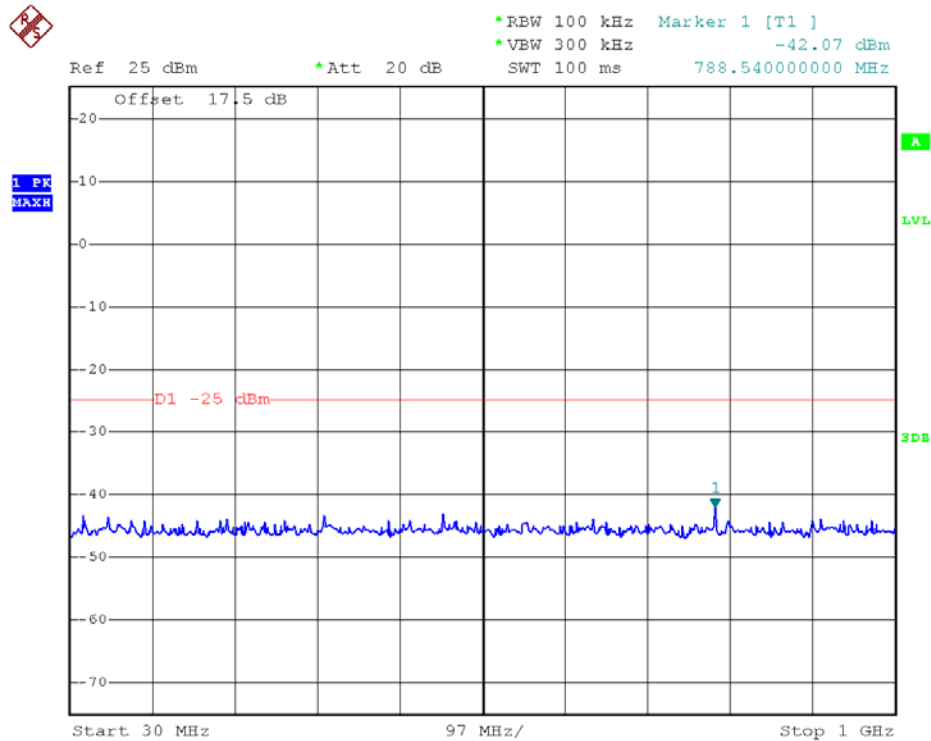
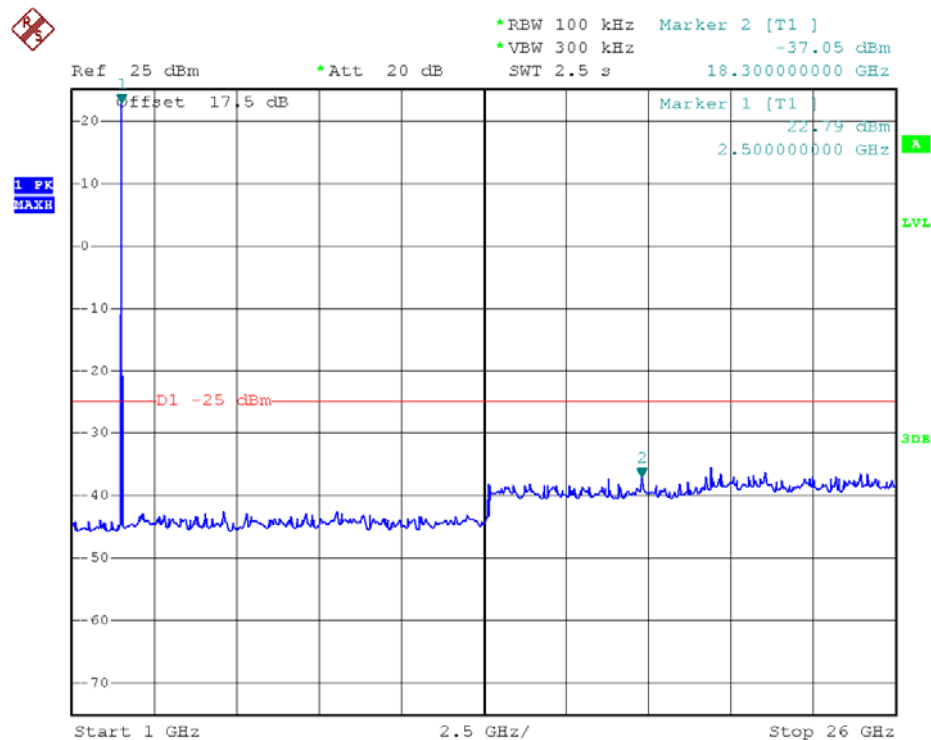


Band	LTE Band 7	Channel	Middle
Bandwidth	20MHz	Modulation	QPSK

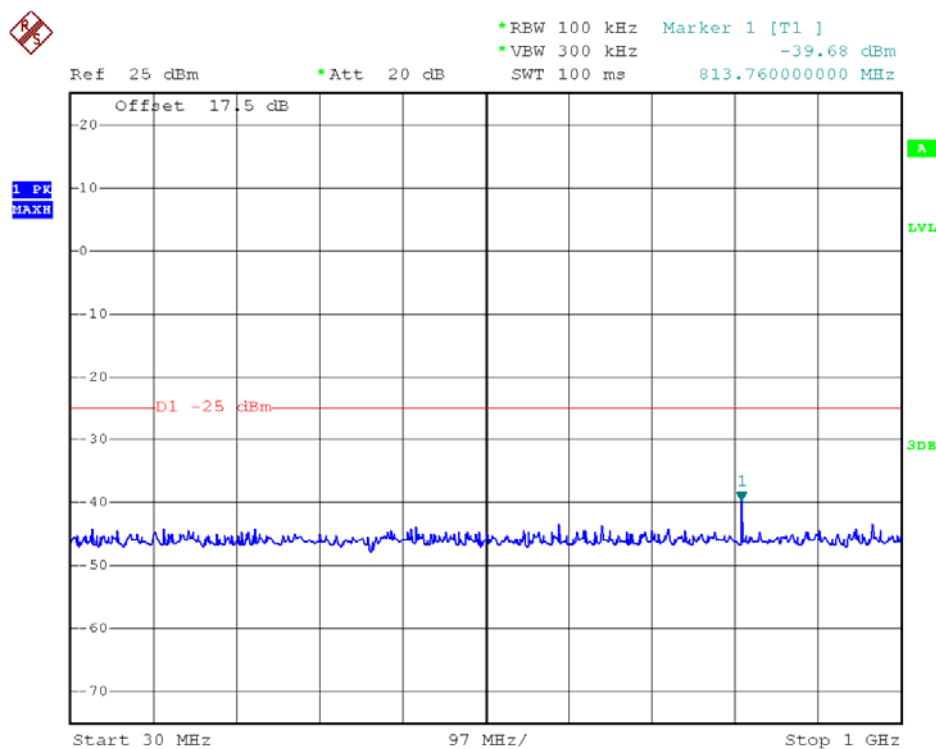


RB Size 1, RB Offset 0 30MHz to 1GHz

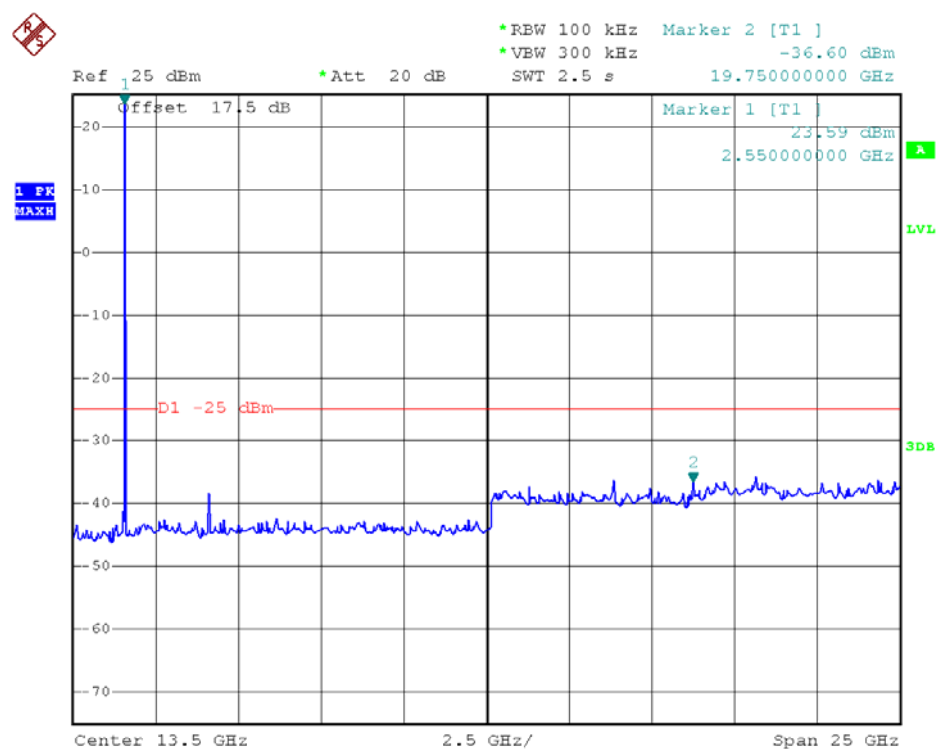


RB Size 1, RB Offset 0 1GHz to 26GHz

Band	LTE Band 7	Channel	High
Bandwidth	20MHz	Modulation	QPSK

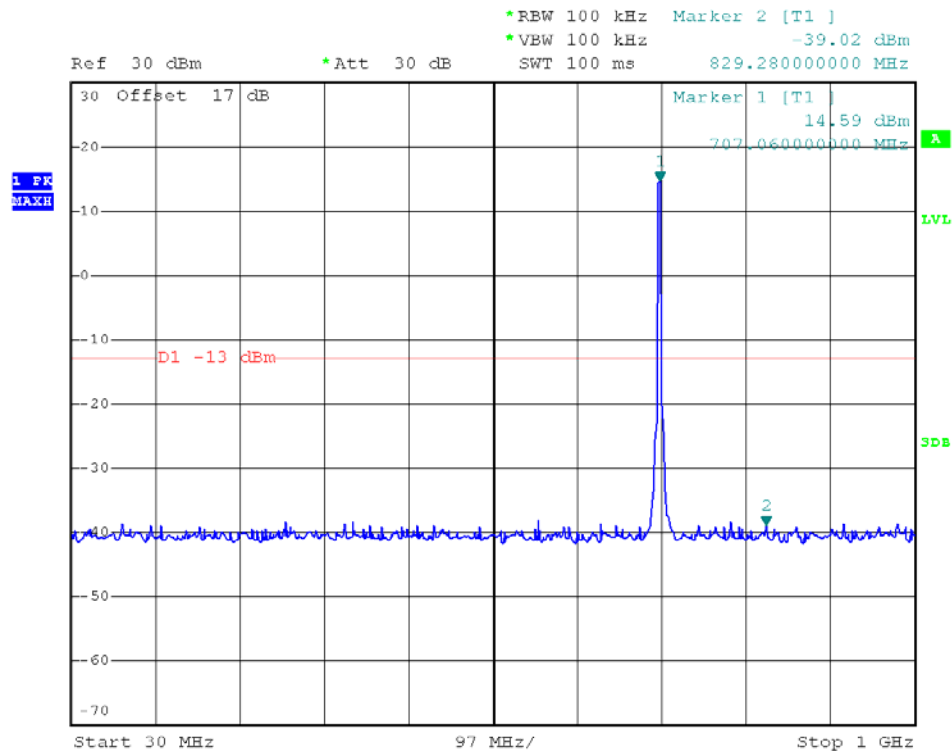


RB Size 1, RB Offset 0 30MHz to 1GHz

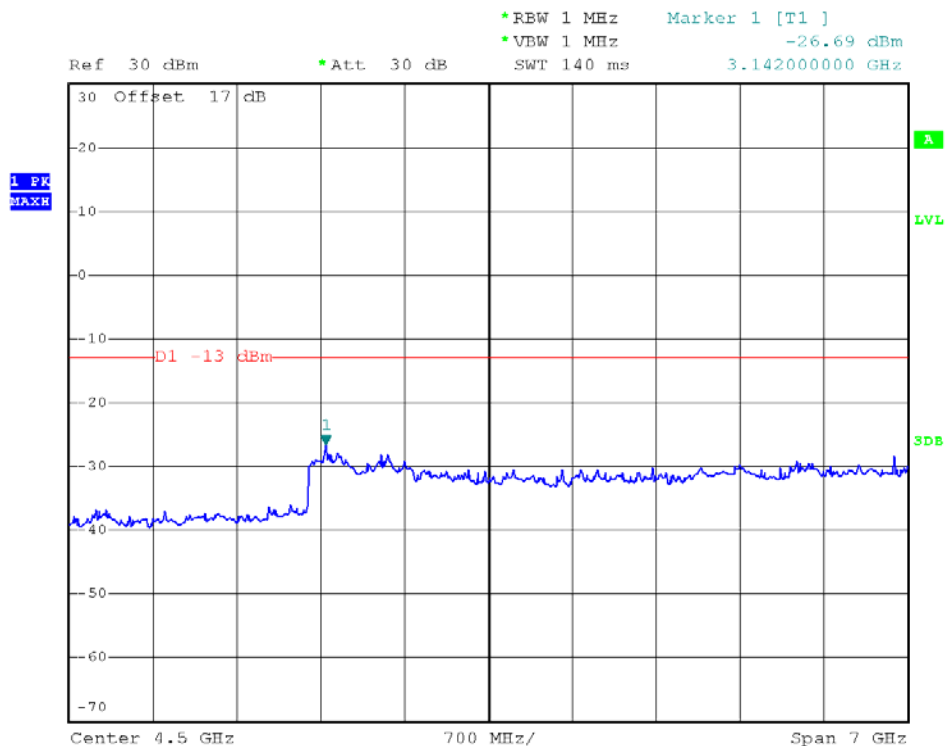


RB Size 1, RB Offset 0 1GHz to 26GHz

Band	LTE Band 17	Channel:	Low
Bandwidth	5MHz	Modulation	QPSK

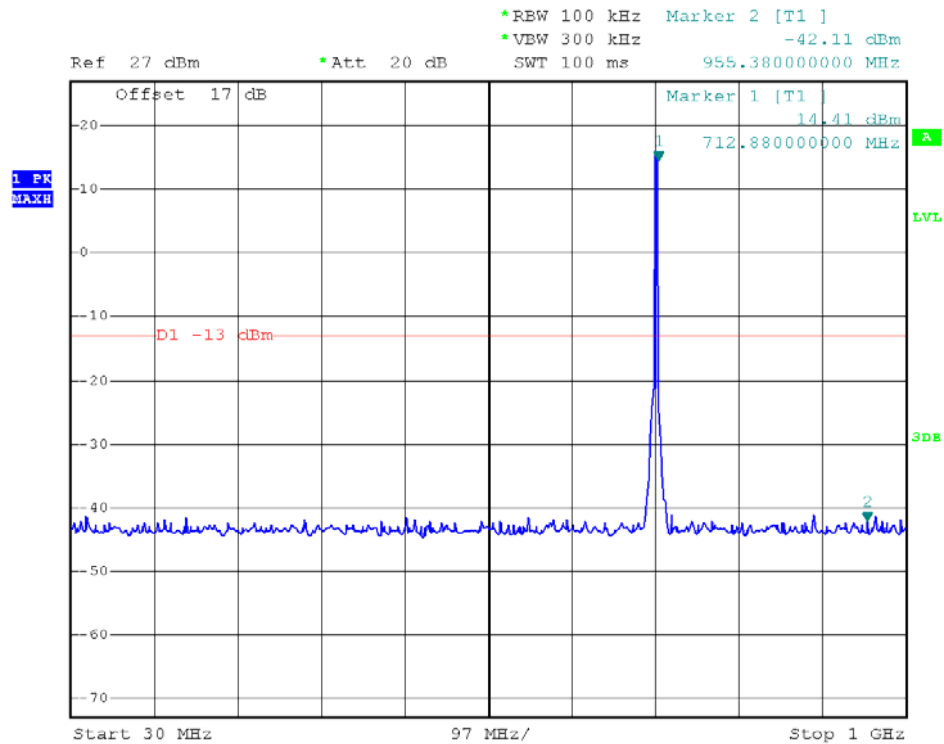


RB Size 1, RB Offset 0 30MHz to 1GHz

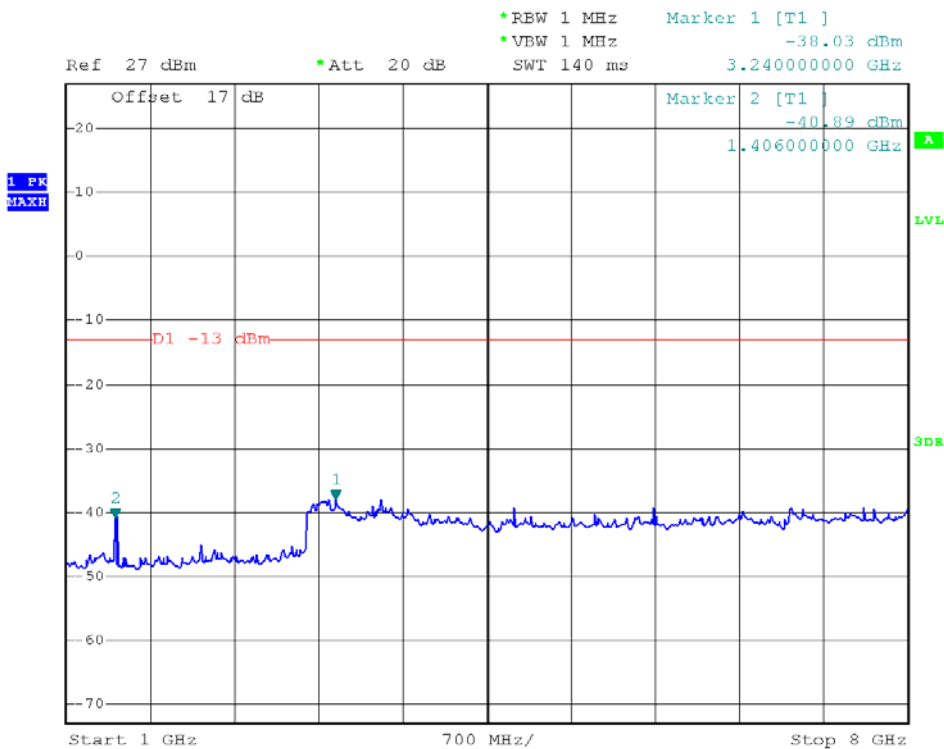


RB Size 1, RB Offset 0 1GHz to 8GHz

Band	LTE Band 17	Channel	Ch 23790(Middle)
Bandwidth	5MHz	Modulation	QPSK

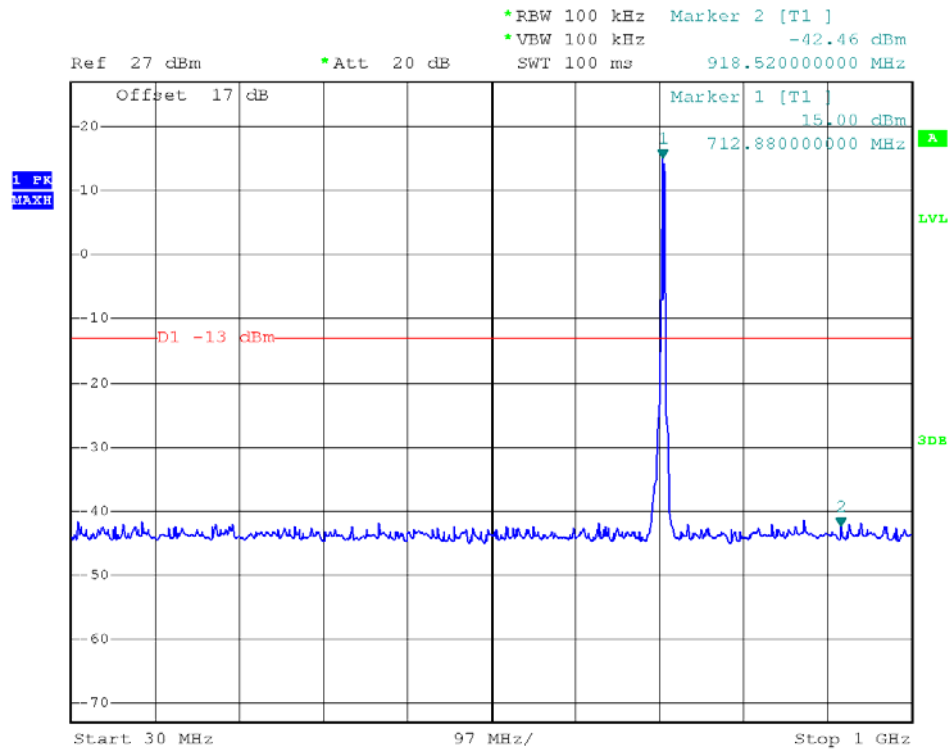


RB Size 1, RB Offset 0 30MHz to 1GHz

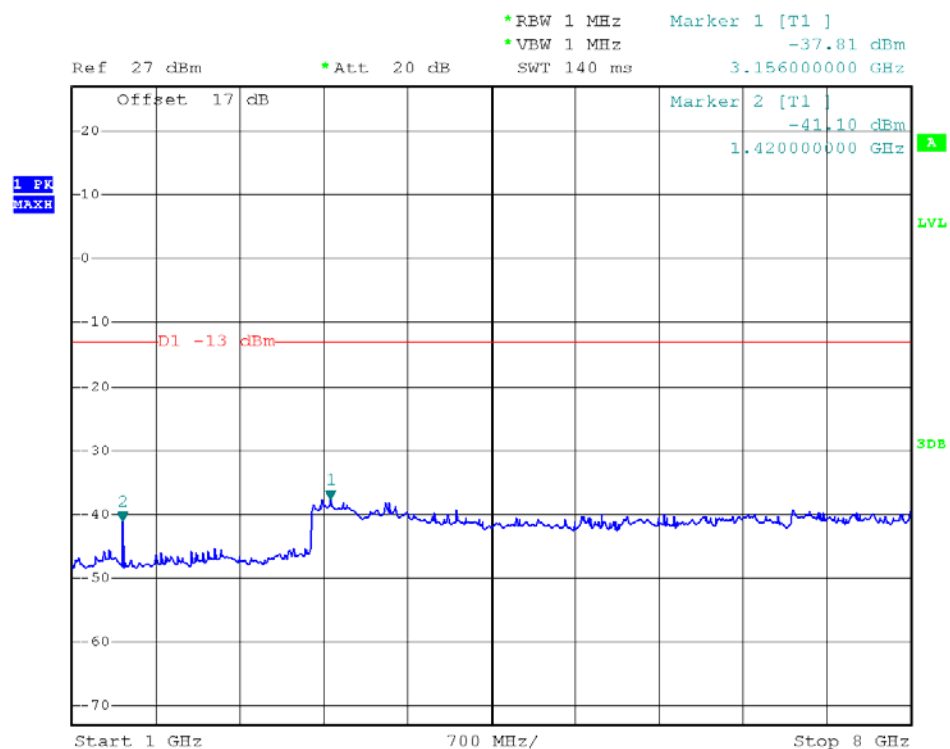


RB Size 1, RB Offset 0 1GHz to 8GHz

Band	LTE Band 17	Channel:	Ch 23825(High)
Bandwidth	5MHz	Modulation	QPSK

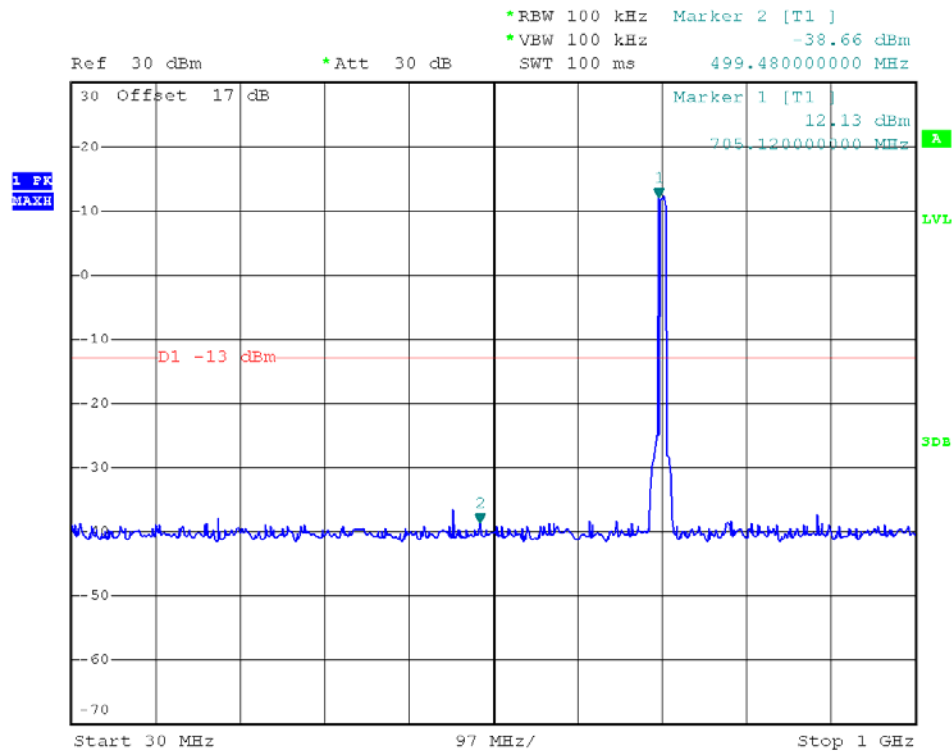


RB Size 1, RB Offset 0 30MHz to 1GHz

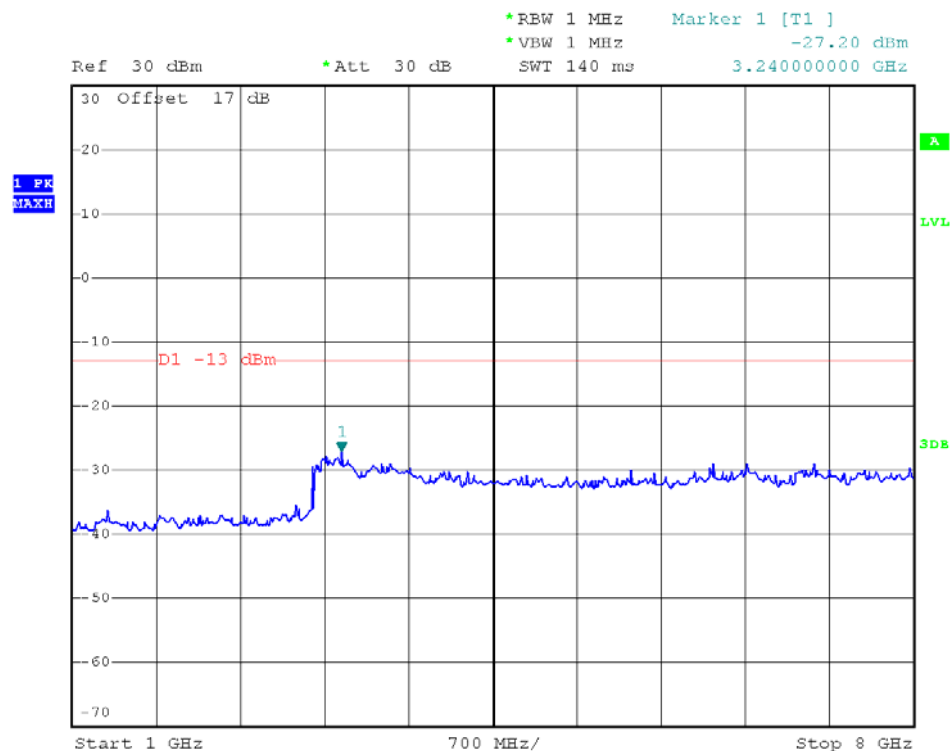


RB Size 1, RB Offset 0 1GHz to 8GHz

Band	LTE Band 17	Channel:	Ch 23780(Low)
Bandwidth	10MHz	Modulation	QPSK

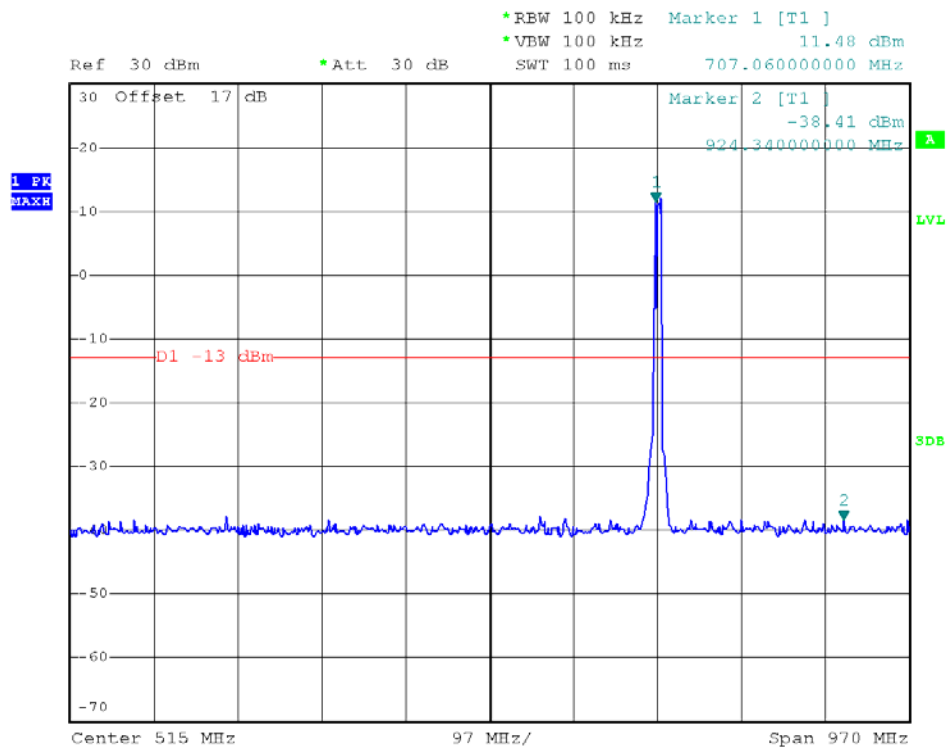


RB Size 1, RB Offset 0 30MHz to 1GHz

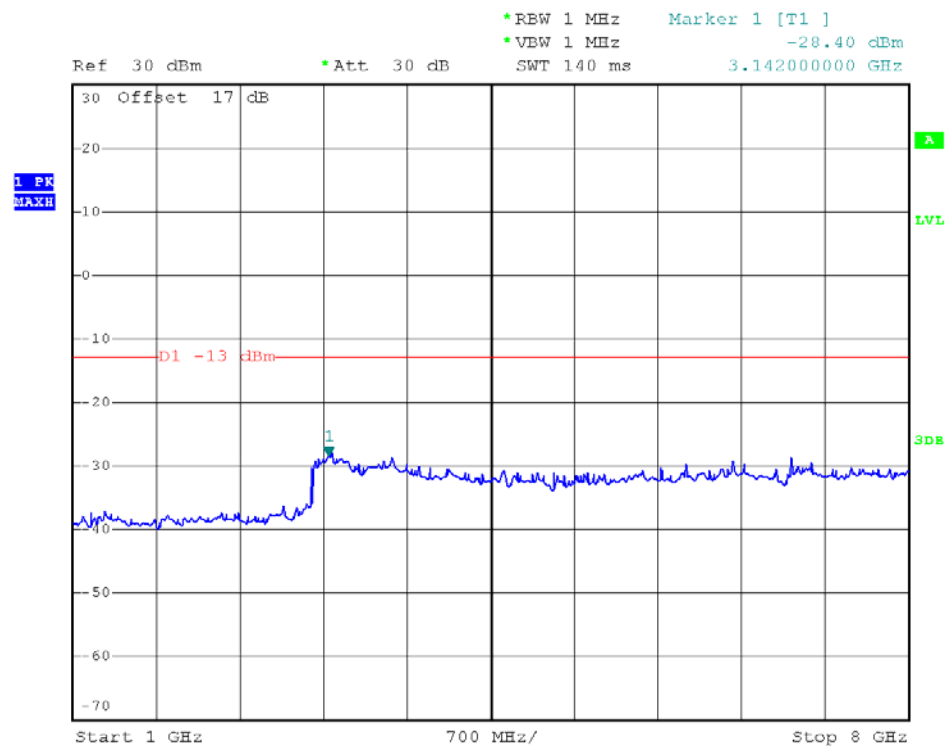


RB Size 1, RB Offset 0 1GHz to 8GHz

Band	LTE Band 17	Channel:	Ch 23790(Middle)
Bandwidth	10MHz	Modulation	QPSK

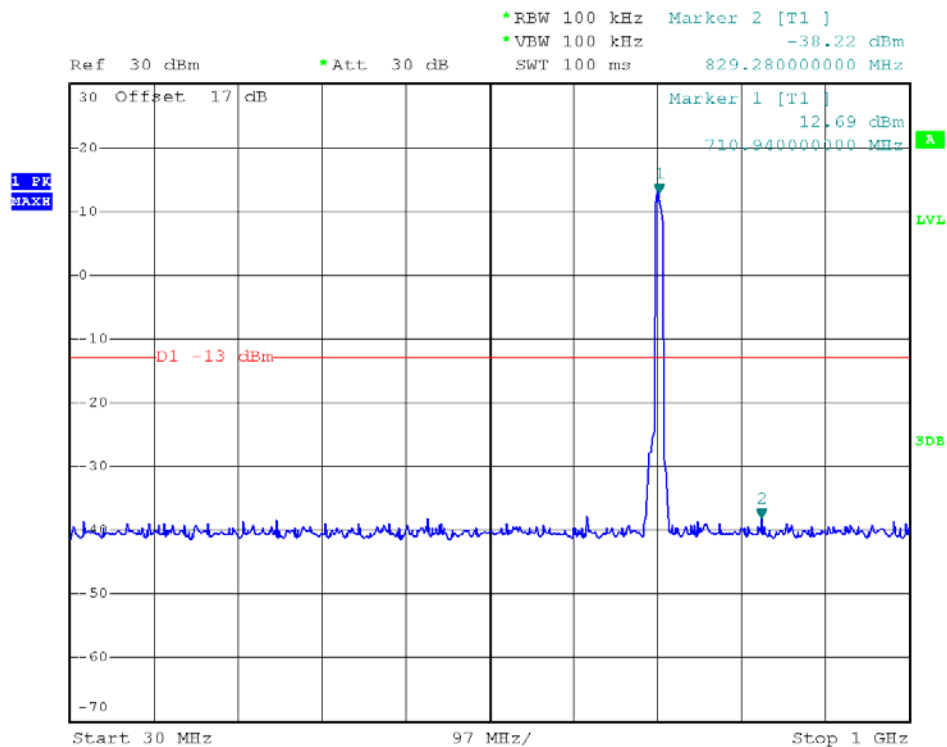


RB Size 1, RB Offset 0 30MHz to 1GHz

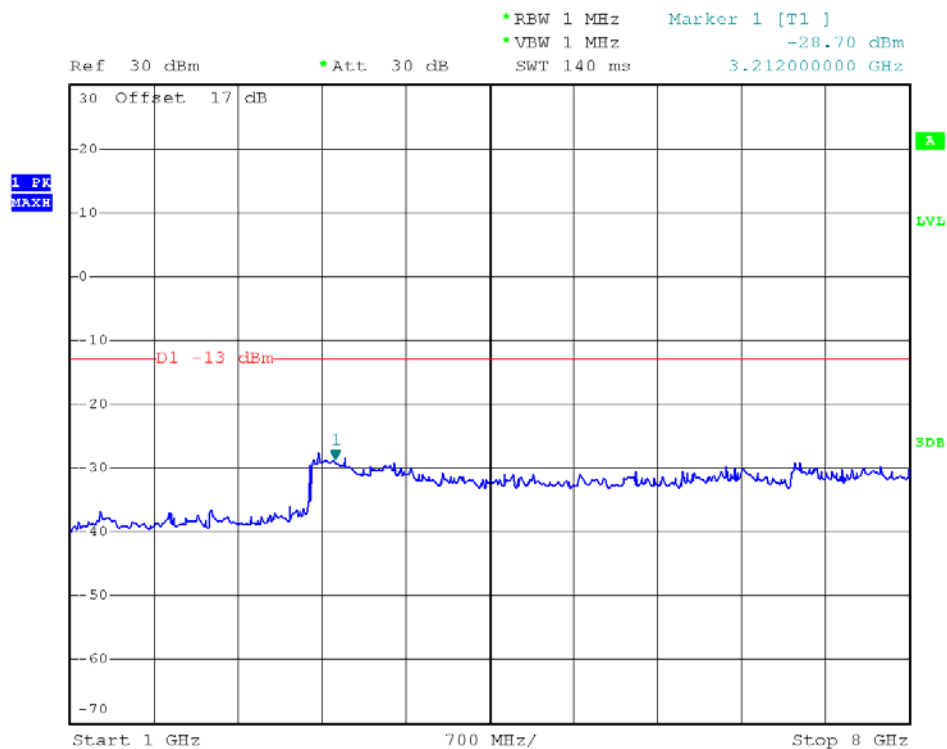


RB Size 1, RB Offset 0 1GHz to 8GHz

Band	LTE Band 17	Channel	Ch 23800(High)
Bandwidth	10MHz	Modulation	QPSK



RB Size 1, RB Offset 0 30MHz to 1GHz



RB Size 1, RB Offset 0 1GHz to 8GHz

2.6 Conducted Band Edge

2.6.1 Description of Conducted Band Edge Measurement

24.238(a) for Band 2

For operations in the 1850 -1910 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

22.917(a) for Band 5

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(h) for Band 4

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(g) for Band 17

For operations in the 698 – 746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

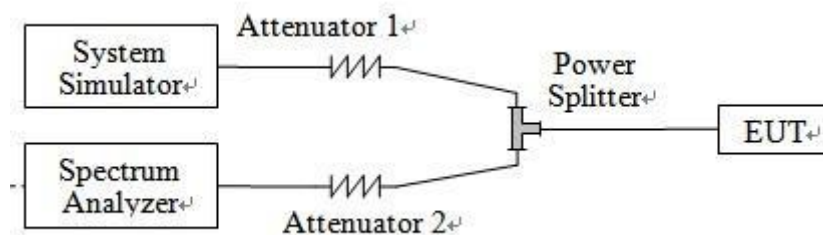
27.53 (m)(4) for Band 7

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

2.6.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.6.3 Test Description



2.6.4 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured. Set $RBW \geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
3. Set spectrum analyzer with RMS detector.
4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

5. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P (Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

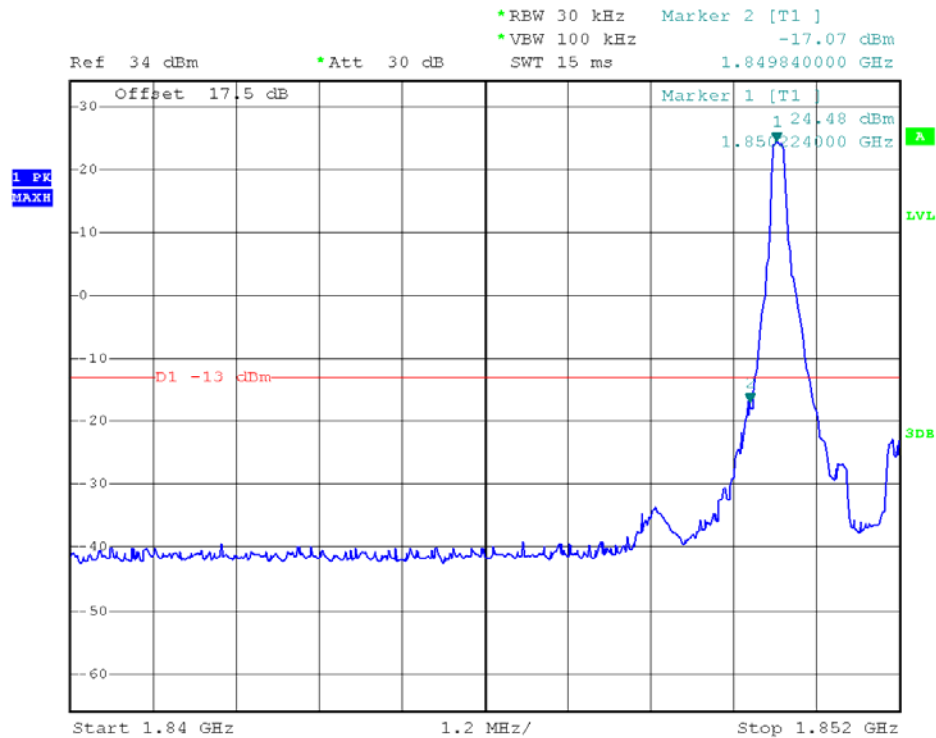
$$= -13\text{dBm}.$$

<For Band 7>

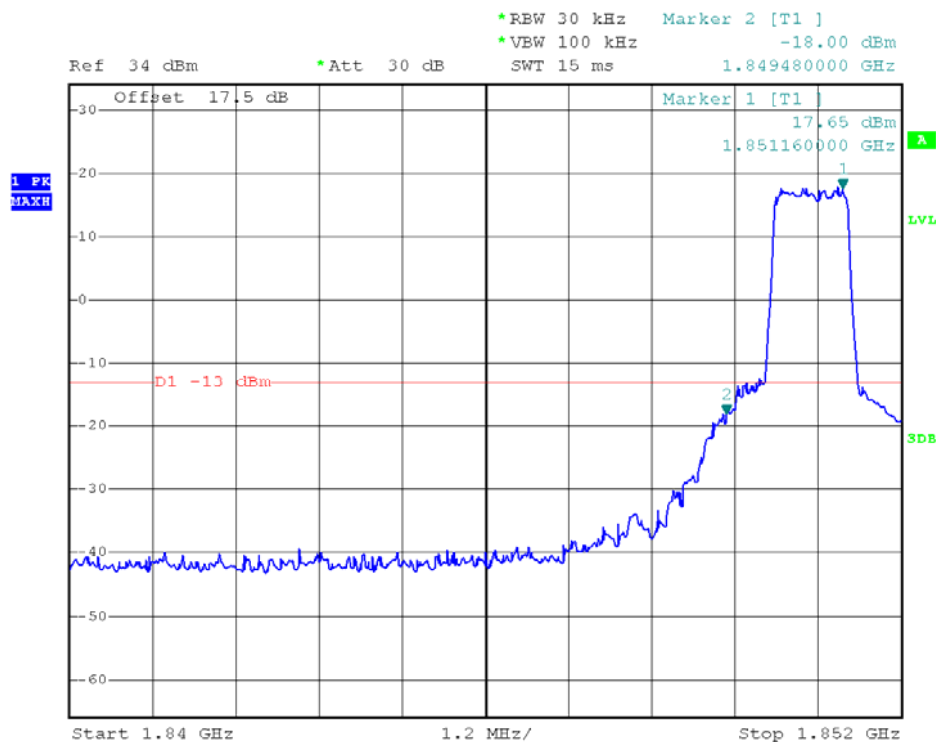
- The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P (Watts)
- $$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$
- $$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$
- $$= -25\text{dBm}.$$

2.6.5 Test Result of Conducted Band Edge

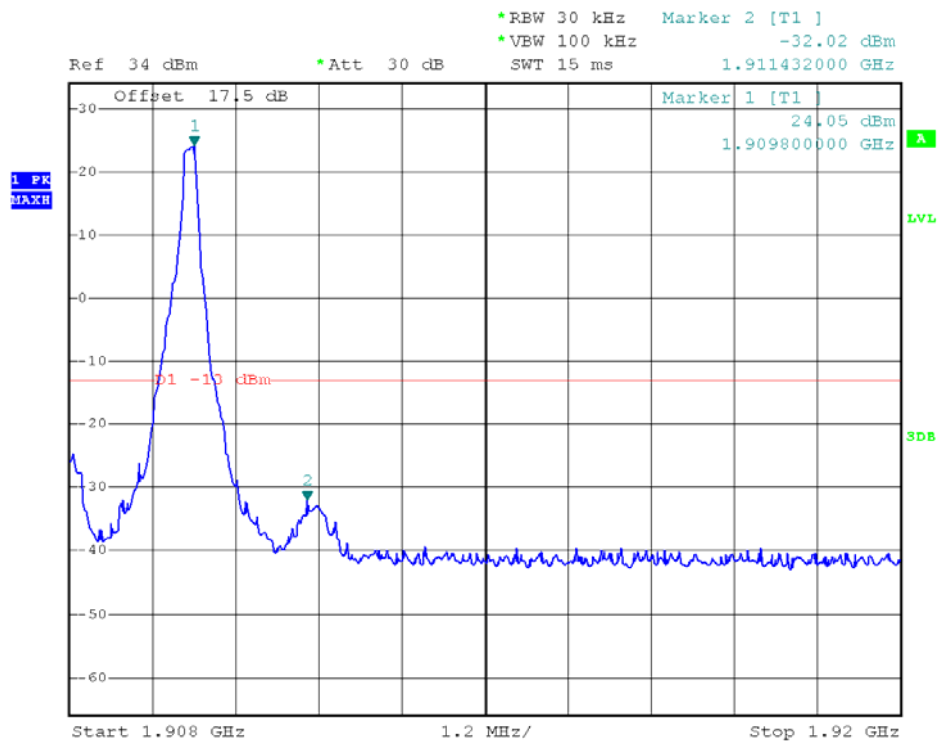
Band	LTE Band 2	Modulation	QPSK
Bandwidth	1.4MHz		



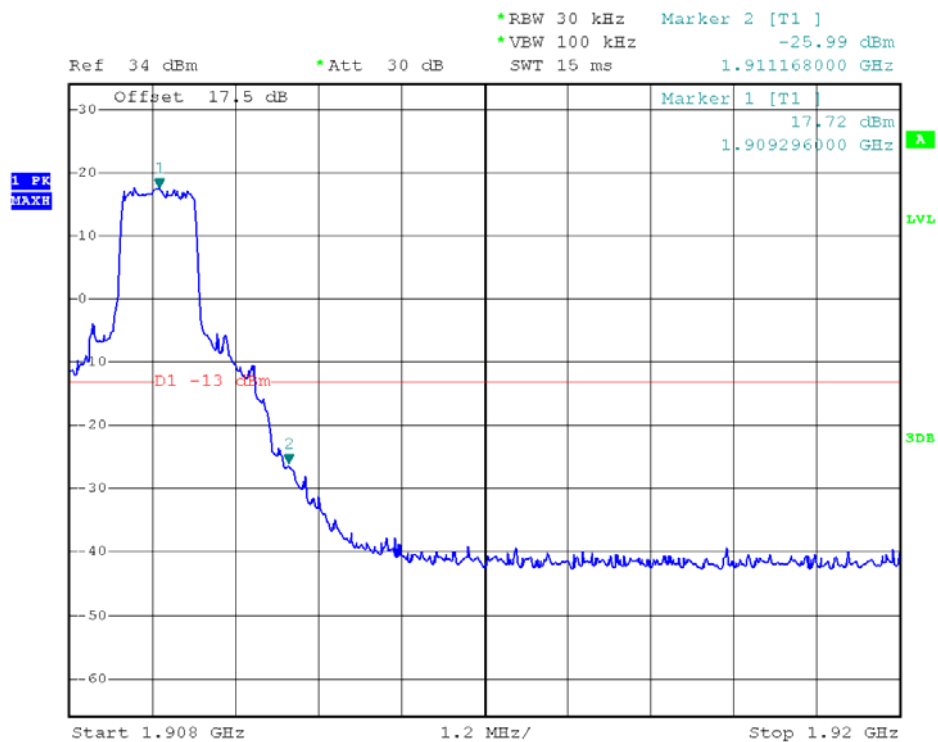
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0

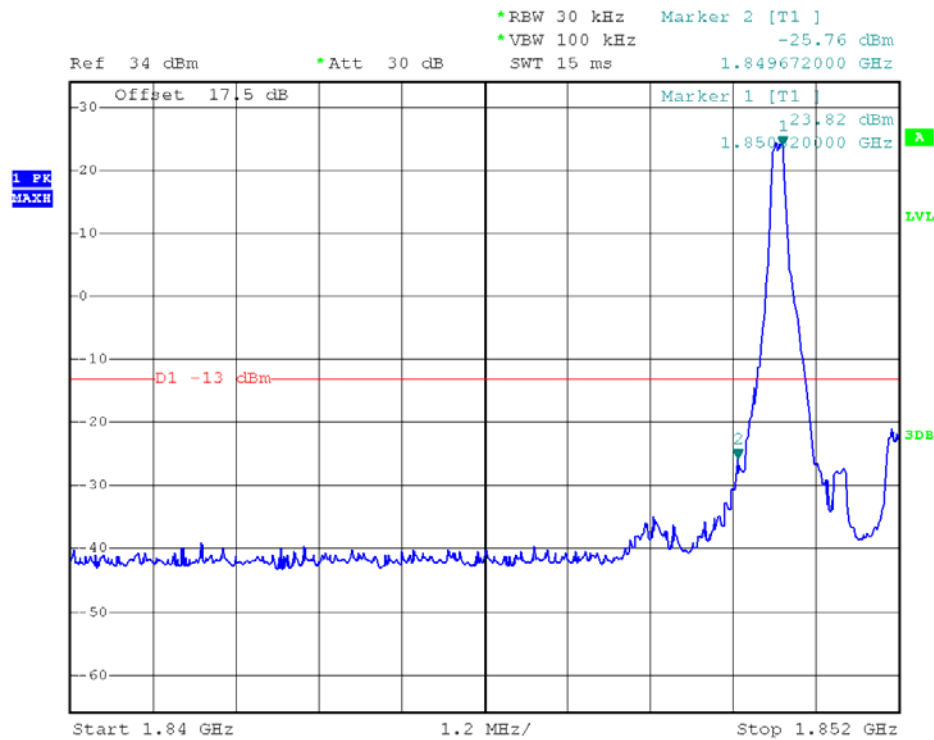


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

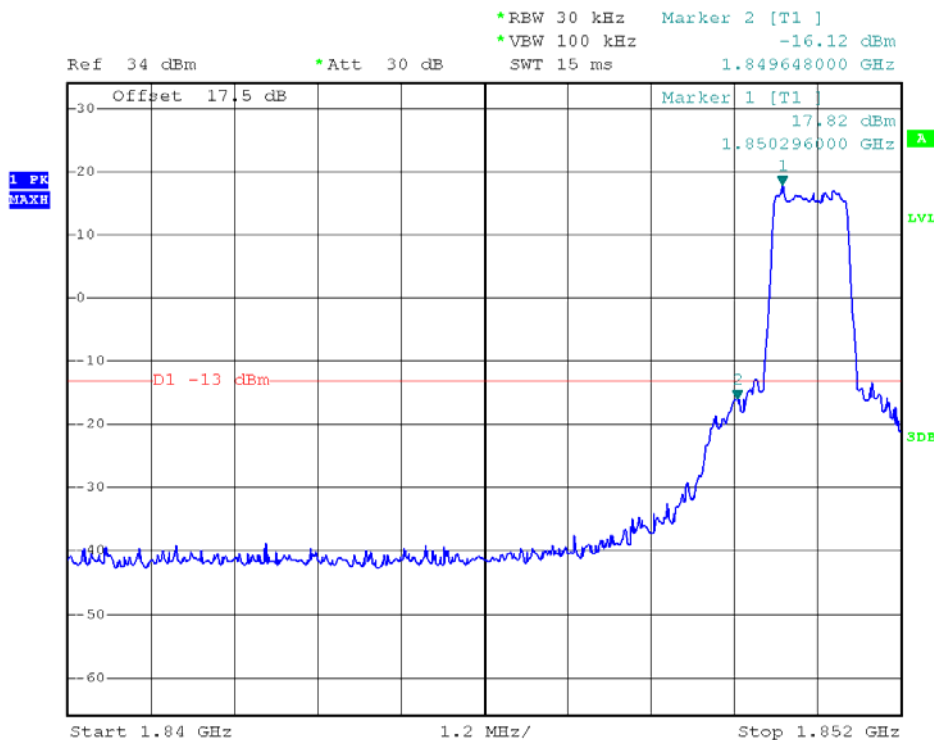


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

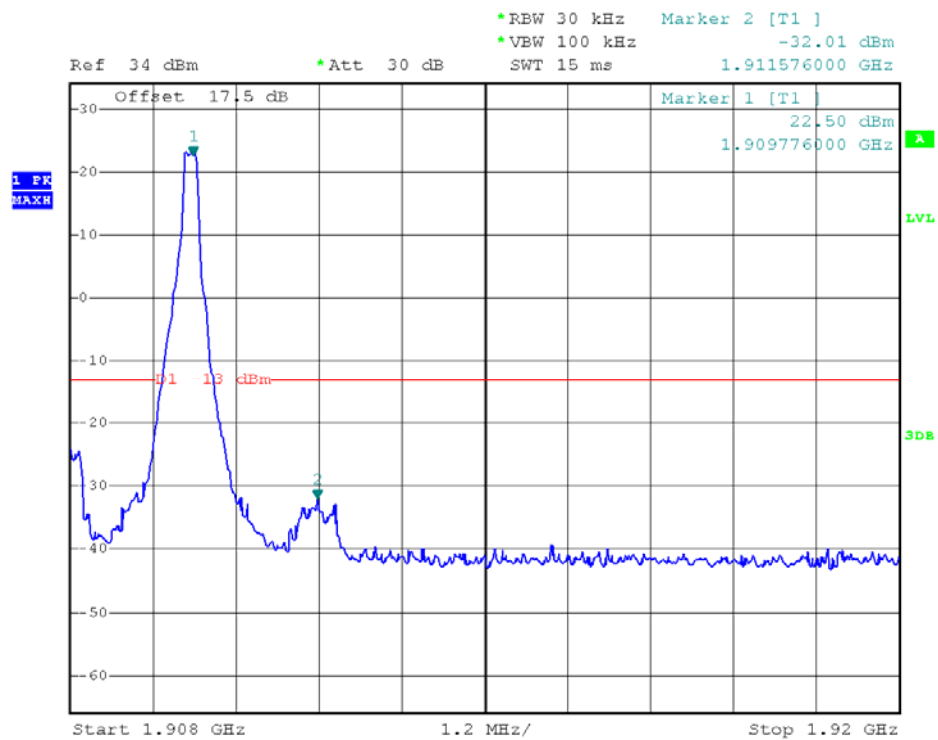
Band	LTE Band 2	Modulation	16QAM
Bandwidth	1.4MHz		



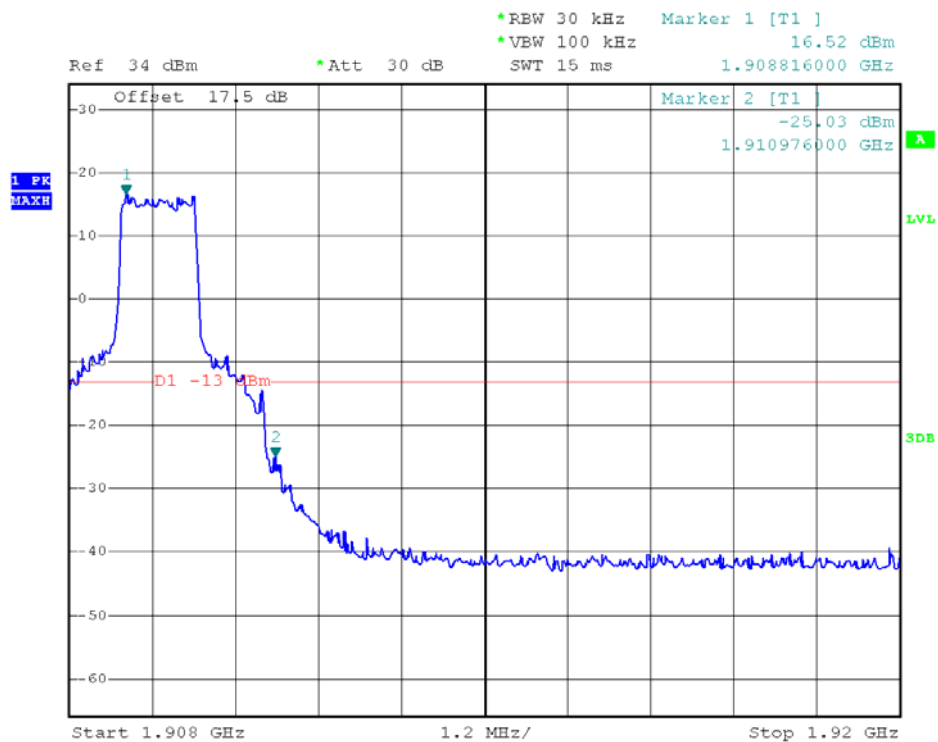
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

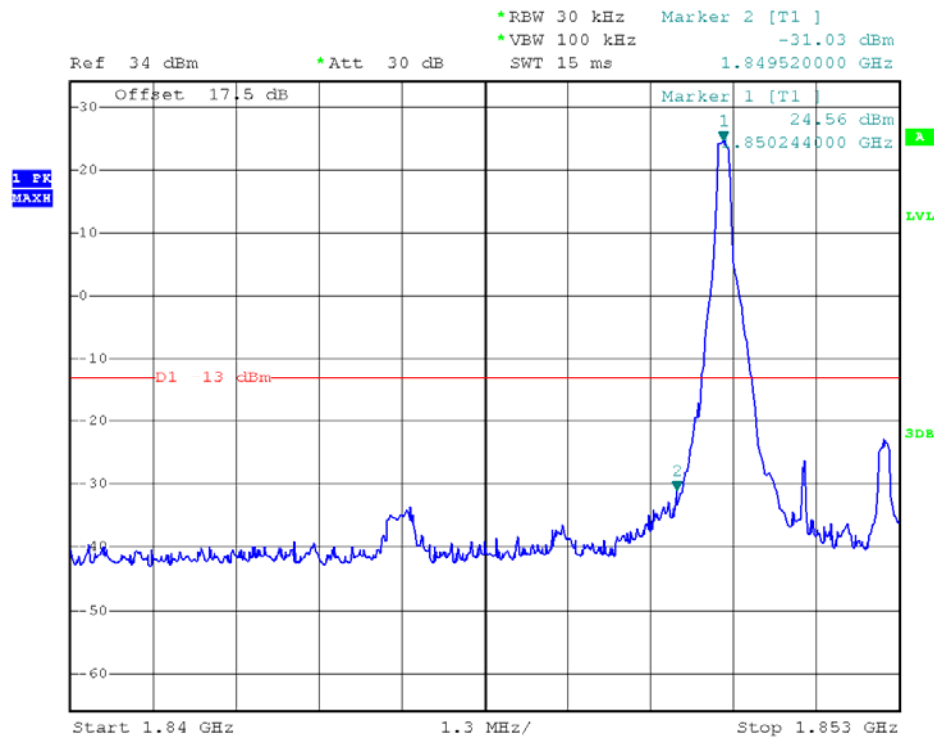


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 5

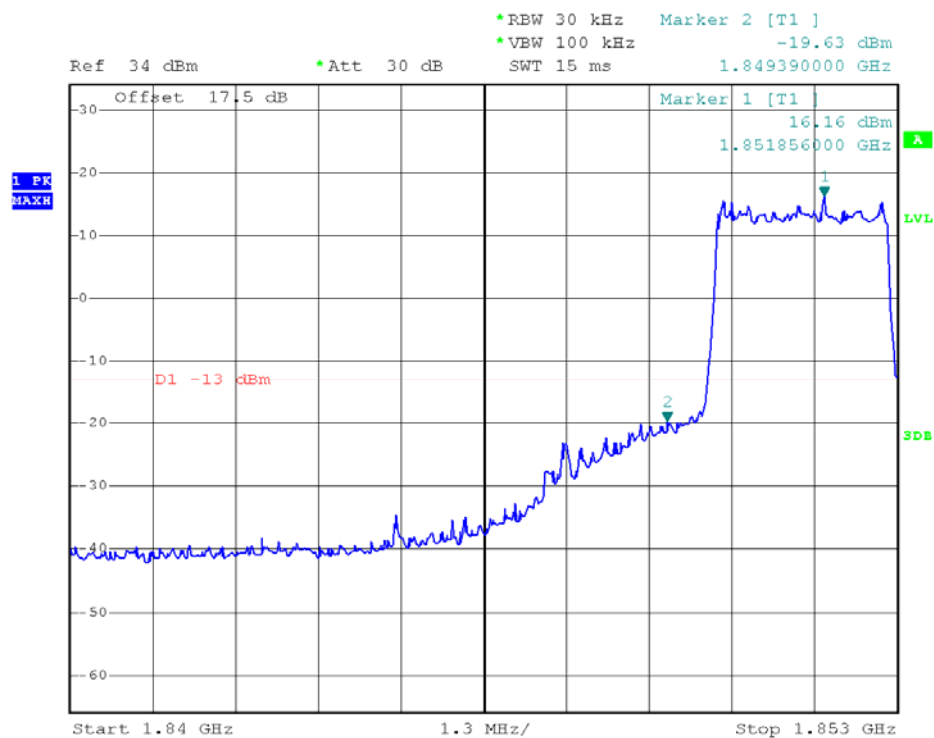


Higher Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

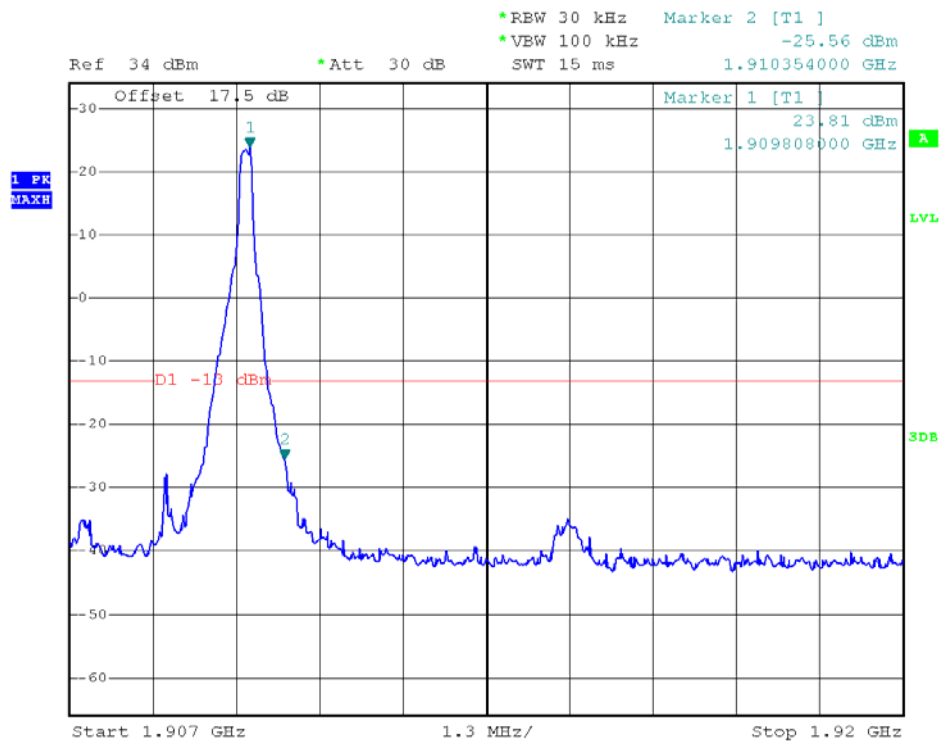
Band	LTE Band 2	Modulation	QPSK
Bandwidth	3MHz		



Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0

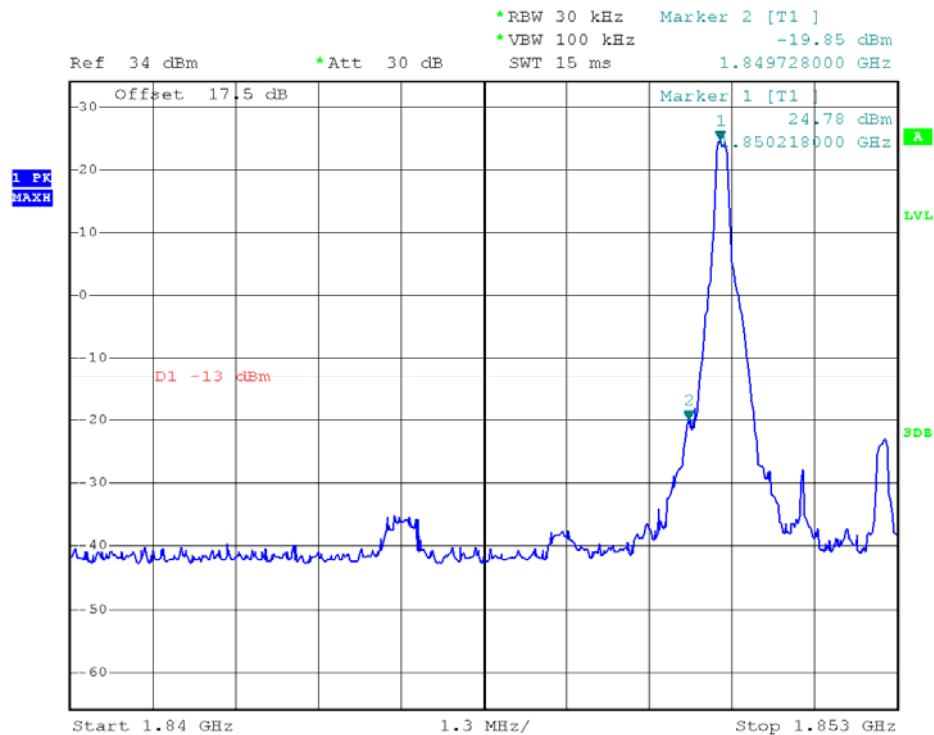


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

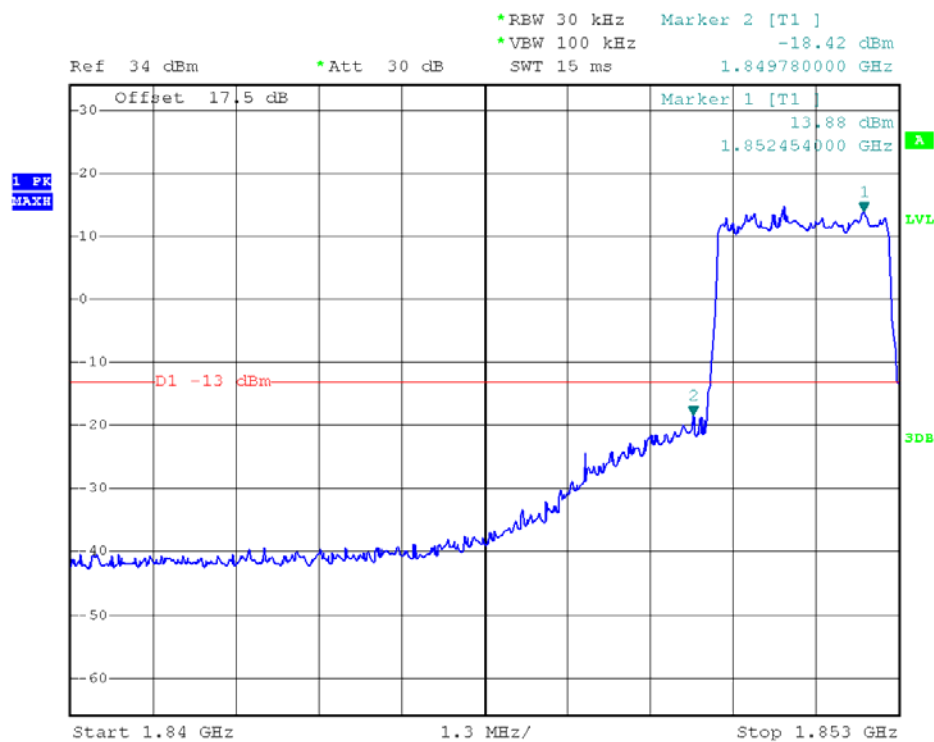


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

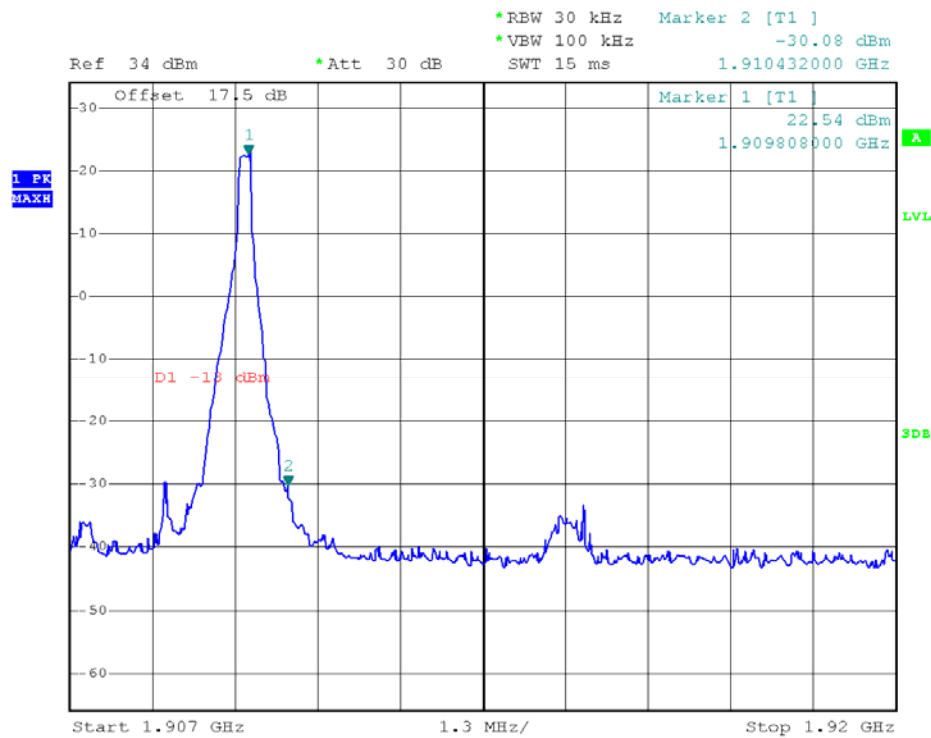
Band	LTE Band 2	Modulation	16QAM
Bandwidth	3MHz		



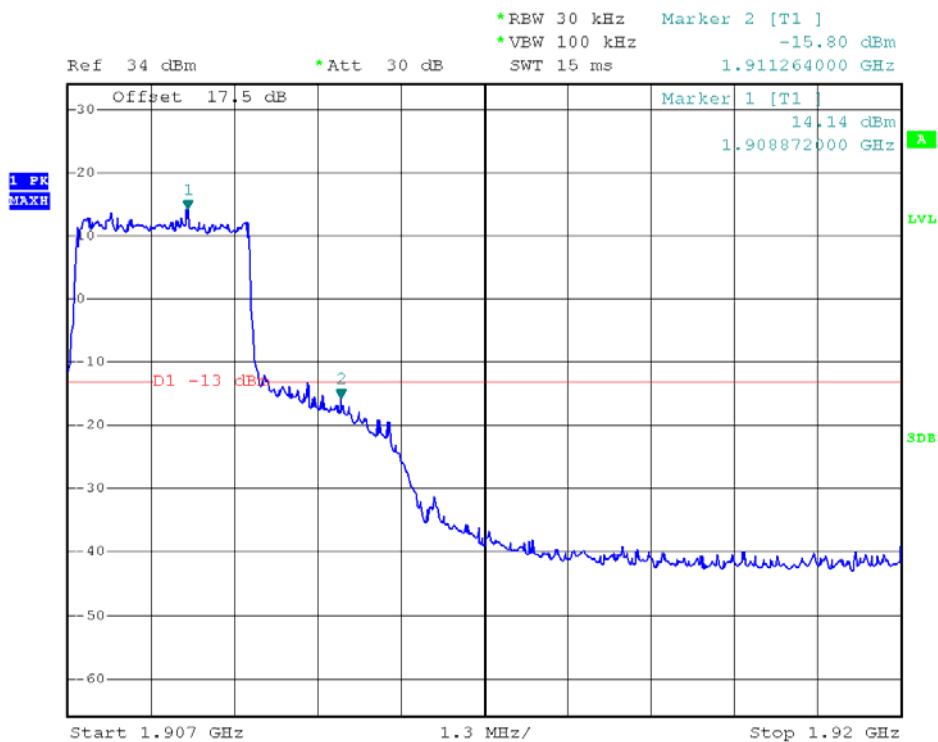
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

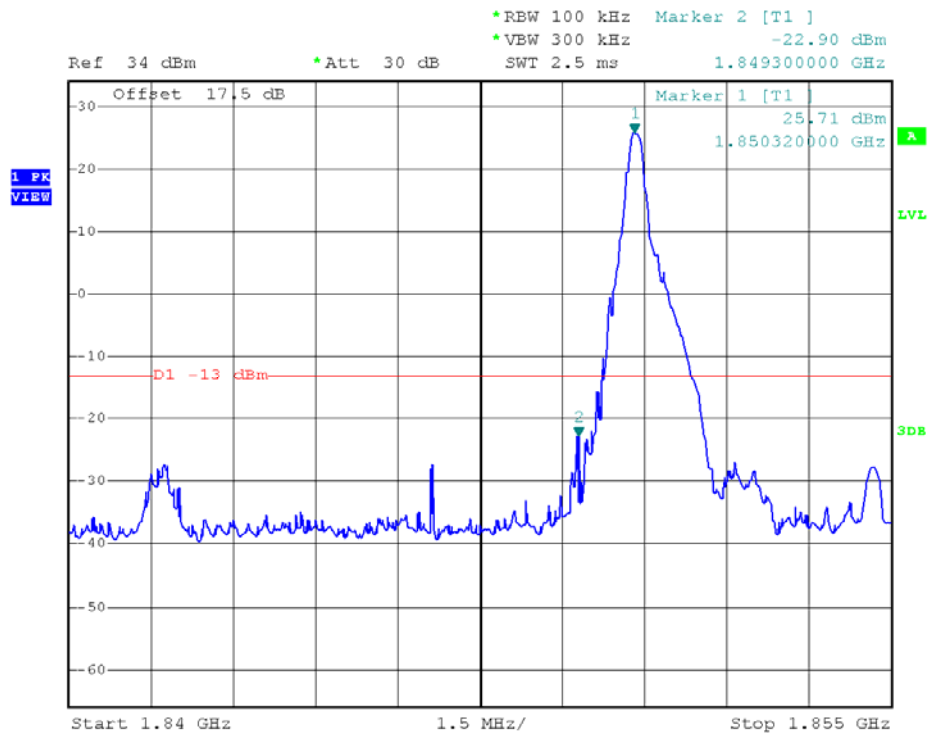


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 14

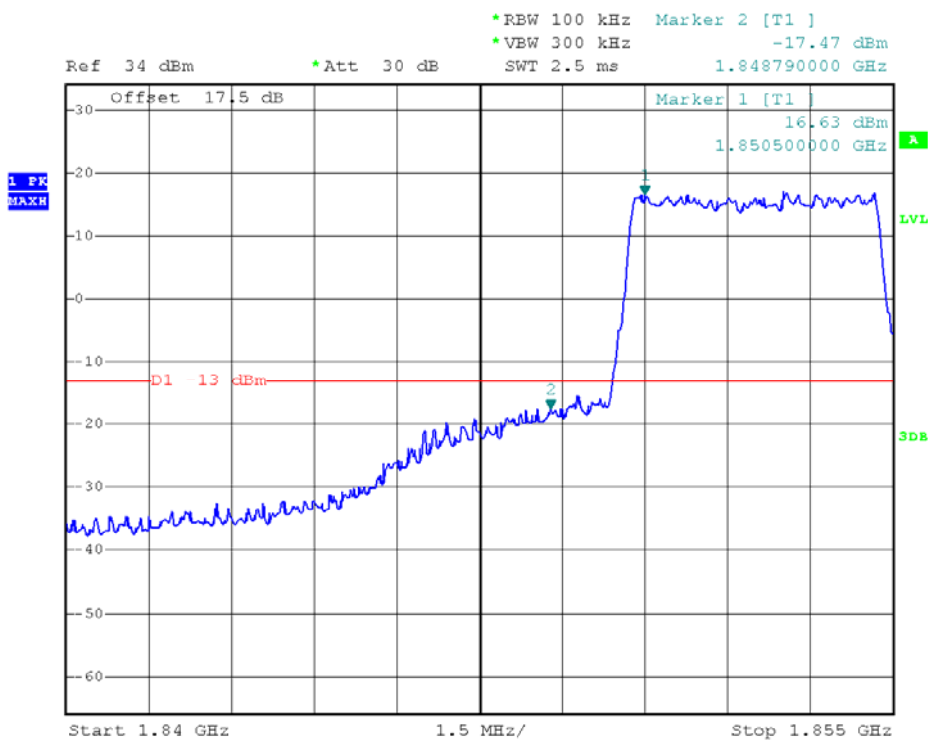


Higher Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

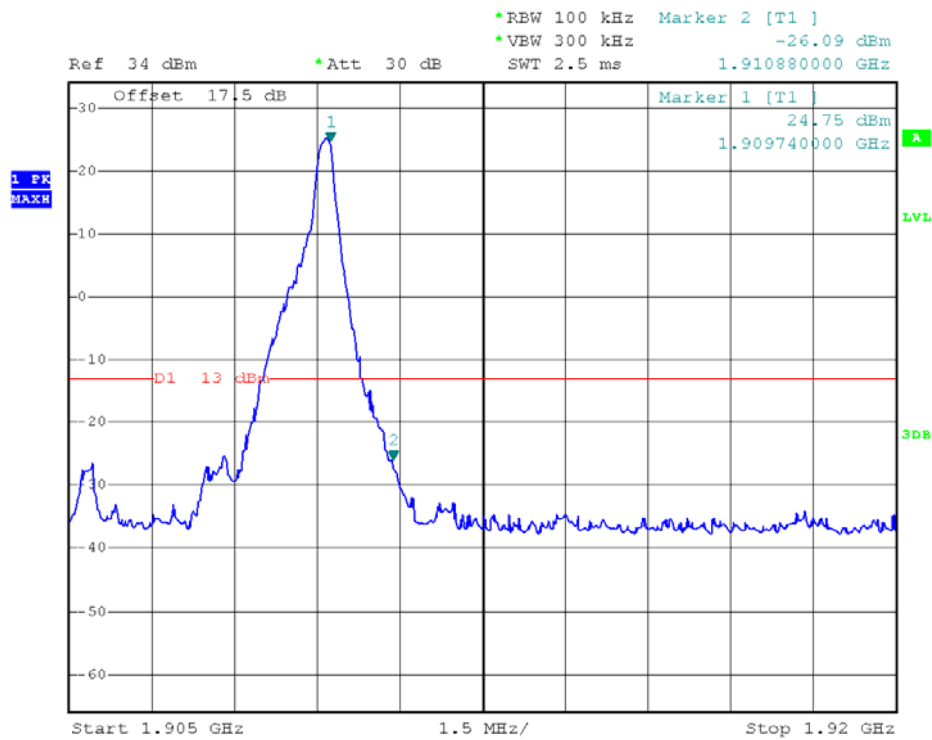
Band	LTE Band 2	Modulation	QPSK
Bandwidth	5MHz		



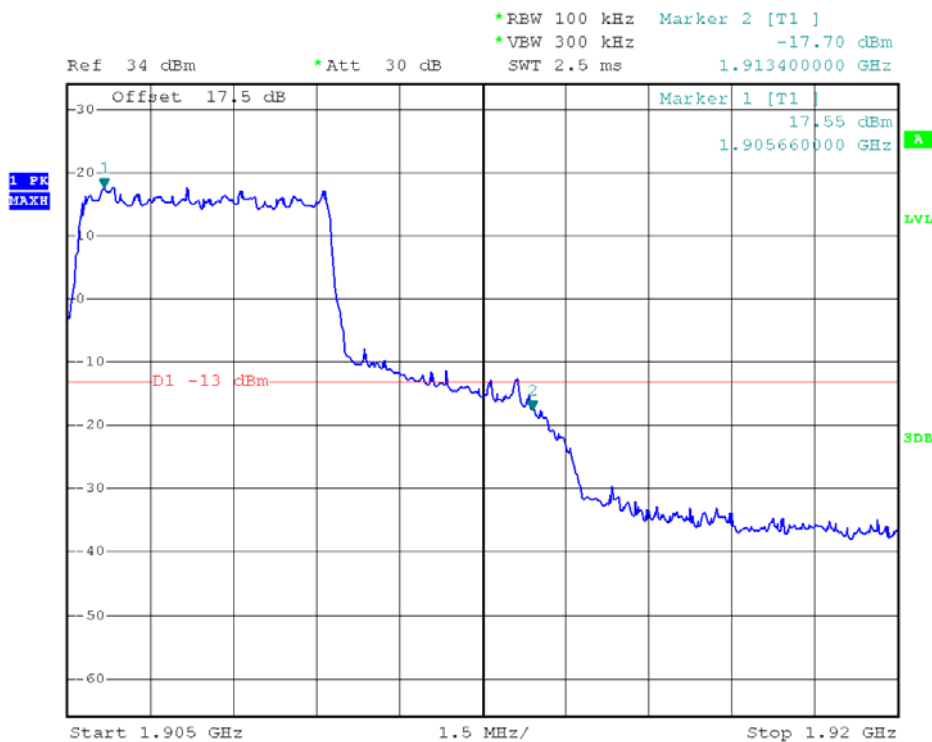
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

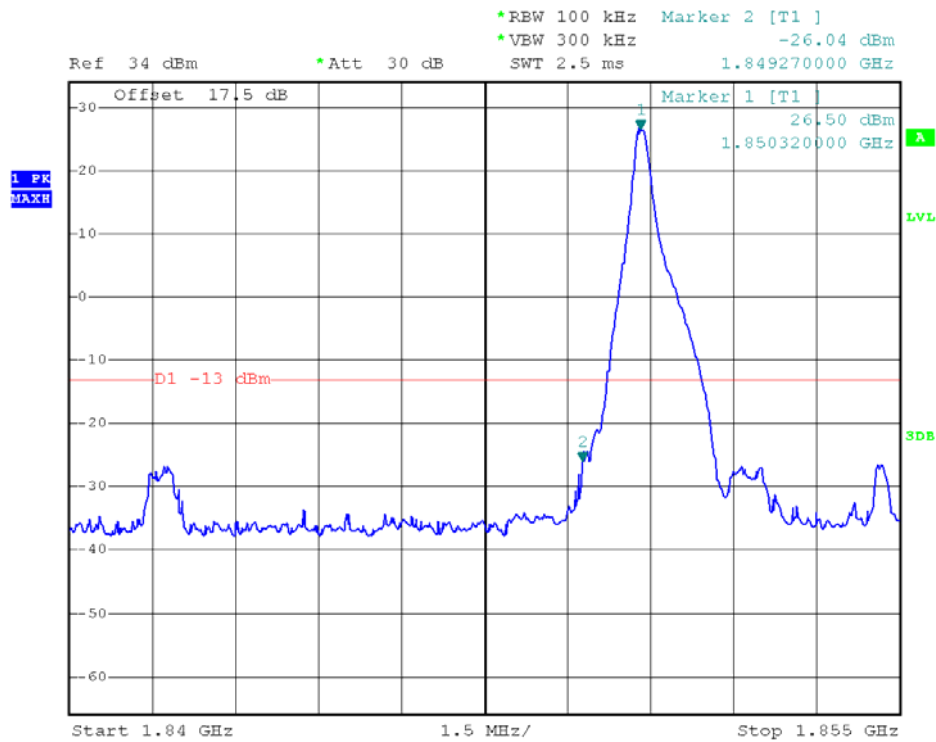


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

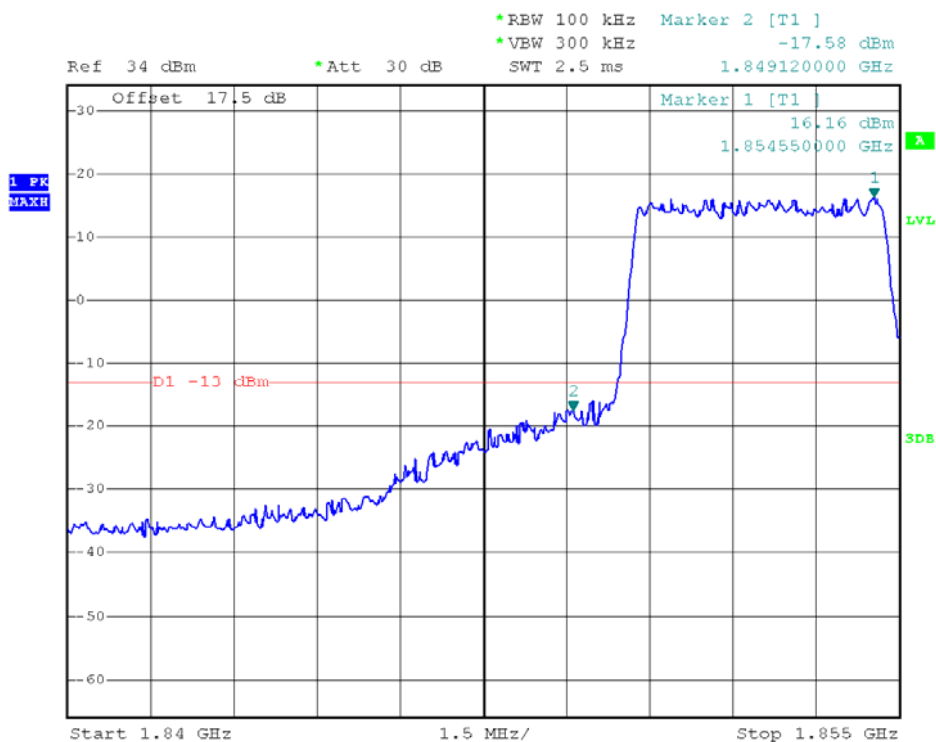


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

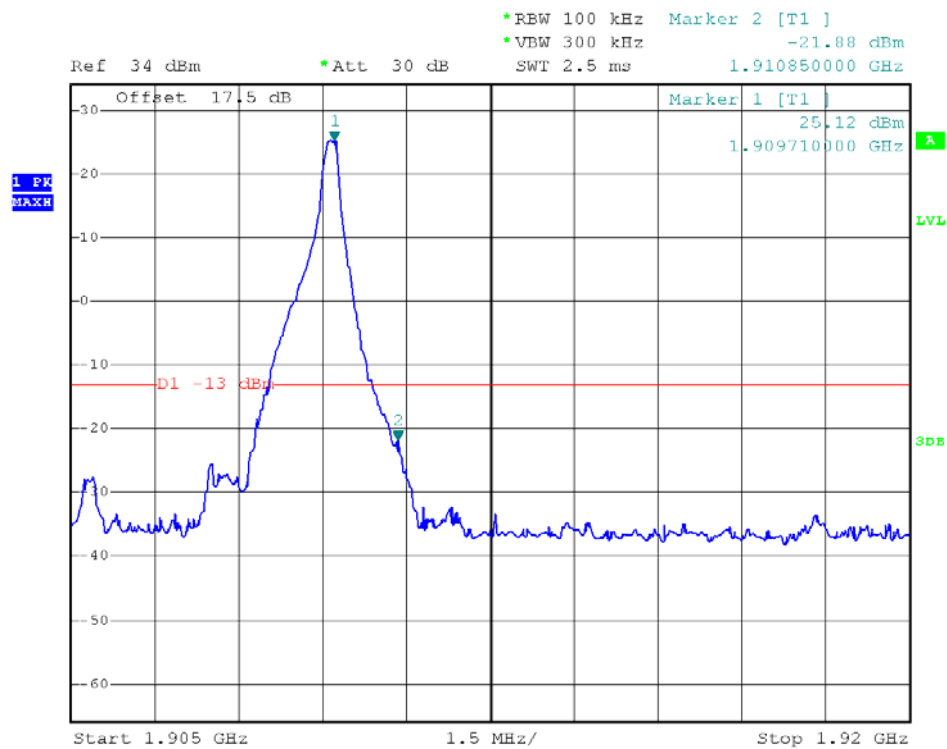
Band	LTE Band 2	Modulation	16QAM
Bandwidth	5MHz		



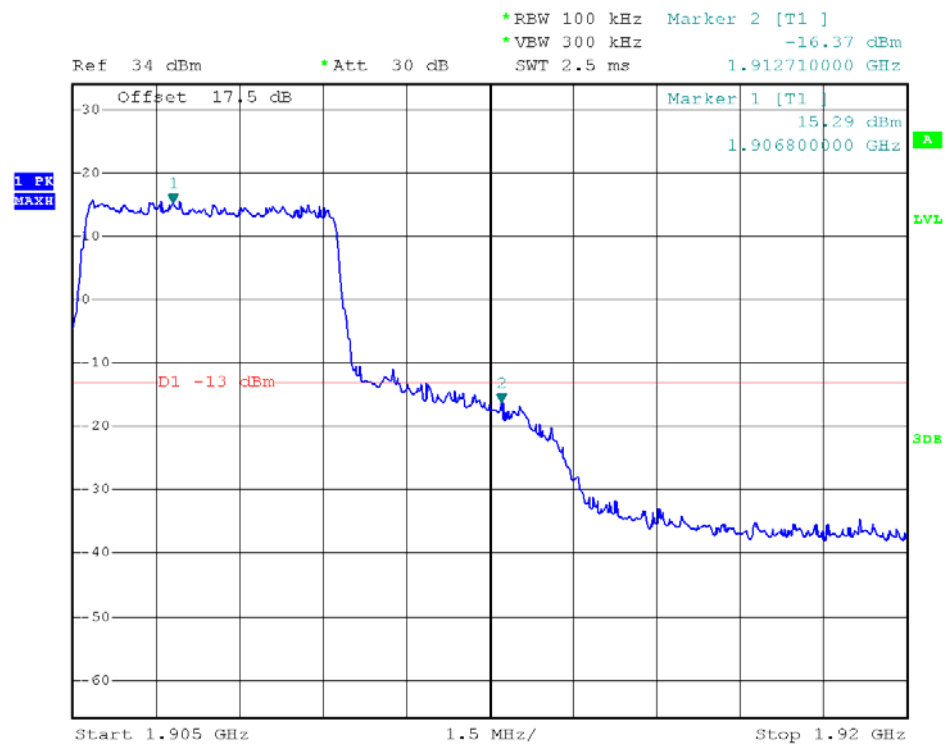
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

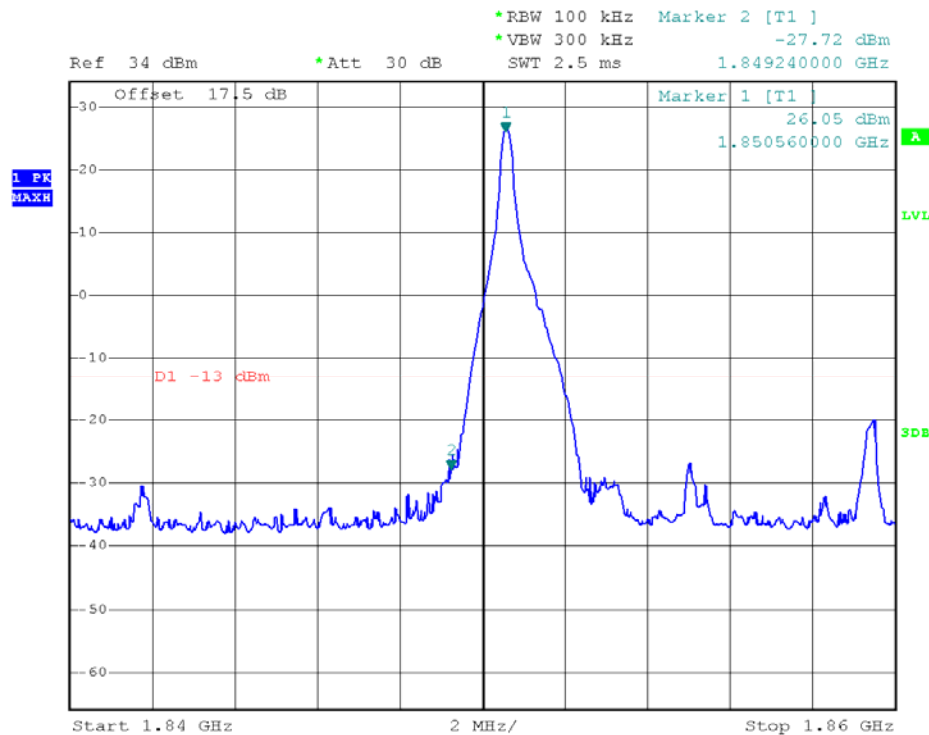


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 24

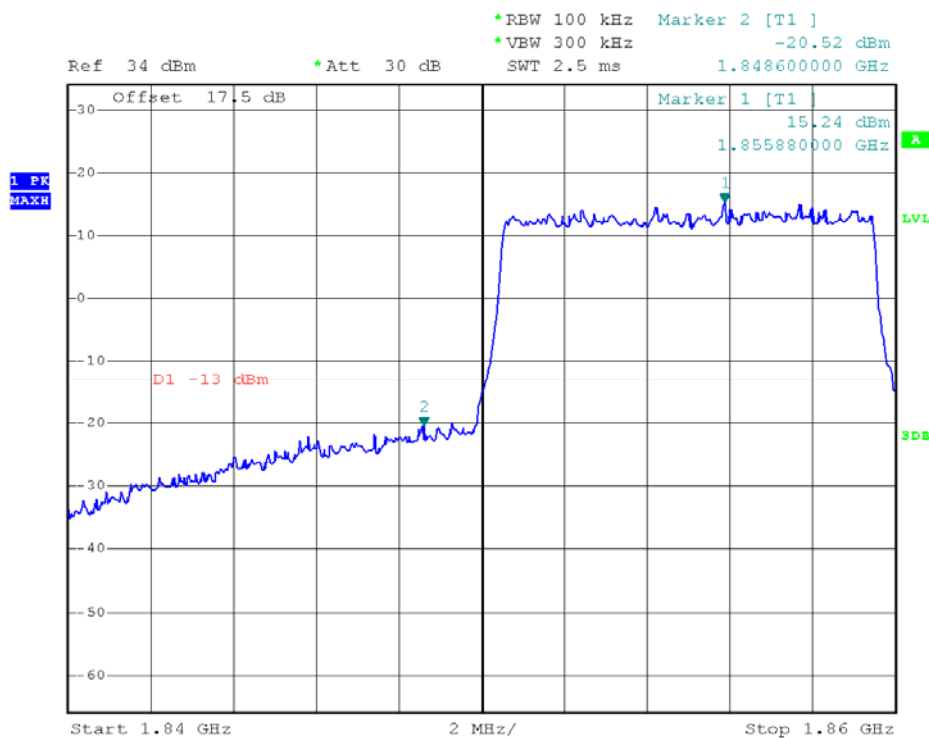


Higher Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

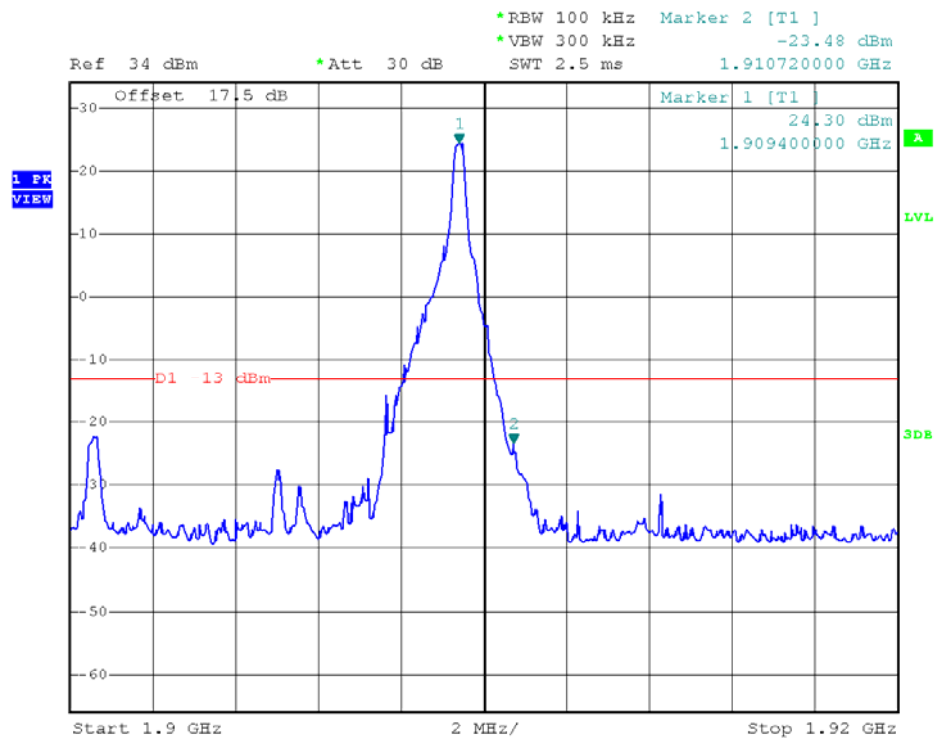
Band	LTE Band 2	Modulation	QPSK
Bandwidth	10MHz		



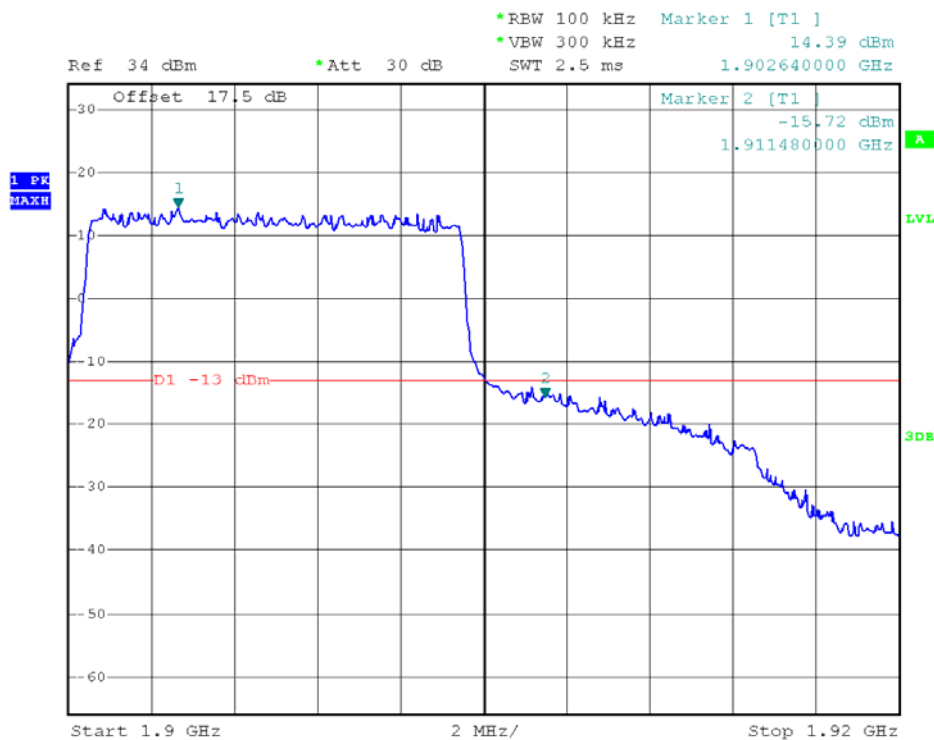
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0

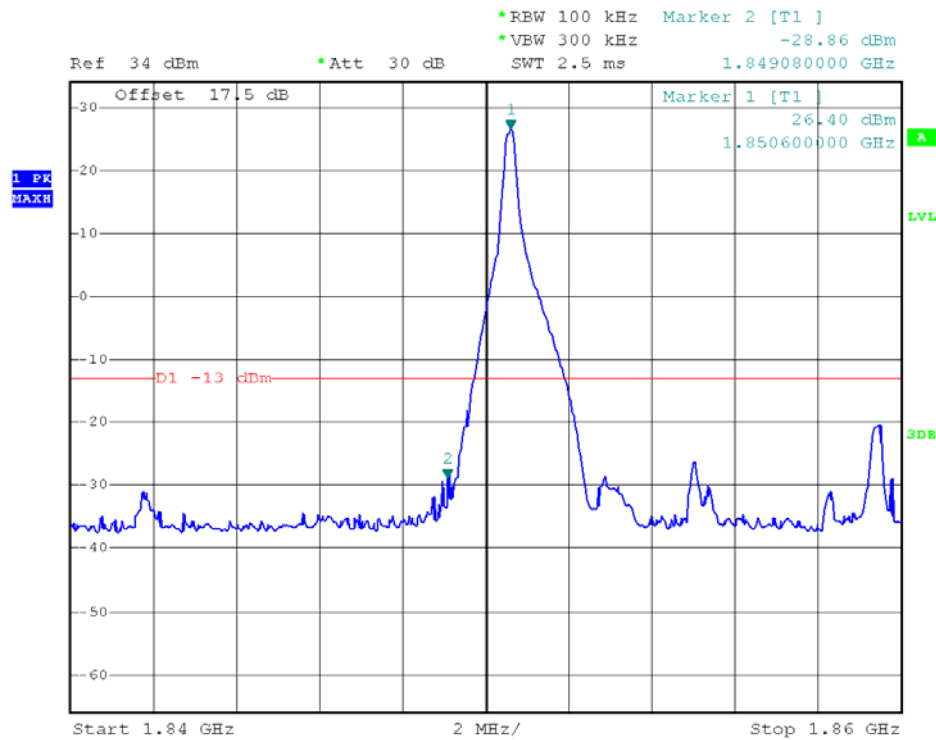


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

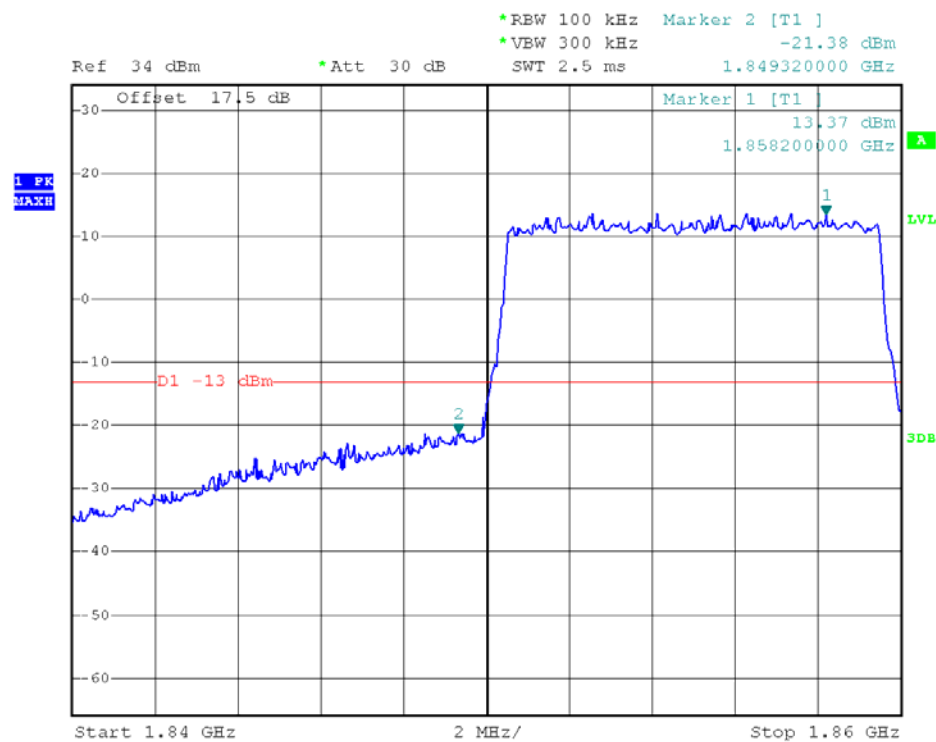


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

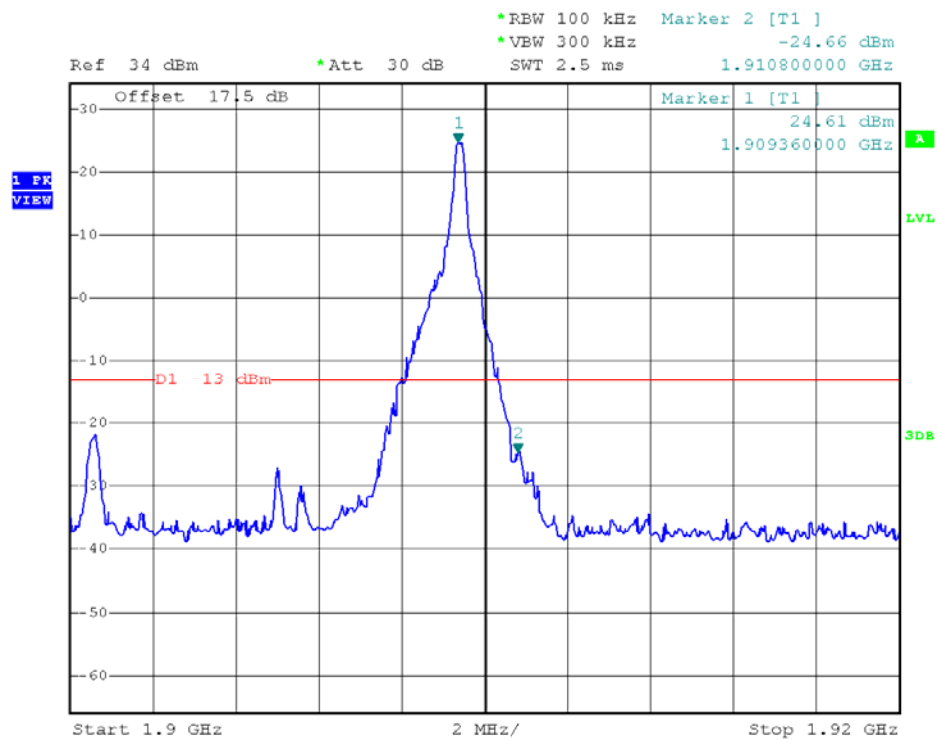
Band	LTE Band 2	Modulation	16QAM
Bandwidth	10MHz		



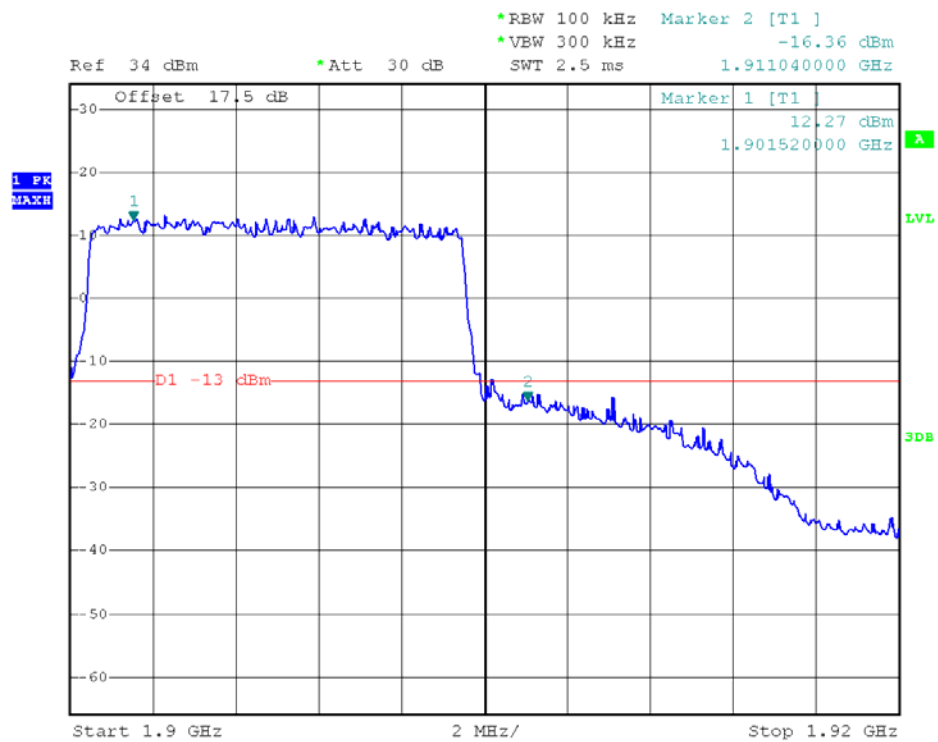
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

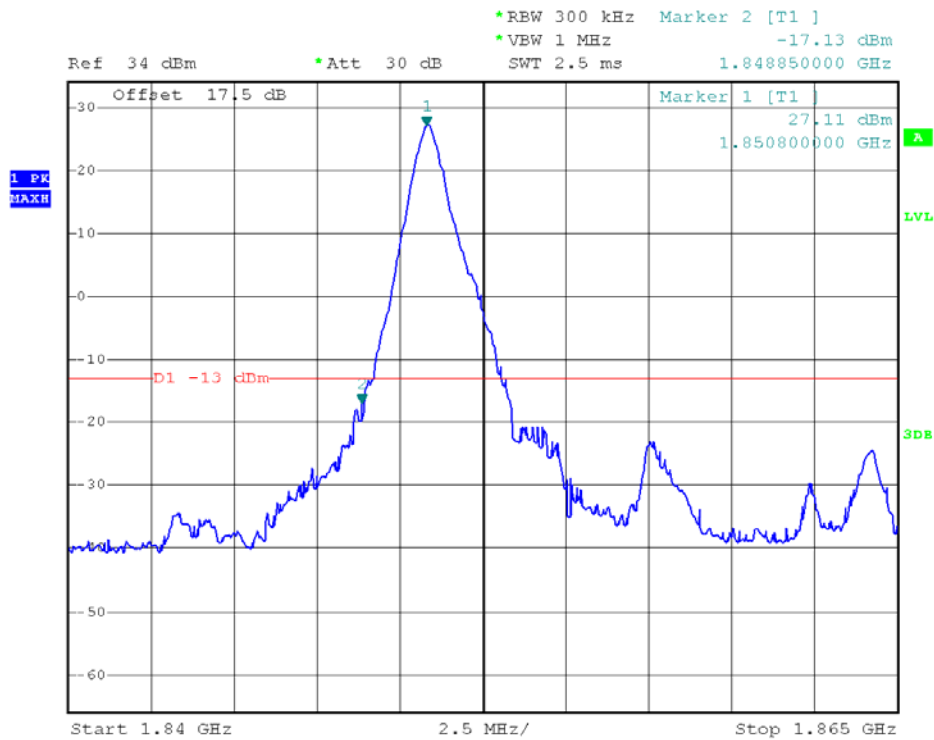


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 49

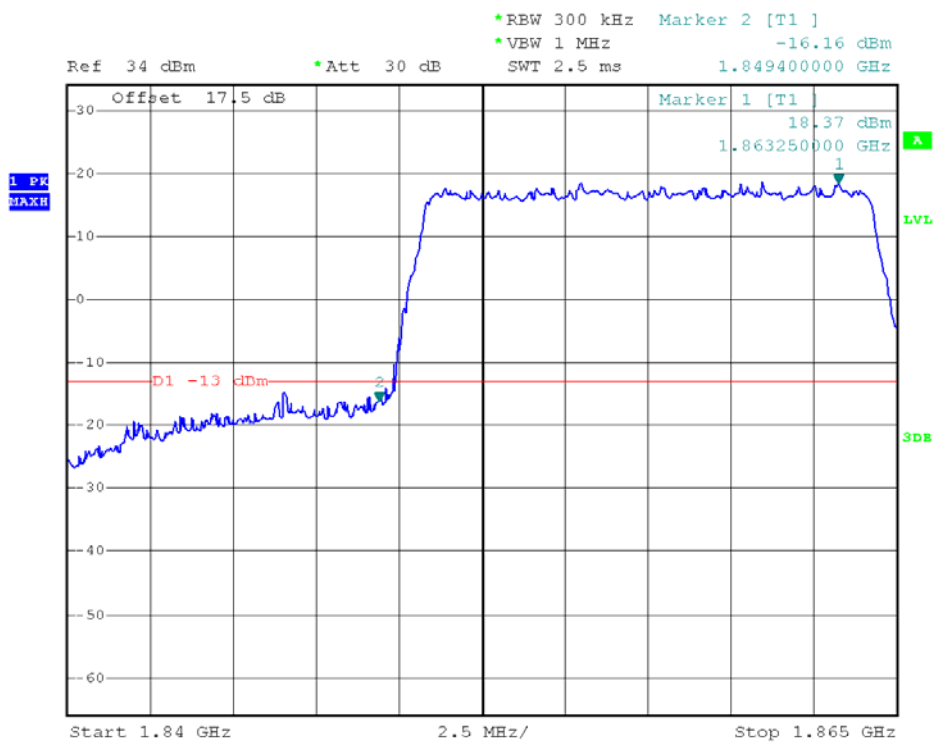


Higher Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

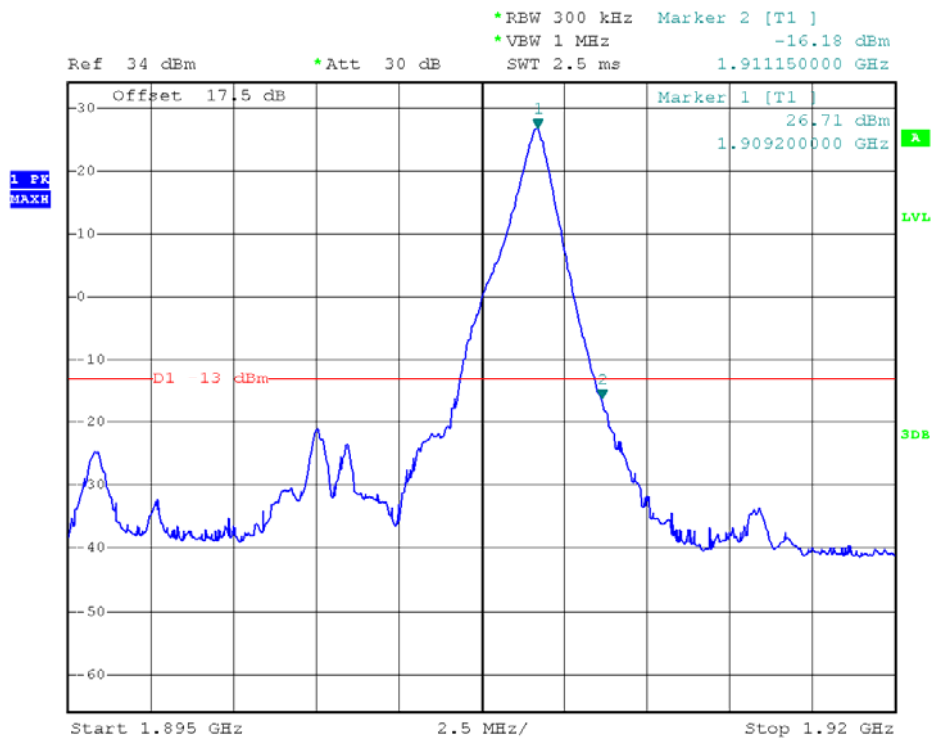
Band	LTE Band 2	Modulation	QPSK
Bandwidth	15MHz		



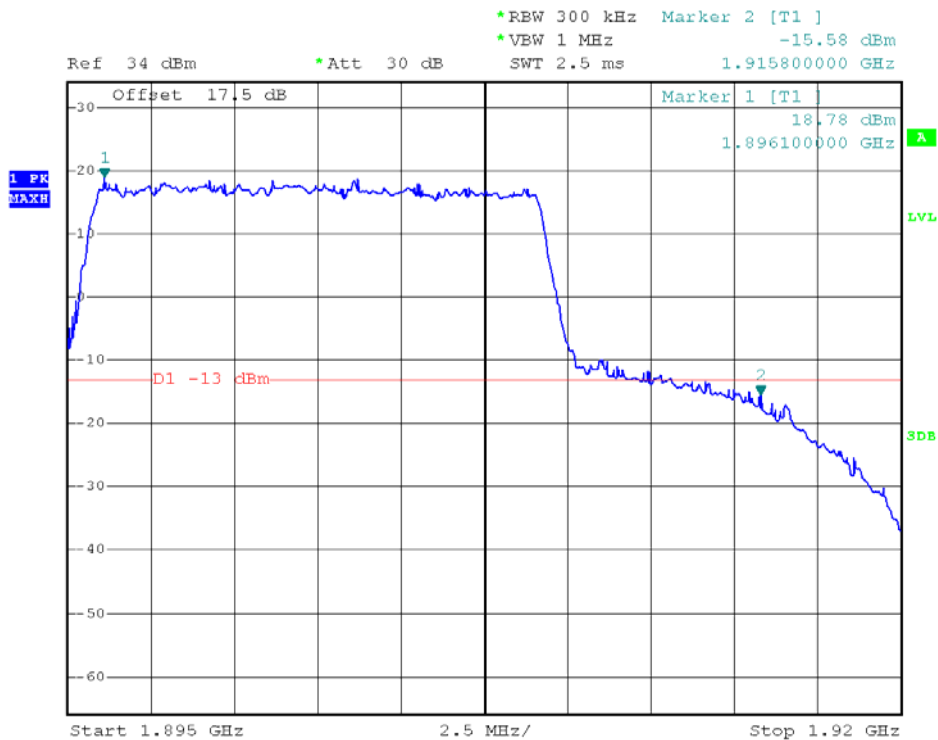
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0

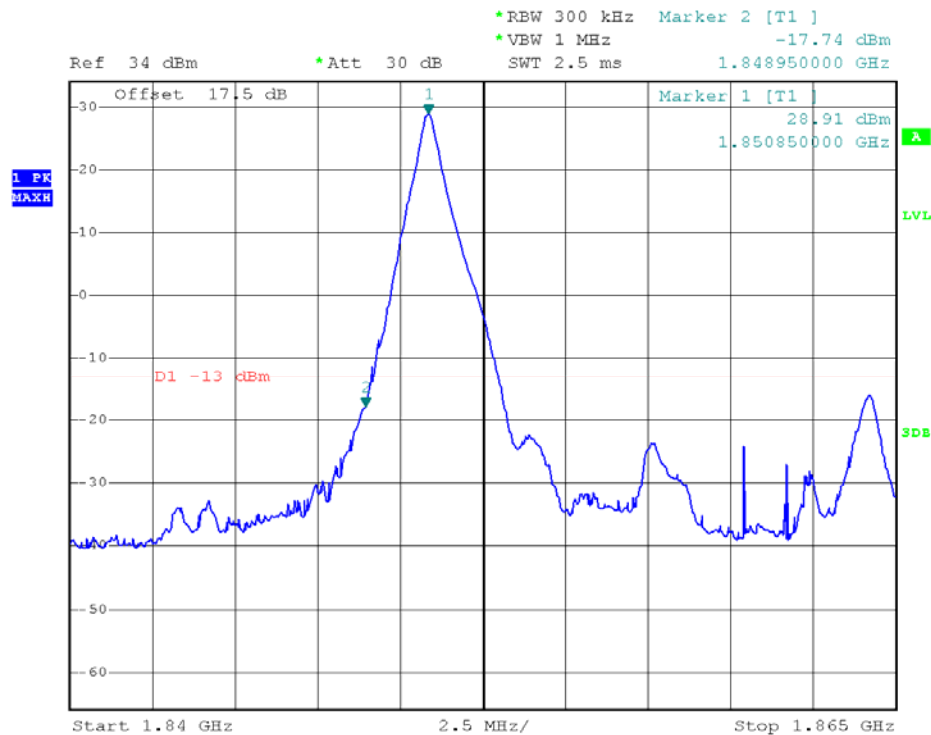


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74

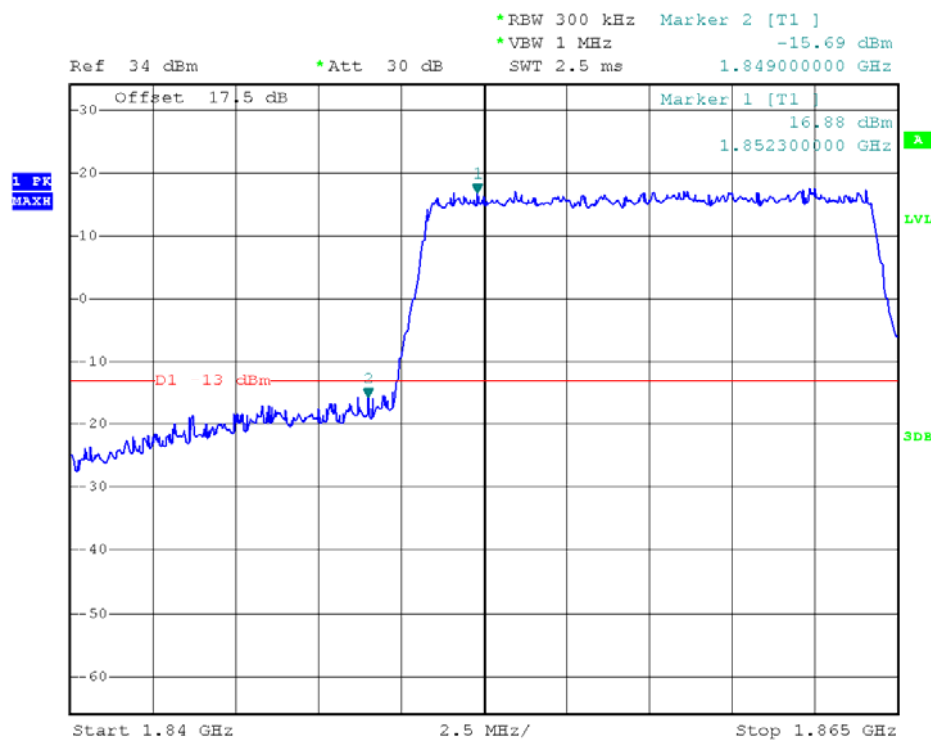


Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

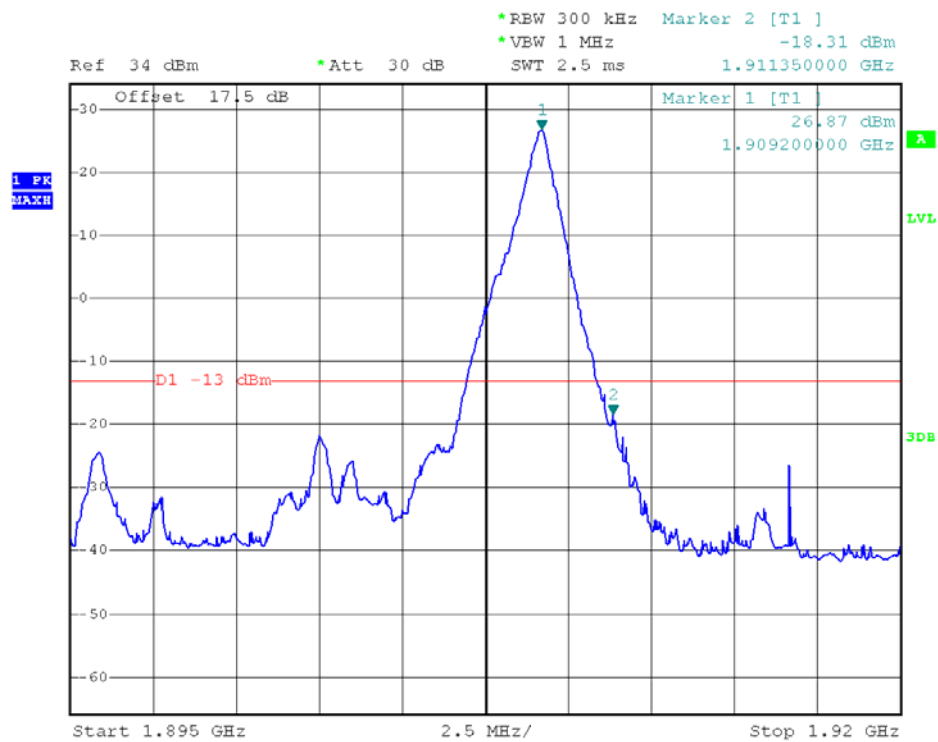
Band	LTE Band 2	Modulation	16QAM
Bandwidth	15MHz		



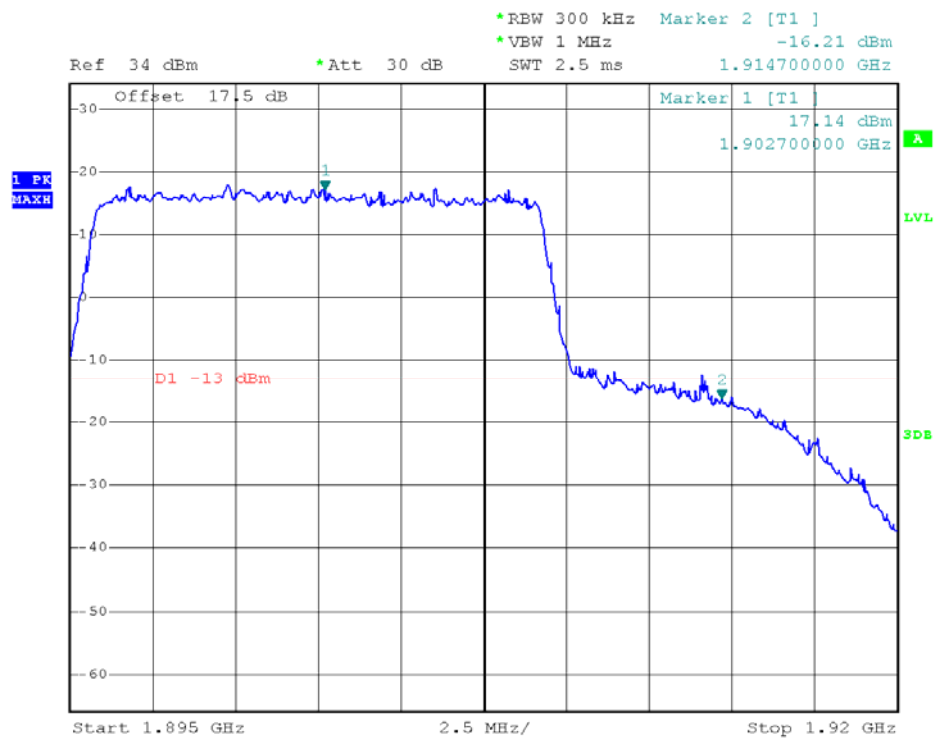
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 75, RB Offset 0



Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 74

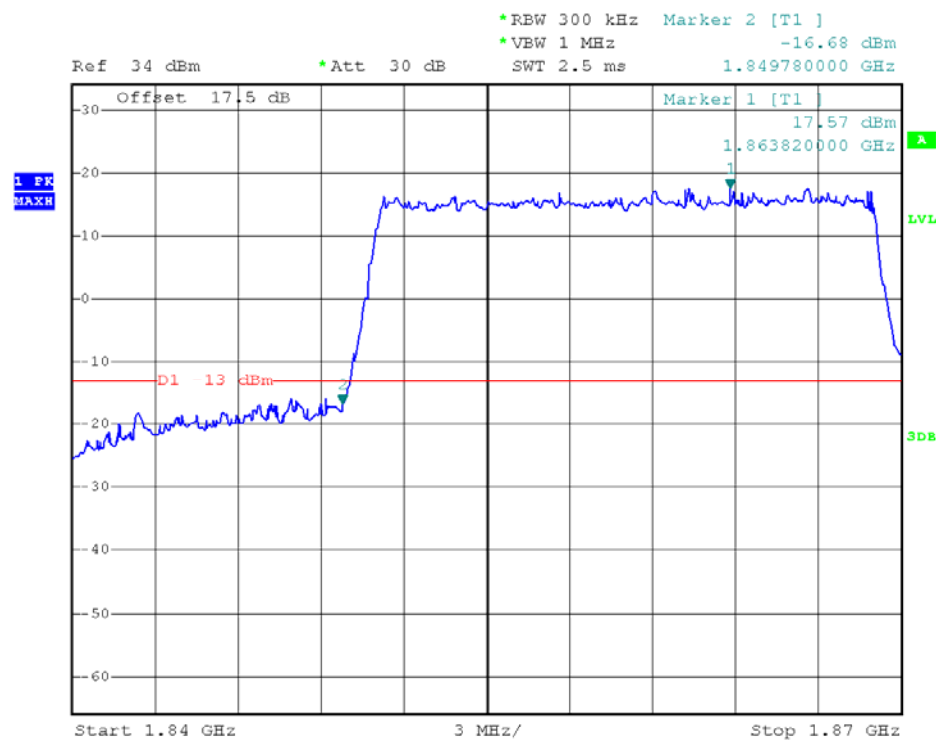


Higher Band Edge Plot for 16QAM-RB Size 75, RB Offset 0

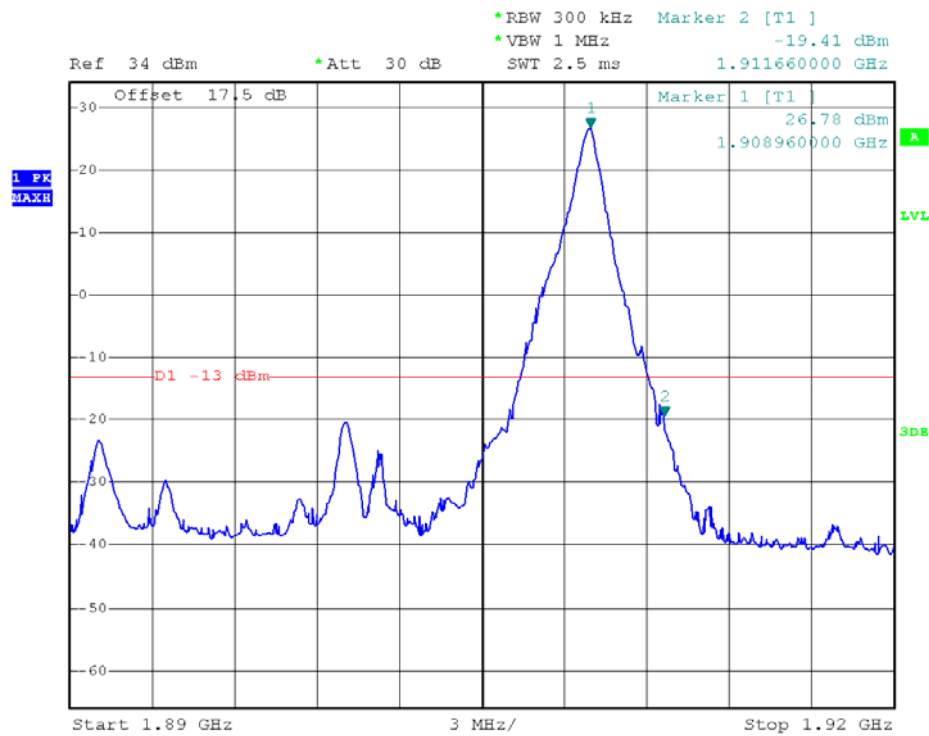
Band	LTE Band 2	Modulation	QPSK
Bandwidth	20MHz		



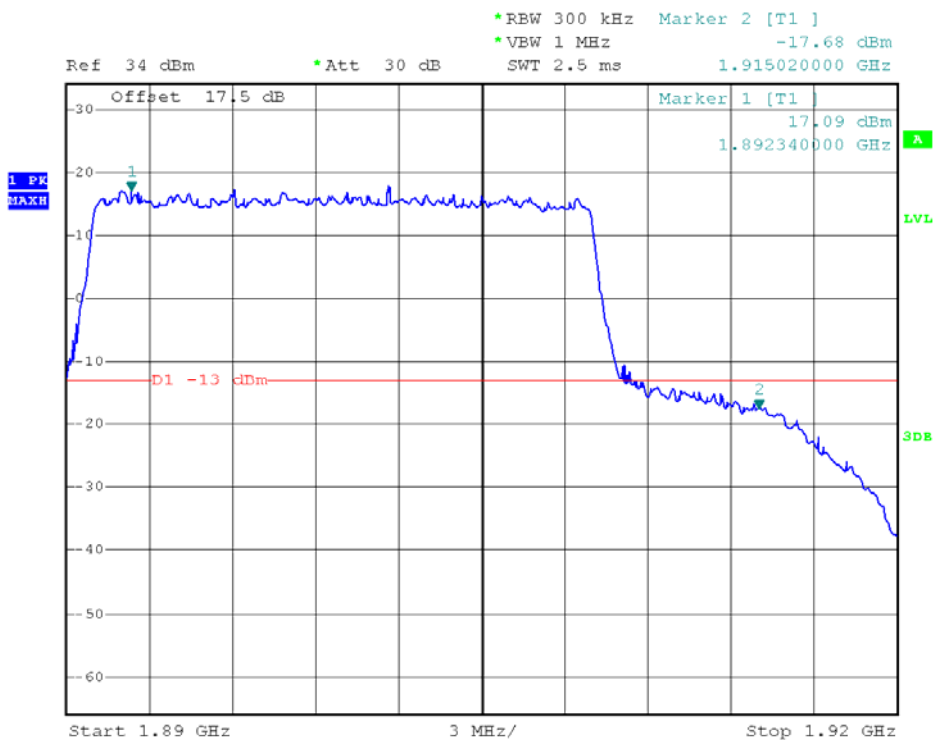
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0

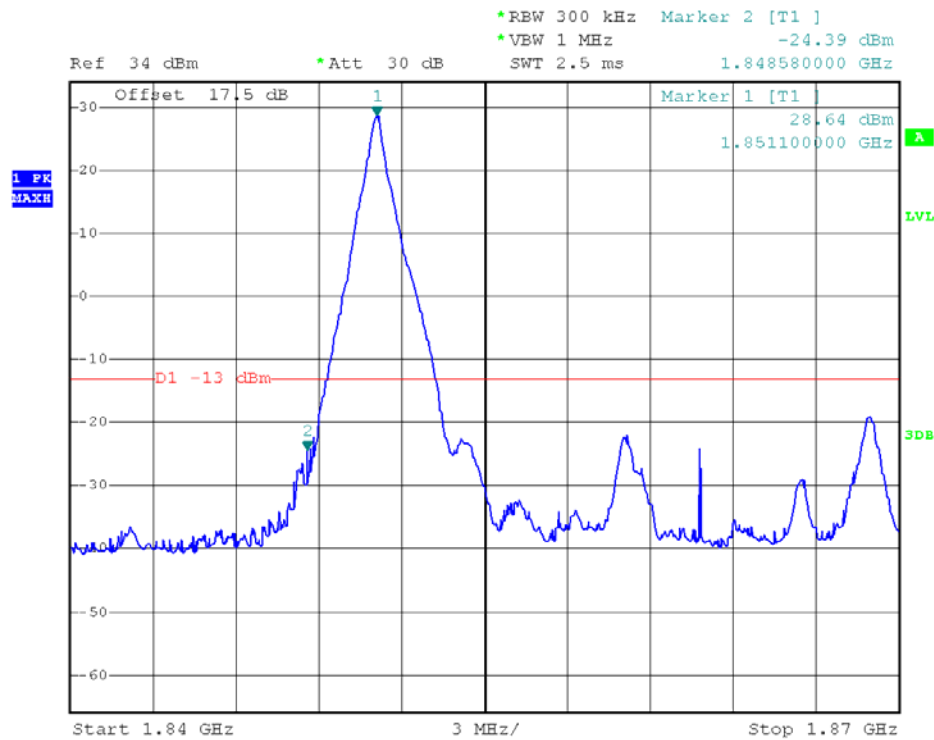


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99

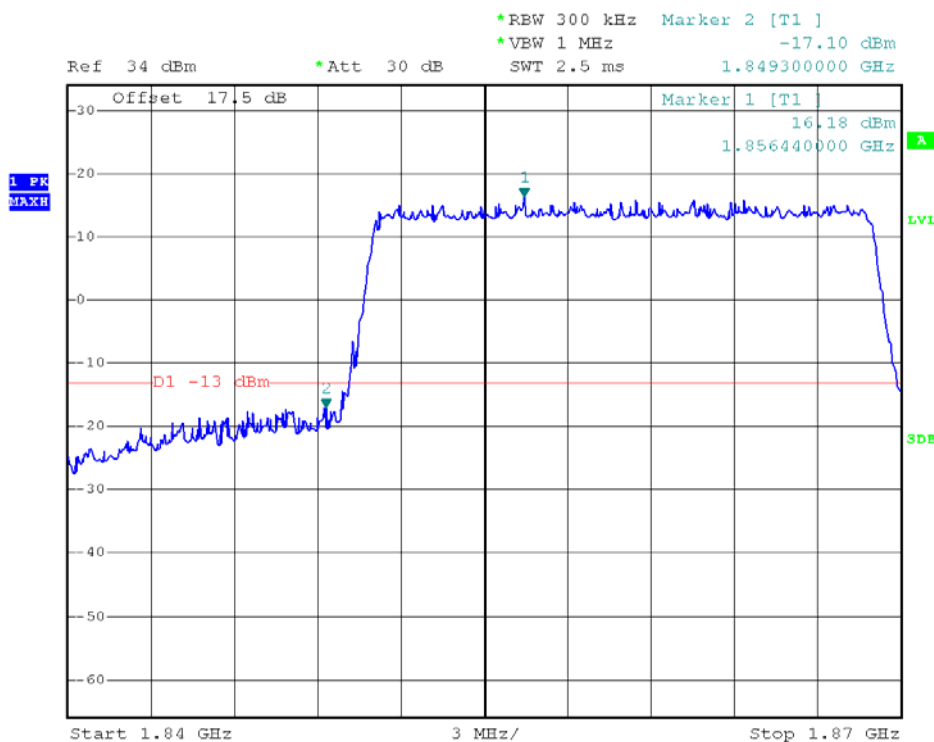


Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

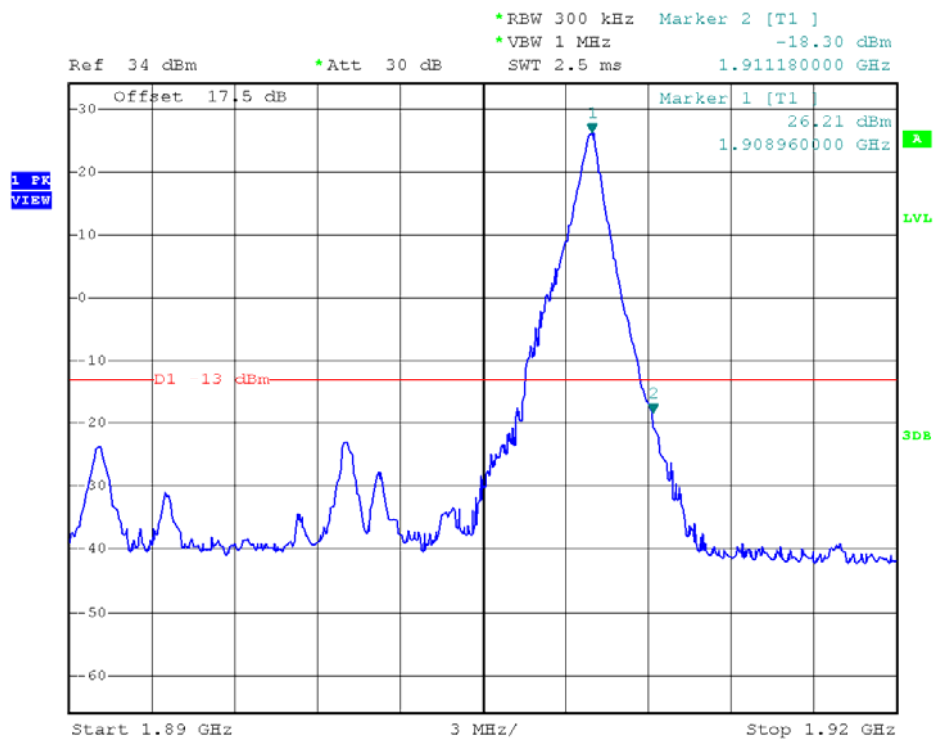
Band	LTE Band 2	Modulation	16QAM
Bandwidth	20MHz		



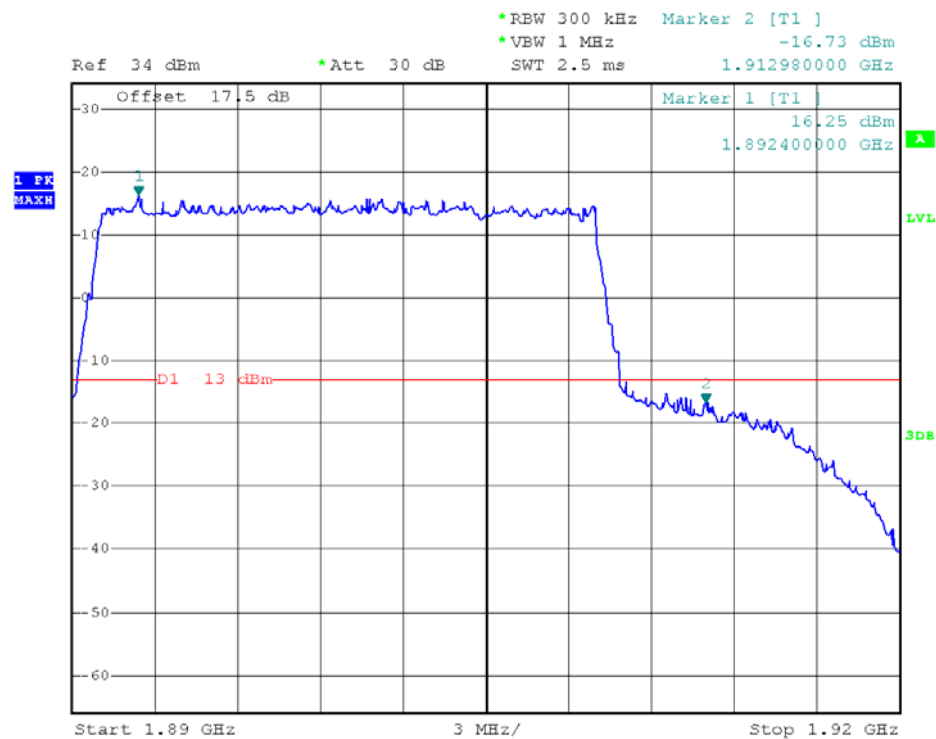
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 100, RB Offset 0



Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 99



Higher Band Edge Plot for 16QAM-RB Size 100, RB Offset 0



Ref 34 dBm *Att 30 dB *RBW 30 kHz *VBW 100 kHz SWT 15 ms Marker 1 [T1] 19.73 dBm 1.710320000 GHz

Offset 14 dB

Marker 2 [T1] -28.84 dBm 1.709264000 GHz

D1 -13 dBm

Start 1.7 GHz 1.2 MHz/ Stop 1.712 GHz

Ref 34 dBm *Att 30 dB *RBW 30 kHz Marker 1 [T1] 15.33 dBm
 *VBW 100 kHz SWT 15 ms 1.711232000 GHz

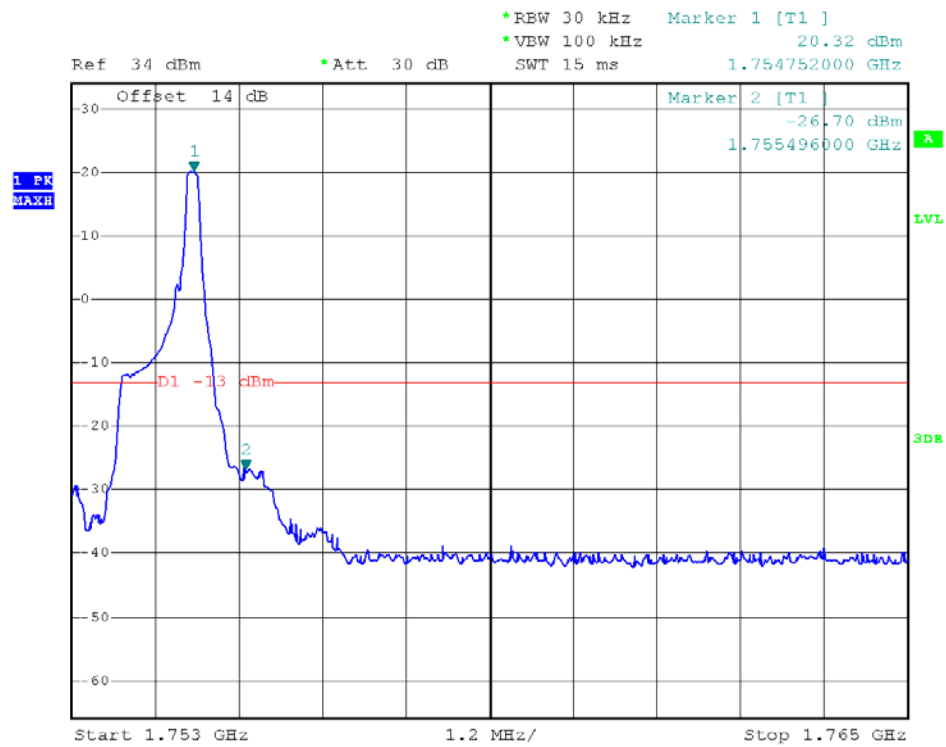
Offset 14 dB

Marker 2 [T1] -19.39 dBm 1.709888000 GHz

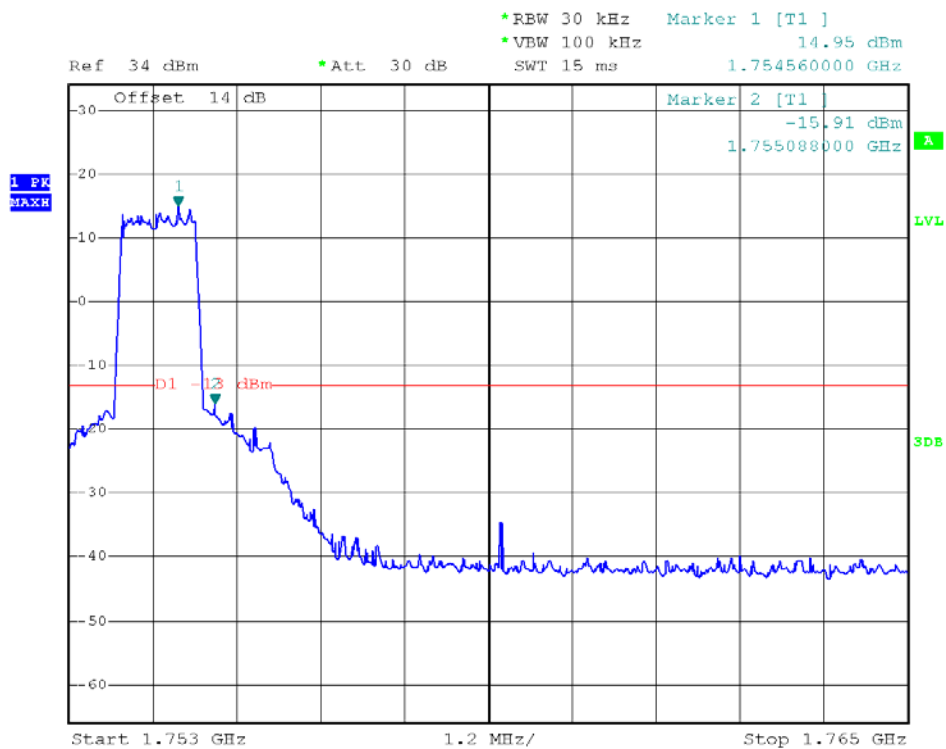
D1 -13 dBm

Start 1.7 GHz 1.2 MHz/ Stop 1.712 GHz

CCIC-SET/T (00)

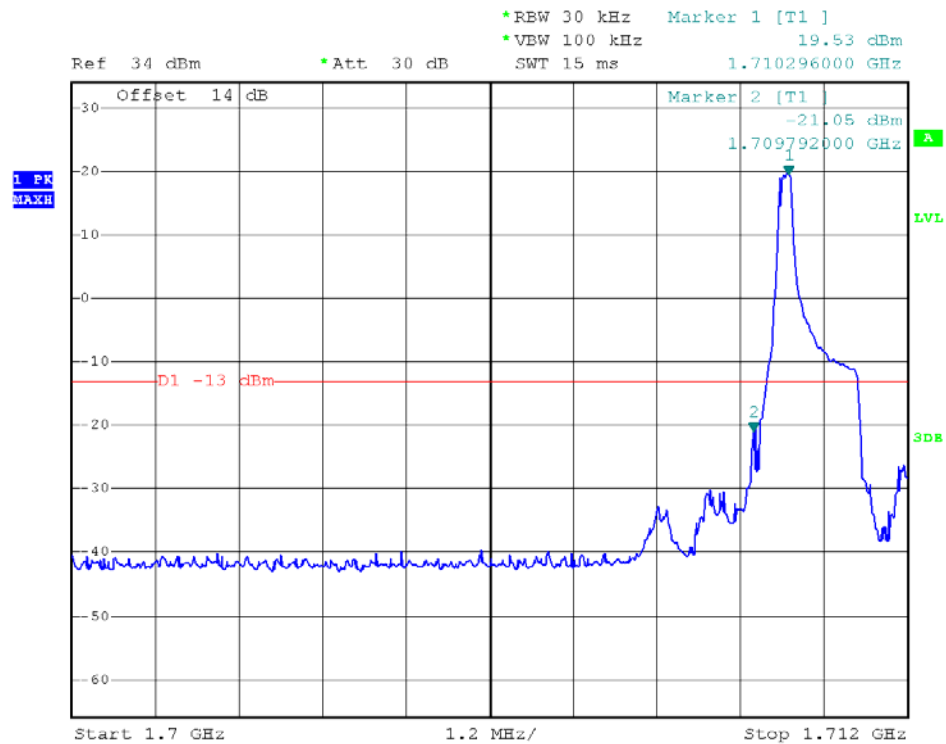


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

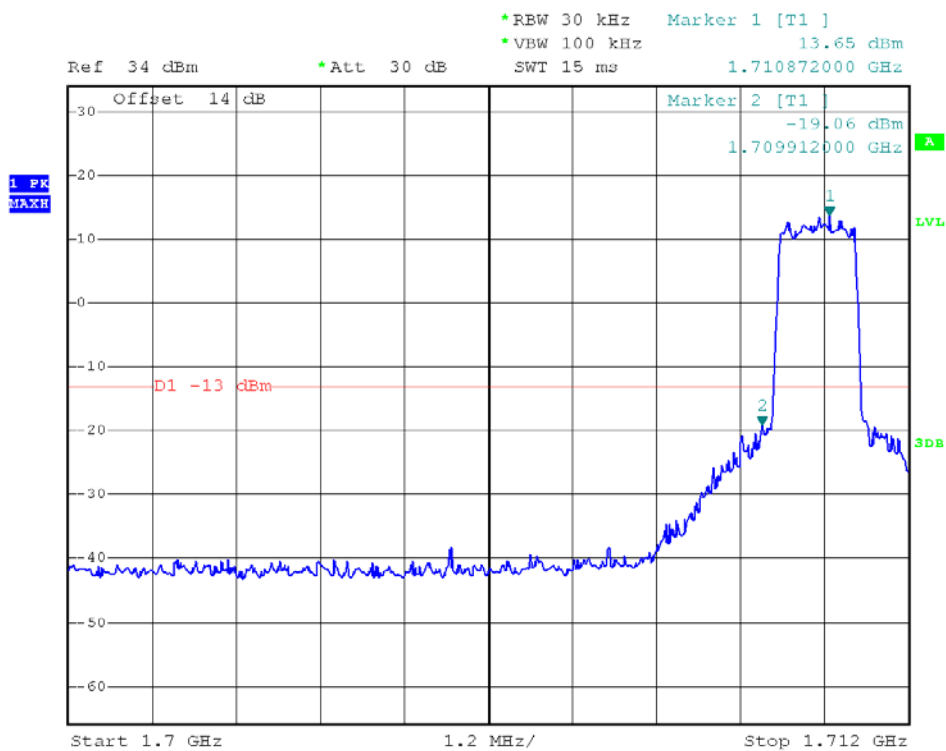


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

Band	LTE Band 4	Modulation	16QAM
Bandwidth	1.4MHz		



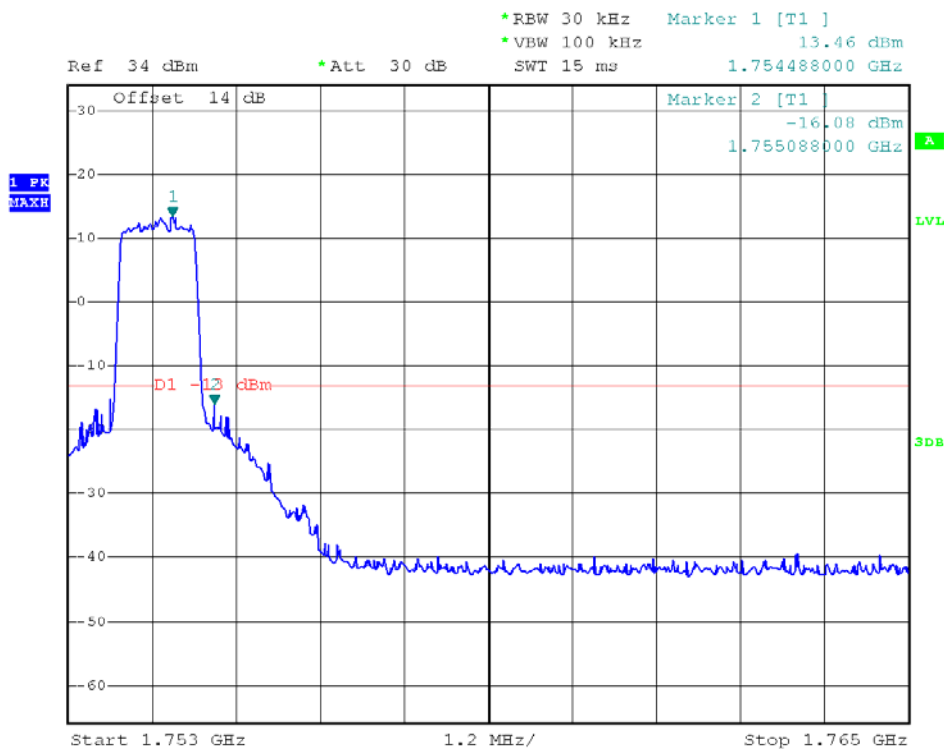
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

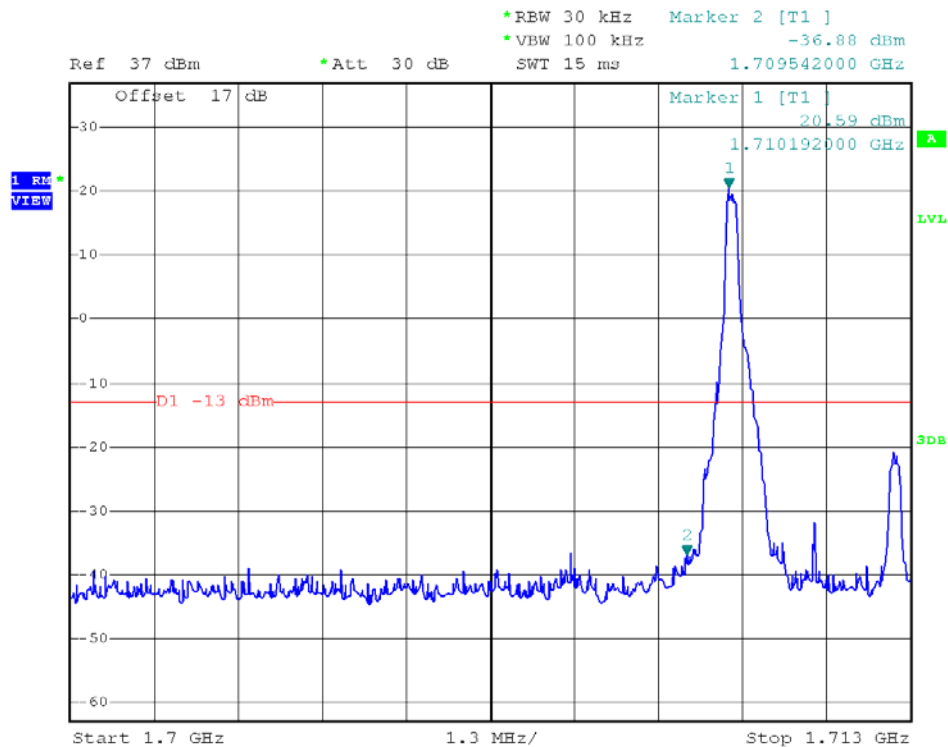


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5

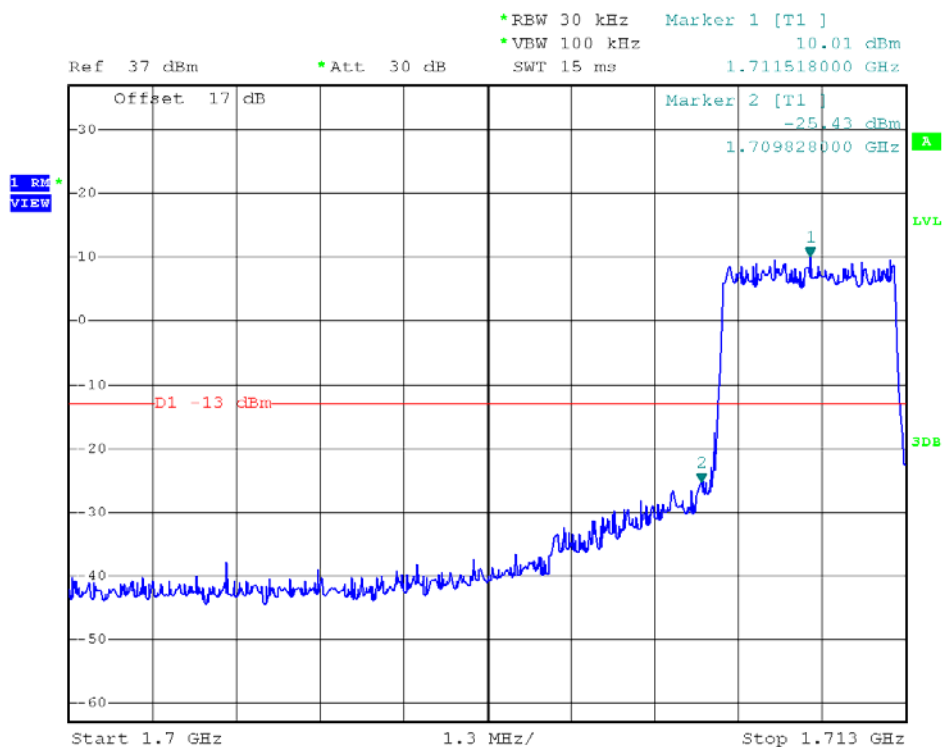


Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

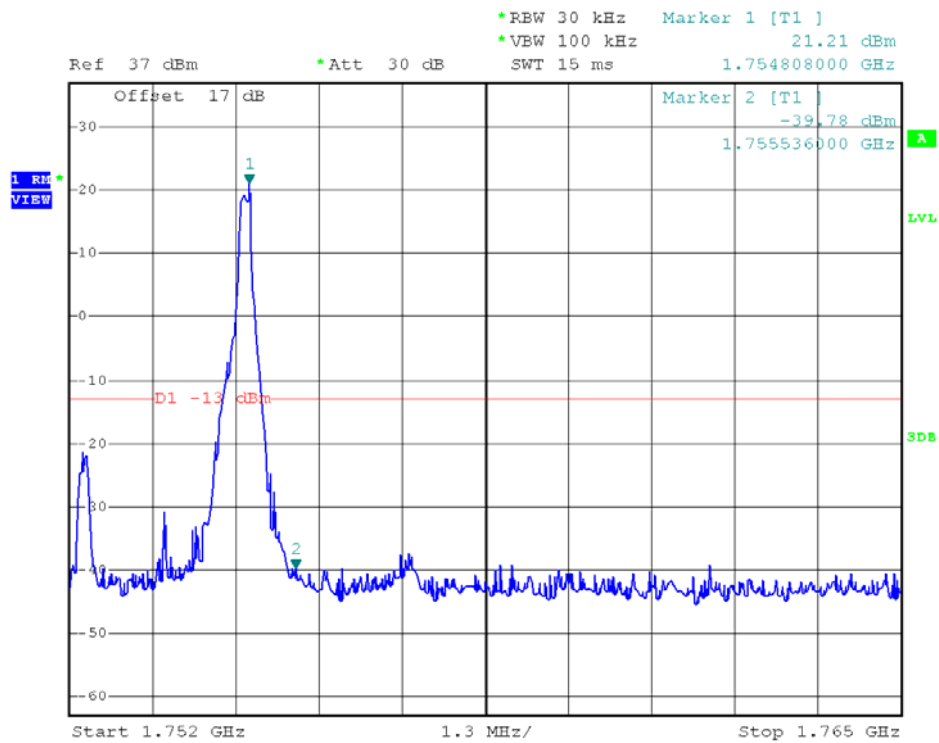
Band	LTE Band 4	Modulation	QPSK
Bandwidth	3MHz		



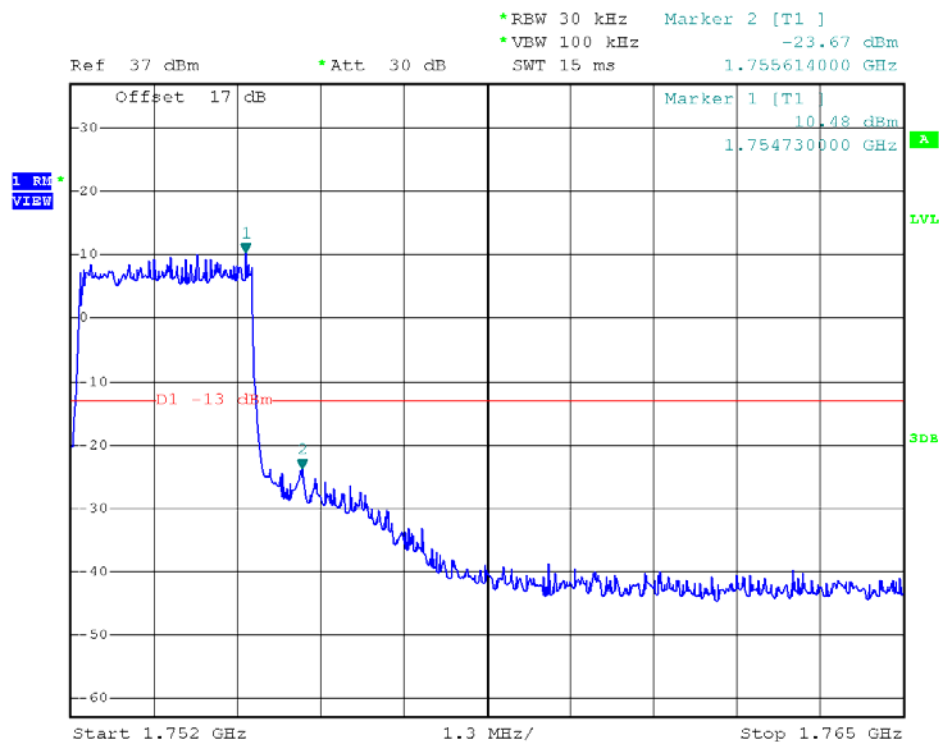
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0

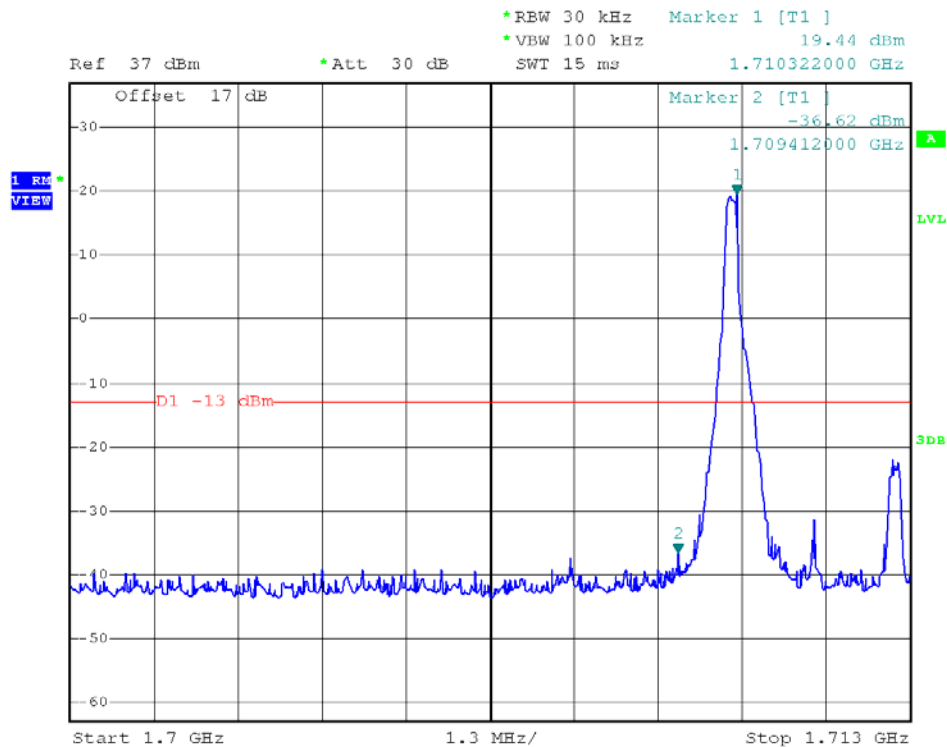


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

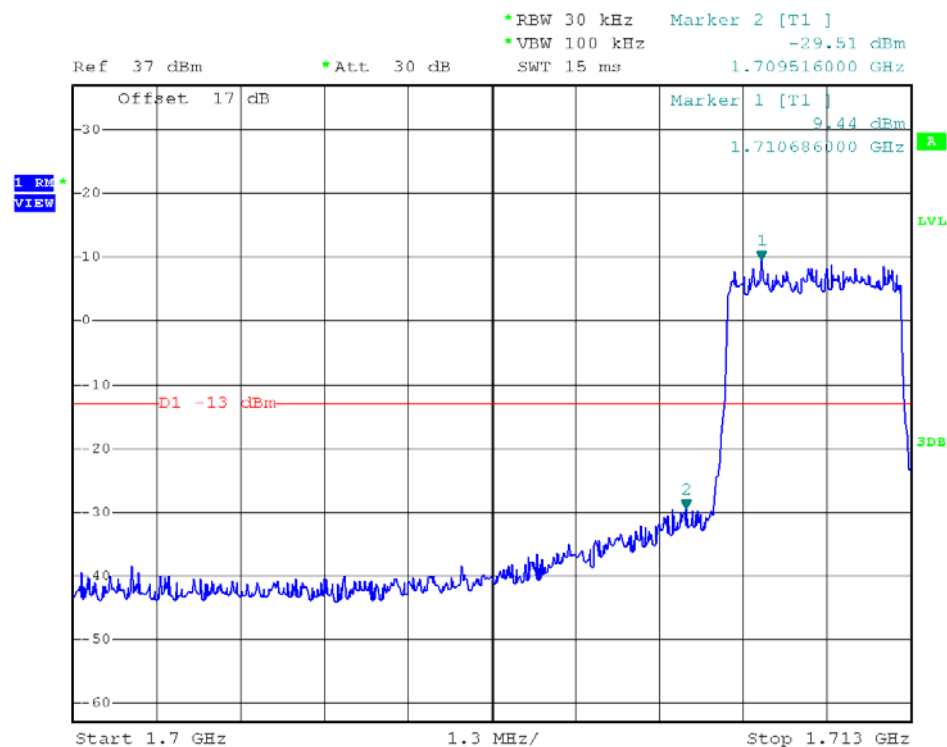


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

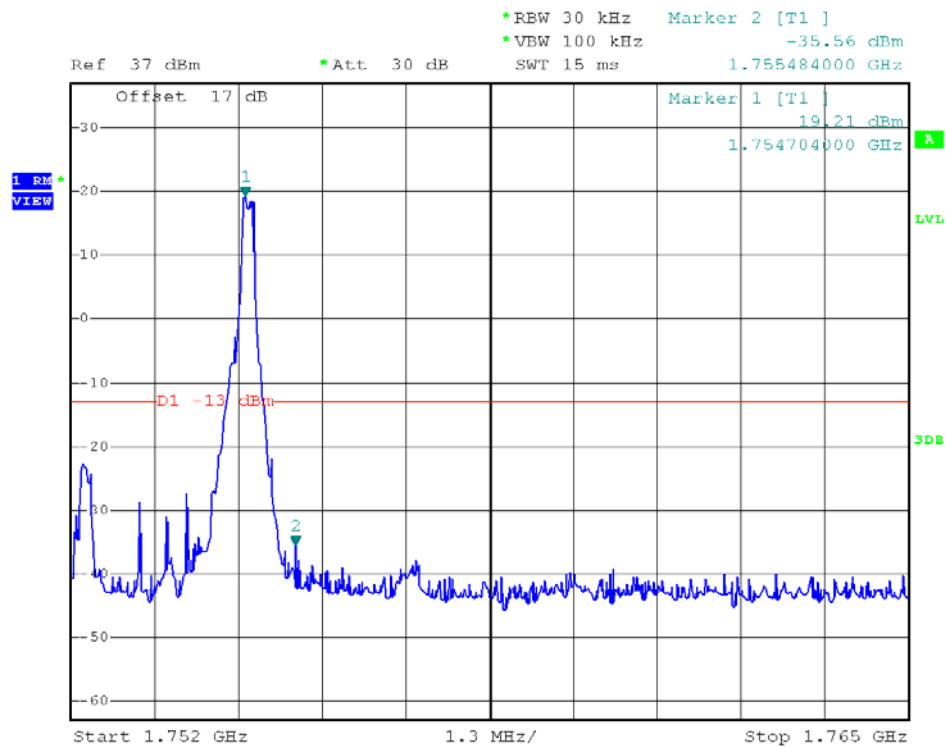
Band	LTE Band 4	Modulation	16QAM
Bandwidth	3MHz		



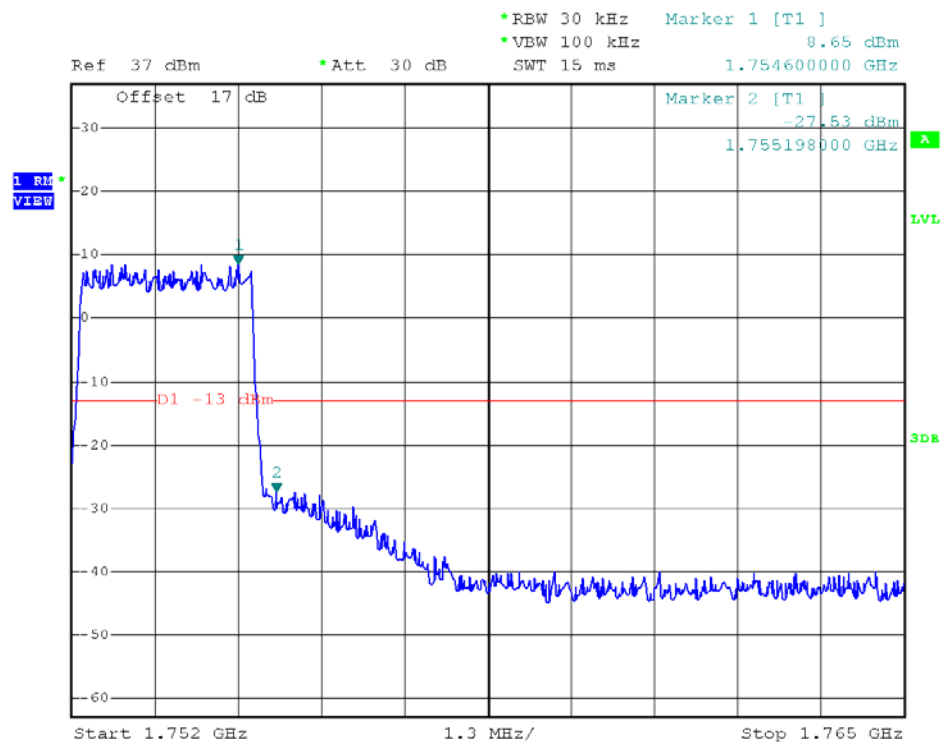
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

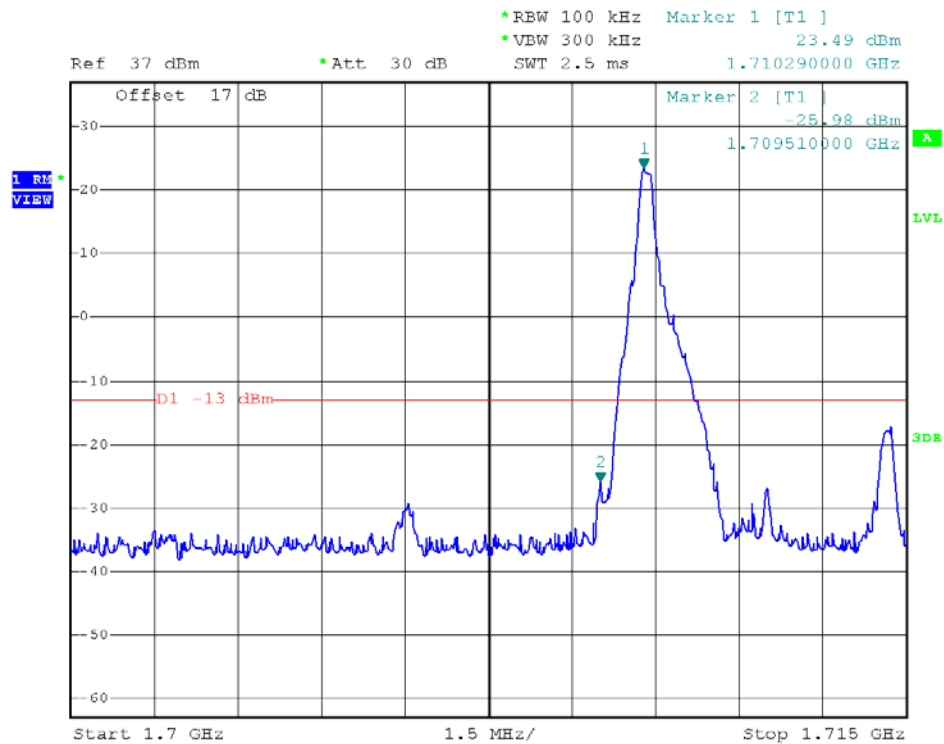


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14

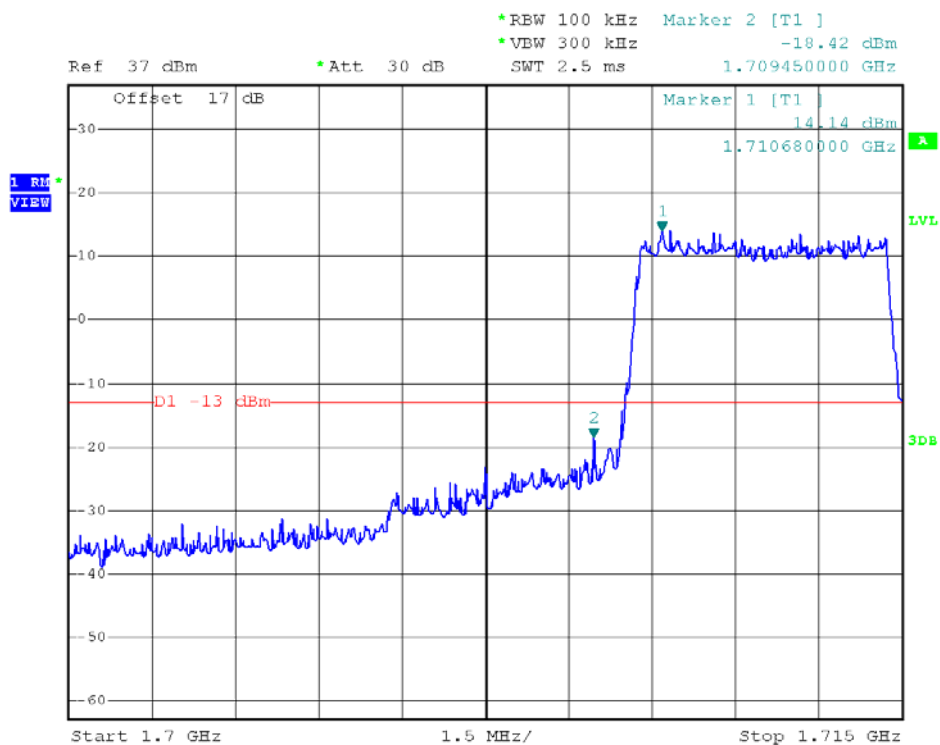


Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

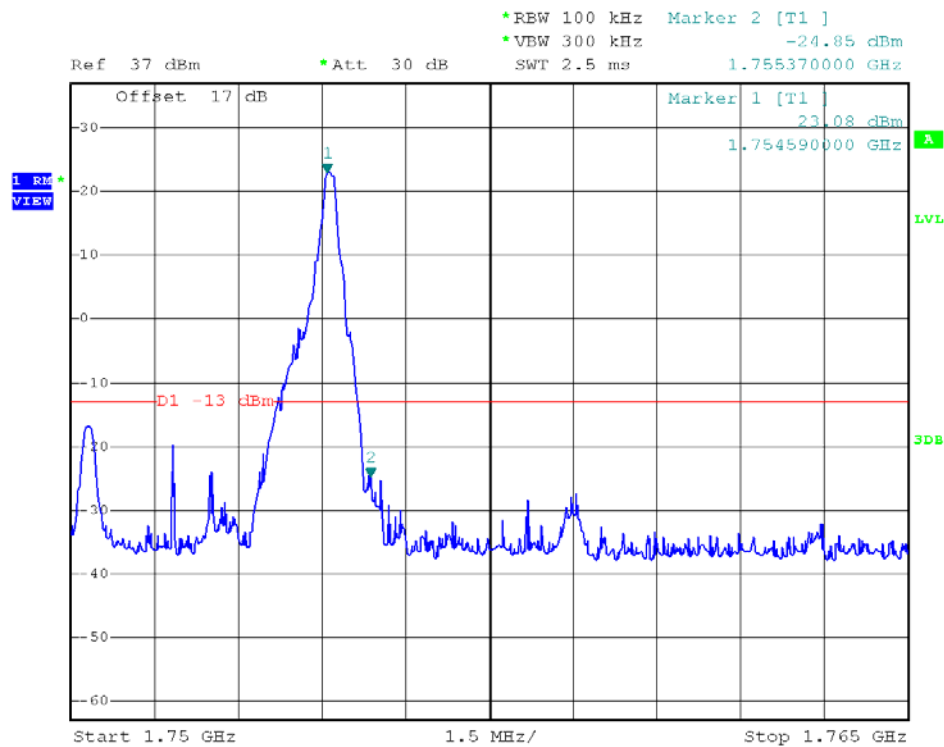
Band	LTE Band 4	Modulation	QPSK
Bandwidth	5MHz		



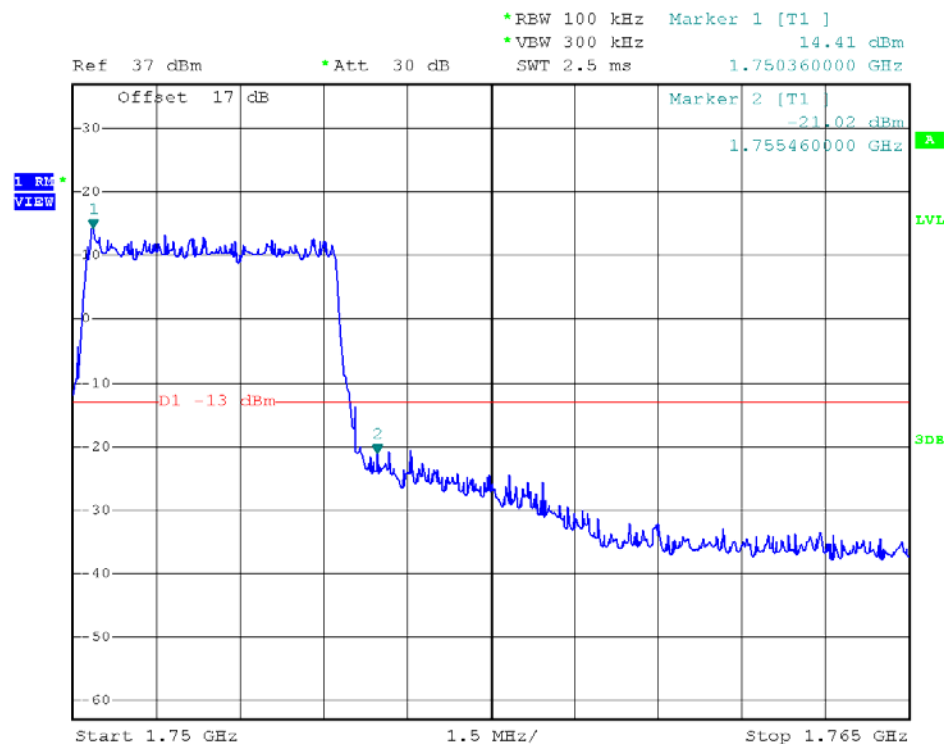
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

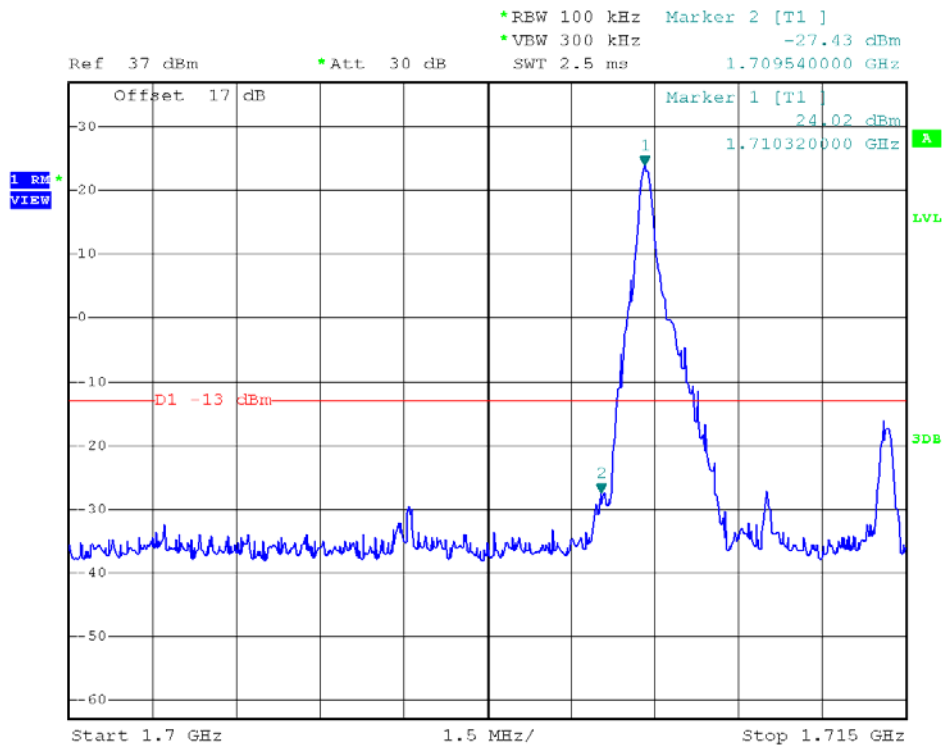


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

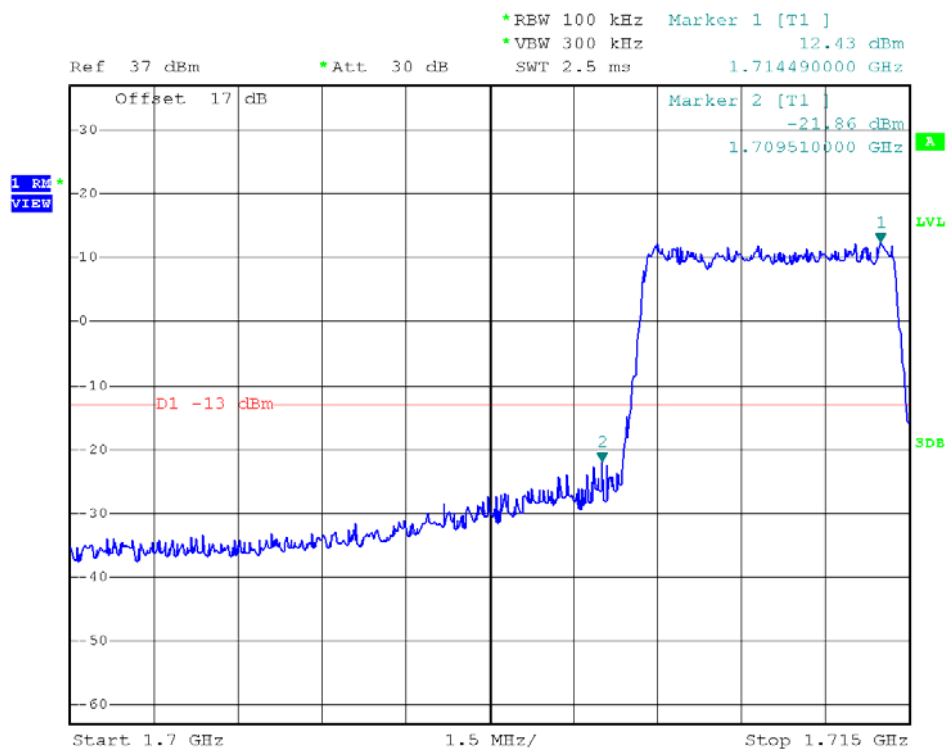


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

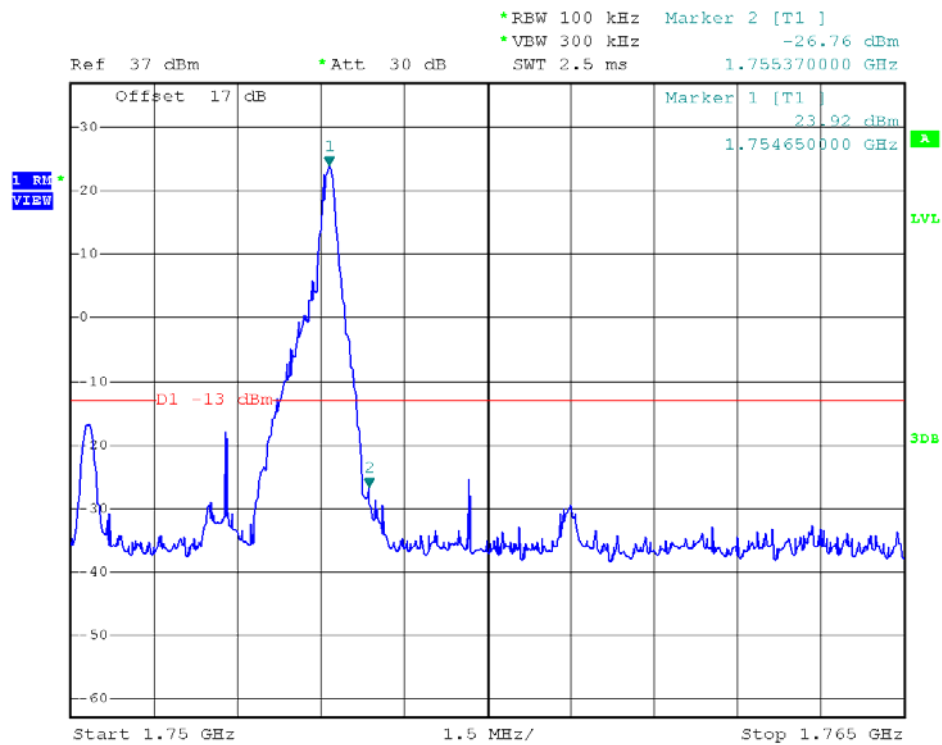
Band	LTE Band 4	Modulation	16QAM
Bandwidth	5MHz		



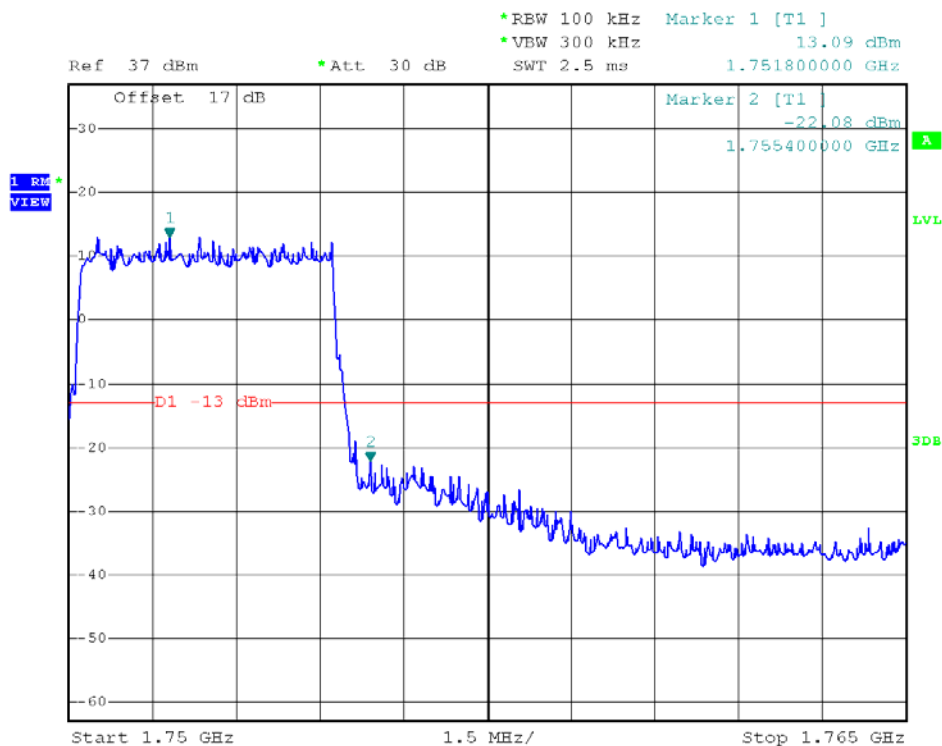
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

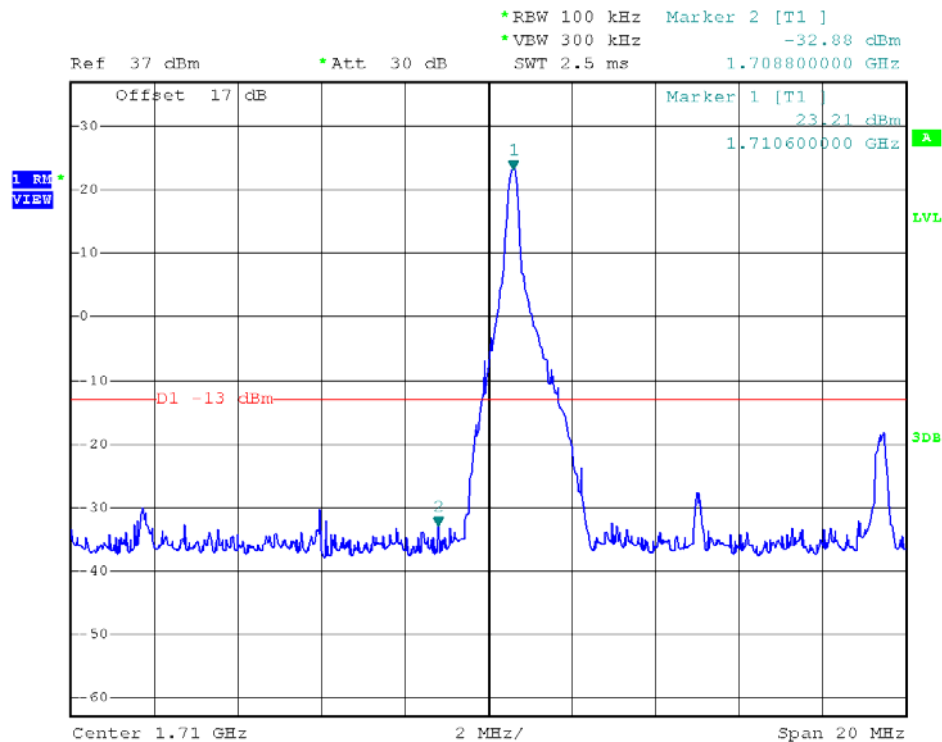


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24

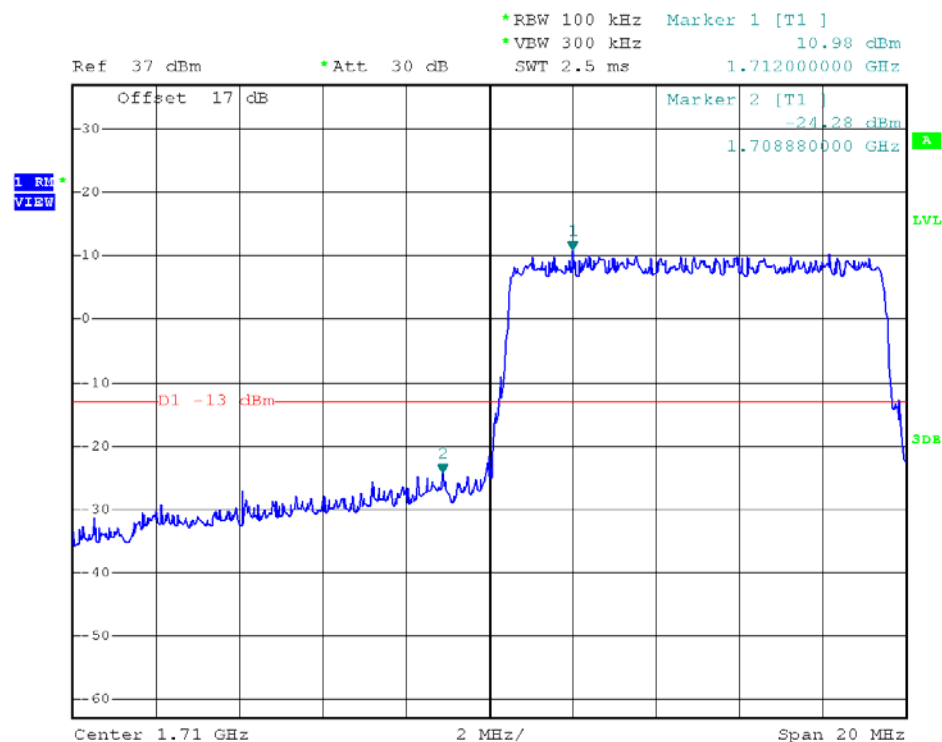


Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

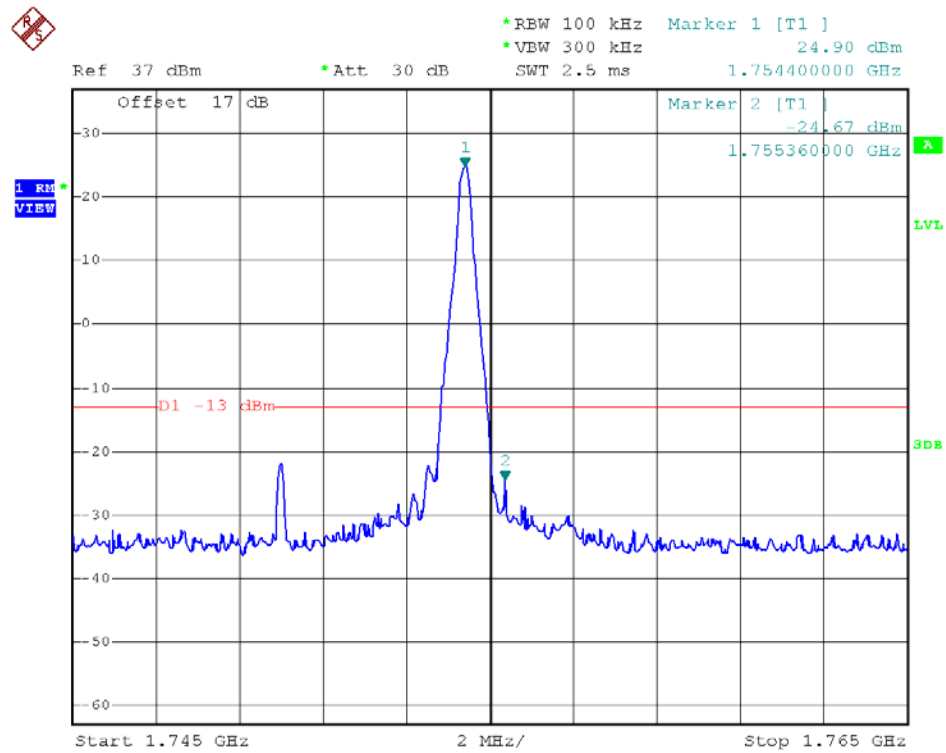
Band	LTE Band 4	Modulation	QPSK
Bandwidth	10MHz		



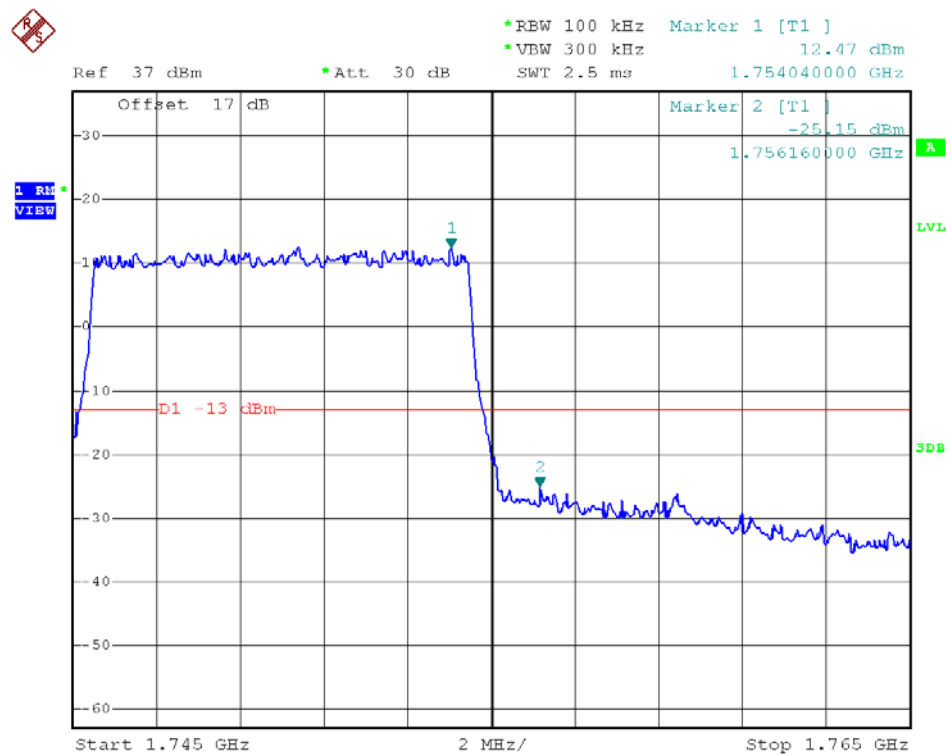
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0

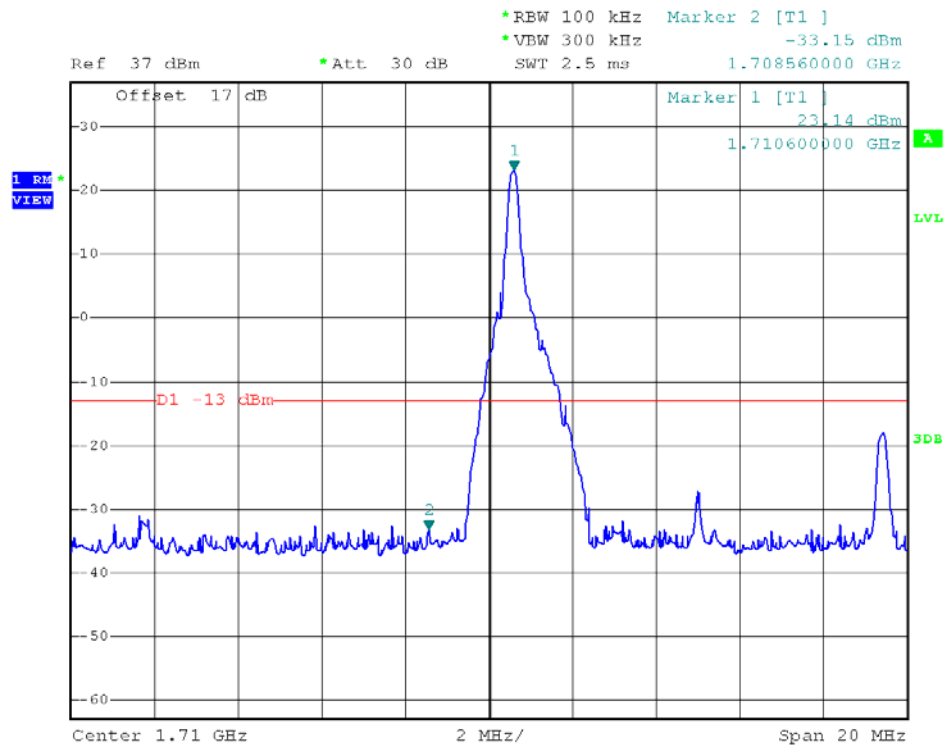


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

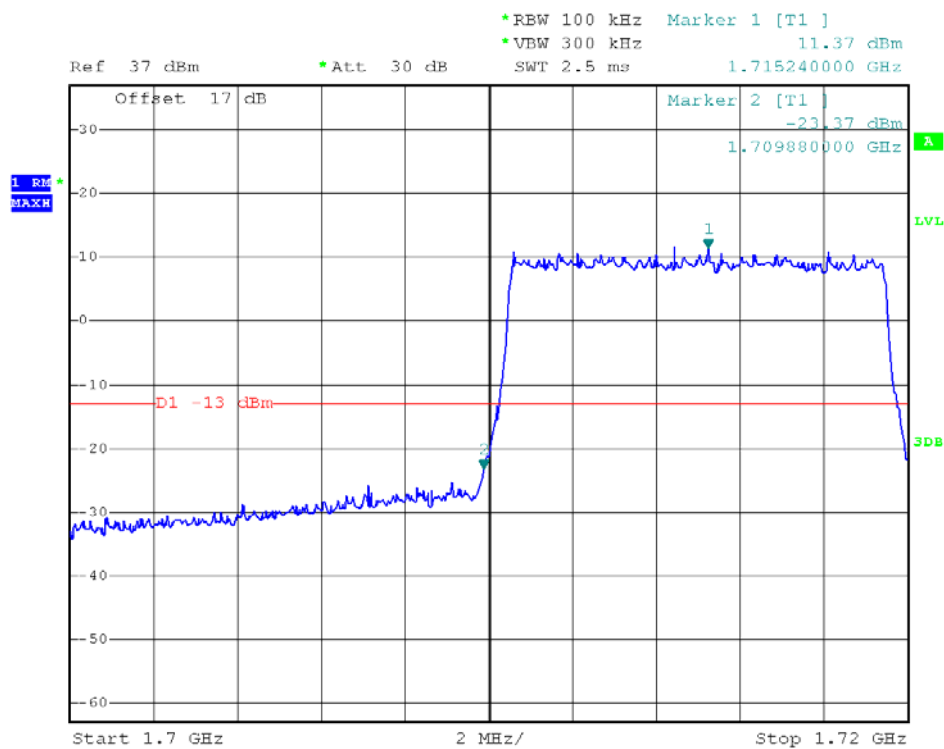


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

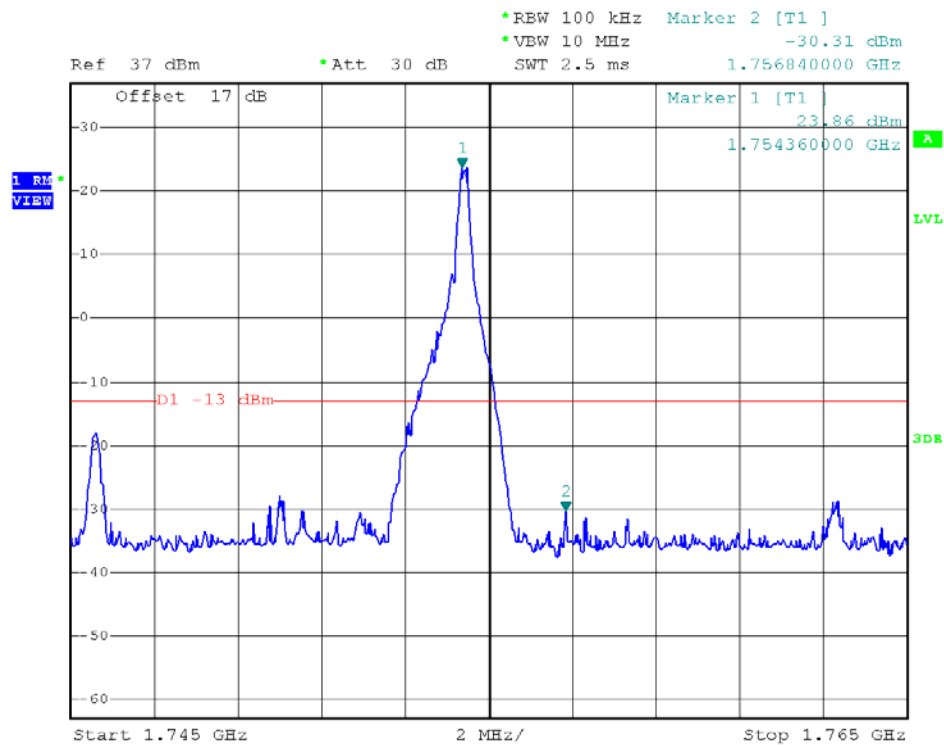
Band	LTE Band 4	Modulation	16QAM
Bandwidth	10MHz		



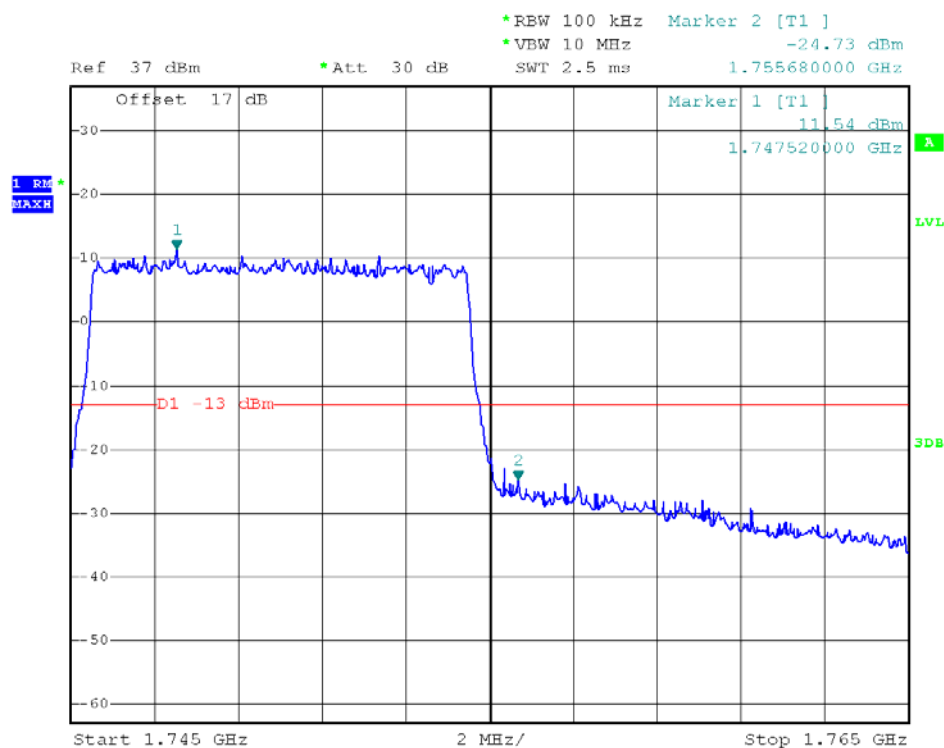
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

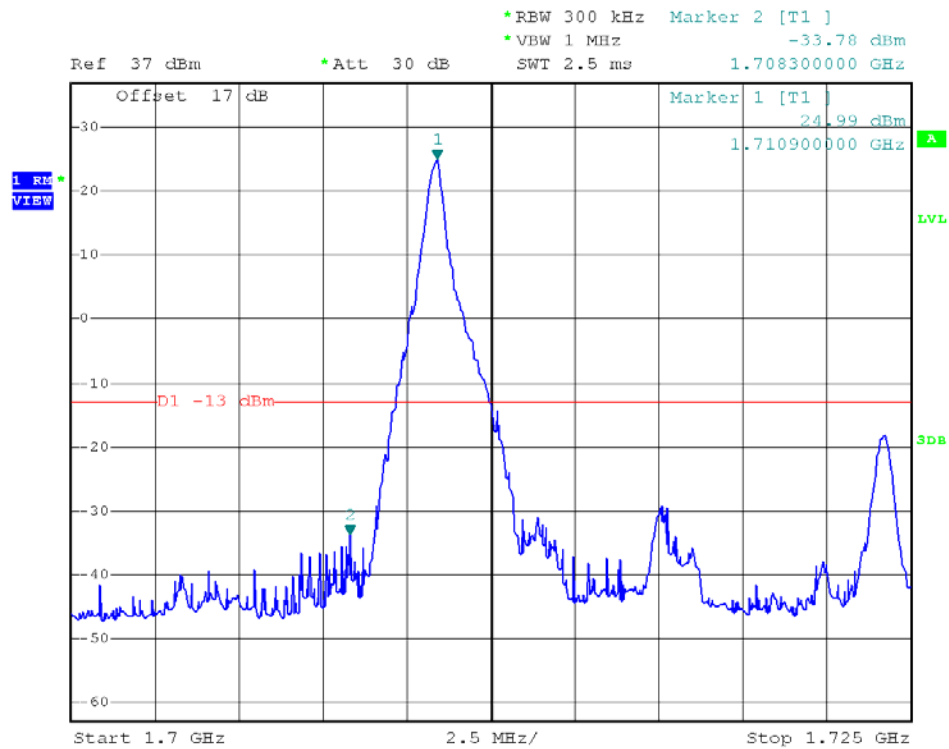


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49

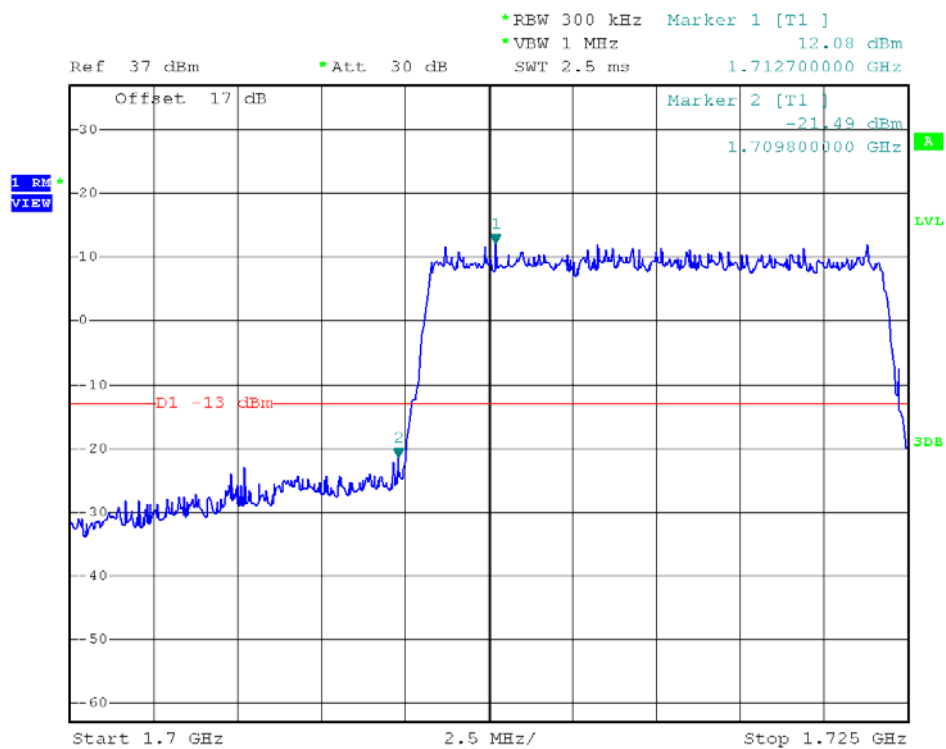


Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

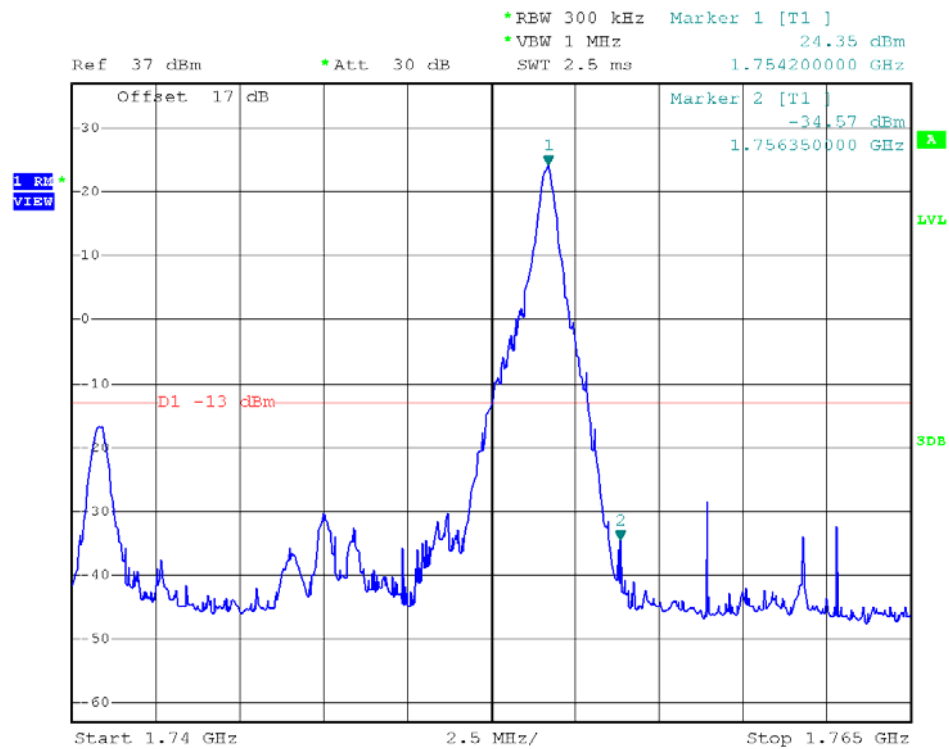
Band	LTE Band 4	Modulation	QPSK
Bandwidth	15MHz		



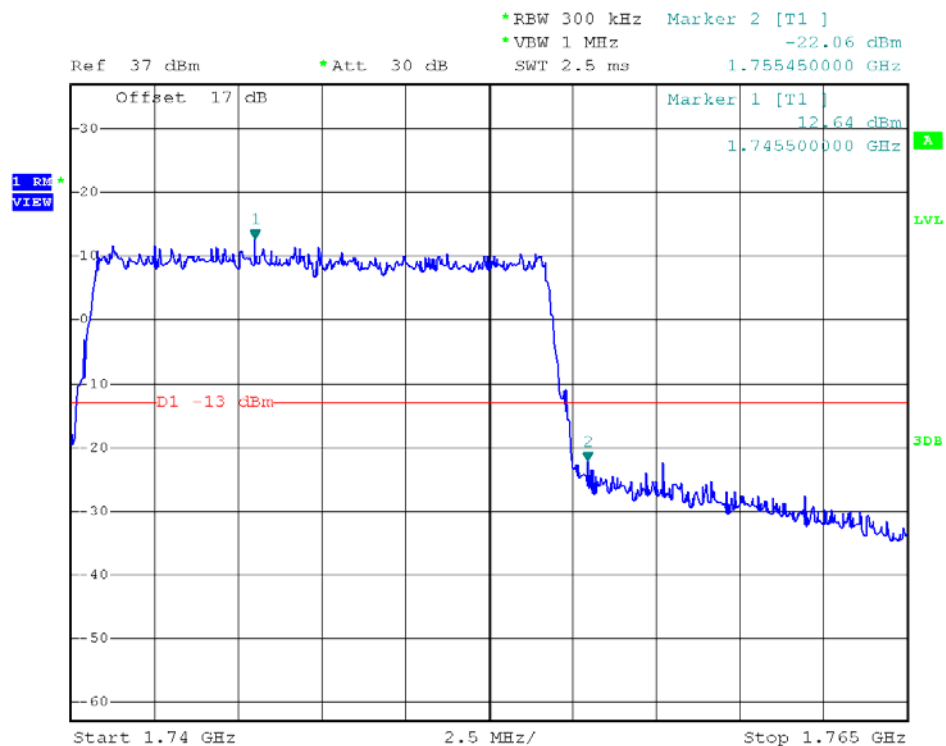
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0

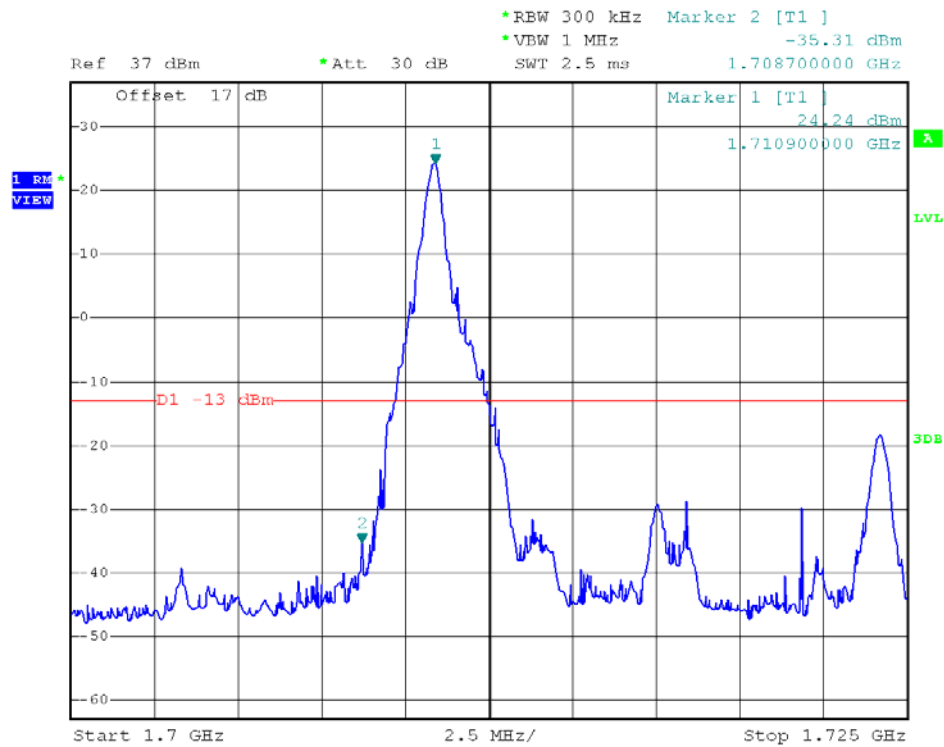


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74

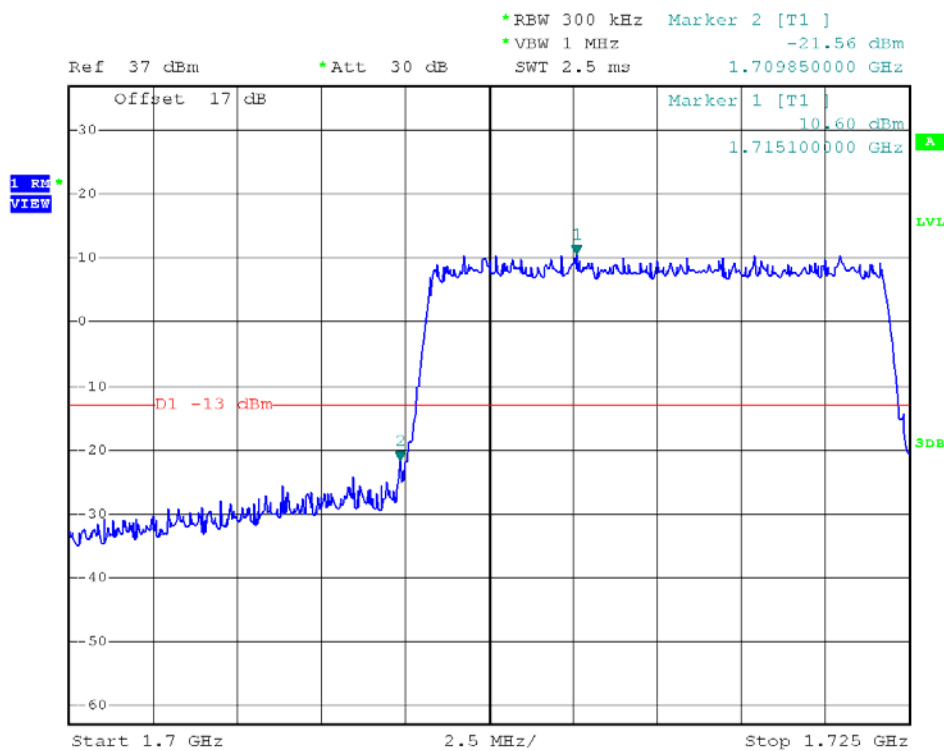


Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

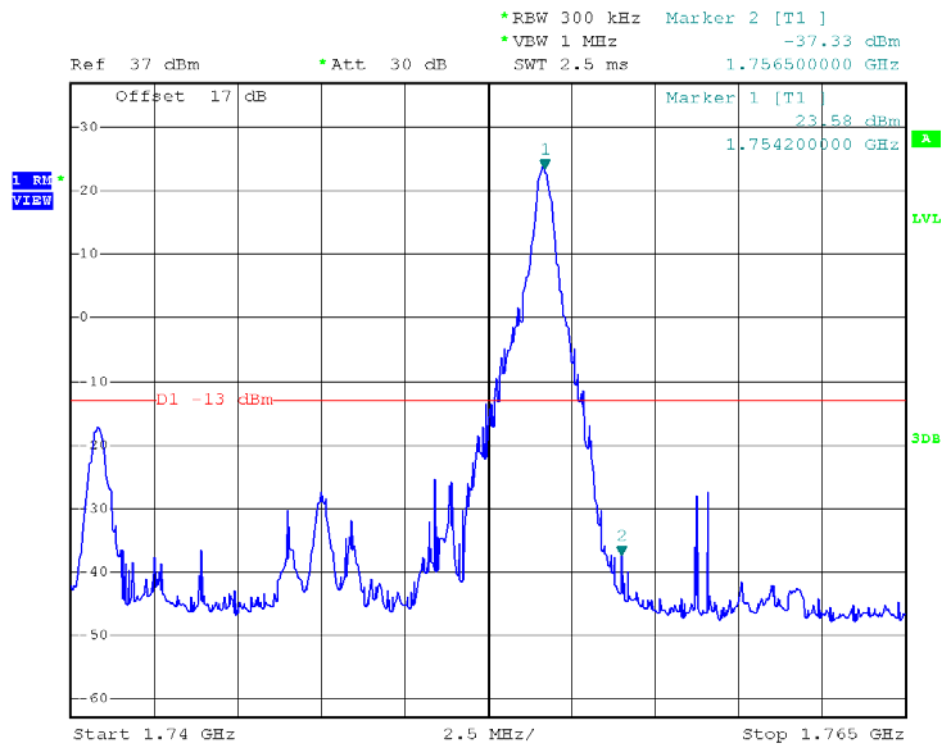
Band	LTE Band 4	Modulation	16QAM
Bandwidth	15MHz		



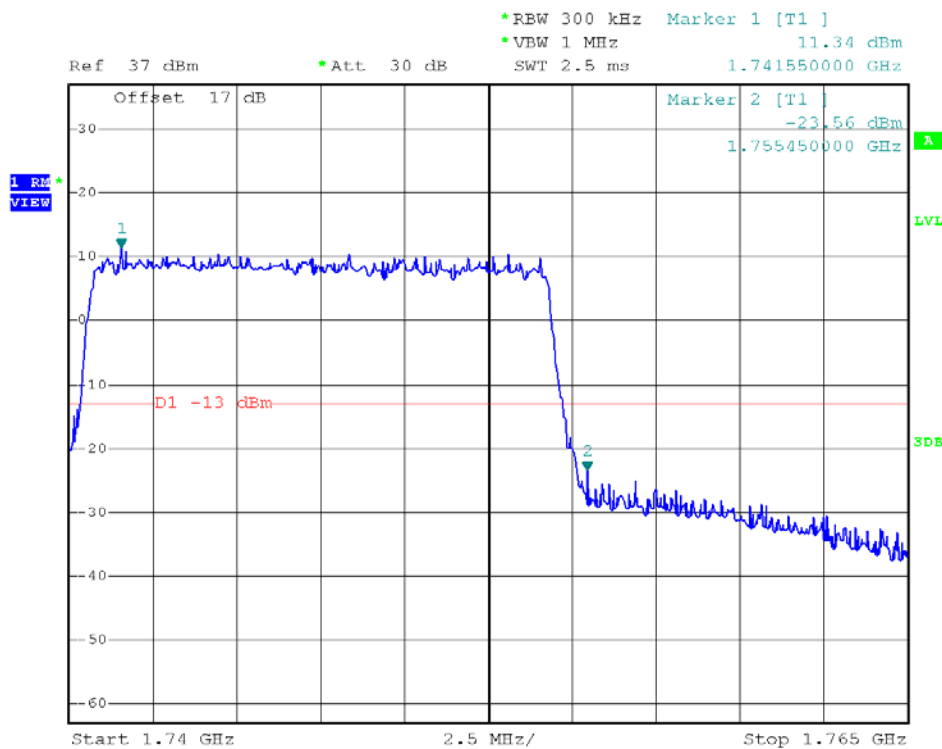
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

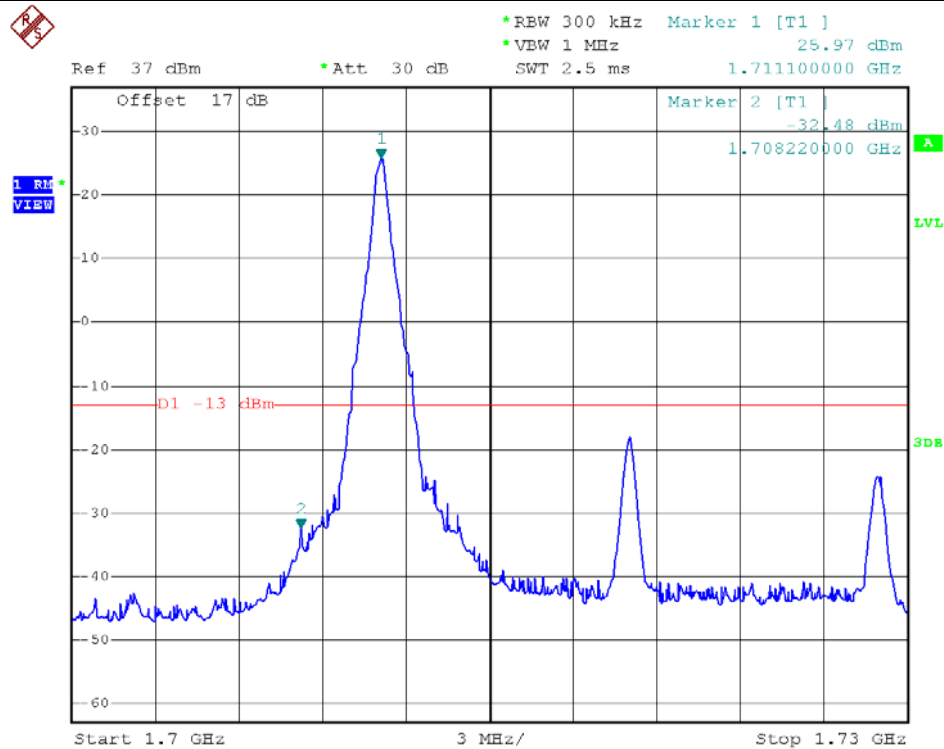


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74

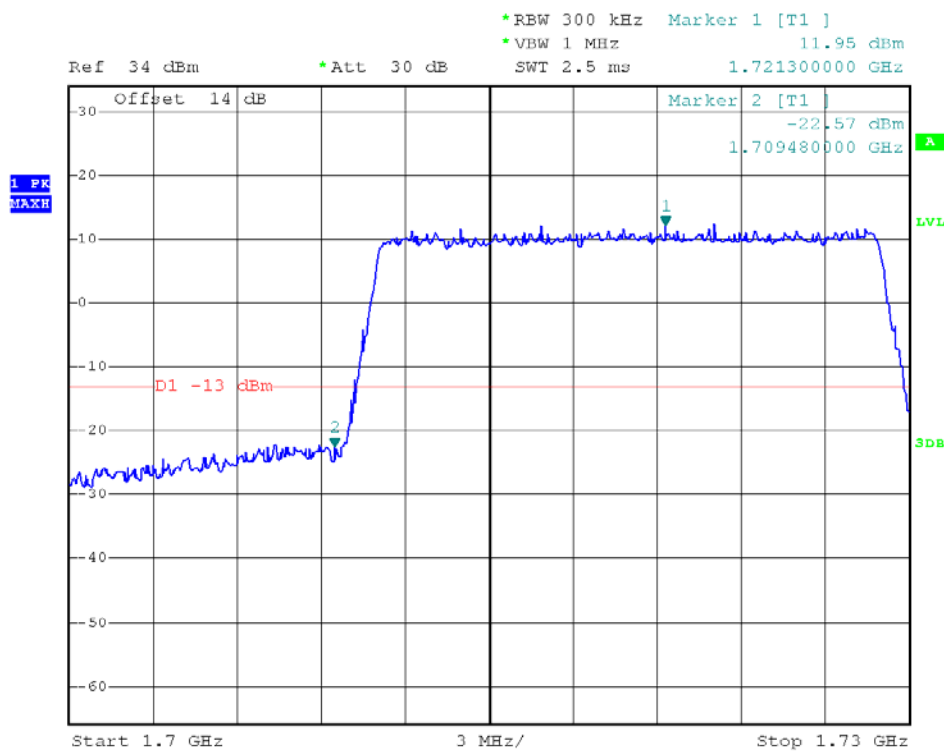


Higher Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

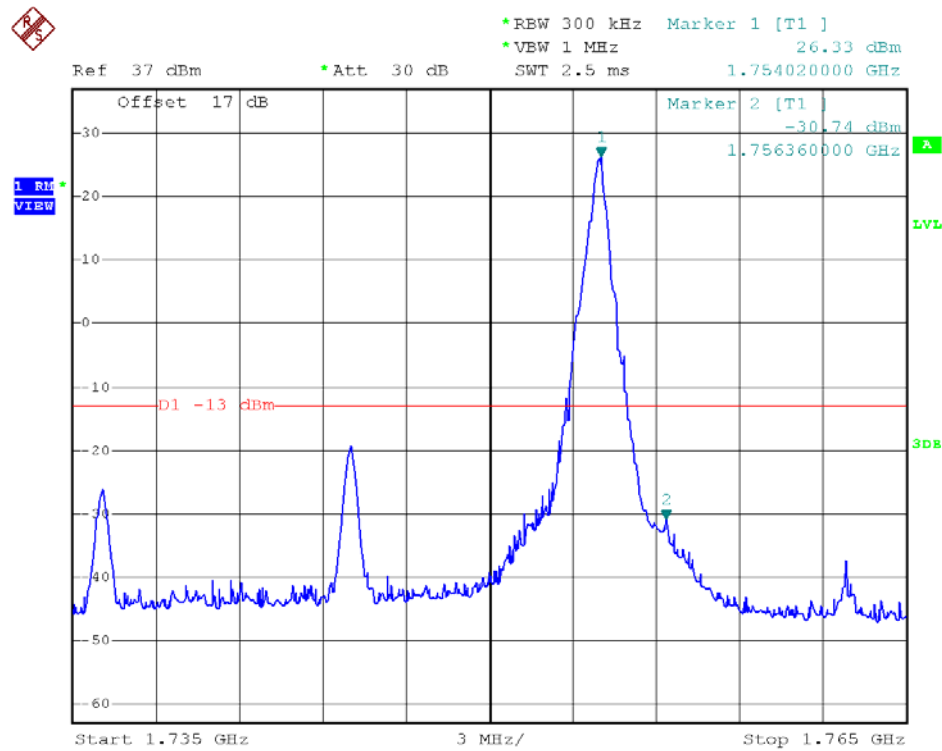
Band	LTE Band 4	Modulation	QPSK
Bandwidth	20MHz		



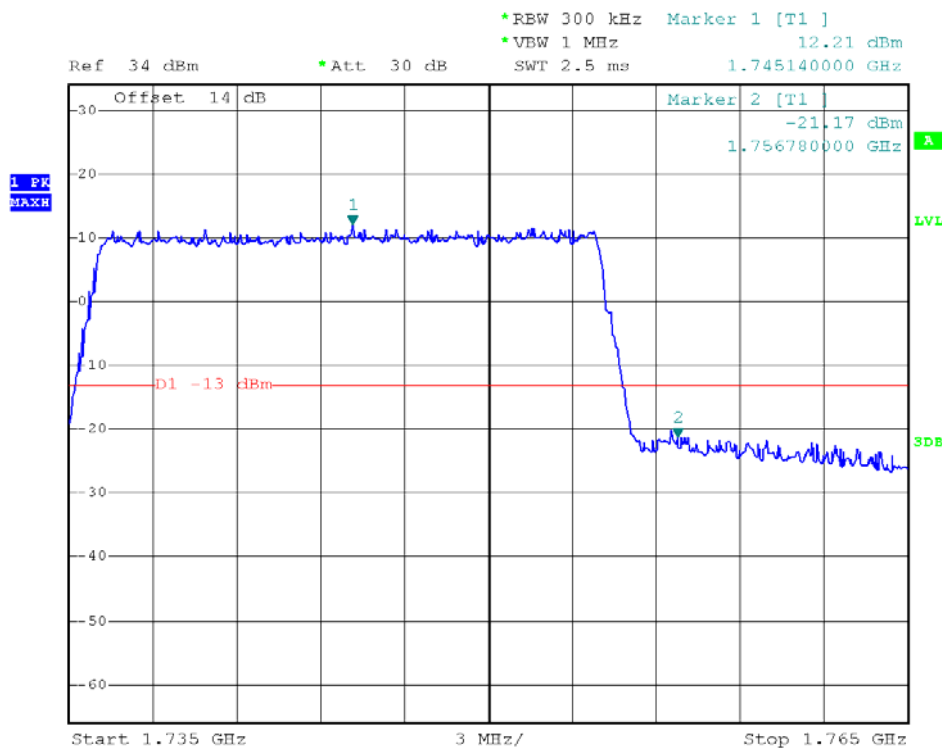
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0

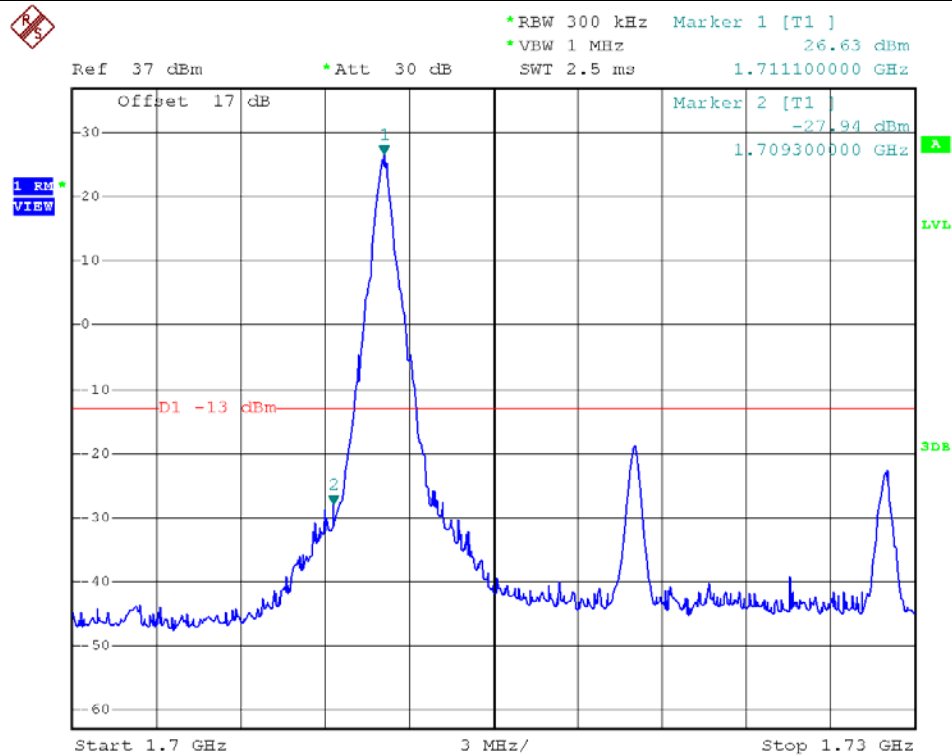


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99

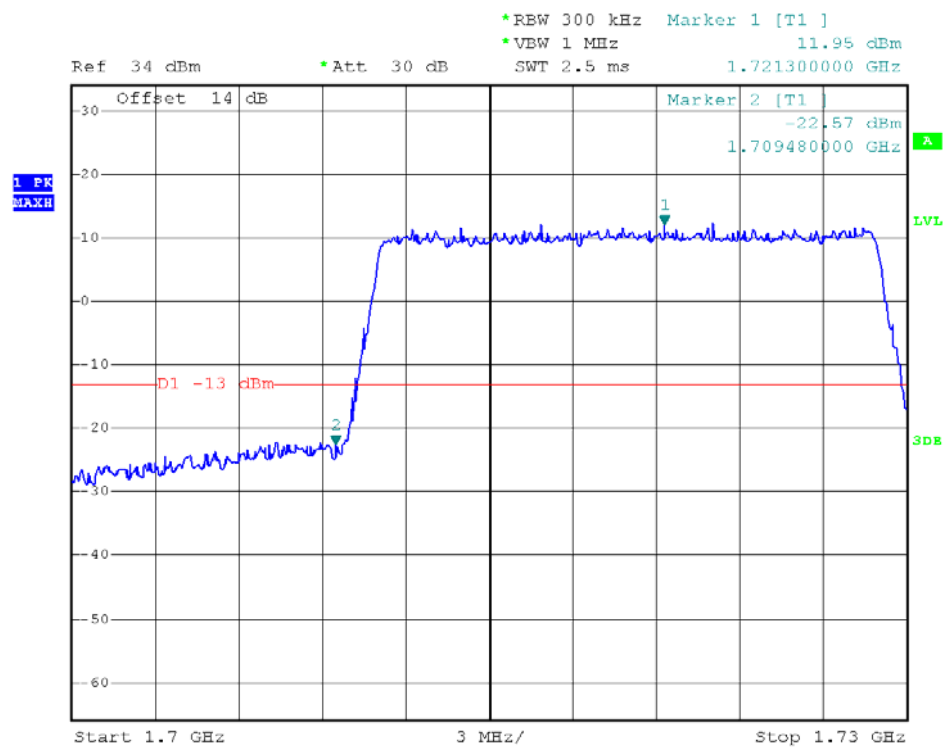


Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

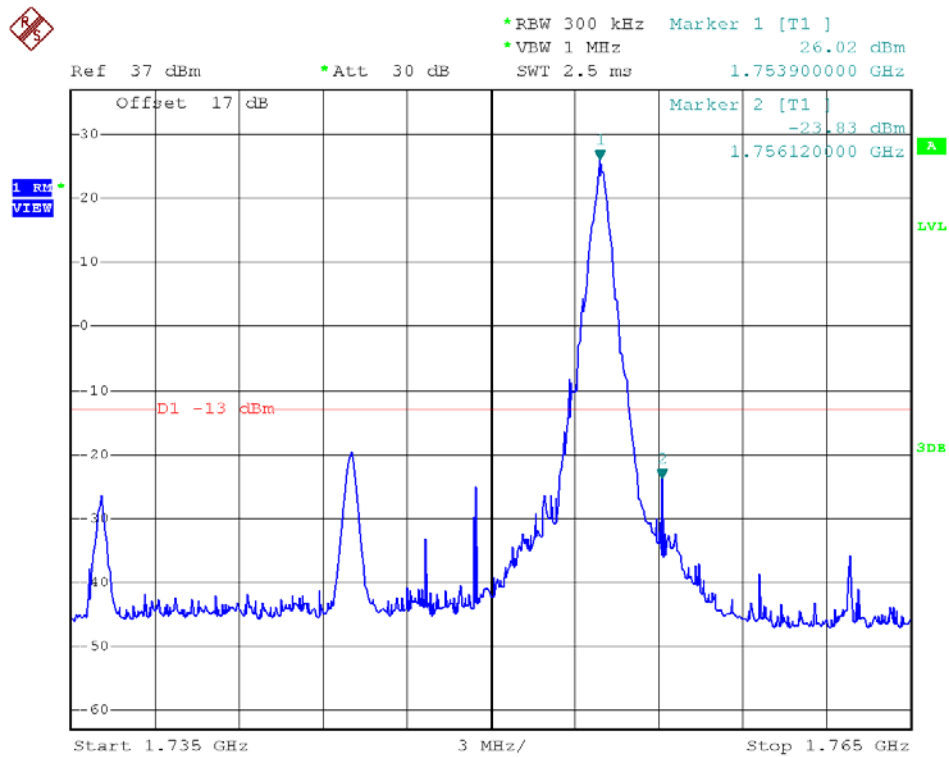
Band	LTE Band 4	Modulation	16QAM
Bandwidth	20MHz		



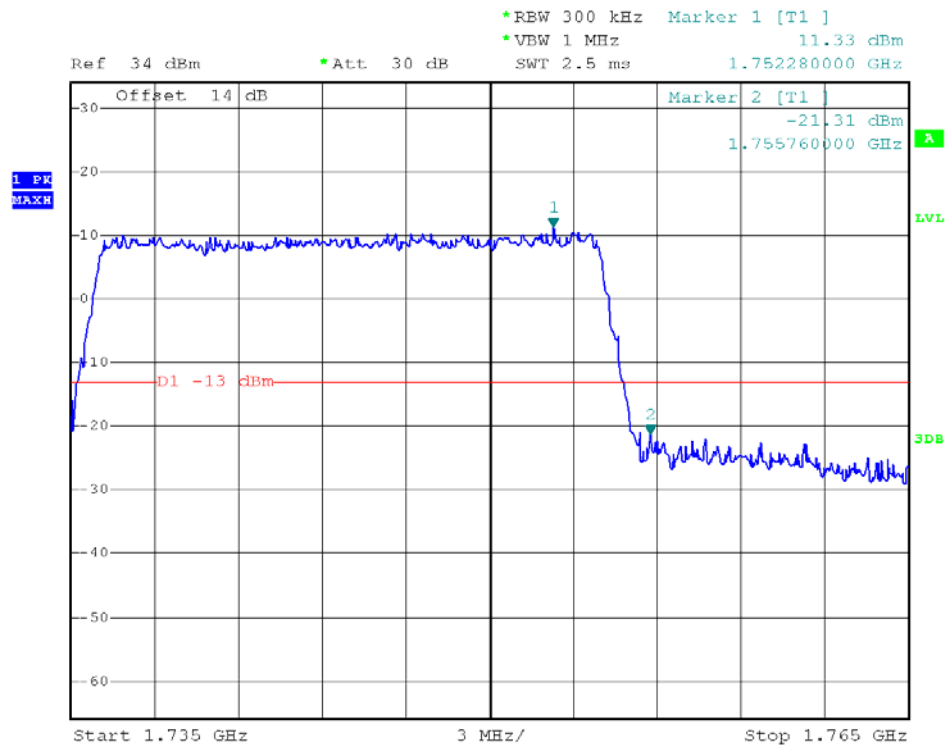
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

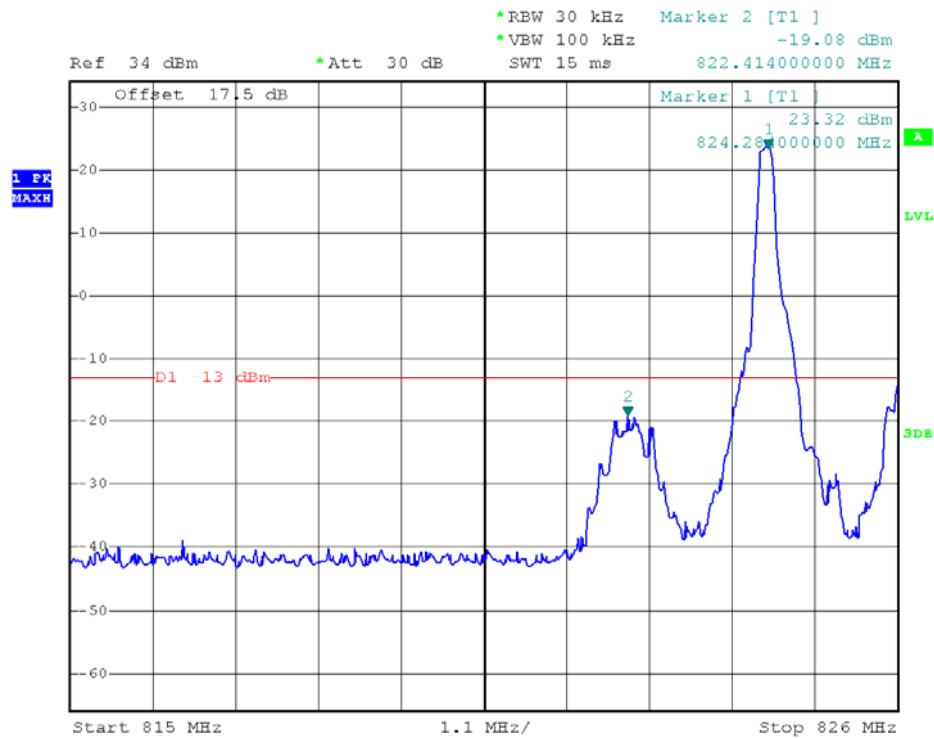


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99

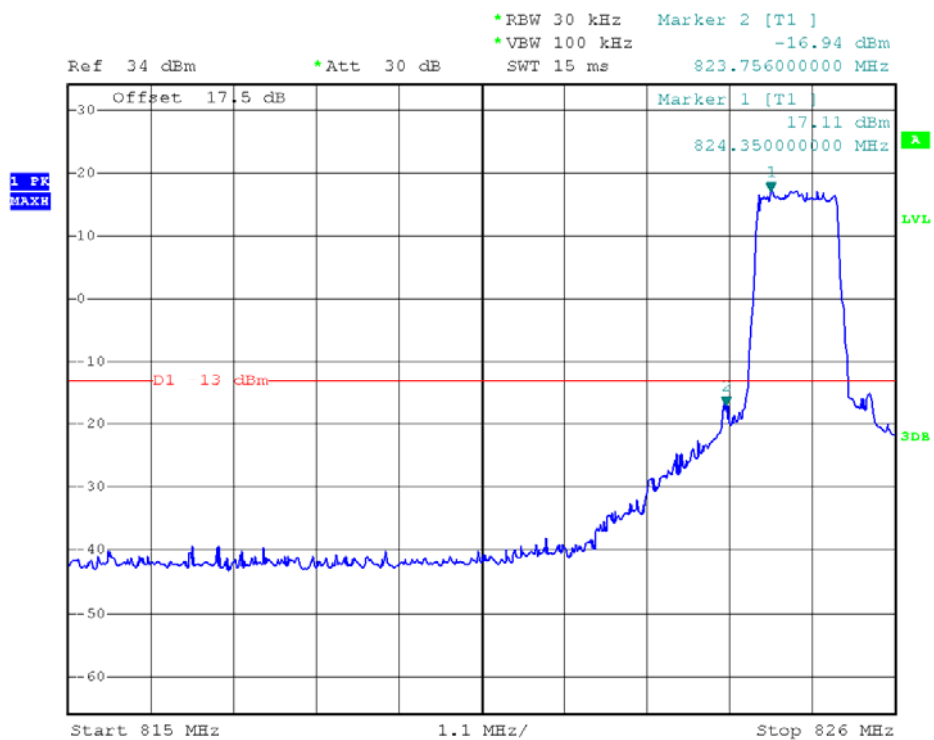


Higher Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

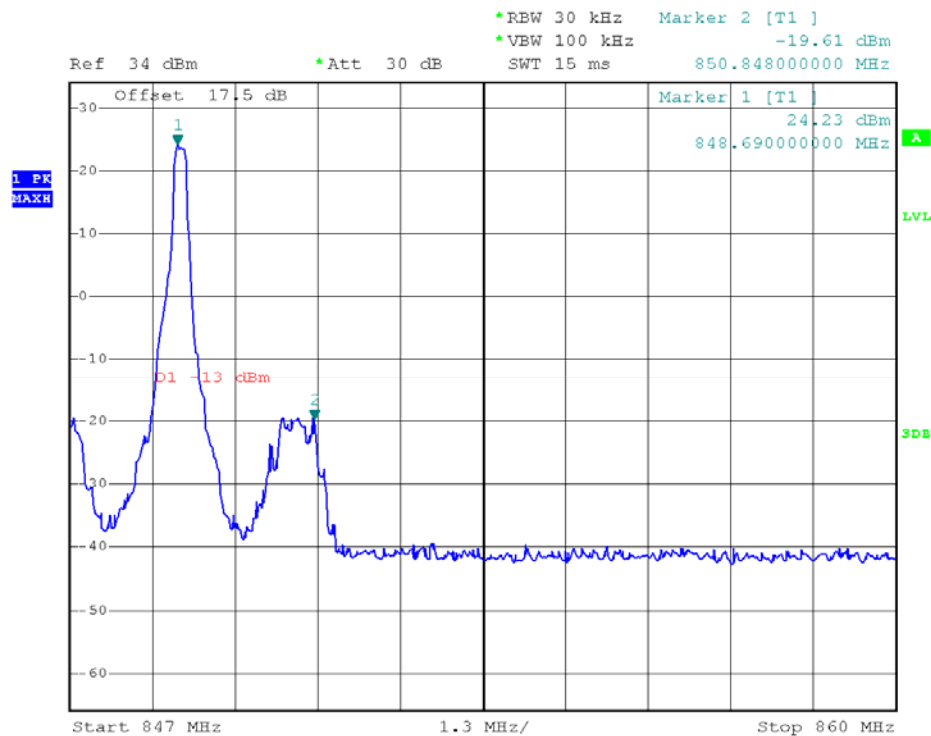
Band	LTE Band 5	Modulation	QPSK
Bandwidth	1.4MHz		



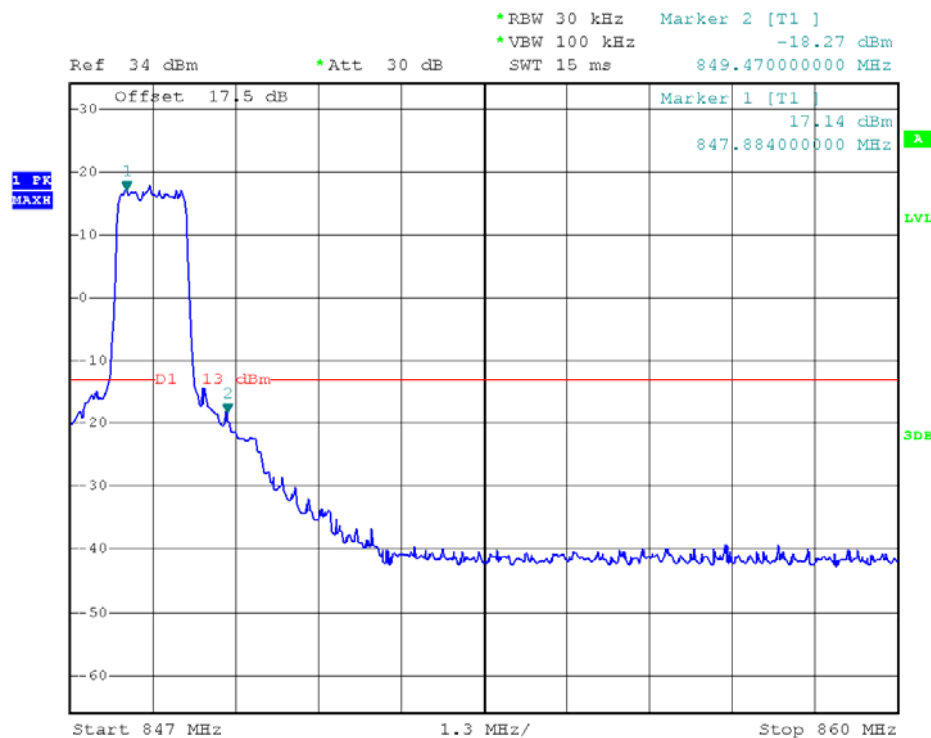
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0

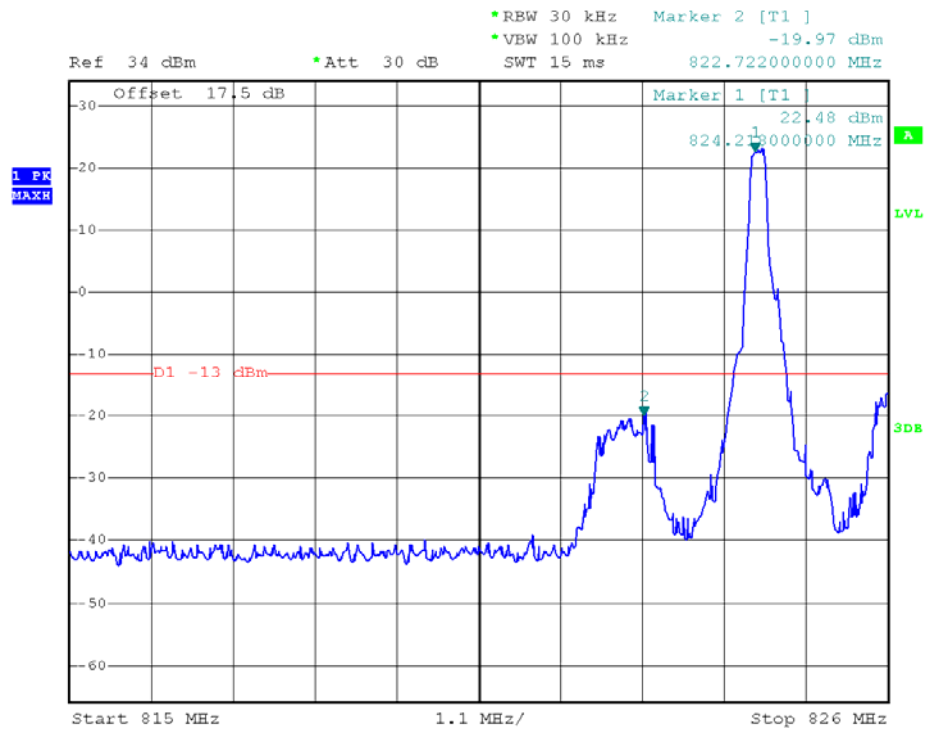


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5

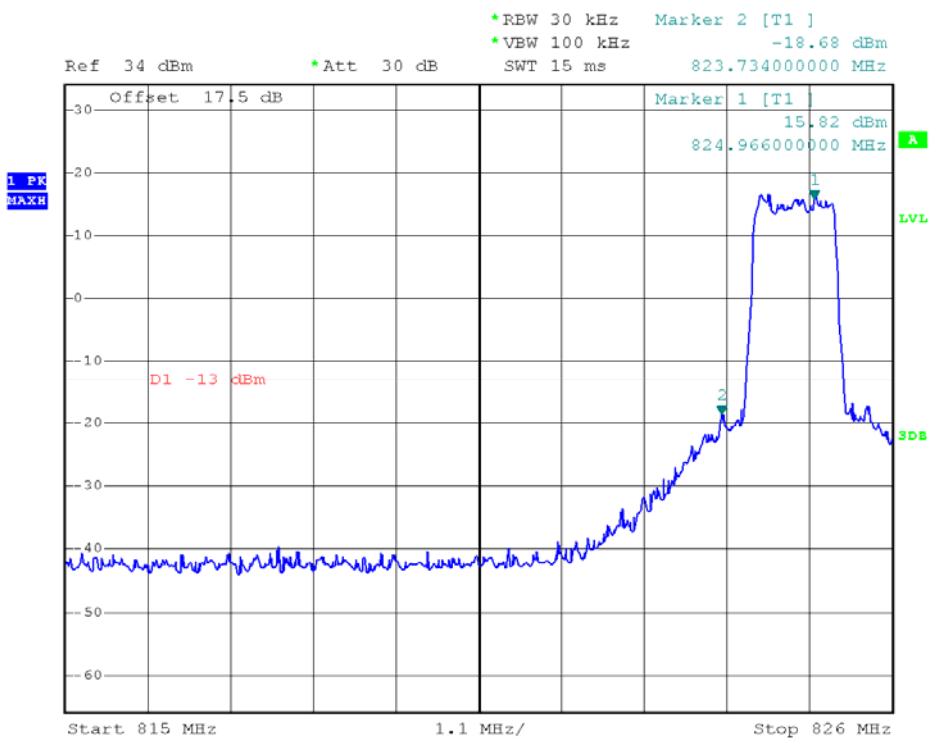


Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

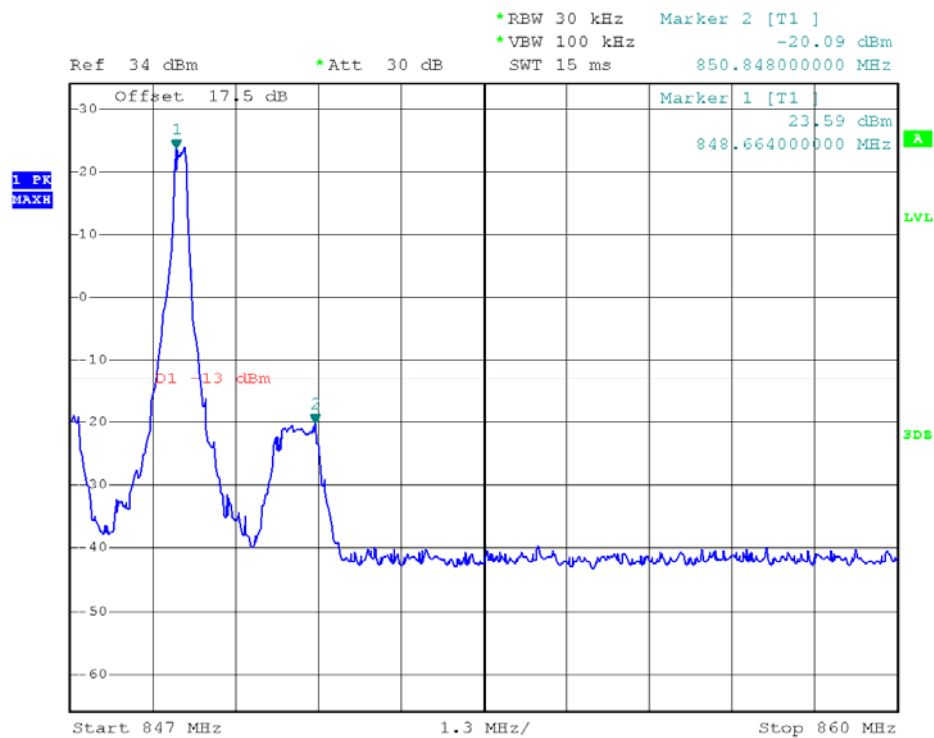
Band	LTE Band 5	Modulation	16QAM
Bandwidth	1.4MHz		



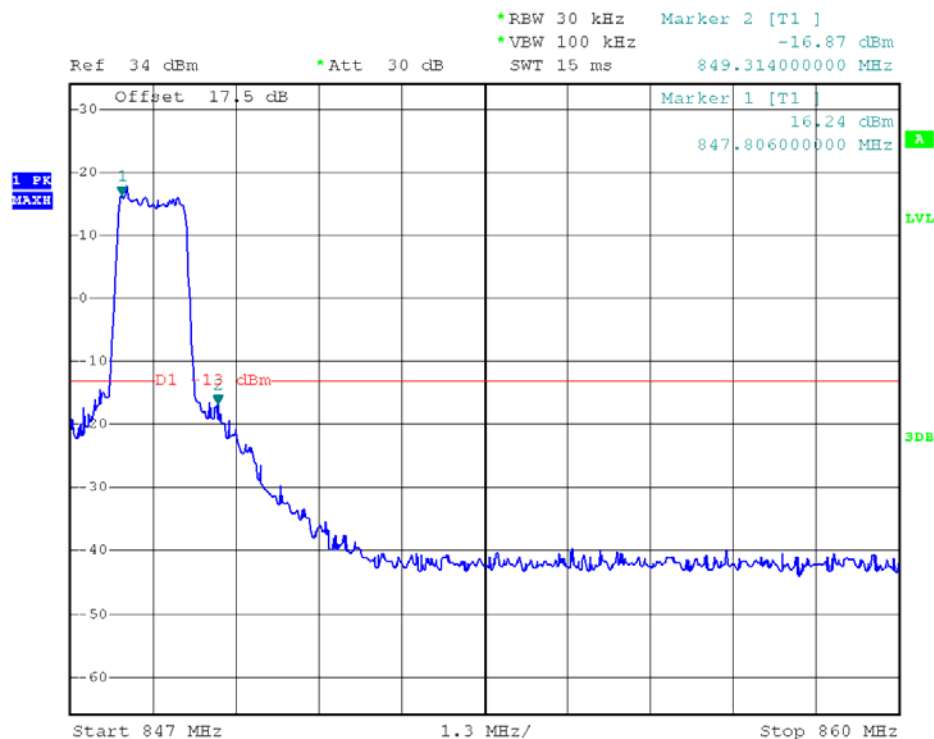
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

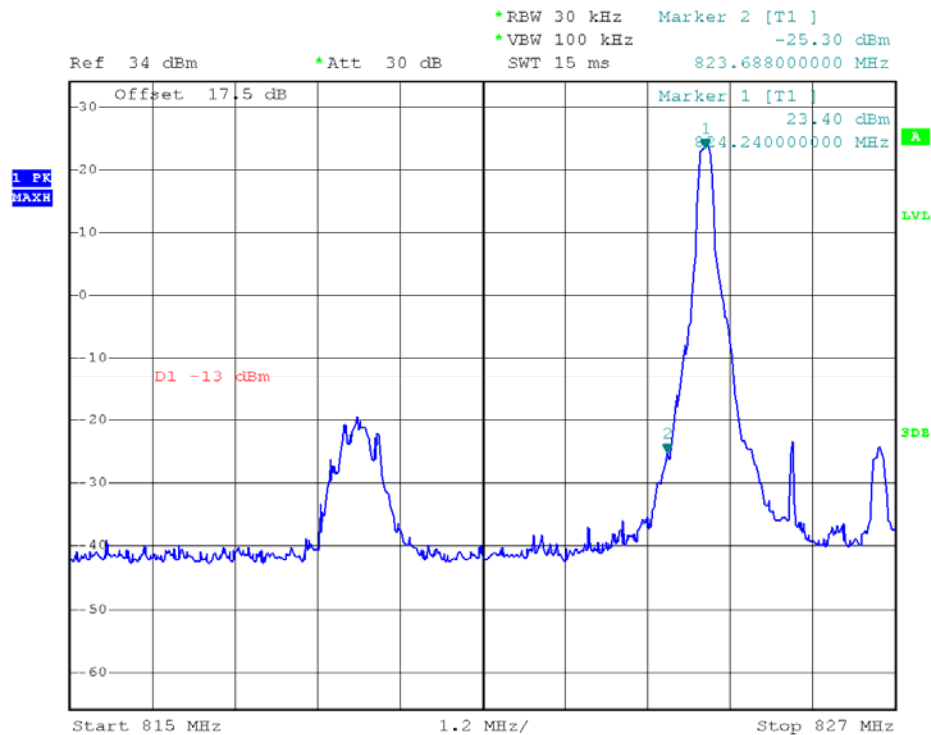


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 5

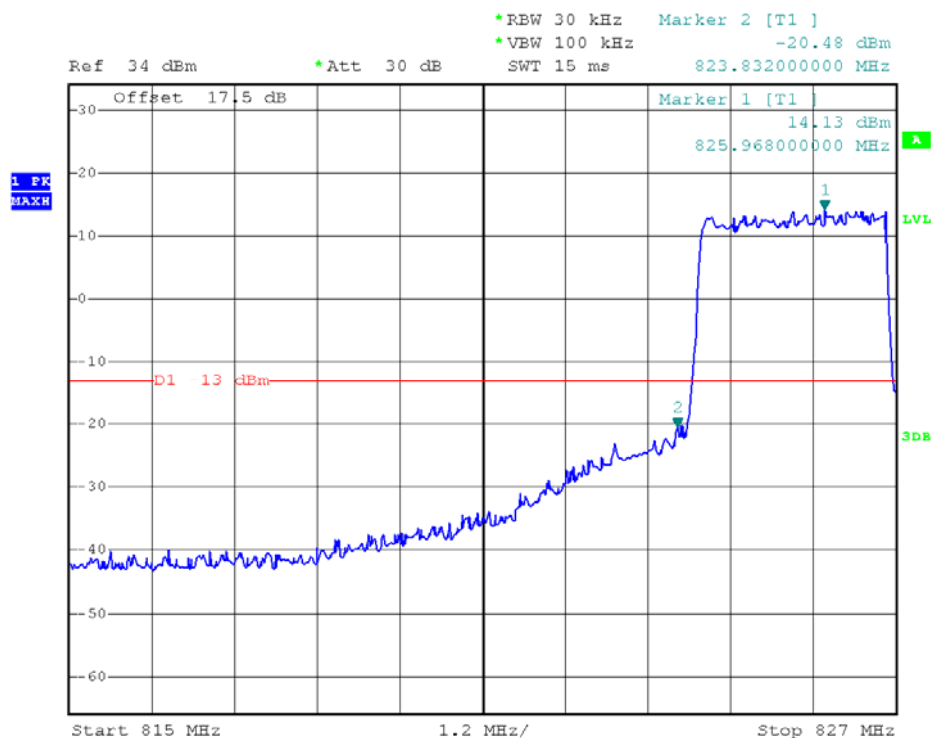


Higher Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

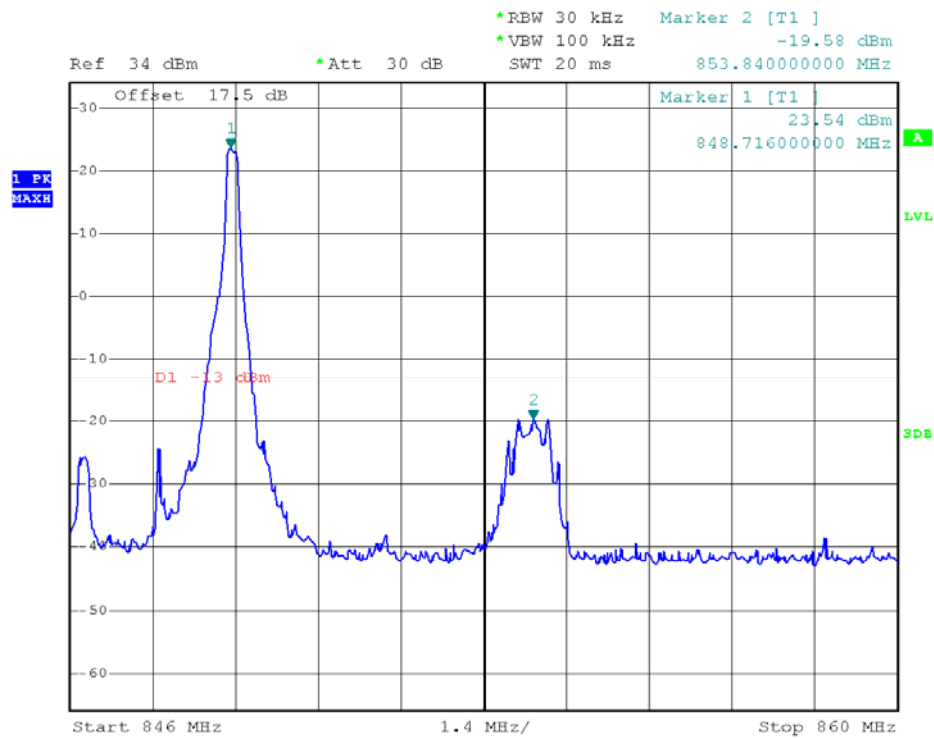
Band	LTE Band 5	Modulation	QPSK
Bandwidth	3MHz		



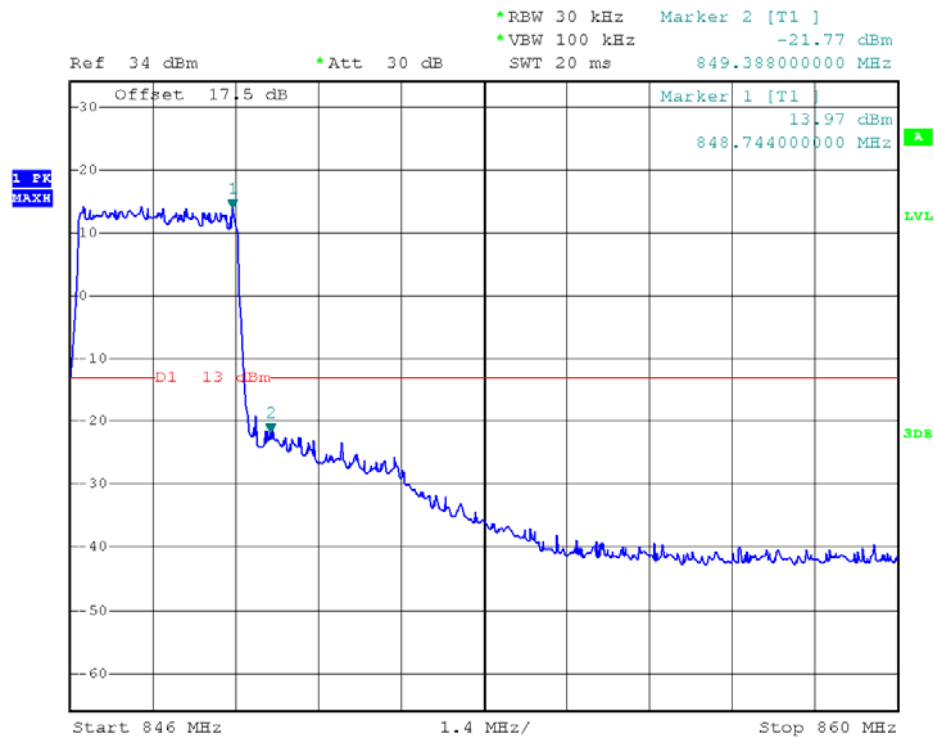
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0

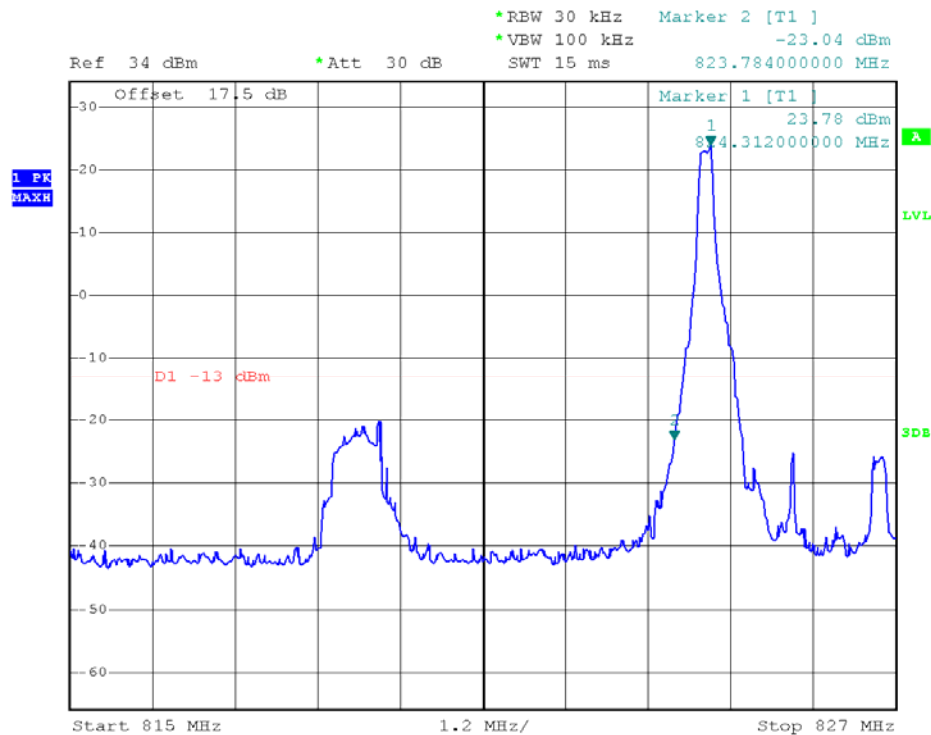


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14

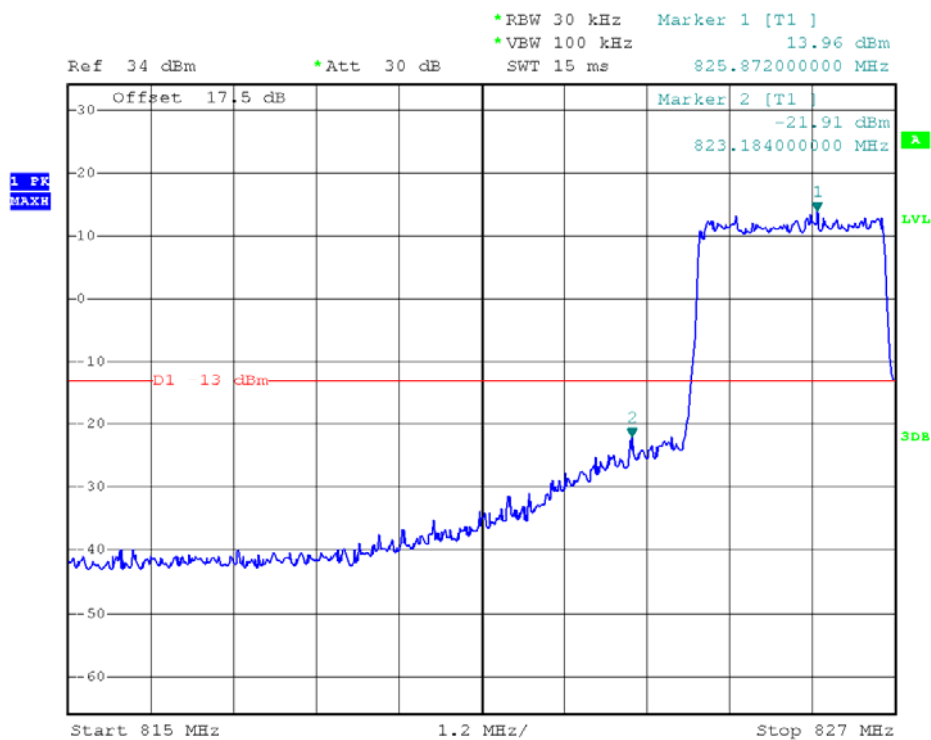


Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

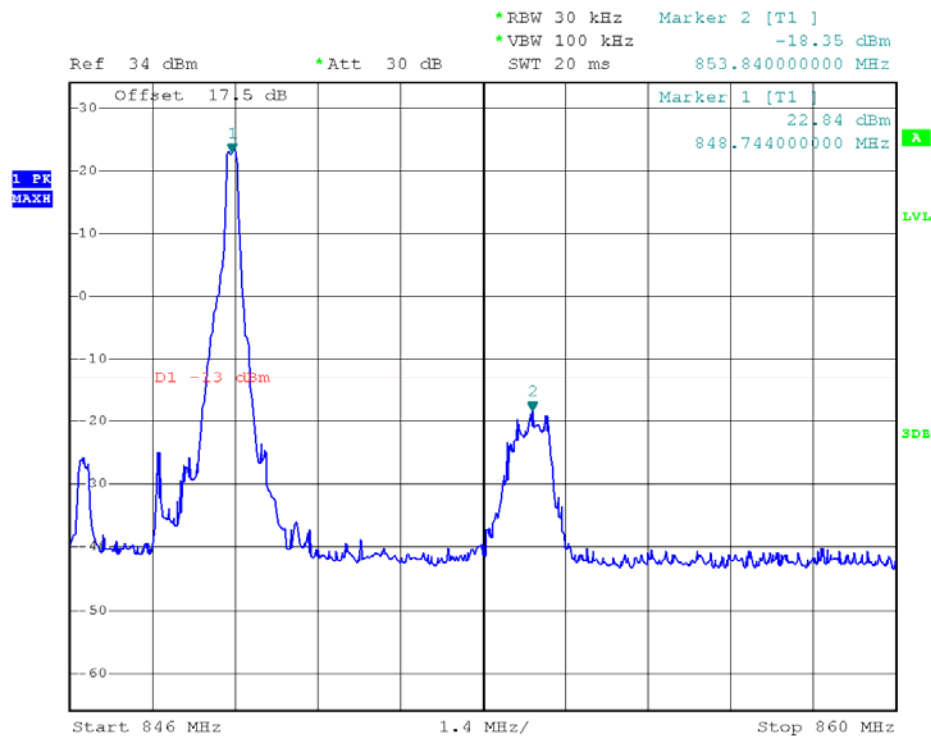
Band	LTE Band 5	Modulation	16QAM
Bandwidth	3MHz		



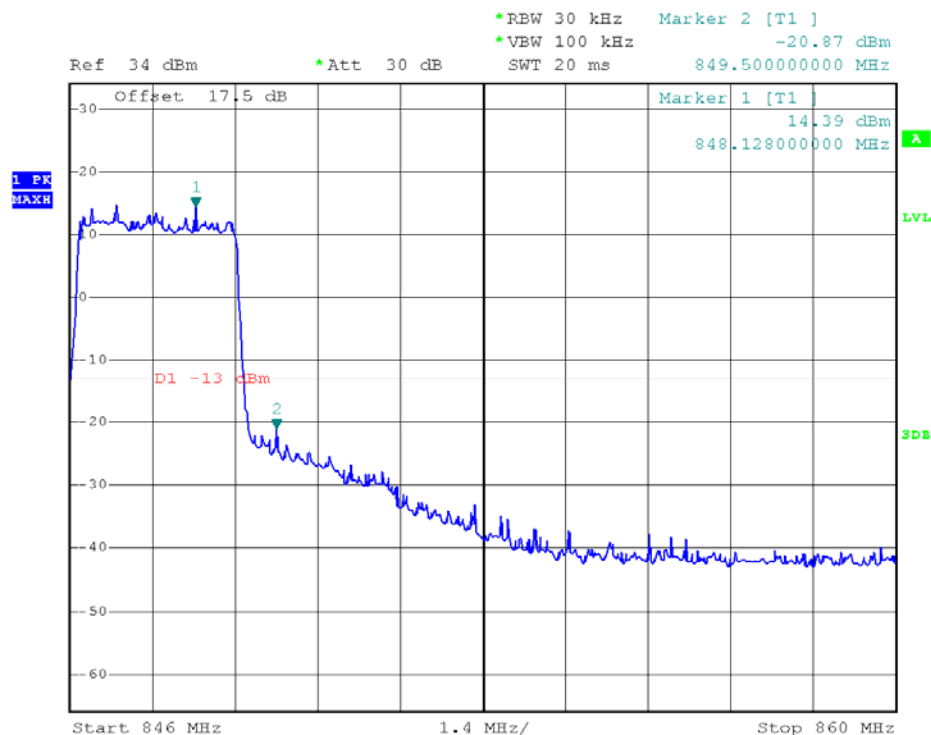
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

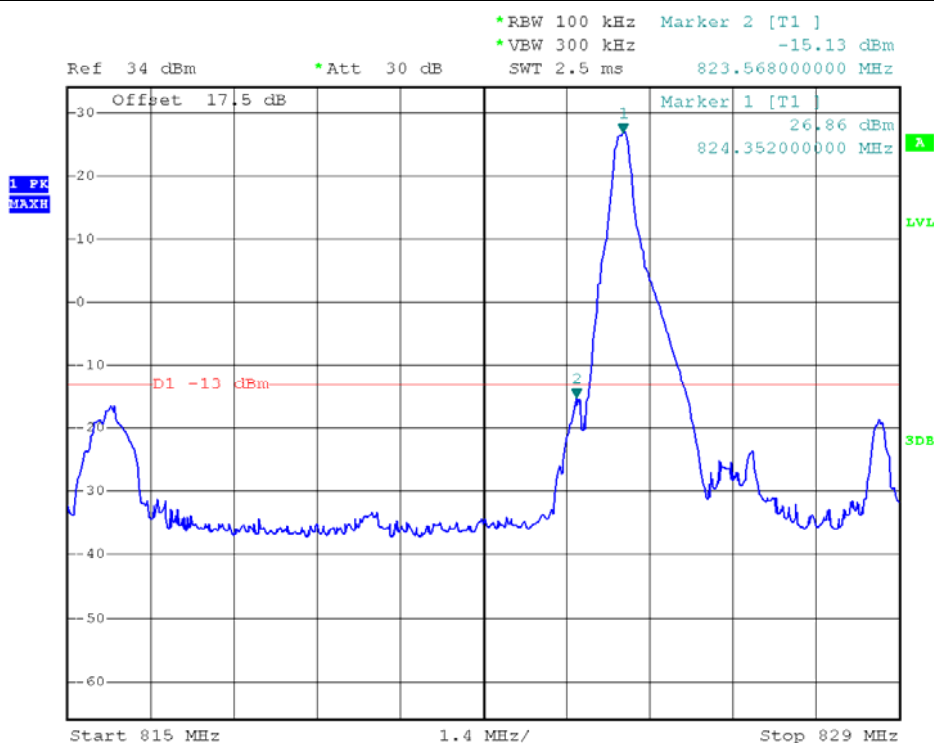


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 14

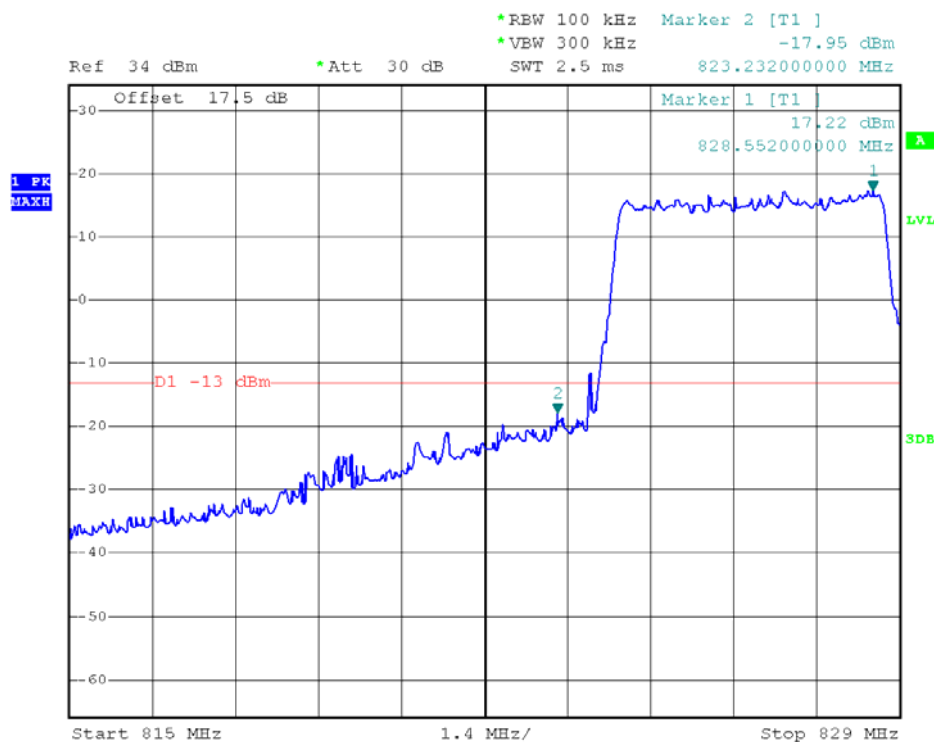


Higher Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

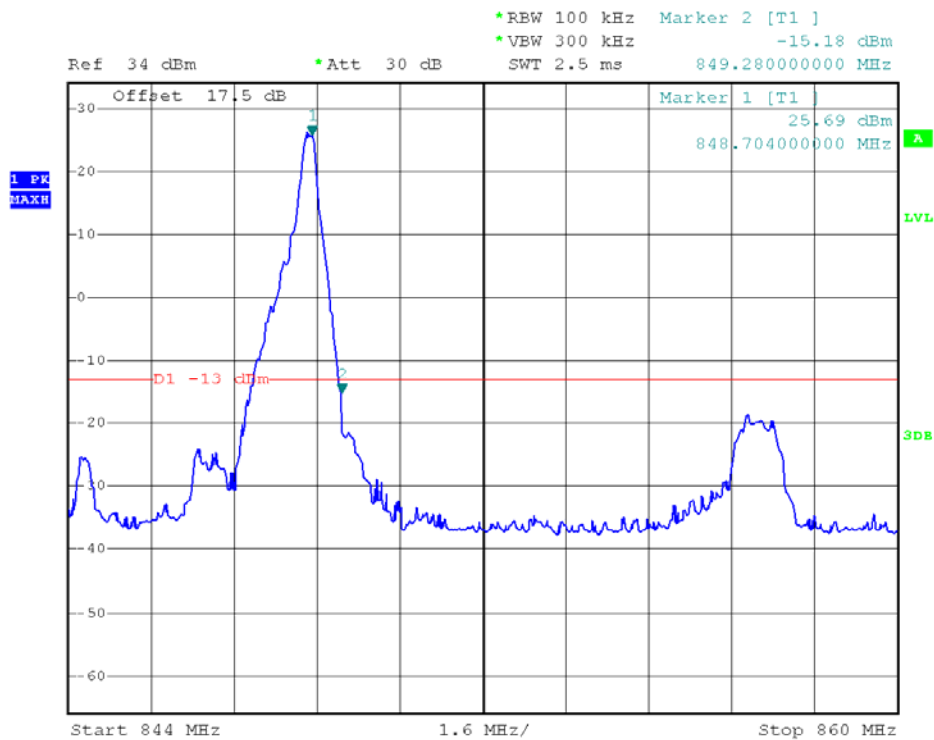
Band	LTE Band 5	Modulation	QPSK
Bandwidth	5MHz		



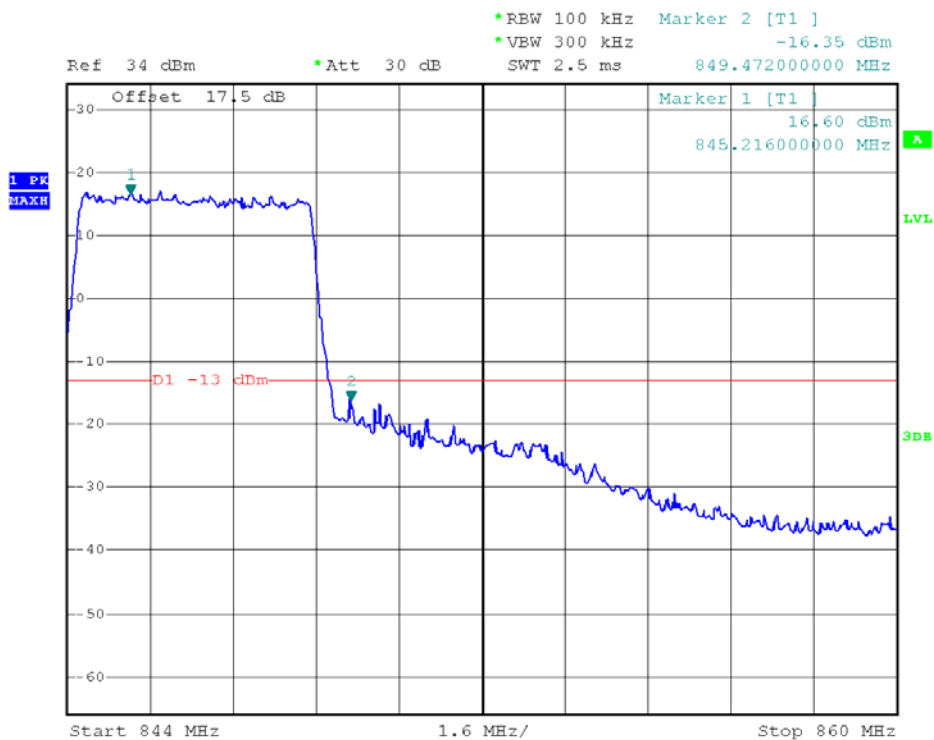
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

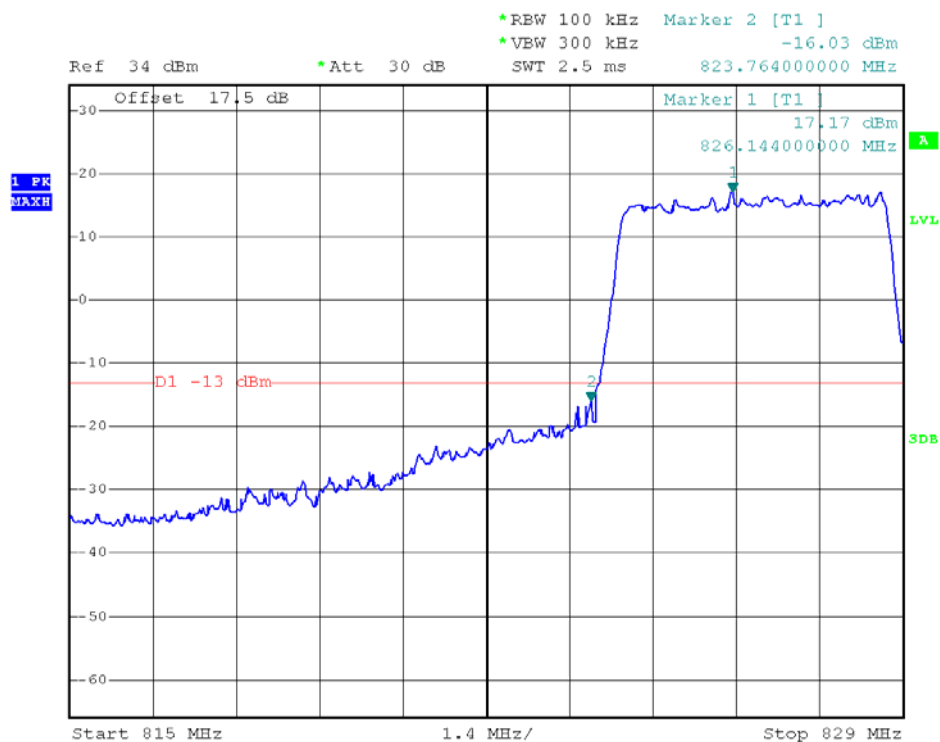


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

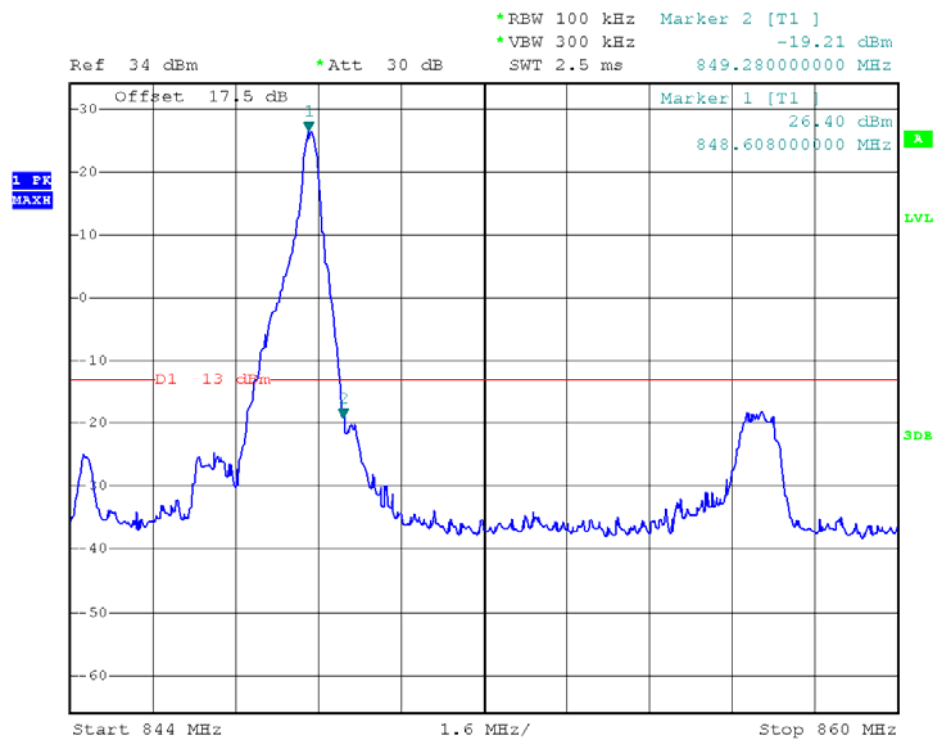
Band	LTE Band 5	Modulation	16QAM
Bandwidth	5MHz		



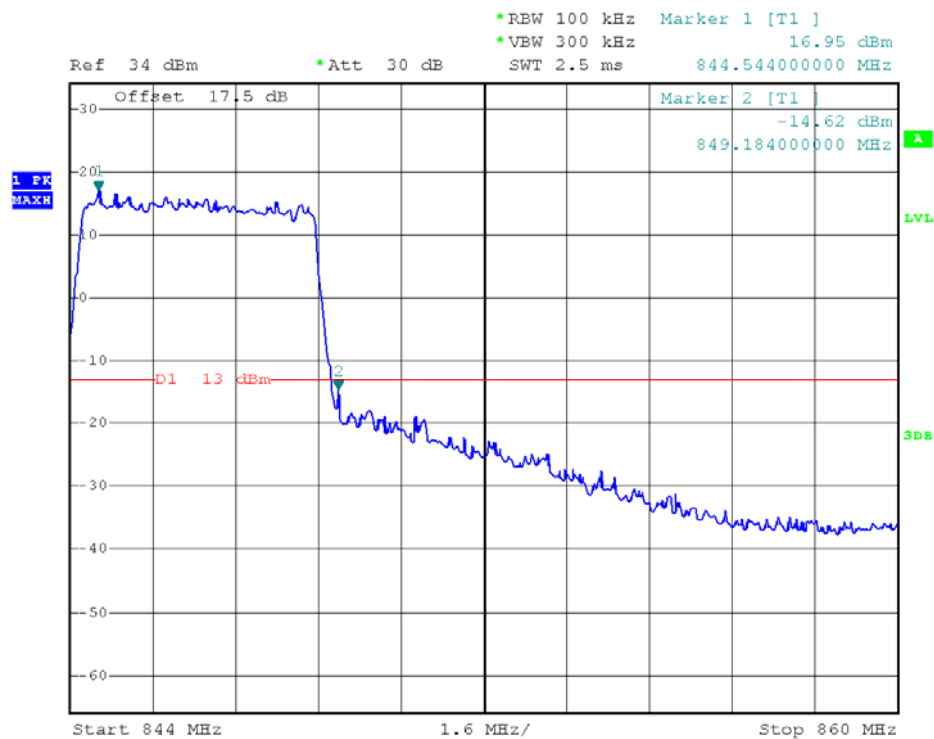
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

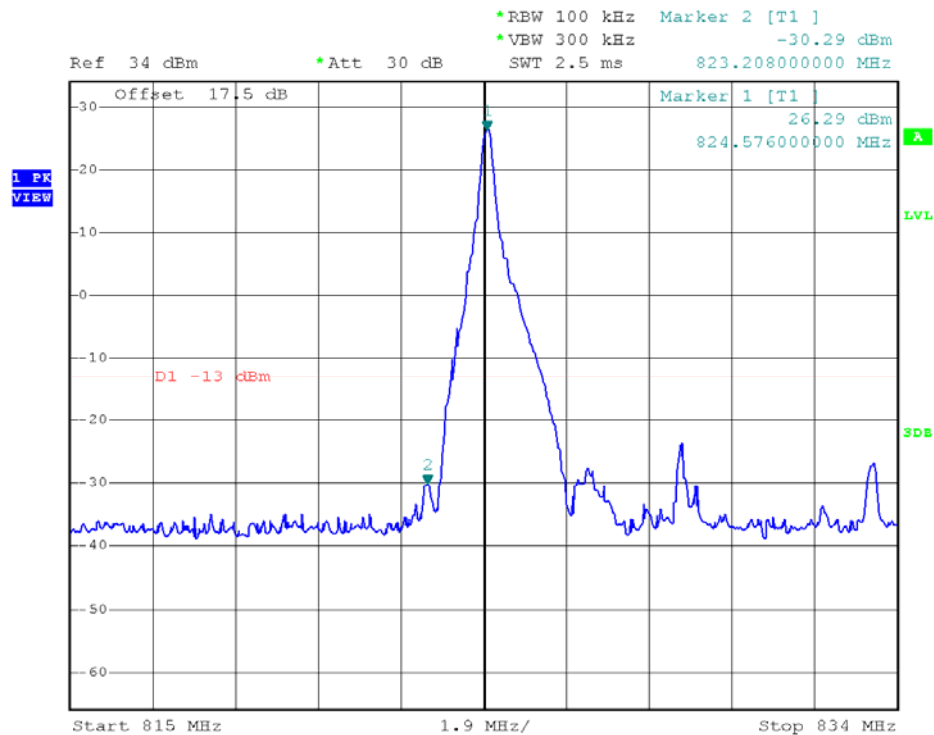


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 24

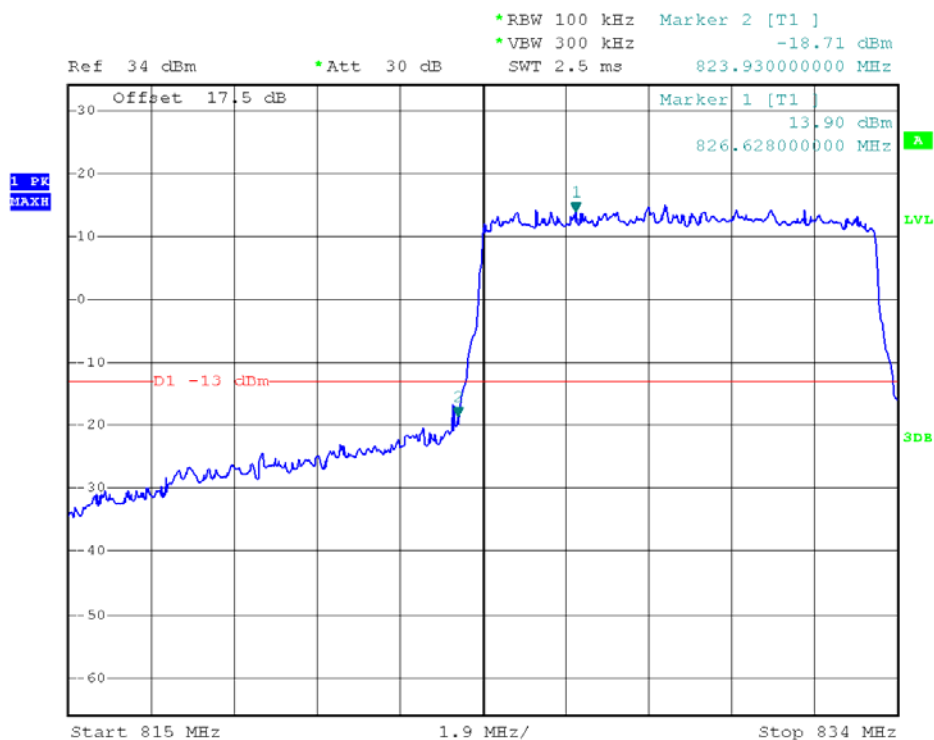


Higher Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

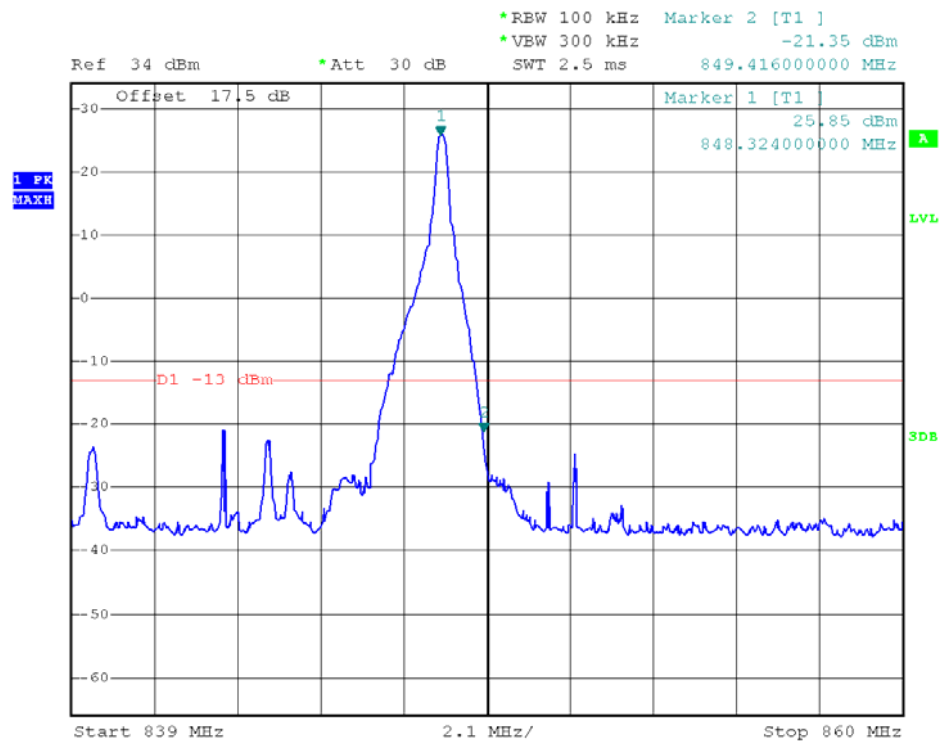
Band	LTE Band 5	Modulation	QPSK
Bandwidth	10MHz		



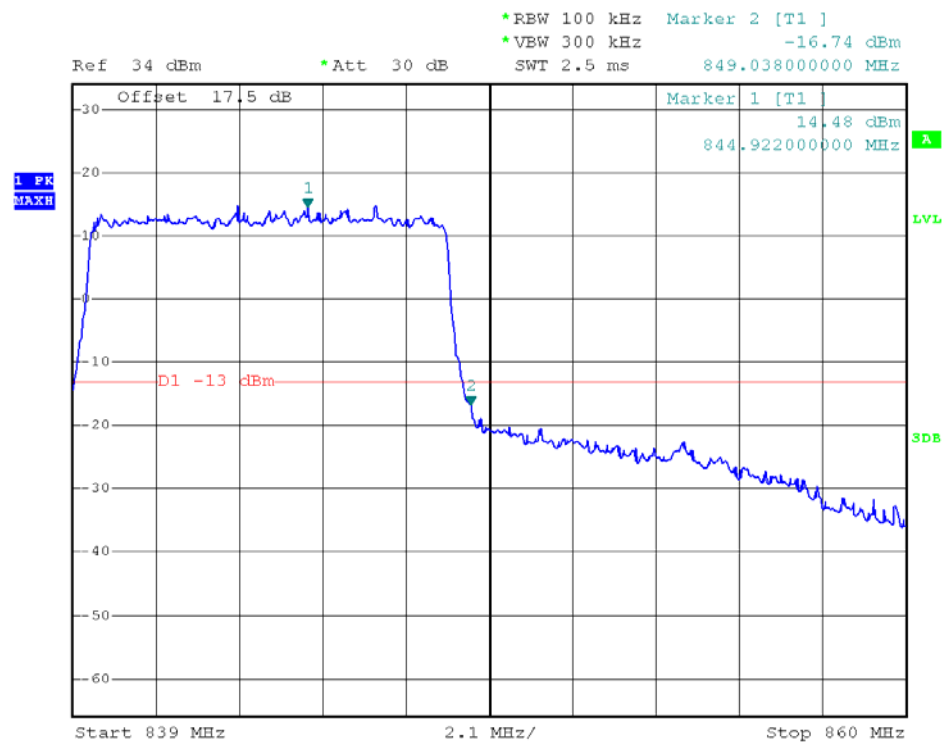
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0

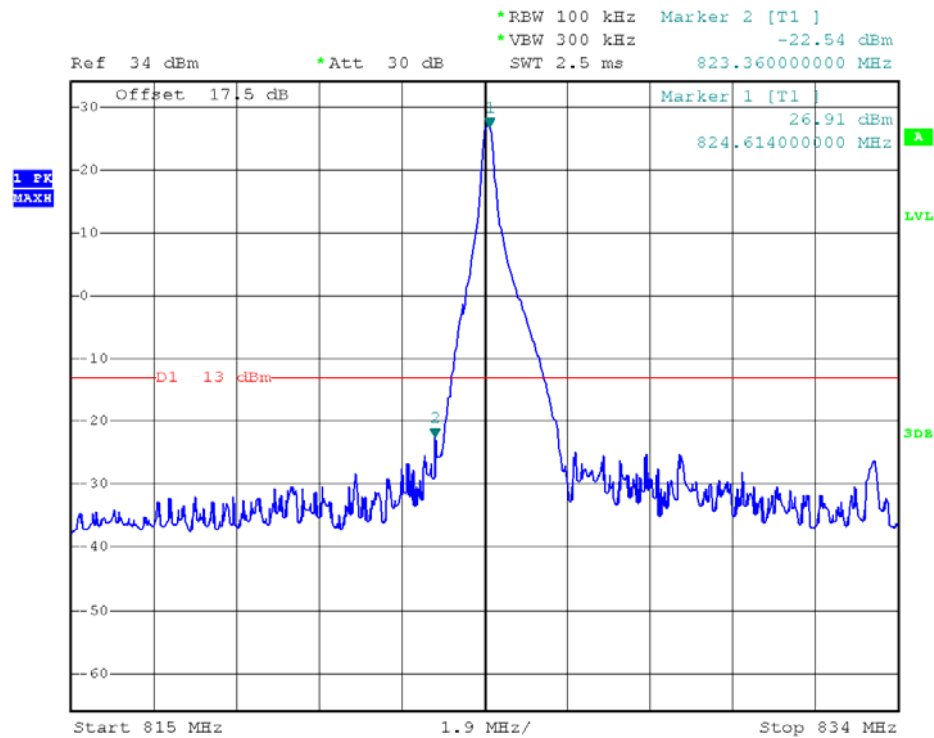


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

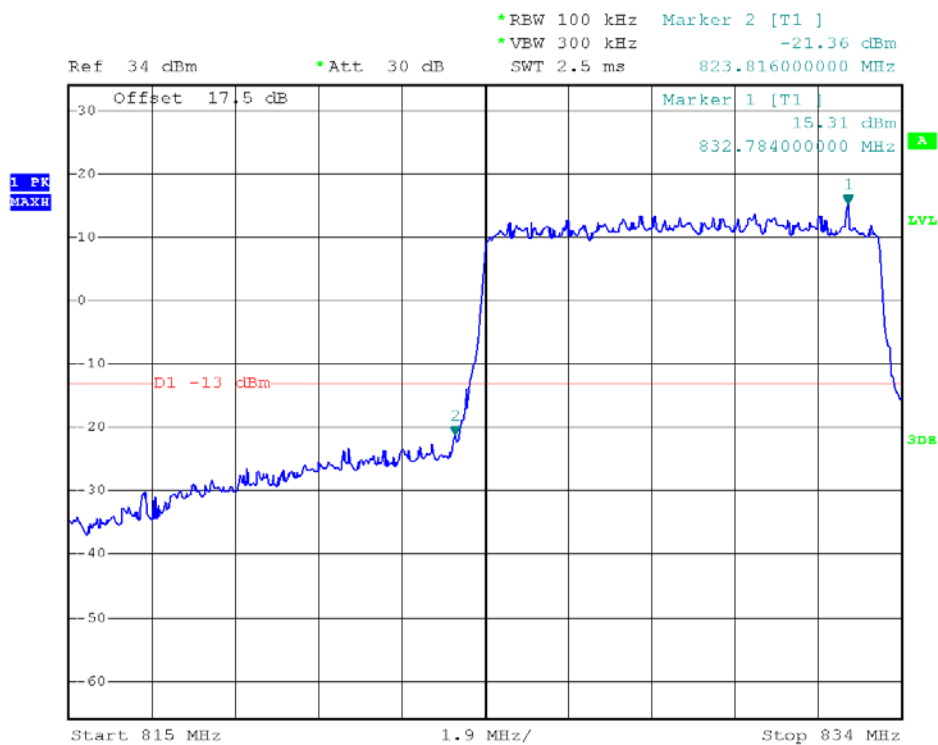


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

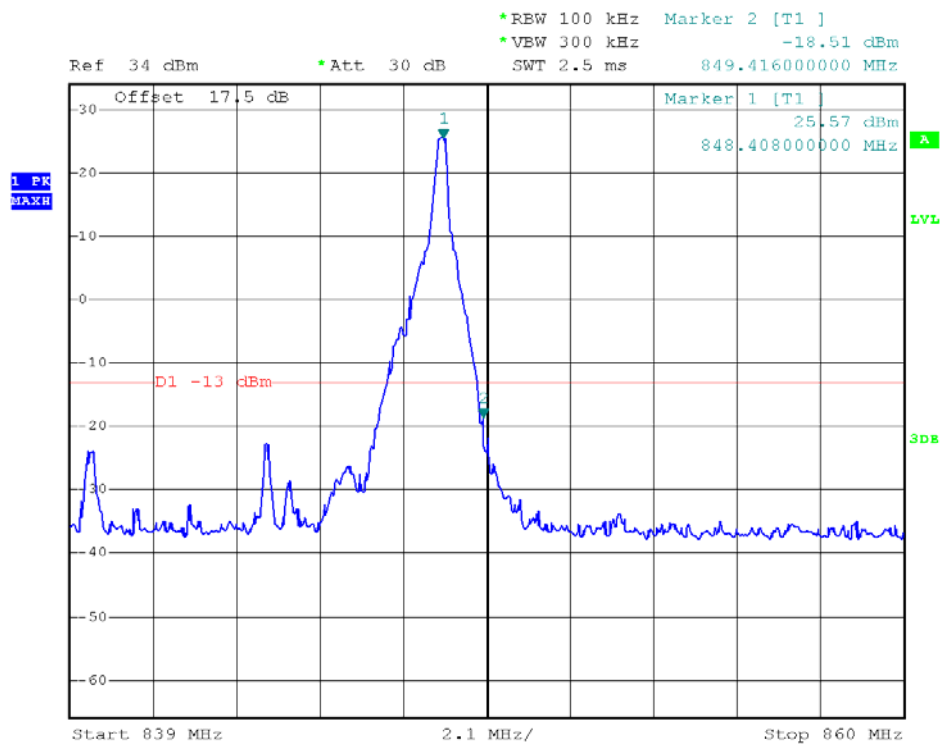
Band	LTE Band 5	Modulation	16QAM
Bandwidth	10MHz		



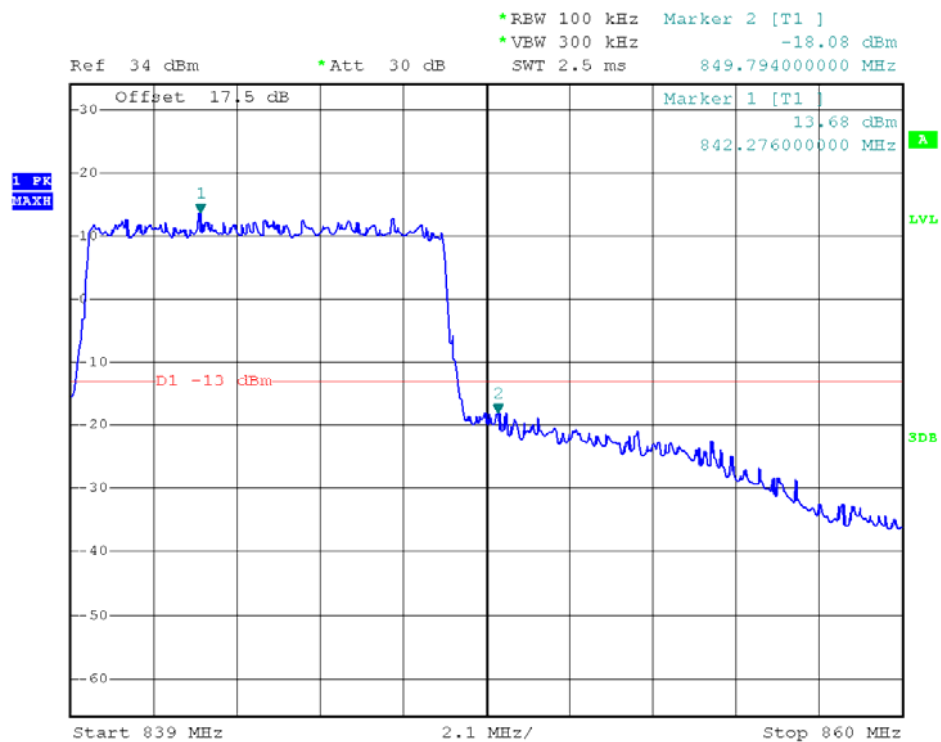
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

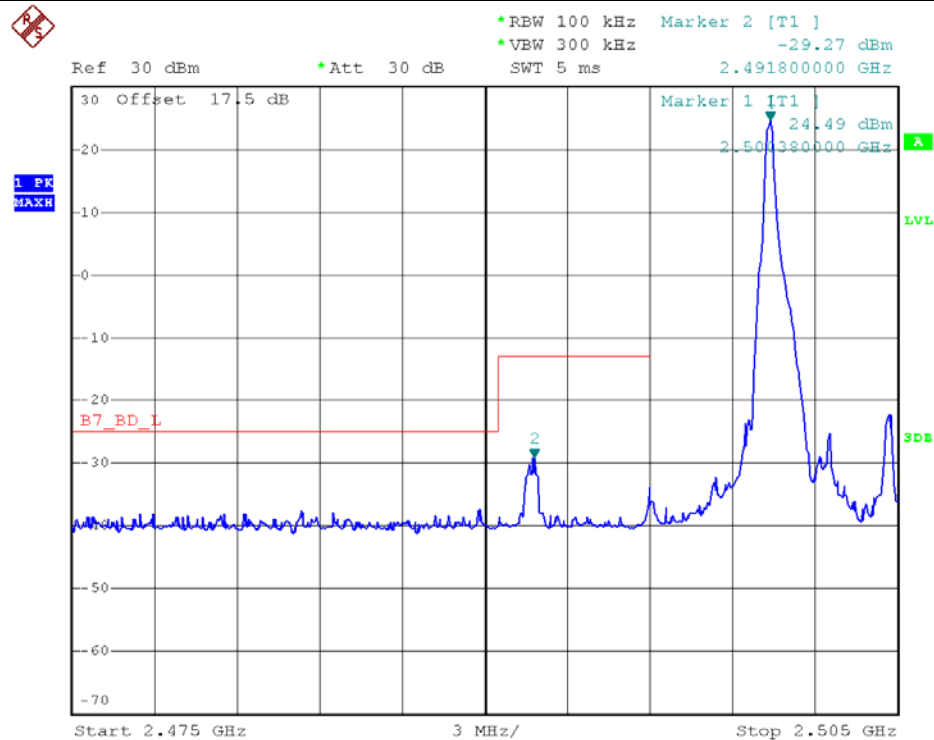


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 49

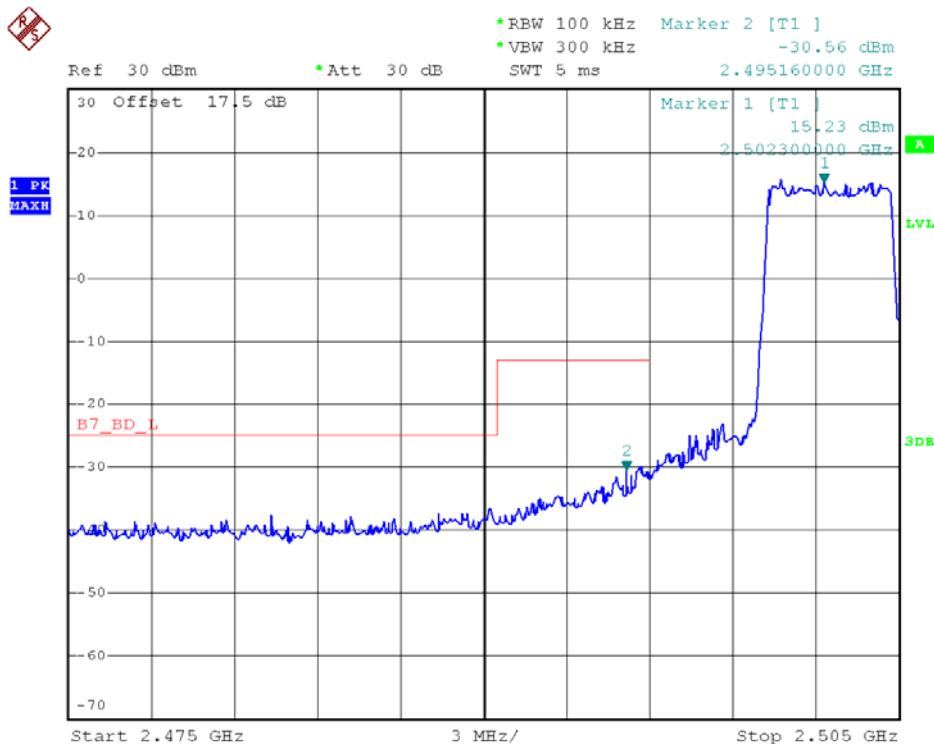


Higher Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

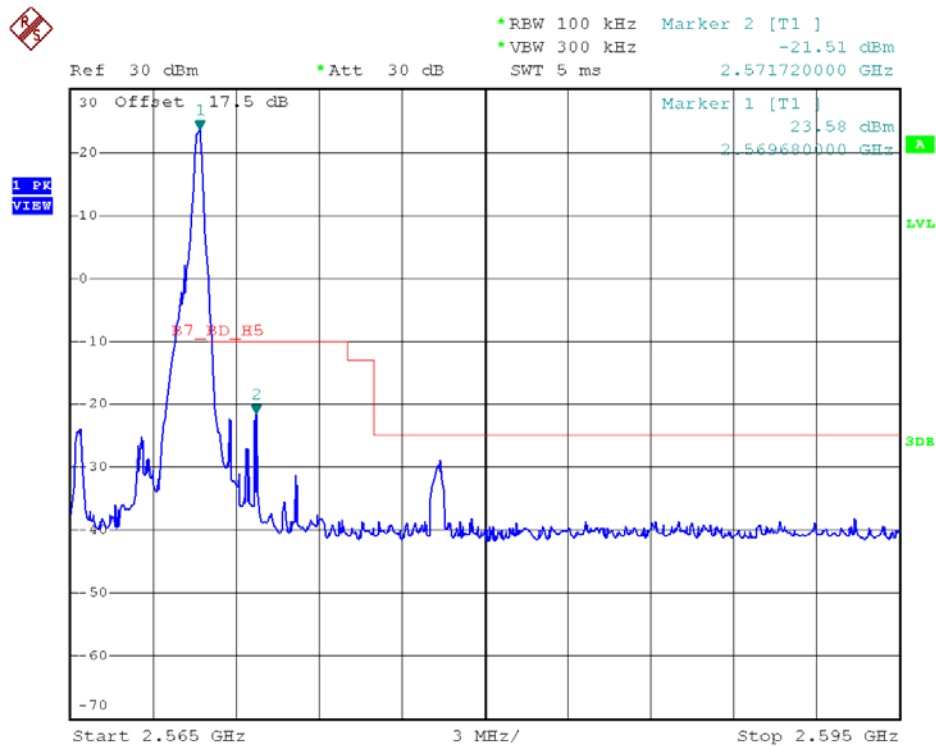
Band	LTE Band 7	Modulation	QPSK
Bandwidth	5MHz		



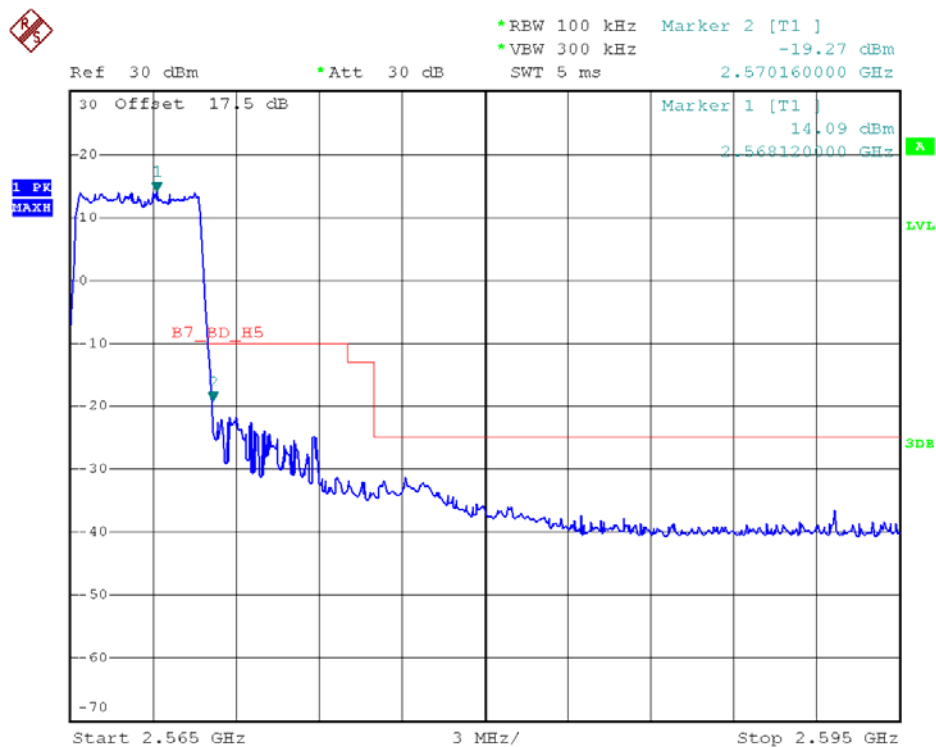
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0

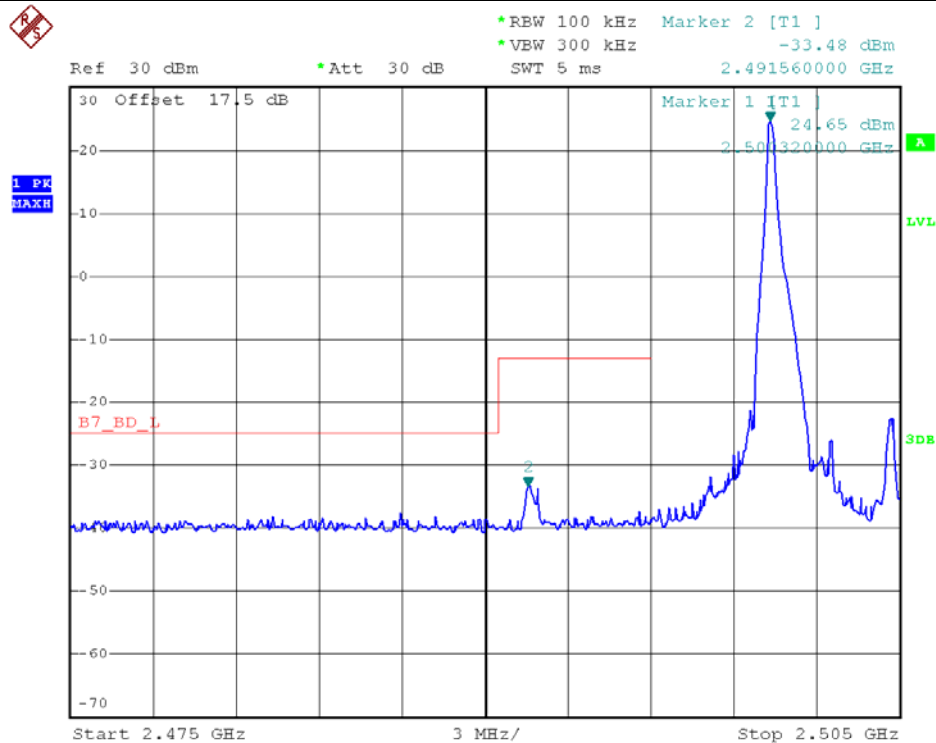


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24

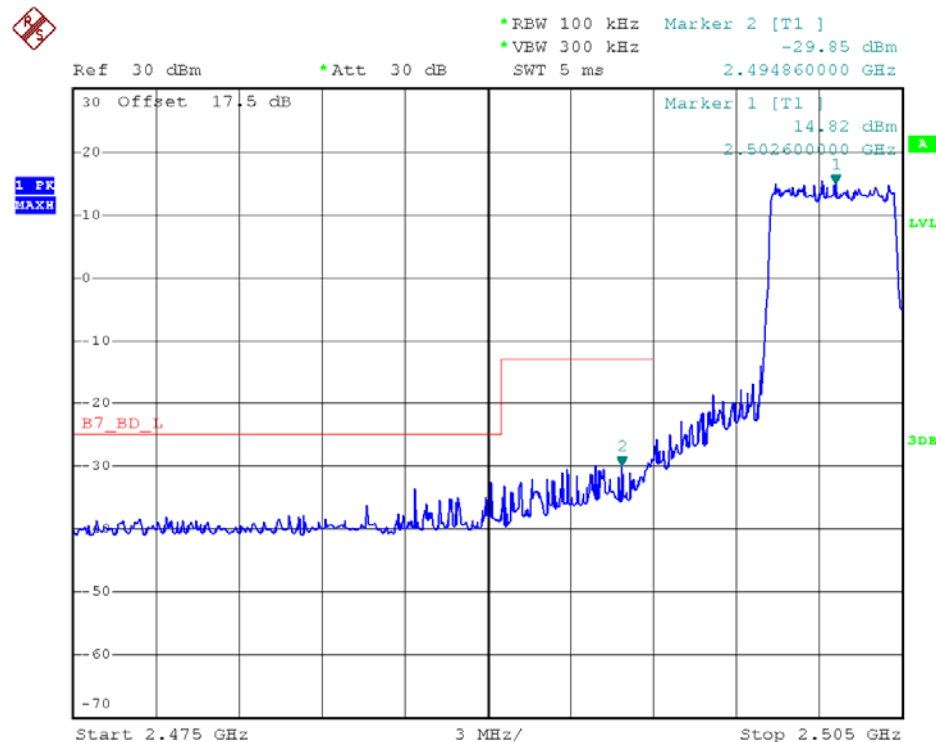


Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

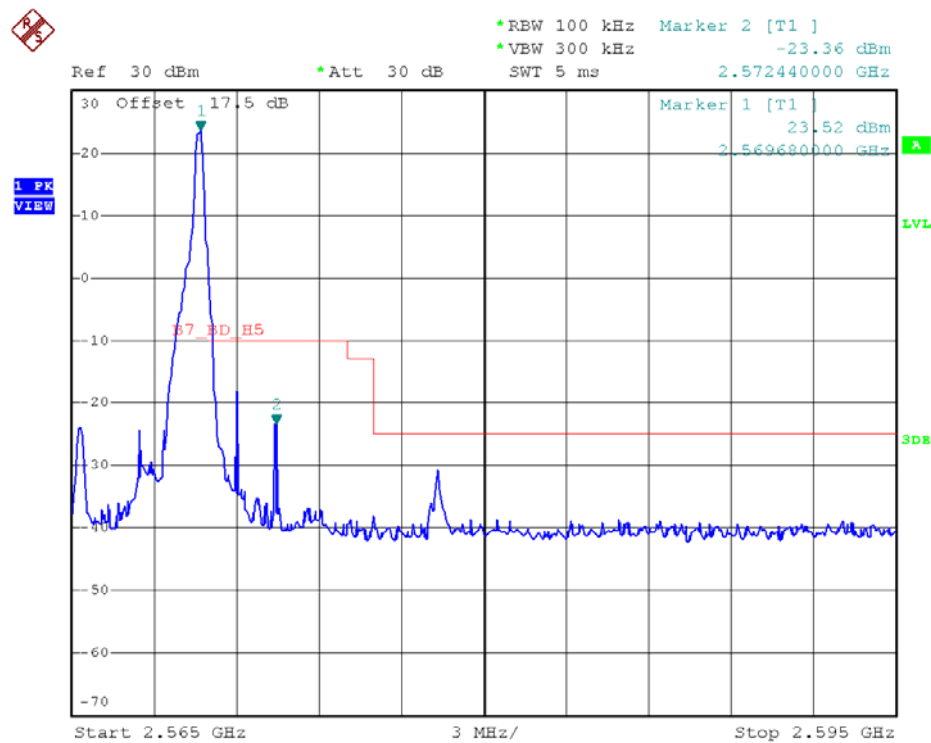
Band	LTE Band 7	Modulation	16QAM
Bandwidth	5MHz		



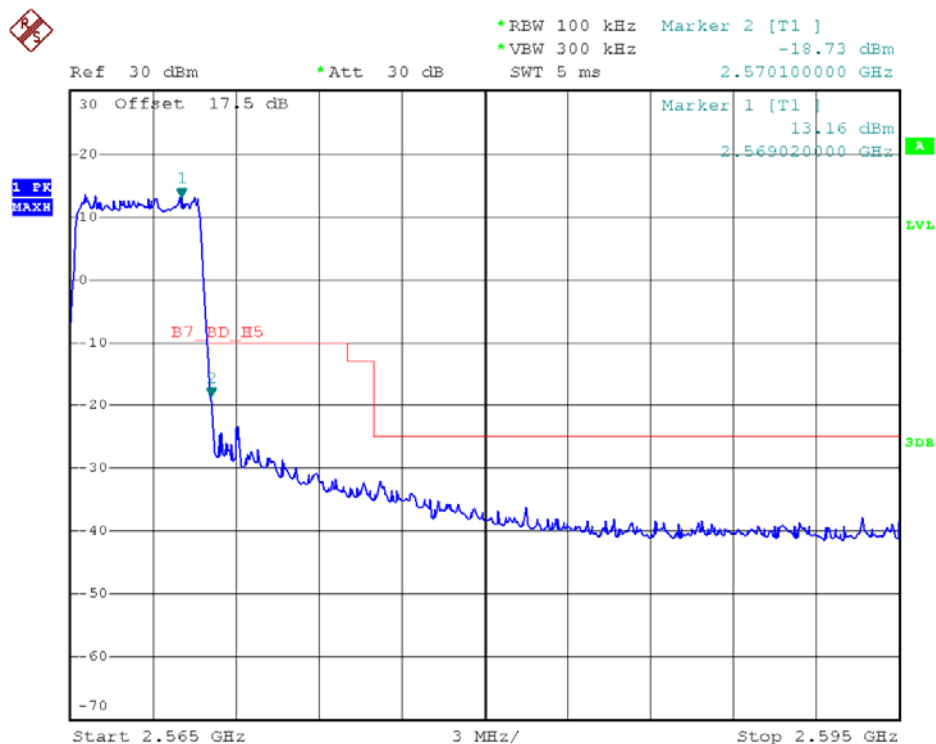
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

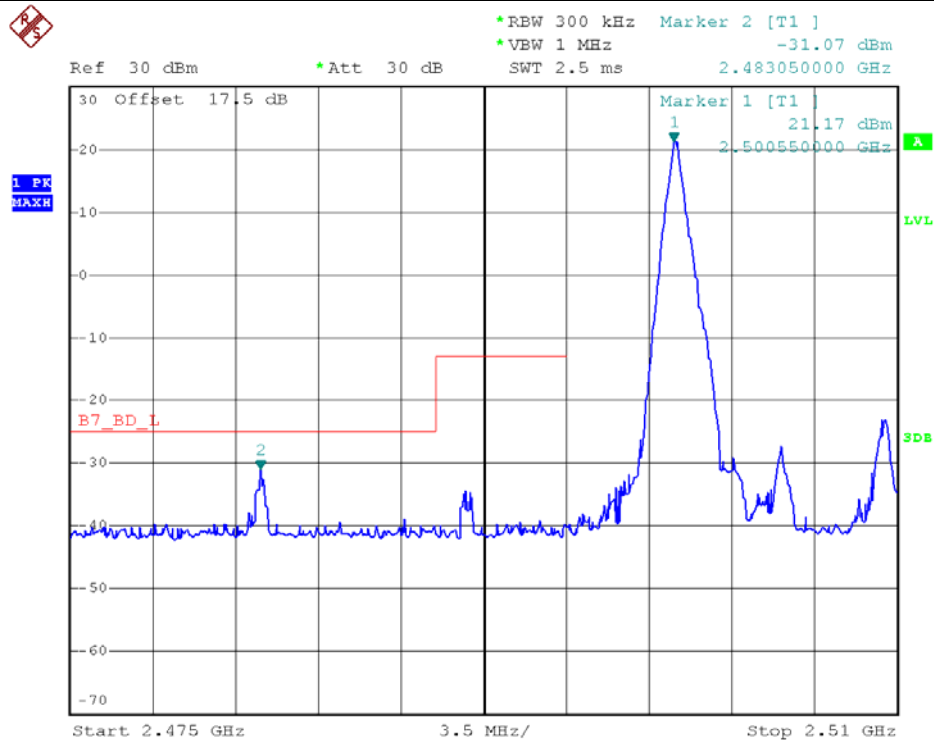


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 24

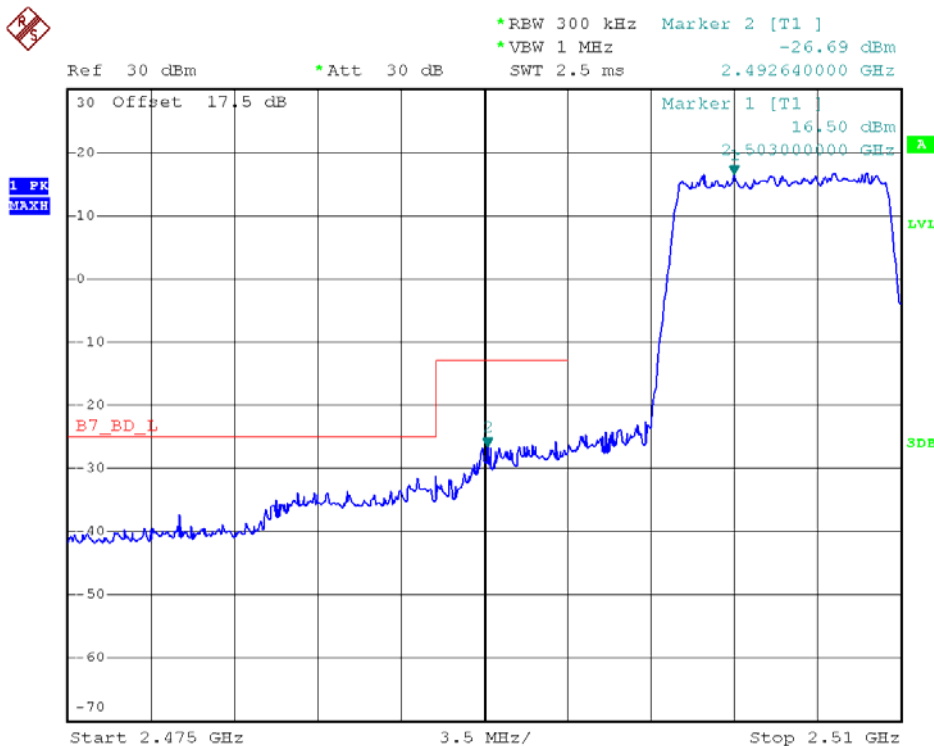


Higher Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

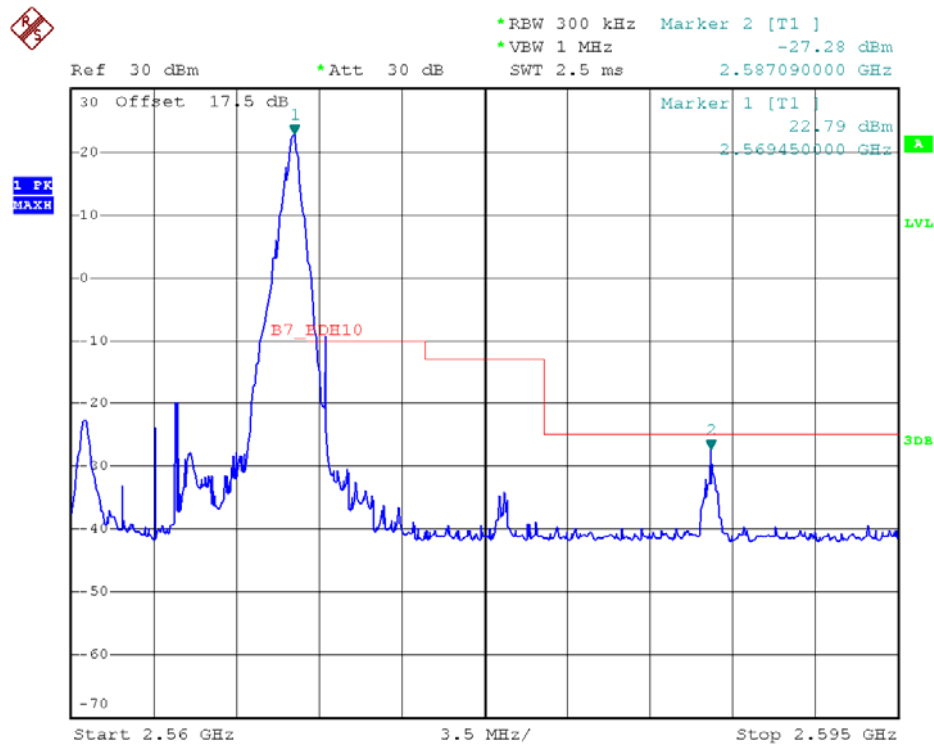
Band	LTE Band 7	Modulation	QPSK
Bandwidth	10MHz		



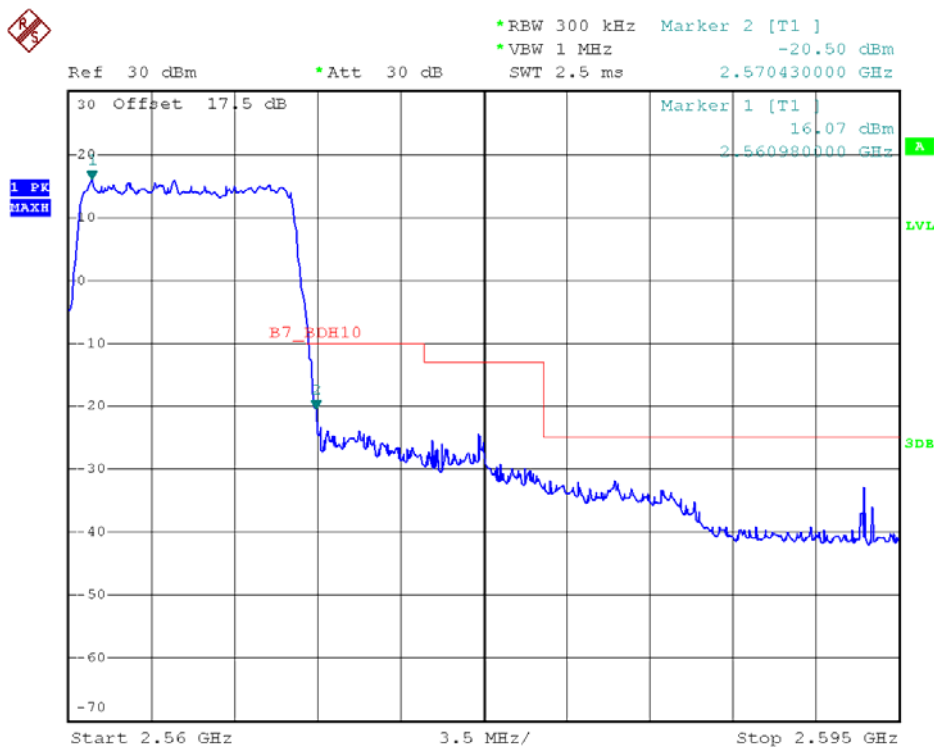
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0

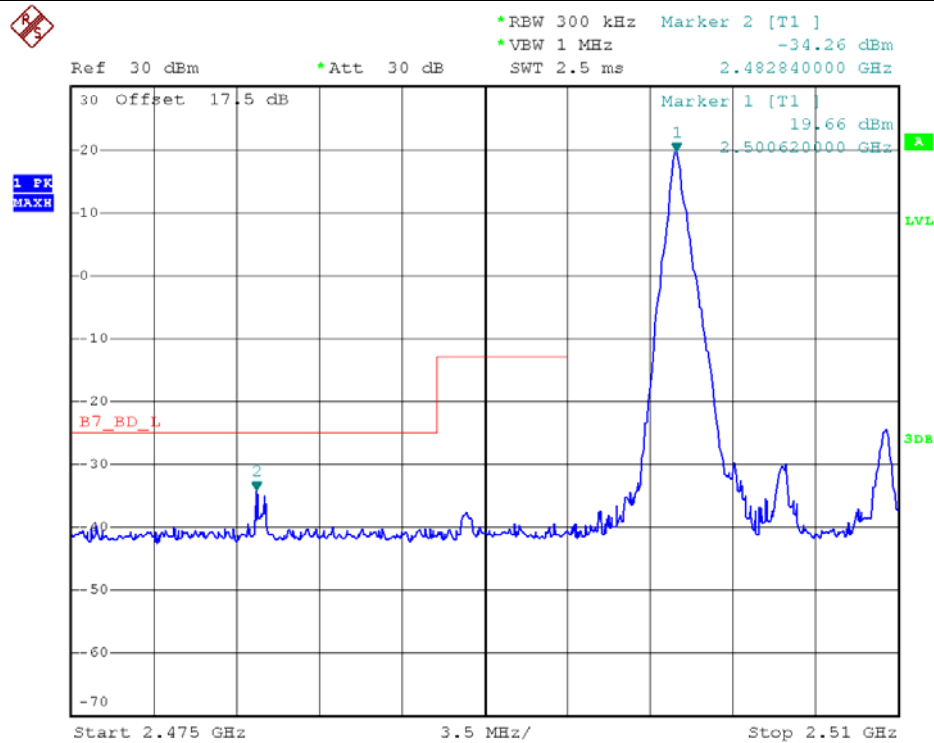


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49

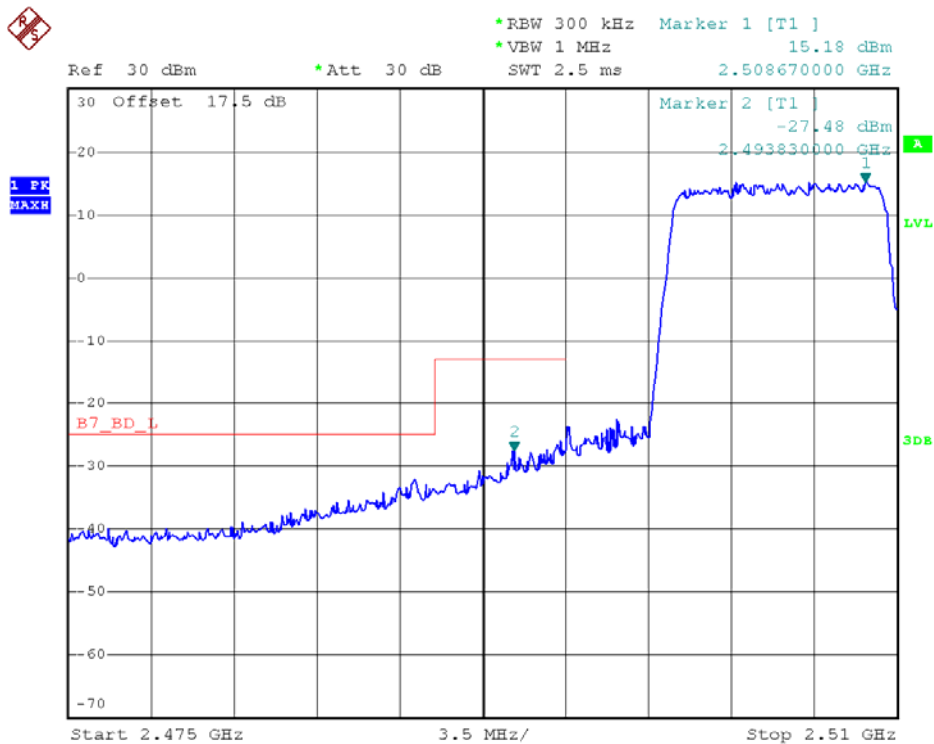


Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

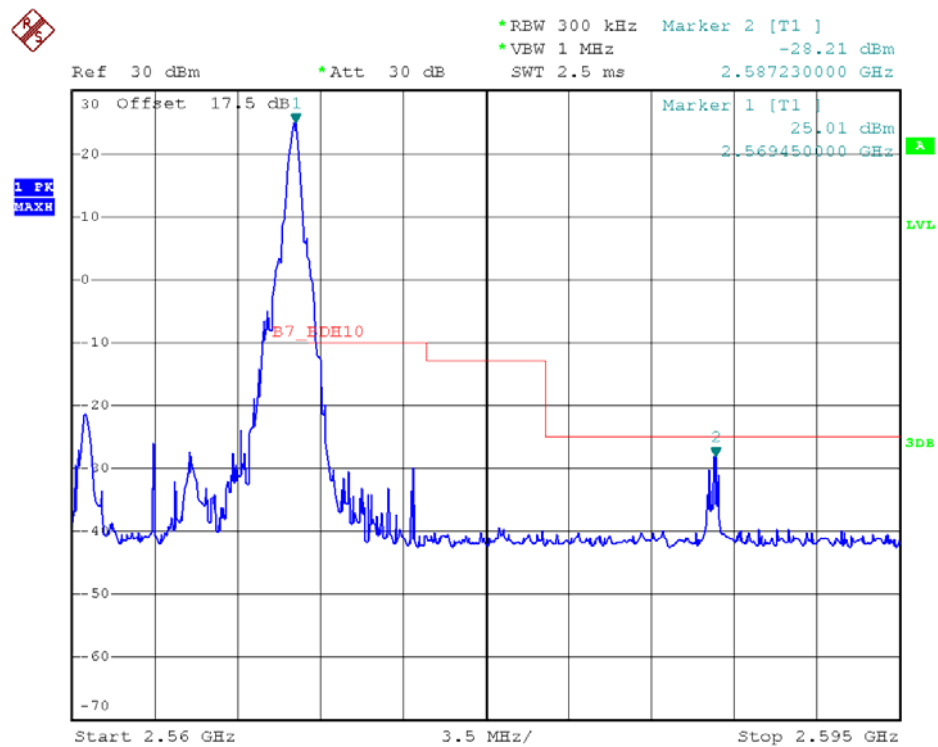
Band	LTE Band 7	Modulation	16QAM
Bandwidth	10MHz		



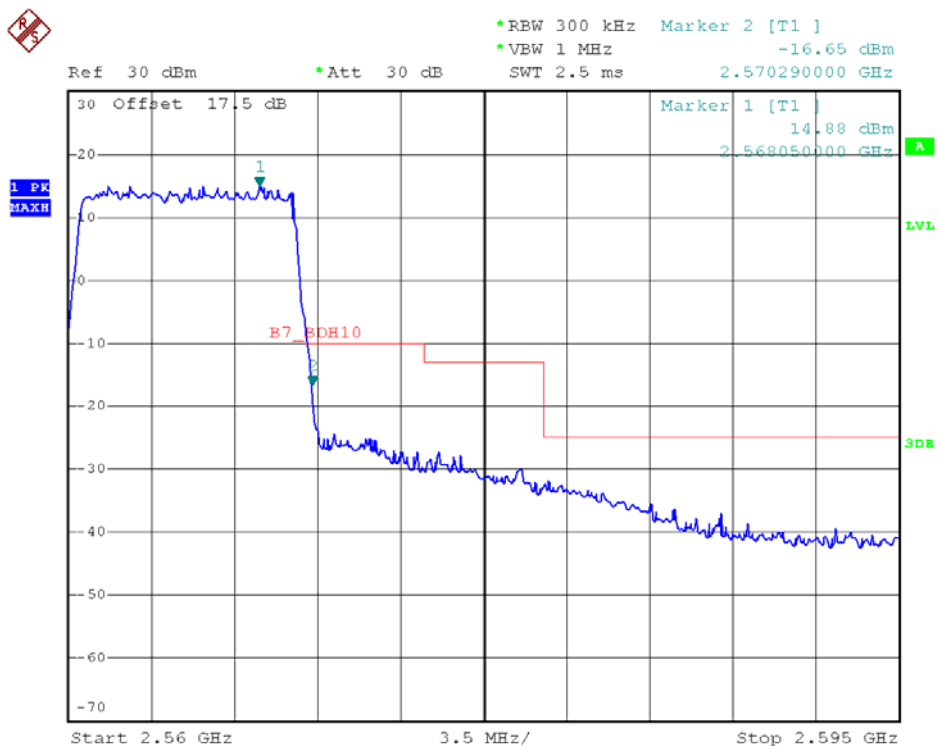
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

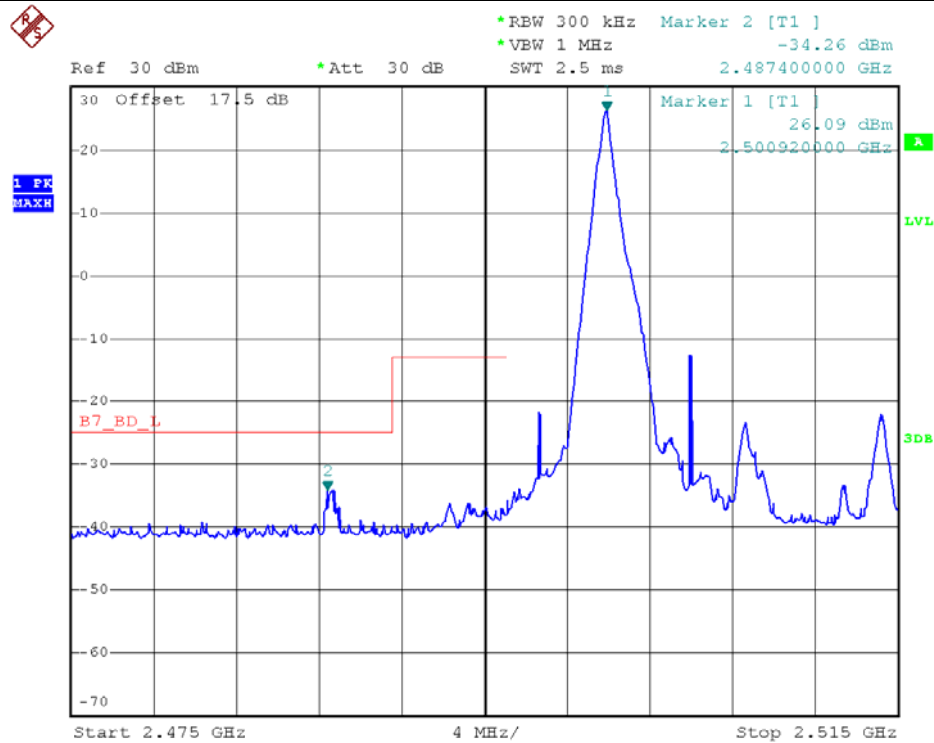


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 49

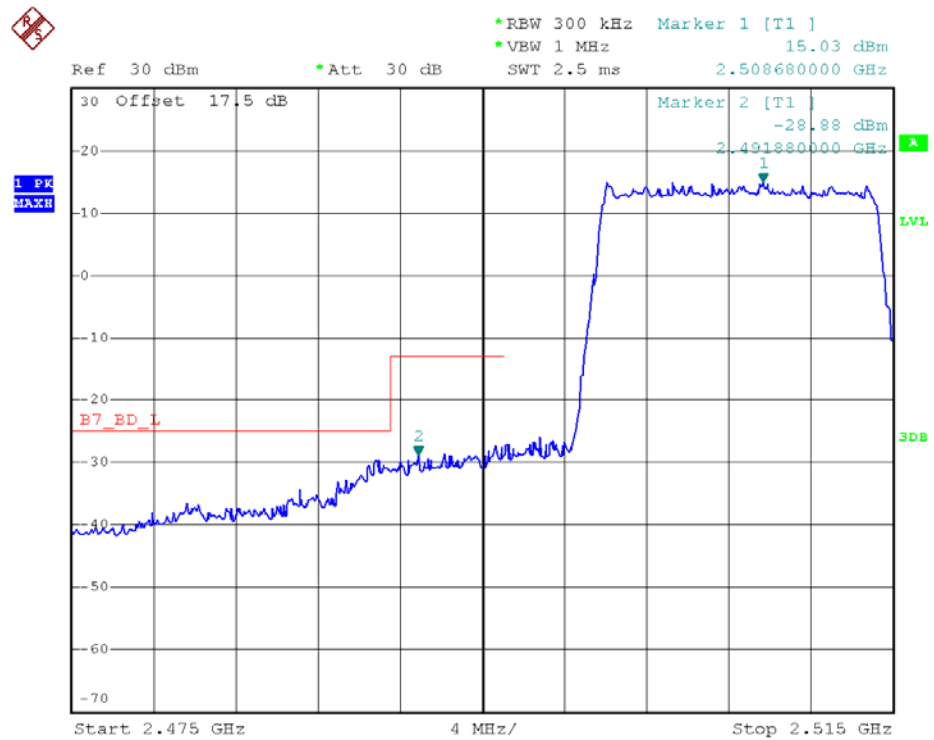


Higher Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

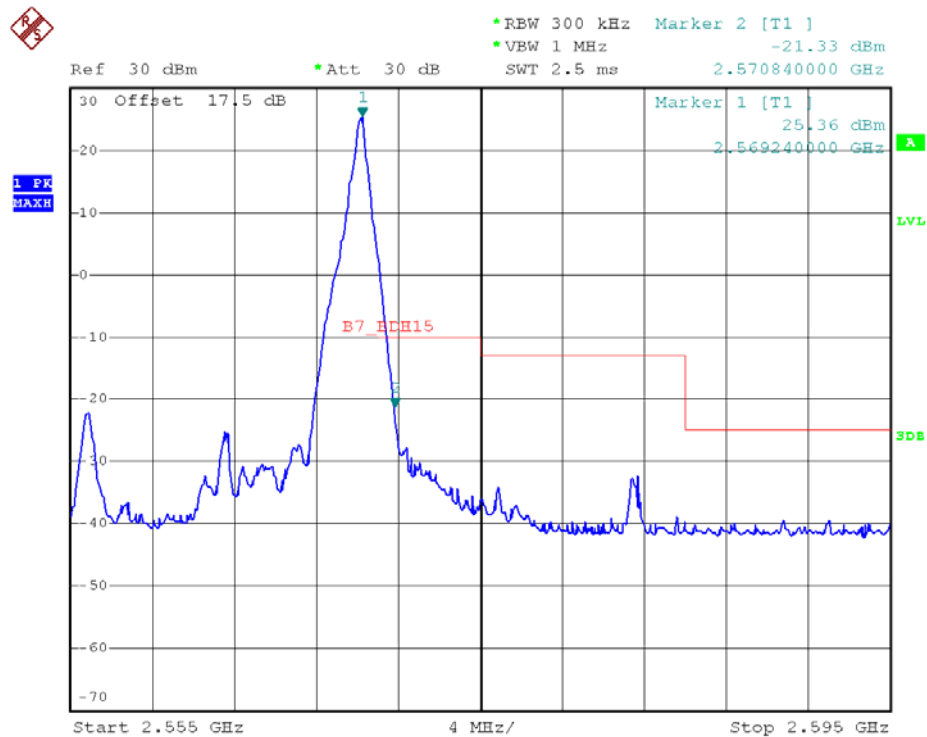
Band	LTE Band 7	Modulation	QPSK
Bandwidth	15MHz		



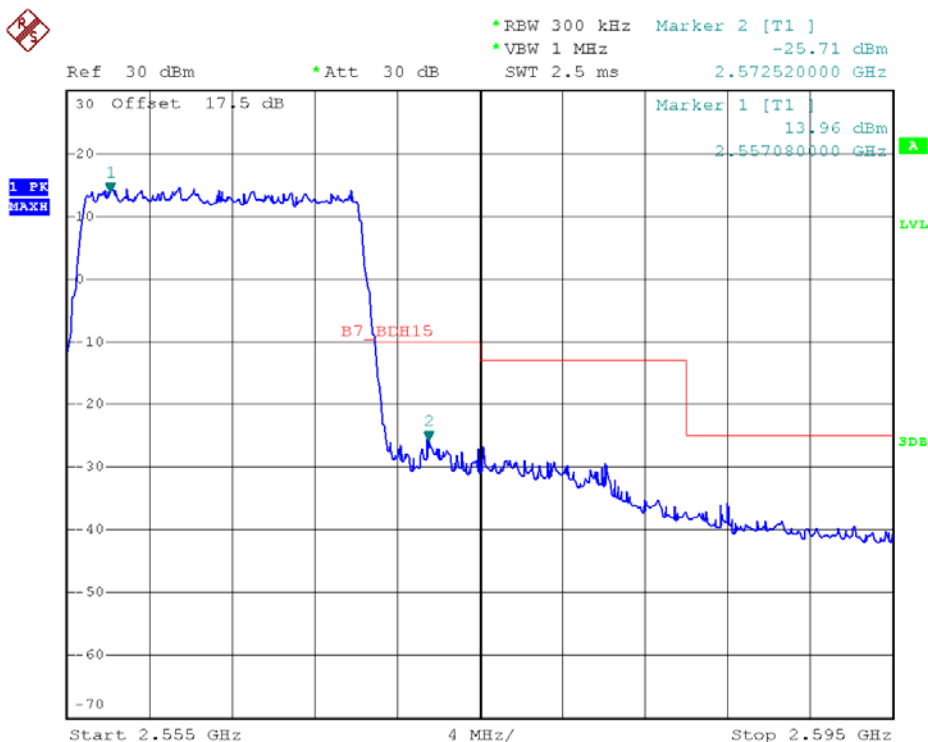
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0

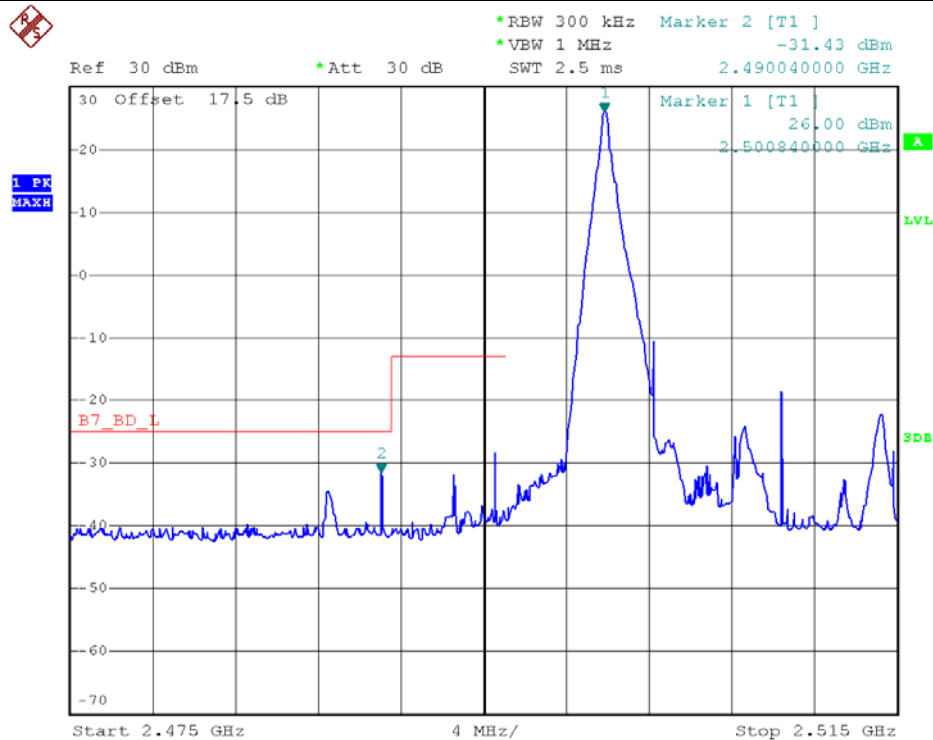


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74

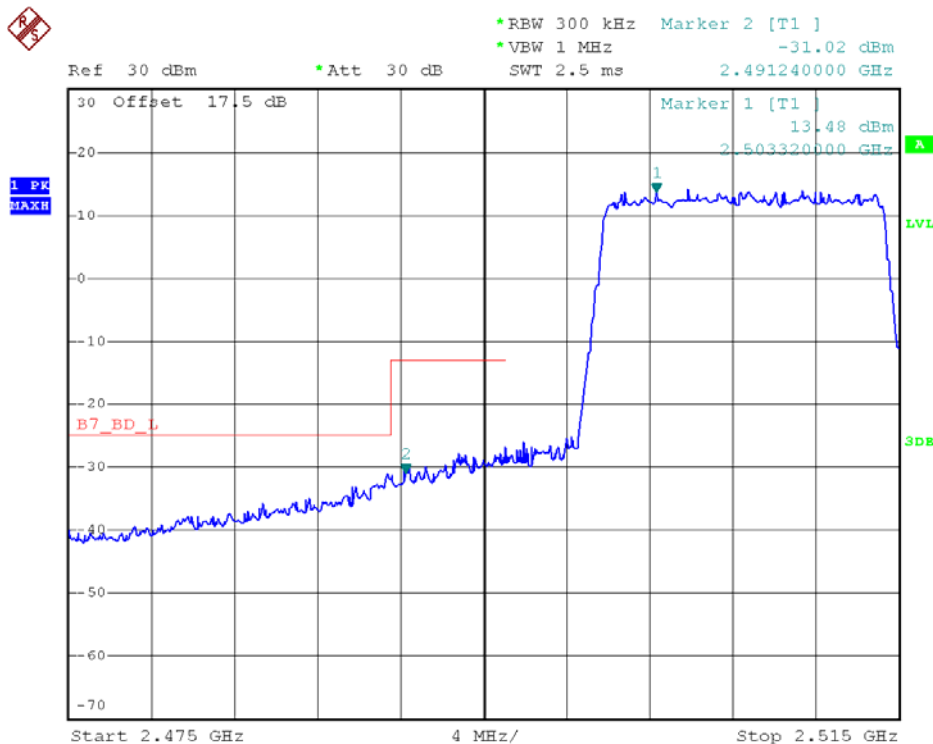


Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

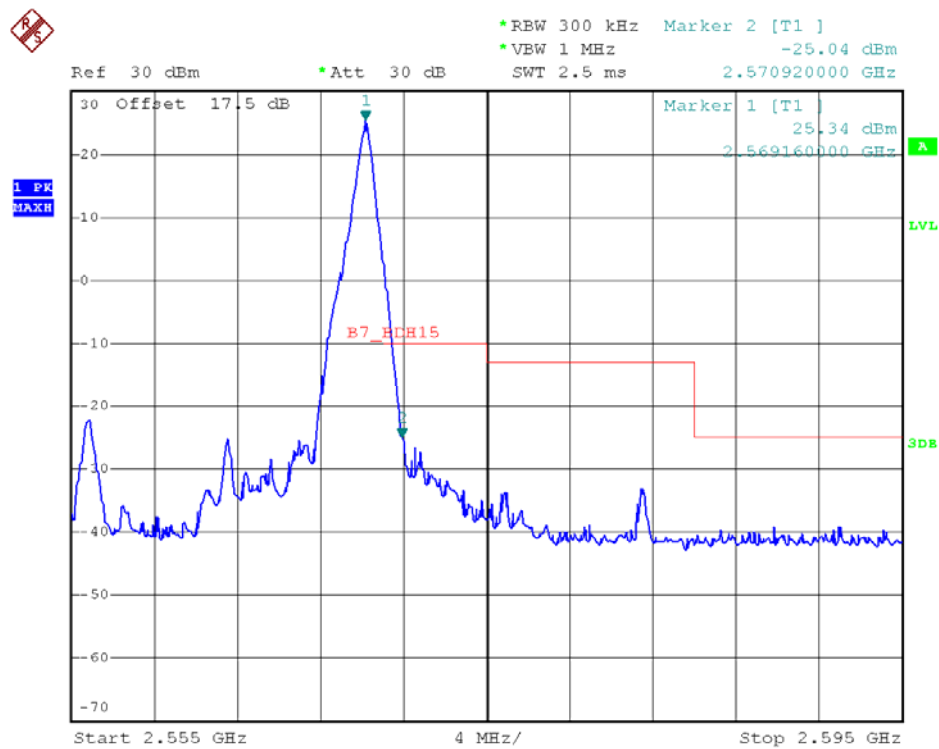
Band	LTE Band 7	Modulation	16QAM
Bandwidth	15MHz		



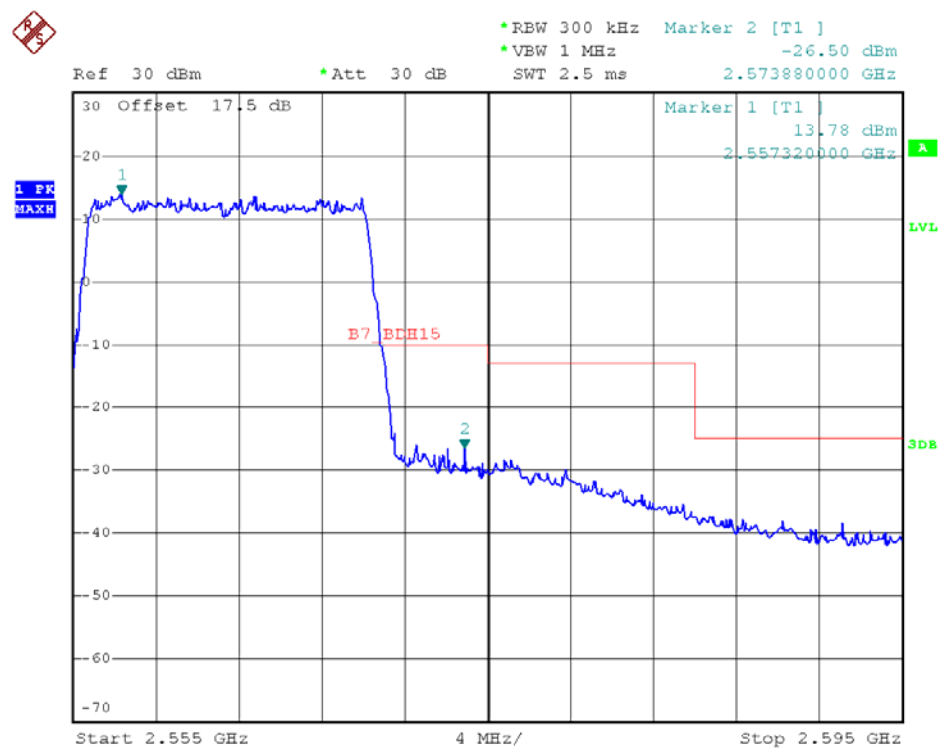
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 75, RB Offset 0

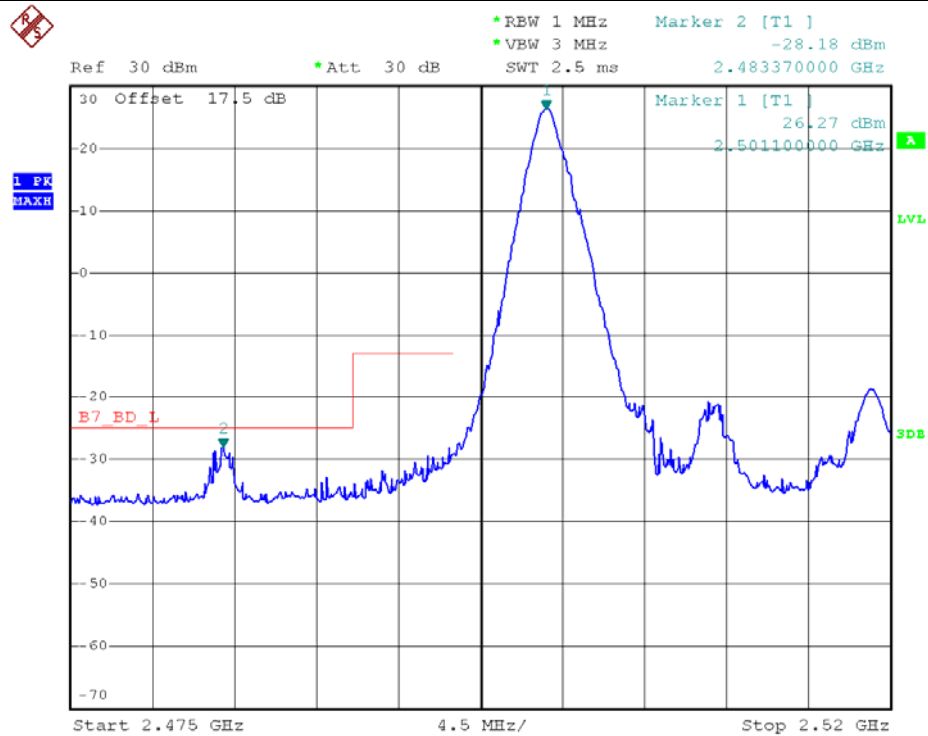


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 74

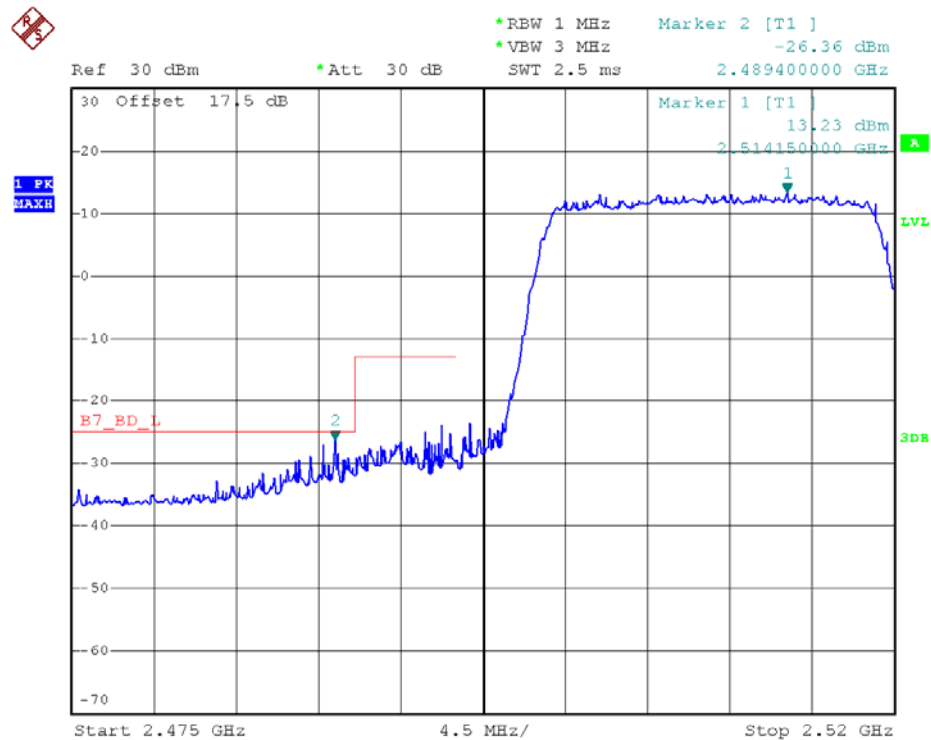


Higher Band Edge Plot for 16QAM-RB Size 75, RB Offset 0

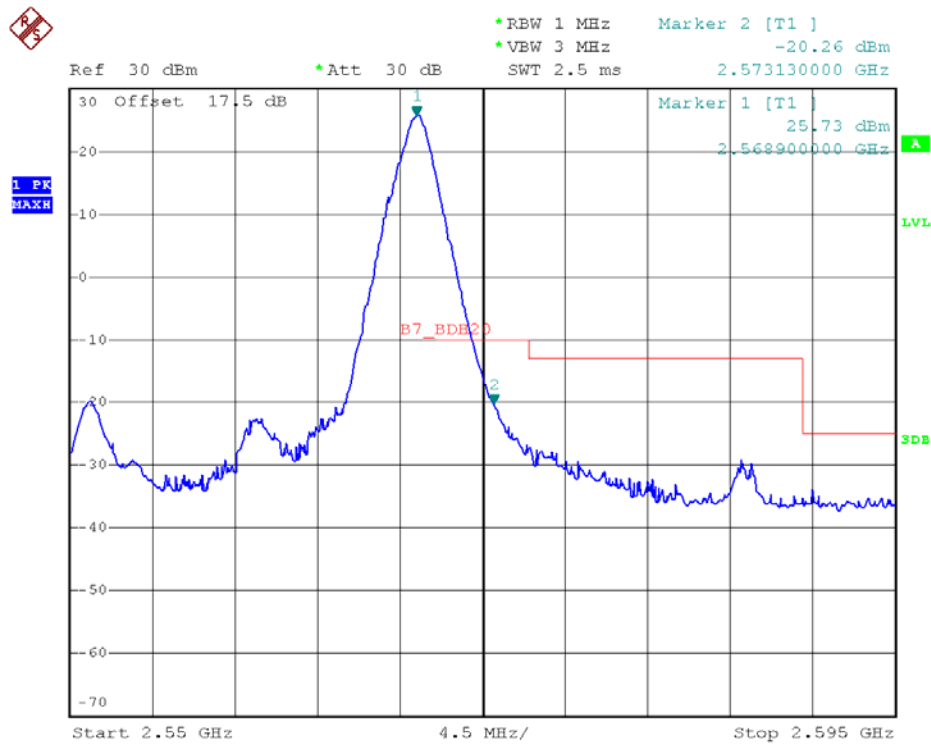
Band	LTE Band 7	Modulation	QPSK
Bandwidth	20MHz		



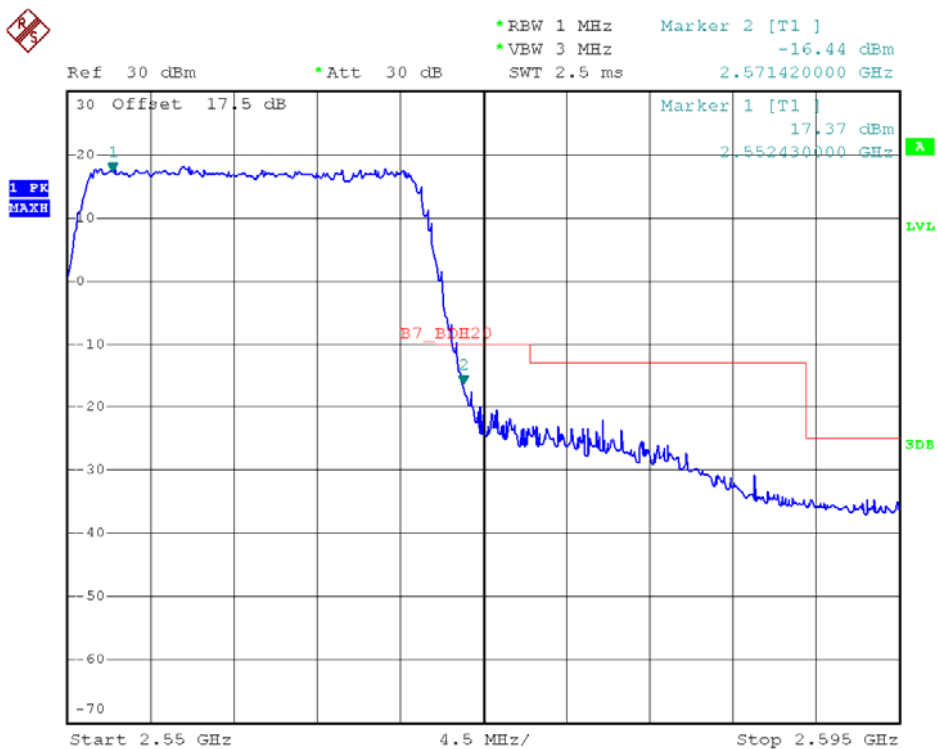
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0

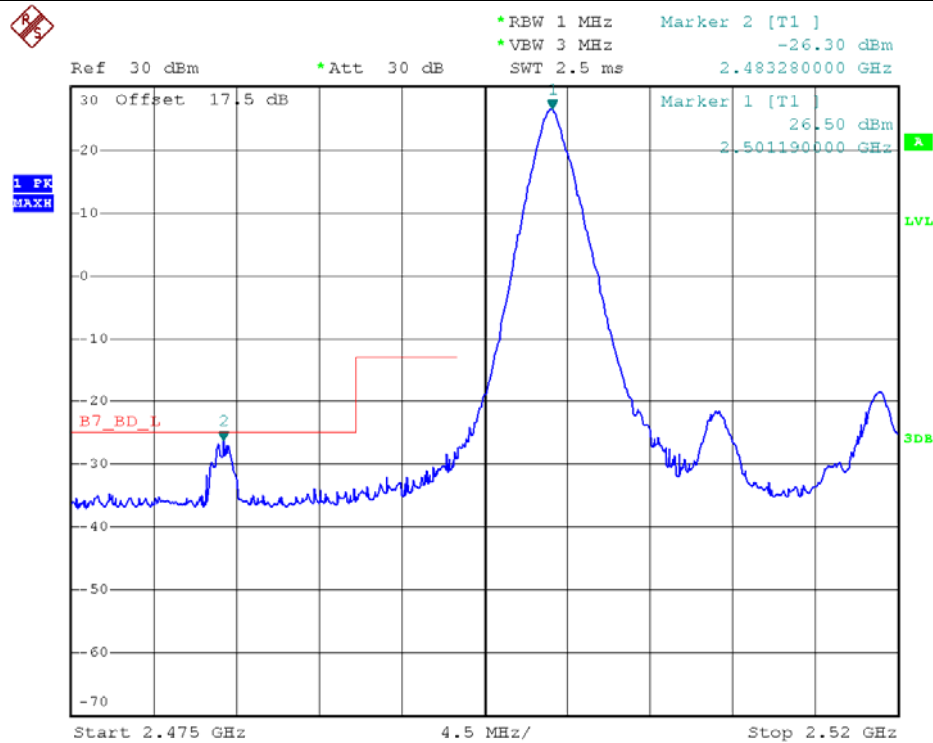


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99

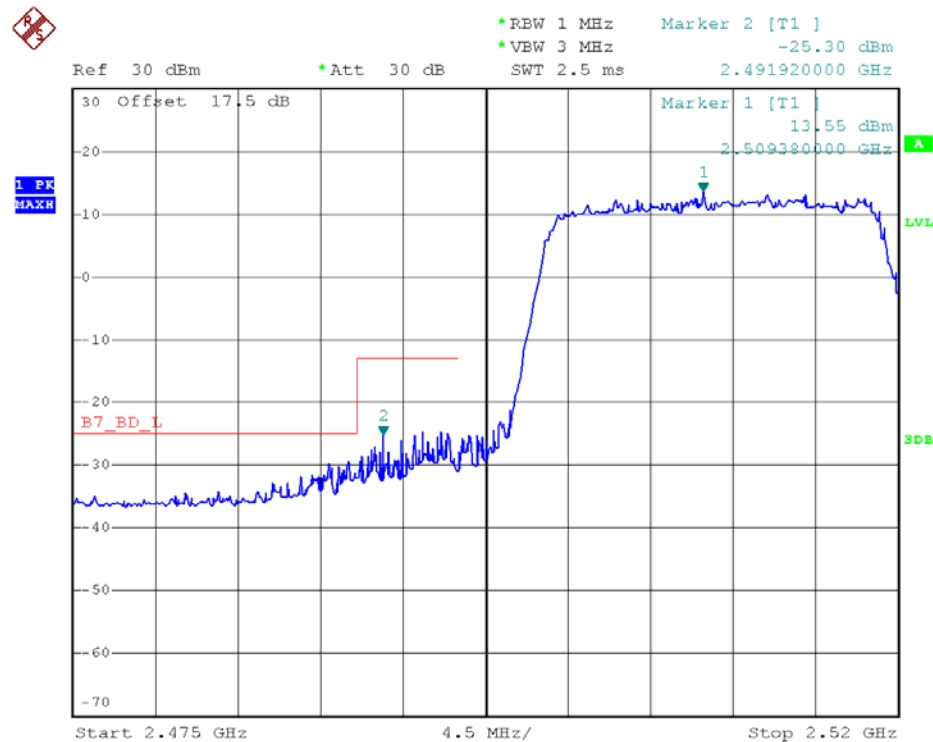


Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

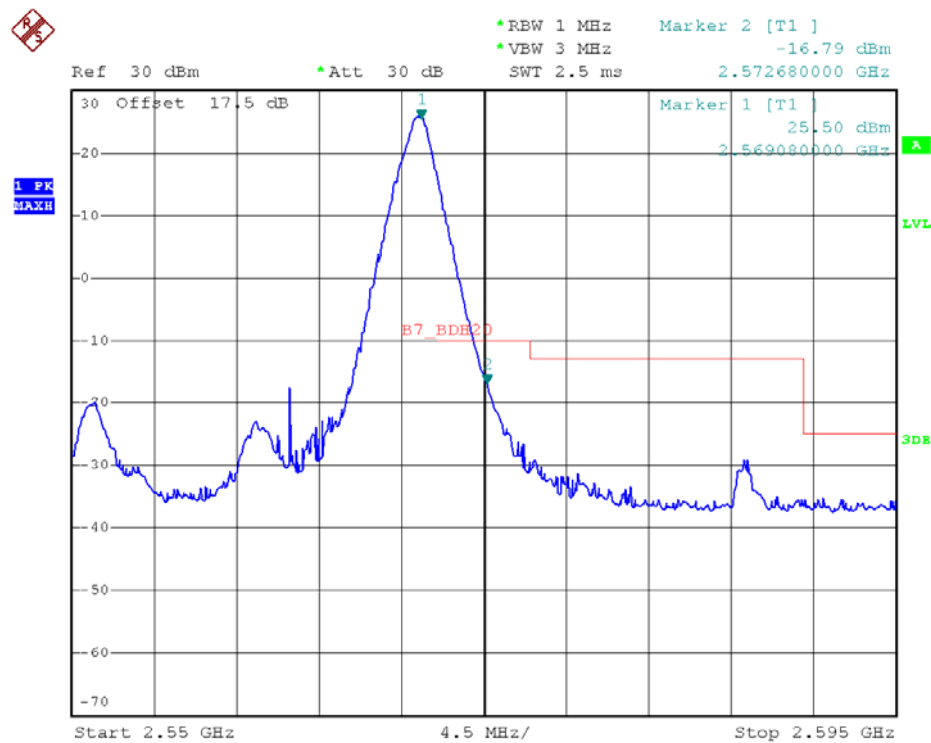
Band	LTE Band 7	Modulation	16QAM
Bandwidth	20MHz		



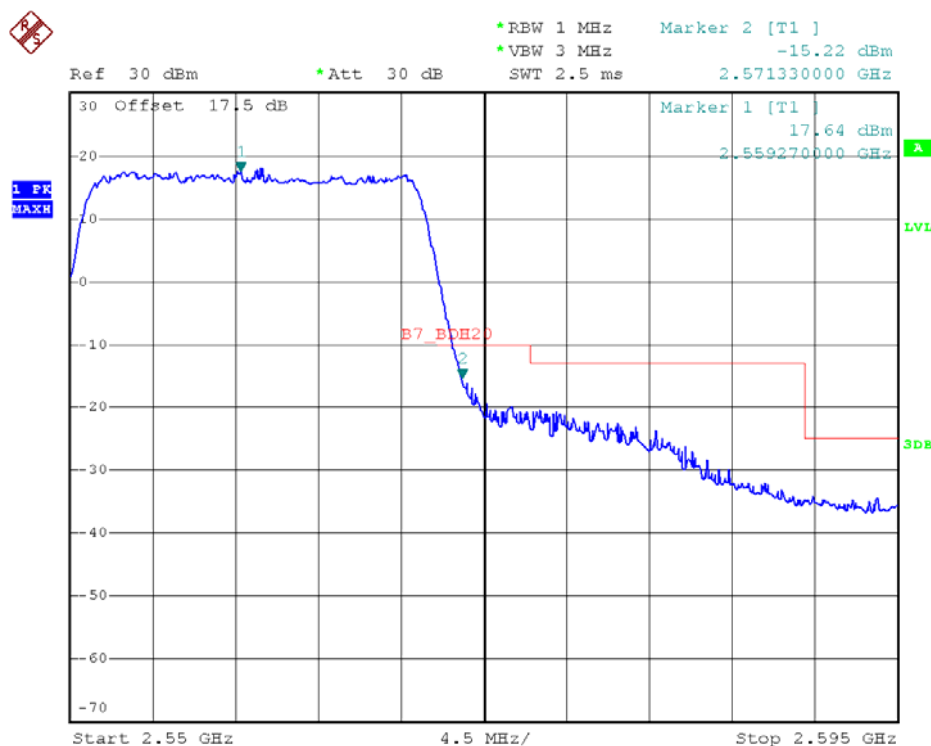
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Lower Band Edge Plot for 16QAM-RB Size 100, RB Offset 0

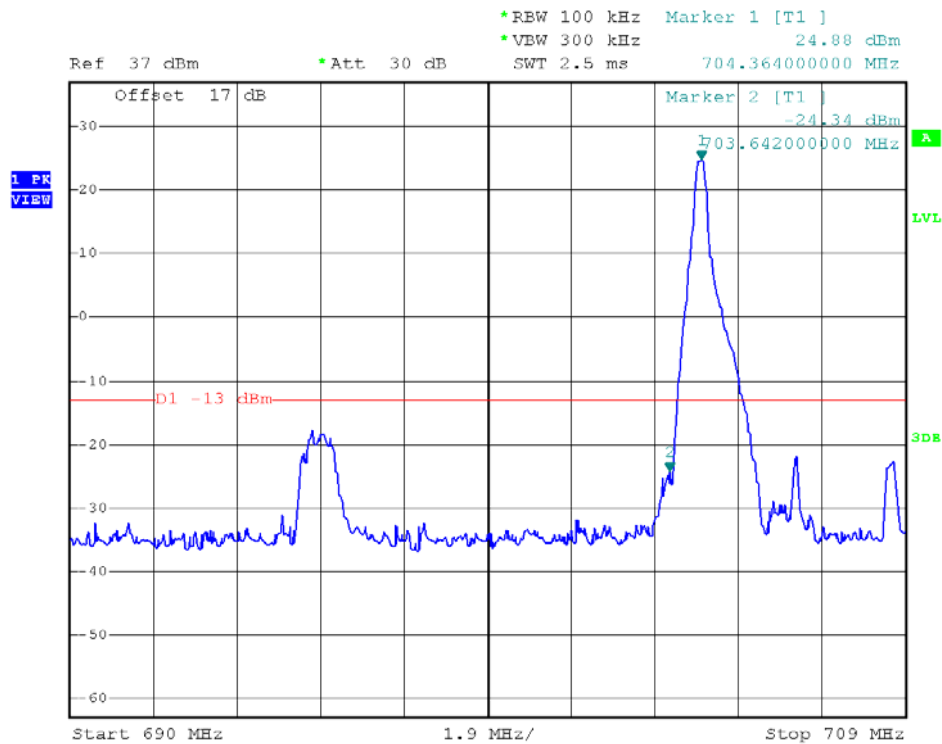


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 99

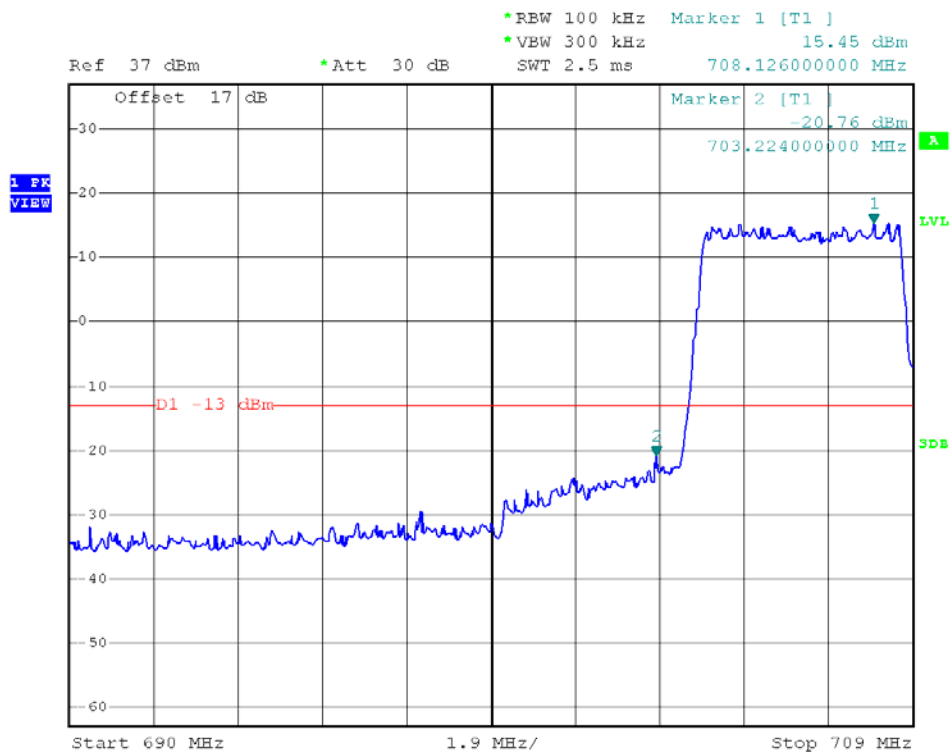


Higher Band Edge Plot for 16QAM-RB Size 100, RB Offset 0

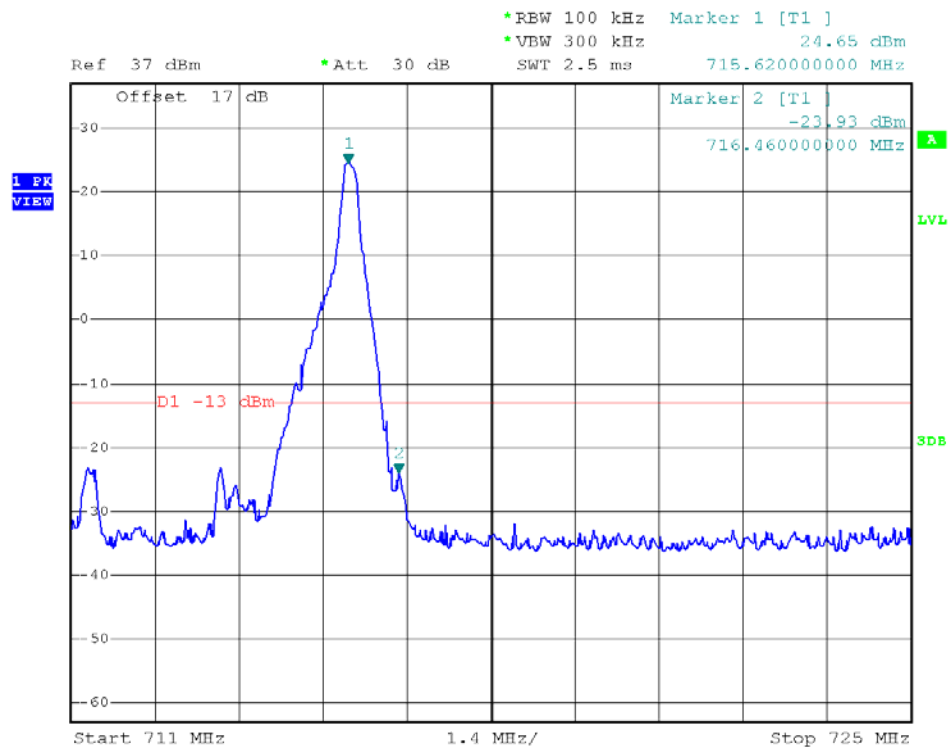
Band	LTE Band 17	Modulation	QPSK
Bandwidth	5MHz		



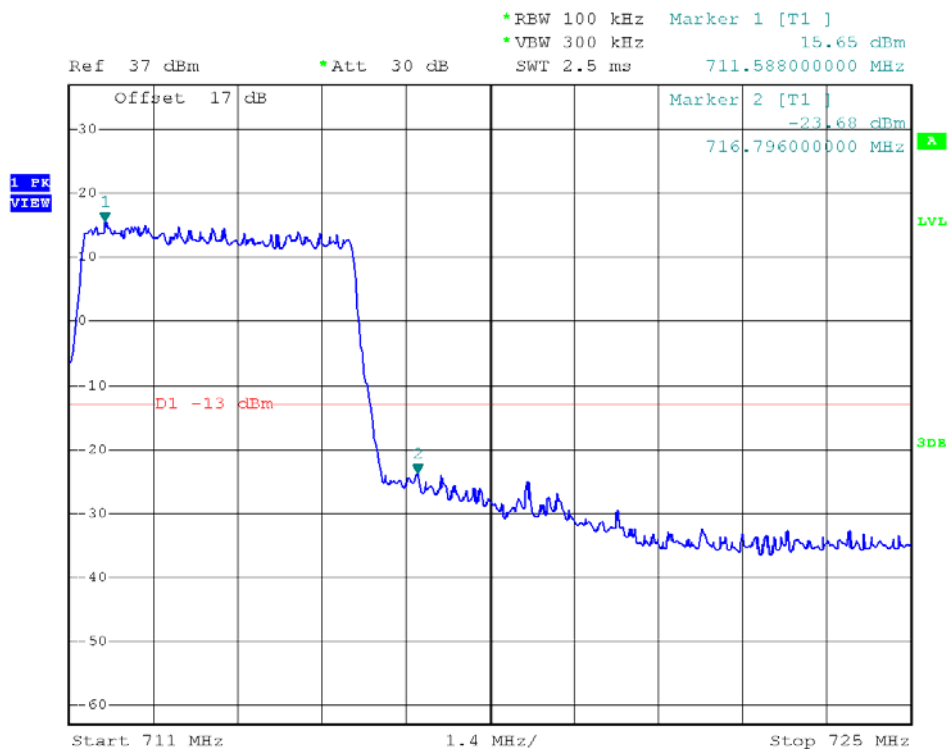
Lower Plot for 5MHz QPSK-RB Size 1, RB Offset 0



Lower Plot for 5MHz QPSK-RB Size 25, RB Offset 0

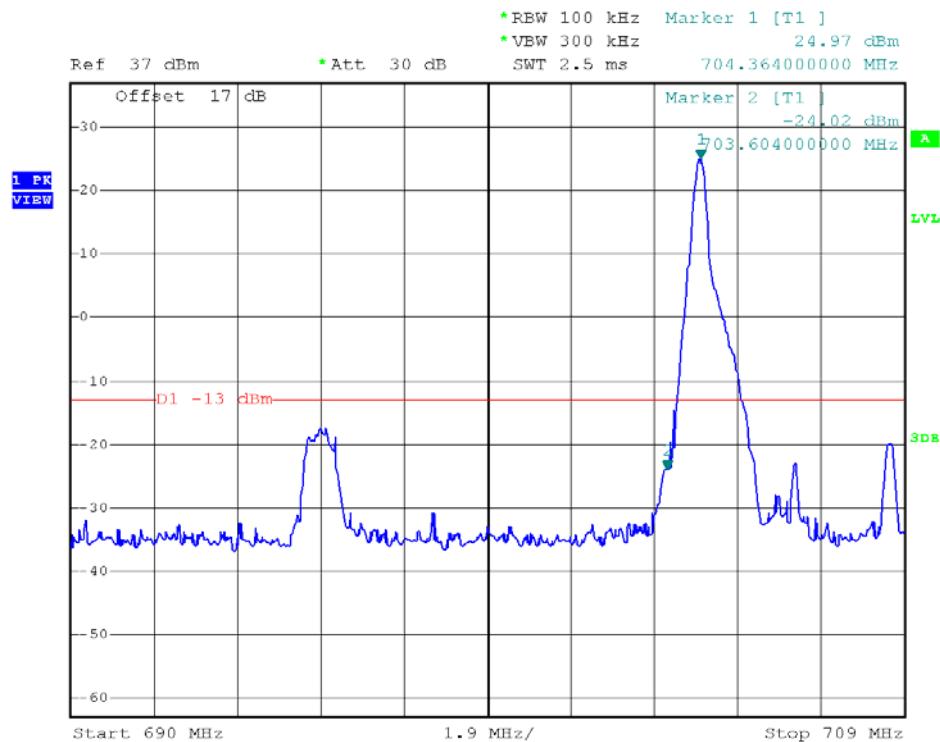


Higher Plot for QPSK-RB Size 1, RB Offset 24

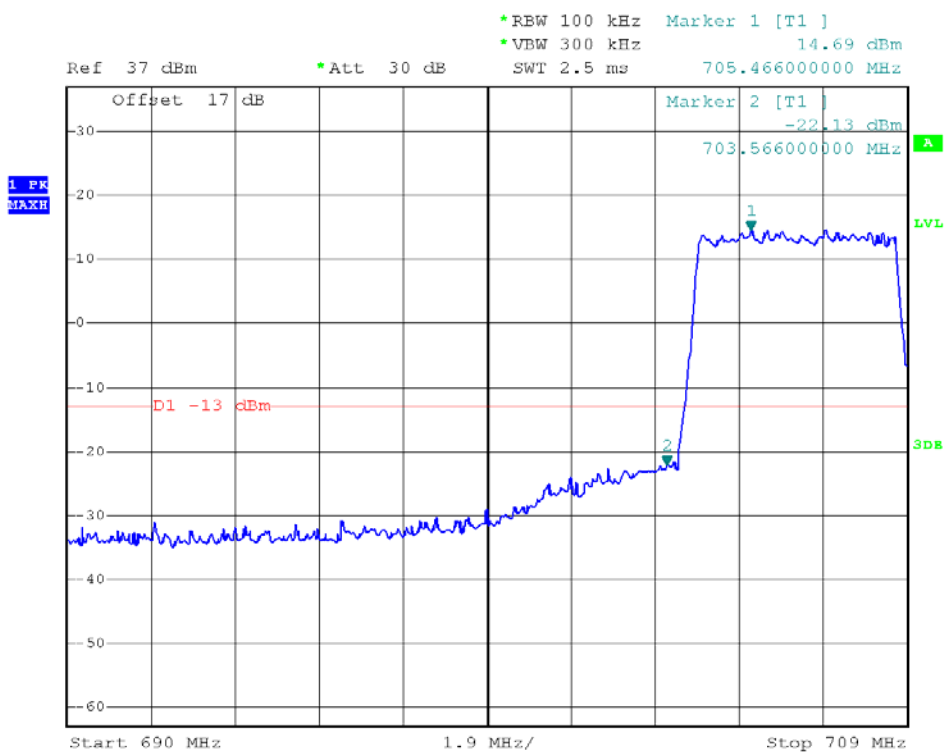


Higher Plot for 5MHz QPSK-RB Size 25, RB Offset 0

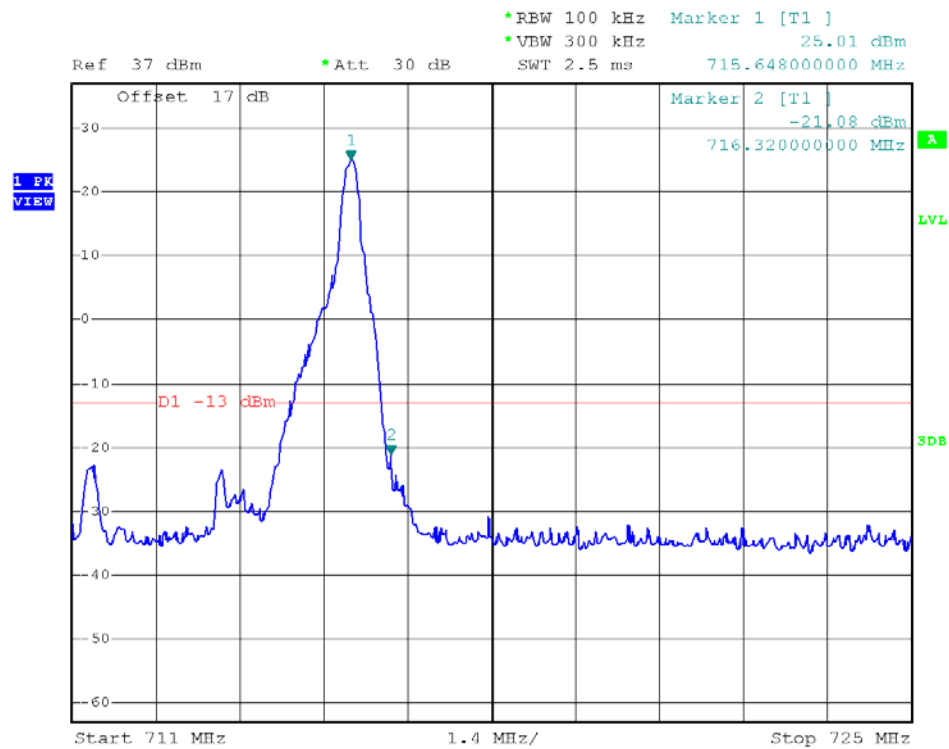
Band	LTE Band 17	Modulation	16QAM
Bandwidth	5MHz		



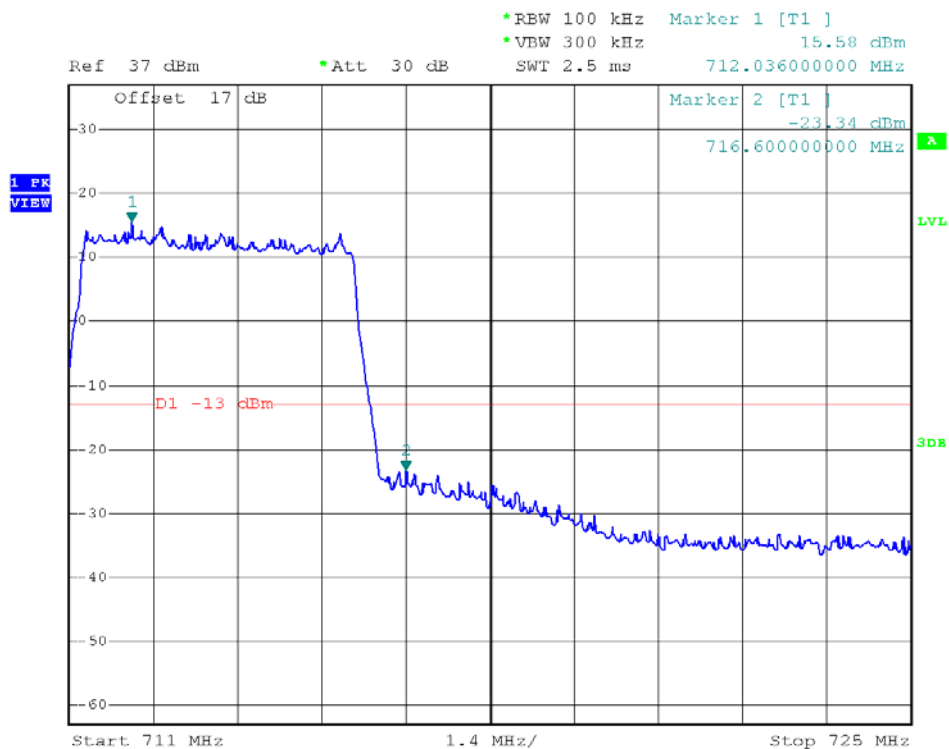
Lower Plot for 5MHz 16QAM-RB Size 1, RB Offset 0



Lower Plot for 5MHz 16QAM -RB Size 25, RB Offset 0

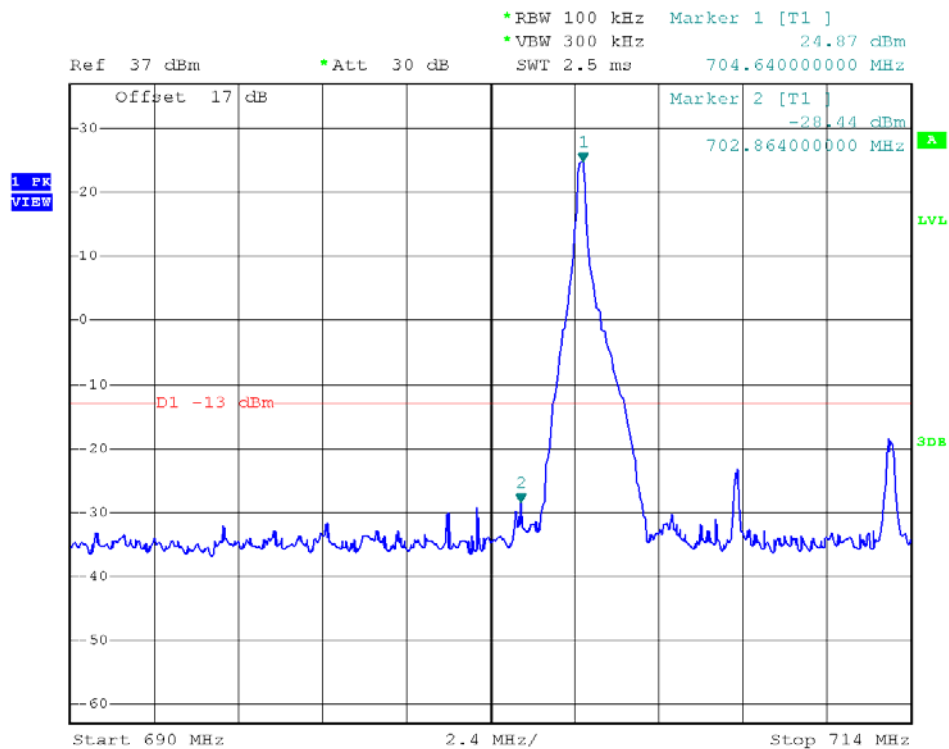


Higher Plot for 5MHz 16QAM -RB Size 1, RB Offset 24

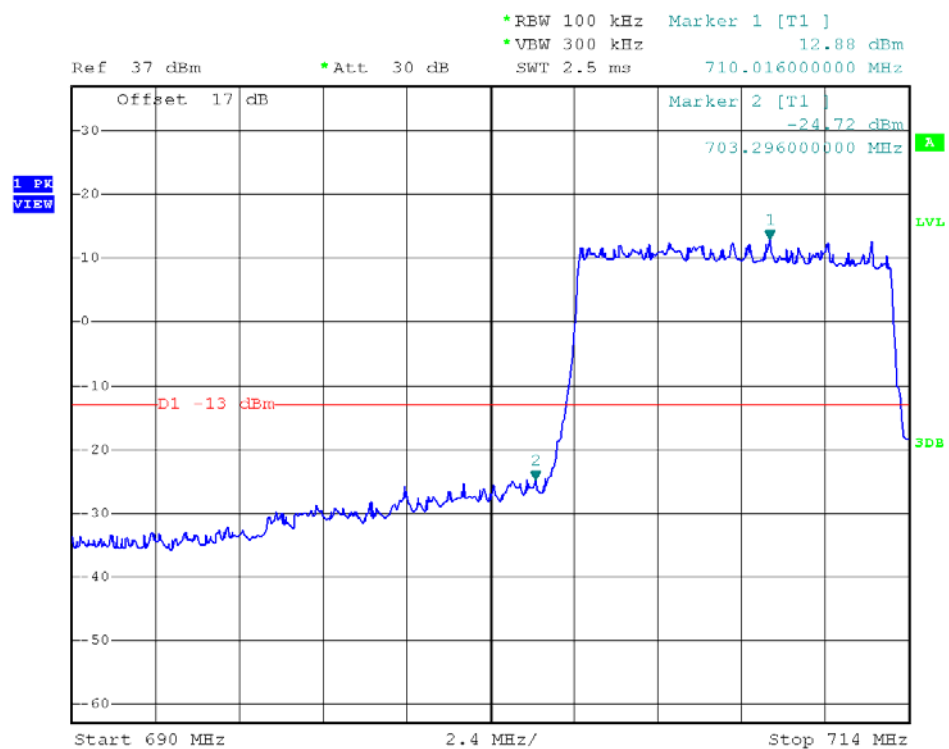


Higher Plot for 5MHz 16QAM -RB Size 25, RB Offset 0

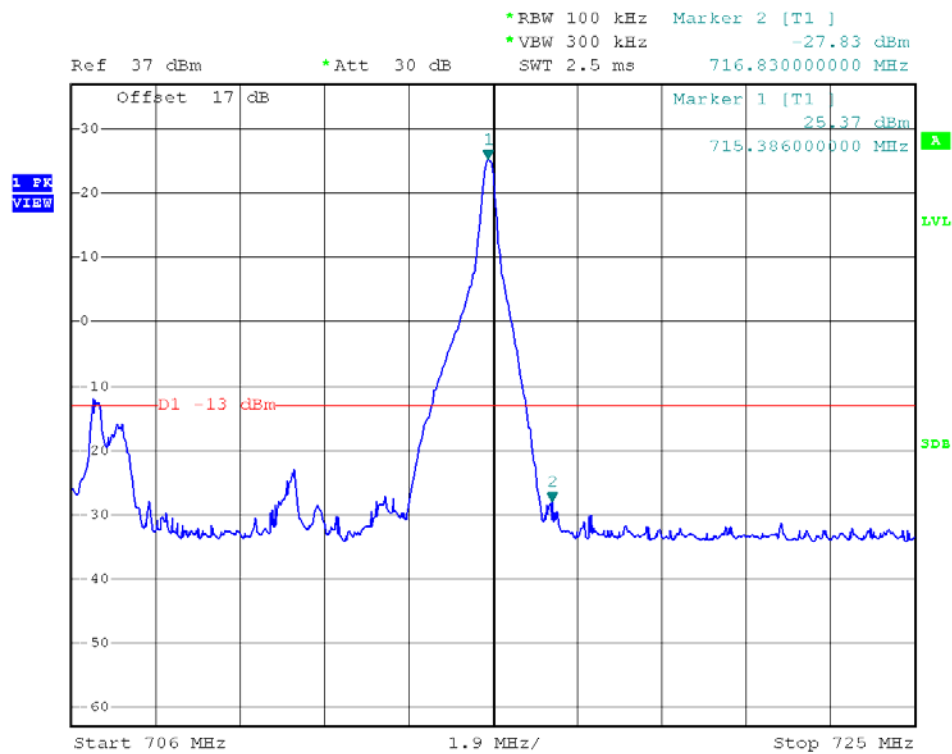
Band	LTE Band 17	Modulation	QPSK
Bandwidth	10MHz		



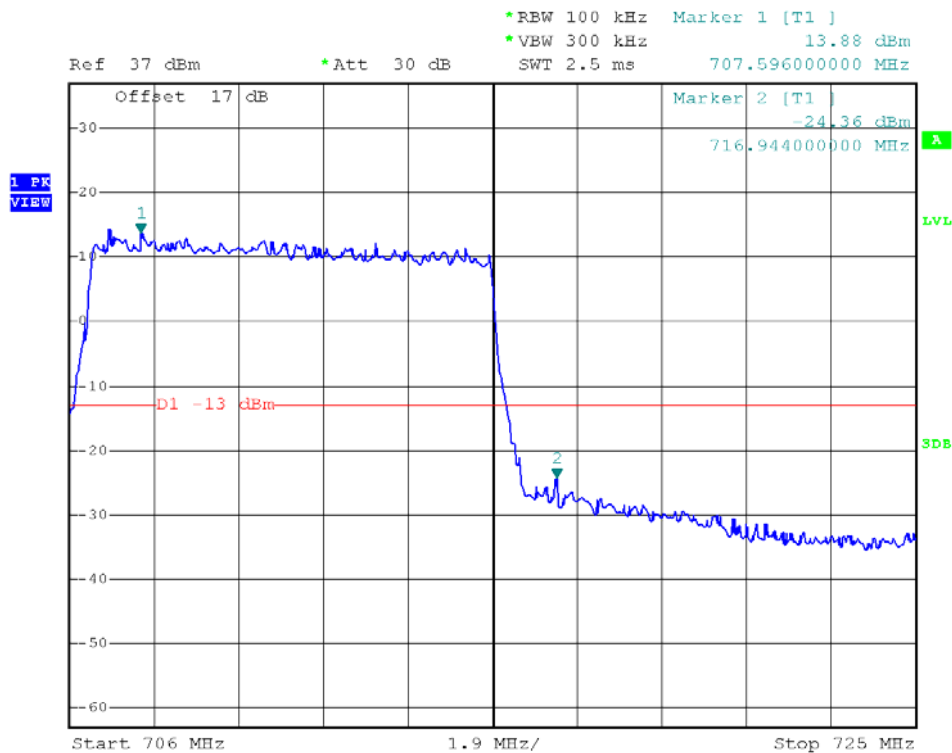
Lower Plot for 10MHz QPSK-RB Size 1, RB Offset 0



Lower Plot for 10MHz QPSK-RB Size 50, RB Offset 0

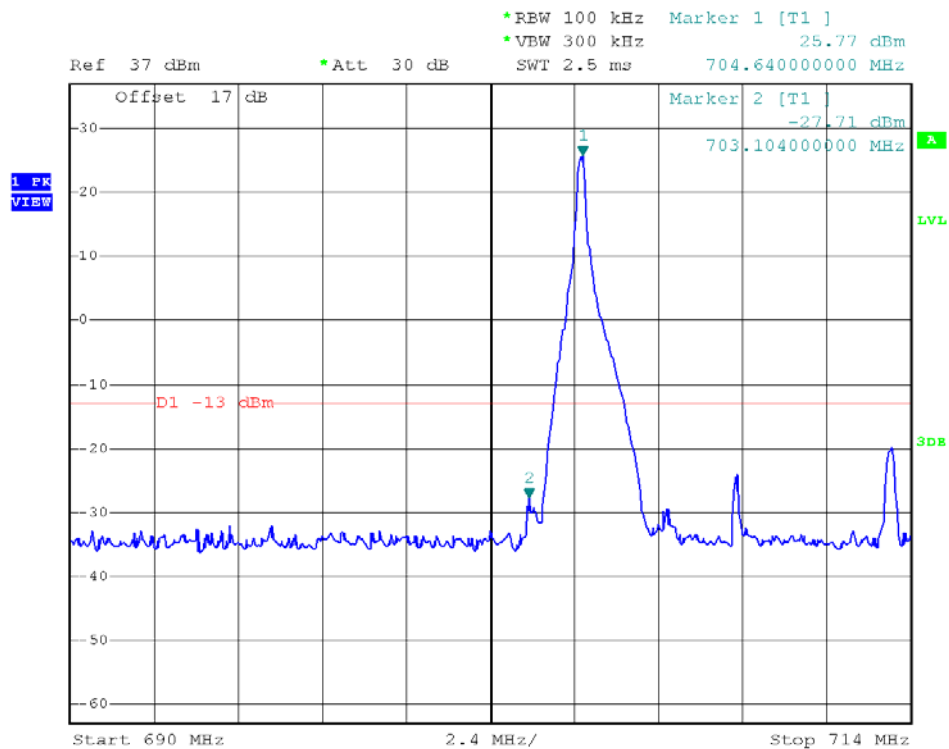


Higher Plot for QPSK-RB Size 1, RB Offset 49

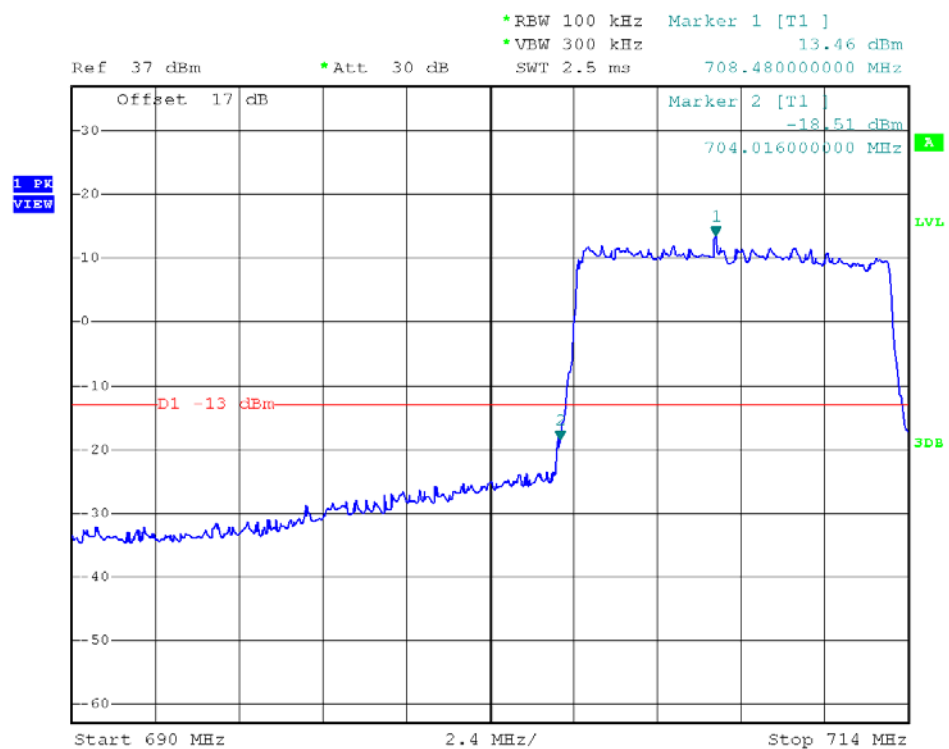


Higher Plot for QPSK-RB Size 50, RB Offset 0

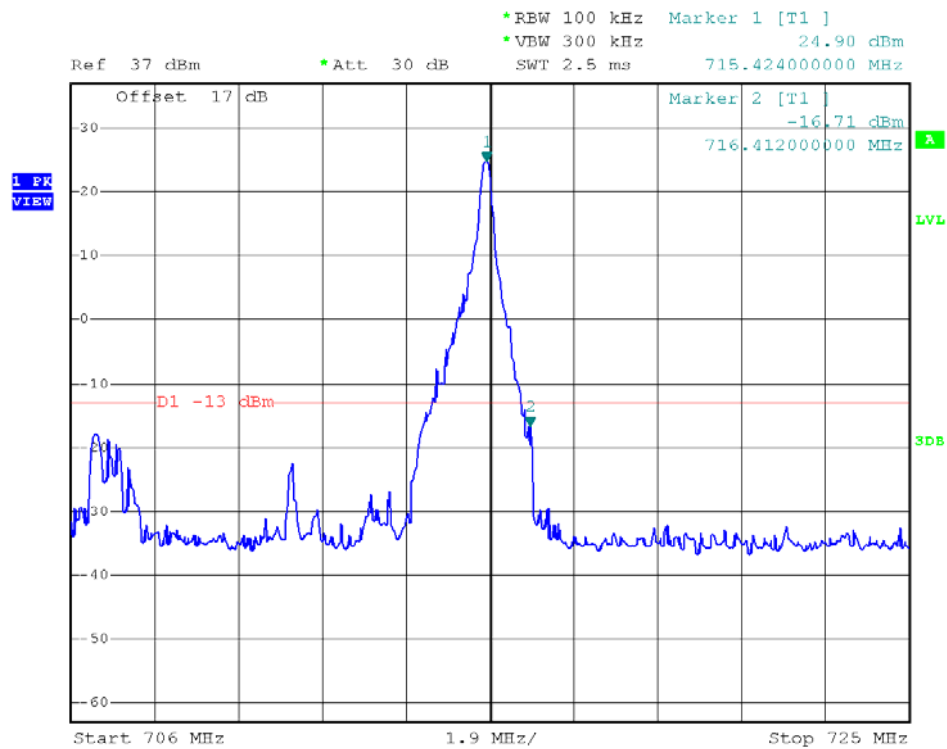
Band	LTE Band 17	Modulation	16QAM
Bandwidth	10MHz		



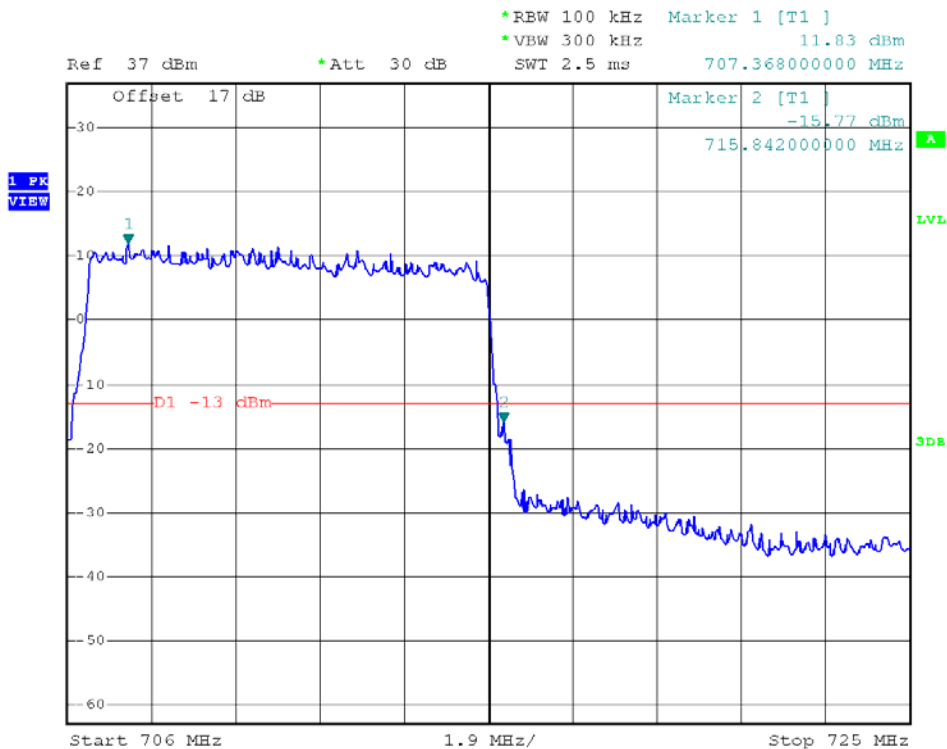
Lower Plot for 10MHz 16QAM-RB Size 1, RB Offset 0



Lower Plot for 10MHz 16QAM -RB Size 50, RB Offset 0



Higher Plot for 10MHz 16QAM -RB Size 1, RB Offset 49



Higher Plot for 10MHz 16QAM -RB Size 50, RB Offset 0

2.7 Transmitter Radiated Power (EIRP/ERP)

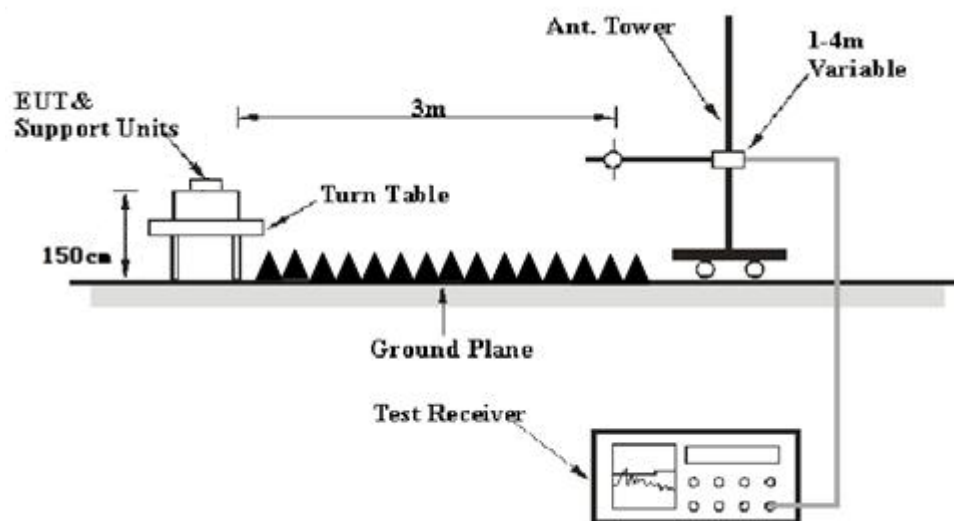
2.7.1 Requirement

Effective radiated power output measurements by substitution method according to ANSI / TIA /EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02.

2.7.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.7.3 Test Setup



2.7.4 Test Procedures

1. The EUT was placed on a turntable with 1.5 meter height on a wooden turntable in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer which used a channel power option across EUT's signal bandwidth per section 4.0 of KDB 971168 D01v02r02.
4. The table was rotated 360 degrees and Both Horizontal & Vertical antenna polarities were

tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

5. The height of the receiving antenna is adjusted to look for the maximum value.
6. Taking the record of maximum value on spectrum analyzer.
7. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.
8. A Broadband antenna (for below 1GHz) and horn antenna (for above 1GHz) was substituted in place of the EUT and was driven by a signal generator.
9. The conducted power at the terminal of the antenna is measured.
10. Repeat step 3 to step 9 to get the maximum ERP/EIRP of the substitution antenna.
11. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

P_s (dBm): Input power to substitution antenna.

G_s (dBi or dBd): Substitution antenna Gain.

$E_t = R_t + AF$

$E_s = R_s + AF$

AF (dB/m): Receive antenna factor

R_t : The highest received signal in spectrum analyzer for EUT.

R_s : The highest received signal in spectrum analyzer for substitution antenna.

**2.7.5 Test Result of ERP/EIRP****1. LTE Band 2 Test Verdict:**

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	H/V	Verdict
			RB Size	RB Offset				
2	1.4	QPSK	1	2	1710.7	16.63	H	PASS
2	1.4	QPSK	1	5	1732.5	16.62	H	PASS
2	1.4	QPSK	3	2	1754.3	16.59	H	PASS
2	1.4	QPSK	1	2	1710.7	15.84	V	PASS
2	1.4	QPSK	1	5	1732.5	15.92	V	PASS
2	1.4	QPSK	3	2	1754.3	15.85	V	PASS
2	1.4	16QAM	1	0	1710.7	14.84	H	PASS
2	1.4	16QAM	1	2	1732.5	14.77	H	PASS
2	1.4	16QAM	3	2	1754.3	14.92	H	PASS
2	1.4	16QAM	1	0	1710.7	13.82	V	PASS
2	1.4	16QAM	1	2	1732.5	13.85	V	PASS
2	1.4	16QAM	3	2	1754.3	13.92	V	PASS
2	3	QPSK	1	7	1711.5	16.59	H	PASS
2	3	QPSK	1	14	1732.5	16.55	H	PASS
2	3	QPSK	1	0	1753.5	16.60	H	PASS
2	3	QPSK	1	7	1711.5	15.82	V	PASS
2	3	QPSK	1	14	1732.5	15.84	V	PASS
2	3	QPSK	1	0	1753.5	15.79	V	PASS
2	3	16QAM	1	14	1711.5	14.81	H	PASS
2	3	16QAM	1	0	1732.5	14.78	H	PASS
2	3	16QAM	1	0	1753.5	14.77	H	PASS
2	3	16QAM	1	14	1711.5	13.81	V	PASS
2	3	16QAM	1	0	1732.5	13.92	V	PASS
2	3	16QAM	1	0	1753.5	13.89	V	PASS
2	5	QPSK	1	0	1712.5	16.57	H	PASS
2	5	QPSK	1	0	1732.5	16.51	H	PASS
2	5	QPSK	1	24	1752.5	16.61	H	PASS
2	5	QPSK	1	0	1712.5	15.85	V	PASS
2	5	QPSK	1	0	1732.5	15.89	V	PASS
2	5	QPSK	1	24	1752.5	15.87	V	PASS
2	5	16QAM	1	12	1712.5	14.76	H	PASS
2	5	16QAM	1	0	1732.5	14.79	H	PASS
2	5	16QAM	1	12	1752.5	14.85	H	PASS
2	5	16QAM	1	12	1712.5	13.91	V	PASS
2	5	16QAM	1	0	1732.5	13.94	V	PASS
2	5	16QAM	1	12	1752.5	13.89	V	PASS



LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	H/V	Verdict
			RB Size	RB Offset				
2	10	QPSK	1	0	1715	16.57	H	PASS
2	10	QPSK	1	0	1732.5	16.54	H	PASS
2	10	QPSK	1	49	1750	16.50	H	PASS
2	10	QPSK	1	0	1715	15.85	V	PASS
2	10	QPSK	1	0	1732.5	15.84	V	PASS
2	10	QPSK	1	49	1750	15.78	V	PASS
2	10	16QAM	1	0	1715	14.84	H	PASS
2	10	16QAM	1	0	1732.5	14.82	H	PASS
2	10	16QAM	1	24	1750	14.88	H	PASS
2	10	16QAM	1	0	1715	13.81	V	PASS
2	10	16QAM	1	0	1732.5	13.90	V	PASS
2	10	16QAM	1	24	1750	13.85	V	PASS
2	15	QPSK	1	0	1717.5	16.55	H	PASS
2	15	QPSK	1	0	1732.5	16.59	H	PASS
2	15	QPSK	1	74	1747.5	16.58	H	PASS
2	15	QPSK	1	0	1717.5	15.72	V	PASS
2	15	QPSK	1	0	1732.5	15.71	V	PASS
2	15	QPSK	1	74	1747.5	15.77	V	PASS
2	15	16QAM	1	0	1717.5	14.79	H	PASS
2	15	16QAM	1	0	1732.5	14.77	H	PASS
2	15	16QAM	1	74	1747.5	14.83	H	PASS
2	15	16QAM	1	0	1717.5	13.89	V	PASS
2	15	16QAM	1	0	1732.5	13.92	V	PASS
2	15	16QAM	1	74	1747.5	13.89	V	PASS
2	20	QPSK	1	0	1720	16.71	H	PASS
2	20	QPSK	1	0	1732.5	16.72	H	PASS
2	20	QPSK	1	0	1745	16.66	H	PASS
2	20	QPSK	1	0	1720	15.65	V	PASS
2	20	QPSK	1	0	1732.5	15.59	V	PASS
2	20	QPSK	1	0	1745	15.58	V	PASS
2	20	16QAM	1	0	1720	14.93	H	PASS
2	20	16QAM	1	0	1732.5	14.86	H	PASS
2	20	16QAM	1	49	1745	14.95	H	PASS
2	20	16QAM	1	0	1720	13.91	V	PASS
2	20	16QAM	1	0	1732.5	13.86	V	PASS
2	20	16QAM	1	49	1745	13.84	V	PASS



2. LTE Band 4 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
			RB Size	RB Offset				
4	1.4	QPSK	1	2	1710.7	16.35	H	PASS
4	1.4	QPSK	1	2	1732.5	16.38	H	PASS
4	1.4	QPSK	1	2	1754.3	16.41	H	PASS
4	1.4	QPSK	1	2	1710.7	15.76	V	PASS
4	1.4	QPSK	1	2	1732.5	15.82	V	PASS
4	1.4	QPSK	1	2	1754.3	15.77	V	PASS
4	1.4	16QAM	1	5	1710.7	14.64	H	PASS
4	1.4	16QAM	1	0	1732.5	14.68	H	PASS
4	1.4	16QAM	1	0	1754.3	14.72	H	PASS
4	1.4	16QAM	1	5	1710.7	13.79	V	PASS
4	1.4	16QAM	1	0	1732.5	13.76	V	PASS
4	1.4	16QAM	1	0	1754.3	13.82	V	PASS
4	3	QPSK	1	7	1711.5	16.45	H	PASS
4	3	QPSK	1	7	1732.5	16.37	H	PASS
4	3	QPSK	1	7	1753.5	16.34	H	PASS
4	3	QPSK	1	7	1711.5	15.75	V	PASS
4	3	QPSK	1	7	1732.5	15.81	V	PASS
4	3	QPSK	1	7	1753.5	15.76	V	PASS
4	3	16QAM	1	14	1711.5	14.67	H	PASS
4	3	16QAM	1	0	1732.5	14.71	H	PASS
4	3	16QAM	1	0	1753.5	14.70	H	PASS
4	3	16QAM	1	14	1711.5	13.62	V	PASS
4	3	16QAM	1	0	1732.5	13.74	V	PASS
4	3	16QAM	1	0	1753.5	13.67	V	PASS
4	5	QPSK	1	12	1712.5	16.52	H	PASS
4	5	QPSK	1	12	1732.5	16.48	H	PASS
4	5	QPSK	1	12	1752.5	16.49	H	PASS
4	5	QPSK	1	12	1712.5	15.76	V	PASS
4	5	QPSK	1	12	1732.5	15.80	V	PASS
4	5	QPSK	1	12	1752.5	15.78	V	PASS
4	5	16QAM	1	24	1712.5	14.72	H	PASS
4	5	16QAM	1	0	1732.5	14.77	H	PASS
4	5	16QAM	1	0	1752.5	14.70	H	PASS
4	5	16QAM	1	24	1712.5	13.68	V	PASS
4	5	16QAM	1	0	1732.5	13.62	V	PASS
4	5	16QAM	1	0	1752.5	13.66	V	PASS



LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
			RB Size	RB Offset				
4	10	QPSK	1	24	1715	16.44	H	PASS
4	10	QPSK	1	24	1732.5	16.50	H	PASS
4	10	QPSK	1	24	1750	16.47	H	PASS
4	10	QPSK	1	24	1715	15.77	V	PASS
4	10	QPSK	1	24	1732.5	15.82	V	PASS
4	10	QPSK	1	24	1750	15.73	V	PASS
4	10	16QAM	1	49	1715	14.72	H	PASS
4	10	16QAM	1	0	1732.5	14.75	H	PASS
4	10	16QAM	1	0	1750	14.69	H	PASS
4	10	16QAM	1	49	1715	13.59	V	PASS
4	10	16QAM	1	0	1732.5	13.55	V	PASS
4	10	16QAM	1	0	1750	13.63	V	PASS
4	15	QPSK	1	37	1717.5	16.54	H	PASS
4	15	QPSK	1	37	1732.5	16.58	H	PASS
4	15	QPSK	1	37	1747.5	16.57	H	PASS
4	15	QPSK	1	37	1717.5	15.73	V	PASS
4	15	QPSK	1	37	1732.5	15.85	V	PASS
4	15	QPSK	1	37	1747.5	15.79	V	PASS
4	15	16QAM	1	74	1717.5	14.76	H	PASS
4	15	16QAM	1	0	1732.5	14.71	H	PASS
4	15	16QAM	1	0	1747.5	14.79	H	PASS
4	15	16QAM	1	74	1717.5	13.84	V	PASS
4	15	16QAM	1	0	1732.5	13.92	V	PASS
4	15	16QAM	1	0	1747.5	13.81	V	PASS
4	20	QPSK	1	49	1720	16.57	H	PASS
4	20	QPSK	1	49	1732.5	16.60	H	PASS
4	20	QPSK	1	49	1745	16.55	H	PASS
4	20	QPSK	1	49	1720	15.69	V	PASS
4	20	QPSK	1	49	1732.5	15.64	V	PASS
4	20	QPSK	1	49	1745	15.72	V	PASS
4	20	16QAM	1	99	1720	14.73	H	PASS
4	20	16QAM	1	0	1732.5	14.76	H	PASS
4	20	16QAM	1	0	1745	14.83	H	PASS
4	20	16QAM	1	99	1720	13.83	V	PASS
4	20	16QAM	1	0	1732.5	13.79	V	PASS
4	20	16QAM	1	0	1745	13.91	V	PASS



3. LTE Band 5 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
			RB Size	RB Offset				
5	1.4	QPSK	1	0	826.5	16.32	H	PASS
5	1.4	QPSK	1	0	836.5	16.28	H	PASS
5	1.4	QPSK	1	0	846.5	16.29	H	PASS
5	1.4	QPSK	1	0	826.5	15.66	V	PASS
5	1.4	QPSK	1	0	836.5	15.70	V	PASS
5	1.4	QPSK	1	0	846.5	15.64	V	PASS
5	1.4	16QAM	1	3	826.5	14.75	H	PASS
5	1.4	16QAM	1	6	836.5	14.68	H	PASS
5	1.4	16QAM	1	0	846.5	14.76	H	PASS
5	1.4	16QAM	1	3	826.5	13.82	V	PASS
5	1.4	16QAM	1	6	836.5	13.95	V	PASS
5	1.4	16QAM	1	0	846.5	13.90	V	PASS
5	3	QPSK	1	14	829	16.37	H	PASS
5	3	QPSK	1	14	836.5	16.29	H	PASS
5	3	QPSK	1	14	844	16.38	H	PASS
5	3	QPSK	1	14	829	15.57	V	PASS
5	3	QPSK	1	1	836.5	15.62	V	PASS
5	3	QPSK	1	14	844	15.63	V	PASS
5	3	16QAM	1	14	829	14.69	H	PASS
5	3	16QAM	1	24	836.5	14.71	H	PASS
5	3	16QAM	1	14	844	14.73	H	PASS
5	3	16QAM	1	14	829	13.87	V	PASS
5	3	16QAM	1	24	836.5	13.85	V	PASS
5	3	16QAM	1	14	844	13.83	V	PASS
5	5	QPSK	1	12	826.5	16.32	H	PASS
5	5	QPSK	1	24	836.5	16.35	H	PASS
5	5	QPSK	1	24	846.5	16.29	H	PASS
5	5	QPSK	1	12	826.5	15.56	V	PASS
5	5	QPSK	1	24	836.5	15.50	V	PASS
5	5	QPSK	1	24	846.5	15.46	V	PASS
5	5	16QAM	1	24	826.5	14.65	H	PASS
5	5	16QAM	1	0	836.5	14.68	H	PASS
5	5	16QAM	1	0	846.5	14.76	H	PASS
5	5	16QAM	1	24	826.5	13.82	V	PASS
5	5	16QAM	1	0	836.5	13.85	V	PASS
5	5	16QAM	1	0	846.5	13.92	V	PASS



LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
			RB Size	RB Offset				
5	10	QPSK	1	24	829	16.35	H	PASS
5	10	QPSK	1	24	836.5	16.37	H	PASS
5	10	QPSK	1	24	844	16.43	H	PASS
5	10	QPSK	1	24	829	15.67	V	PASS
5	10	QPSK	1	24	836.5	15.62	V	PASS
5	10	QPSK	1	24	844	15.63	V	PASS
5	10	16QAM	1	24	829	14.69	H	PASS
5	10	16QAM	1	49	836.5	14.75	H	PASS
5	10	16QAM	1	24	844	14.82	H	PASS
5	10	16QAM	1	24	829	13.92	V	PASS
5	10	16QAM	1	49	836.5	13.85	V	PASS
5	10	16QAM	1	24	844	13.93	V	PASS



4. LTE Band 7 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
			RB Size	RB Offset				
7	5	QPSK	1	12	2502.5	15.86	H	PASS
7	5	QPSK	1	0	2535	15.80	H	PASS
7	5	QPSK	1	24	2567.5	15.79	H	PASS
7	5	QPSK	1	12	2502.5	14.76	V	PASS
7	5	QPSK	1	0	2535	14.80	V	PASS
7	5	QPSK	1	24	2567.5	14.86	V	PASS
7	5	16QAM	1	24	2502.5	13.78	H	PASS
7	5	16QAM	1	24	2535	13.84	H	PASS
7	5	16QAM	1	0	2567.5	13.87	H	PASS
7	5	16QAM	1	24	2502.5	12.82	V	PASS
7	5	16QAM	1	24	2535	12.95	V	PASS
7	5	16QAM	1	0	2567.5	12.90	V	PASS
7	10	QPSK	1	24	2505	15.77	H	PASS
7	10	QPSK	1	49	2535	15.69	H	PASS
7	10	QPSK	1	24	2565	15.71	H	PASS
7	10	QPSK	1	24	2505	14.93	V	PASS
7	10	QPSK	1	49	2535	14.88	V	PASS
7	10	QPSK	1	24	2565	14.83	V	PASS
7	10	16QAM	1	24	2505	13.79	H	PASS
7	10	16QAM	1	49	2535	13.81	H	PASS
7	10	16QAM	1	24	2565	13.83	H	PASS
7	10	16QAM	1	24	2505	12.82	V	PASS
7	10	16QAM	1	49	2535	12.75	V	PASS
7	10	16QAM	1	24	2565	12.83	V	PASS
7	15	QPSK	1	37	2507.5	15.81	H	PASS
7	15	QPSK	1	74	2535	15.76	H	PASS
7	15	QPSK	1	0	2562.5	15.79	H	PASS
7	15	QPSK	1	37	2507.5	14.83	V	PASS
7	15	QPSK	1	74	2535	14.75	V	PASS
7	15	QPSK	1	0	2562.5	14.79	V	PASS
7	15	16QAM	1	37	2507.5	13.74	H	PASS
7	15	16QAM	1	18	2535	13.80	H	PASS
7	15	16QAM	1	0	2562.5	13.81	H	PASS
7	15	16QAM	1	37	2507.5	12.86	V	PASS
7	15	16QAM	1	18	2535	12.81	V	PASS
7	15	16QAM	1	0	2562.5	12.79	V	PASS



LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
7	20	QPSK	1	0	2510	15.78	H	PASS
7	20	QPSK	1	0	2535	15.75	H	PASS
7	20	QPSK	1	0	2560	15.90	H	PASS
7	20	QPSK	1	0	2510	14.79	V	PASS
7	20	QPSK	1	0	2535	14.84	V	PASS
7	20	QPSK	1	0	2560	14.85	V	PASS
7	20	16QAM	1	0	2510	13.83	H	PASS
7	20	16QAM	1	0	2535	13.91	H	PASS
7	20	16QAM	1	0	2560	13.85	H	PASS
7	20	16QAM	1	0	2510	12.73	V	PASS
7	20	16QAM	1	0	2535	12.86	V	PASS
7	20	16QAM	1	0	2560	12.74	V	PASS

5. LTE Band 17 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	H/V	Verdict
			RB Size	RB Offset				
17	5	QPSK	1	24	706.5	16.55	H	PASS
17	5	QPSK	1	24	710	16.68	H	PASS
17	5	QPSK	1	12	713.5	16.53	H	PASS
17	5	QPSK	1	24	706.5	15.86	V	PASS
17	5	QPSK	1	24	710	15.95	V	PASS
17	5	QPSK	1	12	713.5	15.77	V	PASS
17	5	16QAM	1	24	706.5	14.89	H	PASS
17	5	16QAM	1	24	710	14.96	H	PASS
17	5	16QAM	1	12	713.5	14.85	H	PASS
17	5	16QAM	1	24	706.5	13.67	V	PASS
17	5	16QAM	1	24	710	13.68	V	PASS
17	5	16QAM	1	12	713.5	13.62	V	PASS
17	10	QPSK	1	49	709	16.63	H	PASS
17	10	QPSK	1	49	710	16.51	H	PASS
17	10	QPSK	1	49	711	16.70	H	PASS
17	10	QPSK	1	49	709	15.59	V	PASS
17	10	QPSK	1	49	710	15.44	V	PASS
17	10	QPSK	1	49	711	15.58	V	PASS
17	10	16QAM	1	24	709	14.83	H	PASS
17	10	16QAM	1	49	710	14.86	H	PASS
17	10	16QAM	1	24	711	14.89	H	PASS
17	10	16QAM	1	24	709	13.53	V	PASS
17	10	16QAM	1	49	710	13.56	V	PASS
17	10	16QAM	1	24	711	13.44	V	PASS

2.8 Radiated Out of Band Emissions

2.8.1 Requirement

The radiated spurious emission was measured by substitution method according to ANSI / TIA /EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7

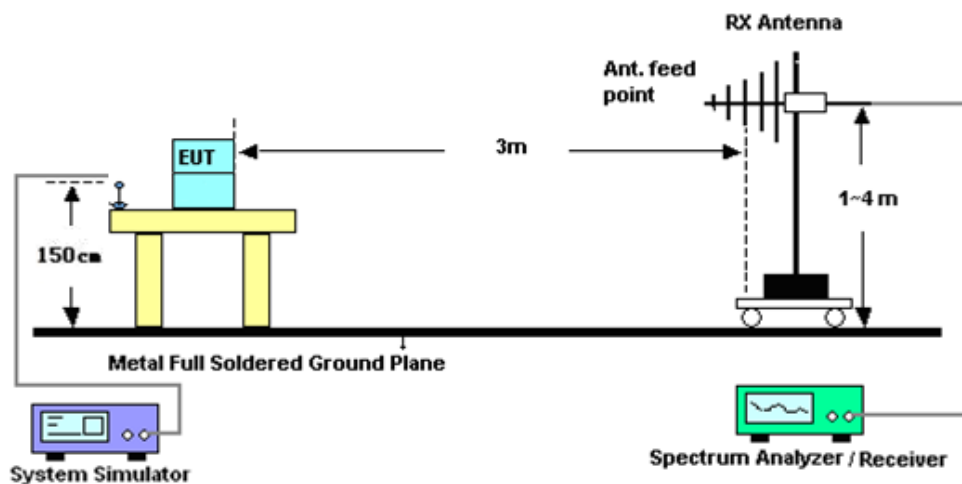
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

2.8.2 Measuring Instruments

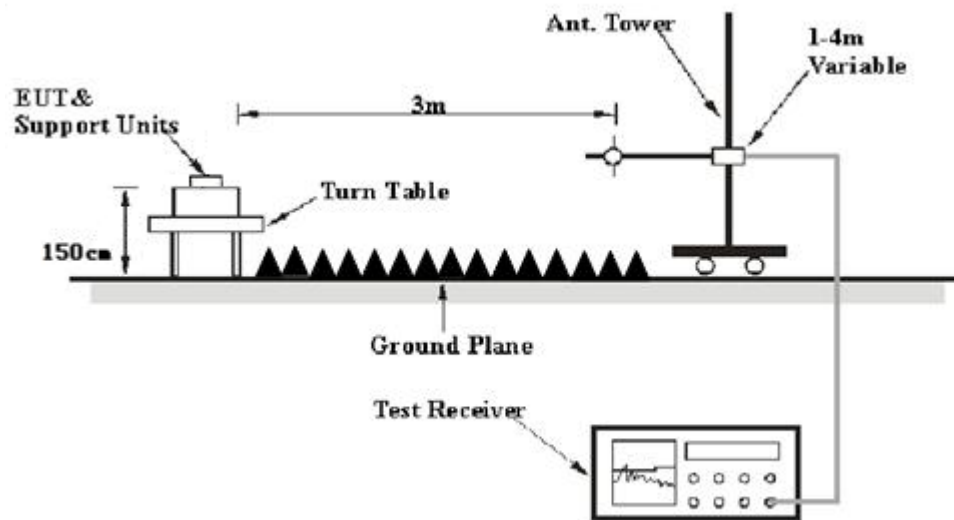
The measuring equipment is listed in the section 3 of this test report.

2.8.3 Test Description

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.8.4 Test Procedures

1. The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees and 3-orthogonal axis to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record the maximum spurious emission.
6. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.
7. A Broadband antenna (for below 1GHz) and horn antenna (for above 1GHz) was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 3 to step 9 for another polarization.

11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P (Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm.}$$

<For Band 7>

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P (Watts)

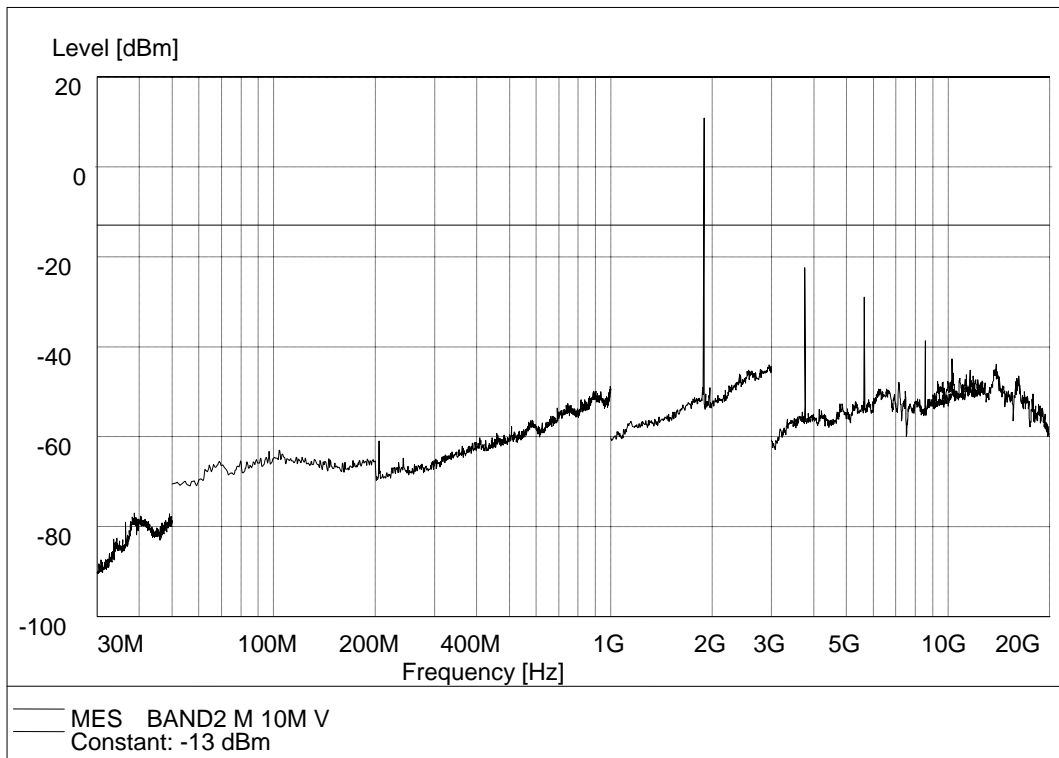
$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

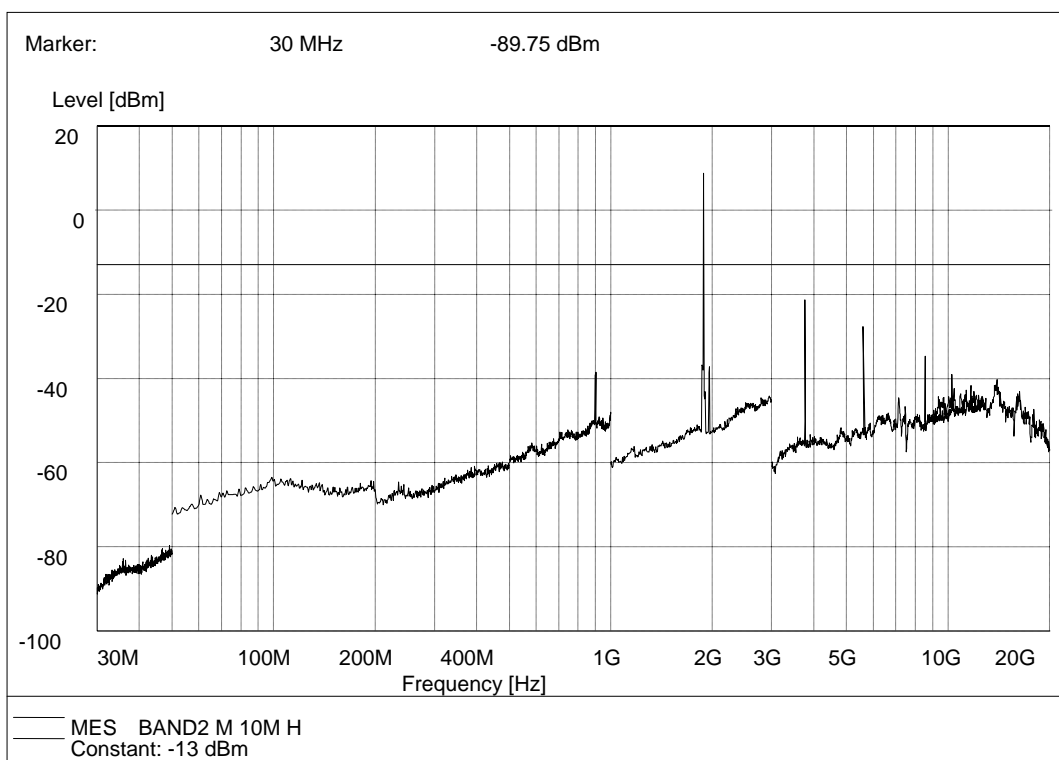
$$= -25\text{dBm.}$$

12. The spectrum is measured from 9 KHz to the 10^{th} harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
13. For 9KHz to 30MHz: the amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
14. The maximum RB configurations of the Radiated Spurious Emissions as RB Size 1, RB Offset 0
15. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.

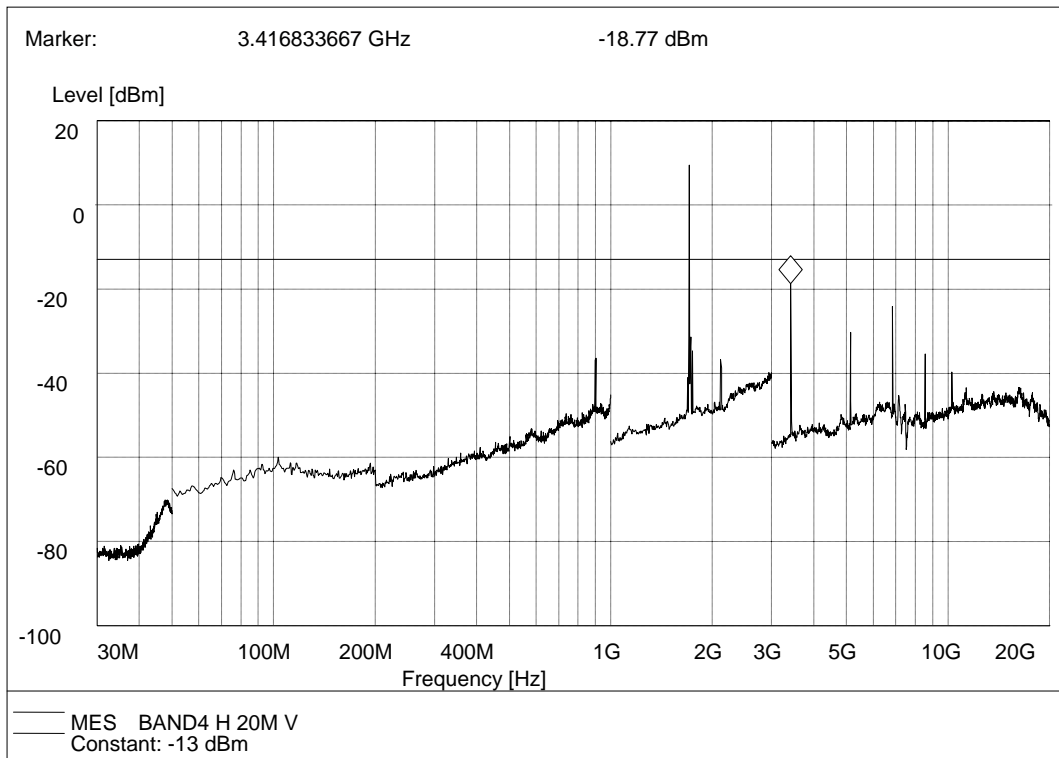
2.8.5 Test Result (Plots) of Radiated Spurious Emission



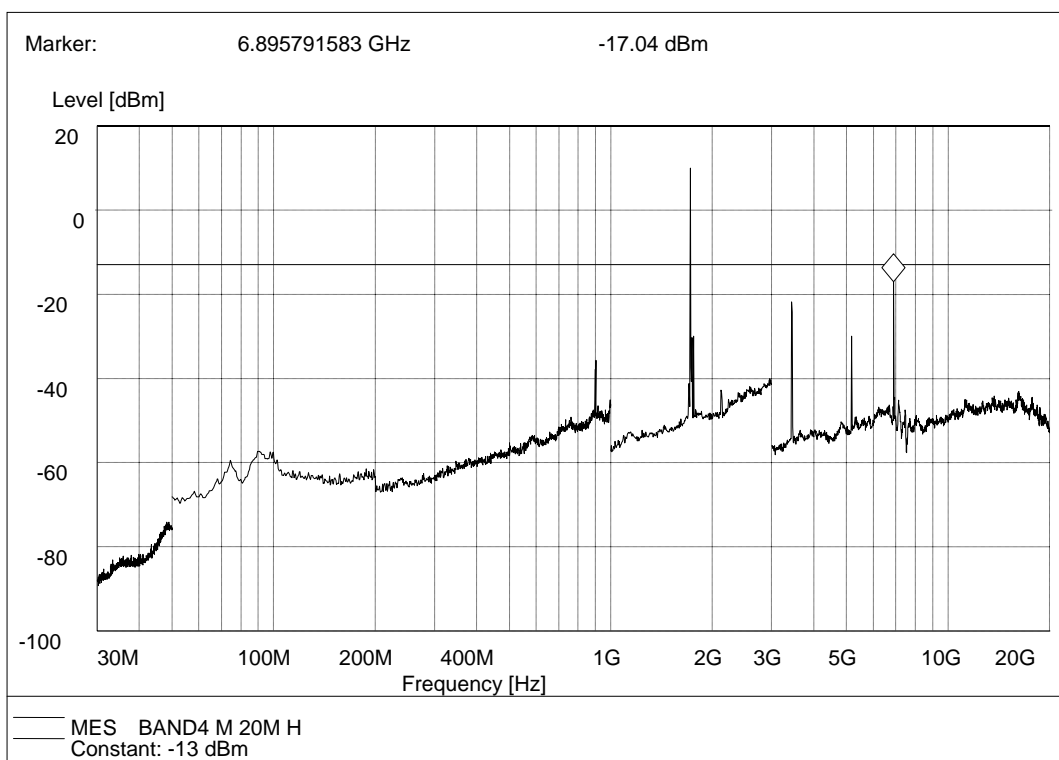
LTE Band 2 QPSK 20MHz BW Test Antenna Vertical



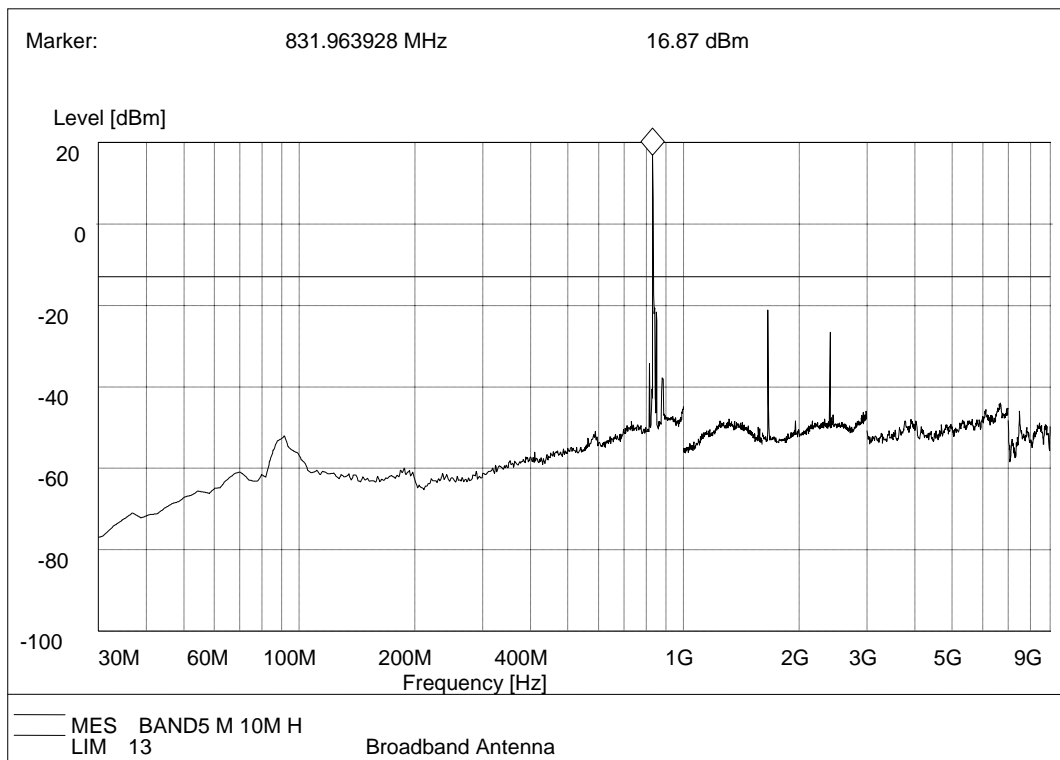
LTE Band 2 QPSK 20MHz BW Test Antenna Horizontal



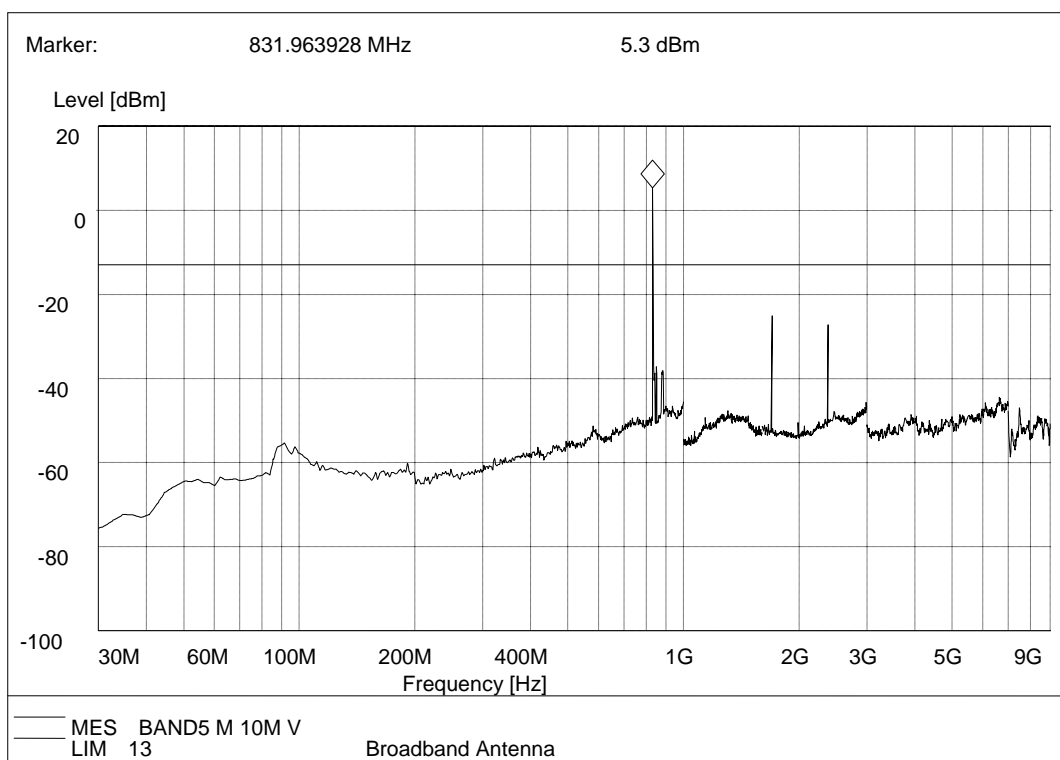
LTE Band 4 QPSK 20MHz BW Test Antenna Vertical



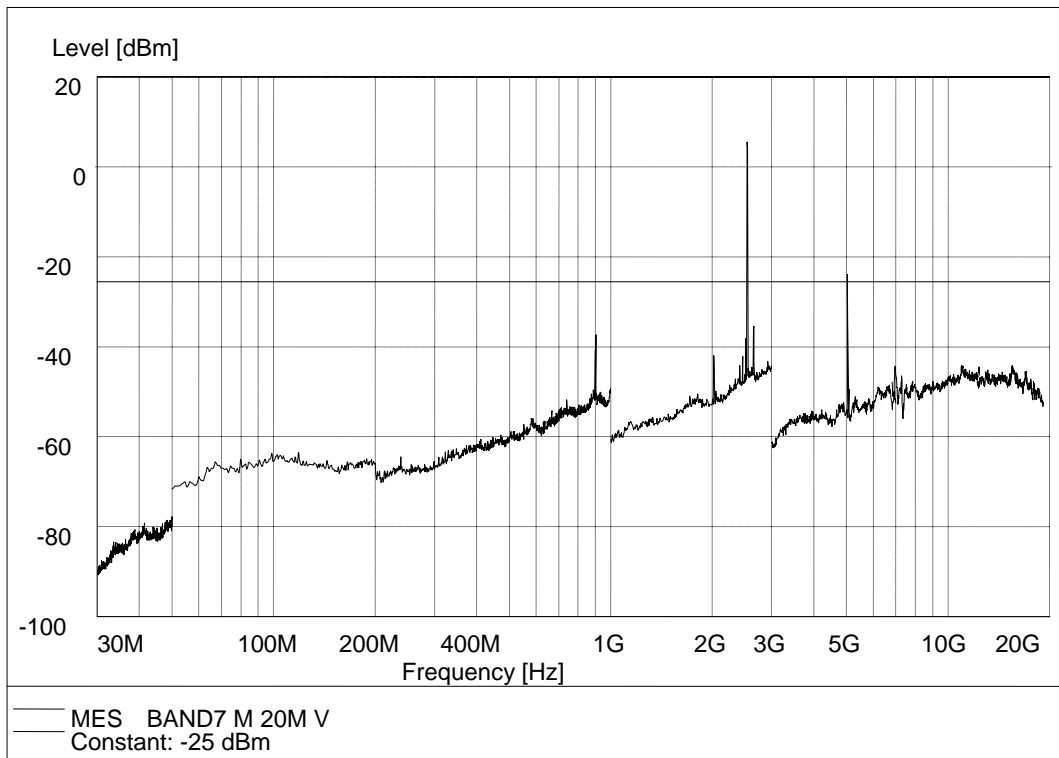
LTE Band 4 QPSK 20MHz BW Test Antenna Horizontal



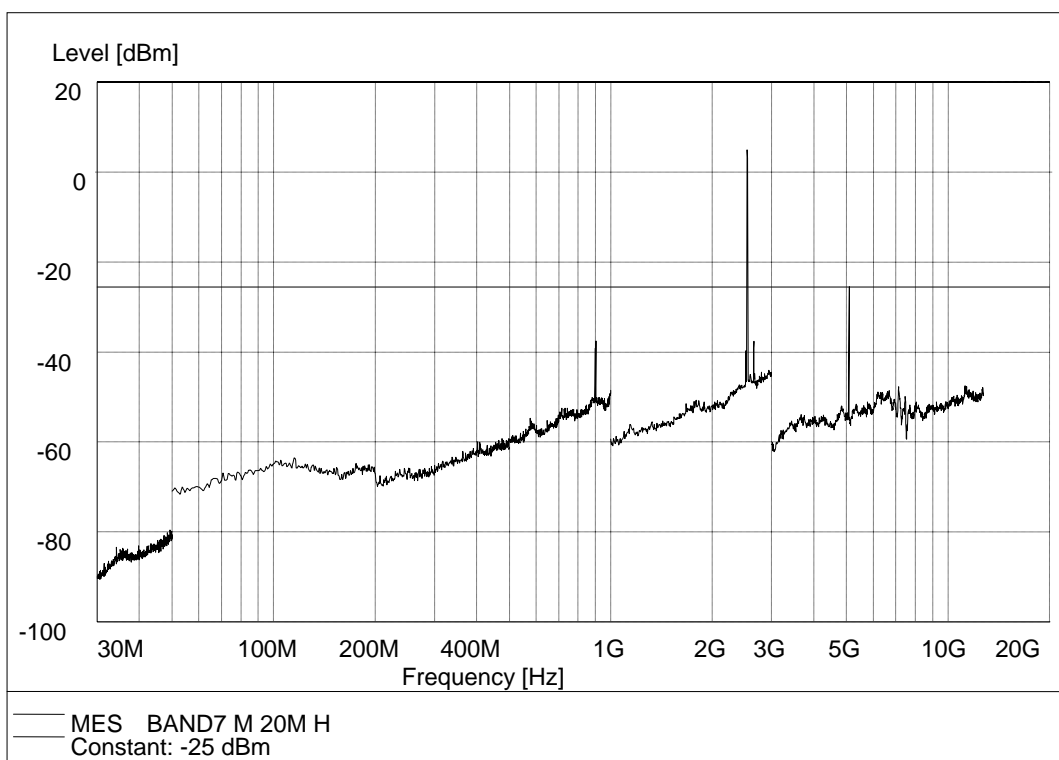
LTE Band 5 QPSK 10MHz BW Test Antenna Vertical



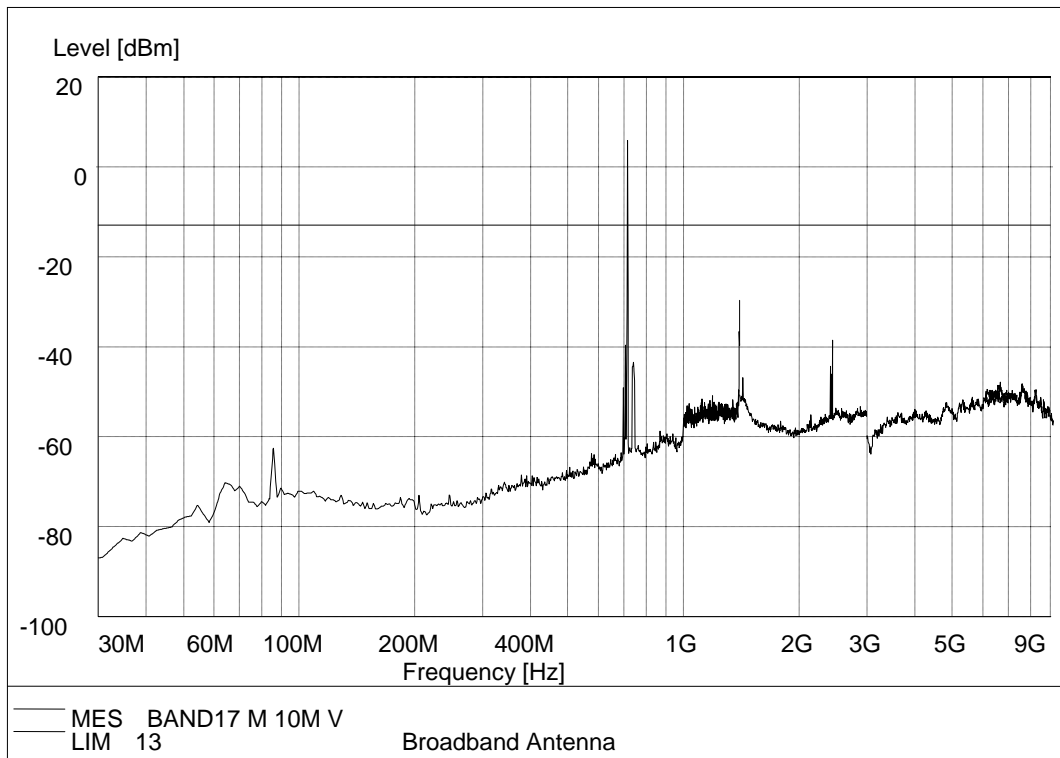
LTE Band 5 QPSK 10MHz BW Test Antenna Horizontal



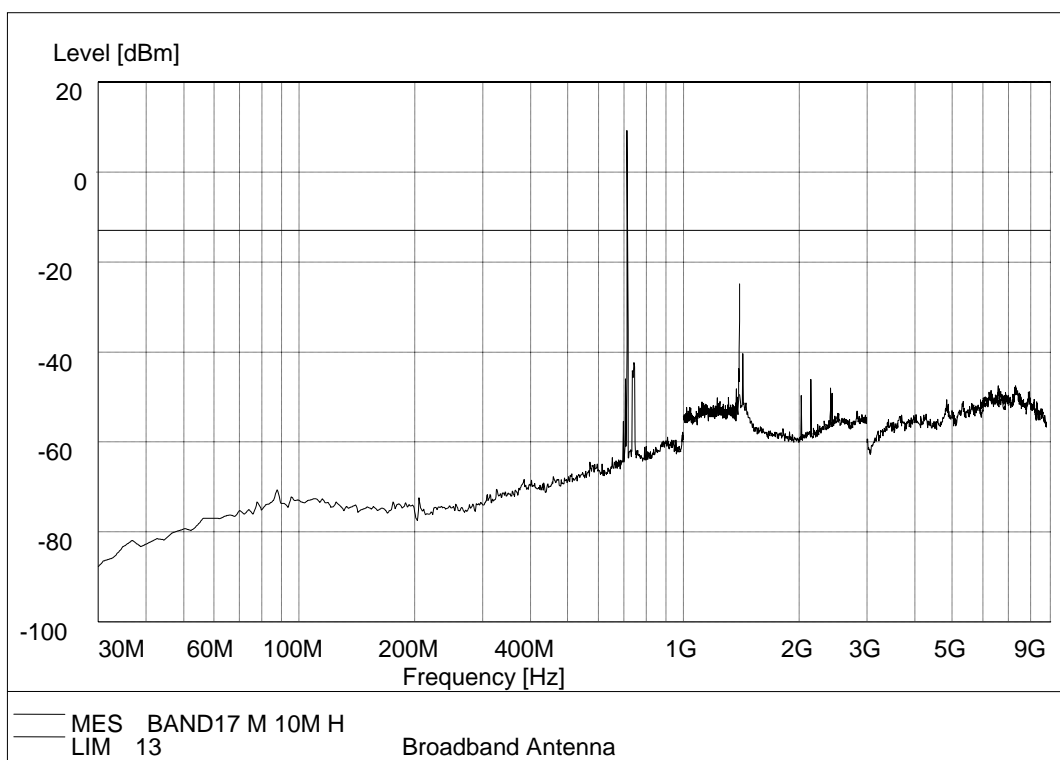
LTE Band 7 QPSK 20MHz BW Test Antenna Vertical



LTE Band 7 QPSK 20MHz BW Test Antenna Horizontal



LTE Band 17 QPSK 10MHz BW Test Antenna Vertical



LTE Band 17 QPSK 10MHz BW Test Antenna Horizontal



3. LIST OF MEASURING EQUIPMENT

Description	Manufacturer	Model	Serial No.	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESIB26	A0304218	2015.06.02	2016.06.01	Radiation
Full-Anechoic Chamber	Albatross	12.8m*6.8m*6.4m	A0412372	2015.01.05	2016.01.04	Radiation
Loop Antenna	Schwarz beck	HFH2-Z2	100047	2015.06.02	2016.06.01	Radiation
Bilog Antenna	Schwarzbeck	VULB 9163	9163-274	2015.06.02	2016.06.01	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100150	2015.06.02	2016.06.01	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100148	2015.06.02	2016.06.01	Radiation
Broadband antenna (30MHz~1GHz)	R&S	HL562	101341	2015.06.02	2016.06.01	Radiation
Broadband antenna (30MHz~1GHz)	R&S	HL562	101339	2015.06.02	2016.06.01	Radiation
Horn antenna (18GHz~26.5GHz)	R&S	HM118	101286	2015.06.02	2016.06.01	Radiation
Horn antenna (18GHz~26.5GHz)	R&S	HM118	101284	2015.06.02	2016.06.01	Radiation
Amplifier 20M~3GHz	R&S	PAP-0203H	22018	2015.06.02	2016.06.01	Radiation
Ampilier 1G~18GHz	R&S	MITEQ AFS42-00101 800	25-S-42	2015.06.02	2016.06.01	Radiation
Ampilier 18G~40GHz	R&S	JS42-180026 00-28-5A	12111.0980.00	2015.06.02	2016.06.01	Radiation
Spectrum Analyzer	R&S	FSP40	1164.4391.40	2015.07.07	2016.07.06	Conducted
Power Meter	R&S	NRVS	1020.1809.02	2015.06.02	2016.06.01	Conducted
Power Sensor	R&S	NRV-Z4	823.3618.03	2015.06.02	2016.06.01	Conducted
LISN	ROHDE&SCH WARZ	ESH2-Z5	A0304221	2015.06.02	2016.06.01	Conducted
Test Receiver	R&S	ESCS30	A0304260	2015.06.02	2016.06.01	Conducted
Cable	SUNHNER	SUCOFLEX1 00	/	2015.06.02	2016.06.01	Radiation
Cable	SUNHNER	SUCOFLEX 104	/	2015.06.02	2016.06.01	Radiation

** END OF REPORT **