

**Carrier Aggregation:
Band 7: 30MHz-26GHz**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
BW:10M+20M, Frequency:2535.000 MHz								
5070.000	H	34.66	-56.7	13.9	2.4	-45.2	-25.0	20.2
5070.000	V	32.92	-59.2	13.9	2.4	-47.7	-25.0	22.7
7605.000	H	36.93	-50.6	13.2	3.1	-40.5	-25.0	15.5
7605.000	V	34.39	-53.1	13.2	3.1	-43.0	-25.0	18.0
450.980	H	33.08	-58.7	0.0	0.7	-59.4	-25.0	34.4
450.980	V	32.14	-57.6	0.0	0.7	-58.3	-25.0	33.3
BW:20M+20M, Frequency: 2535.000 MHz								
5070.000	H	33.97	-57.4	13.9	2.4	-45.9	-25.0	20.9
5070.000	V	32.60	-59.5	13.9	2.4	-48.0	-25.0	23.0
7605.000	H	35.21	-52.3	13.2	3.1	-42.2	-25.0	17.2
7605.000	V	34.14	-53.4	13.2	3.1	-43.3	-25.0	18.3
450.980	H	33.11	-58.7	0.0	0.7	-59.4	-25.0	34.4
450.980	V	32.07	-57.7	0.0	0.7	-58.4	-25.0	33.4

Band 41: 30MHz-26GHz

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
BW:5M+20M, Frequency:2593.000 MHz								
5186.000	H	34.13	-56.9	14.0	2.3	-45.2	-13.0	32.2
5186.000	V	31.48	-61	14.0	2.3	-49.3	-13.0	36.3
7779.000	H	37.30	-49.9	13.3	3.5	-40.1	-13.0	27.1
7779.000	V	40.39	-47.2	13.3	3.5	-37.4	-13.0	24.4
450.980	H	33.24	-58.5	0.0	0.7	-59.2	-13.0	46.2
450.980	V	32.46	-57.3	0.0	0.7	-58.0	-13.0	45.0
16-QAM,Frequency: 2593.000 MHz								
5186.000	H	33.47	-57.5	14.0	2.3	-45.8	-13.0	32.8
5186.000	V	32.69	-59.8	14.0	2.3	-48.1	-13.0	35.1
7779.000	H	39.36	-47.9	13.3	3.5	-38.1	-13.0	25.1
7779.000	V	38.41	-49.2	13.3	3.5	-39.4	-13.0	26.4
450.980	H	33.31	-58.5	0.0	0.7	-59.2	-13.0	46.2
450.980	V	32.51	-57.3	0.0	0.7	-58.0	-13.0	45.0

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
- 3) Margin = Limit-Absolute Level

FCC §27.53, RSS-195 §5.6, RSS-199 §4.5 - BAND EDGES

Applicable Standards

FCC §27.53(a)

(4) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz;

(iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

FCC §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.

RSS-195 § 5.6

The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz.

5.6.2 Mobile, Portable and Low-Power Fixed Subscriber Equipment

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, $P(\text{dBW})$, by the amount indicated in Table 2 and graphically represented in Figure 2, where p is the transmitter output power measured in watts.

Frequency (MHz)	Attenuation (dB)
<2200	$43 + 10 \log_{10}(p)$
2200 - 2288	$70 + 10 \log_{10}(p)$
2288 - 2292	$67 + 10 \log_{10}(p)$
2292 - 2296	$61 + 10 \log_{10}(p)$
2296 - 2300	$55 + 10 \log_{10}(p)$
2300 - 2305	$43 + 10 \log_{10}(p)$
2305 - 2320	$43 + 10 \log_{10}(p)$ ^{Note}
2320 - 2324	$55 + 10 \log_{10}(p)$
2324 - 2328	$61 + 10 \log_{10}(p)$
2328 - 2337	$67 + 10 \log_{10}(p)$
2337 - 2341	$61 + 10 \log_{10}(p)$
2341 - 2345	$55 + 10 \log_{10}(p)$
2345 - 2360	$43 + 10 \log_{10}(p)$ ^{Note}
2360 - 2365	$43 + 10 \log_{10}(p)$
2365 - 2395	$70 + 10 \log_{10}(p)$
>2395	$43 + 10 \log_{10}(p)$

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for various equipment types.

RSS-199 § 4.5

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

(a) for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least $43 + 10 \log_{10} p$.

(b) for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:

- (i) $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away
- (ii) $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and
- (iii) $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges

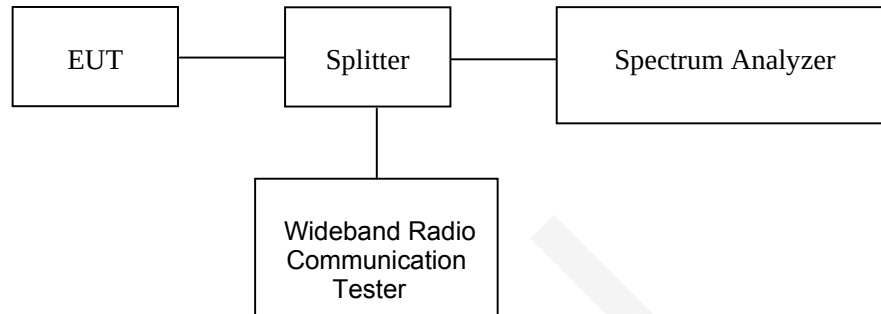
In addition, the attenuation shall not be less than $43 + 10 \log_{10} p$ on all frequencies between 2490.5 MHz and 2496 MHz, and $55 + 10 \log_{10} p$ at or below 2490.5 MHz.

In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2016-09-21	2017-09-20
Unknown	RF Cable	Unknown	NO.3	Each Time	/
Unknown	Two-way Splitter	Unknown	OE0120121	Each Time	/
R&S	Wideband Radio Communication Tester	CMW500	106891	2016-11-23	2017-11-23

*** Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

Test Data

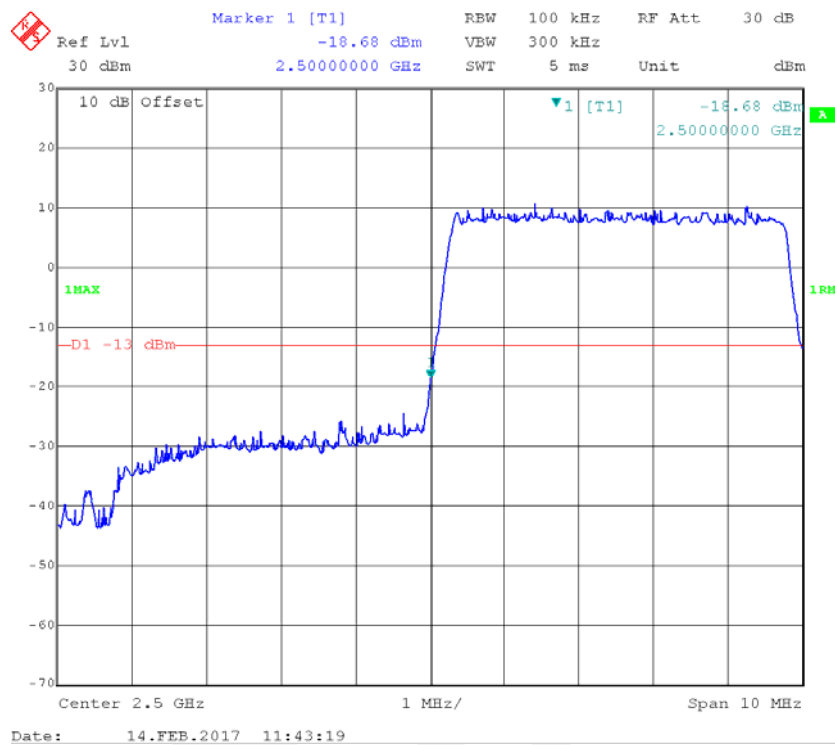
Environmental Conditions

Temperature:	18~20 °C
Relative Humidity:	56~60 %
ATM Pressure:	95~95.2 kPa

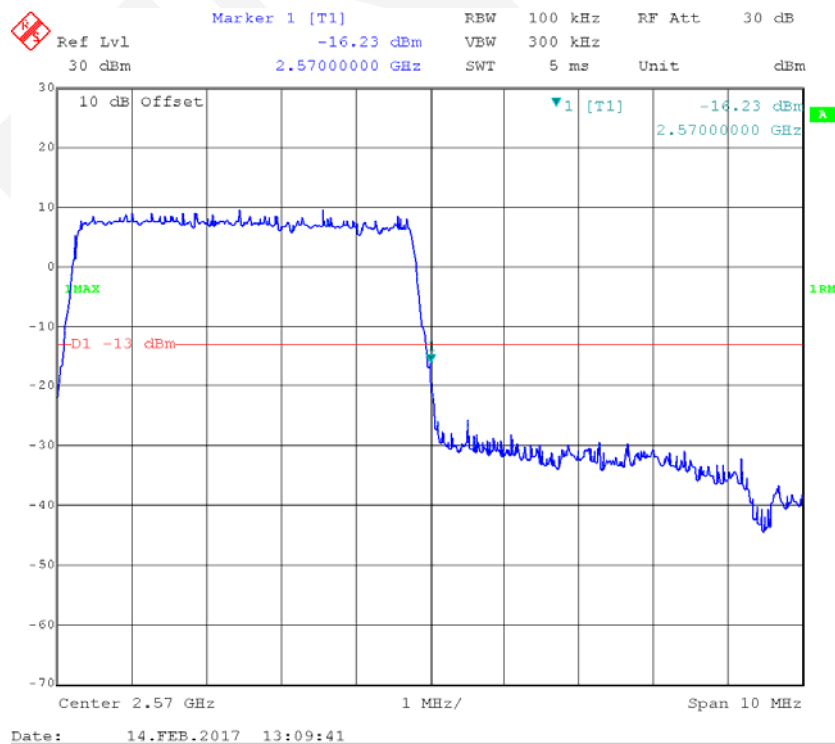
The testing was performed by Lorin Bian from 2017-02-14 to 2017-03-18.

Singer Carrier, Band 7:

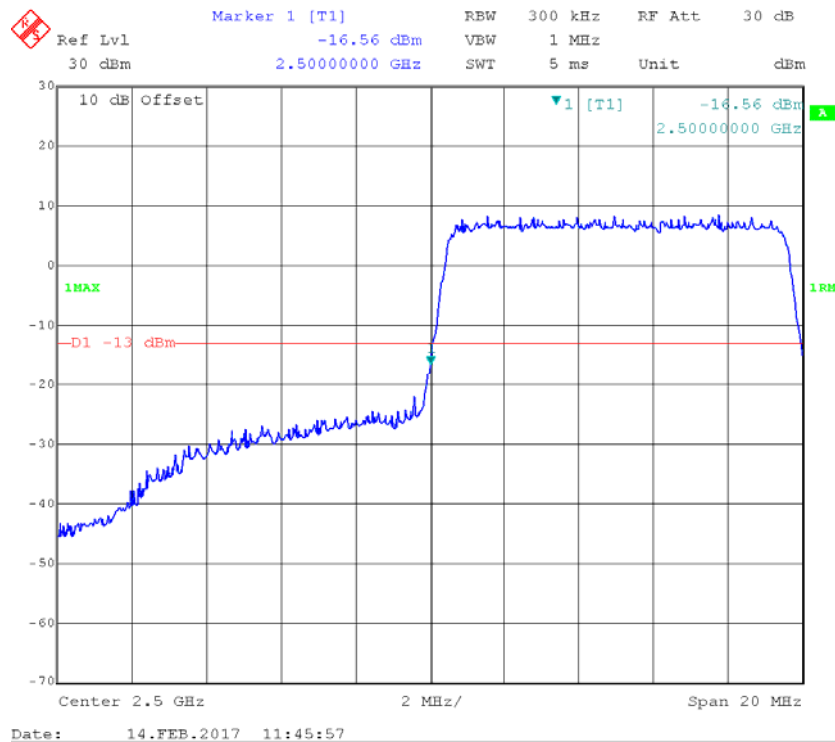
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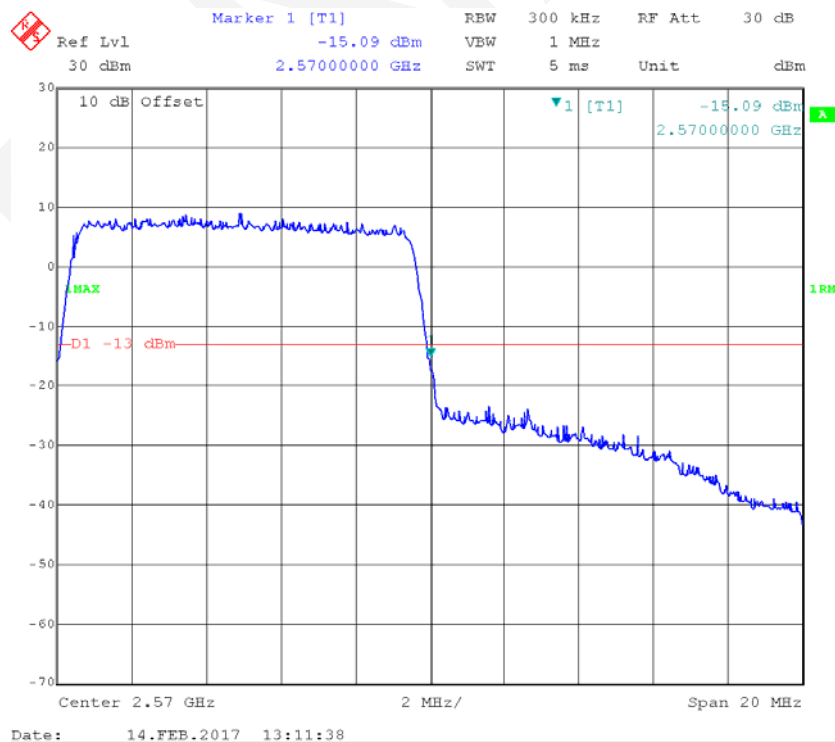
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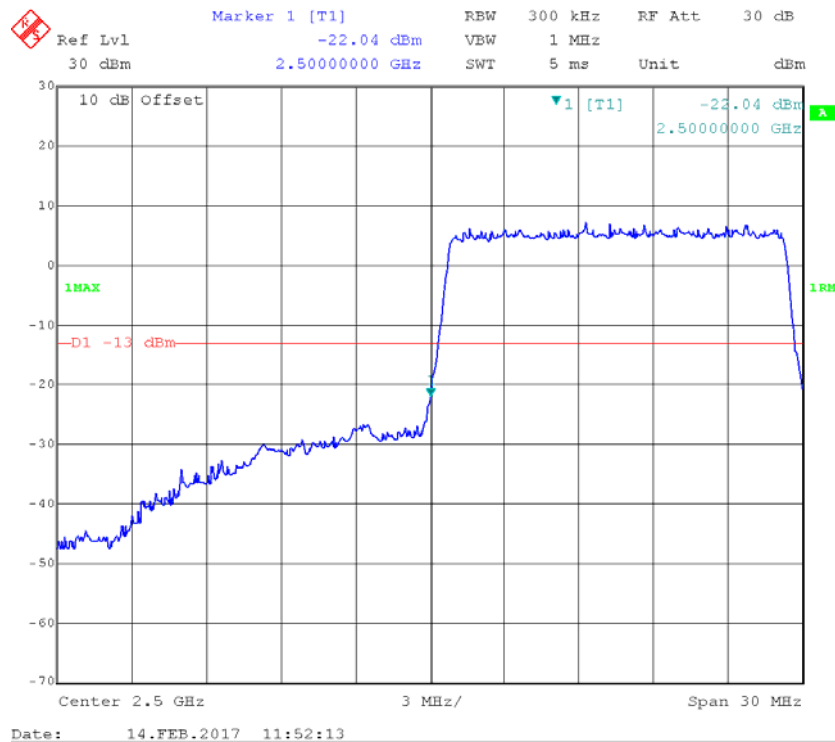
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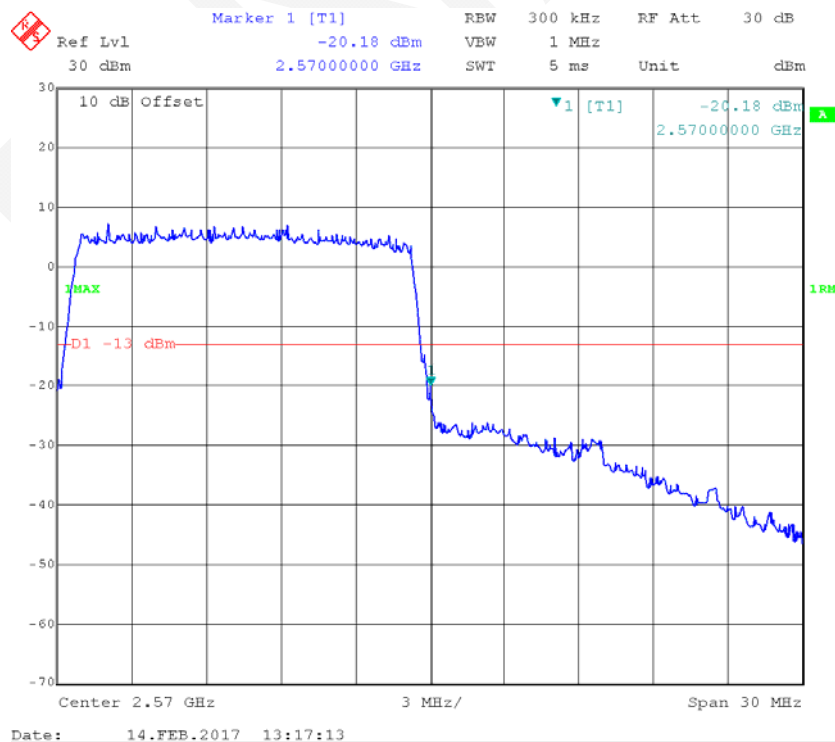
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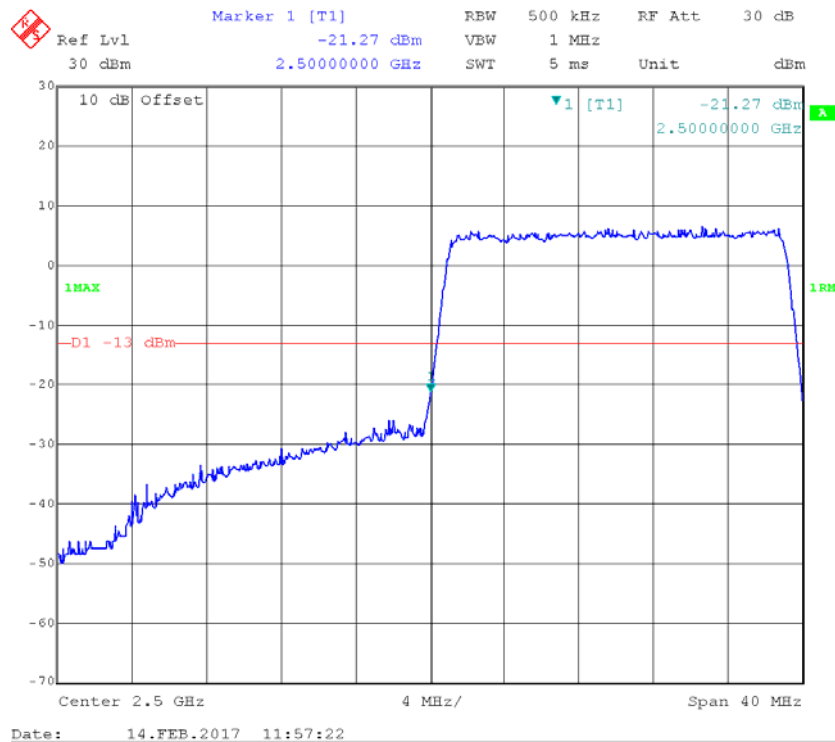
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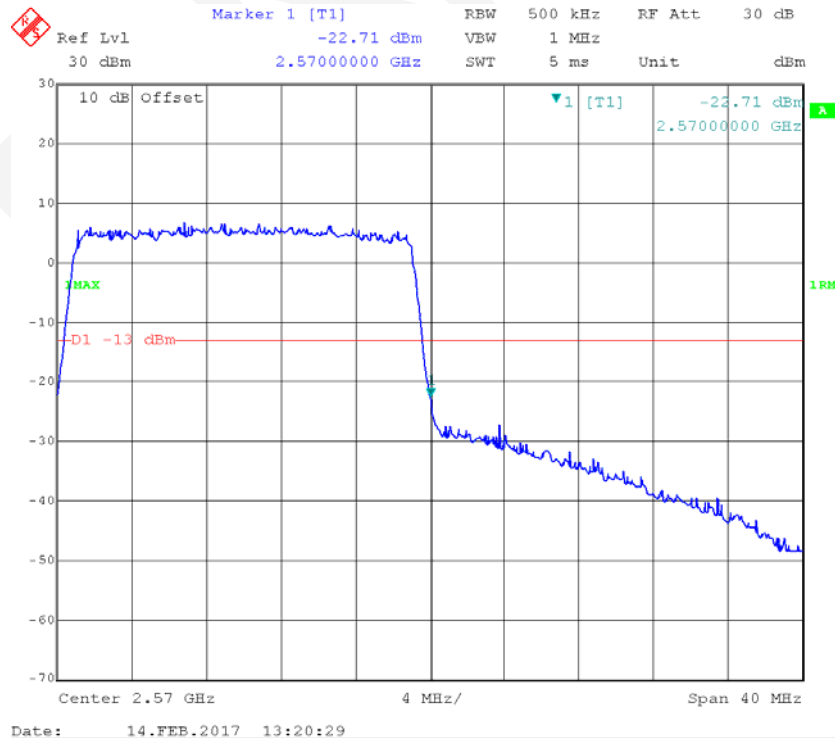
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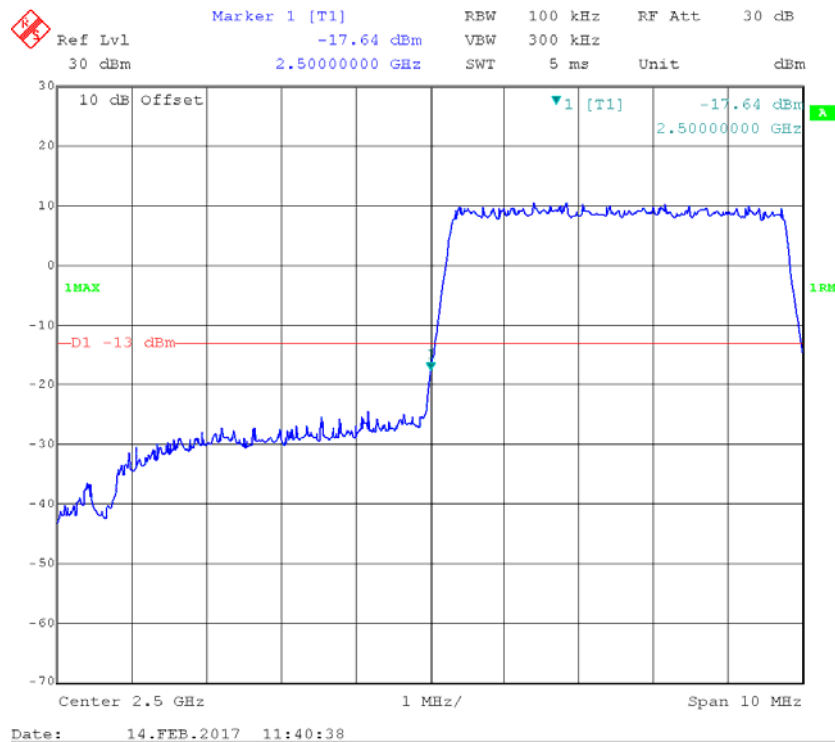
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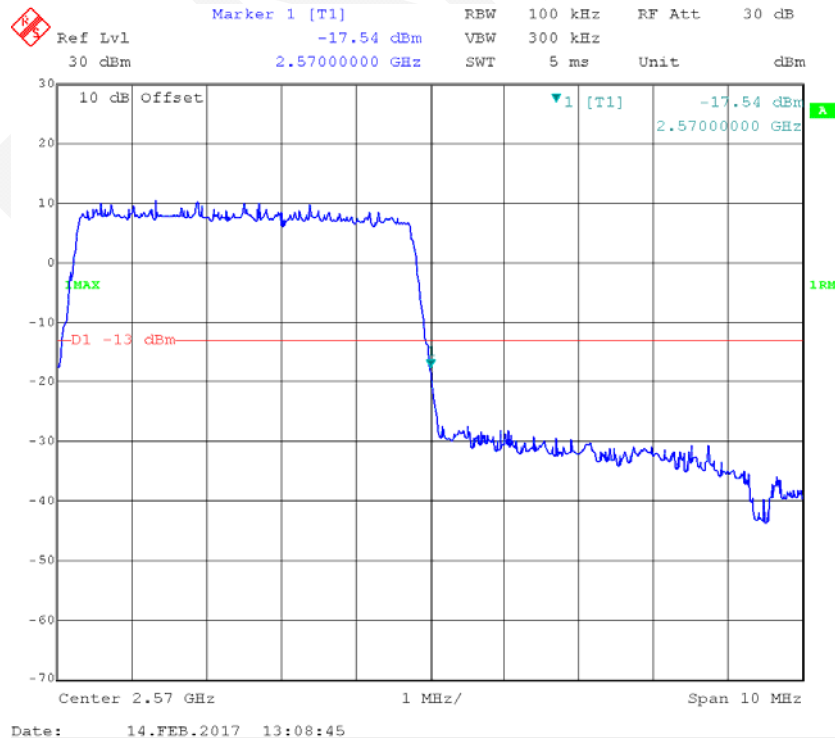
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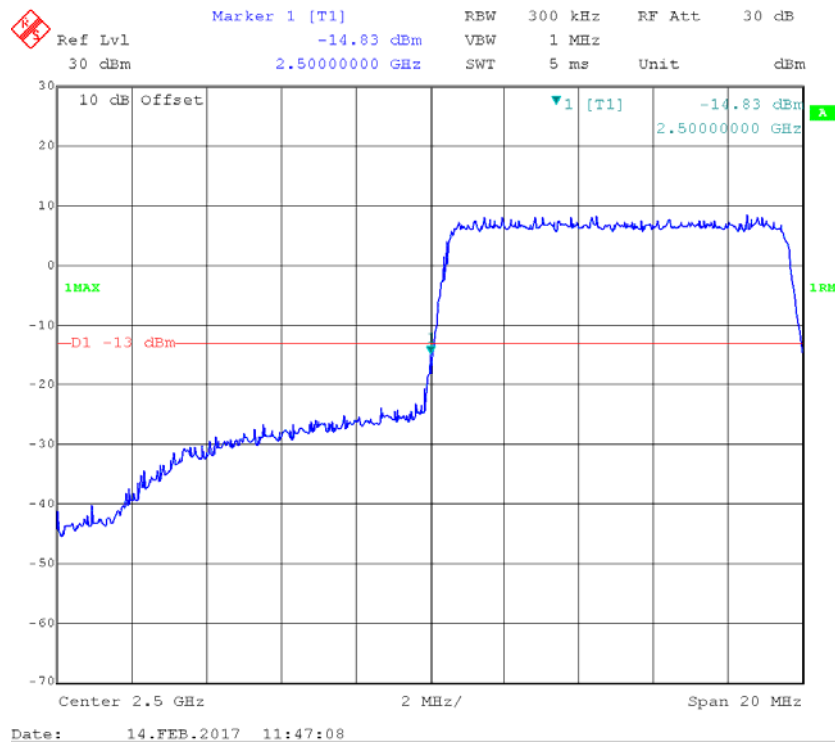
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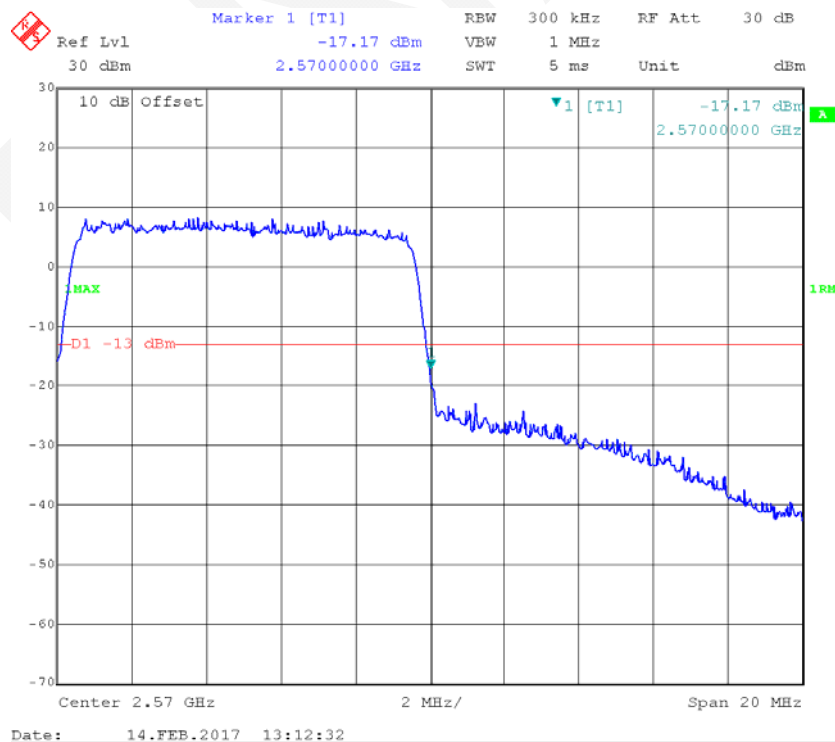
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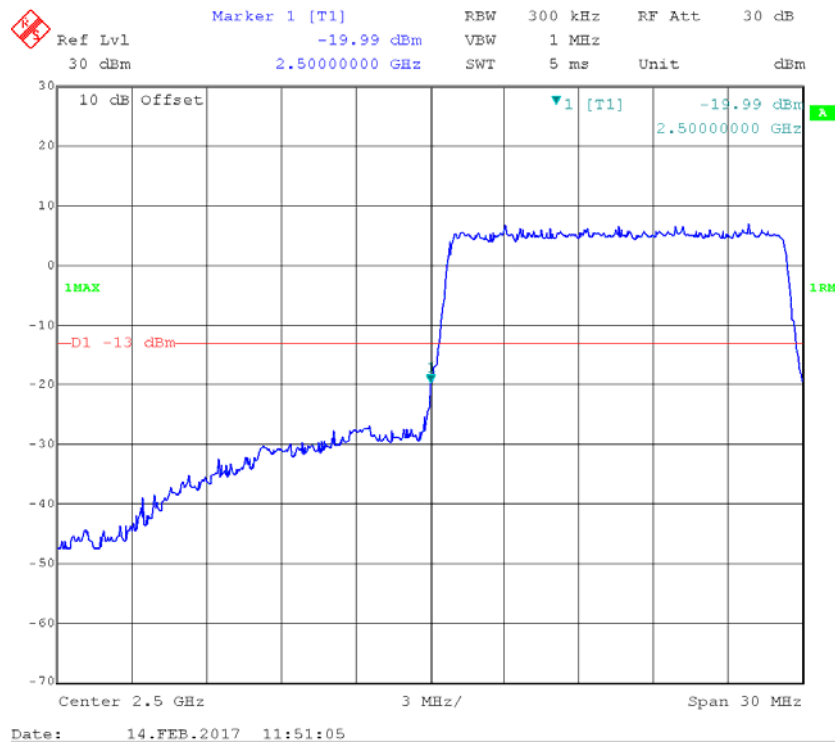
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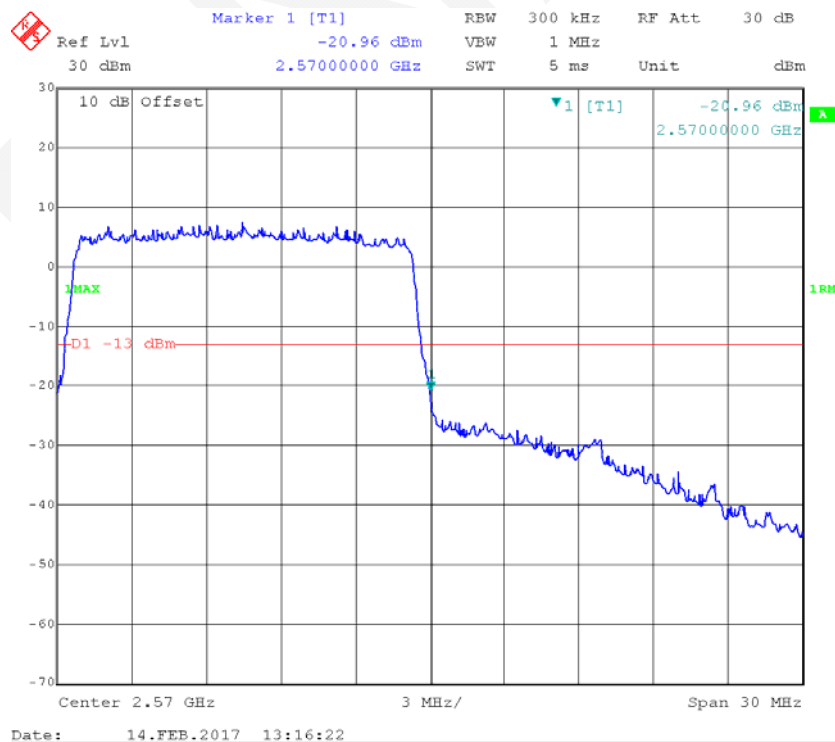
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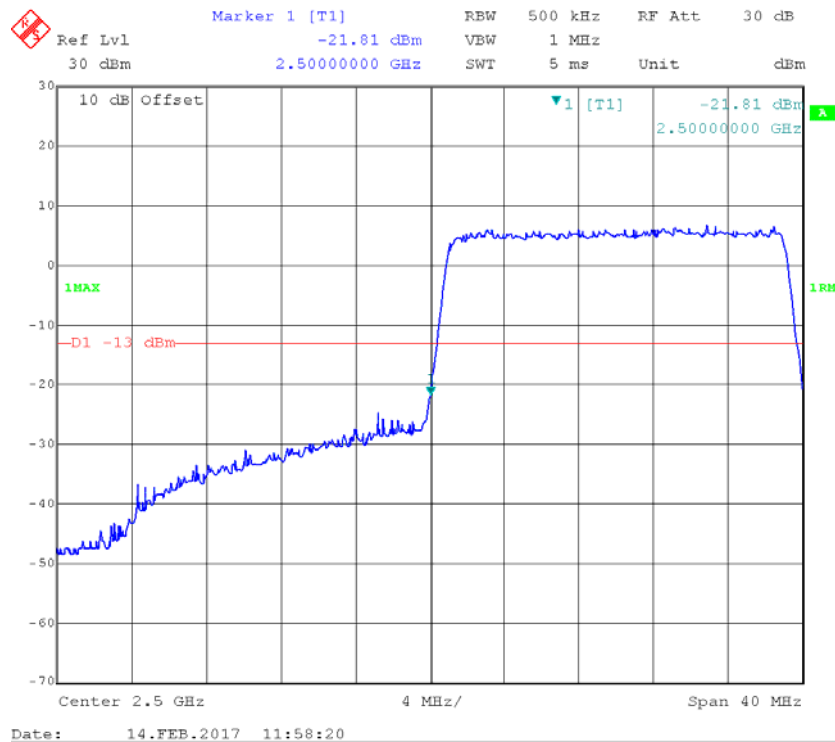
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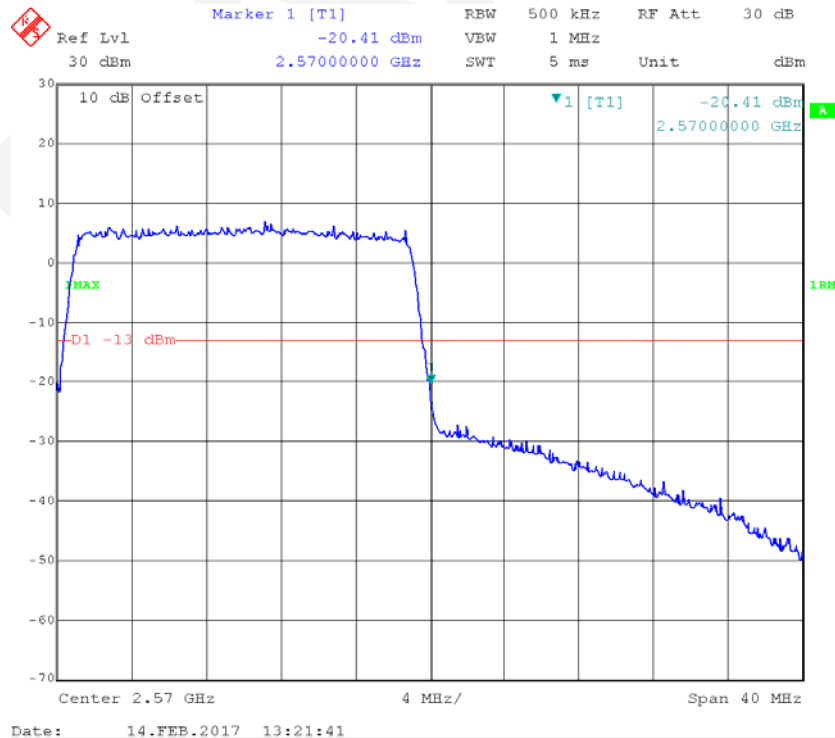
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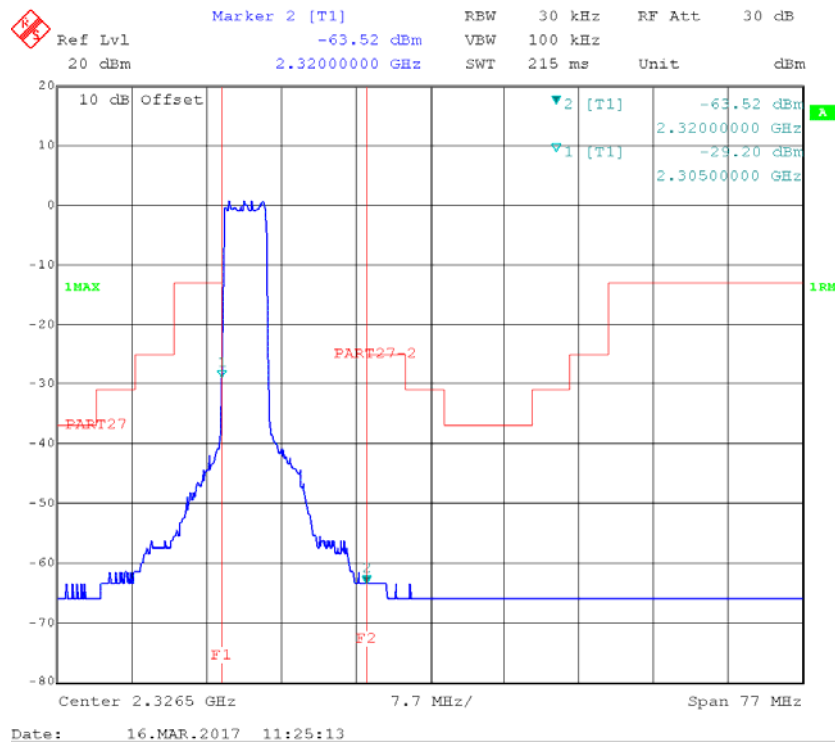


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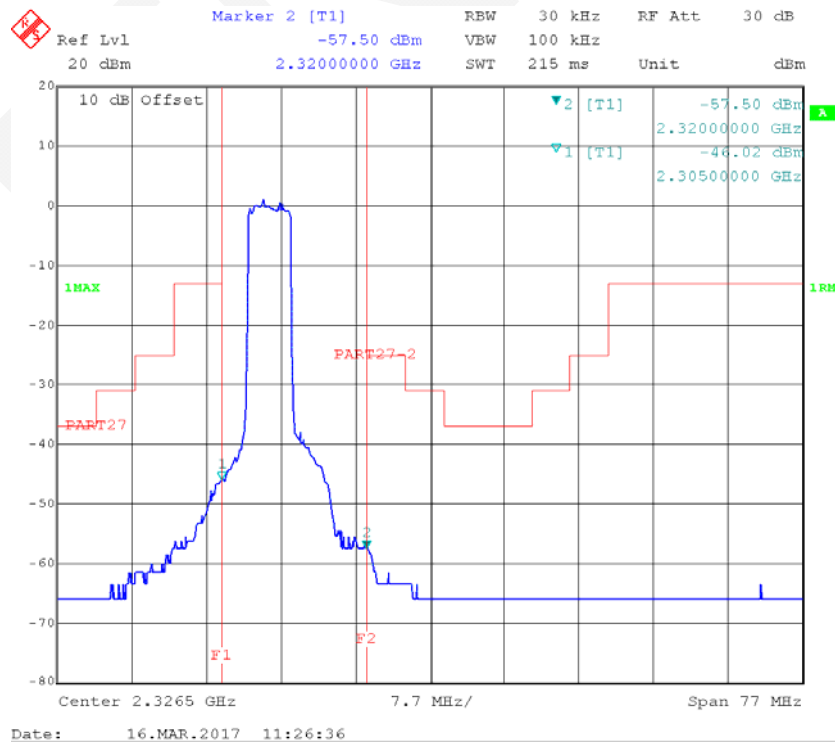


Band 40(2305MHz-2315MHz):

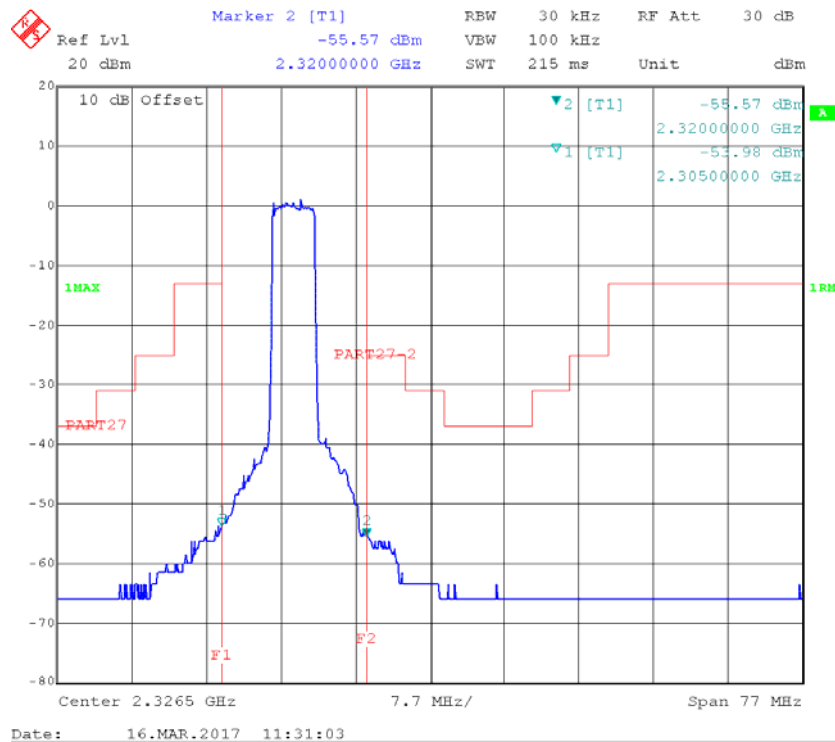
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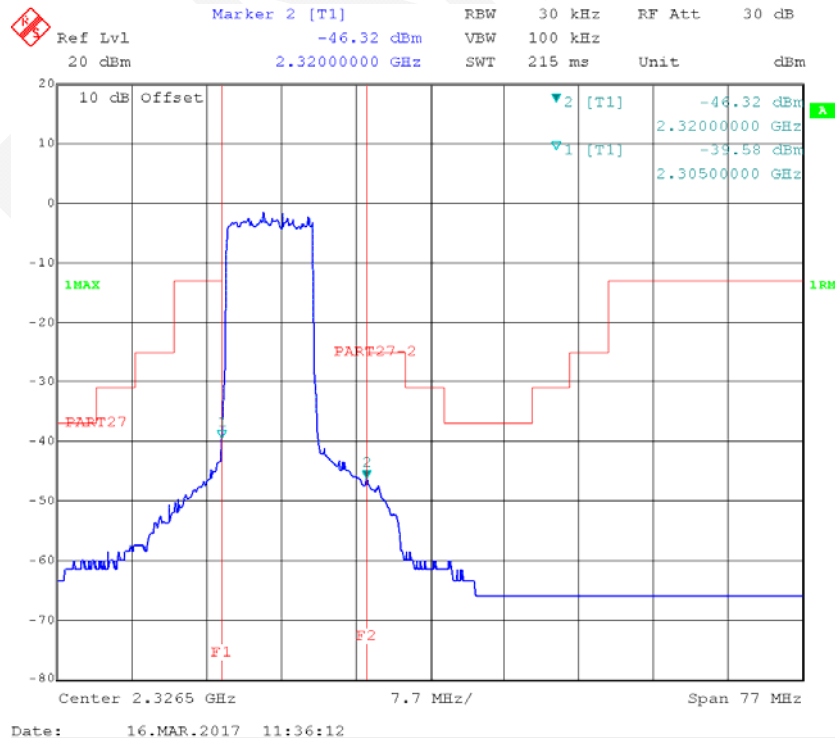
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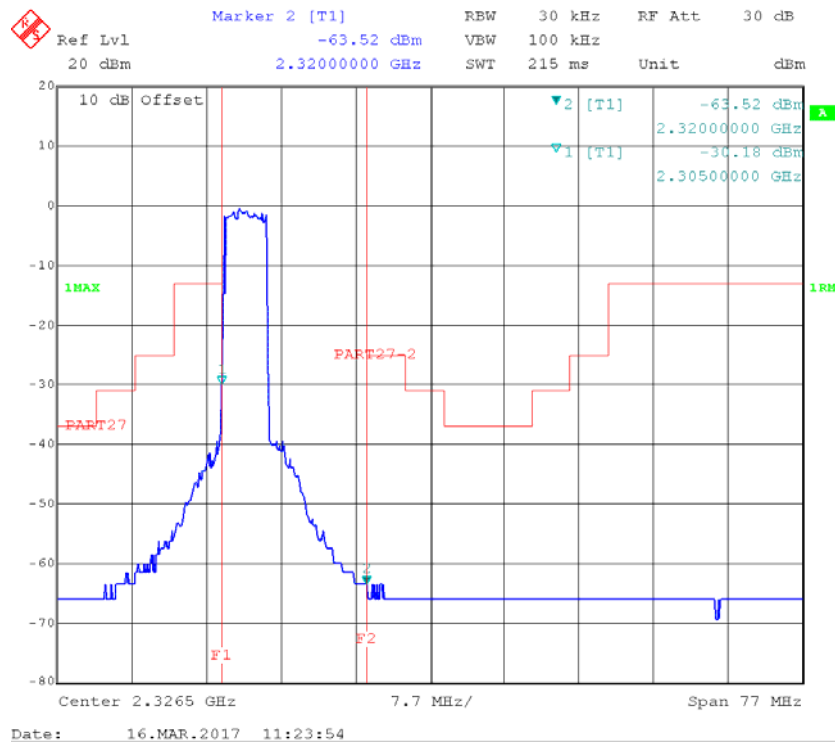
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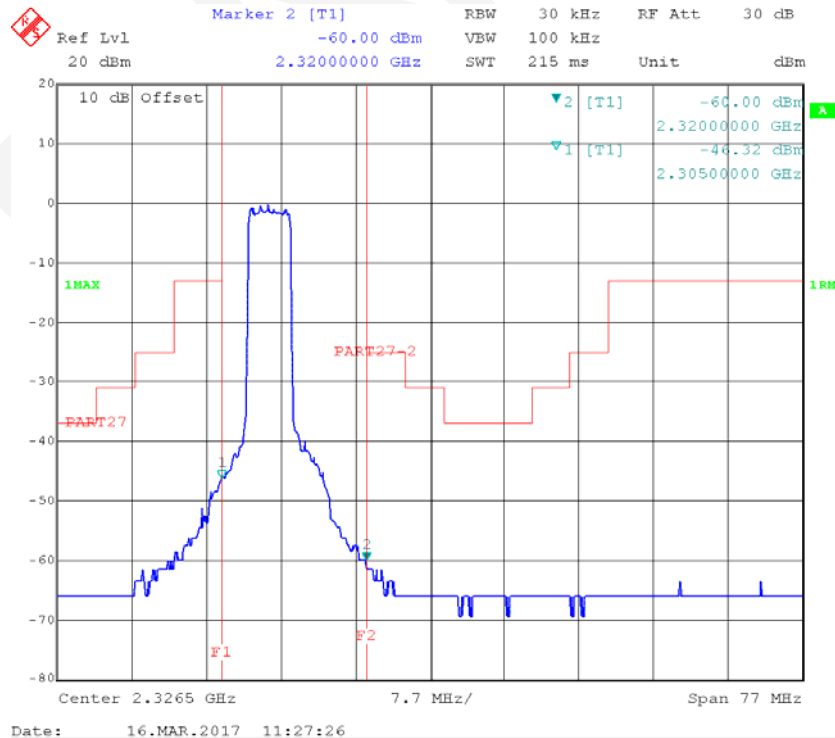
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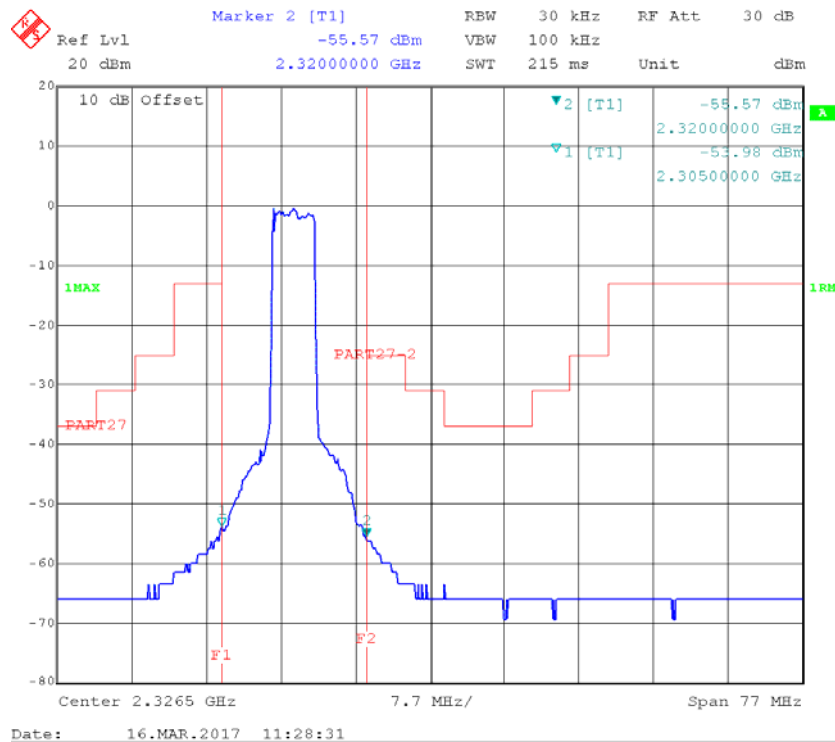
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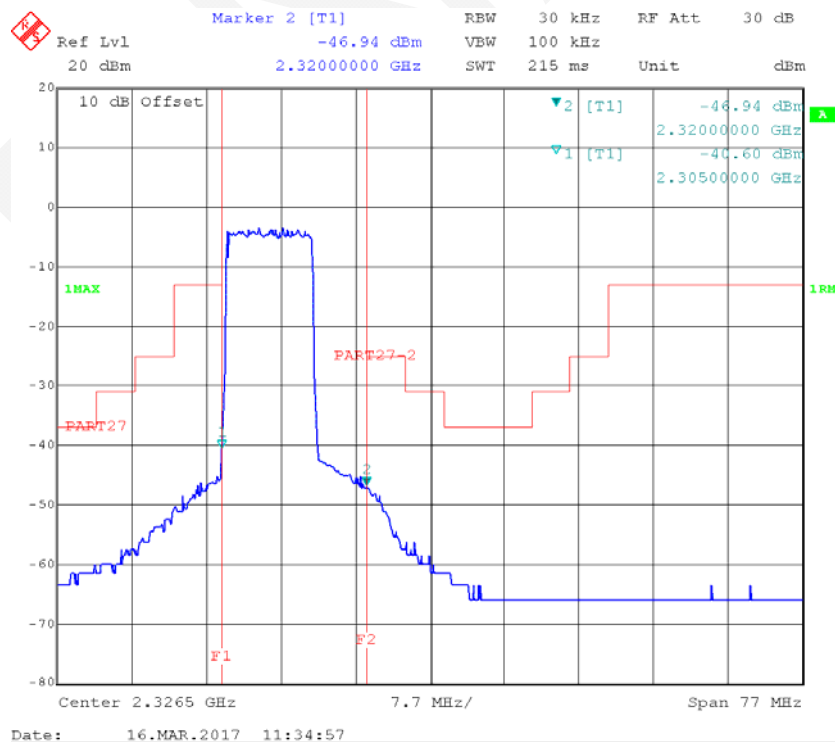
16-QAM_5MHz_Middle Channel



16-QAM_5MHz_High Channel

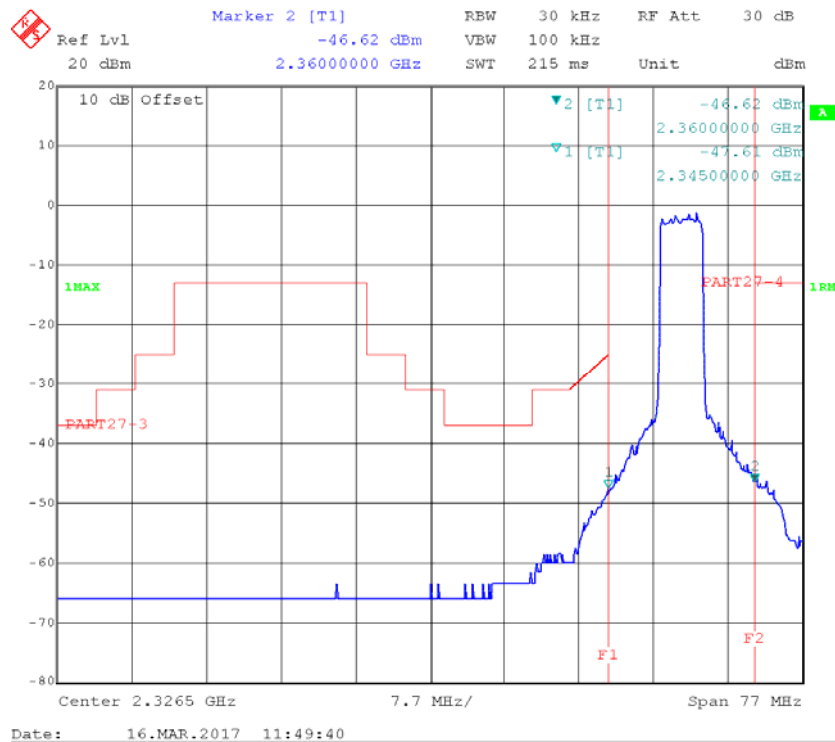


16-QAM_10MHz

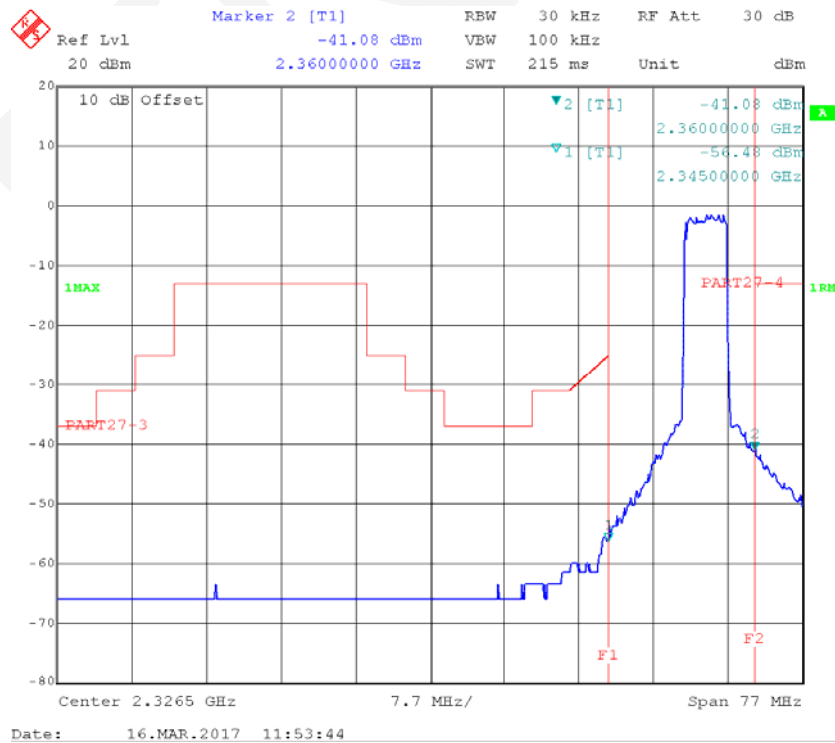


Band 40(2350MHz-2360MHz):

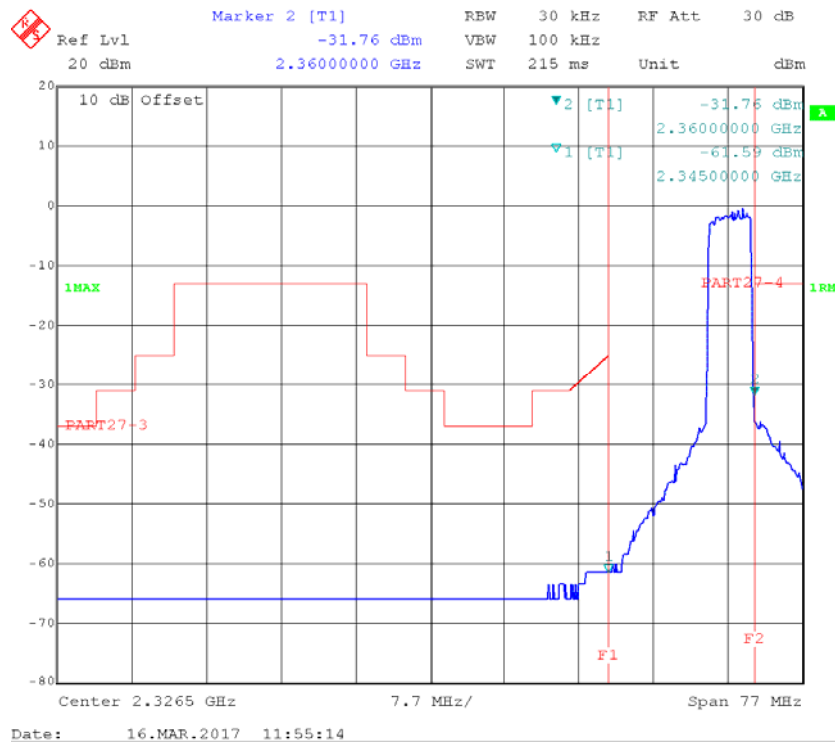
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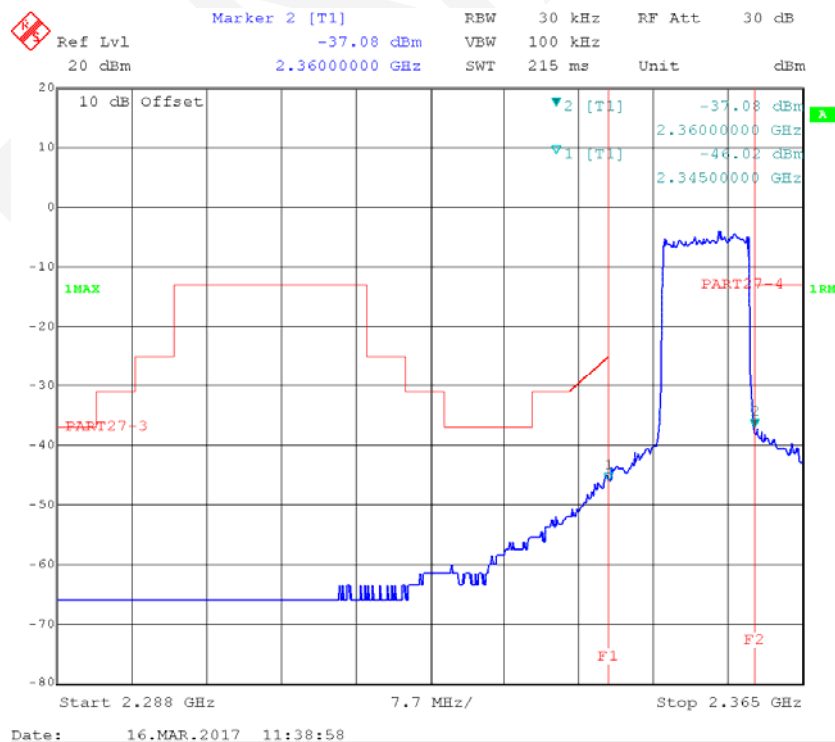
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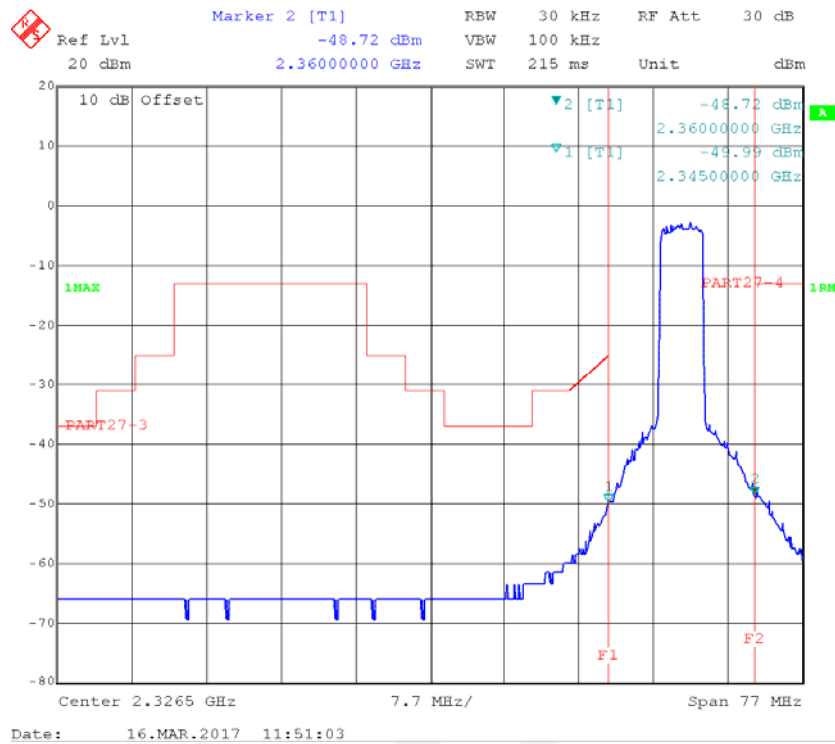
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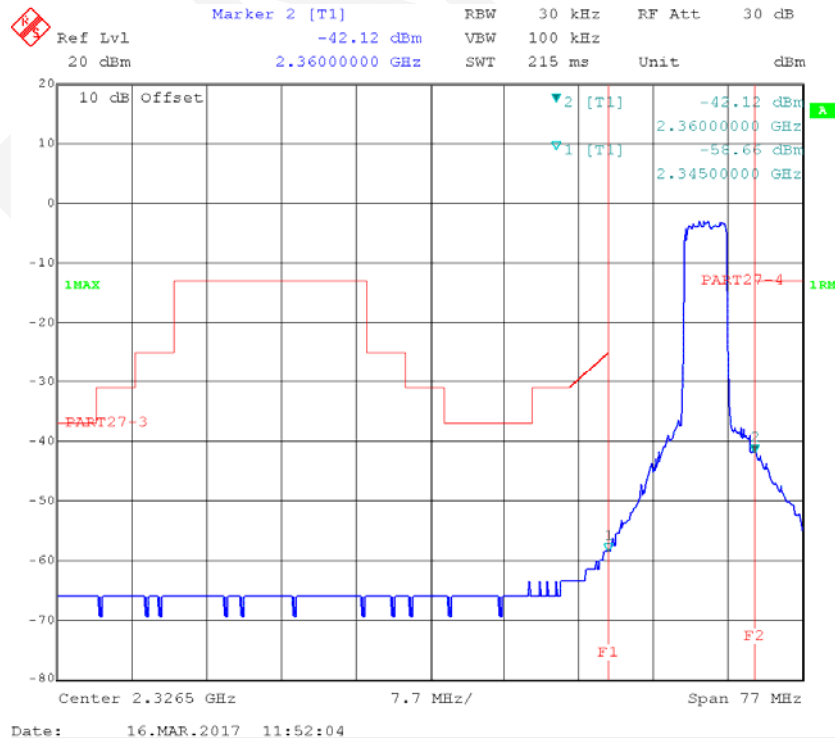
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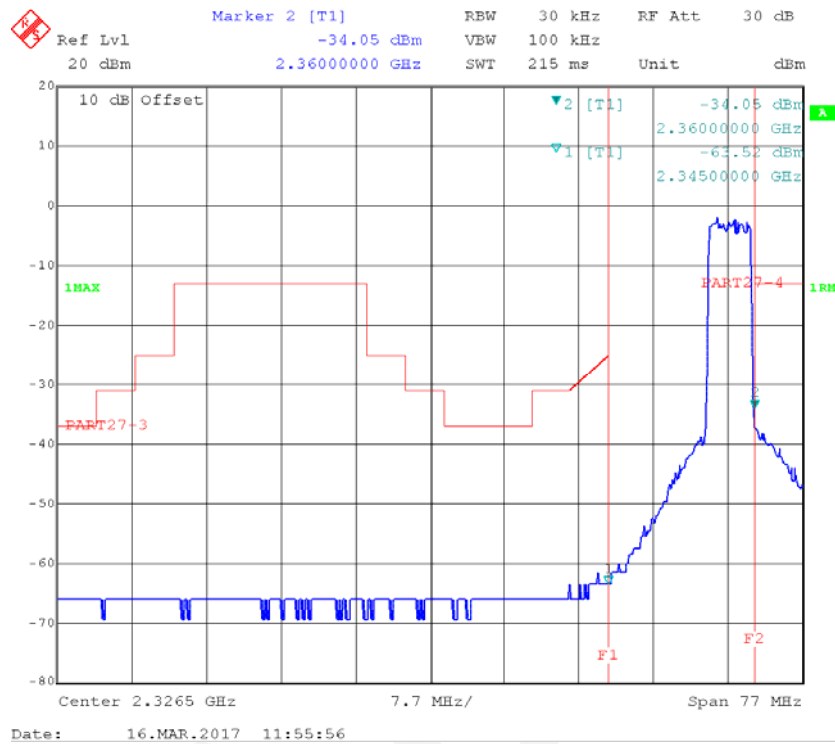
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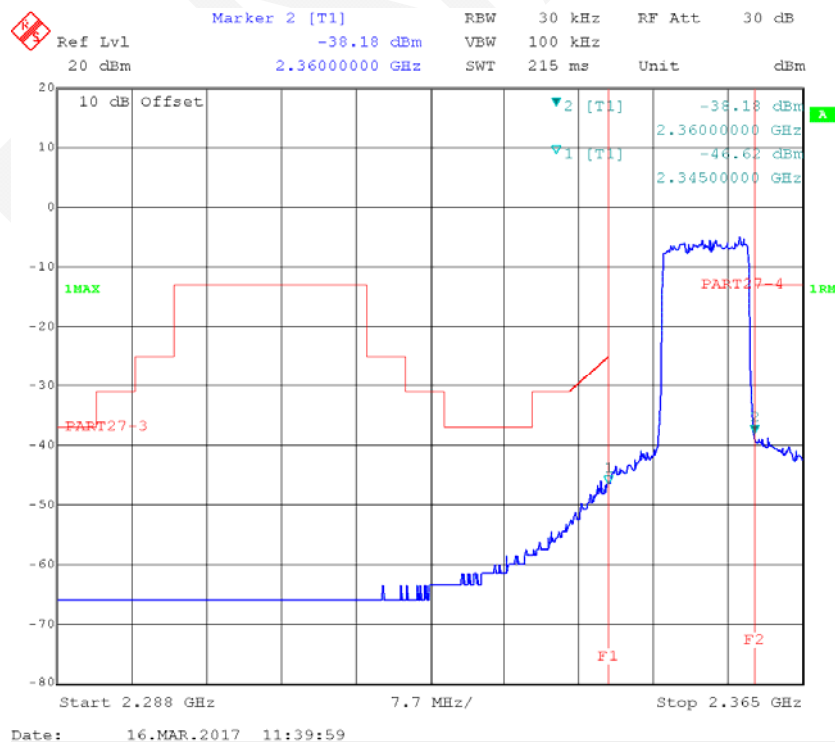
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16-QAM_5MHz_High Channel

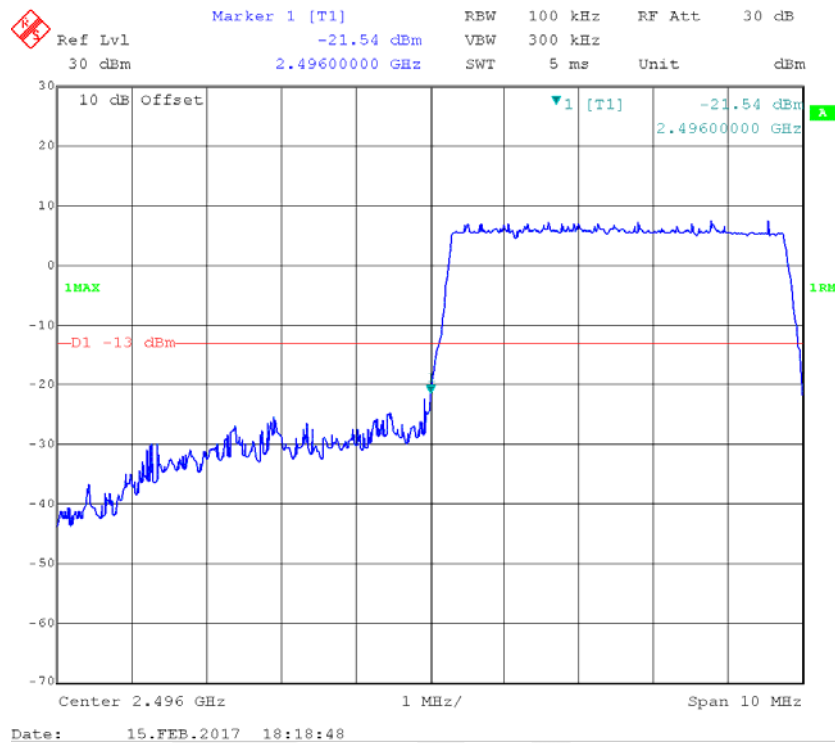


16-QAM_10MHz

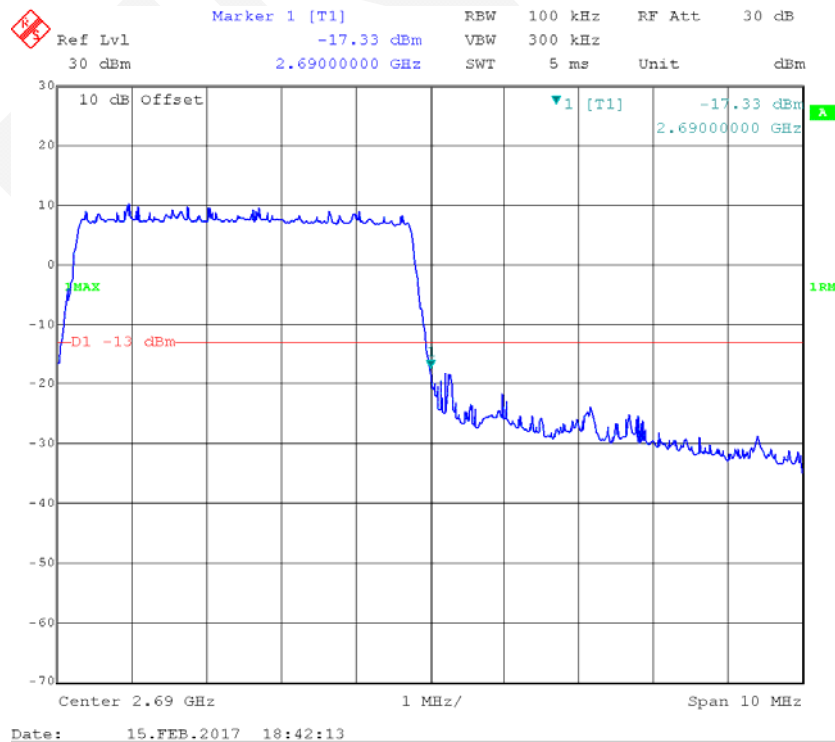


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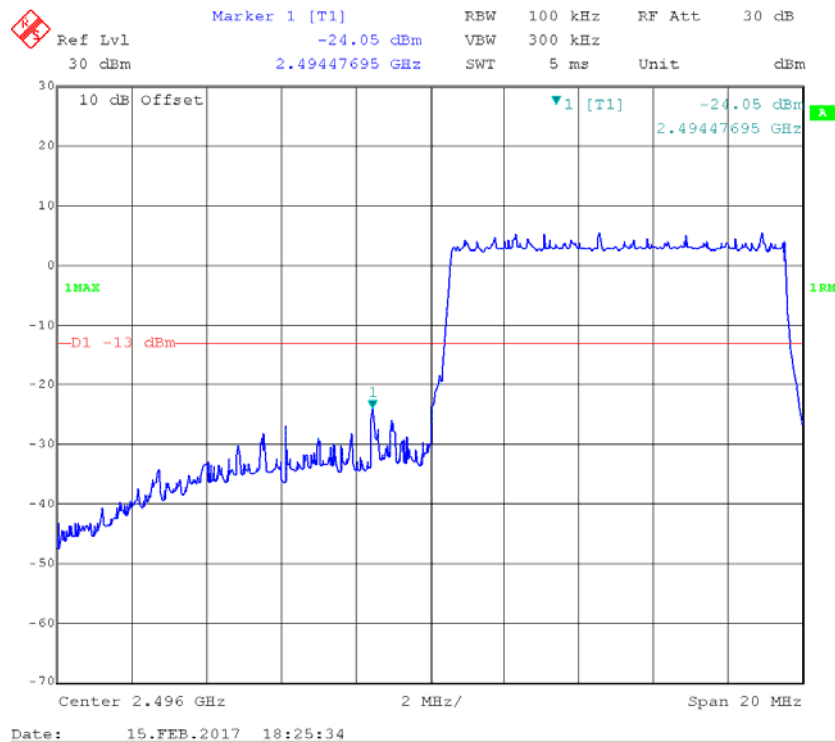
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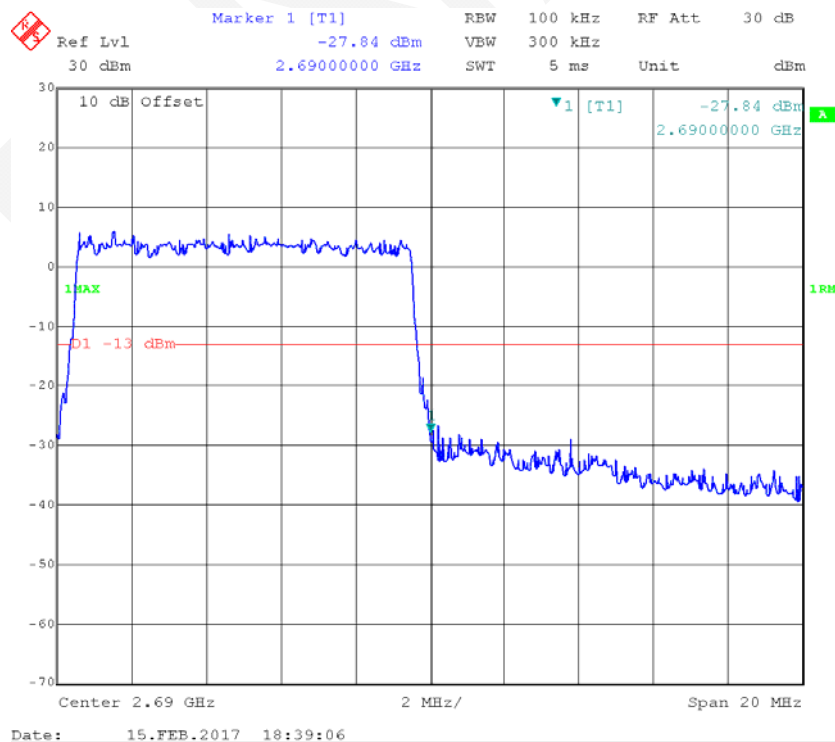
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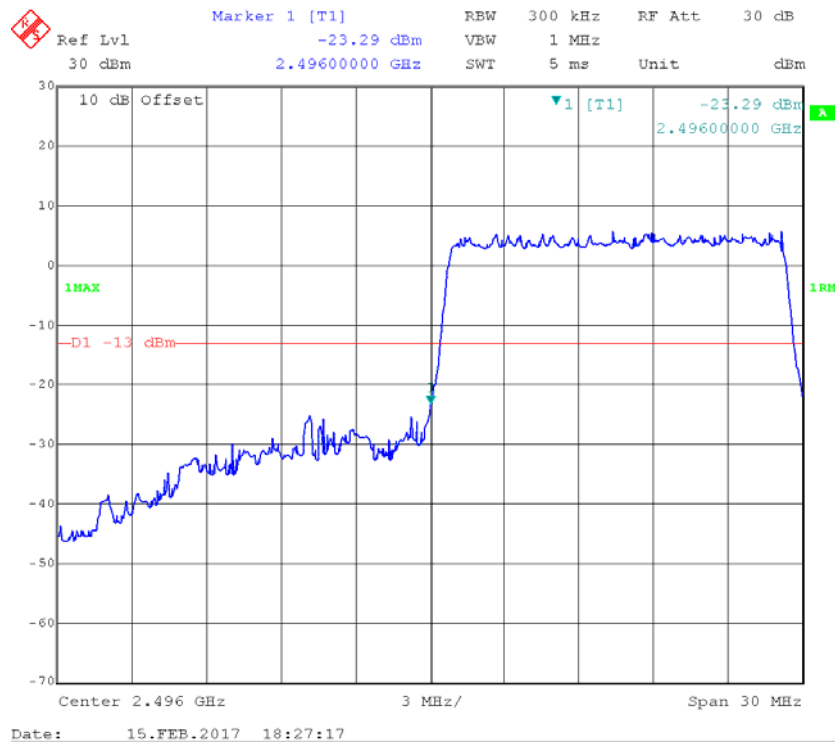
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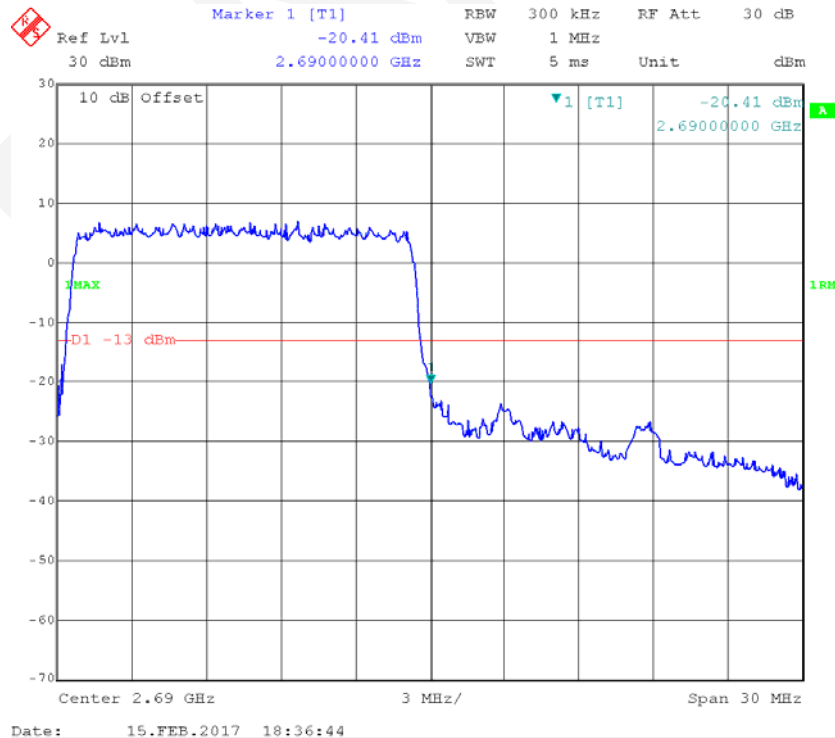
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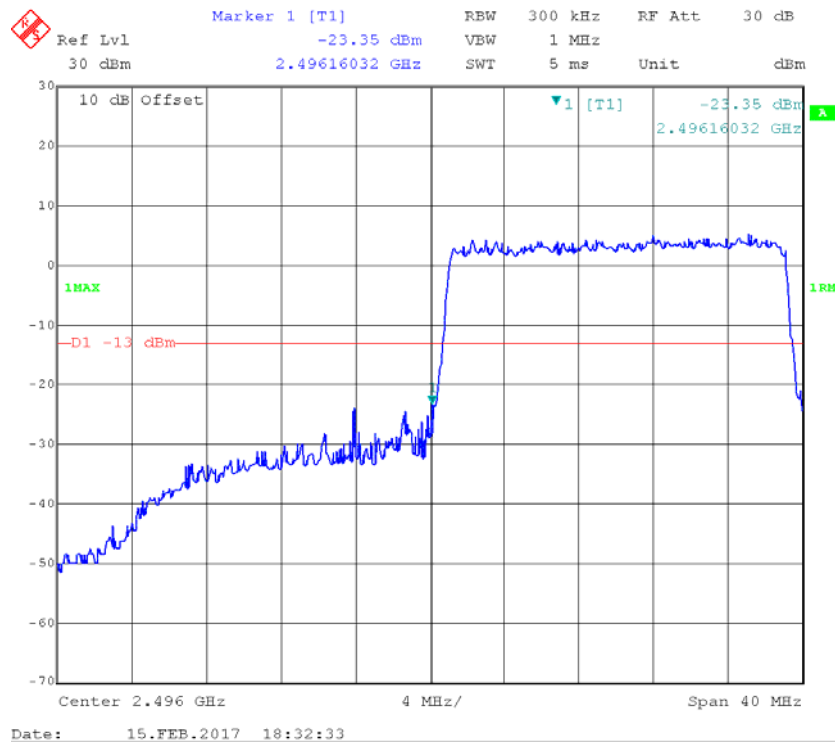
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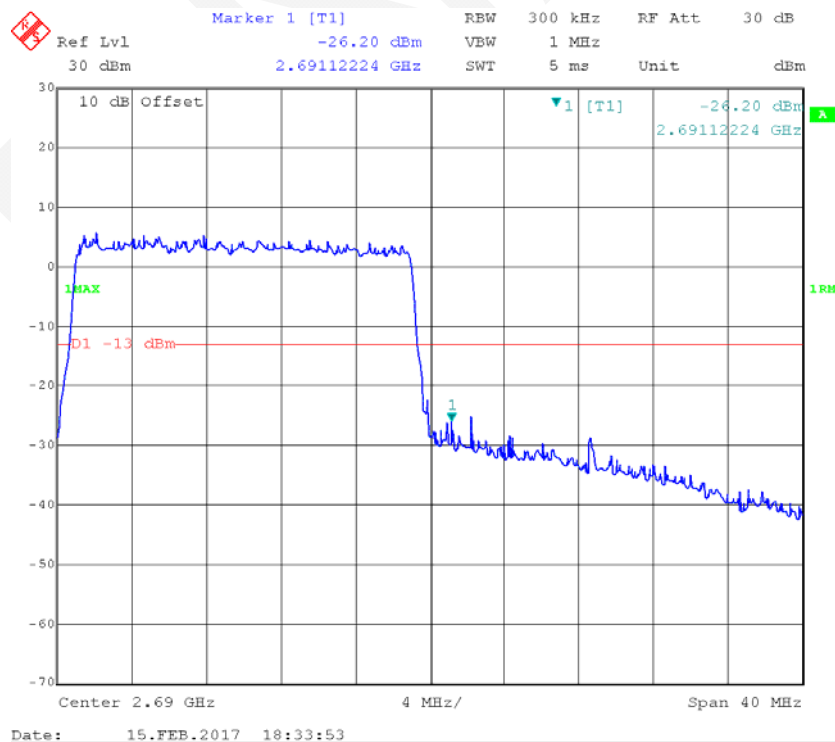
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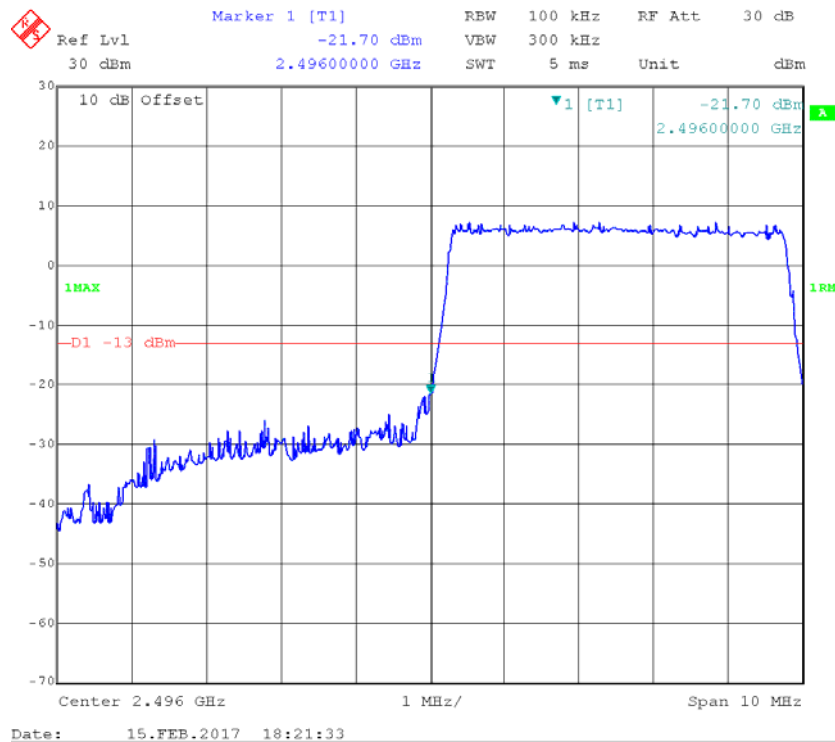
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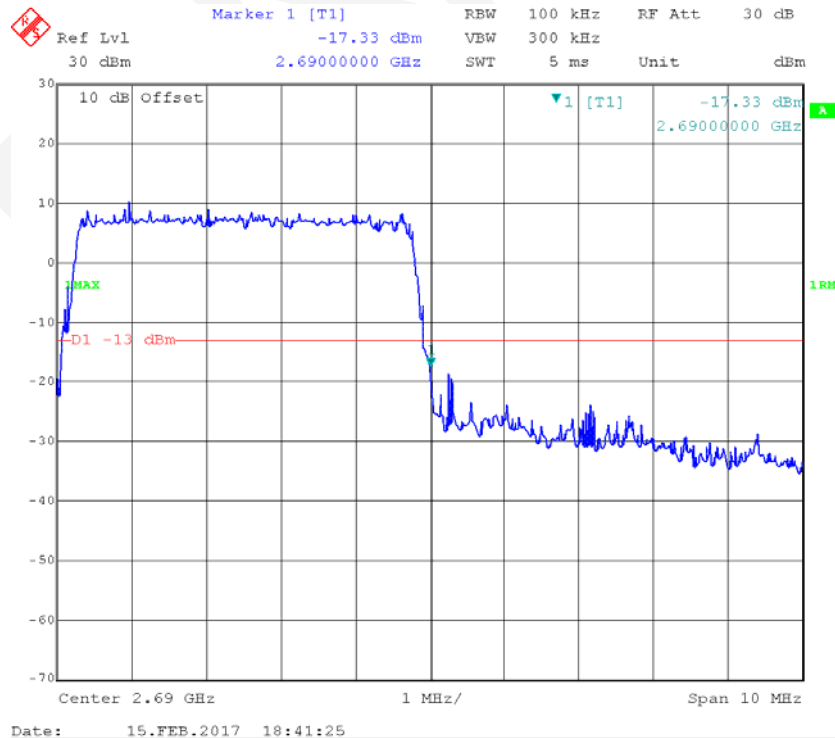
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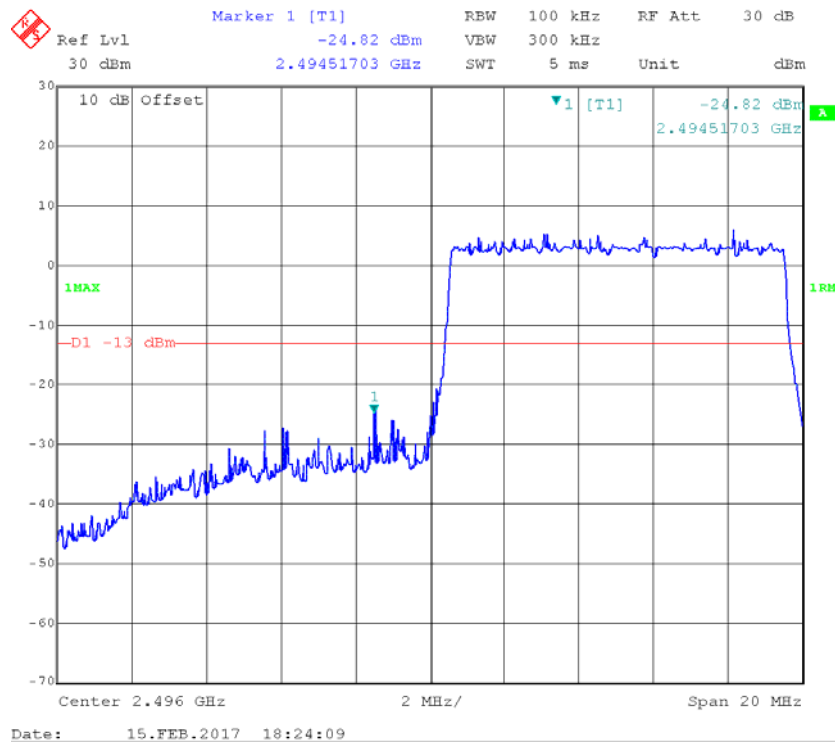
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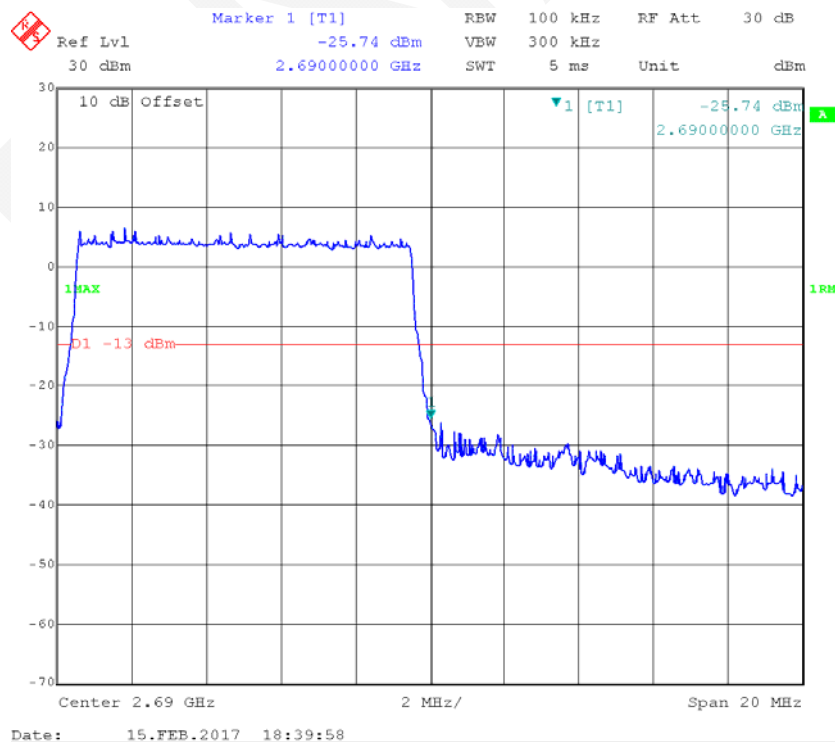
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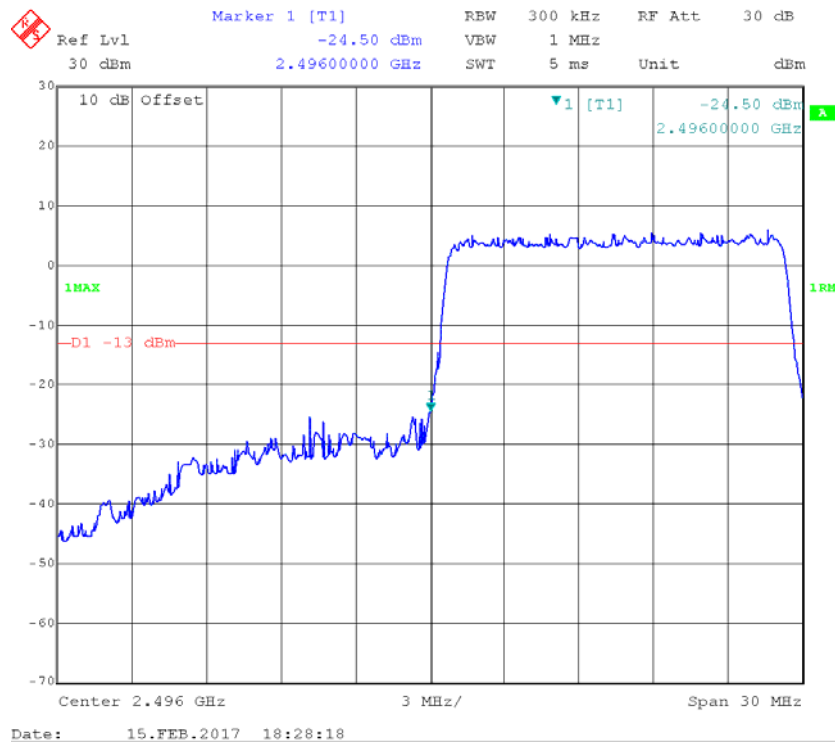
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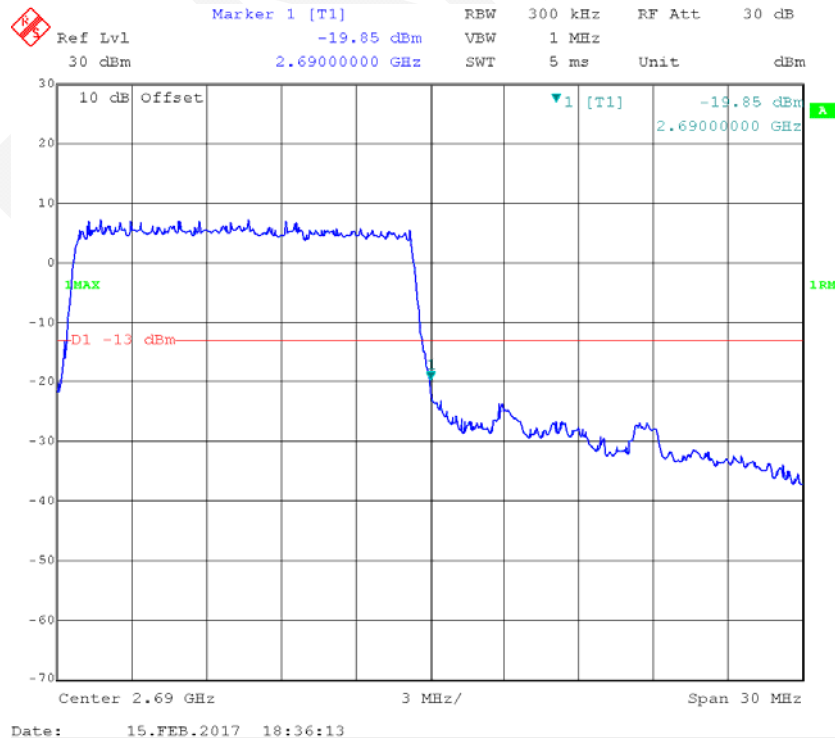
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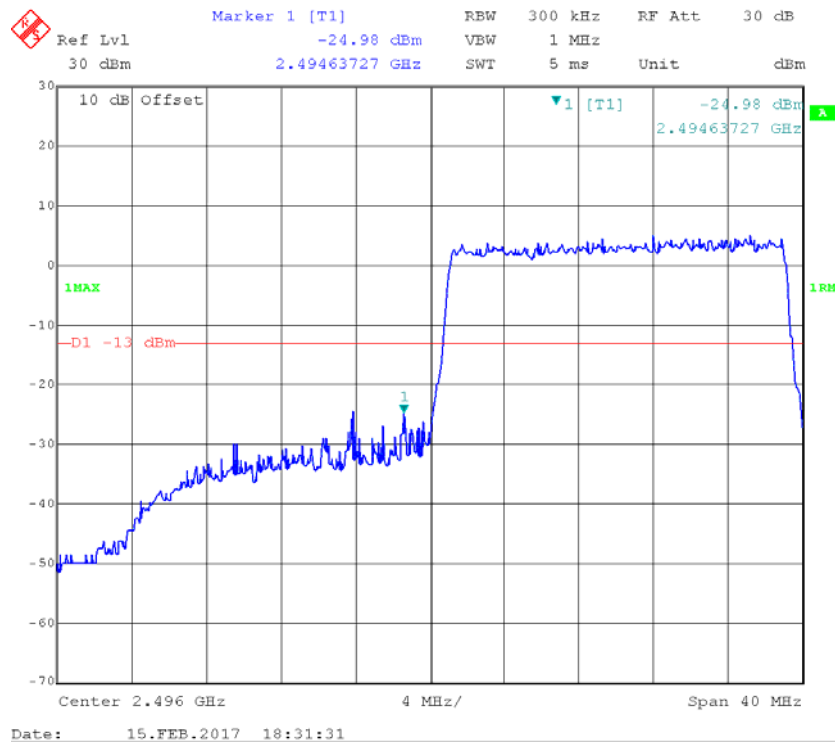
16-QAM 15MHz_RB#75_Low Channel



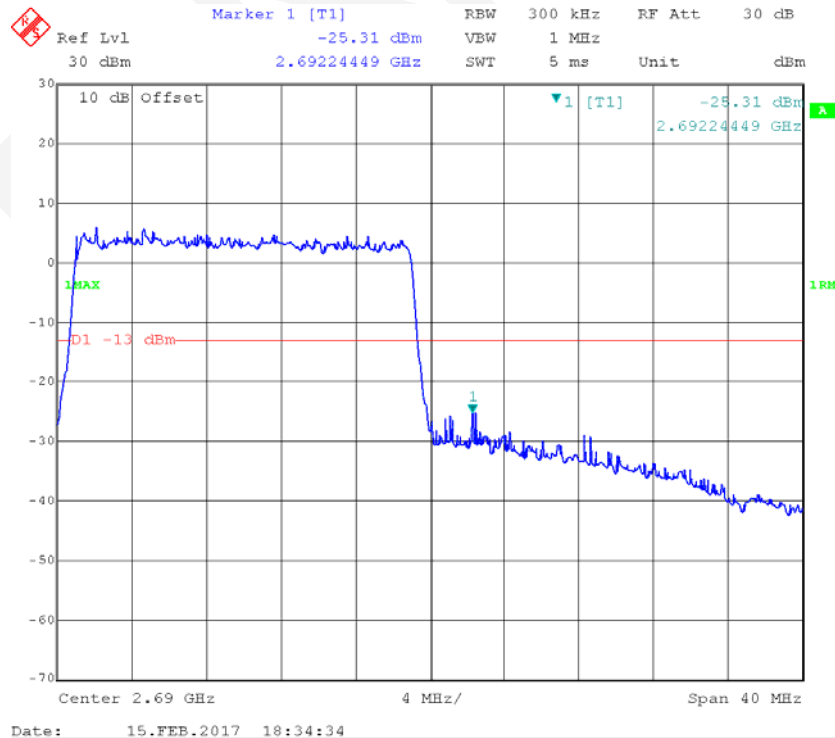
16-QAM 15MHz_RB#75_High Channel



16-QAM_20MHz_RB#100_Low Channel

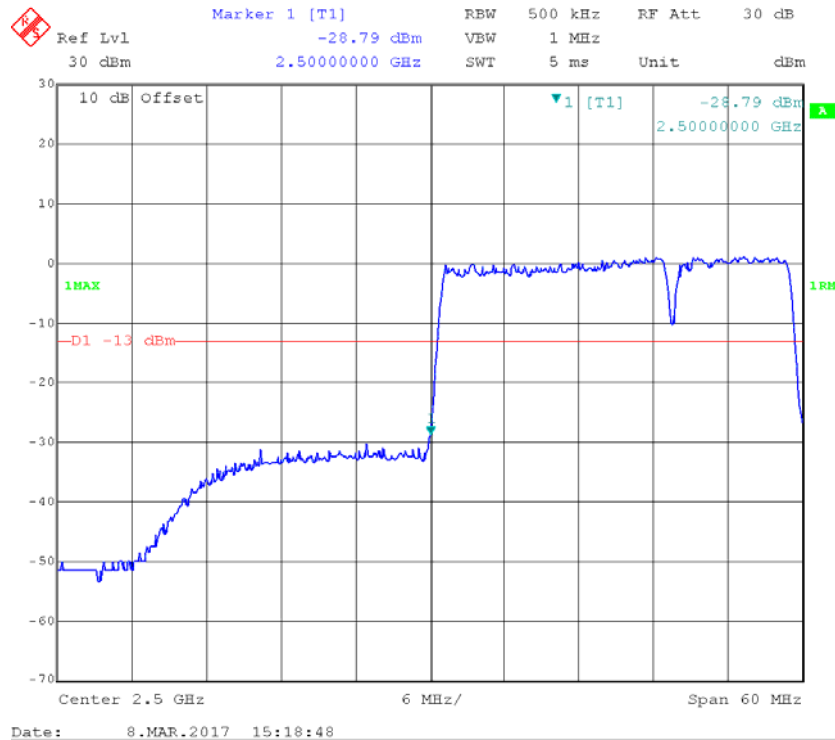


16-QAM_20MHz_RB#100_High Channel

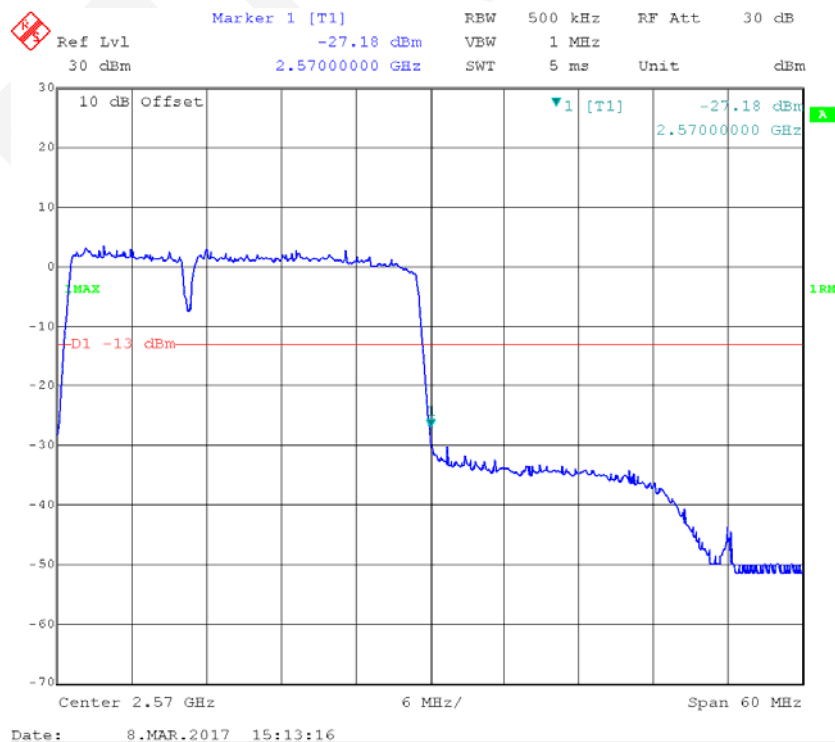


**Carrier Aggregation:
Band 7:**

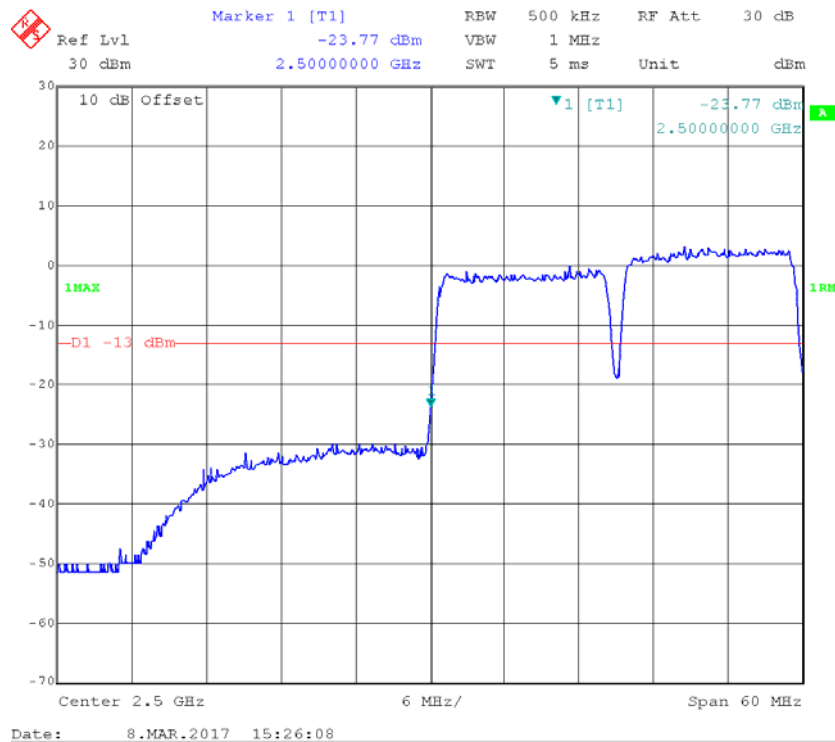
QPSK_RB(50+100)_Low Channel



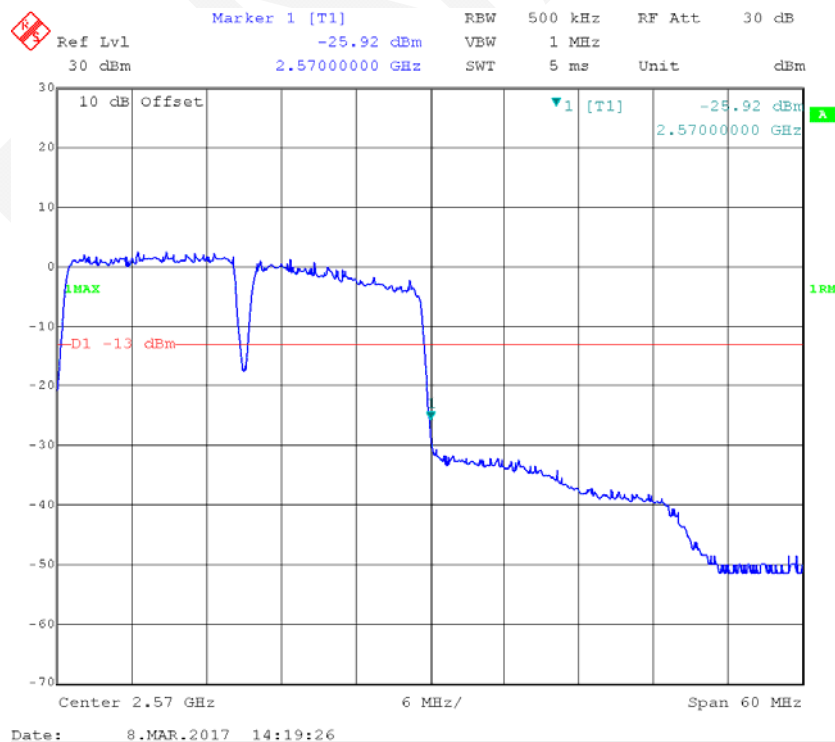
QPSK_RB(50+100)_High Channel



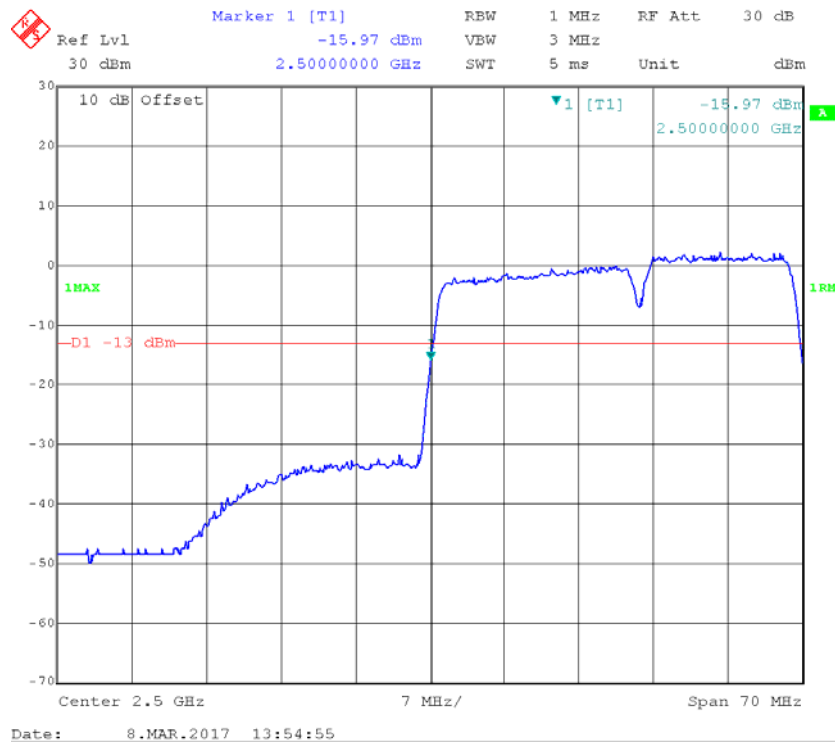
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QPSK_RB(75+75)_High Channel



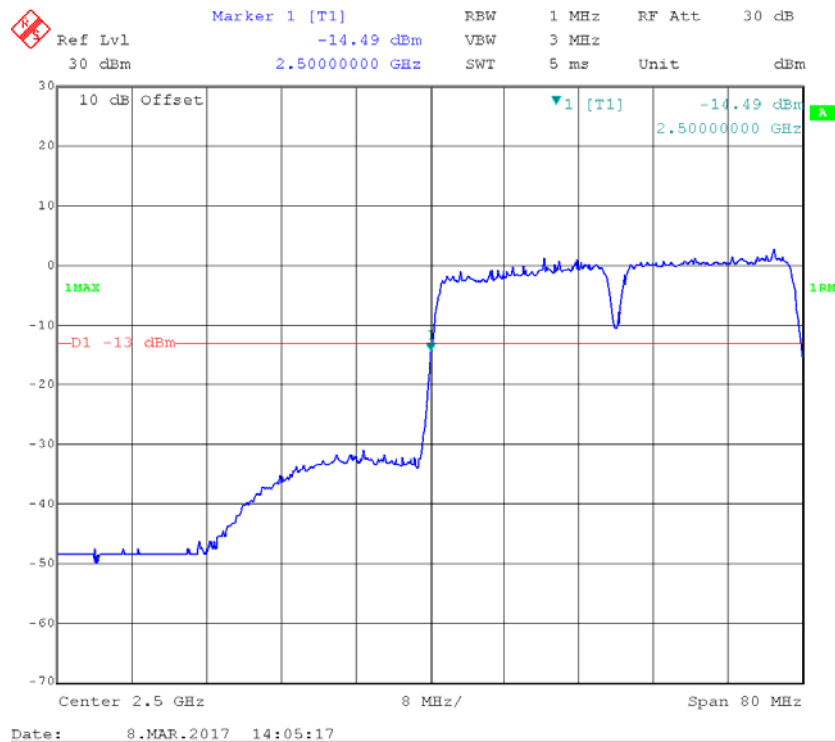
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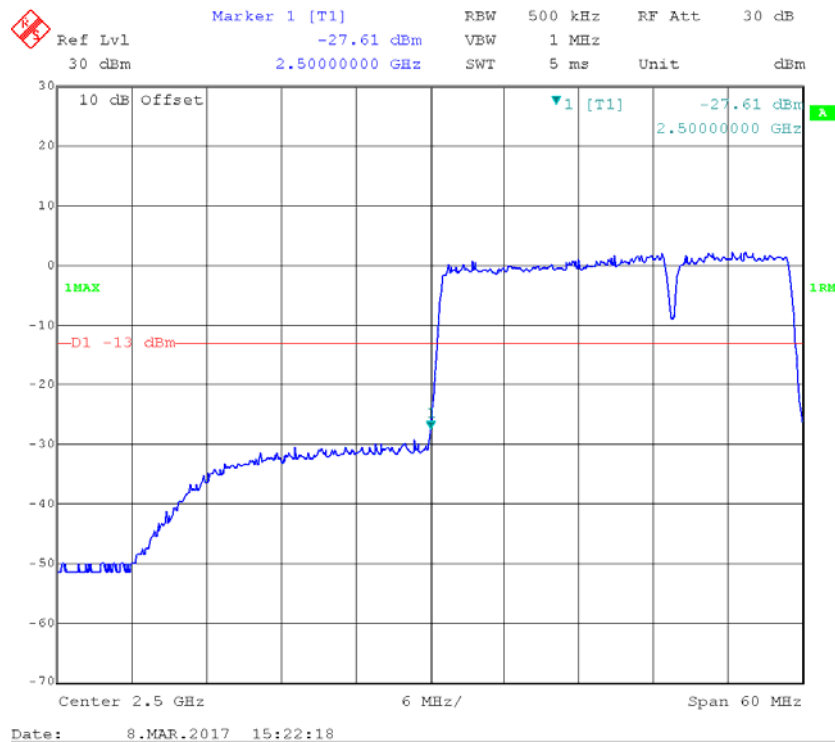
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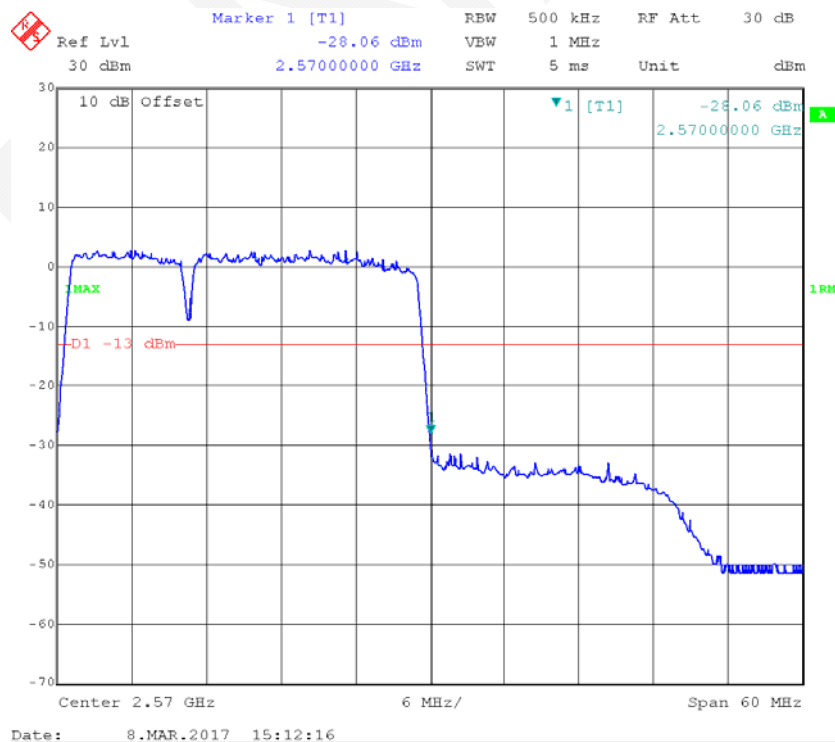
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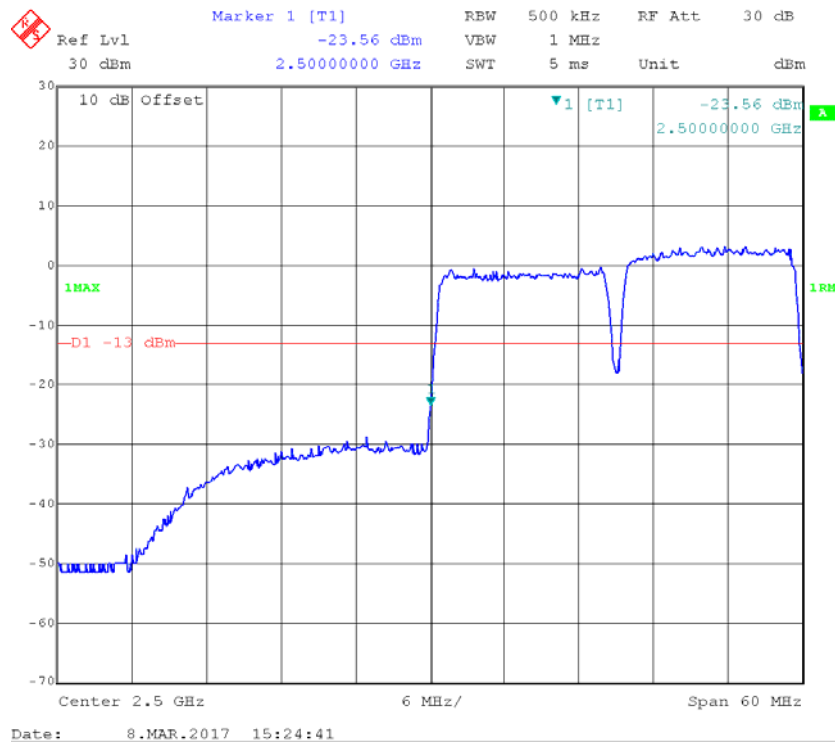
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16-QAM_RB(50+100)_High Channel



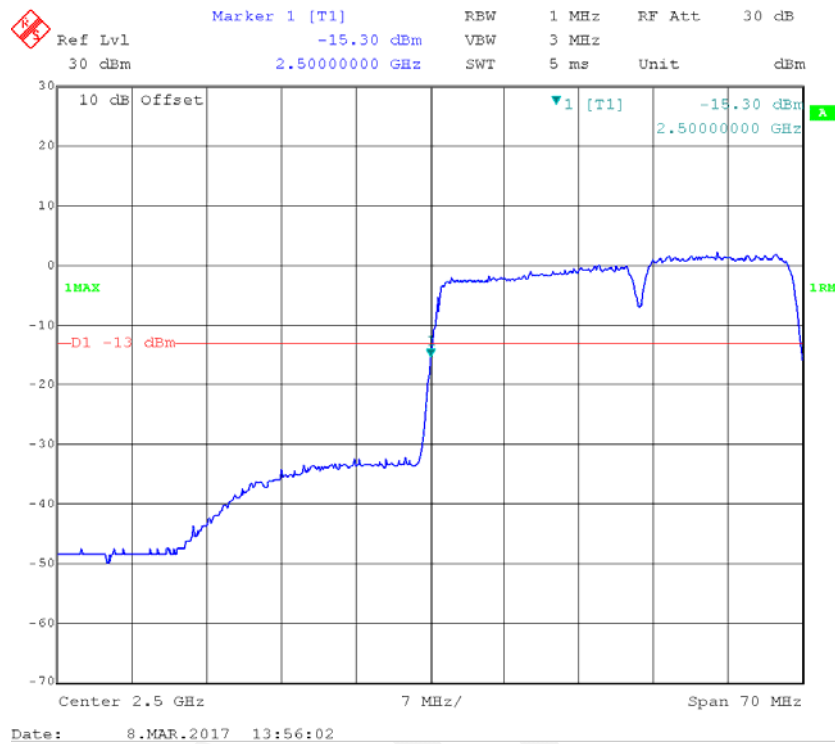
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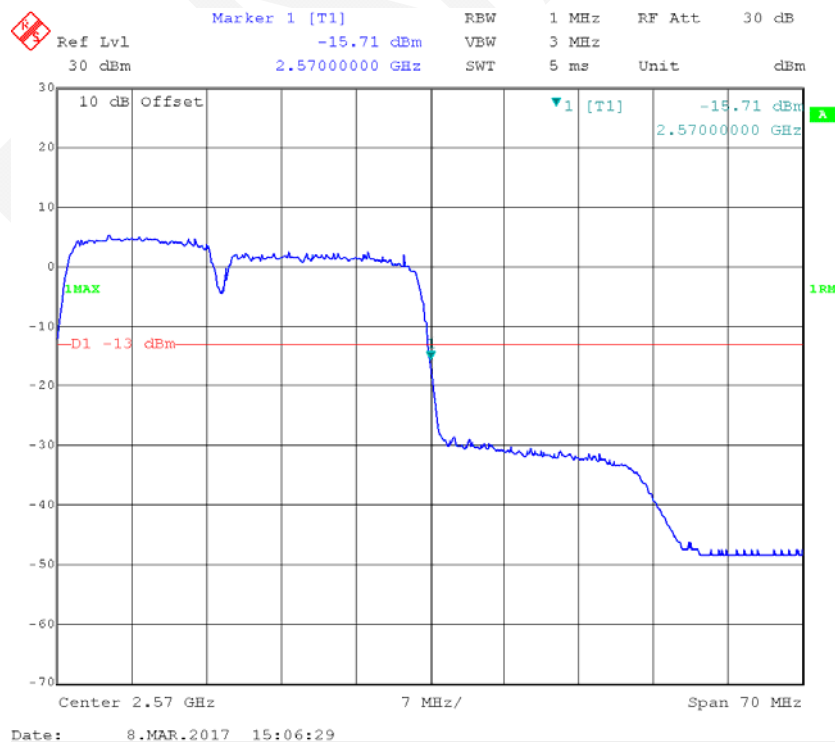
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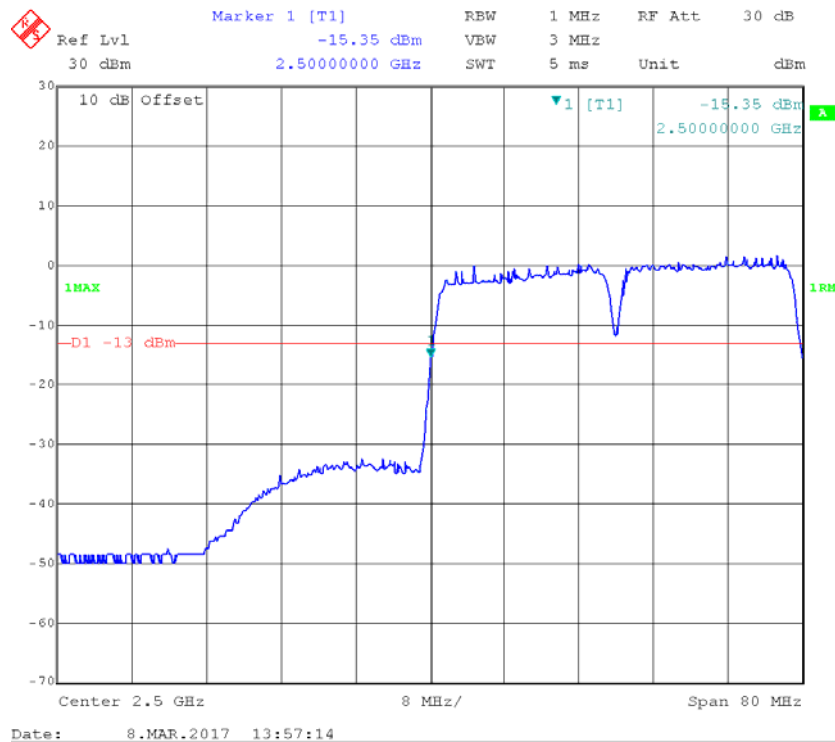
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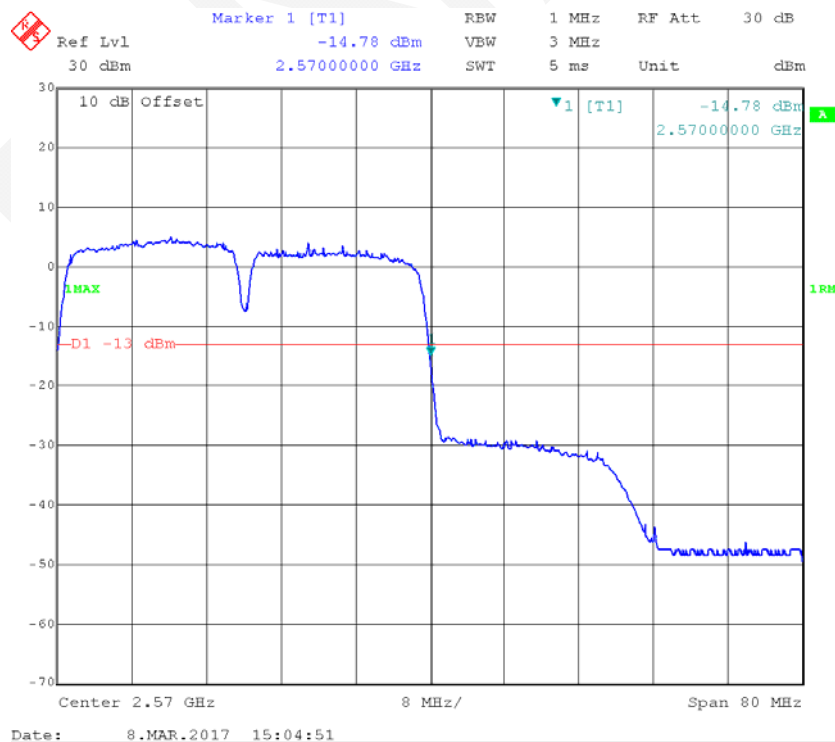
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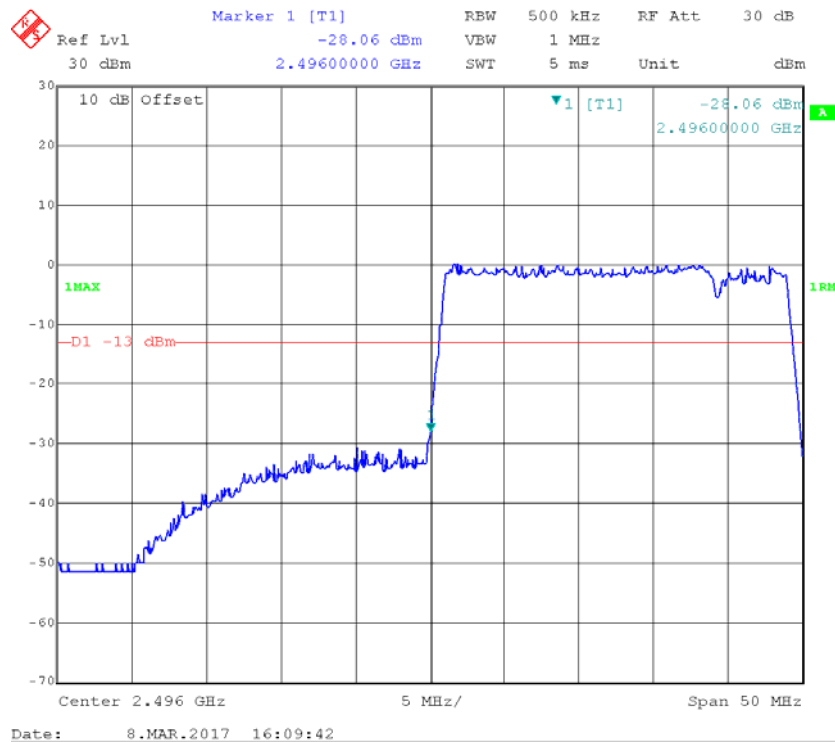


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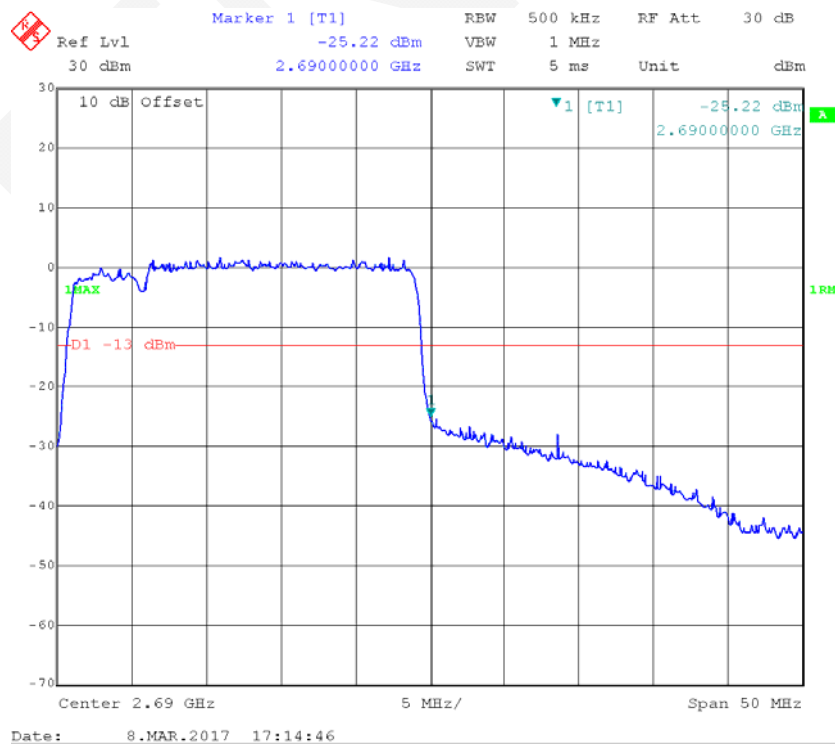


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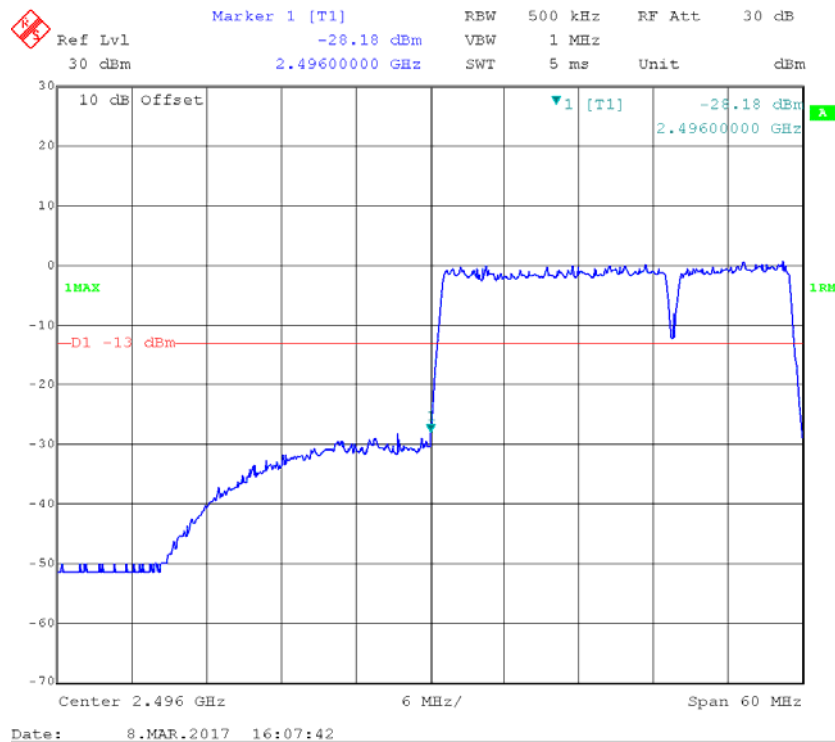
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QPSK_RB(25+100)_High Channel



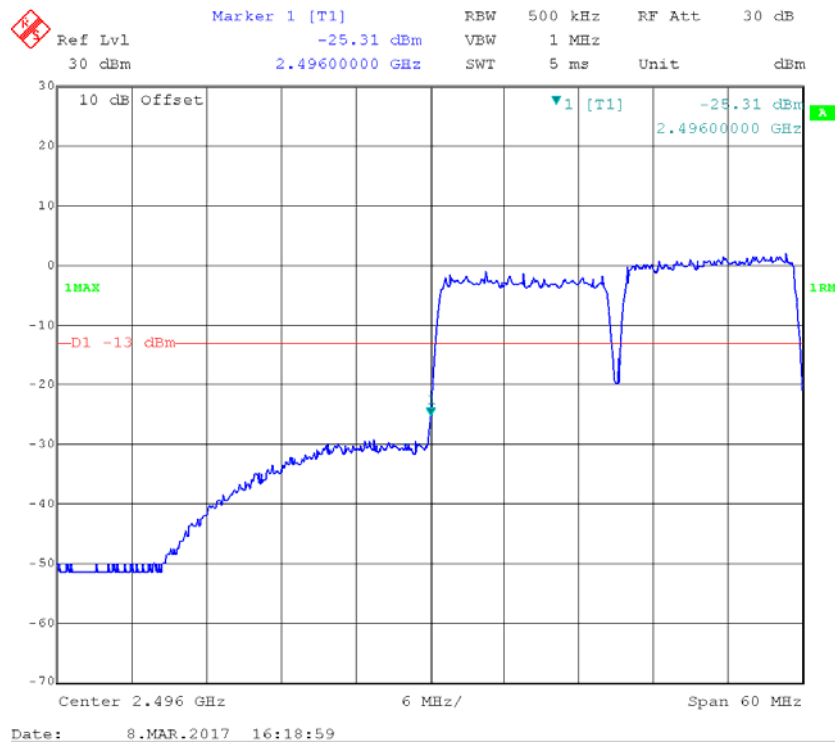
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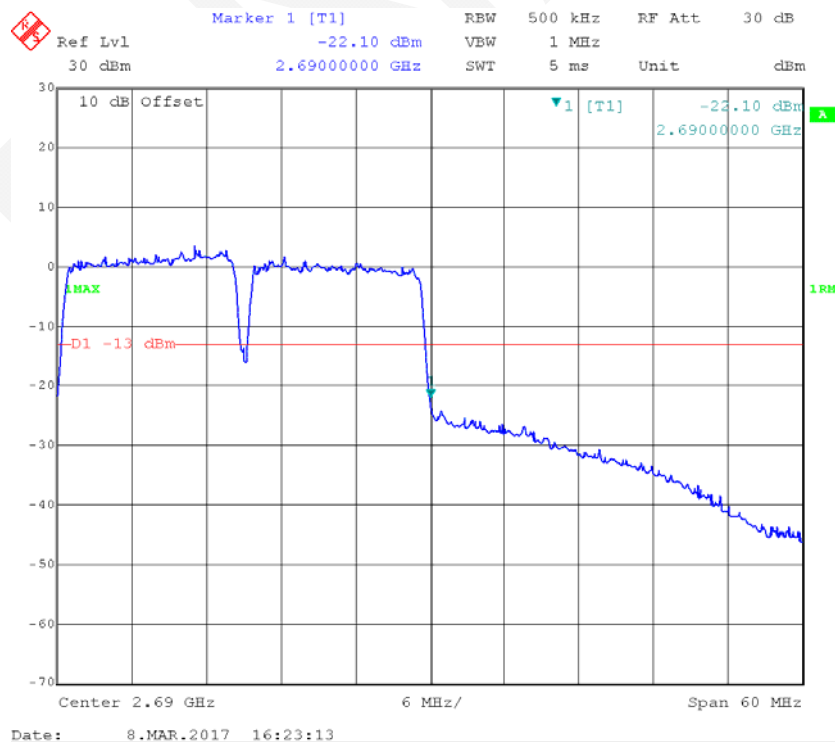
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QPSK_RB(75+75)_Low Channel



QPSK_RB(75+75)_High Channel



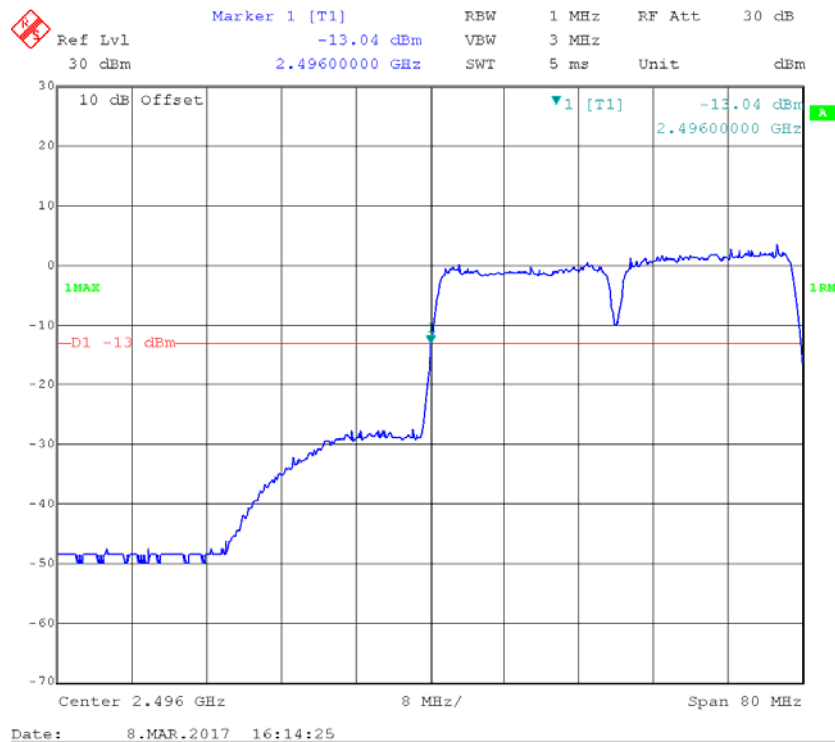
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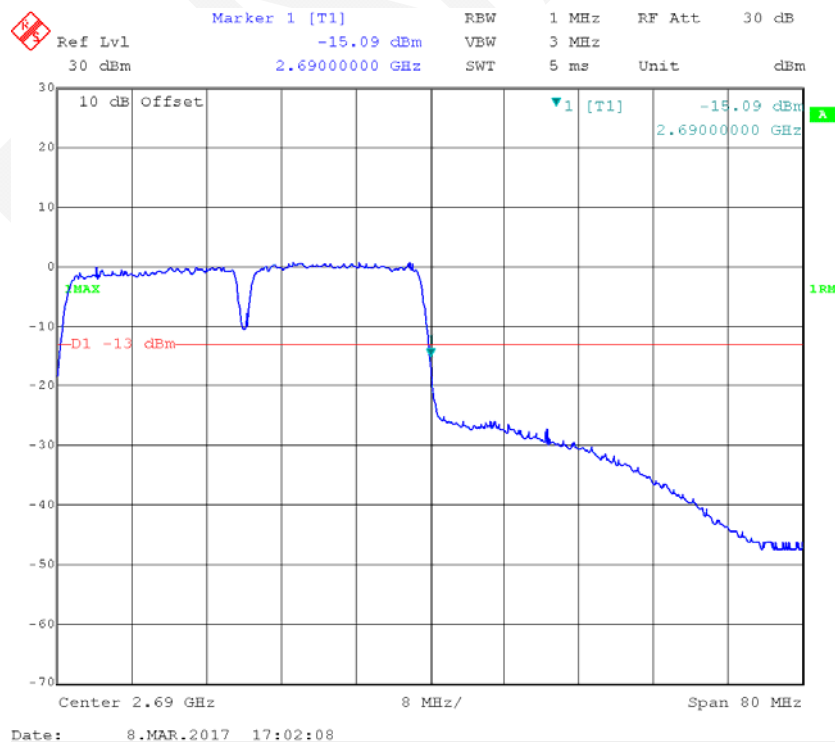
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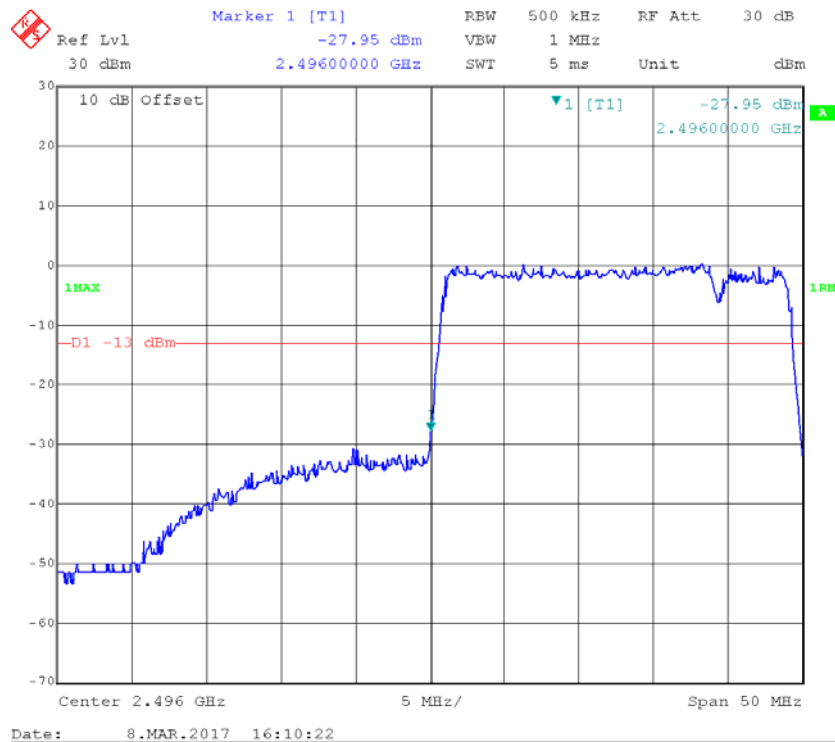
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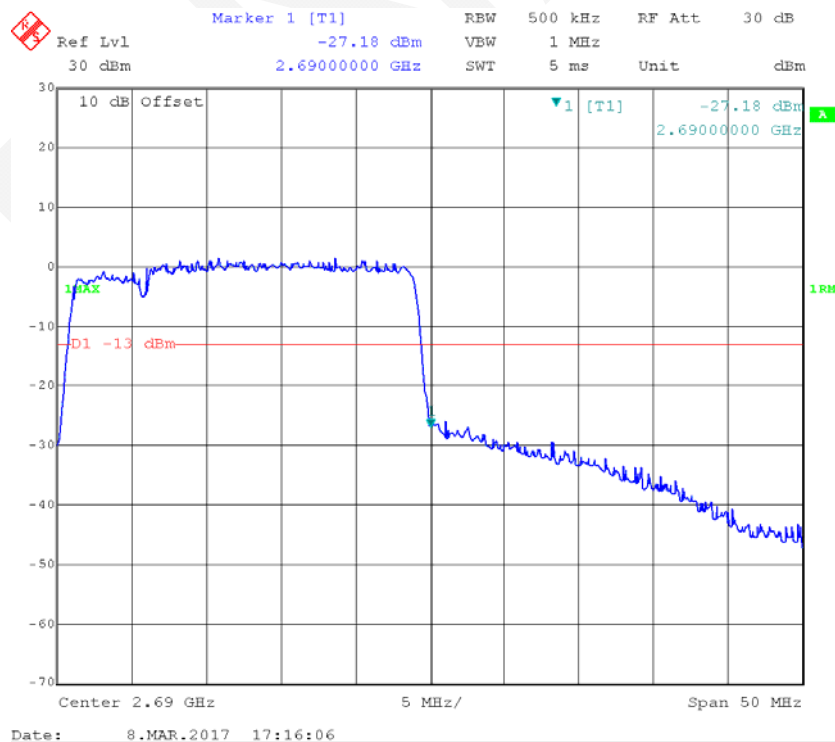
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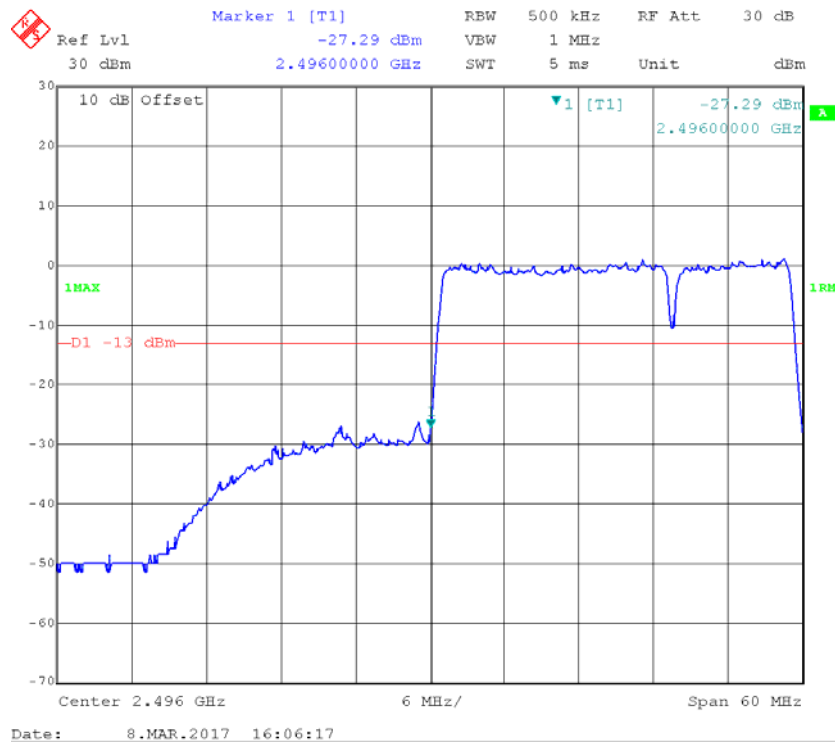
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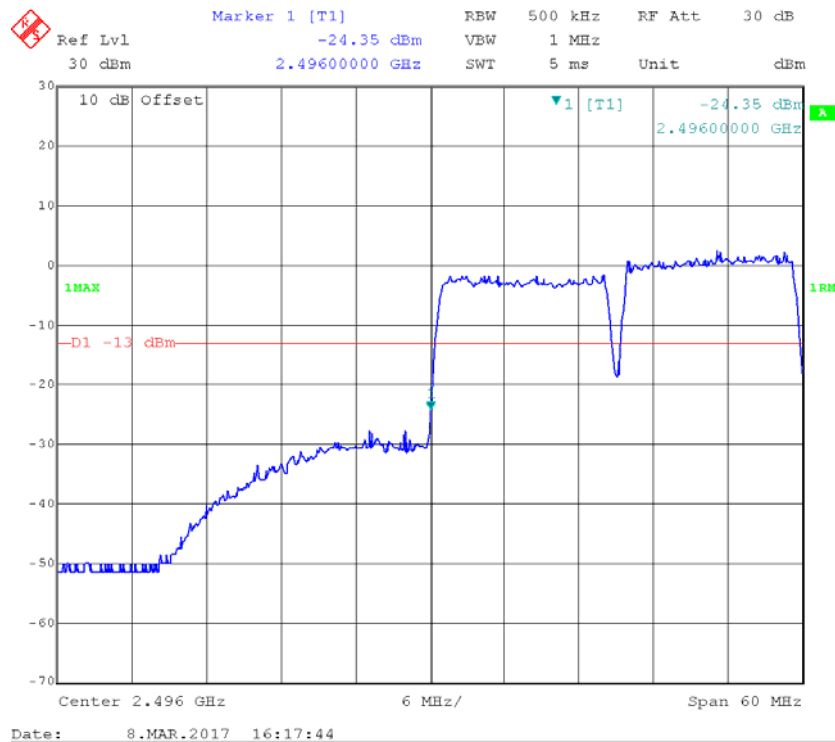
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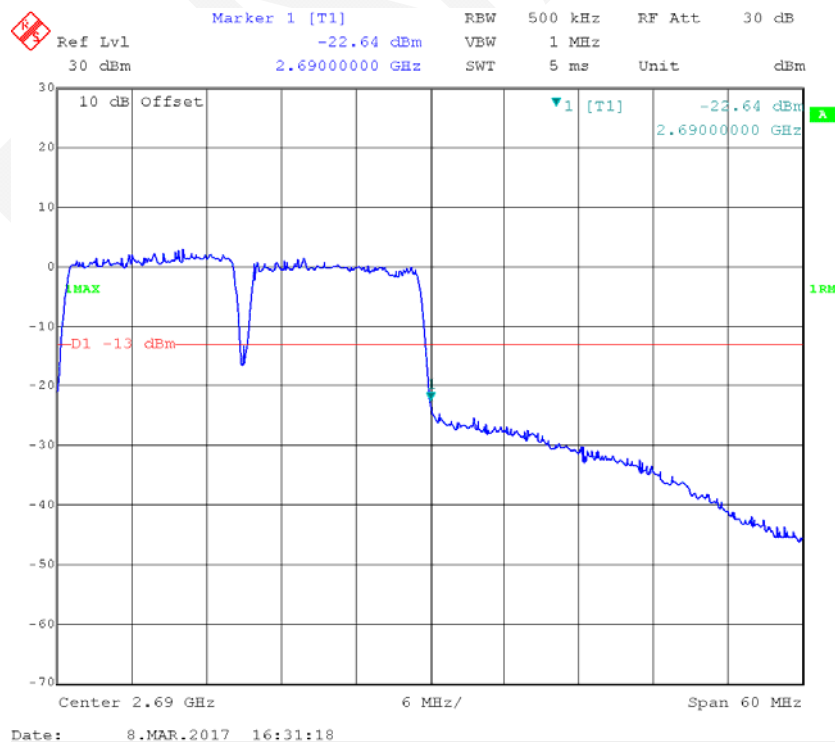
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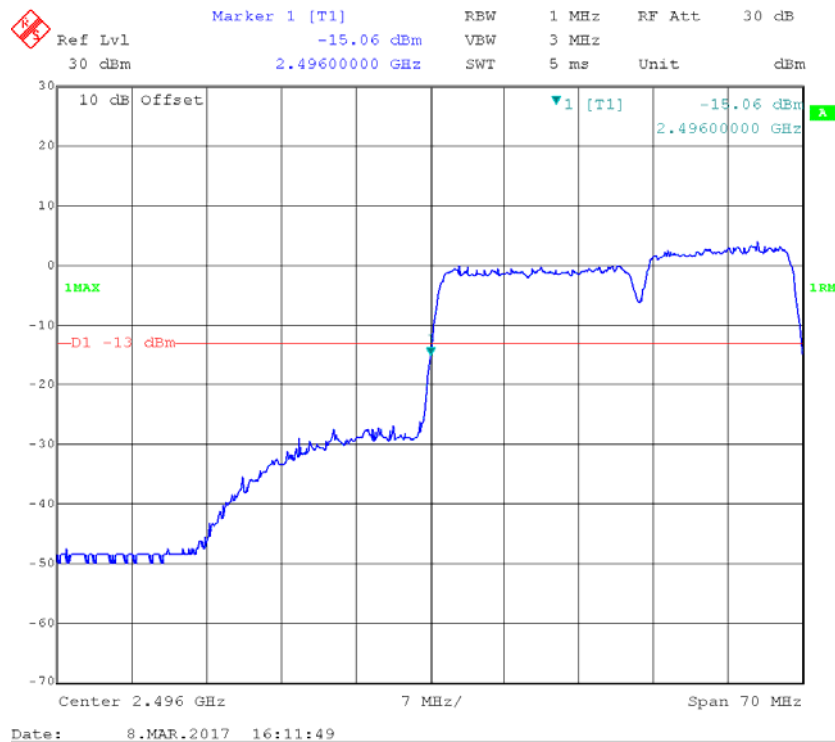
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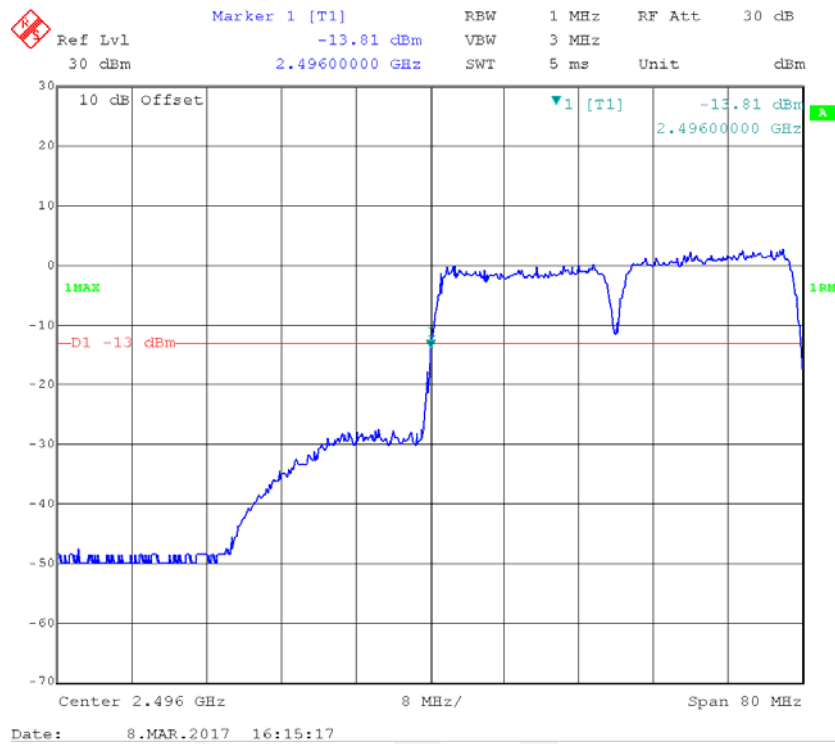
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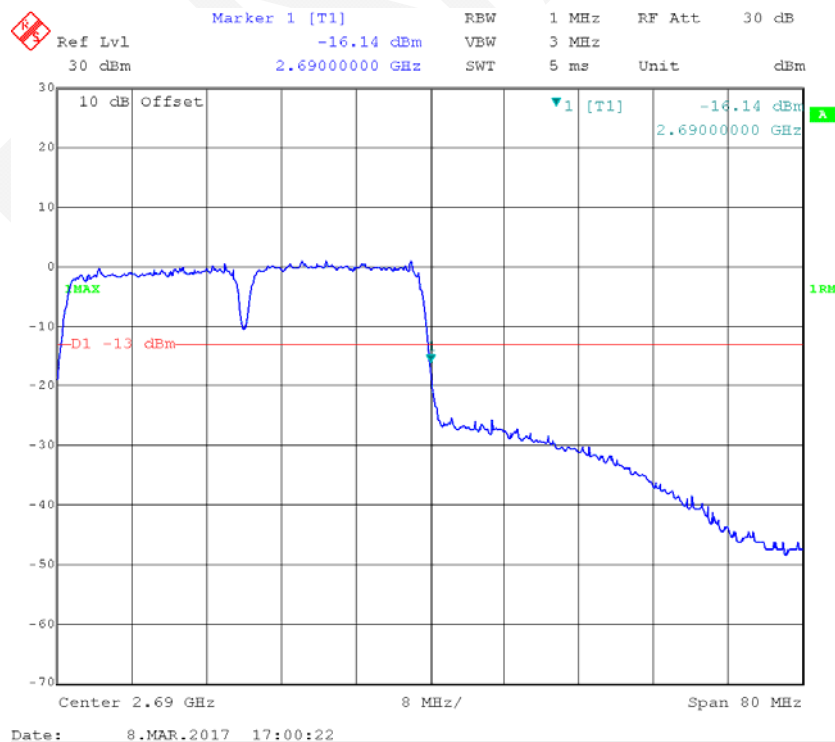
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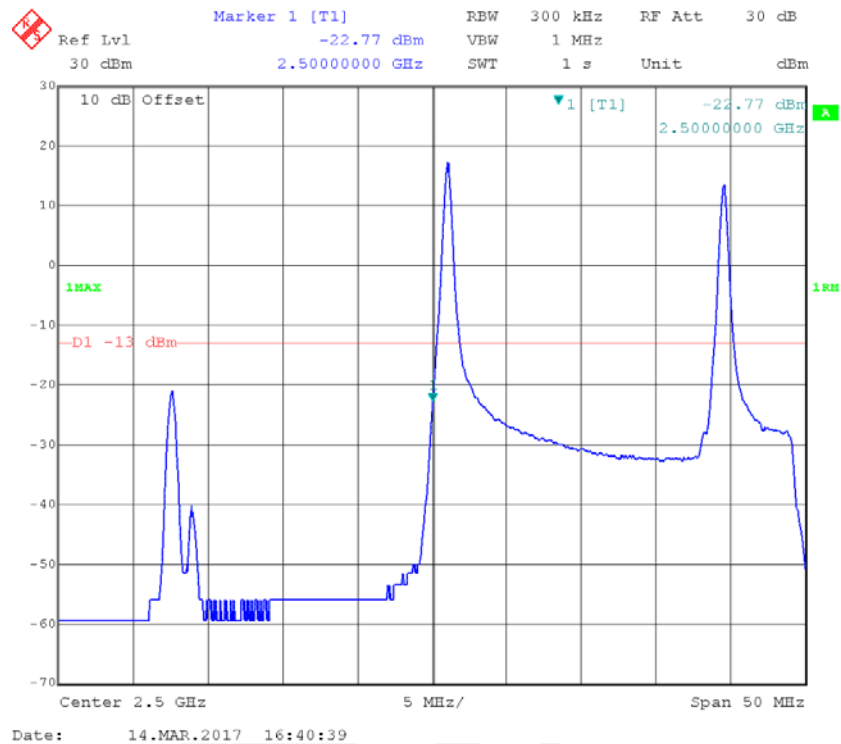


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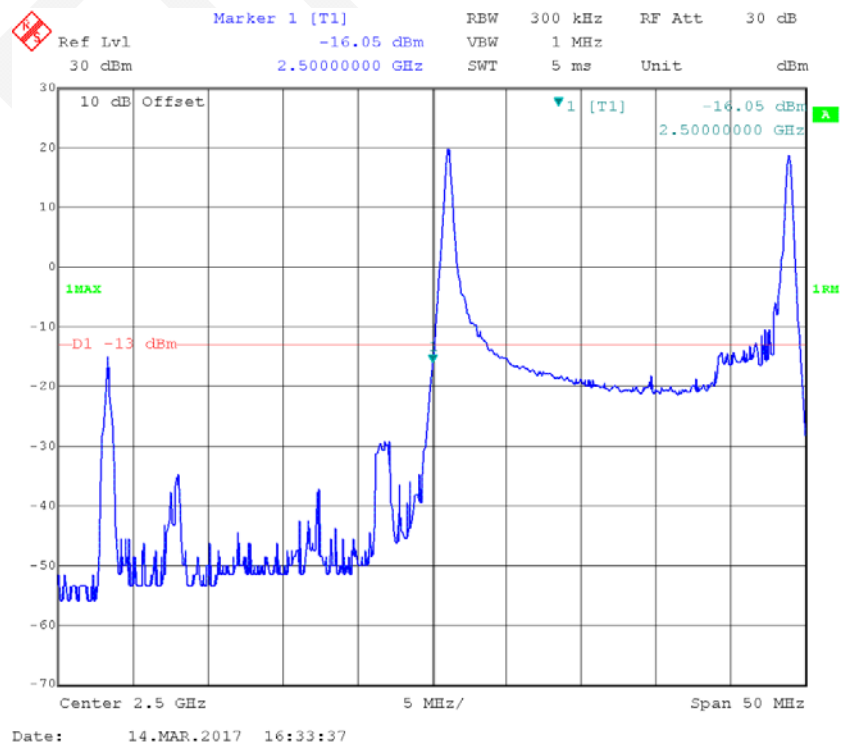


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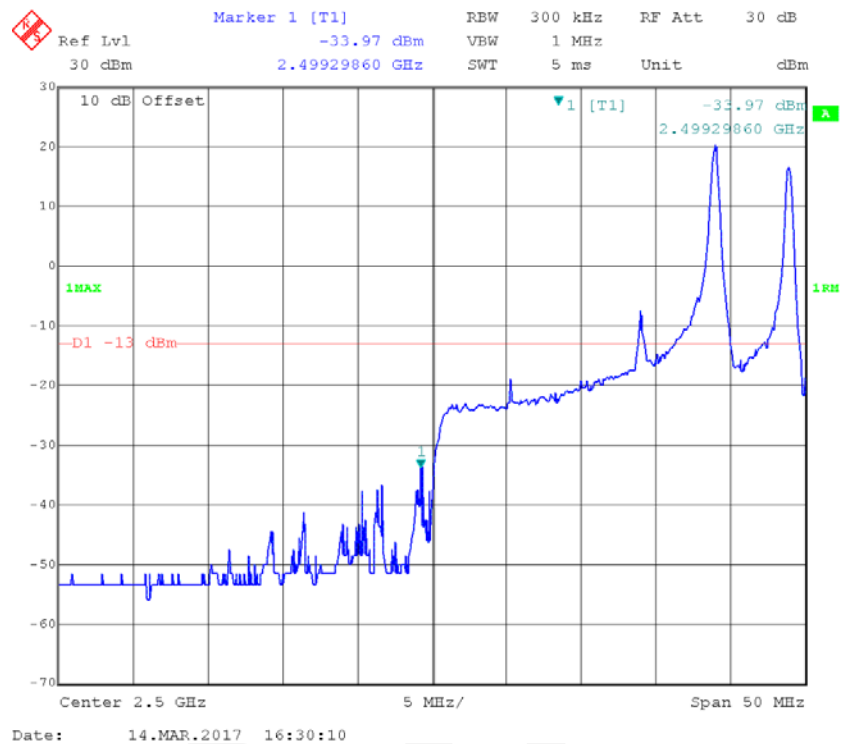
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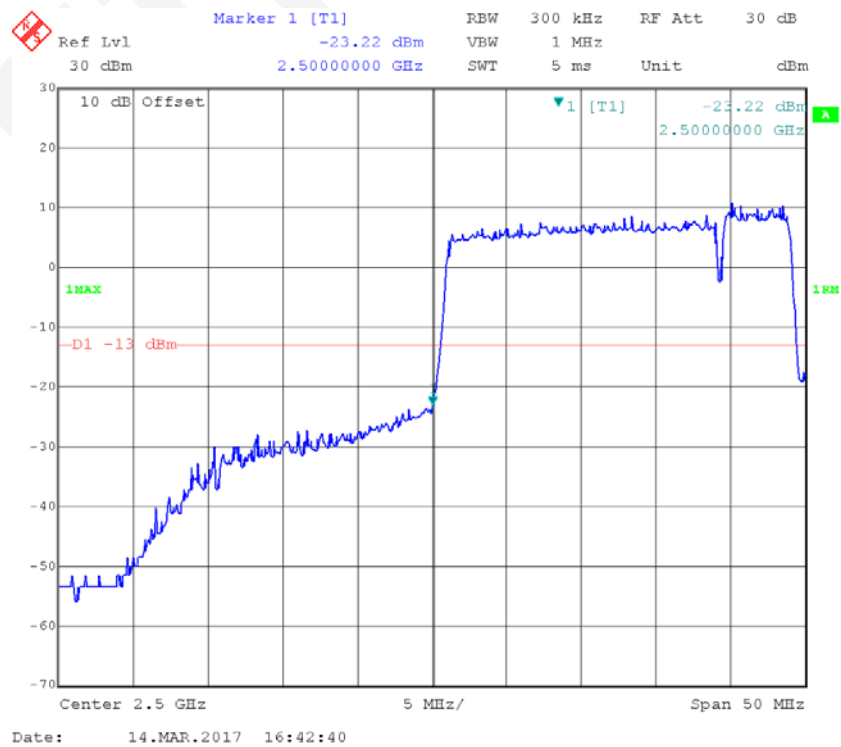
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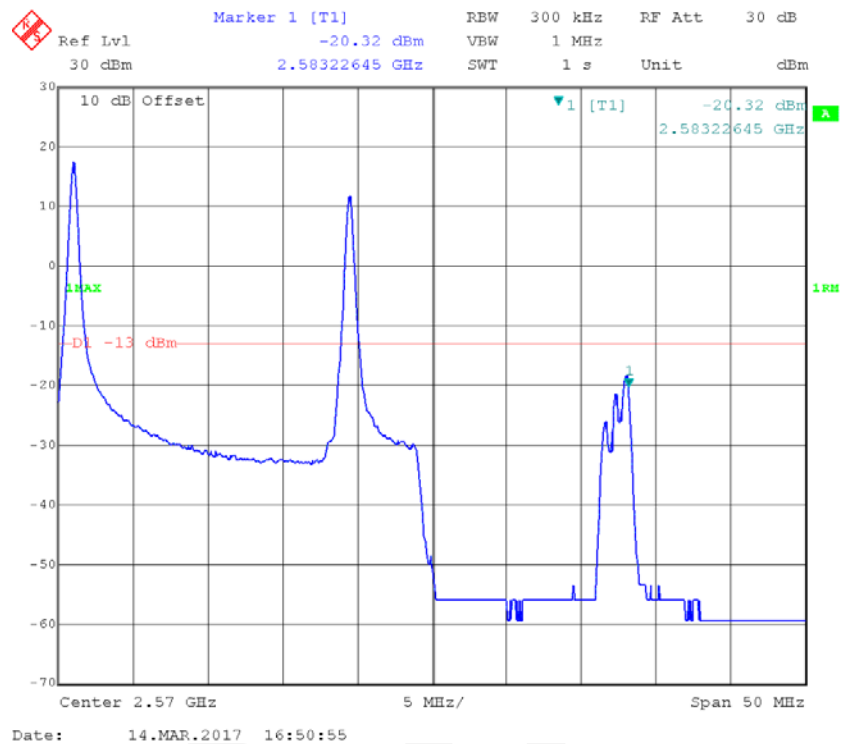
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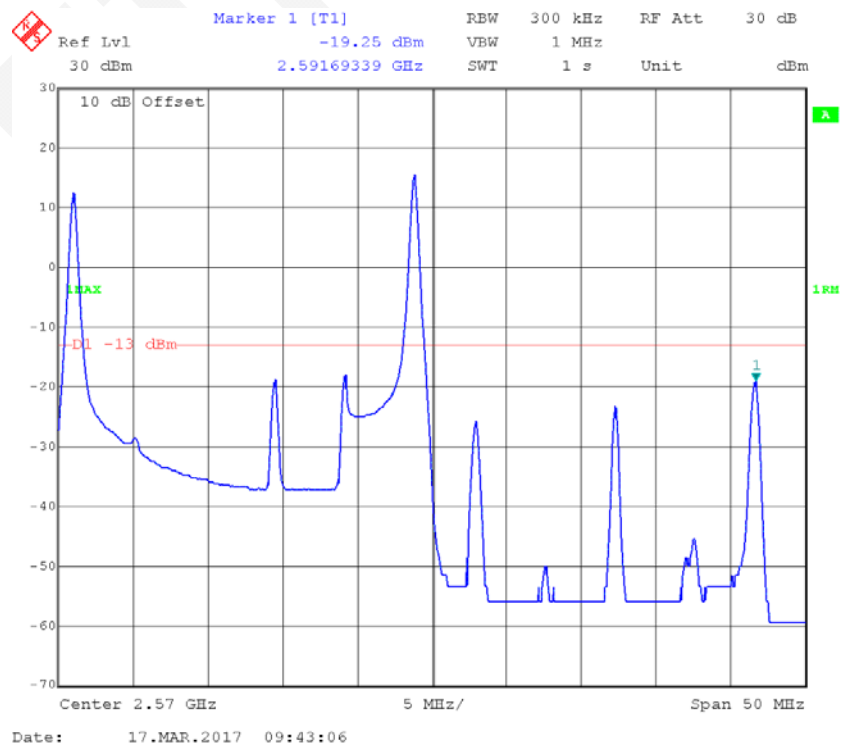
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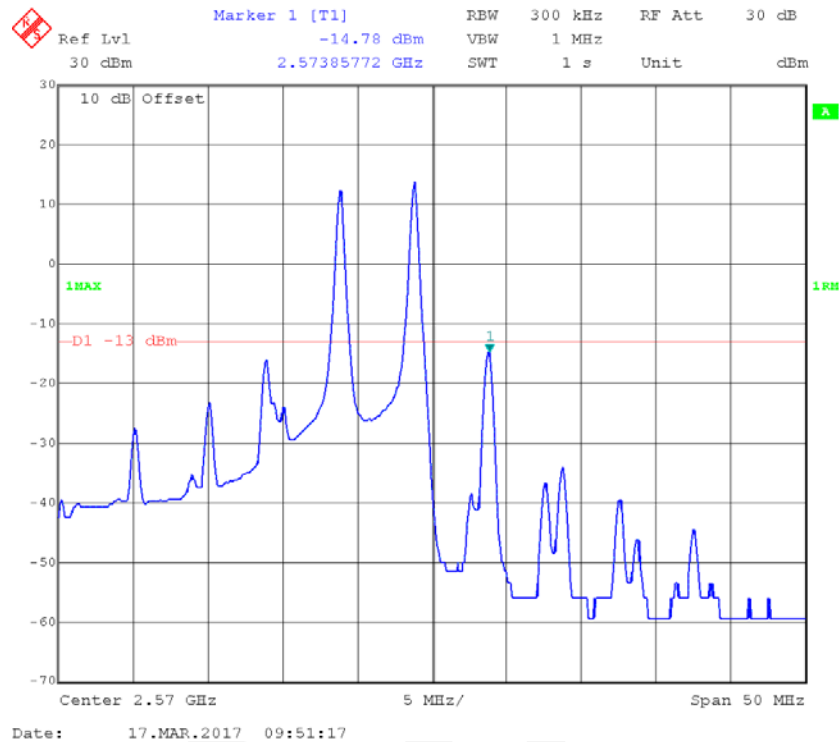
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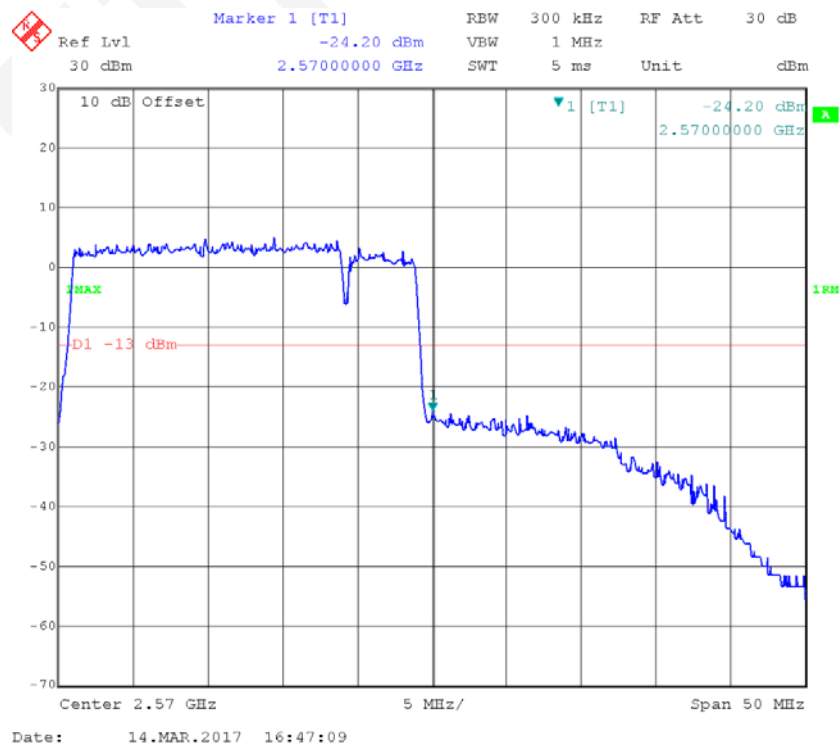
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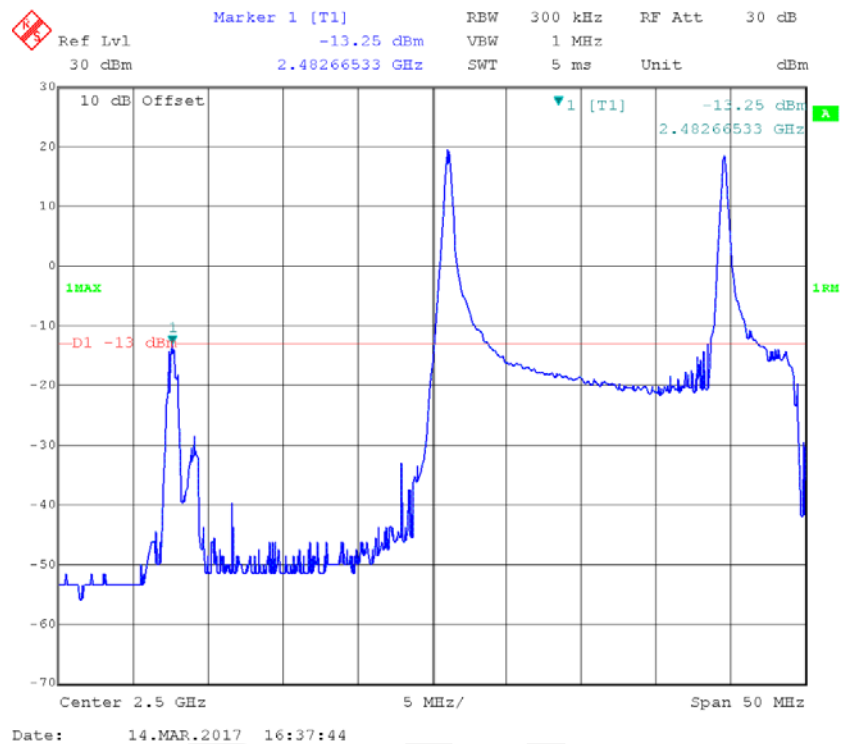
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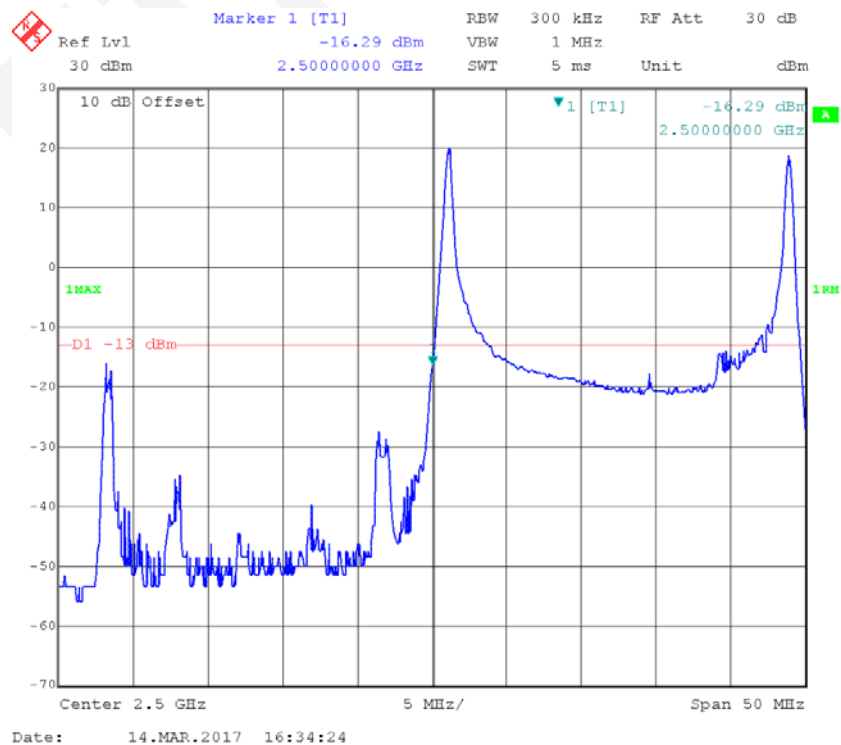
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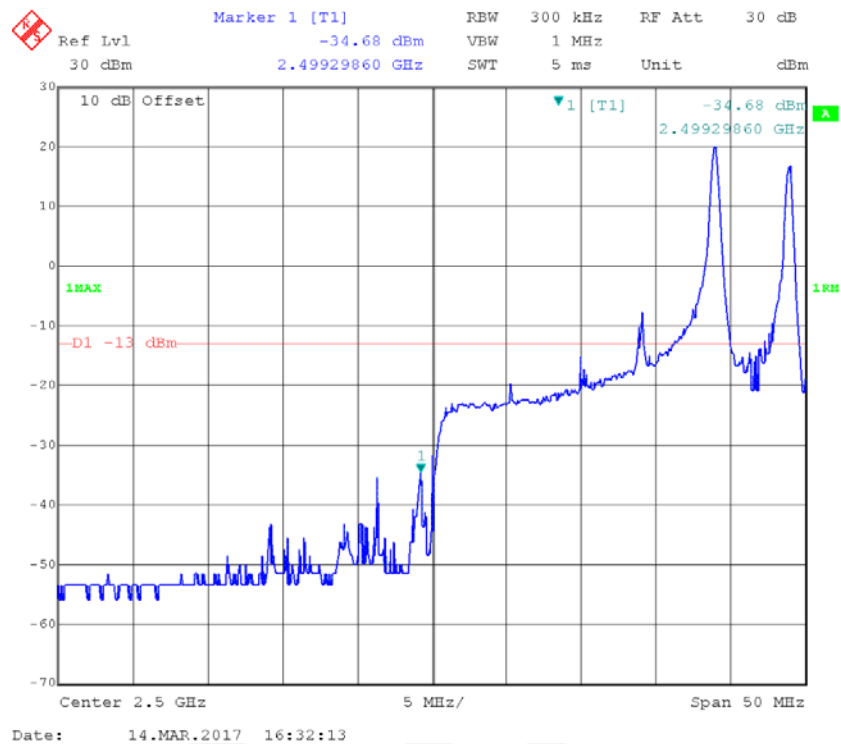
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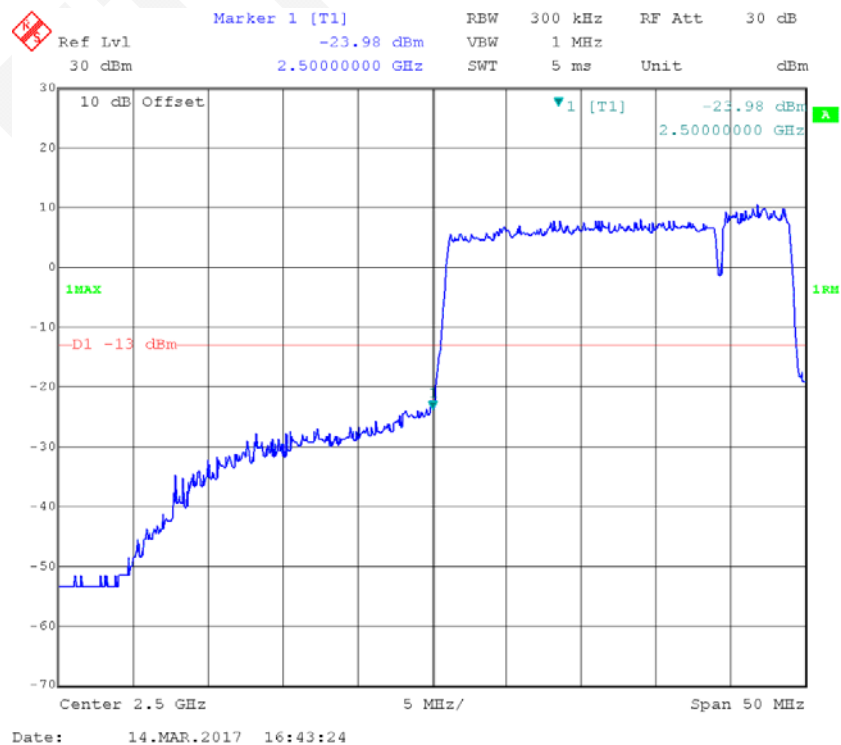
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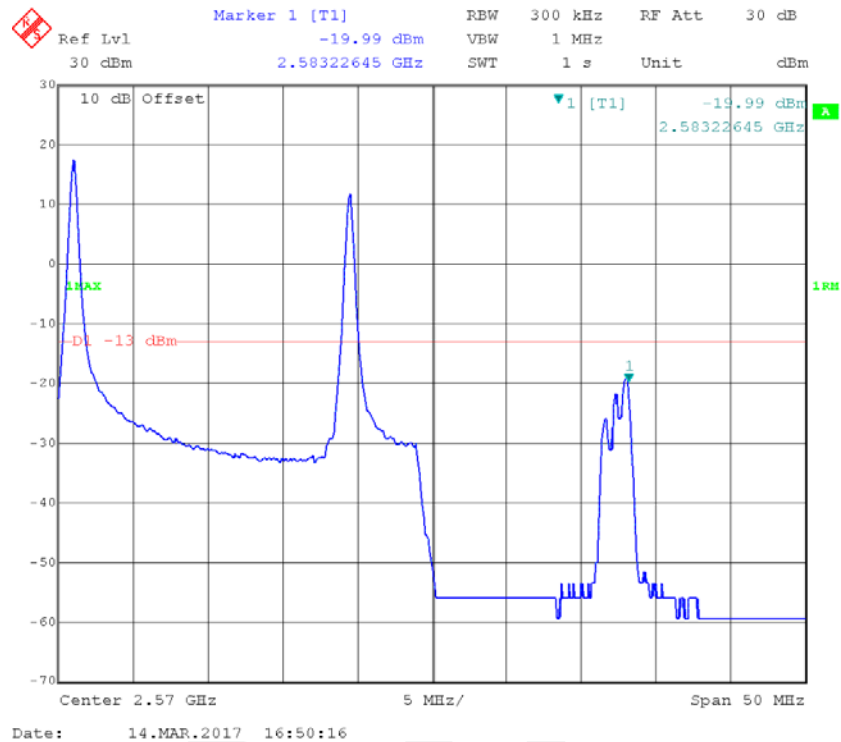
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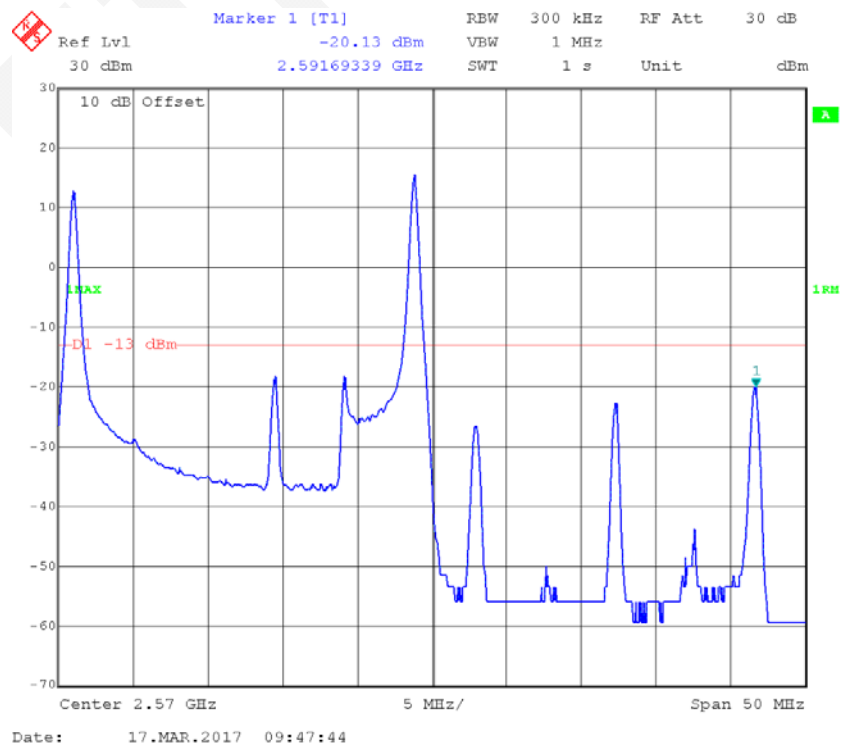
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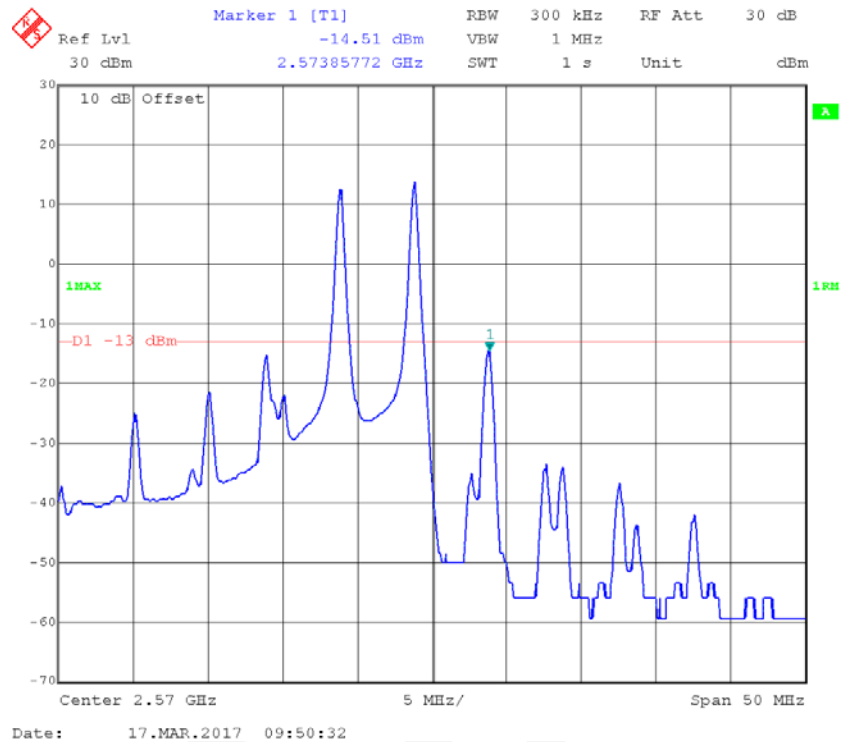
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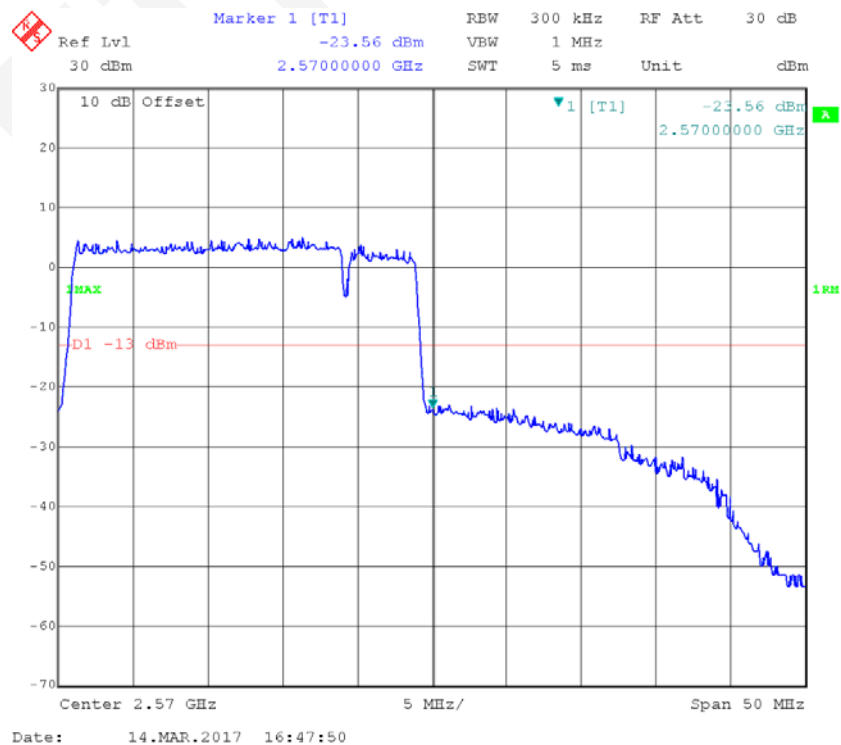
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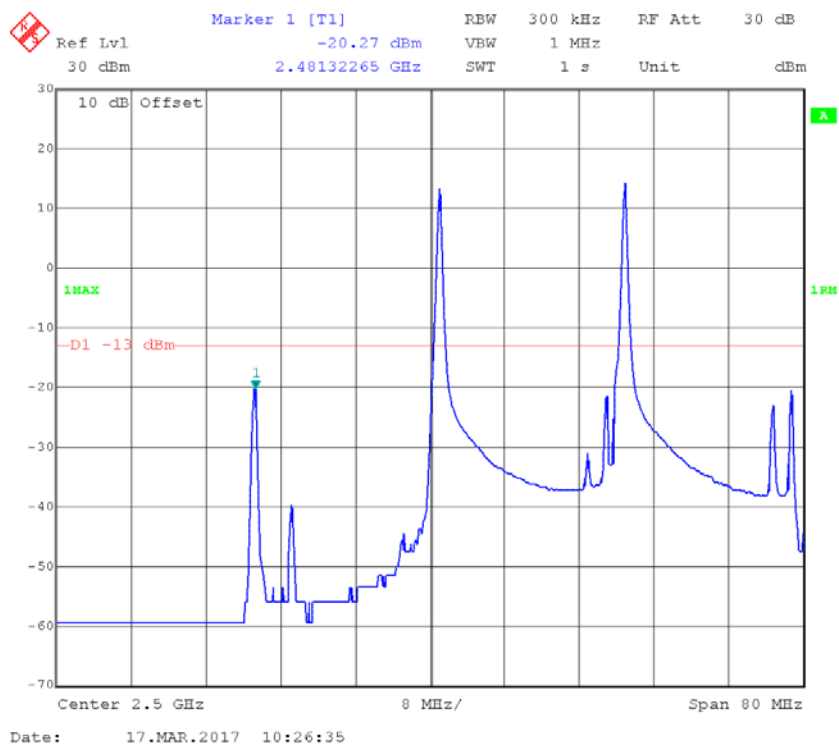
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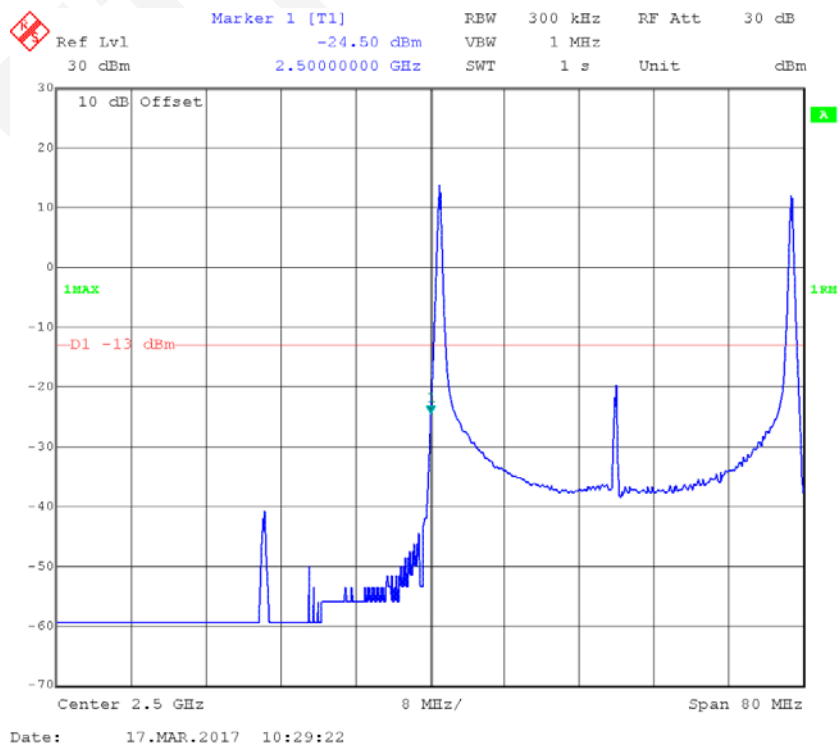
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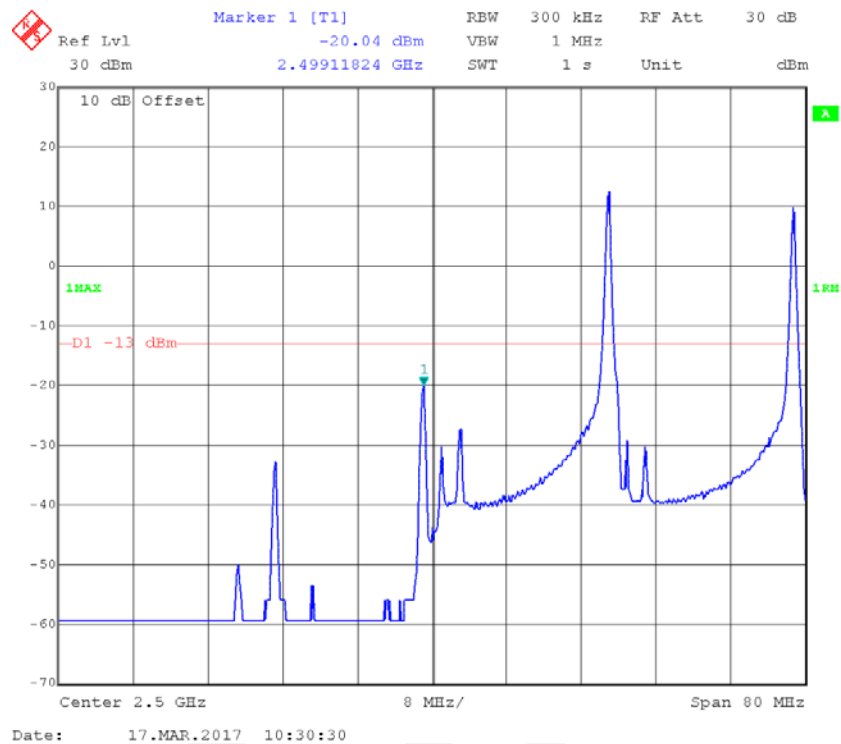
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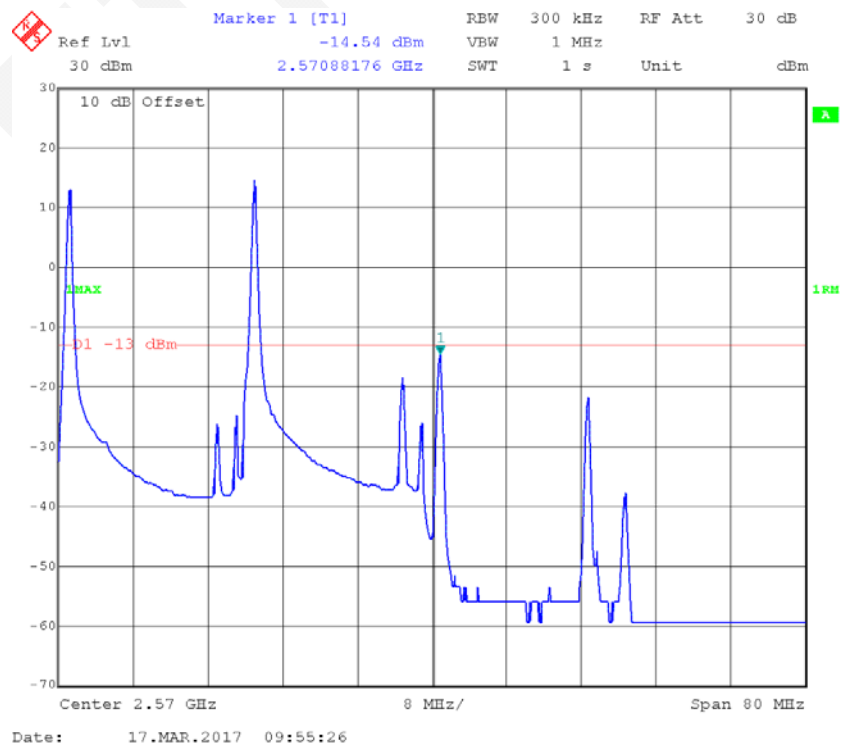
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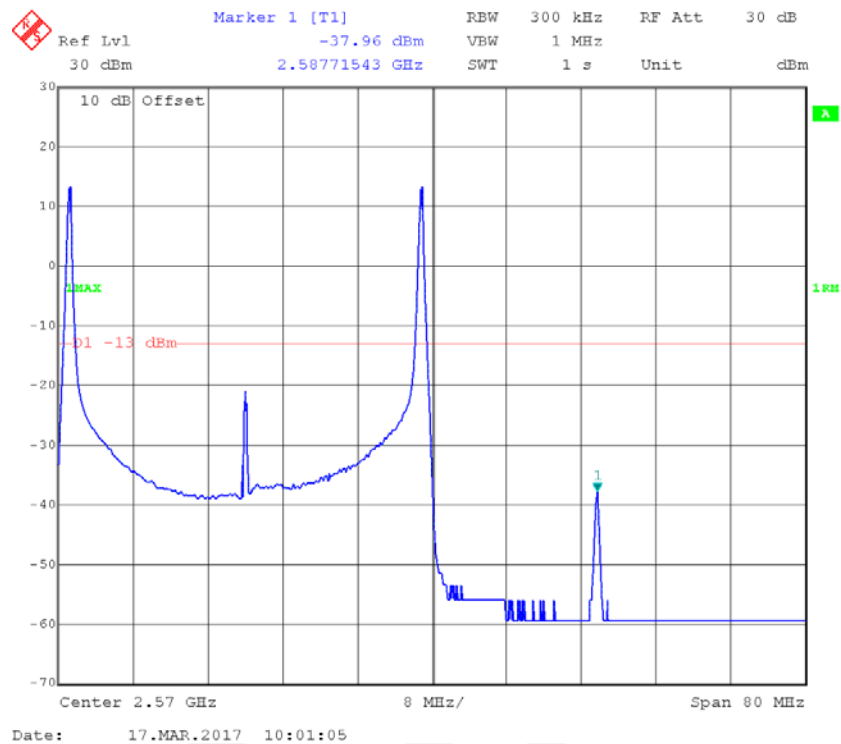
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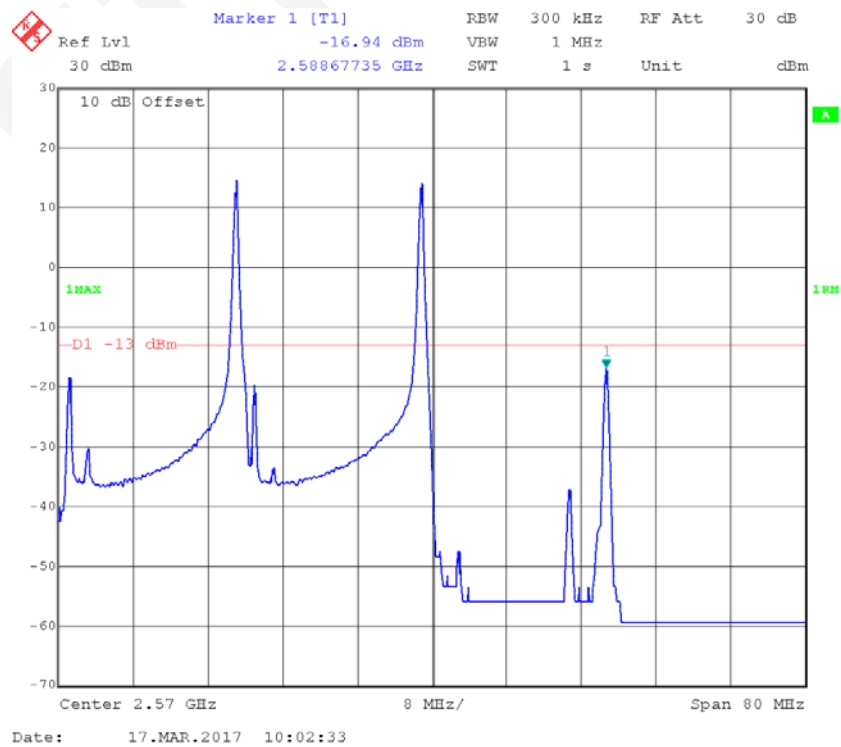
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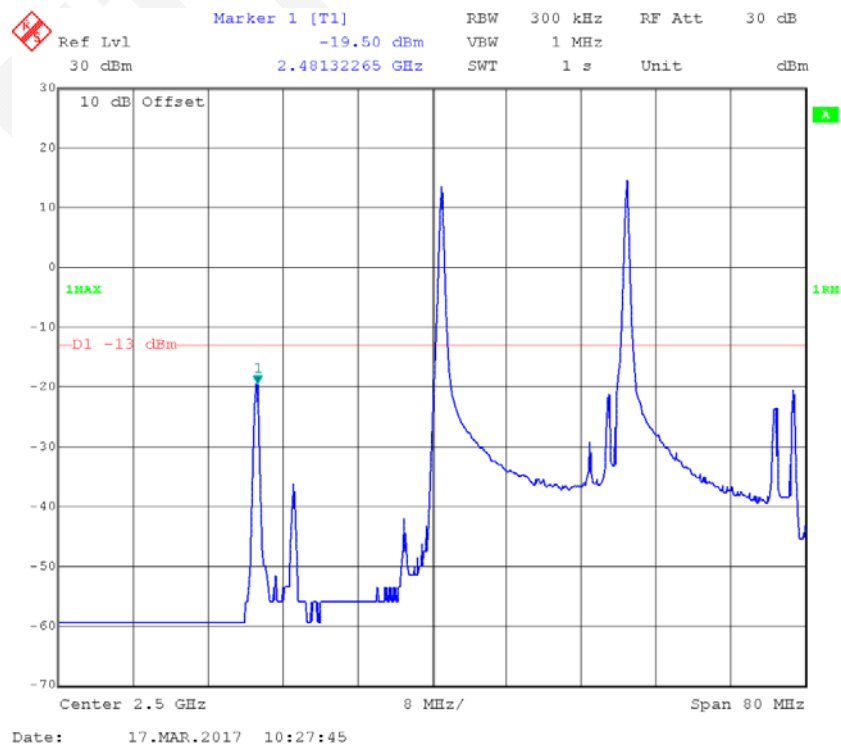
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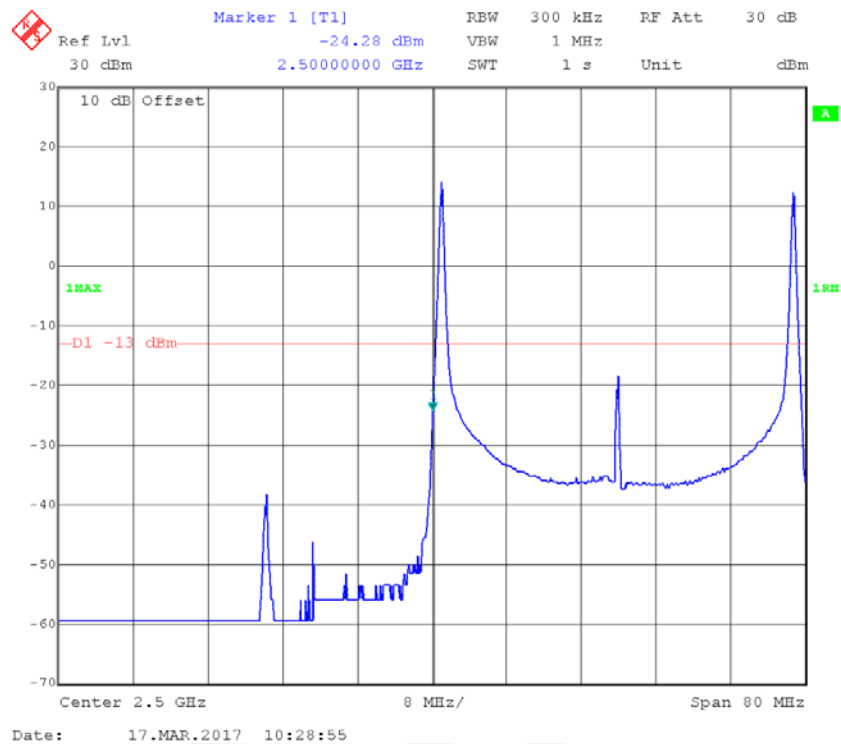
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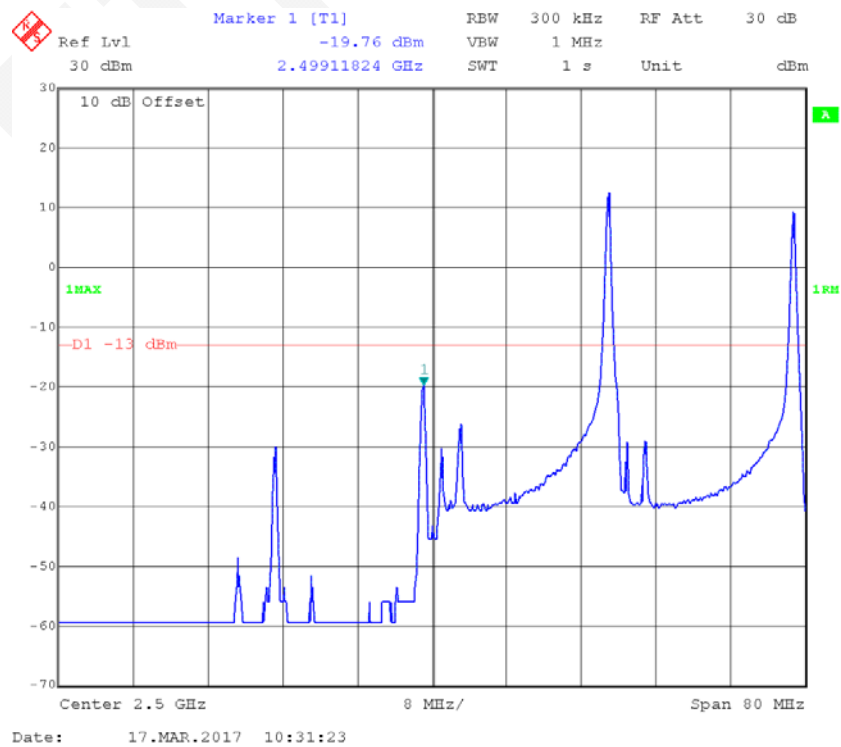
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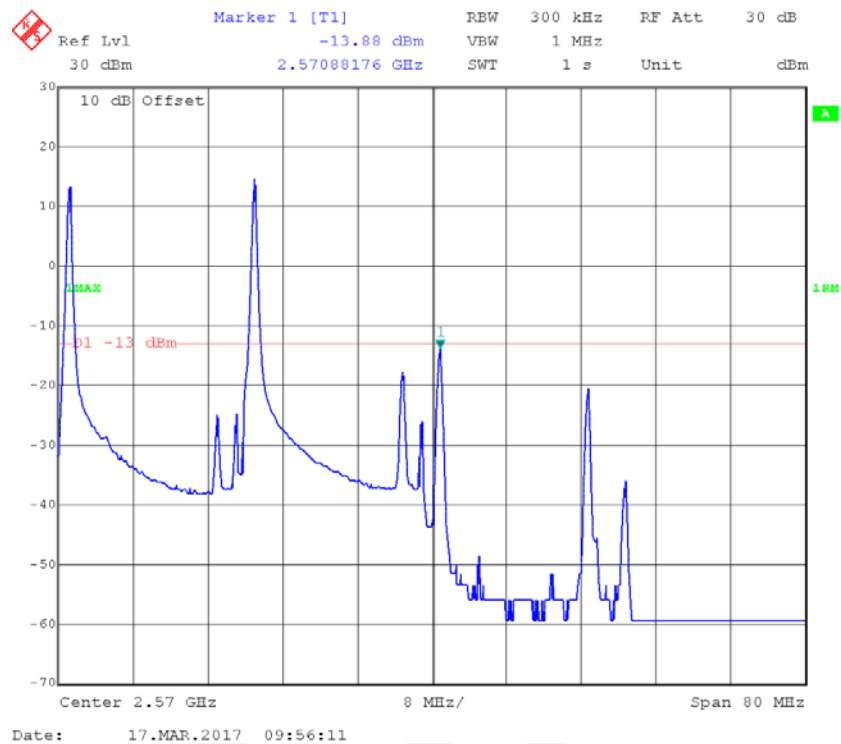
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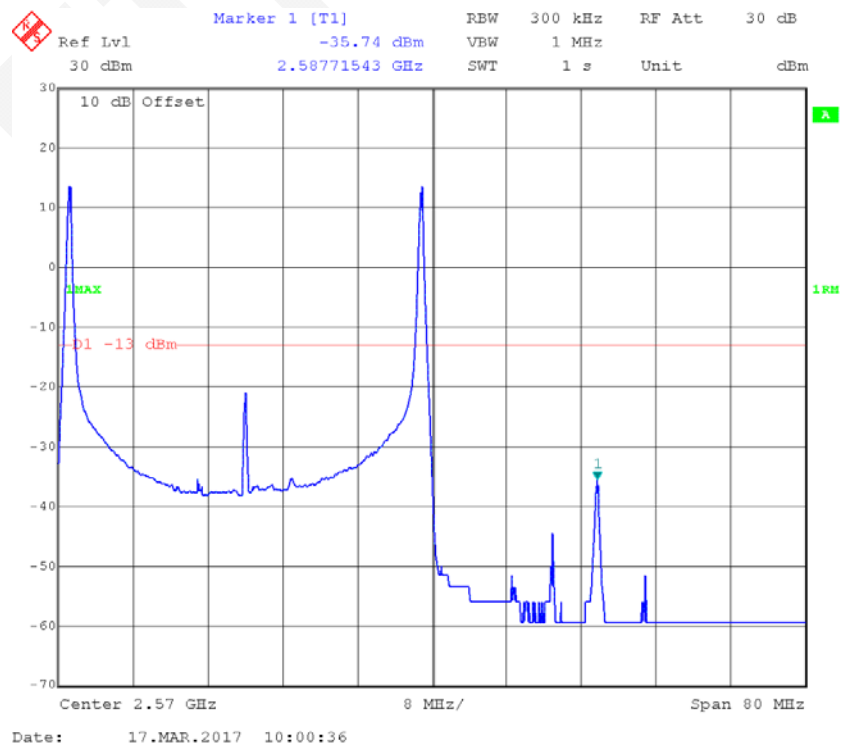
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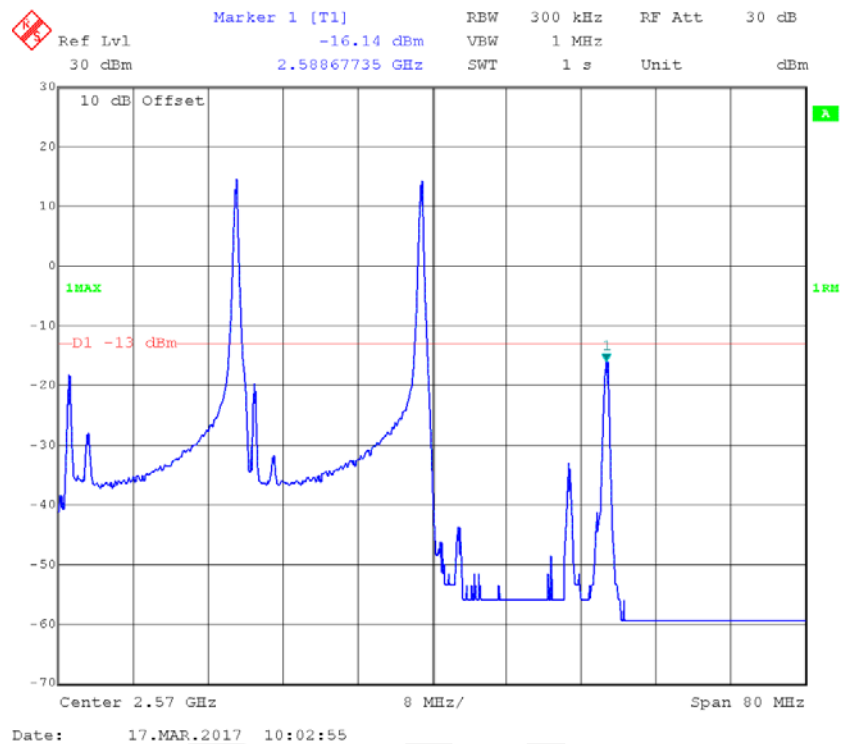
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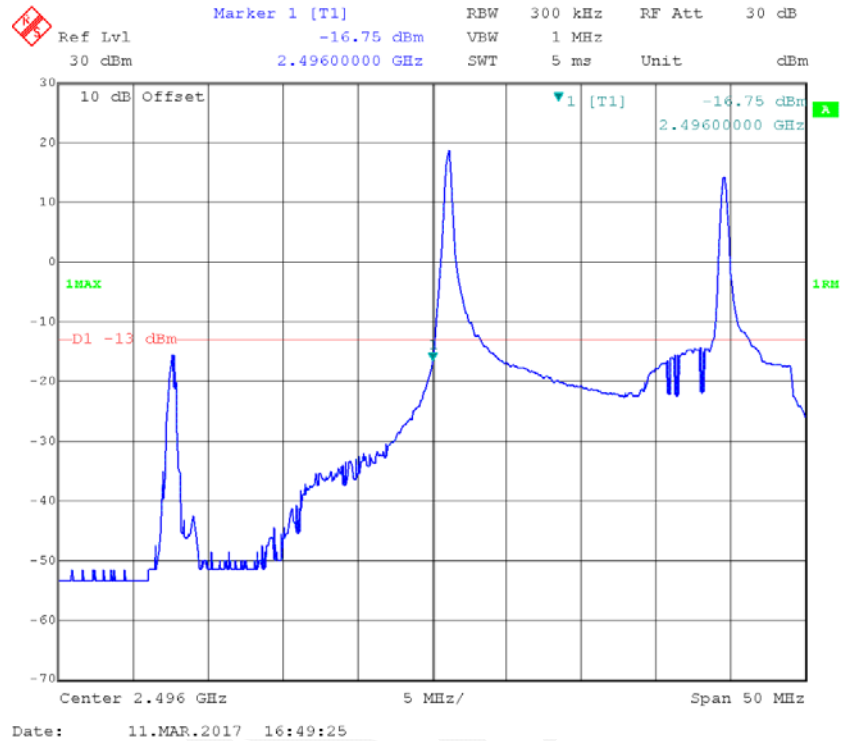
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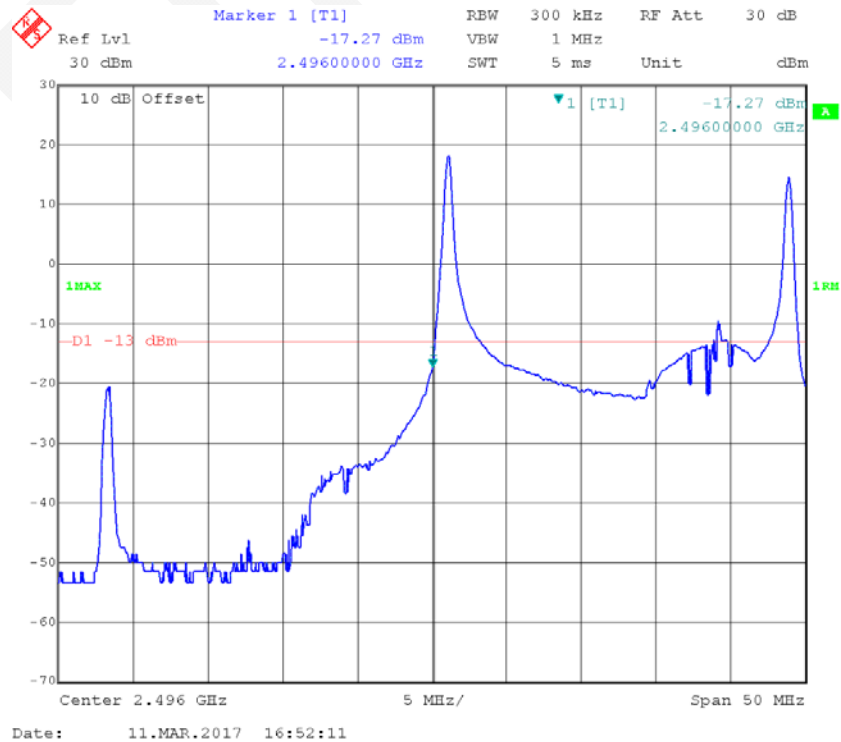
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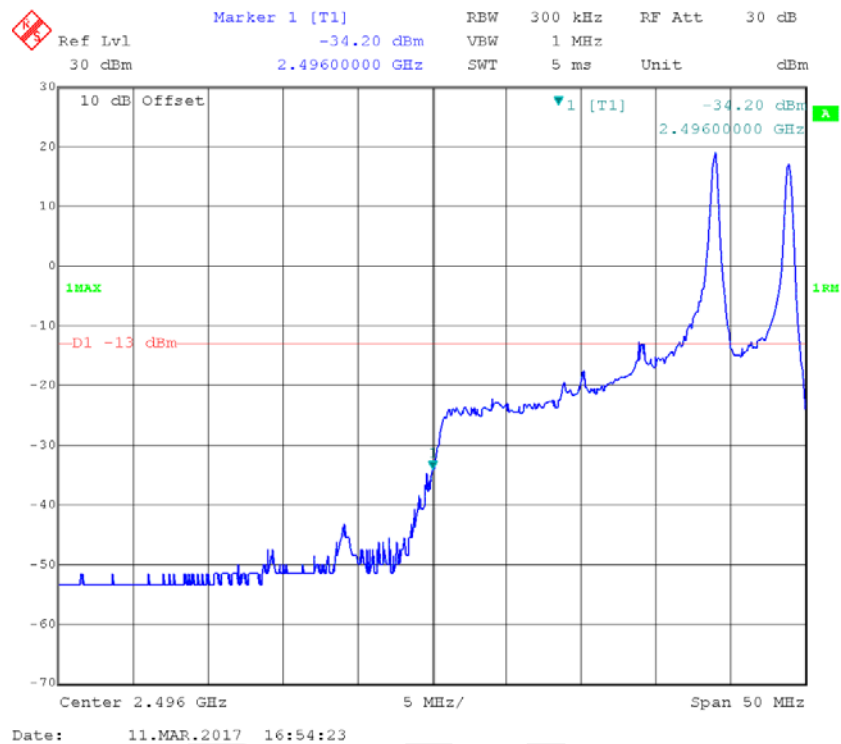
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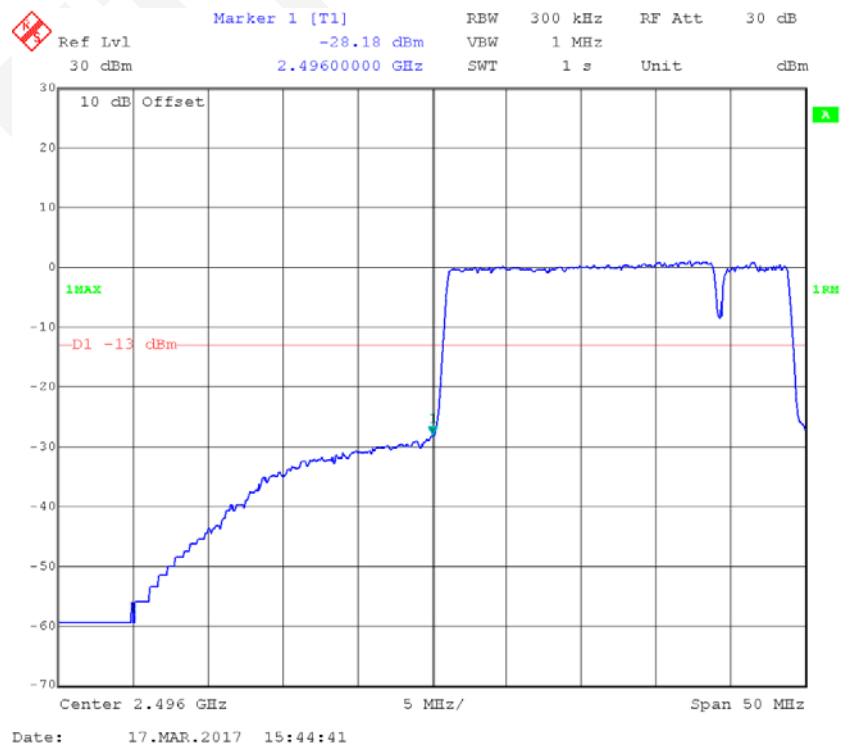
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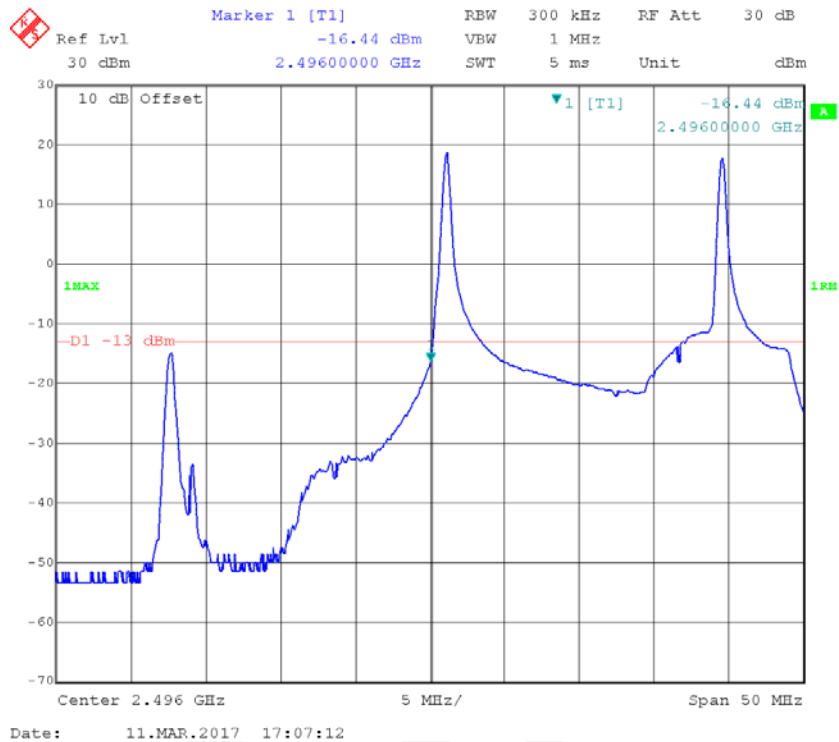
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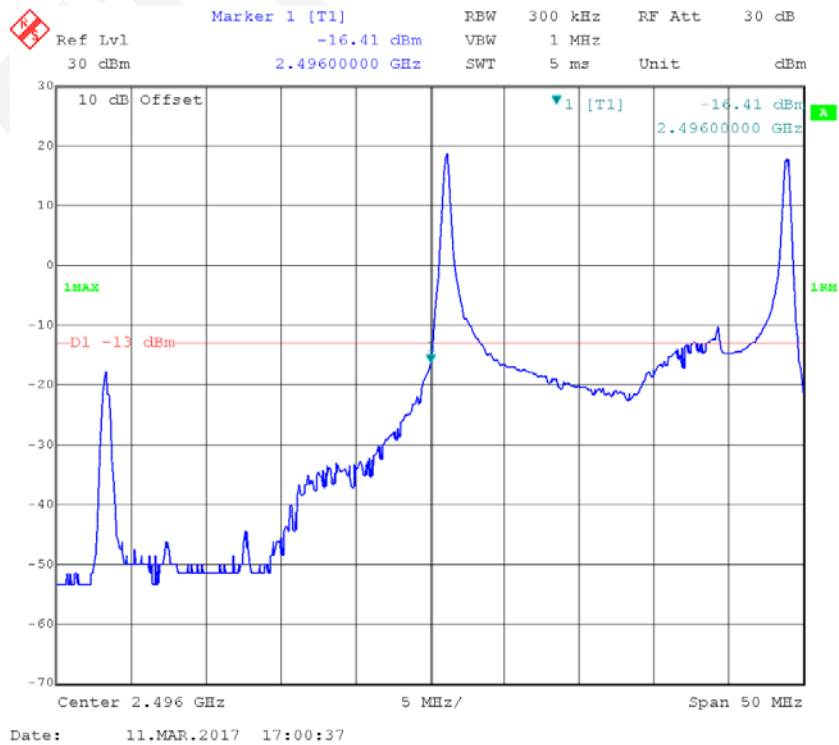
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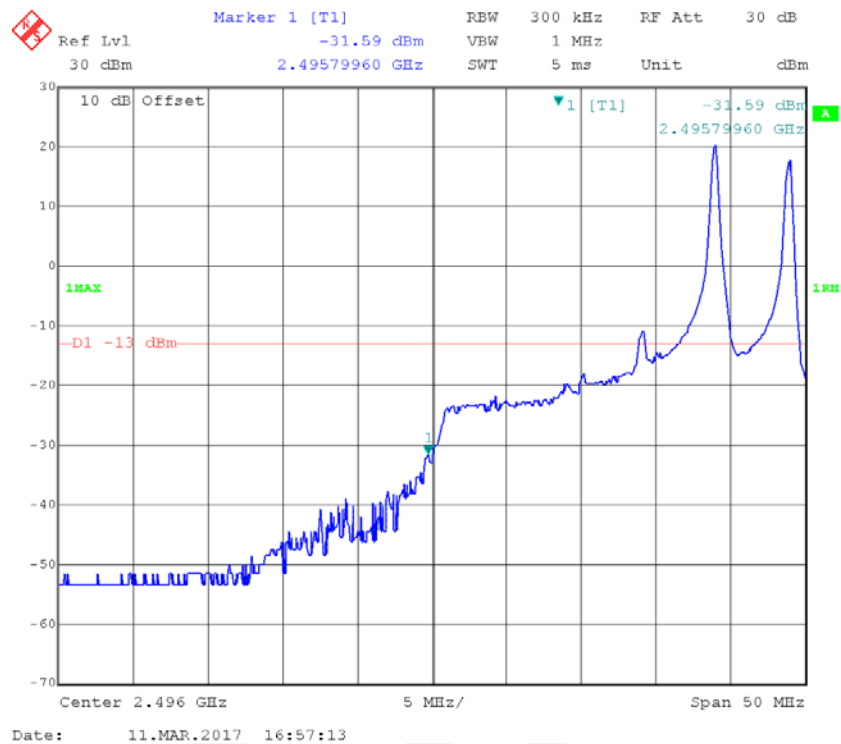
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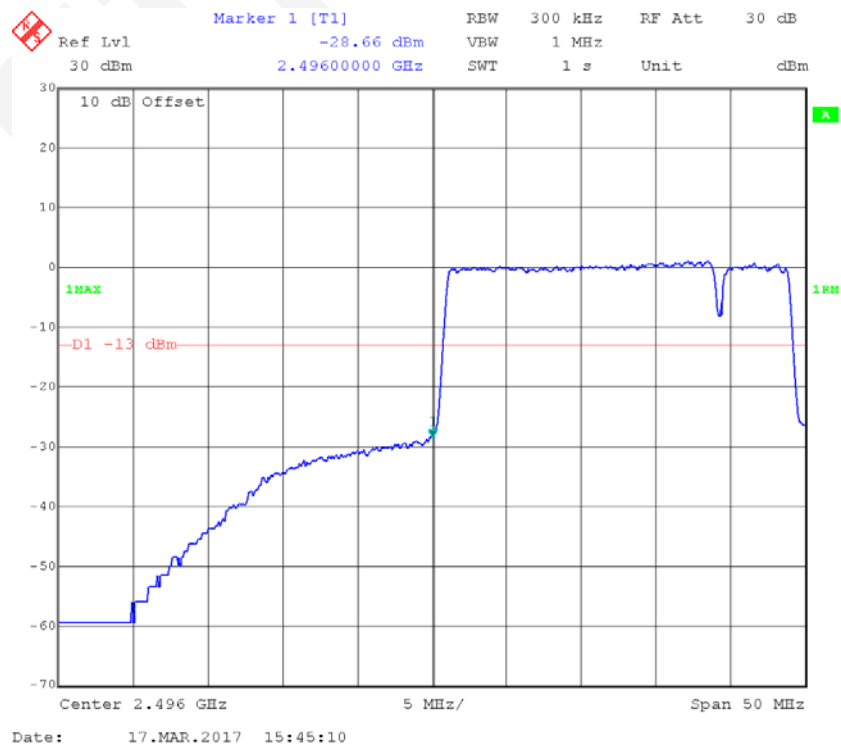
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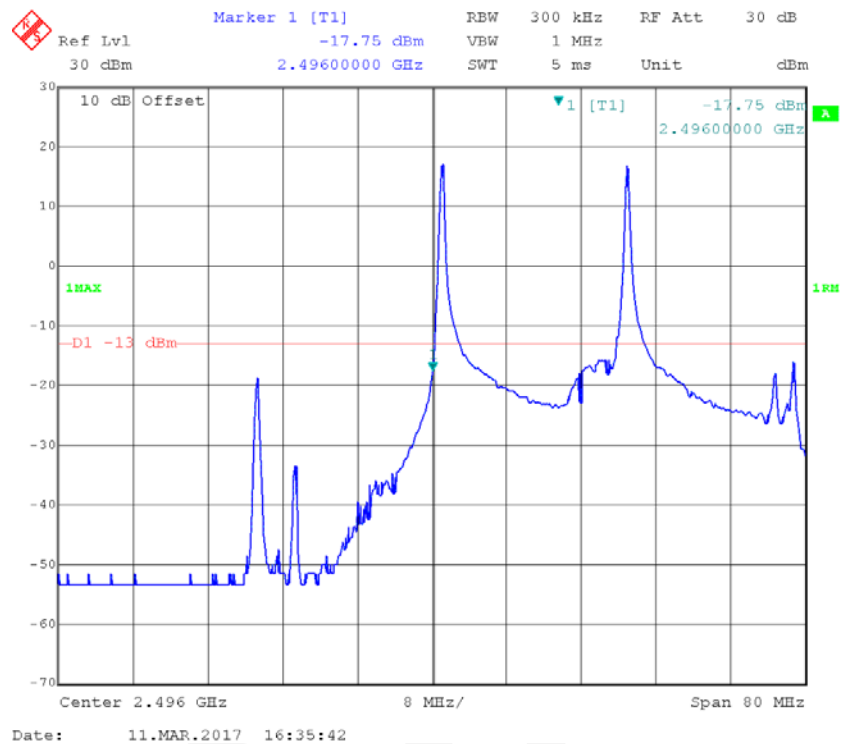
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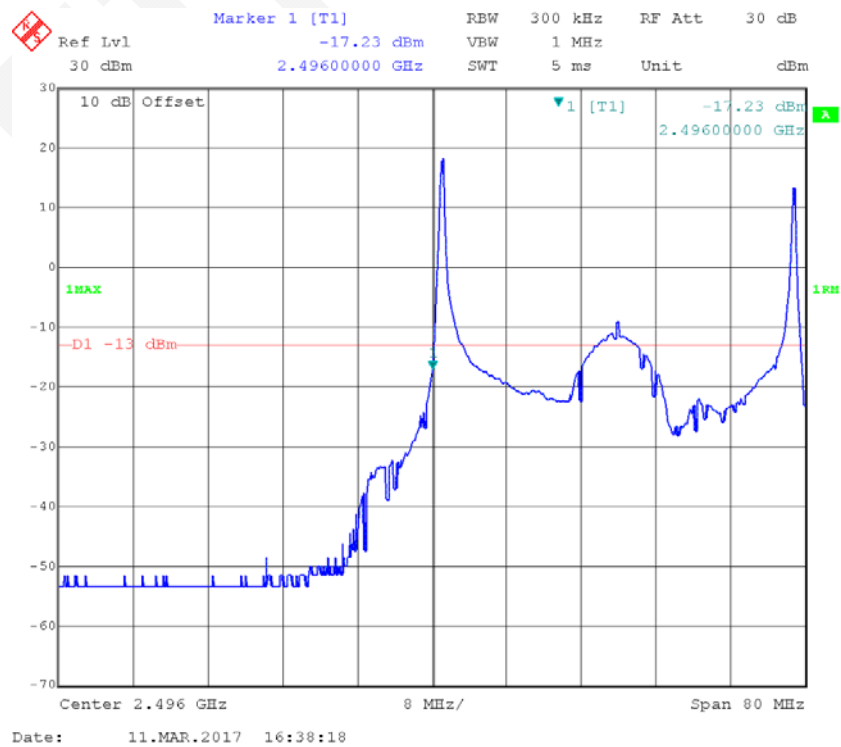
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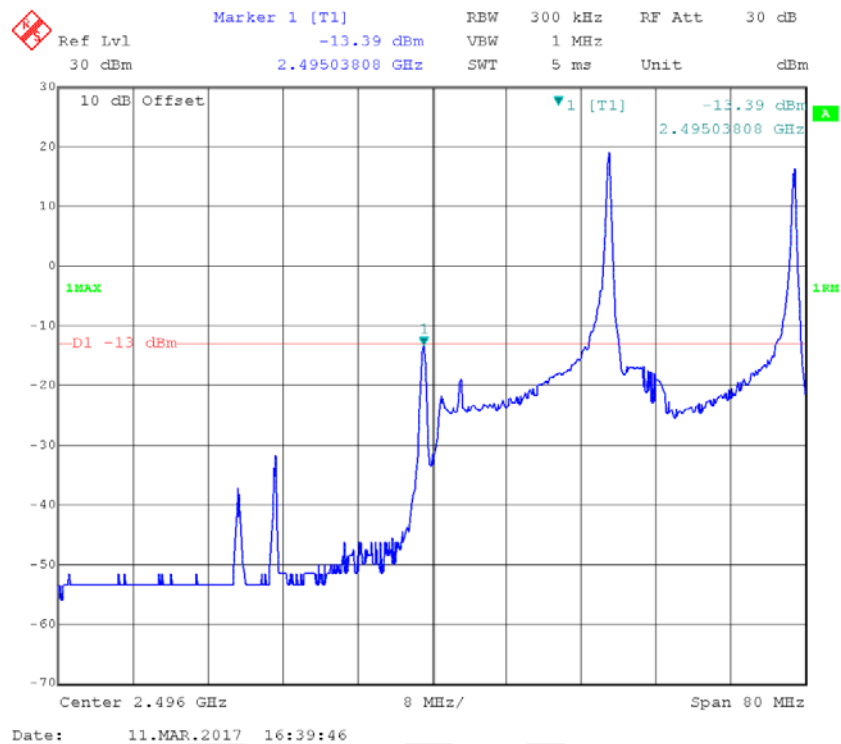
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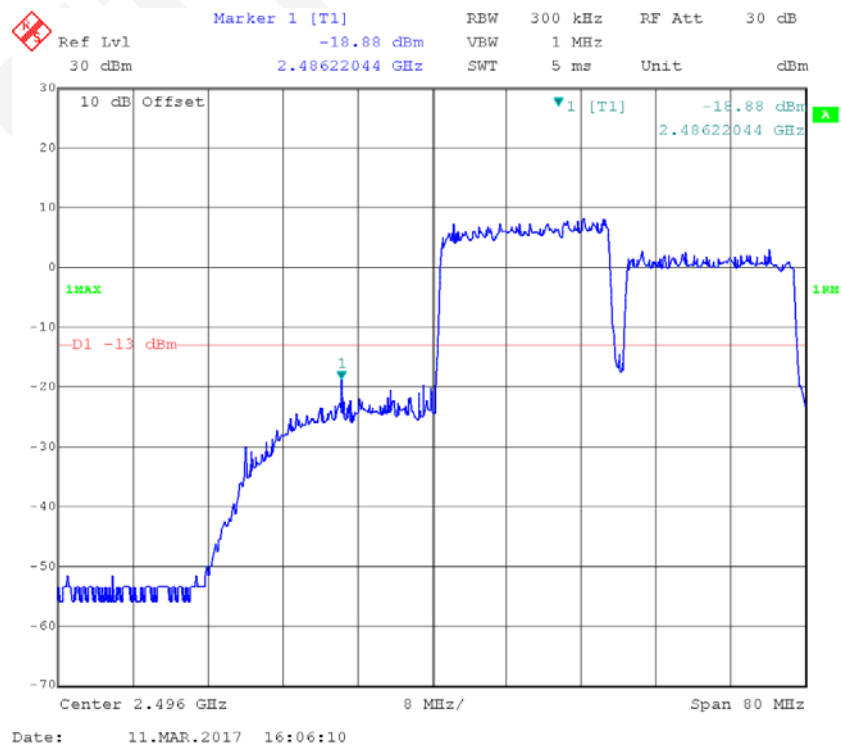
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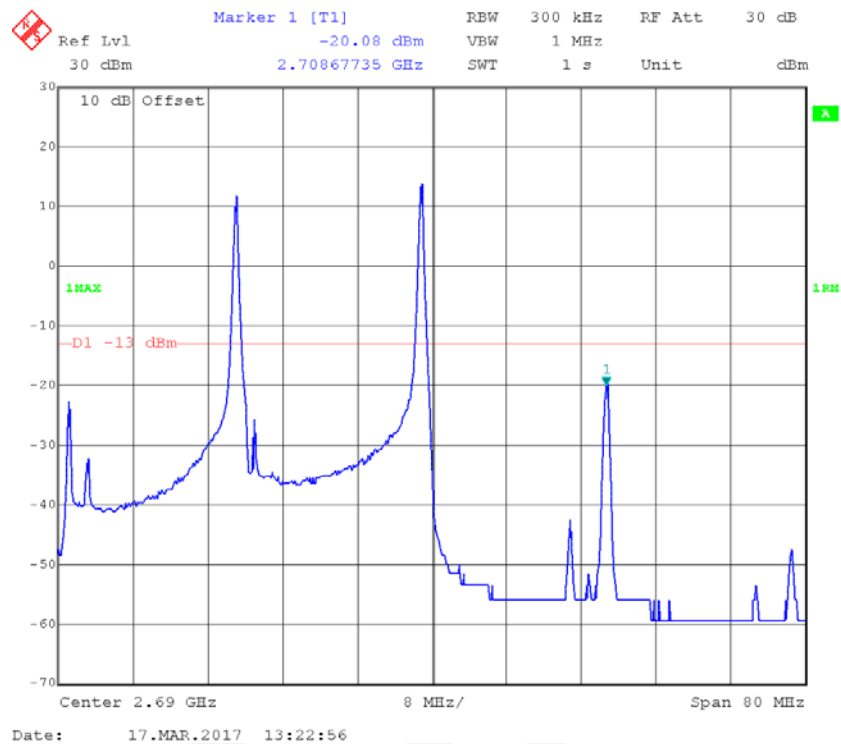
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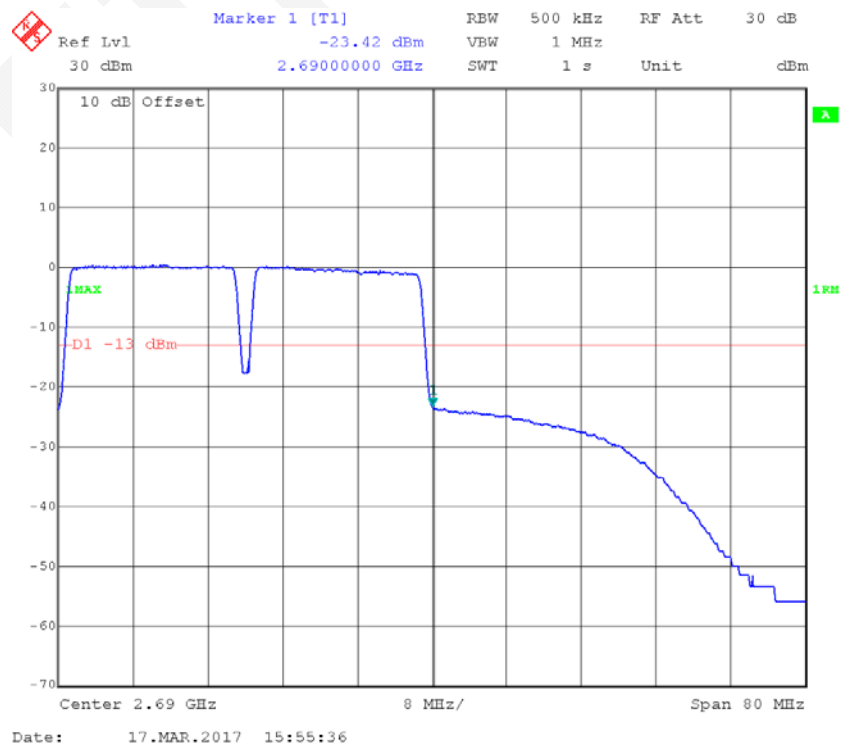
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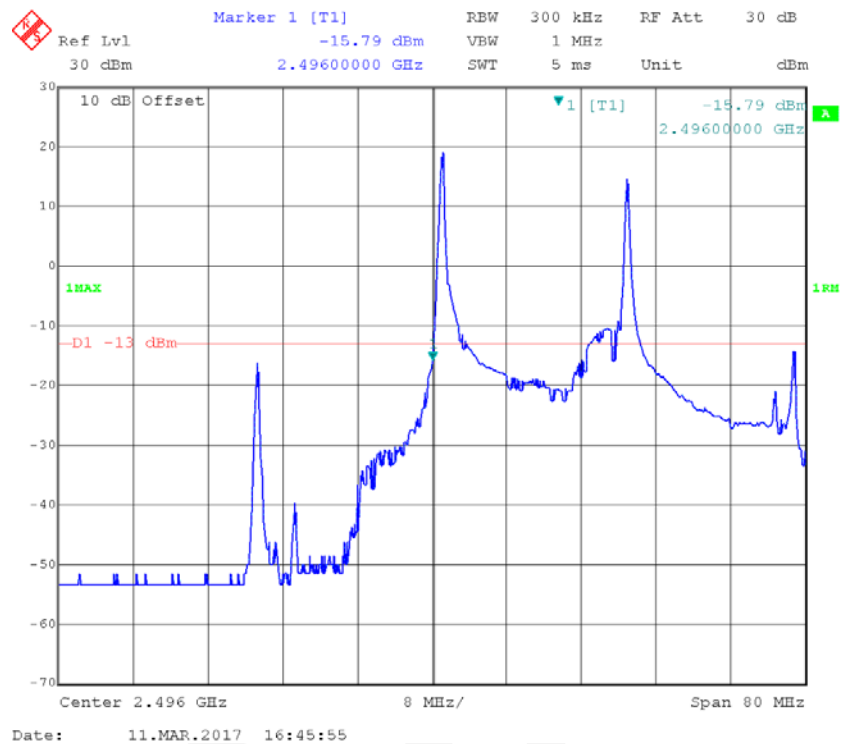
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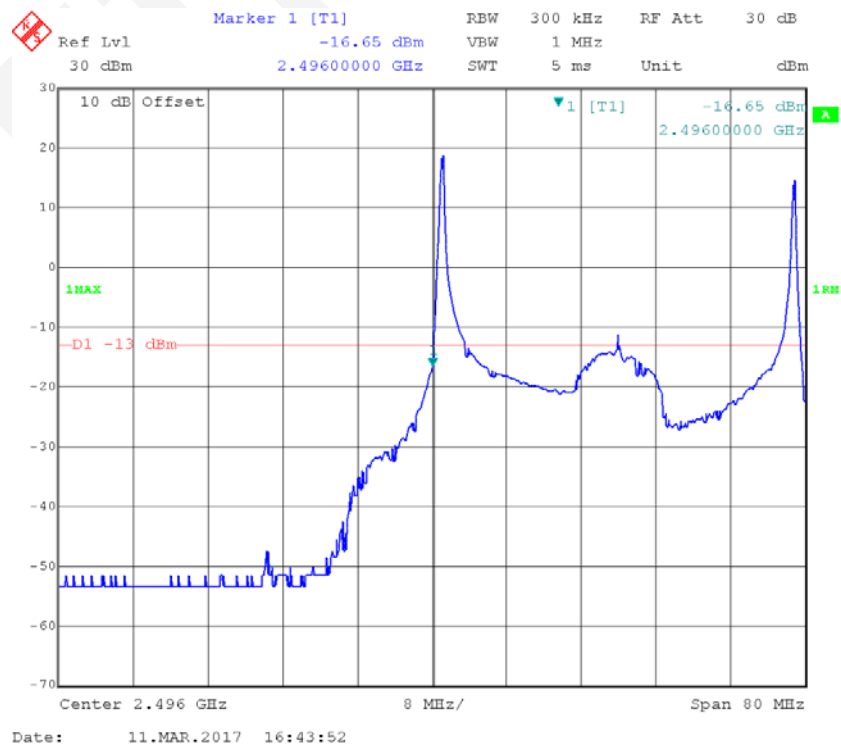
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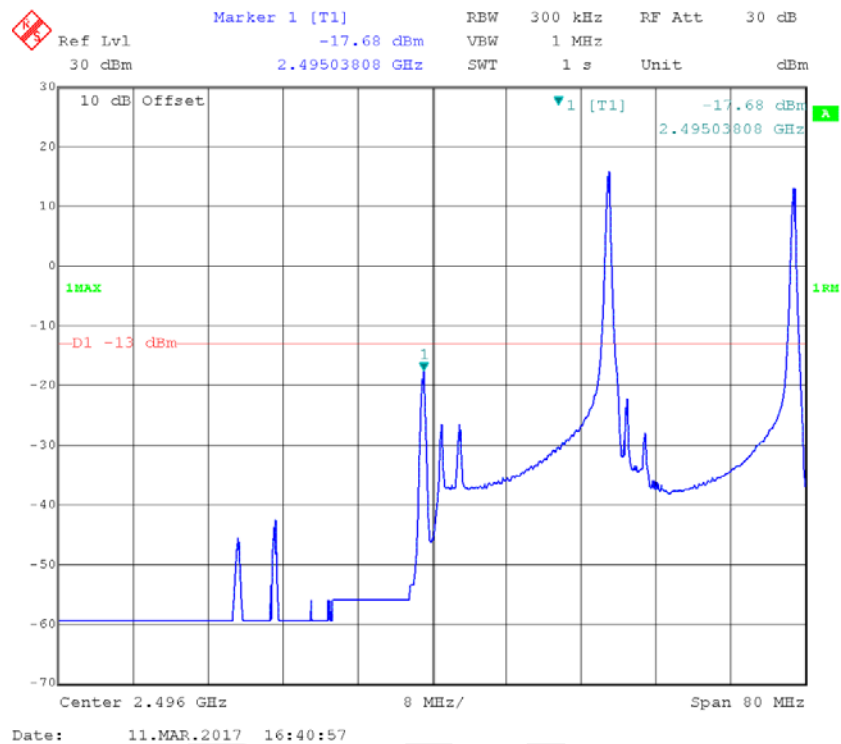
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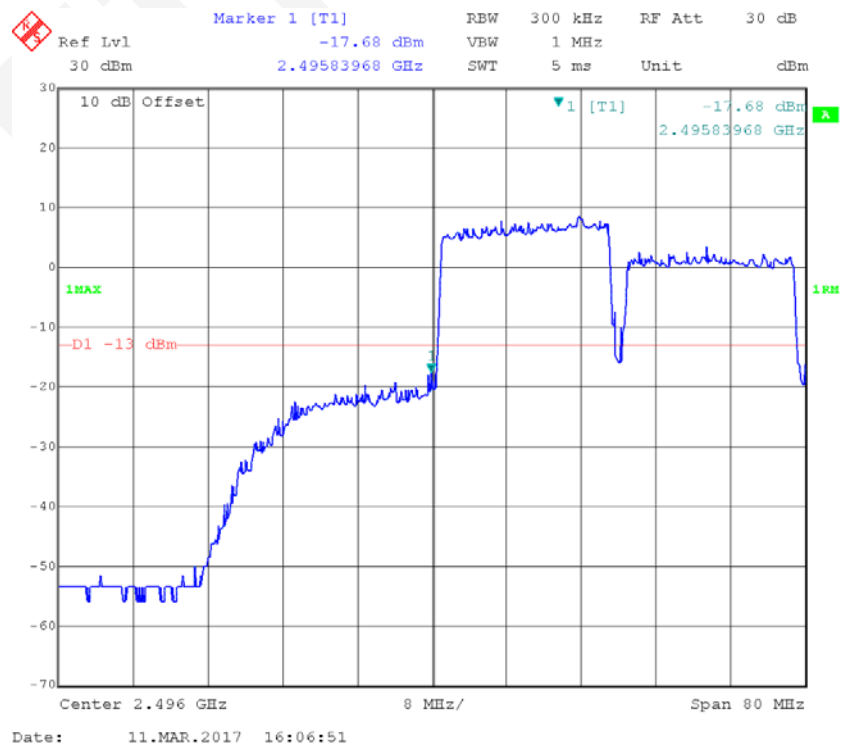
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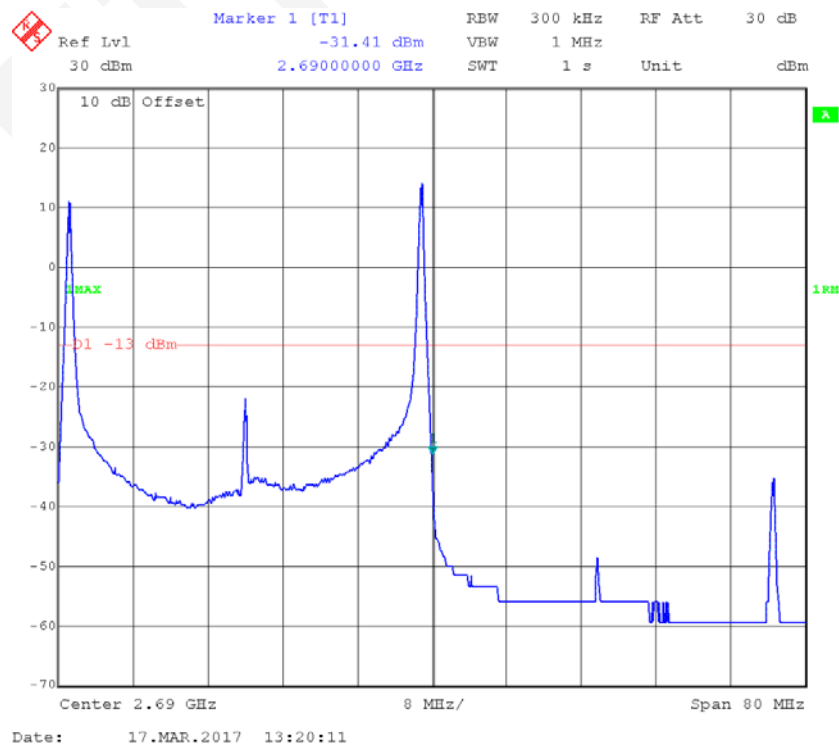
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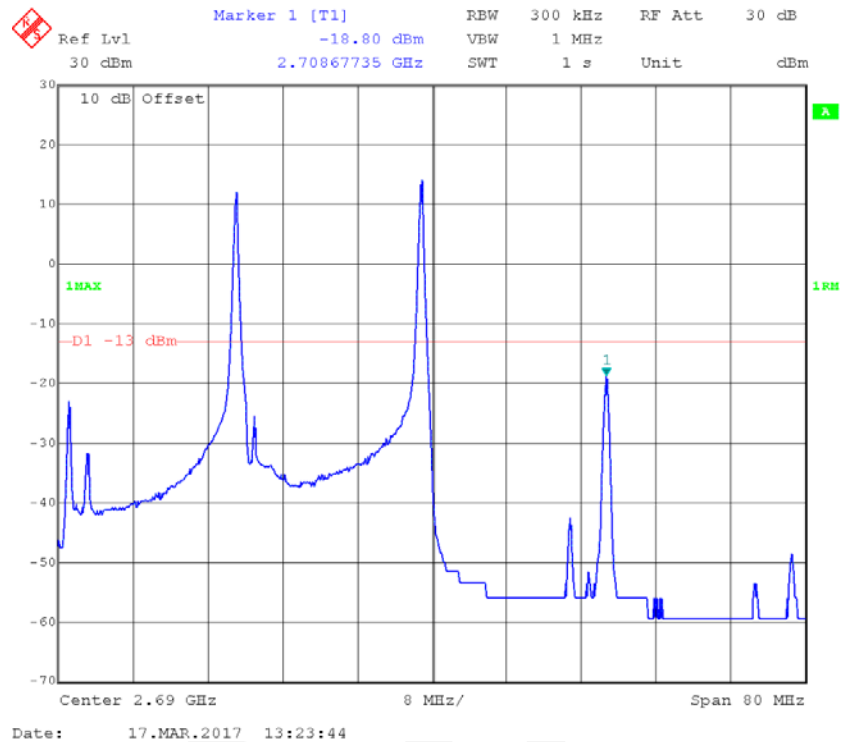
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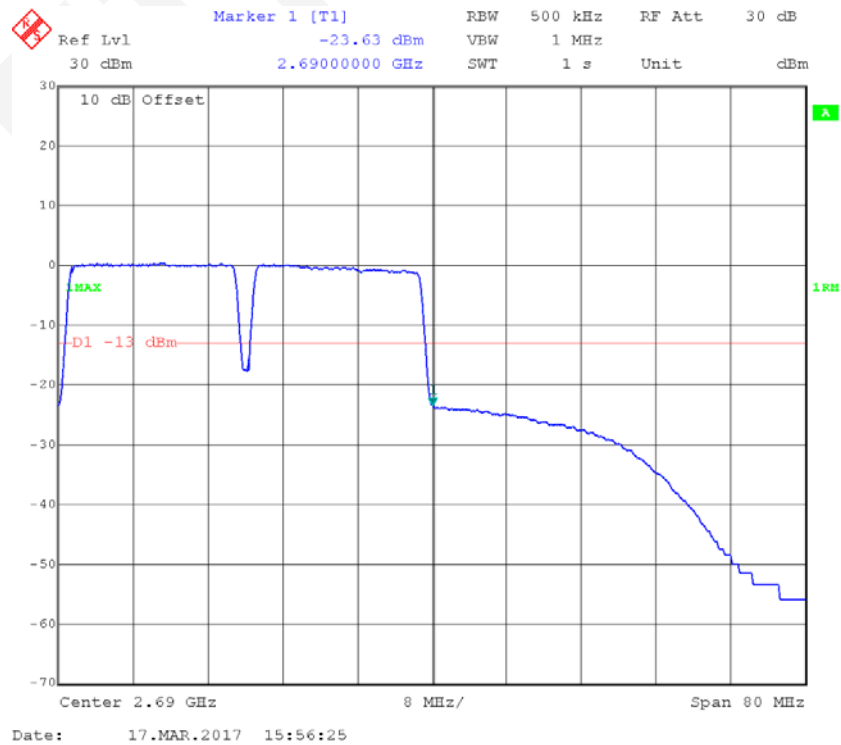
Page 252 of 262



Band 41_20&20MHz_16QAM_P1#99&S1#99_H



Band 41_20&20MHz_16QAM_P100#0&S100#0_H



FCC §2.1055 & §27.54 - FREQUENCY STABILITY

Applicable Standards

According to FCC§27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to RSS-195 §5.4

The applicant shall ensure frequency stability by showing that the occupied bandwidth is maintained within the range of the operating frequency blocks when testing under the temperature and supply voltage variations specified for the frequency stability measurement in RSS-Gen.

According to RSS-199 §4.3

The transmitter frequency stability limit shall be determined as follows:

(a) the frequency offset shall be measured according to the procedure described in RSS-Gen and recorded.

(b) using a resolution bandwidth equal to that permitted within the 1 MHz band immediately outside the channel edge, as found in section 4.5, reference points will be selected at the unwanted emission limits, which comply with the attenuation specified in section 4.5 for the type of device under test, on the emission mask of the lowest and highest channels. The frequency at these points shall be recorded as f_L and f_H respectively.

The applicant shall ensure compliance with frequency stability requirements by showing that f_L minus the frequency offset and f_H plus the frequency offset is within the frequency range in which the equipment is designed to operate.

Test Procedure

The frequency stability of the transmitter is measured by:

a.) **Temperature:** The temperature is varied from - 30 °C to + 50 °C using an environmental chamber.

b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
BACL	High Temperature Test Chamber	BTH-150	30024	2016-12-02	2017-12-01
FLUKE	Multimeter	1587	27870099	2016-12-30	2017-12-29
R&S	Wideband Radio Communication Tester	CMW500	106891	2016-11-23	2017-11-23
Unknown	RF Cable	Unknown	NO.3	Each Time	/

* **Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

Test Data

Environmental Conditions

Temperature:	28.1 °C
Relative Humidity:	41 %
ATM Pressure:	100.1 kPa

The testing was performed by Lorin Bian on 2017-05-25.

Band 7:

QPSK, Channel Bandwidth:10MHz Middle Channel, $f_c = 2535$ MHz				
Power Supplied	Temperature	Frequency Error	Frequency Error	Result
V_{AC}	$^{\circ}C$	Hz	ppm	
120	-30	0.23	0.0001	Pass
	-20	0.13	0.0001	Pass
	-10	0.20	0.0001	Pass
	0	0.18	0.0001	Pass
	10	0.27	0.0001	Pass
	20	0.25	0.0001	Pass
	30	0.23	0.0001	Pass
	40	0.20	0.0001	Pass
	50	0.26	0.0001	Pass
102	25	0.23	0.0001	Pass
138	25	0.18	0.0001	Pass

16-QAM, Channel Bandwidth:10MHz Middle Channel, $f_c = 2535$ MHz				
Power Supplied	Temperature	Frequency Error	Frequency Error	Result
V_{AC}	$^{\circ}C$	Hz	ppm	
120	-30	0.19	0.0001	Pass
	-20	0.11	0.0000	Pass
	-10	0.20	0.0001	Pass
	0	0.26	0.0001	Pass
	10	0.22	0.0001	Pass
	20	0.18	0.0001	Pass
	30	0.17	0.0001	Pass
	40	0.20	0.0001	Pass
	50	0.22	0.0001	Pass
102	25	0.20	0.0001	Pass
138	25	0.15	0.0001	Pass

Band 40

QPSK, Channel Bandwidth:10MHz Middle Channel $f_c = 2310$ MHz				
Power Supplied	Temperature	Frequency Error	Frequency Error	Result
V_{AC}	$^{\circ}C$	Hz	ppm	
120	-30	-28.9	-0.0125	Pass
	-20	-28.64	-0.0124	Pass
	-10	-28.59	-0.0124	Pass
	0	-28.61	-0.0124	Pass
	10	-28.74	-0.0124	Pass
	20	-28.88	-0.0125	Pass
	30	-28.98	-0.0125	Pass
	40	-28.34	-0.0123	Pass
	50	-28.39	-0.0123	Pass
102	25	-28.75	-0.0124	Pass
138	25	-28.66	-0.0124	Pass

16-QAM, Channel Bandwidth:10MHz Middle Channel $f_c = 2310$ MHz				
Power Supplied	Temperature	Frequency Error	Frequency Error	Result
V_{AC}	$^{\circ}C$	Hz	ppm	
120	-30	-38.39	-0.0166	Pass
	-20	-38.27	-0.0166	Pass
	-10	-38.19	-0.0165	Pass
	0	-38.52	-0.0167	Pass
	10	-38.44	-0.0166	Pass
	20	-38.63	-0.0167	Pass
	30	-38.2	-0.0165	Pass
	40	-38.04	-0.0165	Pass
	50	-38.05	-0.0165	Pass
102	25	-38.09	-0.0165	Pass
138	25	-38.19	-0.0165	Pass

Band 41:

QPSK, Channel Bandwidth:10MHz Middle Channel, $f_c = 2593$ MHz				
Power Supplied	Temperature	Frequency Error	Frequency Error	Result
V_{AC}	$^{\circ}C$	Hz	ppm	
120	-30	95.72	0.0378	Pass
	-20	95.70	0.0378	Pass
	-10	95.73	0.0378	Pass
	0	95.69	0.0377	Pass
	10	95.77	0.0378	Pass
	20	95.62	0.0377	Pass
	30	95.70	0.0378	Pass
	40	95.60	0.0377	Pass
	50	95.67	0.0377	Pass
102	25	95.62	0.0377	Pass
138	25	95.71	0.0378	Pass

16-QAM, Channel Bandwidth:10MHz Middle Channel, $f_c = 2593$ MHz				
Power Supplied	Temperature	Frequency Error	Frequency Error	Result
V_{AC}	$^{\circ}C$	Hz	ppm	
120	-30	95.18	0.0375	Pass
	-20	95.20	0.0376	Pass
	-10	95.23	0.0376	Pass
	0	95.13	0.0375	Pass
	10	95.14	0.0375	Pass
	20	95.17	0.0375	Pass
	30	95.24	0.0376	Pass
	40	95.20	0.0376	Pass
	50	95.25	0.0376	Pass
102	25	95.13	0.0375	Pass
138	25	95.22	0.0376	Pass

Carrier Aggregation:

Band 7:

20MHz+5MHz,Middle Channel, QPSK			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	-1.37	-0.0005
	-20	-1.30	-0.0005
	-10	-1.51	-0.0006
	0	-1.67	-0.0007
	10	-1.51	-0.0006
	20	-1.05	-0.0004
	30	-1.67	-0.0007
	40	-1.57	-0.0006
	50	-1.70	-0.0007
102	25	-1.59	-0.0006
138	25	-1.34	-0.0005

20MHz+20MHz,Middle Channel,QPSK			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	-1.79	-0.0007
	-20	-1.63	-0.0006
	-10	-1.81	-0.0007
	0	-1.74	-0.0007
	10	-1.82	-0.0007
	20	-1.92	-0.0008
	30	-1.88	-0.0007
	40	-1.76	-0.0007
	50	-1.85	-0.0007
102	25	-1.66	-0.0007
138	25	-1.59	-0.0006

20MHz+20MHz,Middle Channel,16QAM			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	-1.50	-0.0006
	-20	-1.32	-0.0005
	-10	-1.48	-0.0006
	0	-1.29	-0.0005
	10	-1.37	-0.0005
	20	-1.31	-0.0005
	30	-1.59	-0.0006
	40	-1.66	-0.0007
	50	-1.63	-0.0006
102	25	-1.54	-0.0006
138	25	-1.31	-0.0005

Band 41:

20MHz+5MHz,Middle Channel, QPSK			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	61.38	0.0237
	-20	61.08	0.0236
	-10	61.39	0.0237
	0	61.29	0.0236
	10	61.34	0.0237
	20	61.31	0.0236
	30	61.28	0.0236
	40	61.19	0.0236
	50	61.39	0.0237
102	25	61.45	0.0237
138	25	61.18	0.0236

20MHz+5MHz,Middle Channel,16QAM			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	61.27	0.0236
	-20	61.34	0.0237
	-10	61.45	0.0237
	0	60.82	0.0235
	10	61.28	0.0236
	20	61.15	0.0236
	30	61.26	0.0236
	40	61.25	0.0236
	50	61.32	0.0236
102	25	61.45	0.0237
138	25	61.22	0.0236

20MHz+20MHz,Middle Channel,QPSK			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	61.23	0.0236
	-20	61.24	0.0236
	-10	61.20	0.0236
	0	61.22	0.0236
	10	61.27	0.0236
	20	61.30	0.0236
	30	61.33	0.0237
	40	61.30	0.0236
	50	61.40	0.0237
102	25	61.35	0.0237
138	25	61.30	0.0236

20MHz+20MHz,Middle Channel,16QAM			
Power Supplied	Temperature	Frequency Error	Frequency Error
Vac	℃	Hz	ppm
120	-30	58.23	0.0225
	-20	58.14	0.0224
	-10	58.10	0.0224
	0	58.15	0.0224
	10	58.16	0.0224
	20	58.13	0.0224
	30	58.22	0.0225
	40	58.00	0.0224
	50	58.09	0.0224
102	25	58.18	0.0224
138	25	58.21	0.0224

***** END OF REPORT *****