Industrial Internet Innovation Center (Shanghai) Co.,Ltd.

SRD TEST REPORT

PRODUCT	POS System
BRAND	SUNMI
MODEL	F3510
APPLICANT	Shanghai Sunmi Technology Co.,Ltd.
FCC ID	2AH25D3PRO
IC	22621-D3PRO
ISSUE DATE	March 22, 2024
STANDARD(S)	FCC Part15E, RSS-247 Issue 3, RSS-Gen Issue 5

Prepared by: ***Tao Lingyan*** **Reviewed by:** ***Yang Fan*** **Approved by:** ***Zhang Min***

CONTENTS

1. Summary of Test Report

1.1 Test Standard(s)

No.	Test Standard	Title	Version
1	FCC Part15E	Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices	--
2	RSS-247 Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	2023
3	RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus	2021

1.2 Reference Documents

No.	Test Standard	Title	Version
1	ANSI 63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
2	KDB 789033 D02 General UNII Test Procedures New Rules v02r01	Information Infrastructure (U-NII) Devices - Part 15, Subpart E	--
Note: KDB 789033 D02 General UNII Test Procedures New Rules v02r01 is not A2LA certified.			

1.3 Summary of Test Results

No.	Measurement Items	FCC Rules	IC Rules	Verdict
1	Duty Cycle	15.407(a)	RSS-247 6.2	Pass
2	Maximum Output Power	15.407(a)	RSS-247 6.2	Pass
3	Power Spectral Density	15.407(a)	RSS-247 6.2	Pass
4	99% Occupied Bandwidth	N/A	RSS-247 6.2	Pass
5	-26dB Occupied Bandwidth	15. 407(a)	RSS-Gen 6.7	Pass
6	Band edge compliance	15.407(b)	RSS-247 6.2	Pass
7	Transmitter spurious emissions radiated	15.209 & 15.407(b)	RSS-Gen 8.9, RSS-247 6.2	Pass
8	Frequency Stability	15.407(g)	RSS-247 6.2	Pass
9	Transmit Power Control	15.407(h)	RSS-Gen 8.8	N/A
10	AC Powerline Conducted Emission	15.207	RSS Gen 6.8	Pass
11	Antenna requirement	15.203	RSS-247 6.2	Pass Note 2
Note 1: The F3510 manufactured by Shanghai Sunmi Technology Co.,Ltd. is a new product for testing. There are two configurations S02aa (Mainly Supply) & S11aa (Secondary Supply) in this project. We mainly tested the S02aa (Mainly Supply), and S11aa (Secondary Supply) tested the worst mode of the main supply, and recorded the test results of the worst mode respectively in the report. The description of the differences between S02aa (Mainly Supply) & S11aa (Secondary Supply) are as				

follows:

EUT ID	FCC ID number	IC number	HVIN	Fingerprint
S02aa (Mainly Supply)	2AH25D3PRO	22621-D3PRO	F3510	Yes
S11aa (Secondary Supply)			F3510A	N/A

Industrial Internet Innovation Center (Shanghai) Co., Ltd. only performed test cases which identified with Pass/Fail/Inc result in section 1.3.

Industrial Internet Innovation Center (Shanghai) Co., Ltd. has verified that the compliance of the tested device specified in section 4 of this test report is successfully evaluated according to the procedure and test methods as defined in type certification requirement listed in section 1 of this test report.

Note2:

5G RLAN used a FPC antenna with max Gain 1.63/2.37/2.75 dBi that complied with 15.203 Requirements.

a. All the test data for each data were verified, but only the worst case was reported.

1.4 Data Provided by Applicant

No.	Item(s)	Data
1	Antenna gain of EUT	U-NII-1: 1.63 dBi U-NII-2A: 2.37 dBi U-NII-2C: 2.75 dBi
Note: The data of aantenna gain is provided by the Antenna specification may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.		

2. General Information of The Laboratory

2.1 Testing Laboratory

Lab Name	Industrial Internet Innovation Center (Shanghai) Co.,Ltd.
Address	Building 4，No. 766，Jingang Road，Pudong，Shanghai，China
Telephone	021-68866880
FCC Registration No.	708870
FCC Designation No.	CN1364
IC Designation No.	10766A
CAB identifier	CN0067

2.2 Laboratory Environmental Requirements

Temperature	15℃~35℃
Relative Humidity	25%RH~75%RH
Atmospheric Pressure	86kPa~106kPa

2.3 Project Information

Project Manager	Gao Hongning
Test Date	January 31, 2024 to March 14, 2024

3. General Information of The Customer

3.1 Applicant

Company	Shanghai Sunmi Technology Co.,Ltd.
Address	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
Telephone	+86 17302160204

3.2 Manufacturer

Company	Shanghai Sunmi Technology Co.,Ltd.
Address	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
Telephone	+86 17302160204

4. General Information of The Product

4.1 Product Description for Equipment under Test (EUT)

Product Name	POS System
Model name	F3510
Date of Receipt	S05aa/S02aa:January 31,2024 S09aa:February 21,2024 S11aa:February 22,2024
EUT ID*	S05aa/S09aa/S02aa/S11aa
SN/IMEI	S05aa: DP02D41R10015 S09aa: DP02D41R10035 S02aa: DP02D41R10008 S11aa:DP01D41N10086
Supported Radio Technology and Bands	BT 5.0 BR/EDR/BLE WLAN 802.11b,g,n WLAN 802.11a,n,ac
Hardware Version	SD03_MB V1.1
Software Version	1.0.0
FCC ID	2AH25D3PRO
IC	22621-D3PRO
NOTE1: EUT ID is the internal identification code of the laboratory. NOTE2: Samples in the test report are provided by the customer. The test results are only applicable to the samples received by the laboratory.	

4.2 Internal Identification of AE used during the test

AE ID*	Description	Model	SN/Remark
CA02	Adapter	CYZS36-240150	Jiangsu Chenyang Electron Co., Ltd. 24V,1.5A
UA02	AC Cable	N/A	N/A
NOTE: *AE ID is the internal identification code of the laboratory.			

4.3 Additional Information

	FCC	IC
WLAN Frequency	UNII 1: 5150MHz-5240MHz UNII 2A: 5260MHz-5320MHz UNII 2C: 5500MHz-5700MHz	UNII 1: 5150MHz-5240MHz UNII 2A: 5260MHz-5320MHz UNII 2C: 5500-5580MHz, 5660-5700MHz
Occupied Channel Bandwidth	20 MHz: 802.11 a/n/ac 40 MHz: 802.11 n/ac 80 MHz: 802.11 ac	

WLAN type of modulation	OFDM
NOTE: The test data with the frequencies in 5600-5650MHz are only used for FCC certification.	

Test frequency list:

UNII-1 and UNII-2A:

BW_20M	Channel	36	40	44	48	52	56	60	64
	Freq. (MHz)	5180	5200	5220	5240	5260	5280	5300	5320
BW_40M	Channel	38		46		54		62	
	Freq. (MHz)	5190		5230		5270		5310	
BW_80M	Channel	42				58			
	Freq. (MHz)	5210				5290			
BW_160M	Channel	50							
	Freq. (MHz)	5250							

UNII-2C:

BW_20M	Channel	100	104	108	112	116	120	124	128	132	136	140
	Freq. (MHz)	5500	5520	5540	5560	5580	5600	5620	5640	5660	5680	5700
BW_40M	Channel	102		110		118		126		134		/
	Freq. (MHz)	5510		5550		5590		5630		5670		/
BW_80M	Channel	106				122				/		
	Freq. (MHz)	5530				5610				/		
BW_160M	Channel	114								/		
	Freq. (MHz)	5570										
Note：“/” Represents empty												

Note: This report is for WLAN UNII-1, UNII-2A and UNII-2C only.

5. Test Configuration Information

5.1 Laboratory Environmental Conditions

5.1.1 Permanent Facilities

Relative Humidity	Min. = 45 %, Max. = 55 %		
Atmospheric Pressure	101kPa		
Temperature	Normal	Minimum	Maximum
	25℃	-10℃	40℃
Working Voltage of EUT	Normal	Minimum	Maximum
	24V	22.8V	25.2V

5.2 Test Equipments Utilized

5.2.1 Conducted Test System

No.	Name	Model	S/N	SW Version	HW Version	Manufacturer	Cal. Date	Cal. Interval
1	Test Software	TS1120	10727	V3.2.22	N/A	Tonscend	N/A	N/A
2	Automatic control unit	JS0806-2	2218060623	N/A	N/A	Tonscend	2023-05-06	1 Year
3	Wireless communication comprehensive tester	CMW500	164865	V3.8.12	N/A	R&S	2023-07-26	1 Year
4	Spectrum Analyzer	FSQ40	200063	V4.75	N/A	R&S	2023-10-16	1 Year
5	Analog Signal Generator	SMF	104770	V3.0.13.0-2.20.530.15.4	N/A	R&S	2023-10-16	1 year
6	Vector Signal Generator	SMCV100B	103691	V5.00.122.24	N/A	R&S	2023-07-27	1 Year
7	Programmable Power Supply	Keithley 2303	4039070	N/A	N/A	Keithley	2023-06-23	1 Year
8	Temperature box	B-TF-107C	BTF107C-201804107	N/A	N/A	Boyi	2023-06-28	1 Year
9	Network test unit AP	GT-AXE11000	N2IG0X401637KWF	V3.0.0.4.386_45940	N/A	ASUS	N/A	N/A
10	Vector Signal Generator	SMBV100A	257904	V4.15.125.49	N/A	R&S	2023-10-16	1 Year

5.2.2 Radiated Emission Test System

No.	Name	Model	S/N	SW Version	HW Version	Manufacturer	Cal. Date	Cal. Interval
1	Universal Radio Communication Tester	CMU200	123126	V5.2.1	B12	R&S	2023-10-16	1 Year
2	Universal Radio Communication Tester	CMW500	104178	V3.7.20	1206.0600.00	R&S	2023-10-16	1 Year
3	EMI Test Receiver	ESU40	100307	V5.1-24-3	01	R&S	2023-12-19	1 Year
4	TRILOG Broadband Antenna	VULB9163	01345	N/A	N/A	Schwarzbeck	2023-03-23	1 Year
5	Double- ridged Waveguide Antenna	ETS-3117	00135890	N/A	N/A	ETS	2022-03-09	2 Years
6	EMI Test Software	EMC32 V10.35.02	N/A	N/A	N/A	R&S	N/A	N/A
7	Horn Antenna	3160-09	LM6321	N/A	N/A	R&S	2023-07-16	1 Year
8	Horn Antenna	3160-10	LM5942	N/A	N/A	R&S	2023-07-16	1 Year
9	Loop Antenna	AL-130R	121083	N/A	N/A	COM-POWER	2023-9-13	1 Year
10	Preamplifier	SCU08F1	8320024	N/A	N/A	R&S	2023-10-16	1 Year
11	Preamplifier	SCU18	10155	N/A	N/A	R&S	2023-10-16	1 Year
12	Preamplifier	SCU26	10025	N/A	N/A	R&S	2023-10-16	1 Year
13	Preamplifier	SCU40	10020	N/A	N/A	R&S	2023-10-16	1 Year
14	2-Line V-Network	ENV216	101380	N/A	N/A	R&S	2023-12-19	1 Year
15	EMI Test Software	EMC32 V10.35.02	N/A	N/A	N/A	R&S	N/A	N/A
16	Test Receiver	ESCI	101235	V5.1-24-3	0	R&S	2023-12-19	1 Year

Note:After 2024-3-9, the Double-ridged Waveguide Antenna of this device is not used for radiation testing.

5.2.3 Test Environment

Shielding Room1 (6.0 meters×3.0 meters×2.7 meters) did not exceed following limits along the conducted RF performance testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Ground system resistance	< 0.5 Ω
Temperature	Min. = 15 ℃, Max. = 35 ℃

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. =30 %, Max. = 60 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω

Fully-anechoic chamber1 (9.8 meters×6.7 meters×6.7 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. = 25 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
VSWR	Between 0 and 6 dB, from 1GHz to 18GHz
Site Attenuation Deviation	Between -4 and 4 dB,30MHz to 1GHz

5.3 Measurement Uncertainty

Measurement Uncertainty of Conduction test

Measurement Items	Range	Confidence Level	Calculated Uncertainty
Emission Bandwidth	5150-5850MHz	95%	±1.9%
Maximum Conduct Output Power	5150-5850MHz	95%	± 1.18 dB
Power Spectral Density	5150-5850MHz	95%	±0.98 dB
Band Edge Measurements	5150-5850MHz	95%	±1.21dB
Unwanted Emissions Measurement	9kHz-40GHz	95%	9kHz-7GHz:±1.21dB 7GHz-40GHz: ±3.31dB

Frequency Stability	5150-5850MHz	95%	±1.9%

Measurement Uncertainty of Radiation test

Measurement Items	**Uncertainty(dB)**
Radiated Emission 30MHz-1000MHz	±5.10
Radiated Emission 1000MHz-18000MHz	±5.66
Radiated Emission 18000MHz-40000MHz	±5.22
AC Powerline Conducted Emission	±4.38
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of *k*=2.	

6. Measurement Results

6.1. Duty Cycle

6.1.1. Measurement Limit and Method

Standard	Limit (dBm)
FCC 47 CFR Part 15.407(a)	NA
RSS-247 6.2	N/A

6.1.2. Test Procedure

The measurement method is made according to KDB 789033 B

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

a) A diode detector and an oscilloscope that together have sufficiently short response time topermit accurate measurements of the on and off times of the transmitted signal.

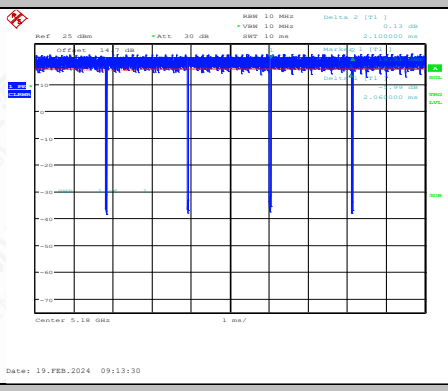
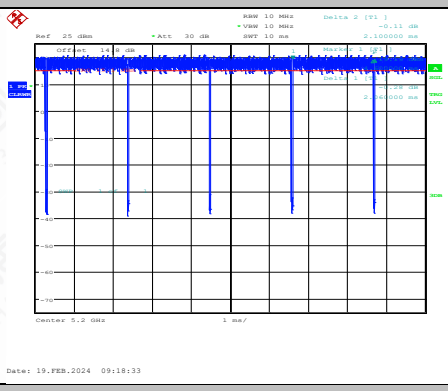
b) The zero-span mode on a spectrum analyzer or EMl receiver, if the response time andspacing between bins on the sweep are sufficient to permit accurate measurements of the onand off times of the transmitted signal. Set the center frequency of the instrument to thecenter frequency of the transmission, Set RBW> EBW if possible: otherwise. set RBW tothe largest available value. Set VBW > RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T. where 7is defined in II.B.1.a), and the number of sweep points across duration Texceeds 100. (Forexample. if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuringduty cycle shall not be used if 7 < 16.7 microseconds.)

6.1.3. Measurement Results

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.06	2.10	98.10
11A	Ant1	5200	2.06	2.10	98.10
11A	Ant1	5240	2.06	2.10	98.10
11A	Ant1	5260	2.07	2.10	98.57
11A	Ant1	5280	2.07	2.11	98.10
11A	Ant1	5320	2.07	2.10	98.57
11A	Ant1	5500	2.06	2.10	98.10
11A	Ant1	5580	2.07	2.10	98.57
11A	Ant1	5700	2.06	2.10	98.10
11N20SISO	Ant1	5180	1.92	1.96	97.96
11N20SISO	Ant1	5200	1.93	1.96	98.47
11N20SISO	Ant1	5240	1.93	1.96	98.47

11N20SISO	Ant1	5260	1.92	1.96	97.96
11N20SISO	Ant1	5280	1.92	1.96	97.96
11N20SISO	Ant1	5320	1.93	1.96	98.47
11N20SISO	Ant1	5500	1.93	1.97	97.97
11N20SISO	Ant1	5580	1.93	1.96	98.47
11N20SISO	Ant1	5700	1.92	1.96	97.96
11N40SISO	Ant1	5190	0.94	0.98	95.92
11N40SISO	Ant1	5230	0.95	0.98	96.94
11N40SISO	Ant1	5270	0.95	0.98	96.94
11N40SISO	Ant1	5310	0.95	0.99	95.96
11N40SISO	Ant1	5510	0.94	0.98	95.92
11N40SISO	Ant1	5550	0.95	0.99	95.96
11N40SISO	Ant1	5670	0.95	0.98	96.94
11AC20SISO	Ant1	5180	1.93	1.97	97.97
11AC20SISO	Ant1	5200	1.93	1.97	97.97
11AC20SISO	Ant1	5240	1.93	1.96	98.47
11AC20SISO	Ant1	5260	1.93	1.97	97.97
11AC20SISO	Ant1	5280	1.94	1.97	98.48
11AC20SISO	Ant1	5320	1.94	1.97	98.48
11AC20SISO	Ant1	5500	1.93	1.97	97.97
11AC20SISO	Ant1	5580	1.93	1.97	97.97
11AC20SISO	Ant1	5700	1.93	1.97	97.97
11AC40SISO	Ant1	5190	0.95	0.99	95.96
11AC40SISO	Ant1	5230	0.95	0.99	95.96
11AC40SISO	Ant1	5270	0.95	0.98	96.94
11AC40SISO	Ant1	5310	0.96	0.99	96.97
11AC40SISO	Ant1	5510	0.96	0.99	96.97
11AC40SISO	Ant1	5550	0.95	0.99	95.96
11AC40SISO	Ant1	5670	0.96	0.99	96.97
11AC80SISO	Ant1	5210	0.46	0.50	92.00
11AC80SISO	Ant1	5290	0.46	0.50	92.00
11AC80SISO	Ant1	5530	0.47	0.50	94.00
11AC80SISO	Ant1	5610	0.47	0.50	94.00

Test Graphs

NTNV-11A-Ant1-5180	NTNV-11A-Ant1-5200
	
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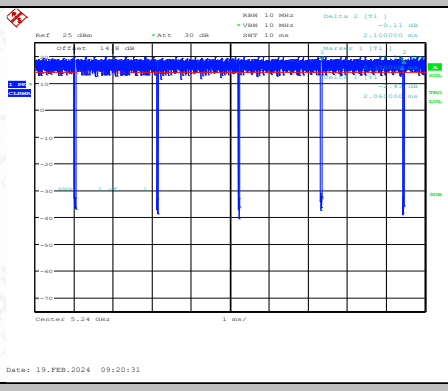	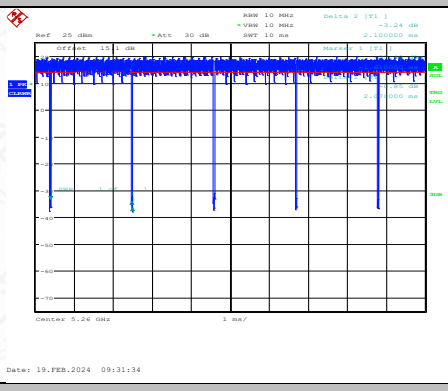
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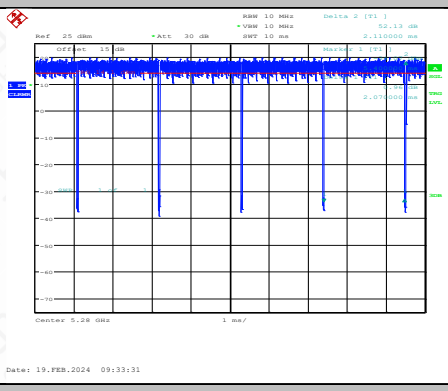	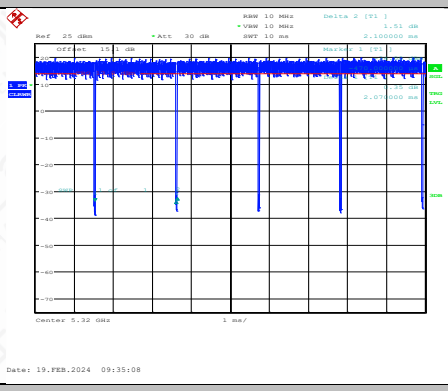
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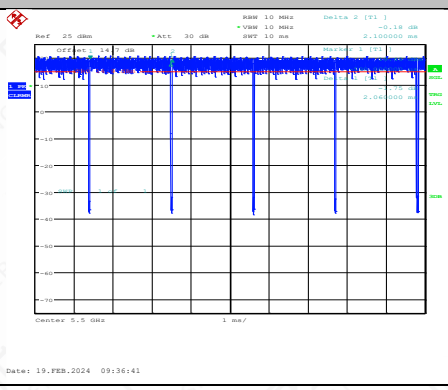	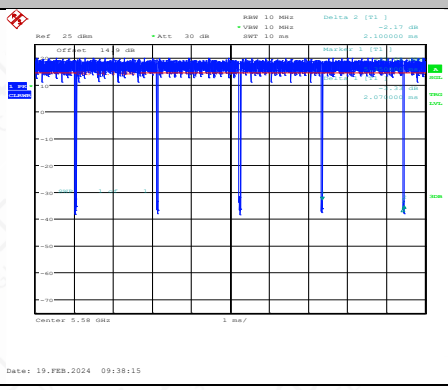

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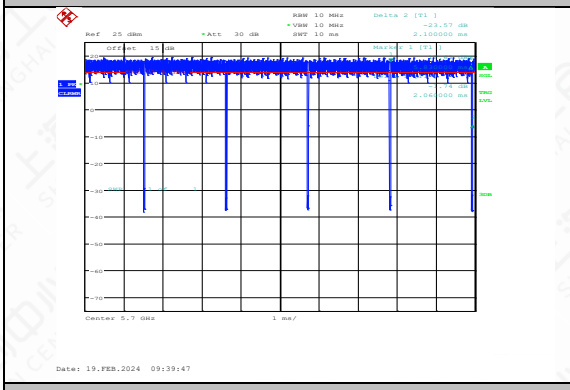	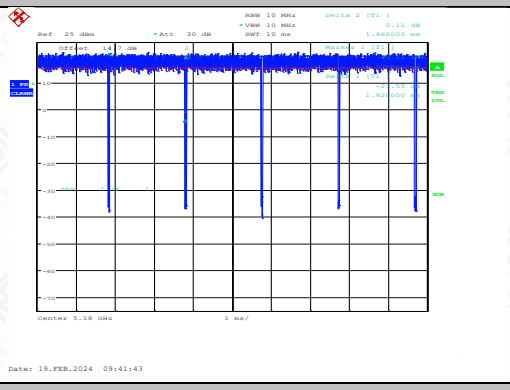
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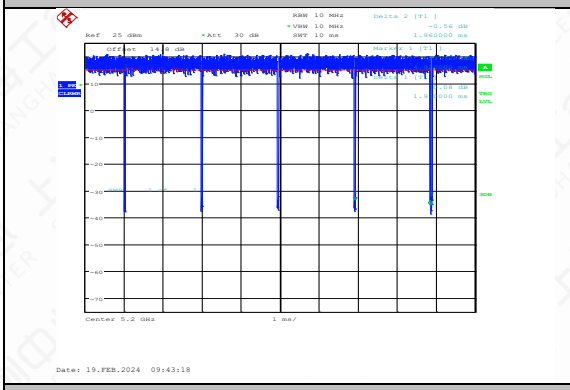	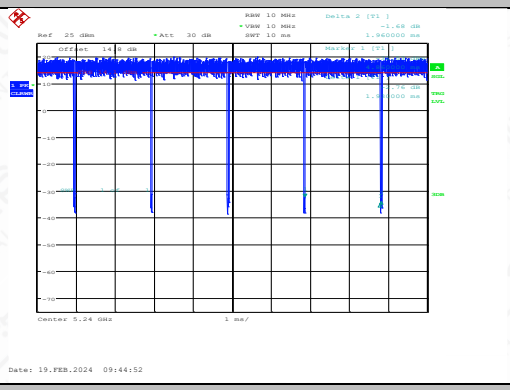
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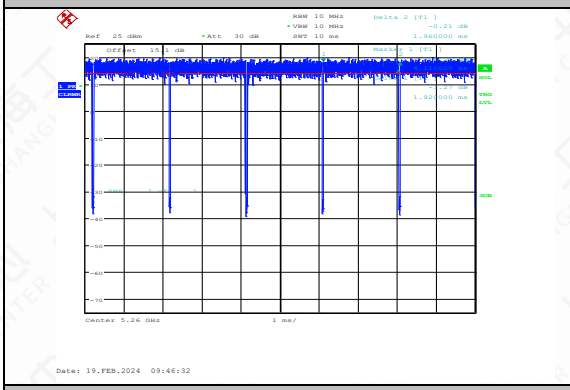	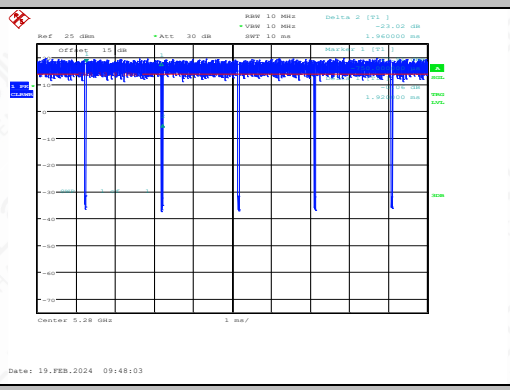
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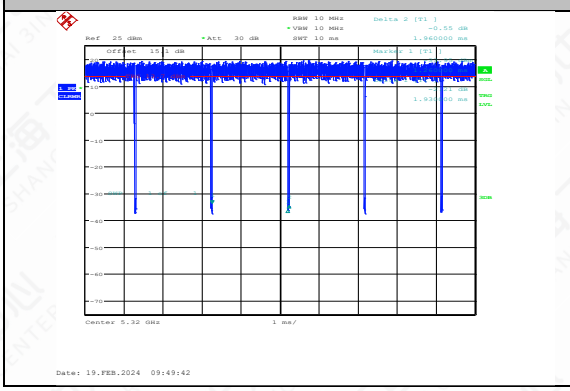	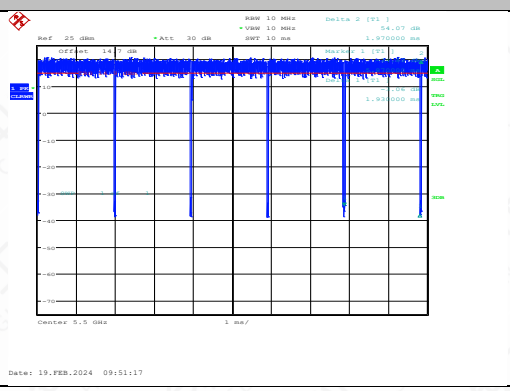

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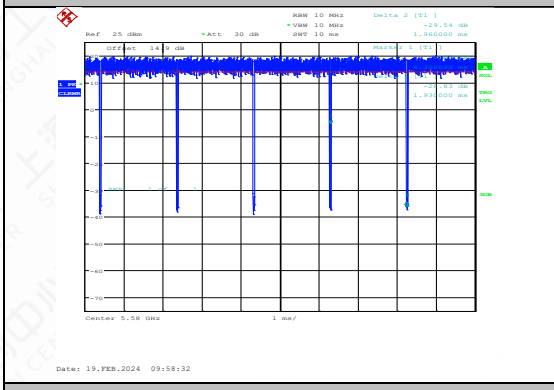	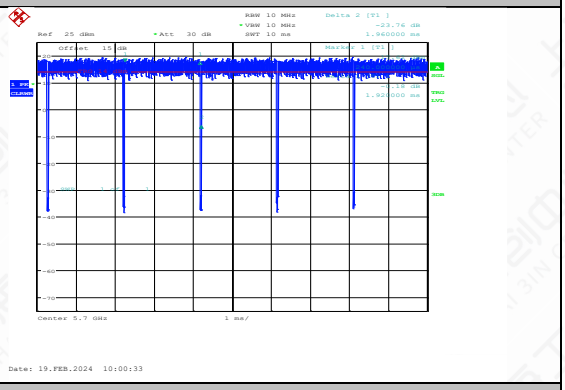
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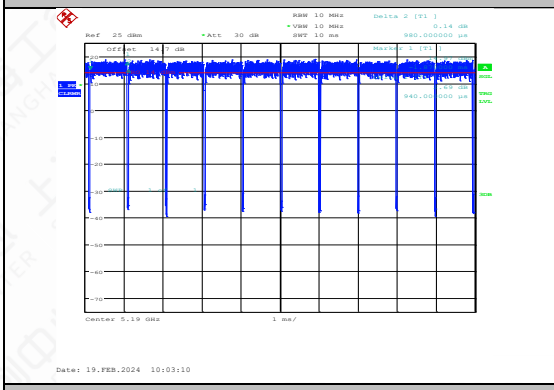	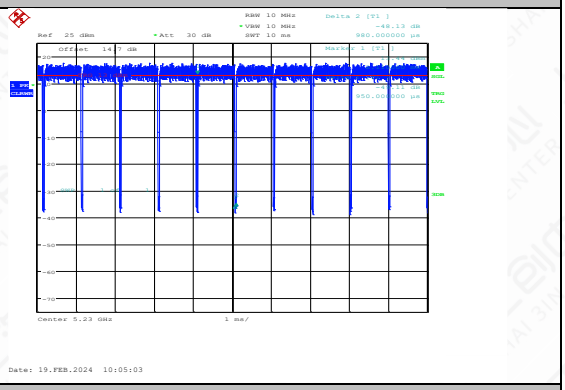
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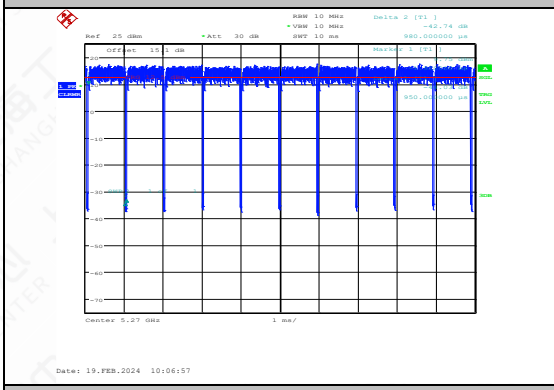	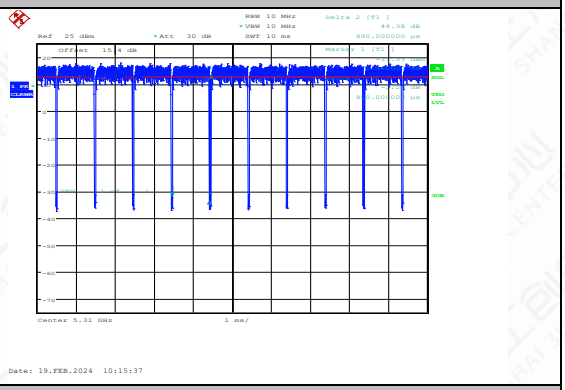
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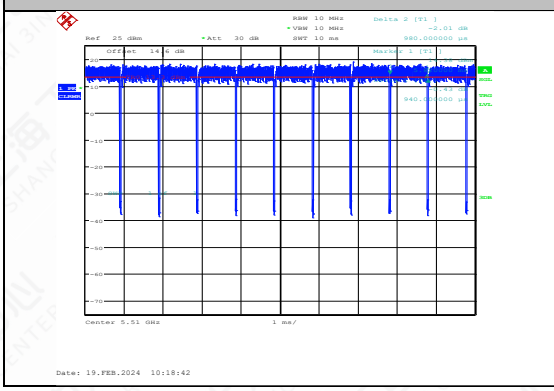	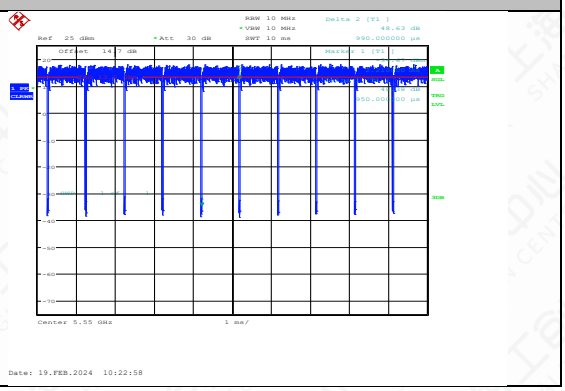

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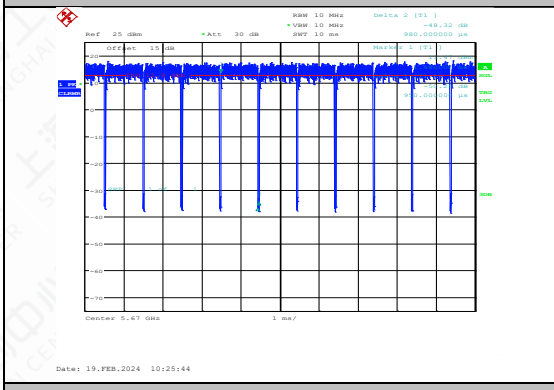	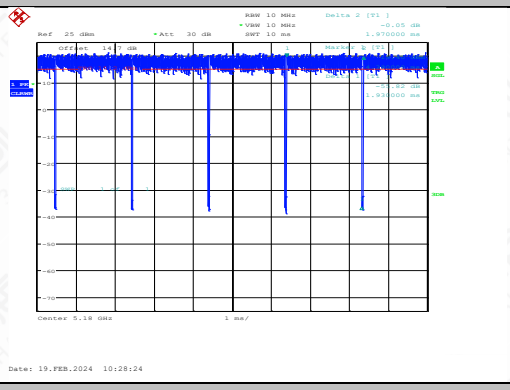
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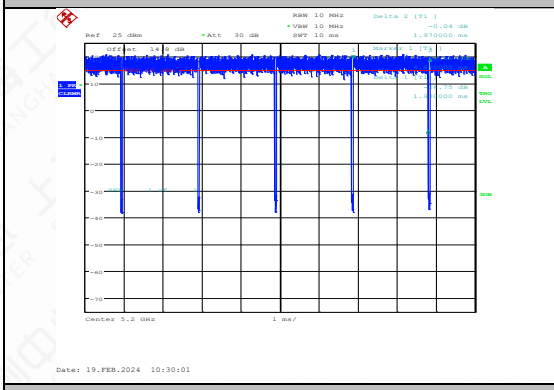	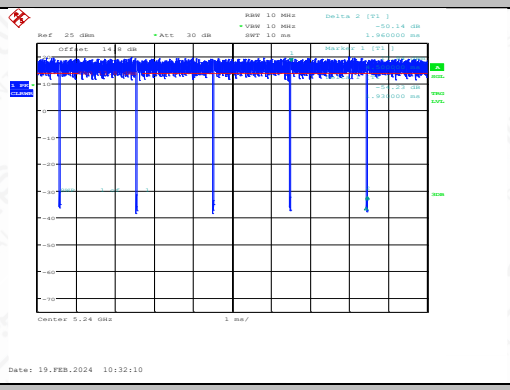
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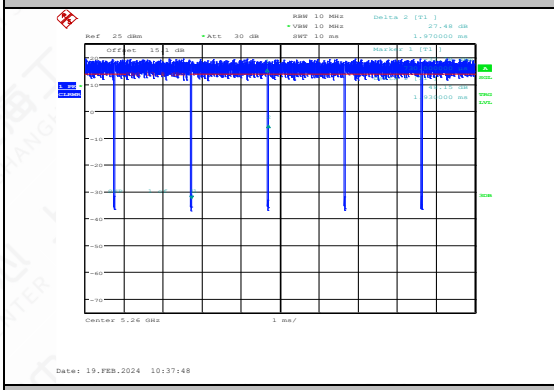	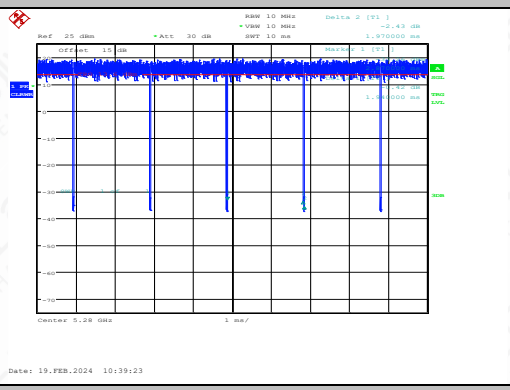
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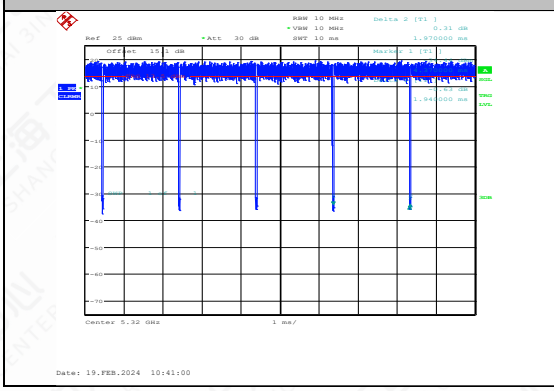	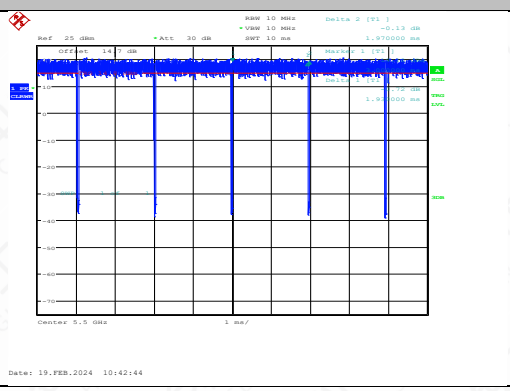

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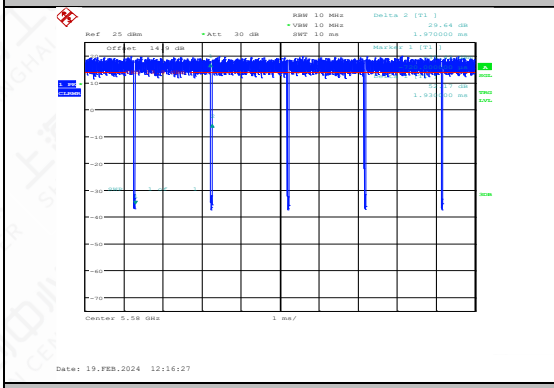	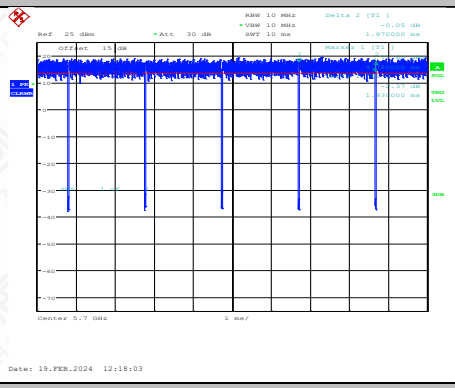
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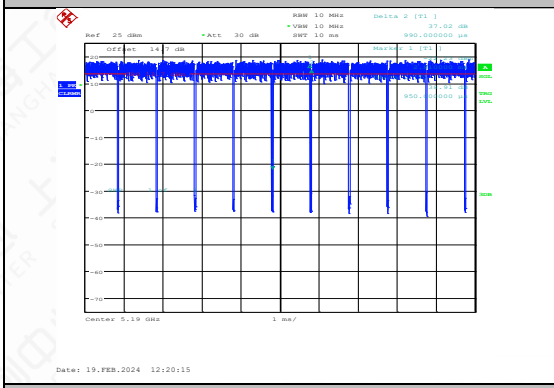	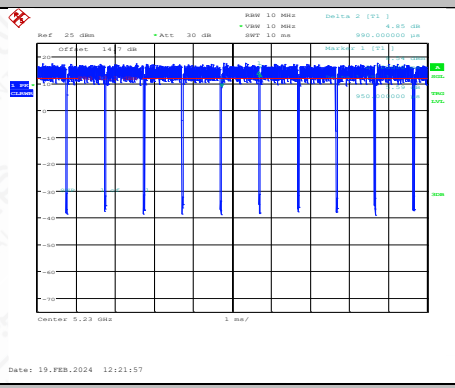
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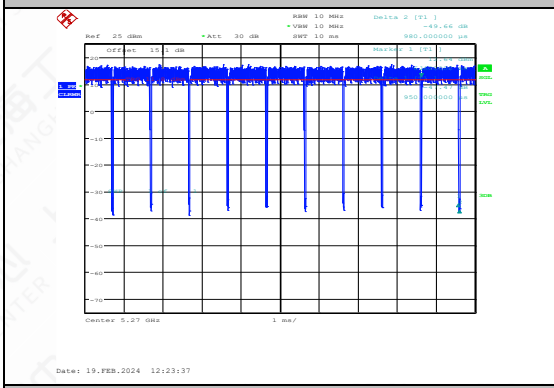	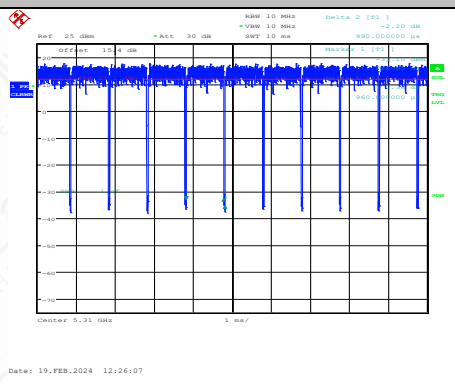
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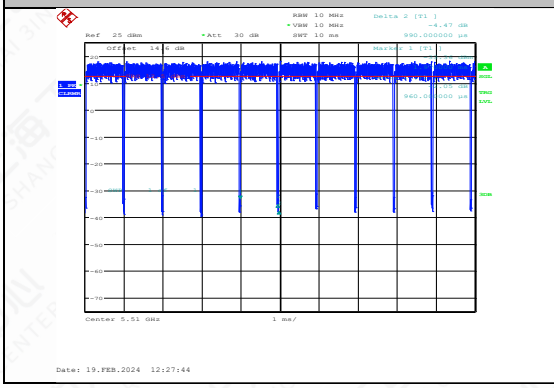	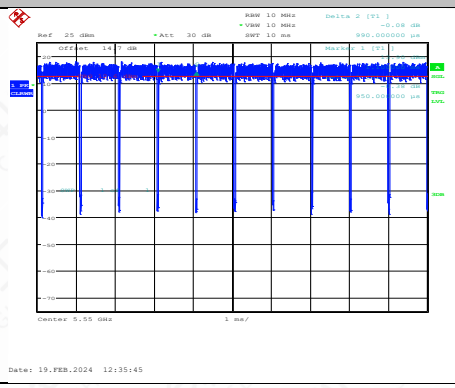

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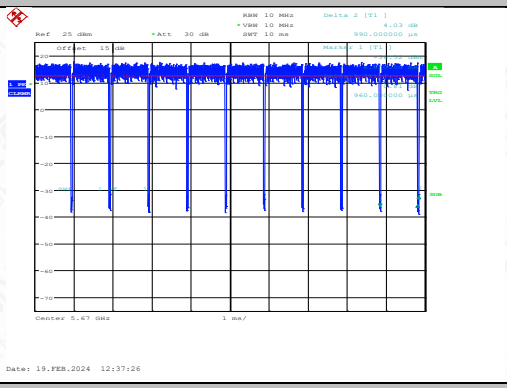	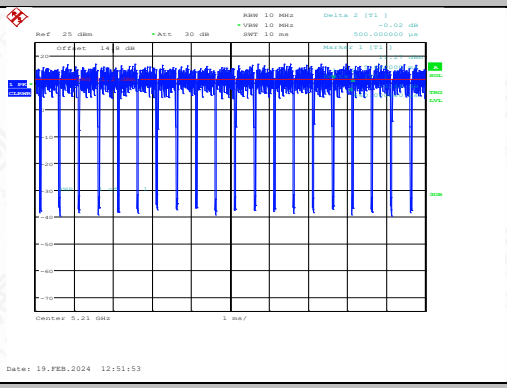
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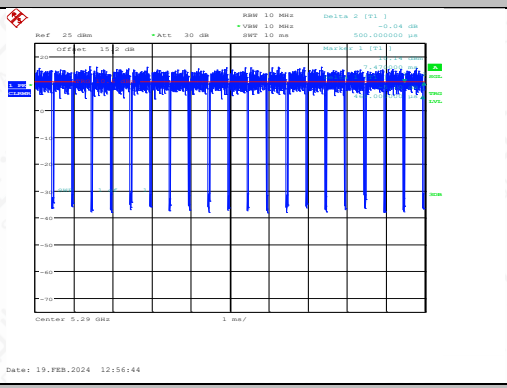	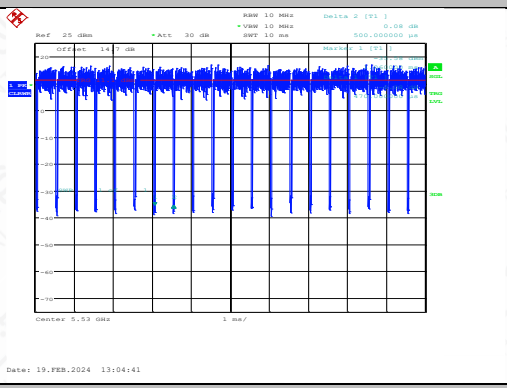
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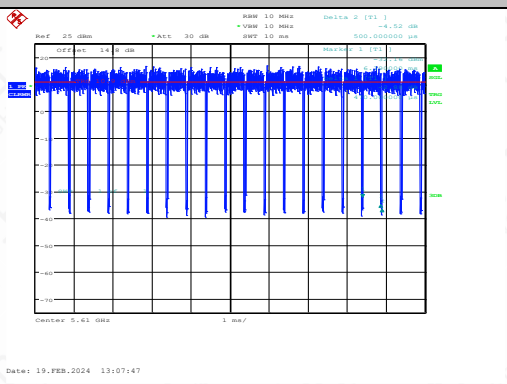
	/

6.2. Maximum Output Power-Conducted

6.2.1. Measurement Limit and Method

Standard	Limit (dBm)
FCC 47 CFR Part 15.407(a)(1)(iv)	For client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
RSS-247 6.2	5150-5250 MHz: For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band. 5250-5350 MHz: The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. 5470-5600 MHz and 5650-5725 MHz: The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm. whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band. The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum

6.2.2. Test Procedure

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

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

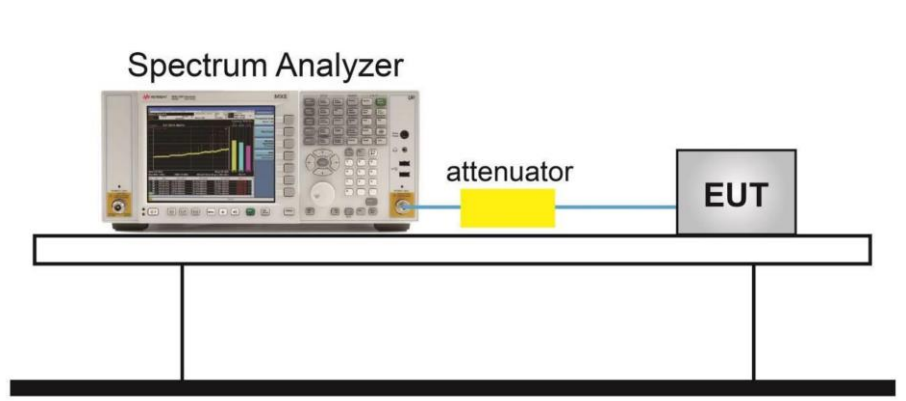
1. Measure the duty cycle, x, of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz. (iv) Set VBW ≥ 3 MHz.
4. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
5. Sweep time = auto.
6. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run.”
8. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be

averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.

9. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

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

6.2.3. Test setup



6.2.4. Measurement Results

FCC:

Test Mode	Frequency [MHz]	Set Power	Duty Cycle [%]	DC Factor [dBm]	Conducted Power [dBm]	Limit [dBm]
11A	5180	16	98.10	0.08	13.73	≤23.98
11A	5200	18	98.10	0.08	16.23	≤23.98
11A	5240	18	98.10	0.08	15.02	≤23.98
11A	5260	18	98.57	0.06	15.11	≤23.98
11A	5280	18	98.10	0.08	14.88	≤23.98
11A	5320	17	98.57	0.06	12.33	≤23.98
11A	5500	12	98.10	0.08	10.35	≤23.98
11A	5580	18	98.57	0.06	15.65	≤23.98
11A	5700	12.5	98.10	0.08	8.59	≤23.98
11N20SISO	5180	16	97.96	0.09	13.67	≤23.98
11N20SISO	5200	18	98.47	0.07	15.95	≤23.98
11N20SISO	5240	18	98.47	0.07	14.68	≤23.98
11N20SISO	5260	18	97.96	0.09	14.92	≤23.98

11N20SISO	5280	18	97.96	0.09	14.69	≤23.98
11N20SISO	5320	16.5	98.47	0.07	11.53	≤23.98
11N20SISO	5500	11.5	97.97	0.09	9.79	≤23.98
11N20SISO	5580	18	98.47	0.07	15.39	≤23.98
11N20SISO	5700	11.5	97.96	0.09	7.41	≤23.98
11N40SISO	5190	9.5	95.92	0.18	8.21	≤23.98
11N40SISO	5230	18	96.94	0.13	15.64	≤23.98
11N40SISO	5270	18	96.94	0.13	15.53	≤23.98
11N40SISO	5310	9.5	95.96	0.18	6.89	≤23.98
11N40SISO	5510	6	95.92	0.18	5.42	≤23.98
11N40SISO	5550	16	95.96	0.18	14.85	≤23.98
11N40SISO	5670	12	96.94	0.13	9.95	≤23.98
11AC20SISO	5180	16	97.97	0.09	13.61	≤23.98
11AC20SISO	5200	18	97.97	0.09	15.88	≤23.98
11AC20SISO	5240	18	98.47	0.07	14.50	≤23.98
11AC20SISO	5260	18	97.97	0.09	14.77	≤23.98
11AC20SISO	5280	18	98.48	0.07	14.54	≤23.98
11AC20SISO	5320	16.5	98.48	0.07	11.49	≤23.98
11AC20SISO	5500	11.5	97.97	0.09	9.78	≤23.98
11AC20SISO	5580	18	97.97	0.09	15.13	≤23.98
11AC20SISO	5700	11.5	97.97	0.09	7.38	≤23.98
11AC40SISO	5190	9.5	95.96	0.18	8.21	≤23.98
11AC40SISO	5230	18	95.96	0.18	15.58	≤23.98
11AC40SISO	5270	18	96.94	0.13	15.42	≤23.98
11AC40SISO	5310	9.5	96.97	0.13	6.85	≤23.98
11AC40SISO	5510	6	96.97	0.13	5.36	≤23.98
11AC40SISO	5550	16	95.96	0.18	14.63	≤23.98
11AC40SISO	5670	12	96.97	0.13	9.99	≤23.98
11AC80SISO	5210	9	92.00	0.36	7.05	≤23.98
11AC80SISO	5290	10	92.00	0.36	7.31	≤23.98
11AC80SISO	5530	4	94.00	0.27	3.22	≤23.98
11AC80SISO	5610	11	94.00	0.27	9.76	≤23.98

IC:

Test Mode	Frequency [MHz]	Set Power	Duty Cycle [%]	DC Factor [dBm]	Conducted Power [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]
11A	5180	16	98.10	0.08	13.73	--	1.63	15.36	22.51
11A	5200	18	98.10	0.08	16.23	--	1.63	17.86	22.48
11A	5240	18	98.10	0.08	15.02	--	1.63	16.65	22.46
11A	5260	18	98.57	0.06	15.11	23.47	2.37	17.48	29.47
11A	5280	18	98.10	0.08	14.88	23.47	2.37	17.25	29.47
11A	5320	17	98.57	0.06	12.33	23.44	2.37	14.7	29.44
11A	5500	12	98.10	0.08	10.35	23.57	2.75	13.1	29.57
11A	5580	18	98.57	0.06	15.65	23.53	2.75	18.4	29.53
11A	5700	12.5	98.10	0.08	8.59	23.45	2.75	11.34	29.45
11N20SISO	5180	16	97.96	0.09	13.67	--	1.63	15.3	22.77
11N20SISO	5200	18	98.47	0.07	15.95	--	1.63	17.58	22.75
11N20SISO	5240	18	98.47	0.07	14.68	--	1.63	16.31	22.71
11N20SISO	5260	18	97.96	0.09	14.92	23.72	2.37	17.29	29.72
11N20SISO	5280	18	97.96	0.09	14.69	23.71	2.37	17.06	29.71
11N20SISO	5320	16.5	98.47	0.07	11.53	23.70	2.37	13.9	29.70
11N20SISO	5500	11.5	97.97	0.09	9.79	23.82	2.75	12.54	29.82
11N20SISO	5580	18	98.47	0.07	15.39	23.77	2.75	18.14	29.77
11N20SISO	5700	11.5	97.96	0.09	7.41	23.70	2.75	10.16	29.70
11N40SISO	5190	9.5	95.92	0.18	8.21	--	1.63	9.84	23.01
11N40SISO	5230	18	96.94	0.13	15.64	--	1.63	17.27	23.01
11N40SISO	5270	18	96.94	0.13	15.53	26.68	2.37	17.9	32.68
11N40SISO	5310	9.5	95.96	0.18	6.89	26.66	2.37	9.26	32.66
11N40SISO	5510	6	95.92	0.18	5.42	26.71	2.75	8.17	32.71
11N40SISO	5550	16	95.96	0.18	14.85	26.70	2.75	17.6	32.70
11N40SISO	5670	12	96.94	0.13	9.95	26.67	2.75	12.7	32.67
11AC20SISO	5180	16	97.97	0.09	13.61	--	1.63	15.24	22.75
11AC20SISO	5200	18	97.97	0.09	15.88	--	1.63	17.51	22.73
11AC20SISO	5240	18	98.47	0.07	14.50	--	1.63	16.13	22.71
11AC20SISO	5260	18	97.97	0.09	14.77	23.73	2.37	17.14	29.73
11AC20SISO	5280	18	98.48	0.07	14.54	23.71	2.37	16.91	29.71
11AC20SISO	5320	16.5	98.48	0.07	11.49	23.70	2.37	13.86	29.70
11AC20SISO	5500	11.5	97.97	0.09	9.78	23.80	2.75	12.53	29.80
11AC20SISO	5580	18	97.97	0.09	15.13	23.77	2.75	17.88	29.77
11AC20SISO	5700	11.5	97.97	0.09	7.38	23.69	2.75	10.13	29.69
11AC40SISO	5190	9.5	95.96	0.18	8.21	--	1.63	9.84	23.01
11AC40SISO	5230	18	95.96	0.18	15.58	--	1.63	17.21	23.01
11AC40SISO	5270	18	96.94	0.13	15.42	26.67	2.37	17.79	32.67
11AC40SISO	5310	9.5	96.97	0.13	6.85	26.65	2.37	9.22	32.65

11AC40SISO	5510	6	96.97	0.13	5.36	26.71	2.75	8.11	32.71
11AC40SISO	5550	16	95.96	0.18	14.63	26.69	2.75	17.38	32.69
11AC40SISO	5670	12	96.97	0.13	9.99	26.66	2.75	12.74	32.66
11AC80SISO	5210	9	92.00	0.36	7.05	--	1.63	8.68	23.01
11AC80SISO	5290	10	92.00	0.36	7.31	29.84	2.37	9.68	35.84
11AC80SISO	5610	11	94.00	0.27	9.76	29.89	2.75	12.51	35.89

Note：

1.The Duty Cycle Factor is compensated in the graph.

2. In the graph, the Center frequency = (Low frequency of 26dB OBW + High frequency of 26dB OBW) /2.

3.The 11a data rate 6Mbps is selected as worse condition, 11n/11ac data rate MCS0 is selected as worse condition, and the following cases are performed with this condition.

Test graphs

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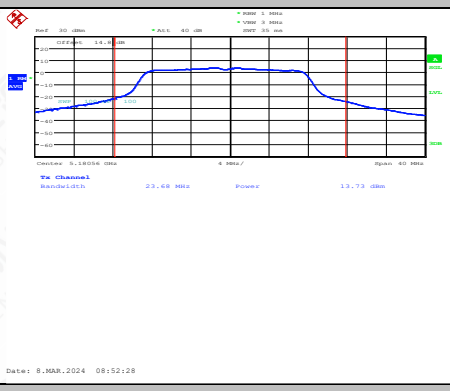	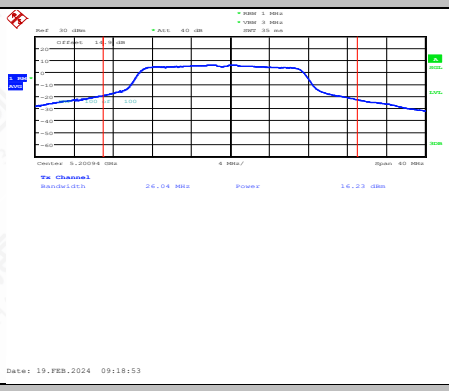
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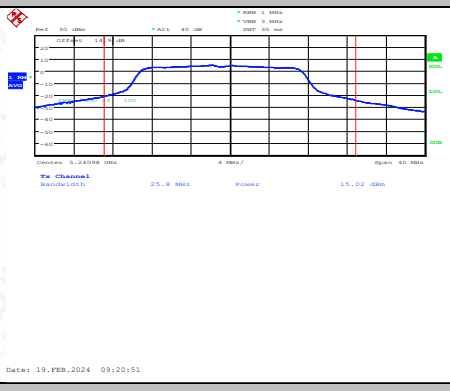	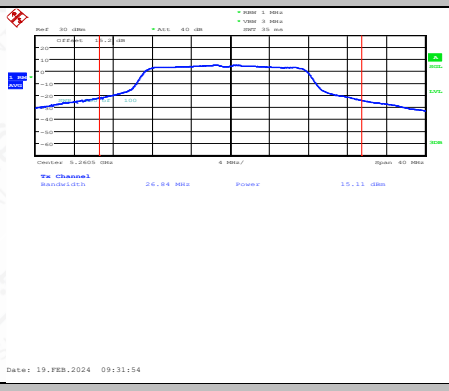
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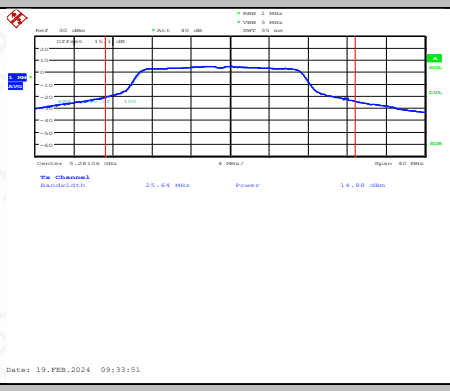	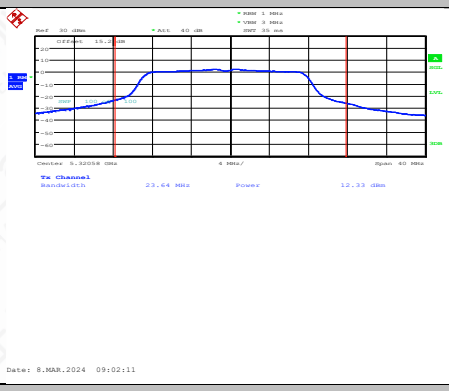
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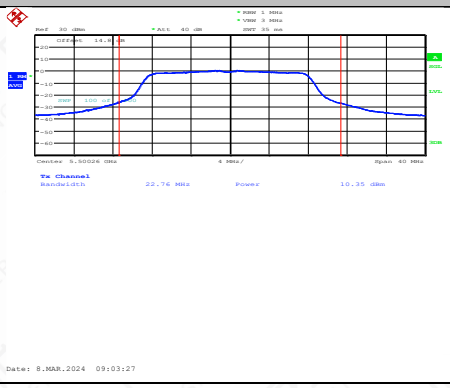	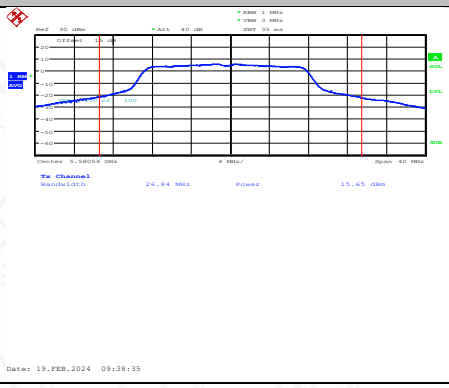

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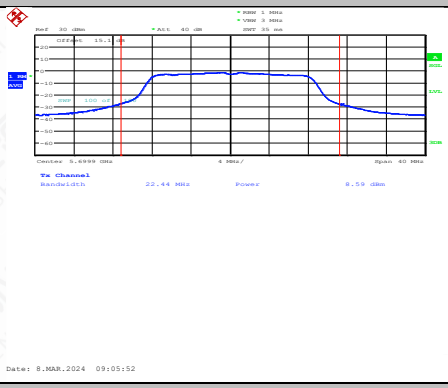	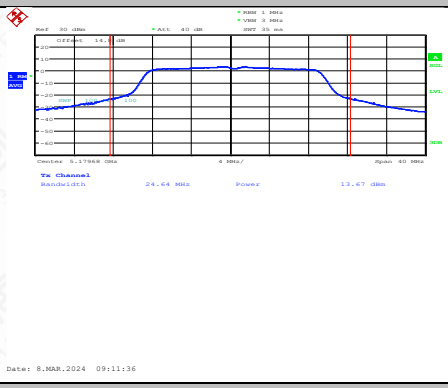
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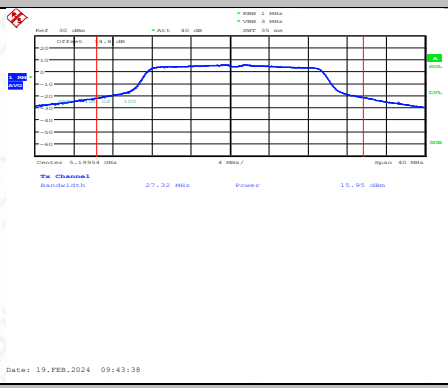	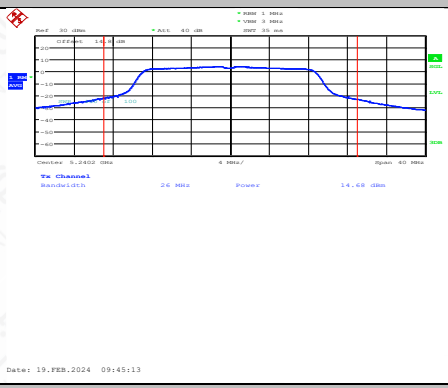
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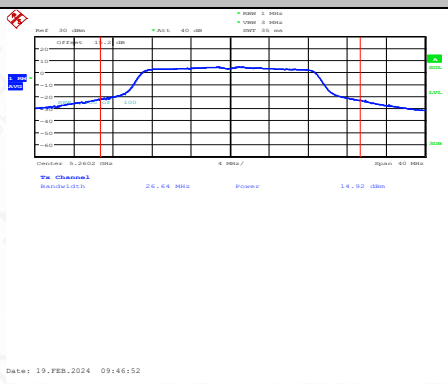	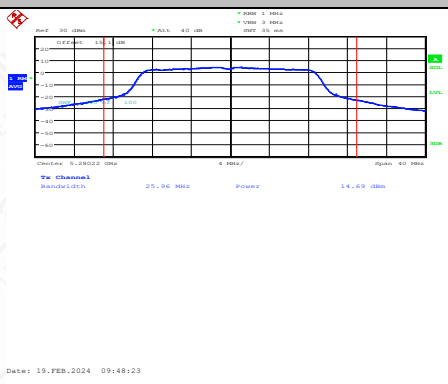
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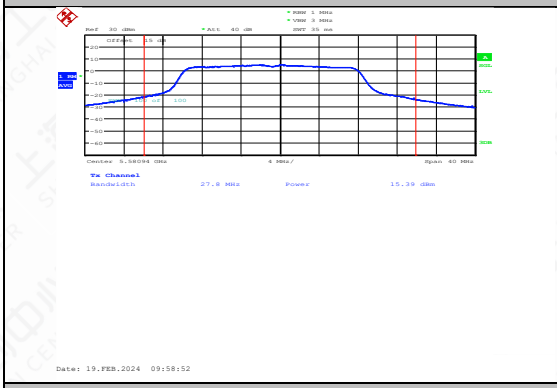	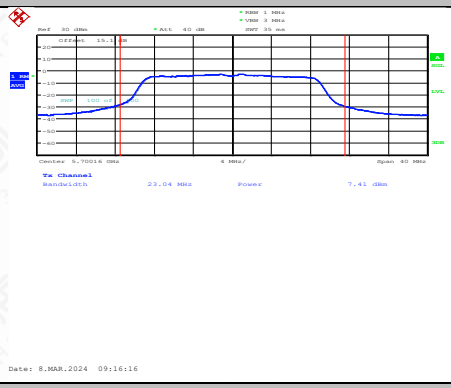
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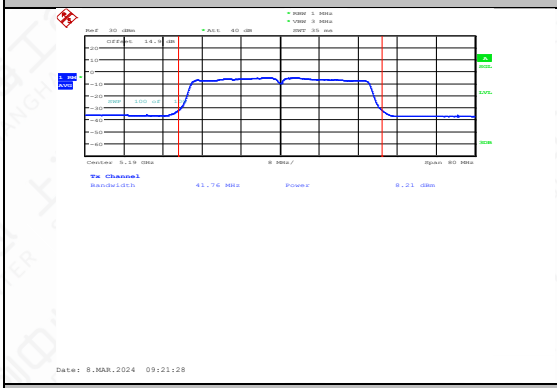	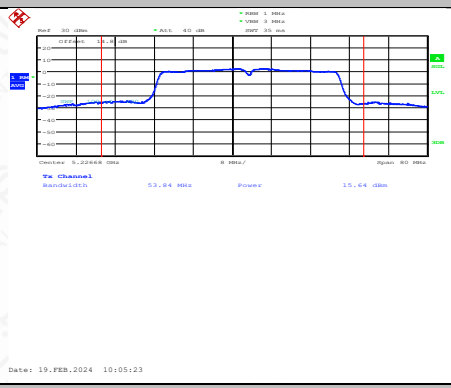
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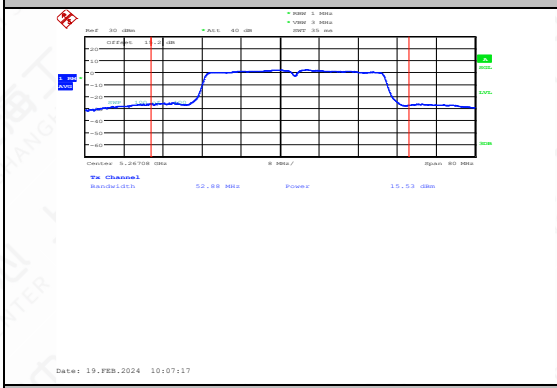	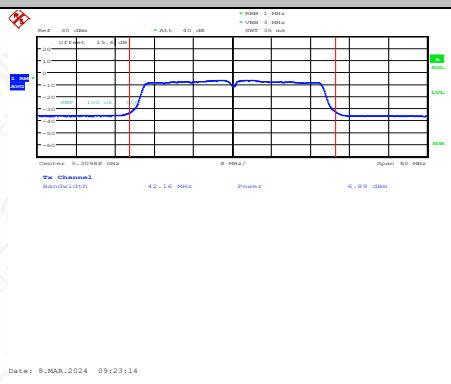
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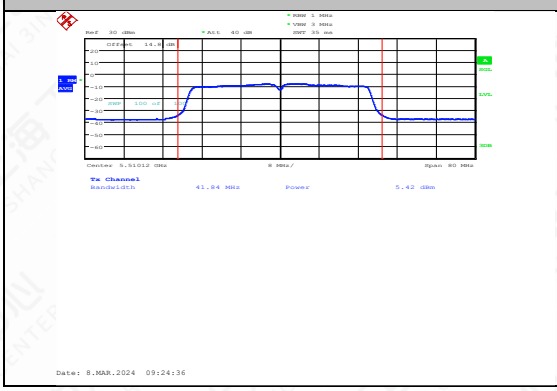	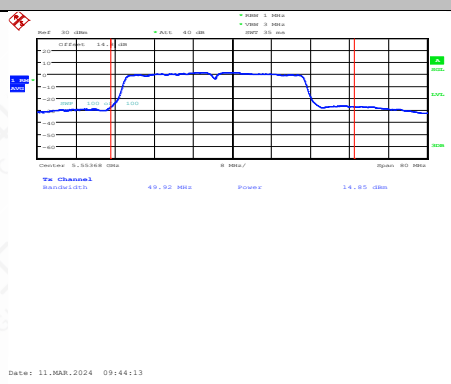

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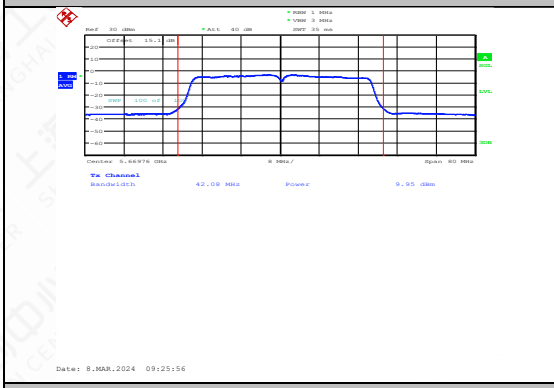	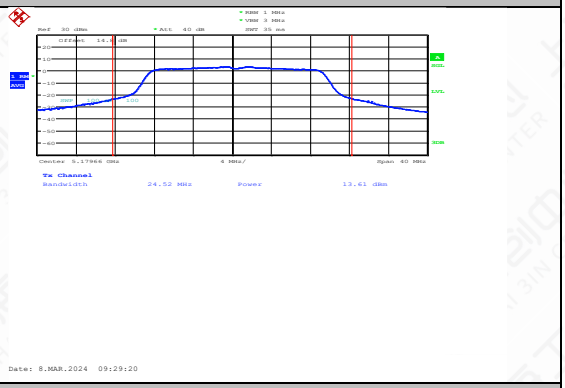
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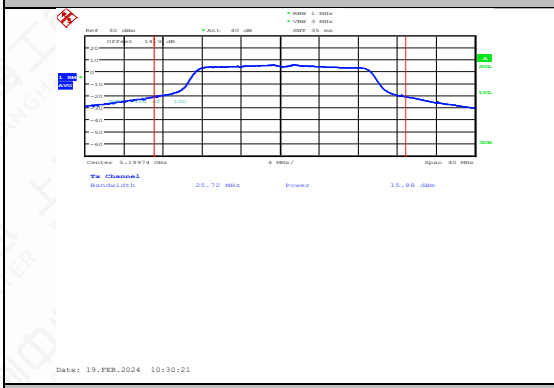	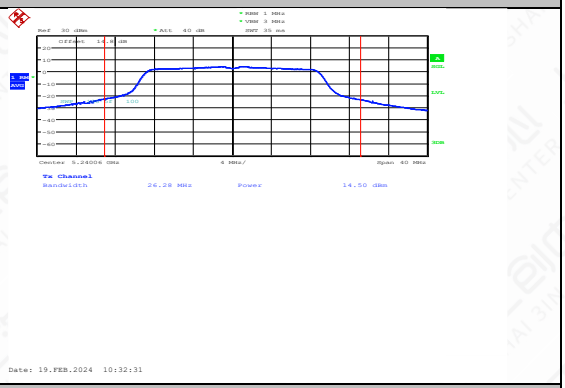
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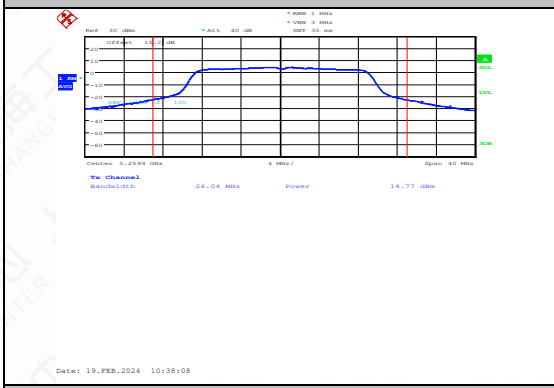	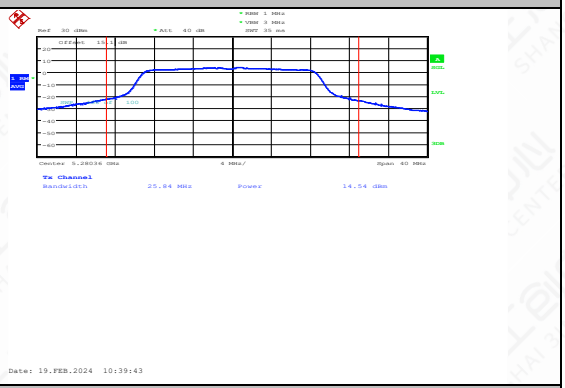
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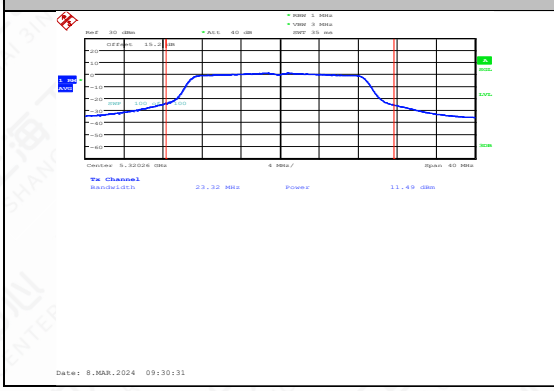	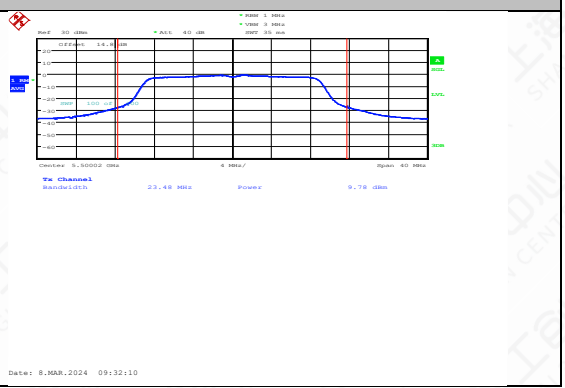

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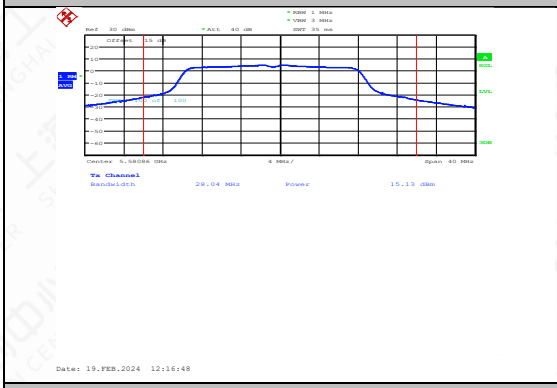	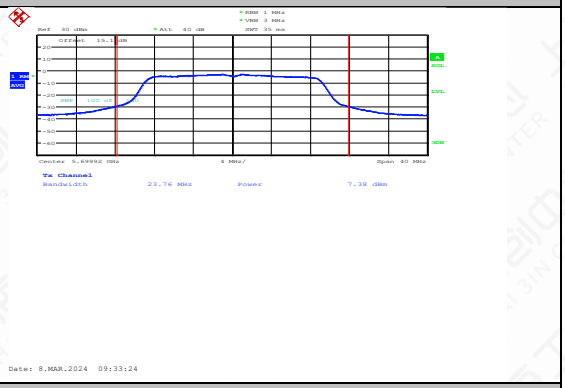
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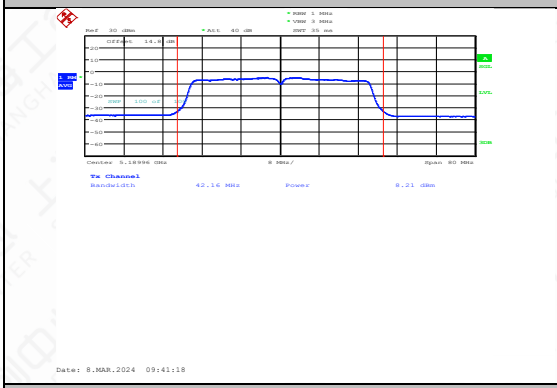	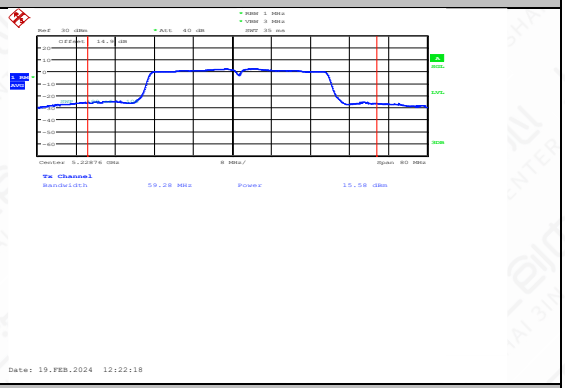
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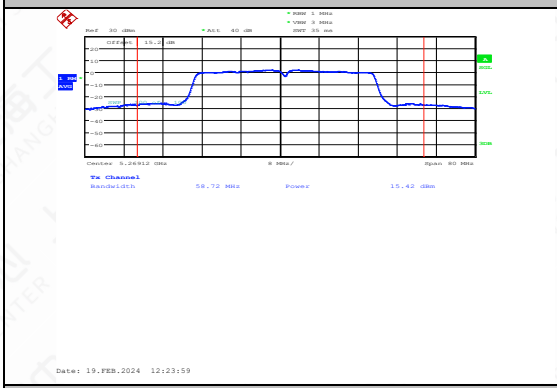	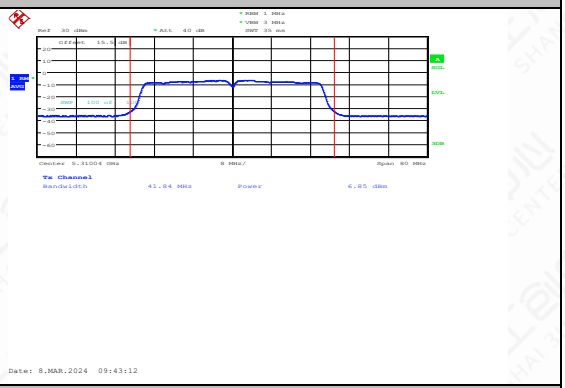
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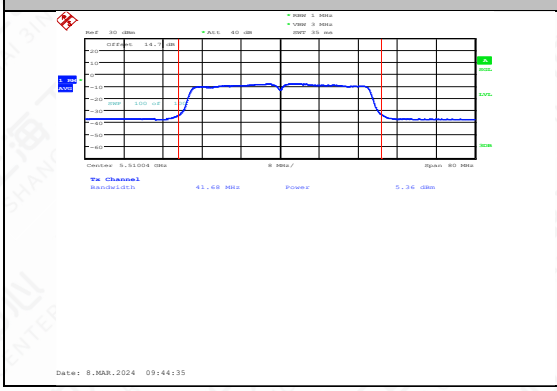	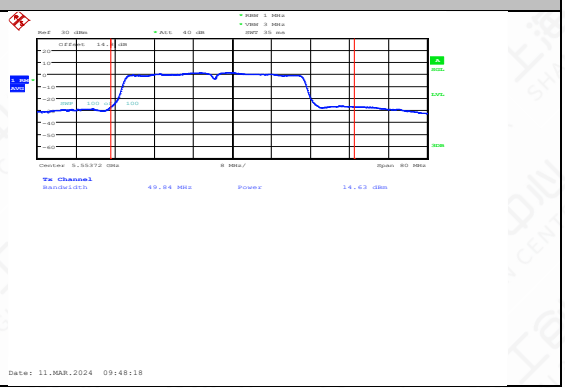

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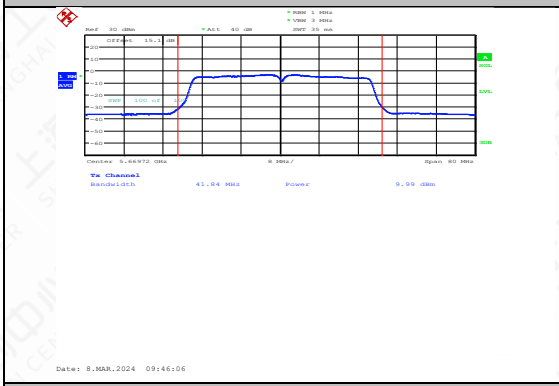	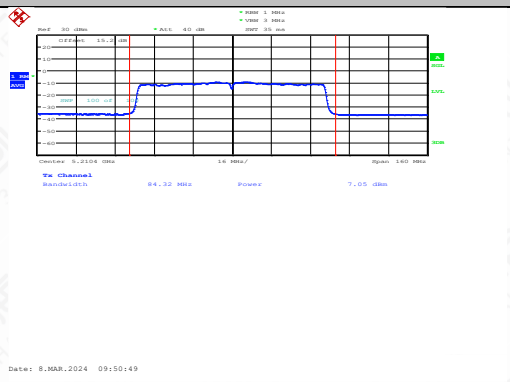
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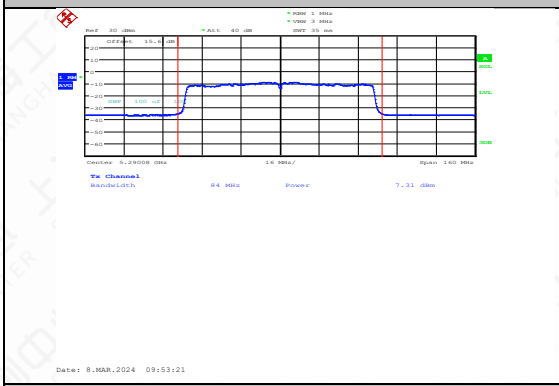	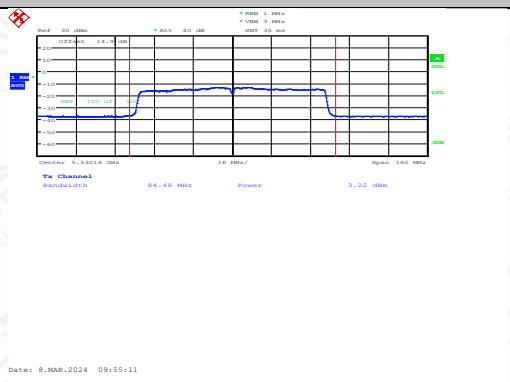
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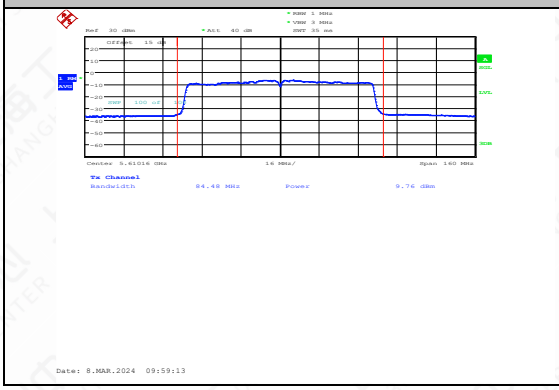
	/

6.3. Peak Power Spectral Density

6.3.1. Measurement Limit

Standard	Limit (dBm)
FCC 47 CFR Part 15.407(a)(1)(iv)	≤11
RSS-247 6.2	5150-5250 MHz: The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band. 5250-5350 MHz: The power spectral density shall not exceed 11 dBm in any 1.0 MHz band. 5470-5600 MHz and 5650-5725 MHz: The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

6.3.2. Test Procedure

The measurement method is made according to KDB 789033 F

1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power….” (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)

2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.

3. Make the following adjustments to the peak value of the spectrum, if applicable:

a) If Method SA-2 or SA-2 Alternative was used, add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum.

b) If Method SA-3 Alternative was used and the linear mode was used in step II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.

4. The result is the Maximum PSD over 1 MHz reference bandwidth.

5. For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the

specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

a) Set RBW ≥ 1/*T*, where *T* is defined in II.B.l.a).

b) Set VBW ≥ 3 RBW.

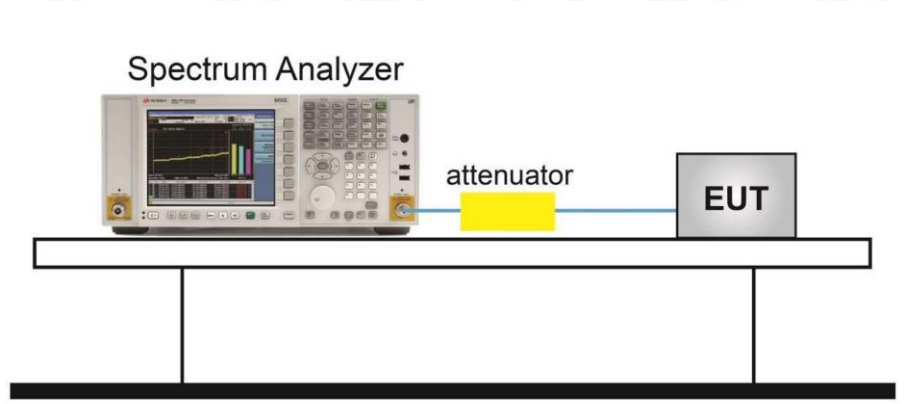
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/RBW) to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

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

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

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

6.3.3. Test setup



6.3.4. Measurement Results

FCC

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.23	≤11.00	PASS
11A	Ant1	5200	5.88	≤11.00	PASS
11A	Ant1	5240	4.69	≤11.00	PASS
11A	Ant1	5260	4.71	≤11.00	PASS
11A	Ant1	5280	4.56	≤11.00	PASS
11A	Ant1	5320	1.72	≤11.00	PASS

11A	Ant1	5500	-0.31	≤11.00	PASS
11A	Ant1	5580	5.10	≤11.00	PASS
11A	Ant1	5700	-1.94	≤11.00	PASS
11N20SISO	Ant1	5180	2.90	≤11.00	PASS
11N20SISO	Ant1	5200	5.31	≤11.00	PASS
11N20SISO	Ant1	5240	4.19	≤11.00	PASS
11N20SISO	Ant1	5260	4.14	≤11.00	PASS
11N20SISO	Ant1	5280	4.09	≤11.00	PASS
11N20SISO	Ant1	5320	0.62	≤11.00	PASS
11N20SISO	Ant1	5500	-1.10	≤11.00	PASS
11N20SISO	Ant1	5580	4.41	≤11.00	PASS
11N20SISO	Ant1	5700	-3.45	≤11.00	PASS
11N40SISO	Ant1	5190	-5.43	≤11.00	PASS
11N40SISO	Ant1	5230	2.01	≤11.00	PASS
11N40SISO	Ant1	5270	1.66	≤11.00	PASS
11N40SISO	Ant1	5310	-7.11	≤11.00	PASS
11N40SISO	Ant1	5510	-8.39	≤11.00	PASS
11N40SISO	Ant1	5550	1.04	≤11.00	PASS
11N40SISO	Ant1	5670	-3.86	≤11.00	PASS
11AC20SISO	Ant1	5180	2.80	≤11.00	PASS
11AC20SISO	Ant1	5200	5.20	≤11.00	PASS
11AC20SISO	Ant1	5240	3.93	≤11.00	PASS
11AC20SISO	Ant1	5260	3.96	≤11.00	PASS
11AC20SISO	Ant1	5280	3.87	≤11.00	PASS
11AC20SISO	Ant1	5320	0.58	≤11.00	PASS
11AC20SISO	Ant1	5500	-1.15	≤11.00	PASS
11AC20SISO	Ant1	5580	4.18	≤11.00	PASS
11AC20SISO	Ant1	5700	-3.51	≤11.00	PASS
11AC40SISO	Ant1	5190	-5.30	≤11.00	PASS
11AC40SISO	Ant1	5230	1.97	≤11.00	PASS
11AC40SISO	Ant1	5270	1.55	≤11.00	PASS
11AC40SISO	Ant1	5310	-7.07	≤11.00	PASS
11AC40SISO	Ant1	5510	-8.45	≤11.00	PASS
11AC40SISO	Ant1	5550	0.76	≤11.00	PASS
11AC40SISO	Ant1	5670	-3.79	≤11.00	PASS
11AC80SISO	Ant1	5210	-9.77	≤11.00	PASS
11AC80SISO	Ant1	5290	-9.01	≤11.00	PASS
11AC80SISO	Ant1	5530	-13.59	≤11.00	PASS
11AC80SISO	Ant1	5610	-6.64	≤11.00	PASS

IC:

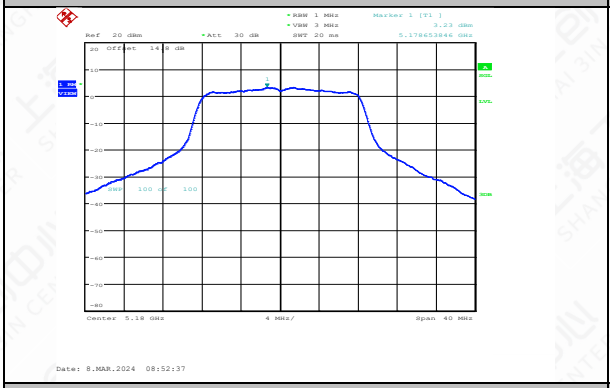
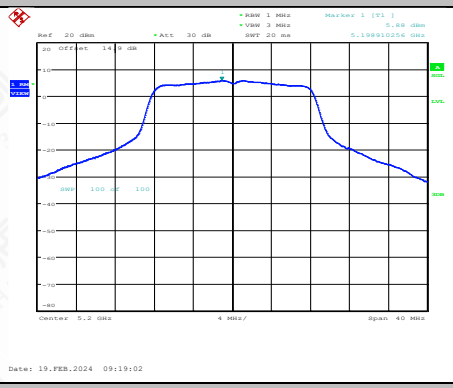
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	EIRP [dBm]	Limit [dBm/MHz]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	3.23	4.86	---	≤10.00	PASS
11A	Ant1	5200	5.88	7.51	---	≤10.00	PASS
11A	Ant1	5240	4.69	6.32	---	≤10.00	PASS
11A	Ant1	5260	4.71	---	≤11.00	---	PASS
11A	Ant1	5280	4.56	---	≤11.00	---	PASS
11A	Ant1	5320	1.72	---	≤11.00	---	PASS
11A	Ant1	5500	-0.31	---	≤11.00	---	PASS
11A	Ant1	5580	5.10	---	≤11.00	---	PASS
11A	Ant1	5700	-1.94	---	≤11.00	---	PASS
11N20SISO	Ant1	5180	2.90	4.53	---	≤10.00	PASS
11N20SISO	Ant1	5200	5.31	6.94	---	≤10.00	PASS
11N20SISO	Ant1	5240	4.19	5.82	---	≤10.00	PASS
11N20SISO	Ant1	5260	4.14	---	≤11.00	---	PASS
11N20SISO	Ant1	5280	4.09	---	≤11.00	---	PASS
11N20SISO	Ant1	5320	0.62	---	≤11.00	---	PASS
11N20SISO	Ant1	5500	-1.10	---	≤11.00	---	PASS
11N20SISO	Ant1	5580	4.41	---	≤11.00	---	PASS
11N20SISO	Ant1	5700	-3.45	---	≤11.00	---	PASS
11N40SISO	Ant1	5190	-5.43	-3.8	---	≤10.00	PASS
11N40SISO	Ant1	5230	2.01	3.64	---	≤10.00	PASS
11N40SISO	Ant1	5270	1.66	---	≤11.00	---	PASS
11N40SISO	Ant1	5310	-7.11	---	≤11.00	---	PASS
11N40SISO	Ant1	5510	-8.39	---	≤11.00	---	PASS
11N40SISO	Ant1	5550	1.04	---	≤11.00	---	PASS
11N40SISO	Ant1	5670	-3.86	---	≤11.00	---	PASS
11AC20SISO	Ant1	5180	2.80	4.43	---	≤10.00	PASS
11AC20SISO	Ant1	5200	5.20	6.83	---	≤10.00	PASS
11AC20SISO	Ant1	5240	3.93	5.56	---	≤10.00	PASS
11AC20SISO	Ant1	5260	3.96	---	≤11.00	---	PASS
11AC20SISO	Ant1	5280	3.87	---	≤11.00	---	PASS
11AC20SISO	Ant1	5320	0.58	---	≤11.00	---	PASS
11AC20SISO	Ant1	5500	-1.15	---	≤11.00	---	PASS
11AC20SISO	Ant1	5580	4.18	---	≤11.00	---	PASS
11AC20SISO	Ant1	5700	-3.51	---	≤11.00	---	PASS
11AC40SISO	Ant1	5190	-5.30	-3.67	---	≤10.00	PASS
11AC40SISO	Ant1	5230	1.97	3.6	---	≤10.00	PASS
11AC40SISO	Ant1	5270	1.55	---	≤11.00	---	PASS
11AC40SISO	Ant1	5310	-7.07	---	≤11.00	---	PASS
11AC40SISO	Ant1	5510	-8.45	---	≤11.00	---	PASS

11AC40SISO	Ant1	5550	0.76	---	≤11.00	---	PASS
11AC40SISO	Ant1	5670	-3.79	---	≤11.00	---	PASS
11AC80SISO	Ant1	5210	-9.77	-8.14	---	≤10.00	PASS
11AC80SISO	Ant1	5290	-9.01	---	≤11.00	---	PASS
11AC80SISO	Ant1	5610	-6.64	---	≤11.00	---	PASS

Note:

1. EIRP= Power Spectral Density(dBm/MHz)+Antenna gain(dBi)
2. The Duty Cycle Factor is compensated in the graph.

Test Graphs

11A-Ant1-5180-PASS	11A-Ant1-5200-PASS
	
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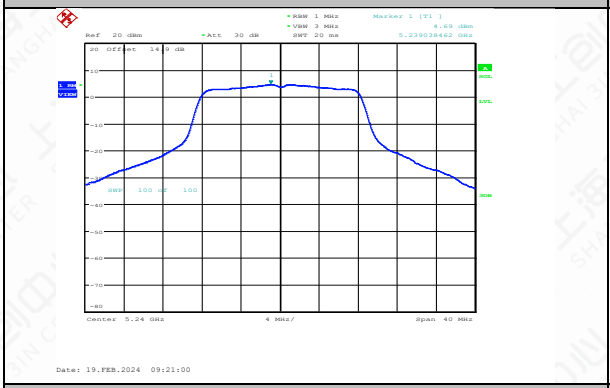	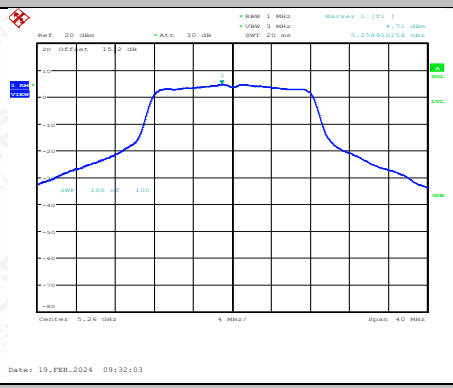
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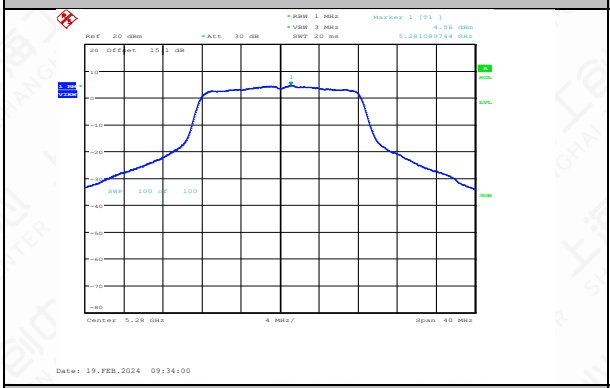
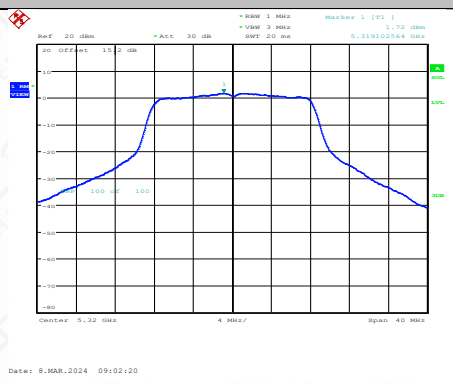
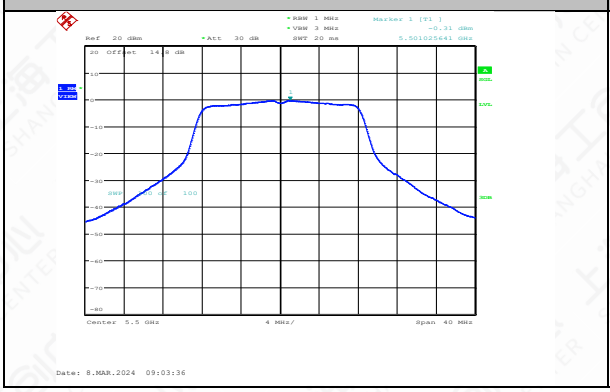
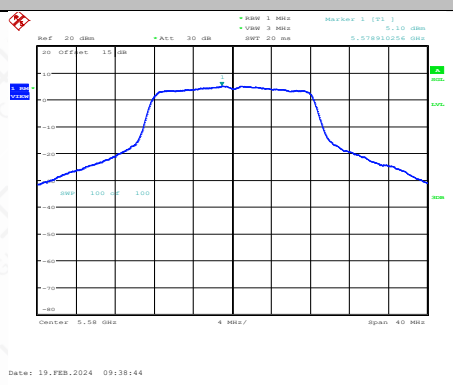
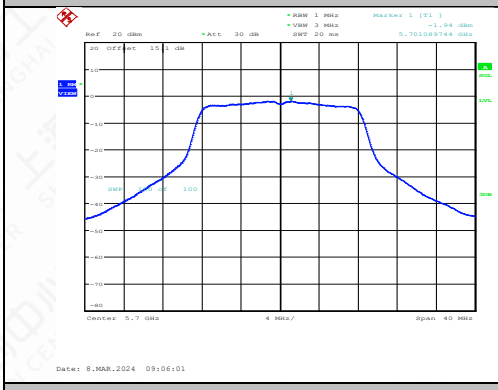
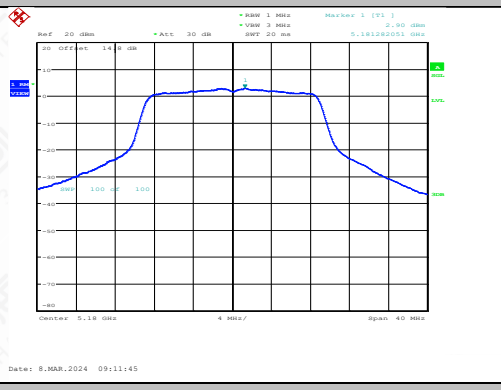
	
11A-Ant1-5500-PASS	11A-Ant1-5580-PASS
	

11A-Ant1-5700-PASS	11N20SISO-Ant1-5180-PASS
	
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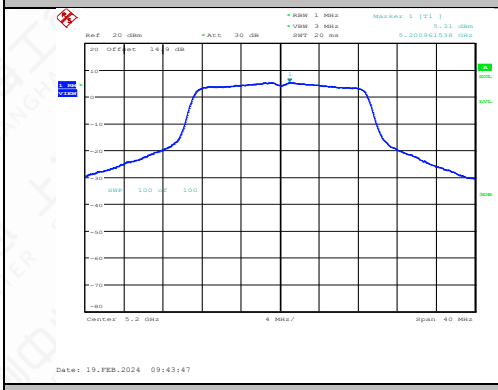
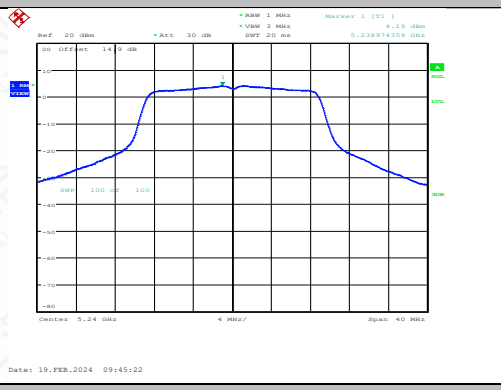
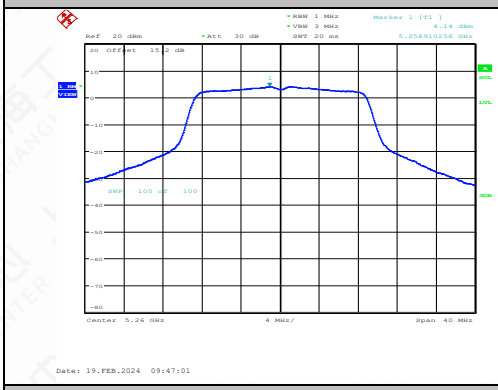
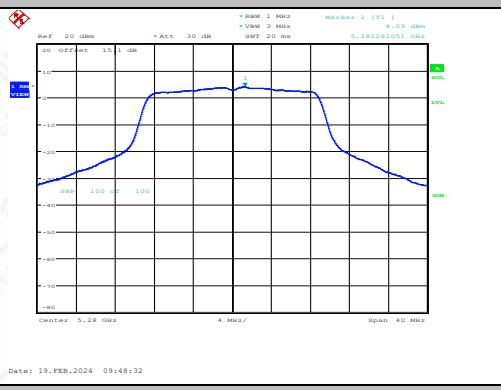
	
11N20SISO-Ant1-5260-PASS	11N20SISO-Ant1-5280-PASS
	
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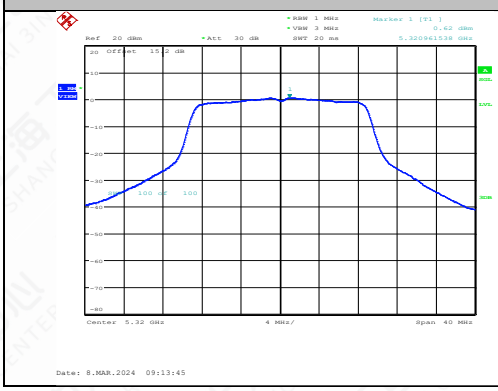	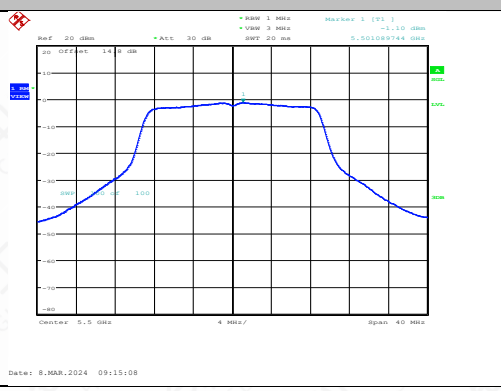

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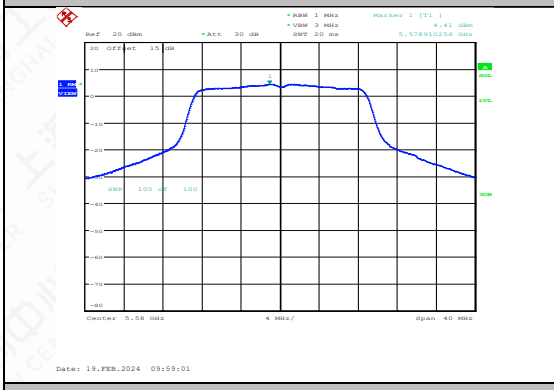	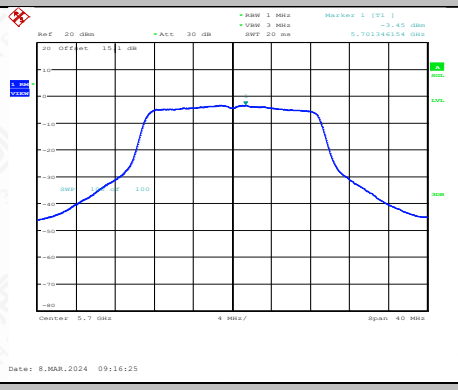
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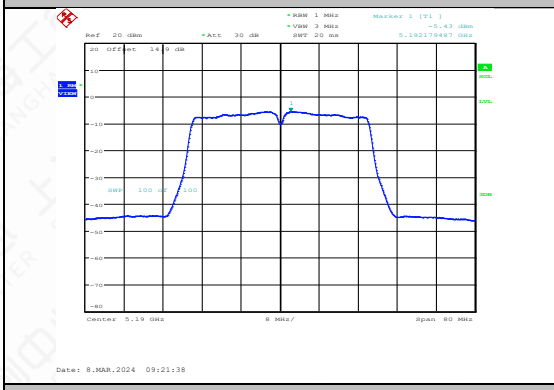	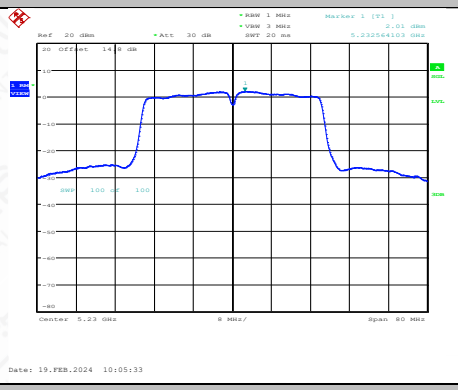
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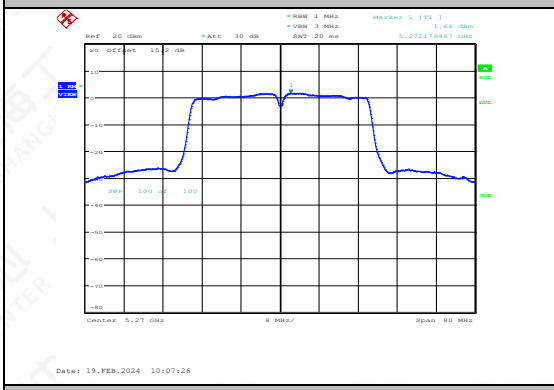	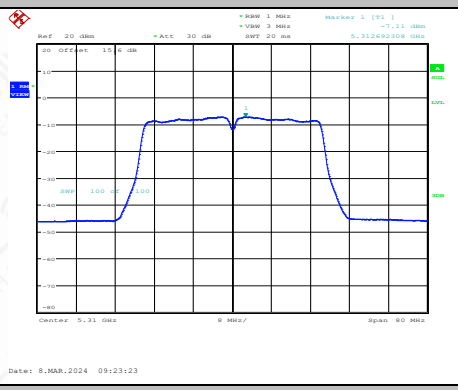
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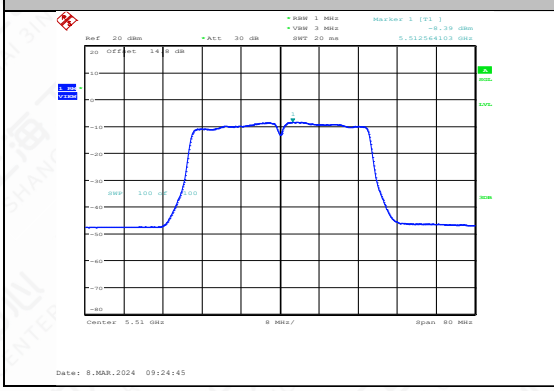	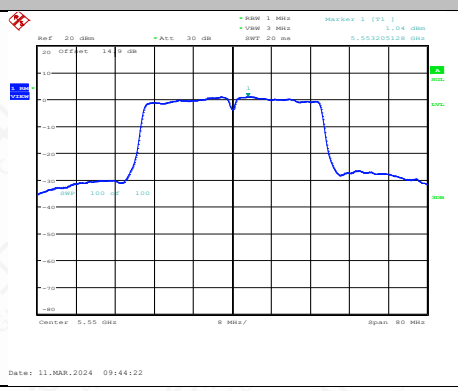

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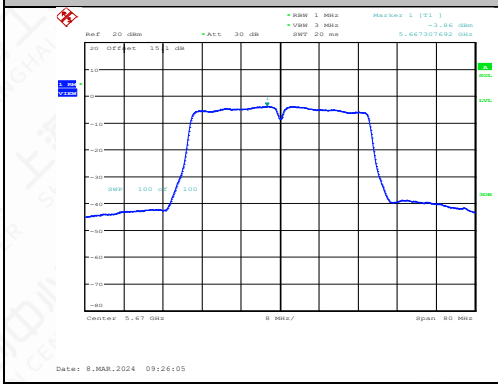	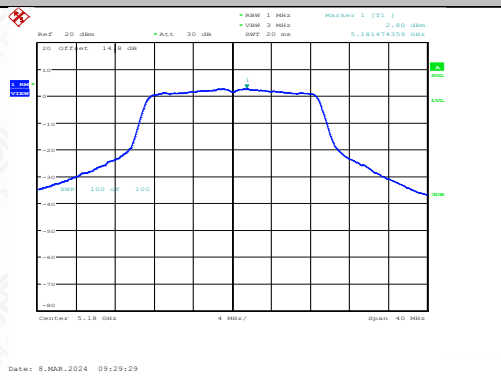
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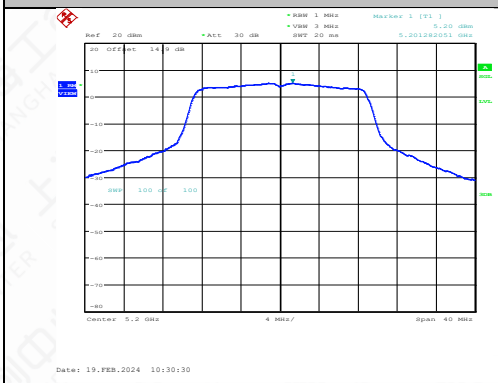	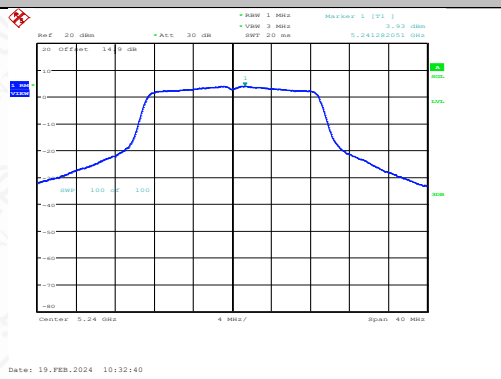
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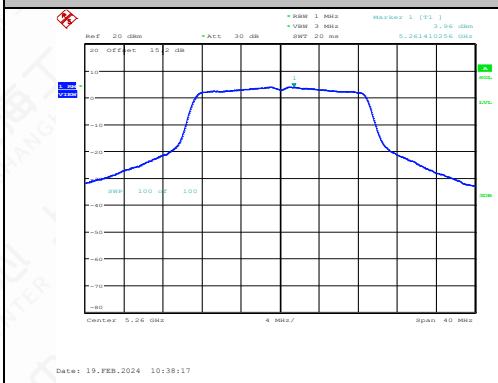	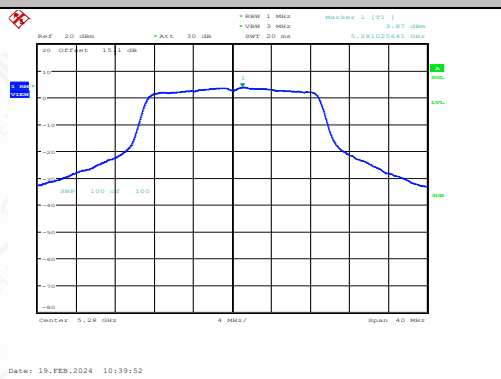
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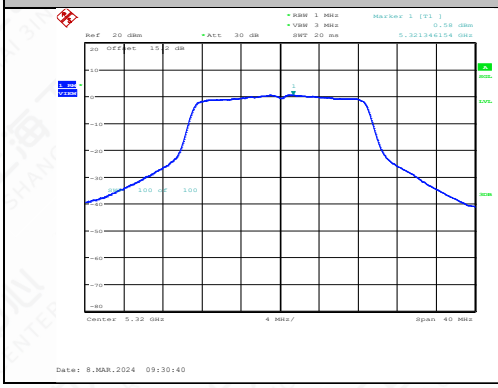	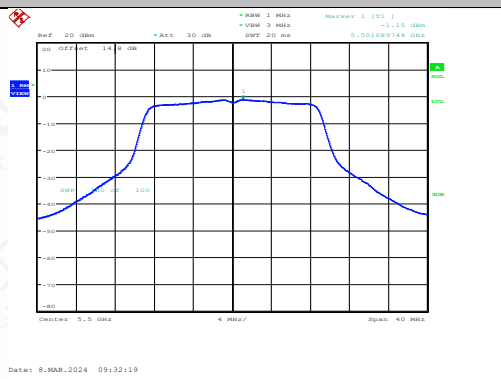

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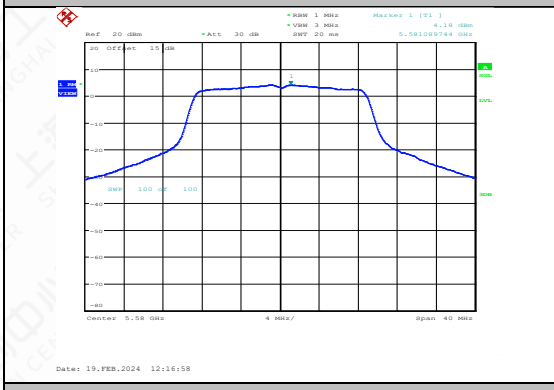	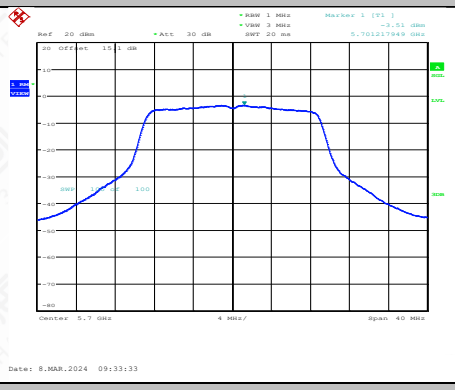
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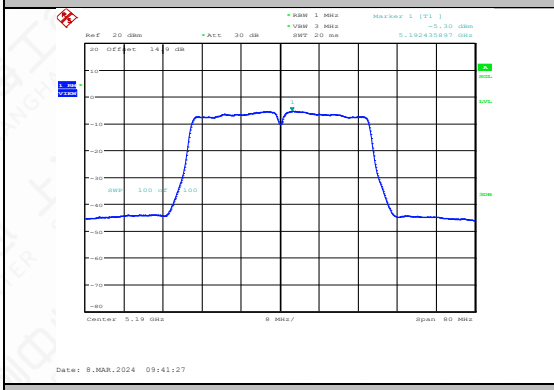	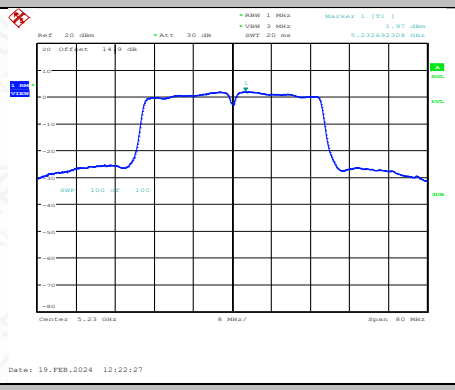
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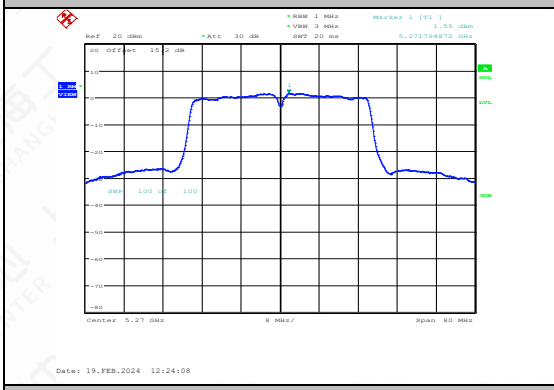	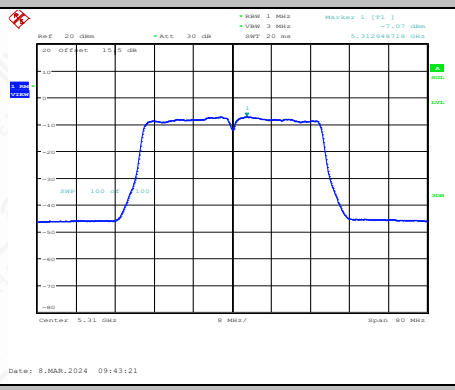
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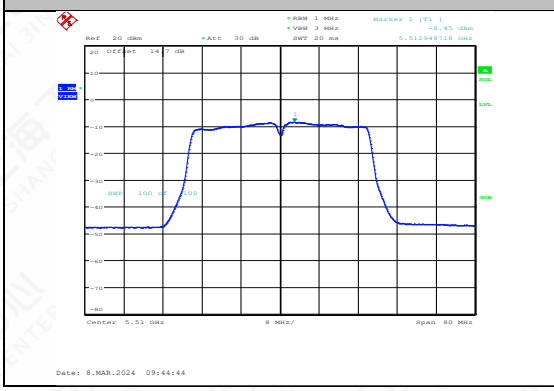	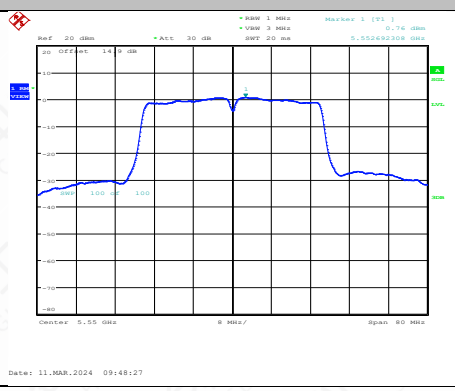

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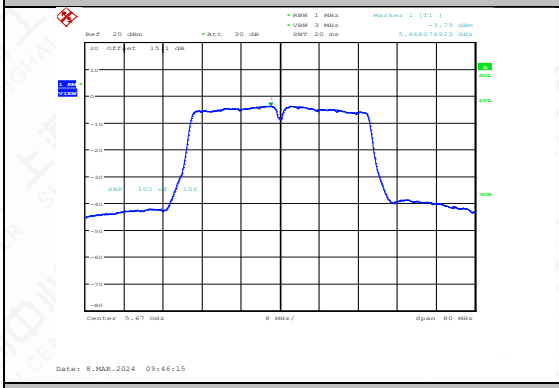	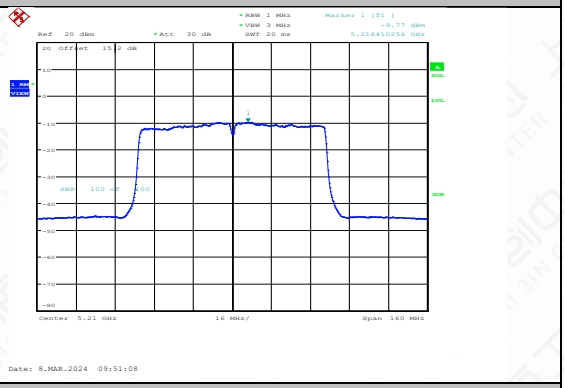
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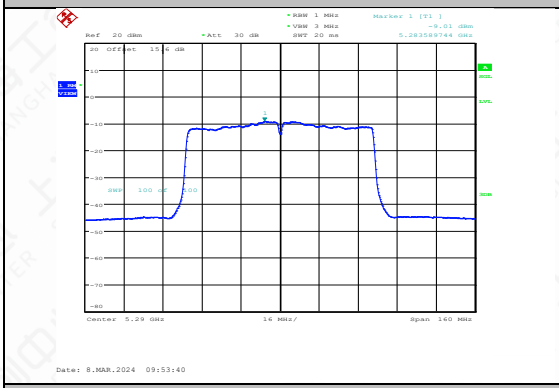	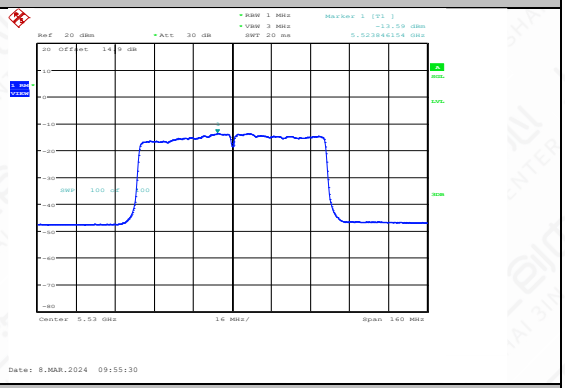
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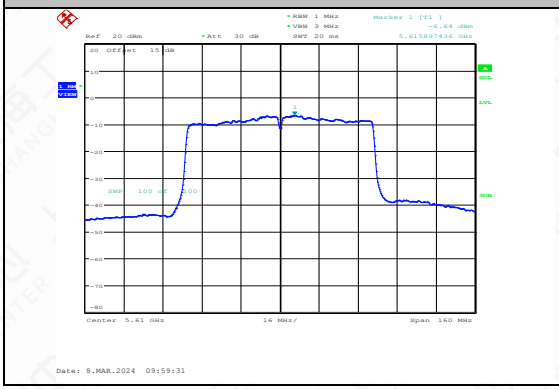
	/

6.4. Occupied 26dB Bandwidth(conducted)

6.4.1 Measurement Limt

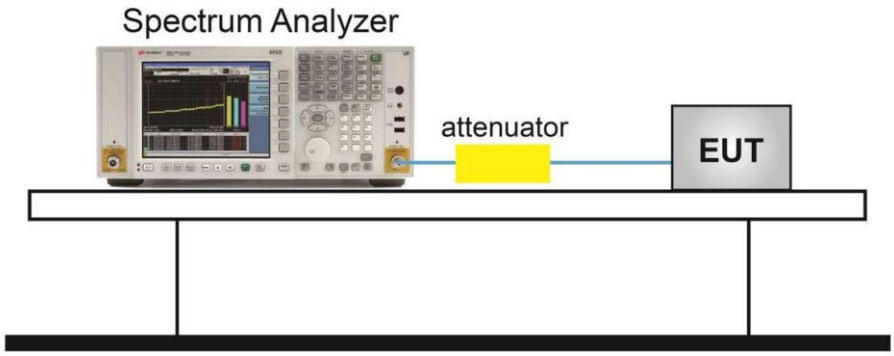
Standard	Limit(MHz)
FCC 47 CFR Part 15.407(a)	N/A
RSS-247 6.2	N/A

6.4.2 Test Procedure

The measurement method is made according to KDB 789033 C

1. Set RBW = approximately 1% of the emission bandwidth
2. Set the VBW > RBW
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6.4.3 Test Setup

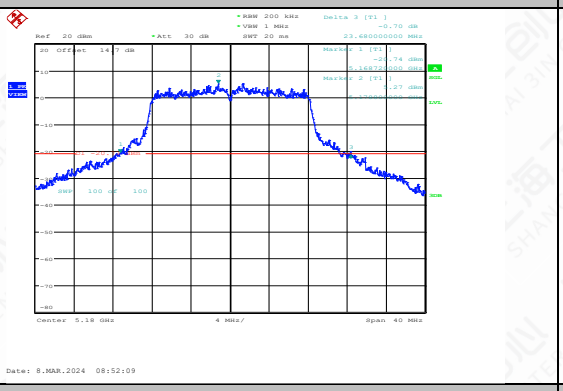
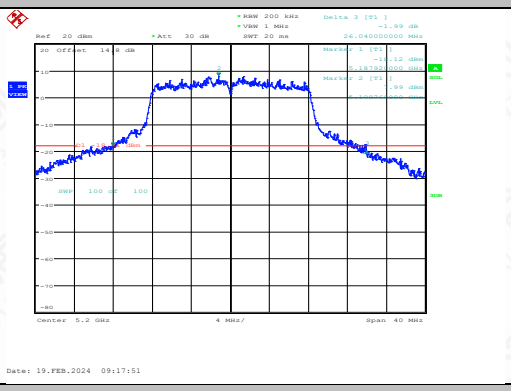


6.4.4 Measurement Results

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.68	5168.72	5192.40	---	---
11A	Ant1	5200	26.04	5187.92	5213.96	---	---
11A	Ant1	5240	25.80	5228.08	5253.88	---	---
11A	Ant1	5260	26.84	5247.08	5273.92	---	---
11A	Ant1	5280	25.64	5268.24	5293.88	---	---
11A	Ant1	5320	23.64	5308.76	5332.40	---	---
11A	Ant1	5500	22.76	5488.88	5511.64	---	---
11A	Ant1	5580	26.84	5567.12	5593.96	---	---

11A	Ant1	5700	22.44	5688.68	5711.12	---	---
11N20SISO	Ant1	5180	24.64	5167.36	5192.00	---	---
11N20SISO	Ant1	5200	27.32	5185.88	5213.20	---	---
11N20SISO	Ant1	5240	26.00	5227.20	5253.20	---	---
11N20SISO	Ant1	5260	26.64	5246.88	5273.52	---	---
11N20SISO	Ant1	5280	25.96	5267.24	5293.20	---	---
11N20SISO	Ant1	5320	23.76	5308.12	5331.88	---	---
11N20SISO	Ant1	5500	23.24	5488.44	5511.68	---	---
11N20SISO	Ant1	5580	27.80	5567.04	5594.84	---	---
11N20SISO	Ant1	5700	23.04	5688.64	5711.68	---	---
11N40SISO	Ant1	5190	41.76	5169.12	5210.88	---	---
11N40SISO	Ant1	5230	53.84	5199.76	5253.60	---	---
11N40SISO	Ant1	5270	52.88	5240.64	5293.52	---	---
11N40SISO	Ant1	5310	42.16	5288.80	5330.96	---	---
11N40SISO	Ant1	5510	41.84	5489.20	5531.04	---	---
11N40SISO	Ant1	5550	49.92	5528.72	5578.64	---	---
11N40SISO	Ant1	5670	42.08	5648.72	5690.80	---	---
11AC20SISO	Ant1	5180	24.52	5167.40	5191.92	---	---
11AC20SISO	Ant1	5200	25.72	5186.88	5212.60	---	---
11AC20SISO	Ant1	5240	26.28	5226.92	5253.20	---	---
11AC20SISO	Ant1	5260	26.04	5246.88	5272.92	---	---
11AC20SISO	Ant1	5280	25.84	5267.44	5293.28	---	---
11AC20SISO	Ant1	5320	23.32	5308.60	5331.92	---	---
11AC20SISO	Ant1	5500	23.48	5488.28	5511.76	---	---
11AC20SISO	Ant1	5580	28.04	5566.84	5594.88	---	---
11AC20SISO	Ant1	5700	23.76	5688.04	5711.80	---	---
11AC40SISO	Ant1	5190	42.16	5168.88	5211.04	---	---
11AC40SISO	Ant1	5230	59.28	5199.12	5258.40	---	---
11AC40SISO	Ant1	5270	58.72	5239.76	5298.48	---	---
11AC40SISO	Ant1	5310	41.84	5289.12	5330.96	---	---
11AC40SISO	Ant1	5510	41.68	5489.20	5530.88	---	---
11AC40SISO	Ant1	5550	49.84	5528.80	5578.64	---	---
11AC40SISO	Ant1	5670	41.84	5648.80	5690.64	---	---
11AC80SISO	Ant1	5210	84.32	5168.24	5252.56	---	---
11AC80SISO	Ant1	5290	84.00	5248.08	5332.08	---	---
11AC80SISO	Ant1	5530	84.48	5487.92	5572.40	---	---
11AC80SISO	Ant1	5610	84.48	5567.92	5652.40	---	---

Test Graphs

11A-Ant1-5180	11A-Ant1-5200
	
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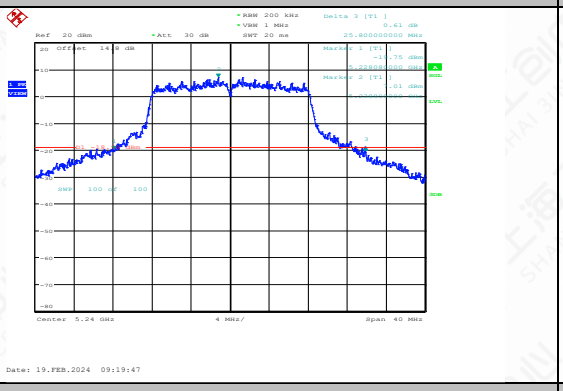	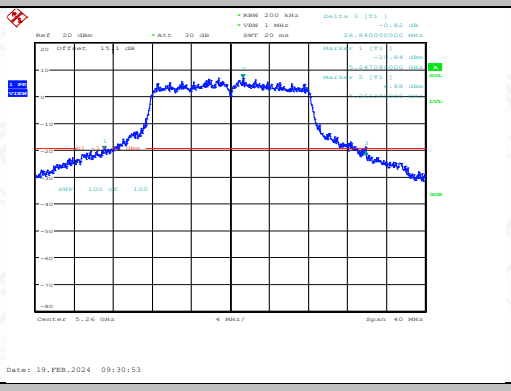
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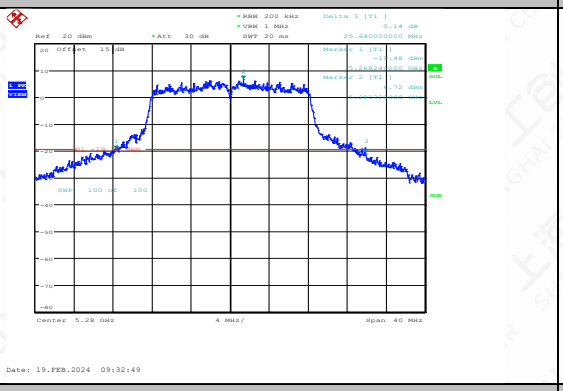	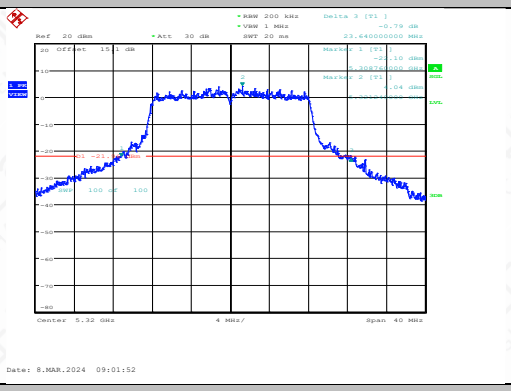
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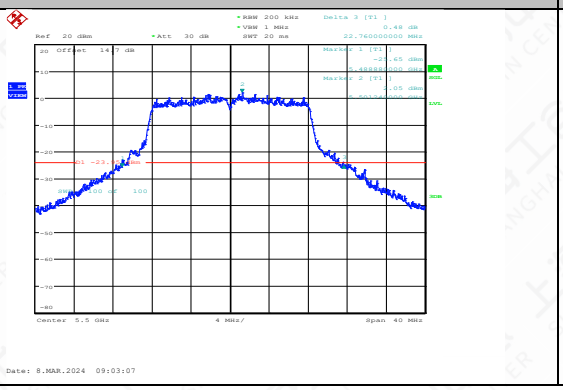	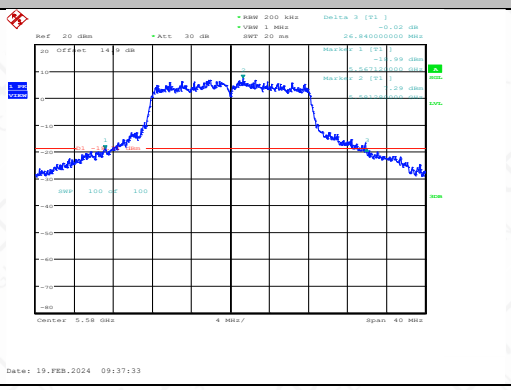

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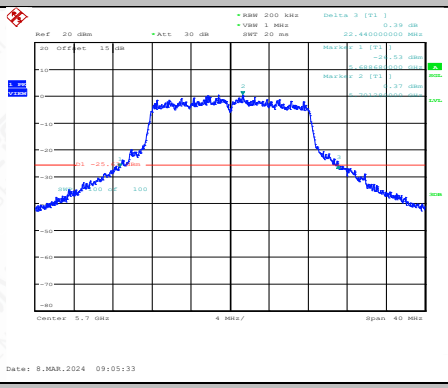	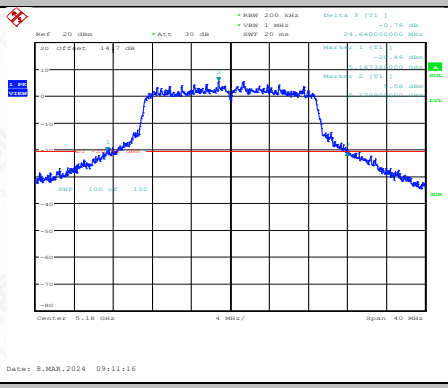
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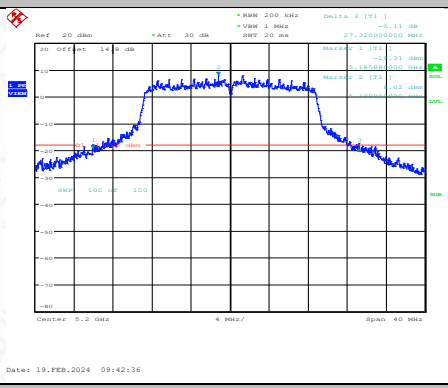	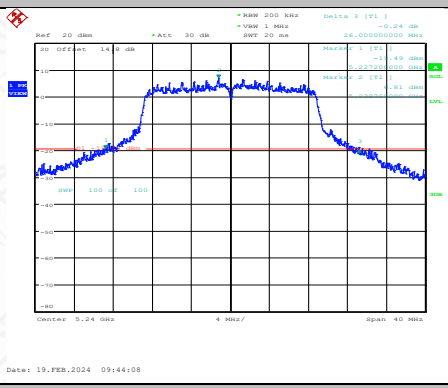
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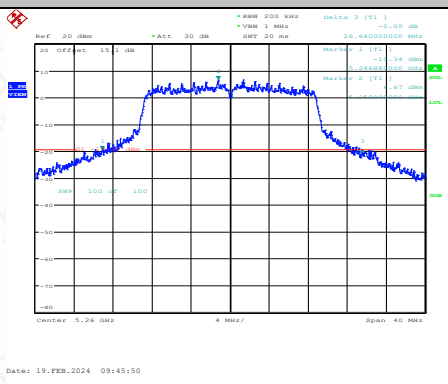	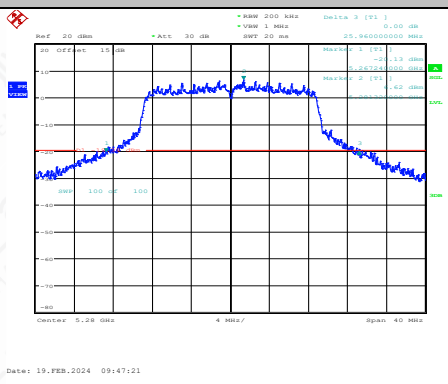
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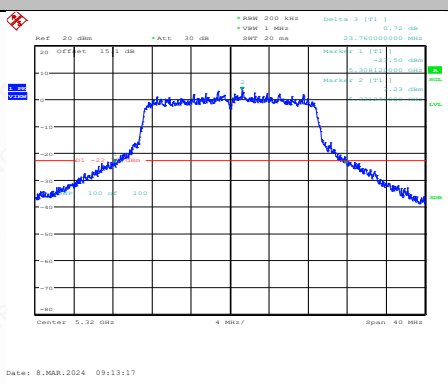	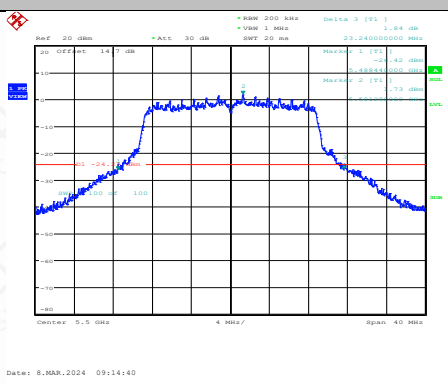

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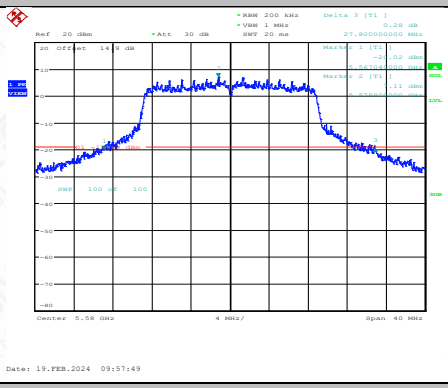	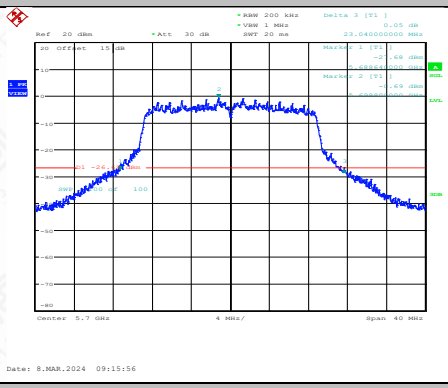
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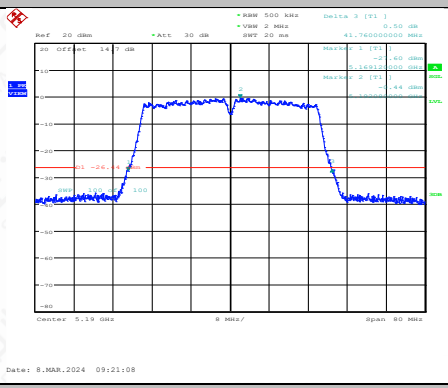	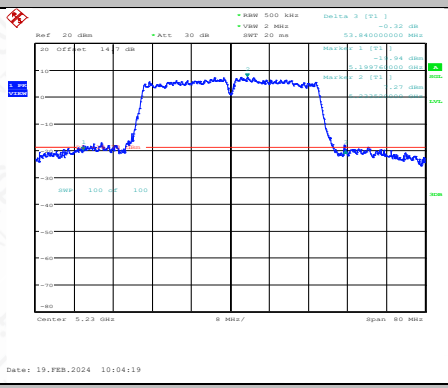
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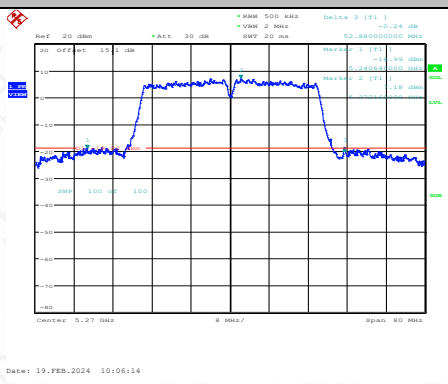	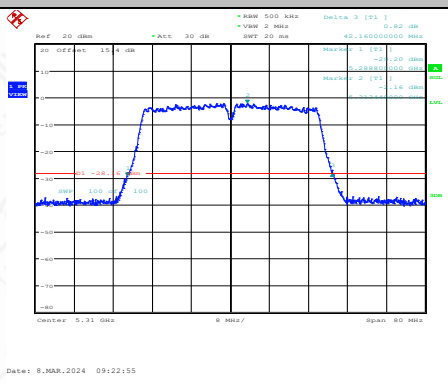
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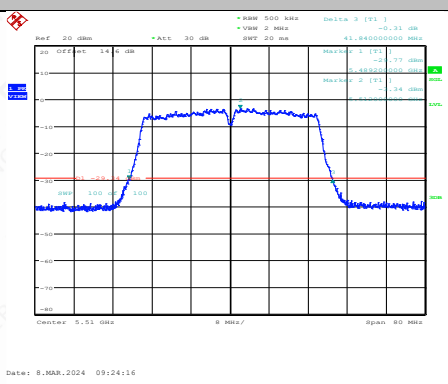	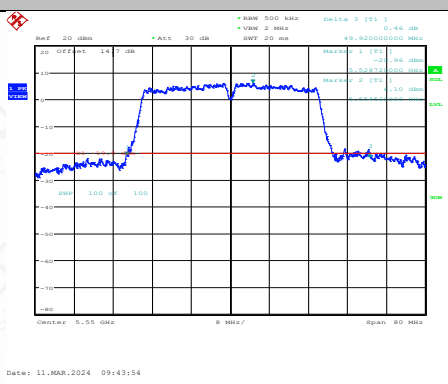

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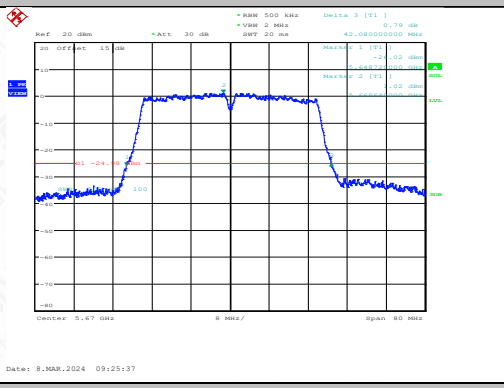	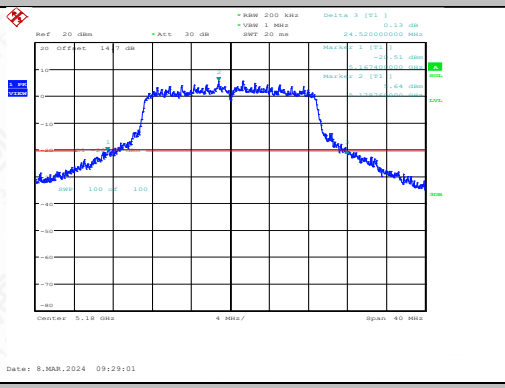
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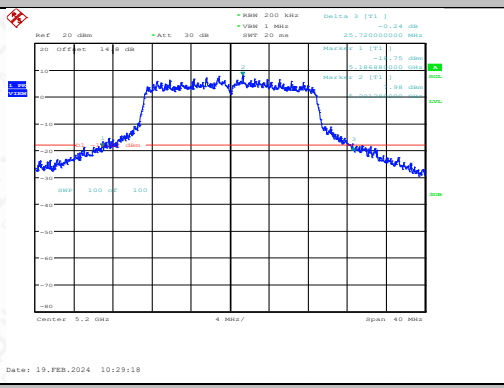	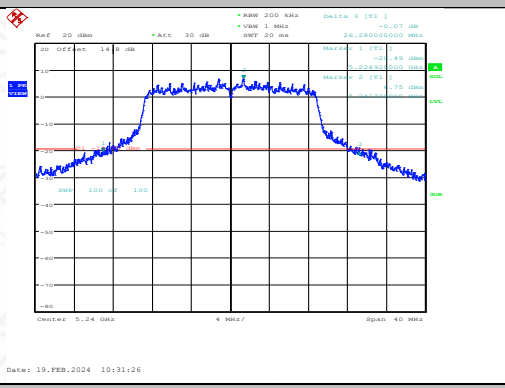
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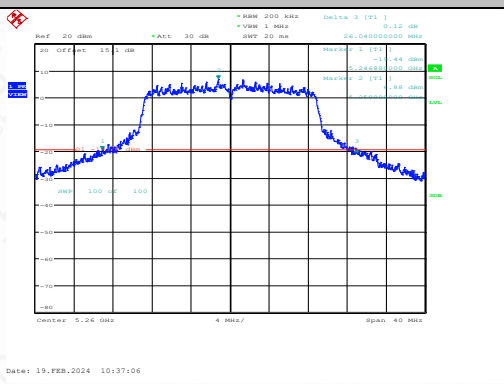	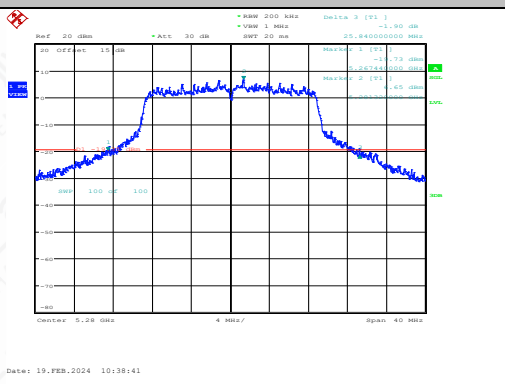
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