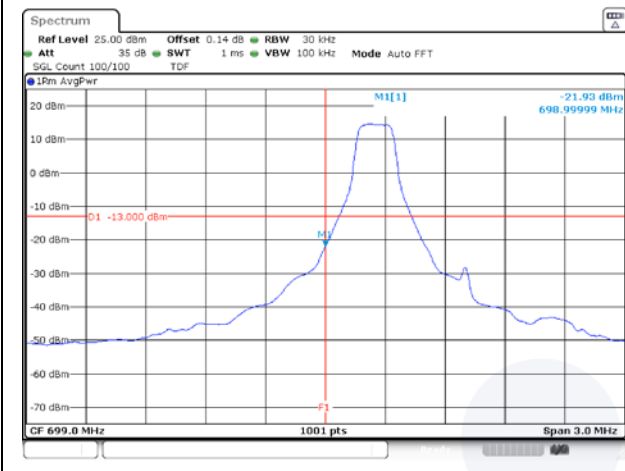


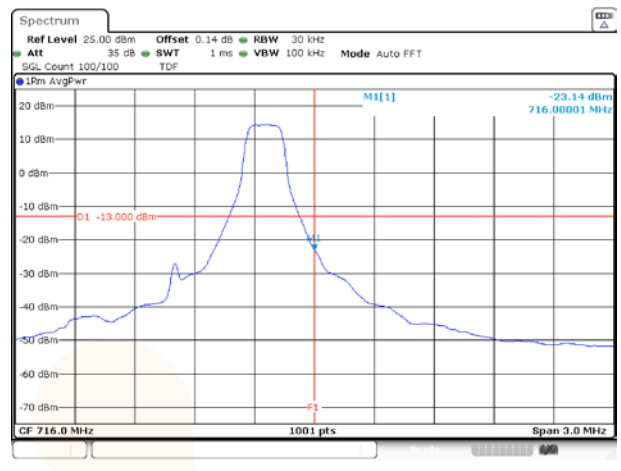
**Test mode: LTE B12**

**1.4M BW QPSK**

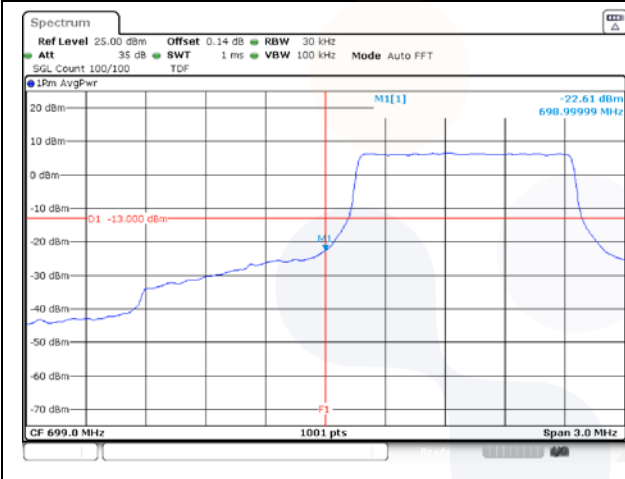
**Low channel 1RB**



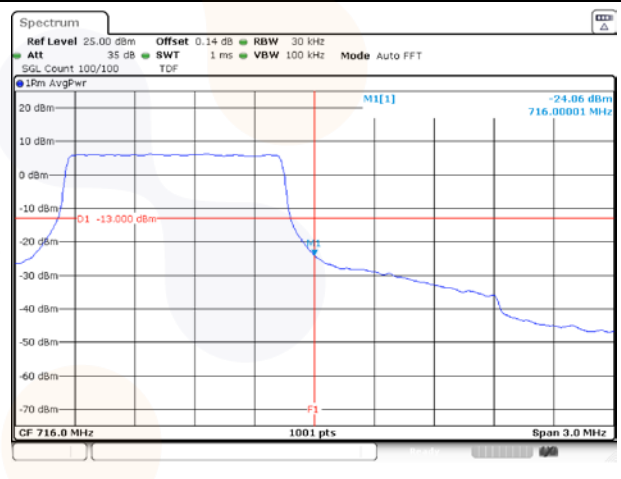
**High channel 1RB**



**Low channel FRB**

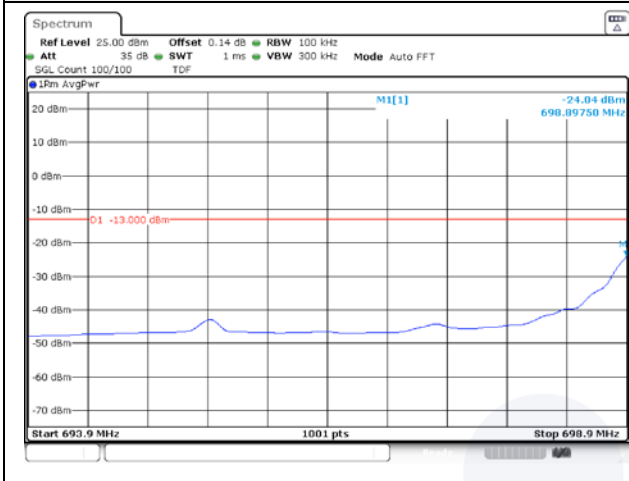


**High channel FRB**

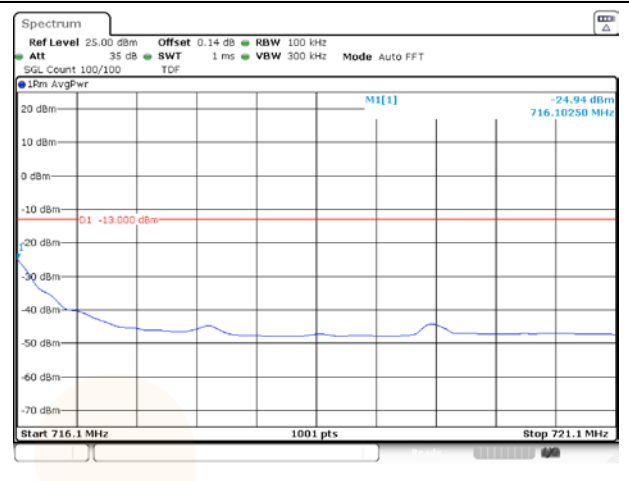


**1.4M BW QPSK**

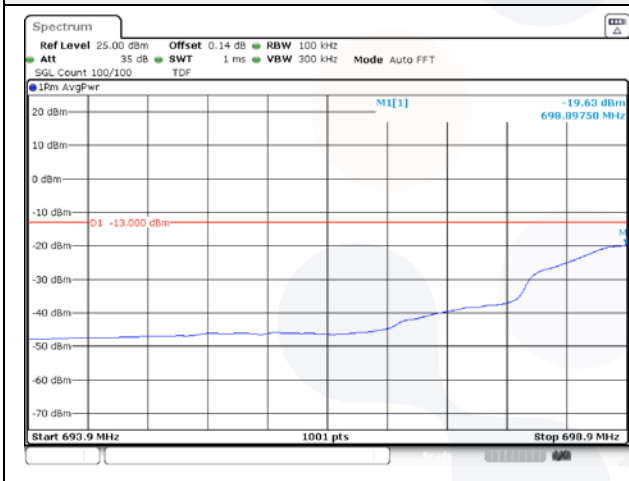
**Lower extended 1RB**



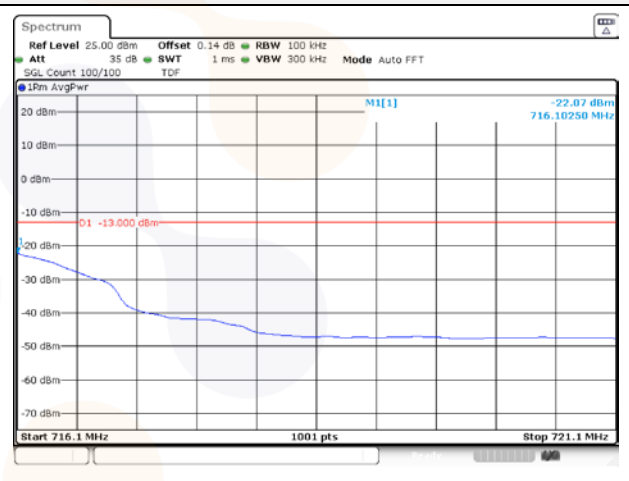
**Upper extended 1RB**



**Lower extended FRB**

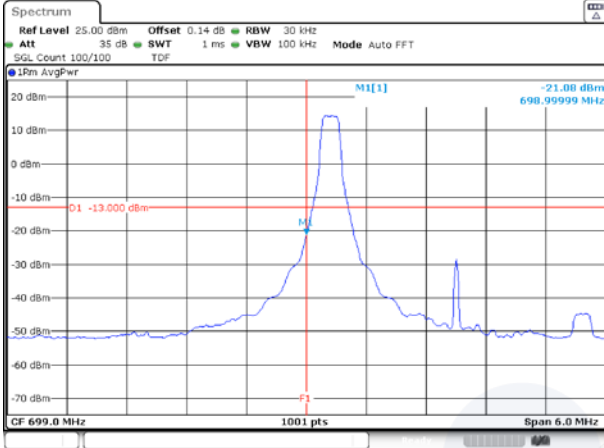


**Upper extended FRB**

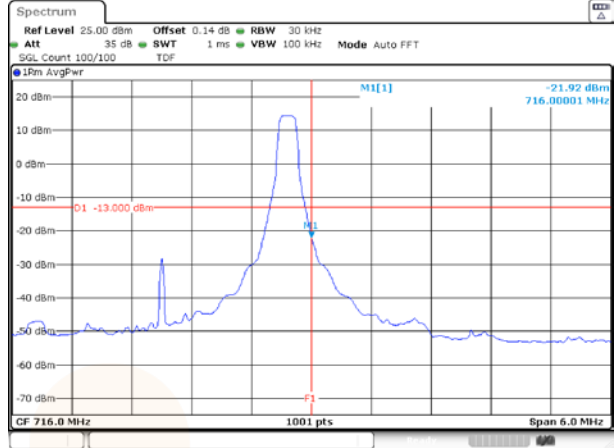


**3M BW QPSK**

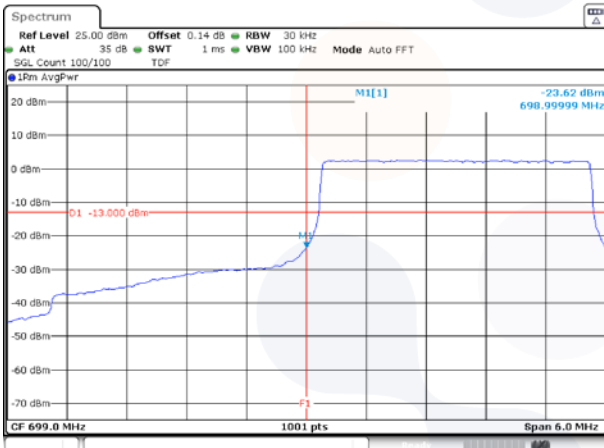
**Low channel 1RB**



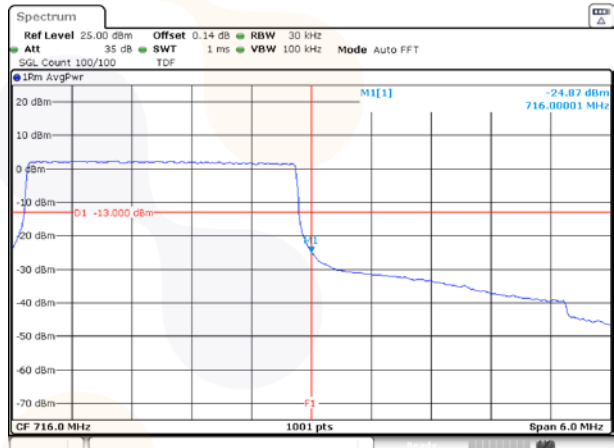
**High channel 1RB**



**Low channel FRB**

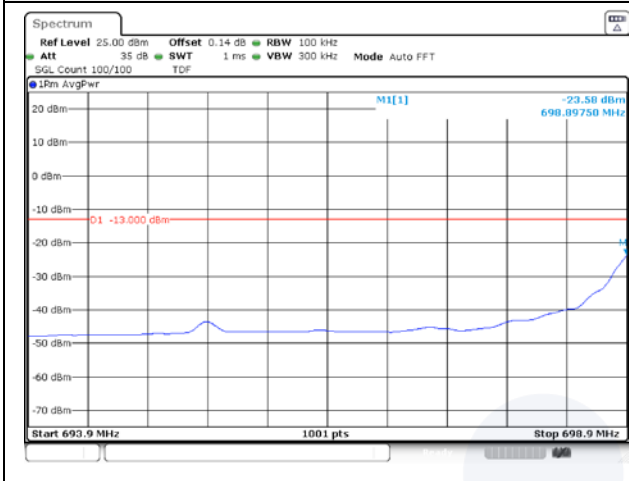


**High channel FRB**

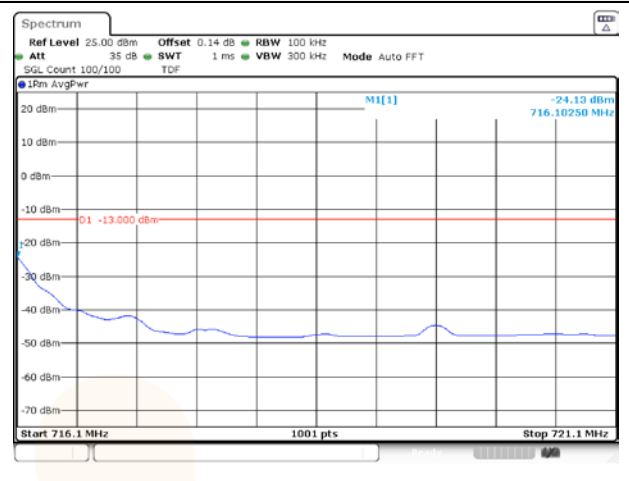


**3M BW QPSK**

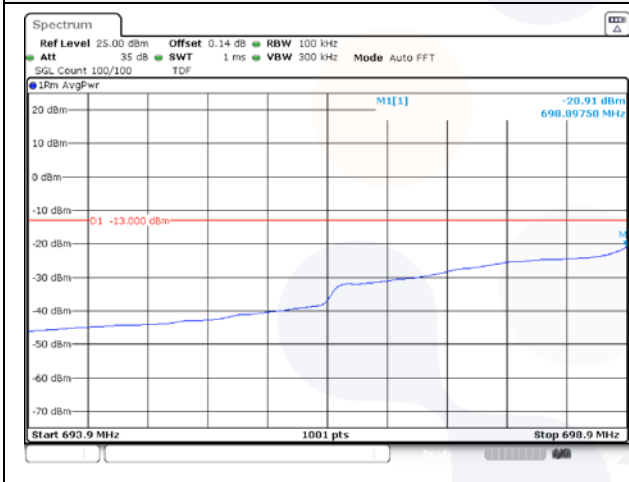
**Lower extended 1RB**



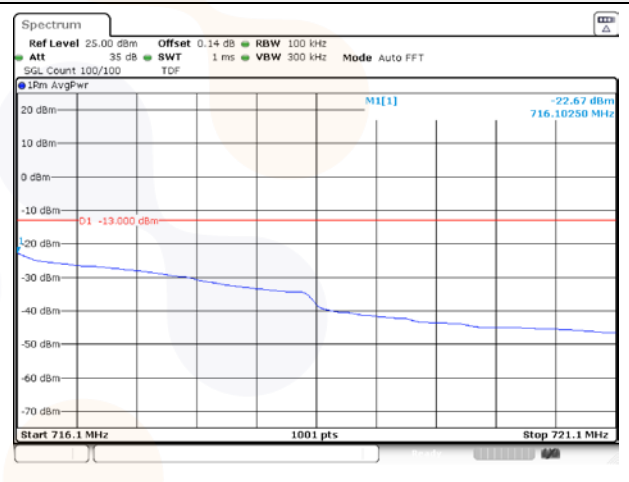
**Upper extended 1RB**



**Lower extended FRB**

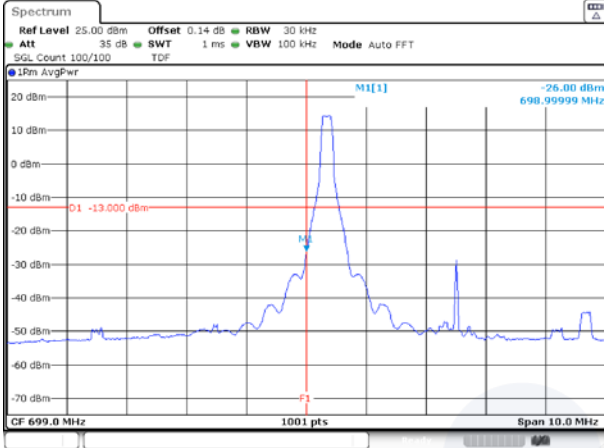


**Upper extended FRB**

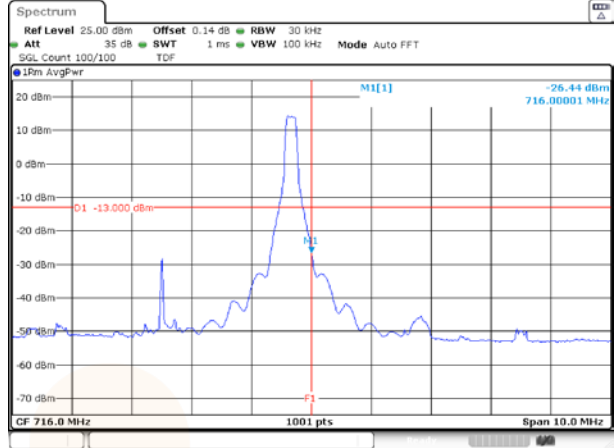


**5M BW QPSK**

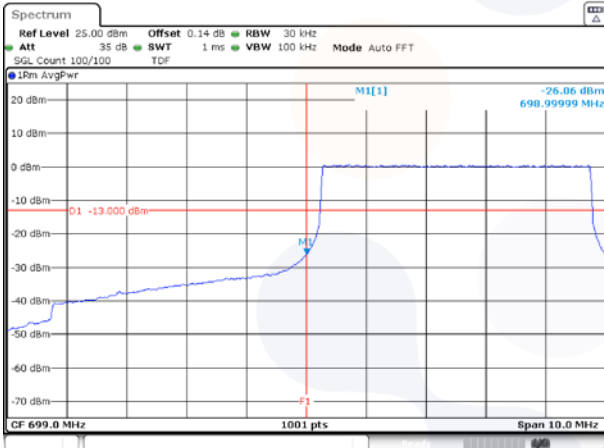
**Low channel 1RB**



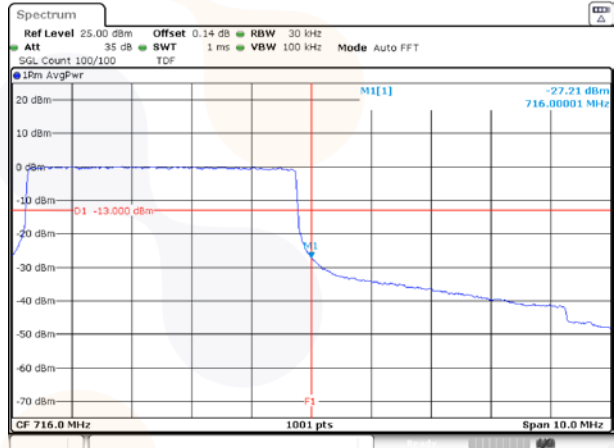
**High channel 1RB**



**Low channel FRB**

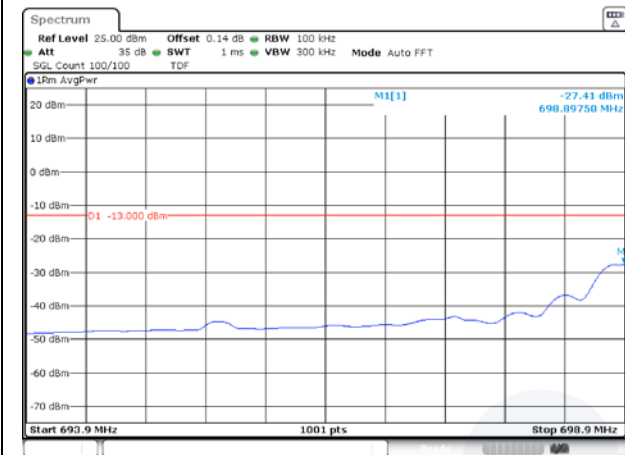


**High channel FRB**



**5M BW QPSK**

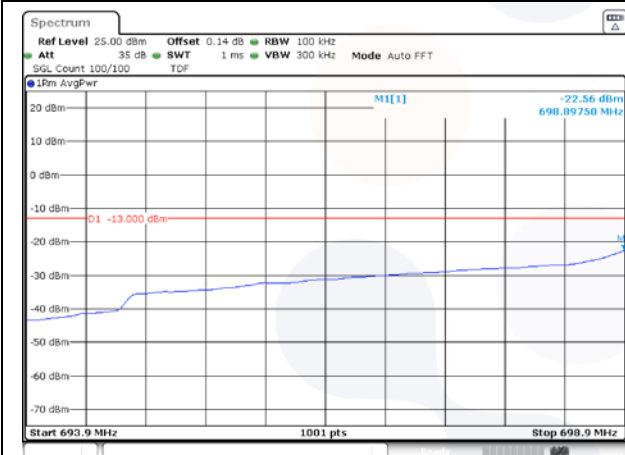
**Lower extended 1RB**



**Upper extended 1RB**



**Lower extended FRB**

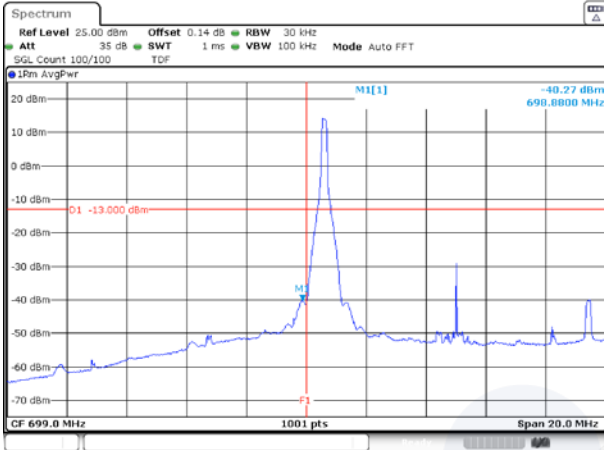


**Upper extended FRB**

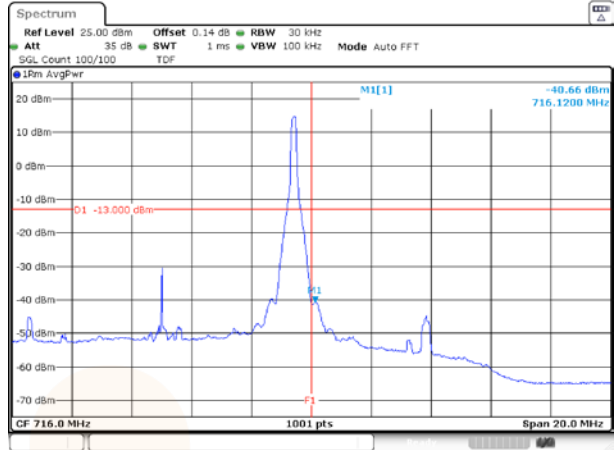


**10M BW QPSK**

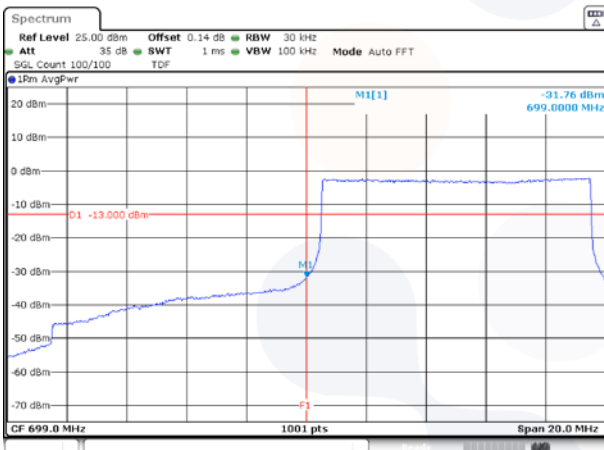
**Low channel 1RB**



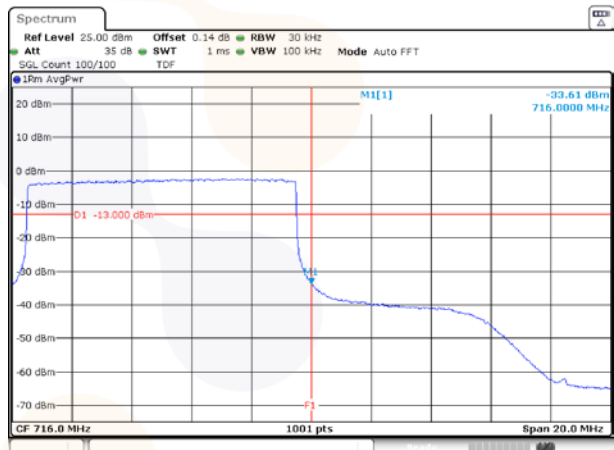
**High channel 1RB**



**Low channel FRB**

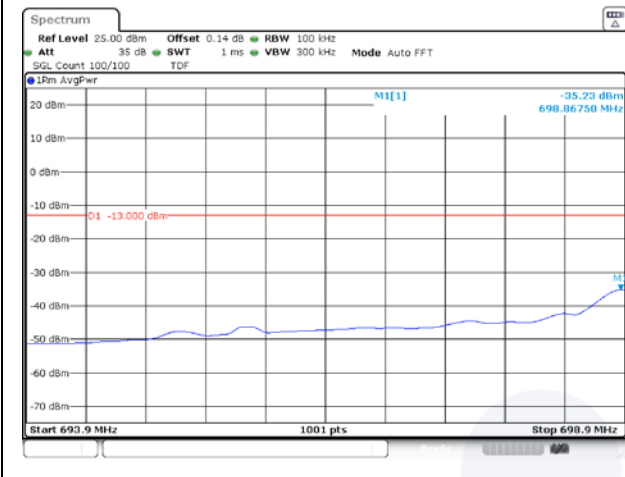


**High channel FRB**

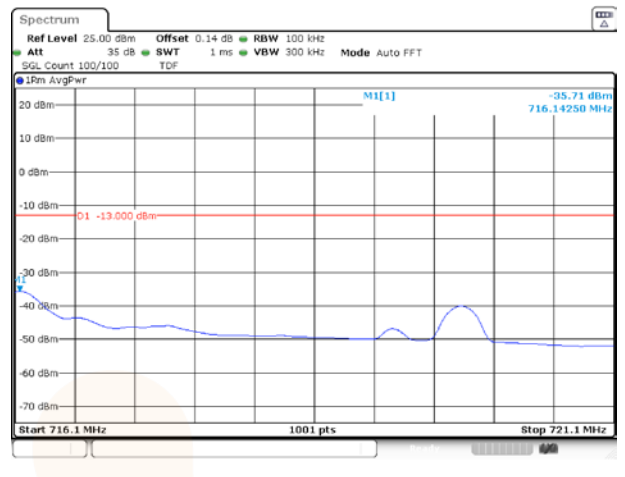


**10M BW QPSK**

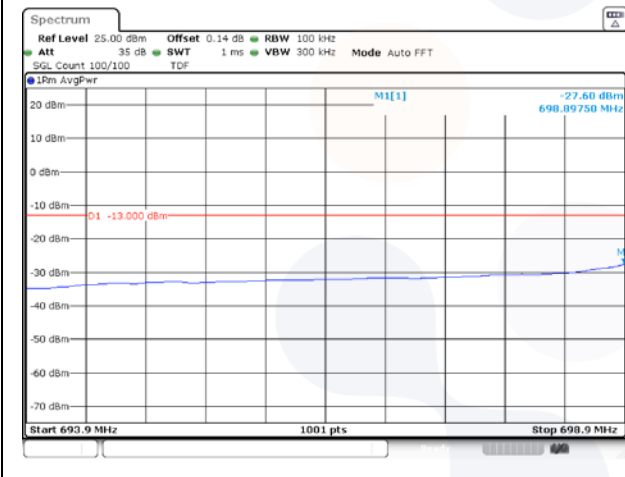
**Lower extended 1RB**



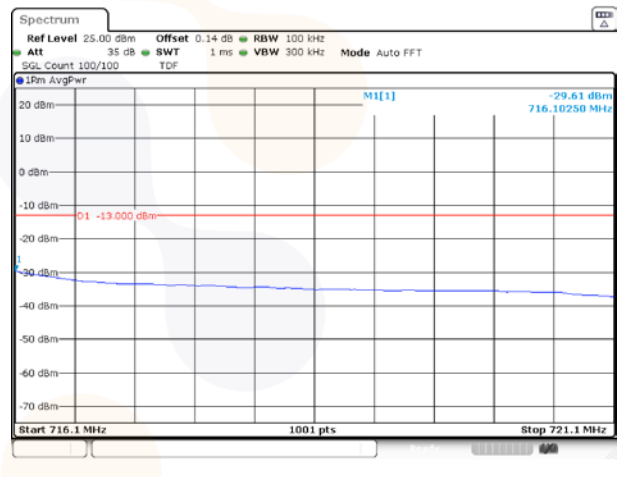
**Upper extended 1RB**



**Lower extended FRB**



**Upper extended FRB**

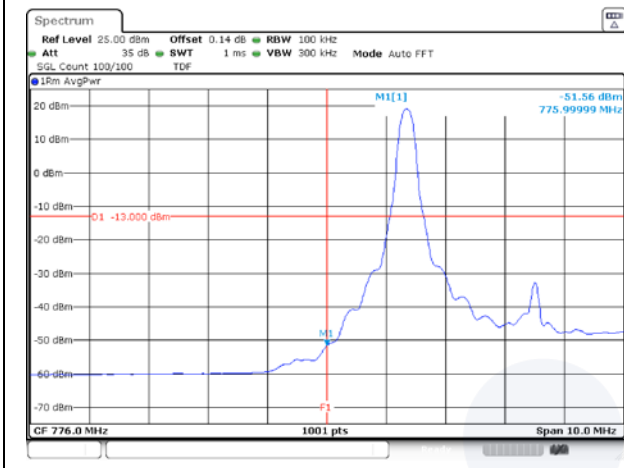




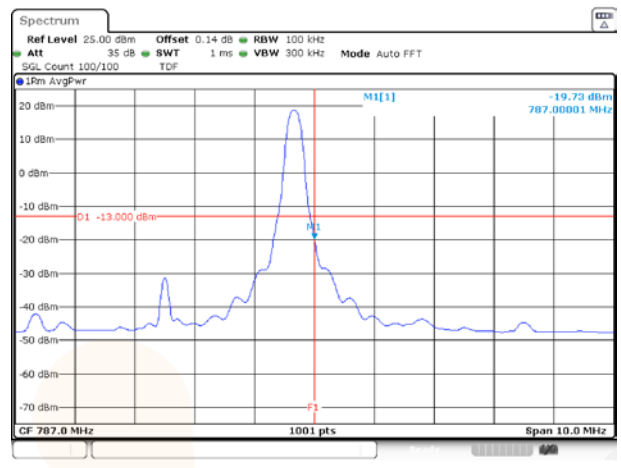
**Test mode: LTE B13**

**5M BW QPSK**

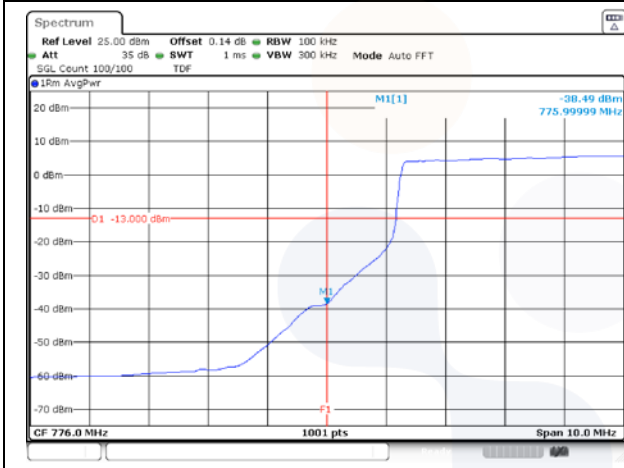
**Low channel 1RB**



**High channel 1RB**



**Low channel FRB**

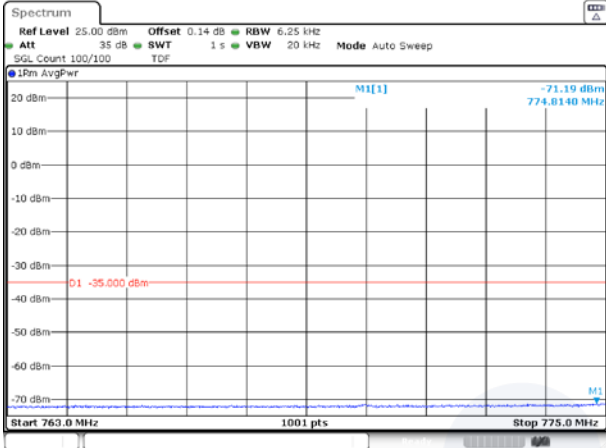


**High channel FRB**

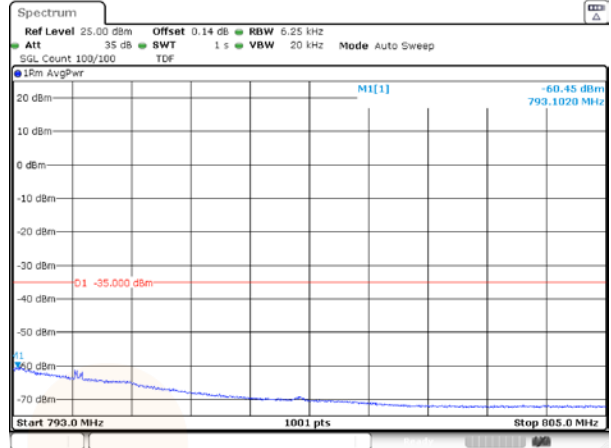


**5M BW QPSK**

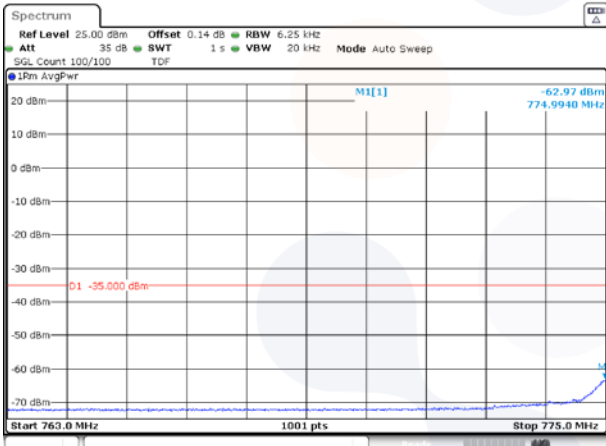
**Lower extended 1RB**



**Upper extended 1RB**



**Lower extended FRB**

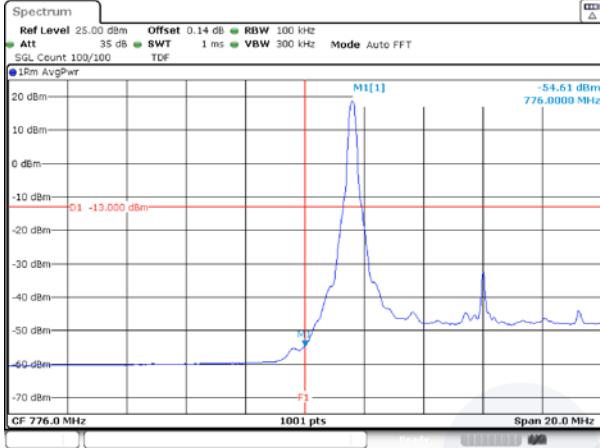


**Upper extended FRB**

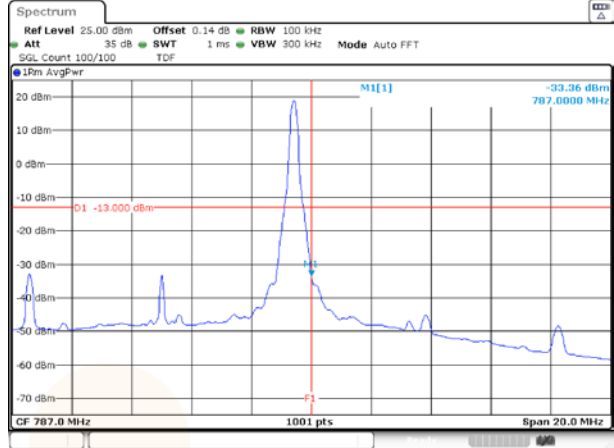


**10M BW QPSK**

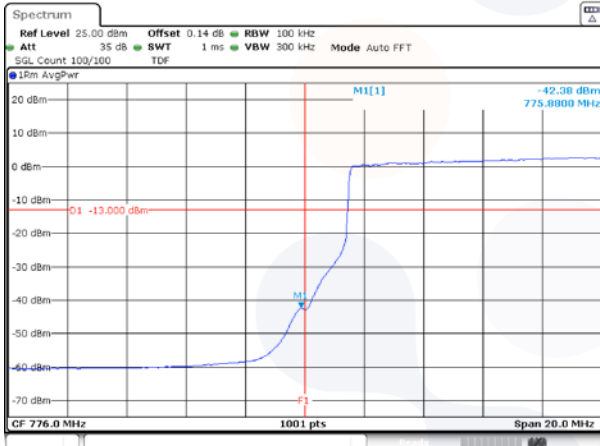
**Middle channel Lower 1RB**



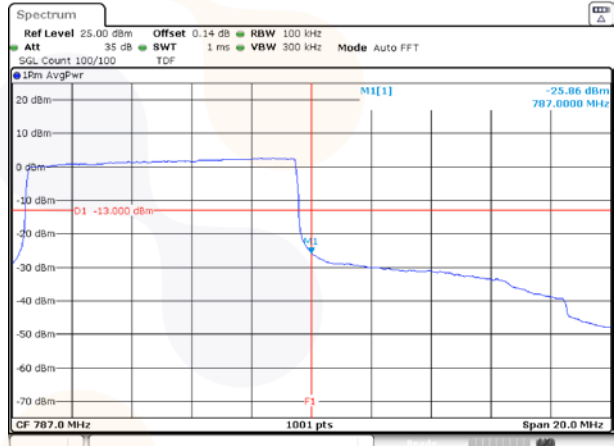
**Middle channel Upper 1RB**



**Middle channel Lower FRB**

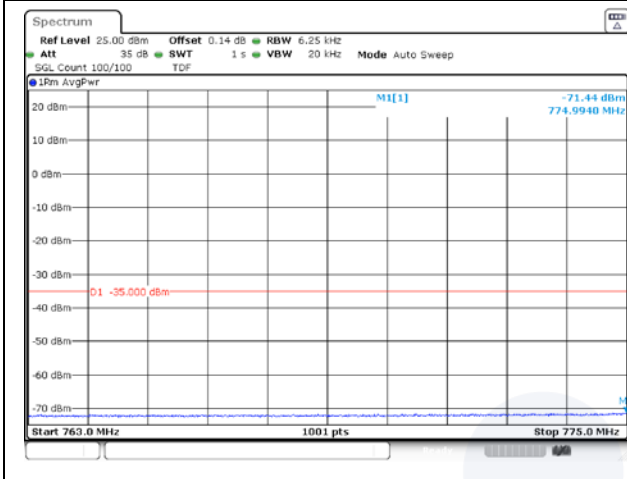


**Middle channel Upper FRB**

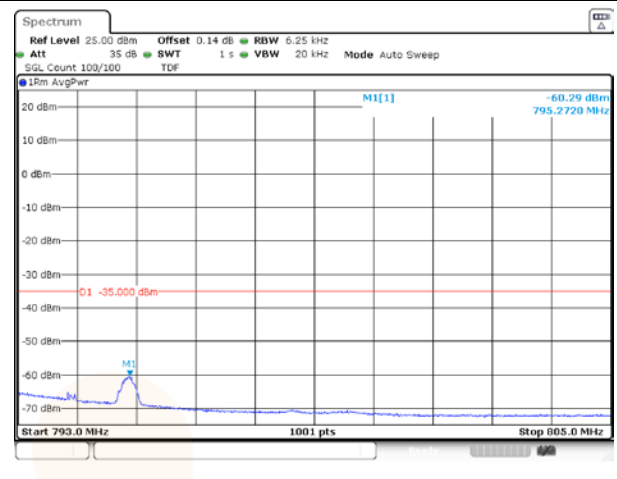


**10M BW QPSK**

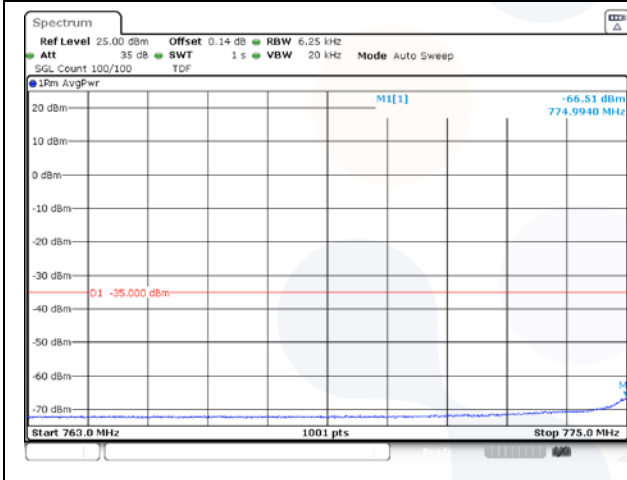
**Lower extended 1RB**



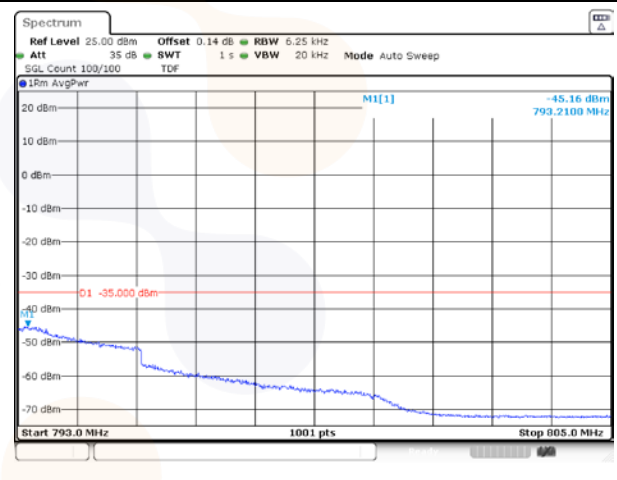
**Upper extended 1RB**



**Lower extended FRB**



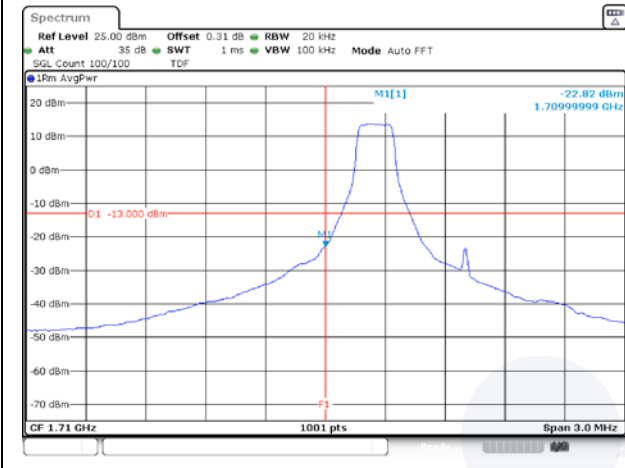
**Upper extended FRB**



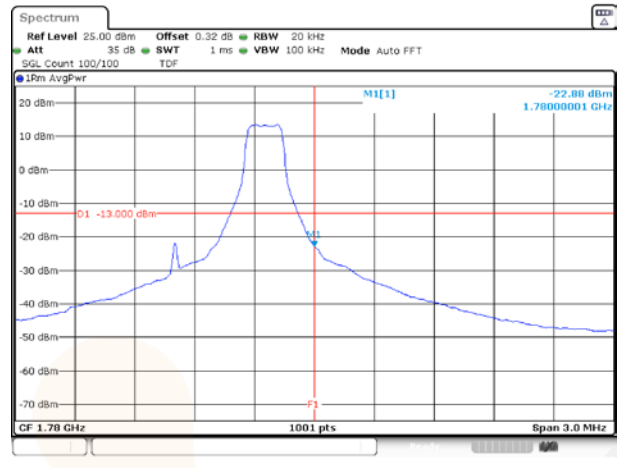
**Test mode: LTE B66/4**

**1.4M BW QPSK**

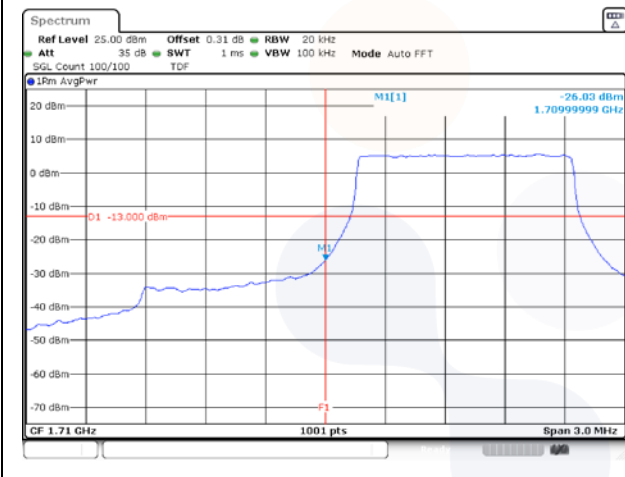
**Low channel 1RB**



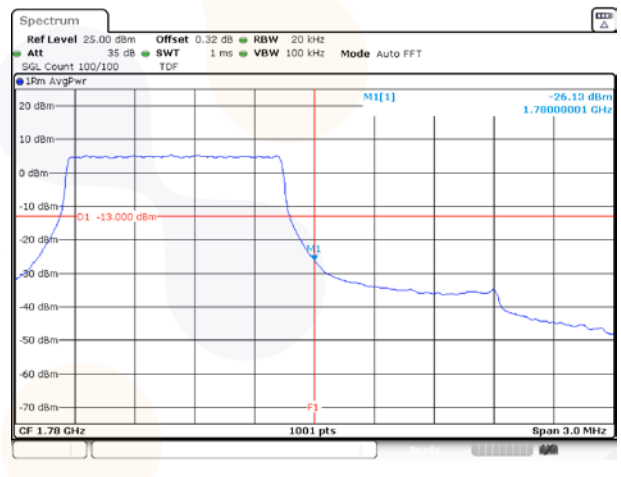
**High channel 1RB**



**Low channel FRB**

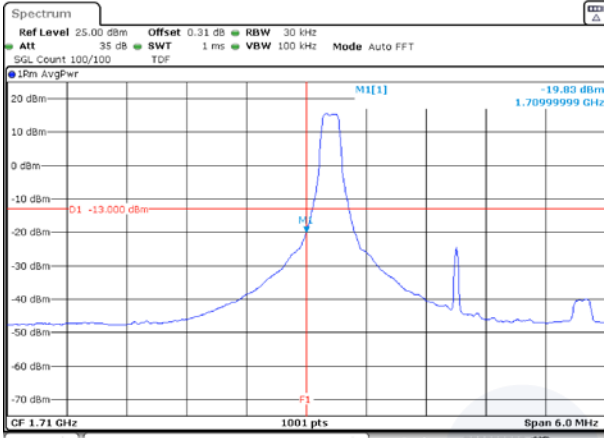


**High channel FRB**

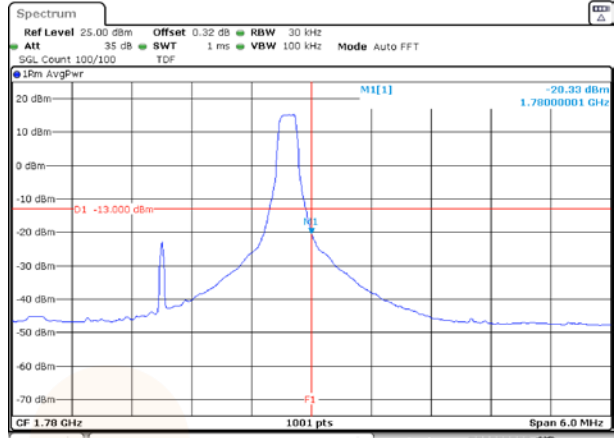


**3M BW QPSK**

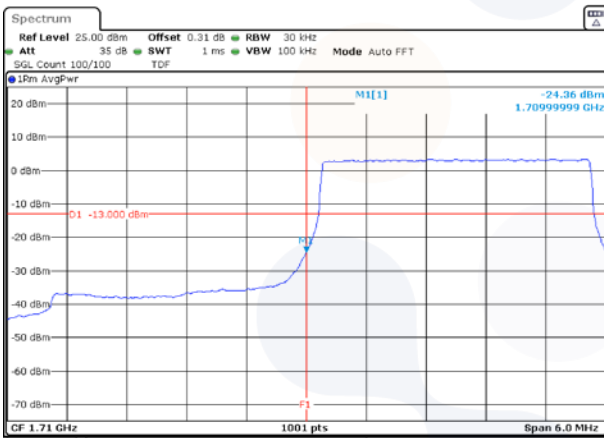
**Low channel 1RB**



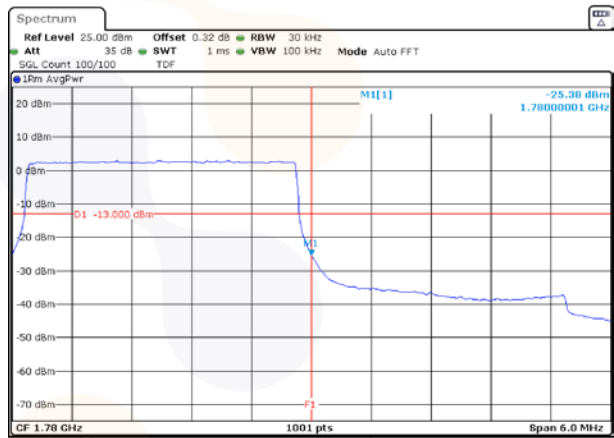
**High channel 1RB**



**Low channel FRB**

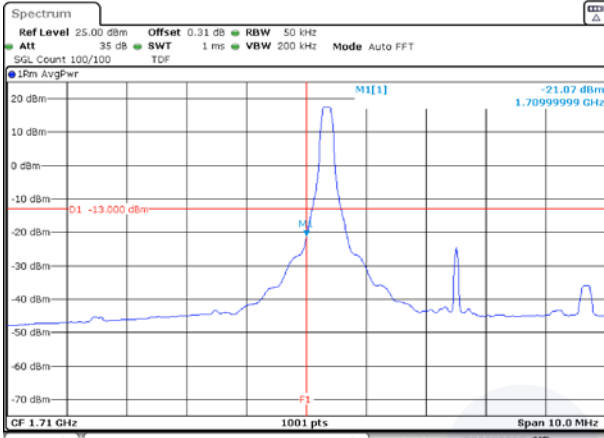


**High channel FRB**

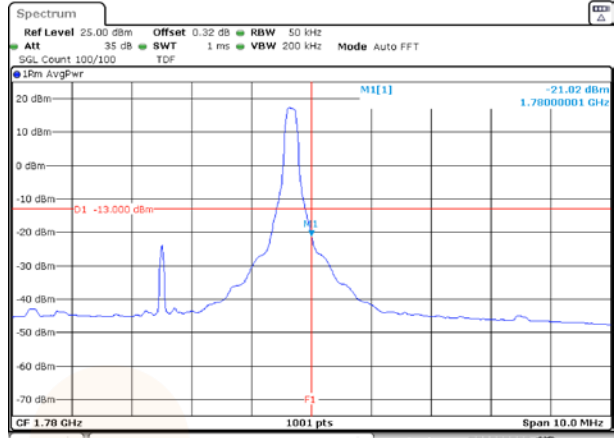


**5M BW QPSK**

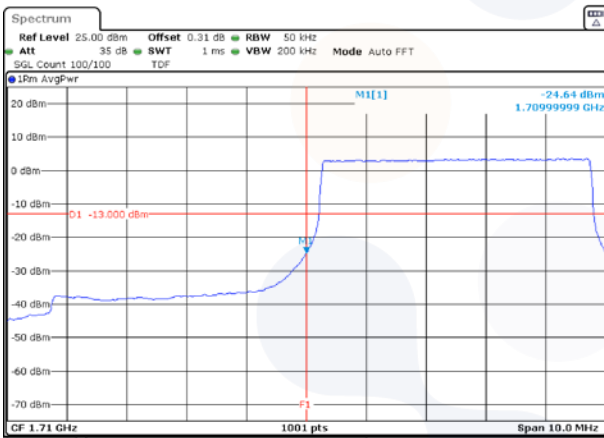
**Low channel 1RB**



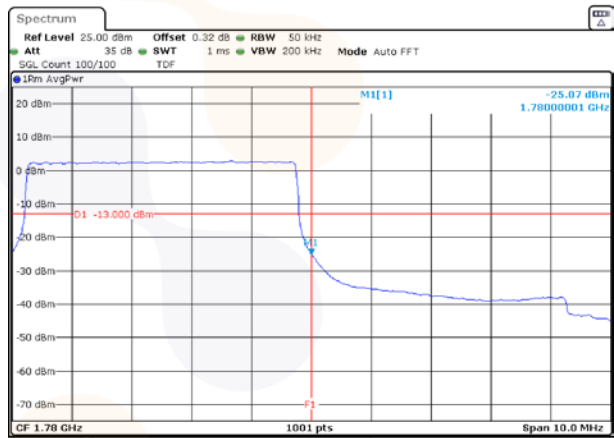
**High channel 1RB**



**Low channel FRB**

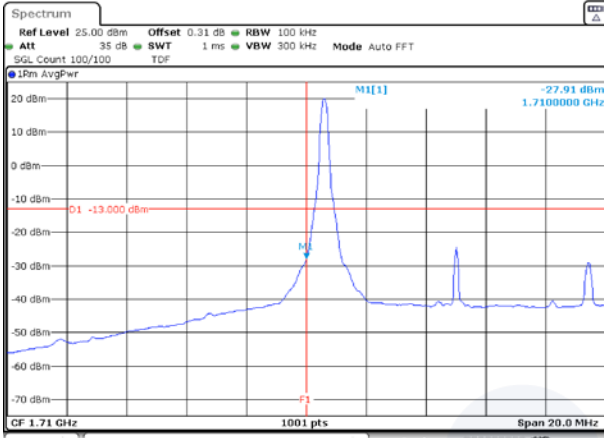


**High channel FRB**

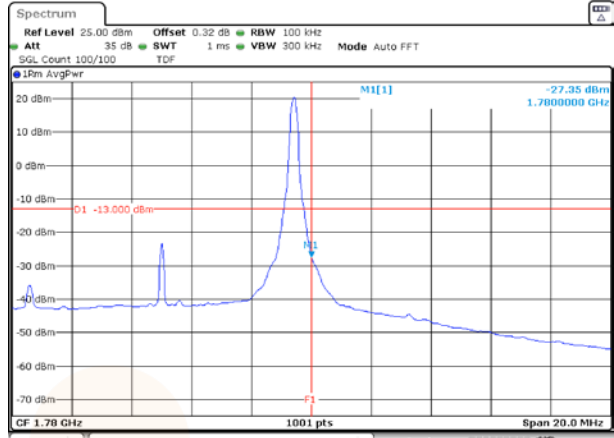


**10M BW QPSK**

**Low channel 1RB**



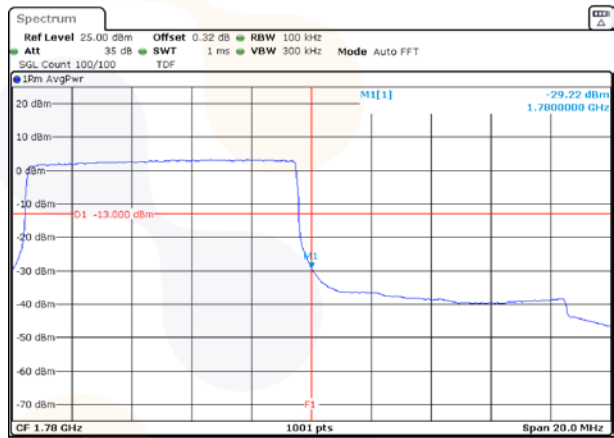
**High channel 1RB**



**Low channel FRB**



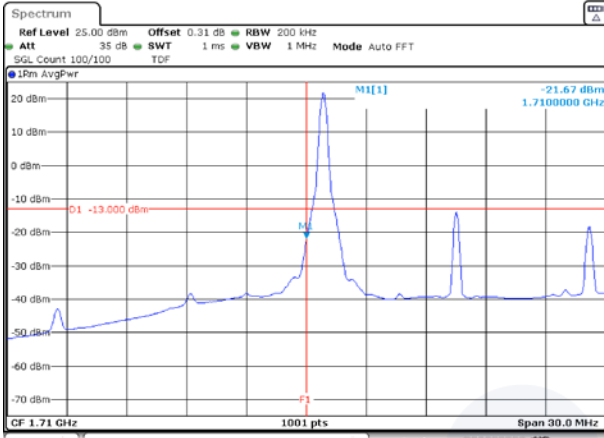
**High channel FRB**



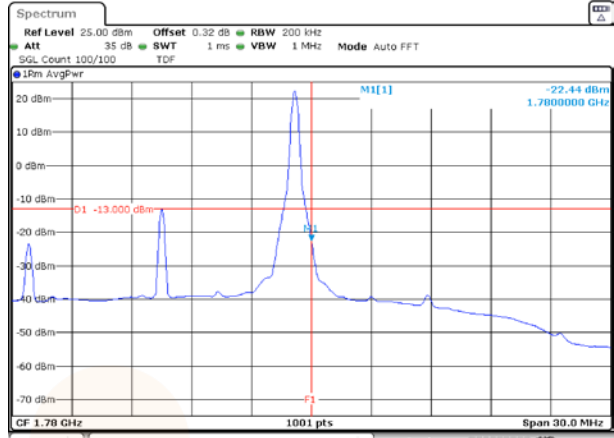


**15M BW QPSK**

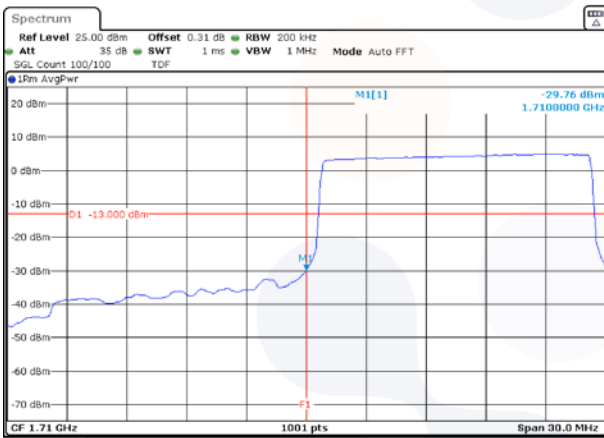
**Low channel 1RB**



**High channel 1RB**



**Low channel FRB**

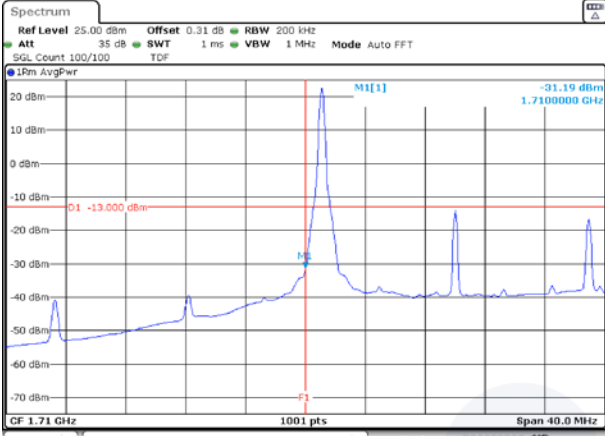


**High channel FRB**

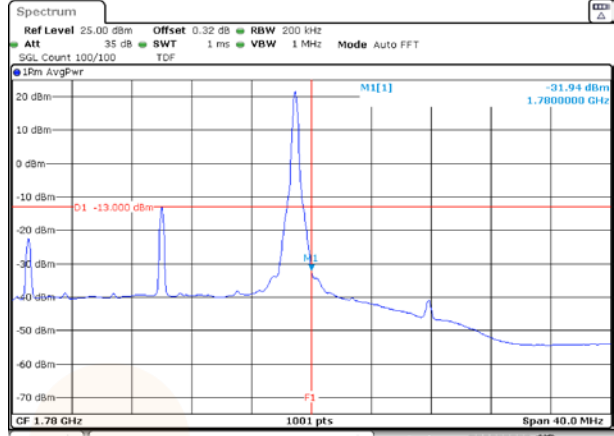


**20M BW QPSK**

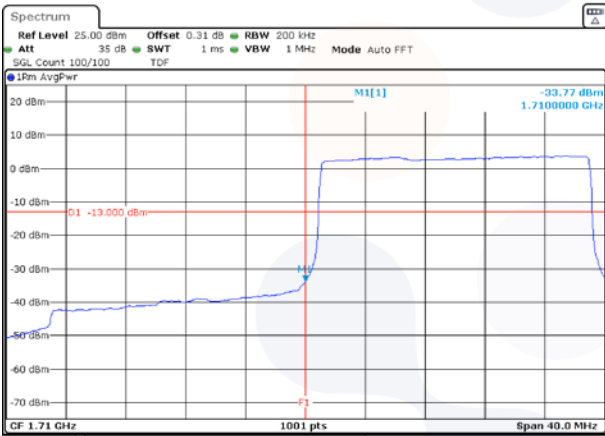
**Low channel 1RB**



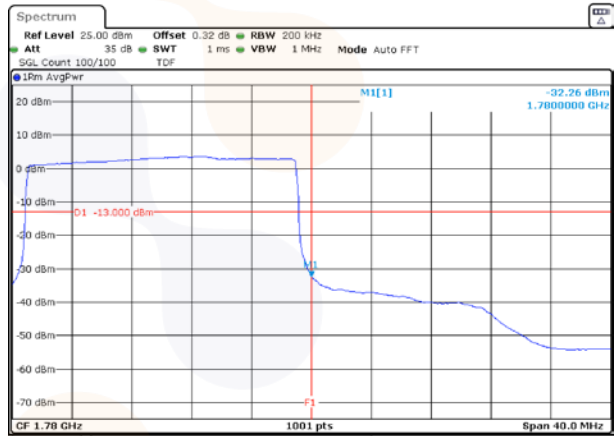
**High channel 1RB**



**Low channel FRB**



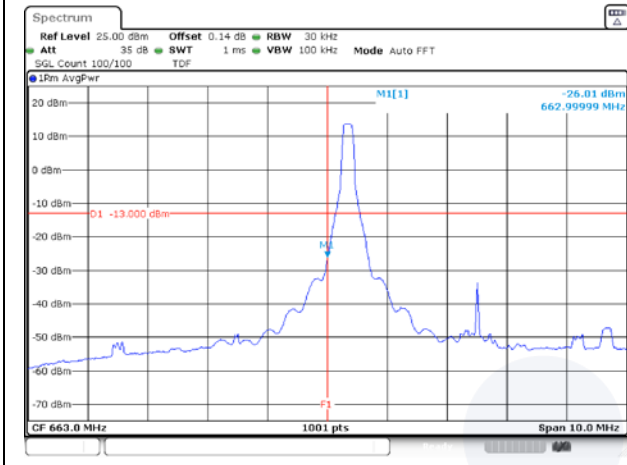
**High channel FRB**



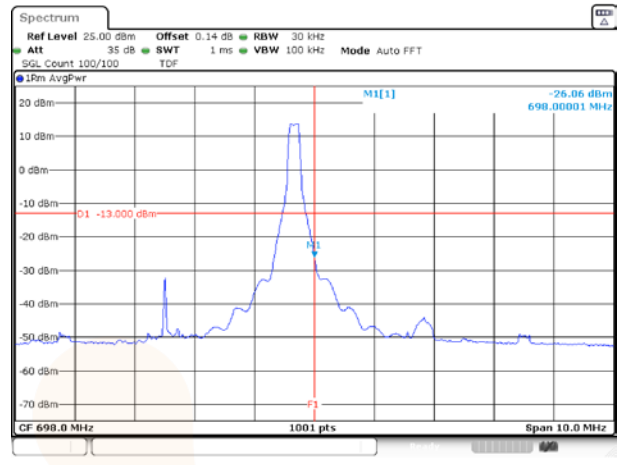
**Test mode: LTE B71**

**5M BW QPSK**

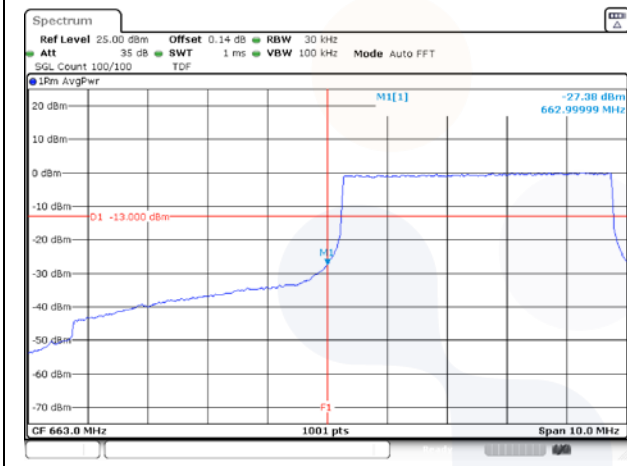
**Low channel 1RB**



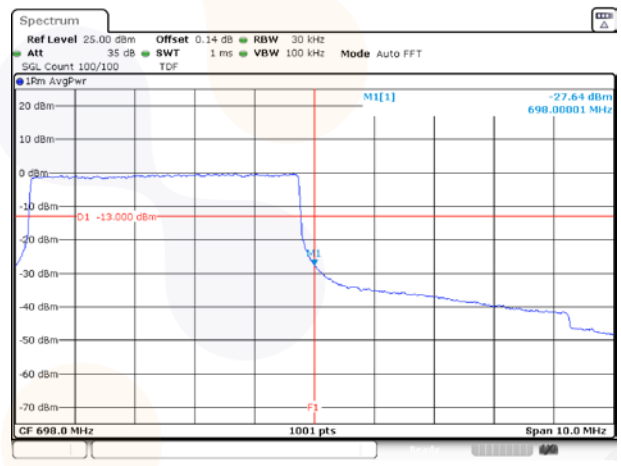
**High channel 1RB**



**Low channel FRB**

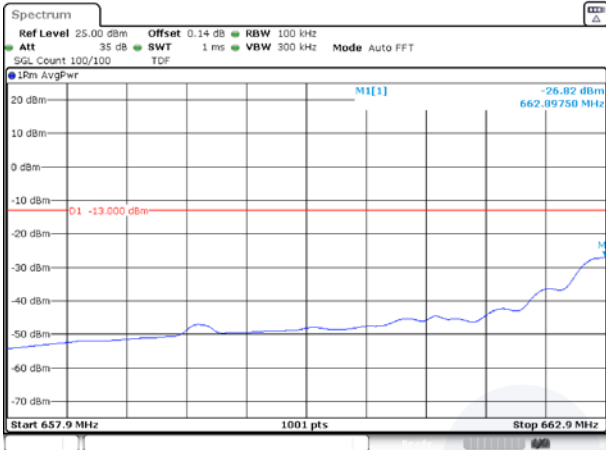


**High channel FRB**

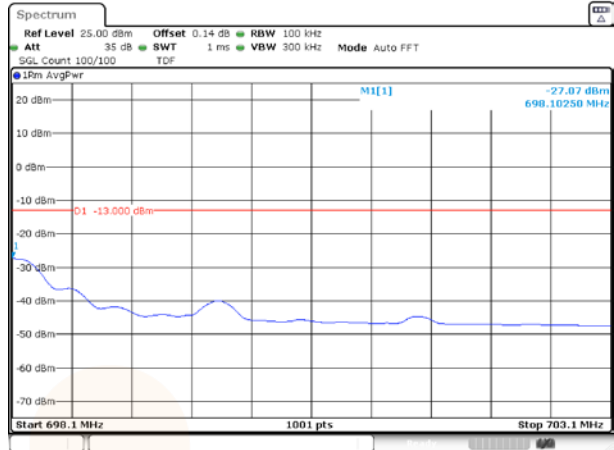


**5M BW QPSK**

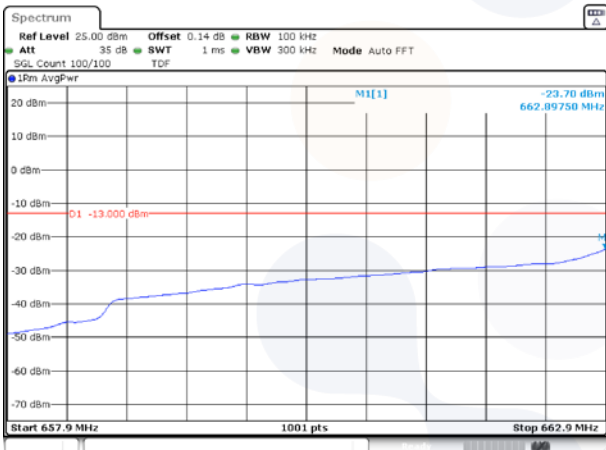
**Lower extended 1RB**



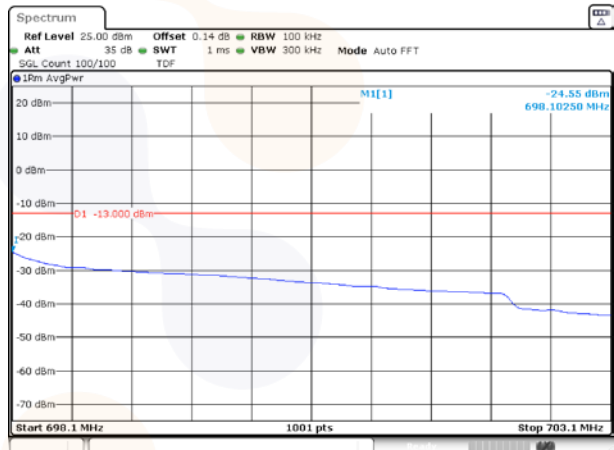
**Upper extended 1RB**



**Lower extended FRB**

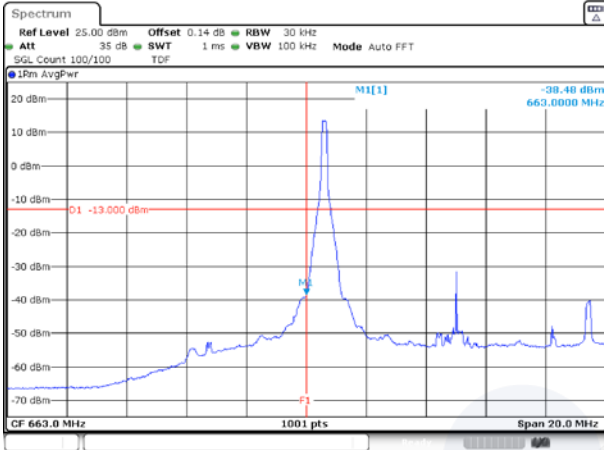


**Upper extended FRB**

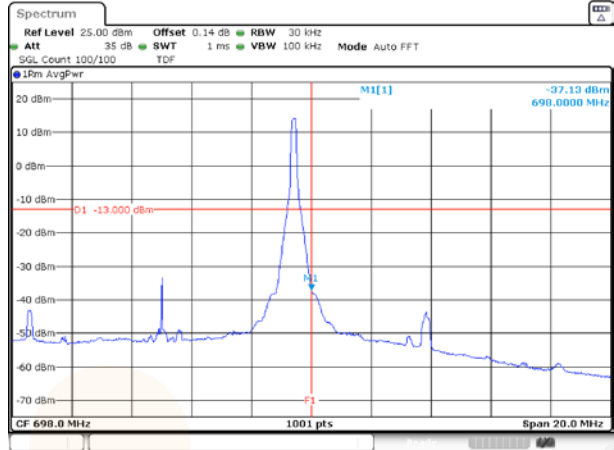


**10M BW QPSK**

**Low channel 1RB**



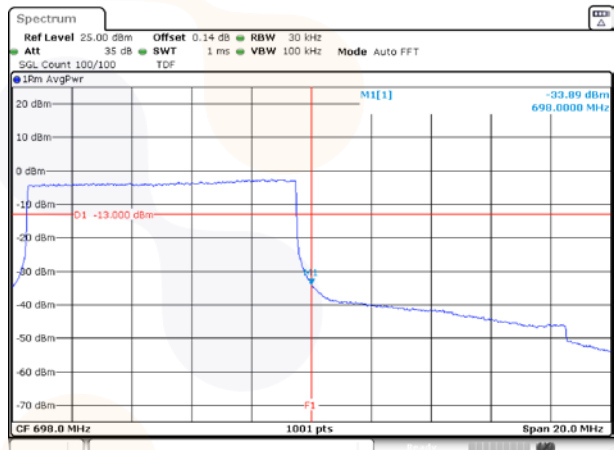
**High channel 1RB**



**Low channel FRB**

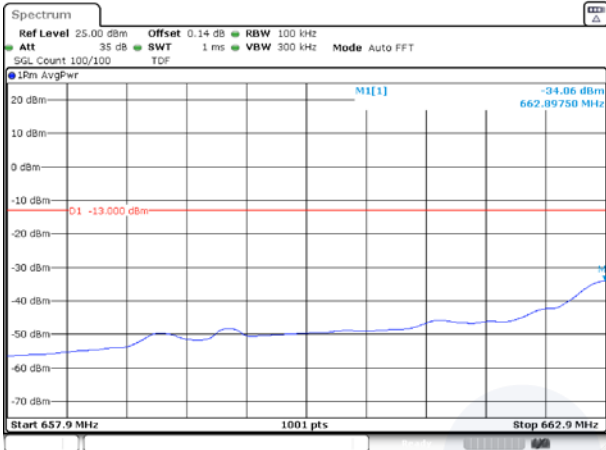


**High channel FRB**

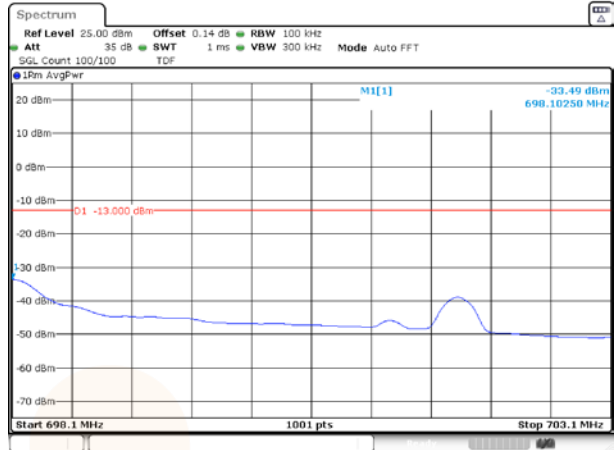


**10M BW QPSK**

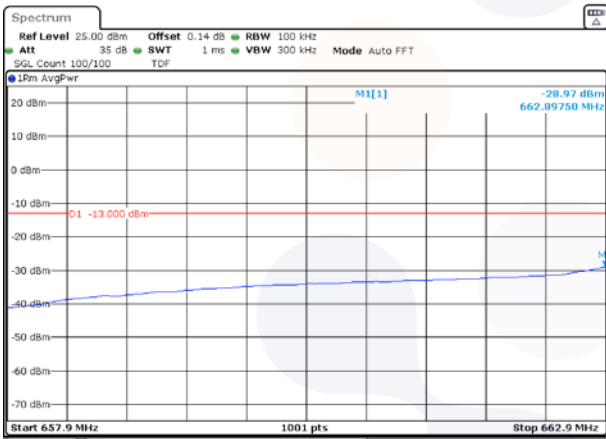
**Lower extended 1RB**



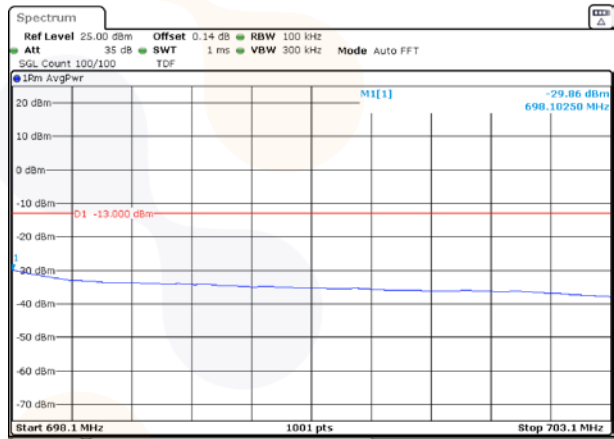
**Upper extended 1RB**



**Lower extended FRB**

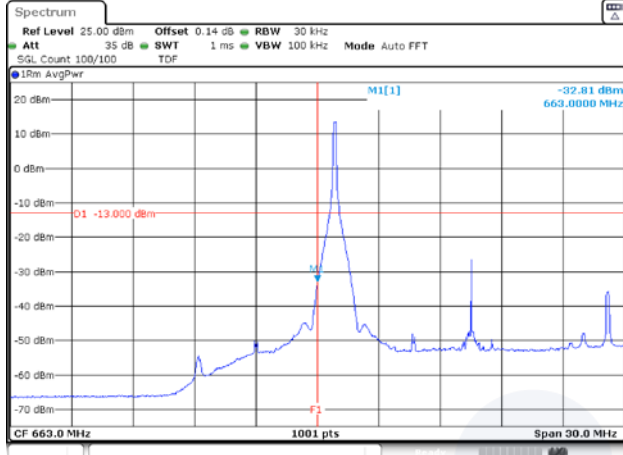


**Upper extended FRB**

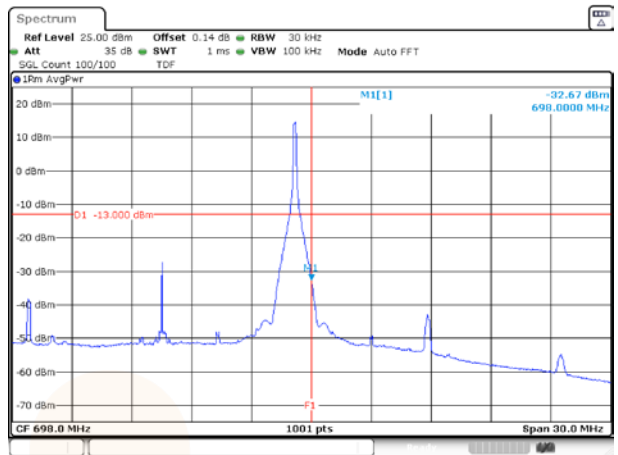


**15M BW QPSK**

**Low channel 1RB**



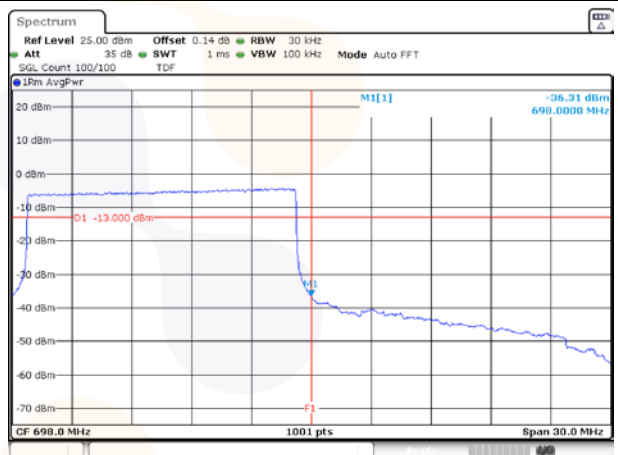
**High channel 1RB**



**Low channel FRB**

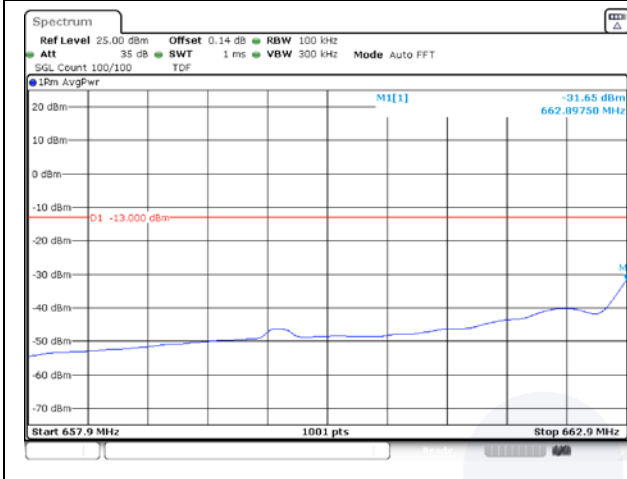


**High channel FRB**

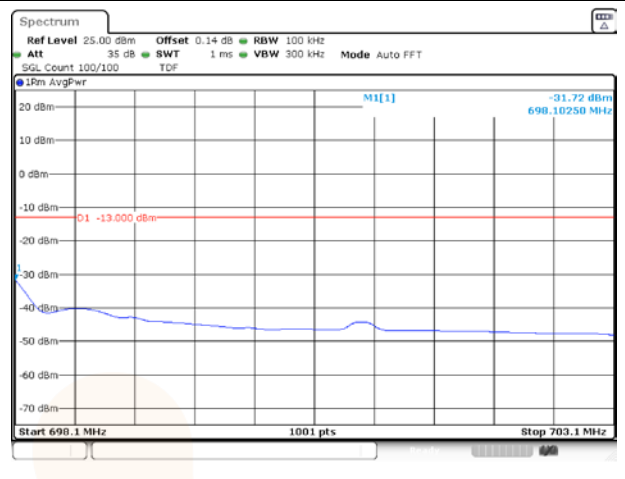


**15M BW QPSK**

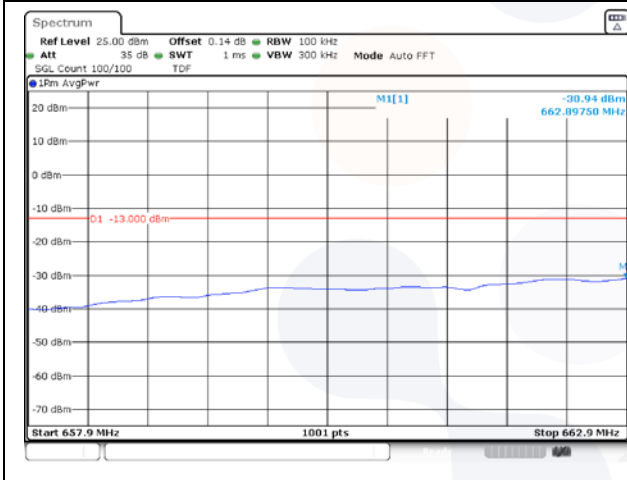
**Lower extended 1RB**



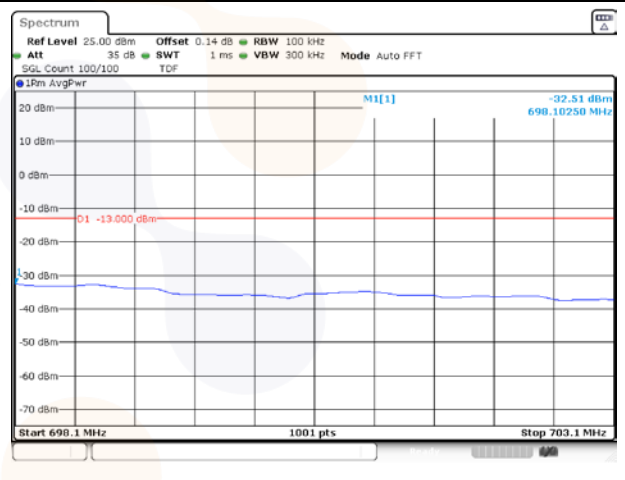
**Upper extended 1RB**



**Lower extended FRB**



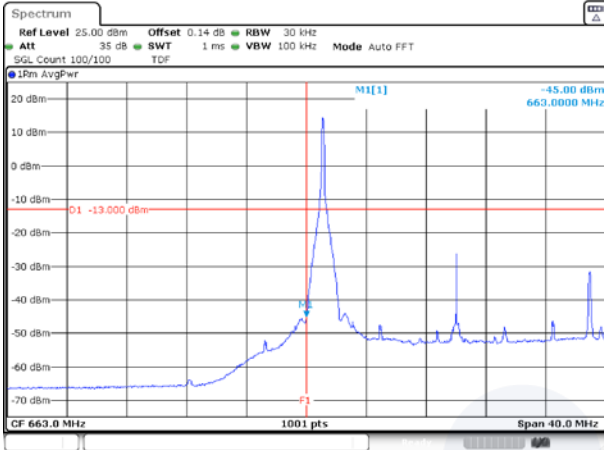
**Upper extended FRB**



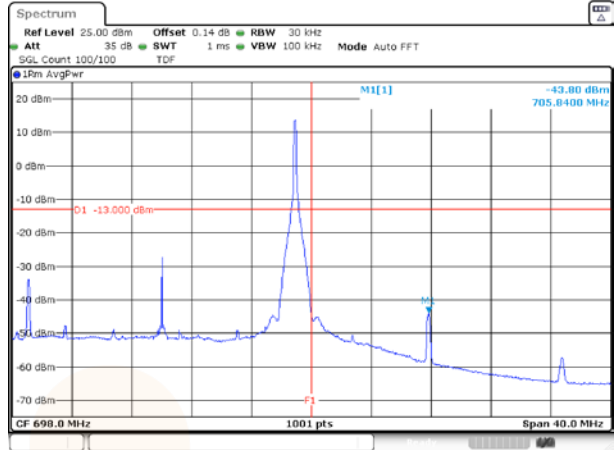


**20M BW QPSK**

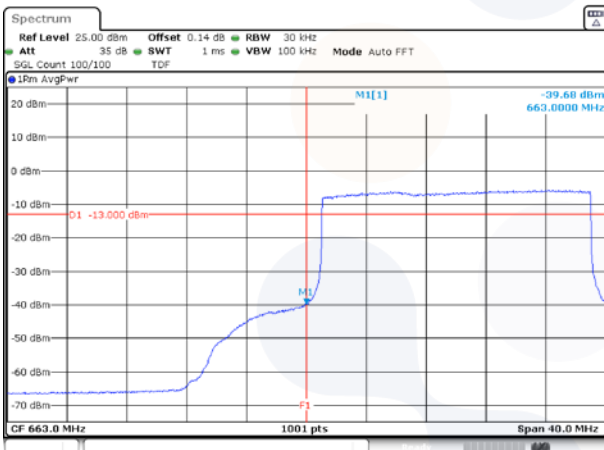
**Low channel 1RB**



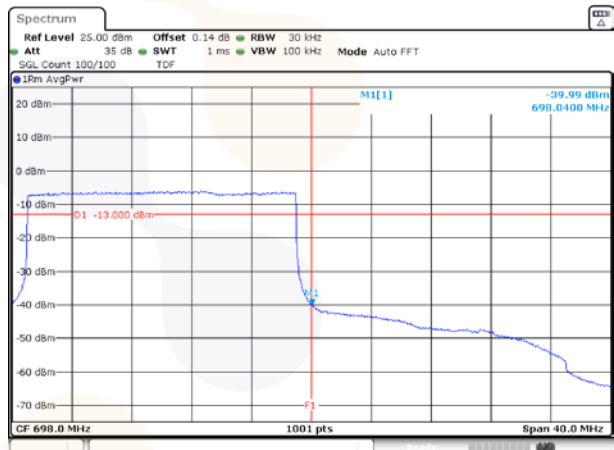
**High channel 1RB**



**Low channel FRB**

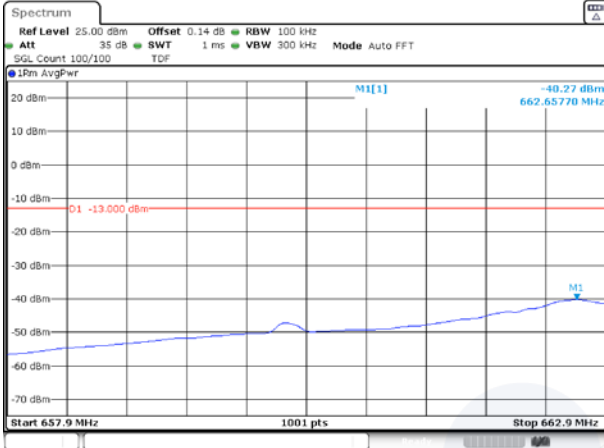


**High channel FRB**

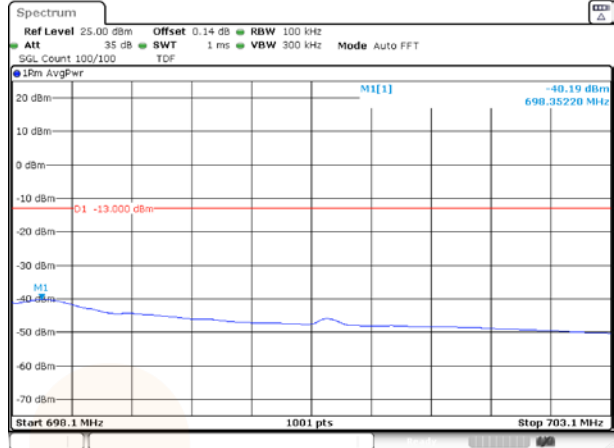


**20M BW QPSK**

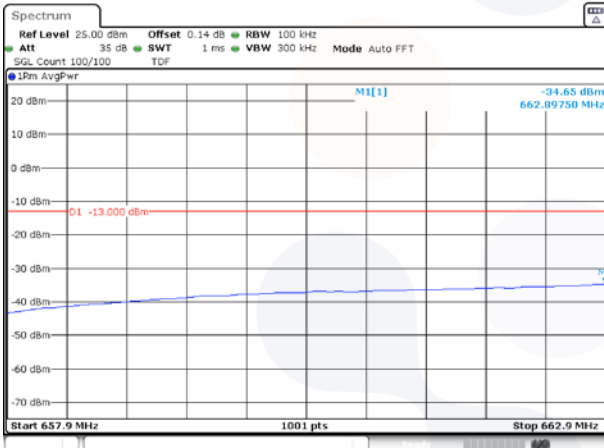
**Lower extended 1RB**



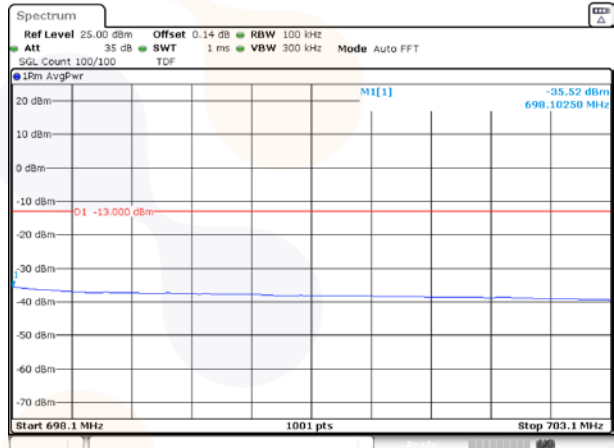
**Upper extended 1RB**



**Lower extended FRB**

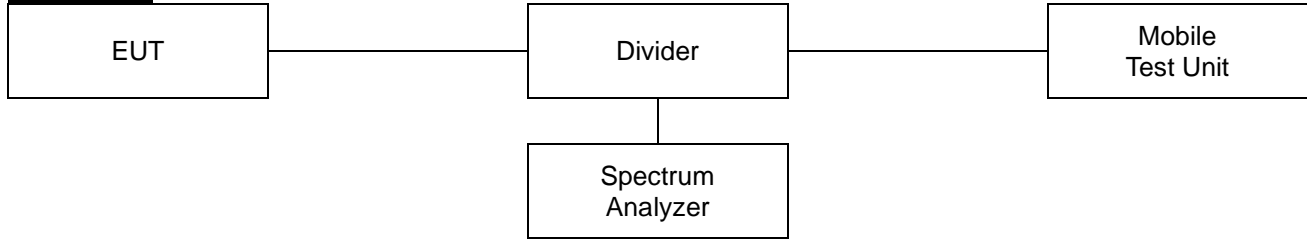


**Upper extended FRB**



## 7.4. Spurious Emissions at Antenna Terminal

### Test setup



### Limit

#### According to §27.53(c)(2),

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than  $76 + 10 \log (P)$  dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment

#### According to §27.53(g),



For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P_{\text{Watts}})$  dB.

#### According to §27.53(h),

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log (P_{\text{Watts}})$  dB.

### Test procedure

971168 D01 v03r01 - Section 6  
ANSI 63.26-2015 – Section 5.7

<p><b>Eurofins KCTL Co.,Ltd.</b> 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea TEL: 82-70-5008-1021 FAX: 82-505-299-8311 <a href="http://www.kctl.co.kr">www.kctl.co.kr</a></p>	<p>Report No.: KR24-SRF0100 Page (78) of (124)</p>	<p>   </p>
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**Test settings**

- 1) Start frequency was set to 30 MHz and stop frequency was set to at least 10<sup>th</sup> the fundamental frequency.
- 2) Detector = RMS
- 3) Sweep time = auto couple.
- 4) Trace mode = trace average
- 5) Allow trace to fully stabilize.
- 6) Please see test notes below RBW and VBW settings.

**Notes:**

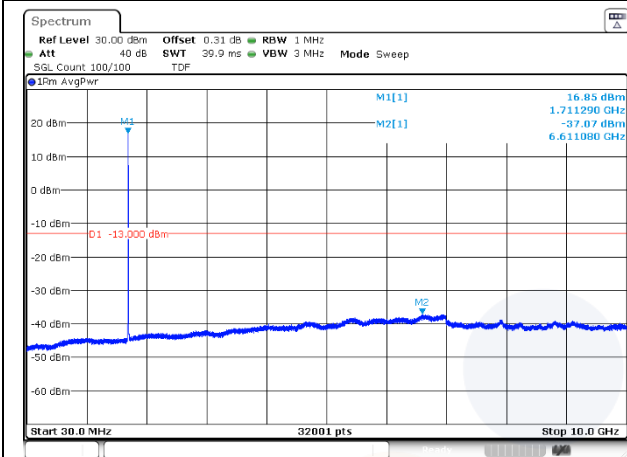
1. Per 27.53(c), 27.53(g), 27.53(h)(3), compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz.  
The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
2. All modes of operation were investigated and the worst-case configuration results are reported.

**Test results**

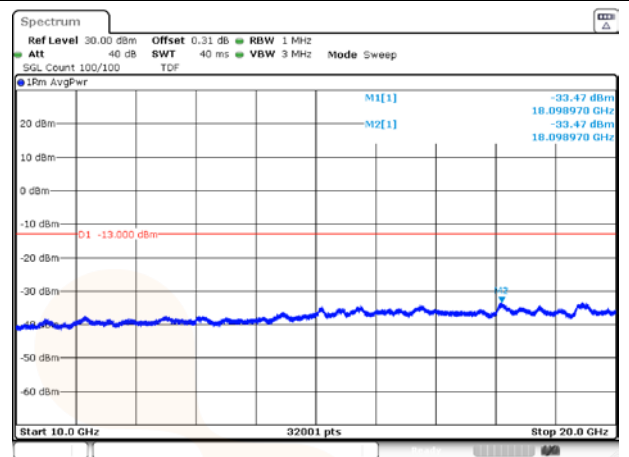
**Test mode: WCDMA 1700**

**RMC**

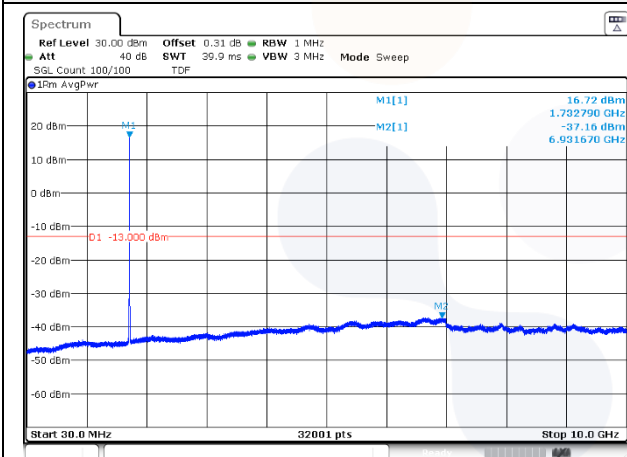
**Low channel (30 MHz ~ 10 GHz)**



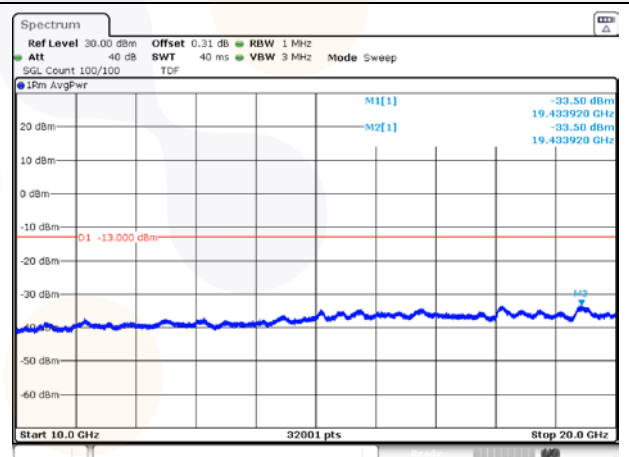
**Low channel (10 GHz ~ 20 GHz)**



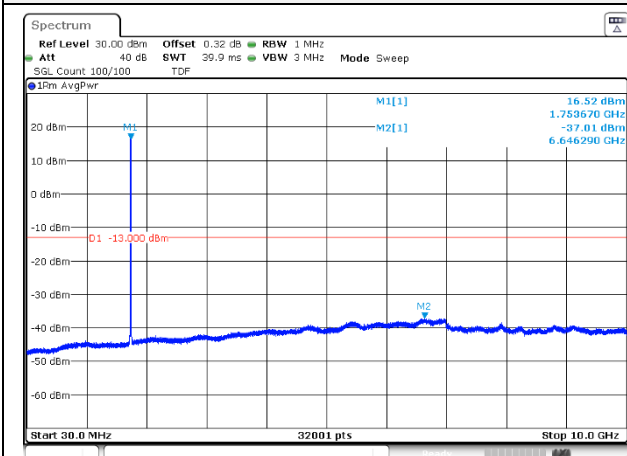
**Middle channel (30 MHz ~ 10 GHz)**



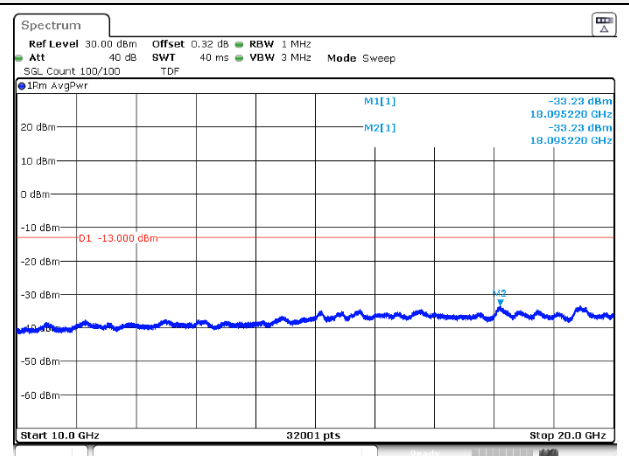
**Middle channel (10 GHz ~ 20 GHz)**



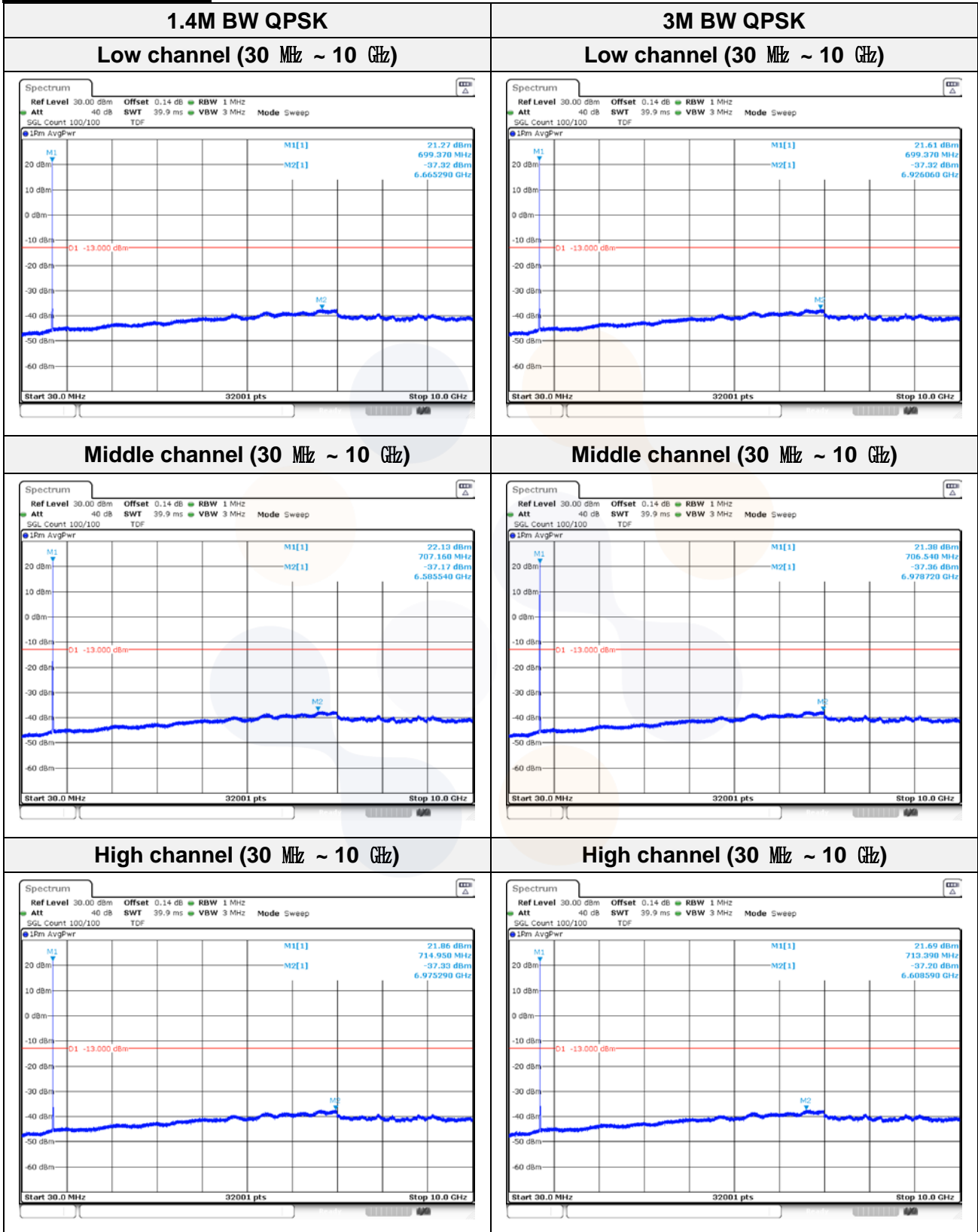
**High channel (30 MHz ~ 10 GHz)**



**High channel (10 GHz ~ 20 GHz)**

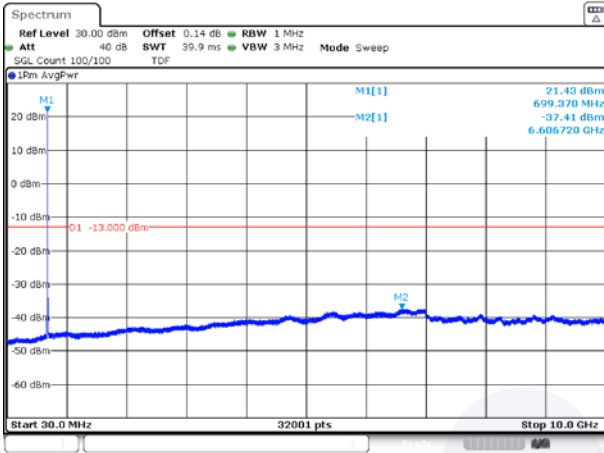


**Test mode: LTE B12**



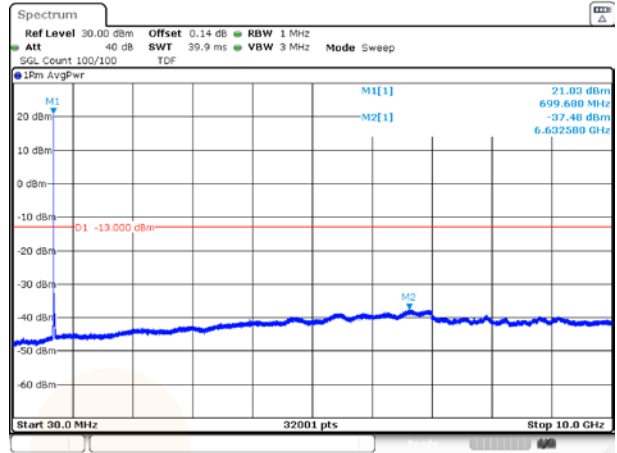
**5M BW QPSK**

**Low channel (30 MHz ~ 10 GHz)**

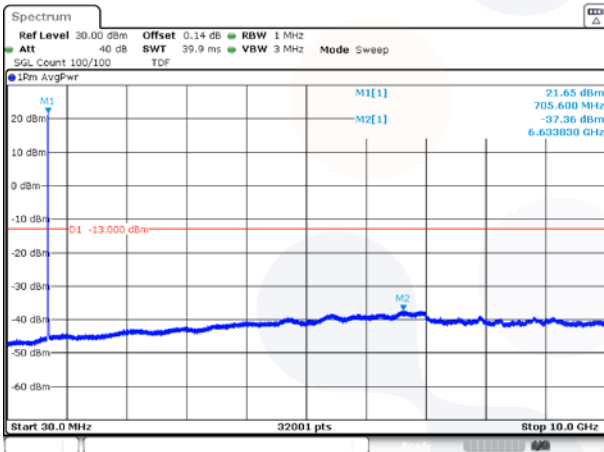


**10M BW QPSK**

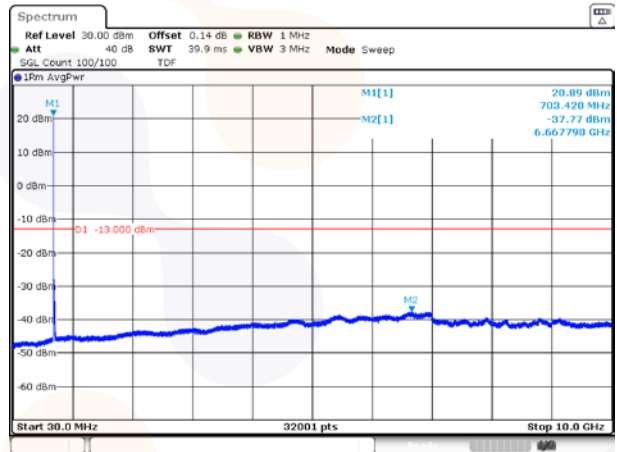
**Low channel (30 MHz ~ 10 GHz)**



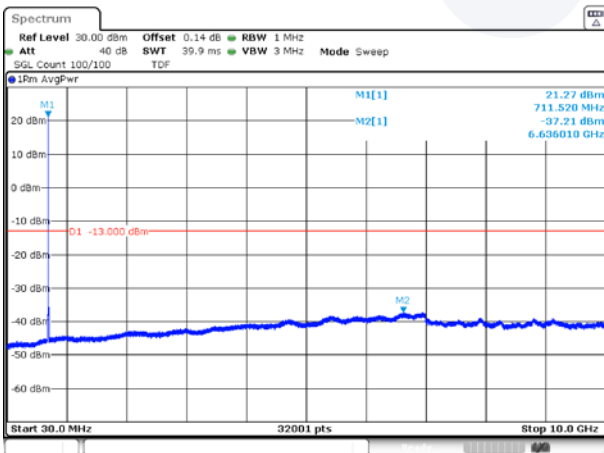
**Middle channel (30 MHz ~ 10 GHz)**



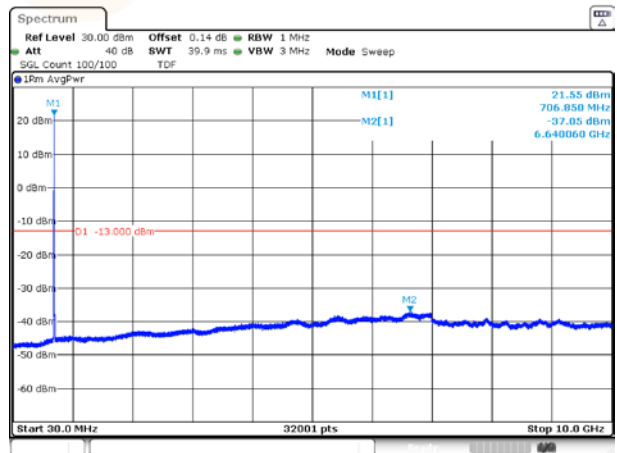
**Middle channel (30 MHz ~ 10 GHz)**



**High channel (30 MHz ~ 10 GHz)**



**High channel (30 MHz ~ 10 GHz)**



**Test mode: LTE B13**

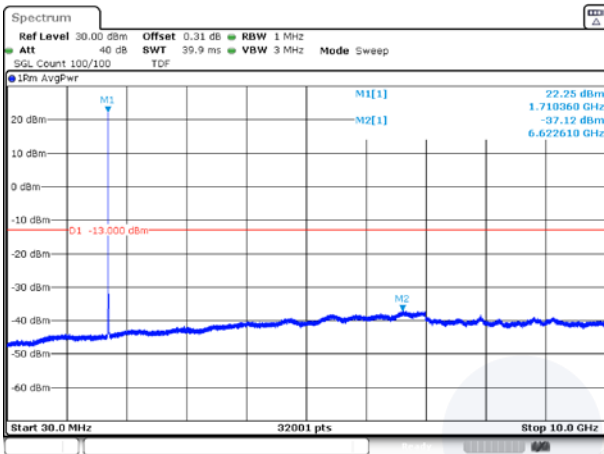
5M BW QPSK	10M BW QPSK
<p align="center"><b>Low channel (30 MHz ~ 10 GHz)</b></p>	<p align="center"><b>Middle channel (30 MHz ~ 10 GHz)</b></p>
<p align="center"><b>Middle channel (30 MHz ~ 10 GHz)</b></p>	<p align="center">-</p>
	<p align="center">Blank</p>
<p align="center"><b>High channel (30 MHz ~ 10 GHz)</b></p>	<p align="center">-</p>
	<p align="center">Blank</p>



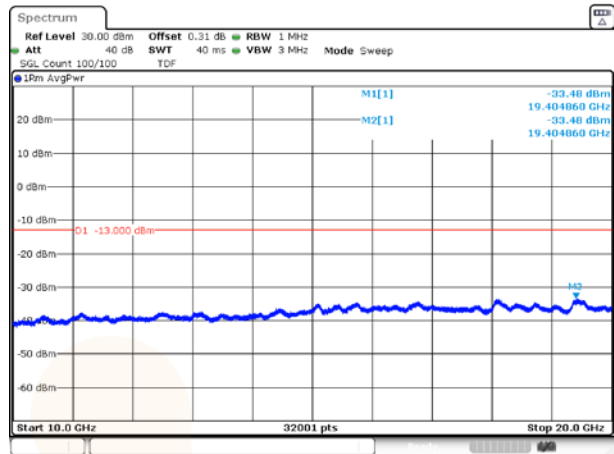
**Test mode: LTE B66/4**

**1.4M BW QPSK**

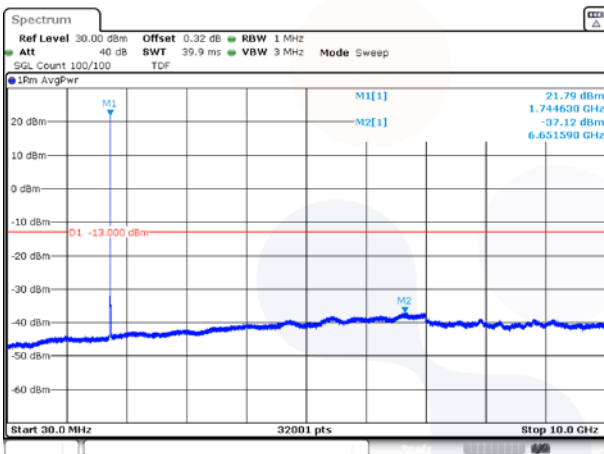
**Low channel (30 MHz ~ 10 GHz)**



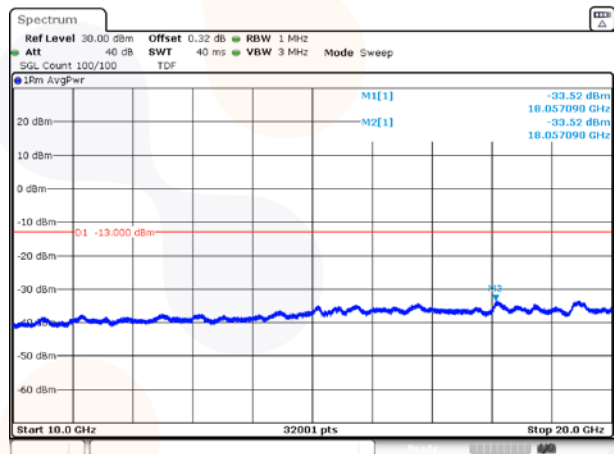
**Low channel (10 GHz ~ 20 GHz)**



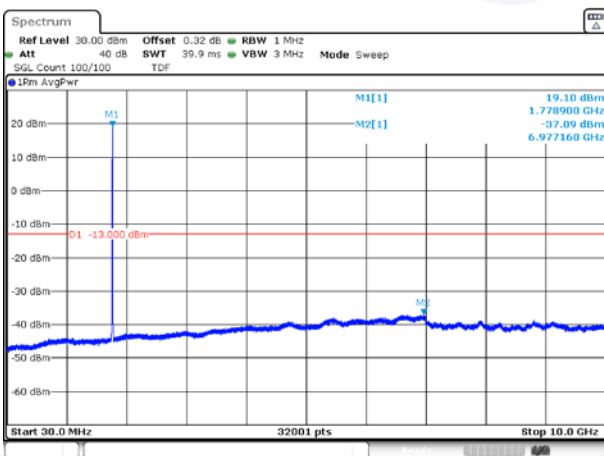
**Middle channel (30 MHz ~ 10 GHz)**



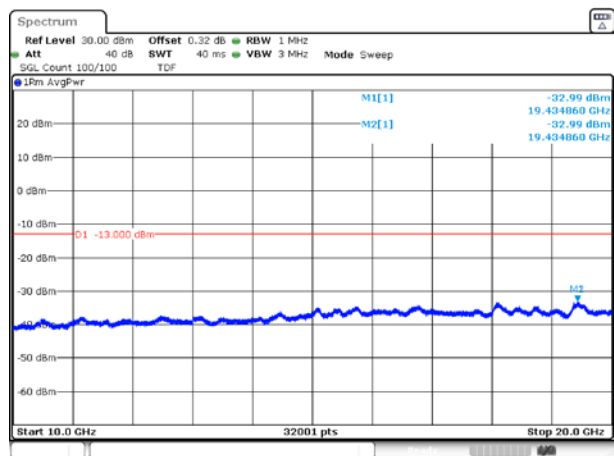
**Middle channel (10 GHz ~ 20 GHz)**



**High channel (30 MHz ~ 10 GHz)**

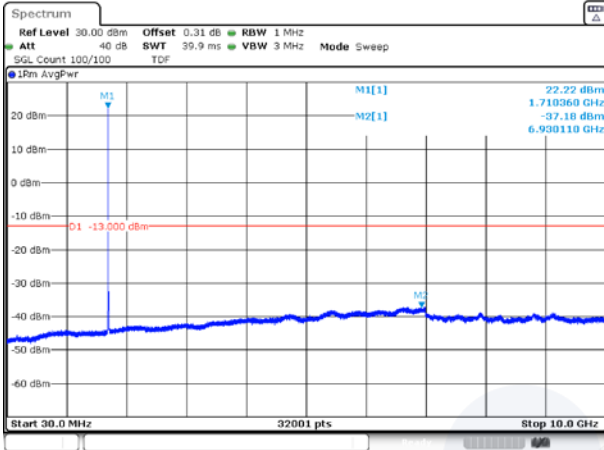


**High channel (10 GHz ~ 20 GHz)**

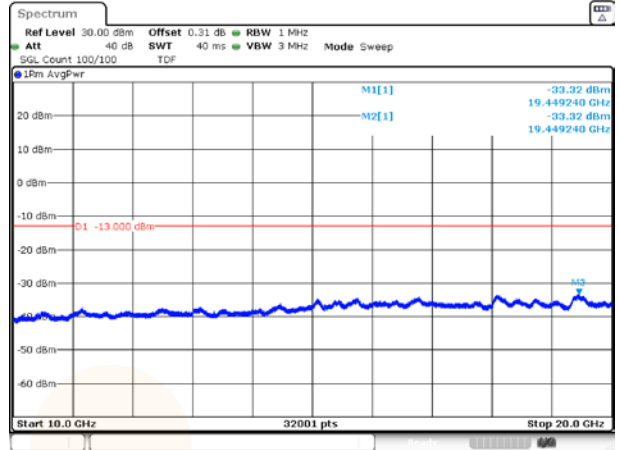


**3M BW QPSK**

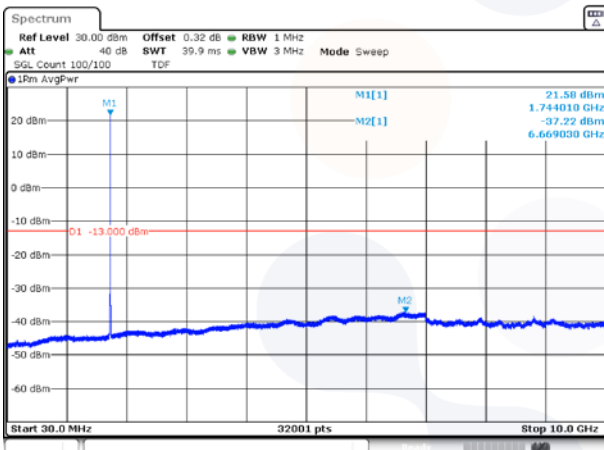
**Low channel (30 MHz ~ 10 GHz)**



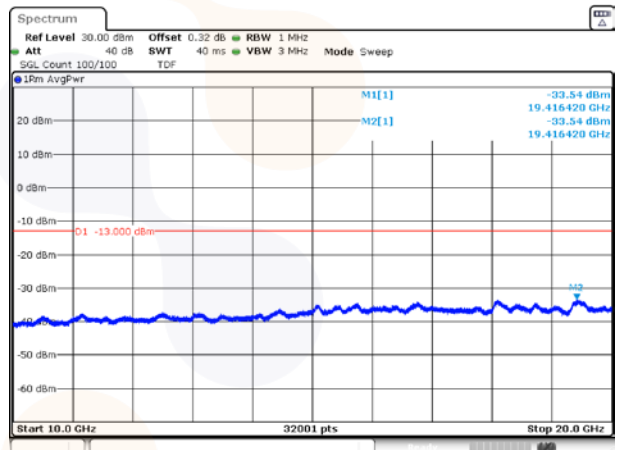
**Low channel (10 GHz ~ 20 GHz)**



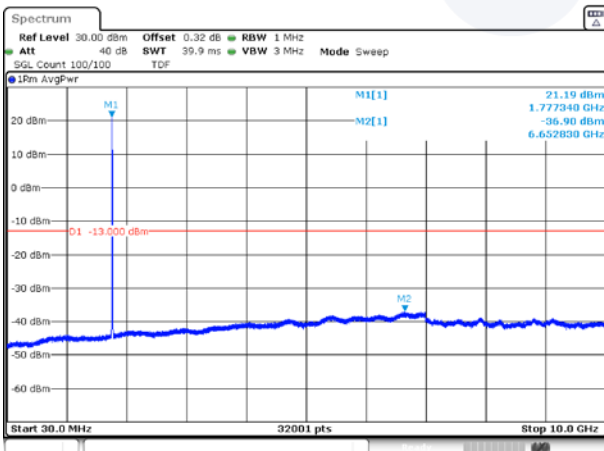
**Middle channel (30 MHz ~ 10 GHz)**



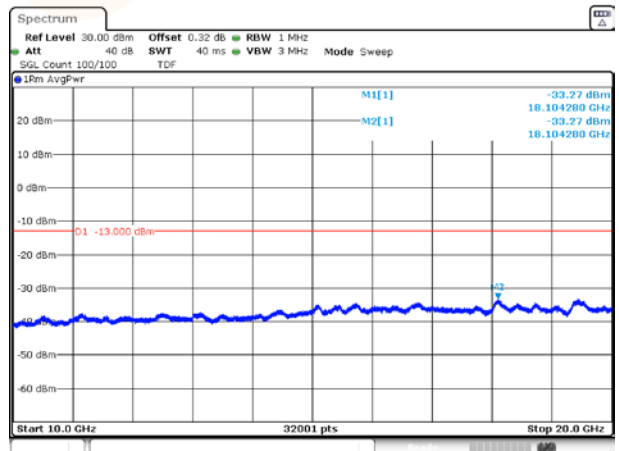
**Middle channel (10 GHz ~ 20 GHz)**



**High channel (30 MHz ~ 10 GHz)**

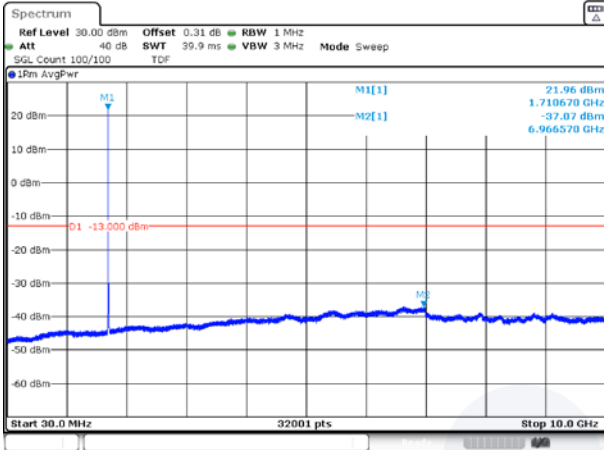


**High channel (10 GHz ~ 20 GHz)**

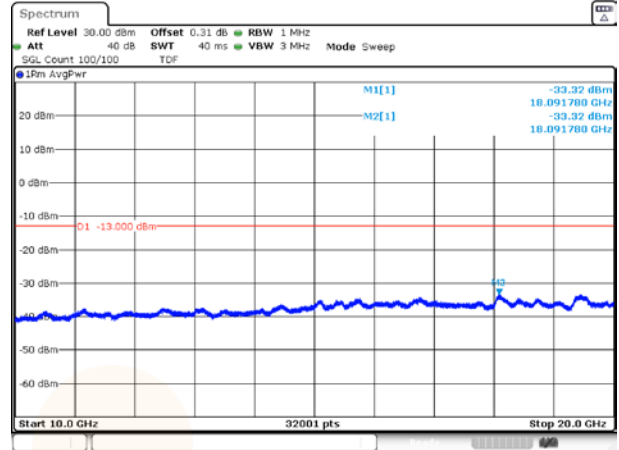


**5M BW QPSK**

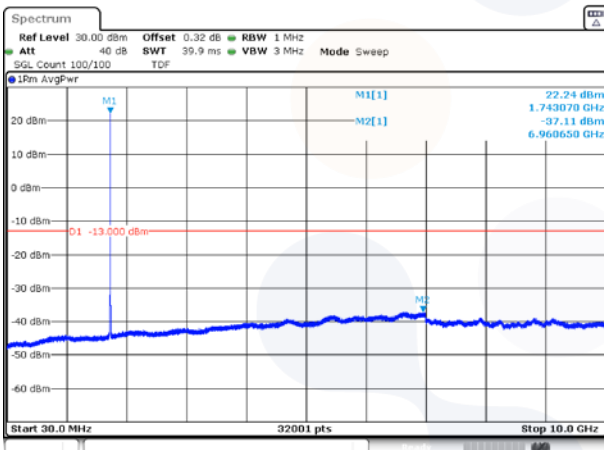
**Low channel (30 MHz ~ 10 GHz)**



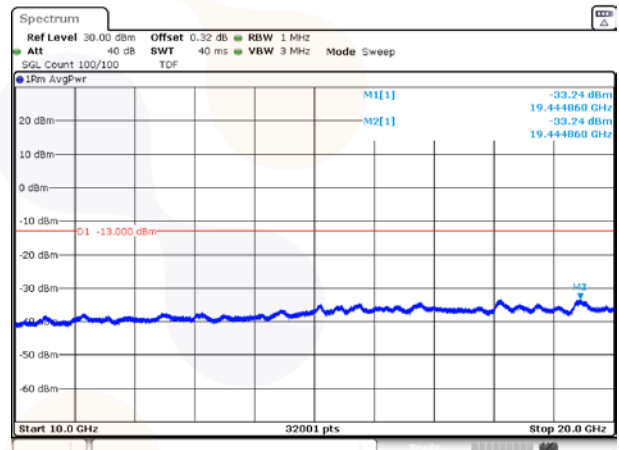
**Low channel (10 GHz ~ 20 GHz)**



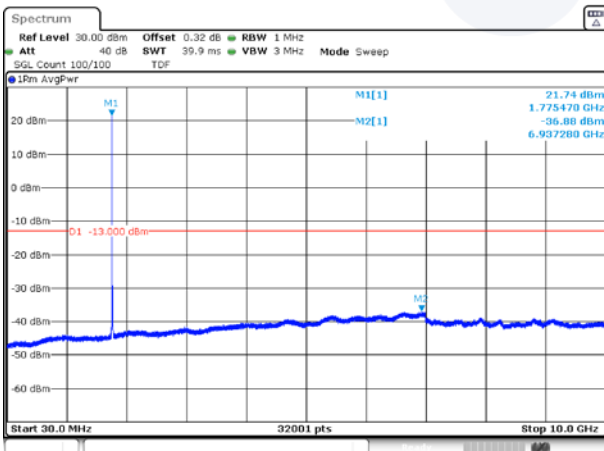
**Middle channel (30 MHz ~ 10 GHz)**



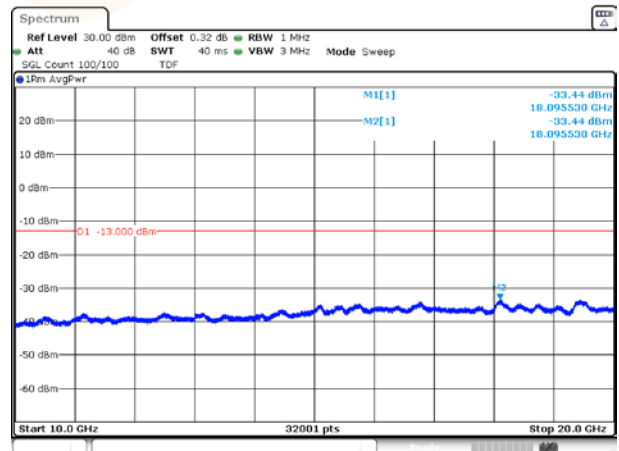
**Middle channel (10 GHz ~ 20 GHz)**



**High channel (30 MHz ~ 10 GHz)**

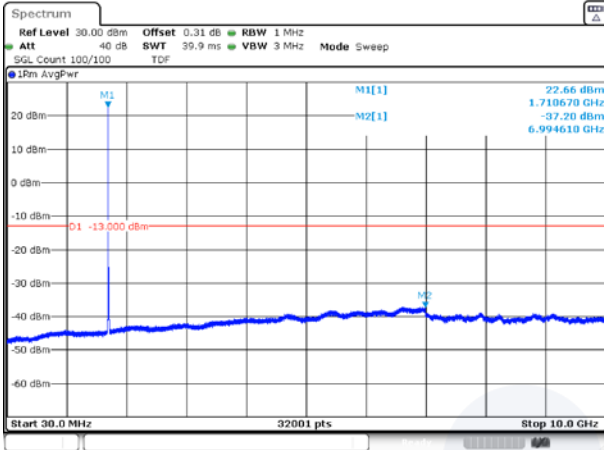


**High channel (10 GHz ~ 20 GHz)**

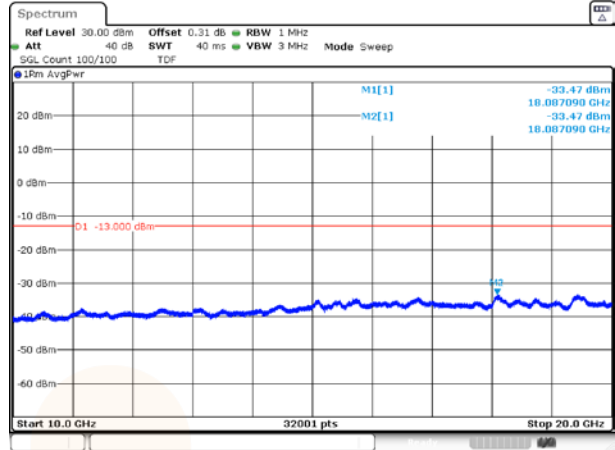


**10M BW QPSK**

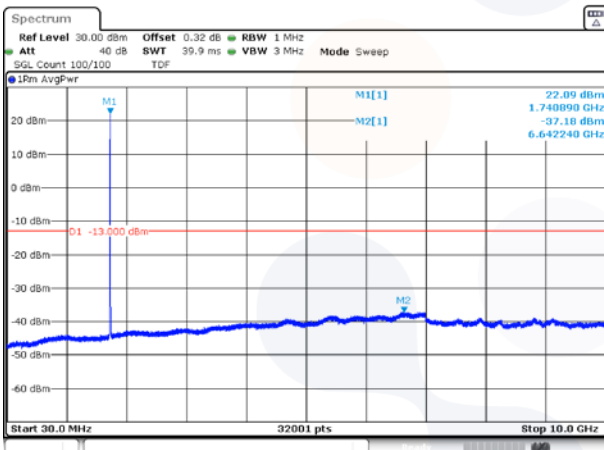
**Low channel (30 MHz ~ 10 GHz)**



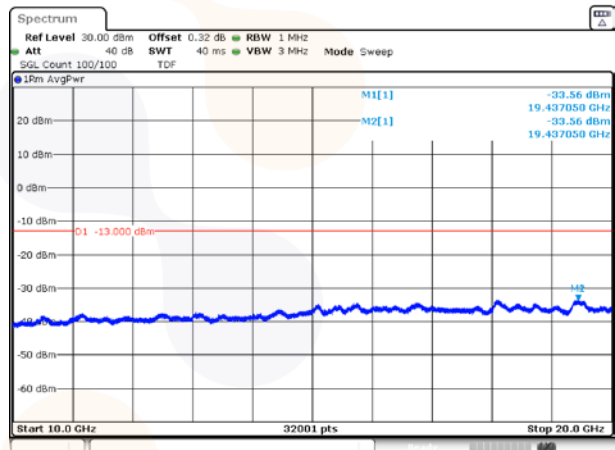
**Low channel (10 GHz ~ 20 GHz)**



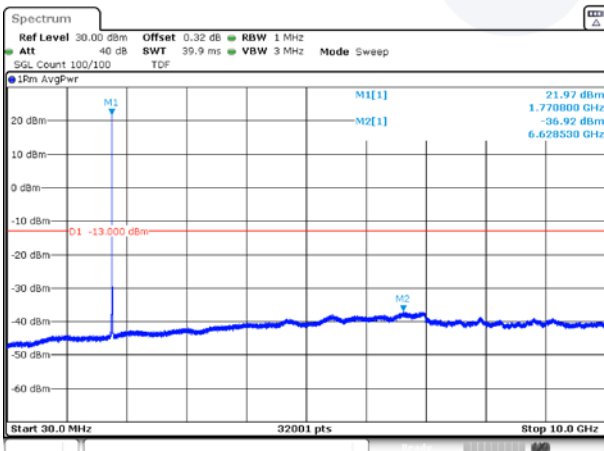
**Middle channel (30 MHz ~ 10 GHz)**



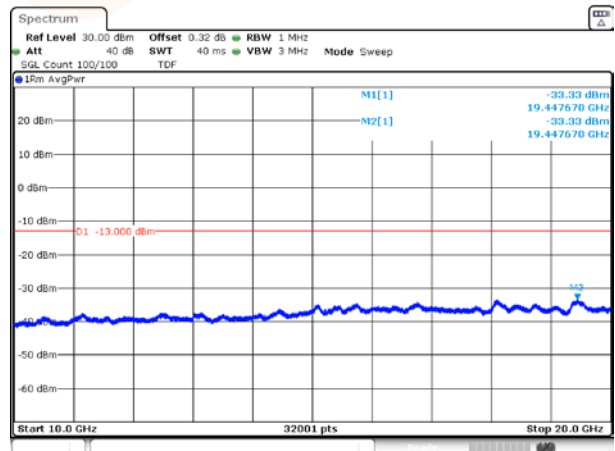
**Middle channel (10 GHz ~ 20 GHz)**



**High channel (30 MHz ~ 10 GHz)**

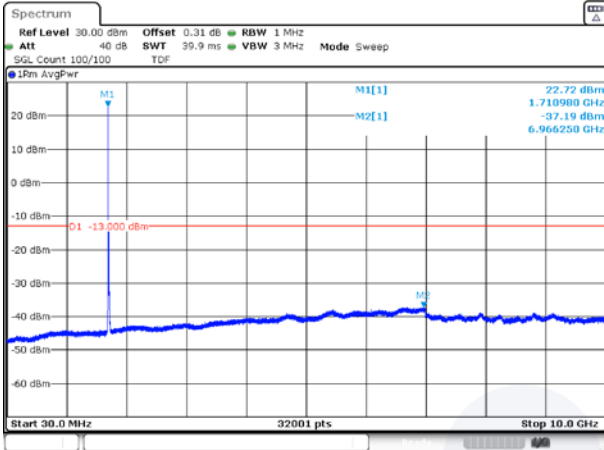


**High channel (10 GHz ~ 20 GHz)**

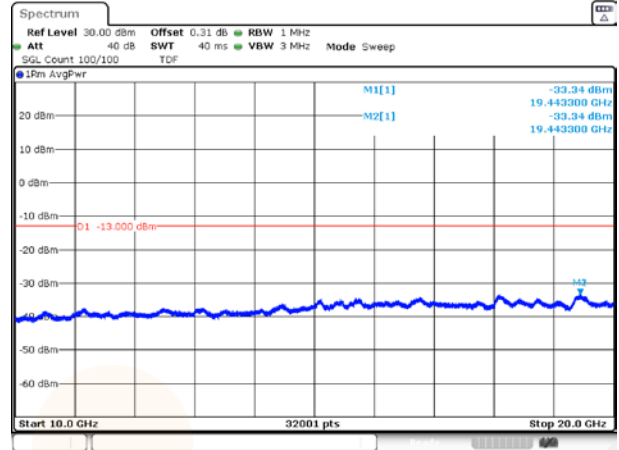


**15M BW QPSK**

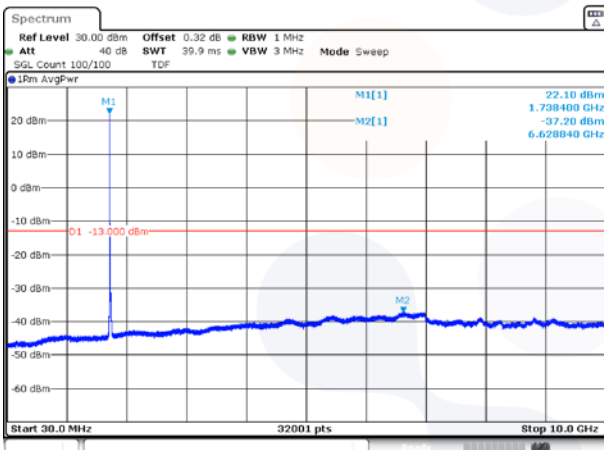
**Low channel (30 MHz ~ 10 GHz)**



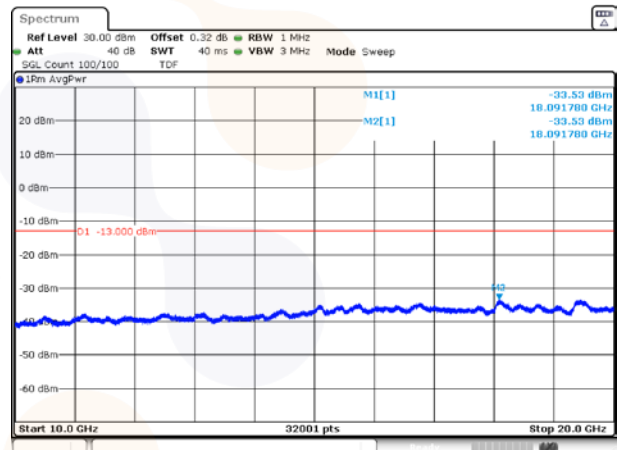
**Low channel (10 GHz ~ 20 GHz)**



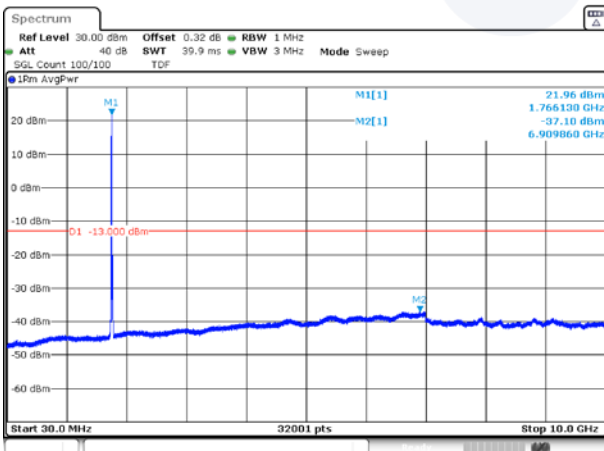
**Middle channel (30 MHz ~ 10 GHz)**



**Middle channel (10 GHz ~ 20 GHz)**



**High channel (30 MHz ~ 10 GHz)**



**High channel (10 GHz ~ 20 GHz)**

