



TEST REPORT

REPORT NUMBER: 25B02W000005-004

ON

Type of Equipment: Barcode Reader

Type of Designation: DLMKWF

Brand Name: DATALOGIC

Manufacturer: Datalogic S.r.l.

FCC ID: U4G-DLMKWF

IC: 3862E-DLMKWF

ACCORDING TO

FCC Part 2, FCC Part 15E, RSS-Gen Issue 5, RSS-247 Issue 3, ANSI C63.10-2013

Chongqing Academy of Information and Communications Technology

Month date, year

Apr.18th, 2025

Signature



Zhou Jin

Director



Note:

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



Report No.: 25B02W000005-004

Revision Version

Report Number	Revision	Date
25B02W000005-004	00	2025-04-18

Chongqing Academy of Information and Communications Technology

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1. Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
Designation Number:	CN1239
IC Registration Number:	29397
Address:	No.19 EastRoad,Xiantao Big-data Valley,Yubei District,Chongqing,People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

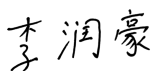
1.2. Testing Environment

Normal Temperature:	15-35°C
Relative Humidity:	30-75%

1.3. Project data

Testing Start Date:	2025-03-25
Testing End Date:	2025-04-14

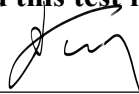
1.4. Signature



2025-04-18

Li Runhao
(Prepared this test report)

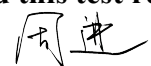
Date



2025-04-18

Wang Lili
(Reviewed this test report)

Date



2025-04-18

Zhou Jin
Director of the laboratory
(Approved this test report)

Date

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2. Client Information

2.1. Applicant Information

Company Name:	Datalogic S.r.l.
Address /Post:	Via San Vitalino no.13, Calderara di Reno -40012(BO)-Italy
City:	Calderara di Reno
Country:	Italy
Telephone:	+39 051 3147 393
Fax:	N/A
Email:	Ruggero.Cacioppo@datalogic.com
Contact Person:	Ruggero Cacioppo

2.2. Manufacturer Information

Company Name:	Datalogic S.r.l.
Address /Post:	Via San Vitalino no.13, Calderara di Reno -40012(BO)-Italy
City:	Calderara di Reno
Country:	Italy
Telephone:	+39 051 3147 393
Fax:	N/A
Email:	Ruggero.Cacioppo@datalogic.com
Contact Person:	Ruggero Cacioppo

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

3.1. About EUT

EUT Description	Barcode Reader
Model name	DLMKWF
Brand name	DATALOGIC
WLAN Frequency Band	Wi-Fi 5G U-NII-1/ U-NII-2a/U-NII-2c/U-NII-3:802.11a/n/ac
Type of WLAN modulation	OFDM
HVIN	DLMKWF
Extreme Temperature	-20/+50°C
Nominal Test Voltage	3.85V
Extreme Test High Voltage	4.4V
Extreme Test Low Voltage	3.6V

Note1: Photographs of EUT are shown in ANNEX A of this test report.

Note2: High and low voltage values in extreme condition test are given by manufacturer.

Note3: The Extreme Temperature is provided by the manufacturer and has not been verified by the laboratory.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
25B02W000005#S07	S25CC0873	V00	0.00.01.20250311	2025-03-20
25B02W000005#S16	867529060024650	V00	0.00.01.20250311	2025-03-27

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

No.	Item(s)	Data
1	Antenna gain of EUT	1.97 dBi
Note: The data of antenna 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.		

3.3. Outline of Equipment under Test

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)
WLAN	5G	UNII 1: 5150MHz-5250MHz UNII 2A: 5250MHz-5350MHz UNII 2C: 5470MHz-5725MHz	

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**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			

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						
Note: “/” Represents empty												

Emissions Information

TestMode	TestBand	Frequency Min(MHz)	Frequency Max(MHz)	Max OutPut Power (dBm)	Max OutPut Power (W)	OBW (KHz)	Necessary Bandwidth & Emission Classification
11A	UNII-1	5180	5240	18.57(EIRP)	0.0719	17400	17M4D1D
11A	UNII-2A	5260	5320	15.85	0.0385	17320	17M3D1D
11A	UNII-2C	5500	5700	16.18	0.0415	17360	17M4D1D
11N20	UNII-1	5180	5240	18(EIRP)	0.0631	18280	18M3D1D
11N20	UNII-2A	5260	5320	15.82	0.0382	18160	18M2D1D
11N20	UNII-2C	5500	5700	16.03	0.0401	18240	18M2D1D
11N40	UNII-1	5190	5230	17.51(EIRP)	0.0564	36640	36M6D1D
11N40	UNII-2A	5270	5310	15.43	0.0349	36720	36M7D1D
11N40	UNII-2C	5510	5670	15.26	0.0336	36800	36M8D1D
11AC20	UNII-1	5180	5240	18.1(EIRP)	0.0646	18200	18M2D1D
11AC20	UNII-2A	5260	5320	16.36	0.0433	18160	18M2D1D
11AC20	UNII-2C	5500	5700	15.89	0.0388	18200	18M2D1D
11AC40	UNII-1	5190	5230	16.98(EIRP)	0.0499	36720	36M7D1D

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11AC40	UNII-2A	5270	5310	15.4	0.0347	36640	36M6D1D
11AC40	UNII-2C	5510	5670	15.22	0.0333	36720	36M7D1D
11AC80	UNII-1	5210	5210	17.96(EIRP)	0.0625	75360	75M4D1D
11AC80	UNII-2A	5290	5290	15.47	0.0352	75360	75M4D1D
11AC80	UNII-2C	5530	5610	16.21	0.0418	75360	75M4D1D

Note:

1. This report is for WLAN UNII-1, UNII-2A and UNII-2C only.
2. The test data with the frequencies in 5600-5650MHz are only used for FCC certification.

3.4. Internal Identification of AE used during the test

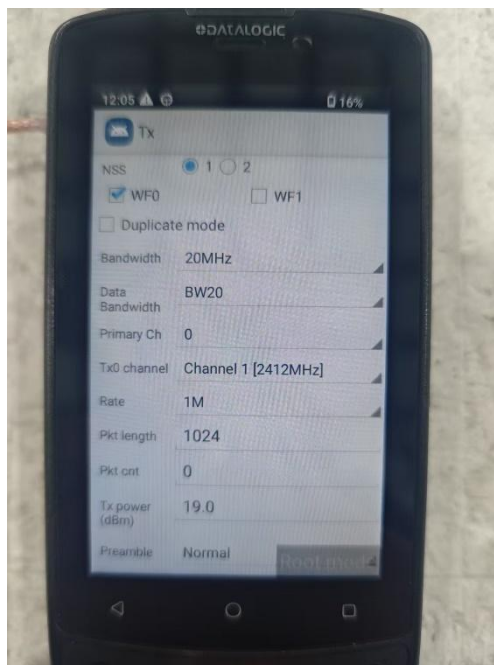
AE ID*	Description	Note
BA01	Battery	Model: MK2-BY-202 3.85V 4850mAh
AE1	RF cable	1.0 dB

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

dB*: is provided customer.

3.5. EUT Test RF Configuration

EUT uses engineering mode to control RF emissions, changing power levels, channels, rates, and HT.



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4. Reference Documents

4.1. Documents supplied by applicant

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

4.2. Reference Documents for testing

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

Reference	Title	Version
FCC Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations	--
FCC Part 15E	FCC CFR 47, Part 15, Subpart E: Unlicensed National InformSation Infrastructure Devices	--
RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus	2021
RSS-247 Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	2023
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
KDB 789033 D02 General UNII Test Procedures New Rules v02r01	Information Infrastructure (U-NII) Devices - Part 15, Subpart E	--
Note: FCC Part 2 and KDB 789033 D02 General UNII Test Procedures New Rules v02r01 is not A2LA certified.		

5. Test Equipments Utilized

5.1. RF Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacturer	Cal. Interval	Cal.Due Date
1	Spectrum analyzer	FSQ 26	201137	--	--	R&S	1 Year	2025-06-28
2	T-SWT01 RF switch unit	--	--	--	--	Beijing Zhiwang Xince Technology Co., Ltd	--	--

5.2. RSE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacturer	Cal. Interval	Cal.Due Date
1	EMI Test Receiver	ESU40	100307	--	--	R&S	1 Year	2025-06-28
2	TRILOG Broadband Antenna	VULB9163	9163-586	--	--	Schwarzbeck	2 Years	2026-10-28
3	Horn antenna	9120D	1083	--	--	Schwarzbeck	2 Years	2026-11-08
4	Horn antenna	DATE 1152	LM7127	--	--	ETS	2 Years	2026-09-30
5	Horn antenna	DATE 1012	LM5945	--	--	ETS	2 Years	2026-09-30
6	Loop Antenna	6502	00213256	--	--	ETS	1 Year	2026-09-04
7	Amplifier1	SCU-08F1	8320027	--	--	R&S	--	--
8	Amplifier2	SCU-18F	180093	--	--	R&S	--	--
9	2-Line V-Network	ENV216	102368	--	--	R&S	1 Year	2025-05-16
10	Test Receiver	ESR 3	101382	03	3.48 SP2	R&S	1 Year	2025-06-28
11	Test Receiver	ESW 26	101382	00	1.50 SP1	R&S	1 Year	2025-06-28

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5.3. Climate Chamber

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

5.4. Anechoic chamber Vibration table

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
1	Fully-Anechoic Chamber	FAC5	--	TDK	3Years	2027-11-04
2	Anechoic Chamber	SAC 10	--	TDK	3Years	2027-11-05

5.5. Test software

No.	Name	version	SN	Manufacture
1	EMC32 (Transmitter Spurious Emission-Radiated Above 1GHz)	V9.26.01	--	R&S
2	EMC32 (Transmitter Spurious Emission-Radiated Below 1GHz)	V 10.20.01	--	R&S
3	EMC32 (AC Powerline Conducted Emission)	V 10.40.10	--	R&S
4	WIFI/BT CE/FCC/ICautomated testing software	V1.0.0.0	--	Beijing Zhiwang Xince Technology Co., Ltd

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6. Test Results

6.1. Summary of Test Results

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

FCC Rules	IC Rules	Name of Test	Result
15.407(a)	RSS-247 6.2	Duty Cycle	N/A ^{note4}
15.407(a)	RSS-247 6.2	Maximum Output Power	Pass
15.407(a)	RSS-247 6.2	Power Spectral Density	Pass
2.1049	RSS-247 6.2	99% Occupied Bandwidth	N/A ^{note4}
15.407(a)	RSS-Gen 6.7	Occupied 26dB Bandwidth	N/A ^{note4}
15.209 & 15.407(b)	RSS-247 6.2	Band edge compliance	Pass
15.209 & 15.407(b)	RSS-Gen 8.9, RSS-247 6.2	Transmitter spurious emissions radiated	Pass
15.407(g)	RSS-247 6.2	Frequency Stability	Pass
15.407(h)	RSS-Gen 8.8	Transmit Power Control	N/A ^{Note 3}
15.207	RSS Gen 6.8	AC Powerline Conducted Emission	Pass
15.203	RSS-247 6.2	Antenna requirement	Pass ^{Note 2}
NOTE 1: The DLMKWF manufactured by Datalogic S.r.l. is a new product for testing. NOTE 2: 5G RLAN used an Internal antenna with max Gain 1.97 dBi that complied with 15.203 Requirements. NOTE 3: A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW. NOTE 4: Unrestricted requirements.			

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6.2. Duty Cycle

Specifications:	15.407(a), RSS-247 6.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Measurement Uncertainty:

Measurement Uncertainty	--
-------------------------	----

Test Procedure:

The measurement method is made according to KDB 789033 B

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

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

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Measurement Results:

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.39	1.43	97.20
11A	Ant1	5200	1.40	1.44	97.22
11A	Ant1	5240	1.40	1.44	97.22
11A	Ant1	5260	1.39	1.43	97.20
11A	Ant1	5280	1.39	1.44	96.53
11A	Ant1	5320	1.39	1.43	97.20
11A	Ant1	5500	1.39	1.44	96.53
11A	Ant1	5580	1.40	1.44	97.22
11A	Ant1	5700	1.40	1.44	97.22
11N20SISO	Ant1	5180	1.30	1.35	96.30
11N20SISO	Ant1	5200	1.30	1.34	97.01
11N20SISO	Ant1	5240	1.30	1.34	97.01
11N20SISO	Ant1	5260	1.30	1.34	97.01
11N20SISO	Ant1	5280	1.30	1.34	97.01
11N20SISO	Ant1	5320	1.30	1.35	96.30
11N20SISO	Ant1	5500	1.30	1.35	96.30
11N20SISO	Ant1	5580	1.30	1.34	97.01
11N20SISO	Ant1	5700	1.30	1.35	96.30
11N40SISO	Ant1	5190	0.65	0.70	92.86
11N40SISO	Ant1	5230	0.64	0.69	92.75
11N40SISO	Ant1	5270	0.65	0.70	92.86
11N40SISO	Ant1	5310	0.65	0.69	94.20
11N40SISO	Ant1	5510	0.64	0.69	92.75
11N40SISO	Ant1	5550	0.65	0.69	94.20
11N40SISO	Ant1	5670	0.65	0.69	94.20
11AC20SISO	Ant1	5180	1.31	1.36	96.32
11AC20SISO	Ant1	5200	1.31	1.36	96.32
11AC20SISO	Ant1	5240	1.31	1.35	97.04
11AC20SISO	Ant1	5260	1.31	1.35	97.04
11AC20SISO	Ant1	5280	1.31	1.35	97.04
11AC20SISO	Ant1	5320	1.31	1.36	96.32
11AC20SISO	Ant1	5500	1.31	1.36	96.32
11AC20SISO	Ant1	5580	1.31	1.35	97.04
11AC20SISO	Ant1	5700	1.31	1.36	96.32
11AC40SISO	Ant1	5190	0.65	0.69	94.20
11AC40SISO	Ant1	5230	0.65	0.70	92.86
11AC40SISO	Ant1	5270	0.65	0.69	94.20
11AC40SISO	Ant1	5310	0.65	0.70	92.86
11AC40SISO	Ant1	5510	0.65	0.69	94.20
11AC40SISO	Ant1	5550	0.66	0.70	94.29
11AC40SISO	Ant1	5670	0.66	0.70	94.29
11AC80SISO	Ant1	5210	0.33	0.37	89.19
11AC80SISO	Ant1	5290	0.32	0.37	86.49
11AC80SISO	Ant1	5530	0.32	0.37	86.49
11AC80SISO	Ant1	5610	0.32	0.37	86.49

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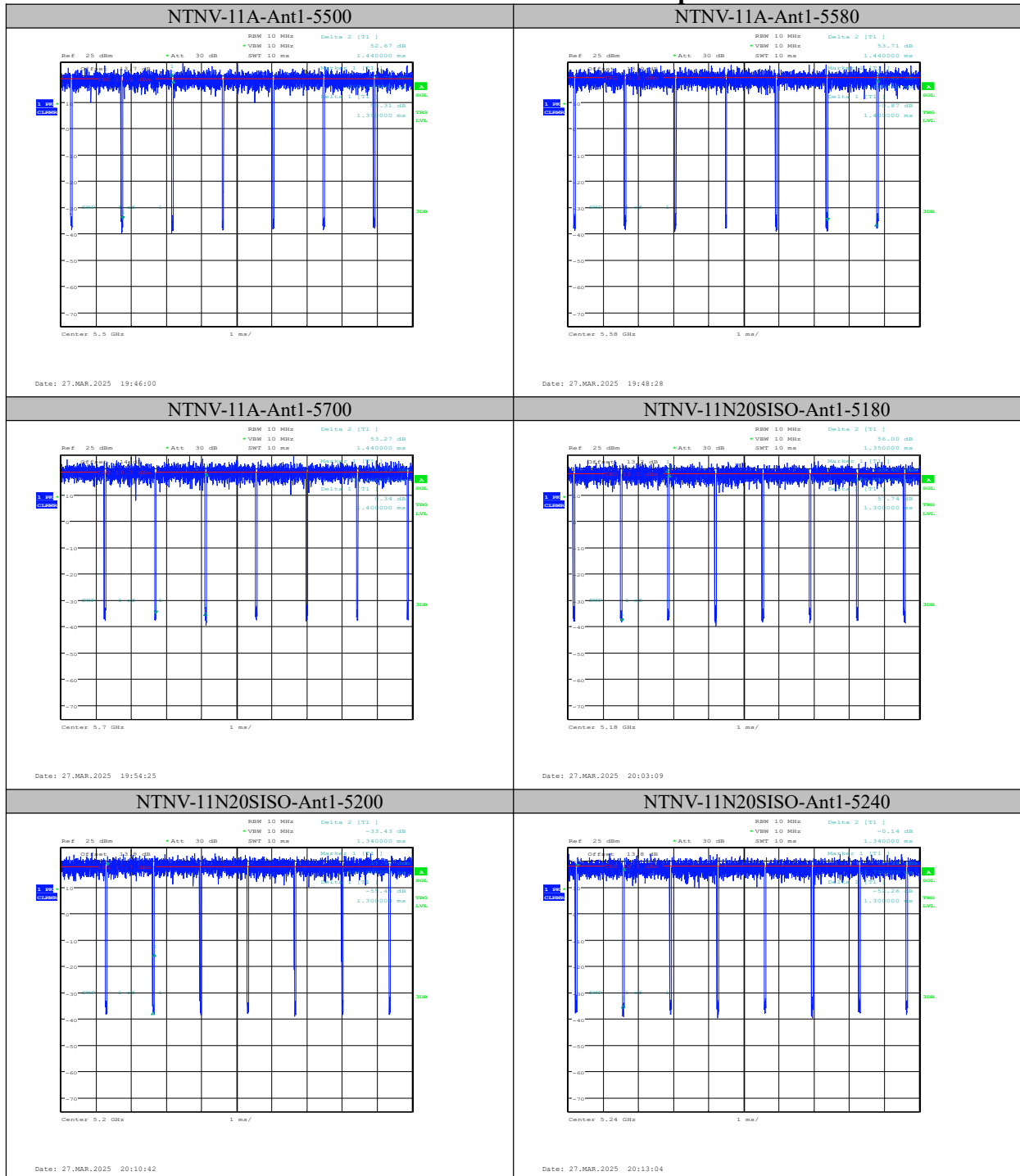
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Tel: 0086-23-88069965 FAX:0086-23-88608777

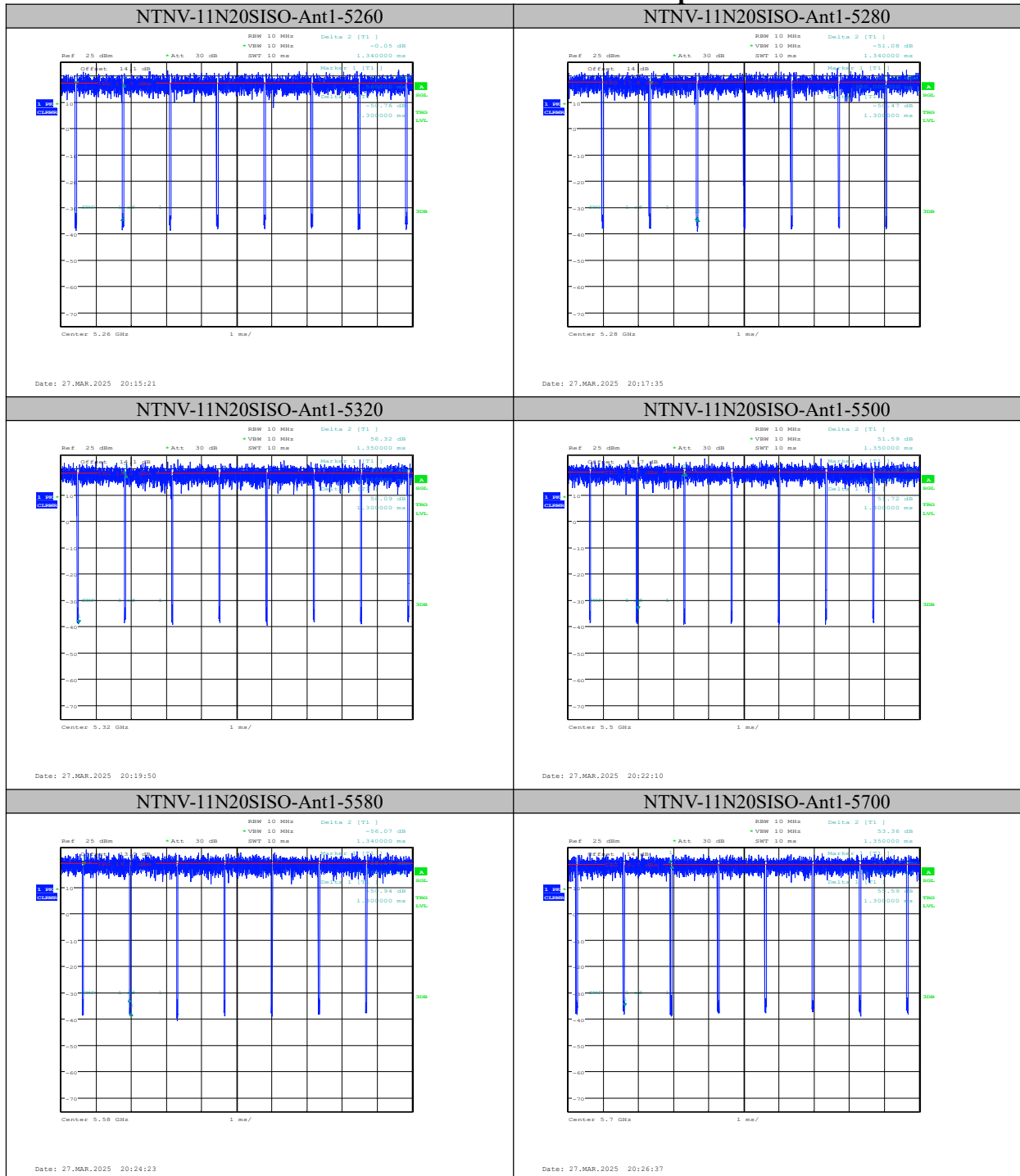


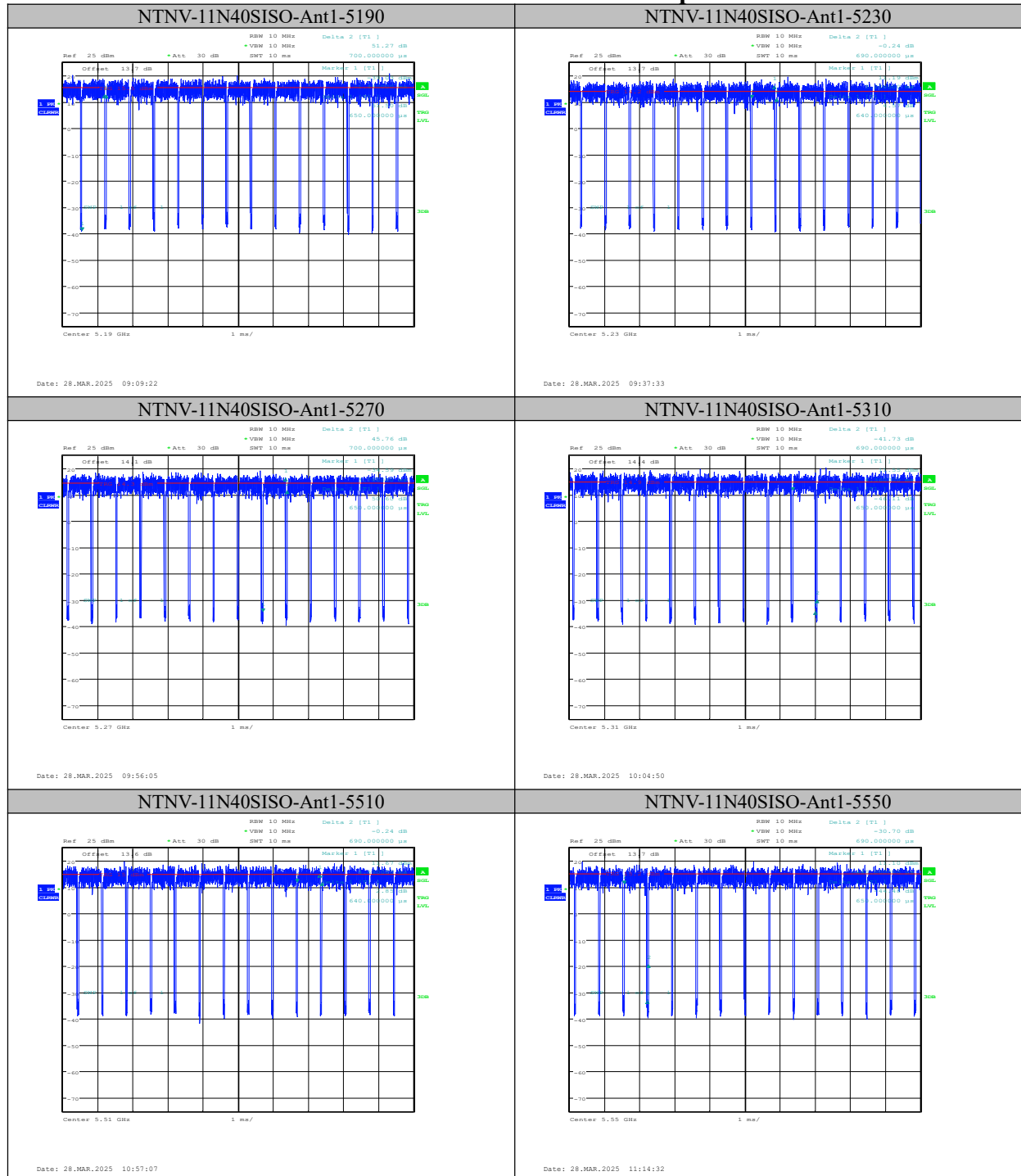
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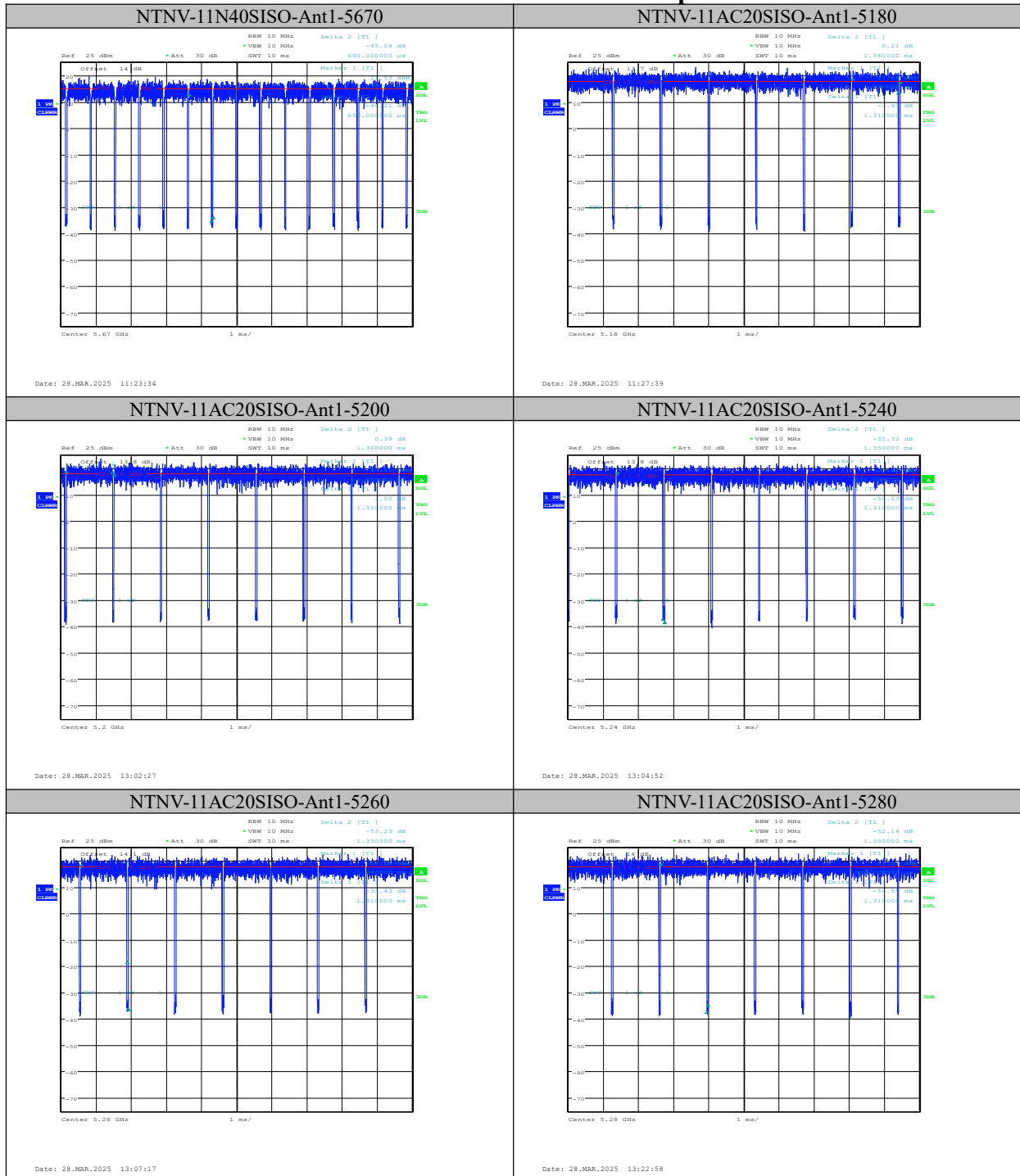


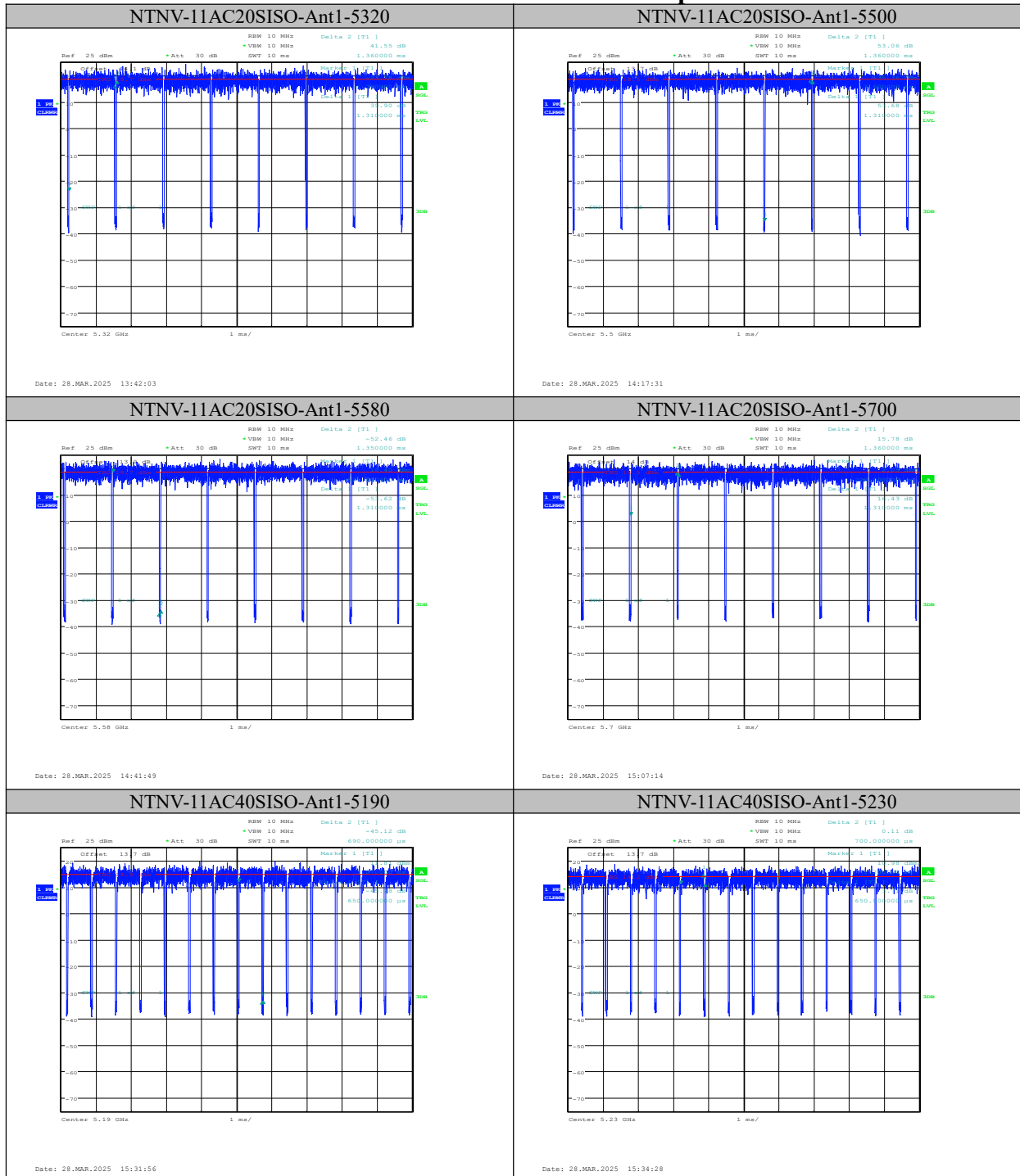
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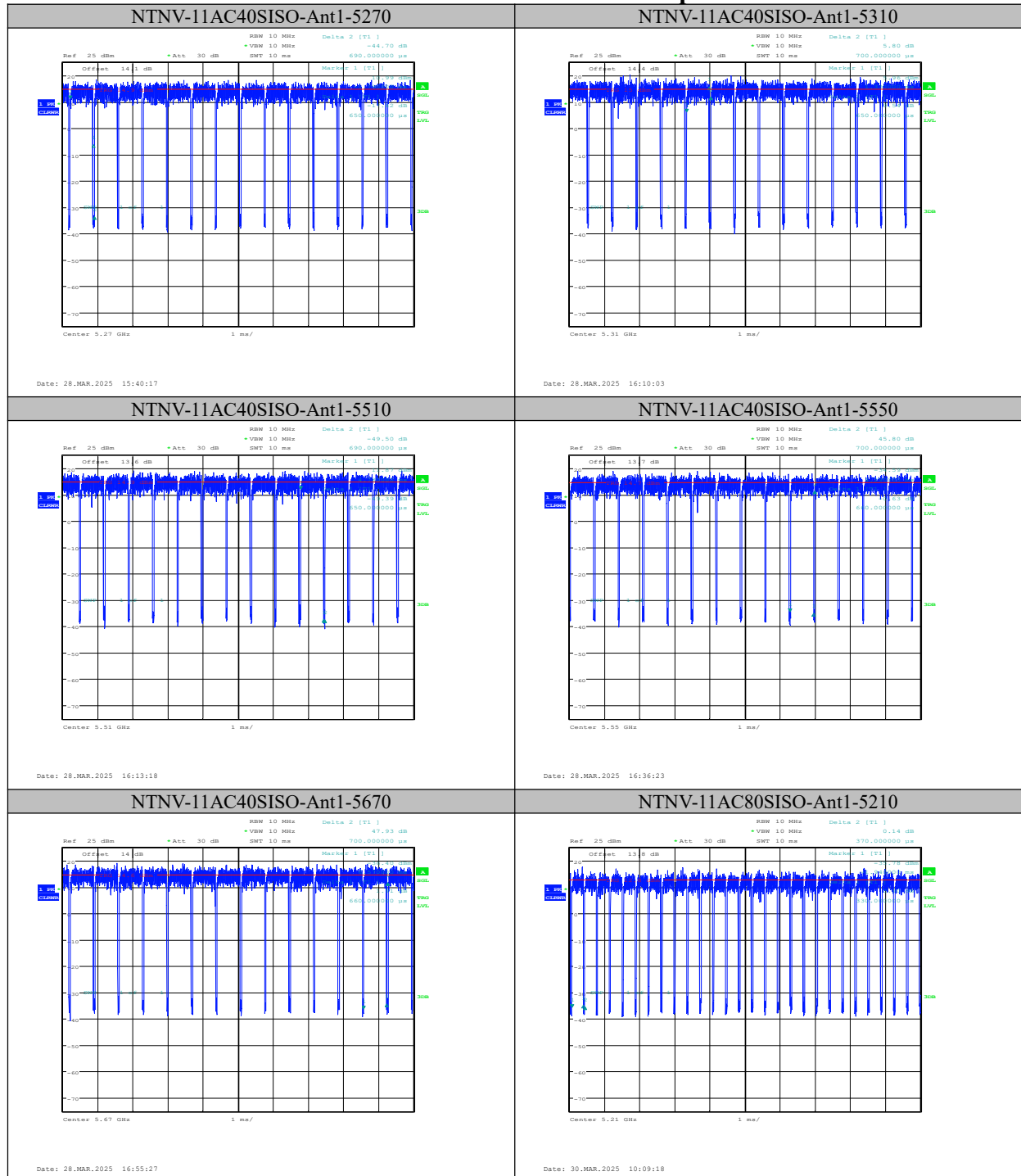


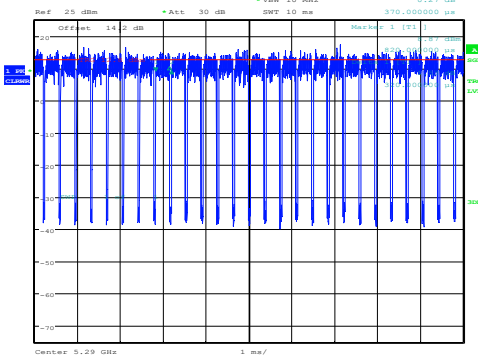
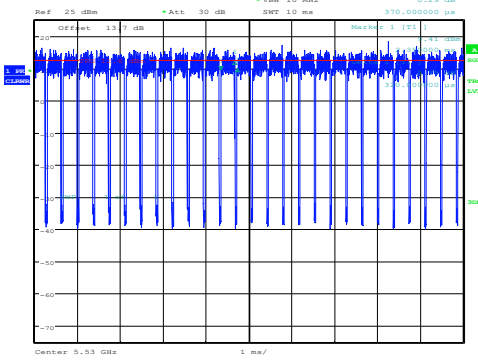
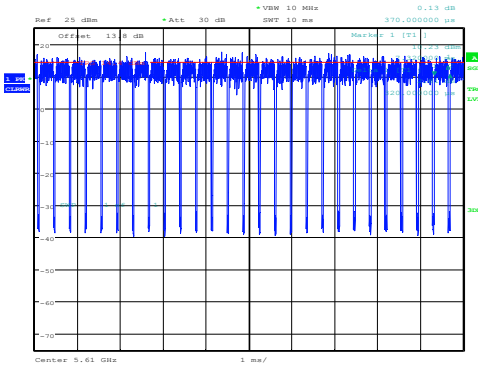










NTNV-11AC80SISO-Ant1-5290	NTNV-11AC80SISO-Ant1-5530
 Date: 30_MAR_2025 10:12:34	 Date: 30_MAR_2025 10:16:17
NTNV-11AC80SISO-Ant1-5610	/
 Date: 30_MAR_2025 10:20:00	/

6.3. Maximum conducted output power

Specifications:	15.407(a), RSS-247 6.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
15.407(a)	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

Measurement Uncertainty:

Measurement Uncertainty	0.46dB
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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

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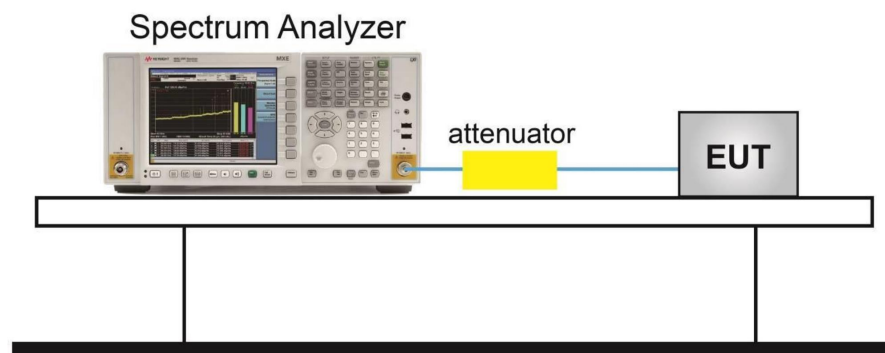
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correction).

1. Measure the duty cycle, x , of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz. (iv) Set VBW $\geq$ 3 MHz.
4. Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, 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 $10 \log (1/0.25) = 6 \text{ dB}$ if the duty cycle is 25%

Test setup



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Measurement Results:

Test Mode	Frequency [MHz]	Set Power	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	FCC Limit [dBm]	IC Limit [dBm]	EIRP [dBm]	FCC EIRP Limit [dBm]	IC EIRP Limit [dBm]	Verdict
11A	5180	17.5	16.40	97.20	0.12	16.52	≤23.98	---	18.49	---	≤22.41	PASS
	5200	17.5	16.48	97.22	0.12	16.60	≤23.98	---	18.57	---	≤22.41	PASS
	5240	17.5	15.42	97.22	0.12	15.54	≤23.98	---	17.51	---	≤22.39	PASS
	5260	17.5	14.96	97.20	0.12	15.08	≤23.98	≤23.38	17.05	---	≤29.38	PASS
	5280	17.5	15.16	96.53	0.15	15.31	≤23.98	≤23.39	17.28	---	≤29.39	PASS
	5320	17.5	15.73	97.20	0.12	15.85	≤23.98	≤23.38	17.82	---	≤29.38	PASS
	5500	16.5	15.94	96.53	0.15	15.94	≤23.98	≤23.40	17.91	---	≤29.40	PASS
	5580	16.5	16.18	97.22	0.12	16.18	≤23.98	≤23.40	18.15	---	≤29.40	PASS
	5700	16.5	15.77	97.22	0.12	15.77	≤23.98	≤23.39	17.74	---	≤29.39	PASS
11N 20SI SO	5180	17.5	15.81	96.30	0.16	15.97	≤23.98	---	17.94	---	≤22.61	PASS
	5200	17.5	15.90	97.01	0.13	16.03	≤23.98	---	18.00	---	≤22.62	PASS
	5240	17.5	15.26	97.01	0.13	15.39	≤23.98	---	17.36	---	≤22.60	PASS
	5260	17.5	14.82	97.01	0.13	14.95	≤23.98	≤23.59	16.92	---	≤29.59	PASS
	5280	17.5	15.06	97.01	0.13	15.19	≤23.98	≤23.58	17.16	---	≤29.58	PASS
	5320	17.5	15.66	96.30	0.16	15.82	≤23.98	≤23.59	17.79	---	≤29.59	PASS
	5500	16.5	15.49	96.30	0.16	15.49	≤23.98	≤23.61	17.46	---	≤29.61	PASS
	5580	16.5	16.03	97.01	0.13	16.03	≤23.98	≤23.61	18.00	---	≤29.61	PASS
	5700	16.5	15.71	96.30	0.16	15.71	≤23.98	≤23.60	17.68	---	≤29.60	PASS
11N 40SI SO	5190	16.5	15.22	92.86	0.32	15.54	≤23.98	---	17.51	---	≤23.01	PASS
	5230	16.5	14.36	92.75	0.33	14.69	≤23.98	---	16.66	---	≤23.01	PASS
	5270	16.5	14.49	92.86	0.32	14.81	≤23.98	≤23.98	16.78	---	≤30.00	PASS
	5310	16.5	15.17	94.20	0.26	15.43	≤23.98	≤23.98	17.40	---	≤30.00	PASS
	5510	16.5	14.69	92.75	0.33	15.02	≤23.98	≤23.98	16.99	---	≤30.00	PASS
	5550	16.5	14.44	94.20	0.26	14.70	≤23.98	≤23.98	16.67	---	≤30.00	PASS
	5670	16.5	15.00	94.20	0.26	15.26	≤23.98	≤23.98	17.23	---	≤30.00	PASS
11A C20 SIS O	5180	17.5	15.97	96.32	0.16	16.13	≤23.98	---	18.10	---	≤22.59	PASS
	5200	17.5	15.87	96.32	0.16	16.03	≤23.98	---	18.00	---	≤22.60	PASS
	5240	17.5	15.28	97.04	0.13	15.41	≤23.98	---	17.38	---	≤22.60	PASS
	5260	17.5	15.34	97.04	0.13	15.47	≤23.98	≤23.59	17.44	---	≤29.59	PASS
	5280	17.5	15.61	97.04	0.13	15.74	≤23.98	≤23.58	17.71	---	≤29.58	PASS
	5320	17.5	16.20	96.32	0.16	16.36	≤23.98	≤23.59	18.33	---	≤29.59	PASS
	5500	16.5	15.35	96.32	0.16	15.35	≤23.98	≤23.59	17.32	---	≤29.59	PASS
	5580	16.5	15.89	97.04	0.13	15.89	≤23.98	≤23.60	17.86	---	≤29.60	PASS
	5700	16.5	15.65	96.32	0.16	15.65	≤23.98	≤23.59	17.62	---	≤29.59	PASS
11A	5190	16.5	14.75	94.20	0.26	15.01	≤23.98	---	16.98	---	≤23.01	PASS

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C40 SIS O	5230	16,5	14.14	92.86	0.32	14.46	≤23.98	---	16.43	---	≤23.01	PASS
	5270	16,5	14.39	94.20	0.26	14.65	≤23.98	≤23.98	16.62	---	≤30.00	PASS
	5310	16,5	15.08	92.86	0.32	15.40	≤23.98	≤23.98	17.37	---	≤30.00	PASS
	5510	16,5	14.90	94.20	0.26	15.16	≤23.98	≤23.98	17.13	---	≤30.00	PASS
	5550	16,5	14.38	94.29	0.26	14.64	≤23.98	≤23.98	16.61	---	≤30.00	PASS
	5670	16,5	14.96	94.29	0.26	15.22	≤23.98	≤23.98	17.19	---	≤30.00	PASS
11A C80 SIS O	5210	16,5	15.49	89.19	0.50	15.99	≤23.98	---	17.96	---	≤23.01	PASS
	5290	16,5	14.84	86.49	0.63	15.47	≤23.98	≤23.98	17.44	---	≤30.00	PASS
	5530	15,5	13.99	86.49	0.63	14.62	≤23.98	≤23.98	16.59	---	≤30.00	PASS
	5610	16,5	15.58	86.49	0.63	16.21	≤23.98	≤23.98	18.18	---	≤30.00	PASS

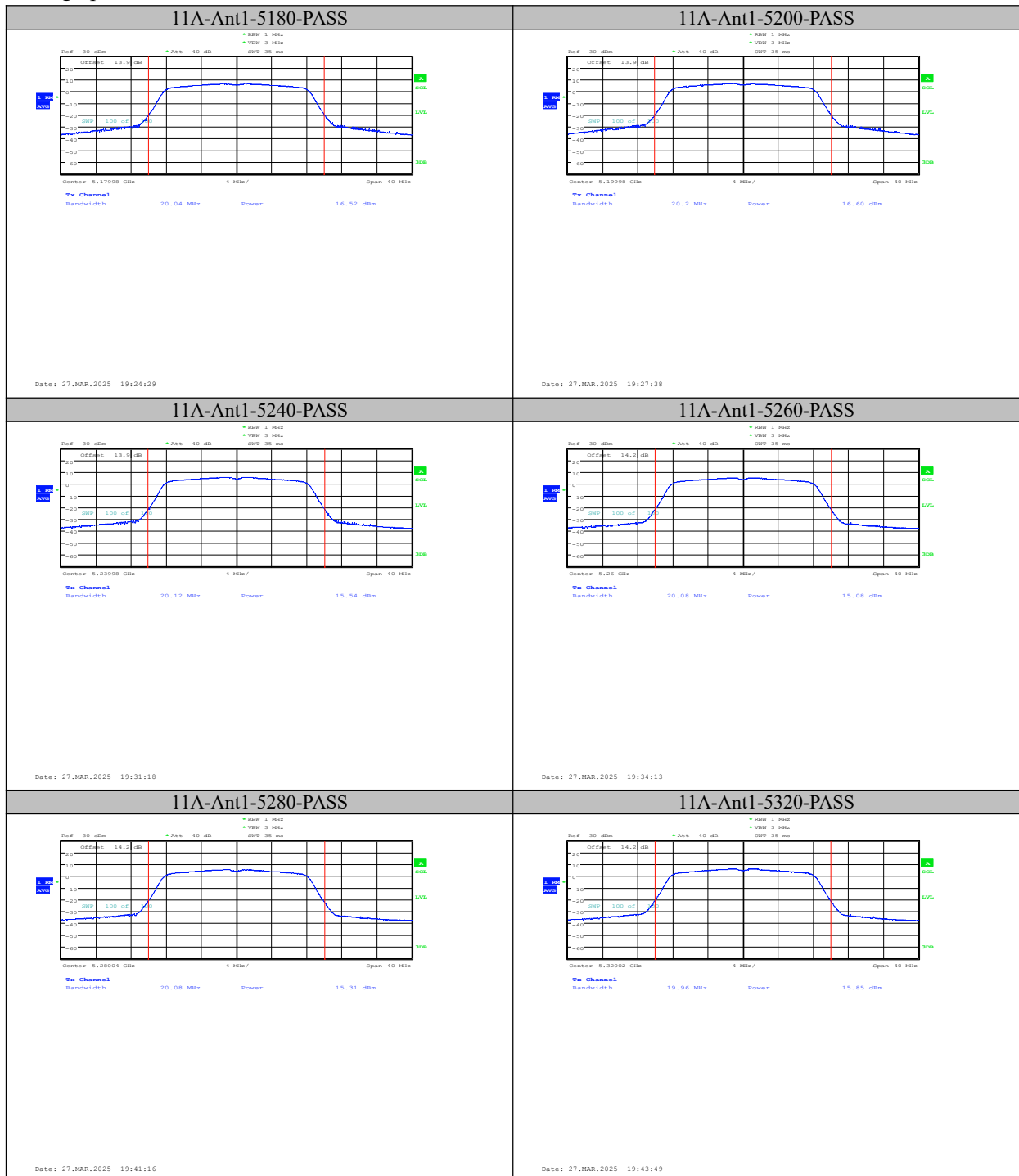
Note:

- 1.The Duty Cycle Factor is compensated in the graph.
2. In the graph, the Center frequency = (Low frequency of 26dB OBW + High frequency of 26dB OBW) /2.
- 3.The 11a data rate 6Mbps is selected as worse condition, 11n/11acdata rate MCS0 is selected as worse condition, and the following cases are performed with this condition.
4. For client devices in the 5.15–5.25 GHz band, Limit =250mW; For the 5.25–5.35 GHz and 5.47–5.725 GHz bands: Limit = Min (250mW, 11dBm+10log B), B is the 26 dB emission bandwidth in megahertz.

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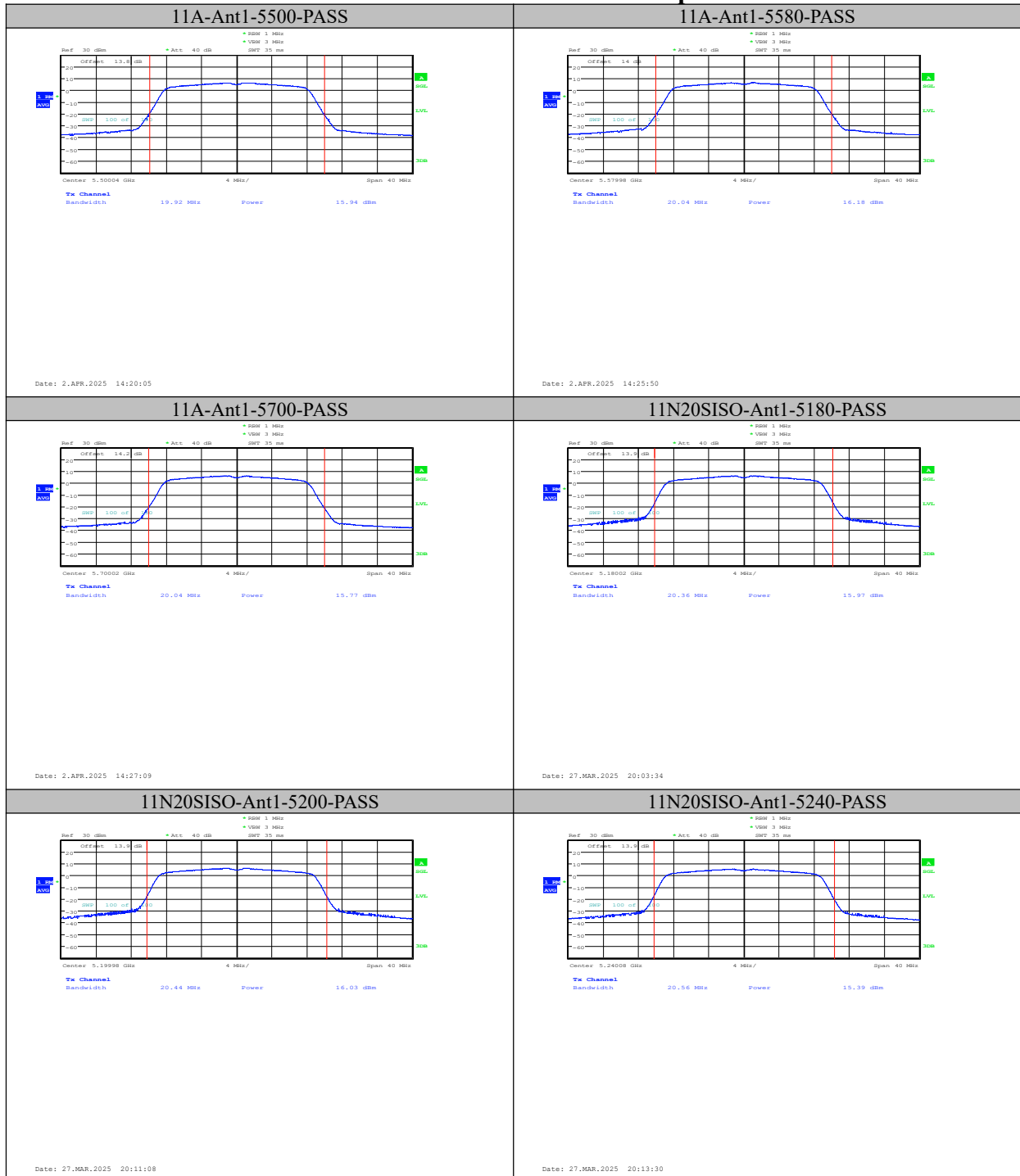
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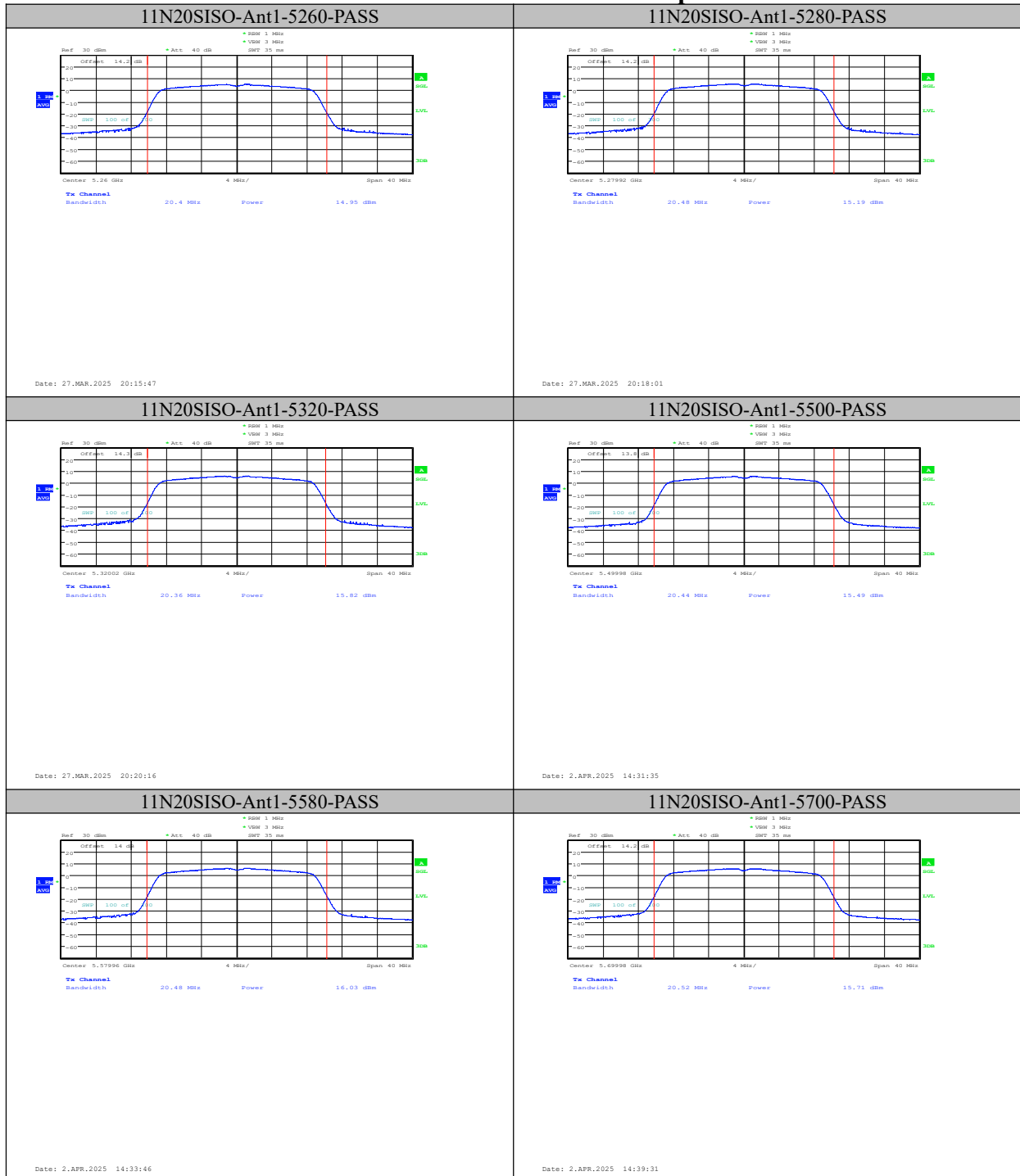
Test graphs



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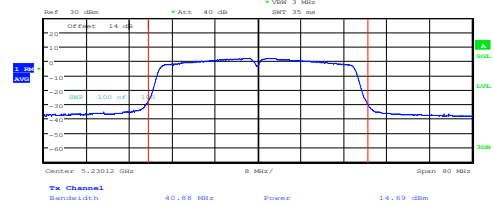
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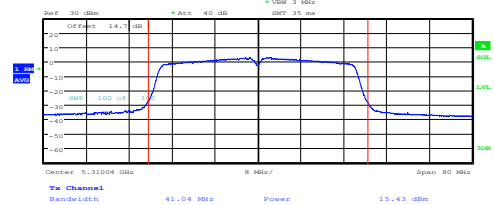


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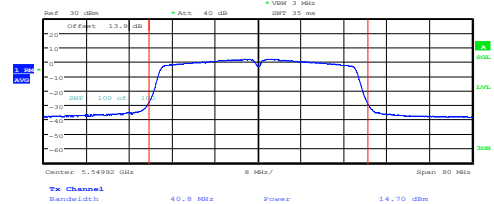
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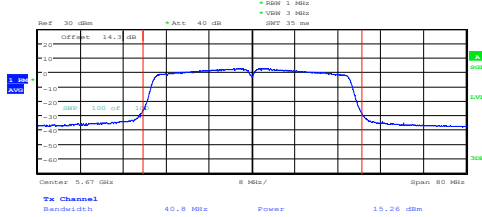
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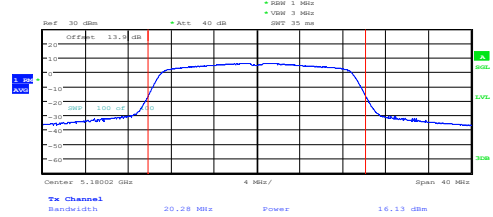


Date: 28.MAR.2025 11:14:58

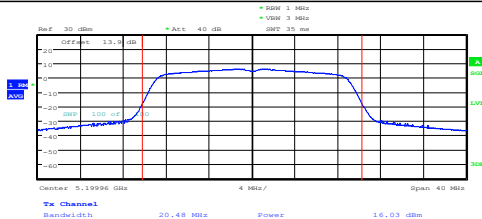
Page 31 of 121

11N40SISO-Ant1-5670-PASS


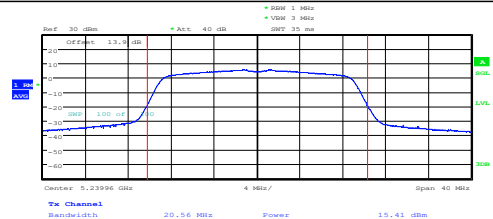
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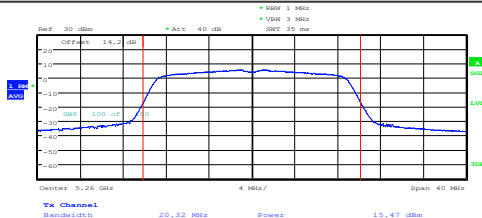
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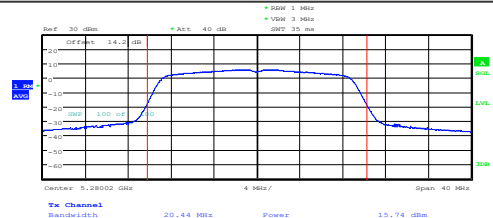
Date: 28.MAR.2025 13:02:53

11AC20SISO-Ant1-5240-PASS


Date: 28.MAR.2025 13:05:18

11AC20SISO-Ant1-5260-PASS


Date: 28.MAR.2025 13:07:43

11AC20SISO-Ant1-5280-PASS


Date: 28.MAR.2025 13:23:24

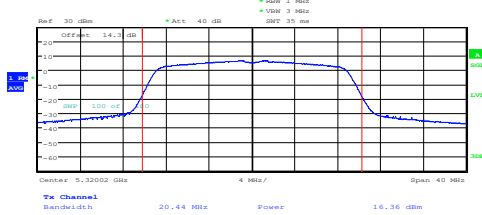
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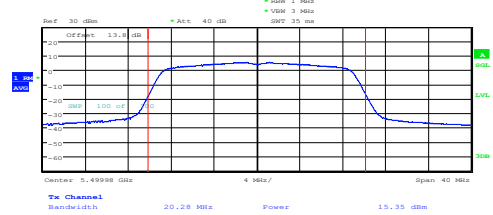
Report No.: 25B02W000005-004

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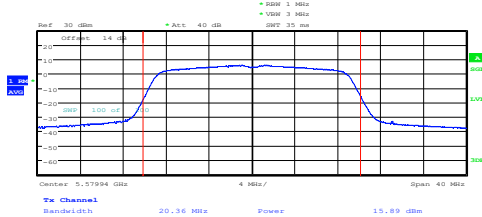
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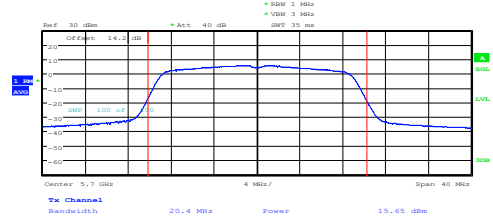
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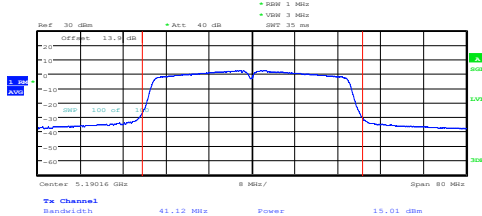
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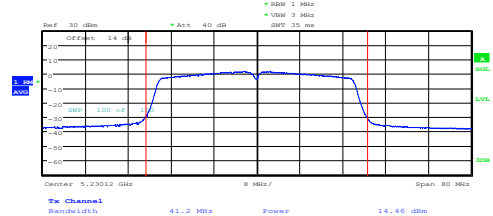
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Date: 28.MAR.2025 15:32:22

11AC40SISO-Ant1-5230-PASS



Date: 28.MAR.2025 15:34:54

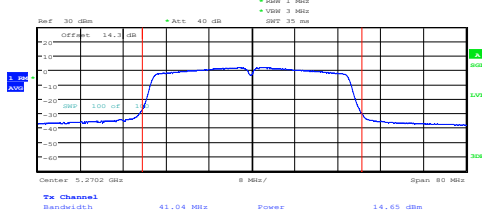
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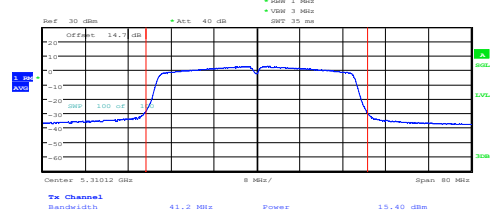
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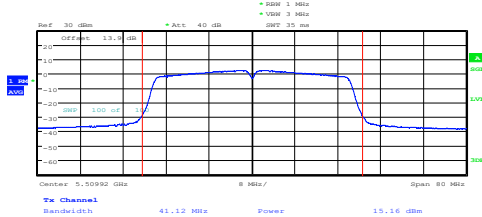
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11AC40SISO-Ant1-5310-PASS



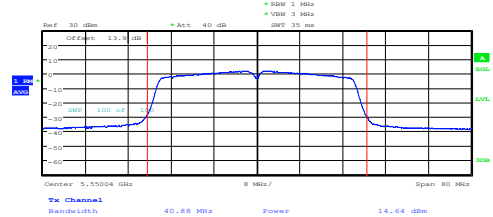
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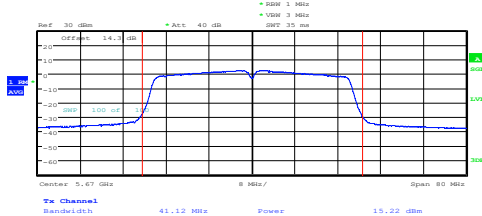
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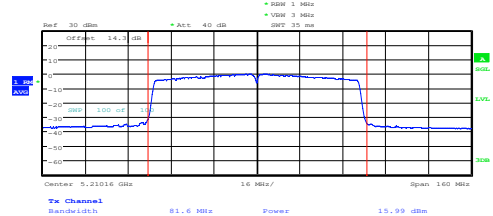
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Date: 28.MAR.2025 16:55:52

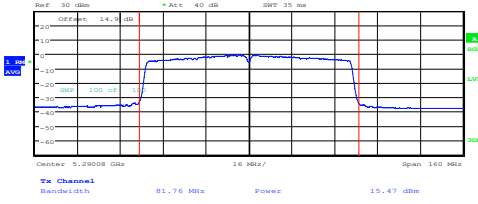
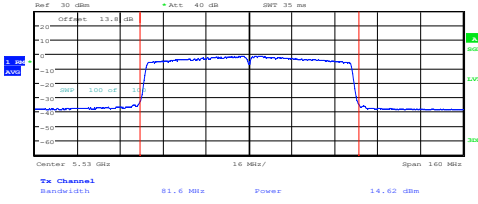
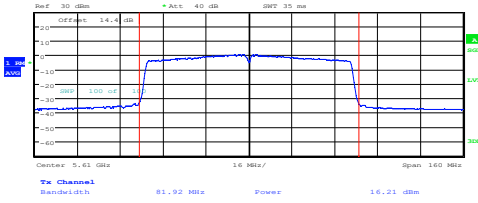
11AC80SISO-Ant1-5210-PASS



Date: 30.MAR.2025 10:09:52

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11AC80SISO-Ant1-5290-PASS  Date: 30.MAR.2025 10:13:08	11AC80SISO-Ant1-5530-PASS  Date: 11.APR.2025 13:26:26
11AC80SISO-Ant1-5610-PASS  Date: 30.MAR.2025 10:20:34	/

6.4. Peak Power Spectral Density

Specifications:	15.407(a), RSS-247 6.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit (dBm/MHz)
15.407(a)	≤ 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.

Measurement Uncertainty:

Measurement Uncertainty	0.56dB
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Test Procedure:

The measurement method is made according to KDB 789033 F

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

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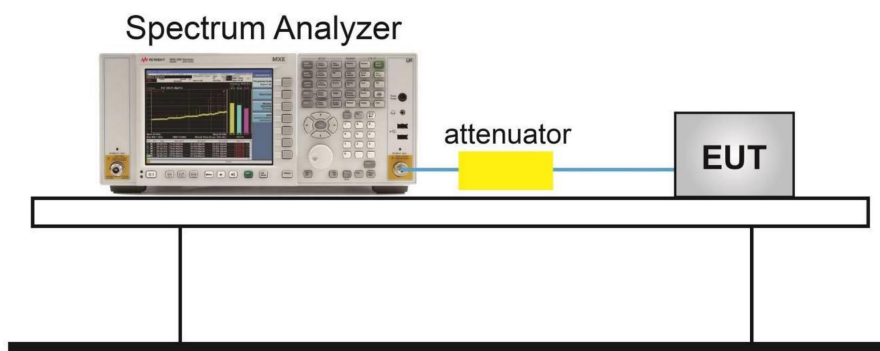
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procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do 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 $RBW \geq 1/T$, where T is defined in II.B.1.a).
- b) Set $VBW \geq 3$ RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/RBW)$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/RBW)$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

Test setup



Measurement Results:

TestMode	Antenna	Frequency [MHz]	Conducted [dBm/MHz]	FCC Limit [dBm/MHz]	IC Limit [dBm/MHz]	EIRP PSD [dBm]	FCC Limit [dBm]	IC Limit [dBm]	Verdict
11A	Ant1	5180	6.34	≤11.00	---	8.31	---	10	PASS
		5200	6.39	≤11.00	---	8.36	---	10	PASS
		5240	5.34	≤11.00	---	7.31	---	10	PASS
		5260	4.93	≤11.00	≤11.00	6.90	---	---	PASS
		5280	5.15	≤11.00	≤11.00	7.12	---	---	PASS
		5320	5.78	≤11.00	≤11.00	7.75	---	---	PASS
		5500	5.64	≤11.00	≤11.00	7.61	---	---	PASS
		5580	5.92	≤11.00	≤11.00	7.89	---	---	PASS
		5700	5.67	≤11.00	≤11.00	7.64	---	---	PASS
11N20SI SO	Ant1	5180	5.59	≤11.00	---	7.56	---	10	PASS
		5200	5.58	≤11.00	---	7.55	---	10	PASS
		5240	5.07	≤11.00	---	7.04	---	10	PASS
		5260	4.59	≤11.00	≤11.00	6.56	---	---	PASS
		5280	4.85	≤11.00	≤11.00	6.82	---	---	PASS
		5320	5.60	≤11.00	≤11.00	7.57	---	---	PASS
		5500	5.56	≤11.00	≤11.00	7.53	---	---	PASS
		5580	5.61	≤11.00	≤11.00	7.58	---	---	PASS
		5700	5.42	≤11.00	≤11.00	7.39	---	---	PASS
11N40SI SO	Ant1	5190	2.32	≤11.00	---	4.29	---	10	PASS
		5230	1.53	≤11.00	---	3.50	---	10	PASS
		5270	1.76	≤11.00	≤11.00	3.73	---	---	PASS
		5310	2.29	≤11.00	≤11.00	4.26	---	---	PASS
		5510	1.89	≤11.00	≤11.00	3.86	---	---	PASS
		5550	1.57	≤11.00	≤11.00	3.54	---	---	PASS
		5670	2.01	≤11.00	≤11.00	3.98	---	---	PASS
11AC20 SISO	Ant1	5180	5.76	≤11.00	---	7.73	---	10	PASS
		5200	5.56	≤11.00	---	7.53	---	10	PASS
		5240	5.12	≤11.00	---	7.09	---	10	PASS
		5260	5.08	≤11.00	≤11.00	7.05	---	---	PASS
		5280	5.36	≤11.00	≤11.00	7.33	---	---	PASS
		5320	6.10	≤11.00	≤11.00	8.07	---	---	PASS

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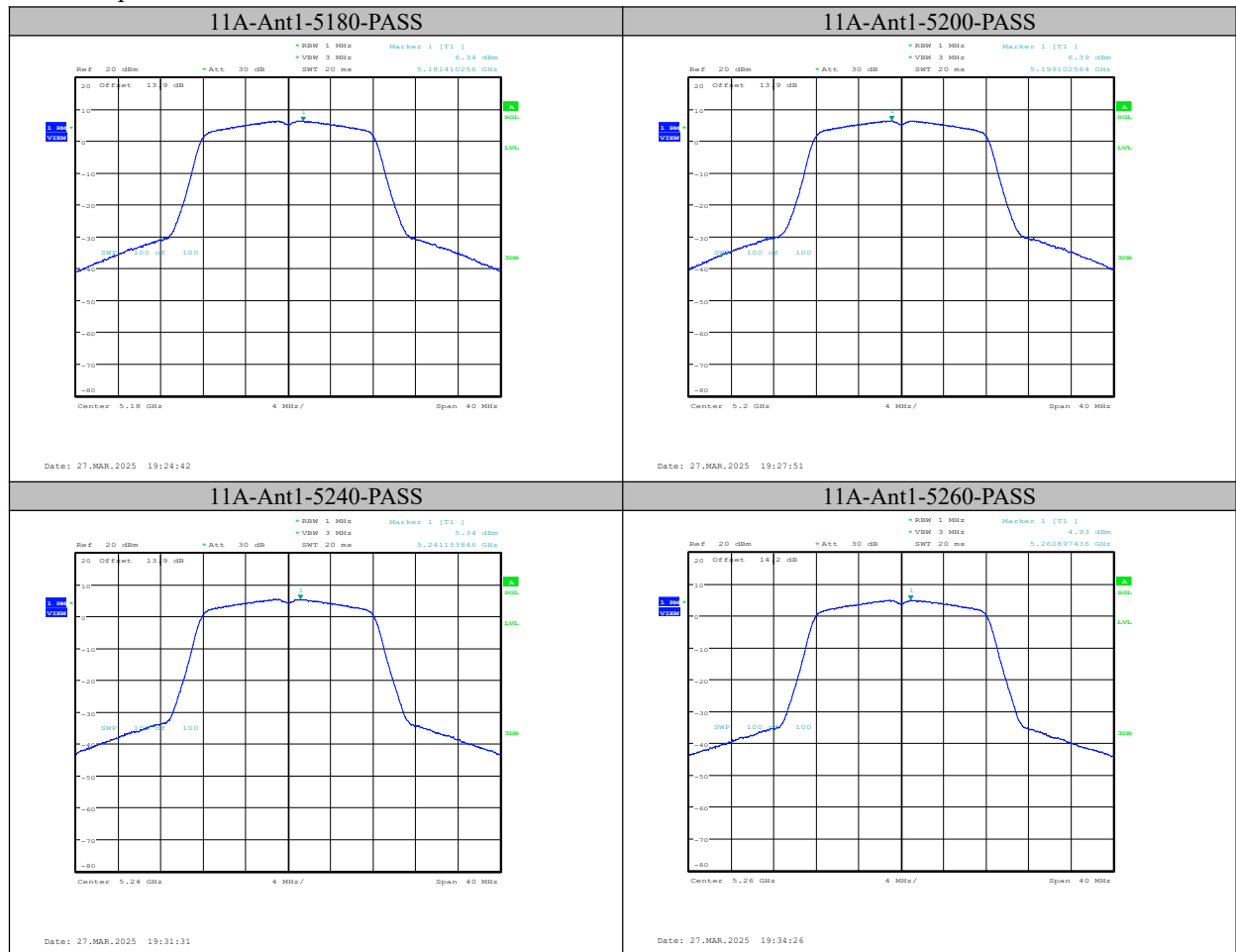
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Tel: 0086-23-88069965 FAX: 0086-23-88608777

		5500	4.83	≤ 11.00	≤ 11.00	6.80	---	---	PASS
		5580	5.42	≤ 11.00	≤ 11.00	7.39	---	---	PASS
		5700	5.36	≤ 11.00	≤ 11.00	7.33	---	---	PASS
11AC40 SISO	Ant1	5190	1.81	≤ 11.00	---	3.78	---	10	PASS
		5230	1.29	≤ 11.00	---	3.26	---	10	PASS
		5270	1.47	≤ 11.00	≤ 11.00	3.44	---	---	PASS
		5310	2.23	≤ 11.00	≤ 11.00	4.20	---	---	PASS
		5510	2.00	≤ 11.00	≤ 11.00	3.97	---	---	PASS
		5550	1.48	≤ 11.00	≤ 11.00	3.45	---	---	PASS
		5670	1.90	≤ 11.00	≤ 11.00	3.87	---	---	PASS
11AC80 SISO	Ant1	5210	-0.57	≤ 11.00	---	1.40	---	10	PASS
		5290	-1.00	≤ 11.00	≤ 11.00	0.97	---	---	PASS
		5530	-0.50	≤ 11.00	≤ 11.00	1.47	---	---	PASS
		5610	0.03	≤ 11.00	≤ 11.00	2.00	---	---	PASS

Note:

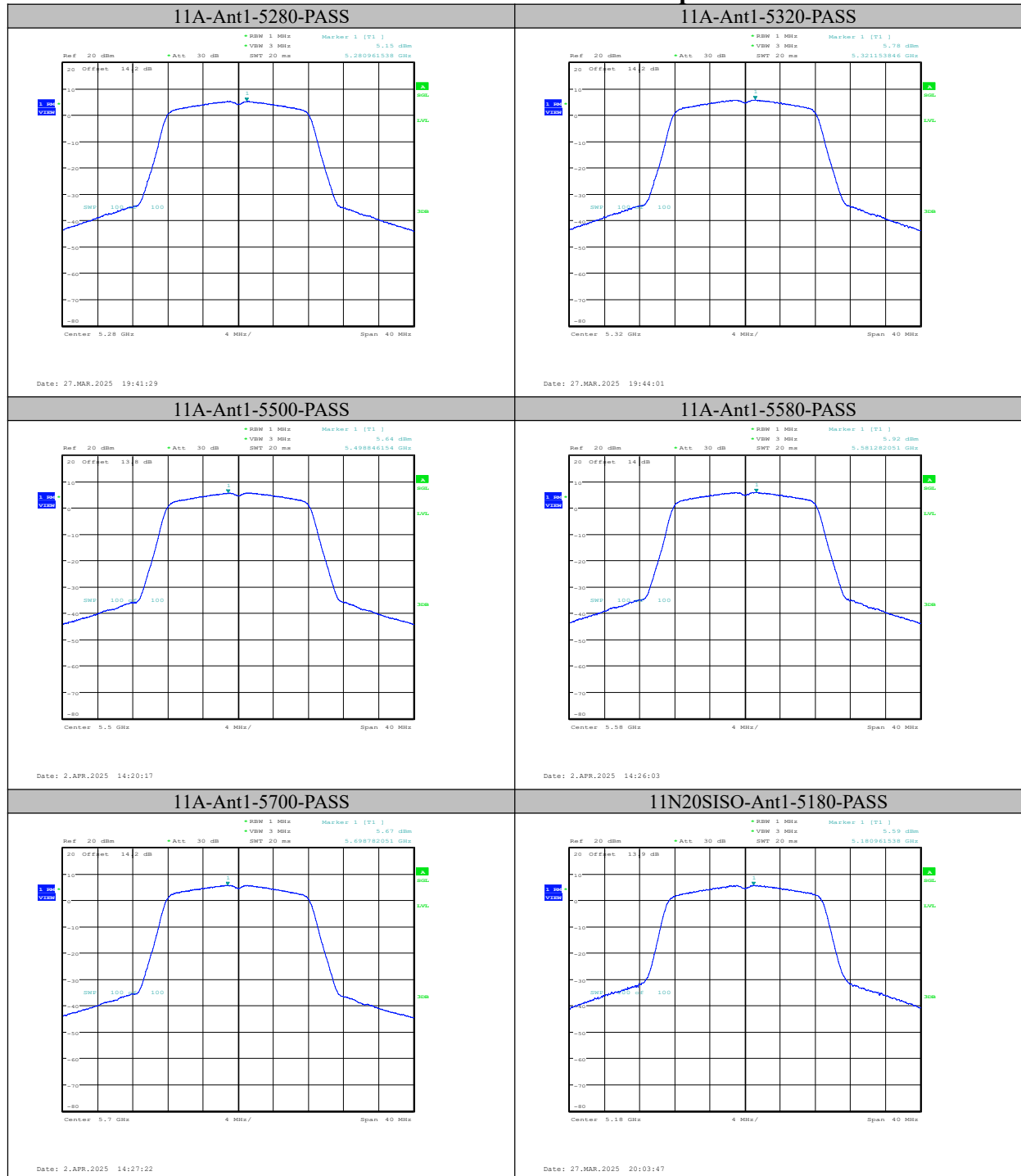
1.The Duty Cycle Factor and RBW Factor is compensated in the graph.

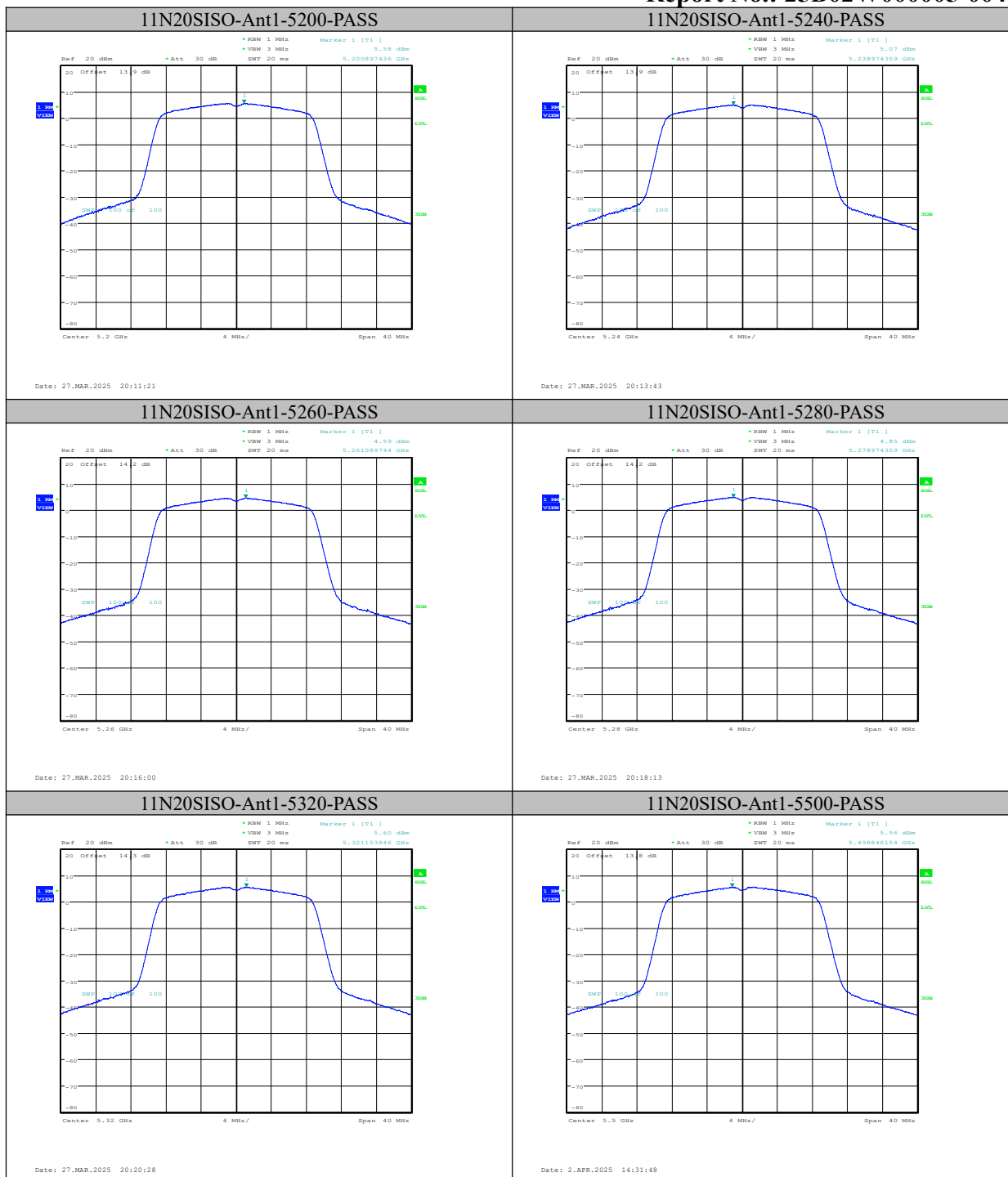
Test Graphs

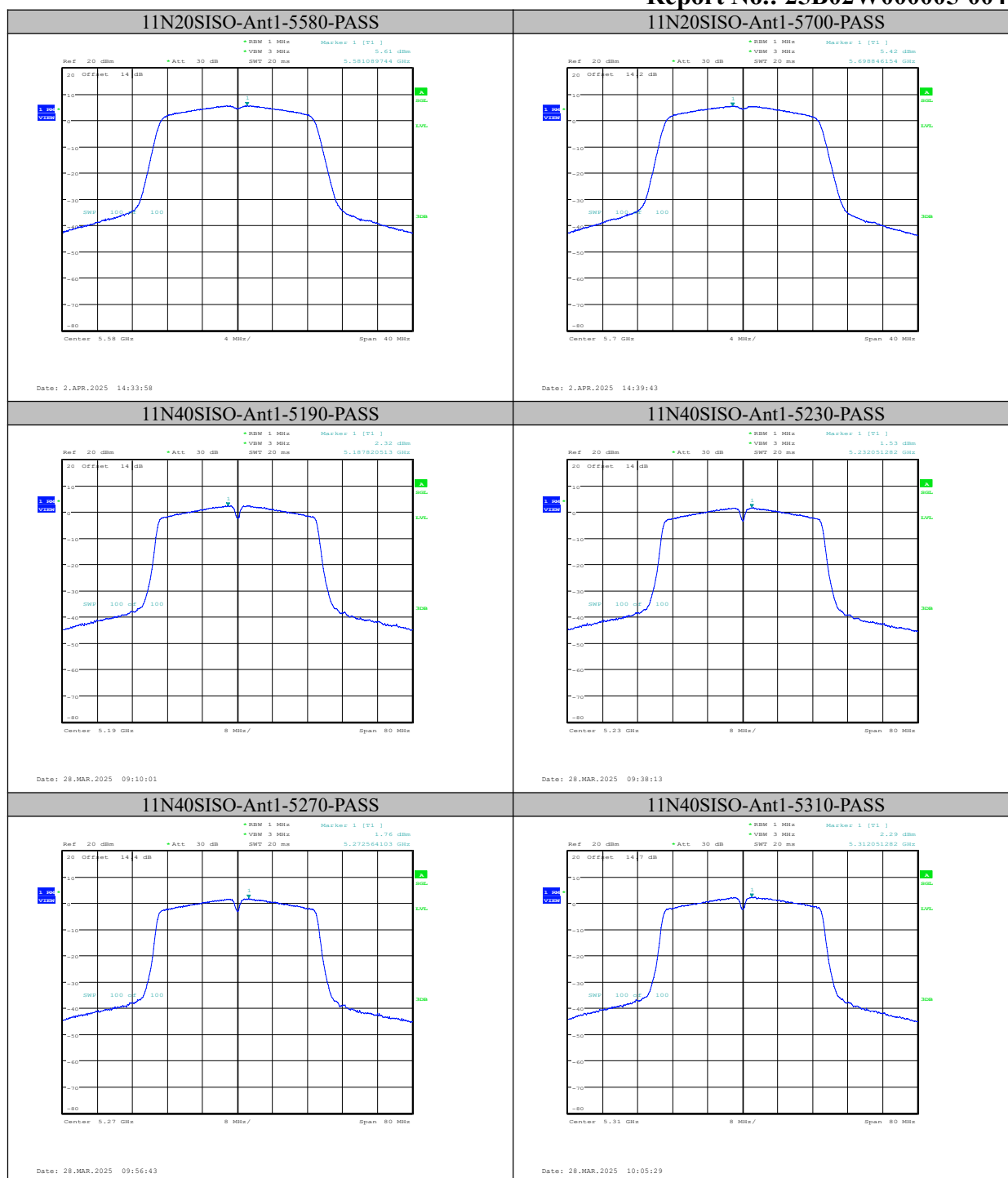


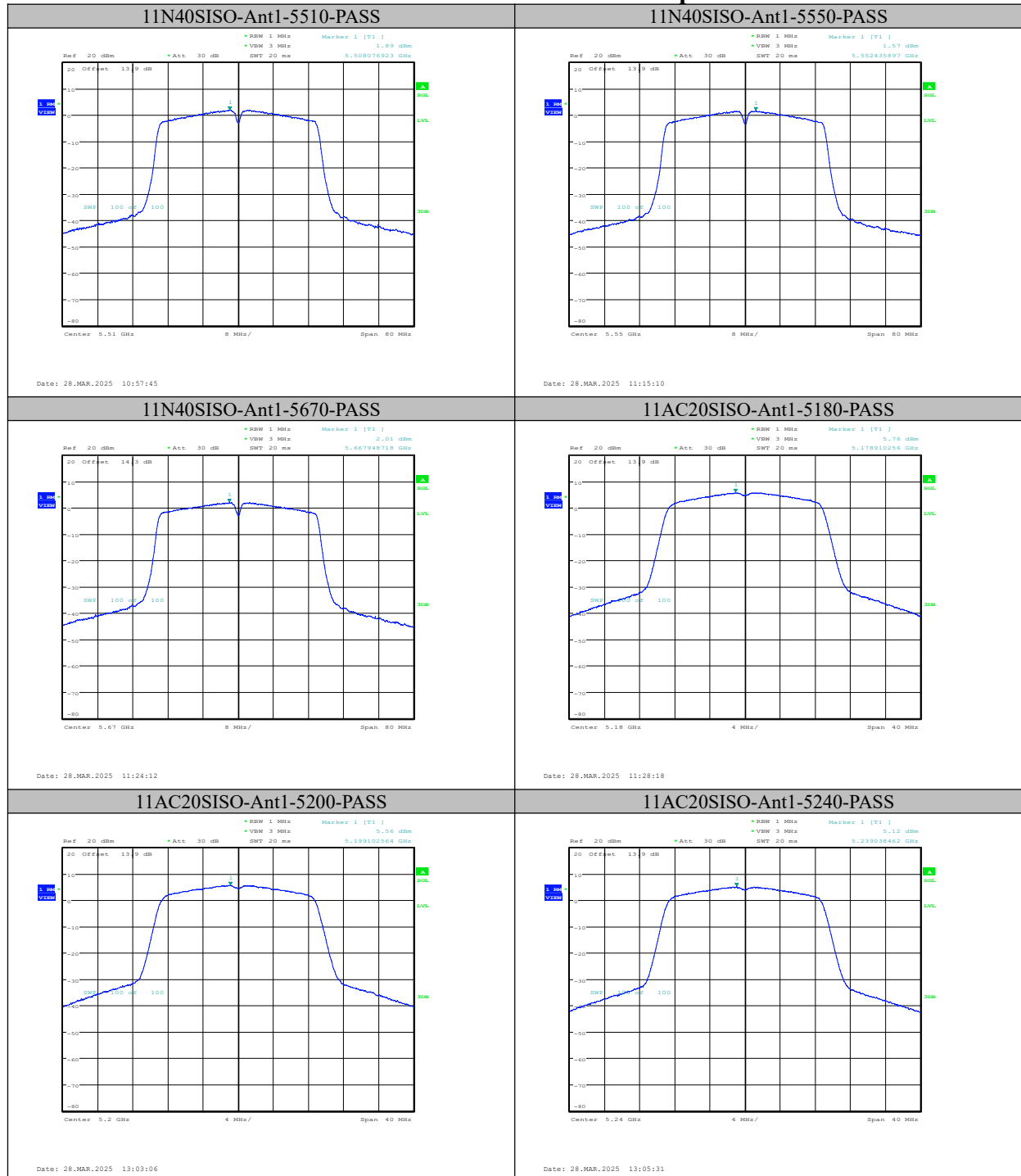
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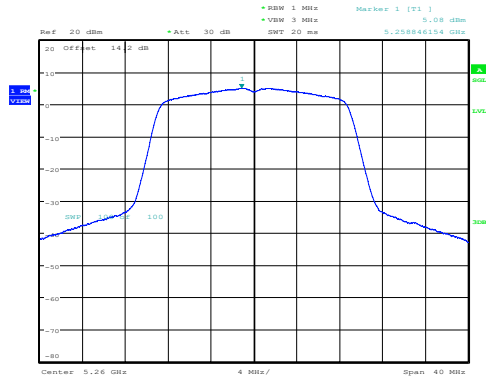




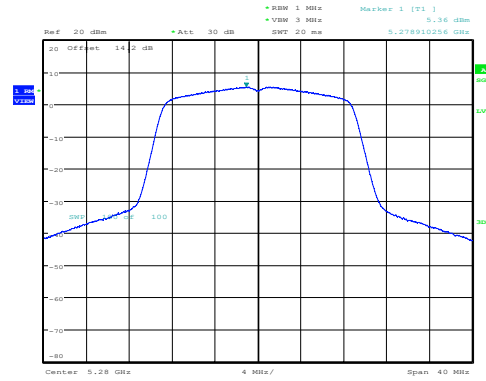


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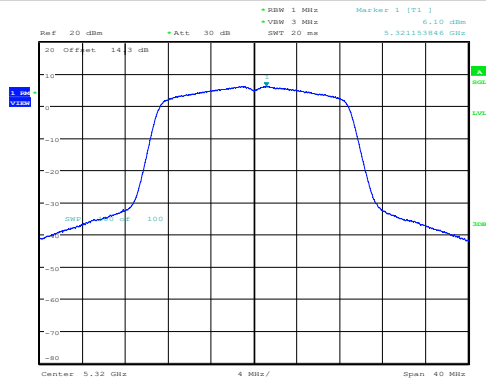
Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
Tel: 0086-23-88069965 FAX:0086-23-88608777

11AC20SISO-Ant1-5260-PASS


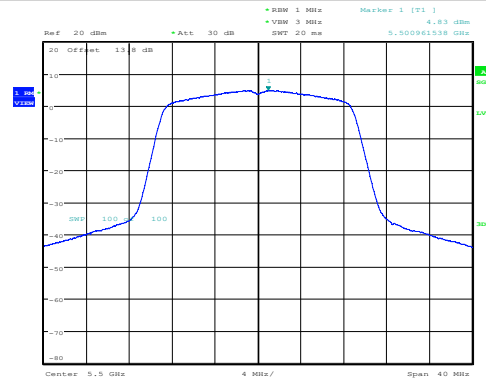
Date: 28.MAR.2025 13:07:56

11AC20SISO-Ant1-5280-PASS


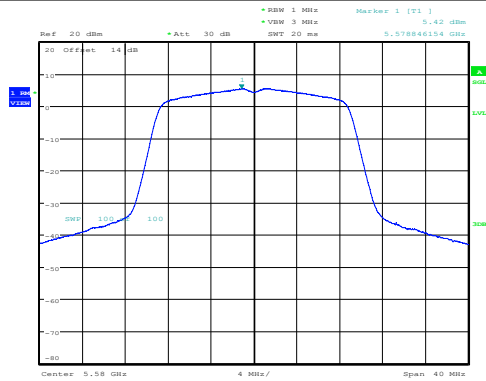
Date: 28.MAR.2025 13:23:36

11AC20SISO-Ant1-5320-PASS


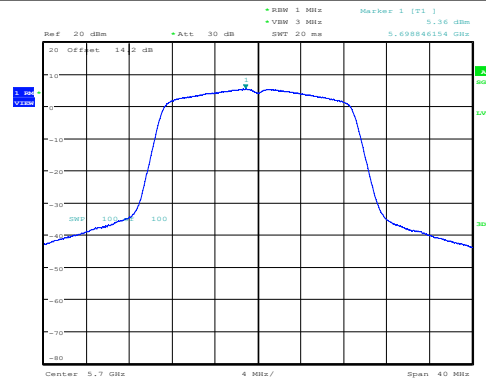
Date: 28.MAR.2025 13:42:42

11AC20SISO-Ant1-5500-PASS


Date: 2.APR.2025 17:34:37

11AC20SISO-Ant1-5580-PASS


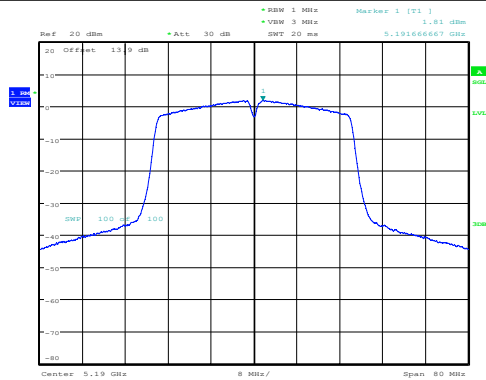
Date: 2.APR.2025 17:35:49

11AC20SISO-Ant1-5700-PASS


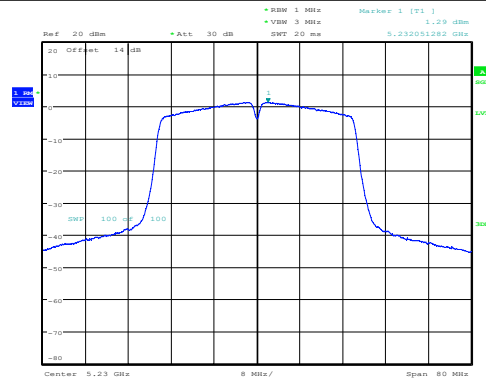
Date: 2.APR.2025 17:37:12

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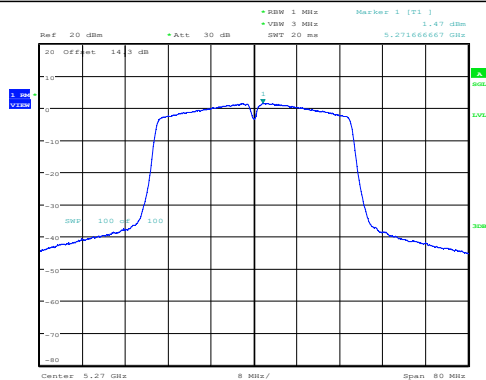
 Address: No. 8,Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China,401336
 Tel: 0086-23-88069965 FAX:0086-23-88608777

11AC40SISO-Ant1-5190-PASS


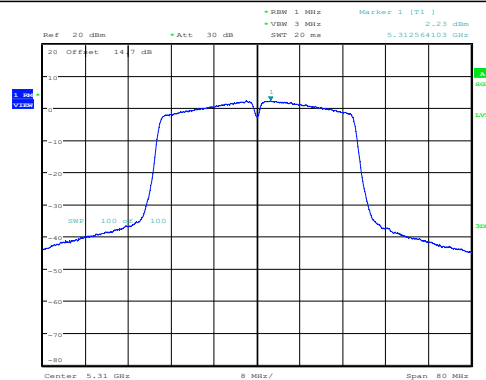
Date: 28.MAR.2025 15:32:36

11AC40SISO-Ant1-5230-PASS


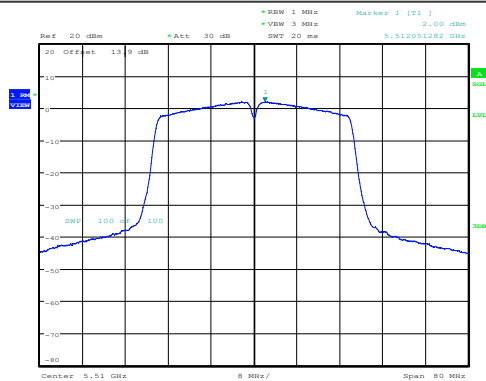
Date: 28.MAR.2025 15:35:08

11AC40SISO-Ant1-5270-PASS


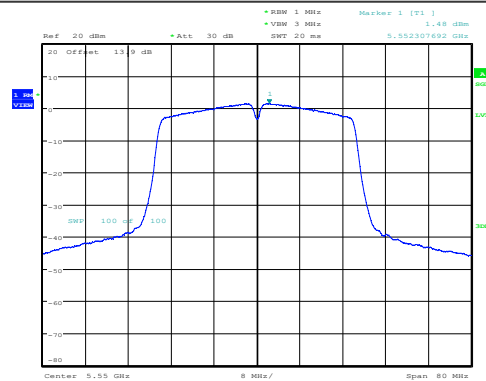
Date: 28.MAR.2025 15:40:56

11AC40SISO-Ant1-5310-PASS


Date: 28.MAR.2025 16:10:39

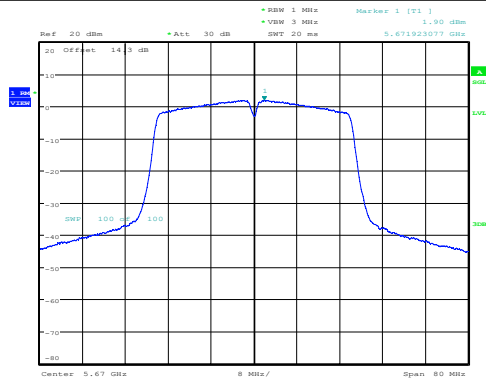
11AC40SISO-Ant1-5510-PASS


Date: 28.MAR.2025 16:13:53

11AC40SISO-Ant1-5550-PASS


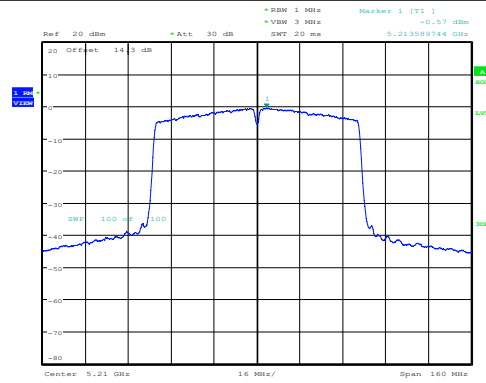
Date: 28.MAR.2025 16:36:58

11AC40SISO-Ant1-5670-PASS



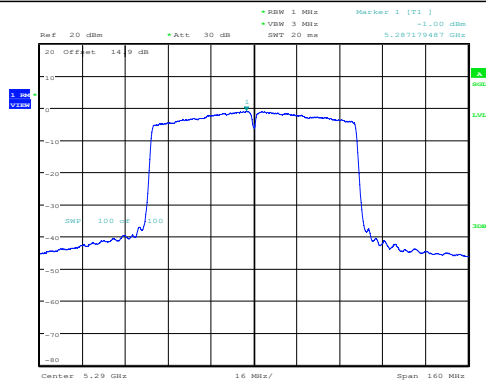
Date: 28.MAR.2025 16:56:04

11AC80SISO-Ant1-5210-PASS



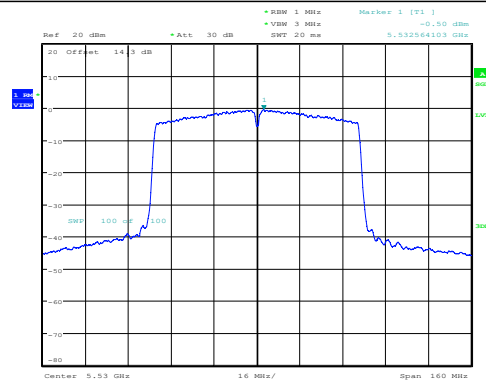
Date: 30.MAR.2025 10:10:13

11AC80SISO-Ant1-5290-PASS



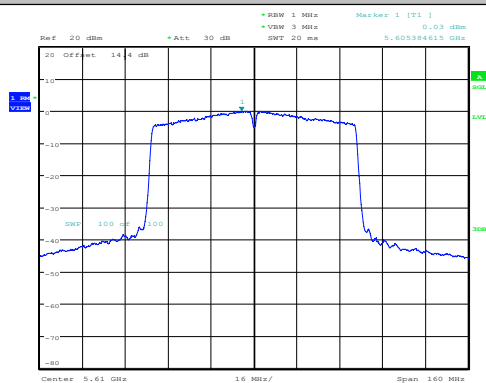
Date: 30.MAR.2025 10:13:28

11AC80SISO-Ant1-5530-PASS



Date: 30.MAR.2025 10:17:10

11AC80SISO-Ant1-5610-PASS



Date: 30.MAR.2025 10:20:54

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6.5. 99% Occupied Bandwidth

Specifications:	FCC 47 Part 2.1049, RSS-247 6.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

Standard	Limit (MHz)
2.1049	N/A
RSS-247 6.2	N/A

Measurement Uncertainty:

Measurement Uncertainty	17.6kHz
-------------------------	---------

Test Procedure:

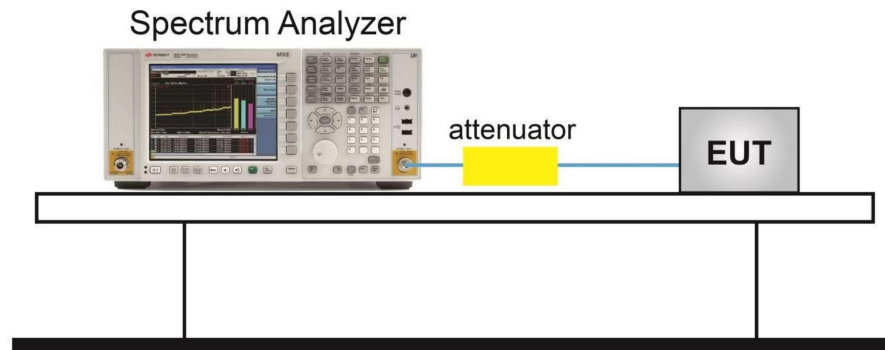
The measurement method is made according to KDB 789033 D

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

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Test Setup



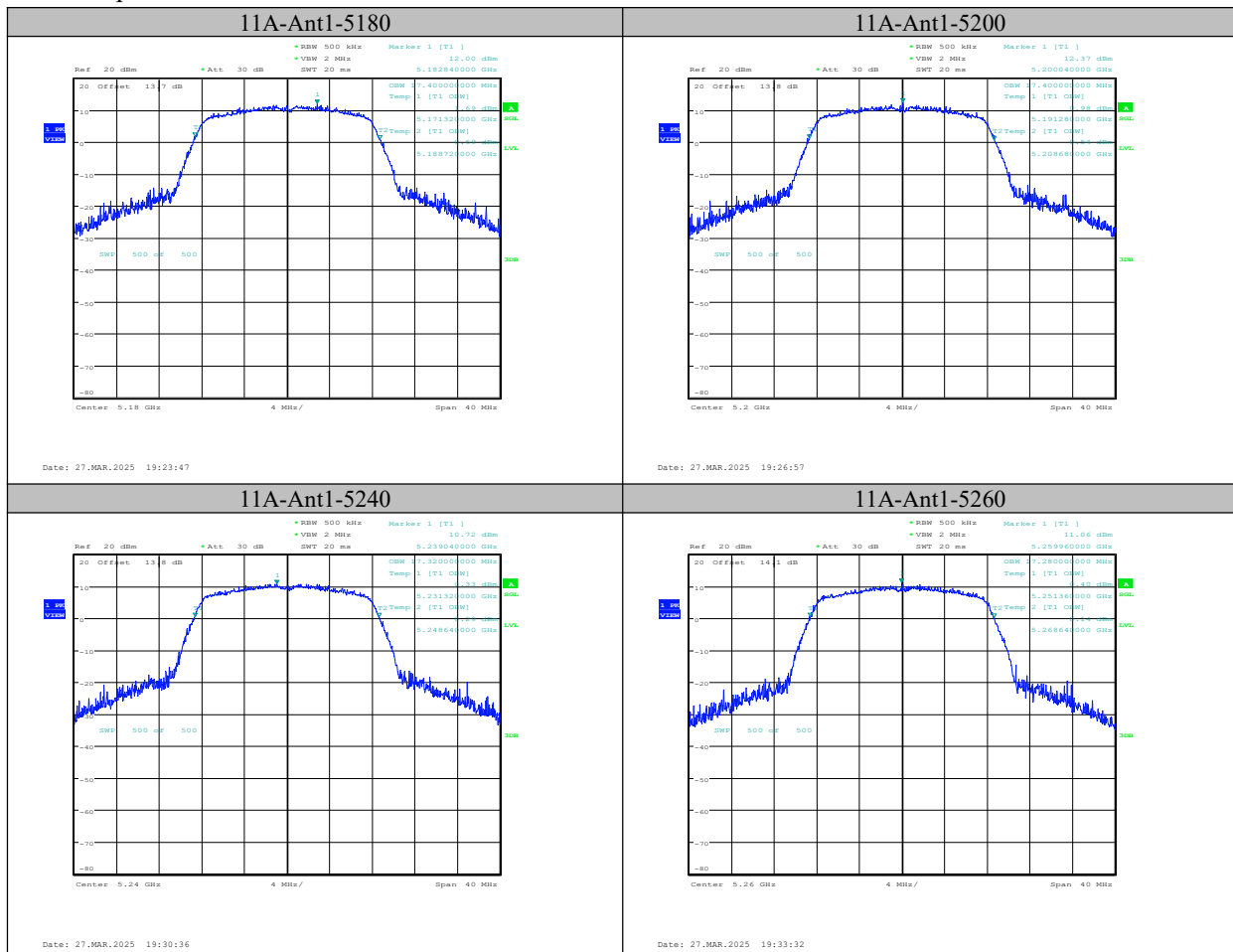
Measurement Results:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.40	5171.3200	5188.7200	---	---
11A	Ant1	5200	17.40	5191.2800	5208.6800	---	---
11A	Ant1	5240	17.32	5231.3200	5248.6400	---	---
11A	Ant1	5260	17.28	5251.3600	5268.6400	---	---
11A	Ant1	5280	17.32	5271.3200	5288.6400	---	---
11A	Ant1	5320	17.28	5311.3600	5328.6400	---	---
11A	Ant1	5500	17.36	5491.3200	5508.6800	---	---
11A	Ant1	5580	17.36	5571.3200	5588.6800	---	---
11A	Ant1	5700	17.32	5691.2800	5708.6000	---	---
11N20SISO	Ant1	5180	18.24	5170.8800	5189.1200	---	---
11N20SISO	Ant1	5200	18.28	5190.8000	5209.0800	---	---
11N20SISO	Ant1	5240	18.20	5230.8800	5249.0800	---	---
11N20SISO	Ant1	5260	18.16	5250.9200	5269.0800	---	---
11N20SISO	Ant1	5280	18.12	5270.9200	5289.0400	---	---
11N20SISO	Ant1	5320	18.16	5310.9200	5329.0800	---	---
11N20SISO	Ant1	5500	18.24	5490.8800	5509.1200	---	---
11N20SISO	Ant1	5580	18.24	5570.8800	5589.1200	---	---
11N20SISO	Ant1	5700	18.20	5690.8400	5709.0400	---	---
11N40SISO	Ant1	5190	36.64	5171.7600	5208.4000	---	---
11N40SISO	Ant1	5230	36.64	5211.6800	5248.3200	---	---
11N40SISO	Ant1	5270	36.72	5251.6800	5288.4000	---	---
11N40SISO	Ant1	5310	36.64	5291.7600	5328.4000	---	---
11N40SISO	Ant1	5510	36.64	5491.6800	5528.3200	---	---
11N40SISO	Ant1	5550	36.64	5531.6800	5568.3200	---	---
11N40SISO	Ant1	5670	36.80	5651.6000	5688.4000	---	---
11AC20SISO	Ant1	5180	18.16	5170.9200	5189.0800	---	---
11AC20SISO	Ant1	5200	18.20	5190.8800	5209.0800	---	---

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11AC20SISO	Ant1	5240	18.20	5230.8800	5249.0800	---	---
11AC20SISO	Ant1	5260	18.16	5250.9200	5269.0800	---	---
11AC20SISO	Ant1	5280	18.12	5270.9200	5289.0400	---	---
11AC20SISO	Ant1	5320	18.16	5310.9200	5329.0800	---	---
11AC20SISO	Ant1	5500	18.16	5490.9200	5509.0800	---	---
11AC20SISO	Ant1	5580	18.20	5570.8800	5589.0800	---	---
11AC20SISO	Ant1	5700	18.16	5690.8800	5709.0400	---	---
11AC40SISO	Ant1	5190	36.72	5171.6800	5208.4000	---	---
11AC40SISO	Ant1	5230	36.72	5211.6800	5248.4000	---	---
11AC40SISO	Ant1	5270	36.64	5251.6800	5288.3200	---	---
11AC40SISO	Ant1	5310	36.64	5291.7600	5328.4000	---	---
11AC40SISO	Ant1	5510	36.56	5491.7600	5528.3200	---	---
11AC40SISO	Ant1	5550	36.64	5531.6800	5568.3200	---	---
11AC40SISO	Ant1	5670	36.72	5651.6000	5688.3200	---	---
11AC80SISO	Ant1	5210	75.36	5172.4000	5247.7600	---	---
11AC80SISO	Ant1	5290	75.36	5252.4000	5327.7600	---	---
11AC80SISO	Ant1	5530	75.36	5492.4000	5567.7600	---	---
11AC80SISO	Ant1	5610	75.36	5572.4000	5647.7600	---	---

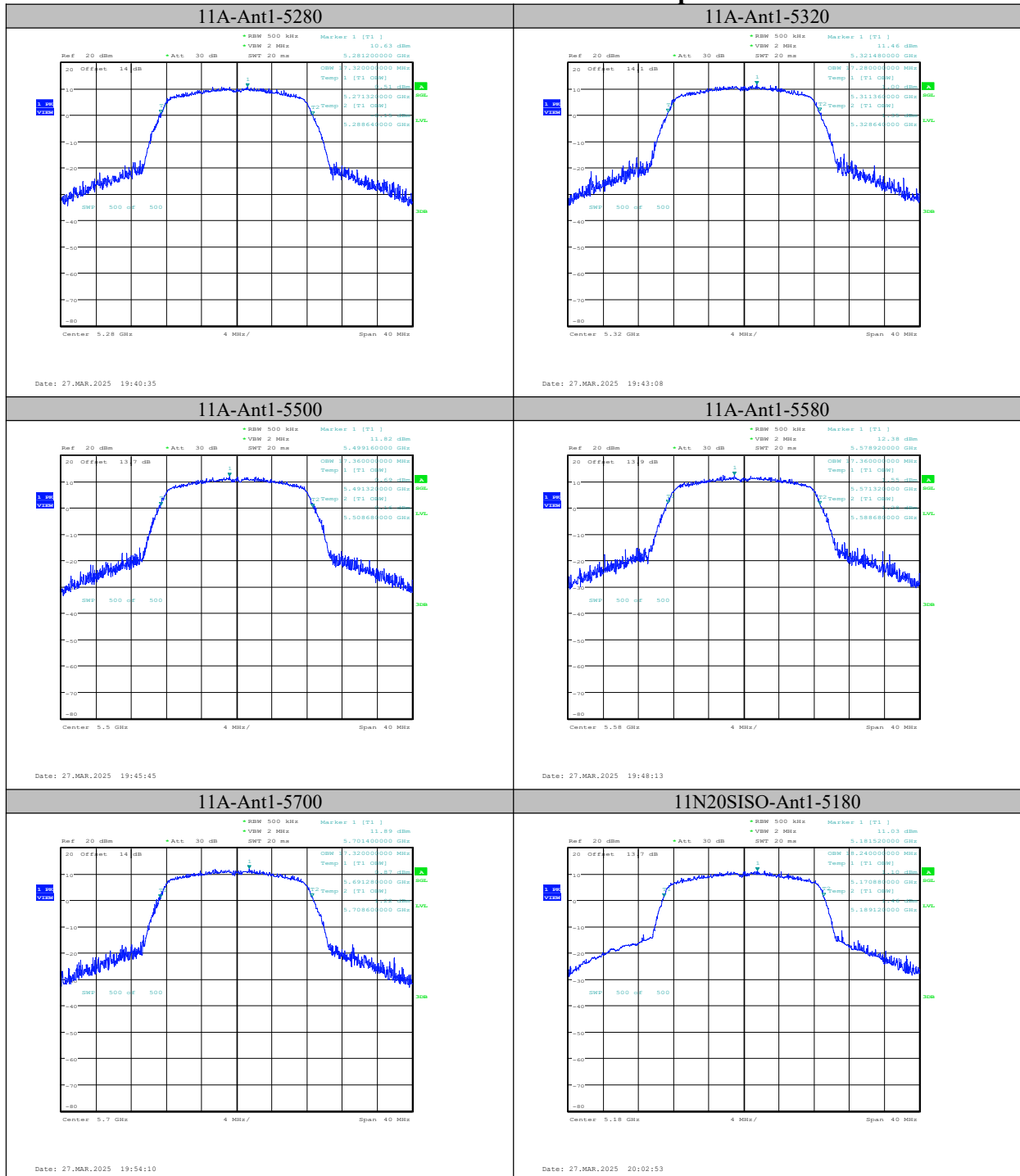
Test Graphs


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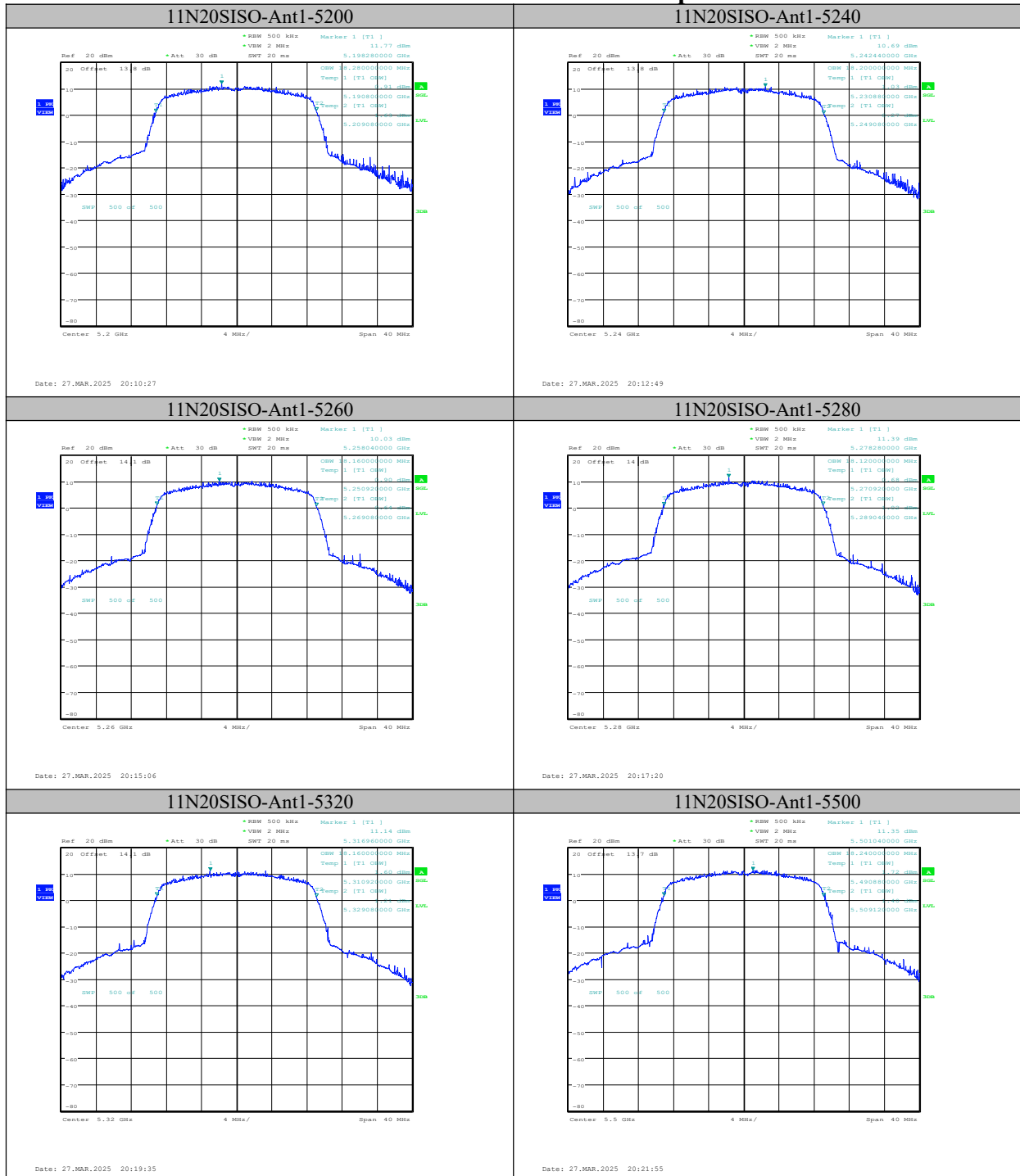


Report No.: 25B02W000005-004



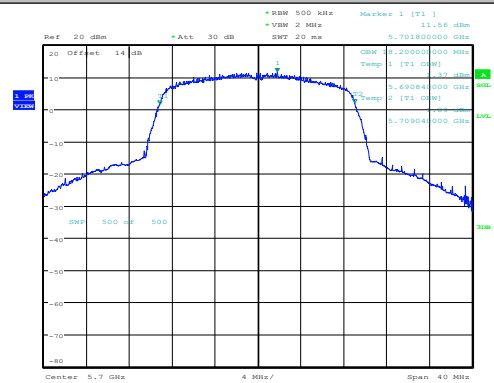
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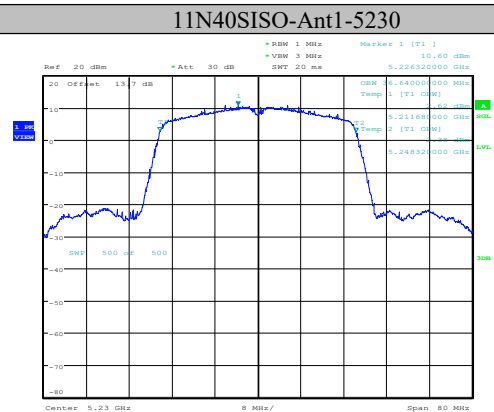




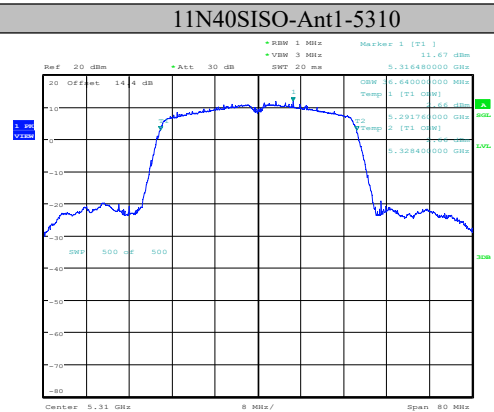
11N20SISO-Ant1-5700



Date: 27.MAR.2025 20:26:21



Date: 28.MAR.2025 09:37:18

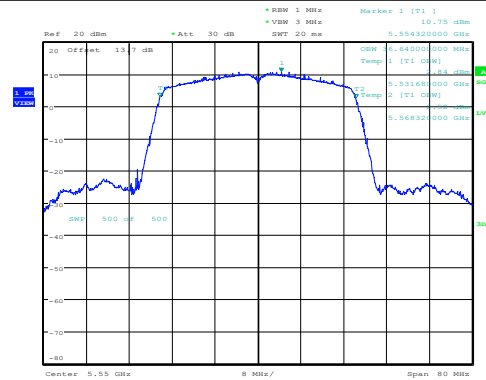


Date: 28.MAR.2025 10:04:35

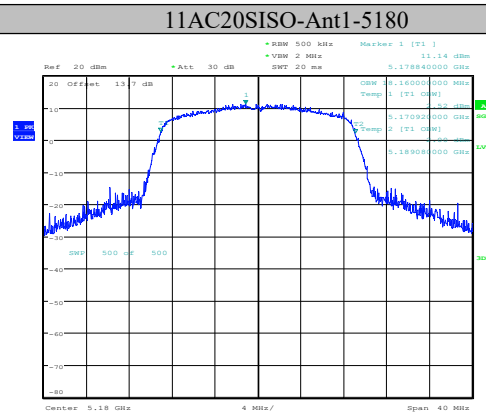
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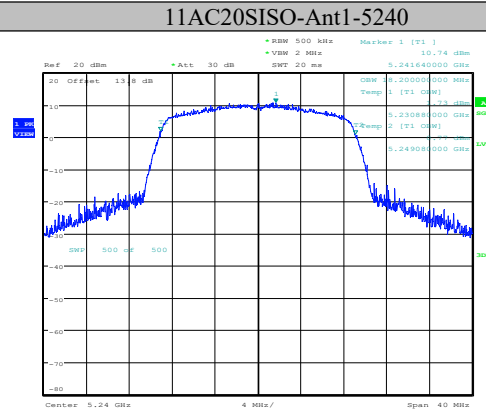
11N40SISO-Ant1-5550



Date: 28.MAR.2025 11:14:17



Date: 28.MAR.2025 11:27:24

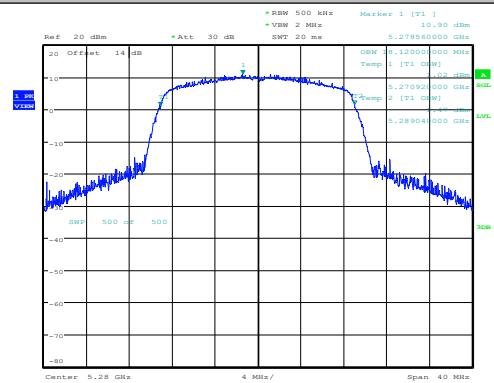


Date: 28.MAR.2025 13:04:37

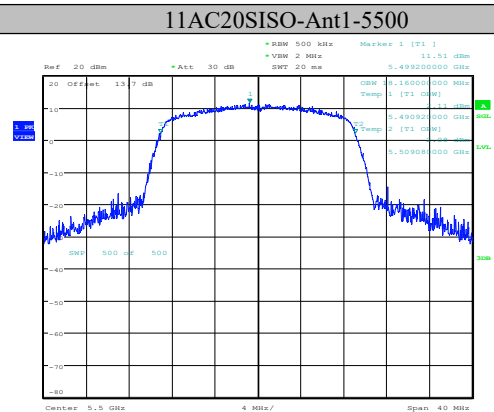
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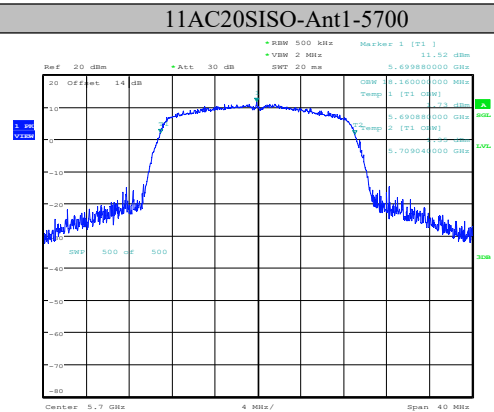
11AC20SISO-Ant1-5280



Date: 28.MAR.2025 13:22:43



Date: 28.MAR.2025 14:17:15

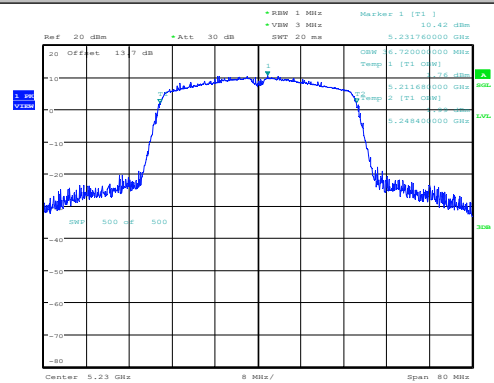


Date: 28.MAR.2025 15:06:59

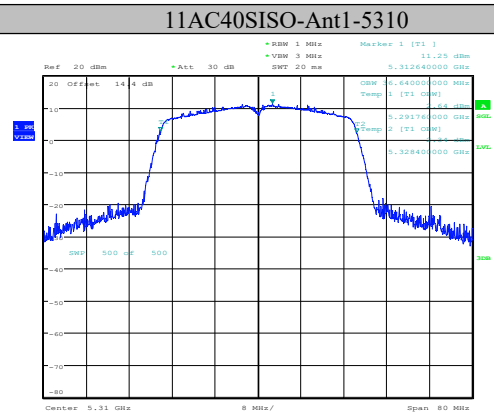
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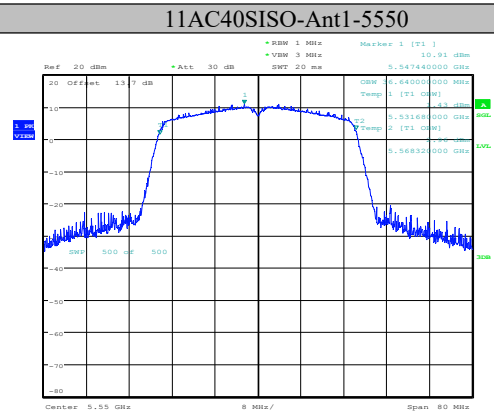
11AC40SISO-Ant1-5230



Date: 28.MAR.2025 15:34:13



Date: 28.MAR.2025 16:09:50



Date: 28.MAR.2025 16:36:10

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11AC40SISO-Ant1-5670 Date: 28.MAR.2025 16:55:14	11AC80SISO-Ant1-5210 Date: 30.MAR.2025 10:09:03
11AC80SISO-Ant1-5290 Date: 30.MAR.2025 10:12:19	11AC80SISO-Ant1-5530 Date: 30.MAR.2025 10:16:01
11AC80SISO-Ant1-5610 Date: 30.MAR.2025 10:19:45	/ /

6.6. Occupied 26dB Bandwidth

Specifications:	15.407(a), RSS-247 6.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

Standard	Limit(MHz)
15.407(a)	N/A
RSS-247 6.2	N/A

Measurement Uncertainty:

Measurement Uncertainty	17.6kHz
-------------------------	---------

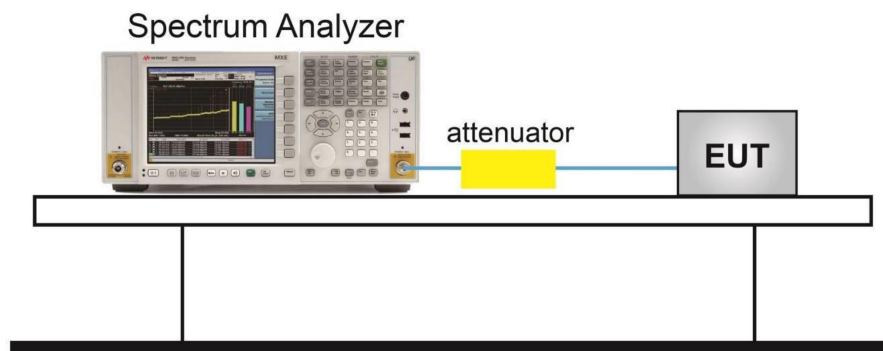
Test Procedure:

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%.

Test Setup:



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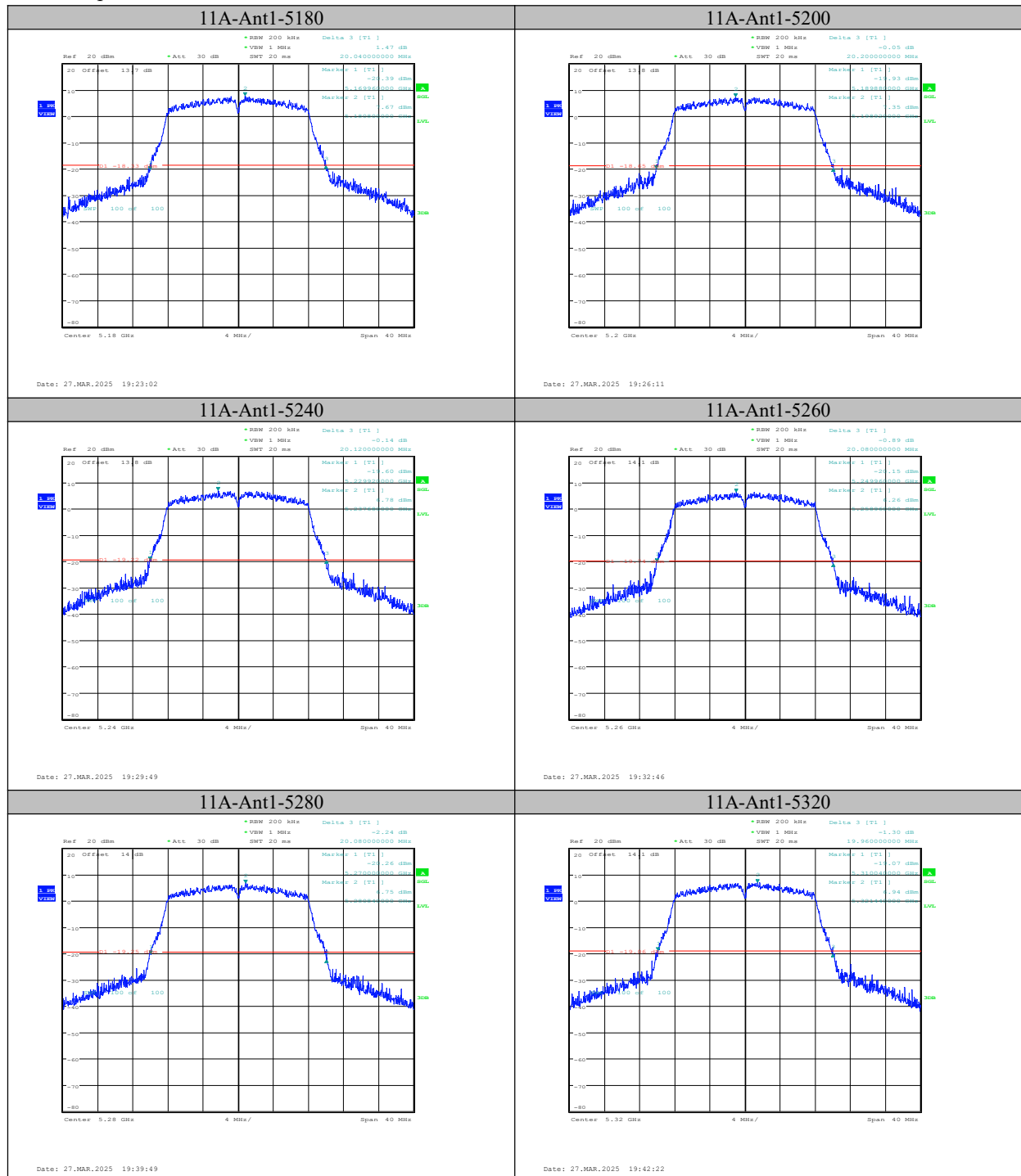
Measurement Results:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.04	5169.96	5190.00	---	---
11A	Ant1	5200	20.20	5189.88	5210.08	---	---
11A	Ant1	5240	20.12	5229.92	5250.04	---	---
11A	Ant1	5260	20.08	5249.96	5270.04	---	---
11A	Ant1	5280	20.08	5270.00	5290.08	---	---
11A	Ant1	5320	19.96	5310.04	5330.00	---	---
11A	Ant1	5500	19.92	5490.08	5510.00	---	---
11A	Ant1	5580	20.04	5569.96	5590.00	---	---
11A	Ant1	5700	20.04	5690.00	5710.04	---	---
11N20SISO	Ant1	5180	20.36	5169.84	5190.20	---	---
11N20SISO	Ant1	5200	20.44	5189.76	5210.20	---	---
11N20SISO	Ant1	5240	20.56	5229.80	5250.36	---	---
11N20SISO	Ant1	5260	20.40	5249.80	5270.20	---	---
11N20SISO	Ant1	5280	20.48	5269.68	5290.16	---	---
11N20SISO	Ant1	5320	20.36	5309.84	5330.20	---	---
11N20SISO	Ant1	5500	20.44	5489.76	5510.20	---	---
11N20SISO	Ant1	5580	20.48	5569.72	5590.20	---	---
11N20SISO	Ant1	5700	20.52	5689.72	5710.24	---	---
11N40SISO	Ant1	5190	40.80	5169.68	5210.48	---	---
11N40SISO	Ant1	5230	40.88	5209.68	5250.56	---	---
11N40SISO	Ant1	5270	40.80	5249.60	5290.40	---	---
11N40SISO	Ant1	5310	41.04	5289.52	5330.56	---	---
11N40SISO	Ant1	5510	41.20	5489.36	5530.56	---	---
11N40SISO	Ant1	5550	40.80	5529.52	5570.32	---	---
11N40SISO	Ant1	5670	40.80	5649.60	5690.40	---	---
11AC20SISO	Ant1	5180	20.28	5169.88	5190.16	---	---
11AC20SISO	Ant1	5200	20.48	5189.72	5210.20	---	---
11AC20SISO	Ant1	5240	20.56	5229.68	5250.24	---	---
11AC20SISO	Ant1	5260	20.32	5249.84	5270.16	---	---
11AC20SISO	Ant1	5280	20.44	5269.80	5290.24	---	---
11AC20SISO	Ant1	5320	20.44	5309.80	5330.24	---	---
11AC20SISO	Ant1	5500	20.28	5489.84	5510.12	---	---
11AC20SISO	Ant1	5580	20.36	5569.76	5590.12	---	---
11AC20SISO	Ant1	5700	20.40	5689.80	5710.20	---	---
11AC40SISO	Ant1	5190	41.12	5169.60	5210.72	---	---
11AC40SISO	Ant1	5230	41.20	5209.52	5250.72	---	---
11AC40SISO	Ant1	5270	41.04	5249.68	5290.72	---	---
11AC40SISO	Ant1	5310	41.20	5289.44	5330.64	---	---
11AC40SISO	Ant1	5510	40.80	5489.52	5530.32	---	---
11AC40SISO	Ant1	5550	40.88	5529.60	5570.48	---	---
11AC40SISO	Ant1	5670	41.12	5649.44	5690.56	---	---
11AC80SISO	Ant1	5210	81.60	5169.20	5250.80	---	---
11AC80SISO	Ant1	5290	81.60	5249.36	5330.96	---	---
11AC80SISO	Ant1	5530	81.60	5489.20	5570.80	---	---
11AC80SISO	Ant1	5610	81.92	5569.04	5650.96	---	---

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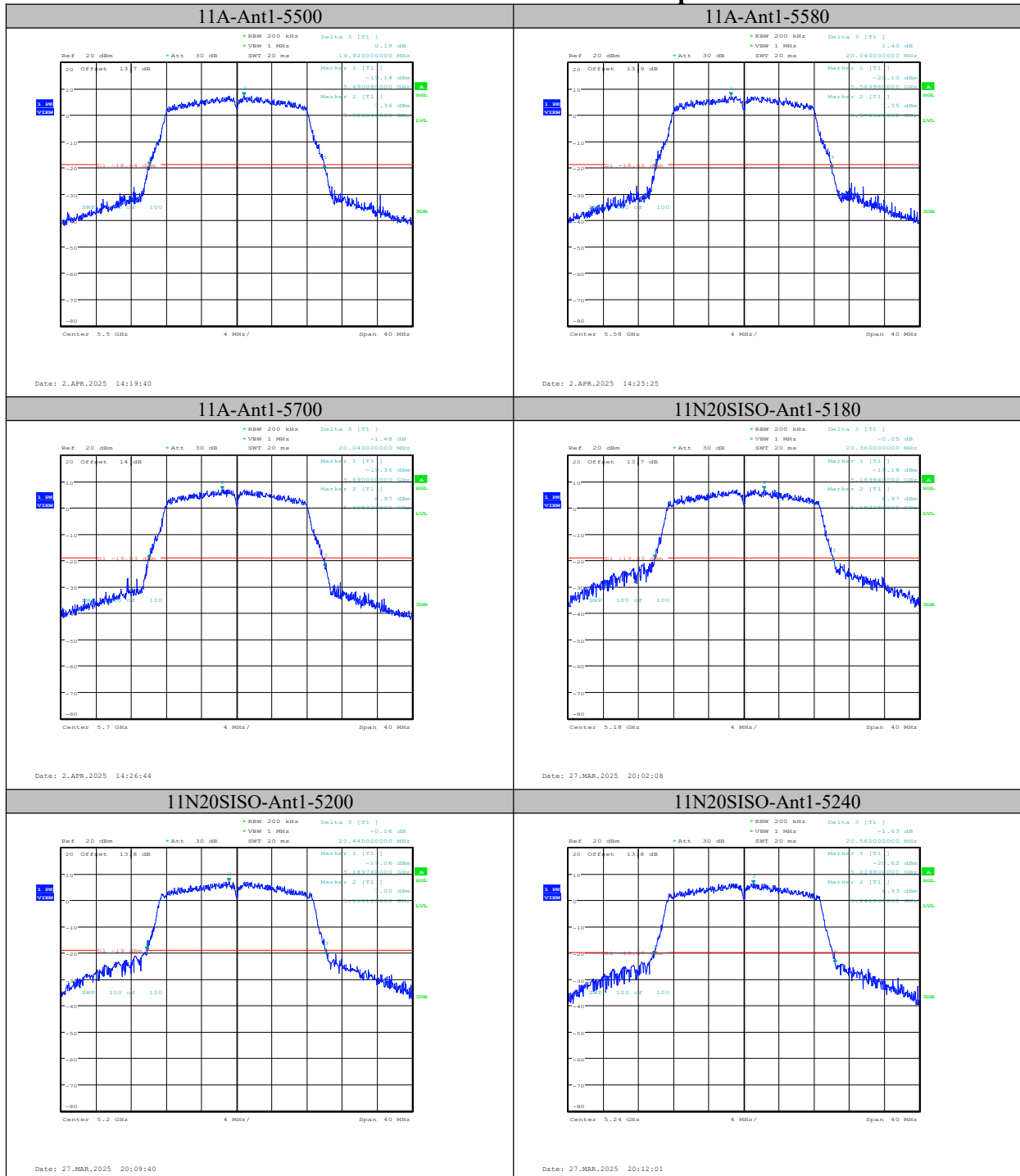
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Test Graphs



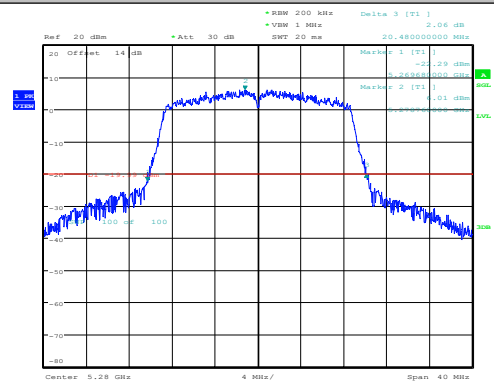
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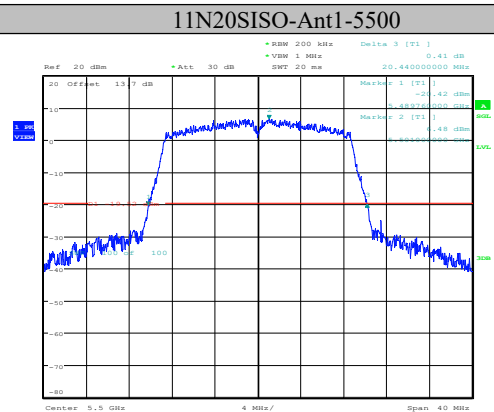




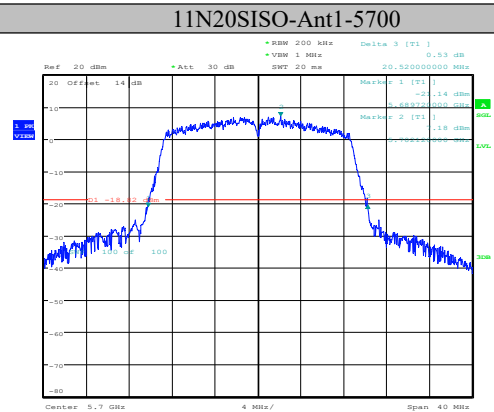
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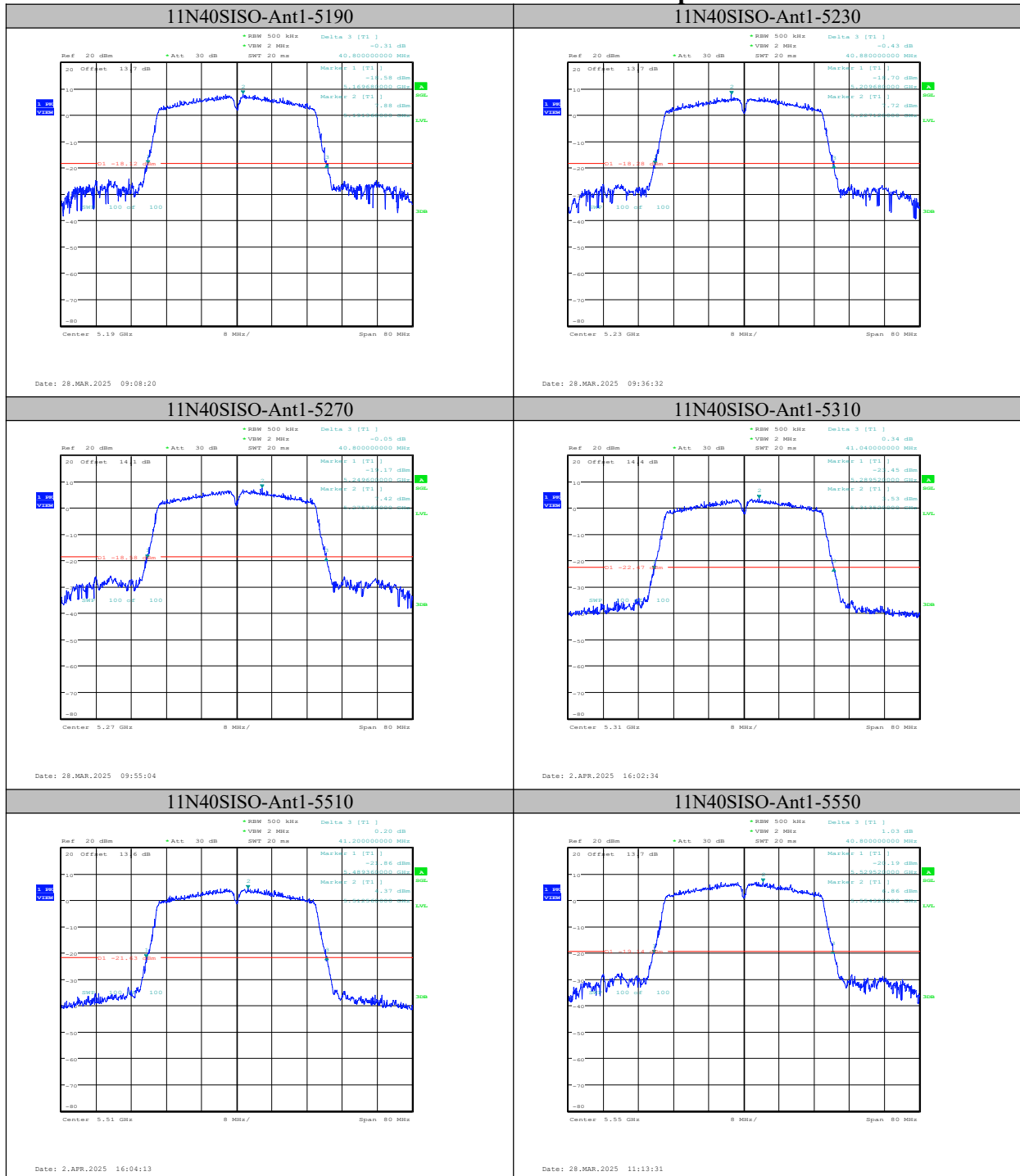


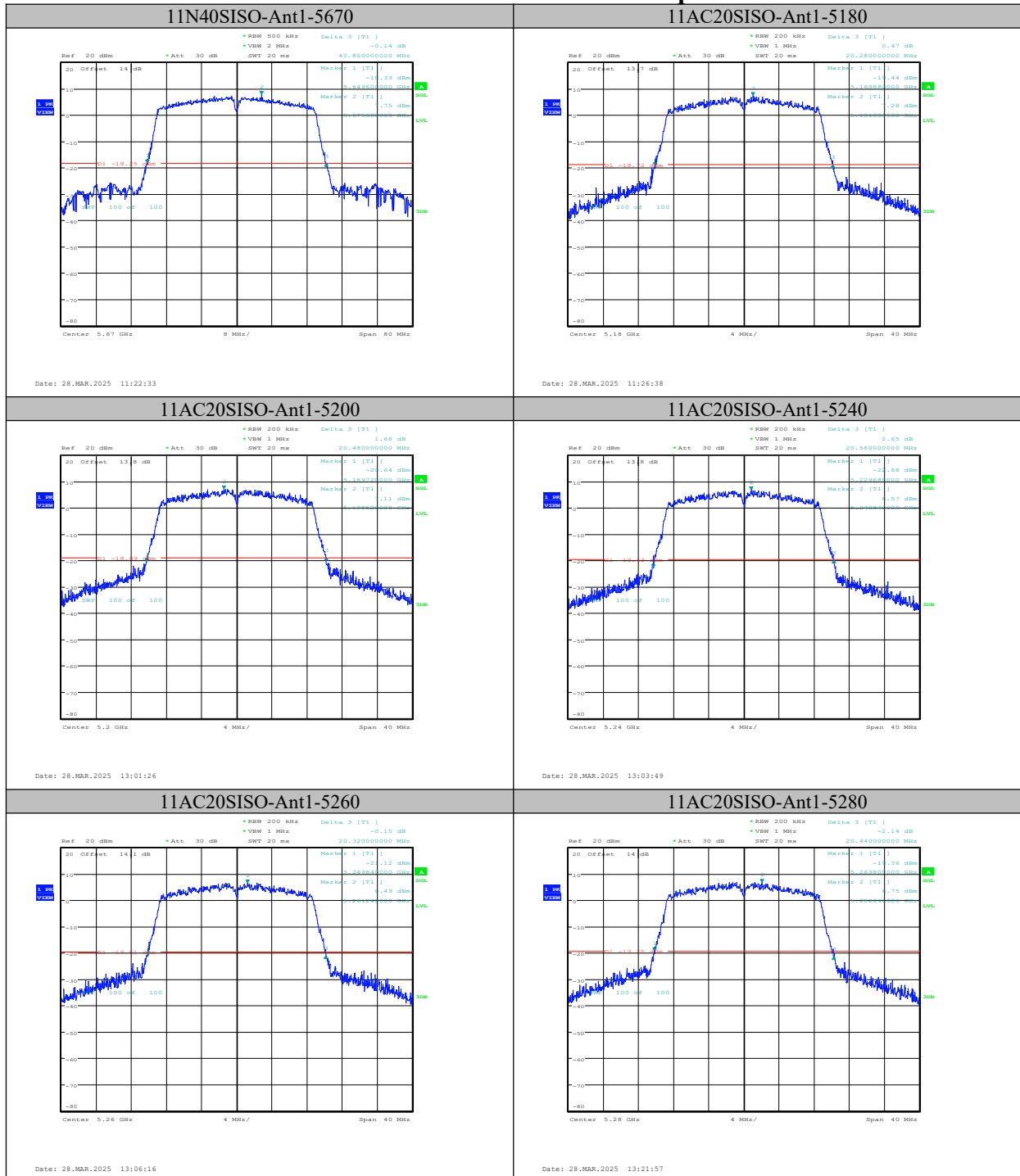
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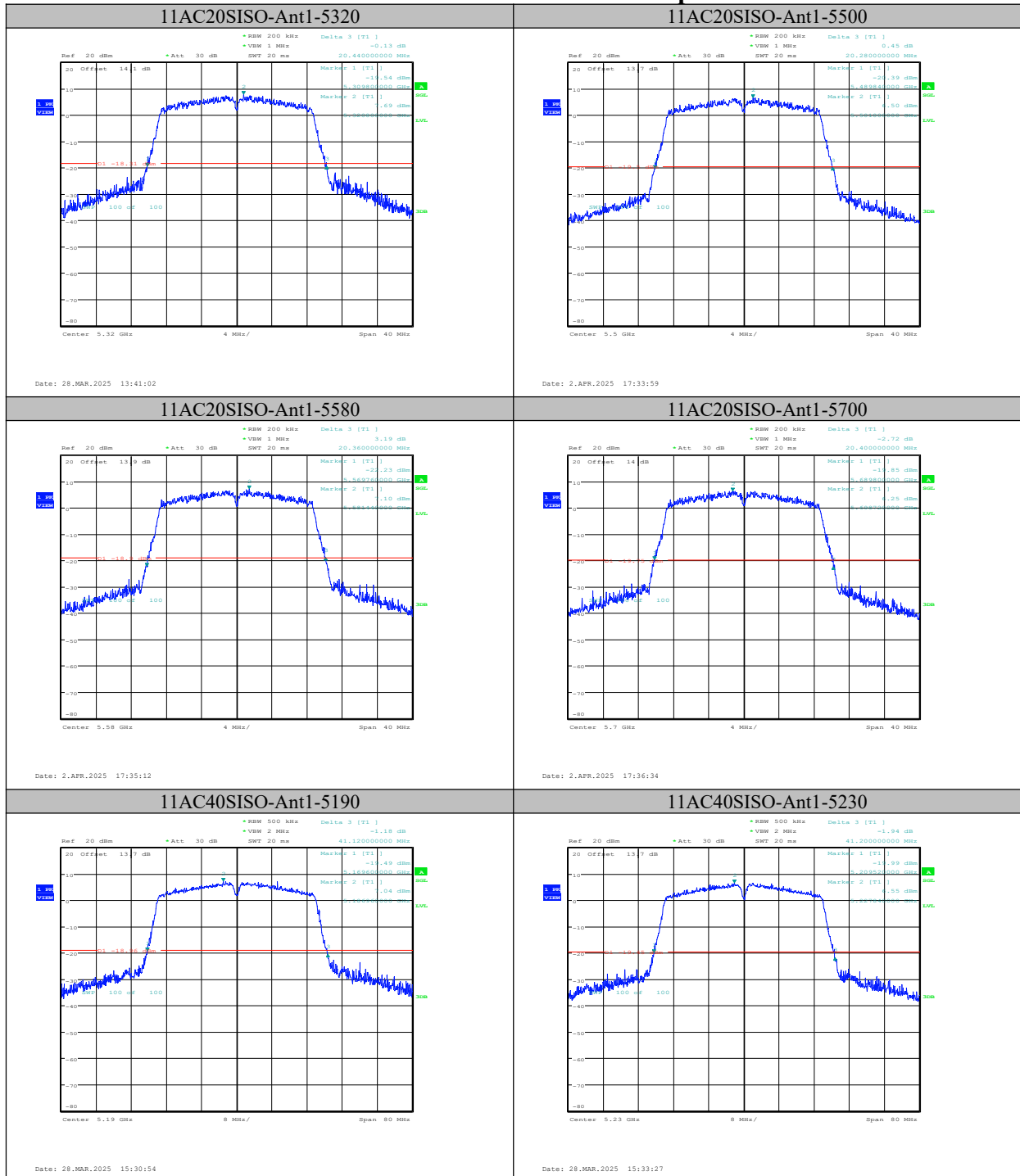


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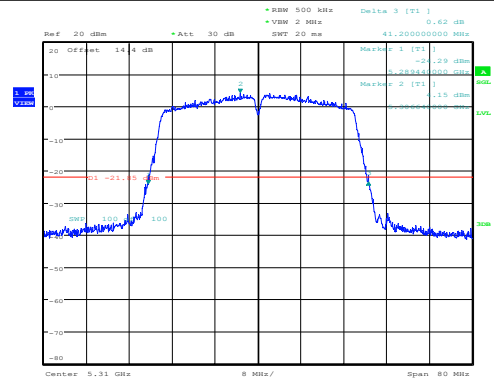




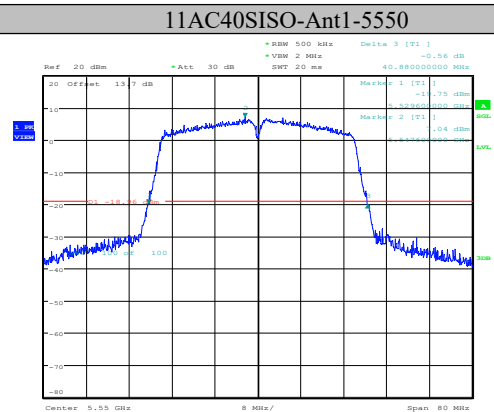




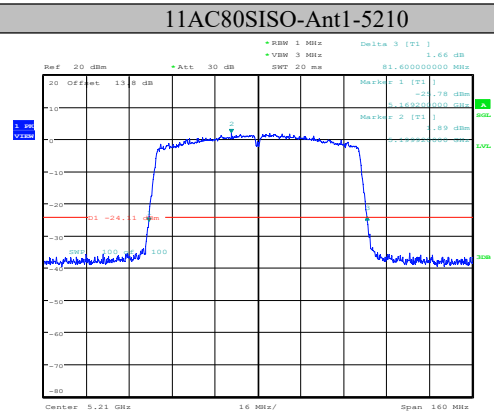
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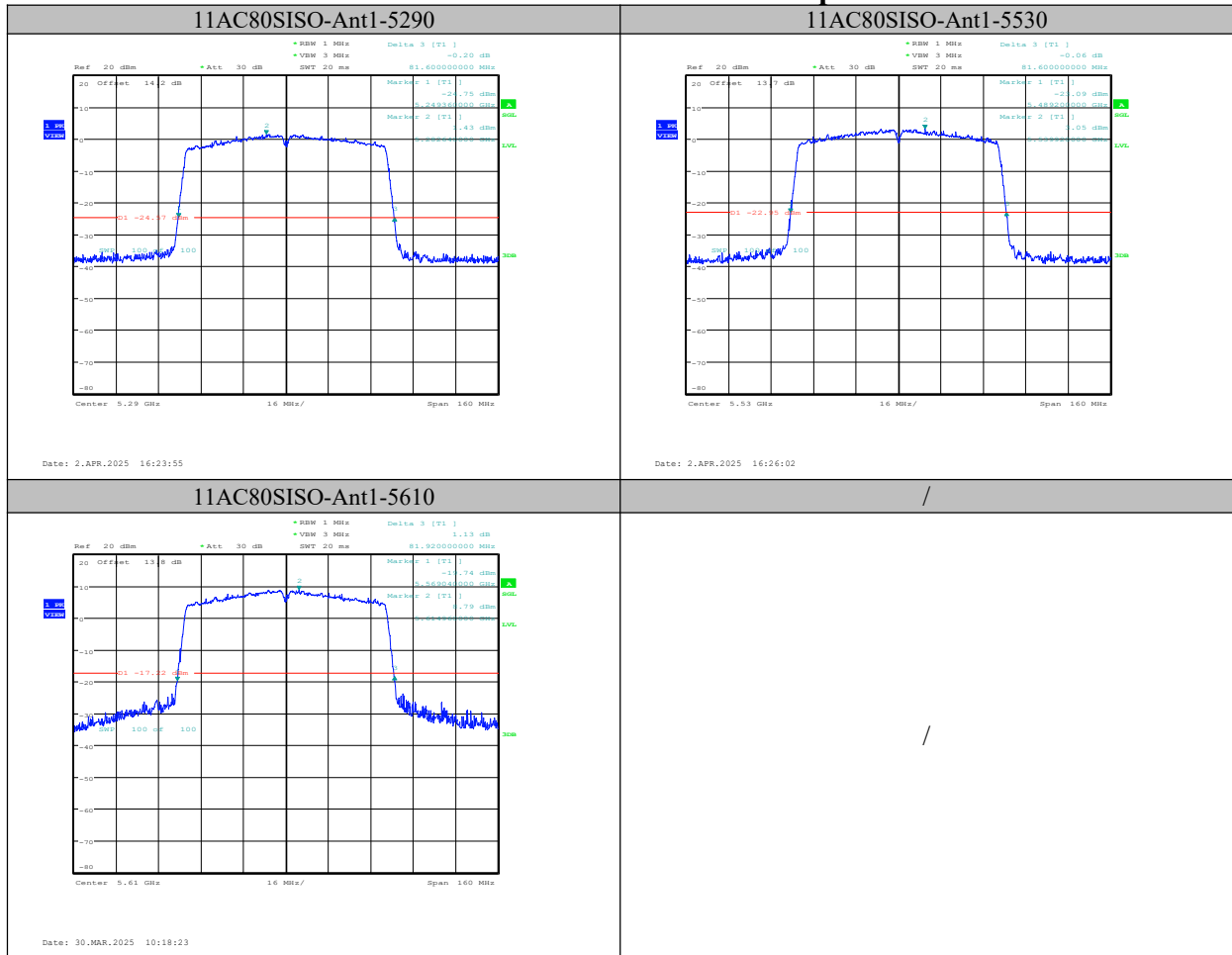


Date: 28.MAR.2025 16:35:32



Date: 2.APR.2025 16:22:09

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6.7. Band Edges Compliance

Specifications:	15.209,15.407(b), RSS-247 6.2, RSS-Gen 8.9
DUT Serial Number:	25B02W000005#S07
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Above 1G, non-restricted band

Standard	EIRP Limit
15.407(b)	< -27dBm/MHz
RSS-247 6.2	< -27dBm/MHz

Above 1G, Restricted band

Standard	EIRP Limit	
15.407(b)	< -27dBm/MHz	
15.209	Peak	74dB μ V/m
	Average	54dB μ V/m
RSS-247 6.2	< -27dBm/MHz	
RSS-Gen 8.9	Peak	74dB μ V/m
	Average	54dB μ V/m

$$\text{EIRP[dBm]} = \text{E[dB}\mu\text{V/m]} + 20 \log(d[\text{m}]) - 104.7$$

$$\text{E[dB}\mu\text{V/m]} = \text{EIRP[dBm]} - 20 \log(d[\text{m}]) + 104.7$$

$$\text{E[dB}\mu\text{V/m]} = \text{EIRP[dBm]} + 95.2 = 68.2, \text{ for } d = 3\text{m}$$

Measurement Uncertainty:

Measurement Uncertainty	1 GHz to 6 GHz: 4.84 dB (k=2).
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Test Procedure:

The measurement is made according to KDB 789033.

Marker-Delta Method: The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

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Procedure for peak unwanted emissions measurements above 1000 MHz

The procedure for peak unwanted emissions measurements above 1000 MHz is as follows:

a) Follow the requirements in 12.7.4.

b) Peak emission levels are measured by setting the instrument as follows:

1) RBW = 1 MHz.

2) VBW $\geq [3 \times \text{RBW}]$.

3) Detector = peak.

4) Sweep time = auto.

5) Trace mode = max hold.

6) Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, then the time required for the trace to stabilize will increase by a factor of approximately $1 / D$, where D is the duty cycle. For example, at 50% duty cycle, the measurement time will increase by a factor of two, relative to measurement time for continuous transmission.

Procedures for average unwanted emissions measurements above 1000 MHz

a) RBW = 1 MHz.

b) Video bandwidth:

1) If the EUT is configured to transmit with $D \geq 98\%$, then set $\text{VBW} \leq \text{RBW} / 100$ (i.e., 10 kHz), but not less than 10 Hz.

2) If the EUT D is $< 98\%$, then set $\text{VBW} \geq 1 / T$, where T is defined in item a1) of 12.2.

c) Video bandwidth mode or display mode:

1) The instrument shall be set with video filtering applied in the power domain. Typically, this requires setting the detector mode to RMS (power averaging) and setting the average-VBW type to power (rms).

2) As an alternative, the instrument may be set to linear detector mode. Video filtering shall be applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode to accomplish this. Others have a setting for average-VBW type, which can be set to “voltage” regardless of the display mode.

d) Detector = peak.

e) Sweep time = auto.

f) Trace mode = max hold.

g) Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98%

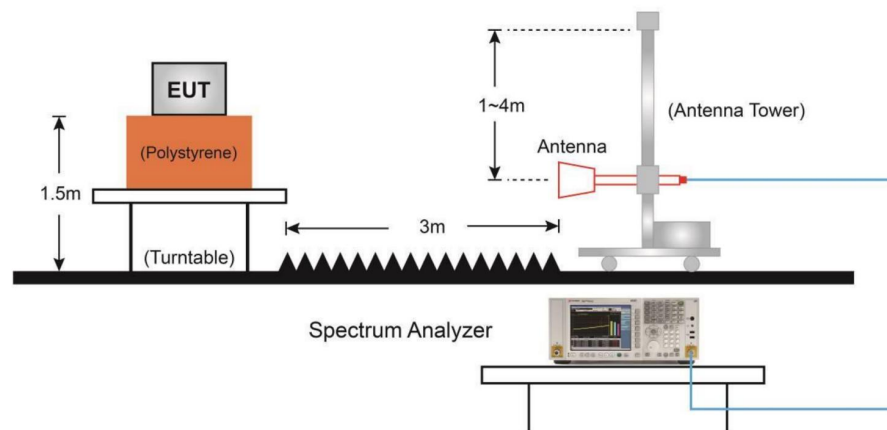
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duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where D is the duty cycle. For example, use at least 200 traces if the duty cycle is 25%. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 50 traces should be averaged.)

The measurement was applied in a fully anechoic chamber. While testing for spurious emission higher than 1 GHz, if applied, the pre-amplifier would be equipped just at the output terminal of the antenna. Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna mast. During the tests, the antenna height varied from 1m to 4m and the EUT azimuth were varied from 0° to 360° in order to identify the maximum level of emissions from the EUT. In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

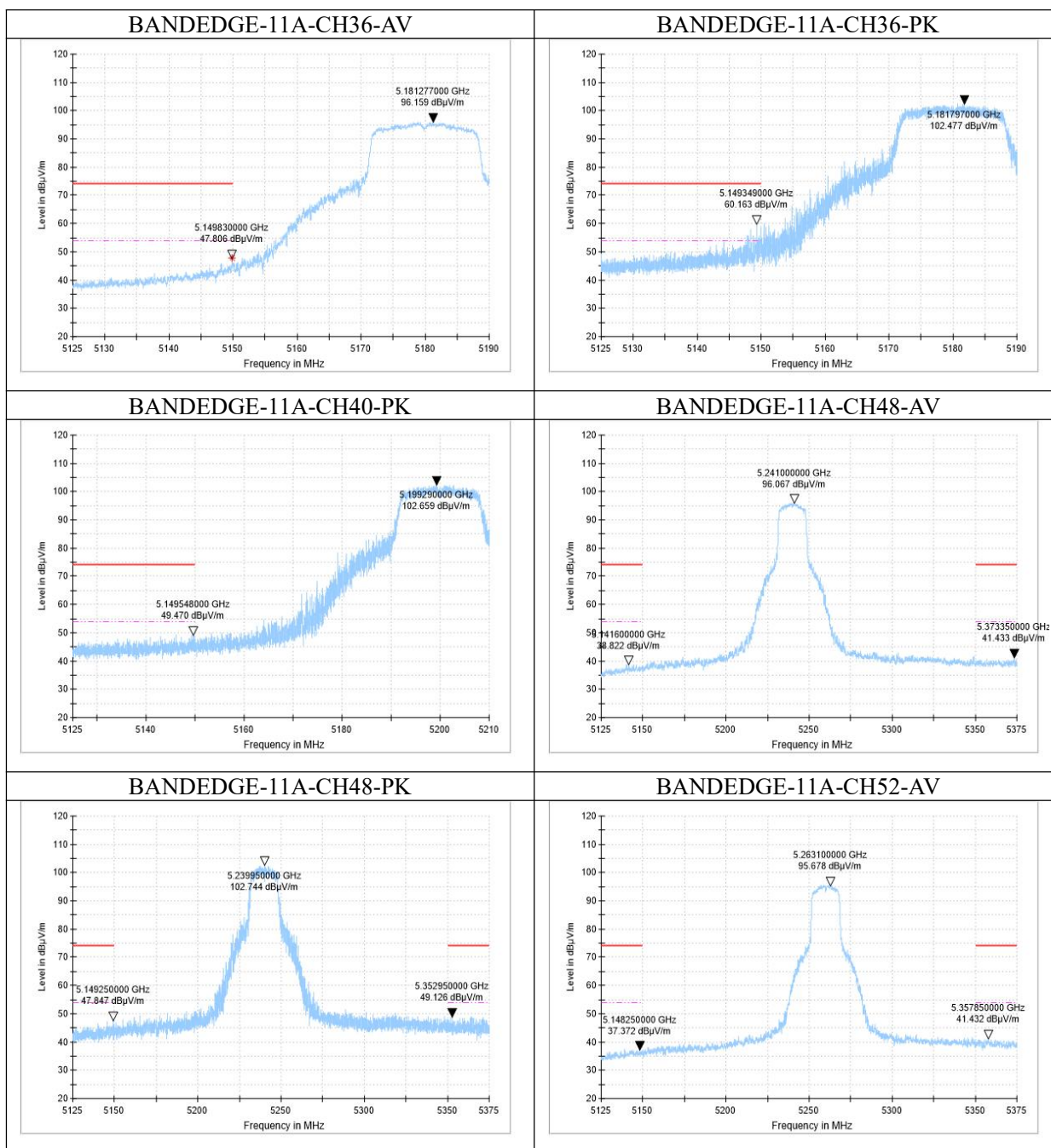
Test Setup



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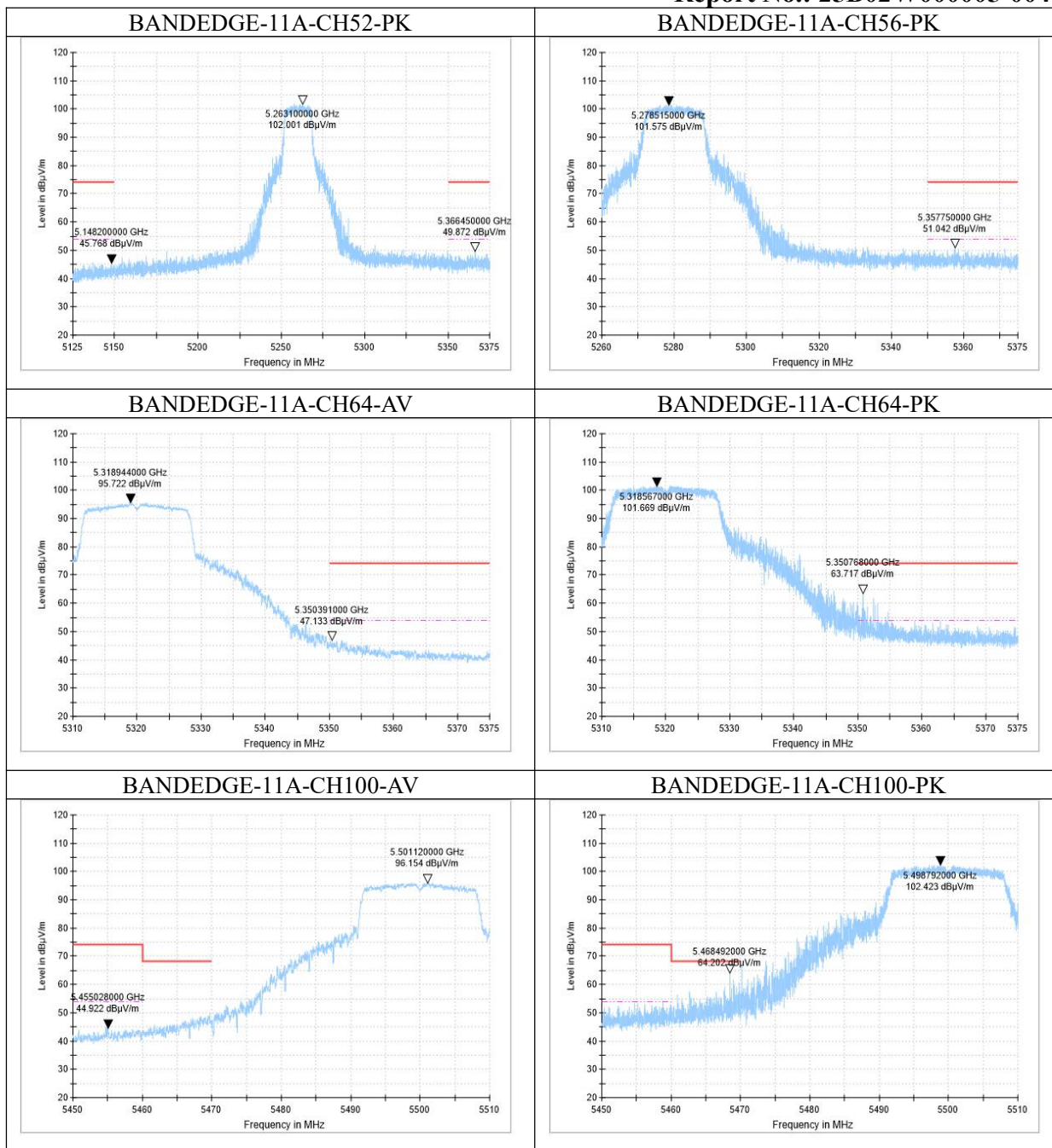
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Measurement Results:



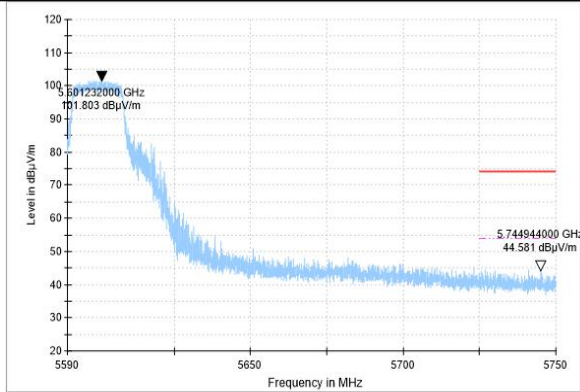
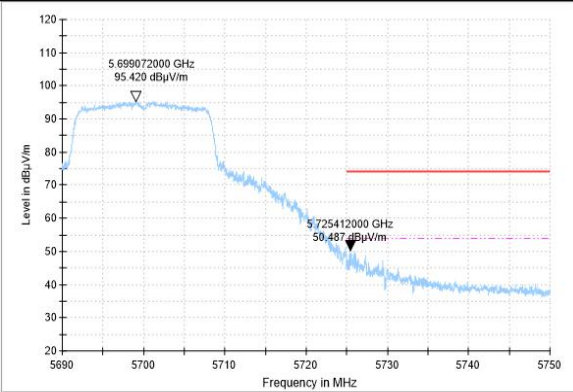
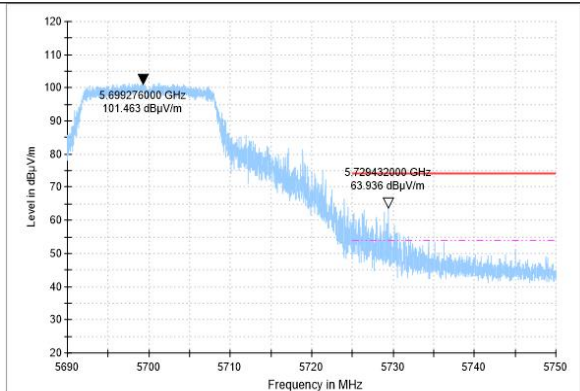
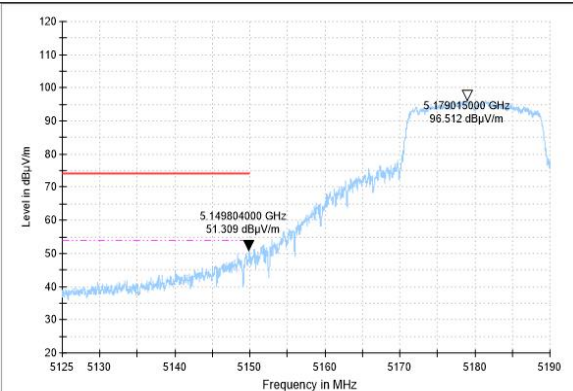
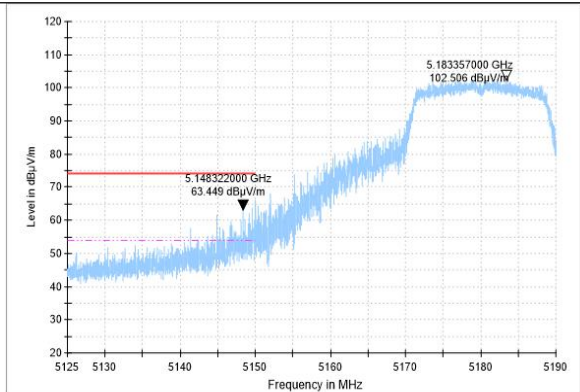
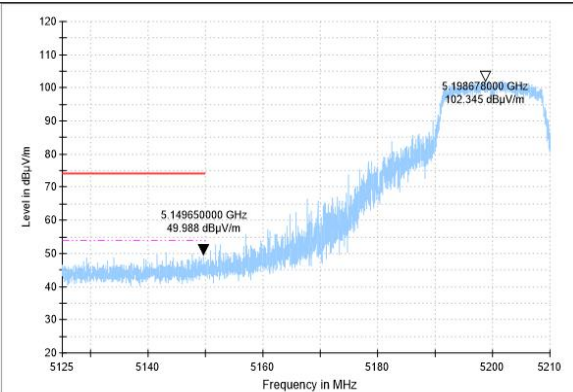
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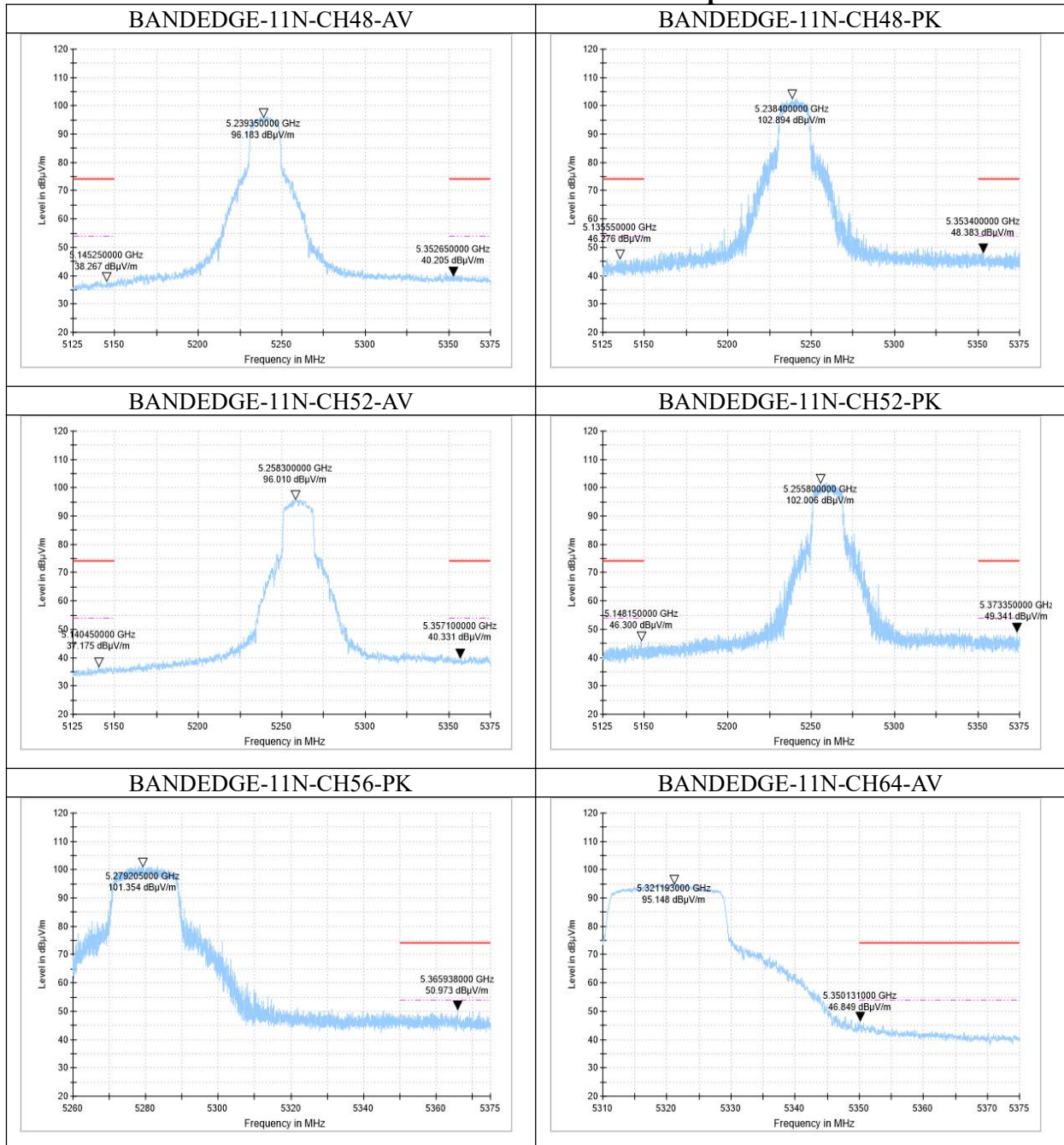
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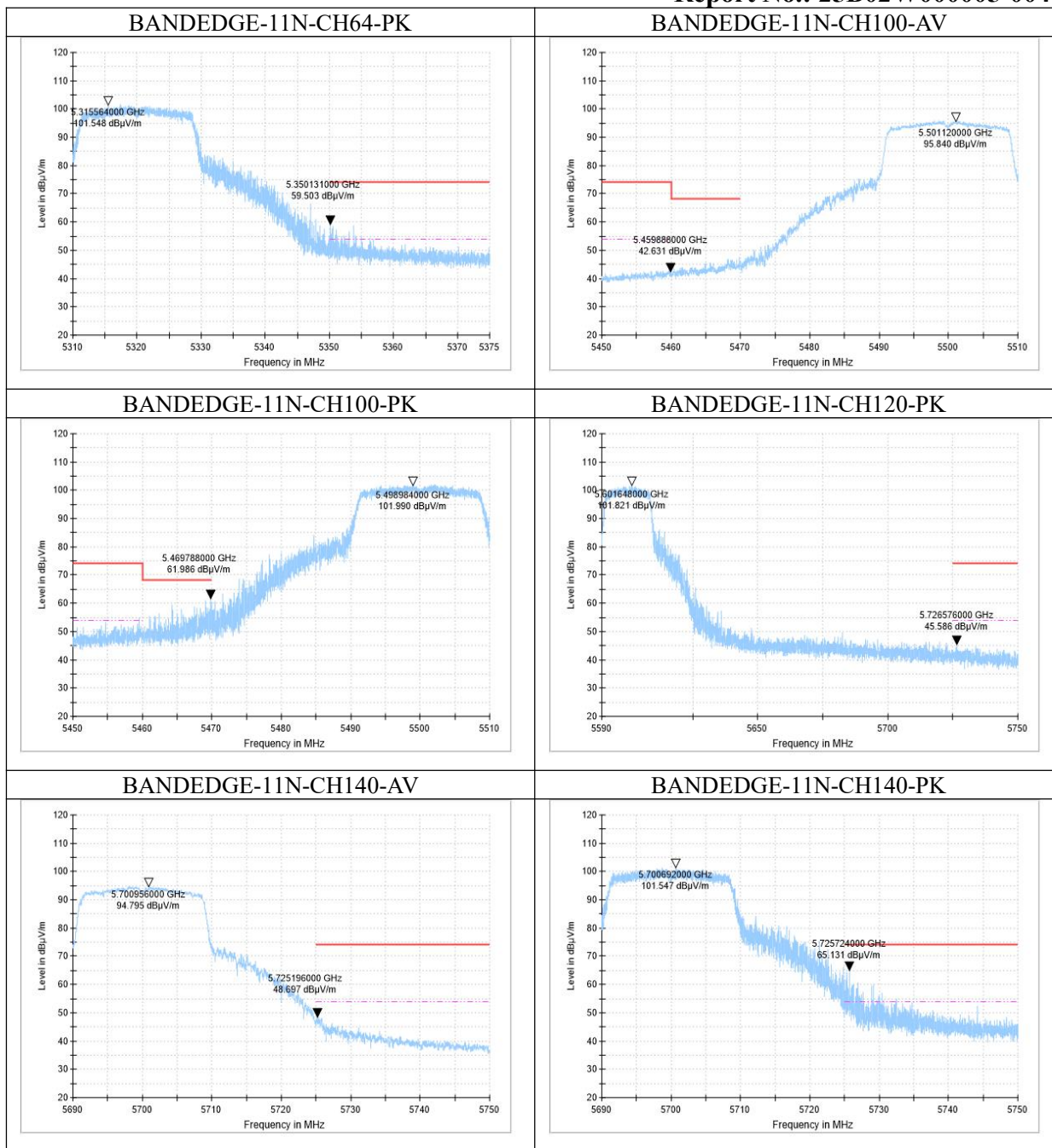
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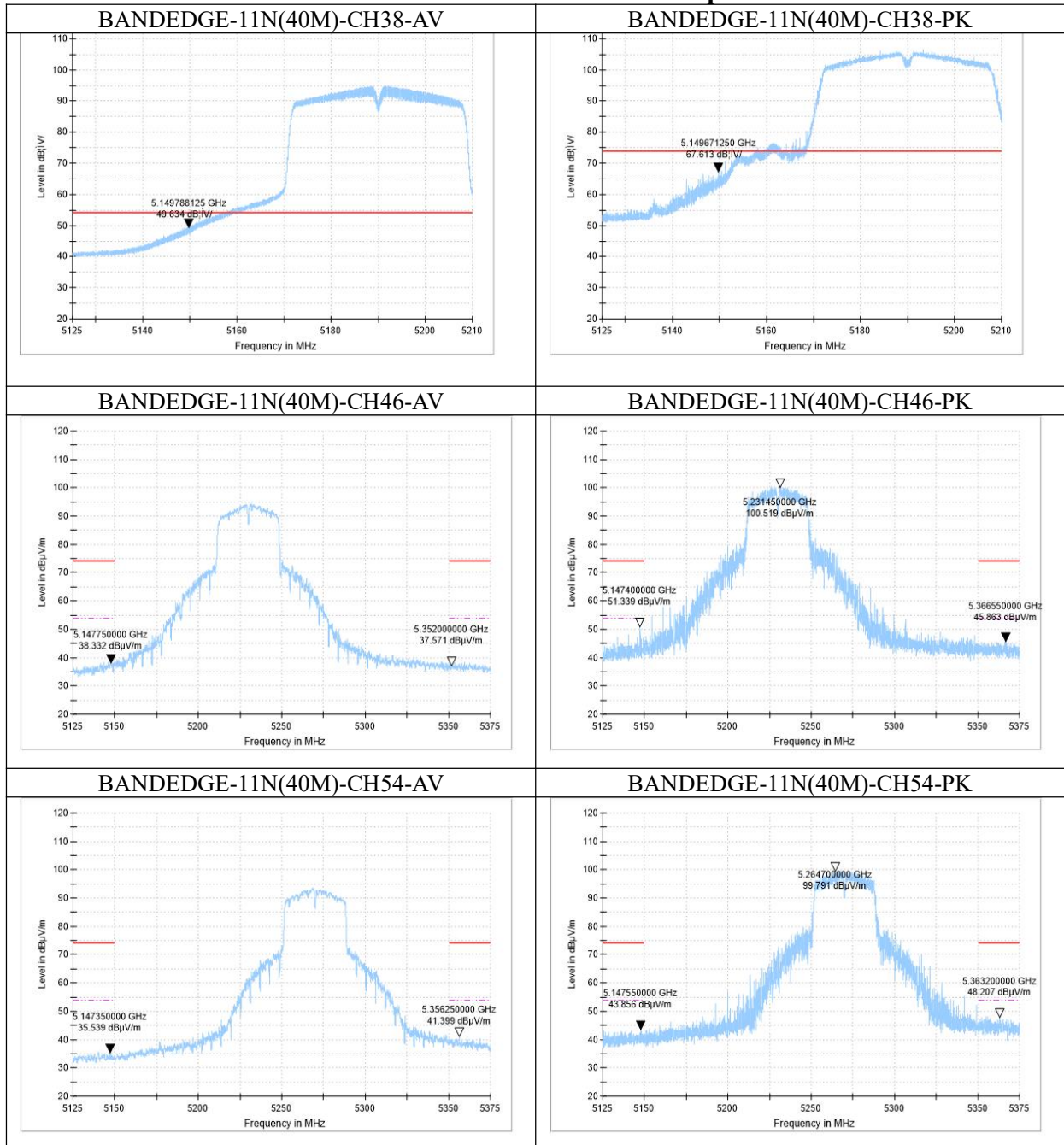
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BANDEDGE-11A-CH140-AV

BANDEDGE-11A-CH140-PK

BANDEDGE-11N-CH36-AV

BANDEDGE-11N-CH36-PK

BANDEDGE-11N-CH40-PK




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