



FCC CERTIFICATION TEST REPORT

Applicant	:	Shenzhen SDMC Technology Co., Ltd.
Address of Applicant	:	Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China
Manufacturer	:	Shenzhen SDMC Technology Co., Ltd.
Address of Manufacturer	:	19/F, Changhong Technology Building, No.18, Keji South 12th Road, High-tech Industrial Park, Nanshan District, Shenzhen, China
Equipment under Test	:	WINBOX
Model No.	:	WINBOX DV8947
FCC ID	:	2AW68-DV8947
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart E, ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01
Report No.	:	DDT-RE24042530-2E04
Issue Date	:	2024/06/14
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

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Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E,
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 Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE24042530-2E04		
Date of Receipt:	2024/05/17	Date of Test:	2024/05/17~2024/06/14

Prepared By:**Tiger Mo/Engineer****Approved By:****Damon Hu/EMC Manager**

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

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2024/06/14	

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	6/26db Bandwidth and 99% Bandwidth	FCC 15.407 (e)	/	Pass
2	Output Power	FCC 15.407 (a)	/	Pass
3	Power Spectral Density	FCC 15.407 (a)	/	Pass
4	Frequency Stability Measurement	FCC 15.407 (g)	/	Pass
5	Radiated Emission	FCC 15.407 (b); FCC 15.209; FCC 15.205	/	Pass
6	Band Edge Compliance	FCC 15.407 (b); FCC 15.209; FCC 15.205	/	Pass
7	Power Line Conducted Emissions	FCC Part 15: 15.207(a)	/	Pass
8	Dynamic Frequency Selection	FCC 15.407 (h)	/	Pass
9	Antenna Requirement	FCC Part 15: 15.203	/	Pass
Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.				

2. General Test Information

2.1. Description of EUT

EUT Name	: WINBOX
Model Number	: WINBOX DV8947
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 12V powered by an external adapter

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz WLAN, 5 GHz WLAN, this report only for 5 GHz WLAN.

Radio Technology	: IEEE 802.11a/n/ac
Operation frequency	: IEEE 802.11a: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz IEEE 802.11n HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz IEEE 802.11n HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5710MHz, 5755MHz-5795MHz IEEE 802.11ac VHT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5720MHz, 5745MHz-5825MHz IEEE 802.11ac VHT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5710MHz, 5755MHz-5795MHz IEEE 802.11ac VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 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)

Antenna information				
Antenna Type	PCB			
		Ant1 Gain	Ant2 Gain	Directional Gain
Max Antenna Gain (dBi)	IEEE 802.11a	2.61	2.62	/
	IEEE 802.11n HT20	2.61	2.62	5.63
	IEEE 802.11n HT40	2.61	2.62	5.63
	IEEE 802.11ac VHT20	2.61	2.62	5.63
	IEEE 802.11ac VHT40	2.61	2.62	5.63
	IEEE 802.11ac VHT80	2.61	2.62	5.63
Note: This EUT MIMO 2X2, any transmit signals are correlated with each other. So the Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2/2] = 5.63\text{dBi}$				

Channel information		
IEEE 802.11a	IEEE 802.11n (HT40)	IEEE 802.11ac (VHT80)
IEEE 802.11n (HT20)	IEEE 802.11ac (VHT40)	
IEEE 802.11ac (VHT20)		
UNII-1		

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

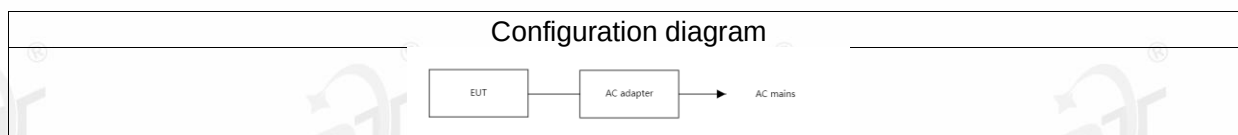
Note : “☑” means to be chosen or applicable; “☐” means don’t to be chosen or not applicable; This note applies to entire report.

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

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
Adapter	SUNUN	SA12BV-120100U	Input: AC 100-240V 50/60Hz Output: DC 12V1A
HDMI cable	/	/	Length: 1.00m, Unshielded
Remote controller	/	/	/

2.3. Block diagram of EUT configuration for test



2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

Test software: adb.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 (Mbps) (see Note)	Channel	Frequency (MHz)
	ANT1	ANT2			
IEEE 802.11a	80	80	6	Low: CH36	5180
	80	80	6	Middle: CH40	5200
	80	80	6	High: CH48	5240
	80	80	6	Low: CH52	5260
	80	80	6	Middle: CH56	5280
	80	80	6	High: CH64	5320
	80	80	6	Low: CH100	5500
	80	80	6	Middle: CH116	5580
	80	80	6	High: CH140	5700
	80	80	6	Straddle: CH144	5720
	92	92	6	Low: CH149	5745
	92	92	6	Middle: CH157	5785
	92	92	6	High: CH165	5825
IEEE 802.11n HT20	80	80	MCS 8	Low: CH36	5180
	80	80	MCS 8	Middle: CH40	5200
	80	80	MCS 8	High: CH48	5240
	80	80	MCS 8	Low: CH52	5260
	80	80	MCS 8	Middle: CH56	5280
	80	80	MCS 8	High: CH64	5320

	80	80	MCS 8	Low: CH100	5500
	80	80	MCS 8	Middle: CH116	5580
	80	80	MCS 8	High: CH140	5700
	80	80	MCS 8	Straddle:CH144	5720
	92	92	MCS 8	Low: CH149	5745
	92	92	MCS 8	Middle: CH157	5785
	92	92	MCS 8	High: CH165	5825
IEEE 802.11n HT40	70	70	MCS 8	Low: CH38	5190
	70	70	MCS 8	Middle: CH46	5230
	70	70	MCS 8	High: CH54	5270
	70	70	MCS 8	Low: CH62	5310
	70	70	MCS 8	Middle: CH102	5510
	70	70	MCS 8	High: CH110	5550
	70	70	MCS 8	Low: CH134	5670
	70	70	MCS 8	Straddle: CH142	5710
	92	92	MCS 8	Middle: CH151	5755
	92	92	MCS 8	High: CH159	5795
IEEE 802.11ac VHT20	80	80	MCS 8	Low: CH36	5180
	80	80	MCS 8	Middle: CH40	5200
	80	80	MCS 8	High: CH48	5240
	80	80	MCS 8	Low: CH52	5260
	80	80	MCS 8	Middle: CH56	5280
	80	80	MCS 8	High: CH64	5320
	80	80	MCS 8	Low: CH100	5500
	80	80	MCS 8	Middle: CH116	5580
	80	80	MCS 8	High: CH140	5700
	80	80	MCS 8	Straddle:CH144	5720
	92	92	MCS 8	Low: CH149	5745
	92	92	MCS 8	Middle: CH157	5785
	92	92	MCS 8	High: CH165	5825
IEEE 802.11 ac VHT40	70	70	MCS 8	Low: CH38	5190
	70	70	MCS 8	Middle: CH46	5230
	70	70	MCS 8	High: CH54	5270
	70	70	MCS 8	Low: CH62	5310
	70	70	MCS 8	Middle: CH102	5510
	70	70	MCS 8	High: CH110	5550
	70	70	MCS 8	Low: CH134	5670
	70	70	MCS 8	Straddle: CH142	5710
	92	92	MCS 8	Middle: CH151	5755
	92	92	MCS 8	High: CH159	5795

IEEE 802.11ac VHT80	66	66	MCS 0	CH42	5210
	66	66	MCS 0	CH58	5290
	66	66	MCS 0	CH106	5530
	66	66	MCS 0	CH122	5610
	66	66	MCS 0	CH138	5690
	92	92	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

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

Temperature range:	+15°C to +35 °C
Humidity range:	20% to 75%
Pressure range:	86 kPa to 106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, 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

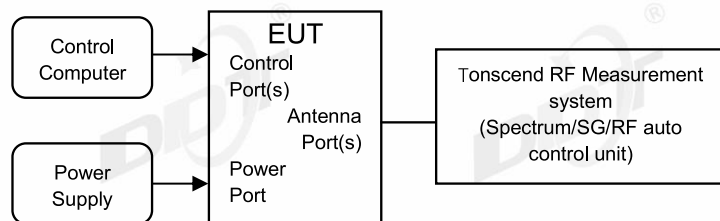
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Frequencies Stability	6.7×10^{-8} (Antenna couple method) 5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 1.40 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$) 1.66 dB ($8 \text{ GHz} \leq f < 26.5 \text{ GHz}$)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 °C
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V) 4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz) 4.40 dB (6 GHz - 18 GHz) 3.54 dB (18 GHz - 26 GHz) 4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.34dB (150KHz-30MHz) 3.72dB (9KHz-150KHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Conductive Test

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☒ RF Connected Test (RF Measurement System 1#)				
SIGNAL ANALYZER	R&S	FSQ26	101272	2025/03/31
Wideband Radio Communication Tester	R&S	CMW500	120259	2024/07/14
MXG Vector Signal Generator	KEYSIGHT	N5182B	MY59100192	2025/03/31
MXG Vector Signal Generator	Agilent	N5182A	MY19060405	2025/03/31
RF Control Unit	Tonsend	JS0806-2	158060010	2025/03/31
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2025/04/22
Test Software	Tonscend	JS1120-3	Ver.3.2.22	N/A

4. 26dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

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

4.3. Test procedure

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

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

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

4.4. Test result

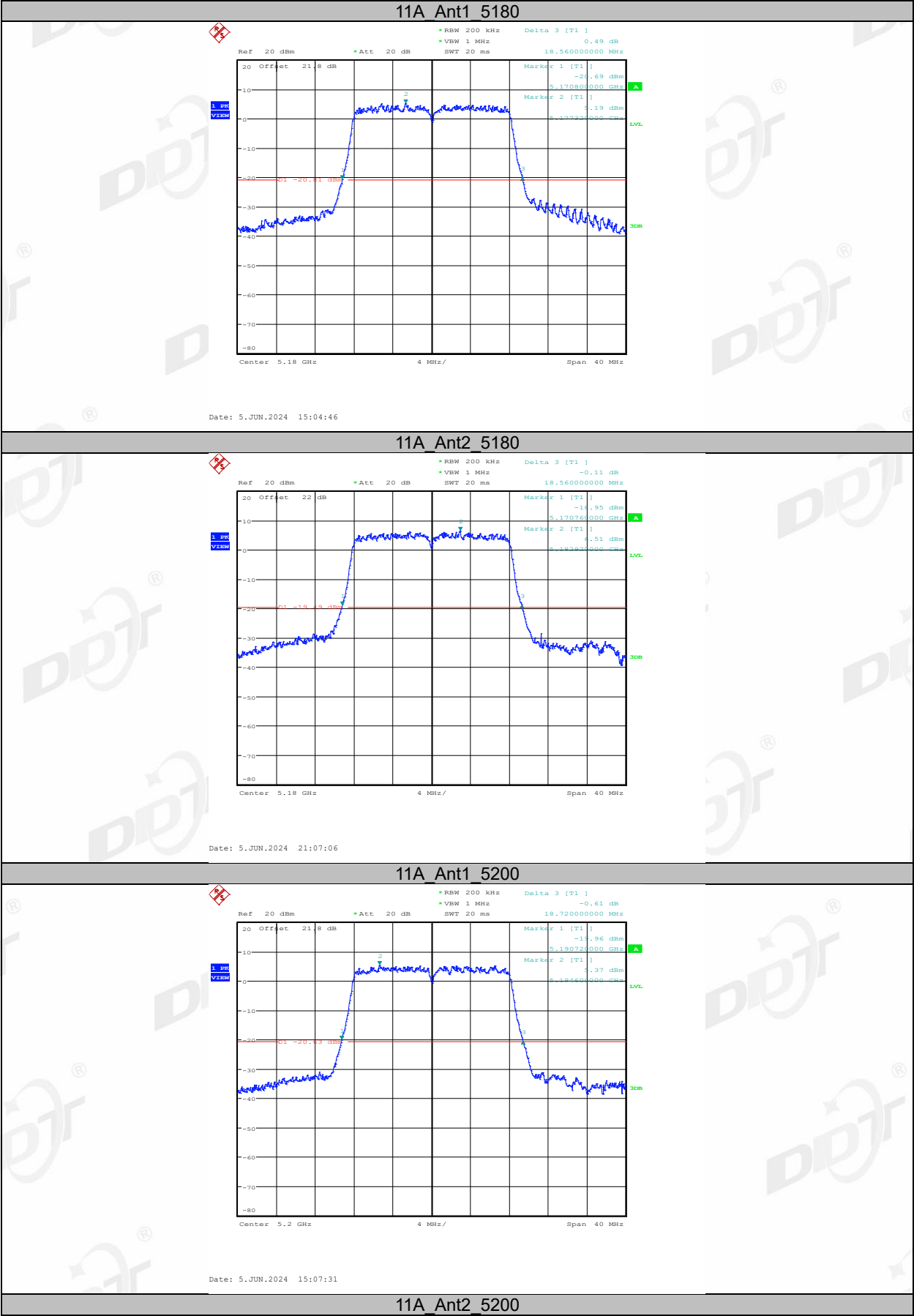
Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 1#
Ambient Condition:	25.1℃,52.5%RH	Test Date:	2024.06.05-2024.06.14
Test Power Supply:	DC 12V	Sample Number:	S24042530-001

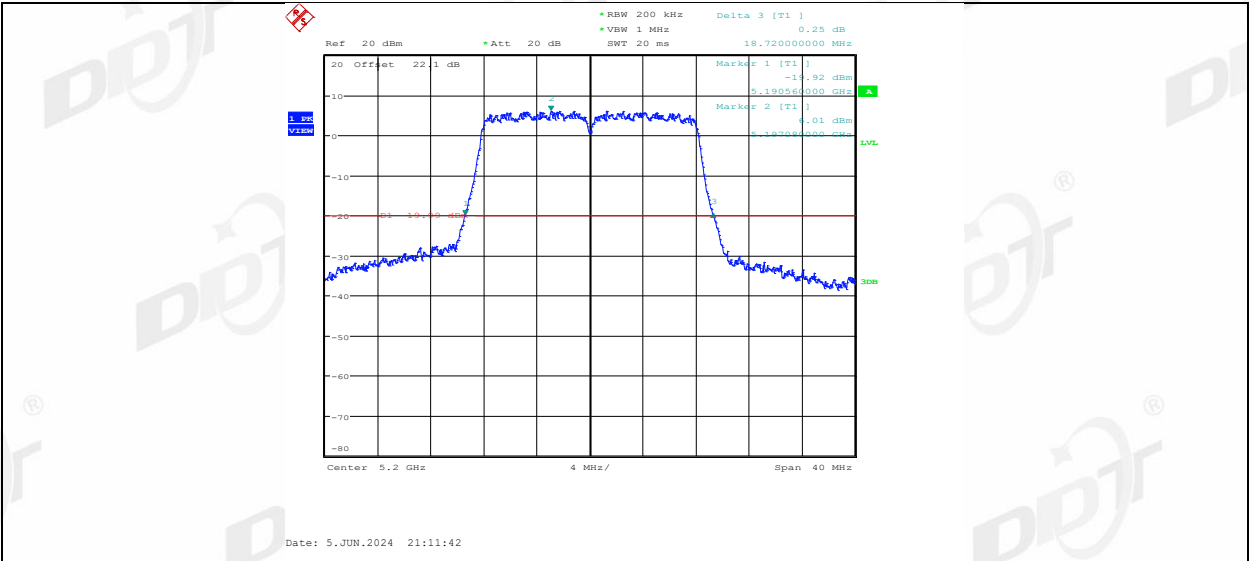
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.56	5170.80	5189.36	---	---
	Ant2	5180	18.56	5170.76	5189.32	---	---
	Ant1	5200	18.72	5190.72	5209.44	---	---
	Ant2	5200	18.72	5190.56	5209.28	---	---
	Ant1	5240	18.52	5230.76	5249.28	---	---
	Ant2	5240	18.48	5230.80	5249.28	---	---
	Ant1	5260	18.60	5250.72	5269.32	---	---
	Ant2	5260	18.56	5250.72	5269.28	---	---
	Ant1	5280	18.56	5270.72	5289.28	---	---
	Ant2	5280	18.64	5270.76	5289.40	---	---
	Ant1	5320	18.60	5310.68	5329.28	---	---
	Ant2	5320	18.64	5310.68	5329.32	---	---
	Ant1	5500	18.68	5490.64	5509.32	---	---
	Ant2	5500	18.76	5490.60	5509.36	---	---
	Ant1	5580	18.76	5570.64	5589.40	---	---
	Ant2	5580	18.60	5570.72	5589.32	---	---
	Ant1	5700	18.64	5690.68	5709.32	---	---
	Ant2	5700	18.56	5690.76	5709.32	---	---
	Ant1	5720	20.12	5710.60	5730.72	---	---
	Ant2	5720	18.68	5710.64	5729.32	---	---
	Ant1	5720 UNII-2C	14.4	5710.60	5725	---	---
	Ant2	5720 UNII-2C	14.36	5710.64	5725	---	---
	Ant1	5720 UNII-3	5.72	5725	5730.72	---	---
	Ant2	5720 UNII-3	4.32	5725	5729.32	---	---
	Ant1	5745	18.64	5735.68	5754.32	---	---
	Ant2	5745	21.56	5734.56	5756.12	---	---
	Ant1	5785	21.72	5774.68	5796.40	---	---
	Ant2	5785	26.48	5774.24	5800.72	---	---
	Ant1	5825	25.72	5813.12	5838.84	---	---
	Ant2	5825	22.80	5814.12	5836.92	---	---
11N20MIMO	Ant1	5180	19.48	5170.32	5189.80	---	---
	Ant2	5180	19.20	5170.48	5189.68	---	---
	Ant1	5200	19.52	5190.24	5209.76	---	---
	Ant2	5200	19.36	5190.36	5209.72	---	---
	Ant1	5240	19.48	5230.28	5249.76	---	---
	Ant2	5240	19.28	5230.44	5249.72	---	---
	Ant1	5260	19.48	5250.36	5269.84	---	---
	Ant2	5260	19.32	5250.44	5269.76	---	---
	Ant1	5280	19.48	5270.24	5289.72	---	---
	Ant2	5280	19.36	5270.32	5289.68	---	---
	Ant1	5320	19.48	5310.28	5329.76	---	---
	Ant2	5320	19.28	5310.36	5329.64	---	---
	Ant1	5500	19.48	5490.28	5509.76	---	---
	Ant2	5500	19.40	5490.32	5509.72	---	---
	Ant1	5580	19.68	5570.12	5589.80	---	---
	Ant2	5580	19.36	5570.32	5589.68	---	---
	Ant1	5700	19.48	5690.32	5709.80	---	---
	Ant2	5700	19.28	5690.40	5709.68	---	---
	Ant1	5720	19.52	5710.24	5729.76	---	---
	Ant2	5720	19.40	5710.32	5729.72	---	---
	Ant1	5720 UNII-2C	14.76	5710.24	5725	---	---
	Ant2	5720 UNII-2C	14.68	5710.32	5725	---	---
	Ant1	5720 UNII-3	4.76	5725	5729.76	---	---
	Ant2	5720 UNII-3	4.72	5725	5729.72	---	---
	Ant1	5745	24.40	5735.32	5759.72	---	---
	Ant2	5745	19.24	5735.52	5754.76	---	---

	Ant1	5785	19.72	5775.40	5795.12	---	---
	Ant2	5785	19.40	5775.36	5794.76	---	---
	Ant1	5825	19.52	5815.32	5834.84	---	---
	Ant2	5825	19.36	5815.44	5834.80	---	---
11N40MIMO	Ant1	5190	41.60	5169.28	5210.88	---	---
	Ant2	5190	40.40	5169.68	5210.08	---	---
	Ant1	5230	41.20	5209.44	5250.64	---	---
	Ant2	5230	40.72	5209.52	5250.24	---	---
	Ant1	5270	41.28	5249.36	5290.64	---	---
	Ant2	5270	40.88	5249.60	5290.48	---	---
	Ant1	5310	41.68	5288.88	5330.56	---	---
	Ant2	5310	40.56	5289.60	5330.16	---	---
	Ant1	5510	41.68	5489.20	5530.88	---	---
	Ant2	5510	40.72	5489.44	5530.16	---	---
	Ant1	5550	42.16	5528.64	5570.80	---	---
	Ant2	5550	40.40	5529.68	5570.08	---	---
	Ant1	5670	41.44	5649.44	5690.88	---	---
	Ant2	5670	40.88	5649.44	5690.32	---	---
	Ant1	5710	42.08	5688.72	5730.80	---	---
	Ant2	5710	40.80	5689.52	5730.32	---	---
	Ant1	5710 UNII-2C	36.28	5688.72	5725	---	---
	Ant2	5710 UNII-2C	35.48	5689.52	5725	---	---
	Ant1	5710 UNII-3	5.8	5725	5730.80	---	---
	Ant2	5710 UNII-3	5.32	5725	5730.32	---	---
	Ant1	5755	55.68	5734.36	5790.04	---	---
	Ant2	5755	43.44	5734.92	5778.36	---	---
	Ant1	5795	41.28	5774.60	5815.88	---	---
	Ant2	5795	45.20	5774.36	5819.56	---	---
11AC20MIMO	Ant1	5180	19.44	5170.32	5189.76	---	---
	Ant2	5180	19.28	5170.40	5189.68	---	---
	Ant1	5200	19.60	5190.20	5209.80	---	---
	Ant2	5200	19.32	5190.36	5209.68	---	---
	Ant1	5240	19.48	5230.32	5249.80	---	---
	Ant2	5240	19.32	5230.40	5249.72	---	---
	Ant1	5260	19.60	5250.32	5269.92	---	---
	Ant2	5260	19.32	5250.40	5269.72	---	---
	Ant1	5280	19.36	5270.40	5289.76	---	---
	Ant2	5280	19.36	5270.36	5289.72	---	---
	Ant1	5320	19.52	5310.32	5329.84	---	---
	Ant2	5320	19.24	5310.48	5329.72	---	---
	Ant1	5500	19.44	5490.36	5509.80	---	---
	Ant2	5500	19.36	5490.40	5509.76	---	---
	Ant1	5580	19.52	5570.32	5589.84	---	---
	Ant2	5580	19.40	5570.40	5589.80	---	---
	Ant1	5700	19.48	5690.36	5709.84	---	---
	Ant2	5700	19.44	5690.36	5709.80	---	---
	Ant1	5720	19.48	5710.24	5729.72	---	---
	Ant2	5720	19.28	5710.36	5729.64	---	---
	Ant1	5720 UNII-2C	14.76	5710.24	5725	---	---
	Ant2	5720 UNII-2C	14.64	5710.36	5725	---	---
	Ant1	5720 UNII-3	4.72	5725	5729.72	---	---
	Ant2	5720 UNII-3	4.64	5725	5729.64	---	---
	Ant1	5745	19.76	5735.40	5755.16	---	---
	Ant2	5745	19.20	5735.60	5754.80	---	---
	Ant1	5785	21.64	5775.44	5797.08	---	---
	Ant2	5785	19.28	5775.56	5794.84	---	---
	Ant1	5825	20.40	5815.32	5835.72	---	---
	Ant2	5825	19.40	5815.40	5834.80	---	---
11AC40MIMO	Ant1	5190	41.84	5169.04	5210.88	---	---
	Ant2	5190	40.24	5169.92	5210.16	---	---
	Ant1	5230	41.44	5209.36	5250.80	---	---
	Ant2	5230	40.56	5209.68	5250.24	---	---
	Ant1	5270	42.00	5249.20	5291.20	---	---
	Ant2	5270	40.16	5250.08	5290.24	---	---

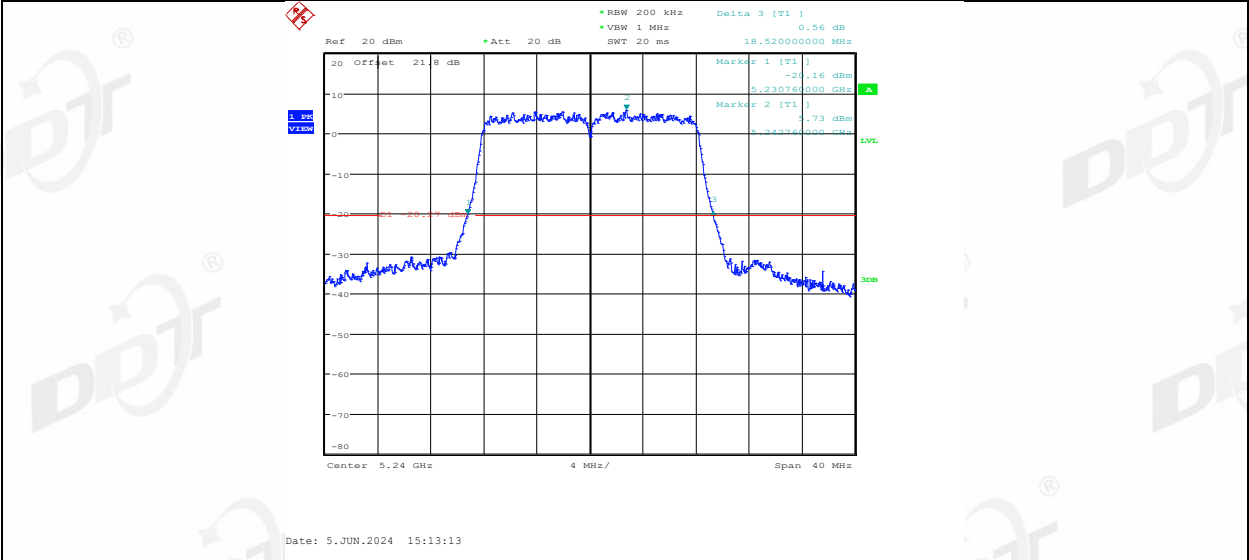
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	Ant2	5310	40.40	5289.76	5330.16	---	---
	Ant1	5510	42.80	5488.32	5531.12	---	---
	Ant2	5510	40.80	5489.60	5530.40	---	---
	Ant1	5550	42.16	5529.12	5571.28	---	---
	Ant2	5550	40.48	5529.84	5570.32	---	---
	Ant1	5670	42.72	5648.08	5690.80	---	---
	Ant2	5670	40.56	5649.68	5690.24	---	---
	Ant1	5710	41.44	5689.20	5730.64	---	---
	Ant2	5710	40.40	5689.68	5730.08	---	---
	Ant1	5710 UNII-2C	35.8	5689.20	5725	---	---
	Ant2	5710 UNII-2C	35.32	5689.68	5725	---	---
	Ant1	5710 UNII-3	5.64	5725	5730.64	---	---
	Ant2	5710 UNII-3	5.08	5725	5730.08	---	---
	Ant1	5755	53.76	5734.28	5788.04	---	---
	Ant2	5755	44.40	5735.16	5779.56	---	---
	Ant1	5795	49.44	5774.20	5823.64	---	---
	Ant2	5795	41.20	5774.92	5816.12	---	---
11AC80MIMO	Ant1	5210	81.12	5169.52	5250.64	---	---
	Ant2	5210	81.12	5169.52	5250.64	---	---
	Ant1	5290	81.76	5249.04	5330.80	---	---
	Ant2	5290	80.80	5249.68	5330.48	---	---
	Ant1	5530	81.28	5489.36	5570.64	---	---
	Ant2	5530	80.96	5489.52	5570.48	---	---
	Ant1	5610	81.60	5569.52	5651.12	---	---
	Ant2	5610	81.28	5569.52	5650.80	---	---
	Ant1	5690	81.92	5649.36	5731.28	---	---
	Ant2	5690	80.64	5649.84	5730.48	---	---
	Ant1	5690 UNII-2C	75.64	5649.36	5725	---	---
	Ant2	5690 UNII-2C	75.16	5649.84	5725	---	---
	Ant1	5690 UNII-3	6.28	5725	5731.28	---	---
	Ant2	5690 UNII-3	5.48	5725	5730.48	---	---
	Ant1	5775	94.56	5734.36	5828.92	---	---
	Ant2	5775	88.32	5735.00	5823.32	---	---

4.5. Test graphs

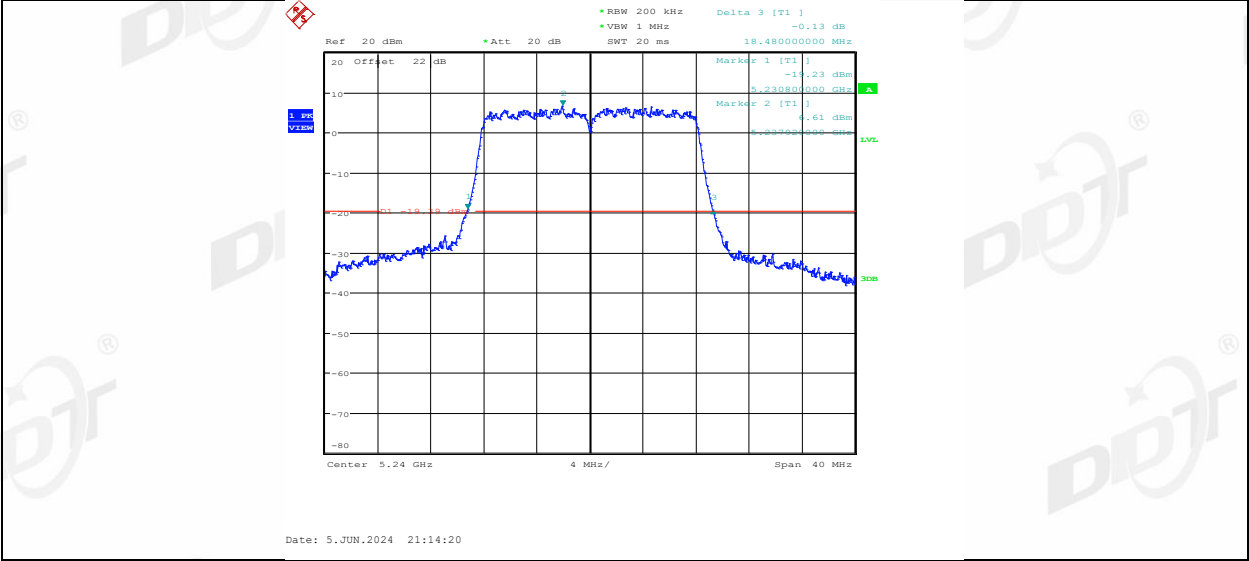




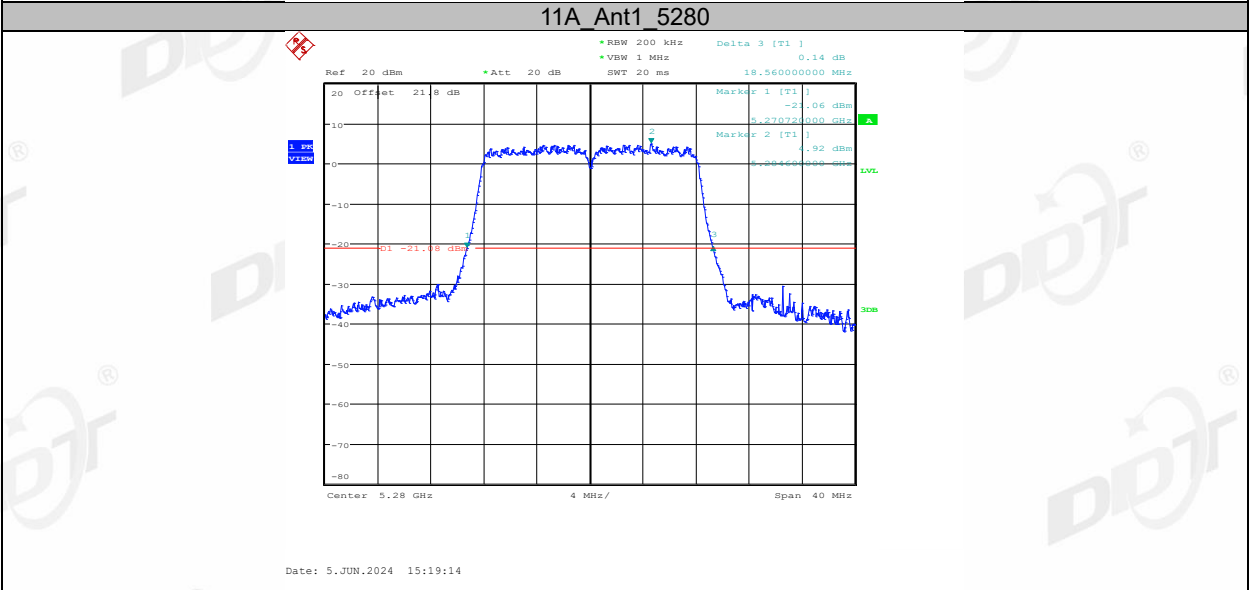
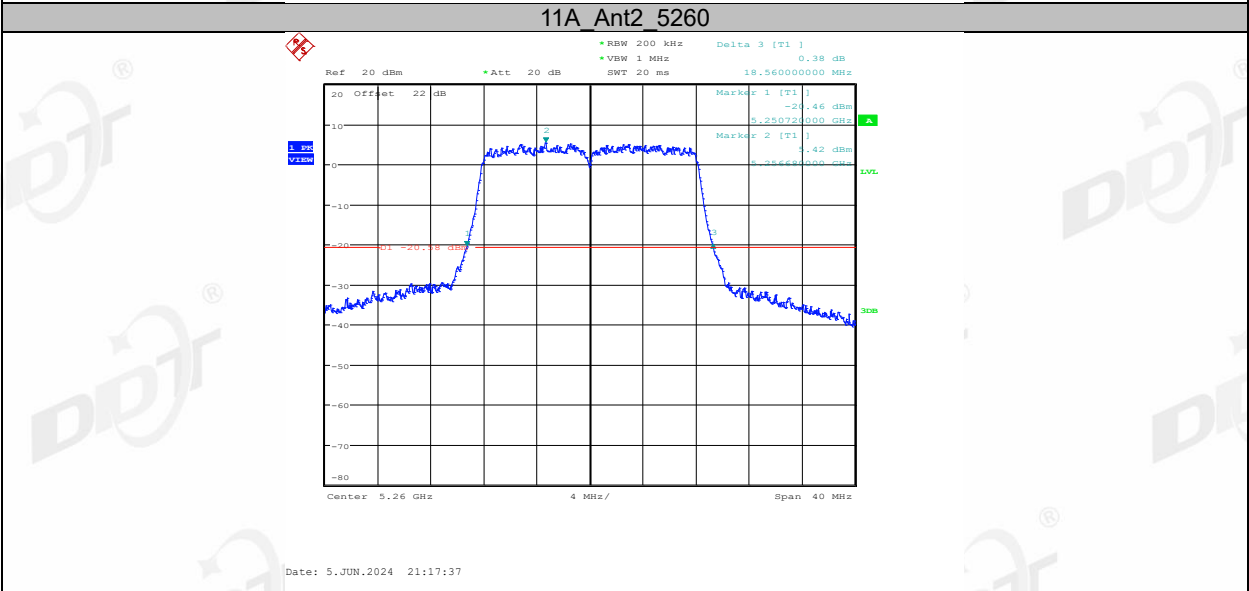
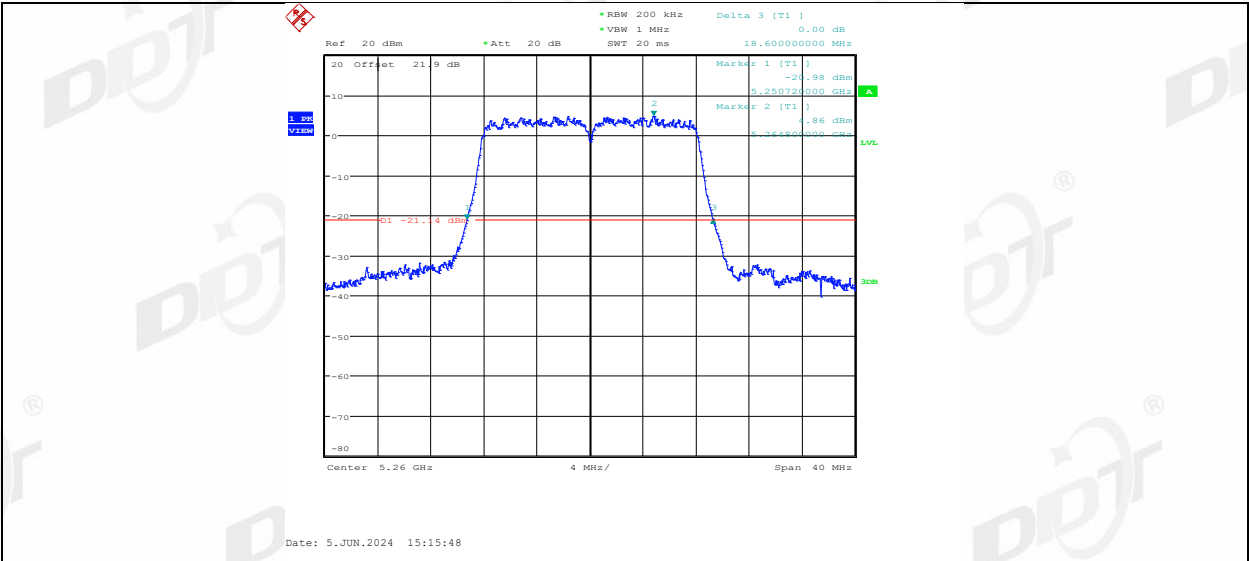
11A_Ant1_5240



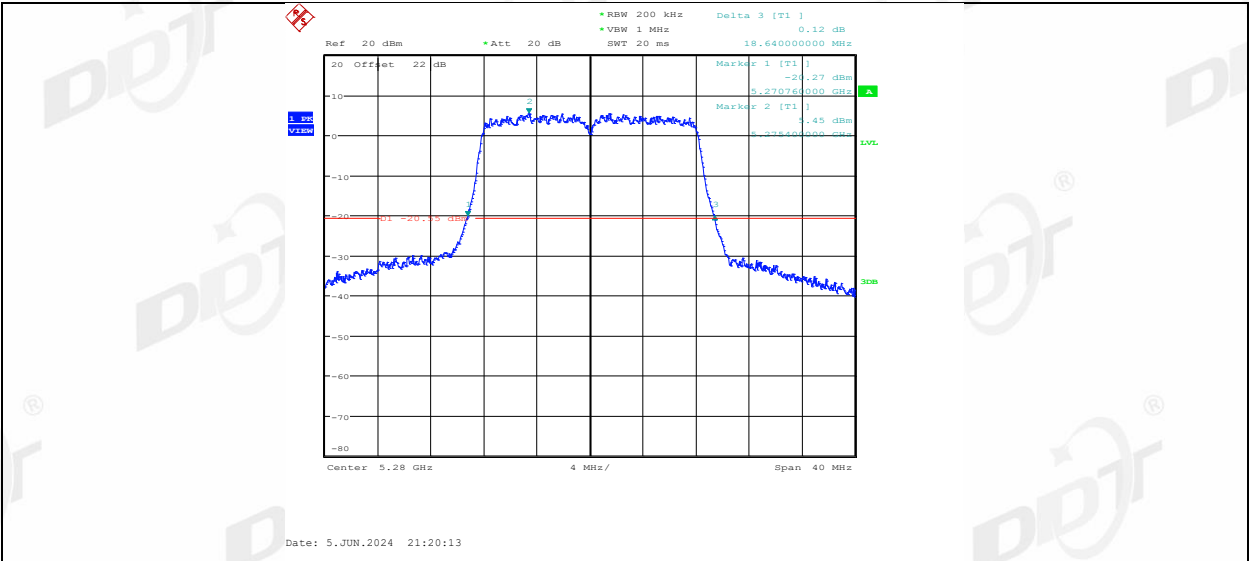
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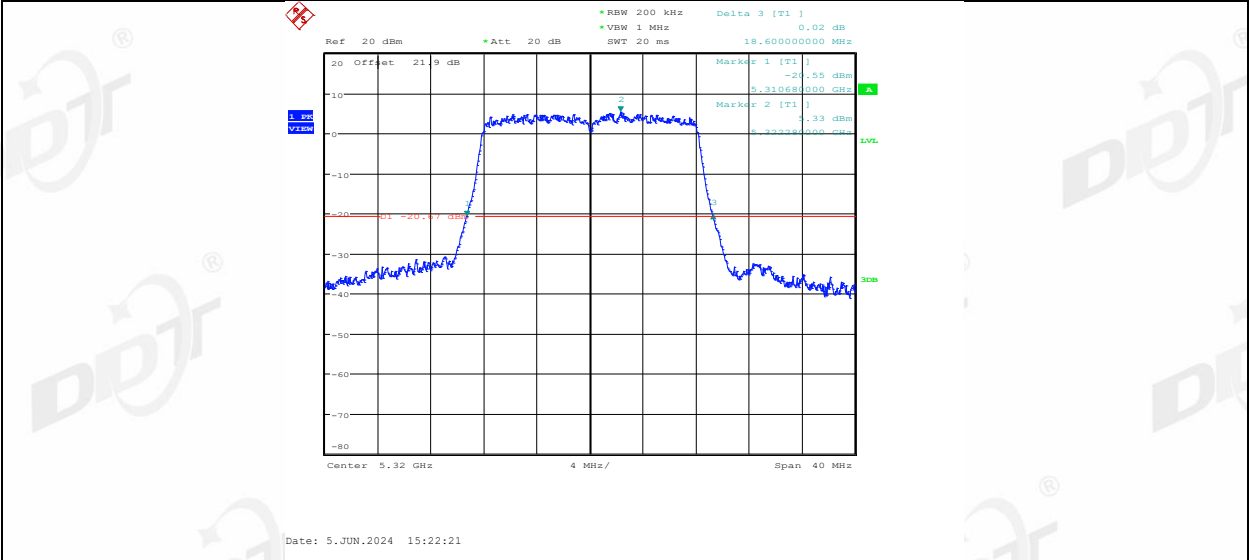
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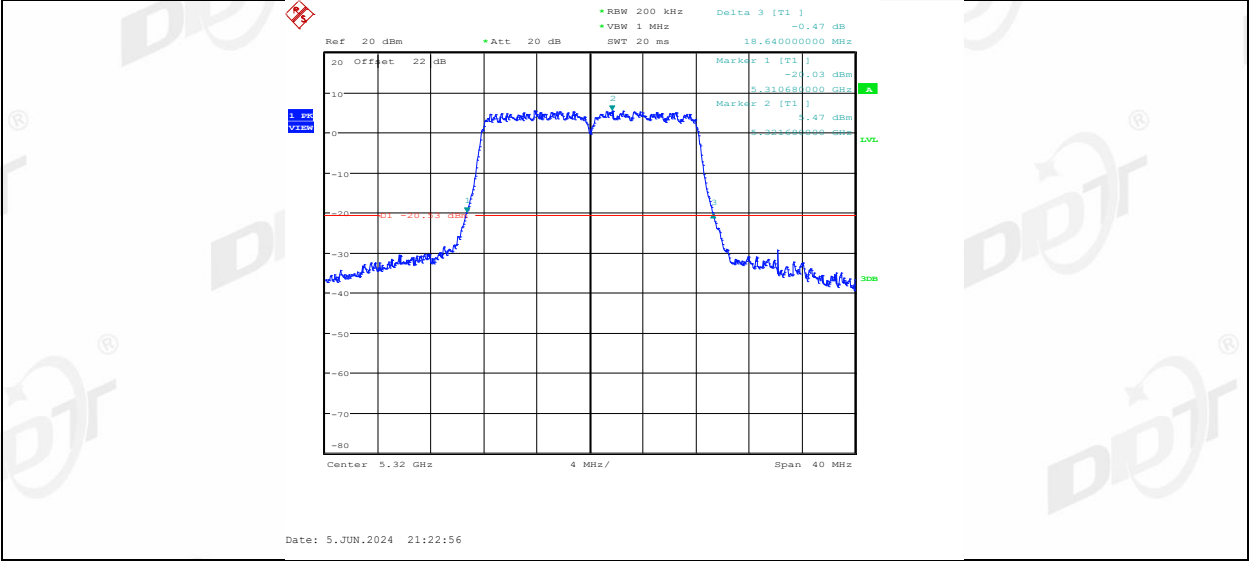
11A_Ant2_5280



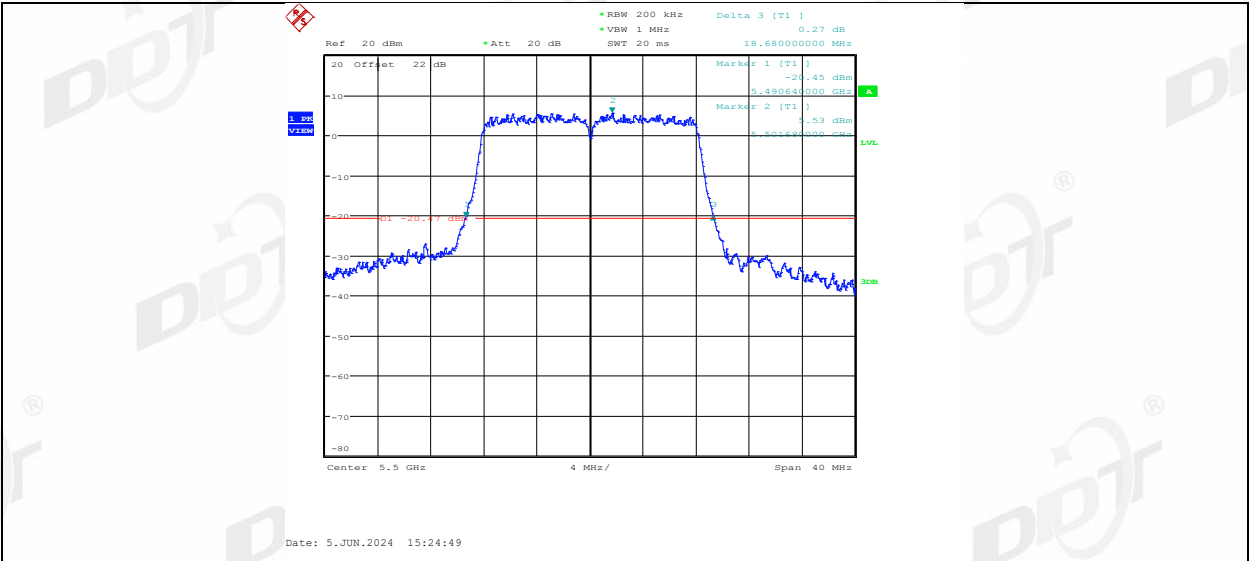
11A_Ant1_5320



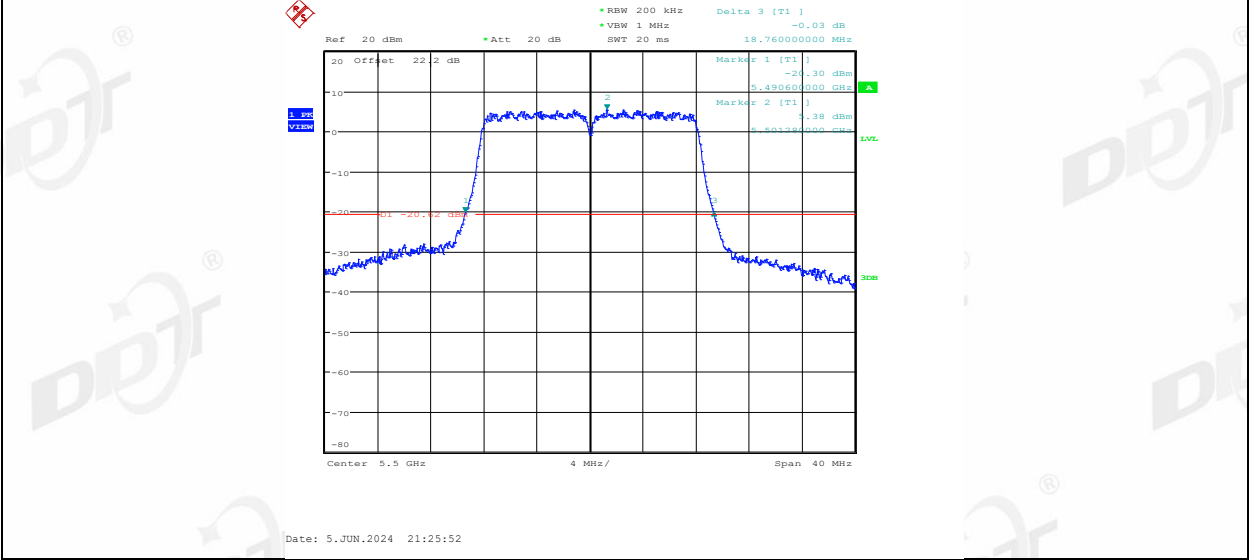
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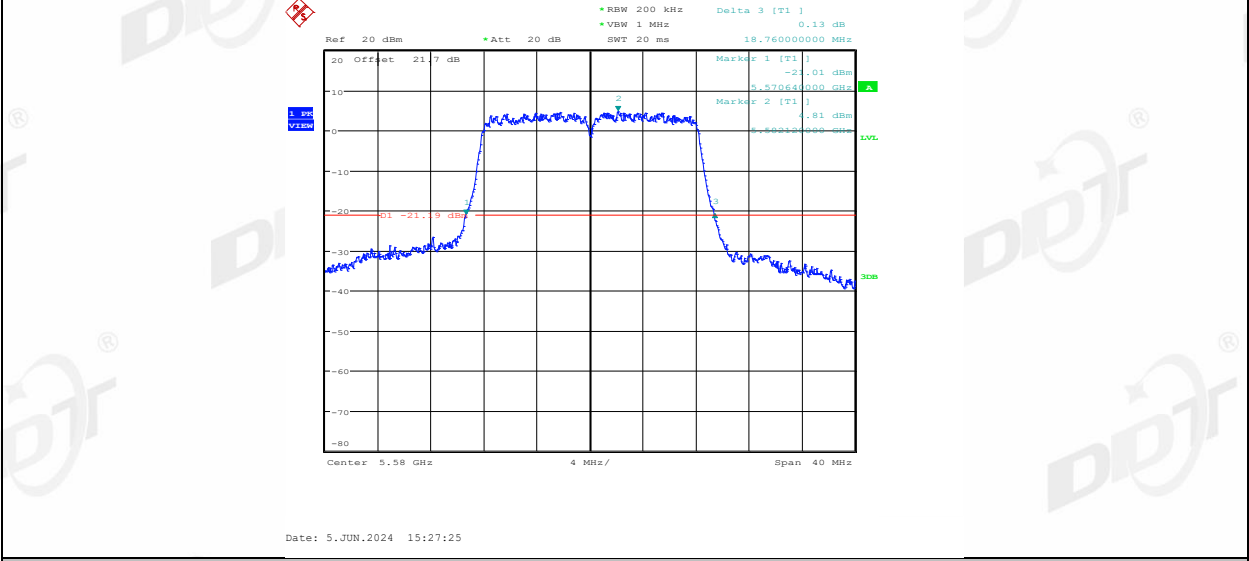
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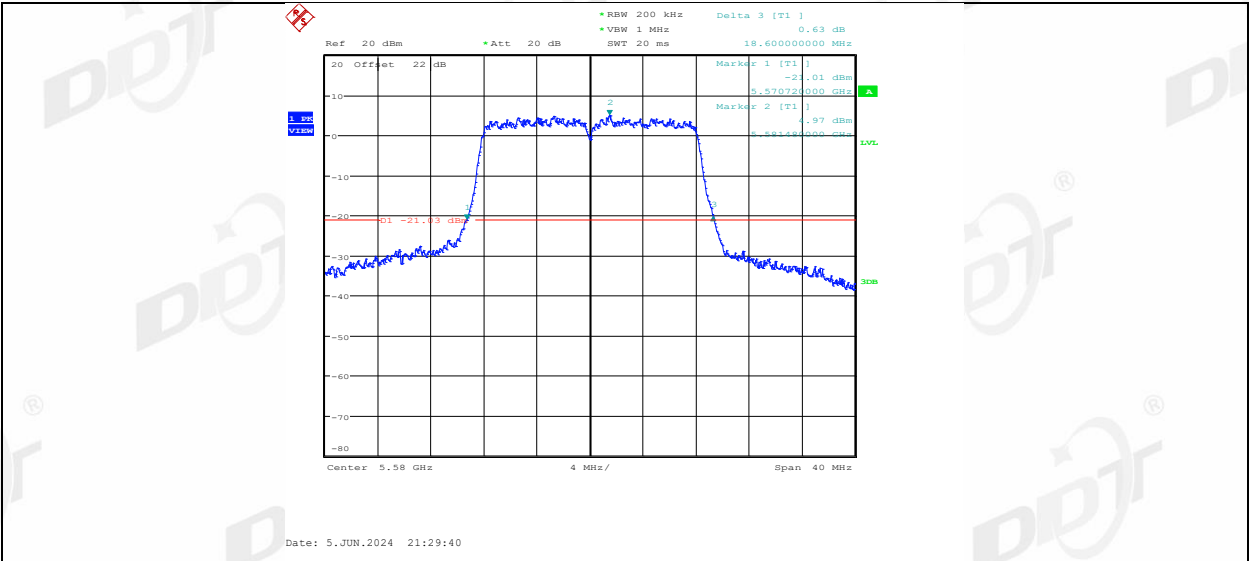
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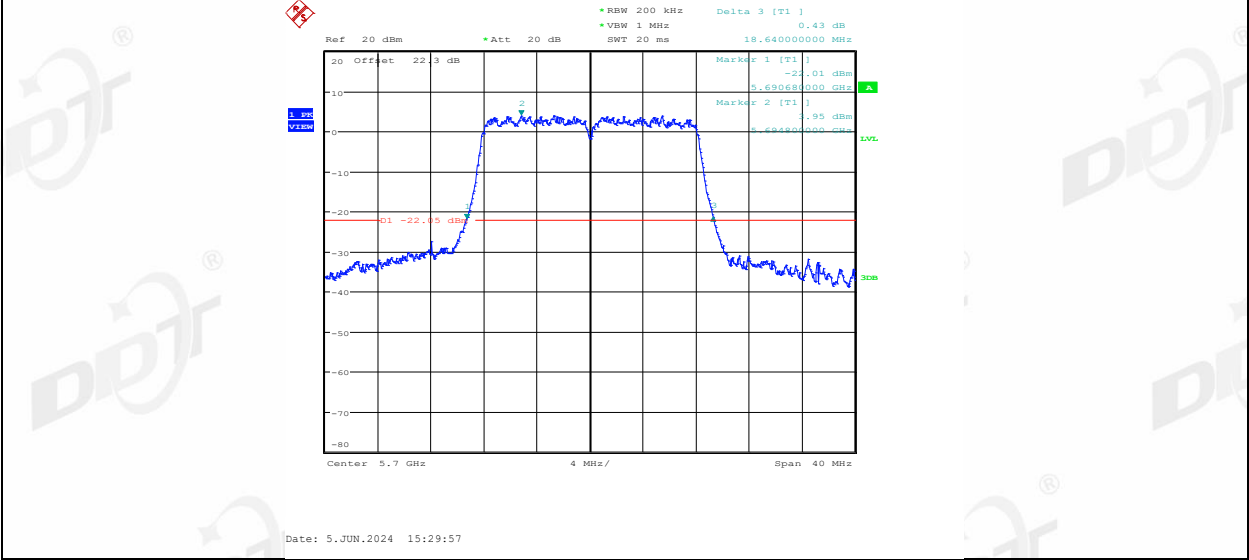
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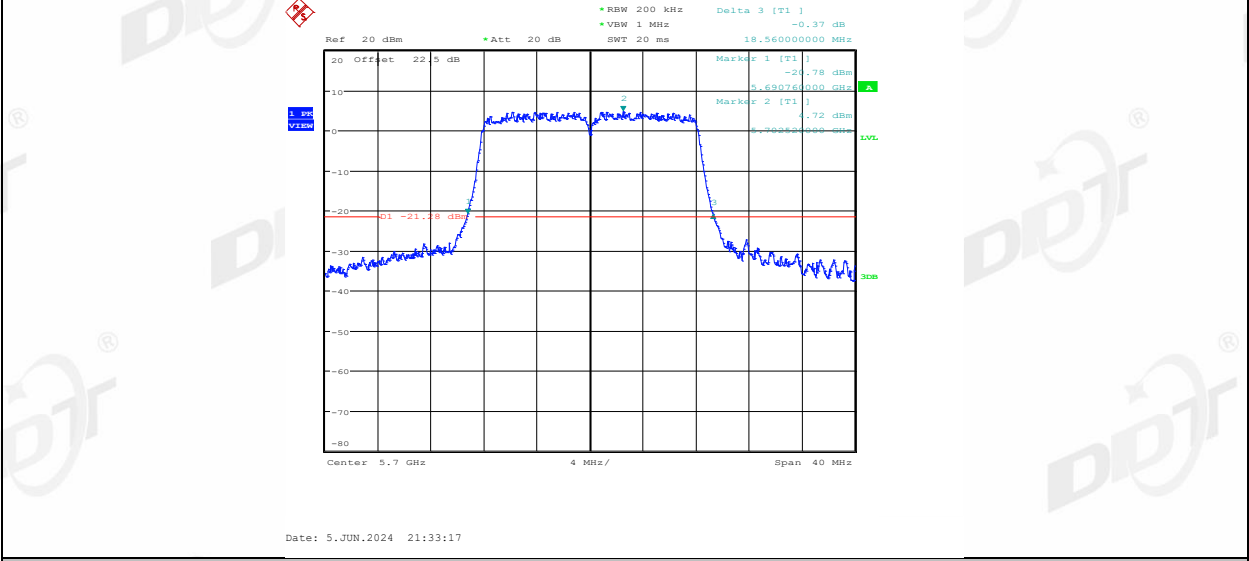
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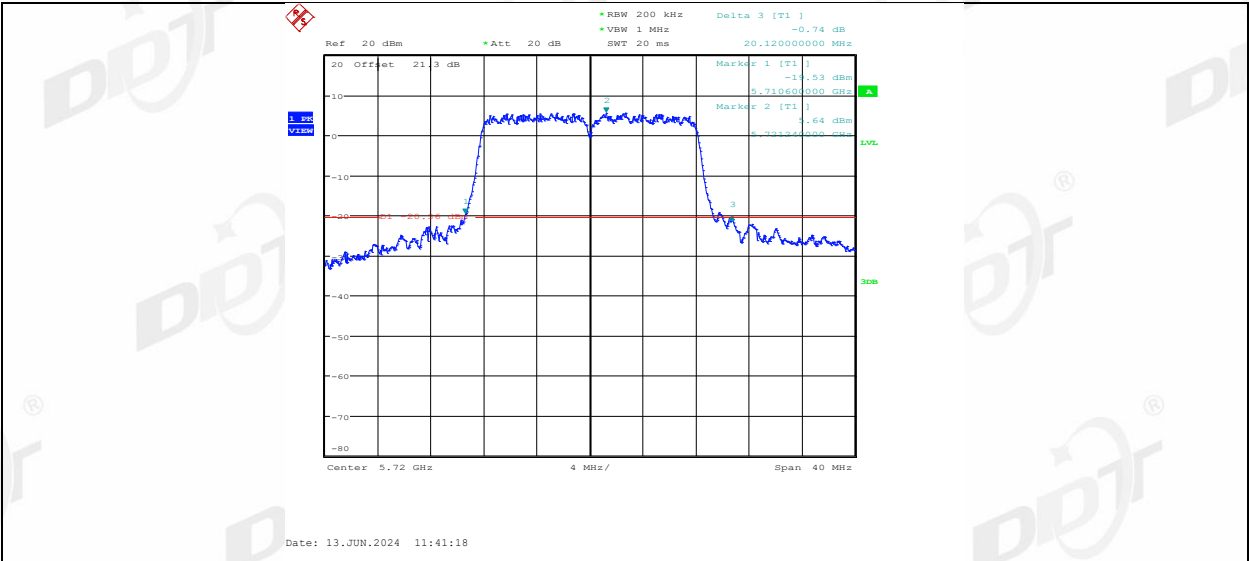
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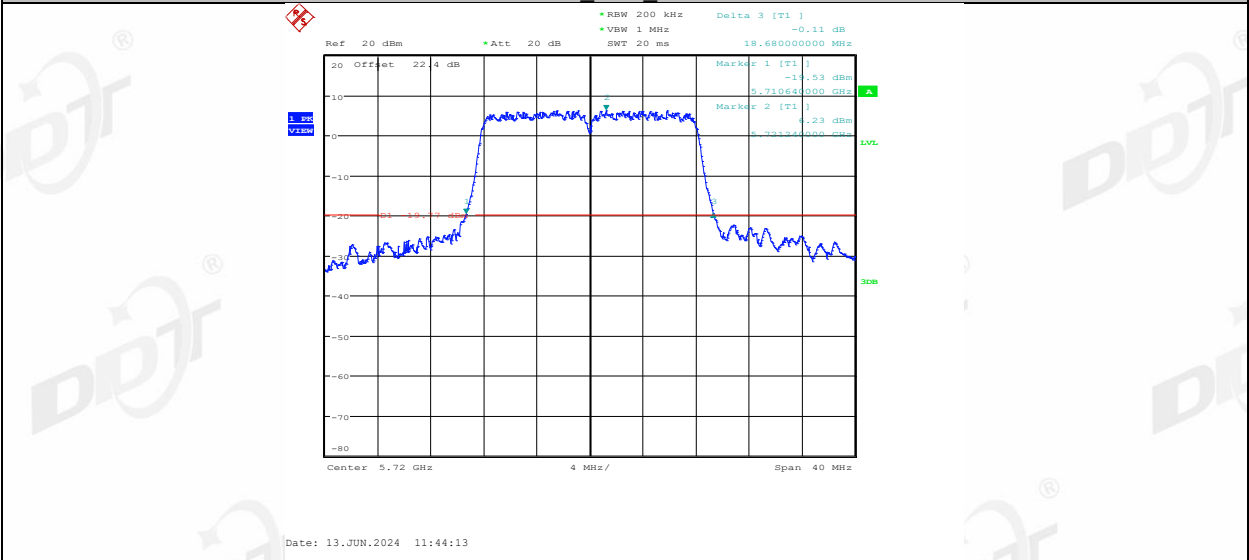
11A_Ant2_5700



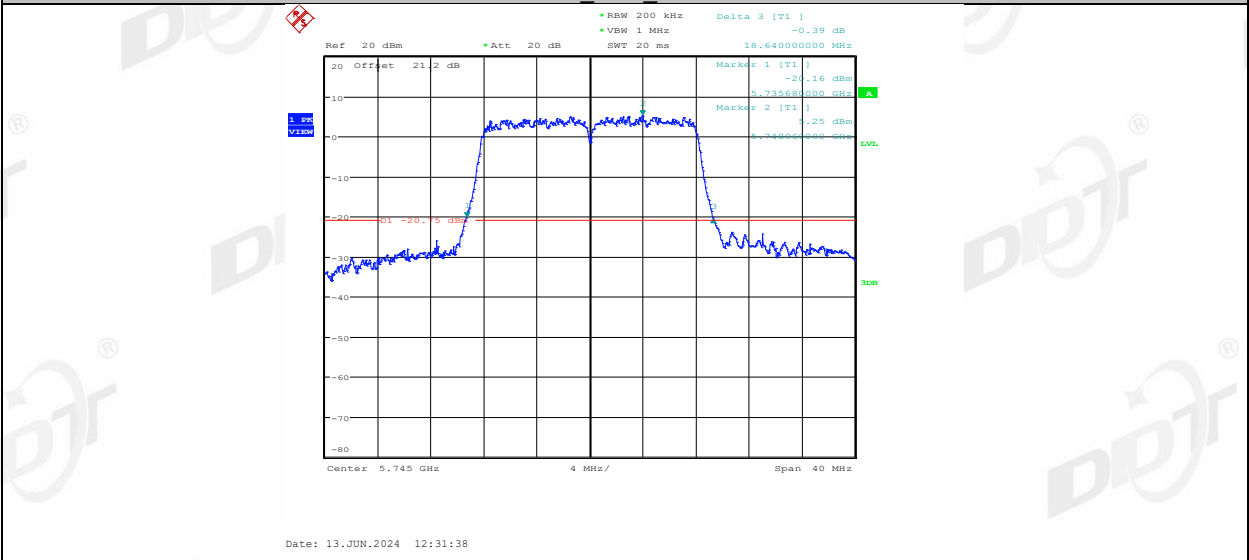
11A_Ant1_5720



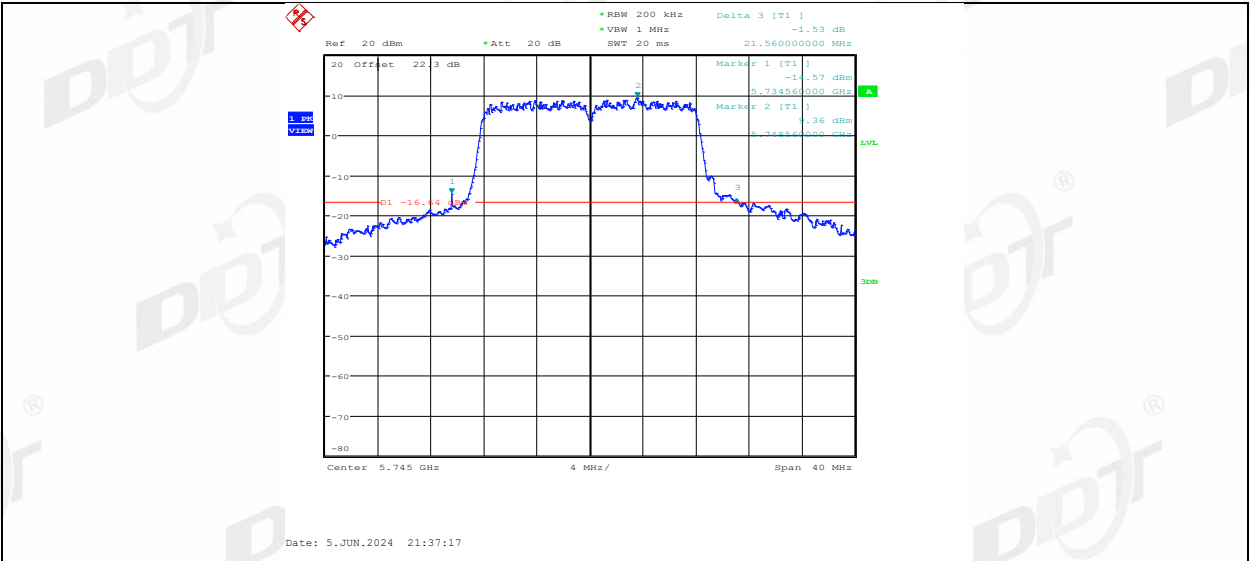
11A_Ant2_5720



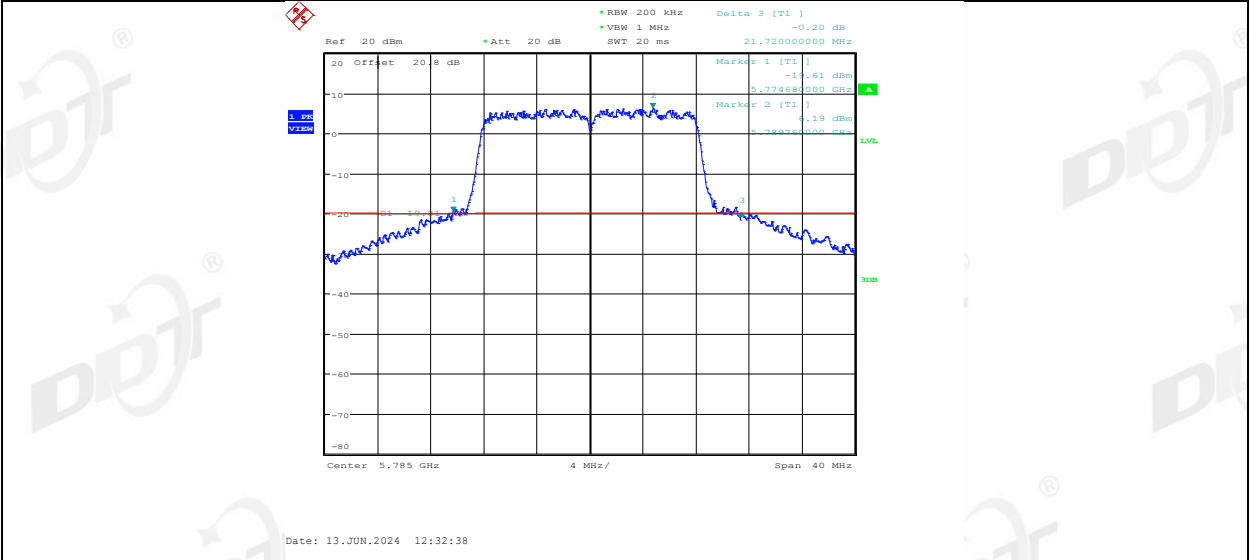
11A_Ant1_5745



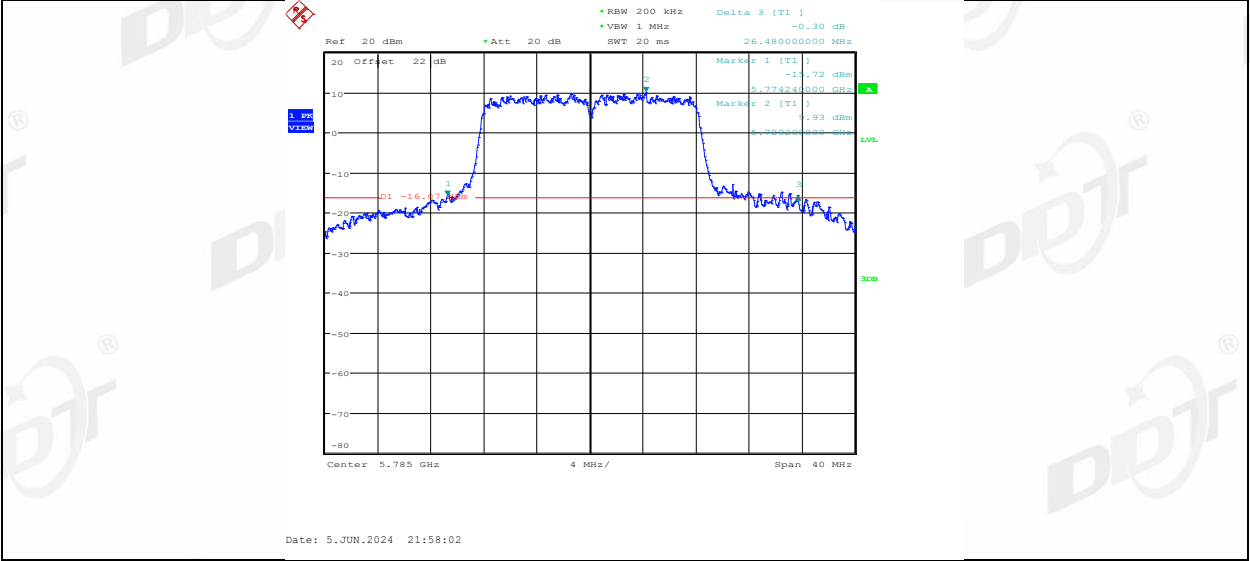
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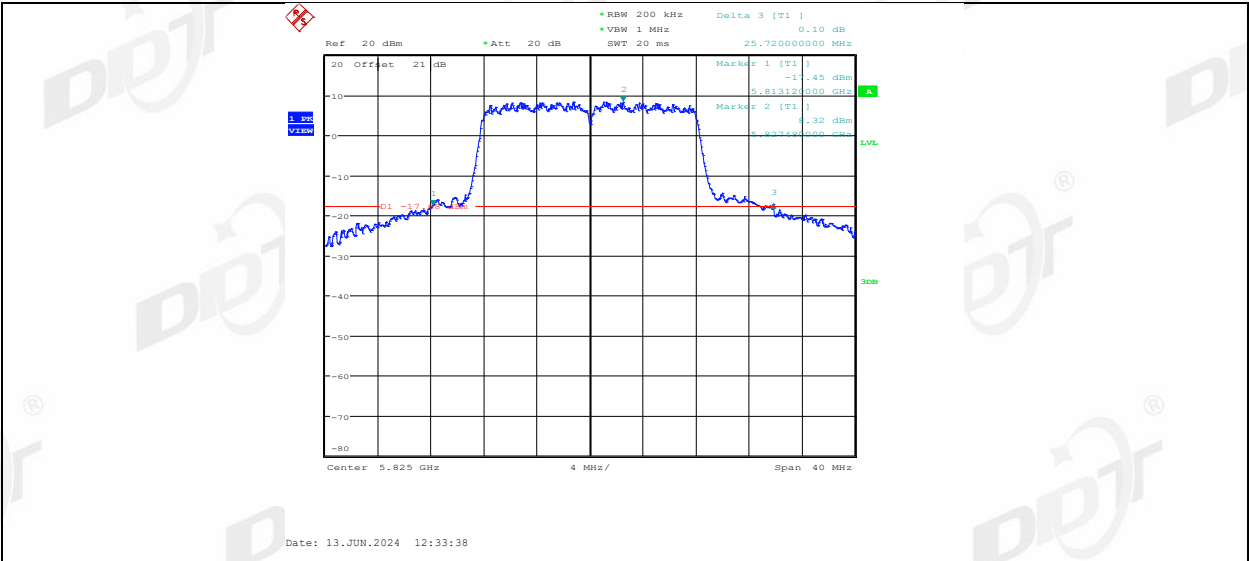
11A_Ant1_5785



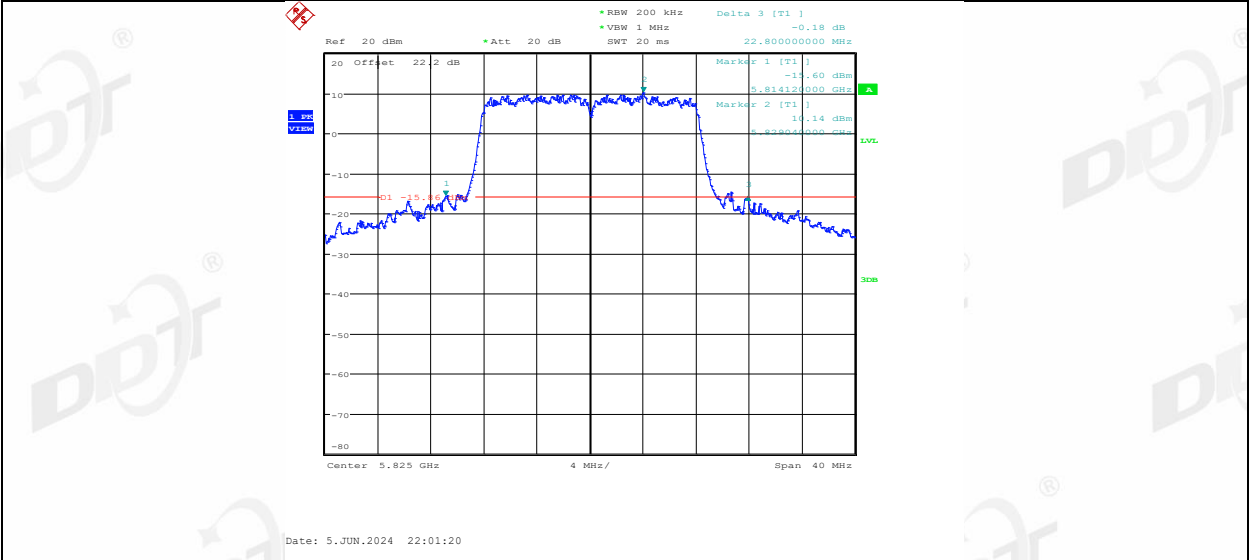
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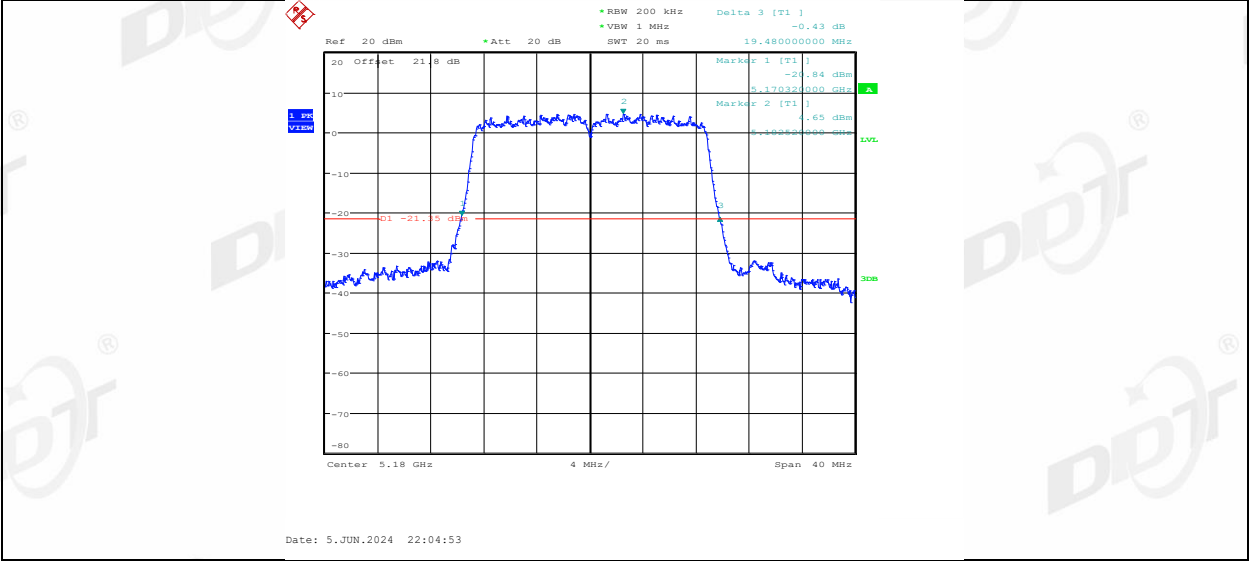
11A_Ant1_5825



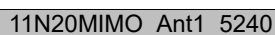
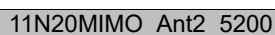
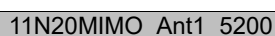
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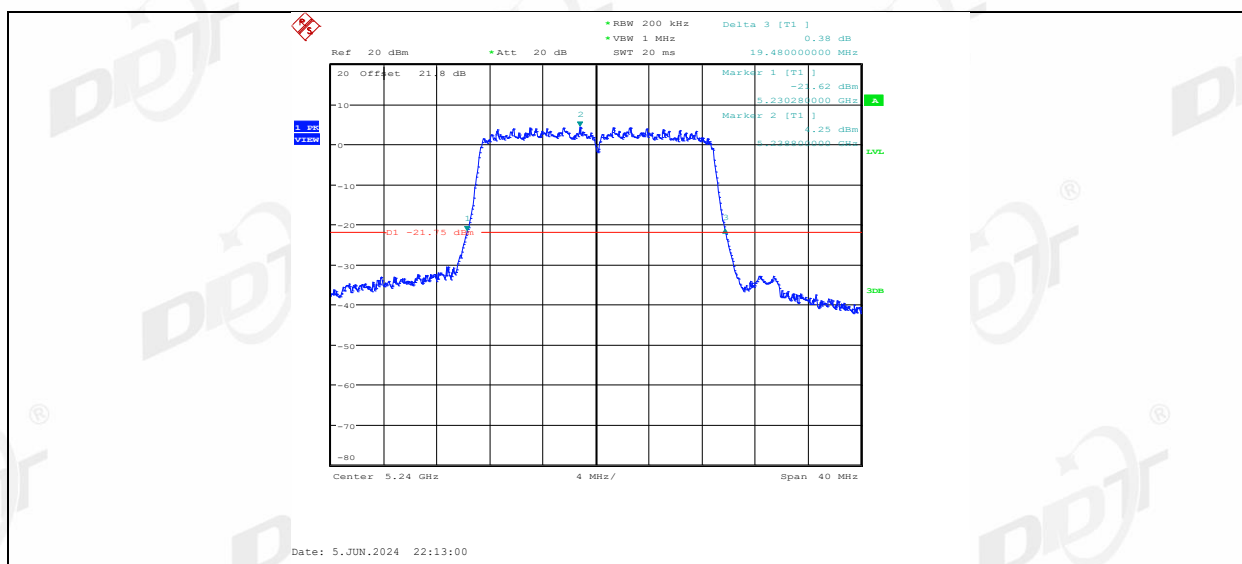


11N20MIMO_Ant1_5180

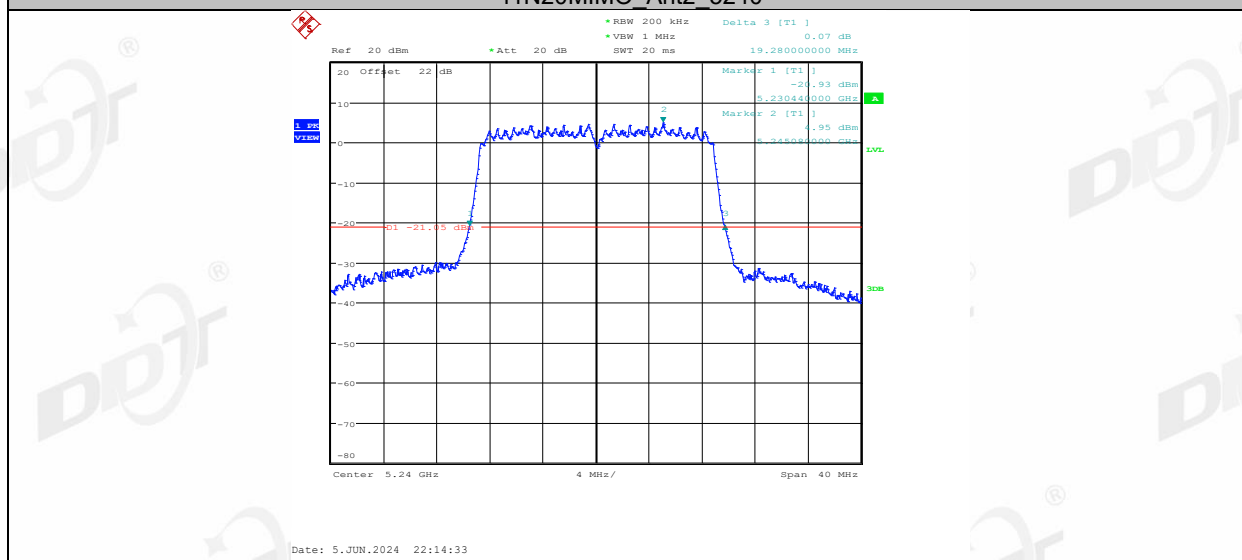


11N20MIMO_Ant2_5180

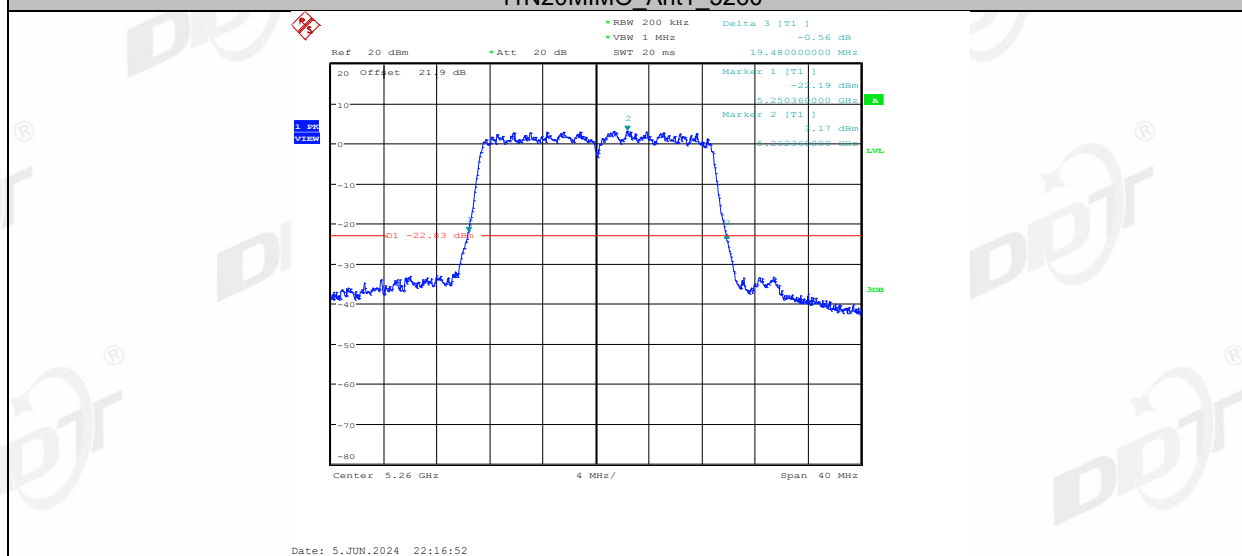




11N20MIMO Ant2 5240



11N20MIMO Ant1 5260



11N20MIMO Ant2 5260

*RBW 200 kHz Delta 3 [T1]
 *VBW 1 MHz 0.15 dB
 Ref 20 dBm *Att 20 dB SWF 20 ms 19.48000000 MHz

20 Offset 21.8 dB
 10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80

Marker 1 [T1]
 -14.72 dBm
 5.27024000 GHz
 Marker 2 [T1]
 -1.83 dBm
 5.28224000 GHz

1 dB VIEW
 3dB

Center 5.28 GHz 4 MHz/
 Span 40 MHz

Date: 6 JUN 2024 11:09:18

The image shows a Keysight E67 Series Spectrum Analyzer display. The main plot area shows a signal with a flat top and sloped sides. The top of the signal is at approximately -20 dBm, and the sides slope down to about -35 dBm at the edges of the 40 MHz span. The center frequency is 5.28 GHz. The display includes various parameters like RBW, VBW, and Span, and a grid for measurement.

Parameters displayed at the top:

- Ref 20 dBm
- Att 20 dB
- SWT 20 ms
- RBW 200 kHz
- Delta 3 [T1]
- VBW 1 MHz
- 0.21 dB
- 19.360000000 MHz

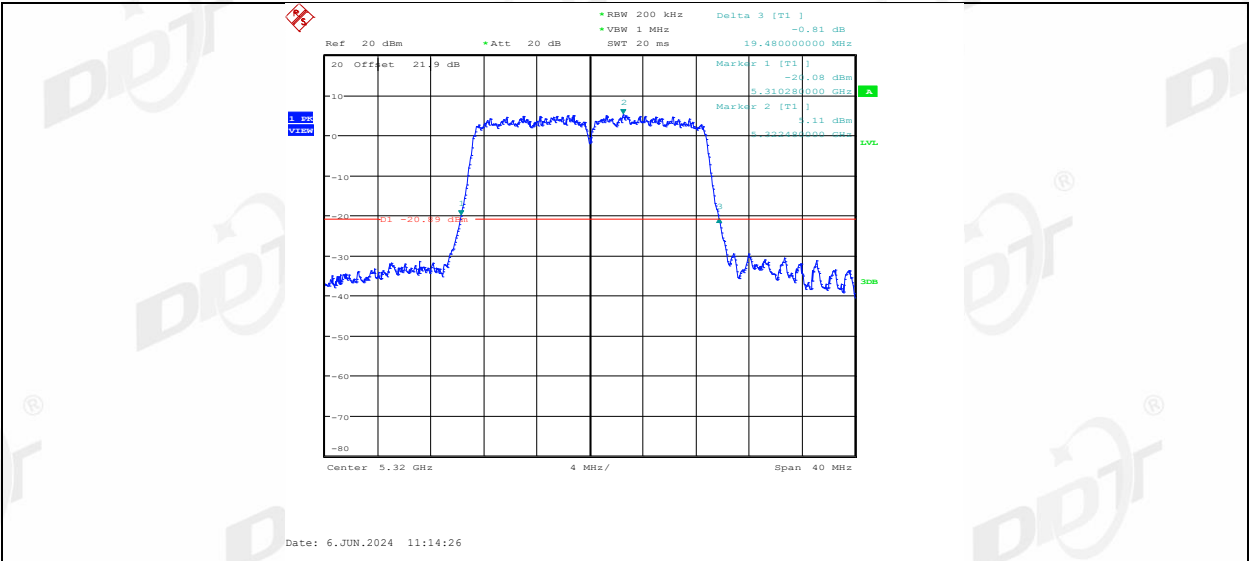
Marker 1 [T1] is at -20.10 dBm, 5.276420000 GHz. Marker 2 [T1] is at -1.67 dBm, 5.286400000 GHz.

The plot shows a signal with a flat top and sloped sides. The top of the signal is at approximately -20 dBm, and the sides slope down to about -35 dBm at the edges of the 40 MHz span. The center frequency is 5.28 GHz. The display includes various parameters like RBW, VBW, and Span, and a grid for measurement.

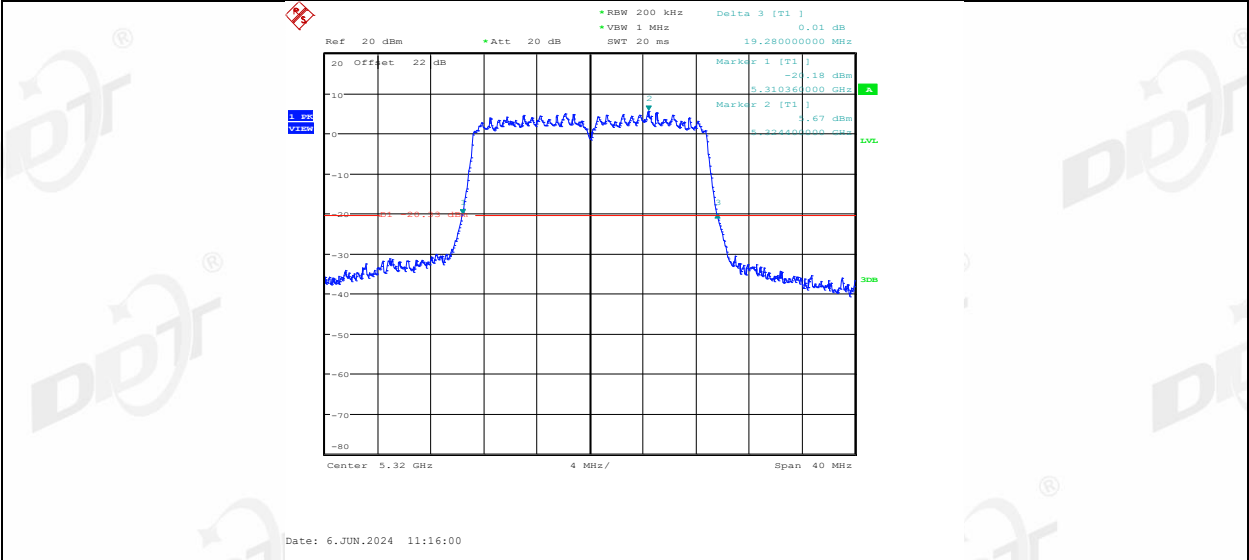
Center 5.28 GHz, 4 MHz/ Span 40 MHz

Date: 6.JUN.2024 11:10:54

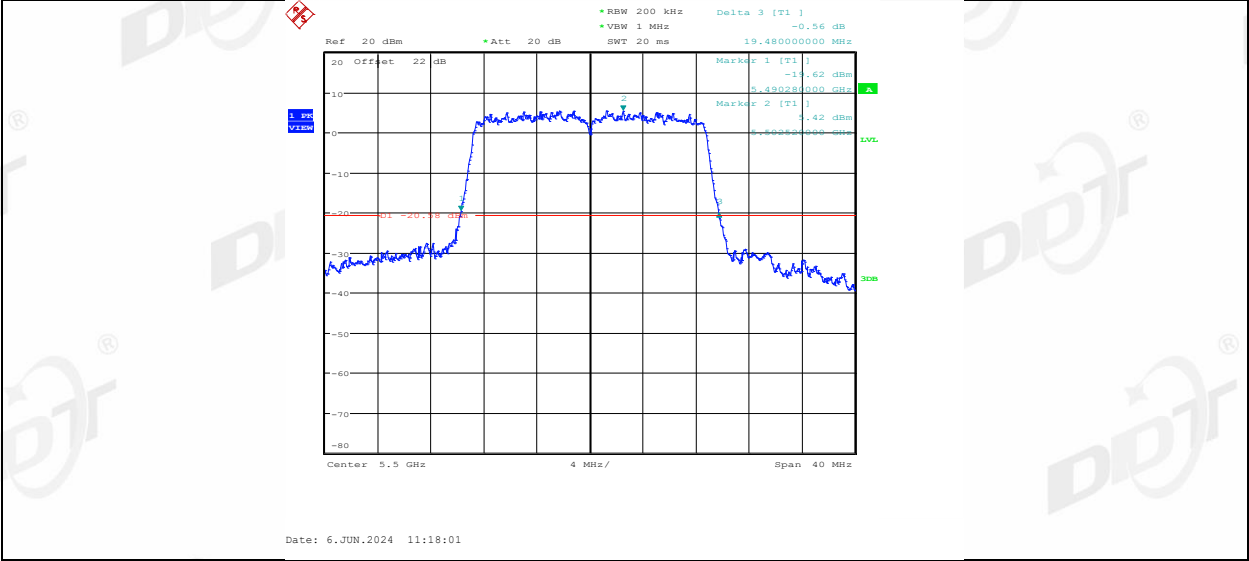
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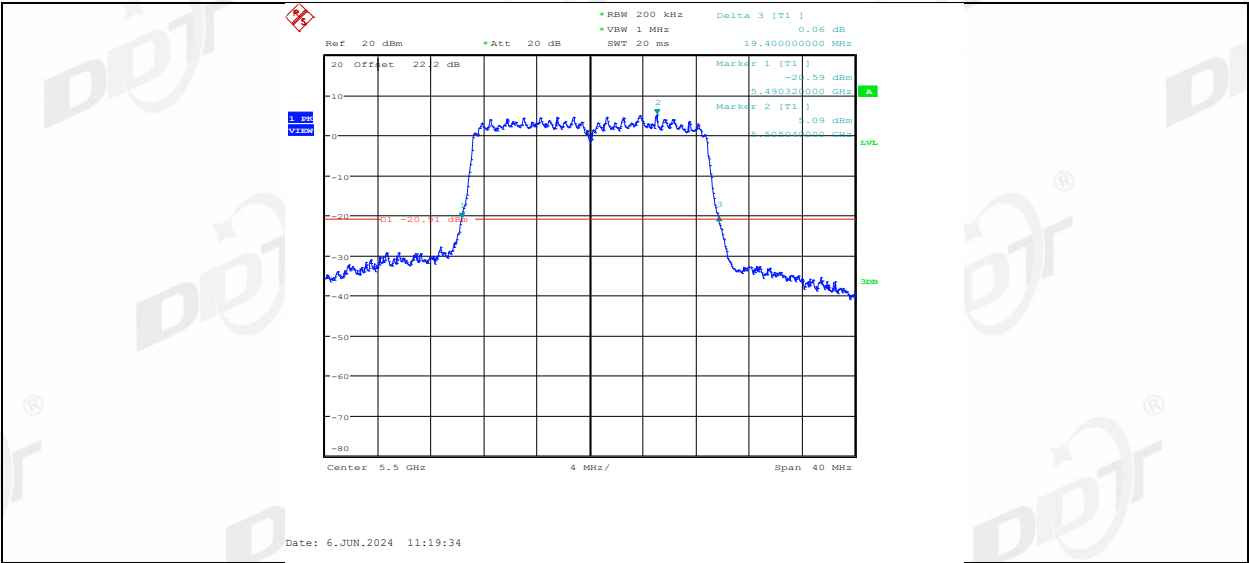
11N20MIMO_Ant2_5320



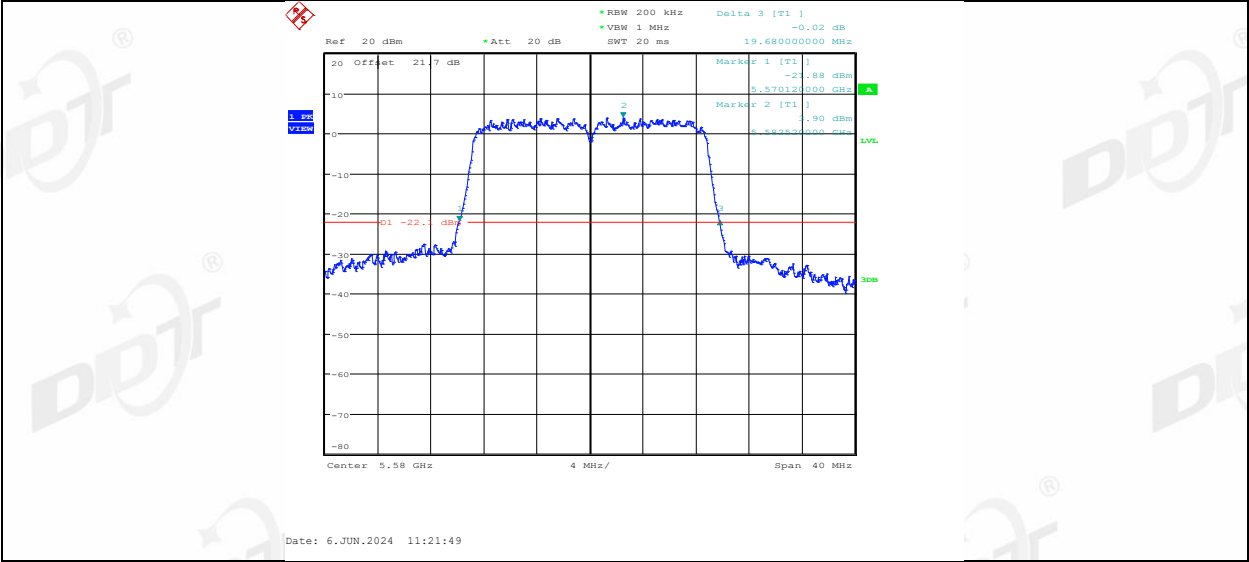
11N20MIMO_Ant1_5500



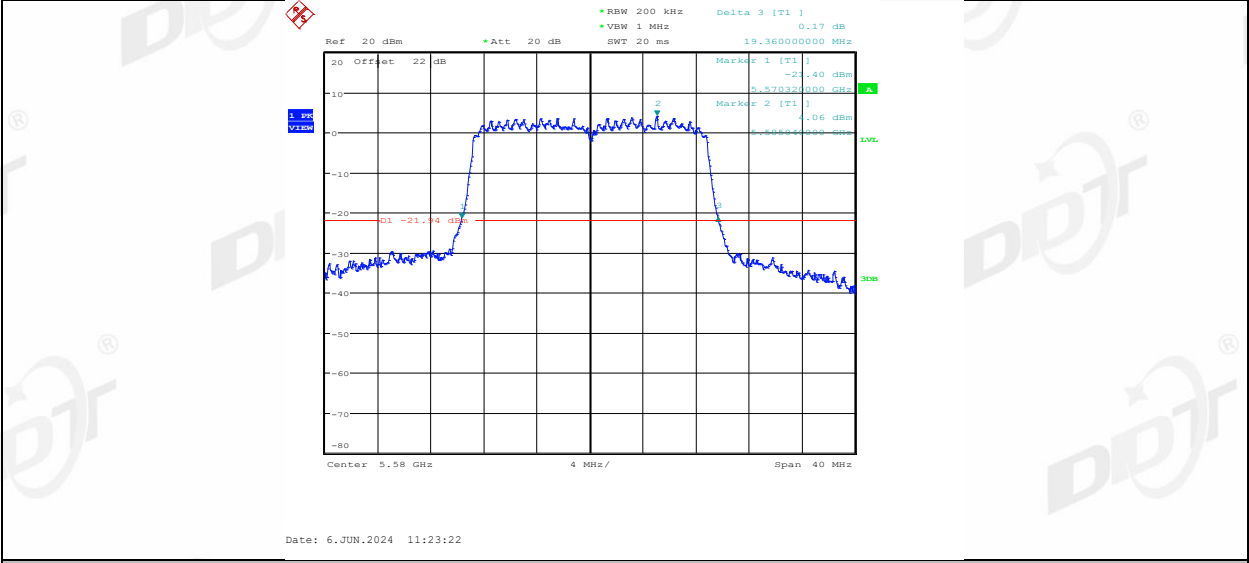
11N20MIMO_Ant2_5500



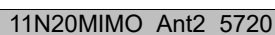
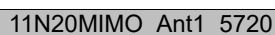
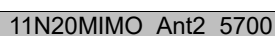
11N20MIMO_Ant1_5580

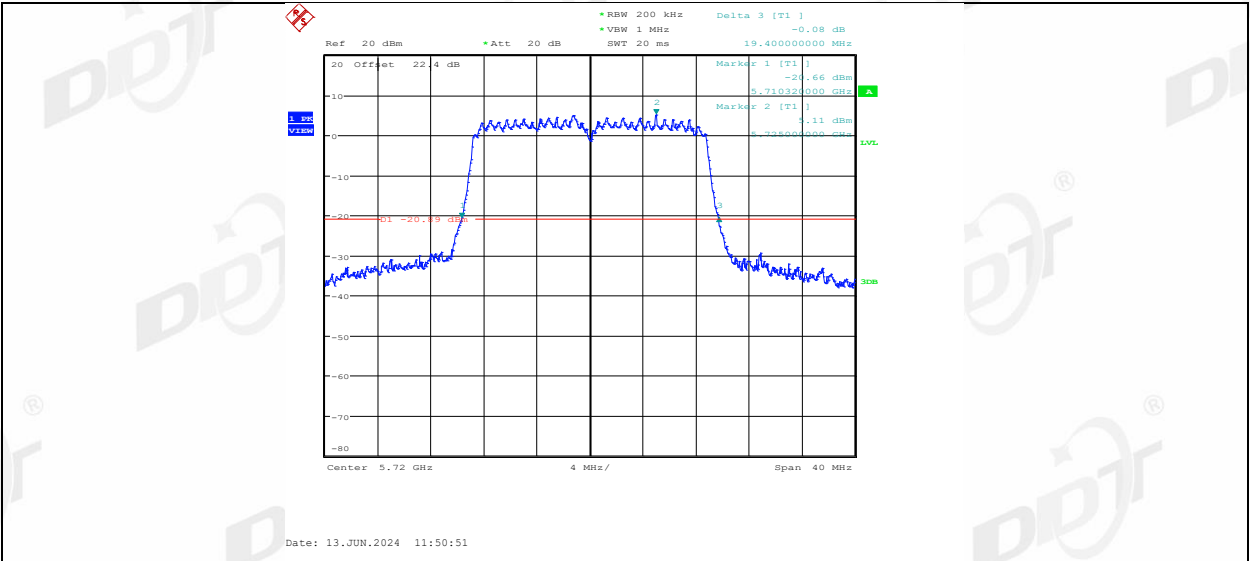


11N20MIMO_Ant2_5580

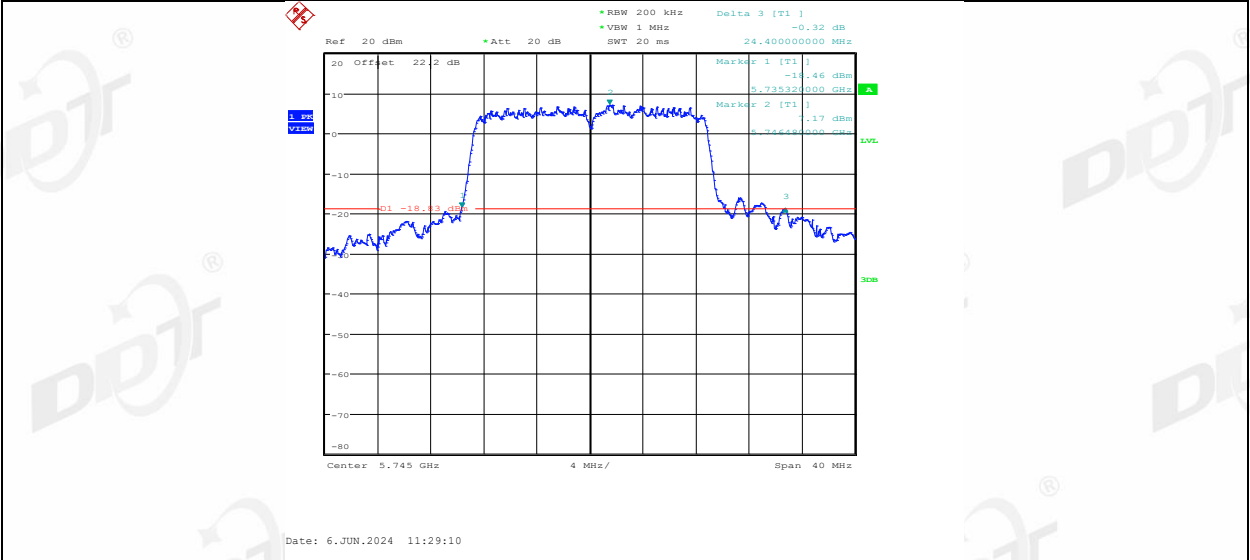


11N20MIMO_Ant1_5700

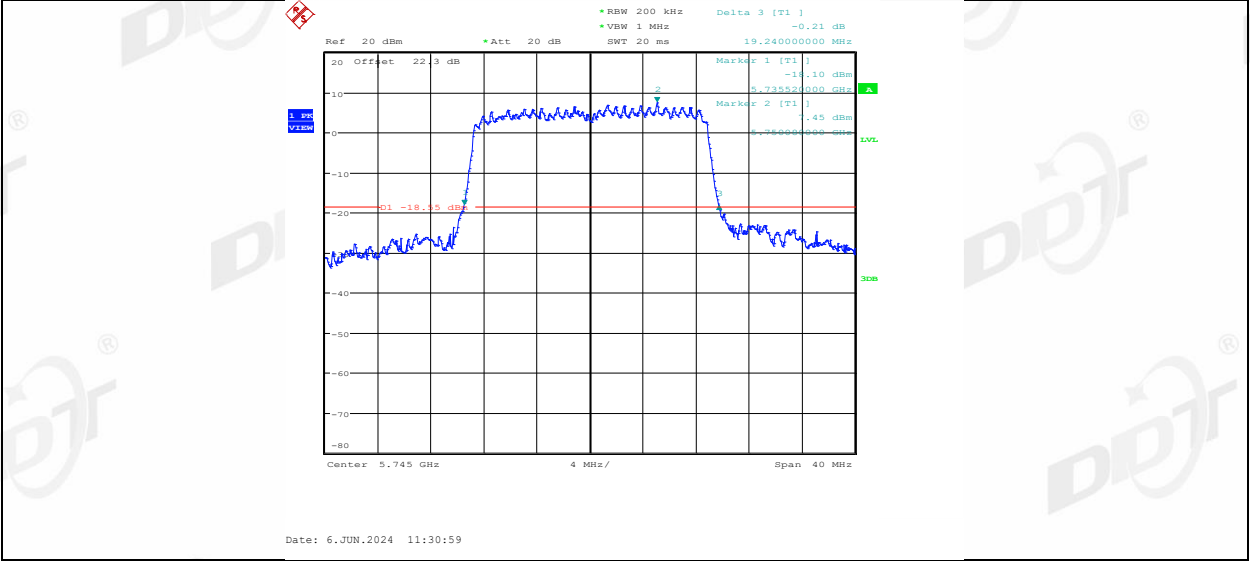




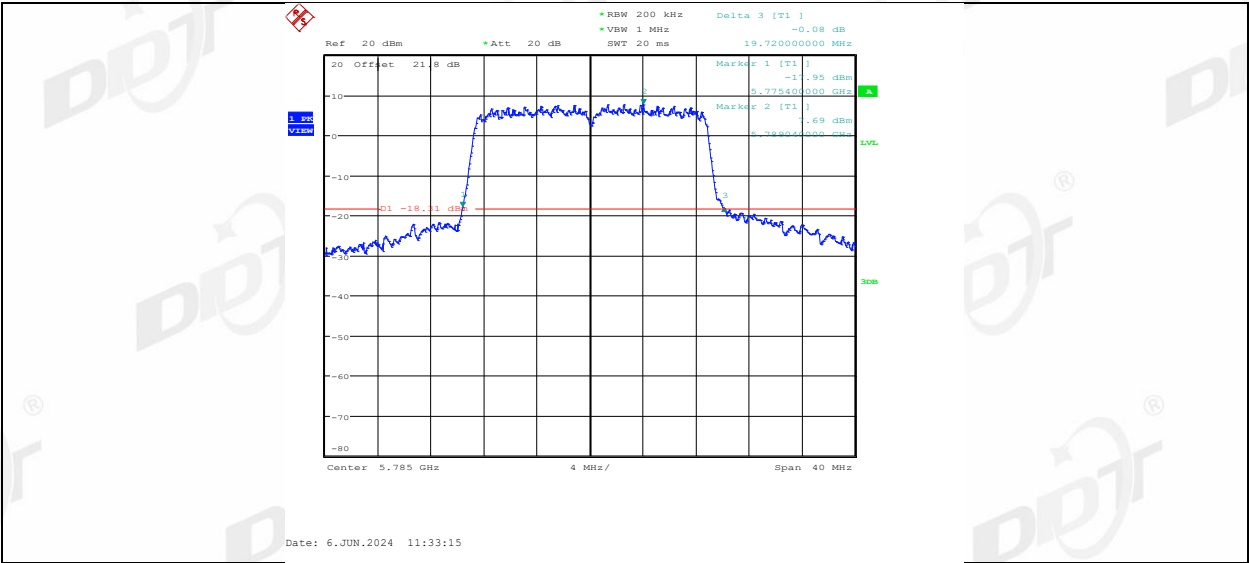
11N20MIMO_Ant1_5745



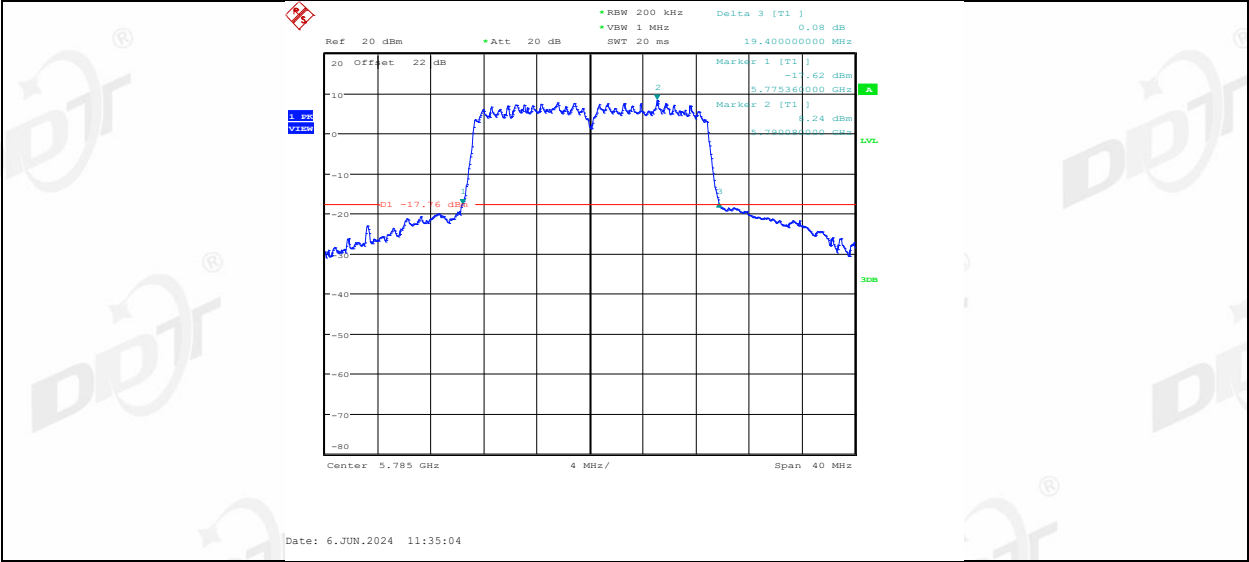
11N20MIMO_Ant2_5745



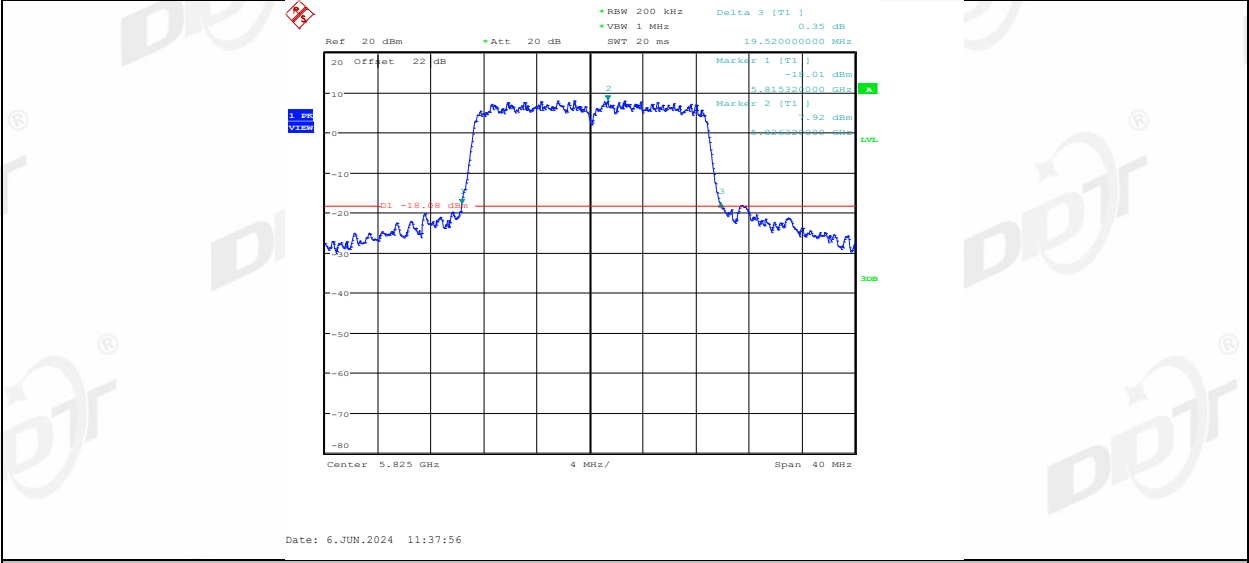
11N20MIMO_Ant1_5785



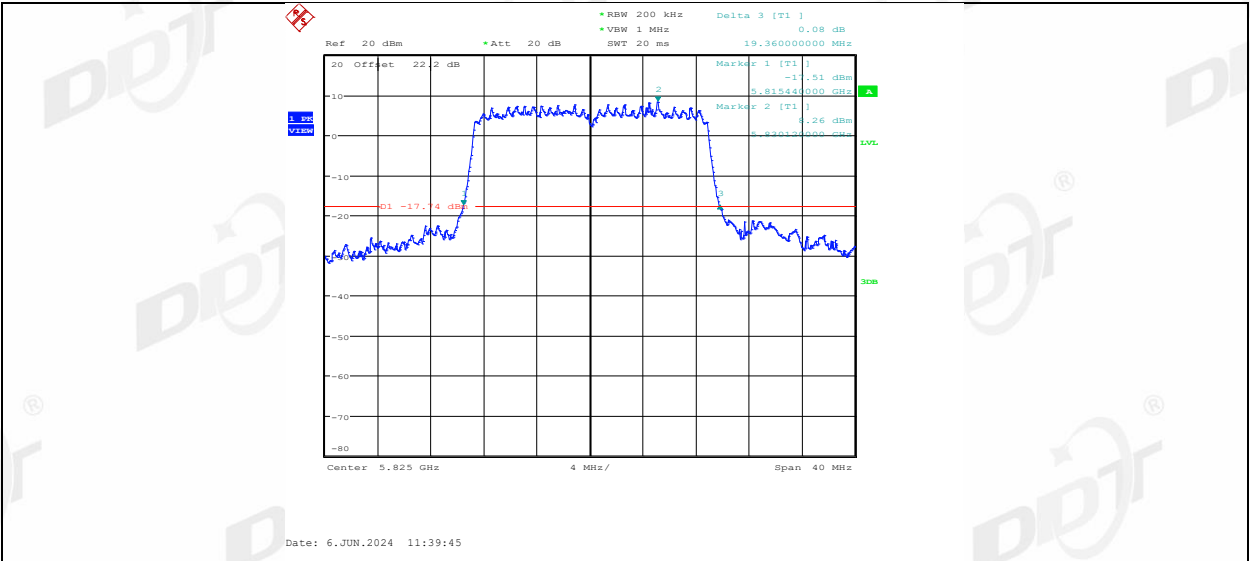
11N20MIMO_Ant2_5785



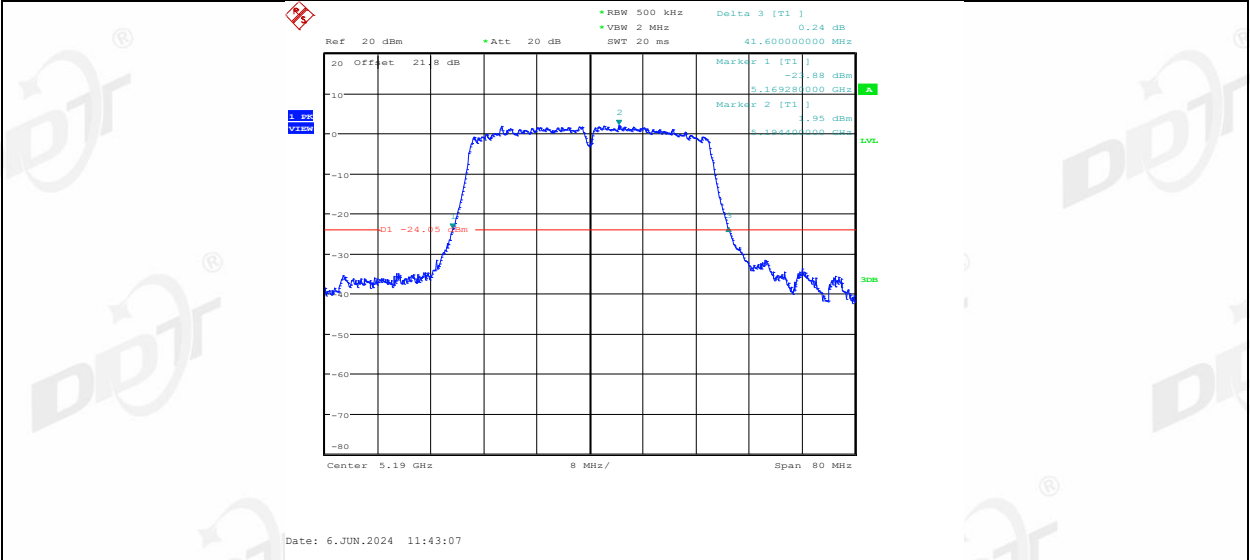
11N20MIMO_Ant1_5825



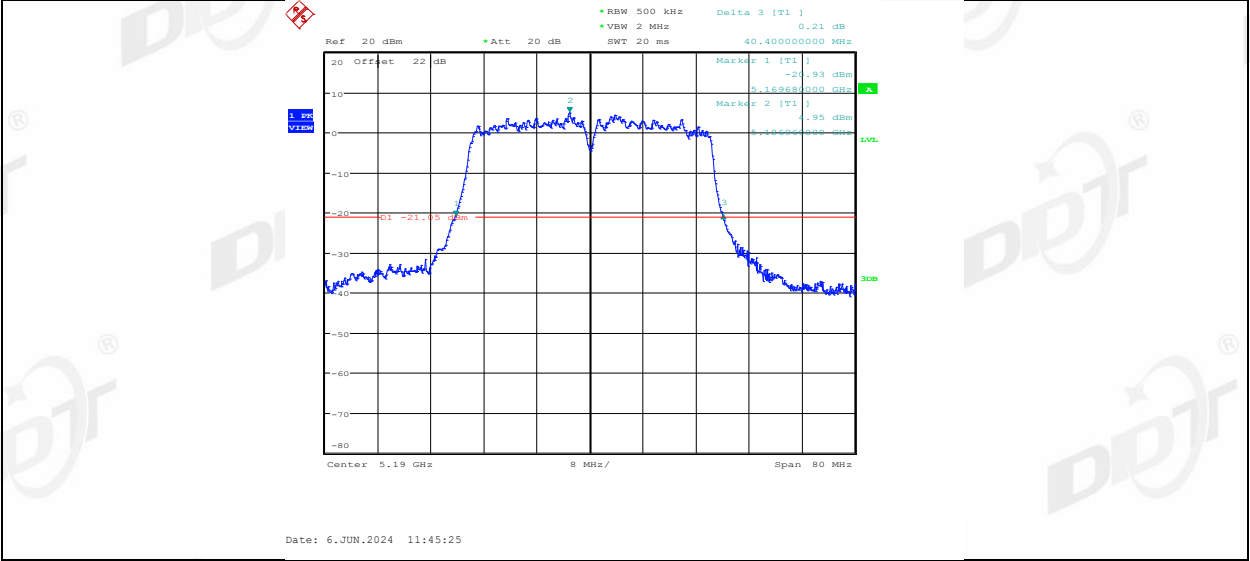
11N20MIMO_Ant2_5825



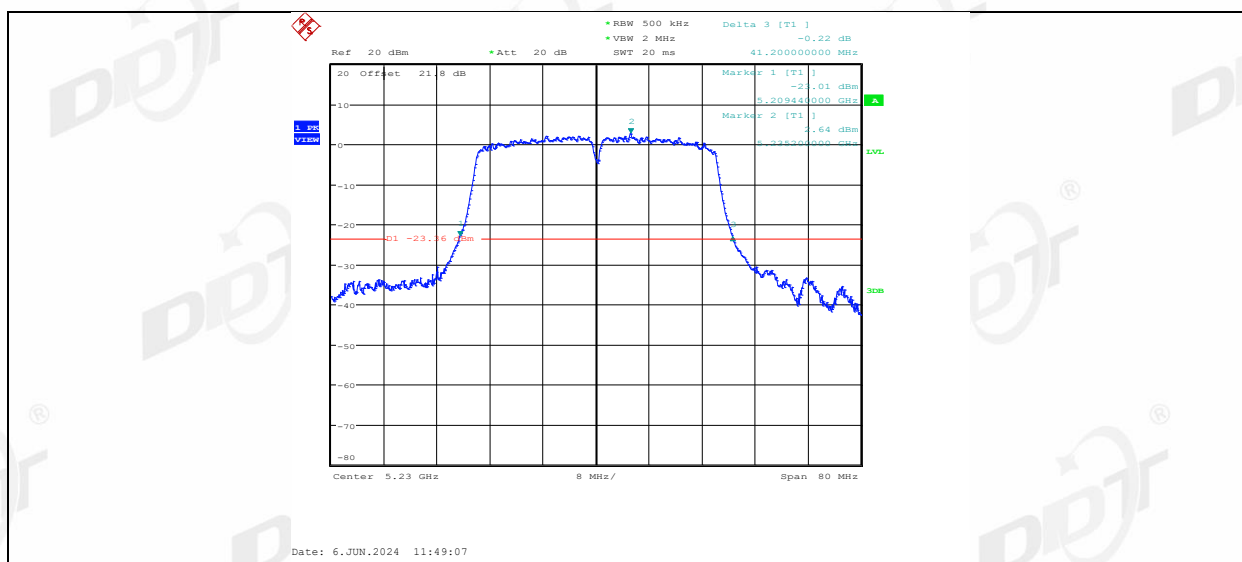
11N40MIMO_Ant1_5190



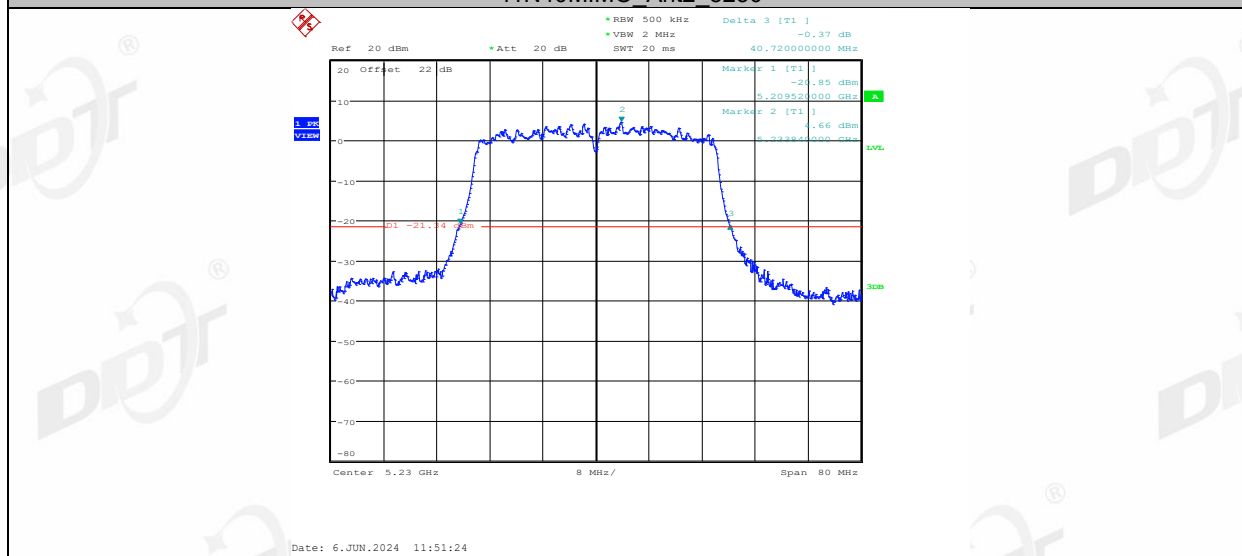
11N40MIMO_Ant2_5190



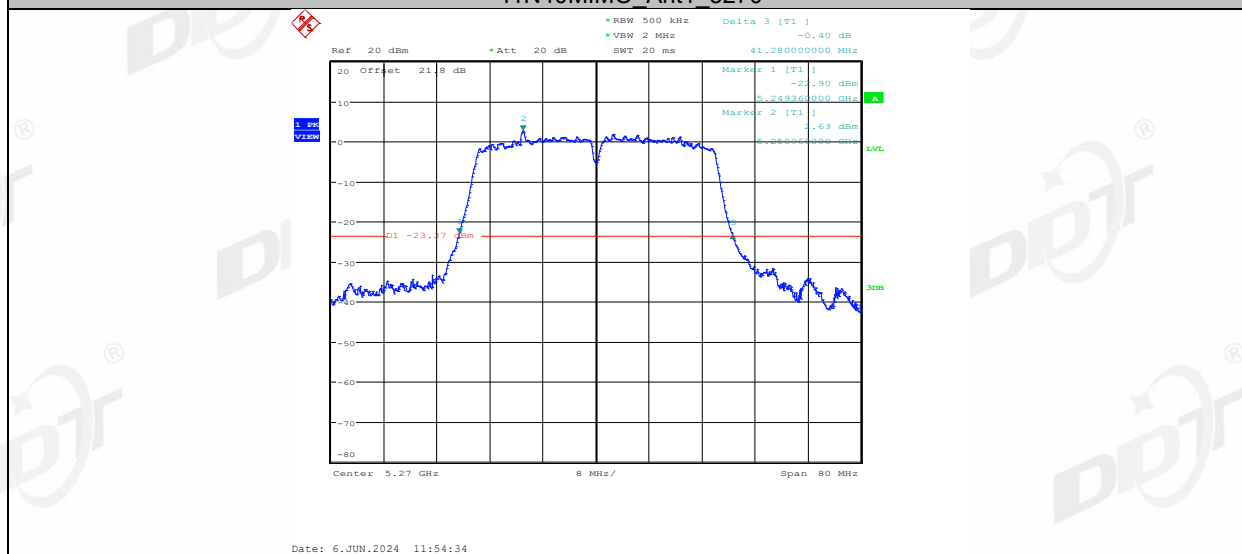
11N40MIMO_Ant1_5230



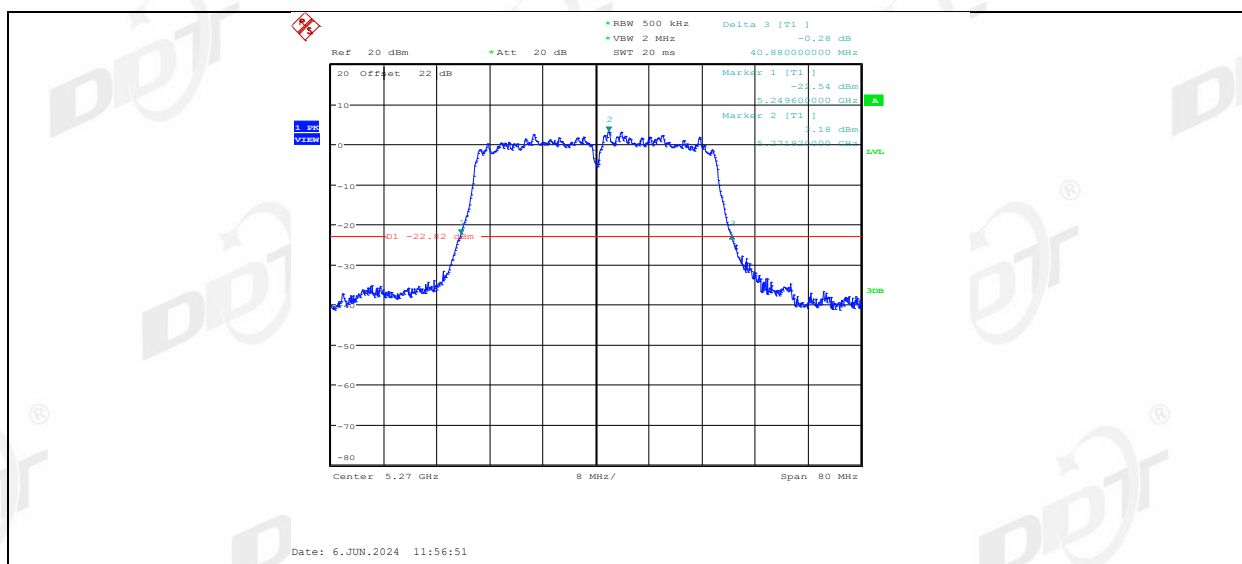
11N40MIMO Ant2 5230



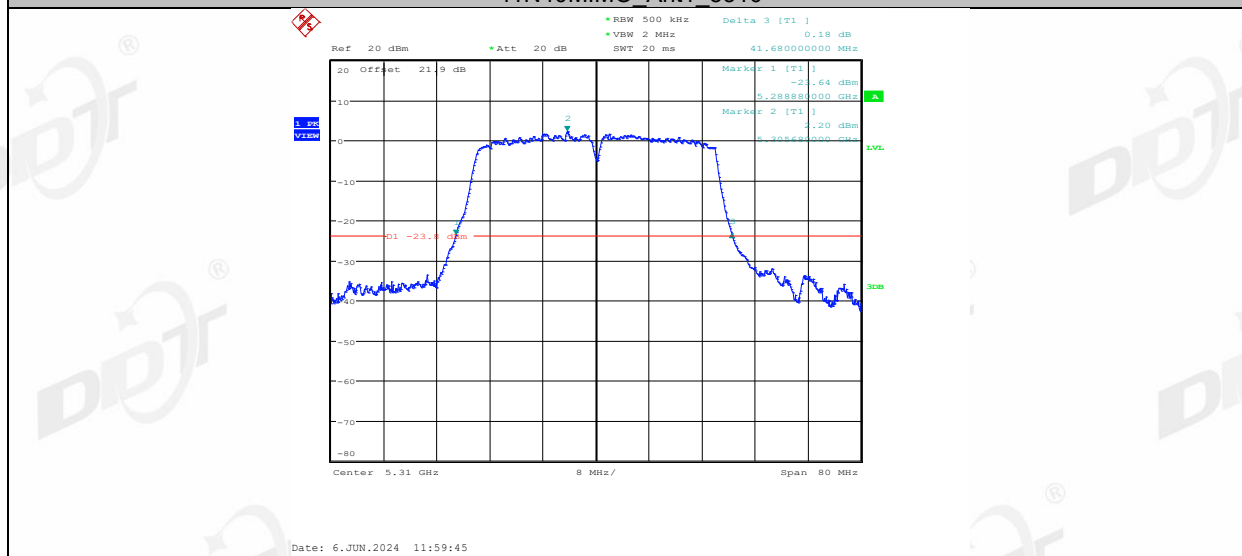
11N40MIMO Ant1 5270



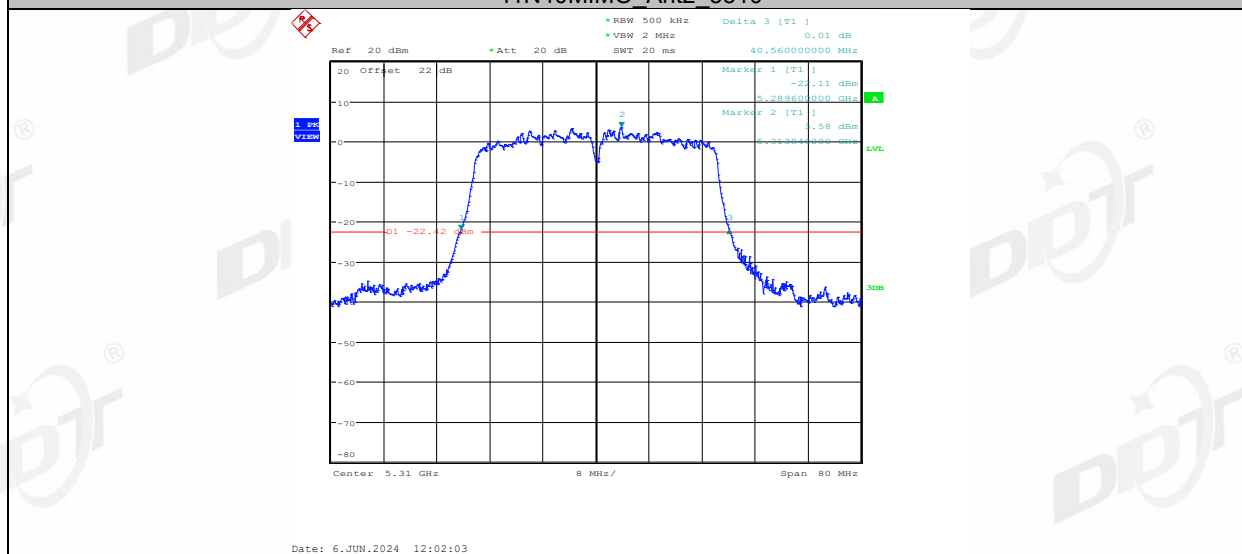
11N40MIMO Ant2 5270



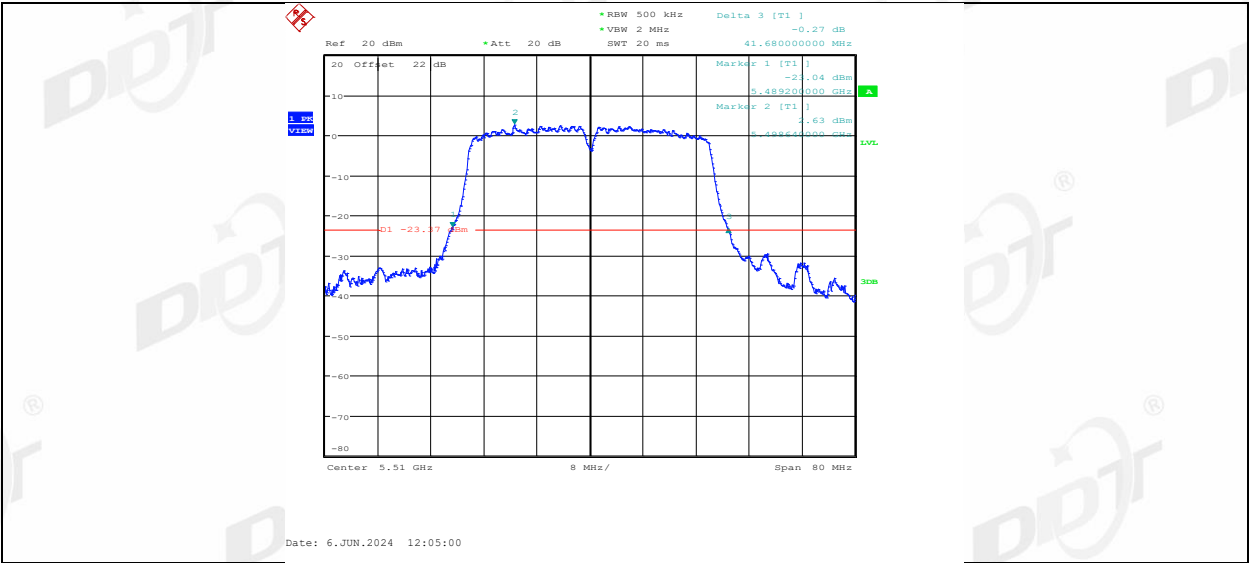
11N40MIMO Ant1 5310



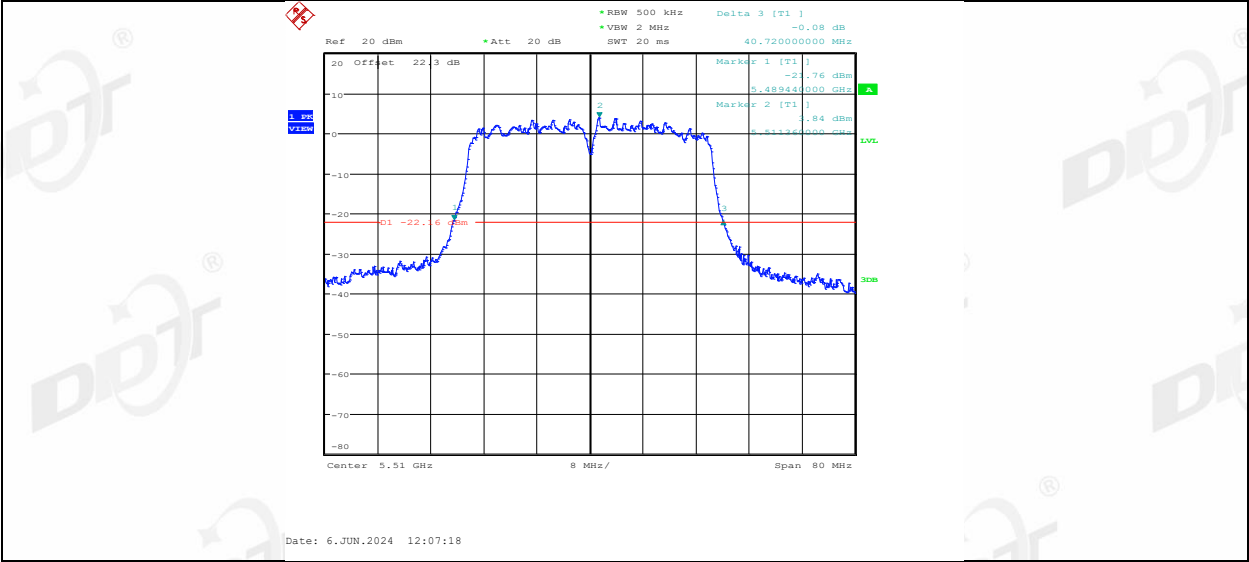
11N40MIMO Ant2 5310



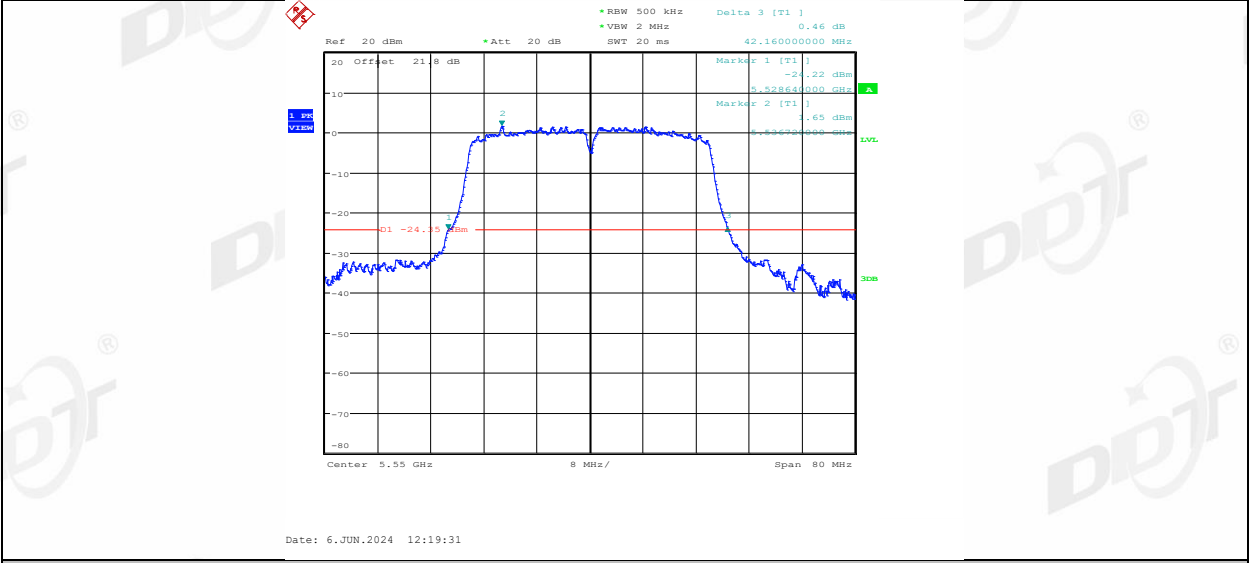
11N40MIMO Ant1 5510



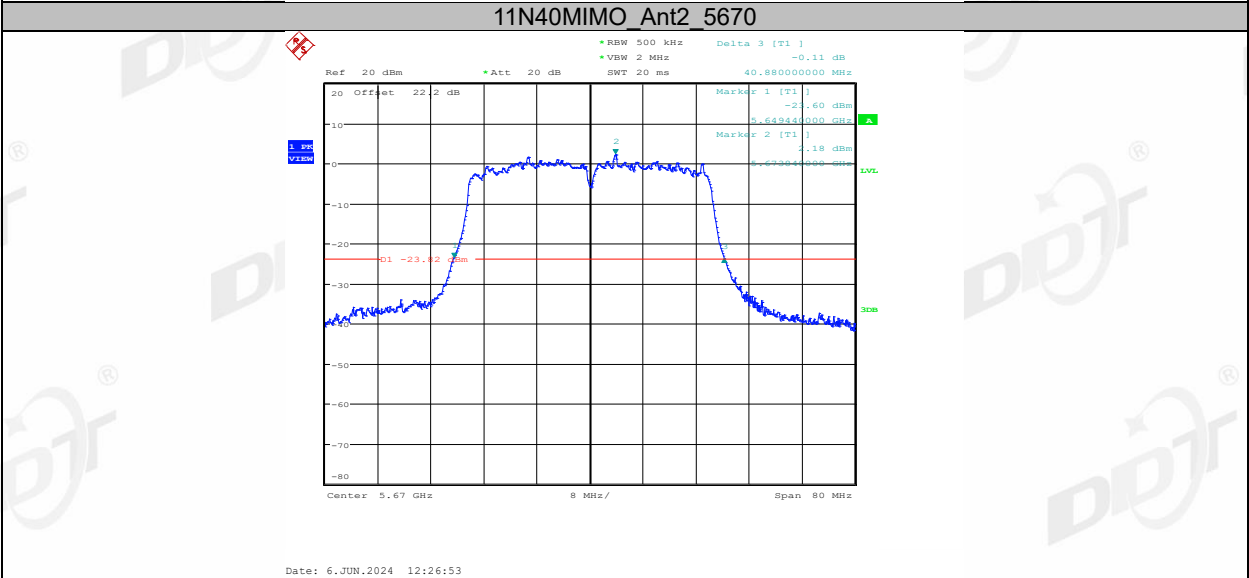
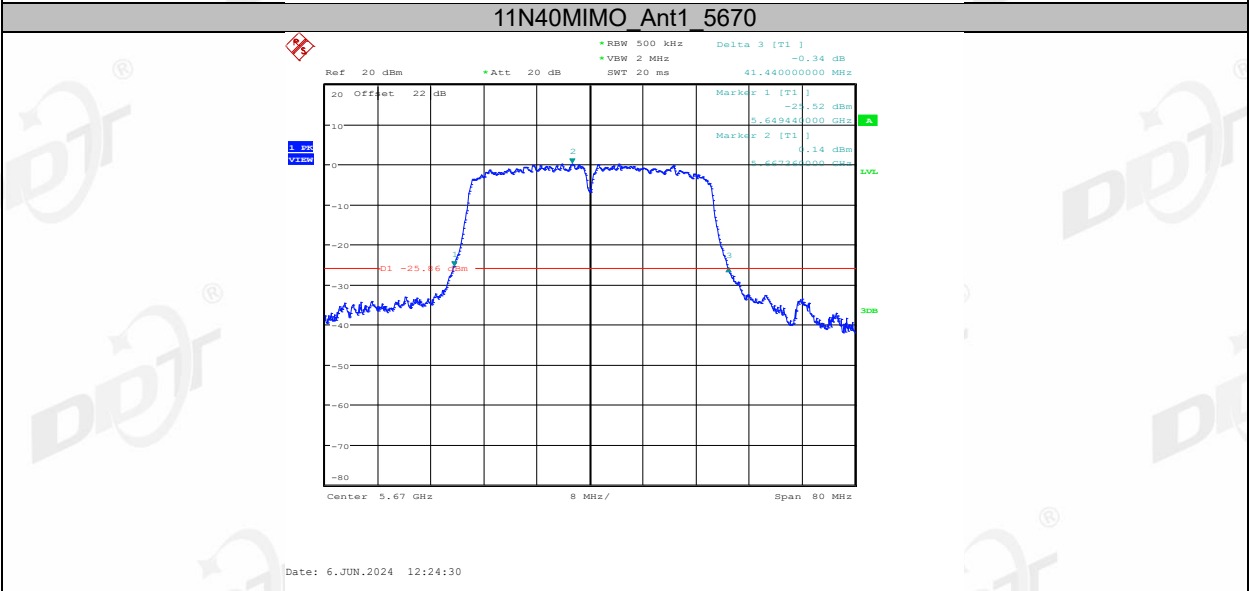
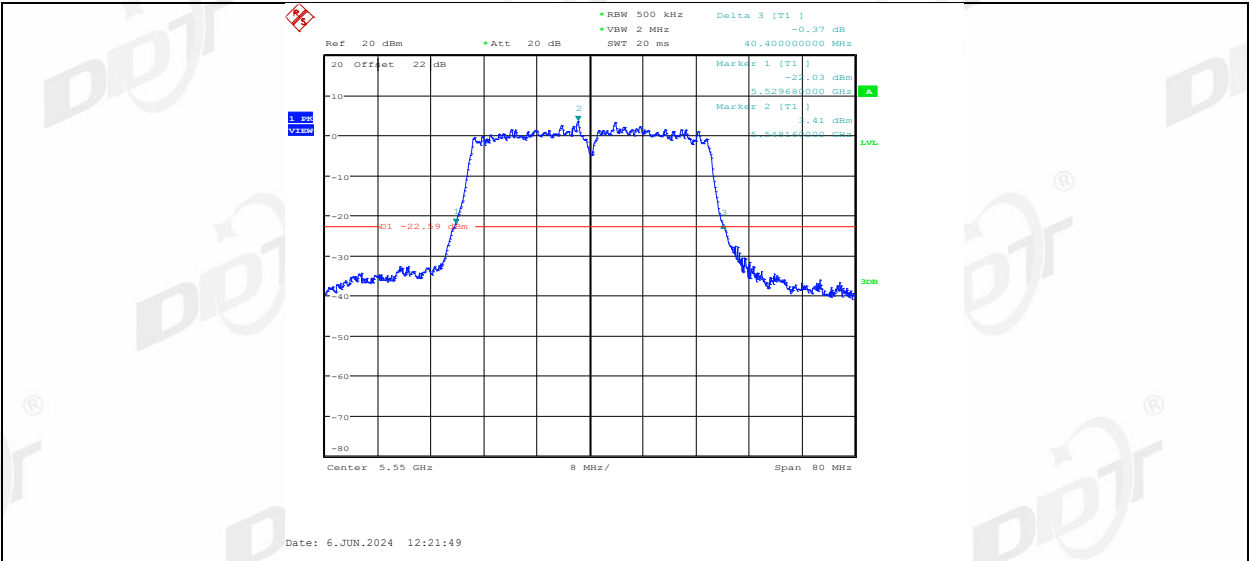
11N40MIMO_Ant2_5510



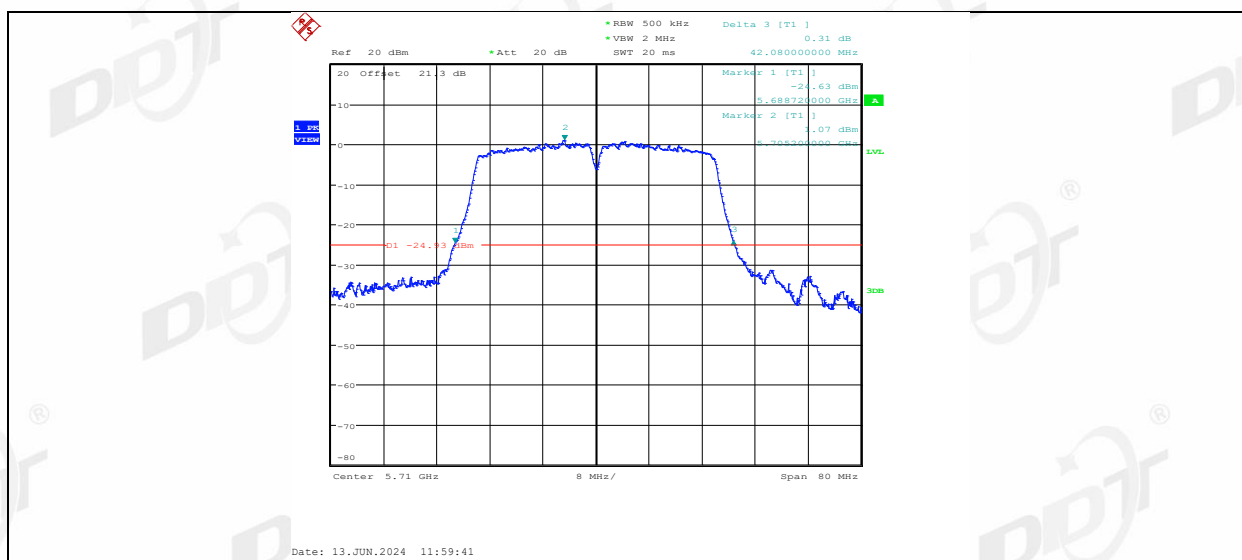
11N40MIMO_Ant1_5550



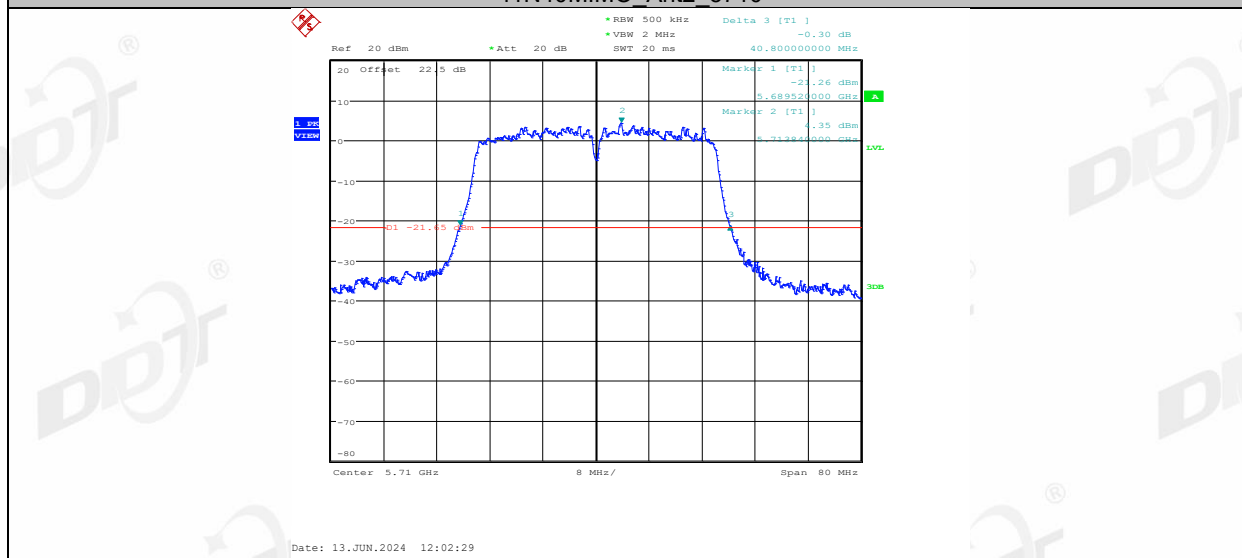
11N40MIMO_Ant2_5550



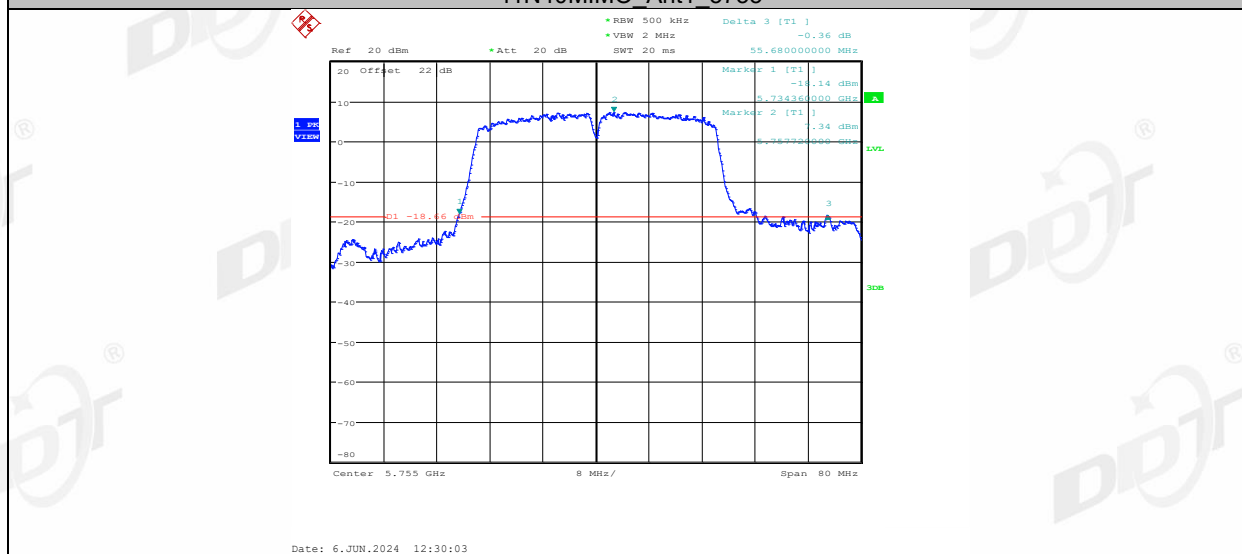
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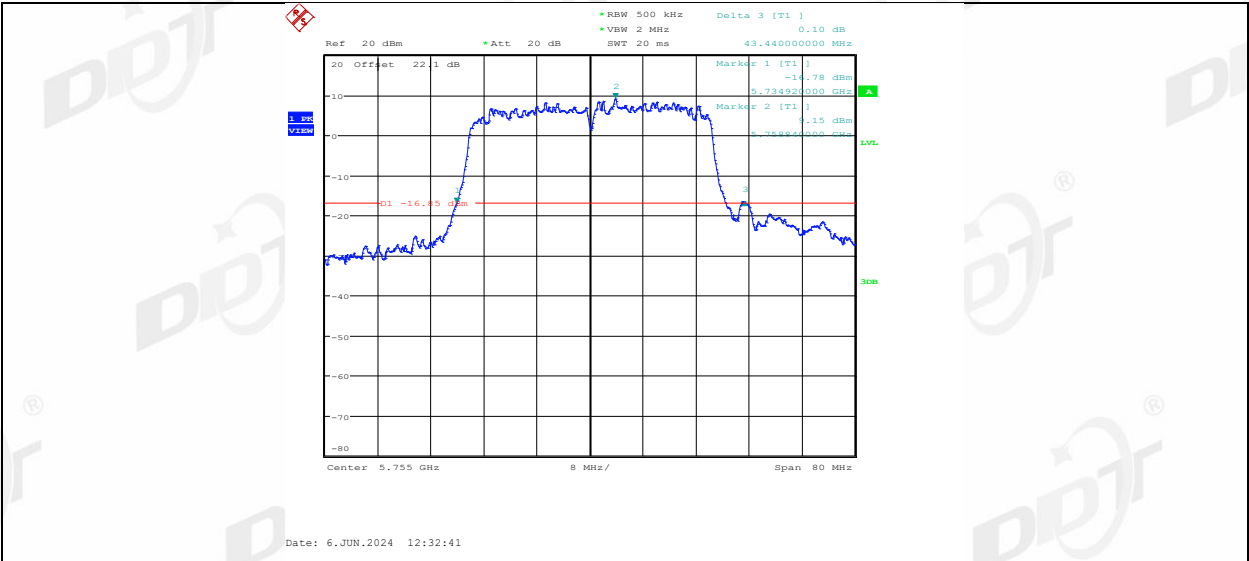
11N40MIMO Ant2 5710



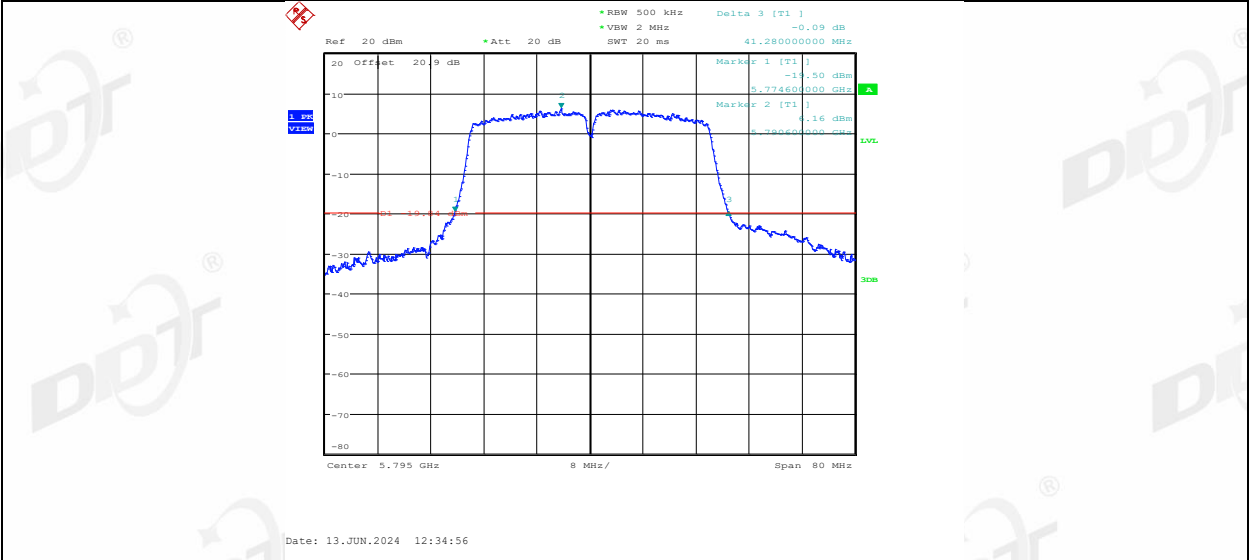
11N40MIMO Ant1 5755



11N40MIMO Ant2 5755



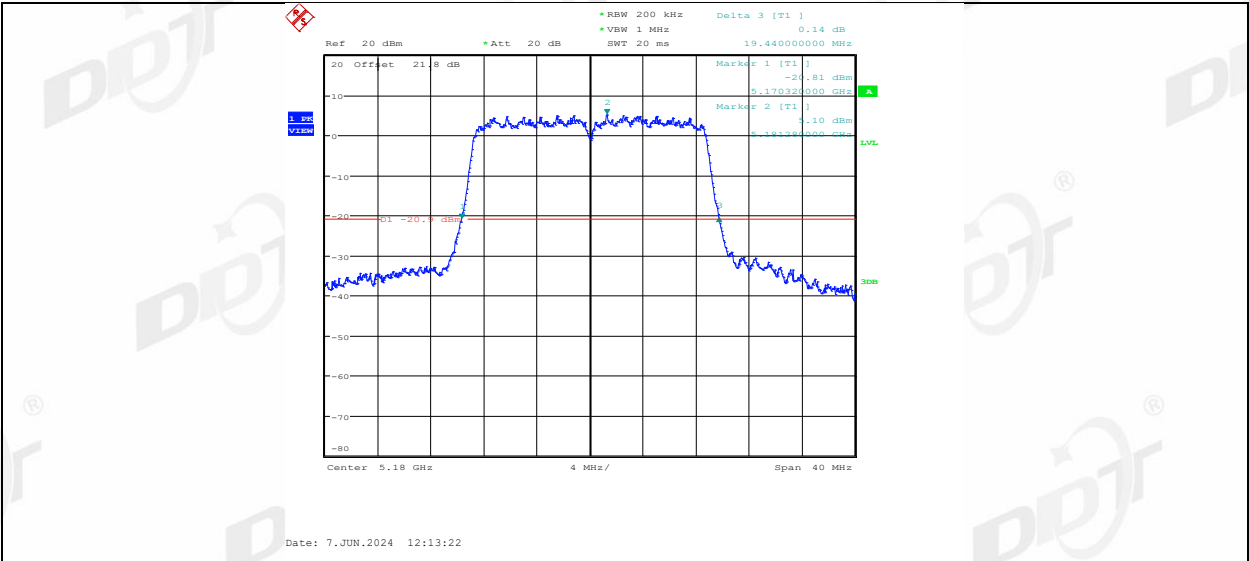
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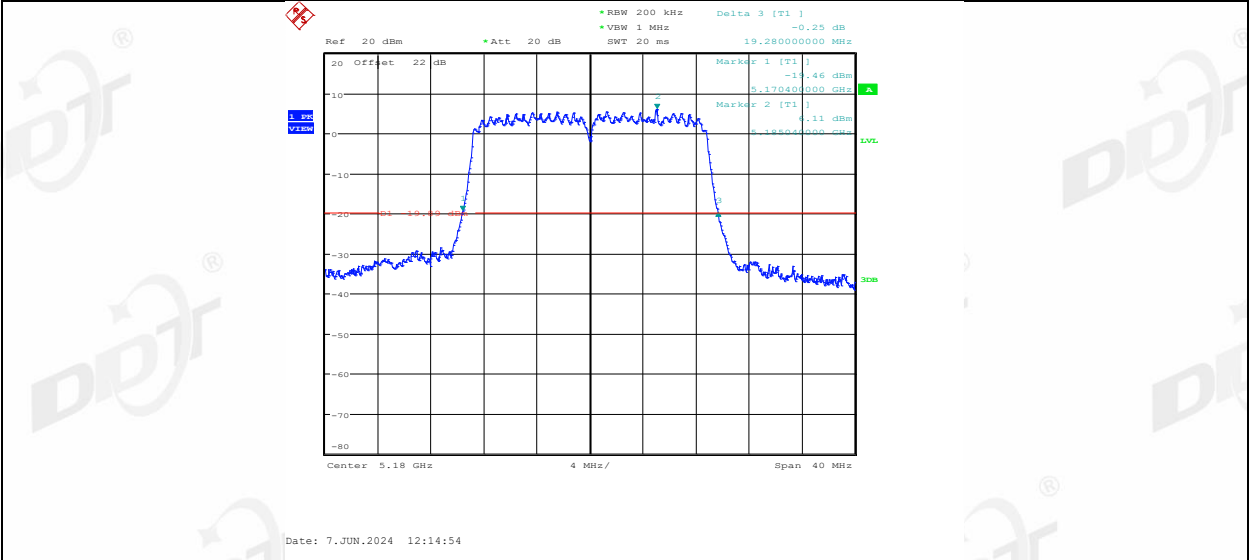
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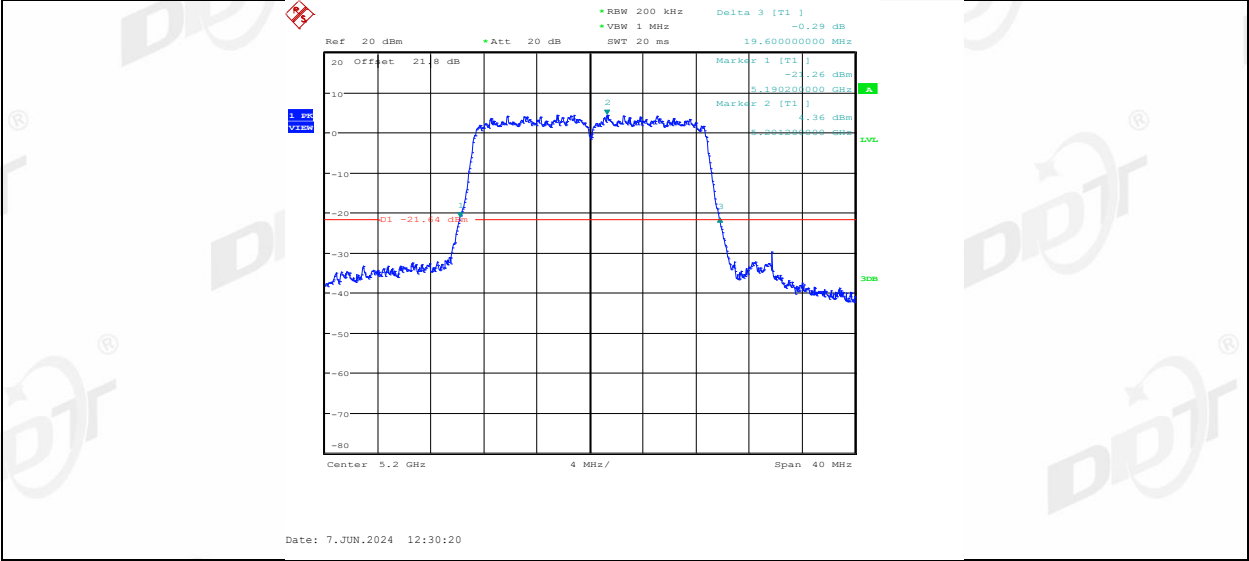
11AC20MIMO_Ant1_5180



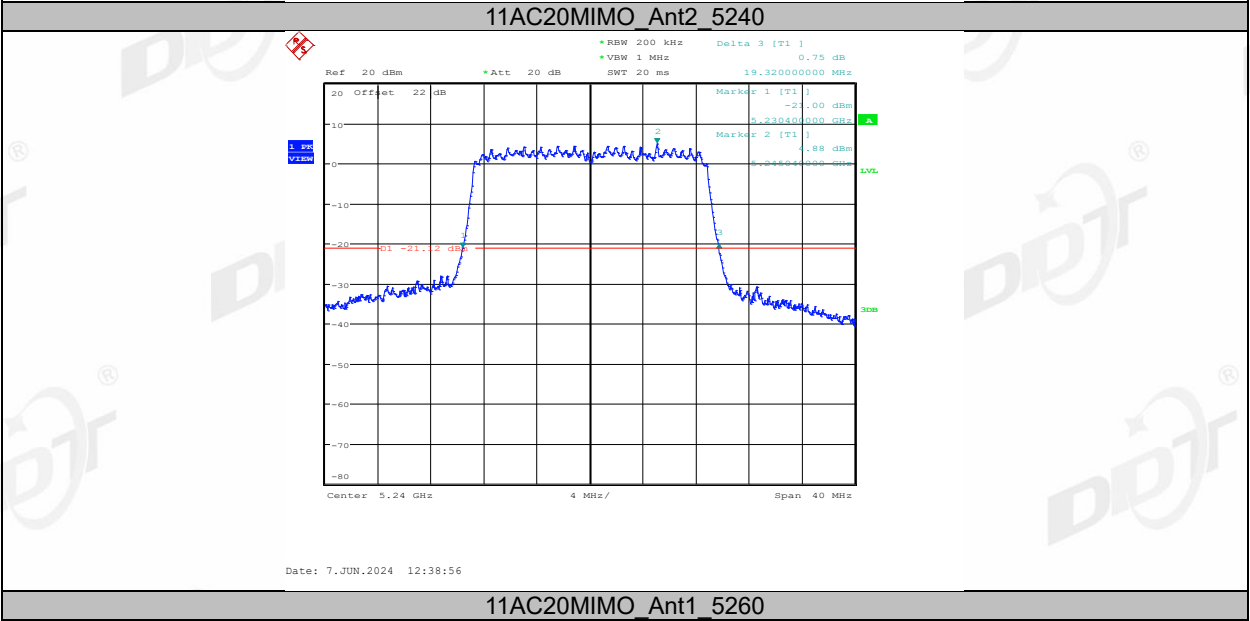
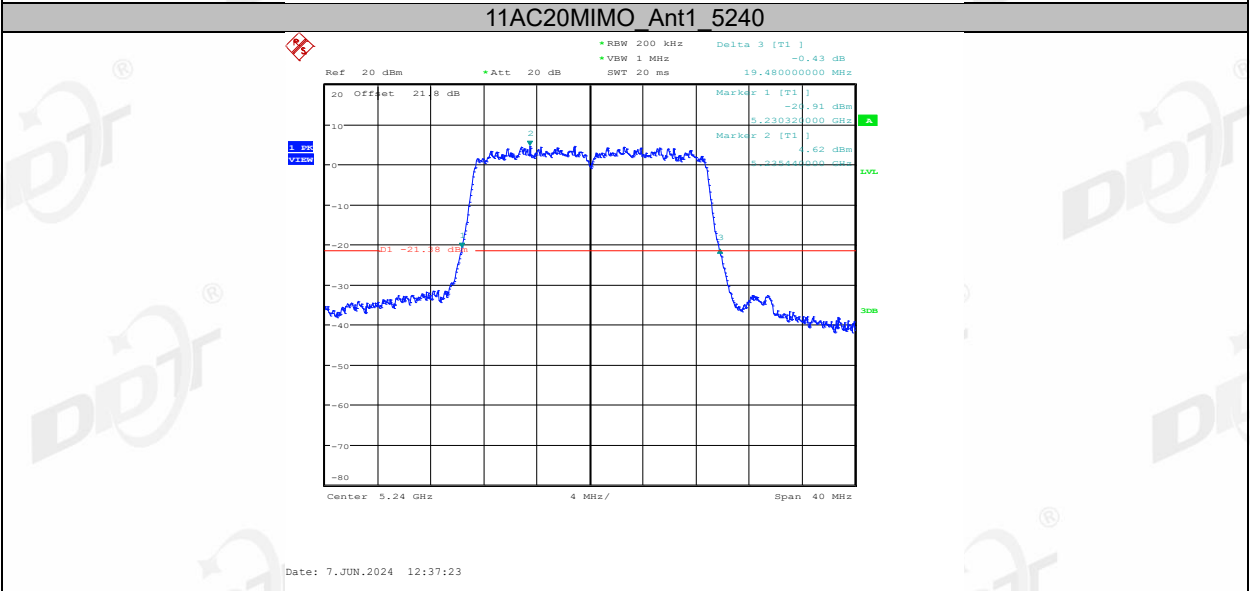
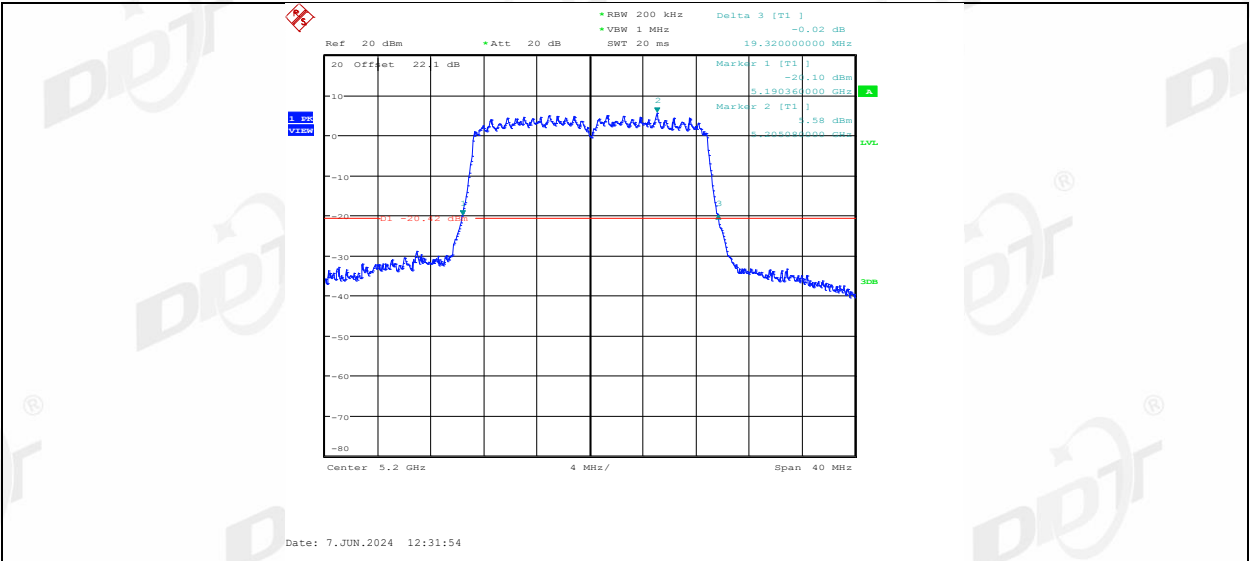
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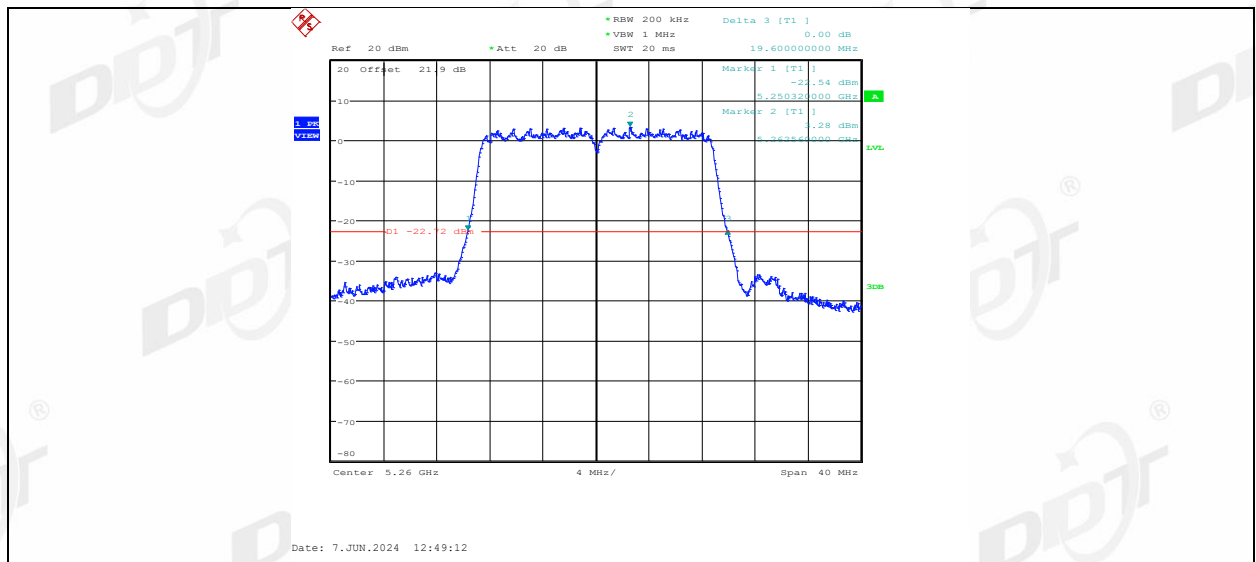


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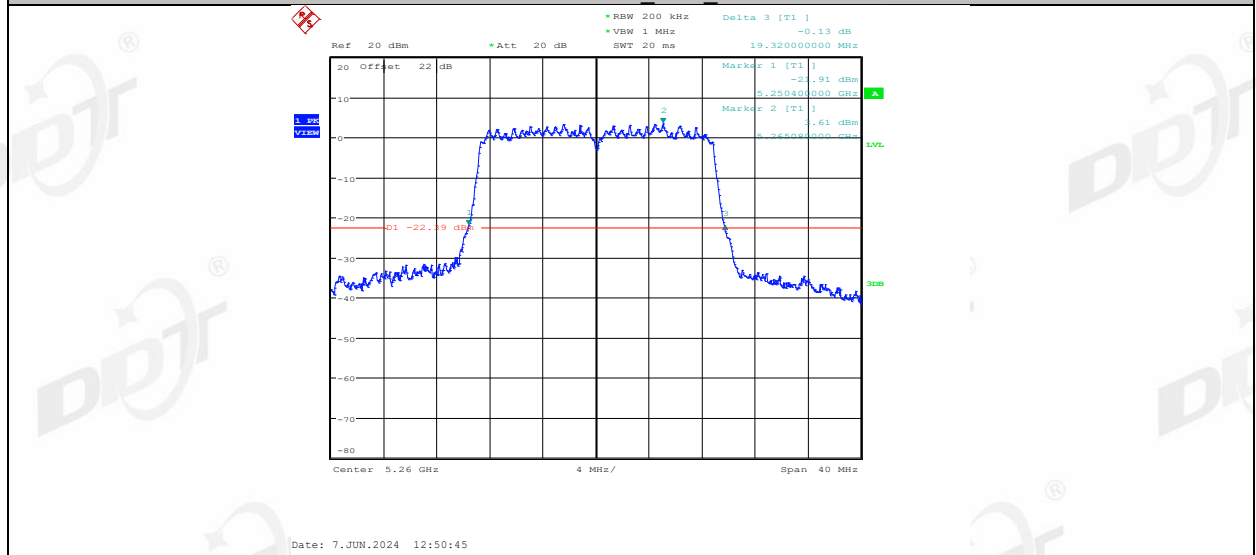


11AC20MIMO_Ant2_5200

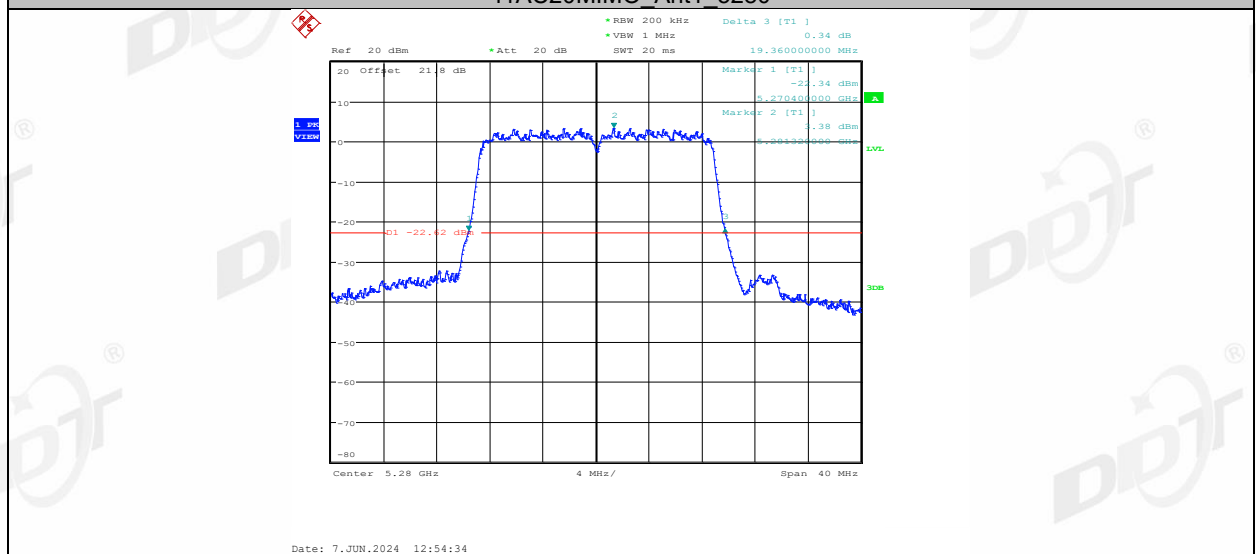




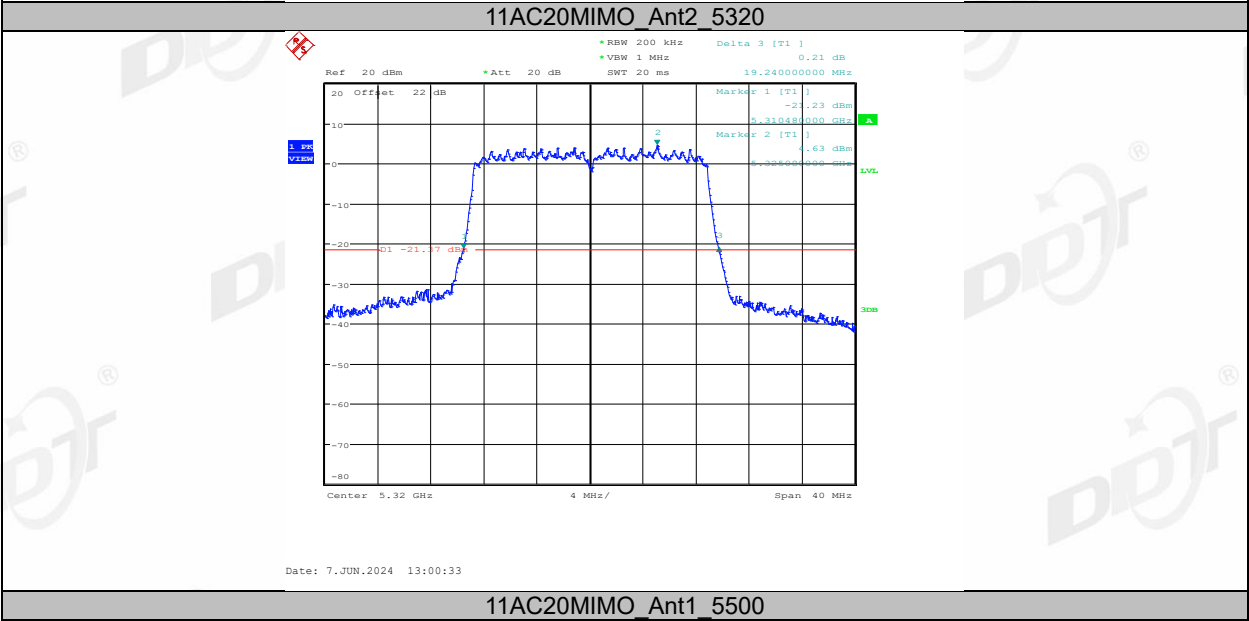
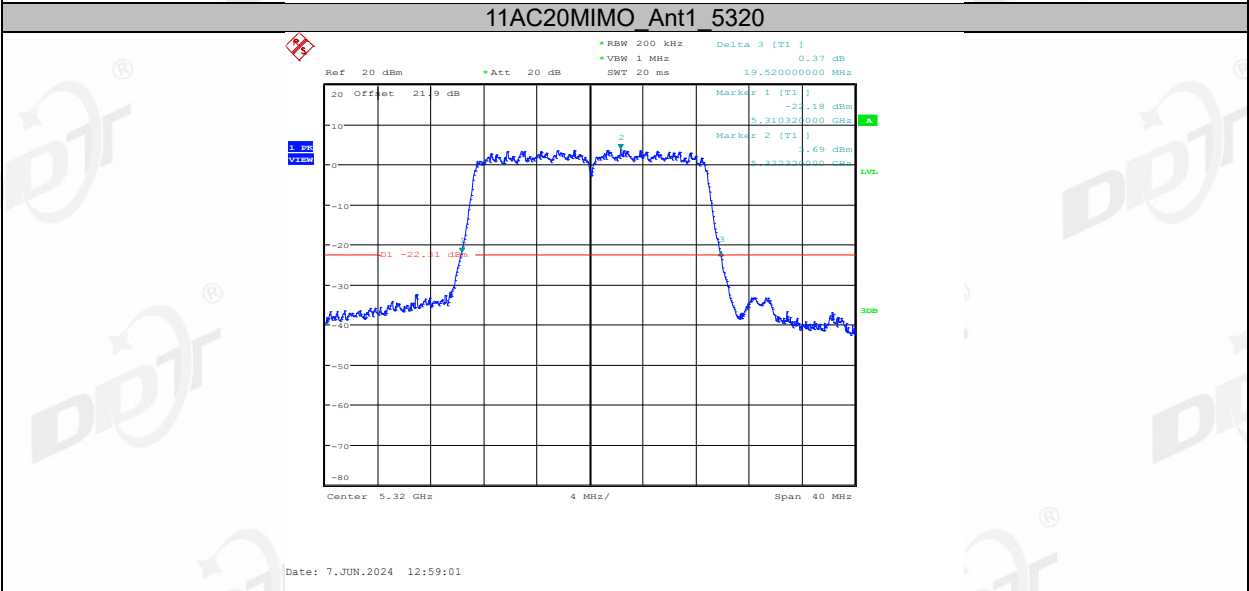
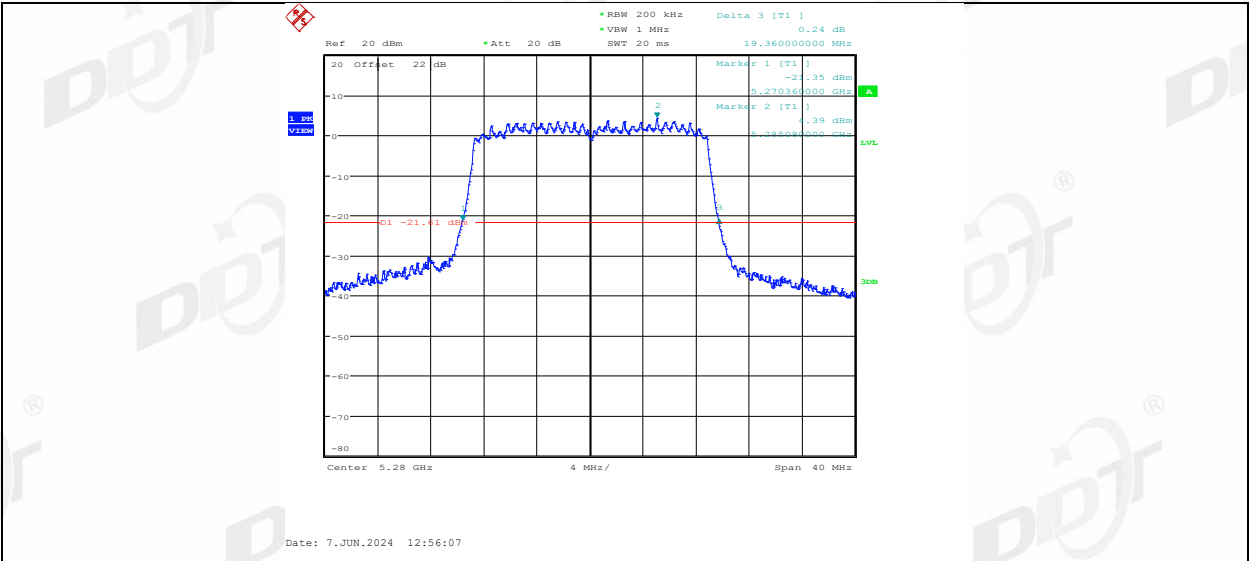
11AC20MIMO_Ant2_5260

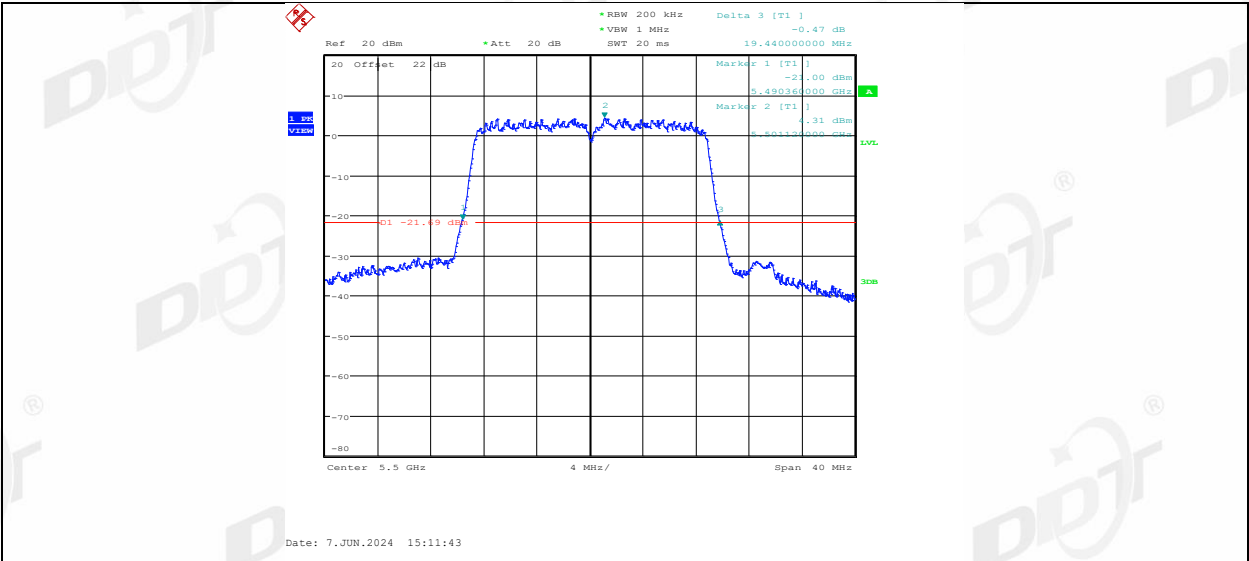


11AC20MIMO_Ant1_5280

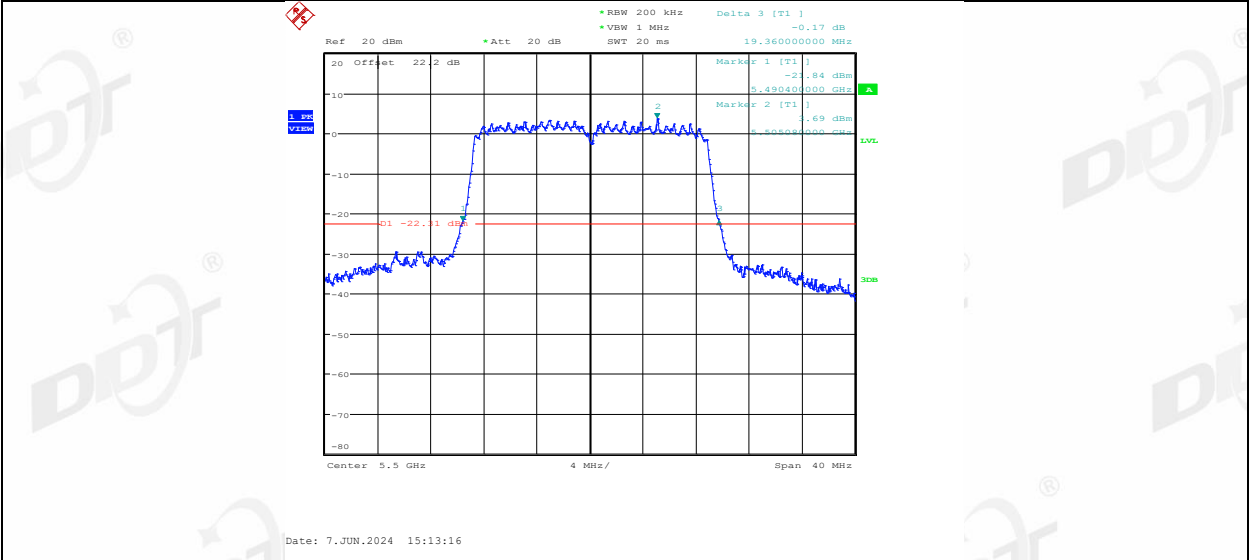


11AC20MIMO_Ant2_5280

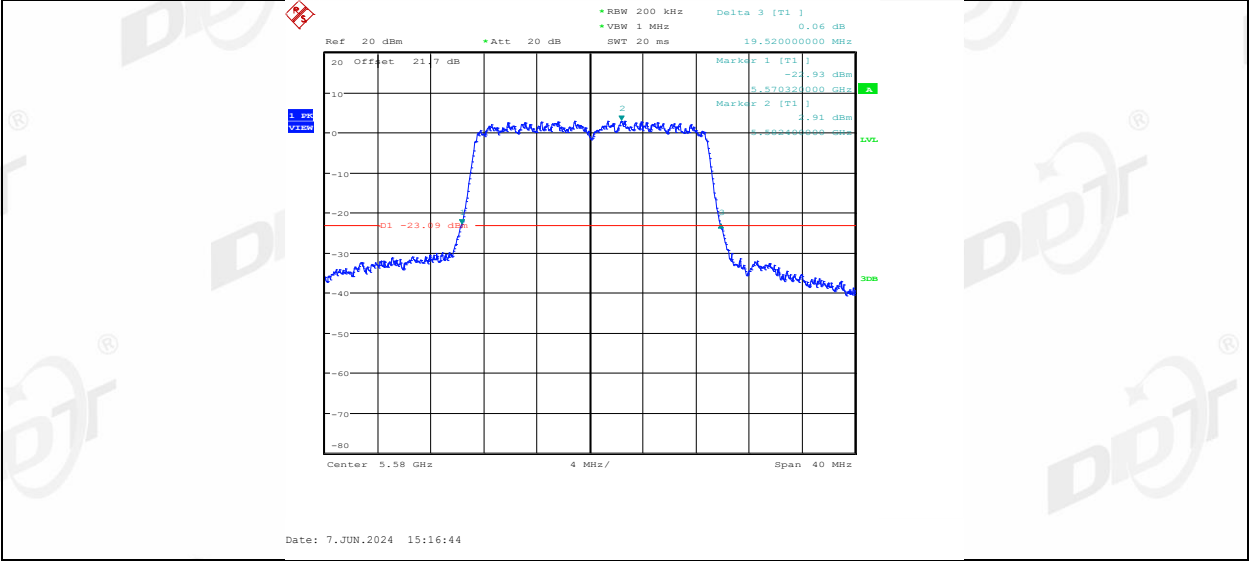




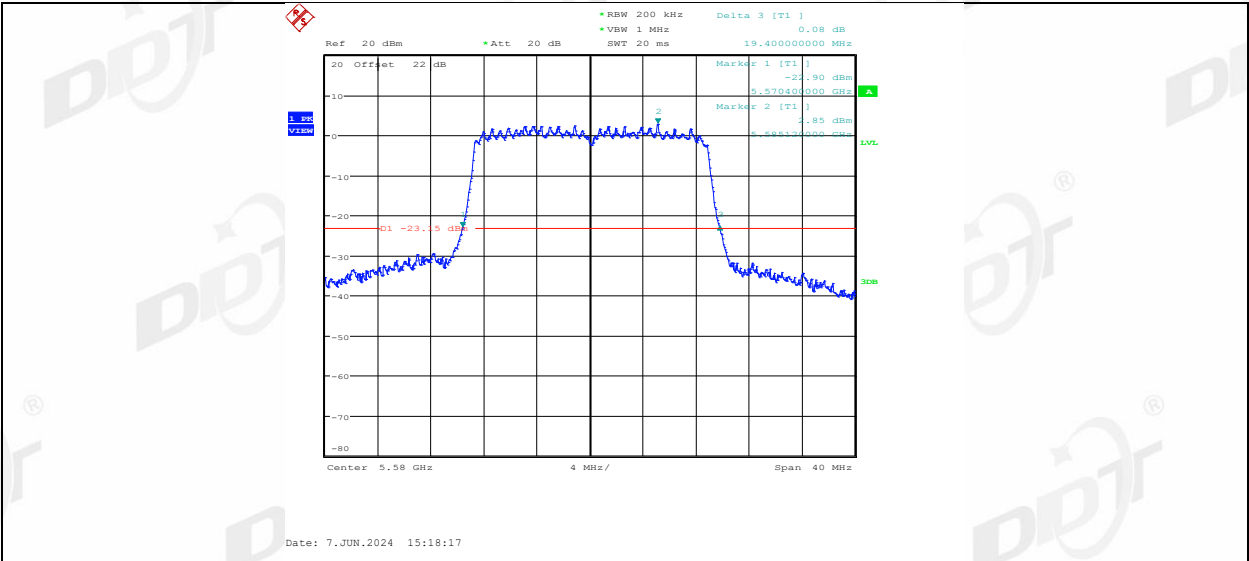
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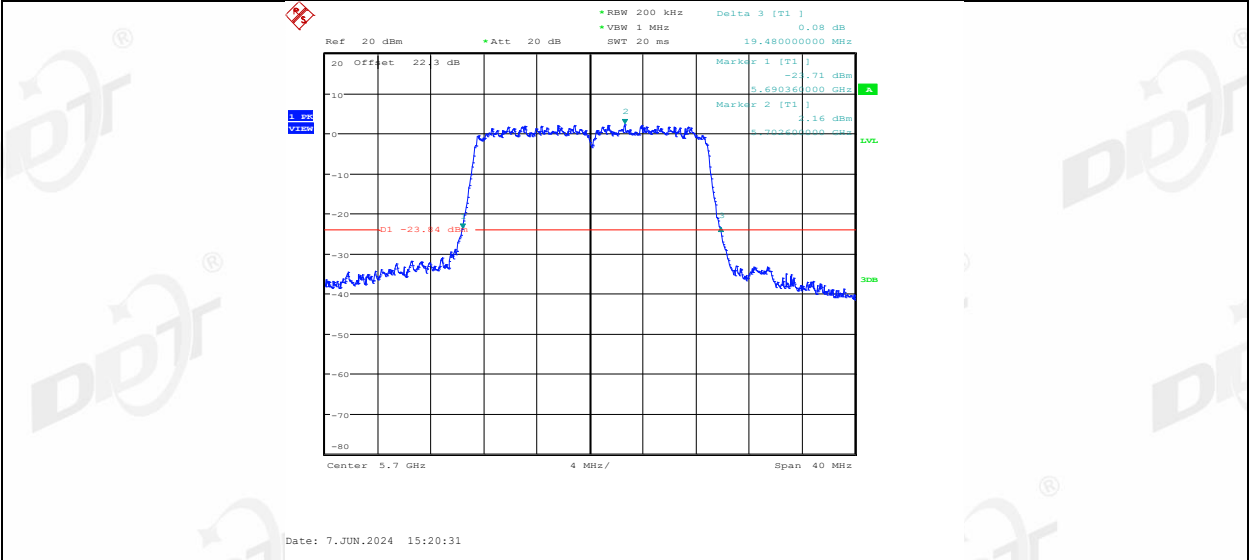
11AC20MIMO_Ant1_5580



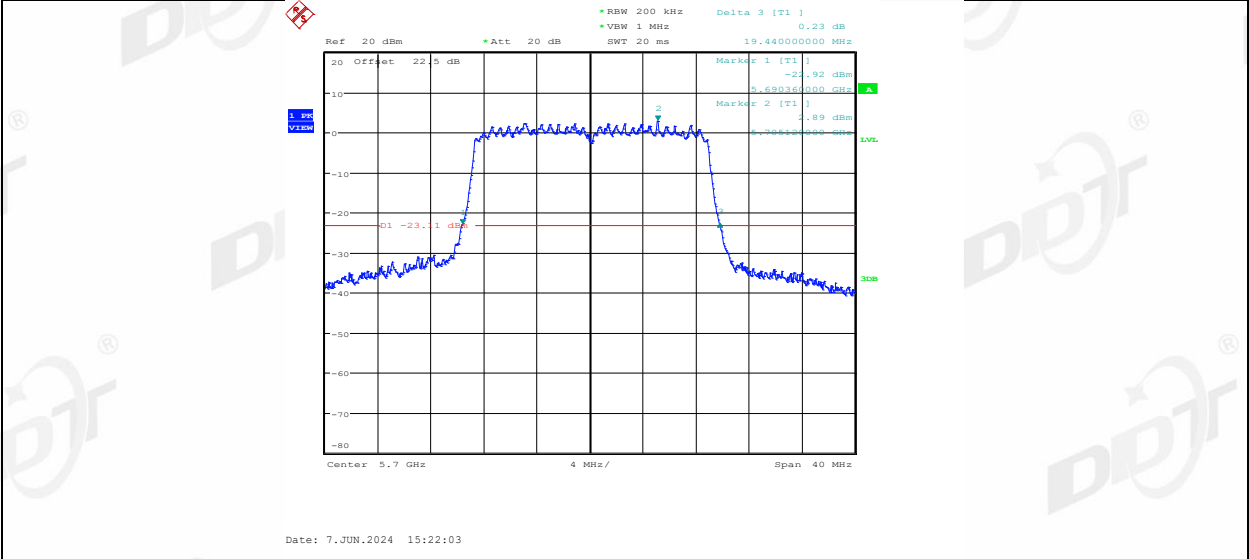
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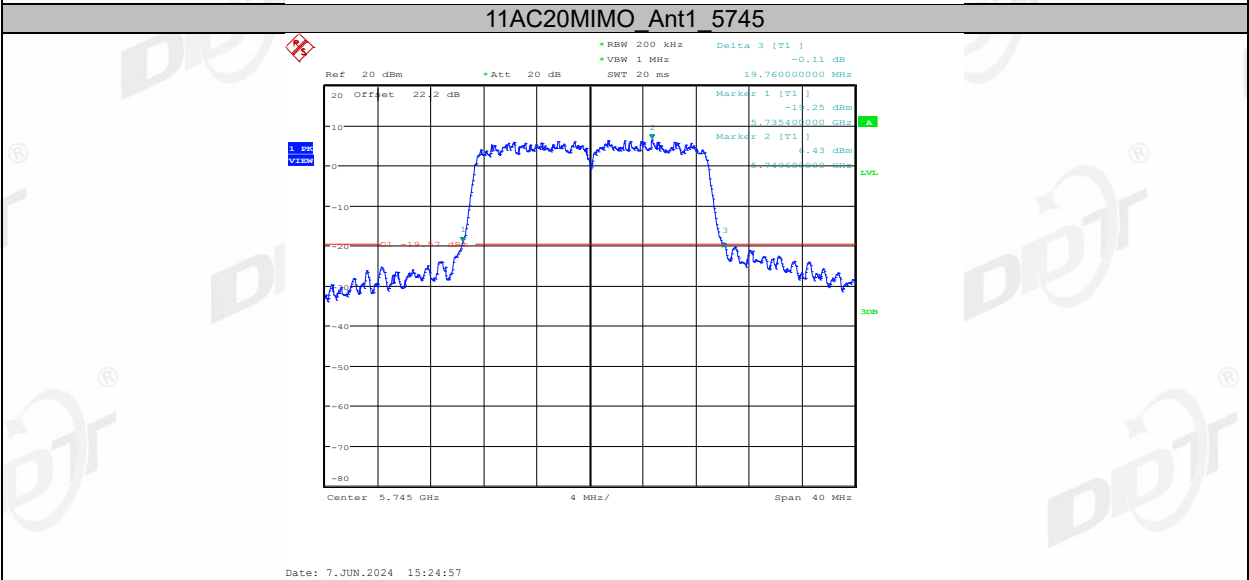
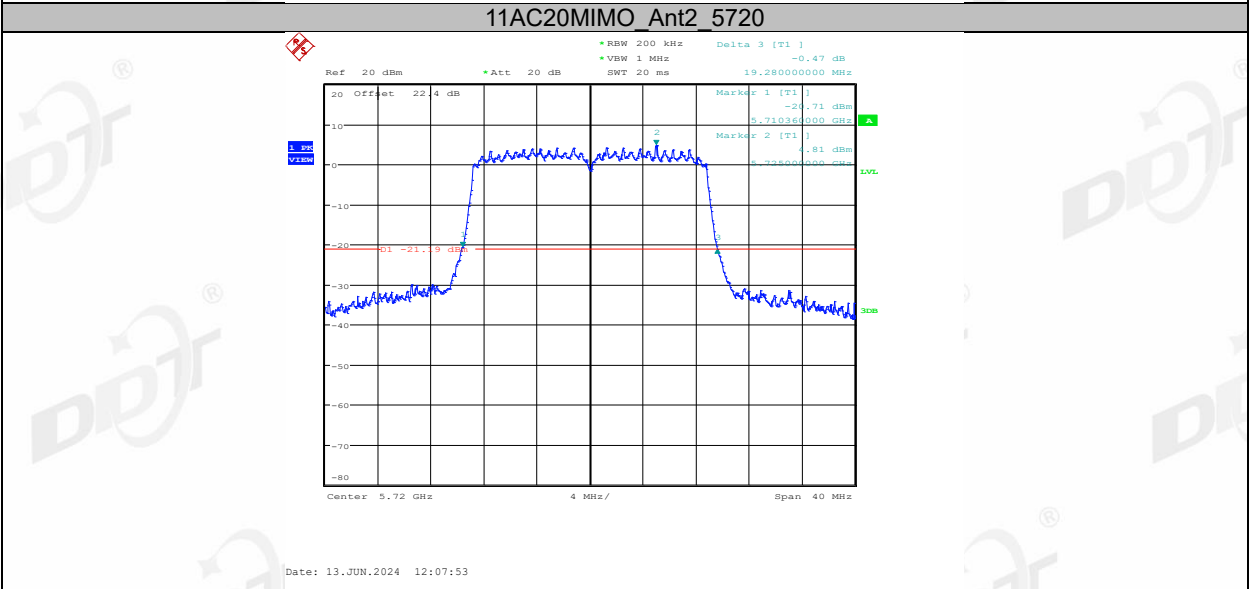
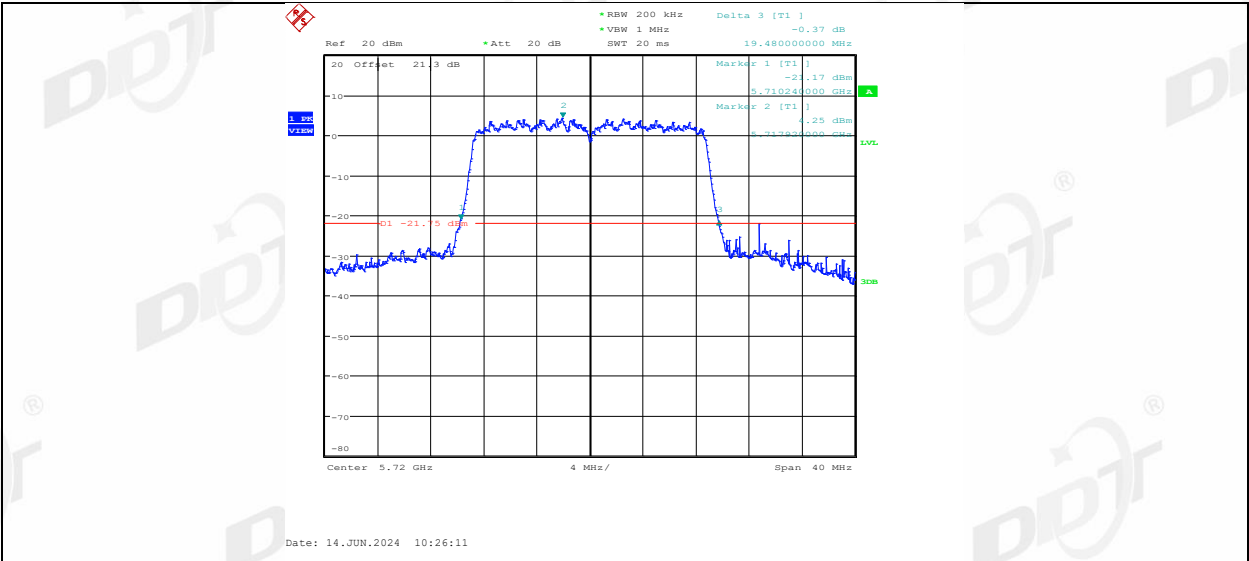
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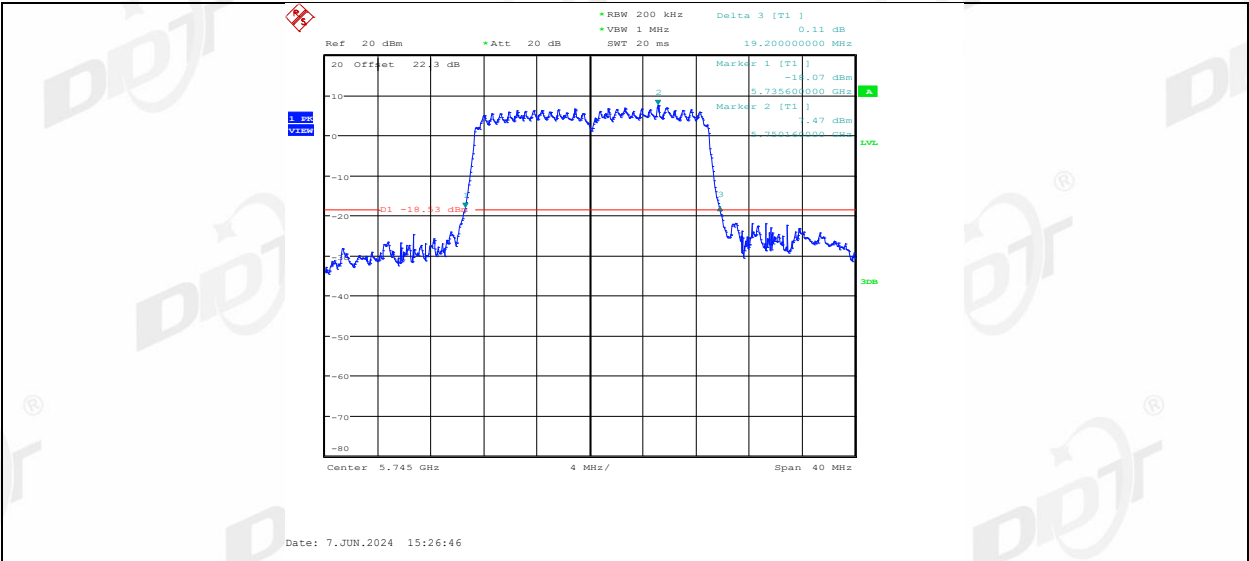
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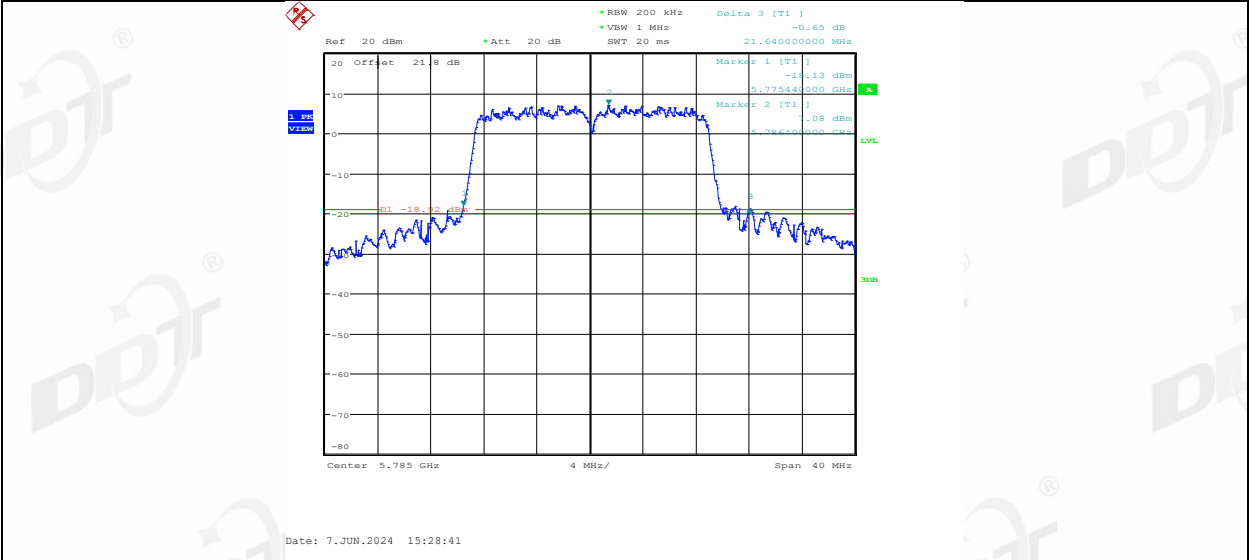
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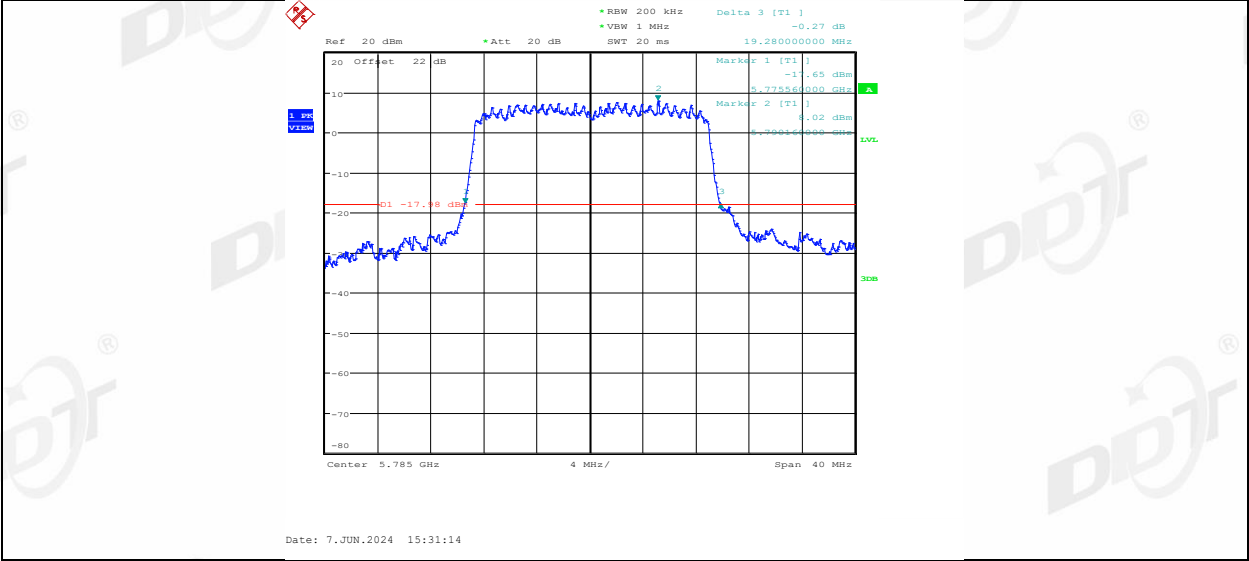
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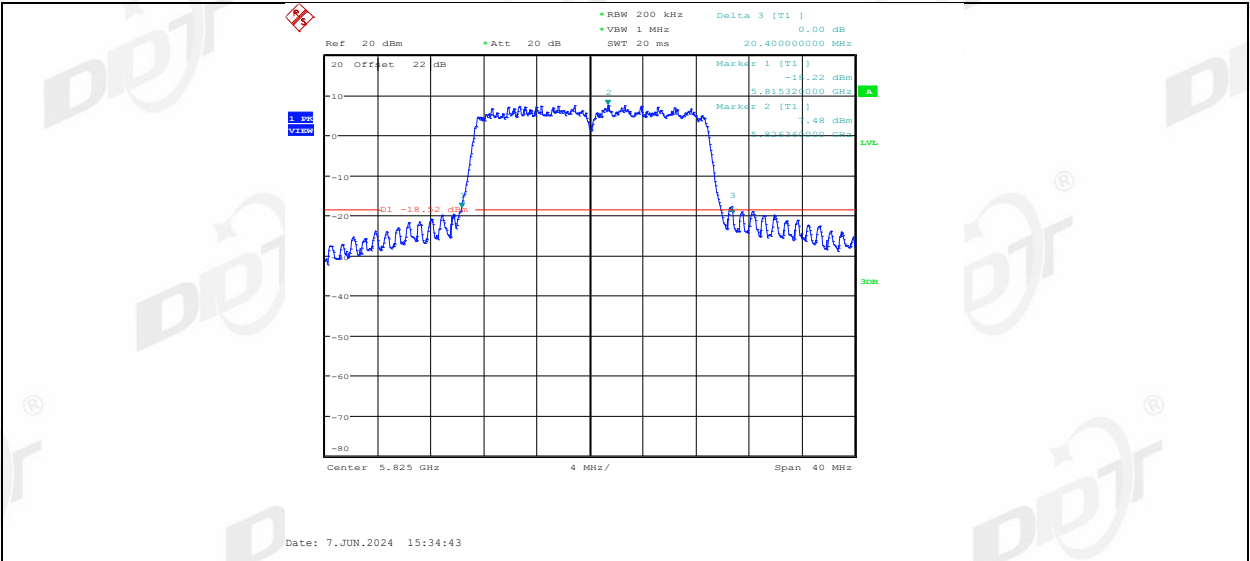
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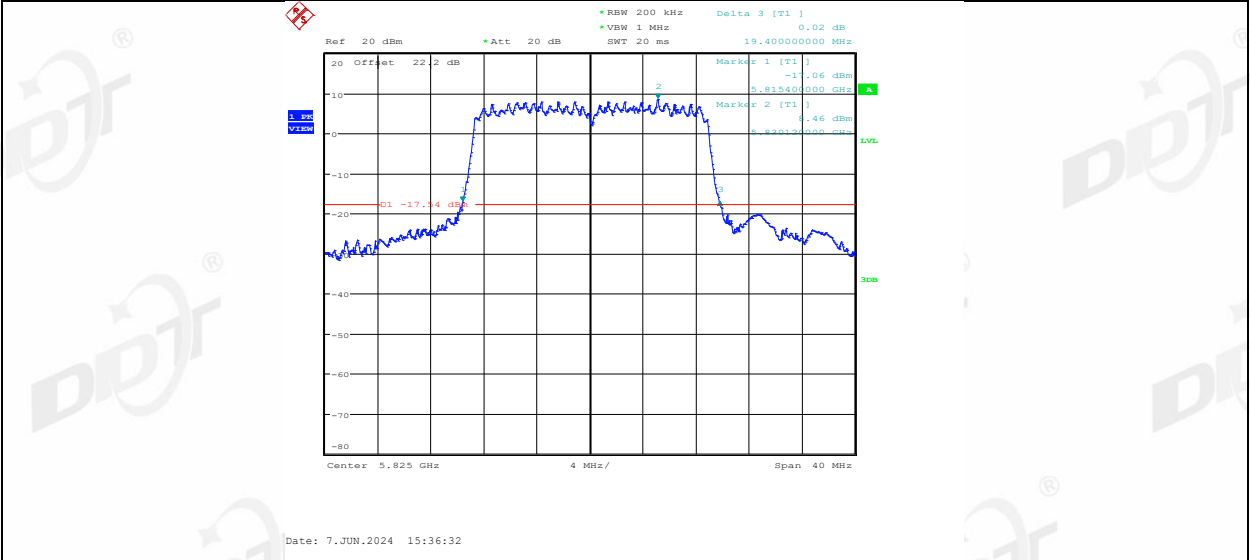
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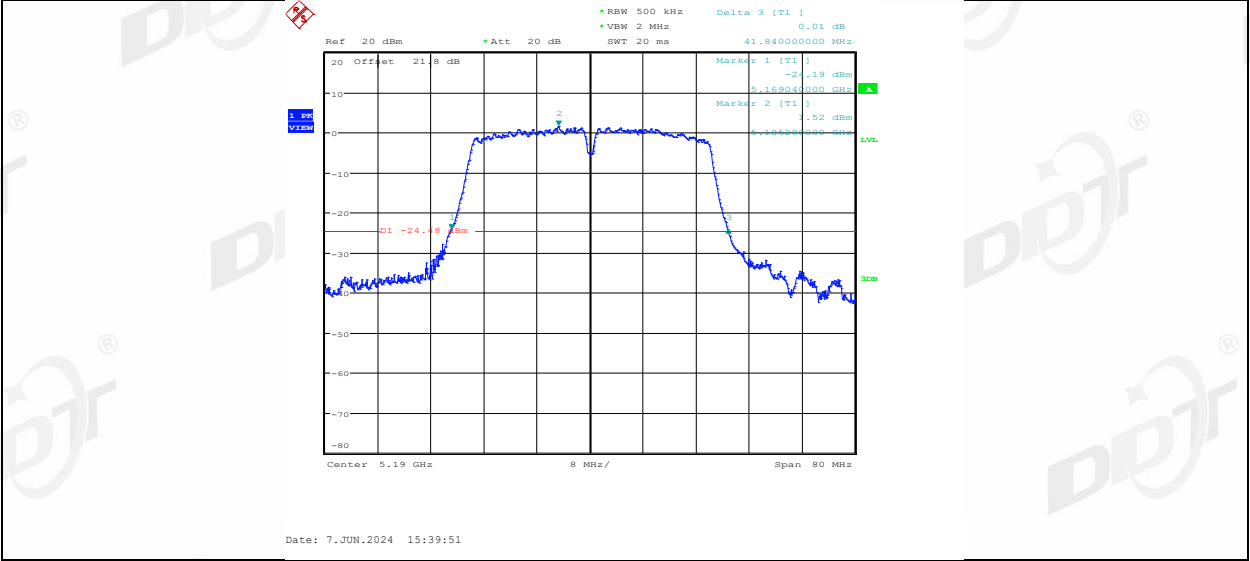
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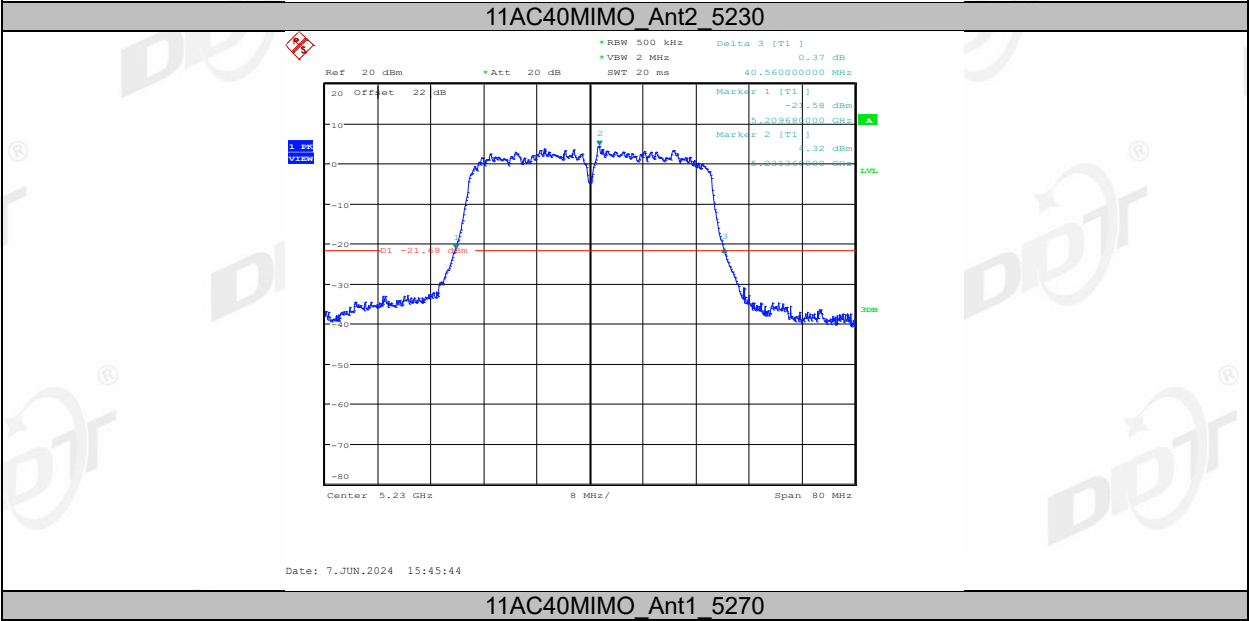
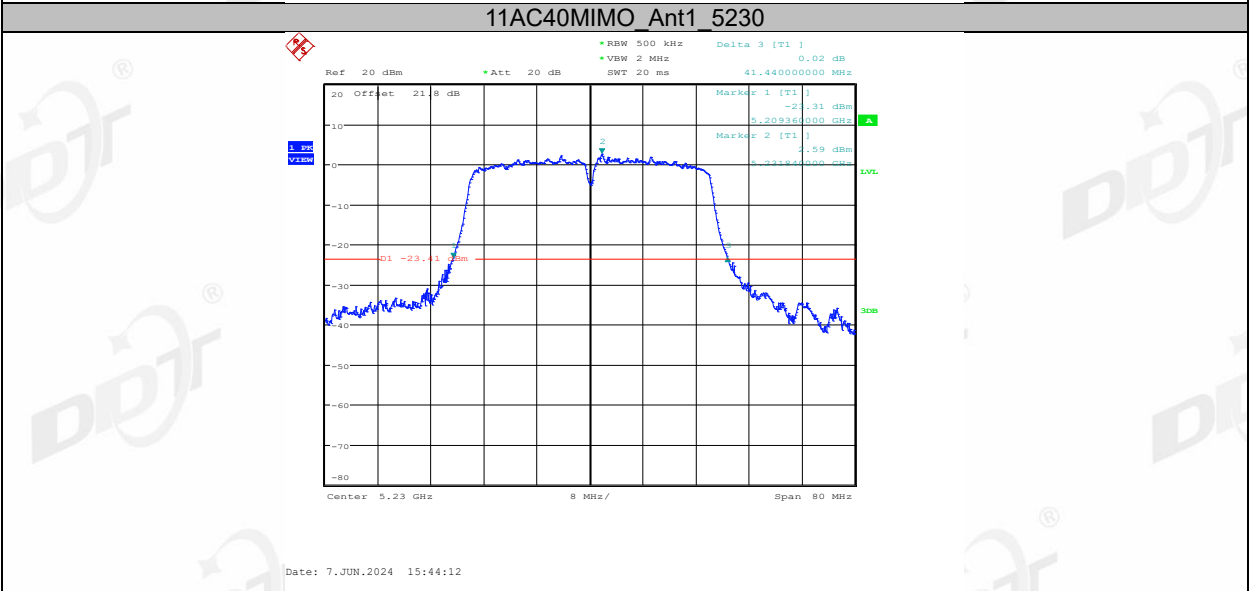
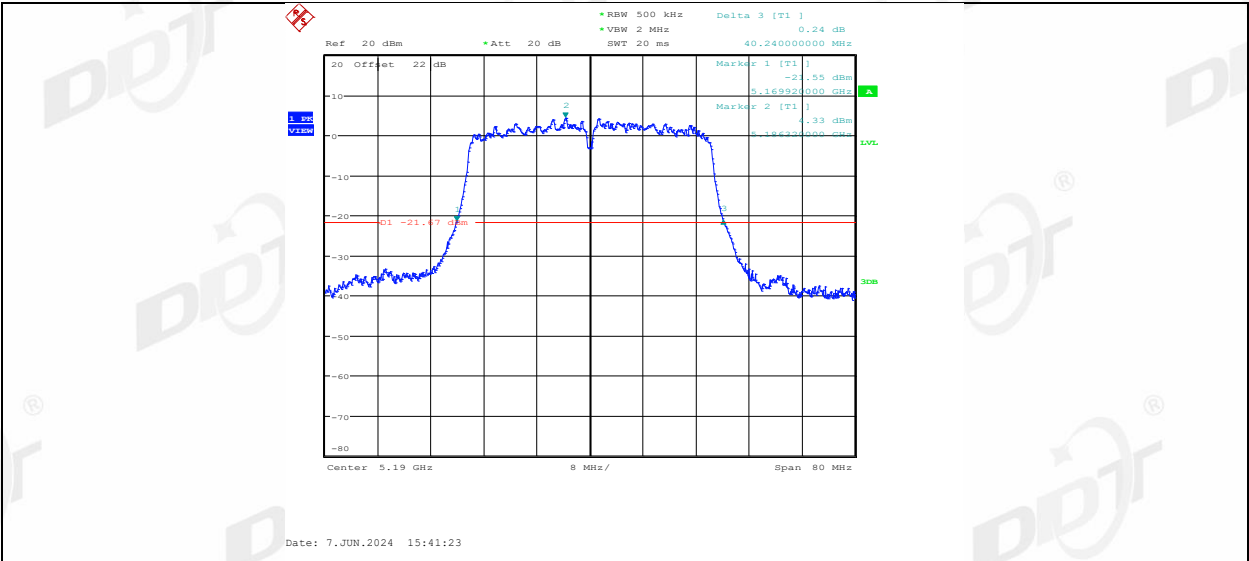
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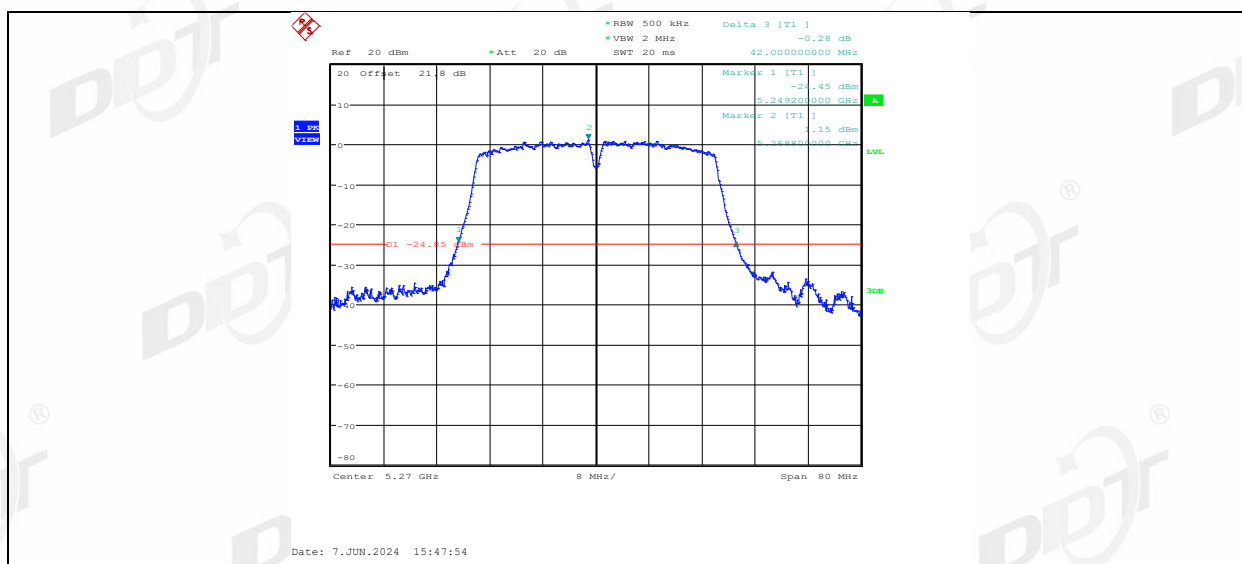


11AC40MIMO_Ant1_5190

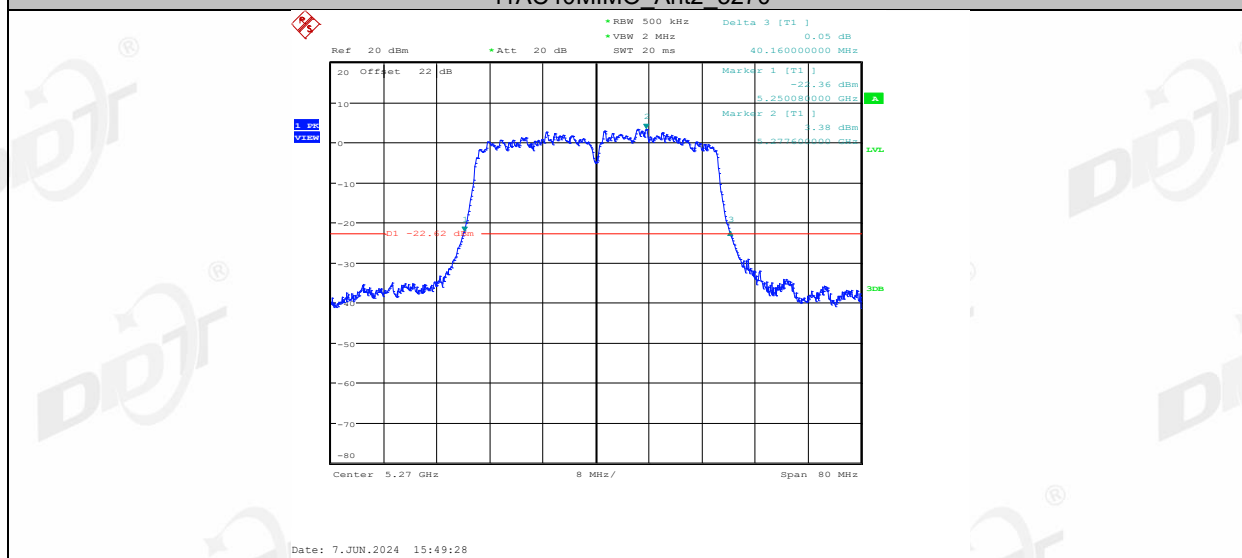


11AC40MIMO_Ant2_5190

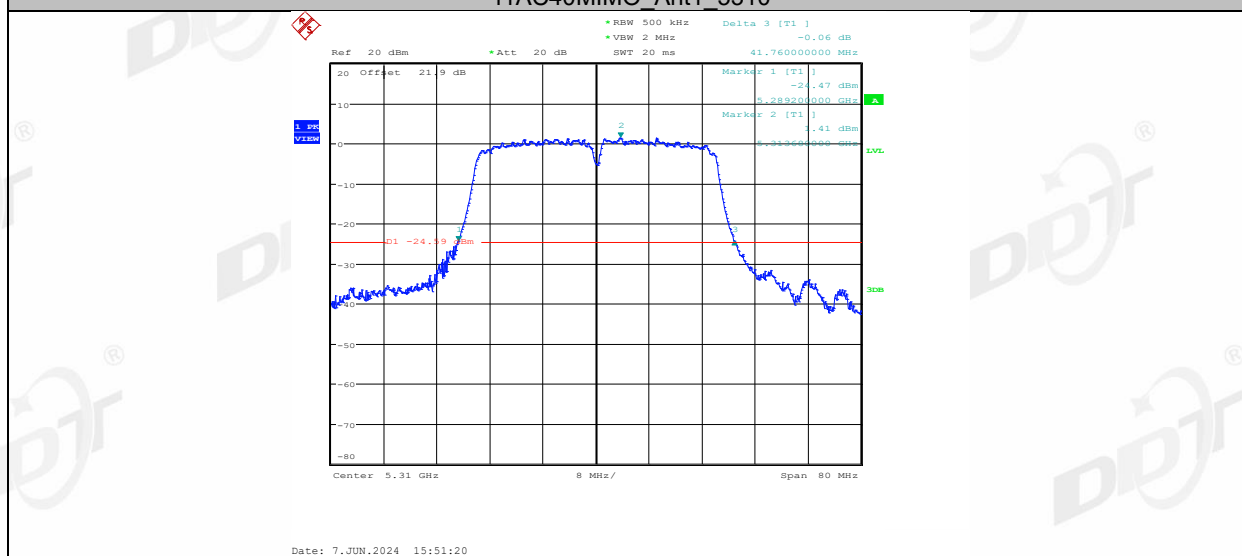




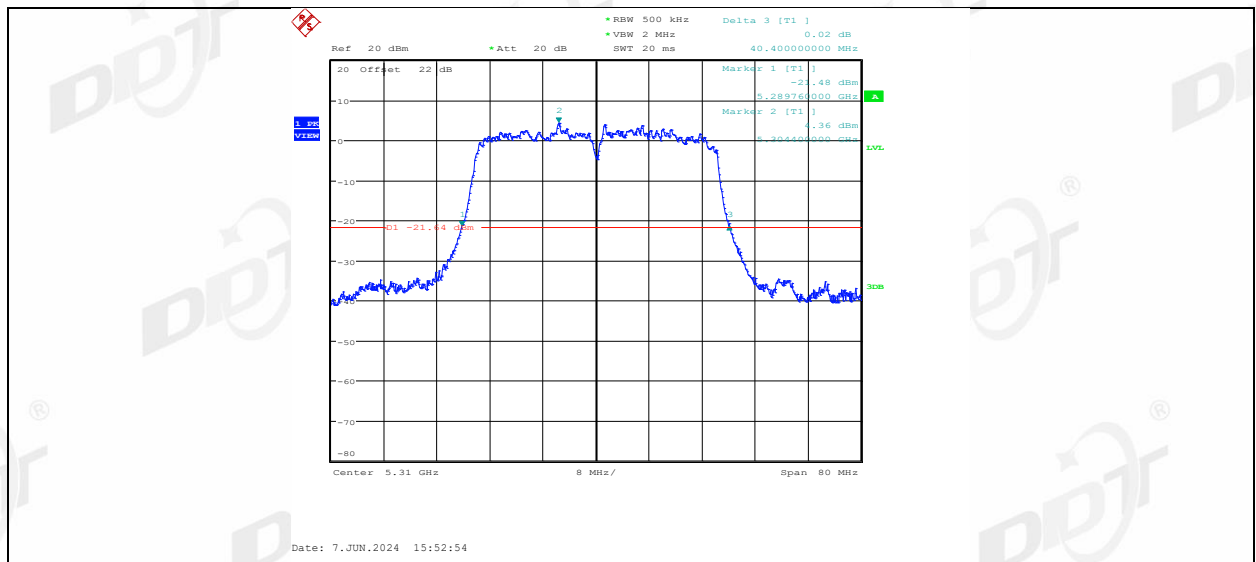
11AC40MIMO Ant2 5270



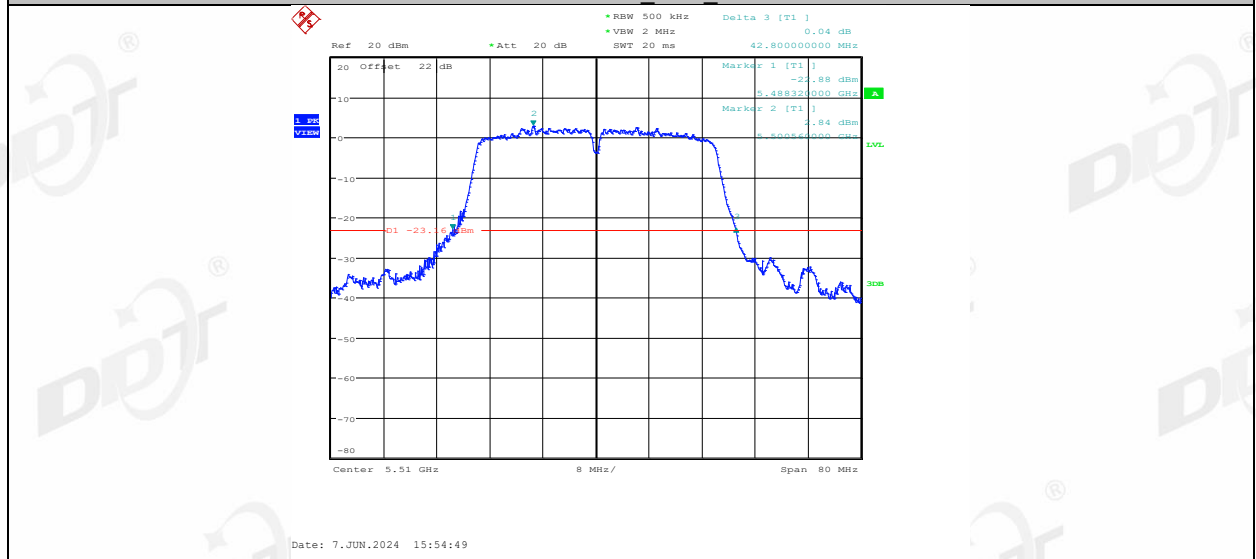
11AC40MIMO Ant1 5310



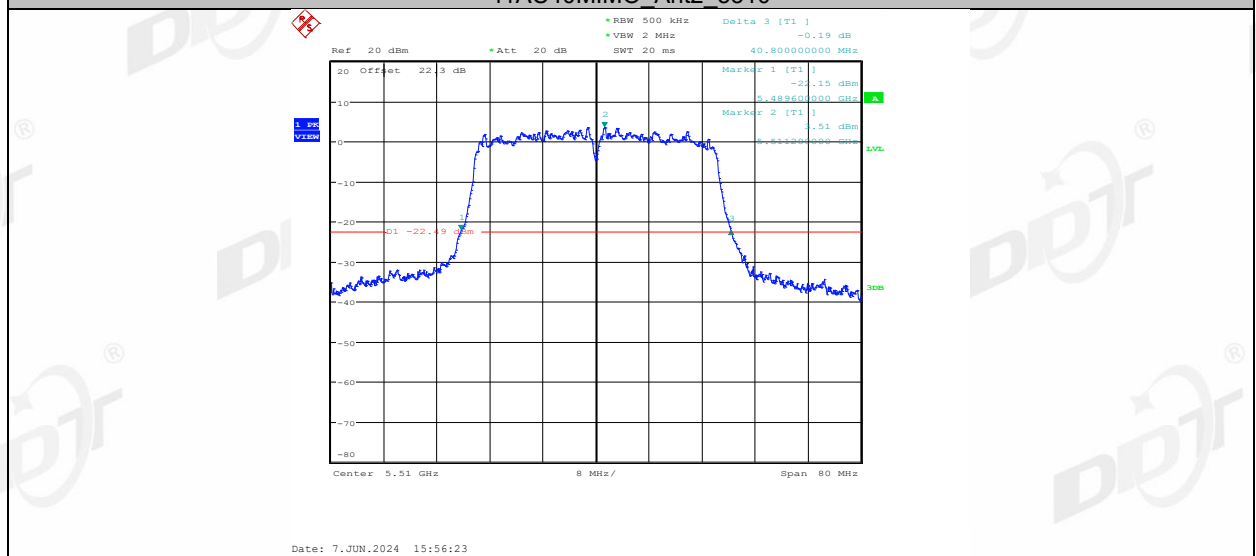
11AC40MIMO Ant2 5310



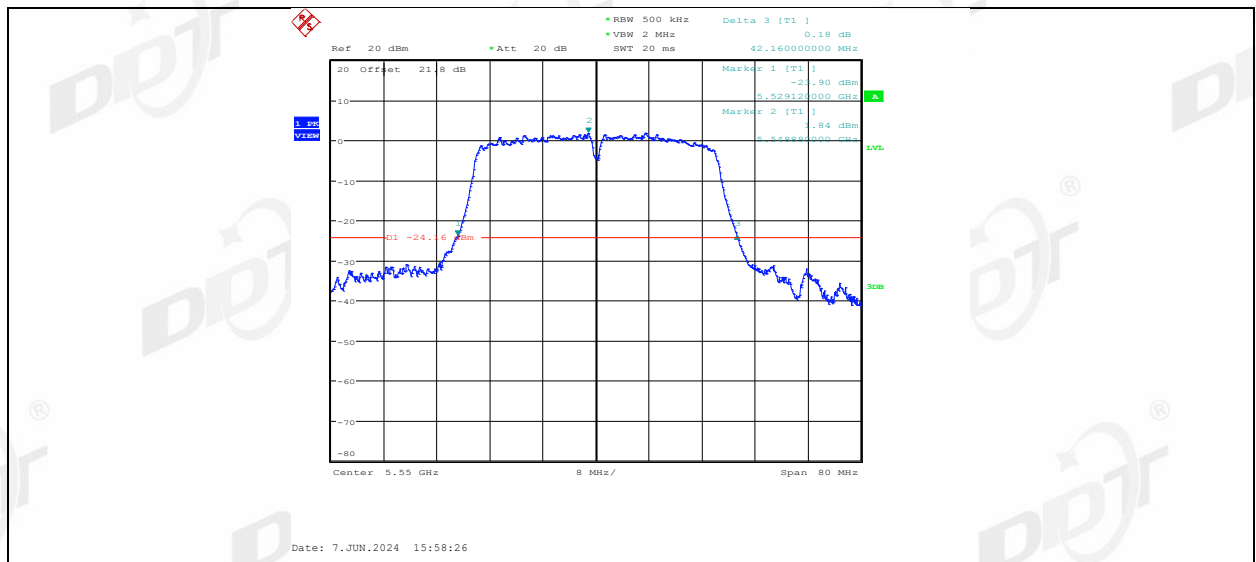
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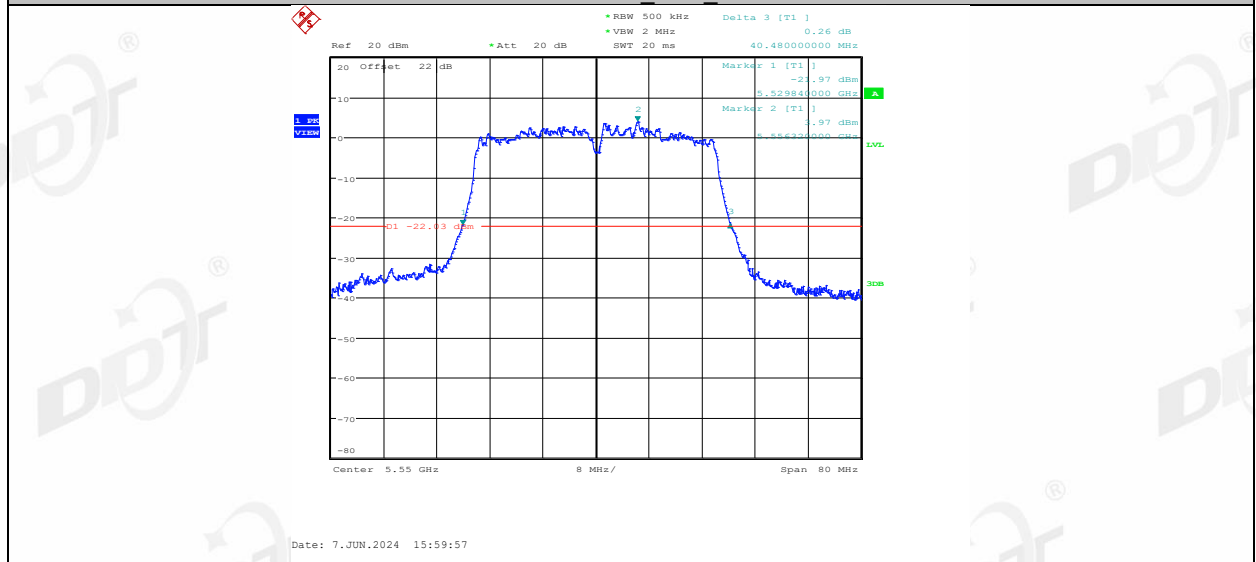
11AC40MIMO_Ant2_5510



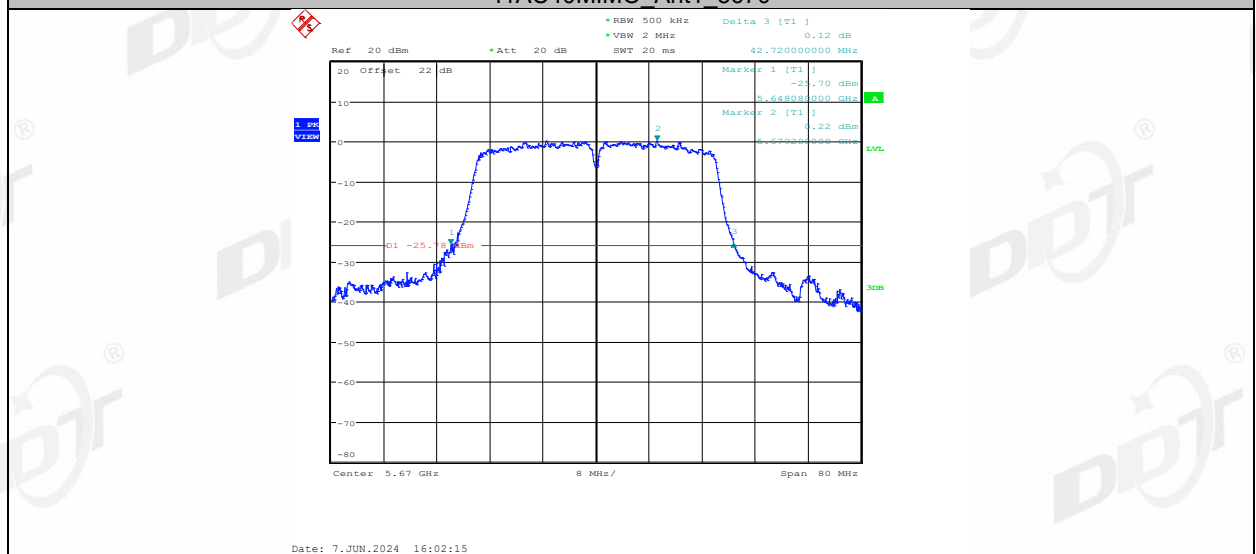
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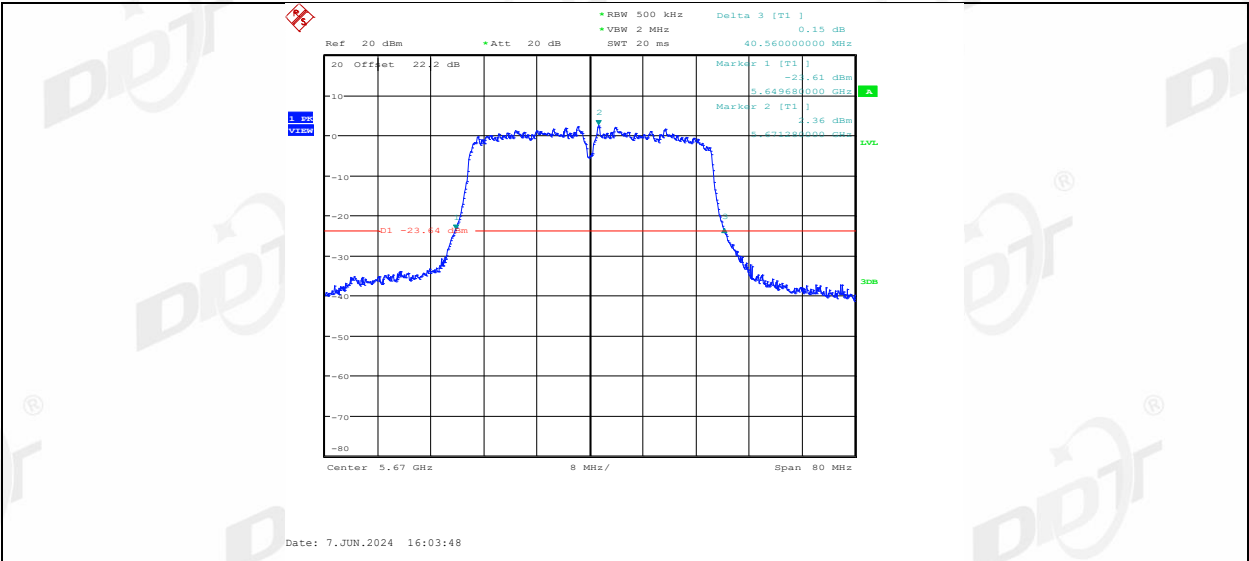
11AC40MIMO_Ant2_5550



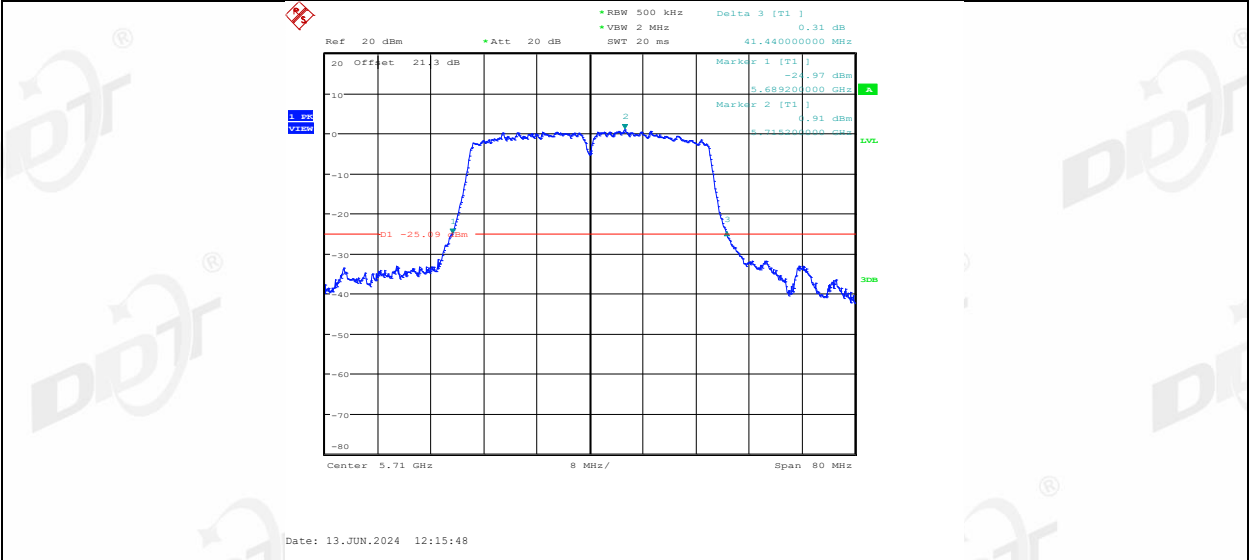
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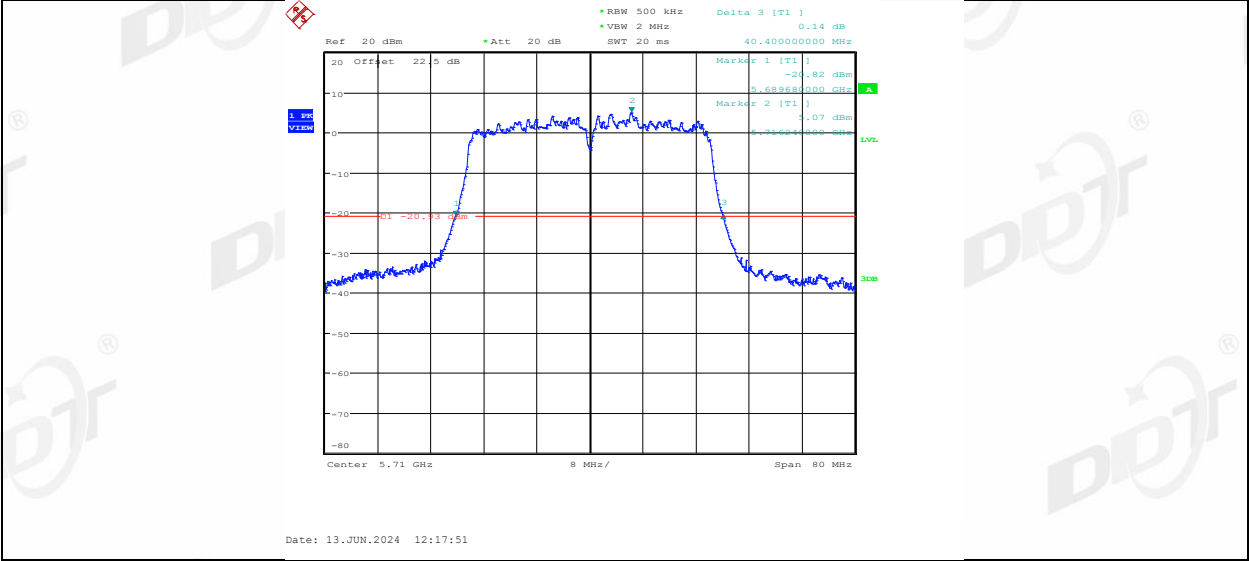
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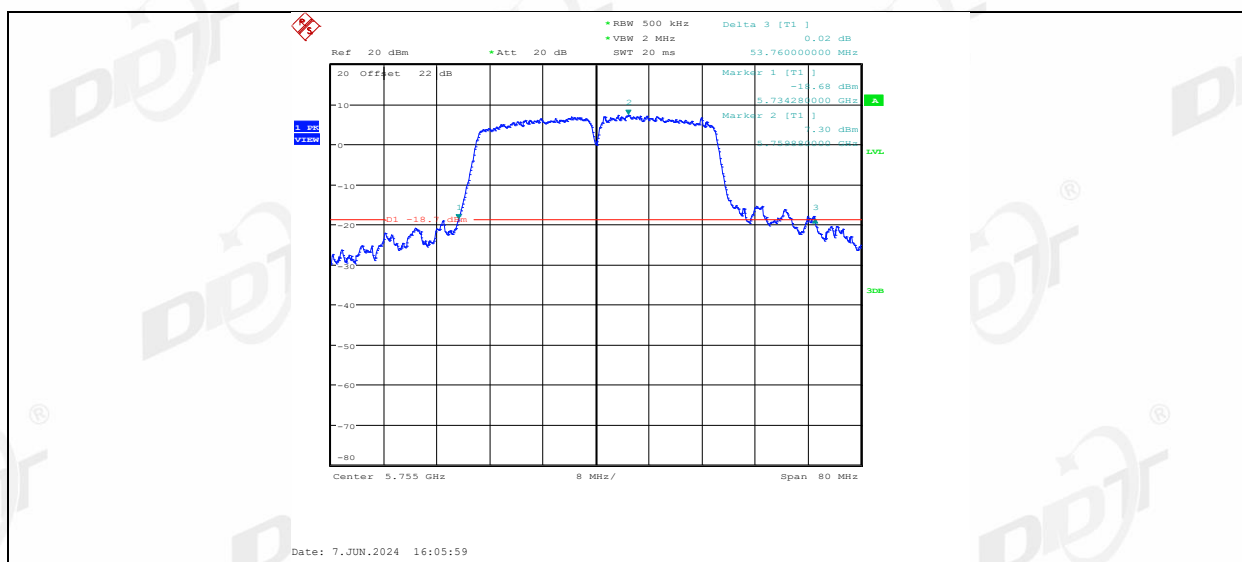
11AC40MIMO_Ant1_5710



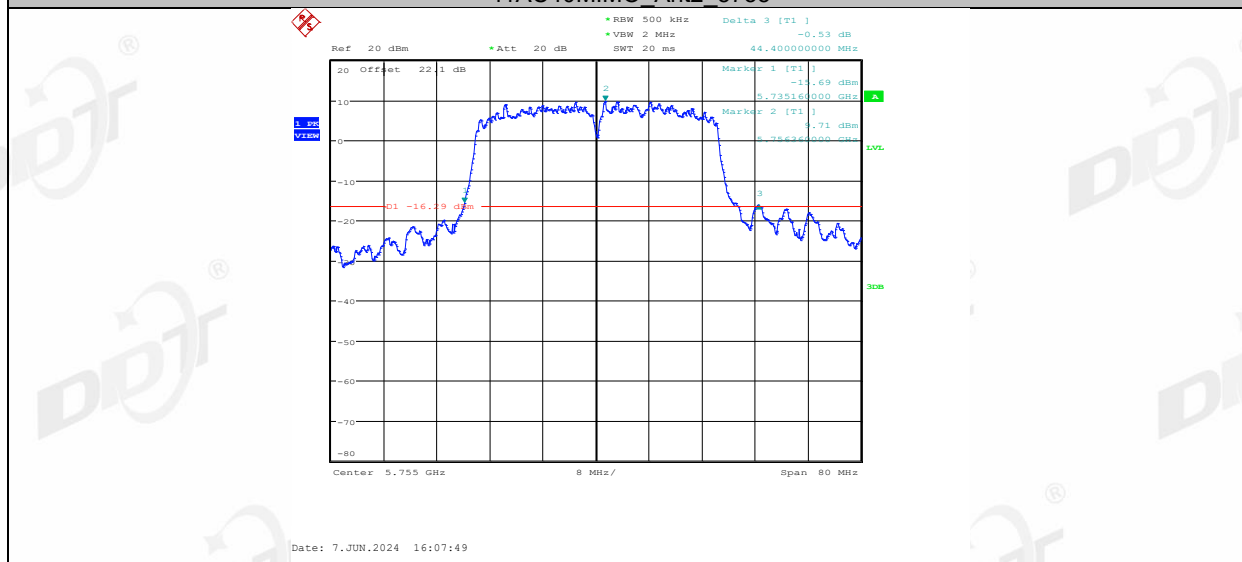
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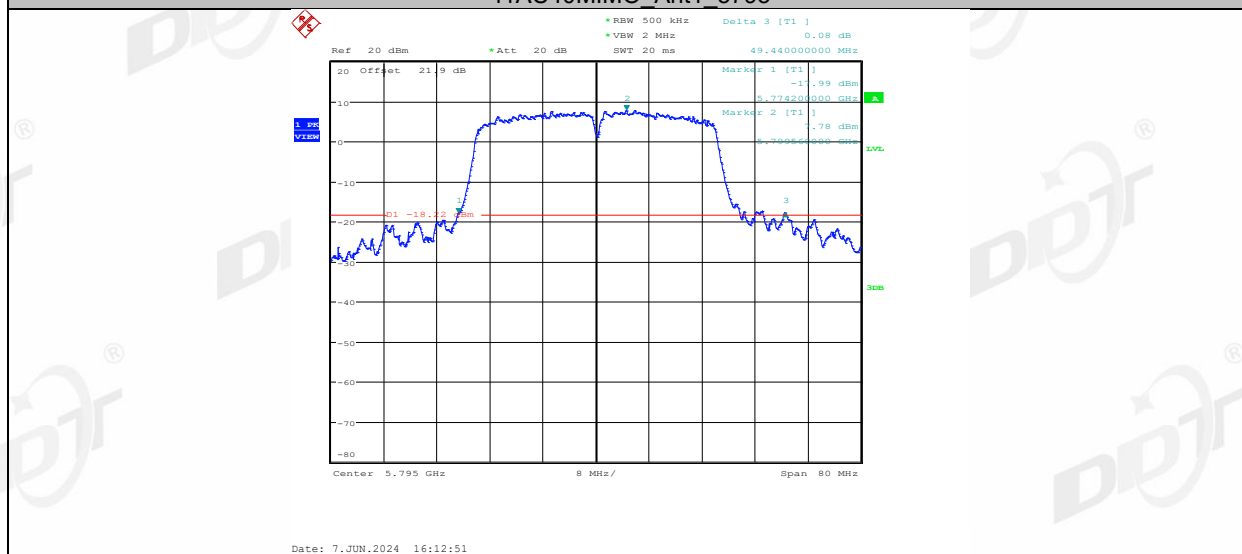
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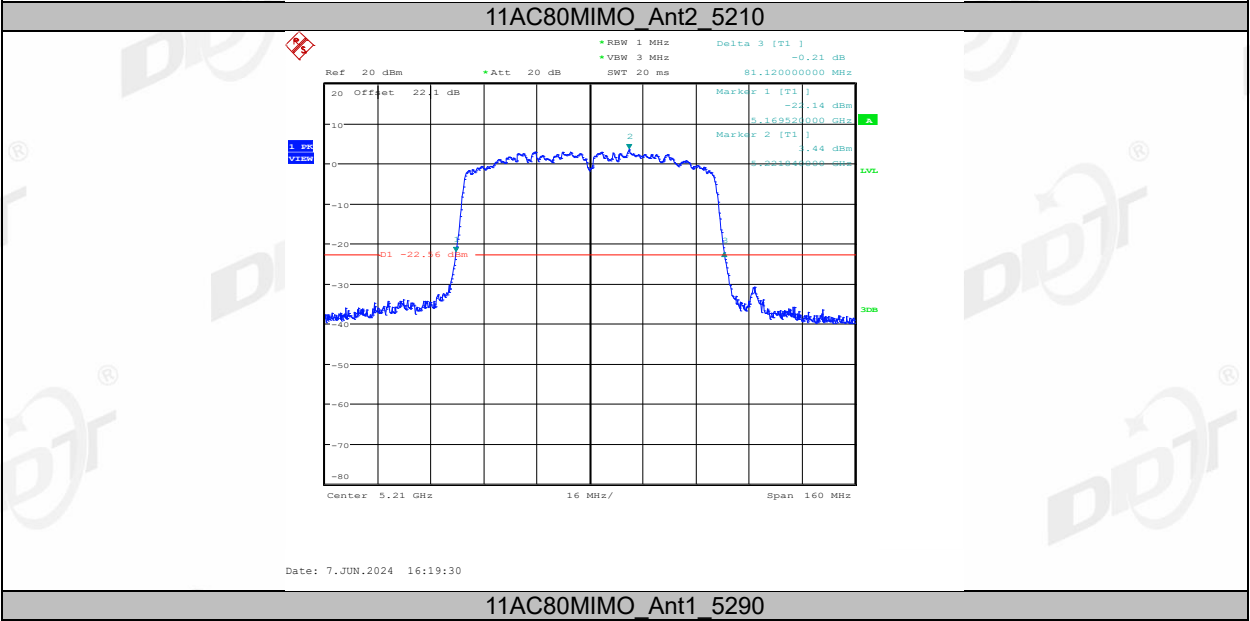
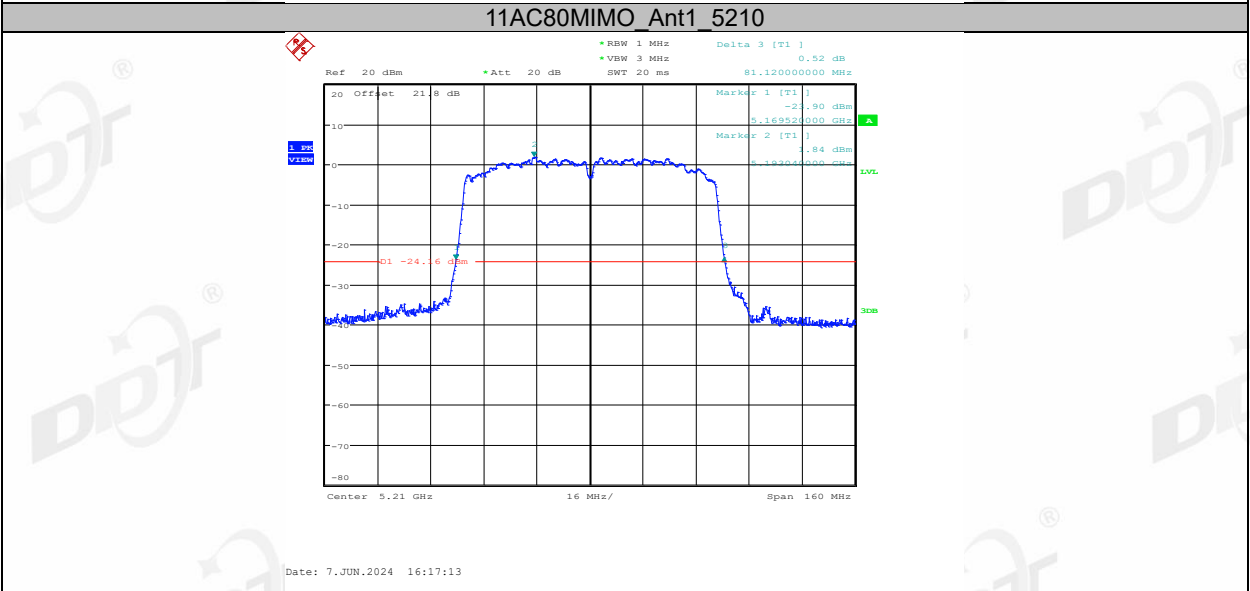
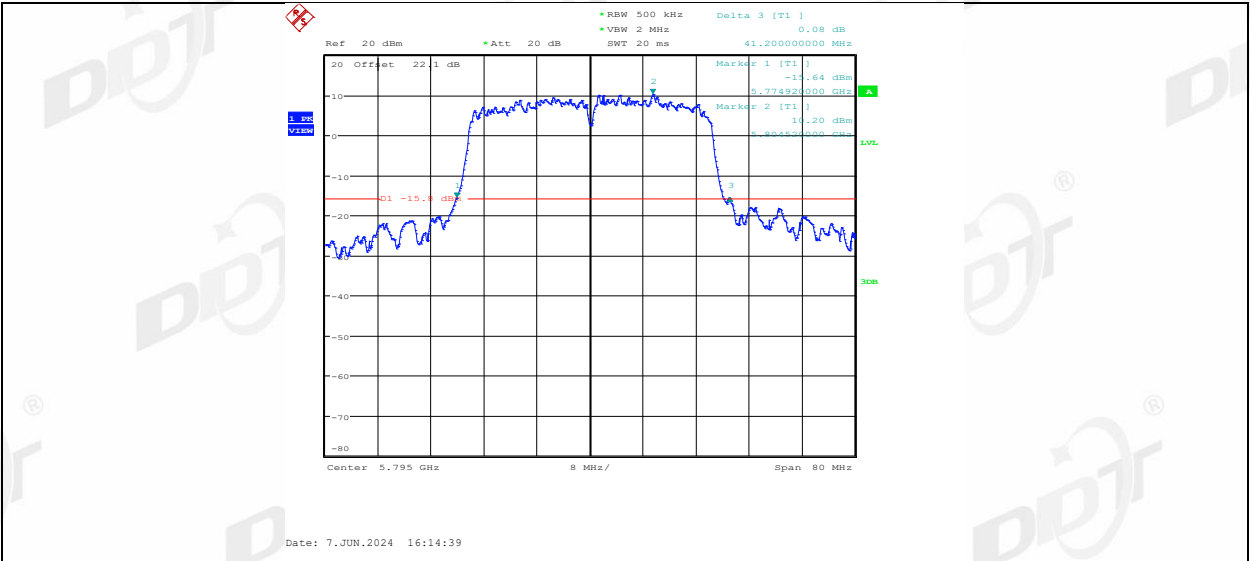
11AC40MIMO Ant2 5755

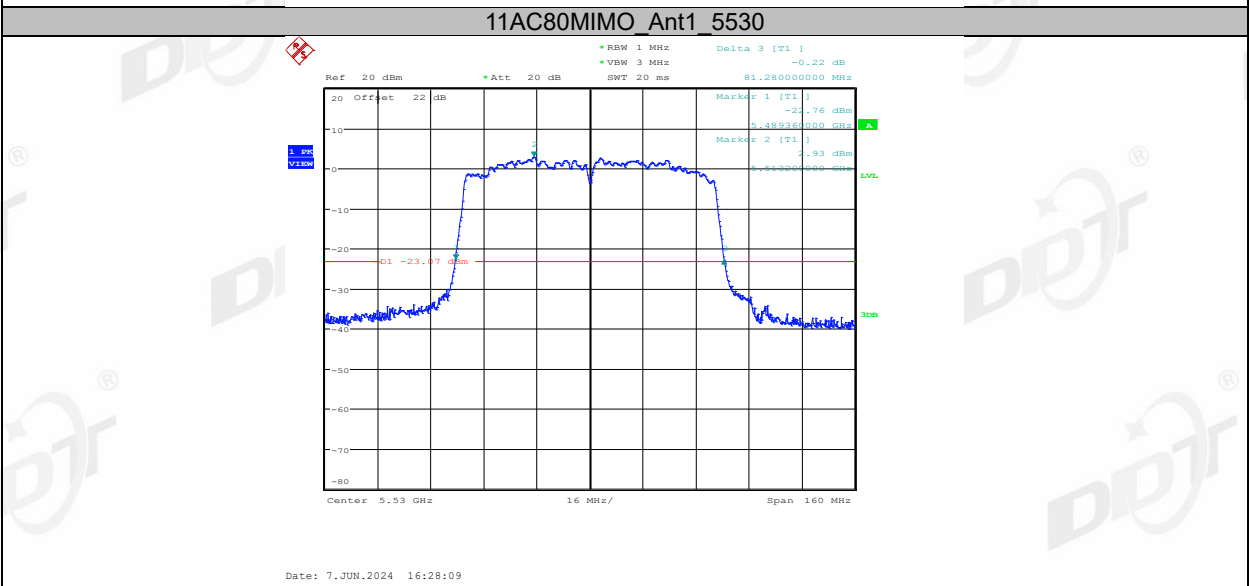
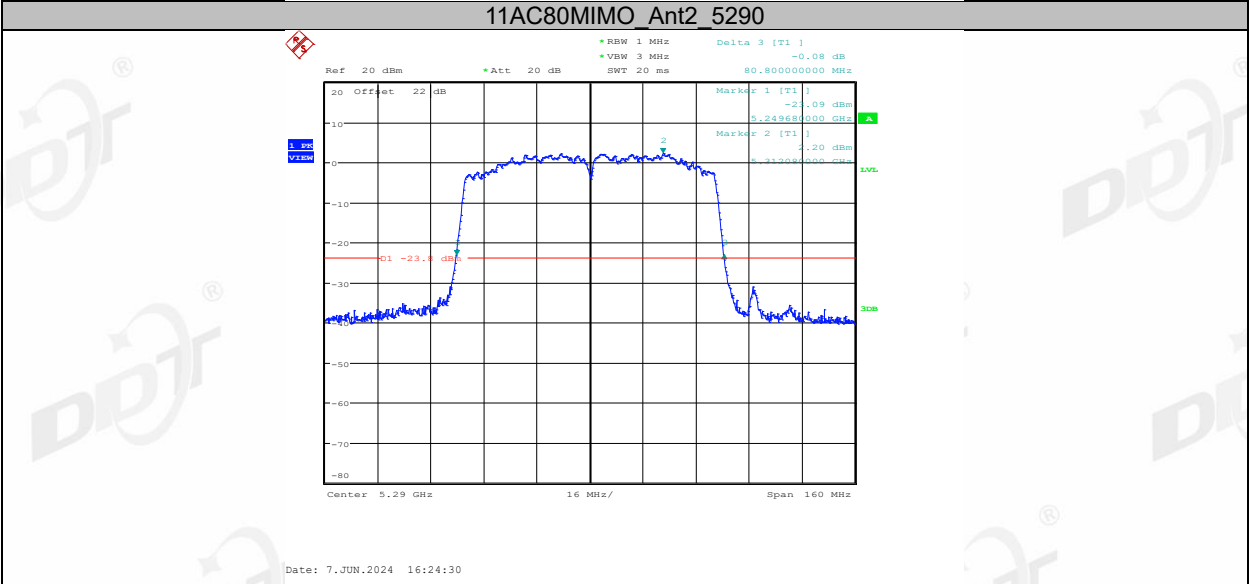
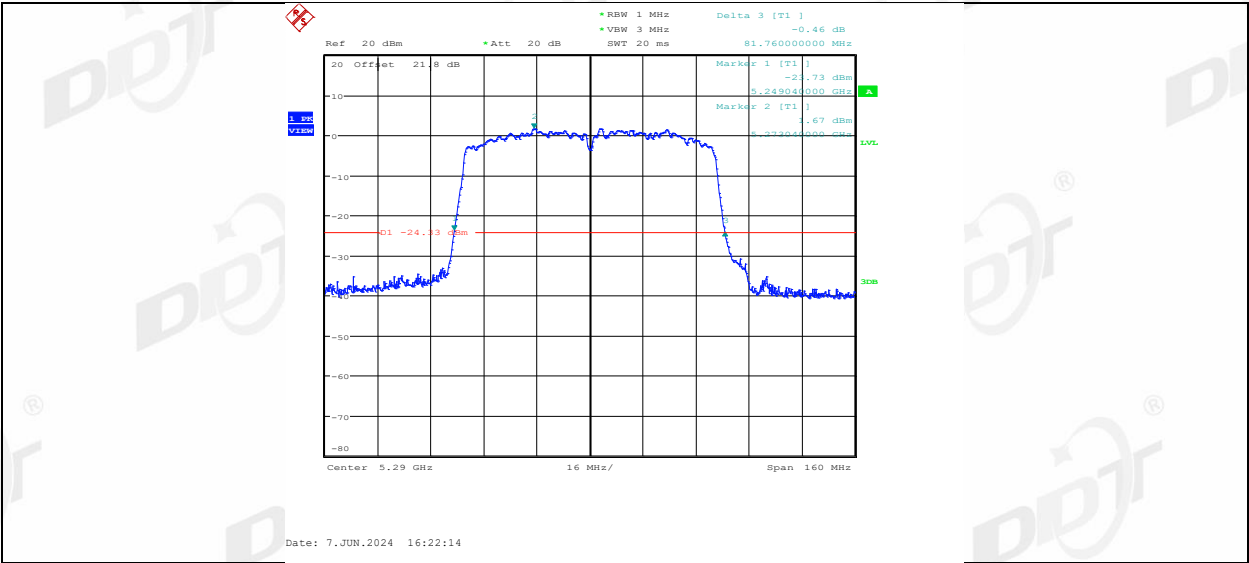


11AC40MIMO Ant1 5795

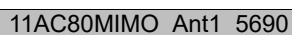
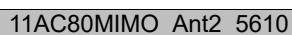
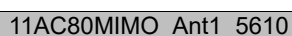


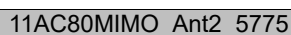
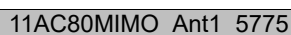
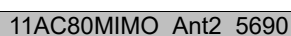
11AC40MIMO Ant2 5795

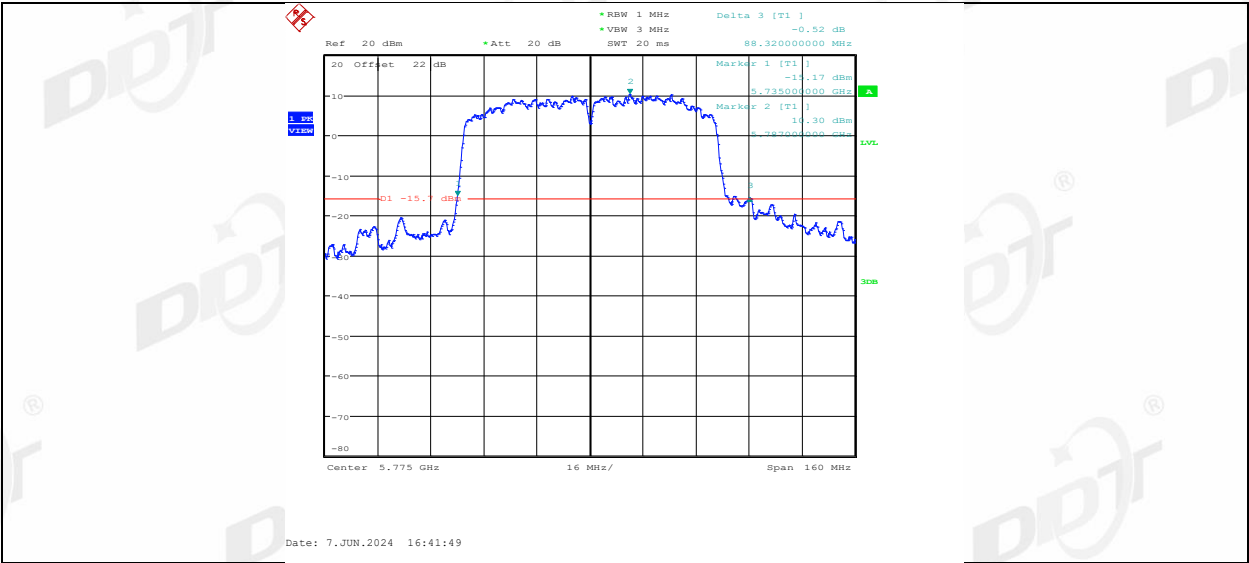




11AC80MIMO_Ant2_5530

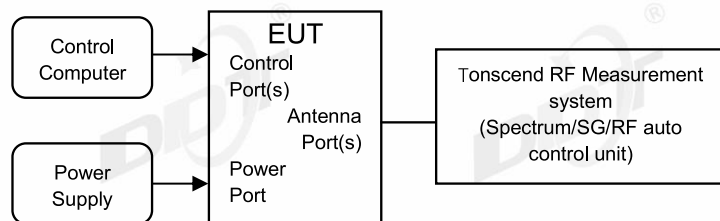






5. 6dB Bandwidth

5.1. Block diagram of test setup



5.2. Limits

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

5.3. Test procedure

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

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

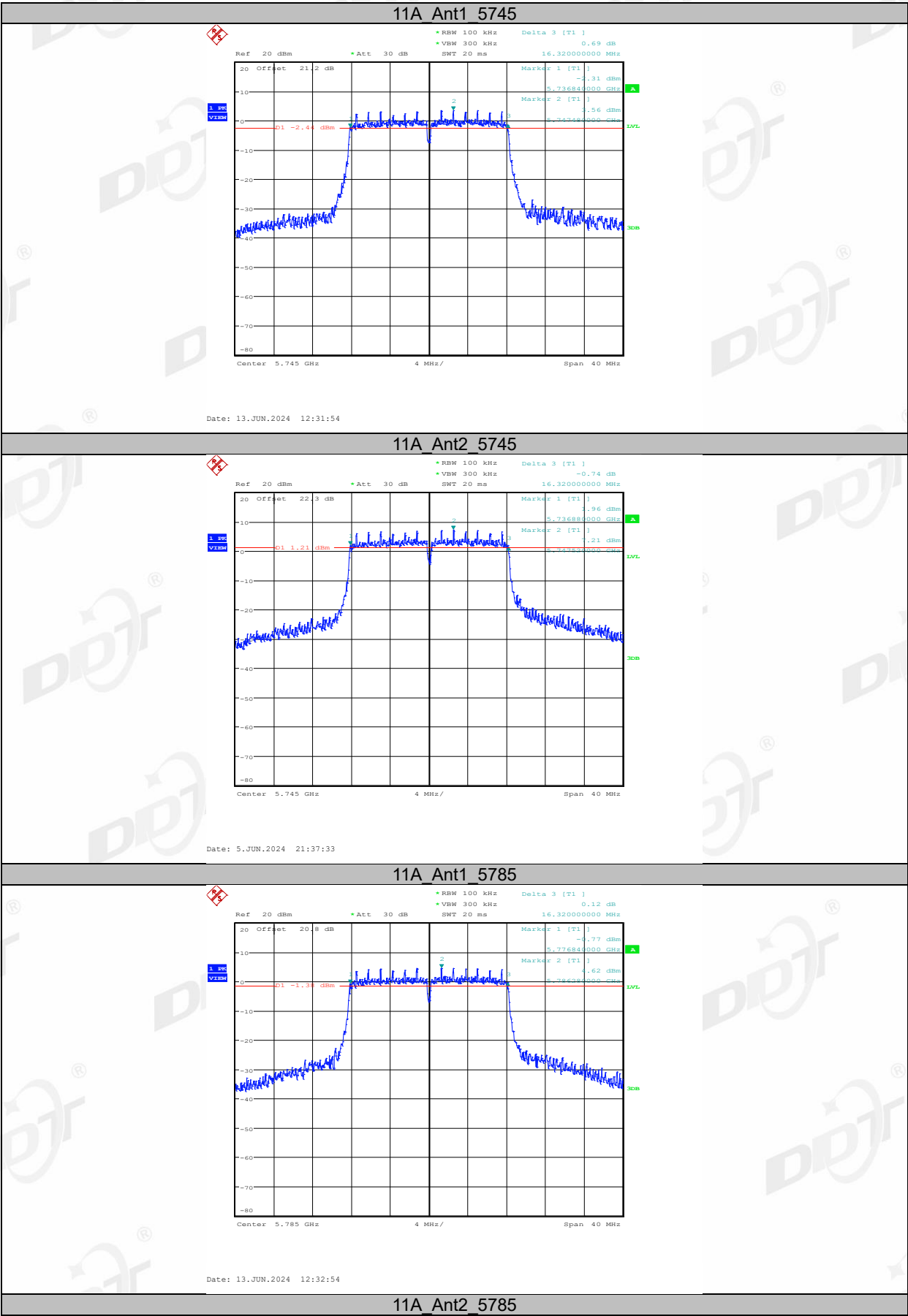
Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

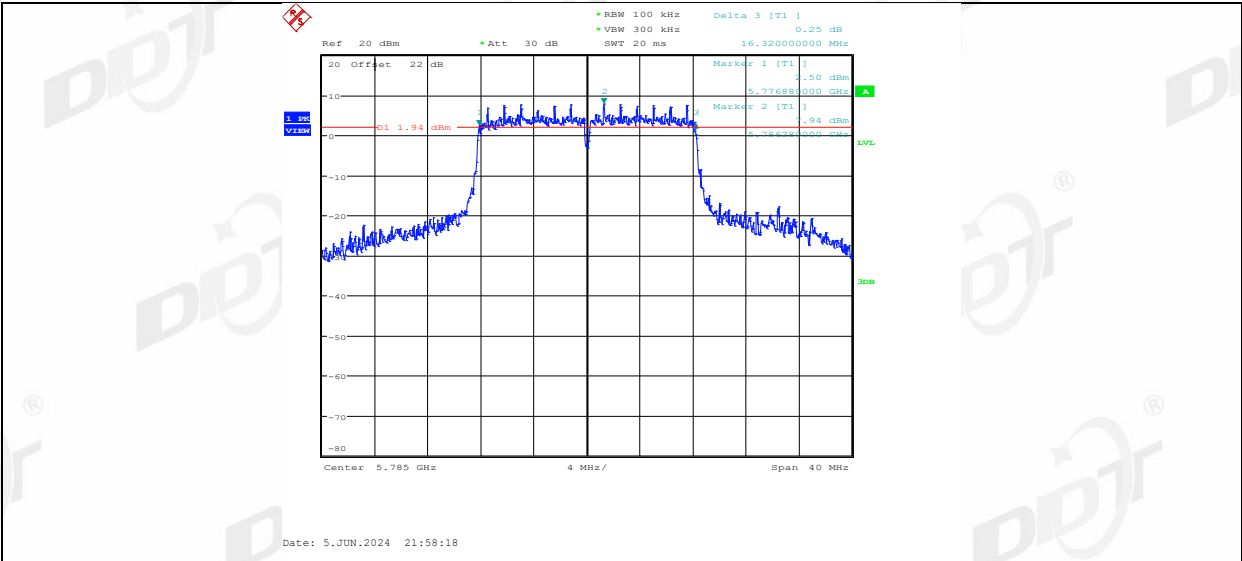
5.4. Test result B4

Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 1#
Ambient Condition:	25.1℃,52.5%RH	Test Date:	2024.06.05-2024.06.14
Test Power Supply:	DC 12V	Sample Number:	S24042530-001

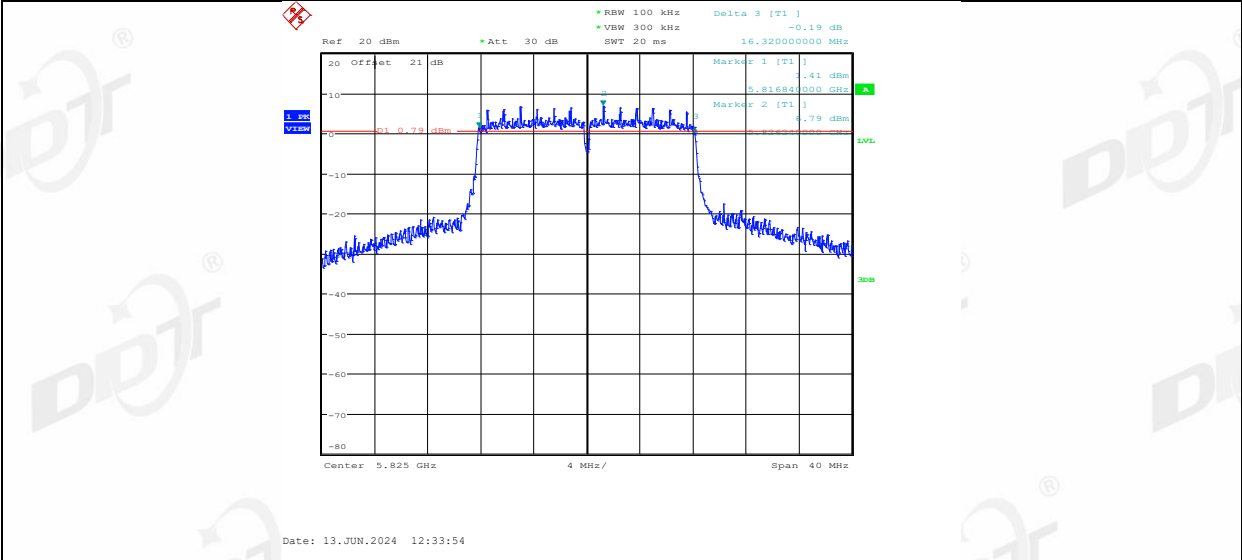
Test Mode	Antenna	Frequenc y[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.32	5736.84	5753.16	0.5	PASS
	Ant2	5745	16.32	5736.88	5753.20	0.5	PASS
	Ant1	5785	16.32	5776.84	5793.16	0.5	PASS
	Ant2	5785	16.32	5776.88	5793.20	0.5	PASS
	Ant1	5825	16.32	5816.84	5833.16	0.5	PASS
	Ant2	5825	16.32	5816.88	5833.20	0.5	PASS
11N20MIM O	Ant1	5745	17.32	5736.52	5753.84	0.5	PASS
	Ant2	5745	16.92	5736.92	5753.84	0.5	PASS
	Ant1	5785	17.16	5776.68	5793.84	0.5	PASS
	Ant2	5785	17.52	5776.32	5793.84	0.5	PASS
	Ant1	5825	17.56	5816.32	5833.88	0.5	PASS
	Ant2	5825	17.56	5816.32	5833.88	0.5	PASS
11N40MIM O	Ant1	5755	35.12	5737.56	5772.68	0.5	PASS
	Ant2	5755	35.12	5737.56	5772.68	0.5	PASS
	Ant1	5795	35.20	5777.40	5812.60	0.5	PASS
	Ant2	5795	35.20	5777.40	5812.60	0.5	PASS
11AC20MI MO	Ant1	5745	17.20	5736.72	5753.92	0.5	PASS
	Ant2	5745	17.56	5736.36	5753.92	0.5	PASS
	Ant1	5785	17.32	5776.60	5793.92	0.5	PASS
	Ant2	5785	17.56	5776.36	5793.92	0.5	PASS
	Ant1	5825	17.32	5816.56	5833.88	0.5	PASS
	Ant2	5825	17.56	5816.32	5833.88	0.5	PASS
11AC40MI MO	Ant1	5755	35.12	5737.56	5772.68	0.5	PASS
	Ant2	5755	35.12	5737.56	5772.68	0.5	PASS
	Ant1	5795	35.12	5777.56	5812.68	0.5	PASS
	Ant2	5795	35.12	5777.56	5812.68	0.5	PASS
11AC80MI MO	Ant1	5775	71.36	5741.24	5812.60	0.5	PASS
	Ant2	5775	72.64	5739.96	5812.60	0.5	PASS

5.5. Test graphs

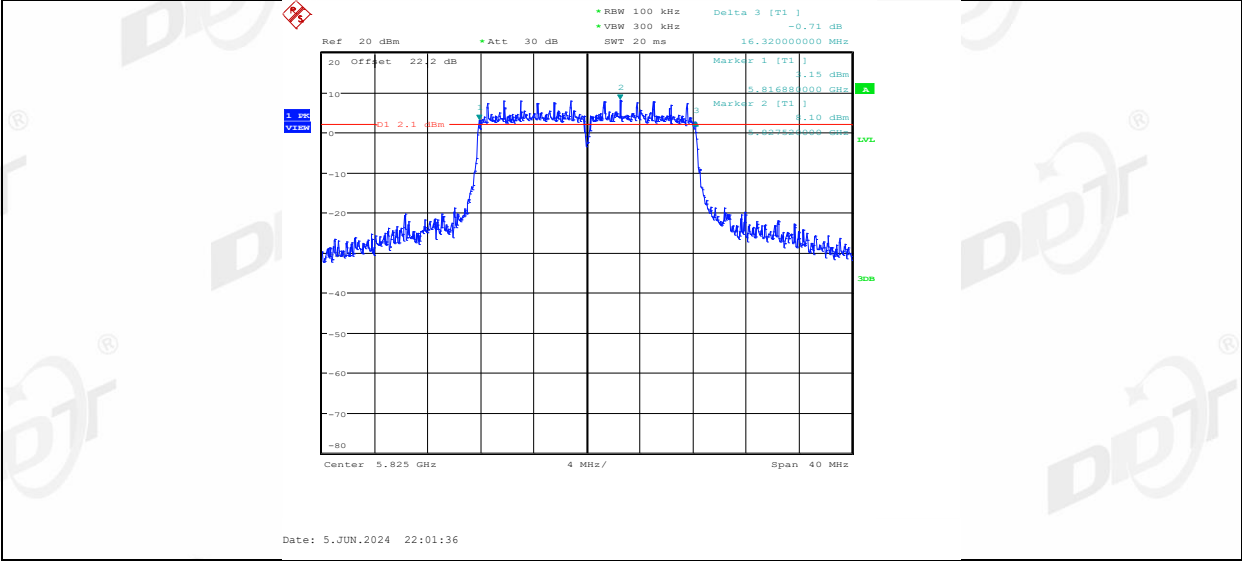




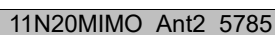
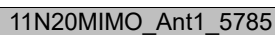
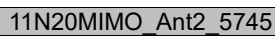
11A_Ant1_5825

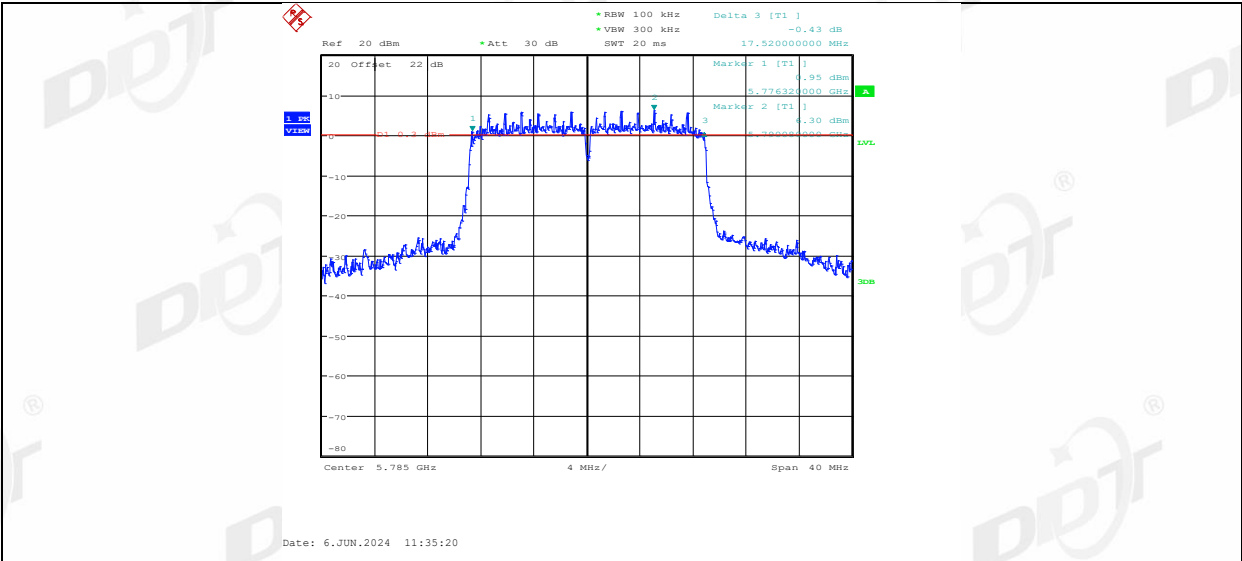


11A_Ant2_5825

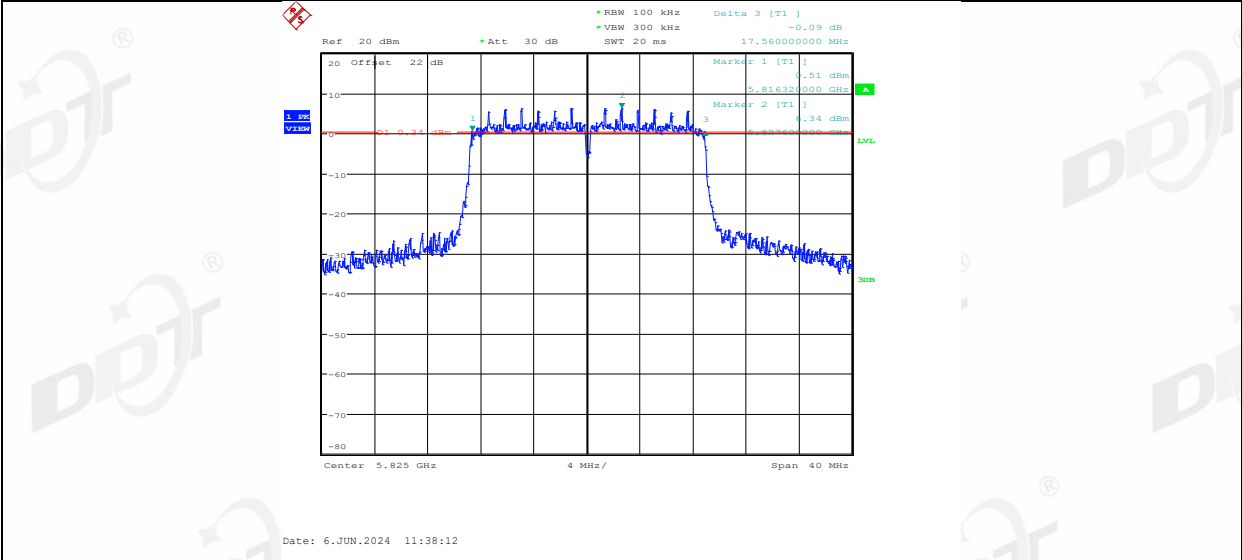


11N20MIMO_Ant1_5745

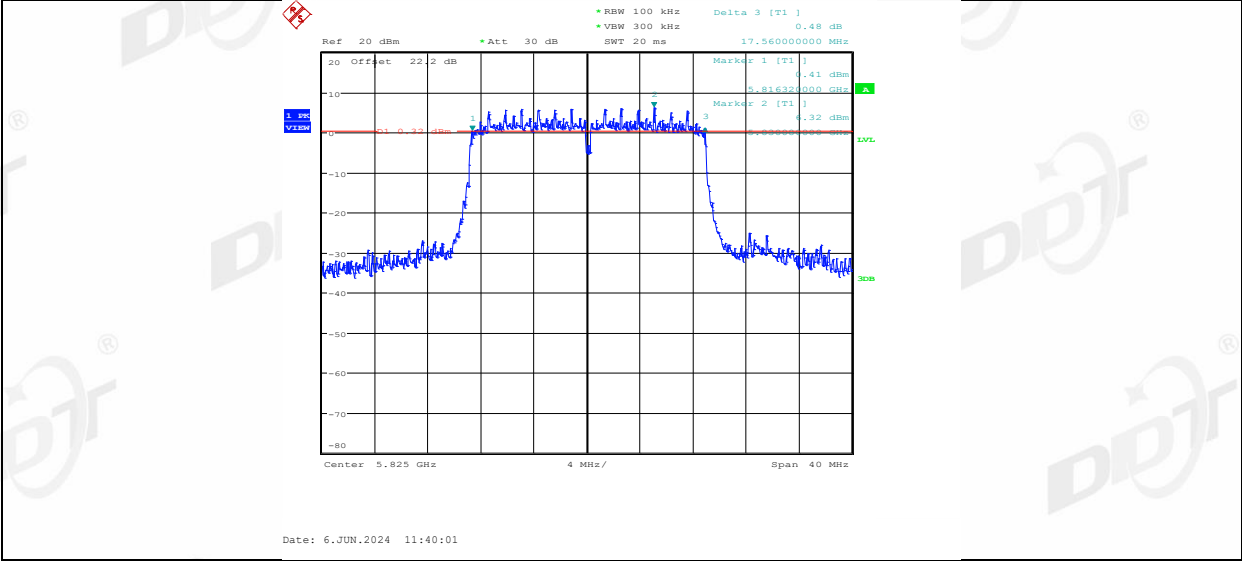




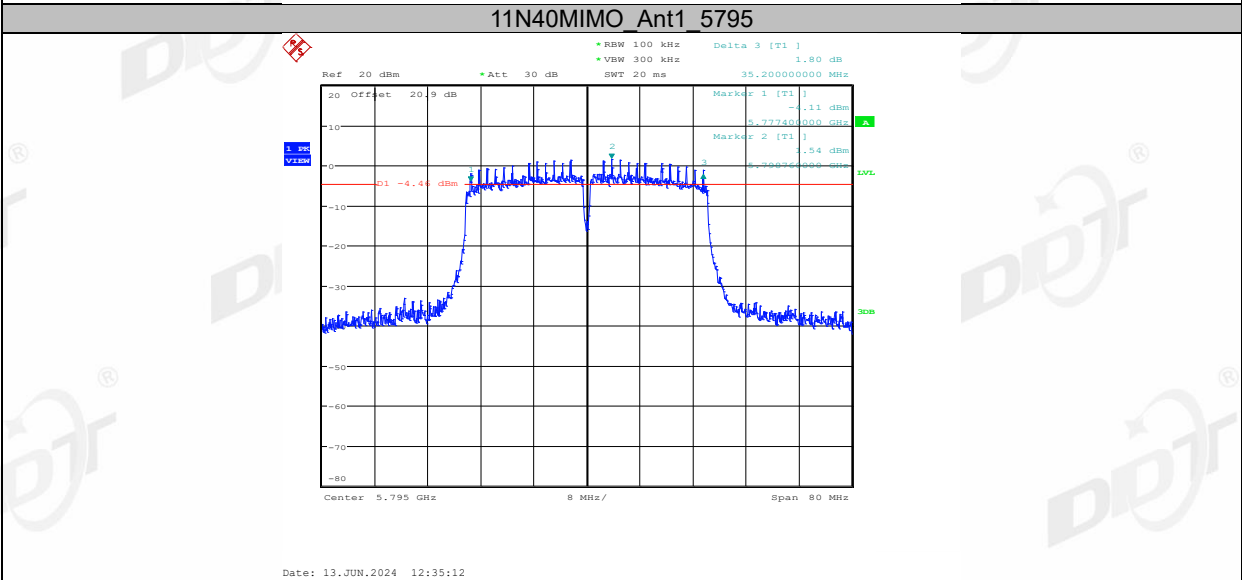
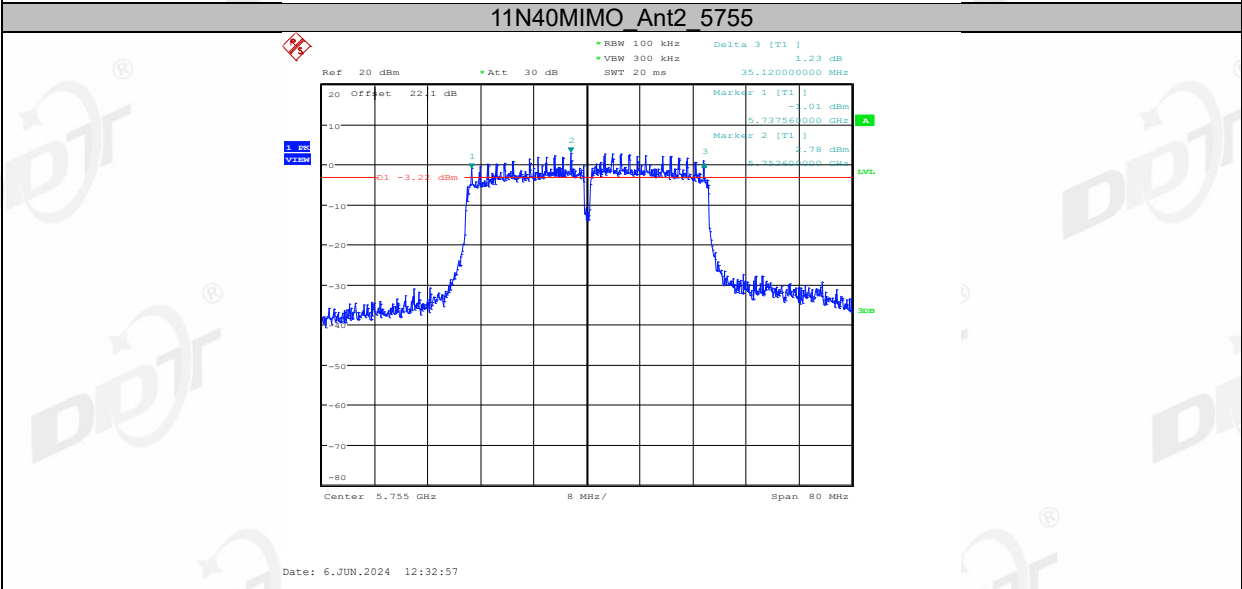
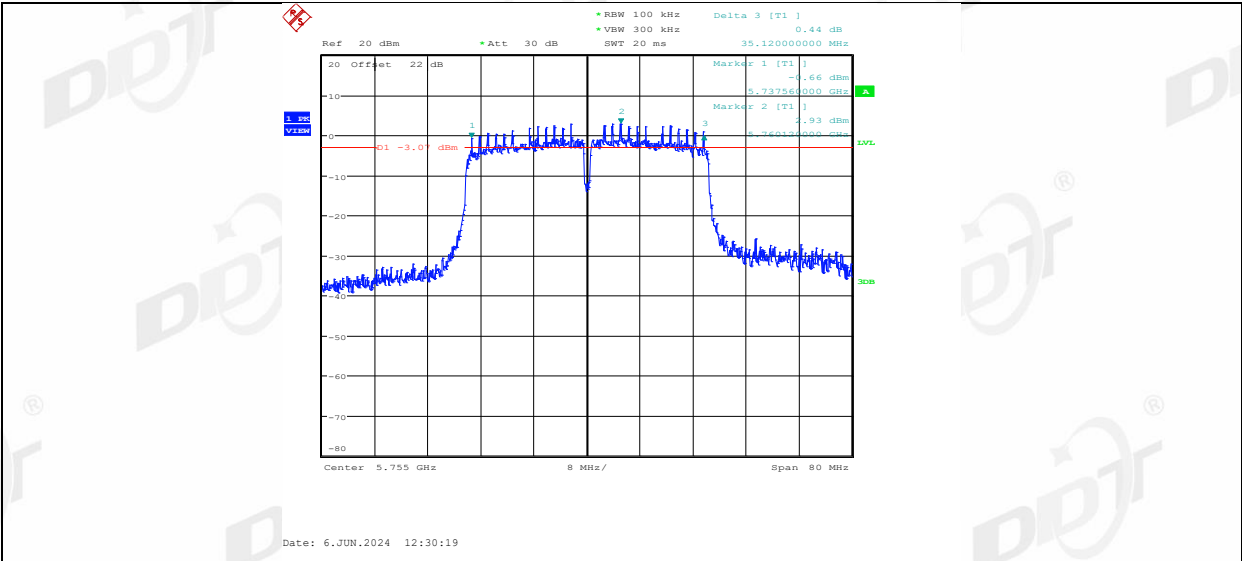
11N20MIMO_Ant1_5825

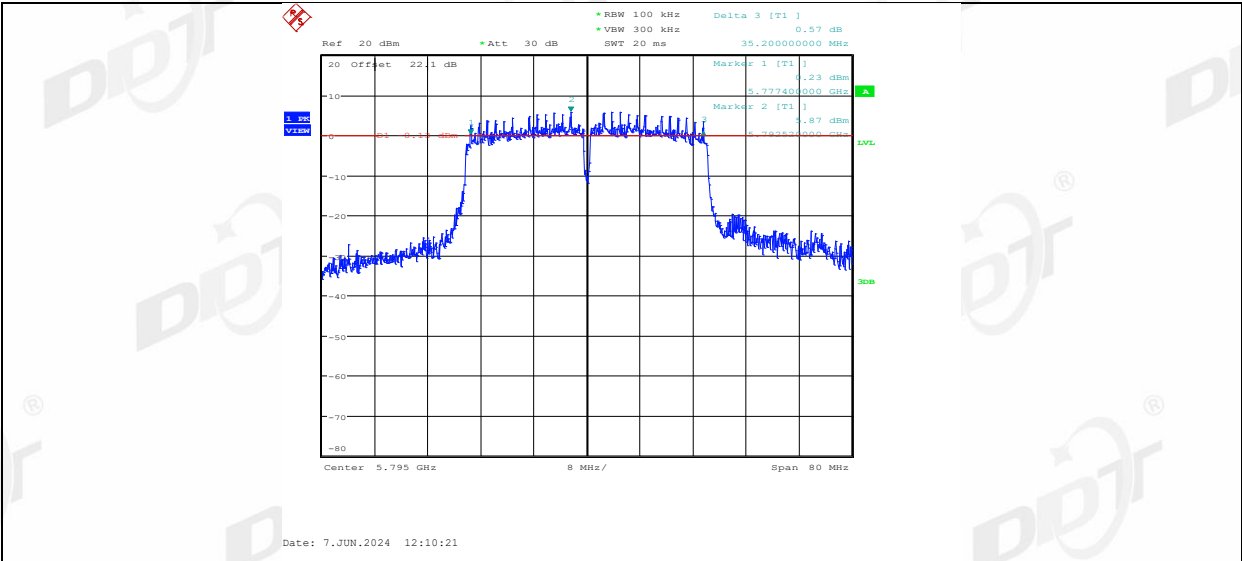


11N20MIMO_Ant2_5825

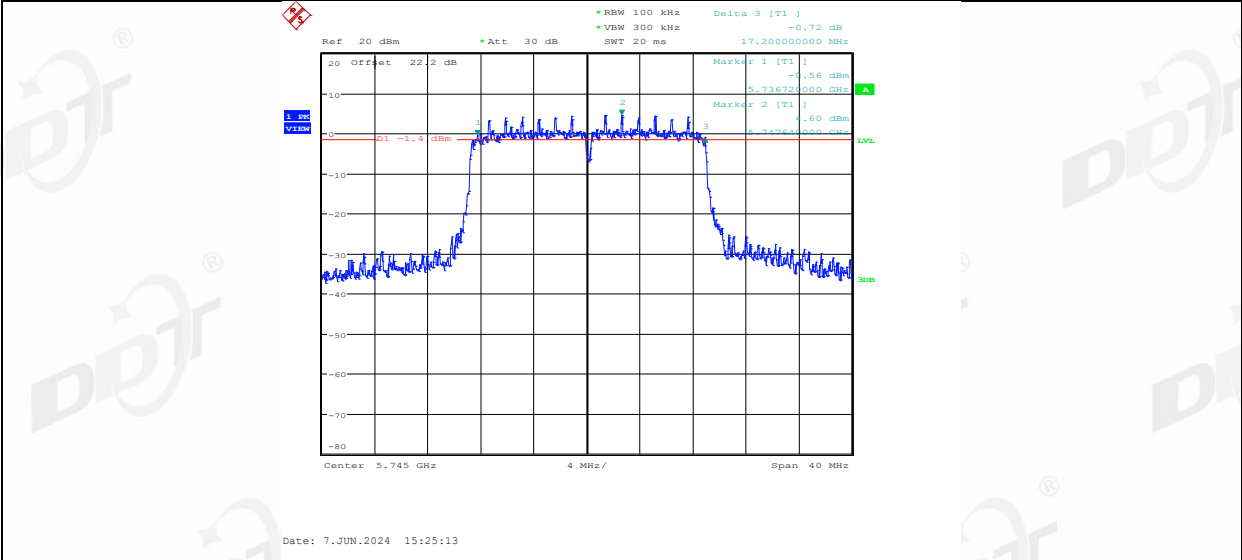


11N40MIMO_Ant1_5755

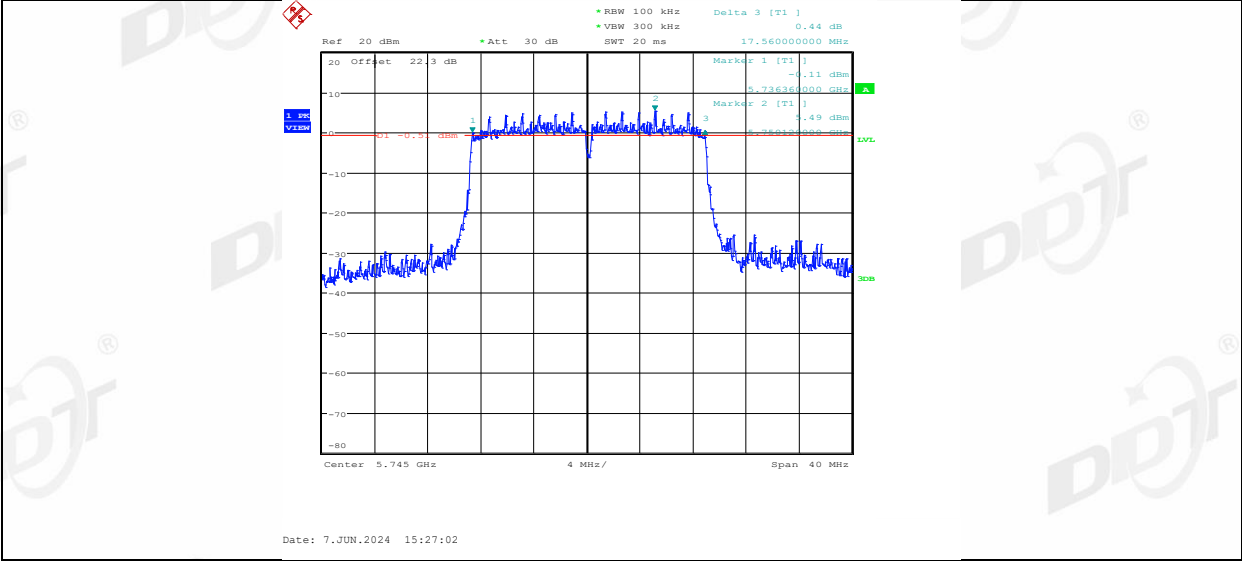




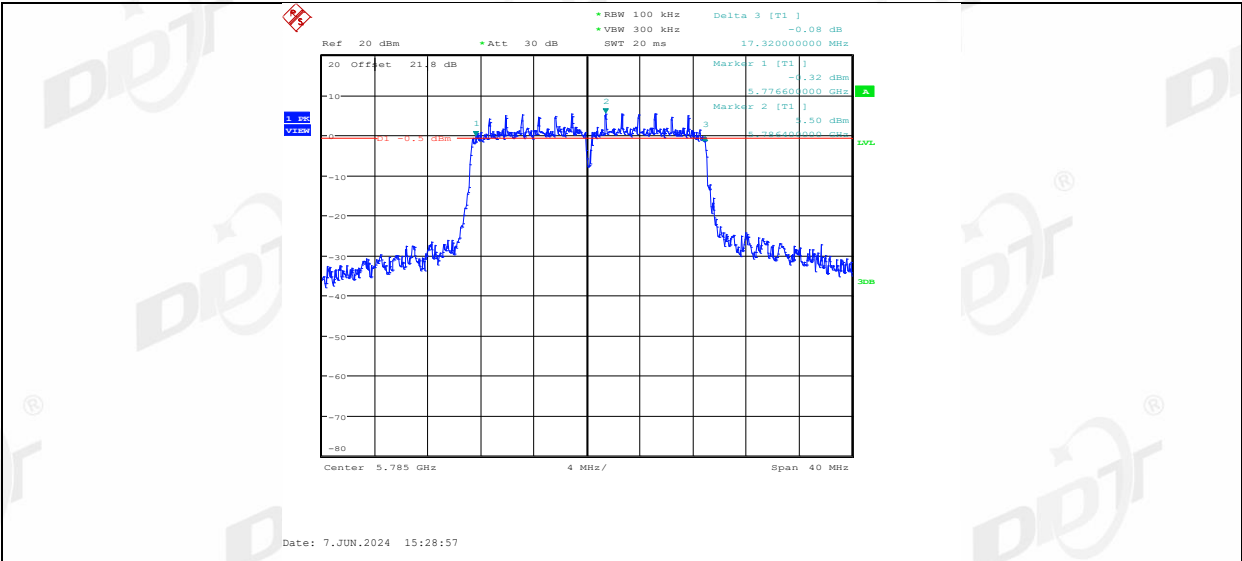
11AC20MIMO_Ant1_5745



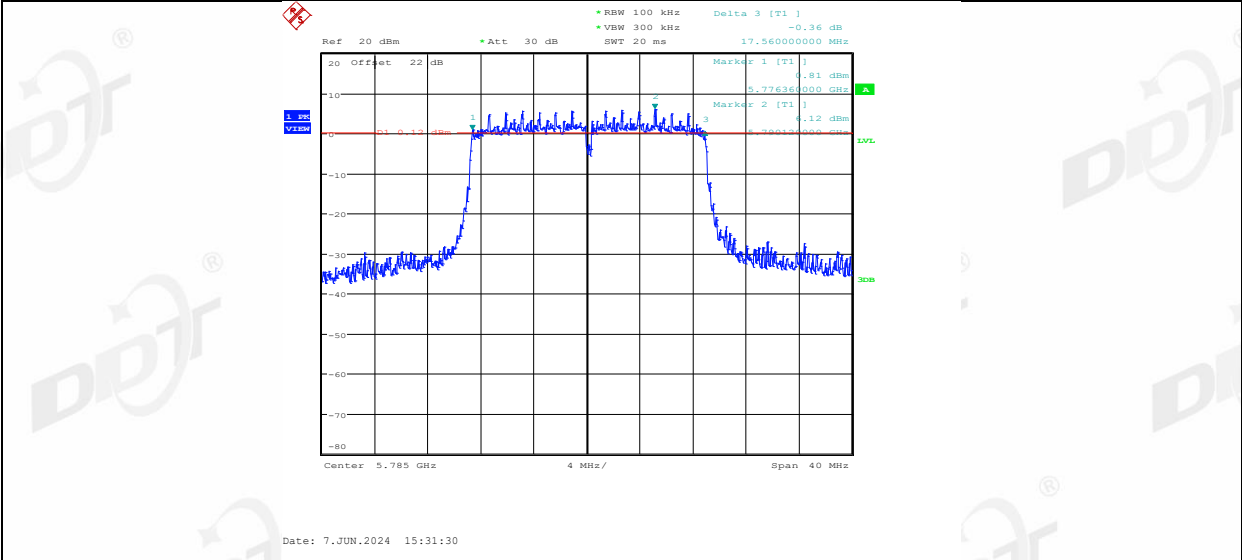
11AC20MIMO_Ant2_5745



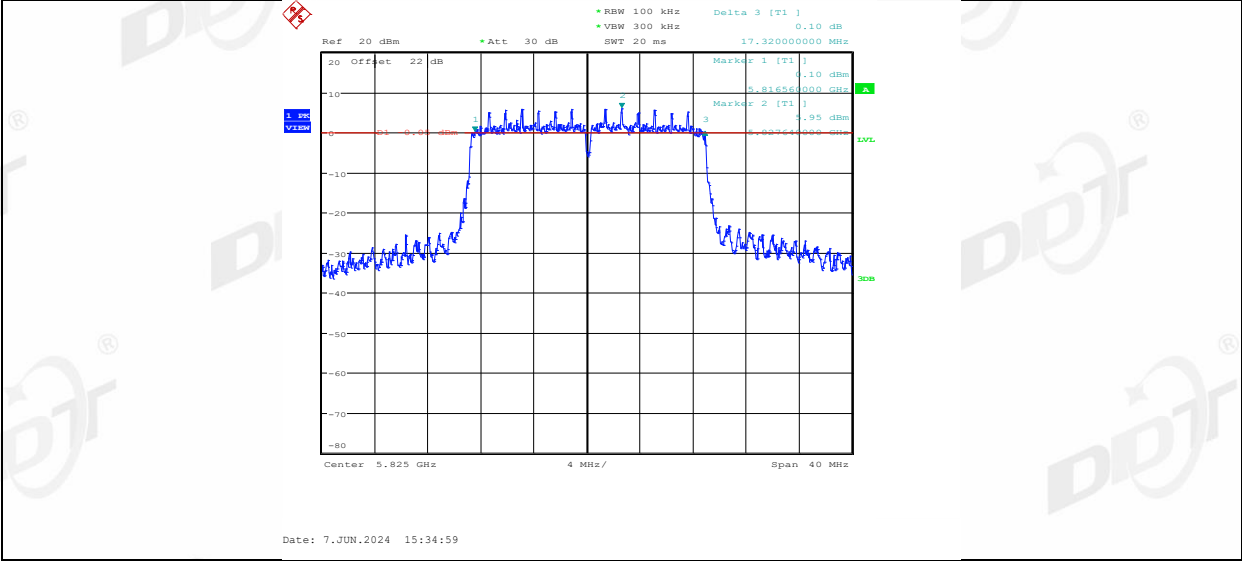
11AC20MIMO_Ant1_5785



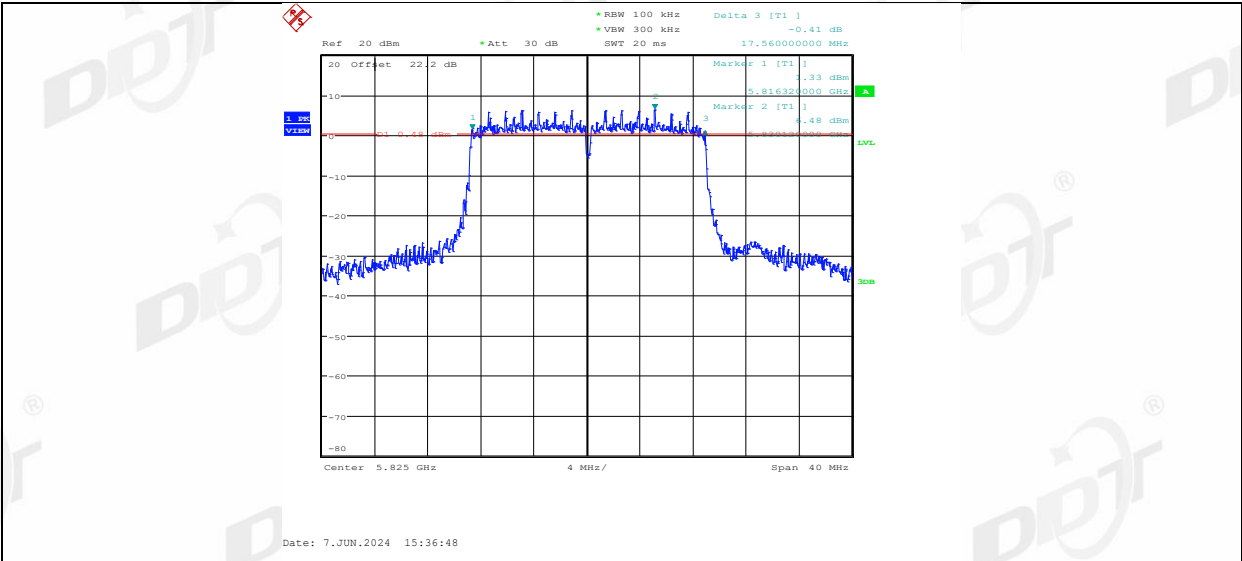
11AC20MIMO_Ant2_5785



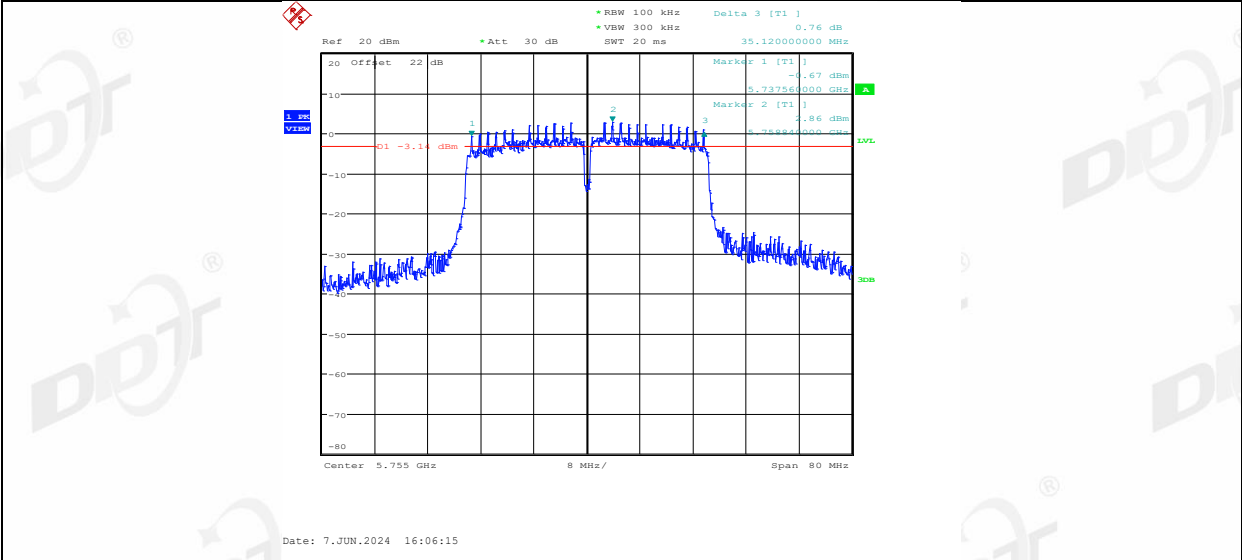
11AC20MIMO_Ant1_5825



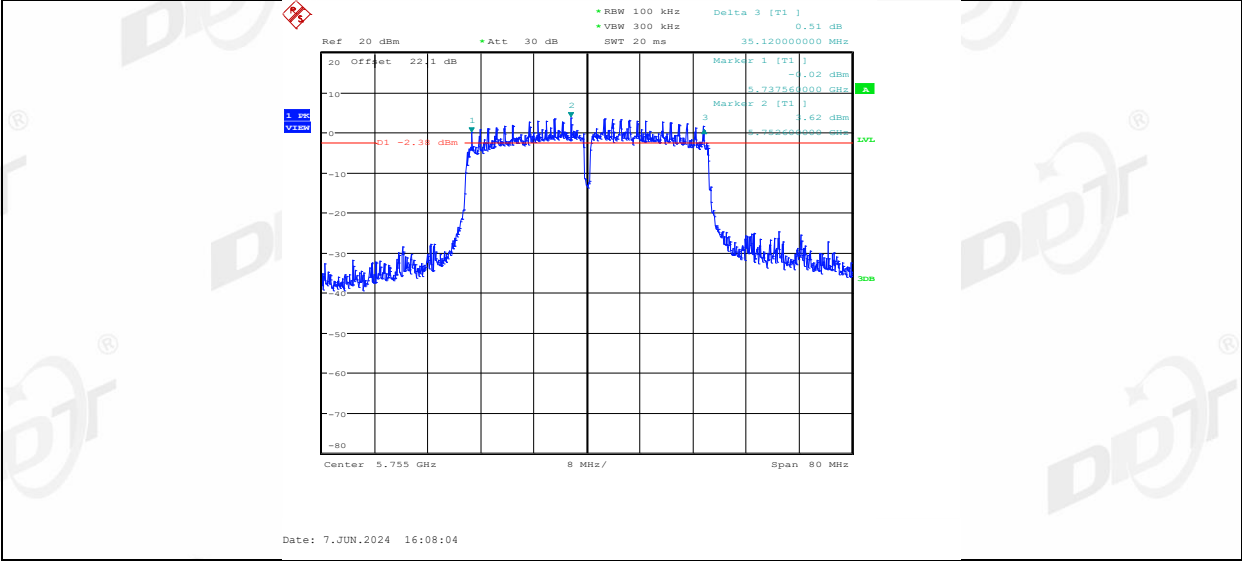
11AC20MIMO_Ant2_5825



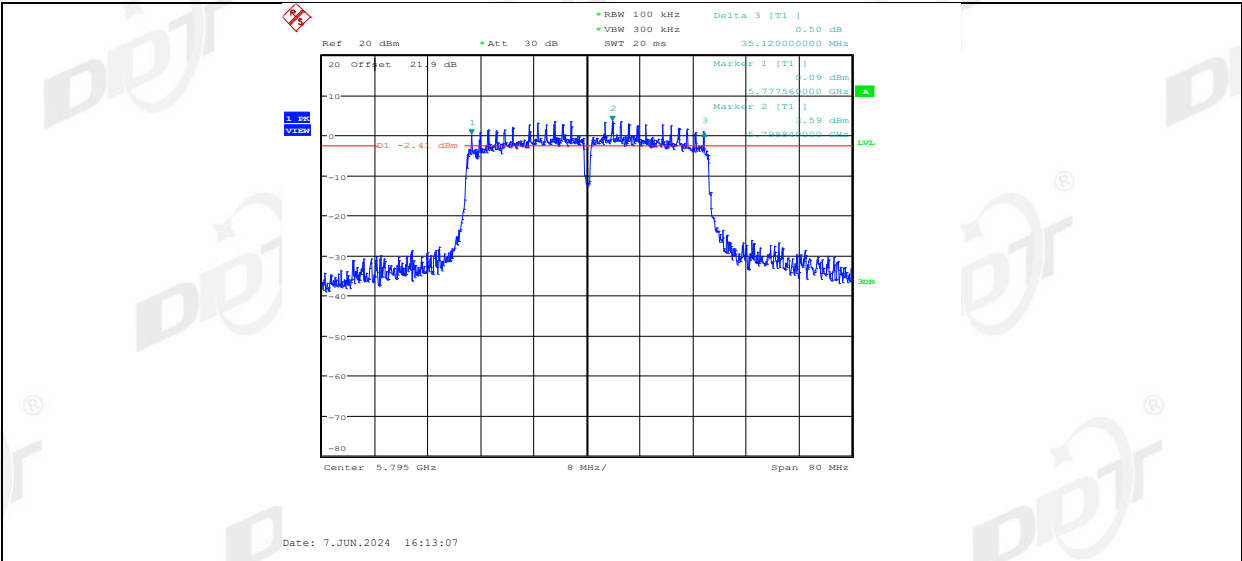
11AC40MIMO_Ant1_5755



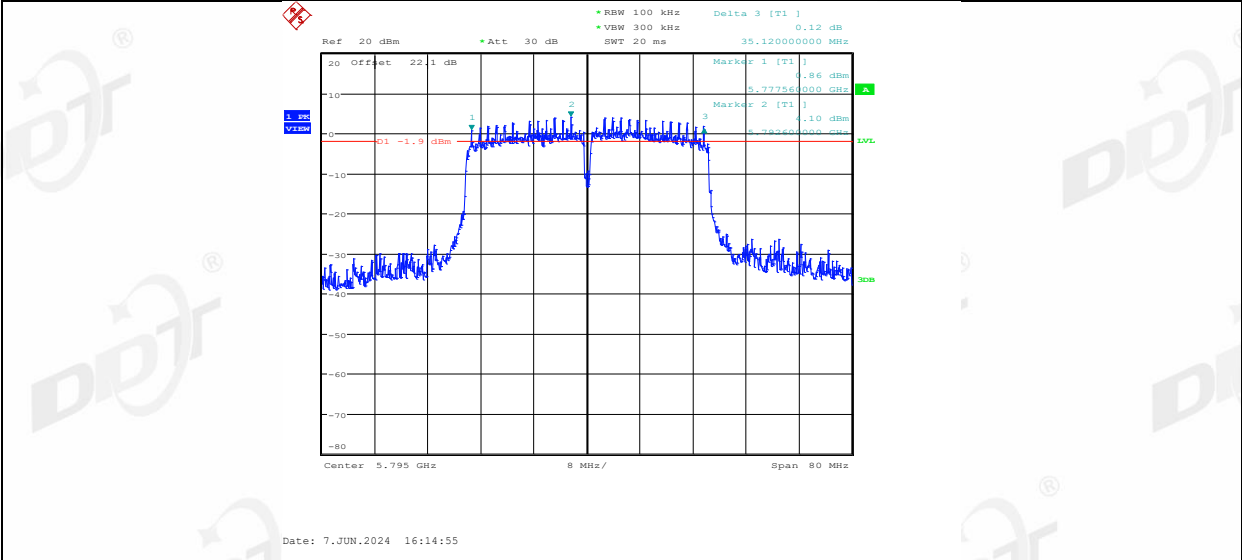
11AC40MIMO_Ant2_5755



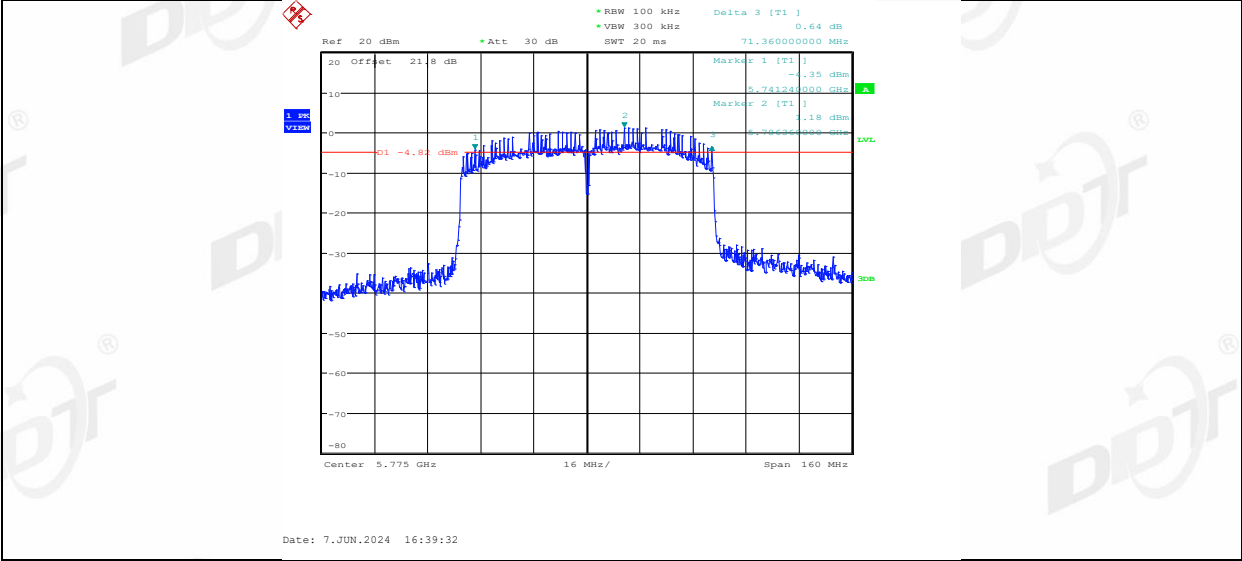
11AC40MIMO_Ant1_5795



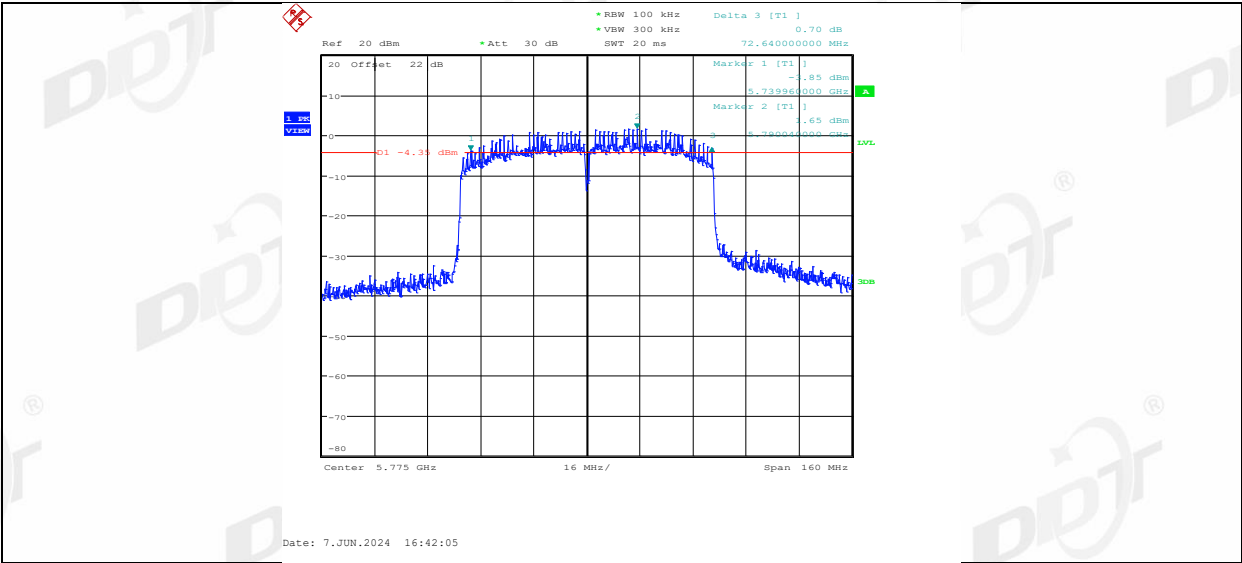
11AC40MIMO_Ant2_5795



11AC80MIMO_Ant1_5775

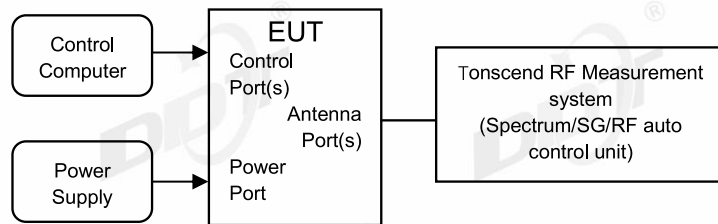


11AC80MIMO_Ant2_5775



6. 99% Bandwidth

6.1. Block diagram of test setup



6.2. Limits

Just for Report.

6.3. Test procedure

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

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

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

6.4. Test result

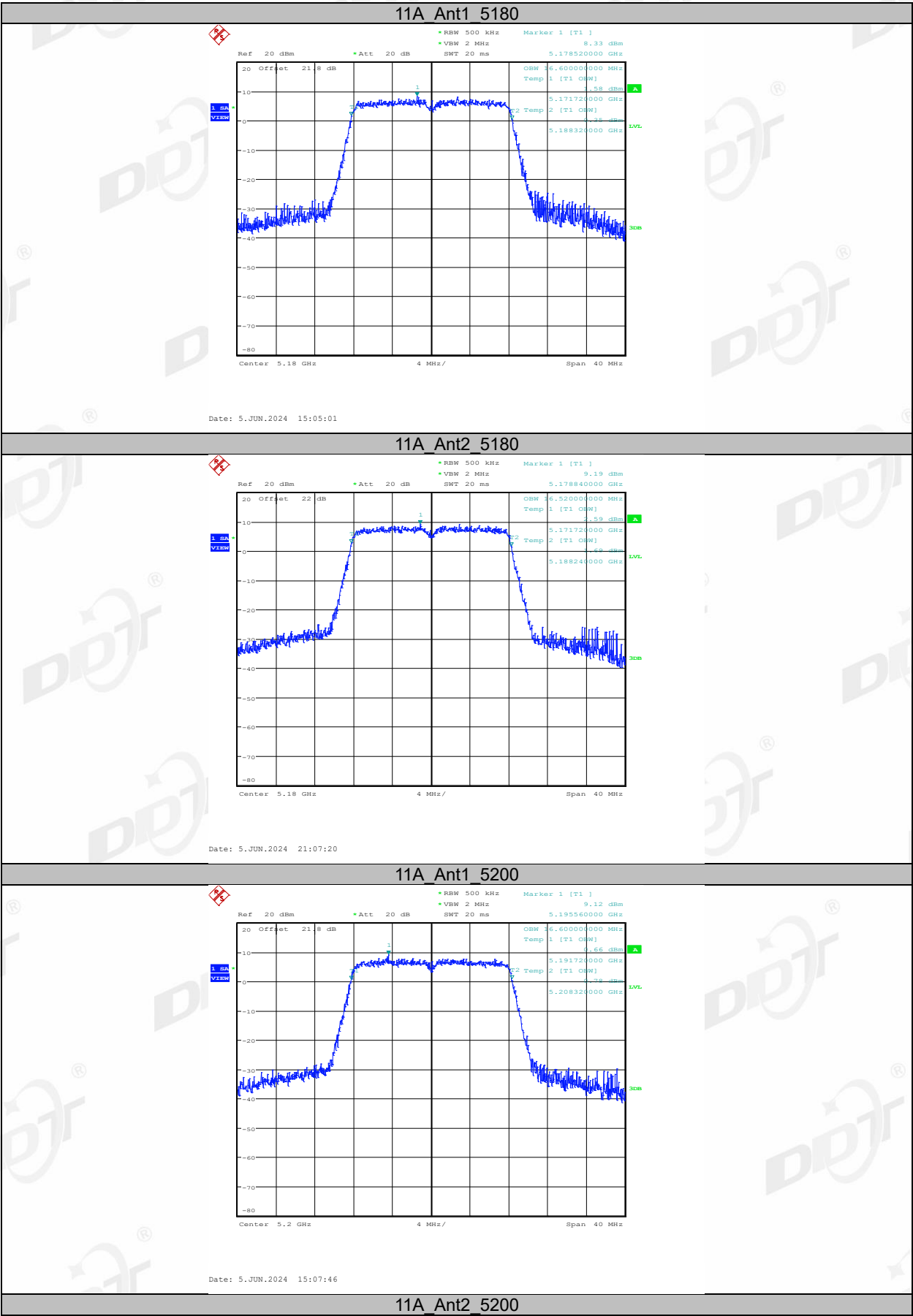
Test Engineer:	Zora Zhang	Test Site:	RF Measurement System 1#
Ambient Condition:	25.1℃,52.5%RH	Test Date:	2024.06.05-2024.06.14
Test Power Supply:	DC 12V	Sample Number:	S24042530-001

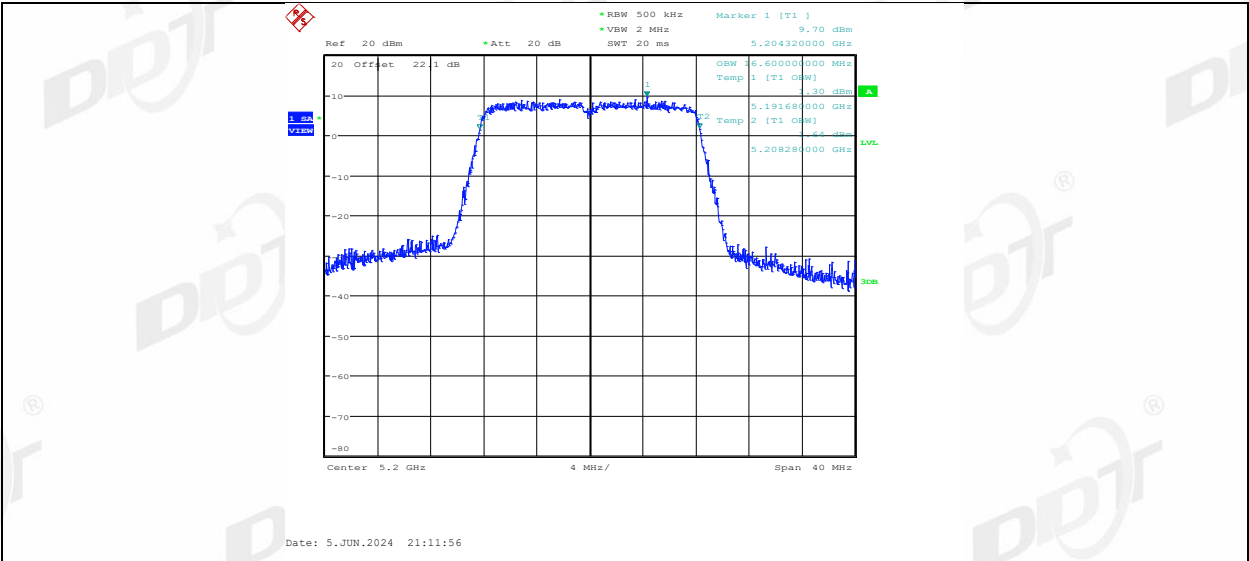
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.6	5171.7200	5188.3200	---	---
	Ant2	5180	16.52	5171.7200	5188.2400	---	---
	Ant1	5200	16.6	5191.7200	5208.3200	---	---
	Ant2	5200	16.6	5191.6800	5208.2800	---	---
	Ant1	5240	16.6	5231.6800	5248.2800	---	---
	Ant2	5240	16.6	5231.6800	5248.2800	---	---
	Ant1	5260	16.56	5251.7200	5268.2800	---	---
	Ant2	5260	16.6	5251.6800	5268.2800	---	---
	Ant1	5280	16.56	5271.7200	5288.2800	---	---
	Ant2	5280	16.56	5271.7200	5288.2800	---	---
	Ant1	5320	16.56	5311.7200	5328.2800	---	---
	Ant2	5320	16.6	5311.6800	5328.2800	---	---
	Ant1	5500	16.6	5491.6800	5508.2800	---	---
	Ant2	5500	16.6	5491.6800	5508.2800	---	---
	Ant1	5580	16.6	5571.7200	5588.3200	---	---
	Ant2	5580	16.6	5571.6800	5588.2800	---	---
	Ant1	5700	16.6	5691.6800	5708.2800	---	---
	Ant2	5700	16.6	5691.7200	5708.3200	---	---
	Ant1	5720	16.64	5711.6400	5728.2800	---	---
	Ant2	5720	16.6	5711.6800	5728.2800	---	---
	Ant1	5720 UNII-2C	13.36	5711.6400	5725	---	---
	Ant2	5720 UNII-2C	13.32	5711.6800	5725	---	---
	Ant1	5720 UNII-3	3.28	5725	5728.2800	---	---
	Ant2	5720 UNII-3	3.28	5725	5728.2800	---	---
	Ant1	5745	16.6	5736.6800	5753.2800	---	---
	Ant2	5745	16.8	5736.6400	5753.4400	---	---
	Ant1	5785	16.64	5776.6800	5793.3200	---	---
	Ant2	5785	16.8	5776.6800	5793.4800	---	---
	Ant1	5825	16.8	5816.6000	5833.4000	---	---
	Ant2	5825	16.68	5816.6800	5833.3600	---	---
11N20MIMO	Ant1	5180	17.68	5171.2000	5188.8800	---	---
	Ant2	5180	17.72	5171.2000	5188.9200	---	---
	Ant1	5200	17.72	5191.2000	5208.9200	---	---
	Ant2	5200	17.72	5191.1600	5208.8800	---	---
	Ant1	5240	17.76	5231.1600	5248.9200	---	---
	Ant2	5240	17.72	5231.2000	5248.9200	---	---
	Ant1	5260	17.68	5251.2000	5268.8800	---	---
	Ant2	5260	17.72	5251.2000	5268.9200	---	---
	Ant1	5280	17.68	5271.1200	5288.8000	---	---
	Ant2	5280	17.72	5271.1200	5288.8400	---	---
	Ant1	5320	17.72	5311.1200	5328.8400	---	---
	Ant2	5320	17.72	5311.1200	5328.8400	---	---
	Ant1	5500	17.76	5491.1200	5508.8800	---	---
	Ant2	5500	17.76	5491.1200	5508.8800	---	---
	Ant1	5580	17.76	5571.1200	5588.8800	---	---
	Ant2	5580	17.76	5571.1600	5588.9200	---	---
	Ant1	5700	17.72	5691.1600	5708.8800	---	---
	Ant2	5700	17.72	5691.1600	5708.8800	---	---
	Ant1	5720	17.76	5711.0800	5728.8400	---	---
	Ant2	5720	17.68	5711.1600	5728.8400	---	---
	Ant1	5720 UNII-2C	13.92	5711.0800	5725	---	---
	Ant2	5720 UNII-2C	13.84	5711.1600	5725	---	---
	Ant1	5720 UNII-3	3.84	5725	5728.8400	---	---
	Ant2	5720 UNII-3	3.84	5725	5728.8400	---	---
	Ant1	5745	17.84	5736.1600	5754.0000	---	---
	Ant2	5745	17.76	5736.2000	5753.9600	---	---

	Ant1	5785	17.76	5776.2000	5793.9600	---	---
	Ant2	5785	17.8	5776.1600	5793.9600	---	---
	Ant1	5825	17.76	5816.1600	5833.9200	---	---
	Ant2	5825	17.76	5816.2000	5833.9600	---	---
11N40MIMO	Ant1	5190	36.32	5171.9200	5208.2400	---	---
	Ant2	5190	36.4	5171.9200	5208.3200	---	---
	Ant1	5230	36.24	5211.9200	5248.1600	---	---
	Ant2	5230	36.4	5211.8400	5248.2400	---	---
	Ant1	5270	36.4	5251.8400	5288.2400	---	---
	Ant2	5270	36.32	5251.8400	5288.1600	---	---
	Ant1	5310	36.48	5291.7600	5328.2400	---	---
	Ant2	5310	36.32	5291.8400	5328.1600	---	---
	Ant1	5510	36.4	5491.7600	5528.1600	---	---
	Ant2	5510	36.24	5491.8400	5528.0800	---	---
	Ant1	5550	36.4	5531.8400	5568.2400	---	---
	Ant2	5550	36.16	5532.0000	5568.1600	---	---
	Ant1	5670	36.32	5651.9200	5688.2400	---	---
	Ant2	5670	36.32	5651.8400	5688.1600	---	---
	Ant1	5710	36.48	5691.7600	5728.2400	---	---
	Ant2	5710	36.32	5691.8400	5728.1600	---	---
	Ant1	5710 UNII-2C	33.24	5691.7600	5725	---	---
	Ant2	5710 UNII-2C	33.16	5691.8400	5725	---	---
	Ant1	5710 UNII-3	3.24	5725	5728.2400	---	---
	Ant2	5710 UNII-3	3.16	5725	5728.1600	---	---
	Ant1	5755	36.56	5736.9200	5773.4800	---	---
	Ant2	5755	36.32	5737.0000	5773.3200	---	---
	Ant1	5795	36.72	5776.7600	5813.4800	---	---
	Ant2	5795	36.56	5776.7600	5813.3200	---	---
11AC20MIMO	Ant1	5180	17.68	5171.1600	5188.8400	---	---
	Ant2	5180	17.68	5171.1600	5188.8400	---	---
	Ant1	5200	17.72	5191.1600	5208.8800	---	---
	Ant2	5200	17.72	5191.2000	5208.9200	---	---
	Ant1	5240	17.76	5231.1600	5248.9200	---	---
	Ant2	5240	17.72	5231.1600	5248.8800	---	---
	Ant1	5260	17.72	5251.2000	5268.9200	---	---
	Ant2	5260	17.68	5251.2000	5268.8800	---	---
	Ant1	5280	17.68	5271.2000	5288.8800	---	---
	Ant2	5280	17.8	5271.1600	5288.9600	---	---
	Ant1	5320	17.72	5311.2000	5328.9200	---	---
	Ant2	5320	17.76	5311.1600	5328.9200	---	---
	Ant1	5500	17.72	5491.2000	5508.9200	---	---
	Ant2	5500	17.72	5491.2000	5508.9200	---	---
	Ant1	5580	17.76	5571.2000	5588.9600	---	---
	Ant2	5580	17.72	5571.2000	5588.9200	---	---
	Ant1	5700	17.72	5691.2400	5708.9600	---	---
	Ant2	5700	17.72	5691.2400	5708.9600	---	---
	Ant1	5720	17.76	5711.0800	5728.8400	---	---
	Ant2	5720	17.72	5711.1200	5728.8400	---	---
	Ant1	5720 UNII-2C	13.92	5711.0800	5725	---	---
	Ant2	5720 UNII-2C	13.88	5711.1200	5725	---	---
	Ant1	5720 UNII-3	3.84	5725	5728.8400	---	---
	Ant2	5720 UNII-3	3.84	5725	5728.8400	---	---
	Ant1	5745	17.76	5736.2800	5754.0400	---	---
	Ant2	5745	17.68	5736.3200	5754.0000	---	---
	Ant1	5785	17.76	5776.2800	5794.0400	---	---
	Ant2	5785	17.72	5776.2400	5793.9600	---	---
	Ant1	5825	17.8	5816.2000	5834.0000	---	---
	Ant2	5825	17.76	5816.2000	5833.9600	---	---
11AC40MIMO	Ant1	5190	36.32	5171.9200	5208.2400	---	---
	Ant2	5190	36.4	5171.9200	5208.3200	---	---
	Ant1	5230	36.56	5211.7600	5248.3200	---	---
	Ant2	5230	36.32	5211.9200	5248.2400	---	---
	Ant1	5270	36.4	5251.8400	5288.2400	---	---
	Ant2	5270	36.32	5252.0000	5288.3200	---	---

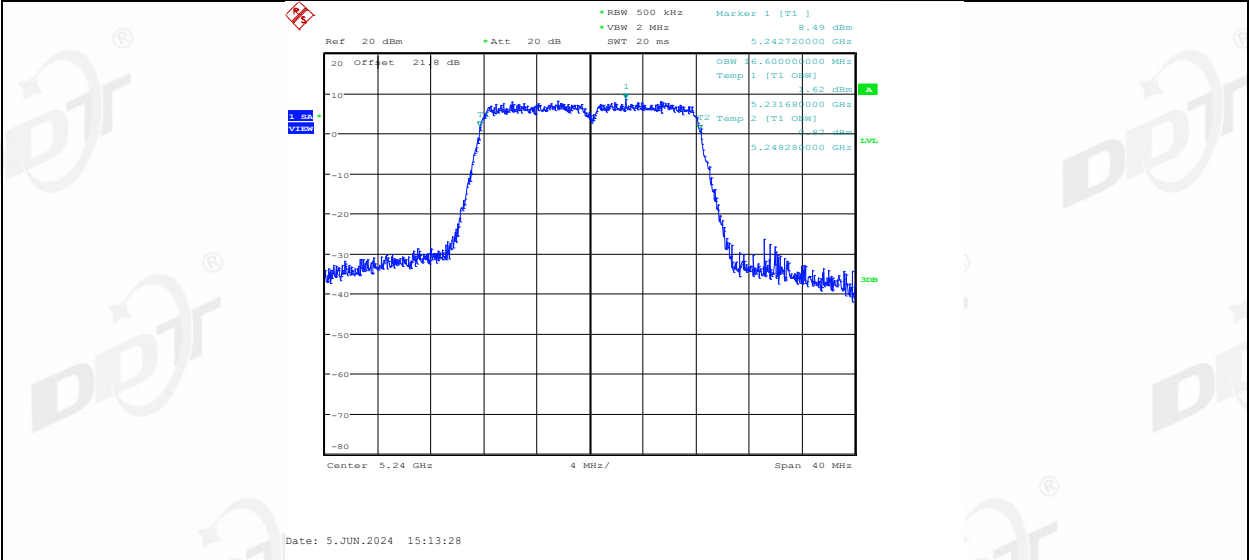
	Ant1	5310	36.4	5291.8400	5328.2400	---	---
	Ant2	5310	36.24	5291.9200	5328.1600	---	---
	Ant1	5510	36.32	5491.9200	5528.2400	---	---
	Ant2	5510	36.4	5491.8400	5528.2400	---	---
	Ant1	5550	36.4	5531.8400	5568.2400	---	---
	Ant2	5550	36.24	5531.9200	5568.1600	---	---
	Ant1	5670	36.32	5651.8400	5688.1600	---	---
	Ant2	5670	36.32	5651.9200	5688.2400	---	---
	Ant1	5710	36.32	5691.8400	5728.1600	---	---
	Ant2	5710	36.32	5691.8400	5728.1600	---	---
	Ant1	5710 UNII-2C	33.16	5691.8400	5725	---	---
	Ant2	5710 UNII-2C	33.16	5691.8400	5725	---	---
	Ant1	5710 UNII-3	3.16	5725	5728.1600	---	---
	Ant2	5710 UNII-3	3.16	5725	5728.1600	---	---
	Ant1	5755	36.48	5736.9200	5773.4000	---	---
	Ant2	5755	36.24	5737.0800	5773.3200	---	---
	Ant1	5795	36.4	5776.9200	5813.3200	---	---
	Ant2	5795	36.32	5776.9200	5813.2400	---	---
11AC80MIMO	Ant1	5210	74.88	5172.5600	5247.4400	---	---
	Ant2	5210	74.72	5172.5600	5247.2800	---	---
	Ant1	5290	74.88	5252.4000	5327.2800	---	---
	Ant2	5290	74.56	5252.7200	5327.2800	---	---
	Ant1	5530	75.04	5492.4000	5567.4400	---	---
	Ant2	5530	74.72	5492.5600	5567.2800	---	---
	Ant1	5610	75.04	5572.4000	5647.4400	---	---
	Ant2	5610	75.36	5572.2400	5647.6000	---	---
	Ant1	5690	75.04	5652.4000	5727.4400	---	---
	Ant2	5690	74.88	5652.5600	5727.4400	---	---
	Ant1	5690 UNII-2C	72.6	5652.4000	5725	---	---
	Ant2	5690 UNII-2C	72.44	5652.5600	5725	---	---
	Ant1	5690 UNII-3	2.44	5725	5727.4400	---	---
	Ant2	5690 UNII-3	2.44	5725	5727.4400	---	---
	Ant1	5775	74.88	5737.8800	5812.7600	---	---
	Ant2	5775	75.04	5737.7200	5812.7600	---	---

6.5. Test graphs

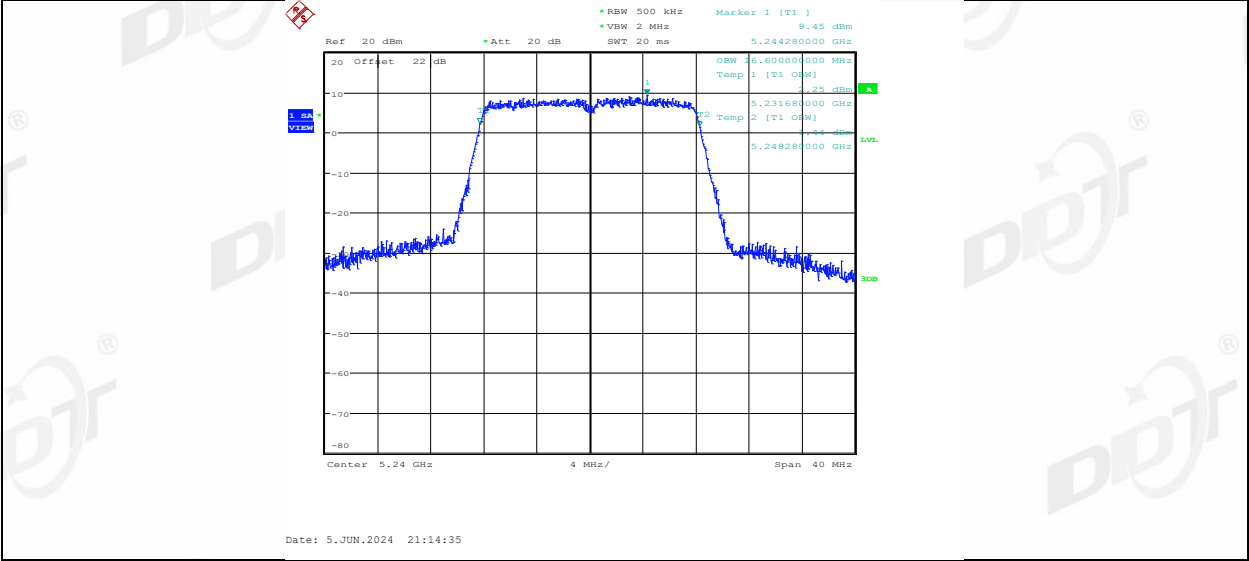




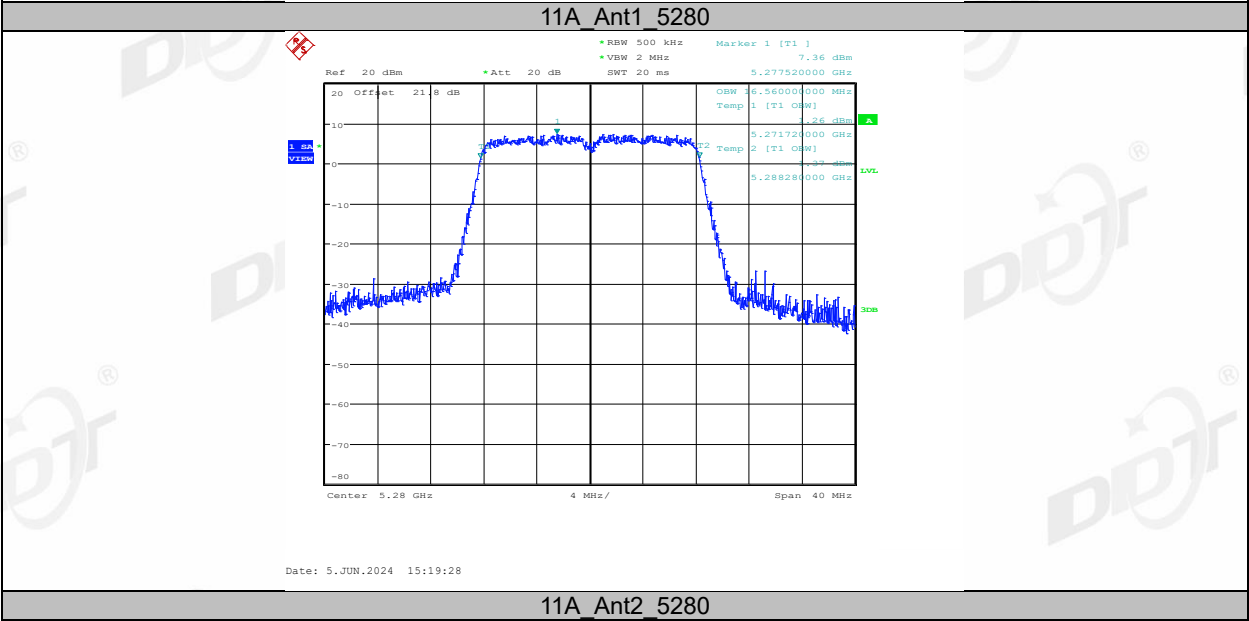
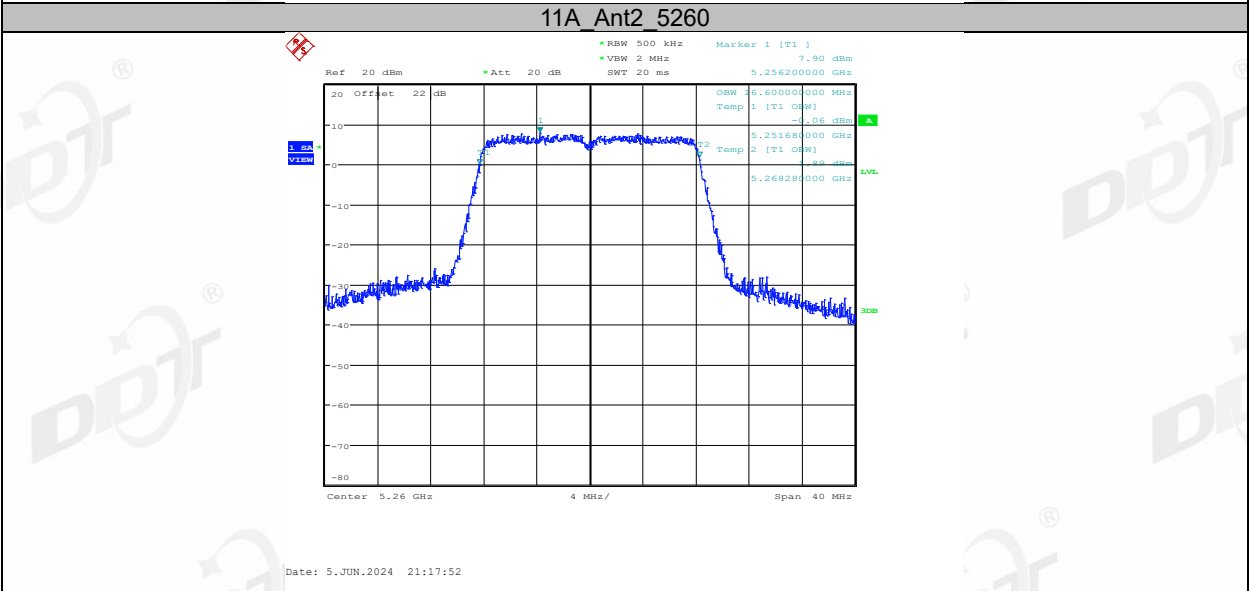
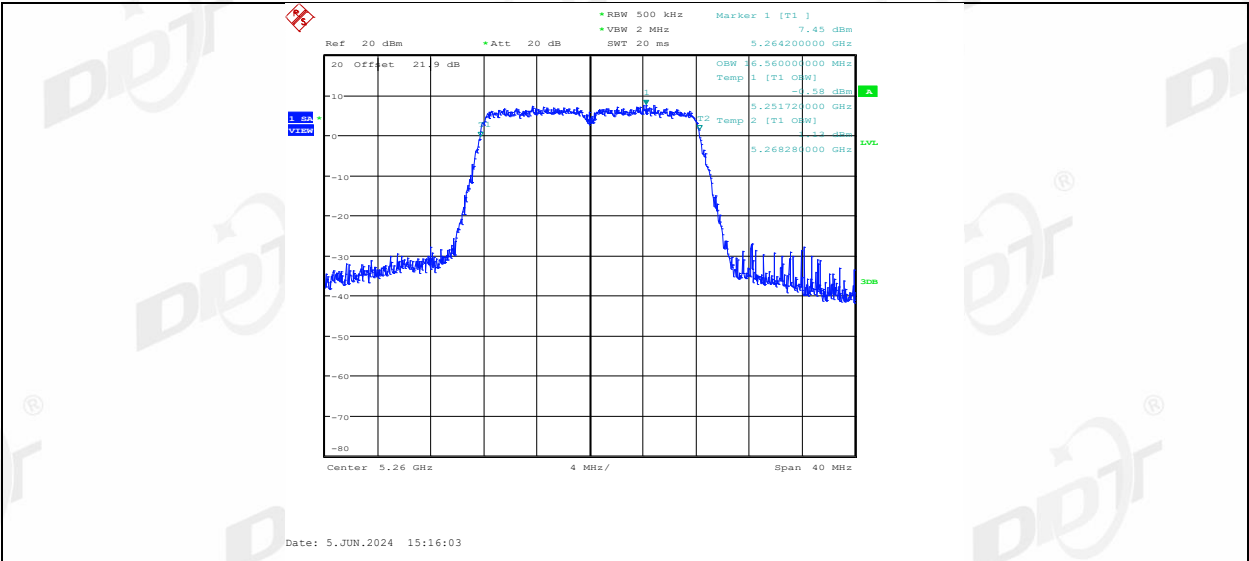
11A_Ant1_5240

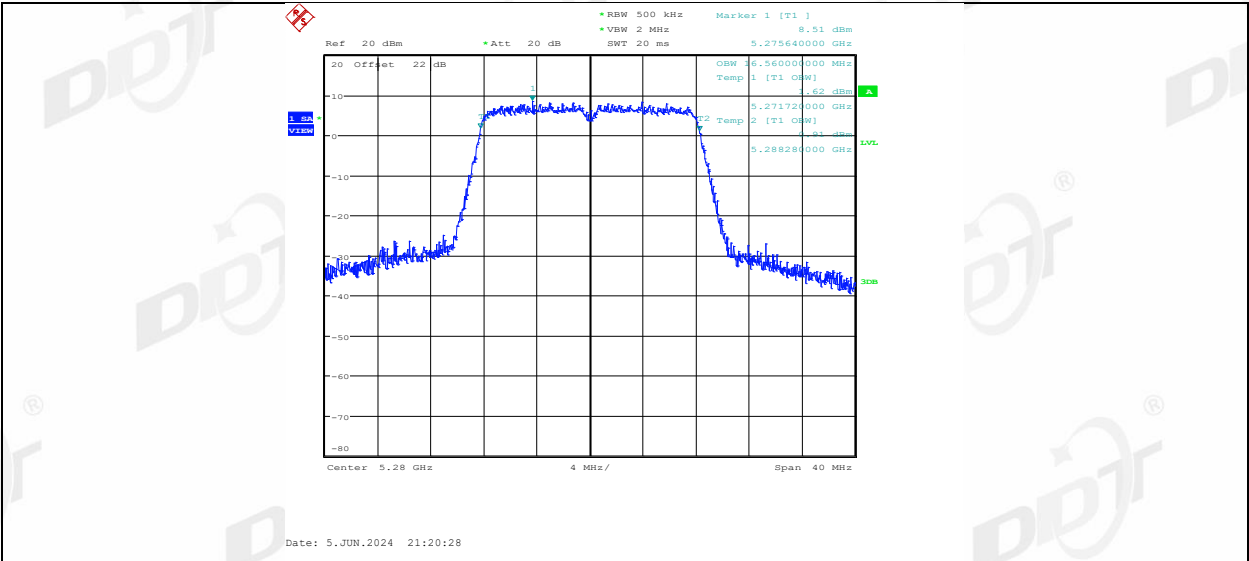


11A_Ant2_5240

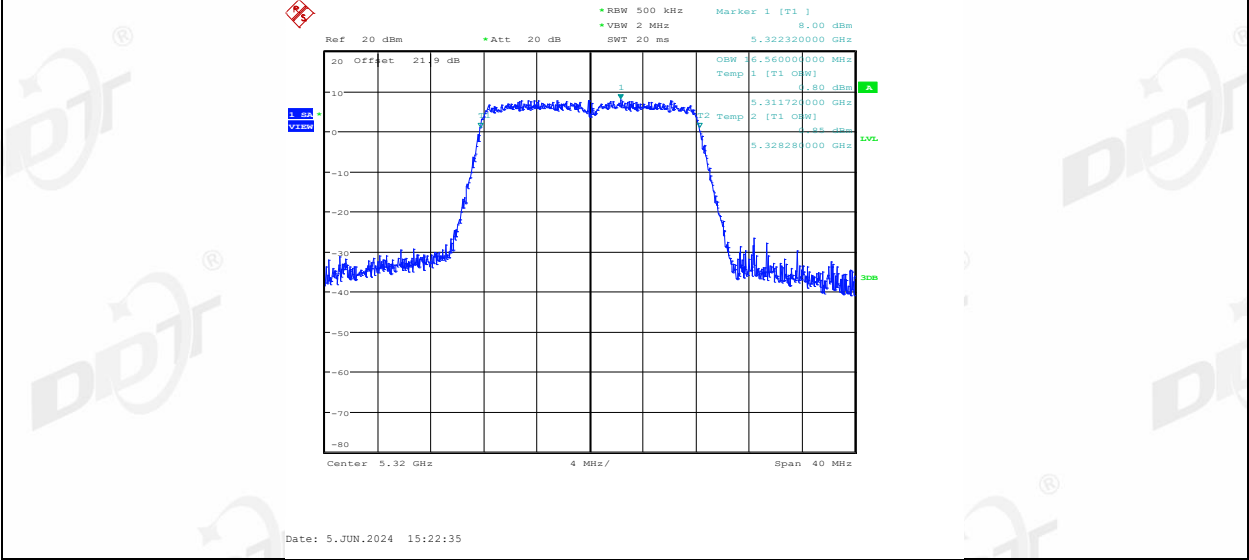


11A_Ant1_5260

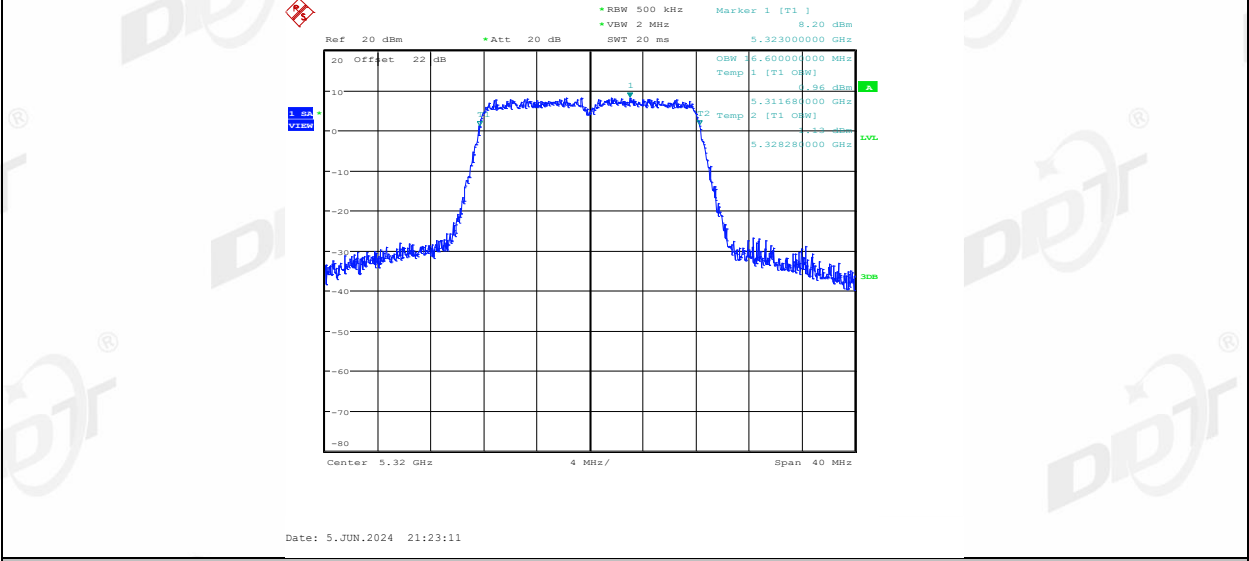




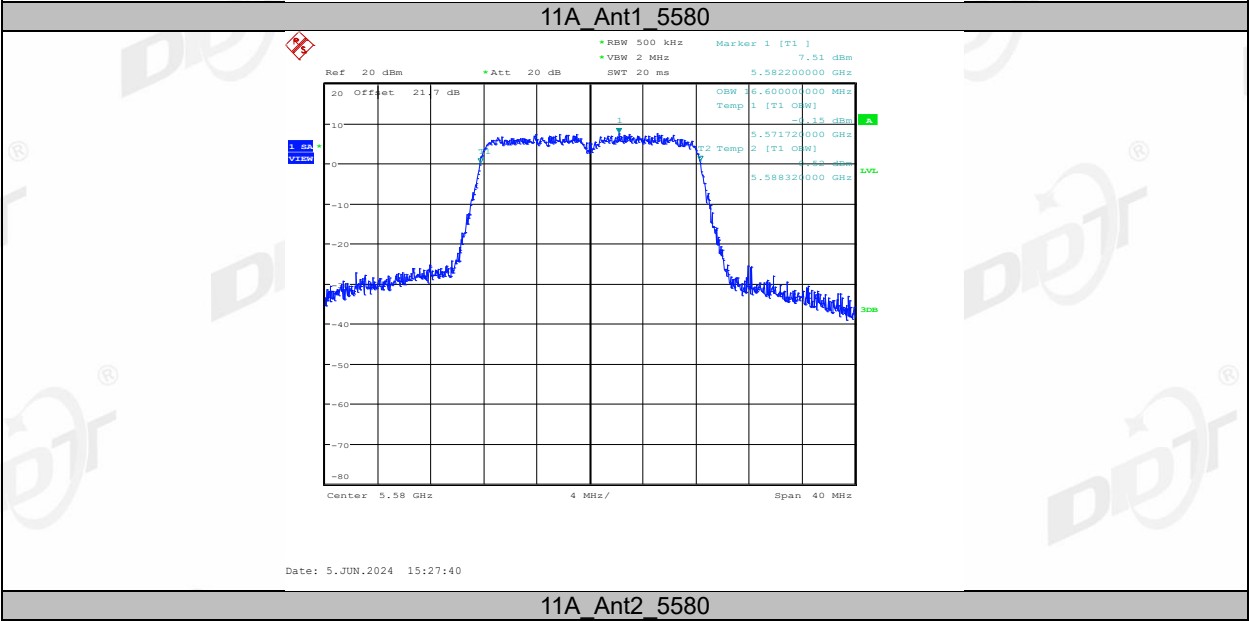
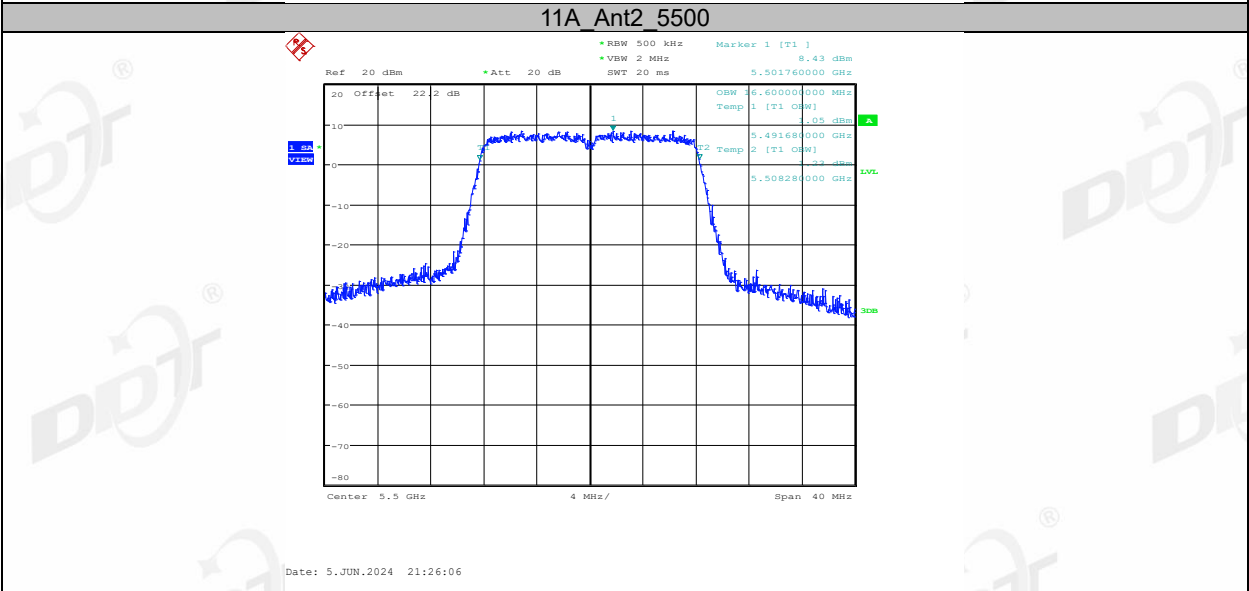
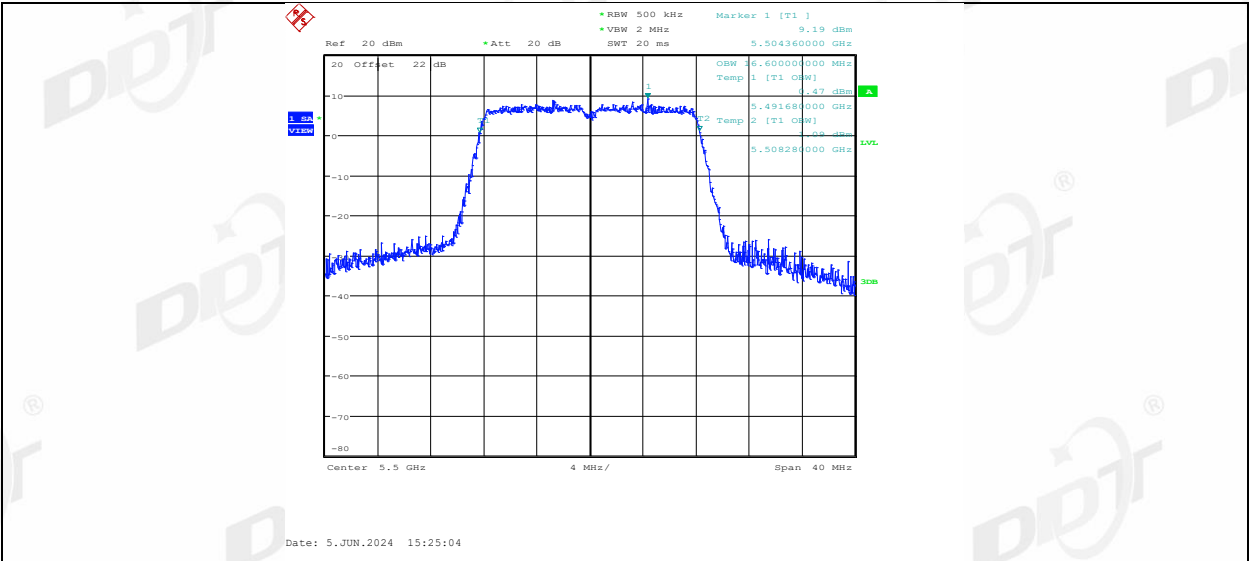
11A_Ant1_5320

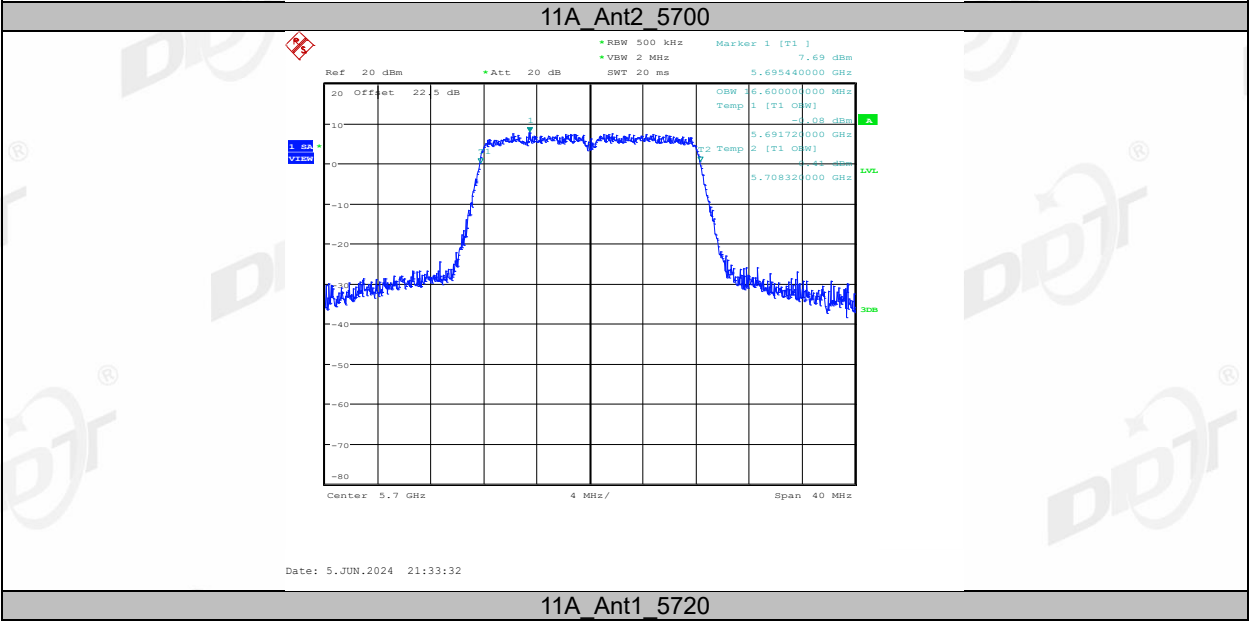
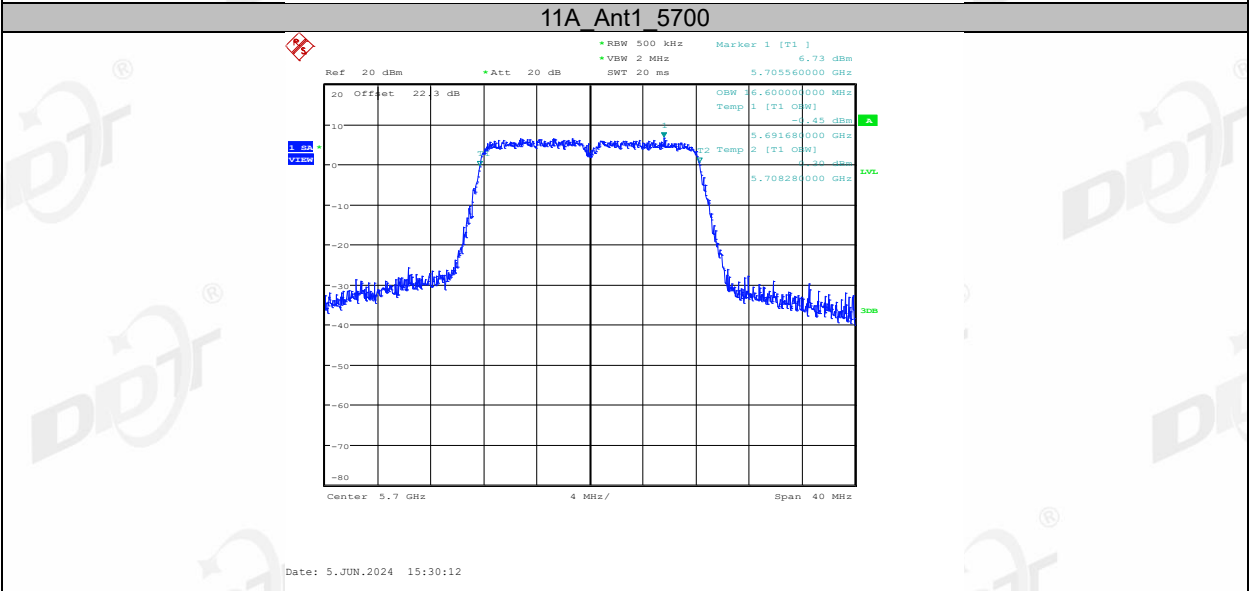
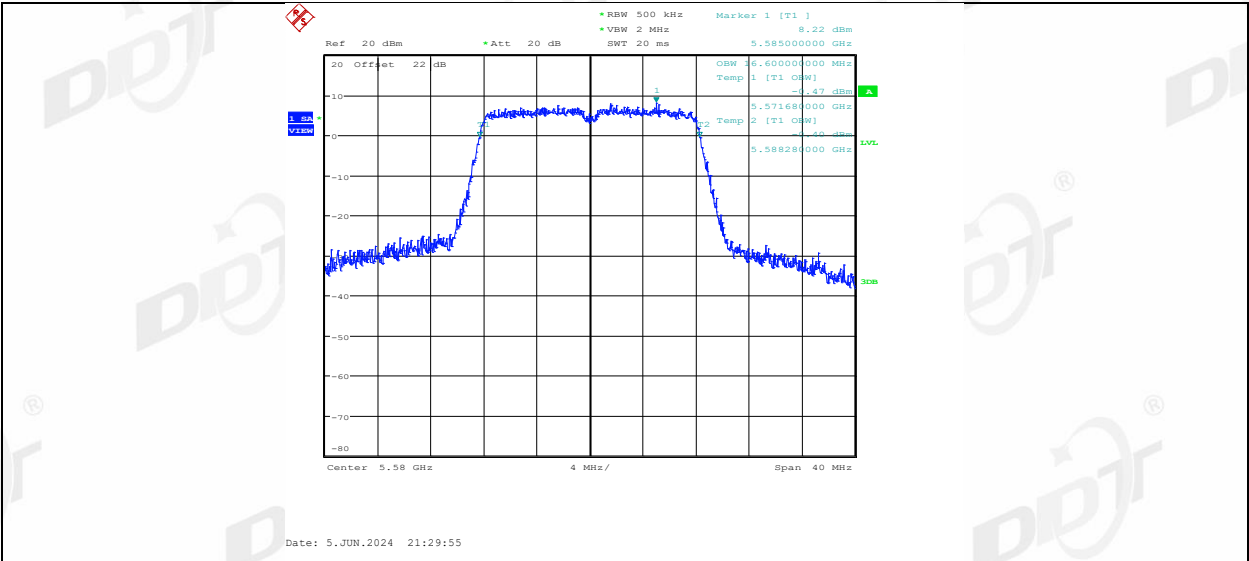


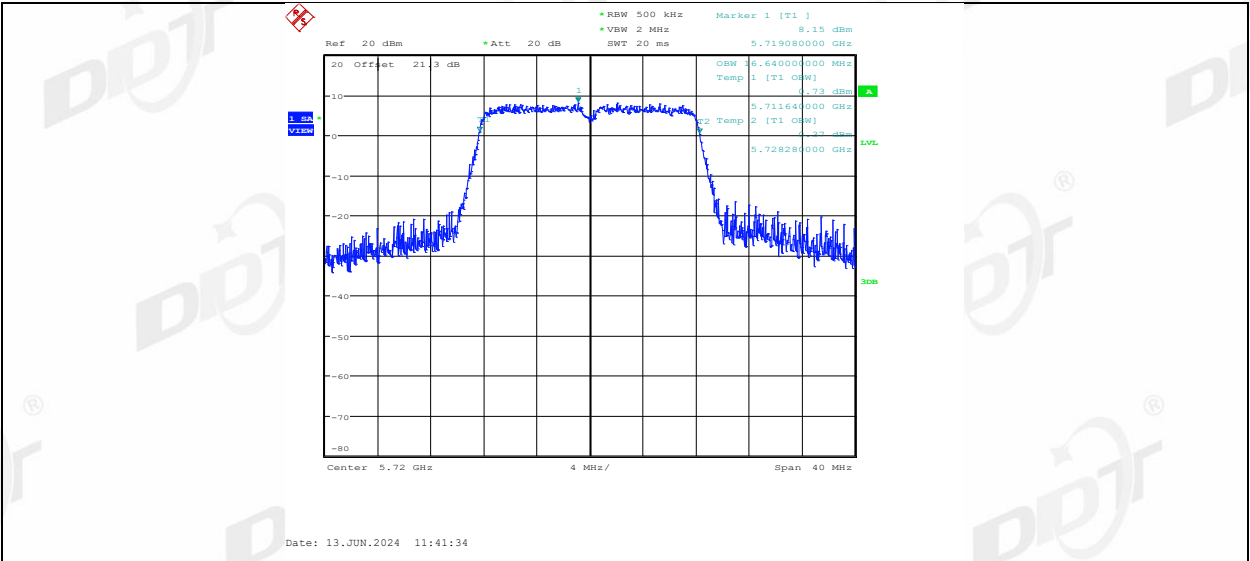
11A_Ant2_5320



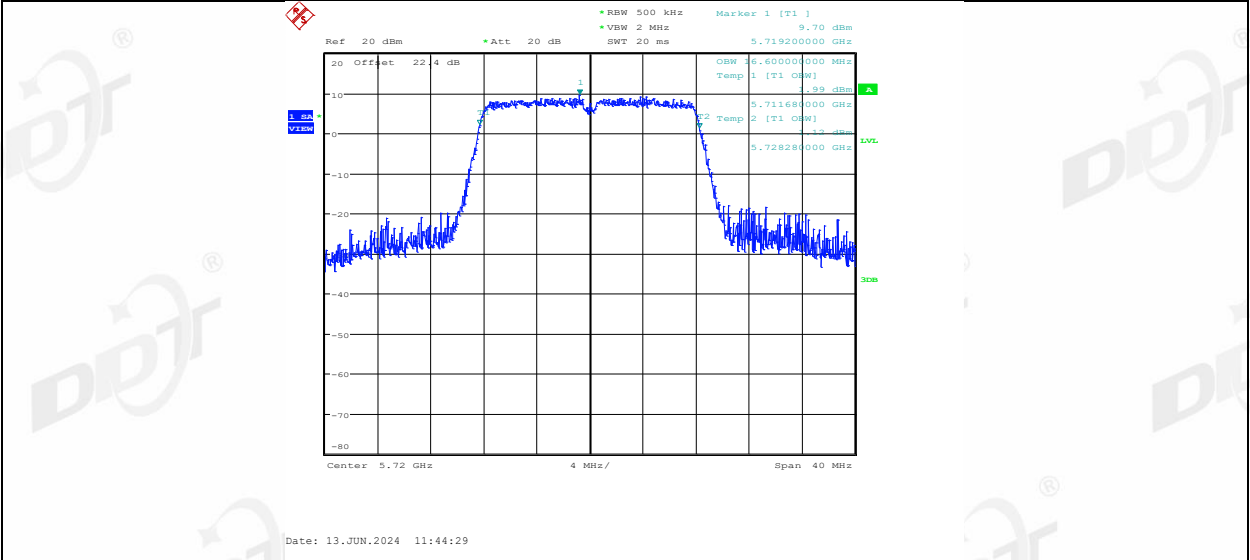
11A_Ant1_5500



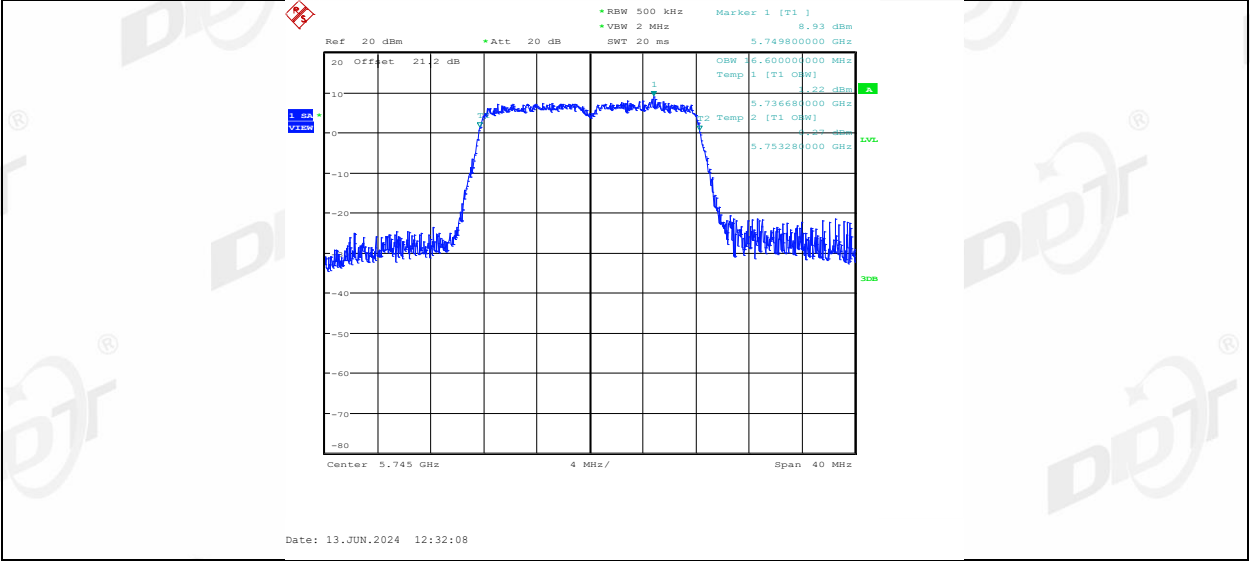




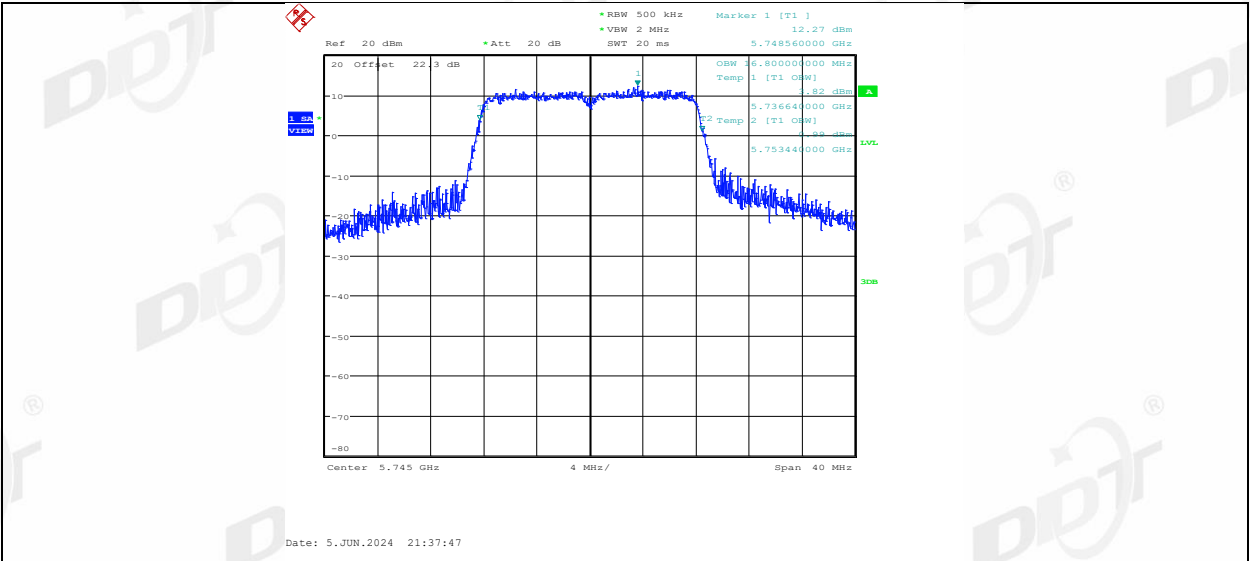
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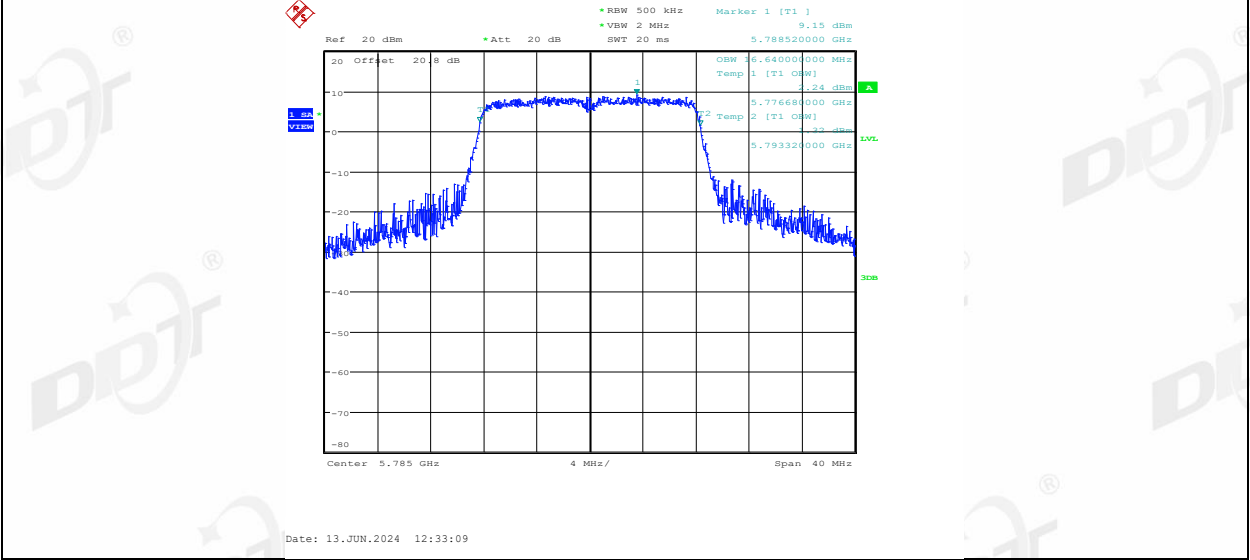
11A_Ant1_5745



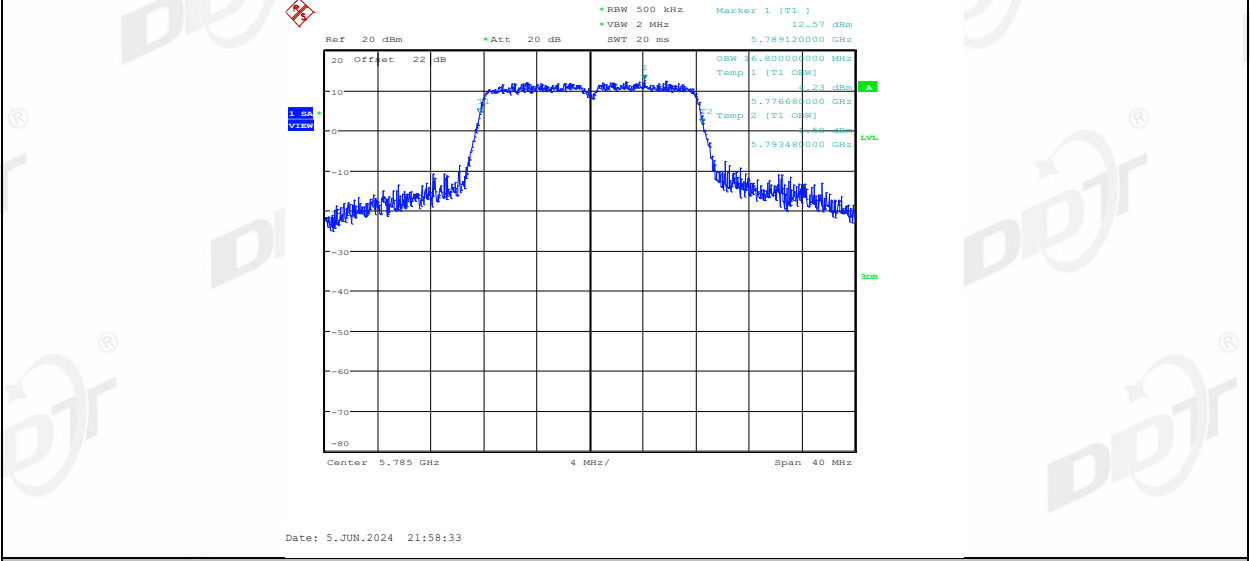
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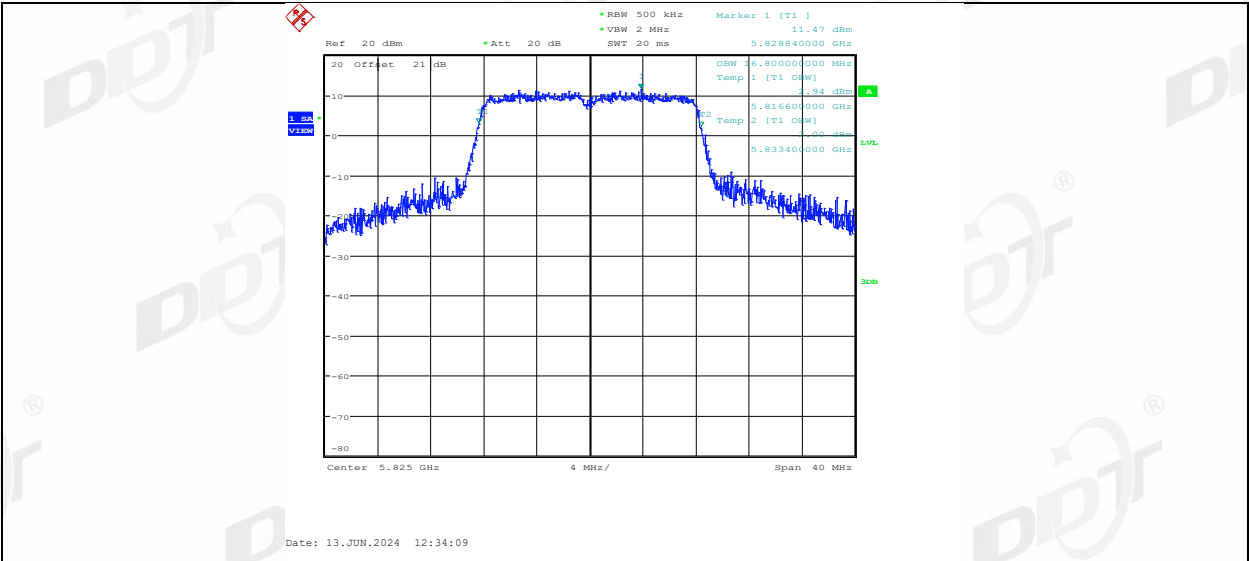
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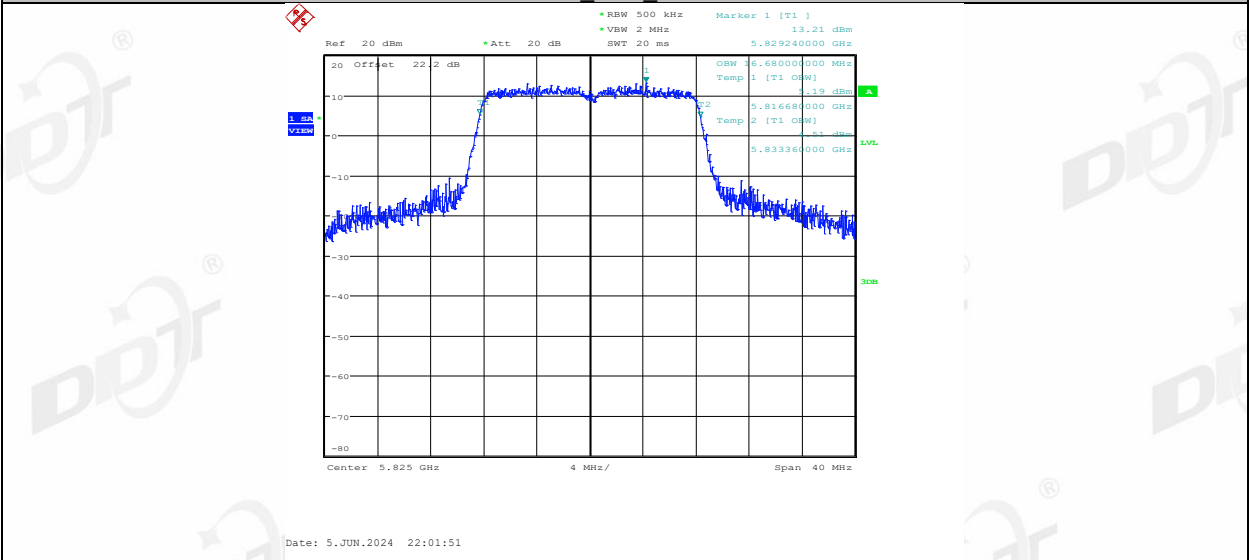
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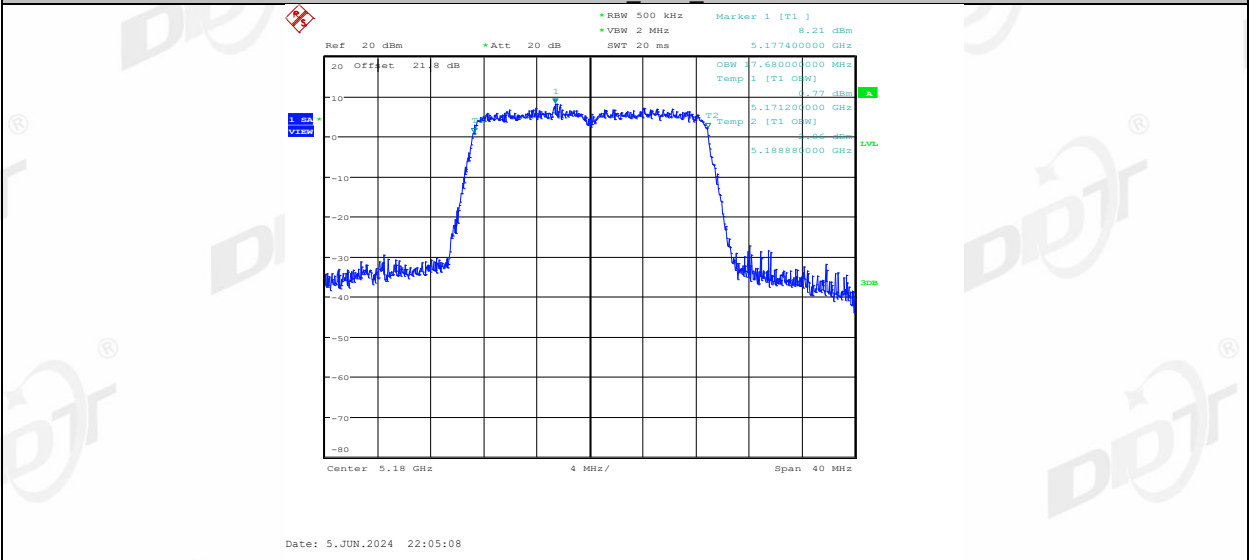
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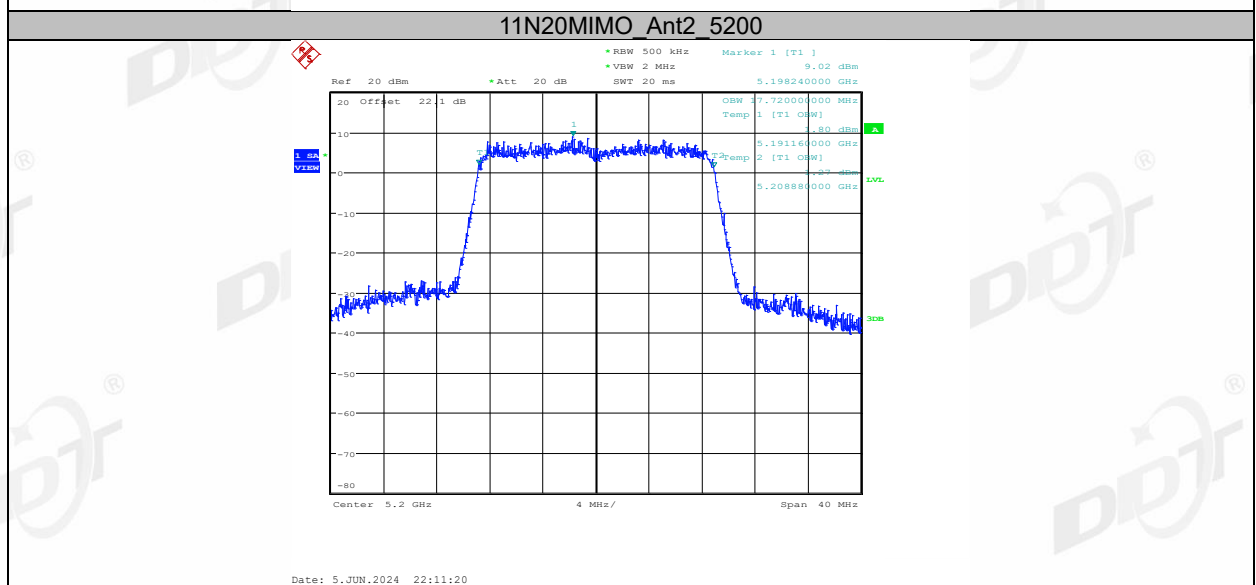
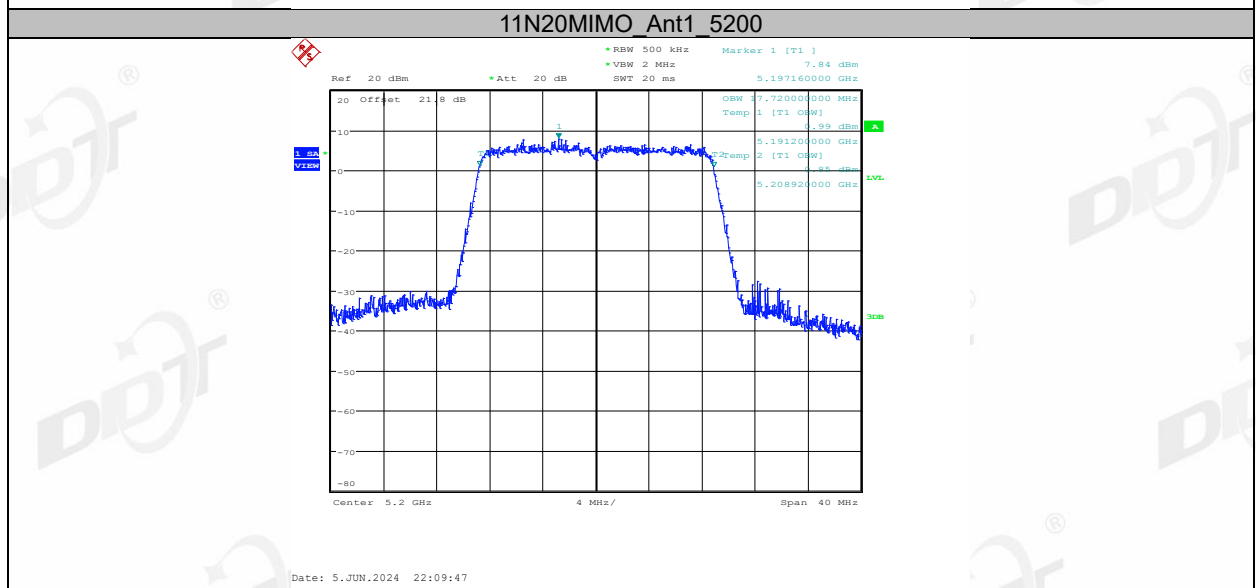
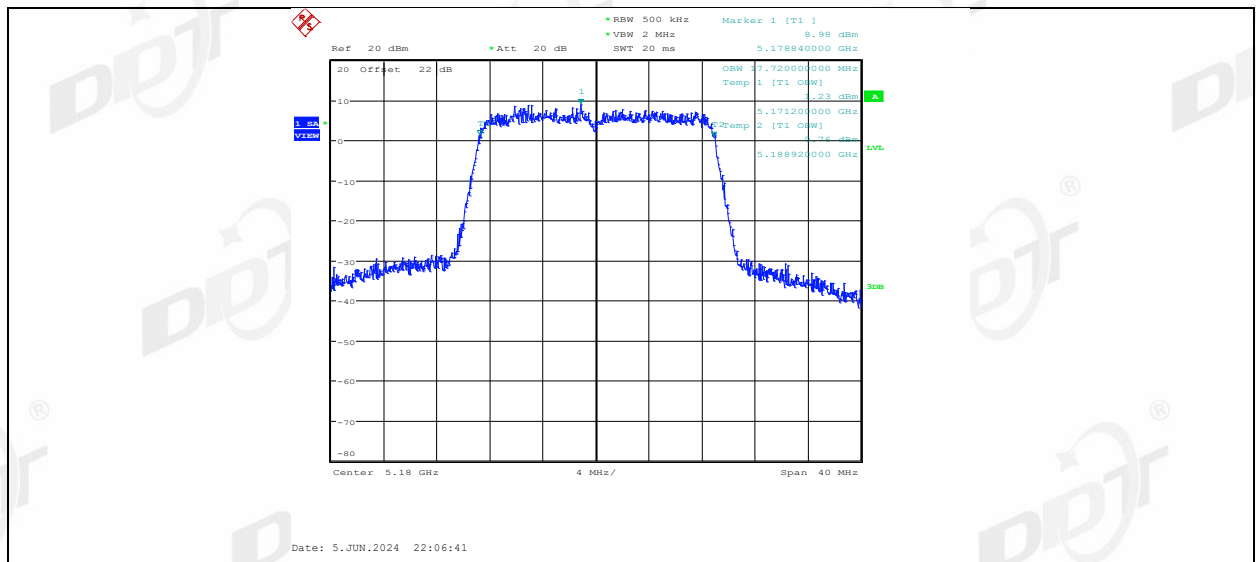
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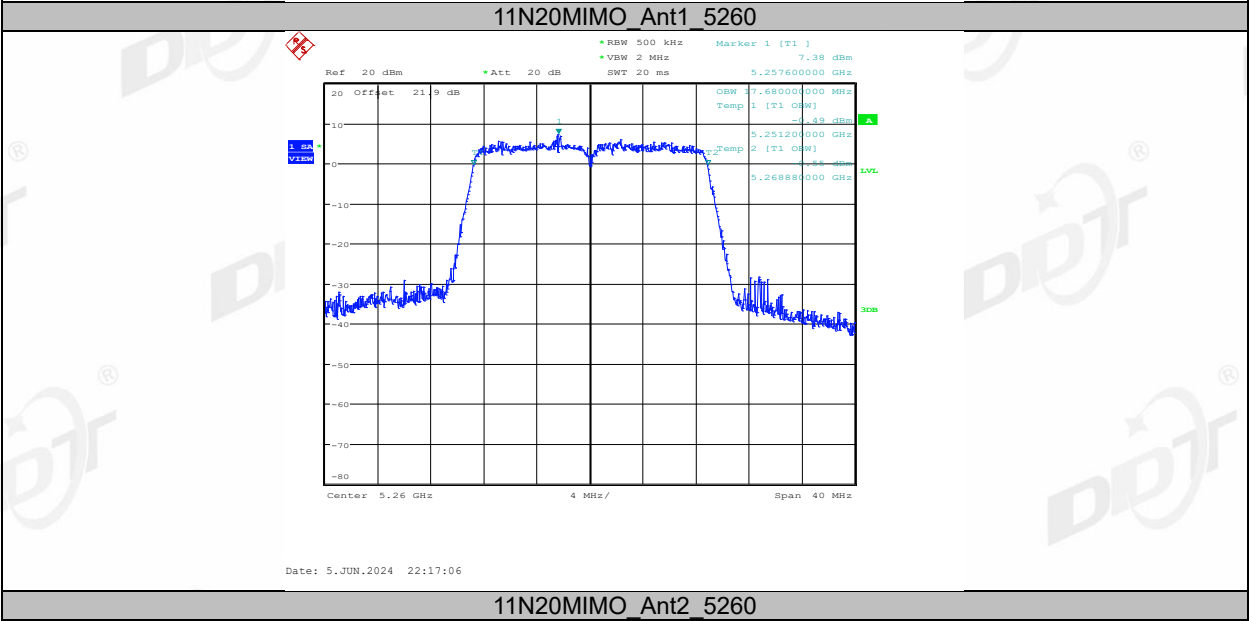
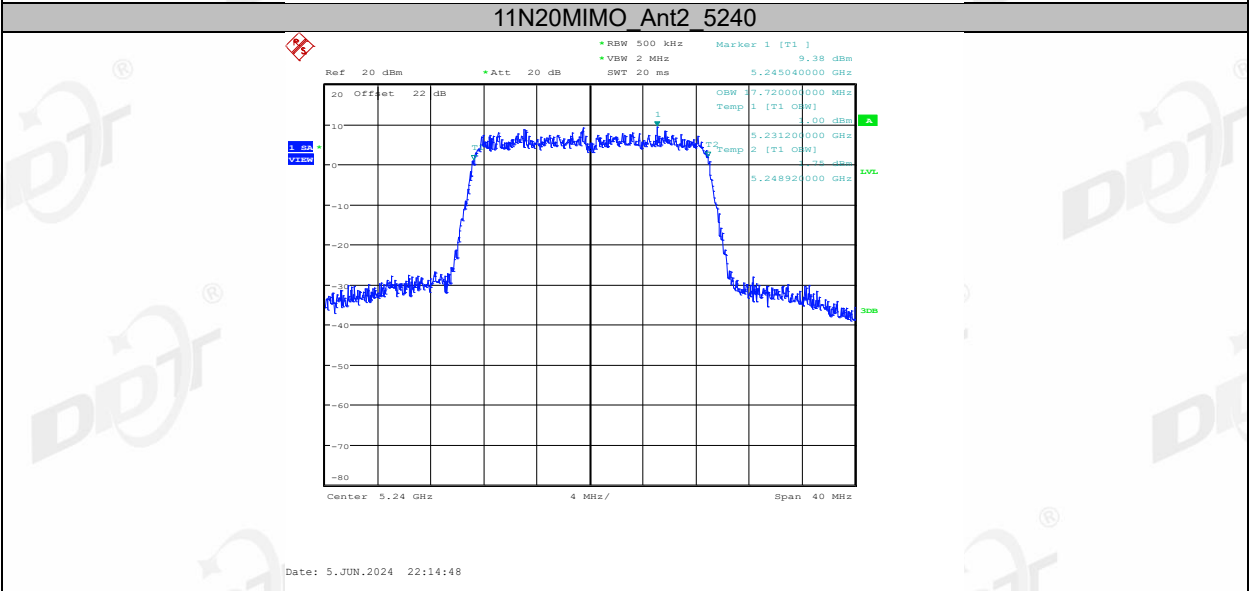
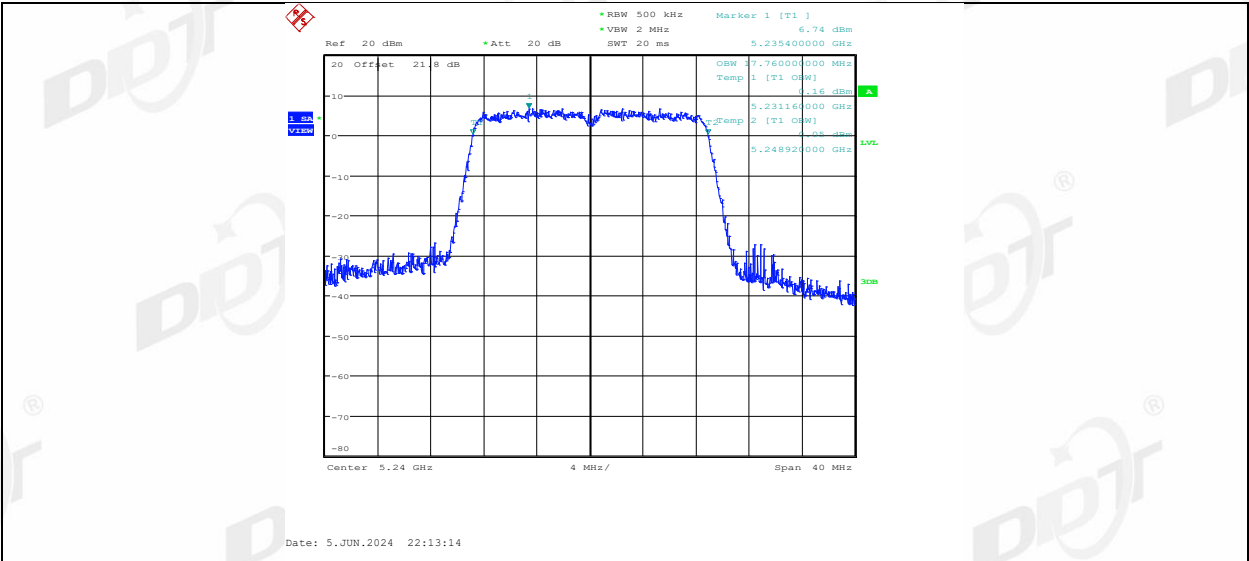


11N20MIMO_Ant1_5180



11N20MIMO_Ant2_5180





Ref 20 dBm Att 20 dB SWT 20 ms Marker 1 [T1] 10.28 dBm

RBW 500 kHz VBW 2 MHz

Offset 21.8 dB

OBW 7.68000000 MHz

Temp 1 [T1] 0.00 GHz

Temp 2 [T1] 0.00 GHz

Temp 3 [T1] 0.00 GHz

Center 5.28 GHz Span 40 MHz

4 MHz/

21.8 dB

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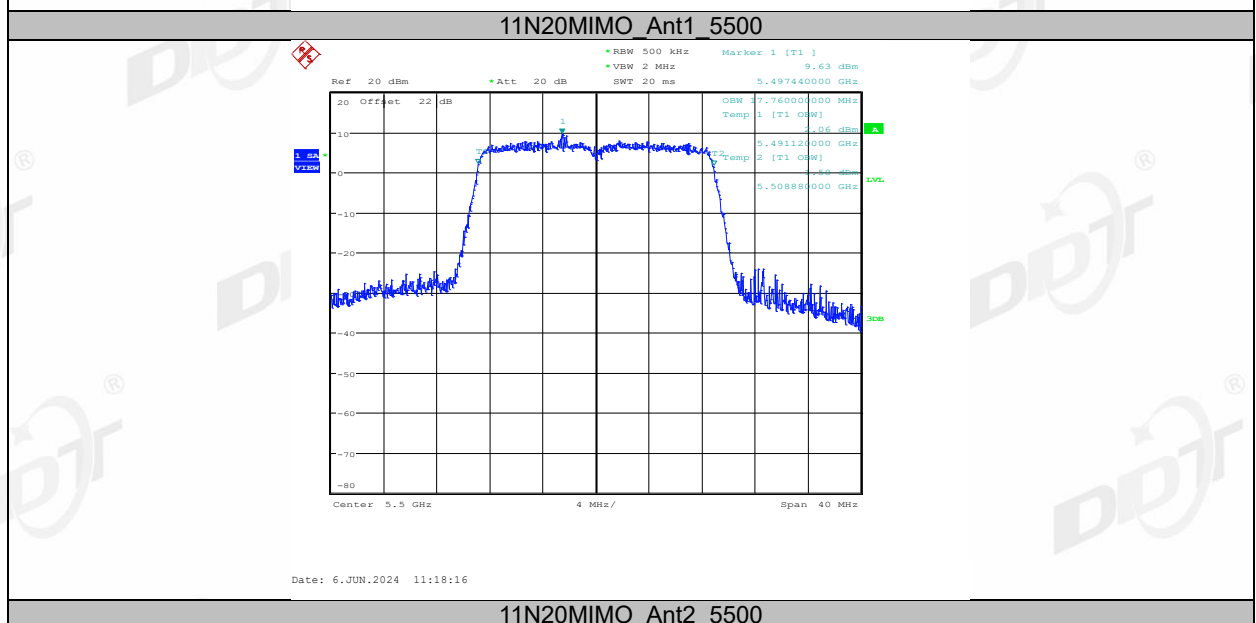
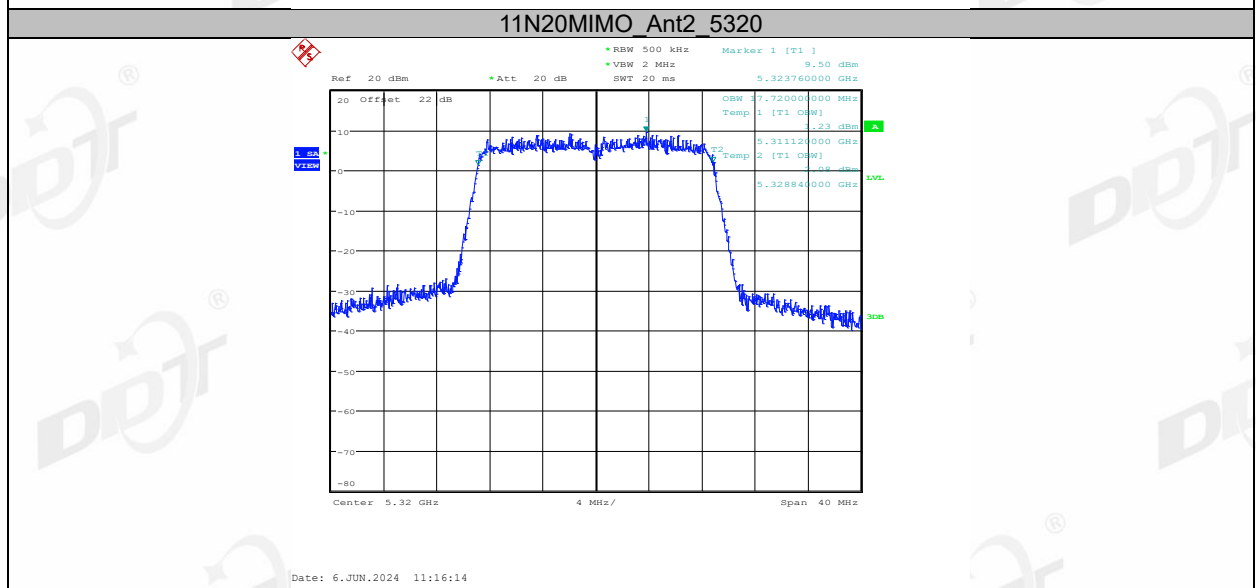
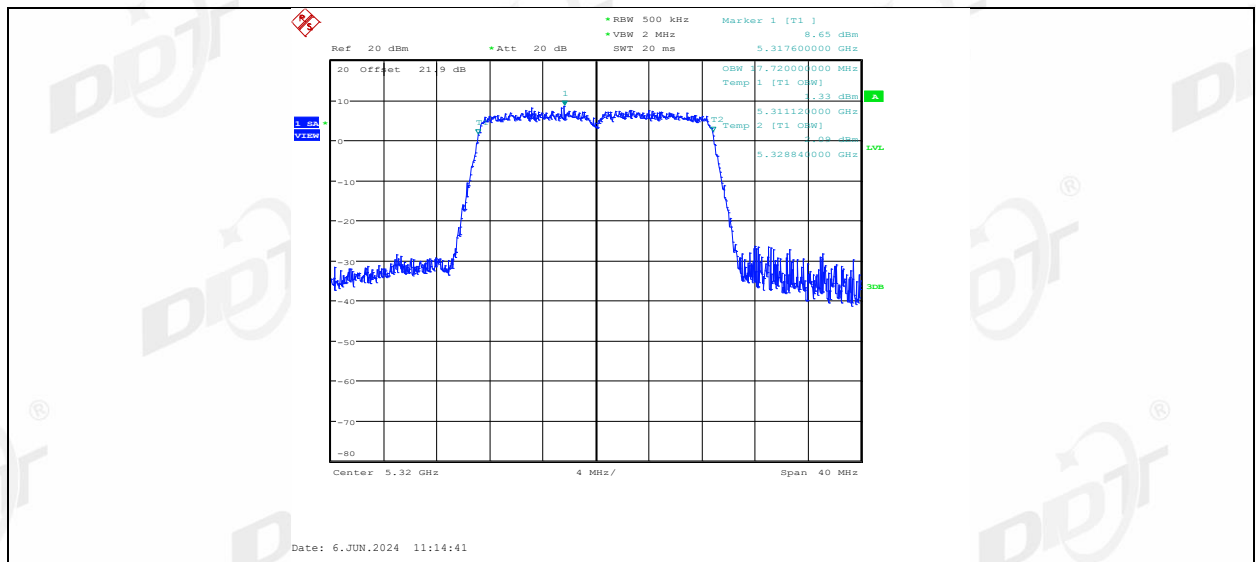
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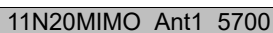
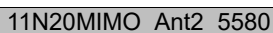
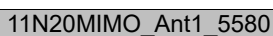
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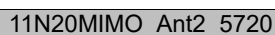
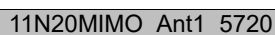
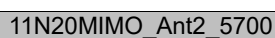
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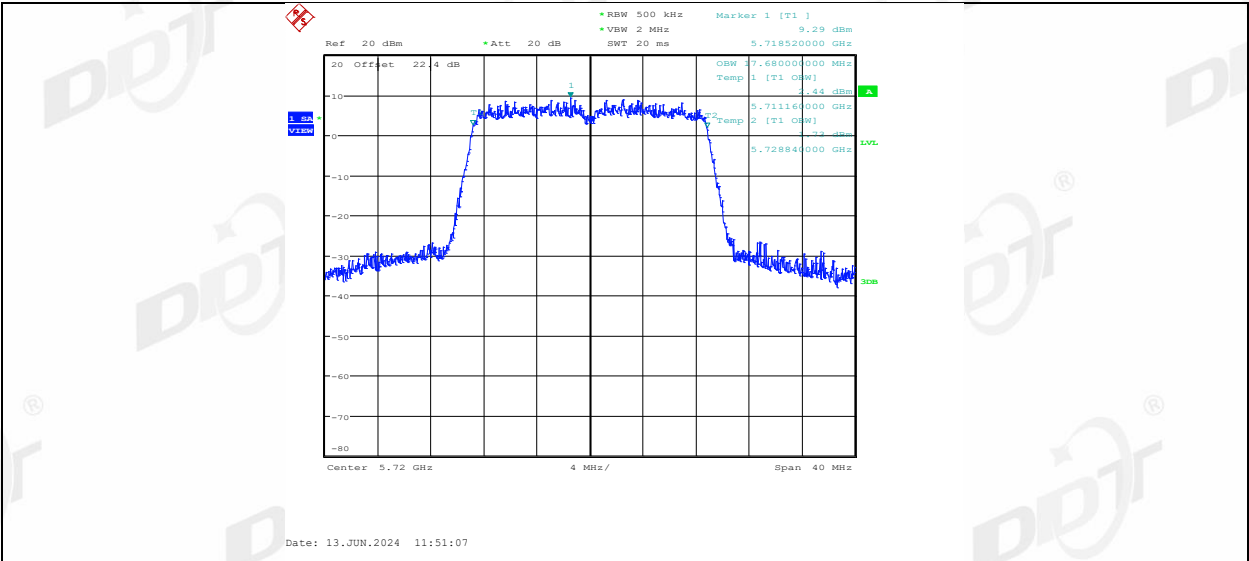
434

REF 20 dBm Att 20 dB SWT 20 ms Marker 1 [T1] 5.28186000 GHz
 RBW 500 kHz VBW 2 MHz 10.20 dBm
 20 Offset 22 dB OBW 7.720000000 MHz
 Temp 1 [T1] ONW
 10 dB VISO 1.42 dBm
 5.271120000 GHz Temp 2 [T1] ONW
 5.288840000 GHz
 Center 5.28 GHz 4 MHz/ Span 40 MHz
 Date: 6 JUN 2024 11:11:08

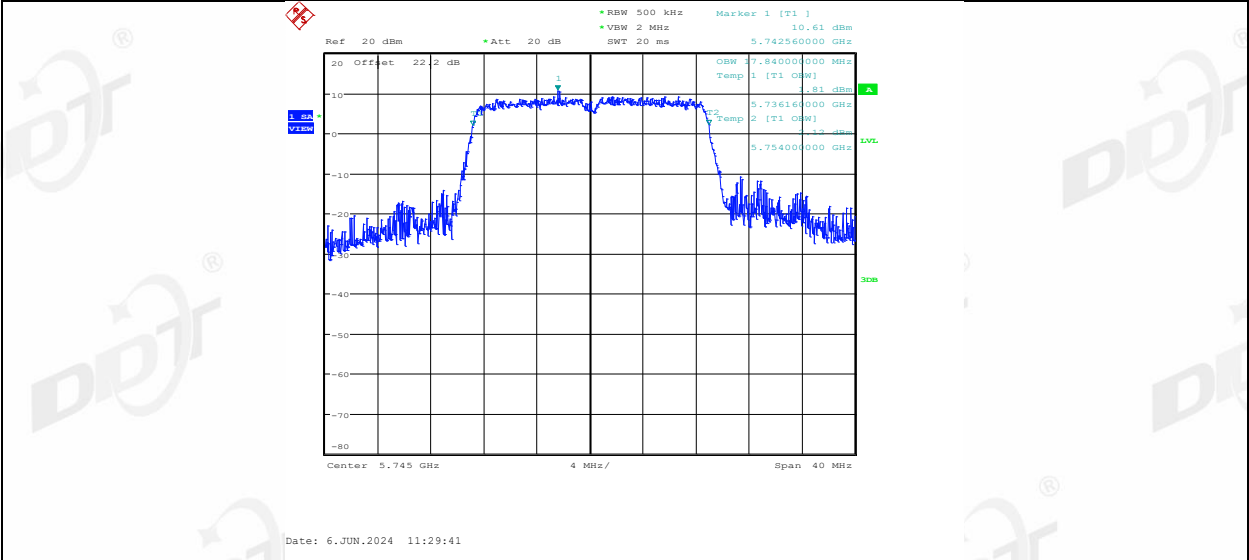




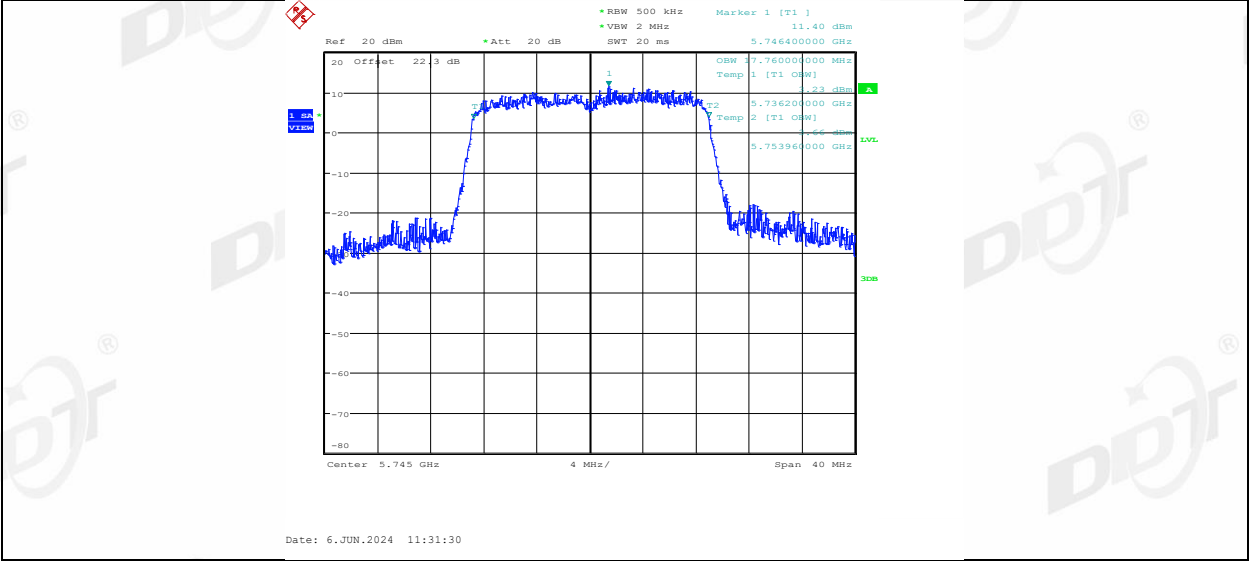




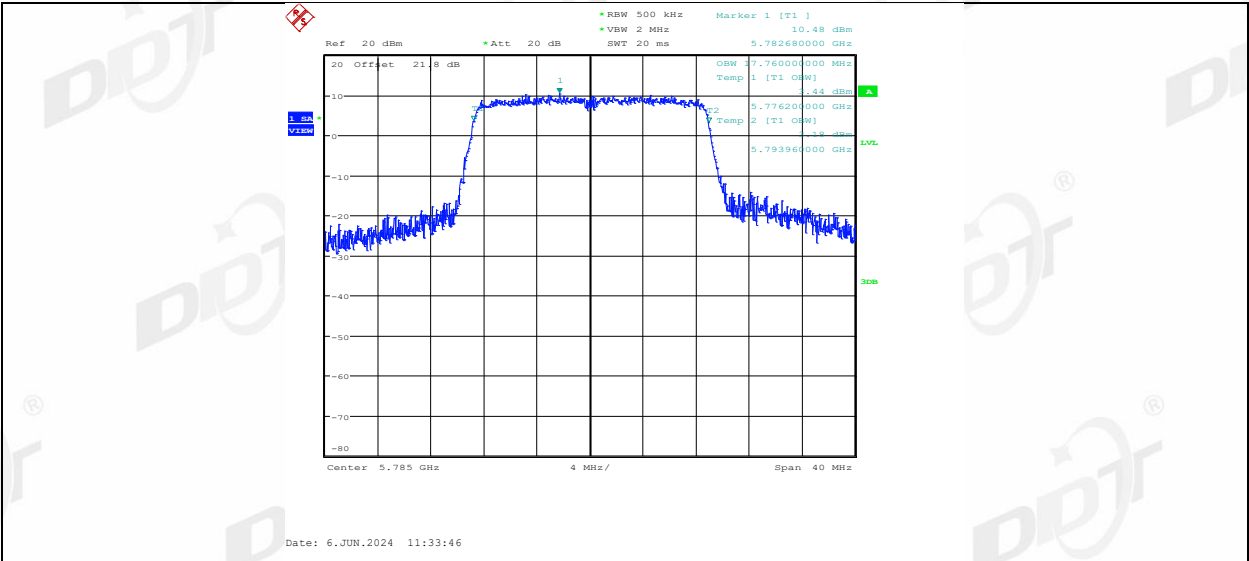
11N20MIMO_Ant1_5745



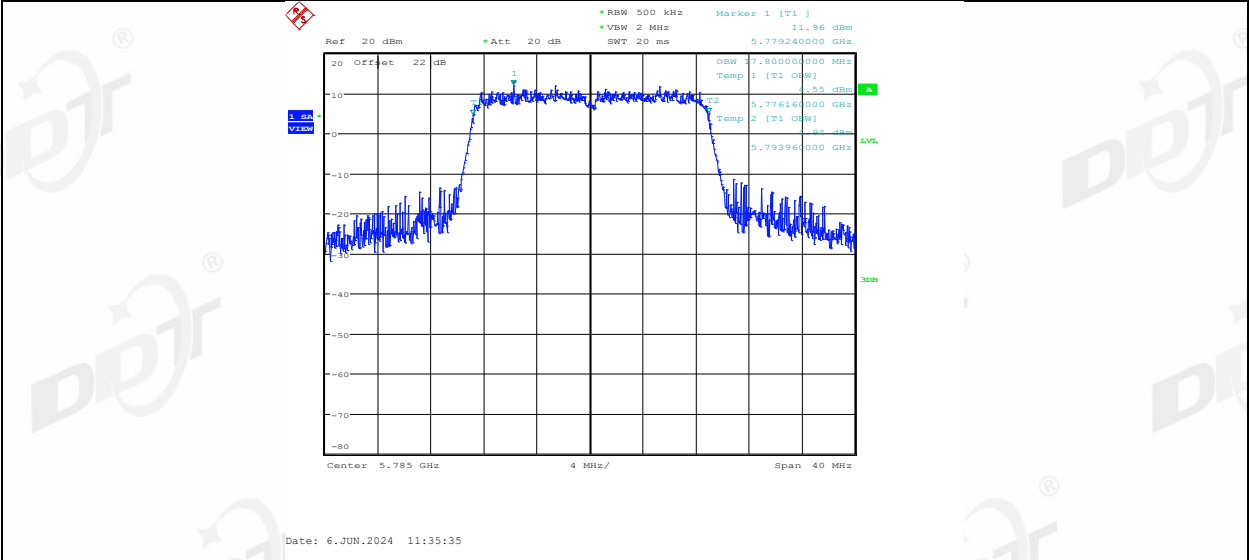
11N20MIMO_Ant2_5745



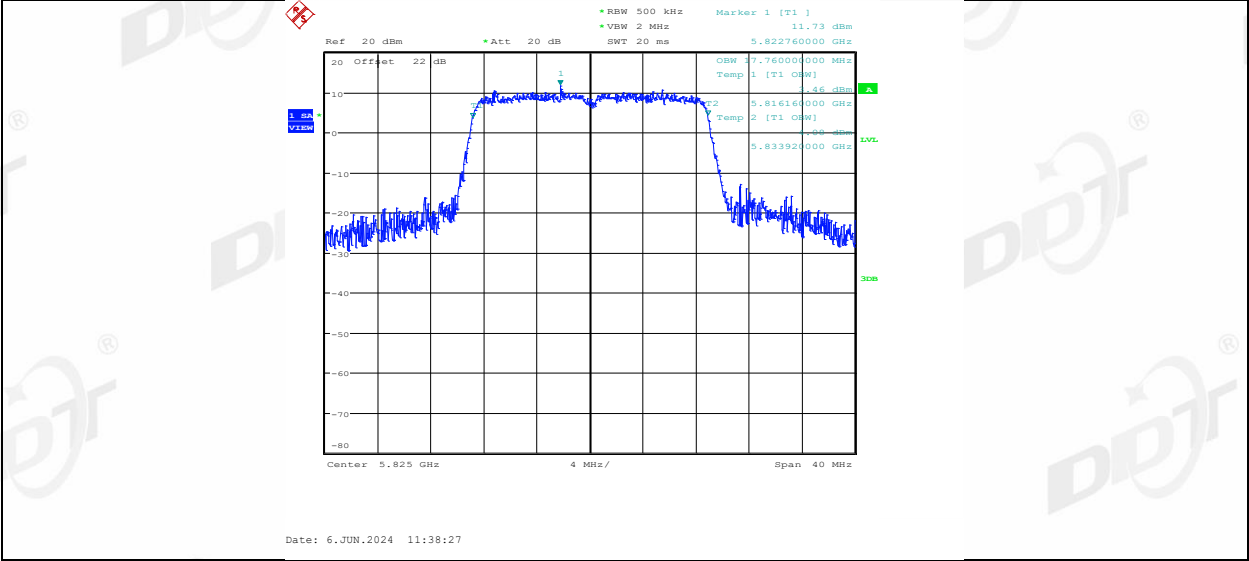
11N20MIMO_Ant1_5785



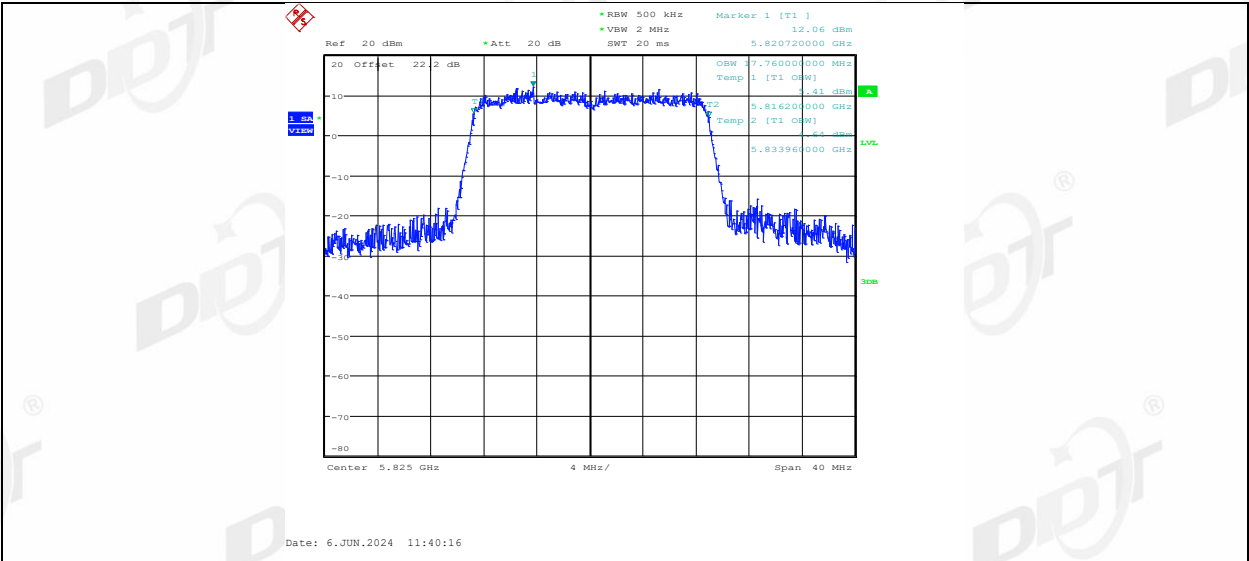
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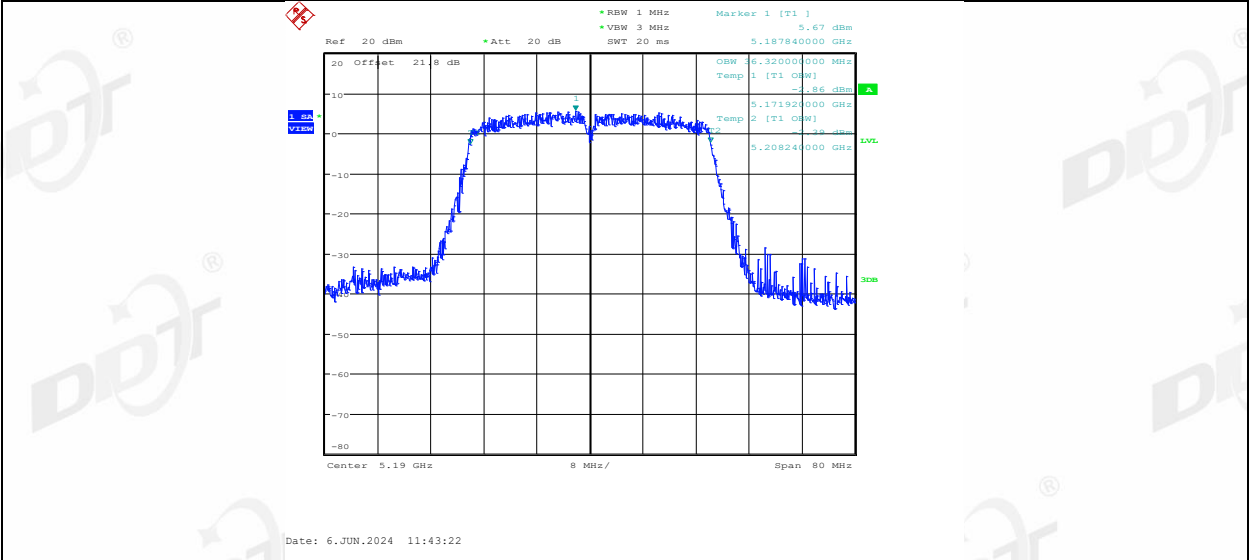
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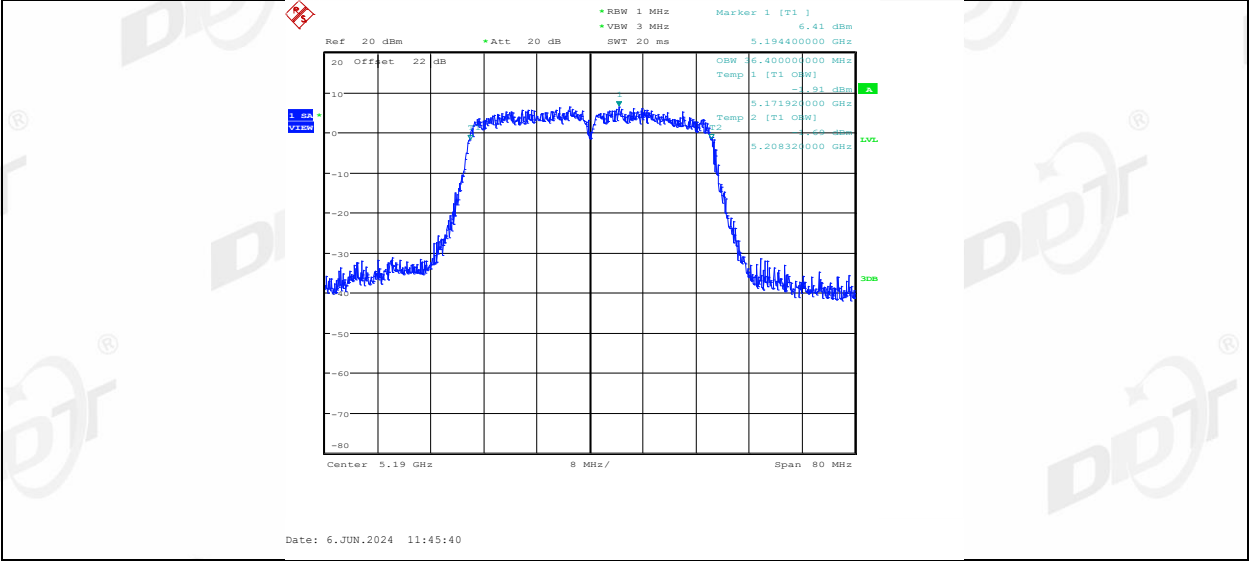
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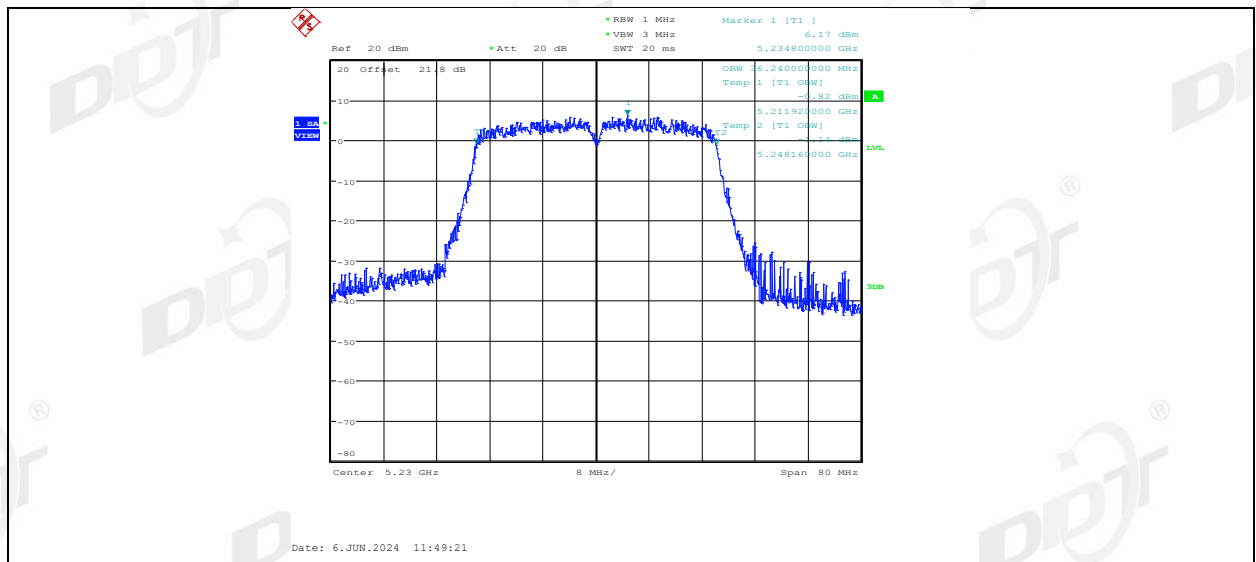
11N40MIMO_Ant1_5190



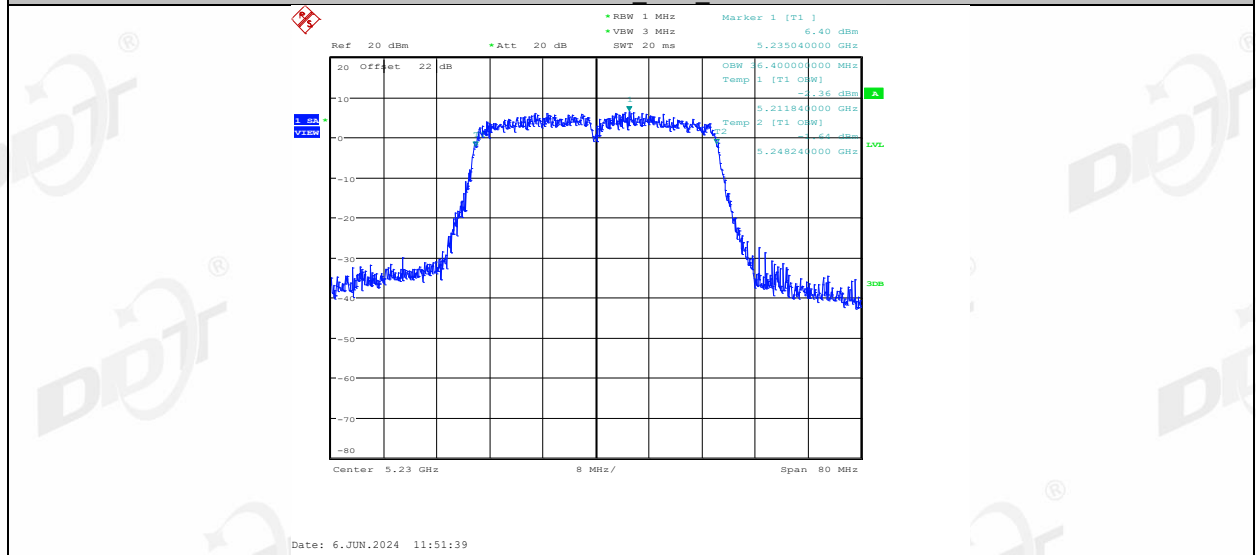
11N40MIMO_Ant2_5190



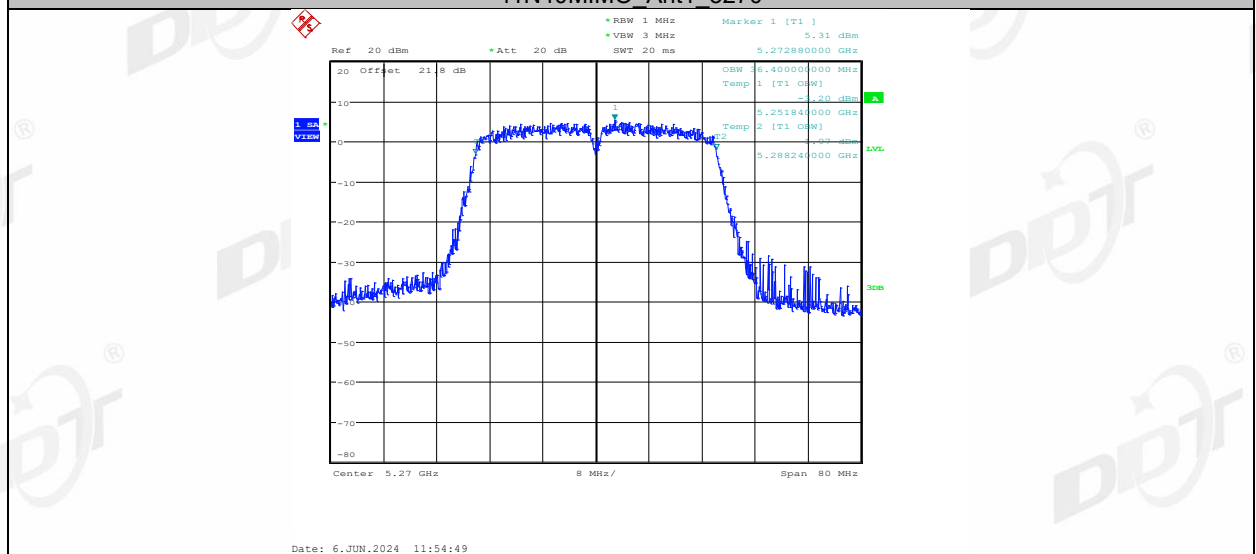
11N40MIMO_Ant1_5230



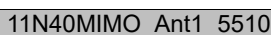
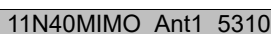
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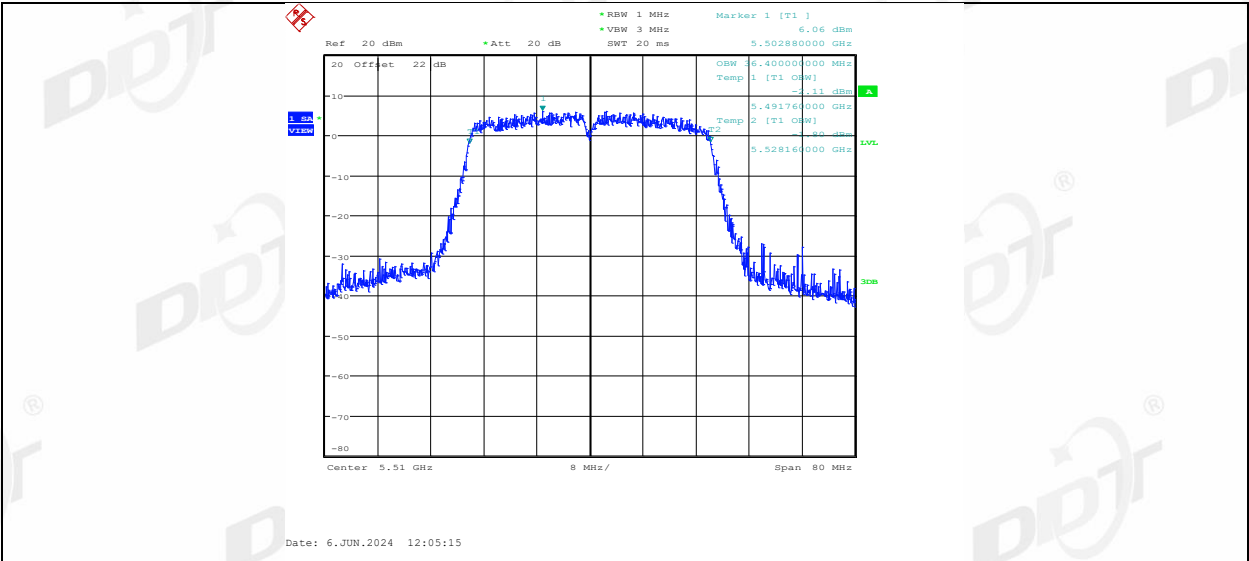


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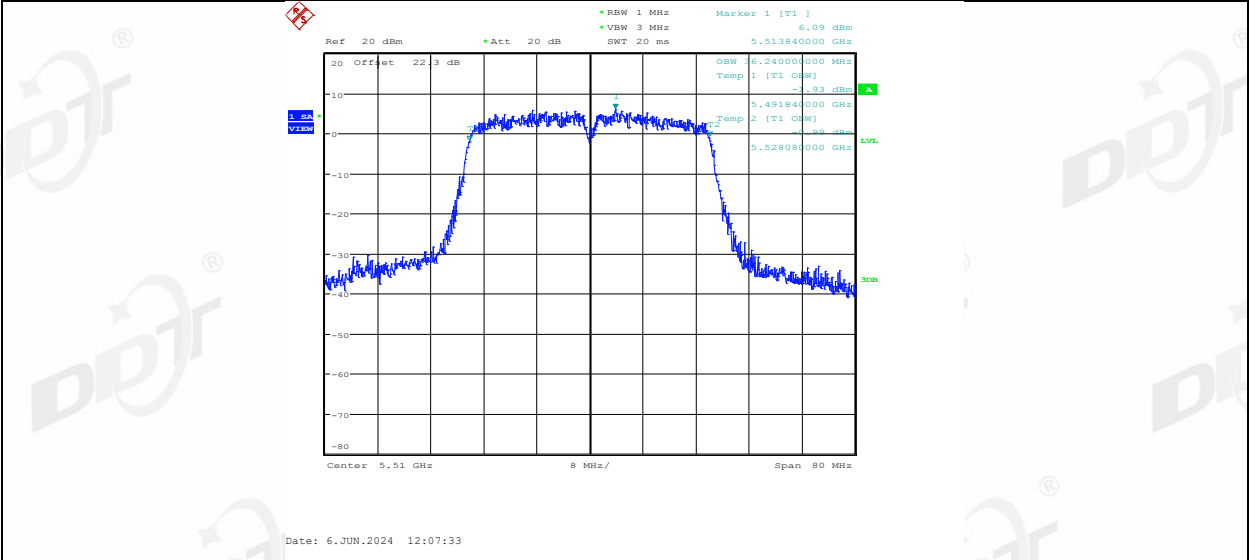


11N40MIMO Ant2 5270

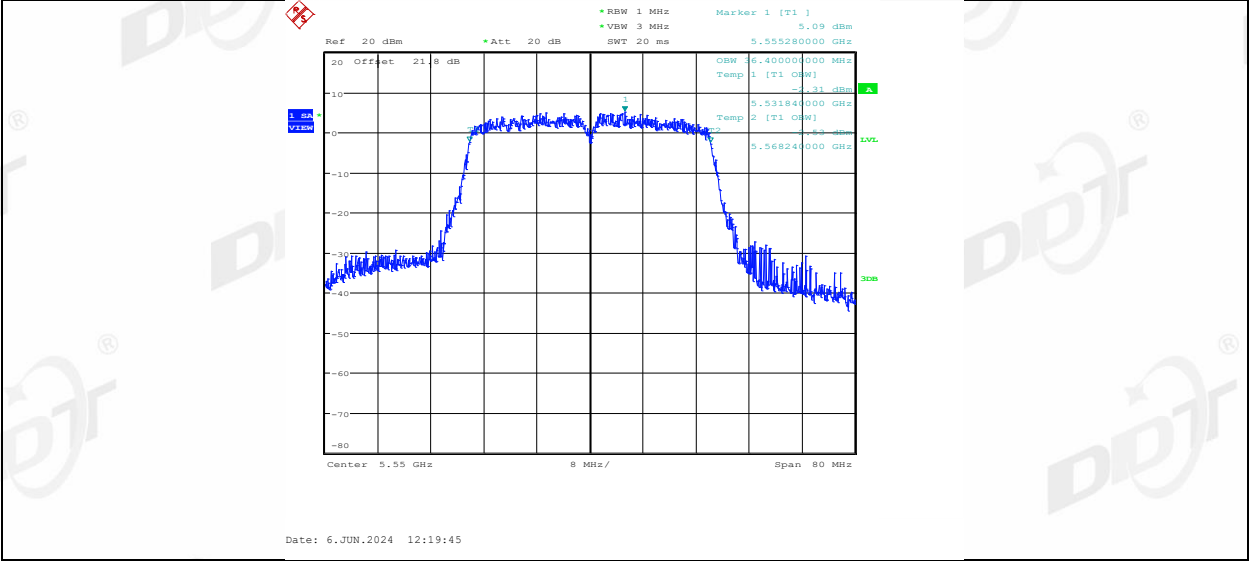




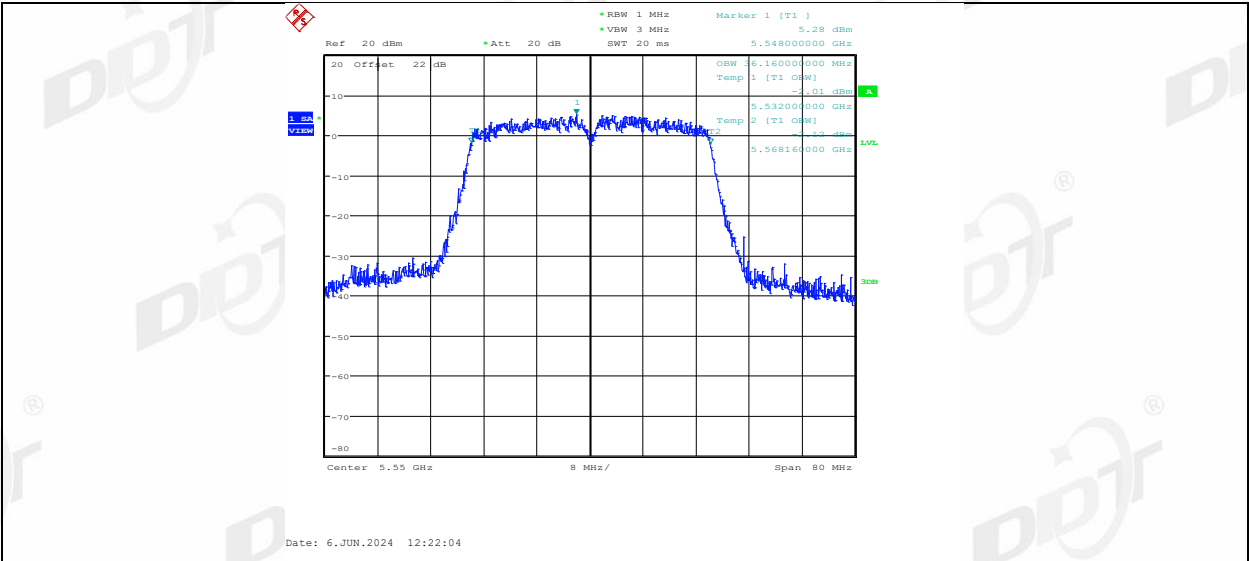
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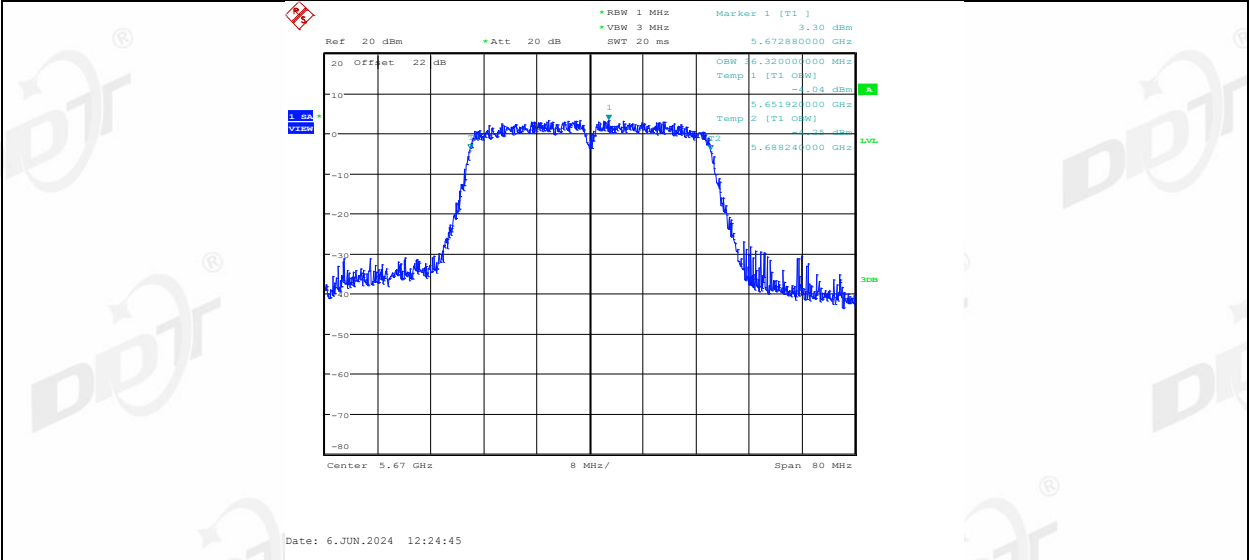
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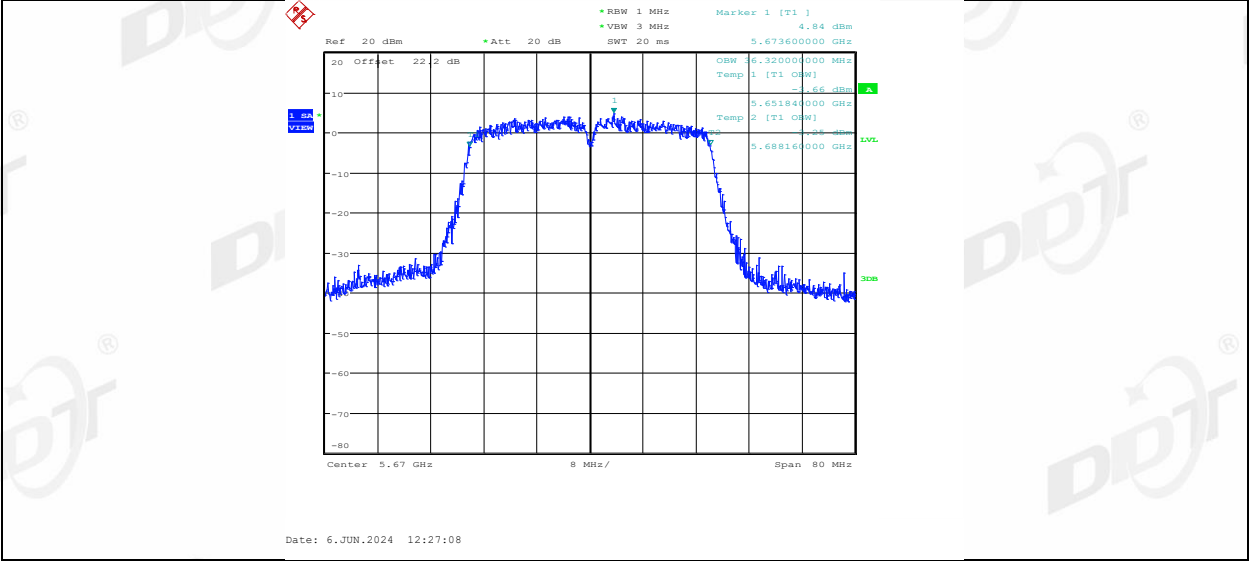
11N40MIMO_Ant2_5550



11N40MIMO_Ant1_5670



11N40MIMO_Ant2_5670



11N40MIMO_Ant1_5710