



TEST REPORT

REPORT NUMBER: I23W00036-WIFI 5.8G RF-FCC

ON

Type of Equipment:	POS System
Type of Designation:	L15A1, L15B1
Brand Name:	SUNMI
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
FCC ID:	2AH25T3PRO

ACCORDING TO

FCC Part 15 Subpart E

Chongqing Academy of Information and Communications Technology

Month date, year

Oct 23, 2023

Signature

Director

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.



Report No.: I23W00036-WIFI 5.8G RF-FCC
Revision Version

Report Number	Revision	Date	Memo
I23W00036-WIFI 5.8G RF-FCC	00	2023-09-13	Initial creation of test report
I23W00036-WIFI 5.8G RF-FCC	01	2023-10-20	first change of test report
I23W00036-WIFI 5.8G RF-FCC	02	2023-10-23	Second change of test report

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1. Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
Identifier Number:	CN0044
Designation Number:	CN1239
Address:	Building C, Technology Innovation Center, No.8, Yuma Road, Chayuan New Area, Nan'an District, Chongqing, People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

1.2. Testing Environment

Normal Temperature:	15-35°C
Relative Humidity:	25-75%

1.3. Project data

Testing Start Date:	2023-07-20
Testing End Date:	2023-10-23

1.4. Signature



2023-10-23

Dong Junxin
(Prepared this test report)

Date

2023-10-23

Wang Lili
(Reviewed this test report)

Date

2023-10-23

Xiang Luoyong
Director of the laboratory
(Approved this test report)

Date

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2. Client Information

2.1. Applicant Information

Company Name:	Shanghai Sunmi Technology Co.,Ltd.
Address /Post:	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
City:	Shanghai
Country:	China
Telephone:	+86 17302160204
Fax:	N/A
Email:	minfei.chen@sunmi.com
Contact Person:	Chen Minfei

2.2. Manufacturer Information

Company Name:	Shanghai Sunmi Technology Co.,Ltd.
Address /Post:	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
City:	Shanghai
Country:	China
Telephone:	+86 17302160204
Fax:	N/A
Email:	minfei.chen@sunmi.com
Contact Person:	Chen Minfei

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3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	POS System
Model name	L15A1, L15B1
Brand name	SUNMI
WLAN Frequency Band	Wi-Fi 2.4G:802.11b/g/n/ax Wi-Fi 5G U-NII-1/ U-NII-2a/U-NII-2c/U-NII-3:802.11a/n/ac/ax Wi-Fi 6E U-NII-5/U-NII-6/U-NII-7/U-NII-8:802.11ax
Type of WLAN modulation	DSSS/OFDM/OFDMA
Power Rating	DC 24 from Adapter

Note: Photographs of EUT are shown in ANNEX A of this test report.

Note: High and low voltage values in extreme condition test are given by manufacturer.

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)
WLAN	5G	UNII 3: 5725MHz-5850MHz	

Test frequency list:

UNII-3:

BW_20M	Channel	149	153	157	161	165
	Freq. (MHz)	5745	5765	5785	5805	5825
BW_40M	Channel	151		159		/
	Freq. (MHz)	5755		5795		
BW_80M	Channel	155				
	Freq. (MHz)	5775				

Note: “/” Represents empty

Note: This report is for WLAN UNII-3 only.

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3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
S3	T302D37140072	6490Coreboard_MB_V2.0	1.0.0	2023-07-20
S8	T302D37140061	6490Coreboard_MB_V2.0	1.0.0	2023-07-20
S11	TK02D37240116	6490Coreboard_MB_V2.0	1.0.0	2023-07-20

*EUT ID: is used to identify the test sample in the lab internally.

Technology	Band	Frequency range(MHz)	Support mode	Antenna gain Note2	Simultaneous TX port	Directional gain Note4
WLAN	2.4G	2400-2483.5	802.11b/g/n(HT20/40) /ax(HE20/40)Note1	Ant1:2.6 Ant2:2.5	2TX	Power:2.6dBi PSD:2.6dBi+10log(2)=5.61dBi
	5G	UNII 1: 5150MHz-5250MHz UNII 2A: 5250MHz-5350MHz UNII 2C: 5470MHz-5725MHz UNII 3: 5725MHz-5850MHz	802.11a/n(HT20/40) /ac (VHT20/40/80/160) /ax (HE20/40/80/160) Note1	Ant1:3.5 Ant2:3.0	2TX	Power:3.5dBi PSD: 3.5dBi+10log(2)=6.51dBi
	6G	UNII 5: 5925MHz-6425MHz UNII 6: 6425MHz-6525MHz UNII 7: 6525MHz-6875MHz UNII 8: 6875MHz-7125MHz	802.11ax (HE20/40/80/160) Note1	Ant1:3.5 Ant2:3.0	2TX	Power:3.5dBi PSD: 3.5dBi+10log(2)=6.51dBi

Note1: This device only supports full RU transmission.

Note2: Antenna gain data provided by the customer ANT1 and ANT2 antennas have the unequal gain. We choose the maximum gain value to calculate the directional gain.

Note3: EUT supports CDD technology.

Note4: According to KDB 662911 D01 Multiple Transmitter Output V02R01, if any transmit signals are correlated with each other, Directional gain = $G_{ant} + \text{Array Gain}$, For power measurements: Array Gain = 0 dB; For power spectral density measurements: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

3.3. Outline of Equipment under Test

3.4. Internal Identification of AE used during the test

AE ID*	Description	Note
CB04	Adapter	Model: CYZSE65-240250 Input: 100-240V~50/60Hz 1.7A Output: 24.0V=2.5A 60.0W
AE1	RF cable	1dB

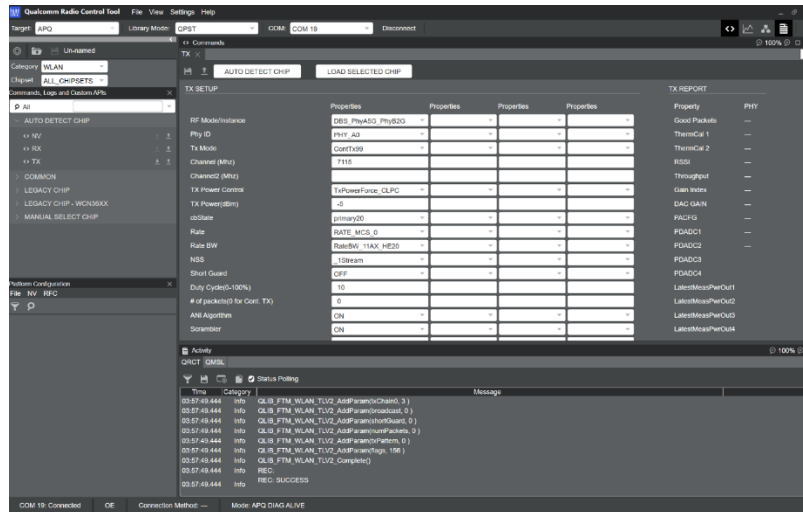
*AE ID: is used to identify the test sample in the lab internally.

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3.5. EUT Test RF Configuration

EUT uses QRCT working control emission measurement, Change power level, channel, rate and HT .



Power Level:

Test mode	Power level
11a	20.5
11n 20m	20.5
11n 40m	20.5
11ac 20m	20.5
11ac 40m	20.5
11ac 80m	20.5
11ax 20m	14.5
11ax 40m	14.5
11ax 80m	14.5

4. Reference Documents

4.1. Documents supplied by applicant

PICS/PIXIT, referring to Annex B for detailed information, is supplied by the client or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 15E	FCC CFR 47, Part 15, Subpart E: Unlicensed National Information Infrastructure Devices	--
ANSI 63.10	Methods Of Measurement Of Radio-Noise Emissions From Low-Voltage Electrical And Electronic Equipment In The Range Of 9 Khz To 40 Ghz	2013
KDB 789033 D02 General UNII Test Procedures New Rules v02r01	Guidelines For Compliance Testing Of Unlicensed National Information Infrastructure (U-Nii) Devices (Part 15, Subpart E)	--
KDB 662911 D01 Multiple Transmitter Output v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band	--
<p>Note: KDB 789033 D02 General UNII Test Procedures New Rules v02r01 and KDB 662911 D01 Multiple Transmitter Output v02r01 are not A2LA certified.</p>		

5. Test Equipments Utilized

5.1. RF Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacturer	Cal. Interval	Cal.Due Date
1	Spectrum analyzer	FSQ 26	201137/026	--	--	R&S	1 Year	2024-06-28
2	Spectrum analyzer	FSW26	104280	--	--	R&S	1 Year	2024-06-28
3	DC Power Supply	62015L-60-6	L02000001587	--	--	Chroma	1 Year	2024-06-28

5.2. RSE and CE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacturer	Cal. Interval	Cal.Due Date
1	EMI Test Receiver	ESU40	100307	--	--	R&S	1 Year	2024-06-28
2	TRILOG Broadband Antenna	VULB9163	9163-586	--	--	Schwarzbeck	2 Years	2023-10-29
3	Horn antenna	9120D	1083	--	--	Schwarzbeck	2 Years	2024-12-14
4	Horn antenna	DATE 1152	LM7127	--	--	ETS	2 Years	2024-09-06
5	Horn antenna	DATE 1012	LM5945	--	--	ETS	2 Years	2024-09-06
6	Loop Antenna	6502	00213256	--	--	ETS	1 Year	2024-06-29
7	Amplifier1	SCU-08F1	8320027	--	--	R&S	1 Year	2024-06-28
8	Amplifier2	SCU-18F	180093	--	--	R&S	1 Year	2024-06-28
9	2-Line V-Network	ENV216	102368	--	--	R&S	1 Year	2024-05-27
10	Test Receiver	ESR 3	101382	03	3.48 SP2	R&S	1 Year	2024-01-28
11	Test Receiver	ESW 26	101382	00	1.50 SP1	R&S	1 Year	2024-06-28

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5.3. Climate Chamber

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
--	--	--	--	--	--	--

5.4. Anechoic chamber Vibration table

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
1	Fully-Anechoic Chamber	FAC5	--	TDK	3 Years	2024-09-22
2	Anechoic Chamber	SAC 10	--	TDK	3 Years	2024-08-26

5.5. Test software

No.	Name	version	SN	Manufacture
1	EMC32 (Transmitter Spurious Emission-Radiated Above 1GHz)	V 10.20.01	--	R&S
2	EMC32 (Transmitter Spurious Emission-Radiated Below 1GHz)	V9.26.01	--	R&S
3	EMC32 (AC Powerline Conducted Emission)	V 10.40.10	--	R&S

6. Test Results

6.1. Summary of Test Results

A brief summary of the tests carried out is shown as following.

FCC Rules	Name of Test	Result
15.407(a)	Duty cycle	Pass
15.407(a)	Maximum Output Power	Pass
15.407(a)	Power Spectral Density	Pass
15.407(e)	6dB Occupied Bandwidth	Pass
15.407(e)	99% Occupied Bandwidth	Pass
15.407(b)	Band edge compliance	Pass
15.407	Transmitter Spurious Emission-Conducted	Pass
15.407/15.205/15.209	Transmitter Spurious Emission - Radiated	Pass
15.207	AC Powerline Conducted Emission	Pass
15.407(g)	Frequency Stability	N/A
15.203/15.247(c)	Antenna requirement	Pass ^{Note 2}

NOTE 1

The L15A1, L15B1, manufactured by Shanghai Sunmi Technology Co.,Ltd.is a new product for testing. There are two configurations S3 &S8 mainly supply (With Printer) & S11 secondary supply (Without Printer). We mainly tested S3 mainly supply (conducted), S8 mainly supply(radiated) and S11 secondary supply tested the worst mode of the S8 mainly supply and recorded the test results of the worst respectively in the report.

The description of the differences between S3&S8 and S11 is as follows:

EUT ID	SN or IMEI	Model	Printer
S3	T302D37140072	L15A1	80 Printer
S8	T302D37140061	L15A1	80 Printer
S11	TK02D37240116	L15B1	N/A

NOTE 2:

The EUT has two internal FPC antennas. The antenna gain refers to section 3.2, So this EUT complies with the FCC section 15.203/15.247(c) antenna requirements, please refer to the internal photos.

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6.2. Duty cycle

Specifications:	FCC 47 Part 15.407(a)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Measurement Uncertainty:

Measurement Uncertainty	--
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Test Procedure:

The measurement method is made according to KDB 789033 B

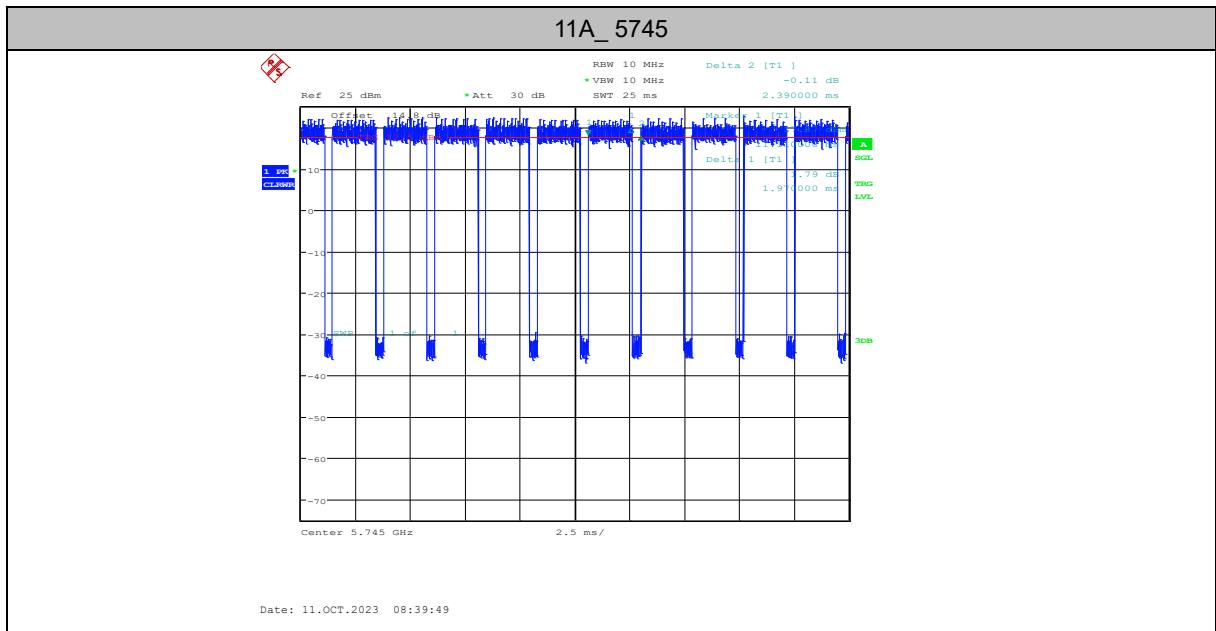
Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

- a) A diode detector and an oscilloscope that together have sufficiently short response time to permit accurate measurements of the on and off times of the transmitted signal.
- b) The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission, Set $RBW > EBW$ if possible; otherwise, set RBW to the largest available value. Set $VBW > RBW$. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T < 16.7$ microseconds.)

Measurement Results:

TestMode	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	5745	1.97	2.39	82.43
11N20	5745	5.37	5.76	93.23
11N40	5755	5.39	5.83	92.45
11AC20	5745	5.37	5.79	92.75
11AC40	5755	5.39	5.78	93.25
11AC80	5775	5.39	5.82	92.61
11AX20	5745	5.36	5.73	93.54
11AX40	5755	4.82	5.21	92.51
11AX80	5775	2.55	3.00	85.00

Test Graphs

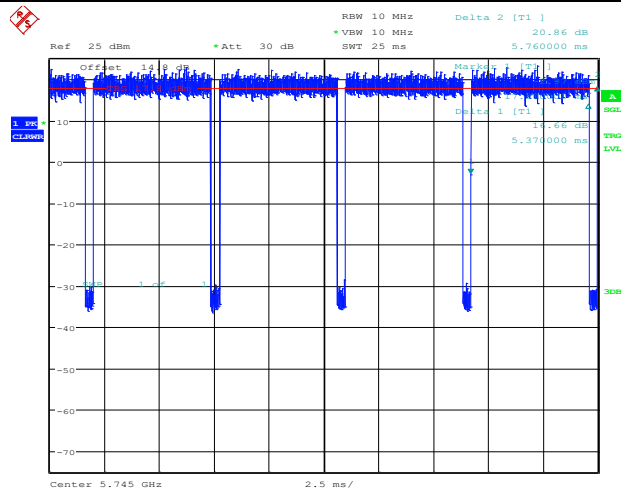


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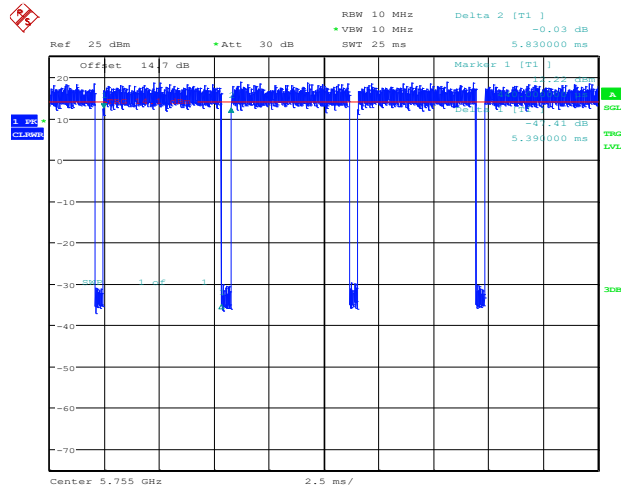
Report No.: I23W00036-WIFI 5.8G RF-FCC

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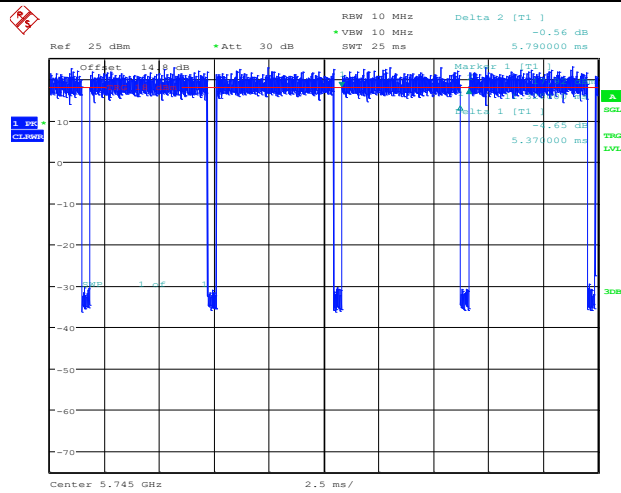
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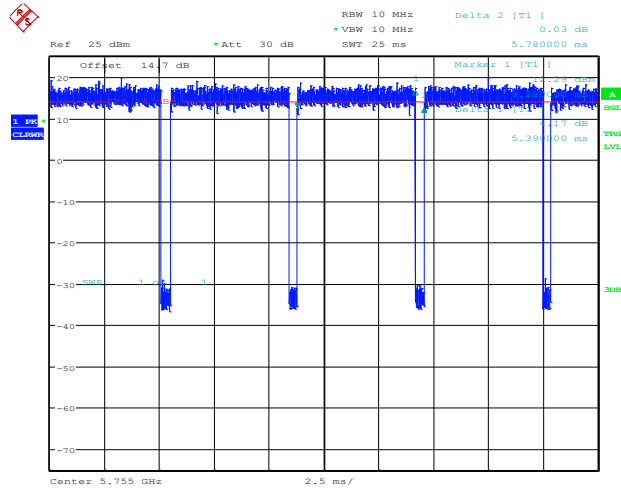
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11AC20_5745



Date: 11.OCT.2023 08:46:10

11AC40_5755



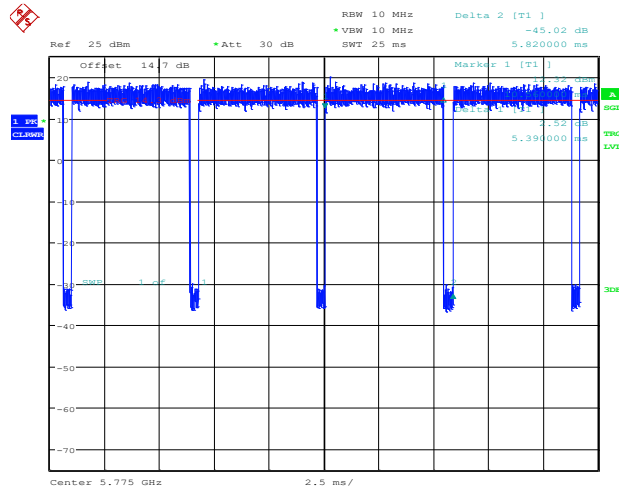
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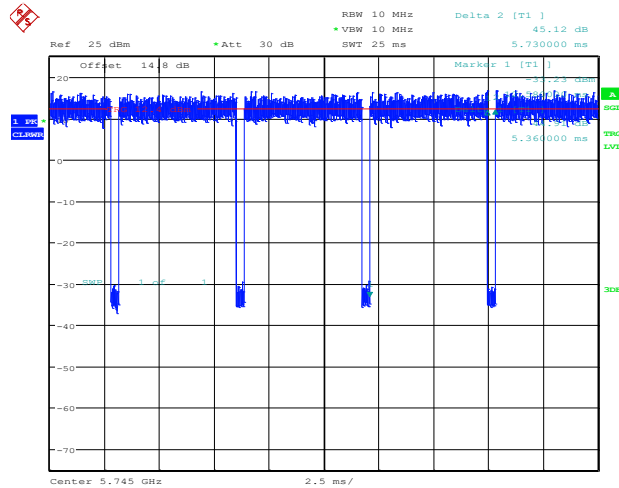
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11AC80_5775



Date: 11.OCT.2023 08:49:04

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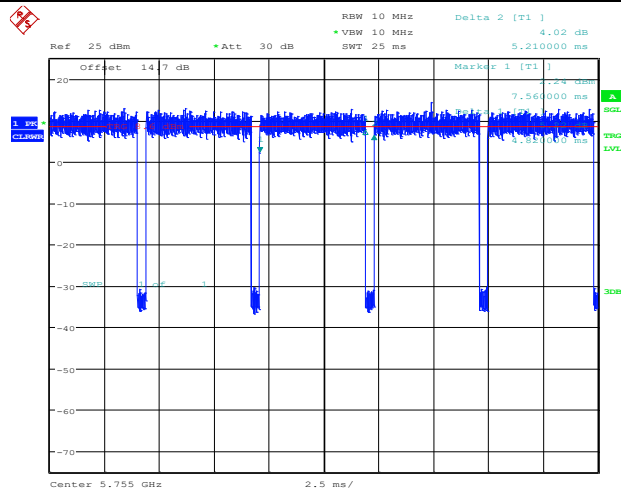
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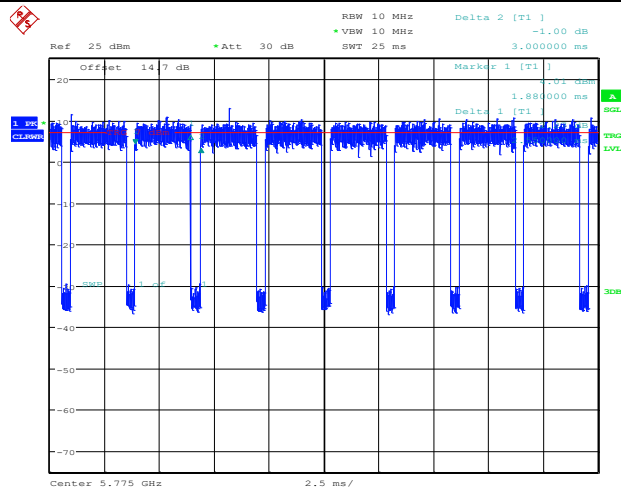
Report No.: I23W00036-WIFI 5.8G RF-FCC

11AX40_5755



Date: 11.OCT.2023 08:51:47

11AX80_5775



Date: 11.OCT.2023 08:53:16

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6.3. Maximum conducted output power

Specifications:	FCC 47 Part 15.407 (a)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature:20°C Relative Humidity:40% Air pressure: 90kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit (dBm)
FCC 47 Part 15.407 (a)	< 30

Measurement Uncertainty:

Measurement Uncertainty	±0.48dB
-------------------------	---------

Test Procedure:

The measurement method SA-2 is made according to KDB 789033 E

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. Measure the duty cycle, x , of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz. (iv) Set VBW \geq 3 MHz.
4. Number of points in sweep $\geq 2 \times$ span / RBW. (This ensures that bin-to-bin spacing is \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
5. Sweep time = auto.
6. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run.”
8. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
9. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum

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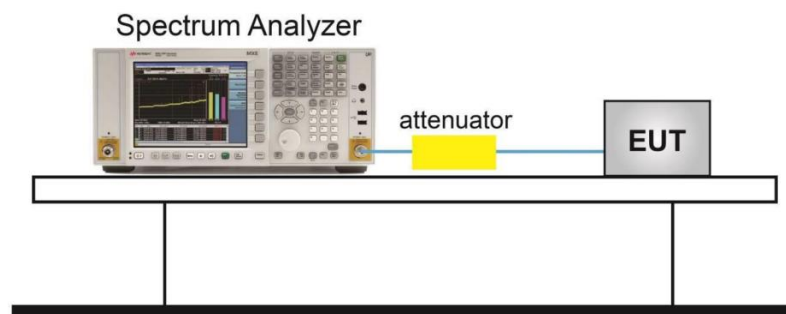
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the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

10. Add $10 \log (1/x)$, where x is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \log (1/0.25) = 6 \text{ dB}$ if the duty cycle is 25%

Test setup



Measurement Results:

Test Mode	Antenna	Frequency [MHz]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	82.43	0.84	16.31	≤30.00	PASS
	Ant2	5745	82.43	0.84	17.2	≤30.00	PASS
	Ant1	5785	82.43	0.84	16.56	≤30.00	PASS
	Ant2	5785	82.43	0.84	17.14	≤30.00	PASS
	Ant1	5825	82.43	0.84	16.37	≤30.00	PASS
	Ant2	5825	82.43	0.84	17.27	≤30.00	PASS
11N20SISO	Ant1	5745	93.23	0.30	16.25	≤30.00	PASS
	Ant2	5745	93.23	0.30	17.03	≤30.00	PASS
	Ant1	5785	93.23	0.30	16.29	≤30.00	PASS
	Ant2	5785	93.23	0.30	17.07	≤30.00	PASS
	Ant1	5825	93.23	0.30	16.31	≤30.00	PASS
	Ant2	5825	93.23	0.30	16.99	≤30.00	PASS
11N40SISO	Ant1	5755	92.45	0.34	16.38	≤30.00	PASS
	Ant2	5755	92.45	0.34	17.04	≤30.00	PASS
	Ant1	5795	92.45	0.34	16.5	≤30.00	PASS
	Ant2	5795	92.45	0.34	17.09	≤30.00	PASS
11AC20SISO	Ant1	5745	92.75	0.33	16.25	≤30.00	PASS
	Ant2	5745	92.75	0.33	17.02	≤30.00	PASS
	Ant1	5785	92.75	0.33	16.31	≤30.00	PASS

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Report No.: I23W00036-WIFI 5.8G RF-FCC

	Ant2	5785	92.75	0.33	17.06	≤30.00	PASS
	Ant1	5825	92.75	0.33	16.29	≤30.00	PASS
	Ant2	5825	92.75	0.33	17.02	≤30.00	PASS
11AC40SISO	Ant1	5755	93.25	0.30	16.36	≤30.00	PASS
	Ant2	5755	93.25	0.30	17.06	≤30.00	PASS
	Ant1	5795	93.25	0.30	16.4	≤30.00	PASS
	Ant2	5795	93.25	0.30	17.07	≤30.00	PASS
11AC80SISO	Ant1	5775	92.61	0.33	16.03	≤30.00	PASS
	Ant2	5775	92.61	0.33	16.86	≤30.00	PASS
11AX20SISO	Ant1	5745	93.54	0.29	10.21	≤30.00	PASS
	Ant2	5745	93.54	0.29	11.19	≤30.00	PASS
	Ant1	5785	93.54	0.29	10.28	≤30.00	PASS
	Ant2	5785	93.54	0.29	11.18	≤30.00	PASS
	Ant1	5825	93.54	0.29	10.14	≤30.00	PASS
	Ant2	5825	93.54	0.29	11.03	≤30.00	PASS
11AX40SISO	Ant1	5755	92.51	0.34	10.2	≤30.00	PASS
	Ant2	5755	92.51	0.34	11.1	≤30.00	PASS
	Ant1	5795	92.51	0.34	10.2	≤30.00	PASS
	Ant2	5795	92.51	0.34	10.81	≤30.00	PASS
11AX80SISO	Ant1	5775	85	0.71	10.16	≤30.00	PASS
	Ant2	5775	85	0.71	10.96	≤30.00	PASS
11A-CDD	Ant1	5745	82.43	0.84	16.41	≤30.00	PASS
	Ant2	5745	82.43	0.84	17.17	≤30.00	PASS
	total	5745	---	---	19.82	≤30.00	PASS
	Ant1	5785	82.43	0.84	16.44	≤30.00	PASS
	Ant2	5785	82.43	0.84	17.03	≤30.00	PASS
	total	5785	---	---	19.76	≤30.00	PASS
	Ant1	5825	82.43	0.84	16.36	≤30.00	PASS
	Ant2	5825	82.43	0.84	17.05	≤30.00	PASS
	total	5825	---	---	19.73	≤30.00	PASS
11N20MIMO	Ant1	5745	93.23	0.30	16.23	≤30.00	PASS
	Ant2	5745	93.23	0.30	16.92	≤30.00	PASS
	total	5745	---	---	19.6	≤30.00	PASS
	Ant1	5785	93.23	0.30	16.28	≤30.00	PASS
	Ant2	5785	93.23	0.30	16.92	≤30.00	PASS
	total	5785	---	---	19.62	≤30.00	PASS
	Ant1	5825	93.23	0.30	16.29	≤30.00	PASS
	Ant2	5825	93.23	0.30	16.85	≤30.00	PASS
	total	5825	---	---	19.59	≤30.00	PASS
11N40MIMO	Ant1	5755	92.45	0.34	16.36	≤30.00	PASS
	Ant2	5755	92.45	0.34	16.9	≤30.00	PASS
	total	5755	---	---	19.65	≤30.00	PASS
	Ant1	5795	92.45	0.34	16.48	≤30.00	PASS

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	Ant2	5795	92.45	0.34	16.92	≤30.00	PASS
	total	5795	---	---	19.72	≤30.00	PASS
11AC20MIMO	Ant1	5745	92.75	0.33	16.12	≤30.00	PASS
	Ant2	5745	92.75	0.33	16.87	≤30.00	PASS
	total	5745	---	---	19.52	≤30.00	PASS
	Ant1	5785	92.75	0.33	16.25	≤30.00	PASS
	Ant2	5785	92.75	0.33	16.89	≤30.00	PASS
	total	5785	---	---	19.59	≤30.00	PASS
	Ant1	5825	92.75	0.33	16.26	≤30.00	PASS
	Ant2	5825	92.75	0.33	16.85	≤30.00	PASS
	total	5825	---	---	19.58	≤30.00	PASS
11AC40MIMO	Ant1	5755	93.25	0.30	16.35	≤30.00	PASS
	Ant2	5755	93.25	0.30	16.9	≤30.00	PASS
	total	5755	---	---	19.64	≤30.00	PASS
	Ant1	5795	93.25	0.30	16.37	≤30.00	PASS
	Ant2	5795	93.25	0.30	16.91	≤30.00	PASS
	total	5795	---	---	19.66	≤30.00	PASS
11AC80MIMO	Ant1	5775	92.61	0.33	15.79	≤30.00	PASS
	Ant2	5775	92.61	0.33	16.68	≤30.00	PASS
	total	5775	---	---	19.27	≤30.00	PASS
11AX20MIMO	Ant1	5745	93.54	0.29	10.3	≤30.00	PASS
	Ant2	5745	93.54	0.29	11.15	≤30.00	PASS
	total	5745	---	---	13.76	≤30.00	PASS
	Ant1	5785	93.54	0.29	10.37	≤30.00	PASS
	Ant2	5785	93.54	0.29	11.08	≤30.00	PASS
	total	5785	---	---	13.75	≤30.00	PASS
	Ant1	5825	93.54	0.29	10.1	≤30.00	PASS
	Ant2	5825	93.54	0.29	10.88	≤30.00	PASS
total	5825	---	---	13.52	≤30.00	PASS	
11AX40MIMO	Ant1	5755	92.51	0.34	10.34	≤30.00	PASS
	Ant2	5755	92.51	0.34	10.97	≤30.00	PASS
	total	5755	---	---	13.68	≤30.00	PASS
	Ant1	5795	92.51	0.34	10.27	≤30.00	PASS
	Ant2	5795	92.51	0.34	10.8	≤30.00	PASS
	total	5795	---	---	13.55	≤30.00	PASS
11AX80MIMO	Ant1	5775	85	0.71	10.14	≤30.00	PASS
	Ant2	5775	85	0.71	10.87	≤30.00	PASS
	total	5775	---	---	13.53	≤30.00	PASS

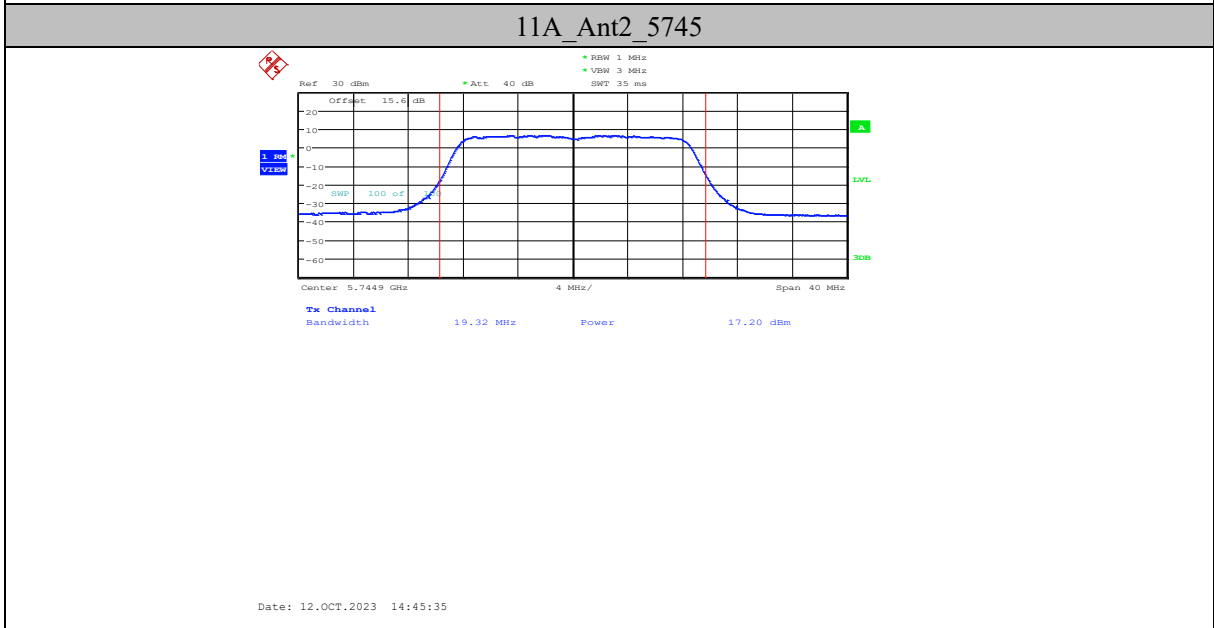
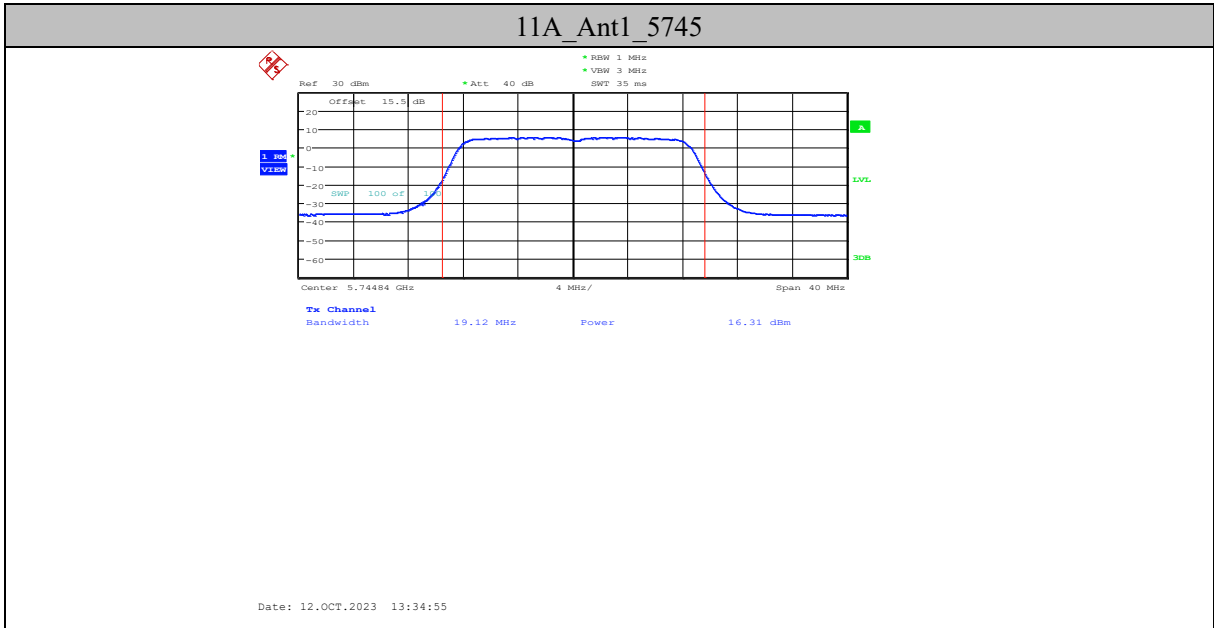
Note:

- 1.The Duty Cycle Factor is compensated in the graph.
2. In the graph, the Center frequency = (Low frequency of 26dB OBW + High frequency of 26dB OBW) /2.
- 3.The 11a data rate 6Mbps is selected as worse condition, 11n/11ac/11ax data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

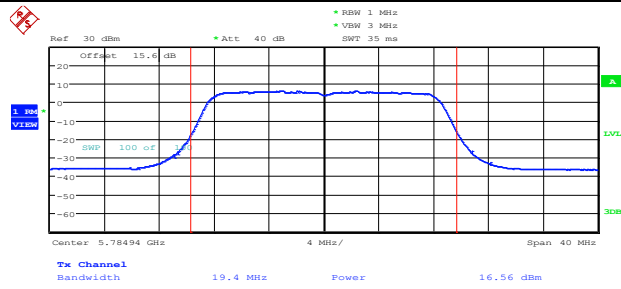
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Test Graphs Channel Power

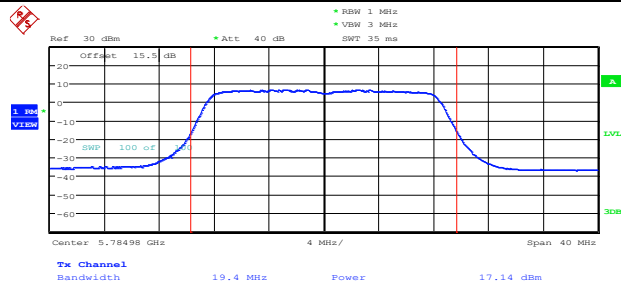


11A_Ant1_5785



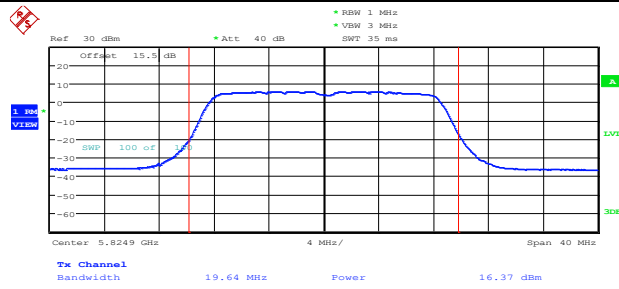
Date: 12.OCT.2023 13:39:53

11A_Ant2_5785



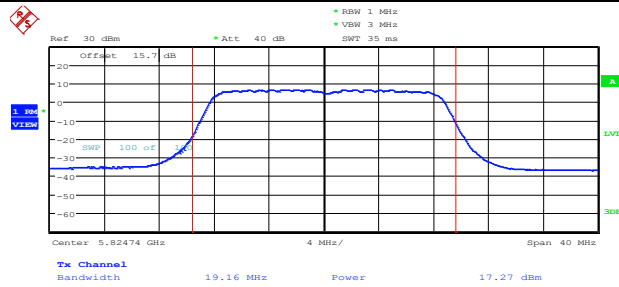
Date: 12.OCT.2023 14:46:42

11A_Ant1_5825



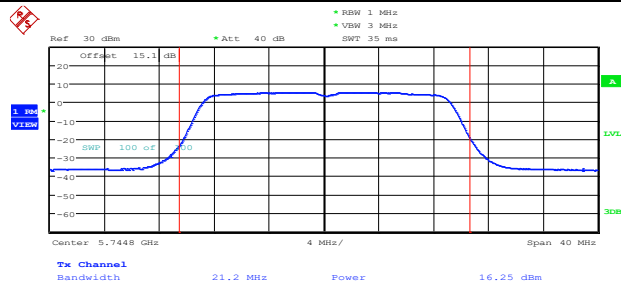
Date: 12.OCT.2023 13:41:26

11A_Ant2_5825



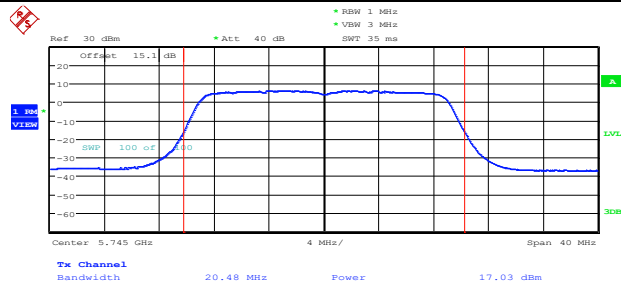
Date: 12.OCT.2023 14:47:45

11N20SISO_Ant1_5745



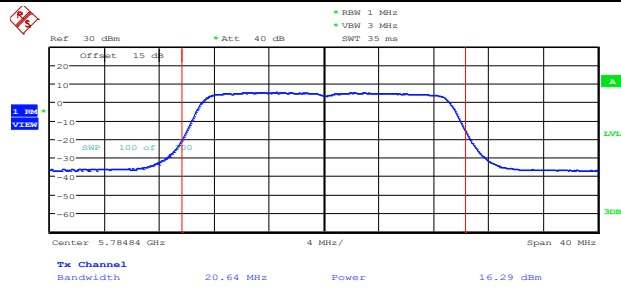
Date: 12.OCT.2023 13:49:12

11N20SISO_Ant2_5745



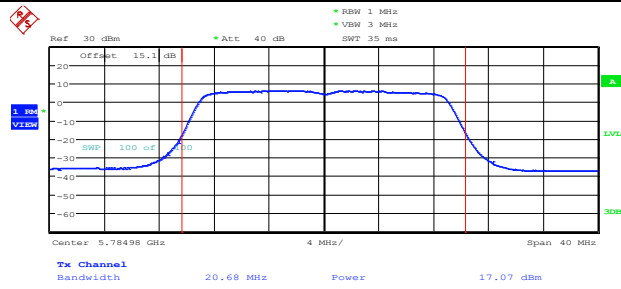
Date: 12.OCT.2023 14:49:54

11N20SISO_Ant1_5785



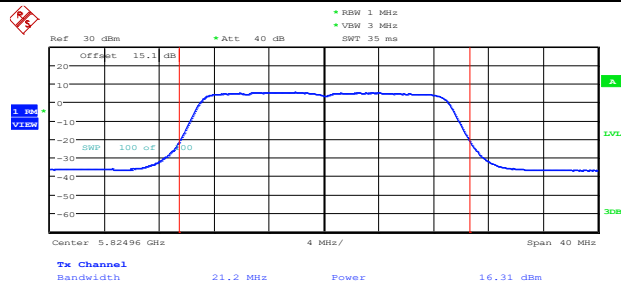
Date: 12.OCT.2023 13:51:06

11N20SISO_Ant2_5785



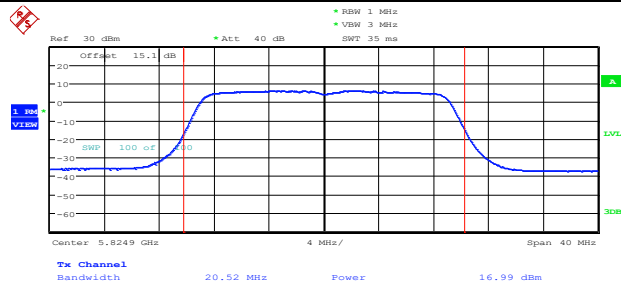
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11N20SISO_Ant1_5825



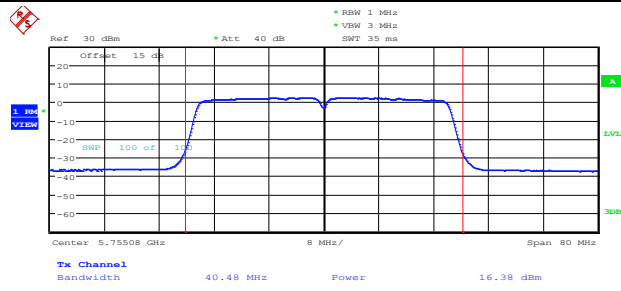
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11N20SISO_Ant2_5825



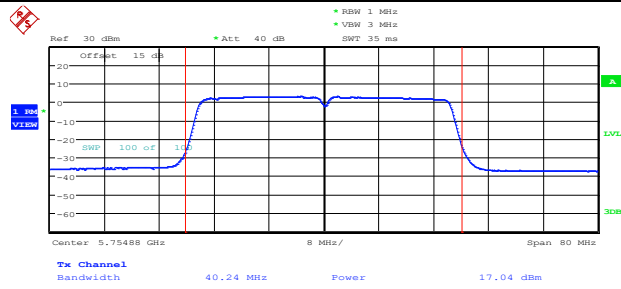
Date: 12.OCT.2023 14:51:39

11N40SISO_Ant1_5755



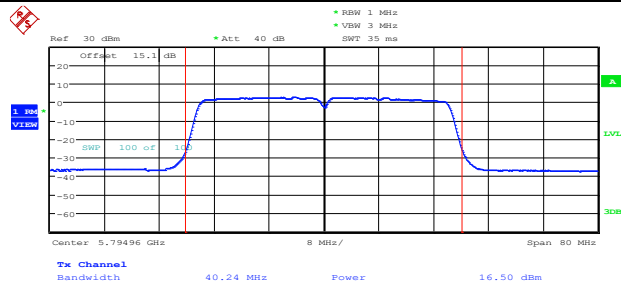
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11N40SISO_Ant2_5755



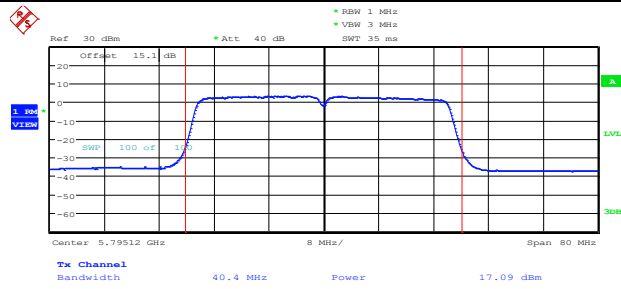
Date: 12.OCT.2023 14:52:42

11N40SISO_Ant1_5795



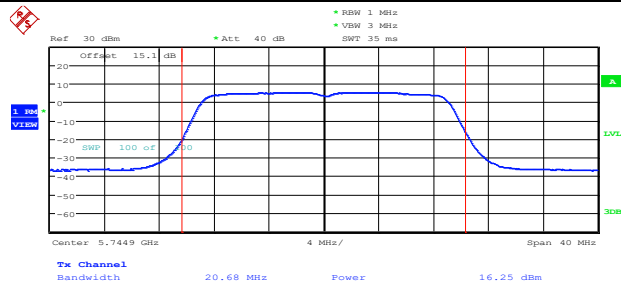
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11N40SISO_Ant2_5795



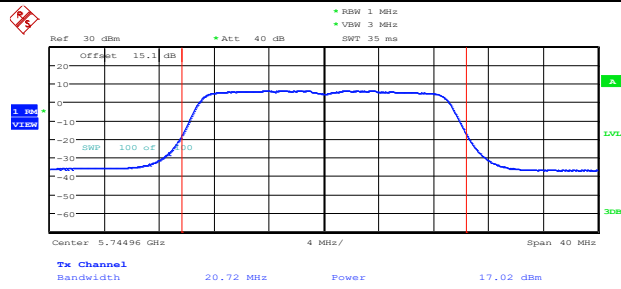
Date: 12.OCT.2023 14:53:39

11AC20SISO_Ant1_5745



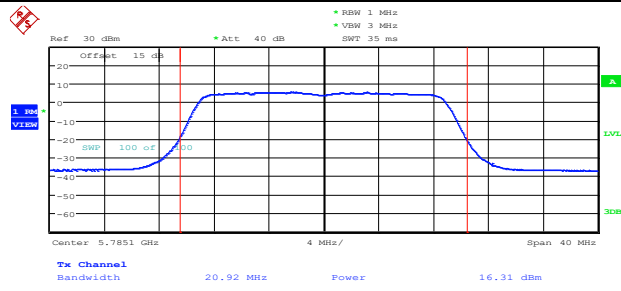
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11AC20SISO_Ant2_5745



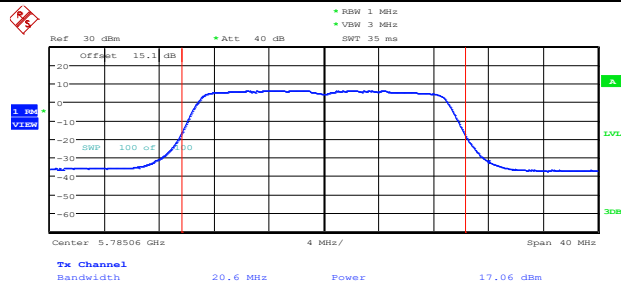
Date: 12.OCT.2023 14:54:50

11AC20SISO_Ant1_5785



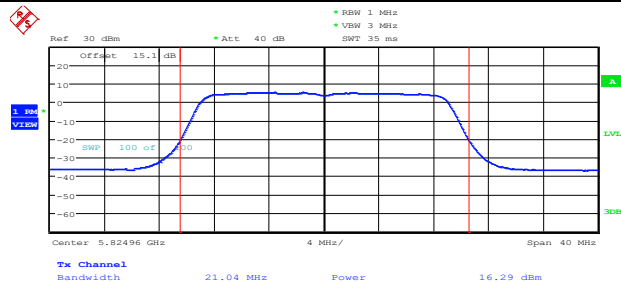
Date: 12.OCT.2023 13:59:16

11AC20SISO_Ant2_5785



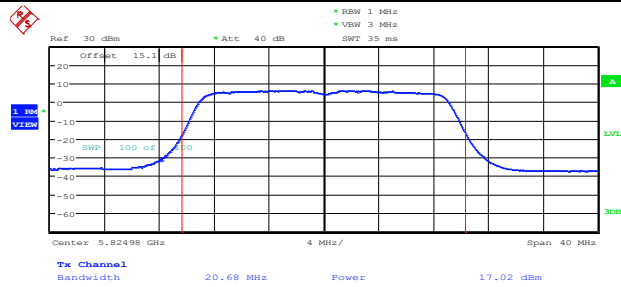
Date: 12.OCT.2023 14:55:42

11AC20SISO_Ant1_5825



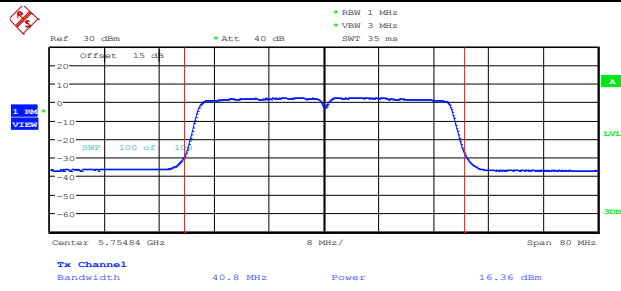
Date: 12.OCT.2023 14:01:13

11AC20SISO_Ant2_5825



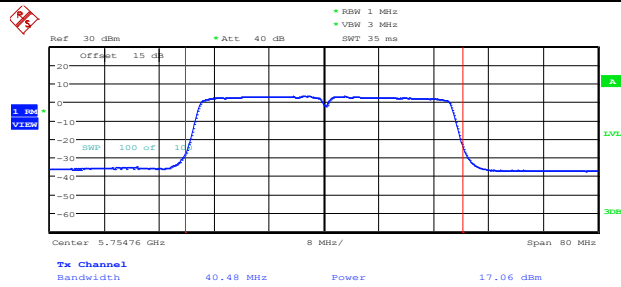
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11AC40SISO_Ant1_5755



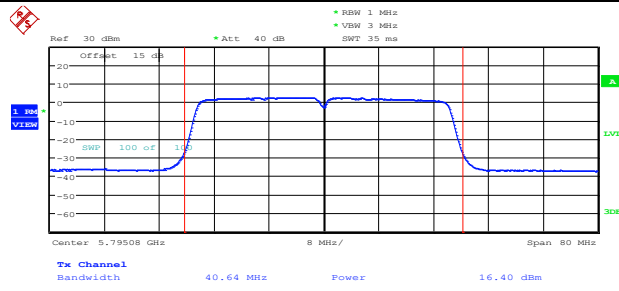
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11AC40SISO_Ant2_5755



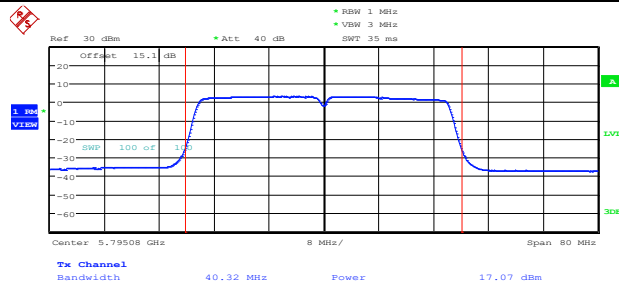
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11AC40SISO_Ant1_5795



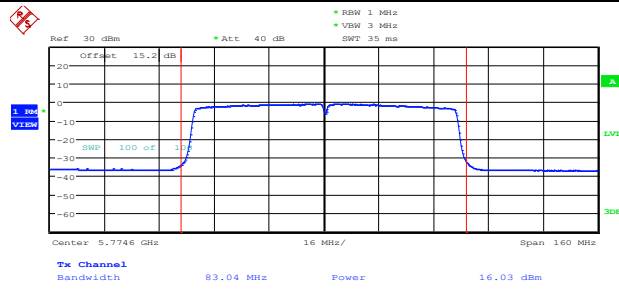
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11AC40SISO_Ant2_5795



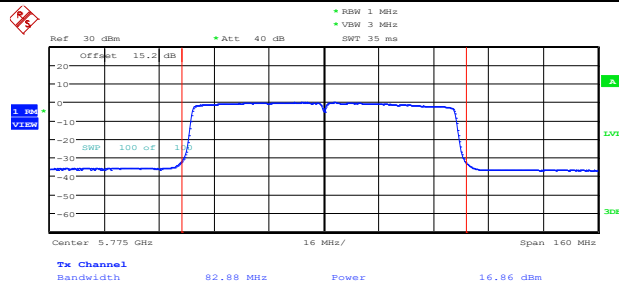
Date: 12.OCT.2023 14:59:03

11AC80SISO_Ant1_5775



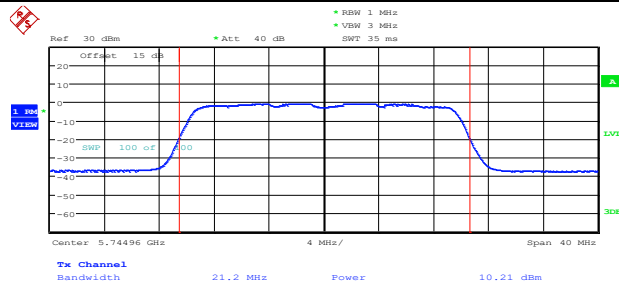
Date: 19.OCT.2023 16:16:26

11AC80SISO_Ant2_5775



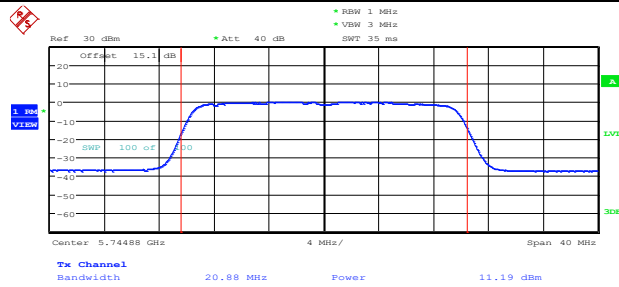
Date: 19.OCT.2023 16:23:01

11AX20SISO_Ant1_5745



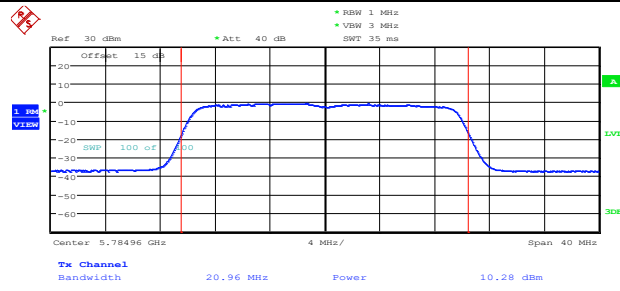
Date: 12.OCT.2023 14:25:05

11AX20SISO_Ant2_5745



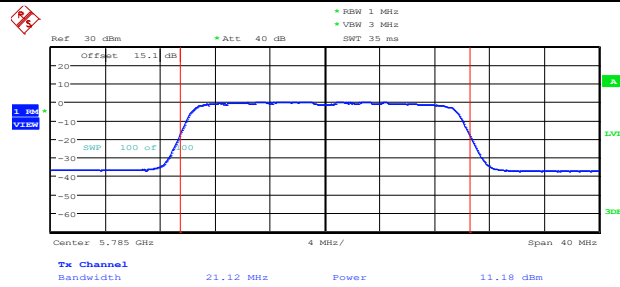
Date: 12.OCT.2023 15:02:15

11AX20SISO_Ant1_5785



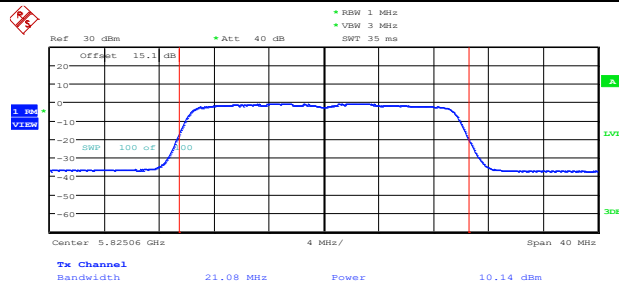
Date: 12.OCT.2023 14:26:09

11AX20SISO_Ant2_5785



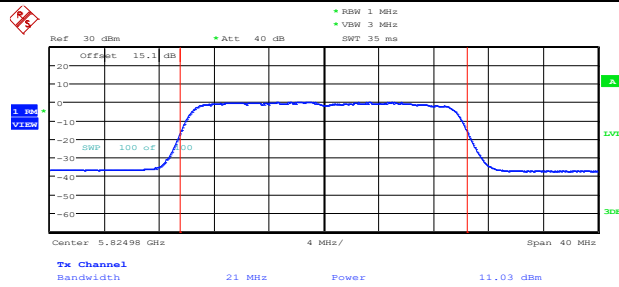
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11AX20SISO_Ant1_5825



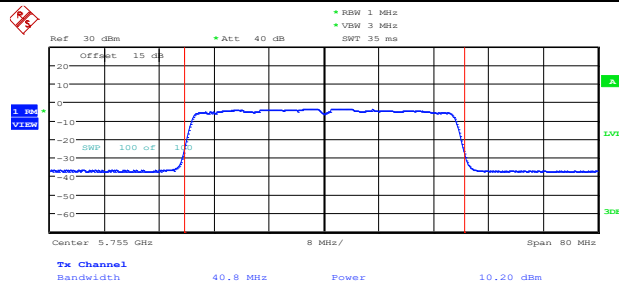
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11AX20SISO_Ant2_5825



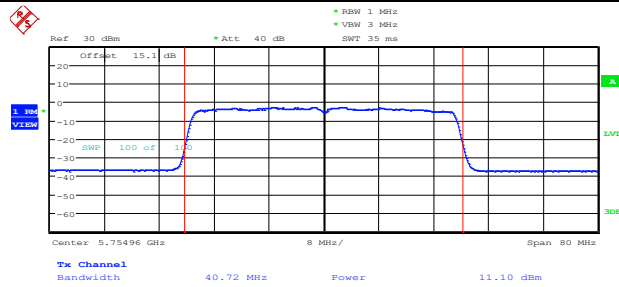
Date: 12.OCT.2023 15:03:57

11AX40SISO_Ant1_5755



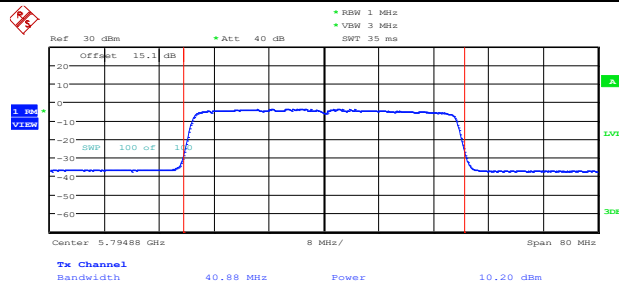
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11AX40SISO_Ant2_5755



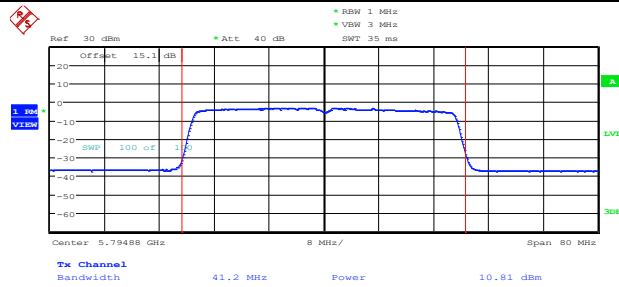
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11AX40SISO_Ant1_5795



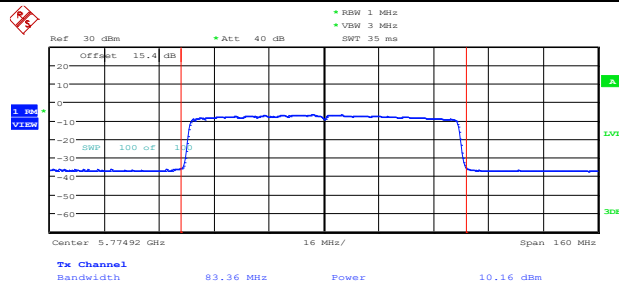
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11AX40SISO_Ant2_5795



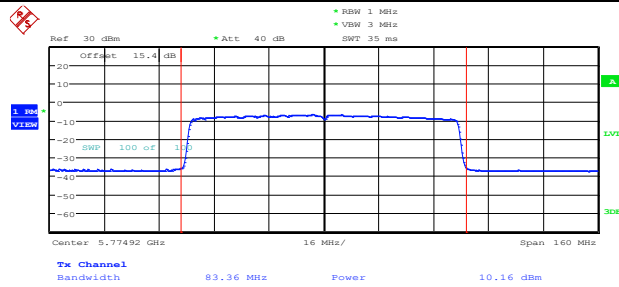
Date: 23.OCT.2023 18:51:41

11AX80SISO_Ant1_5775



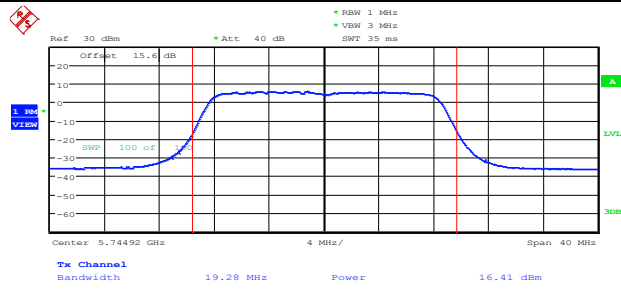
Date: 19.OCT.2023 16:19:56

11AX80SISO_Ant2_5775



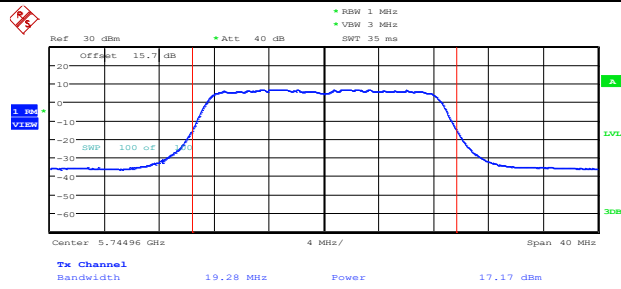
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11A-CDD_Ant1_5745



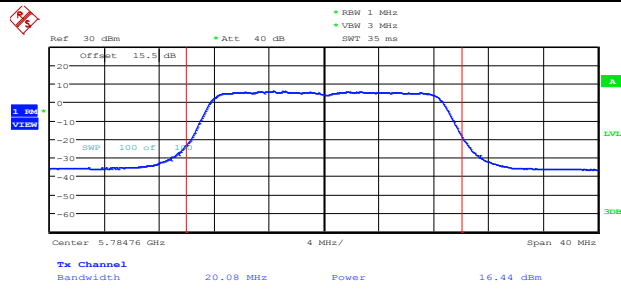
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11A-CDD_Ant2_5745



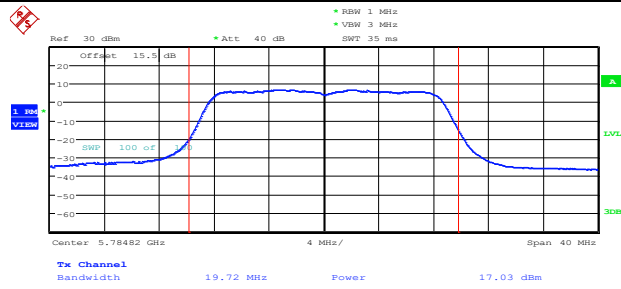
Date: 12.OCT.2023 15:10:05

11A-CDD_Ant1_5785



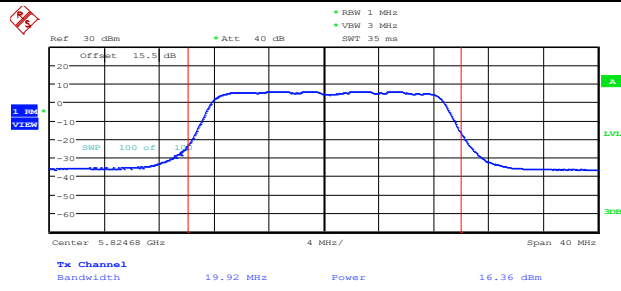
Date: 12.OCT.2023 15:11:21

11A-CDD_Ant2_5785



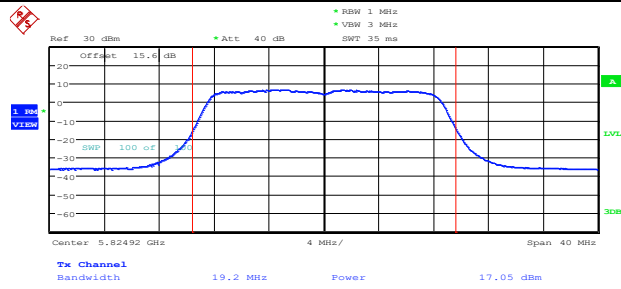
Date: 12.OCT.2023 15:11:47

11A-CDD_Ant1_5825



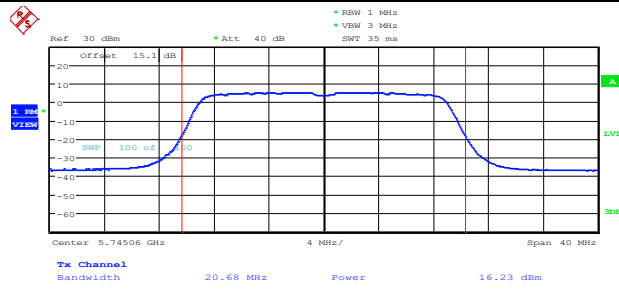
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11A-CDD_Ant2_5825



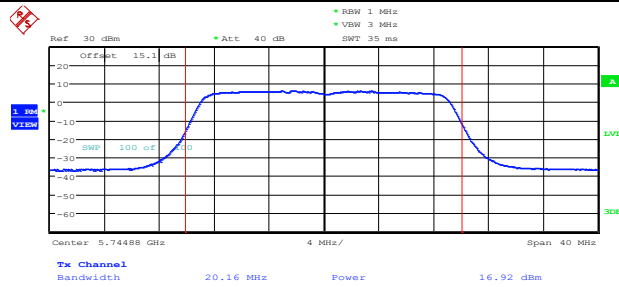
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11N20MIMO_Ant1_5745



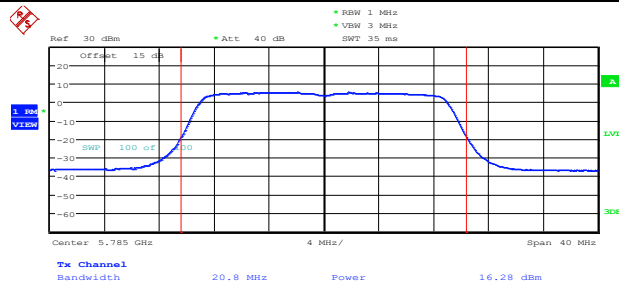
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11N20MIMO_Ant2_5745



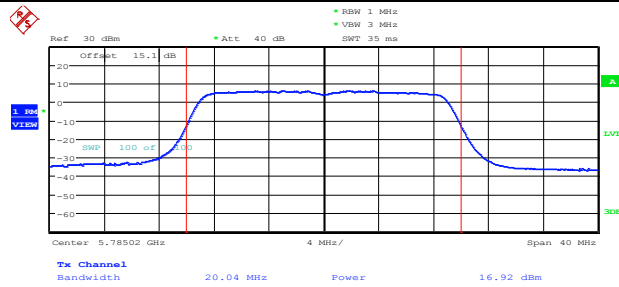
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11N20MIMO_Ant1_5785



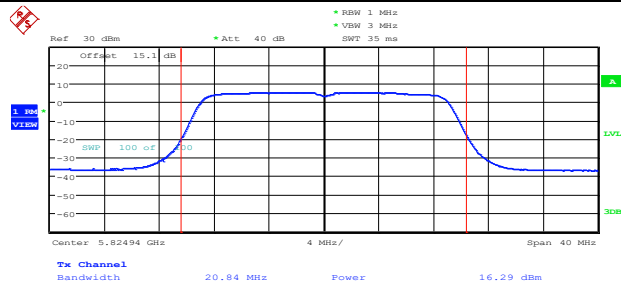
Date: 12.OCT.2023 15:18:08

11N20MIMO_Ant2_5785



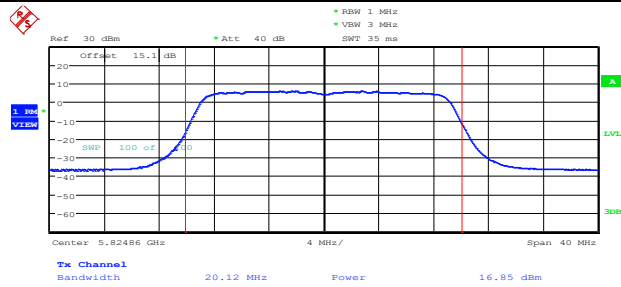
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11N20MIMO_Ant1_5825



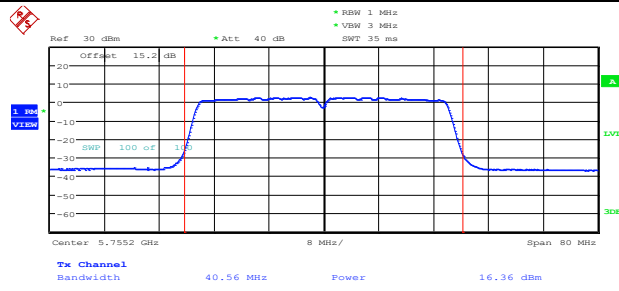
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11N20MIMO_Ant2_5825



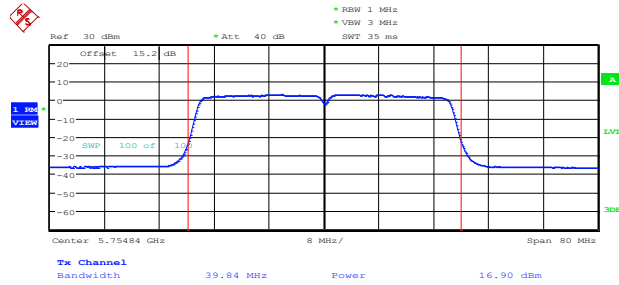
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11N40MIMO_Ant1_5755



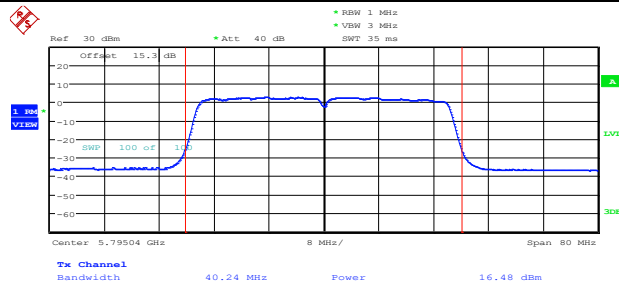
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11N40MIMO_Ant2_5755



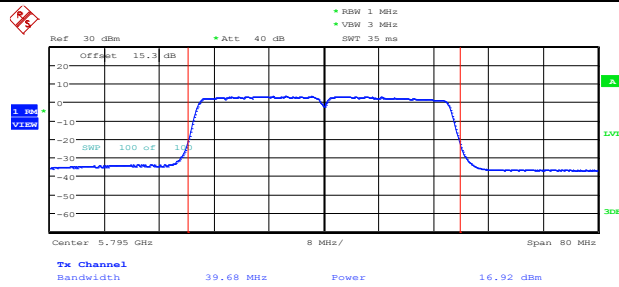
Date: 12.OCT.2023 15:23:19

11N40MIMO_Ant1_5795



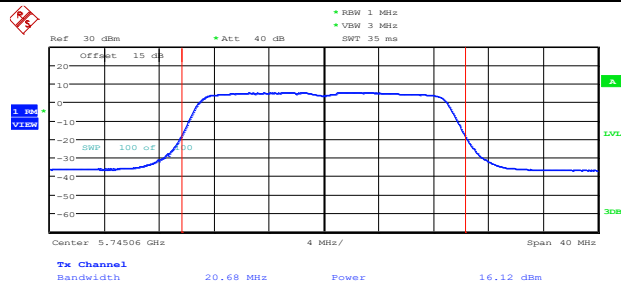
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11N40MIMO_Ant2_5795



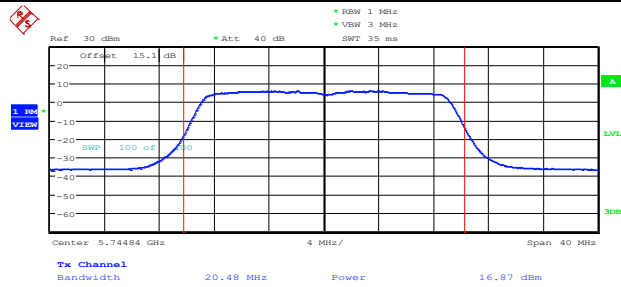
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11AC20MIMO_Ant1_5745



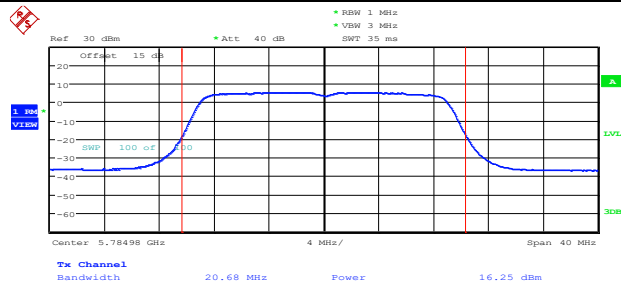
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11AC20MIMO_Ant2_5745



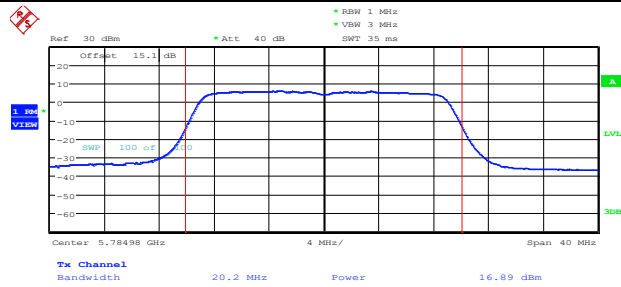
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11AC20MIMO_Ant1_5785



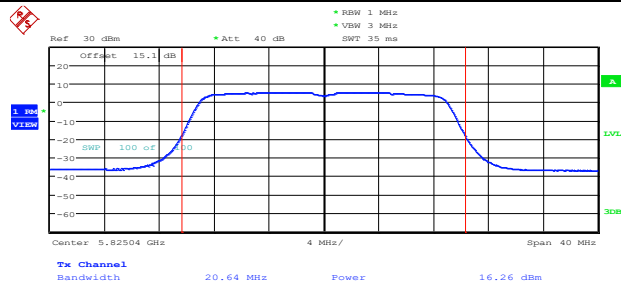
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11AC20MIMO_Ant2_5785



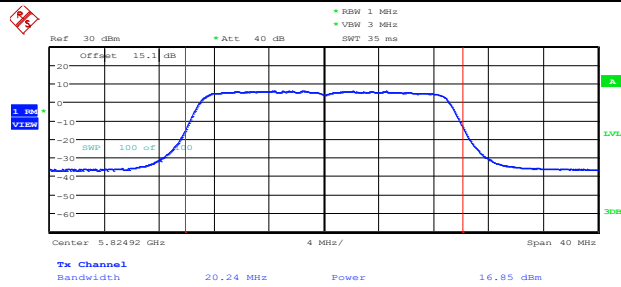
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11AC20MIMO_Ant1_5825



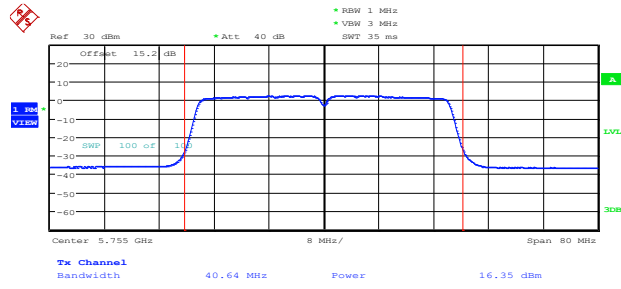
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11AC20MIMO_Ant2_5825



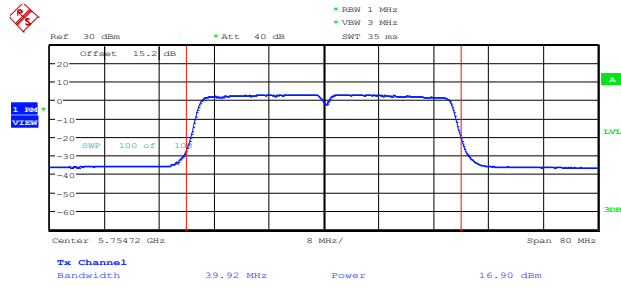
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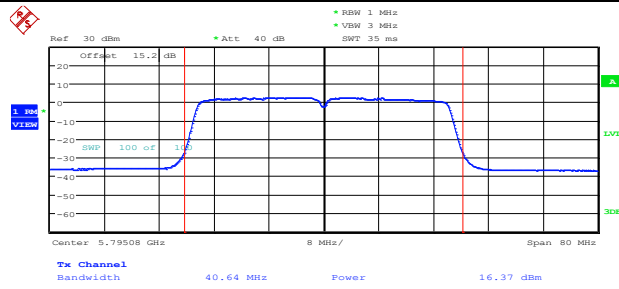
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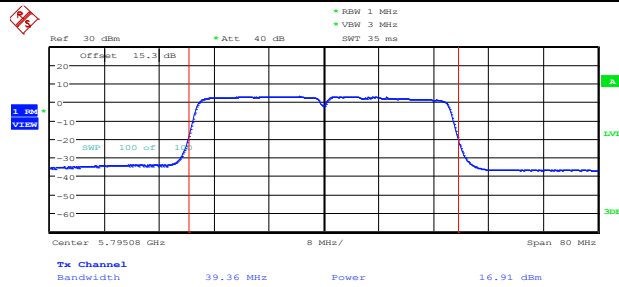
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11AC40MIMO_Ant1_5795



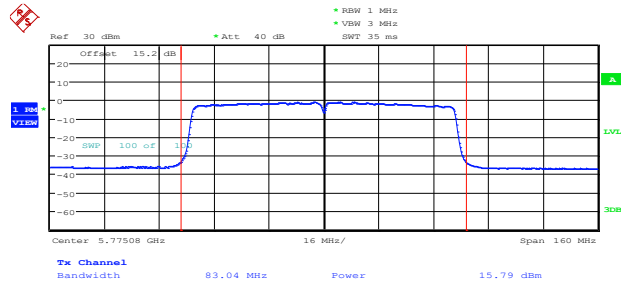
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11AC40MIMO_Ant2_5795



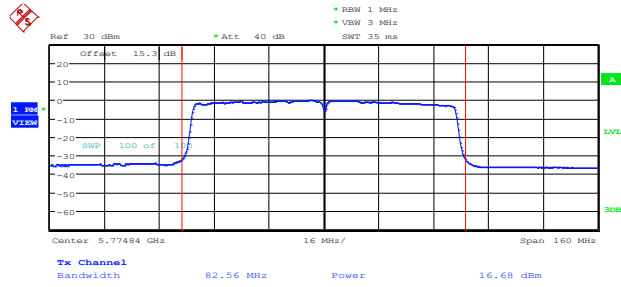
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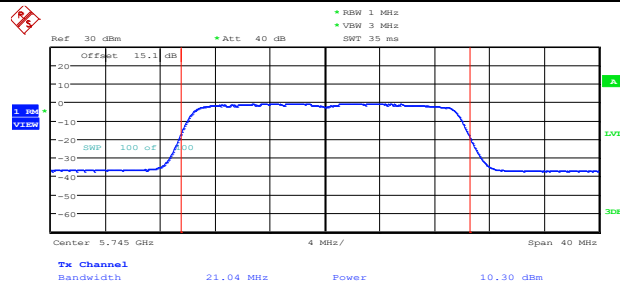
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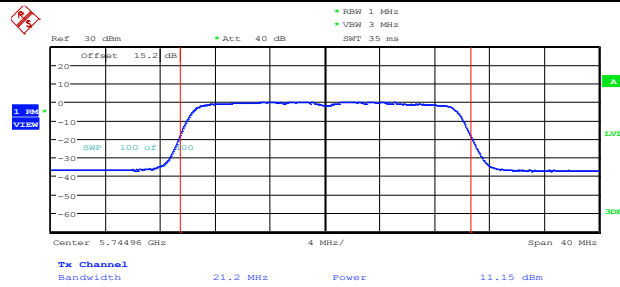
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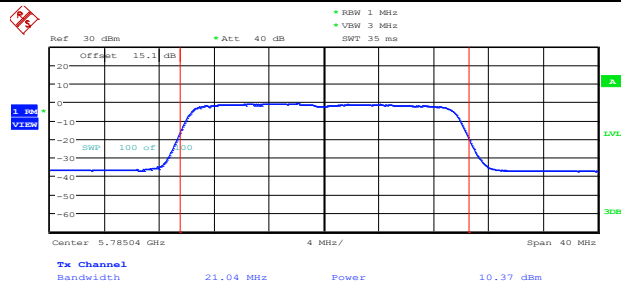
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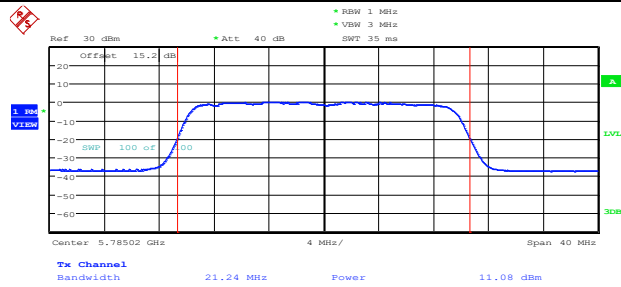
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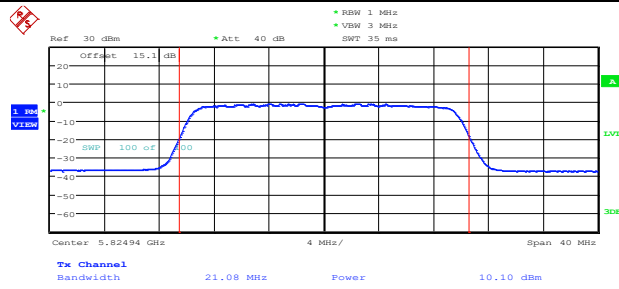
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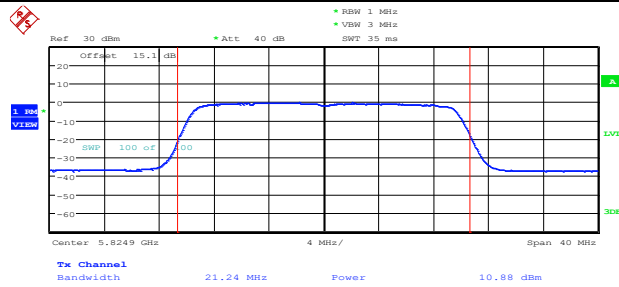
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11AX20MIMO_Ant1_5825



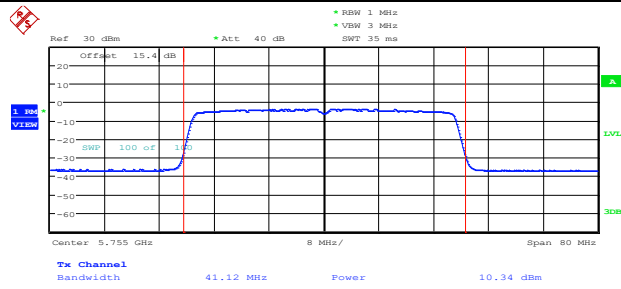
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11AX20MIMO_Ant2_5825



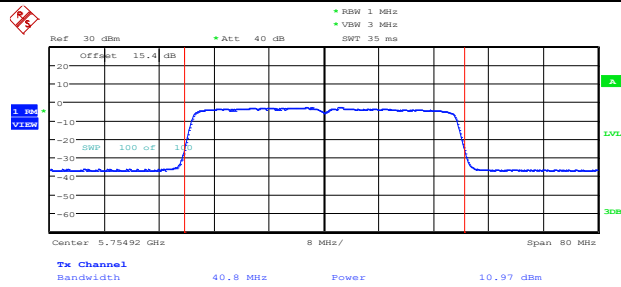
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11AX40MIMO_Ant1_5755



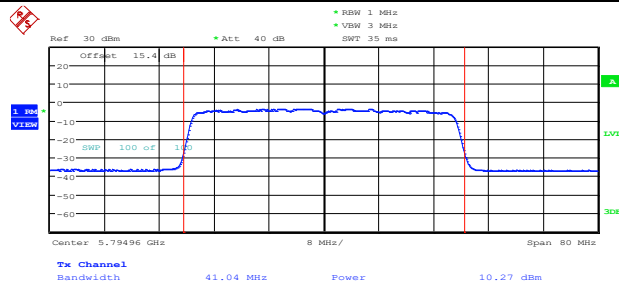
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11AX40MIMO_Ant2_5755



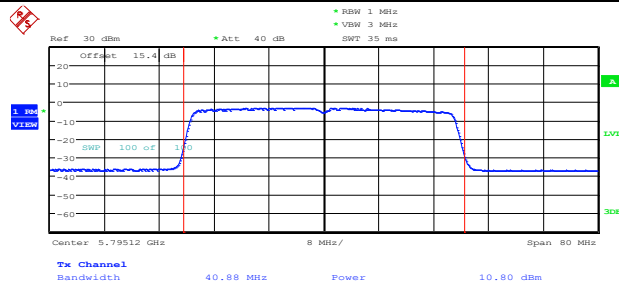
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11AX40MIMO_Ant1_5795



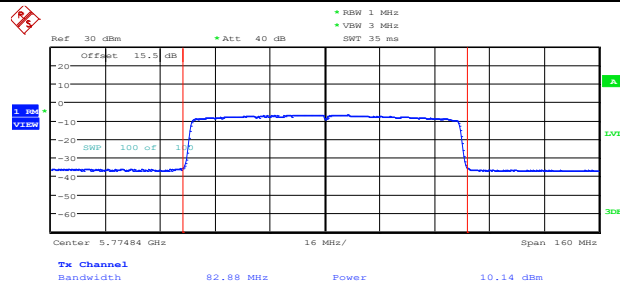
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11AX40MIMO_Ant2_5795



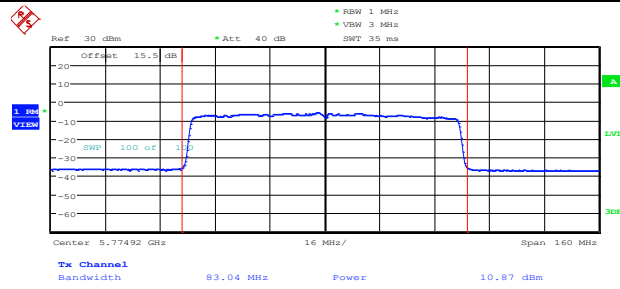
Date: 12.OCT.2023 15:51:15

11AX80MIMO_Ant1_5775



Date: 19.OCT.2023 16:45:30

11AX80MIMO_Ant2_5775



Date: 19.OCT.2023 16:47:33

6.4. Maximum power spectral density

Specifications:	FCC 47 Part 15.407(a)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature:20°C Relative Humidity:40% Air pressure: 90kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.407(a)	< 30dBm/500kHz
Note: Because the MIMO Directional gain is greater than 6, Limit =30-(Directional gain-6) =30-(6.51-6) =29.49.	

Measurement Uncertainty:

Measurement Uncertainty	±0.48dB
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Test Procedure:

The measurement method is made according to KDB 789033 F

1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power...” (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
3. Make the following adjustments to the peak value of the spectrum, if applicable:
 - a) If Method SA-2 or SA-2 Alternative was used, add $10 \log (1/x)$, where x is the duty cycle, to the peak of the spectrum.
 - b) If Method SA-3 Alternative was used and the linear mode was used in step II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
4. The result is the Maximum PSD over 1 MHz reference bandwidth.
5. For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement

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Report No.: I23W00036-WIFI 5.8G RF-FCC

bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

a) Set $RBW \geq 1/T$, where T is defined in II.B.1.a).

b) Set $VBW \geq 3$ RBW.

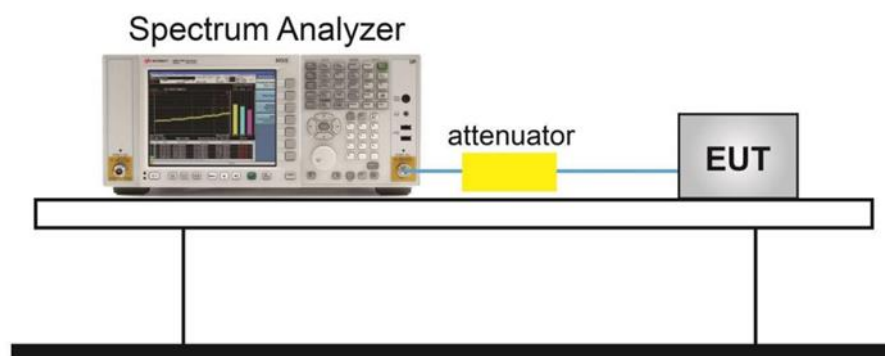
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log(500 \text{ kHz}/RBW)$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log(1\text{MHz}/RBW)$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for steps 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

Test setup:



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Measurement Results:

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	2.26	≤30.00	PASS
	Ant2	5745	3.17	≤30.00	PASS
	Ant1	5785	2.19	≤30.00	PASS
	Ant2	5785	3.03	≤30.00	PASS
	Ant1	5825	2.27	≤30.00	PASS
	Ant2	5825	3.21	≤30.00	PASS
11N20SISO	Ant1	5745	1.97	≤30.00	PASS
	Ant2	5745	2.59	≤30.00	PASS
	Ant1	5785	2.05	≤30.00	PASS
	Ant2	5785	2.73	≤30.00	PASS
	Ant1	5825	2	≤30.00	PASS
	Ant2	5825	2.57	≤30.00	PASS
11N40SISO	Ant1	5755	-1.08	≤30.00	PASS
	Ant2	5755	-0.43	≤30.00	PASS
	Ant1	5795	-0.82	≤30.00	PASS
	Ant2	5795	-0.28	≤30.00	PASS
11AC20SISO	Ant1	5745	1.91	≤30.00	PASS
	Ant2	5745	2.66	≤30.00	PASS
	Ant1	5785	1.92	≤30.00	PASS
	Ant2	5785	2.67	≤30.00	PASS
	Ant1	5825	1.9	≤30.00	PASS
	Ant2	5825	2.6	≤30.00	PASS
11AC40SISO	Ant1	5755	-1.09	≤30.00	PASS
	Ant2	5755	-0.39	≤30.00	PASS
	Ant1	5795	-1.01	≤30.00	PASS
	Ant2	5795	-0.23	≤30.00	PASS
11AC80SISO	Ant1	5775	-4.32	≤30.00	PASS
	Ant2	5775	-3.6	≤30.00	PASS
11AX20SISO	Ant1	5745	-4.25	≤30.00	PASS
	Ant2	5745	-3.47	≤30.00	PASS
	Ant1	5785	-4.31	≤30.00	PASS
	Ant2	5785	-3.45	≤30.00	PASS
	Ant1	5825	-4.53	≤30.00	PASS
	Ant2	5825	-3.67	≤30.00	PASS
11AX40SISO	Ant1	5755	-7.42	≤30.00	PASS
	Ant2	5755	-6.58	≤30.00	PASS
	Ant1	5795	-7.33	≤30.00	PASS

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**Report No.: I23W00036-WIFI 5.8G RF-FCC**

	Ant2	5795	-6.69	≤ 30.00	PASS
11AX80SISO	Ant1	5775	-10.27	≤ 30.00	PASS
	Ant2	5775	-9.47	≤ 30.00	PASS
11A-CDD	Ant1	5745	2.37	≤ 29.49	PASS
	Ant2	5745	3.28	≤ 29.49	PASS
	total	5745	5.86	≤ 29.49	PASS
	Ant1	5785	2.39	≤ 29.49	PASS
	Ant2	5785	3.19	≤ 29.49	PASS
	total	5785	5.82	≤ 29.49	PASS
	Ant1	5825	2.21	≤ 29.49	PASS
	Ant2	5825	3.22	≤ 29.49	PASS
	total	5825	5.75	≤ 29.49	PASS
11N20MIMO	Ant1	5745	2.31	≤ 29.49	PASS
	Ant2	5745	3.08	≤ 29.49	PASS
	total	5745	5.72	≤ 29.49	PASS
	Ant1	5785	2.3	≤ 29.49	PASS
	Ant2	5785	2.98	≤ 29.49	PASS
	total	5785	5.66	≤ 29.49	PASS
	Ant1	5825	2.23	≤ 29.49	PASS
	Ant2	5825	2.88	≤ 29.49	PASS
total	5825	5.58	≤ 29.49	PASS	
11N40MIMO	Ant1	5755	-0.63	≤ 29.49	PASS
	Ant2	5755	0.04	≤ 29.49	PASS
	total	5755	2.73	≤ 29.49	PASS
	Ant1	5795	-0.57	≤ 29.49	PASS
	Ant2	5795	-0.08	≤ 29.49	PASS
	total	5795	2.69	≤ 29.49	PASS
11AC20MIMO	Ant1	5745	1.98	≤ 29.49	PASS
	Ant2	5745	2.82	≤ 29.49	PASS
	total	5745	5.43	≤ 29.49	PASS
	Ant1	5785	2.13	≤ 29.49	PASS
	Ant2	5785	2.7	≤ 29.49	PASS
	total	5785	5.43	≤ 29.49	PASS
	Ant1	5825	2.11	≤ 29.49	PASS
	Ant2	5825	2.69	≤ 29.49	PASS
	total	5825	5.42	≤ 29.49	PASS
11AC40MIMO	Ant1	5755	-0.79	≤ 29.49	PASS
	Ant2	5755	-0.2	≤ 29.49	PASS
	total	5755	2.53	≤ 29.49	PASS
	Ant1	5795	-0.77	≤ 29.49	PASS

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Report No.: I23W00036-WIFI 5.8G RF-FCC

	Ant2	5795	-0.18	≤ 29.49	PASS
	total	5795	2.55	≤ 29.49	PASS
11AC80MIMO	Ant1	5775	-4.51	≤ 30.00	PASS
	Ant2	5775	-3.63	≤ 30.00	PASS
	total	5775	-1.04	≤ 30.00	PASS
11AX20MIMO	Ant1	5745	-4.22	≤ 29.49	PASS
	Ant2	5745	-3.4	≤ 29.49	PASS
	total	5745	-0.78	≤ 29.49	PASS
	Ant1	5785	-4.15	≤ 29.49	PASS
	Ant2	5785	-3.51	≤ 29.49	PASS
	total	5785	-0.81	≤ 29.49	PASS
	Ant1	5825	-4.49	≤ 29.49	PASS
	Ant2	5825	-3.81	≤ 29.49	PASS
total	5825	-1.13	≤ 29.49	PASS	
11AX40MIMO	Ant1	5755	-7.14	≤ 29.49	PASS
	Ant2	5755	-6.54	≤ 29.49	PASS
	total	5755	-3.82	≤ 29.49	PASS
	Ant1	5795	-7.17	≤ 29.49	PASS
	Ant2	5795	-6.63	≤ 29.49	PASS
	total	5795	-3.88	≤ 29.49	PASS
11AX80MIMO	Ant1	5775	-10.17	≤ 30.00	PASS
	Ant2	5775	-9.58	≤ 30.00	PASS
	total	5775	-6.85	≤ 30.00	PASS

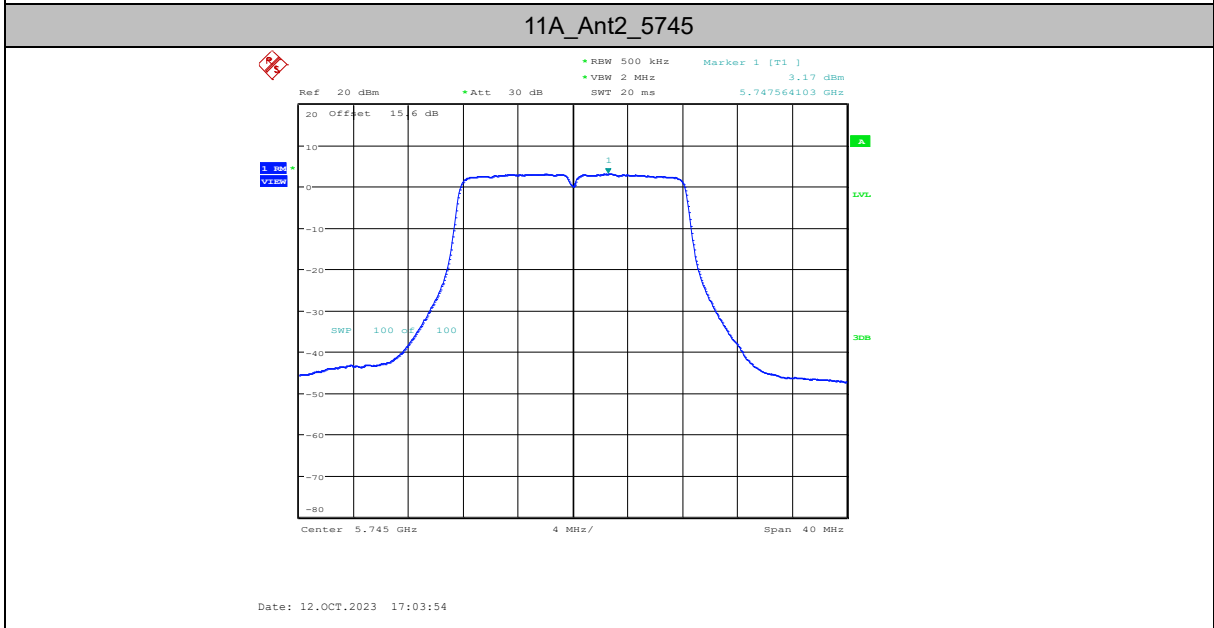
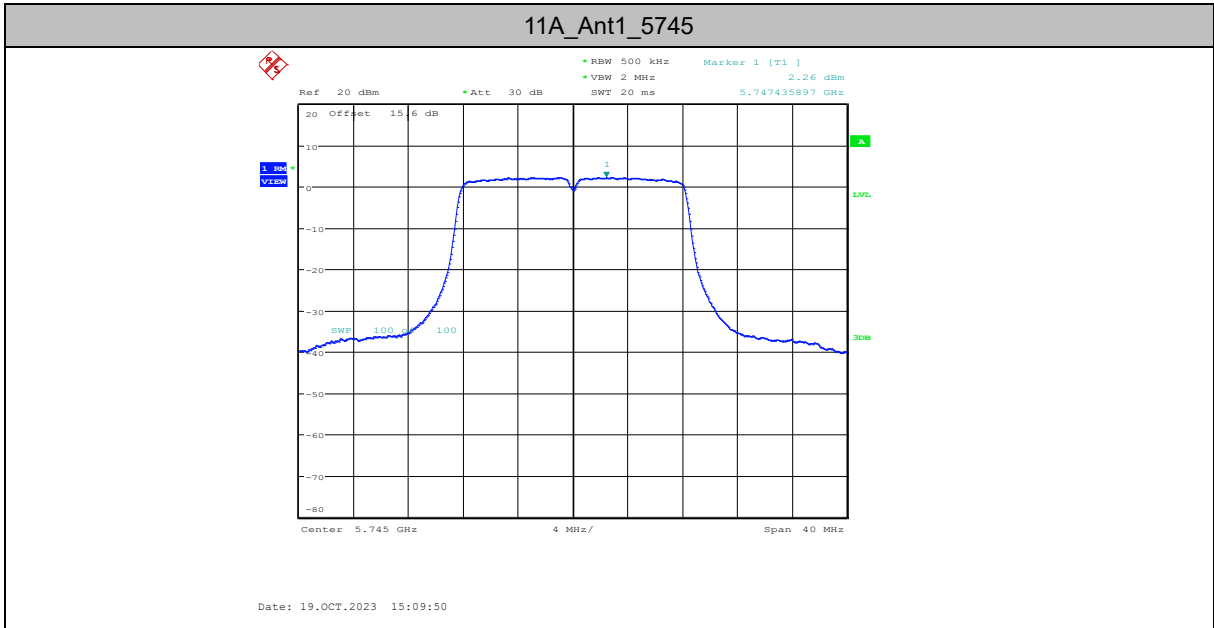
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

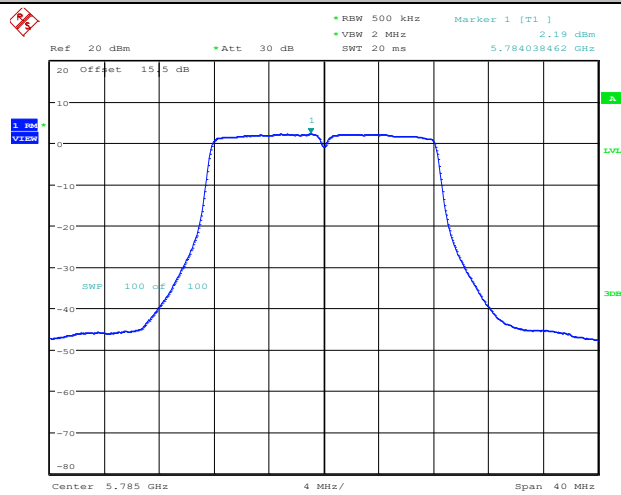
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Test Graphs

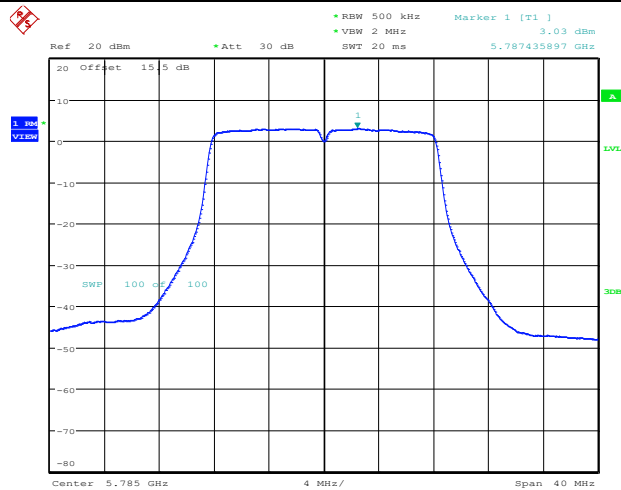


11A_Ant1_5785



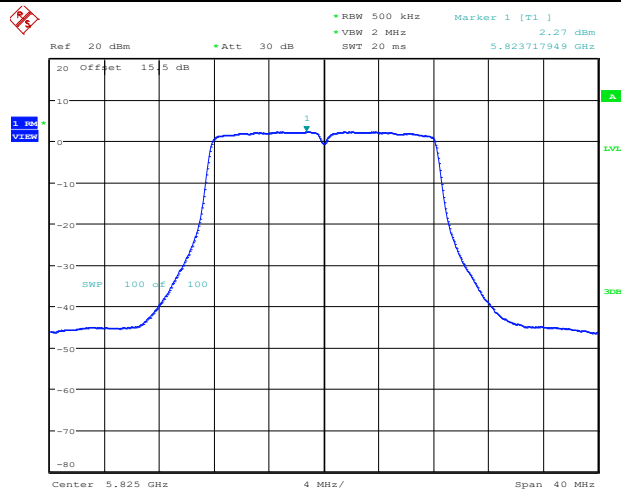
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11A_Ant2_5785



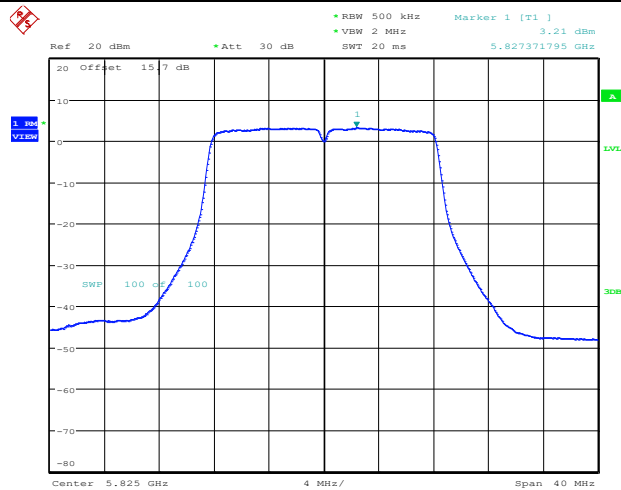
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11A_Ant1_5825



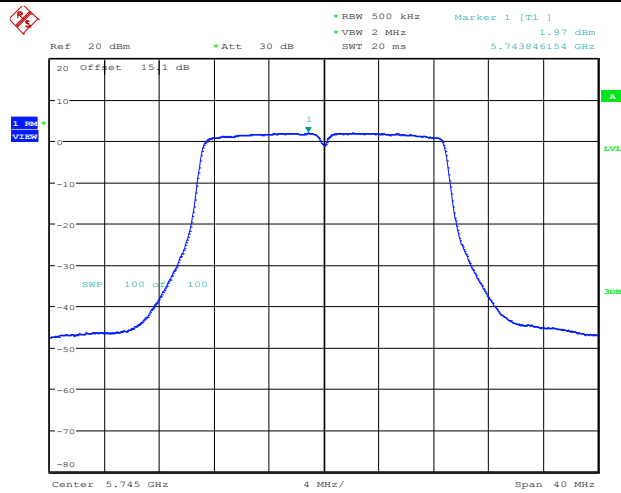
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11A_Ant2_5825



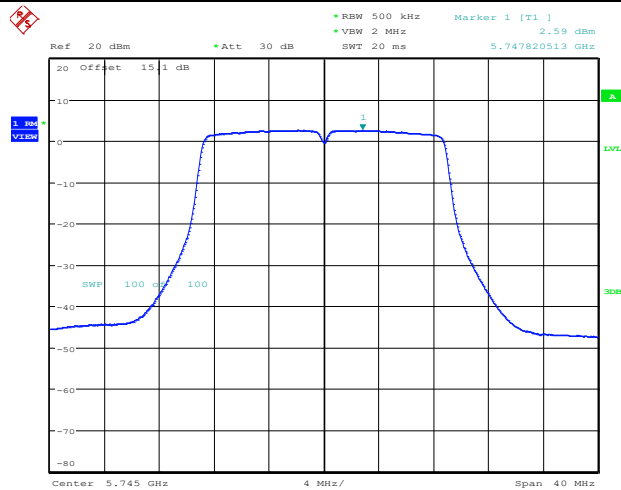
Date: 12.OCT.2023 17:05:21

11N20SISO_Ant1_5745



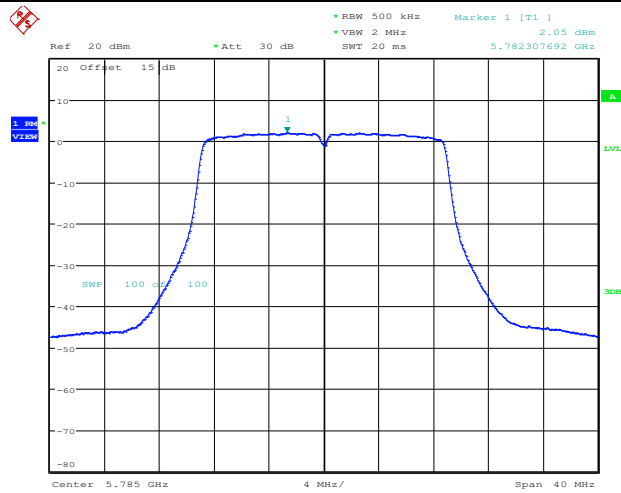
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11N20SISO_Ant2_5745



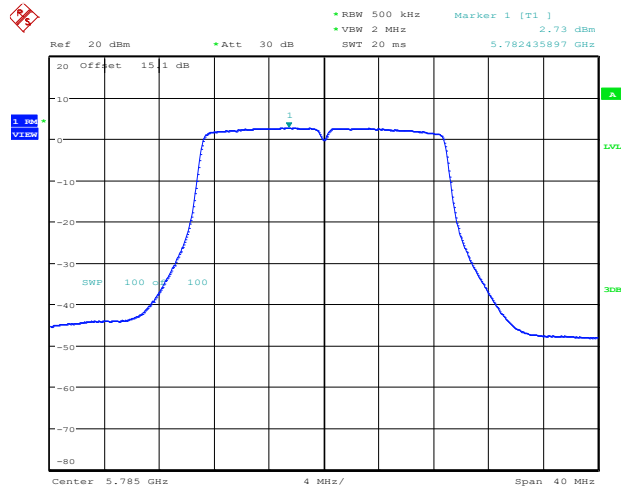
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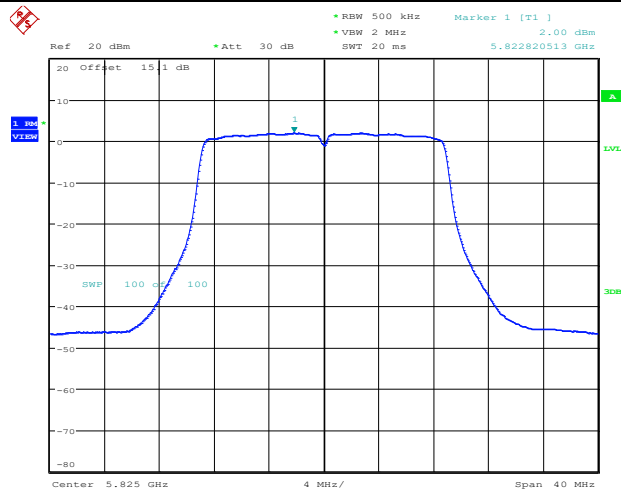
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11N20SISO_Ant2_5785



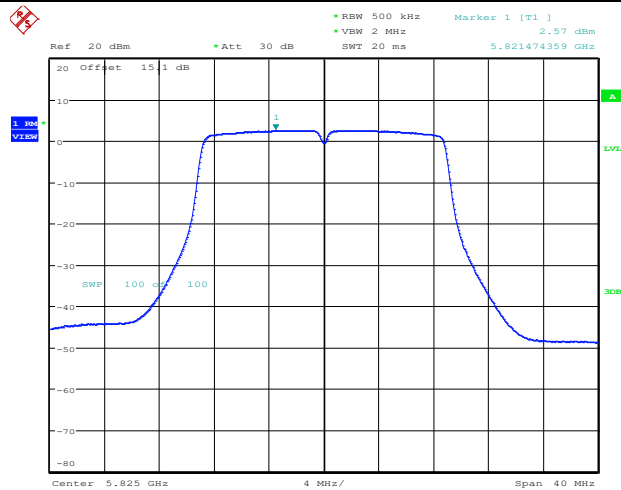
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11N20SISO_Ant1_5825



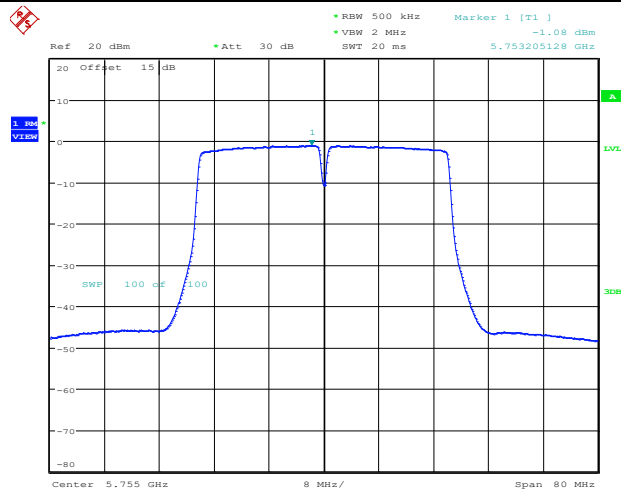
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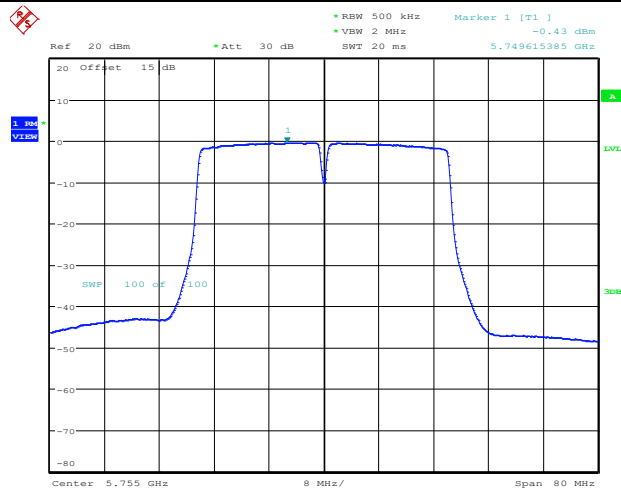
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11N40SISO_Ant1_5755



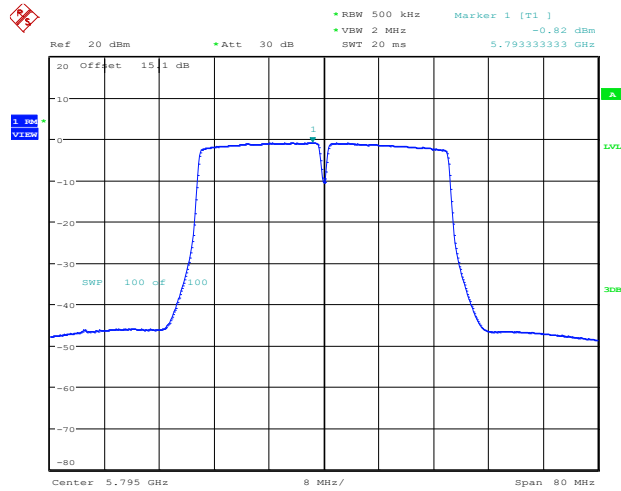
Date: 12.OCT.2023 16:39:13

11N40SISO_Ant2_5755



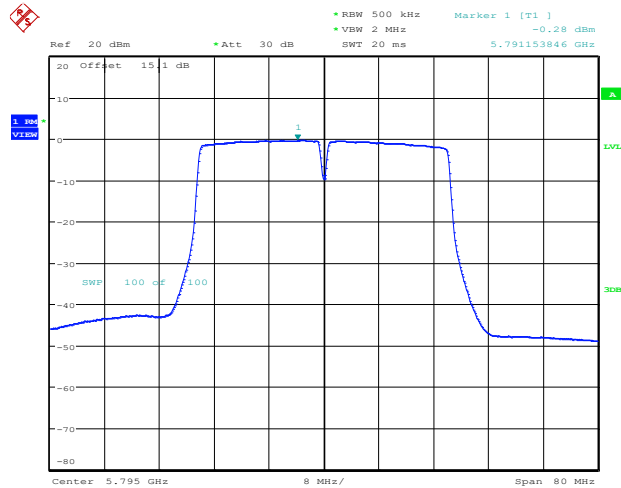
Date: 12.OCT.2023 17:11:47

11N40SISO_Ant1_5795



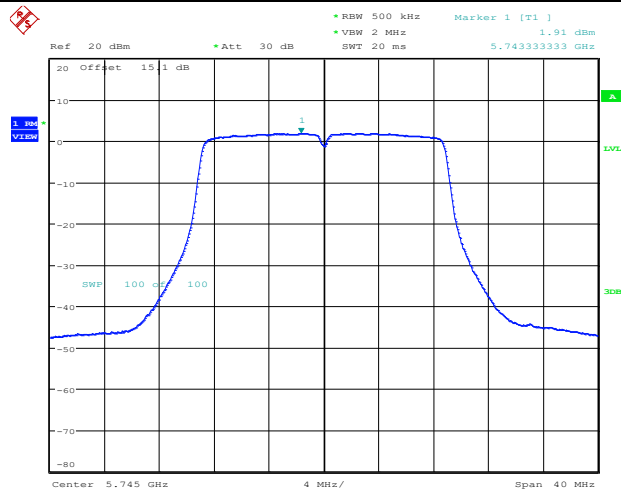
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11N40SISO_Ant2_5795



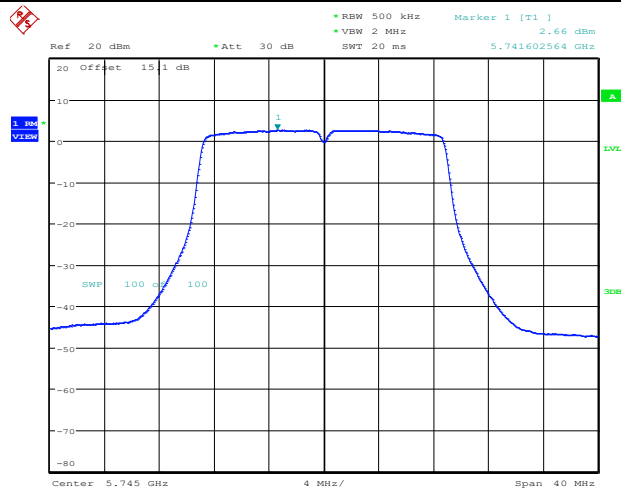
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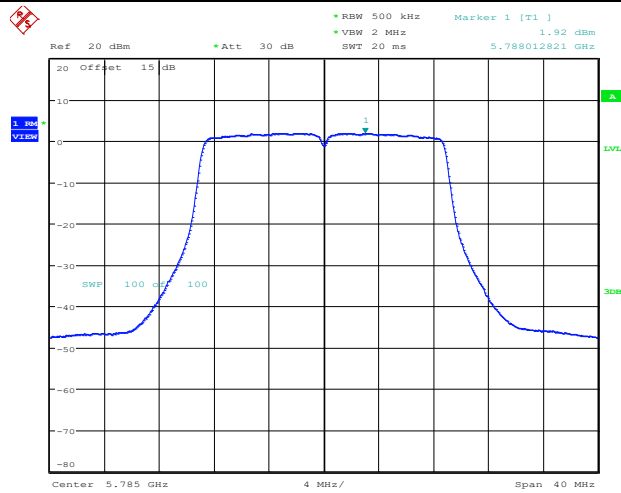
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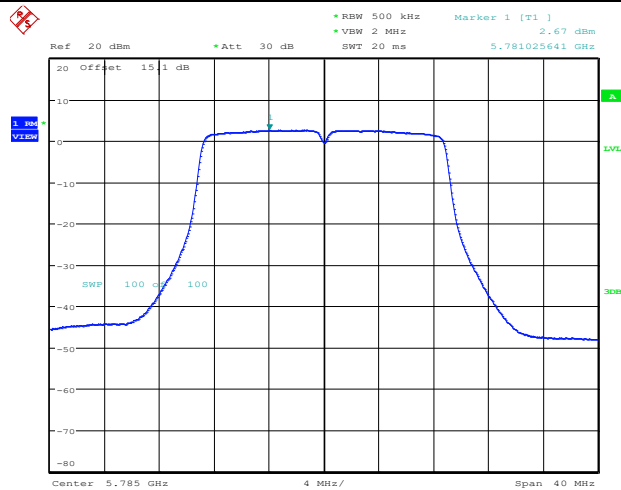
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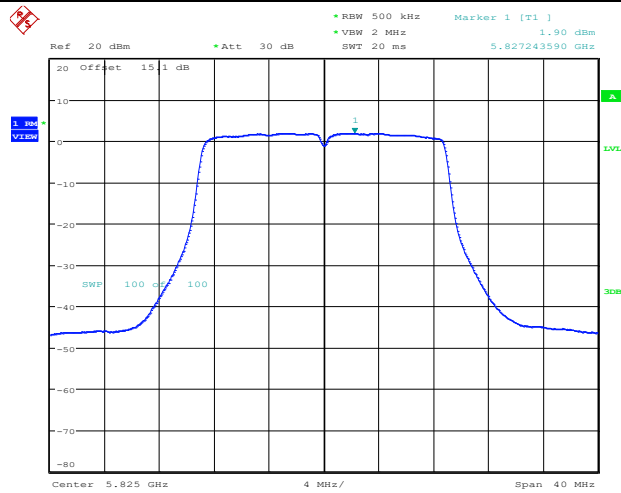
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11AC20SISO_Ant2_5785



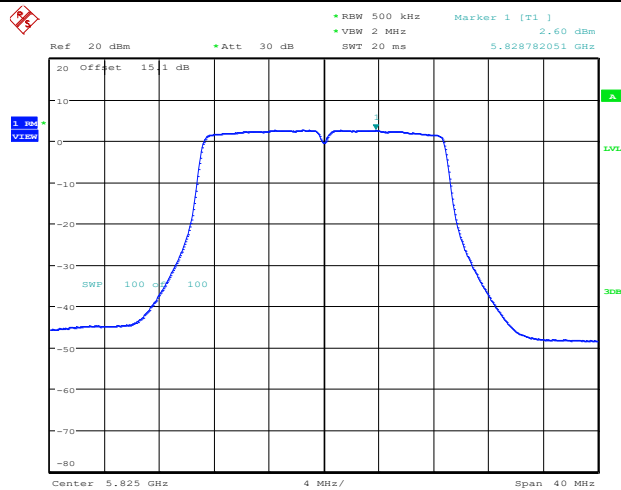
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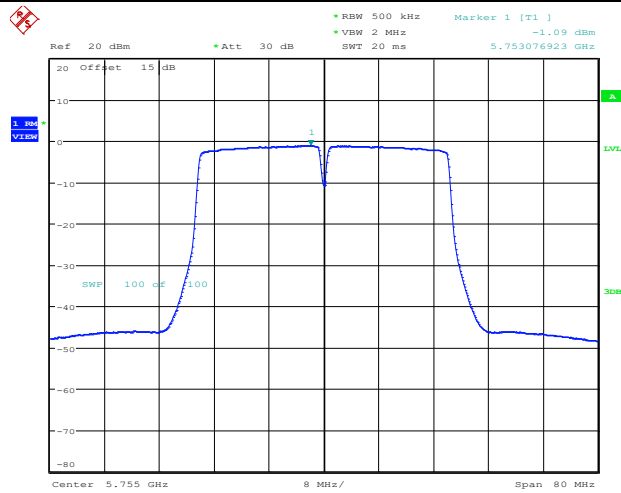
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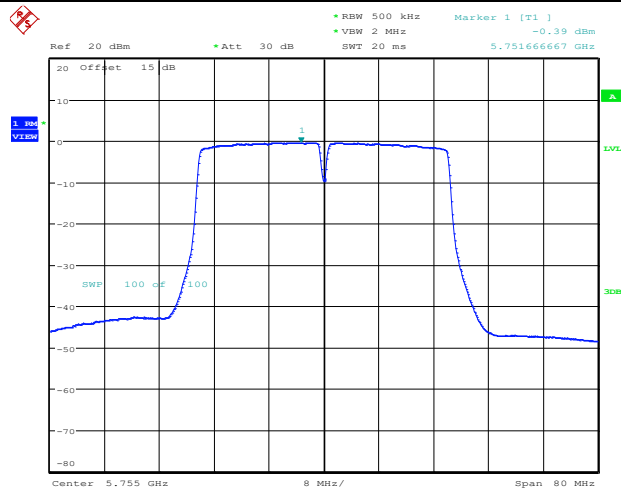
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11AC40SISO_Ant1_5755



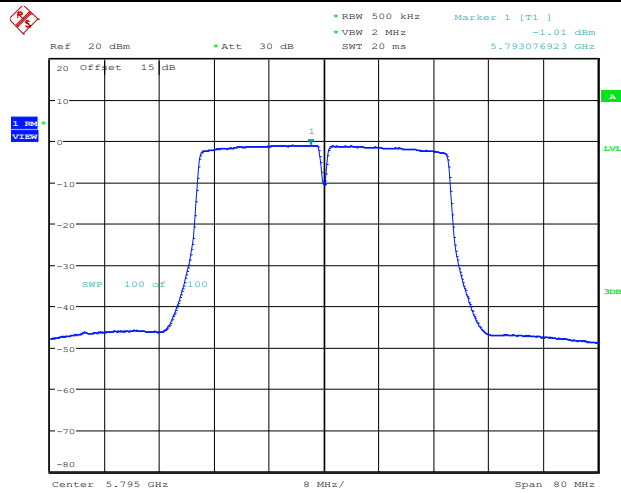
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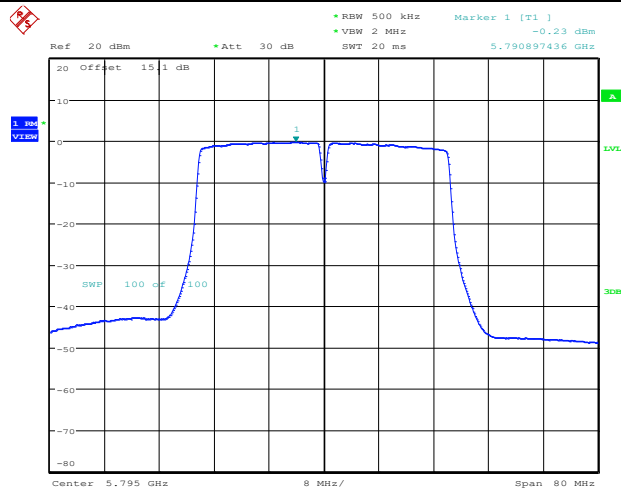
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11AC40SISO_Ant1_5795



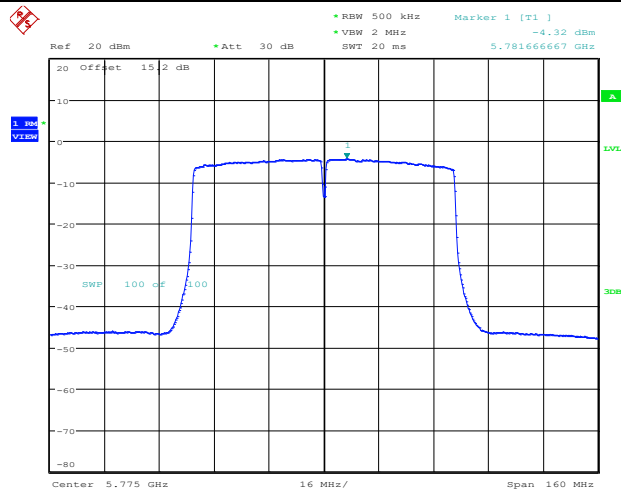
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11AC40SISO_Ant2_5795



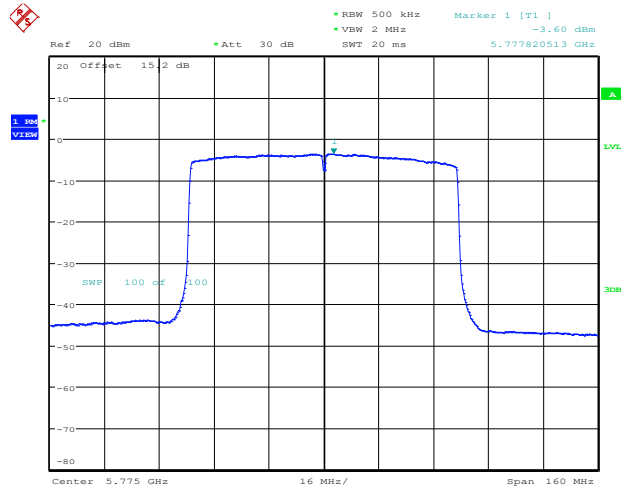
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11AC80SISO_Ant1_5775



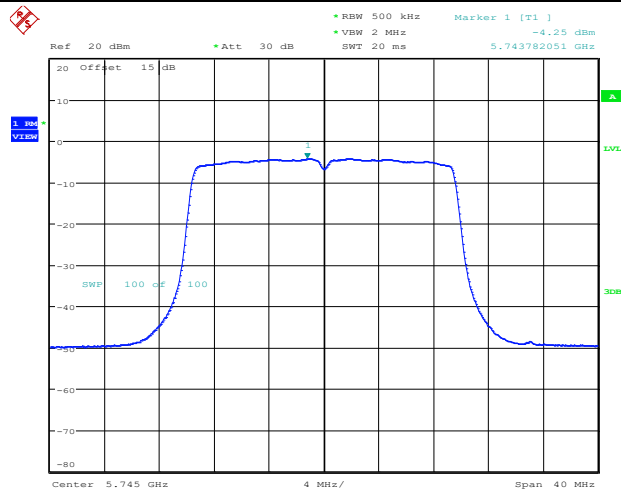
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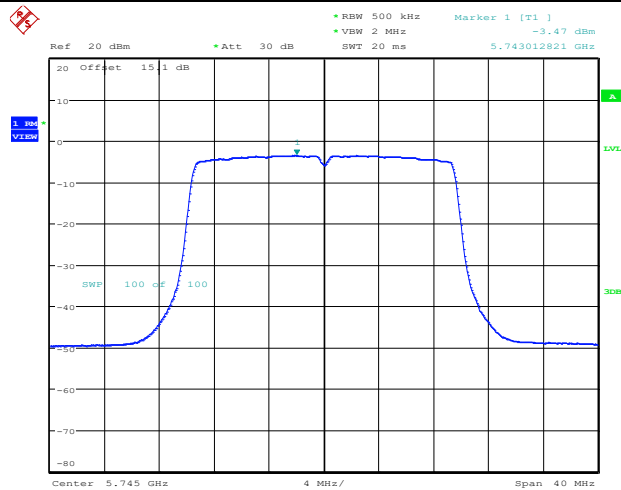
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11AX20SISO_Ant1_5745



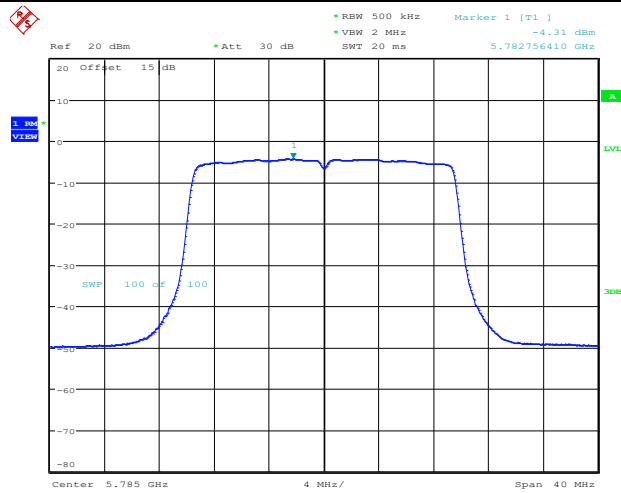
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11AX20SISO_Ant2_5745



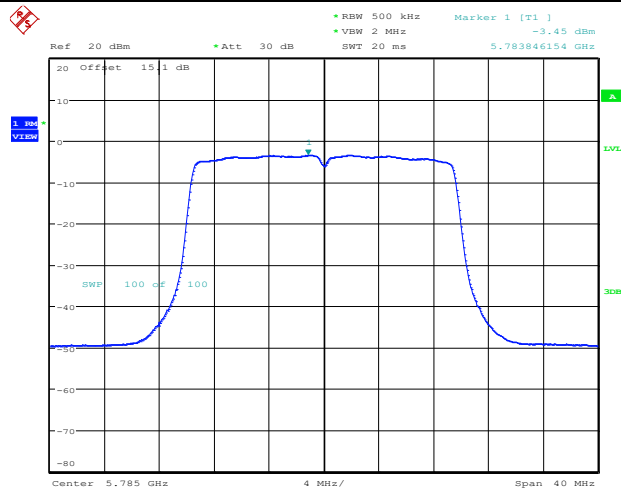
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11AX20SISO_Ant1_5785



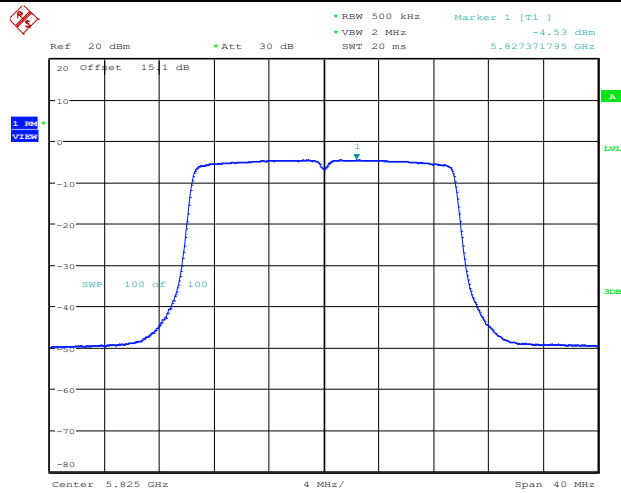
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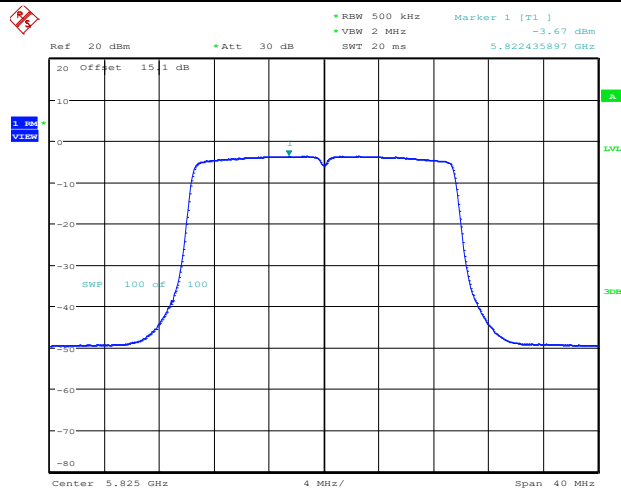
Date: 12.OCT.2023 17:20:12

11AX20SISO_Ant1_5825



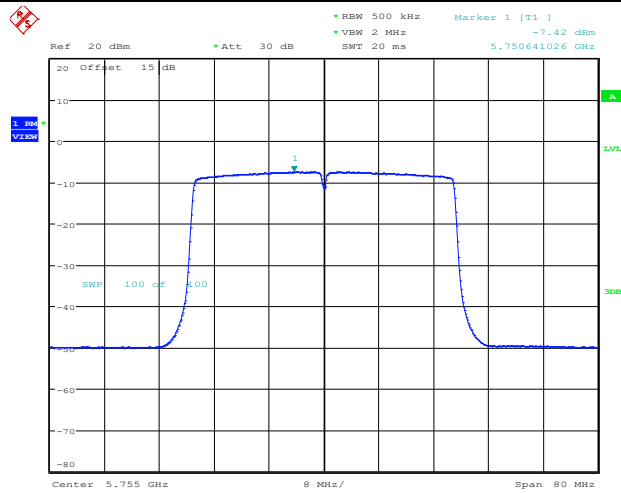
Date: 12.OCT.2023 16:46:59

11AX20SISO_Ant2_5825



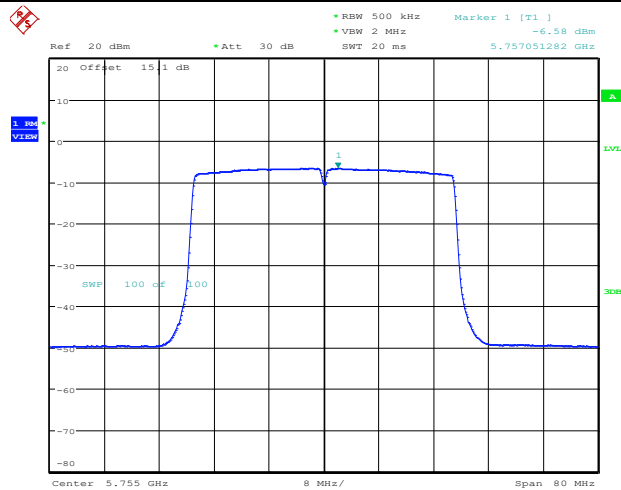
Date: 12.OCT.2023 17:21:30

11AX40SISO_Ant1_5755



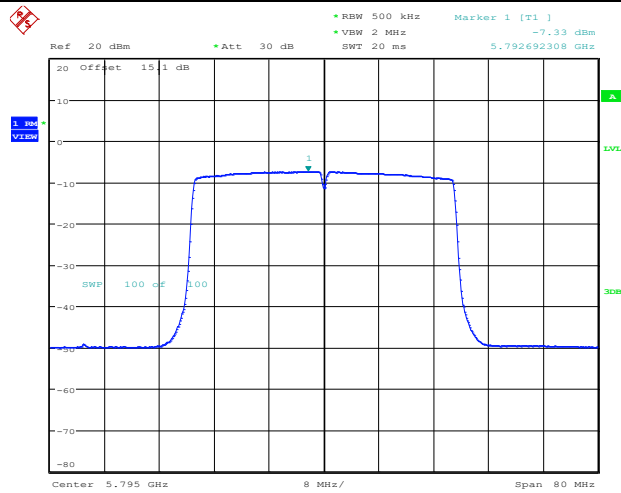
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11AX40SISO_Ant2_5755



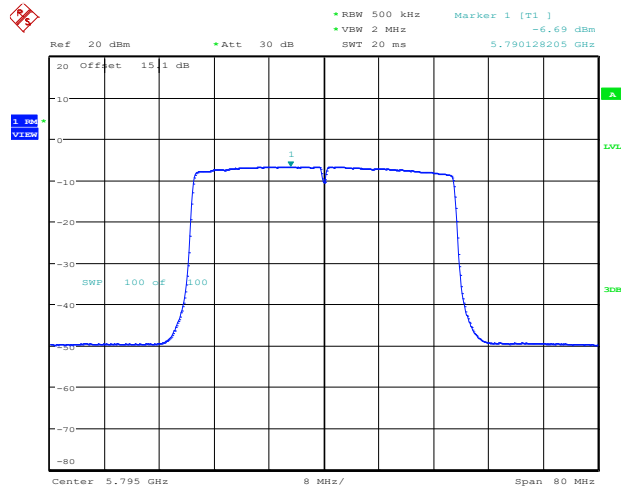
Date: 12.OCT.2023 17:24:09

11AX40SISO_Ant1_5795



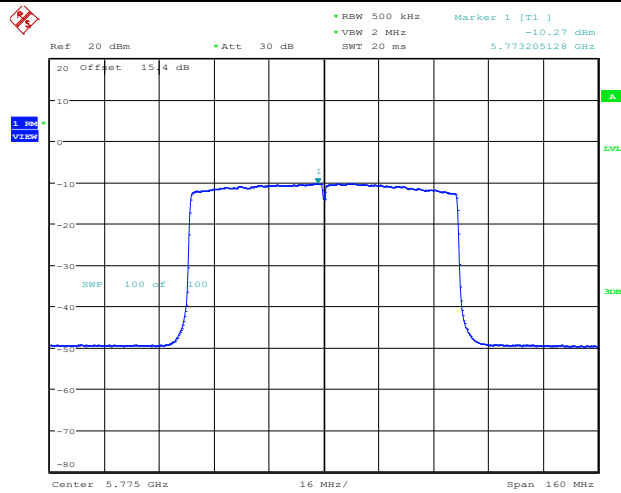
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11AX40SISO_Ant2_5795



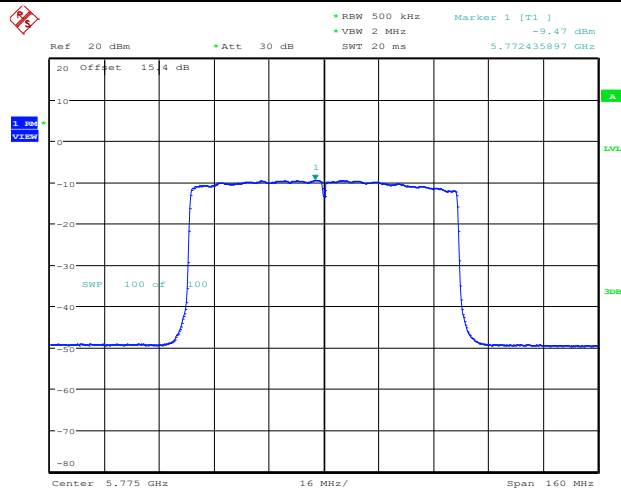
Date: 12.OCT.2023 17:24:45

11AX80SISO_Ant1_5775



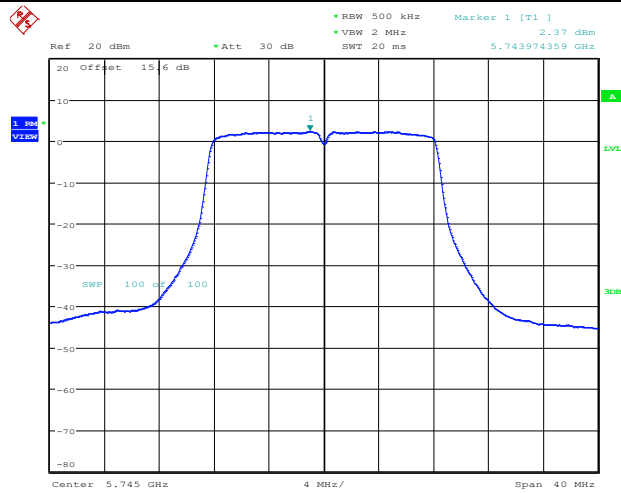
Date: 19.OCT.2023 16:30:35

11AX80SISO_Ant2_5775



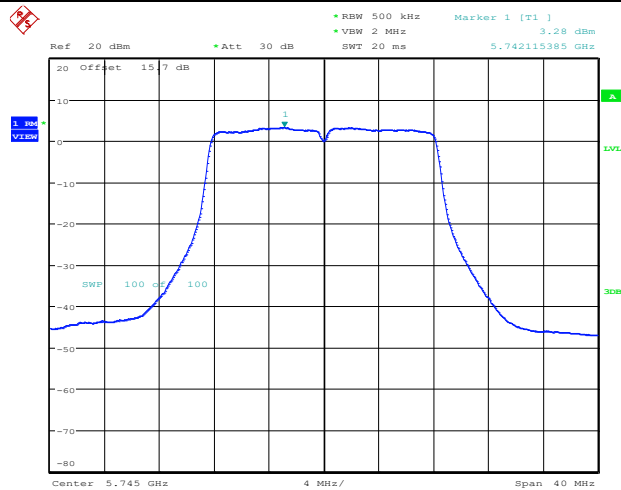
Date: 19.OCT.2023 16:37:06

11A-CDD_Ant1_5745



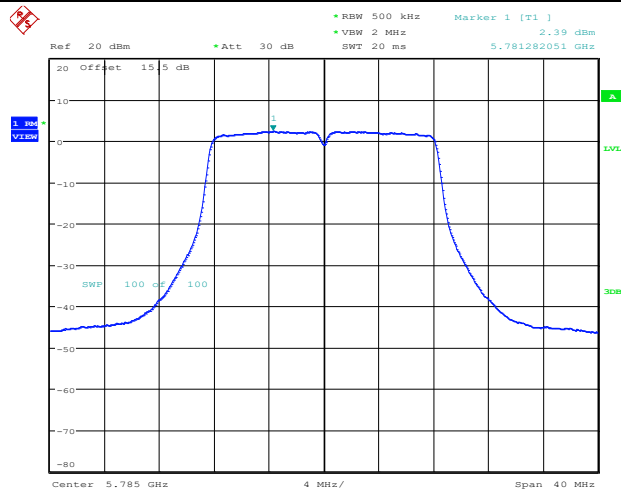
Date: 12.OCT.2023 17:30:49

11A-CDD_Ant2_5745



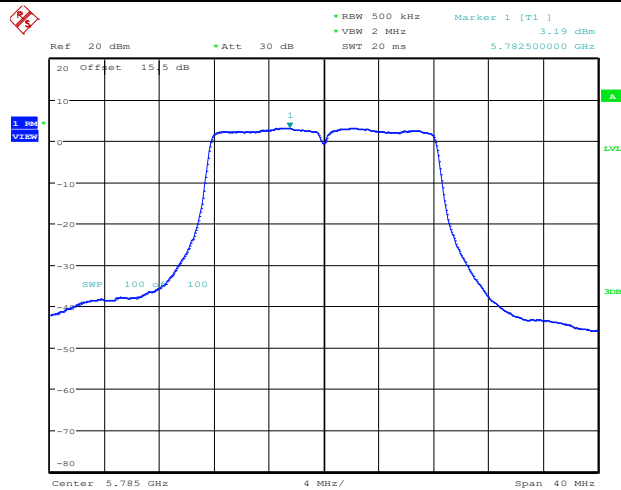
Date: 12.OCT.2023 17:31:09

11A-CDD_Ant1_5785



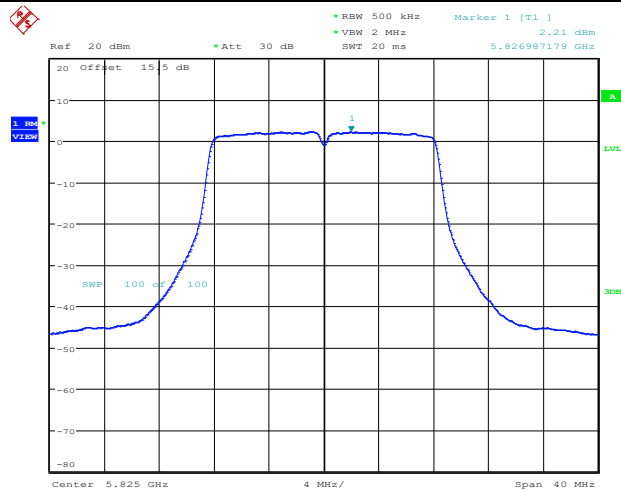
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11A-CDD_Ant2_5785



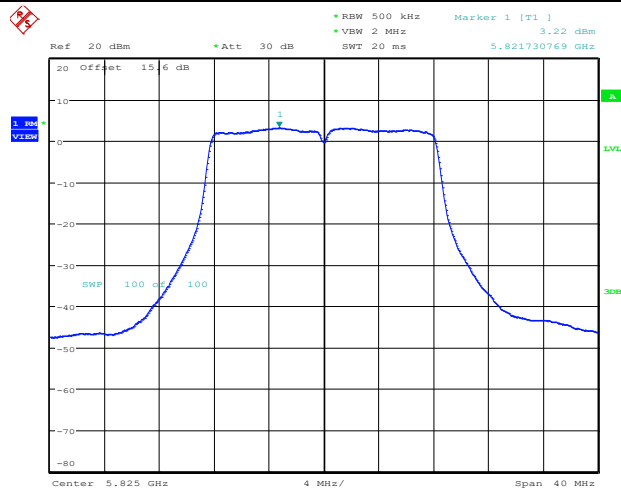
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11A-CDD_Ant1_5825



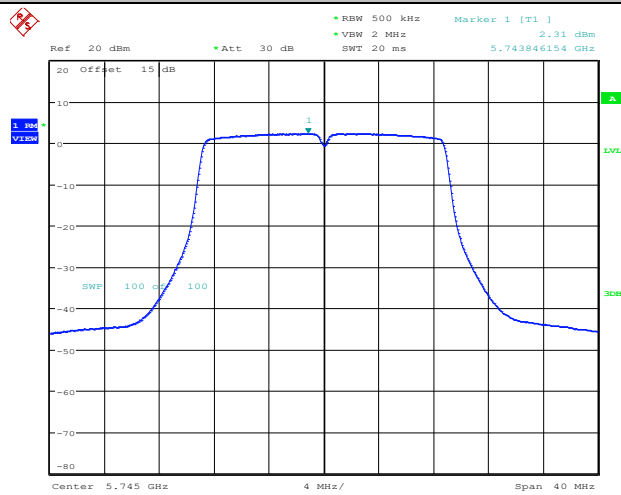
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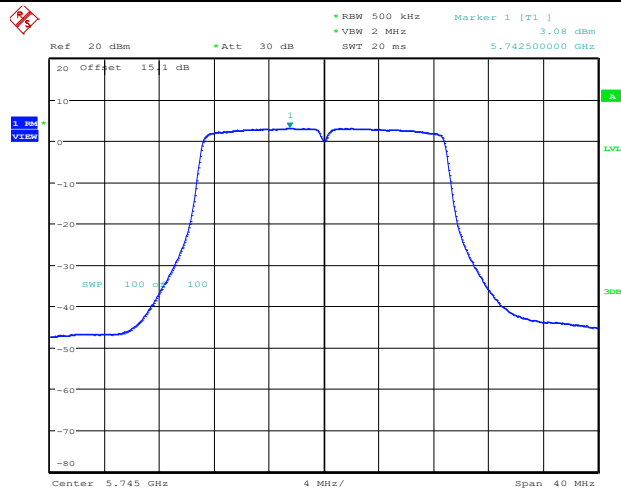
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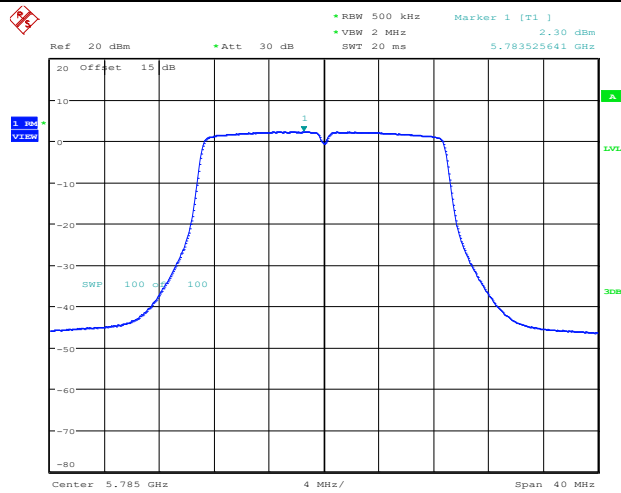
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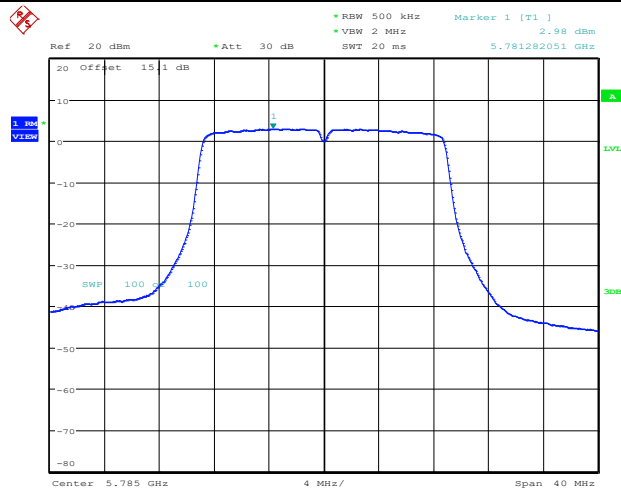
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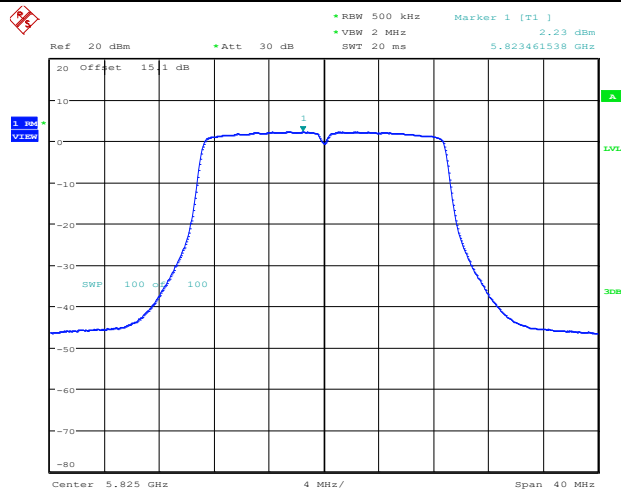
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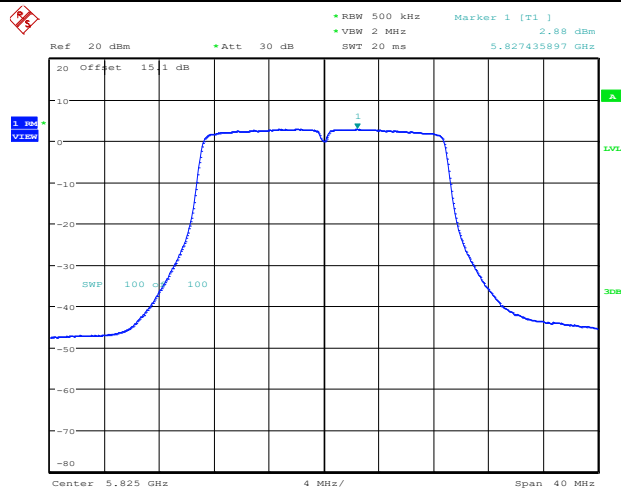
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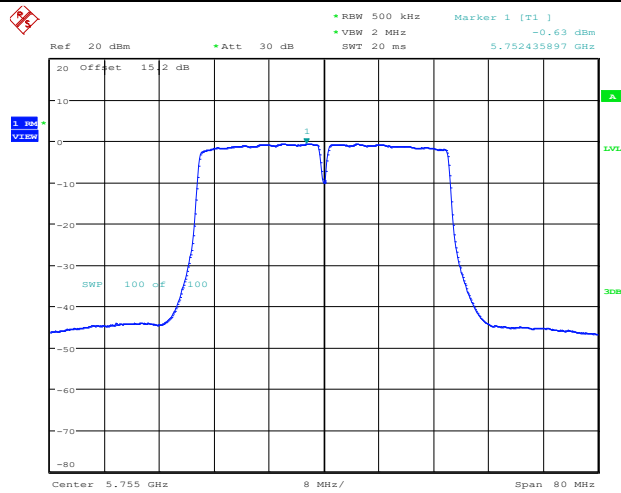
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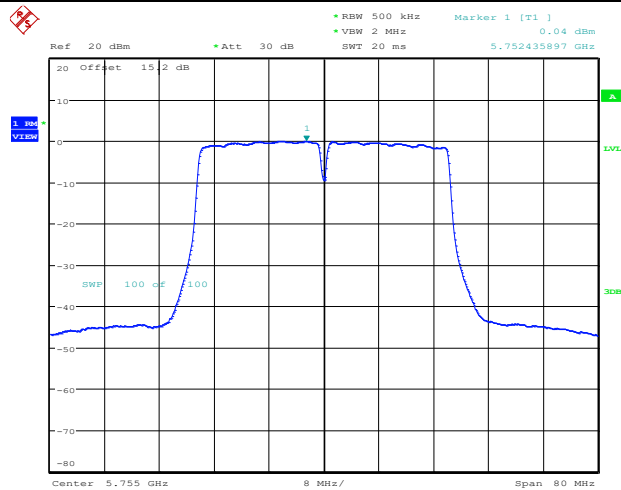
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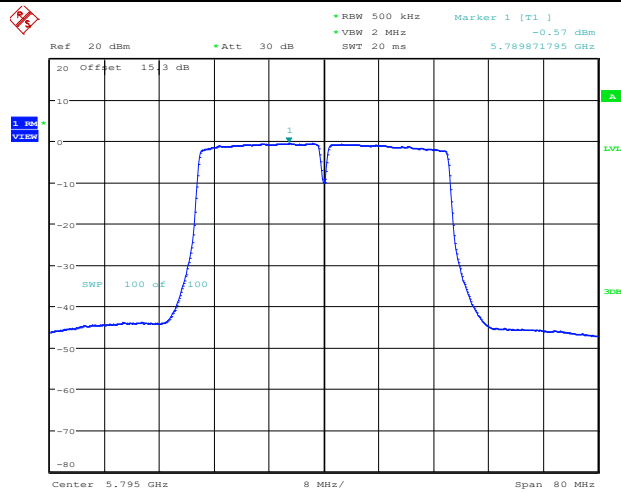
Date: 13.OCT.2023 09:02:25

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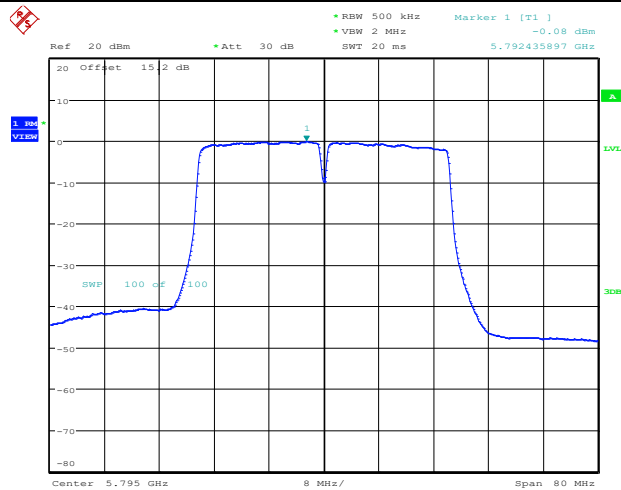
Date: 13.OCT.2023 09:02:45

11N40MIMO_Ant1_5795



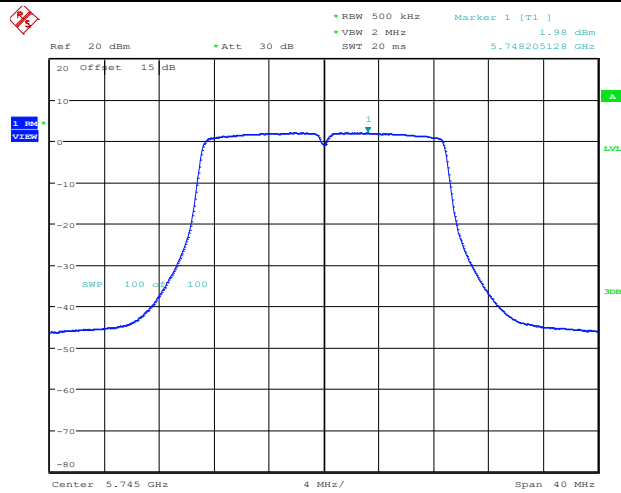
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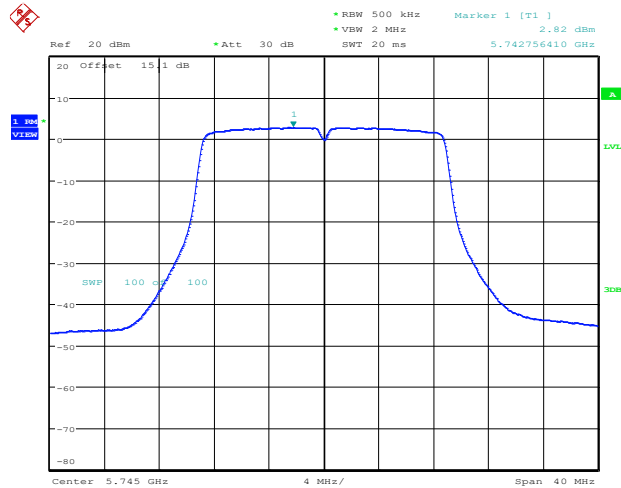
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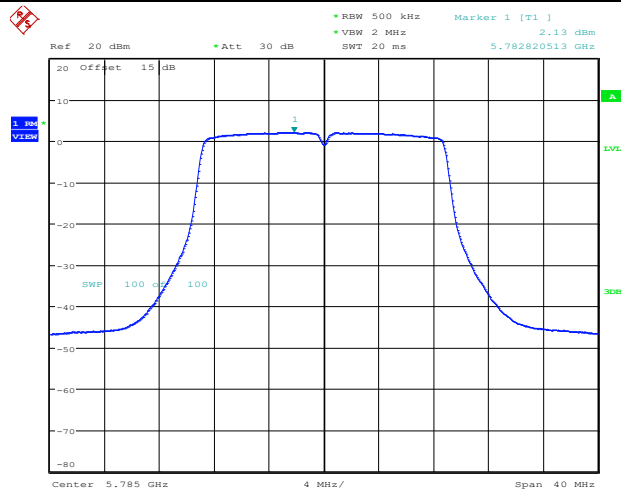
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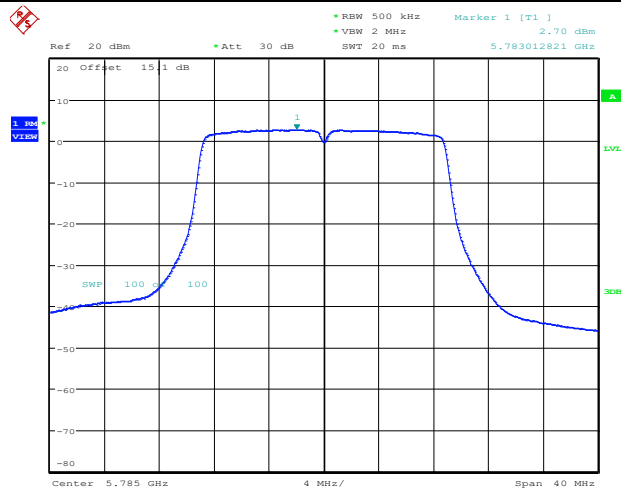
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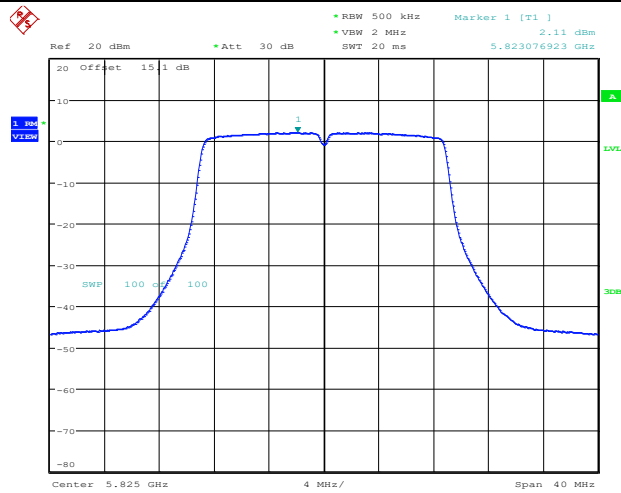
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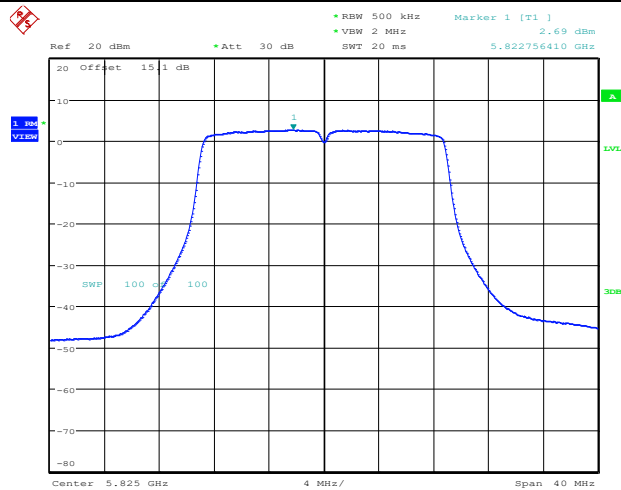
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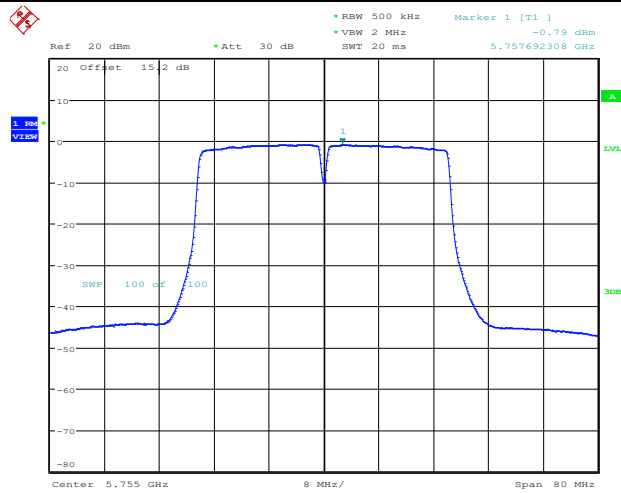
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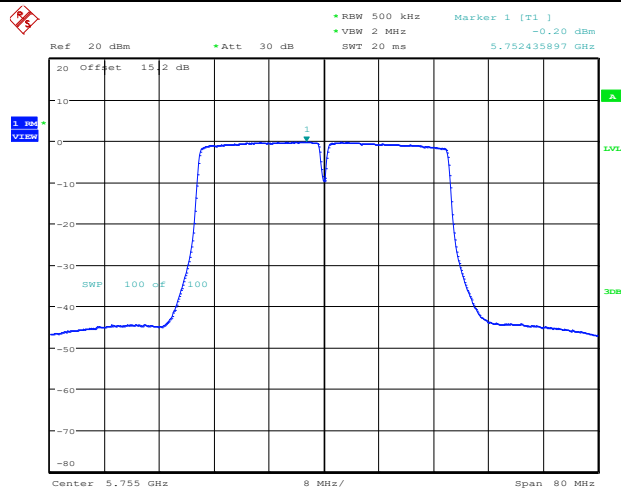
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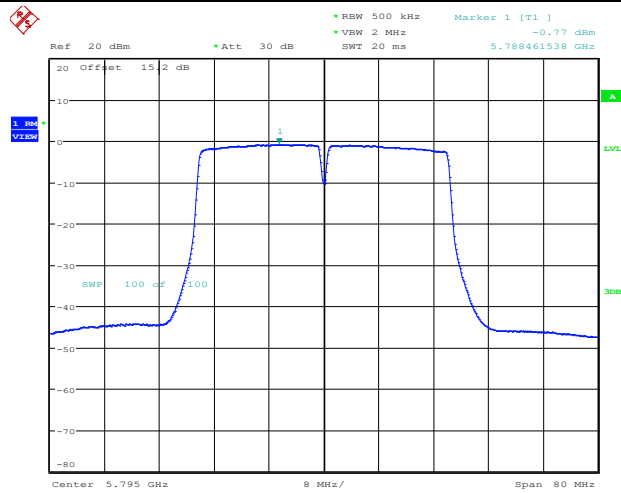
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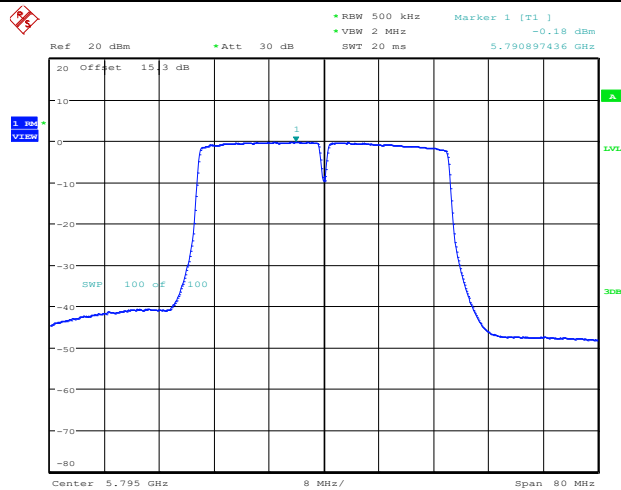
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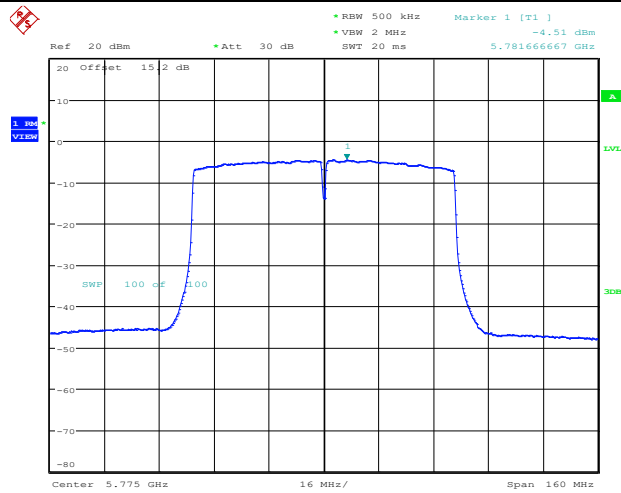
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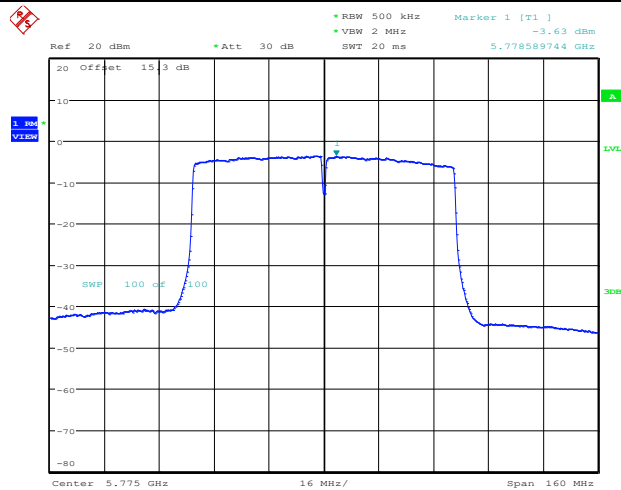
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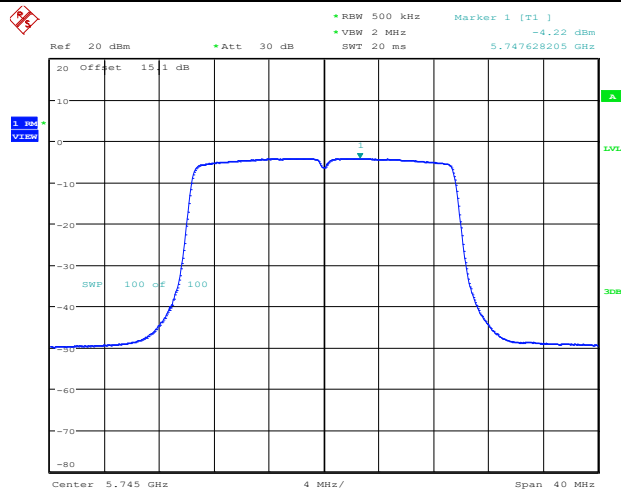
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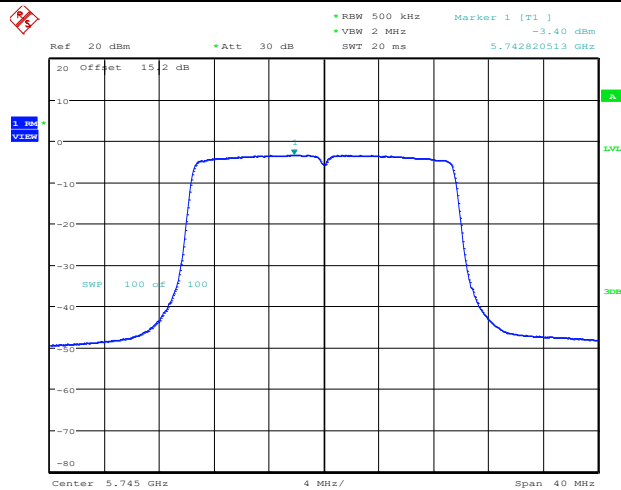
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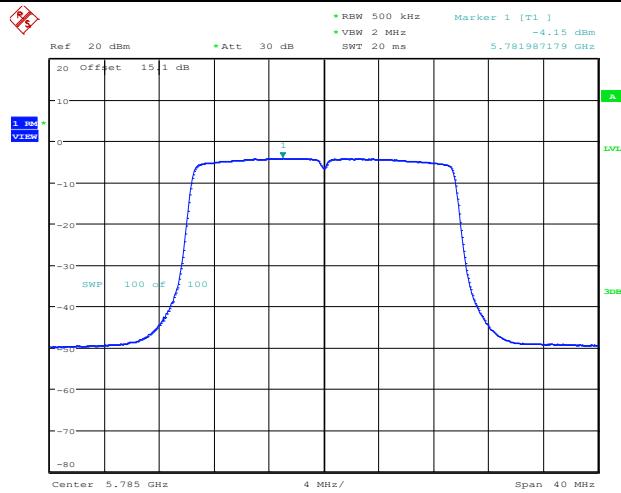
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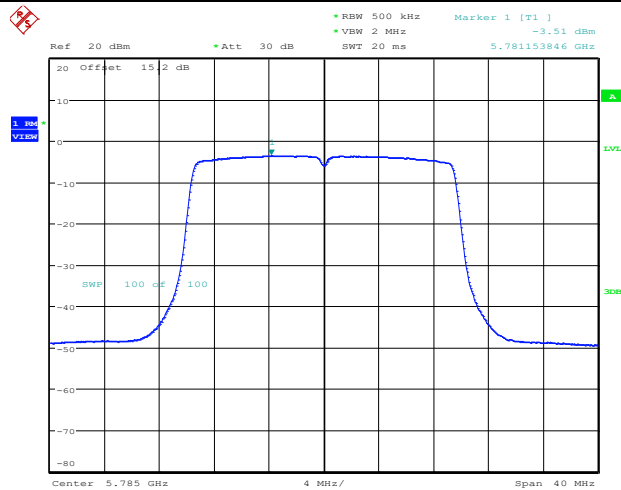
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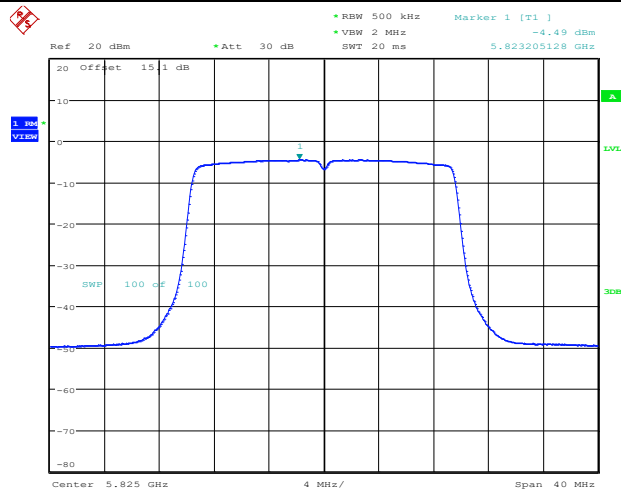
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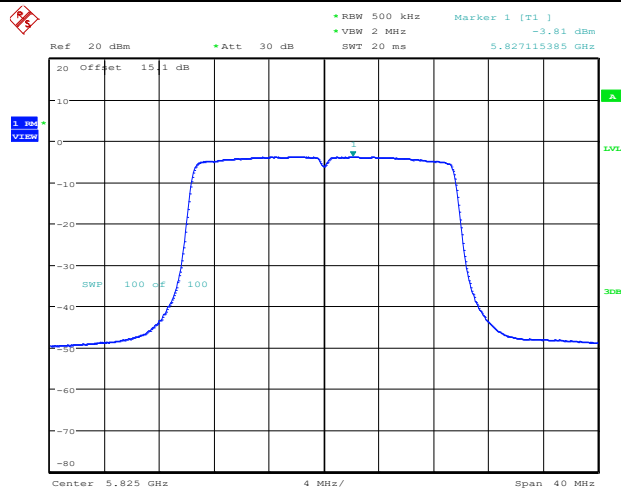
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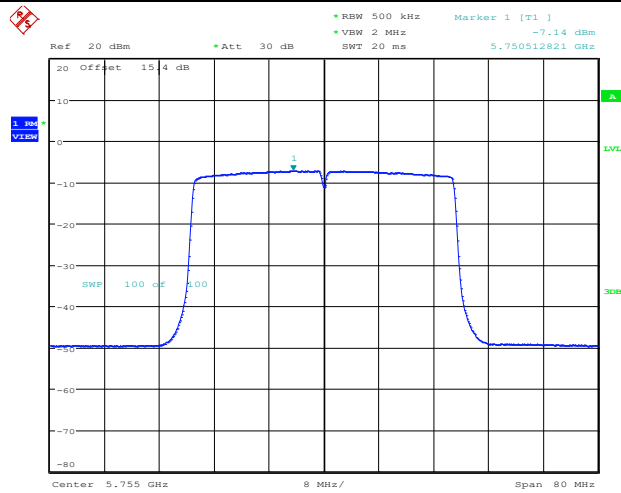
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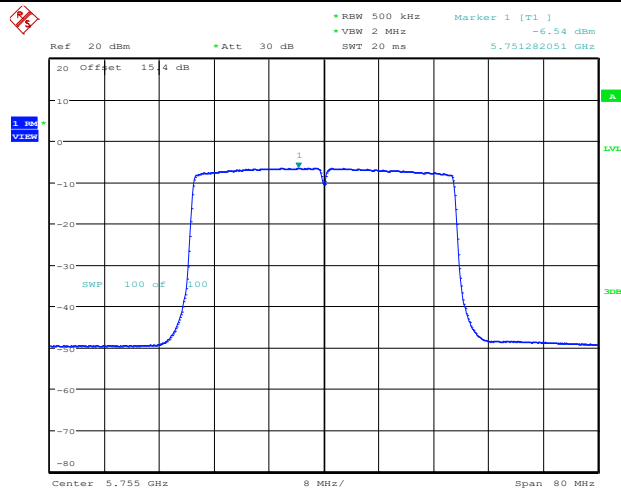
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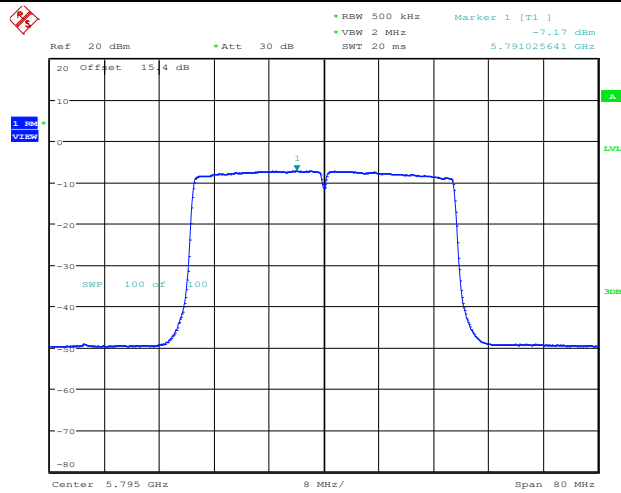
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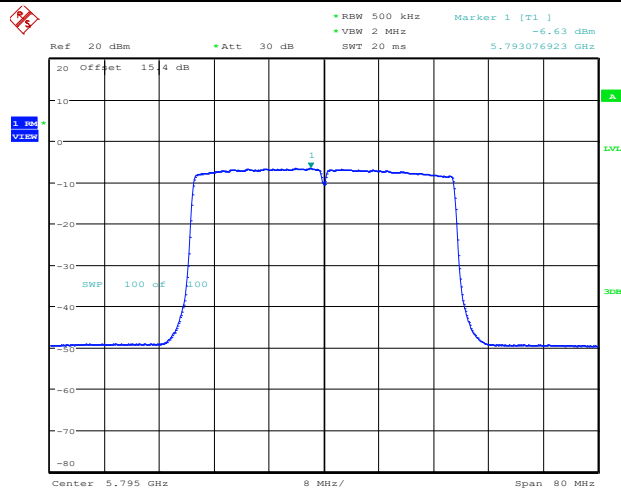
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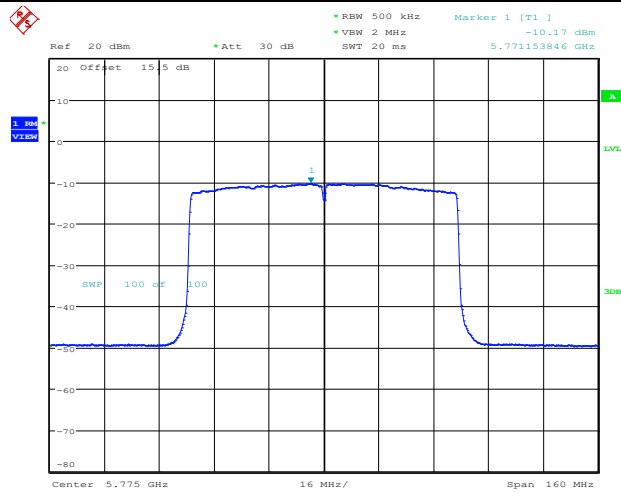
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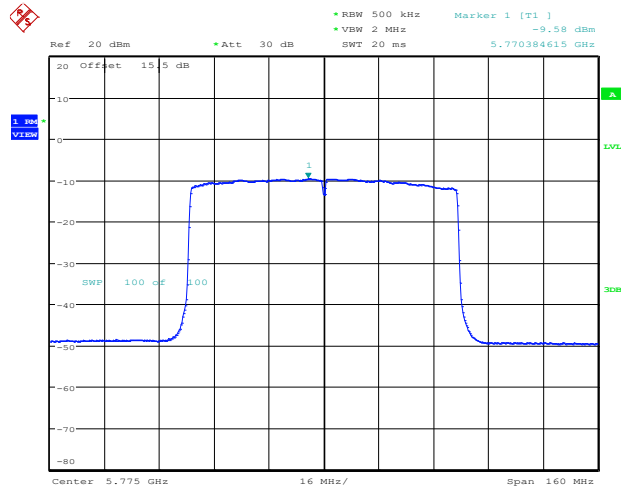
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11AX80MIMO_Ant1_5775



Date: 19.OCT.2023 16:45:51

11AX80MIMO_Ant2_5775



Date: 19.OCT.2023 16:47:57

6.5. 6dB & 26dB Occupied Bandwidth

Specifications:	FCC 47 Part 15.407(e)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature: 20°C Relative Humidity: 40% Air pressure: 90kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit(KHz)
FCC 47 Part 15.407(e)	≥ 500

Measurement Uncertainty:

Measurement Uncertainty	28KHz
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Test Procedure:

The measurement is made according to KDB 789033 C

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 kHz for the band 5.725-5.85GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.

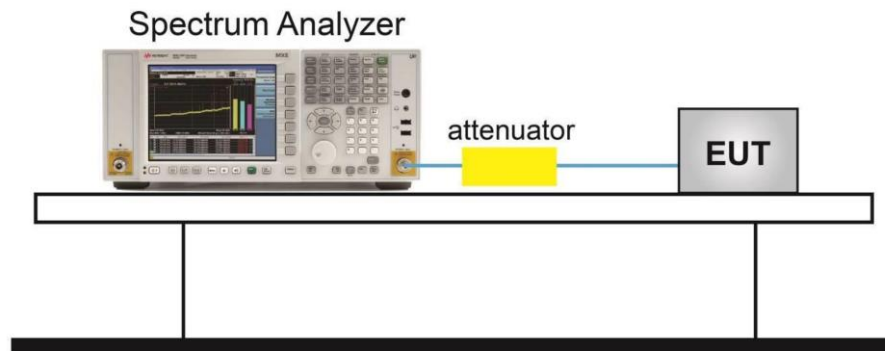
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB and 26dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Chongqing Academy of Information and Communication Technology

Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336
Tel: 0086-23-88069965 FAX: 0086-23-88608777

Test Setup:



6dB Occupied Bandwidth Measurement Results:

TestMode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.36	5736.80	5753.16	0.5	PASS
	Ant2	5745	16.28	5736.84	5753.12	0.5	PASS
	Ant1	5785	16.28	5776.84	5793.12	0.5	PASS
	Ant2	5785	16.32	5776.84	5793.16	0.5	PASS
	Ant1	5825	16.28	5816.84	5833.12	0.5	PASS
	Ant2	5825	16.32	5816.80	5833.12	0.5	PASS
11N20SISO	Ant1	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant2	5745	17.32	5736.20	5753.52	0.5	PASS
	Ant1	5785	17.56	5776.20	5793.76	0.5	PASS
	Ant2	5785	17.56	5776.20	5793.76	0.5	PASS
	Ant1	5825	17.56	5816.20	5833.76	0.5	PASS
	Ant2	5825	17.20	5816.20	5833.40	0.5	PASS
11N40SISO	Ant1	5755	35.92	5736.84	5772.76	0.5	PASS
	Ant2	5755	34.32	5736.84	5771.16	0.5	PASS
	Ant1	5795	35.92	5776.84	5812.76	0.5	PASS
	Ant2	5795	35.68	5777.48	5813.16	0.5	PASS
11AC20SISO	Ant1	5745	17.20	5736.20	5753.40	0.5	PASS
	Ant2	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant1	5785	17.32	5776.20	5793.52	0.5	PASS
	Ant2	5785	17.28	5776.48	5793.76	0.5	PASS
	Ant1	5825	17.56	5816.20	5833.76	0.5	PASS
	Ant2	5825	17.28	5816.20	5833.48	0.5	PASS
11AC40SISO	Ant1	5755	35.84	5736.84	5772.68	0.5	PASS
	Ant2	5755	35.60	5736.84	5772.44	0.5	PASS
	Ant1	5795	35.92	5776.84	5812.76	0.5	PASS
	Ant2	5795	36.08	5777.08	5813.16	0.5	PASS
11AC80SISO	Ant1	5775	74.72	5737.88	5812.60	0.5	PASS
	Ant2	5775	74.08	5737.24	5811.32	0.5	PASS
11AX20SISO	Ant1	5745	18.96	5735.48	5754.44	0.5	PASS
	Ant2	5745	18.76	5735.48	5754.24	0.5	PASS

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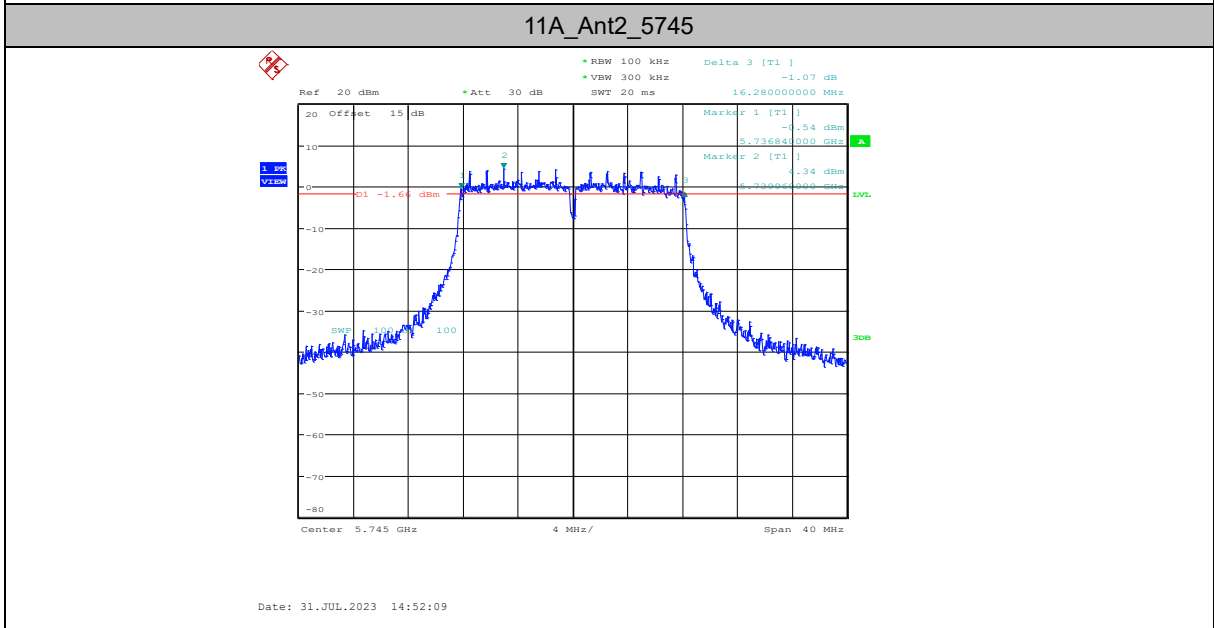
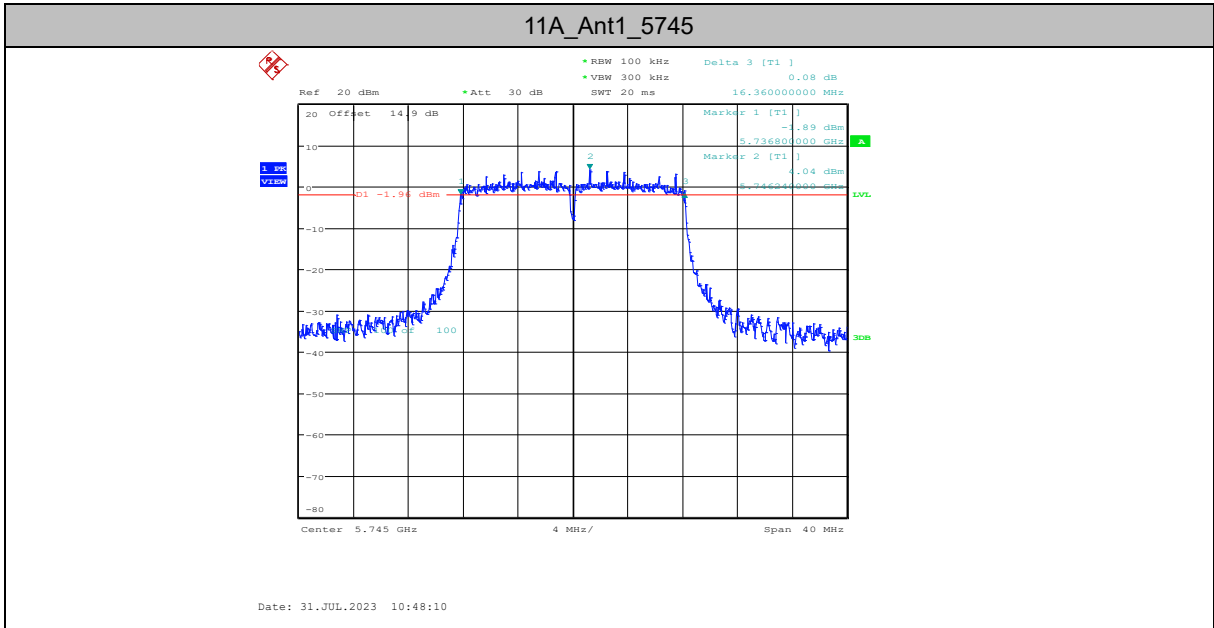
**Report No.: I23W00036-WIFI 5.8G RF-FCC**

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	Ant1	5825	18.72	5815.64	5834.36	0.5	PASS
	Ant2	5825	18.60	5815.64	5834.24	0.5	PASS
11AX40SISO	Ant1	5755	37.92	5736.04	5773.96	0.5	PASS
	Ant2	5755	36.32	5736.12	5772.44	0.5	PASS
	Ant1	5795	37.60	5776.20	5813.80	0.5	PASS
	Ant2	5795	37.84	5776.04	5813.88	0.5	PASS
11AX80SISO	Ant1	5775	76.48	5736.44	5812.92	0.5	PASS
	Ant2	5775	77.28	5736.28	5813.56	0.5	PASS
11A-CDD	Ant1	5745	16.32	5736.84	5753.16	0.5	PASS
	Ant2	5745	16.32	5736.80	5753.12	0.5	PASS
	Ant1	5785	16.28	5776.84	5793.12	0.5	PASS
	Ant2	5785	16.28	5776.84	5793.12	0.5	PASS
	Ant1	5825	16.28	5816.84	5833.12	0.5	PASS
	Ant2	5825	16.32	5816.80	5833.12	0.5	PASS
11N20MIMO	Ant1	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant2	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant1	5785	17.56	5776.20	5793.76	0.5	PASS
	Ant2	5785	17.56	5776.20	5793.76	0.5	PASS
	Ant1	5825	17.28	5816.24	5833.52	0.5	PASS
	Ant2	5825	17.60	5816.16	5833.76	0.5	PASS
11N40MIMO	Ant1	5755	35.84	5737.08	5772.92	0.5	PASS
	Ant2	5755	36.32	5736.84	5773.16	0.5	PASS
	Ant1	5795	36.32	5776.84	5813.16	0.5	PASS
	Ant2	5795	36.32	5776.84	5813.16	0.5	PASS
11AC20MIMO	Ant1	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant2	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant1	5785	17.56	5776.20	5793.76	0.5	PASS
	Ant2	5785	17.32	5776.44	5793.76	0.5	PASS
	Ant1	5825	17.00	5816.48	5833.48	0.5	PASS
	Ant2	5825	17.52	5816.20	5833.72	0.5	PASS
11AC40MIMO	Ant1	5755	35.92	5736.84	5772.76	0.5	PASS
	Ant2	5755	35.68	5736.84	5772.52	0.5	PASS
	Ant1	5795	36.08	5776.84	5812.92	0.5	PASS
	Ant2	5795	35.68	5777.48	5813.16	0.5	PASS
11AC80MIMO	Ant1	5775	75.52	5737.24	5812.76	0.5	PASS
	Ant2	5775	75.20	5736.76	5811.96	0.5	PASS
11AX20MIMO	Ant1	5745	18.96	5735.52	5754.48	0.5	PASS
	Ant2	5745	18.64	5735.52	5754.16	0.5	PASS
	Ant1	5785	18.80	5775.56	5794.36	0.5	PASS
	Ant2	5785	18.56	5775.84	5794.40	0.5	PASS
	Ant1	5825	18.84	5815.60	5834.44	0.5	PASS
	Ant2	5825	18.68	5815.56	5834.24	0.5	PASS
11AX40MIMO	Ant1	5755	37.68	5736.20	5773.88	0.5	PASS
	Ant2	5755	37.68	5735.96	5773.64	0.5	PASS
	Ant1	5795	37.92	5776.04	5813.96	0.5	PASS
	Ant2	5795	36.32	5777.48	5813.80	0.5	PASS
11AX80MIMO	Ant1	5775	76.64	5736.28	5812.92	0.5	PASS
	Ant2	5775	77.76	5735.96	5813.72	0.5	PASS

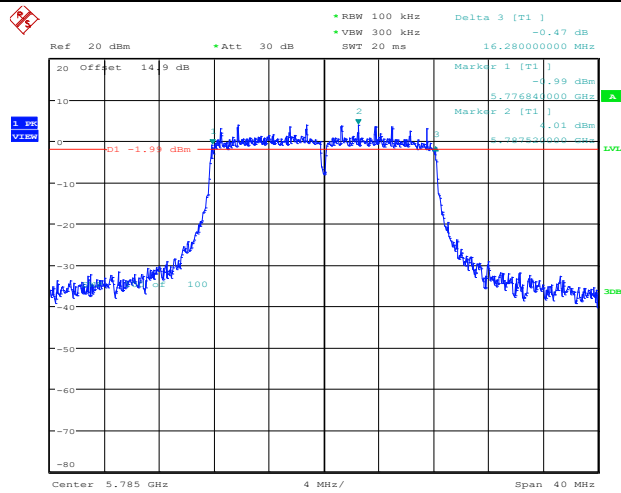
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Test Graphs

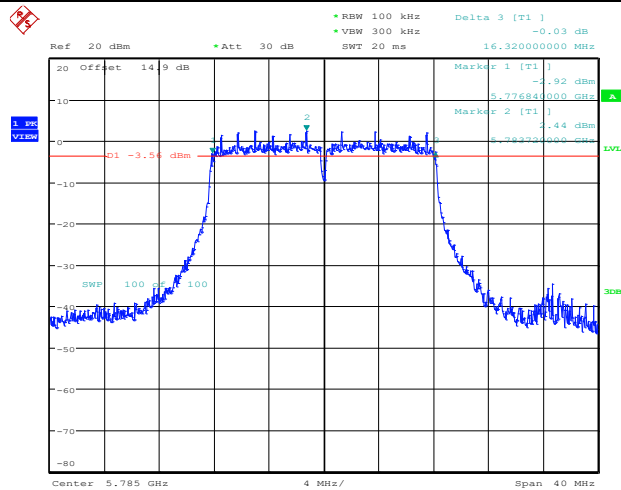


11A_Ant1_5785



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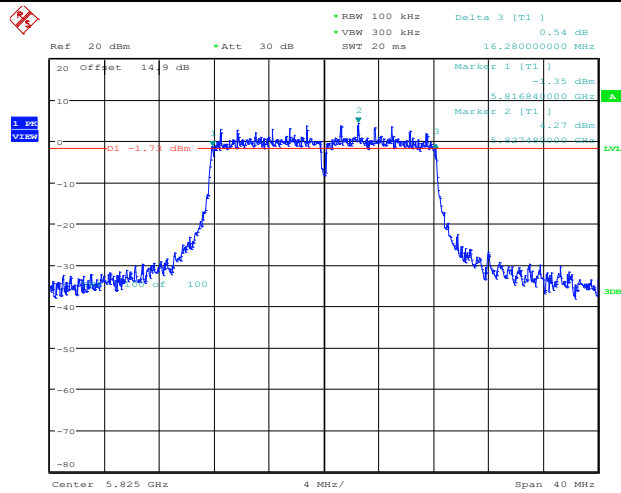
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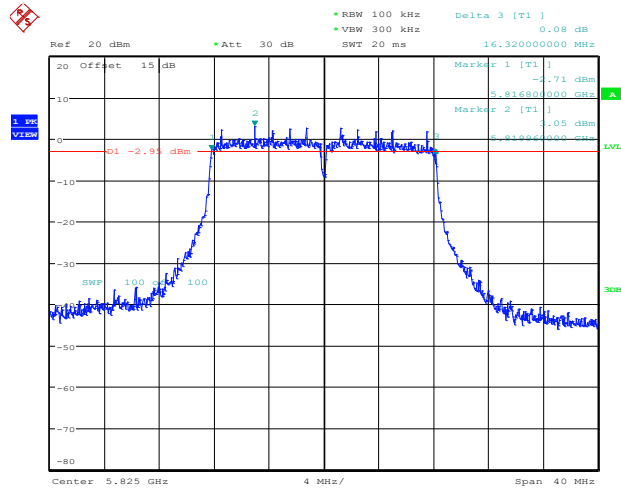
Report No.: I23W00036-WIFI 5.8G RF-FCC

11A_Ant1_5825



Date: 31.JUL.2023 10:51:31

11A_Ant2_5825

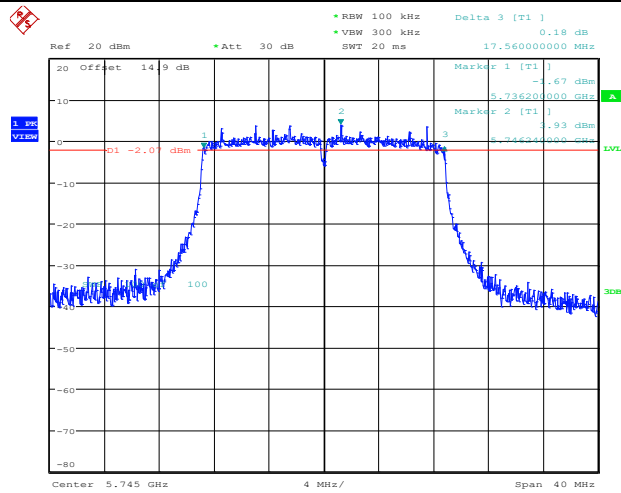


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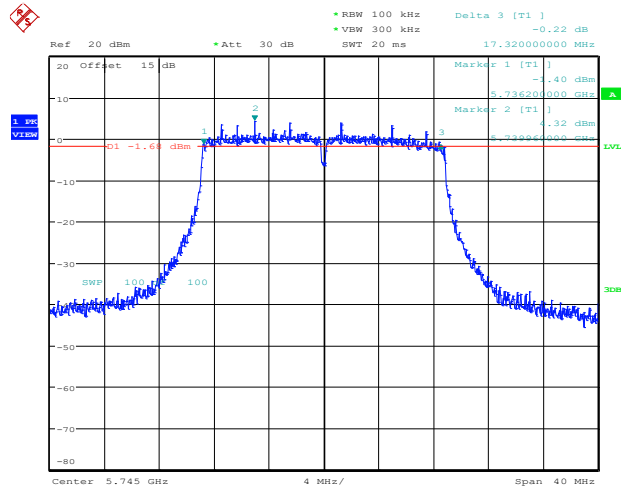
Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336
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11N20SISO_Ant1_5745



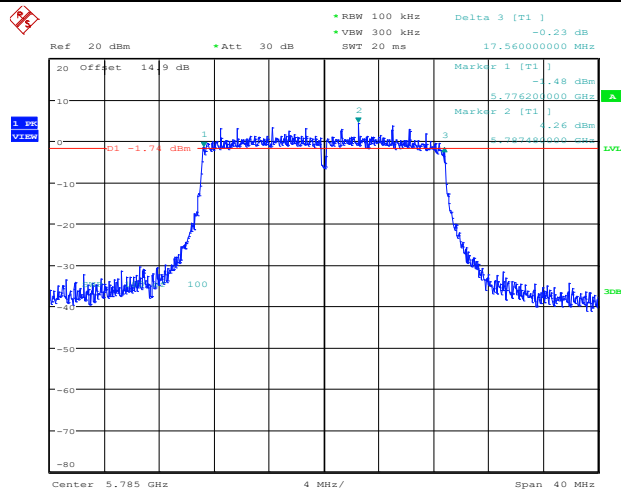
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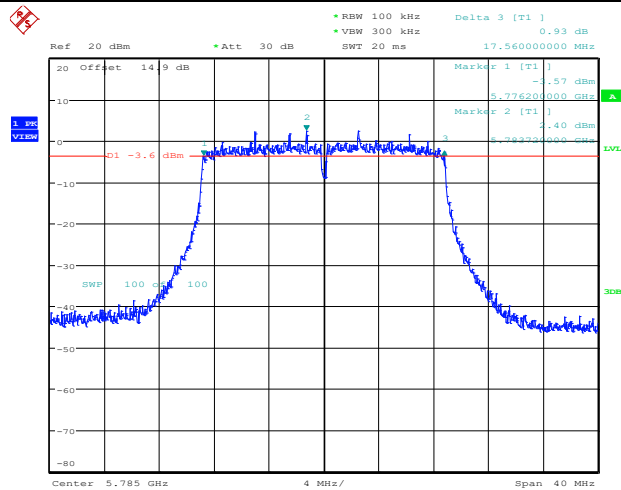
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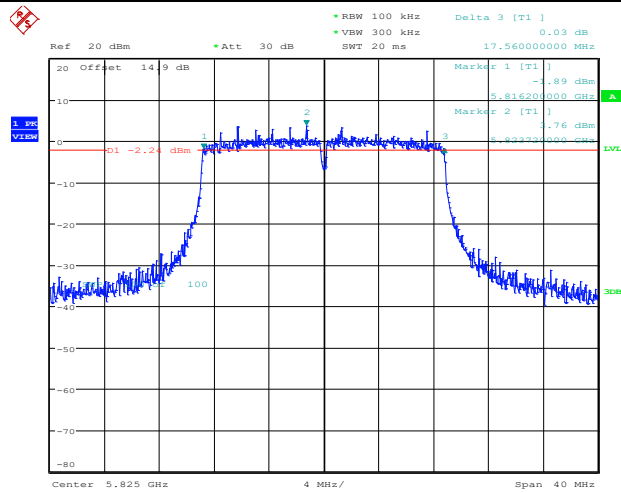
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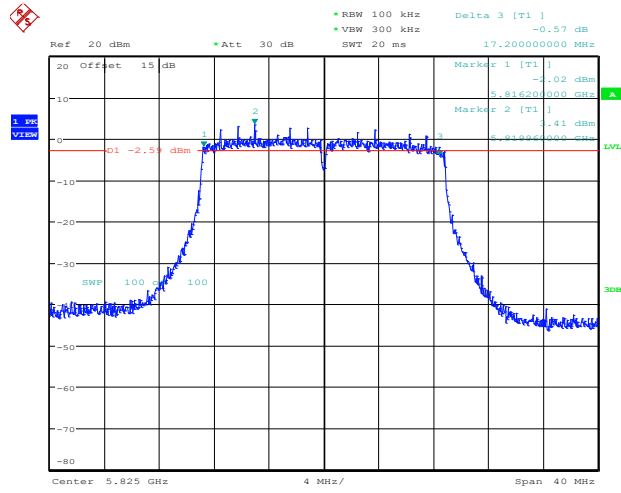
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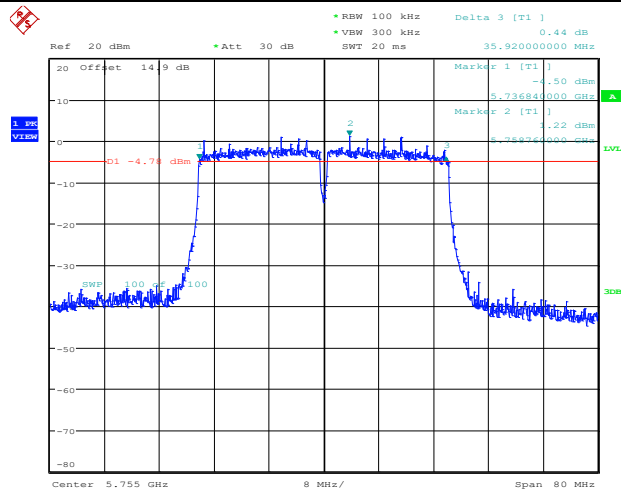
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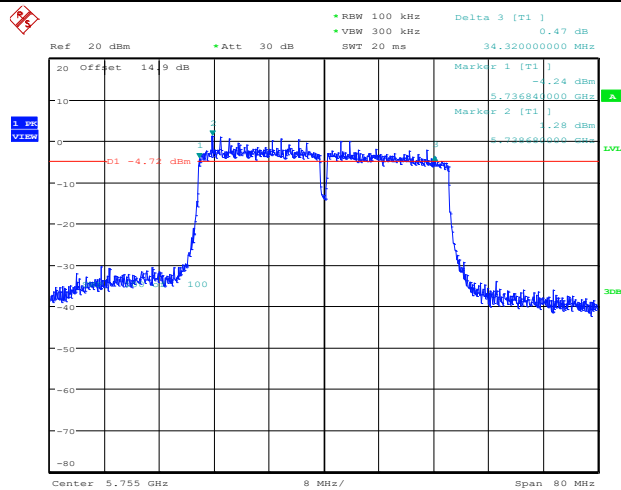
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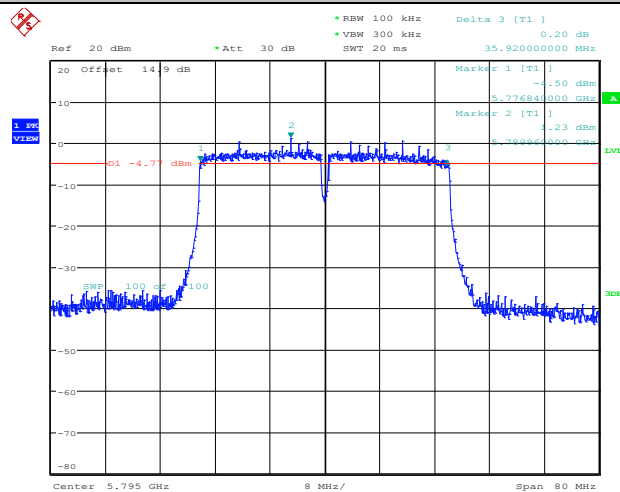
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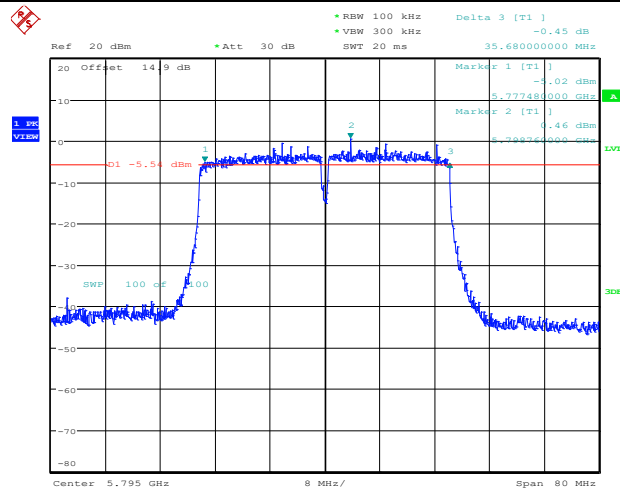
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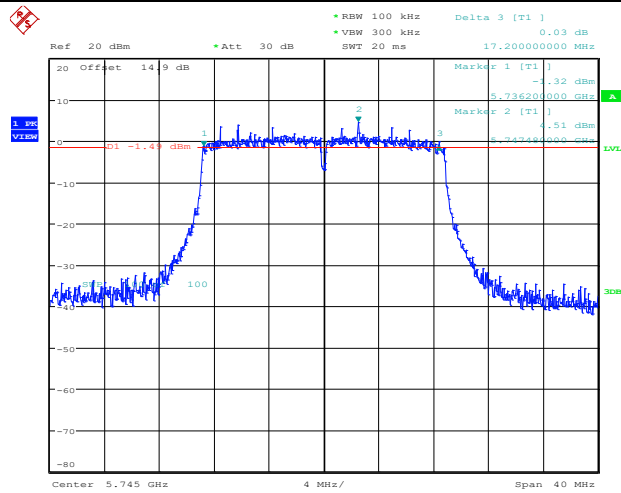
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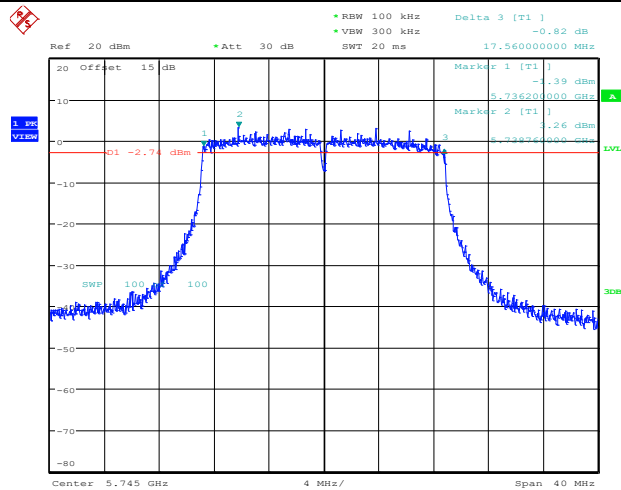
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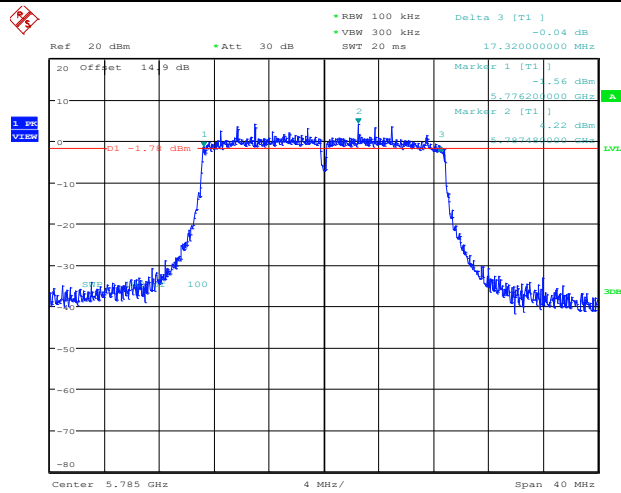
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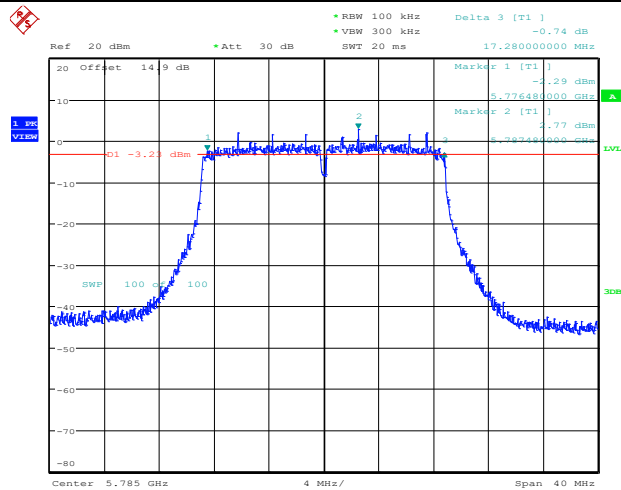
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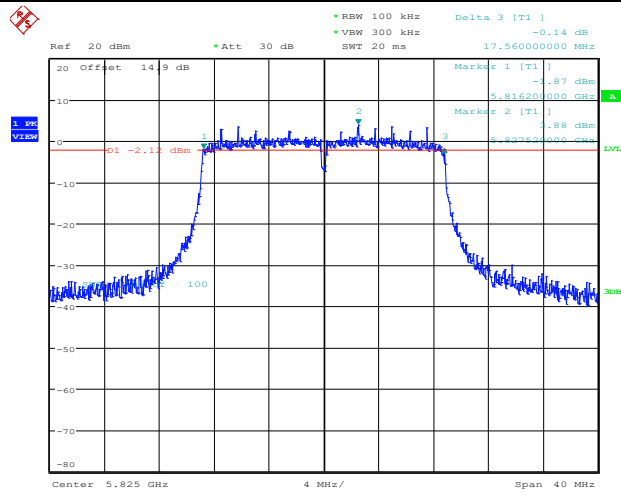
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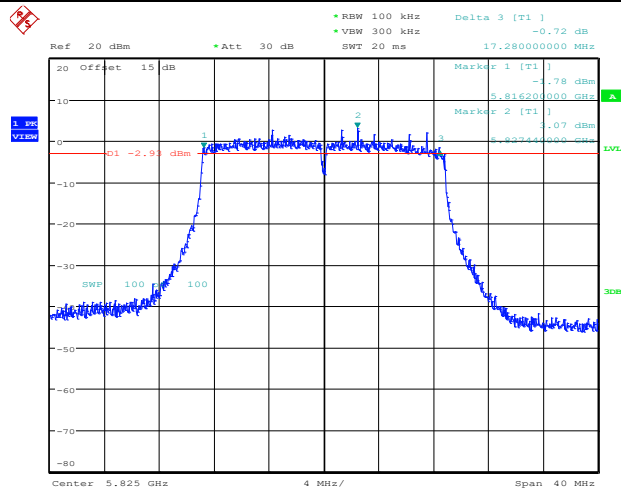
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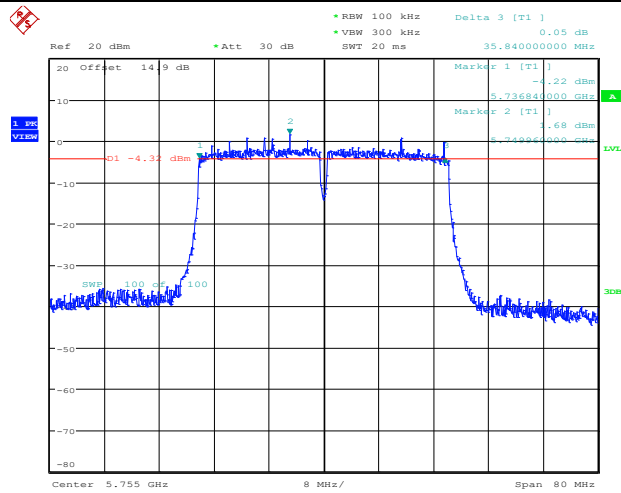
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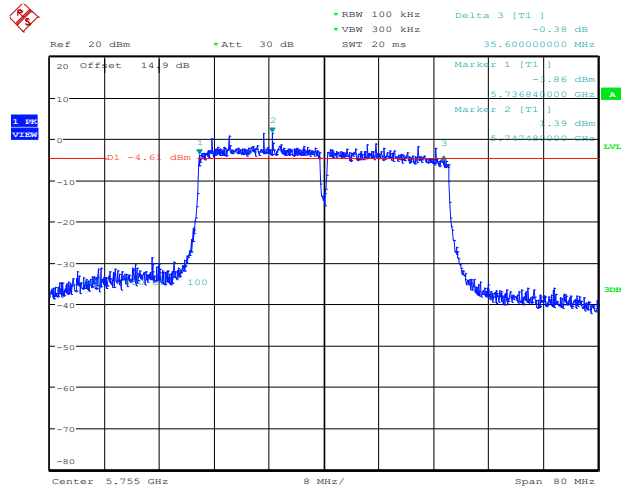
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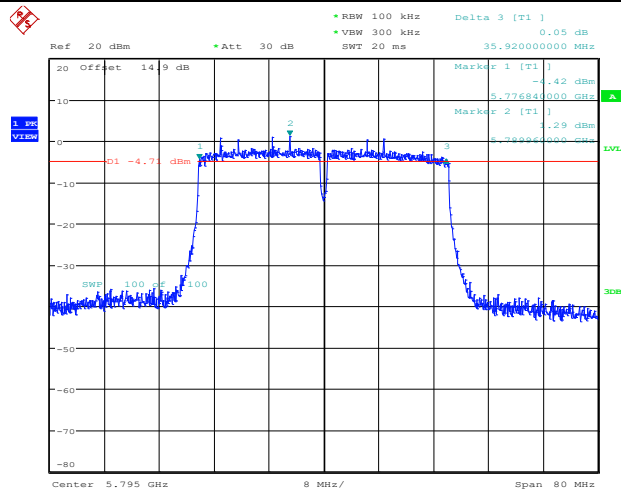
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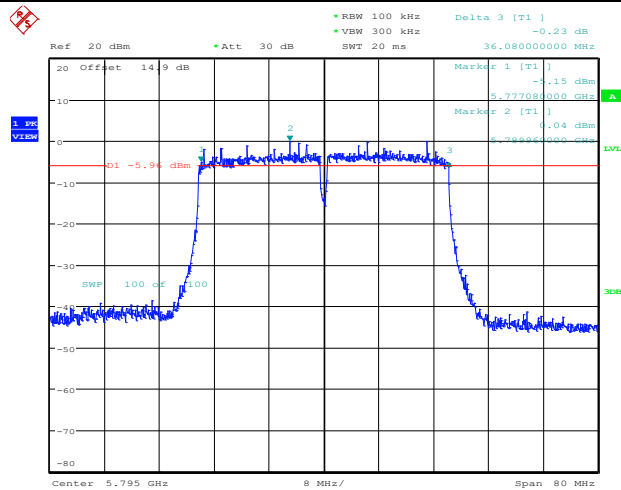
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Date: 31.JUL.2023 11:14:06

11AC40SISO_Ant2_5795



Date: 31.JUL.2023 16:30:01