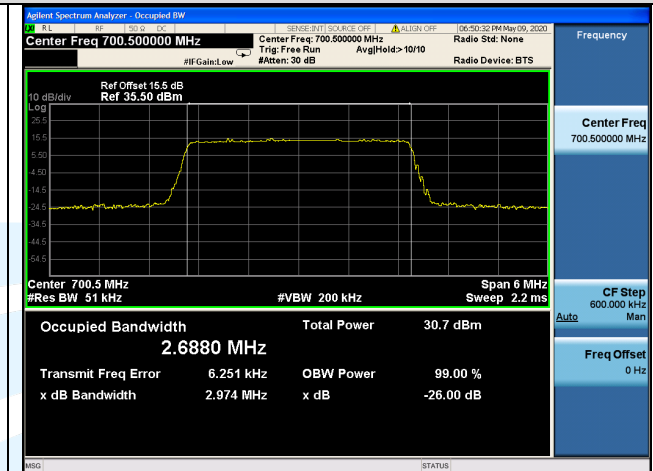
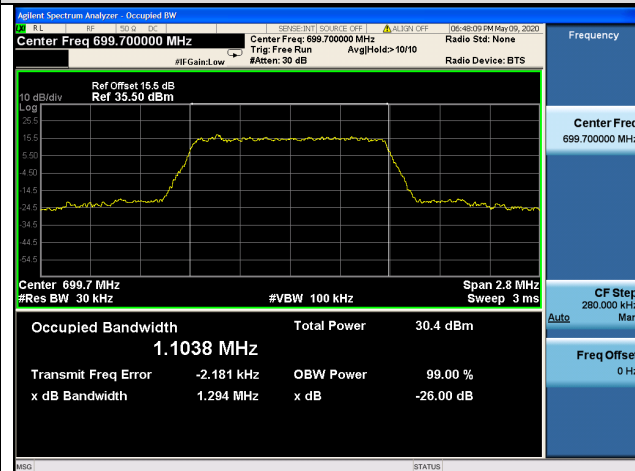
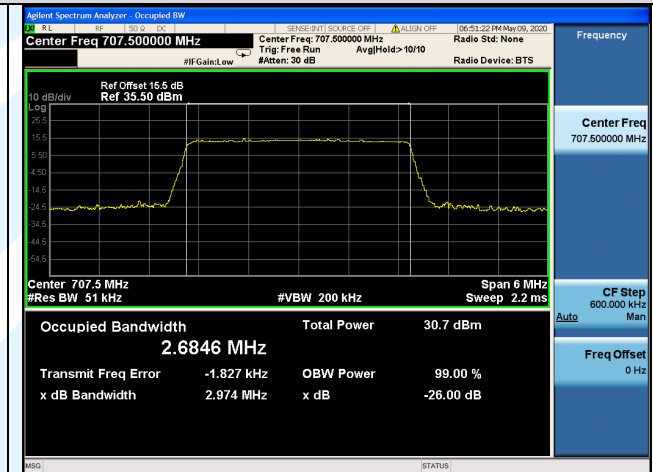
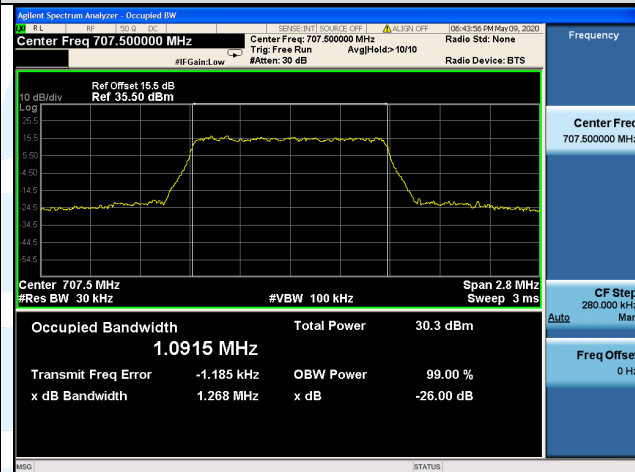


**LTE Band 12 / 1.4MHz / 64QAM      LTE Band 12 / 3MHz / 64QAM**

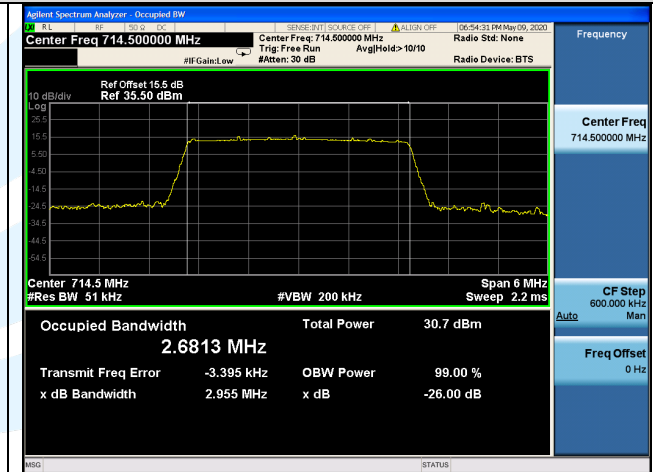
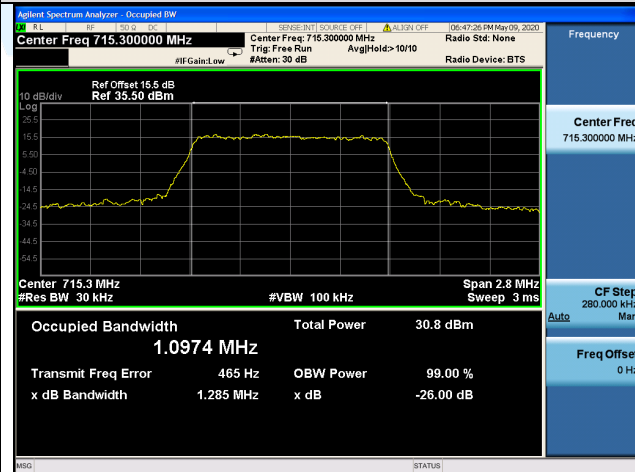
**Lowest Channel**

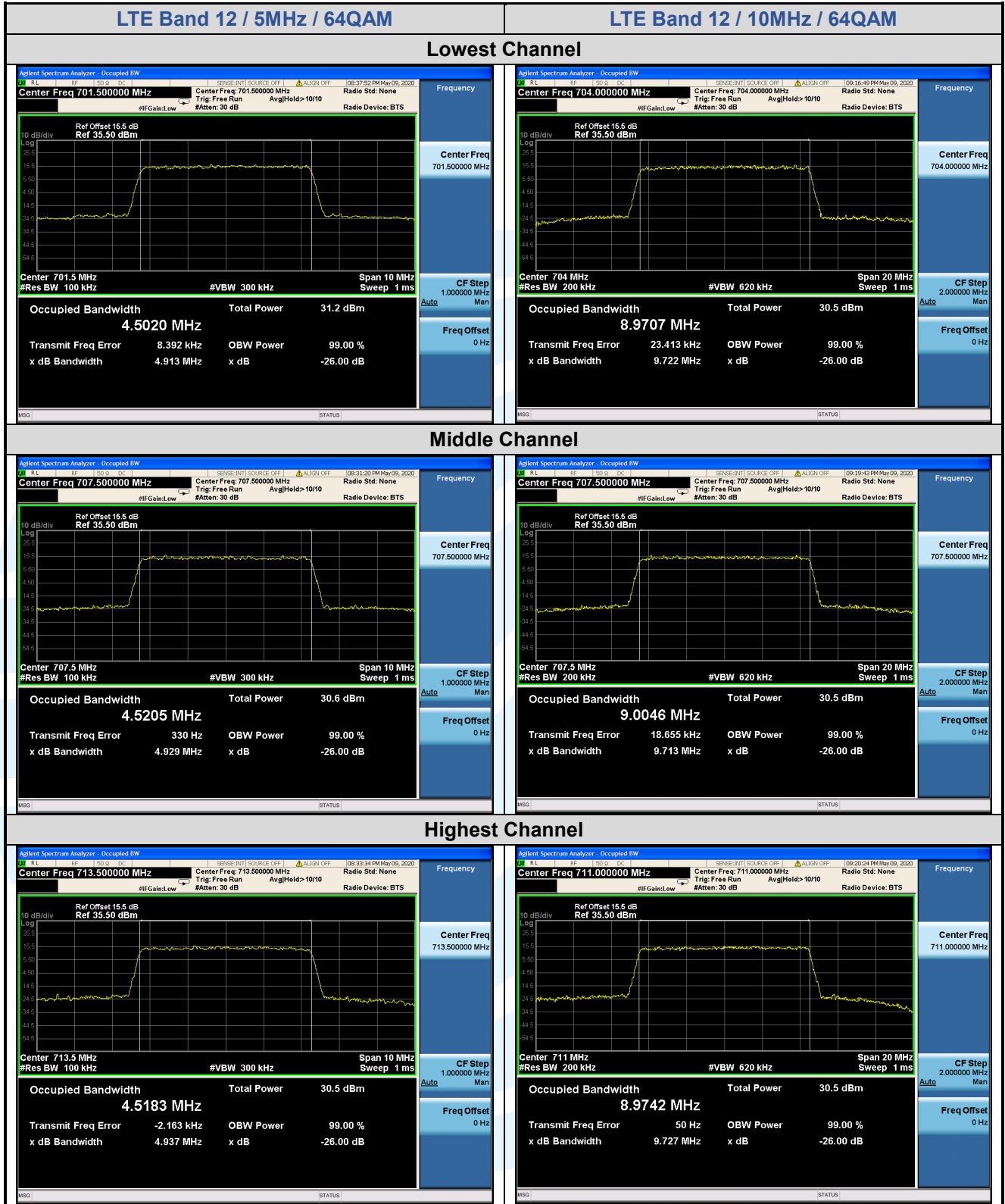


**Middle Channel**



**Highest Channel**





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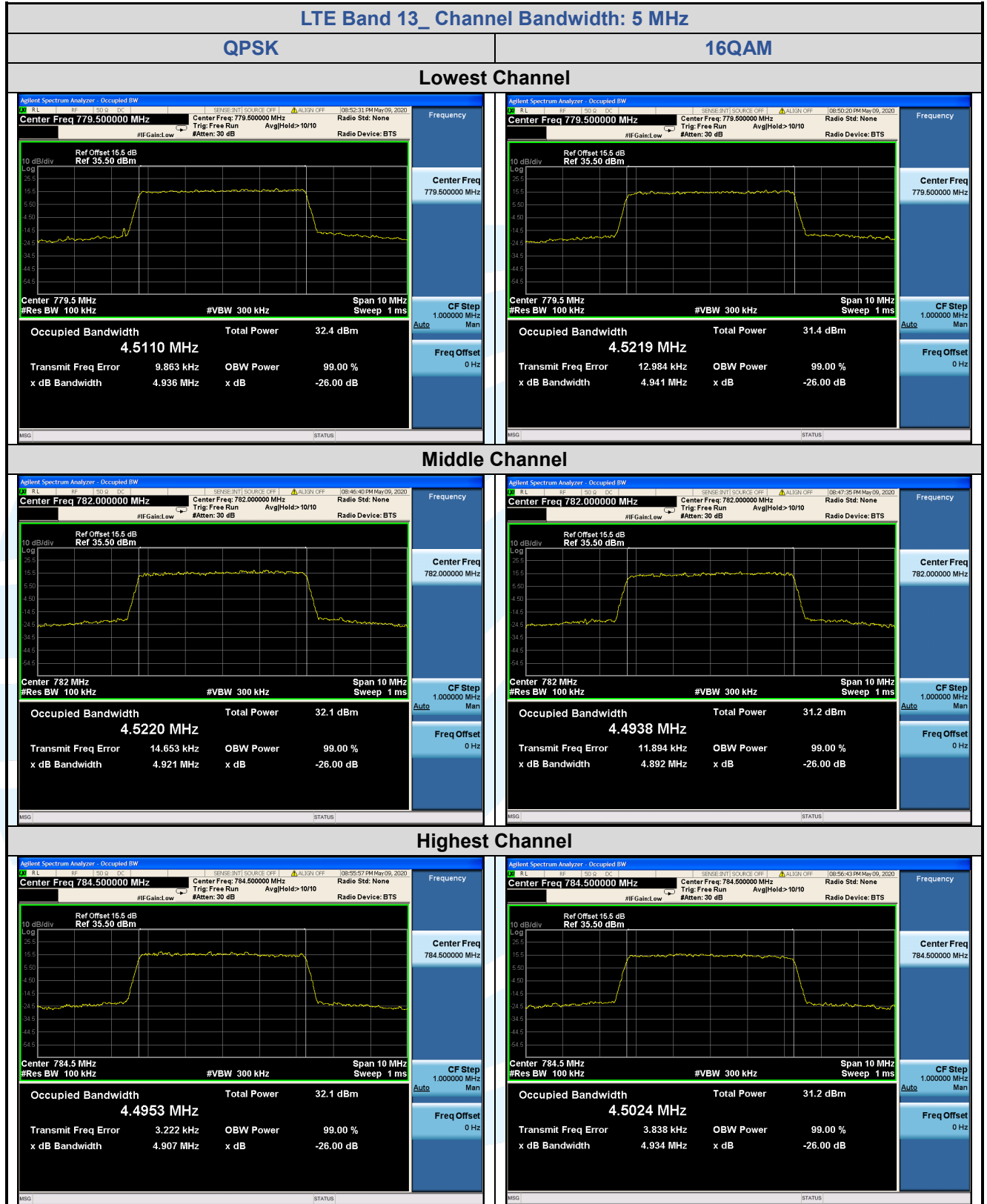
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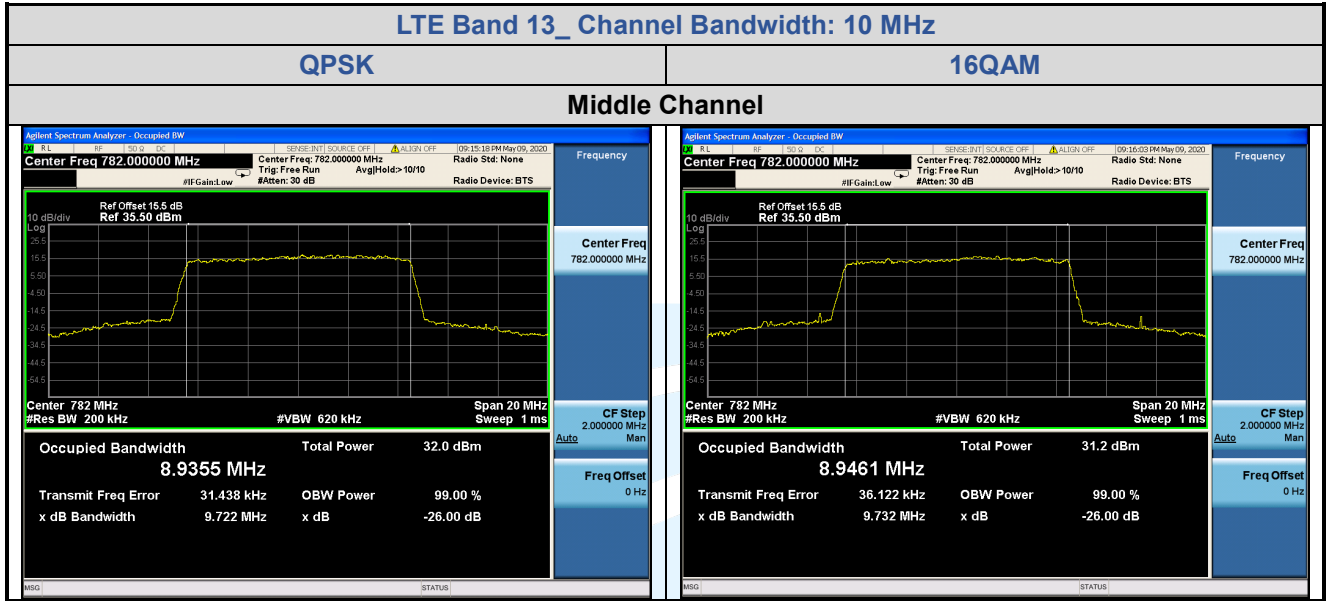
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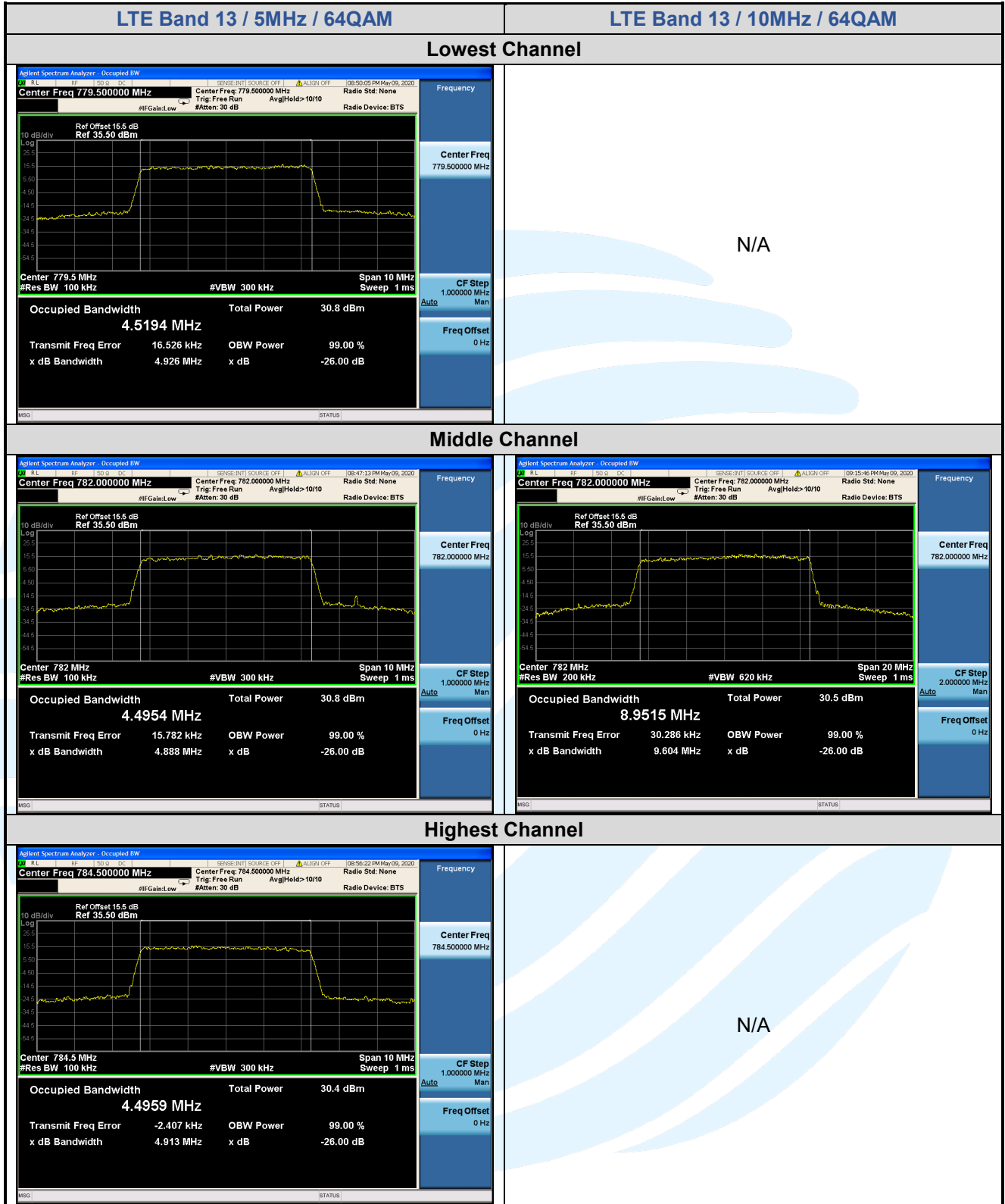
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**5.5.6 LTE Band 13**

LTE Band 13								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
<b>Channel Bandwidth: 5 MHz</b>								
Lowest	25	0	4.936	4.941	4.926	4.5110	4.5219	4.5194
Middle	25	0	4.921	4.892	4.888	4.5220	4.4938	4.4954
Highest	25	0	4.907	4.934	4.913	4.4953	4.5024	4.4959
<b>Channel Bandwidth: 10 MHz</b>								
Middle	50	0	9.722	9.732	9.604	8.9355	8.9461	8.9515







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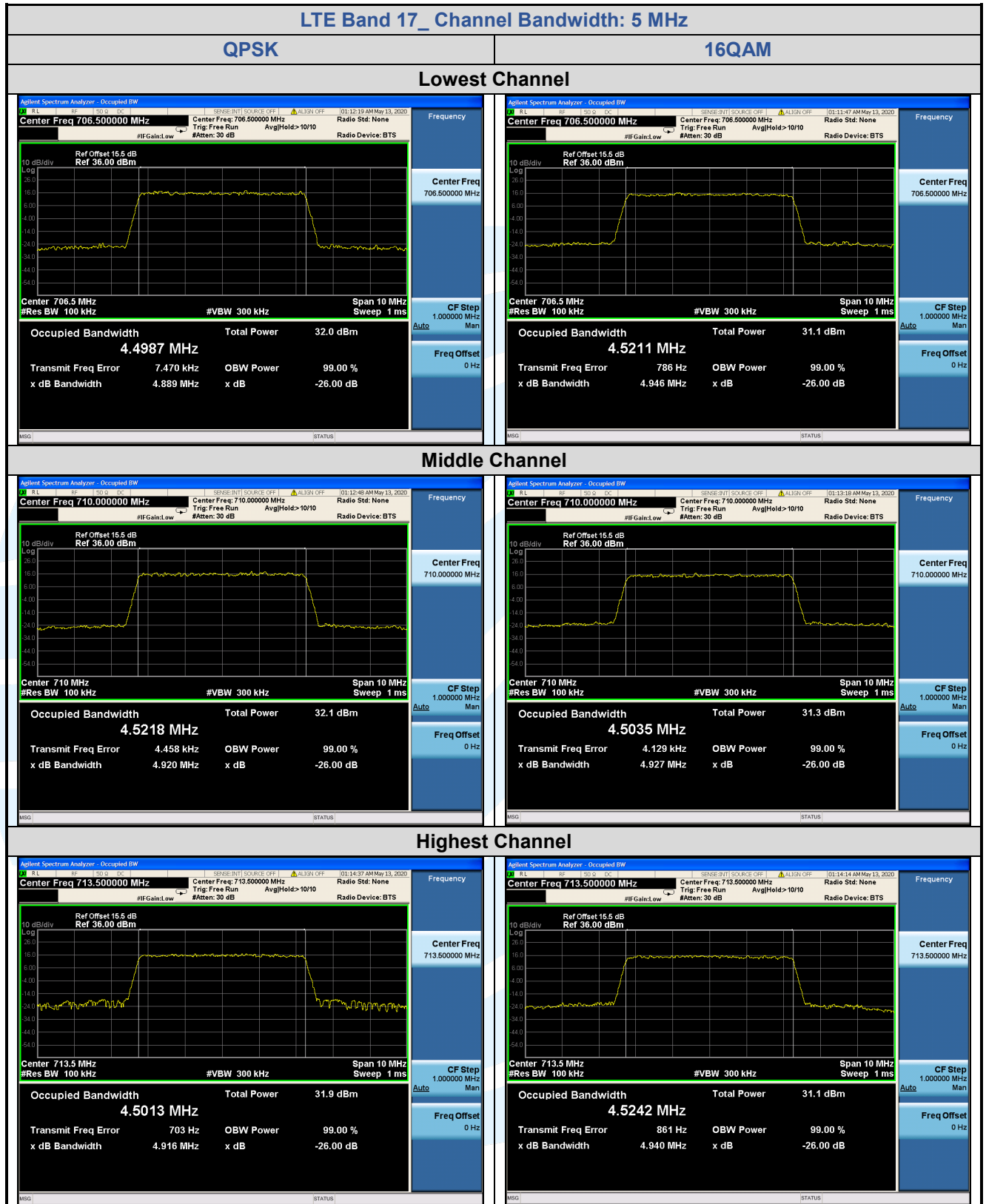
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**5.5.7 LTE Band 17**

LTE Band 17								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
<b>Channel Bandwidth: 5 MHz</b>								
Lowest	25	0	4.889	4.946	4.941	4.4987	4.5211	4.5085
Middle	25	0	4.920	4.927	4.923	4.5218	4.5035	4.5106
Highest	25	0	4.916	4.940	4.929	4.5013	4.5242	4.5054
<b>Channel Bandwidth: 10 MHz</b>								
Lowest	50	0	9.806	9.775	9.744	8.9947	8.9850	8.9901
Middle	50	0	9.777	9.793	9.727	8.9786	8.9875	8.9942
Highest	50	0	9.805	9.724	9.693	8.9736	8.9847	8.9734



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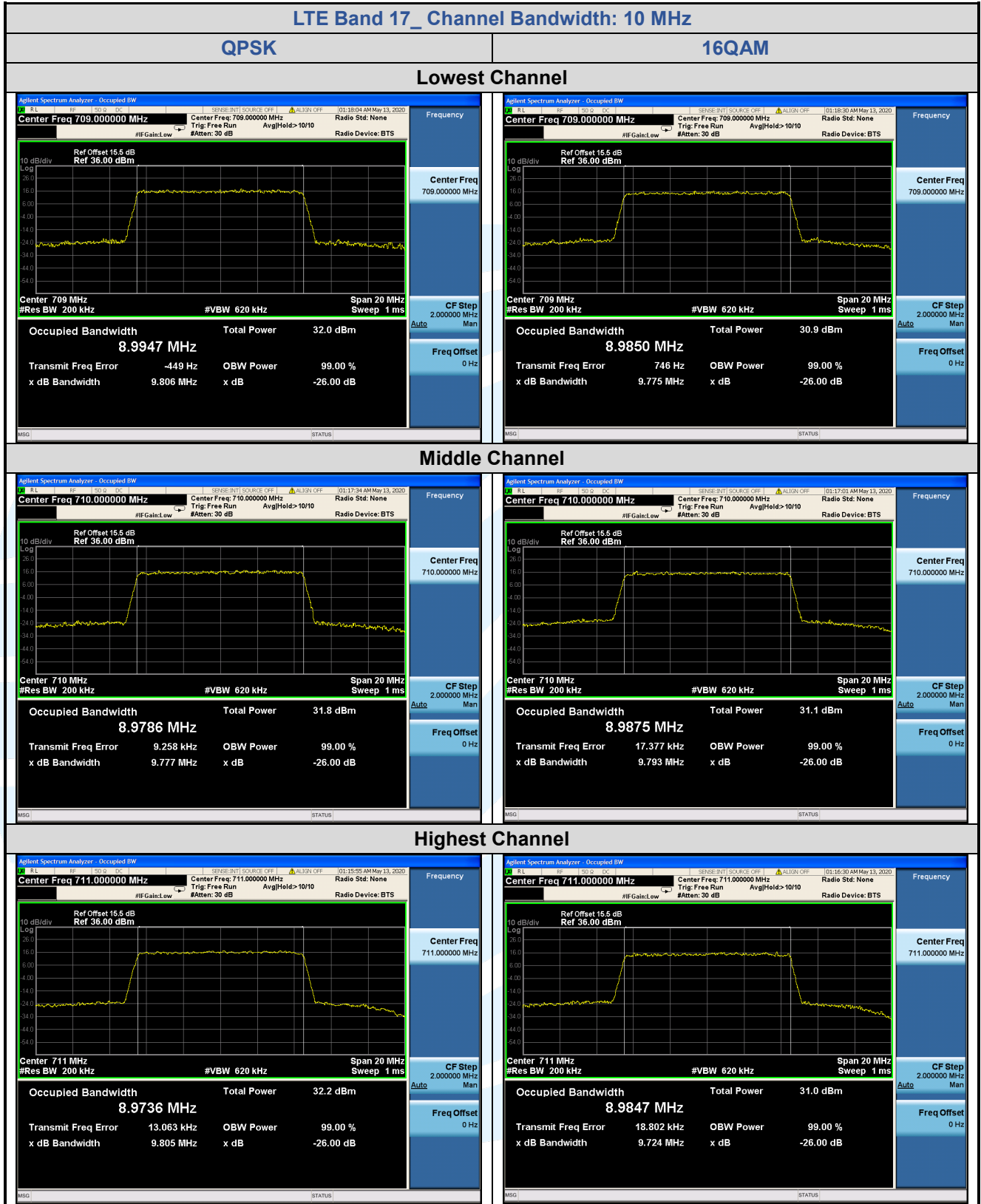
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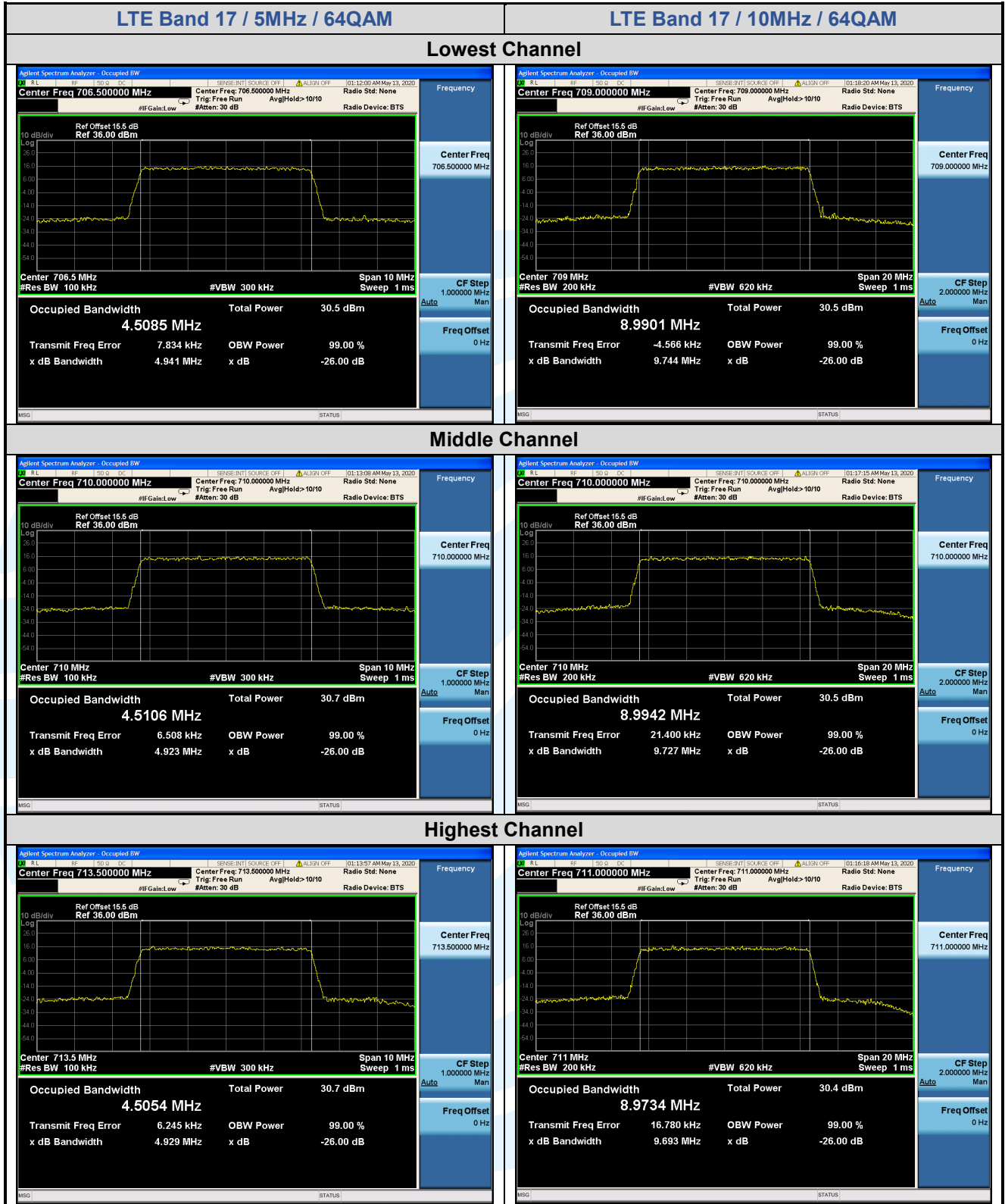
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## 5.6 BAND EDGE AT ANTENNA TERMINALS

**Test Requirement:** LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.238(a)  
 LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)(1)  
 LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)  
 LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.53(m)(4)  
 LTE Band 12 & Band 71: FCC 47 CFR Part 27.53(g)  
 LTE Band 13: FCC 47 CFR Part 27.53(c)(2)

**Test Method:** ANSI C63.26-2015 & KDB 971168 D01v03r01

**Limit:**

**FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a) :**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit equal to -13 dBm.

**FCC 47 CFR Part 27.53(m)(4):**

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.

**FCC 47 CFR Part 27.53(g):**

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

**FCC 47 CFR Part 27.53(c)(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;

**Test Procedure:**

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.

For each band edge measurement:

- 1) Set the spectrum analyzer span to include the block edge frequency.
- 2) Set a marker to point the corresponding band edge frequency in each test case.
- 3) Set display line at -13 dBm
- 4) Set resolution bandwidth to at least 1% of emission bandwidth.
- 5) Set spectrum analyzer with RMS detector.
- 6) Record the max trace plot into the test report

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

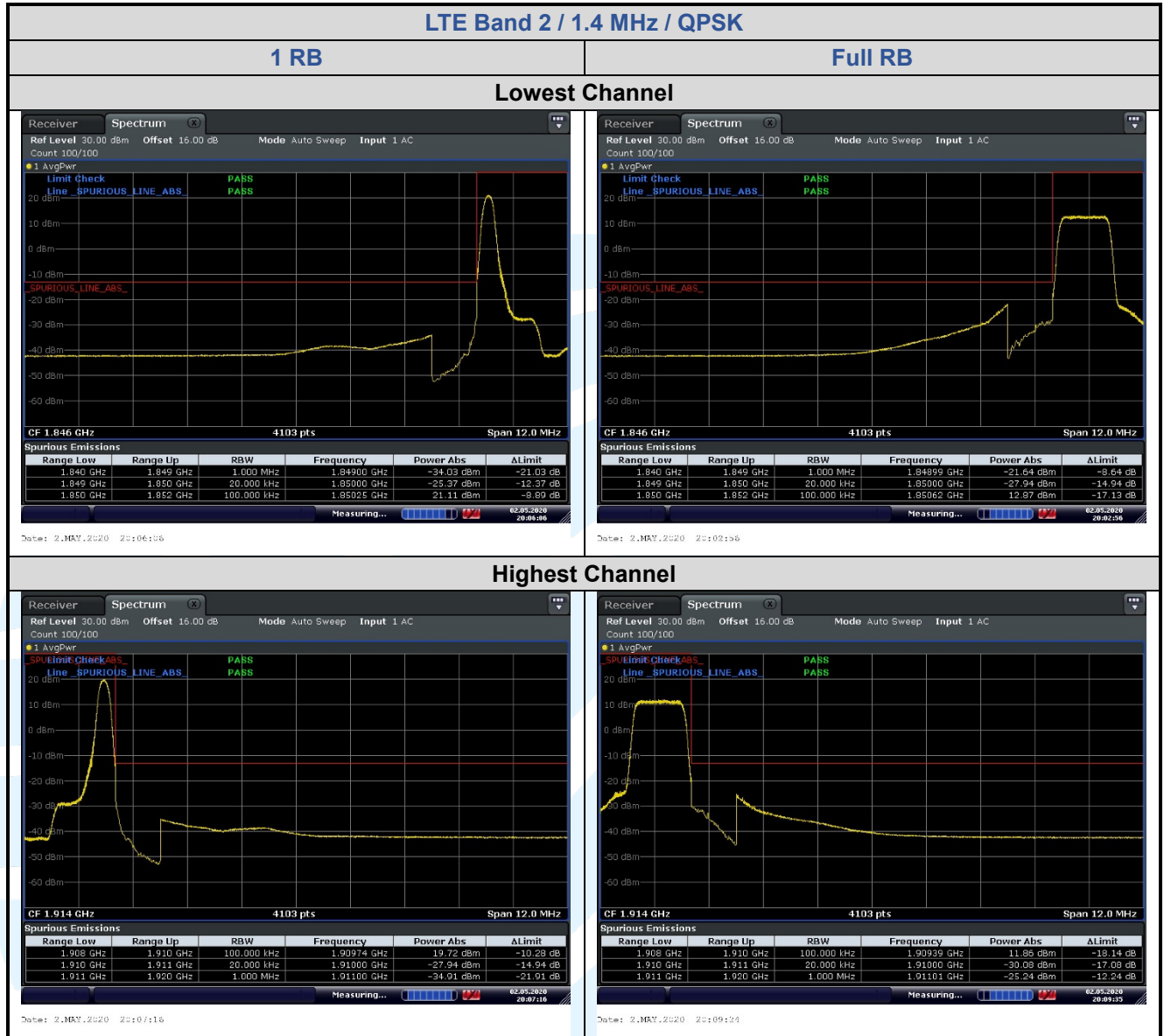
**Test Setup:** Refer to section 4.2.2 for details.

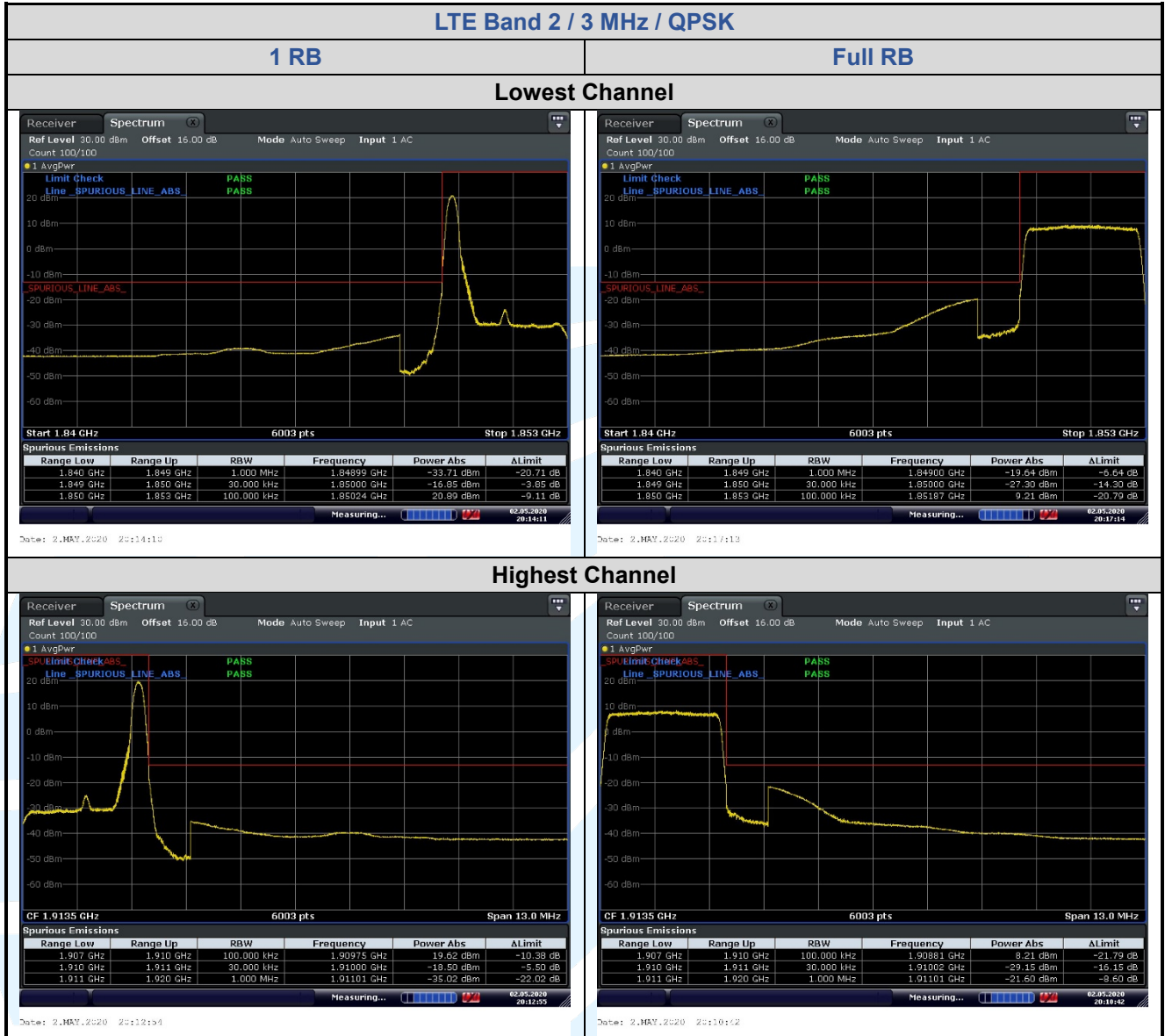
**Instruments Used:** Refer to section 3 for details

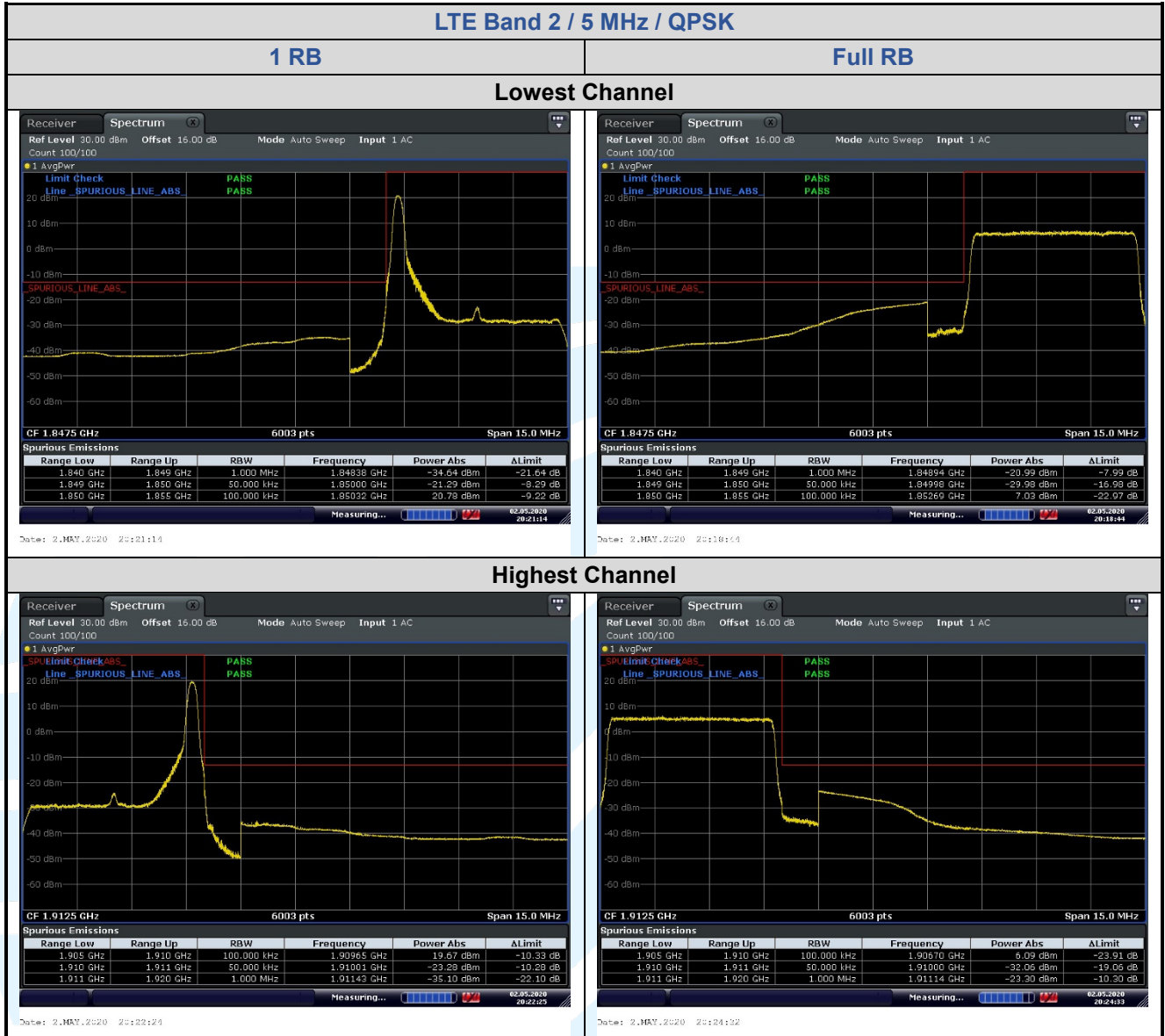
**Test Mode:** Link mode

**Test Results:** Pass

## 5.6.1 LTE Band 2







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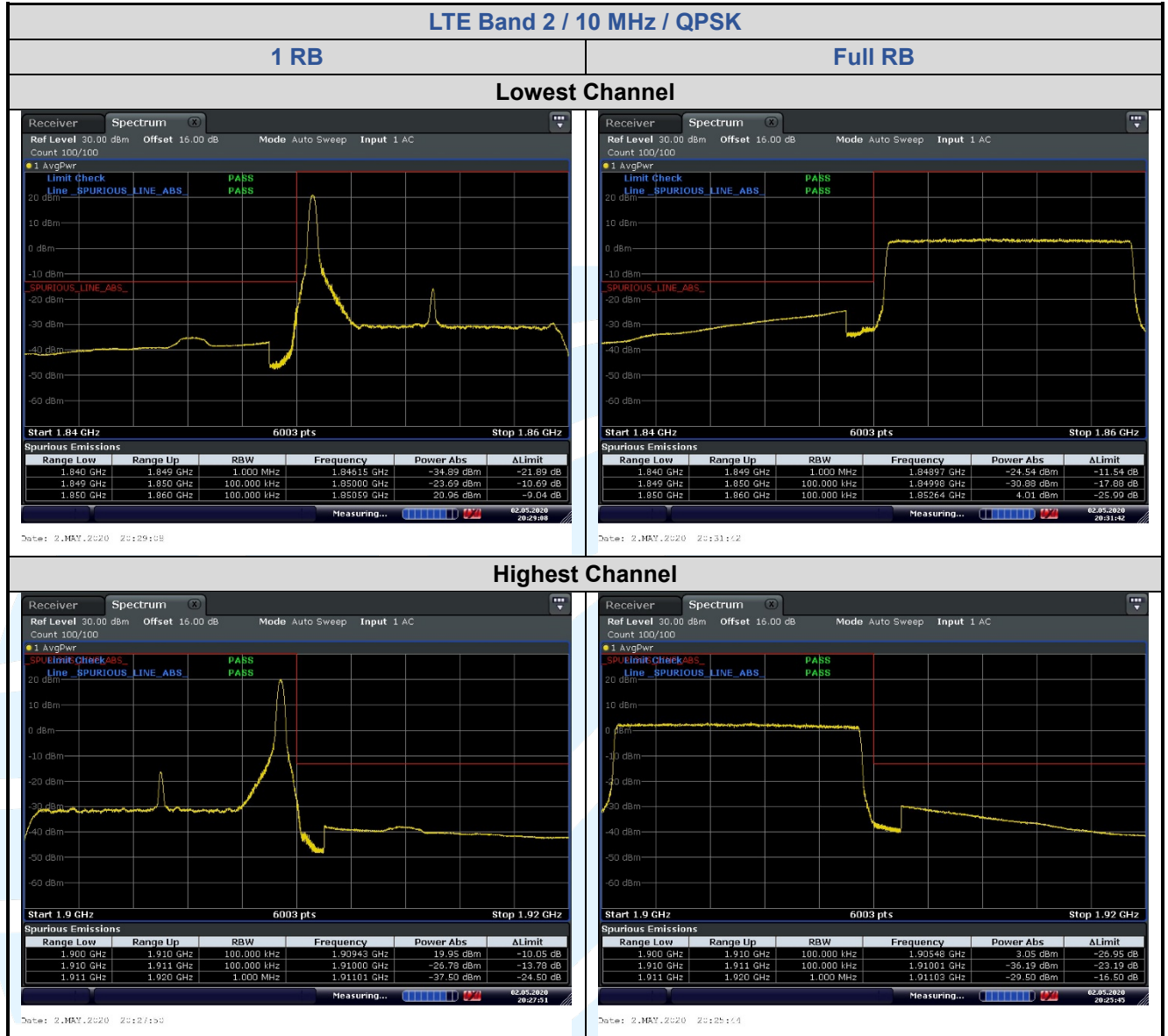
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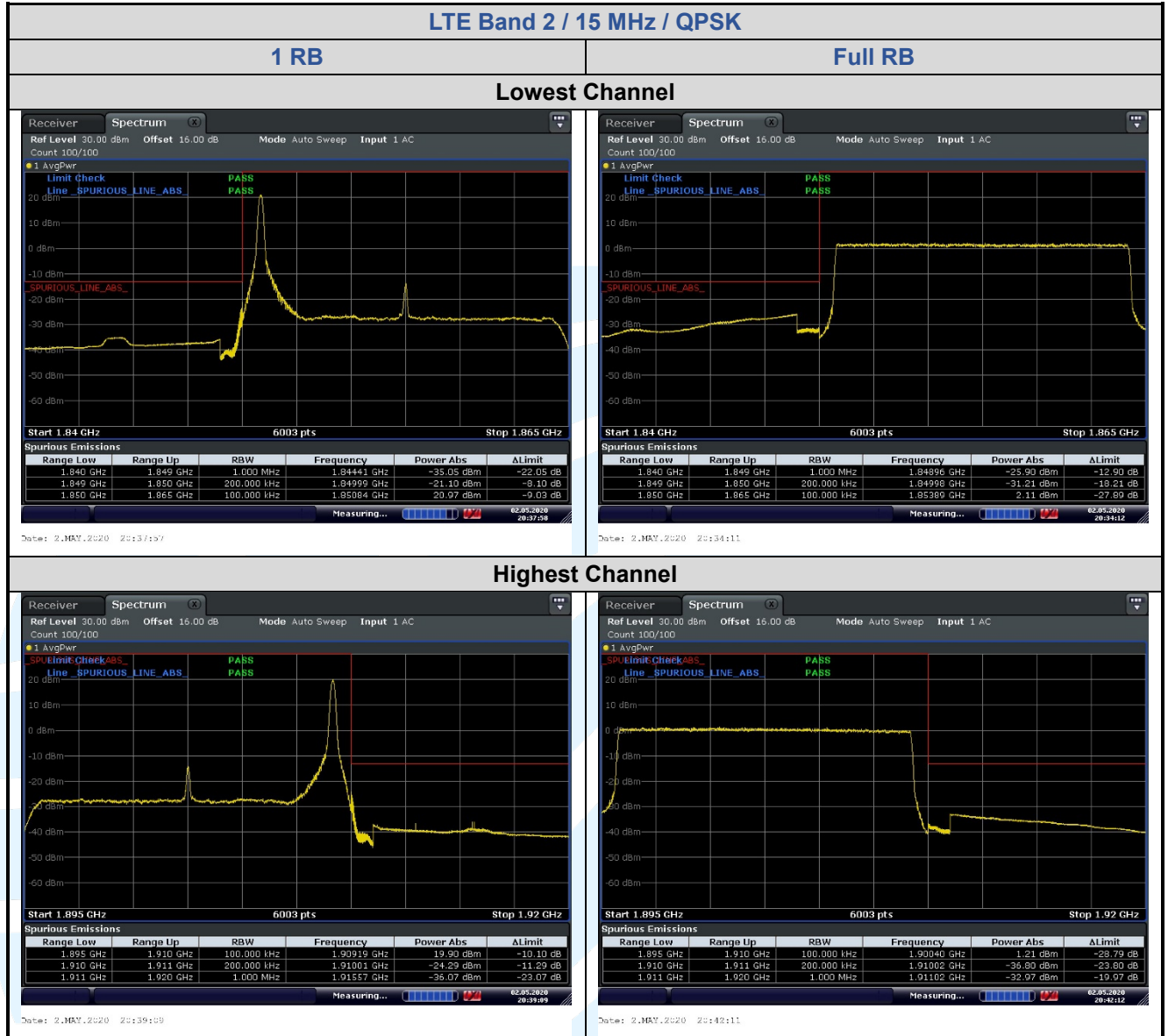
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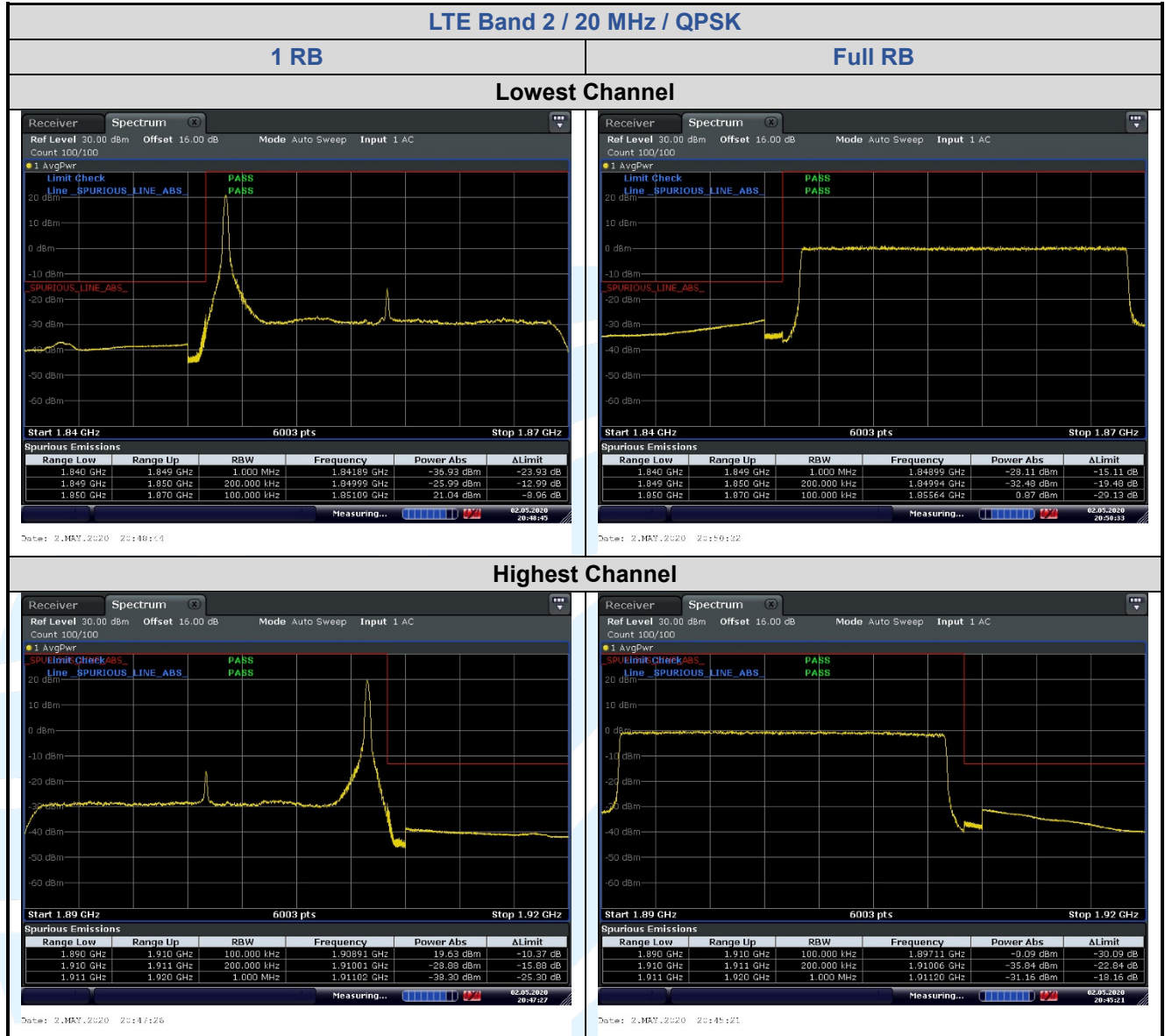
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