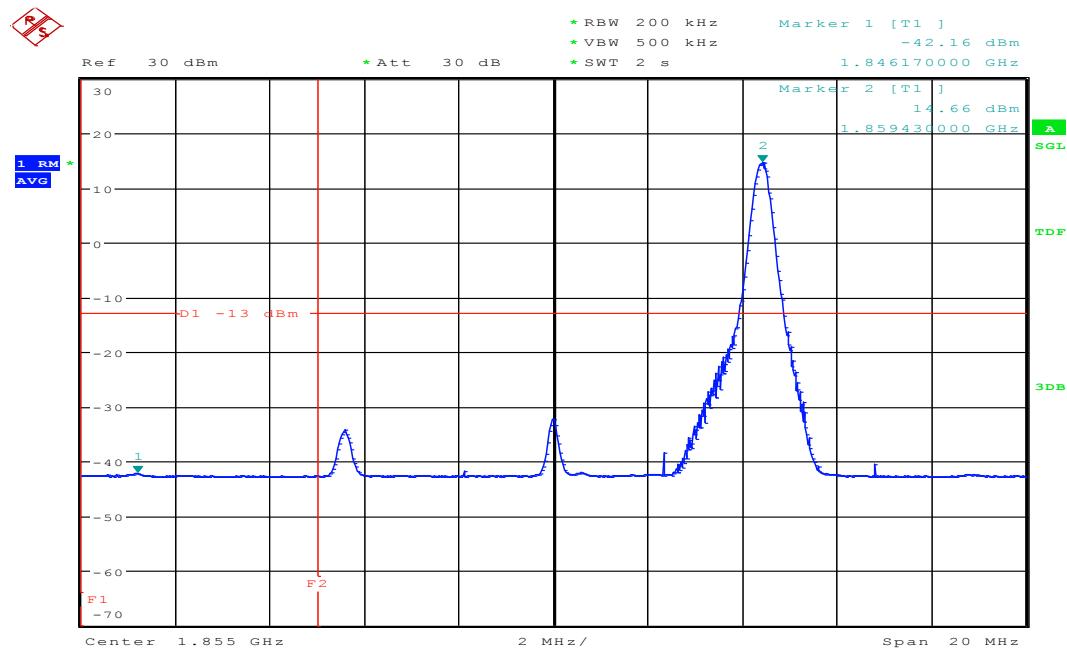
Date: 22.OCT.2016 10:24:41

## BAND2-1852.5MHz,QPSK-25RB\_LOW@Pass



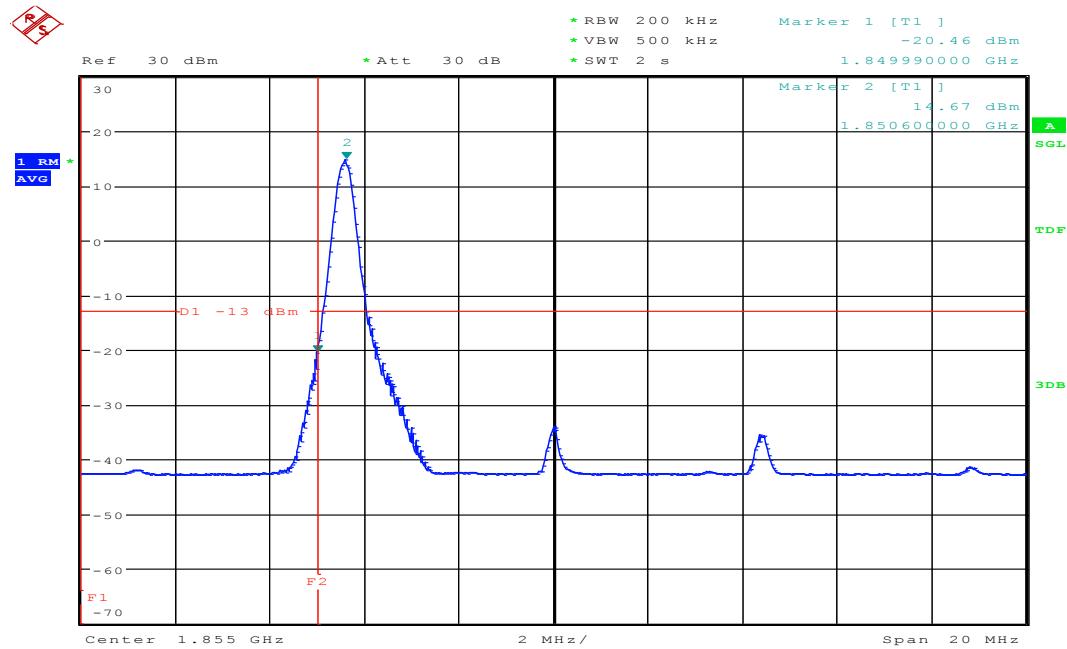
Date: 22.OCT.2016 10:25:04

## BAND2-1855MHz,Q16-1RB\_HIGH@Pass



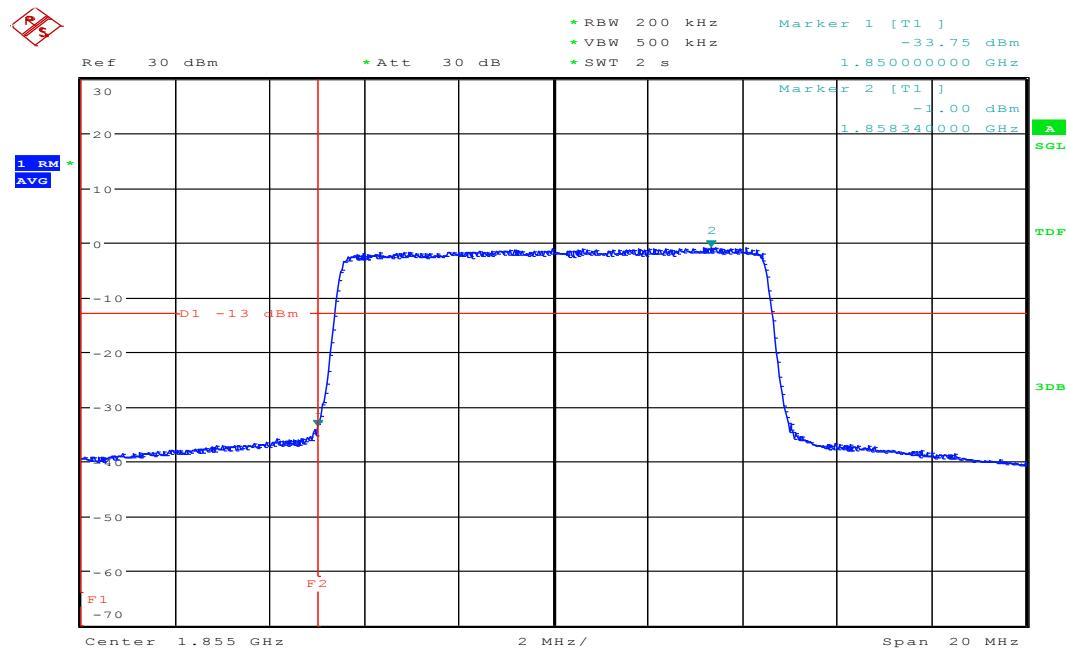
Date: 22.OCT.2016 10:27:56

## BAND2-1855MHz,Q16-1RB\_LOW@Pass



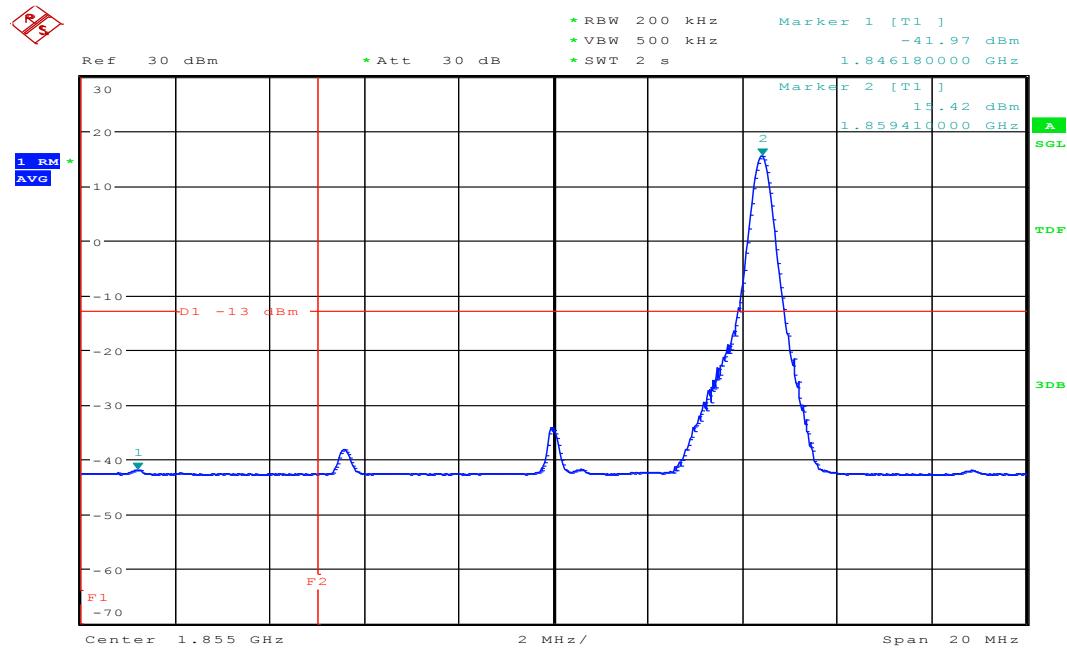
Date: 22.OCT.2016 10:27:44

## BAND2-1855MHz,Q16-50RB\_LOW@Pass



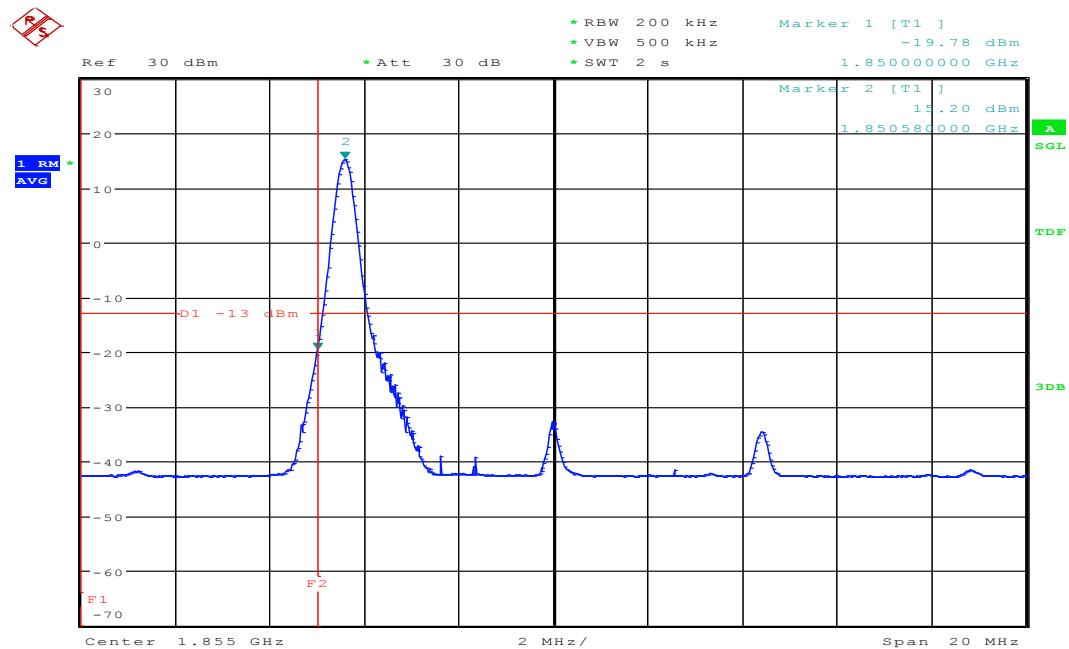
Date: 22.OCT.2016 10:28:08

## BAND2-1855MHz,QPSK-1RB\_HIGH@Pass



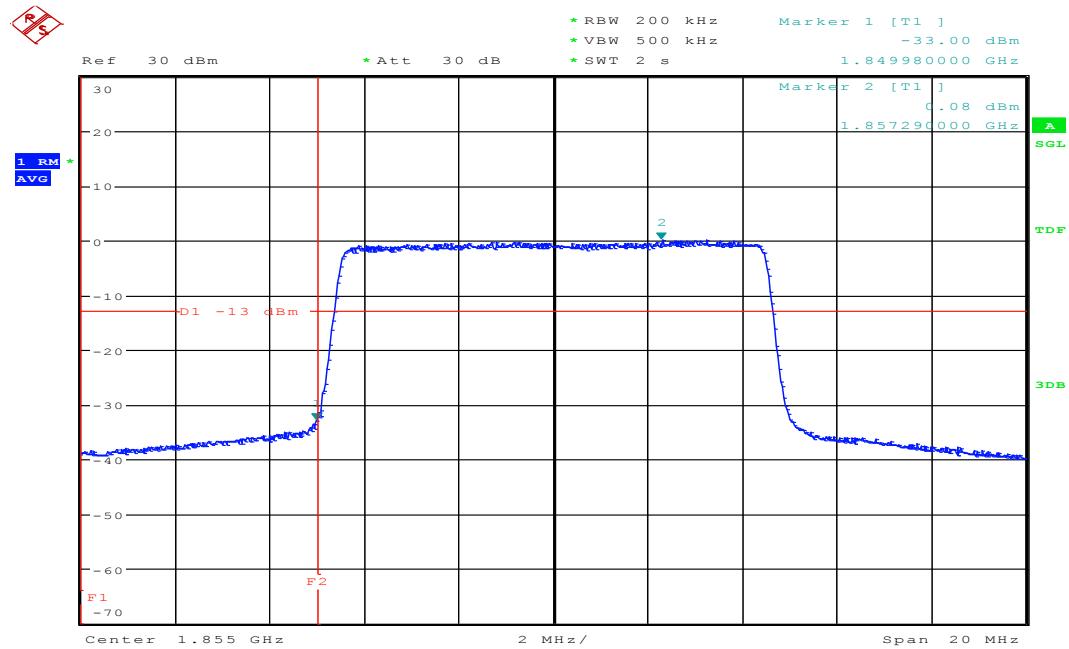
Date: 22.OCT.2016 10:27:19

## BAND2-1855MHz,QPSK-1RB\_LOW@Pass



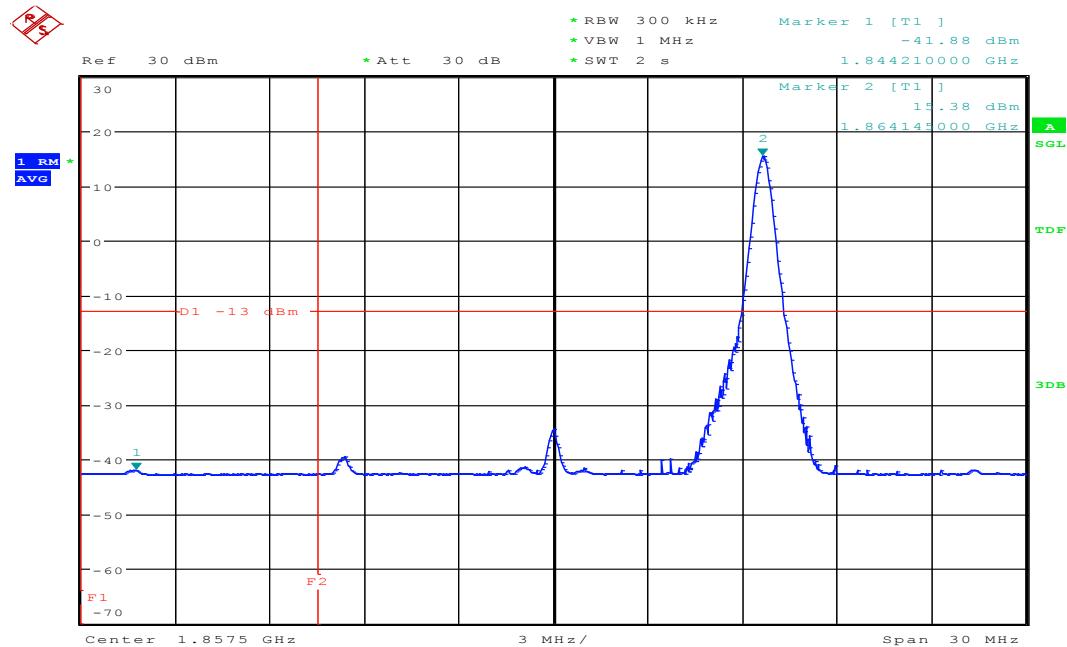
Date: 22.OCT.2016 10:27:07

## BAND2-1855MHz,QPSK-50RB\_LOW@Pass



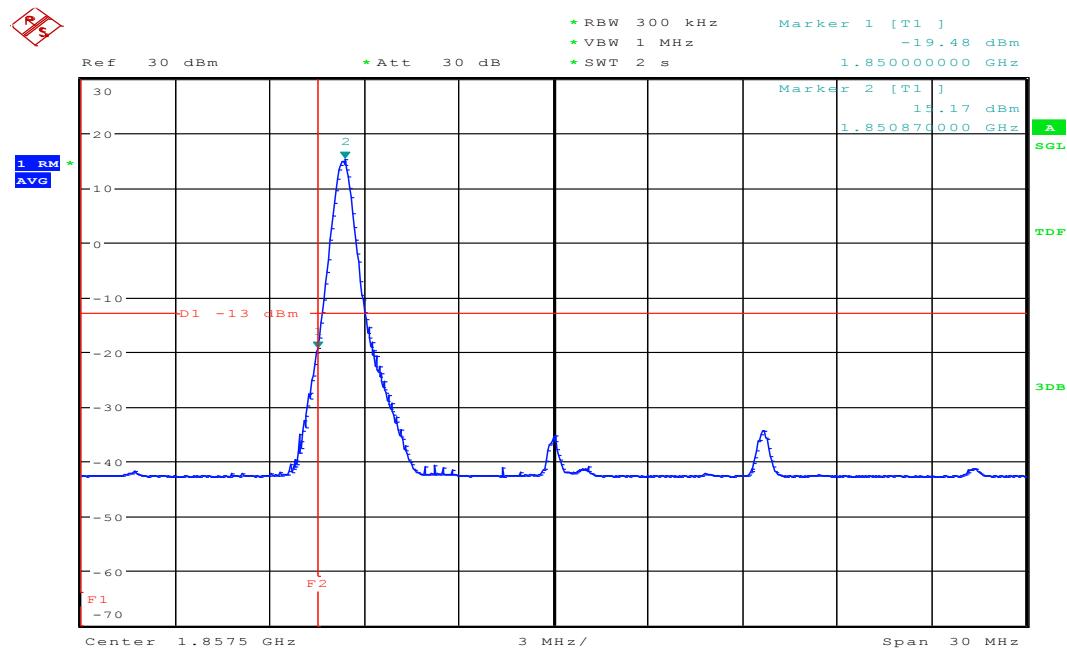
Date: 22.OCT.2016 10:27:32

## BAND2-1857.5MHz,Q16-1RB\_HIGH@Pass



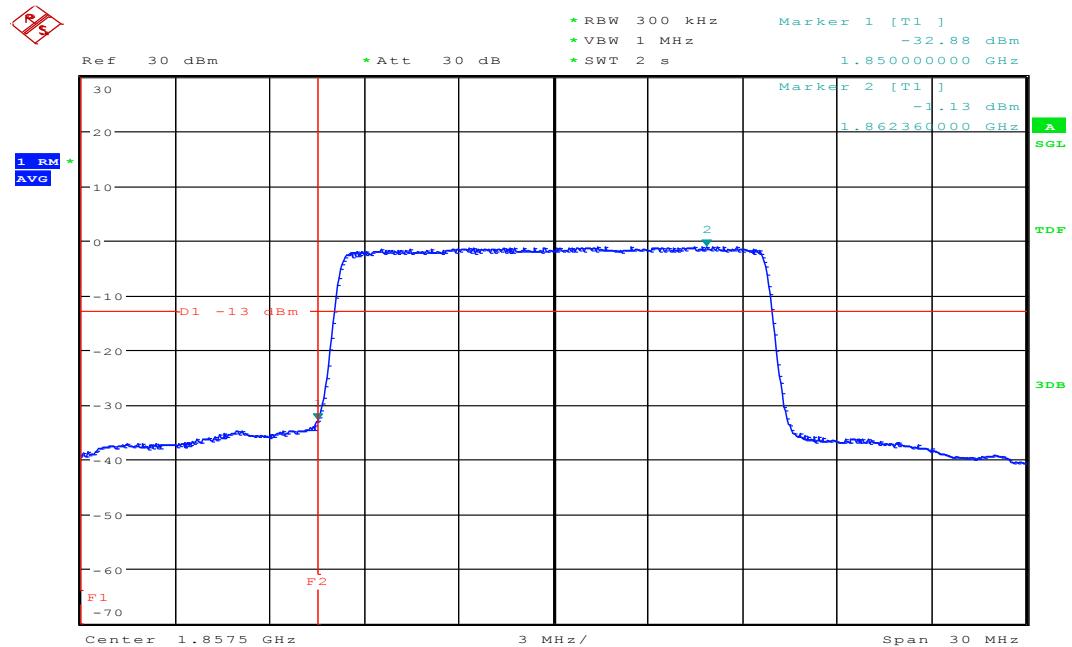
Date: 22.OCT.2016 10:30:34

## BAND2-1857.5MHz,Q16-1RB\_LOW@Pass



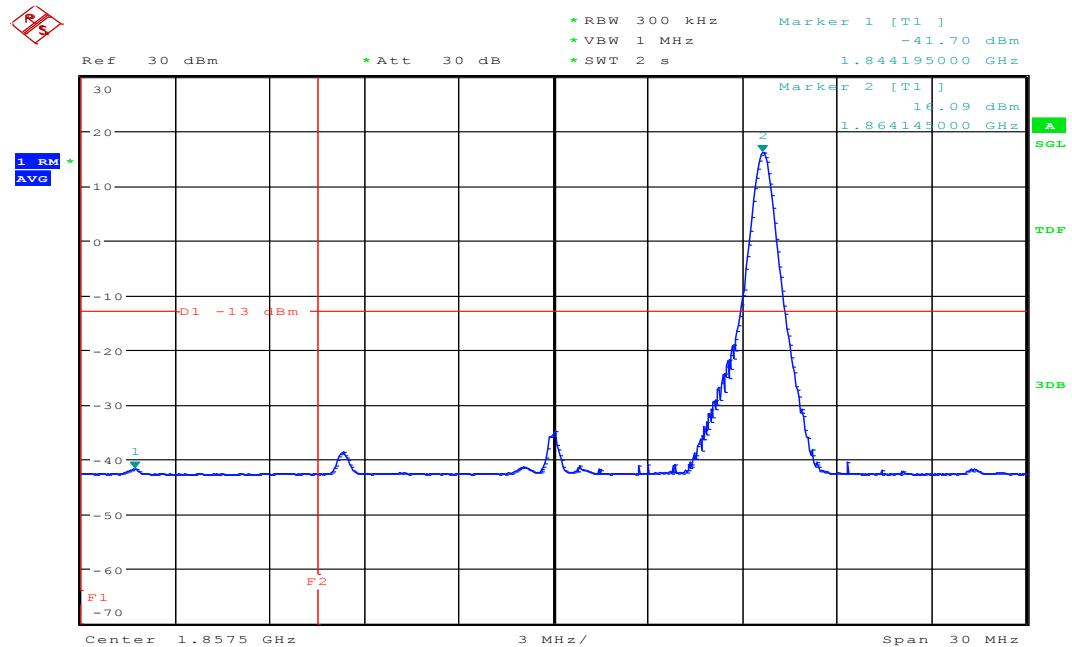
Date: 22.OCT.2016 10:30:20

## BAND2-1857.5MHz,Q16-75RB\_LOW@Pass



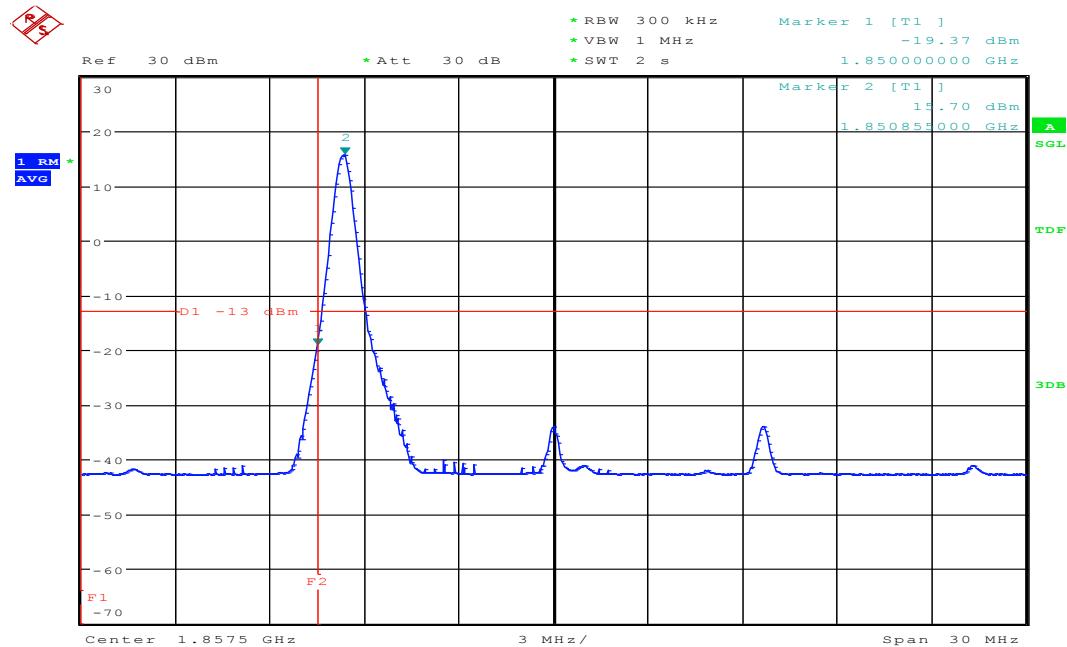
Date: 22.OCT.2016 10:30:49

## BAND2-1857.5MHz,QPSK-1RB\_HIGH@Pass



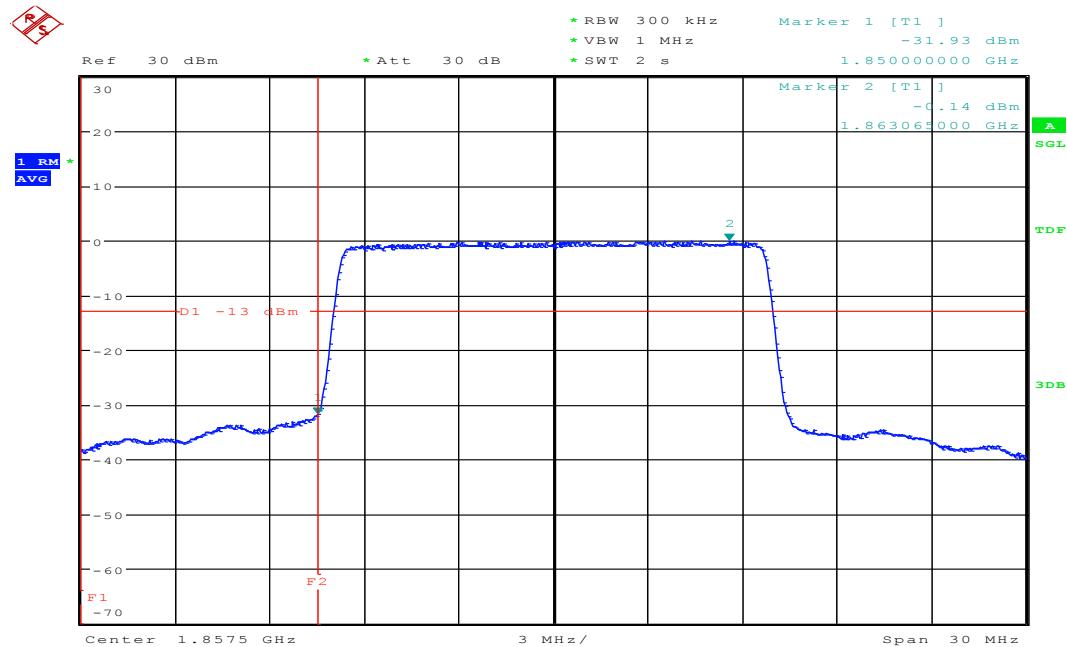
Date: 22.OCT.2016 10:29:52

## BAND2-1857.5MHz,QPSK-1RB\_LOW@Pass



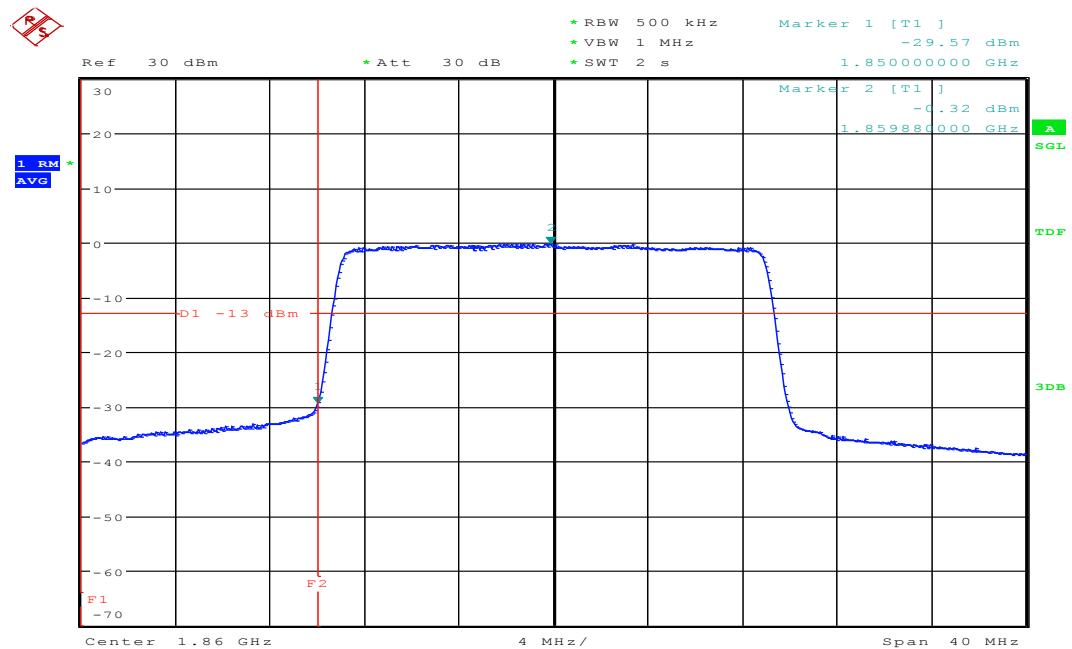
Date: 22.OCT.2016 10:29:38

## BAND2-1857.5MHz,QPSK-75RB\_LOW@Pass



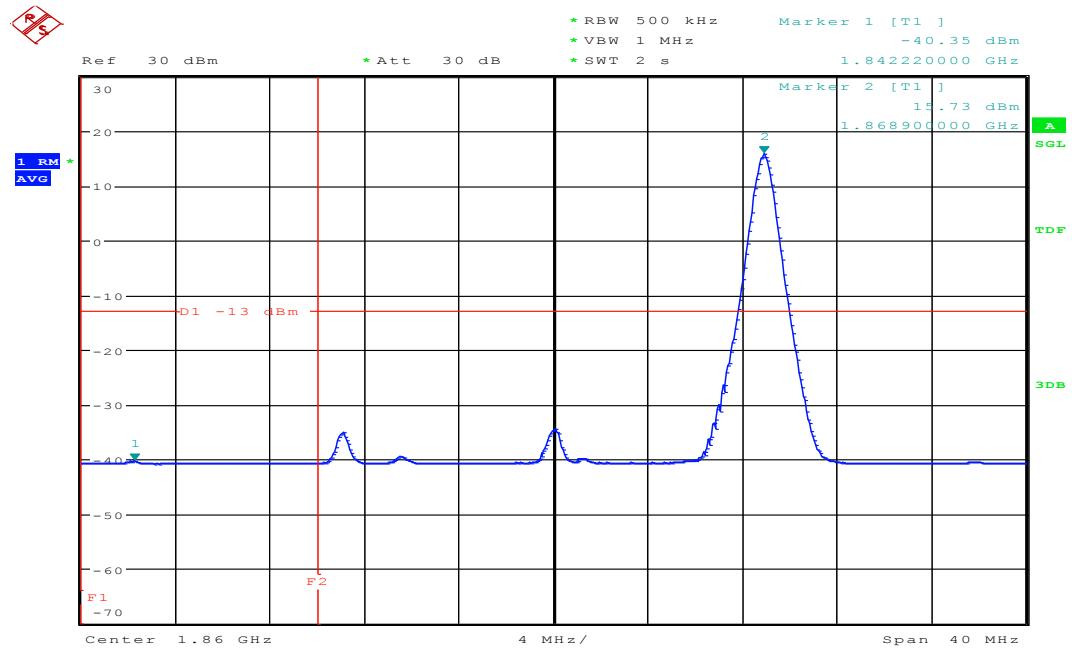
Date: 22.OCT.2016 10:30:06

## BAND2-1860MHz,Q16-100RB\_LOW@Pass



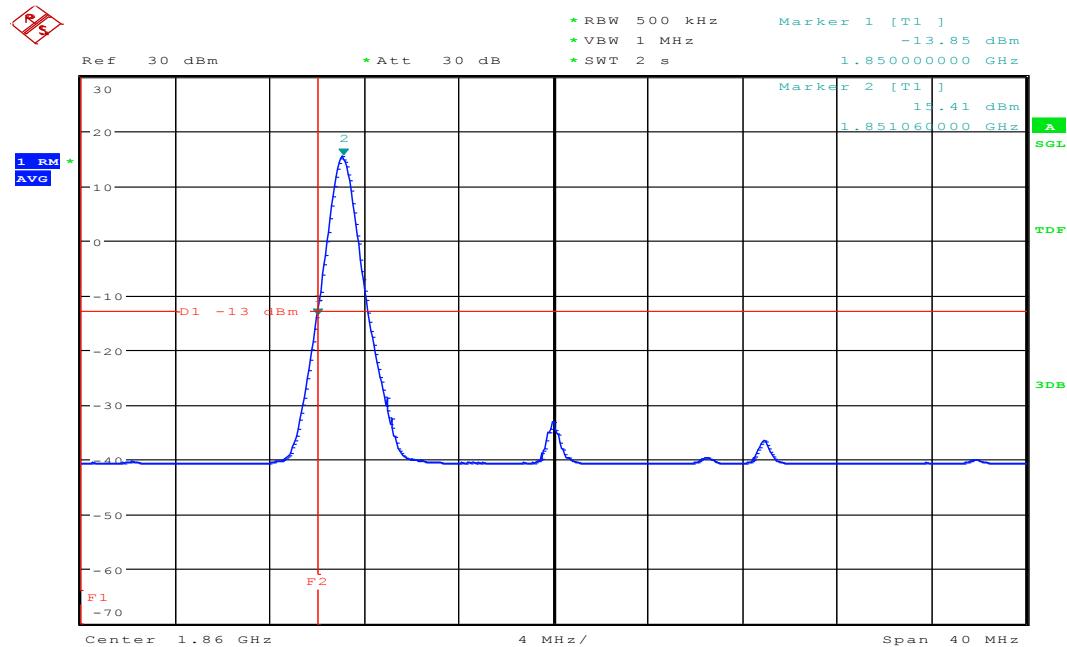
Date: 22.OCT.2016 10:33:42

## BAND2-1860MHz,Q16-1RB\_HIGH@Pass



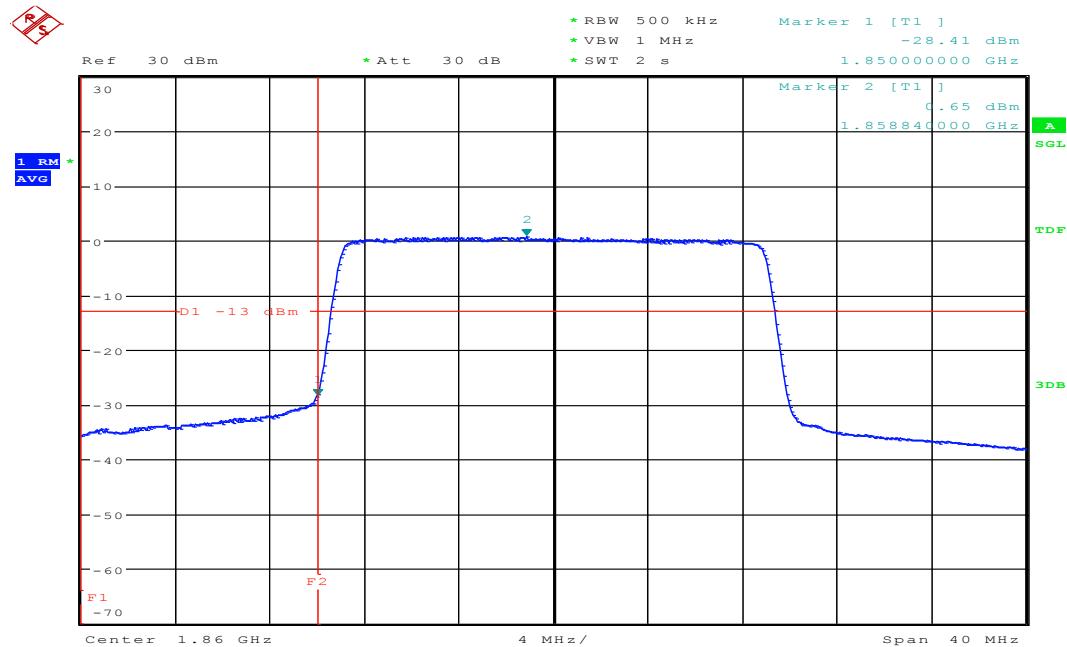
Date: 22.OCT.2016 10:33:27

## BAND2-1860MHz,Q16-1RB\_LOW@Pass



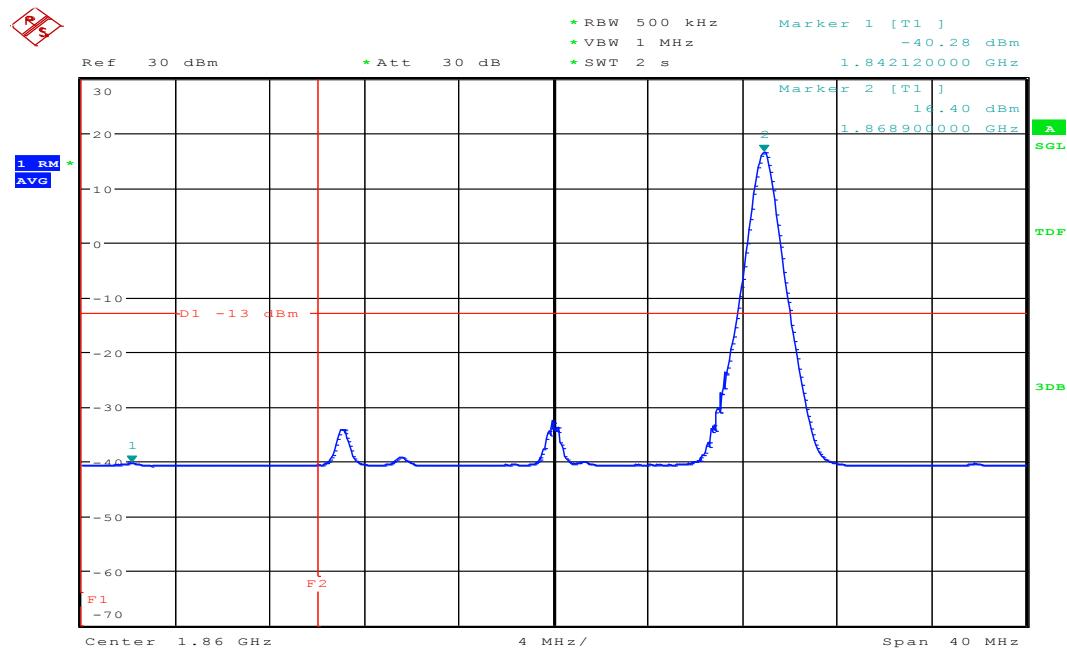
Date: 22.OCT.2016 10:33:13

## BAND2-1860MHz,QPSK-100RB\_LOW@Pass



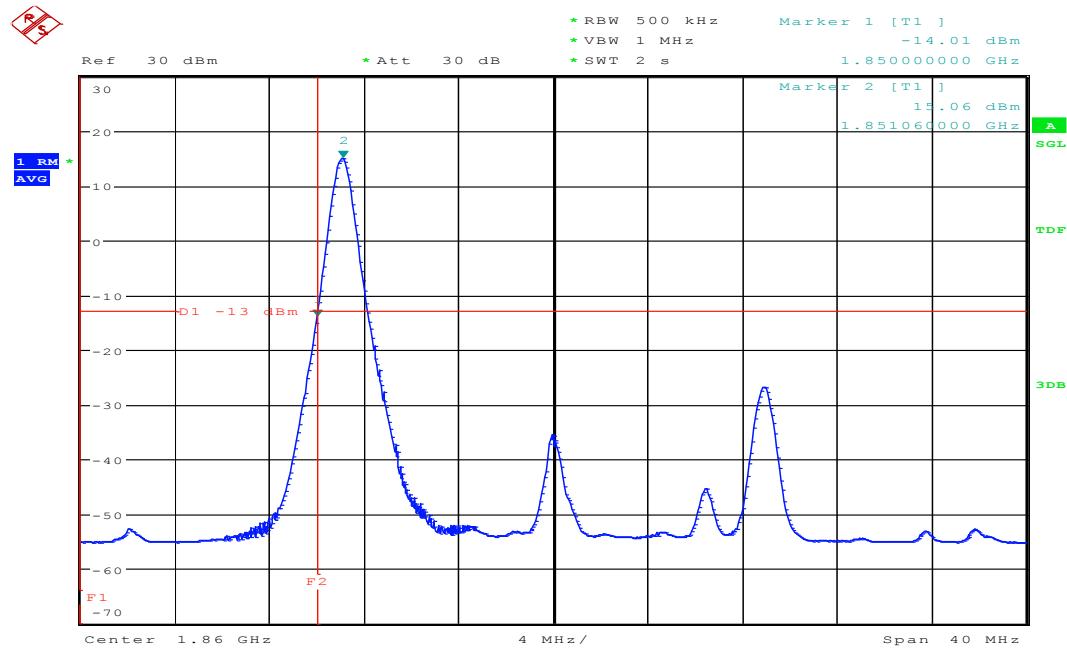
Date: 22.OCT.2016 10:32:59

## BAND2-1860MHz,QPSK-1RB\_HIGH@Pass

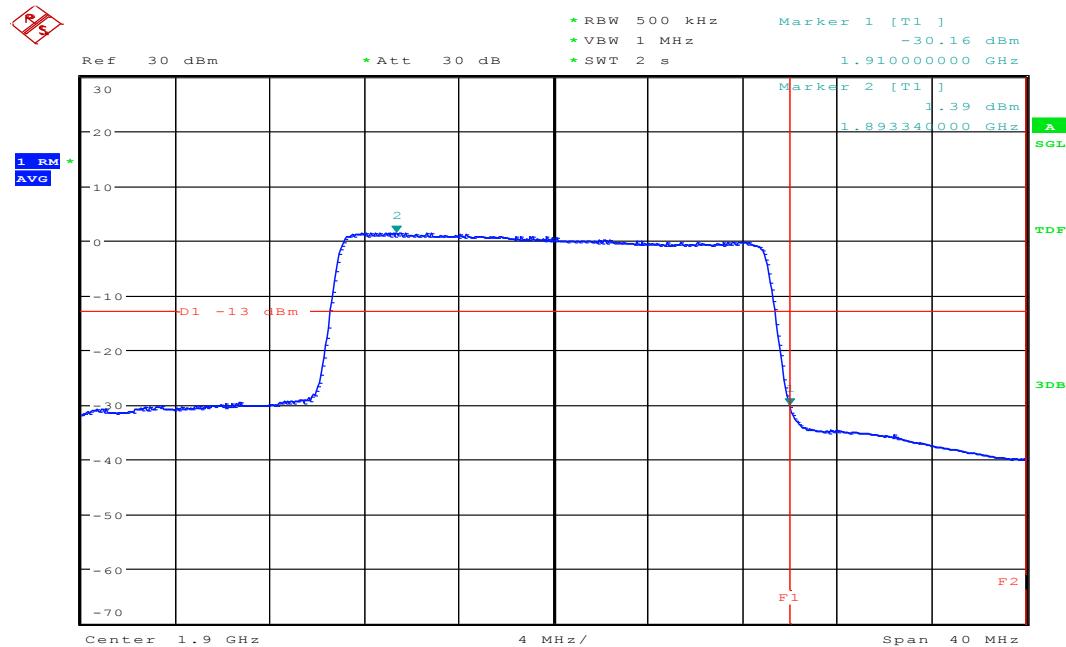


Date: 22.OCT.2016 10:32:45

## BAND2-1860MHz,QPSK-1RB\_LOW@Pass

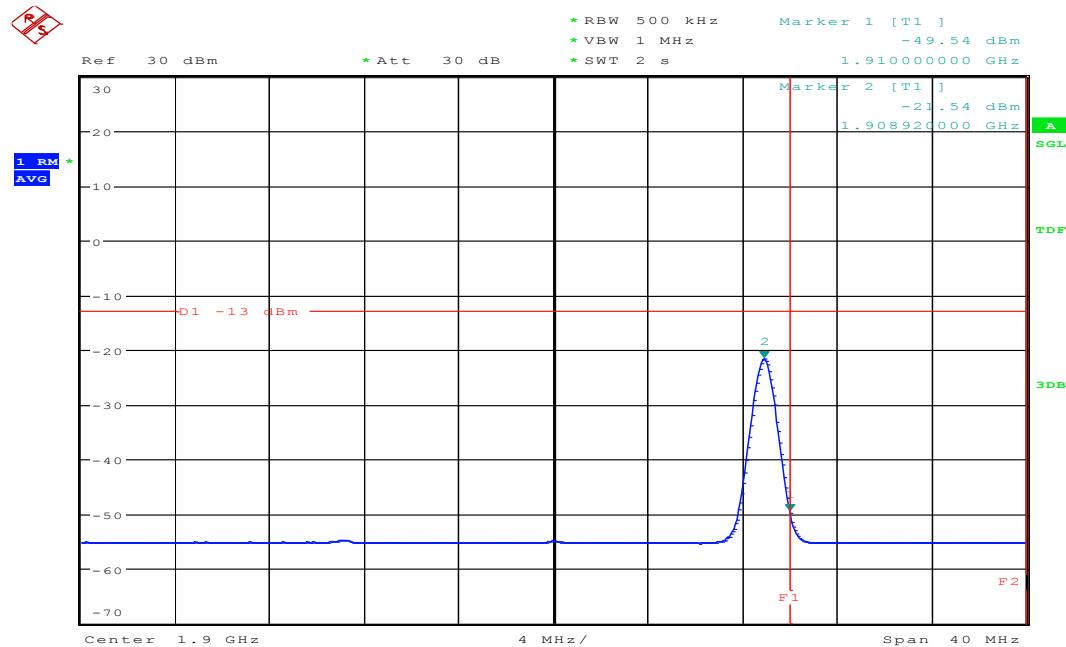


## BAND2-1900MHz,Q16-100RB\_LOW@Pass

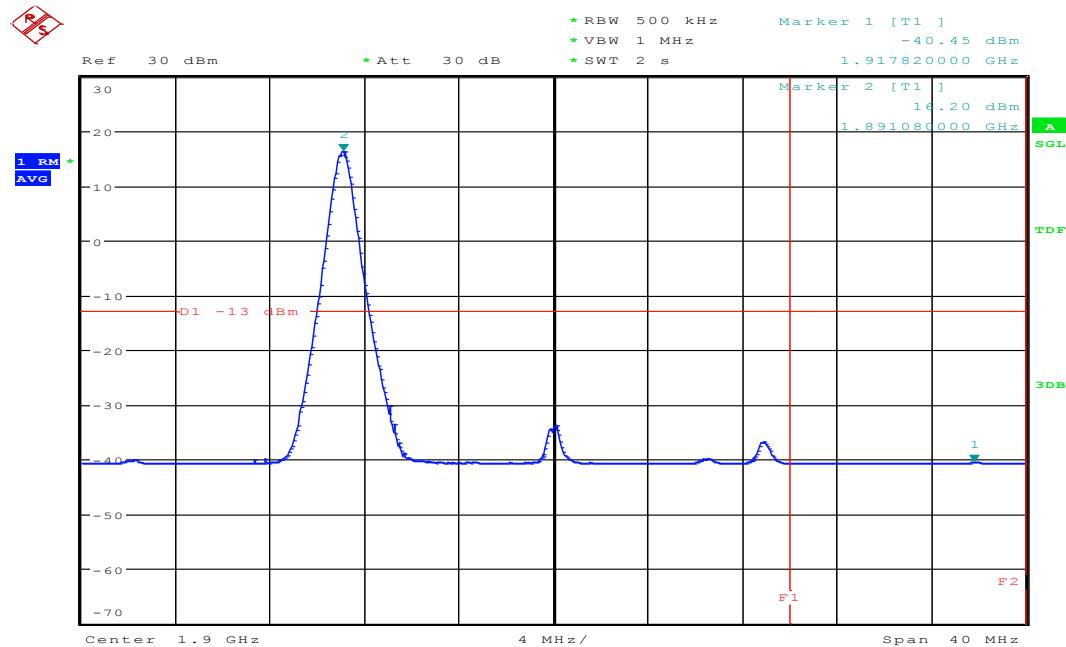


Date: 22.OCT.2016 10:35:08

## BAND2-1900MHz,Q16-1RB\_HIGH@Pass

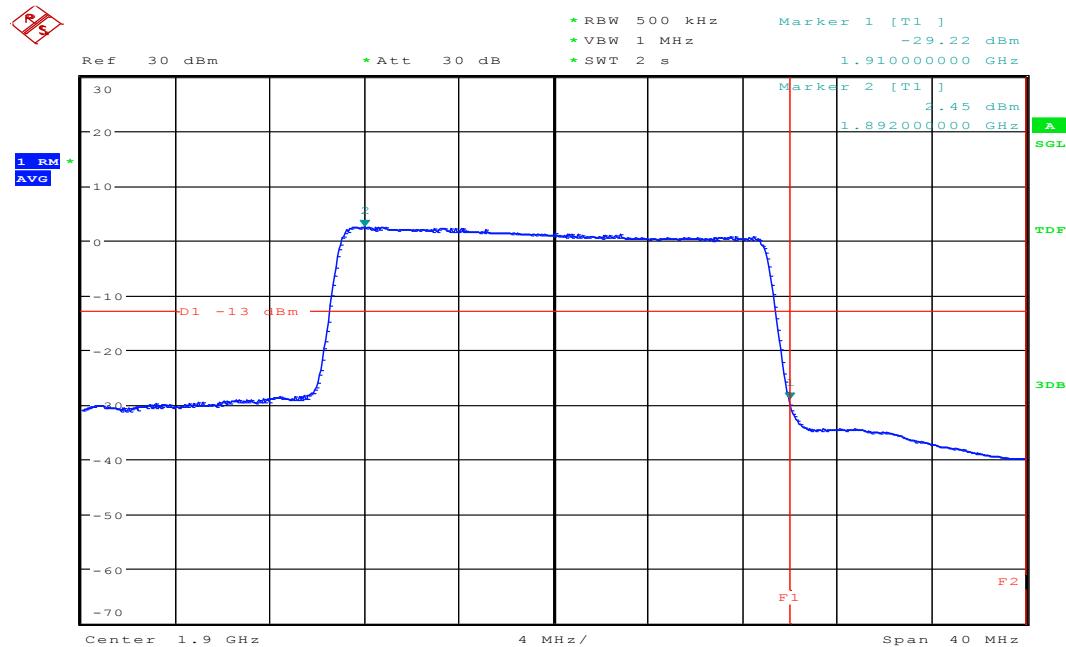


## BAND2-1900MHz,Q16-1RB\_LOW@Pass



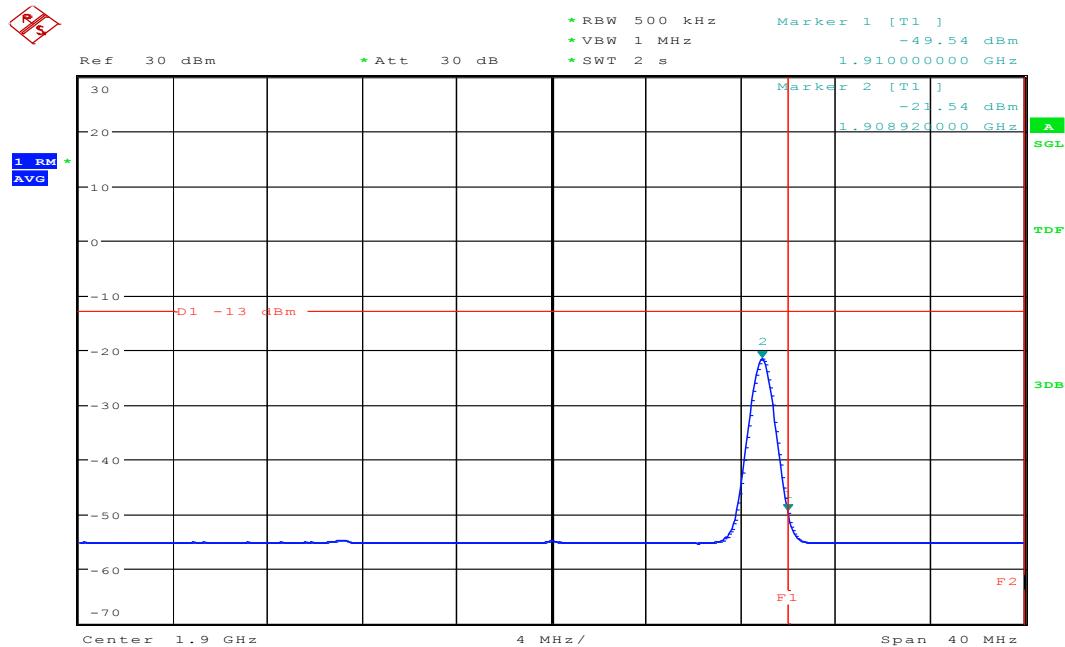
Date: 22.OCT.2016 10:34:39

## BAND2-1900MHz,QPSK-100RB\_LOW@Pass

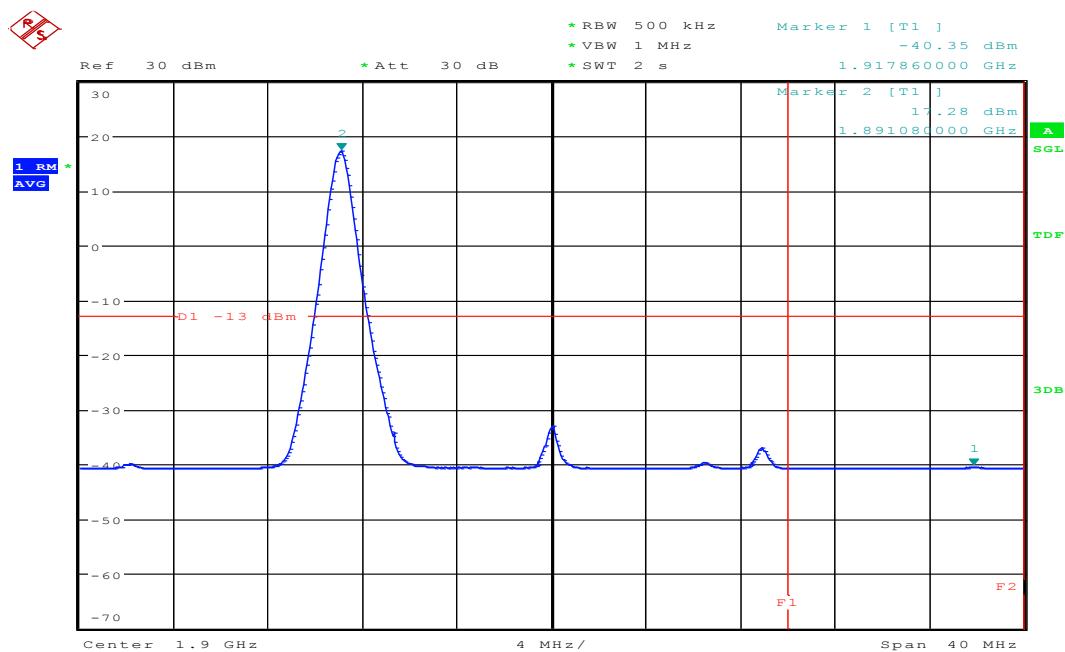


Date: 22.OCT.2016 10:34:25

## BAND2-1900MHz,QPSK-1RB\_HIGH@Pass

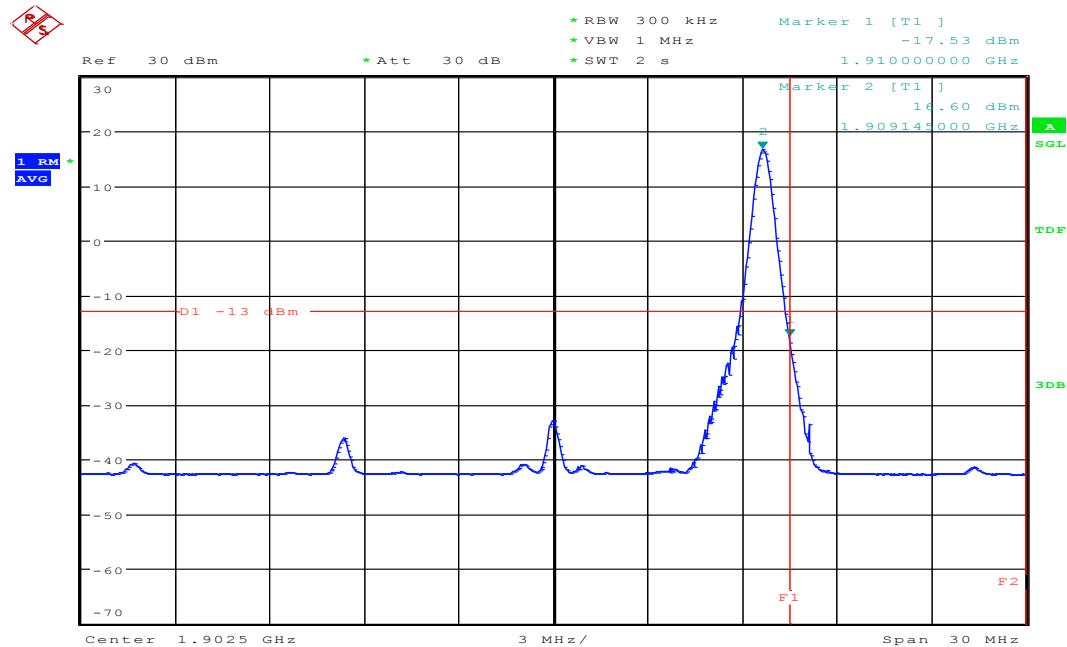


## BAND2-1900MHz,QPSK-1RB\_LOW@Pass



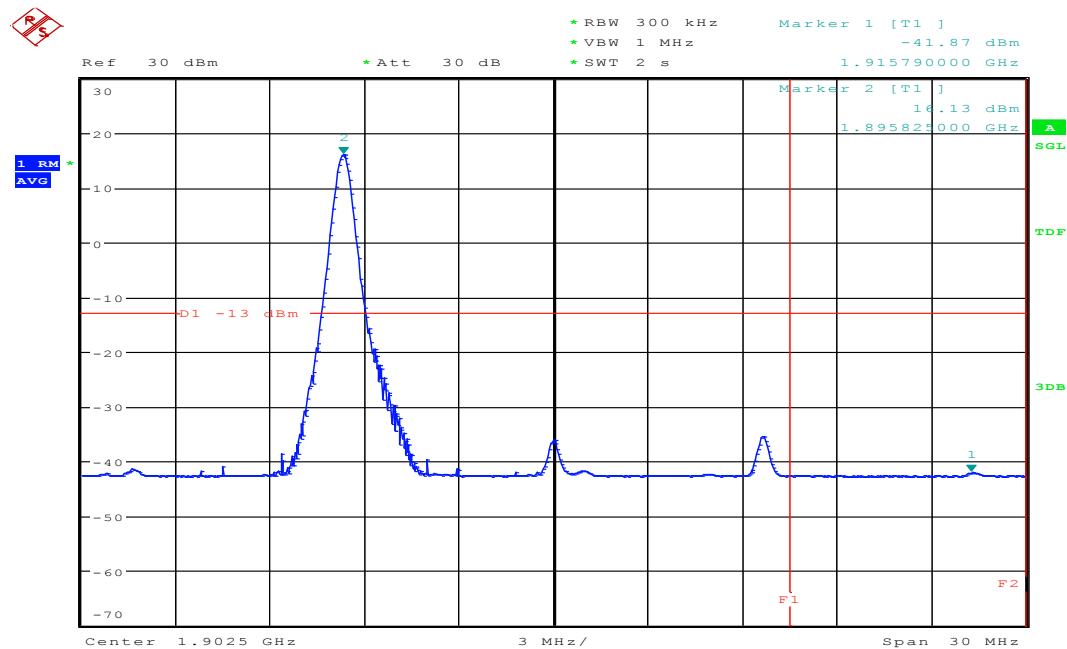
Date: 22.OCT.2016 10:33:57

## BAND2-1902.5MHz,Q16-1RB\_HIGH@Pass



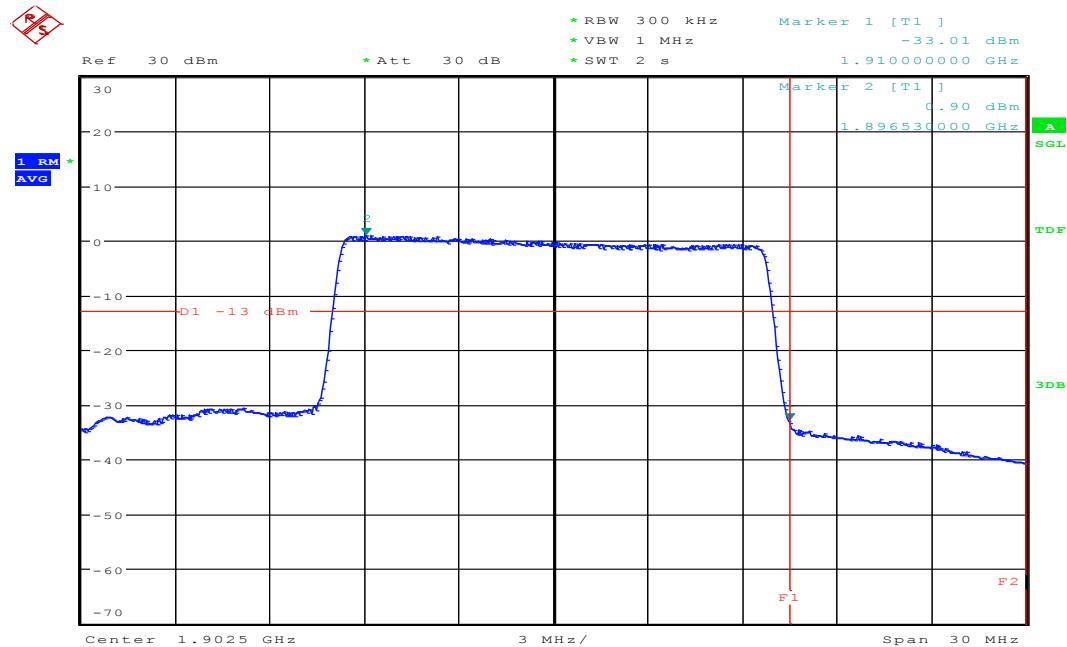
Date: 22.OCT.2016 10:31:59

## BAND2-1902.5MHz,Q16-1RB\_LOW@Pass



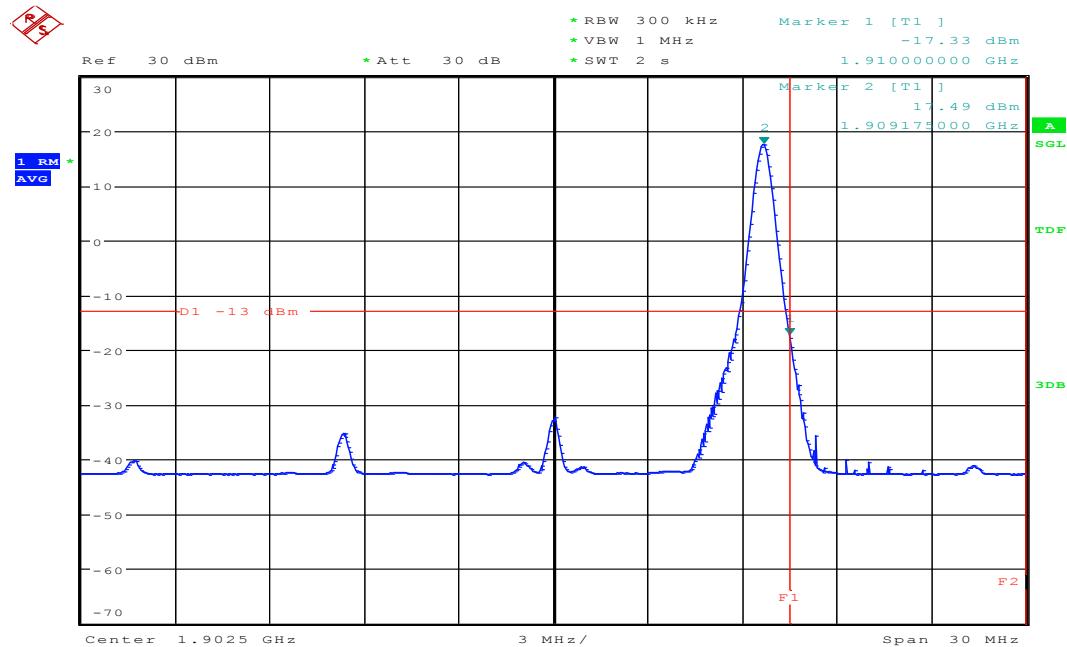
Date: 22.OCT.2016 10:31:46

## BAND2-1902.5MHz,Q16-75RB\_LOW@Pass



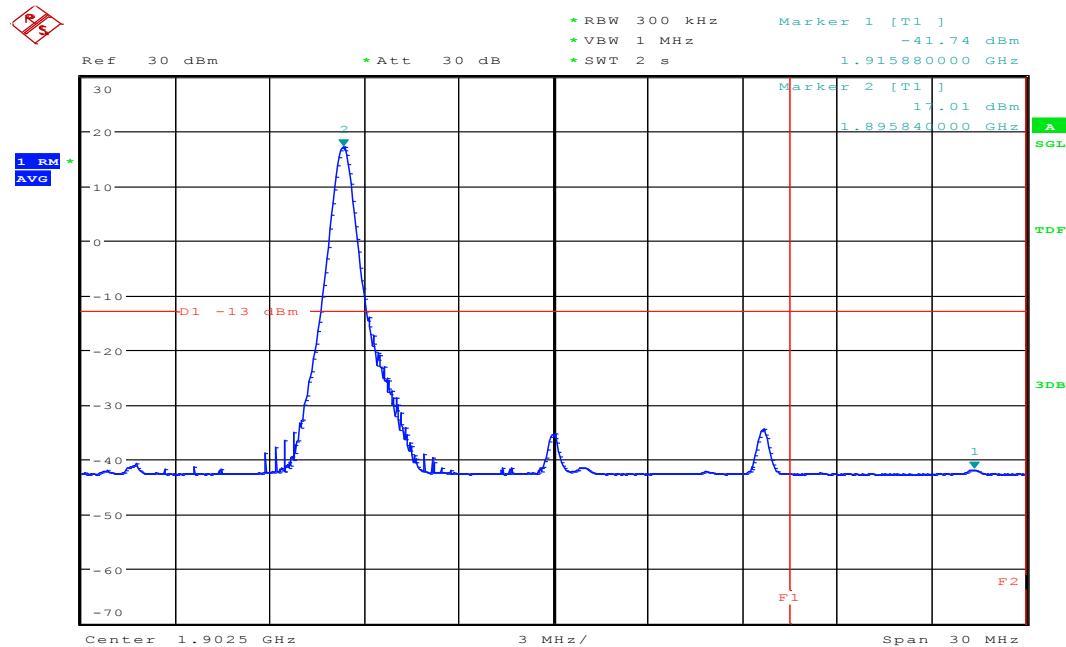
Date: 22.OCT.2016 10:32:14

## BAND2-1902.5MHz,QPSK-1RB\_HIGH@Pass



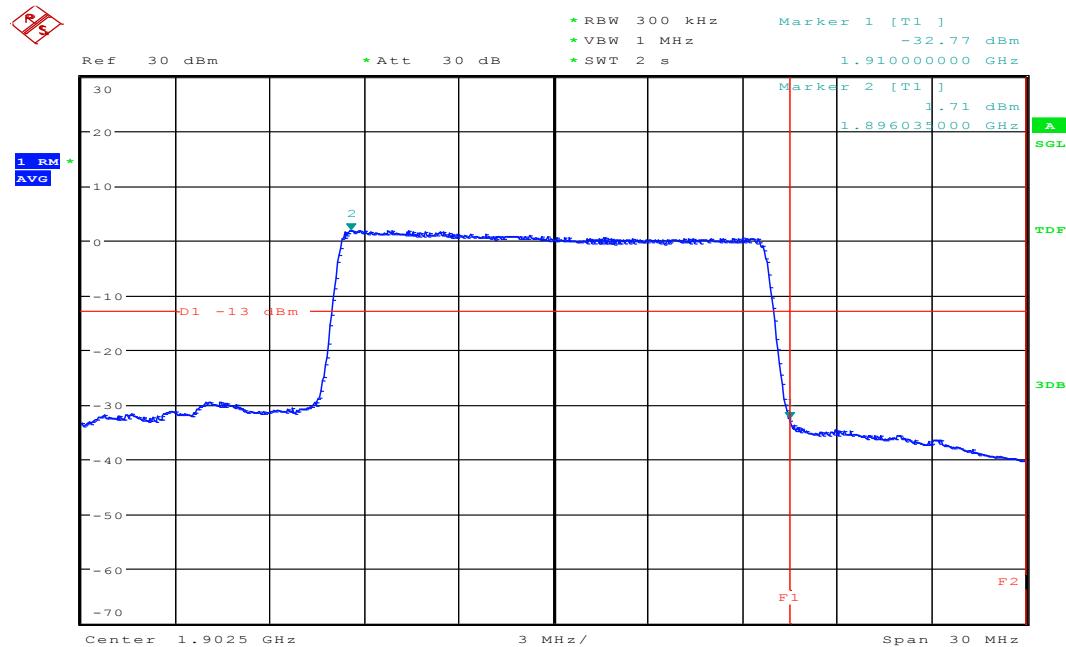
Date: 22.OCT.2016 10:31:17

## BAND2-1902.5MHz,QPSK-1RB\_LOW@Pass



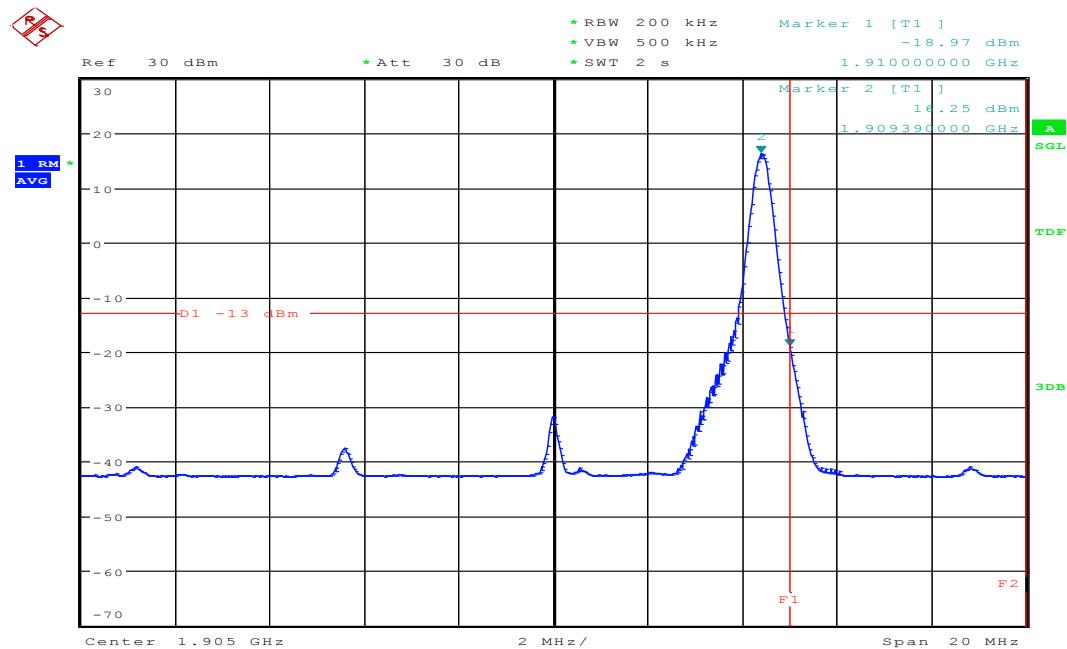
Date: 22.OCT.2016 10:31:03

## BAND2-1902.5MHz,QPSK-75RB\_LOW@Pass



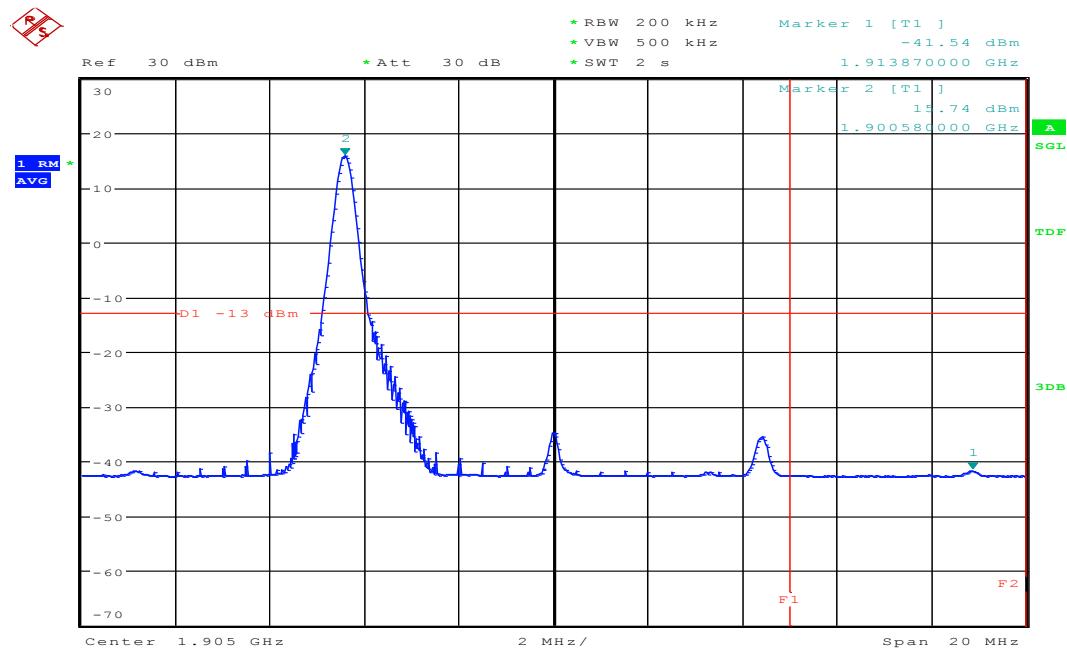
Date: 22.OCT.2016 10:31:32

## BAND2-1905MHz,Q16-1RB\_HIGH@Pass



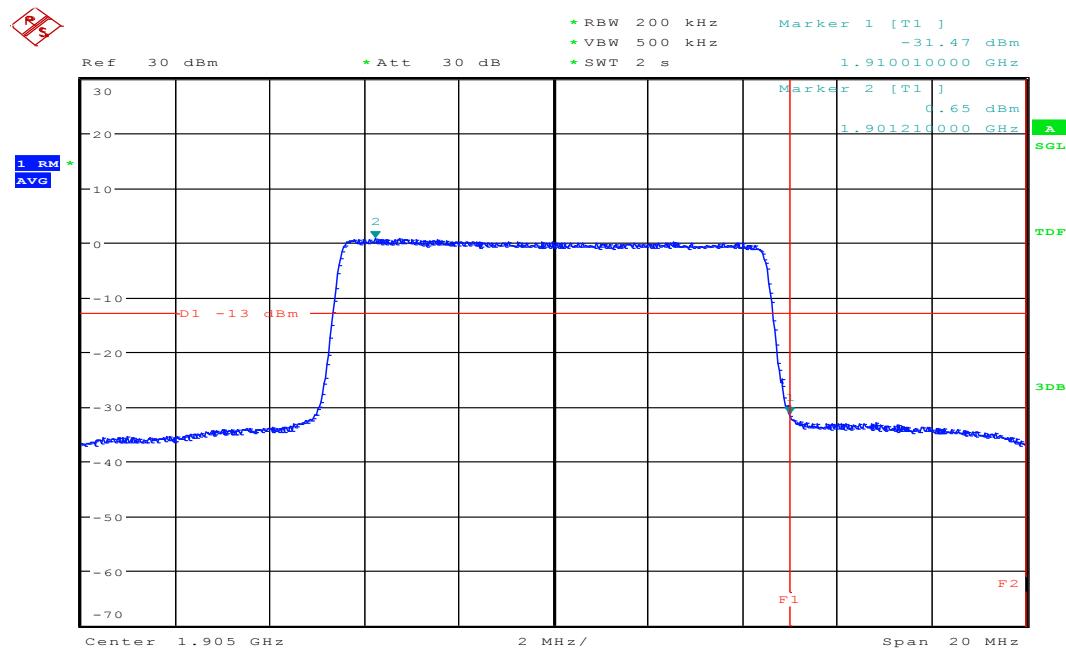
Date: 22.OCT.2016 10:29:09

## BAND2-1905MHz,Q16-1RB\_LOW@Pass



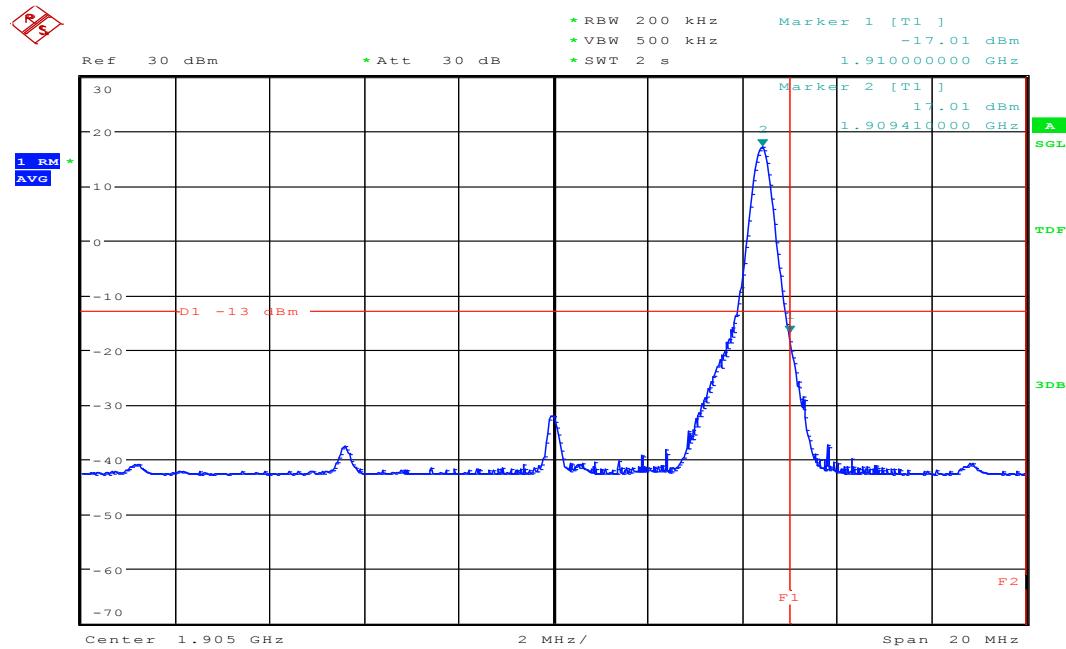
Date: 22.OCT.2016 10:28:57

## BAND2-1905MHz,Q16-50RB\_LOW@Pass



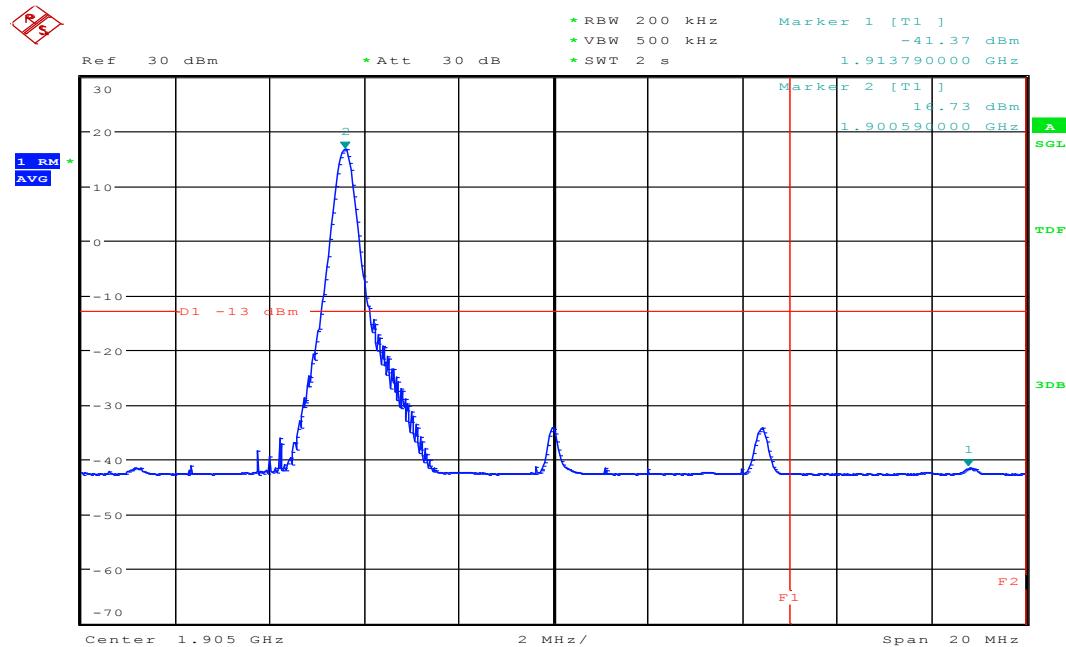
Date: 22.OCT.2016 10:29:22

## BAND2-1905MHz,QPSK-1RB\_HIGH@Pass



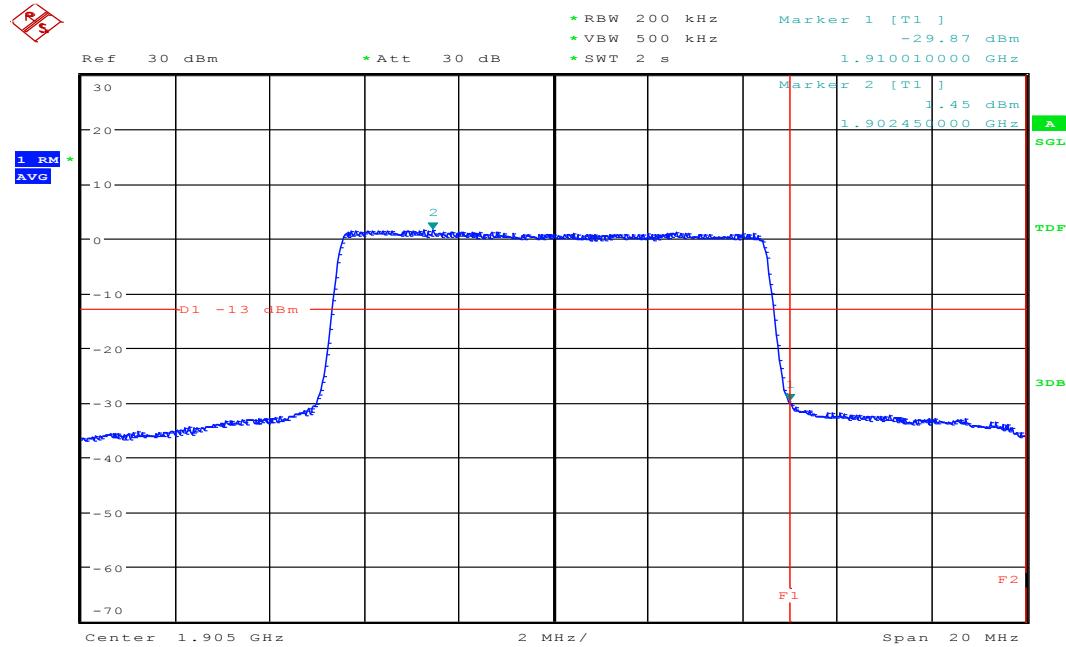
Date: 22.OCT.2016 10:28:33

## BAND2-1905MHz,QPSK-1RB\_LOW@Pass



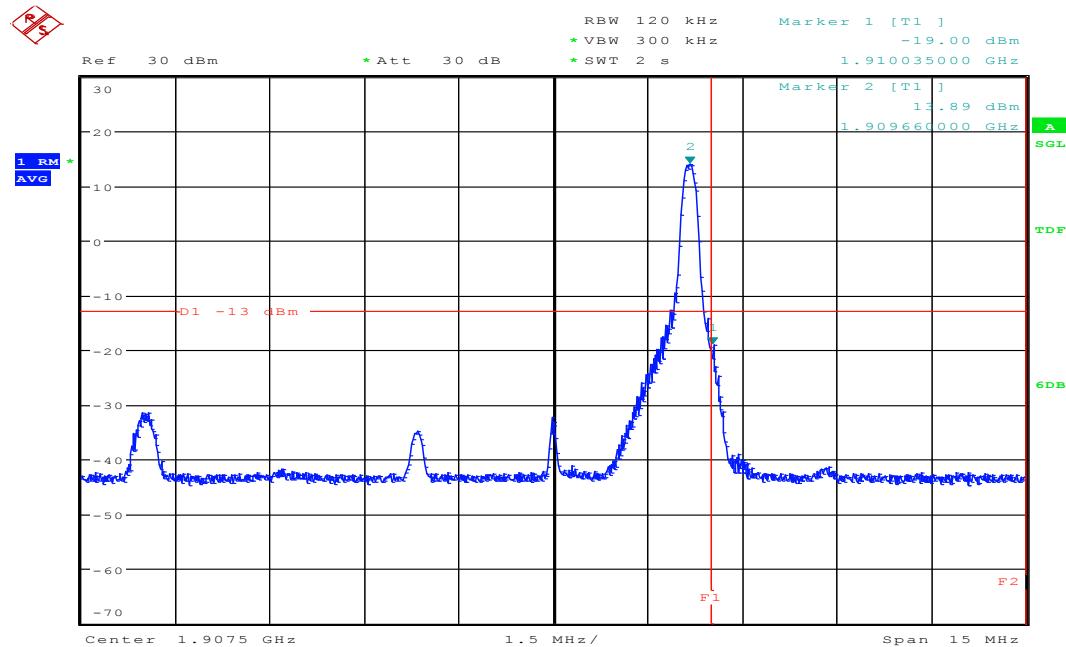
Date: 22.OCT.2016 10:28:21

## BAND2-1905MHz,QPSK-50RB\_LOW@Pass



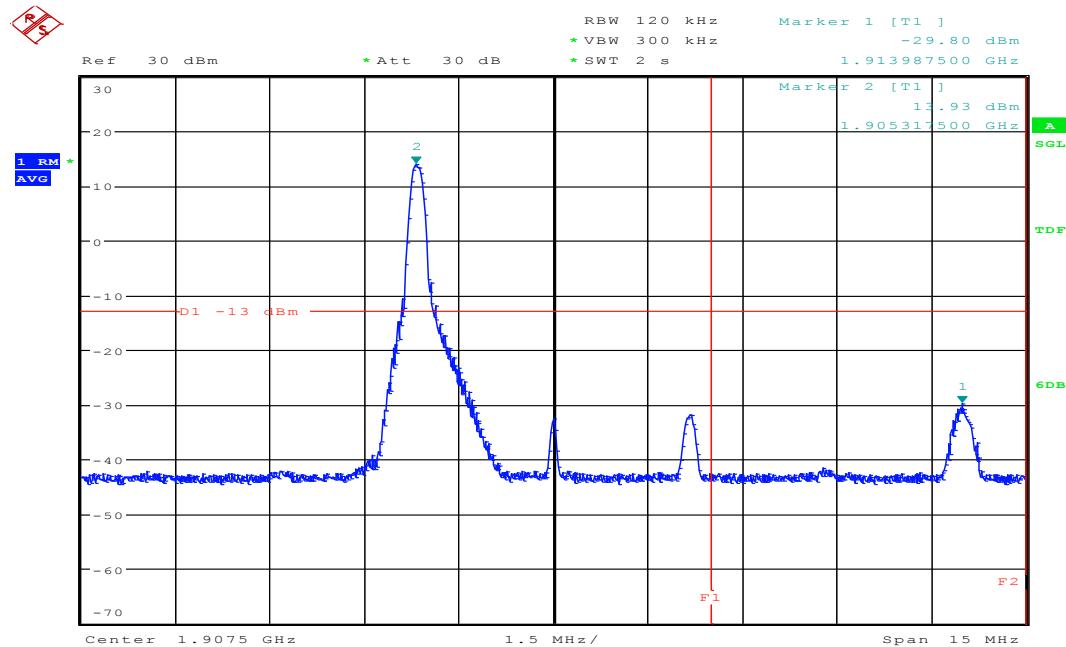
Date: 22.OCT.2016 10:28:45

## BAND2-1907.5MHz,Q16-1RB\_HIGH@Pass



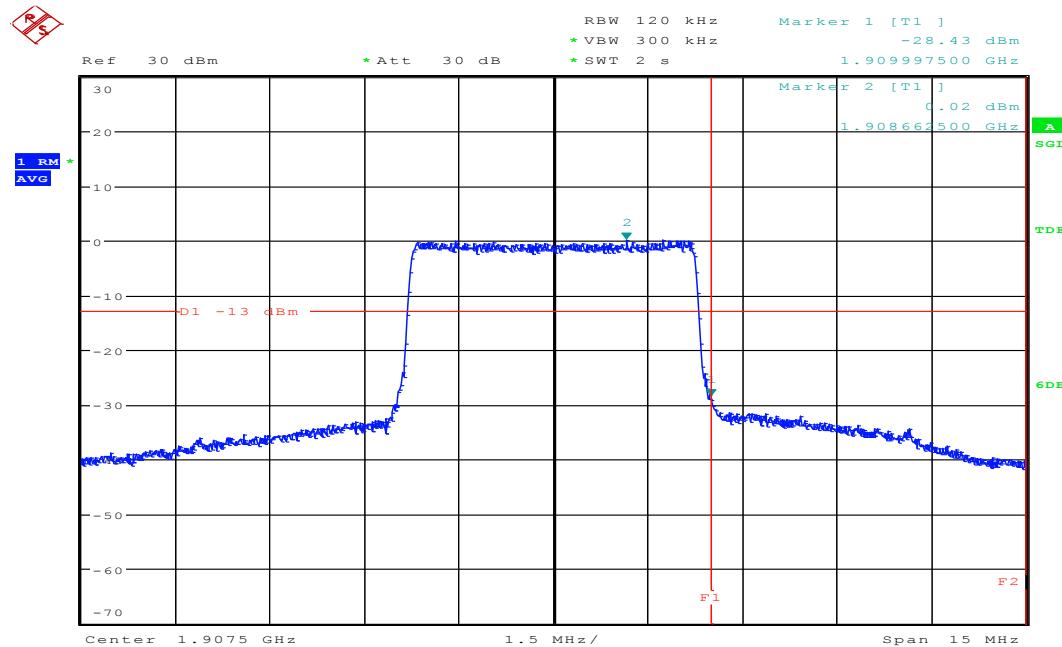
Date: 22.OCT.2016 10:26:41

## BAND2-1907.5MHz,Q16-1RB\_LOW@Pass



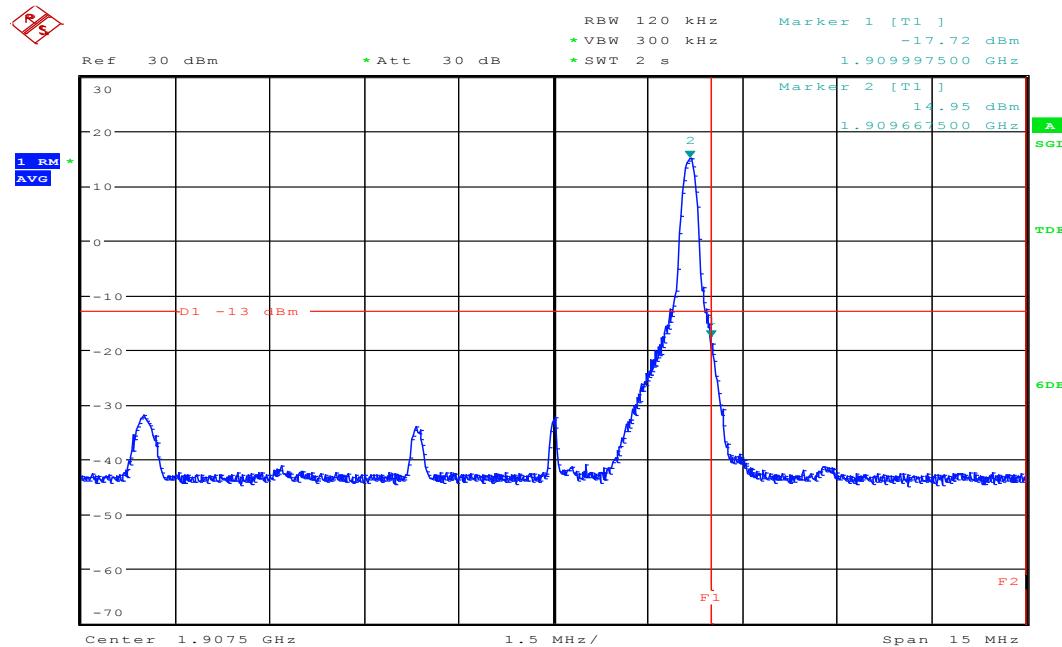
Date: 22.OCT.2016 10:26:29

## BAND2-1907.5MHz,Q16-25RB\_LOW@Pass



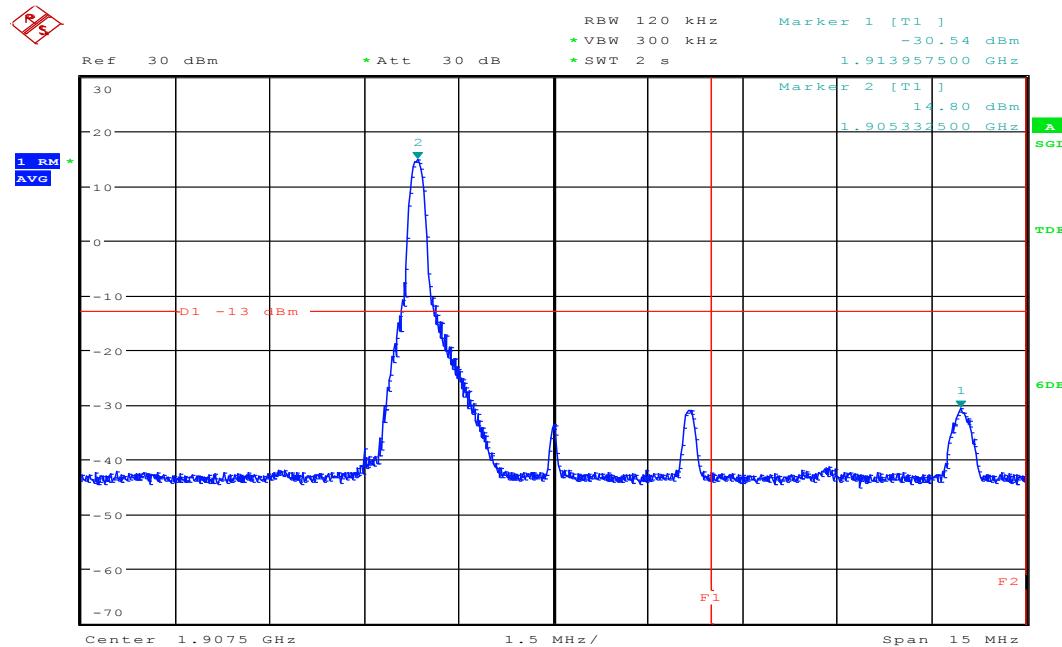
Date: 22.OCT.2016 10:26:53

## BAND2-1907.5MHz,QPSK-1RB\_HIGH@Pass

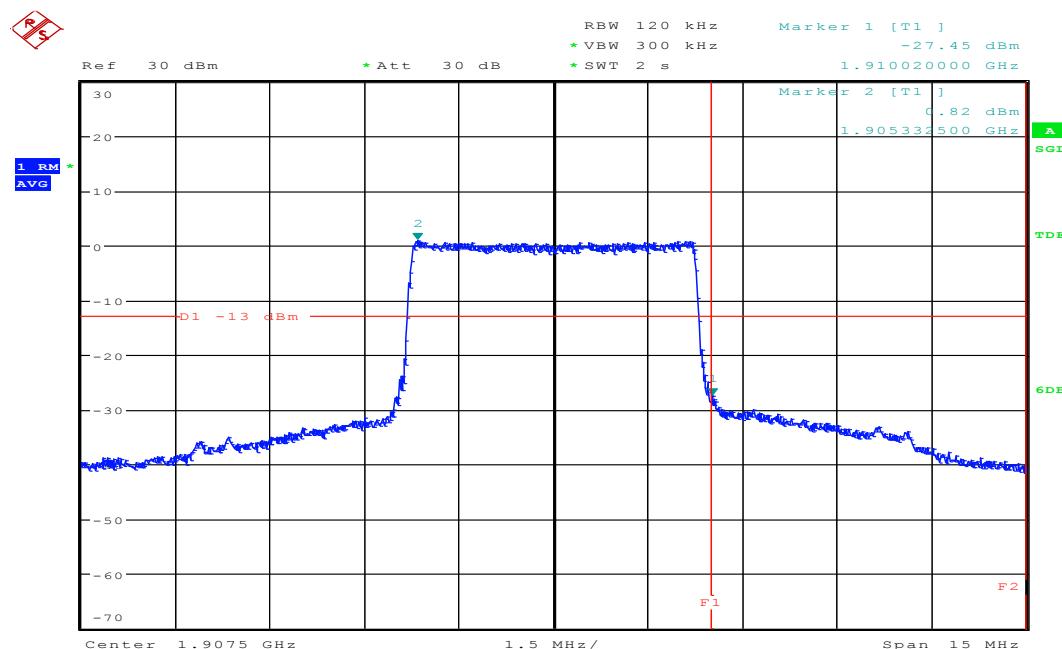


Date: 22.OCT.2016 10:26:05

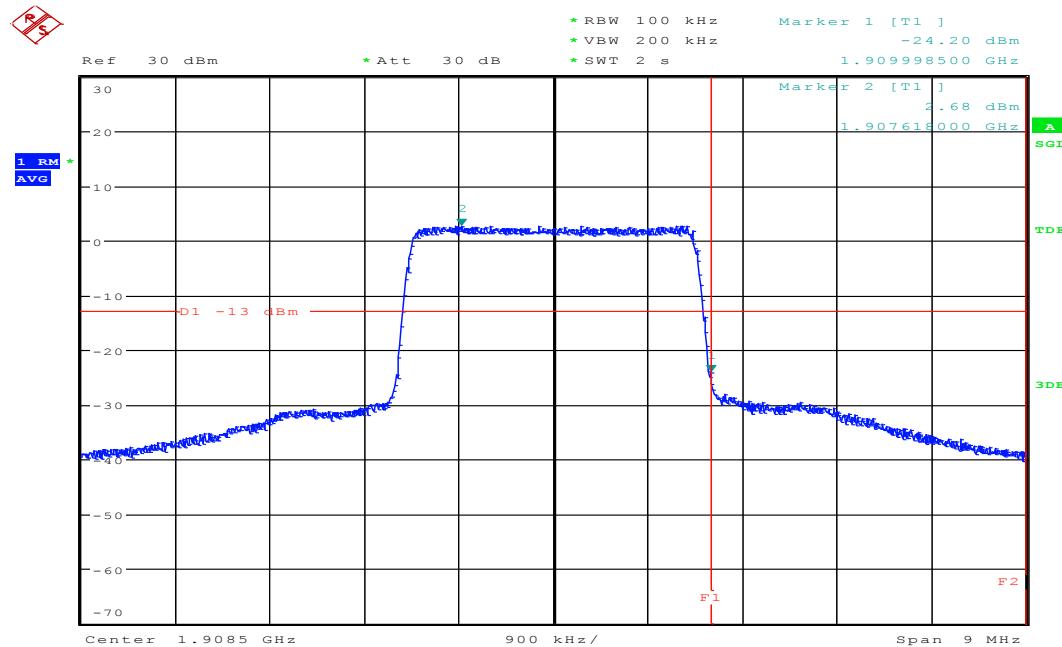
## BAND2-1907.5MHz,QPSK-1RB\_LOW@Pass



## BAND2-1907.5MHz,QPSK-25RB\_LOW@Pass

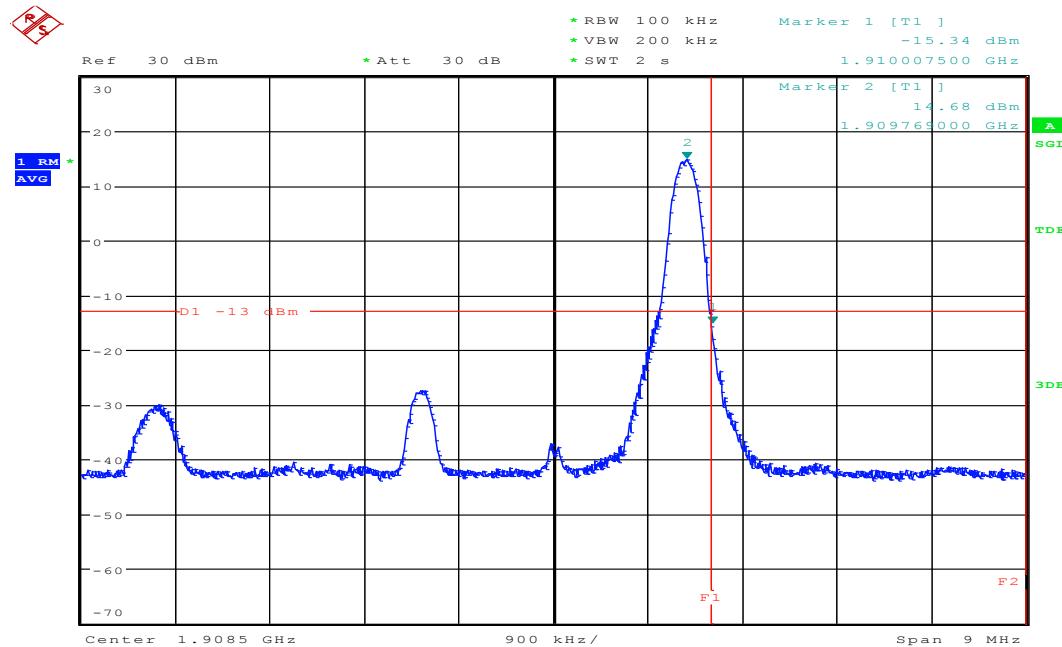


## BAND2-1908.5MHz,Q16-15RB\_LOW@Pass



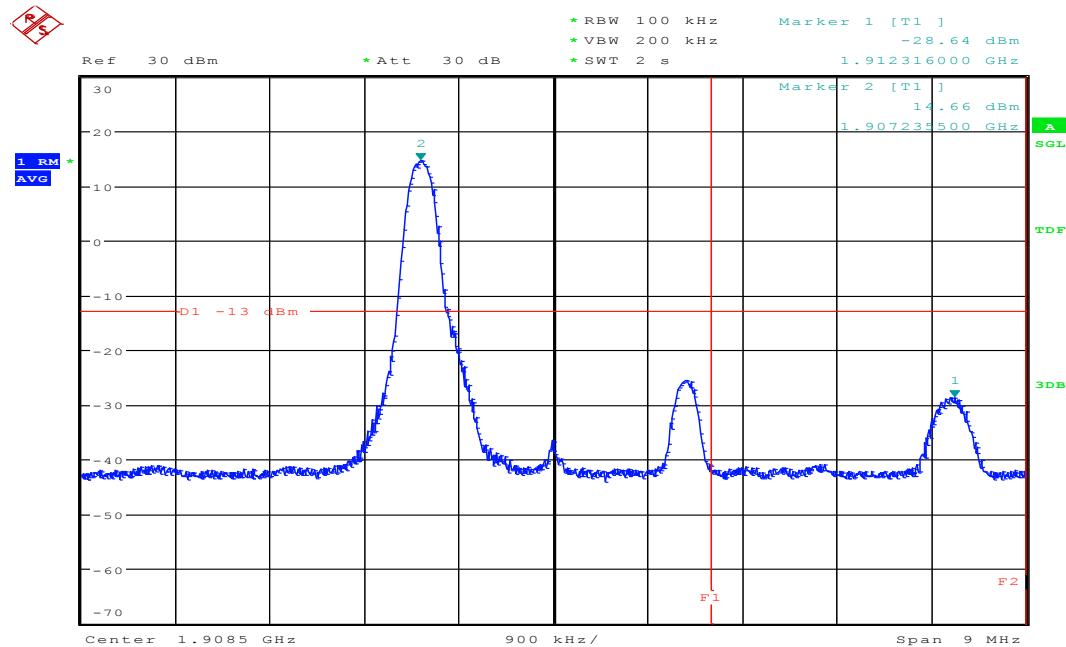
Date: 22.OCT.2016 10:24:26

## BAND2-1908.5MHz,Q16-1RB\_HIGH@Pass



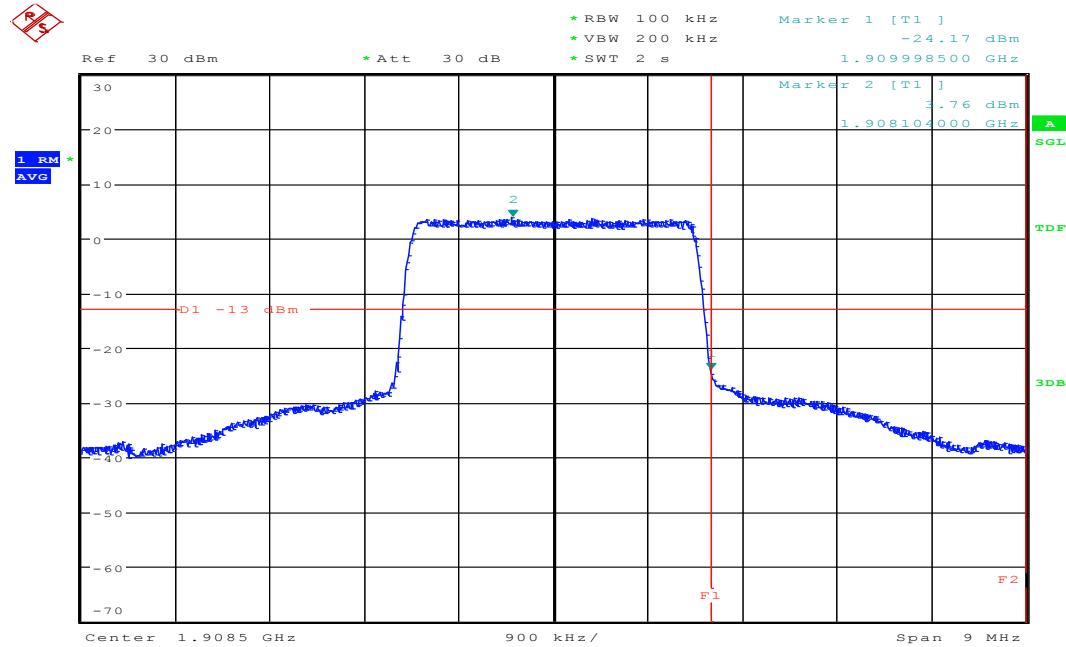
Date: 22.OCT.2016 10:24:14

## BAND2-1908.5MHz,Q16-1RB\_LOW@Pass



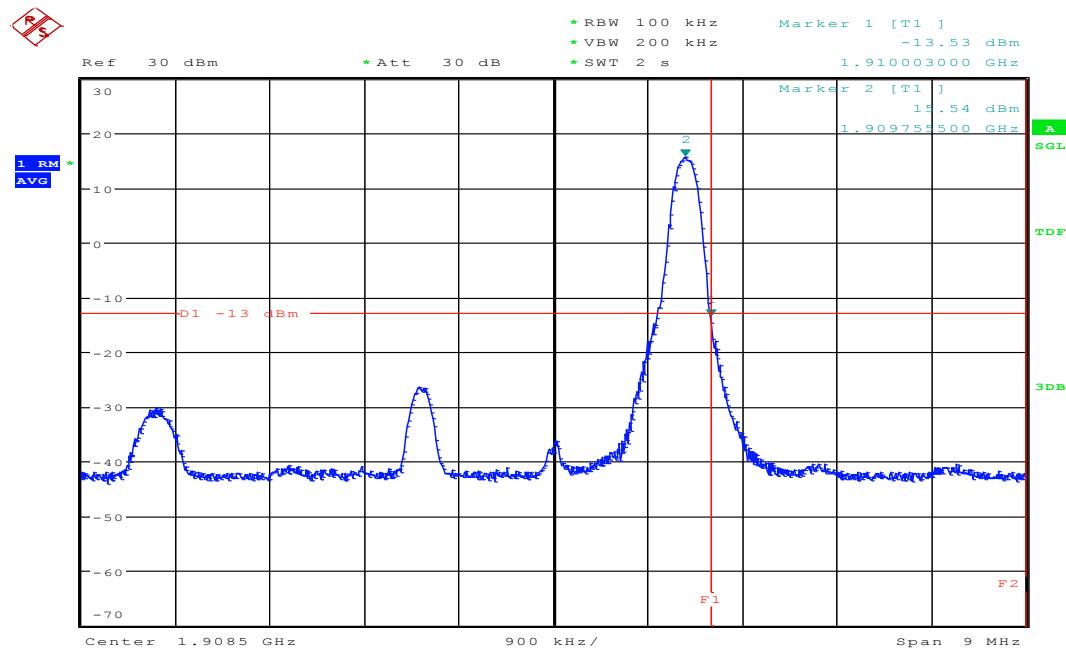
Date: 22.OCT.2016 10:24:03

## BAND2-1908.5MHz,QPSK-15RB\_LOW@Pass



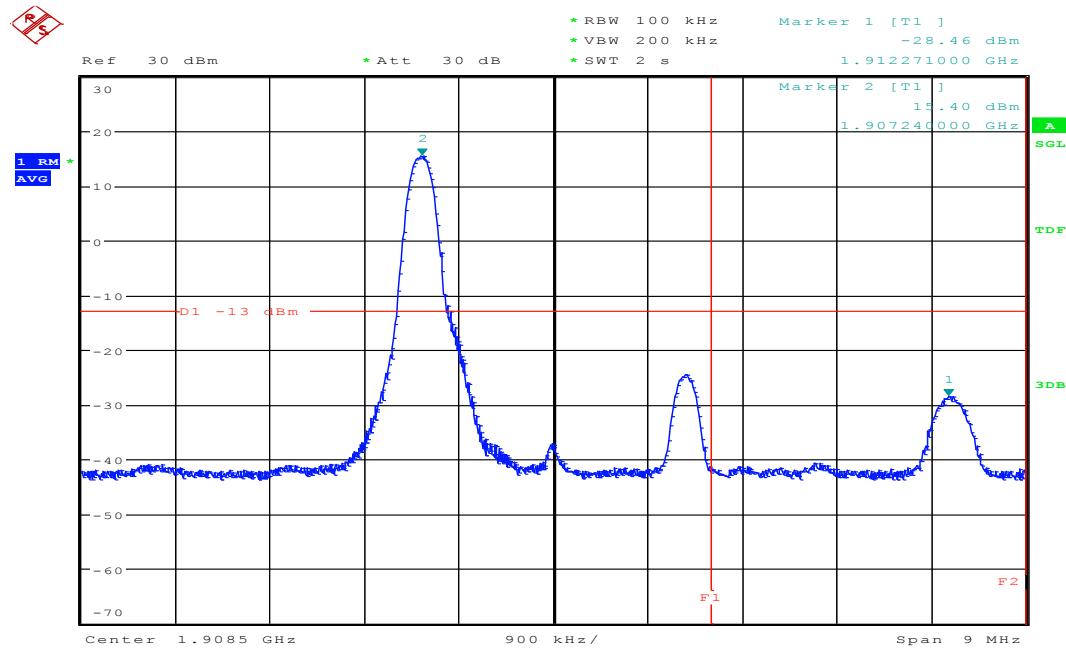
Date: 22.OCT.2016 10:23:51

## BAND2-1908.5MHz,QPSK-1RB\_HIGH@Pass



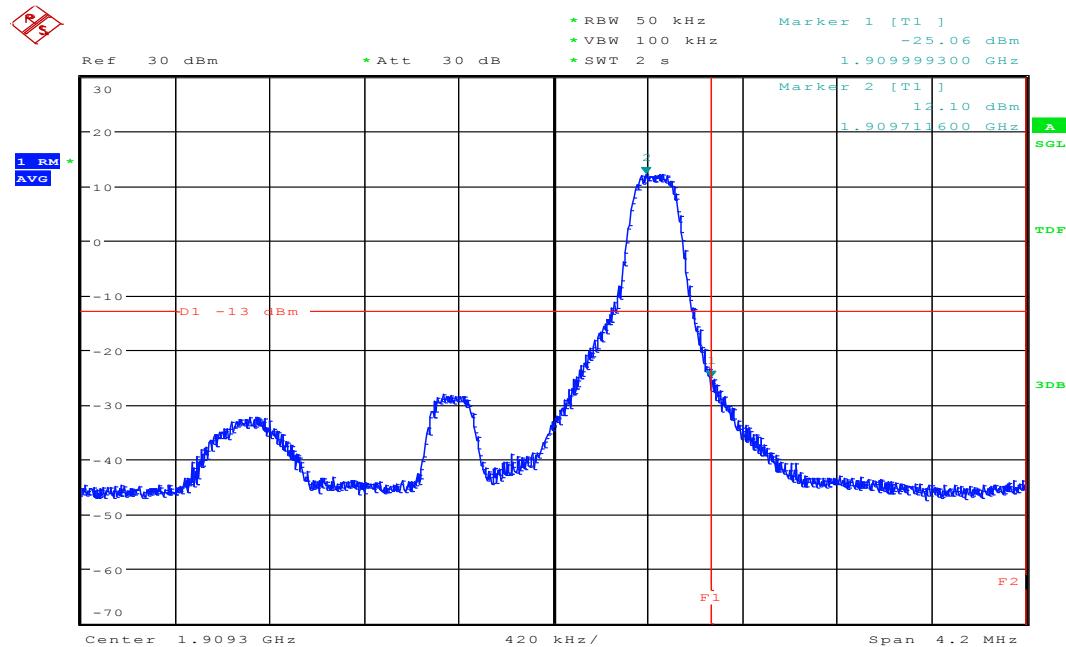
Date: 22.OCT.2016 10:23:40

## BAND2-1908.5MHz,QPSK-1RB\_LOW@Pass



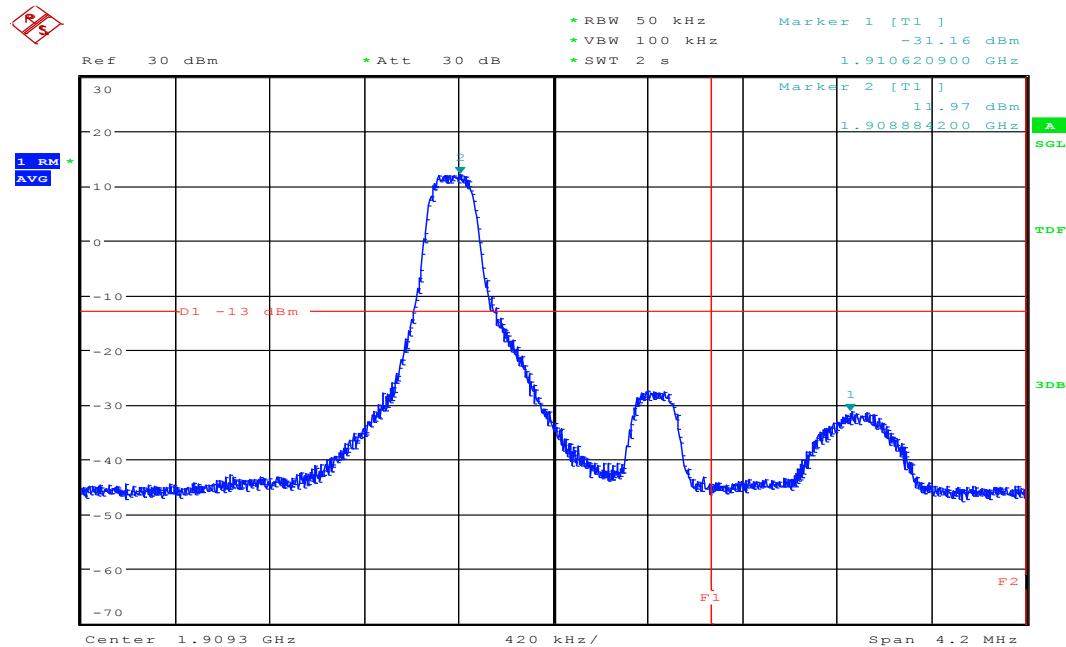
Date: 22.OCT.2016 10:23:28

## BAND2-1909.3MHz,Q16-1RB\_HIGH@Pass



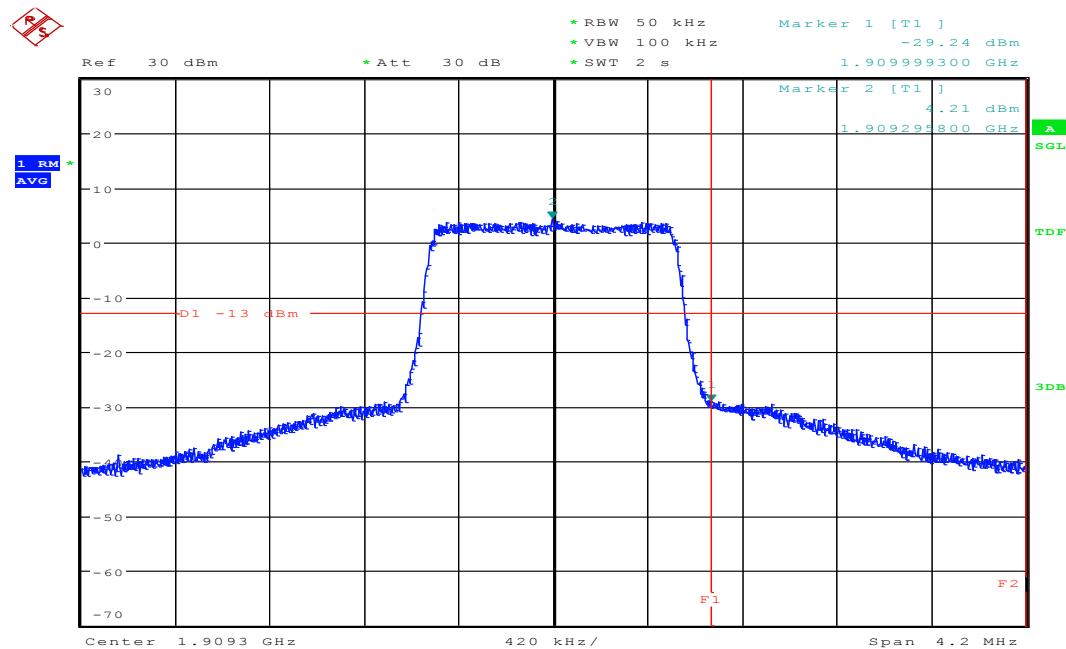
Date: 22.OCT.2016 10:21:52

## BAND2-1909.3MHz,Q16-1RB\_LOW@Pass

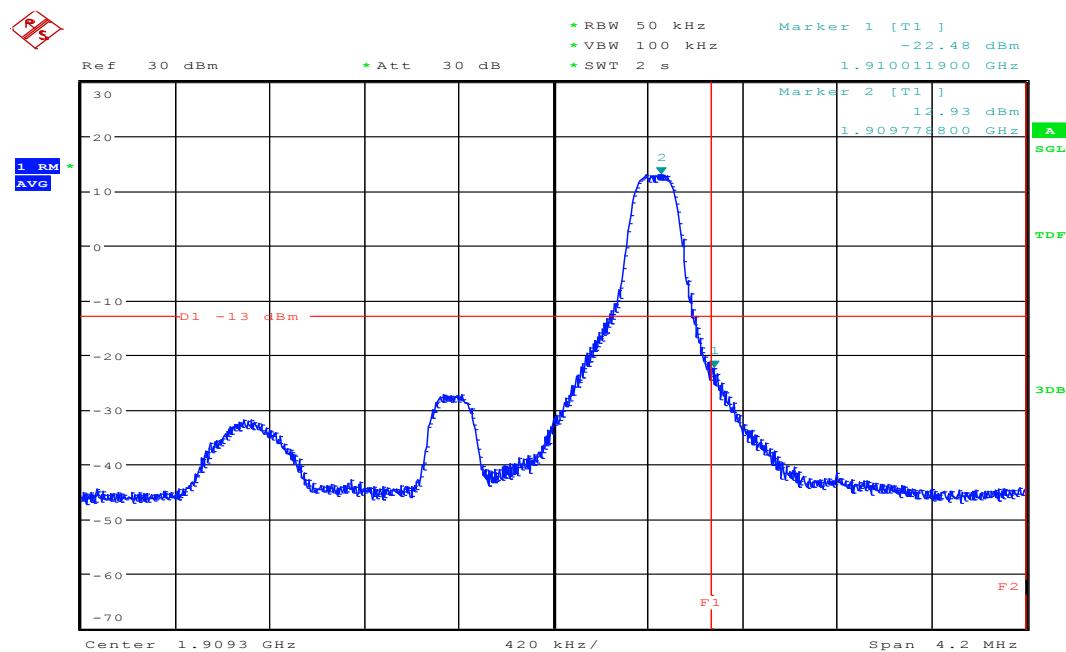


Date: 22.OCT.2016 10:21:41

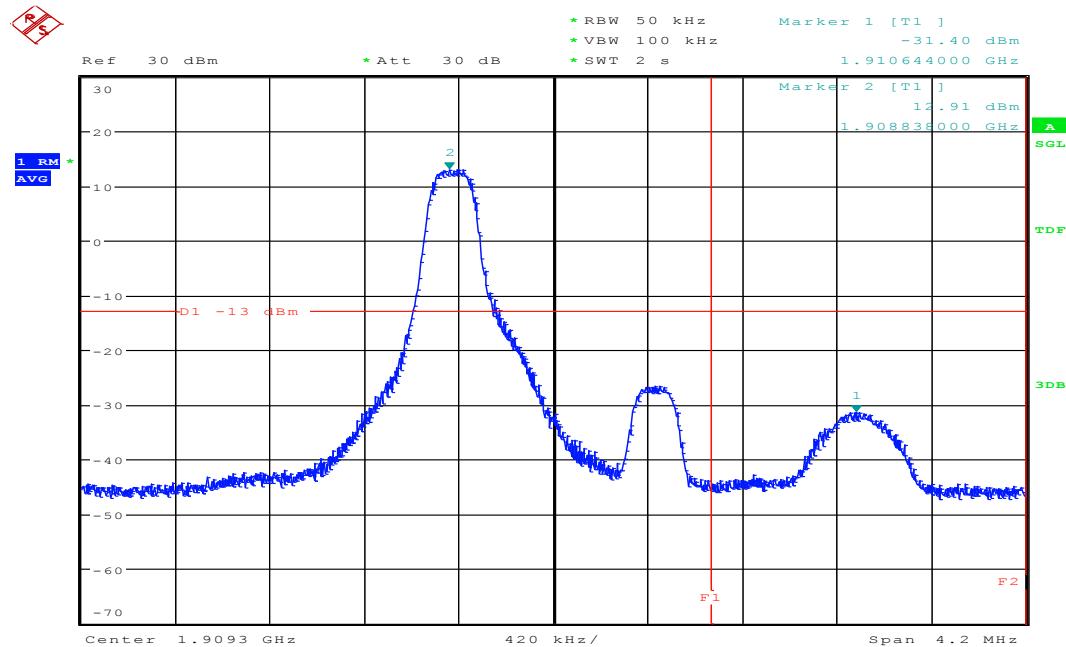
## BAND2-1909.3MHz,Q16-6RB\_LOW@Pass



## BAND2-1909.3MHz,QPSK-1RB\_HIGH@Pass

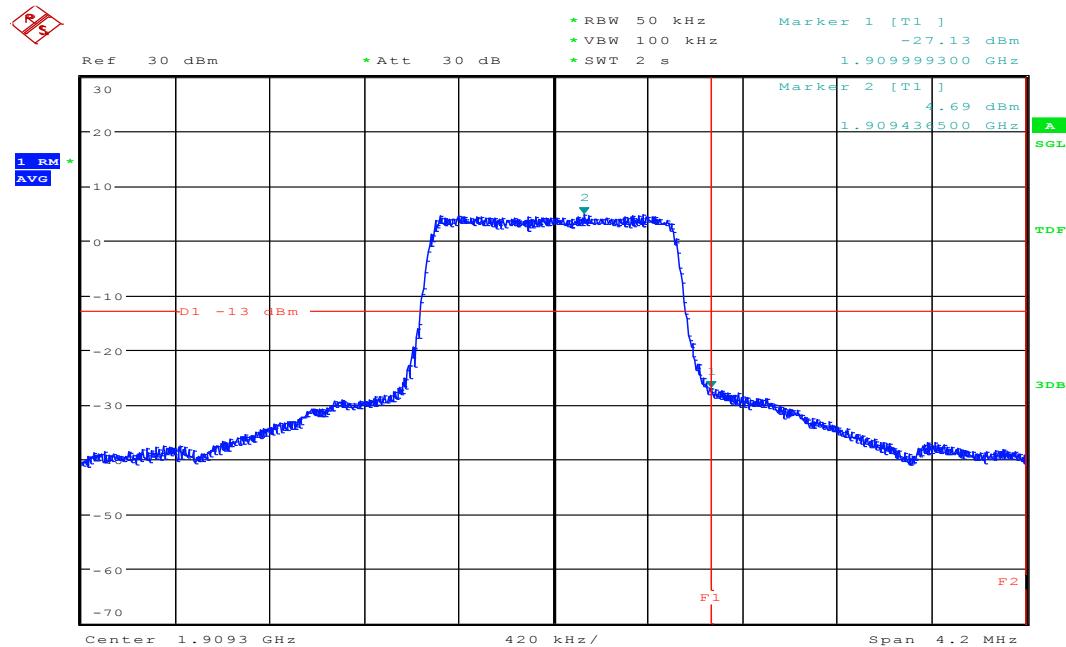


## BAND2-1909.3MHz,QPSK-1RB\_LOW@Pass



Date: 22.OCT.2016 10:21:06

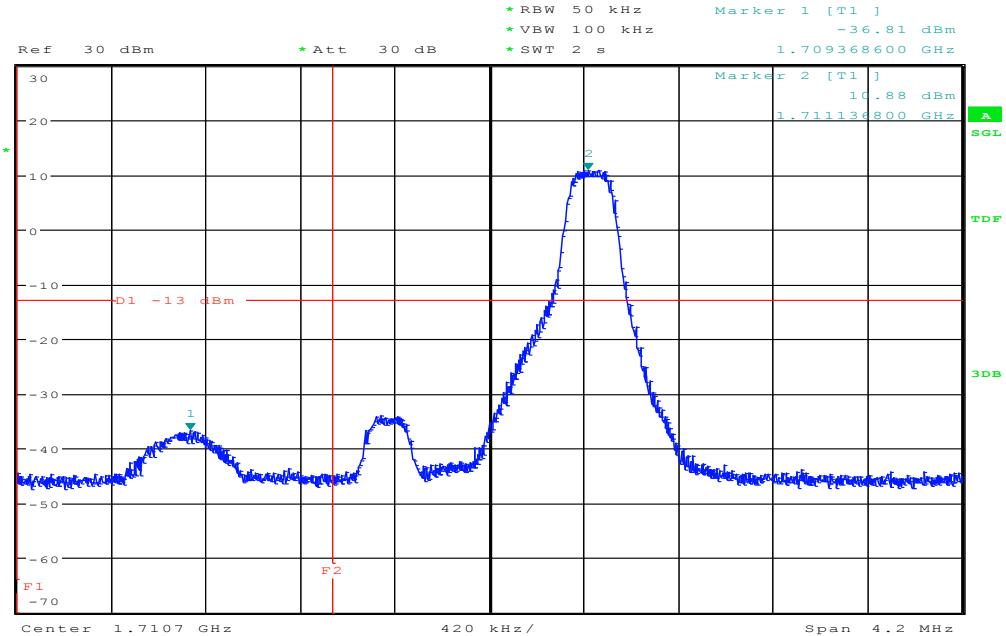
## BAND2-1909.3MHz,QPSK-6RB\_LOW@Pass



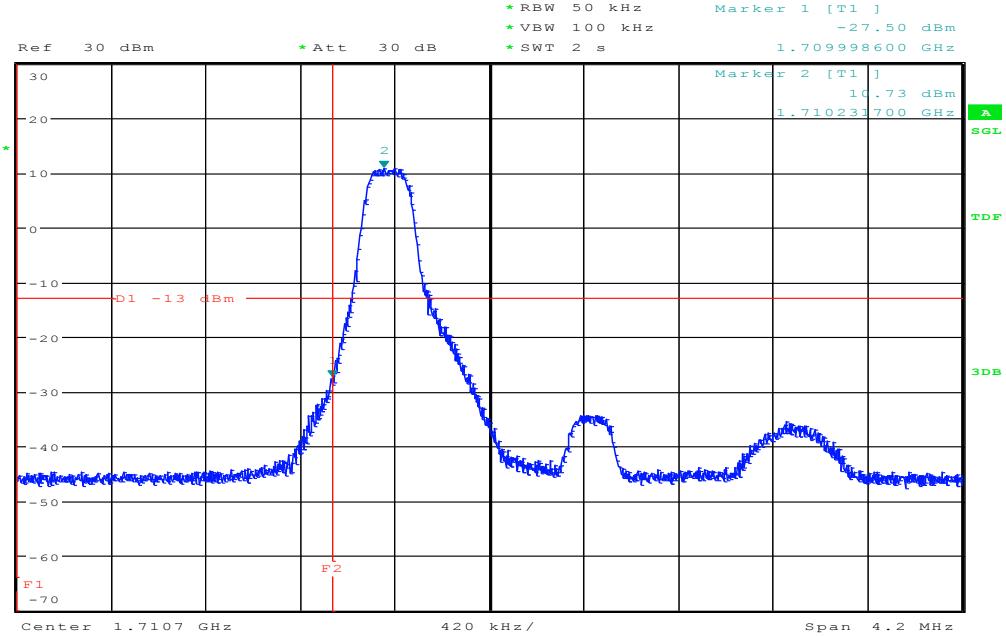
Date: 22.OCT.2016 10:21:29

**BAND 4@Band Edge**

BAND4-1710.7MHz,Q16-1RB\_HIGH@Pass

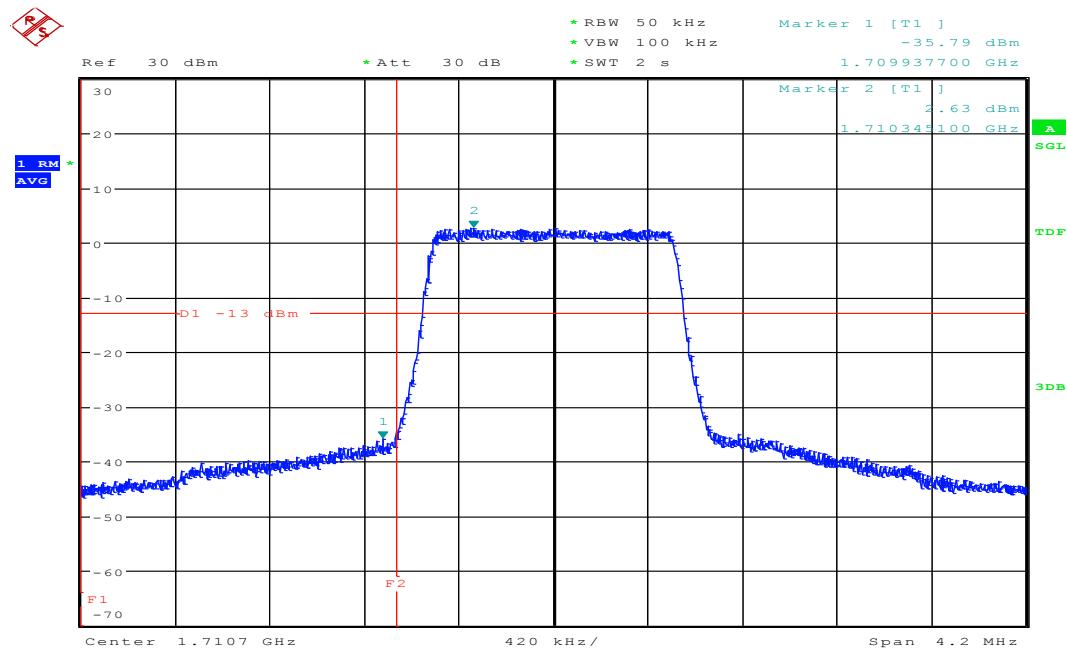


Date: 22.OCT.2016 13:59:33

**BAND4-1710.7MHz,Q16-1RB\_LOW@Pass**

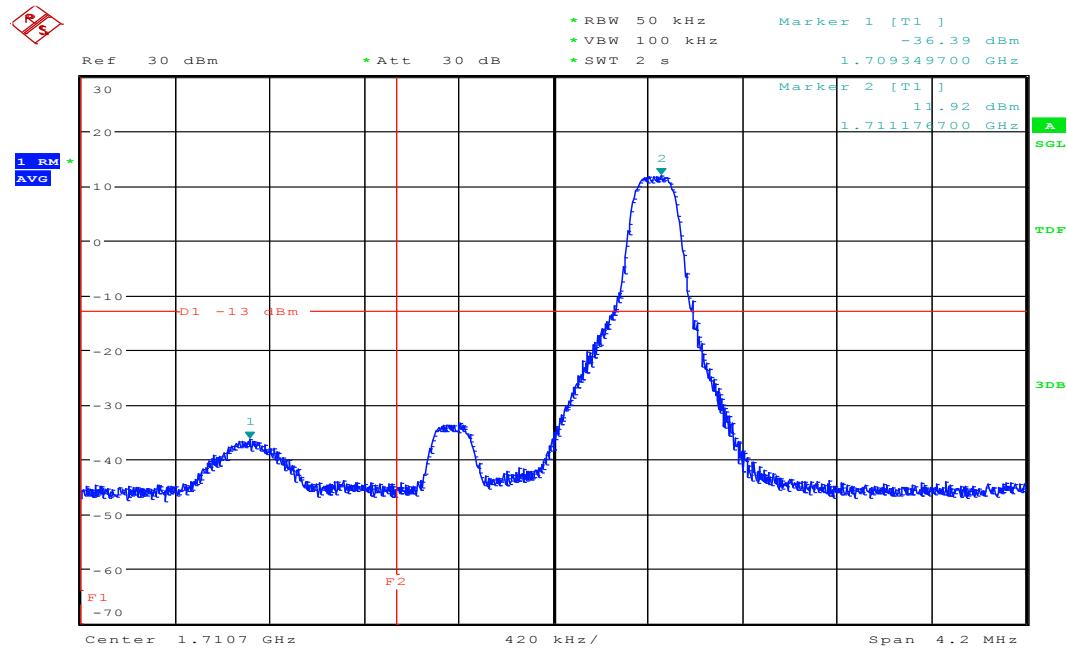
Date: 22.OCT.2016 13:59:21

## BAND4-1710.7MHz,Q16-6RB\_LOW@Pass



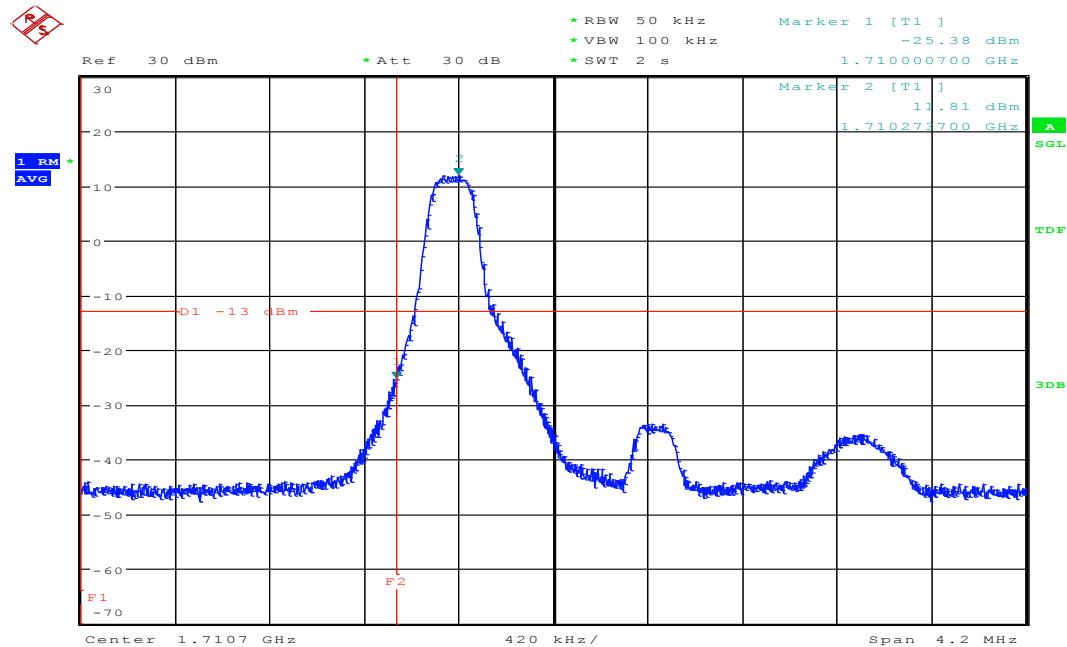
Date: 22.OCT.2016 13:59:44

## BAND4-1710.7MHz,QPSK-1RB\_HIGH@Pass



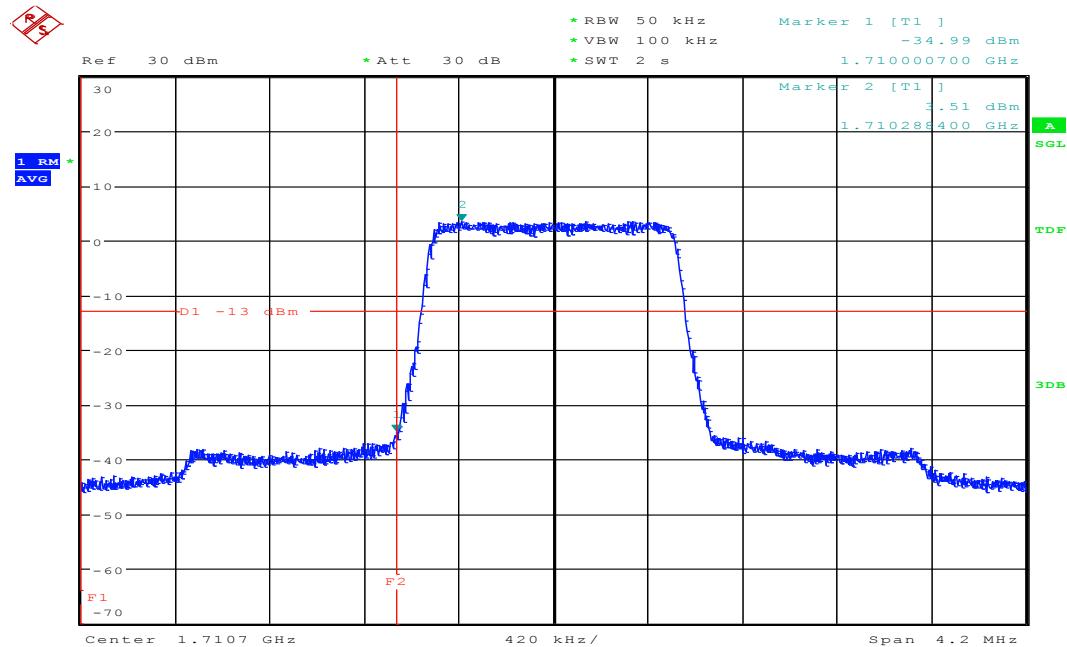
Date: 22.OCT.2016 13:58:58

## BAND4-1710.7MHz,QPSK-1RB\_LOW@Pass



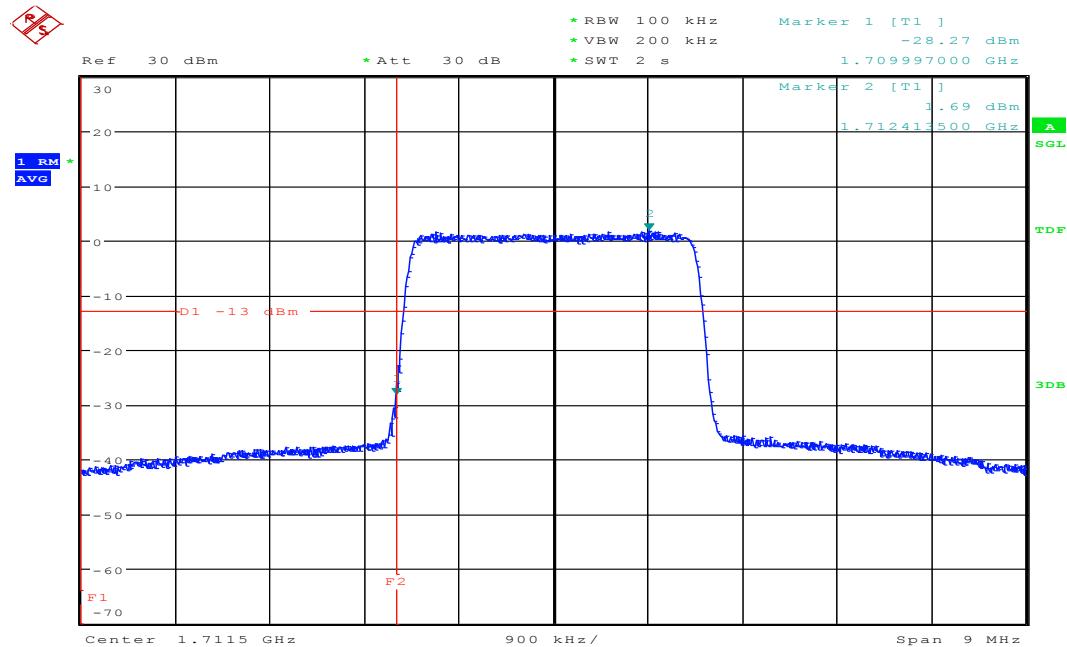
Date: 22.OCT.2016 13:58:46

## BAND4-1710.7MHz,QPSK-6RB\_LOW@Pass



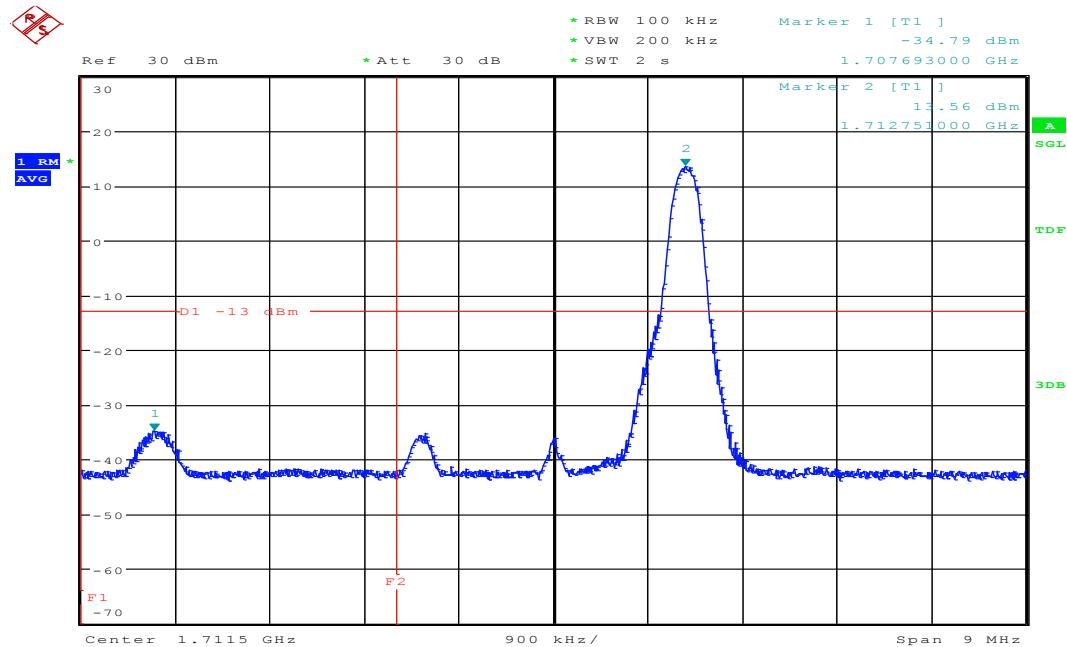
Date: 22.OCT.2016 13:59:10

## BAND4-1711.5MHz,Q16-15RB\_LOW@Pass



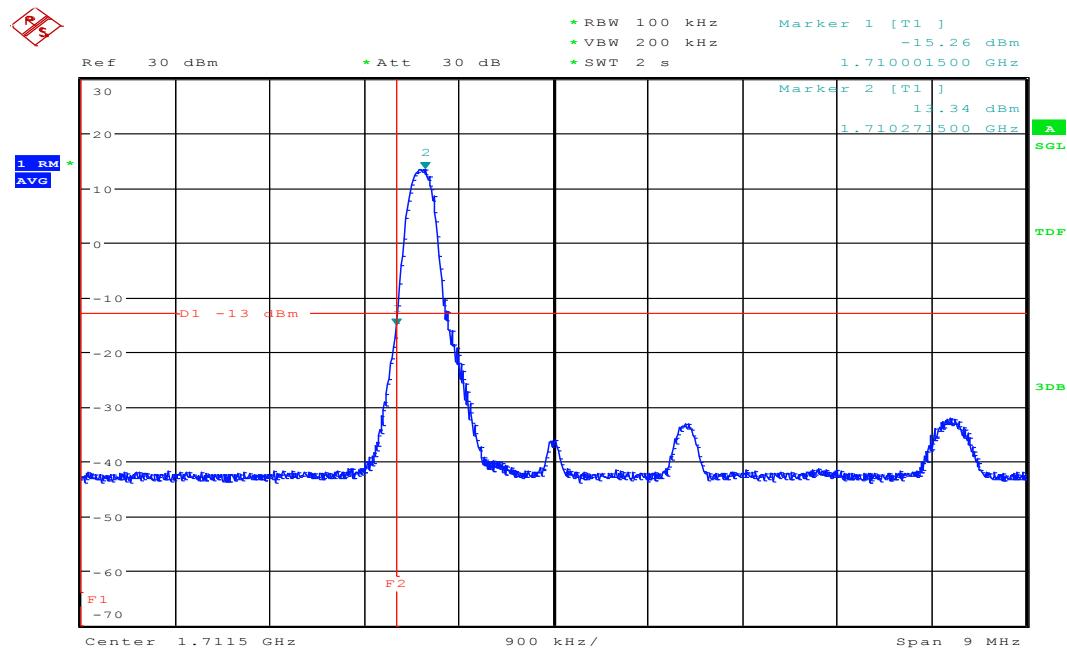
Date: 22.OCT.2016 14:02:07

## BAND4-1711.5MHz,Q16-1RB\_HIGH@Pass



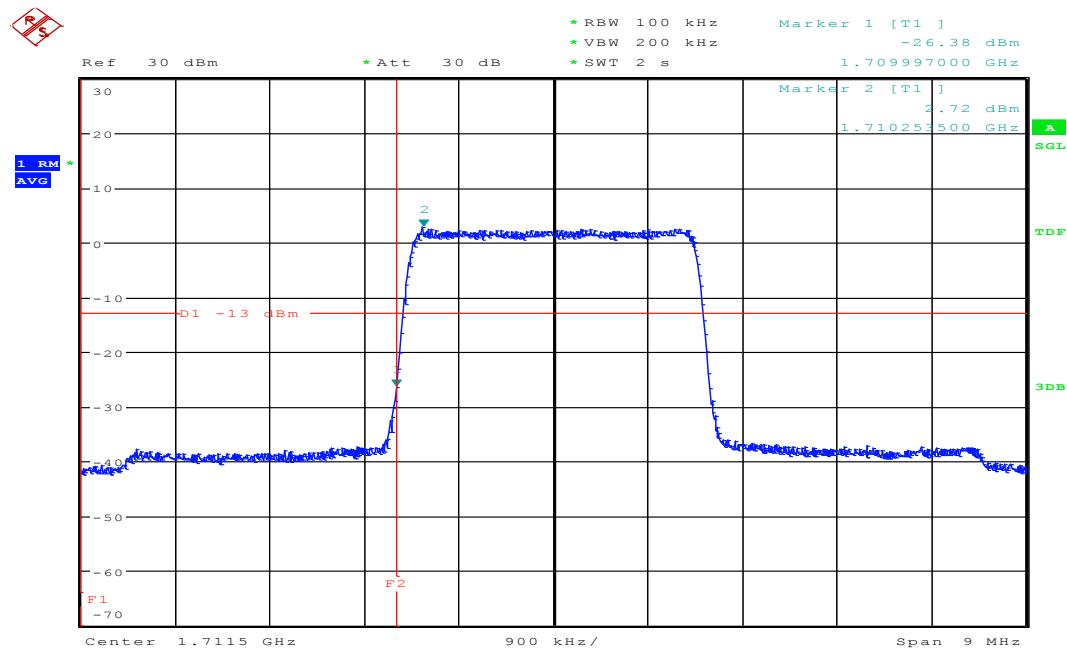
Date: 22.OCT.2016 14:01:55

## BAND4-1711.5MHz,Q16-1RB\_LOW@Pass



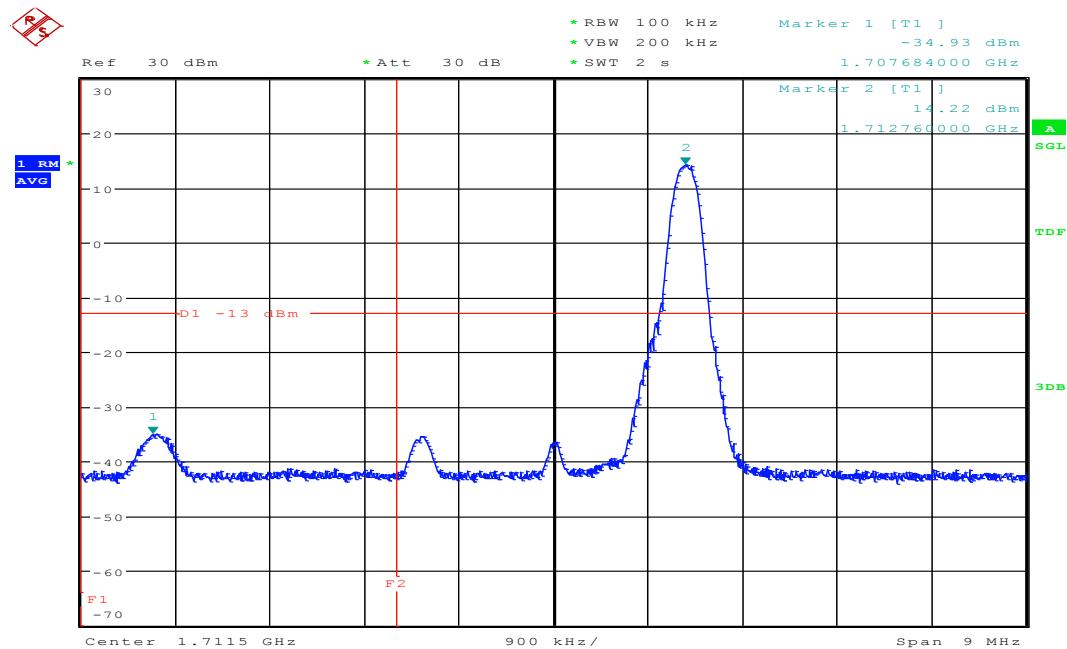
Date: 22.OCT.2016 14:01:44

## BAND4-1711.5MHz,QPSK-15RB\_LOW@Pass



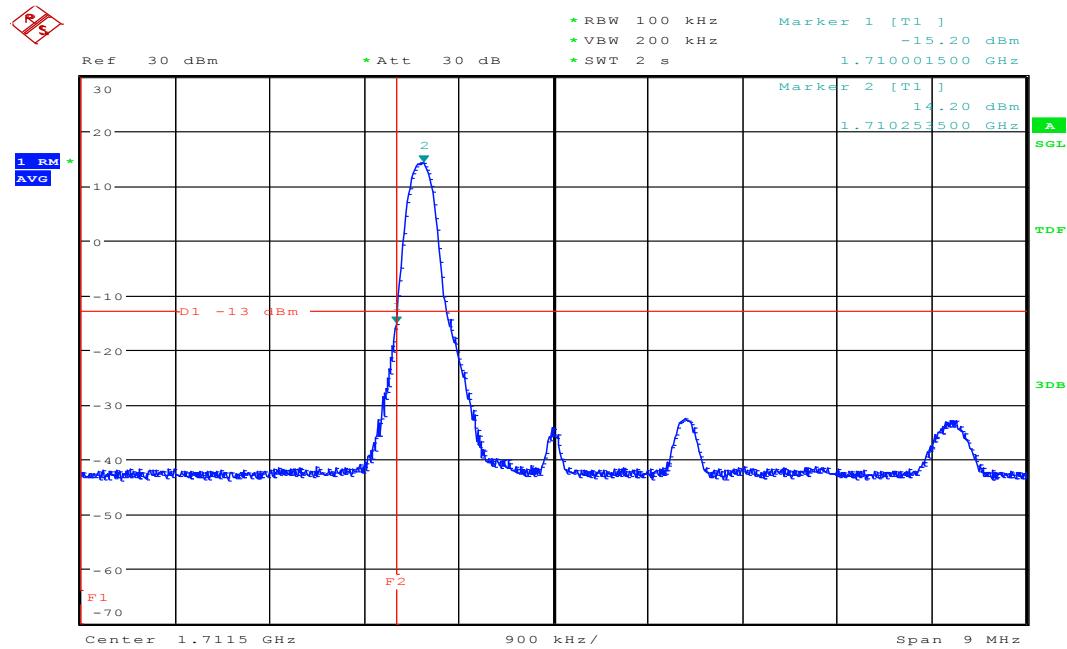
Date: 22.OCT.2016 14:01:32

## BAND4-1711.5MHz,QPSK-1RB\_HIGH@Pass



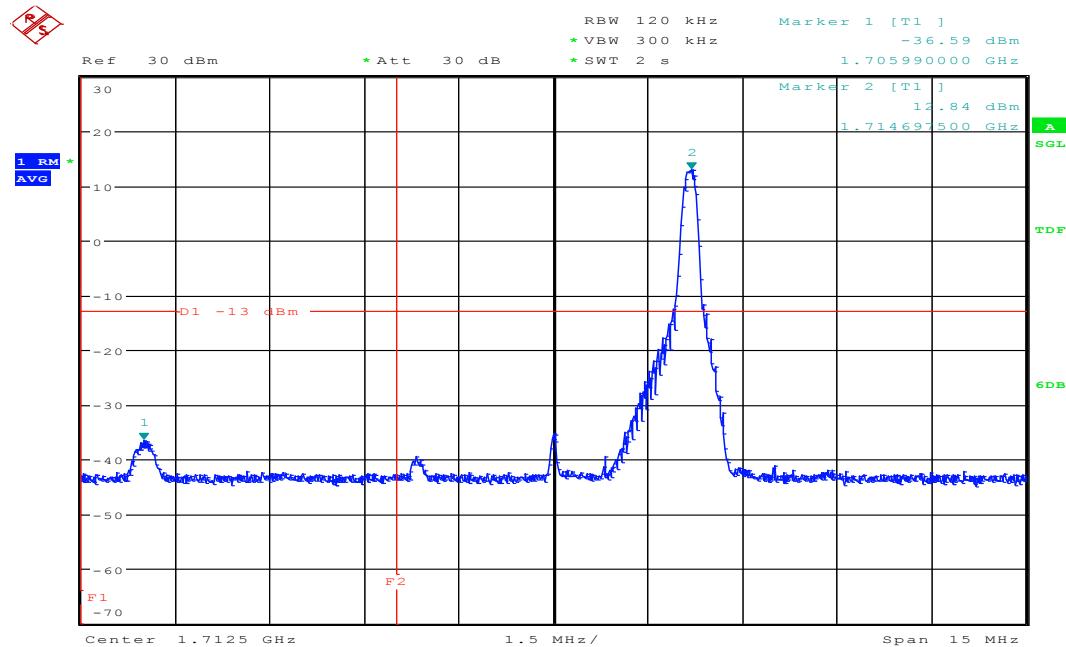
Date: 22.OCT.2016 14:01:20

## BAND4-1711.5MHz,QPSK-1RB\_LOW@Pass



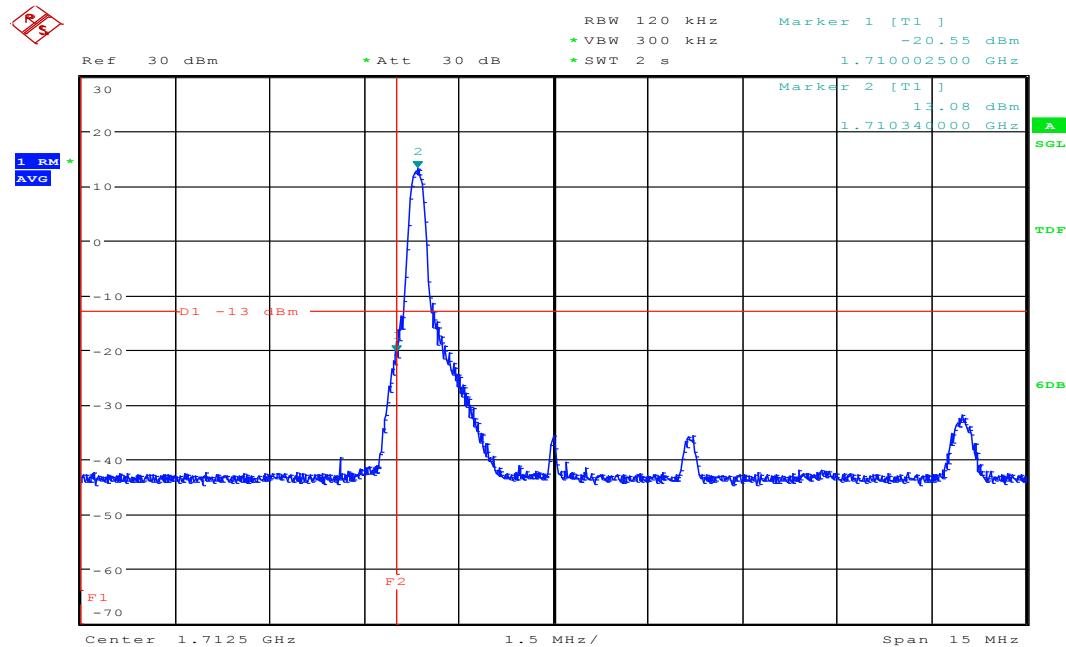
Date: 22.OCT.2016 14:01:09

## BAND4-1712.5MHz,Q16-1RB\_HIGH@Pass



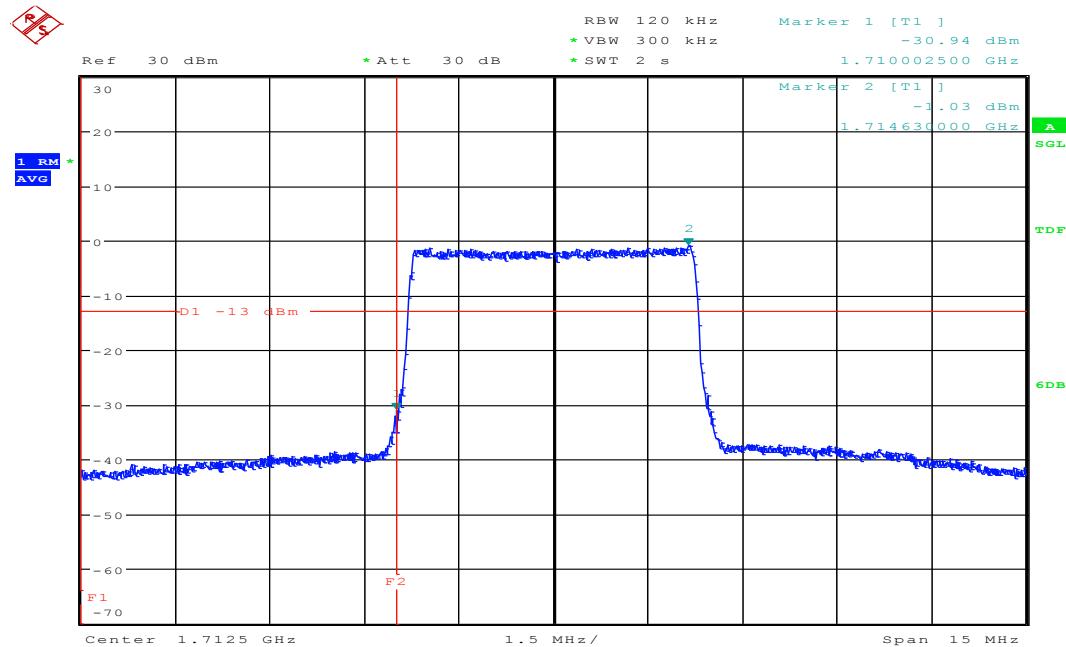
Date: 22.OCT.2016 14:04:19

## BAND4-1712.5MHz,Q16-1RB\_LOW@Pass



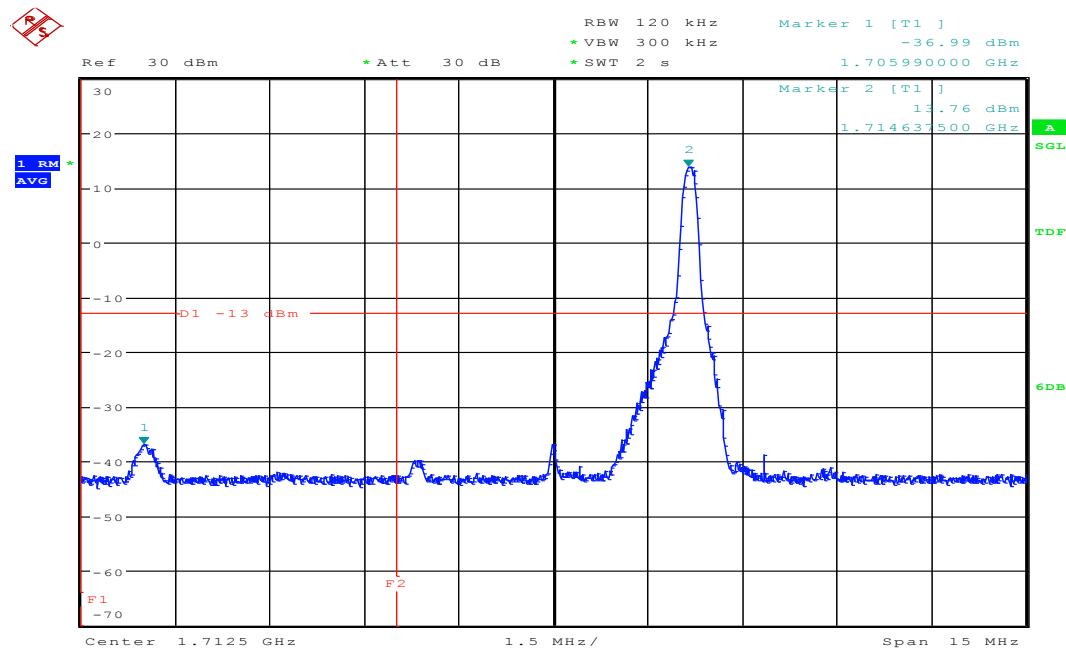
Date: 22.OCT.2016 14:04:07

## BAND4-1712.5MHz,Q16-25RB\_LOW@Pass



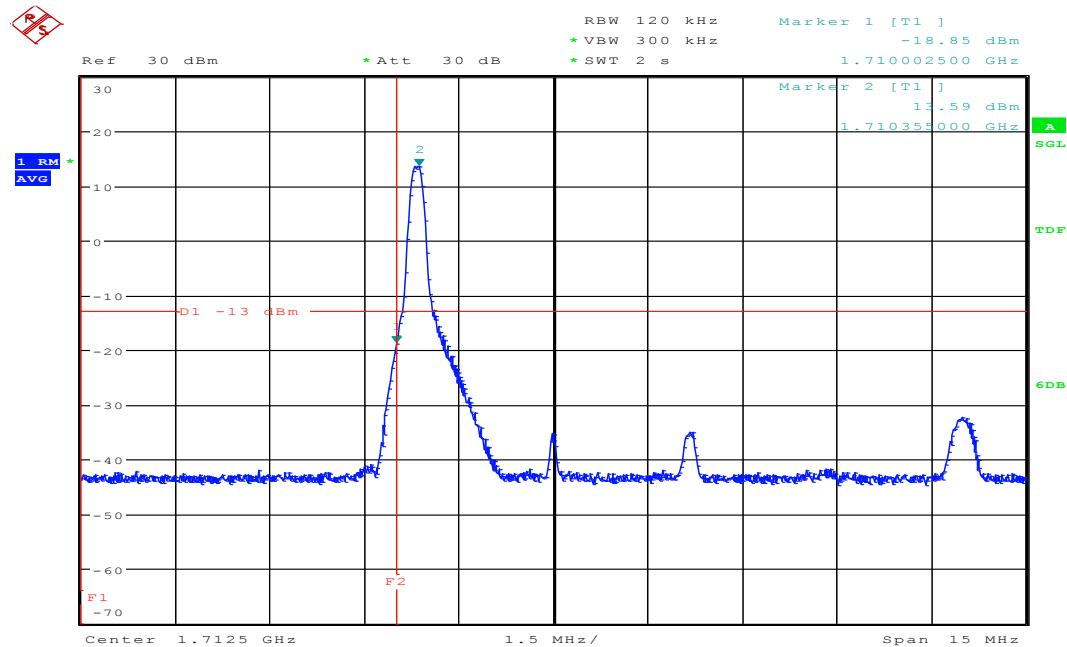
Date: 22.OCT.2016 14:04:31

## BAND4-1712.5MHz,QPSK-1RB\_HIGH@Pass



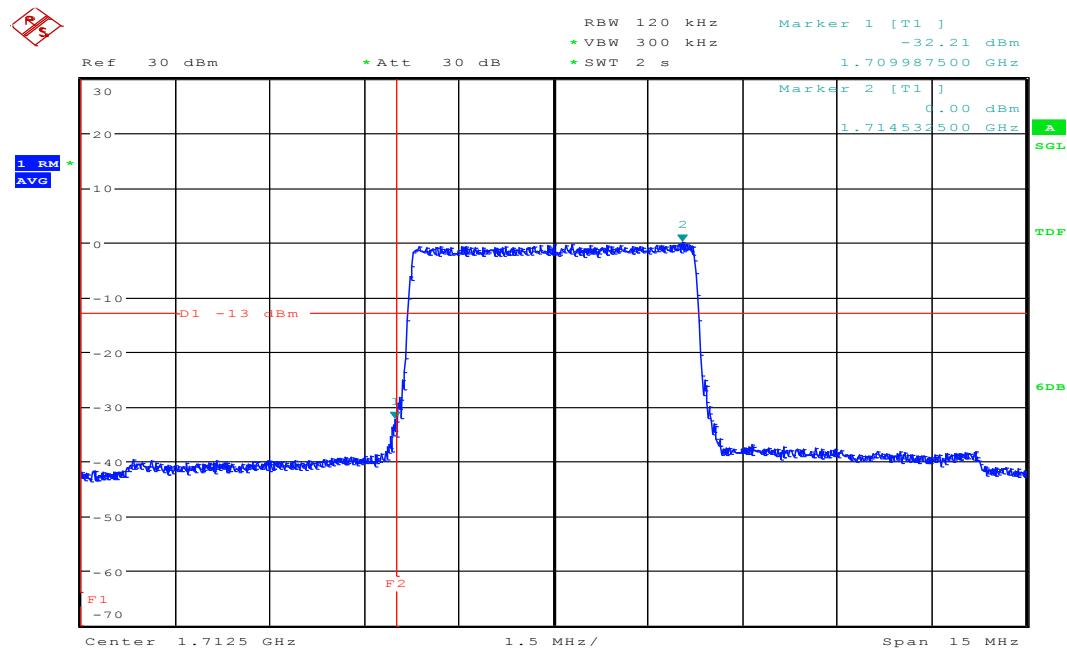
Date: 22.OCT.2016 14:03:43

## BAND4-1712.5MHz,QPSK-1RB\_LOW@Pass



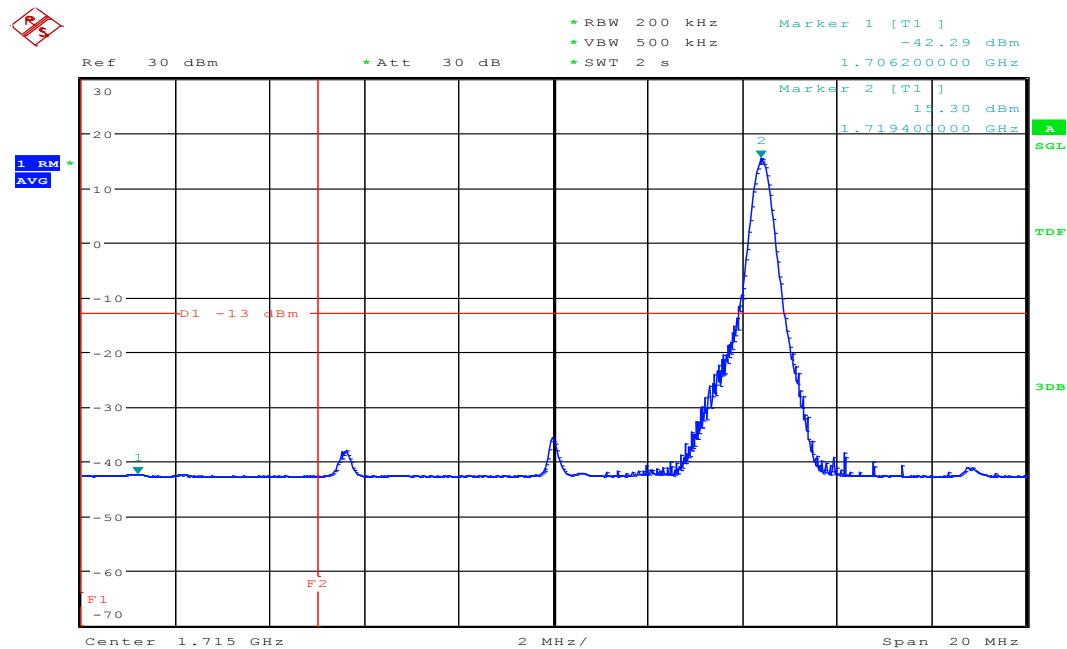
Date: 22.OCT.2016 14:03:31

## BAND4-1712.5MHz,QPSK-25RB\_LOW@Pass



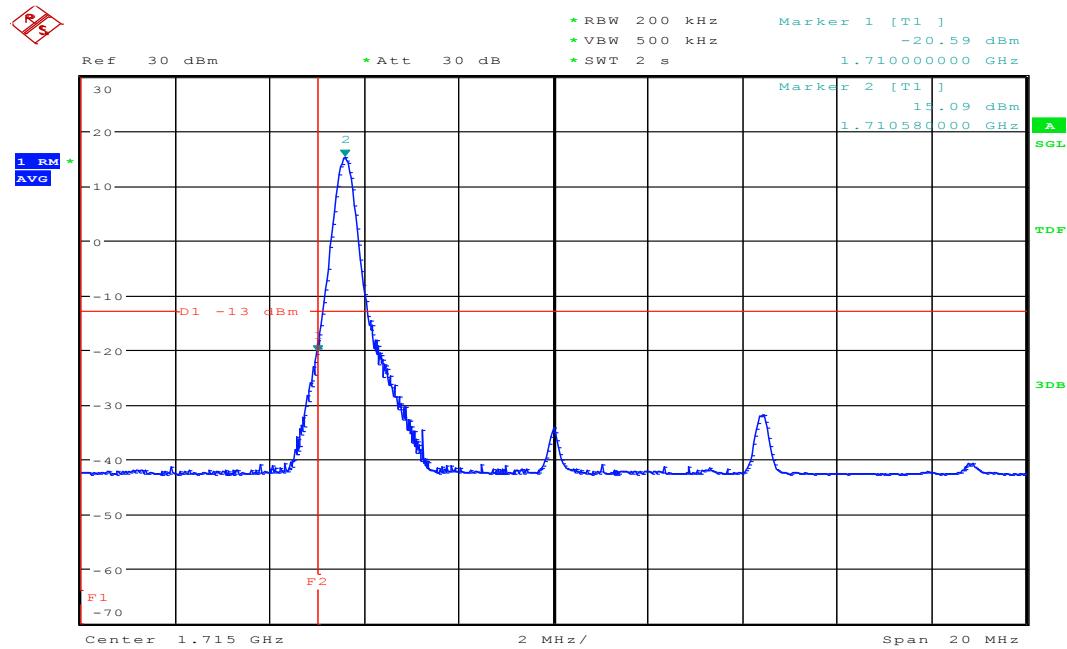
Date: 22.OCT.2016 14:03:55

## BAND4-1715MHz,Q16-1RB\_HIGH@Pass



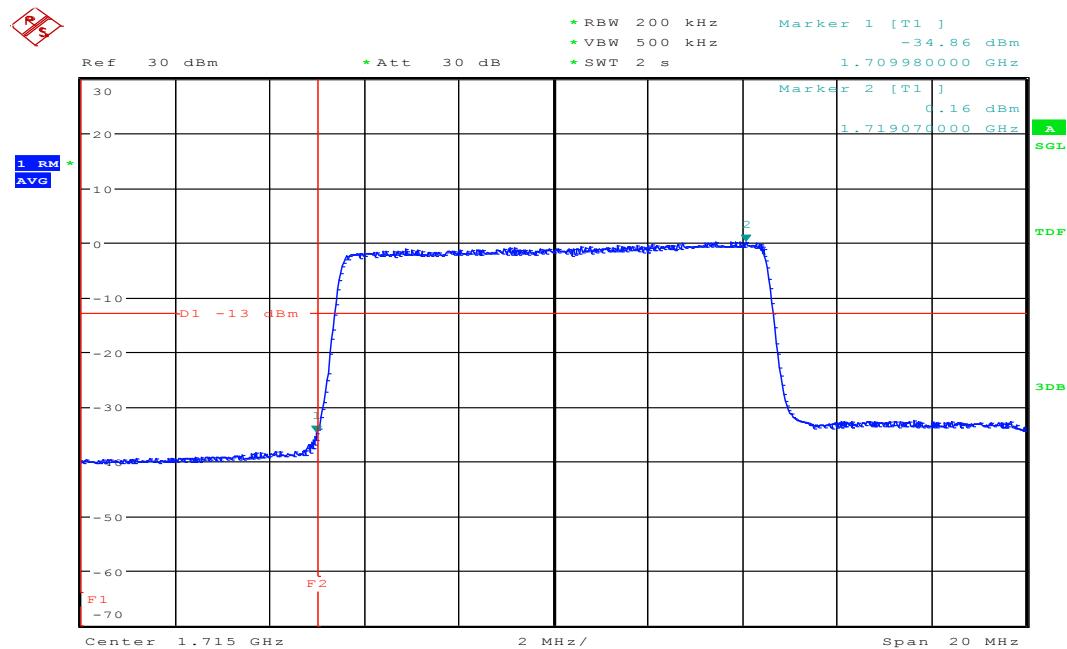
Date: 22.OCT.2016 14:06:39

## BAND4-1715MHz,Q16-1RB\_LOW@Pass



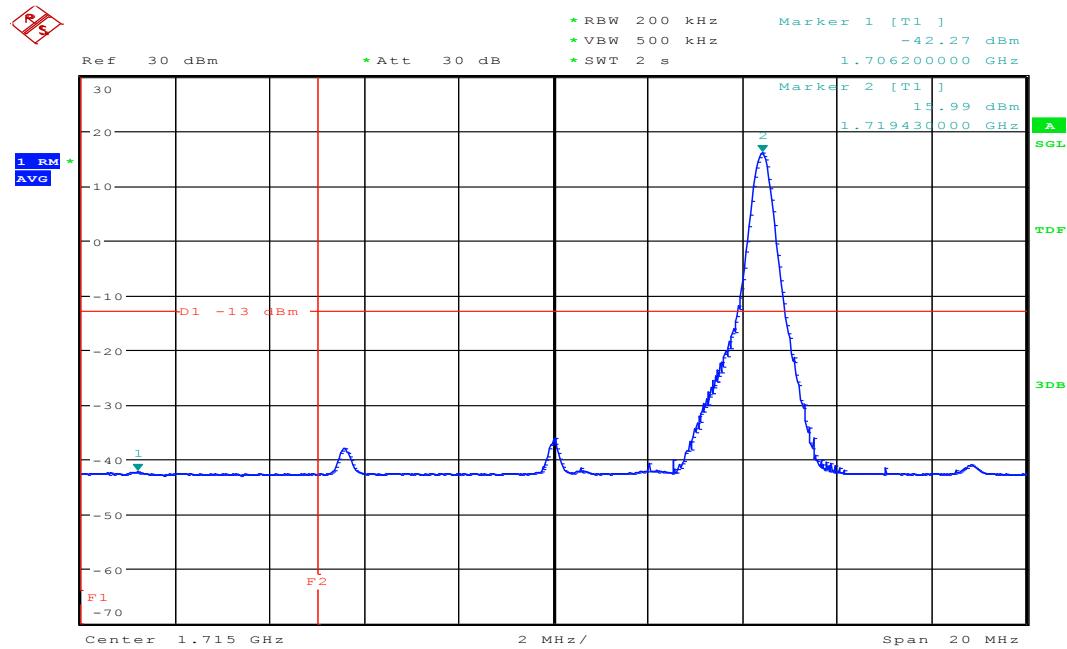
Date: 22.OCT.2016 14:06:28

## BAND4-1715MHz,Q16-50RB\_LOW@Pass



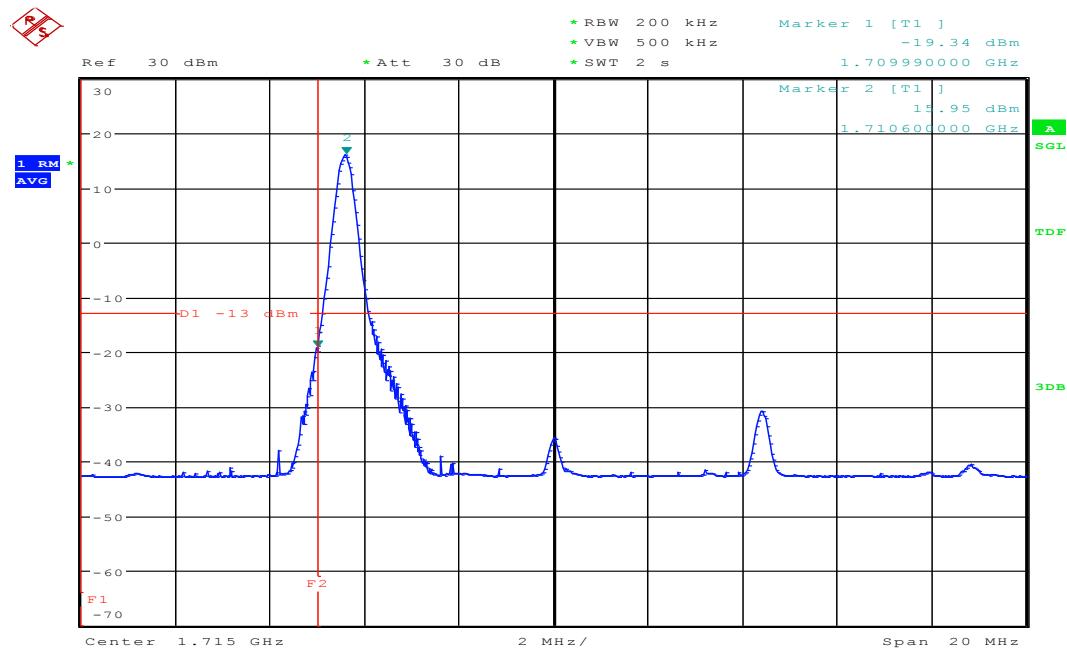
Date: 22.OCT.2016 14:06:50

## BAND4-1715MHz,QPSK-1RB\_HIGH@Pass



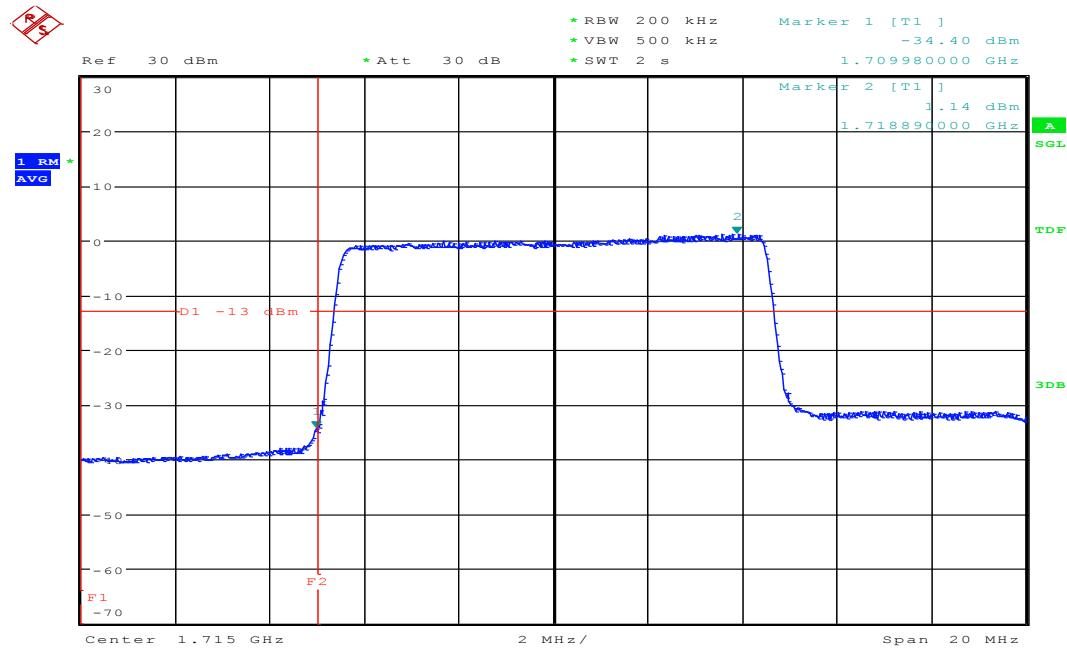
Date: 22.OCT.2016 14:06:06

## BAND4-1715MHz,QPSK-1RB\_LOW@Pass



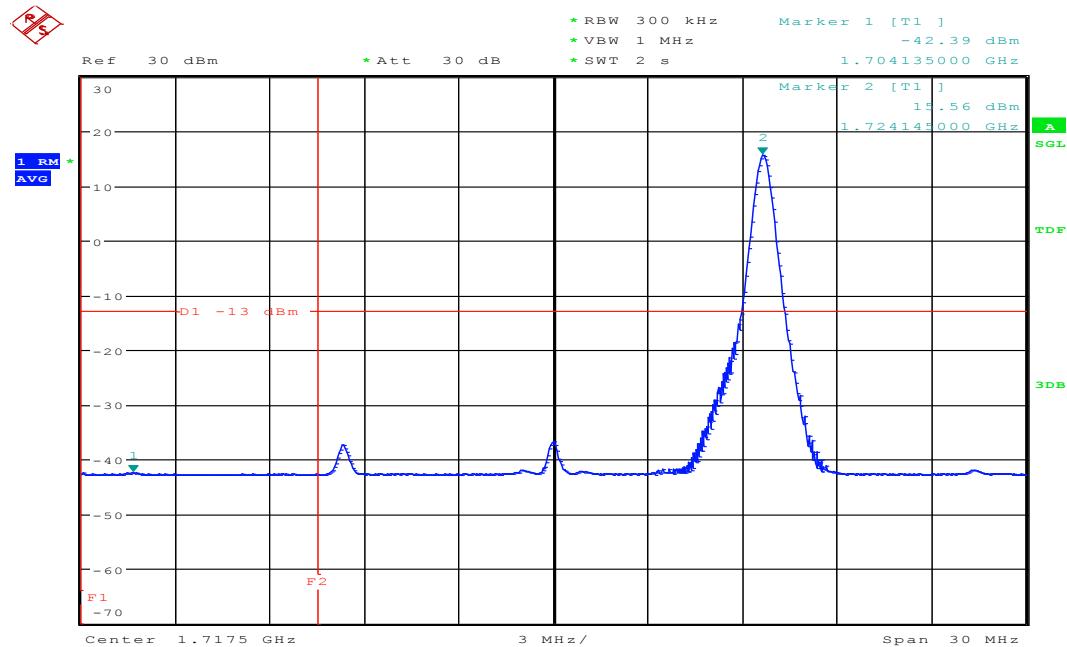
Date: 22.OCT.2016 14:05:55

## BAND4-1715MHz,QPSK-50RB\_LOW@Pass



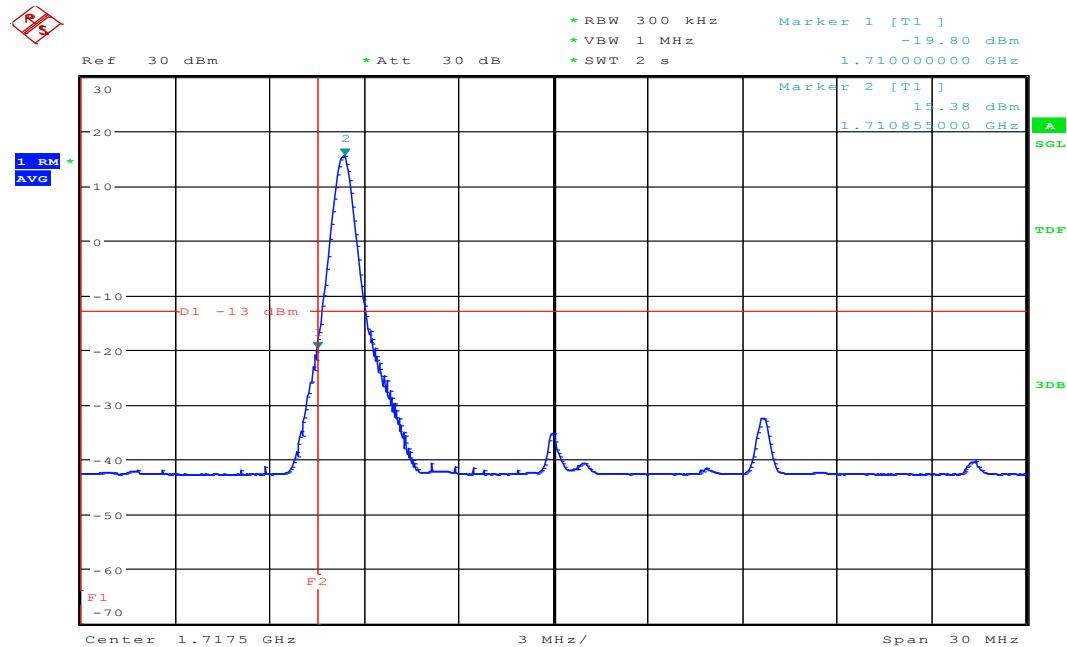
Date: 22.OCT.2016 14:06:17

## BAND4-1717.5MHz,Q16-1RB\_HIGH@Pass



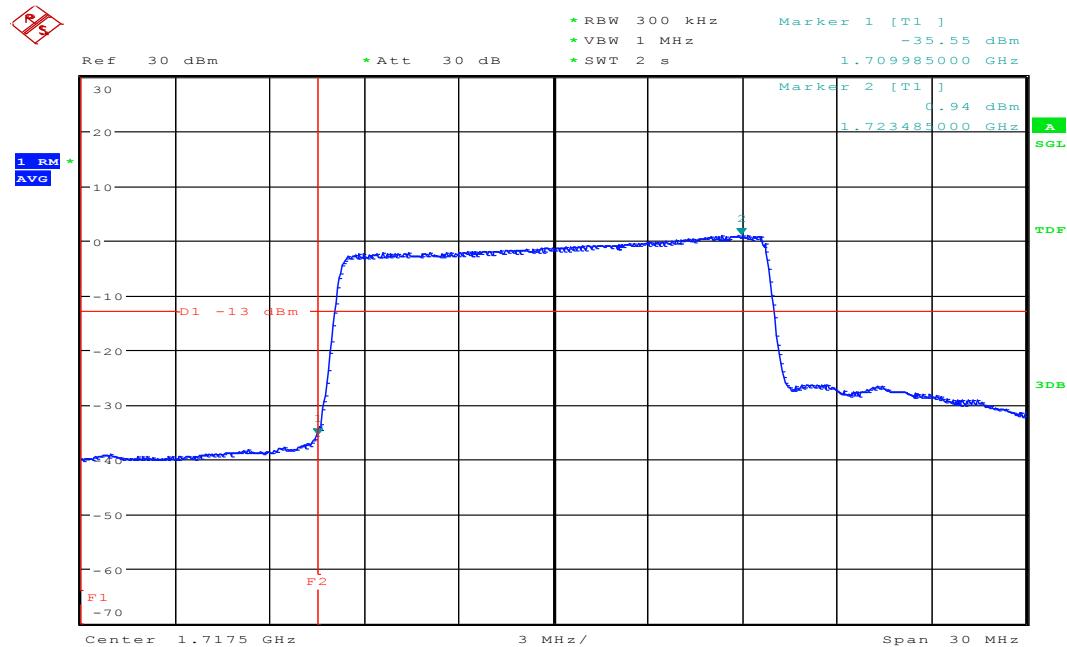
Date: 22.OCT.2016 14:09:05

## BAND4-1717.5MHz,Q16-1RB\_LOW@Pass



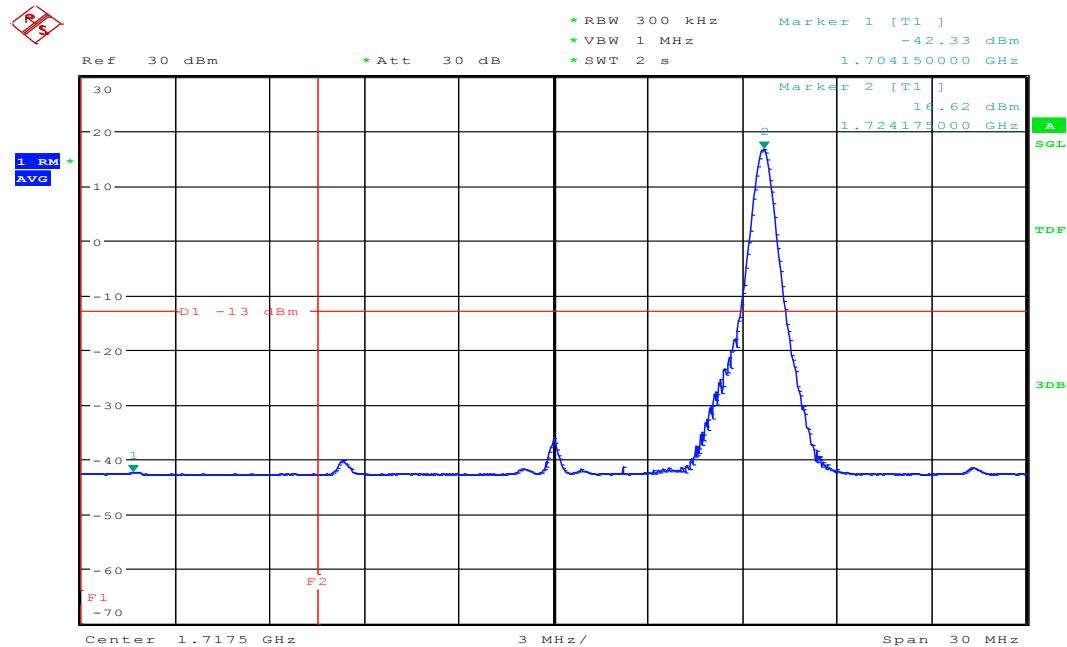
Date: 22.OCT.2016 14:08:52

## BAND4-1717.5MHz,Q16-75RB\_LOW@Pass



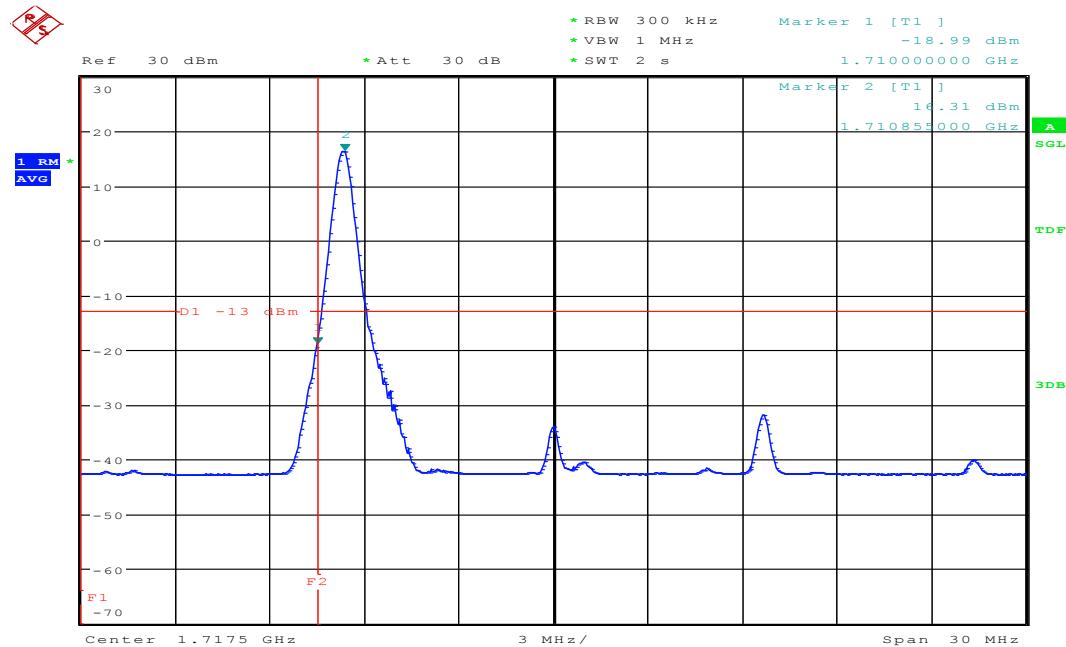
Date: 22.OCT.2016 14:09:18

## BAND4-1717.5MHz,QPSK-1RB\_HIGH@Pass



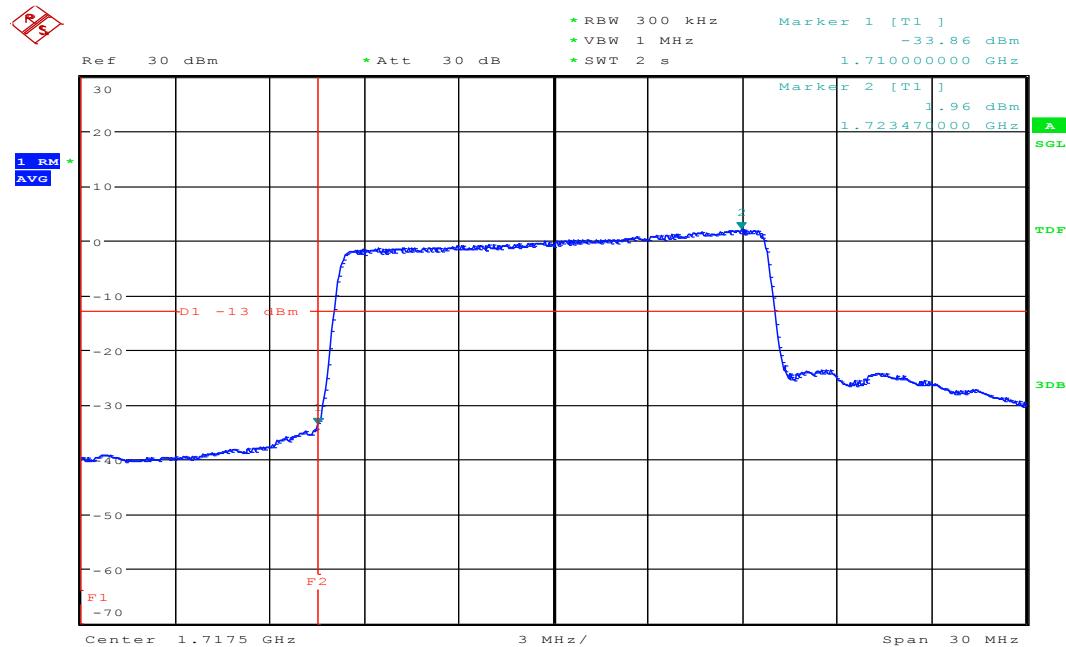
Date: 22.OCT.2016 14:08:25

## BAND4-1717.5MHz,QPSK-1RB\_LOW@Pass



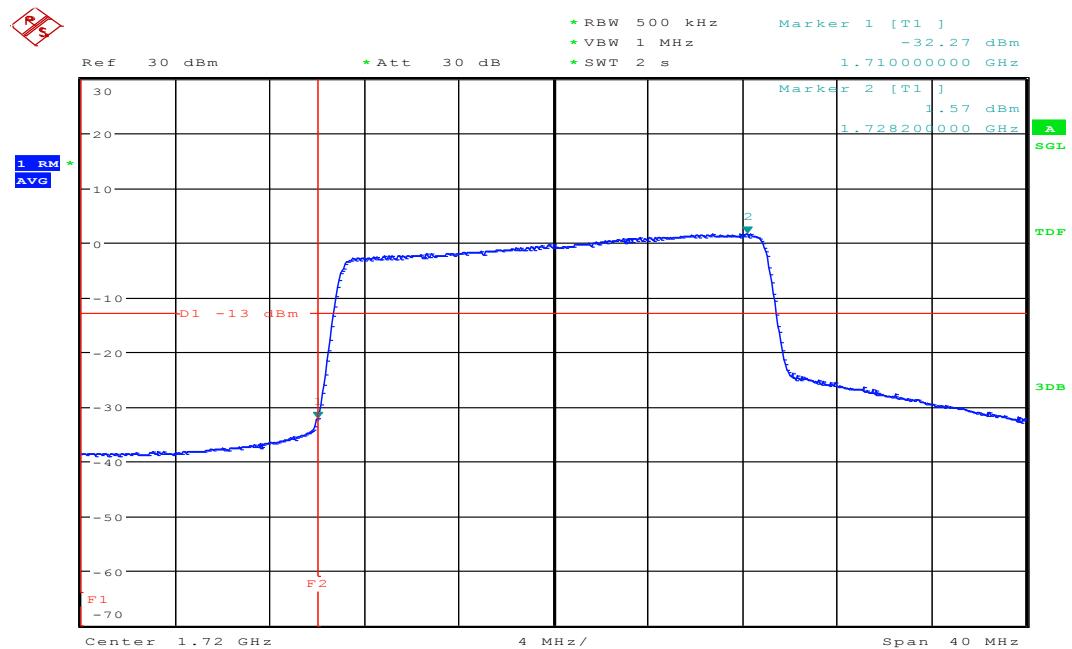
Date: 22.OCT.2016 14:08:13

## BAND4-1717.5MHz,QPSK-75RB\_LOW@Pass



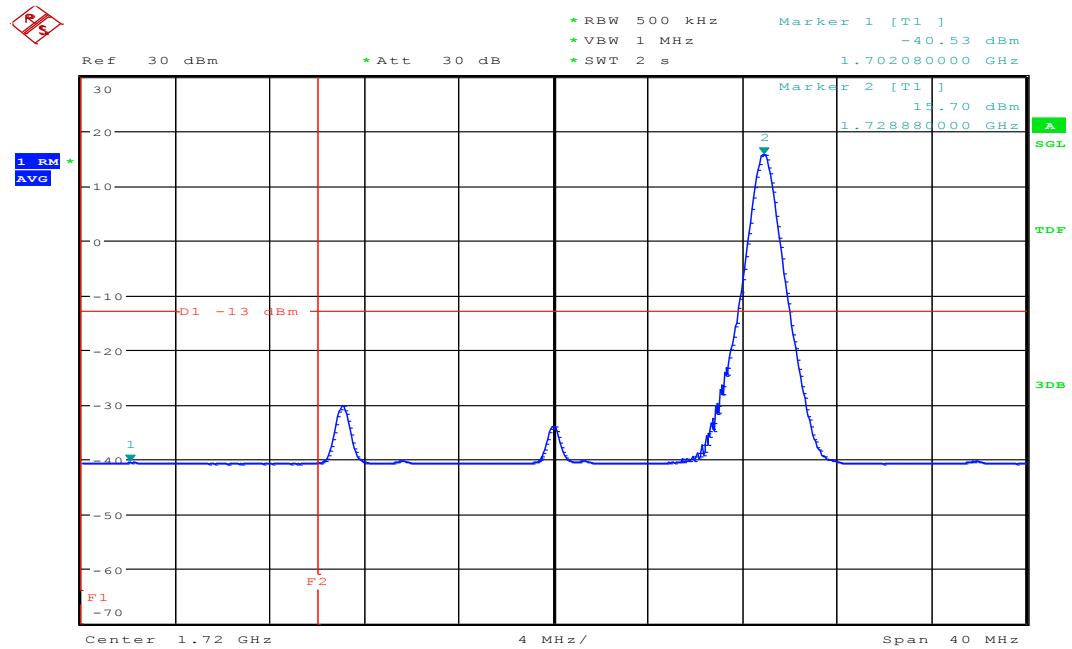
Date: 22.OCT.2016 14:08:39

## BAND4-1720MHz,Q16-100RB\_LOW@Pass

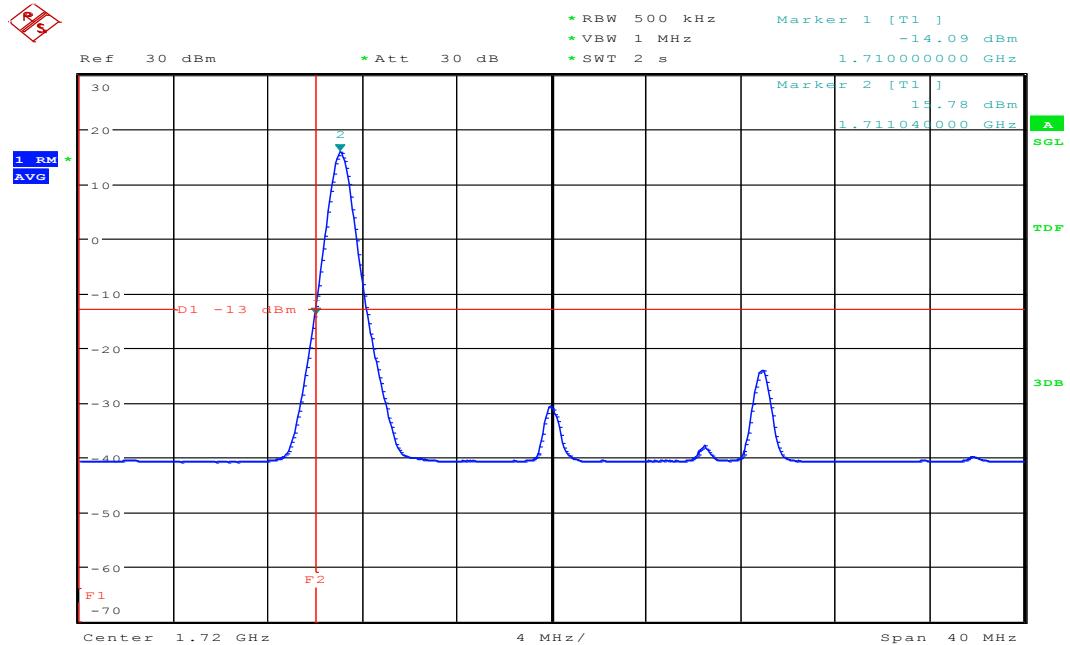


Date: 22.OCT.2016 14:12:00

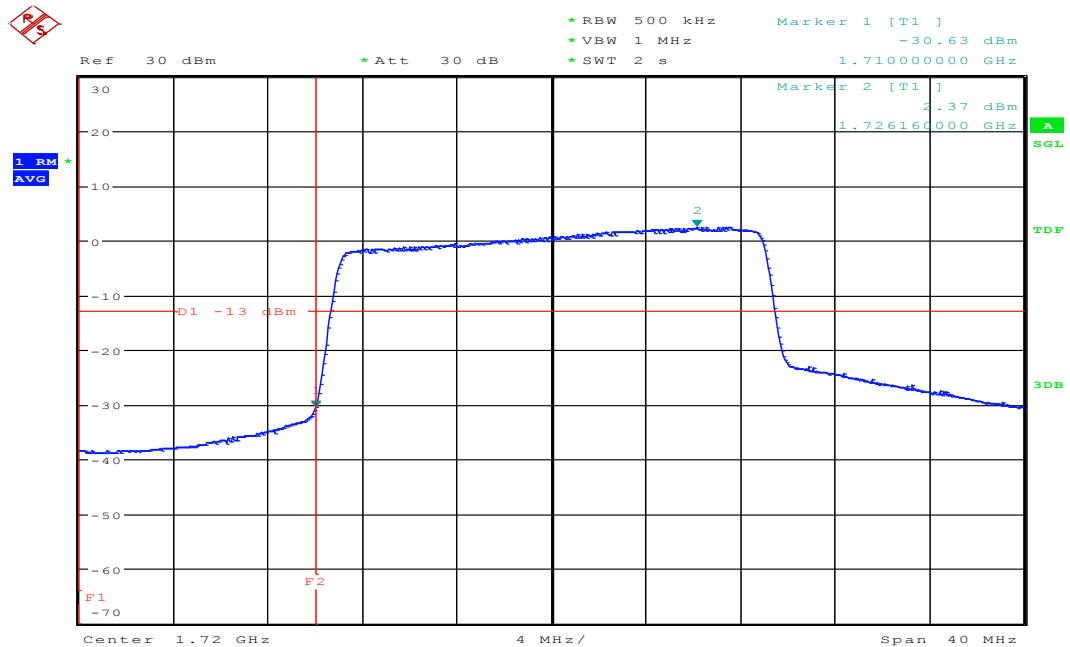
## BAND4-1720MHz,Q16-1RB\_HIGH@Pass



Date: 22.OCT.2016 14:11:45

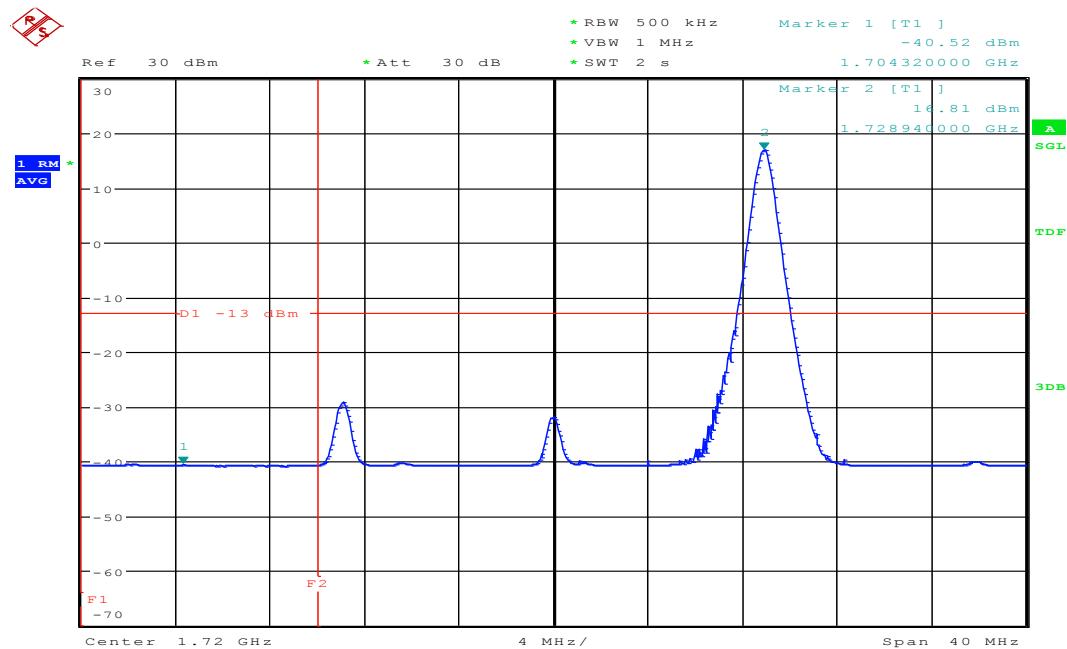
*BAND4-1720MHz,Q16-1RB\_LOW@Pass*

Date: 22.OCT.2016 14:11:33

*BAND4-1720MHz,QPSK-100RB\_LOW@Pass*

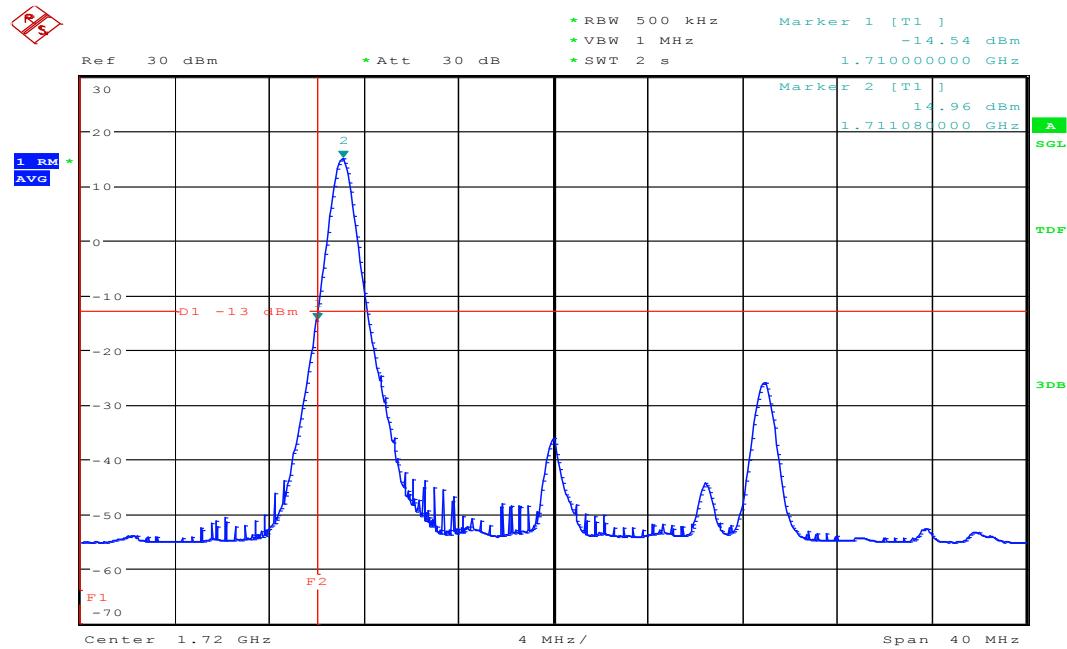
Date: 22.OCT.2016 14:11:20

## BAND4-1720MHz,QPSK-1RB\_HIGH@Pass

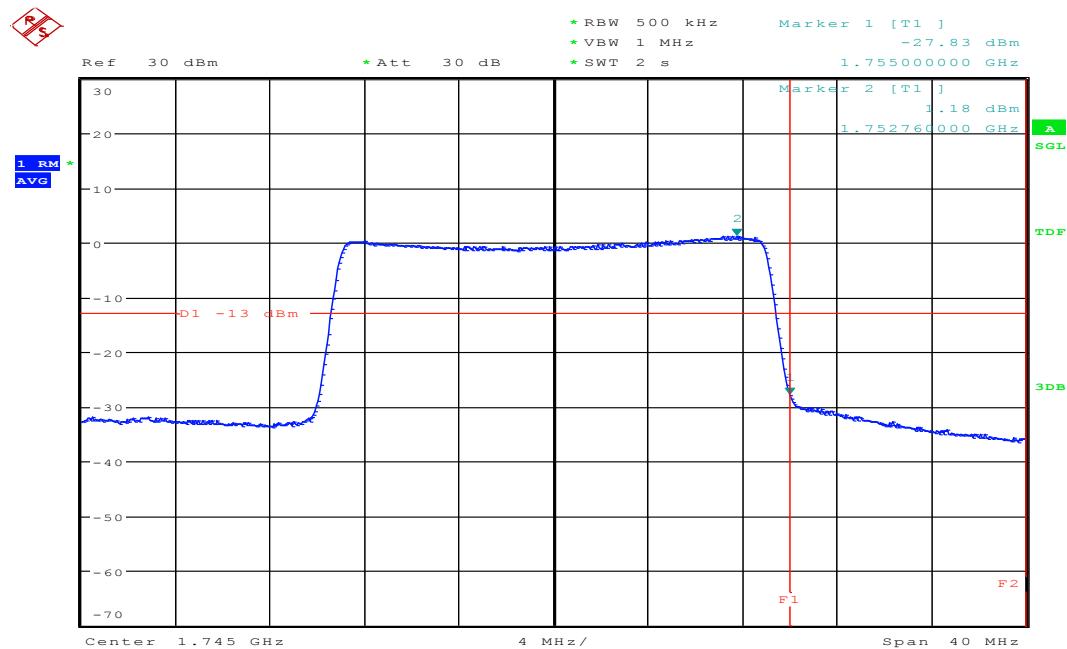


Date: 22.OCT.2016 14:11:06

## BAND4-1720MHz,QPSK-1RB\_LOW@Pass

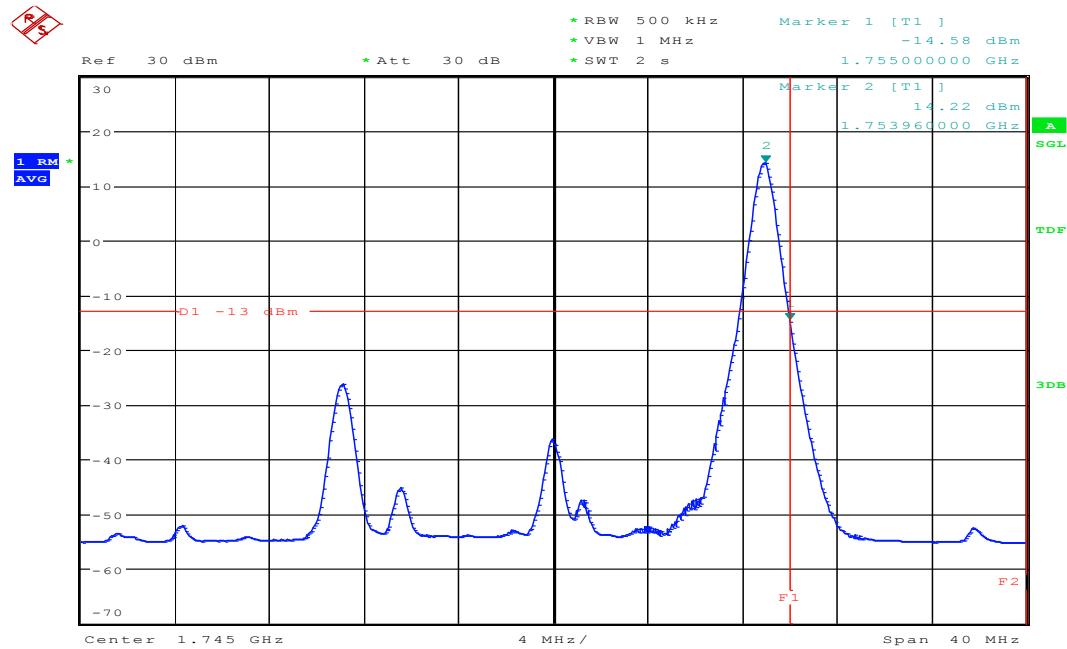


## BAND4-1745MHz,Q16-100RB\_LOW@Pass

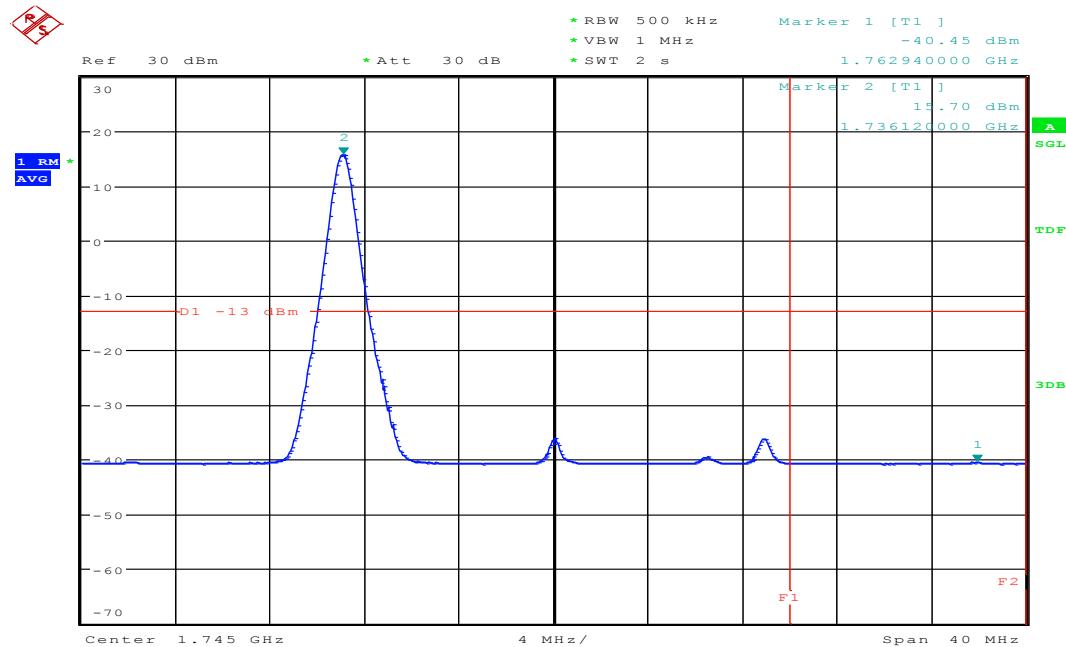


Date: 22.OCT.2016 14:13:26

## BAND4-1745MHz,Q16-1RB\_HIGH@Pass

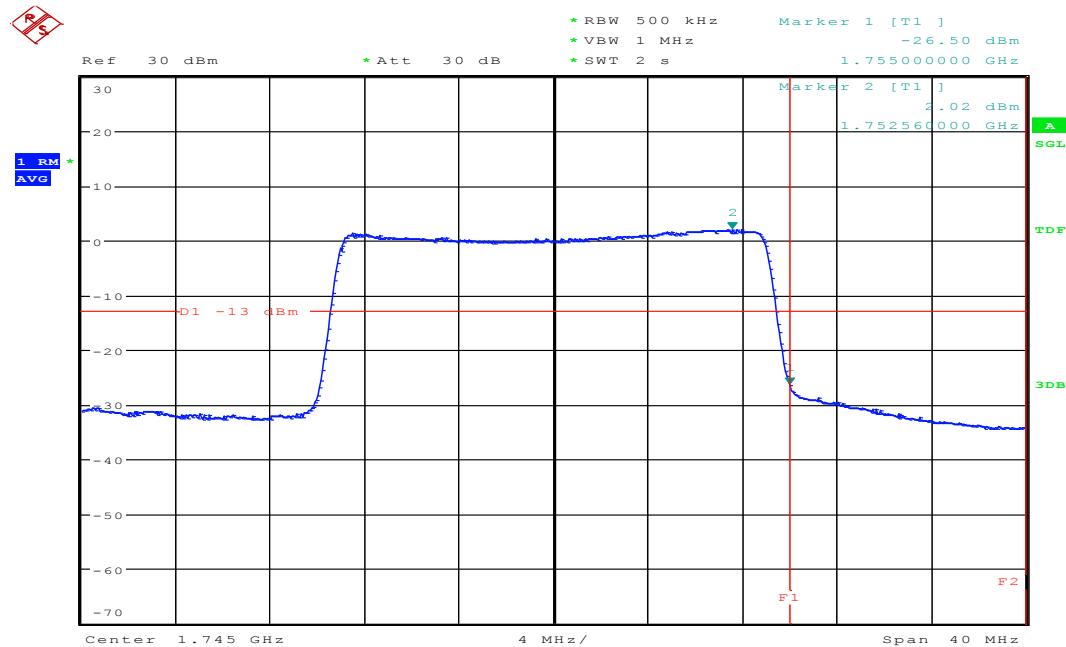


## BAND4-1745MHz,Q16-1RB\_LOW@Pass



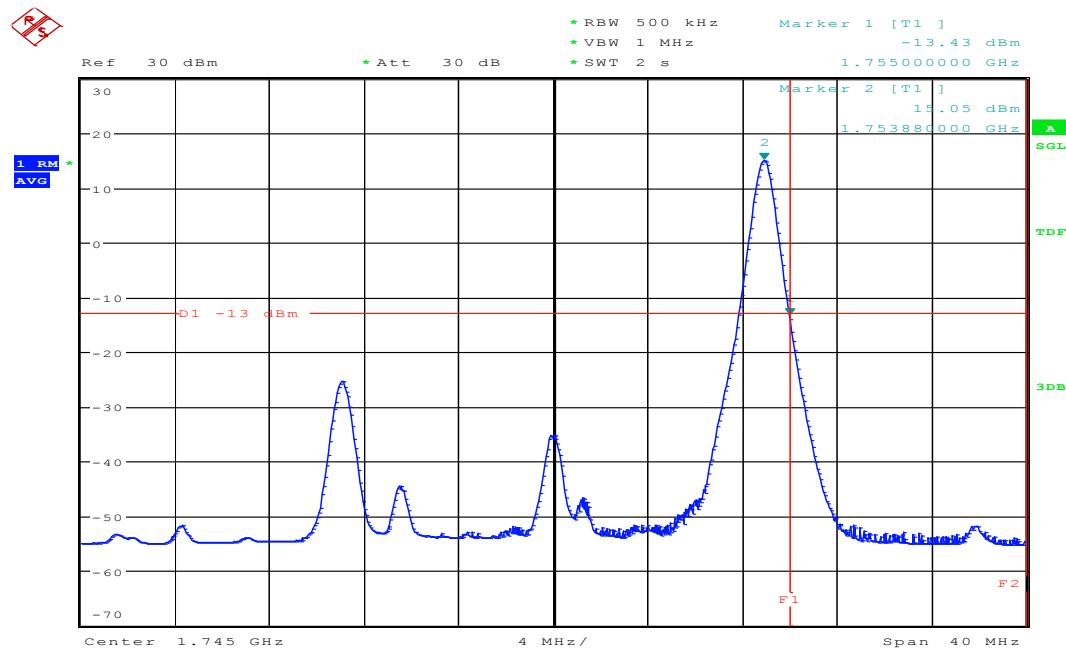
Date: 22.OCT.2016 14:12:57

## BAND4-1745MHz,QPSK-100RB\_LOW@Pass

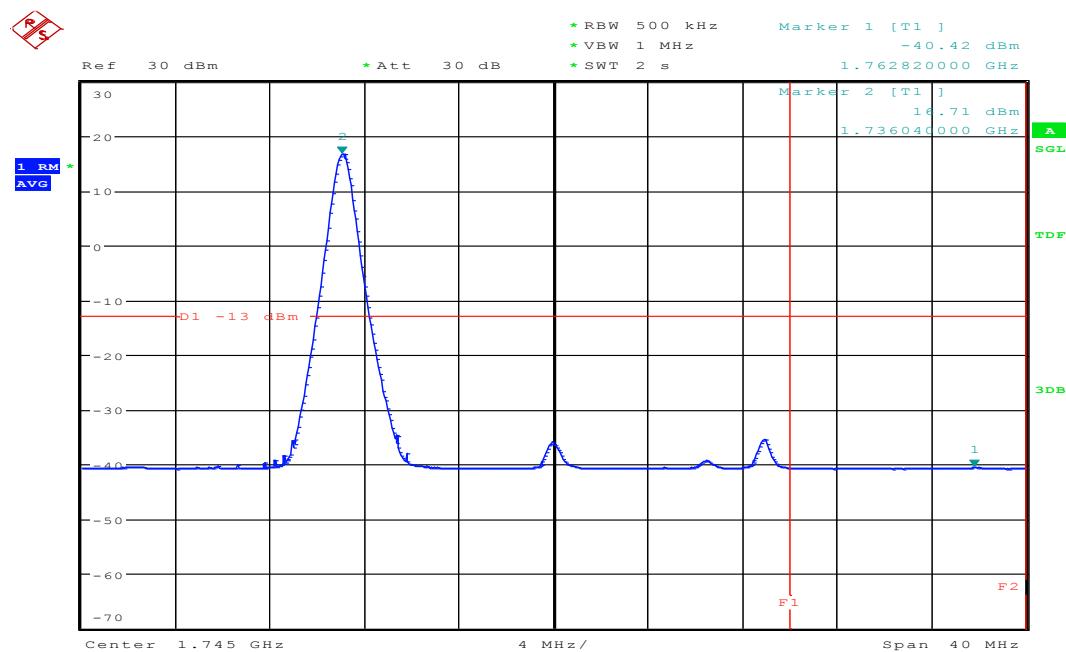


Date: 22.OCT.2016 14:12:43

## BAND4-1745MHz,QPSK-1RB\_HIGH@Pass

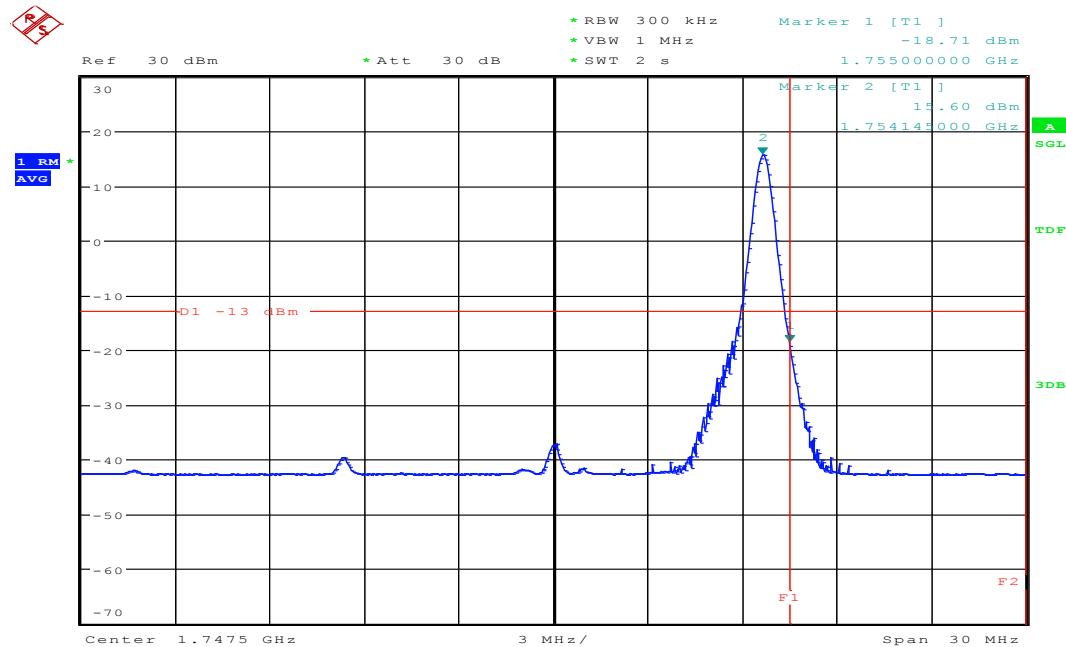


## BAND4-1745MHz,QPSK-1RB\_LOW@Pass



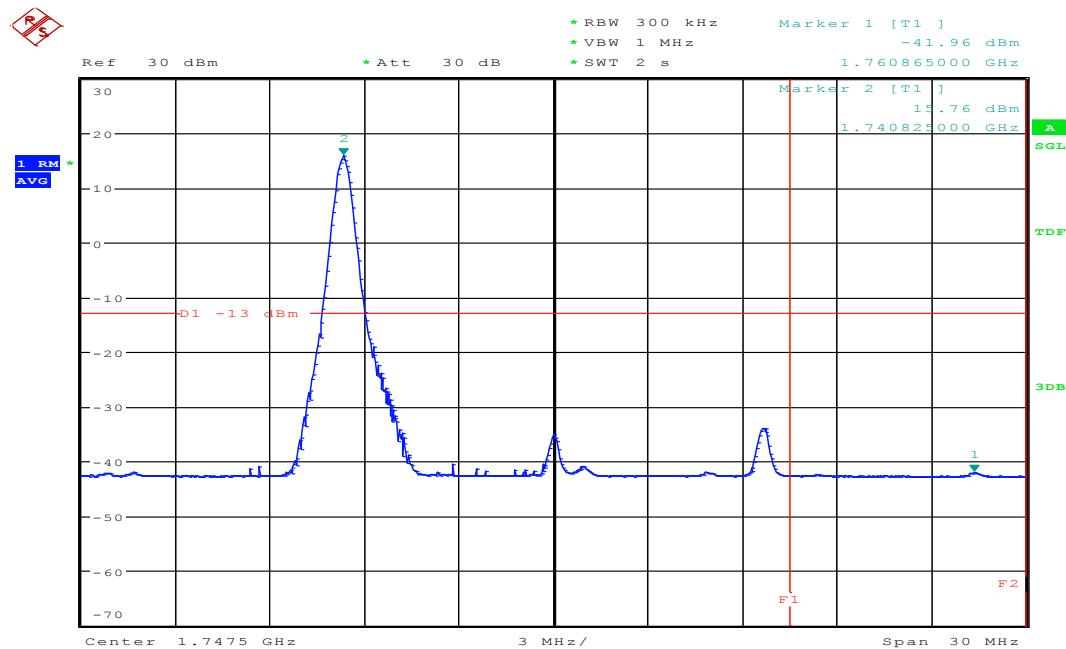
Date: 22.OCT.2016 14:12:15

## BAND4-1747.5MHz,Q16-1RB\_HIGH@Pass



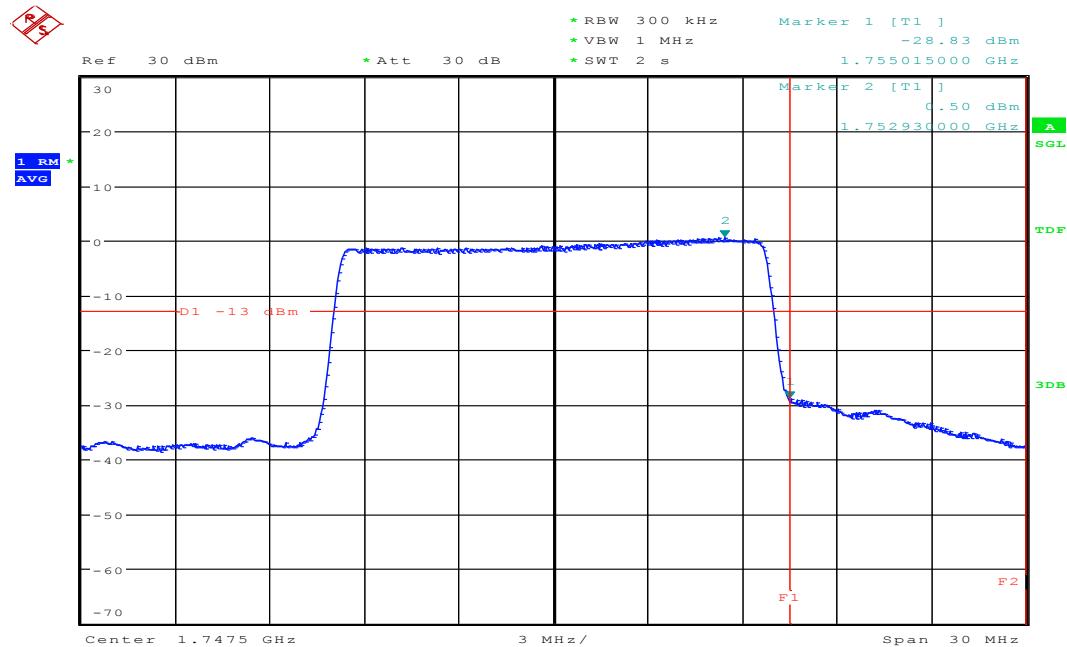
Date: 22.OCT.2016 14:10:24

## BAND4-1747.5MHz,Q16-1RB\_LOW@Pass



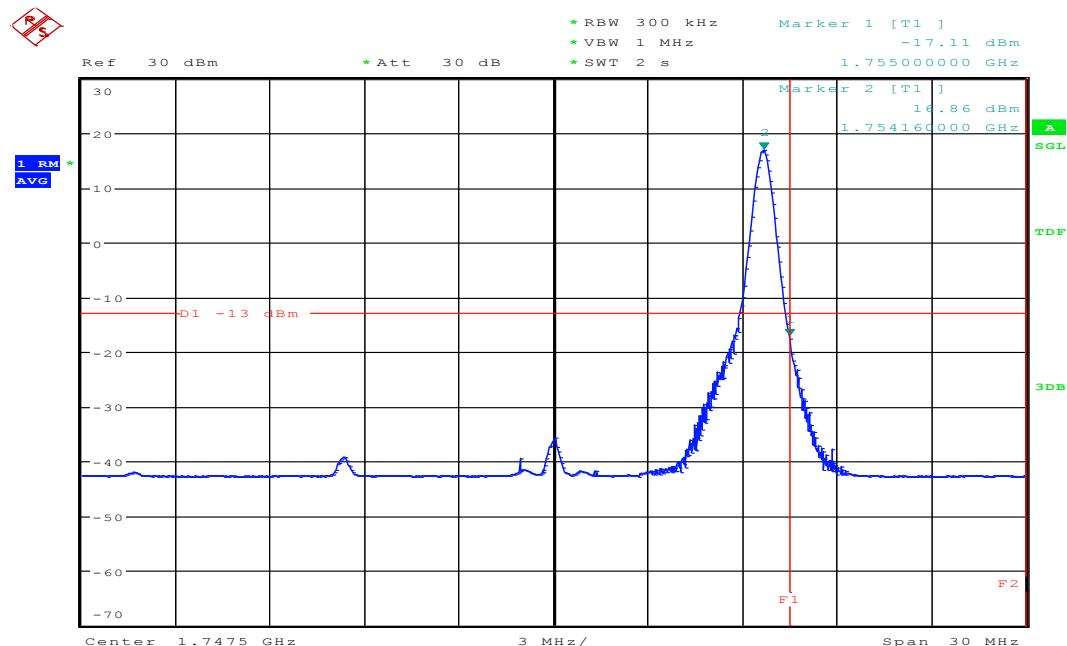
Date: 22.OCT.2016 14:10:11

## BAND4-1747.5MHz,Q16-75RB\_LOW@Pass



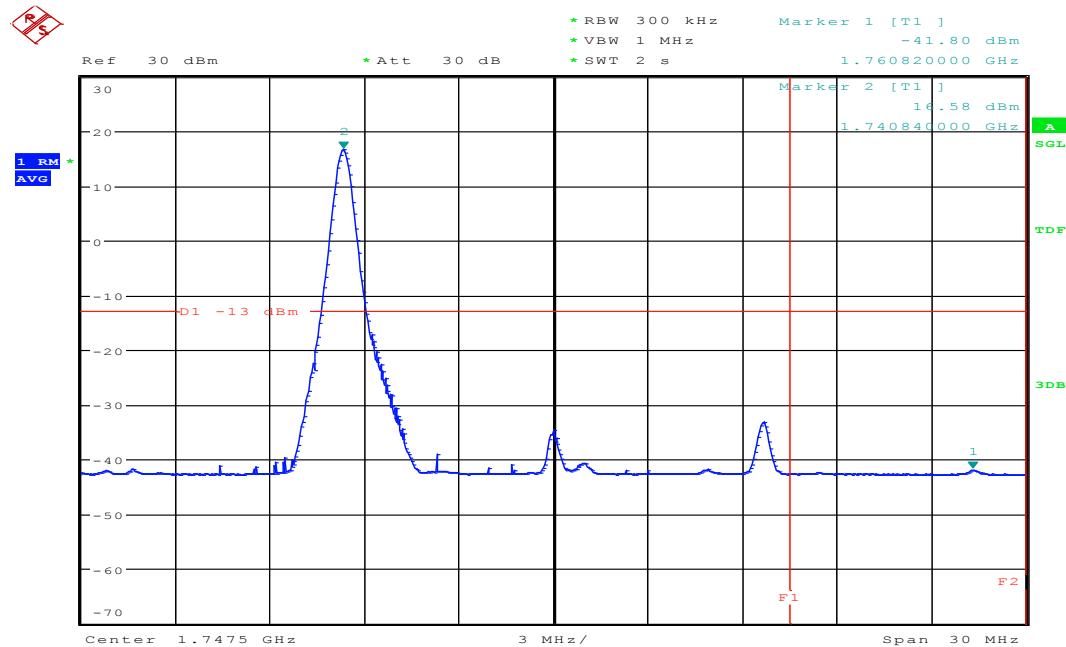
Date: 22.OCT.2016 14:10:37

## BAND4-1747.5MHz,QPSK-1RB\_HIGH@Pass



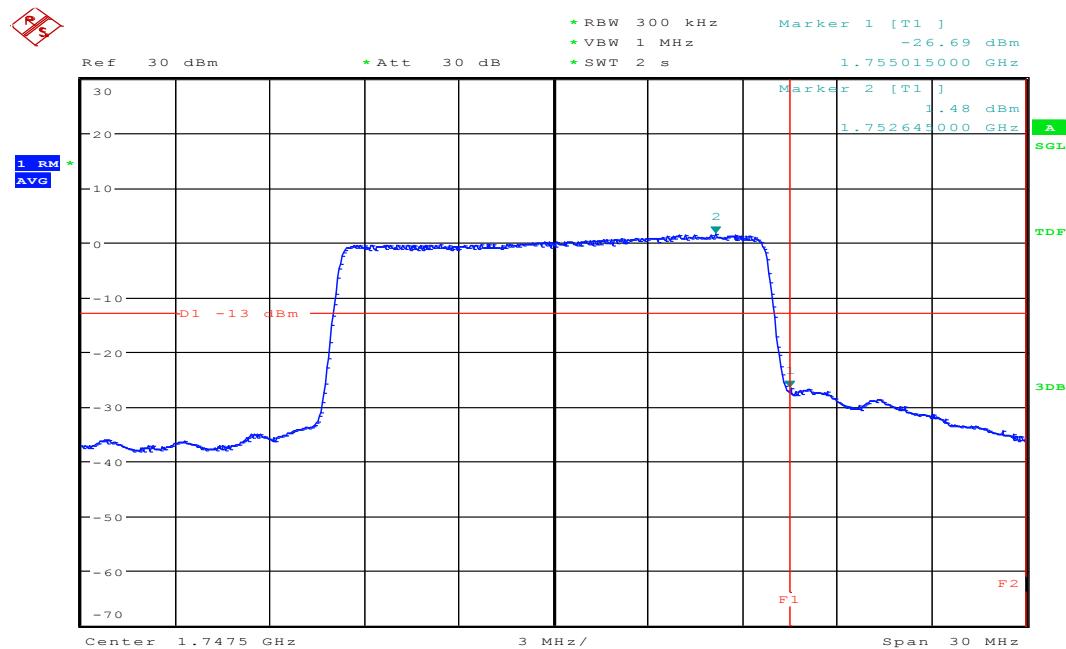
Date: 22.OCT.2016 14:09:45

## BAND4-1747.5MHz,QPSK-1RB\_LOW@Pass

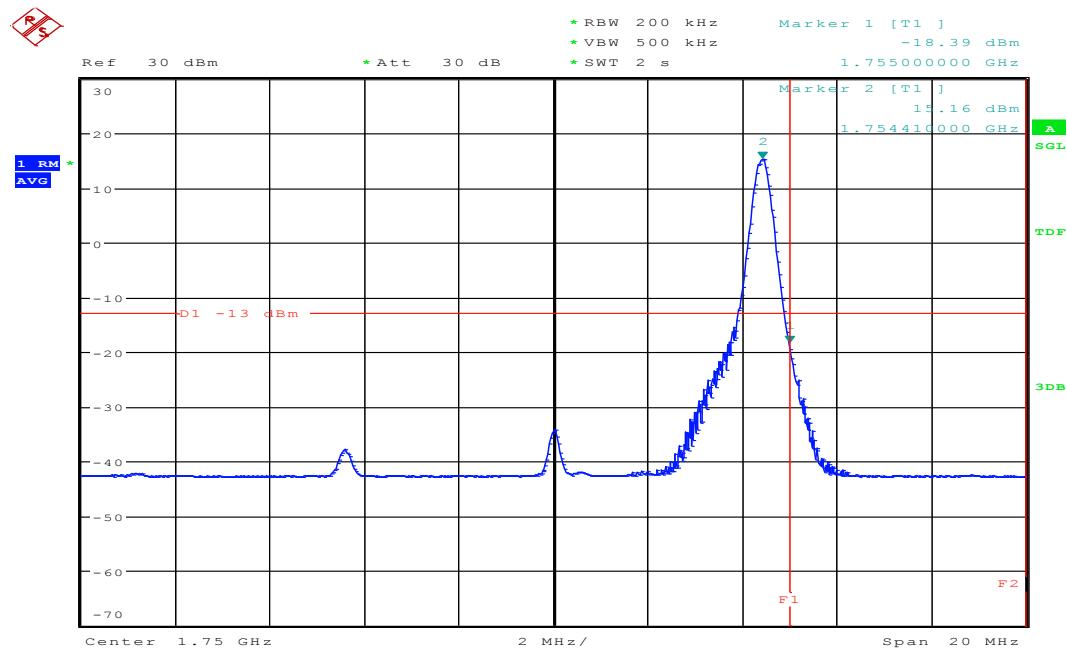


Date: 22.OCT.2016 14:09:32

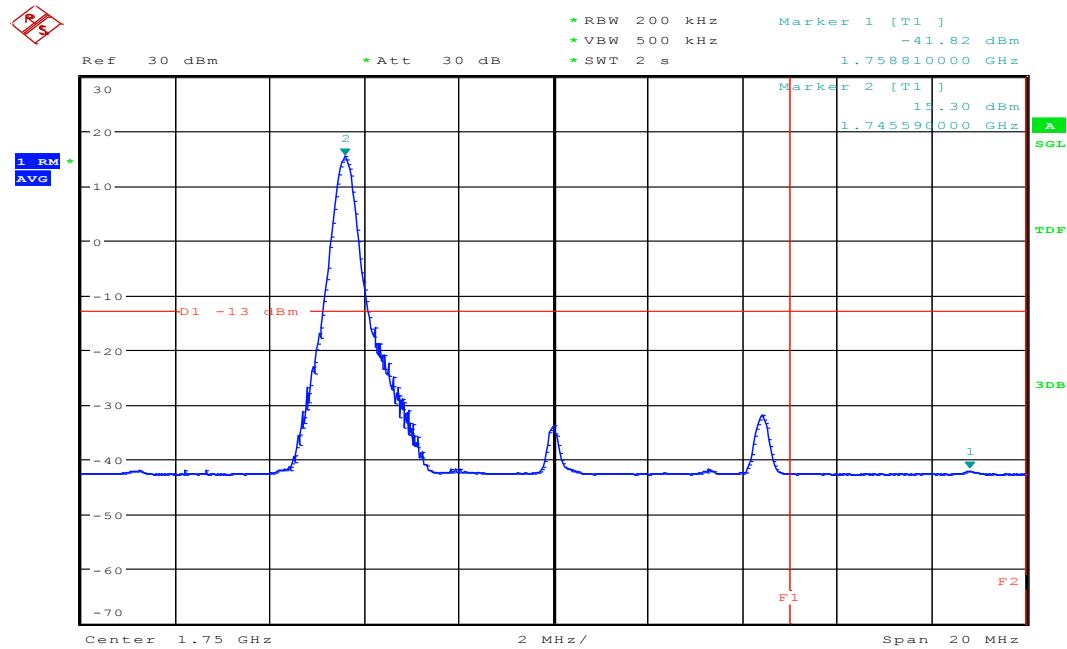
## BAND4-1747.5MHz,QPSK-75RB\_LOW@Pass



Date: 22.OCT.2016 14:09:58

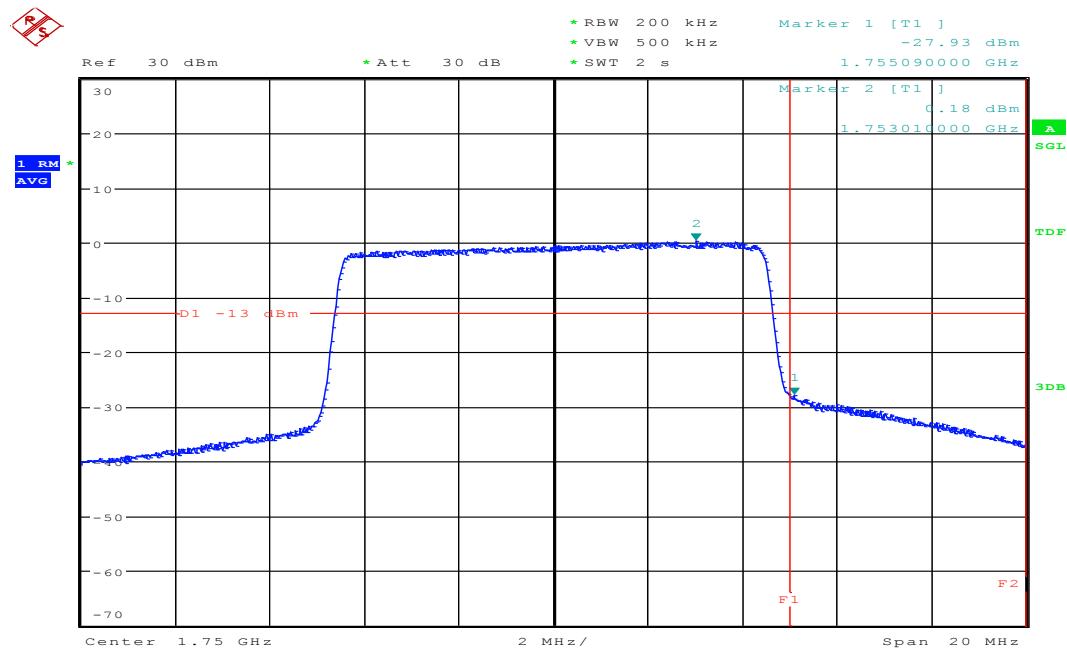
**BAND4-1750MHz,Q16-1RB\_HIGH@Pass**

Date: 22.OCT.2016 14:07:46

**BAND4-1750MHz,Q16-1RB\_LOW@Pass**

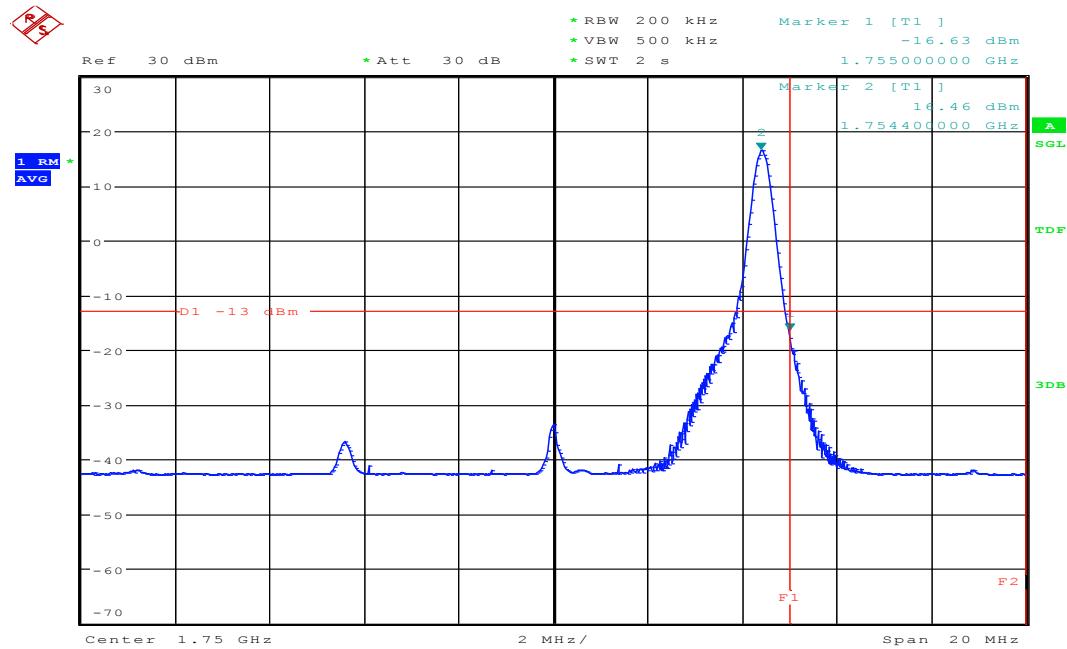
Date: 22.OCT.2016 14:07:35

## BAND4-1750MHz,Q16-50RB\_LOW@Pass



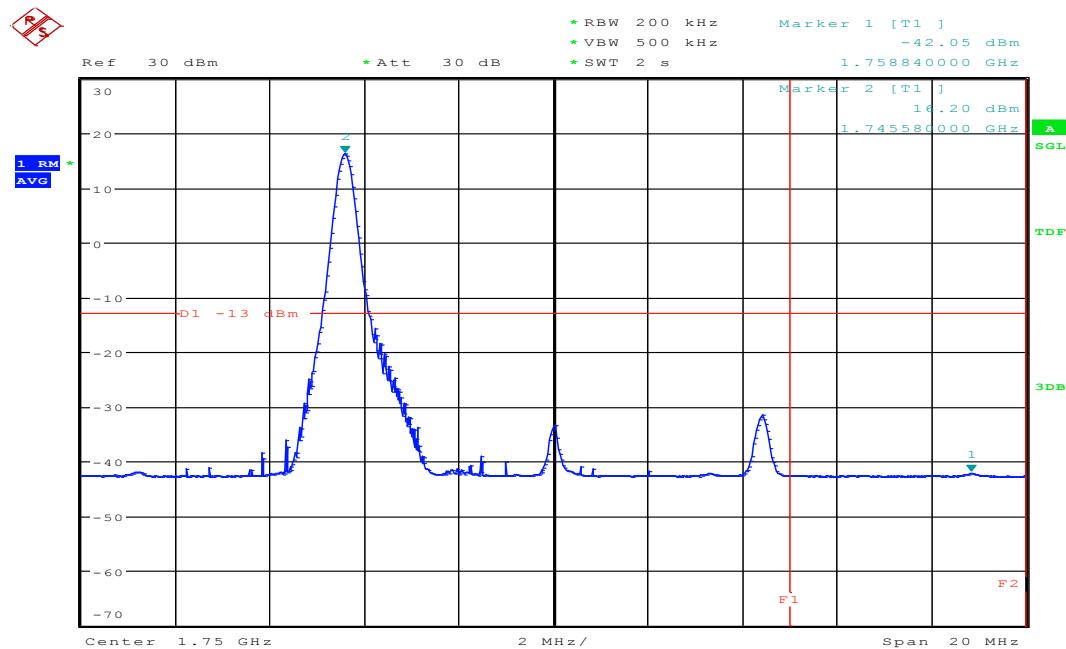
Date: 22.OCT.2016 14:07:57

## BAND4-1750MHz,QPSK-1RB\_HIGH@Pass



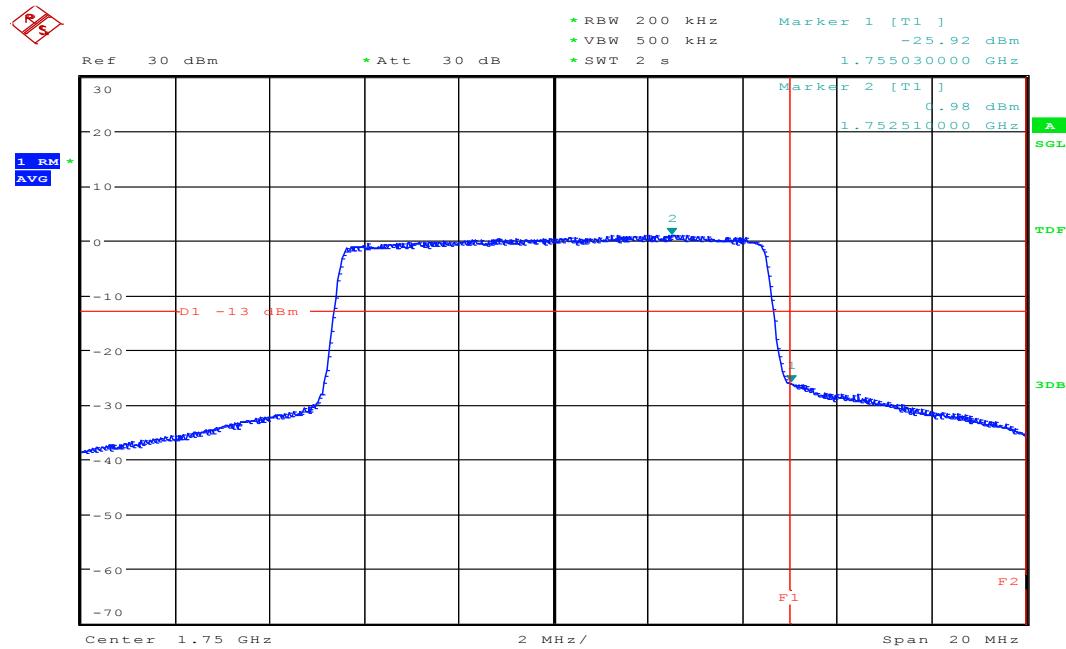
Date: 22.OCT.2016 14:07:13

## BAND4-1750MHz,QPSK-1RB\_LOW@Pass



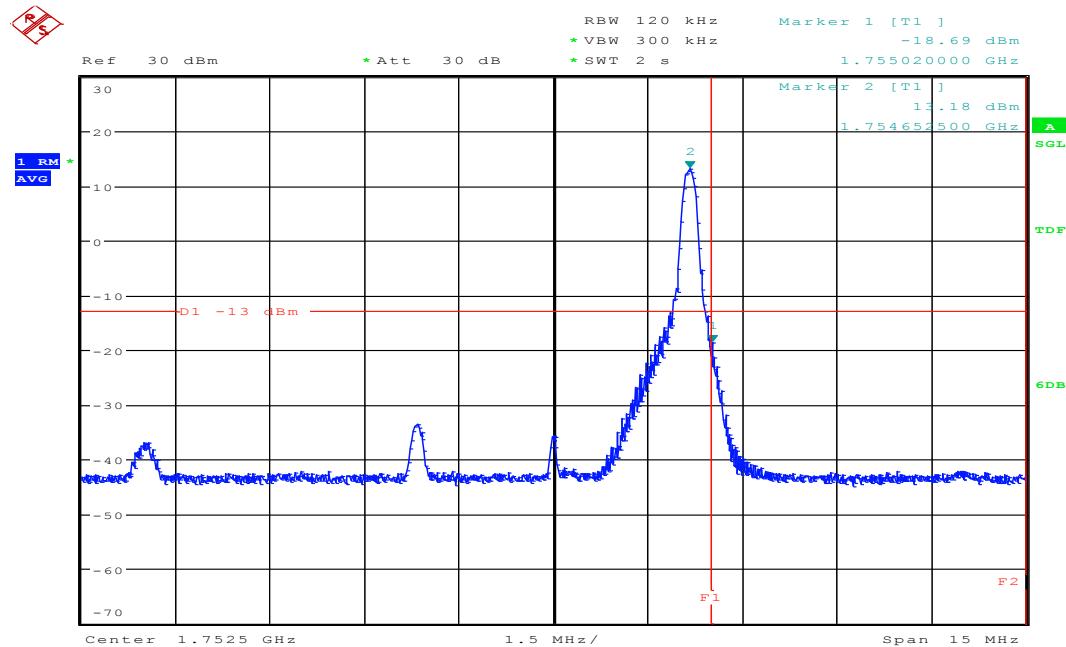
Date: 22.OCT.2016 14:07:02

## BAND4-1750MHz,QPSK-50RB\_LOW@Pass



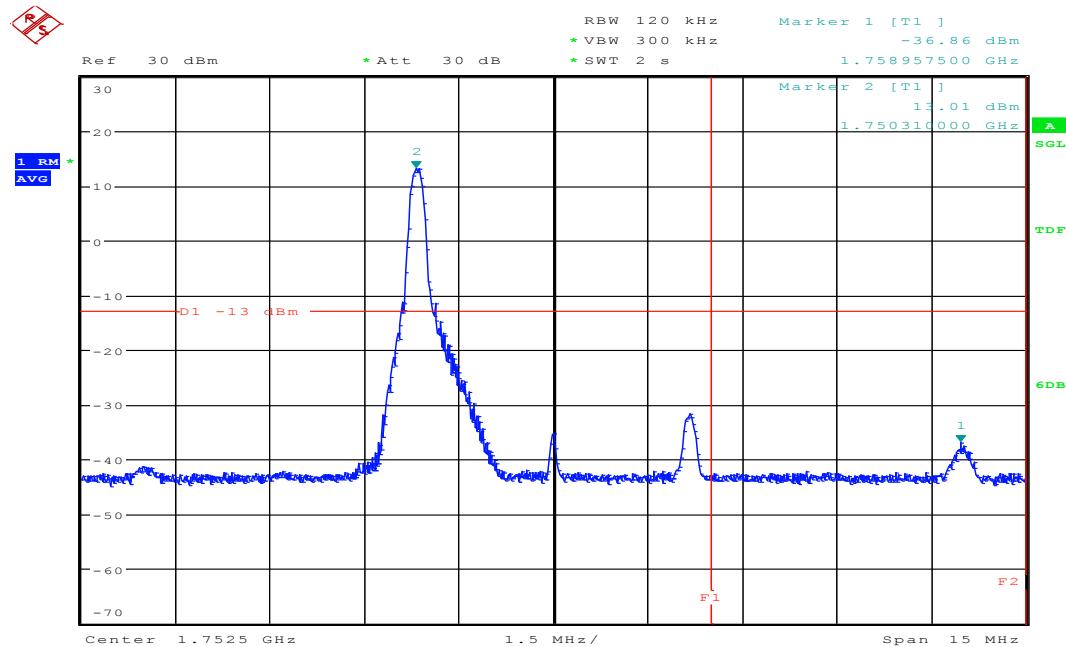
Date: 22.OCT.2016 14:07:24

## BAND4-1752.5MHz,Q16-1RB\_HIGH@Pass



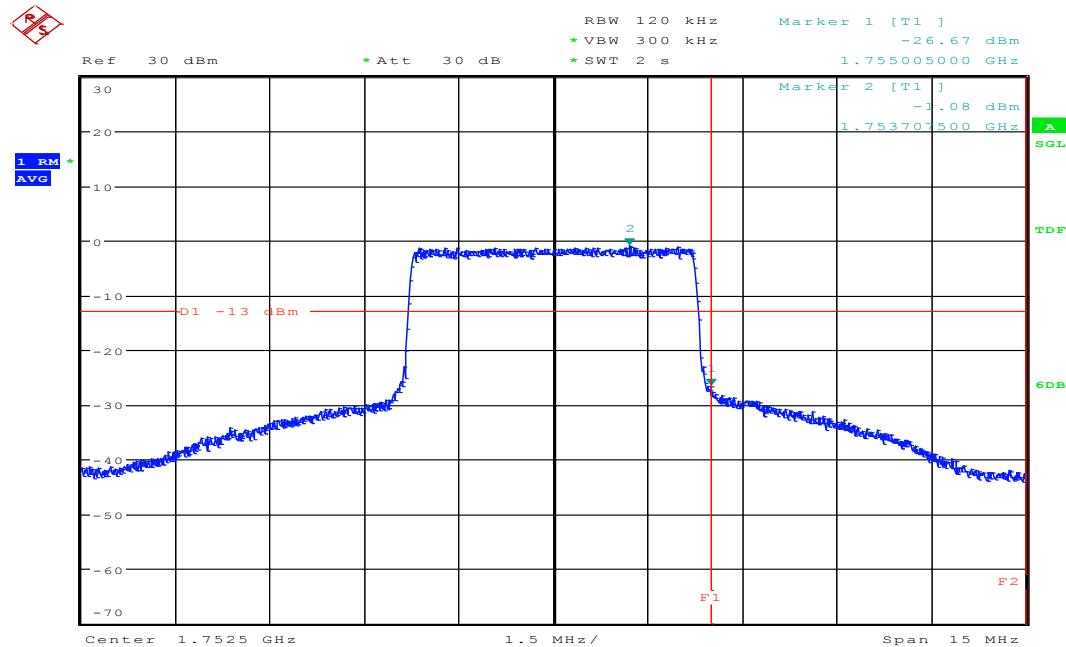
Date: 22.OCT.2016 14:05:30

## BAND4-1752.5MHz,Q16-1RB\_LOW@Pass



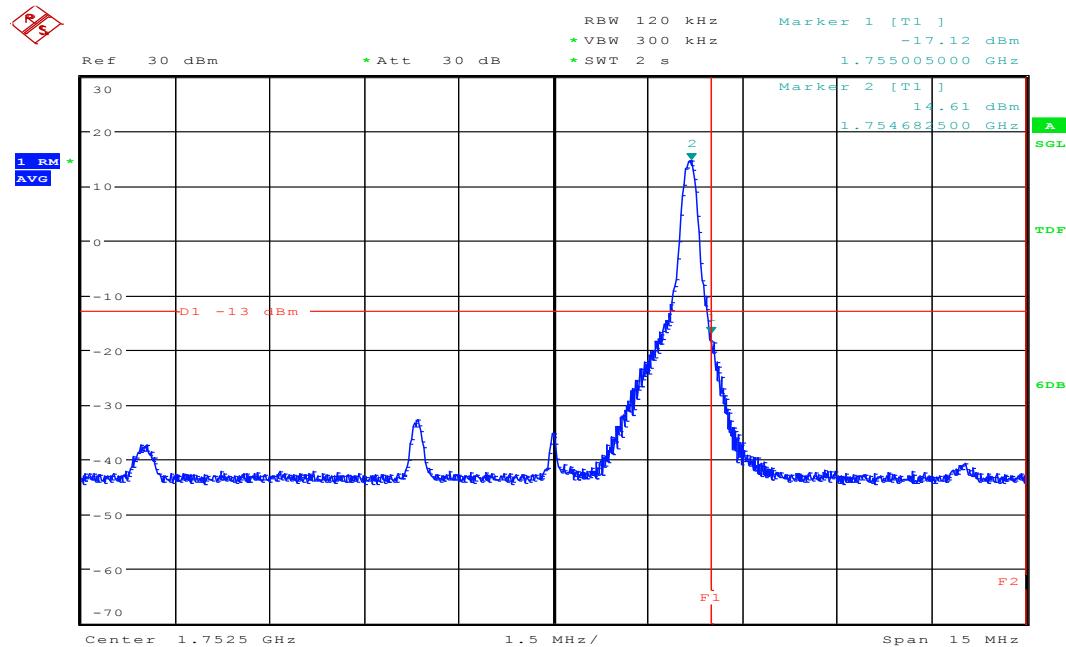
Date: 22.OCT.2016 14:05:20

## BAND4-1752.5MHz,Q16-25RB\_LOW@Pass



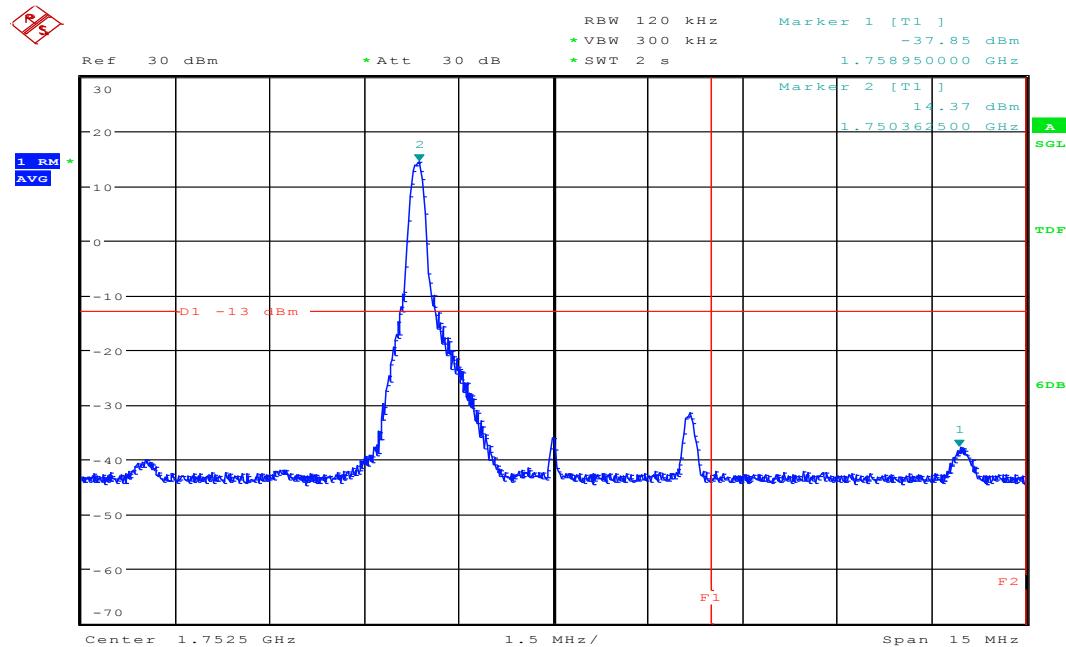
Date: 22.OCT.2016 14:05:41

## BAND4-1752.5MHz,QPSK-1RB\_HIGH@Pass



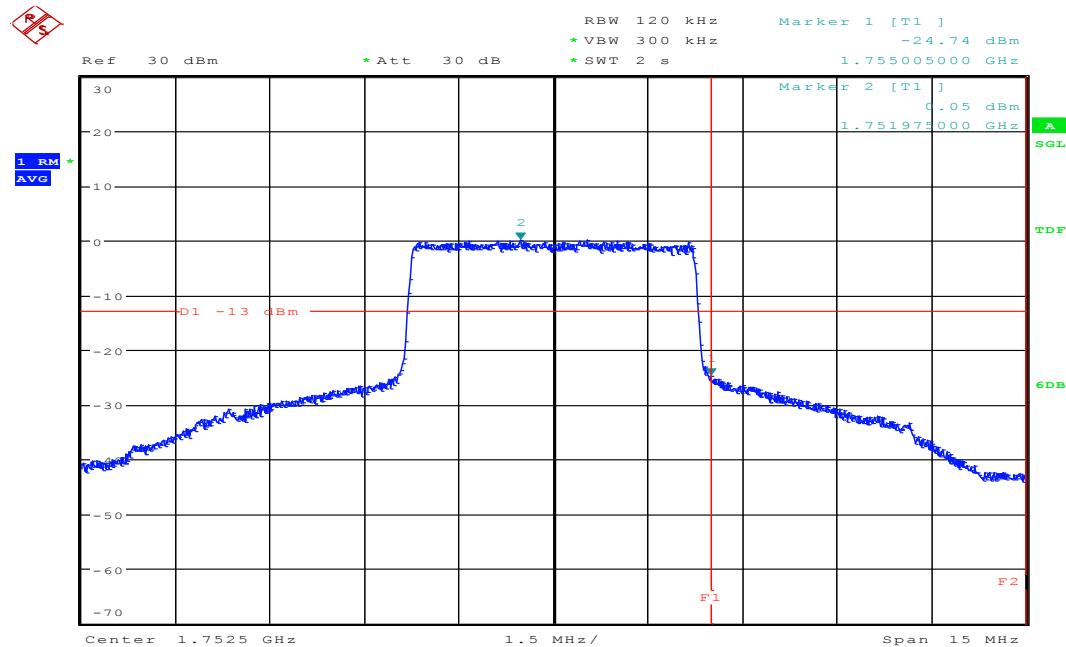
Date: 22.OCT.2016 14:04:56

## BAND4-1752.5MHz,QPSK-1RB\_LOW@Pass



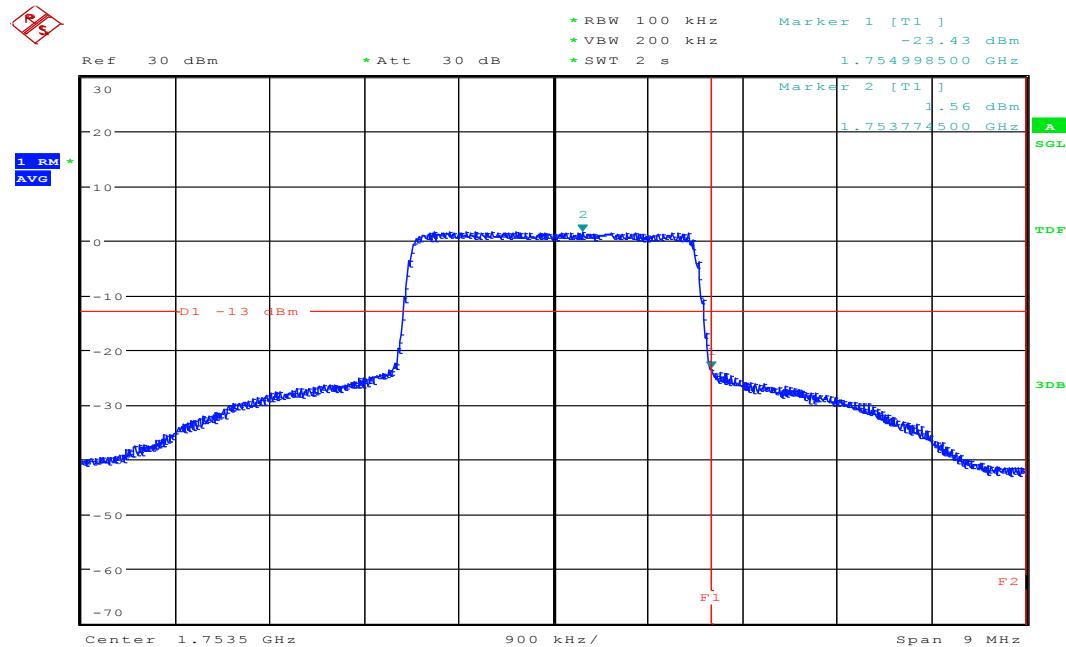
Date: 22.OCT.2016 14:04:44

## BAND4-1752.5MHz,QPSK-25RB\_LOW@Pass



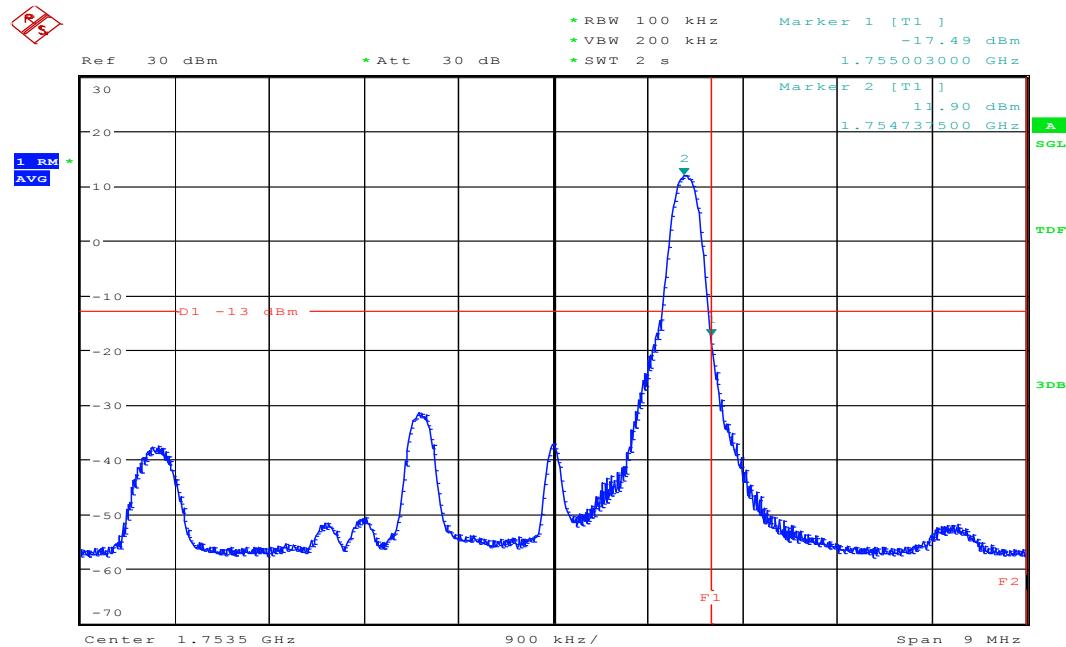
Date: 22.OCT.2016 14:05:08

## BAND4-1753.5MHz,Q16-15RB\_LOW@Pass

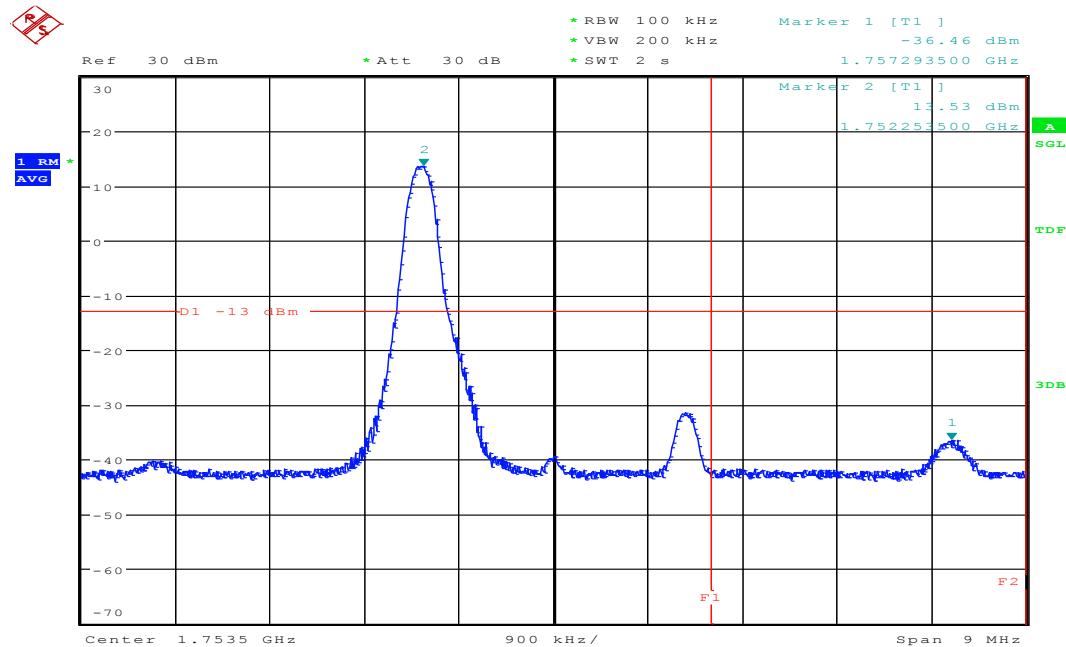


Date: 22.OCT.2016 14:03:17

## BAND4-1753.5MHz,Q16-1RB\_HIGH@Pass

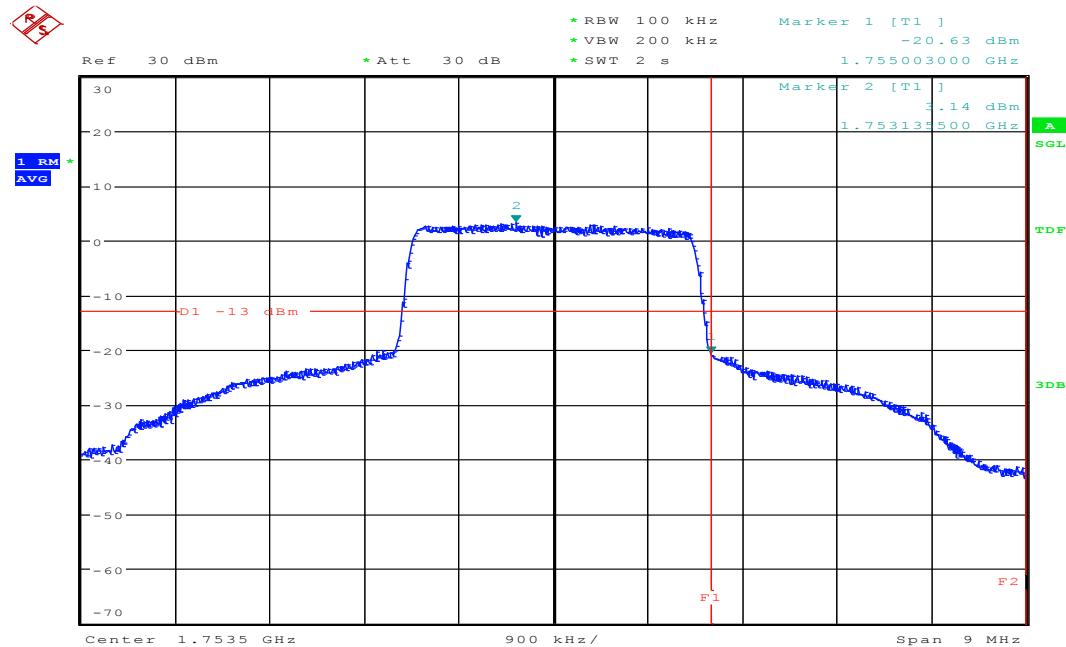


## BAND4-1753.5MHz,Q16-1RB\_LOW@Pass



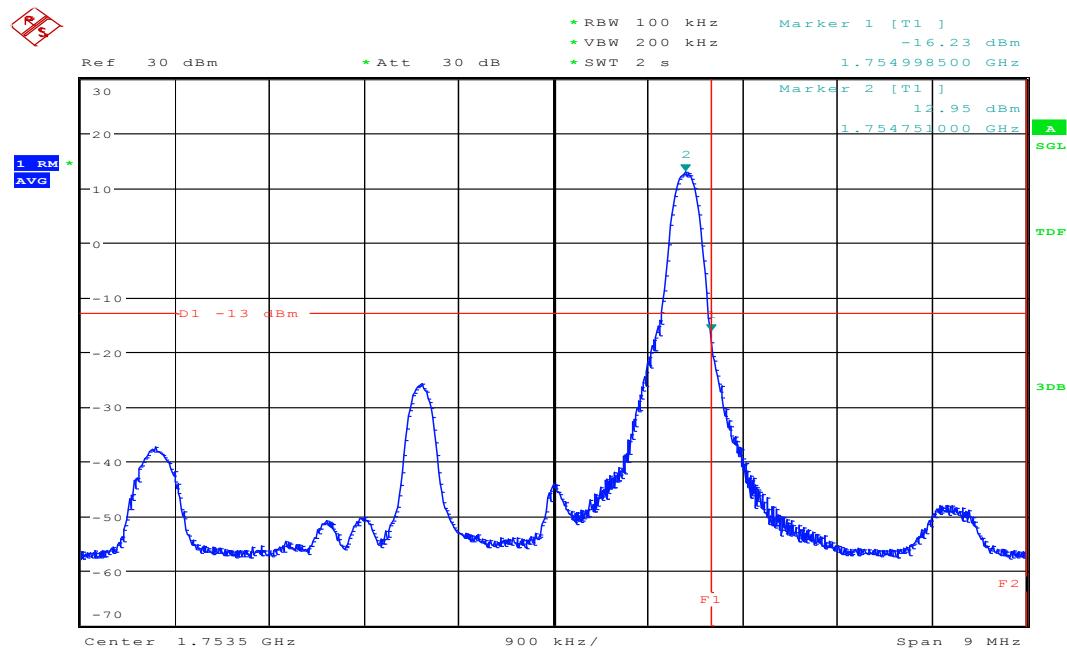
Date: 22.OCT.2016 14:02:54

## BAND4-1753.5MHz,QPSK-15RB\_LOW@Pass

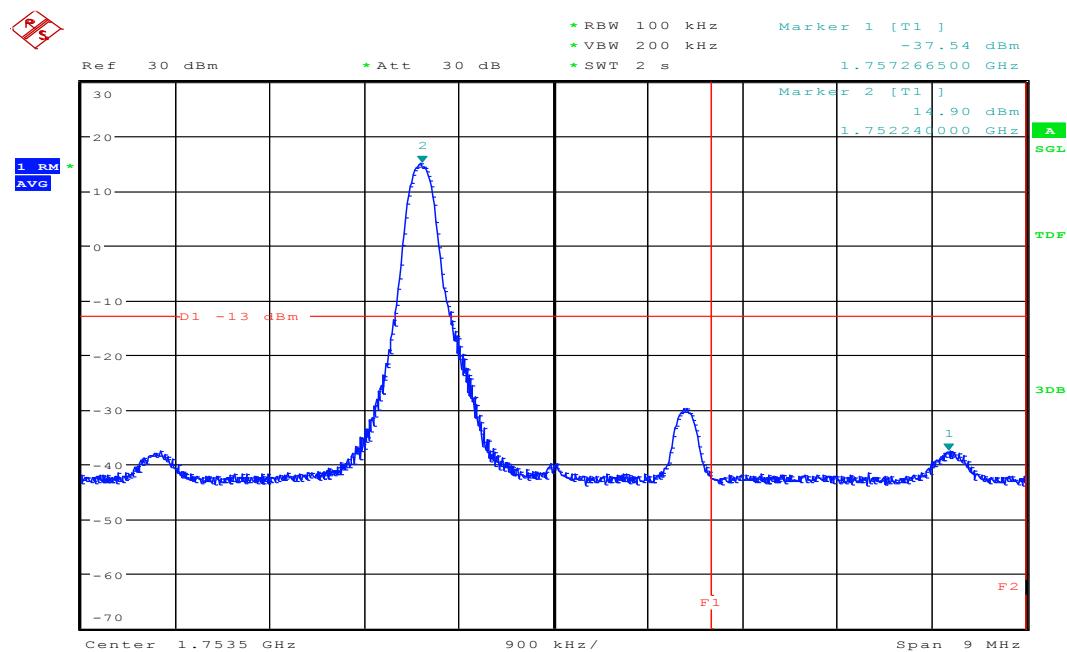


Date: 22.OCT.2016 14:02:42

## BAND4-1753.5MHz,QPSK-1RB\_HIGH@Pass

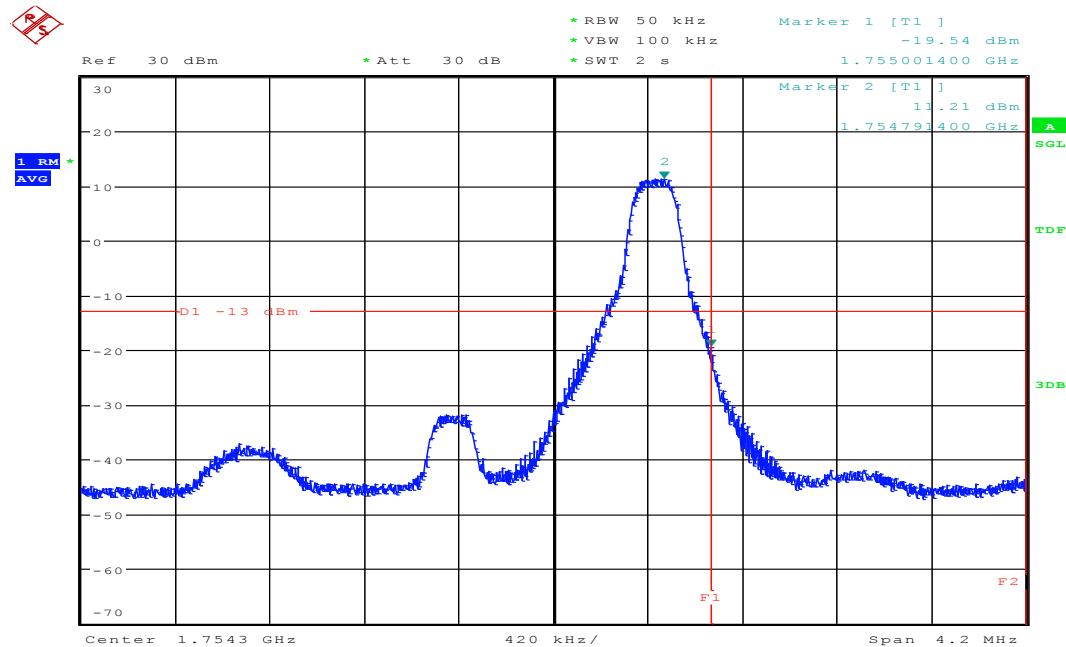


## BAND4-1753.5MHz,QPSK-1RB\_LOW@Pass



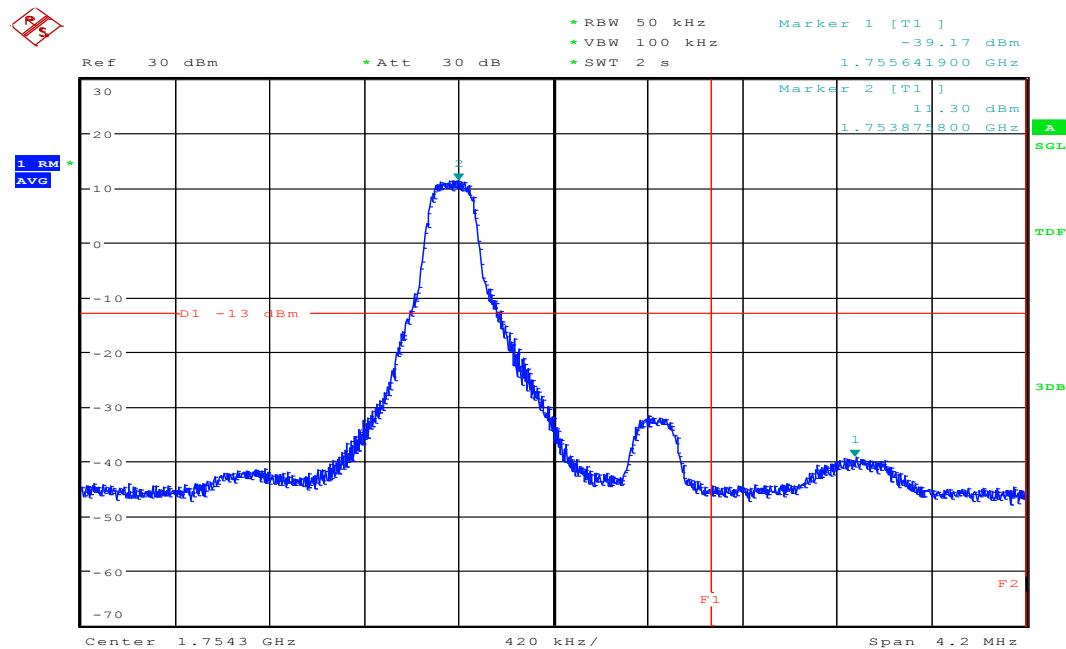
Date: 22.OCT.2016 14:02:19

## BAND4-1754.3MHz,Q16-1RB\_HIGH@Pass



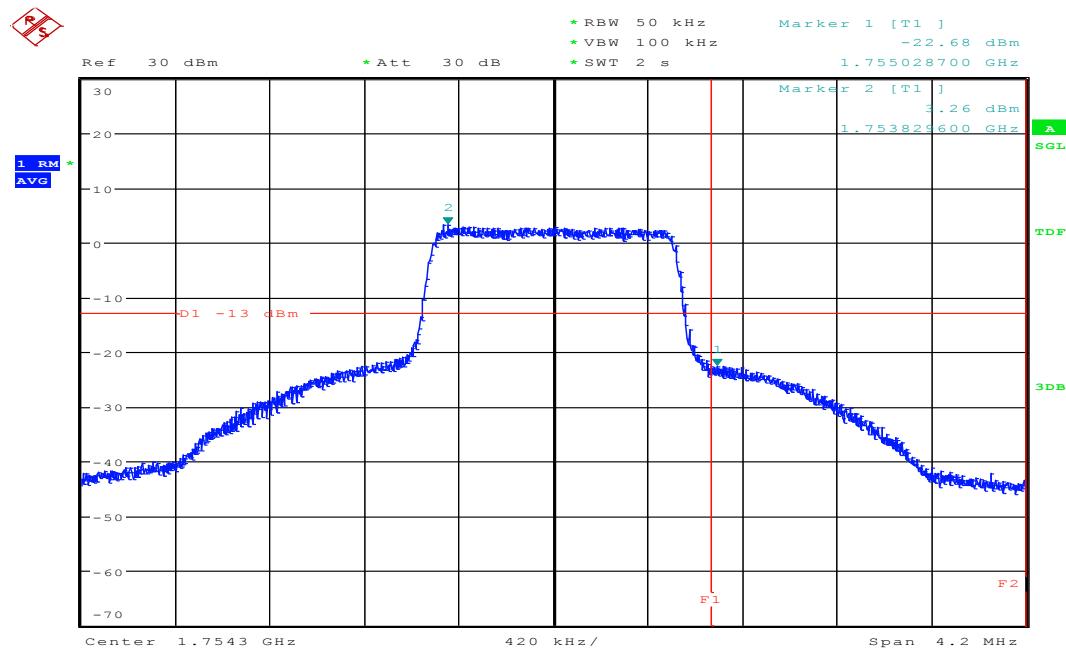
Date: 22.OCT.2016 14:00:43

## BAND4-1754.3MHz,Q16-1RB\_LOW@Pass



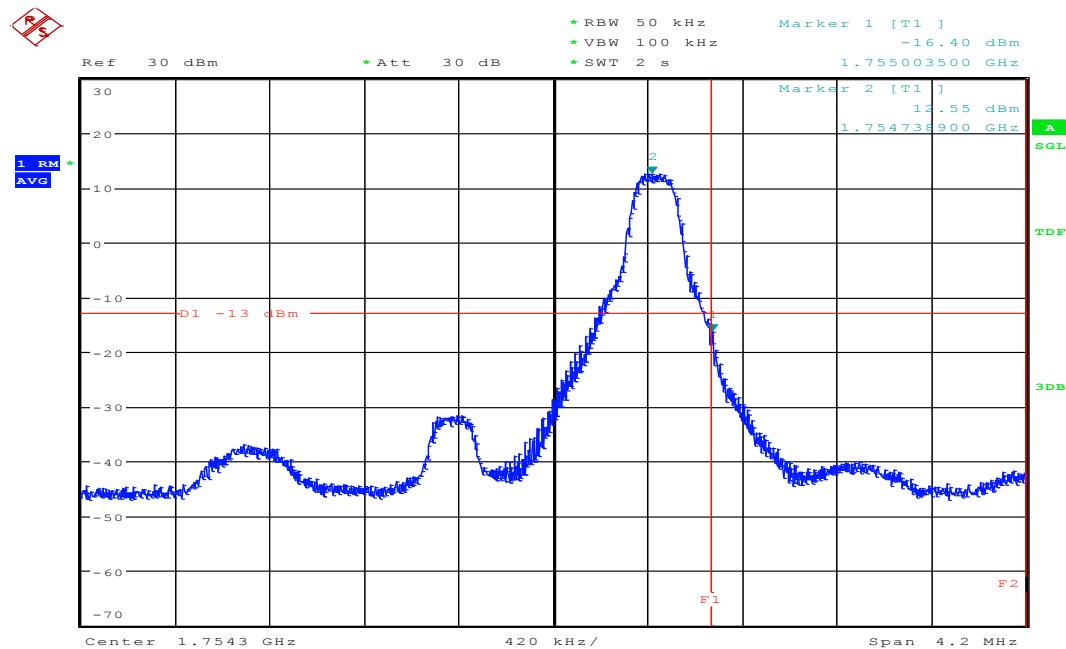
Date: 22.OCT.2016 14:00:31

## BAND4-1754.3MHz,Q16-6RB\_LOW@Pass



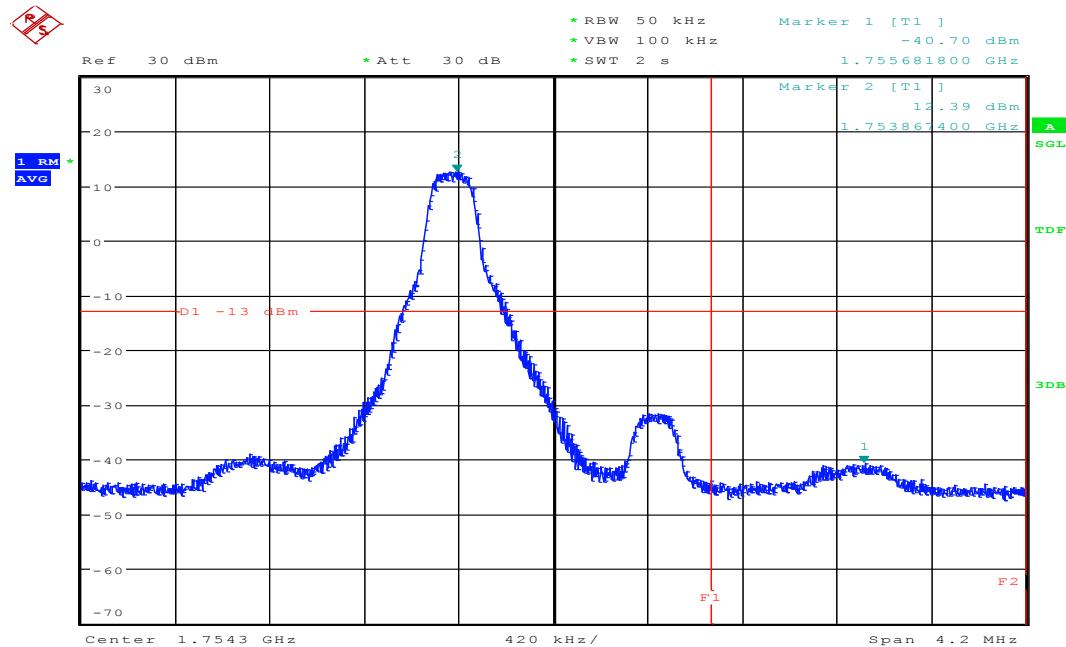
Date: 22.OCT.2016 14:00:55

## BAND4-1754.3MHz,QPSK-1RB\_HIGH@Pass



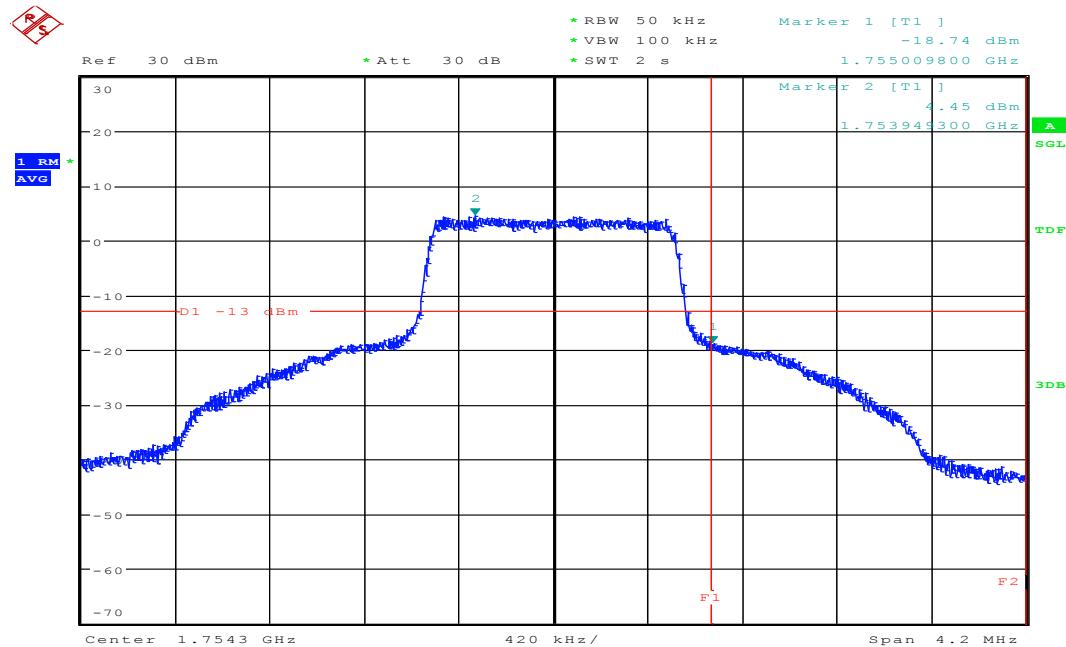
Date: 22.OCT.2016 14:00:08

## BAND4-1754.3MHz,QPSK-1RB\_LOW@Pass



Date: 22.OCT.2016 13:59:57

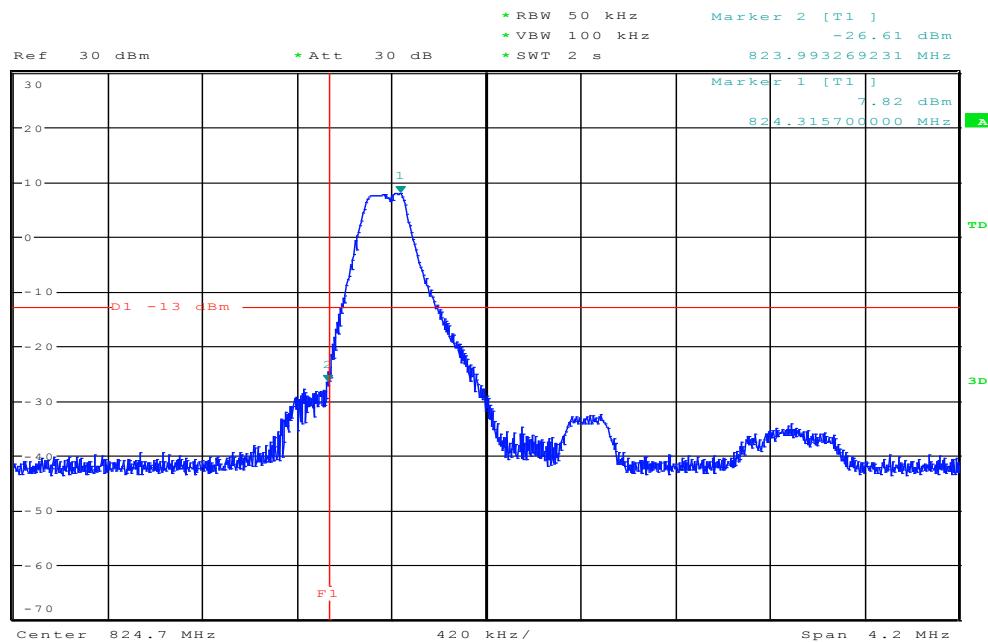
## BAND4-1754.3MHz,QPSK-6RB\_LOW@Pass



Date: 22.OCT.2016 14:00:20

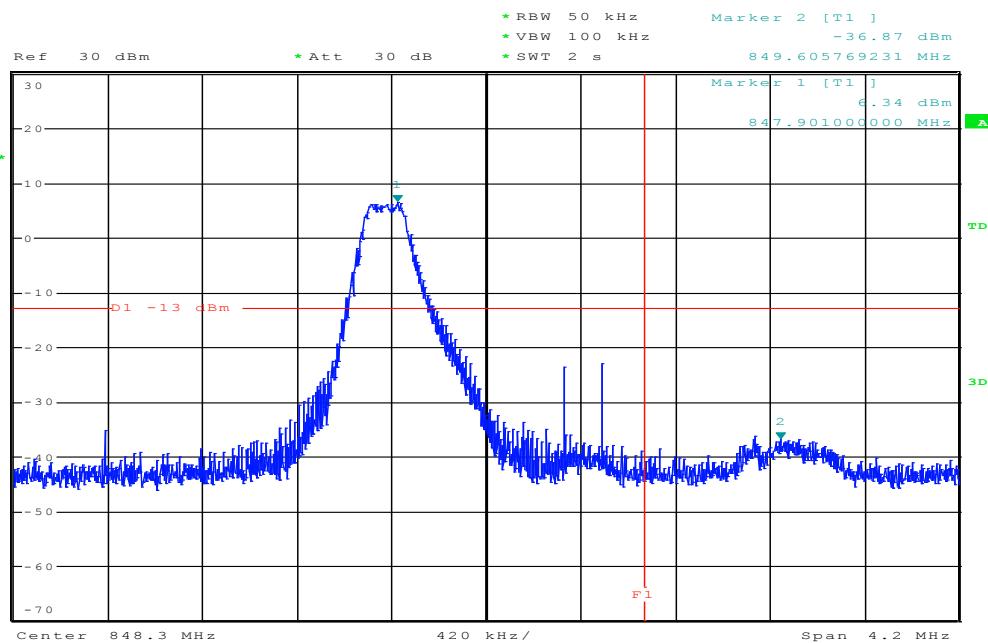
## BAND 5@Emission Mask

BAND5-824.7MHz,QPSK-1RB\_LOW@Pass

**F5**

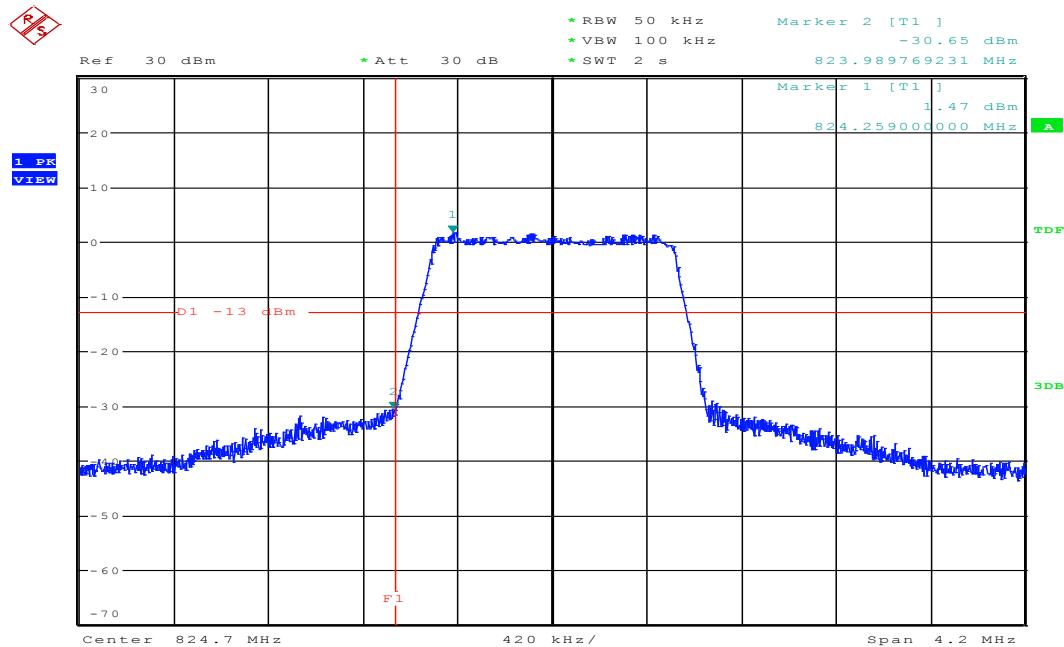
Date: 24.OCT.2016 17:11:19

## BAND5-848.3MHz,QPSK-1RB\_HIGH@Pass

**F5**

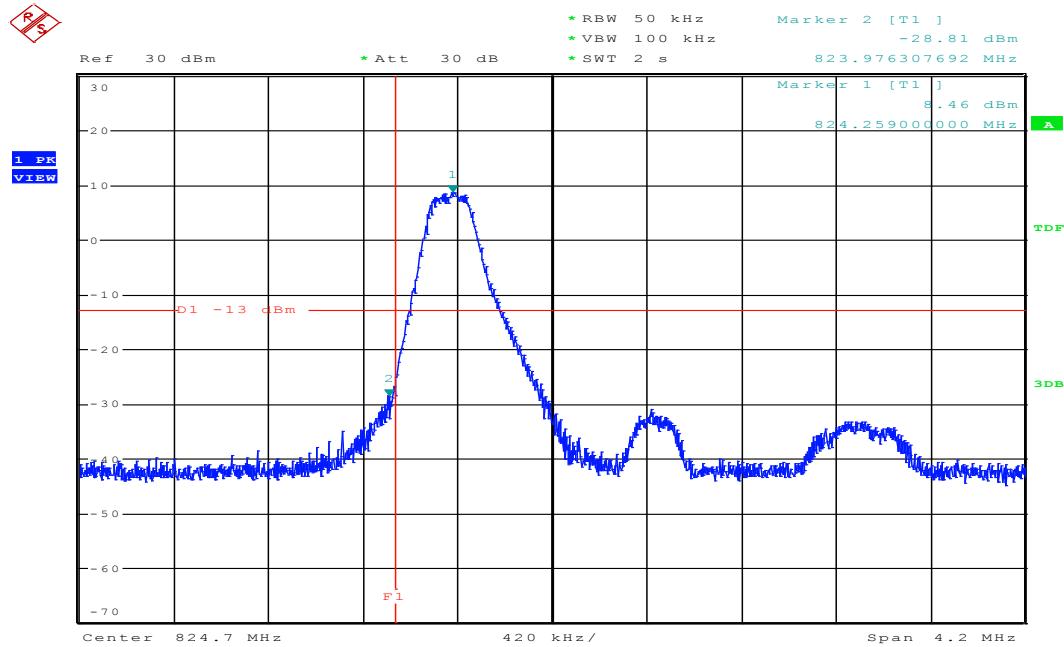
Date: 24.OCT.2016 17:22:24

## BAND5-824.7MHz,QPSK-6RB\_LOW@Pass



Date: 24.OCT.2016 17:14:48

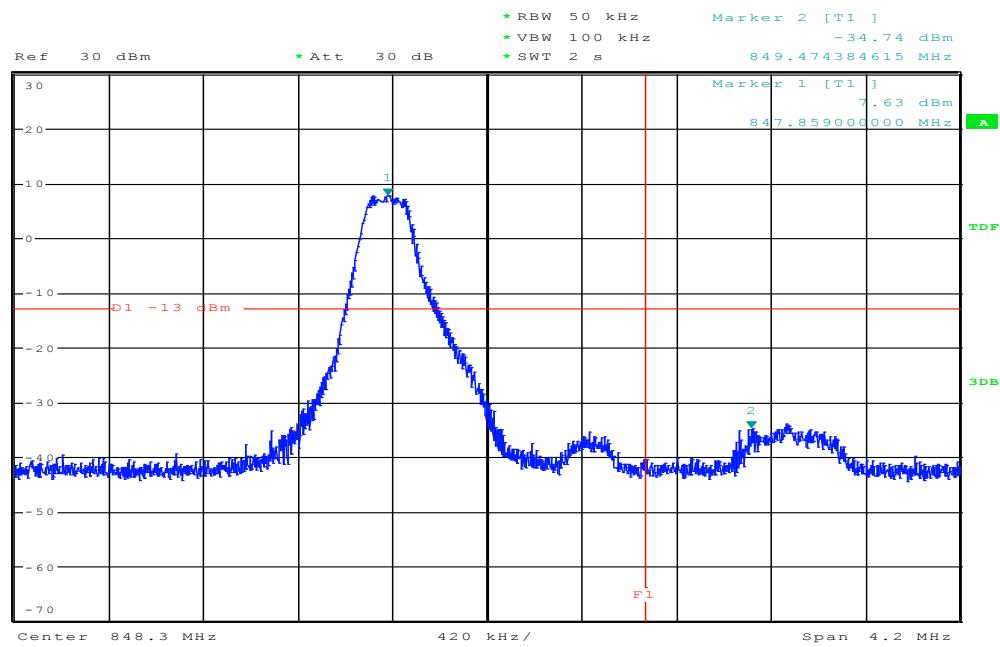
## BAND5-824.7MHz, Q16-1RB\_LOW@Pass



Date: 24.OCT.2016 17:15:46

## BAND5-848.3MHz, Q16-1RB\_HIGH@Pass

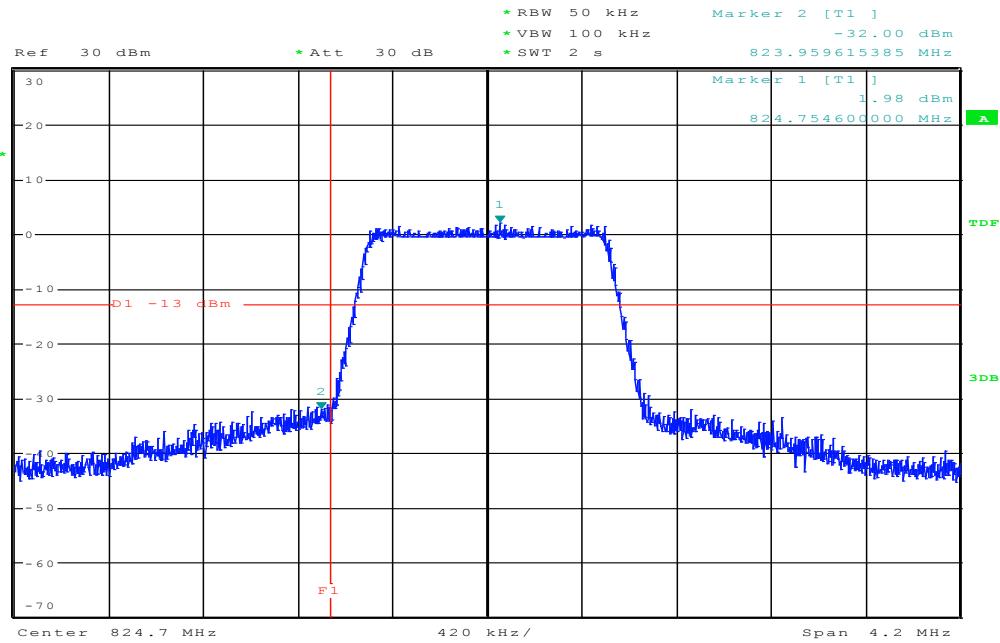
RS



Date: 24.OCT.2016 17:17:54

## BAND5-824.7MHz, Q16-6RB\_LOW@Pass

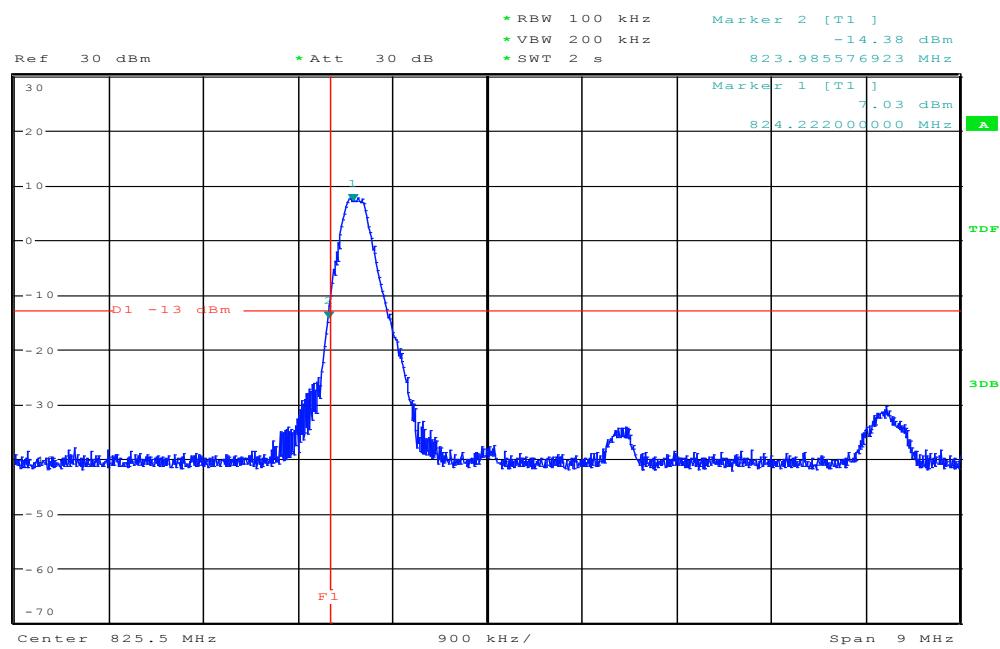
RS



Date: 24.OCT.2016 17:19:30

## BAND5-825.5MHz, QPSK-1RB\_LOW@Pass

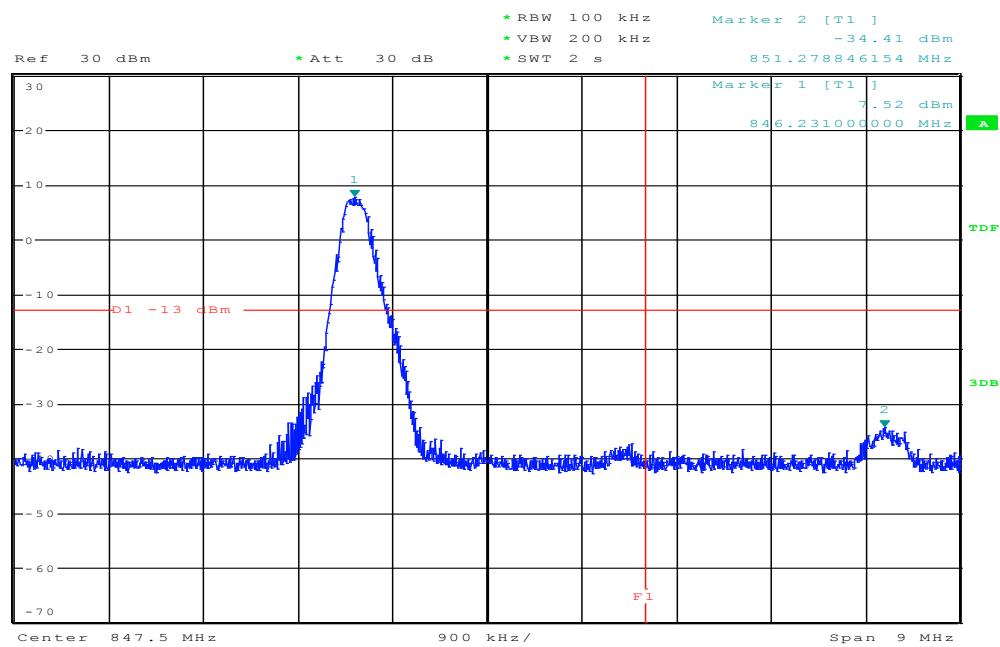
RS



Date: 24.OCT.2016 17:28:05

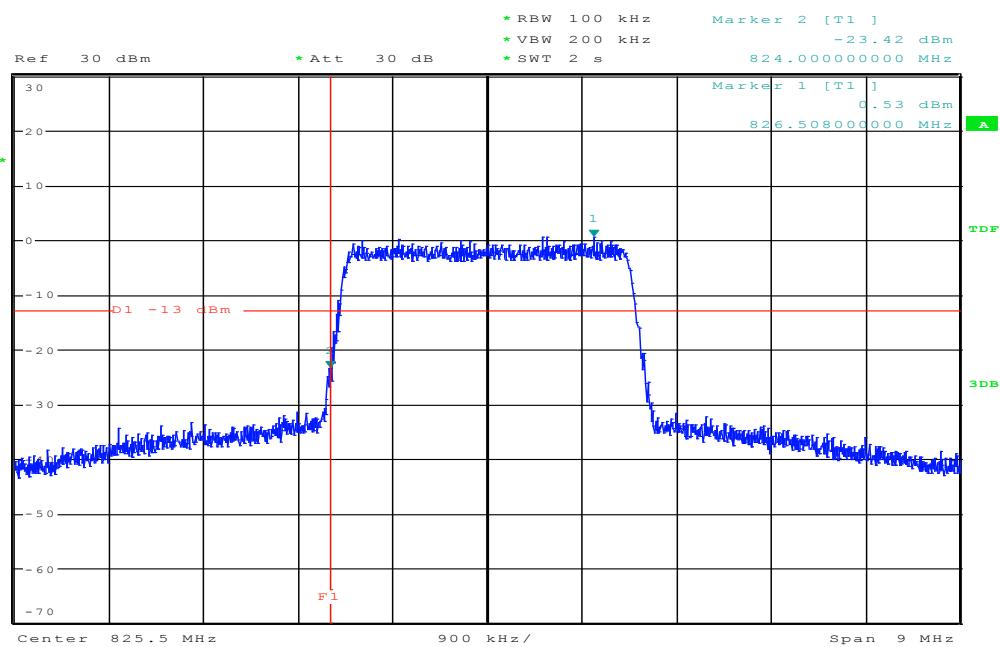
## BAND5-847.5MHz, QPSK-1RB\_HIGH@Pass

RS



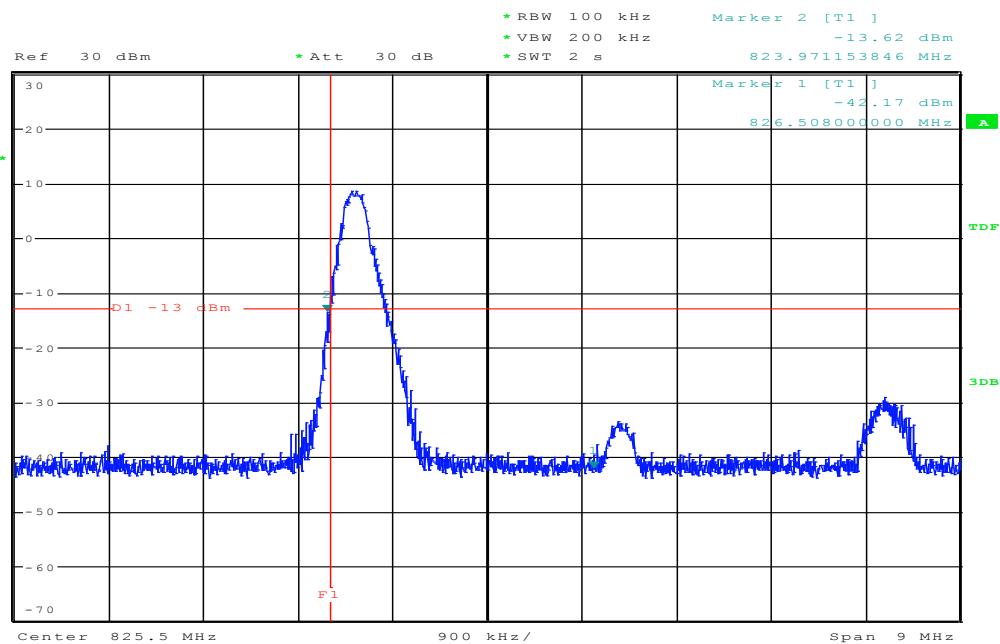
Date: 24.OCT.2016 17:30:05

## BAND5-825.5MHz, QPSK-15RB\_LOW@Pass

**RS**

Date: 24.OCT.2016 17:32:44

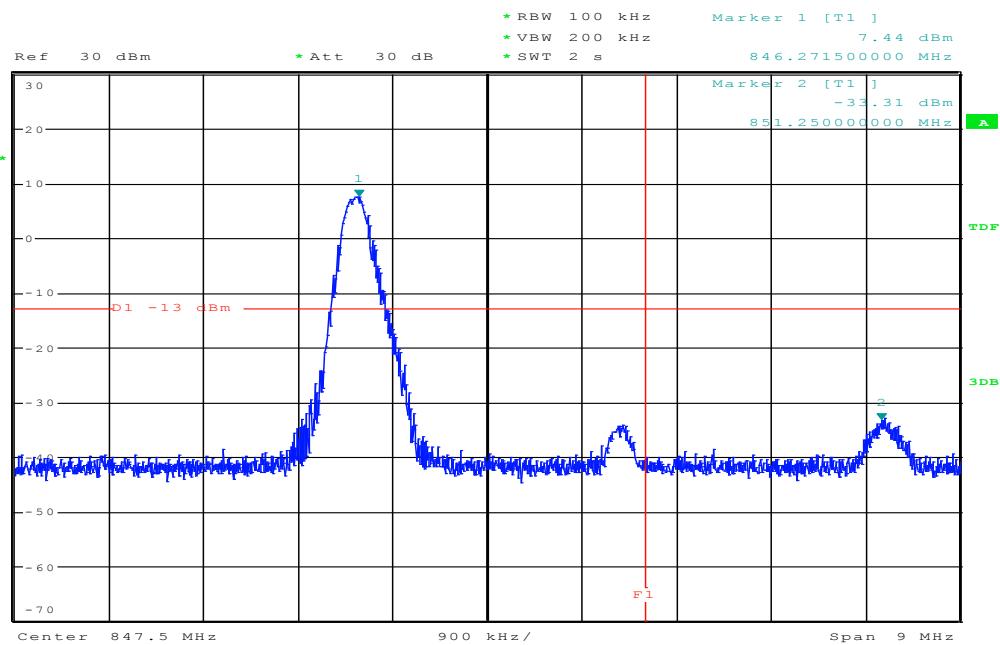
## BAND5-825.5MHz, Q16-1RB\_LOW@Pass

**RS**

Date: 24.OCT.2016 17:33:57

## BAND5-847.5MHz, Q16-1RB\_HIGH@Pass

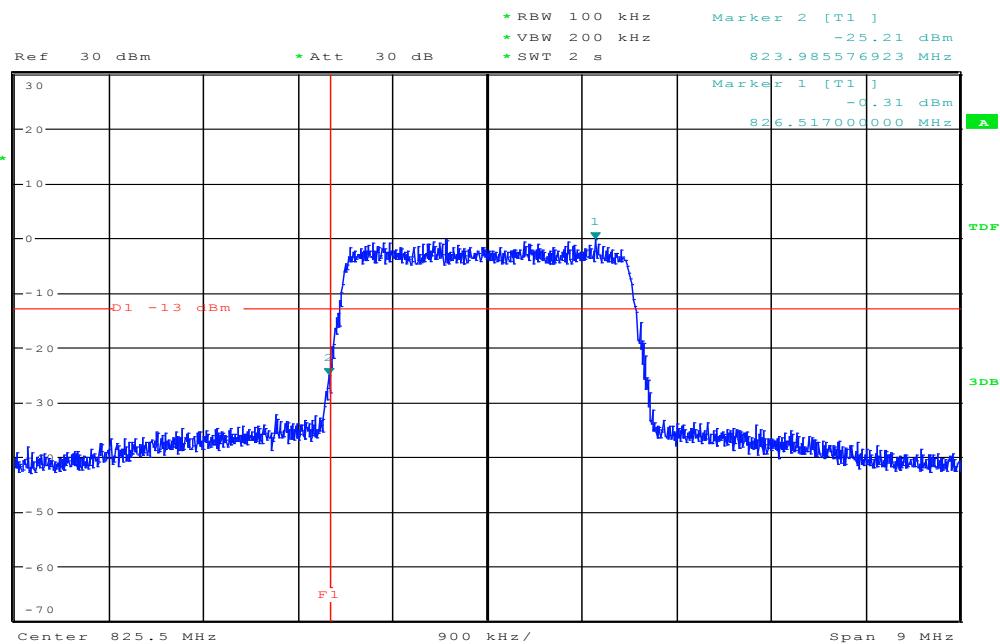
RF



Date: 24.OCT.2016 17:34:46

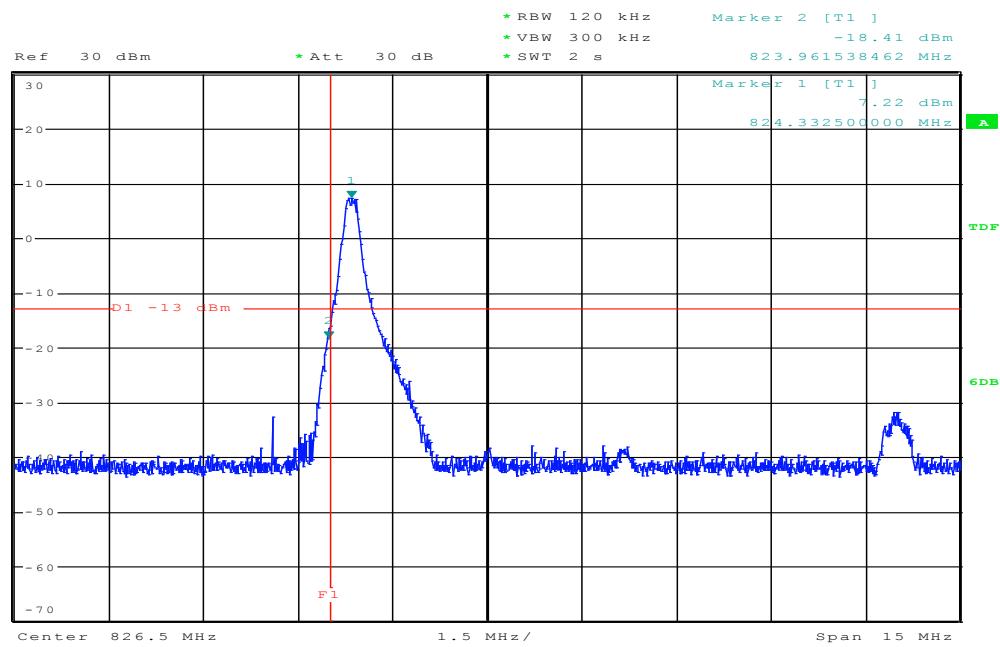
## BAND5-825.5MHz, Q16-15RB\_LOW@Pass

RF



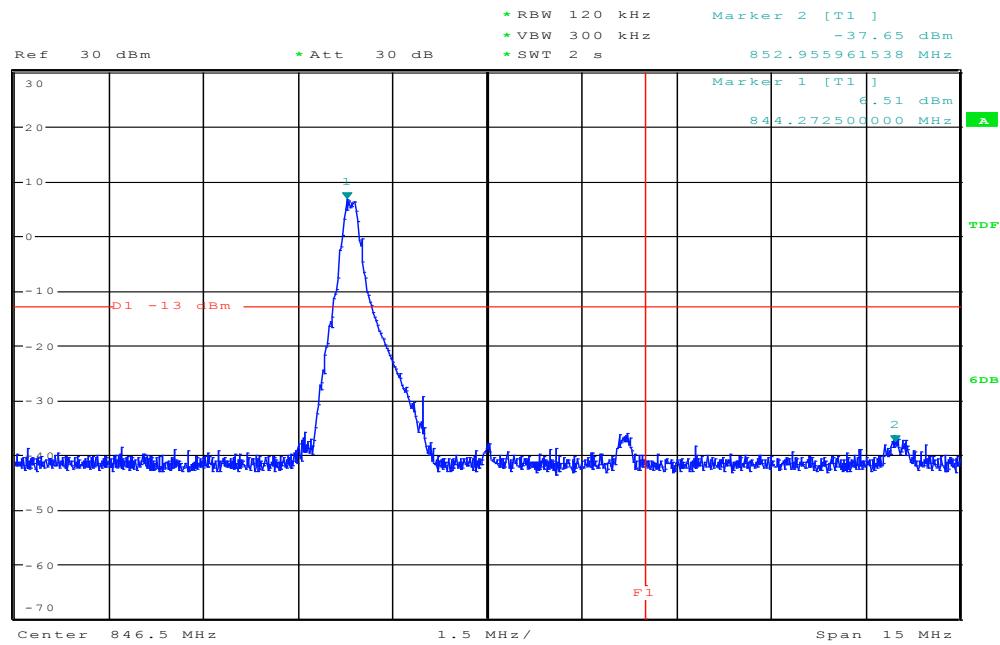
Date: 24.OCT.2016 17:35:34

## BAND5-826.5MHz, QPSK-1RB\_LOW@Pass

**RS**

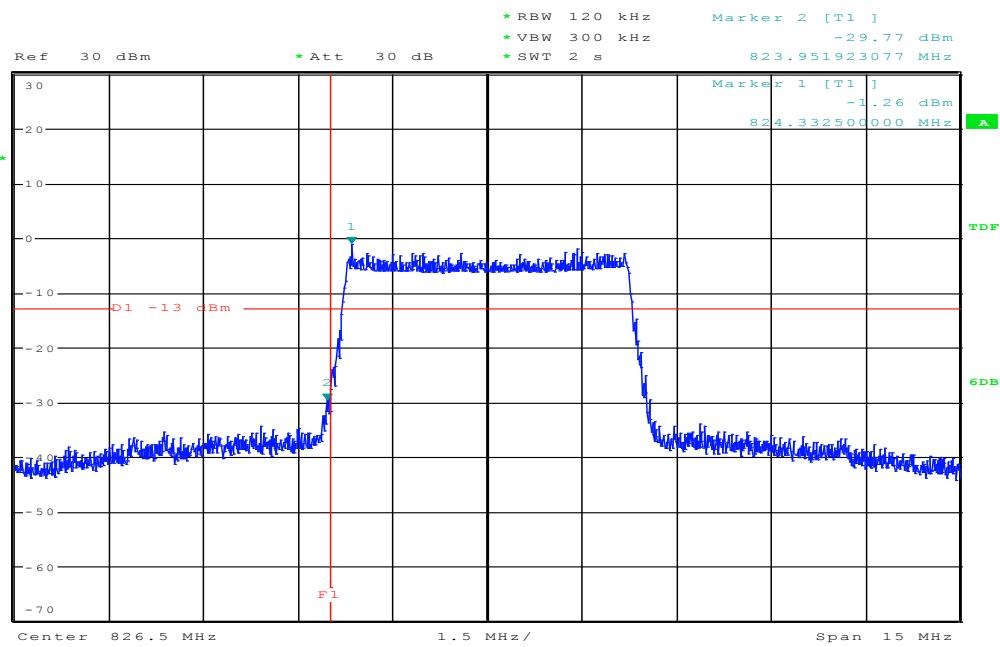
Date: 24.OCT.2016 17:37:09

## BAND5-846.5MHz, QPSK-1RB\_HIGH@Pass

**RS**

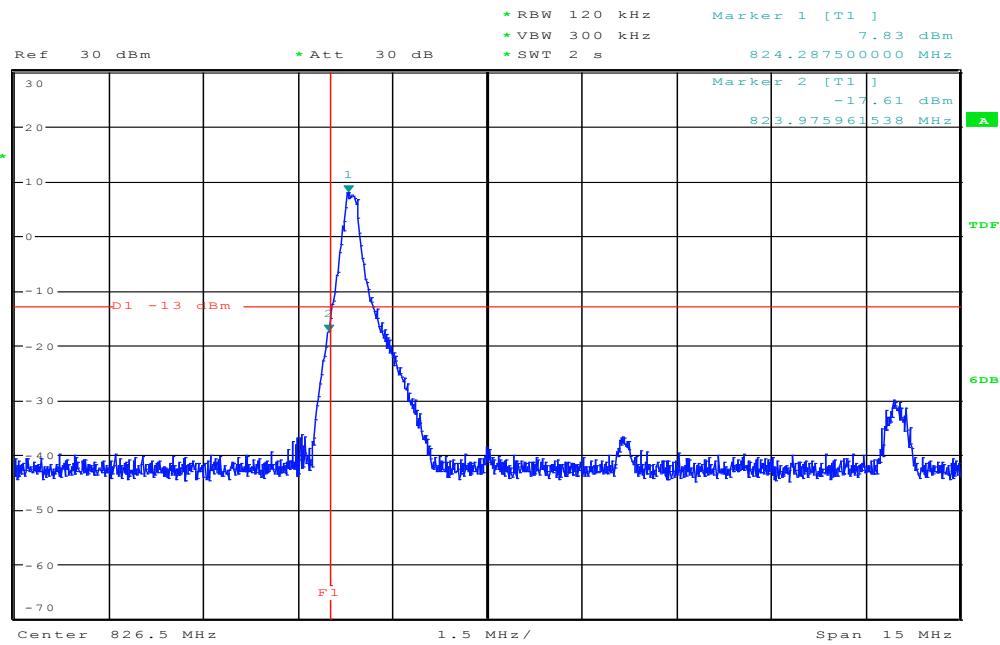
Date: 24.OCT.2016 17:38:11

## BAND5-826.5MHz, QPSK-25RB\_LOW@Pass

**RS**

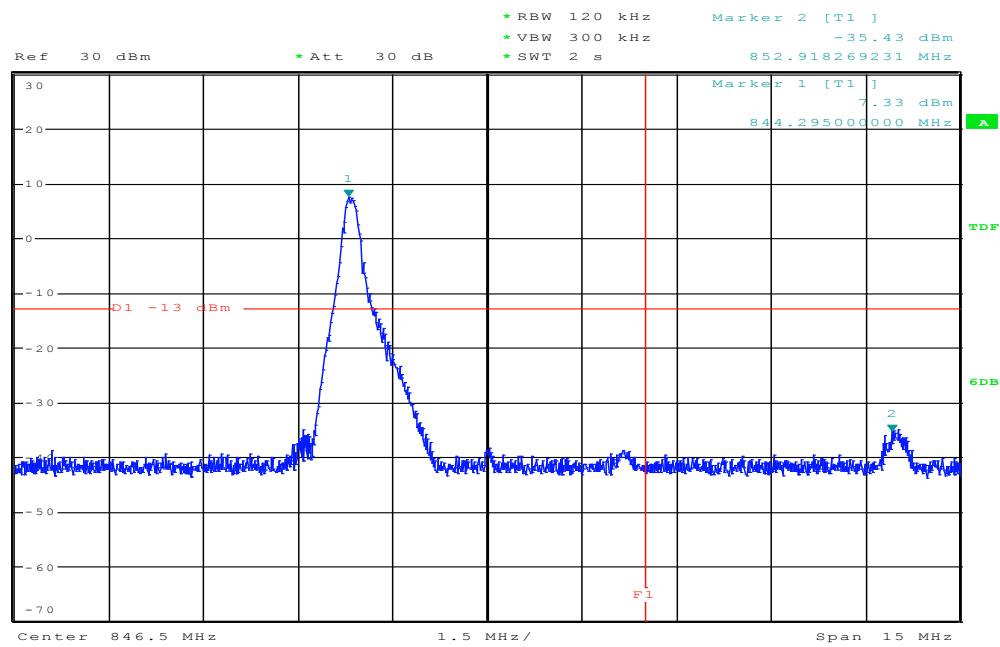
Date: 24.OCT.2016 17:39:05

## BAND5-826.5MHz, Q16-1RB\_LOW@Pass

**RS**

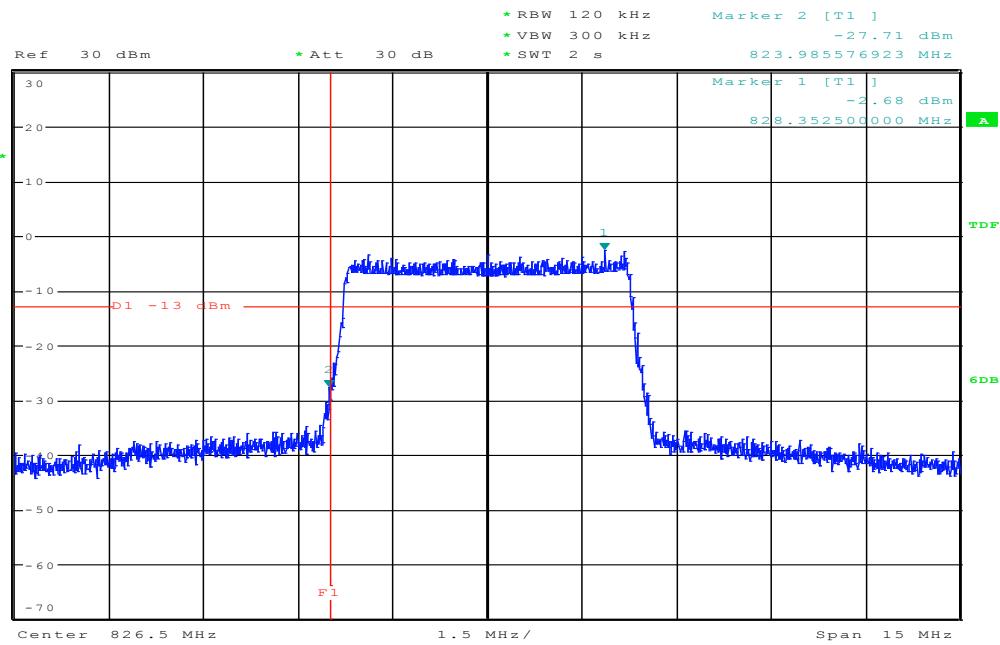
Date: 24.OCT.2016 17:39:37

## BAND5-846.5MHz, Q16-1RB\_HIGH@Pass

**RS**

Date: 24.OCT.2016 17:40:34

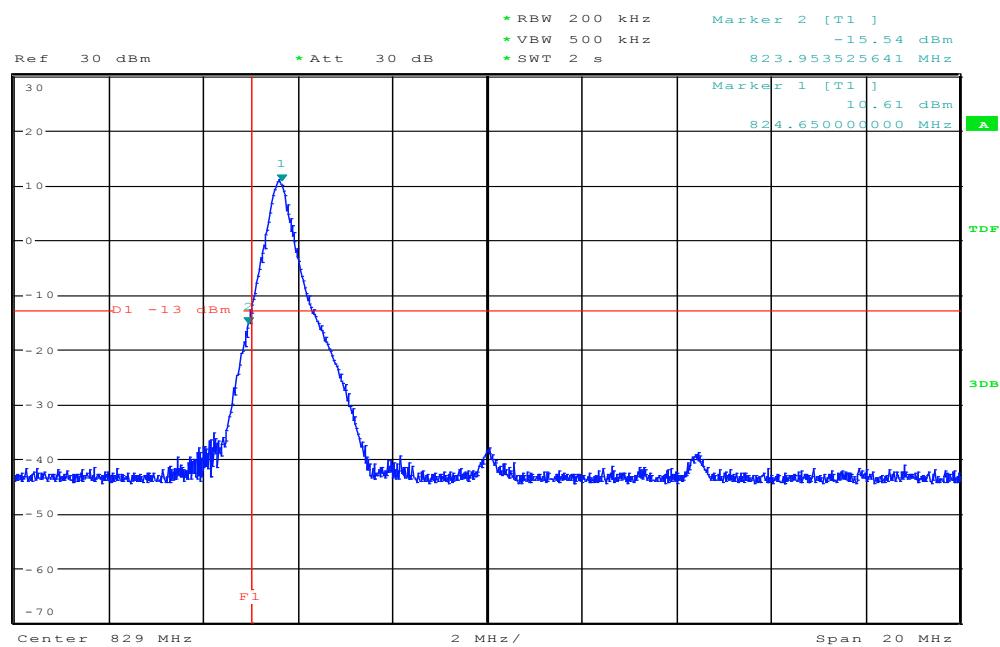
## BAND5-826.5MHz, Q16-25RB\_LOW@Pass

**RS**

Date: 24.OCT.2016 17:42:03

## BAND5-829MHz, QPSK-1RB\_LOW@Pass

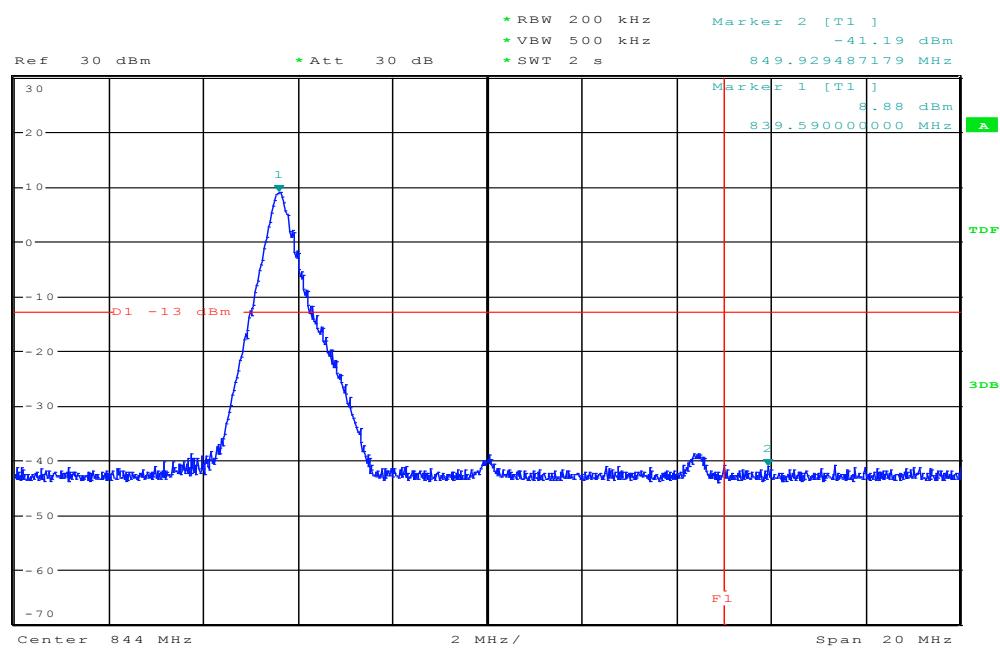
RS



Date: 24.OCT.2016 17:43:30

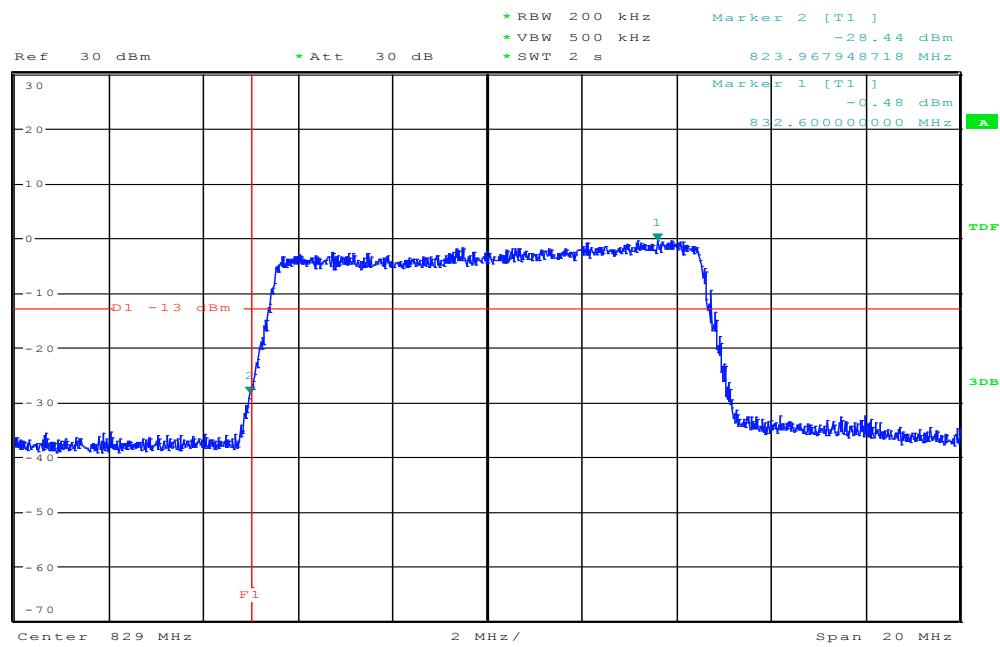
## BAND5-844MHz, QPSK-1RB\_HIGH@Pass

RS



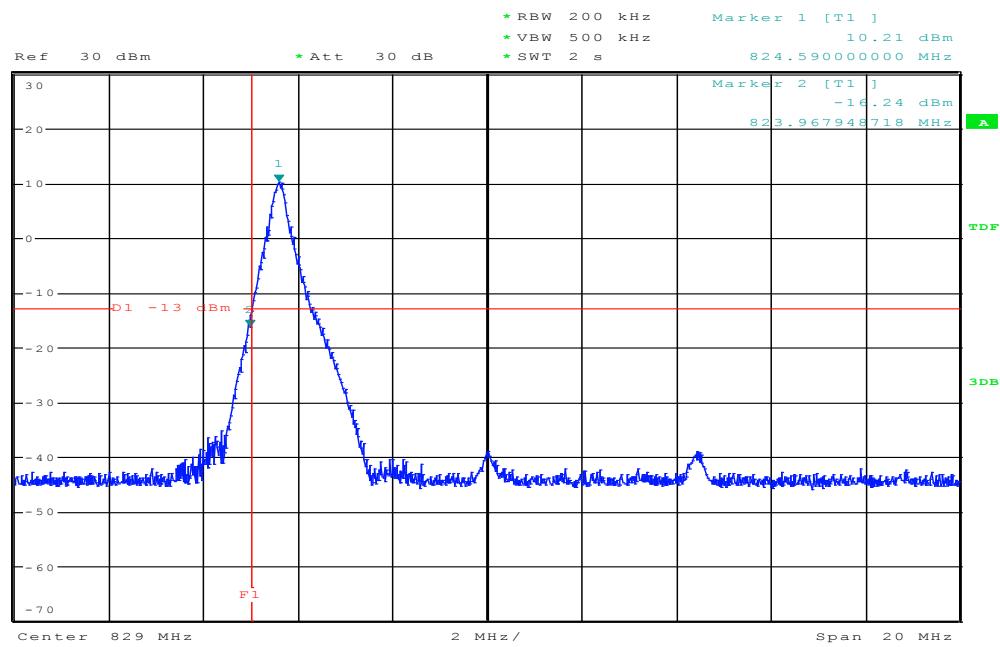
Date: 24.OCT.2016 17:44:23

## BAND5-829MHz, QPSK-50RB\_LOW@Pass

**RF**

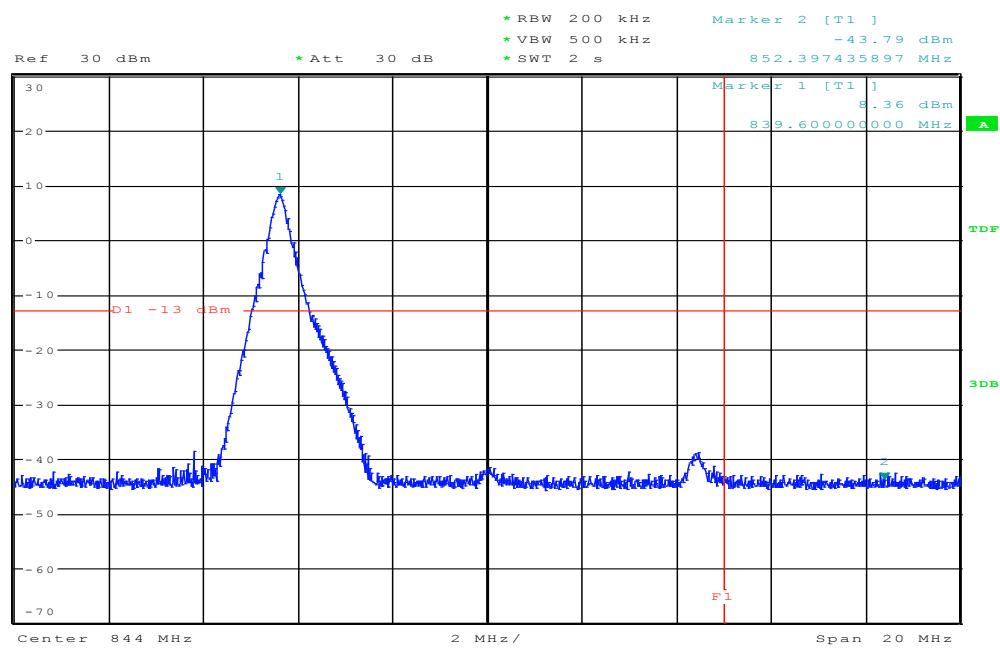
Date: 24.OCT.2016 17:46:00

## BAND5-829MHz, Q16-1RB\_LOW@Pass

**RF**

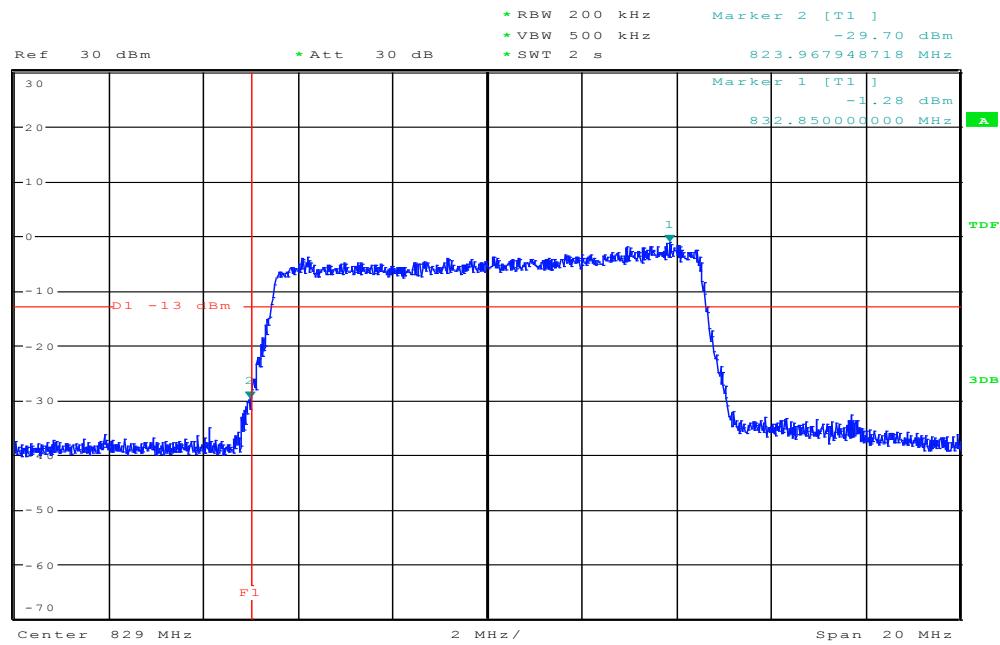
Date: 24.OCT.2016 17:47:30

## BAND5-844MHz, Q16-1RB\_LOW@Pass

**RS**

Date: 24.OCT.2016 17:48:18

## BAND5-829MHz, Q16-50RB\_LOW@Pass

**RS**

Date: 24.OCT.2016 17:49:05