

## FCC AND IC CERTIFICATION TEST REPORT

### FOR

<b>Applicant</b>	:	Harman International Industries, Inc.
<b>Address</b>	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES
<b>Equipment under Test</b>	:	WIRELESS SPEAKER
<b>Model No.</b>	:	LINK MUSIC
<b>Trade Mark</b>	:	JBL
<b>FCC ID</b>	:	APIJBLLINKMUSIC
<b>IC</b>	:	6132A-JBLLINKMUSIC
<b>Manufacturer</b>	:	Harman International Industries, Inc.
<b>Address</b>	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

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## TEST REPORT DECLARE

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**Test Standard Used:** FCC Rules and Regulations Part 15 Subpart C, RSS-247 Issue 2 February 2017.

**Test procedure used:** ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01, RSS-Gen Issue 5, Apr. 2018

**We Declare:**

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC&IC standards.**

<b>Report No:</b>	DDT-R19032116-1E6		
<b>Date of Receipt:</b>	Mar. 25, 2019	<b>Date of Test:</b>	Mar. 25, 2019 ~ Jun. 11, 2019

**Prepared By:**

*Sam Li*

**Sam Li/Engineer**

**Approved By:**



**Damon Hu/EMC Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

## Revision history

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Jun. 11, 2019	



## 1. Summary of test results

The EUT have been tested according to the applicable standards as referenced below.

Description of Test Item	Standard	Results
6/26db Bandwidth and 99% Bandwidth	FCC 15.407 (e) RSS-247 Clause 6.2	PASS
Maximum Conducted Output Power	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
Power Spectral Density	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
Frequency Stability Measurement	FCC 15.407 (g)	PASS
Emissions in restricted frequency bands	FCC 15.407 (a) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
Band Edge Compliance	FCC 15.407 (a) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
Power Line Conducted Emission	FCC 15.207 RSS-GEN Clause 8.8	PASS
Antenna requirement	FCC 15.203 RSS-GEN Clause 8.3	PASS
Dynamic Frequency Selection	FCC 15.407 (h) RSS-247 Clause 6.3	PASS

## 2. General test information

### 2.1. Description of EUT

EUT* Name	: WIRELESS SPEAKER
Model Number	: LINK MUSIC
EUT function description	: Please reference user manual of this device
Power supply	: 100-240V~, 50/60Hz, 30W
Radio Technology	: IEEE 802.11a/n/ac
FCC Operation frequency	: IEEE 802.11a: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11n HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11n HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5755MHz IEEE 802.11ac HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11ac HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5755MHz IEEE 802.11ac HT80: 5210MHz, 5290MHz, 5530MHz, 5775MHz
Modulation	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Transmitter rate	: IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11n HT20: 14.4, 28.9, 43.3, 57.8, 86.7, 115.6, 130.0, 144.4 Mbps IEEE 802.11n HT40: 30, 60, 90, 120, 180, 240, 270, 300 Mbps IEEE 802.11ac HT20: 14.4, 28.8, 43.4, 57.8, 86.6, 115.6, 130, 144.4, 173.4 Mbps IEEE 802.11ac HT40: 30, 60, 90, 120, 180, 240, 270, 300, 360, 400 Mbps IEEE 802.11ac HT80: 65, 130, 195, 260, 390, 520, 585, 650, 780, 866.6 Mbps
Antenna Type	: Antenna 1: External FPC antenna, maximum PK gain: 3.79 dBi Antenna 2: External FPC antenna, maximum PK gain: 3.82 dBi
Sample Type	: Series production

Note: EUT is the ab. of equipment under test.

### 2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description	Remark
AC cable	Harman	N/A	Length: 1.5m, unshielded	N/A

### 2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	EMC Compliance	SN
Notebook	DELL	Latitude D610	FCC DOC	00045-534-136-300
Wireless LAN Access Point	HUAWEI	AP6050	21500829352SC5000371	FCC ID: QISAP6050DN6150DN

### 2.4. Block diagram of EUT configuration for test



EUT was connected to control to provide by manufacturer which has a standard LAN port connector to connect to Notebook, and the Notebook will run a special test software “adb.EXE” provided by manufacturer to control EUT work in Continuous Tx mode (>98% duty cycle), and select test channel, wireless mode and data rate.



Tested mode, channel, and data rate information				
Mode	Setting Tx Power	data rate (Mbps) (see Note)	Channel	Frequency (MHz)
IEEE 802.11a	13	54	Low: CH36	5180
	13	54	Middle: CH40	5200
	12	54	High: CH48	5240
	15	54	Low: CH52	5260
	15	54	Middle: CH56	5280
	15	54	High: CH64	5320
	15	54	Low: CH100	5500
	15	54	Middle: CH116	5580
	15	54	High: CH140	5700
	15	54	Low: CH149	5745
	15	54	Middle: CH157	5785
	15	54	High: CH165	5825
IEEE 802.11n HT20	14	MCS 7	Low: CH36	5180
	14	MCS 7	Middle: CH40	5200
	14	MCS 7	High: CH48	5240
	15	MCS 7	Low: CH52	5260
	15	MCS 7	Middle: CH56	5280
	15	MCS 7	High: CH64	5320
	15	MCS 7	Low: CH100	5500
	15	MCS 7	Middle: CH116	5580
	15	MCS 7	High: CH140	5700
	15	MCS 7	Low: CH149	5745
	15	MCS 7	Middle: CH157	5785
	15	MCS 7	High: CH165	5825
IEEE 802.11n HT40	15	MCS 7	Low: CH38	5190
	15	MCS 7	Middle: CH46	5230
	15	MCS 7	High: CH54	5270
	15	MCS 7	Low: CH62	5310
	15	MCS 7	Middle: CH102	5510
	15	MCS 7	High: CH110	5550
	15	MCS 7	Low: CH134	5670
	15	MCS 7	Middle: CH151	5755
	15	MCS 7	High: CH159	5795
IEEE 802.11ac HT20	12	MCS 7	Low: CH36	5180
	12	MCS 7	Middle: CH40	5200
	12	MCS 7	High: CH48	5240
	15	MCS 7	Low: CH52	5260
	15	MCS 7	Middle: CH56	5280
	15	MCS 7	High: CH64	5320
	15	MCS 7	Low: CH100	5500
	15	MCS 7	Middle: CH116	5580
	15	MCS 7	High: CH140	5700
	15	MCS 7	Low: CH149	5745
	15	MCS 7	Middle: CH157	5785
	15	MCS 7	High: CH165	5825

IEEE 802.11ac HT40	13	MCS 7	Low: CH38	5190
	13	MCS 7	Middle: CH46	5230
	15	MCS 7	High: CH54	5270
	15	MCS 7	Low: CH62	5310
	15	MCS 7	Middle: CH102	5510
	15	MCS 7	High: CH110	5550
	15	MCS 7	Low: CH134	5670
	15	MCS 7	Middle: CH151	5755
IEEE 802.11ac HT80	15	MCS 7	High: CH159	5795
	11	MCS 7	CH42	5210
	15	MCS 7	CH58	5290
	15	MCS 7	CH106	5530
	15	MCS 7	CH155	5775

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

## 2.5. Deviations of test standard

No Deviation.

## 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25°C
Humidity range:	40-75%
Pressure range:	86-106 kPa

## 2.7. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

Tel: +86-0769-38826678, <http://www.dgddt.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com)

CNAS Accreditation No. L6451; A2LA Accreditation No. 3870.01

Designation Number: CN1182; Test Firm Registration Number: 540522

Industry Canada site registration number: 10288A-1

## 2.8. Measurement uncertainty

Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB (10 MHz ≤ f < 3.6 GHz); 1.38 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB (10 MHz ≤ f < 3.6 GHz); 1.38 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7 × 10 <sup>-8</sup> (Antenna couple method) 5.5 × 10 <sup>-8</sup> (Conducted method)
Conducted spurious emissions	0.86 dB (10 MHz ≤ f < 3.6GHz); 1.40 dB (3.6 GHz ≤ f < 8 GHz) 1.66 dB (8 GHz ≤ f < 22 GHz)
Uncertainty for radio frequency (RBW<20kHz)	3×10 <sup>-8</sup>
Temperature	0.4℃
Humidity	2%
Uncertainty for Radiation Emission test (30MHz-1GHz)	4.70 dB (Antenna Polarize: V) 4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1GHz-40GHz)	4.10 dB (1-6 GHz) 4.40 dB (6 GHz-18 GHz) 3.54 dB (18 GHz-26 GHz) 4.30 dB (26 GHz-40 GHz)
Uncertainty for Power line conduction emission test	3.32 dB (150 kHz-30 MHz)

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



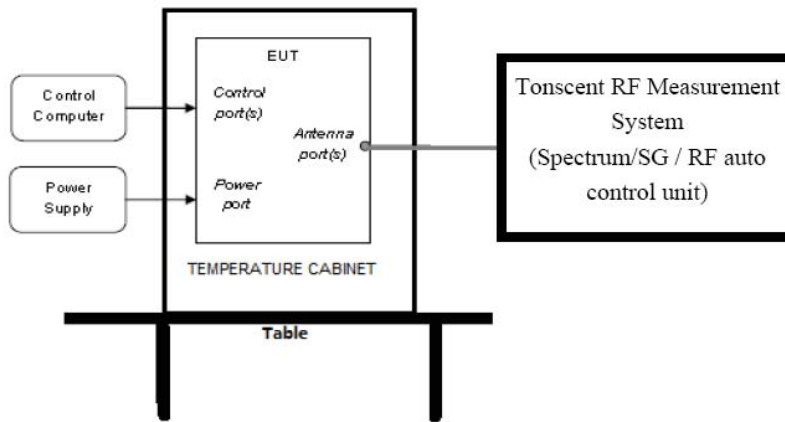
### 3. Equipment used during test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
<b>RF Connected Test (Tonscend RF Measurement System)</b>					
Spectrum analyzer	R&S	FSU26	200071	Oct. 12, 2018	1 Year
Wideband Radio Communication tester	R&S	CMW500	117491	Jun. 29, 2018	1 Year
Vector Signal Generator	Agilent	E8267D	US49060192	Oct. 12, 2018	1 Year
Vector Signal Generator	Agilent	N5182A	MY48180737	Jun. 29, 2018	1 Year
Power Sensor	Agilent	U2021XA	MY55150010	Oct. 21, 2018	1 Year
Power Sensor	Agilent	U2021XA	MY55150011	Oct. 23, 2018	1 Year
DC Power Source	MATRIS	MPS-3005L-3	D813058W	Aug. 18, 2018	1 Year
Attenuator	Mini-Circuits	BW-S10W2	101109	Aug. 18, 2018	1 Year
RF Cable	Micable	C10-01-01-1	100309	Oct. 21, 2018	1 Year
Temp&Humi Programmable	ZHIXIANG	ZXGDJS-150L	ZX170110-A	Oct. 21, 2018	1 Year
Test Software	JS Tonscend	JS1120-3	Ver.2.7	N/A	N/A
<b>Radiation 1#chamber</b>					
EMI Test Receiver	R&S	ESU8	100316	Oct. 12, 2018	1 Year
Spectrum analyzer	Agilent	E4447A	MY50180031	Jun. 29, 2018	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	Nov. 09, 2018	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Oct. 20, 2018	1 Year
Double Ridged Horn Antenna	R&S	HF907	100276	Nov. 16, 2018	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	Oct. 25, 2018	1 Year
Pre-amplifier	A.H.	PAM-0118	360	Oct. 12, 2018	1 Year
Pre-amplifier	TERA-MW	TRLA-0040 G35	101303	Oct. 12, 2018	1 Year
RF Cable	HUBSER	CP-X2+ CP-X1	W11.03+ W12.02	Oct. 21, 2018	1 Year
RF Cable	N/A	SMAJ-SMA J-1M+ 11M	17070133+17070131	Nov. 08, 2018	1 Year
MI Cable	HUBSER	C10-01-01-1 M	1091629	Oct. 21, 2018	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A
<b>Power Line Conducted Emissions Test</b>					
EMI Test Receiver	R&S	ESU8	100316	Oct. 21, 2018	1 Year
LISN 1	R&S	ENV216	101109	Oct. 21, 2018	1 Year
LISN 2	R&S	ESH2-Z5	100309	Oct. 21, 2018	1 Year
Pulse Limiter	R&S	ESH3-Z2	101242	Oct. 21, 2018	1 Year
CE Cable 1	HUBSER	N/A	W10.01	Oct. 21, 2018	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A



## 4. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

### 4.1. Block diagram of test setup



### 4.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150-5250
	26 dB Bandwidth	5250-5350
	26 dB Bandwidth	For FCC:5470-5725 For IC:5470-5600 5650-5725
	Minimum 500kHz 6dB Bandwidth	5725-5850

### 4.3. Test Procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: RBW=100 kHz For 26 dB Bandwidth: approximately 1% of the emission bandwidth.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3 RBW
Trace	Max hold
Sweep	Auto couple

(2) Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB and 6 dB relative to the maximum level measured in the fundamental emission.

## 4.4. Test Result

Test Mode	Antenna	Channel	99% BW[MHz]	EBW[MHz]	Limit [MHz]	Verdict
11A	ANT1	5180	16.59	19.89	---	PASS
11A	ANT2	5180	16.59	19.92	---	PASS
11A	ANT1	5200	16.59	19.86	---	PASS
11A	ANT2	5200	16.56	19.77	---	PASS
11A	ANT1	5240	16.59	19.83	---	PASS
11A	ANT2	5240	16.59	19.71	---	PASS
11A	ANT1	5260	16.59	19.86	---	PASS
11A	ANT2	5260	16.59	19.92	---	PASS
11A	ANT1	5280	16.59	19.95	---	PASS
11A	ANT2	5280	16.59	19.86	---	PASS
11A	ANT1	5320	16.62	20.10	---	PASS
11A	ANT2	5320	16.59	20.07	---	PASS
11A	ANT1	5500	16.65	20.04	---	PASS
11A	ANT2	5500	16.65	20.01	---	PASS
11A	ANT1	5580	16.59	19.89	---	PASS
11A	ANT2	5580	16.59	19.74	---	PASS
11A	ANT1	5700	16.65	19.89	---	PASS
11A	ANT2	5700	16.56	19.83	---	PASS
11A	ANT1	5745	16.38	15.75	0.5	PASS
11A	ANT2	5745	16.35	15.78	0.5	PASS
11A	ANT1	5785	16.35	15.75	0.5	PASS
11A	ANT2	5785	16.38	15.75	0.5	PASS
11A	ANT1	5825	16.35	15.75	0.5	PASS
11A	ANT2	5825	16.35	15.78	0.5	PASS
11N20	ANT1	5180	17.76	20.40	---	PASS
11N20	ANT2	5180	17.73	20.49	---	PASS
11N20	ANT1	5200	17.73	20.49	---	PASS
11N20	ANT2	5200	17.73	20.49	---	PASS
11N20	ANT1	5240	17.79	24.00	---	PASS
11N20	ANT2	5240	17.79	23.94	---	PASS
11N20	ANT1	5260	17.73	23.97	---	PASS
11N20	ANT2	5260	17.79	24.15	---	PASS
11N20	ANT1	5280	17.82	24.12	---	PASS
11N20	ANT2	5280	17.79	24.18	---	PASS
11N20	ANT1	5320	17.85	26.73	---	PASS
11N20	ANT2	5320	17.82	27.03	---	PASS

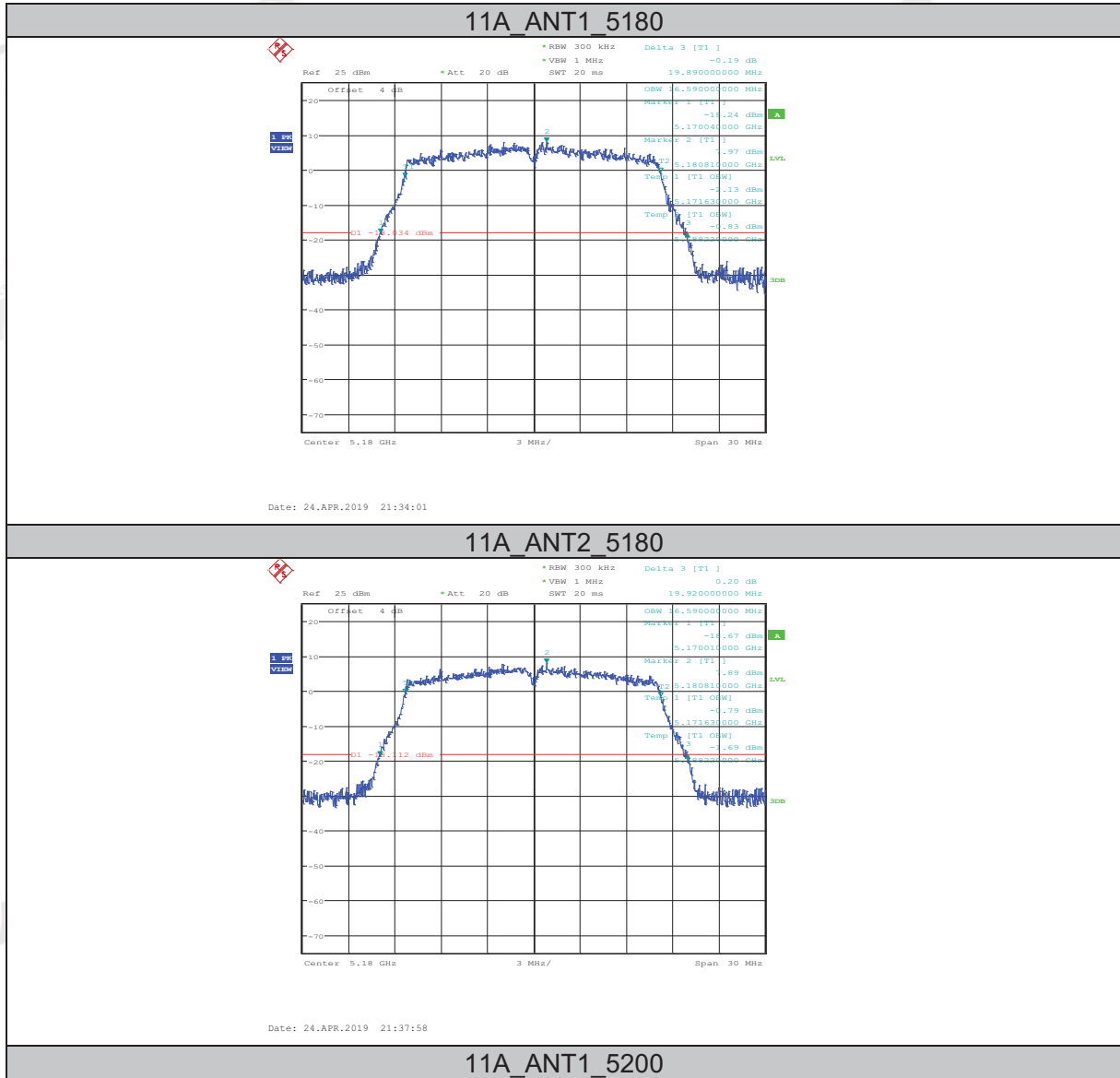
11N20	ANT1	5500	17.91	29.34	---	PASS
11N20	ANT2	5500	17.94	27.90	---	PASS
11N20	ANT1	5580	17.85	28.62	---	PASS
11N20	ANT2	5580	17.85	28.59	---	PASS
11N20	ANT1	5700	17.79	24.24	---	PASS
11N20	ANT2	5700	17.79	26.79	---	PASS
11N20	ANT1	5745	17.58	15.12	0.5	PASS
11N20	ANT2	5745	17.58	15.15	0.5	PASS
11N20	ANT1	5785	17.58	15.09	0.5	PASS
11N20	ANT2	5785	17.61	15.15	0.5	PASS
11N20	ANT1	5825	17.55	15.12	0.5	PASS
11N20	ANT2	5825	17.58	13.92	0.5	PASS
11N40	ANT1	5190	36.36	46.98	---	PASS
11N40	ANT2	5190	36.42	45.48	---	PASS
11N40	ANT1	5230	36.48	54.30	---	PASS
11N40	ANT2	5230	36.42	54.36	---	PASS
11N40	ANT1	5270	36.42	54.42	---	PASS
11N40	ANT2	5270	36.42	54.42	---	PASS
11N40	ANT1	5310	36.66	59.70	---	PASS
11N40	ANT2	5310	36.60	55.62	---	PASS
11N40	ANT1	5510	36.6	59.64	---	PASS
11N40	ANT2	5510	36.66	59.46	---	PASS
11N40	ANT1	5550	36.54	55.86	---	PASS
11N40	ANT2	5550	36.54	55.62	---	PASS
11N40	ANT1	5670	36.48	55.80	---	PASS
11N40	ANT2	5670	36.48	55.74	---	PASS
11N40	ANT1	5755	36.06	35.16	0.5	PASS
11N40	ANT2	5755	36.06	35.16	0.5	PASS
11N40	ANT1	5795	36.18	35.22	0.5	PASS
11N40	ANT2	5795	36.12	35.28	0.5	PASS
11AC20	ANT1	5180	17.64	20.04	---	PASS
11AC20	ANT2	5180	17.64	20.22	---	PASS
11AC20	ANT1	5200	17.61	20.10	---	PASS
11AC20	ANT2	5200	17.64	20.10	---	PASS
11AC20	ANT1	5240	17.64	20.16	---	PASS
11AC20	ANT2	5240	17.67	20.10	---	PASS
11AC20	ANT1	5260	17.61	20.16	---	PASS
11AC20	ANT2	5260	17.67	20.01	---	PASS
11AC20	ANT1	5280	17.61	20.04	---	PASS

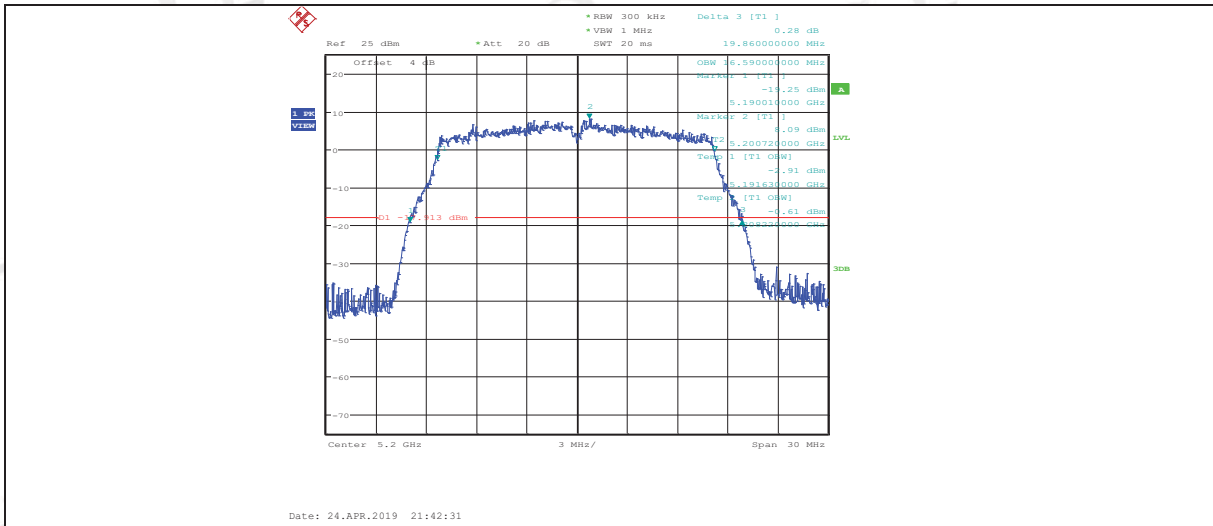
11AC20	ANT2	5280	17.67	20.16	---	PASS
11AC20	ANT1	5320	17.67	20.04	---	PASS
11AC20	ANT2	5320	17.67	19.95	---	PASS
11AC20	ANT1	5500	17.67	20.13	---	PASS
11AC20	ANT2	5500	17.67	20.19	---	PASS
11AC20	ANT1	5580	17.64	20.01	---	PASS
11AC20	ANT2	5580	17.61	20.22	---	PASS
11AC20	ANT1	5700	17.61	20.10	---	PASS
11AC20	ANT2	5700	17.64	20.01	---	PASS
11AC20	ANT1	5745	17.52	16.05	0.5	PASS
11AC20	ANT2	5745	17.52	16.65	0.5	PASS
11AC20	ANT1	5785	17.55	15.78	0.5	PASS
11AC20	ANT2	5785	17.55	15.75	0.5	PASS
11AC20	ANT1	5825	17.52	16.05	0.5	PASS
11AC20	ANT2	5825	17.52	16.08	0.5	PASS
11AC40	ANT1	5190	36.18	39.90	---	PASS
11AC40	ANT2	5190	36.12	40.32	---	PASS
11AC40	ANT1	5230	36.18	40.62	---	PASS
11AC40	ANT2	5230	36.12	40.32	---	PASS
11AC40	ANT1	5270	36.18	40.50	---	PASS
11AC40	ANT2	5270	36.18	40.44	---	PASS
11AC40	ANT1	5310	36.18	40.56	---	PASS
11AC40	ANT2	5310	36.30	40.20	---	PASS
11AC40	ANT1	5510	36.30	40.38	---	PASS
11AC40	ANT2	5510	36.12	40.74	---	PASS
11AC40	ANT1	5550	36.18	40.38	---	PASS
11AC40	ANT2	5550	36.24	40.44	---	PASS
11AC40	ANT1	5670	36.18	40.62	---	PASS
11AC40	ANT2	5670	36.24	40.26	---	PASS
11AC40	ANT1	5755	35.94	35.22	0.5	PASS
11AC40	ANT2	5755	36.00	35.52	0.5	PASS
11AC40	ANT1	5795	36.06	36.00	0.5	PASS
11AC40	ANT2	5795	36.12	35.88	0.5	PASS
11AC80	ANT1	5210	75.84	81.84	---	PASS
11AC80	ANT2	5210	75.96	81.84	---	PASS
11AC80	ANT1	5290	76.20	81.96	---	PASS
11AC80	ANT2	5290	76.08	81.96	---	PASS
11AC80	ANT1	5530	76.08	81.72	---	PASS
11AC80	ANT2	5530	76.08	81.72	---	PASS



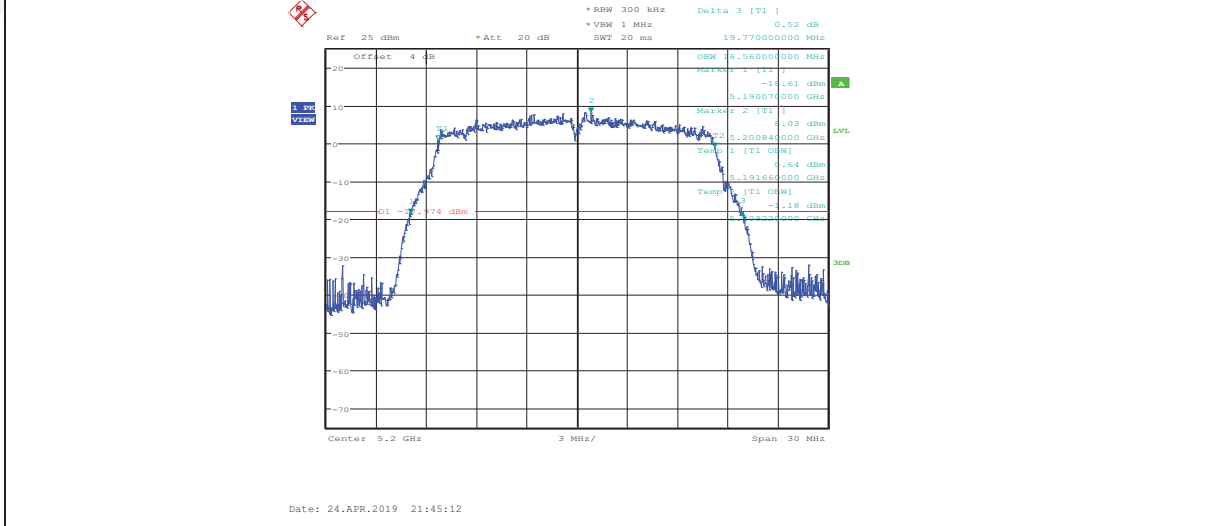
11AC80	ANT1	5775	75.60	75.48	0.5	PASS
11AC80	ANT2	5775	75.48	75.72	0.5	PASS

4.5. Original test data

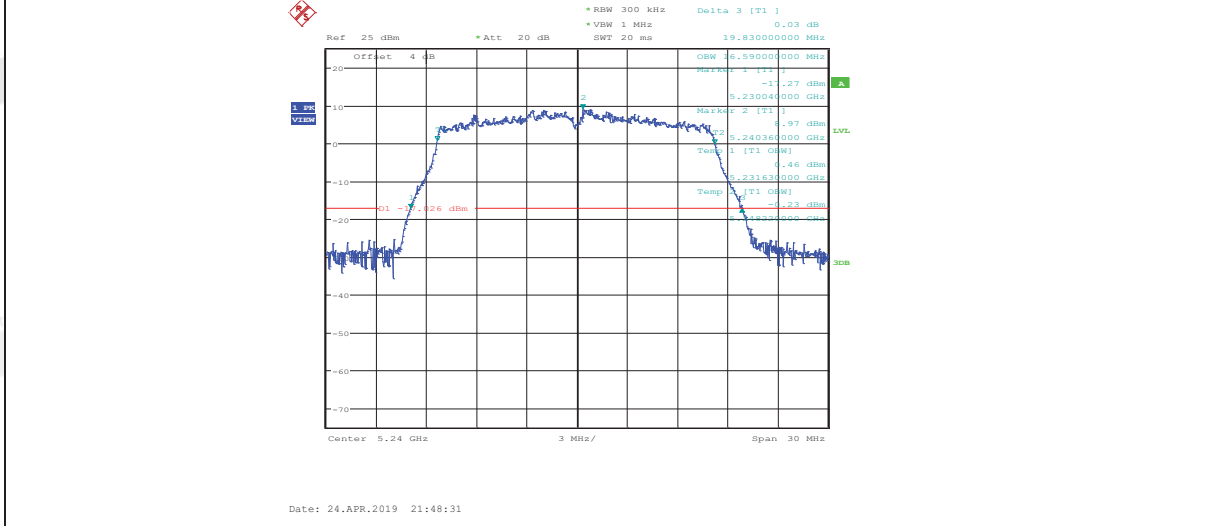




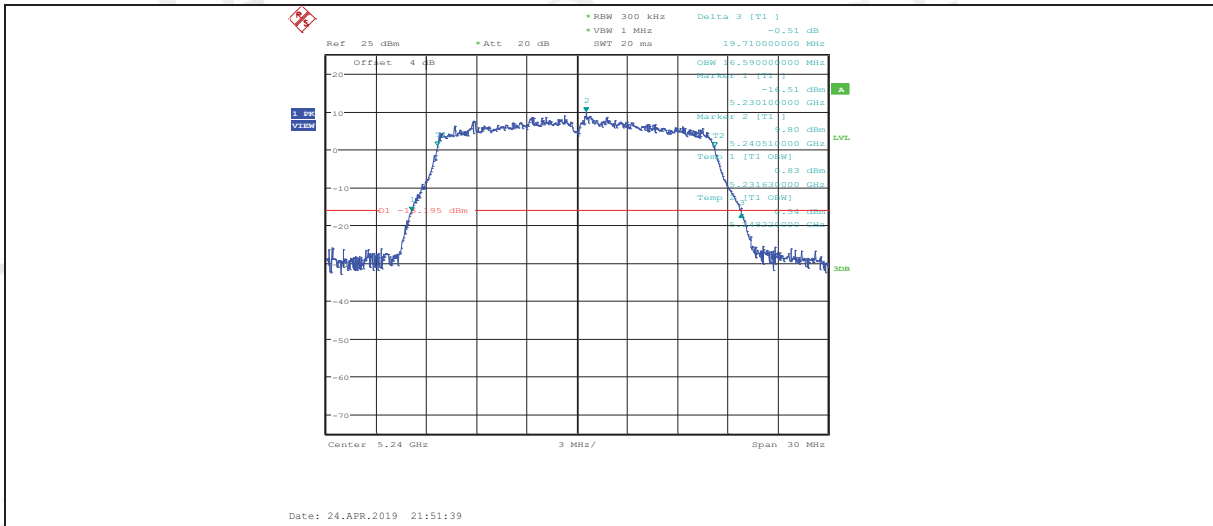
11A ANT2 5200



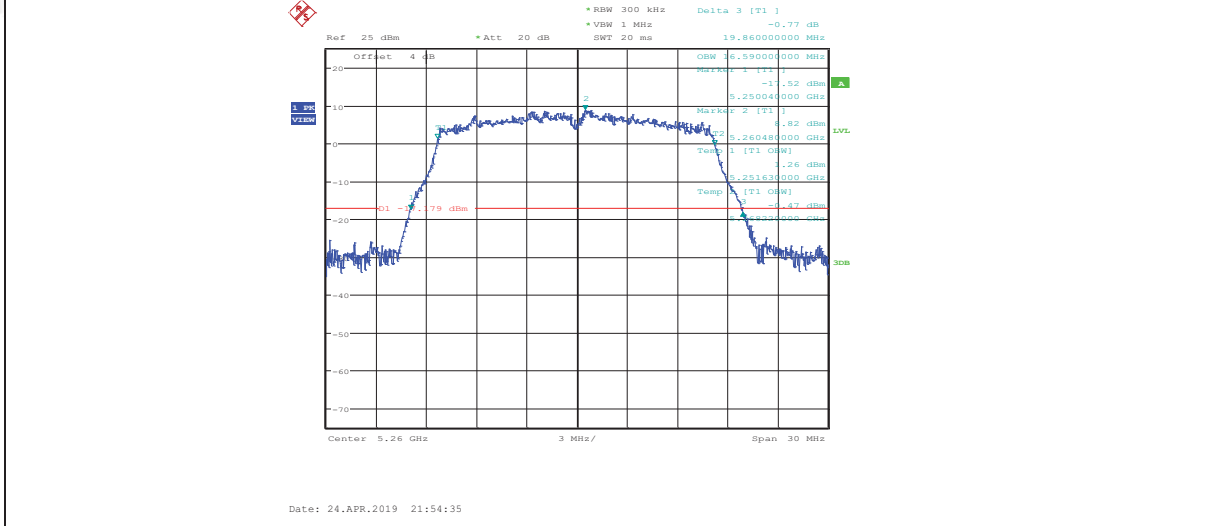
11A ANT1 5240



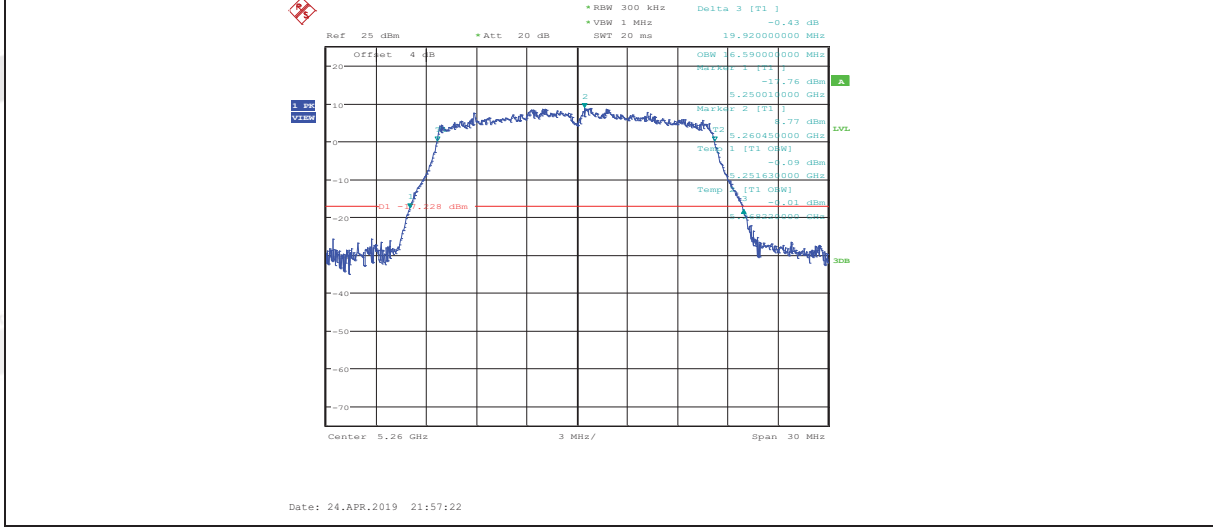
11A ANT2 5240



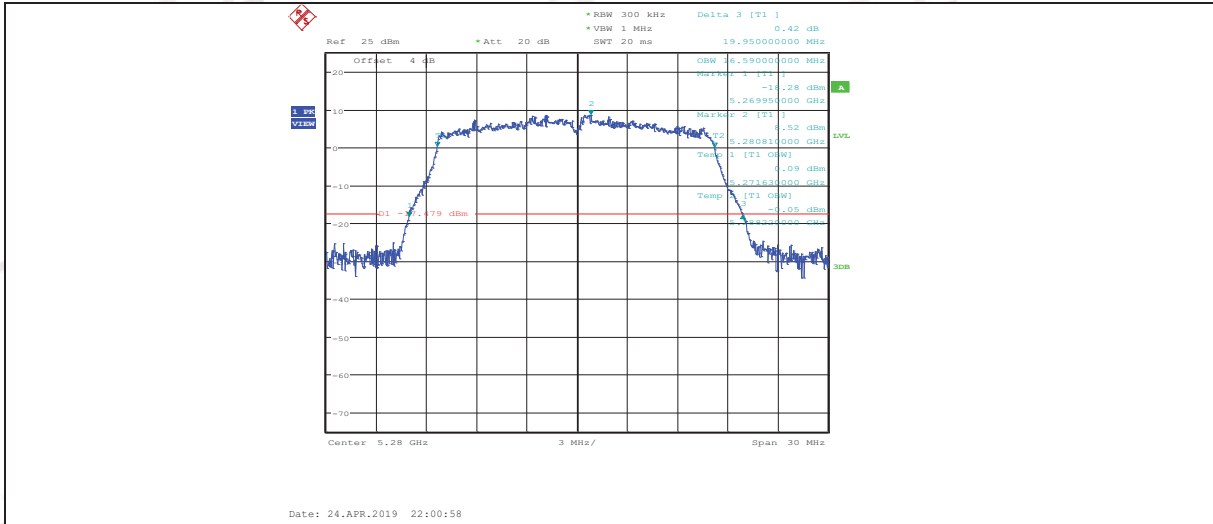
11A ANT1\_5260



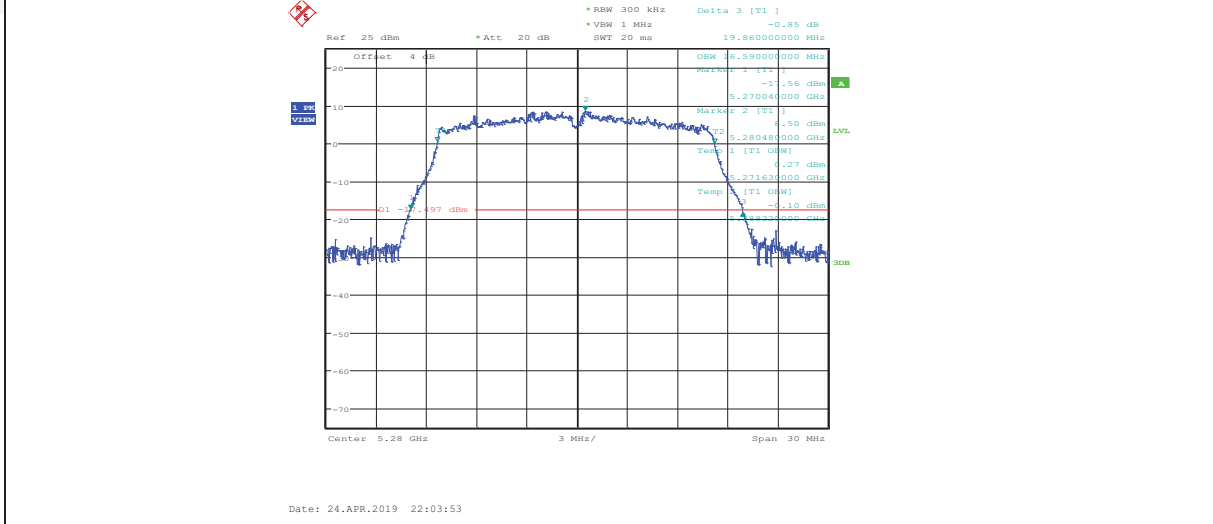
11A ANT2\_5260



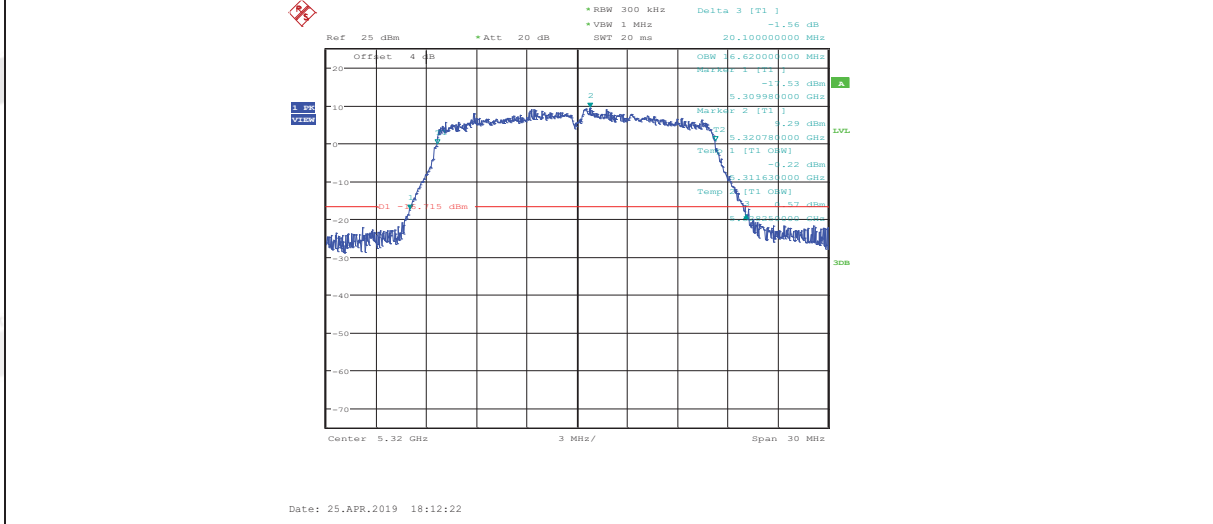
11A ANT1\_5280



11A ANT2 5280

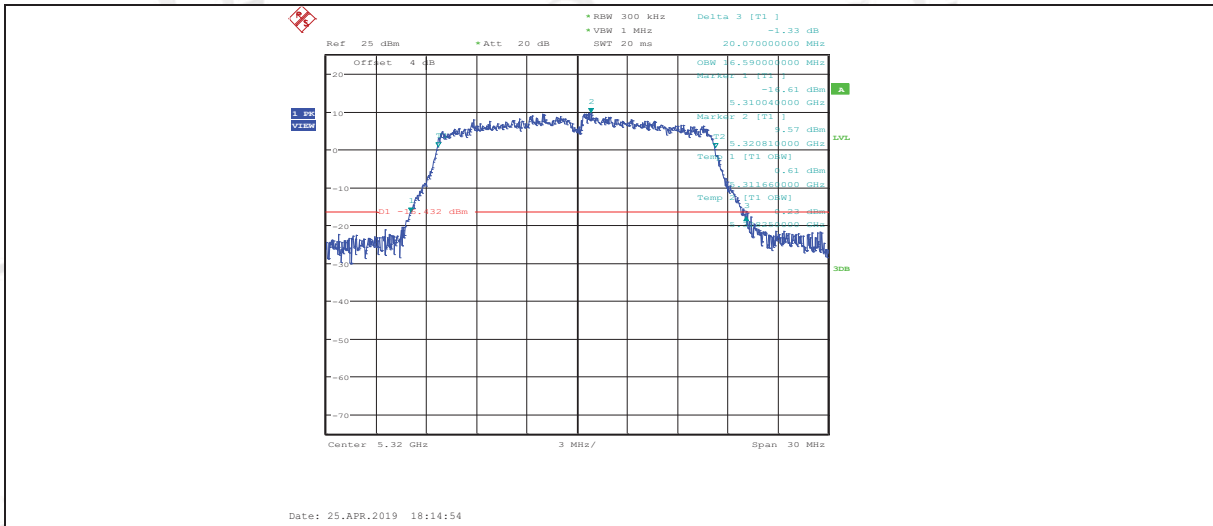


11A ANT1 5320

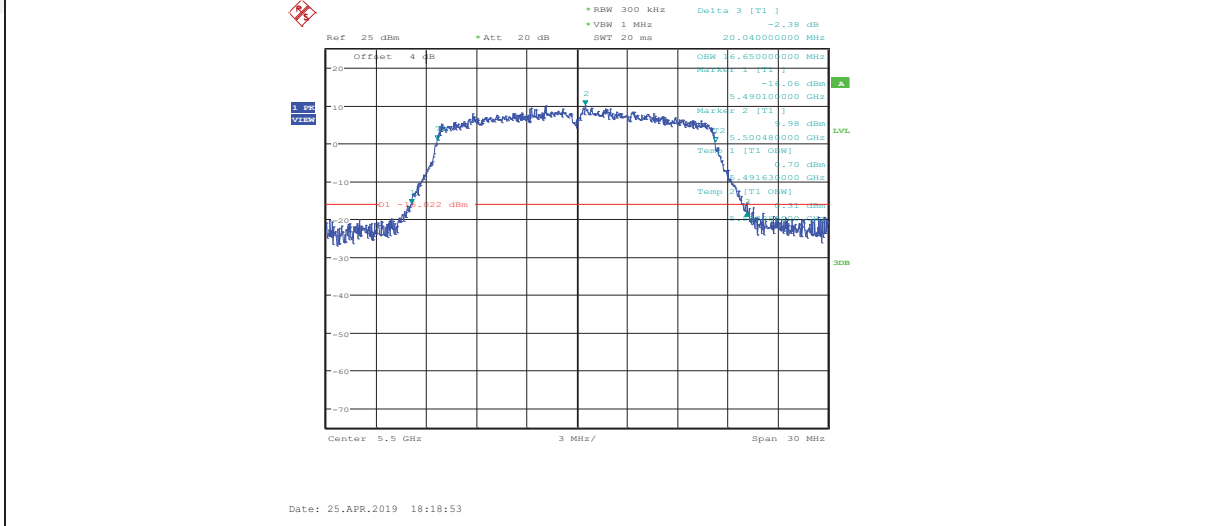


11A ANT2 5320

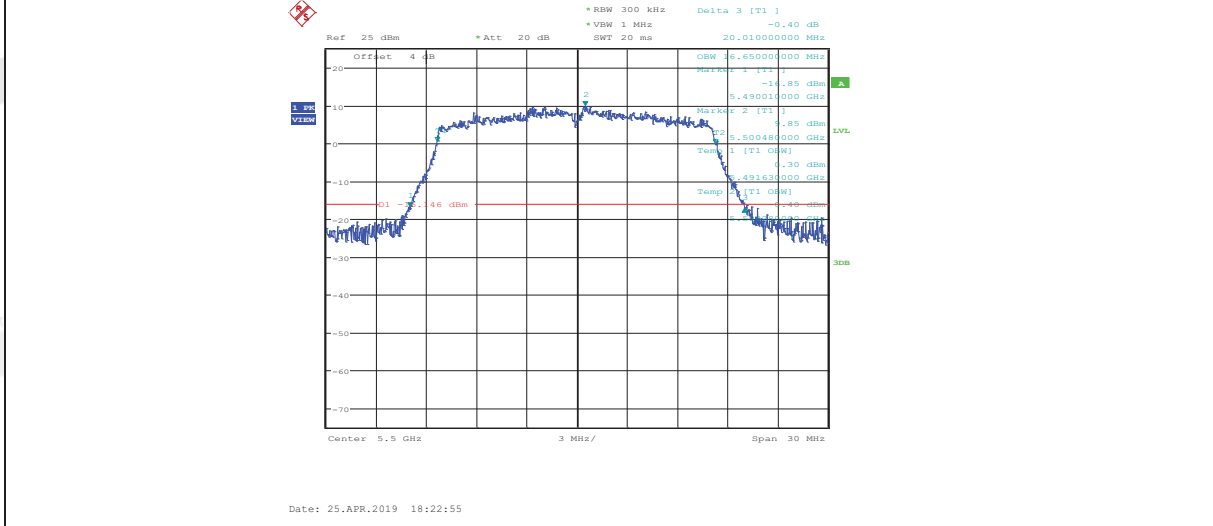




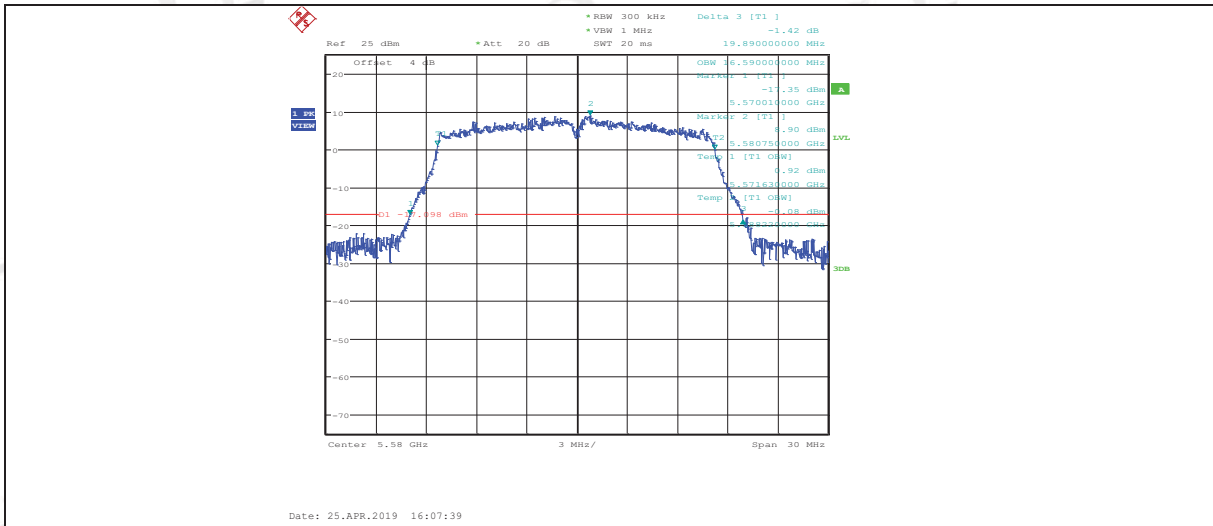
11A ANT1 5500



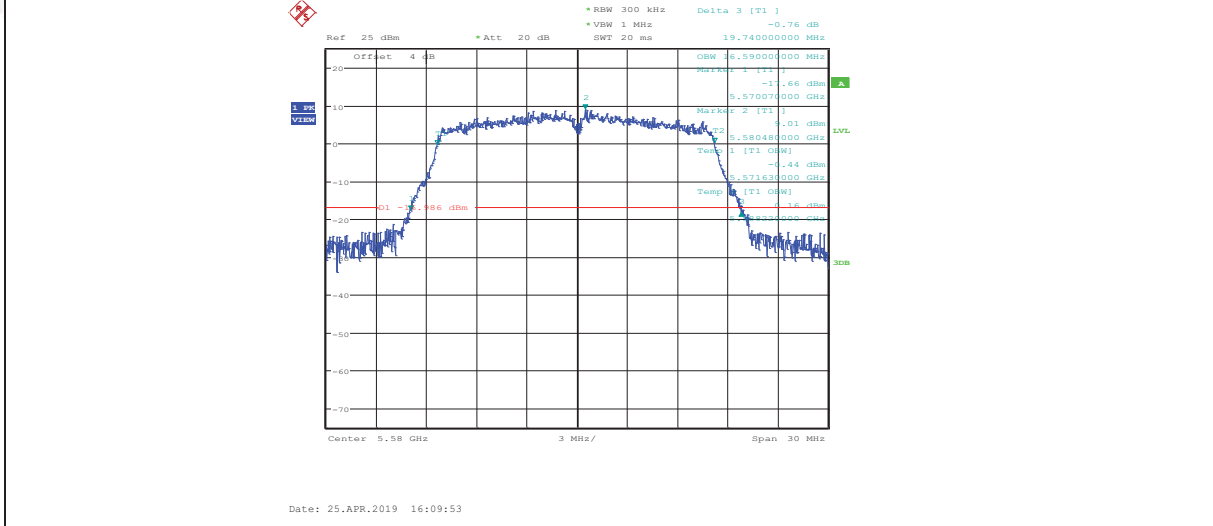
11A ANT2 5500



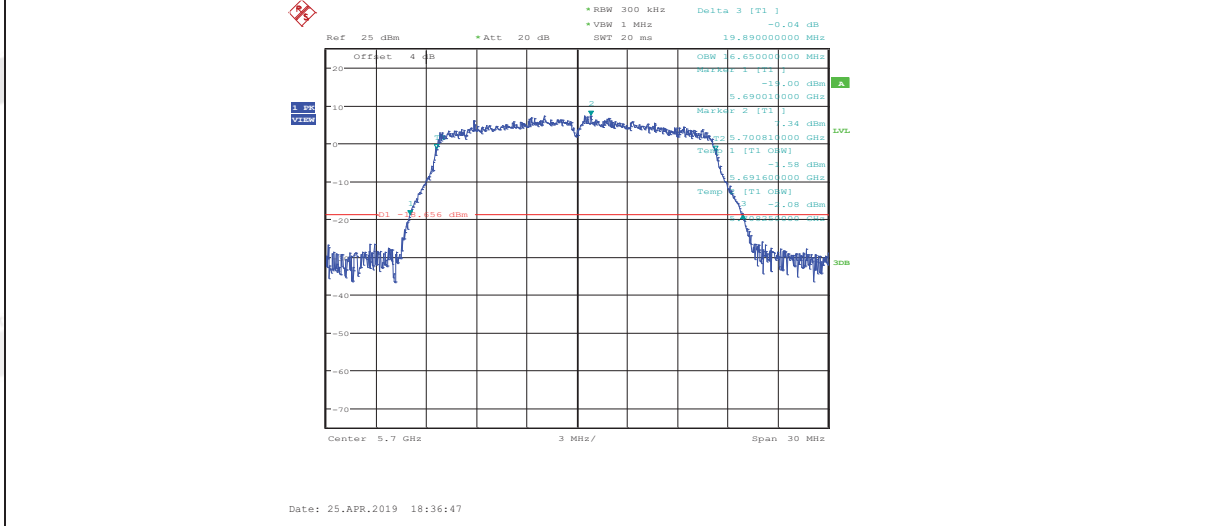
11A ANT1 5580



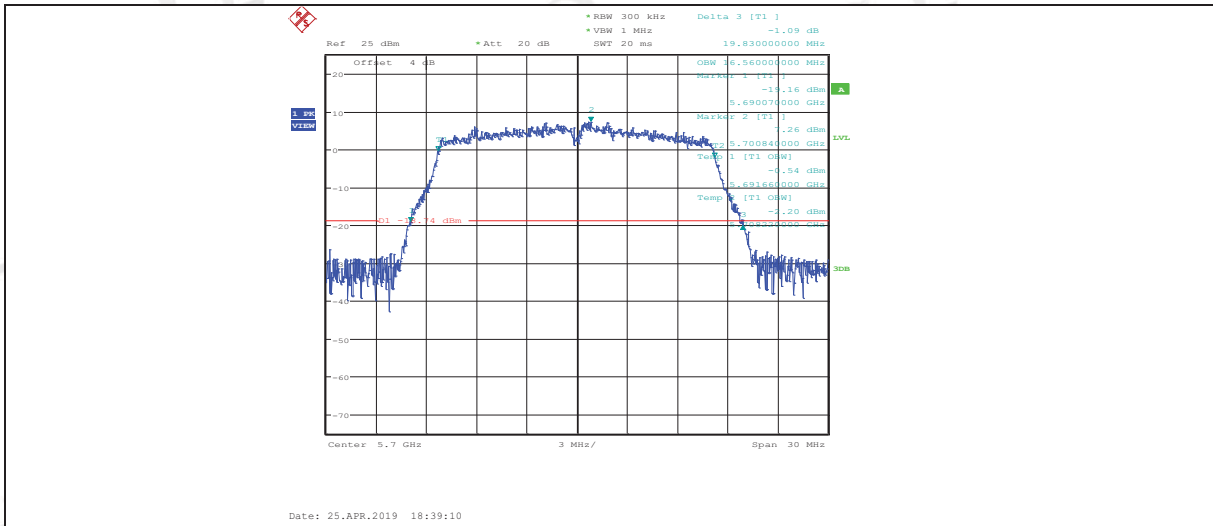
11A ANT2 5580



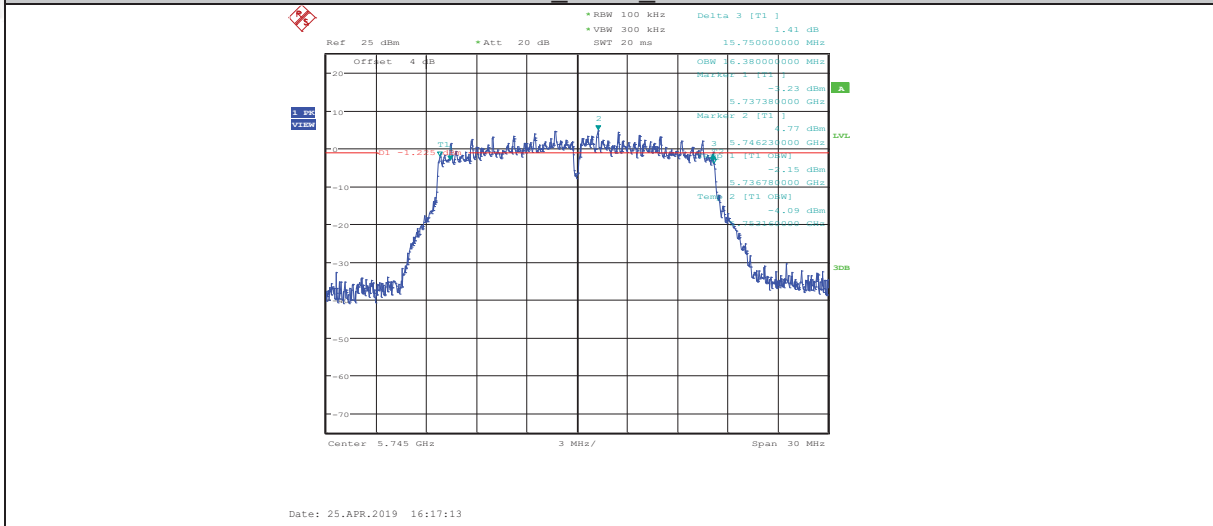
11A ANT1 5700



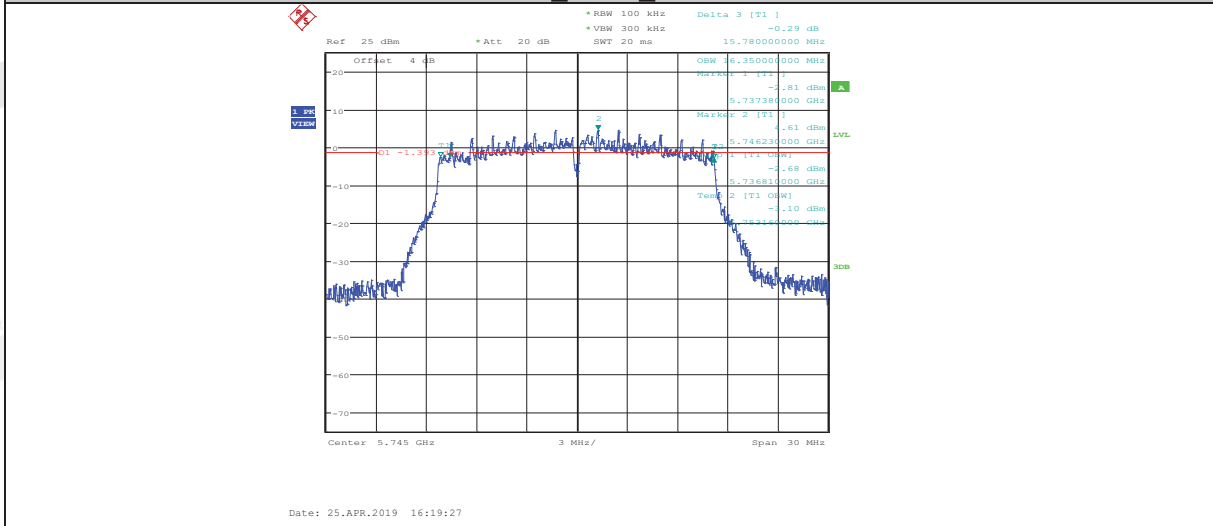
11A ANT2 5700



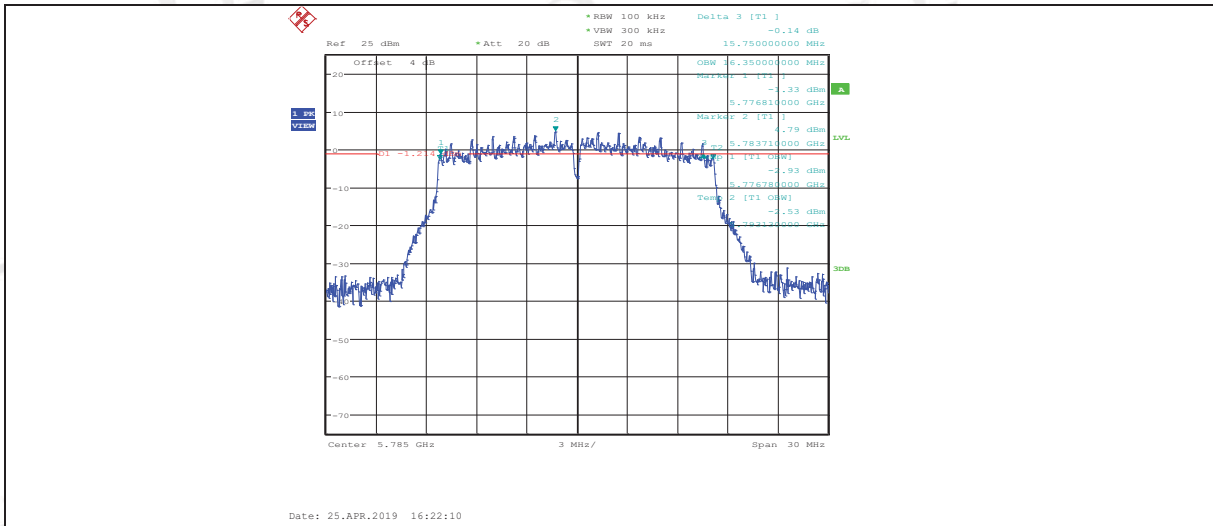
11A ANT1\_5745



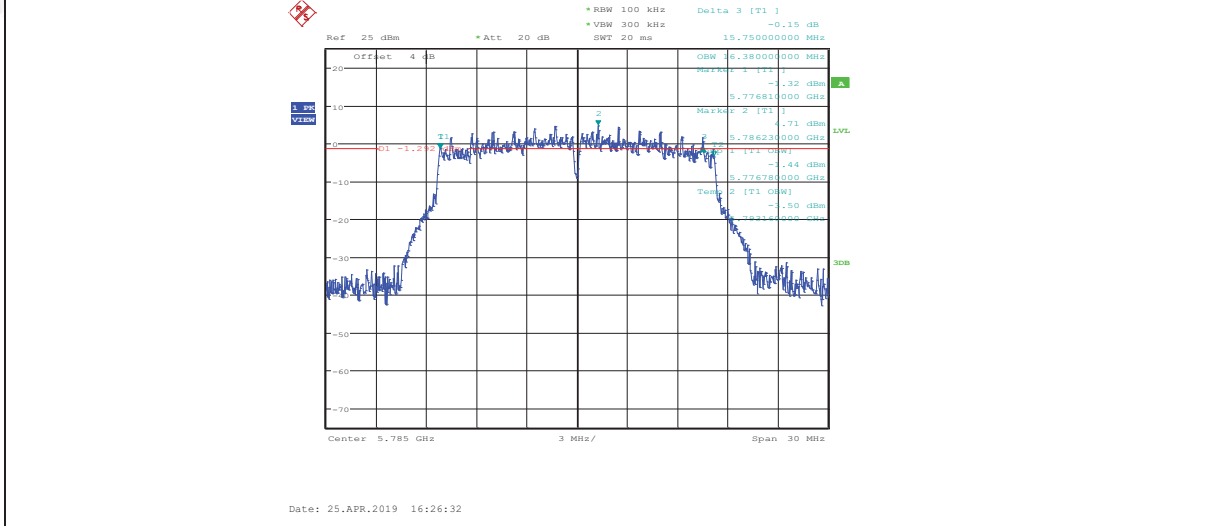
11A ANT2\_5745



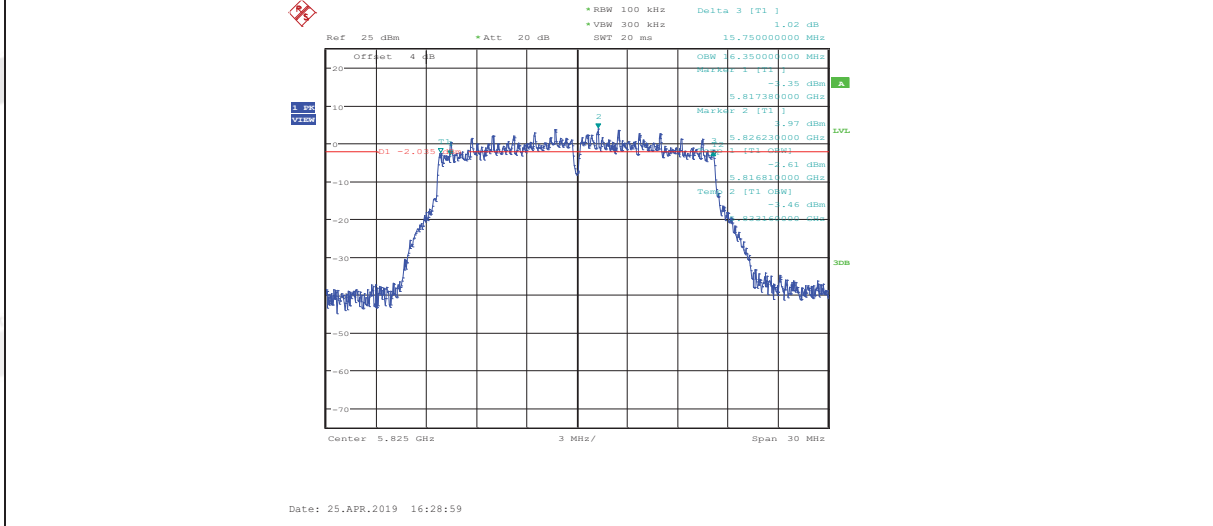
11A ANT1\_5785



11A ANT2 5785

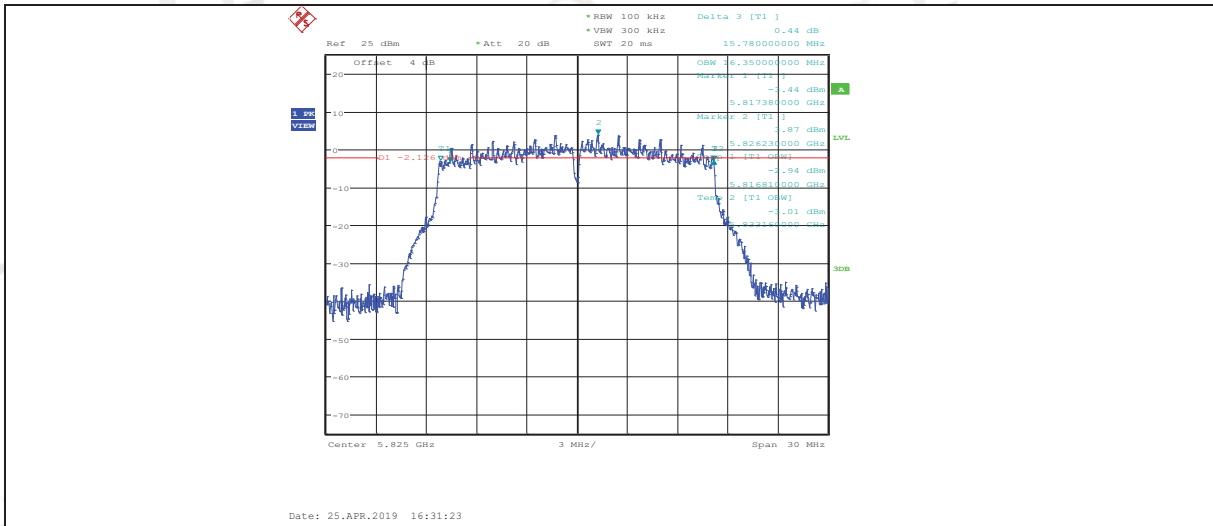


11A ANT1 5825

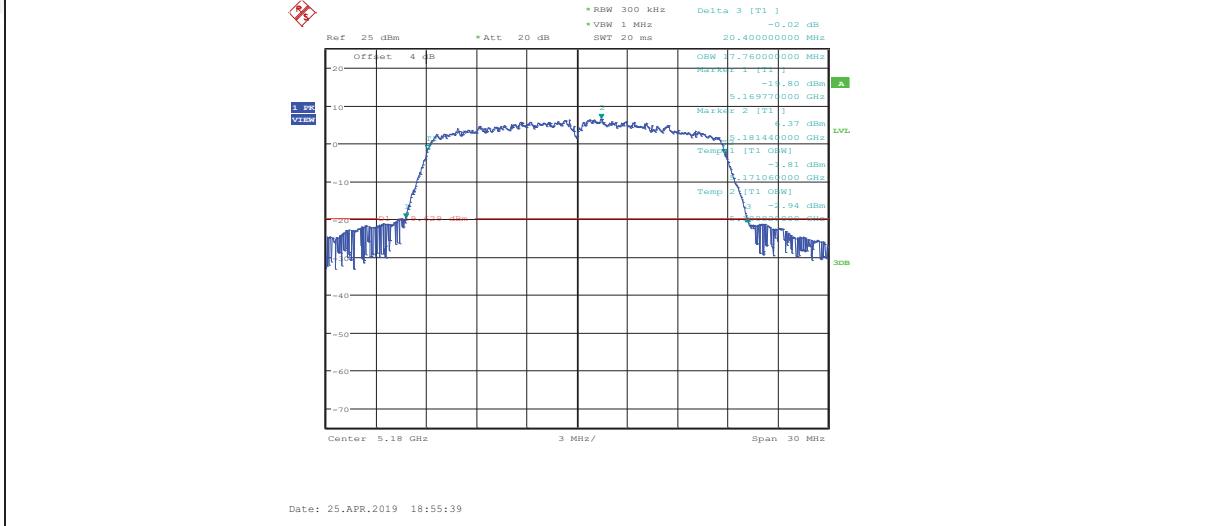


11A ANT2 5825

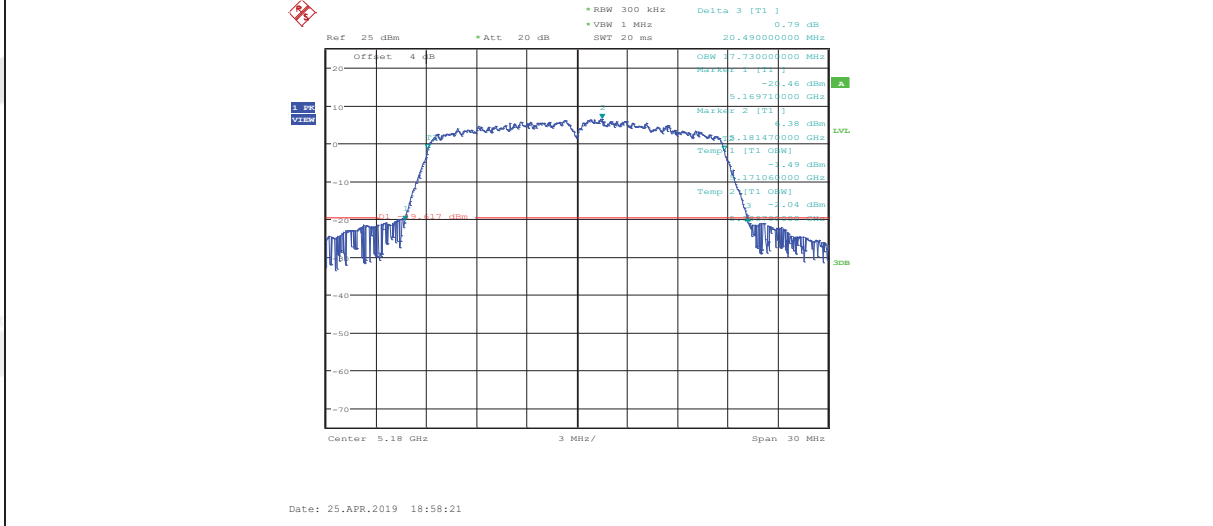




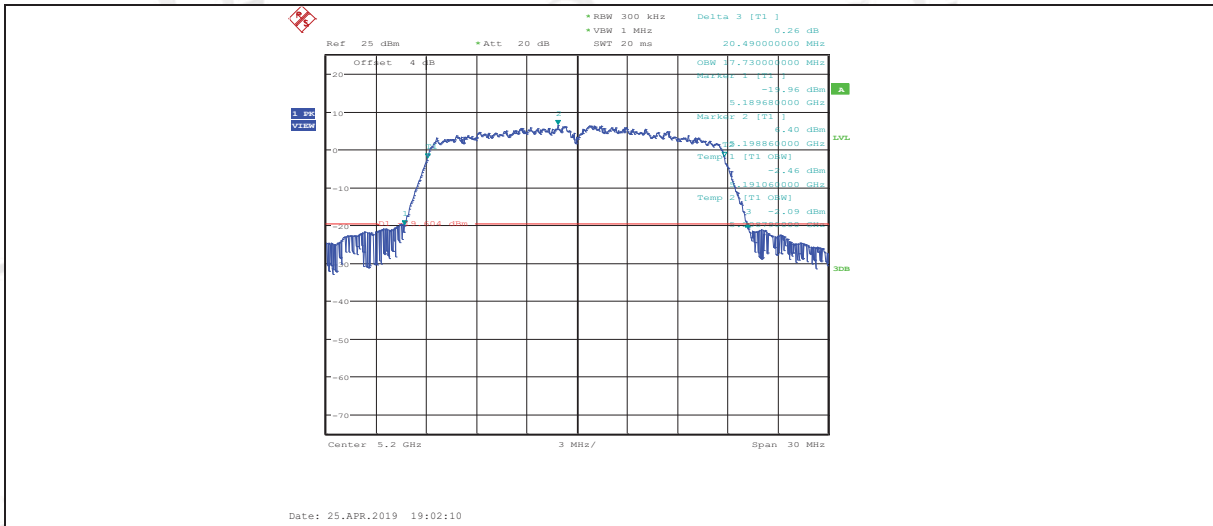
11N20 ANT1 5180



11N20 ANT2 5180

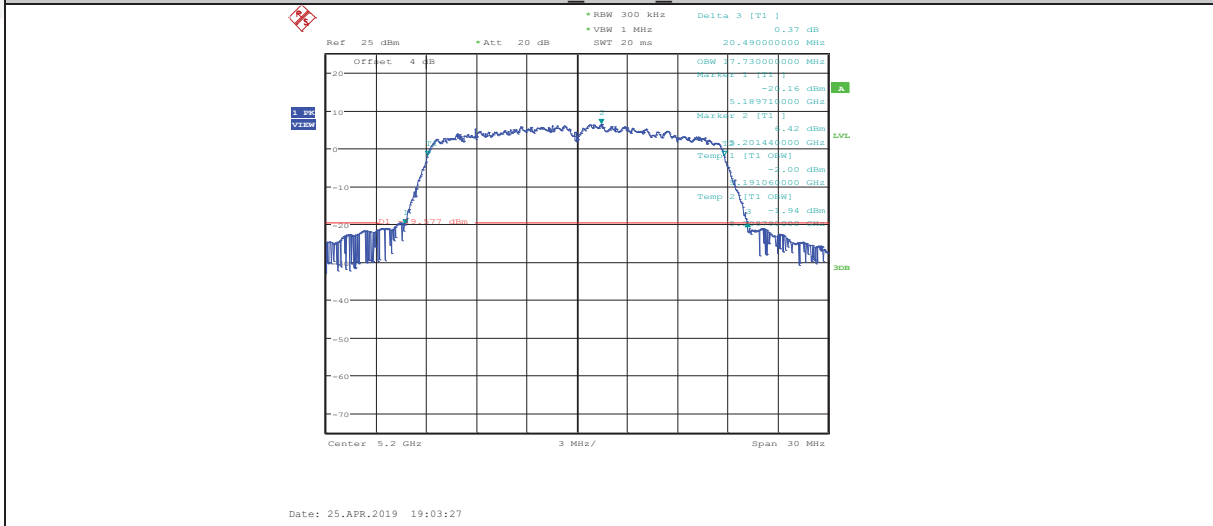


11N20 ANT1 5200



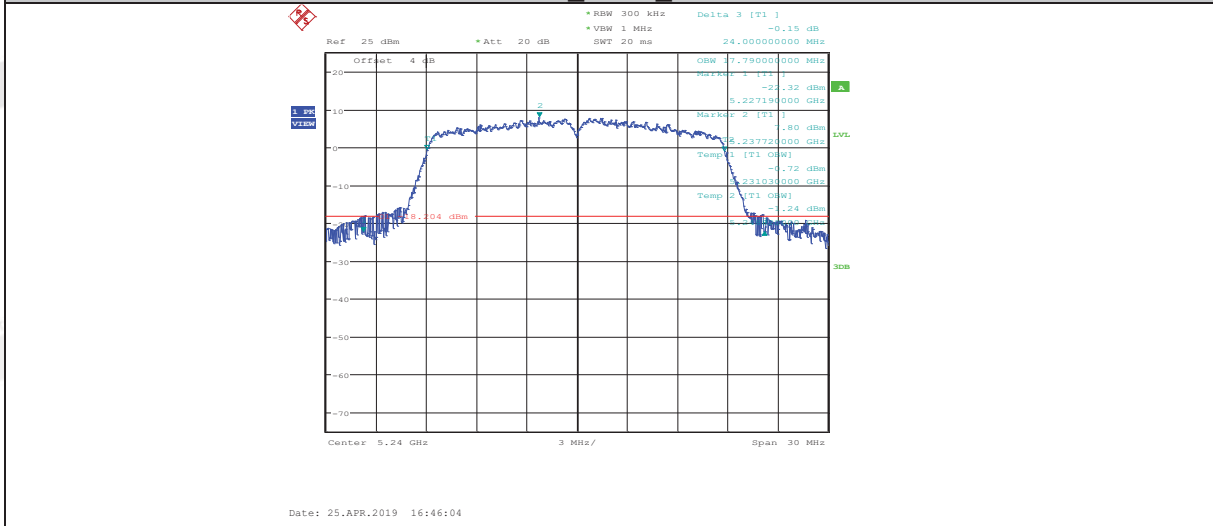
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11N20 ANT2 5200



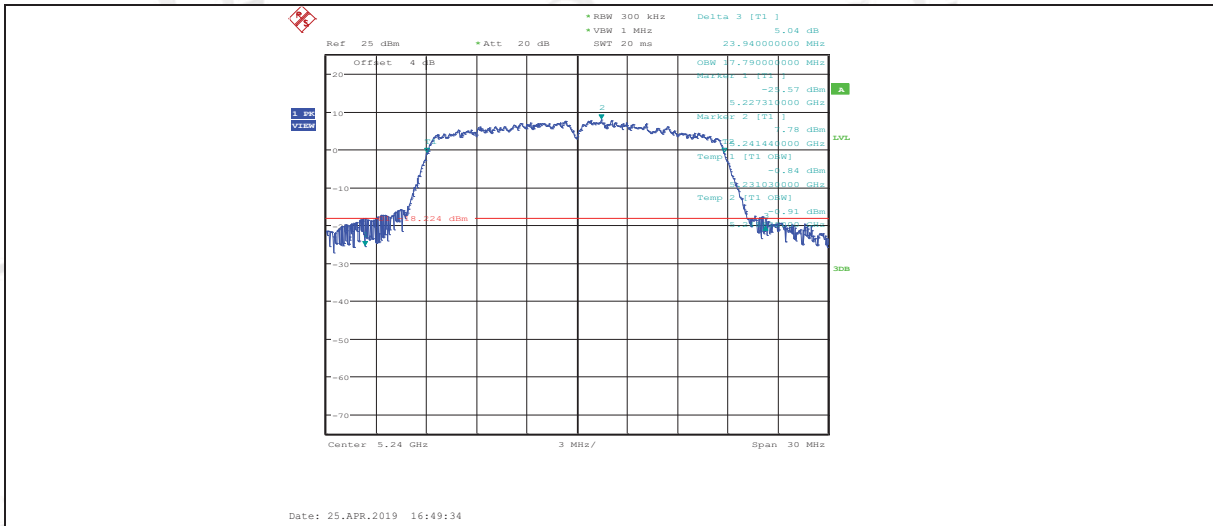
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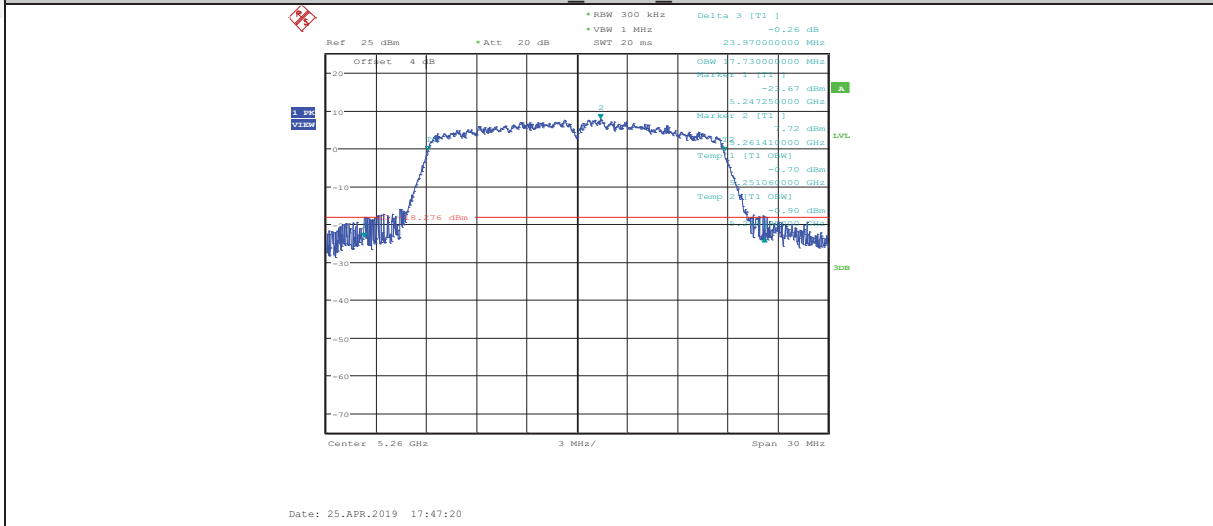


Date: 25.APR.2019 16:46:04

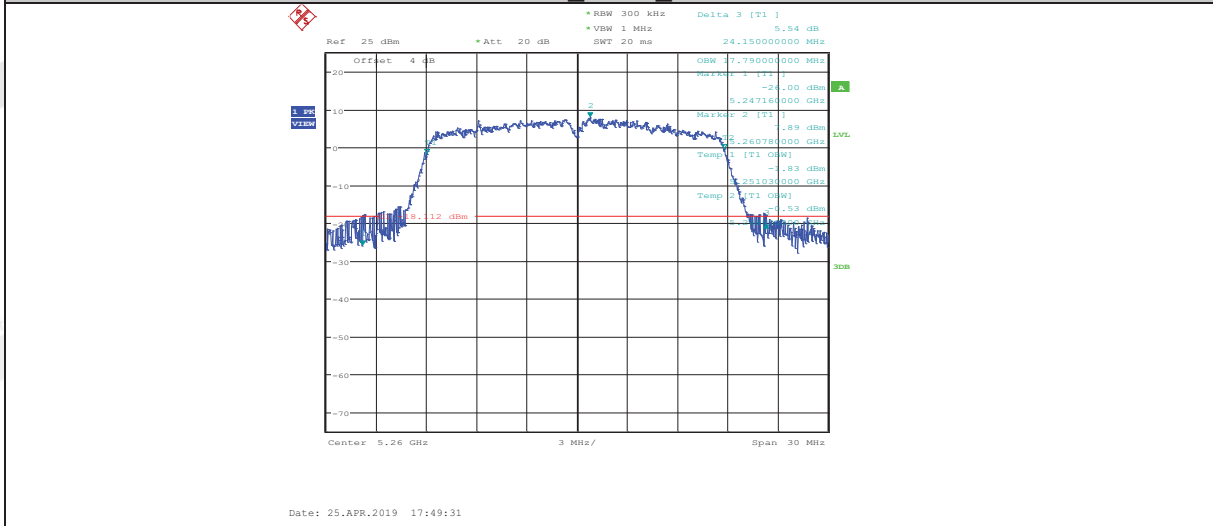
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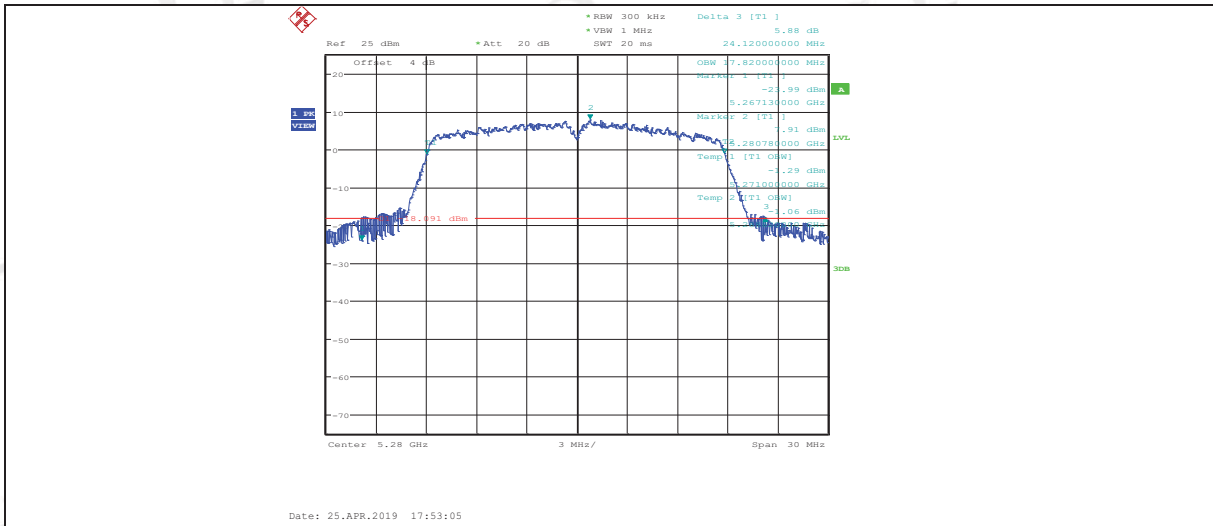
11N20 ANT1 5260



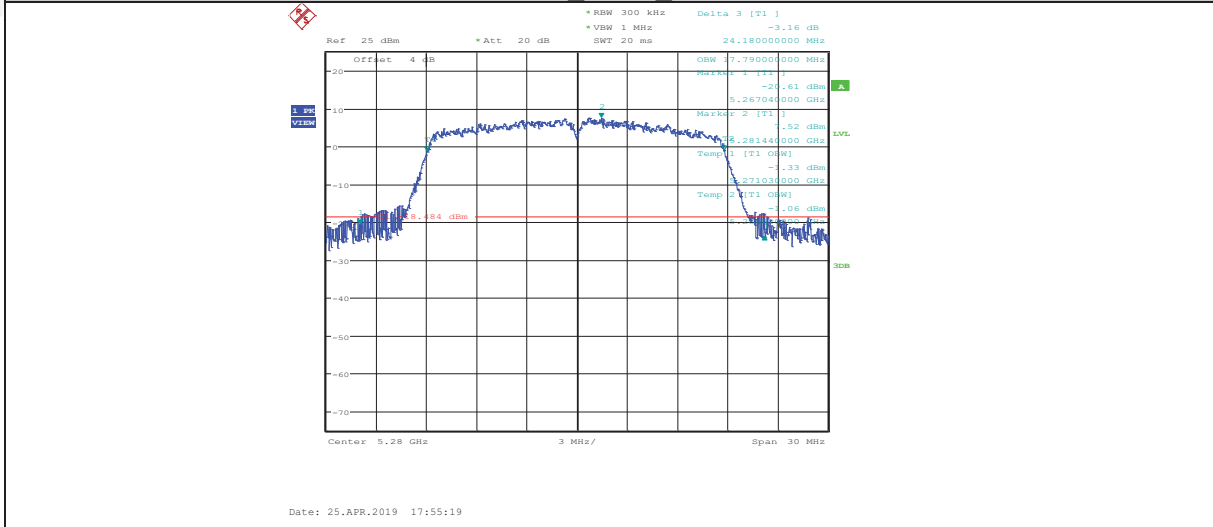
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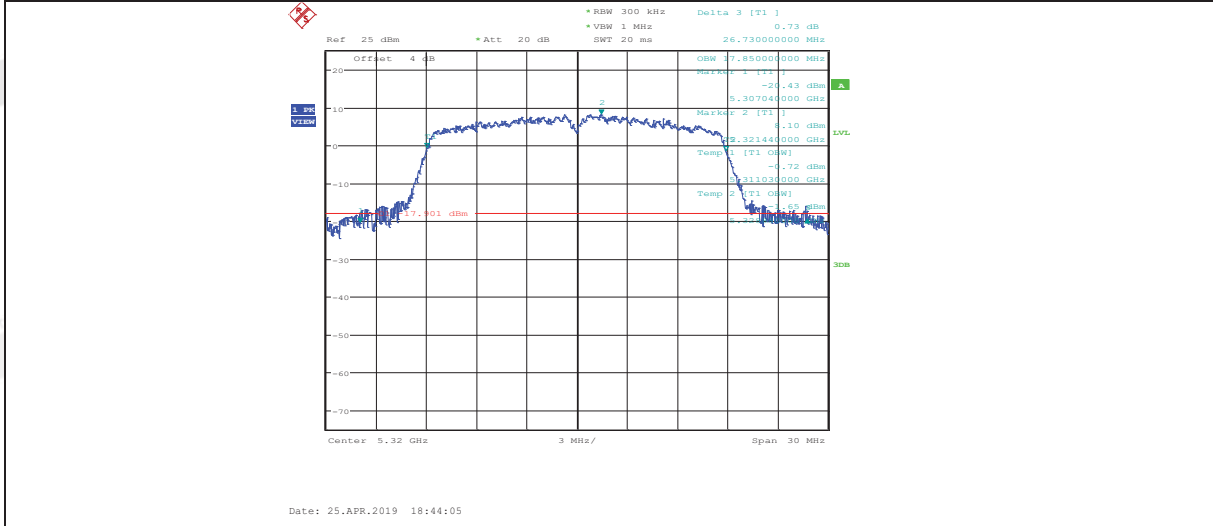
11N20 ANT1 5280



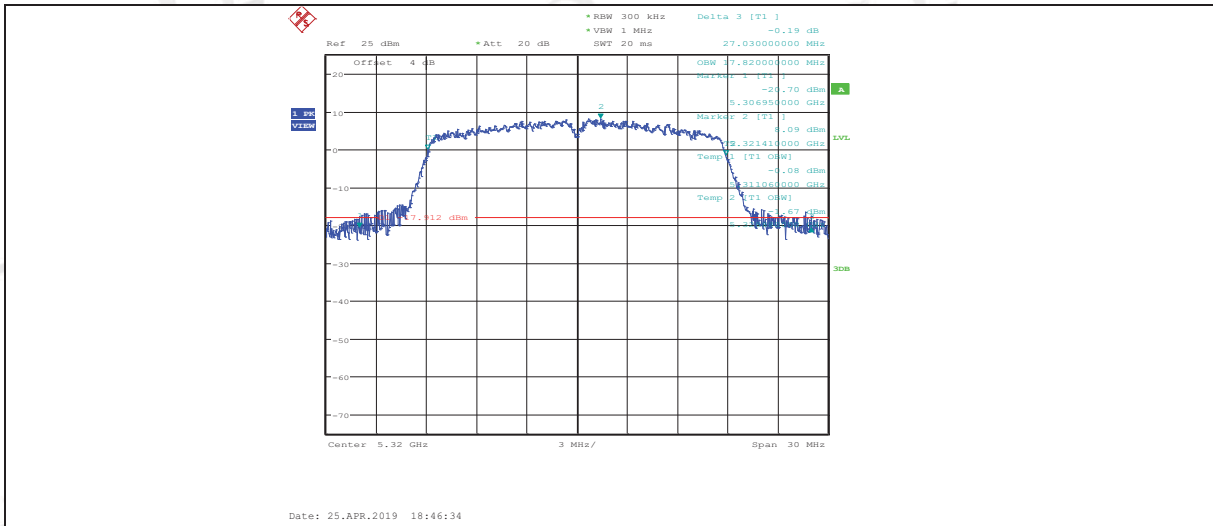
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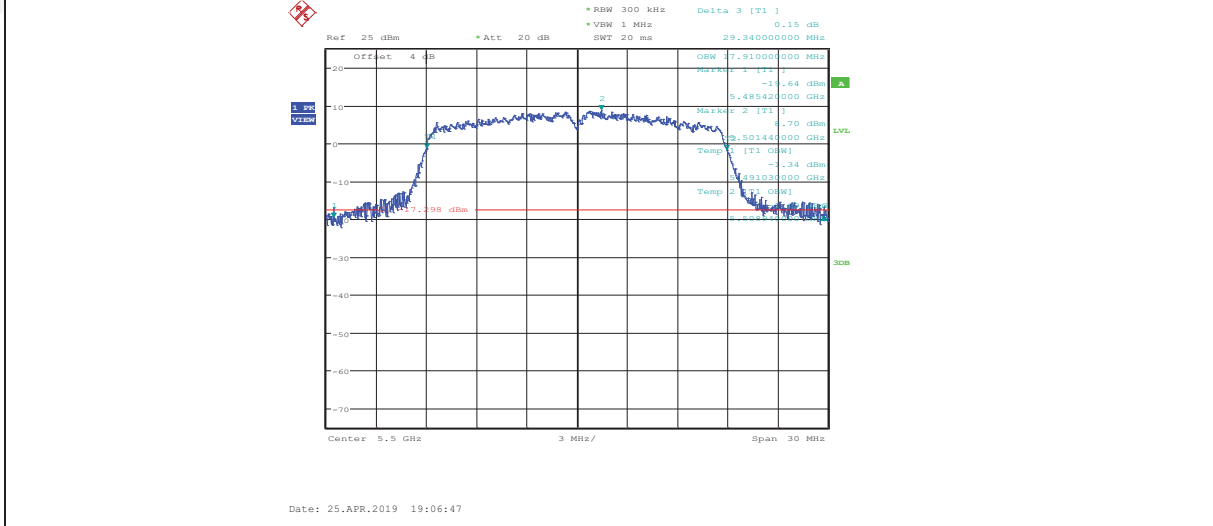
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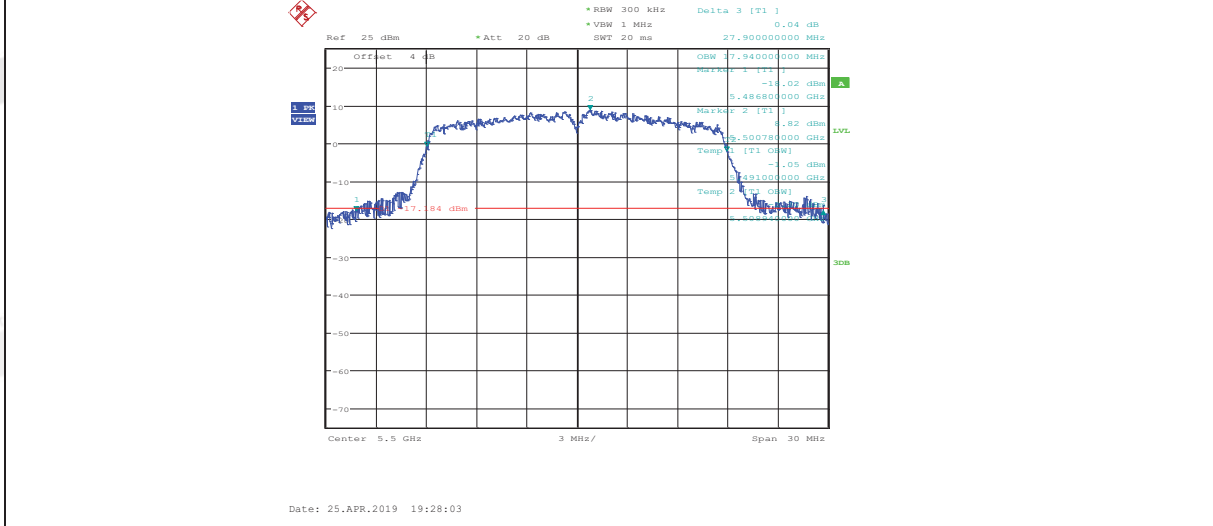
11N20 ANT2 5320



11N20 ANT1 5500

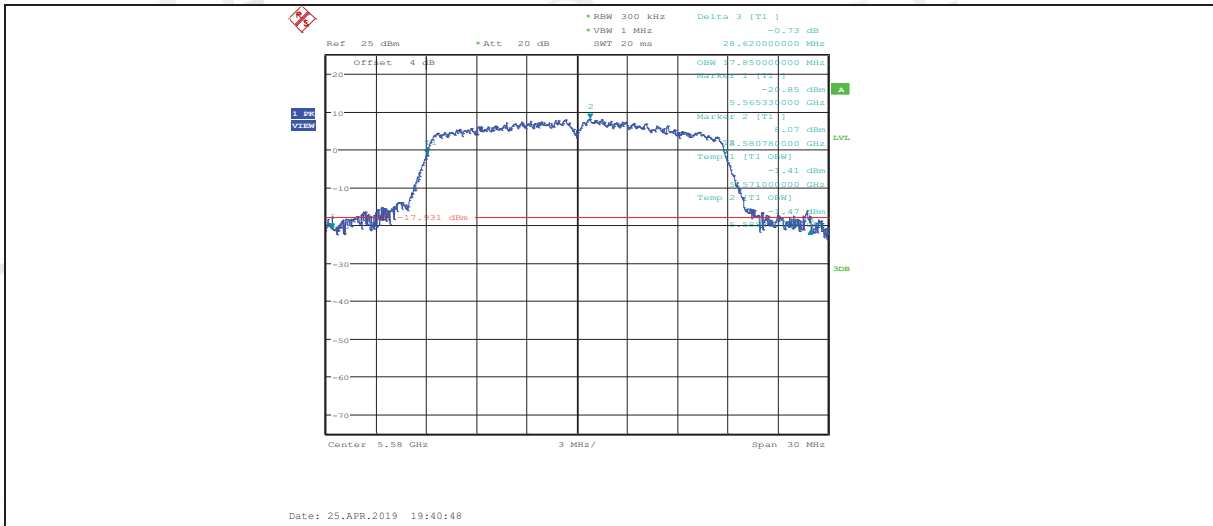


11N20 ANT2 5500

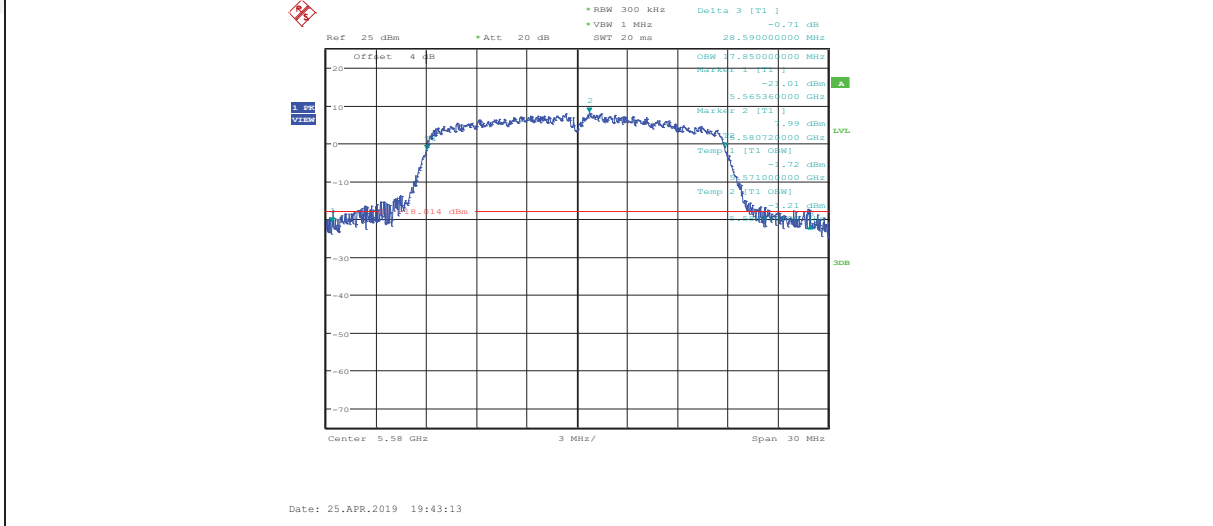


11N20 ANT1 5580

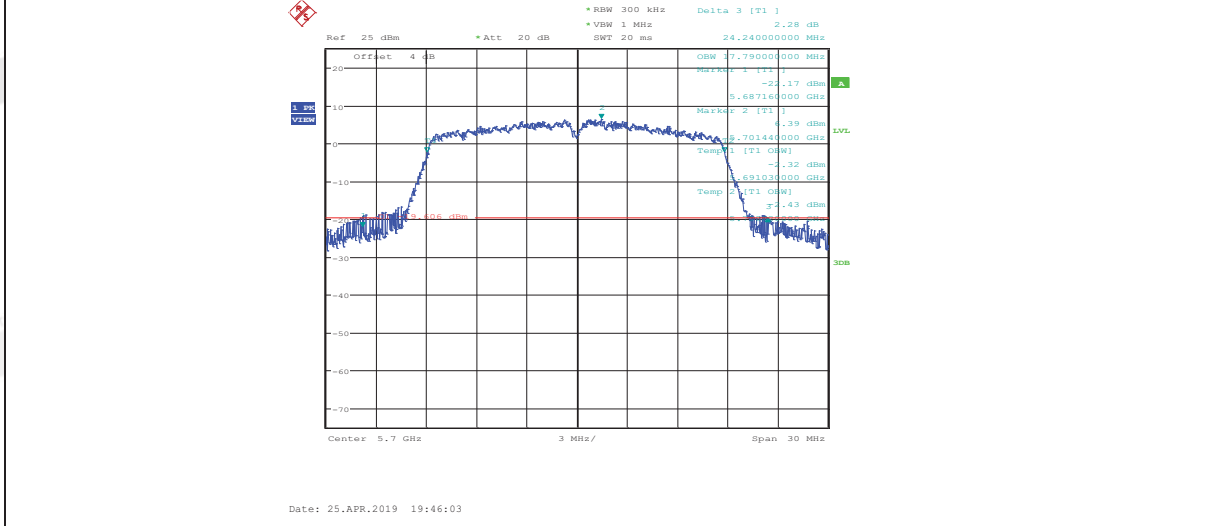




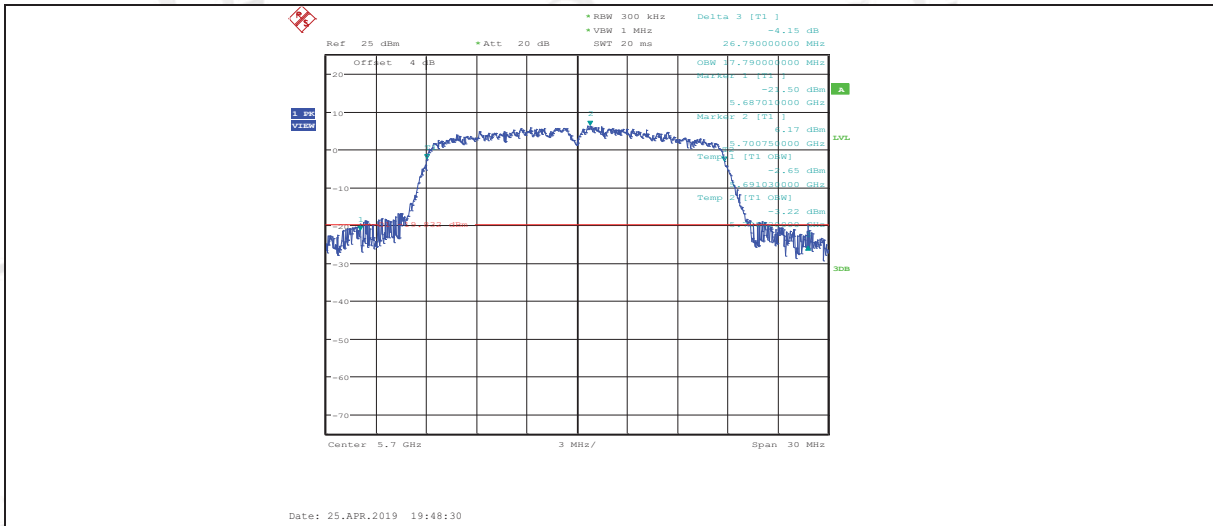
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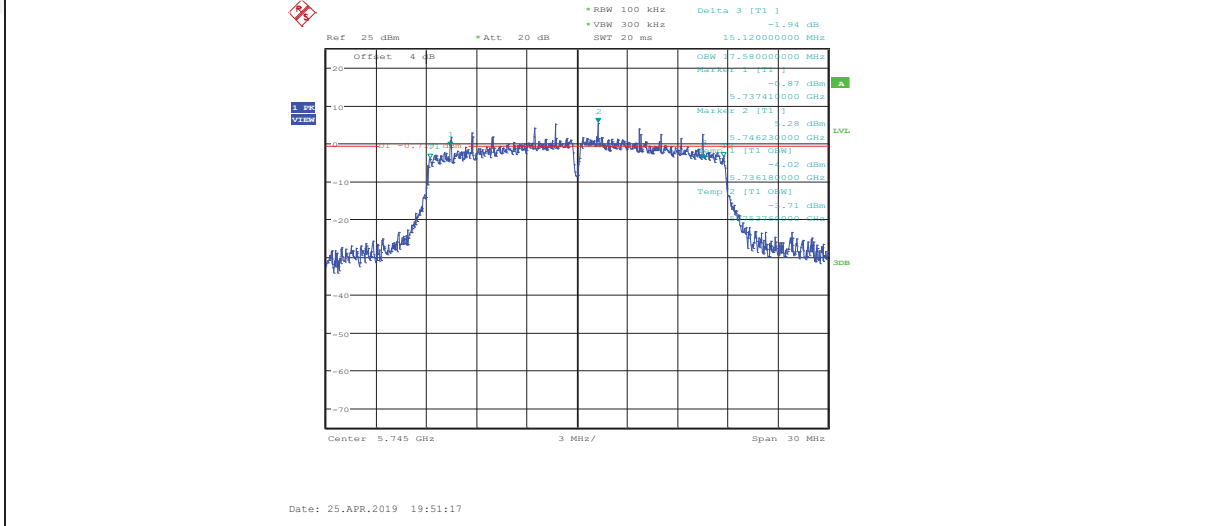
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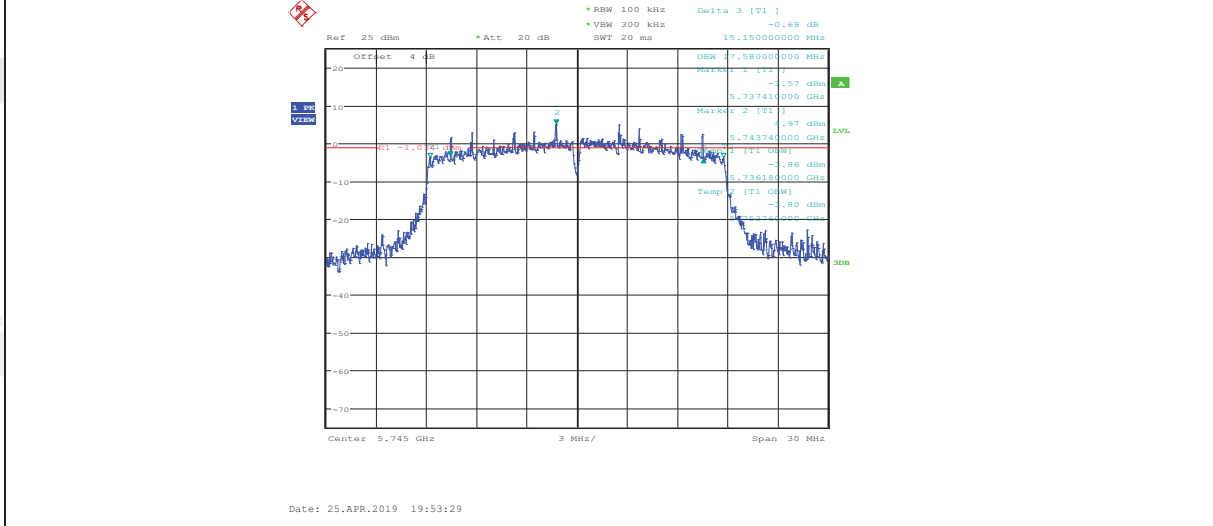
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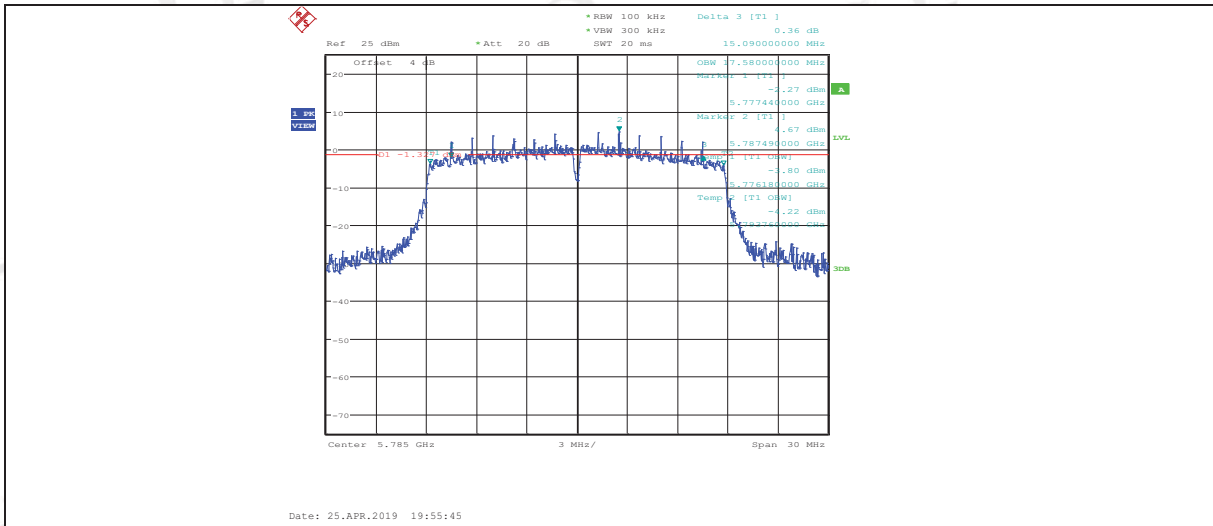
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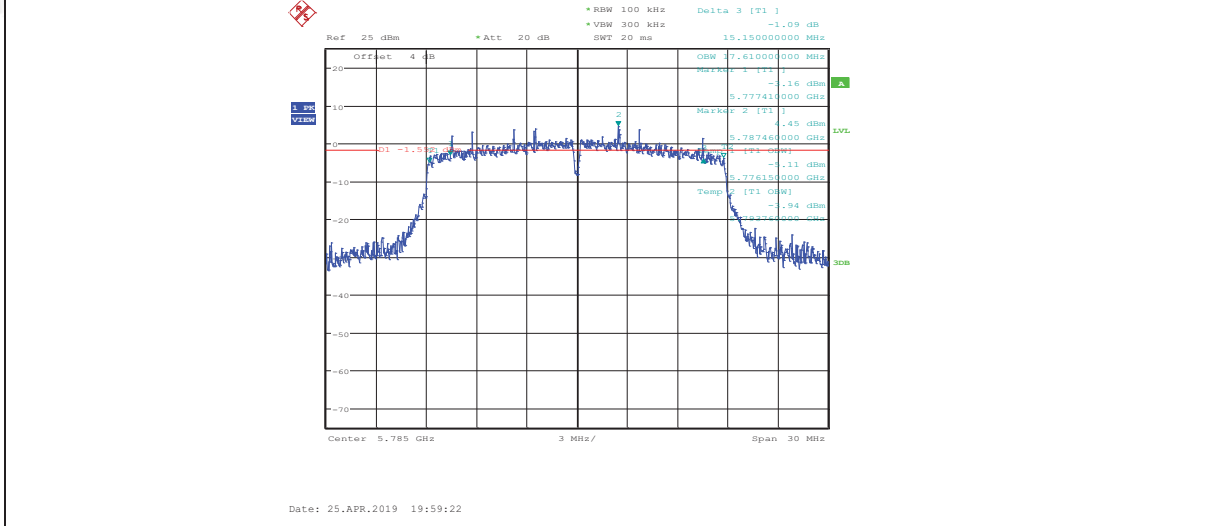
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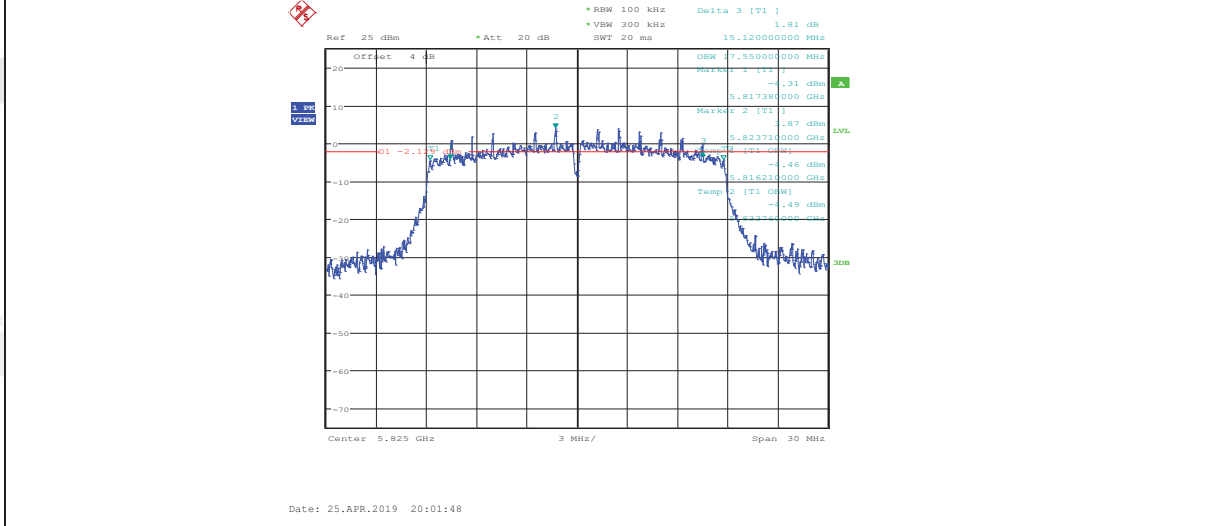
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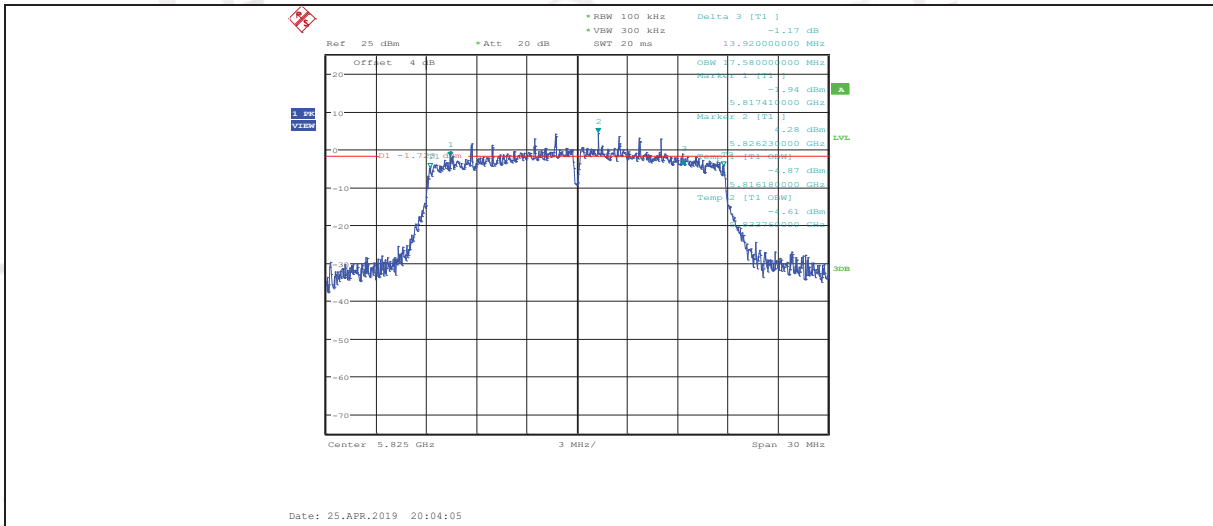
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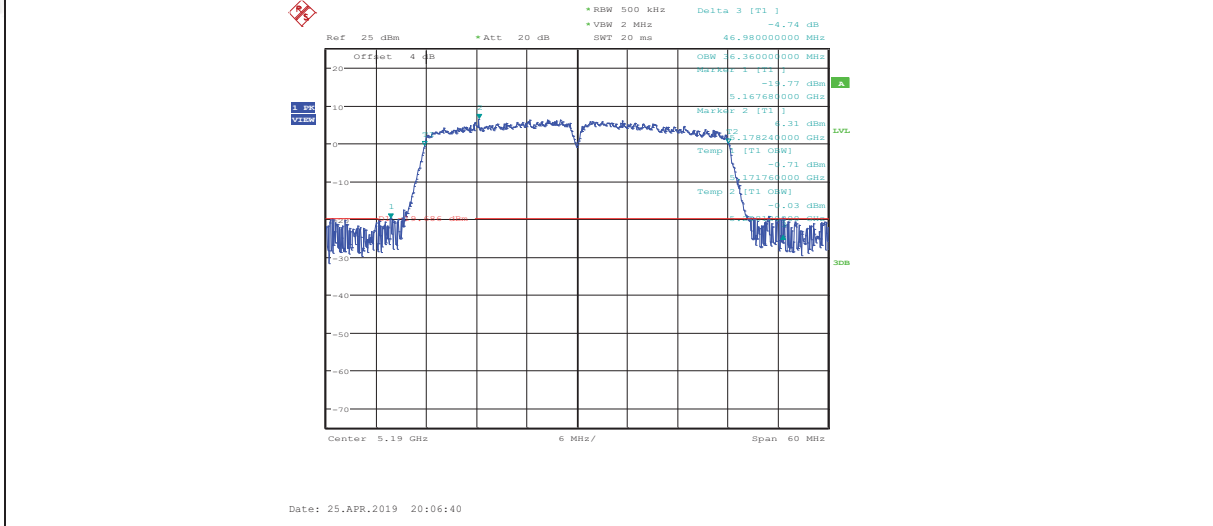
11N20 ANT1 5825



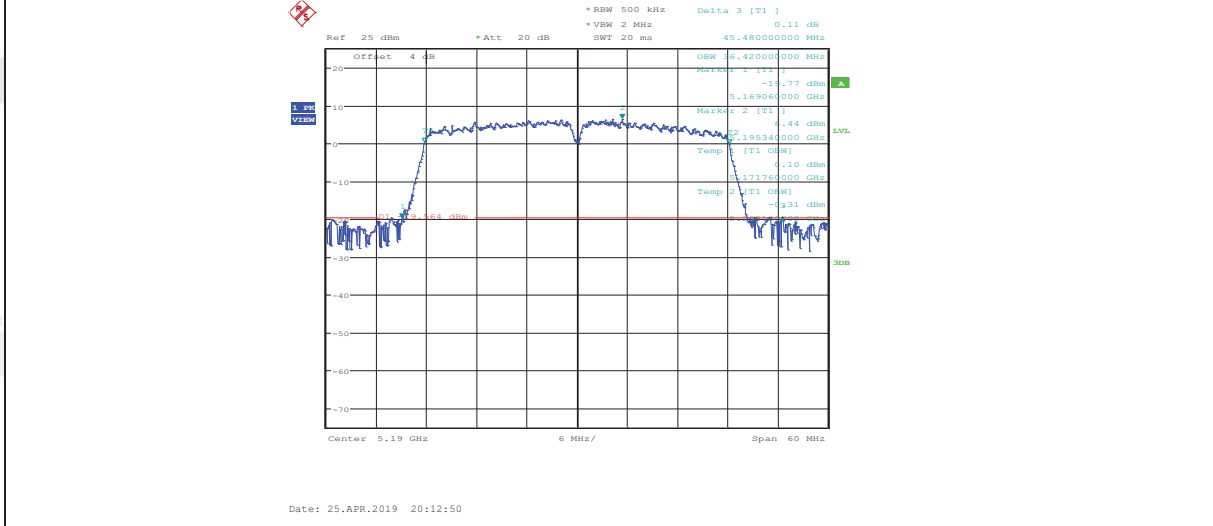
11N20 ANT2 5825



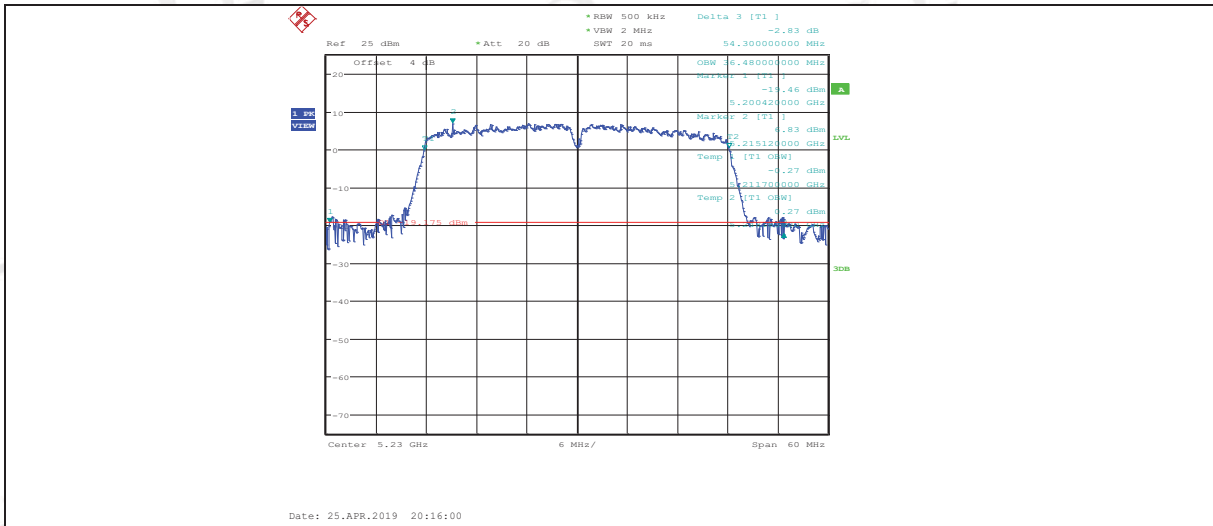
11N40 ANT1 5190



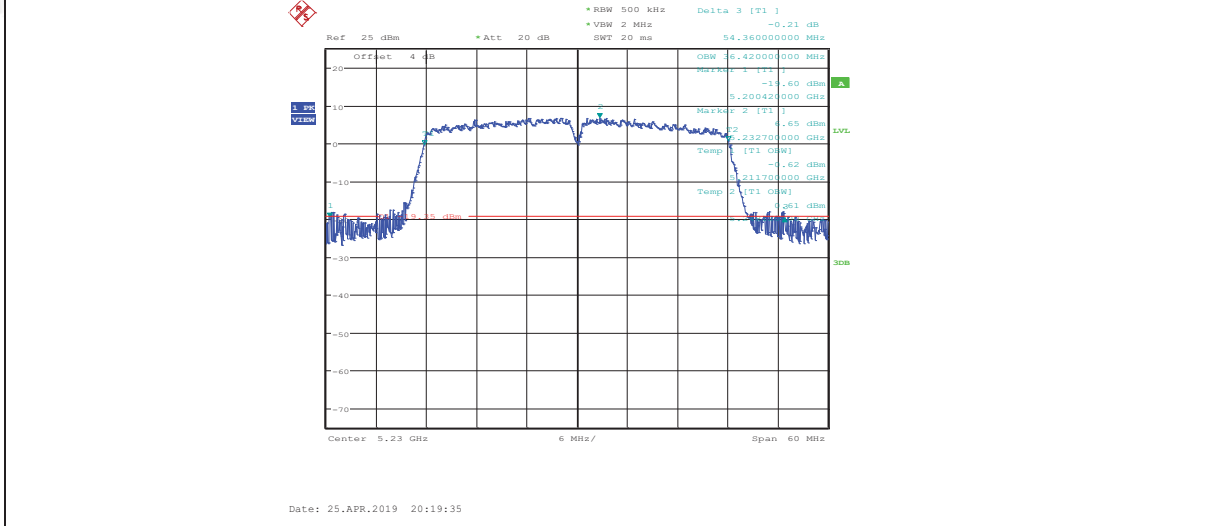
11N40 ANT2 5190



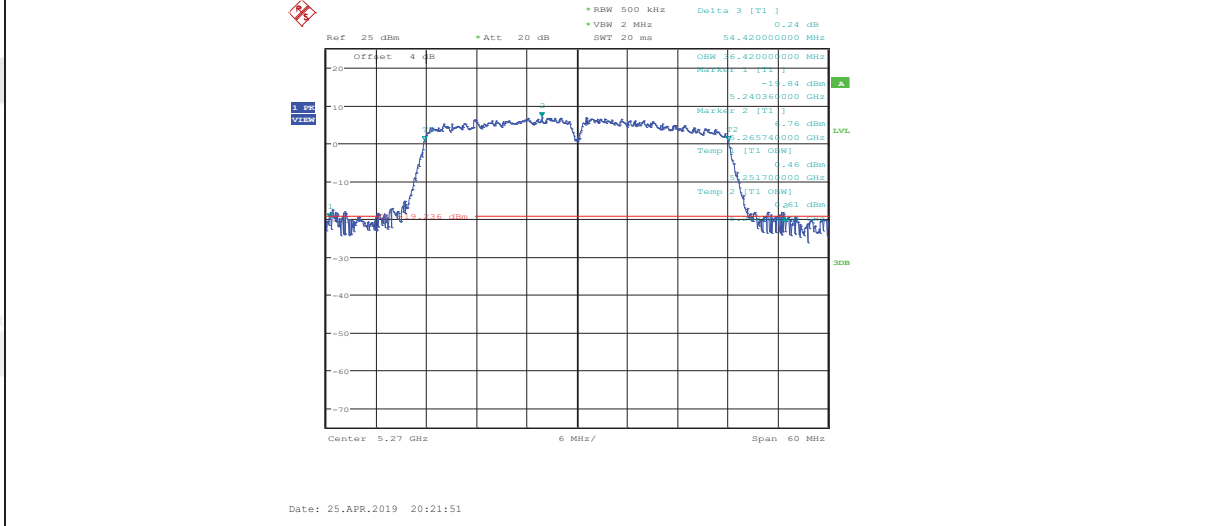
11N40 ANT1 5230



11N40 ANT2 5230

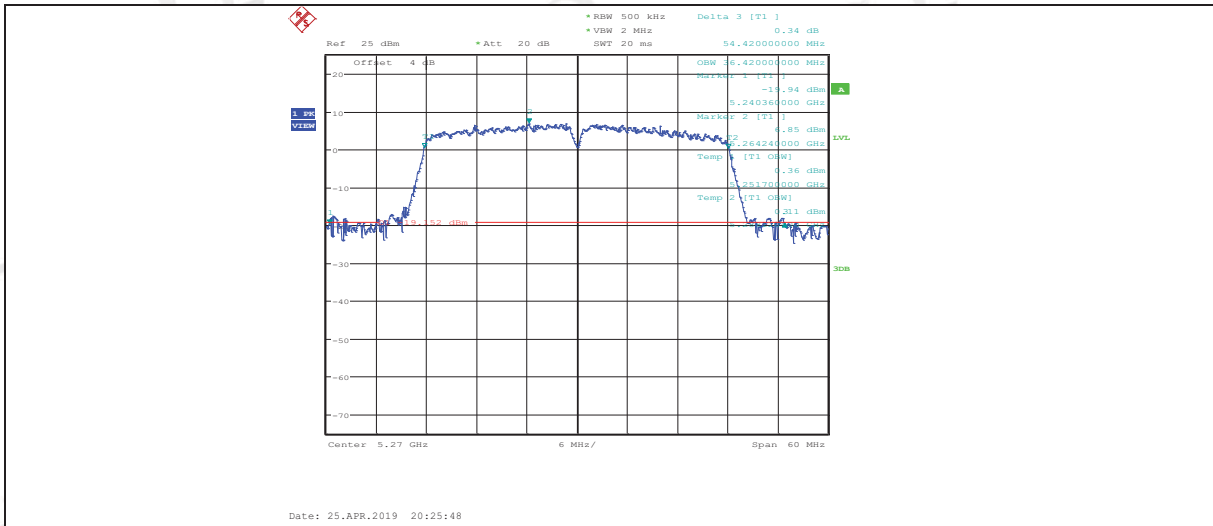


11N40 ANT1 5270

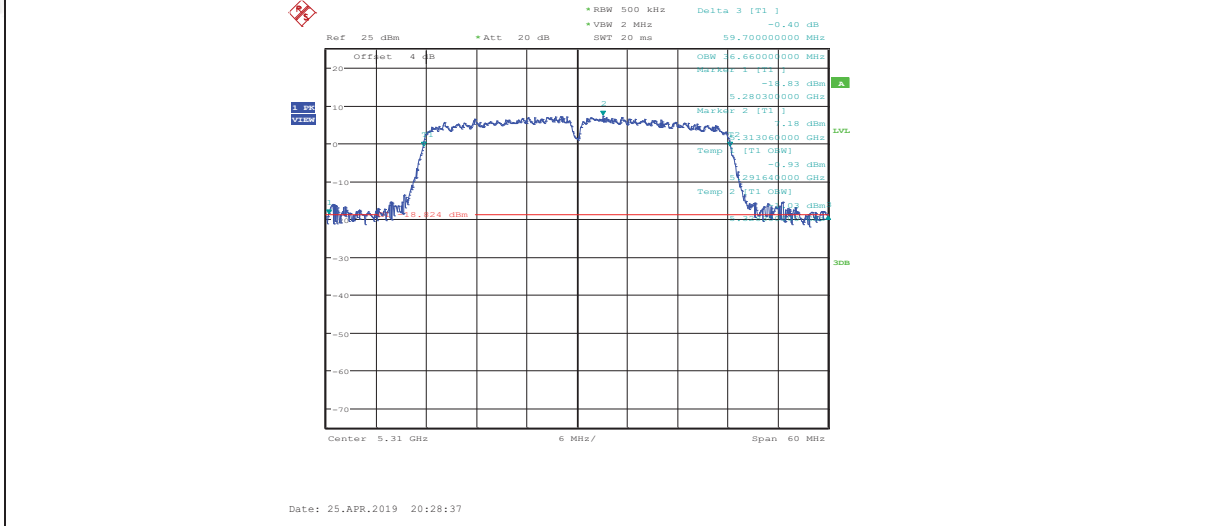


11N40 ANT2 5270

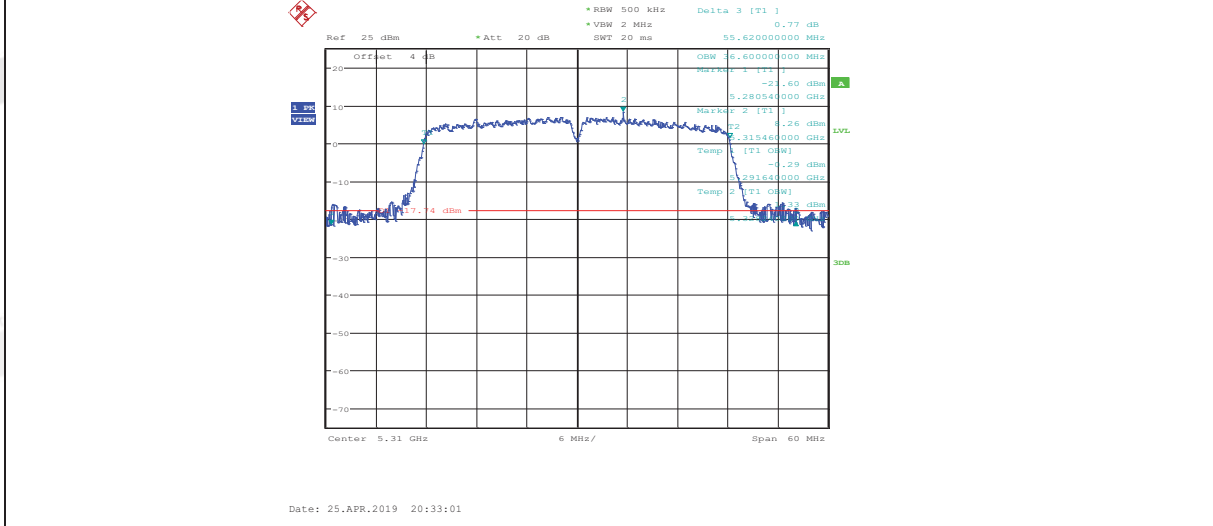




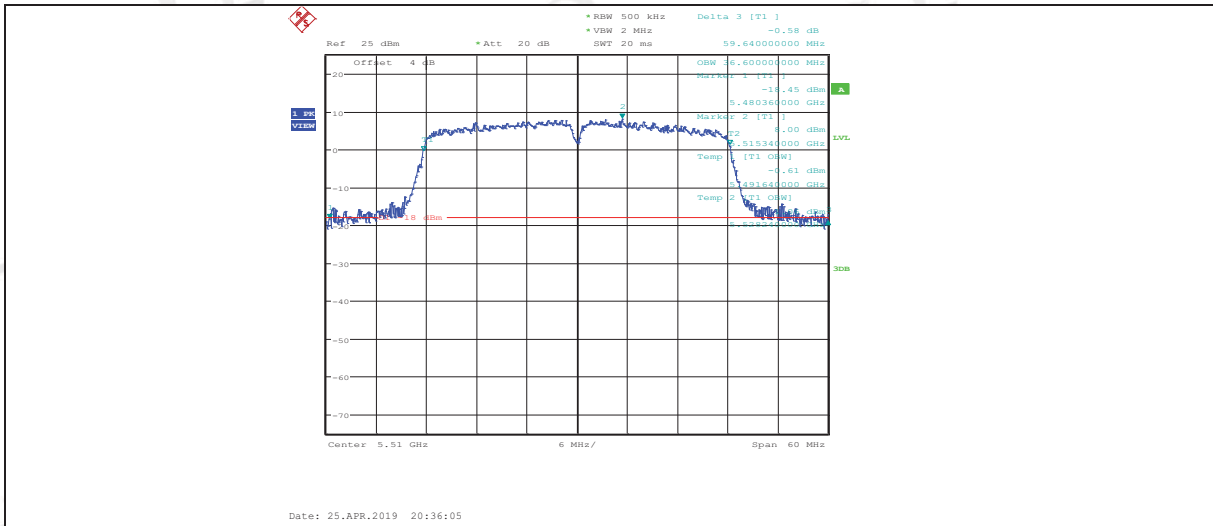
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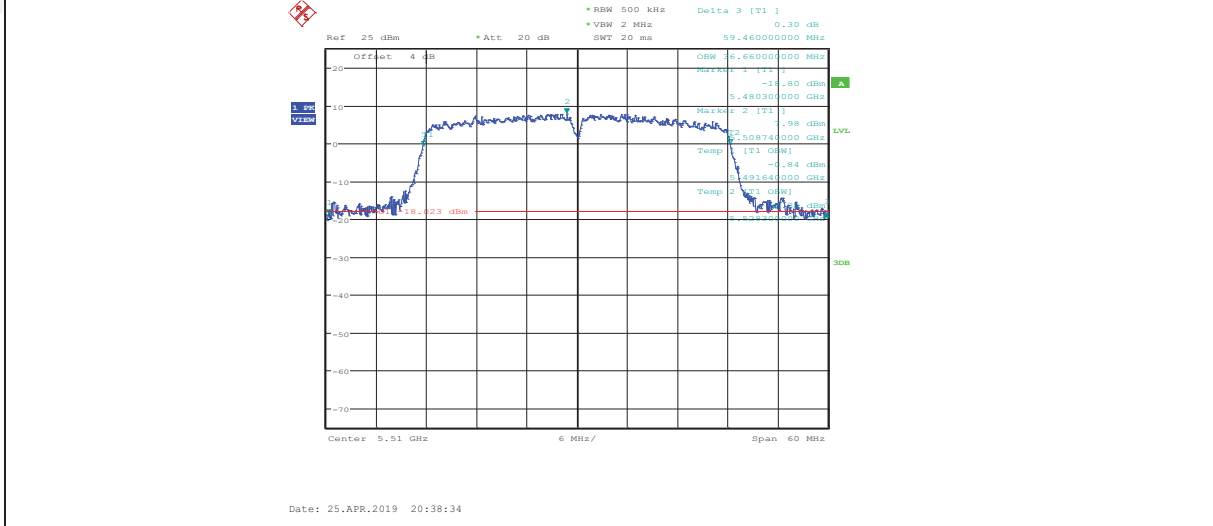
11N40 ANT2 5310



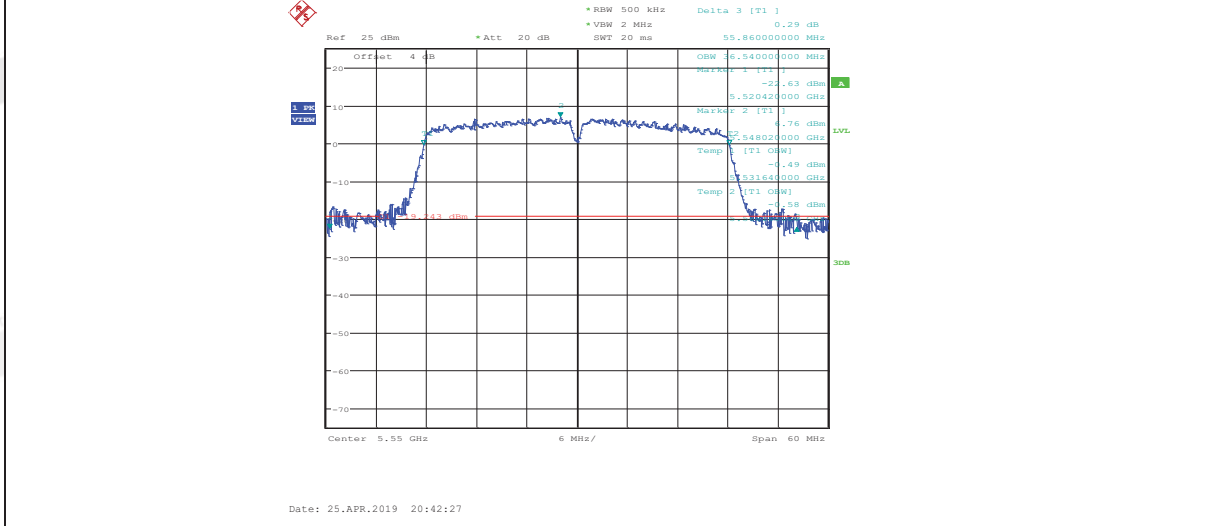
11N40 ANT1 5510



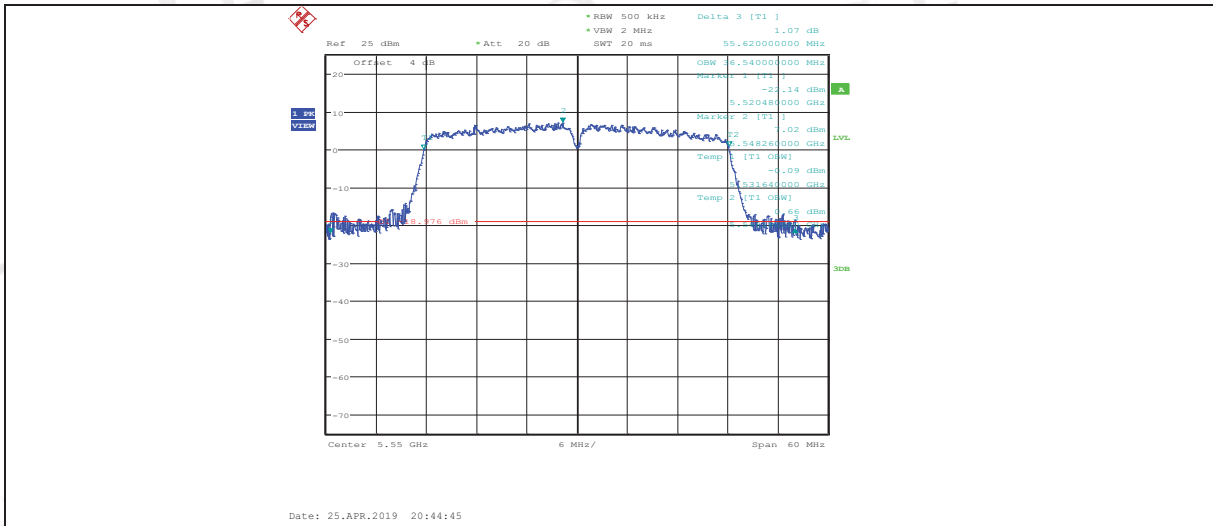
11N40 ANT2 5510



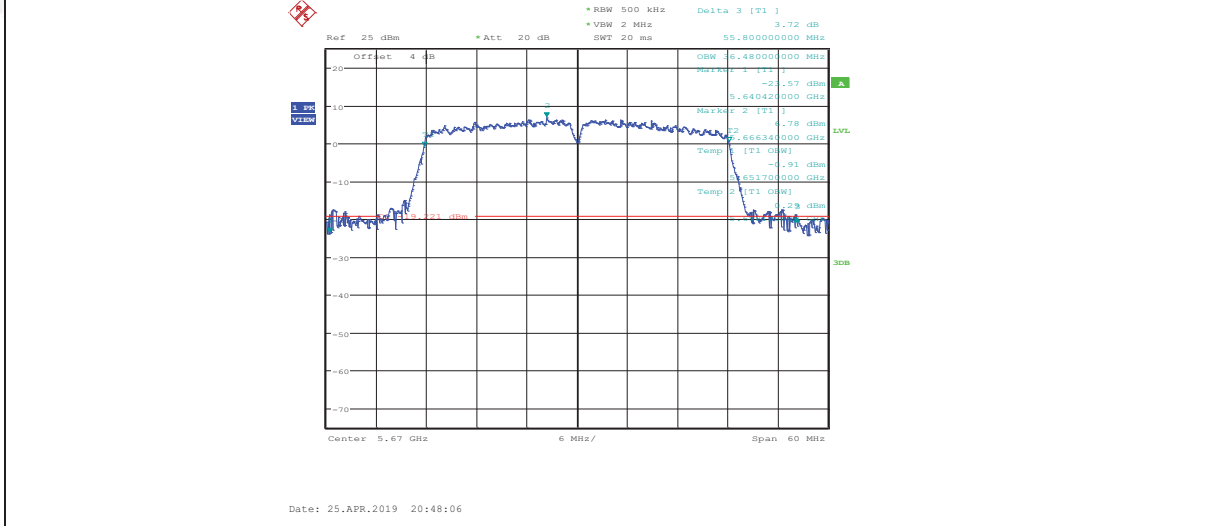
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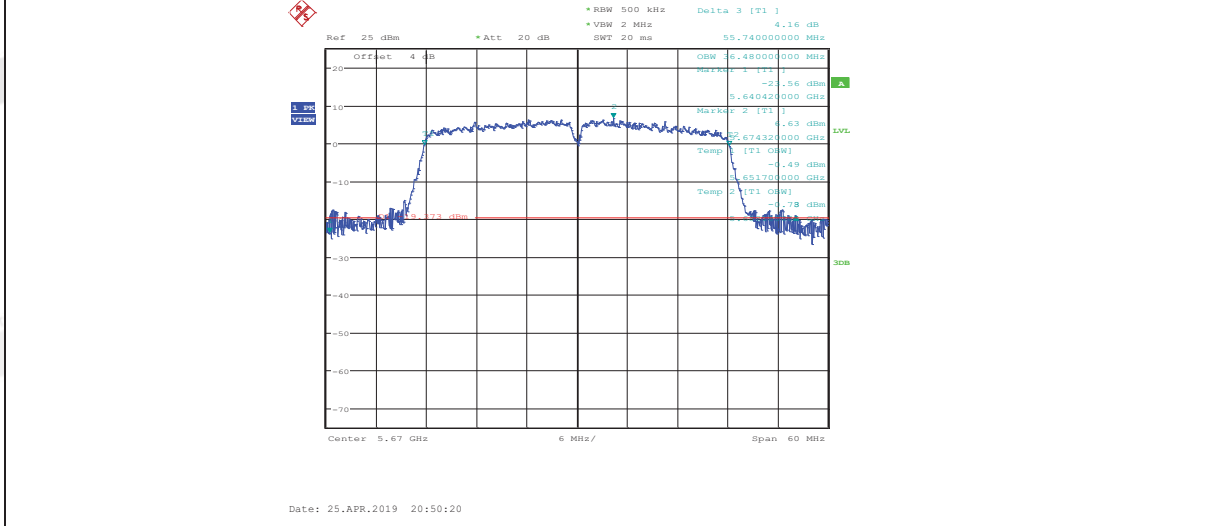
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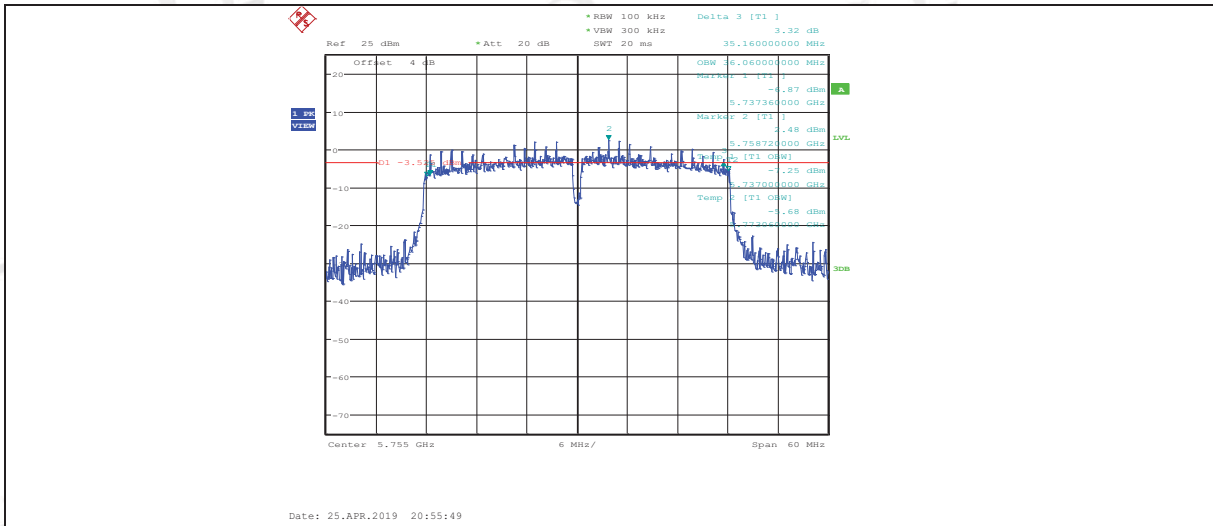
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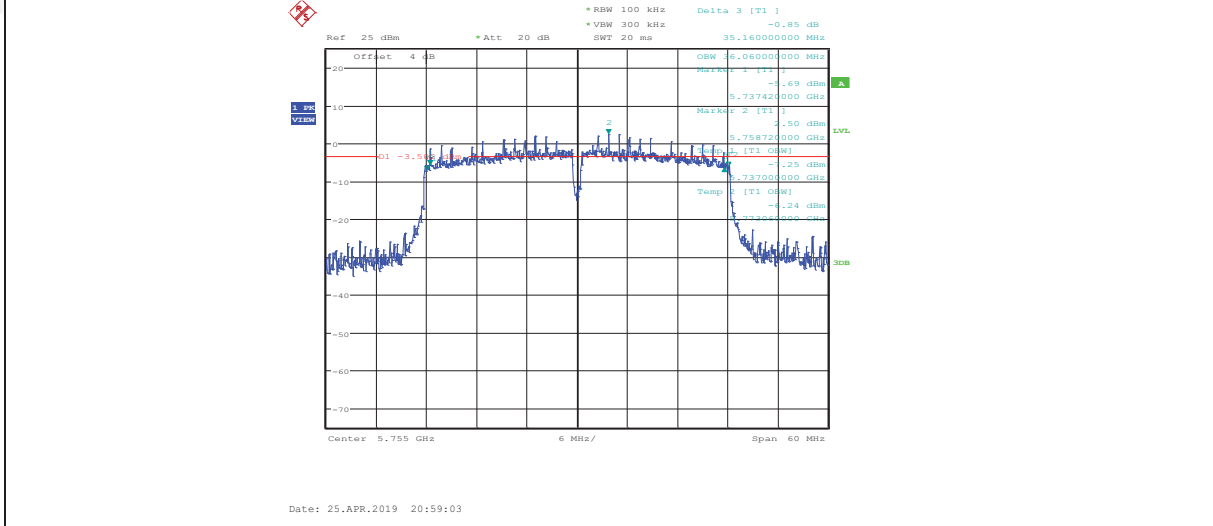
11N40 ANT2 5670



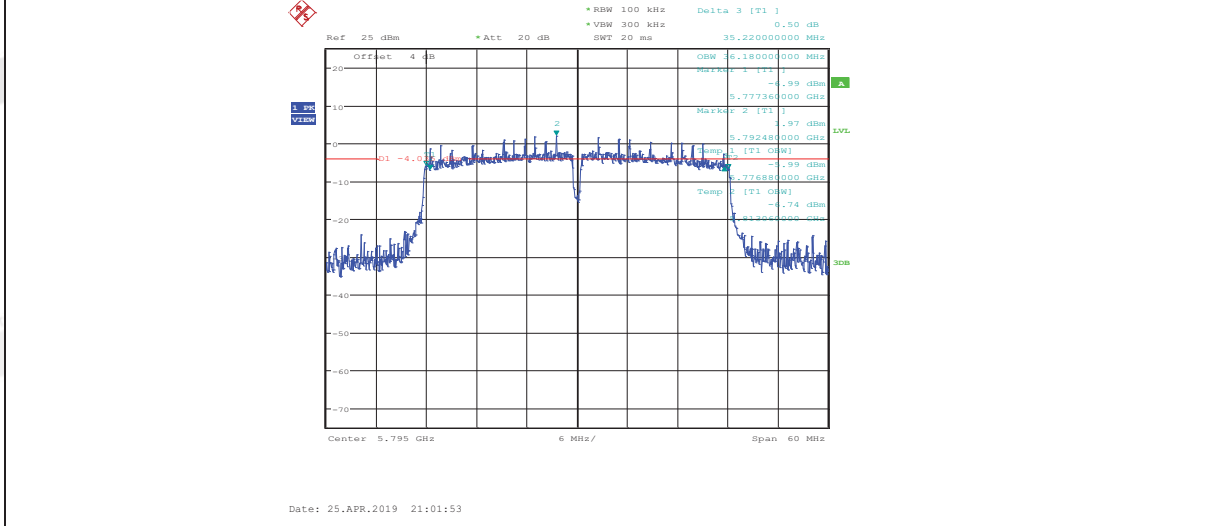
11N40 ANT1 5755



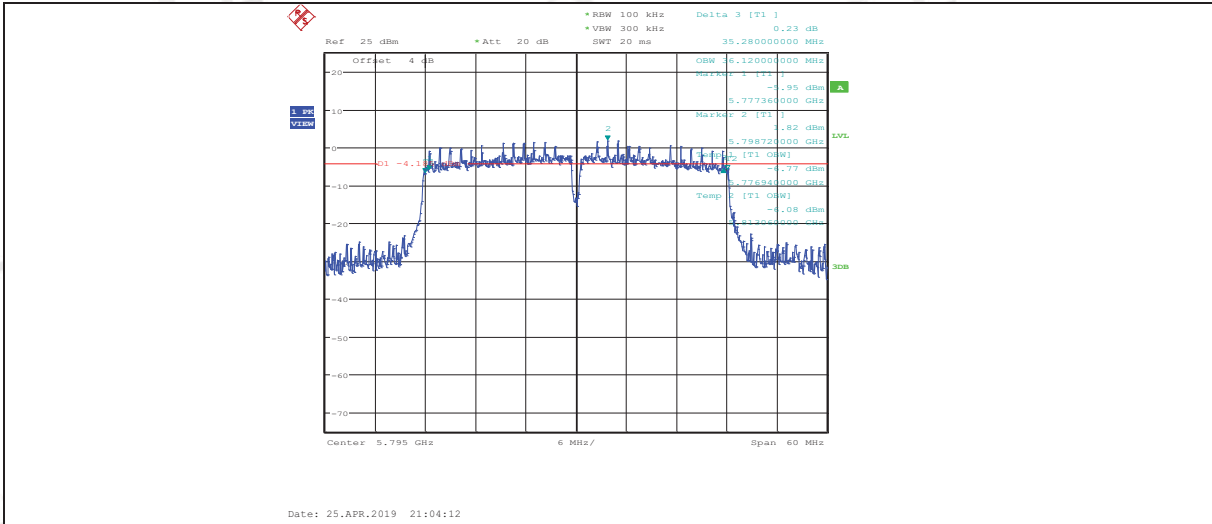
11N40 ANT2 5755



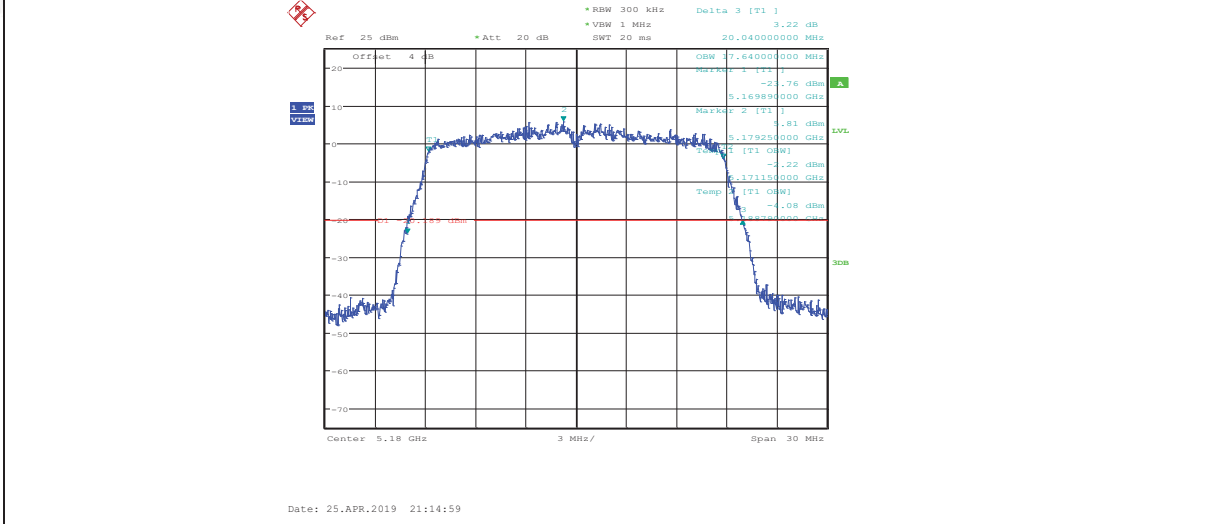
11N40 ANT1 5795



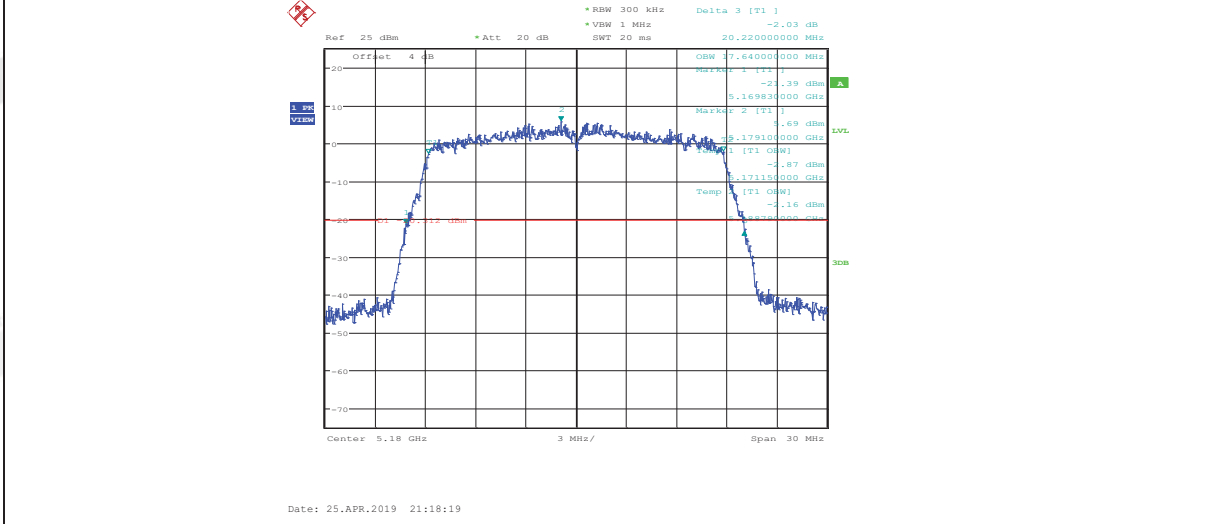
11N40 ANT2 5795



11AC20 ANT1 5180

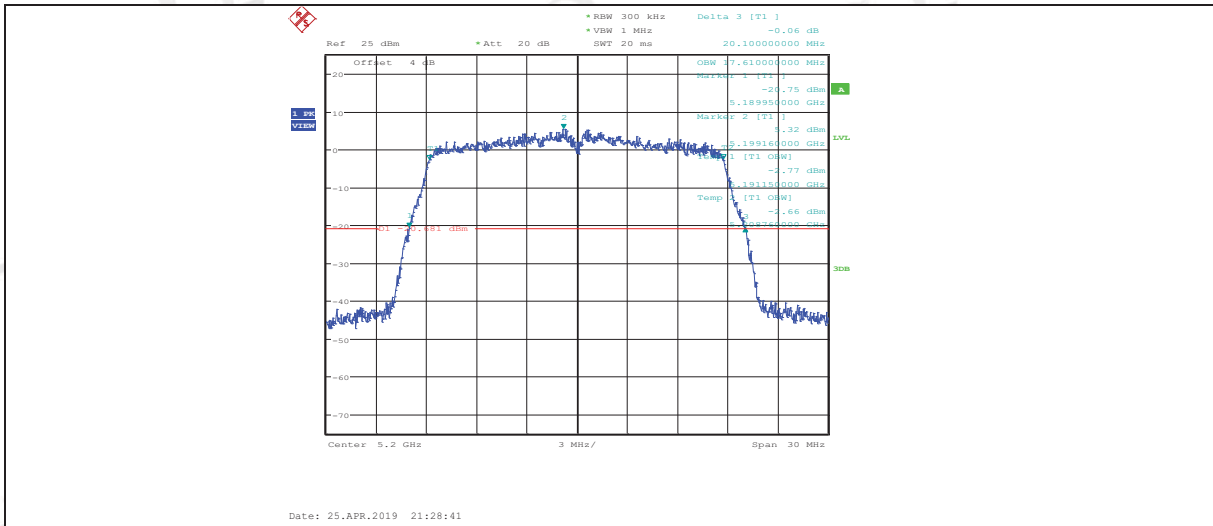


11AC20 ANT2 5180

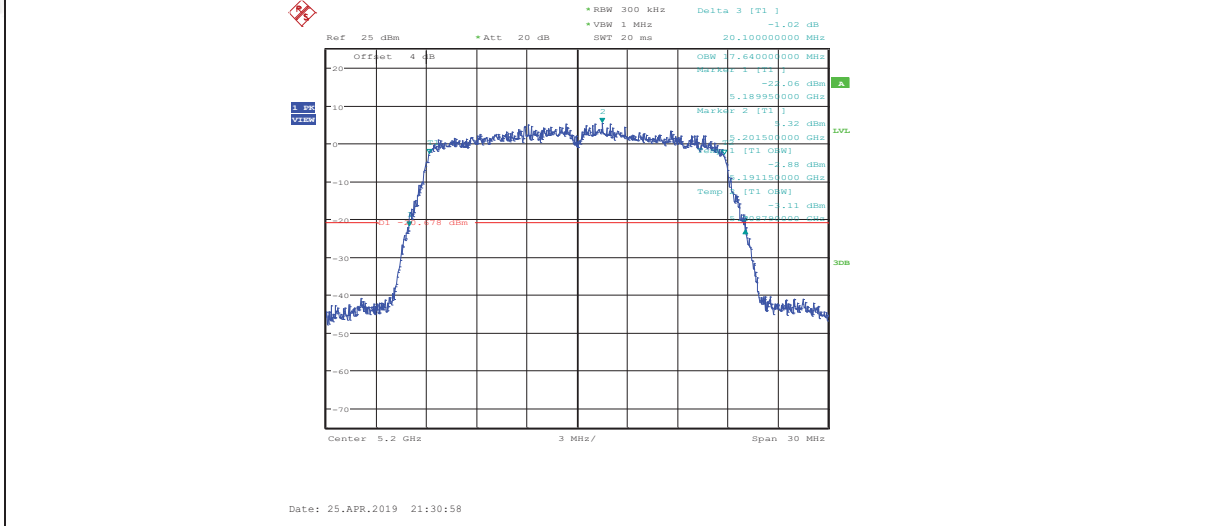


11AC20 ANT1 5200

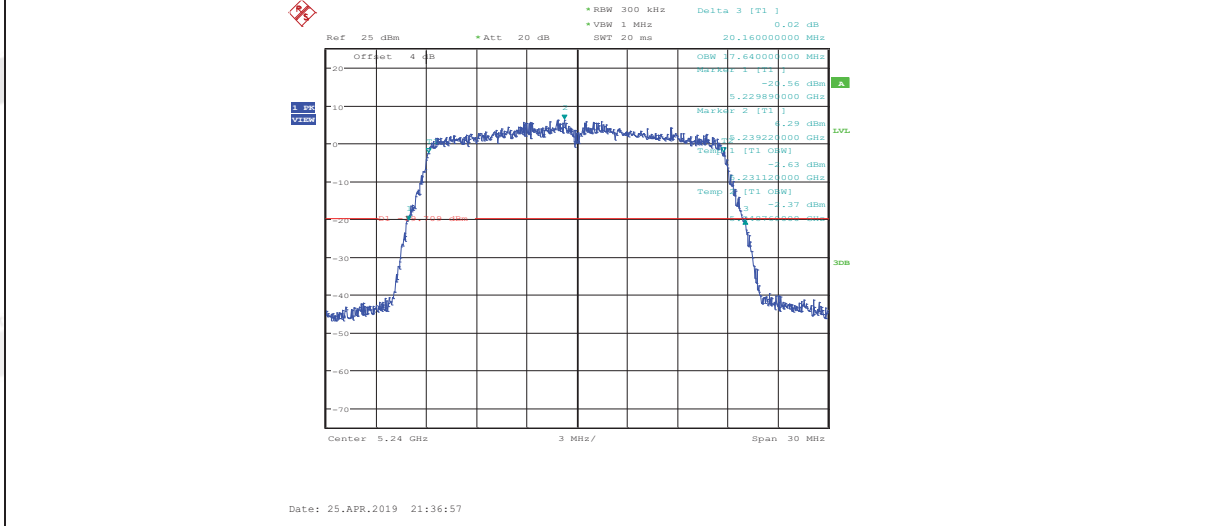




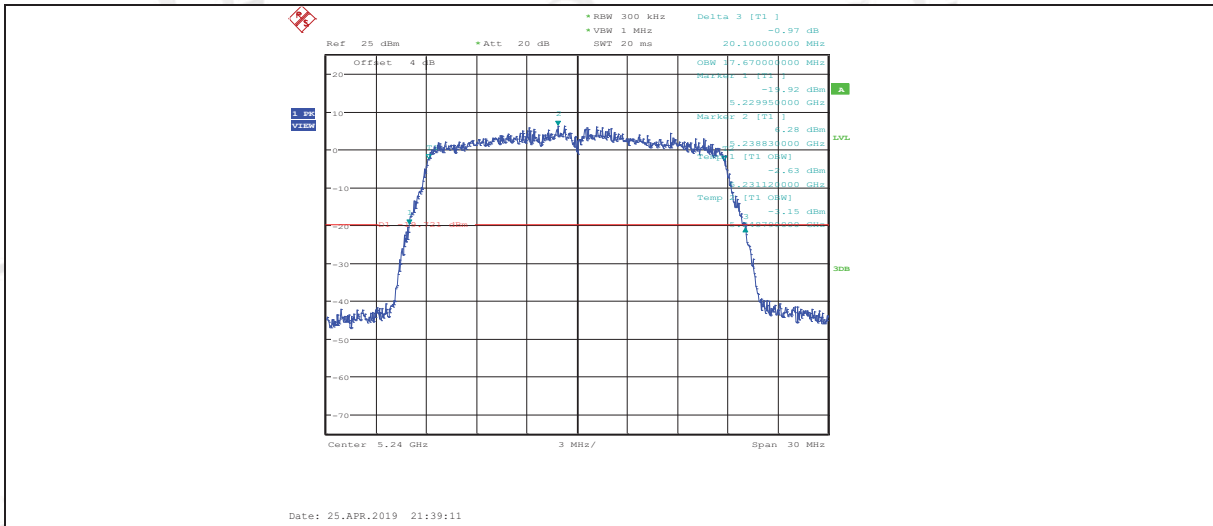
11AC20 ANT2 5200



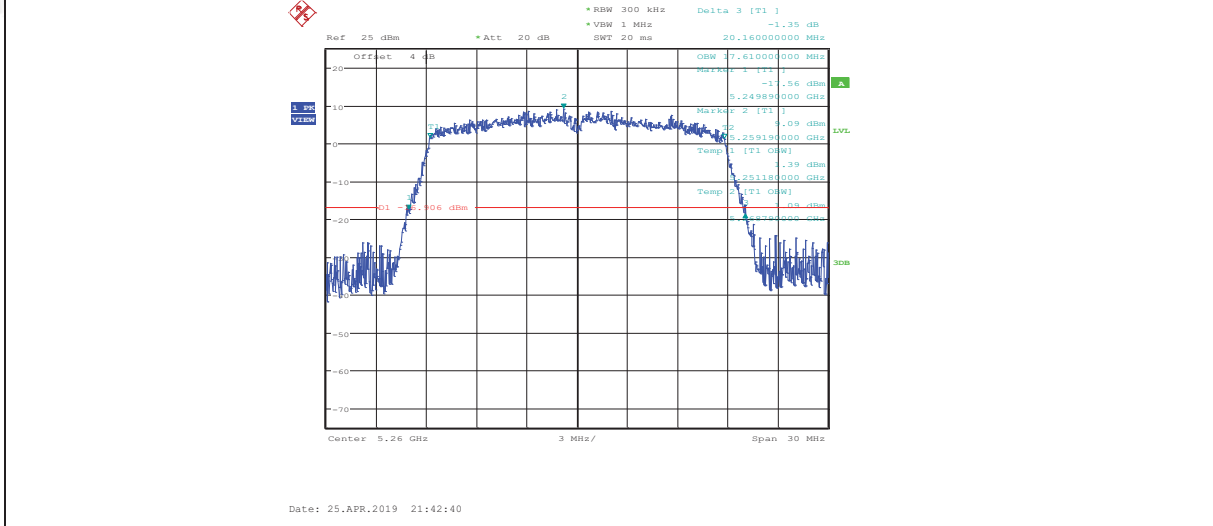
11AC20 ANT1 5240



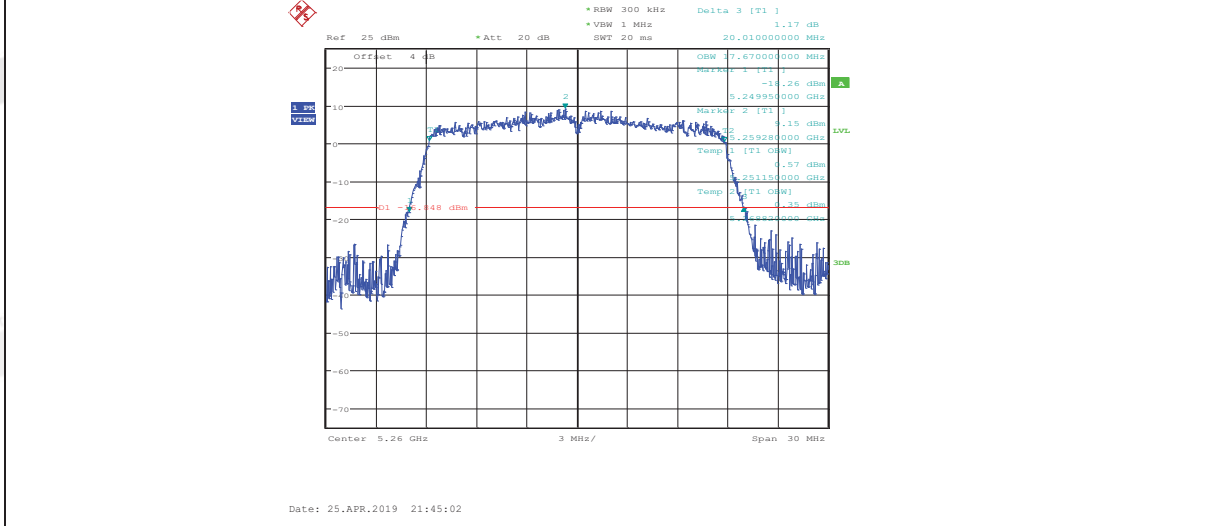
11AC20 ANT2 5240



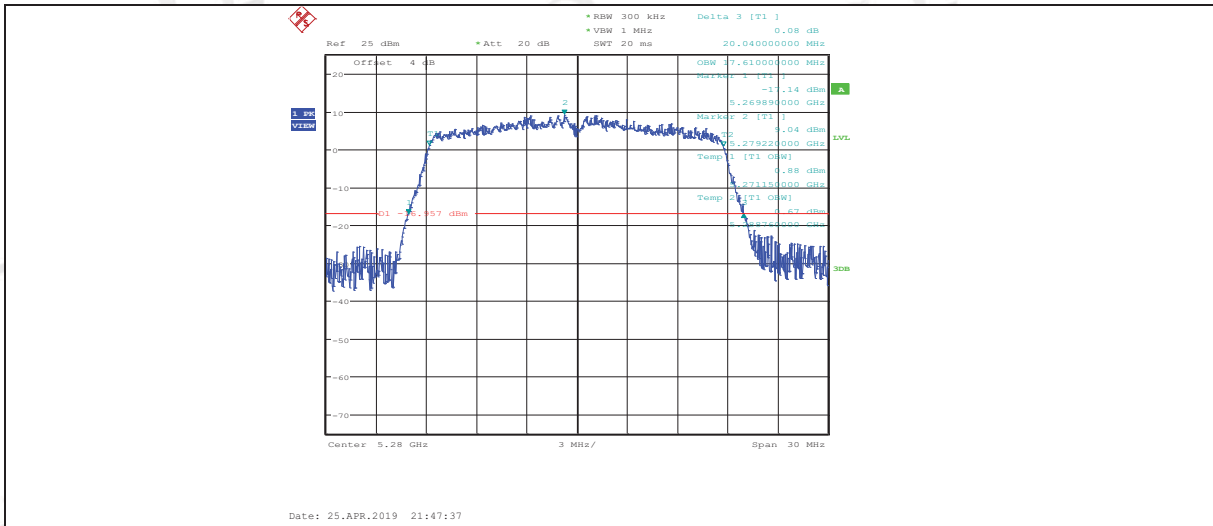
11AC20 ANT1 5260



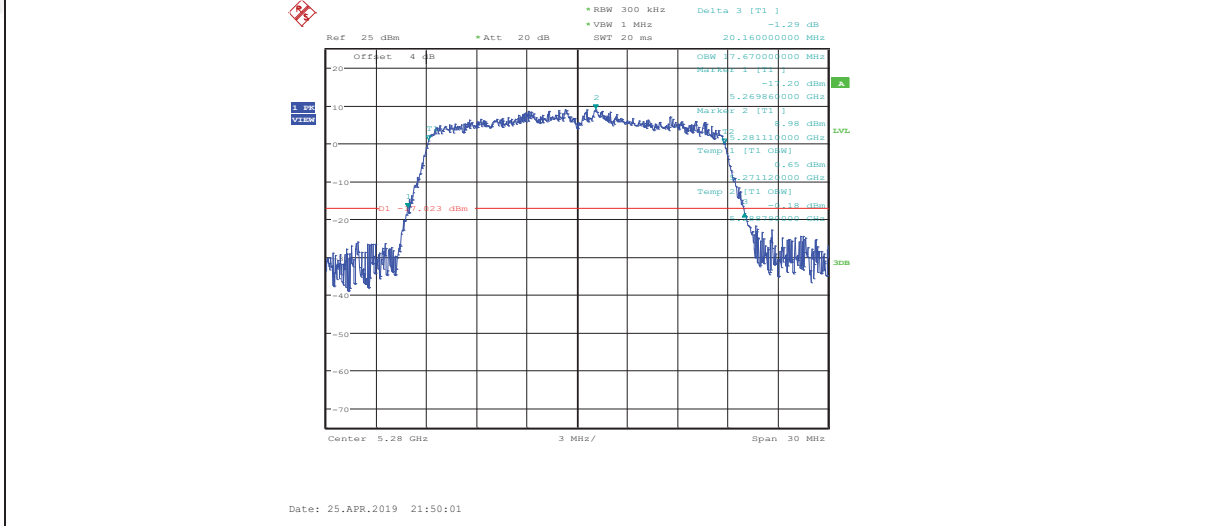
11AC20 ANT2 5260



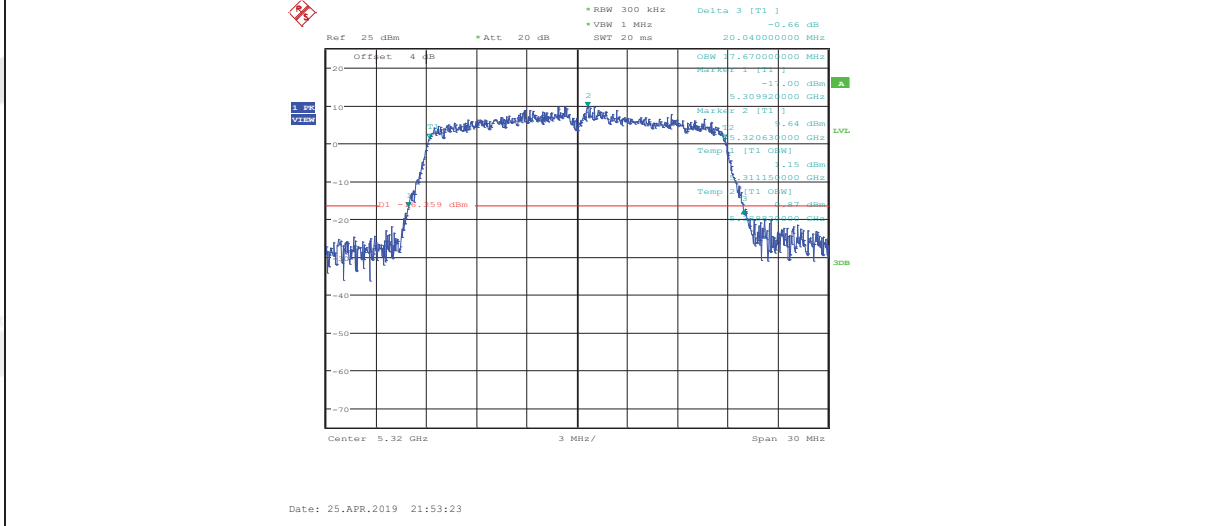
11AC20 ANT1 5280



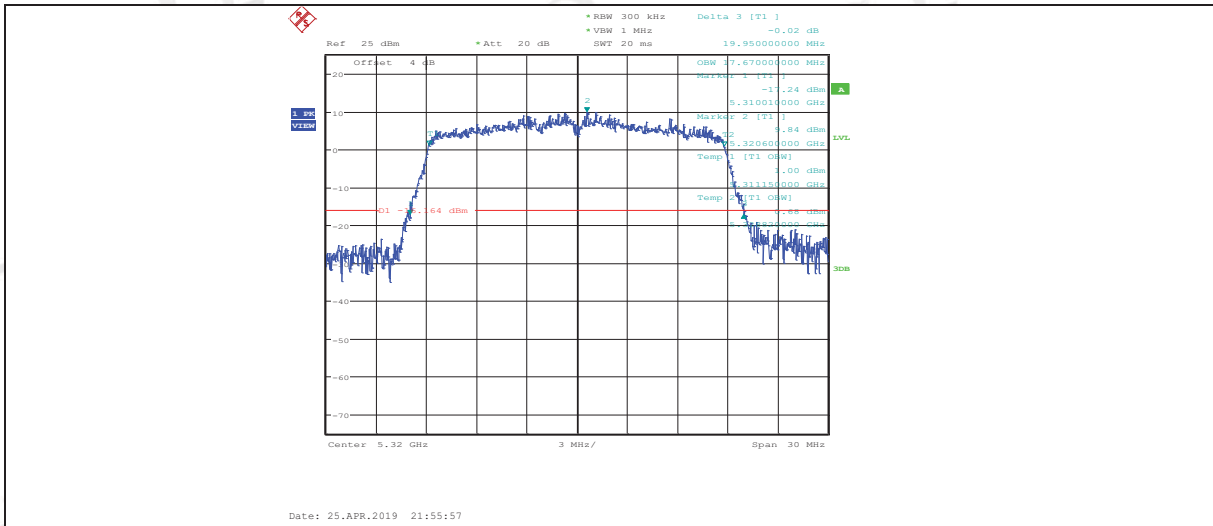
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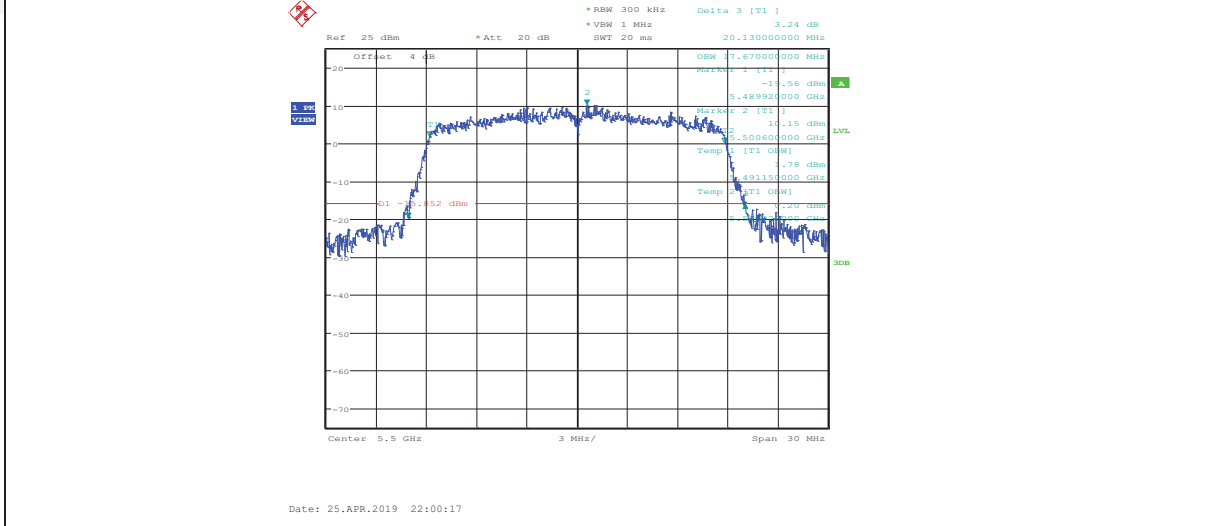
11AC20 ANT1 5320



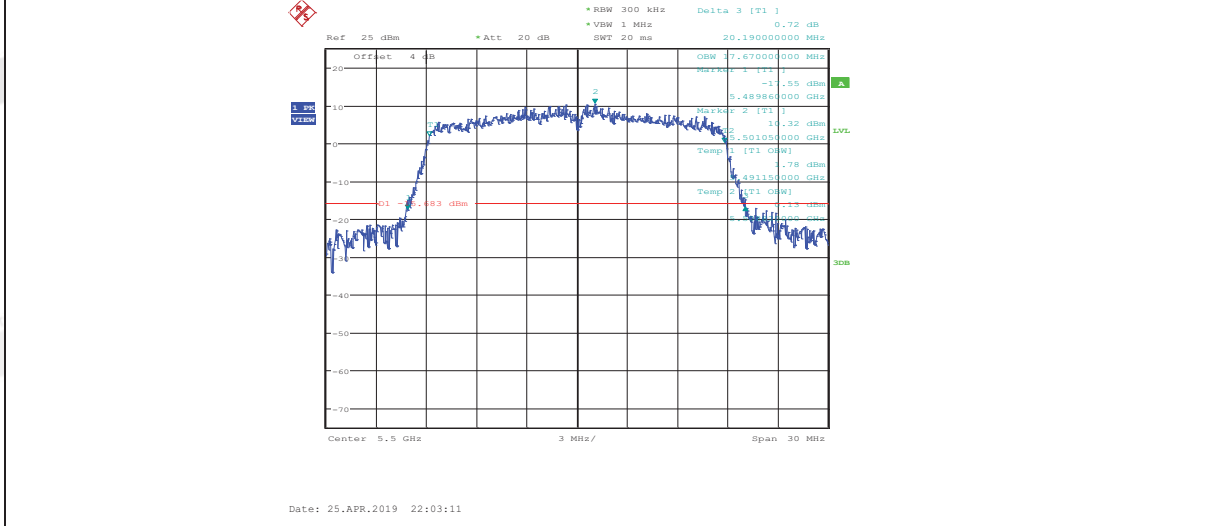
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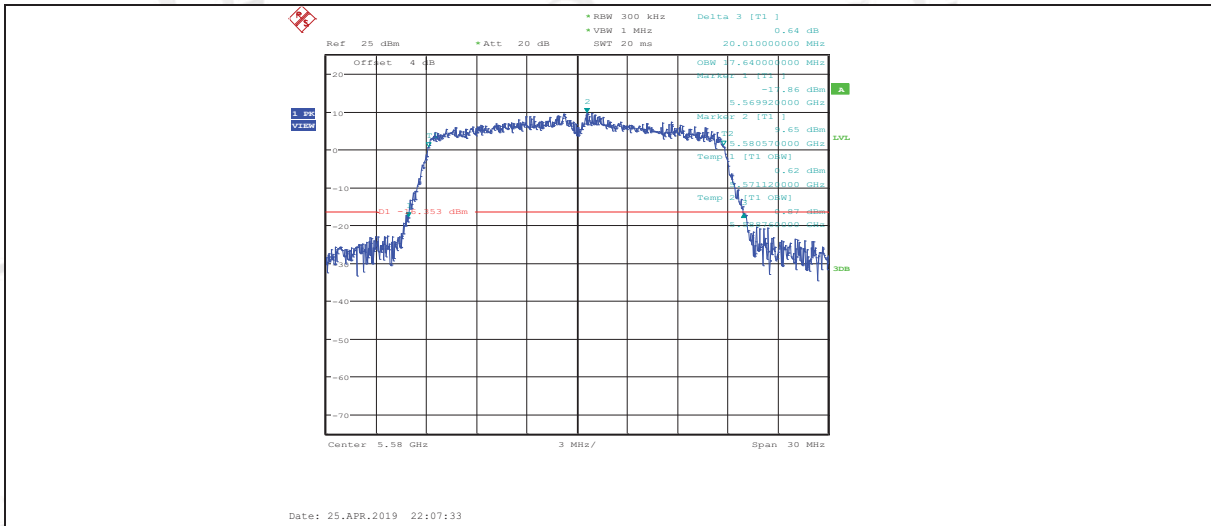
11AC20 ANT1 5500



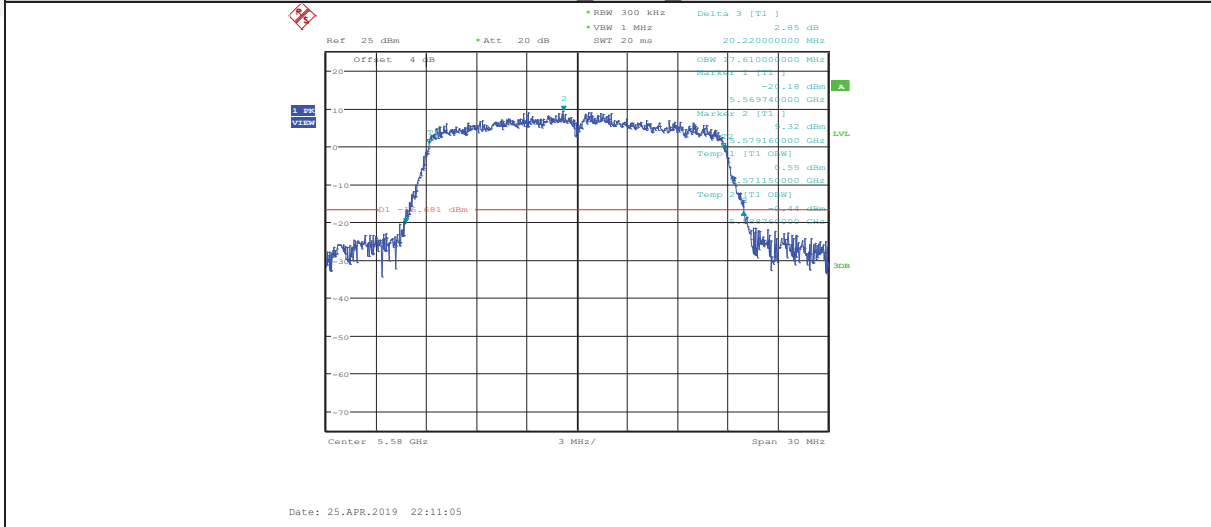
11AC20 ANT2 5500



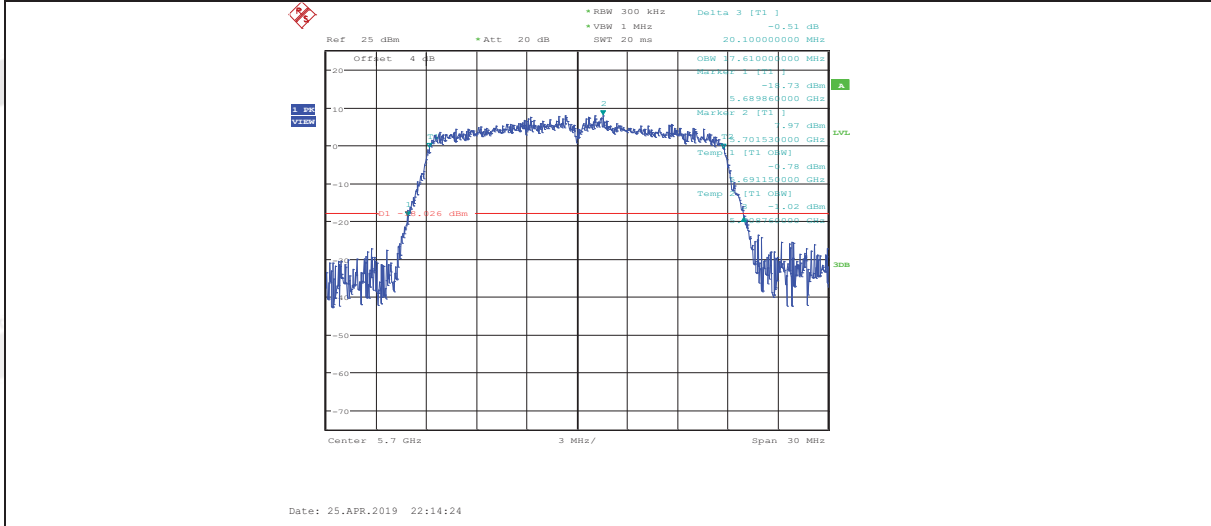
11AC20 ANT1 5580



11AC20 ANT2 5580

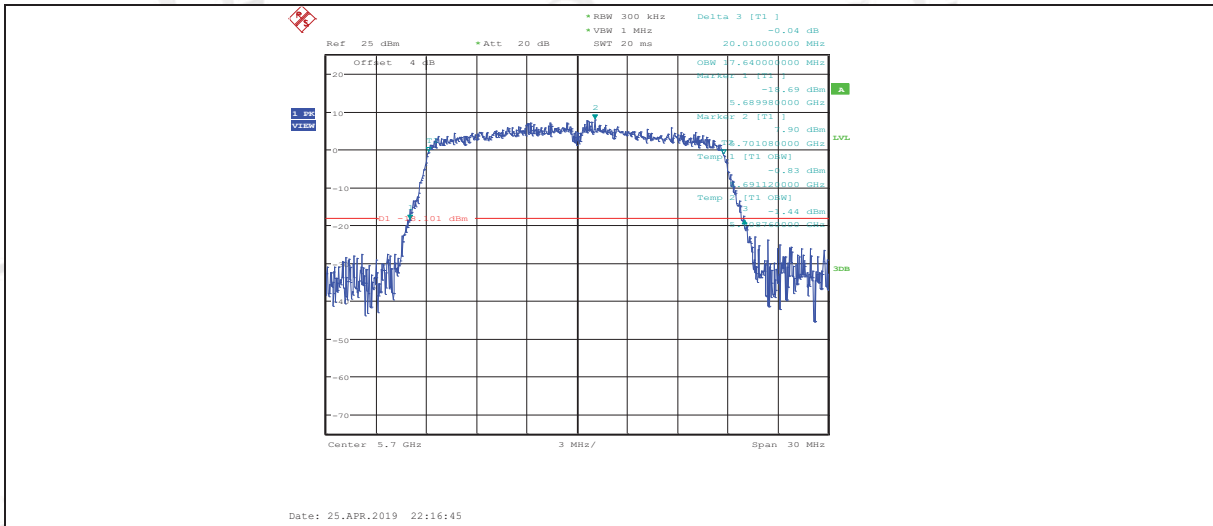


11AC20 ANT1 5700

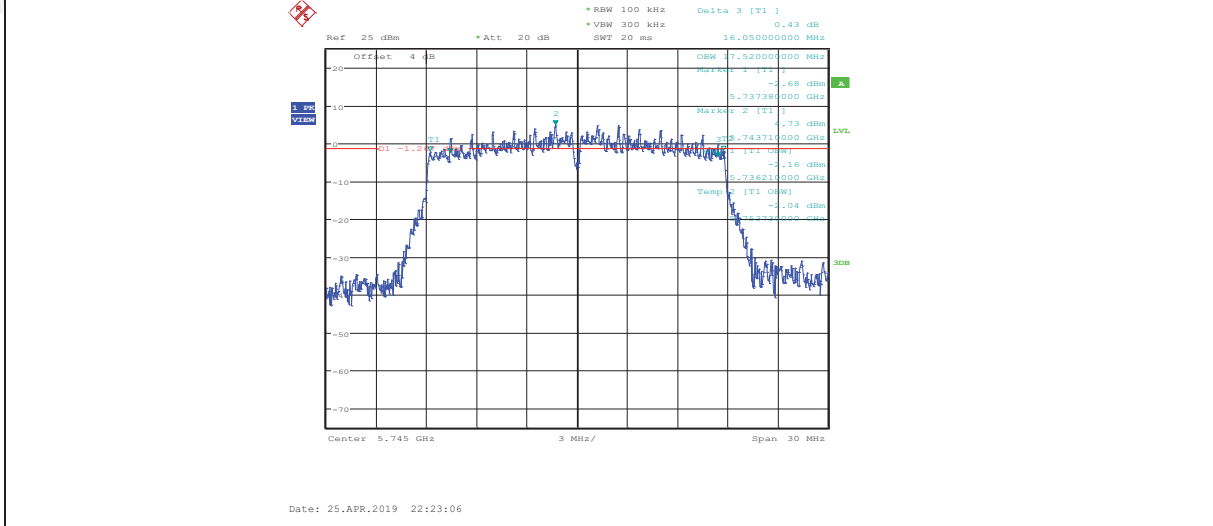


11AC20 ANT2 5700

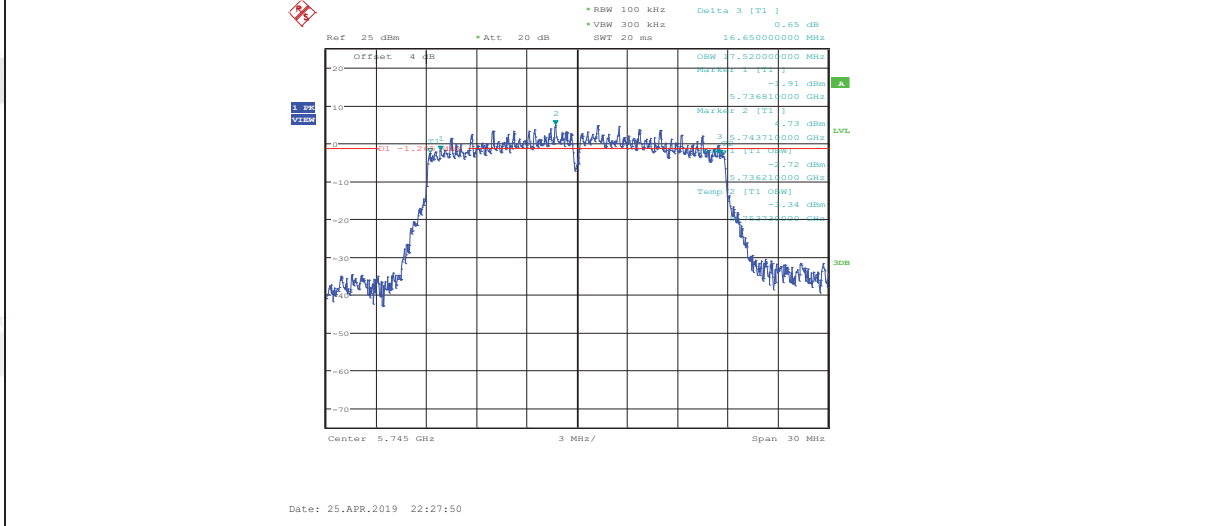




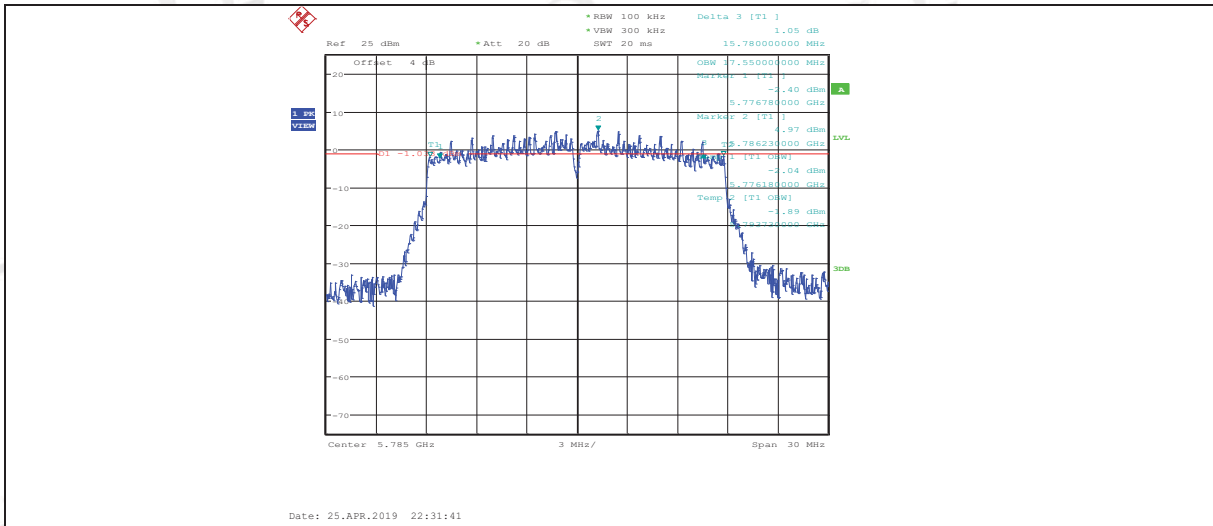
11AC20 ANT1 5745



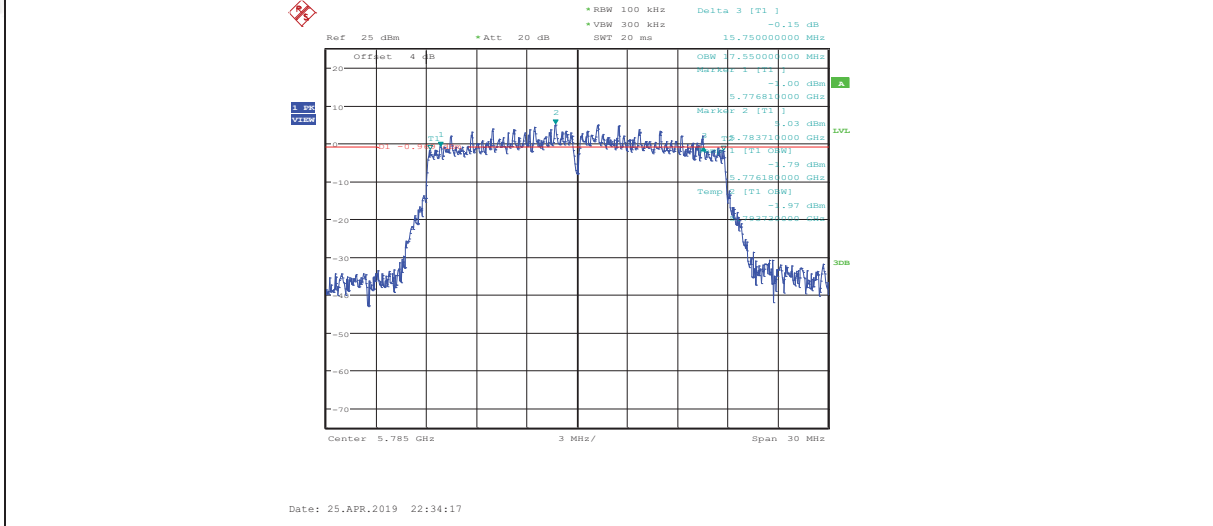
11AC20 ANT2 5745



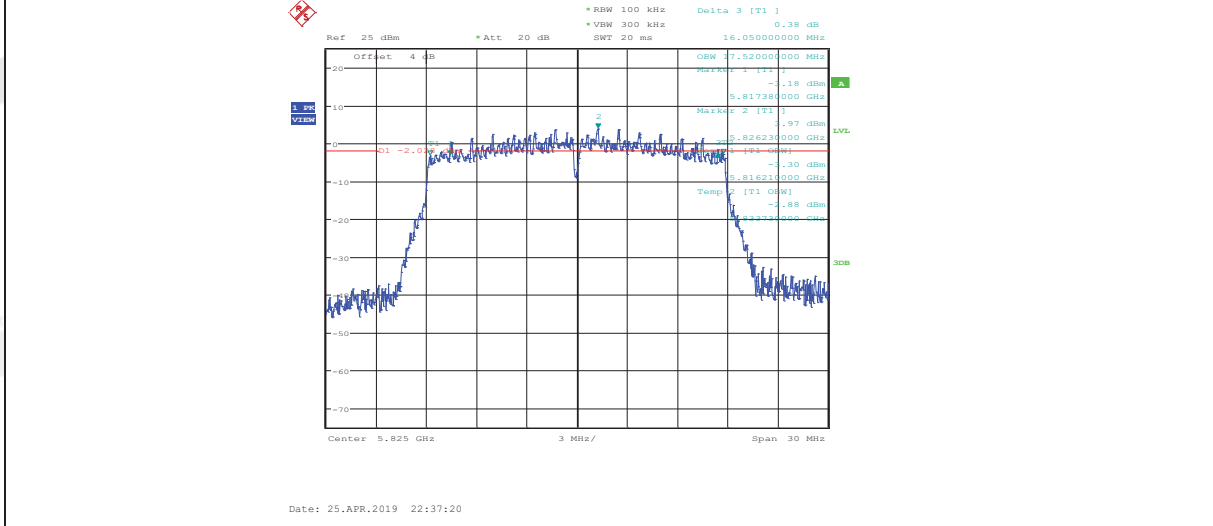
11AC20 ANT1 5785



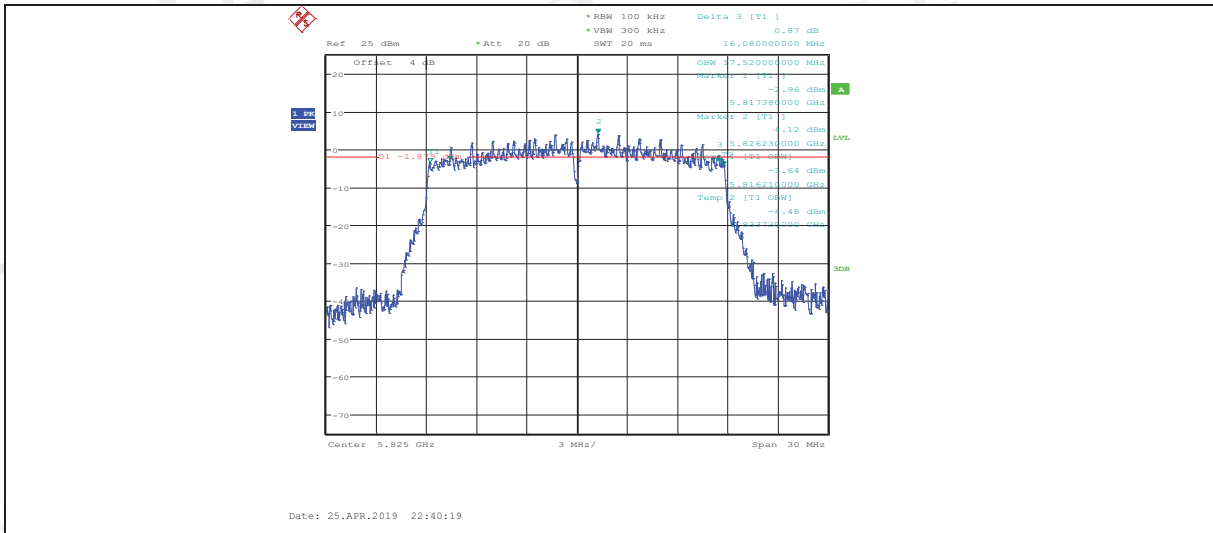
11AC20 ANT2 5785



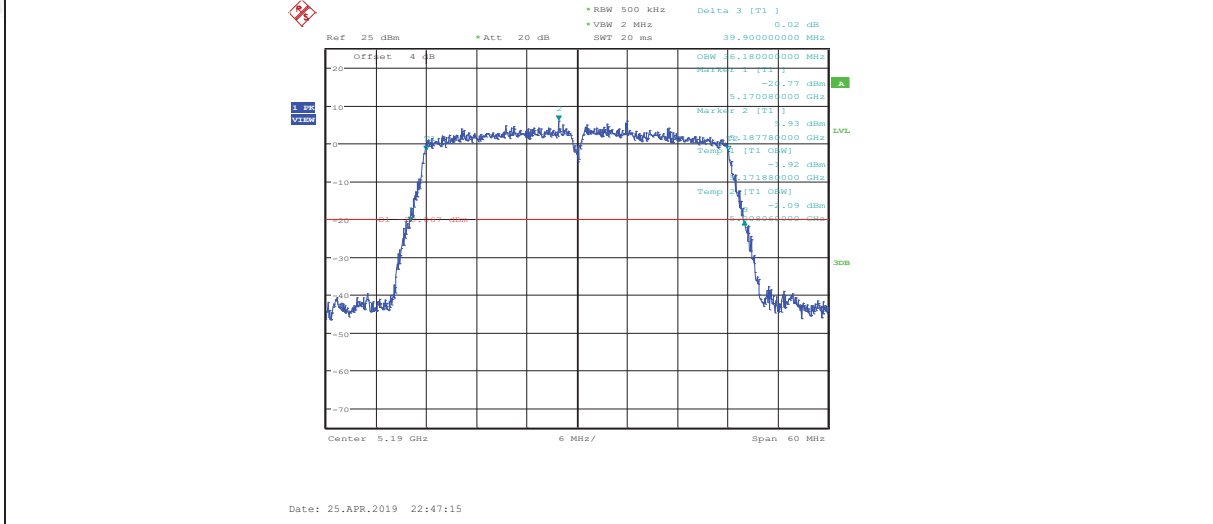
11AC20 ANT1 5825



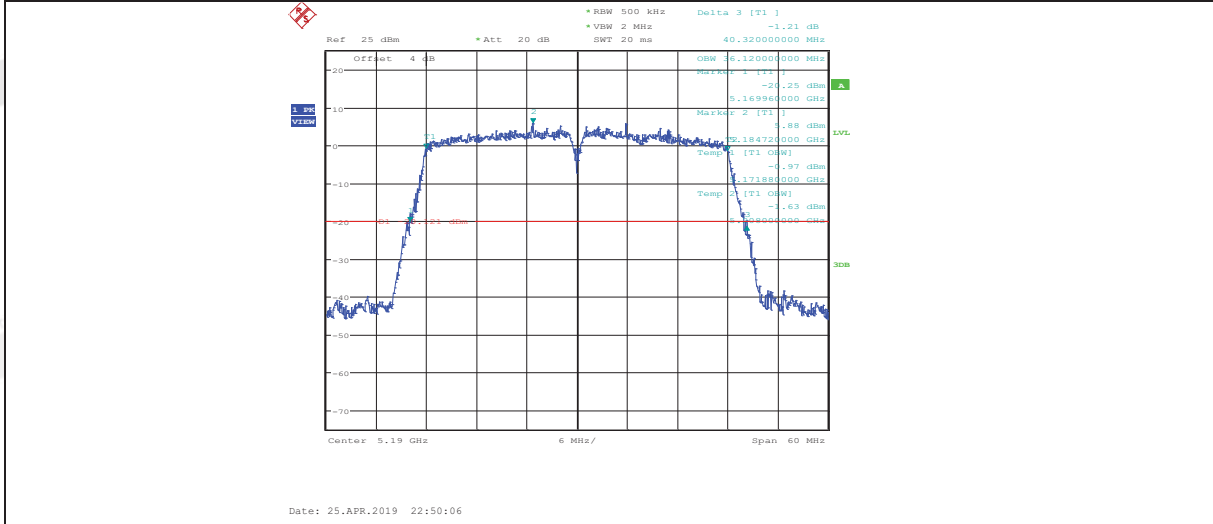
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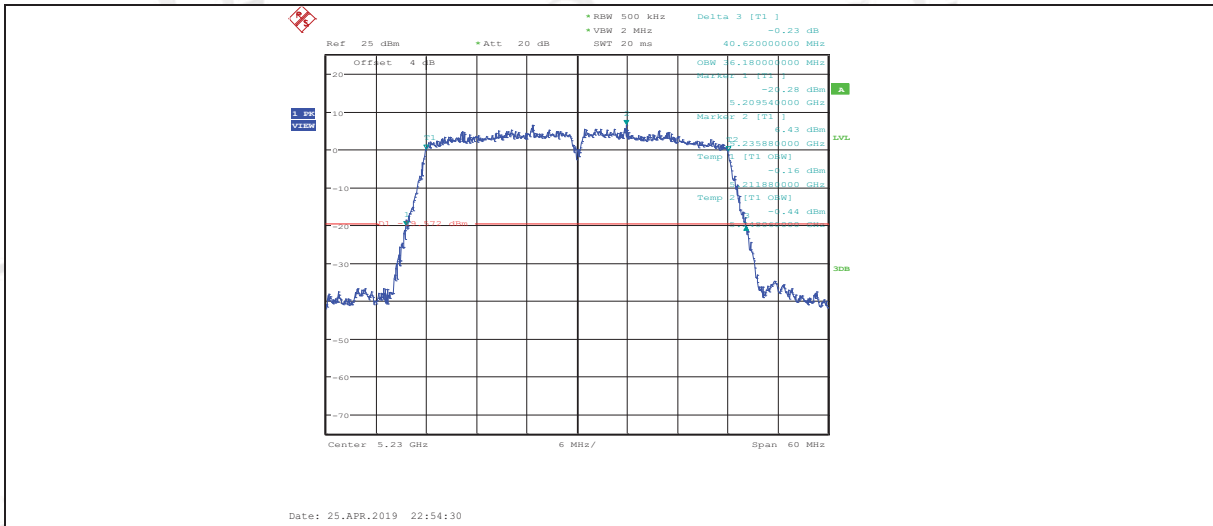
11AC40 ANT1 5190



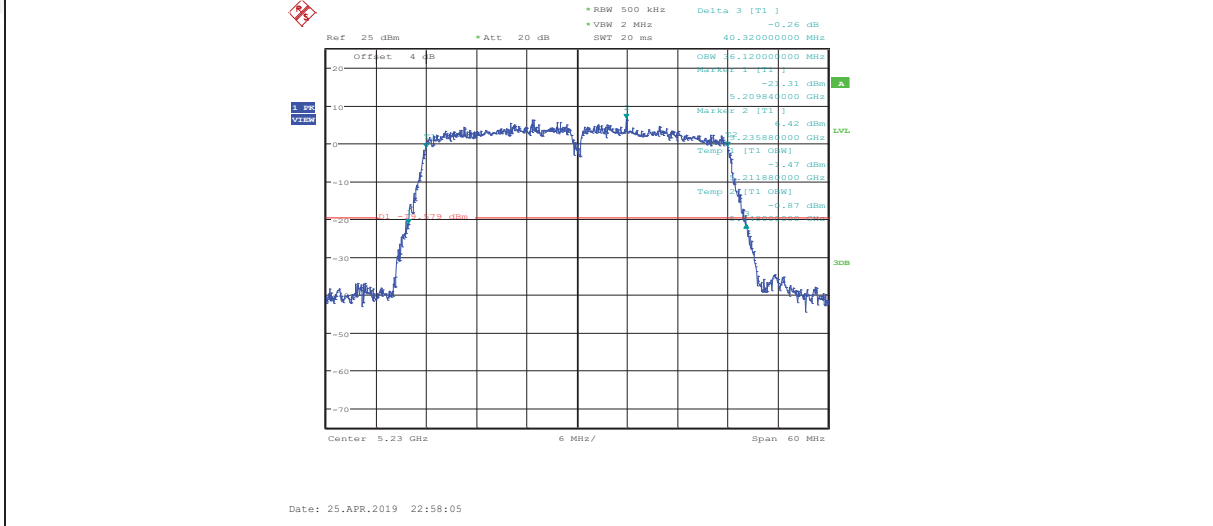
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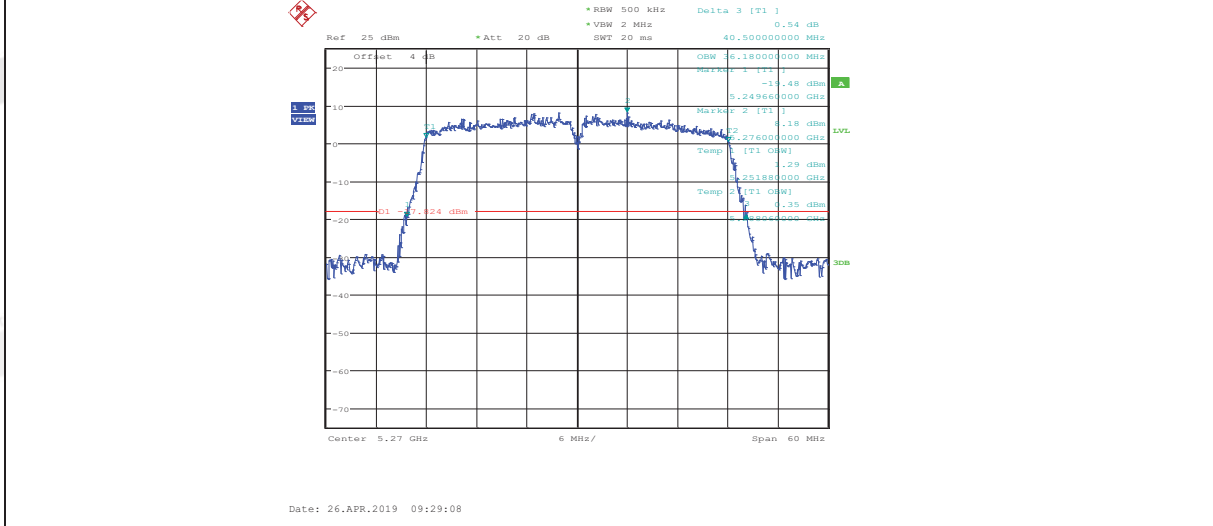
11AC40 ANT1\_5230



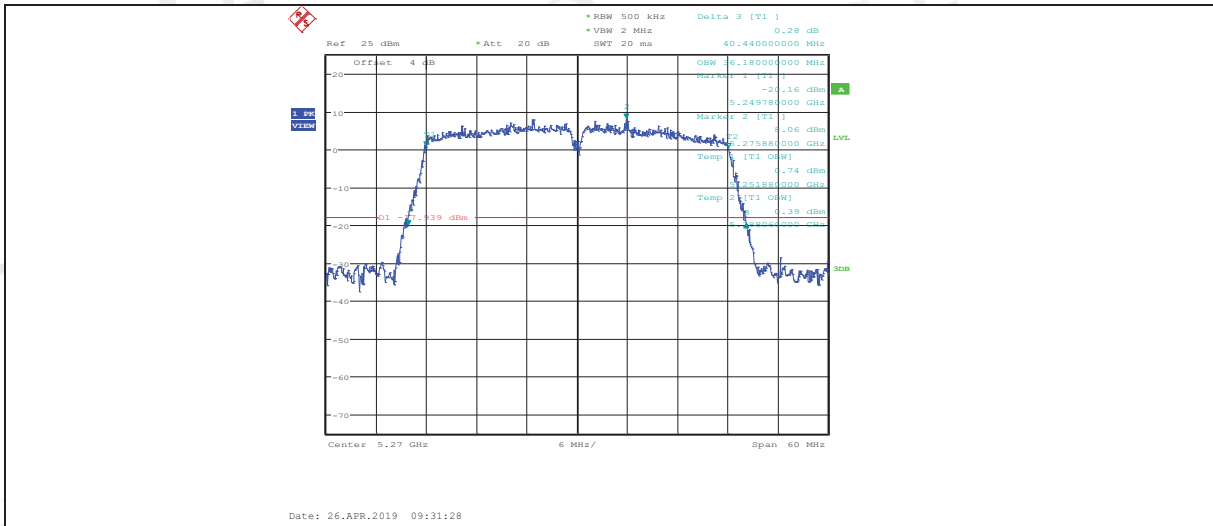
11AC40 ANT2 5230



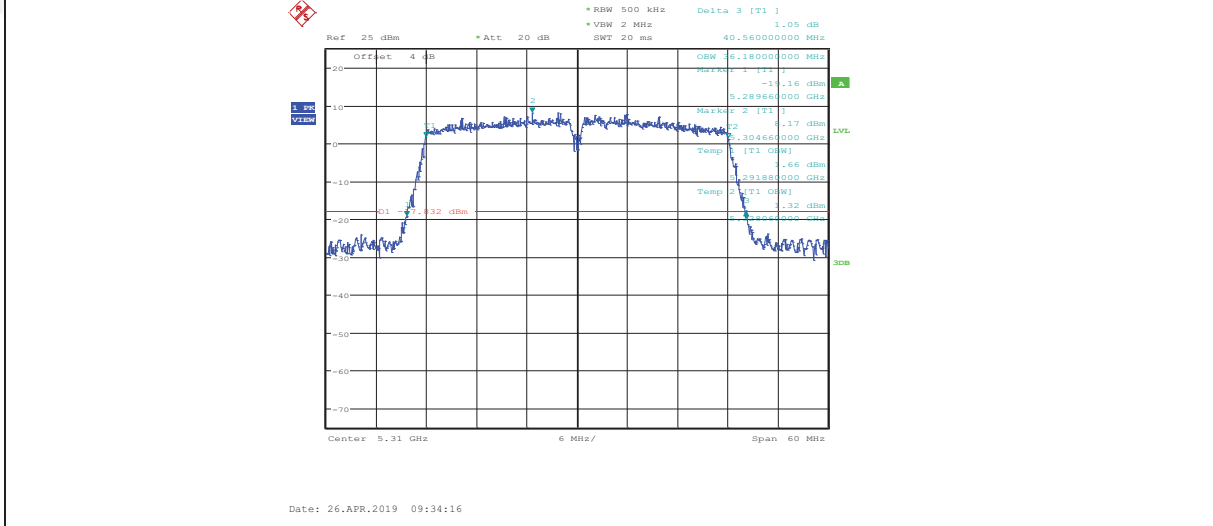
11AC40 ANT1 5270



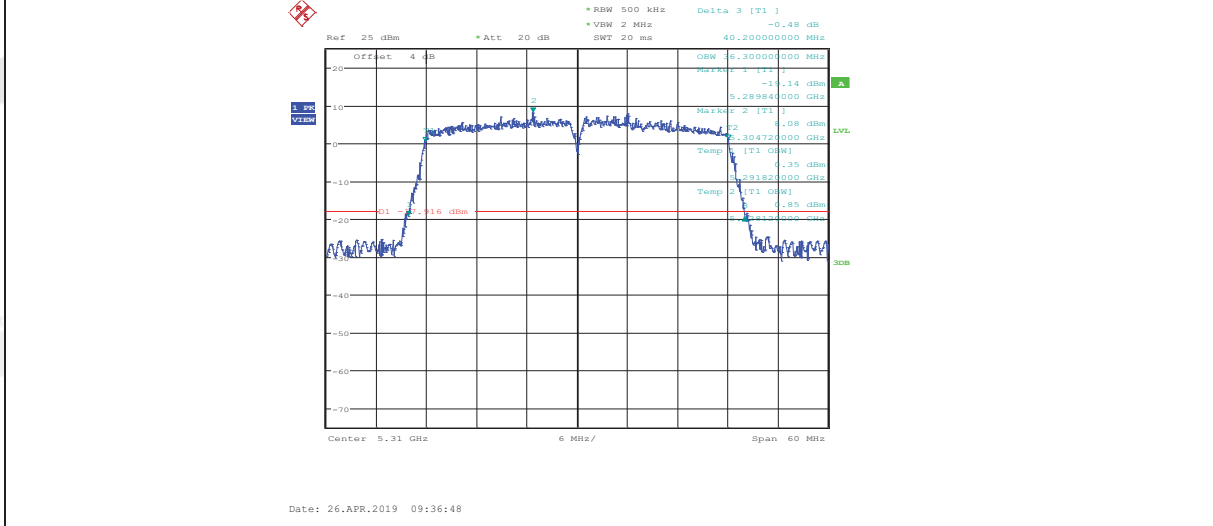
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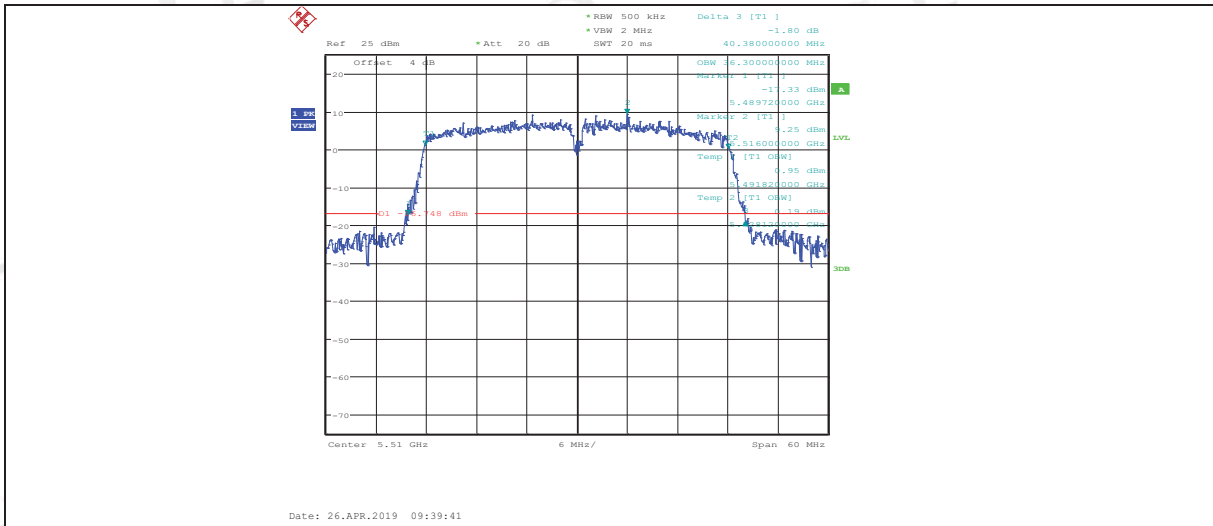
11AC40 ANT1 5310



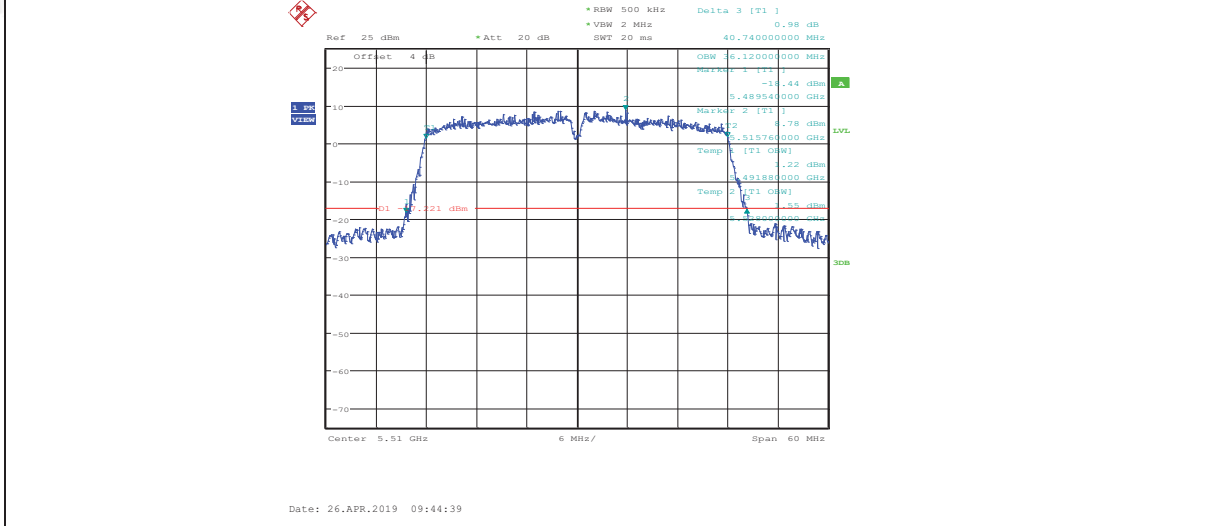
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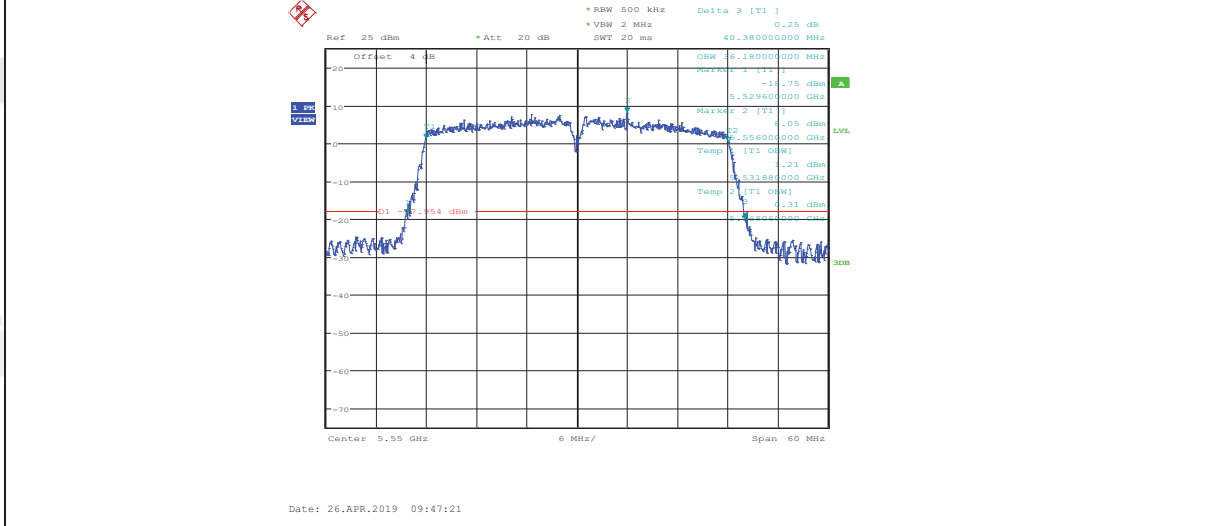
11AC40 ANT1\_5510



11AC40 ANT2 5510

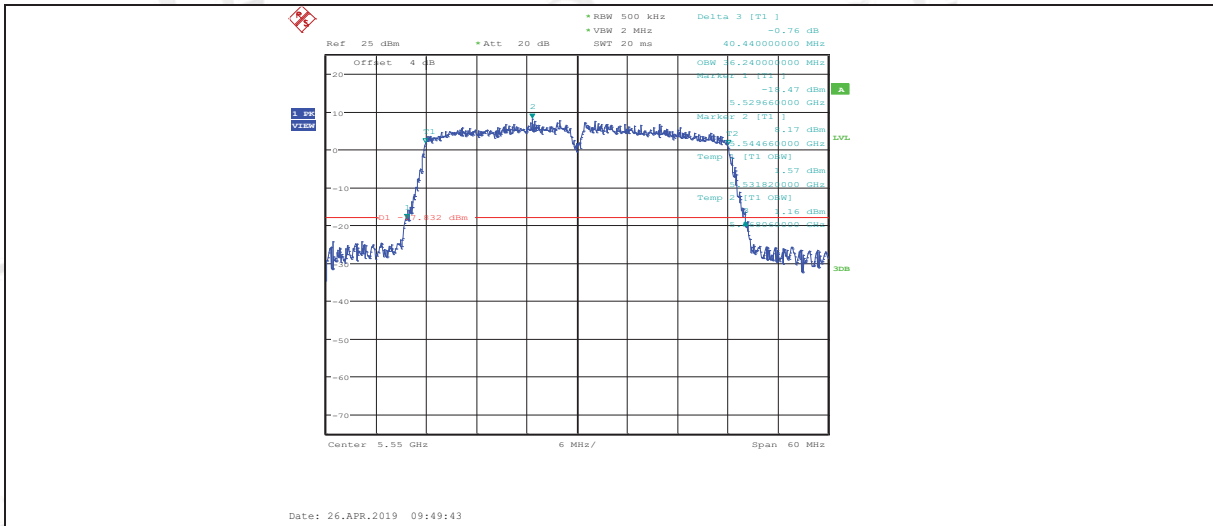


11AC40 ANT1 5550

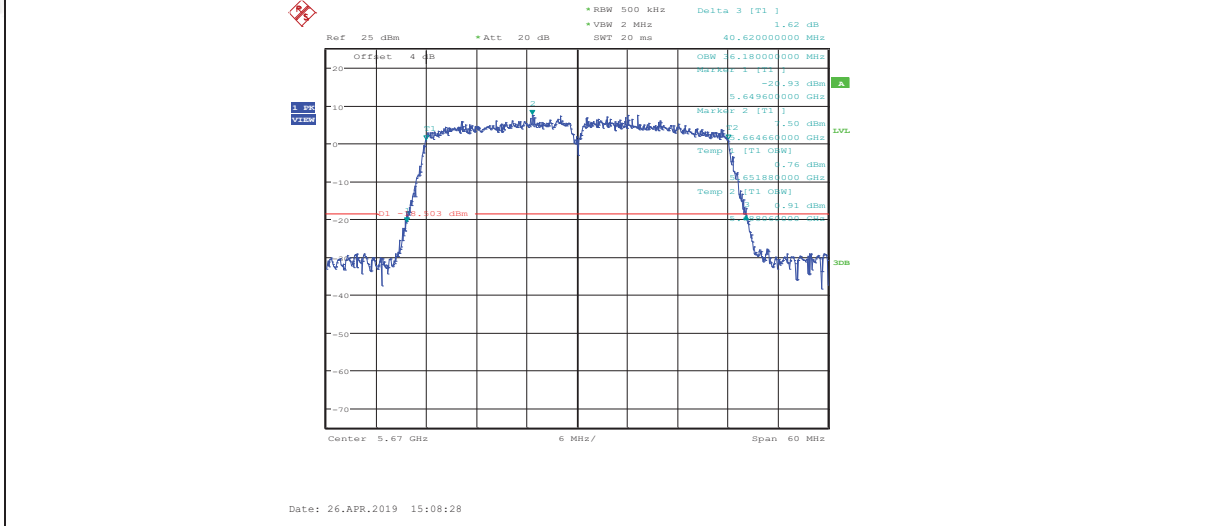


11AC40 ANT2 5550

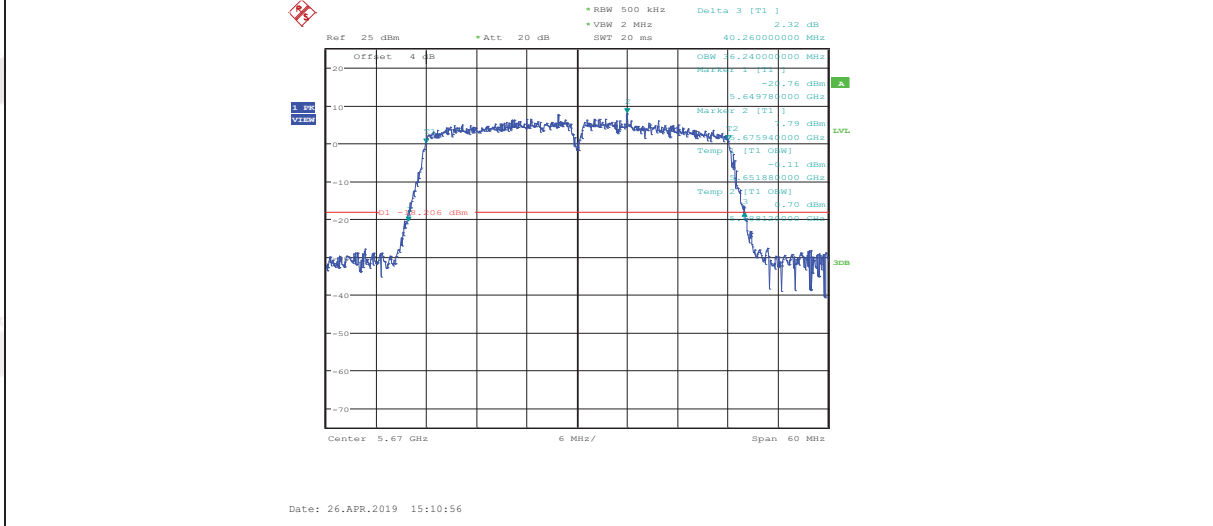




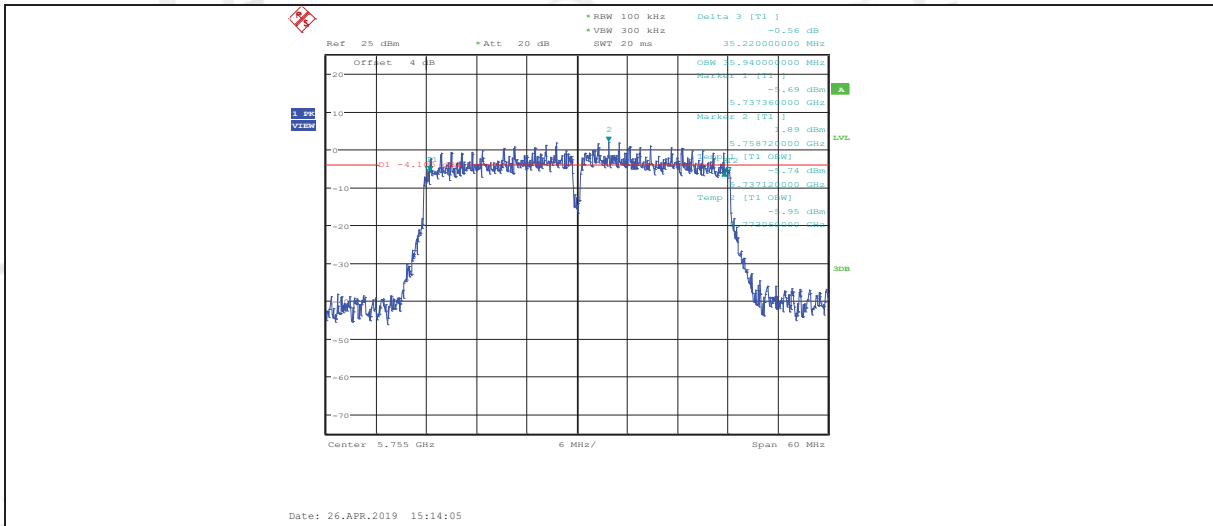
11AC40 ANT1 5670



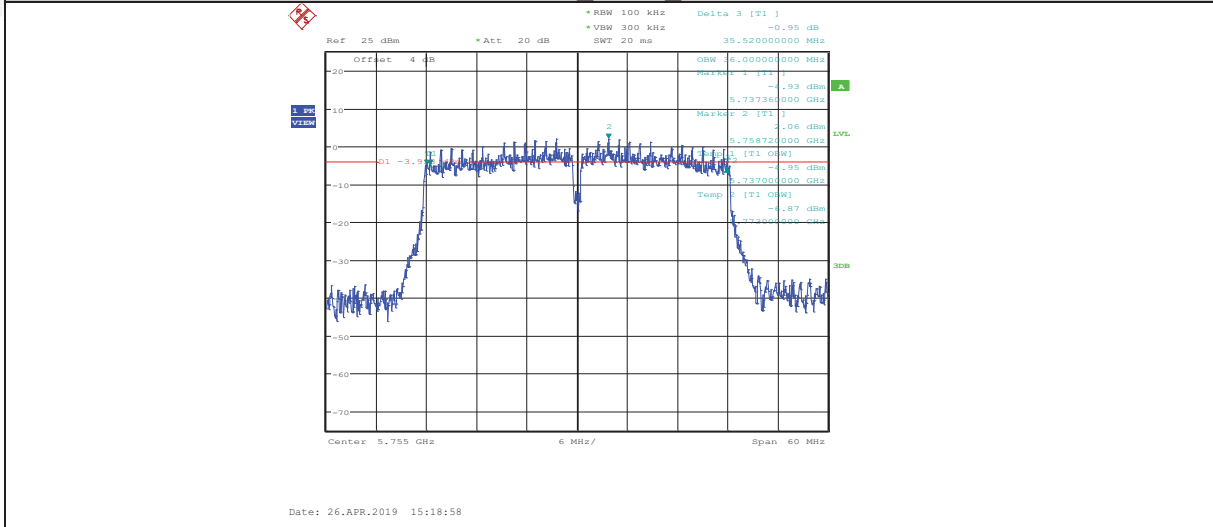
11AC40 ANT2 5670



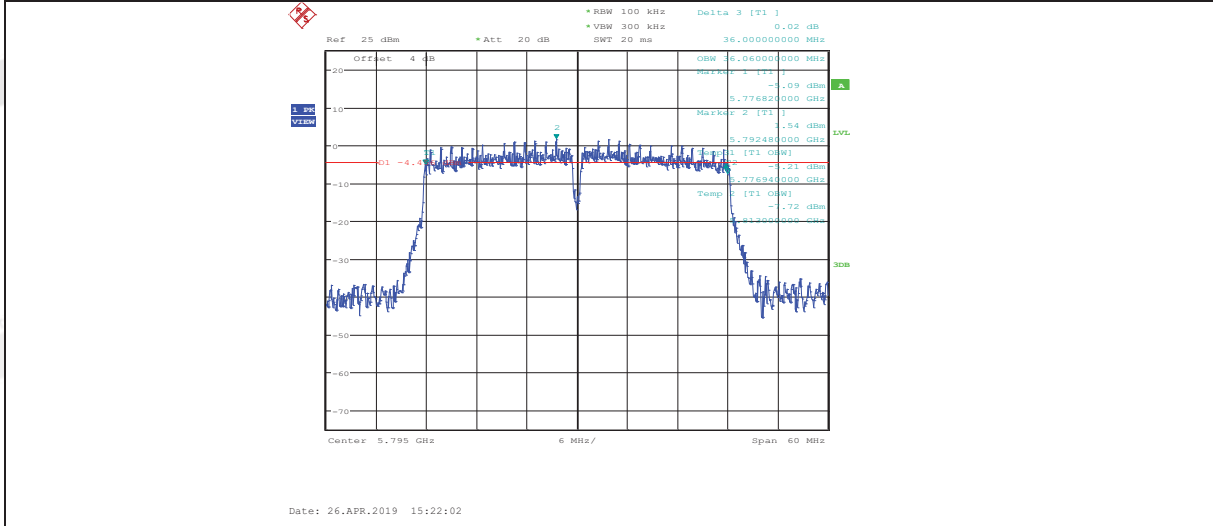
11AC40 ANT1 5755



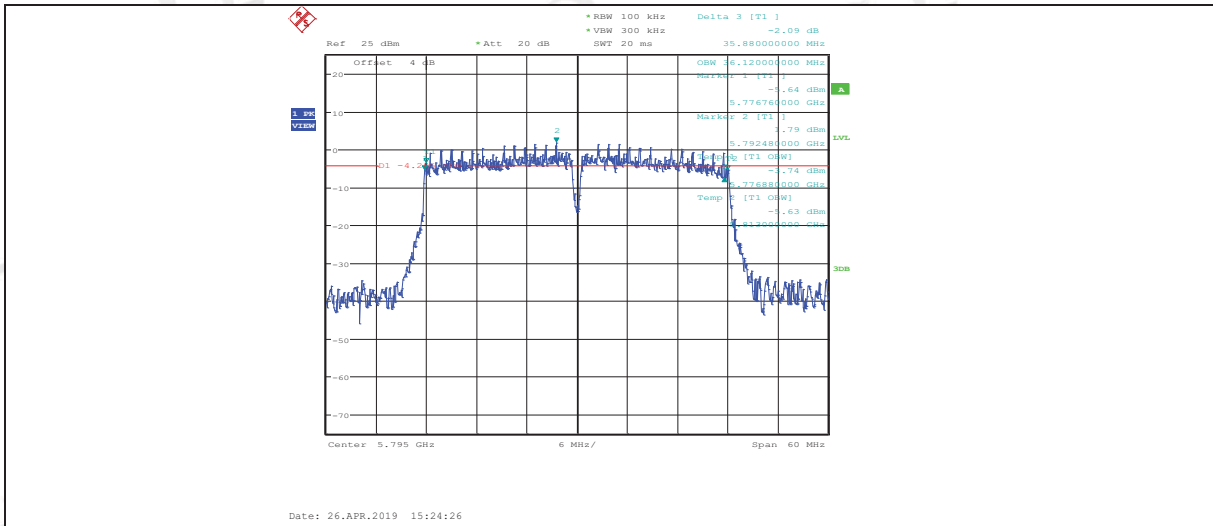
11AC40 ANT2 5755



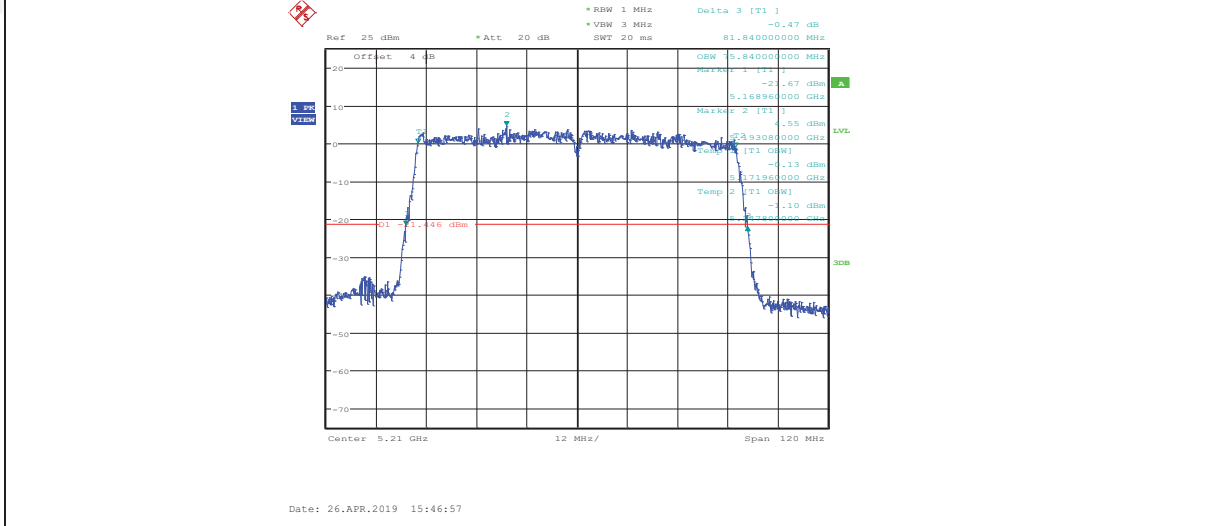
11AC40 ANT1 5795



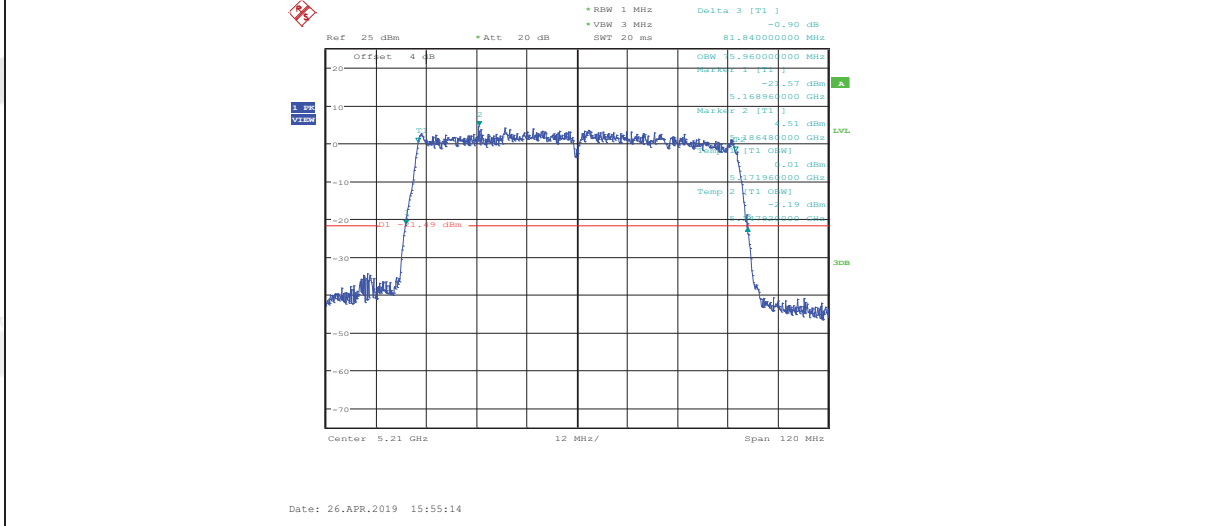
11AC40 ANT2 5795



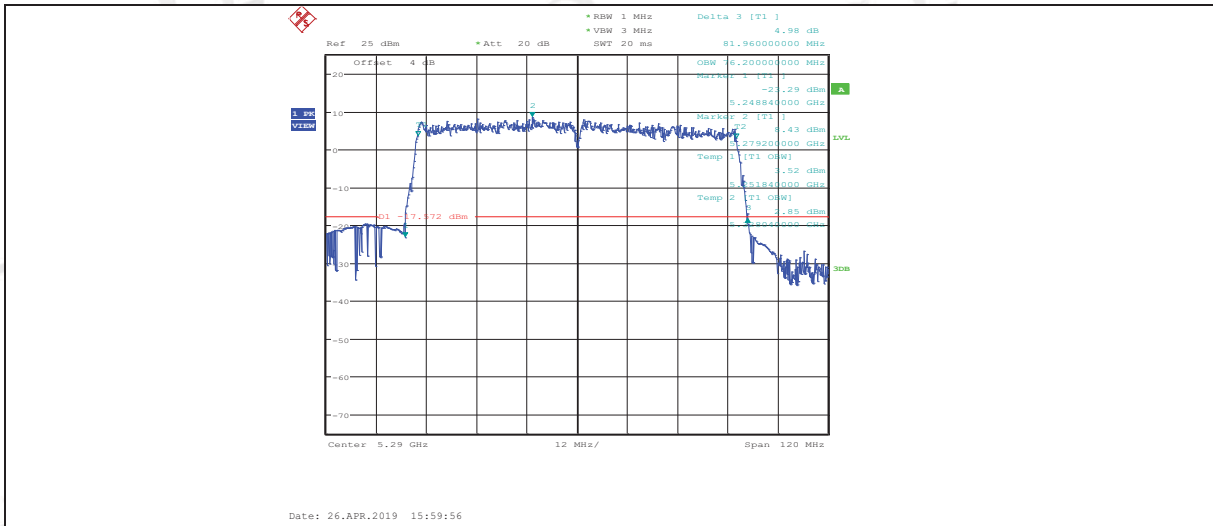
11AC80 ANT1 5210



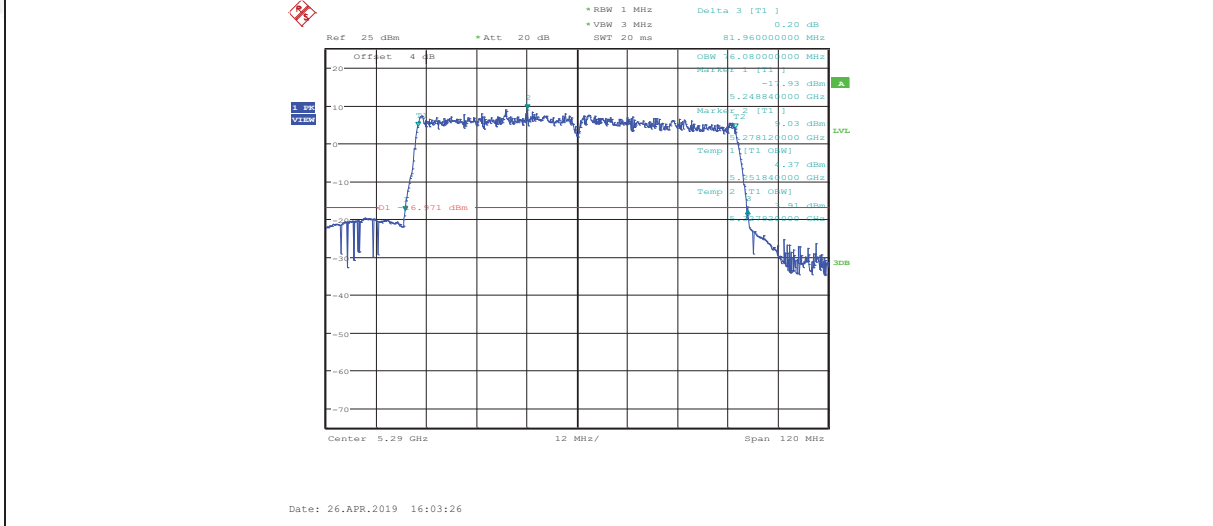
11AC80 ANT2 5210



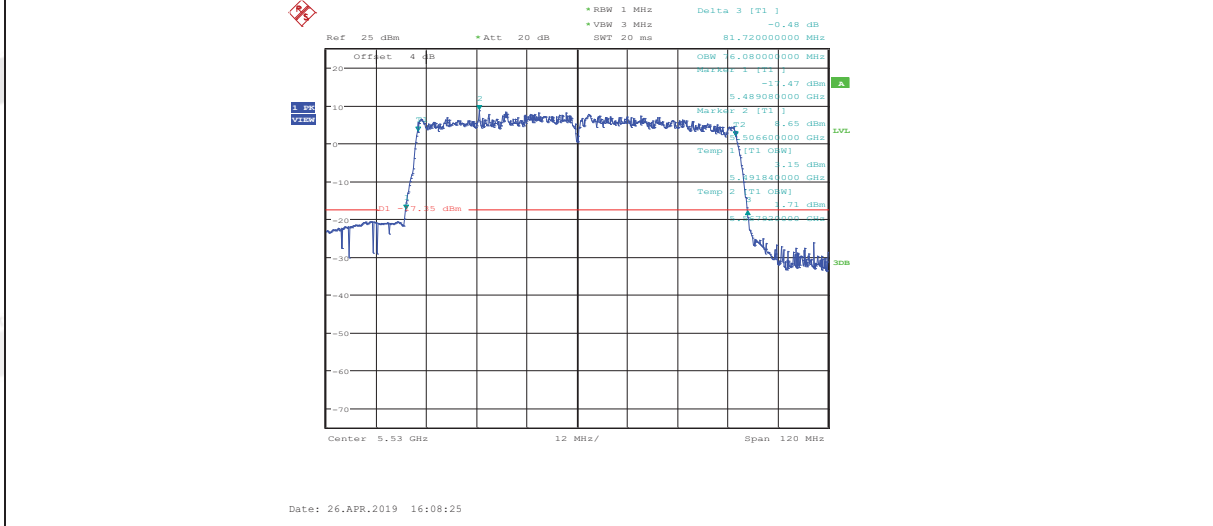
11AC80 ANT1\_5290



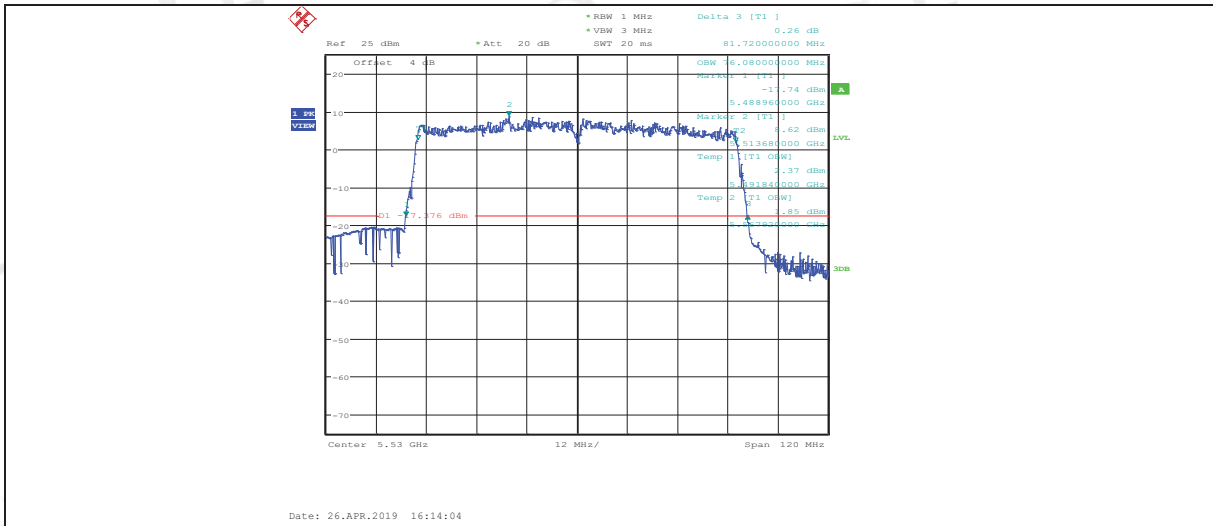
11AC80 ANT2 5290



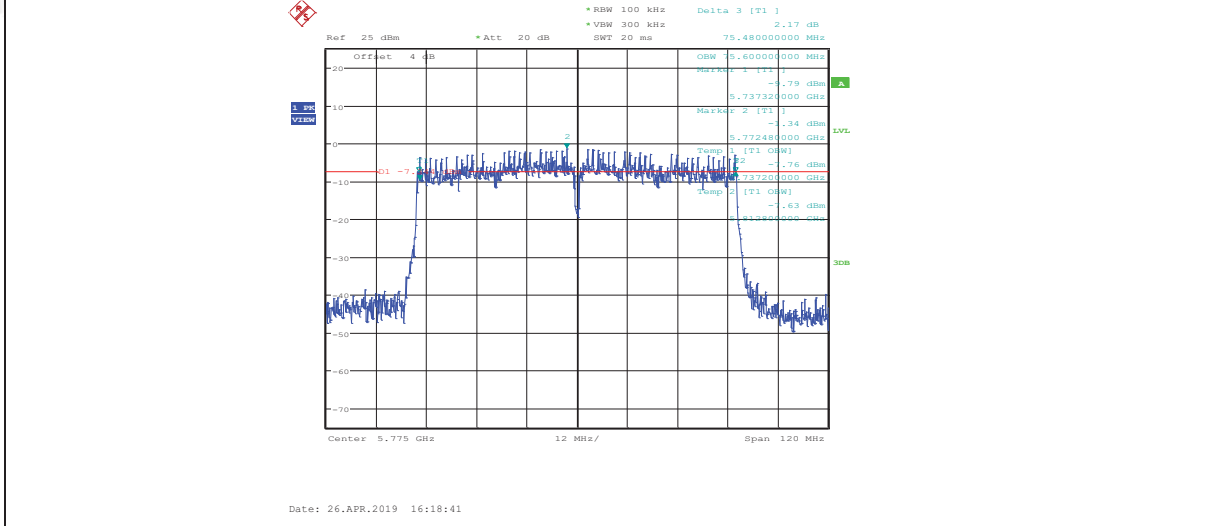
11AC80 ANT1 5530



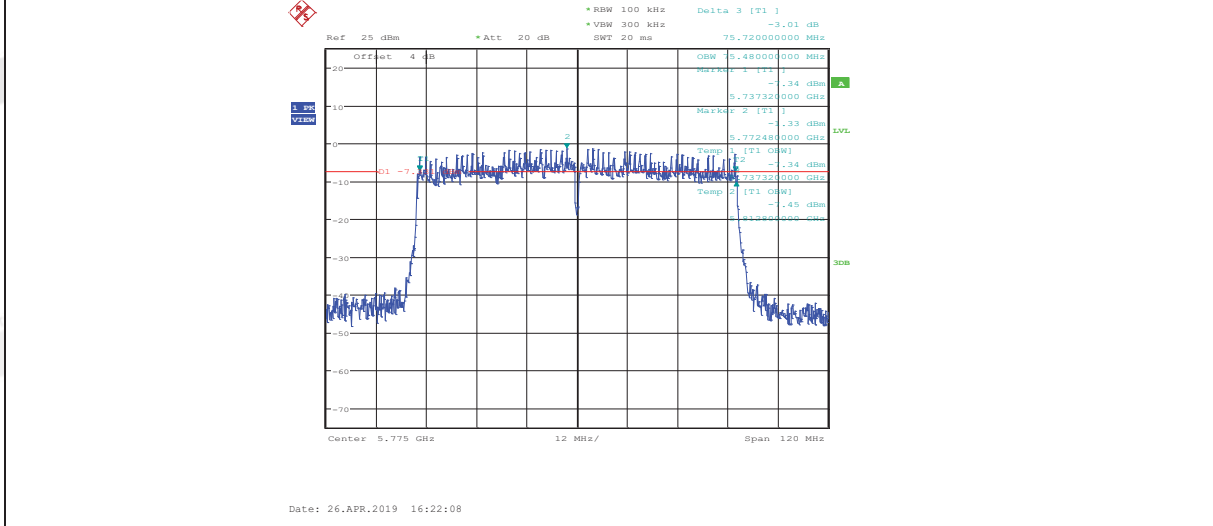
11AC80 ANT2 5530



11AC80 ANT1 5775



11AC80 ANT2 5775



## 5. Maximum Output Power

### 5.1. Block diagram of test setup

Same as section 4.1

### 5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	For FCC client devices: 250 mW (24 dBm)	5150-5250
	For RSS: e.i.r.p. power: not exceed 200 mW(23 dBm) or $10 + 10 \log_{10} B$	
	For FCC: 250mW (24d Bm) or $11 + 10 \log_{10} B$	5250-5350
	For RSS: e.i.r.p. power: not exceed 1.0 W(30 dBm) or $17 + 10 \log_{10} B$	
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	For FCC:5470-5725 For IC:5470-5600 5650-5725
	For RSS: e.i.r.p. power: not exceed 1.0 W(30 dBm) or $17 + 10 \log_{10} B$	
	1 Watt (30 dBm)	5725-5850
Note: For FCC: B=26 bandwidth; For ISSED: B=99% bandwidth. (For ISSED e.i.r.p. power only for 5725-5850 Band)		

### 5.3. Test Procedure

- (1) Connect each EUT's antenna output to Spectrum Analyzer by RF cable and attenuator
- (2) Add each antenna port's results to get the total output power of EUT.

### 5.4. Test Result

Test Mode	Test Channel	Ant	Output Power [dBm]	EIRP [dBm]	FCC LIMIT	ISED LIMIT
11A	ANT1	5180	15.05	18.84	24	22.20
11A	ANT2	5180	15.04	18.86	24	22.20
11A	ANT1	5200	14.96	18.75	24	22.20
11A	ANT2	5200	14.96	18.78	24	22.19
11A	ANT1	5240	14.55	18.34	24	22.20
11A	ANT2	5240	14.52	18.34	24	22.20
11A	ANT1	5260	17.43	21.22	24	29.20
11A	ANT2	5260	17.54	21.36	24	29.20
11A	ANT1	5280	17.17	20.96	24	29.20
11A	ANT2	5280	17.26	21.08	24	29.20
11A	ANT1	5320	18.09	21.88	24	29.21

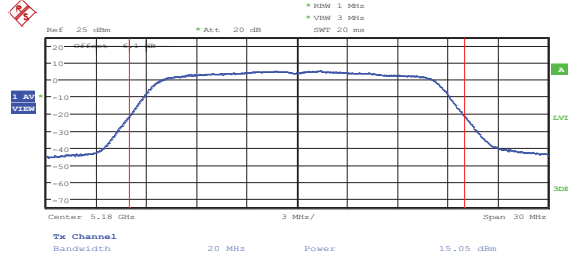


11A	ANT2	5320	18.16	21.98	24	29.20
11A	ANT1	5500	18.64	22.43	24	23.21
11A	ANT2	5500	18.45	22.27	24	23.21
11A	ANT1	5580	17.66	21.45	24	23.20
11A	ANT2	5580	17.64	21.46	24	23.20
11A	ANT1	5700	16.11	19.90	24	29.21
11A	ANT2	5700	16.12	19.94	24	29.19
11A	ANT1	5745	17.36	21.15	30	30
11A	ANT2	5745	17.32	21.14	30	30
11A	ANT1	5785	17.36	21.15	30	30
11A	ANT2	5785	17.51	21.33	30	30
11A	ANT1	5825	16.55	20.34	30	30
11A	ANT2	5825	16.67	20.49	30	30
11N20	ANT1	5180	14.14	17.93	30	22.49
11N20	ANT2	5180	14.18	18.00	24	22.49
11N20	ANT1	5200	14.14	17.93	24	22.49
11N20	ANT2	5200	14.14	17.96	24	22.49
11N20	ANT1	5240	14.65	18.44	24	22.50
11N20	ANT2	5240	14.61	18.43	24	22.50
11N20	ANT1	5260	15.75	19.54	24	29.49
11N20	ANT2	5260	15.69	19.51	24	29.50
11N20	ANT1	5280	15.49	19.28	24	29.51
11N20	ANT2	5280	15.49	19.31	24	29.50
11N20	ANT1	5320	16.02	19.81	24	29.52
11N20	ANT2	5320	16.09	19.91	24	29.51
11N20	ANT1	5500	16.63	20.42	24	23.53
11N20	ANT2	5500	16.67	20.49	24	23.54
11N20	ANT1	5580	15.93	19.72	24	23.52
11N20	ANT2	5580	15.94	19.76	24	23.52
11N20	ANT1	5700	14.28	18.07	24	29.50
11N20	ANT2	5700	14.28	18.10	24	29.50
11N20	ANT1	5745	15.71	19.50	30	30
11N20	ANT2	5745	15.72	19.54	30	30
11N20	ANT1	5785	15.62	19.41	30	30
11N20	ANT2	5785	15.65	19.47	30	30
11N20	ANT1	5825	14.79	18.58	30	30
11N20	ANT2	5825	14.84	18.66	30	30
11N40	ANT1	5190	15.78	19.57	24	23

11N40	ANT2	5190	15.88	19.70	24	23
11N40	ANT1	5230	16.47	20.26	24	23
11N40	ANT2	5230	16.47	20.29	24	23
11N40	ANT1	5270	16.30	20.09	24	30
11N40	ANT2	5270	16.39	20.21	24	30
11N40	ANT1	5310	16.80	20.59	24	30
11N40	ANT2	5310	16.78	20.60	24	30
11N40	ANT1	5510	17.47	21.26	24	24
11N40	ANT2	5510	17.48	21.30	24	24
11N40	ANT1	5550	16.50	20.29	24	24
11N40	ANT2	5550	16.52	20.34	24	24
11N40	ANT1	5670	15.99	19.78	24	30
11N40	ANT2	5670	15.91	19.73	24	30
11N40	ANT1	5755	16.49	20.28	30	30
11N40	ANT2	5755	16.42	20.24	30	30
11N40	ANT1	5795	16.22	20.01	30	30
11N40	ANT2	5795	16.21	20.03	30	30
11AC20	ANT1	5180	14.24	18.03	24	22.46
11AC20	ANT2	5180	14.18	18.00	24	22.46
11AC20	ANT1	5200	14.31	18.10	24	22.46
11AC20	ANT2	5200	14.15	17.97	24	22.46
11AC20	ANT1	5240	14.85	18.64	24	22.46
11AC20	ANT2	5240	14.98	18.80	24	22.47
11AC20	ANT1	5260	17.98	21.77	24	29.46
11AC20	ANT2	5260	17.96	21.78	24	29.47
11AC20	ANT1	5280	17.85	21.64	24	29.46
11AC20	ANT2	5280	17.64	21.46	24	29.47
11AC20	ANT1	5320	18.29	22.08	24	29.47
11AC20	ANT2	5320	18.55	22.37	24	29.47
11AC20	ANT1	5500	18.96	22.75	24	23.47
11AC20	ANT2	5500	18.87	22.69	24	23.47
11AC20	ANT1	5580	18.22	22.01	24	23.46
11AC20	ANT2	5580	18.20	22.02	24	23.46
11AC20	ANT1	5700	16.48	20.27	24	29.46
11AC20	ANT2	5700	16.57	20.39	24	29.46
11AC20	ANT1	5745	17.94	21.73	30	30
11AC20	ANT2	5745	17.71	21.53	30	30
11AC20	ANT1	5785	17.96	21.75	30	30

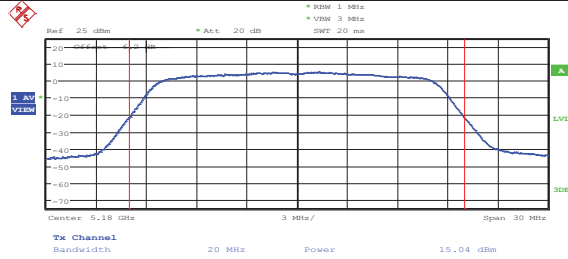
11AC20	ANT2	5785	17.96	21.78	30	30
11AC20	ANT1	5825	16.87	20.66	30	30
11AC20	ANT2	5825	16.86	20.68	30	30
11AC40	ANT1	5190	17.57	21.36	24	30
11AC40	ANT2	5190	17.19	21.01	24	30
11AC40	ANT1	5230	17.75	21.54	24	30
11AC40	ANT2	5230	17.66	21.48	24	30
11AC40	ANT1	5270	19.26	23.05	24	24
11AC40	ANT2	5270	19.38	23.20	24	24
11AC40	ANT1	5310	19.77	23.56	24	24
11AC40	ANT2	5310	19.53	23.35	24	24
11AC40	ANT1	5510	20.54	24.33	24	24
11AC40	ANT2	5510	20.44	24.26	24	24
11AC40	ANT1	5550	19.50	23.29	24	24
11AC40	ANT2	5550	19.36	23.18	24	24
11AC40	ANT1	5670	19.20	22.99	24	30
11AC40	ANT2	5670	19.54	23.36	24	30
11AC40	ANT1	5755	19.99	23.78	30	30
11AC40	ANT2	5755	19.86	23.68	30	30
11AC40	ANT1	5795	19.41	23.20	30	30
11AC40	ANT2	5795	19.80	23.62	30	30
11AC80	ANT1	5210	17.38	21.17	24	23
11AC80	ANT2	5210	17.36	21.18	24	23
11AC80	ANT1	5290	21.6	25.39	24	30
11AC80	ANT2	5290	21.69	25.51	24	30
11AC80	ANT1	5530	21.53	25.32	24	24
11AC80	ANT2	5530	21.66	25.48	24	24
11AC80	ANT1	5775	21.33	25.12	30	30
11AC80	ANT2	5775	21.47	25.29	30	30

### 11A ANT1\_5180



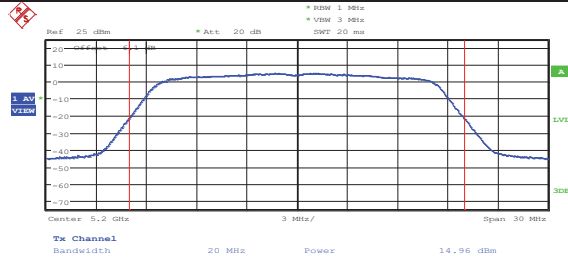
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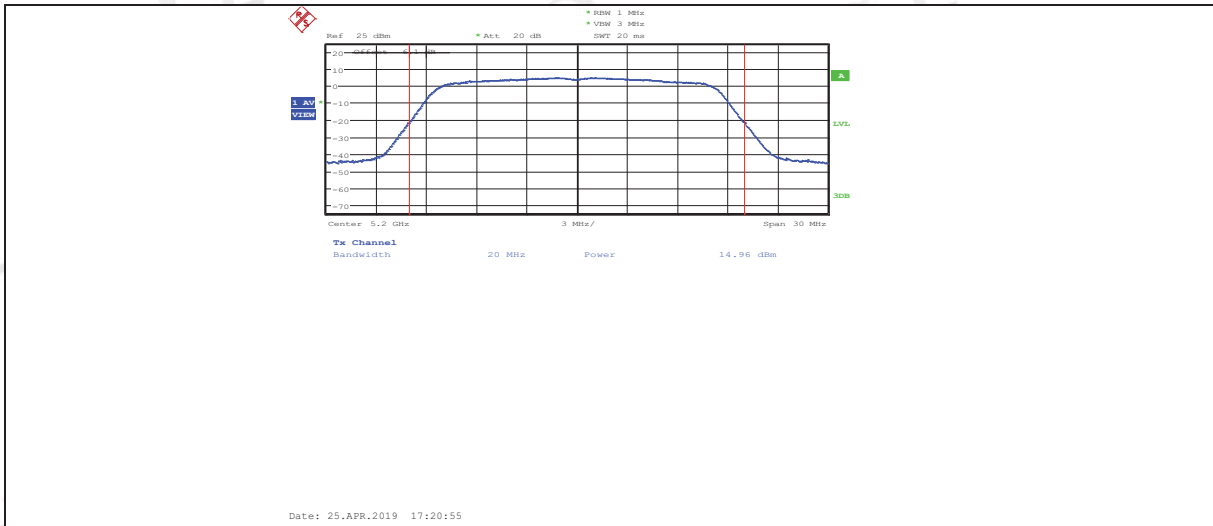
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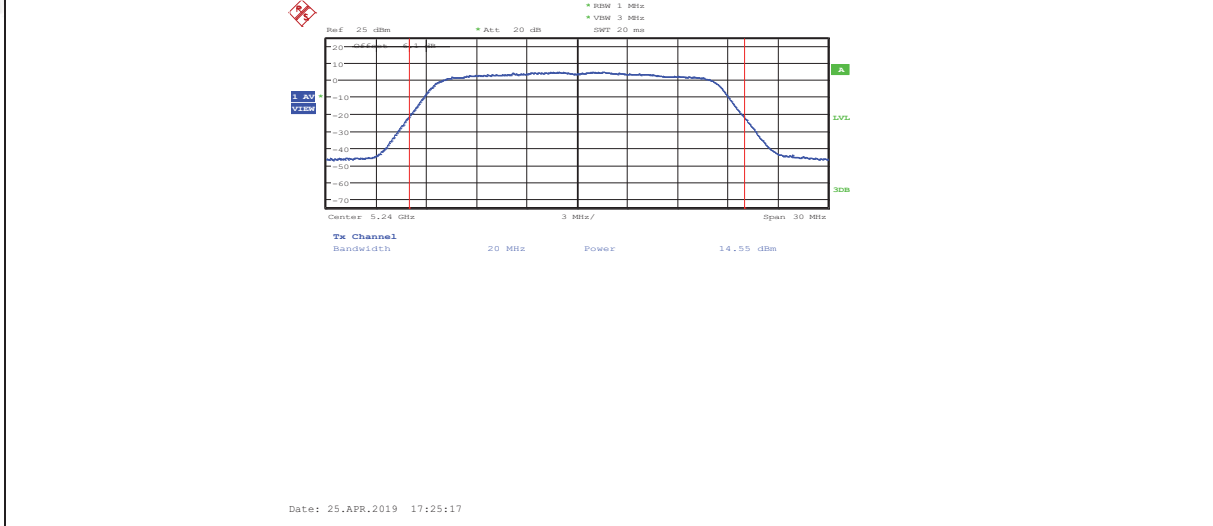


Date: 25.APR.2019 17:19:57

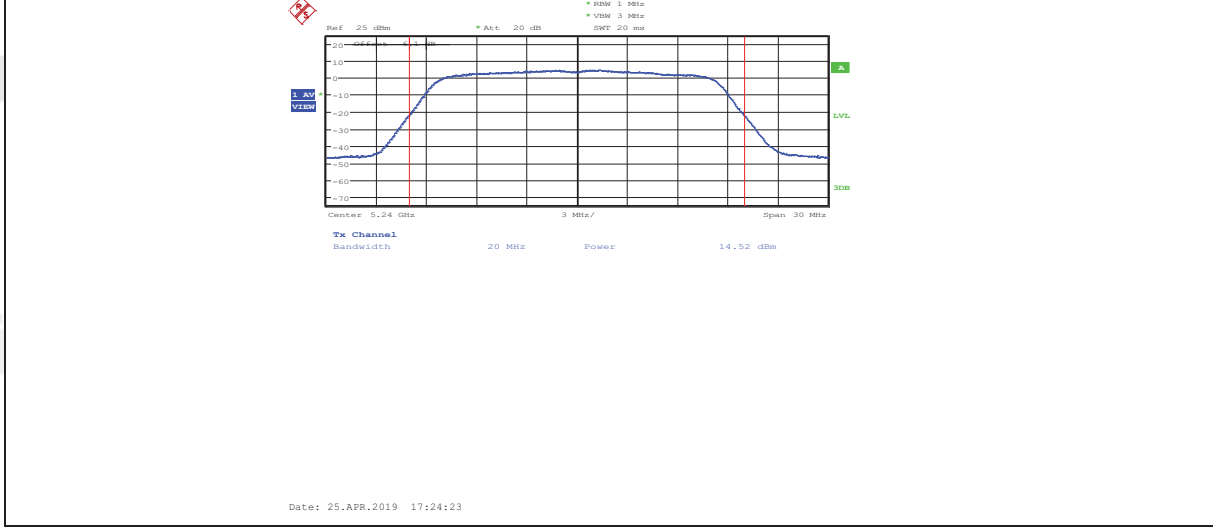
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11A ANT1\_5240

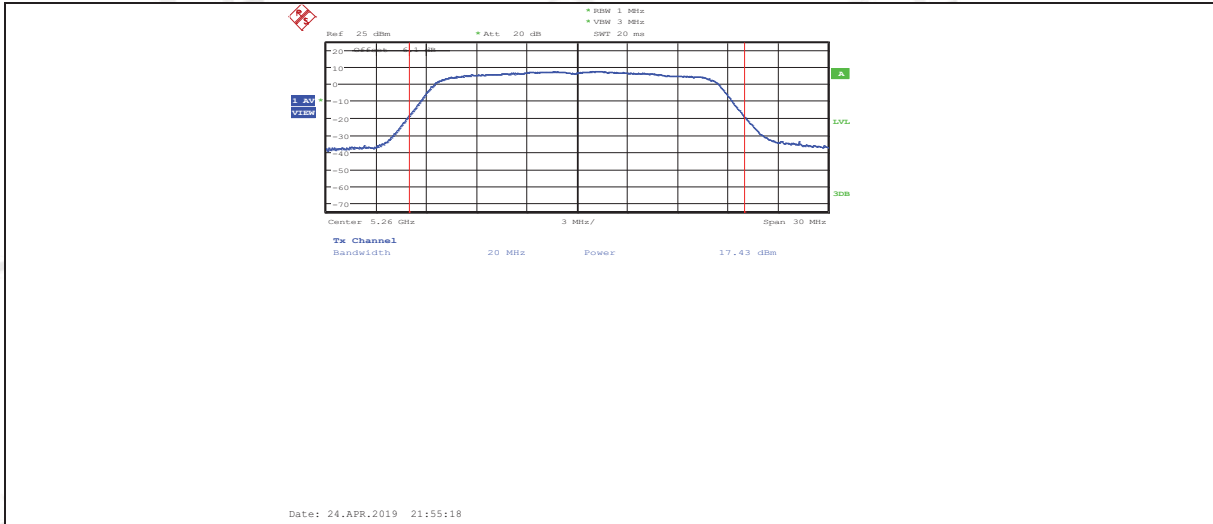


11A ANT2\_5240

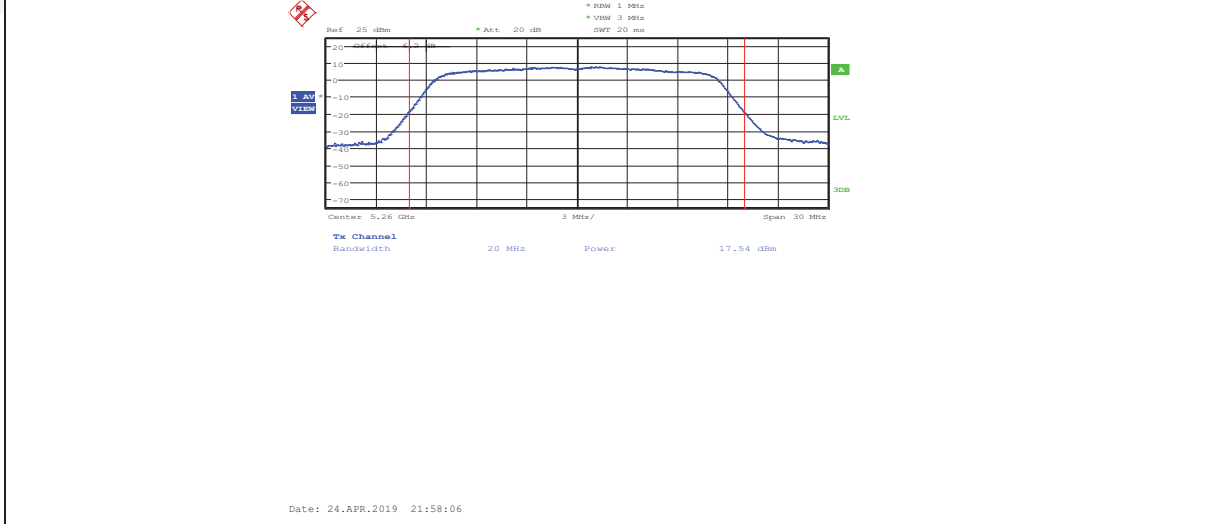


11A ANT1\_5260

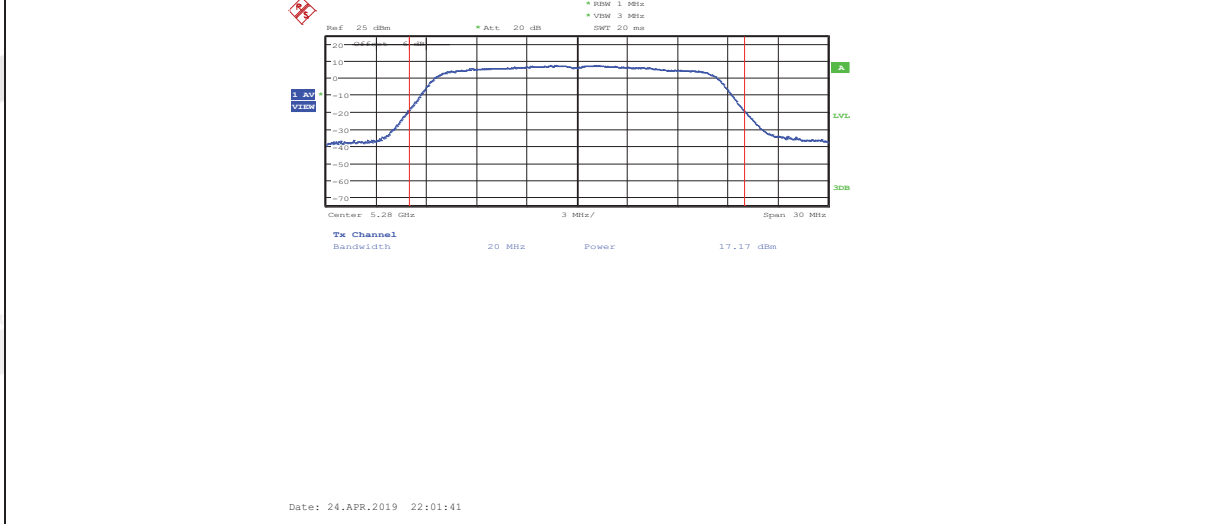




11A ANT2 5260

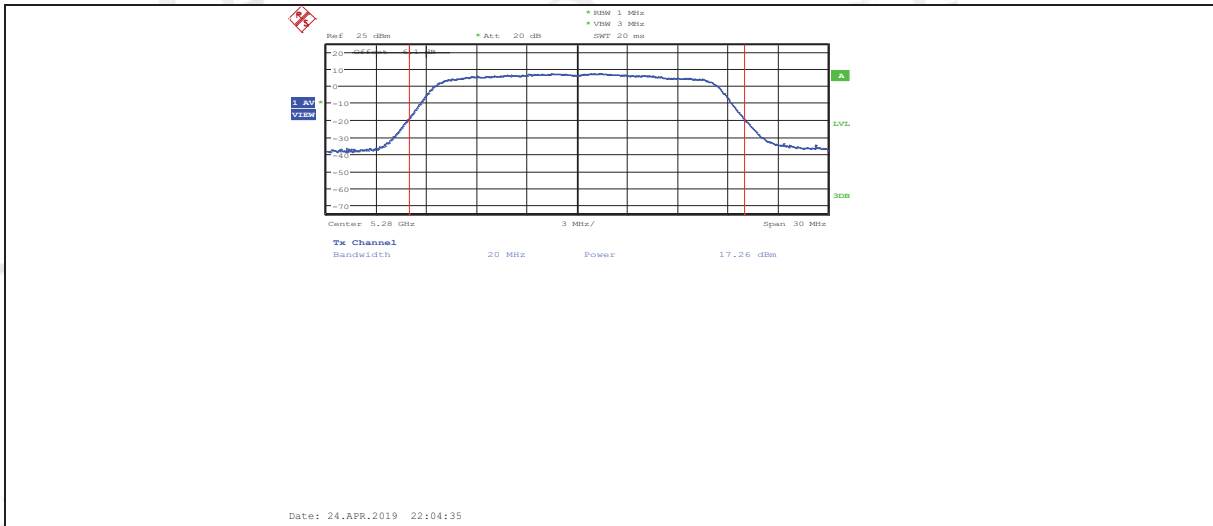


11A ANT1 5280

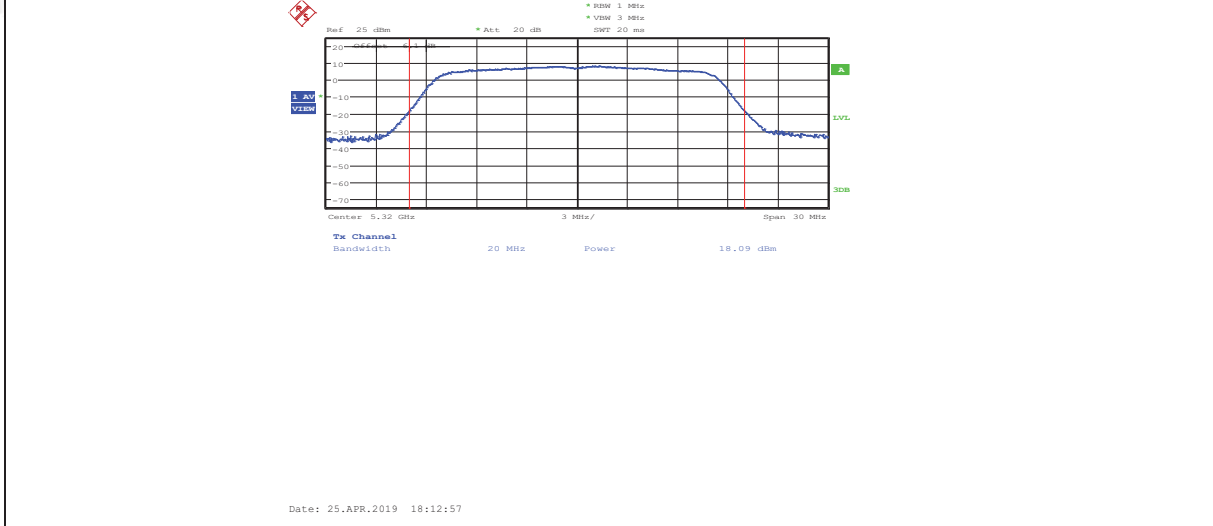


11A ANT2 5280

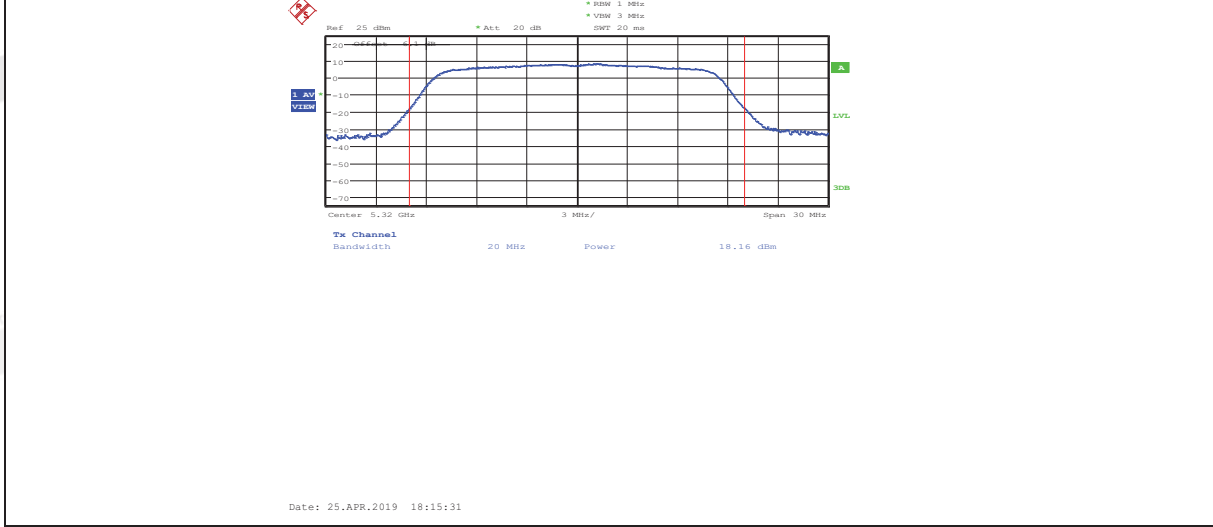




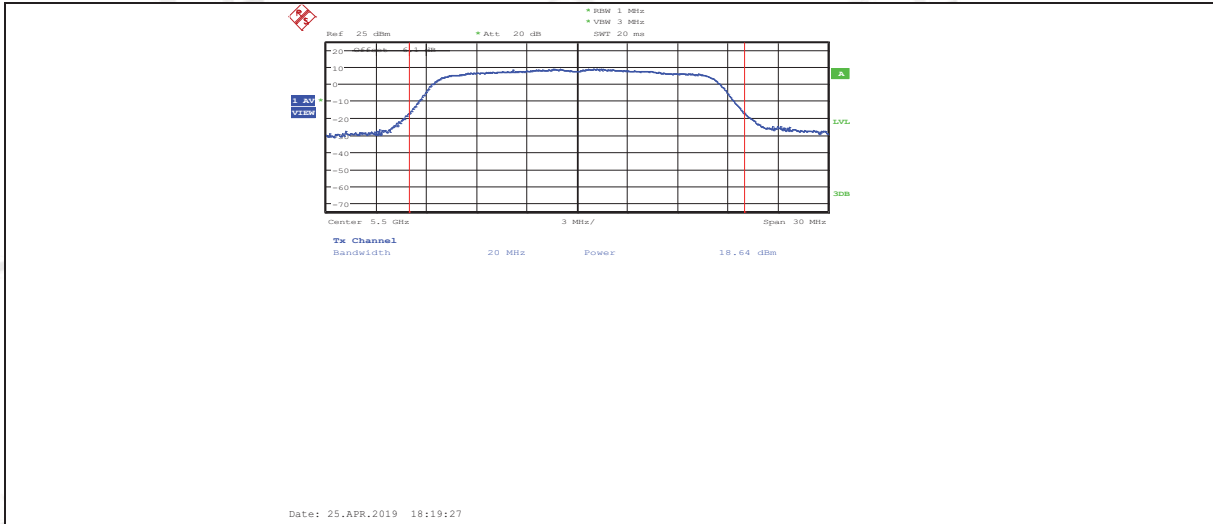
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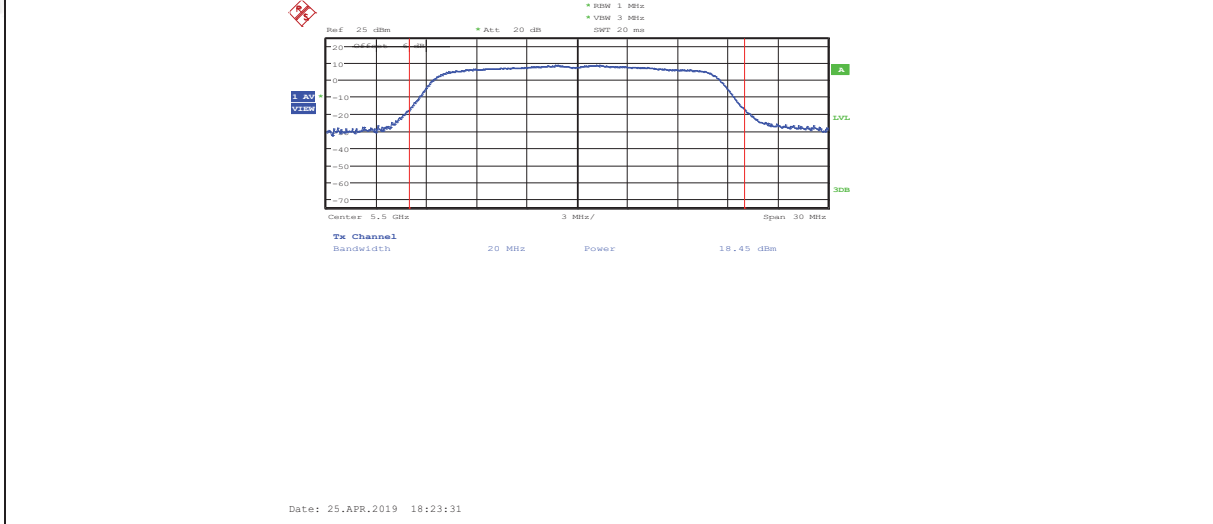
11A ANT2\_5320



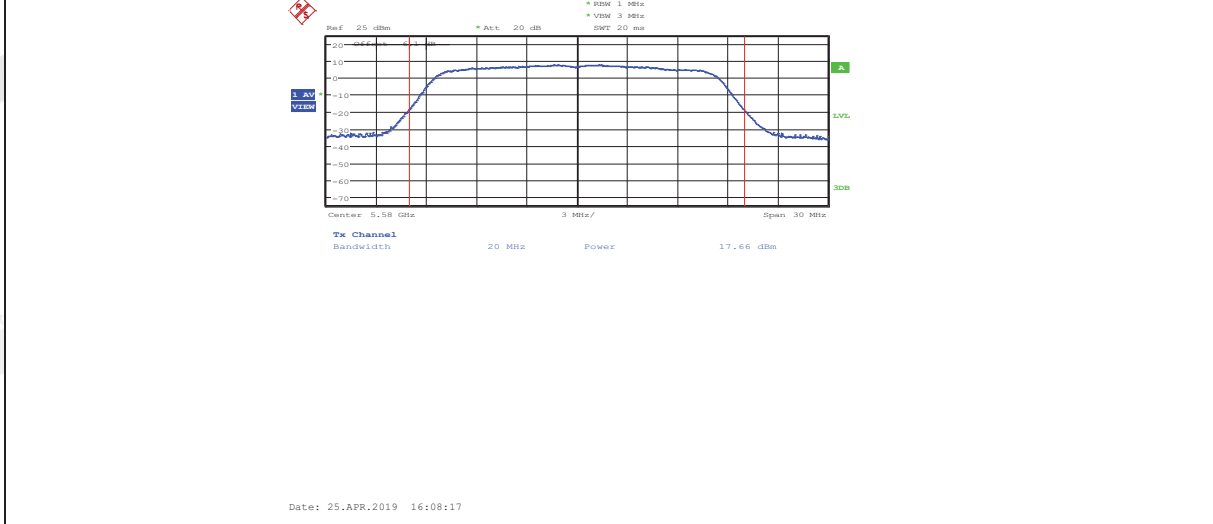
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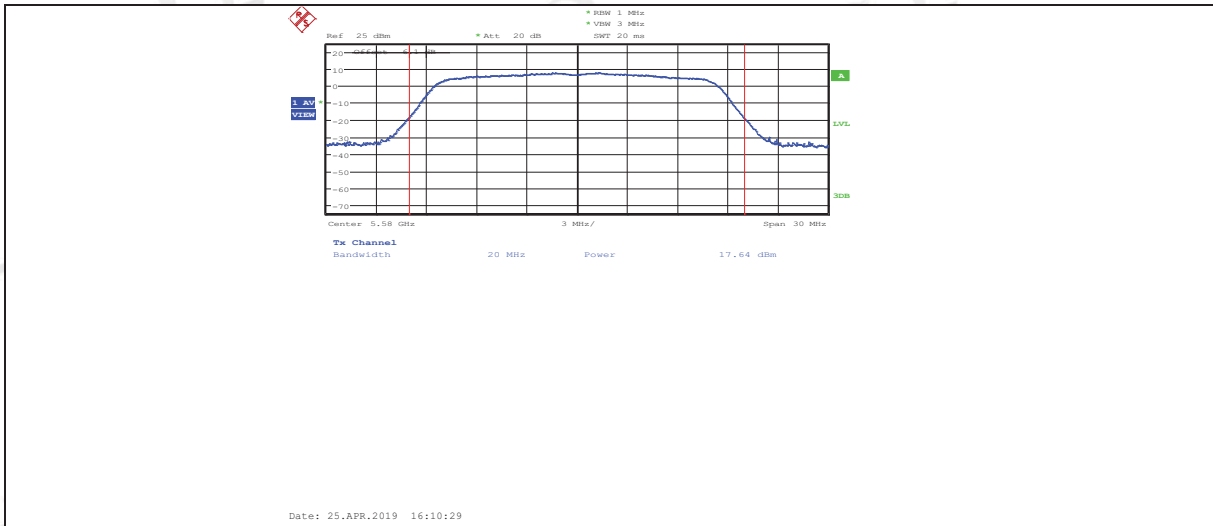
11A ANT2 5500



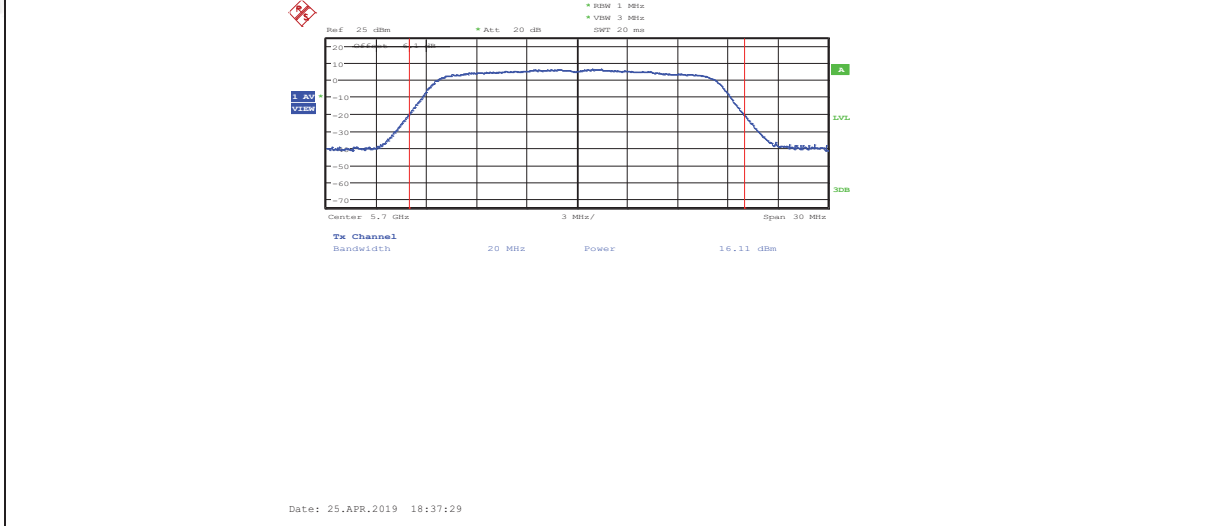
11A ANT1 5580



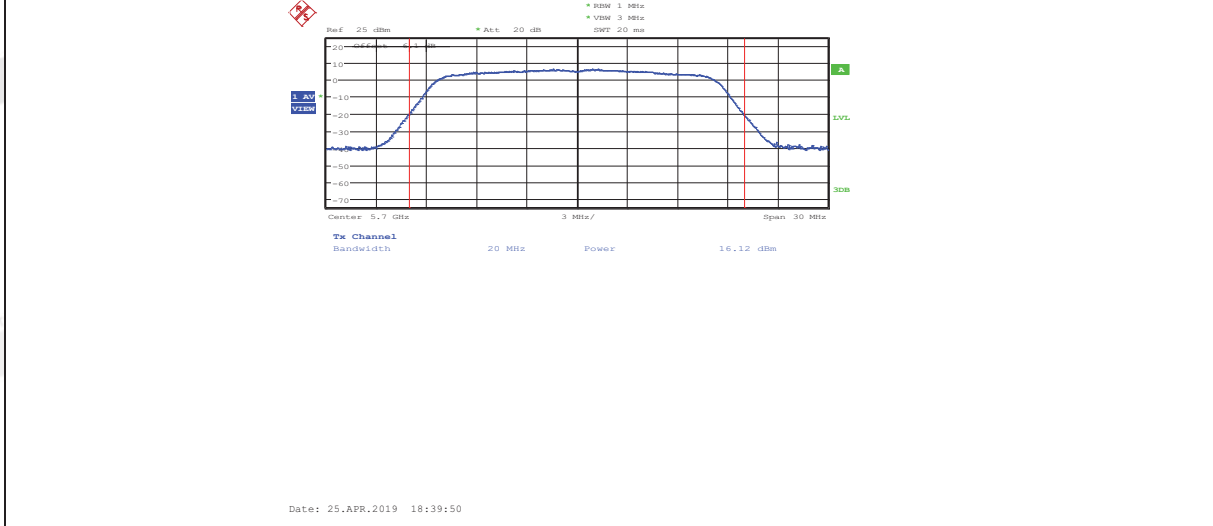
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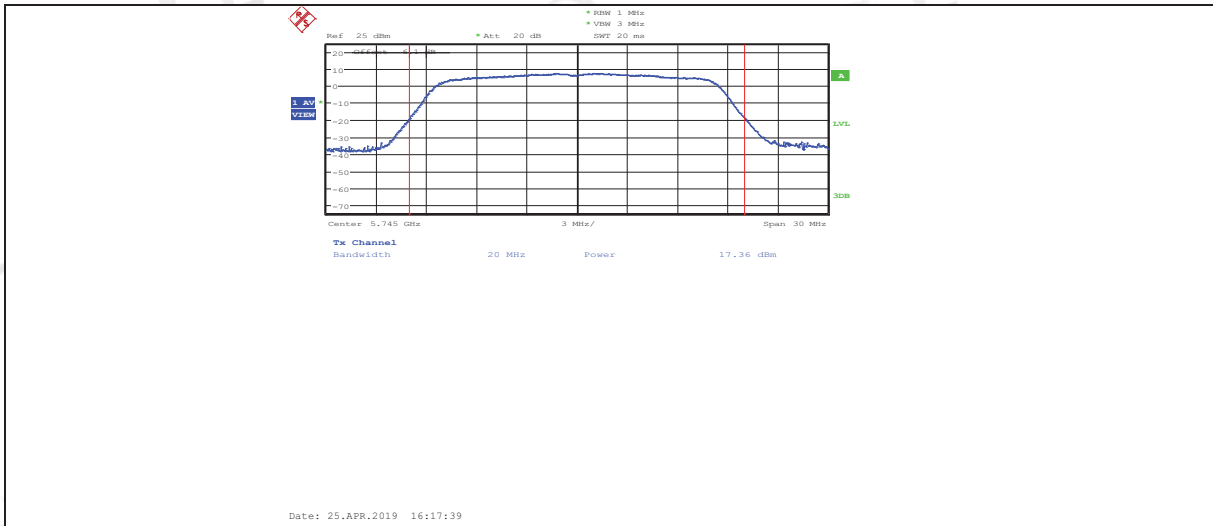
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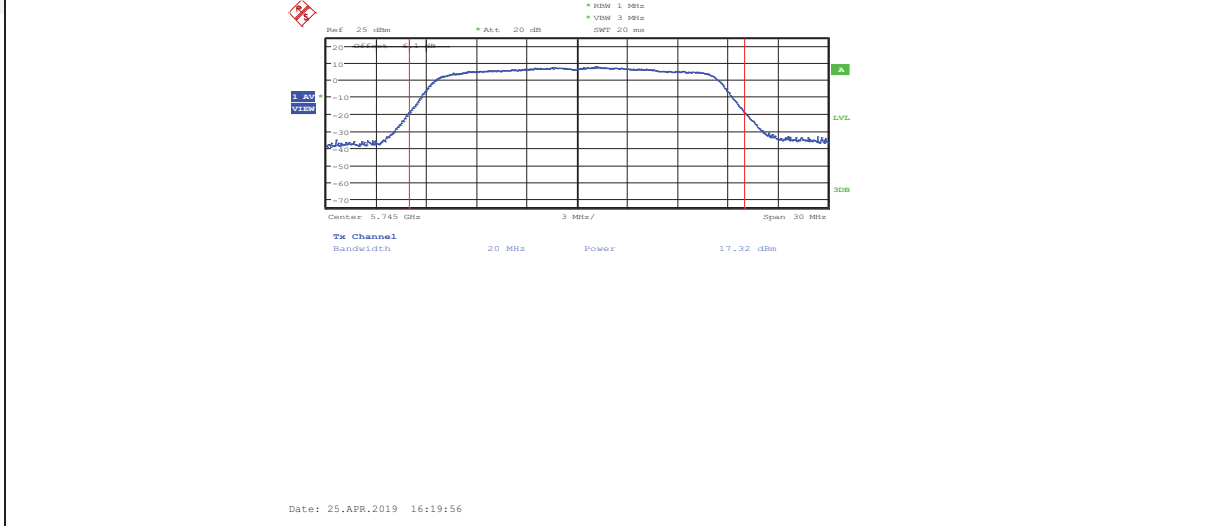
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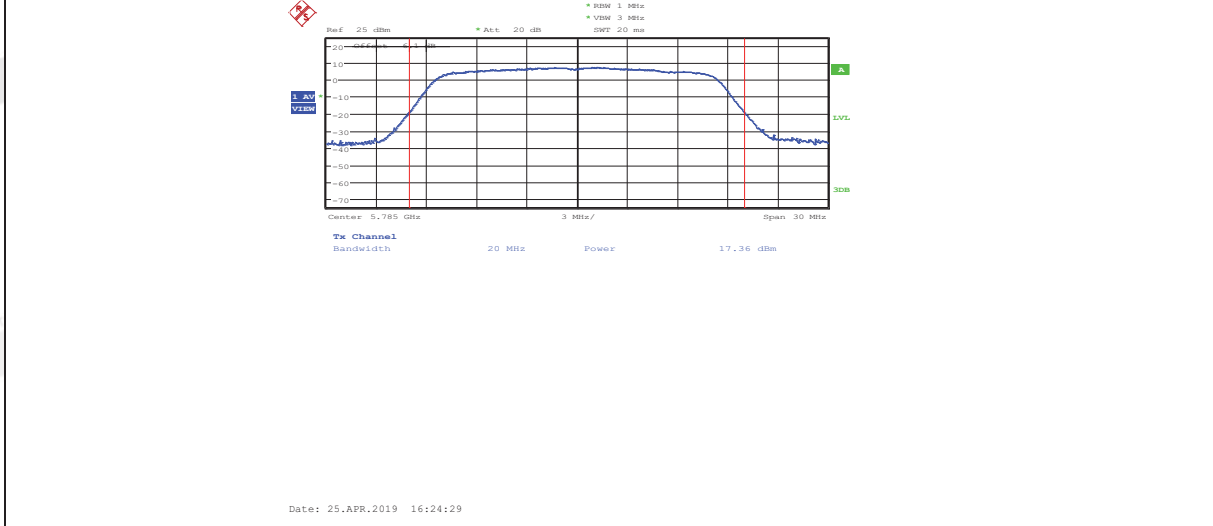
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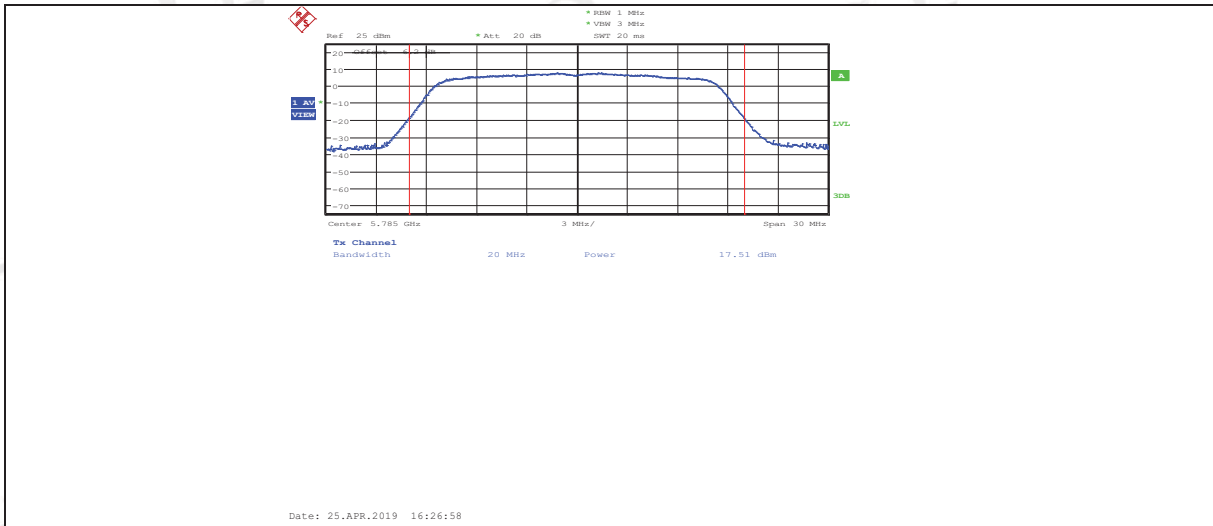
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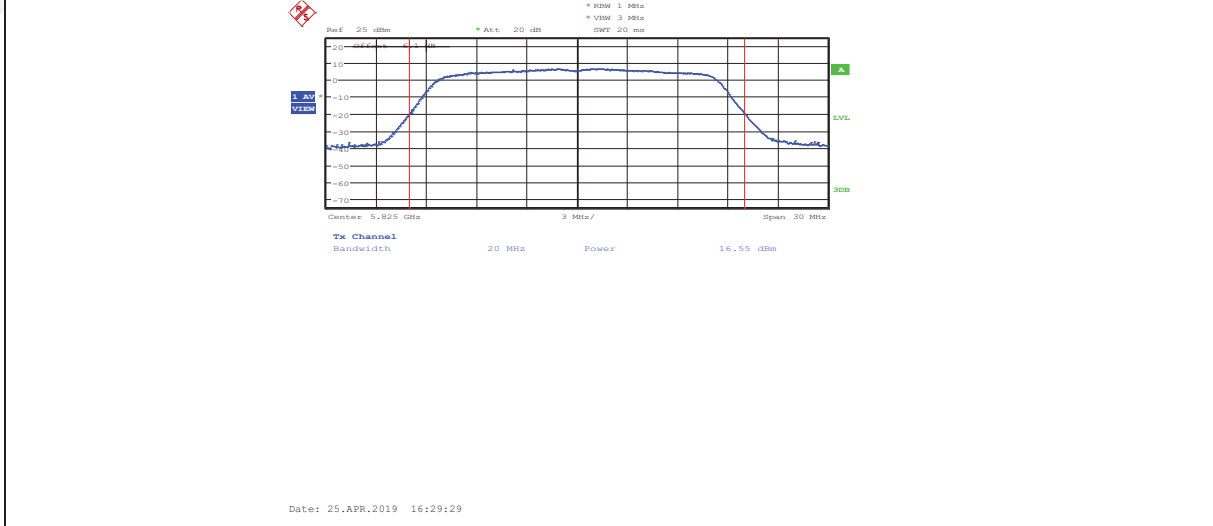
11A ANT1 5785



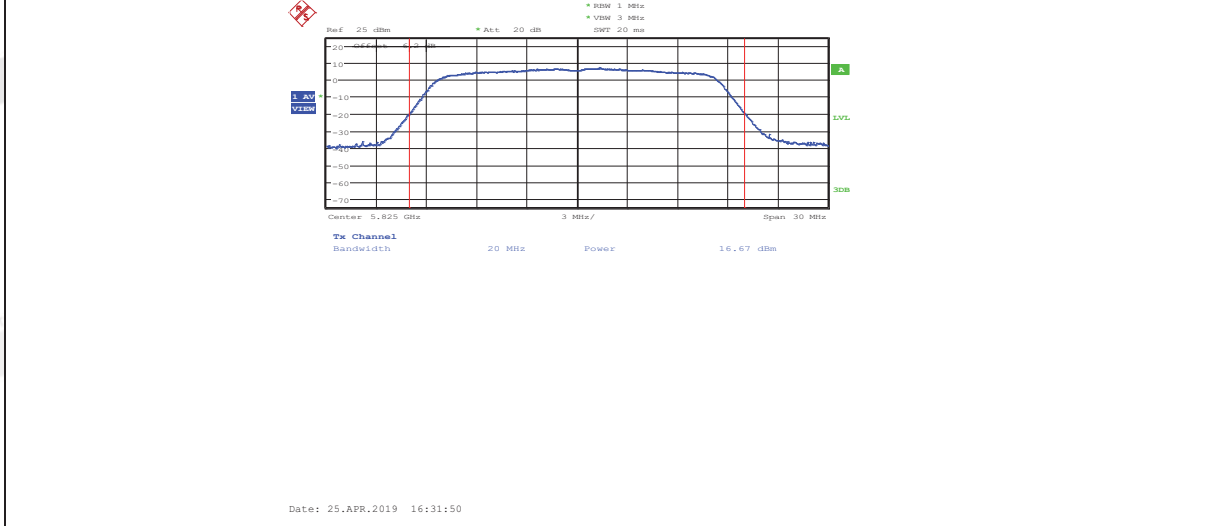
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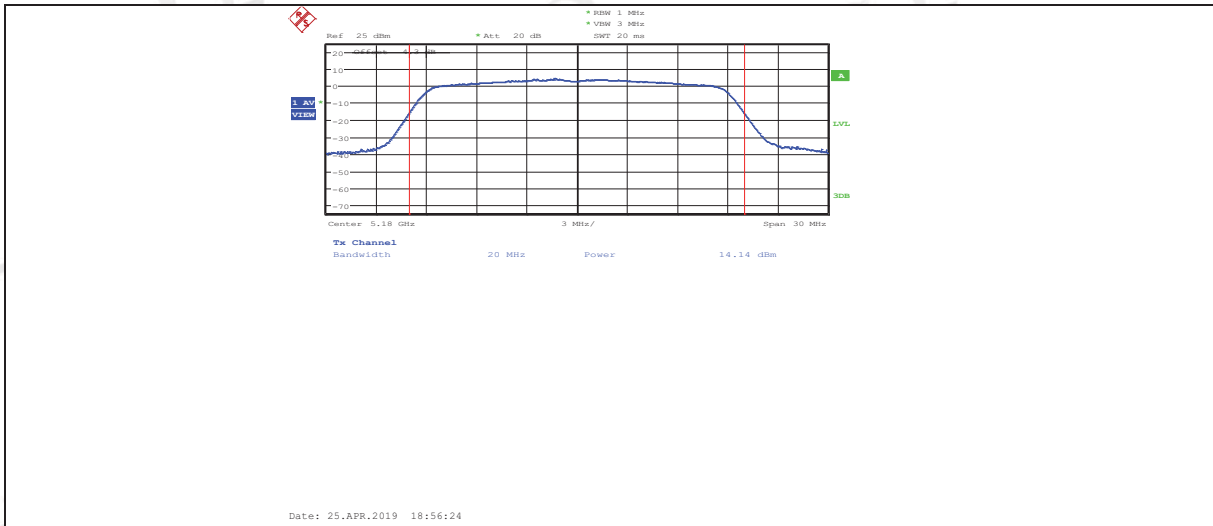
11A ANT1\_5825



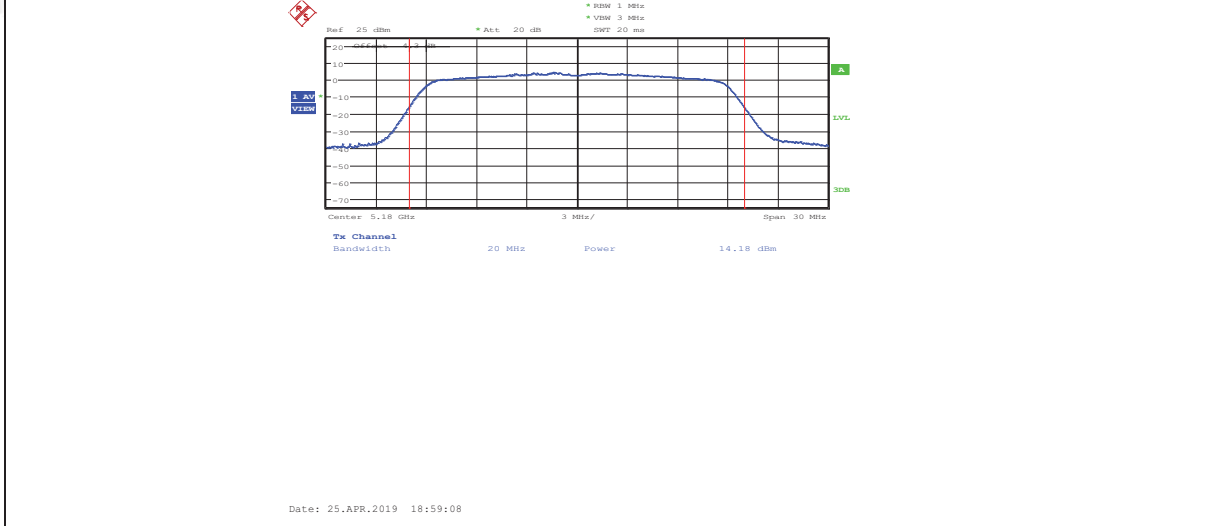
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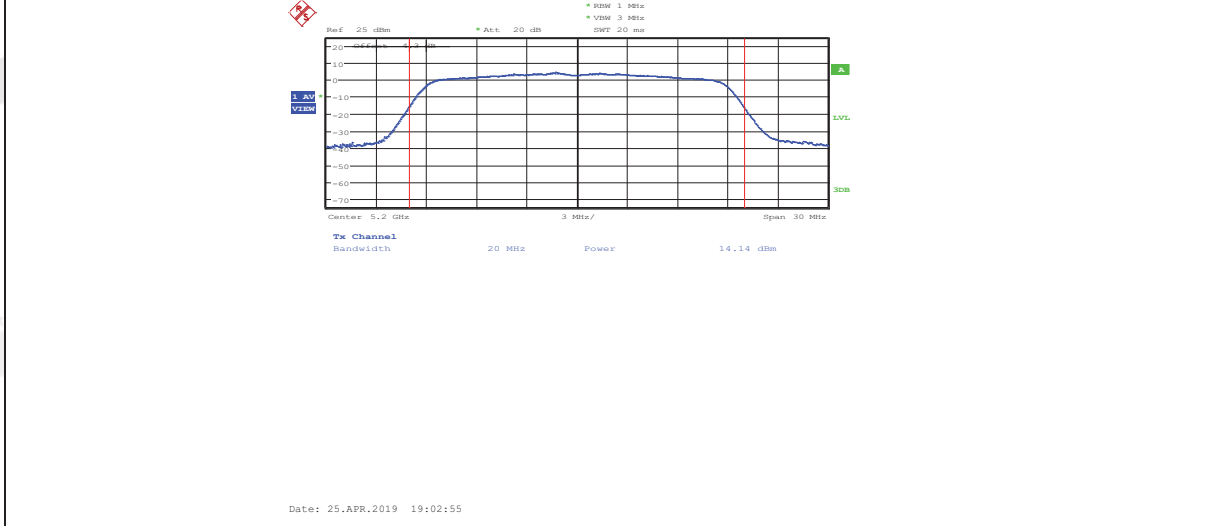
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11N20 ANT2 5180

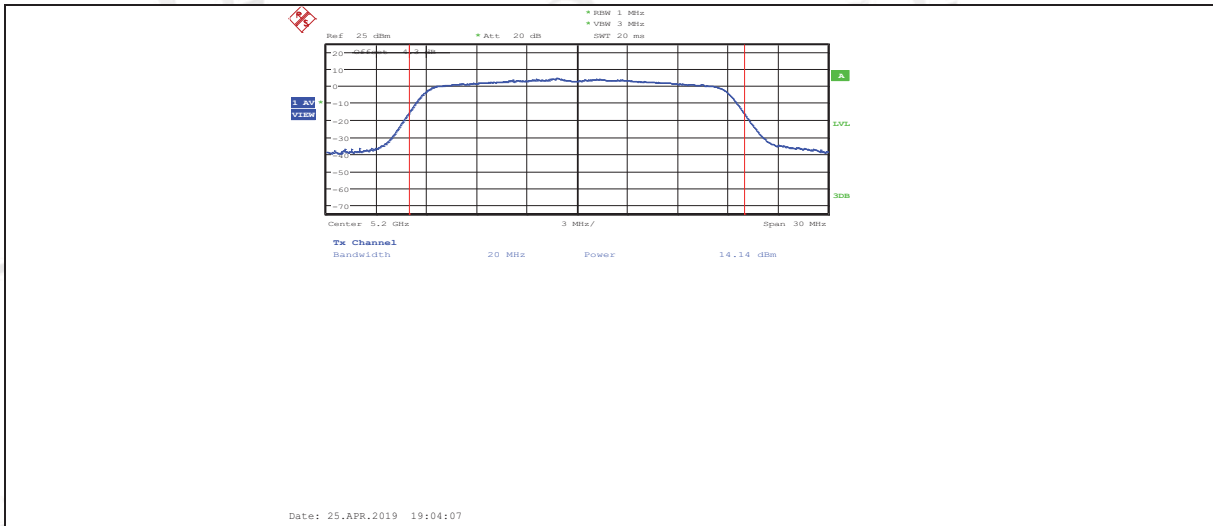


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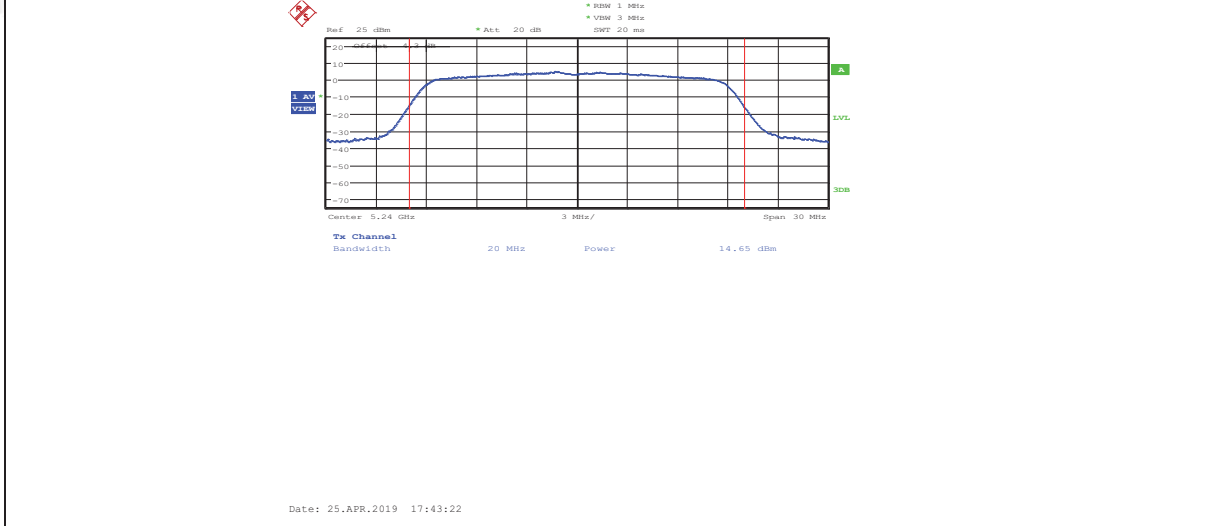


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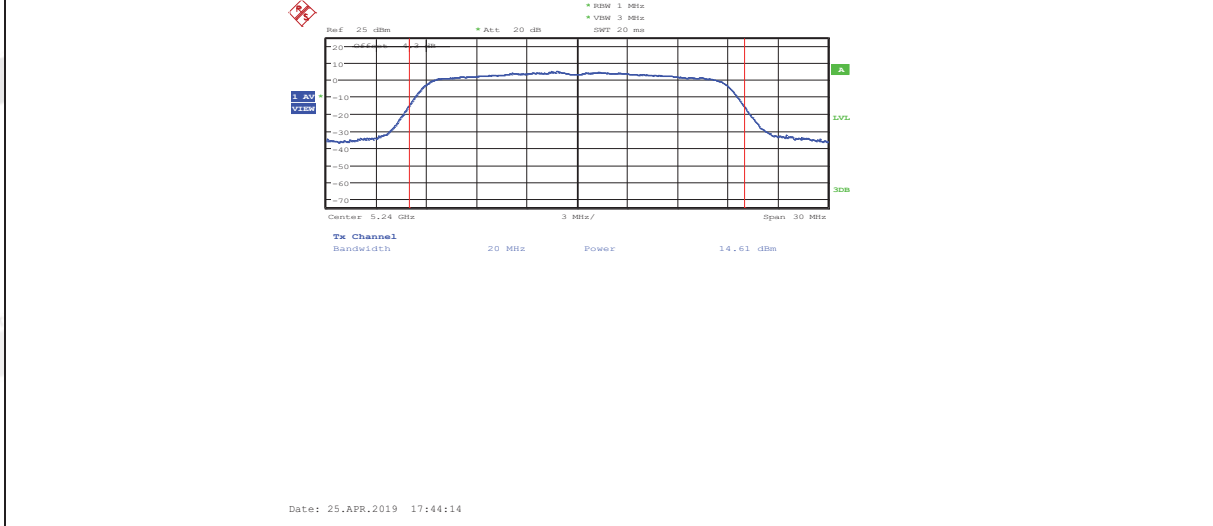




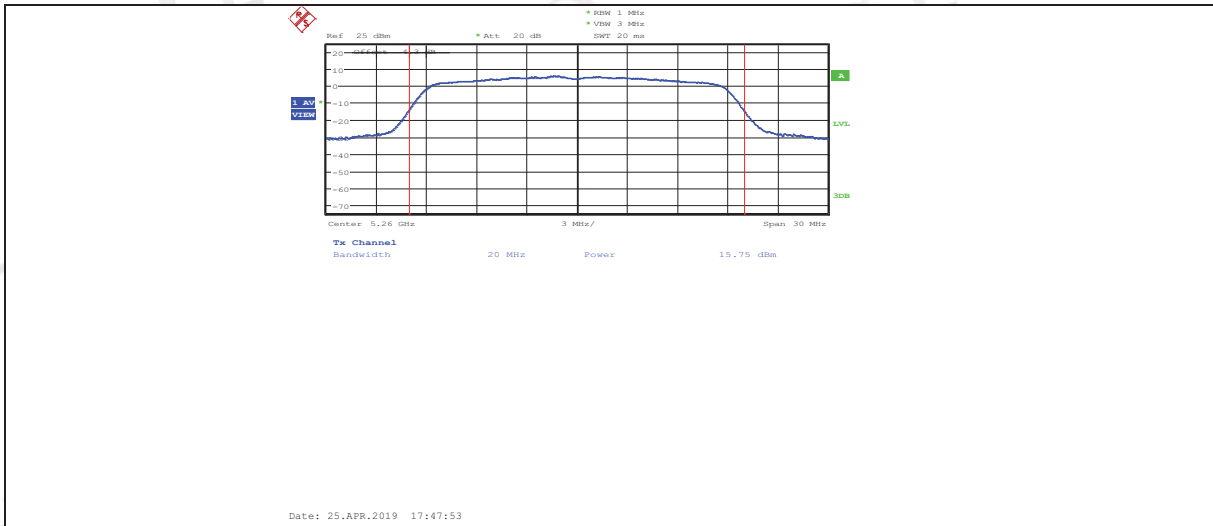
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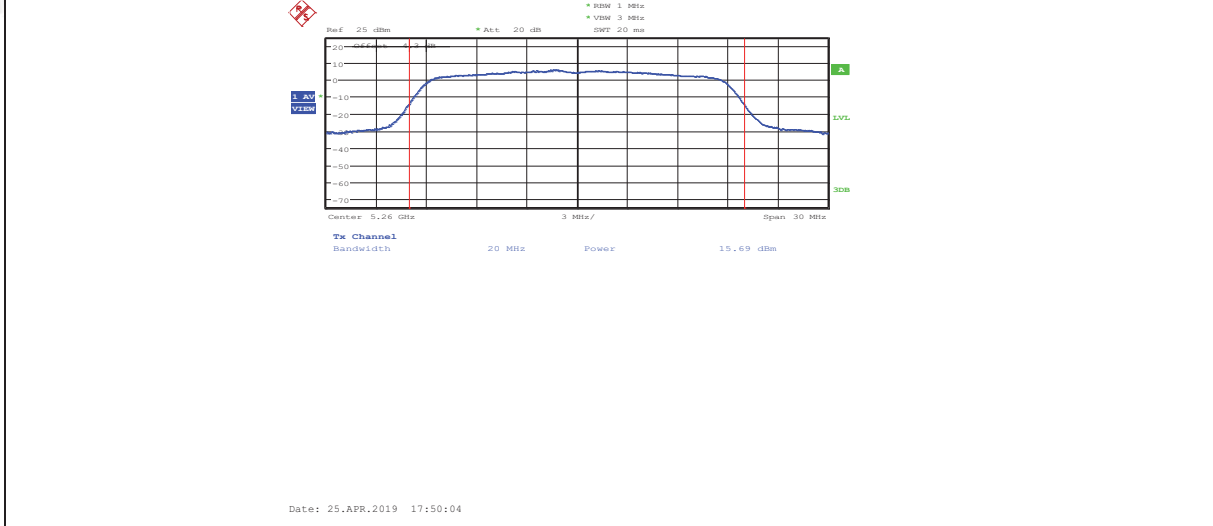
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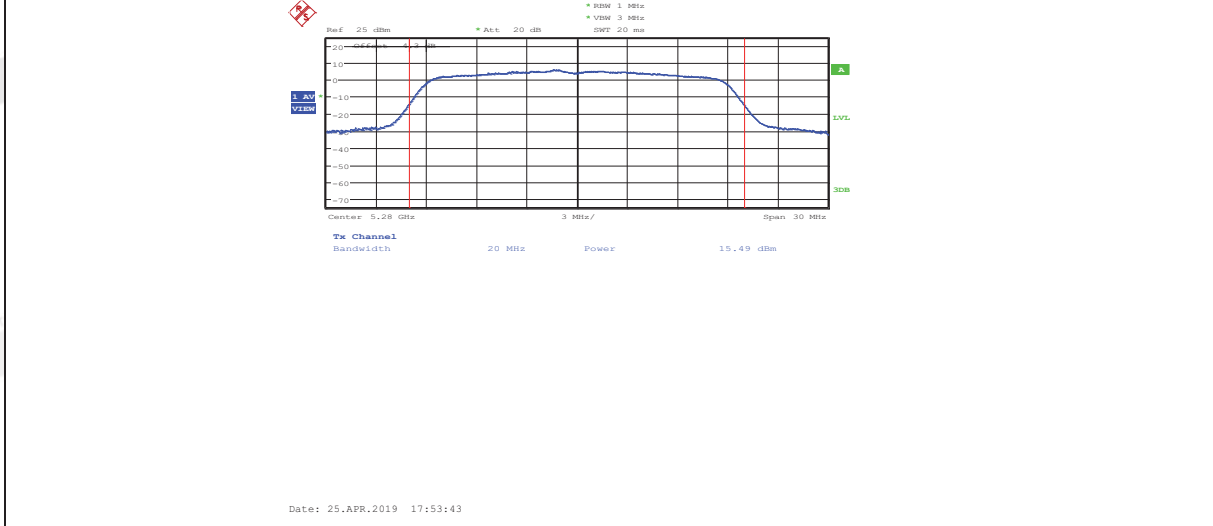
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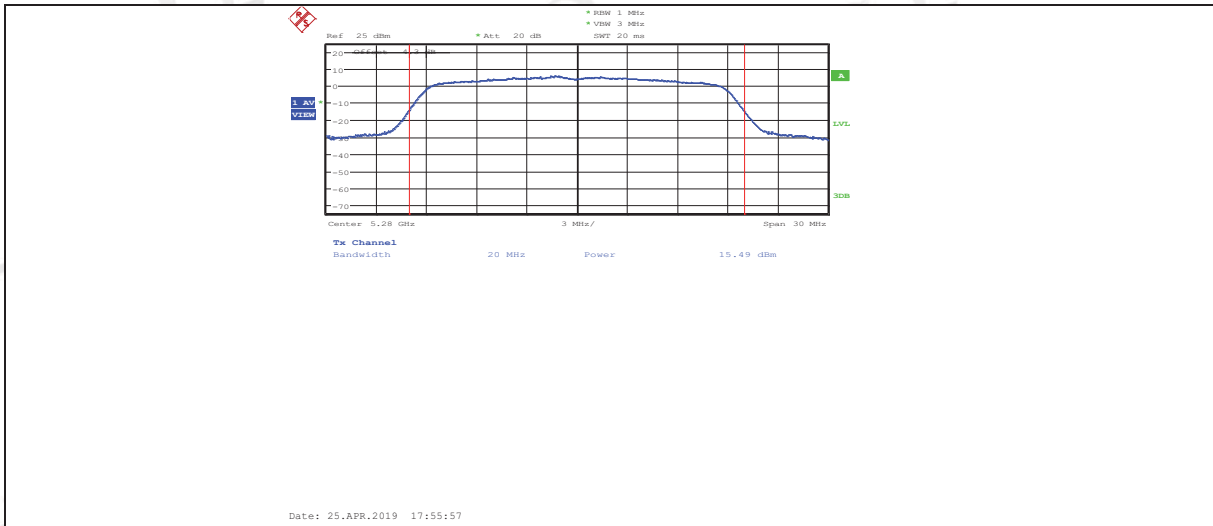
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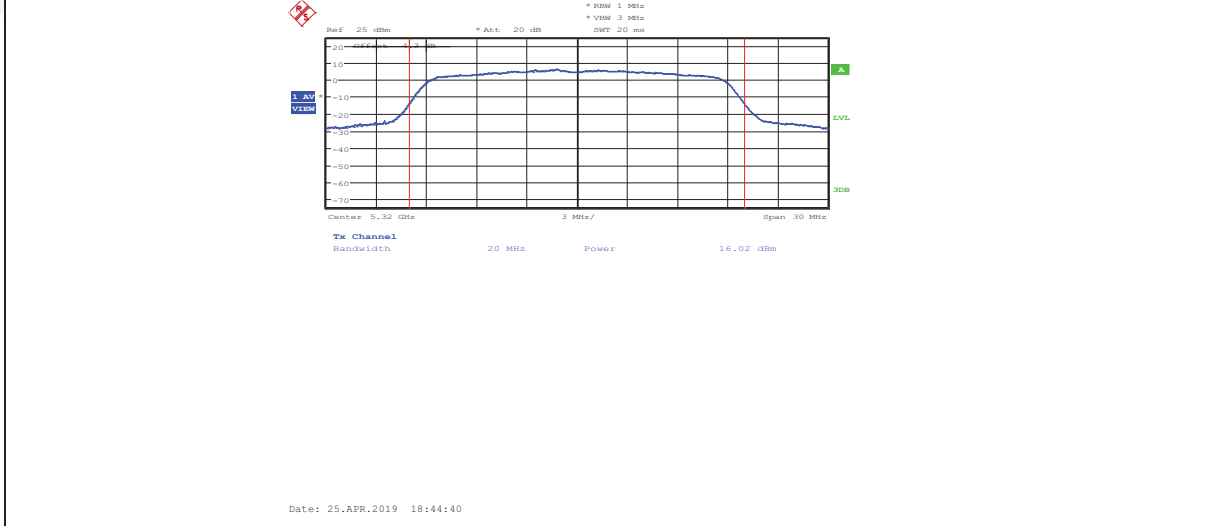
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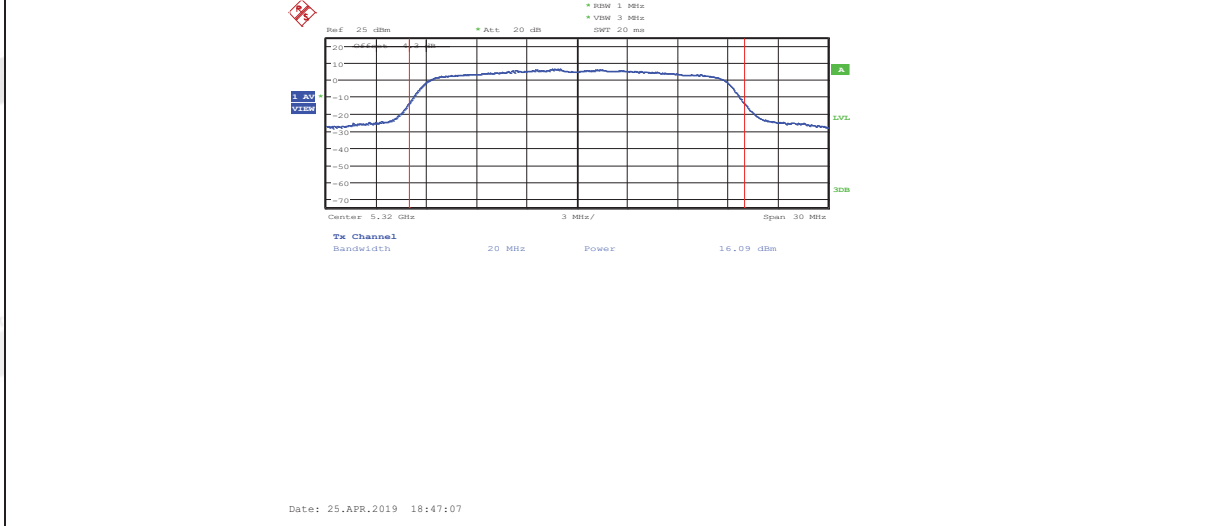
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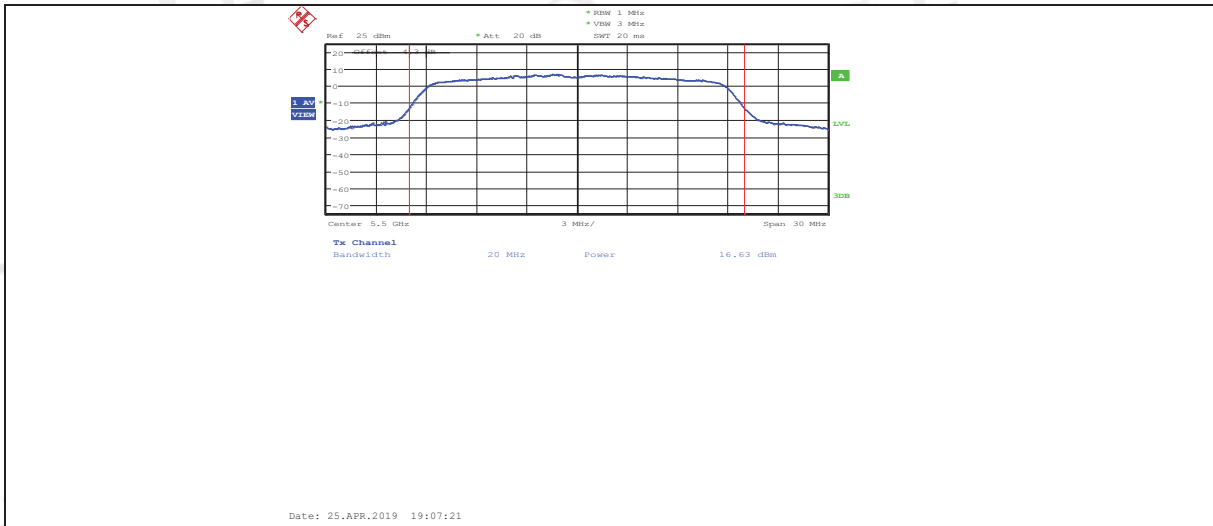
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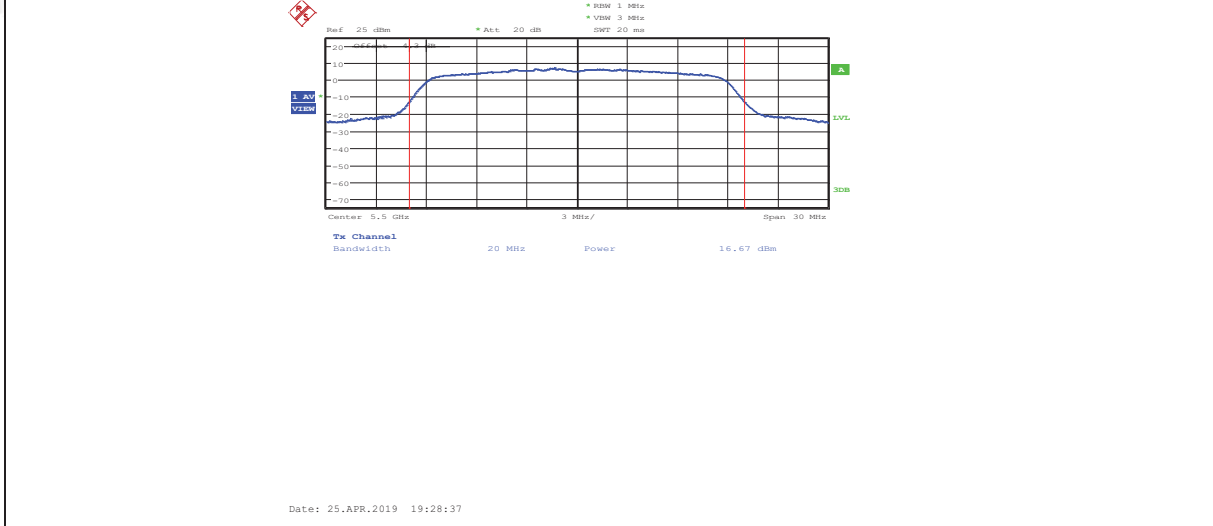
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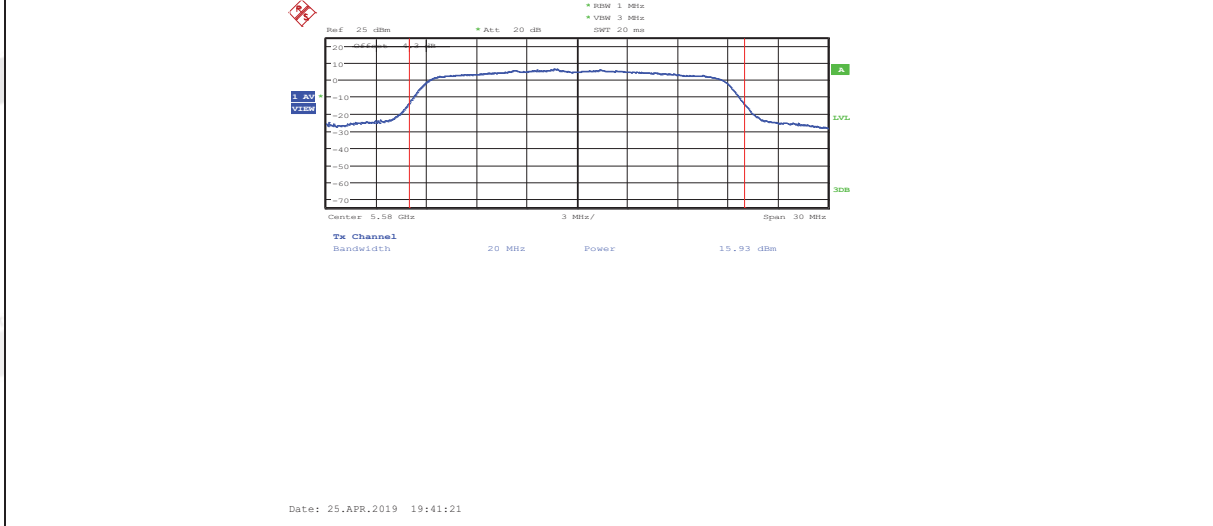
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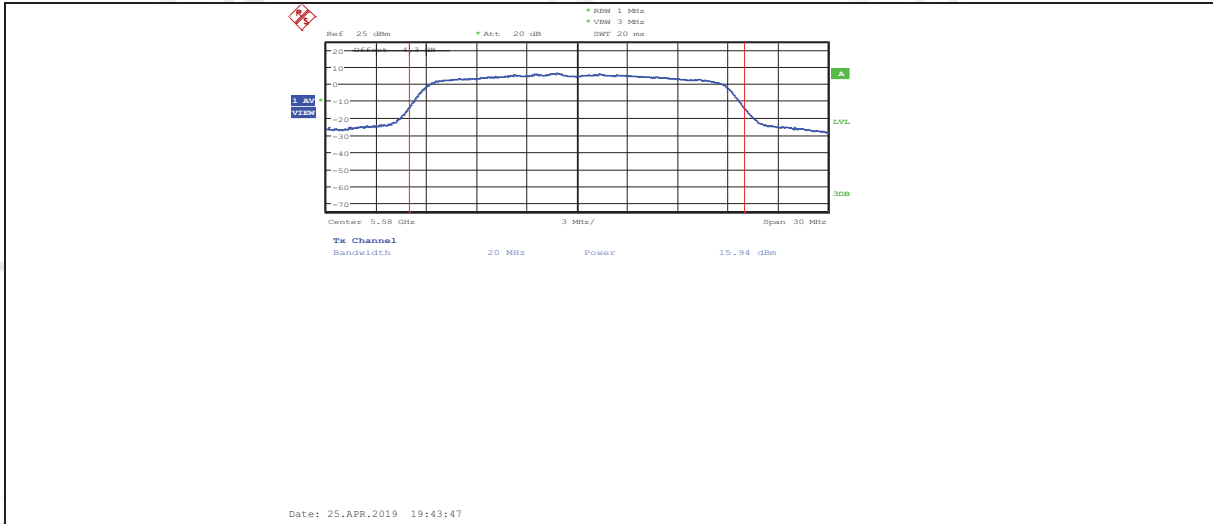
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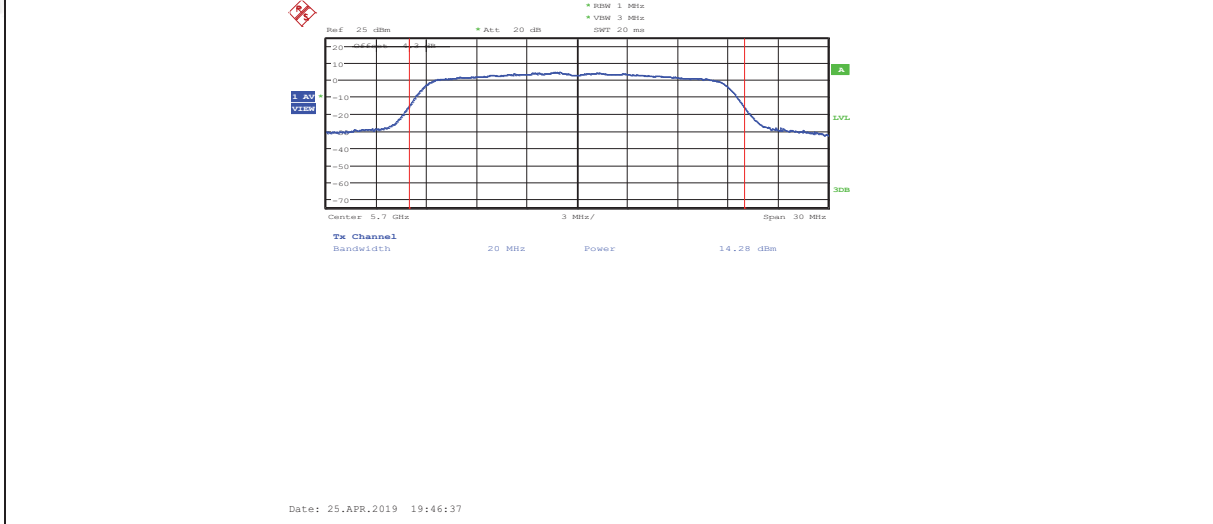
11N20 ANT1 5580



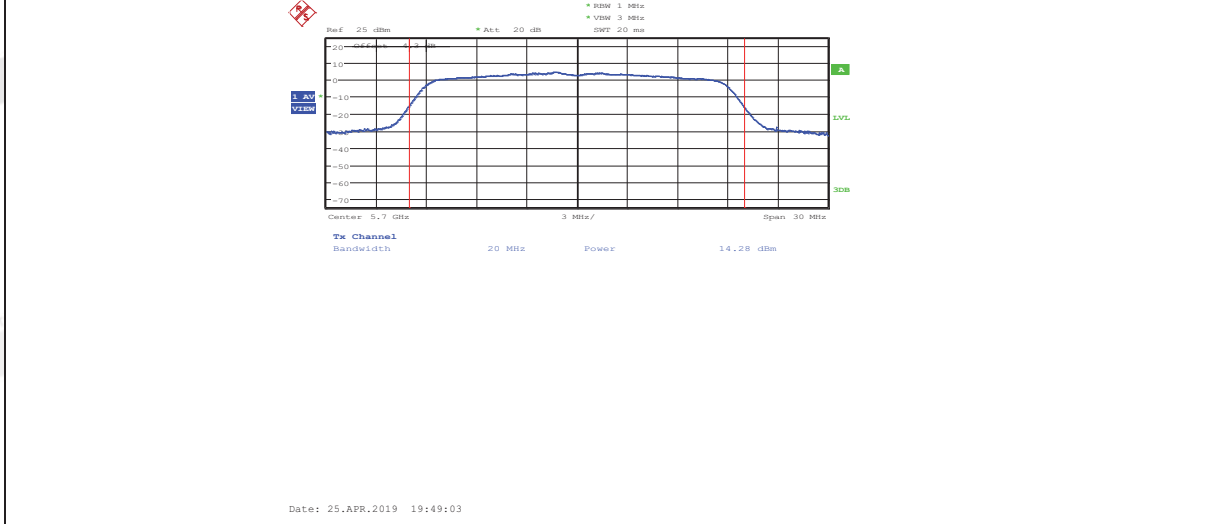
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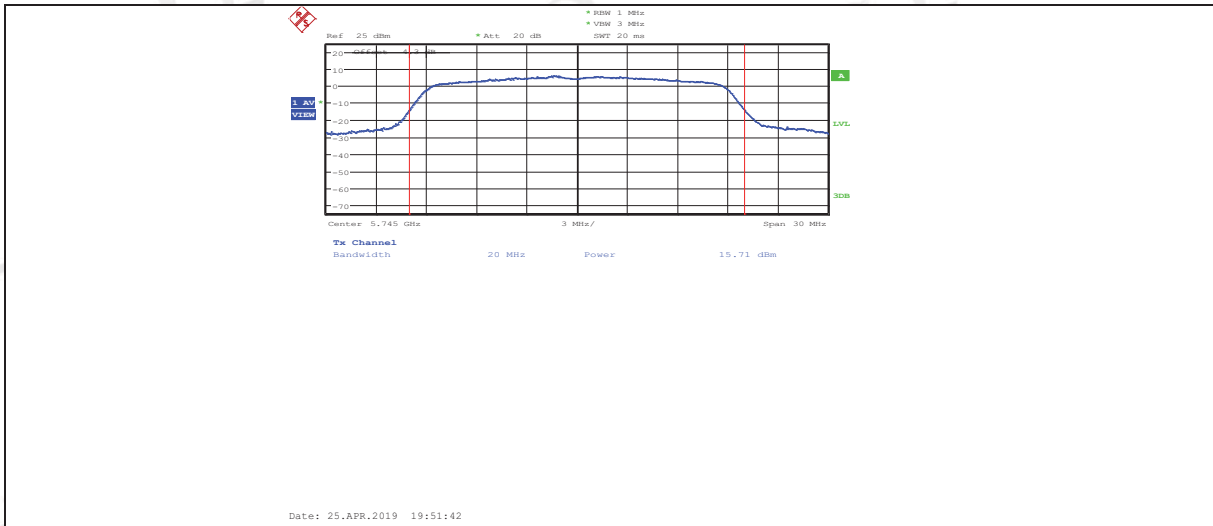
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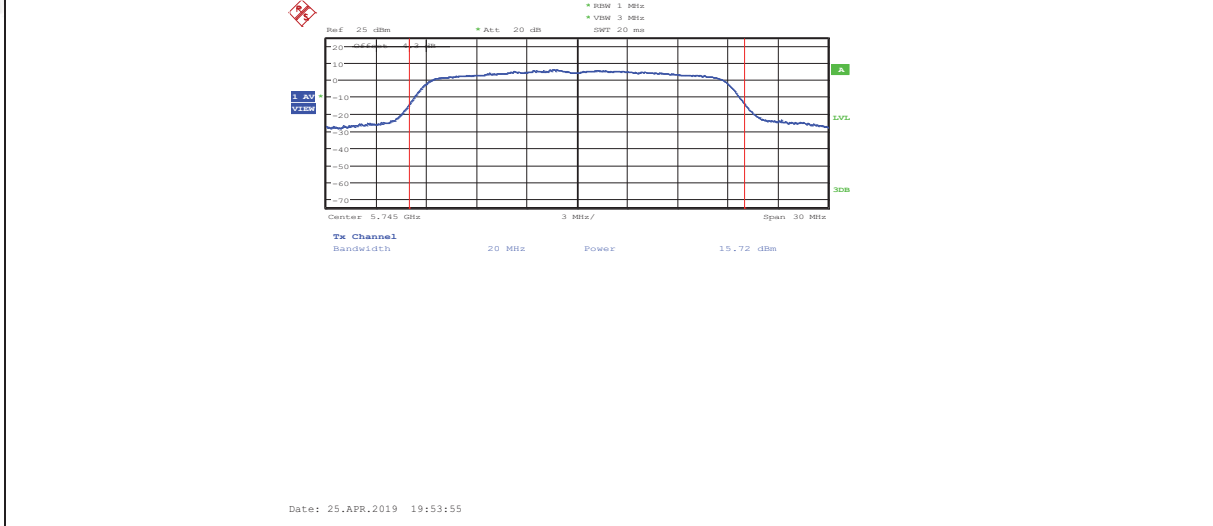
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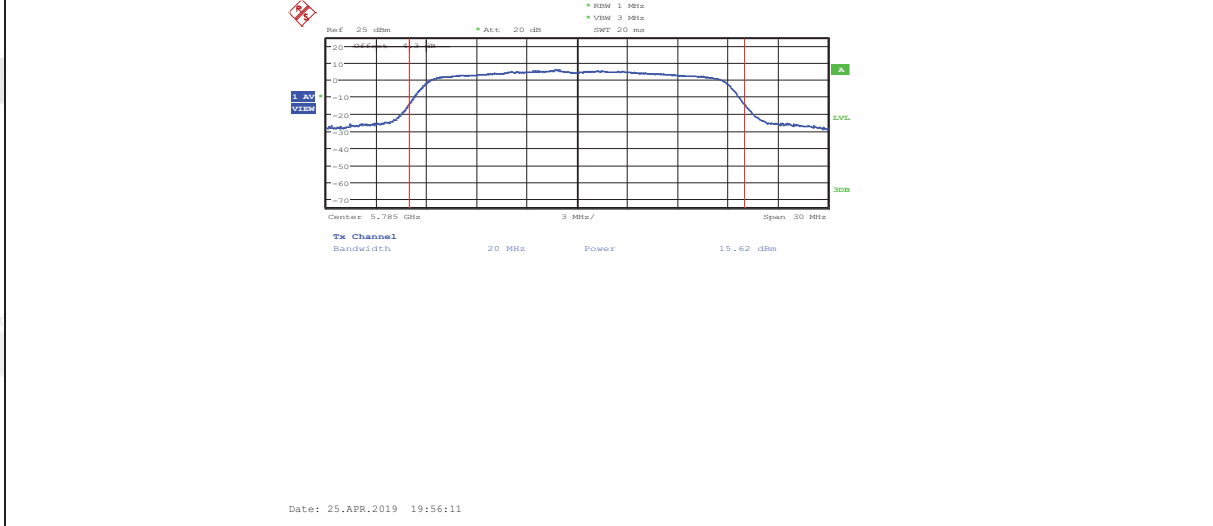
11N20 ANT1 5745



11N20 ANT2 5745

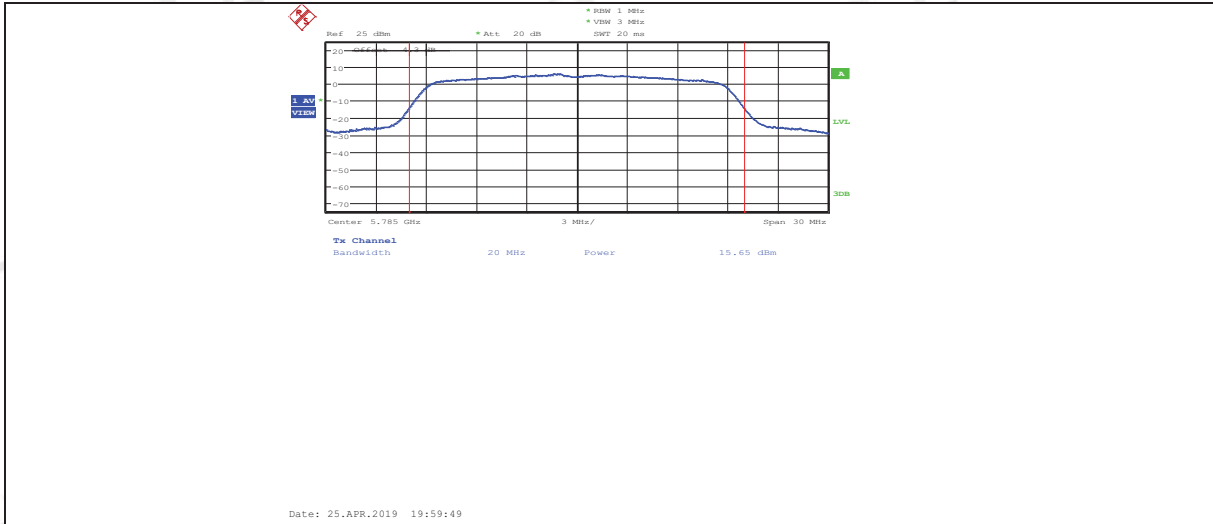


11N20 ANT1 5785

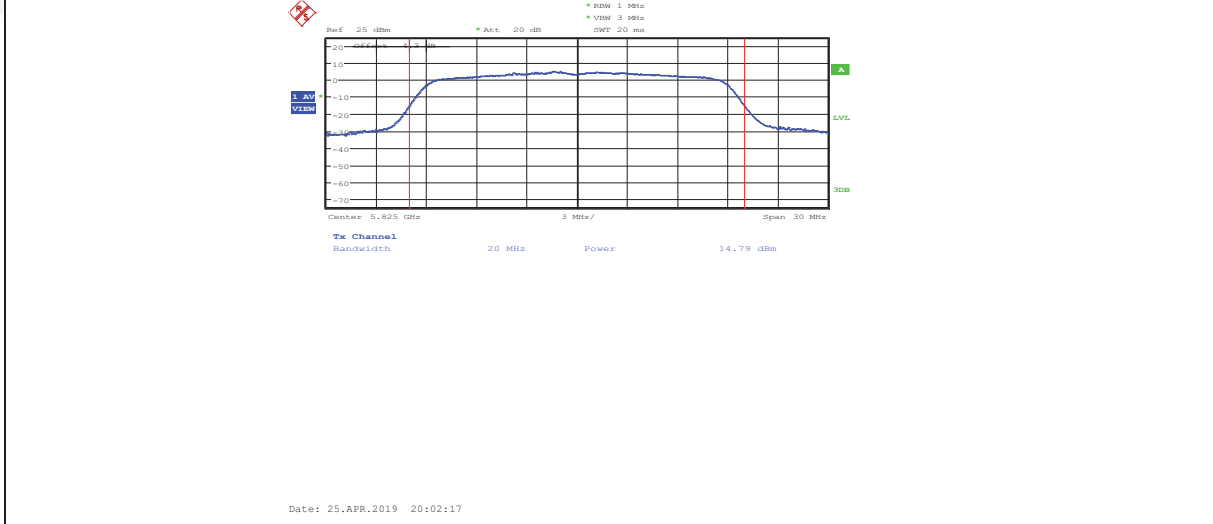


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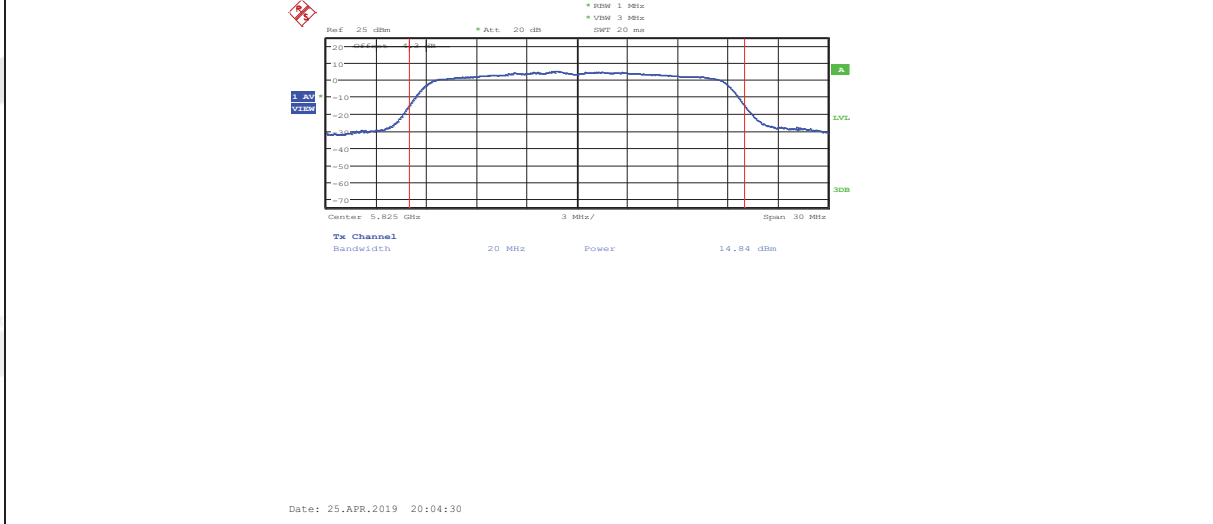




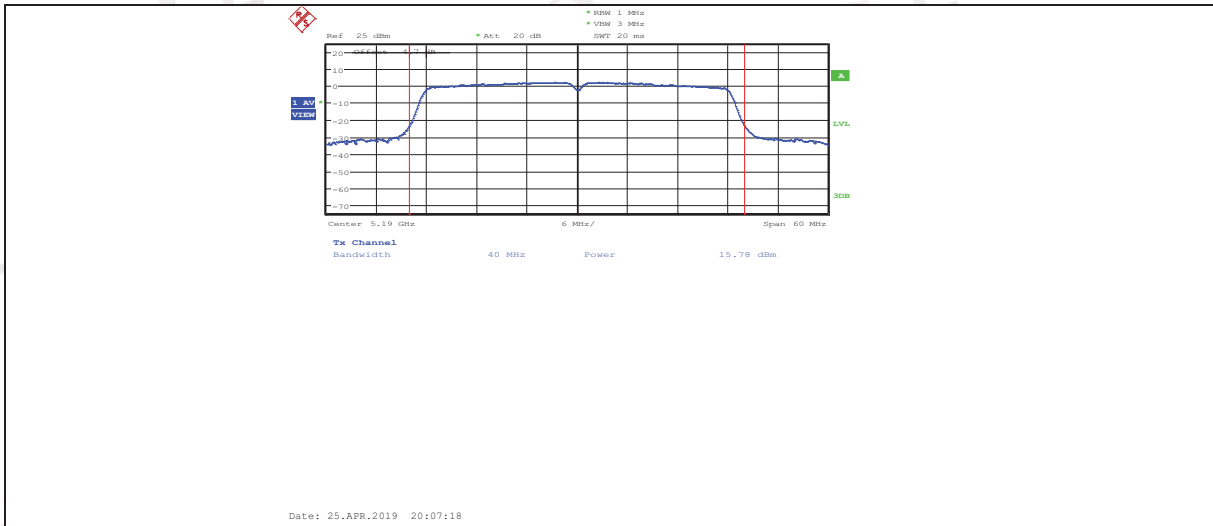
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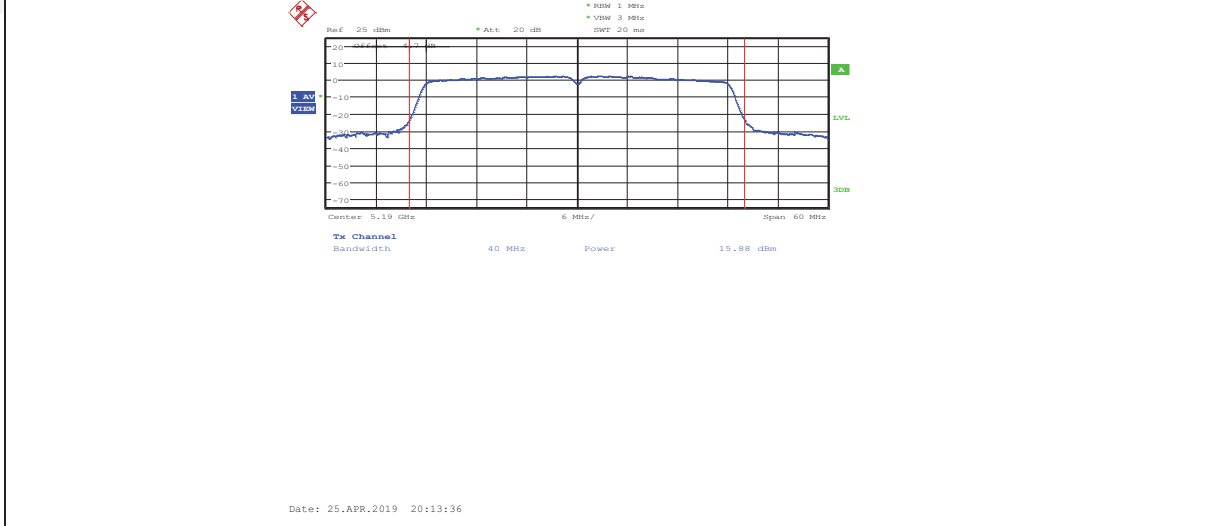
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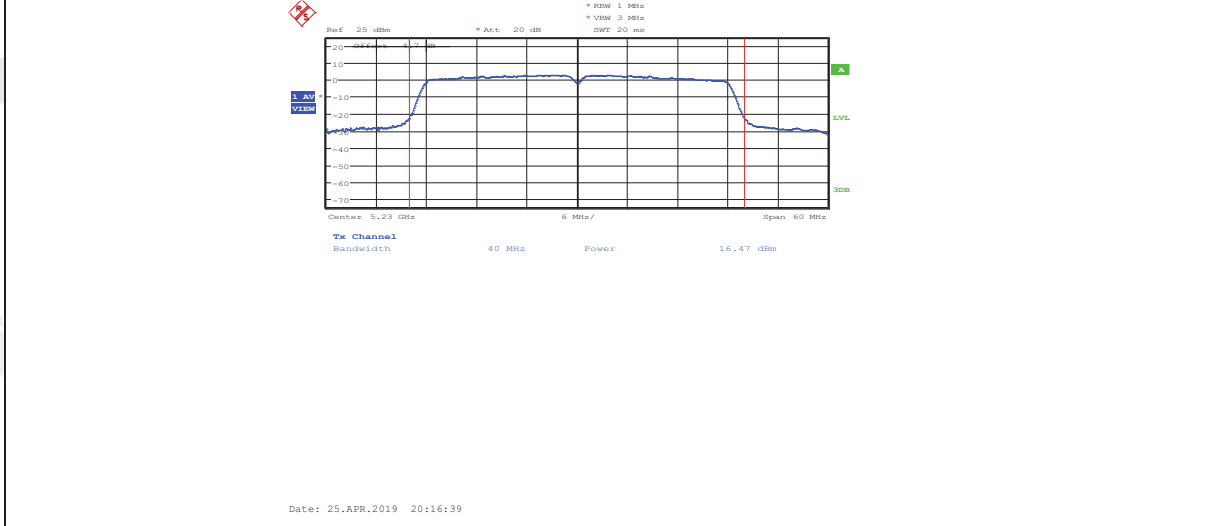
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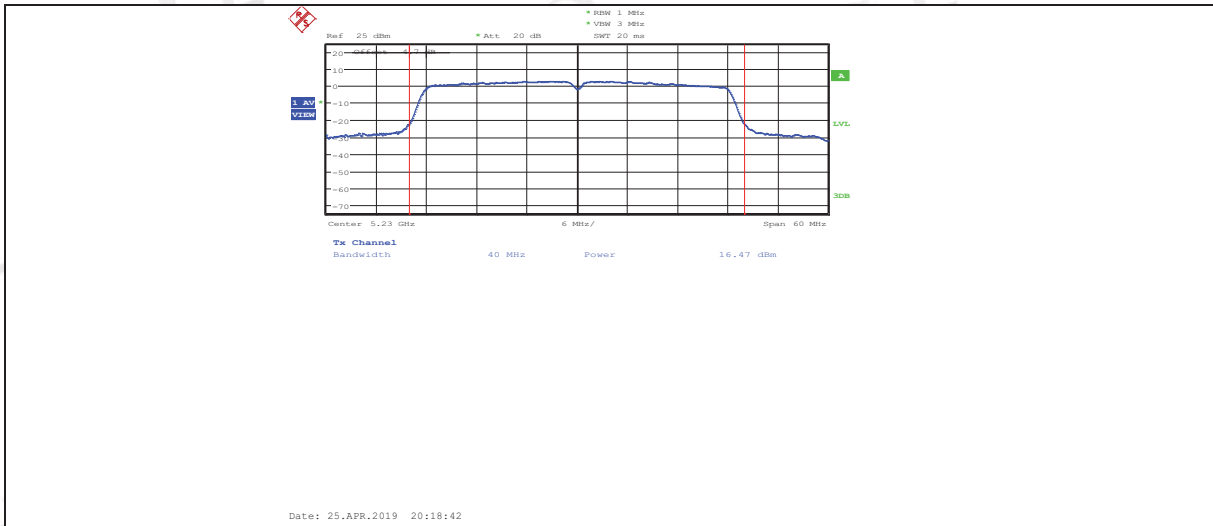
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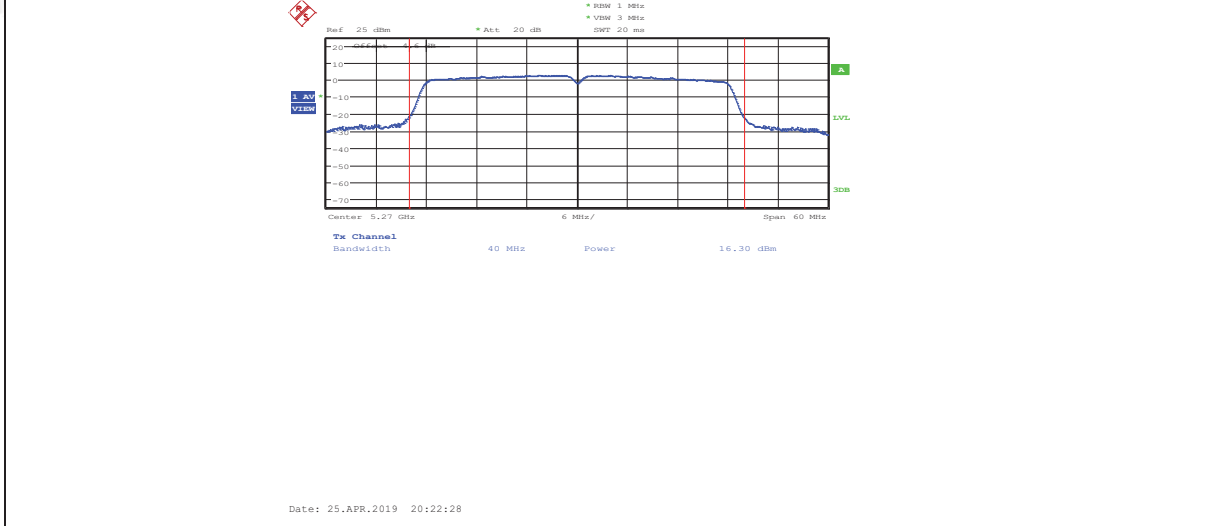
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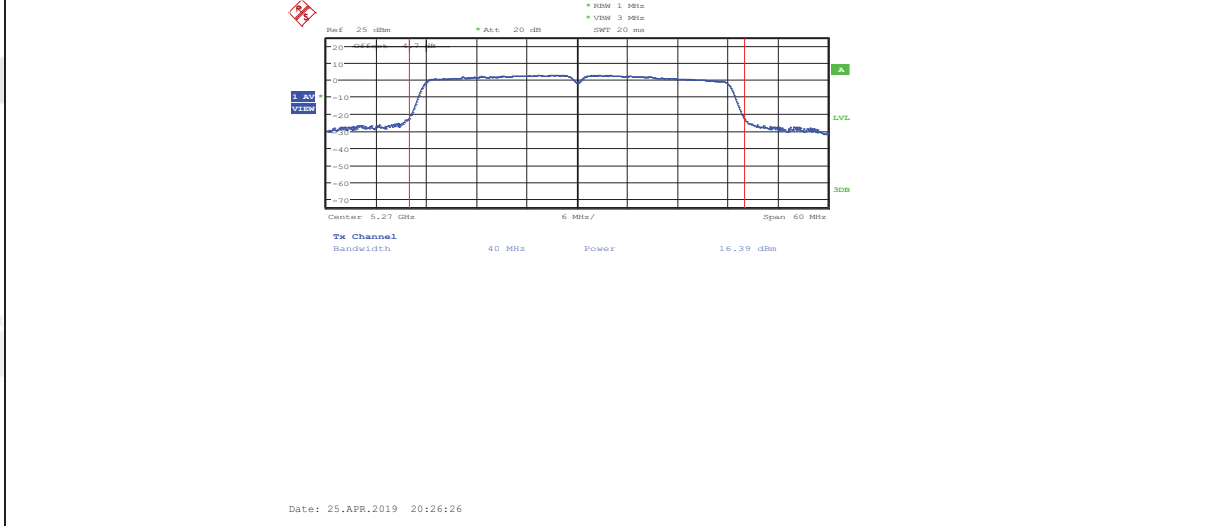
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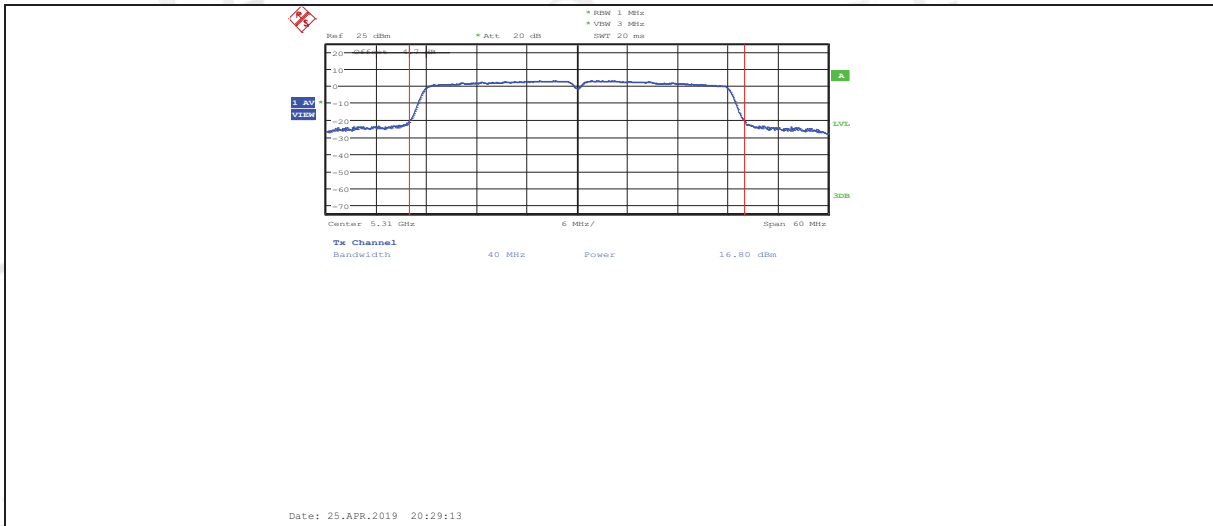
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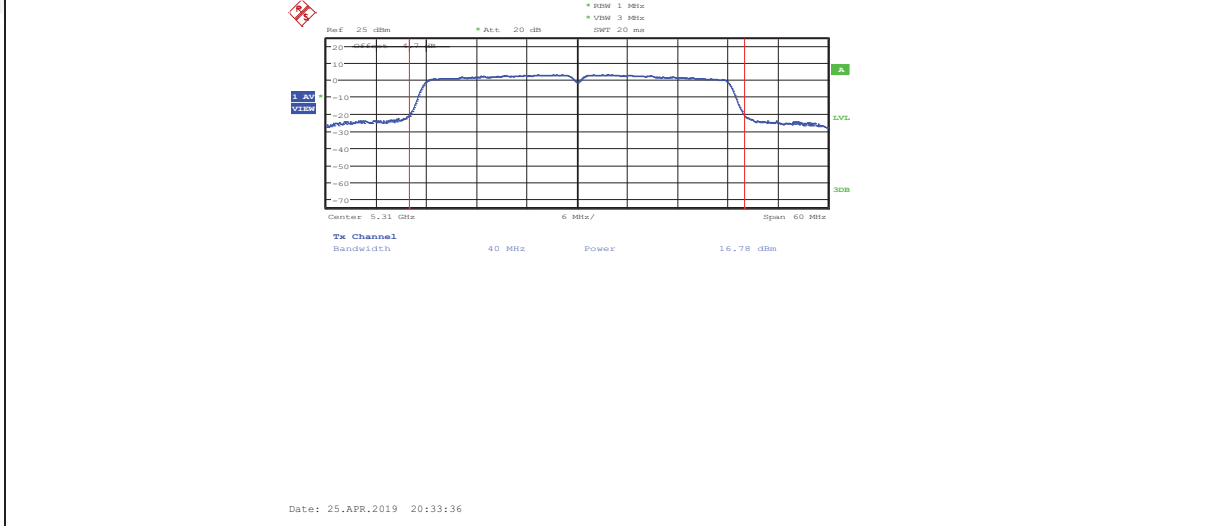
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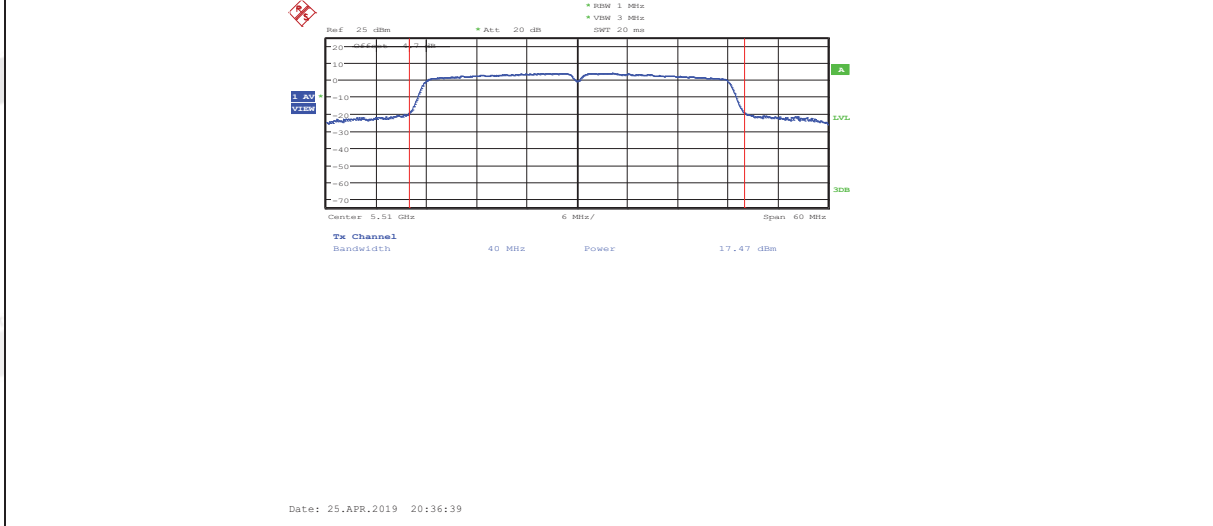
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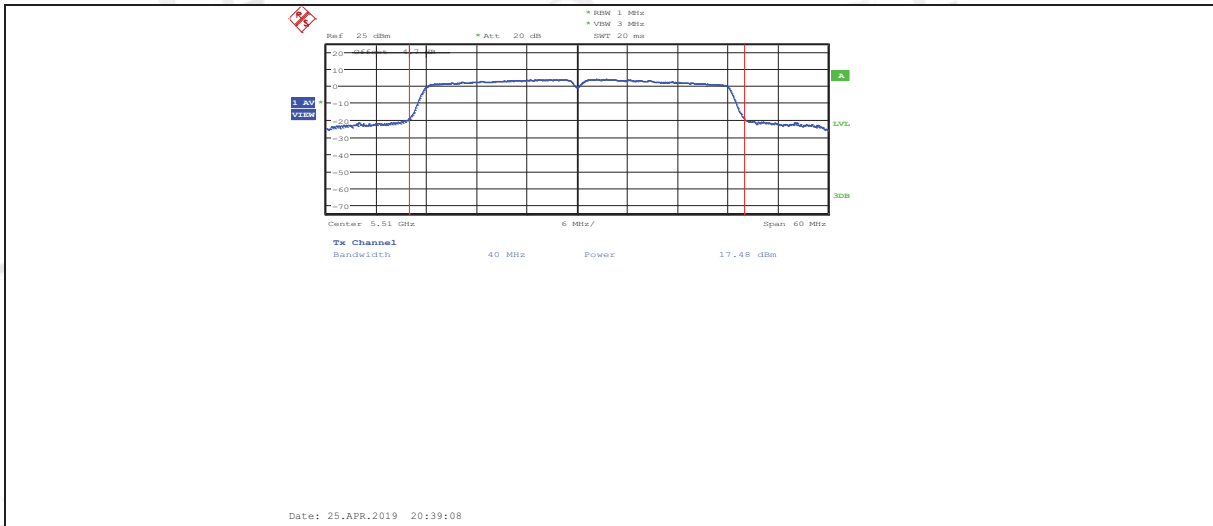
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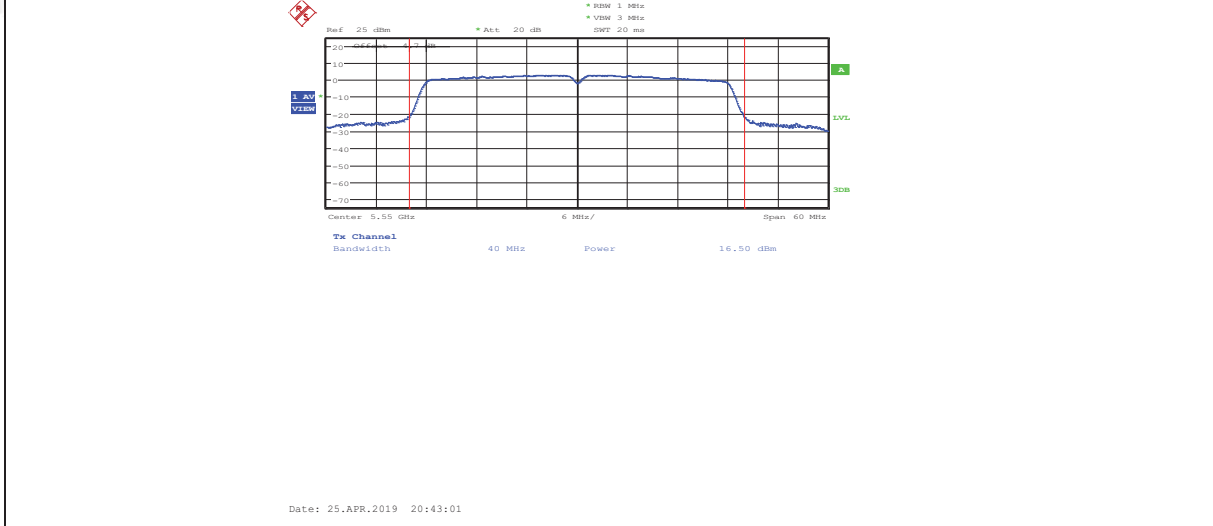
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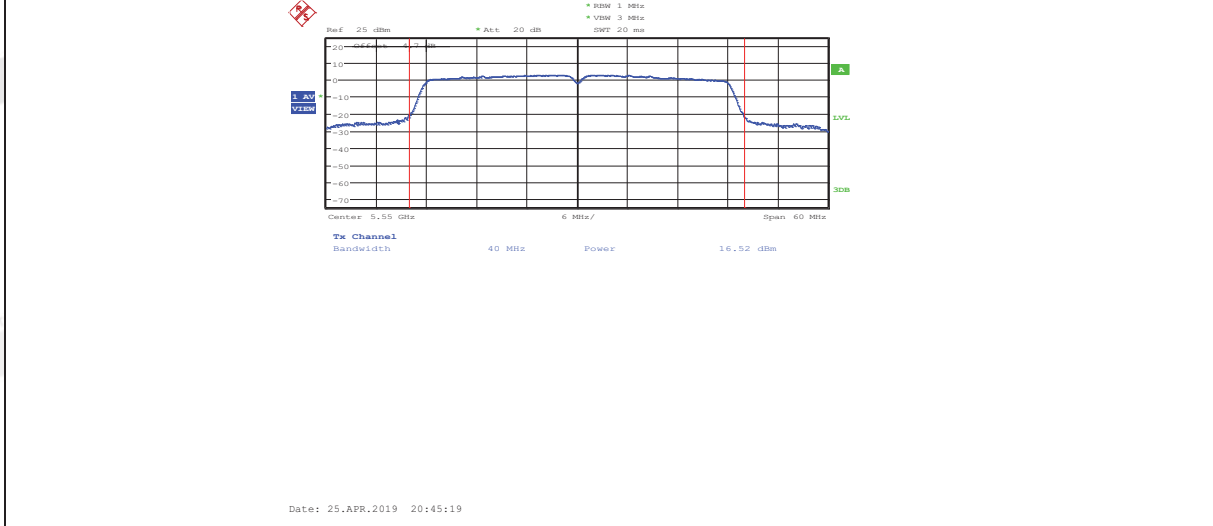
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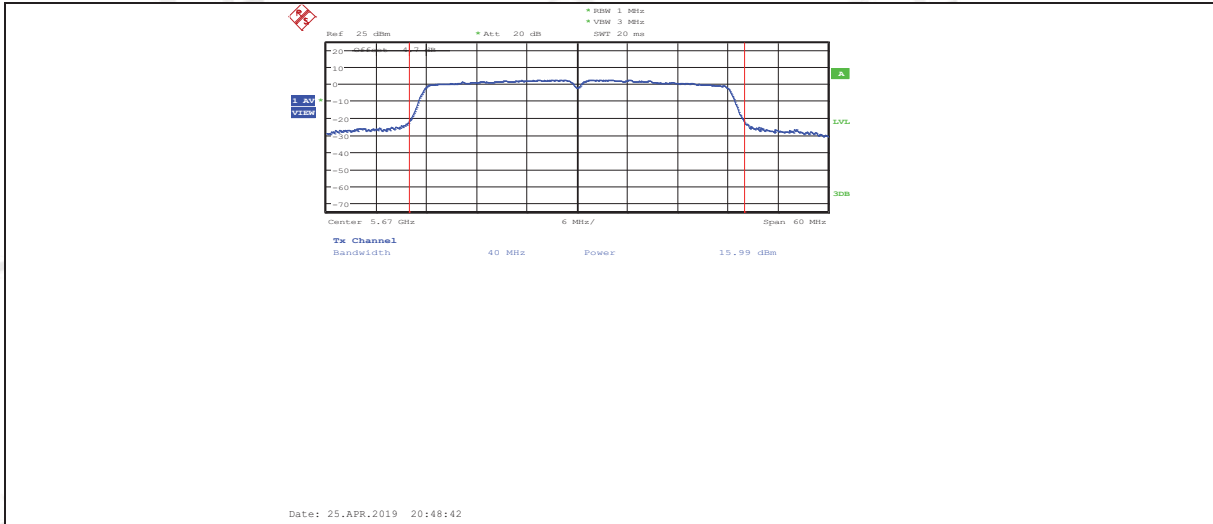
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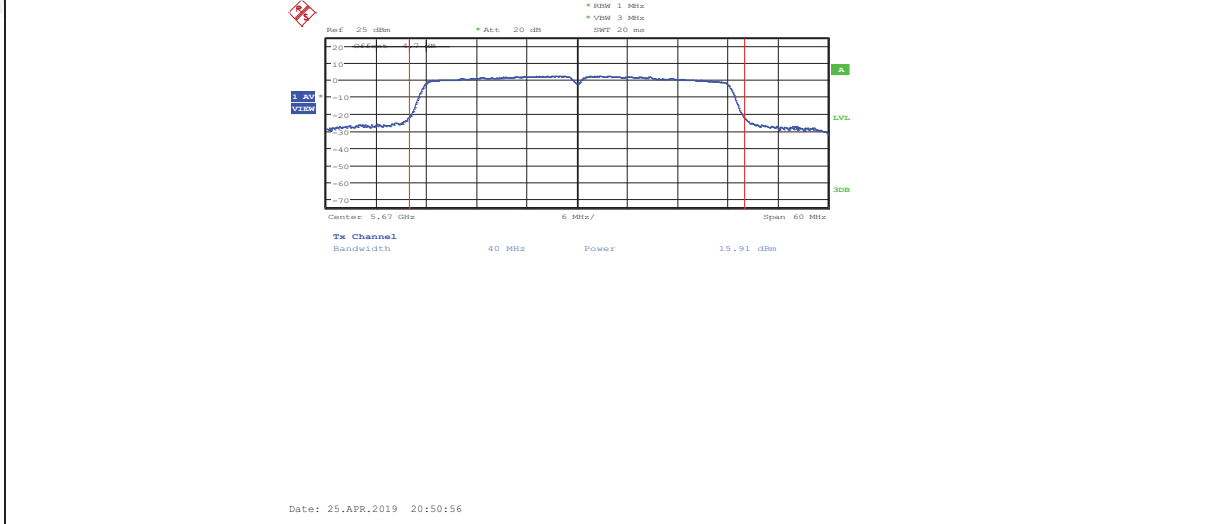
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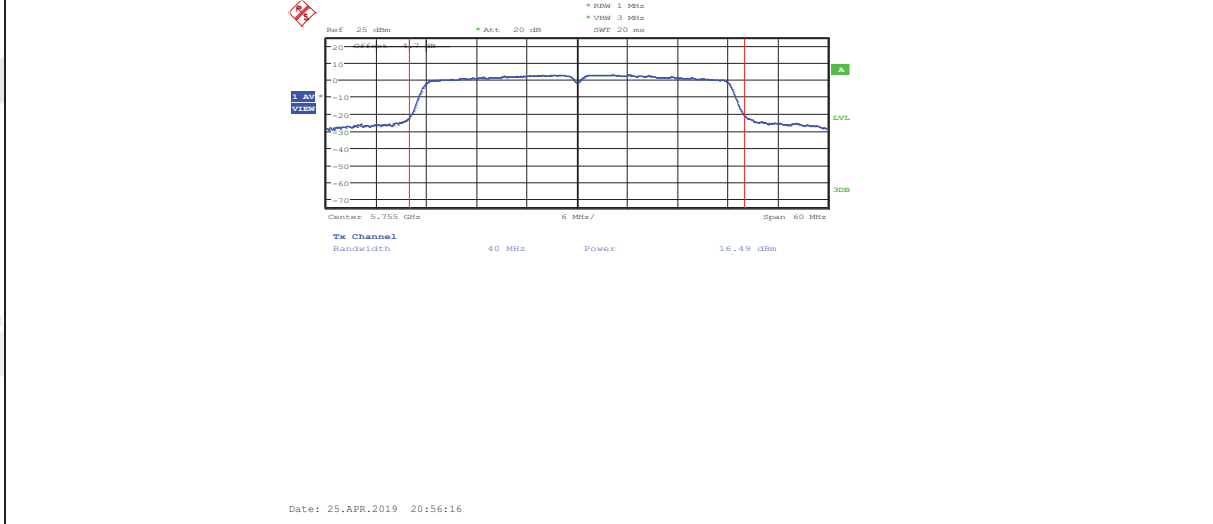
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11N40 ANT2 5670

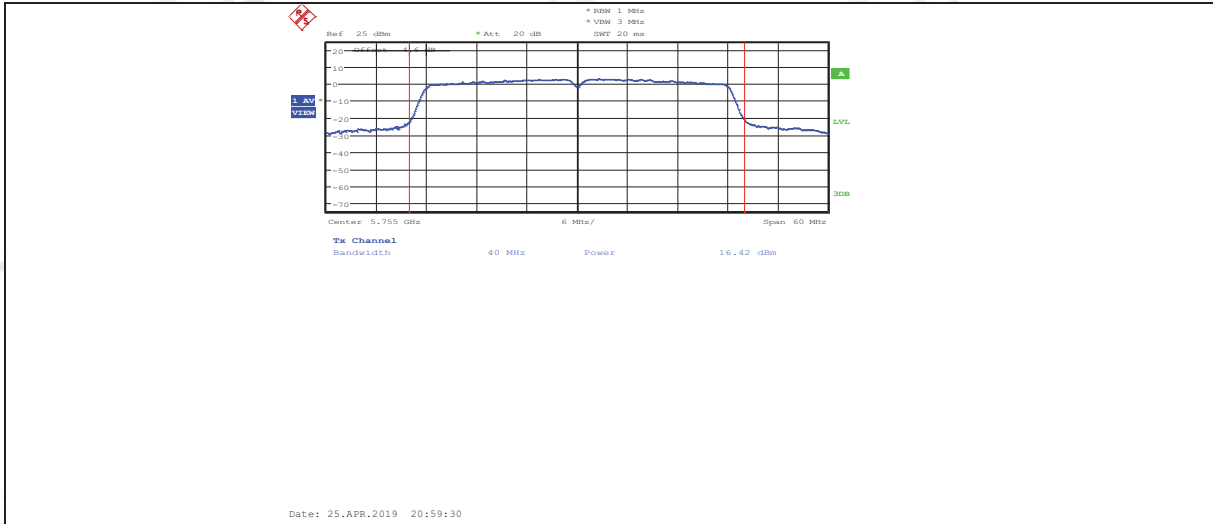


11N40 ANT1 5755

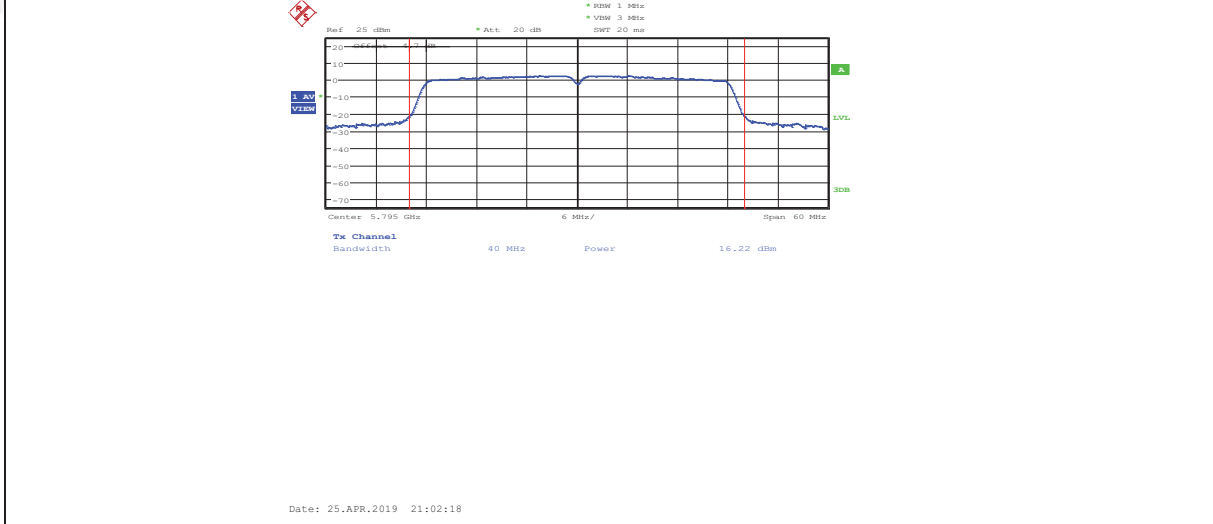


11N40 ANT2 5755

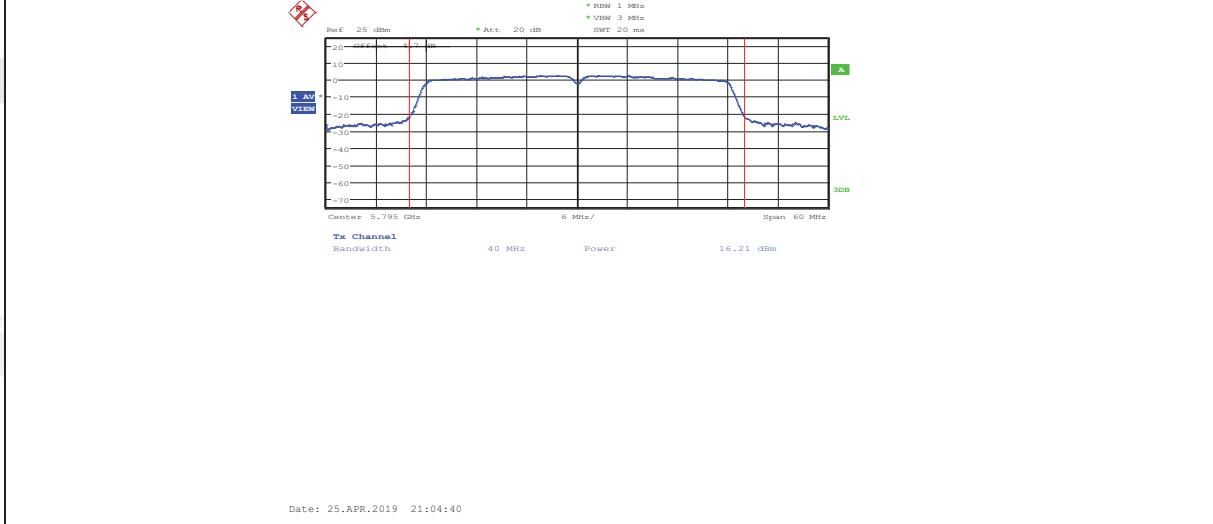




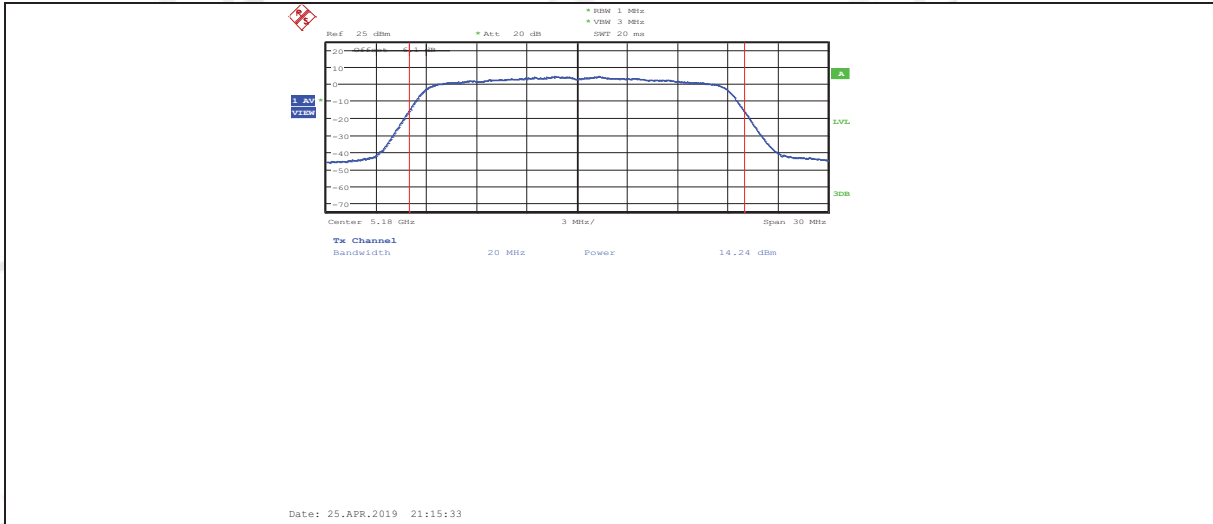
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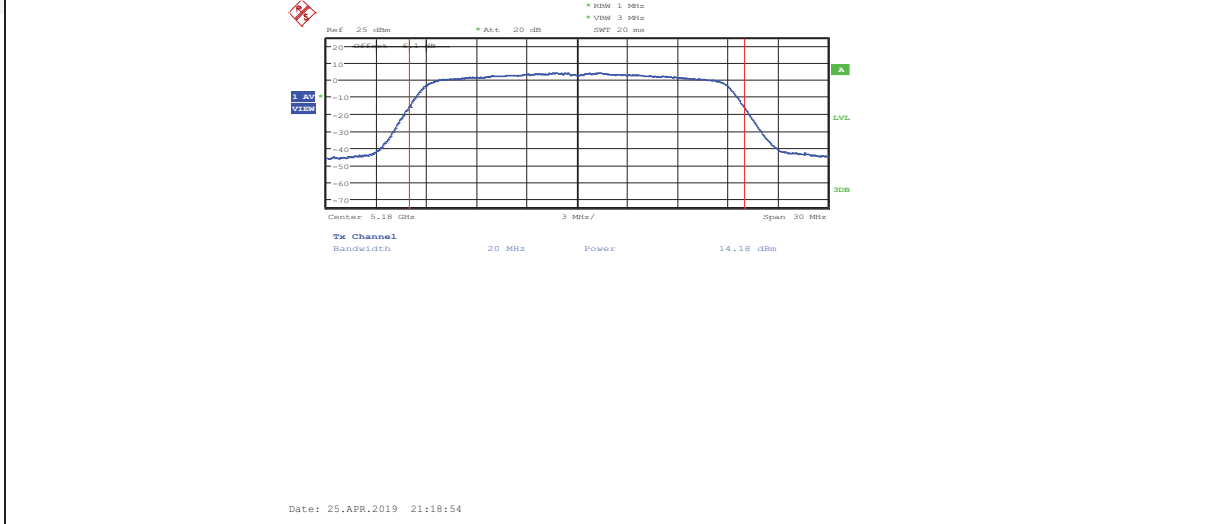
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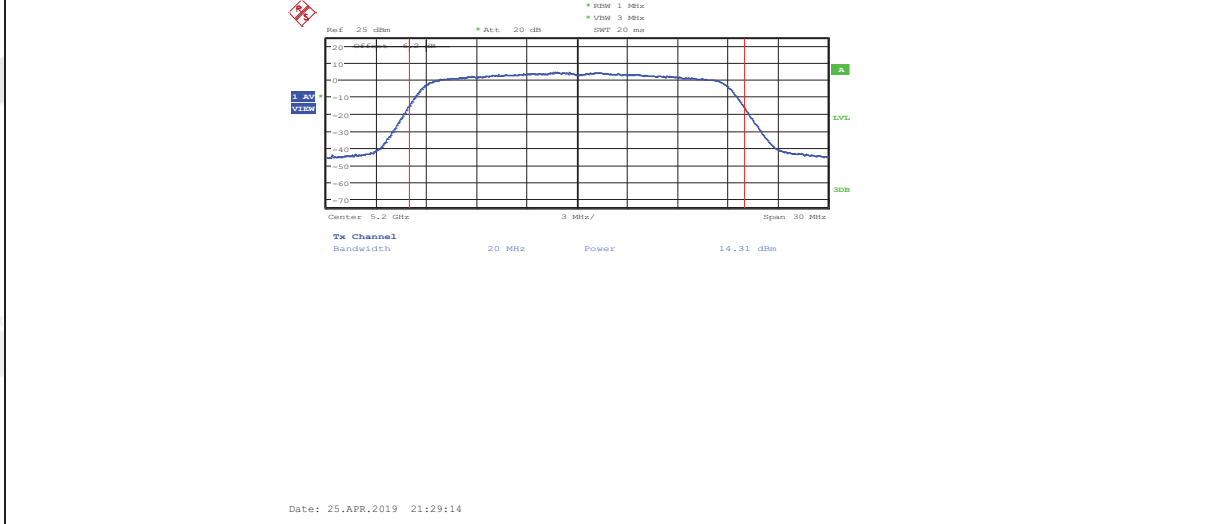
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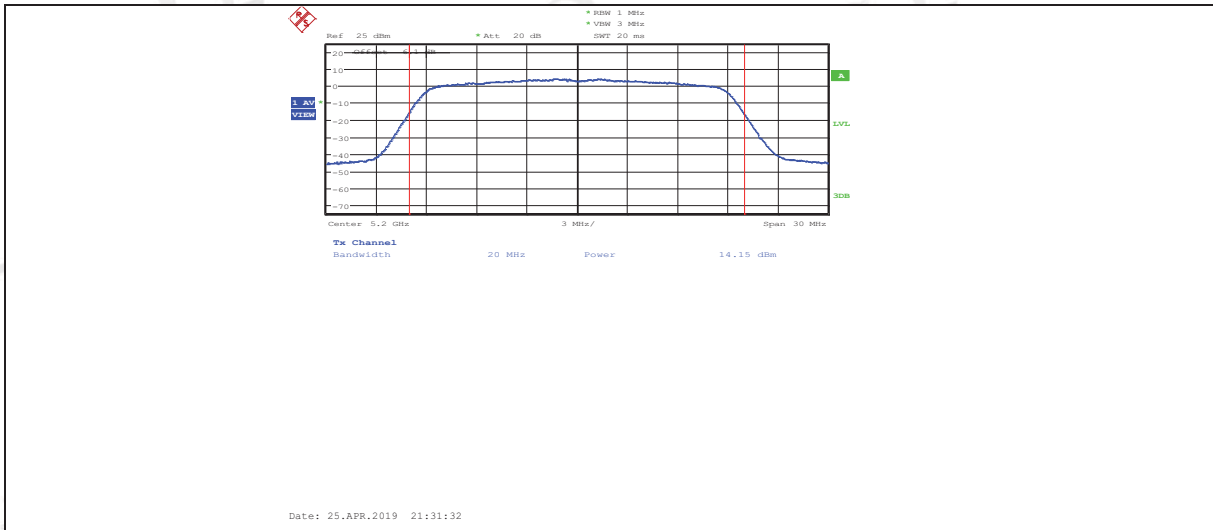
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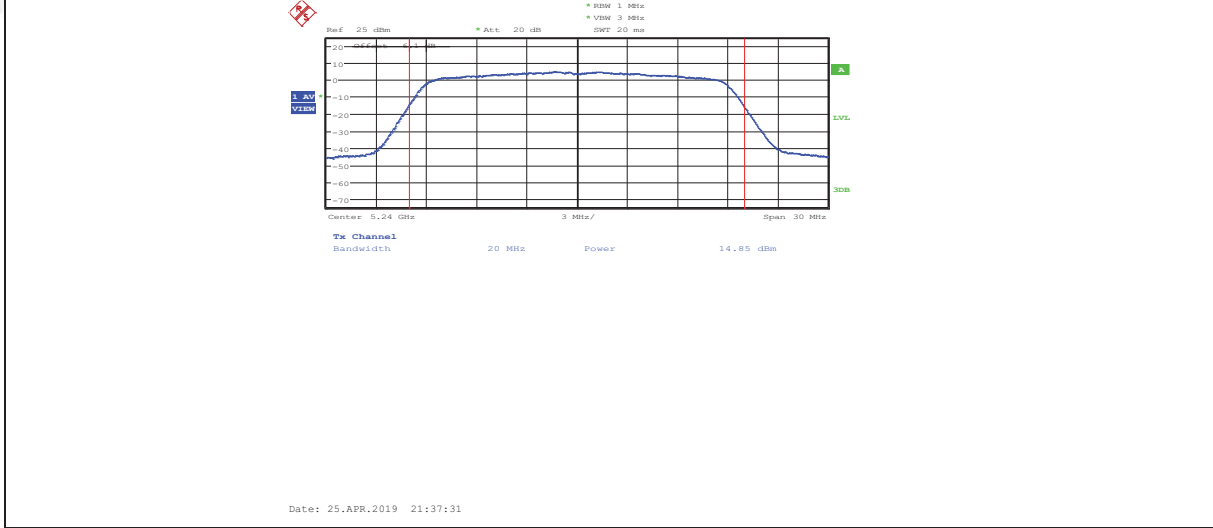
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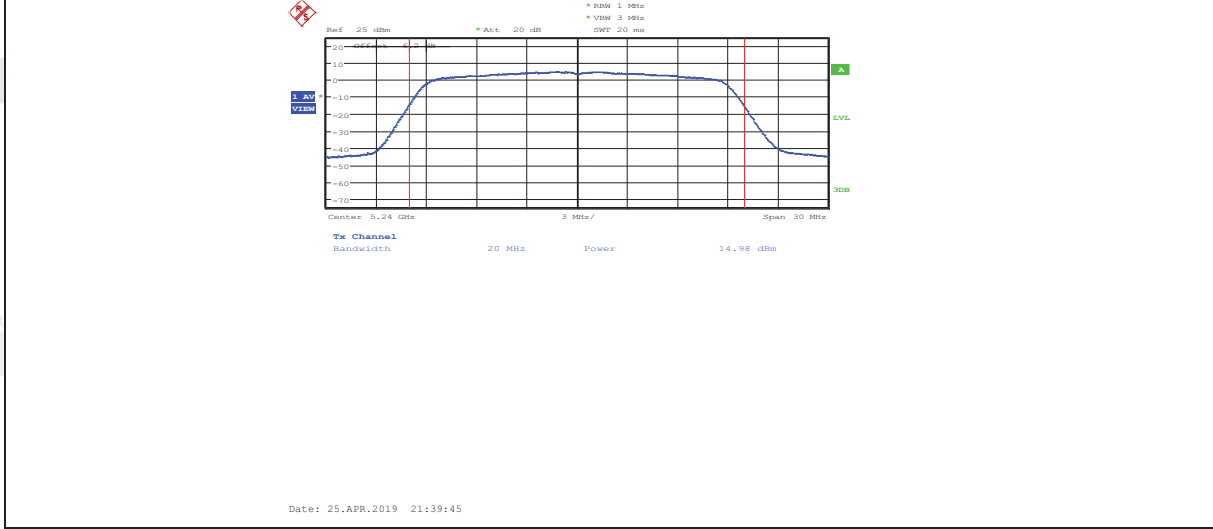
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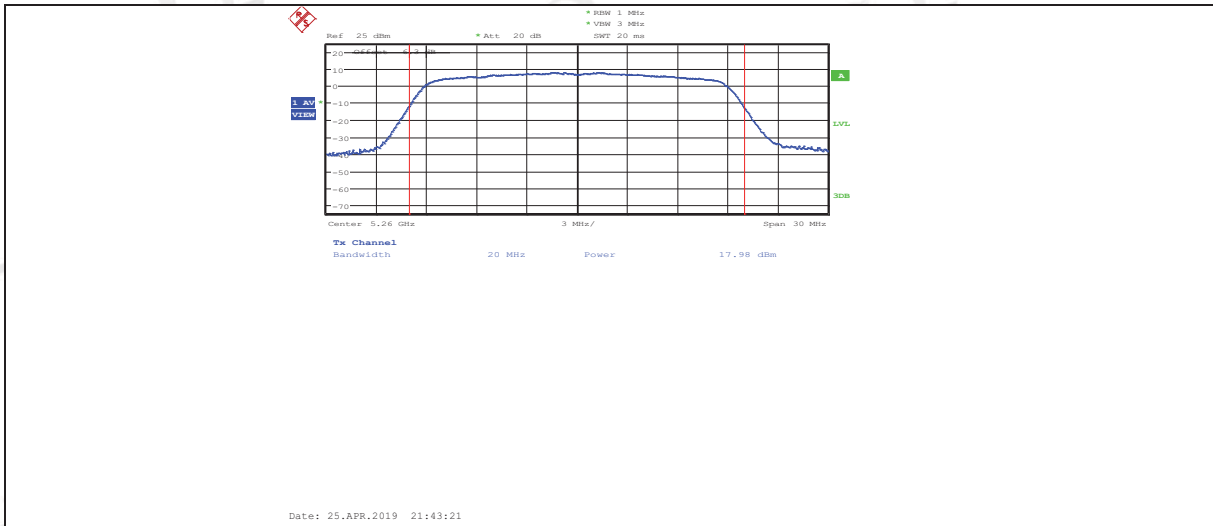
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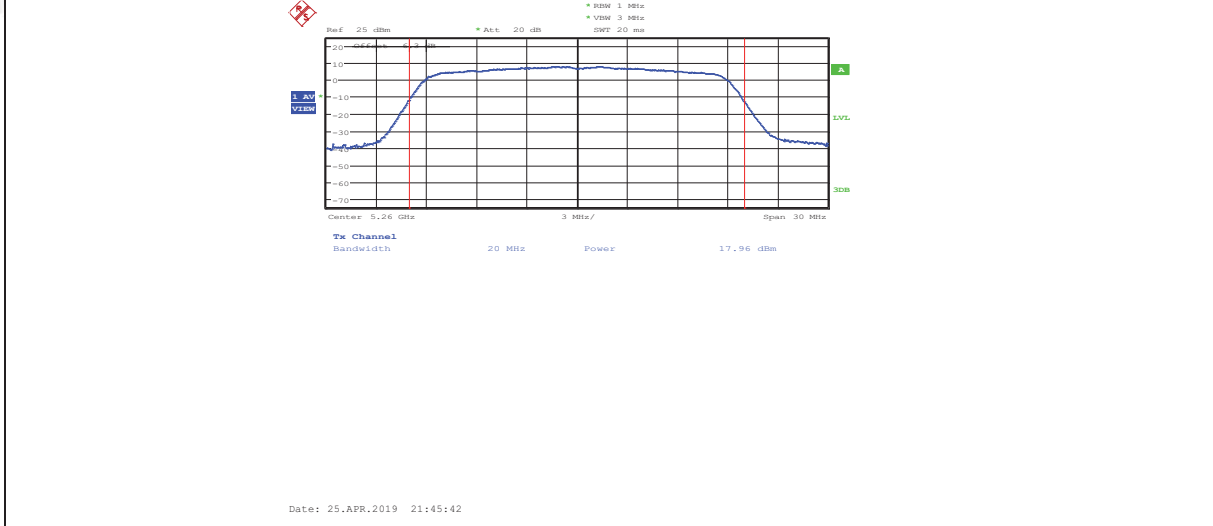
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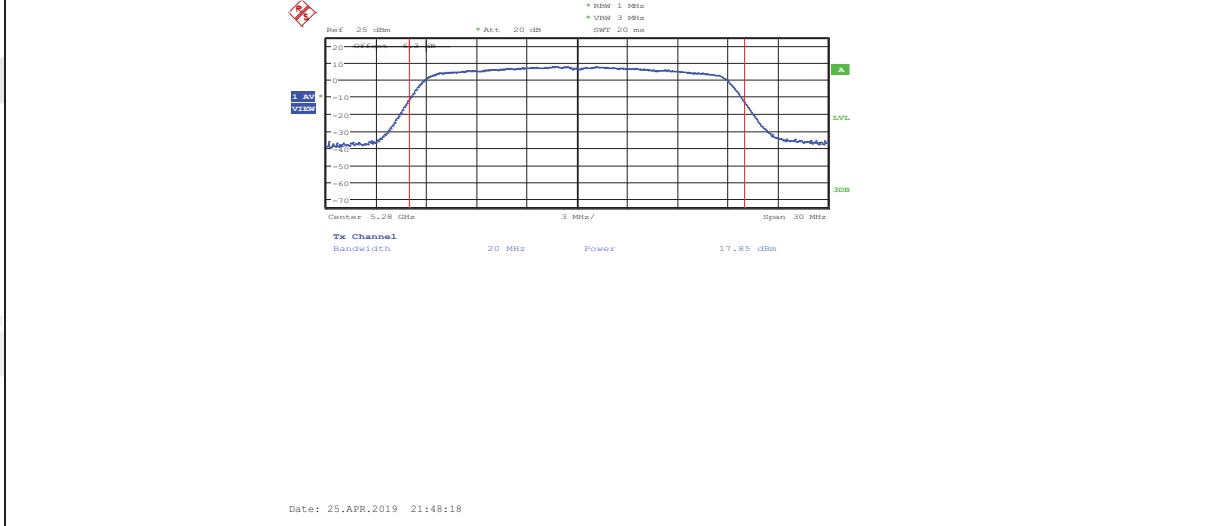
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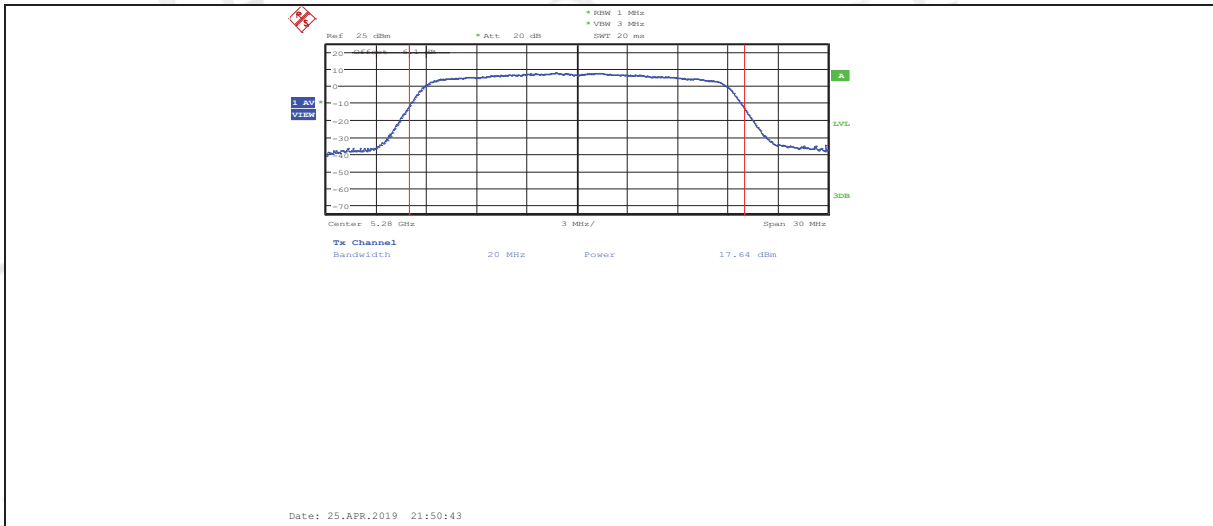
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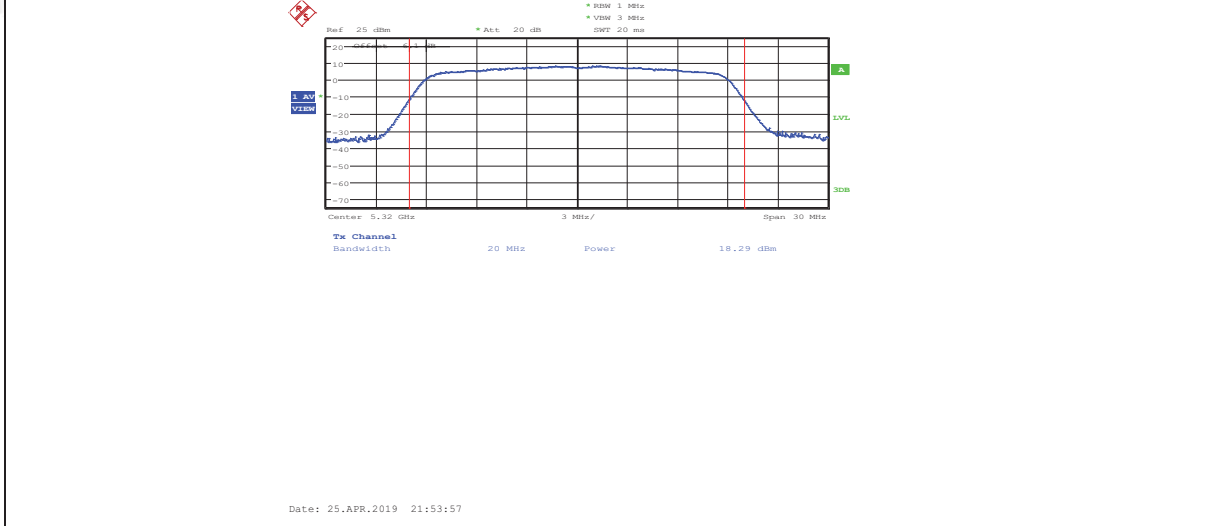
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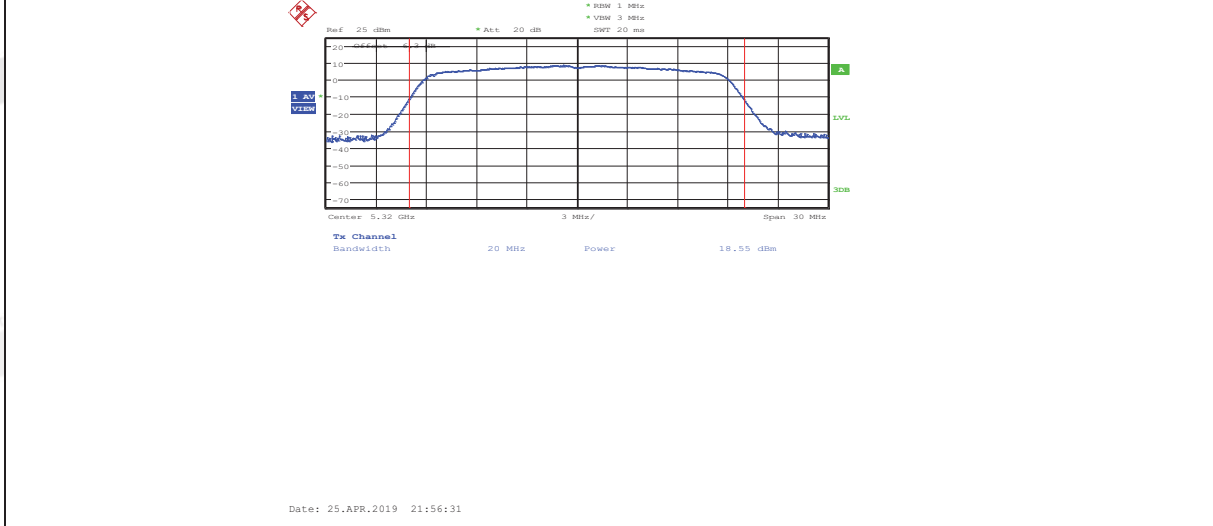
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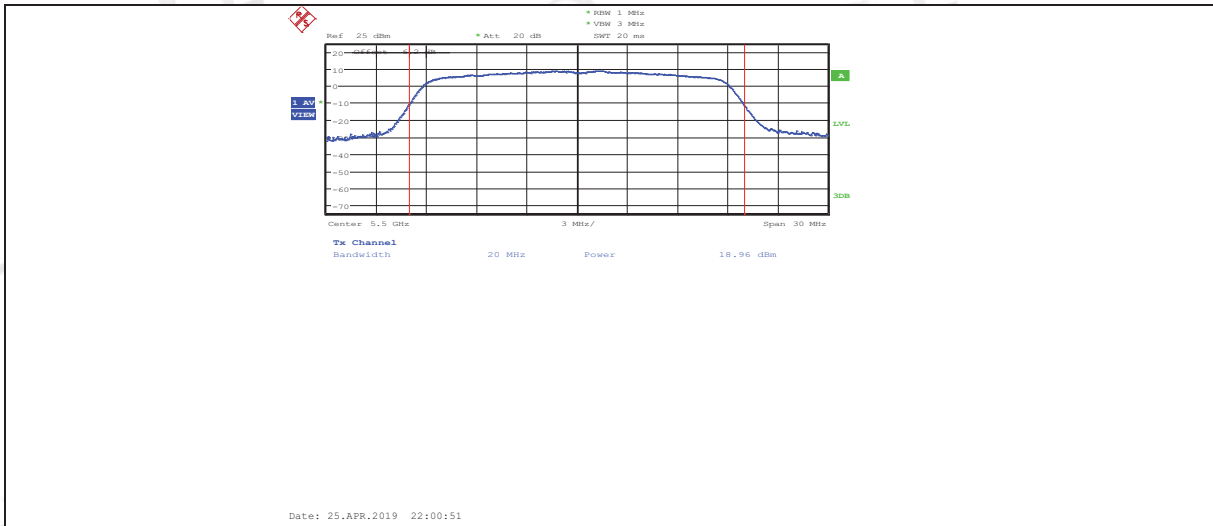
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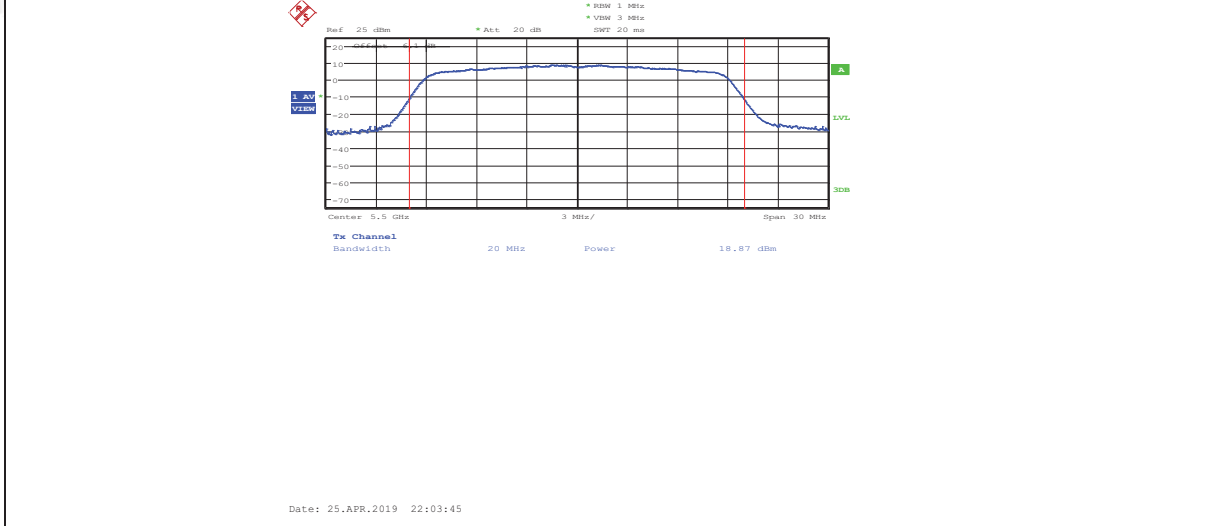
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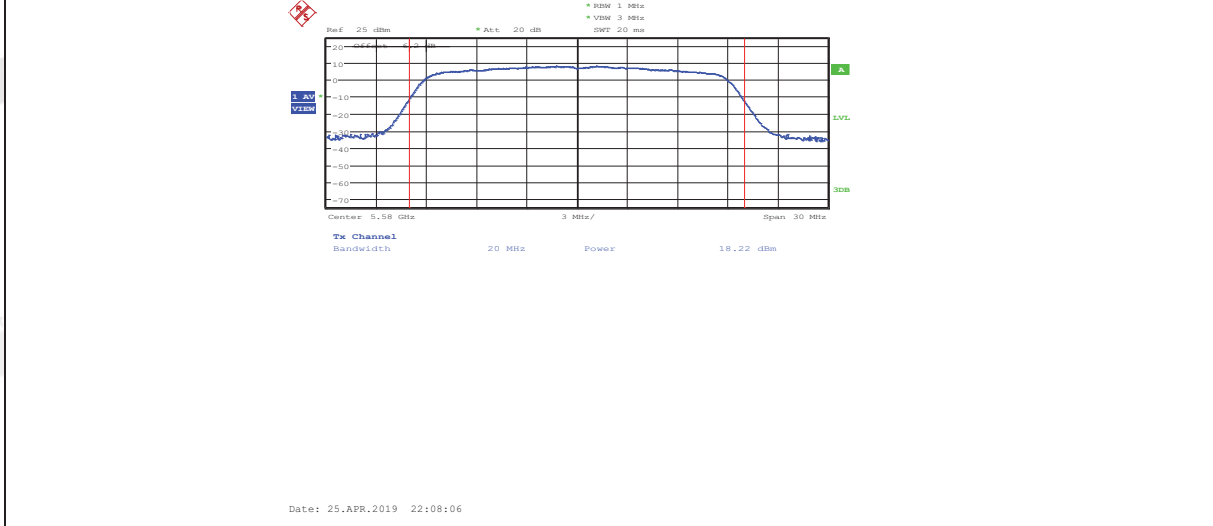
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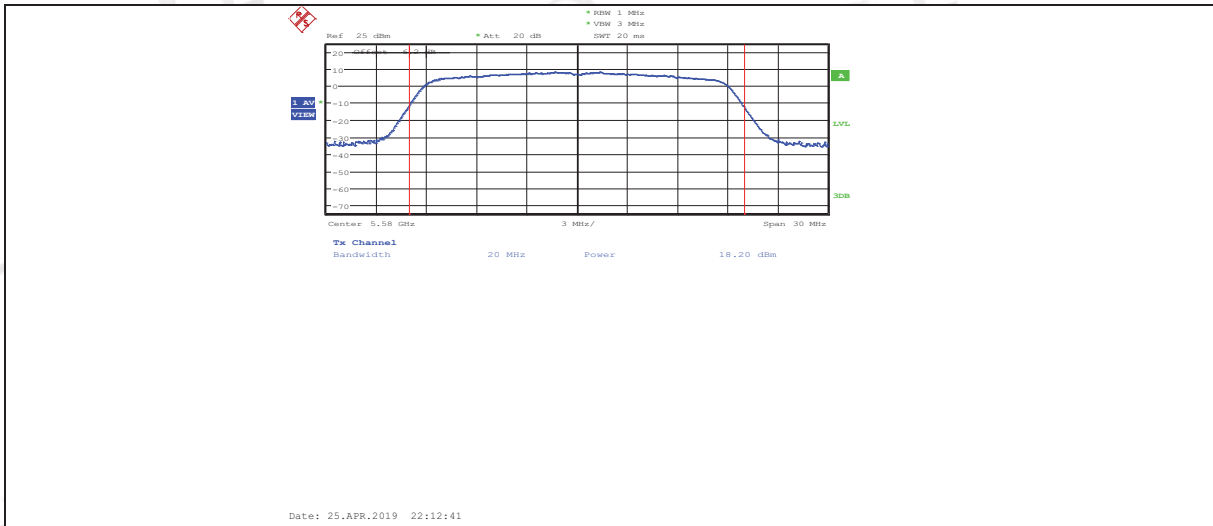


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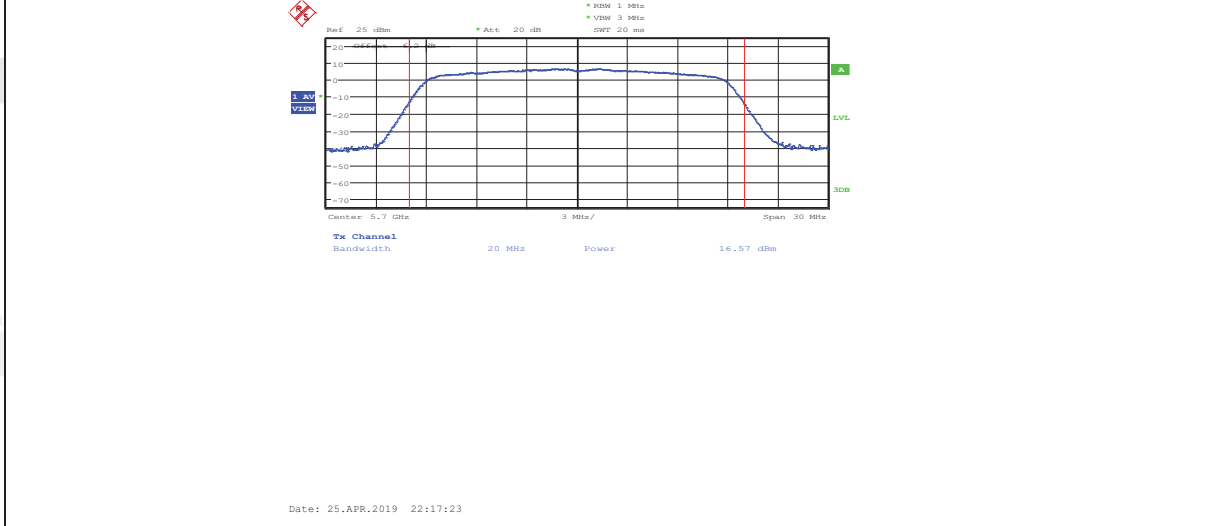




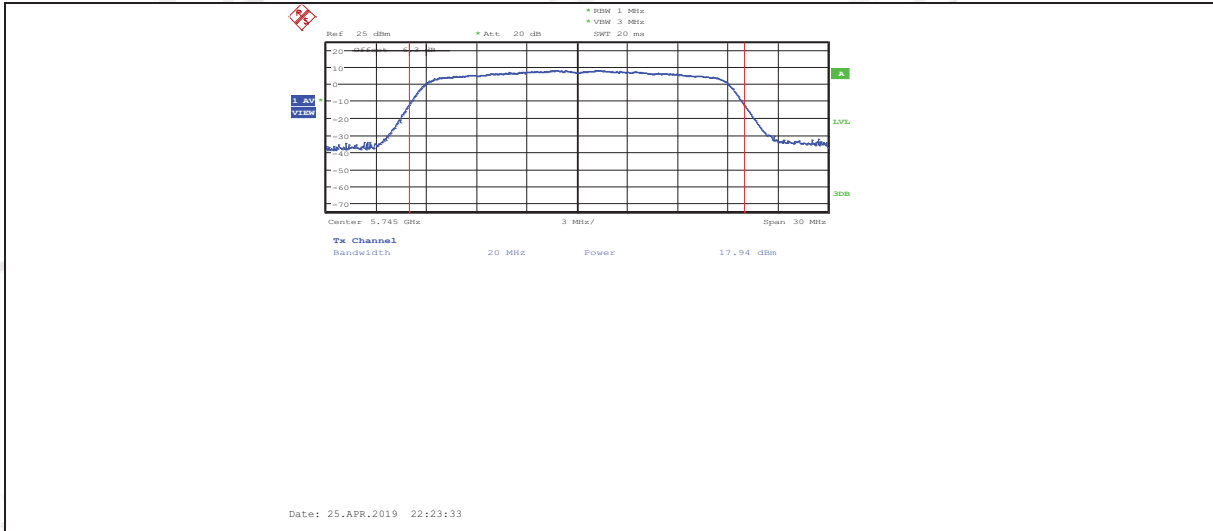
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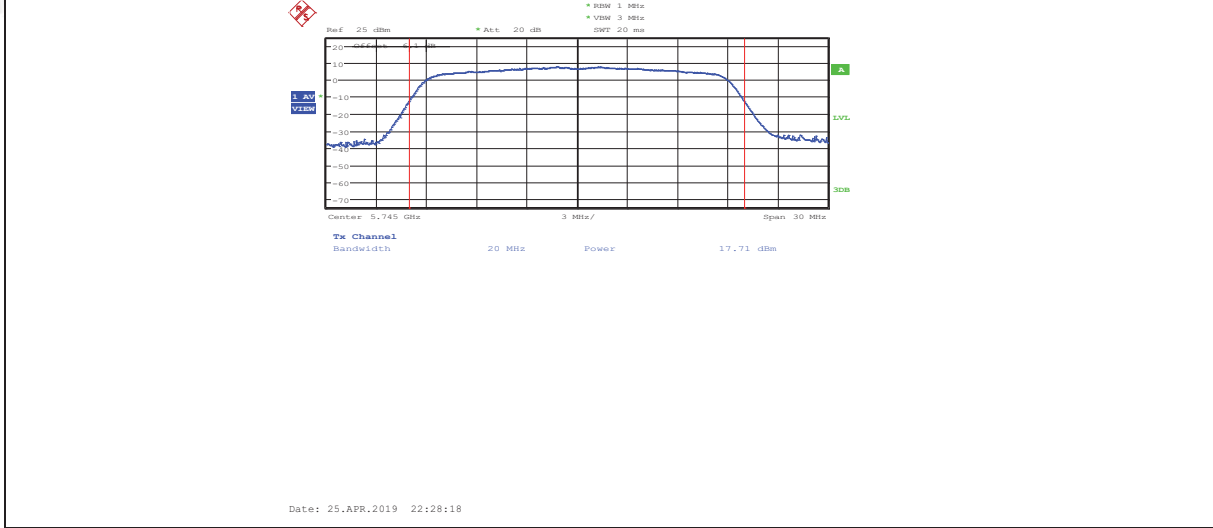
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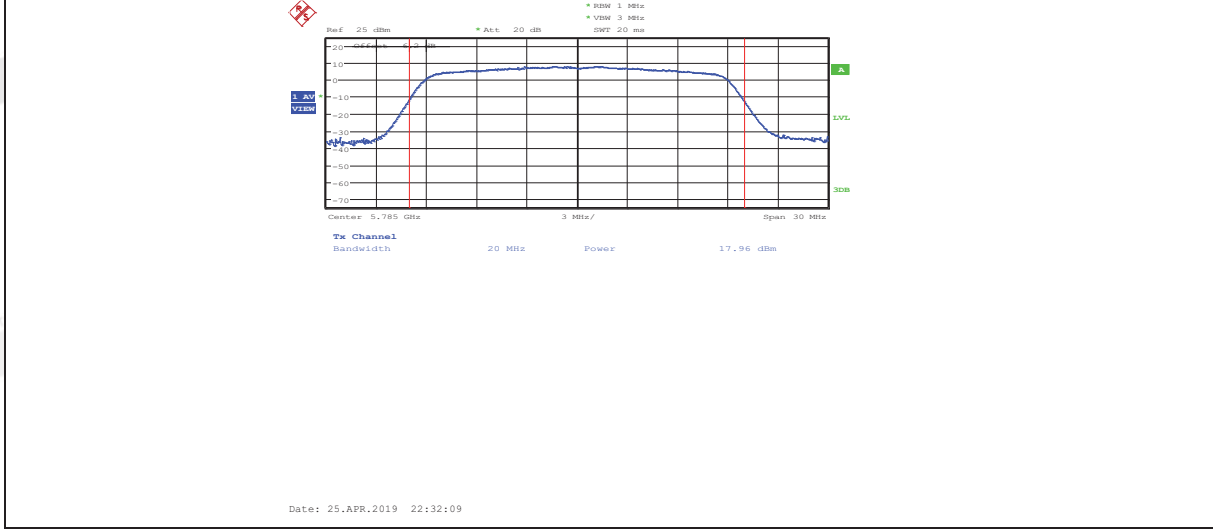
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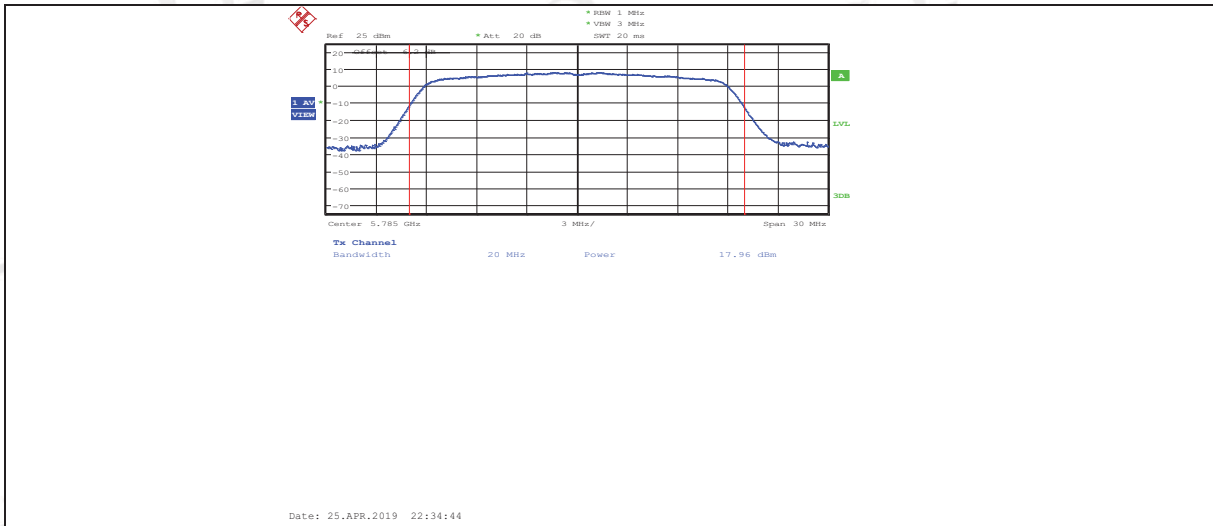
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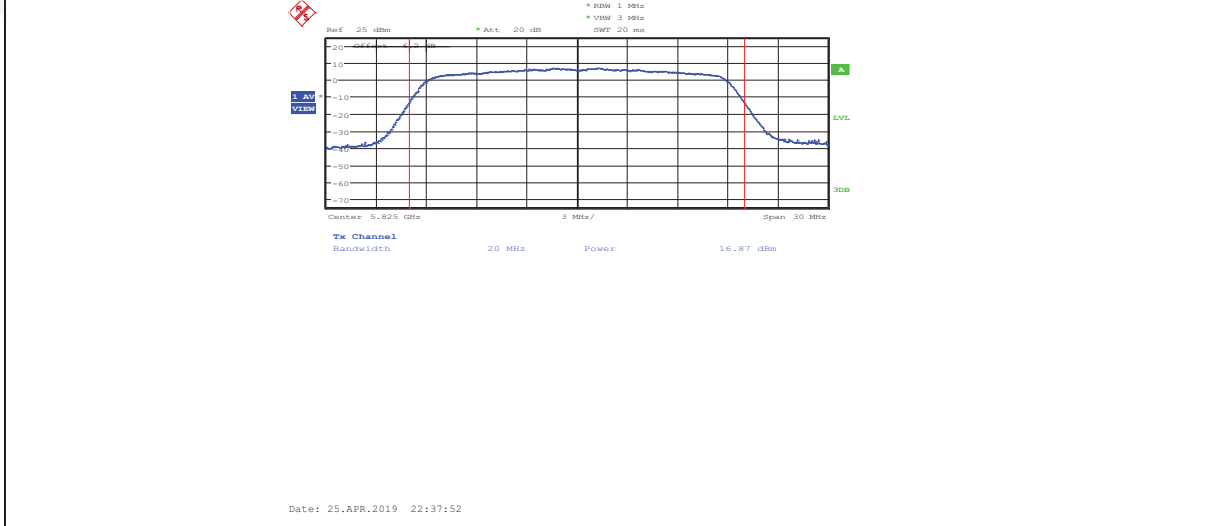
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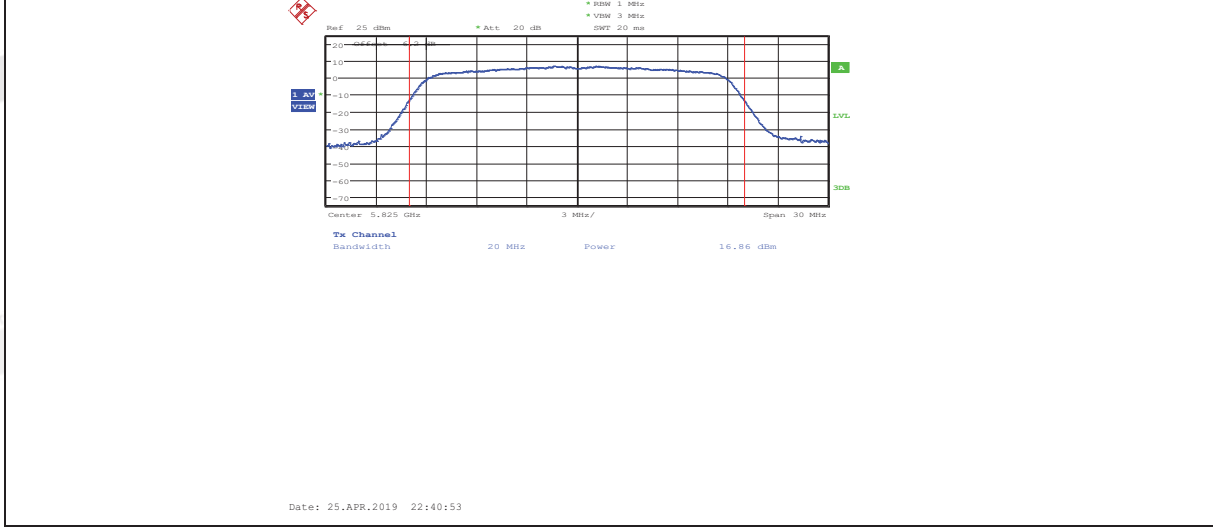
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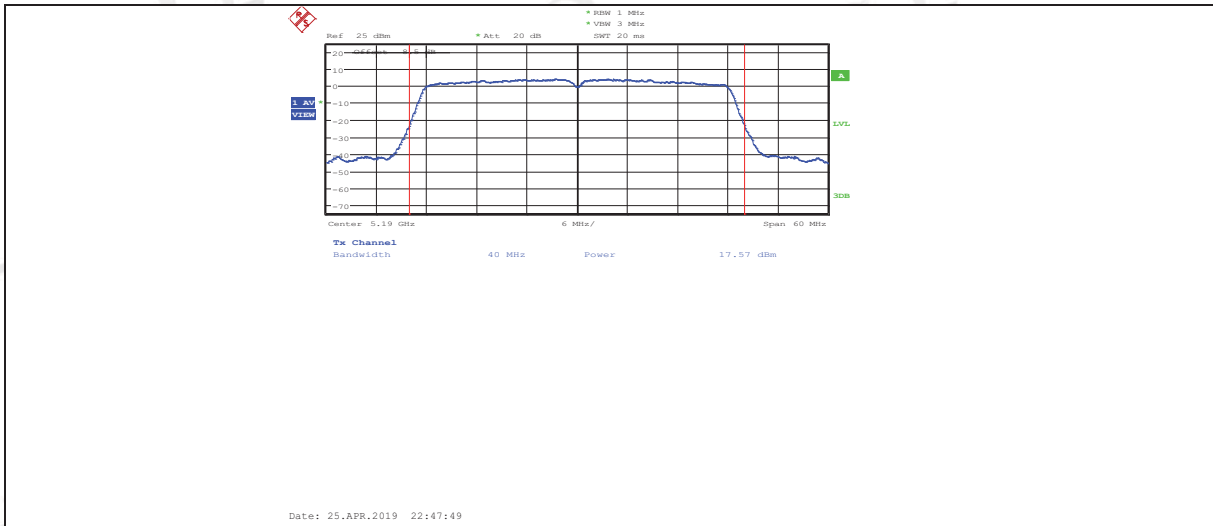
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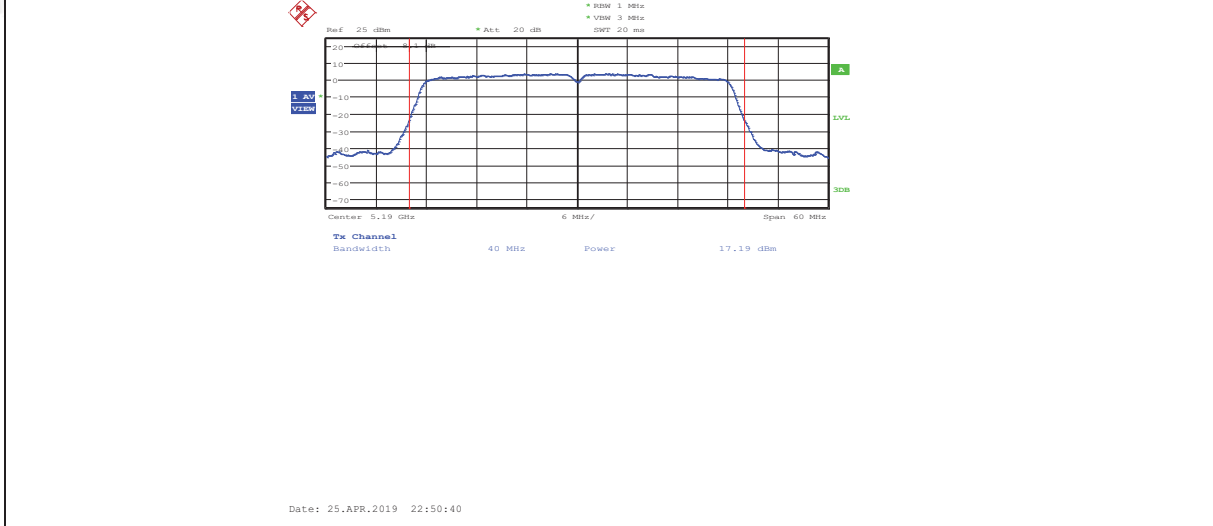
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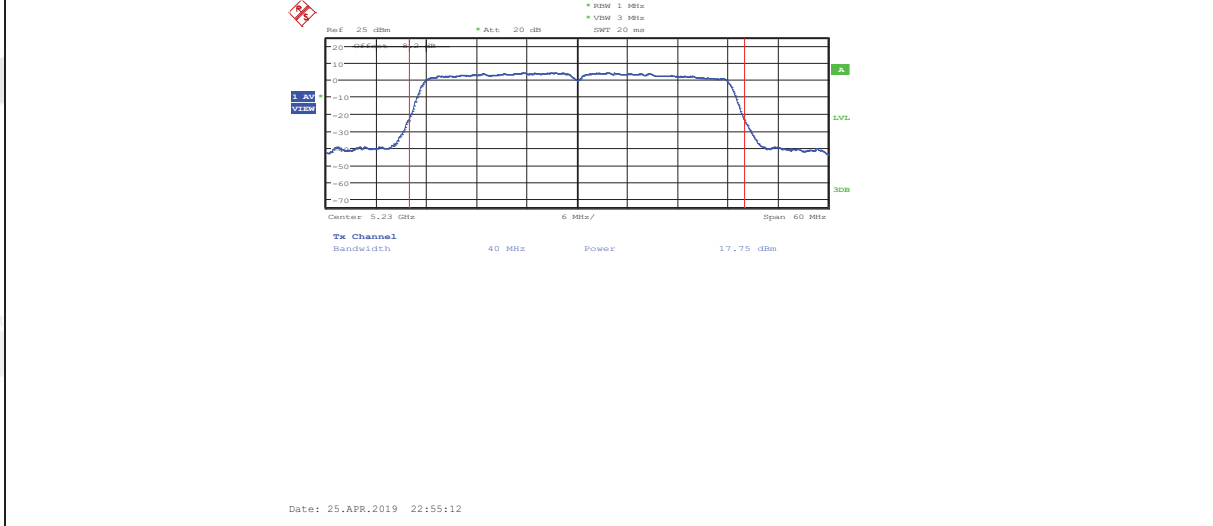
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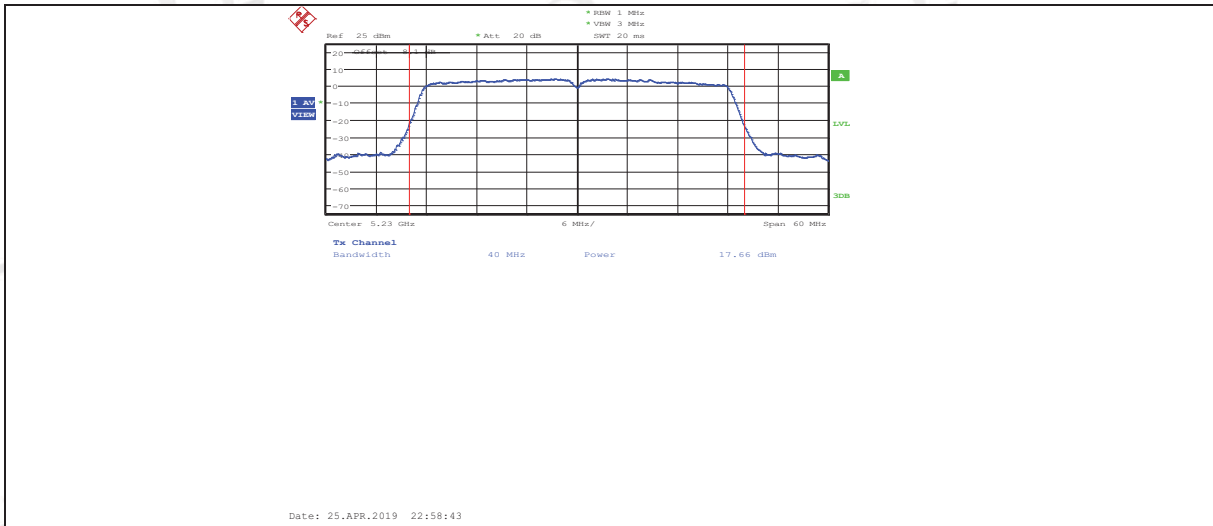
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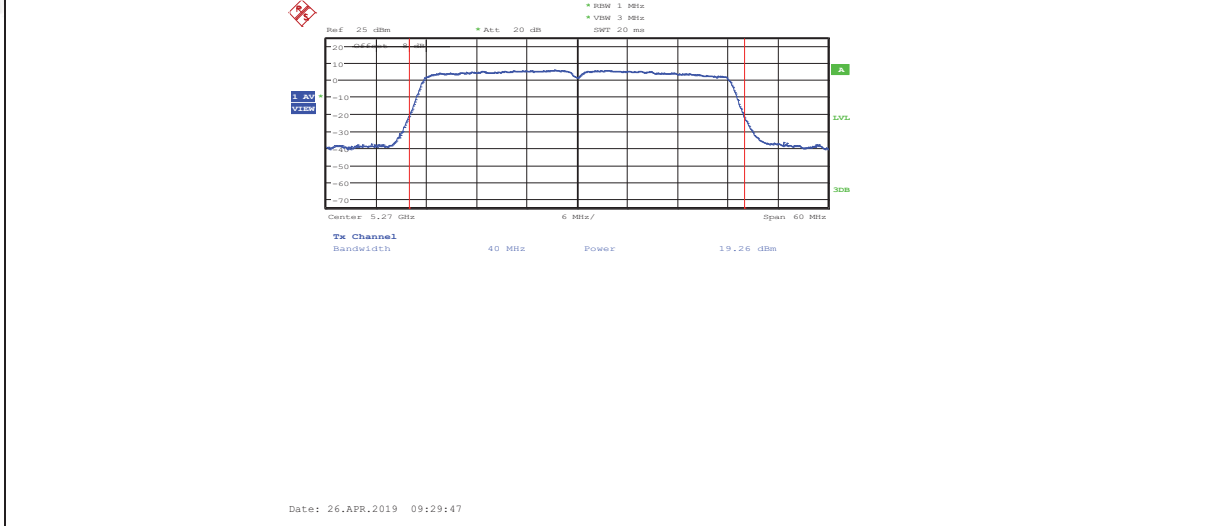
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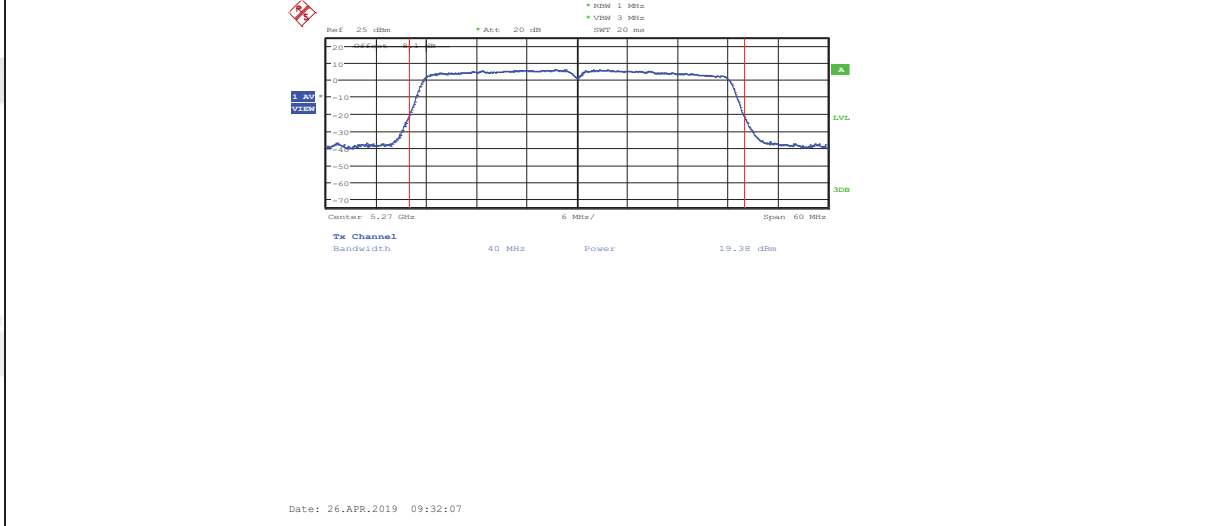
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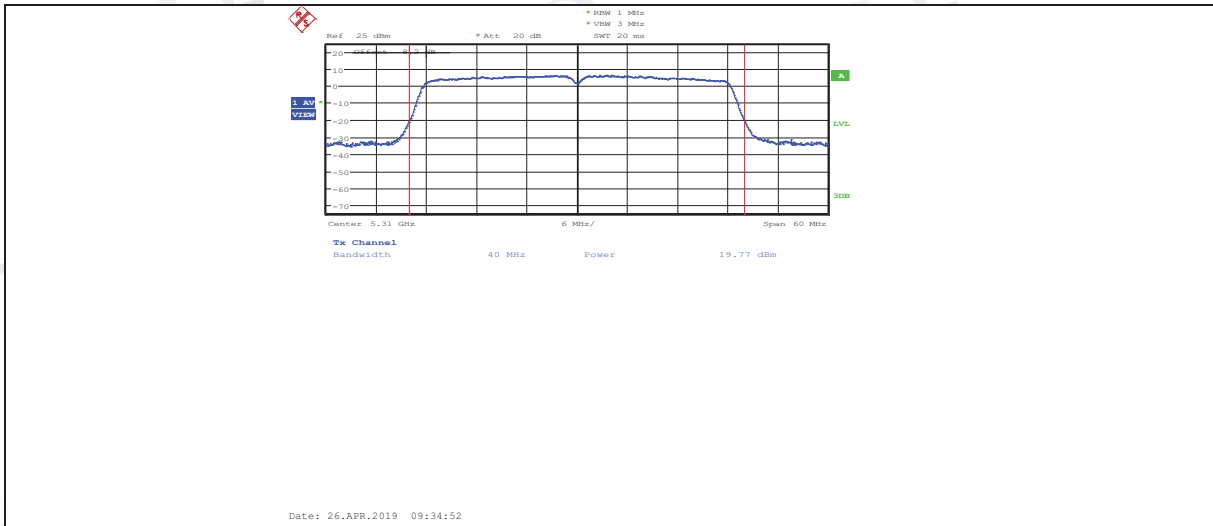
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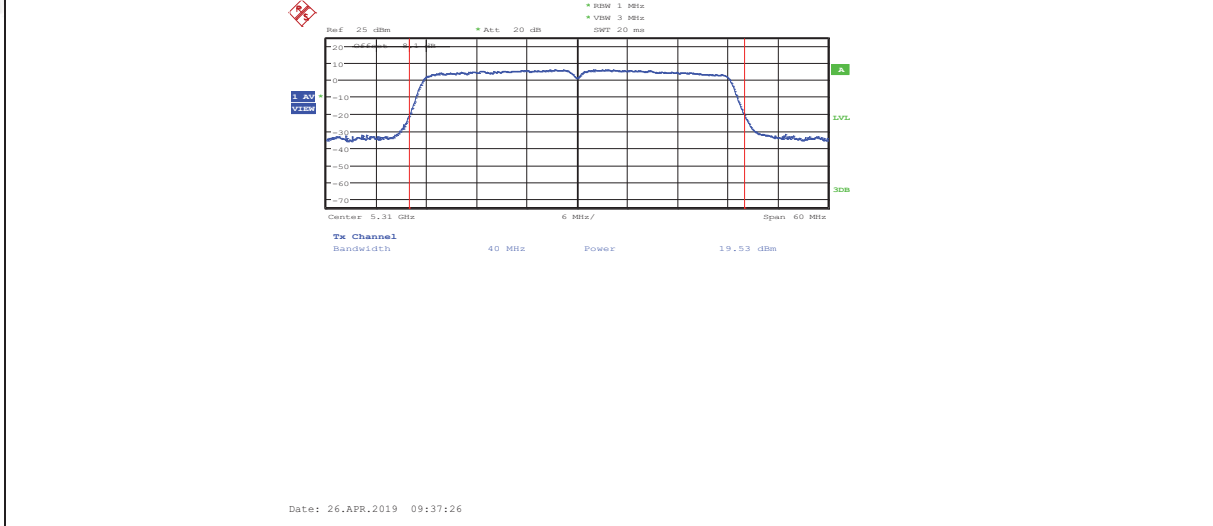
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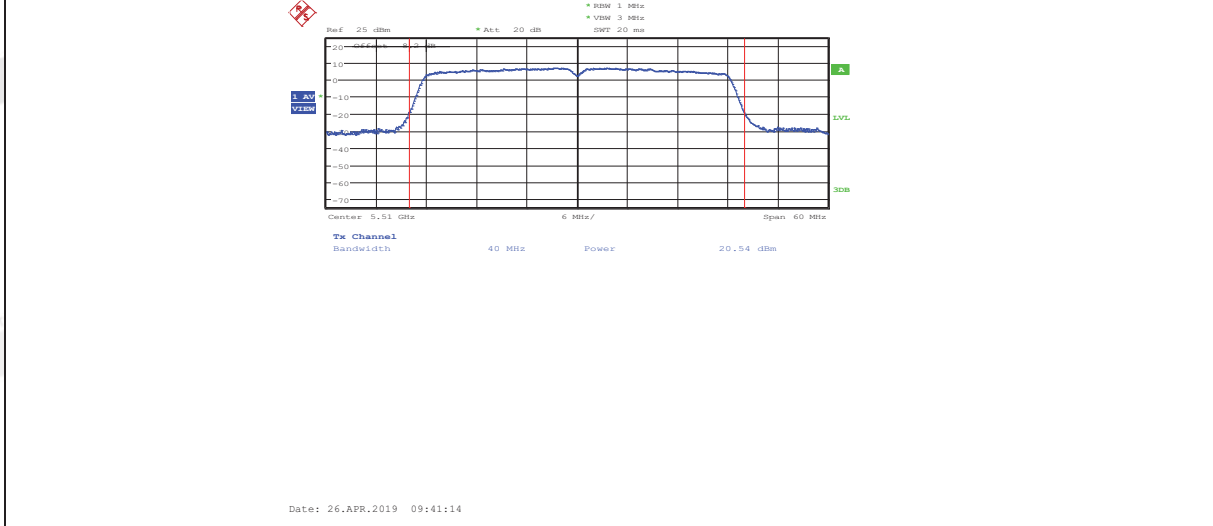
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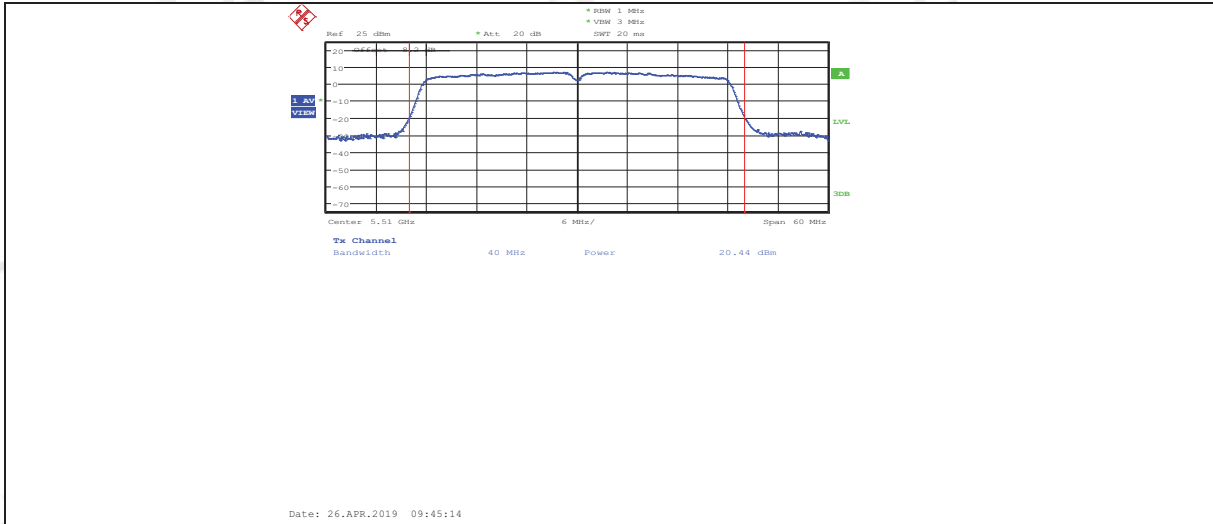


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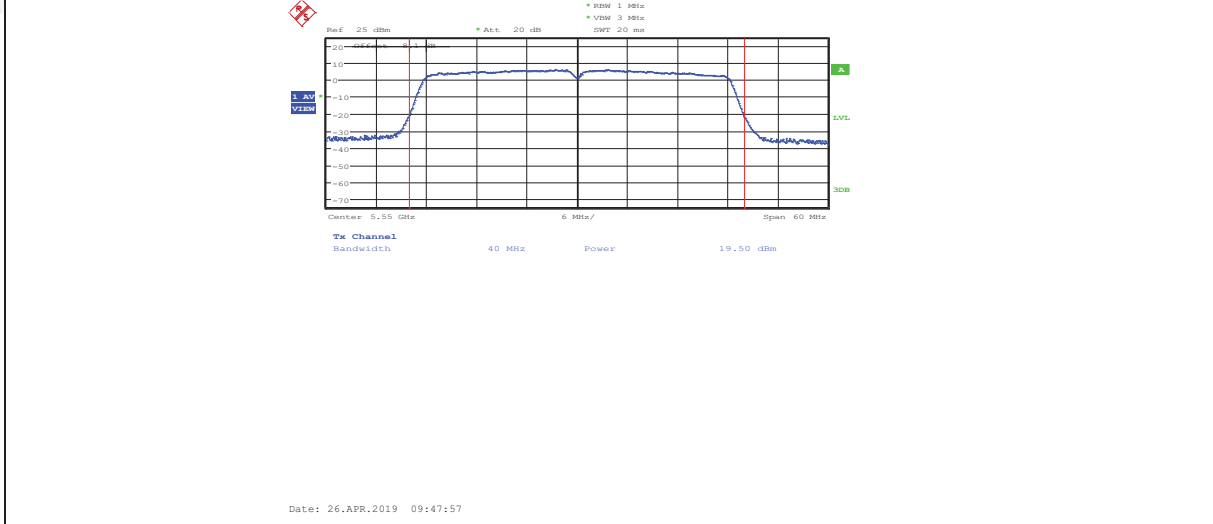


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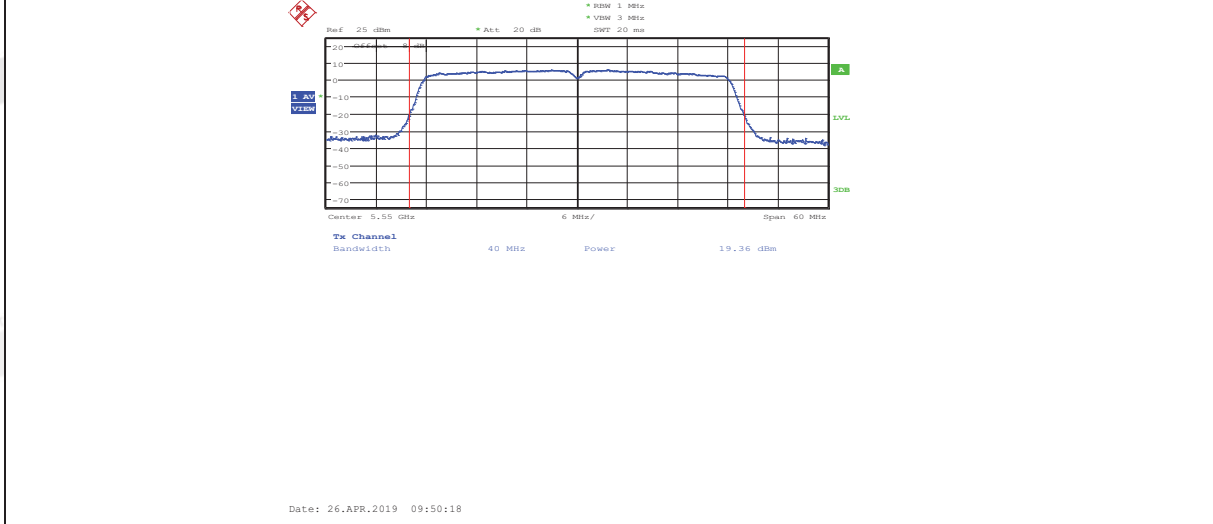




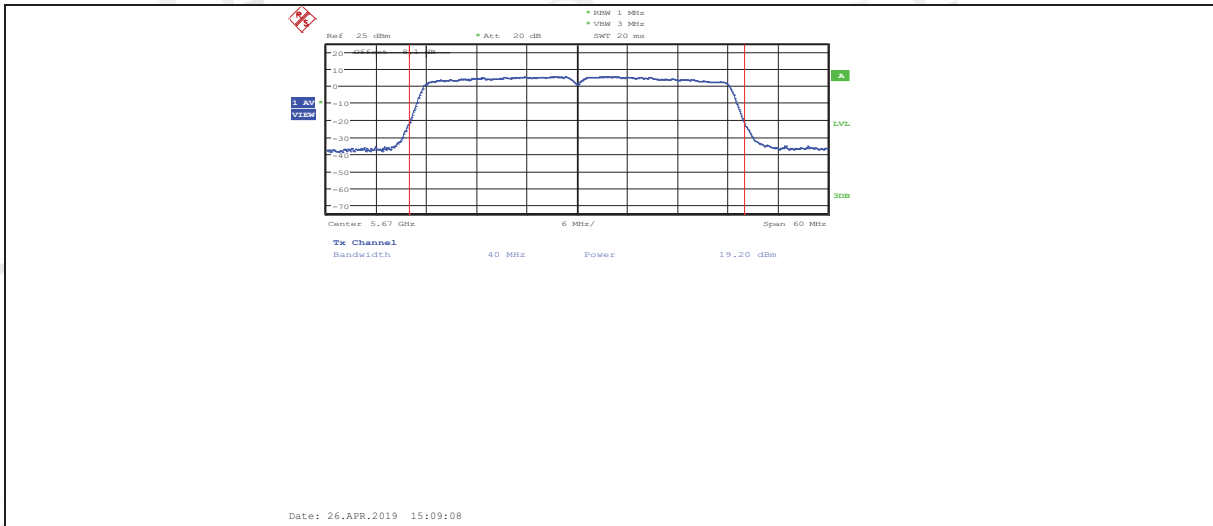
11AC40 ANT1 5550



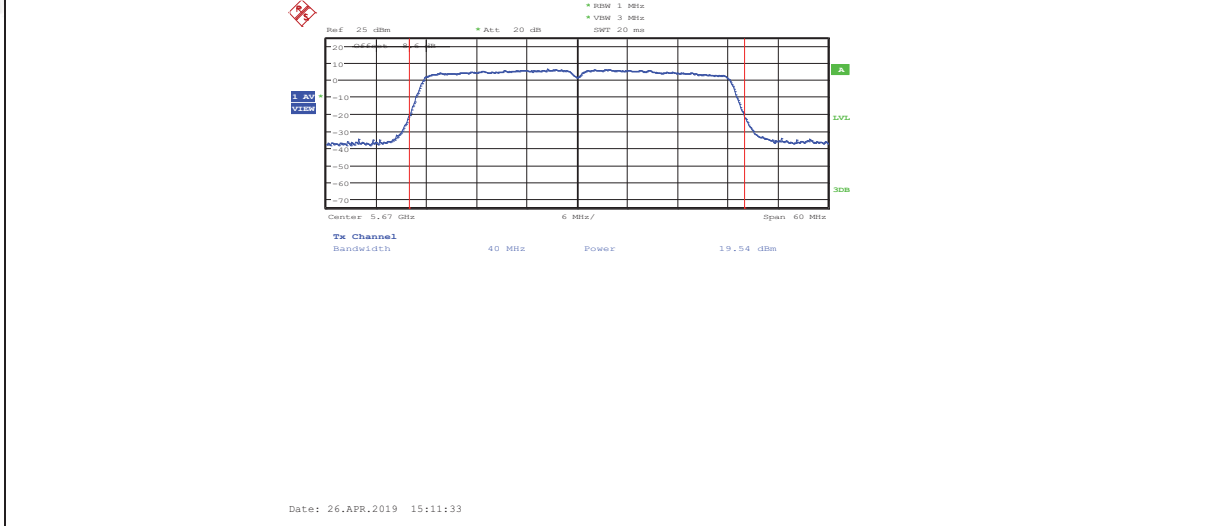
11AC40 ANT2 5550



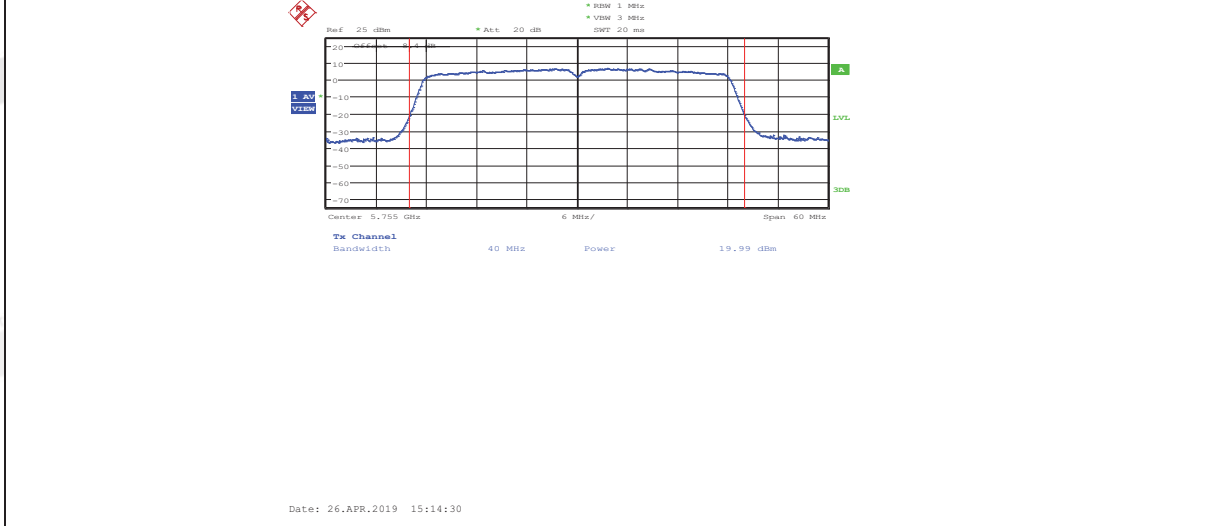
11AC40 ANT1 5670



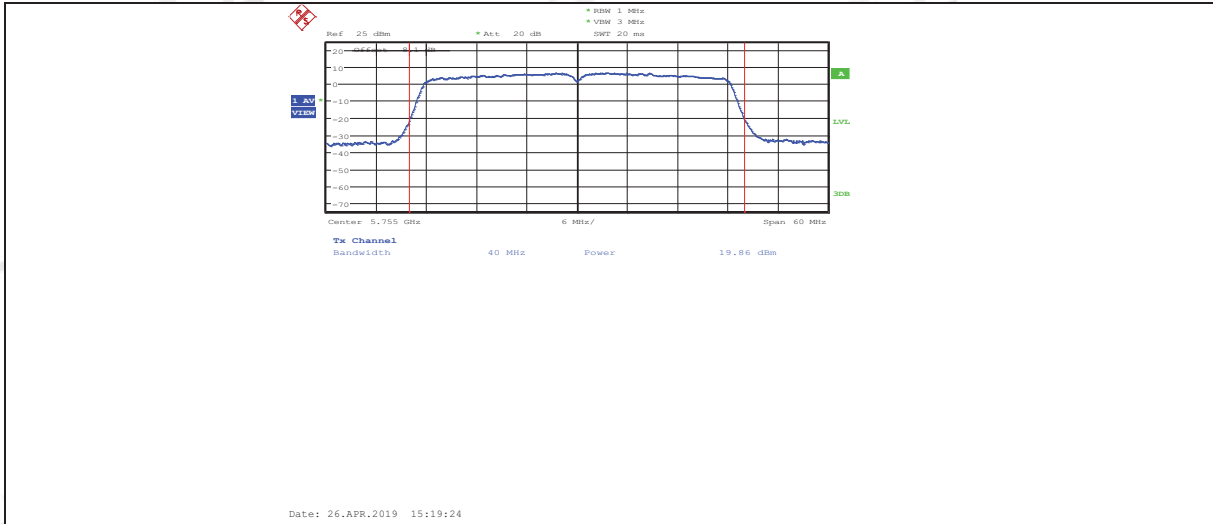
11AC40 ANT2 5670



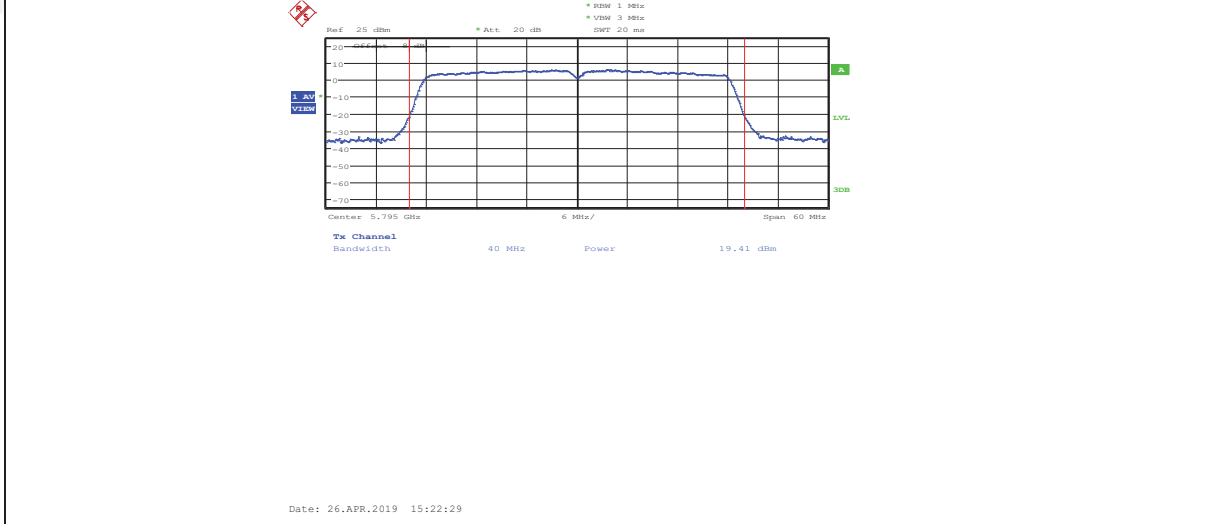
11AC40 ANT1 5755



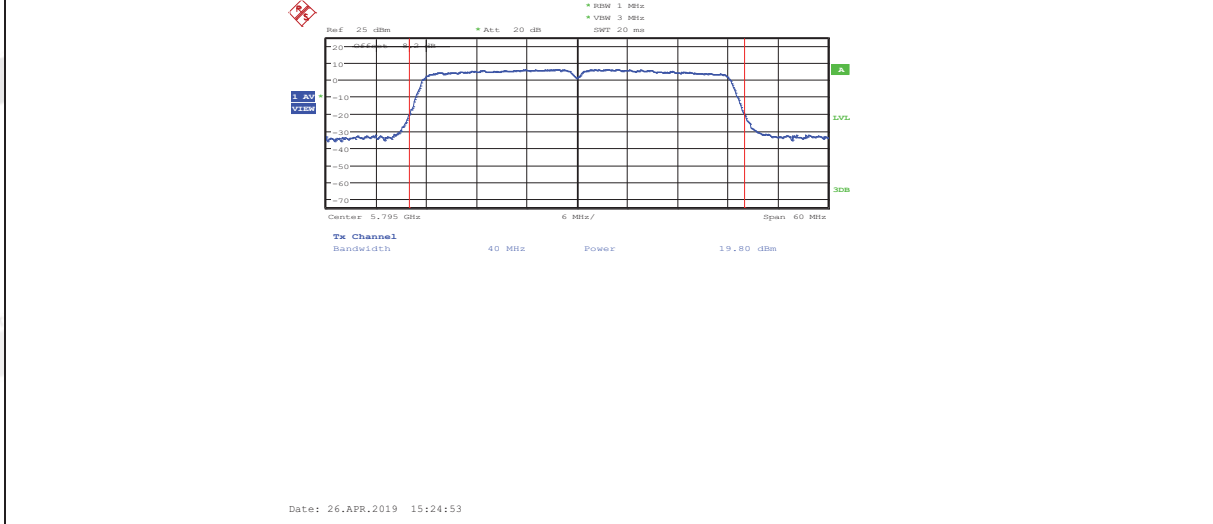
11AC40 ANT2 5755



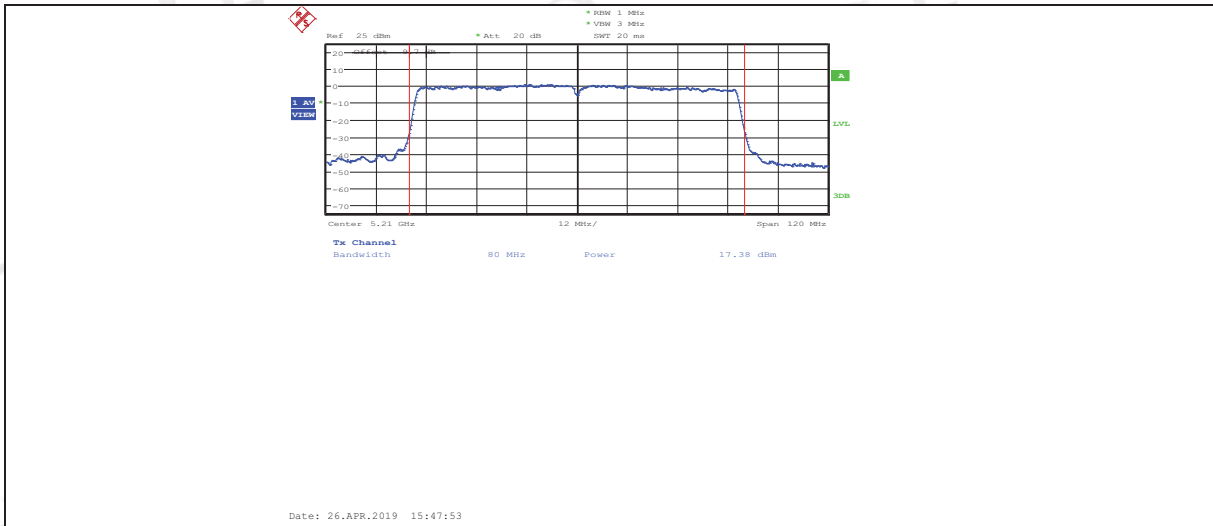
11AC40 ANT1\_5795



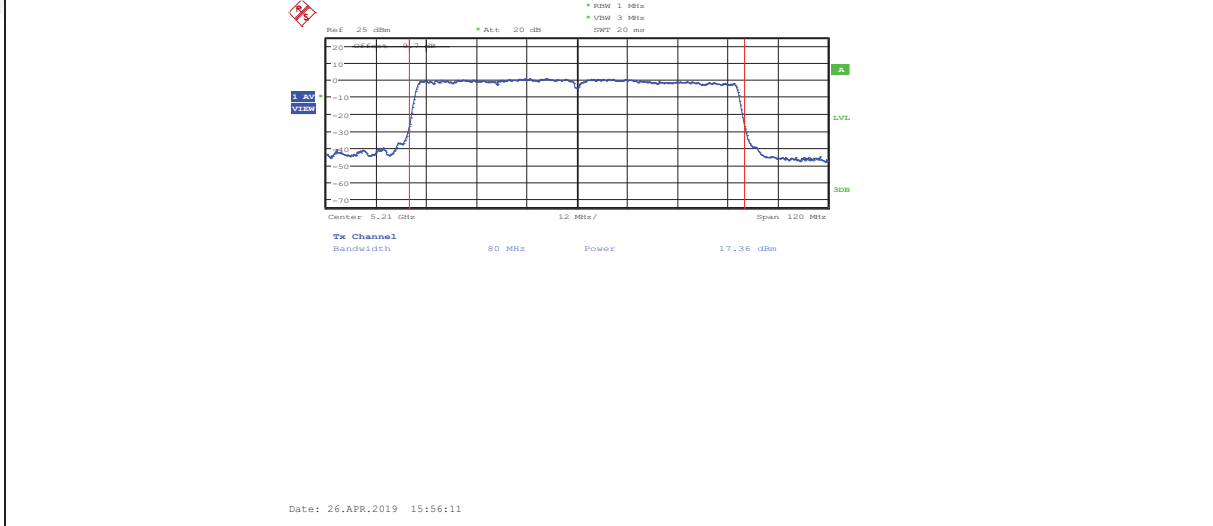
11AC40 ANT2\_5795



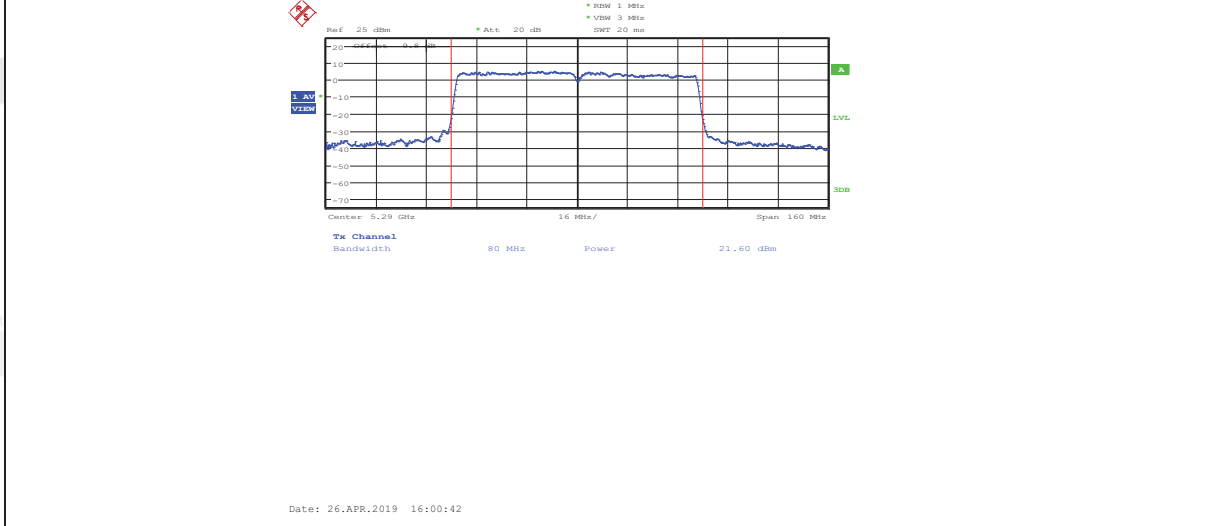
11AC80 ANT1\_5210



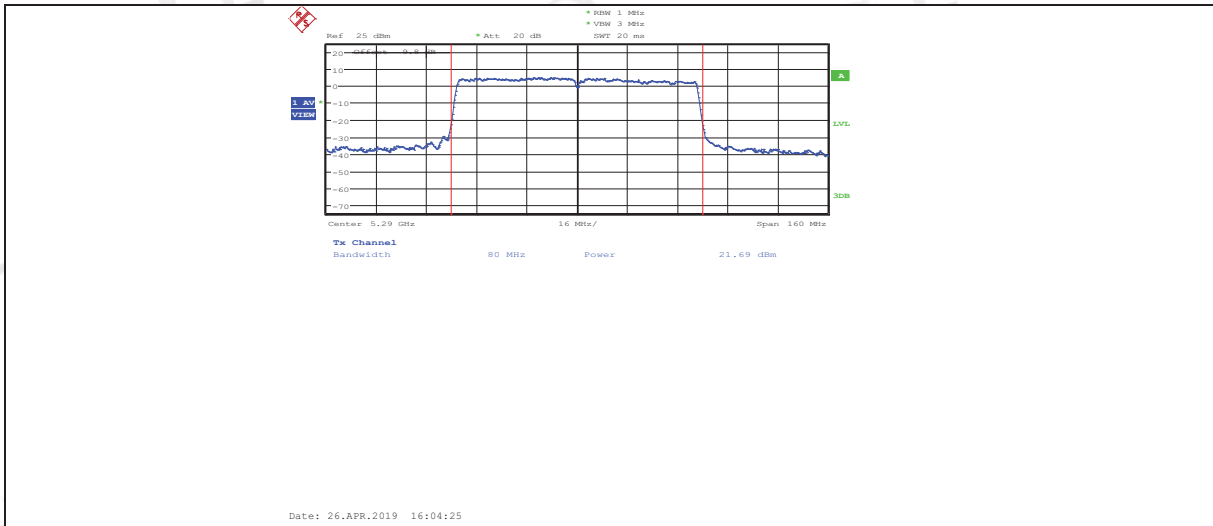
11AC80\_ANT2\_5210



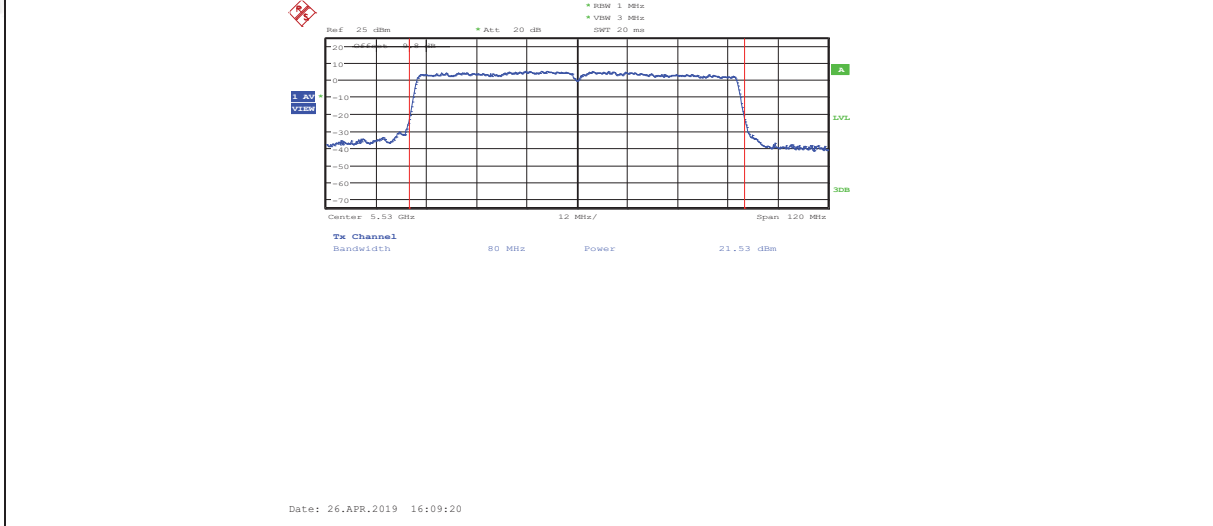
11AC80\_ANT1\_5290



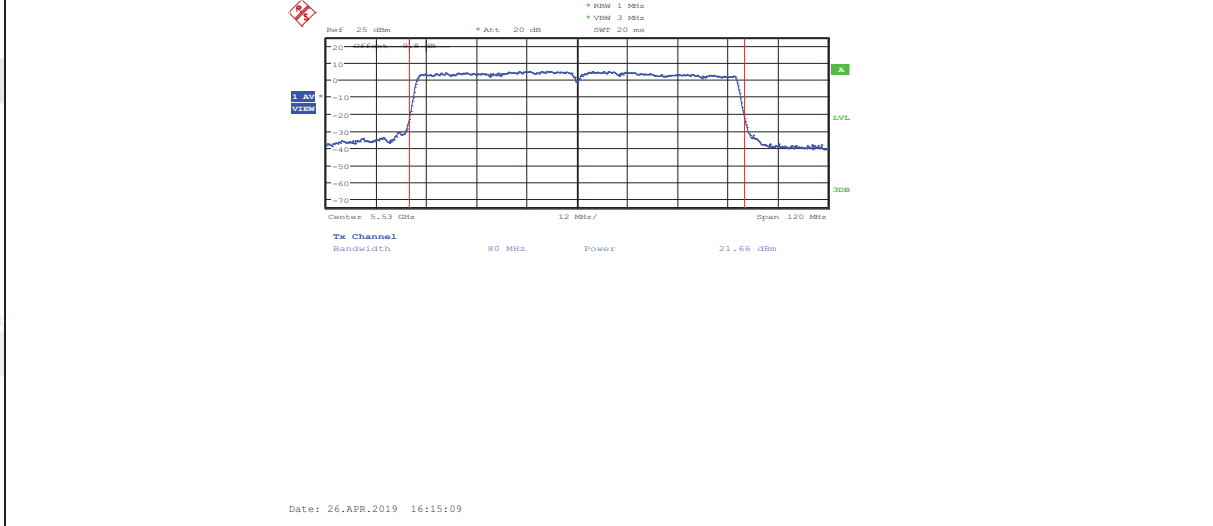
11AC80\_ANT2\_5290



11AC80 ANT1 5530



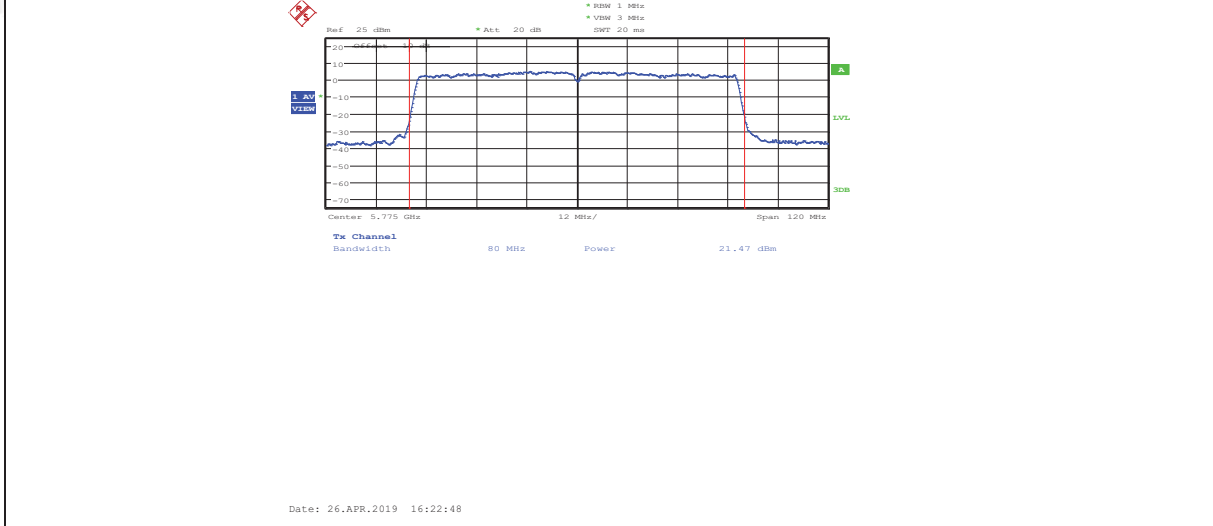
11AC80 ANT2 5530



11AC80 ANT1 5775



11AC80 ANT2 5775



## 6. Power Spectral Density

### 6.1. Block diagram of test setup

Same with 4.1

### 6.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz Mobile and portable:11 dBm/MHz	5150-5250
	For RSS eirp:10 dBm/MHz	
	11 dBm/MHz	5250-5350
	11 dBm/MHz	For FCC:5470-5725 For IC:5470-5600 5650-5725
	30 dBm/500 kHz	5725-5850

### 6.3. Test Procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto



## Note:

1. For UNII-3, according to KDB publication 789033 D02 General U-NII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.
  2. The value measured with RBW=1MHz is to be added with  $10\log(500\text{kHz}/1\text{MHz})$  which is - 3dB. For example, if the measured value is +10 dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7 dBm/500 kHz.
- Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

## 6.4. Test Result

### (5150-5250)

Test Mode	Ant	Test Channel	PSD [dBm/MHz]	PSD eirp [dBm/MHz]	FCC Limit [dBm/MHz]	ISED Limit [dBm/MHz]
11A	ANT1	5180	4.85	8.64	11	10
11A	ANT2	5180	5.27	9.09	11	10
11A	ANT1	5200	5.33	9.12	11	10
11A	ANT2	5200	5.24	9.06	11	10
11A	ANT1	5240	4.63	8.42	11	10
11A	ANT2	5240	4.54	8.36	11	10
11N20	ANT1	5180	4.66	8.45	11	10
11N20	ANT2	5180	4.67	8.49	11	10
11N20	ANT1	5200	4.52	8.31	11	10
11N20	ANT2	5200	4.3	8.12	11	10
11N20	ANT1	5240	5.06	8.85	11	10
11N20	ANT2	5240	5.00	8.82	11	10
11N40	ANT1	5190	2.15	5.94	11	10
11N40	ANT2	5190	2.23	6.05	11	10
11N40	ANT1	5230	2.79	6.58	11	10
11N40	ANT2	5230	2.80	6.62	11	10
11AC20	ANT1	5180	4.42	8.21	11	10
11AC20	ANT2	5180	4.37	8.19	11	10
11AC20	ANT1	5200	4.28	8.07	11	10
11AC20	ANT2	5200	4.29	8.11	11	10
11AC20	ANT1	5240	4.76	8.55	11	10
11AC20	ANT2	5240	5.12	8.94	11	10
11AC40	ANT1	5190	3.59	7.38	11	10
11AC40	ANT2	5190	4.28	8.10	11	10
11AC40	ANT1	5230	4.35	8.14	11	10
11AC40	ANT2	5230	4.04	7.86	11	10
11AC80	ANT1	5210	0.95	4.74	11	10

11AC80	ANT2	5210	1.30	5.12	11	10
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**(5250-5350, 5470-5725)**

Test Mode	Ant	Test Channel	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	ANT1	5260	7.47	11	PASS
11A	ANT2	5260	7.53	11	PASS
11A	ANT1	5280	7.35	11	PASS
11A	ANT2	5280	7.18	11	PASS
11A	ANT1	5320	8.54	11	PASS
11A	ANT2	5320	8.37	11	PASS
11A	ANT1	5500	8.93	11	PASS
11A	ANT2	5500	8.60	11	PASS
11A	ANT1	5580	8.15	11	PASS
11A	ANT2	5580	7.81	11	PASS
11A	ANT1	5700	6.10	11	PASS
11A	ANT2	5700	6.08	11	PASS
11N20	ANT1	5260	6.28	11	PASS
11N20	ANT2	5260	5.91	11	PASS
11N20	ANT1	5280	5.86	11	PASS
11N20	ANT2	5280	6.05	11	PASS
11N20	ANT1	5320	6.34	11	PASS
11N20	ANT2	5320	6.39	11	PASS
11N20	ANT1	5500	7.15	11	PASS
11N20	ANT2	5500	7.02	11	PASS
11N20	ANT1	5580	6.45	11	PASS
11N20	ANT2	5580	6.02	11	PASS
11N20	ANT1	5700	4.30	11	PASS
11N20	ANT2	5700	4.67	11	PASS
11N40	ANT1	5270	2.67	11	PASS
11N40	ANT2	5270	2.75	11	PASS
11N40	ANT1	5310	3.15	11	PASS
11N40	ANT2	5310	2.98	11	PASS
11N40	ANT1	5510	3.72	11	PASS
11N40	ANT2	5510	3.89	11	PASS
11N40	ANT1	5550	2.80	11	PASS
11N40	ANT2	5550	2.81	11	PASS
11N40	ANT1	5670	2.46	11	PASS
11N40	ANT2	5670	2.21	11	PASS

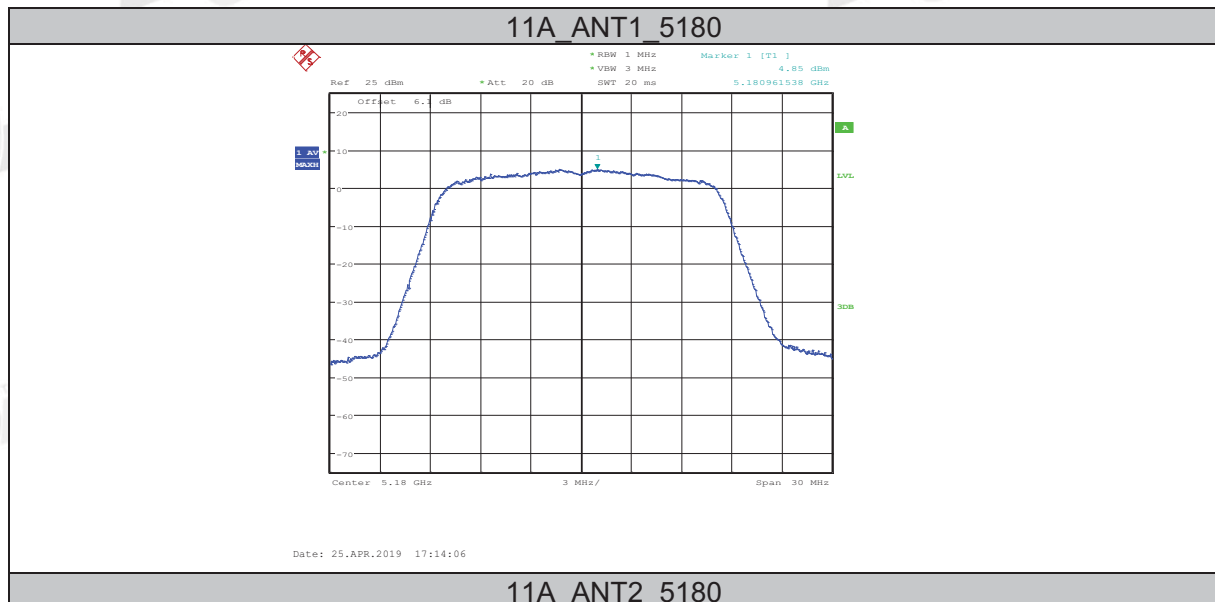
11AC20	ANT1	5260	7.87	11	PASS
11AC20	ANT2	5260	7.67	11	PASS
11AC20	ANT1	5280	7.92	11	PASS
11AC20	ANT2	5280	7.84	11	PASS
11AC20	ANT1	5320	8.26	11	PASS
11AC20	ANT2	5320	8.37	11	PASS
11AC20	ANT1	5500	8.85	11	PASS
11AC20	ANT2	5500	8.78	11	PASS
11AC20	ANT1	5580	8.21	11	PASS
11AC20	ANT2	5580	8.22	11	PASS
11AC20	ANT1	5700	6.70	11	PASS
11AC20	ANT2	5700	6.66	11	PASS
11AC40	ANT1	5270	5.76	11	PASS
11AC40	ANT2	5270	5.87	11	PASS
11AC40	ANT1	5310	5.98	11	PASS
11AC40	ANT2	5310	5.93	11	PASS
11AC40	ANT1	5510	6.98	11	PASS
11AC40	ANT2	5510	6.82	11	PASS
11AC40	ANT1	5550	6.00	11	PASS
11AC40	ANT2	5550	5.73	11	PASS
11AC40	ANT1	5670	5.52	11	PASS
11AC40	ANT2	5670	5.68	11	PASS
11AC80	ANT1	5290	5.01	11	PASS
11AC80	ANT2	5290	5.07	11	PASS
11AC80	ANT1	5530	5.14	11	PASS
11AC80	ANT2	5530	5.39	11	PASS

**(5725-5850)**

Test Mode	Test Channel	Ant	PSD [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
11A	ANT1	5745	5.18	30	PASS
11A	ANT2	5745	5.47	30	PASS
11A	ANT1	5785	5.40	30	PASS
11A	ANT2	5785	5.38	30	PASS
11A	ANT1	5825	4.55	30	PASS
11A	ANT2	5825	4.27	30	PASS
11N20	ANT1	5745	3.92	30	PASS
11N20	ANT2	5745	4.05	30	PASS

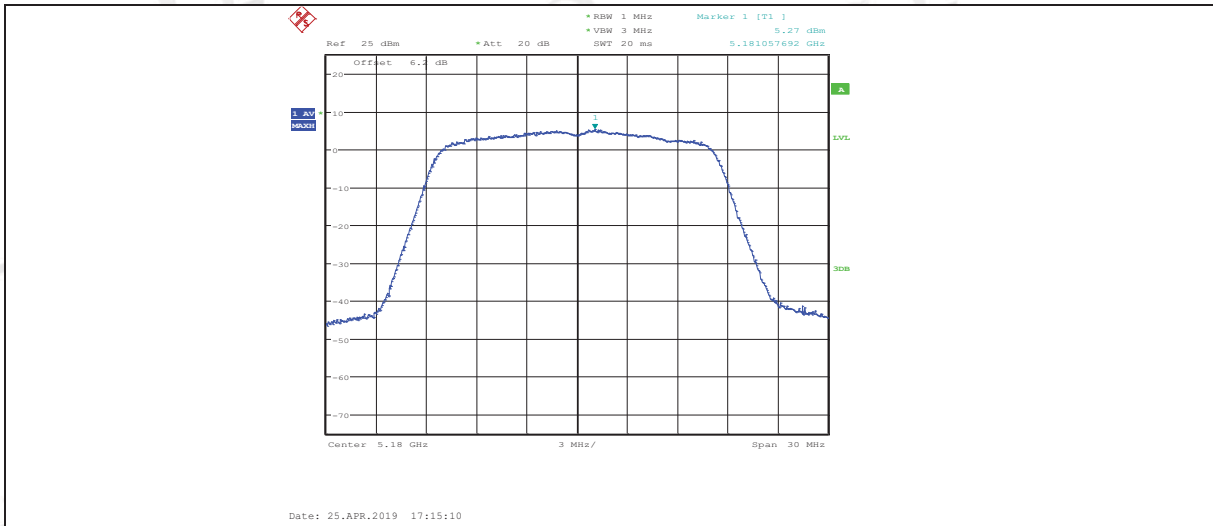
11N20	ANT1	5785	3.76	30	PASS
11N20	ANT2	5785	3.86	30	PASS
11N20	ANT1	5825	3.13	30	PASS
11N20	ANT2	5825	3.21	30	PASS
11N40	ANT1	5755	0.67	30	PASS
11N40	ANT2	5755	1.13	30	PASS
11N40	ANT1	5795	0.95	30	PASS
11N40	ANT2	5795	0.73	30	PASS
11AC20	ANT1	5745	6.11	30	PASS
11AC20	ANT2	5745	6.06	30	PASS
11AC20	ANT1	5785	6.14	30	PASS
11AC20	ANT2	5785	5.95	30	PASS
11AC20	ANT1	5825	4.88	30	PASS
11AC20	ANT2	5825	5.21	30	PASS
11AC40	ANT1	5755	4.26	30	PASS
11AC40	ANT2	5755	4.32	30	PASS
11AC40	ANT1	5795	3.93	30	PASS
11AC40	ANT2	5795	4.70	30	PASS
11AC80	ANT1	5775	4.93	30	PASS
11AC80	ANT2	5775	4.89	30	PASS

6.5. Original test data

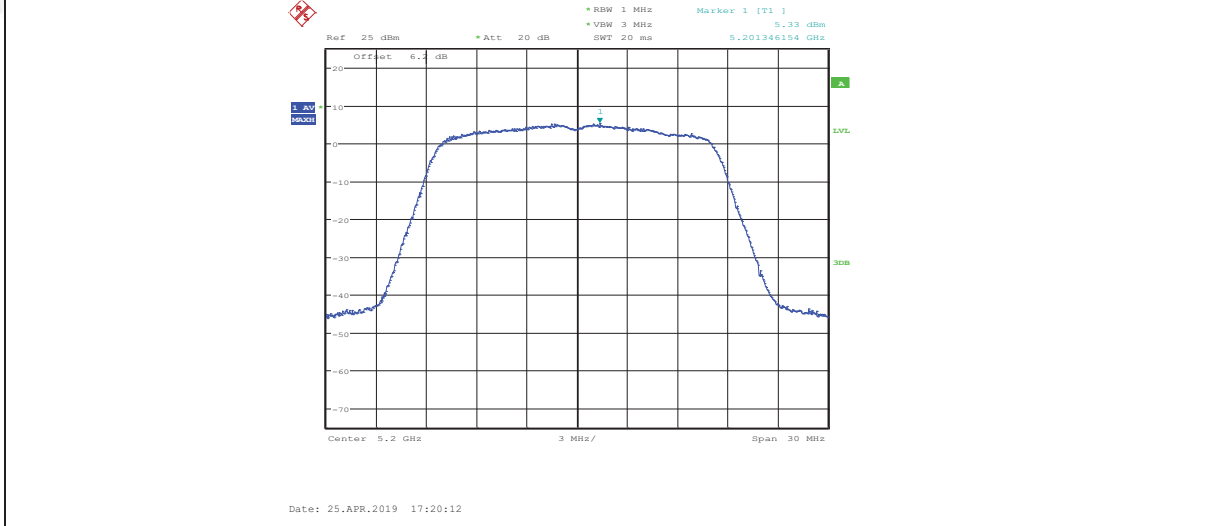


11A ANT2 5180

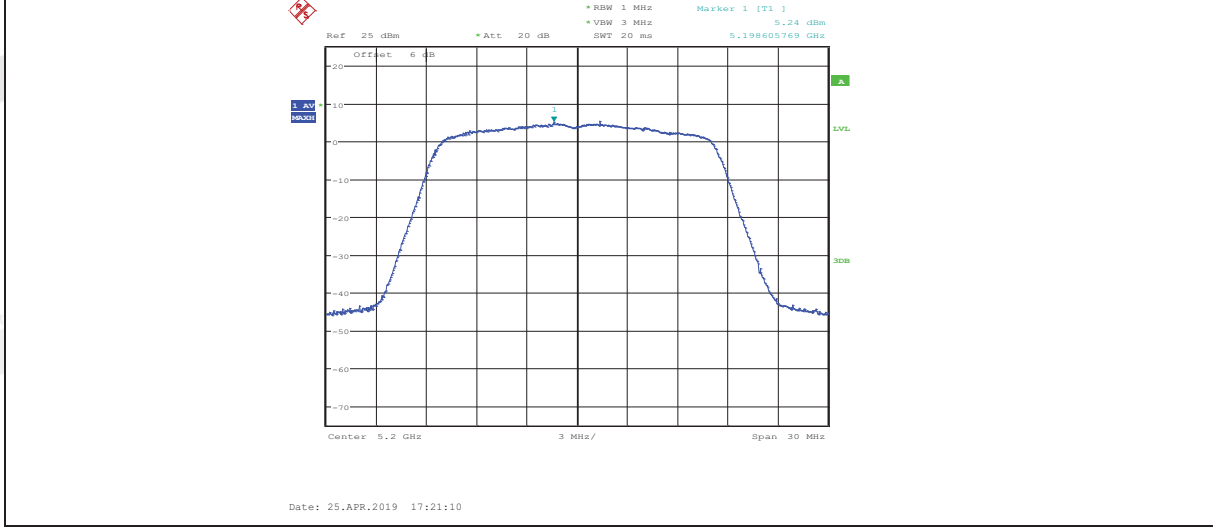




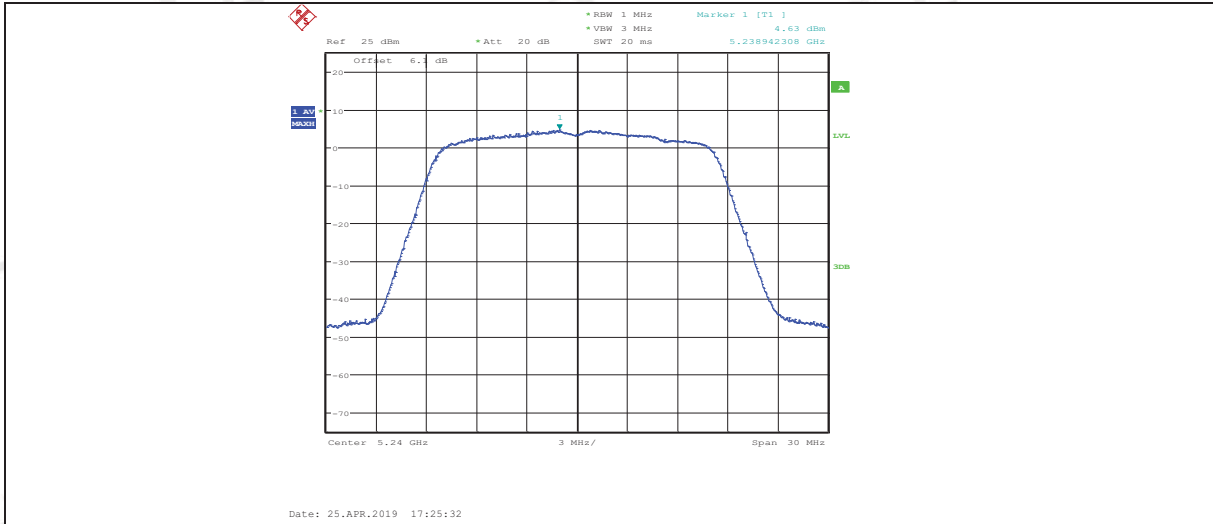
11A ANT1 5200



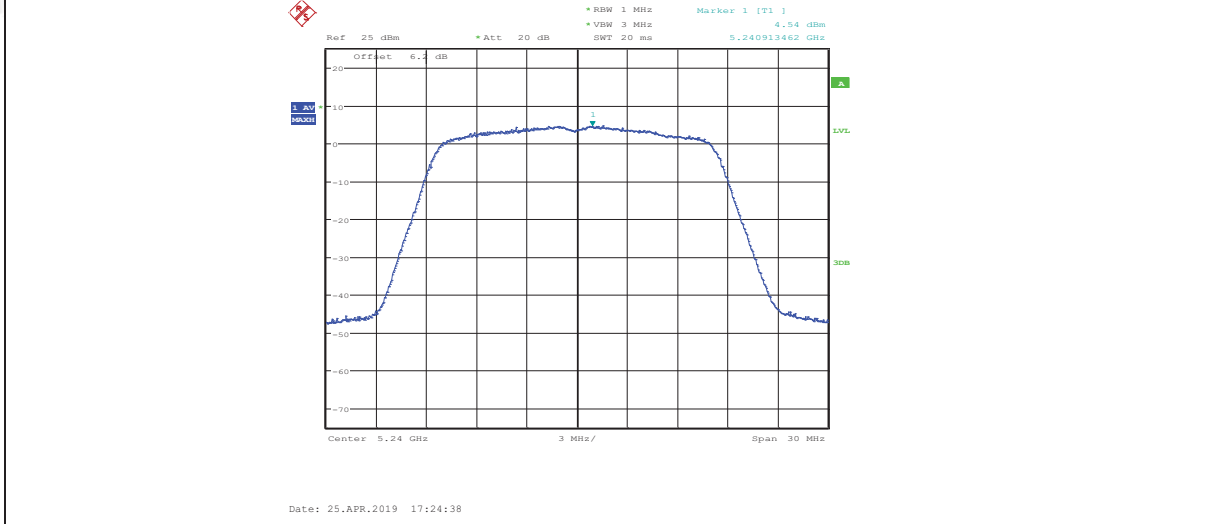
11A ANT2 5200



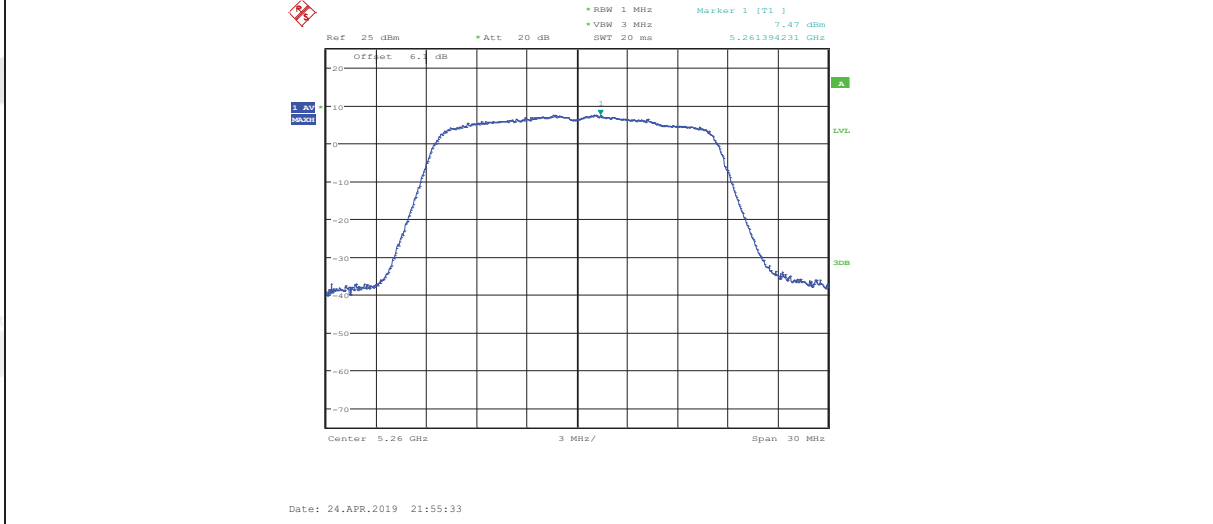
11A ANT1 5240



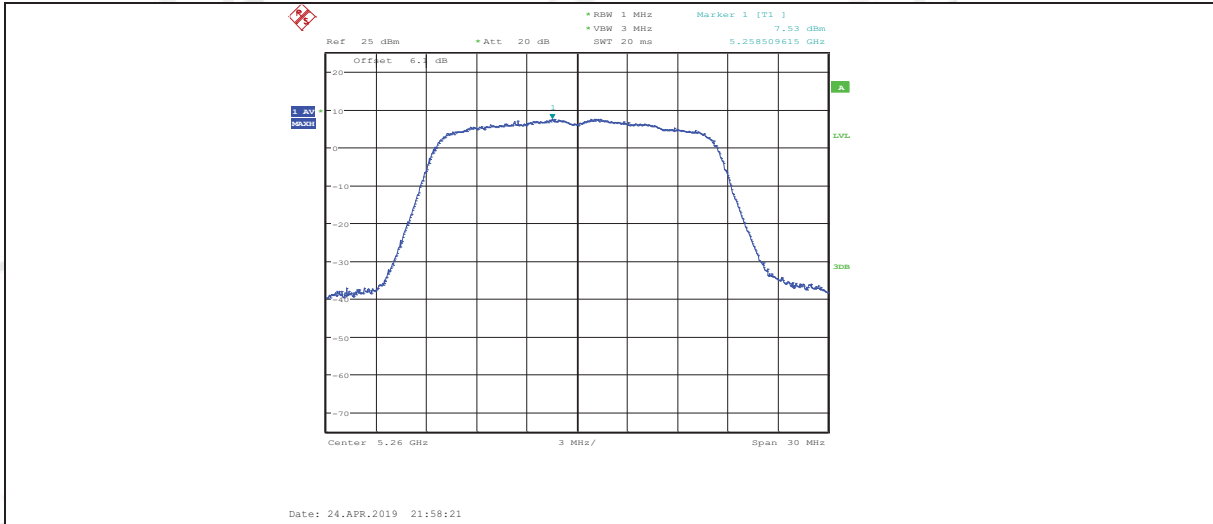
11A ANT2 5240



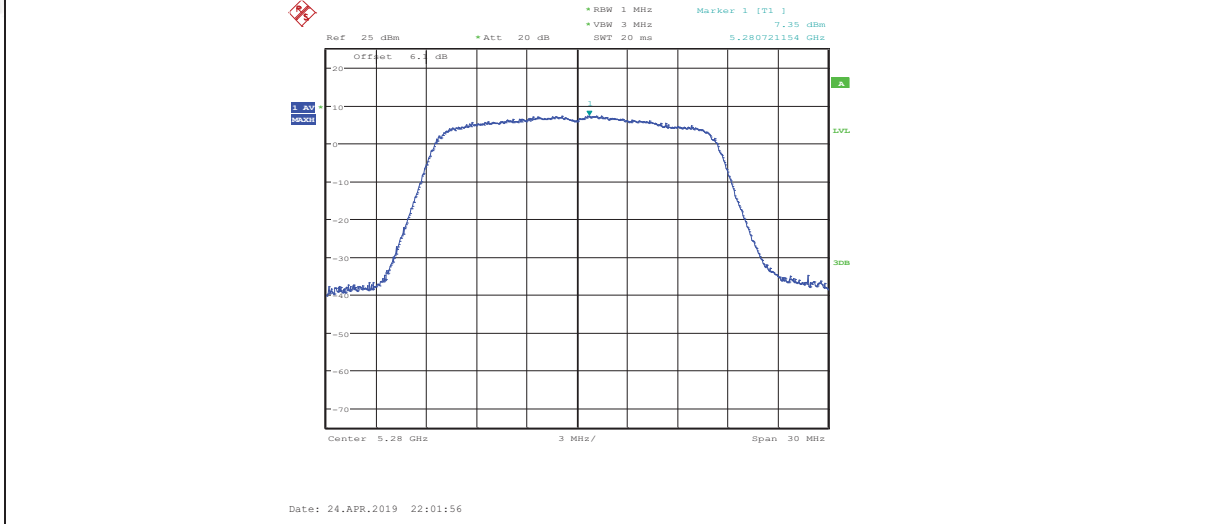
11A ANT1 5260



11A ANT2 5260



11A ANT1 5280

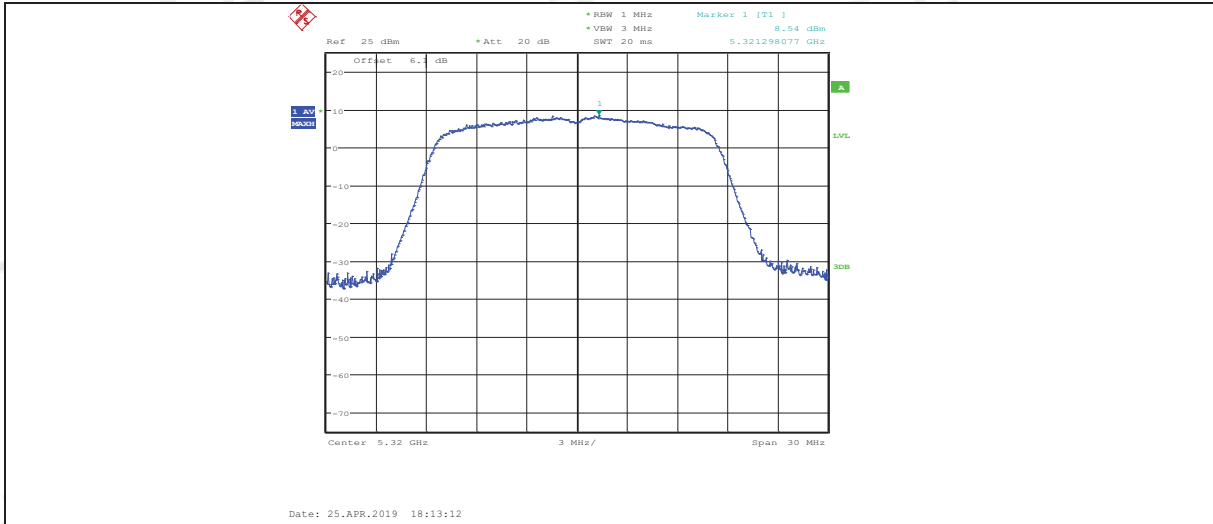


11A ANT2 5280

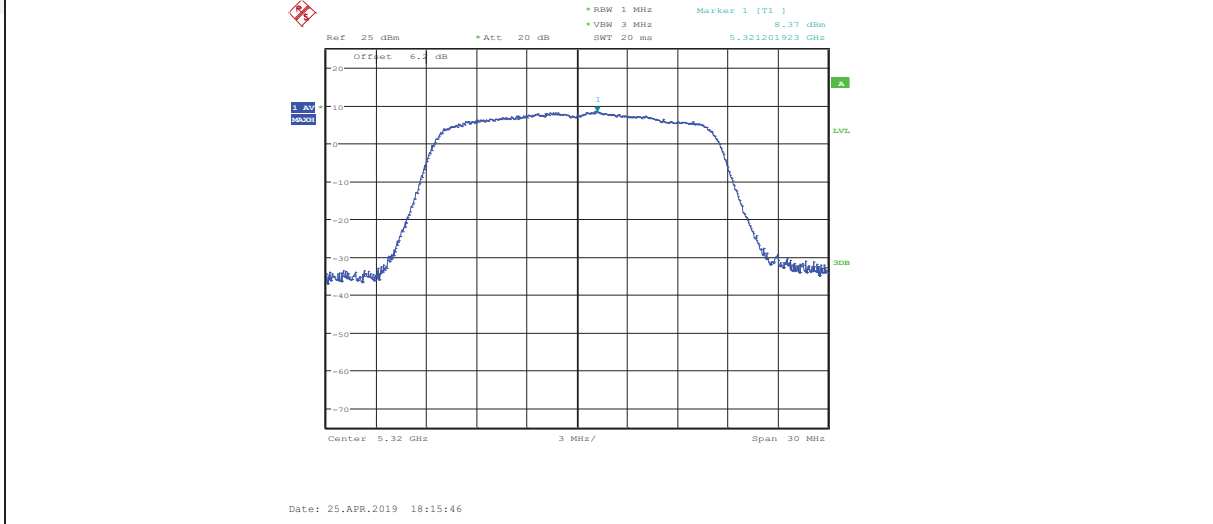


11A ANT1 5320

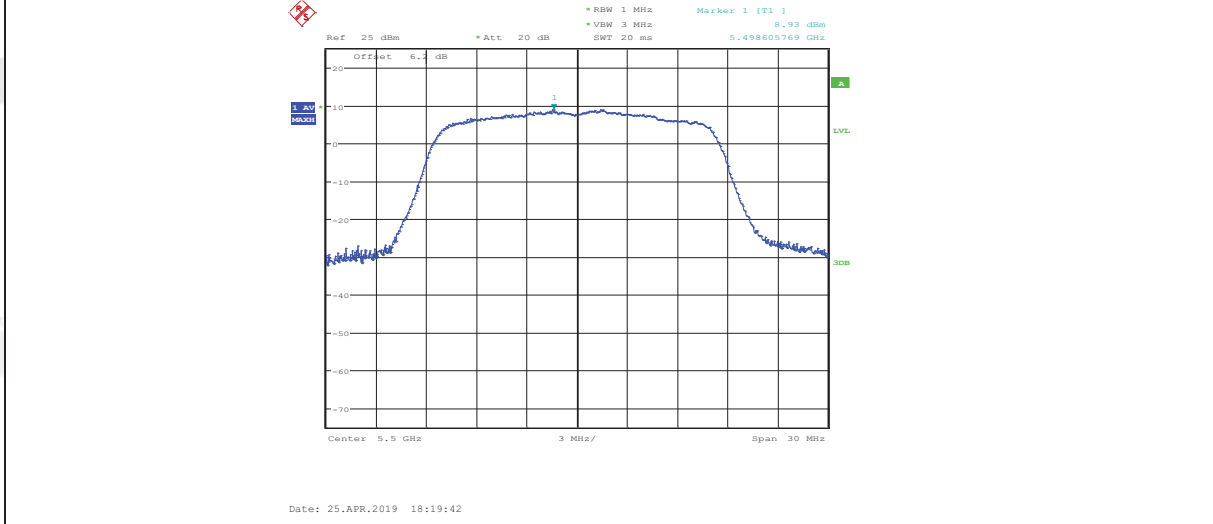




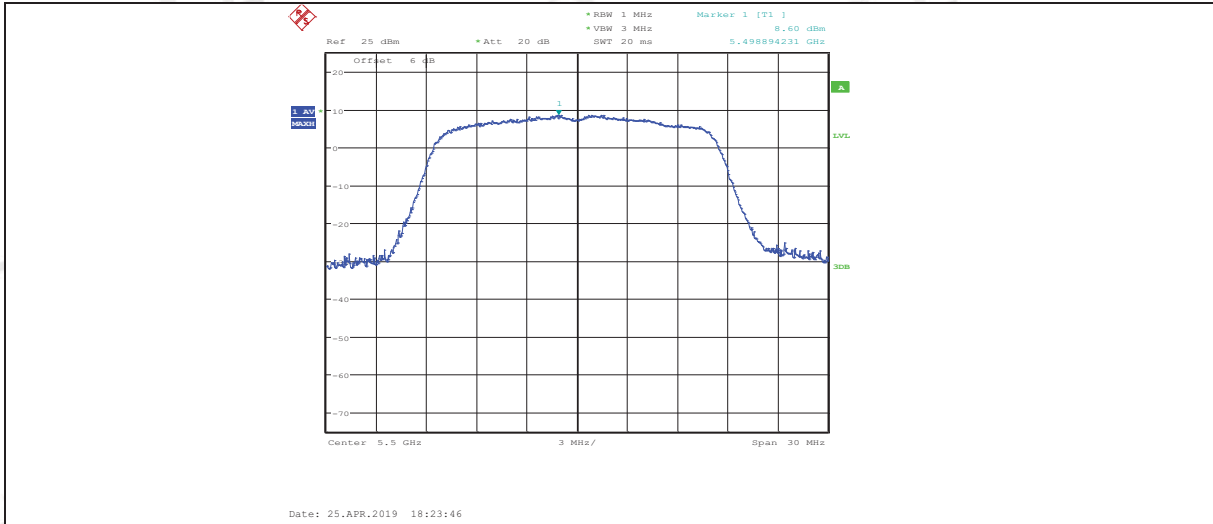
11A ANT2 5320



11A ANT1 5500



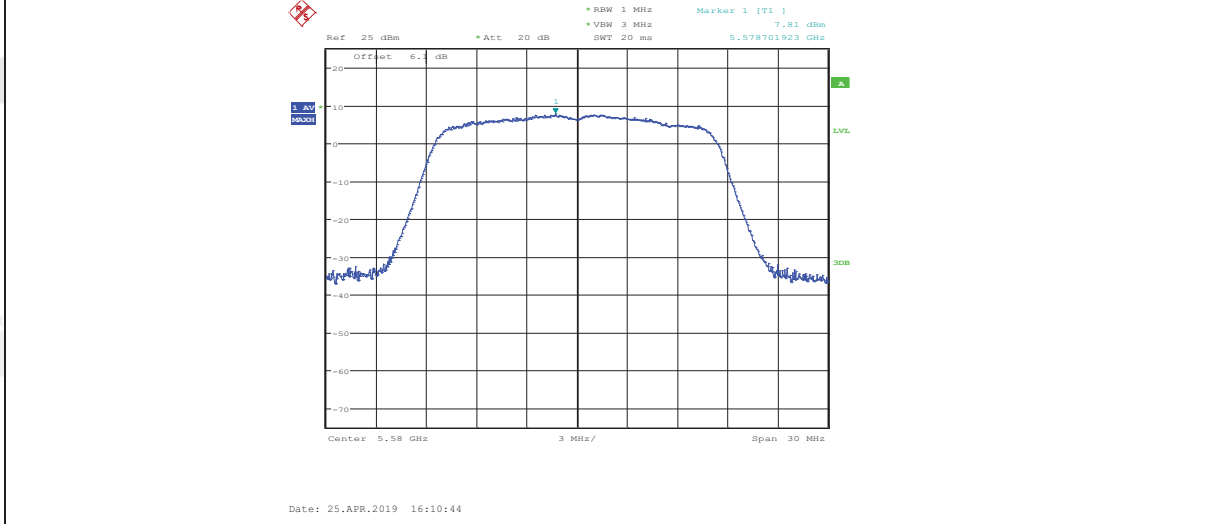
11A ANT2 5500



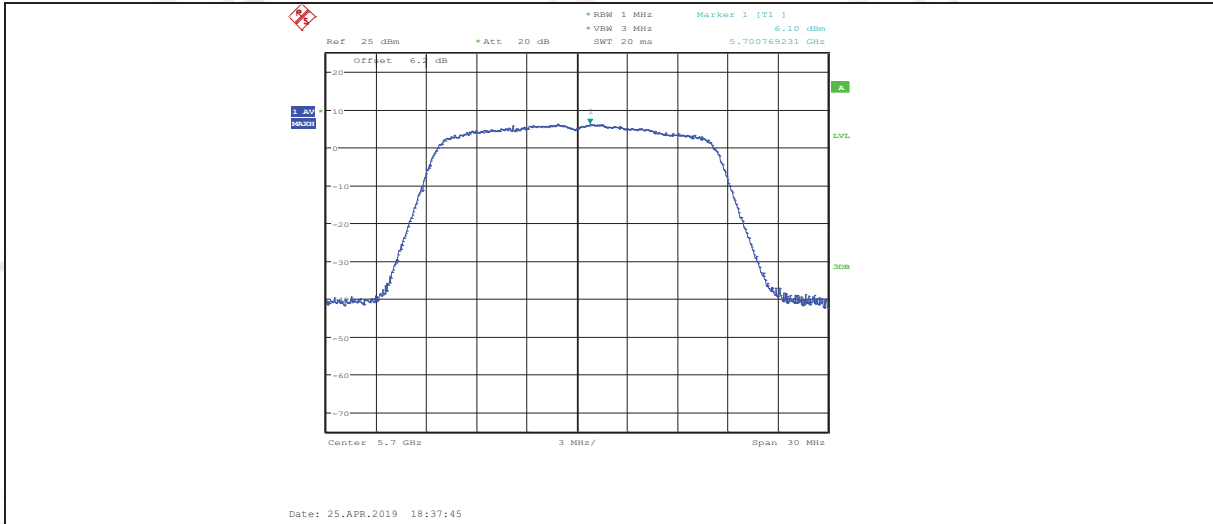
11A ANT1 5580



11A ANT2 5580



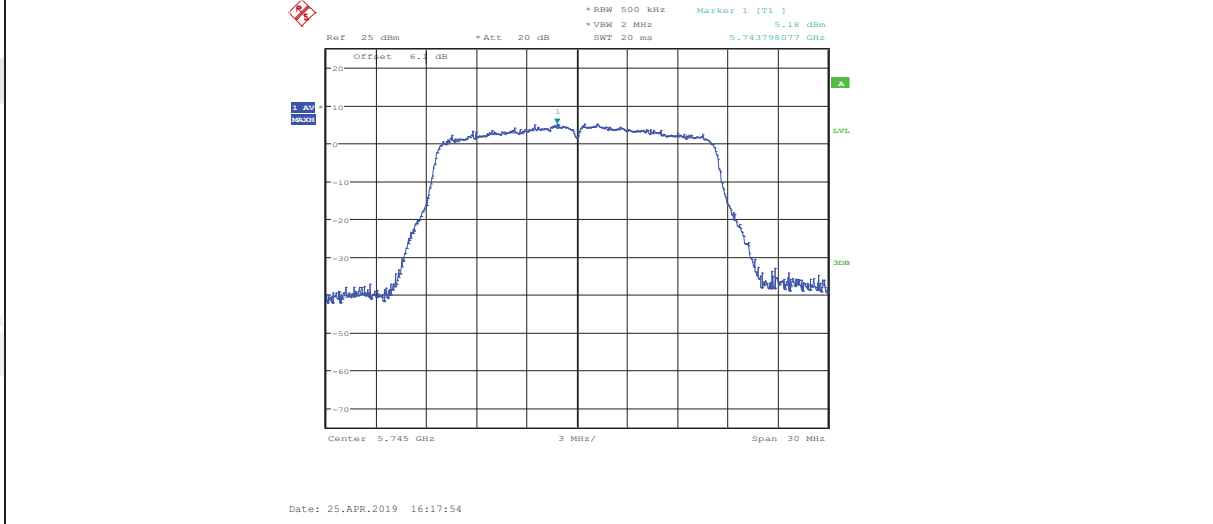
11A ANT1 5700



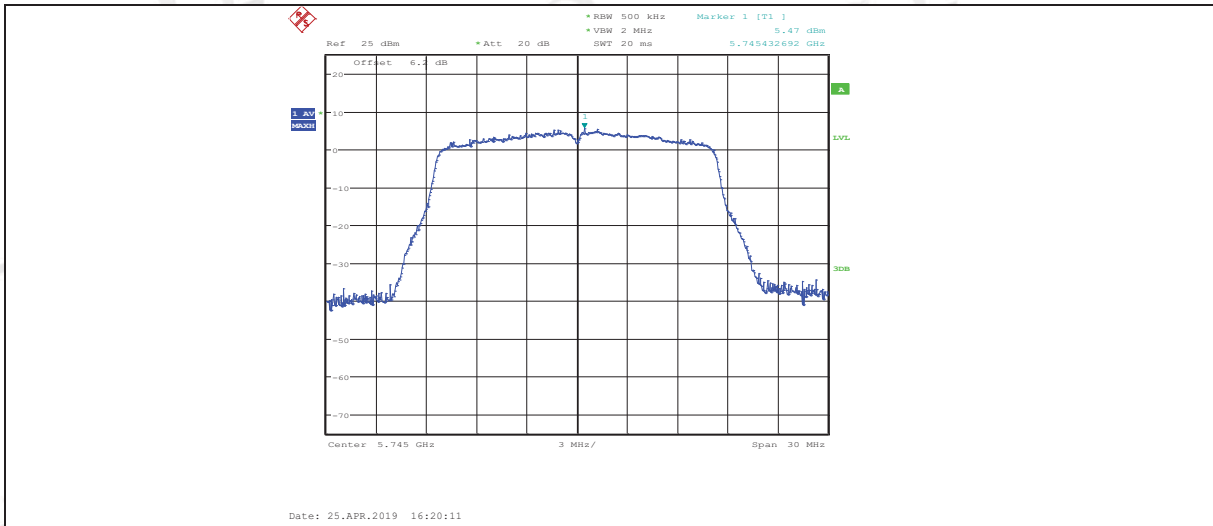
11A ANT2 5700



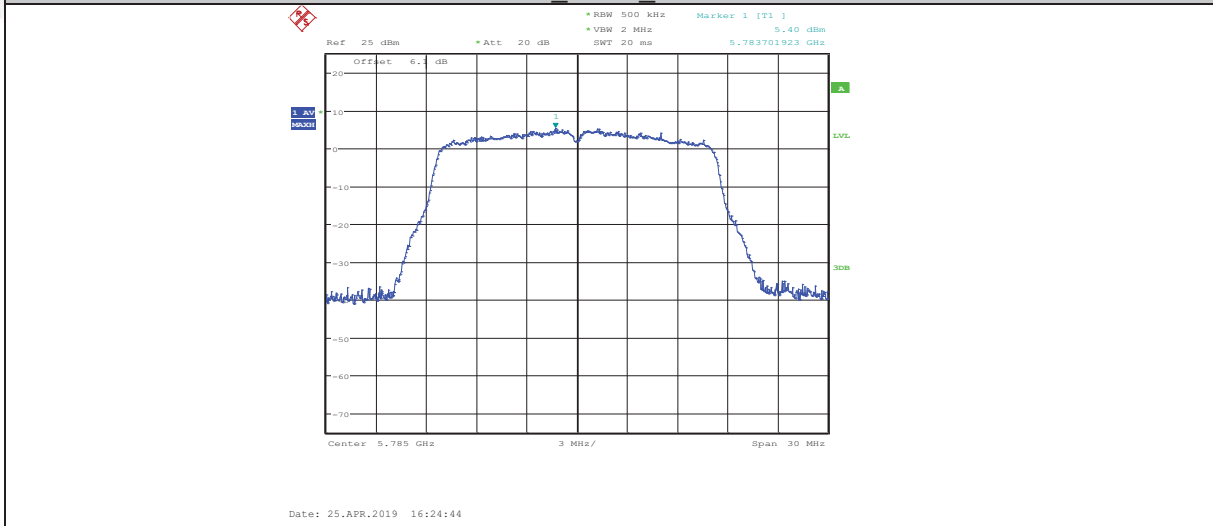
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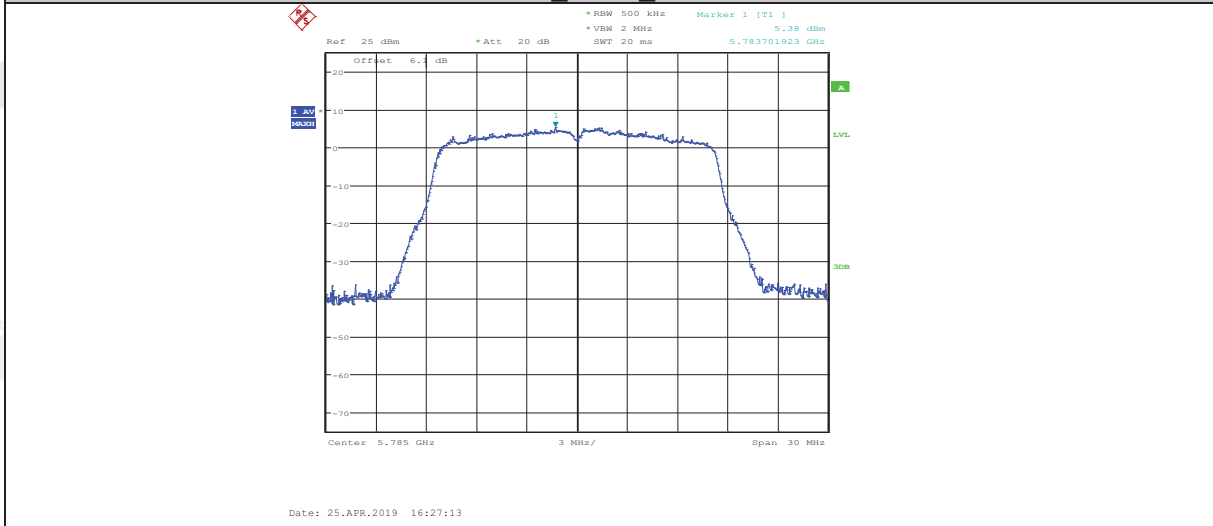
11A ANT2 5745



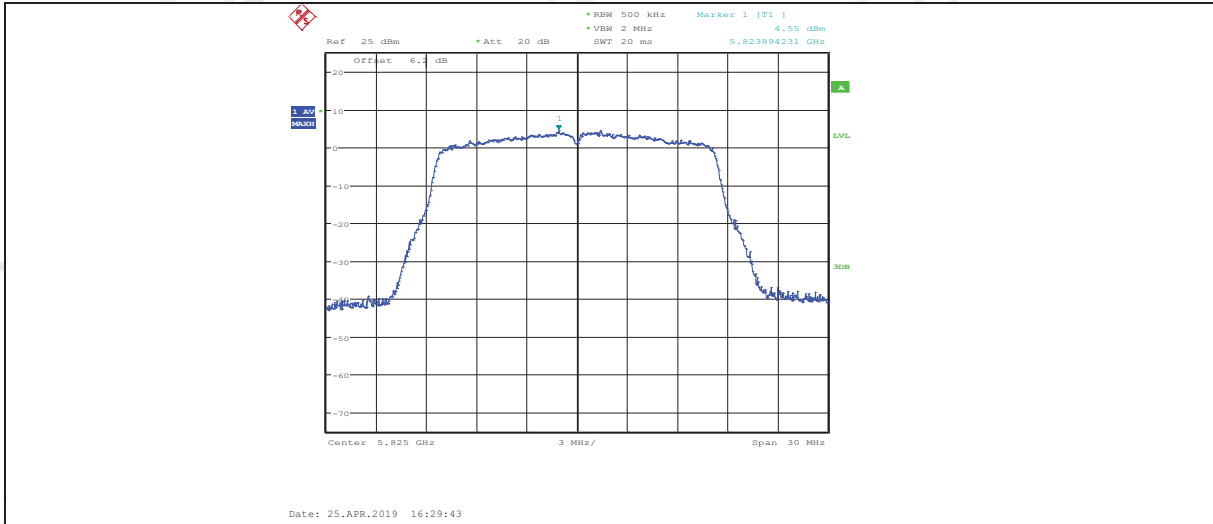
11A ANT1\_5785



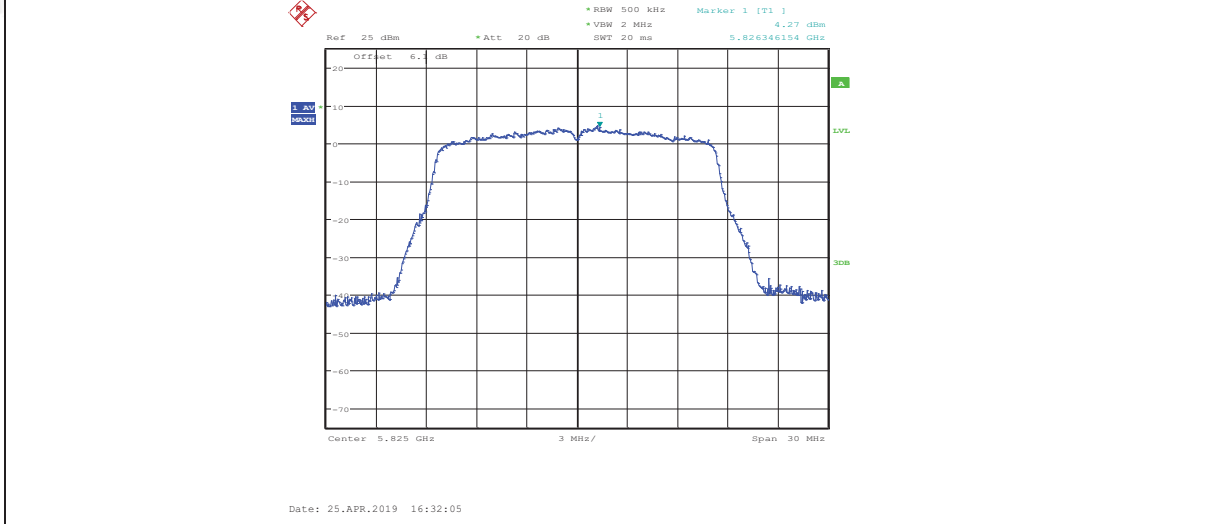
11A ANT2\_5785



11A ANT1\_5825



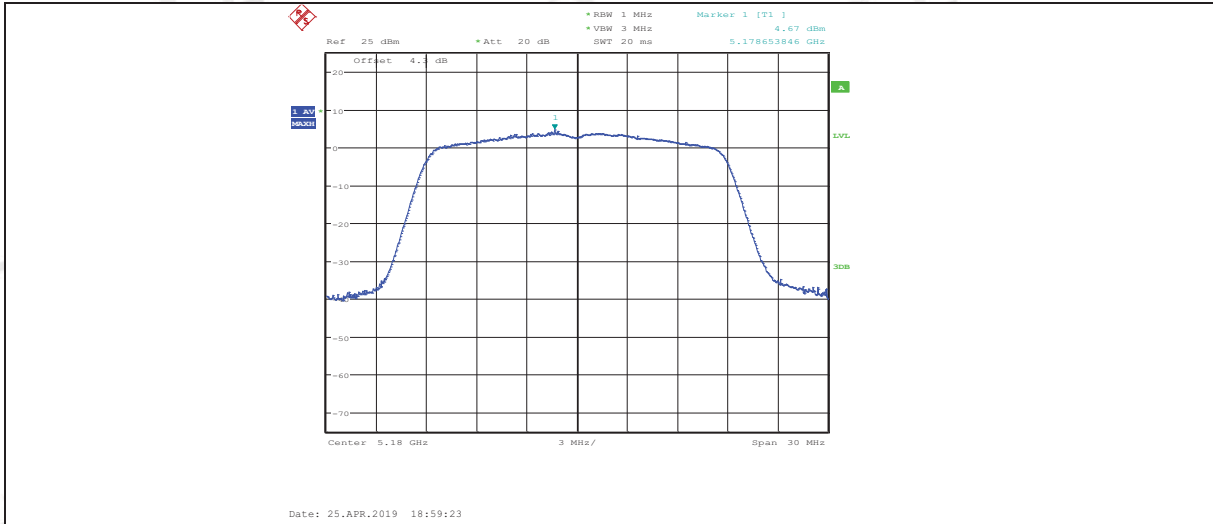
11A ANT2 5825



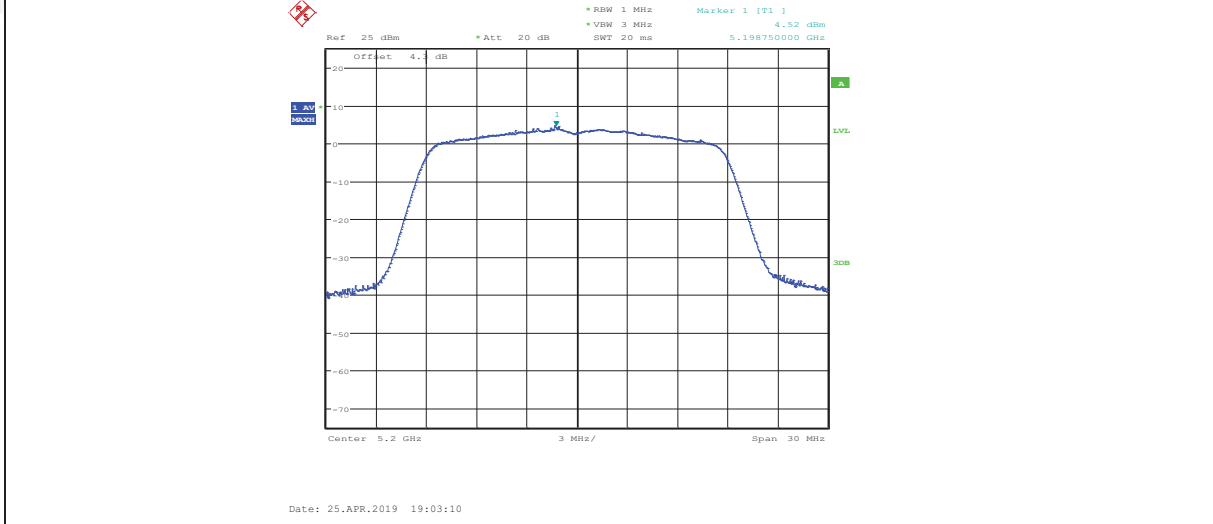
11N20 ANT1 5180



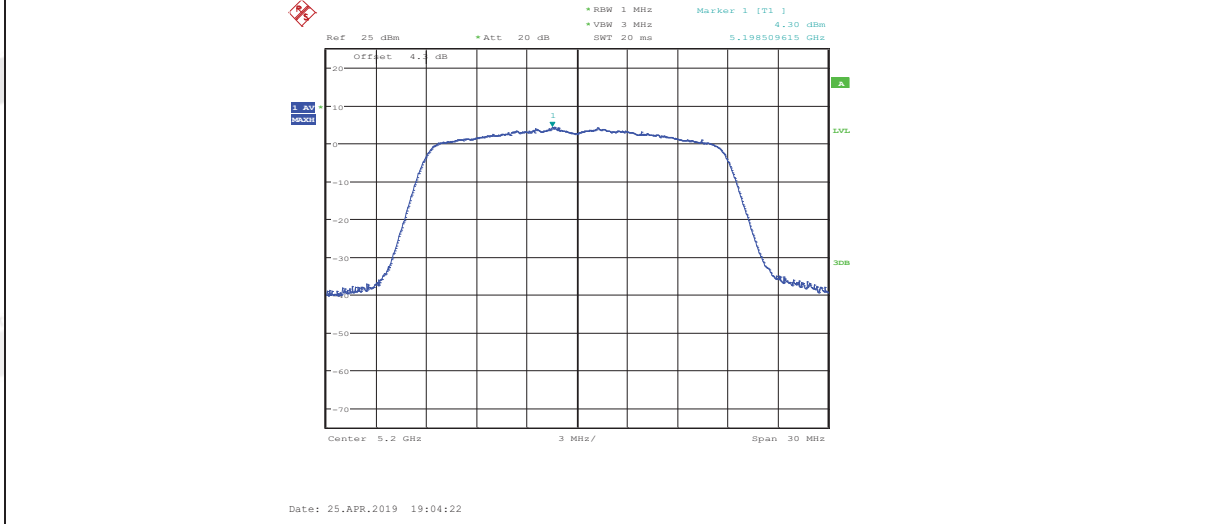
11N20 ANT2 5180



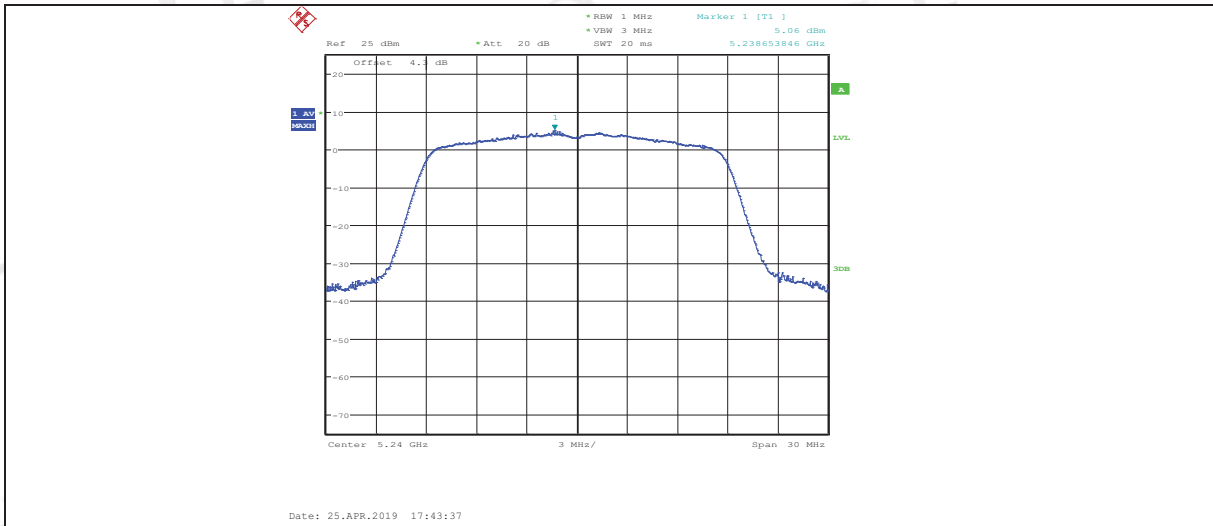
11N20 ANT1 5200



11N20 ANT2 5200



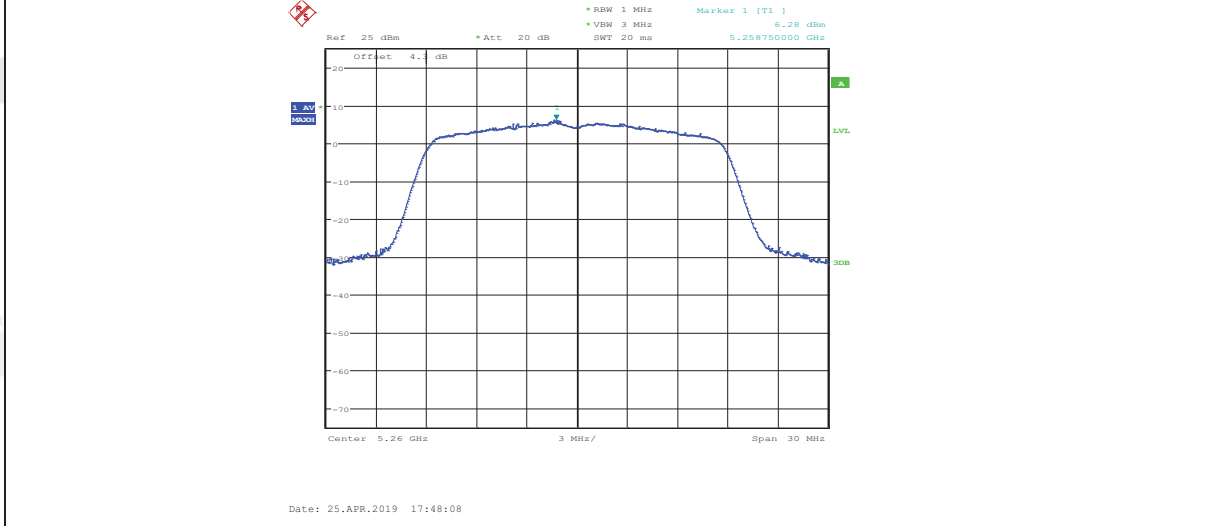
11N20 ANT1 5240



11N20 ANT2 5240

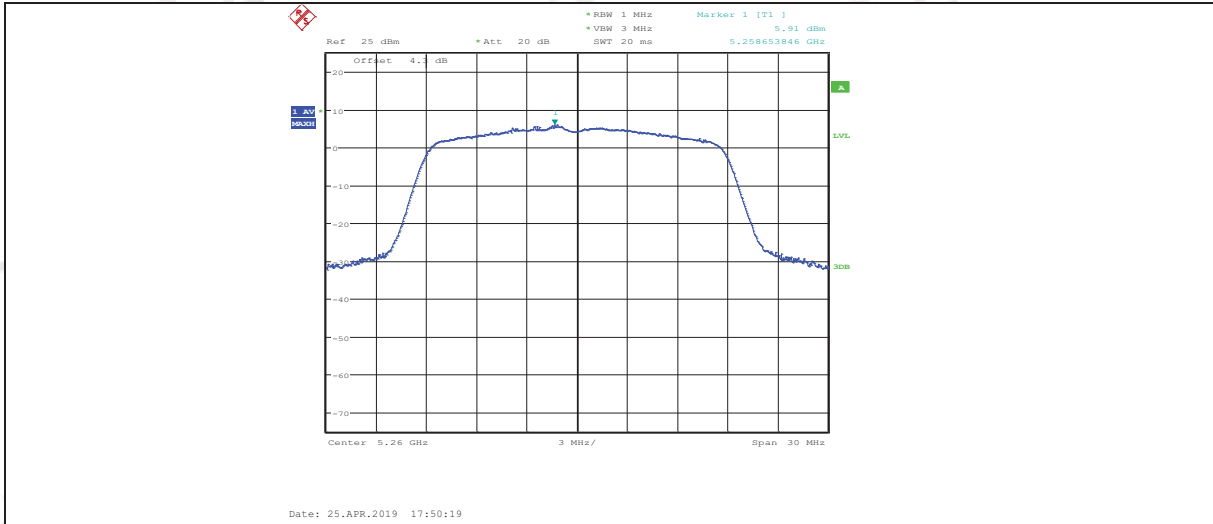


11N20 ANT1 5260

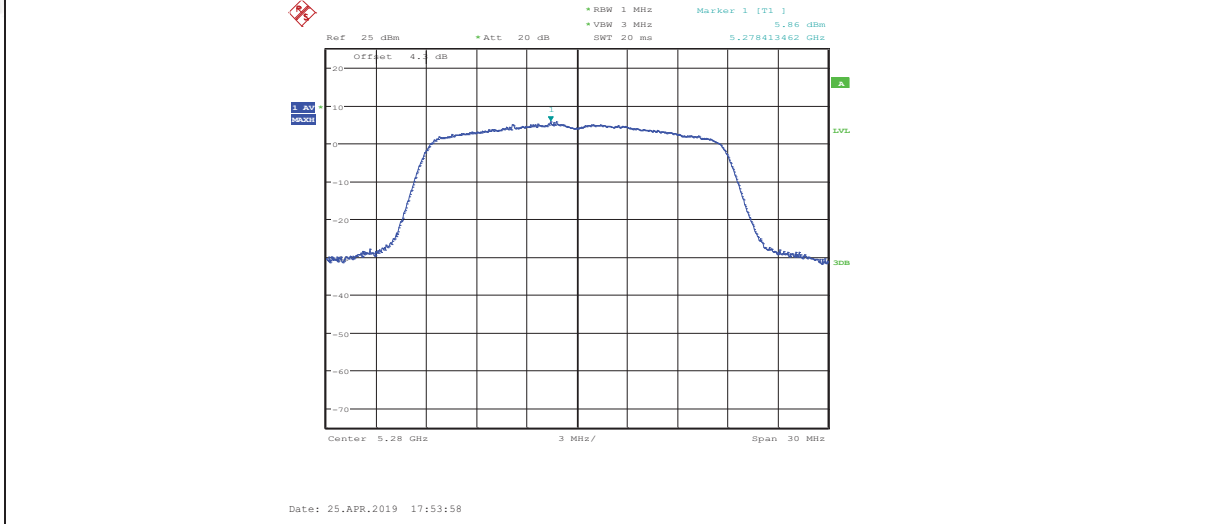


11N20 ANT2 5260

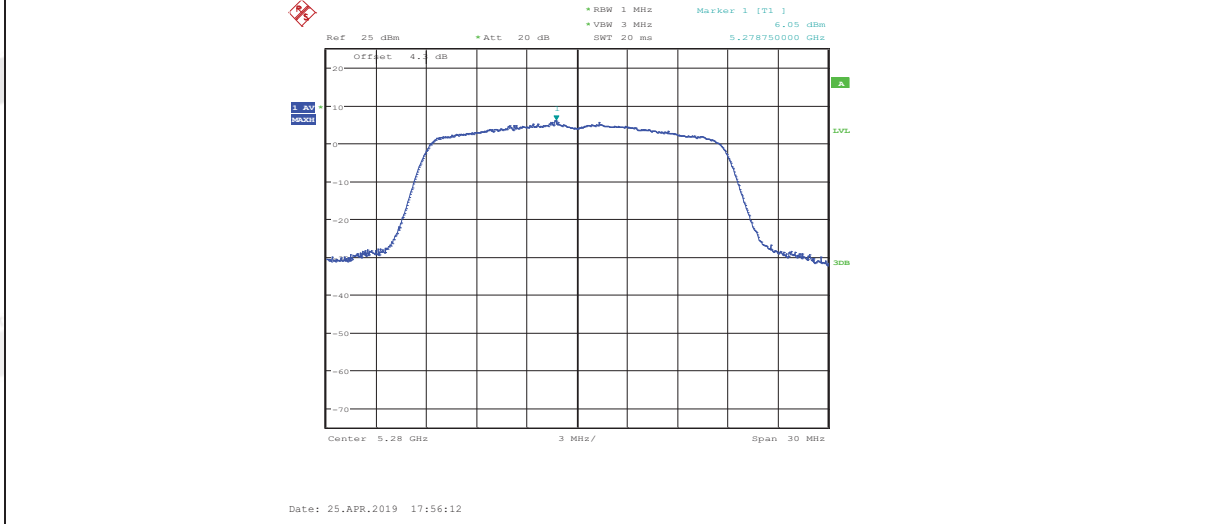




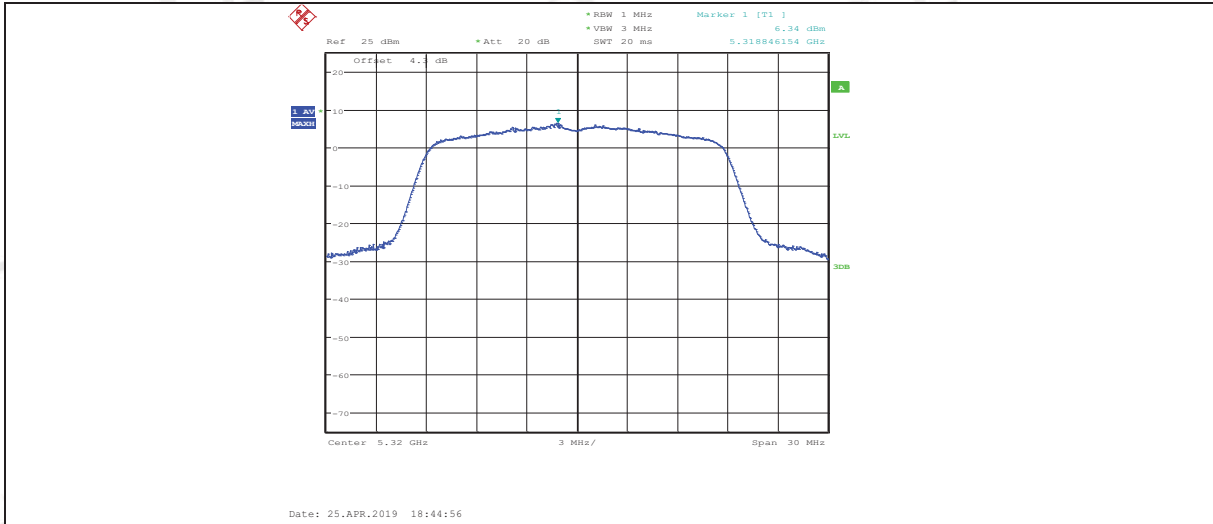
11N20 ANT1 5280



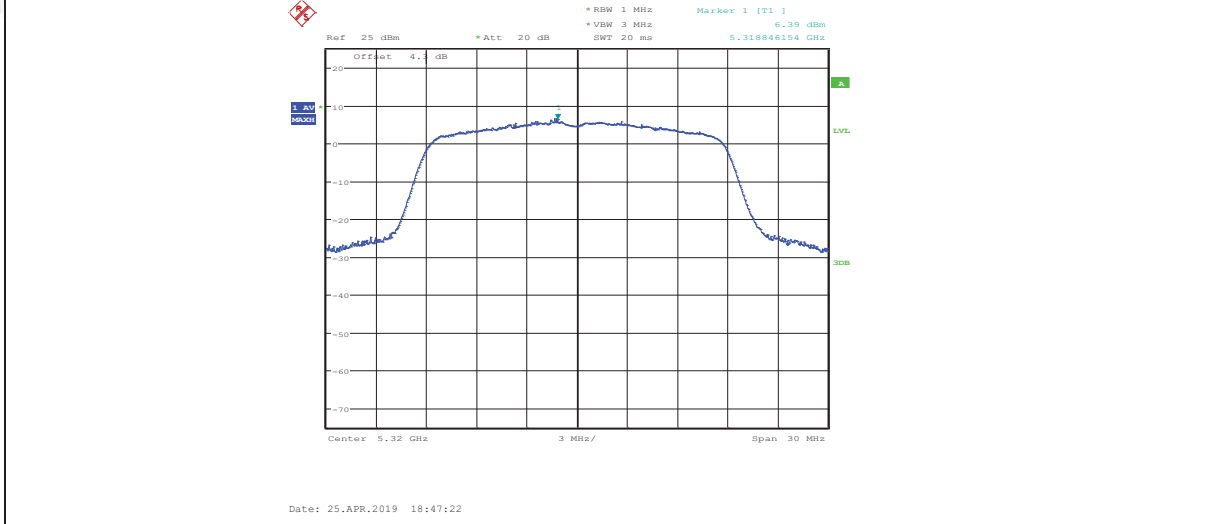
11N20 ANT2 5280



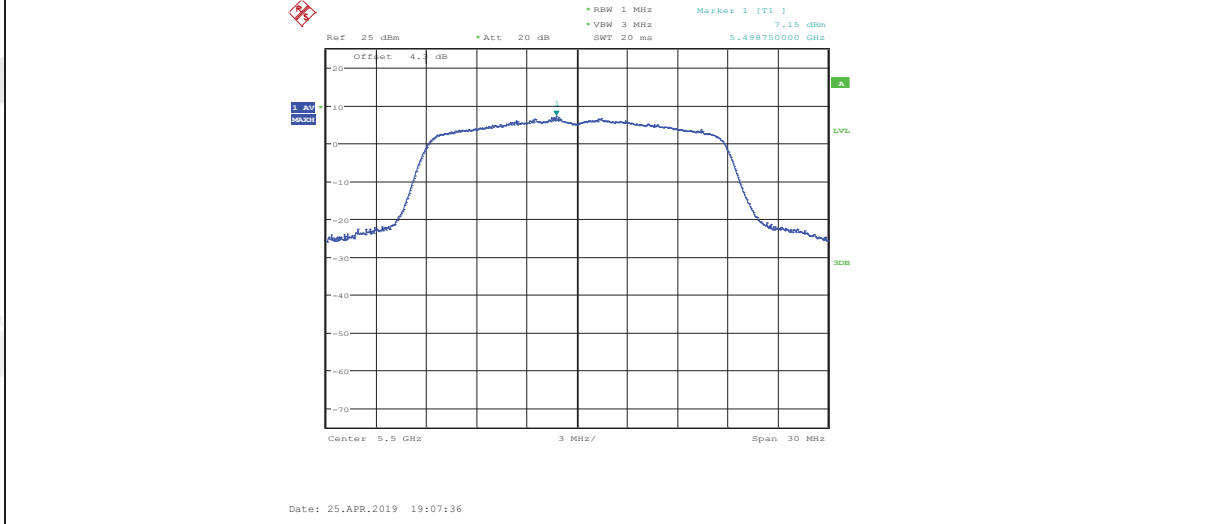
11N20 ANT1 5320



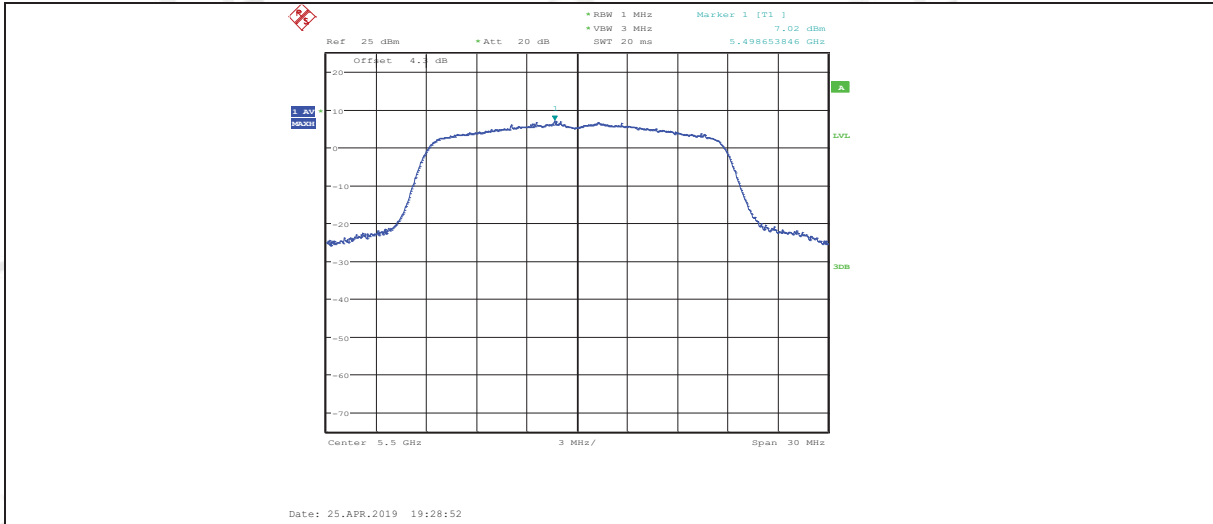
11N20 ANT2 5320



11N20 ANT1 5500



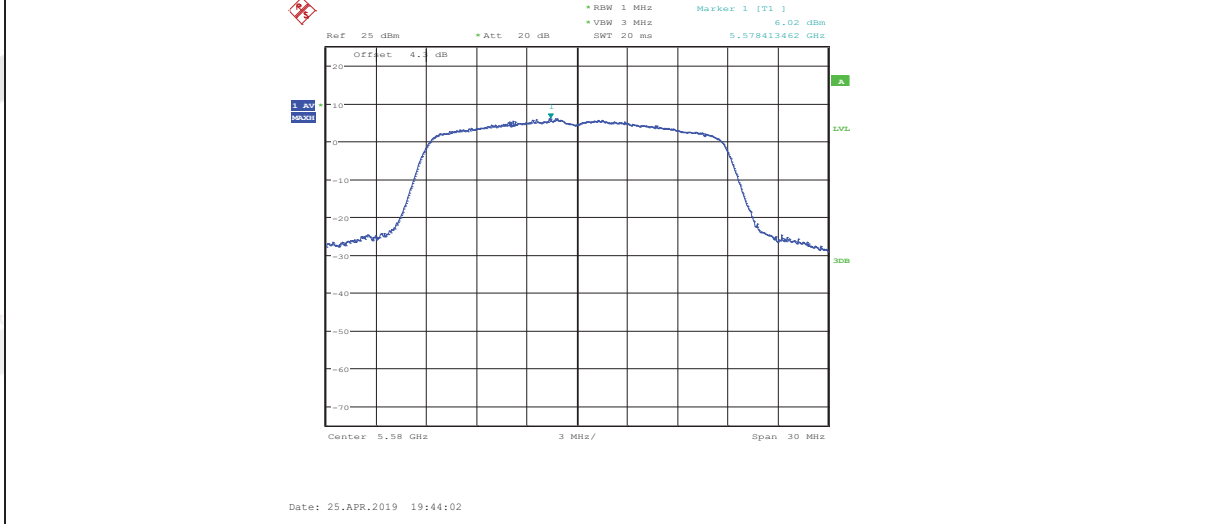
11N20 ANT2 5500



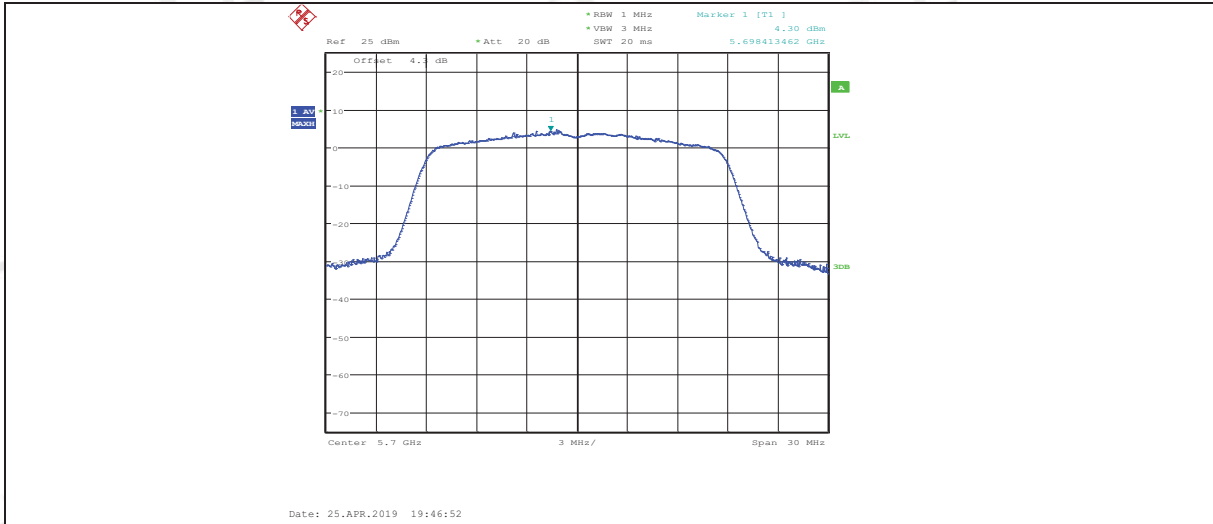
11N20 ANT1 5580



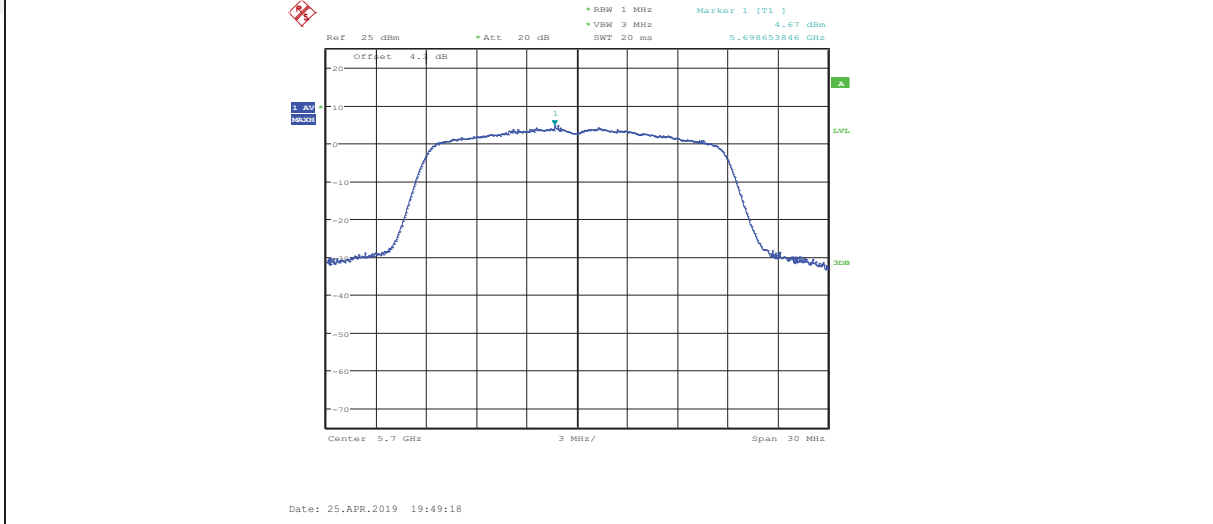
11N20 ANT2 5580



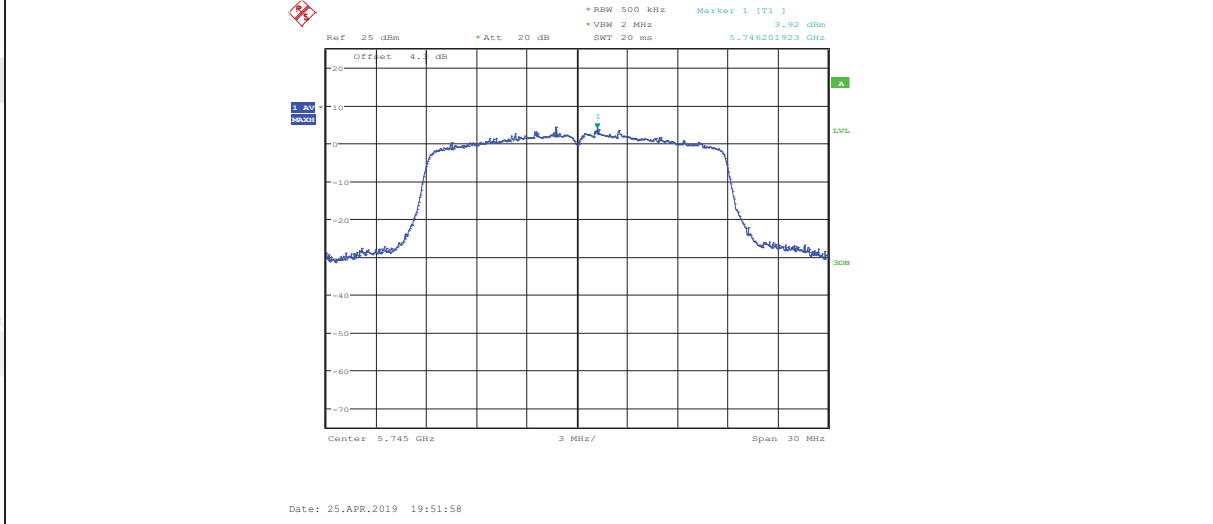
11N20 ANT1 5700



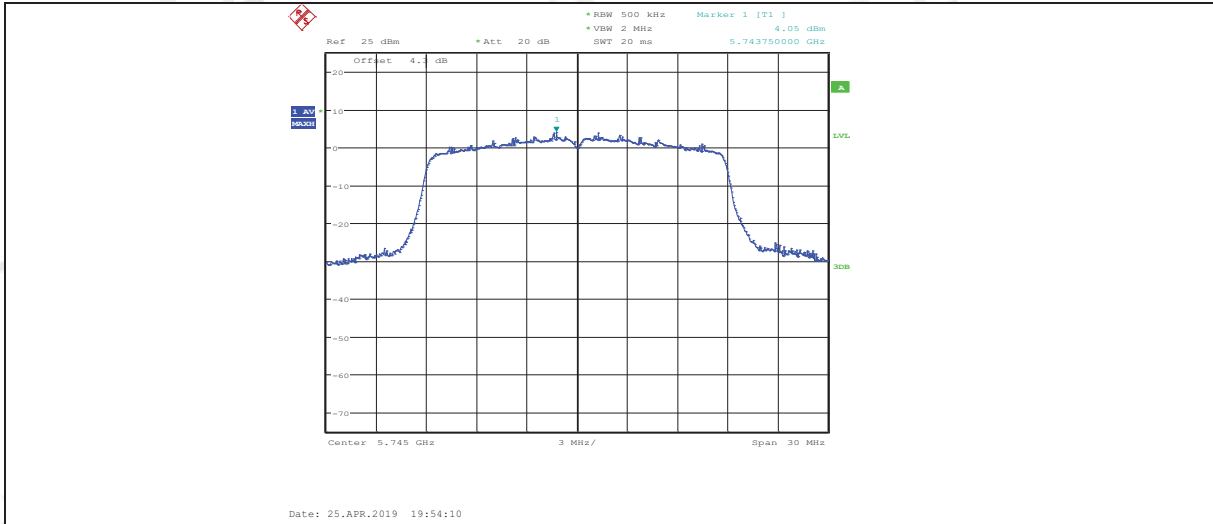
11N20 ANT2 5700



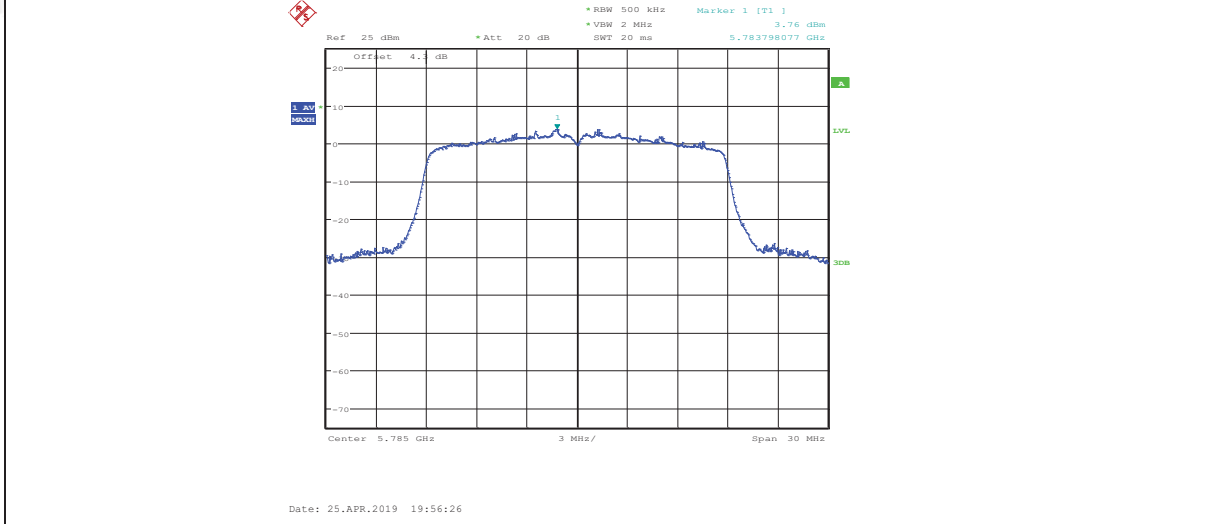
11N20 ANT1 5745



11N20 ANT2 5745



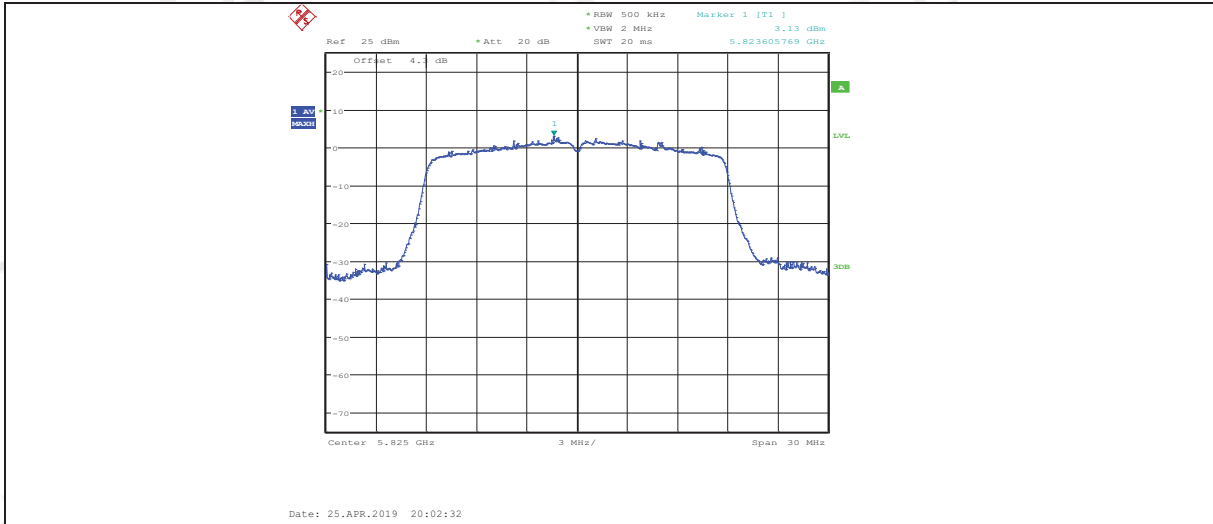
11N20 ANT1 5785



11N20 ANT2 5785



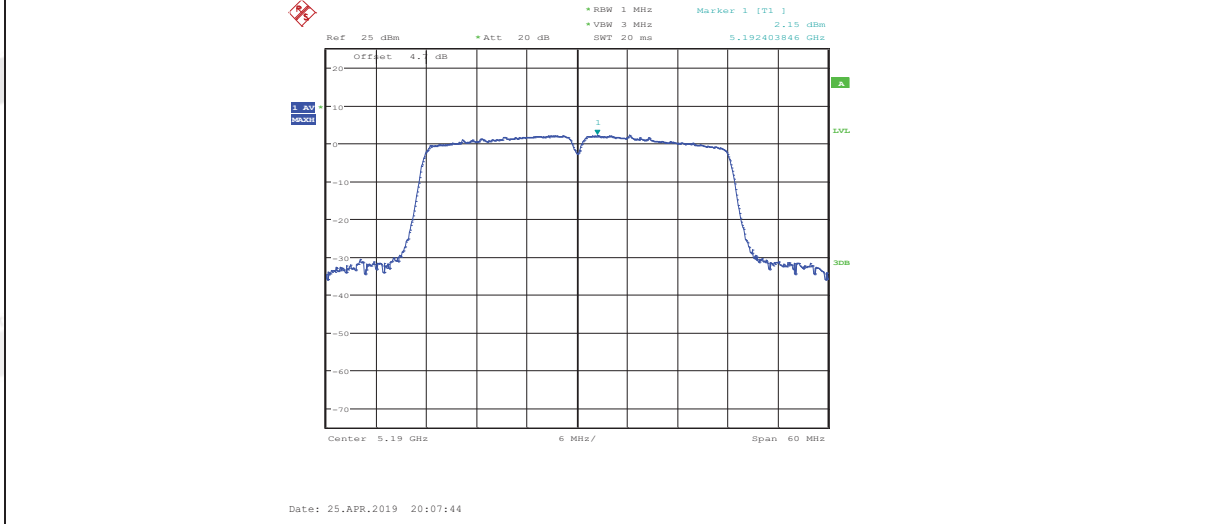
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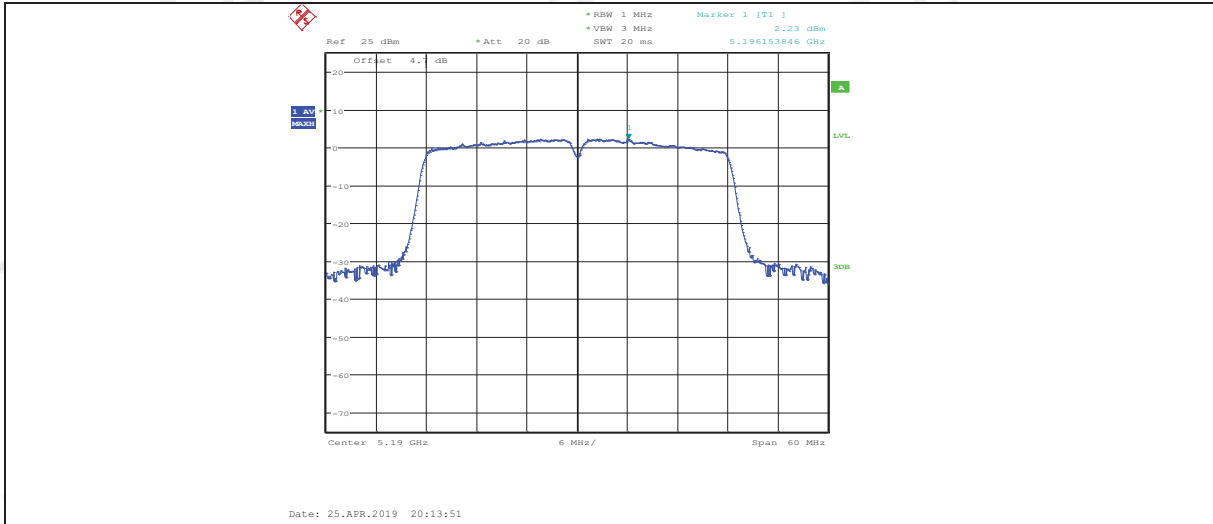
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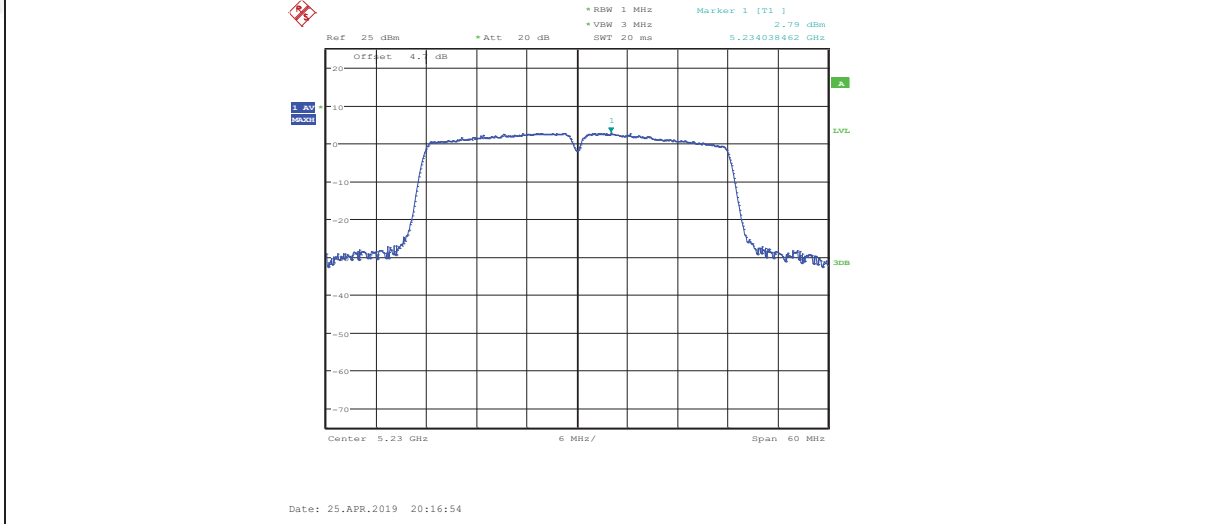
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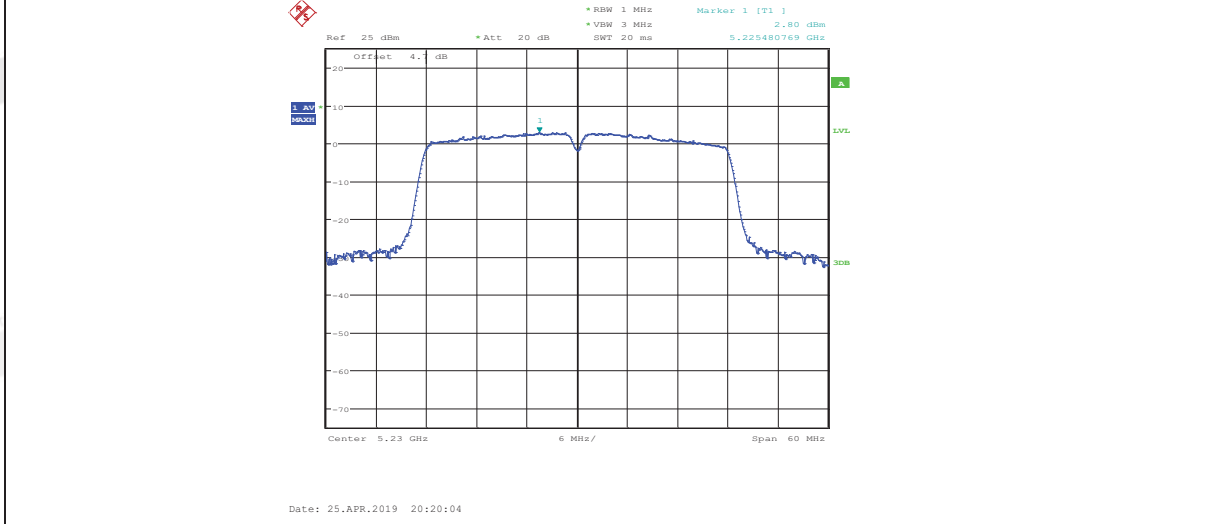
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11N40 ANT1 5230

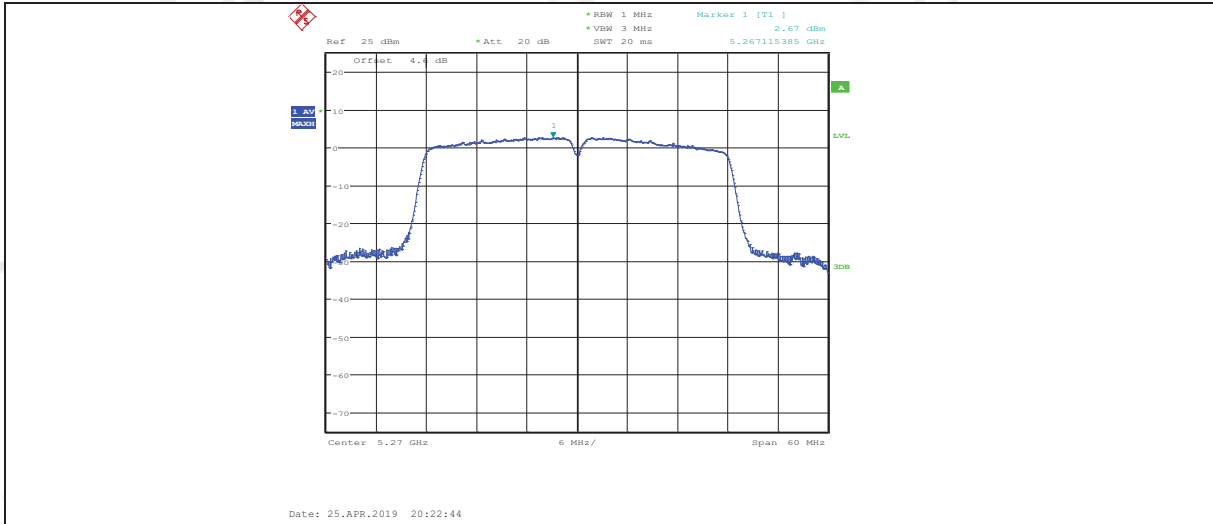


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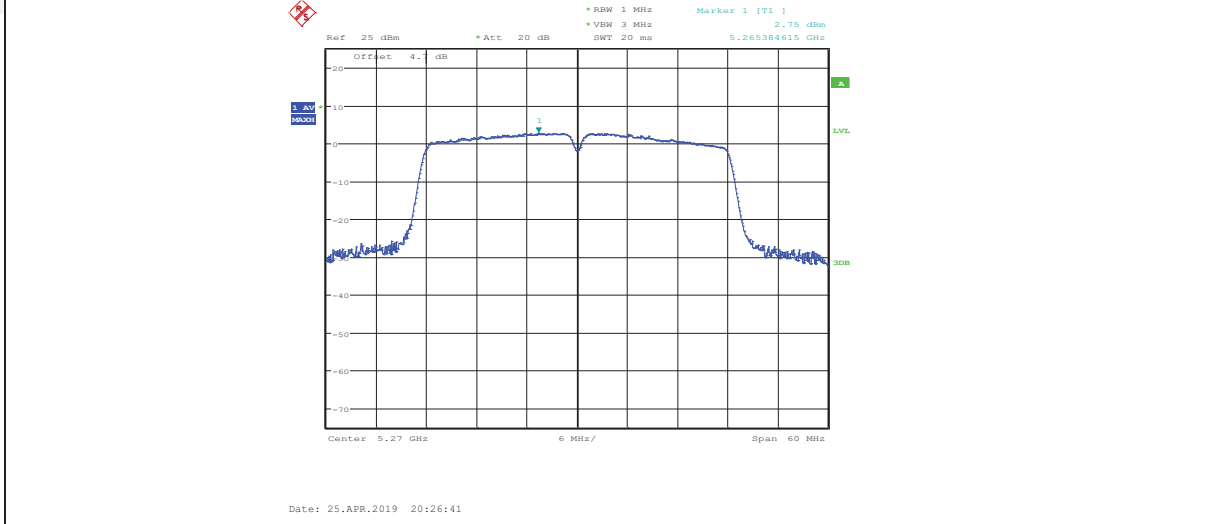


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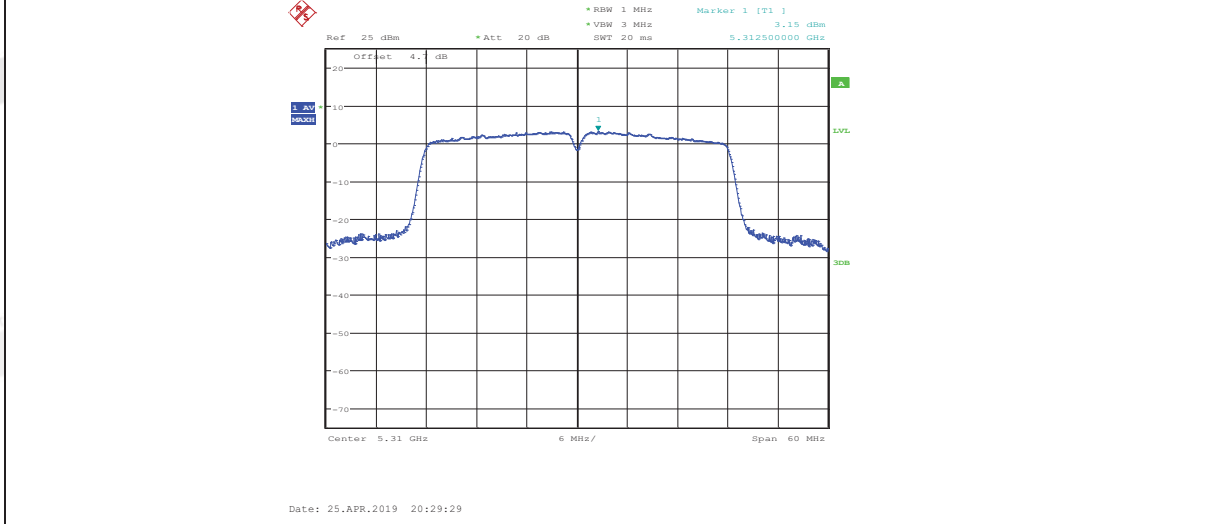




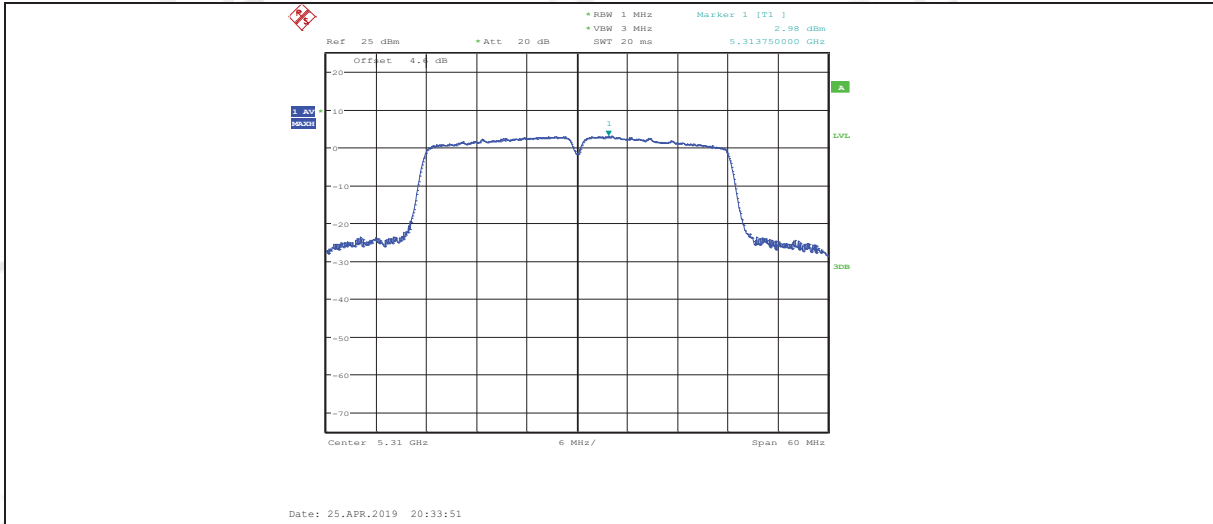
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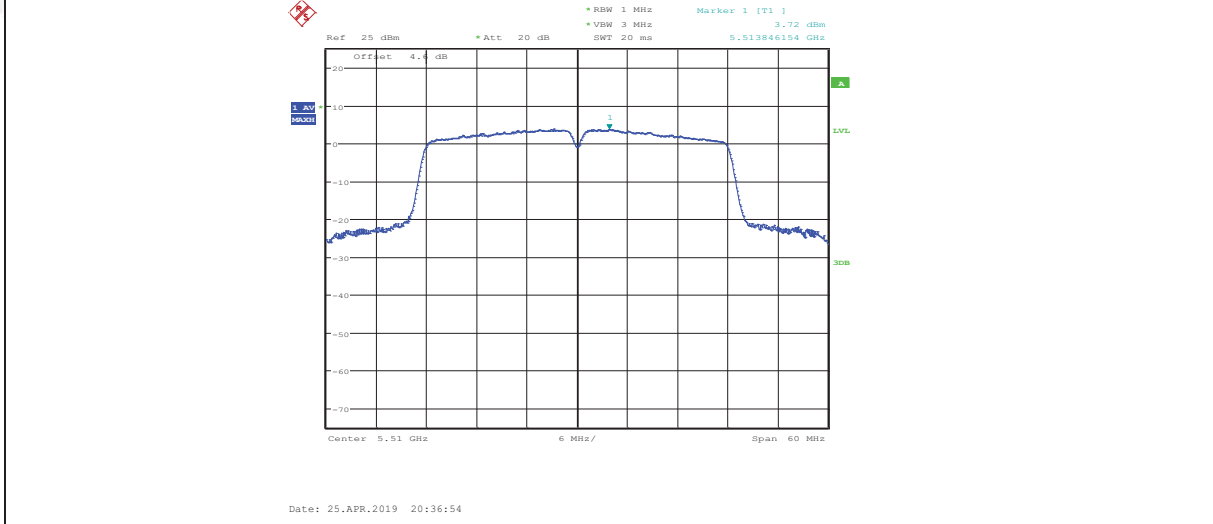
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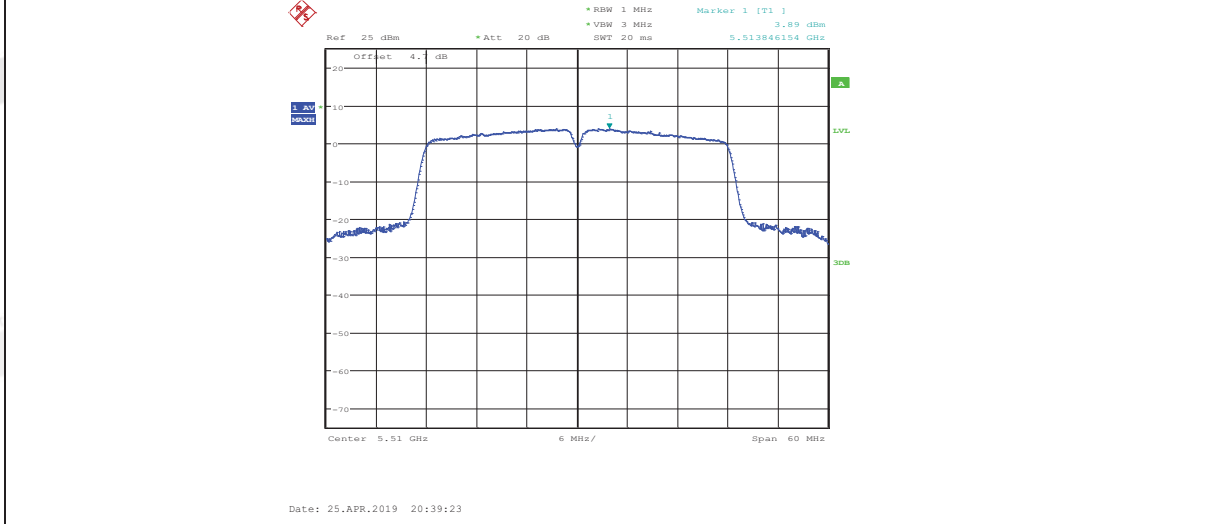
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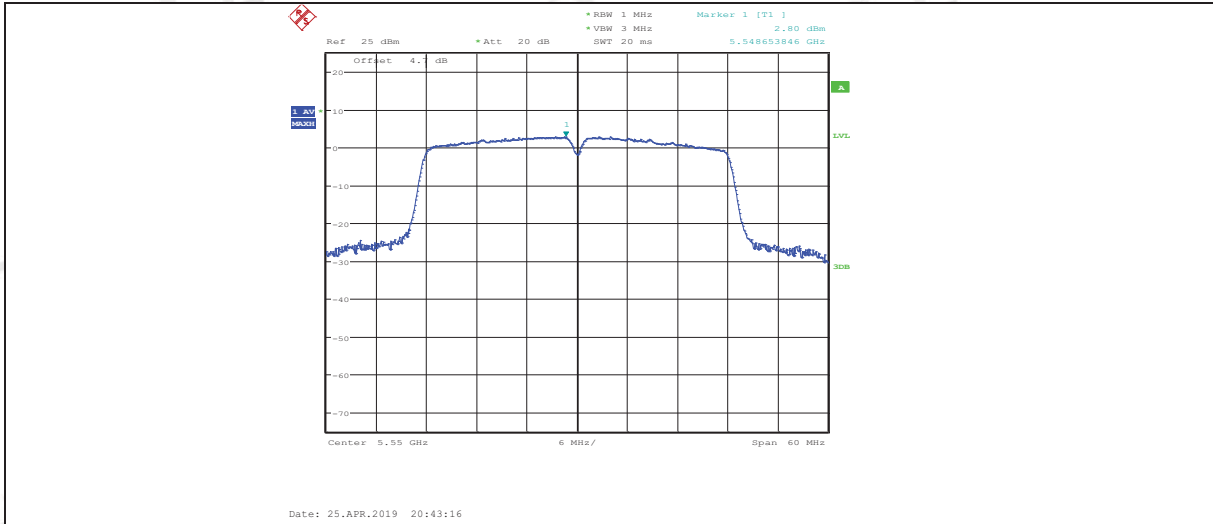
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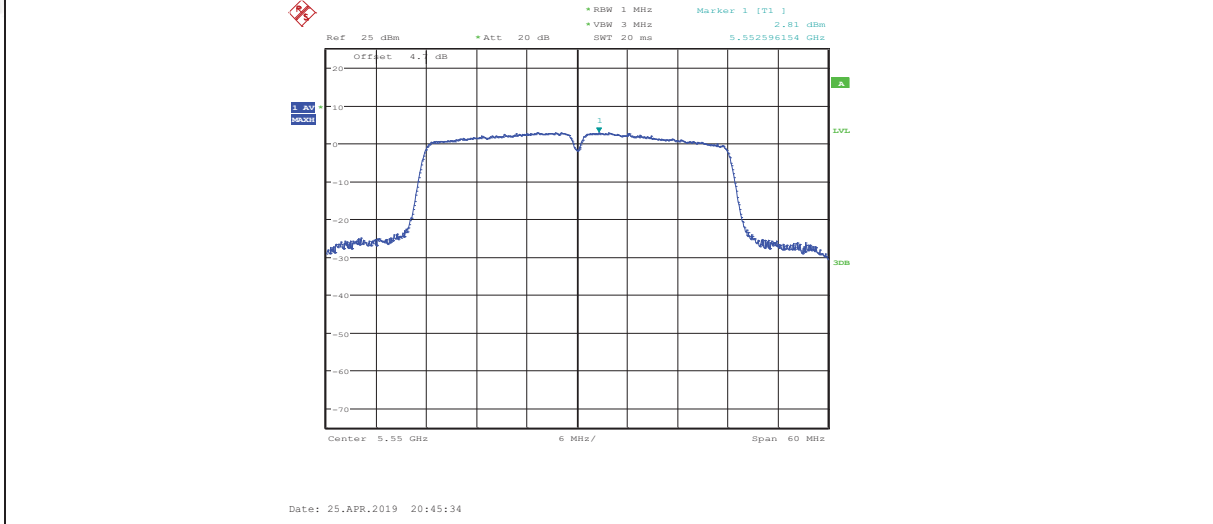
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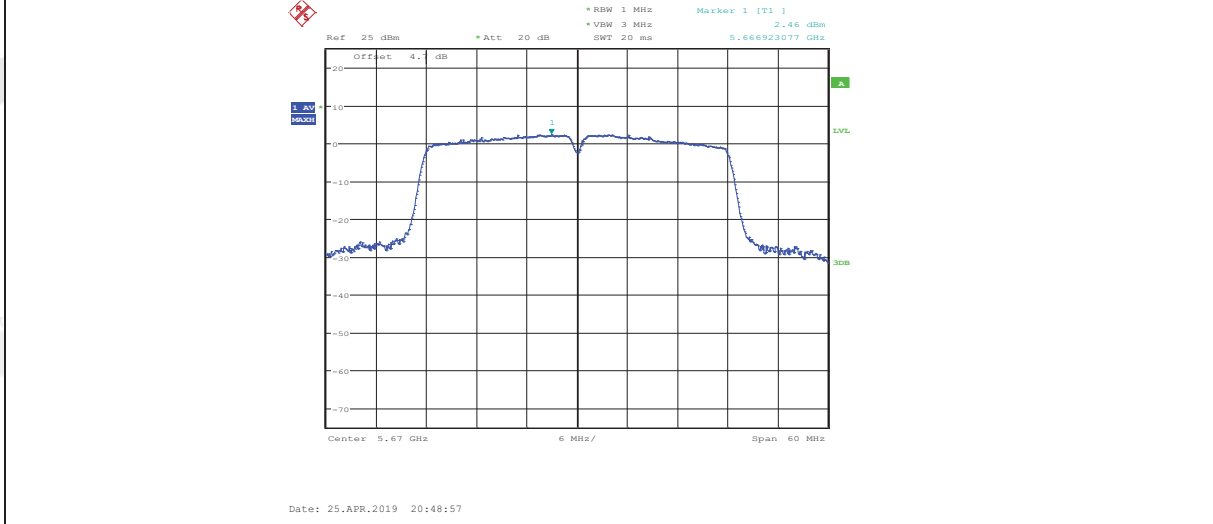
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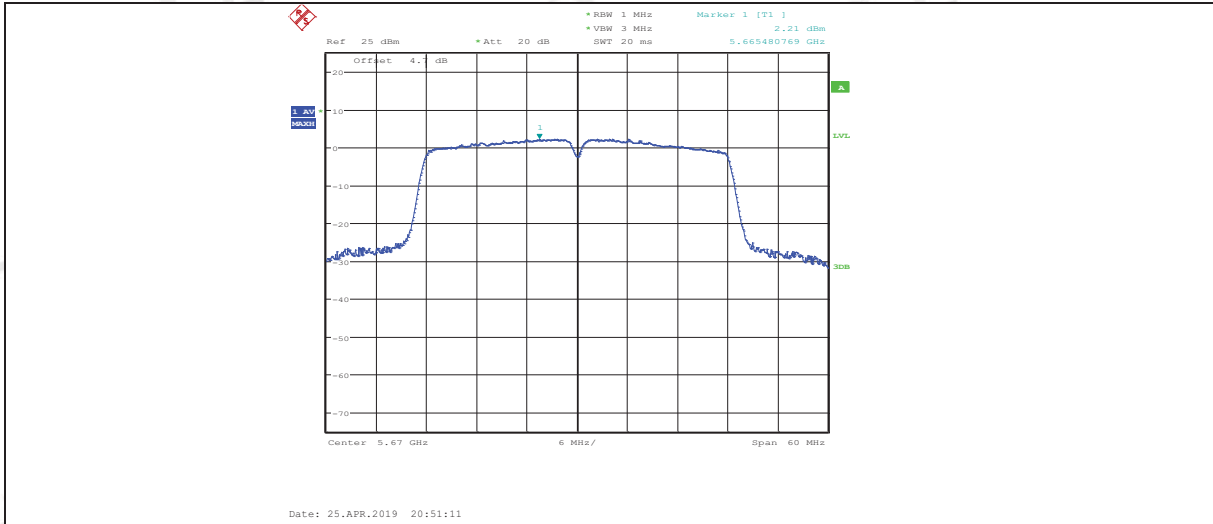
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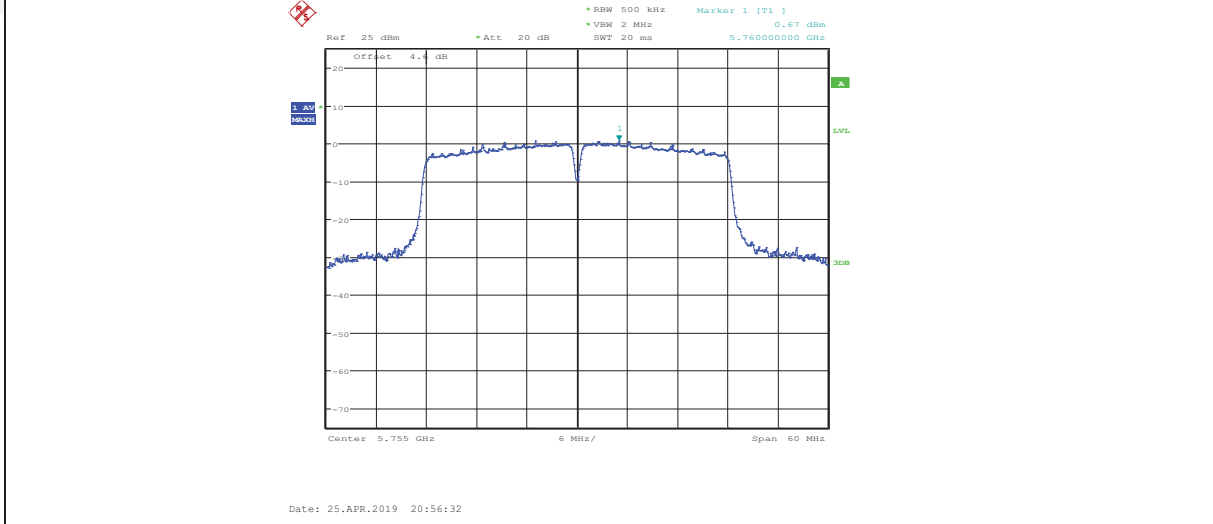
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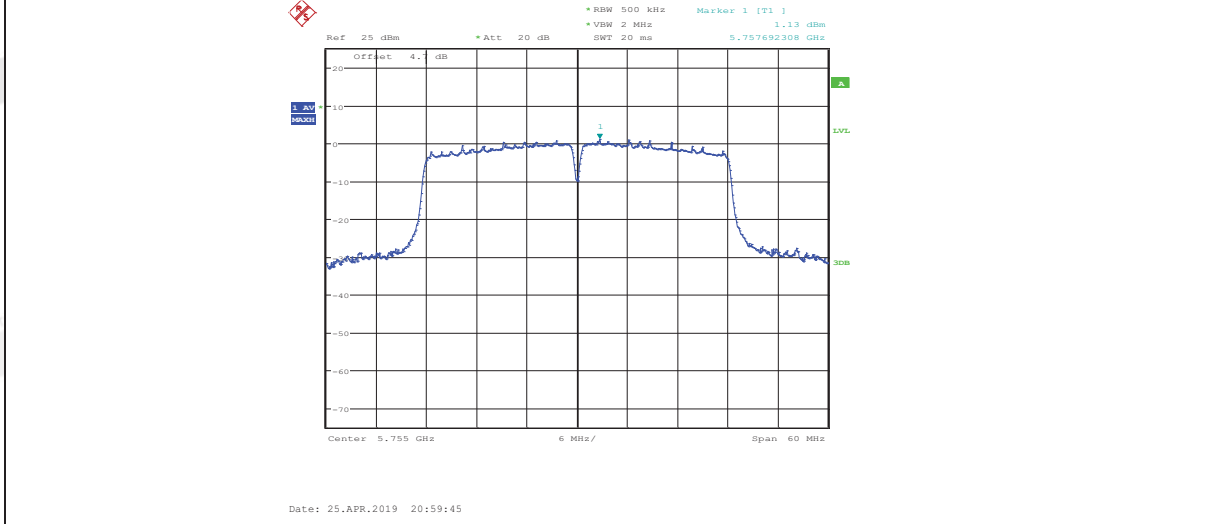
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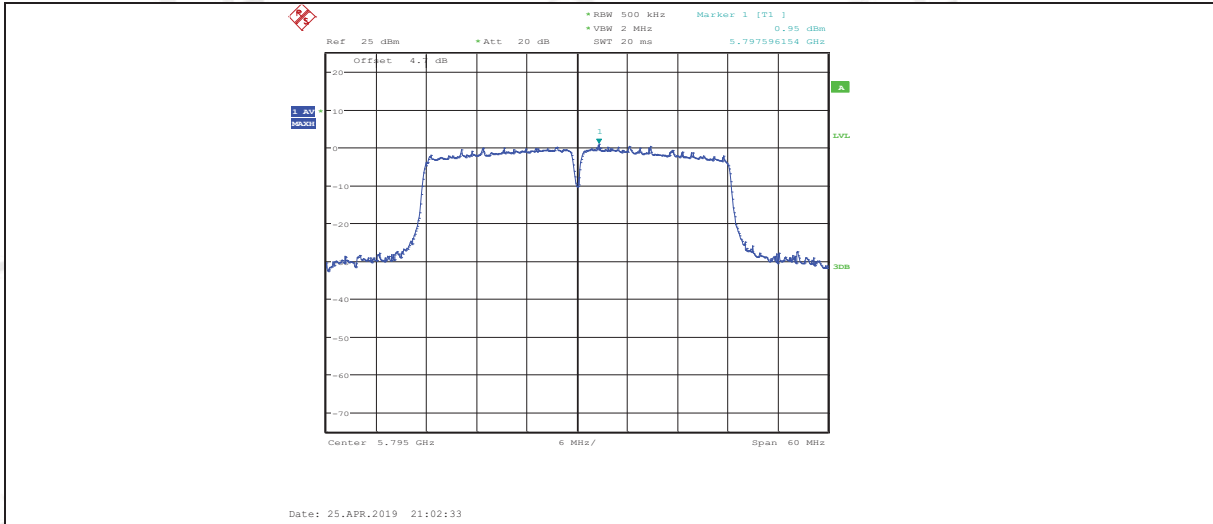
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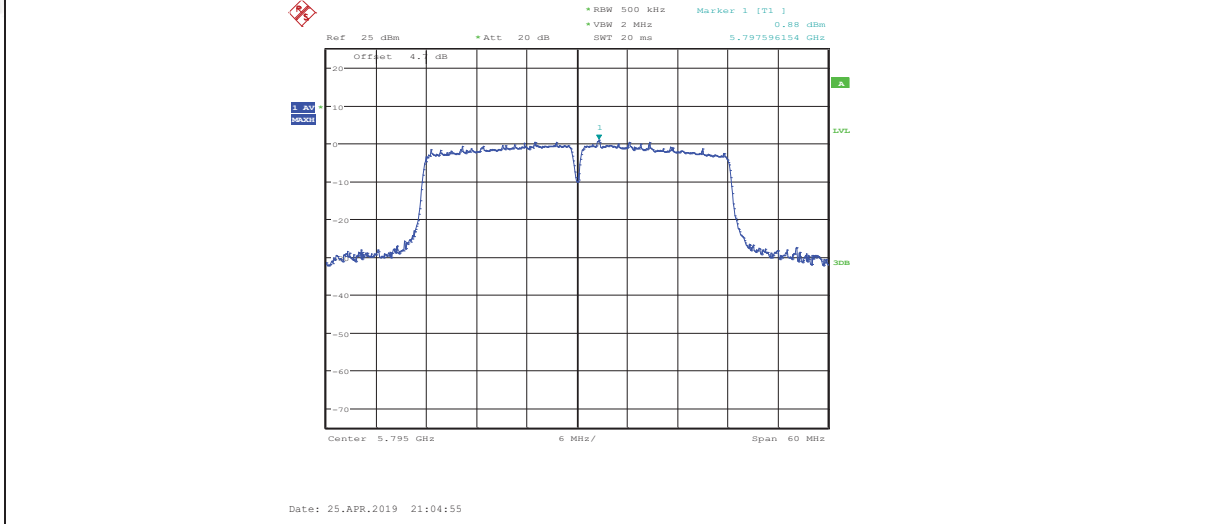
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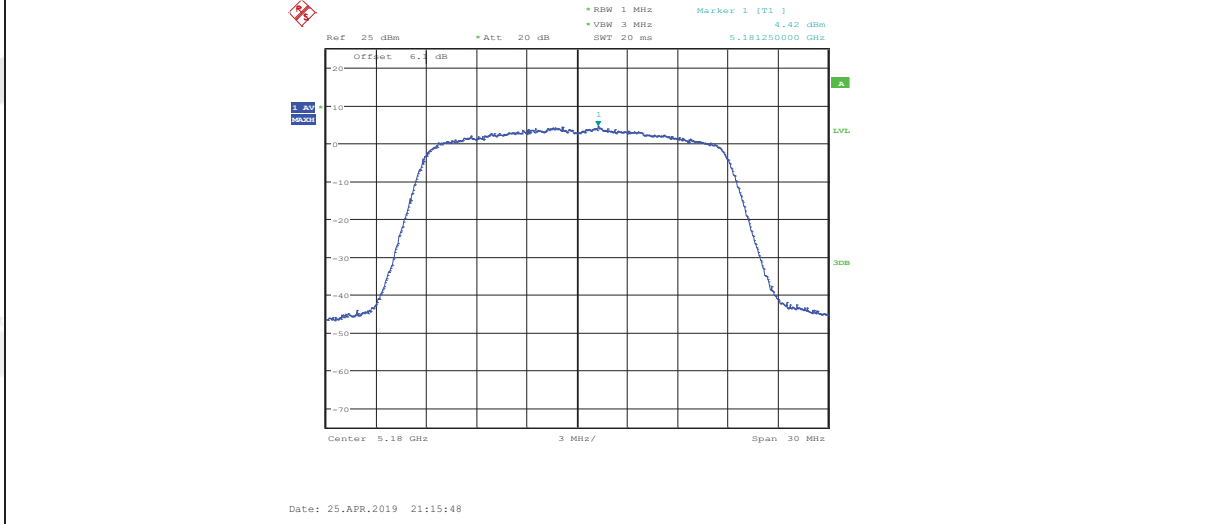
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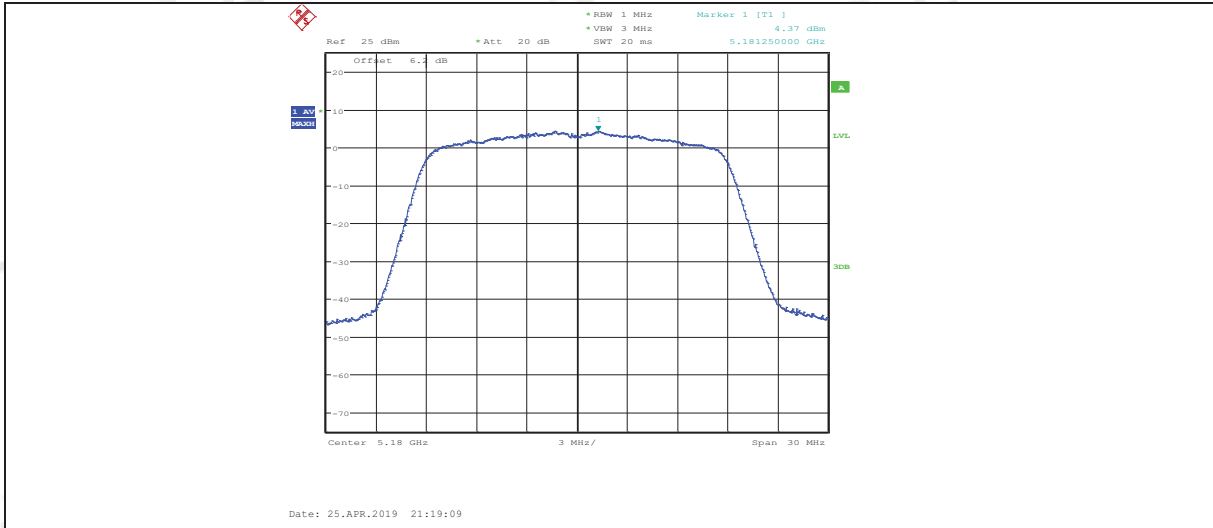
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11AC20 ANT1 5180



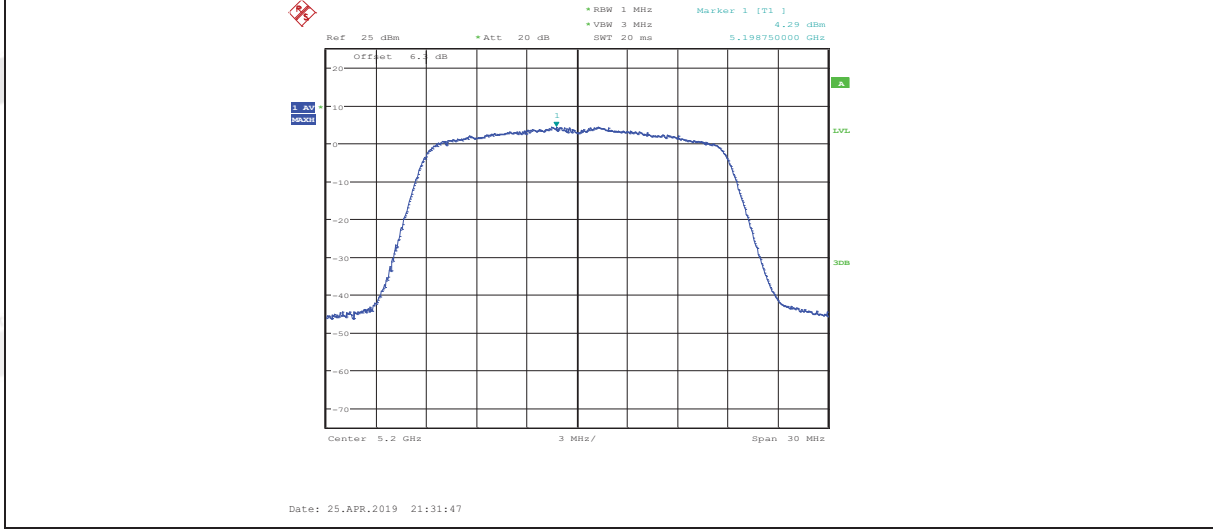
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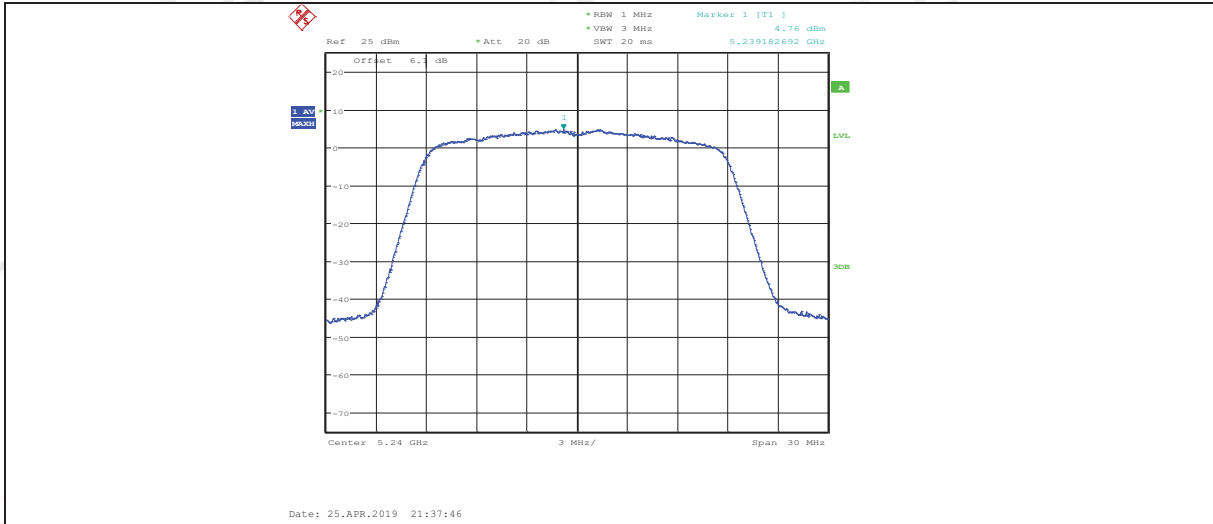
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11AC20 ANT2 5200



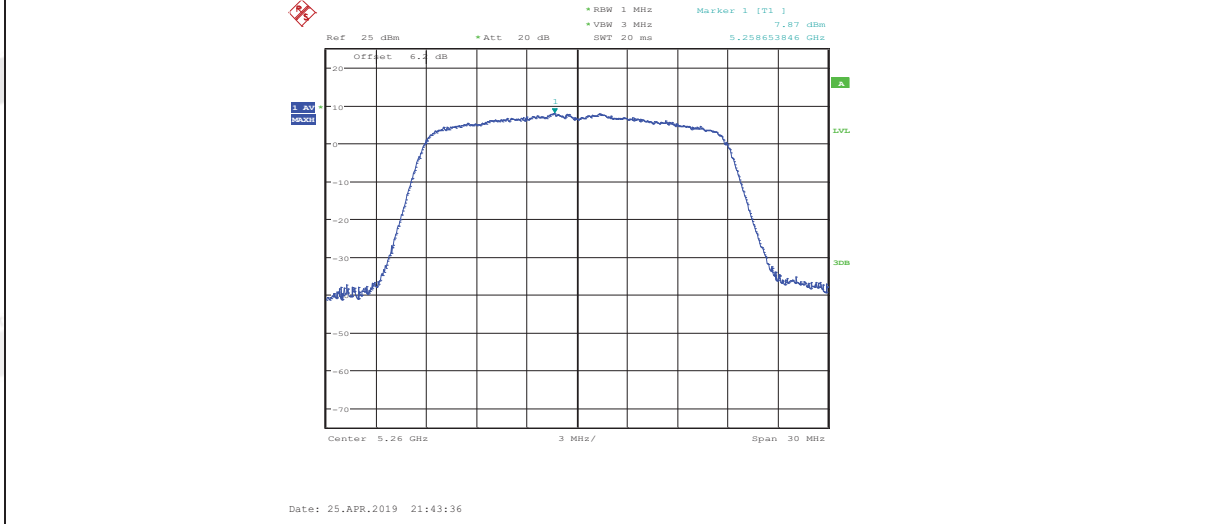
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11AC20 ANT2 5240

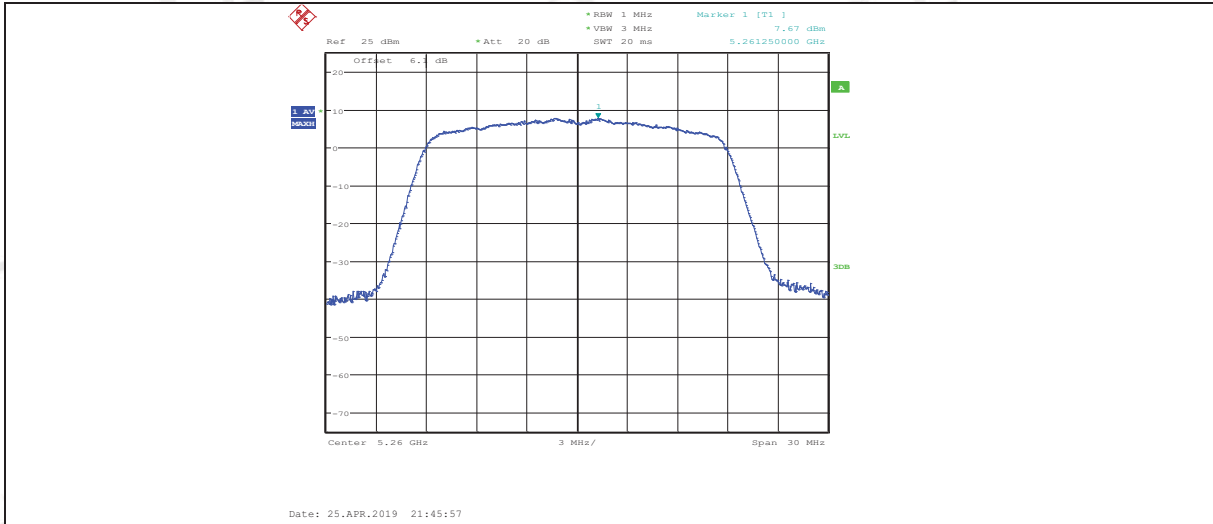


11AC20 ANT1 5260



11AC20 ANT2 5260





11AC20 ANT1 5280



11AC20 ANT2 5280



11AC20 ANT1 5320