



FCC PART 15E TEST REPORT No.24T04Z100472-009

for

Guangdong OPPO Mobile Telecommunications Corp., Ltd.

Mobile Phone

CPH2625

FCC ID:R9C-OP23262

with

Hardware Version: 11

Software Version: ColorOS 14.1

Issued Date: 2024-05-11

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 CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04Z100472-009	Rev.0	1st edition	2024-04-24
24T04Z100472-009	Rev.1	Add the conducted result description on page9.	2024-05-11

Note: the latest revision of the test report supersedes all previous version.

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Conducted testing Location: CTTL(Huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China100191

Radiated testing Location: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
100191, P. R. China

1.3. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

Testing Start Date: 2024-03-19

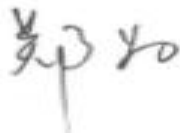
Testing End Date: 2024-04-23

1.5. Signature



Yao Xingyu

(Prepared this test report)



Zheng Wei

(Reviewed this test report)



Pang Shuai

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address: NO.18 HaiBin Road, Wusha Village, Chang'an Town, DongGuan City,
Guangdong Province, P.R. China
City: DongGuan
Postal Code: /
Country: China
Telephone: (86)76986076999
Fax: /

2.2. Manufacturer Information

Company Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address: NO.18 HaiBin Road, Wusha Village, Chang'an Town, DongGuan City,
Guangdong Province, P.R. China
City: DongGuan
Postal Code: /
Country: China
Telephone: (86)76986076999
Fax: /

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

3.1. About EUT

Description	Mobile Phone
Model name	CPH2625
FCC ID	R9C-OP23262
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM/OFDMA
Antenna	Integral Antenna
Nominal Voltage	3.91V
Extreme High Voltage	4.55V
Extreme Low Voltage	3.4V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT05a	869029070043731/ 869029070043723	11	ColorOS 14.1	2024-03-18
UT09a	869029070036479	11	ColorOS 14.1	2024-04-02

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

UT05a is used for Conduction test, UT09a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Note	Manufacturer
AE1-1	Battery	BLPA59	Sunwoda
AE1-2	Battery	BLPA59	TWS Technology(GuangZhou) Limited
AE2-1	Charger	VCB80AUH	Huizhou Golden Lake Industrial Co., Ltd
AE2-2	Charger	VCB80AUH	Dongguan Aohai Technolgy Co., Ltd.
AE3	USB cable	/	/
AE4-1	Charger	VCB80AEH	Aohai
AE4-2	Charger	VCB80AEH	GoldenLake
AE4-3	Charger	VCB80ATH	Aohai
AE4-4	Charger	VCB80AAH	Aohai
AE4-5	Charger	VCB80AYH	Aohai
AE4-6	Charger	VCB80AUH	Aohai
AE4-7	Charger	VCB80AUH	GoldenLake

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

3.4. General Description

The Equipment under Test (EUT) is a model of Mobile Phone with integrated antenna and inbuilt battery.

It consists of normal options: travel charger, USB cable.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

3.5. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor $k=2$.

Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant 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.

FCC Part15	Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices	2021
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12

5. Laboratory Environment

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. Test Results

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15E	Sub-clause of IC	Verdict
Maximum Output Power	15.407	/	P
Peak Power Spectral Density	15.407	/	P
Occupied 26dB Bandwidth	15.403	/	P
Band edge compliance (Radiated)	15.209	/	P
Transmitter spurious emissions (Radiated)	15.407	/	P
AC Powerline Conducted Emission (150kHz- 30MHz)	15.407	/	P
99% Occupied bandwidth	/	/	P
Transmit Power Control	15.407	/	NA

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NM	Not measured, The test was not measured by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

6.2. **For conducted result :**

For 802.11ax single RU modes, Both of the 20M、40M and 80M are measured, as the PSD of 20M is the worse case, so the results of 20M are reflected in the report. the whole testing has reported only 802.11ax- HE20.

6.3. Statements

CTTL has evaluated the test cases as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.

This report only deals with the WLAN function among the features described in section 3.

6.4. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	26°C
Voltage	3.91V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2024-07-04
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2025-04-01
3	Test Receiver	ESCI	100344	R&S	2 years	2025-02-20
4	LISN	ENV216	101200	R&S	1 year	2024-06-04
5	Attenuator	10dB/2W	/	Rosenberger	/	/
6	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESW44	103144	R&S	1 year	2024-11-26
2	EMI Antenna	VULB 9163	01223	SCHWARZBE CK	2 years	2024-07-18
3	EMI Antenna	3115	6914	ETS-Lindgren	1 year	2024-05-07
4	EMI Antenna	3116	2661	ETS-Lindgren	2 years	2025-01-30

8. Measurement Uncertainty

8.1 Transmitter Output Power

Measurement Uncertainty: 0.387dB,k=1.96

8.2 Peak Power Spectral Density

Measurement Uncertainty: 0.705dB,k=1.96

8.3 26dB Emission Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4 Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

8.5 Spurious Emissions

Conducted (k=1.96)

Frequency Range	Uncertainty(dB)
$30\text{MHz} \leq f \leq 2\text{GHz}$	1.22
$2\text{GHz} \leq f \leq 3.6\text{GHz}$	1.22
$3.6\text{GHz} \leq f \leq 8\text{GHz}$	1.22
$8\text{GHz} \leq f \leq 12.75\text{GHz}$	1.51
$12.75\text{GHz} \leq f \leq 26\text{GHz}$	1.51
$26\text{GHz} \leq f \leq 40\text{GHz}$	1.59

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	4.92
$30\text{MHz} \leq f \leq 1\text{GHz}$	4.72
$1\text{GHz} \leq f \leq 18\text{GHz}$	4.84
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.12

8.6 AC Power-line Conducted Emission

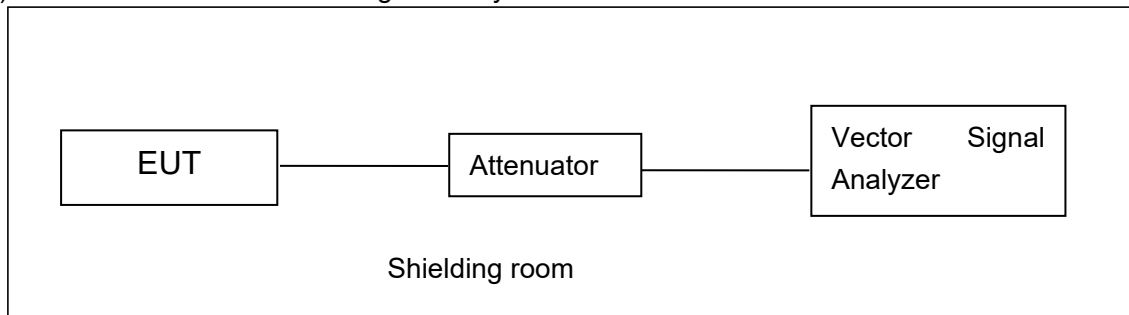
Measurement Uncertainty : 3.08dB,k=2

ANNEX A: Detailed Test Results

A.1. Measurement Method

A.1.1. Conducted Measurements

- 1). Connect the EUT to the test system correctly.
- 2). Set the EUT to the required work mode.
- 3). Set the EUT to the required channel.
- 4). Set the spectrum analyzer to start measurement.
- 5). Record the values. Vector Signal Analyzer

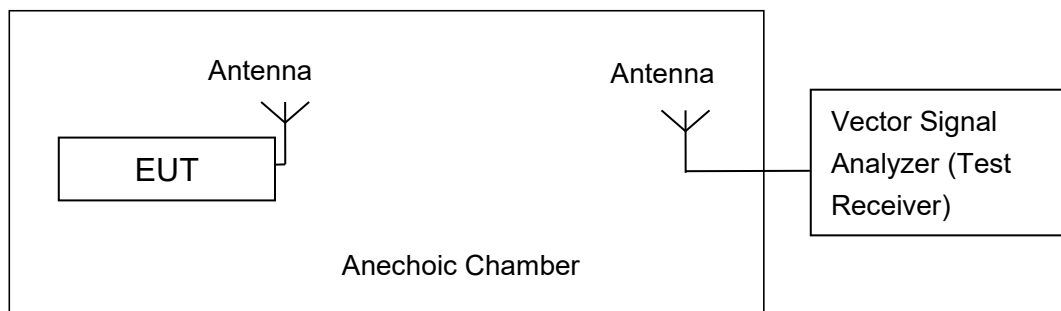


A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,

Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;

Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 3MHz;



The measurement is made according to KDB 789033

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

A.2. Maximum output Power

Measurement Limit and Method:

Standard	Frequency (MHz)	Limit (dBm)
FCC CRF Part 15.407(a)	5150MHz~5250MHz	24dBm
	5250MHz~5350MHz	24dBm or 11+10logB
	5470MHz~5725MHz	24dBm or 11+10logB

Limit use the less value, and B is the 26dB bandwidth.

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

A.2.1 Antenna Gain

Antenna gain is UNII-1:0dBi(ANT8)/-1dBi(ANT9) 、 UNII-2A:0dBi(ANT8)/0dBi(ANT9) 、 UNII-2C:2dBi(ANT8)/2dBi(ANT9) dBi and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT05a

Measurement Results:

MIMO

802.11a mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		6		
		Ant8	Ant9	Sum
802.11a	5180MHz (Ch36)	13.24	13.26	16.26
	5200MHz (Ch40)	13.02	13.25	16.15
	5240MHz(Ch48)	13.36	13.97	16.69
	5260MHz(Ch52)	13.32	14.57	17.00
	5280MHz(Ch56)	13.53	14.32	16.95
	5320MHz(Ch64)	13.01	13.69	16.37
	5500MHz(Ch100)	13.98	13.27	16.65
	5580MHz(Ch116)	13.56	13.53	16.56
	5700MHz(Ch140)	13.03	13.31	16.18

The data rate 6Mbps is selected as worst condition, and the following cases are performed with this condition.

802.11n-HT20 mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		MCS0		
		Ant8	Ant9	Sum
802.11n20	5180MHz (Ch36)	13.09	13.03	16.07
	5200MHz (Ch40)	13.01	13.26	16.15
	5240MHz(Ch48)	13.08	13.65	16.38
	5260MHz(Ch52)	13.16	14.15	16.69
	5280MHz(Ch56)	13.37	14.31	16.88
	5320MHz(Ch64)	13.00	13.53	16.28
	5500MHz(Ch100)	13.66	13.22	16.46
	5580MHz(Ch116)	13.27	13.29	16.29
	5700MHz(Ch140)	13.01	13.21	16.12

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT20 mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		MCS0		
		Ant8	Ant9	Sum
802.11ac20	5180MHz (Ch36)	13.02	13.01	16.03
	5200MHz (Ch40)	13.12	13.02	16.08
	5240MHz(Ch48)	13.34	13.44	16.40
	5260MHz(Ch52)	13.26	14.09	16.71
	5280MHz(Ch56)	13.22	14.35	16.83
	5320MHz(Ch64)	13.00	13.71	16.38
	5500MHz(Ch100)	13.43	13.25	16.35
	5580MHz(Ch116)	13.28	13.47	16.39
	5700MHz(Ch140)	13.01	13.05	16.04

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE20 mode

Mode	Channel	Test Result (dBm)		
		Data Rate (Mbps)		
		MCS0		
		Ant8	Ant9	Sum
802.11ax20	5180MHz (Ch36)	13.06	13.35	16.22
	5200MHz (Ch40)	13.01	13.21	16.12
	5240MHz(Ch48)	13.40	13.18	16.30
	5260MHz(Ch52)	13.17	13.96	16.59
	5280MHz(Ch56)	13.11	14.26	16.73
	5320MHz(Ch64)	13.02	13.45	16.25
	5500MHz(Ch100)	13.88	13.25	16.59
	5580MHz(Ch116)	13.28	13.57	16.44
	5700MHz(Ch140)	13.19	13.02	16.12

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11n-HT40 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant8	Ant9	Sum
802.11n40	5190MHz (Ch38)	13.08	13.24	16.17
	5230MHz(Ch46)	13.22	13.35	16.30
	5270MHz(Ch54)	13.13	14.13	16.67
	5310MHz(Ch62)	13.02	13.77	16.42
	5510MHz(Ch102)	13.25	13.00	16.14
	5550MHz(Ch110)	13.32	13.01	16.18
	5670MHz(Ch134)	13.19	13.16	16.19

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT40 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant8	Ant9	Sum
802.11ac40	5190MHz (Ch38)	13.01	13.06	16.05
	5230MHz(Ch46)	13.28	13.51	16.41
	5270MHz(Ch54)	13.14	13.82	16.50
	5310MHz(Ch62)	13.00	13.58	16.31
	5510MHz(Ch102)	13.38	13.02	16.21
	5550MHz(Ch110)	13.56	13.10	16.35
	5670MHz(Ch134)	13.14	13.05	16.11

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE40 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant8	Ant9	Sum
802.11ax40	5190MHz (Ch38)	13.00	13.22	16.12
	5230MHz(Ch46)	13.09	13.59	16.36
	5270MHz(Ch54)	13.02	13.76	16.42
	5310MHz(Ch62)	13.06	13.96	16.54
	5510MHz(Ch102)	13.36	13.07	16.23
	5550MHz(Ch110)	13.57	13.01	16.31
	5670MHz(Ch134)	13.51	13.19	16.36

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT80 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant8	Ant9	Sum
802.11ac80	5210MHz(Ch42)	13.22	13.04	16.14
	5290MHz(Ch58)	13.13	13.79	16.48
	5530MHz(Ch106)	13.24	13.01	16.14
	5610MHz(Ch122)	13.41	13.28	16.36

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE80 mode

Mode	Channel	Test Result (dBm)		
		Data Rate		
		MCS0		
		Ant8	Ant9	Sum
802.11ax80	5210MHz(Ch42)	13.00	13.23	16.13
	5290MHz(Ch58)	13.15	13.77	16.48
	5530MHz(Ch106)	13.57	13.16	16.38
	5610MHz(Ch122)	13.62	13.71	16.68

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

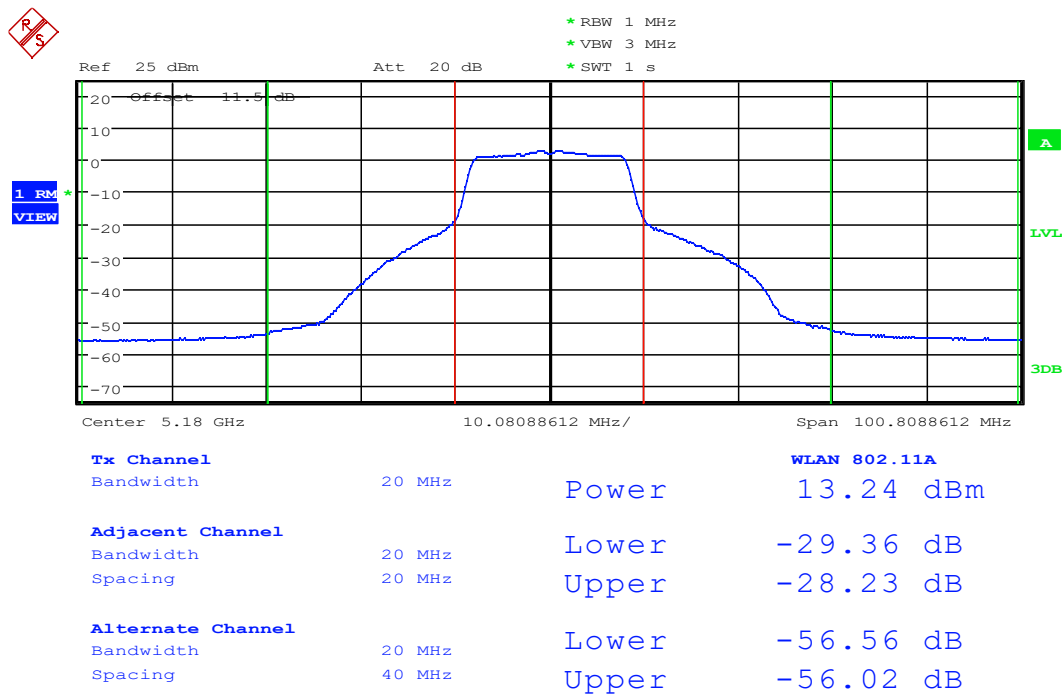
RU Mode
802.11ax-20 RU MIMO mode

Mode	Channel	Test Result (dBm)		
		Ant8	Ant9	mimo
		MCS0	MCS0	MCS0
RU26-L	5180MHz (Ch36)	9.09	9.87	12.51
	5200MHz (Ch40)	8.82	9.43	12.15
	5240MHz(Ch48)	8.95	9.12	12.05
	5260MHz(Ch52)	8.94	9.91	12.46
	5280MHz(Ch56)	8.87	9.82	12.38
	5320MHz(Ch64)	8.86	9.85	12.39
RU26-R	5500MHz(Ch100)	9.54	8.87	12.23
	5580MHz(Ch116)	9.11	9.19	12.16
	5700MHz(Ch140)	9.47	9.11	12.30
Mode	Channel	Test Result (dBm)		
		Ant8	Ant9	mimo
		MCS0	MCS0	MCS0
RU52-L	5180MHz (Ch36)	11.54	12.06	14.82
	5200MHz (Ch40)	11.62	11.97	14.81
	5240MHz(Ch48)	11.68	11.78	14.74
	5260MHz(Ch52)	11.52	12.54	15.07
	5280MHz(Ch56)	11.55	12.52	15.07
	5320MHz(Ch64)	11.48	12.58	15.08
RU52-R	5500MHz(Ch100)	12.05	11.41	14.75
	5580MHz(Ch116)	11.65	11.77	14.72
	5700MHz(Ch140)	11.98	11.76	14.88
Mode	Channel	Test Result (dBm)		
		Ant8	Ant9	mimo
		MCS0	MCS0	MCS0
RU106-L	5180MHz (Ch36)	13.04	13.57	16.32
	5200MHz (Ch40)	13.06	13.39	16.24
	5240MHz(Ch48)	13.10	13.13	16.12
	5260MHz(Ch52)	13.01	13.86	16.46
	5280MHz(Ch56)	13.06	13.76	16.43
	5320MHz(Ch64)	13.03	14.05	16.58
RU106-R	5500MHz(Ch100)	13.40	13.02	16.22
	5580MHz(Ch116)	13.00	13.14	16.08
	5700MHz(Ch140)	13.33	13.13	16.24

Duty Cycle

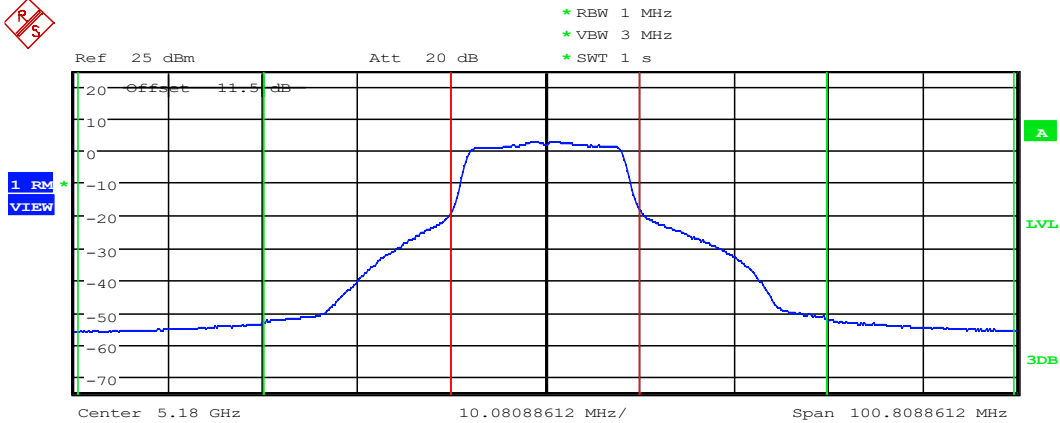
Mode	802.11a	802.11n20	802.11n40	802.11ac20	802.11ac40	802.11ac80
Duty Cycle	100%	100%	100%	100%	100%	100%

Mode	802.11ax-20	802.11ax-40	802.11ax-80	802.11ax-20 RU26	802.11ax-20 RU52	802.11ax-20 RU106
Duty Cycle	100%	100%	100%	86%	76%	61%



Date: 24.APR.2024 14:54:15

11a CH36 ANT8



Tx Channel		WLAN 802.11A	
Bandwidth	20 MHz	Power	13.26 dBm
Adjacent Channel		Lower	-30.17 dB
Bandwidth	20 MHz	Upper	-28.54 dB
Spacing	20 MHz		
Alternate Channel		Lower	-56.23 dB
Bandwidth	20 MHz	Upper	-55.57 dB
Spacing	40 MHz		

Date: 24.APR.2024 14:59:15

11a CH36 ANT9

Conclusion: PASS

A.3. Peak Power Spectral Density (conducted)

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC CRF Part 15.407(a)	5150MHz~5250MHz	11
	5250MHz~5350MHz	11
	5470MHz~5725MHz	11

The output power measurement method Section F is made according to KDB 789033

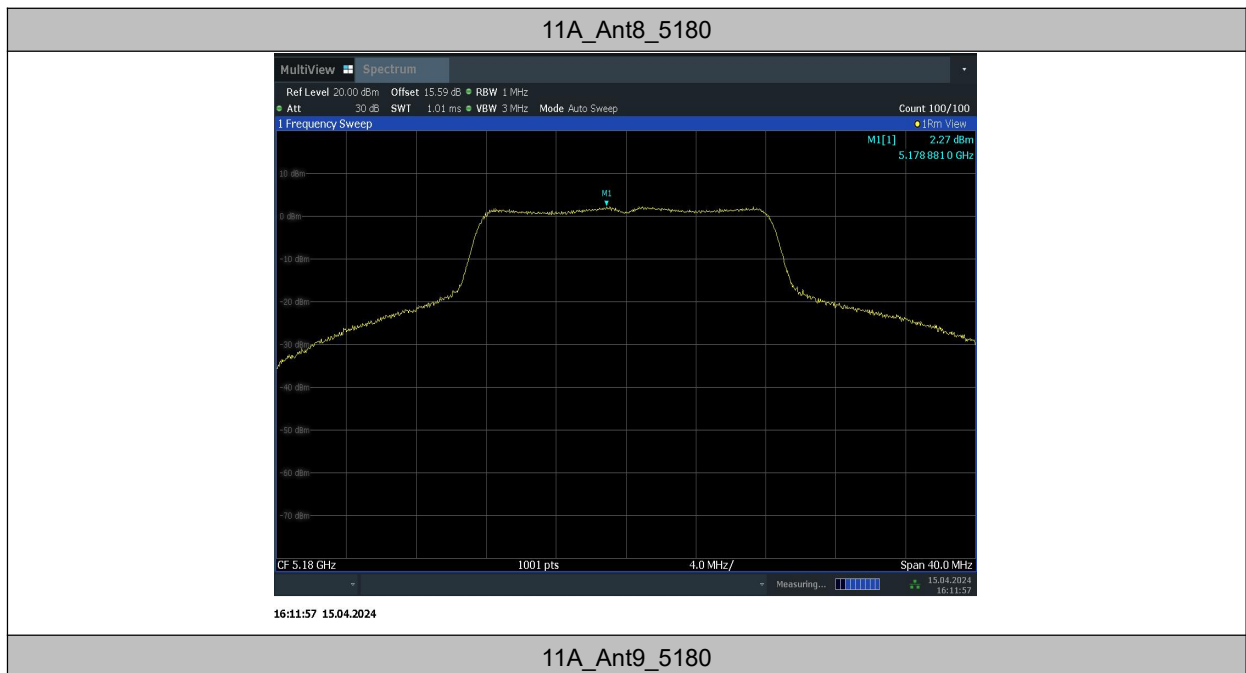
EUT ID: UT05a

Measurement Results:

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant8	5180	2.27	≤11.00	PASS
	Ant9	5180	2.61	≤11.00	PASS
	total	5180	5.45	≤11.00	PASS
	Ant8	5200	2.11	≤11.00	PASS
	Ant9	5200	2.55	≤11.00	PASS
	total	5200	5.35	≤11.00	PASS
	Ant8	5240	3.09	≤11.00	PASS
	Ant9	5240	2.92	≤11.00	PASS
	total	5240	6.02	≤11.00	PASS
	Ant8	5260	2.74	≤11.00	PASS
	Ant9	5260	2.58	≤11.00	PASS
	total	5260	5.67	≤11.00	PASS
	Ant8	5280	3.57	≤11.00	PASS
	Ant9	5280	3.60	≤11.00	PASS
	total	5280	6.60	≤11.00	PASS
	Ant8	5320	2.04	≤11.00	PASS
	Ant9	5320	3.17	≤11.00	PASS
	total	5320	5.65	≤11.00	PASS
	Ant8	5500	3.87	≤11.00	PASS
	Ant9	5500	2.41	≤11.00	PASS
	total	5500	6.21	≤11.00	PASS
	Ant8	5580	2.68	≤11.00	PASS
	Ant9	5580	2.61	≤11.00	PASS
	total	5580	5.66	≤11.00	PASS
Ant8	5700	3.23	≤11.00	PASS	
Ant9	5700	2.97	≤11.00	PASS	
total	5700	6.11	≤11.00	PASS	
11N20MIMO	Ant8	5180	1.44	≤11.00	PASS
	Ant9	5180	1.87	≤11.00	PASS
	total	5180	4.67	≤11.00	PASS
	Ant8	5200	1.87	≤11.00	PASS

	Ant9	5200	1.97	≤11.00	PASS
	total	5200	4.93	≤11.00	PASS
	Ant8	5240	2.51	≤11.00	PASS
	Ant9	5240	2.01	≤11.00	PASS
	total	5240	5.28	≤11.00	PASS
	Ant8	5260	2.04	≤11.00	PASS
	Ant9	5260	2.65	≤11.00	PASS
	total	5260	5.37	≤11.00	PASS
	Ant8	5280	2.62	≤11.00	PASS
	Ant9	5280	2.80	≤11.00	PASS
	total	5280	5.72	≤11.00	PASS
	Ant8	5320	1.62	≤11.00	PASS
	Ant9	5320	2.52	≤11.00	PASS
	total	5320	5.10	≤11.00	PASS
	Ant8	5500	2.49	≤11.00	PASS
	Ant9	5500	1.34	≤11.00	PASS
	total	5500	4.96	≤11.00	PASS
	Ant8	5580	2.78	≤11.00	PASS
	Ant9	5580	2.39	≤11.00	PASS
	total	5580	5.60	≤11.00	PASS
	Ant8	5700	2.57	≤11.00	PASS
Ant9	5700	1.87	≤11.00	PASS	
total	5700	5.24	≤11.00	PASS	
11N40MIMO	Ant8	5190	-0.26	≤11.00	PASS
	Ant9	5190	-0.95	≤11.00	PASS
	total	5190	2.42	≤11.00	PASS
	Ant8	5230	-0.17	≤11.00	PASS
	Ant9	5230	-0.38	≤11.00	PASS
	total	5230	2.74	≤11.00	PASS
	Ant8	5270	0.29	≤11.00	PASS
	Ant9	5270	-0.52	≤11.00	PASS
	total	5270	2.91	≤11.00	PASS
	Ant8	5310	-0.64	≤11.00	PASS
	Ant9	5310	-0.57	≤11.00	PASS
	total	5310	2.41	≤11.00	PASS
	Ant8	5510	-0.71	≤11.00	PASS
	Ant9	5510	-1.07	≤11.00	PASS
	total	5510	2.12	≤11.00	PASS
	Ant8	5550	-0.13	≤11.00	PASS
	Ant9	5550	-1.12	≤11.00	PASS
	total	5550	2.41	≤11.00	PASS
Ant8	5670	0.08	≤11.00	PASS	

	Ant9	5670	-0.93	≤11.00	PASS
	total	5670	2.61	≤11.00	PASS
11AX80MIMO	Ant8	5210	-4.42	≤11.00	PASS
	Ant9	5210	-4.83	≤11.00	PASS
	total	5210	-1.61	≤11.00	PASS
	Ant8	5290	-4.27	≤11.00	PASS
	Ant9	5290	-3.92	≤11.00	PASS
	total	5290	-1.08	≤11.00	PASS
	Ant8	5530	-3.91	≤11.00	PASS
	Ant9	5530	-5.06	≤11.00	PASS
	total	5530	-1.44	≤11.00	PASS
	Ant8	5610	-4.86	≤11.00	PASS
	Ant9	5610	-5.20	≤11.00	PASS
	total	5610	-2.02	≤11.00	PASS





Peak Power Spectral Density:11a CH36

11ax RU

Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11AX20MIMO	Ant8	5180	26Tone	RU0	4.71	≤11.00	PASS
			52Tone	RU37	4.59	≤11.00	PASS
			106Tone	RU53	4.02	≤11.00	PASS
	Ant9	5180	26Tone	RU0	5.82	≤11.00	PASS
			52Tone	RU37	5.92	≤11.00	PASS
			106Tone	RU53	5.03	≤11.00	PASS
	total	5180	26Tone	RU0	8.31	≤11.00	PASS
			52Tone	RU37	8.32	≤11.00	PASS
			106Tone	RU53	7.56	≤11.00	PASS
	Ant8	5200	26Tone	RU0	5.02	≤11.00	PASS
			52Tone	RU37	5.36	≤11.00	PASS
			106Tone	RU53	4.35	≤11.00	PASS
	Ant9	5200	26Tone	RU0	5.05	≤11.00	PASS
			52Tone	RU37	5.35	≤11.00	PASS
			106Tone	RU53	4.85	≤11.00	PASS
	total	5200	26Tone	RU0	8.05	≤11.00	PASS
			52Tone	RU37	8.37	≤11.00	PASS
			106Tone	RU53	7.62	≤11.00	PASS
	Ant8	5240	26Tone	RU0	5.07	≤11.00	PASS
			52Tone	RU37	5.57	≤11.00	PASS
			106Tone	RU53	4.44	≤11.00	PASS
	Ant9	5240	26Tone	RU0	5.46	≤11.00	PASS
			52Tone	RU37	5.69	≤11.00	PASS

		106Tone	RU53	5.12	≤11.00	PASS
total	5240	26Tone	RU0	8.28	≤11.00	PASS
		52Tone	RU37	8.64	≤11.00	PASS
		106Tone	RU53	7.80	≤11.00	PASS
Ant8	5260	26Tone	RU0	5.44	≤11.00	PASS
		52Tone	RU37	5.41	≤11.00	PASS
		106Tone	RU53	4.44	≤11.00	PASS
Ant9	5260	26Tone	RU0	5.53	≤11.00	PASS
		52Tone	RU37	5.67	≤11.00	PASS
		106Tone	RU53	5.09	≤11.00	PASS
total	5260	26Tone	RU0	8.50	≤11.00	PASS
		52Tone	RU37	8.55	≤11.00	PASS
		106Tone	RU53	7.79	≤11.00	PASS
Ant8	5280	26Tone	RU0	5.14	≤11.00	PASS
		52Tone	RU37	5.30	≤11.00	PASS
		106Tone	RU53	4.42	≤11.00	PASS
Ant9	5280	26Tone	RU0	5.97	≤11.00	PASS
		52Tone	RU37	6.02	≤11.00	PASS
		106Tone	RU53	5.19	≤11.00	PASS
total	5280	26Tone	RU0	8.59	≤11.00	PASS
		52Tone	RU37	8.69	≤11.00	PASS
		106Tone	RU53	7.83	≤11.00	PASS
Ant8	5320	26Tone	RU0	4.85	≤11.00	PASS
		52Tone	RU37	5.14	≤11.00	PASS
		106Tone	RU53	4.47	≤11.00	PASS
Ant9	5320	26Tone	RU0	6.15	≤11.00	PASS
		52Tone	RU37	5.85	≤11.00	PASS
		106Tone	RU53	5.05	≤11.00	PASS
total	5320	26Tone	RU0	8.56	≤11.00	PASS
		52Tone	RU37	8.52	≤11.00	PASS
		106Tone	RU53	7.78	≤11.00	PASS
Ant8	5500	26Tone	RU8	5.62	≤11.00	PASS
		52Tone	RU40	5.79	≤11.00	PASS
		106Tone	RU54	5.29	≤11.00	PASS
Ant9	5500	26Tone	RU8	6.22	≤11.00	PASS
		52Tone	RU40	6.11	≤11.00	PASS
		106Tone	RU54	5.34	≤11.00	PASS
total	5500	26Tone	RU8	8.94	≤11.00	PASS
		52Tone	RU40	8.96	≤11.00	PASS
		106Tone	RU54	8.33	≤11.00	PASS
Ant8	5580	26Tone	RU8	5.96	≤11.00	PASS
		52Tone	RU40	5.10	≤11.00	PASS

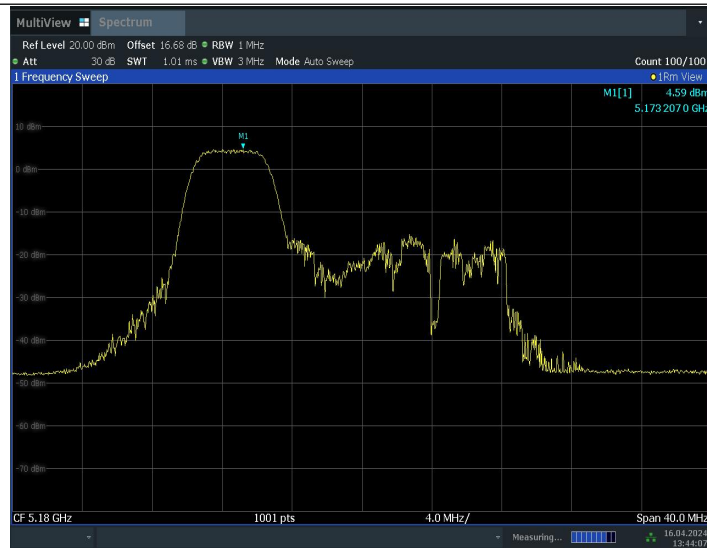
		106Tone	RU54	4.11	≤11.00	PASS
Ant9	5580	26Tone	RU8	5.93	≤11.00	PASS
		52Tone	RU40	5.86	≤11.00	PASS
		106Tone	RU54	4.06	≤11.00	PASS
total	5580	26Tone	RU8	8.96	≤11.00	PASS
		52Tone	RU40	8.51	≤11.00	PASS
		106Tone	RU54	7.10	≤11.00	PASS
Ant8	5700	26Tone	RU8	6.06	≤11.00	PASS
		52Tone	RU40	6.20	≤11.00	PASS
		106Tone	RU54	5.61	≤11.00	PASS
Ant9	5700	26Tone	RU8	6.21	≤11.00	PASS
		52Tone	RU40	6.38	≤11.00	PASS
		106Tone	RU54	5.14	≤11.00	PASS
total	5700	26Tone	RU8	9.15	≤11.00	PASS
		52Tone	RU40	9.30	≤11.00	PASS
		106Tone	RU54	8.39	≤11.00	PASS

11AX20MIMO_Ant8_5180_26Tone_RU0



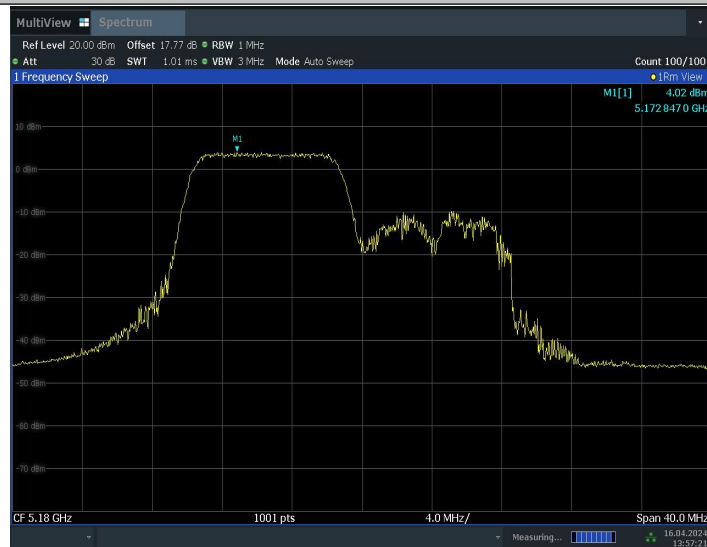
13:42:57 16.04.2024

11AX20MIMO_Ant8_5180_52Tone_RU37



13:44:07 16.04.2024

11AX20MIMO_Ant8_5180_106Tone_RU53



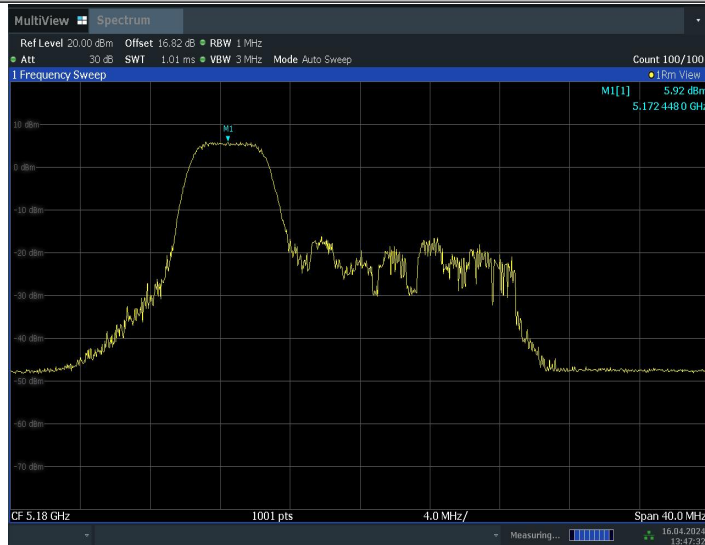
13:57:21 16.04.2024

11AX20MIMO_Ant9_5180_26Tone_RU0



13:46:19 16.04.2024

11AX20MIMO_Ant9_5180_52Tone_RU37



13:47:33 16.04.2024

11AX20MIMO_Ant9_5180_106Tone_RU53



13:58:07 16.04.2024

Conclusion: PASS

A.4. 26dB Emission Bandwidth (conducted)

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.403 (i)	/

The measurement is made according to KDB 789033

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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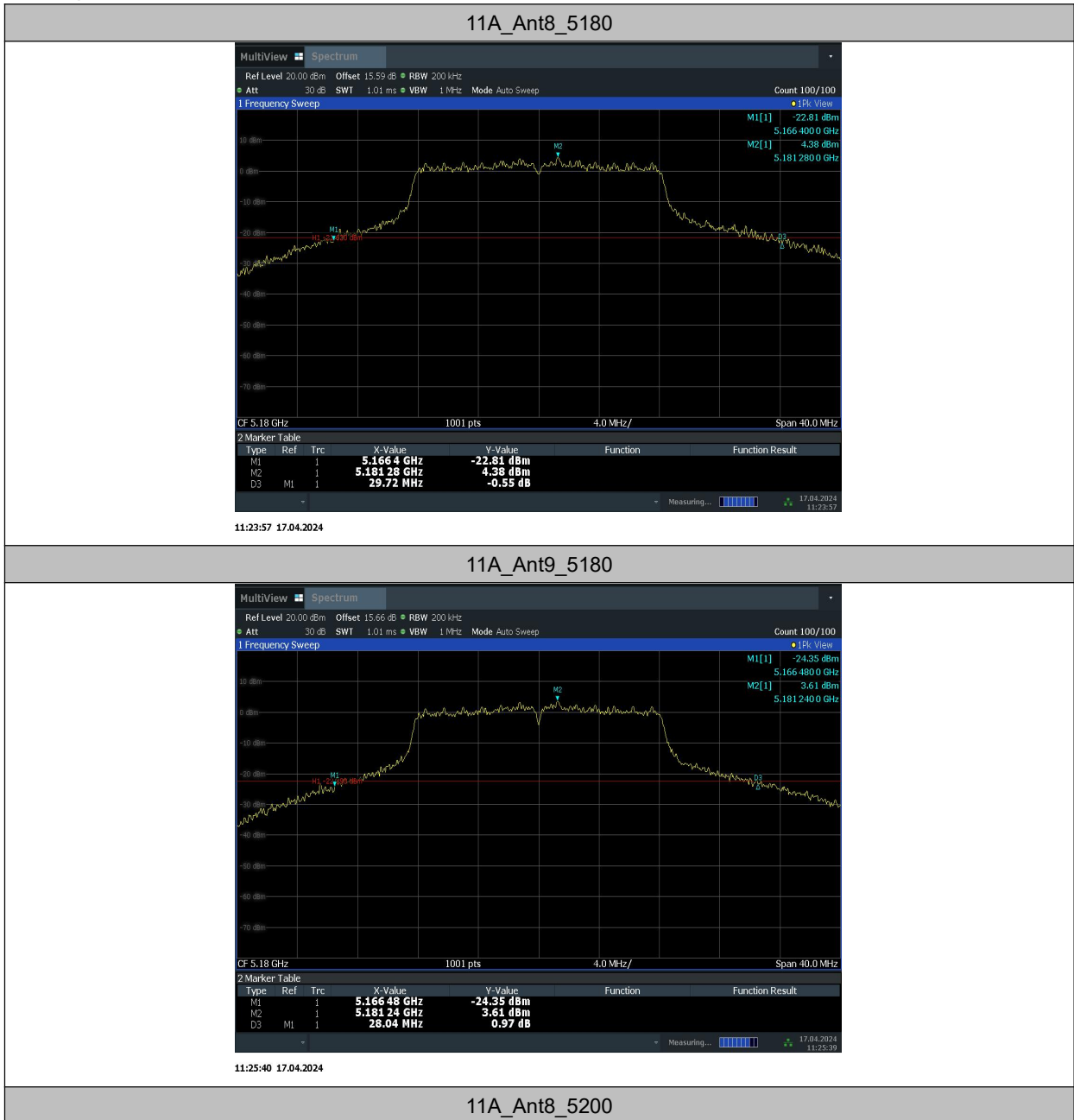
EUT ID: UT05a

Measurement Result:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant8	5180	29.72	5166.40	5196.12	---	---
	Ant9	5180	28.04	5166.48	5194.52	---	---
	Ant8	5200	29.20	5185.24	5214.44	---	---
	Ant9	5200	28.16	5185.64	5213.80	---	---
	Ant8	5240	22.04	5228.88	5250.92	---	---
	Ant9	5240	21.92	5228.96	5250.88	---	---
	Ant8	5260	22.44	5248.68	5271.12	---	---
	Ant9	5260	21.92	5248.92	5270.84	---	---
	Ant8	5280	22.28	5269.00	5291.28	---	---
	Ant9	5280	21.92	5269.16	5291.08	---	---
	Ant8	5320	29.32	5304.64	5333.96	---	---
	Ant9	5320	29.08	5305.08	5334.16	---	---
	Ant8	5500	28.80	5486.08	5514.88	---	---
	Ant9	5500	29.56	5485.72	5515.28	---	---
	Ant8	5580	22.12	5568.76	5590.88	---	---
	Ant9	5580	21.76	5569.00	5590.76	---	---
	Ant8	5700	28.52	5684.52	5713.04	---	---
	Ant9	5700	27.76	5685.16	5712.92	---	---
11N20MIMO	Ant8	5180	27.72	5166.16	5193.88	---	---
	Ant9	5180	29.24	5166.36	5195.60	---	---
	Ant8	5200	29.40	5185.44	5214.84	---	---
	Ant9	5200	29.68	5185.04	5214.72	---	---
	Ant8	5240	22.96	5228.48	5251.44	---	---
	Ant9	5240	23.24	5228.44	5251.68	---	---
	Ant8	5260	22.92	5248.48	5271.40	---	---
	Ant9	5260	22.76	5248.64	5271.40	---	---
	Ant8	5280	23.24	5268.36	5291.60	---	---
	Ant9	5280	23.52	5268.40	5291.92	---	---
	Ant8	5320	29.84	5304.56	5334.40	---	---
	Ant9	5320	28.64	5304.96	5333.60	---	---

	Ant8	5500	29.88	5486.16	5516.04	---	---
	Ant9	5500	29.96	5485.72	5515.68	---	---
	Ant8	5580	23.56	5568.08	5591.64	---	---
	Ant9	5580	23.64	5567.80	5591.44	---	---
	Ant8	5700	27.88	5684.28	5712.16	---	---
	Ant9	5700	26.48	5685.44	5711.92	---	---
11N40MIMO	Ant8	5190	53.12	5163.44	5216.56	---	---
	Ant9	5190	48.16	5166.72	5214.88	---	---
	Ant8	5230	41.52	5209.20	5250.72	---	---
	Ant9	5230	40.64	5209.68	5250.32	---	---
	Ant8	5270	41.28	5249.36	5290.64	---	---
	Ant9	5270	40.32	5249.84	5290.16	---	---
	Ant8	5310	58.56	5277.36	5335.92	---	---
	Ant9	5310	57.04	5277.76	5334.80	---	---
	Ant8	5510	58.80	5483.36	5542.16	---	---
	Ant9	5510	49.04	5486.08	5535.12	---	---
	Ant8	5550	41.04	5529.44	5570.48	---	---
	Ant9	5550	40.24	5529.84	5570.08	---	---
	Ant8	5670	55.28	5640.80	5696.08	---	---
	Ant9	5670	54.40	5642.48	5696.88	---	---
11AX80MIMO	Ant8	5210	91.04	5167.12	5258.16	---	---
	Ant9	5210	85.92	5169.20	5255.12	---	---
	Ant8	5290	88.80	5242.32	5331.12	---	---
	Ant9	5290	99.84	5232.24	5332.08	---	---
	Ant8	5530	87.04	5486.16	5573.20	---	---
	Ant9	5530	91.68	5487.92	5579.60	---	---
	Ant8	5610	80.96	5569.52	5650.48	---	---
	Ant9	5610	81.12	5569.36	5650.48	---	---

Test graphs as below:





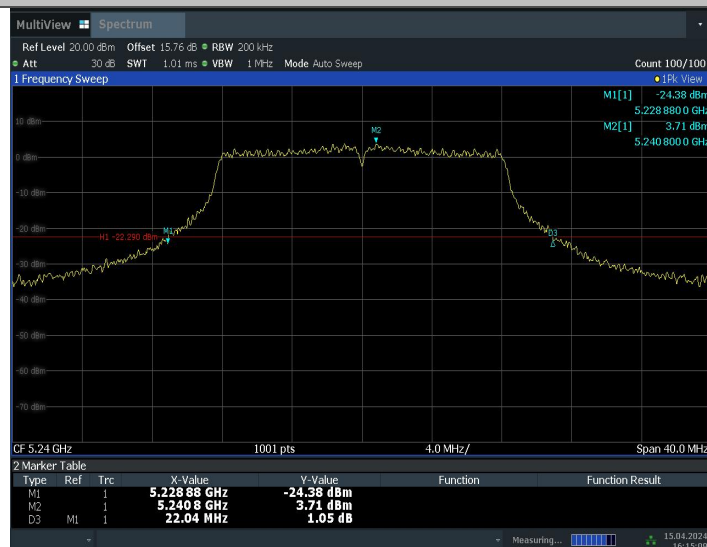
11:26:23 17.04.2024

11A_Ant9_5200



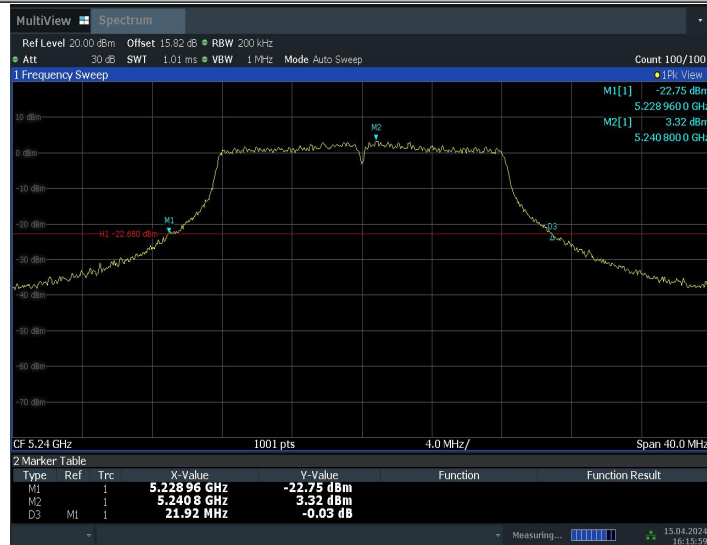
11:26:37 17.04.2024

11A_Ant8_5240



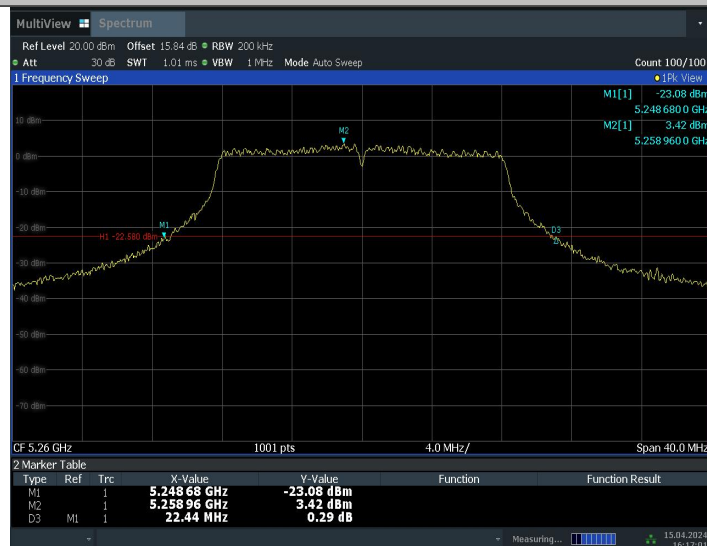
16:15:10 15.04.2024

11A_Ant9_5240



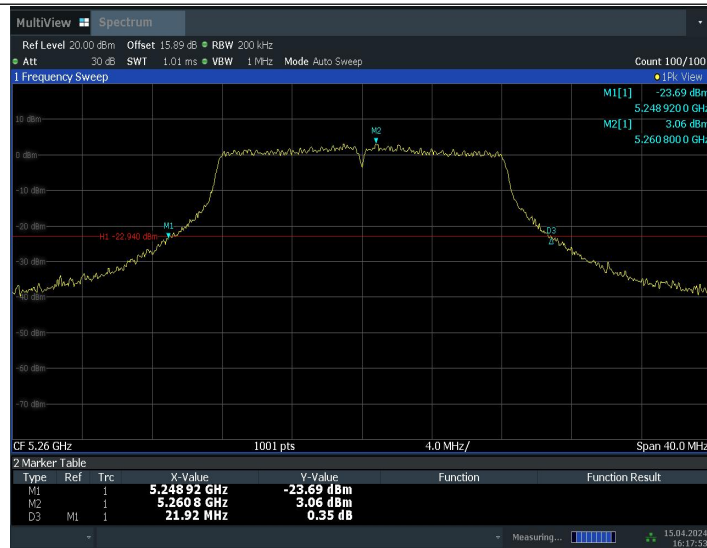
16:16:00 15.04.2024

11A_Ant8_5260



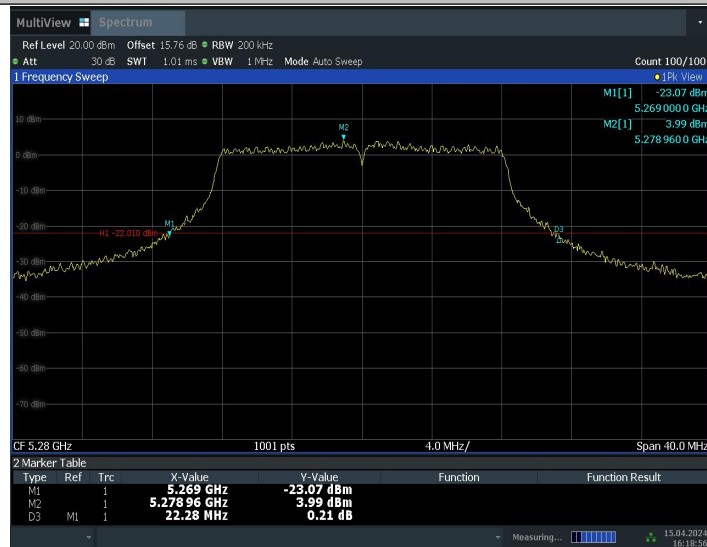
16:17:02 15.04.2024

11A_Ant9_5260



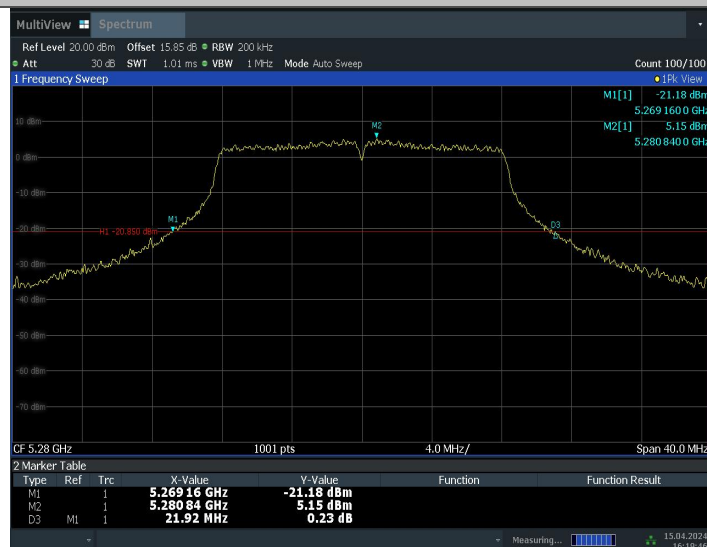
16:17:53 15.04.2024

11A_Ant8_5280



16:18:56 15.04.2024

11A_Ant9_5280



16:19:47 15.04.2024

11A_Ant8_5320



11:29:09 17.04.2024

11A_Ant9_5320



11:29:22 17.04.2024

11A_Ant8_5500



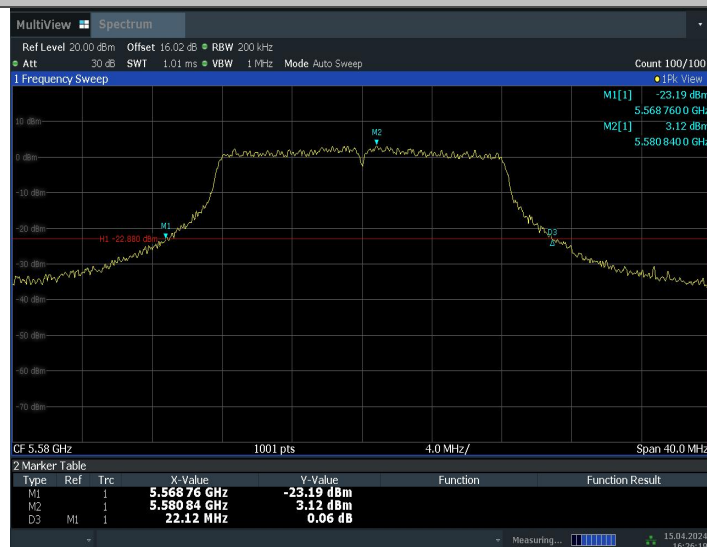
12:02:34 17.04.2024

11A_Ant9_5500



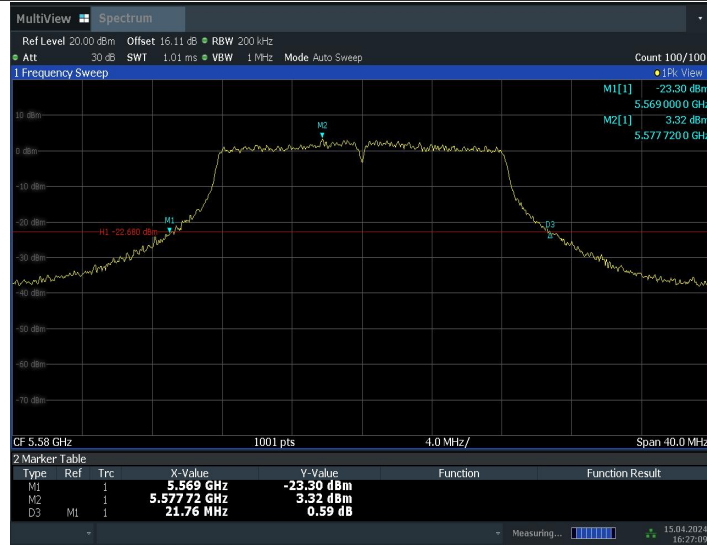
12:04:48 17.04.2024

11A_Ant8_5580



16:26:20 15.04.2024

11A_Ant9_5580



16:27:10 15.04.2024

11A_Ant8_5700



16:28:20 15.04.2024

11A_Ant9_5700



16:29:10 15.04.2024

11N20MIMO_Ant8_5180



12:06:02 17.04.2024

11N20MIMO_Ant9_5180



12:06:15 17.04.2024

11N20MIMO_Ant8_5200



12:06:56 17.04.2024

11N20MIMO_Ant9_5200



12:07:13 17.04.2024

11N20MIMO_Ant8_5240



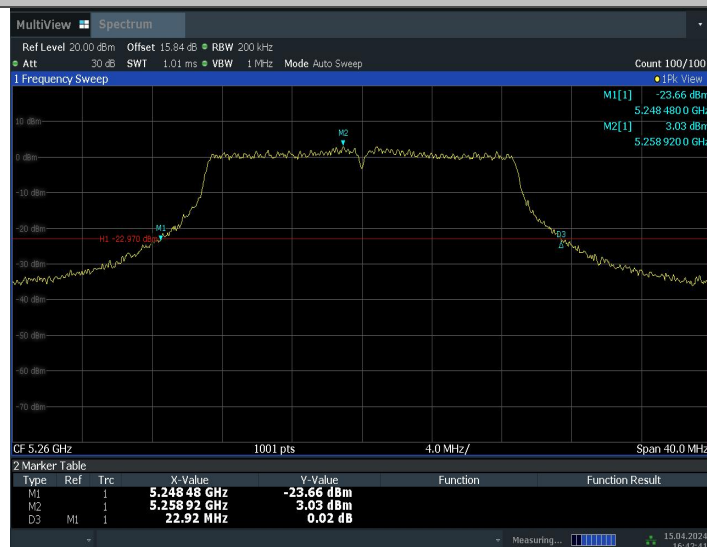
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11N20MIMO_Ant9_5240



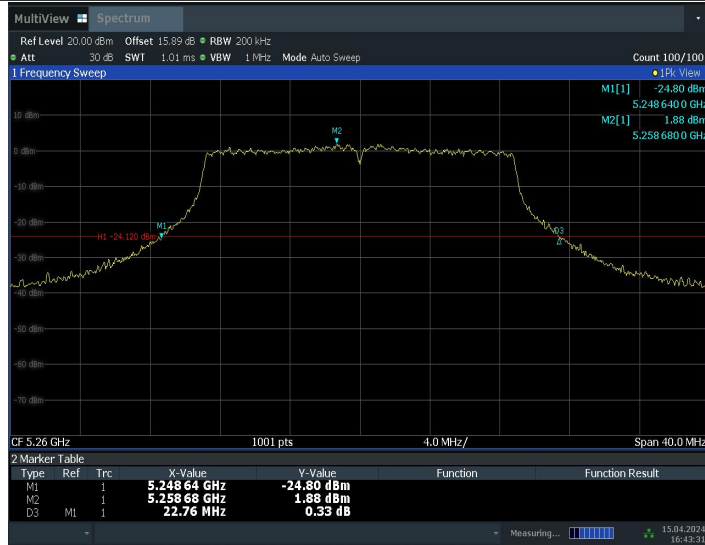
16:41:40 15.04.2024

11N20MIMO_Ant8_5260



16:42:42 15.04.2024

11N20MIMO_Ant9_5260



16:43:32 15.04.2024

11N20MIMO_Ant8_5280



16:44:33 15.04.2024

11N20MIMO_Ant9_5280



11N20MIMO_Ant8_5320



11N20MIMO_Ant9_5320



11N20MIMO_Ant8_5500



12:09:31 17.04.2024

11N20MIMO_Ant9_5500



12:17:36 17.04.2024

11N20MIMO_Ant8_5580