Report No.: DDT-R22112913-2E01

Issued Date: Dec. 29, 2022

FCC CERTIFICATION TEST REPORT

FOR

Applicant	**:**	Ruijie Networks Co., Ltd.
Address	**:**	Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District , Fuzhou, Fujian, China
Equipment under Test	**:**	Wireless Bridge
Model No.	**:**	RG-EST310 V2
Trade Mark	**:**	Ruijie, Reyee, Ruijie | Reyee, Reyee by Ruijie, Ruijie | 睿Reyee
FCC ID	**:**	2AX5J-EST310V2
Manufacturer	**:**	Ruijie Networks Co., Ltd.
Address	**:**	Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District , Fuzhou, Fujian, China

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

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REPORT

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Test Report Declare

Applicant	:	Ruijie Networks Co., Ltd.
Address	:	Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District , Fuzhou, Fujian, China
Equipment under Test	:	Wireless Bridge
Model No.	:	RG-EST310 V2
Trade Mark	:	Ruijie, Reyee, Ruijie | Reyee, Reyee by Ruijie, Ruijie | Reyee
Manufacturer	:	Ruijie Networks Co., Ltd.
Address	:	Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road, Cangshan District , Fuzhou, Fujian, China

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E

Test procedure used: ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01

We Declare:

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

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

Report No:	DDT-R22112913-2E01		
Date of Receipt:	Nov. 30, 2022	**Date of Test:**	Nov. 30, 2022 ~ Dec. 29, 2022

Prepared By:

Ella Gong

Ella Gong/Engineer

Approved By:

DONGGUAN DONGDIAN TESTING SERVICE CO., LTD. APPROVED

Damon Hu/EMC Manager

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

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Dec. 29, 2022	

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)	PASS
Maximum Conducted Output Power	FCC 15.407 (a)	PASS
Power Spectral Density	FCC 15.407 (a)	PASS
Frequency Stability Measurement	FCC 15.407 (g)	PASS
Emissions in restricted frequency bands	FCC 15.407 (a) FCC 15.209 FCC 15.205	PASS
Band Edge Compliance	FCC 15.407 (a) FCC 15.209 FCC 15.205	PASS
Power Line Conducted Emission	FCC 15.207	PASS
Antenna requirement	FCC 15.203	PASS

2. General Test Information

2.1. Description of EUT

EUT* Name	:	Wireless Bridge
Model Number	:	RG-EST310 V2
EUT function description	:	Please reference user manual of this device
Power supply	:	24 VDC non-standard PoE power supply or 12 VDC power supply from DC port
Radio Technology	:	IEEE 802.11a/n/ac
Operation frequency	:	IEEE 802.11a: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11n HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11n HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5795MHz IEEE 802.11ac VHT20: 5180MHz-5240MHz, 5260MHz-5320MHz,5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11ac VHT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5795MHz IEEE 802.11ac VHT80: 5210MHz, 5290MHz, 5530MHz,5610MHz, 5775MHz
Modulation	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Transmitter rate	:	IEEE 802.11a: up to 54 Mbps IEEE 802.11n HT20: up to 144.4 Mbps IEEE 802.11n HT40: up to 300 Mbps IEEE 802.11ac VHT20: up to 173.4 Mbps IEEE 802.11ac VHT40: up to 400 Mbps IEEE 802.11ac VHT80: up to 866.6 Mbps
Antenna Type	:	Antenna 1: Directional antenna, Maximum PK gain: 11.86 dBi Antenna 2: Directional antenna, Maximum PK gain: 11.86 dBi
Sample Number	:	S22112913-02 for conductive, S22112913-03 for radiation

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

Antenna information		
Ant.	Antenna Type	Gain (dBi)
1	Directional antenna	11.86
2	Directional antenna	11.86

Note:
This EUT supports CDD, and antenna gains are equal,
so Directional gain = GANT+ Array Gain, where Array Gain is as follows:

For power measurements,
Array Gain = 0 dB ($N_{ANT} \leq 4$), so the Directional gain=11.86.

For power spectral density measurements,
$N_{ANT} = 2$, $N_{SS} = 1$. So Directional gain = G_{ANT} + Array Gain =10 log (N_{ANT}/ N_{SS}) dB
=11.86+10log(2/1)dBi=14.87.

1) For UNII-1: This EUT belong fixed point-to-point U-NII devices as well as the directional antenna gain less than 23dBi, so both the maximum conducted output power and the maximum power spectral density limit don't need to reduce.
2) For UNII-2A and UNII-2C: The directional antenna gain greater than 6 dBi, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi, so the power limit [250 mW (24dBm) or (11 dBm + 10 log B)]-(11.86-6)dB=18.14 dBm or 5.14 dBm + 10 log B, and the power spectral density limit 11 dBm/MHz -(14.87-6)dB=2.13. dBm/MHz
3) For UNII-3: fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power, so the power spectral density limit 30 dBm/500kHz-(14.87-6)=21.13 dBm/500kHz.

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	/	/
112	5560	126	5630	/	/
116	5580	134	5670	/	/
120	5600	/	/	/	/
124	5620	/	/	/	/
128	5640	/	/	/	/
132	5660	/	/	/	/
136	5680	/	/	/	/
140	5700	/	/	/	/
UNII-3					
149	5745	151	5755	155	5725
153	5765	159	5795	/	/
157	5785	/	/	/	/
161	5805	/	/	/	/
165	5825	/	/	/	/

2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Other
AC cable	N/A	N/A	N/A
POE Power Supply	RISUNIC Technology (ShenZhen) Co., Ltd.	RP028-2400500	Input: 100-240~50/60Hz 0.6A Max Output: DC 24V/0.5A 12.0W

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	EMC Compliance	SN
N/A	N/A	N/A	N/A	N/A

2.4. Block diagram of EUT configuration for test

Test software: QATool_Dbg.exe

The test software 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	26	6	Low: CH36	5180
	26	6	Middle: CH40	5200
	26	6	High: CH48	5240
	0E	6	Low: CH52	5260
	0E	6	Middle: CH56	5280
	0E	6	High: CH64	5320
	0C	6	Low: CH100	5500
	0C	6	Middle: CH116	5580
	0C	6	High: CH140	5700
	26	6	Low: CH149	5745
	26	6	Middle: CH157	5785
	26	6	High: CH165	5825
IEEE 802.11n HT20	26	MCS 8	Low: CH36	5180
	26	MCS 8	Middle: CH40	5200
	26	MCS 8	High: CH48	5240
	0E	MCS 8	Low: CH52	5260
	0E	MCS 8	Middle: CH56	5280
	0E	MCS 8	High: CH64	5320
	0C	MCS 8	Low: CH100	5500
	0C	MCS 8	Middle: CH116	5580
	0C	MCS 8	High: CH140	5700
	26	MCS 8	Low: CH149	5745
	26	MCS 8	Middle: CH157	5785
	26	MCS 8	High: CH165	5825
IEEE 802.11n HT40	1C	MCS 8	Low: CH38	5190
	1C	MCS 8	Middle: CH46	5230
	14	MCS 8	High: CH54	5270
	14	MCS 8	Low: CH62	5310
	14	MCS 8	Middle: CH102	5510
	14	MCS 8	High: CH110	5550
	14	MCS 8	Low: CH134	5670
	26	MCS 8	Middle: CH151	5755
	26	MCS 8	High: CH159	5795
IEEE 802.11ac	26	MCS 0	Low: CH36	5180
	26	MCS 0	Middle: CH40	5200

VHT20	26	MCS 0	High: CH48	5240
	0E	MCS 0	Low: CH52	5260
	0E	MCS 0	Middle: CH56	5280
	0E	MCS 0	High: CH64	5320
	0C	MCS 0	Low: CH100	5500
	0C	MCS 0	Middle: CH116	5580
	0C	MCS 0	High: CH140	5700
	26	MCS 0	Low: CH149	5745
	26	MCS 0	Middle: CH157	5785
	26	MCS 0	High: CH165	5825
IEEE 802.11ac VHT40	1C	MCS 0	Low: CH38	5190
	1C	MCS 0	Middle: CH46	5230
	14	MCS 0	High: CH54	5270
	14	MCS 0	Low: CH62	5310
	14	MCS 0	Middle: CH102	5510
	14	MCS 0	High: CH110	5550
	14	MCS 0	Low: CH134	5670
	26	MCS 0	Middle: CH151	5755
	26	MCS 0	High: CH159	5795
IEEE 802.11ac VHT80	18	MCS 0	CH42	5210
	16	MCS 0	CH58	5290
	16	MCS 0	CH106	5530
	16	MCS 0	CH122	5610
	26	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.				

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

Dongguan Dongdian Testing Service Co., Ltd.

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

Tel.: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com

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

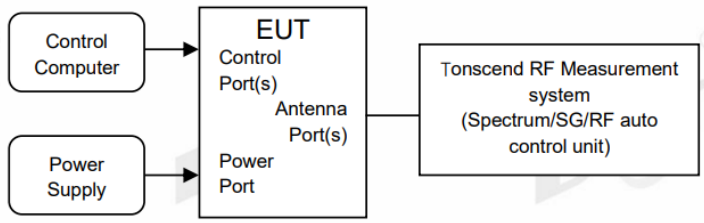
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB (10 MHz ≤ f < 3.6 GHz);
	1.38 dB (3.6 GHz ≤ f < 8 GHz)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB (10 MHz ≤ f < 3.6GHz);
	1.40 dB (3.6 GHz ≤ f < 8 GHz)
	1.66 dB (8 GHz≤ f < 26.5 GHz)
Uncertainty for radio frequency (RBW<20kHz)	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 (30MHz-1GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1GHz-40GHz)	4.10 dB (1-6 GHz)
	4.40 dB (6 GHz-18 GHz)
	3.54 dB (18 GHz-26 GHz)
	4.30 dB (26 GHz-40 GHz)
Uncertainty for Power line conduction emission test	3.32 dB (150 kHz-30 MHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☒RF Connected Test (Tonscend RF Measurement System 3#)					
Signal &Spectrum analyzer	R&S	FSV40	101407	Jul. 21, 2022	1 Year
Wideband Radio Communication tester	R&S	CMW500	117491	May 18, 2022	1 Year
Vector Signal Generator	Agilent	N5182A	MY19060405	May 18, 2022	1 Year
Vector Signal Generator	Agilent	N5182A	MY48180912	May 18, 2022	1 Year
RF Control Unit	Tonscend	JS0806-2	20C8060230	May 18, 2022	1 Year
Temp&Humi Programmable	ZHIXIANG	ZXGDJS-150L	ZX170110-A	May 26, 2022	1 Year
Test Software	JS Tonscend	JS1120-3	Ver.3.2.22	N/A	N/A
☒Radiation 3#chamber					
EMI Test Receiver	R&S	ESU26	100472	May 19, 2022	1 Year
Spectrum analyzer	Agilent	E4447A	MY50180031	May 17, 2022	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Sep. 29, 2022	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	01429	Jul. 22, 2022	1 Year
Double Ridged Horn Antenna	Schwarzbeck	BBHA9120 D	02468	Sep. 29, 2022	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	May 06, 2022	1 Year
Pre-amplifier	COM-POWER	PAM-118A	18040084	Aug. 17, 2022	1 Year
Pre-amplifier	COM-POWER	PAM-840A	461369	Apr. 11, 2022	1 Year
RE Cable	N/A	W23.02 CP1-X2 + W23.09 AP1-X8+ JCT26S-NJ-NJ-1.5M+ JCT26S-NJ-NJ-1.5M	4.5M+8M+1.5M+1.5M	Aug. 17, 2022	1 Year
RF Cable	Yuhu Technology	JCTB810-NJ-NJ-9M	21123964	May 19, 2022	1 Year
RF Cable	Yuhu Technology	ZT26S-SMAJ-SMAJ-1M	21073466	Aug. 17, 2022	1 Year
Test software	Tonscend	JS32-RE	V 5.0.0.1	N/A	N/A
Test software	Audix	E3	V 6.1.1.1	N/A	N/A
☒Power Line Conducted Emissions Test 1#					
Test Receiver	R&S	ESCI	100551	Aug. 26, 2022	1 Year
LISN 1	R&S	ENV216	101109	Aug. 26, 2022	1 Year
LISN 2	R&S	ESH2-Z5	100309	Aug. 26, 2022	1 Year
Pulse Limiter	R&S	ESH3-Z2	101242	Aug. 26, 2022	1 Year
CE Cable 1	HUBSER	N/A	W10.01	Aug. 26, 2022	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A
Test Receiver	R&S	ESCI	100551	Aug. 26, 2022	1 Year

4. 26dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
26 dB Bandwidth	---	5150 - 5250
	---	5250 - 5350
	---	5470 - 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

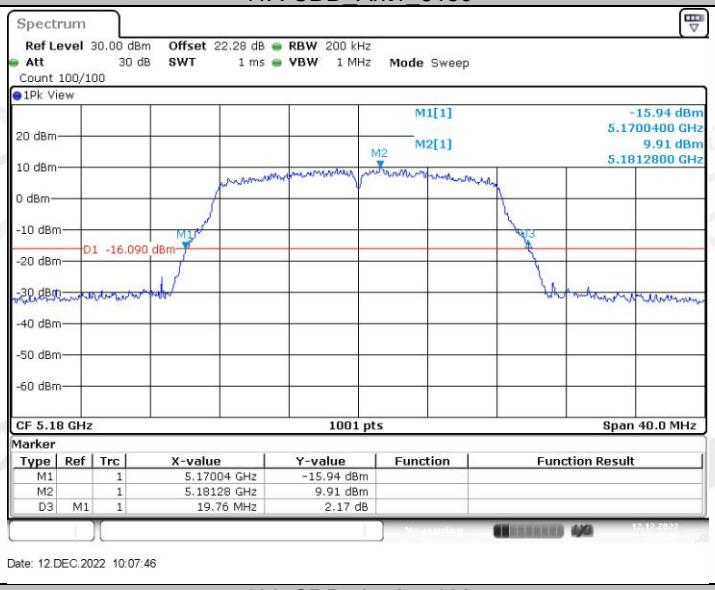
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A-CDD	Ant1	5180	19.76	5170.04	5189.80	---	---
	Ant2	5180	19.64	5170.12	5189.76	---	---
	Ant1	5200	19.88	5190.00	5209.88	---	---
	Ant2	5200	19.64	5190.12	5209.76	---	---
	Ant1	5240	19.96	5230.00	5249.96	---	---
	Ant2	5240	19.48	5230.24	5249.72	---	---
	Ant1	5260	20.24	5249.92	5270.16	---	---
	Ant2	5260	20.00	5249.96	5269.96	---	---
	Ant1	5280	20.04	5269.96	5290.00	---	---
	Ant2	5280	19.96	5270.08	5290.04	---	---
	Ant1	5320	19.96	5310.00	5329.96	---	---
	Ant2	5320	19.64	5310.20	5329.84	---	---
	Ant1	5500	19.92	5490.00	5509.92	---	---
	Ant2	5500	19.56	5490.16	5509.72	---	---

	Ant1	5580	19.84	5570.08	5589.92	---	---
	Ant2	5580	19.56	5570.20	5589.76	---	---
	Ant1	5700	19.92	5690.12	5710.04	---	---
	Ant2	5700	19.64	5690.20	5709.84	---	---
	Ant1	5745	19.80	5735.16	5754.96	---	---
	Ant2	5745	19.56	5735.28	5754.84	---	---
	Ant1	5785	19.92	5774.96	5794.88	---	---
	Ant2	5785	19.60	5775.16	5794.76	---	---
	Ant1	5825	19.88	5815.12	5835.00	---	---
	Ant2	5825	19.88	5815.12	5835.00	---	---
11N20MIMO	Ant1	5180	20.08	5170.00	5190.08	---	---
	Ant2	5180	20.04	5170.08	5190.12	---	---
	Ant1	5200	20.16	5189.88	5210.04	---	---
	Ant2	5200	19.96	5190.00	5209.96	---	---
	Ant1	5240	20.16	5229.88	5250.04	---	---
	Ant2	5240	19.92	5230.00	5249.92	---	---
	Ant1	5260	20.16	5249.96	5270.12	---	---
	Ant2	5260	20.00	5250.00	5270.00	---	---
	Ant1	5280	20.04	5270.00	5290.04	---	---
	Ant2	5280	20.00	5270.04	5290.04	---	---
	Ant1	5320	20.12	5309.92	5330.04	---	---
	Ant2	5320	20.00	5310.04	5330.04	---	---
	Ant1	5500	20.08	5489.92	5510.00	---	---
	Ant2	5500	20.08	5490.00	5510.08	---	---
	Ant1	5580	20.16	5569.92	5590.08	---	---
	Ant2	5580	19.92	5569.96	5589.88	---	---
	Ant1	5700	20.28	5689.80	5710.08	---	---
	Ant2	5700	19.96	5689.96	5709.92	---	---
	Ant1	5745	20.24	5734.96	5755.20	---	---
	Ant2	5745	19.76	5735.12	5754.88	---	---
	Ant1	5785	20.16	5774.92	5795.08	---	---
	Ant2	5785	19.92	5775.08	5795.00	---	---
	Ant1	5825	20.28	5814.88	5835.16	---	---
	Ant2	5825	20.00	5815.00	5835.00	---	---
11N40MIMO	Ant1	5190	40.72	5169.60	5210.32	---	---
	Ant2	5190	40.08	5170.00	5210.08	---	---
	Ant1	5230	41.28	5209.36	5250.64	---	---
	Ant2	5230	40.48	5209.68	5250.16	---	---
	Ant1	5270	40.64	5249.84	5290.48	---	---
	Ant2	5270	40.32	5249.92	5290.24	---	---
	Ant1	5310	40.80	5289.68	5330.48	---	---
	Ant2	5310	40.24	5289.84	5330.08	---	---
	Ant1	5510	40.96	5489.44	5530.40	---	---
	Ant2	5510	40.24	5489.92	5530.16	---	---
	Ant1	5550	41.20	5529.44	5570.64	---	---
	Ant2	5550	40.32	5529.92	5570.24	---	---
	Ant1	5670	41.12	5649.52	5690.64	---	---
	Ant2	5670	40.56	5649.76	5690.32	---	---
	Ant1	5755	41.04	5734.60	5775.64	---	---
	Ant2	5755	40.24	5734.84	5775.08	---	---
	Ant1	5795	40.96	5774.60	5815.56	---	---
	Ant2	5795	40.48	5774.68	5815.16	---	---
11AC20MIMO	Ant1	5180	20.20	5169.92	5190.12	---	---
	Ant2	5180	19.88	5170.08	5189.96	---	---
	Ant1	5200	20.16	5189.88	5210.04	---	---
	Ant2	5200	20.00	5189.96	5209.96	---	---
	Ant1	5240	20.32	5229.76	5250.08	---	---
	Ant2	5240	20.04	5229.96	5250.00	---	---
	Ant1	5260	20.24	5249.88	5270.12	---	---
	Ant2	5260	20.04	5250.00	5270.04	---	---
	Ant1	5280	20.04	5270.00	5290.04	---	---
	Ant2	5280	19.92	5270.04	5289.96	---	---
	Ant1	5320	20.12	5309.96	5330.08	---	---
	Ant2	5320	20.00	5310.00	5330.00	---	---

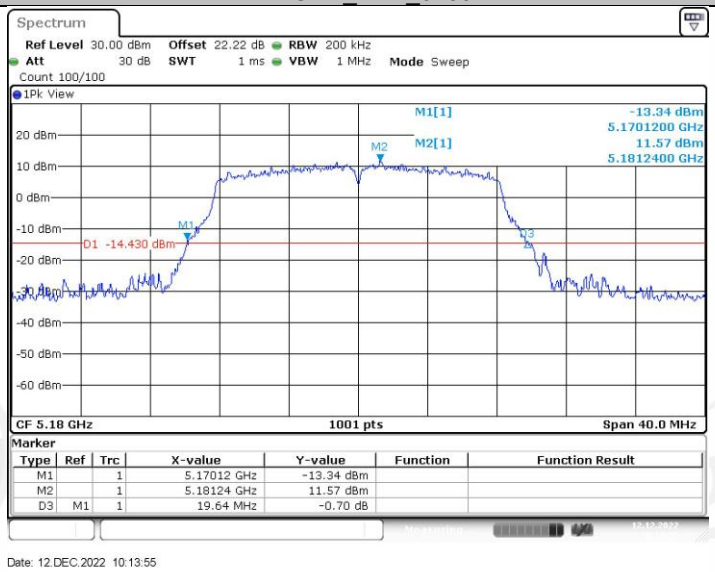
	Ant1	5500	20.00	5489.96	5509.96	---	---
	Ant2	5500	19.92	5490.00	5509.92	---	---
	Ant1	5580	20.12	5569.96	5590.08	---	---
	Ant2	5580	20.04	5570.00	5590.04	---	---
	Ant1	5700	20.16	5689.92	5710.08	---	---
	Ant2	5700	20.08	5689.92	5710.00	---	---
	Ant1	5745	20.20	5734.96	5755.16	---	---
	Ant2	5745	19.92	5735.04	5754.96	---	---
	Ant1	5785	20.16	5774.92	5795.08	---	---
	Ant2	5785	20.00	5775.00	5795.00	---	---
	Ant1	5825	20.24	5814.92	5835.16	---	---
	Ant2	5825	20.12	5814.92	5835.04	---	---
11AC40MIMO	Ant1	5190	40.72	5169.60	5210.32	---	---
	Ant2	5190	40.48	5169.68	5210.16	---	---
	Ant1	5230	41.04	5209.36	5250.40	---	---
	Ant2	5230	40.32	5209.84	5250.16	---	---
	Ant1	5270	40.64	5249.76	5290.40	---	---
	Ant2	5270	40.24	5249.92	5290.16	---	---
	Ant1	5310	41.12	5289.60	5330.72	---	---
	Ant2	5310	40.16	5289.92	5330.08	---	---
	Ant1	5510	40.80	5489.52	5530.32	---	---
	Ant2	5510	40.48	5489.76	5530.24	---	---
	Ant1	5550	41.04	5529.36	5570.40	---	---
	Ant2	5550	40.64	5529.68	5570.32	---	---
	Ant1	5670	41.04	5649.52	5690.56	---	---
	Ant2	5670	40.56	5649.68	5690.24	---	---
	Ant1	5755	40.96	5734.60	5775.56	---	---
	Ant2	5755	40.40	5734.76	5775.16	---	---
	Ant1	5795	41.20	5774.44	5815.64	---	---
	Ant2	5795	40.56	5774.68	5815.24	---	---
11AC80MIMO	Ant1	5210	81.28	5169.36	5250.64	---	---
	Ant2	5210	80.80	5169.68	5250.48	---	---
	Ant1	5290	81.76	5249.36	5331.12	---	---
	Ant2	5290	80.96	5249.52	5330.48	---	---
	Ant1	5530	81.44	5489.36	5570.80	---	---
	Ant2	5530	80.80	5489.68	5570.48	---	---
	Ant1	5610	81.60	5569.20	5650.80	---	---
	Ant2	5610	80.80	5569.52	5650.32	---	---
	Ant1	5775	81.92	5734.20	5816.12	---	---
	Ant2	5775	81.28	5734.36	5815.64	---	---

4.5. Test graphs

11A-CDD_Ant1_5180



11A-CDD_Ant2_5180



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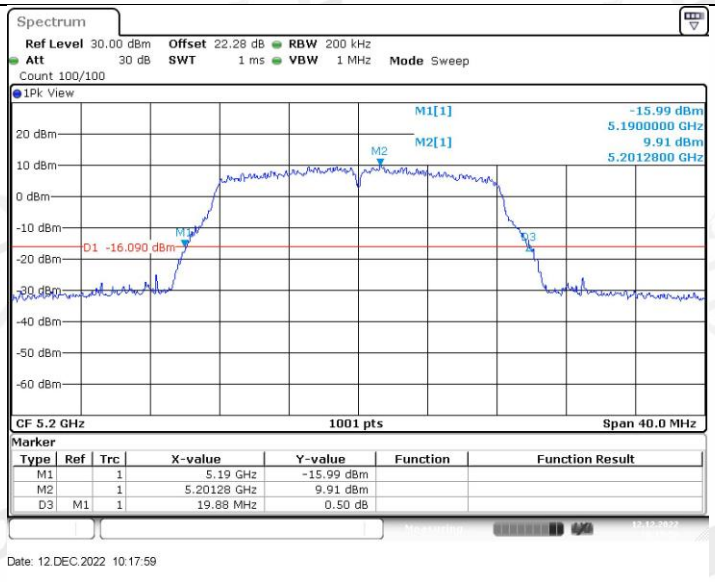

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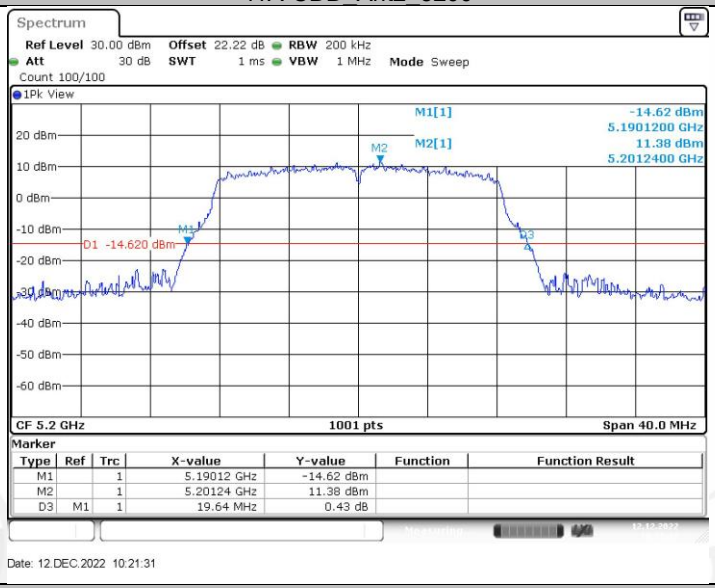

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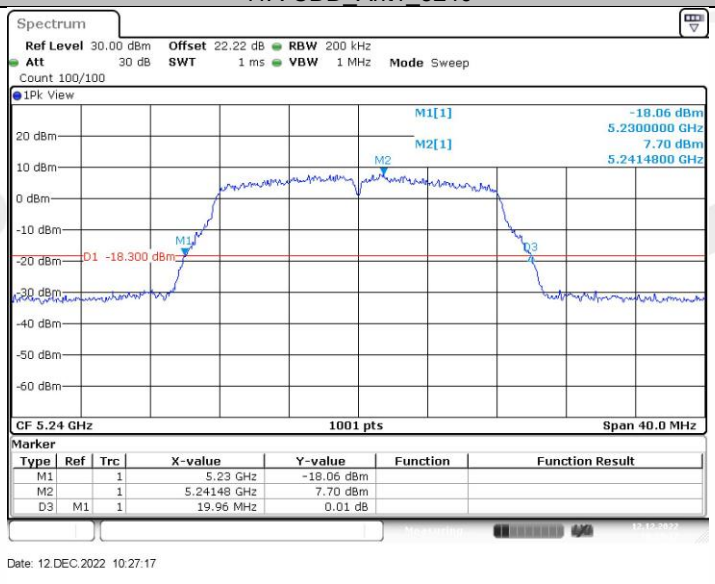

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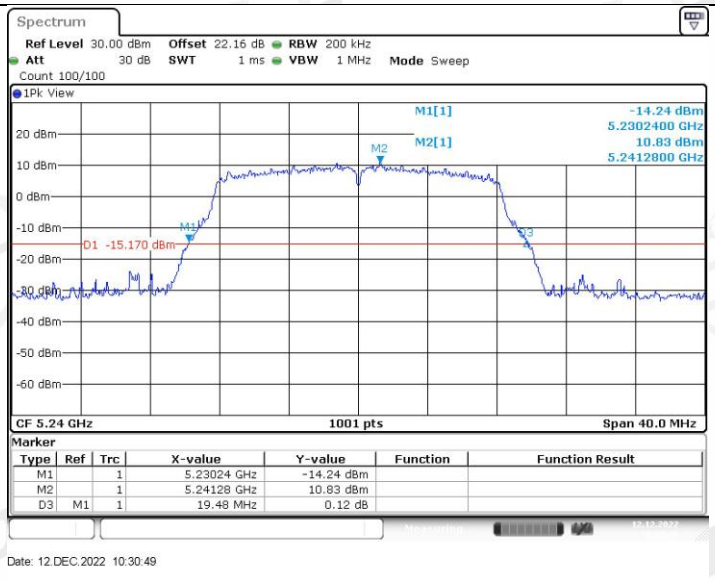

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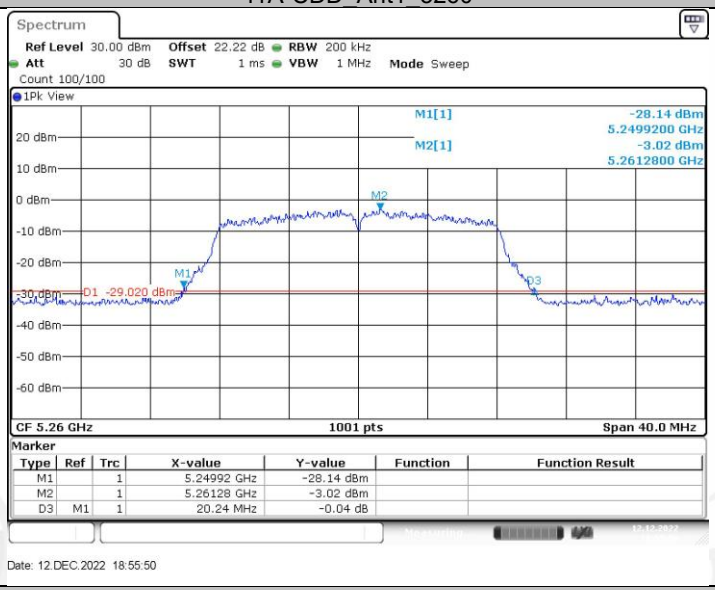

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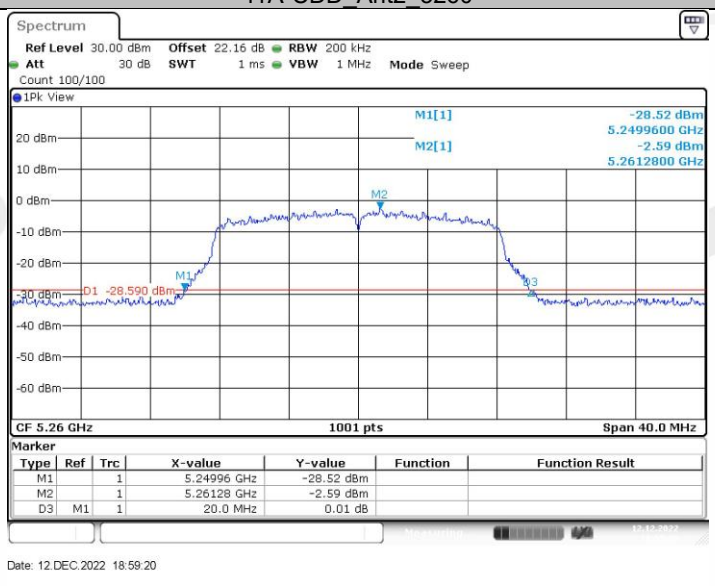

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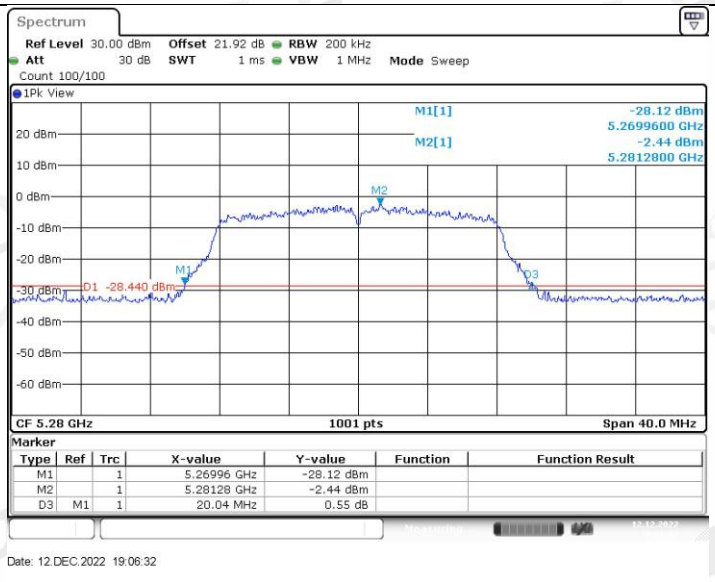

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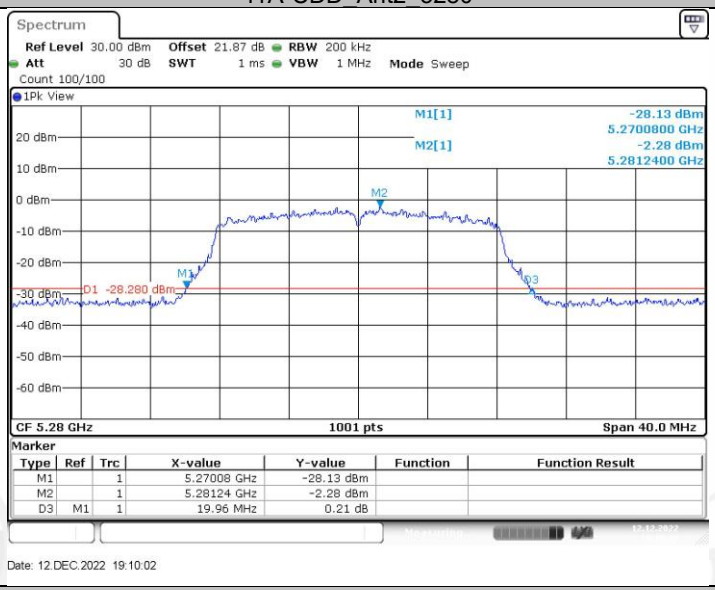

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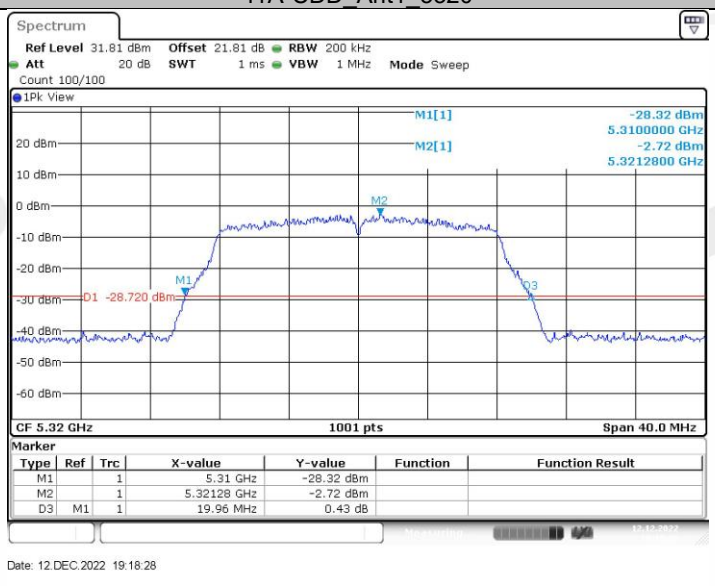

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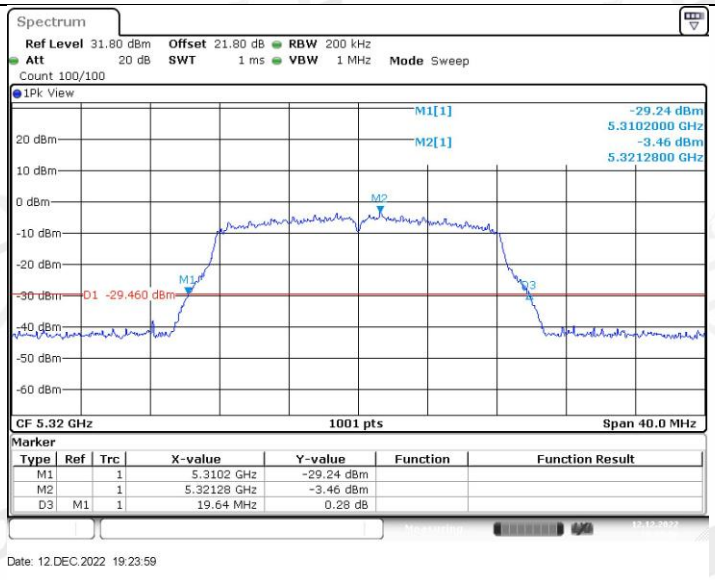

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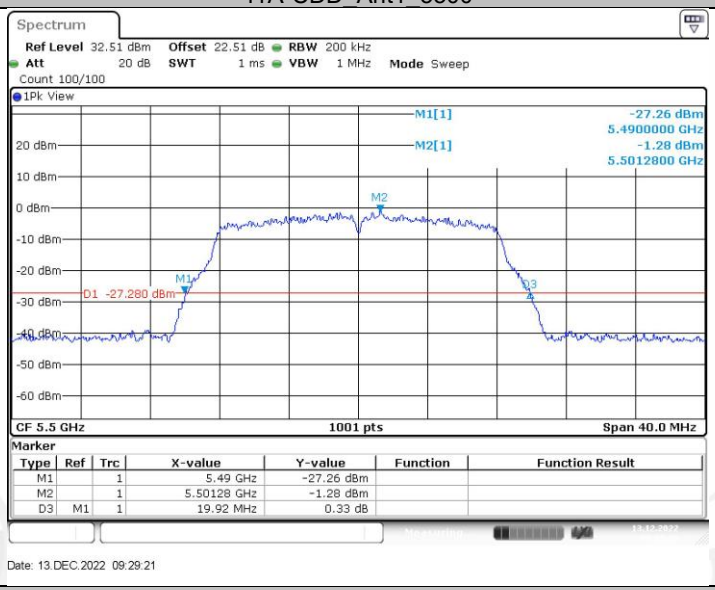

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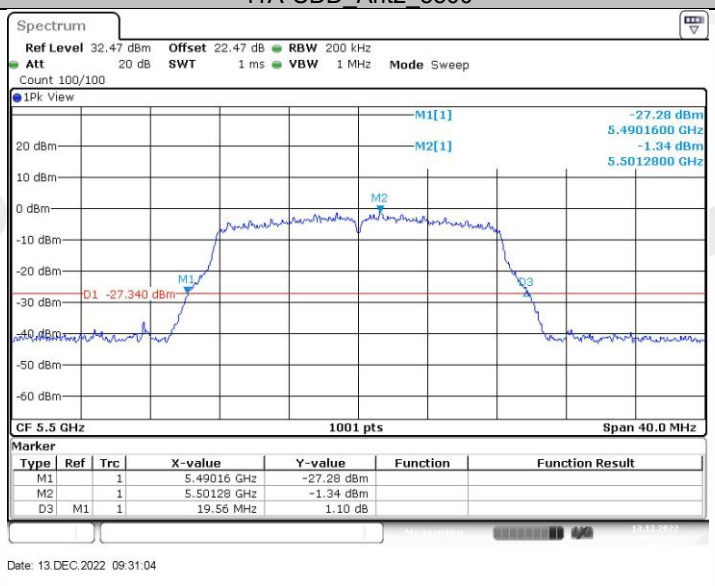

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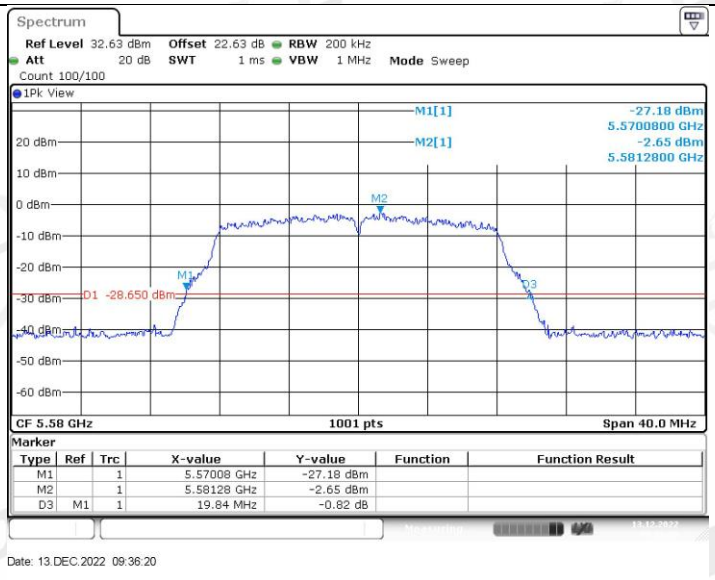

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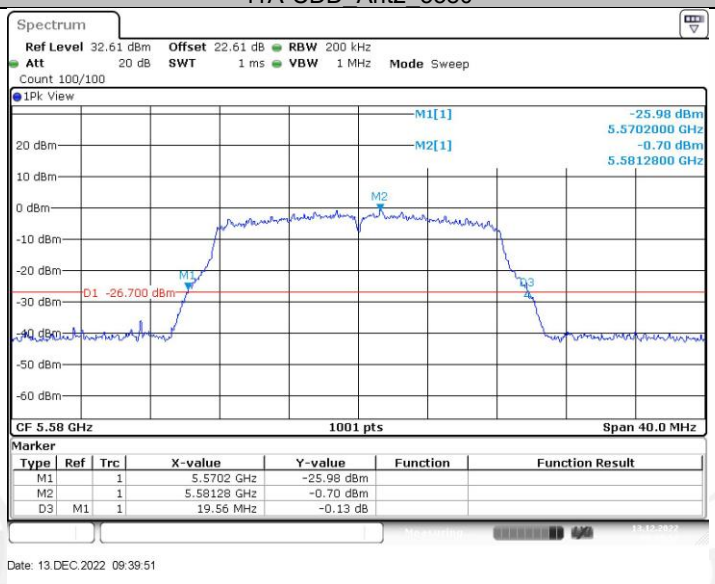

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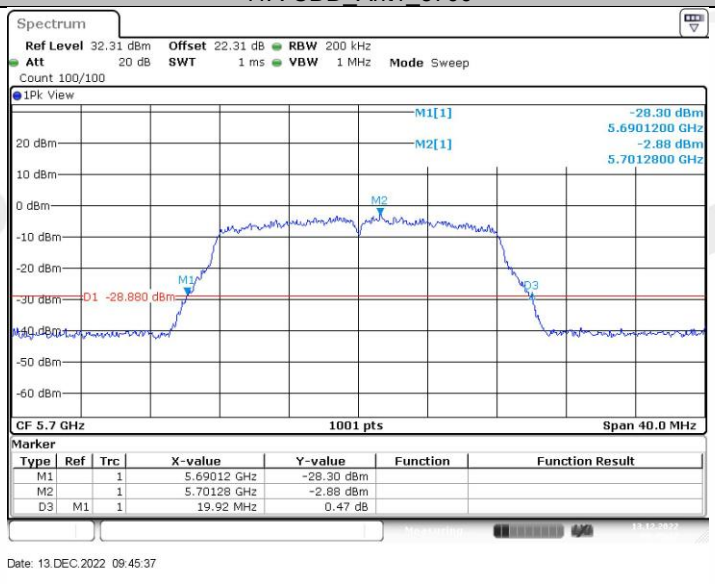

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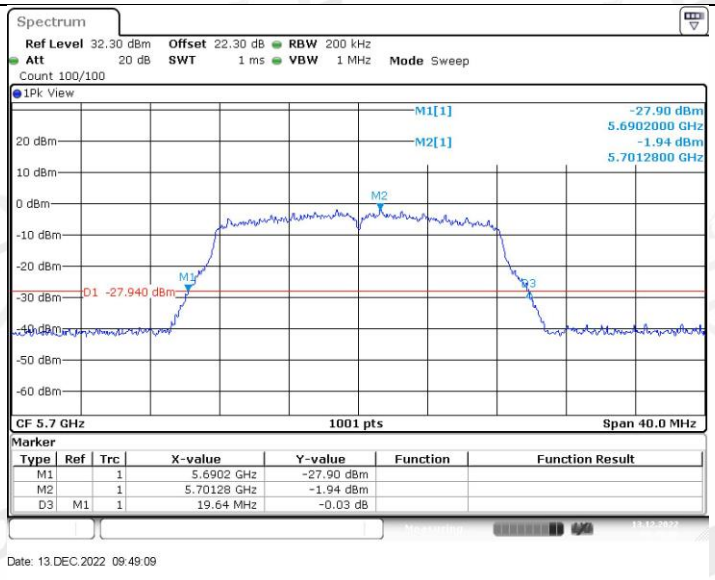

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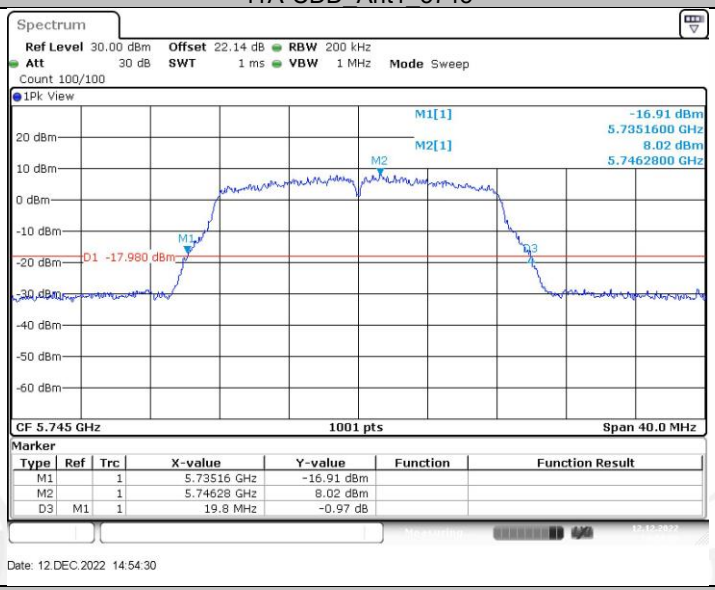

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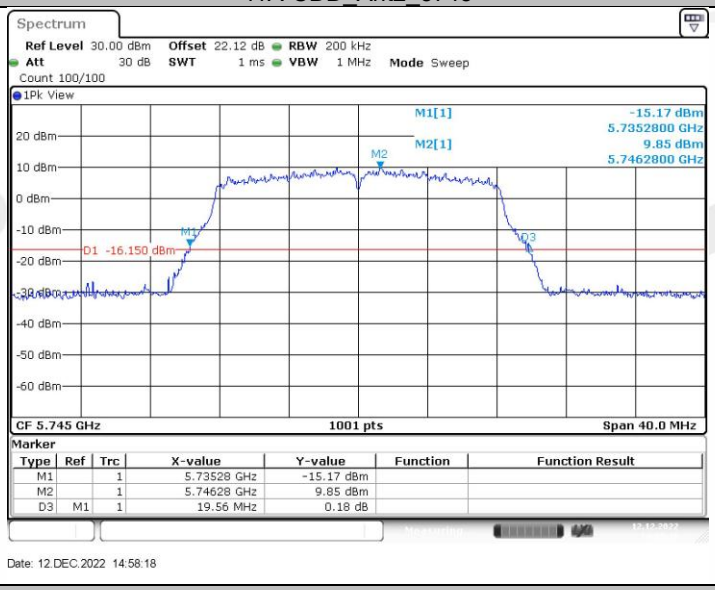

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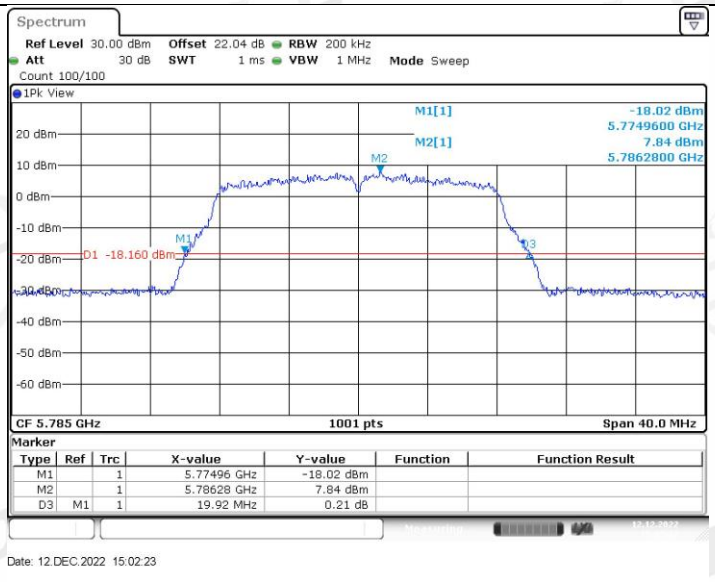

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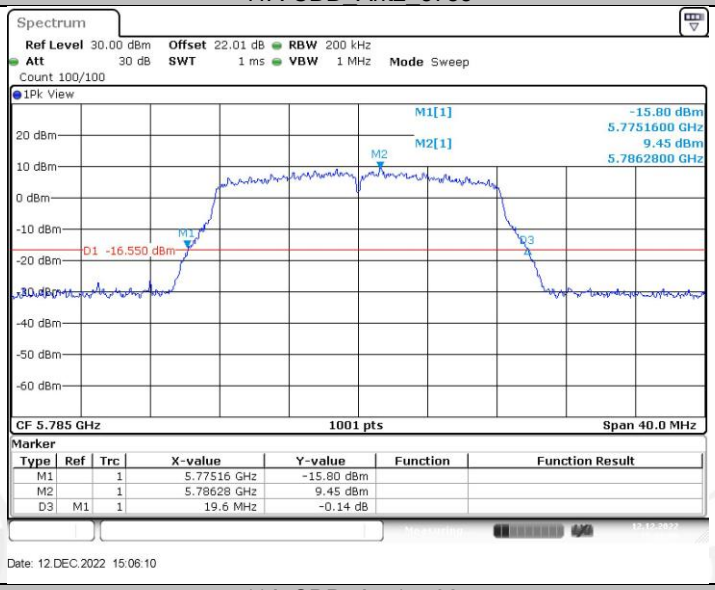

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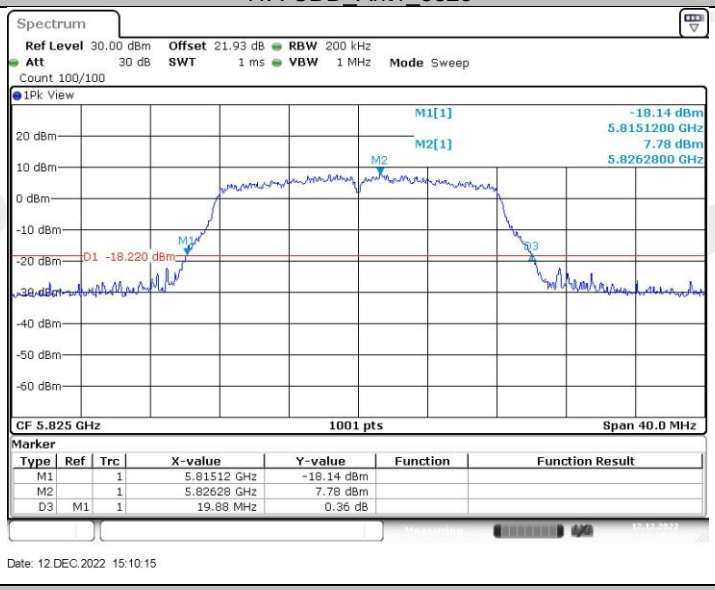

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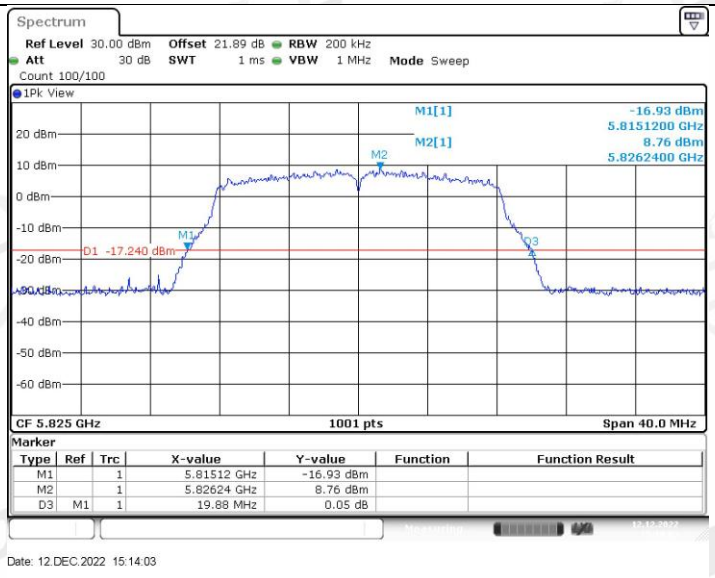

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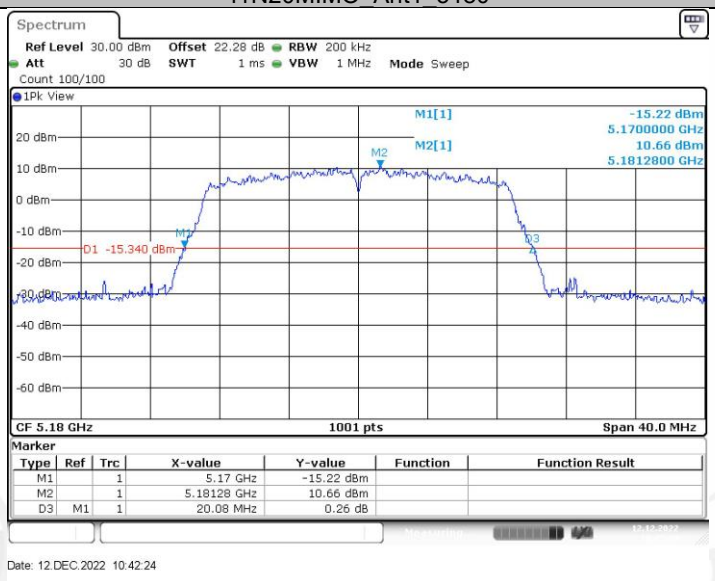

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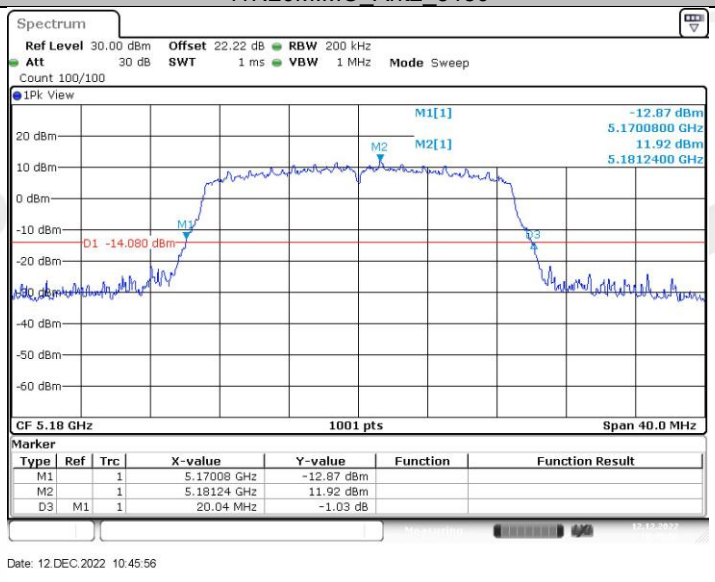

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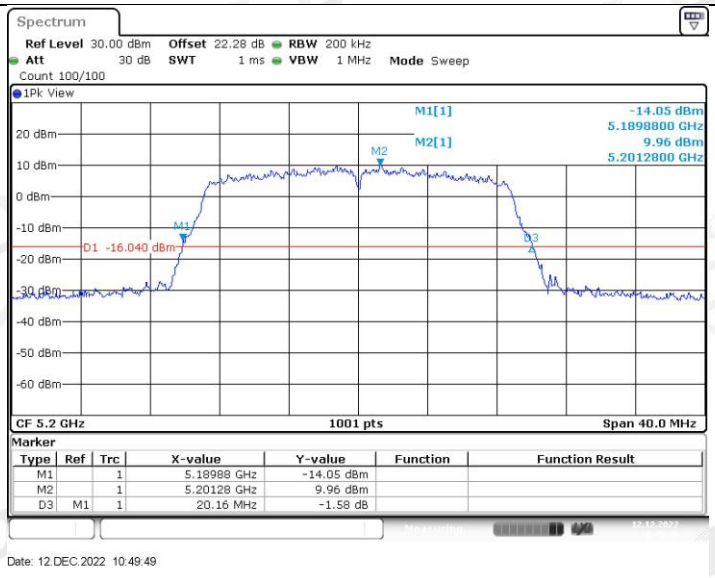

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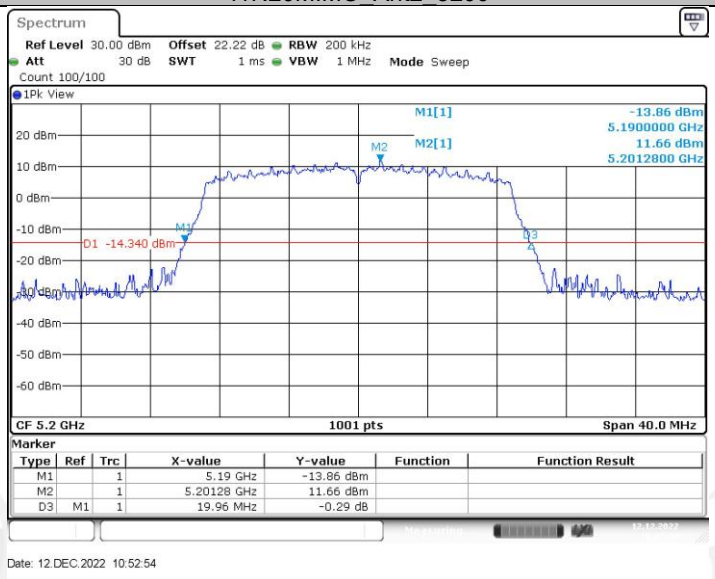

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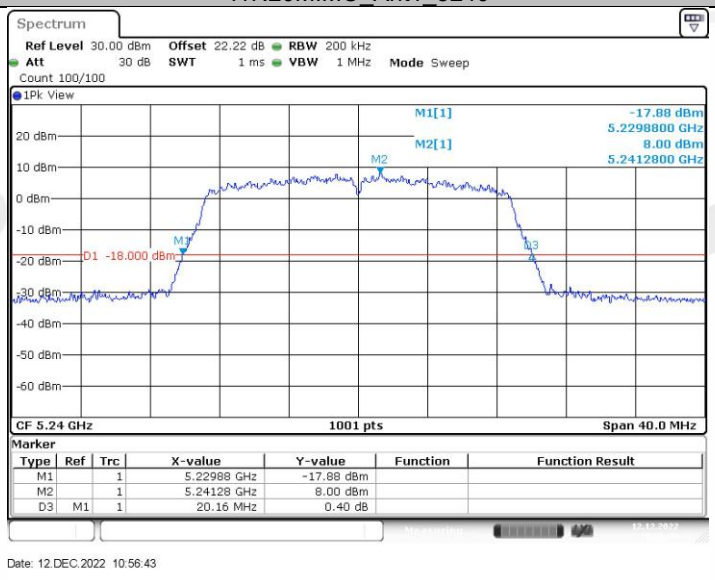

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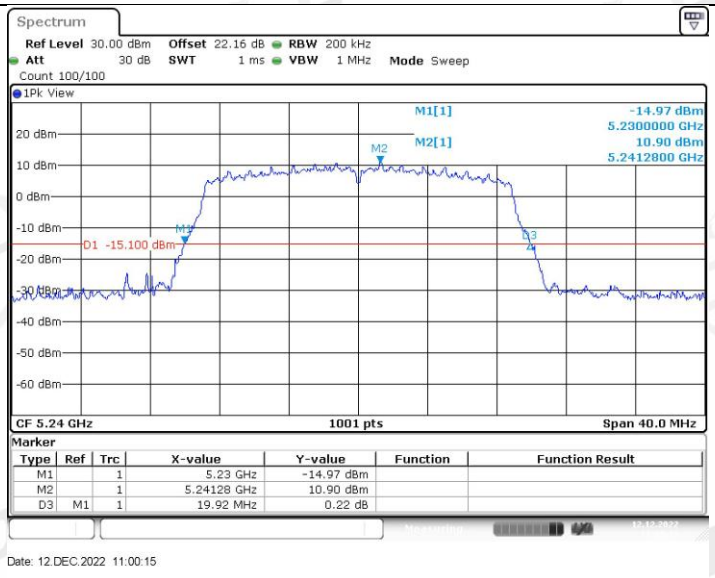

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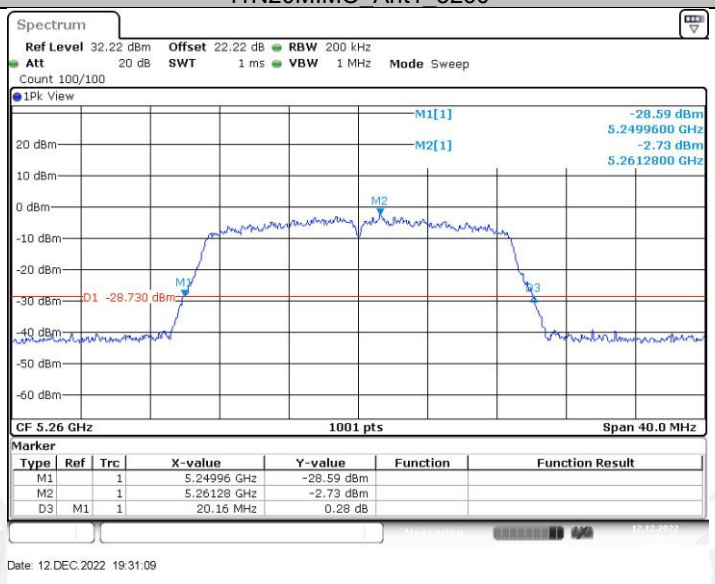

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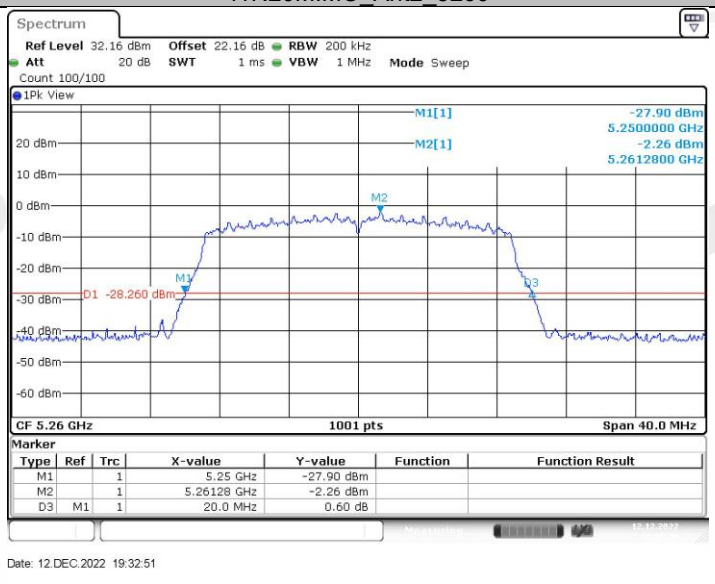

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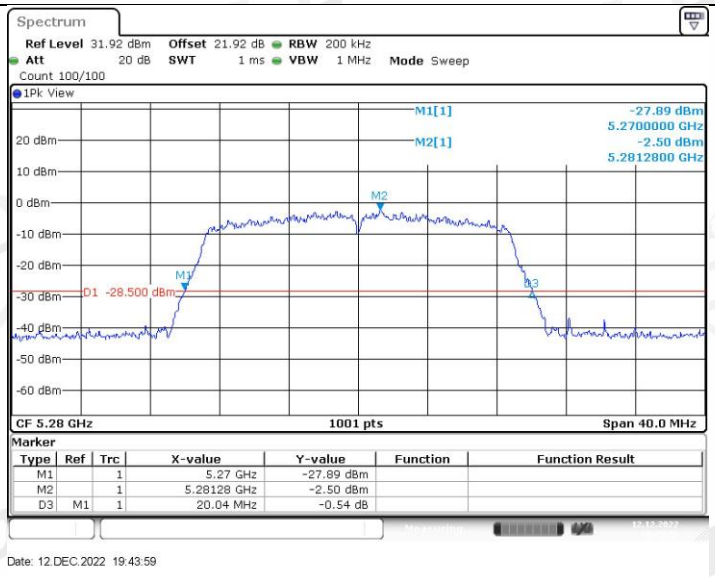

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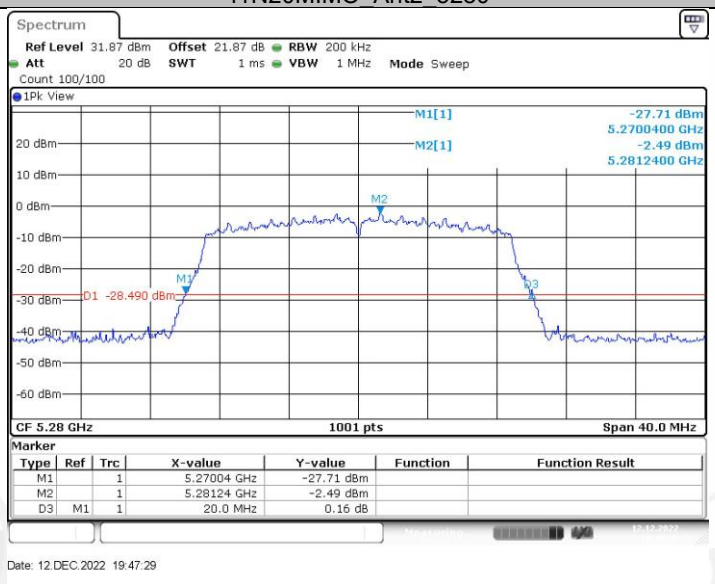

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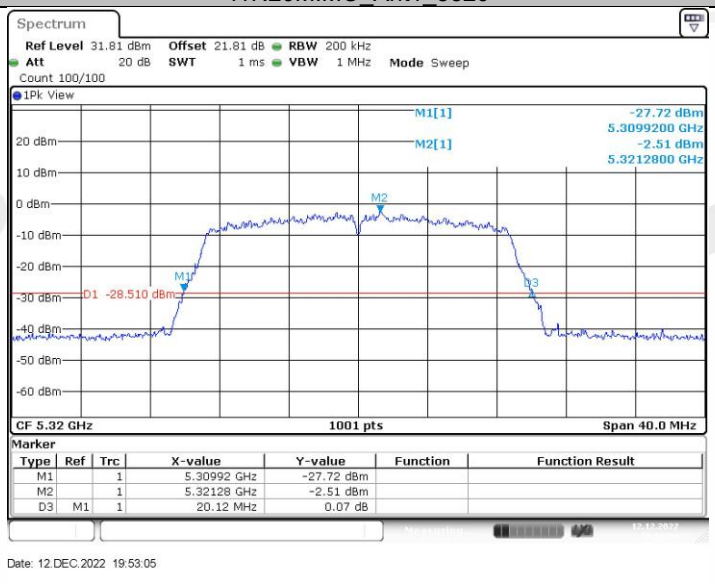

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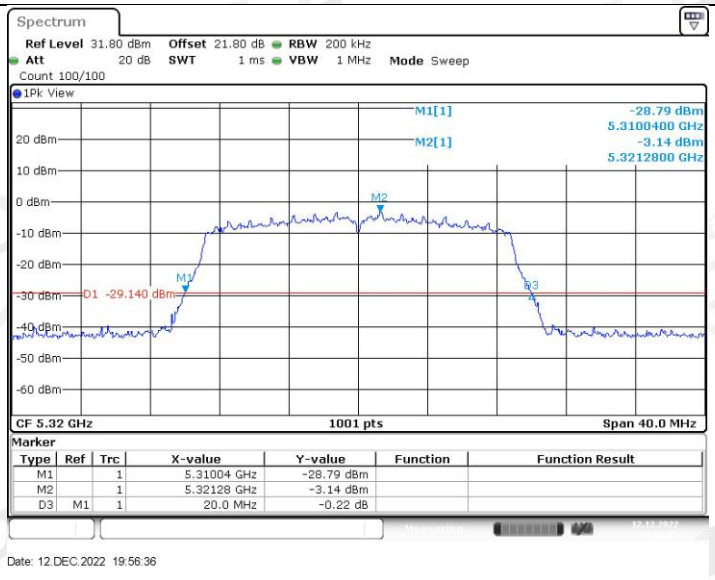

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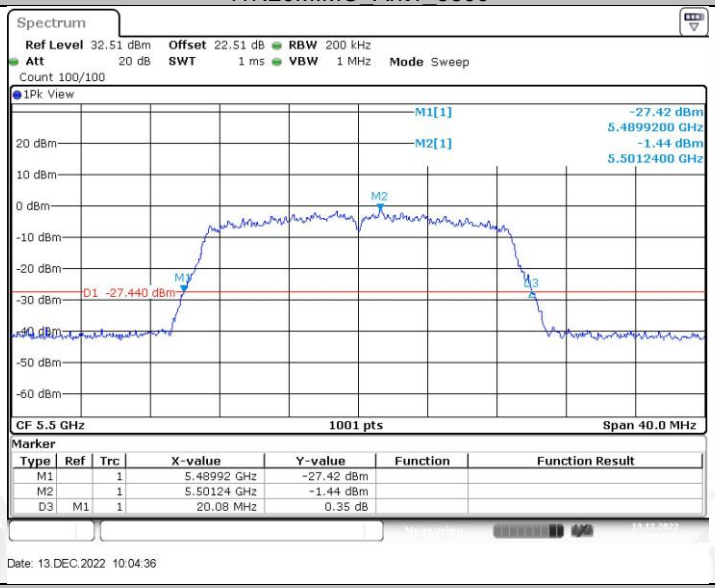

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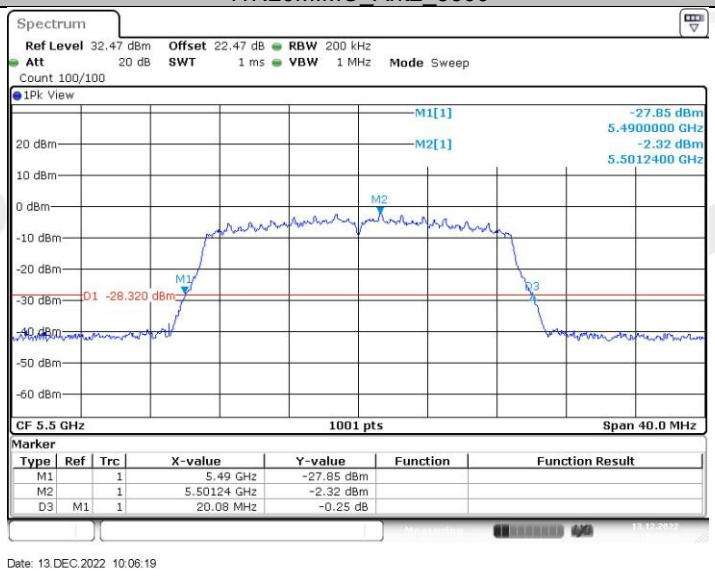

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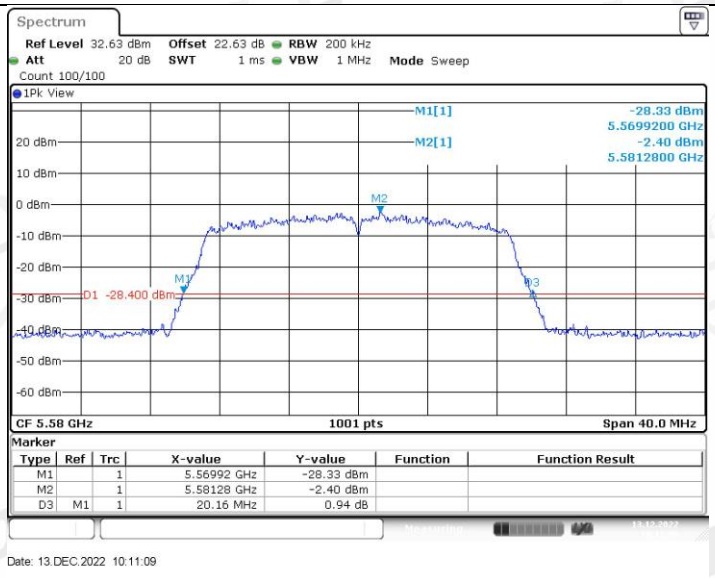

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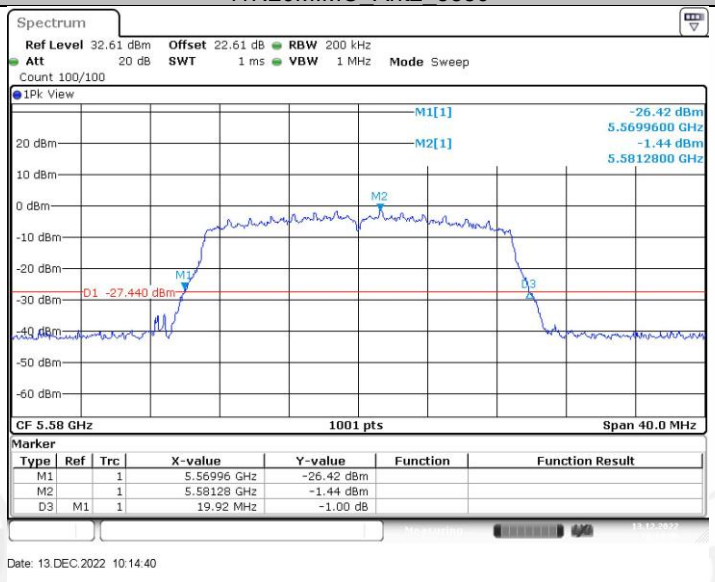

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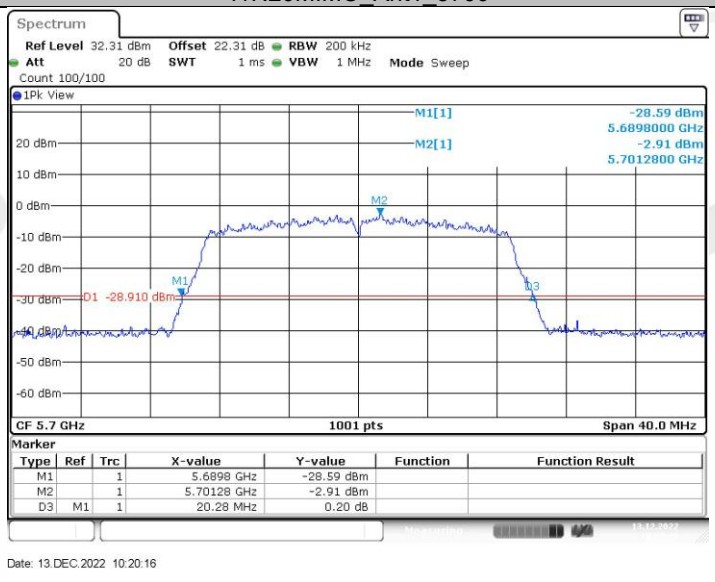

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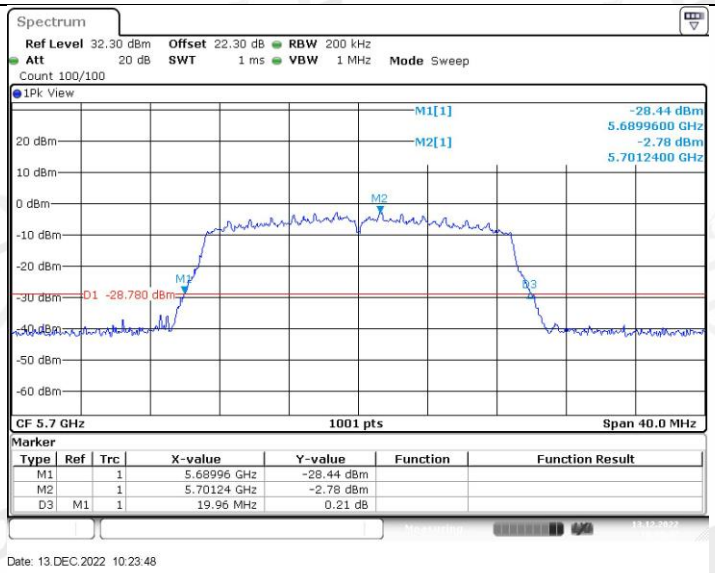

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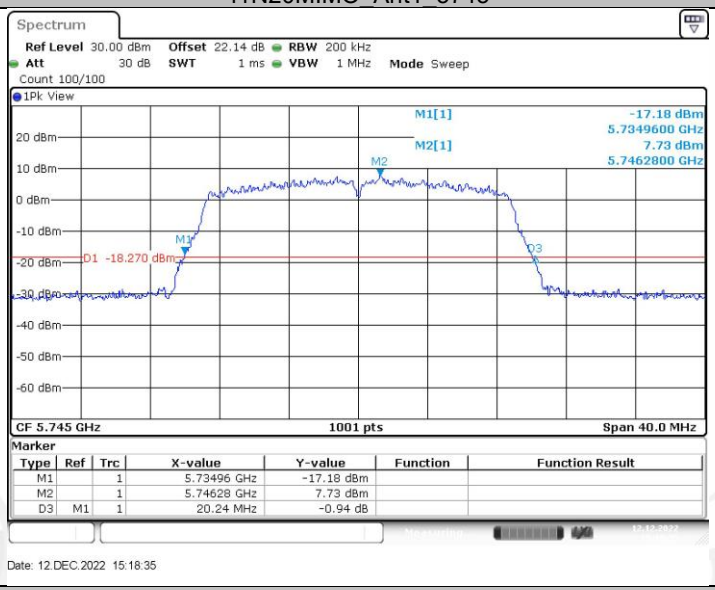

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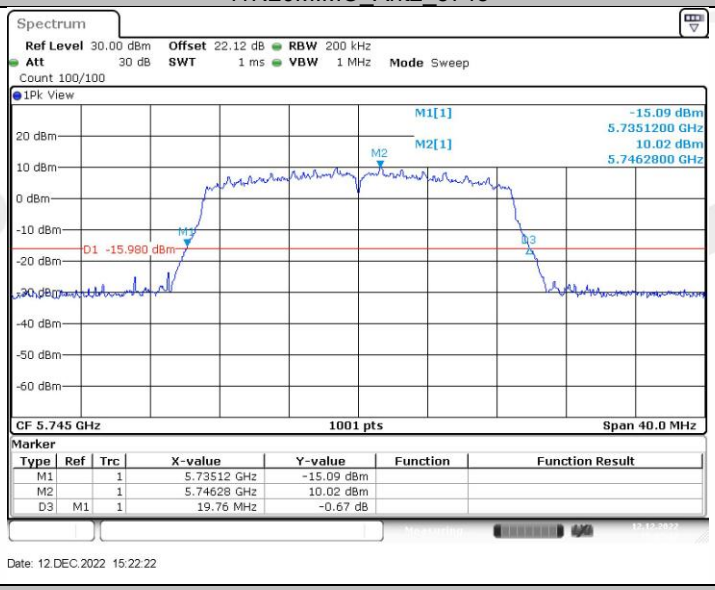

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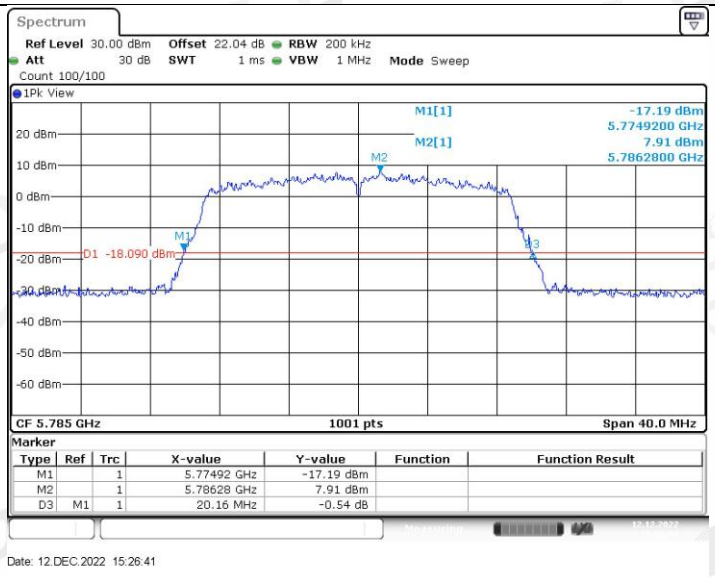

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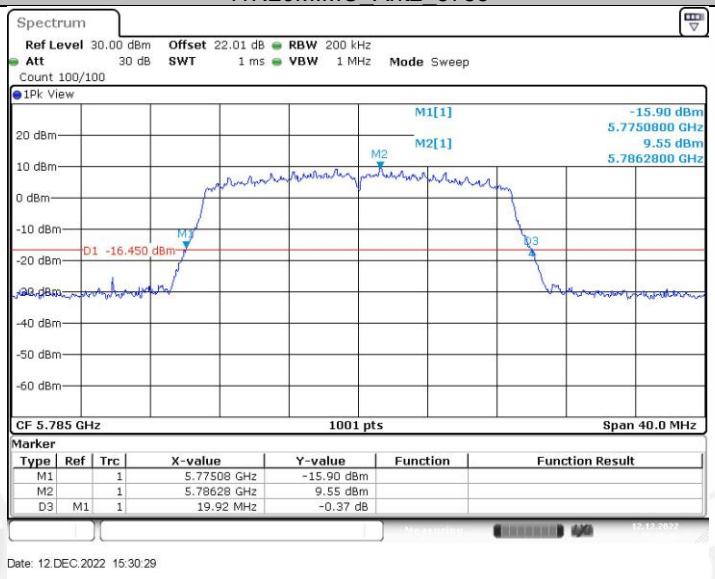
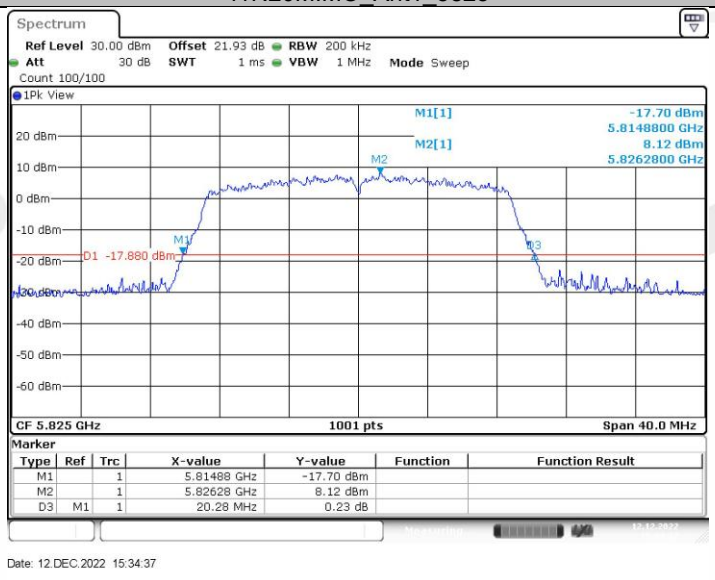


11N20MIMO_Ant1_5825



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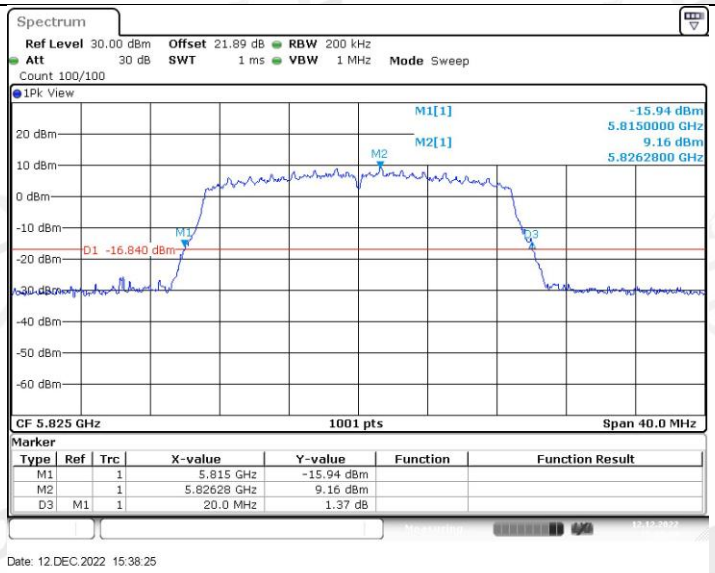

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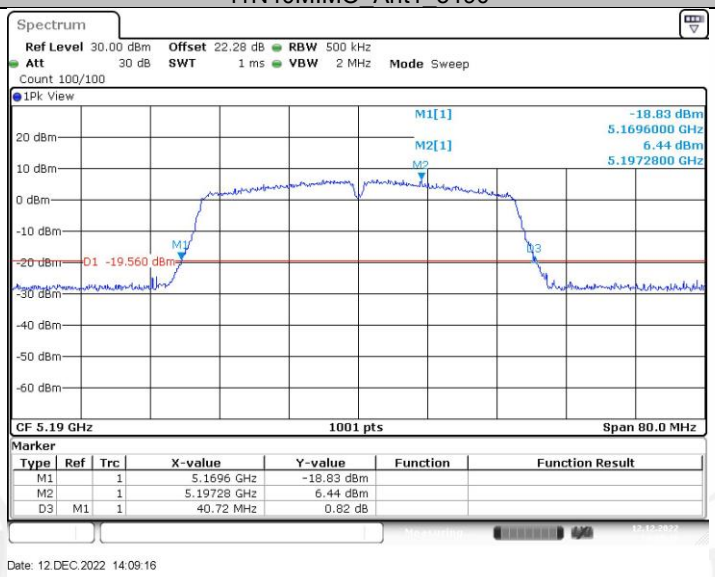

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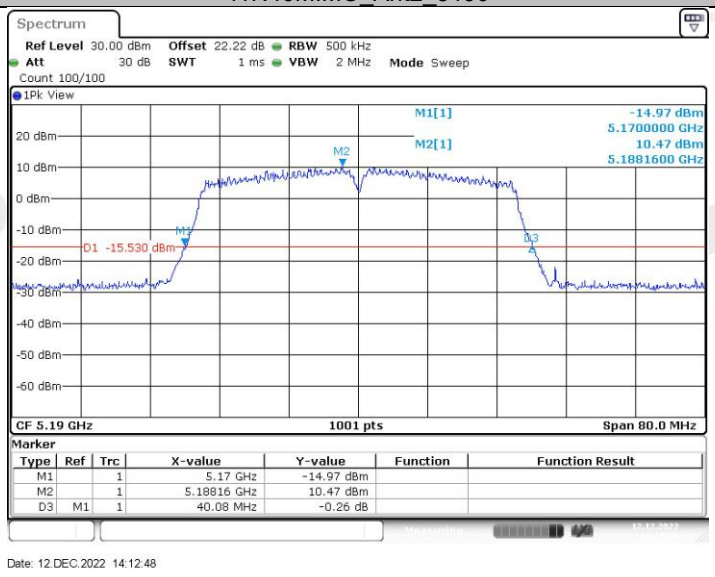

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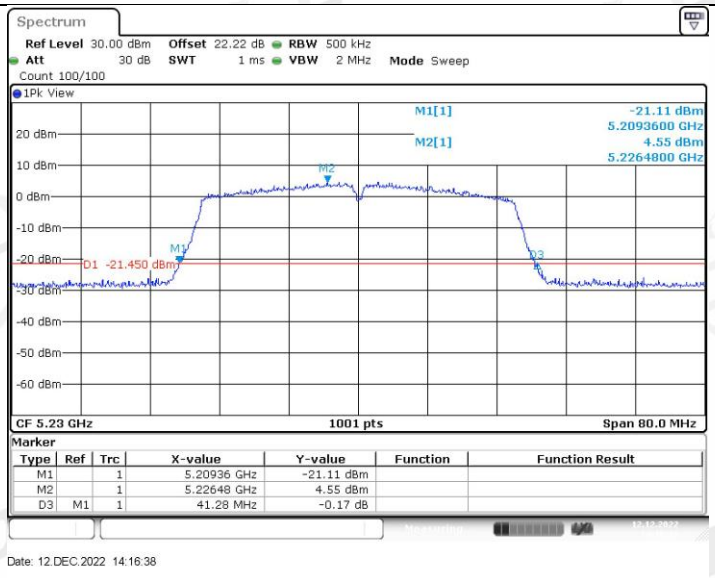

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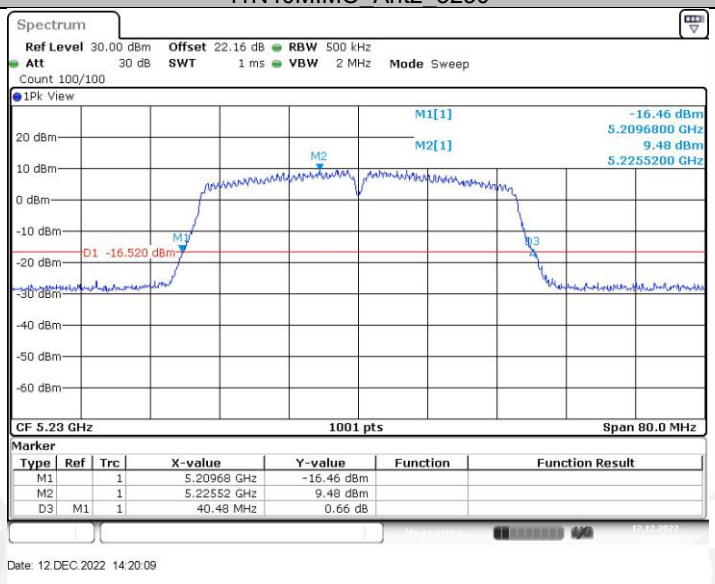

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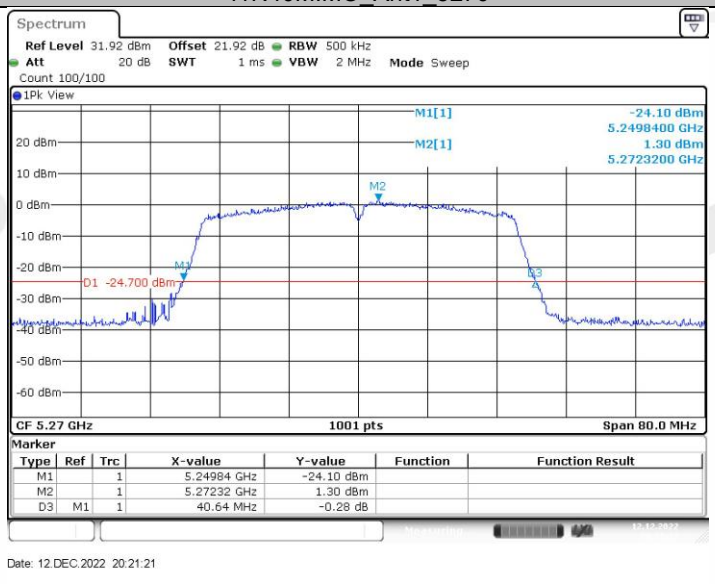
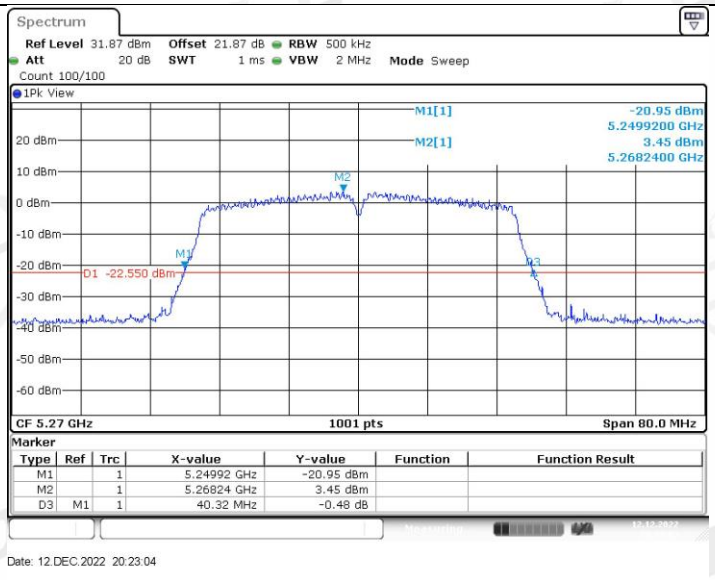


11N40MIMO_Ant2_5270



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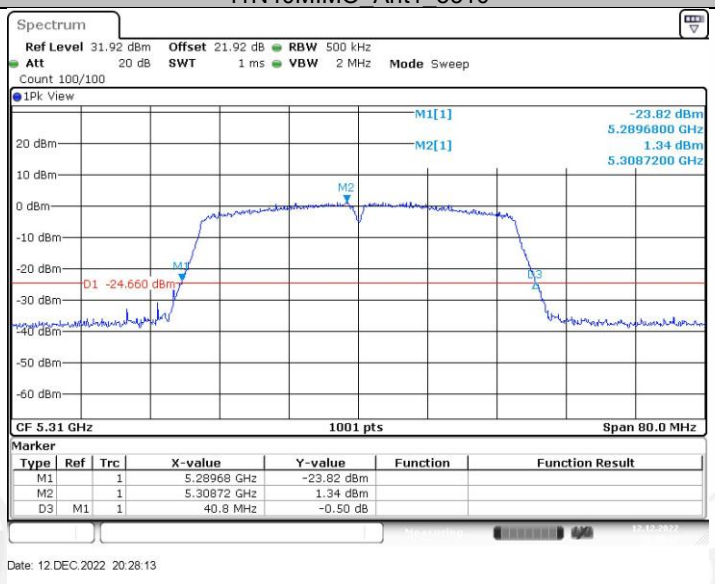

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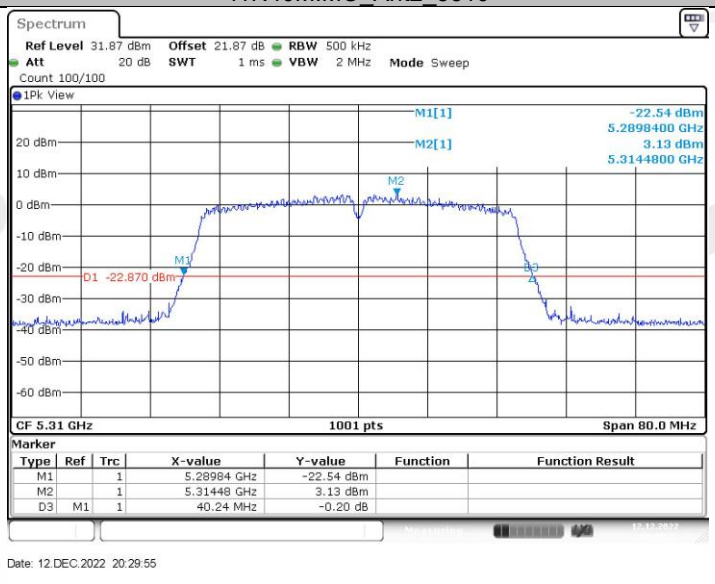

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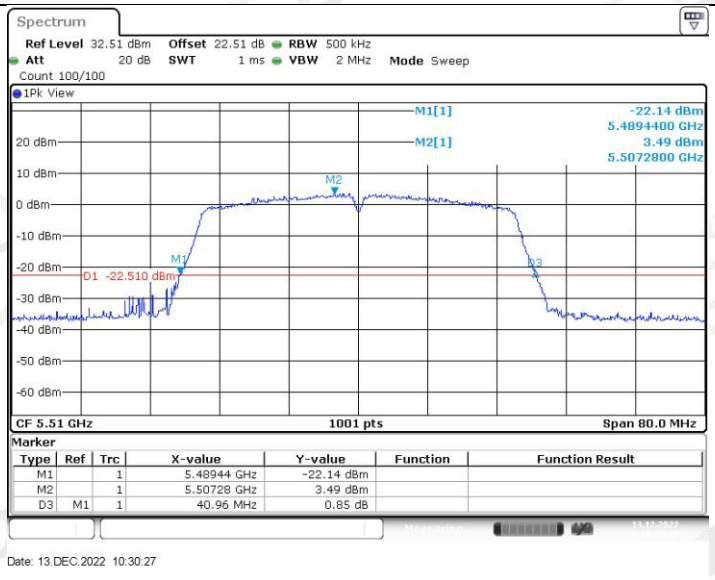

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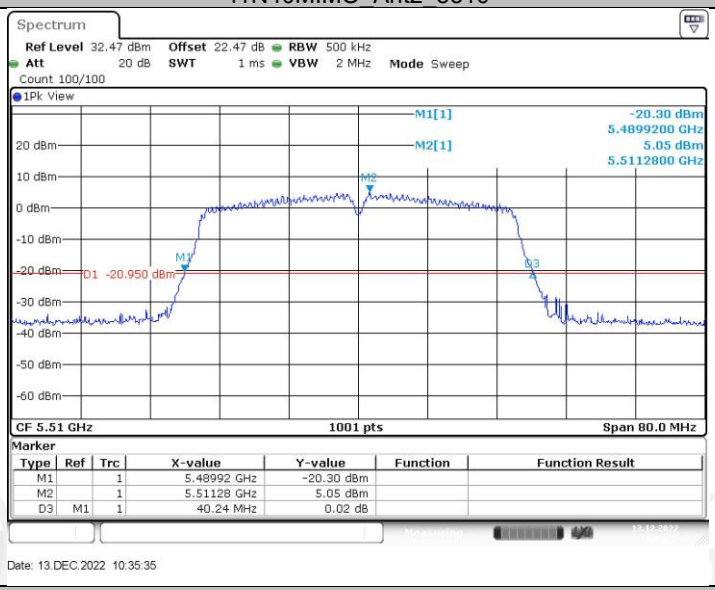

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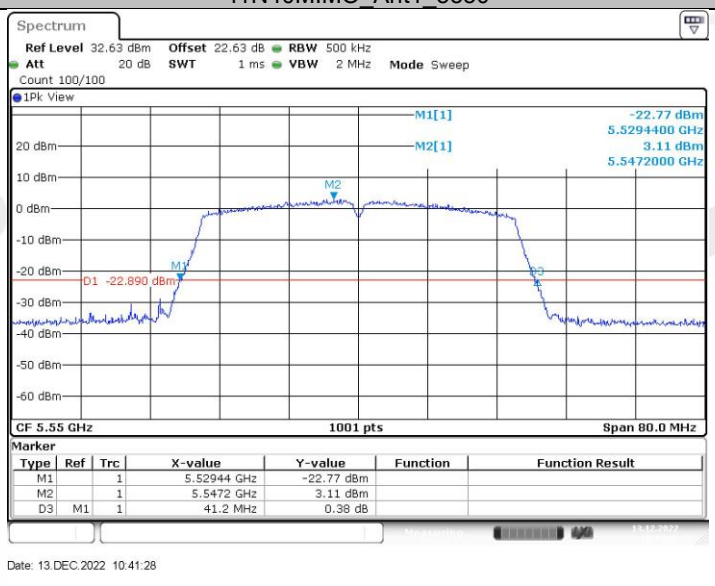

11N40MIMO_Ant2_5550