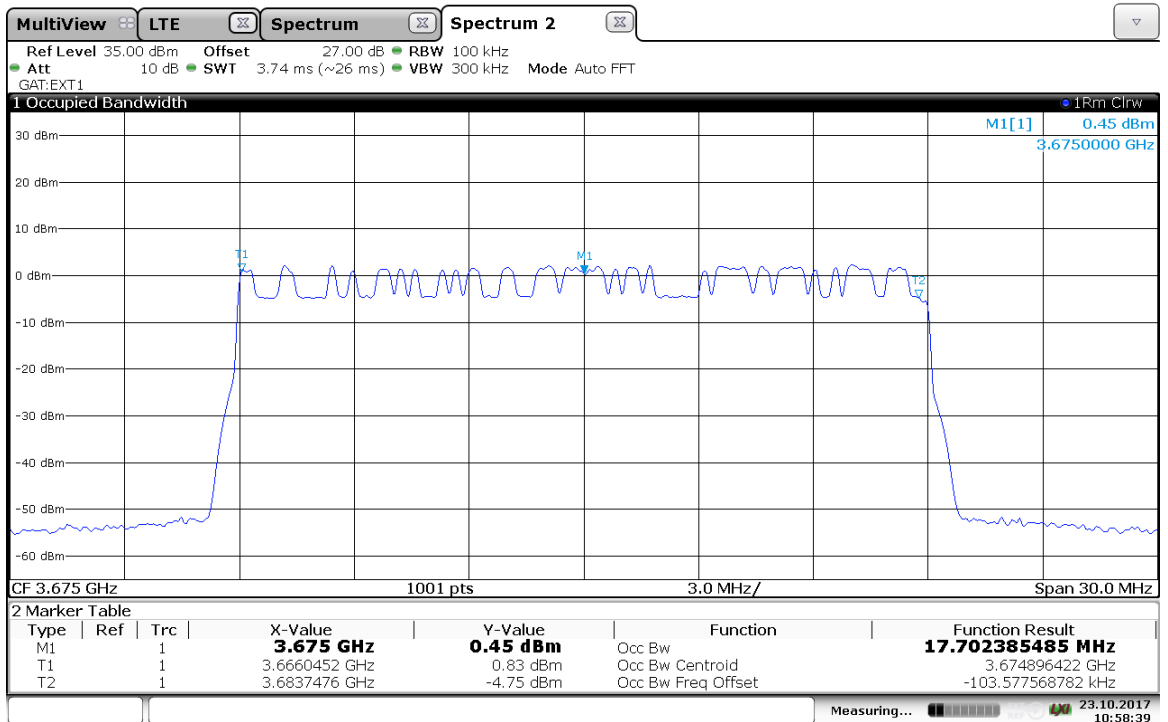
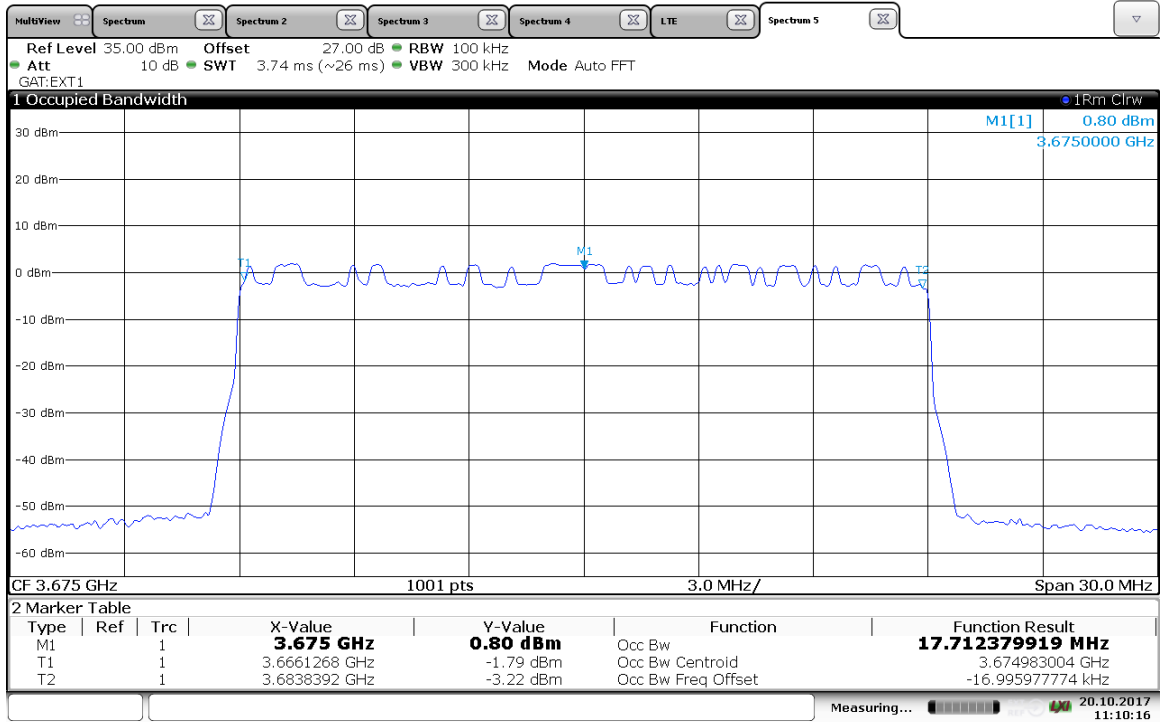


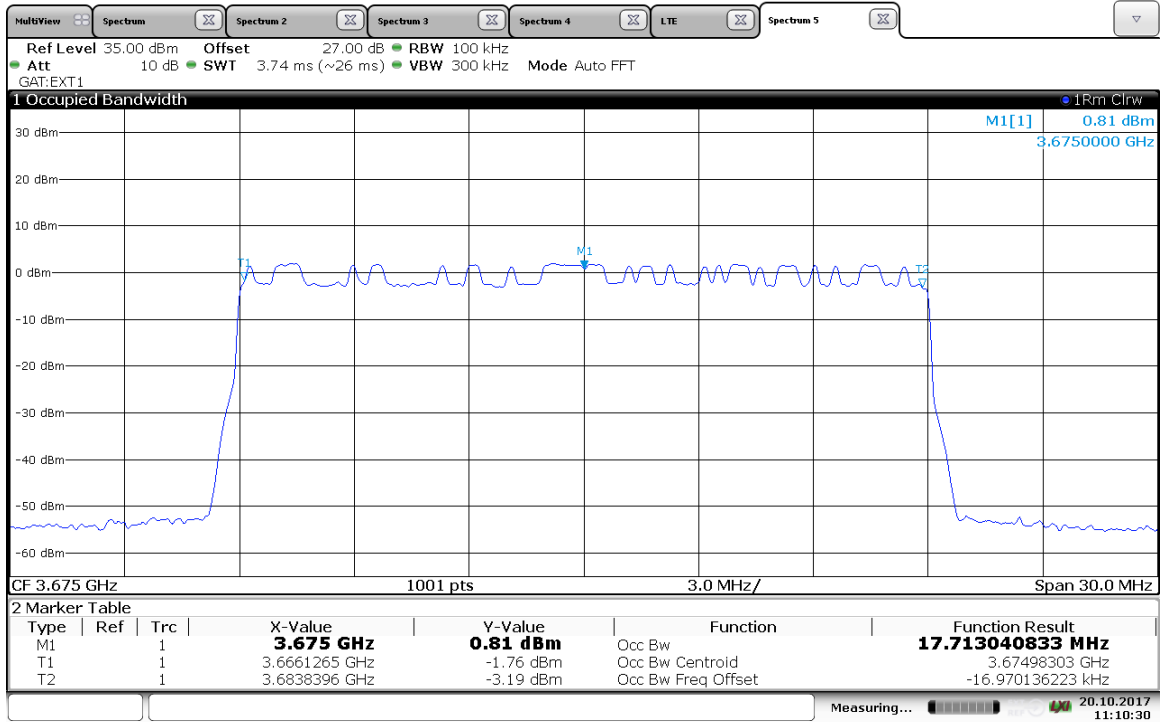
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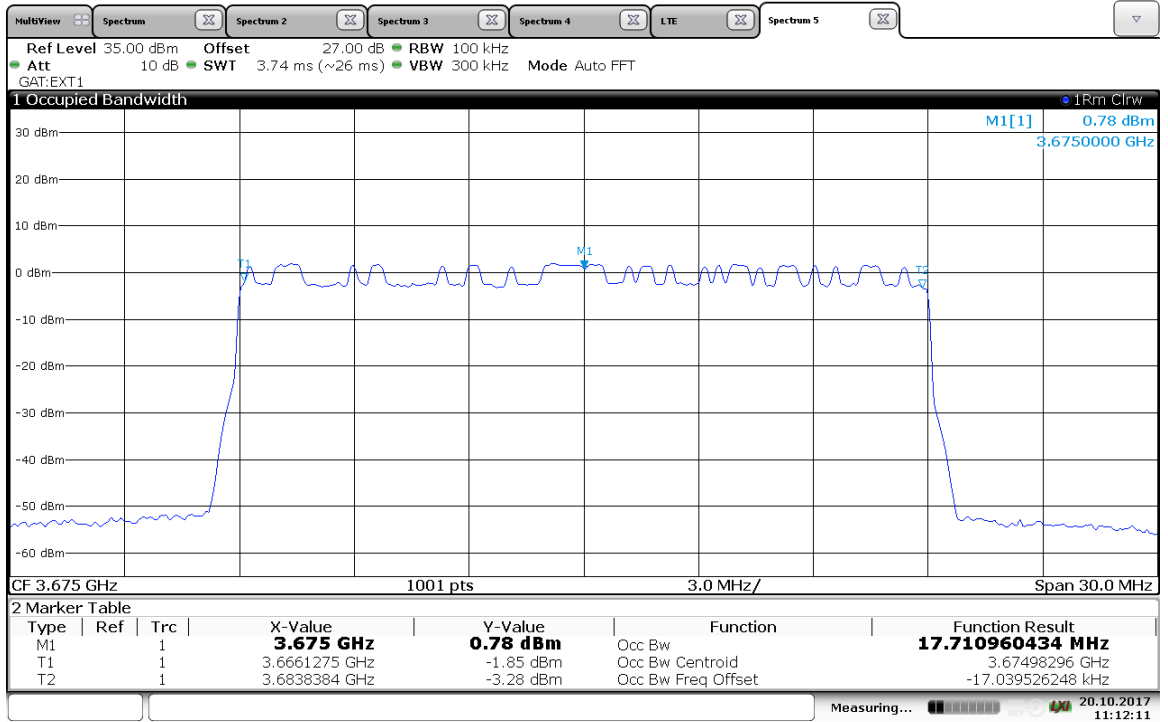
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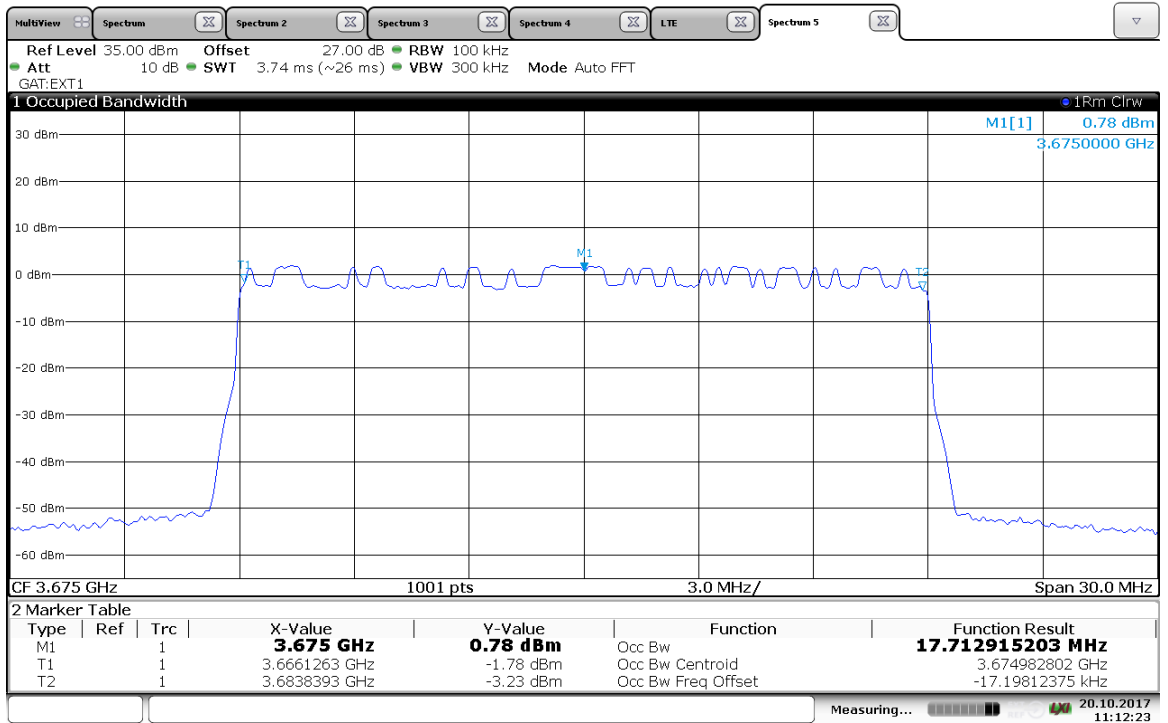
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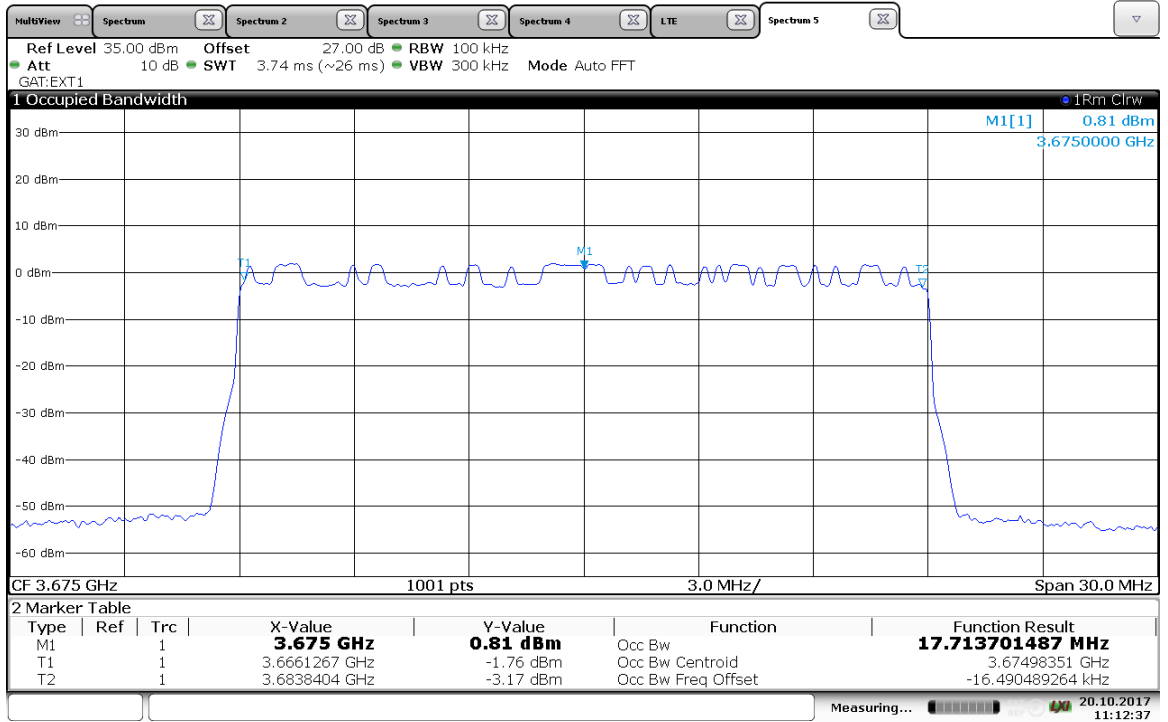
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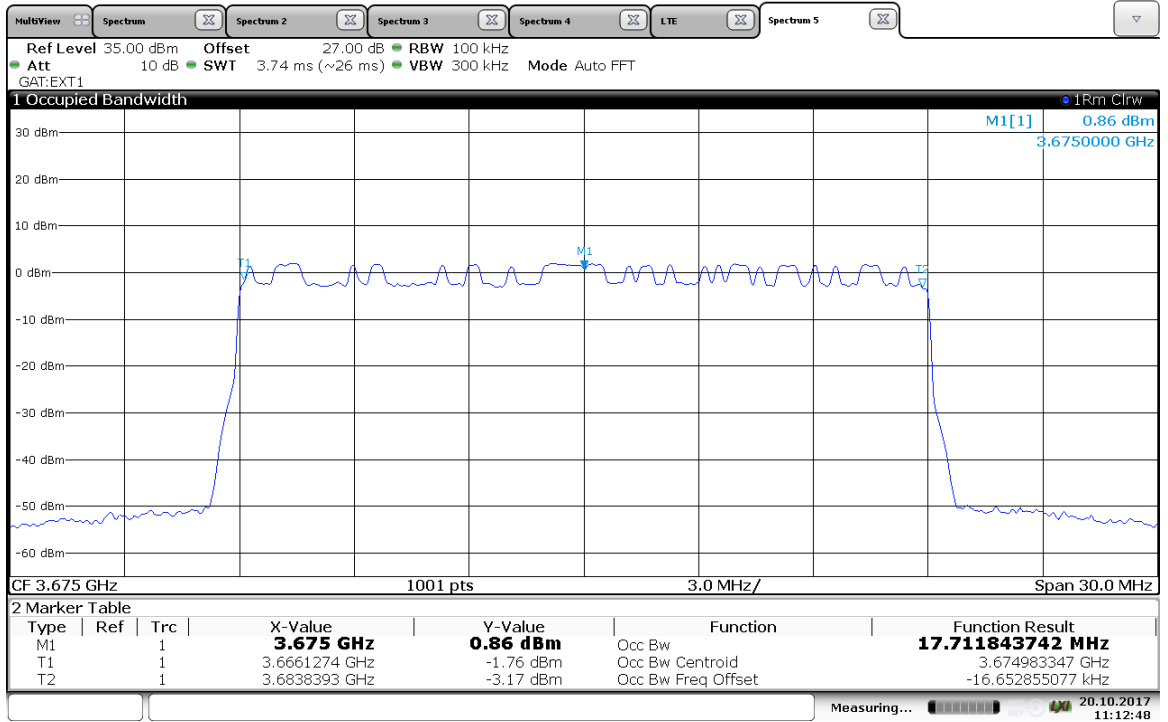
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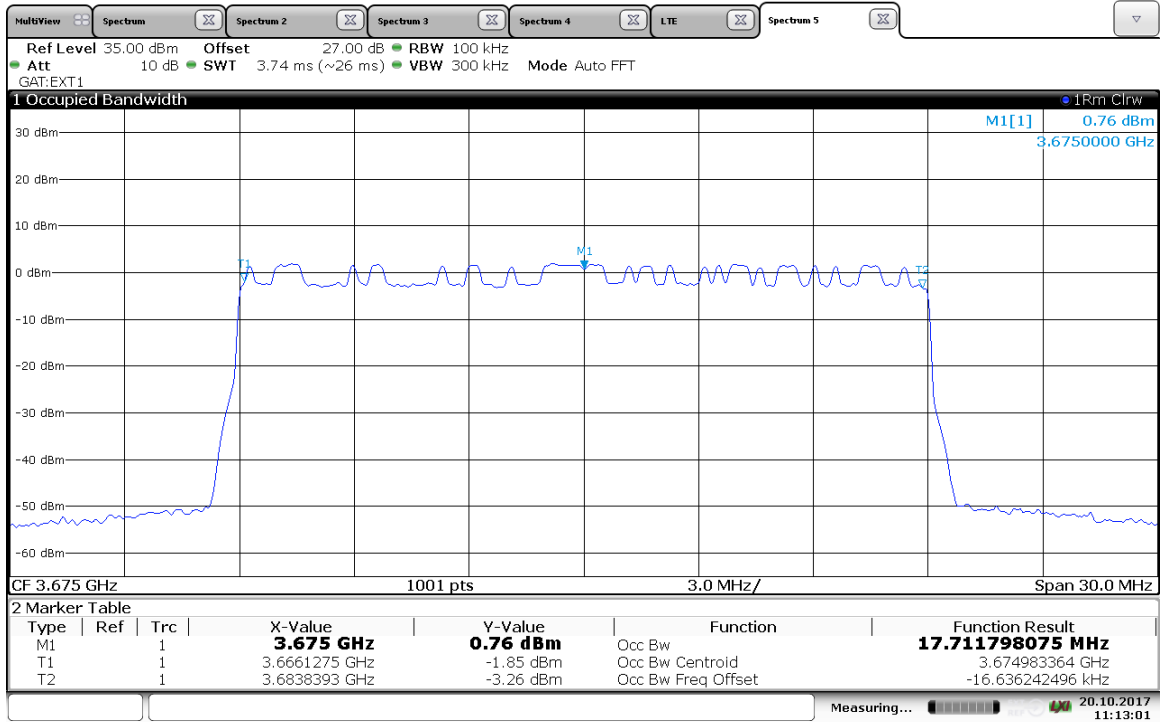
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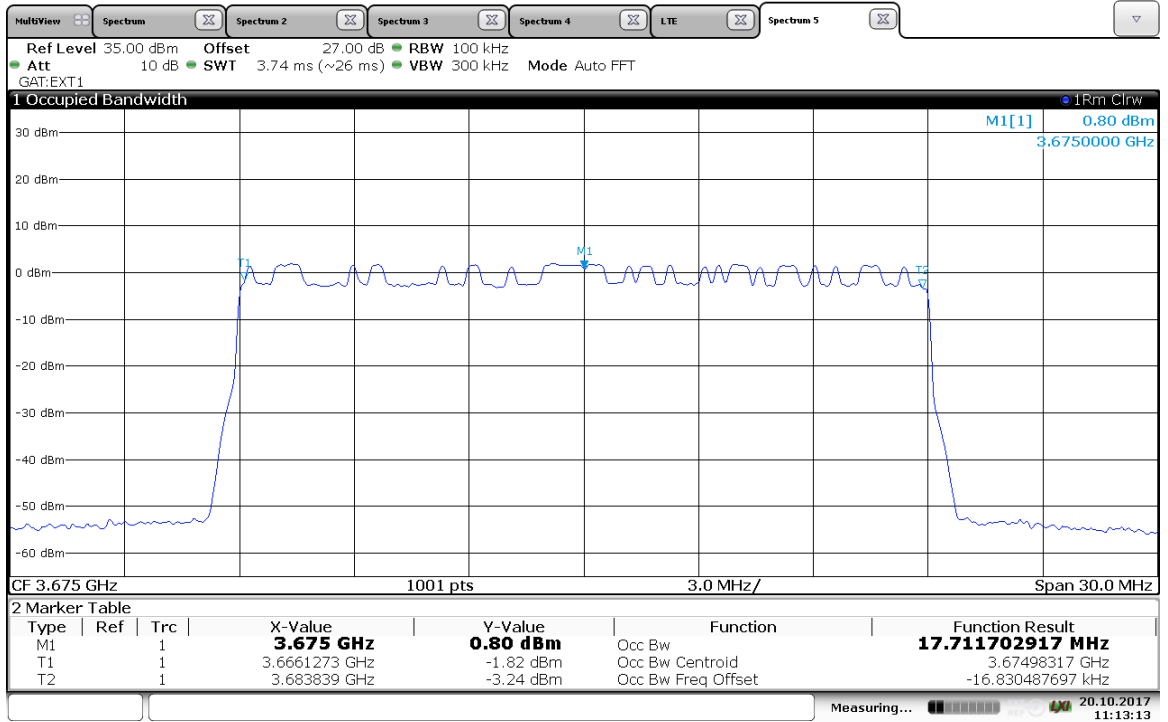
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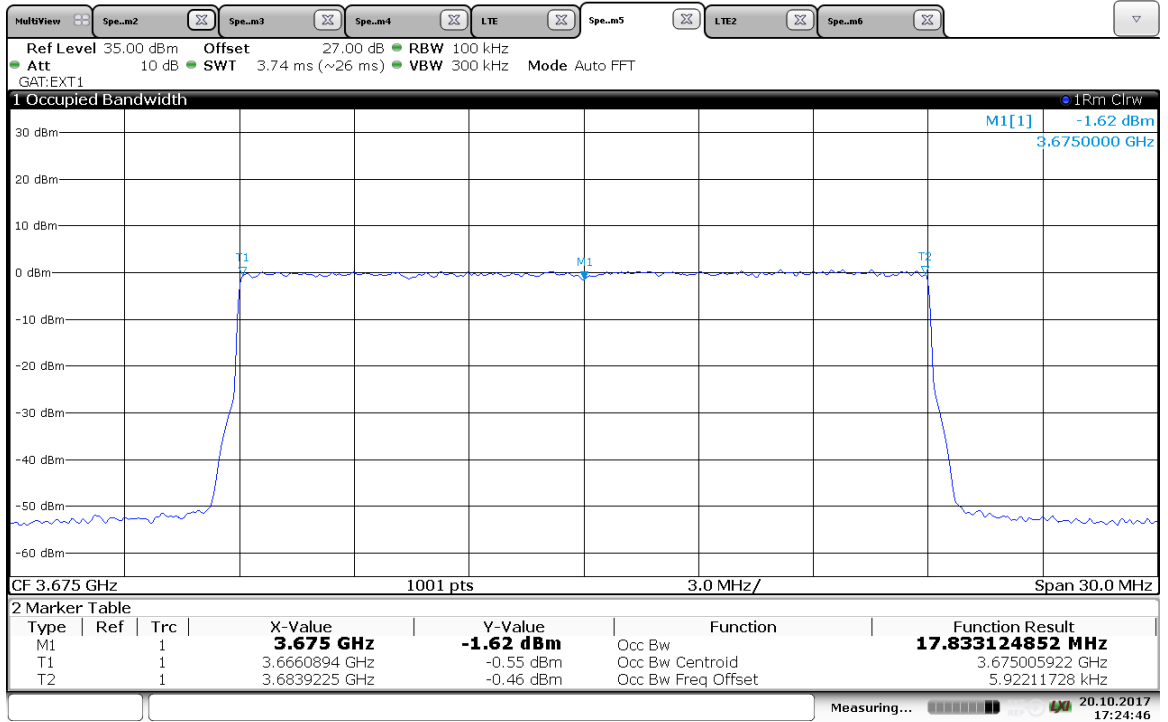
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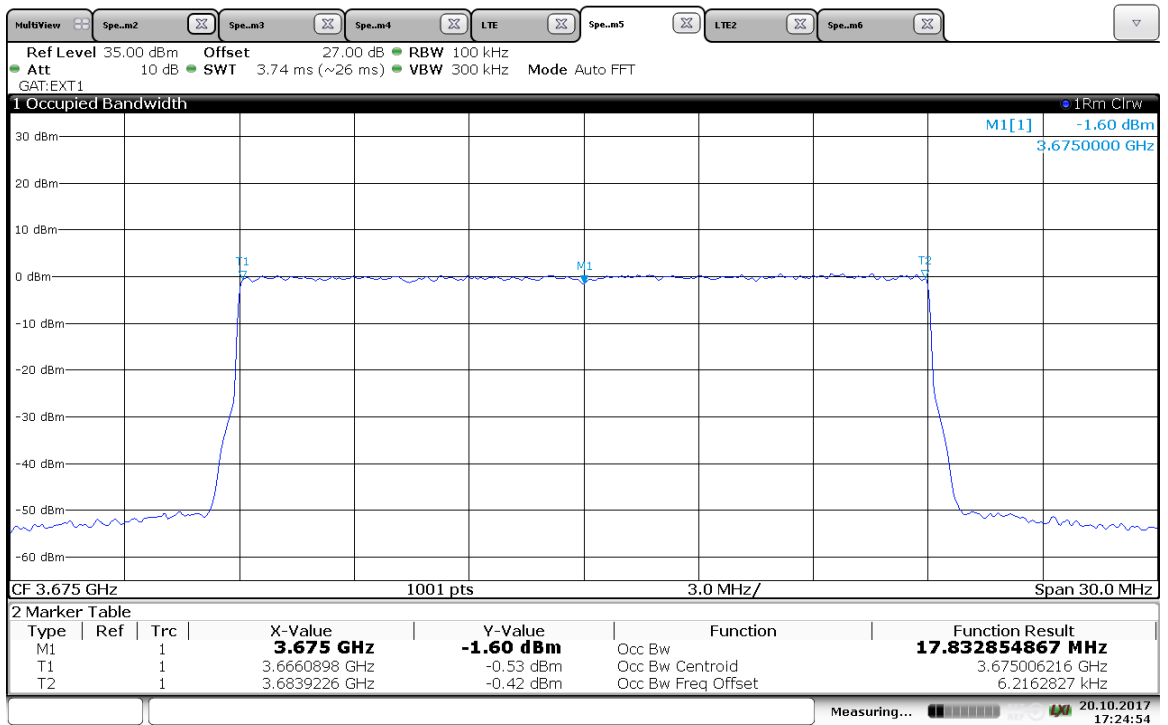
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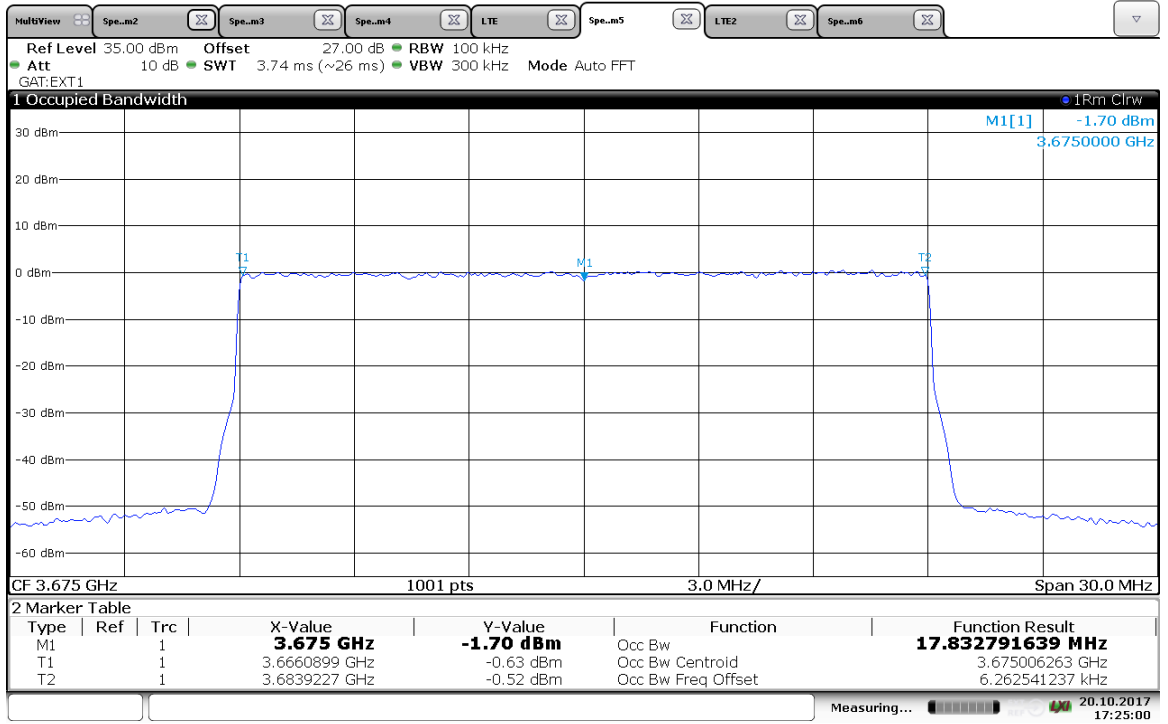
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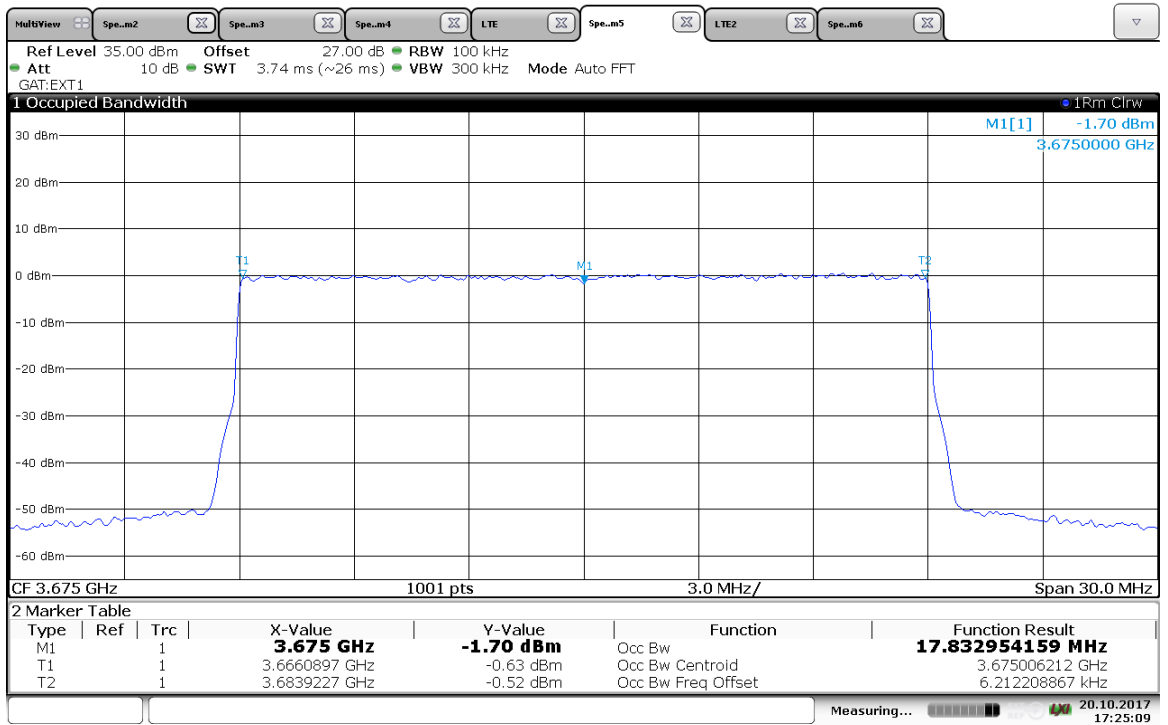
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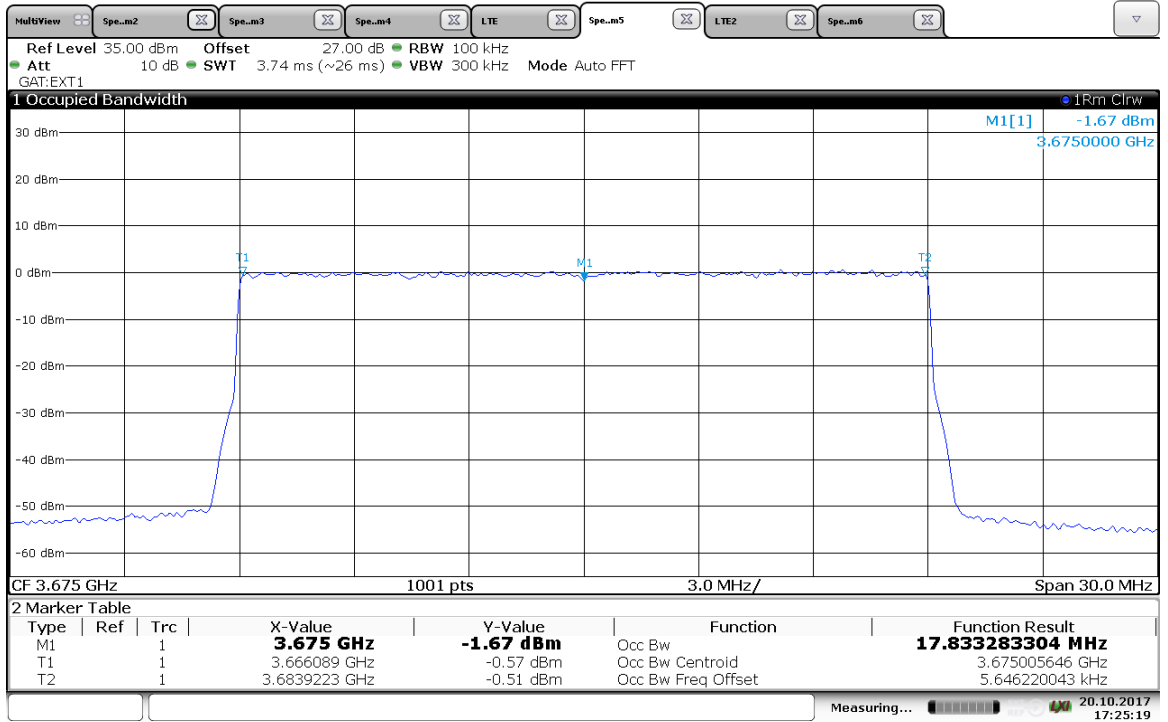
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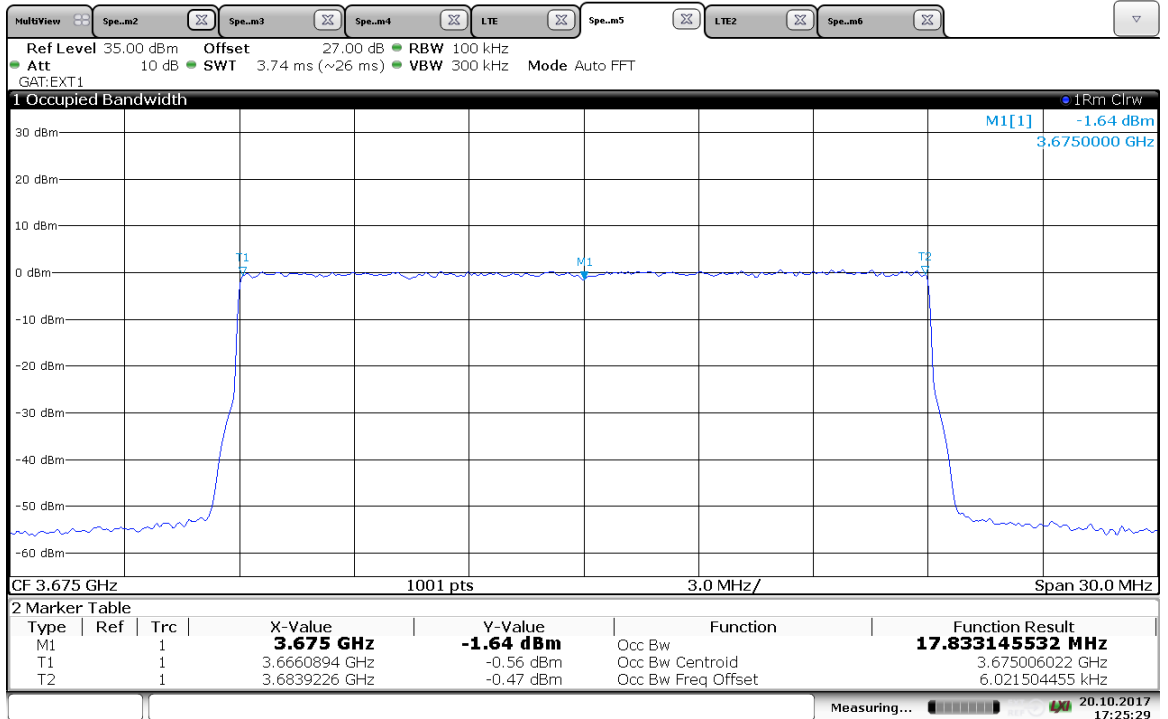
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17:25:09 20.10.2017

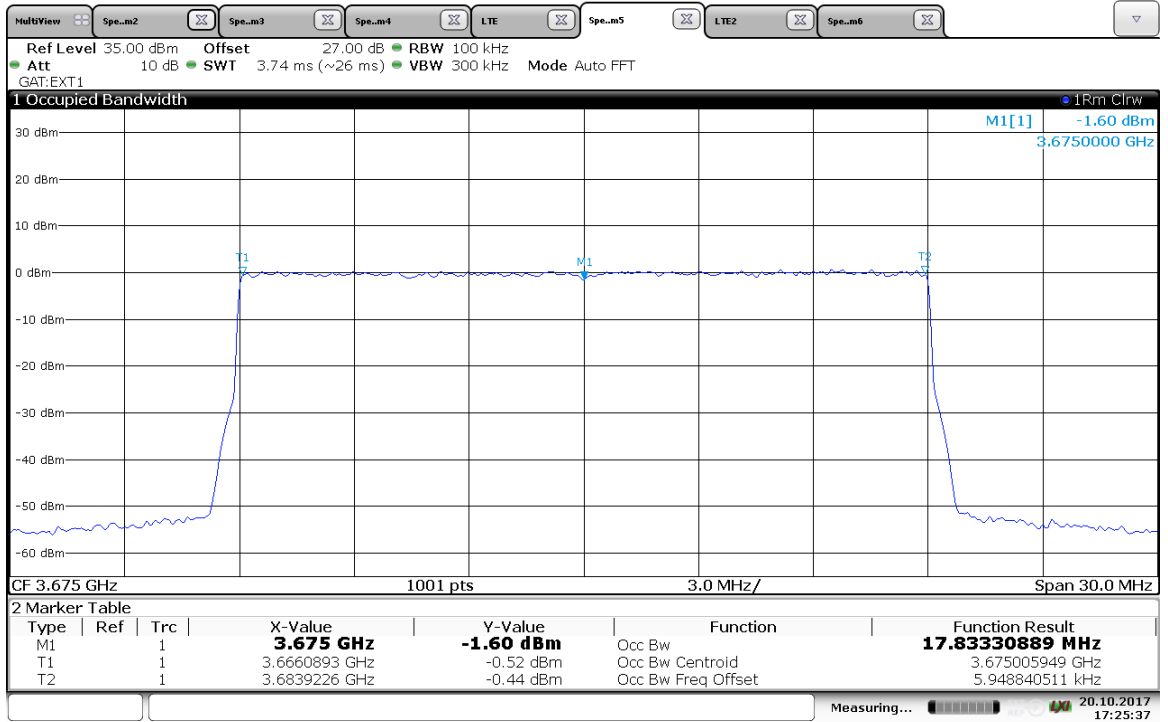


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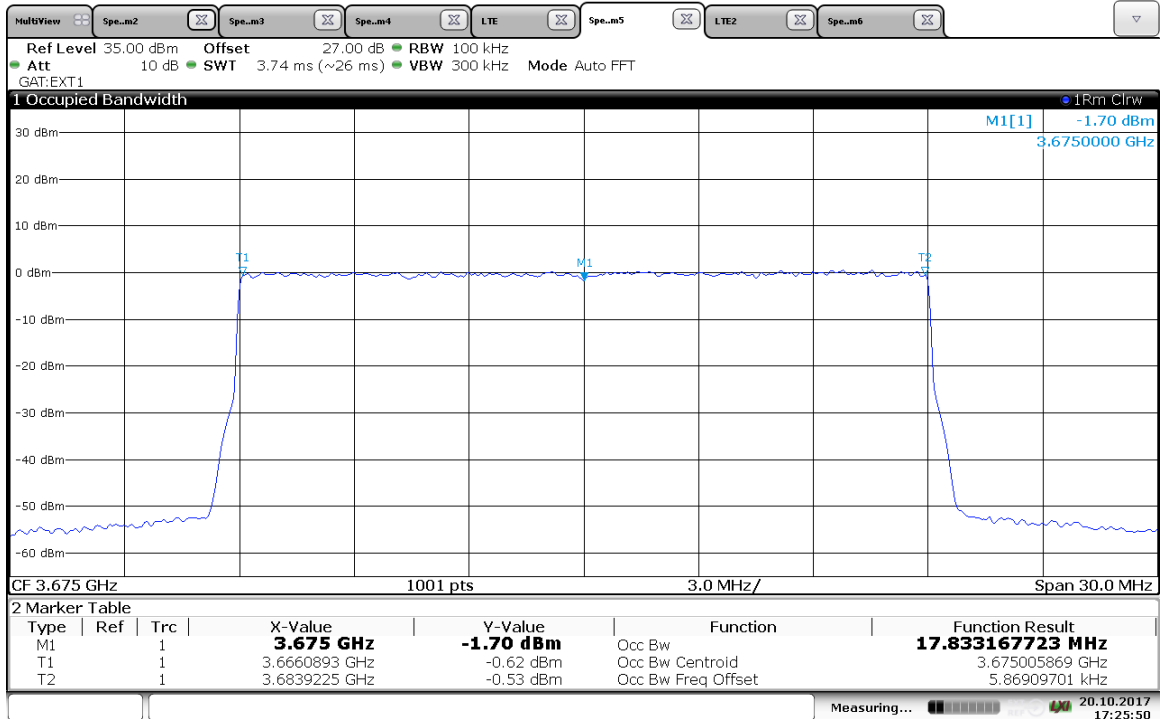


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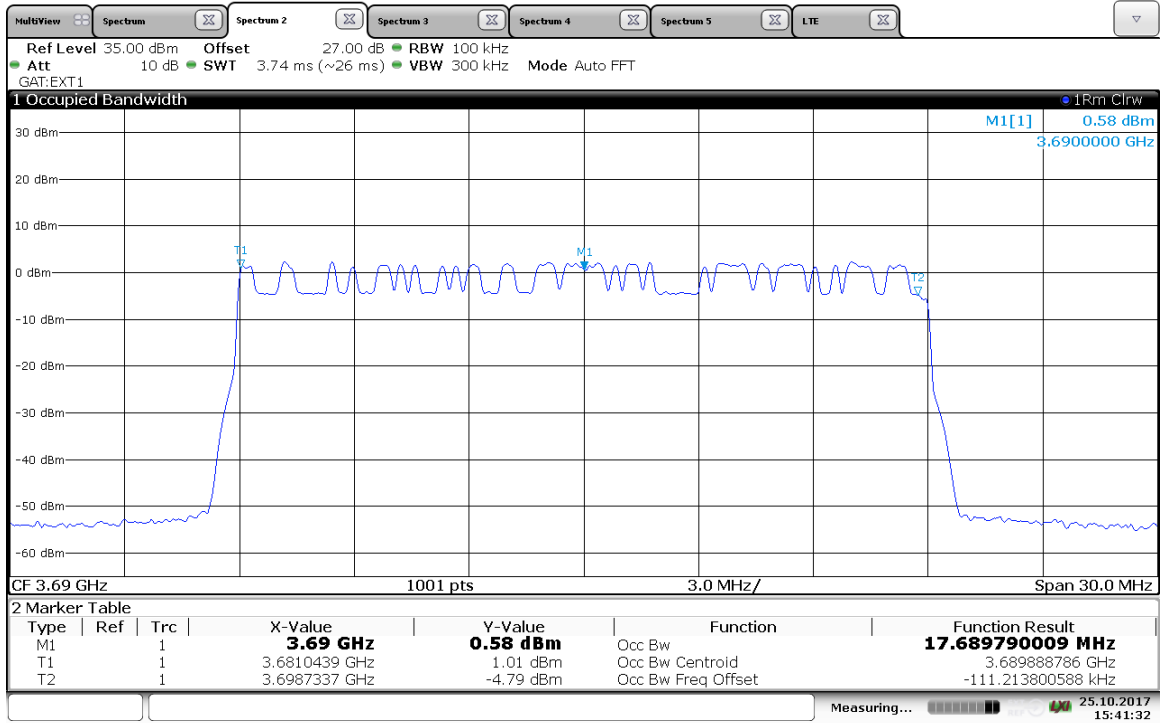




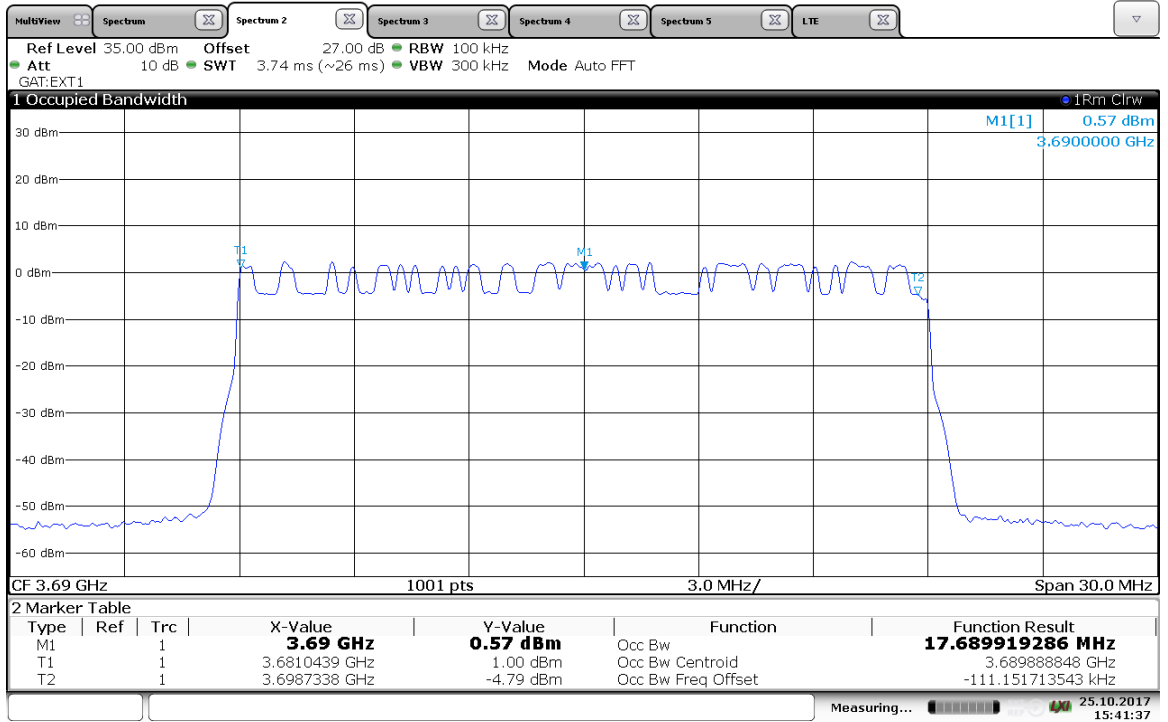
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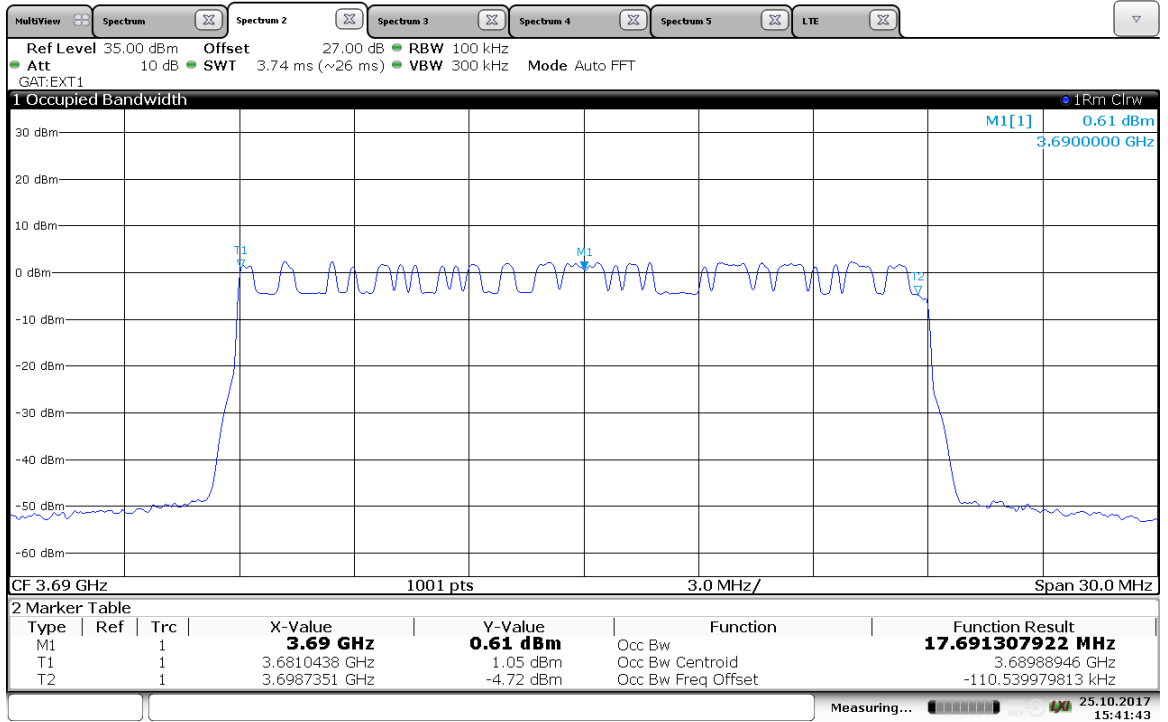
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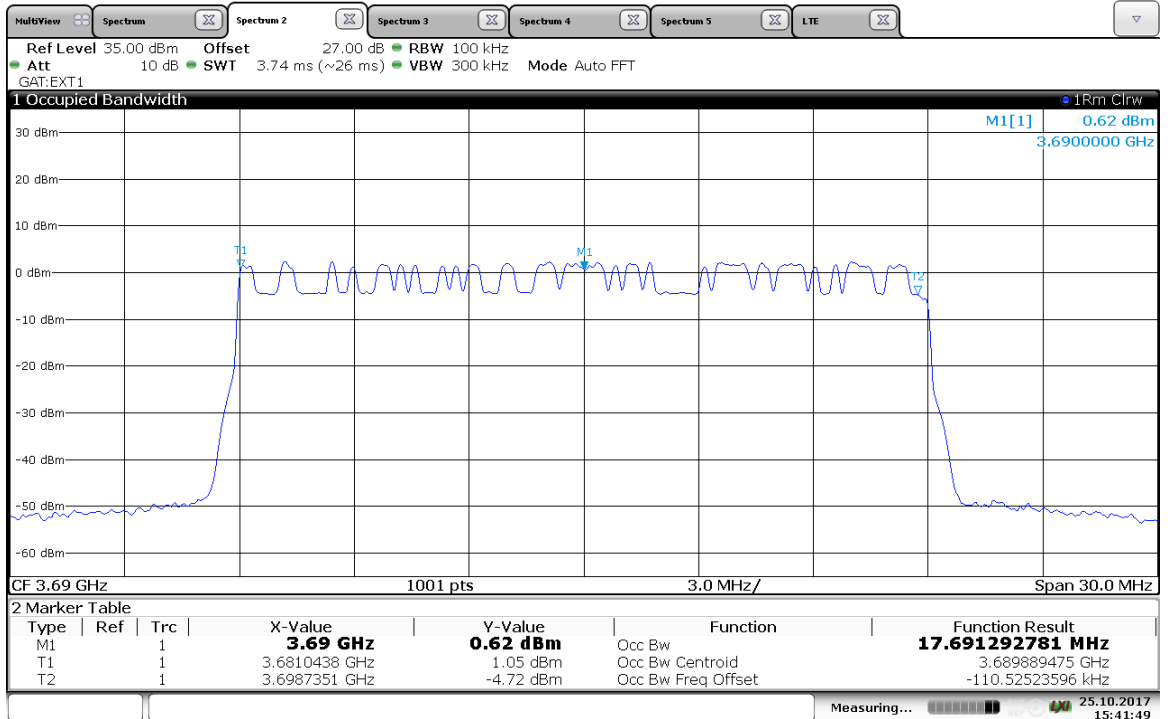
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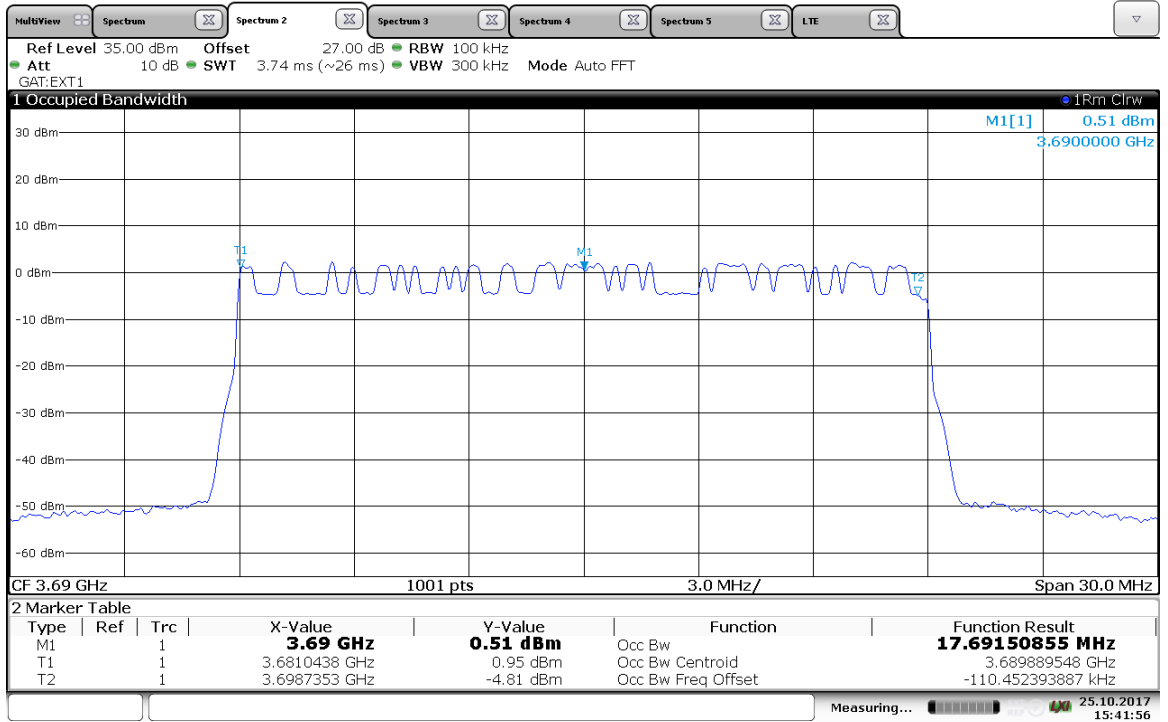
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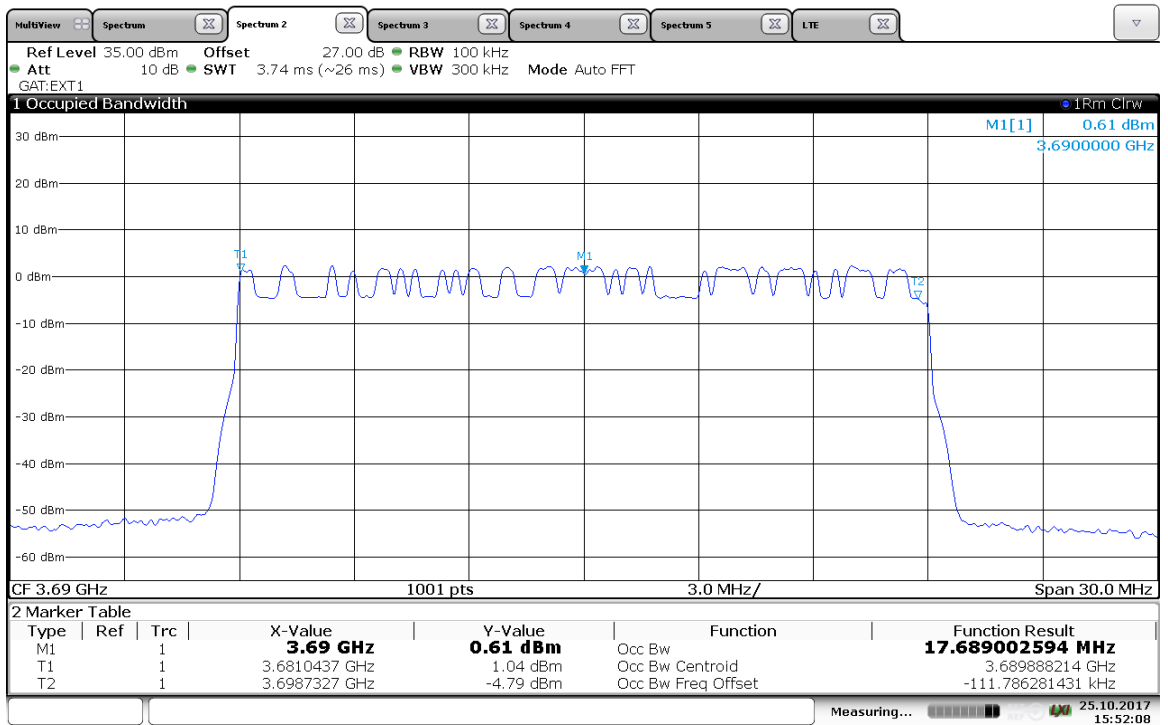
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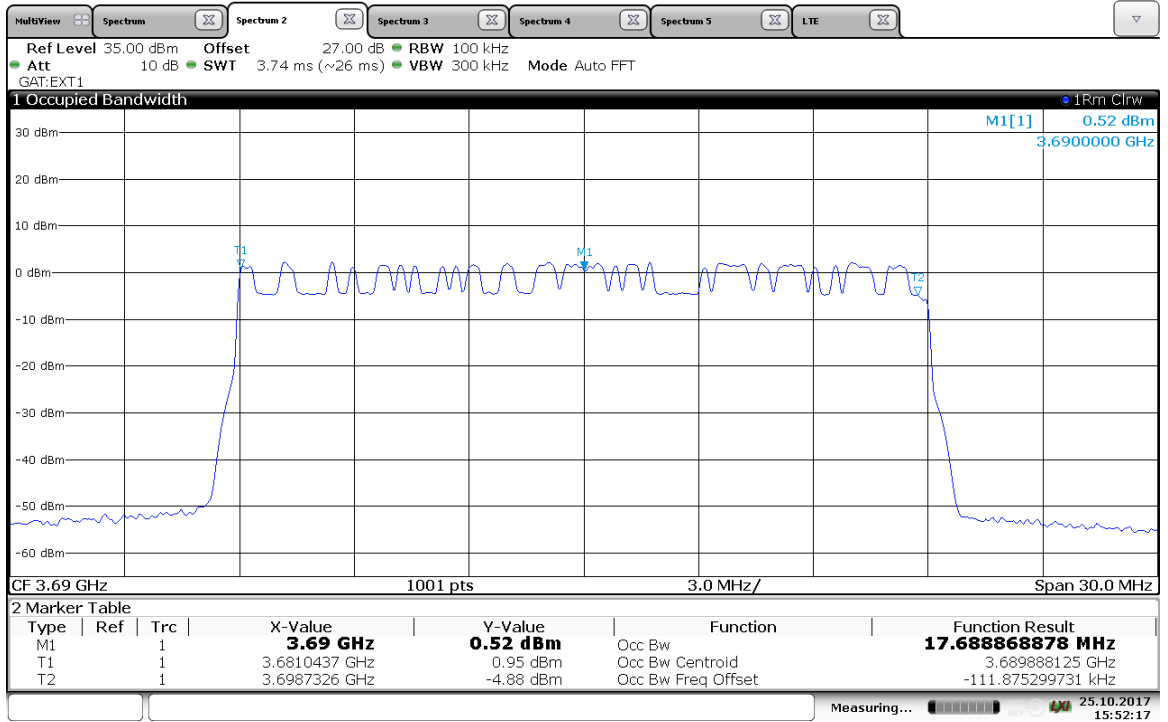
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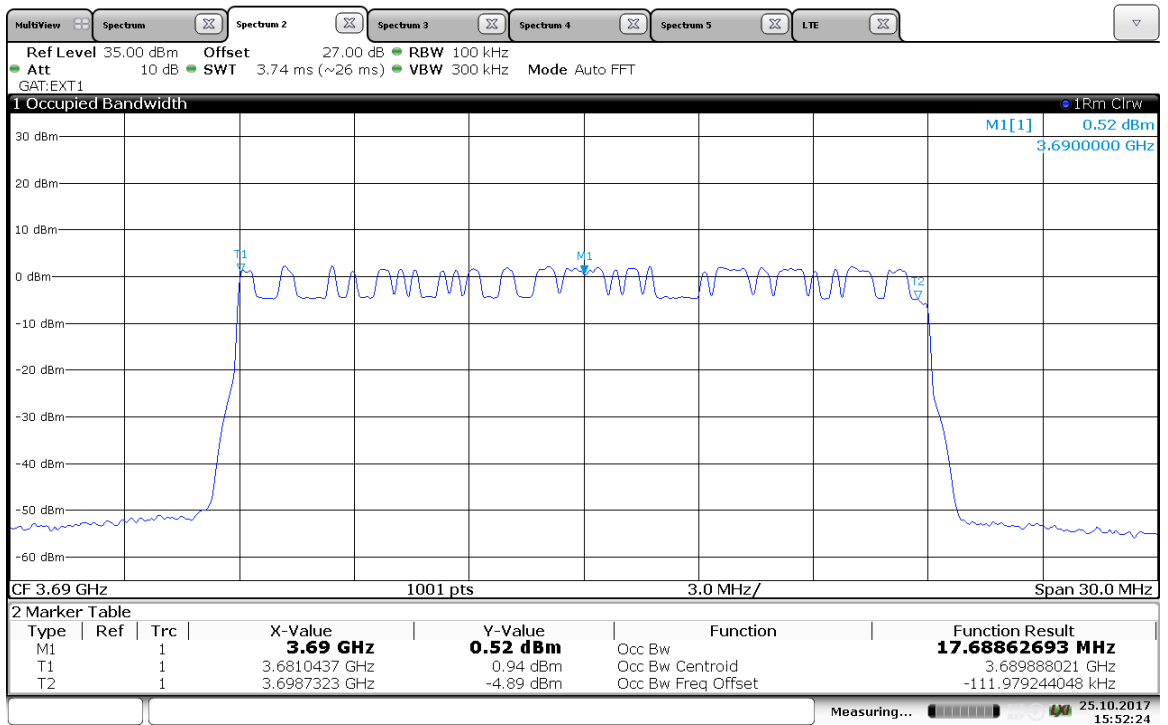
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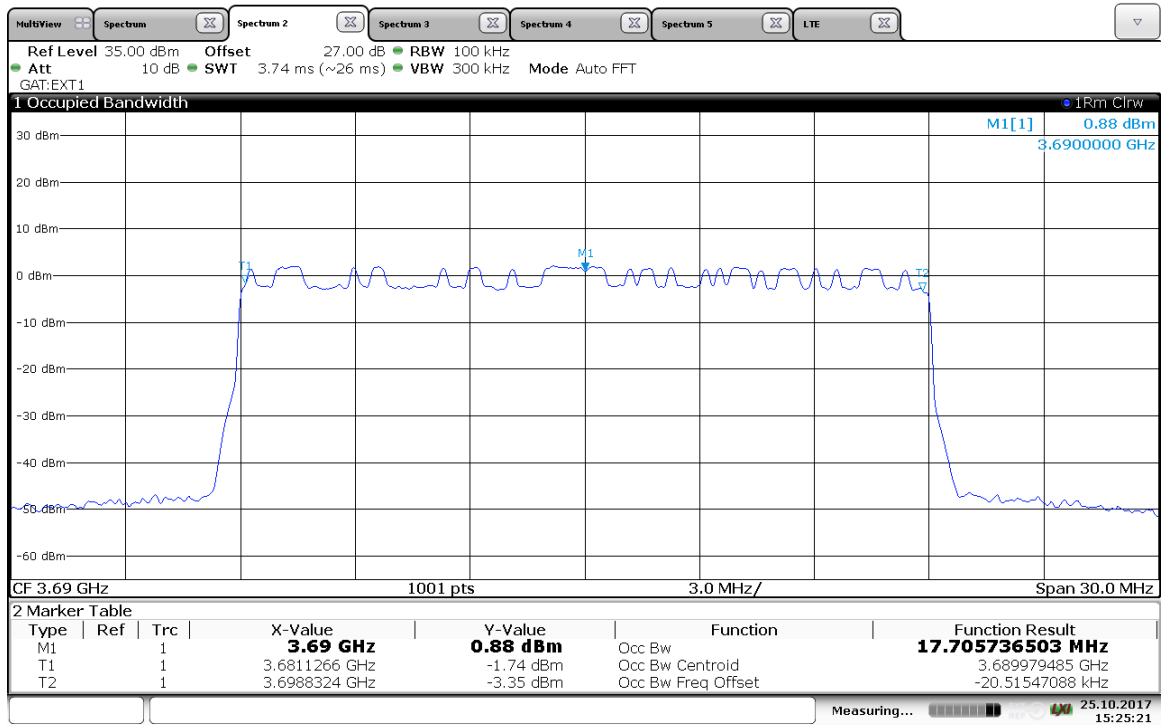
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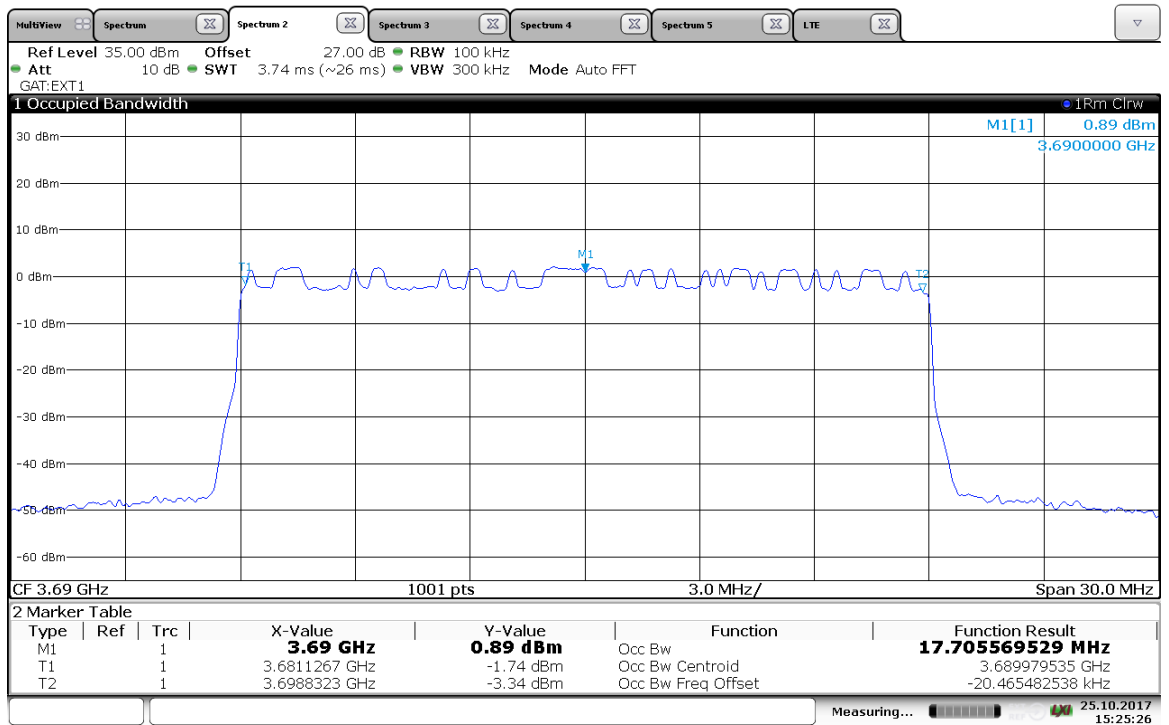
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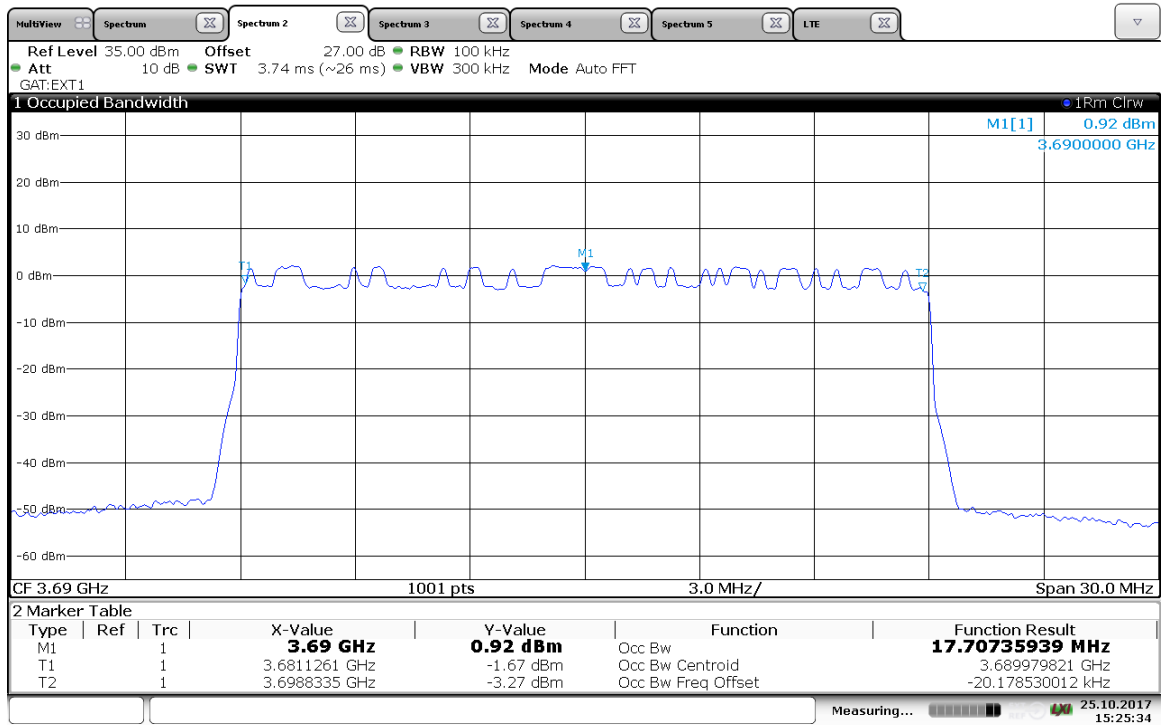
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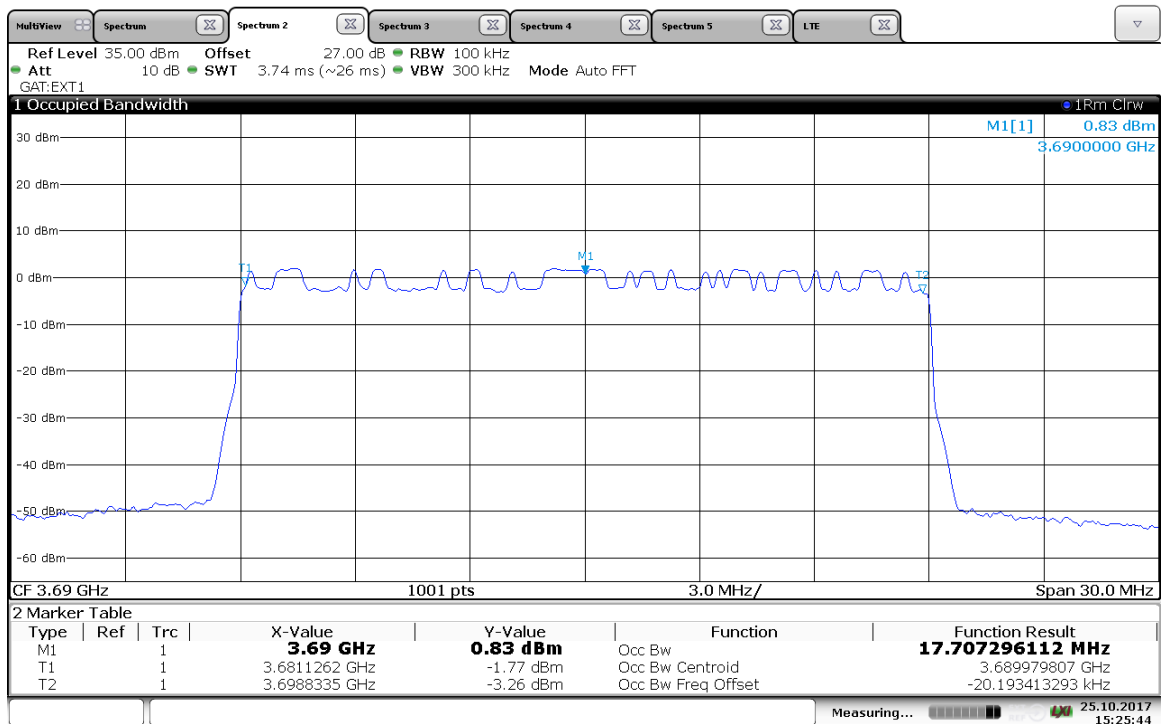
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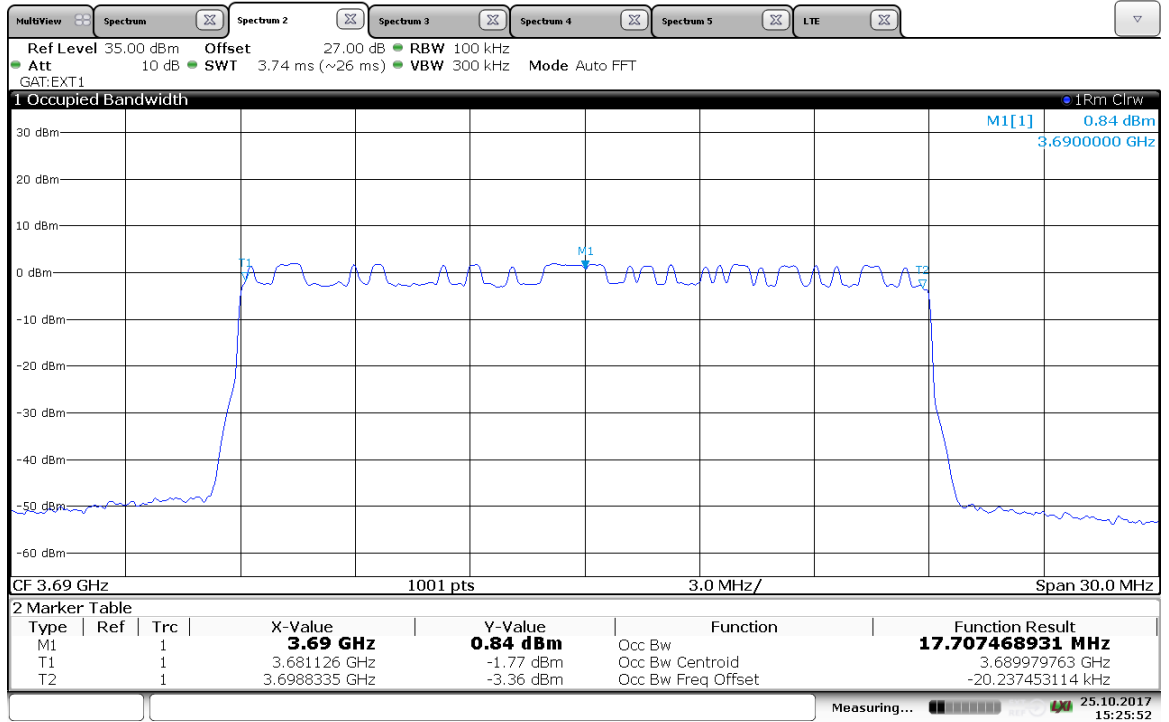
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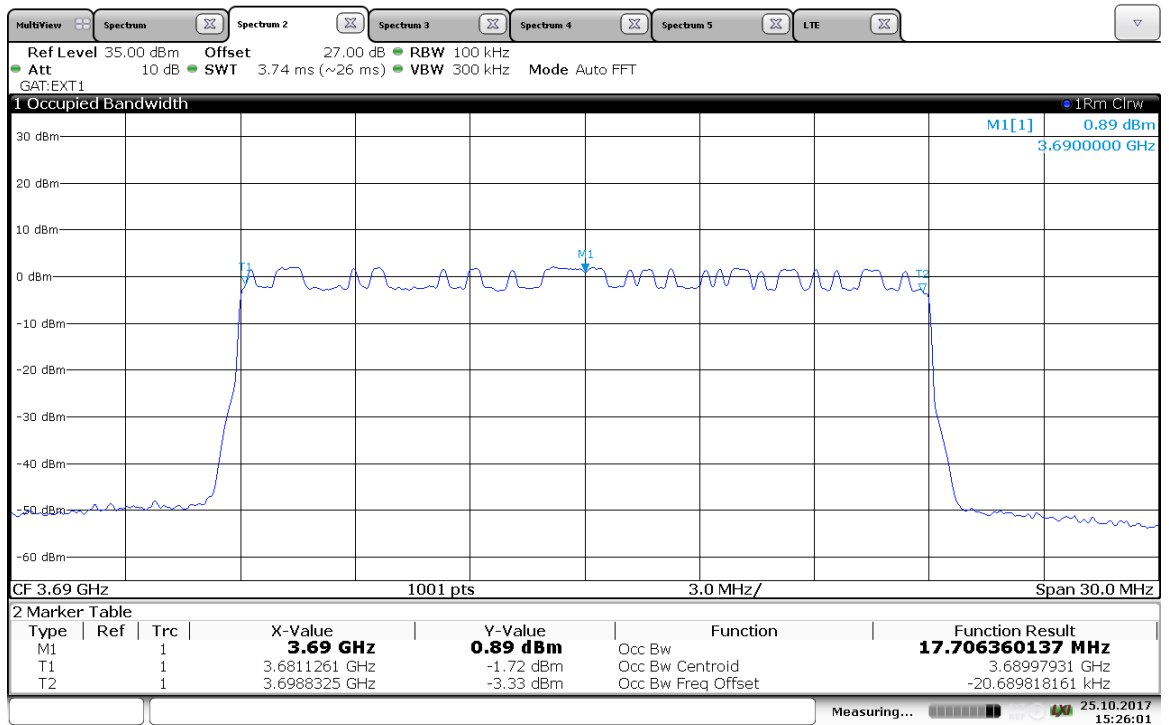
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15:25:45 25.10.2017

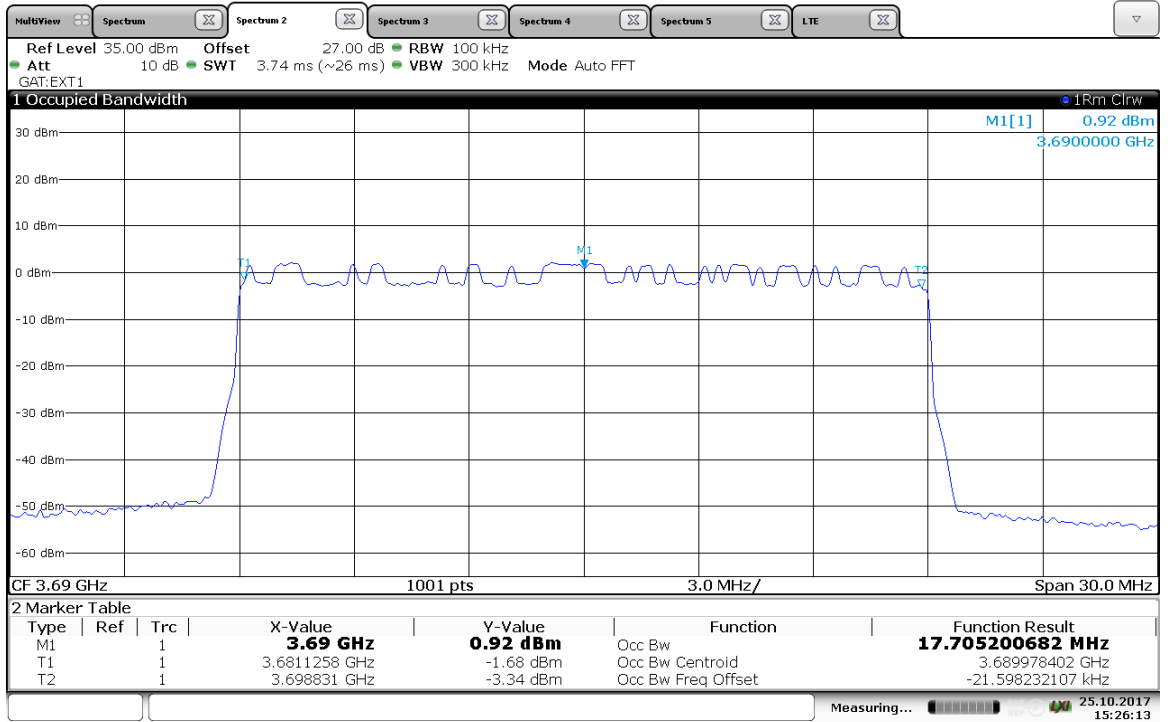


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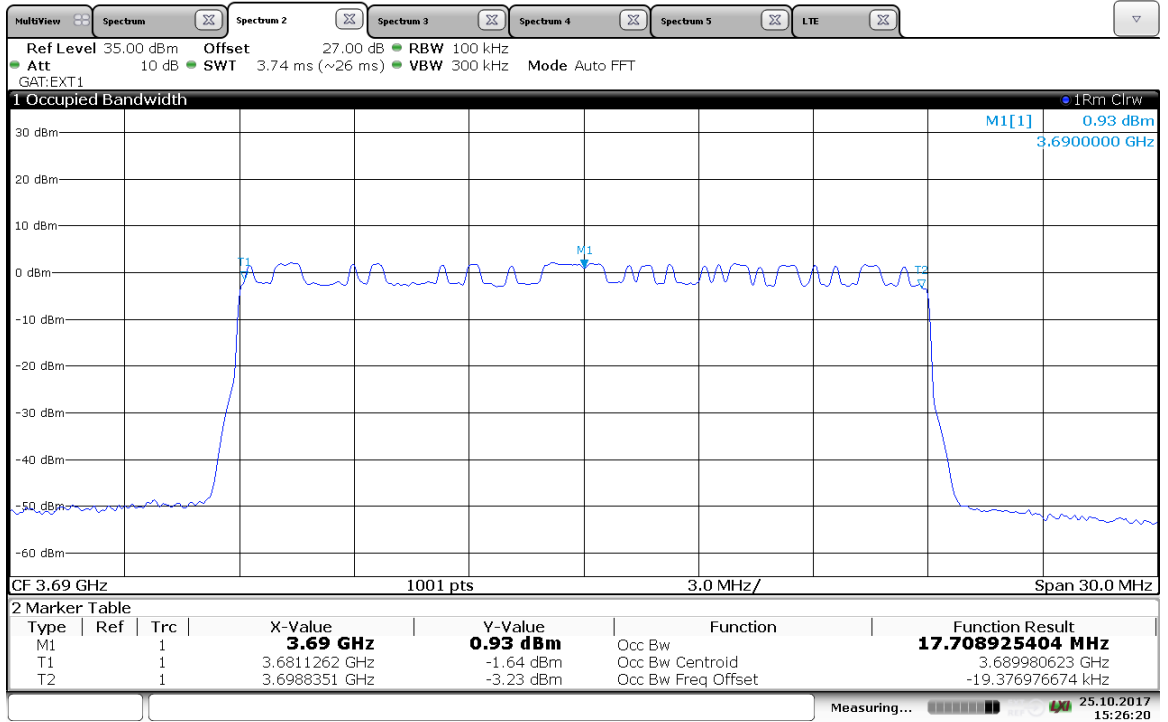


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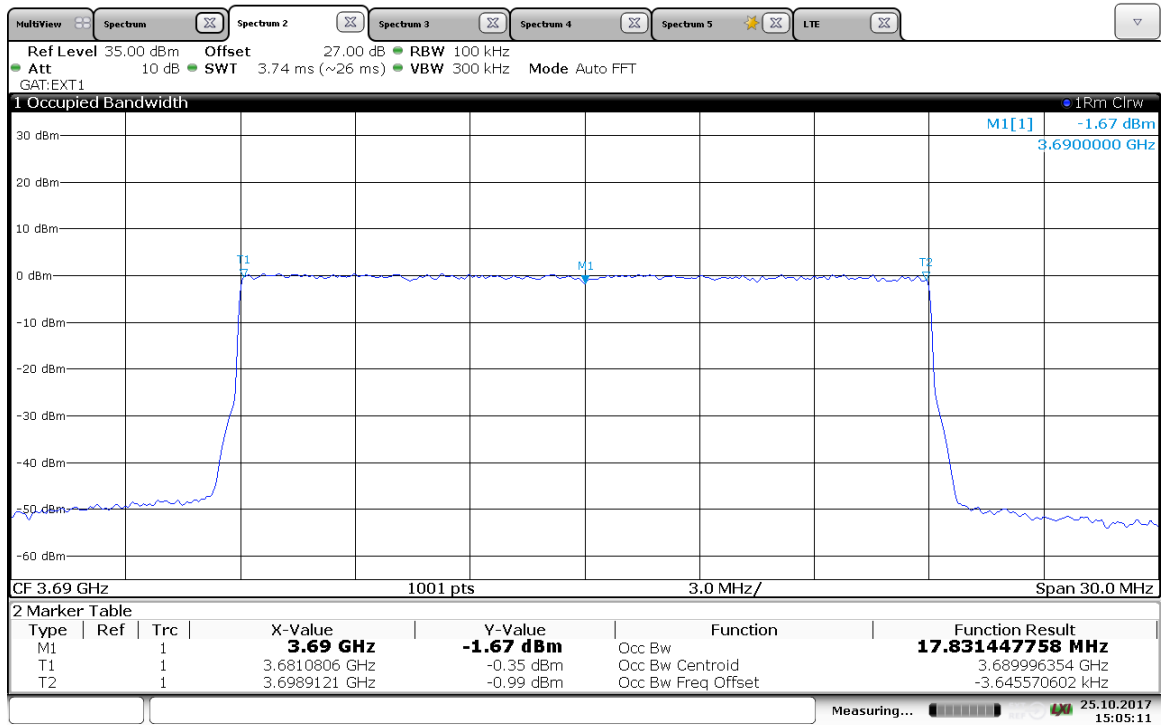




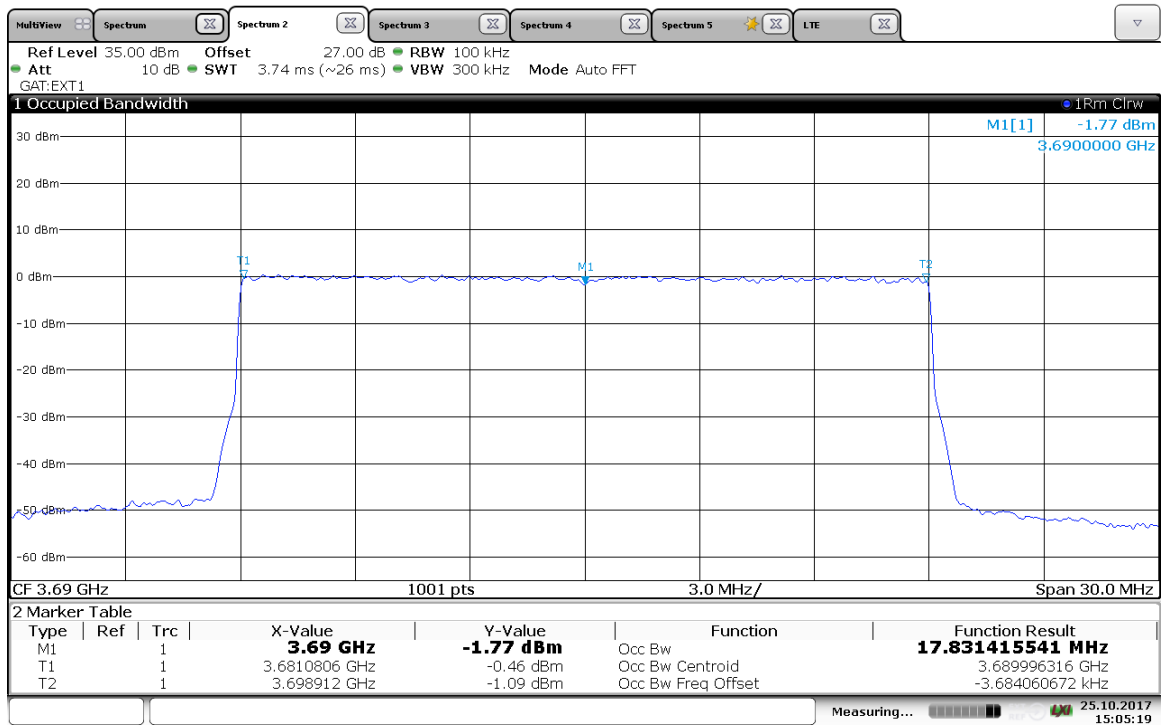
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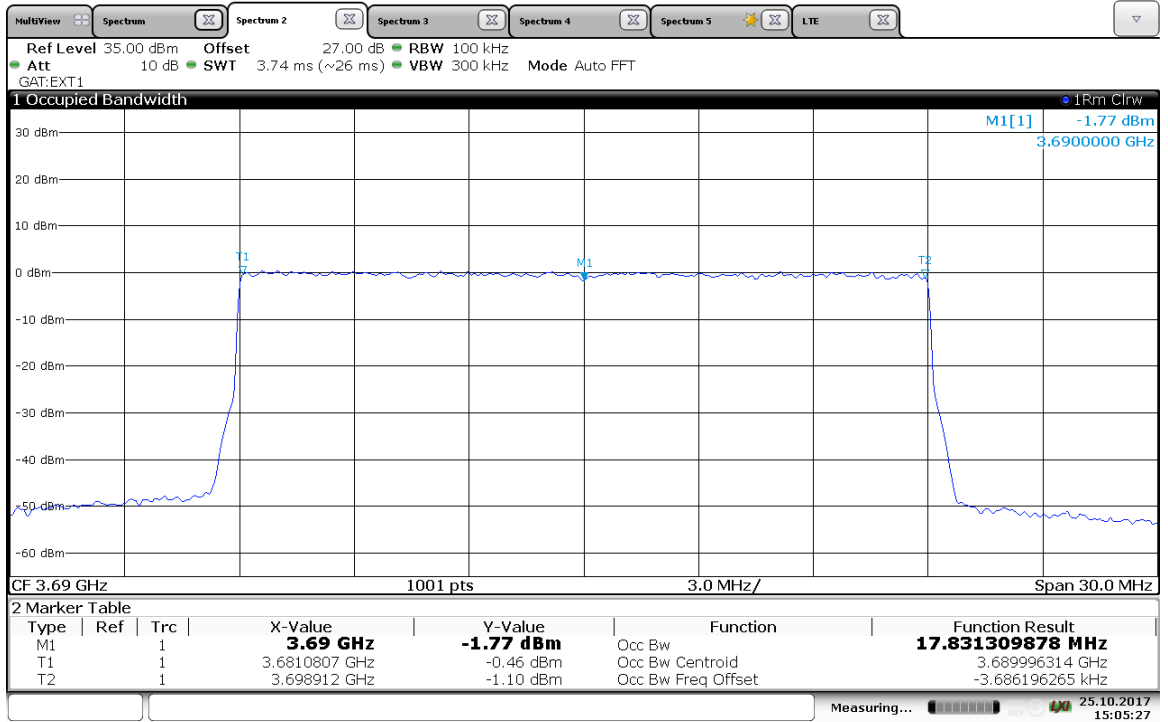
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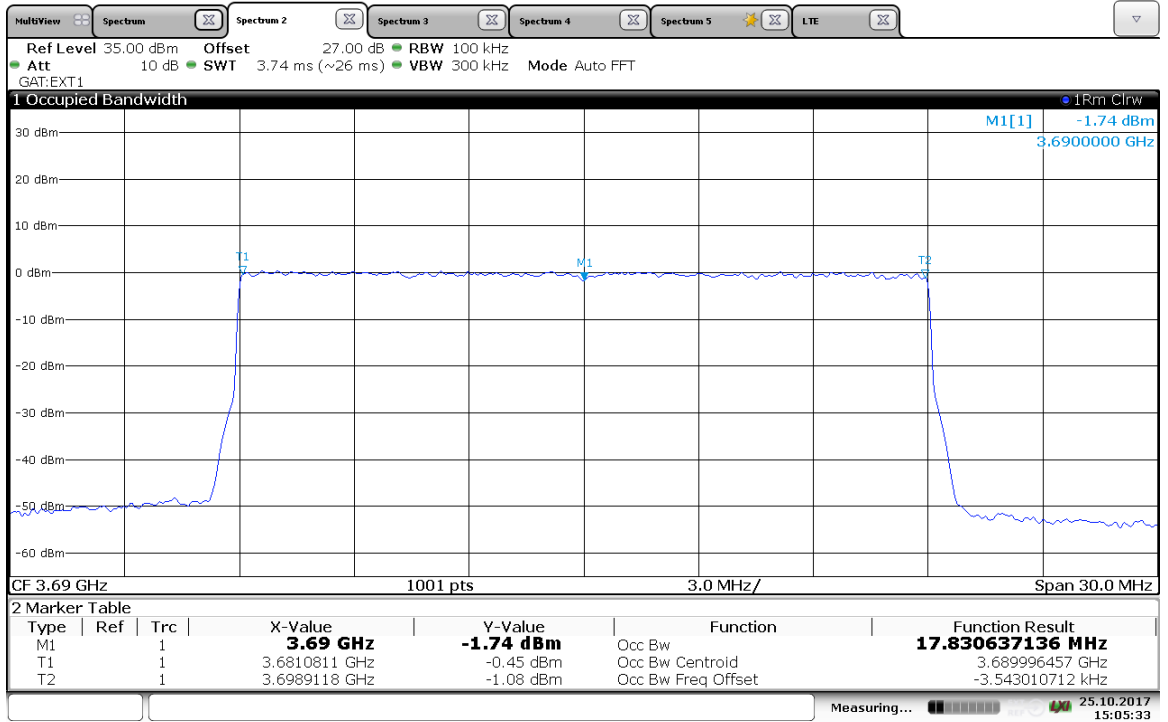
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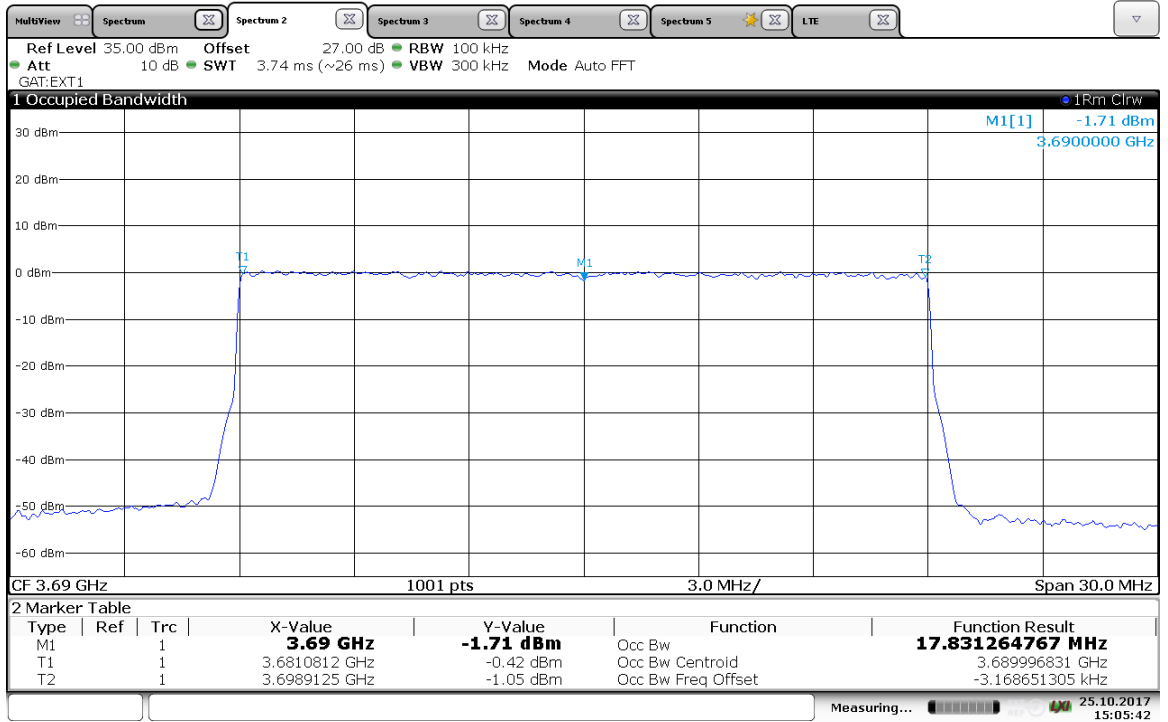
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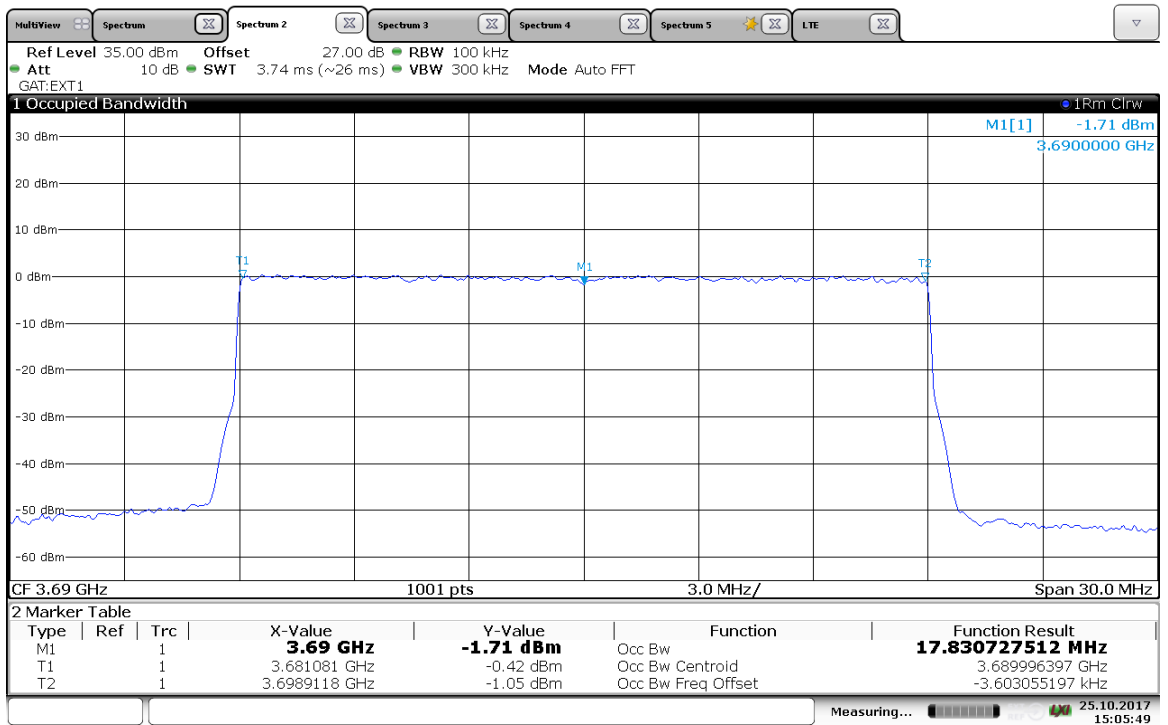
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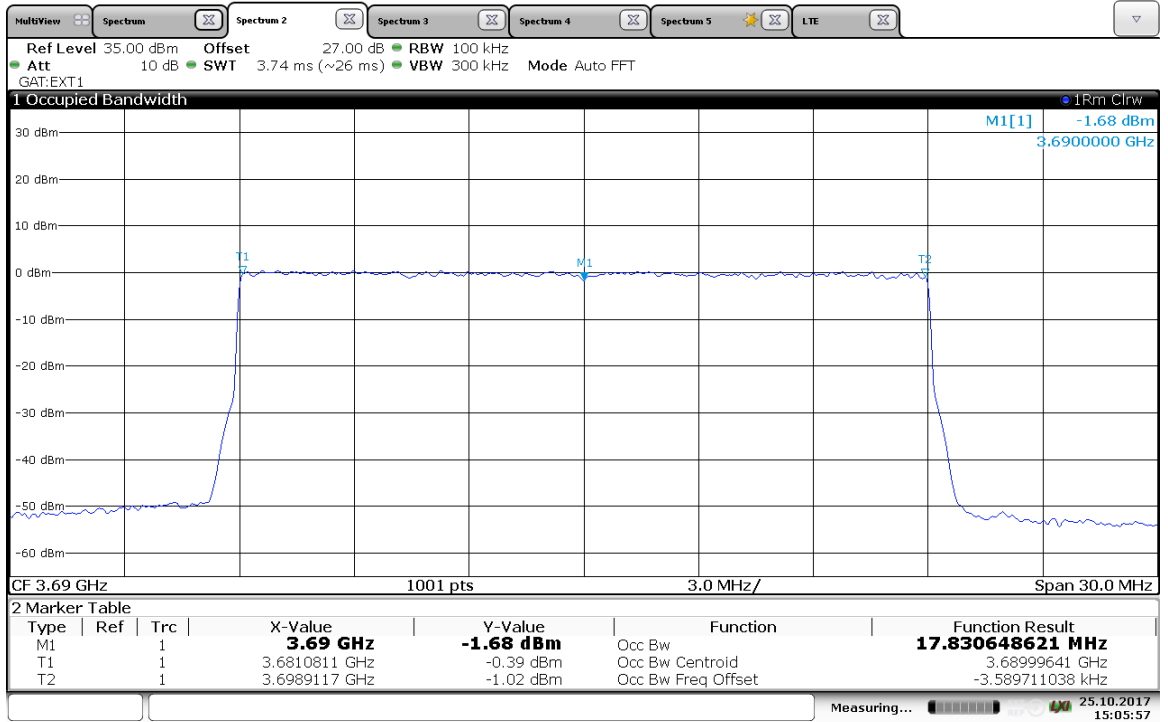
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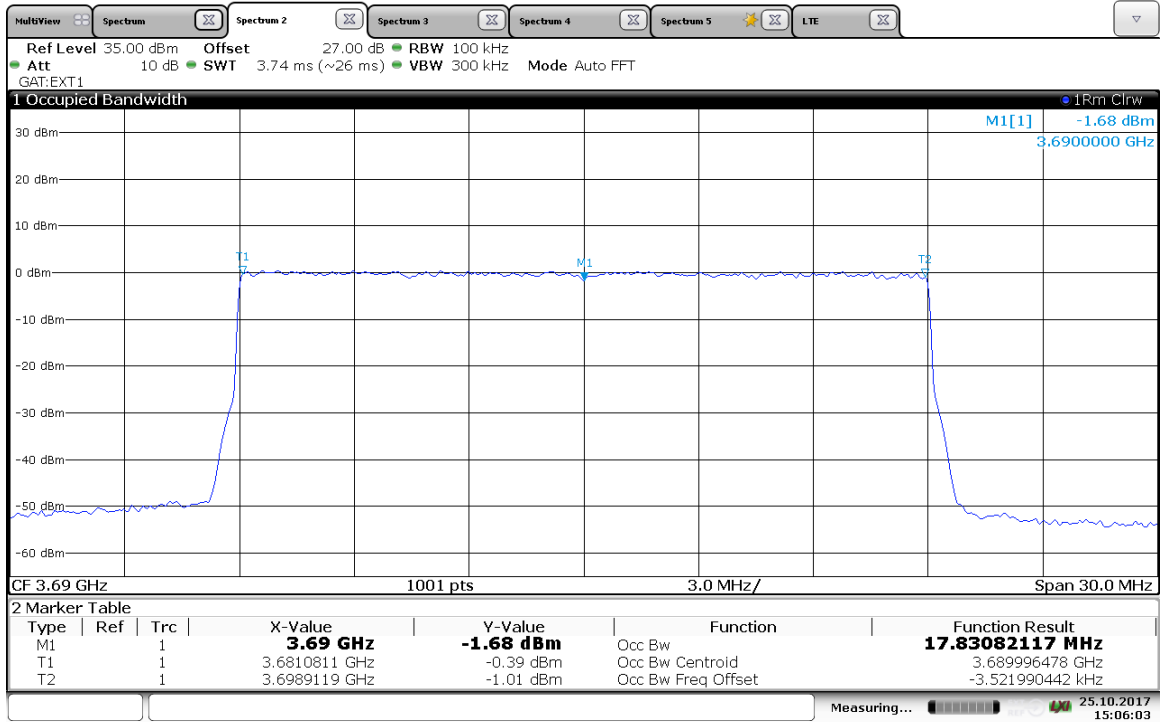
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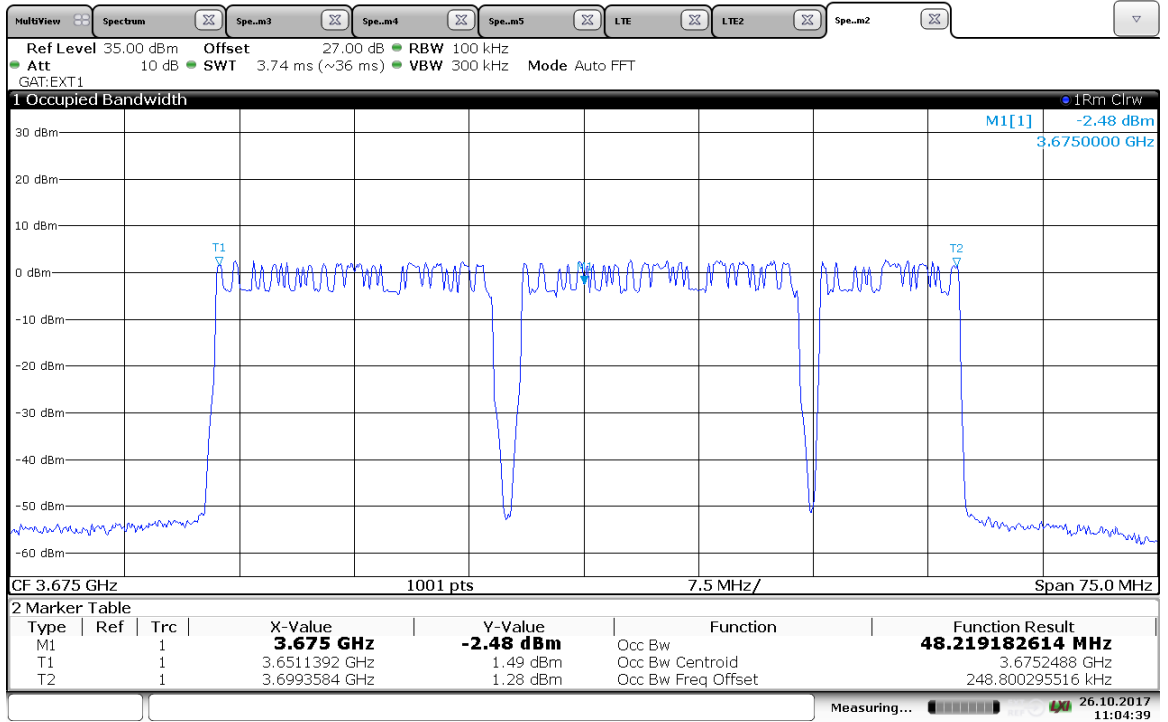
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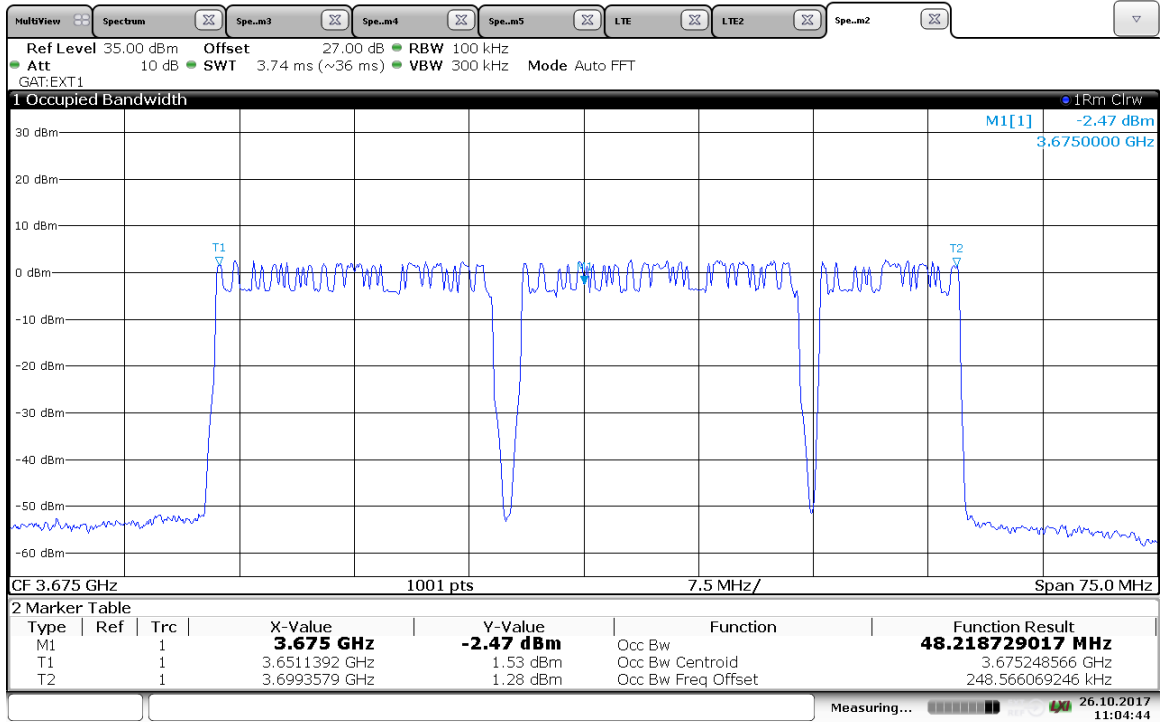
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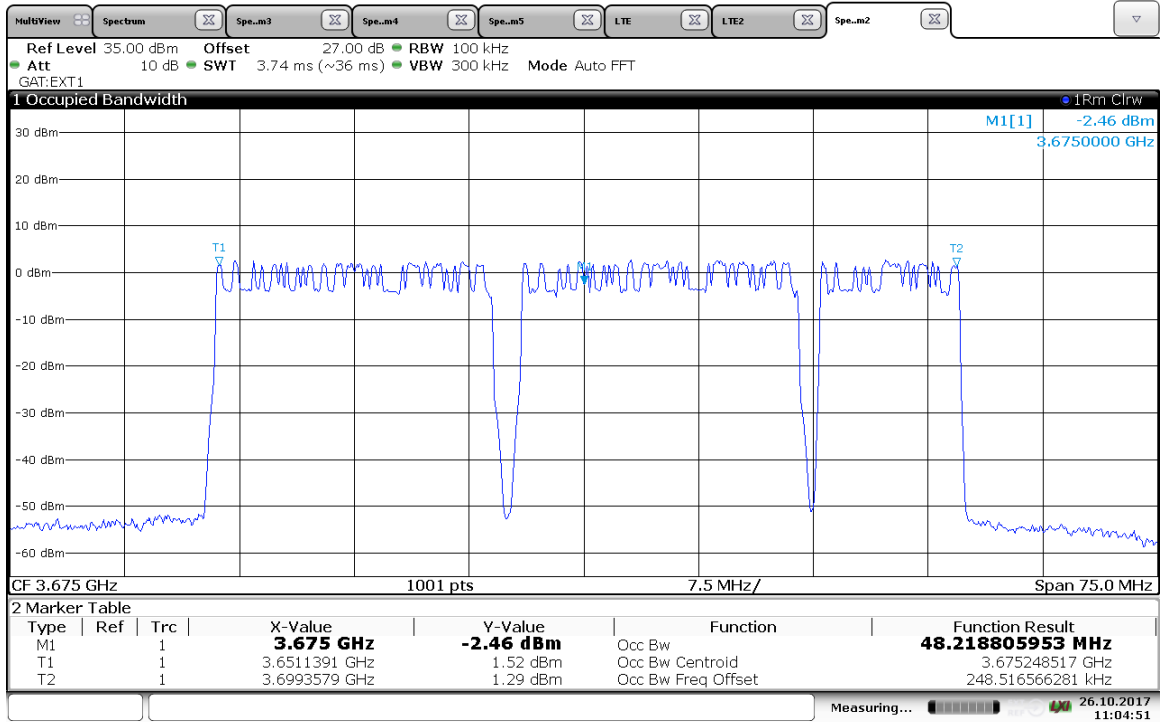
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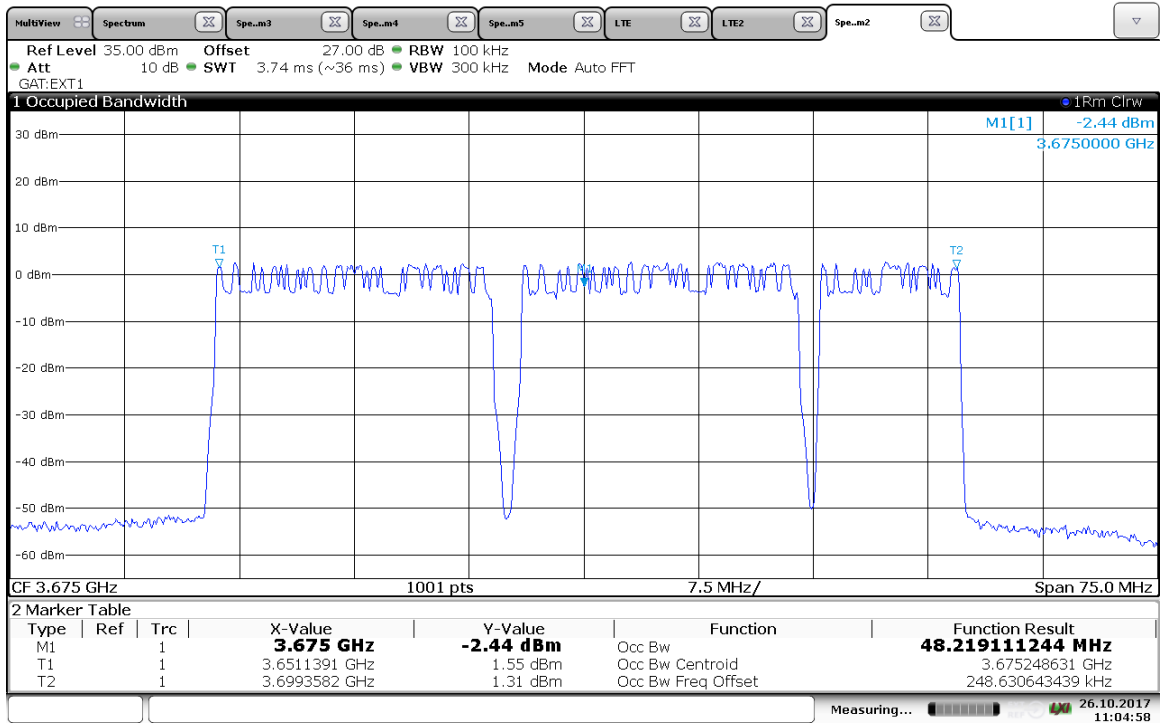
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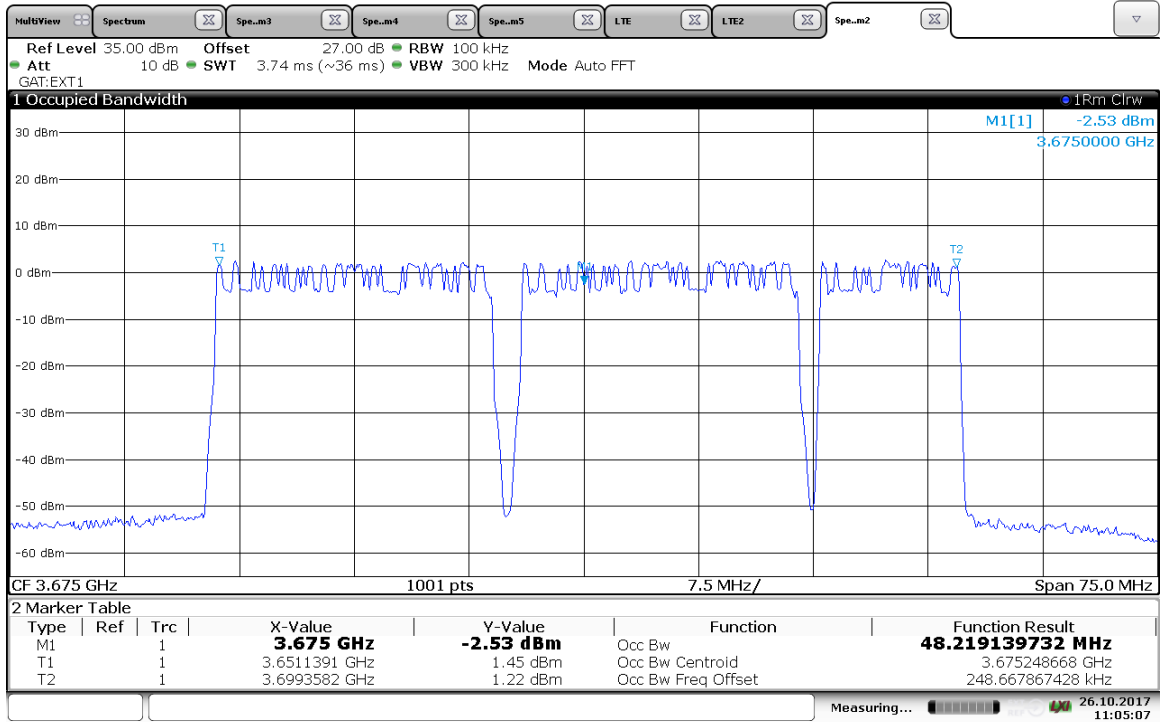
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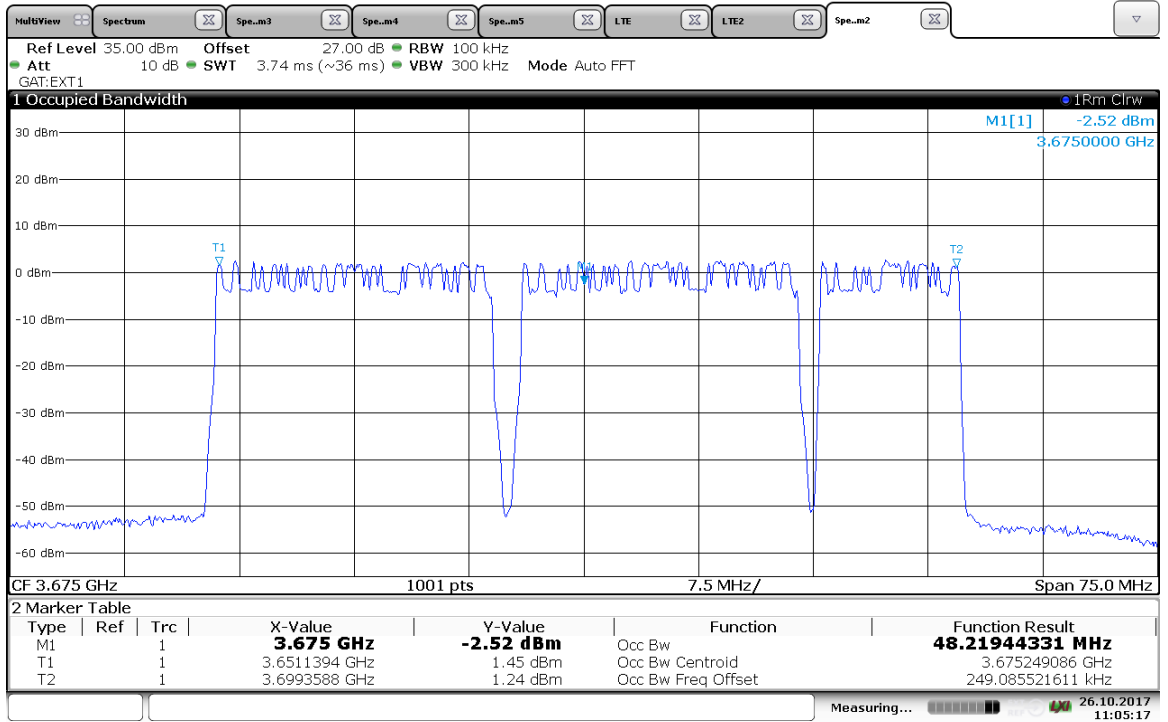
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11:04:59 26.10.2017

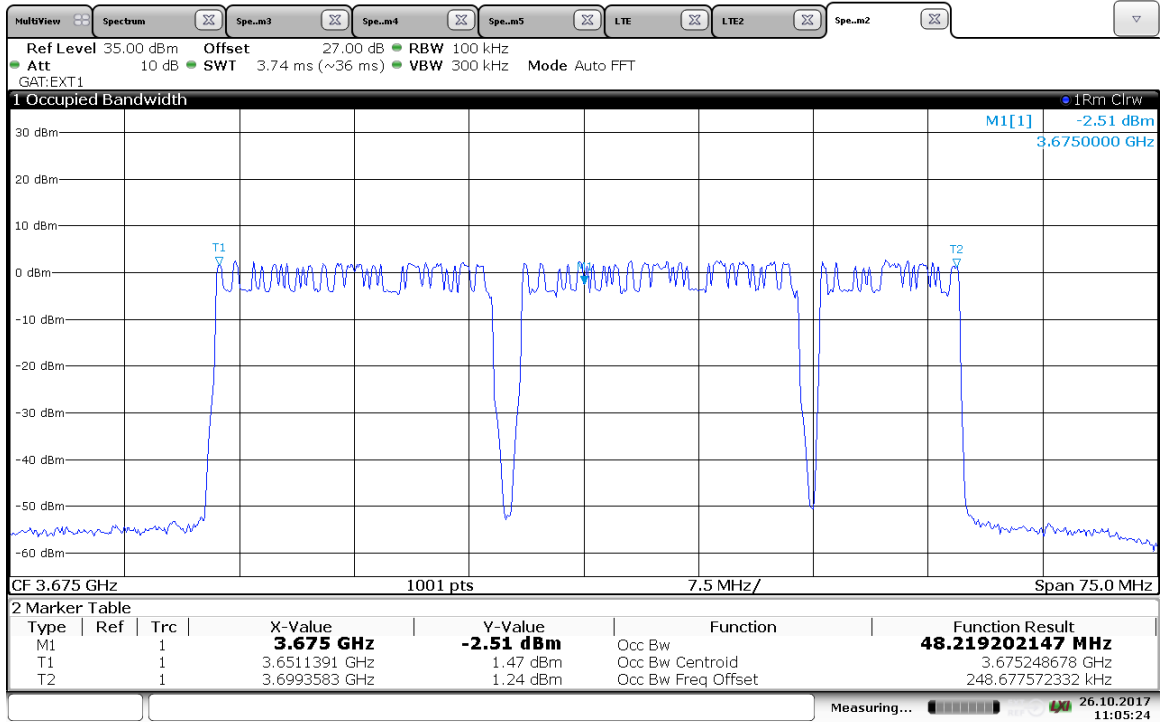


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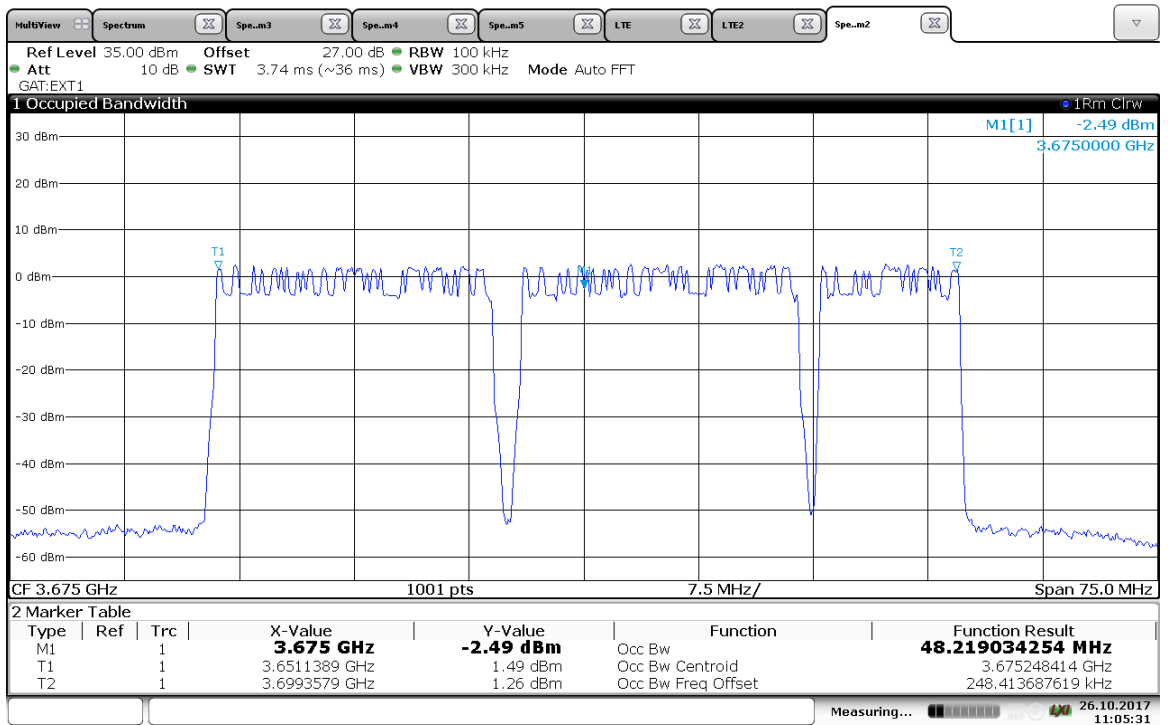


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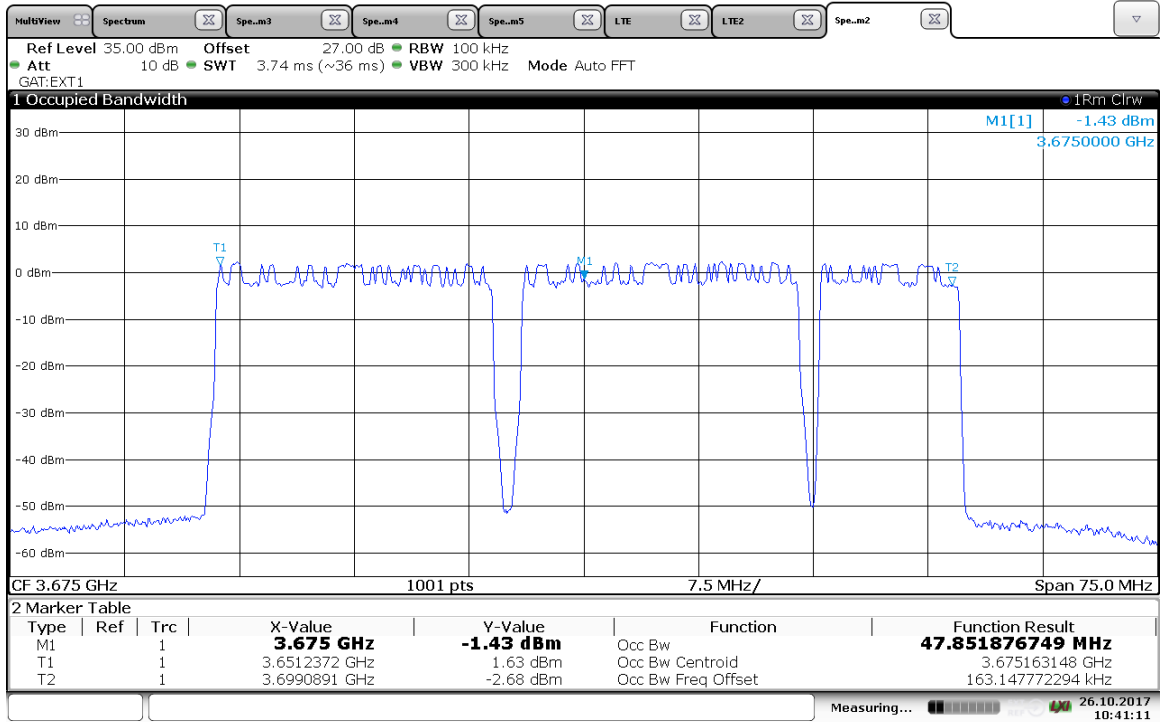




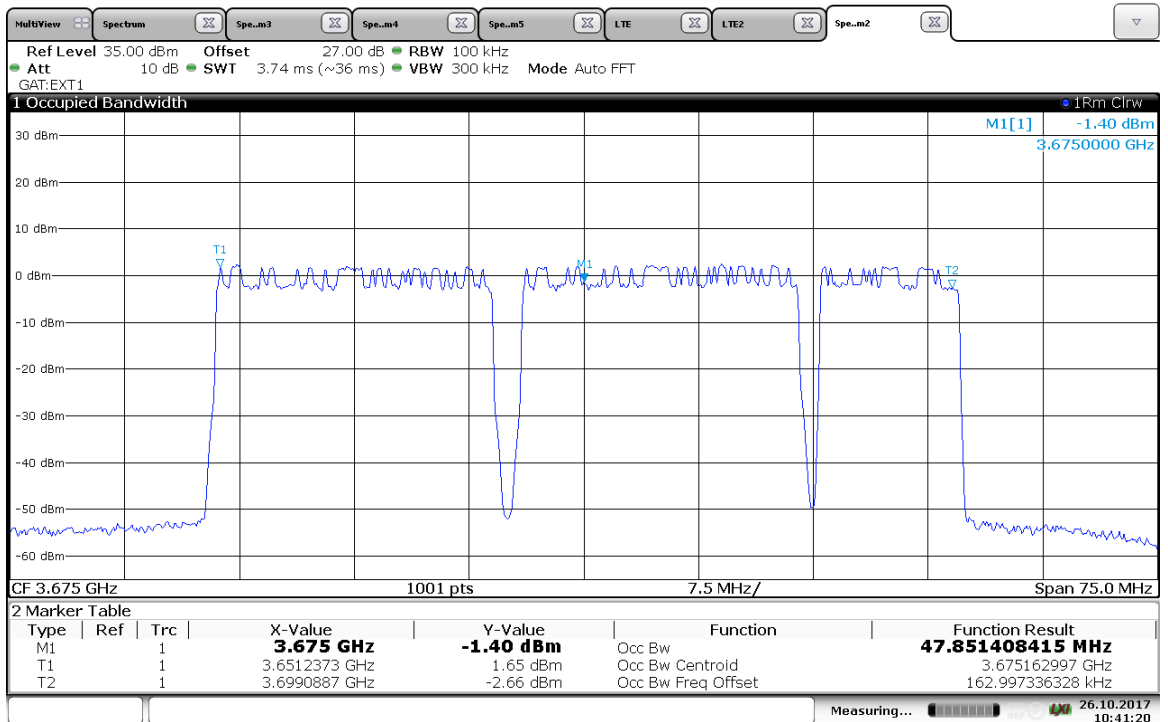
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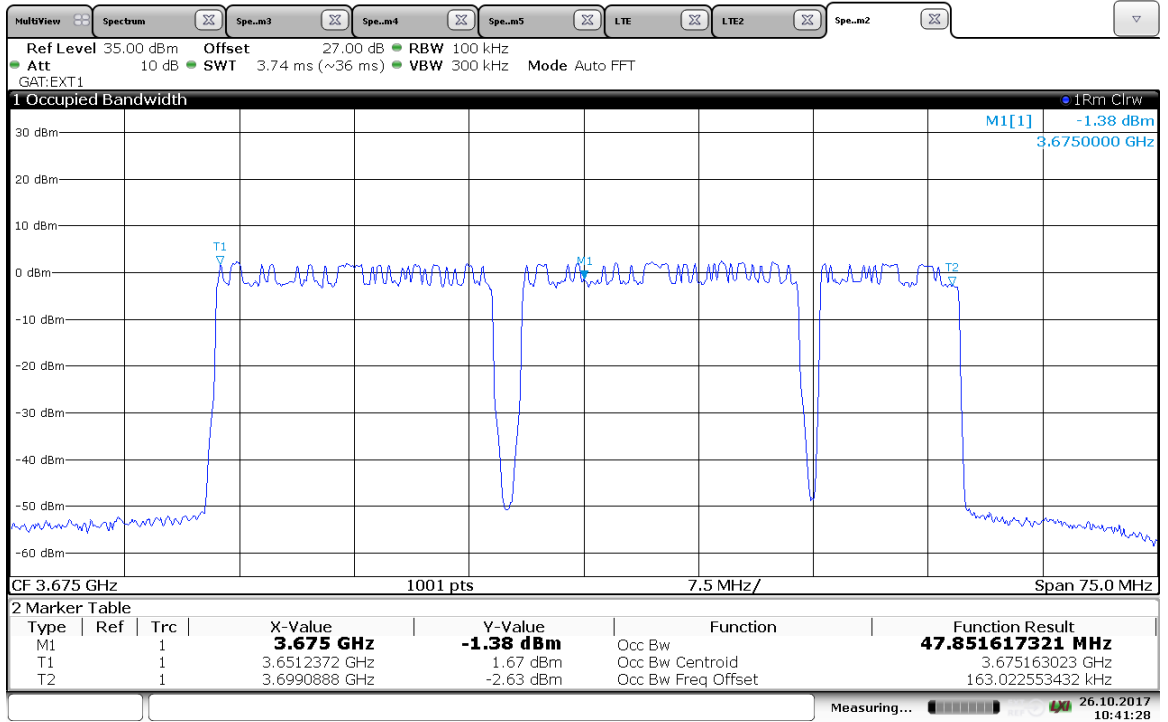
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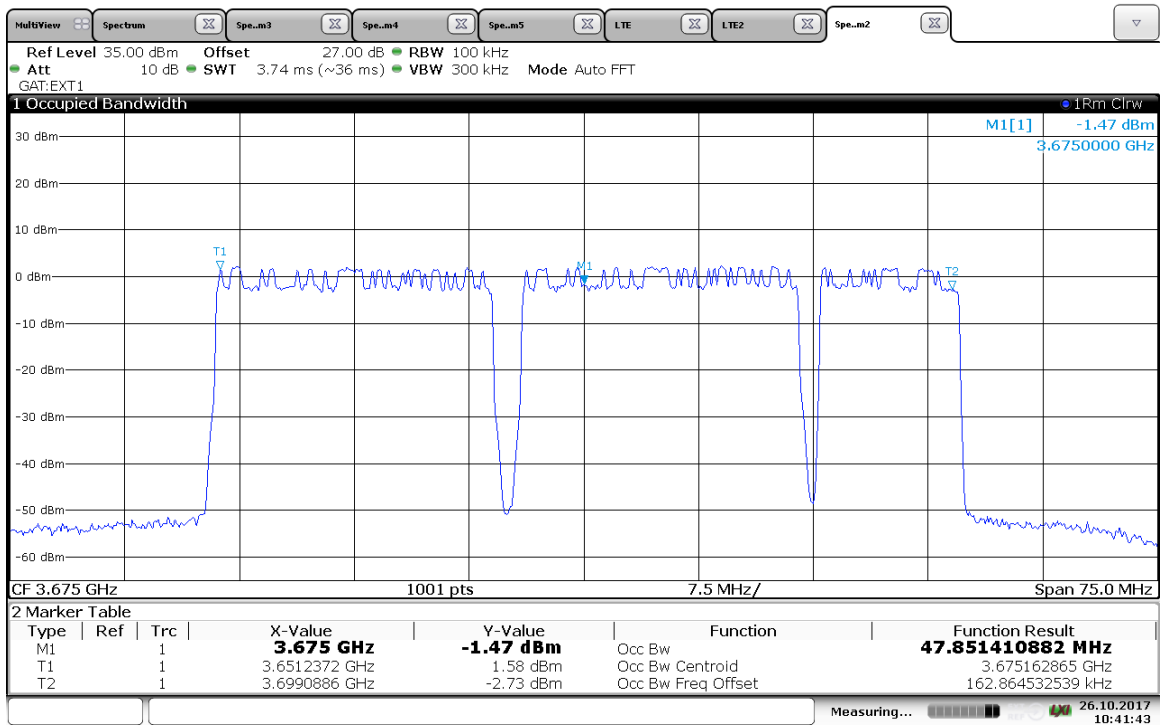
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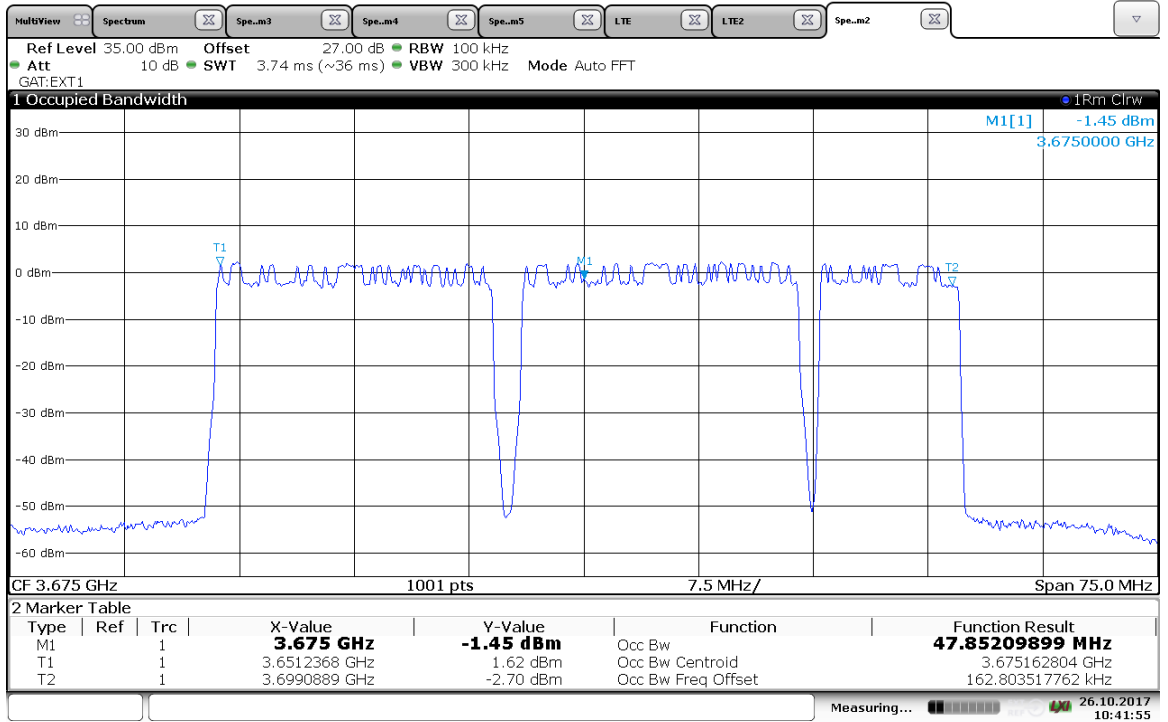
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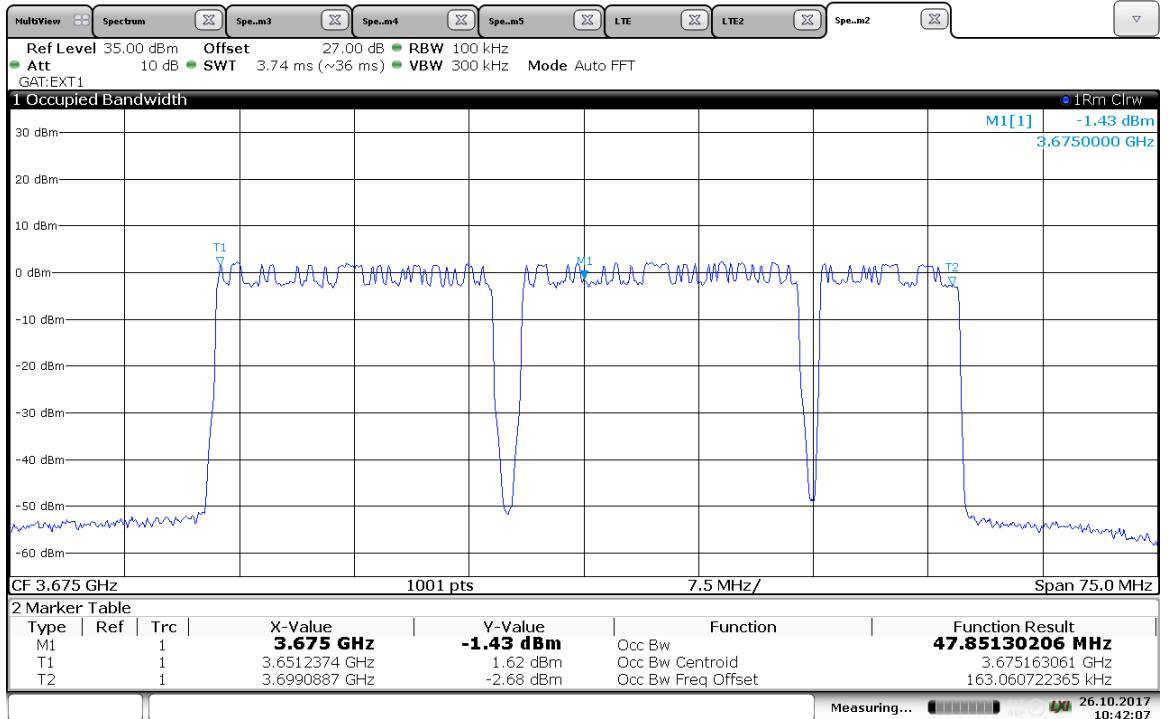
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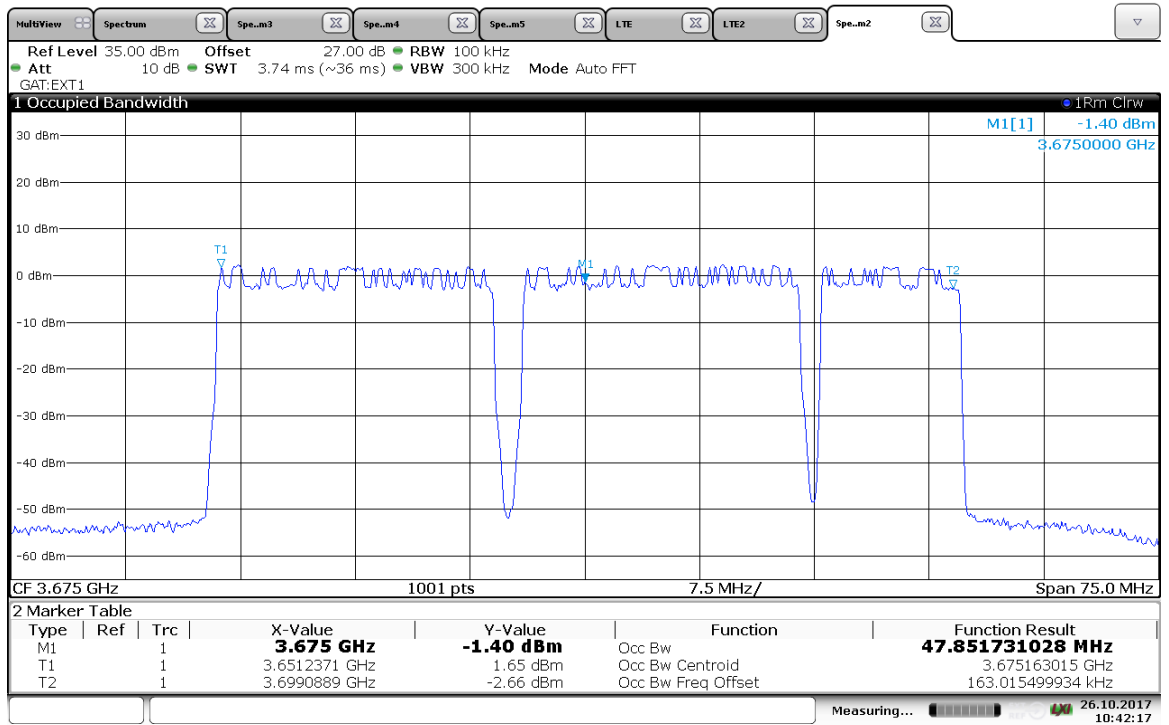
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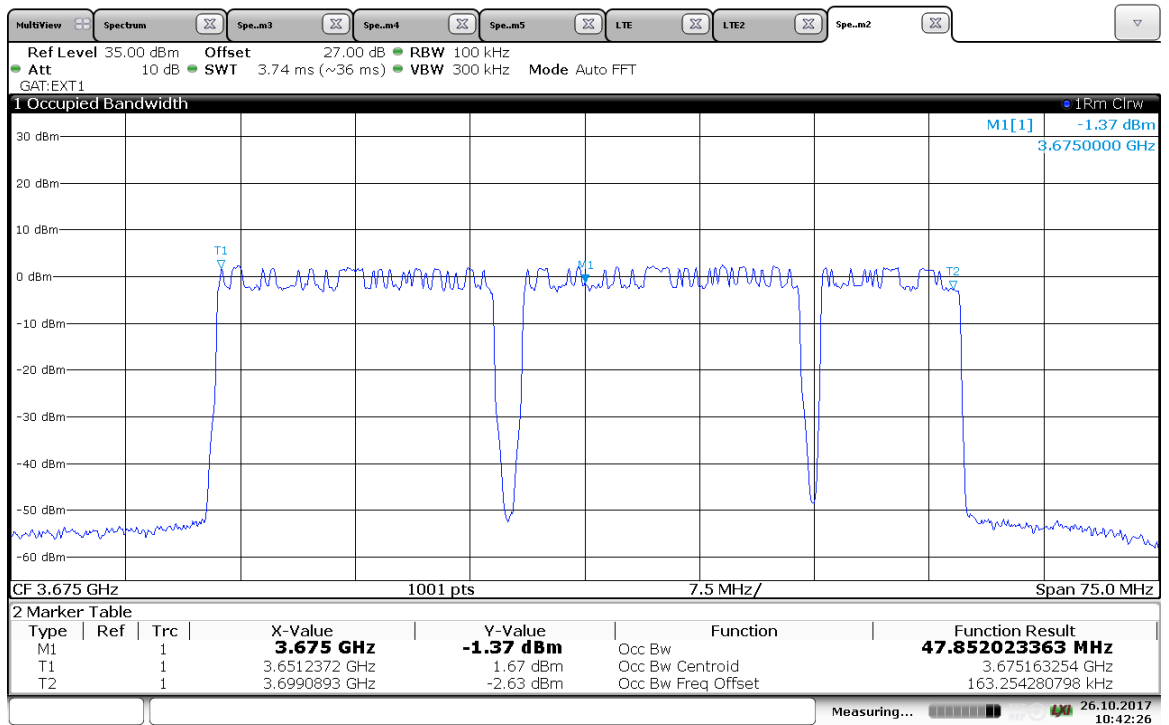
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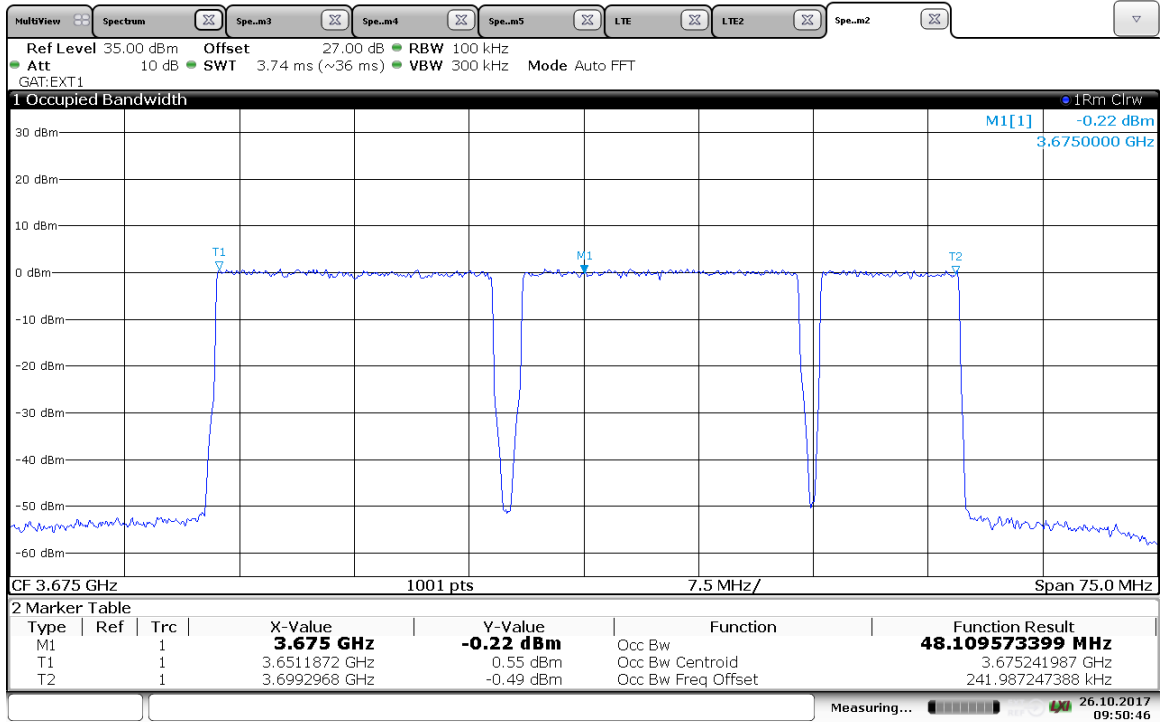
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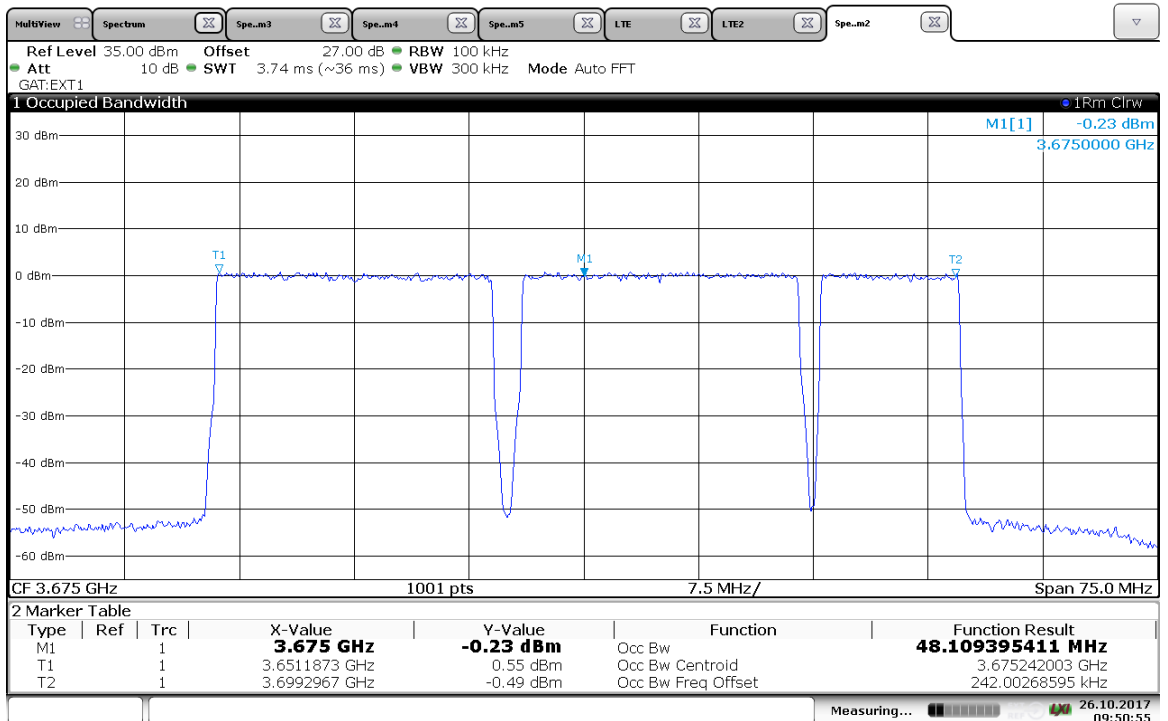
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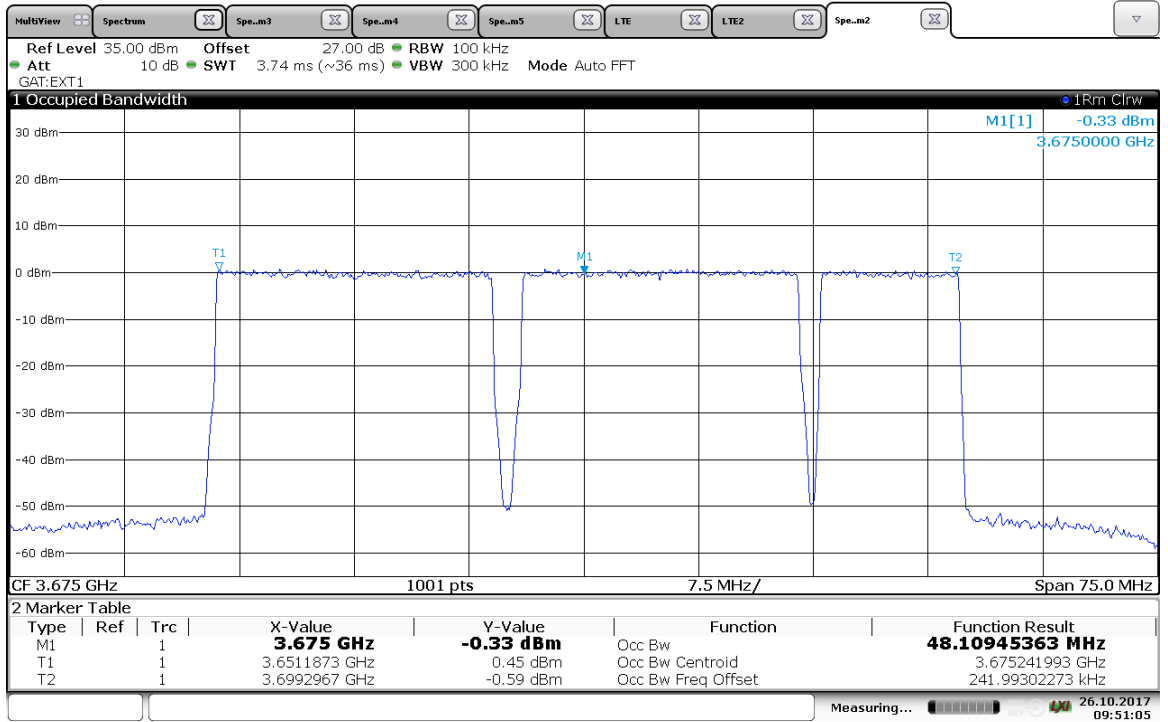
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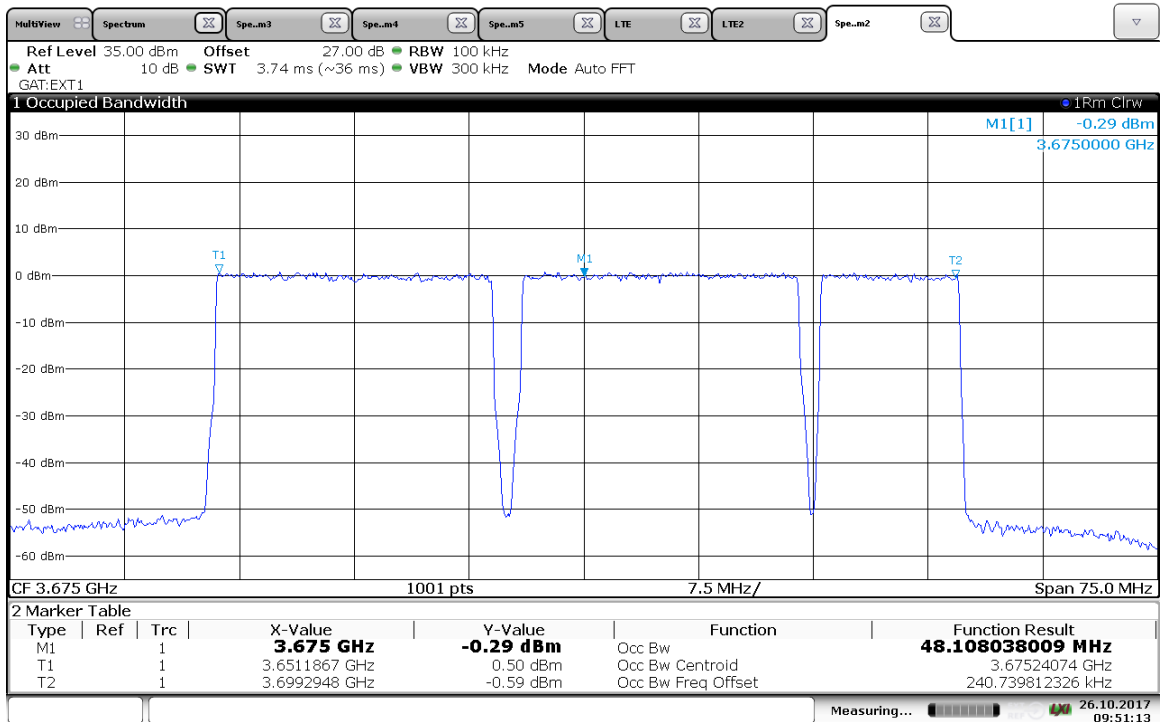
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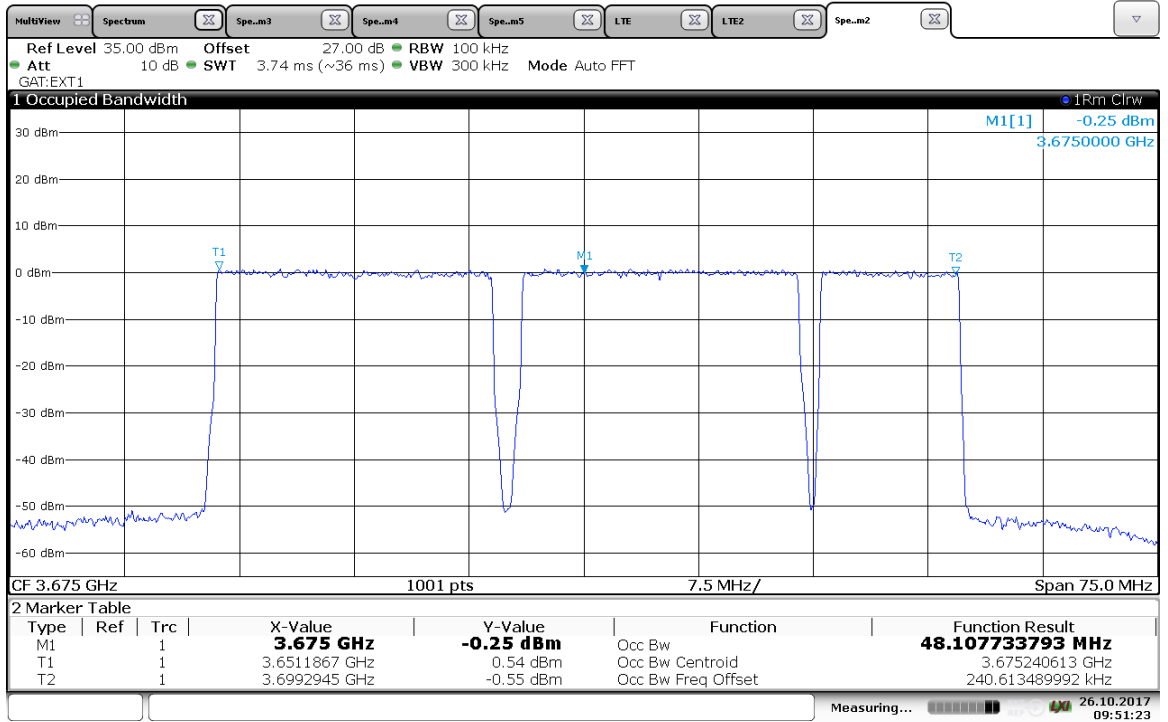
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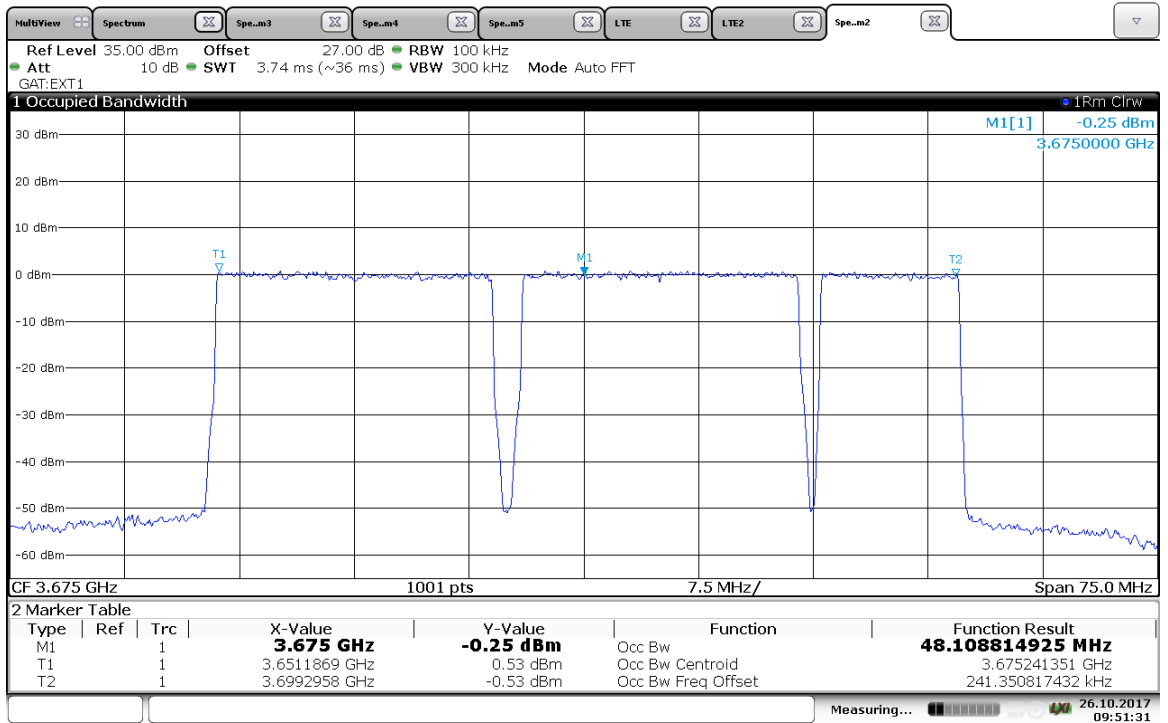
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09:51:14 26.10.2017

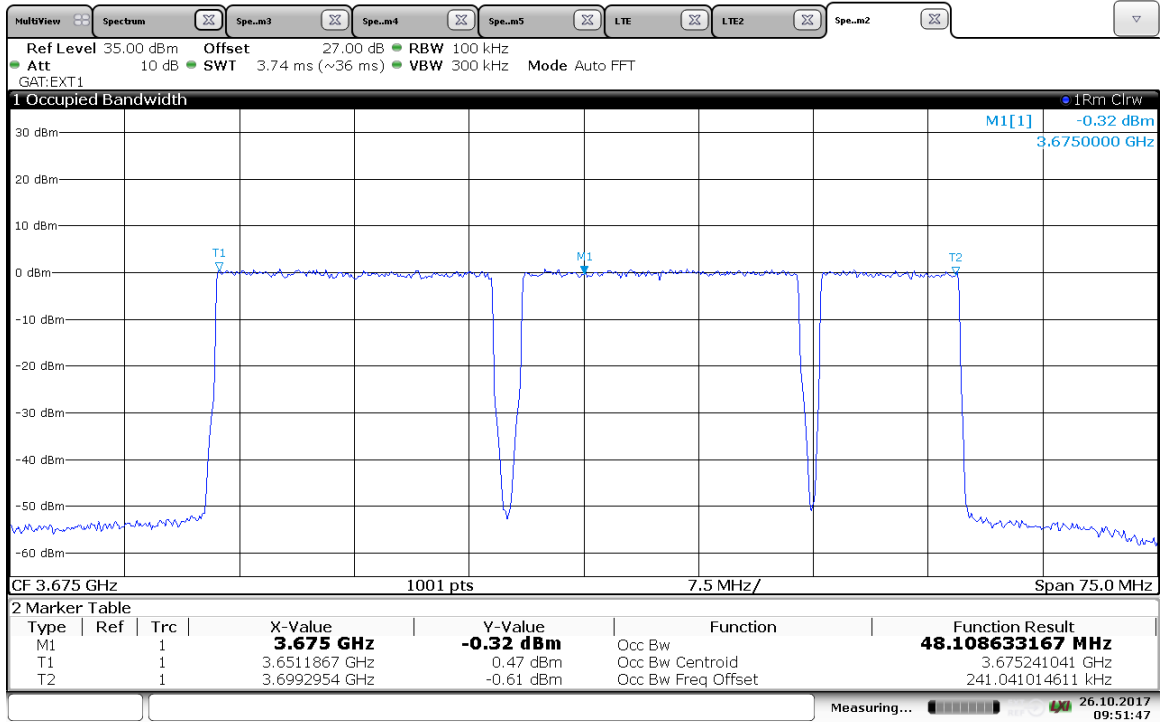


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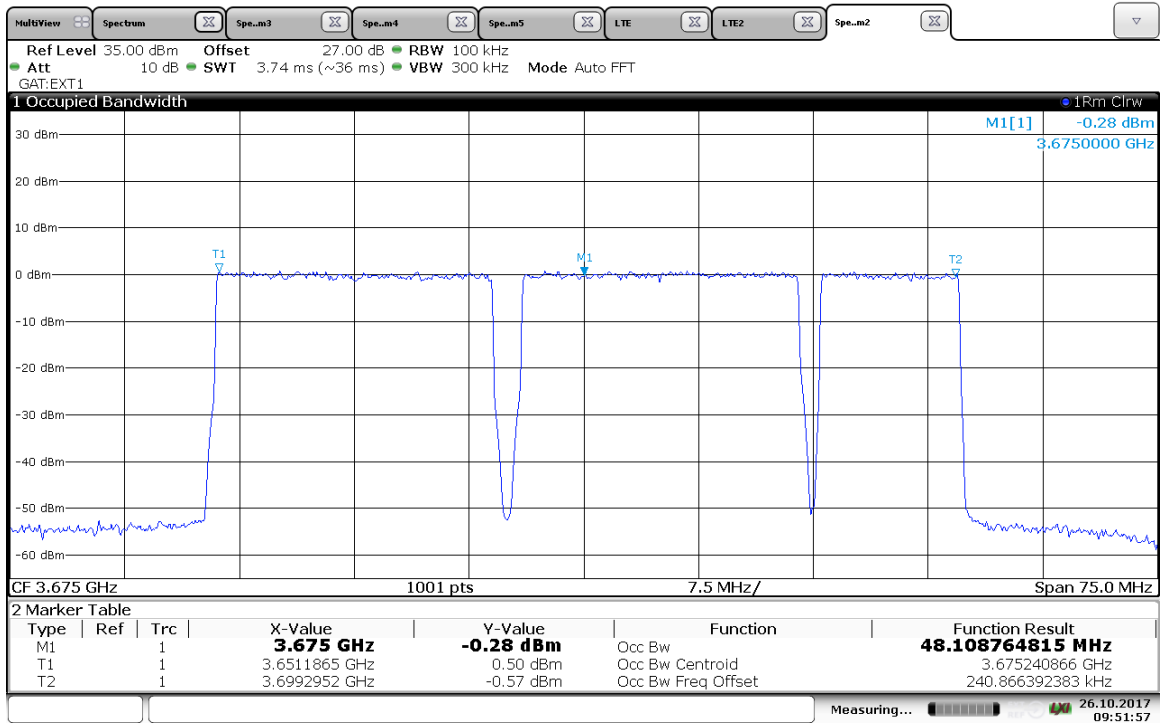


09:51:32 26.10.2017





09:51:47 26.10.2017



09:51:57 26.10.2017

### 3.4. Spurious Emission at Portenna Terminals

#### 3.4.1. Applicable Standard: FCC §2.1051, §90.1323

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 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

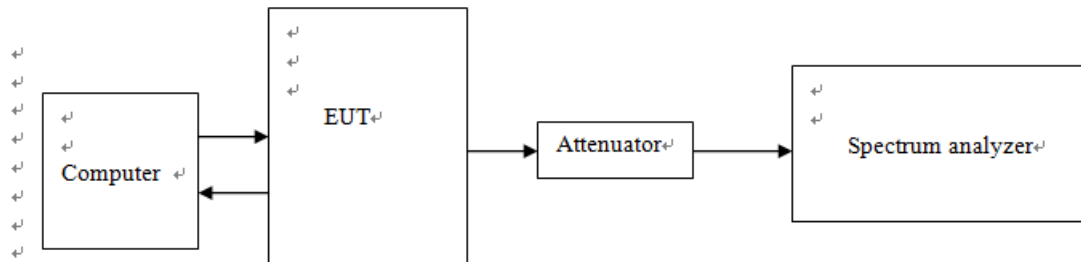
The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in §2.1051.

#### 3.4.2. Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Signal & Spectrum Analyzer	FSW26	SB12724/01	2017.6.19	2018.6.18

**\*statement of traceability:** SMQ attests that all calibration has been performed per the A2LA requirements, traceable to NIM.

#### 3.4.3. Test Procedure



The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). 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. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

3.4.4.Environmental Conditions

Temperature:	20 °C
RelativeHumidity:	53 %
ATM Pressure:	1009 mbar

3.4.5.Test Result: Pass

3.4.6.Test Mode: Transmitting LTE

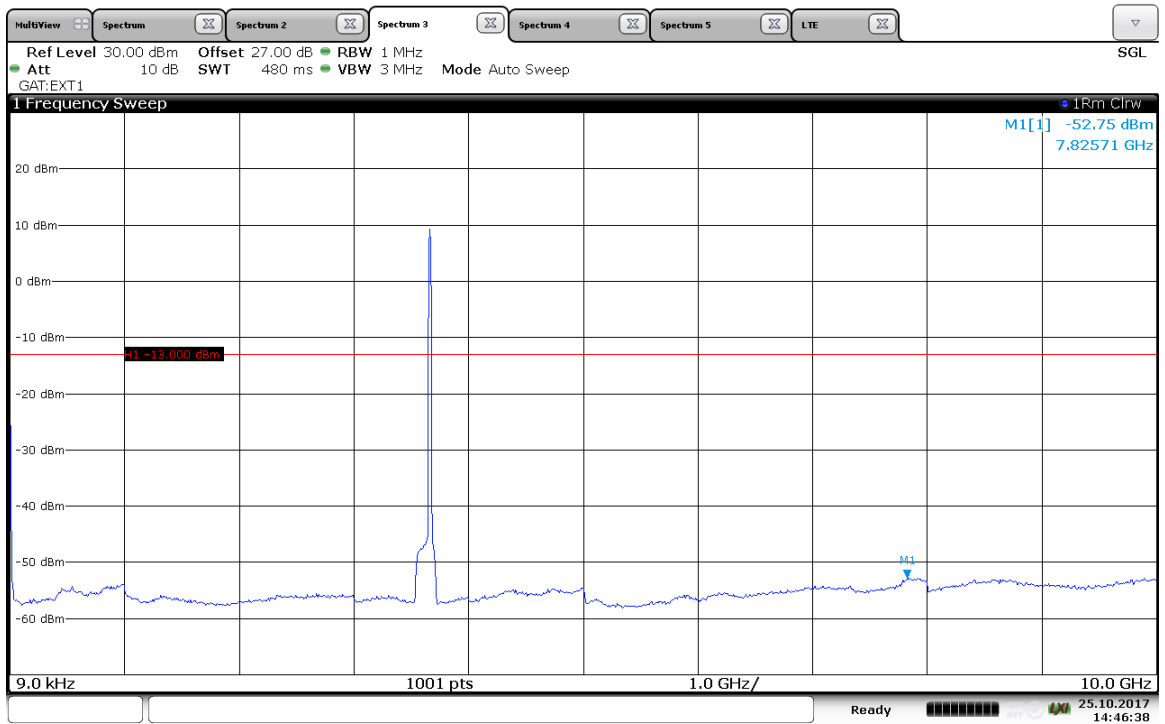
3.4.7.Test Data:

Channel Bandwidth: 20M

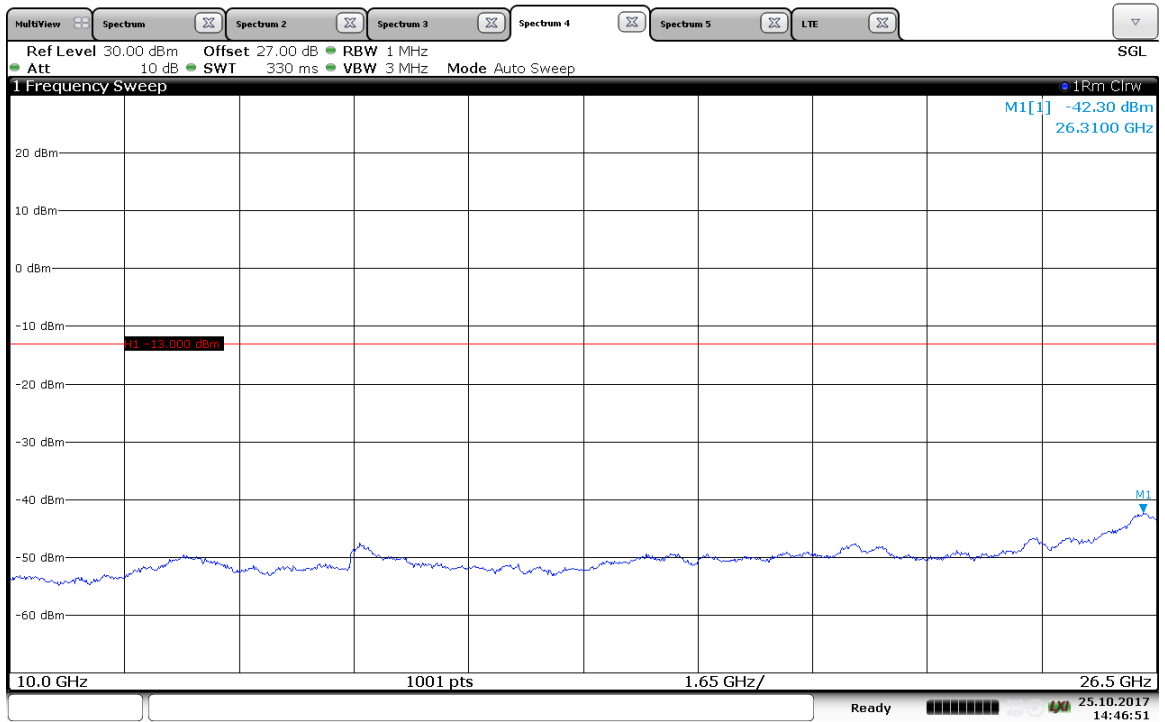
Port	Carrier Freq. (MHz)	Spurious Emissions(dBm)									Limit
		QPSK			16QAM			64QAM			
		9k-10G	10G-26.5	Band Edge	9k-10G	10G-26.5	Band	9k-10G	10G-26.5	Band Edge	
0	3660	-52.75	-42.3	-30.9	-52.7	-42.2	-37.	-52.62	-42.43	-30.57	<-22
1		-52.81	-42.4	-31.6	-52.6	-42.4	-37.	-52.76	-42.54	-31.33	<-22
2		-52.54	-42.3	-31.3	-52.7	-42.5	-37.	-52.38	-42.29	-31.01	<-22
3		-52.77	-42.5	-30.8	-52.6	-42.3	-37.	-52.78	-42.36	-30.13	<-22
4		-52.64	-42.2	-31.2	-52.6	-42.4	-34.	-52.6	-42.26	-31.75	<-22
5		-52.81	-42.2	-31.5	-52.4	-42.2	-36.	-52.73	-42.34	-31.82	<-22
6		-52.57	-42.1	-31.7	-52.7	-42.4	-37.	-52.79	-42.37	-31.65	<-22
7		-52.79	-42.5	-30.5	-52.7	-42.4	-35.	-52.69	-42.41	-31.96	<-22
0	3675	-52.77	-42.3	-32.5	-52.8	-42.4	-32.	-52.46	-42.61	-32.45	<-22
1		-52.78	-42.4	-32.3	-52.6	-42.3	-31.	-53	-42.41	-32.28	<-22
2		-52.6	-42.0	-32.8	-52.8	-42.4	-31.	-52.63	-42.4	-32.43	<-22
3		-52.69	-42.2	-32.2	-52.7	-42.2	-32.	-53.02	-42.46	-32.54	<-22
4		-52.7	-42.3	-32.4	-52.6	-42.5	-31.	-52.58	-42.57	-31.8	<-22
5		-52.99	-42.1	-32.7	-52.7	-42.2	-31.	-52.85	-42.47	-31.89	<-22
6		-52.76	-42.3	-32.5	-52.8	-42.3	-32.	-52.36	-42.35	-31.89	<-22
7		-52.61	-42.5	-32.6	-52.7	-42.2	-32.	-52.78	-42.29	-32.43	<-22
0	3690	-52.58	-42.1	-31.6	-52.7	-42.2	-31.	-52.81	-42.15	-31.87	<-22
1		-52.73	-42.5	-31.7	-53.2	-42.3	-30.	-52.69	-42.3	-32.79	<-22
2		-52.59	-42.4	-31.6	-52.4	-42.4	-31.	-52.29	-42.55	-31.06	<-22
3		-52.74	-42.2	-31.5	-52.7	-42.7	-31.	-52.55	-42.38	-32.07	<-22
4		-52.61	-42.5	-31.4	-52.8	-42.5	-31.	-52.79	-42.42	-31.72	<-22
5		-52.79	-42.3	-31.5	-52.8	-42.3	-31.	-52.78	-42.45	-31.5	<-22
6		-52.88	-42.4	-31.3	-52.6	-42.2	-31.	-52.77	-42.52	-31.5	<-22
7		-52.64	-42.4	-31.1	-52.6	-42.1	-31.	-52.79	-42.22	-31.86	<-22

Channel Bandwidth: 20+20+10M

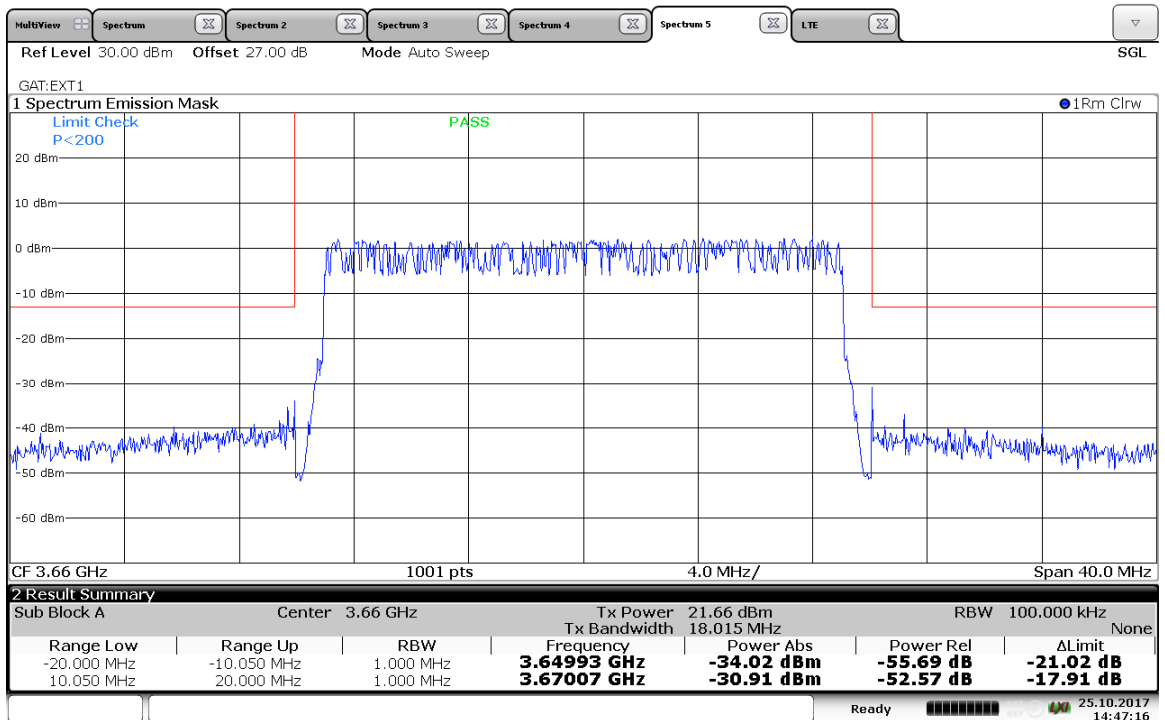
Port	Carrier Freq. (MHz)	Spurious Emissions(dBm)									Limit
		QPSK			16QAM			64QAM			
		9k-10G	10G-26.5	Band	9k-10G	10G-26.	Band	9k-10G	10G-26.5G	Band Edge	
0	3660+ 3680+ 3695	-49.58	-41.2	-52.1	-49.6	-41.	-50.7	-49.74	-41.32	-51.35	<-22
1		-49.33	-41.4	-52.1	-49.7	-41.	-52.2	-49.62	-41.51	-51.41	<-22
2		-49.74	-41.4	-51.1	-49.6	-41.	-50.4	-49.79	-41.25	-51.87	<-22
3		-49.73	-41.4	-51	-49.7	-41.	-50.4	-49.75	-41.46	-51.29	<-22
4		-49.65	-41.3	-50.7	-49.5	-41.	-51.9	49.7	41.59	-51.8	<-22
5		-49.64	-41.5	-51.6	-49.8	-41.	-51.3	-49.63	-41.31	-51.18	<-22
6		-50	-41.2	-51.5	-49.7	-41.	-51.7	-49.45	-41.18	-50.9	<-22
7		-49.78	-41.5	-51.8	-49.5	-41.	-51.6	-49.59	-41.52	-52.11	<-22



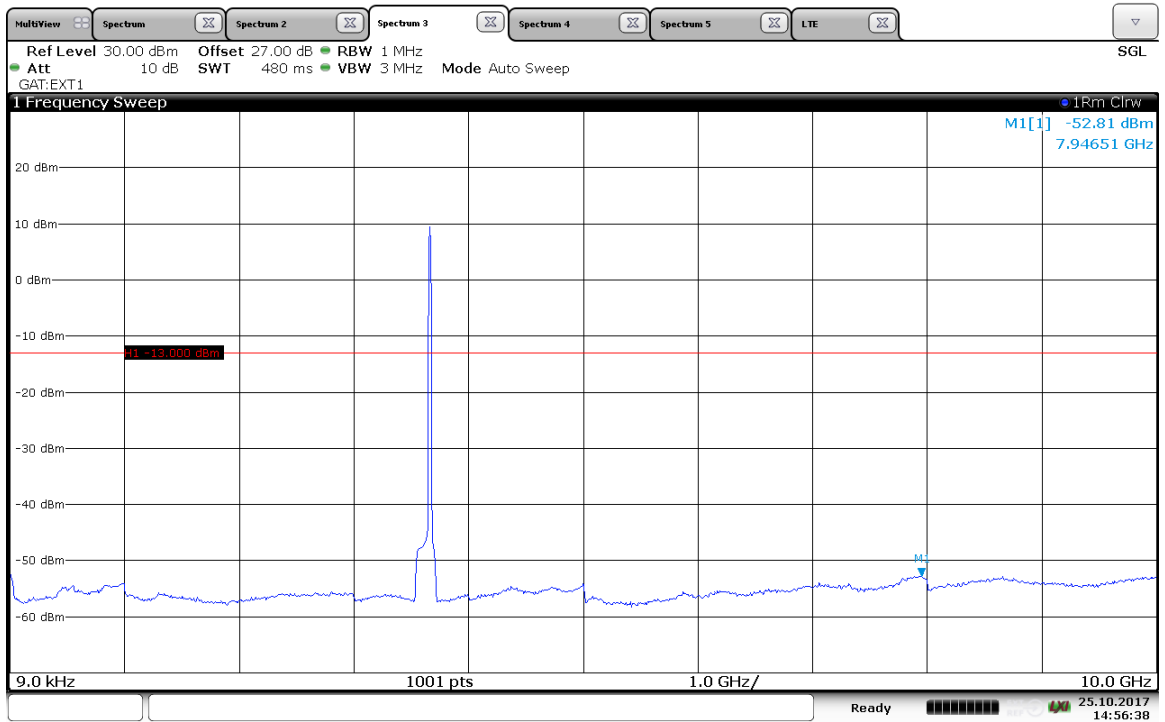
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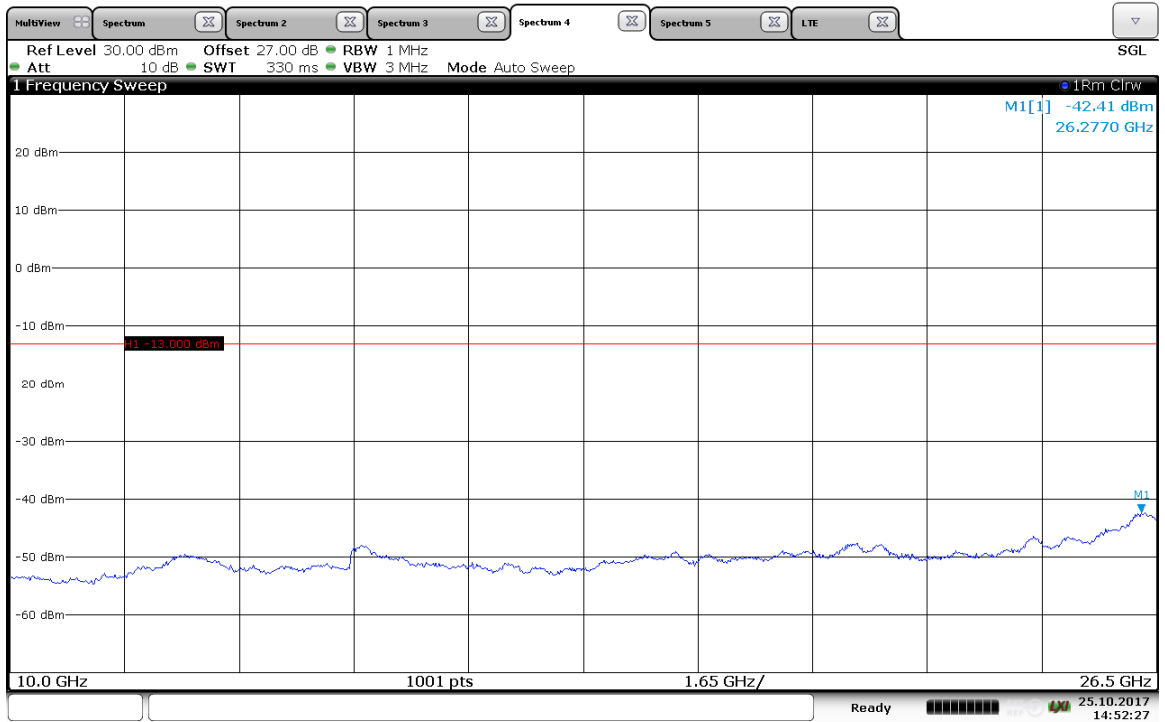
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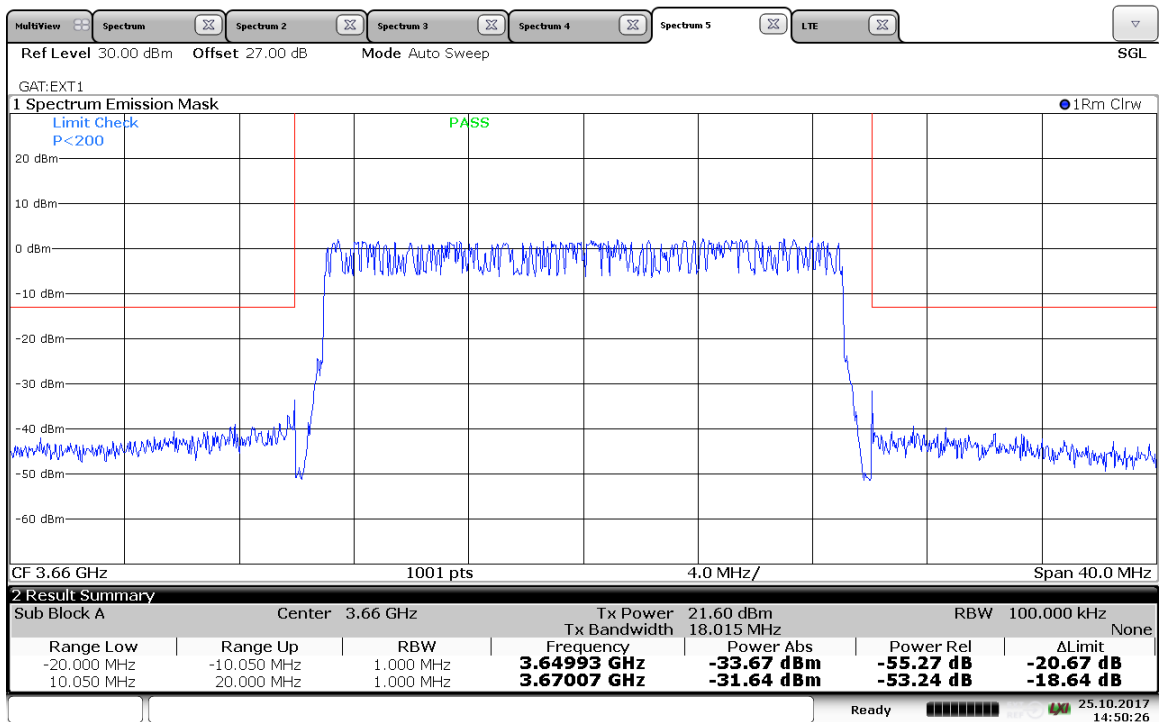
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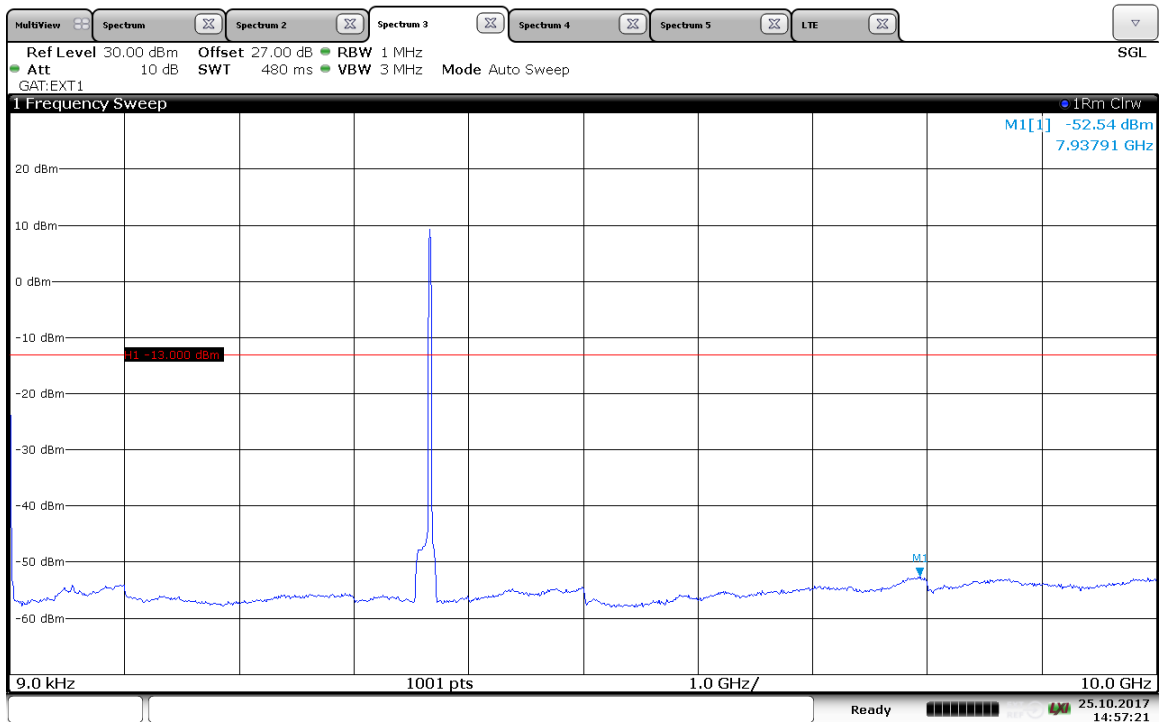
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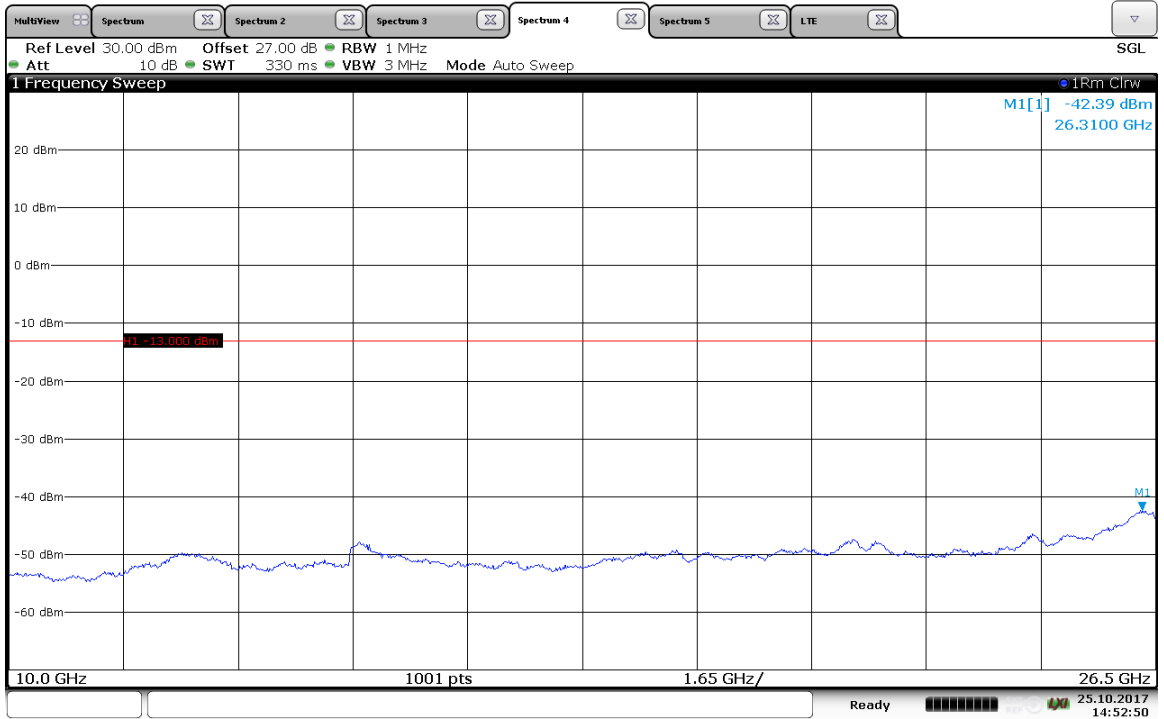
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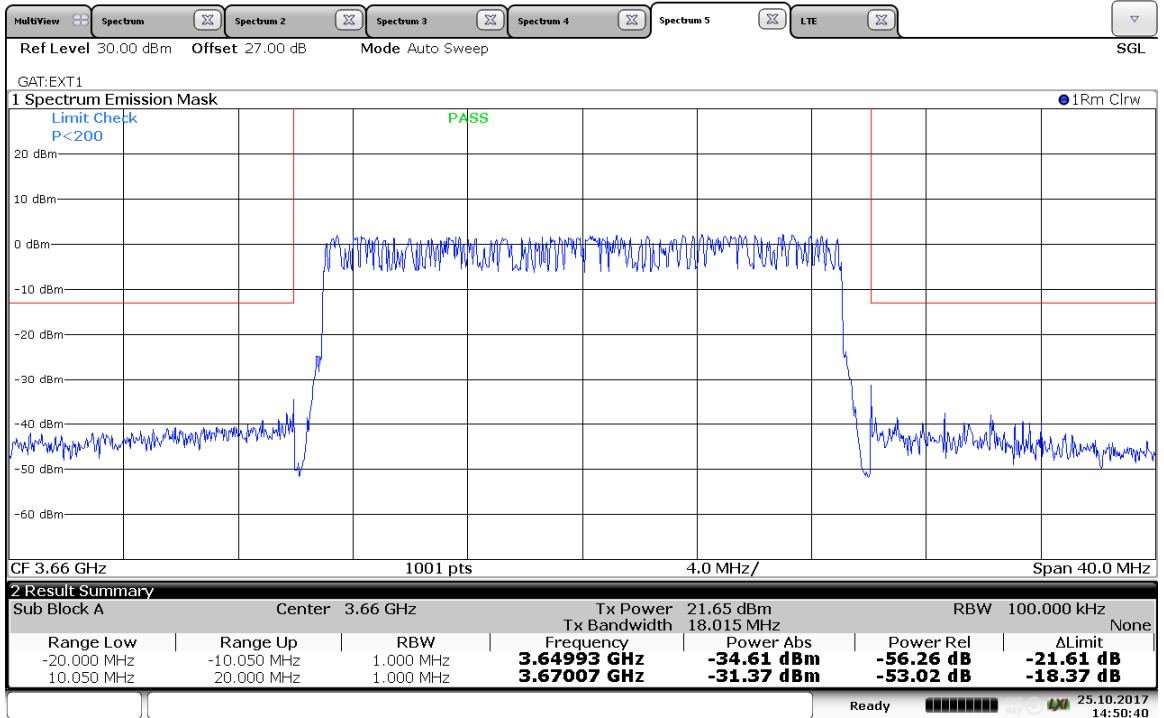
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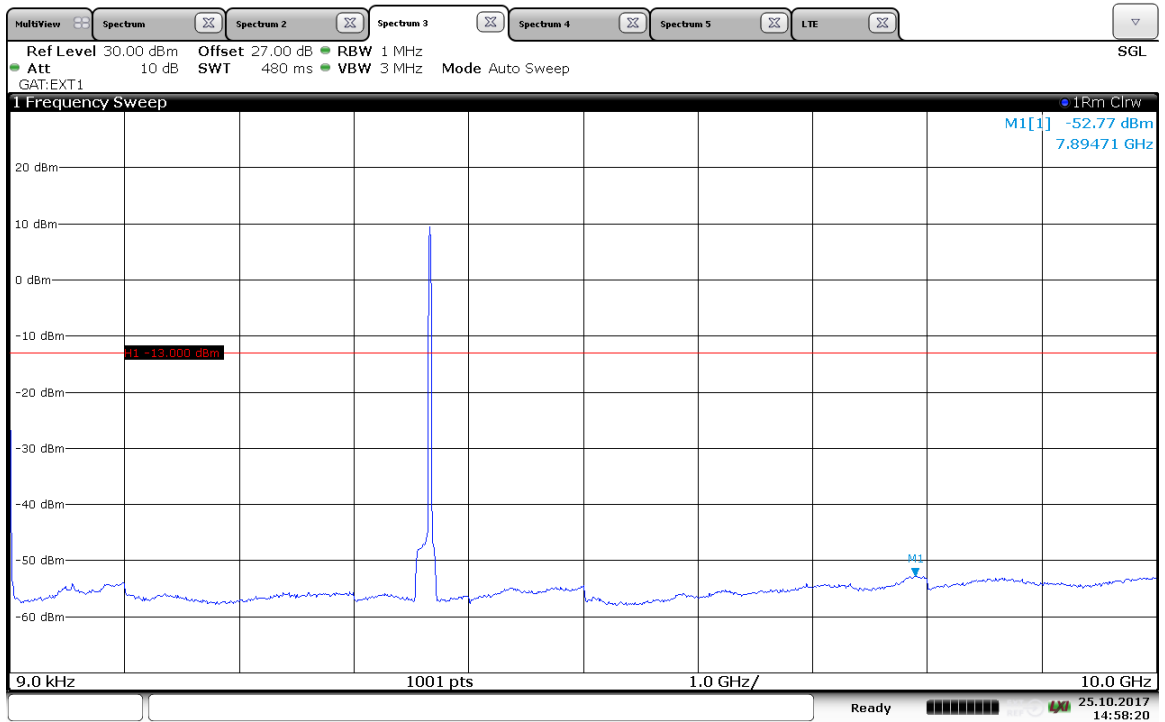


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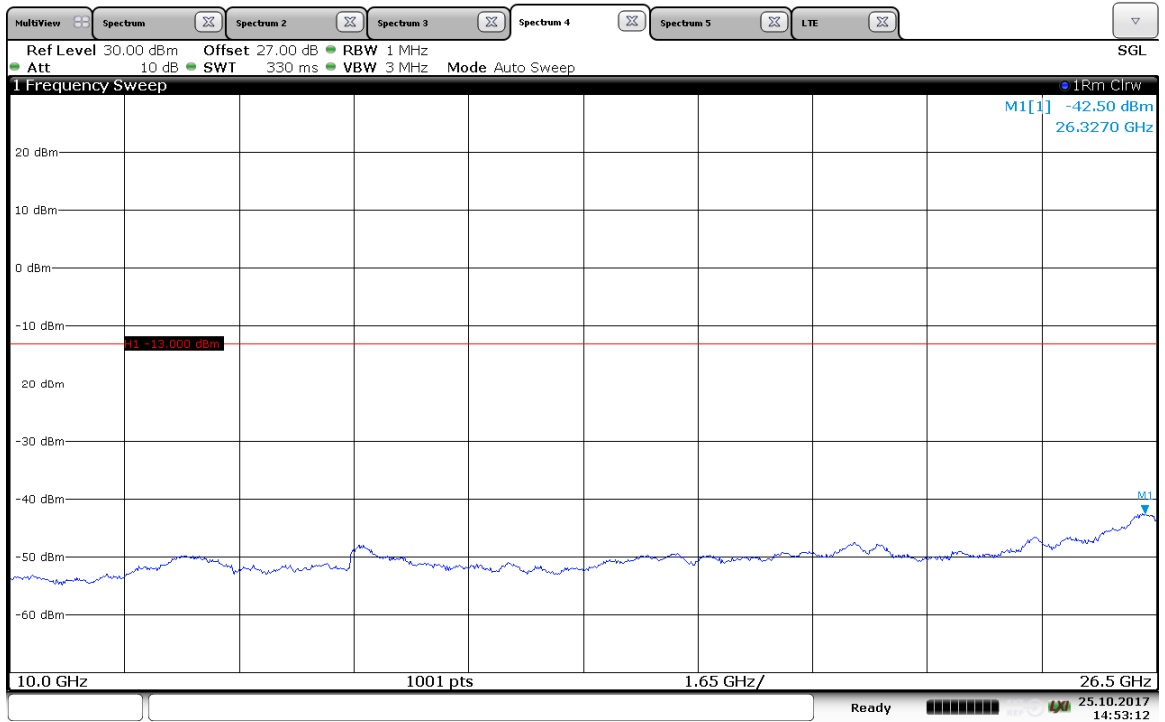


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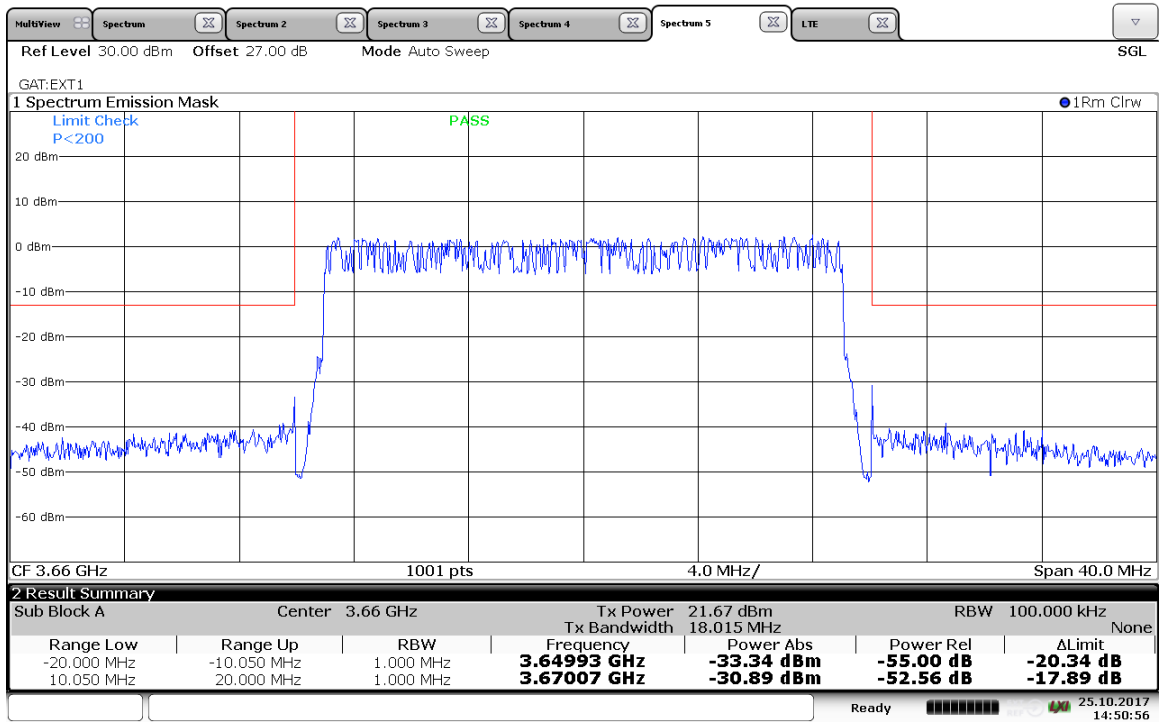




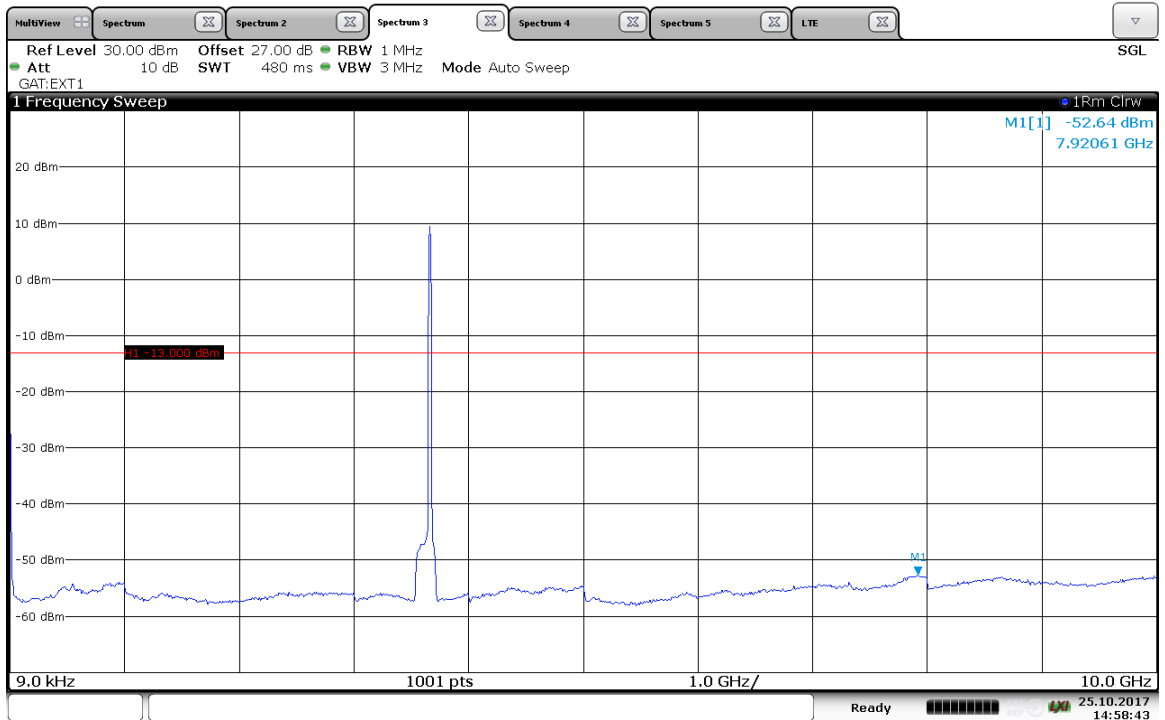
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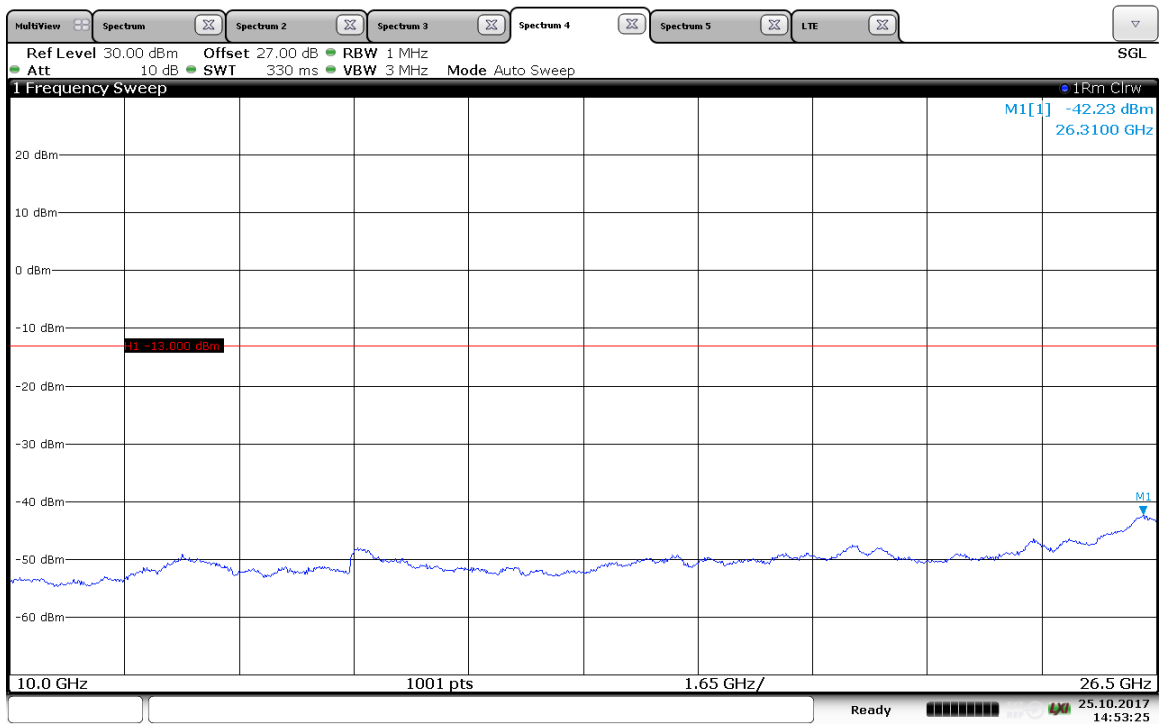
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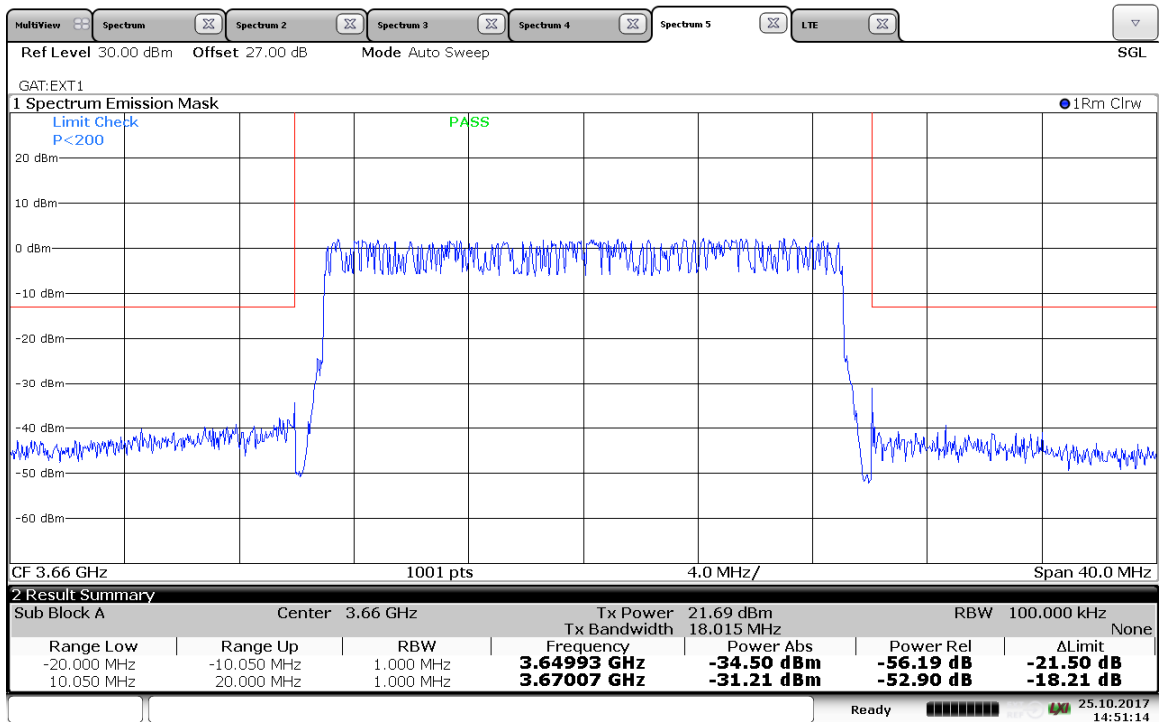
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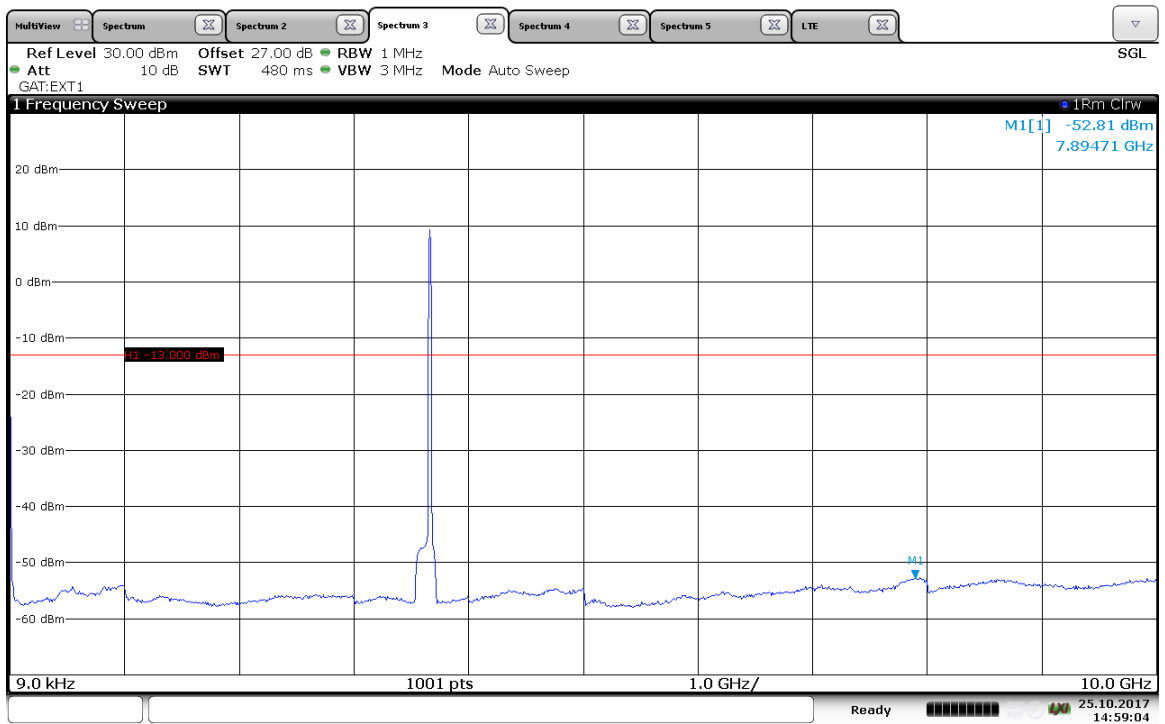
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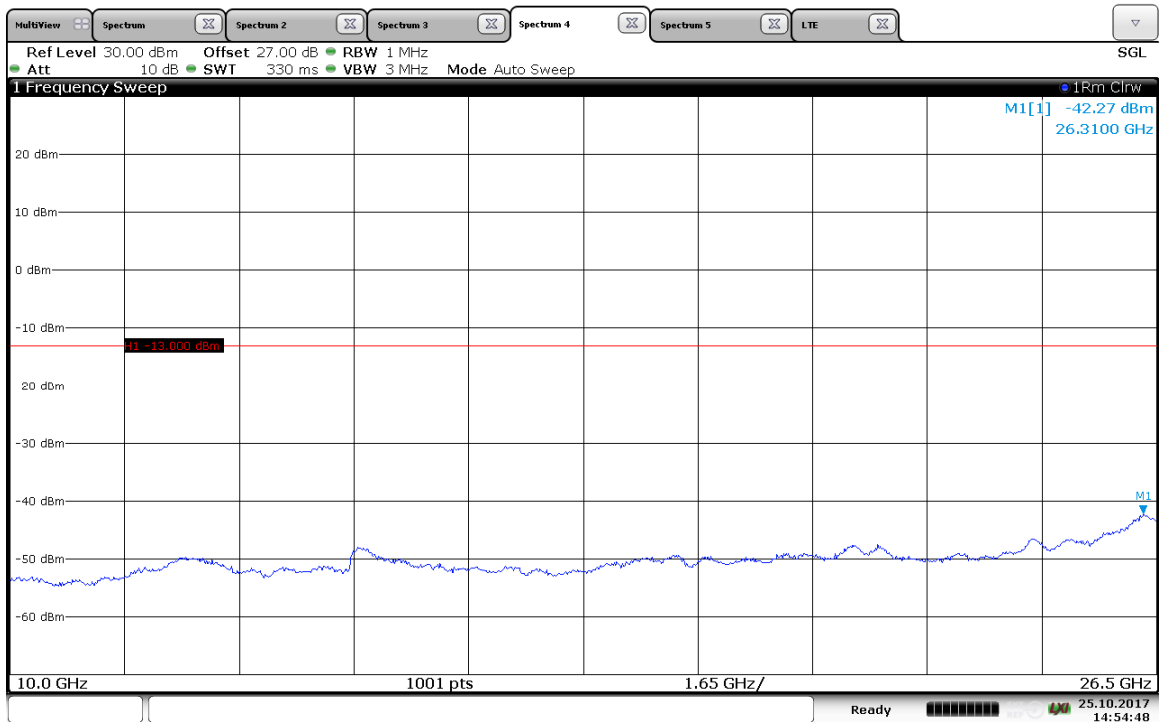
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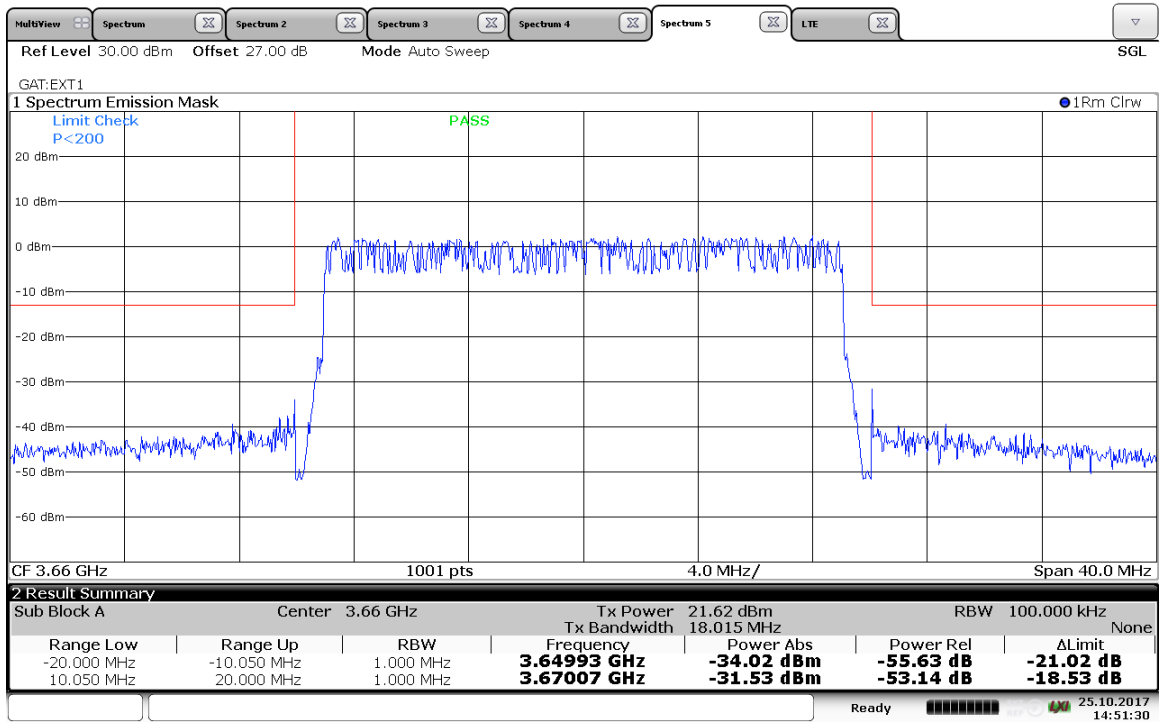
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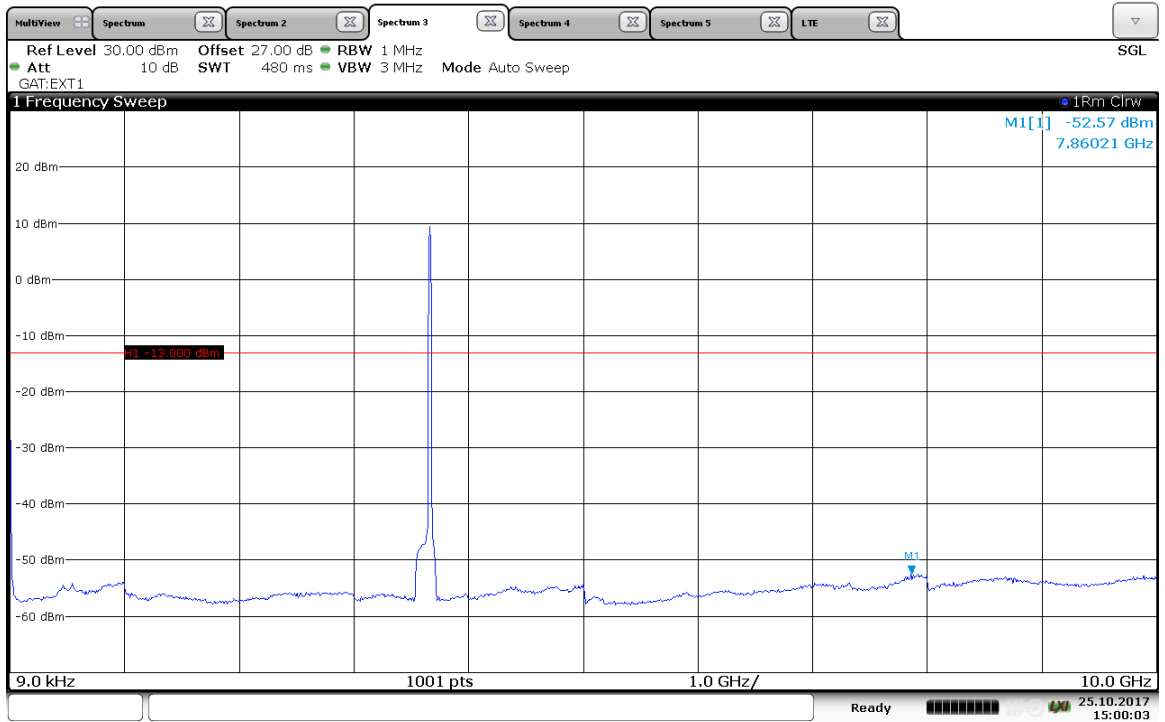
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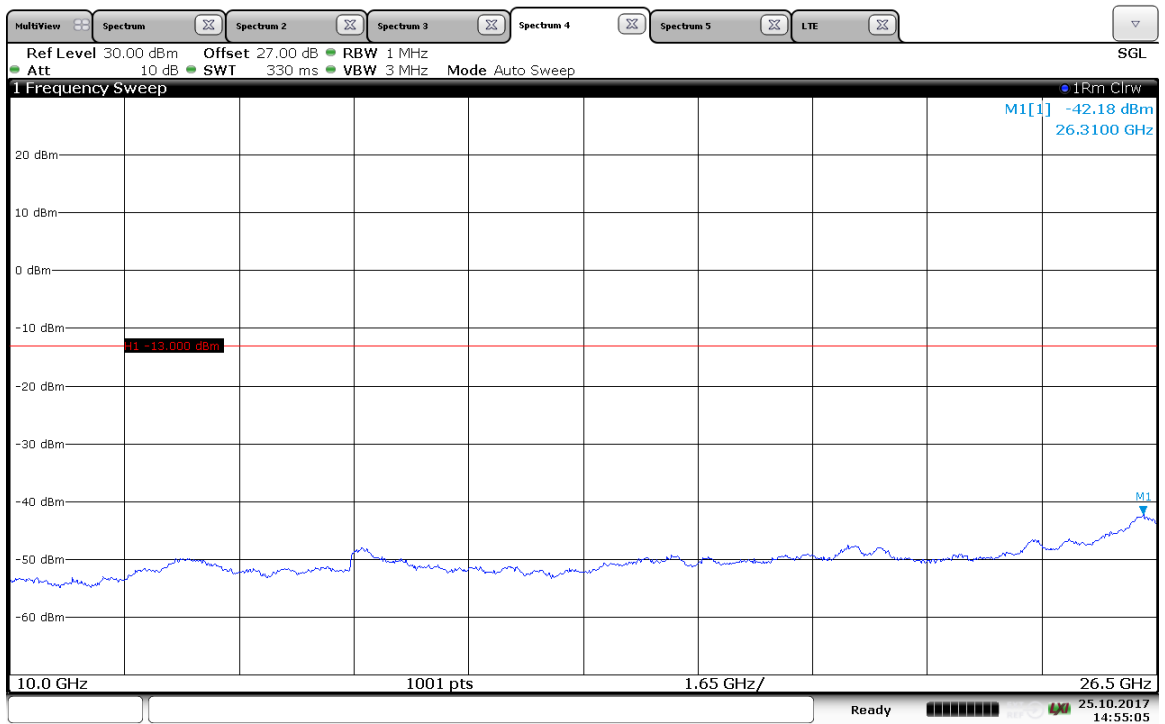
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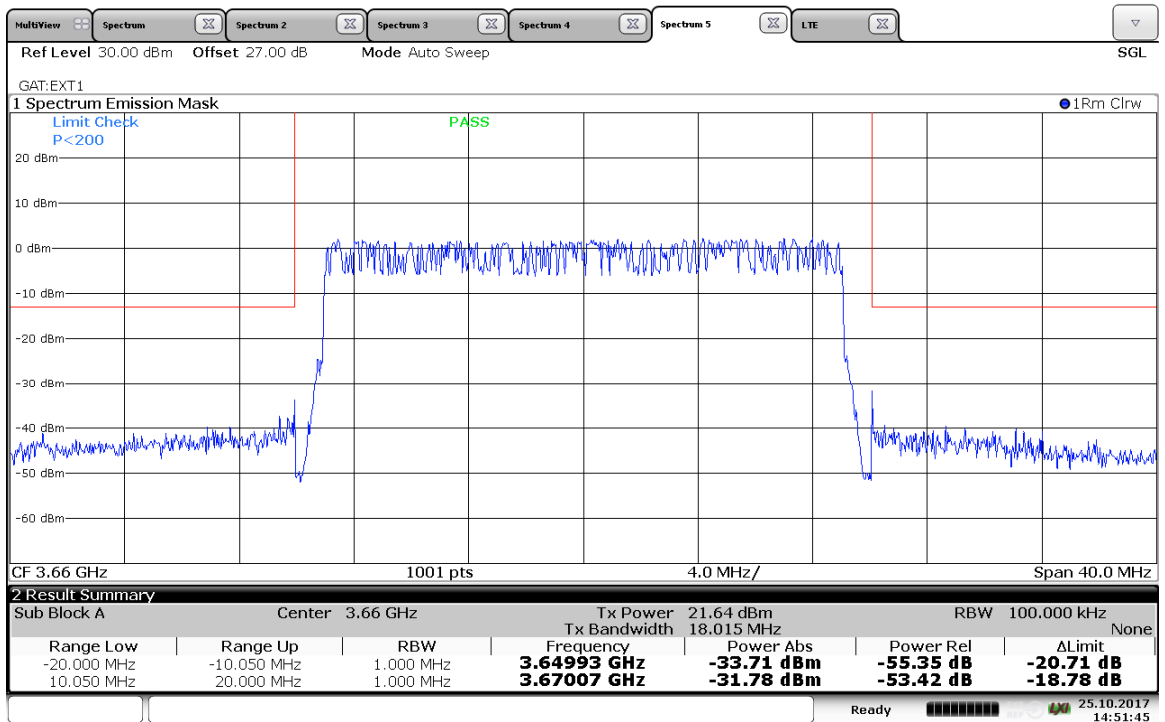
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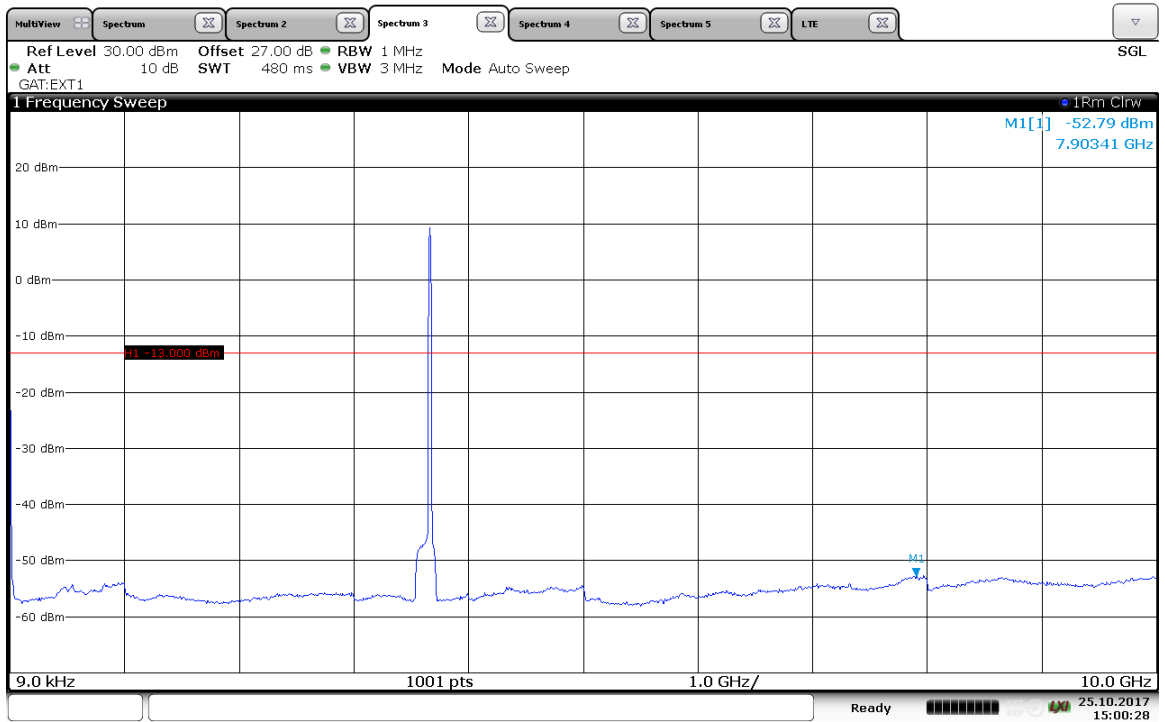
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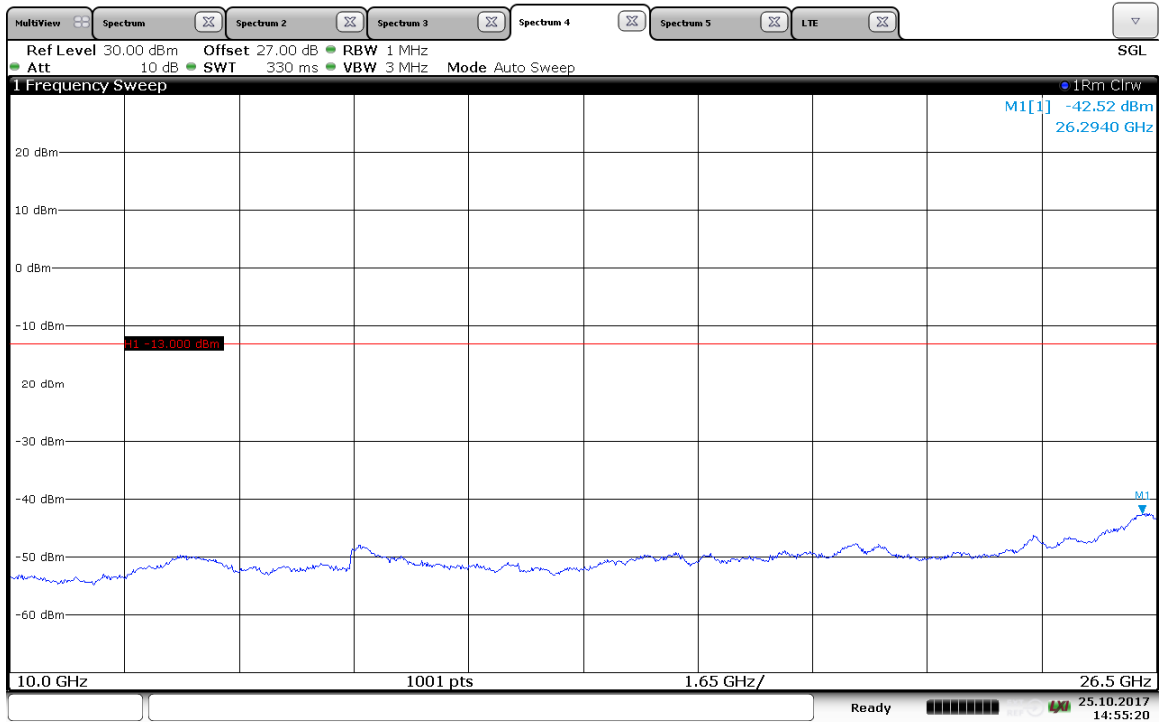
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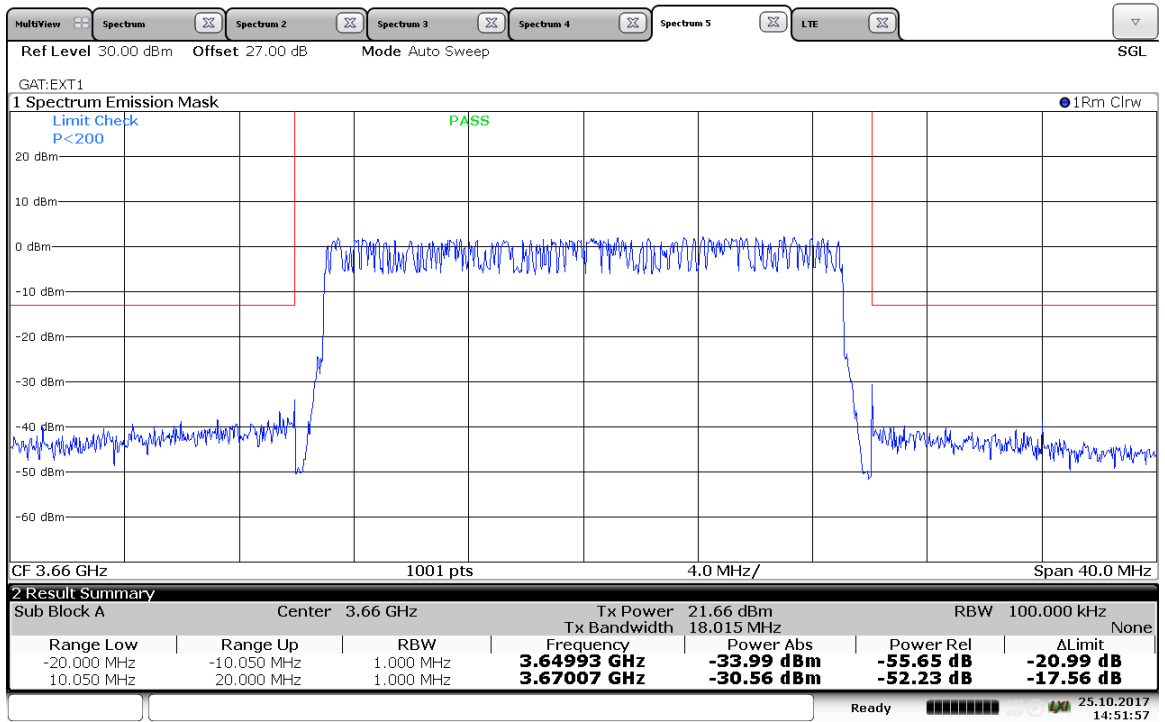
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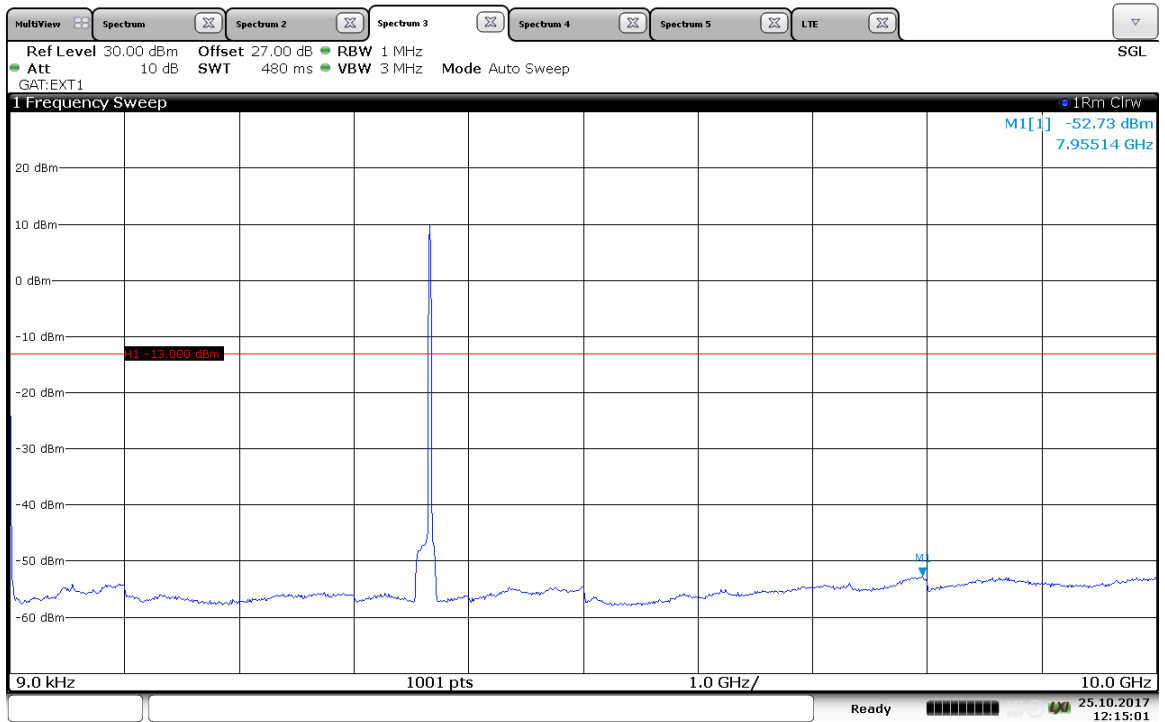
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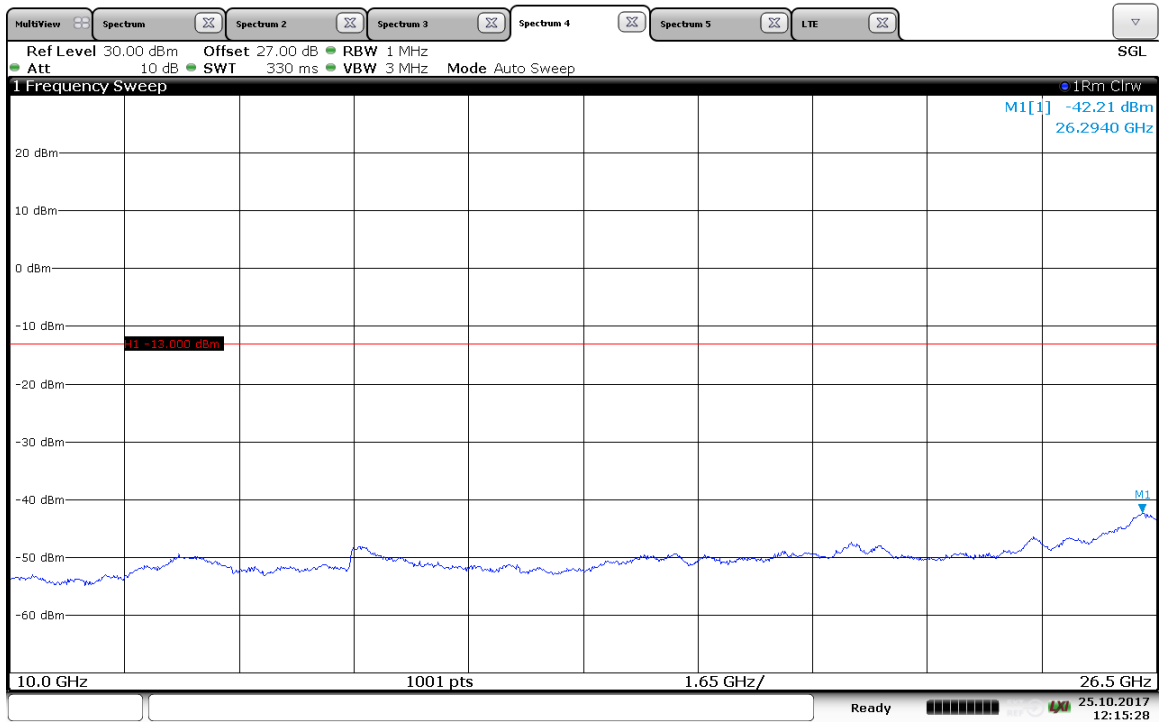


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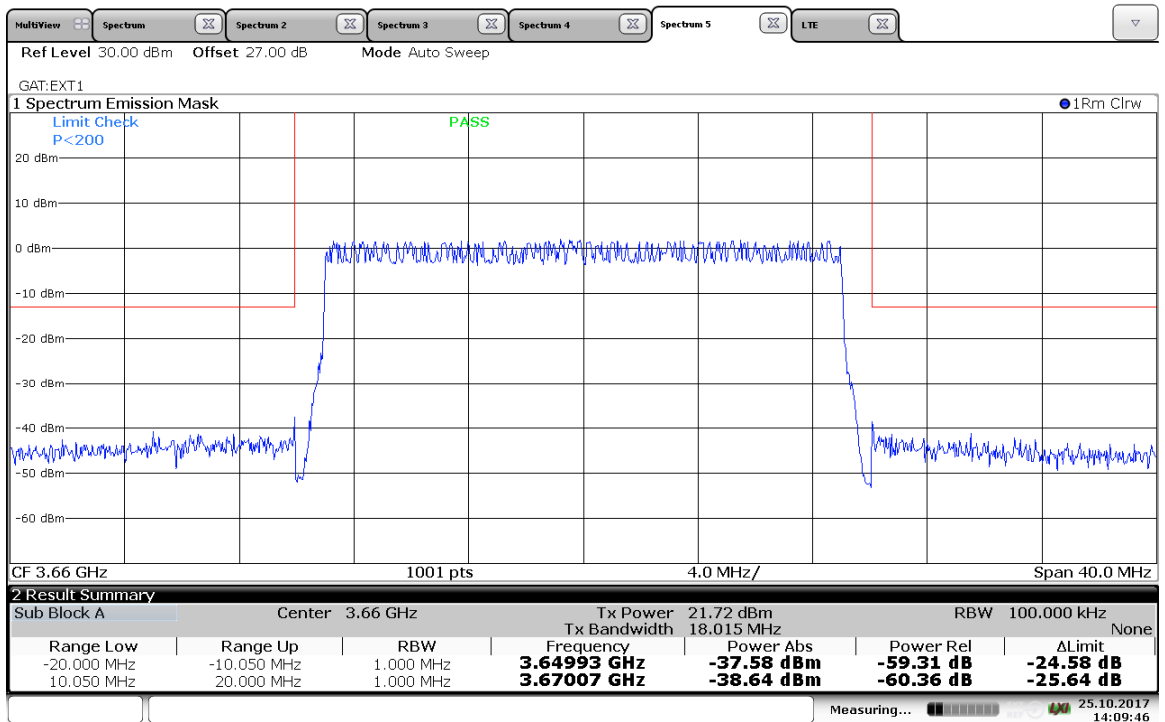


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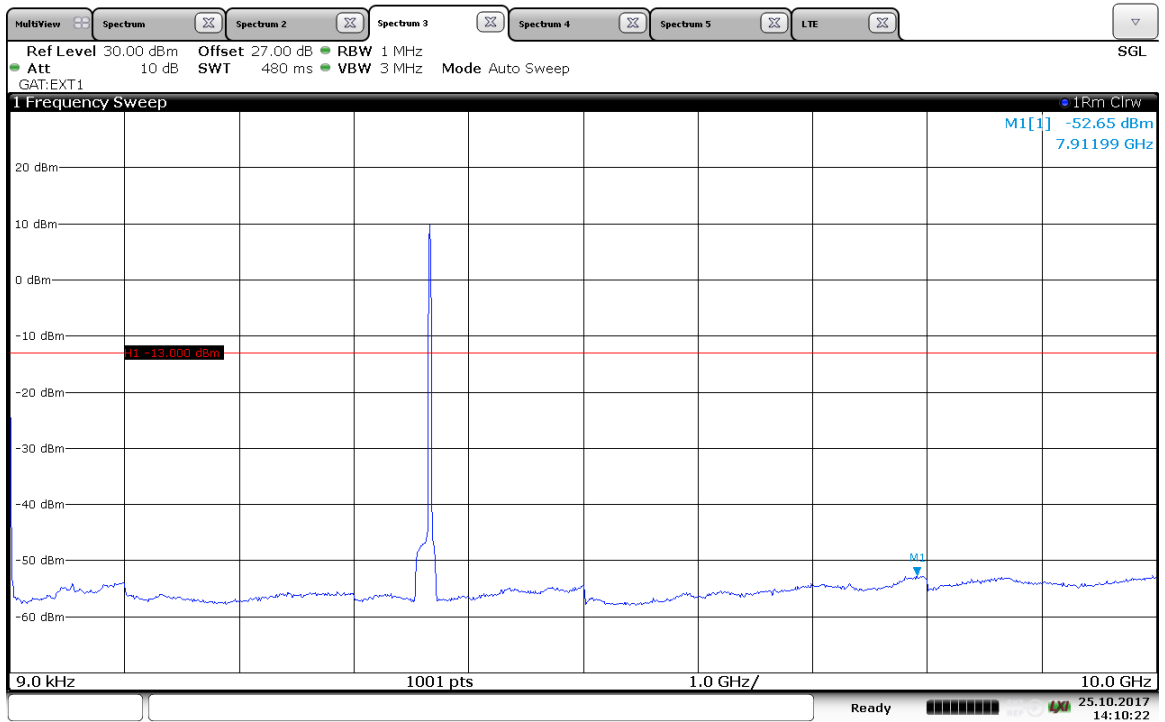




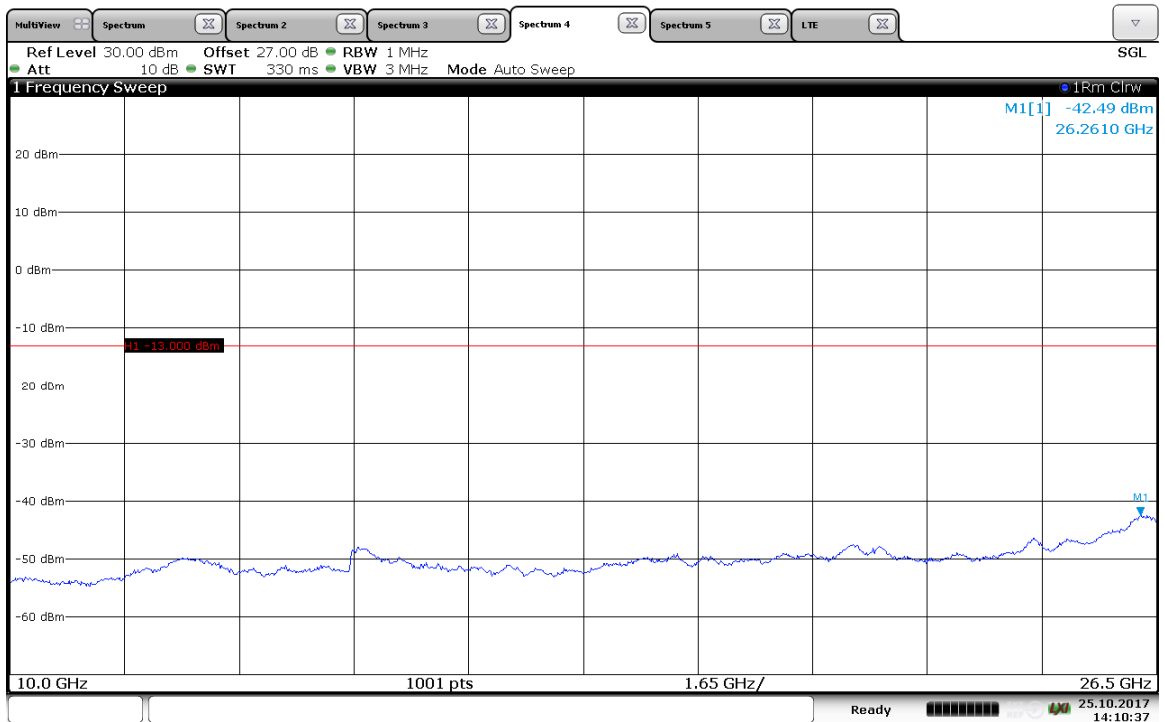
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14:10:37 25.10.2017