FCC AND ISED CERTIFICATION TEST REPORT

Applicant	:	Linkplay Technology Inc.
Address of Applicant	:	8000 Jarvis Avenue Suite #130, Newark, CA 94560, United States
Manufacturer	:	DongGuan Tristar Electronic Co.,Ltd
Address of Manufacturer	:	Building 1 & Building2, NO.196, Tangxia Dongxing Road, Tangxia Town, Dongguan City, Guangdong Province, China
Equipment under Test	:	WiiM Amp
Model No.	:	AMP001, WiiM Amp Space Gray, WiiM Amp Silver, WiiM Amp Midnight Blue
FCC ID	:	2BABF-AMP001
IC	:	30828-AMP001
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart E, RSS-247 Issue 2 February 2017, ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01, RSS-Gen Issue 5 April 2018
Report No.	:	DDT-RE23061614-2E04
Issue Date	:	2023/11/09
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd.
Address of Laboratory	:	Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

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Manufacturer	:	DongGuan Tristar Electronic Co.,Ltd
Address of Manufacturer	:	Building 1 & Building2, NO.196, Tangxia Dongxing Road, Tangxia Town, Dongguan City, Guangdong Province, China

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E, RSS-247 Issue 2 February 2017.

Test procedure used:

ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01, RSS-Gen Issue 5 April 2018

We Declare:

The equipment described above is tested by Guangdong 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 Guangdong 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 standards.

Report No.:	DDT-RE23061614-2E04		
Date of Receipt:	2023/09/22	**Date of Test:**	2023/09/22-2023/11/08

Prepared By: ***Approved By:***

Jacky Huang

Jacky Huang/Engineer ***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 Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2023/11/09	

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) RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
Emissions in restricted frequency bands	FCC 15.407 (b) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
Band Edge Compliance	FCC 15.407 (b) 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 6.8	PASS

2. General Test Information

2.1. Description of EUT

EUT Name	:	WiiM Amp
Model Number	:	AMP001, WiiM Amp Space Gray, WiiM Amp Silver, WiiM Amp Midnight Blue
Model Difference	:	Only the model number and the color of the product are different, the test model is AMP001
EUT function description	:	Please reference user manual of this device
Power Supply	:	AC 100-240V-50/60Hz, 4A Max.
Radio Technology	:	Bluetooth V5.0 (BR/EDR/LE), WLAN (2.4 GHz): IEEE 802.11b/g/n, WLAN (5 GHz): IEEE 802.11a/n/ac
Operation frequency	:	Bluetooth (BR/EDR/LE): 2402 MHz-2480 MHz IEEE 802.11b/g/n: 2412 MHz to 2462 MHz, IEEE 802.11a/n/ac: 5180 MHz to 5240 MHz, 5260 MHz to 5320 MHz, 5500 MHz to 5720 MHz, 5745 MHz to 5825 MHz
Modulation	:	Bluetooth BR/EDR: GFSK, π/4-DQPSK, 8DPSK Bluetooth LE: GFSK IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g/a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Operating mode	:	☐ Master ☒ Client Without Radar Detection ☐ Client with Radar Detection
TPC function	:	☐With TPC ☒Without TPC
Sample Number	:	S23061614-04 for conductive, S23061614-05 for radiation

Note 1: EUT is the abbreviation of equipment under test.

Note 2: "☒" means to be chosen or applicable; "☐" means don't to be chosen or not applicable; This note applies to entire report.

Note 3: Band 5600-5650MHz will be disabled when shipped to Canada

Note 4: This report only for WLAN (5 GHz): IEEE 802.11a/n/ac.

Note 5: Simultaneously transmission condition: N/A.

Note 6: Antenna information:

WLAN (5 GHz) Antenna information		
Antenna Type	:	FPC
Antenna Gain(dBi)	:	2.41

Note 7: Channel information:

Channel information					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-1					
CH	Frequency (MHz)	CH	Frequency (MHz)	CH	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	/	/
44	5220	/	/	/	/
48	5240	/	/	/	/
UNII-2A					
52	5260	54	5270	58	5290
56	5280	62	5310		/
60	5300	/	/	/	/
64	5320	/	/	/	/
UNII-2C					
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590	138	5690
112	5560	126	5630	/	/
116	5580	134	5670	/	/
120	5600	142	5710	/	/
124	5620	/	/	/	/
128	5640	/	/	/	/
132	5660	/	/	/	/
136	5680	/	/	/	/
140	5700	/	/	/	/
144	5720	/	/	/	/
UNII-3					
149	5745	151	5755	155	5775
153	5765	159	5795	/	/
157	5785	/	/	/	/
161	5805	/	/	/	/
165	5825	/	/	/	/

Note 8: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
HDMI line	/	/	Length: 1.50m, Unshielded
Line in cable	/	/	Length: 1.50m, Unshielded
OPT cable	/	/	Length: 1.50m, Unshielded
Controller	/	WVR001	/

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Other	SN
Laptop	Lenovo	X201	N/A	00154-290-415-484
Router	ASUS	GT-AXE11000	FCC ID: MSQ-RTAXJF00	M8IG0X400384RSG

2.4. Block diagram of EUT configuration for test

The CMD was used to control EUT work in Continuous Tx mode and select test channel, wireless mode as below table.

The pathloss of external cable: 2 dB (According to the manufacturer's claims)

Tested mode, channel, and data rate information				
Mode	Setting Tx Power	data rate (Mpbs) (see Note)	Channel	Frequency (MHz)
IEEE 802.11a	Default	6	Low: CH36	5180
	Default	6	Middle: CH40	5200
	Default	6	High: CH48	5240
	Default	6	Low: CH52	5260
	Default	6	Middle: CH56	5280
	Default	6	High: CH64	5320
	Default	6	Low: CH100	5500
	Default	6	Middle: CH116	5580
	Default	6	High: CH140	5700
	Default	6	High: CH144	5720
	Default	6	Low: CH149	5745
	Default	6	Middle: CH157	5785
	Default	6	High: CH165	5825
IEEE 802.11n	Default	MCS 0	Low: CH36	5180
	Default	MCS 0	Middle: CH40	5200

HT20	Default	MCS 0	High: CH48	5240
	Default	MCS 0	Low: CH52	5260
	Default	MCS 0	Middle: CH56	5280
	Default	MCS 0	High: CH64	5320
	Default	MCS 0	Low: CH100	5500
	Default	MCS 0	Middle: CH116	5580
	Default	MCS 0	High: CH140	5700
	Default	MCS 0	High: CH144	5720
	Default	MCS 0	Low: CH149	5745
	Default	MCS 0	Middle: CH157	5785
	Default	MCS 0	High: CH165	5825
IEEE 802.11n HT40	Default	MCS 0	Low: CH38	5190
	Default	MCS 0	Middle: CH46	5230
	Default	MCS 0	High: CH54	5270
	Default	MCS 0	Low: CH62	5310
	Default	MCS 0	Middle: CH102	5510
	Default	MCS 0	High: CH110	5550
	Default	MCS 0	Low: CH134	5670
	Default	MCS 0	Low: CH142	5710
	Default	MCS 0	Middle: CH151	5755
	Default	MCS 0	High: CH159	5795
IEEE 802.11ac VHT20	Default	MCS 0	Low: CH36	5180
	Default	MCS 0	Middle: CH40	5200
	Default	MCS 0	High: CH48	5240
	Default	MCS 0	Low: CH52	5260
	Default	MCS 0	Middle: CH56	5280
	Default	MCS 0	High: CH64	5320
	Default	MCS 0	Low: CH100	5500
	Default	MCS 0	Middle: CH116	5580
	Default	MCS 0	High: CH140	5700
	Default	MCS 0	High: CH144	5720
	Default	MCS 0	Low: CH149	5745
	Default	MCS 0	Middle: CH157	5785
	Default	MCS 0	High: CH165	5825
IEEE 802.11ac VHT40	Default	MCS 0	Low: CH38	5190
	Default	MCS 0	Middle: CH46	5230
	Default	MCS 0	High: CH54	5270
	Default	MCS 0	Low: CH62	5310
	Default	MCS 0	Middle: CH102	5510

	Default	MCS 0	High: CH110	5550
	Default	MCS 0	Low: CH134	5670
	Default	MCS 0	Low: CH142	5710
	Default	MCS 0	Middle: CH151	5755
	Default	MCS 0	High: CH159	5795
IEEE 802.11ac VHT80	Default	MCS 0	CH42	5210
	Default	MCS 0	CH58	5290
	Default	MCS 0	CH106	5530
	Default	MCS 0	CH122	5610
	Default	MCS 0	CH122	5690
	Default	MCS 0	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.				

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

Temperature range:	+15℃ to +35 ℃
Humidity range:	20% to 75%
Pressure range:	86 kPa to106 kPa

2.7. Test laboratory

Guangdong 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

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

2.8. Measurement uncertainty

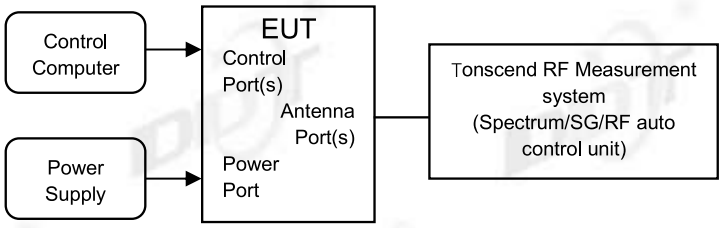
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7 x 10^{-8} (Antenna couple method)
	5.5 x 10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.40 dB (3.6 GHz ≤ f < 8 GHz)
	1.66 dB (8 GHz ≤ f < 26.5 GHz)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 ℃
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	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	3.34dB (150KHz-30MHz)
	3.72dB (9KHz-150KHz)
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 Conductive Test

Equipment	Manufacturer	Model No.	Serial Number	Due Date	Cal. Interval
☒ RF Connected Test (RF Measurement System 1#)					
SIGNAL ANALYZER	R&S	FSQ26	101272	2024/04/26	1 Year
Wideband Radio Communication Tester	R&S	CMW500	120259	2024/07/14	1 Year
MXG Vector Signal Generator	KEYSIGHT	N5182B	MY59100192	2024/04/26	1 Year
MXG Vector Signal Generator	Agilent	N5182A	MY19060405	2024/04/26	1 Year
RF Control Unit	Tonsend	JS0806-2	158060010	2024/04/26	1 Year
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2024/05/14	1 Year
Test Software	Tonscend	JS1120-3	Ver.3.2.22	N/A	N/A

4. 26dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

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

4.3. Test procedure

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	approximately 1% of the emission bandwidth.
VBW	> RBW
Trace	Max hold
Sweep	Auto couple

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 relative to the maximum level measured in the fundamental emission.

4.4. Test result

Test Site:	RF Measurement System 1#	Test Date:	2023.10.16-2023.10.23
Ambient Condition:	25.4℃, 46.5 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	WiiM Amp	Model No.:	AMP001
Sample Number:	S23061614-04	Test Power Supply:	AC 230V

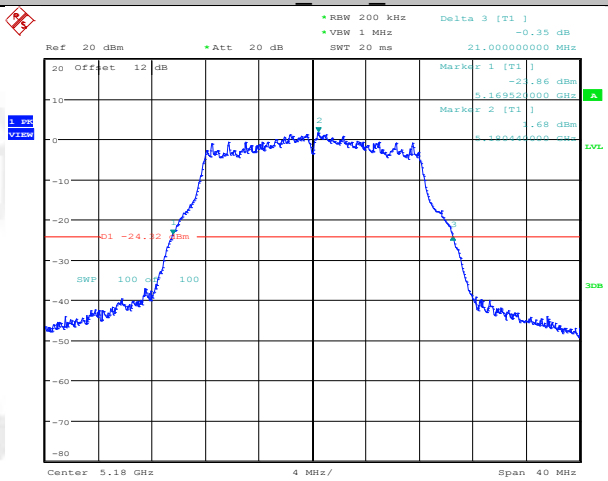
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	21.00	5169.52	5190.52	---	---
		5200	21.00	5189.52	5210.52	---	---
		5240	21.12	5229.40	5250.52	---	---
		5260	21.04	5249.48	5270.52	---	---
		5280	21.12	5269.44	5290.56	---	---
		5320	21.12	5309.48	5330.60	---	---
		5500	21.08	5489.48	5510.56	---	---
		5580	21.16	5569.40	5590.56	---	---
		5700	21.20	5689.44	5710.64	---	---
		5720	21.12	5709.48	5730.60	---	---
		5720_UNII-2C	15.52	5709.48	5725	---	---
		5720_UNII-3	5.6	5725	5730.60	---	---
		5745	21.12	5734.48	5755.60	---	---
		5785	21.12	5774.48	5795.60	---	---
		5825	21.08	5814.48	5835.56	---	---
11N20SISO	Ant1	5180	21.64	5169.20	5190.84	---	---
		5200	21.48	5189.24	5210.72	---	---
		5240	21.44	5229.28	5250.72	---	---
		5260	21.56	5249.32	5270.88	---	---
		5280	21.56	5269.32	5290.88	---	---
		5320	21.56	5309.24	5330.80	---	---
		5500	21.52	5489.32	5510.84	---	---
		5580	21.40	5569.28	5590.68	---	---

		5700	21.52	5689.28	5710.80	---	---
		5720	21.52	5709.24	5730.76	---	---
		5720_UNII-2C	15.76	5709.24	5725	---	---
		5720_UNII-3	5.76	5725	5730.76	---	---
		5745	21.40	5734.32	5755.72	---	---
		5785	21.48	5774.24	5795.72	---	---
		5825	21.40	5814.32	5835.72	---	---
11N40SISO	Ant1	5190	39.84	5170.16	5210.00	---	---
		5230	40.24	5209.84	5250.08	---	---
		5270	39.92	5250.16	5290.08	---	---
		5310	40.16	5289.92	5330.08	---	---
		5510	40.08	5490.00	5530.08	---	---
		5550	39.92	5530.00	5569.92	---	---
		5670	40.16	5649.92	5690.08	---	---
		5710	40.16	5689.92	5730.08	---	---
		5710_UNII-2C	35.08	5689.92	5725	---	---
		5710_UNII-3	5.08	5725	5730.08	---	---
		5755	39.84	5735.16	5775.00	---	---
		5795	39.92	5775.08	5815.00	---	---
11AC20SISO	Ant1	5180	21.40	5169.24	5190.64	---	---
		5200	21.44	5189.28	5210.72	---	---
		5240	21.44	5229.28	5250.72	---	---
		5260	21.36	5249.24	5270.60	---	---
		5280	21.48	5269.28	5290.76	---	---
		5320	21.48	5309.24	5330.72	---	---
		5500	21.56	5489.20	5510.76	---	---
		5580	21.40	5569.32	5590.72	---	---
		5700	21.52	5689.20	5710.72	---	---
		5720	21.36	5709.28	5730.64	---	---
		5720_UNII-2C	15.72	5709.28	5725	---	---

		5720_UNII-3	5.64	5725	5730.64	---	---
		5745	21.32	5734.40	5755.72	---	---
		5785	21.48	5774.24	5795.72	---	---
		5825	21.56	5814.24	5835.80	---	---
11AC40SISO	Ant1	5190	40.00	5170.08	5210.08	---	---
		5230	40.32	5209.84	5250.16	---	---
		5270	40.00	5250.00	5290.00	---	---
		5310	39.84	5290.08	5329.92	---	---
		5510	40.00	5490.00	5530.00	---	---
		5550	40.00	5530.00	5570.00	---	---
		5670	40.00	5650.00	5690.00	---	---
		5710	40.00	5690.08	5730.08	---	---
		5710_UNII-2C	34.92	5690.08	5725	---	---
		5710_UNII-3	5.08	5725	5730.08	---	---
		5755	40.00	5735.08	5775.08	---	---
		5795	39.92	5775.08	5815.00	---	---
11AC80SISO	Ant1	5210	81.76	5169.04	5250.80	---	---
		5290	81.92	5249.04	5330.96	---	---
		5530	81.28	5489.52	5570.80	---	---
		5610	81.60	5569.20	5650.80	---	---
		5690	82.08	5649.04	5731.12	---	---
		5690_UNII-2C	75.96	5649.04	5725	---	---
		5690_UNII-3	6.12	5725	5731.12	---	---
		5775	81.44	5734.52	5815.96	---	---

4.5. Test graphs

11A_Ant1_5180



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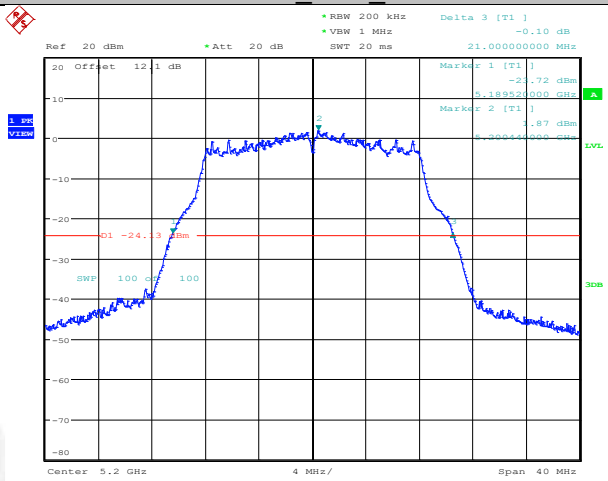

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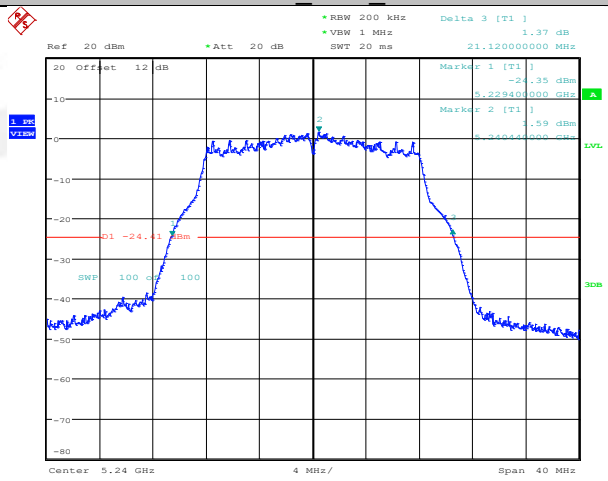

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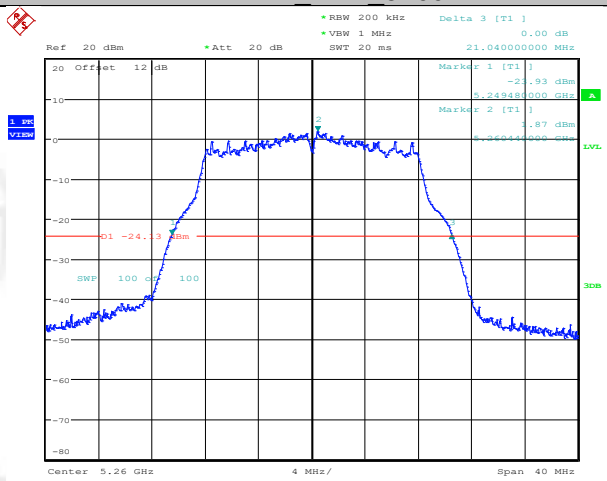

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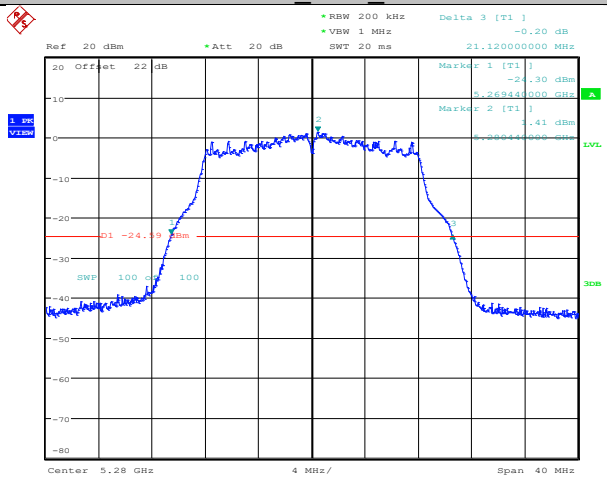

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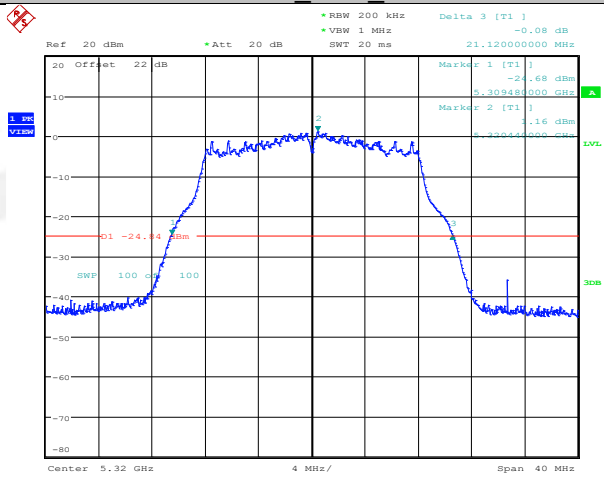

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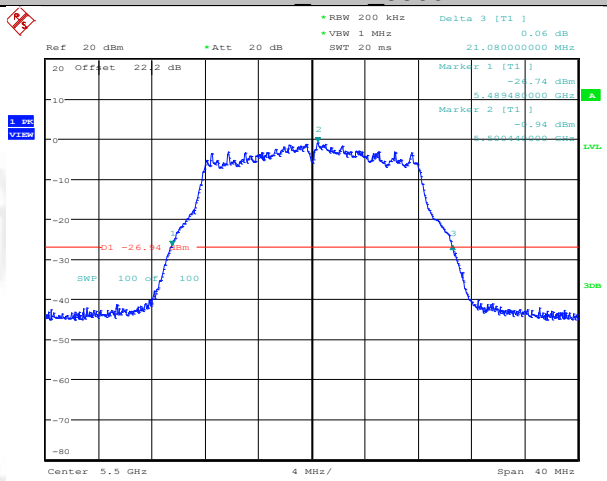

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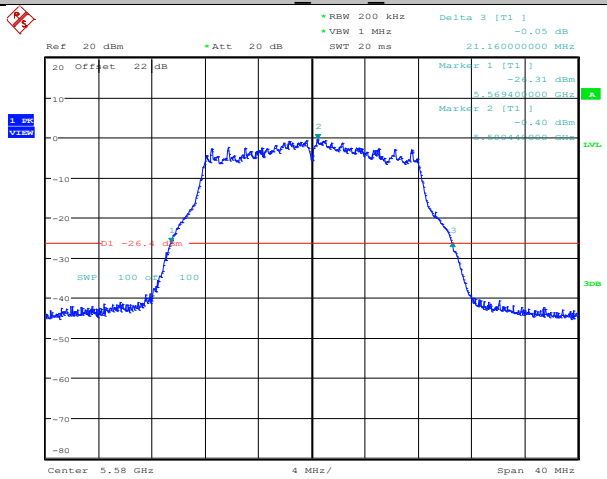

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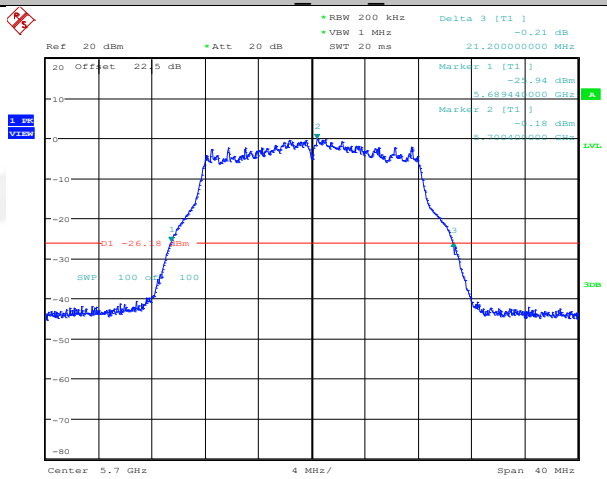

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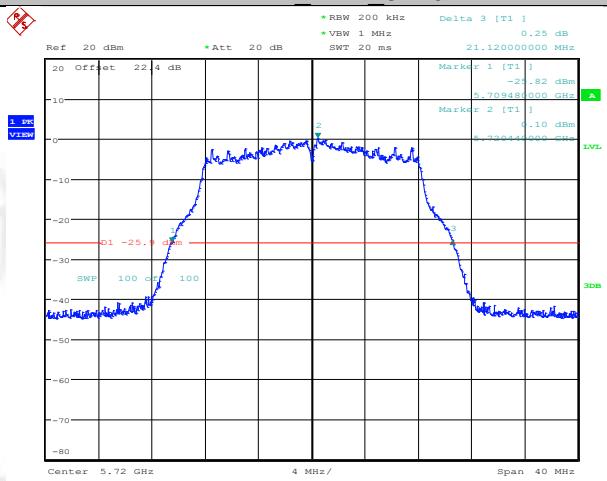

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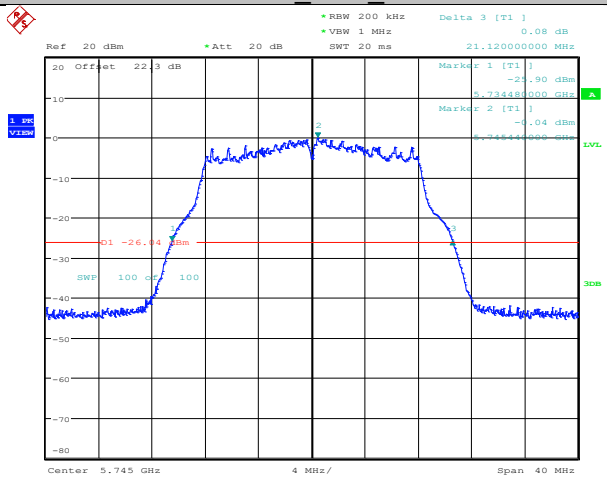

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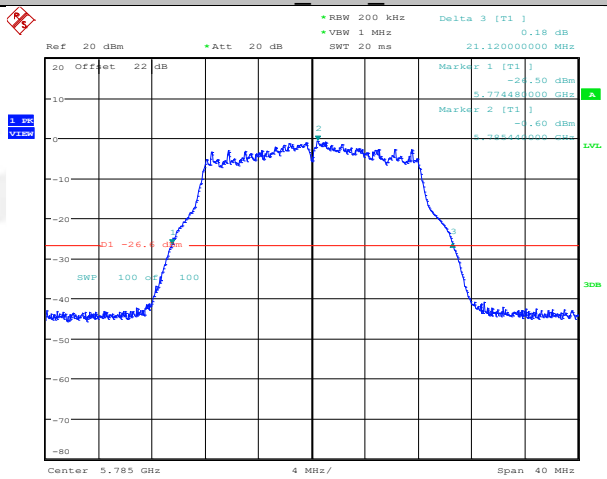

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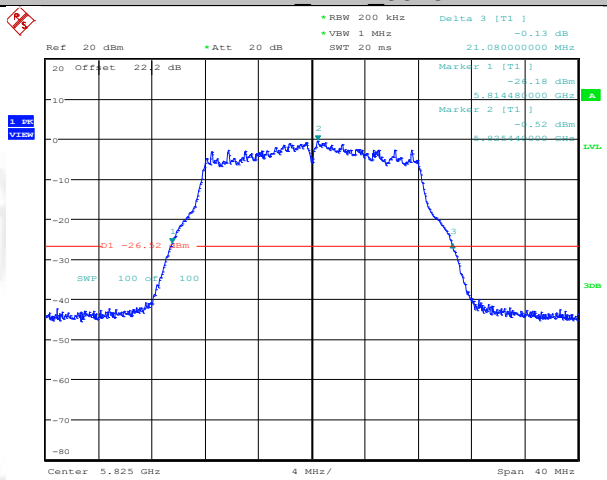

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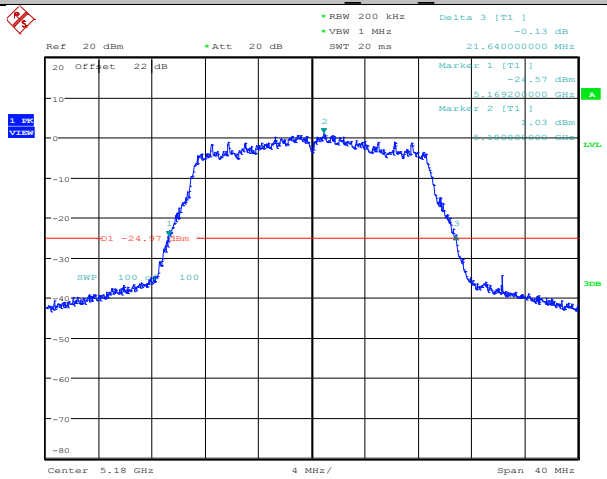

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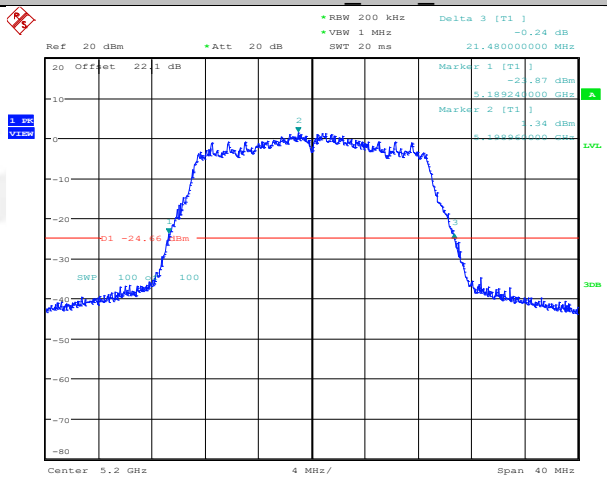

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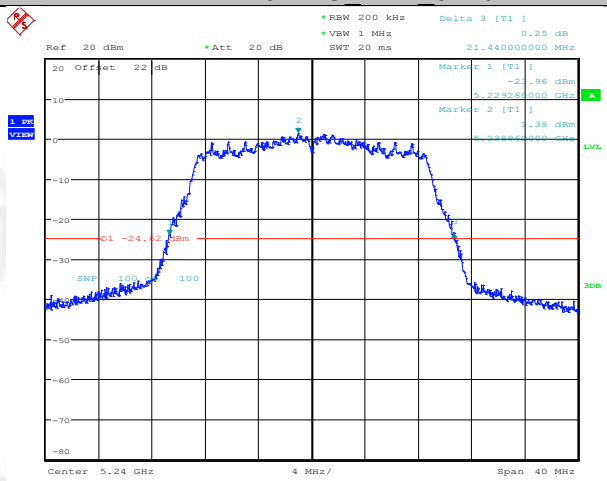

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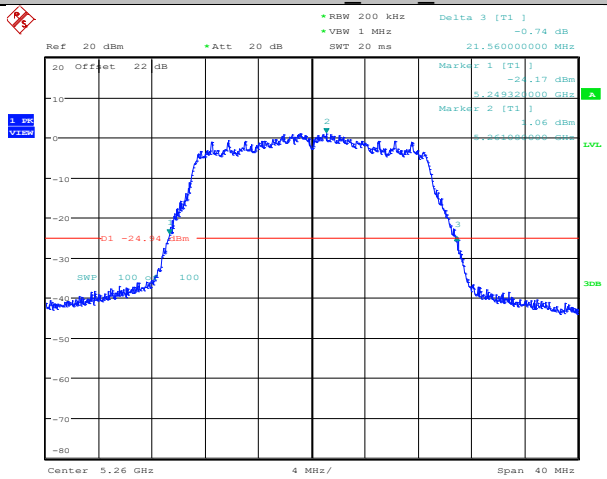

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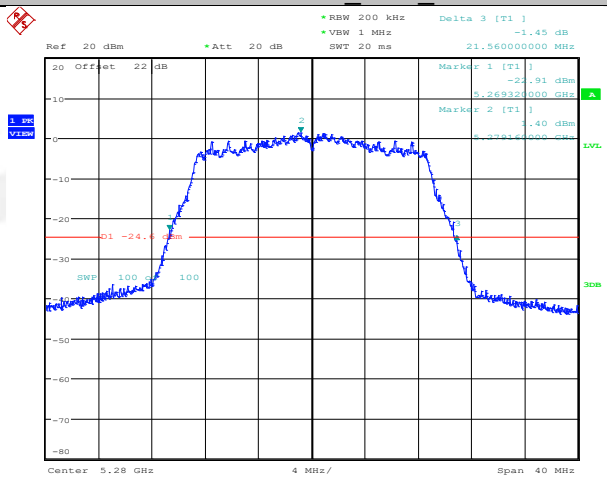

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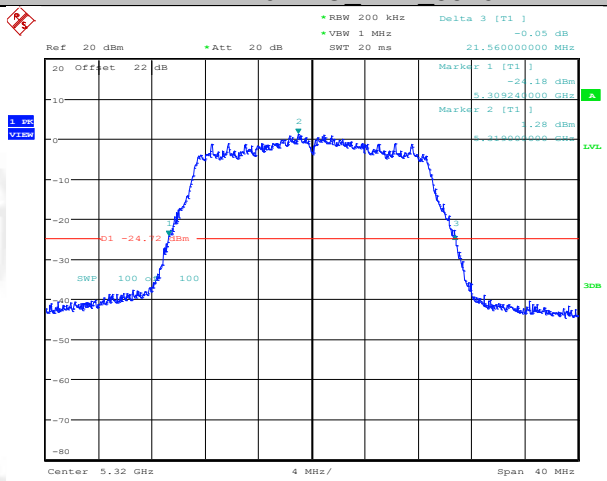

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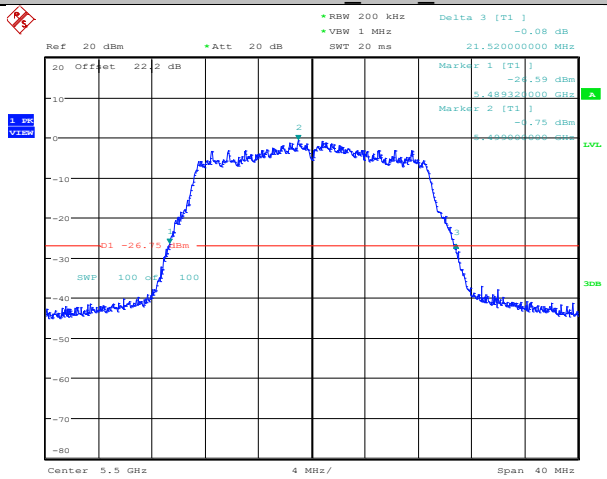

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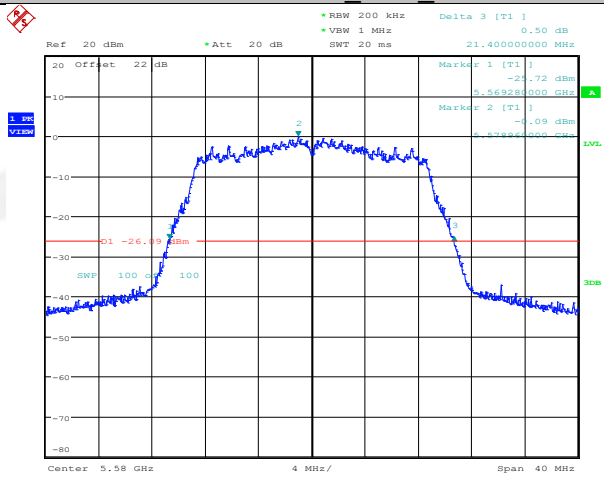

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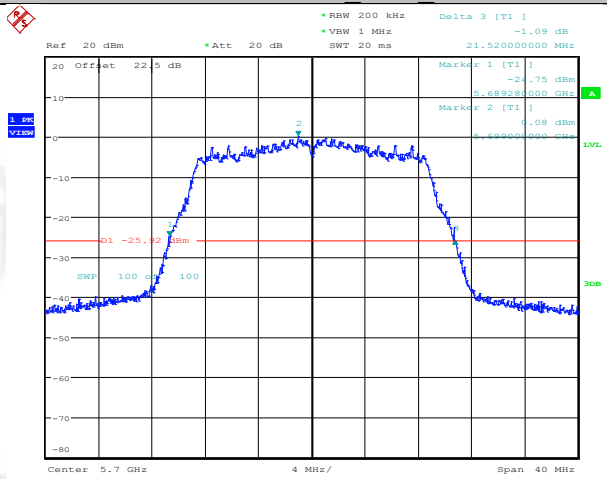

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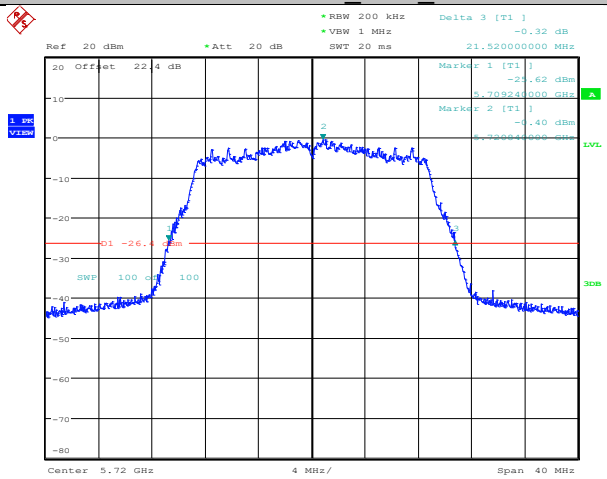

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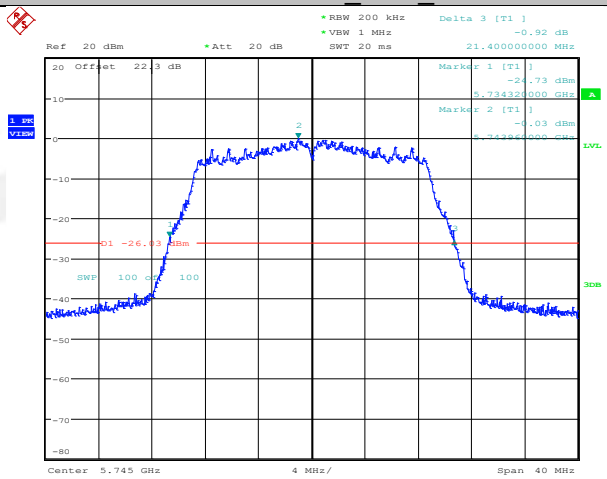

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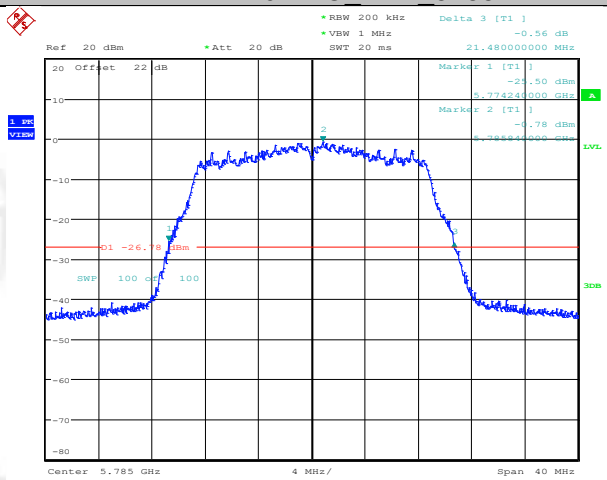

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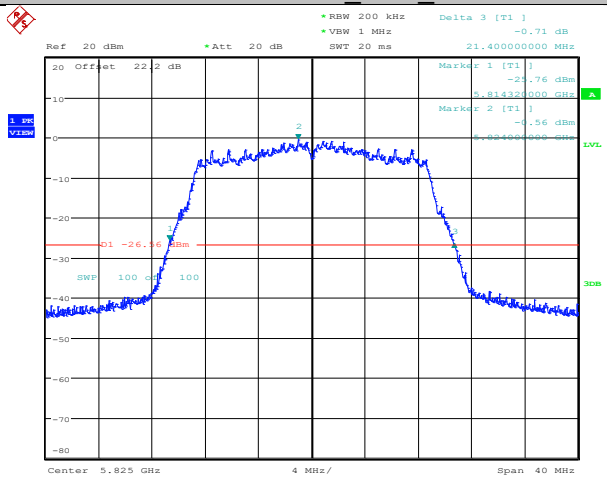

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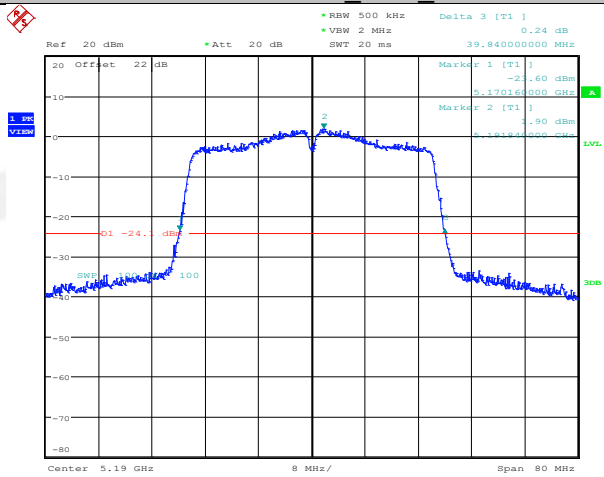

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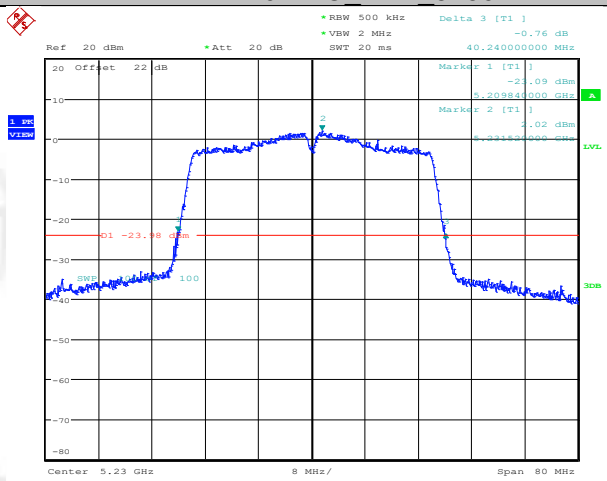

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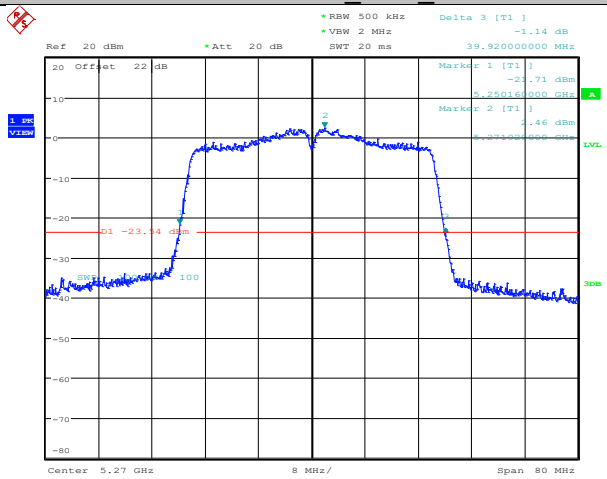

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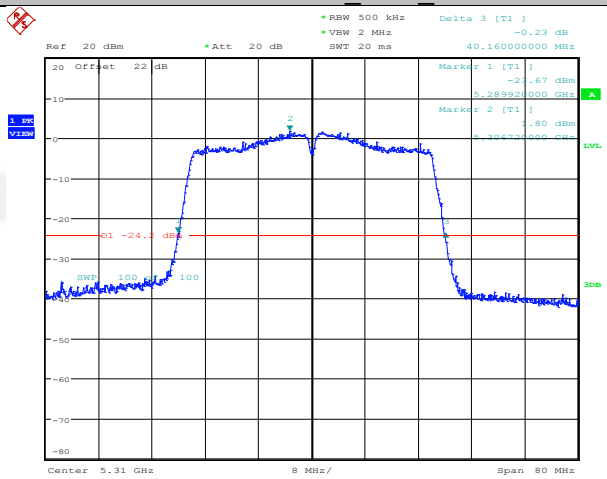

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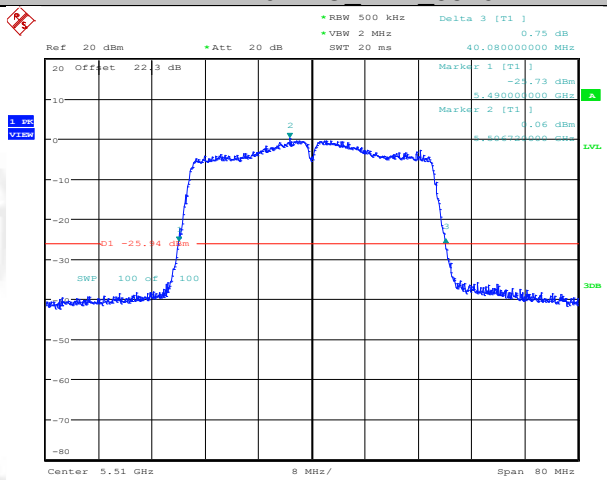

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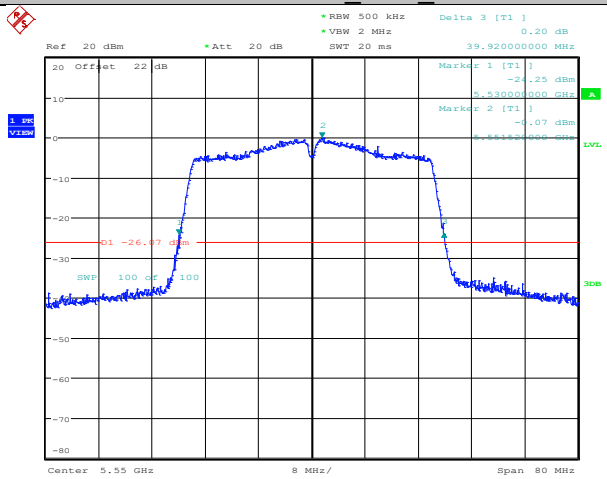

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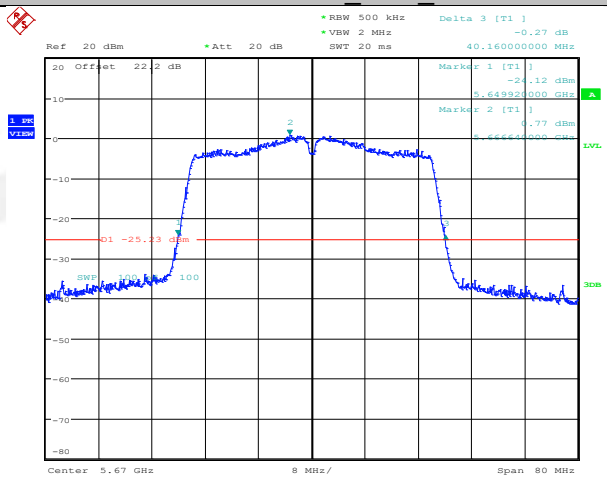

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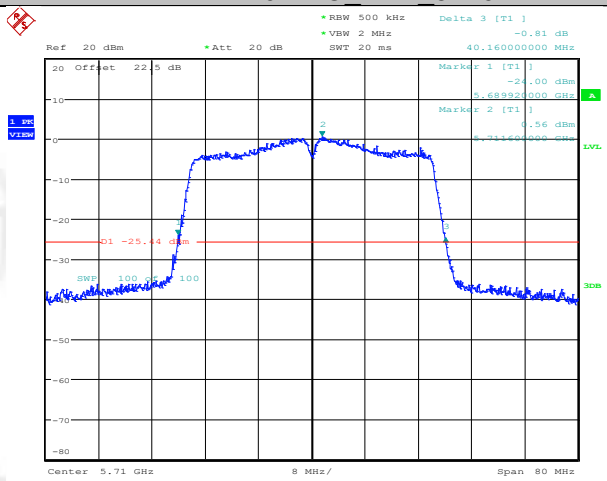

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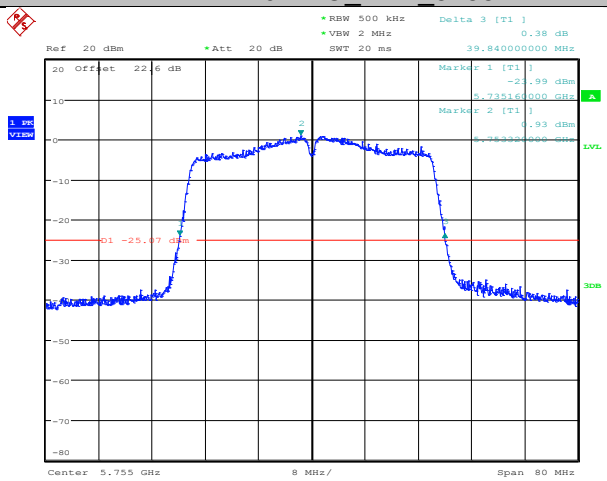

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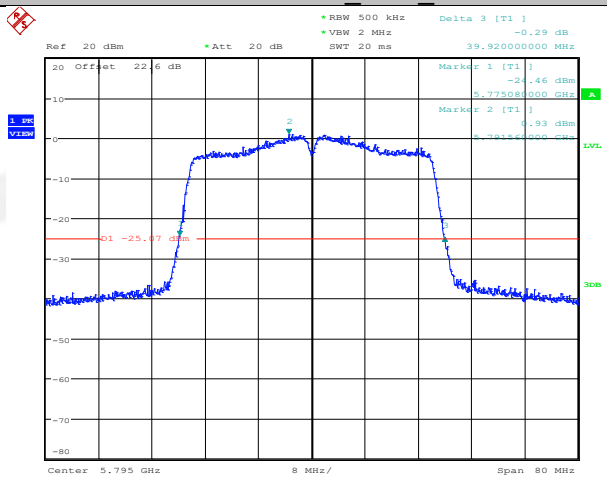

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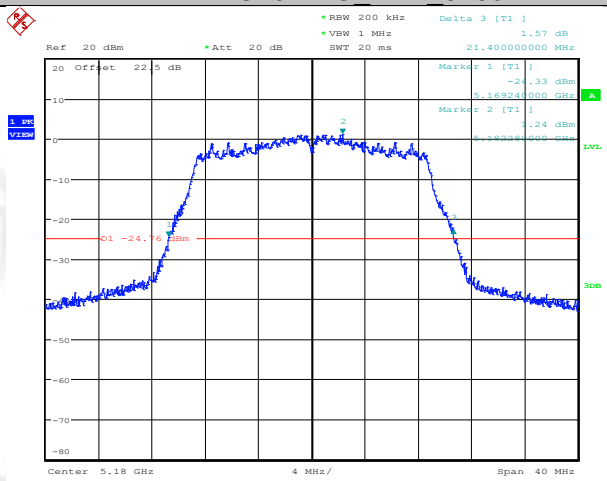

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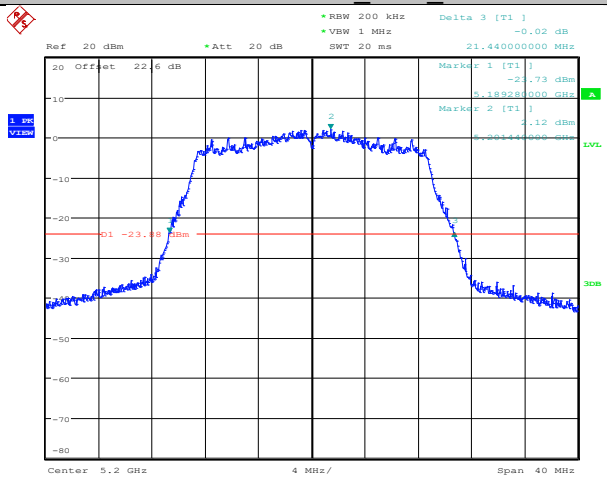

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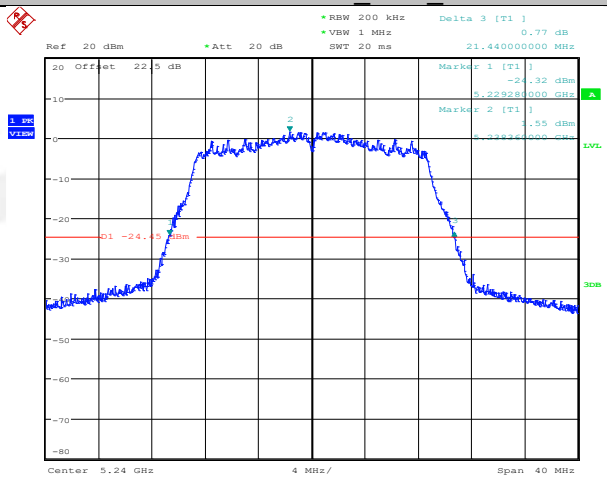

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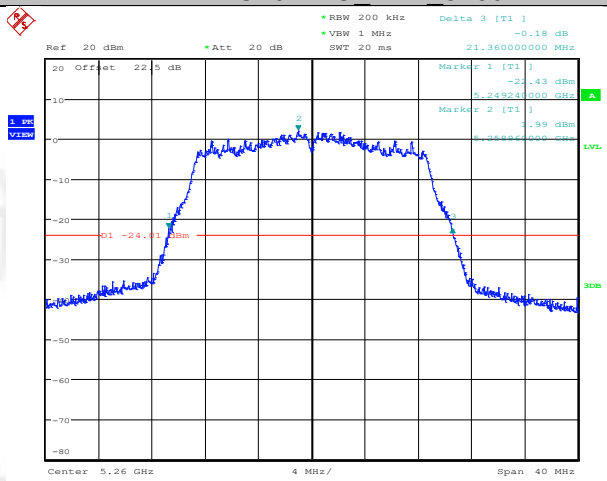

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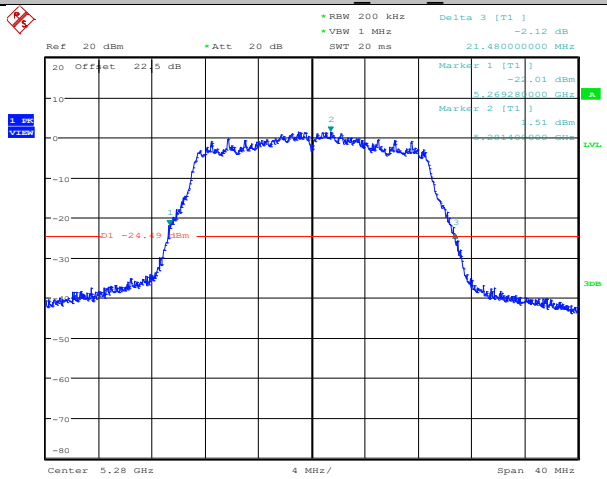

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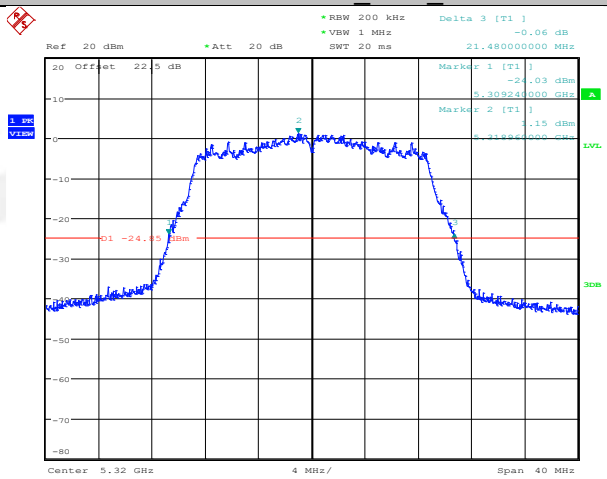

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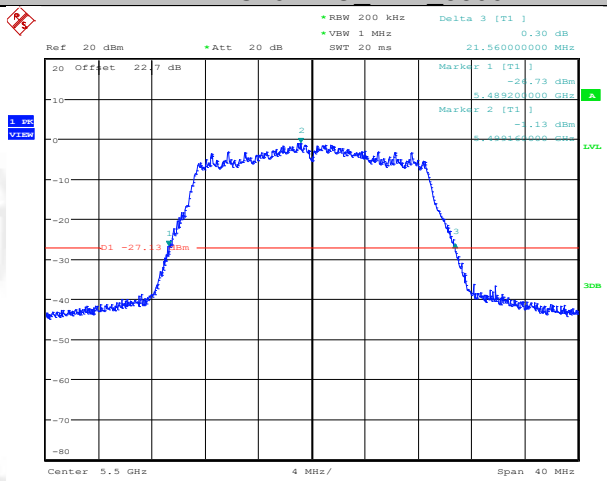

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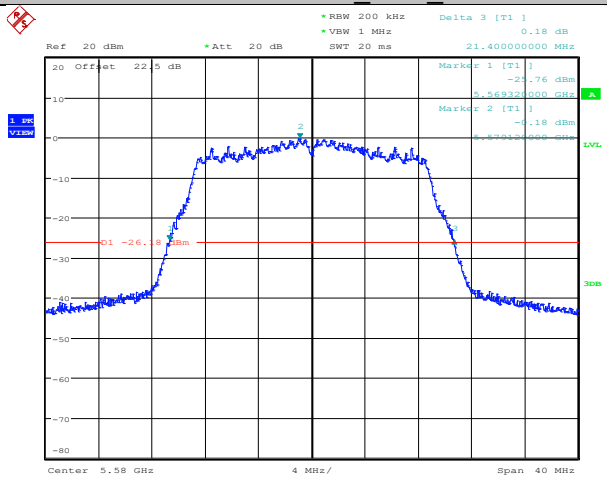

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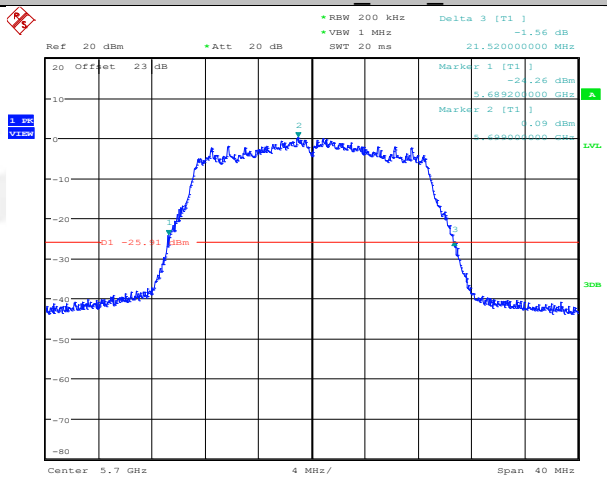

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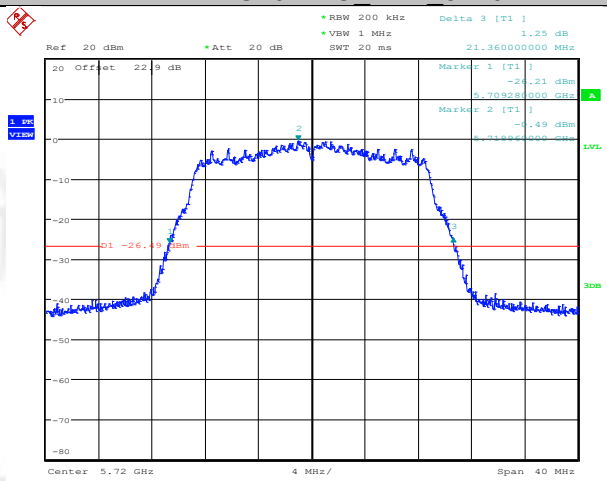

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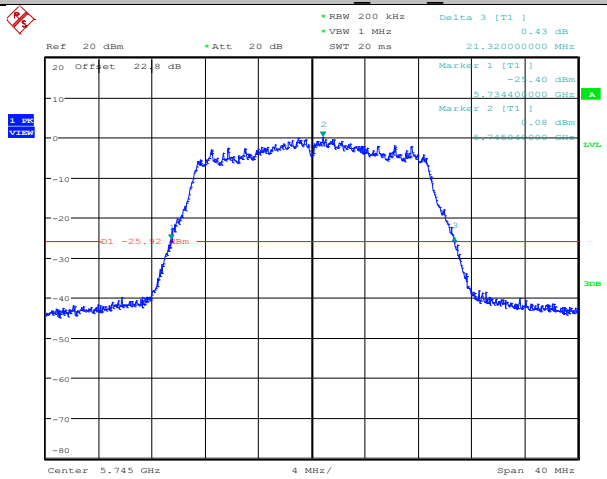

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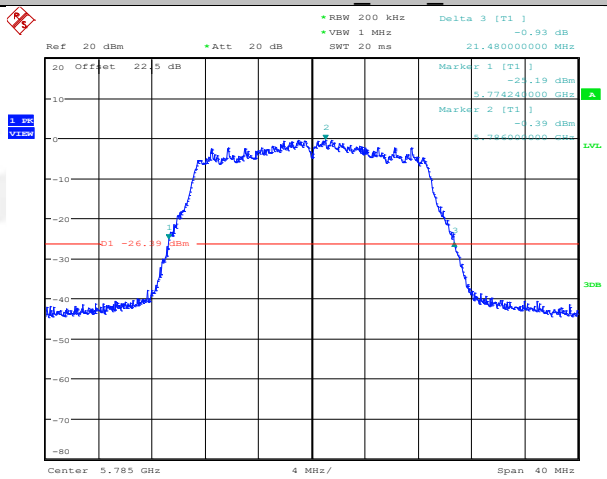

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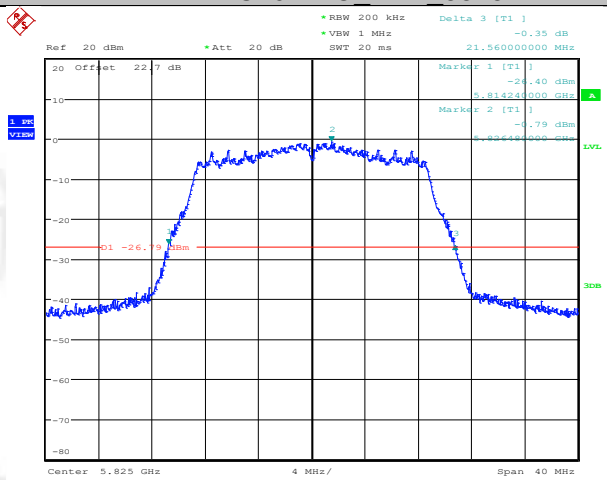
11AC20SISO_Ant1_5825



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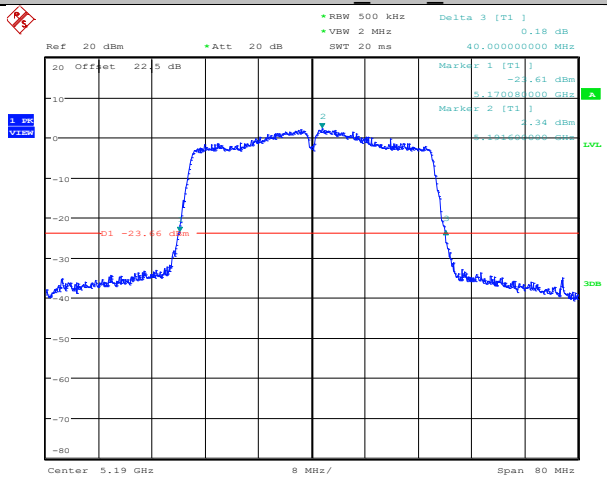

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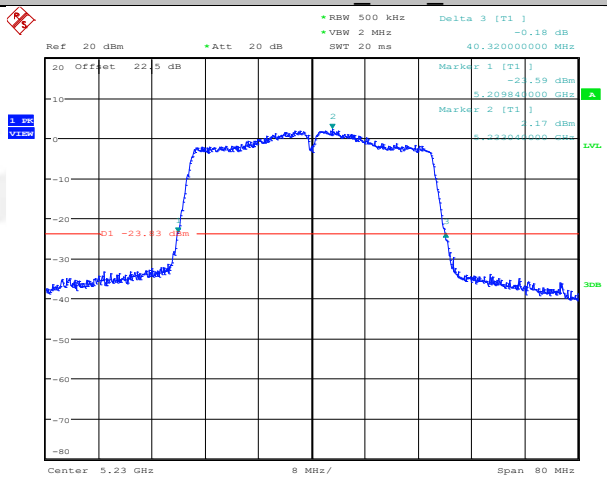

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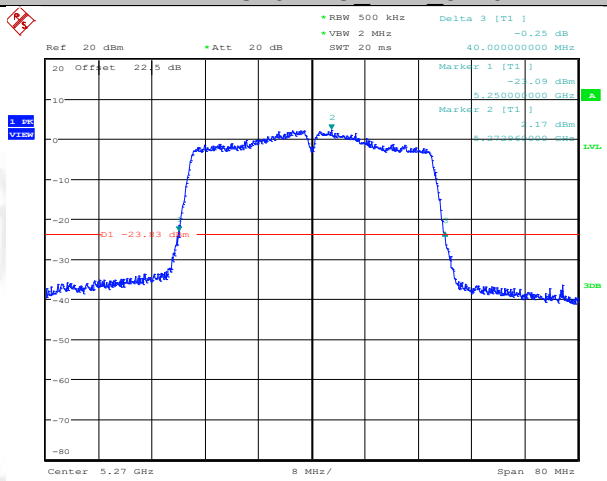

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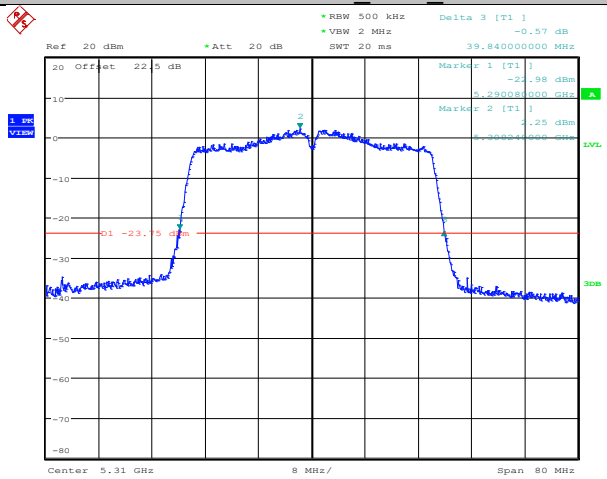

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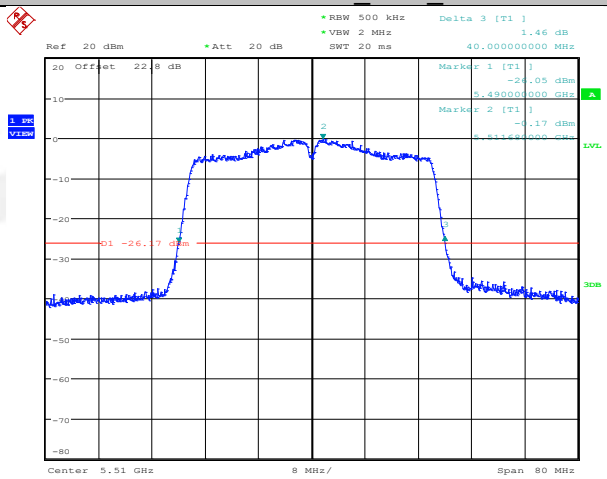
11AC40SISO_Ant1_5510



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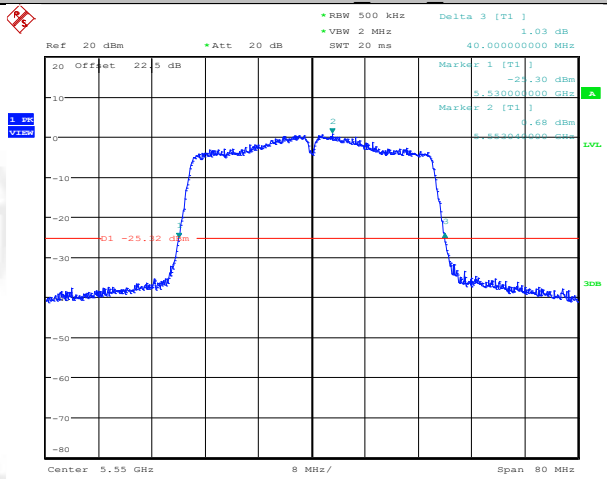

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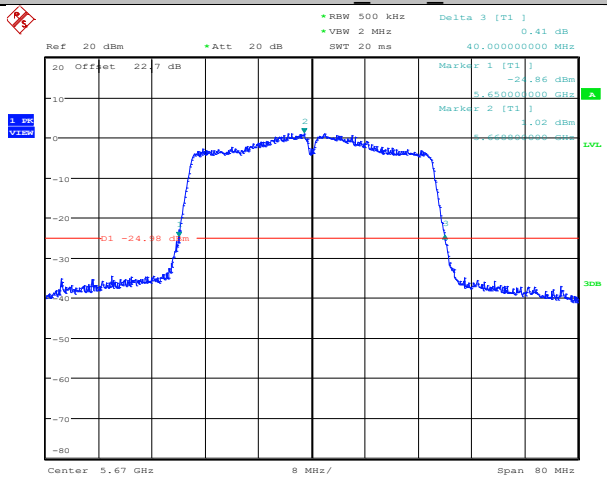
11AC40SISO_Ant1_5670



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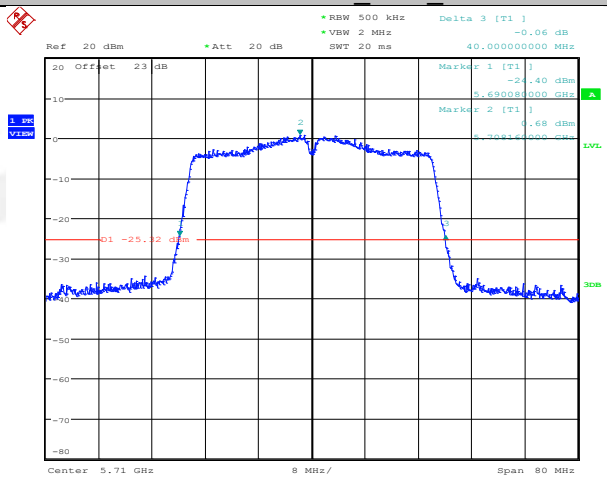
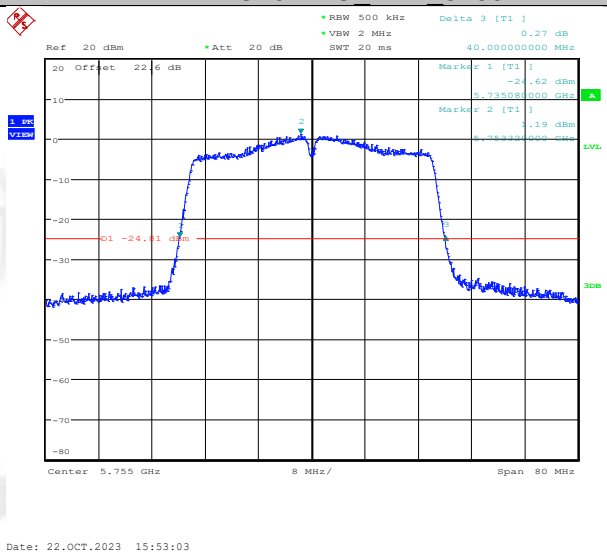
11AC40SISO_Ant1_5710



Date: 22.OCT.2023 15:50:54

11AC40SISO_Ant1_5755



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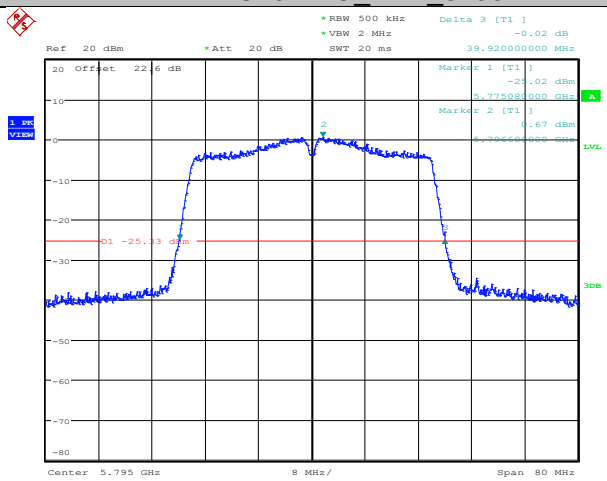
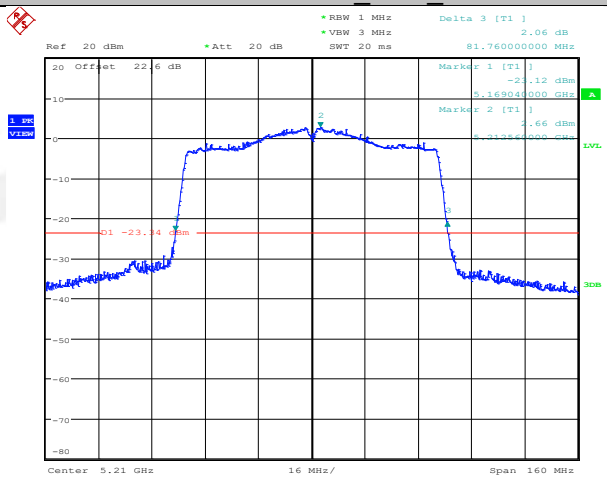


11AC80SISO_Ant1_5210



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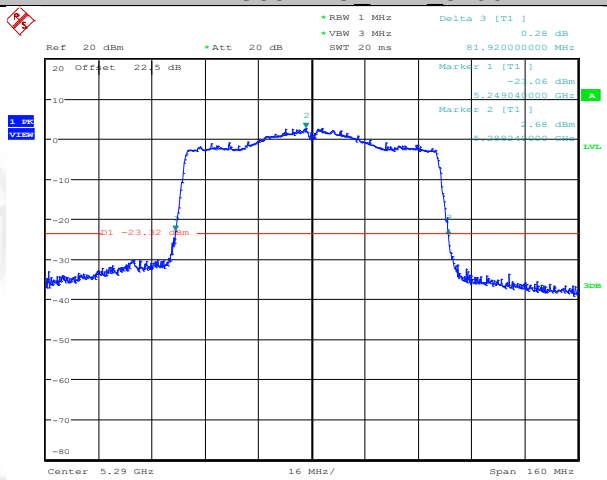

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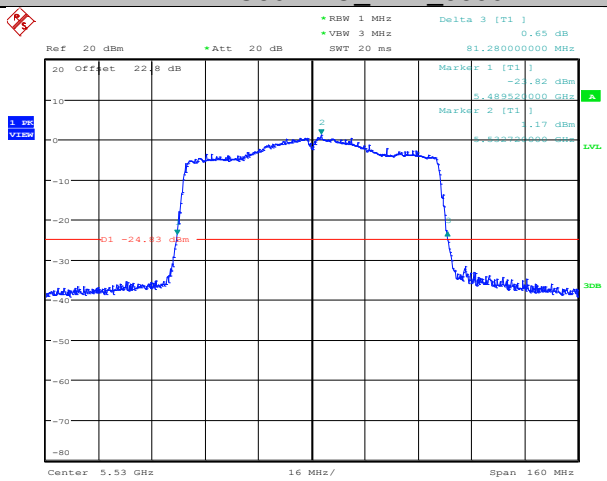
11AC80SISO_Ant1_5530



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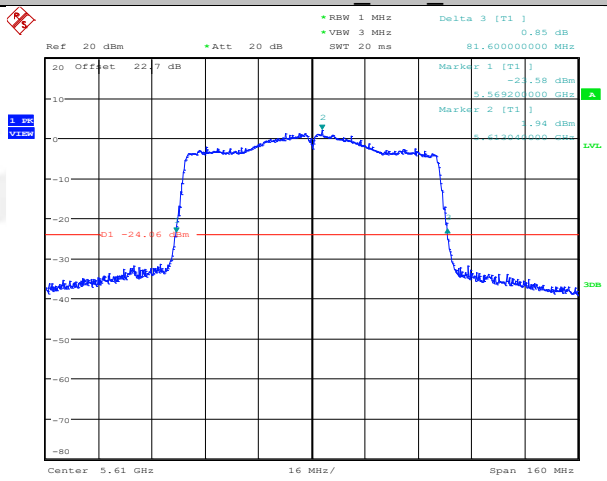

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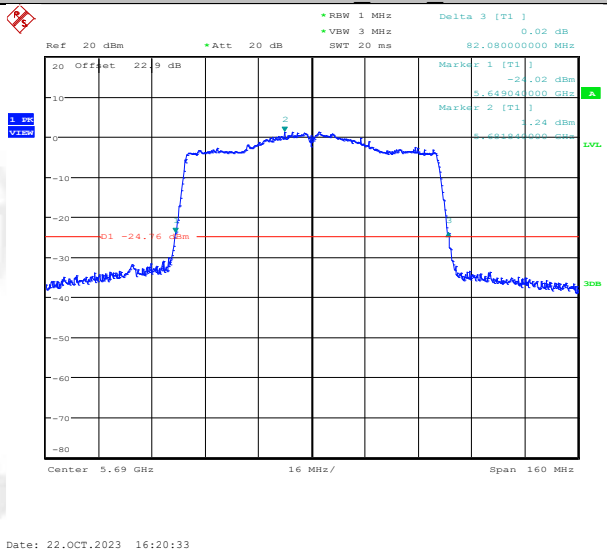
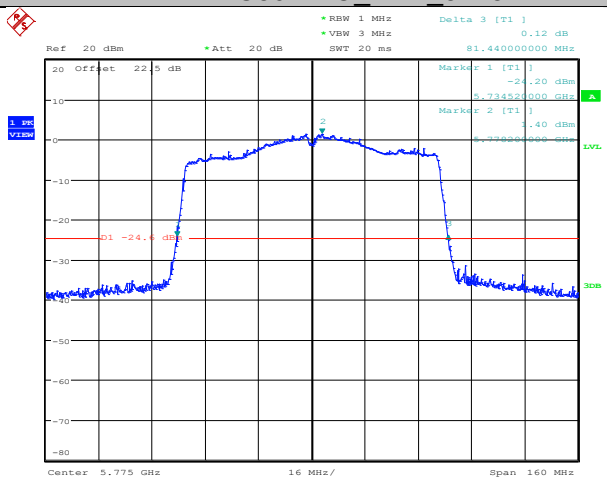
11AC80SISO_Ant1_5690

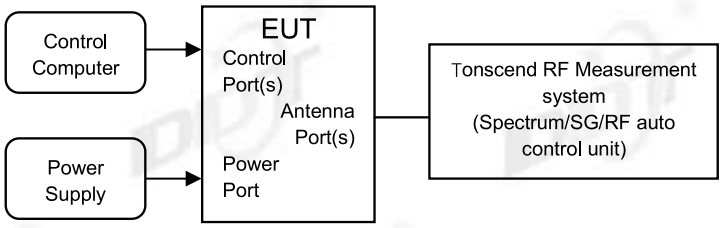


11AC80SISO_Ant1_5775



5. 6dB Bandwidth

5.1. Block diagram of test setup



5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
6 dB Bandwidth	Minimum 500 kHz	5725 - 5850

5.3. Test procedure

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

Center Frequency	The center 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

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 6 dB relative to the maximum level measured in the fundamental emission.

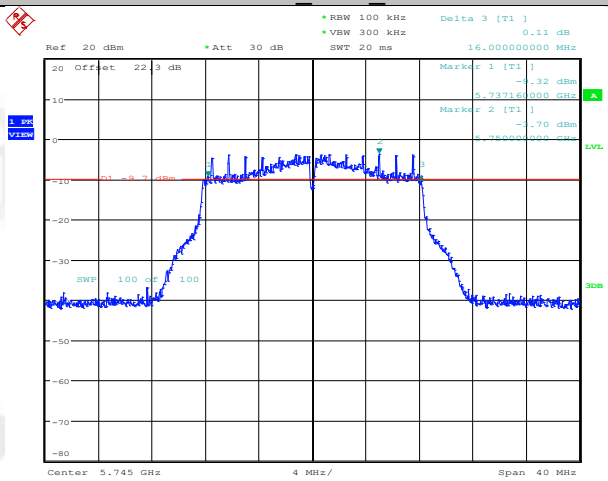
5.4. Test result

Test Site:	RF Measurement System 1#	Test Date:	2023.10.16-2023.10.23
Ambient Condition:	25.4℃, 46.5 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	WiiM Amp	Model No.:	AMP001
Sample Number:	S23061614-04	Test Power Supply:	AC 230V

Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	16.00	5737.16	5753.16	0.5	PASS
		5785	16.00	5777.16	5793.16	0.5	PASS
		5825	16.04	5817.12	5833.16	0.5	PASS
11N20SISO	Ant1	5745	16.88	5736.64	5753.52	0.5	PASS
		5785	16.68	5776.88	5793.56	0.5	PASS
		5825	16.28	5817.12	5833.40	0.5	PASS
11N40SISO	Ant1	5755	35.44	5737.40	5772.84	0.5	PASS
		5795	35.36	5777.40	5812.76	0.5	PASS
11AC20SISO	Ant1	5745	16.12	5737.40	5753.52	0.5	PASS
		5785	15.96	5777.40	5793.36	0.5	PASS
		5825	16.16	5817.20	5833.36	0.5	PASS
11AC40SISO	Ant1	5755	35.20	5737.40	5772.60	0.5	PASS
		5795	35.20	5777.40	5812.60	0.5	PASS
11AC80SISO	Ant1	5775	75.20	5737.40	5812.60	0.5	PASS

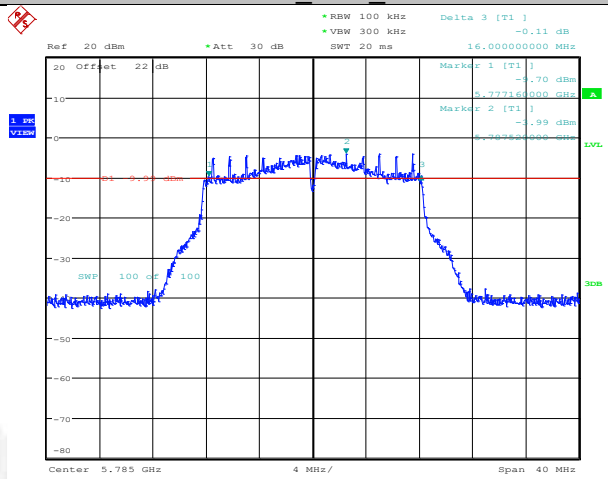
5.5. Test graphs

11A_Ant1_5745



Date: 13.OCT.2023 15:31:38

11A_Ant1_5785



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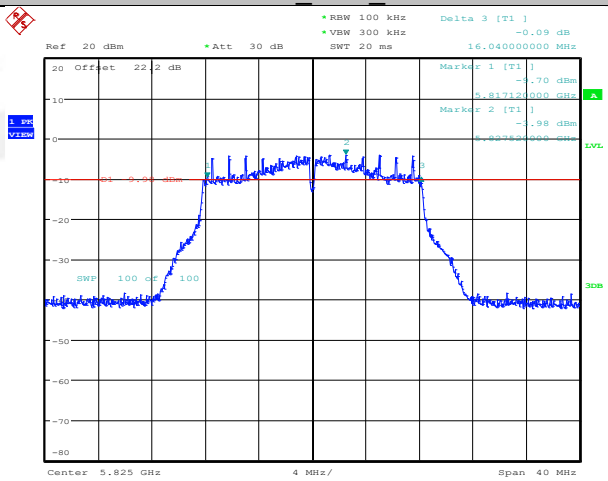
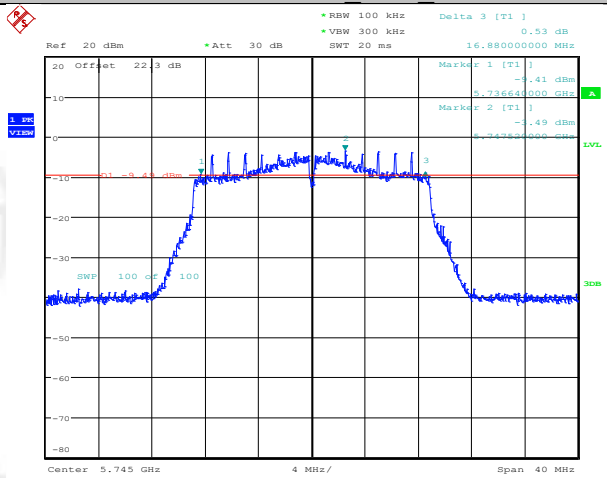
11A_Ant1_5825



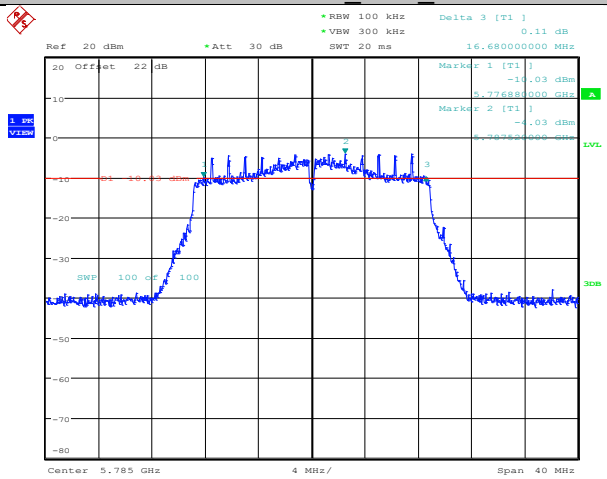
Date: 13.OCT.2023 15:43:23

11N20SISO_Ant1_5745



Date: 13.OCT.2023 16:46:14

11N20SISO_Ant1_5785



Date: 13.OCT.2023 16:52:15

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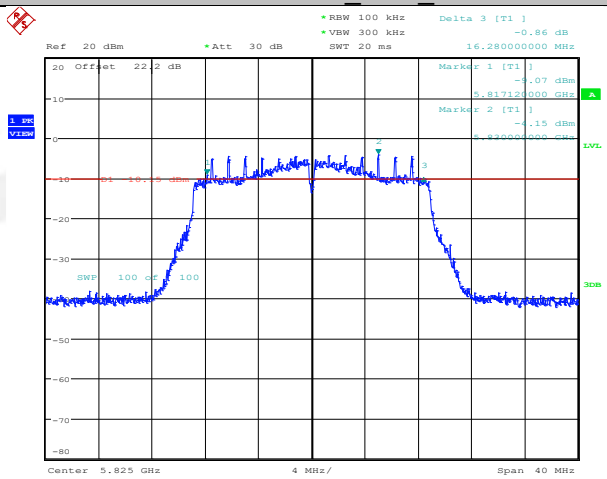
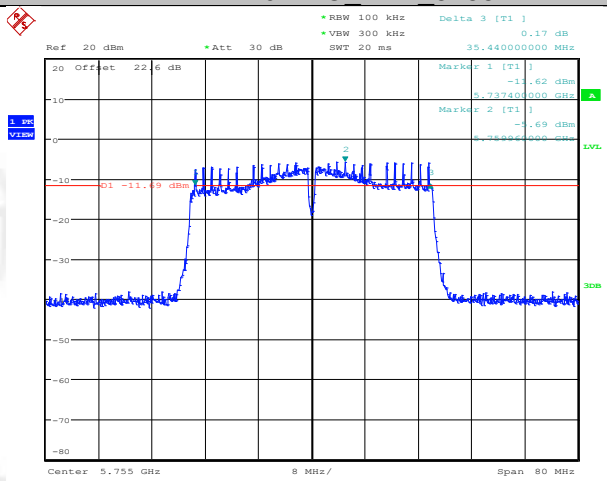


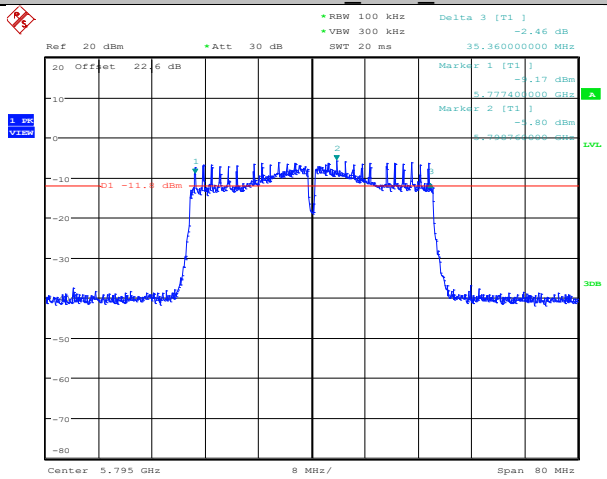
Date: 13.OCT.2023 17:11:29

11N40SISO_Ant1_5755



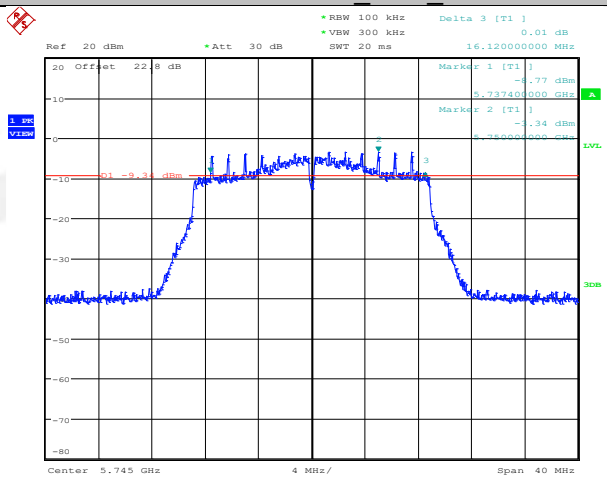
Date: 22.OCT.2023 14:55:24

11N40SISO_Ant1_5795



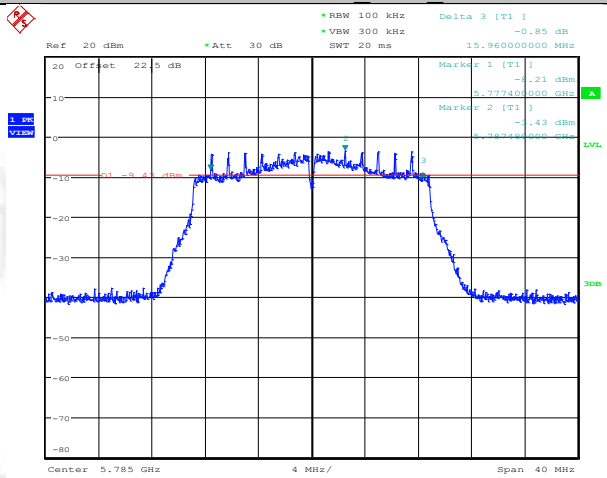
Date: 22.OCT.2023 15:00:57

11AC20SISO_Ant1_5745



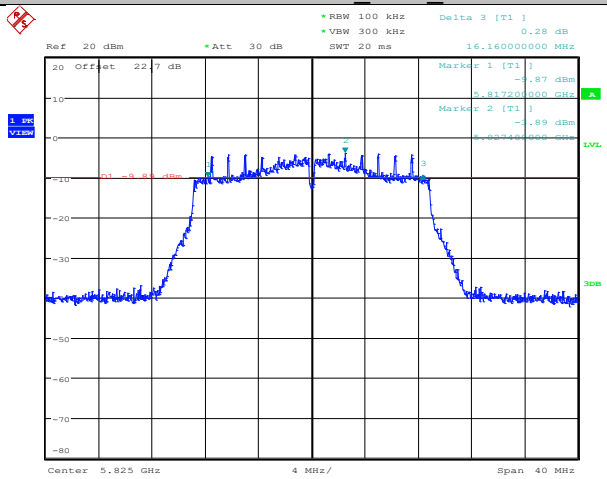
Date: 22.OCT.2023 15:26:12

11AC20SISO_Ant1_5785



Date: 22.OCT.2023 15:28:46

11AC20SISO_Ant1_5825



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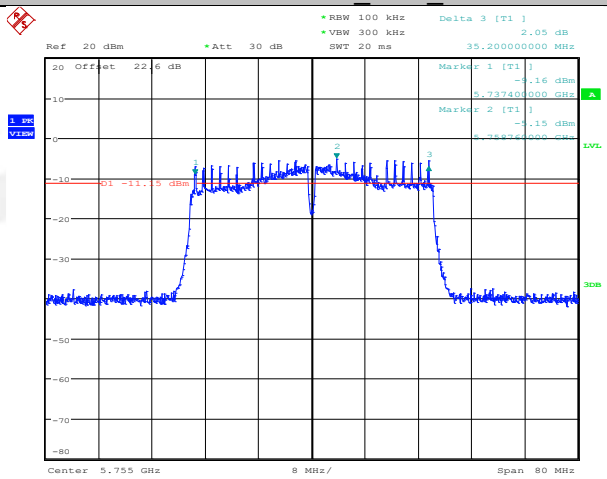

Date: 22.OCT.2023 15:53:19

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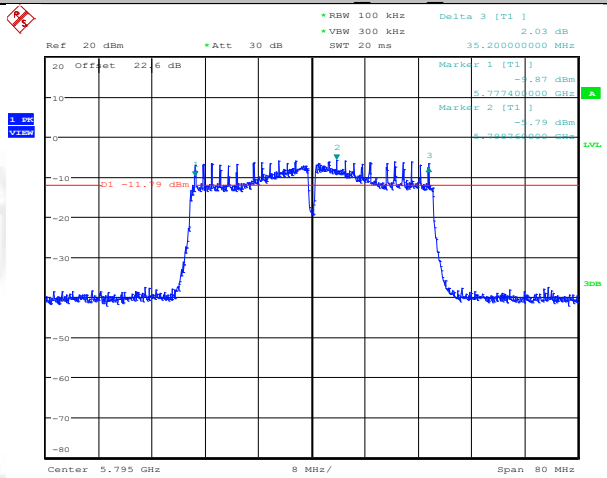
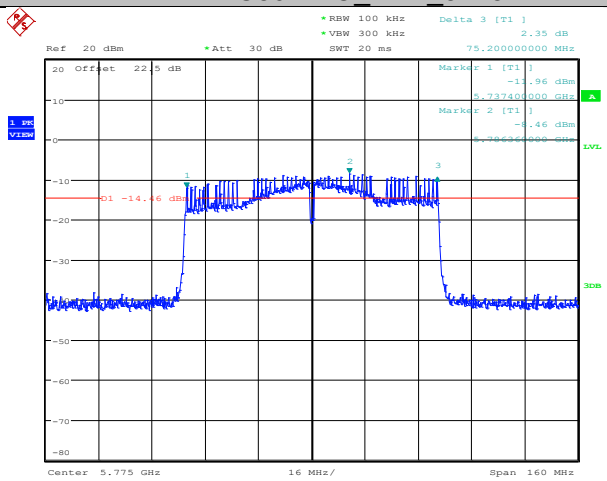


Date: 22.OCT.2023 15:55:18

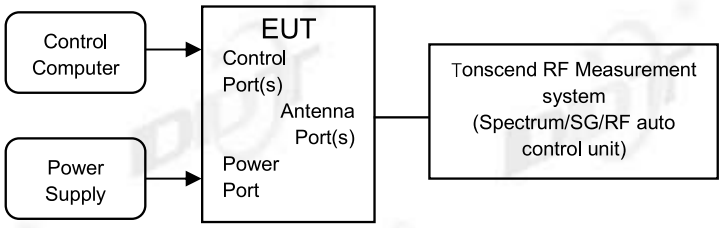
11AC80SISO_Ant1_5775



Date: 22.OCT.2023 16:27:24

6. 99% Bandwidth

6.1. Block diagram of test setup



6.2. Limits

Just for Report.

6.3. Test procedure

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	1% to 5% of the OBW
VBW	approximately three times the RBW
Trace	Max hold

Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

6.4. Test result

Test Site:	RF Measurement System 1#	Test Date:	2023.10.16-2023.10.23
Ambient Condition:	25.4℃, 46.5 %RH	Test Engineer:	Zora Zhang
Equipment under Test:	WiiM Amp	Model No.:	AMP001
Sample Number:	S23061614-04	Test Power Supply:	AC 230V

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	17.24	5171.3600	5188.6000	---	---
		5200	17.28	5191.3600	5208.6400	---	---
		5240	17.28	5231.2800	5248.5600	---	---
		5260	17.20	5251.3600	5268.5600	---	---
		5280	17.20	5271.3600	5288.5600	---	---
		5320	17.28	5311.3600	5328.6400	---	---
		5500	17.32	5491.3200	5508.6400	---	---
		5580	17.24	5571.3200	5588.5600	---	---
		5700	17.32	5691.3200	5708.6400	---	---
		5720	17.32	5711.3200	5728.6400	---	---
		5720_UNII-2C	13.68	5711.3200	5725	---	---
		5720_UNII-3	3.64	5725	5728.6400	---	---
		5745	17.20	5736.4000	5753.6000	---	---
		5785	17.32	5776.3600	5793.6800	---	---
		5825	17.20	5816.4000	5833.6000	---	---
11N20SISO	Ant1	5180	18.16	5170.9200	5189.0800	---	---
		5200	18.16	5190.9200	5209.0800	---	---
		5240	18.32	5230.8400	5249.1600	---	---
		5260	18.28	5250.8400	5269.1200	---	---
		5280	18.28	5270.8400	5289.1200	---	---
		5320	18.32	5310.7600	5329.0800	---	---
		5500	18.16	5490.9200	5509.0800	---	---
		5580	18.20	5570.8400	5589.0400	---	---

		5700	18.24	5690.9200	5709.1600	---	---
		5720	18.20	5710.8800	5729.0800	---	---
		5720_UNII-2C	14.12	5710.8800	5725	---	---
		5720_UNII-3	4.08	5725	5729.0800	---	---
		5745	18.16	5735.9200	5754.0800	---	---
		5785	18.24	5775.9200	5794.1600	---	---
		5825	18.24	5815.8800	5834.1200	---	---
11N40SISO	Ant1	5190	36.32	5171.8400	5208.1600	---	---
		5230	36.24	5211.8400	5248.0800	---	---
		5270	36.32	5251.8400	5288.1600	---	---
		5310	36.40	5291.7600	5328.1600	---	---
		5510	36.32	5491.8400	5528.1600	---	---
		5550	36.24	5531.8400	5568.0800	---	---
		5670	36.40	5651.7600	5688.1600	---	---
		5710	36.32	5691.8400	5728.1600	---	---
		5710_UNII-2C	33.16	5691.8400	5725	---	---
		5710_UNII-3	3.16	5725	5728.1600	---	---
		5755	36.24	5736.9200	5773.1600	---	---
		5795	36.16	5776.9200	5813.0800	---	---
11AC20SISO	Ant1	5180	18.24	5170.8400	5189.0800	---	---
		5200	18.32	5190.7600	5209.0800	---	---
		5240	18.16	5230.8800	5249.0400	---	---
		5260	18.24	5250.8400	5269.0800	---	---
		5280	18.28	5270.8000	5289.0800	---	---
		5320	18.28	5310.8400	5329.1200	---	---
		5500	18.24	5490.8800	5509.1200	---	---
		5580	18.28	5570.8000	5589.0800	---	---
		5700	18.24	5690.8400	5709.0800	---	---
		5720	18.24	5710.8800	5729.1200	---	---
		5720_UNII-2C	14.12	5710.8800	5725	---	---

		5720_UNII-3	4.12	5725	5729.1200	---	---
		5745	18.16	5735.9600	5754.1200	---	---
		5785	18.28	5775.8400	5794.1200	---	---
		5825	18.28	5815.8400	5834.1200	---	---
11AC40SISO	Ant1	5190	36.32	5171.8400	5208.1600	---	---
		5230	36.24	5211.8400	5248.0800	---	---
		5270	36.32	5251.7600	5288.0800	---	---
		5310	36.32	5291.7600	5328.0800	---	---
		5510	36.32	5491.8400	5528.1600	---	---
		5550	36.32	5531.8400	5568.1600	---	---
		5670	36.32	5651.8400	5688.1600	---	---
		5710	36.4	5691.7600	5728.1600	---	---
		5710_UNII-2C	33.24	5691.7600	5725	---	---
		5710_UNII-3	3.16	5725	5728.1600	---	---
		5755	36.24	5736.9200	5773.1600	---	---
		5795	36.24	5776.8400	5813.0800	---	---
11AC80SISO	Ant1	5210	75.84	5172.0800	5247.9200	---	---
		5290	76	5251.9200	5327.9200	---	---
		5530	75.68	5492.2400	5567.9200	---	---
		5610	76	5571.9200	5647.9200	---	---
		5690	75.84	5652.0800	5727.9200	---	---
		5690_UNII-2C	72.92	5652.0800	5725	---	---
		5690_UNII-3	2.92	5725	5727.9200	---	---
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6.5. Test graphs

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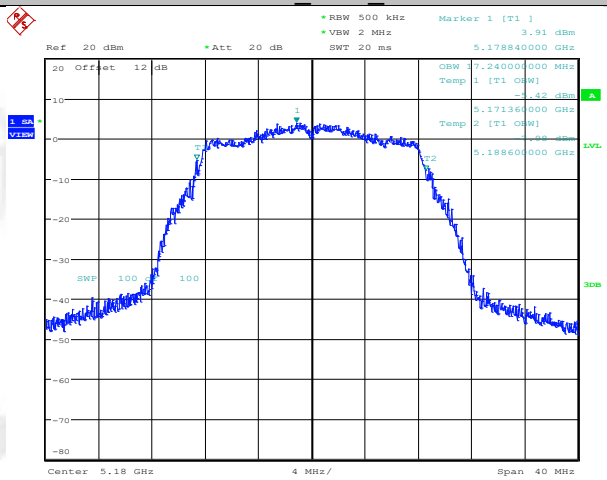

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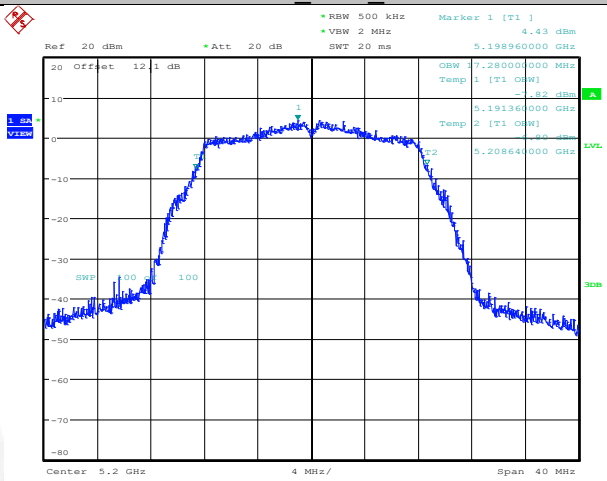

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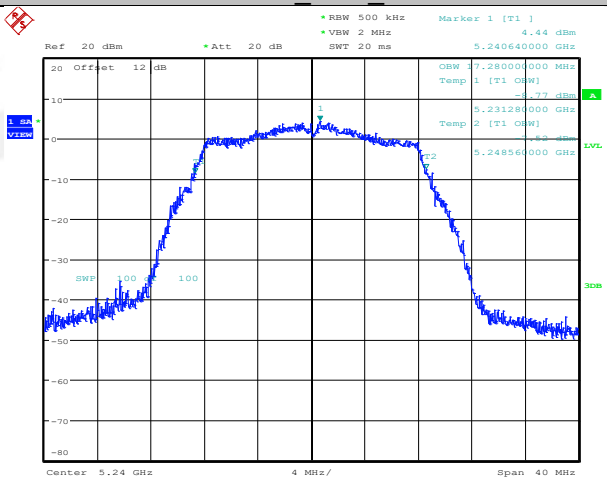

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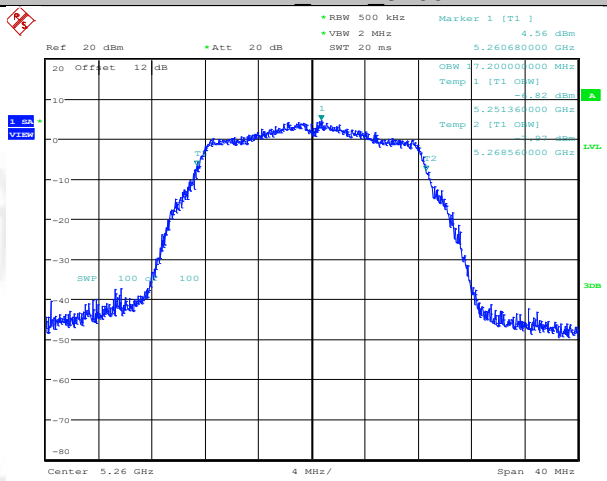

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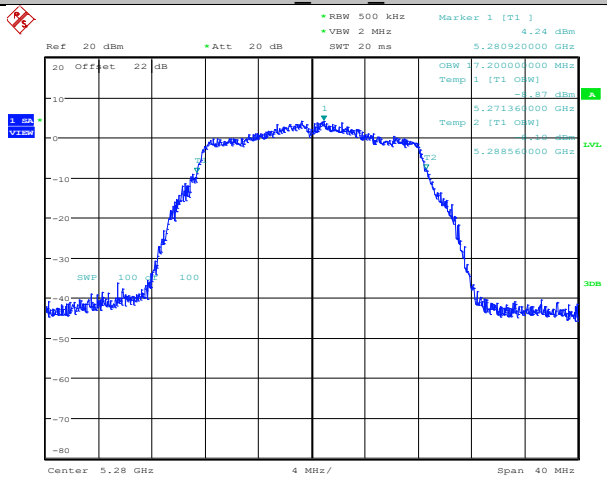

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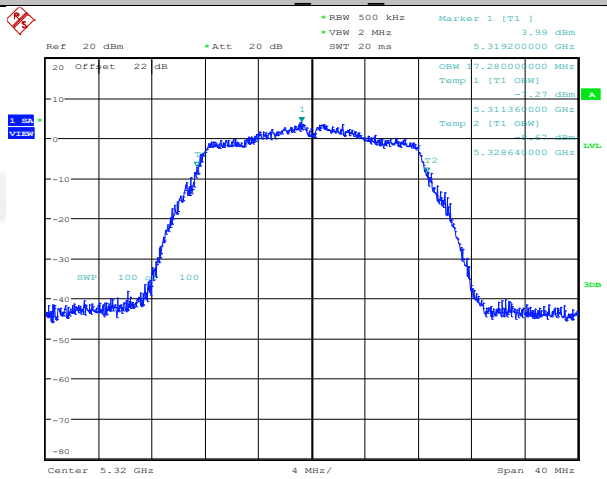

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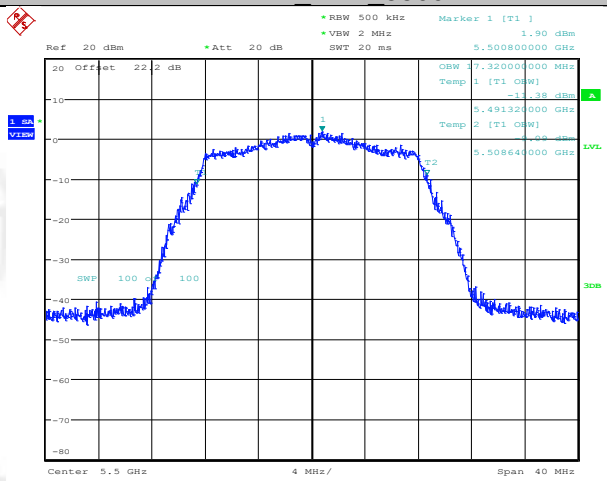

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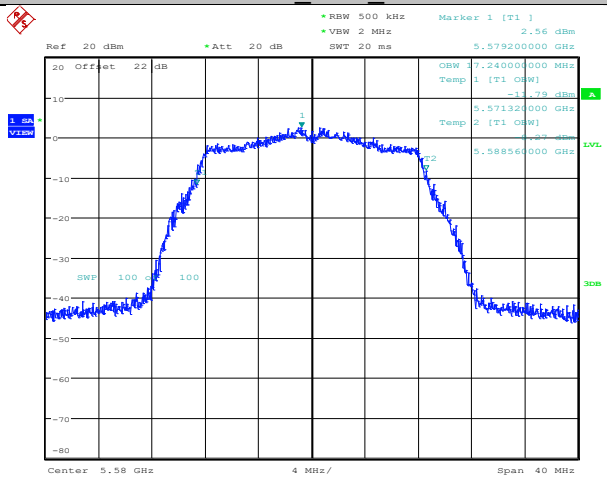

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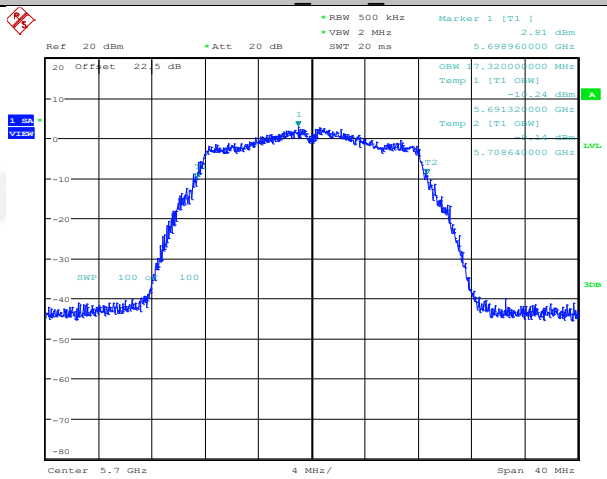

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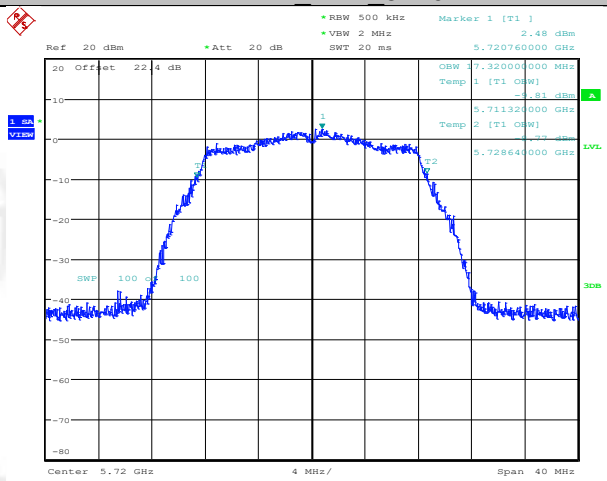

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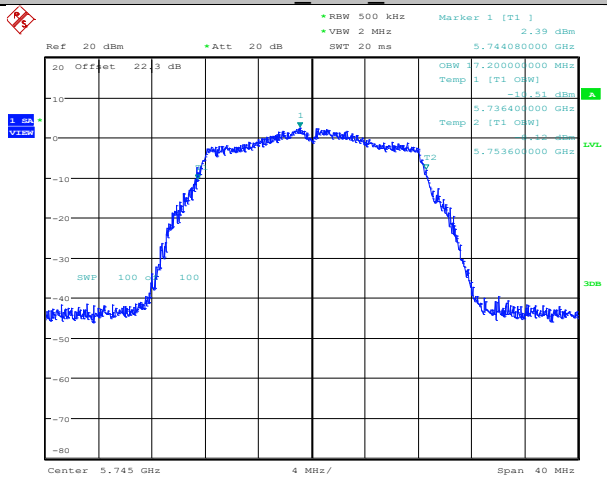

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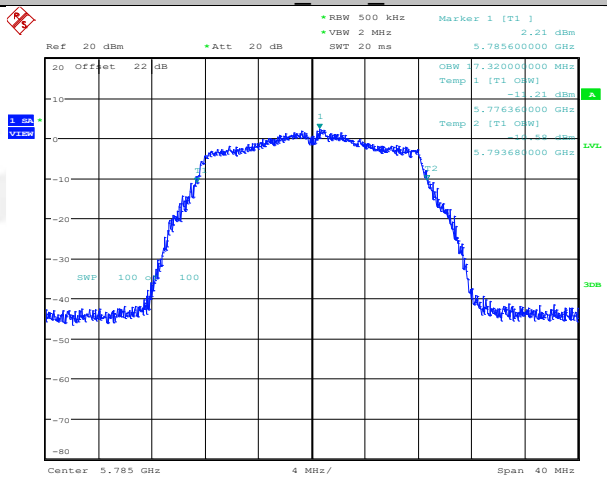

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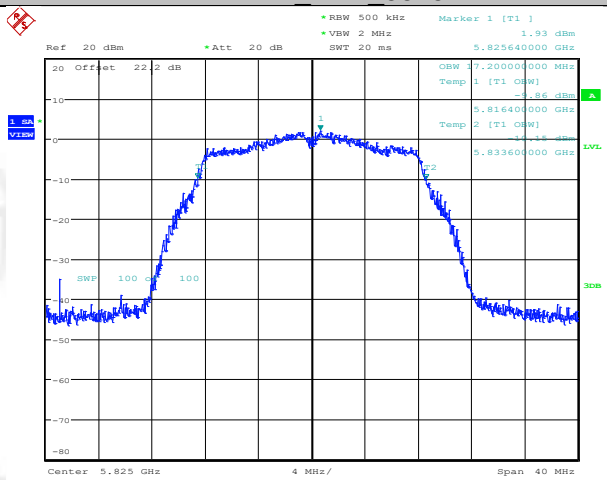

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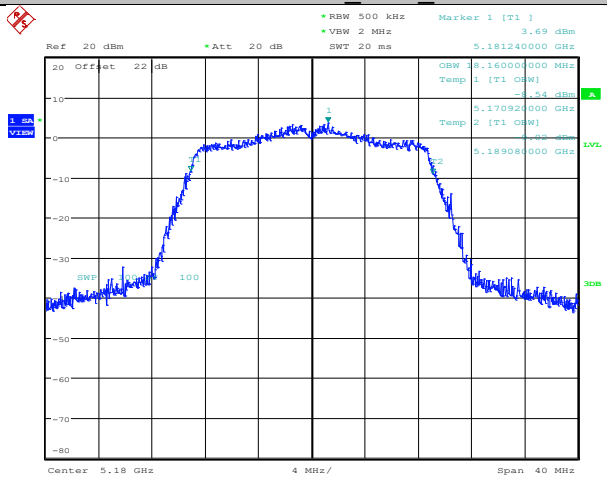

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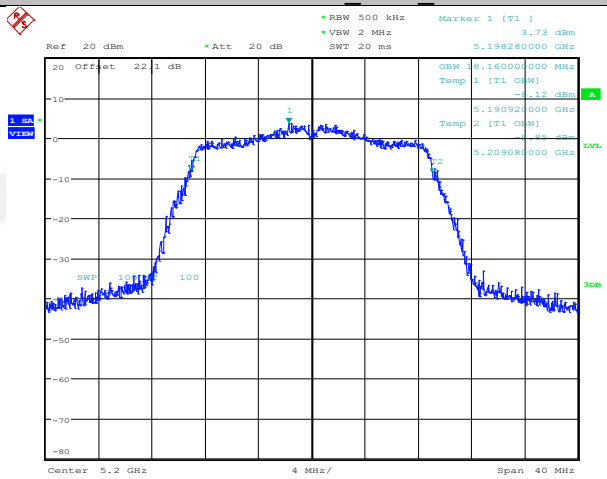

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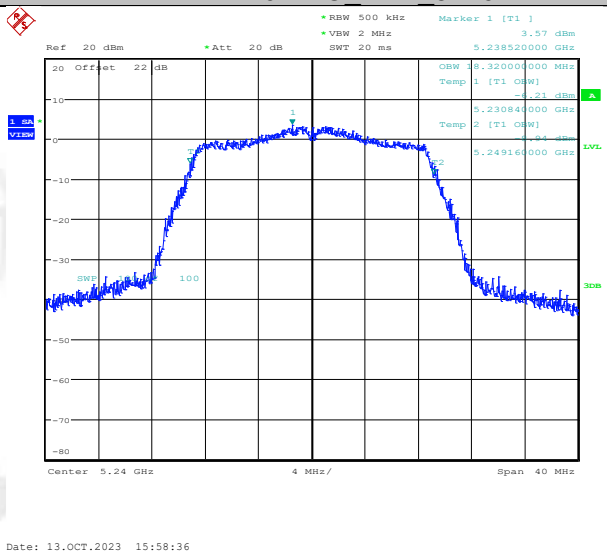

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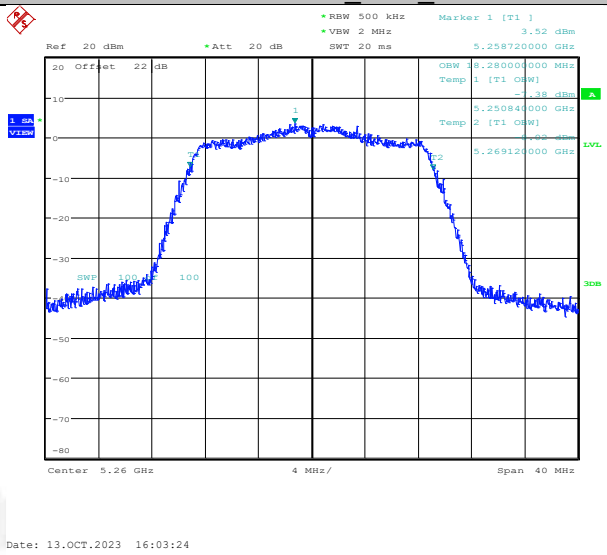

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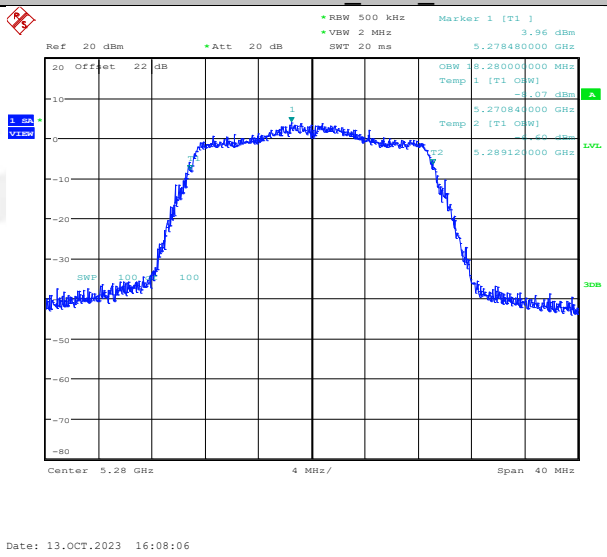

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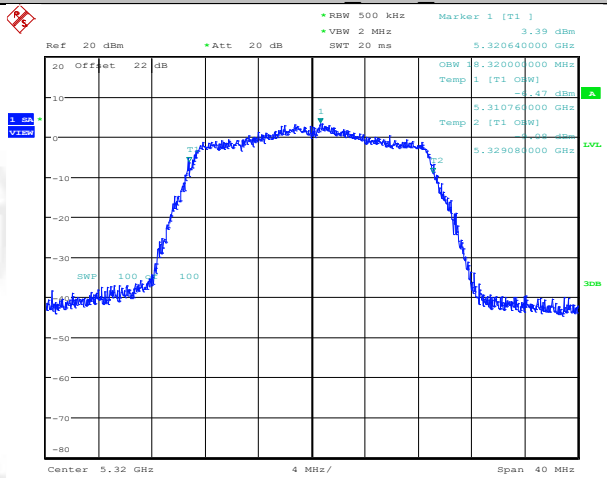

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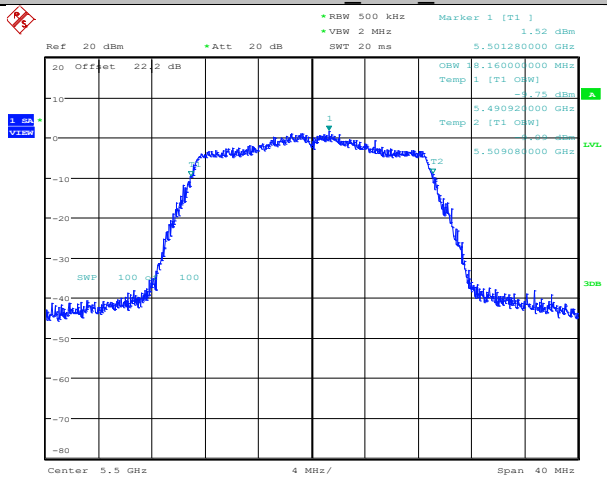

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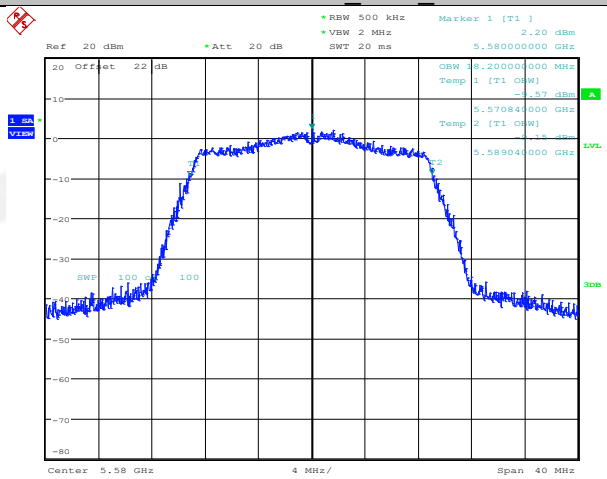

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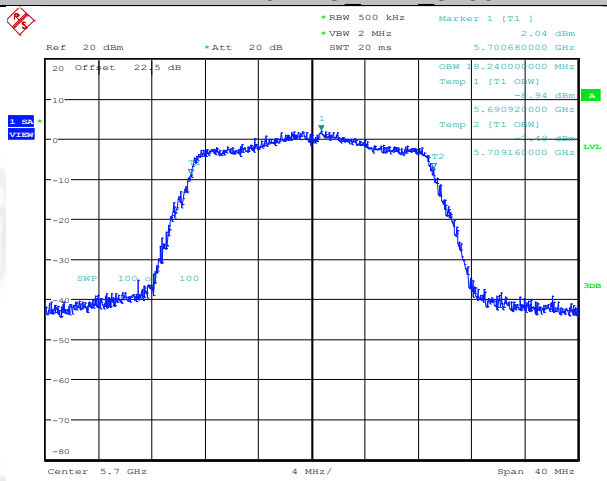

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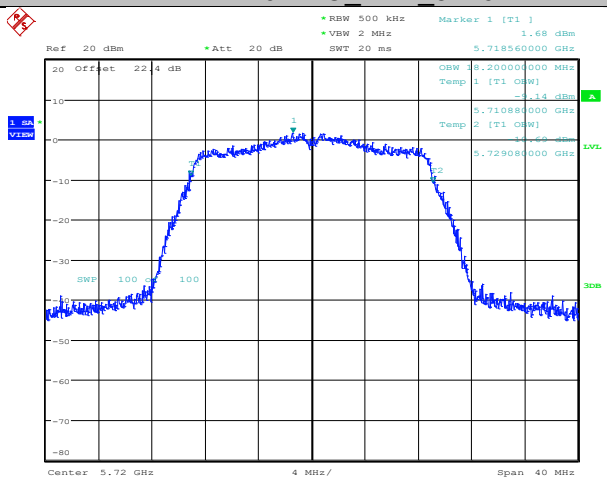

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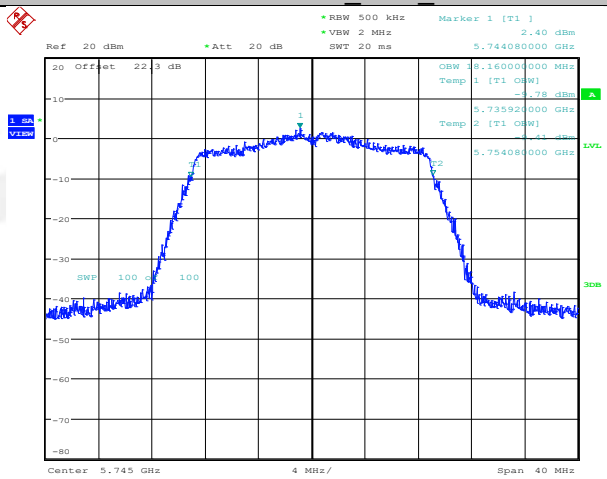

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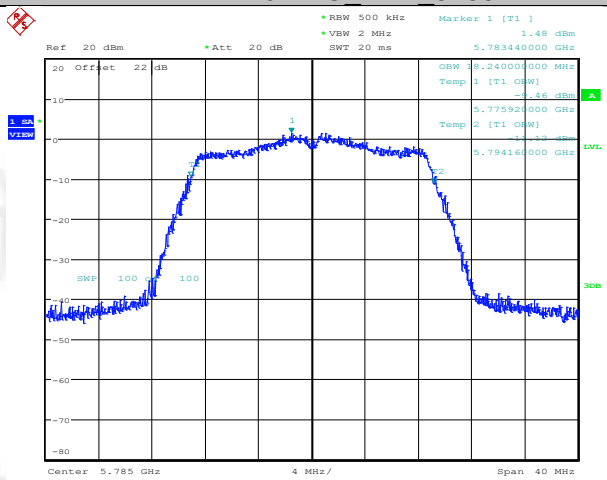

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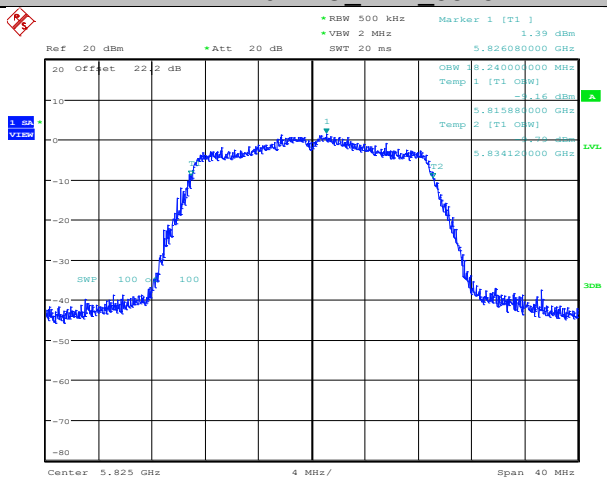

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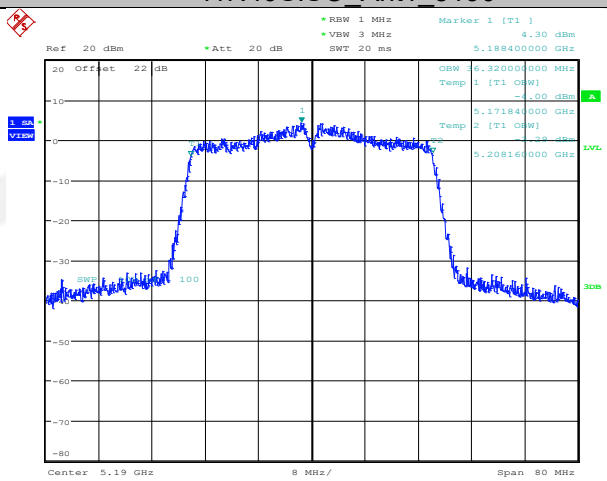

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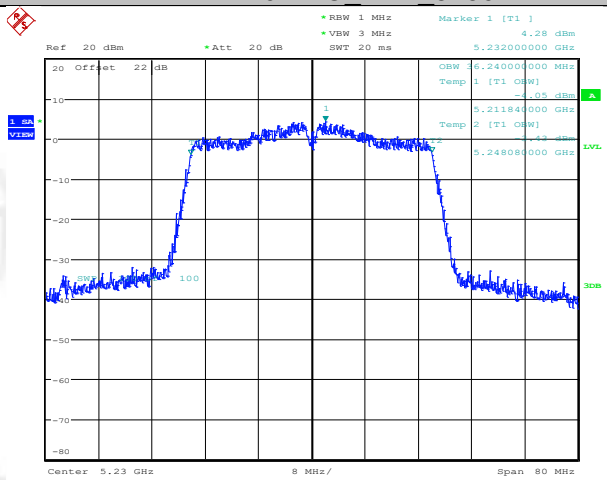

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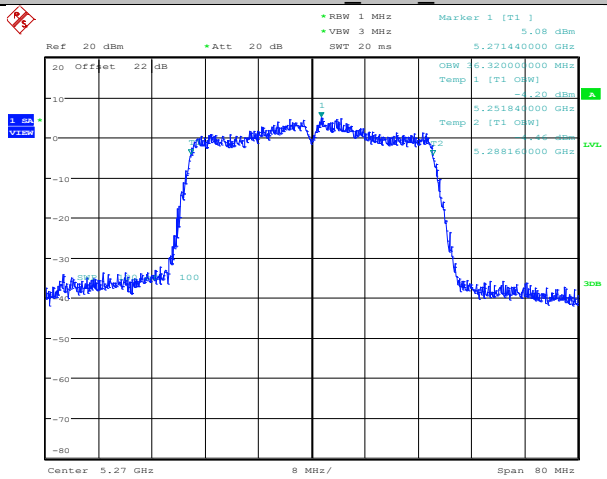

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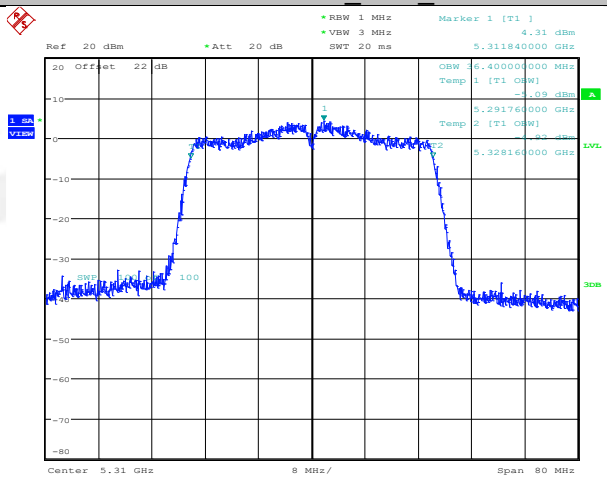

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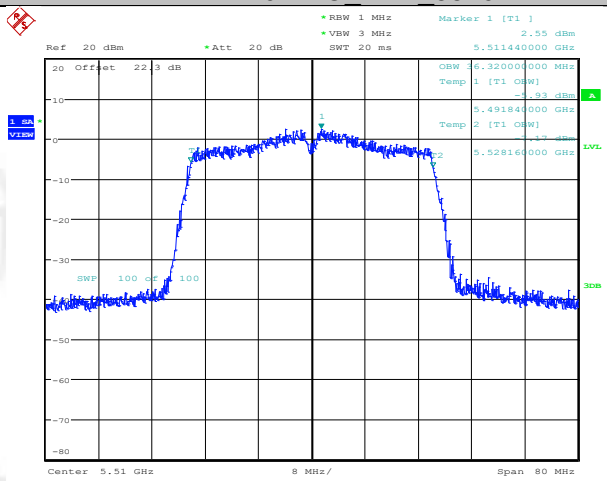

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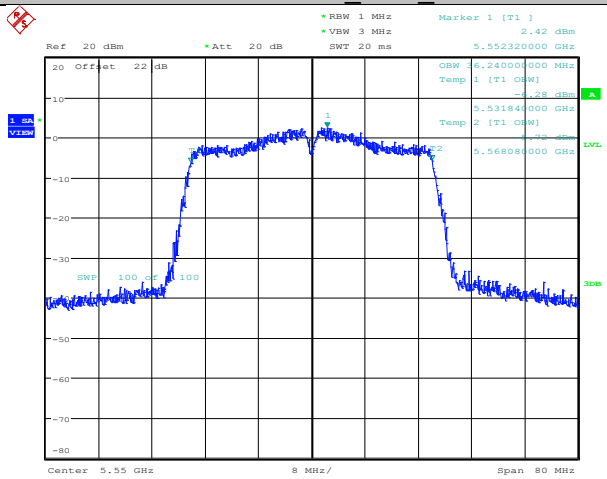

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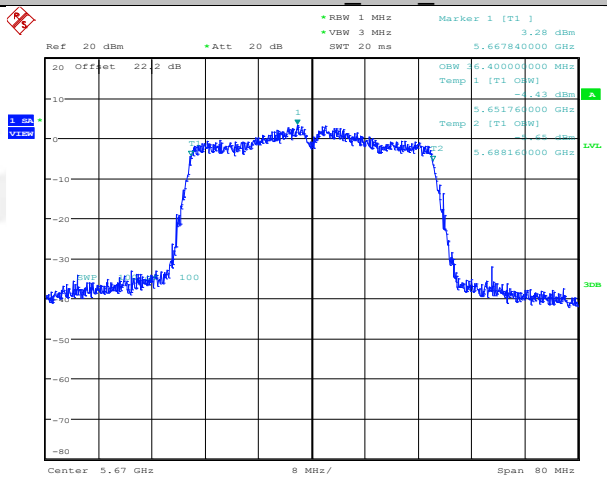

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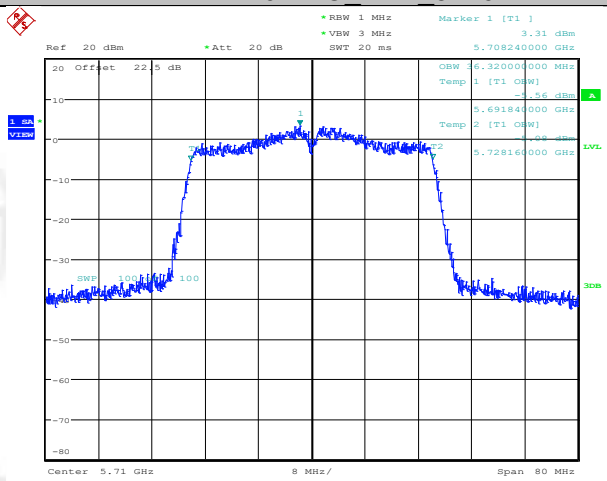

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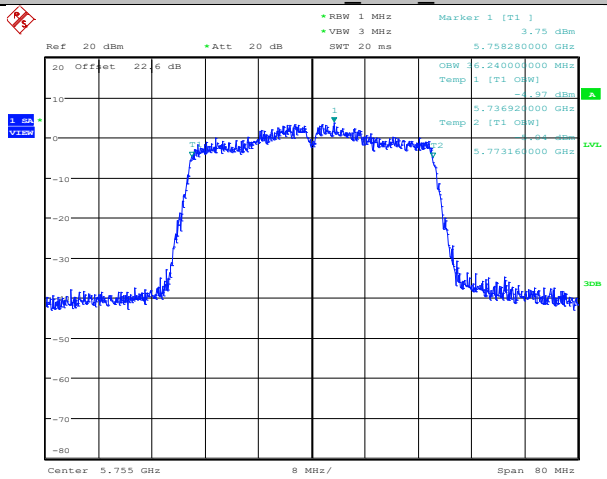

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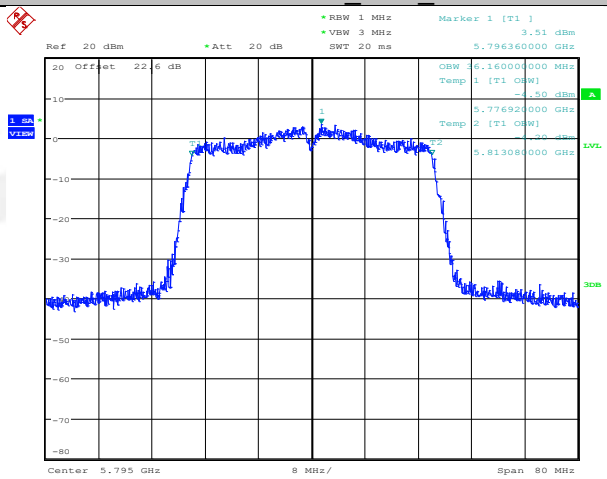

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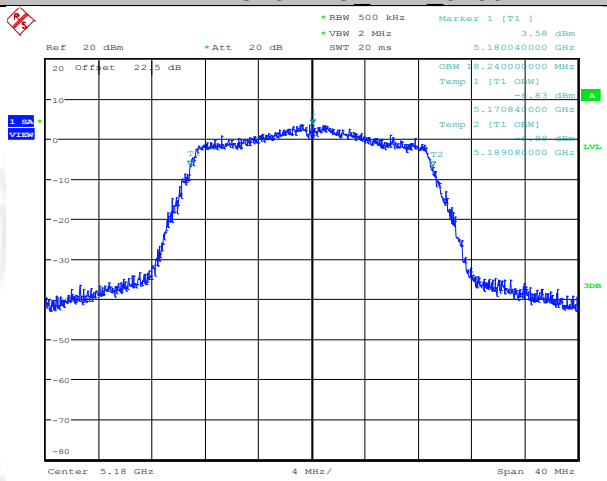

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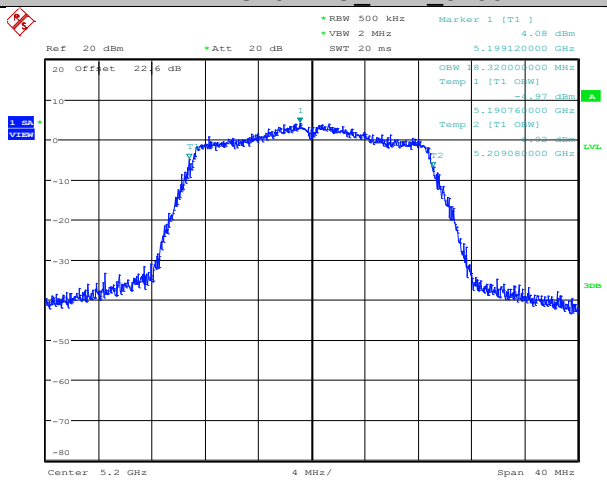

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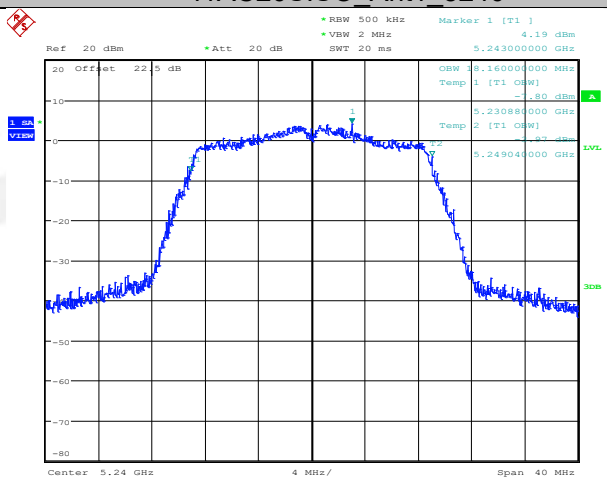

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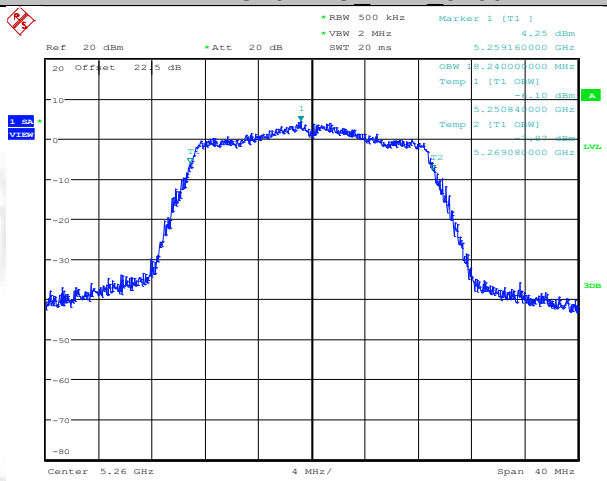

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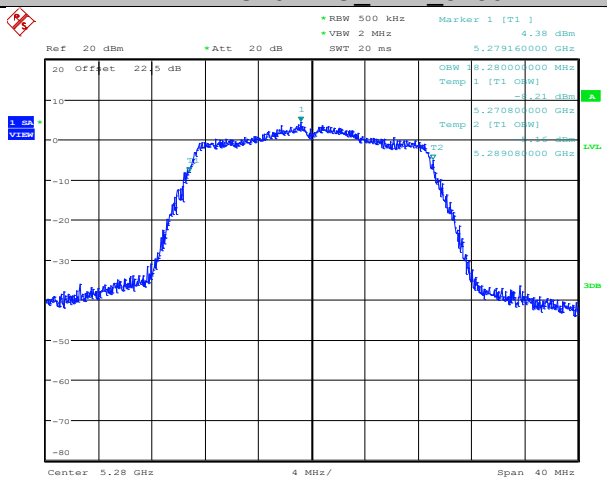

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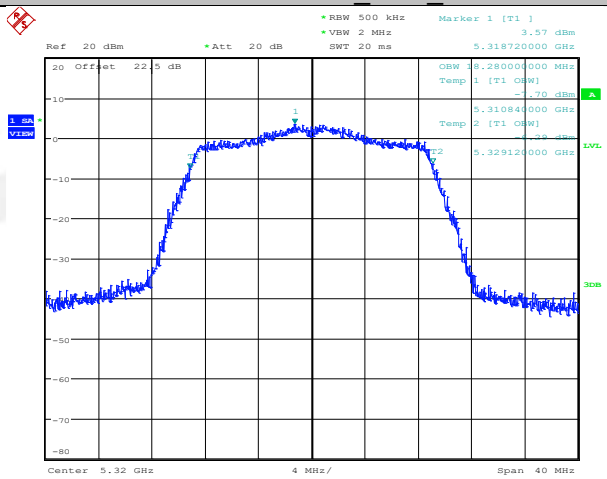

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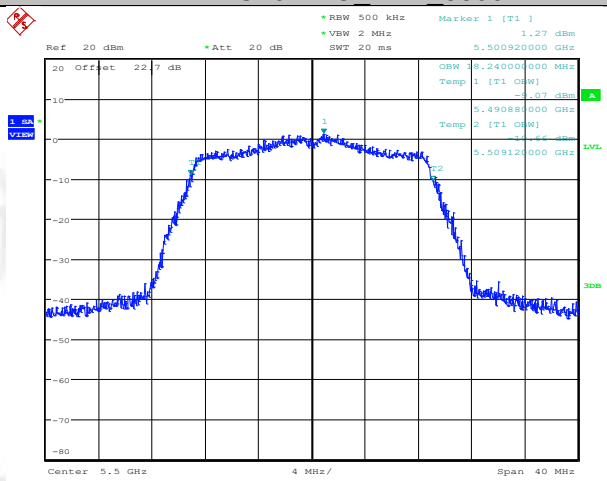

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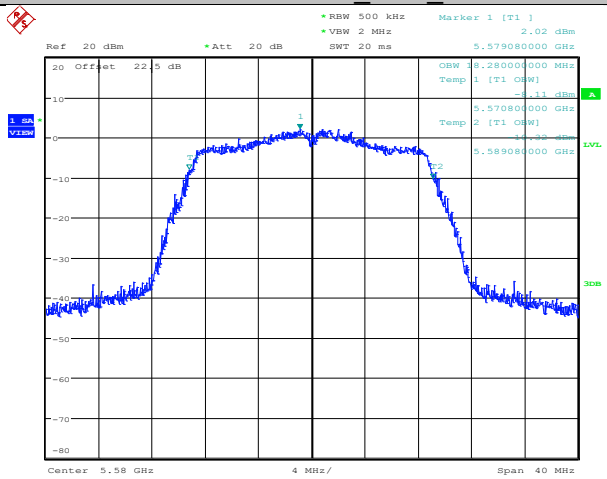

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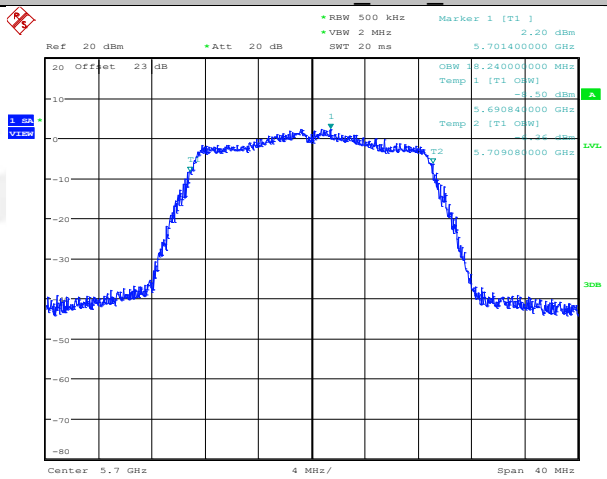

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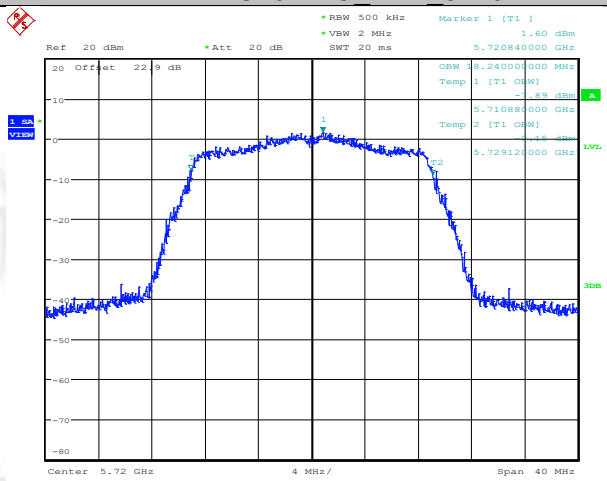

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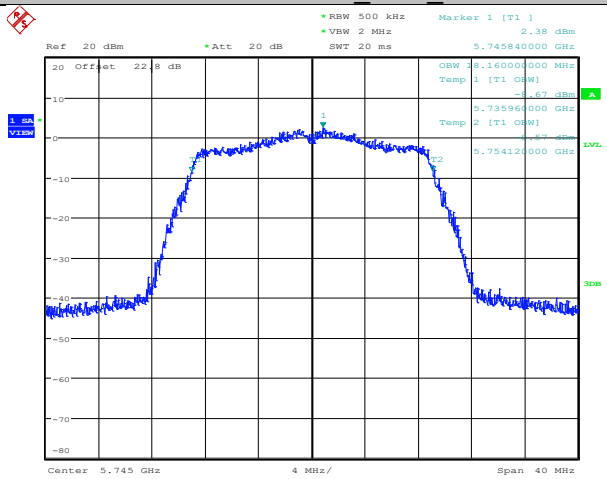

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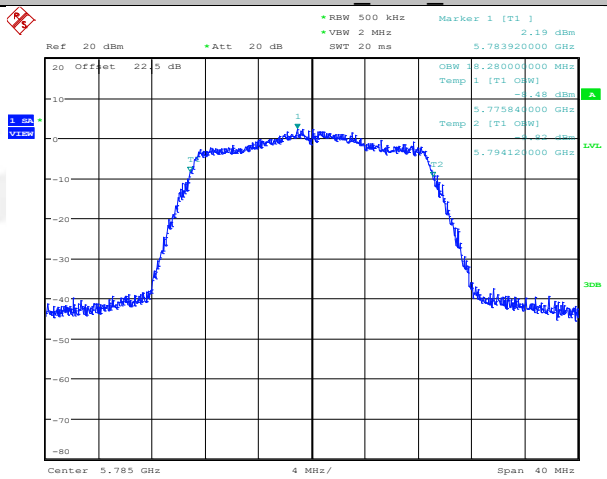

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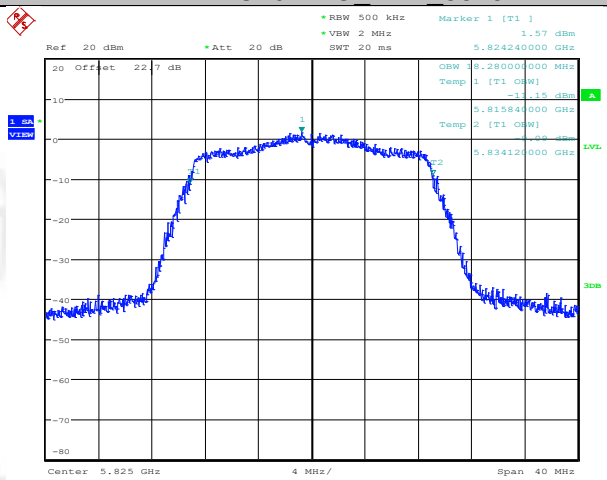

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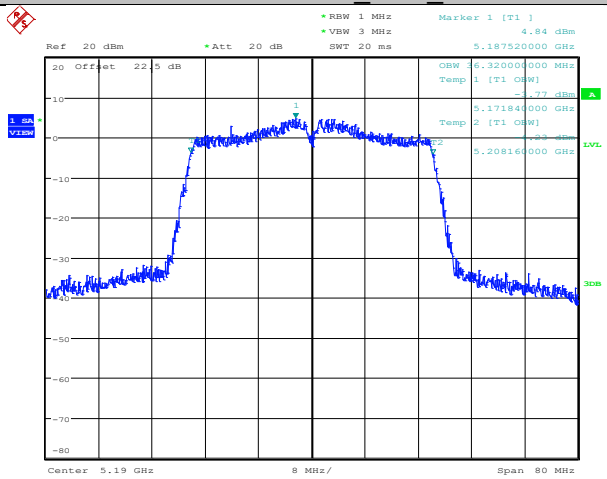

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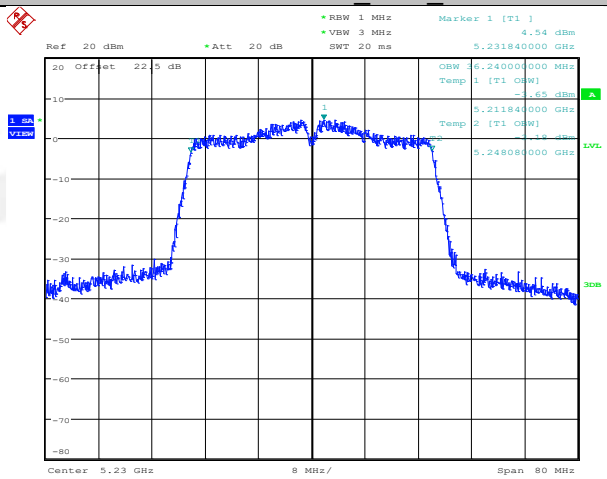

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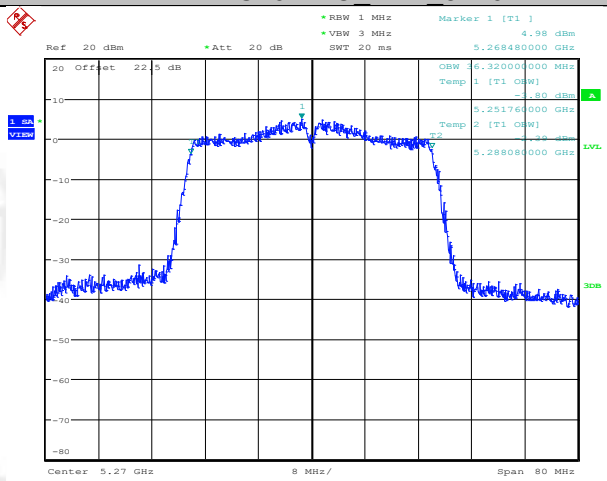

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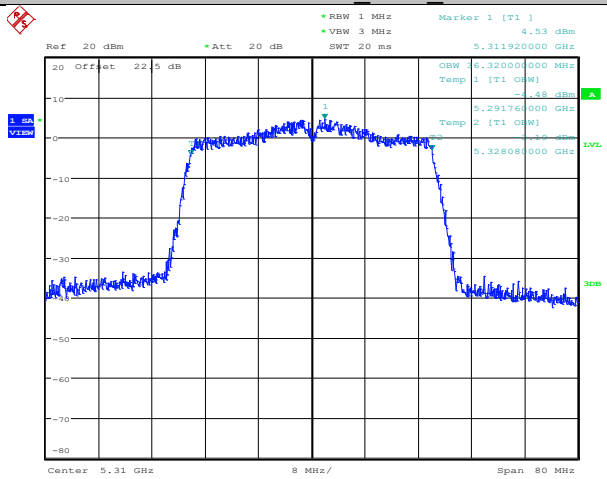

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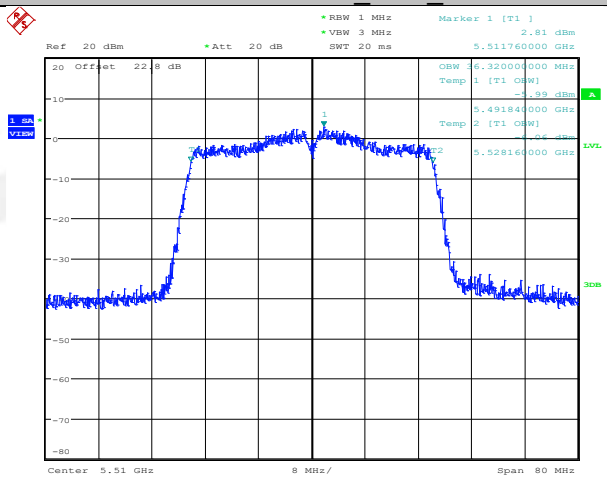

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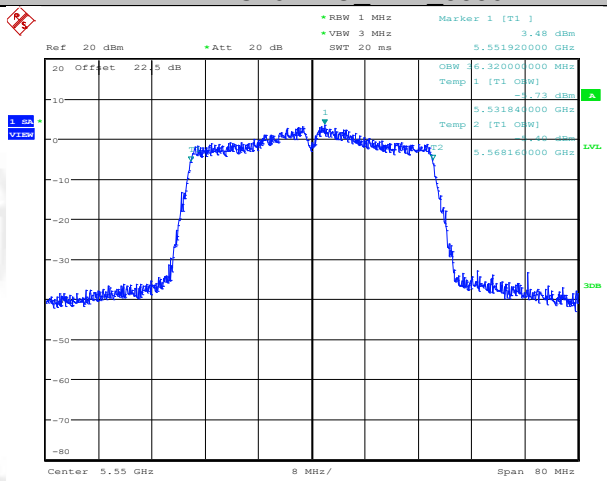

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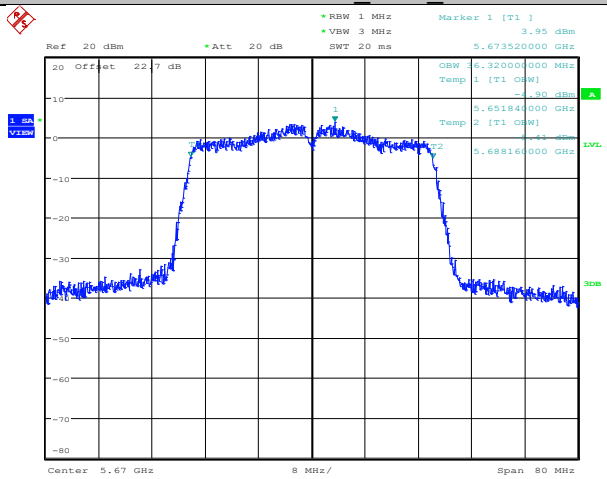

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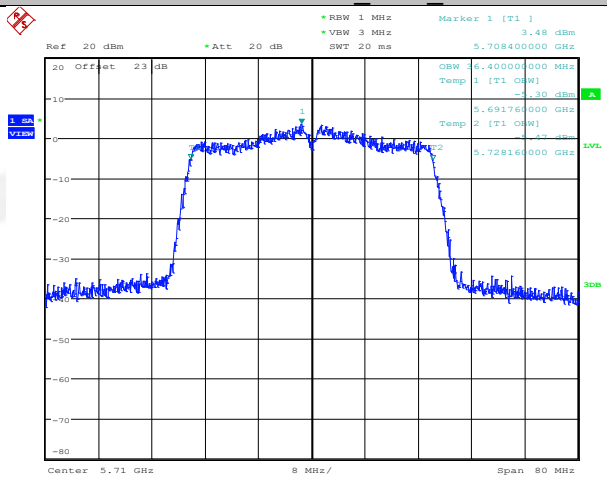

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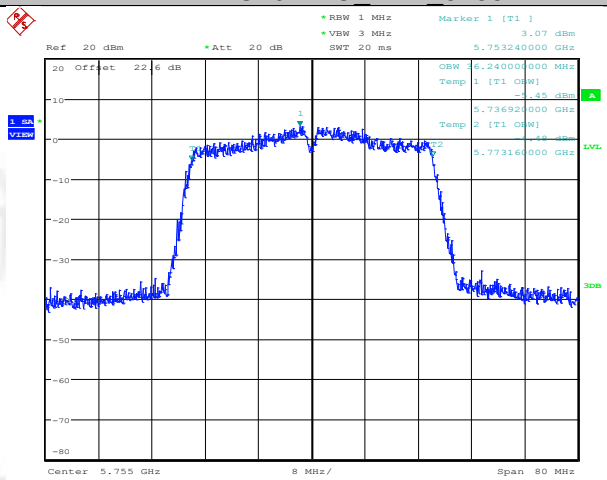

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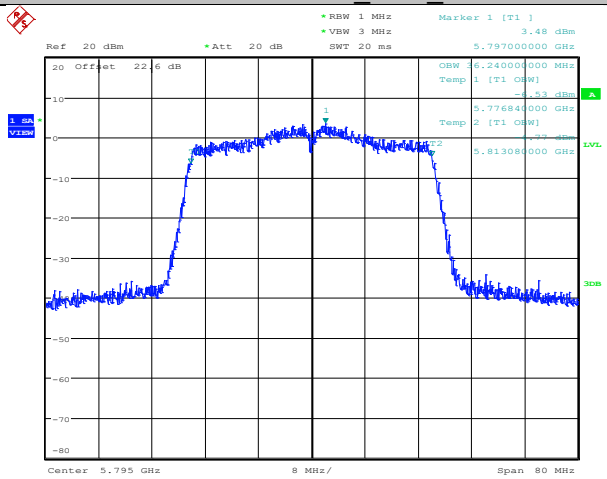

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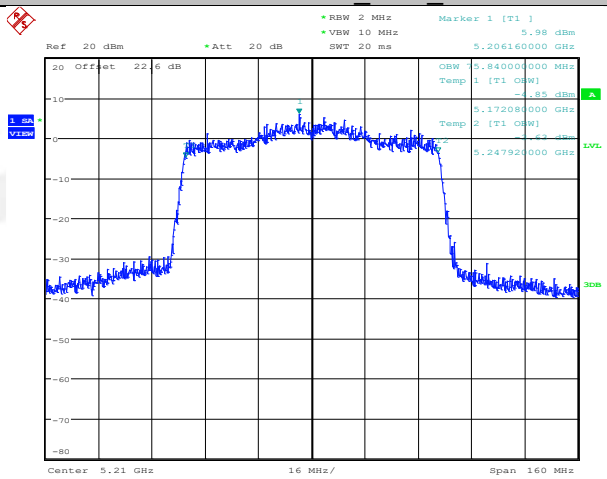

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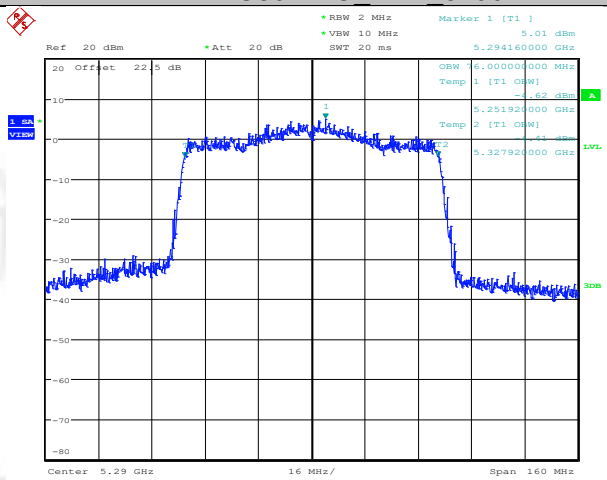

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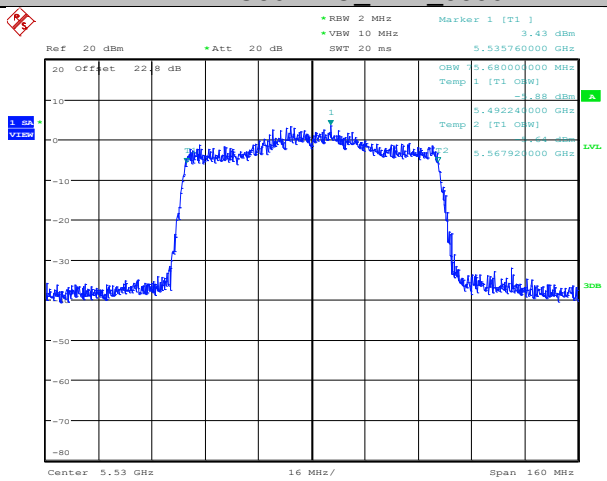

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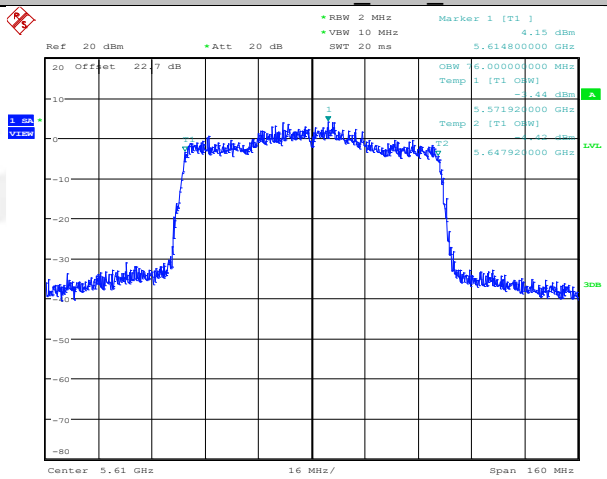

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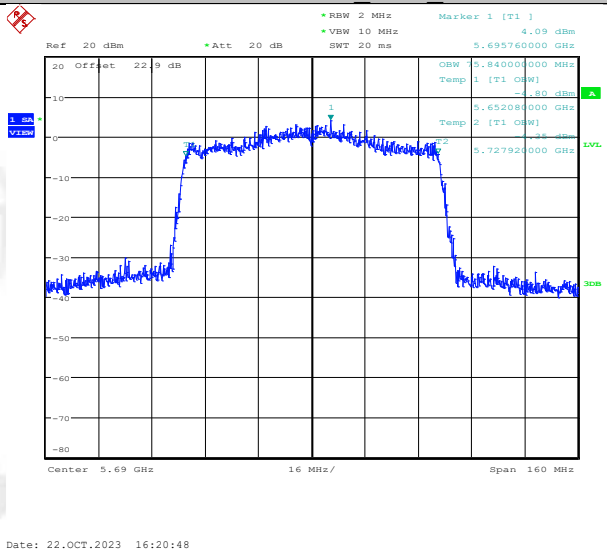
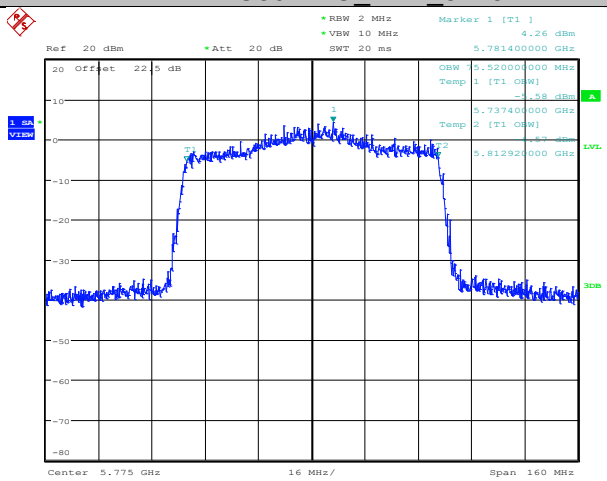
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