



FCC PART 15E TEST REPORT No.25T04Z100884-015

for

Shenzhen Tinno Mobile Technology Corp.

Smart Phone

U656AA,U656AC

FCC ID: XD6U656AA

with

Hardware Version: V1.0

Software Version: U656AAV01.07.10/U656ACV01.18.10

Issued Date: 2025-06-26

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

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

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn



No.25T04Z100884-015

REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04Z100884-015	Rev.0	1st edition	2025-06-26

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

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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(Gaolizhang Road)

Address: Cuihu Cloud Center, No.1, Gaolizhang Road, Wenquan, Haidian District, Beijing, China

Radiated testing Location: CTTL(Huayuan North Road)

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

1.3. Testing Environment

Normal Temperature: 15-35°C

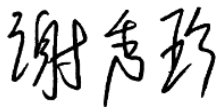
Relative Humidity: 20-75%

1.4. Project date

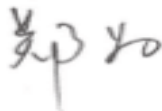
Testing Start Date: 2025-05-07

Testing End Date: 2025-06-26

1.5. Signature



Xie Xiuzhen
(Prepared this test report)



Zheng Wei
(Reviewed this test report)





No.25T04Z100884-015

Pang Shuai
(Approved this test report)

2. Client Information

2.1 Applicant Information

Company Name: Shenzhen Tinno Mobile Technology Corp.
27-001, South Side of Tianlong Mobile Headquarters Building,
Address: Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shenzhen, PRC
Contact: xiaoping.li
Email: xiaoping.li@tinno.com
Telephone: 0755-86095550
Fax: 0755-86095551

2.2 Manufacturer Information

Company Name: Shenzhen Tinno Mobile Technology Corp.
27-001, South Side of Tianlong Mobile Headquarters Building,
Address: Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shenzhen, PRC
Contact: xiaoping.li
Email: xiaoping.li@tinno.com
Telephone: 0755-86095550
Fax: 0755-86095551

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

3.1. About EUT

Description	Smart Phone
Model name	U656AA,U656AC
FCC ID	XD6U656AA
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Normal Voltage	3.87V
Extreme High Voltage	4.45V
Extreme Low Voltage	3.6V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT31A	868992070008825/ (U656AA) 868992070011829	V1.0	U656AAV01.07.10	2025-05-07
UT77a	868992070017529/ (U656AA) 868992070019327	V1.0	U656AAV01.07.10	2025-05-22

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

UT31A is used for Conduction test, UT77A is used for Radiation test.

Notes: According to the PED declaration file from manufacturer,U656AA and U656AC use the same FCC ID, we used U656AA for the testing.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery	TM490M1	HUNAN GAOYUAN BATTERY CO.,LTD

*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 Smart 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	FCC CFR 47, Part 15, Subpart C and E:	
	15.205 Restricted bands of operation;	2021
	15.207 Conducted limits;	
	15.209 Radiated emission limits, general requirements;	
ANSI C63.10	15.407 General technical requirements.	
	Methods of Measurement of Radio-Noise Emissions from	
	Low-Voltage Electrical and Electronic Equipment in the	2013
UNII: KDB 789033 D02	Range of 9 kHz to 40 GHz	
	General U-NII Test Procedures New Rules v02r01	2017-12

Note:UNII: KDB 789033 D02 is not in the scope of ISO/IEC 17025 accreditation by A2LA.

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 Part15C/E	Sub-clause of IC	Verdict
Maximum Output Power	15.407	/	P
Peak Power Spectral Density	15.407	/	P
26dB Emission Bandwidth	15.403	/	P
Radiated Unwanted Emission	15.407, 15.205, 15.209	/	P
AC Powerline Conducted Emission (150kHz- 30MHz)	15.207	/	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. 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. And all of the test use the model of U656AA.

6.3. 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	3.87V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2026-06-09
2	Test Receiver	ESCI	100344	R&S	1 year	2026-04-01
3	LISN	ENV216	101200	R&S	1 year	2026-06-05
4	Attenuator	10dB/2W	/	Rosenberger	/	/
5	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESW44	103023	Rohde & Schwarz	1 year	2026-05-07
2	EMI Antenna	VULB9163	01222	Schwarzbeck	1 year	2025-09-11
3	EMI Antenna	3115	6914	ETS-Lindgren	1 year	2026-03-31
4	EMI Antenna	3116	2663	ETS-Lindgren	1 year	2026-03-03

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 Radiated Unwanted Emission

Frequency Range	Uncertainty(dB) (k=2)
9kHz-30MHz	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	4.72
$1\text{GHz} \leq f \leq 18\text{GHz}$	4.84
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.12

8.5 AC Power-line Conducted Emission

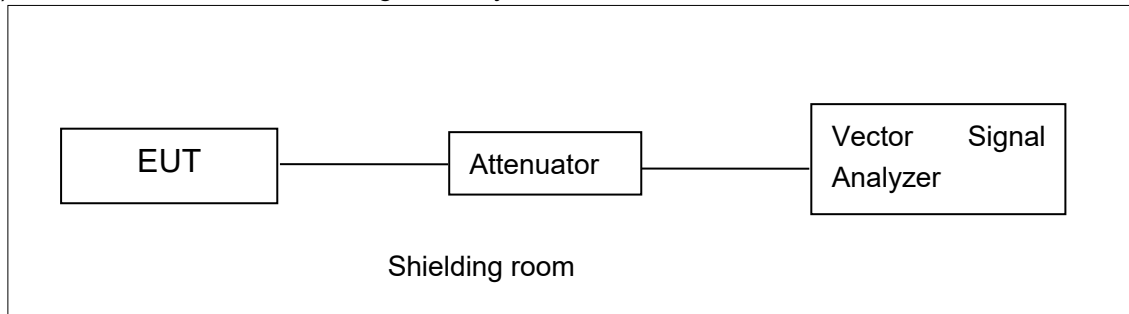
Measurement Uncertainty : 3.08dB,k=2

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

Measurement performed according to Clause 6.4, 6.5, 6.6 in ANSI C63.10-2013 and II.G.4, II.G.5, II.G.6 in KDB 789033.

The radiated emission test is performed in semi-anechoic chamber. The EUT was placed on a non-conductive table with 80cm above the ground plane for measurement below 1GHz and 1.5m above the ground plane for measurement above 1GHz. The measurement antenna was placed at a distance of 3 meters from the EUT. 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 from 0° to 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. The maximization process was repeated with the EUT positioned in each of its three orthogonal orientations

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 -0.5dBi and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT31A

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	15.45	/	/	/	/	/	/	/
	5200MHz	15.89	/	/	/	/	/	/	/
	5240MHz	15.87	/	/	/	/	/	/	/
	5260MHz	16.08	/	/	/	/	/	/	/
	5280MHz	16.12	/	/	/	/	/	/	/
	5320MHz	15.65	/	/	/	/	/	/	/
	5500MHz	15.90	/	/	/	/	/	/	/
	5580MHz	18.51	/	/	/	/	/	/	/
	5700MHz	14.32	/	/	/	/	/	/	/
	5720MHz	18.54	/	/	/	/	/	/	/

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

802.11n-HT20 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT20)	5180MHz	15.63	/	/	/	/	/	/	/
	5200MHz	15.80	/	/	/	/	/	/	/
	5240MHz	15.88	/	/	/	/	/	/	/
	5260MHz	15.96	/	/	/	/	/	/	/
	5280MHz	16.09	/	/	/	/	/	/	/
	5320MHz	16.11	/	/	/	/	/	/	/

	5500MHz	14.71	/	/	/	/	/	/	/
	5580MHz	17.68	/	/	/	/	/	/	/
	5700MHz	13.78	/	/	/	/	/	/	/
	5720MHz	17.50	/	/	/	/	/	/	/

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

802.11ac-VHT20 mode

Mode	Frequency	Test Result (dBm)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
802.11ac (VHT20)	5180MHz	15.32	/	/	/	/	/	/	/	/
	5200MHz	15.51	/	/	/	/	/	/	/	/
	5240MHz	15.58	/	/	/	/	/	/	/	/
	5260MHz	15.76	/	/	/	/	/	/	/	/
	5280MHz	15.75	/	/	/	/	/	/	/	/
	5320MHz	15.89	/	/	/	/	/	/	/	/
	5500MHz	14.62	/	/	/	/	/	/	/	/
	5580MHz	17.70	/	/	/	/	/	/	/	/
	5700MHz	14.02	/	/	/	/	/	/	/	/
	5720MHz	17.57	/	/	/	/	/	/	/	/

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

802.11n-HT40 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT40)	5190MHz	15.07	/	/	/	/	/	/	/
	5230MHz	15.23	/	/	/	/	/	/	/
	5270MHz	15.33	/	/	/	/	/	/	/
	5310MHz	14.05	/	/	/	/	/	/	/
	5510MHz	11.51	/	/	/	/	/	/	/
	5550MHz	15.35	/	/	/	/	/	/	/
	5670MHz	15.66	/	/	/	/	/	/	/
	5710MHz	15.94	/	/	/	/	/	/	/

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

802.11ac-VHT40 mode

Mode	Frequency	Test Result (dBm)								
		Data Rate								

		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (VHT40)	5190MHz	13.95	/	/	/	/	/	/	/	/	/
	5230MHz	14.05	/	/	/	/	/	/	/	/	/
	5270MHz	14.22	/	/	/	/	/	/	/	/	/
	5310MHz	14.37	/	/	/	/	/	/	/	/	/
	5510MHz	12.51	/	/	/	/	/	/	/	/	/
	5550MHz	15.86	/	/	/	/	/	/	/	/	/
	5670MHz	15.74	/	/	/	/	/	/	/	/	/
	5710MHz	16.30	/	/	/	/	/	/	/	/	/

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

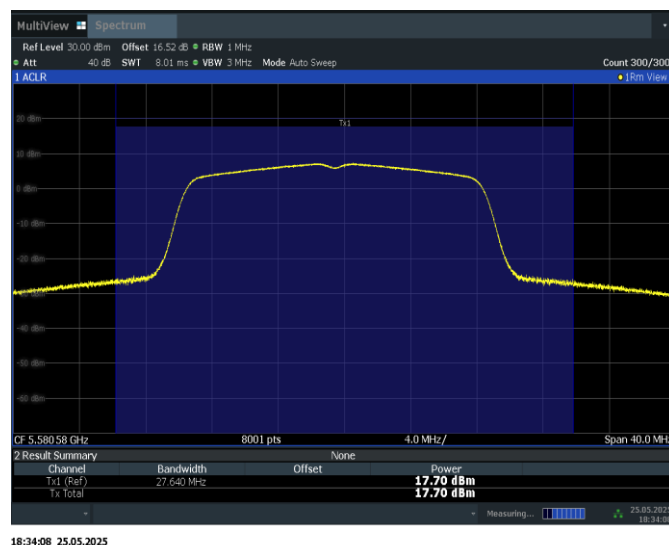
802.11ac-VHT80 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (VHT80)	5210MHz	13.69	/	/	/	/	/	/	/	/	/
	5290MHz	13.76	/	/	/	/	/	/	/	/	/
	5530MHz	12.49	/	/	/	/	/	/	/	/	/
	5610MHz	15.02	/	/	/	/	/	/	/	/	/
	5690MHz	15.68	/	/	/	/	/	/	/	/	/

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

The duty cycle of all mode are 100%

Conclusion: PASS



Output Power: 802.11ac-VHT20

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

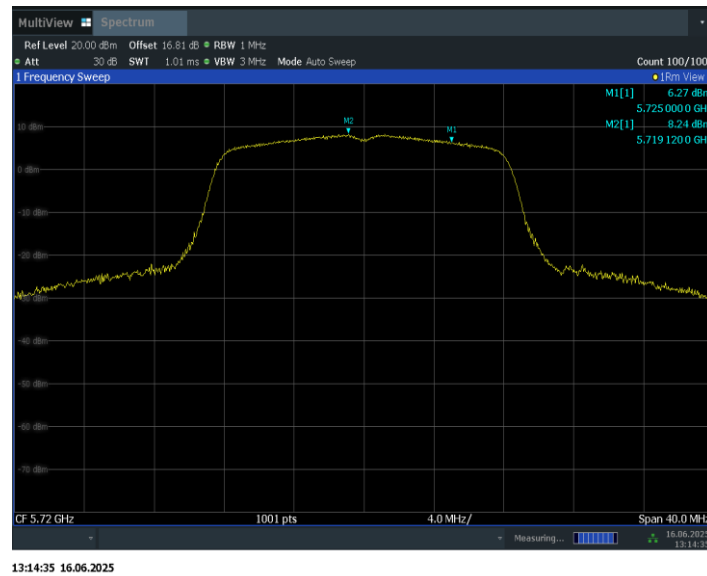
EUT ID: UT31A

Measurement Results:

Mode	Frequency	Power Spectral Density (dBm/MHz)	Conclusion
802.11a	5180 MHz	5.11	P
	5200 MHz	5.75	P
	5240 MHz	5.73	P
	5260 MHz	5.83	P
	5280 MHz	6.00	P
	5320 MHz	5.45	P
	5500 MHz	5.77	P
	5580 MHz	7.11	P
	5700 MHz	4.23	P
	5720 MHz	8.24	P
802.11ac VHT20	5180 MHz	4.86	P
	5200 MHz	5.27	P
	5240 MHz	5.18	P
	5260 MHz	5.32	P
	5280 MHz	5.37	P
	5320 MHz	5.49	P
	5500 MHz	4.18	P
	5580 MHz	7.63	P
	5700 MHz	3.55	P
	5720 MHz	8.15	P
802.11ac VHT40	5190 MHz	0.76	P
	5230 MHz	0.76	P
	5270 MHz	0.92	P
	5310 MHz	1.02	P
	5510 MHz	-0.54	P
	5550 MHz	2.67	P
	5670 MHz	2.65	P
	5710 MHz	3.25	P
802.11ac	5210 MHz	-2.99	P

VHT80	5290 MHz	-2.71	P
	5530 MHz	-4.19	P
	5610 MHz	-1.29	P
	5690 MHz	-0.52	P

Conclusion: PASS



Peak Power Spectral Density:

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: UT31A

Measurement Result:

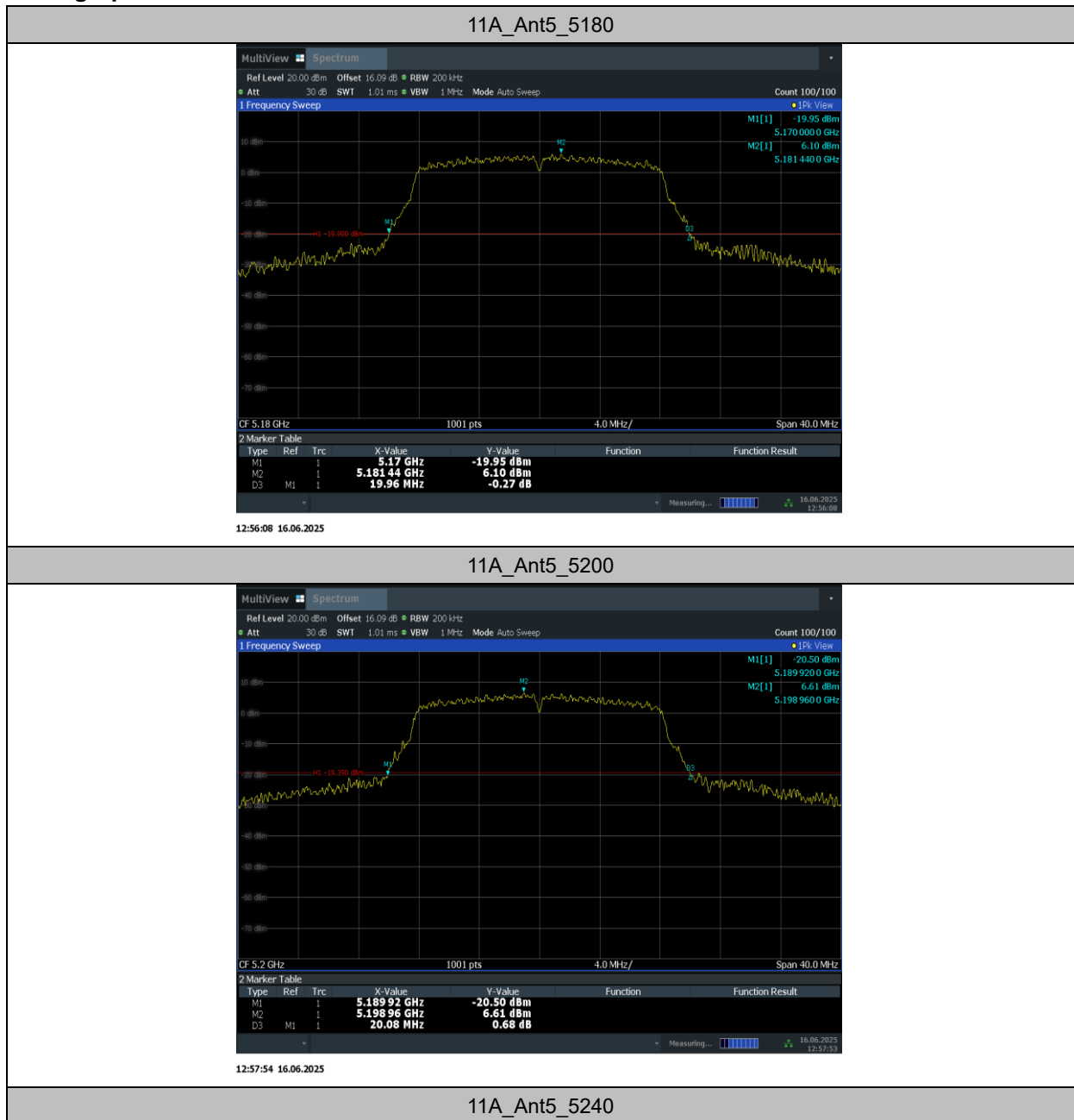
Test graphs as below:

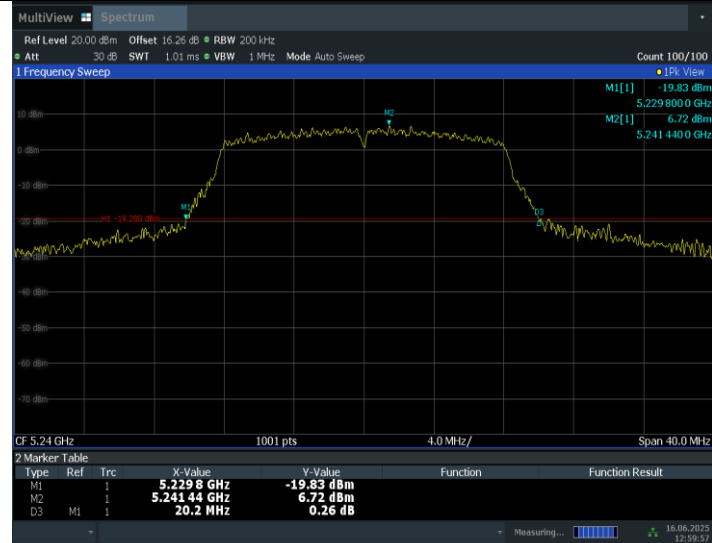
Test Mode	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	5180	19.96	5170.00	5189.96
	5200	20.08	5189.92	5210.00
	5240	20.20	5229.80	5250.00
	5260	21.28	5248.84	5270.12

	5280	20.80	5269.84	5290.64
	5320	20.24	5309.88	5330.12
	5500	20.12	5489.84	5509.96
	5580	26.68	5567.76	5594.44
	5700	20.24	5689.96	5710.20
	5720	27.68	5705.84	5733.52
11AC VHT20	5180	22.84	5167.48	5190.32
	5200	20.24	5189.80	5210.04
	5240	20.40	5229.84	5250.24
	5260	21.00	5249.76	5270.76
	5280	21.44	5268.96	5290.40
	5320	22.96	5307.36	5330.32
	5500	20.52	5489.68	5510.20
	5580	27.64	5566.76	5594.40
	5700	20.48	5689.68	5710.16
	5720	28.16	5705.52	5733.68
11AC VHT40	5190	40.88	5169.60	5210.48
	5230	41.04	5209.60	5250.64
	5270	41.04	5249.44	5290.48
	5310	41.04	5289.60	5330.64
	5510	40.72	5489.60	5530.32
	5550	41.04	5529.44	5570.48
	5670	40.96	5649.60	5690.56
	5710	45.44	5689.44	5734.88
11AC VHT80	5210	81.44	5169.20	5250.64
	5290	81.44	5249.20	5330.64
	5530	81.44	5489.20	5570.64
	5610	82.08	5568.72	5650.80
	5690	81.44	5649.20	5730.64

Conclusion: PASS

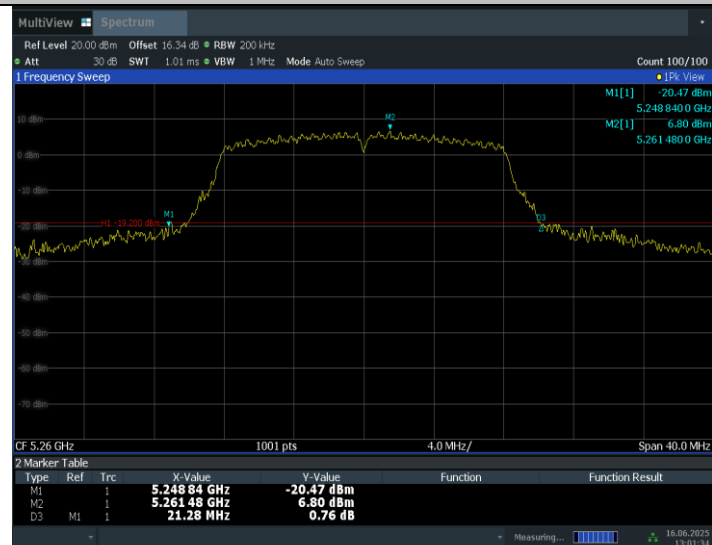
Test graphs as below:





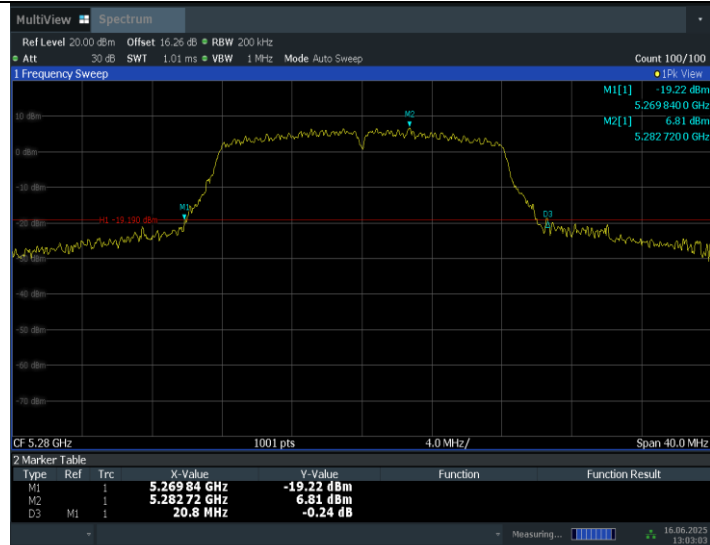
12:59:57 16.06.2025

11A_Ant5_5260



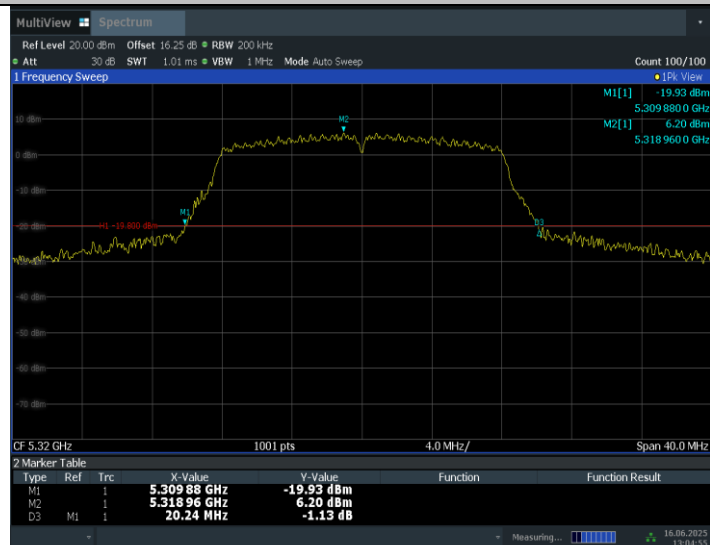
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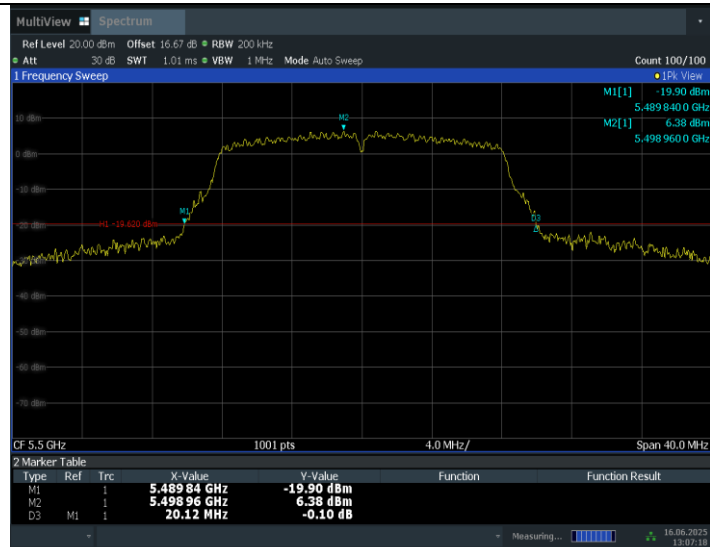
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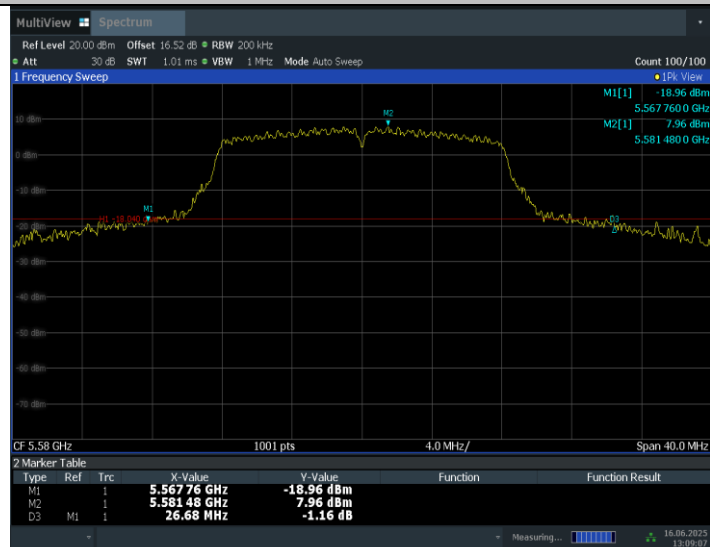
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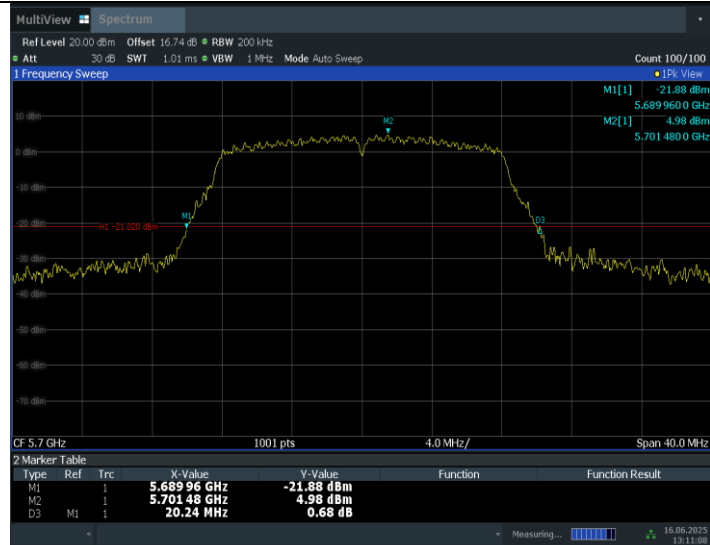
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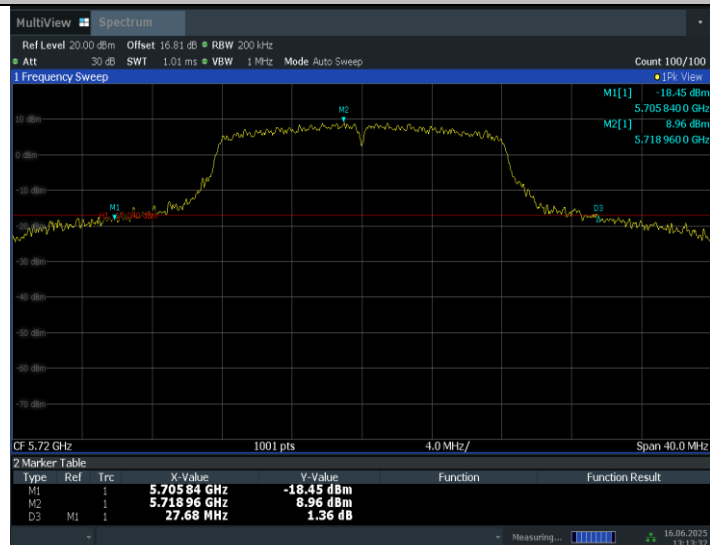
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11A_Ant5_5700



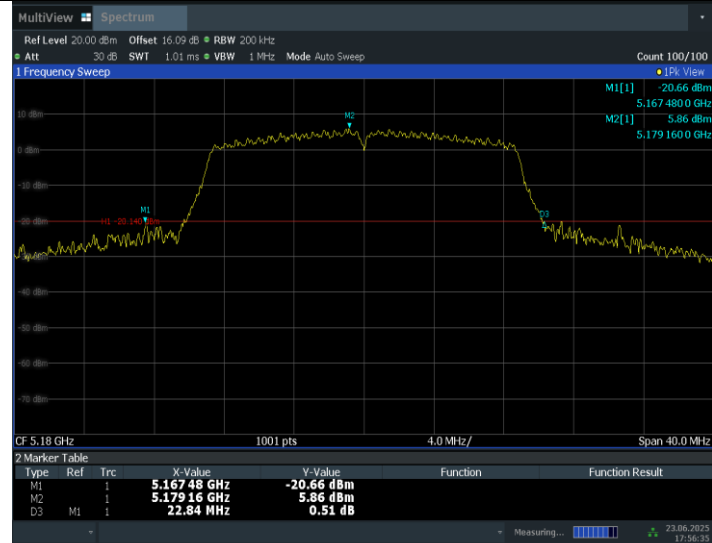
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11A_Ant5_5720



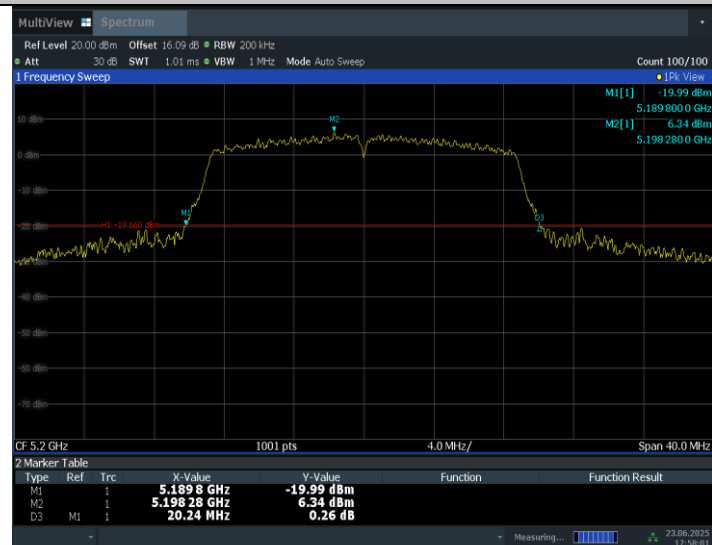
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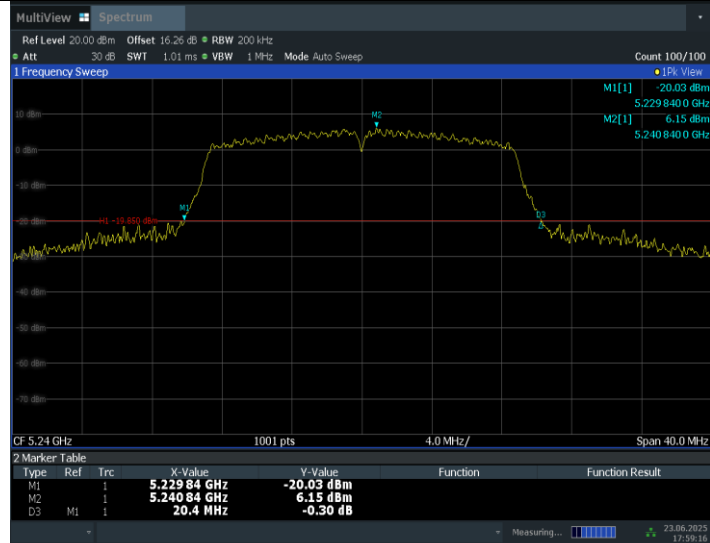
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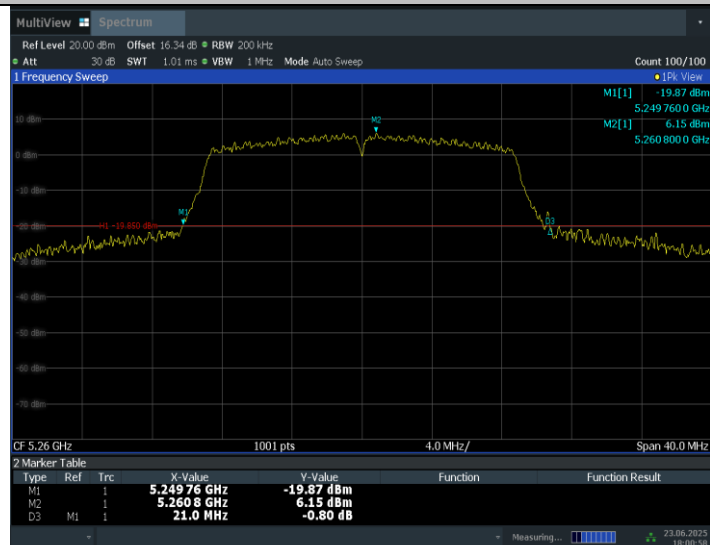
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11AC20SISO_Ant5_5240



17:59:17 23.06.2025

11AC20SISO_Ant5_5260



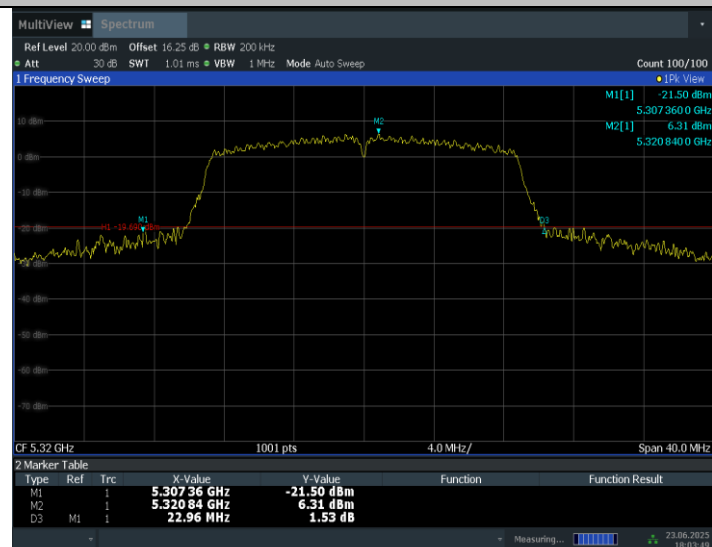
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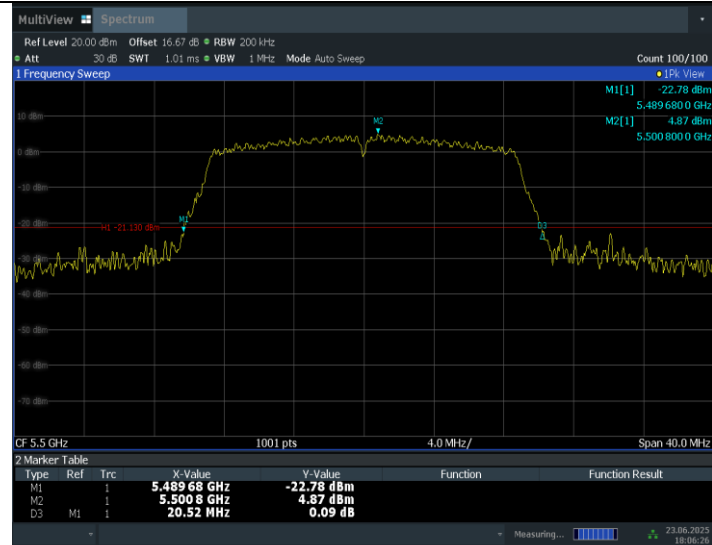
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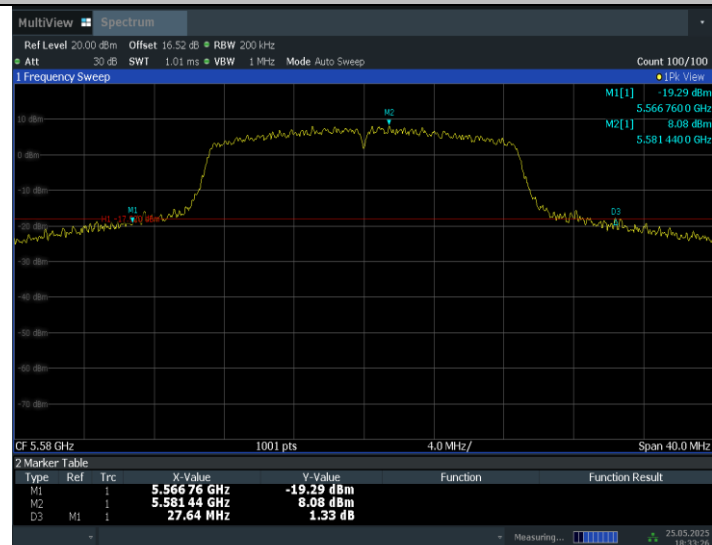
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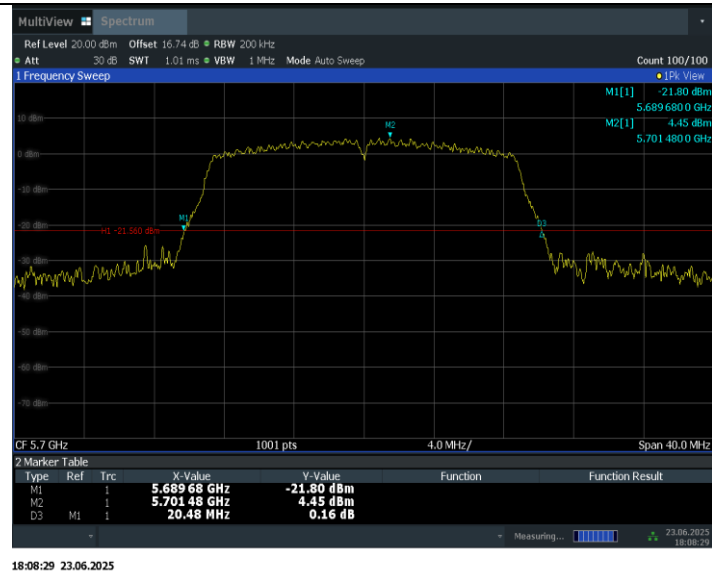
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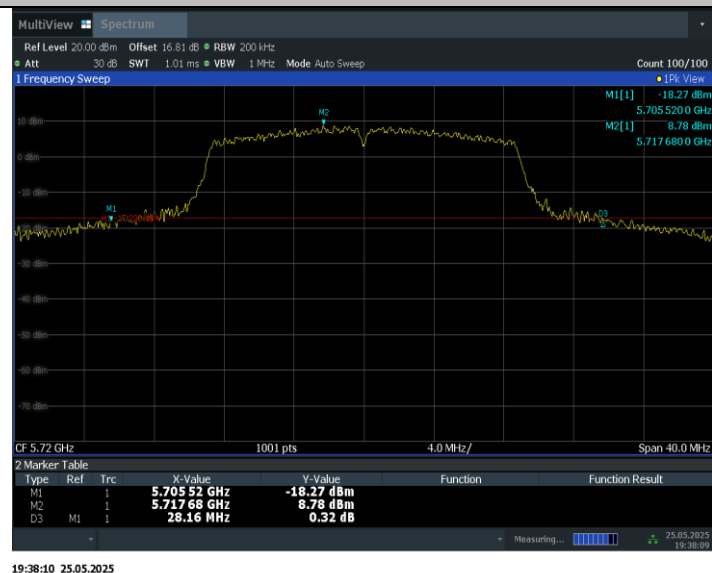


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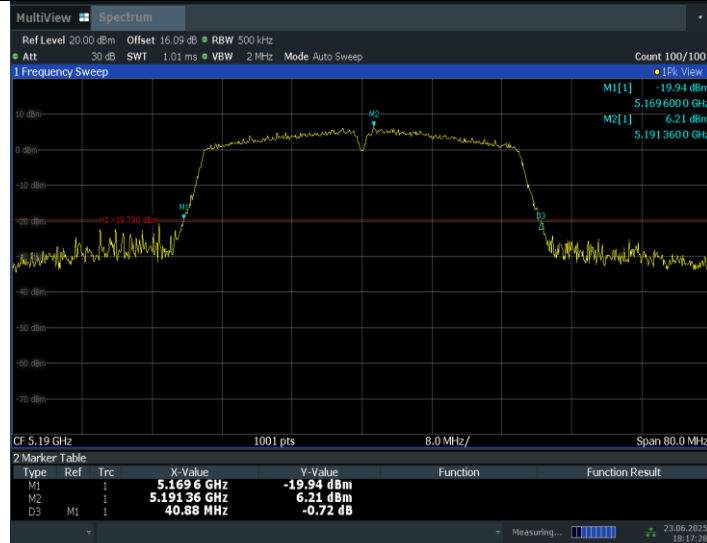
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11AC20SISO_Ant5_5720

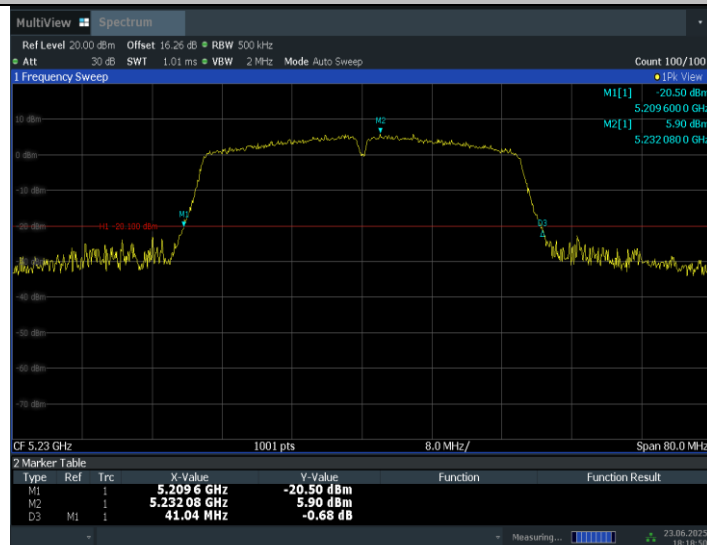


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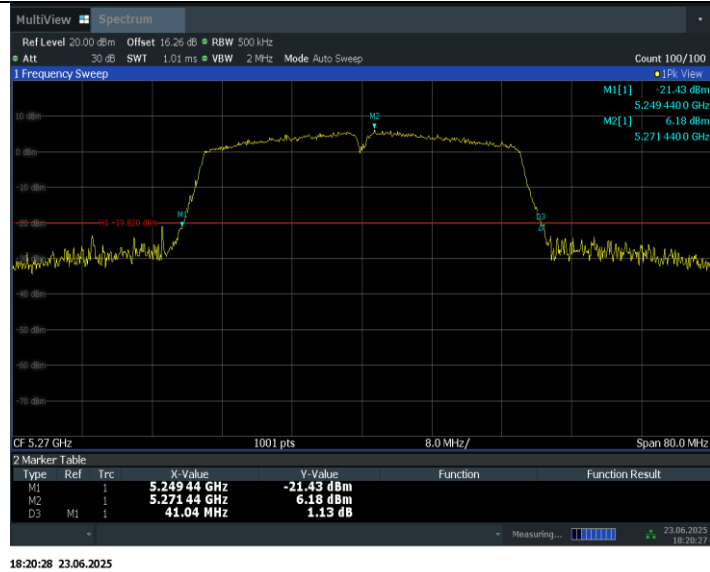
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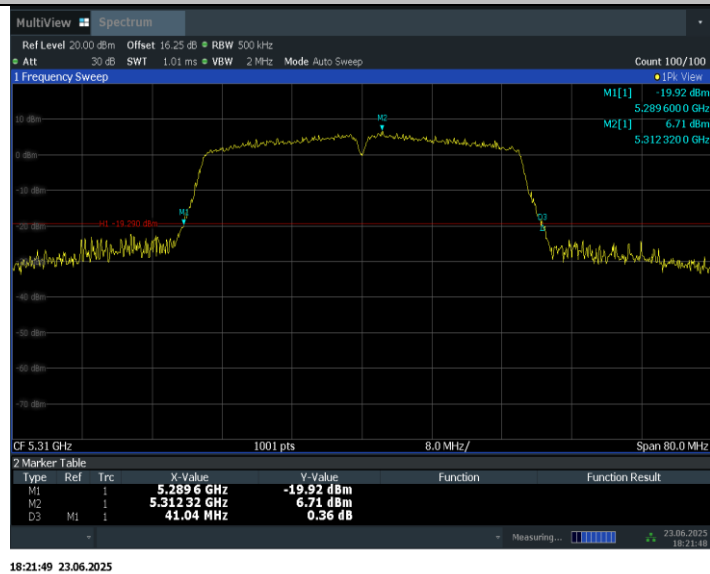


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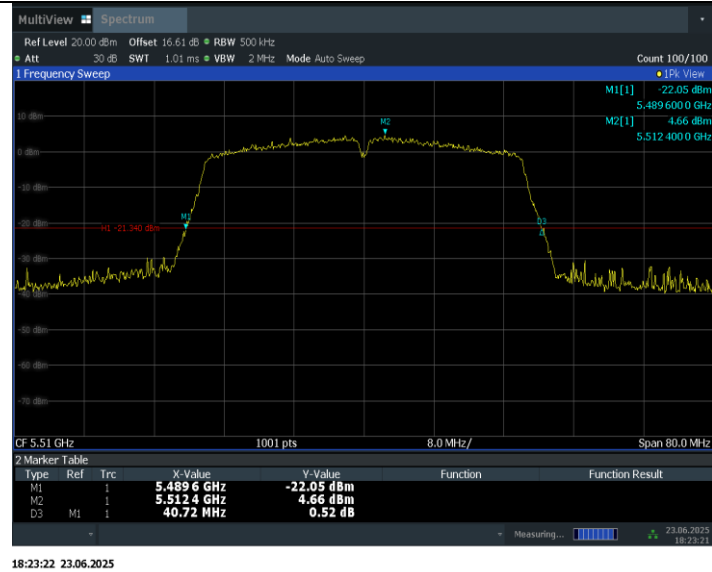
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11AC40SISO_Ant5_5310



11AC40SISO_Ant5_5510



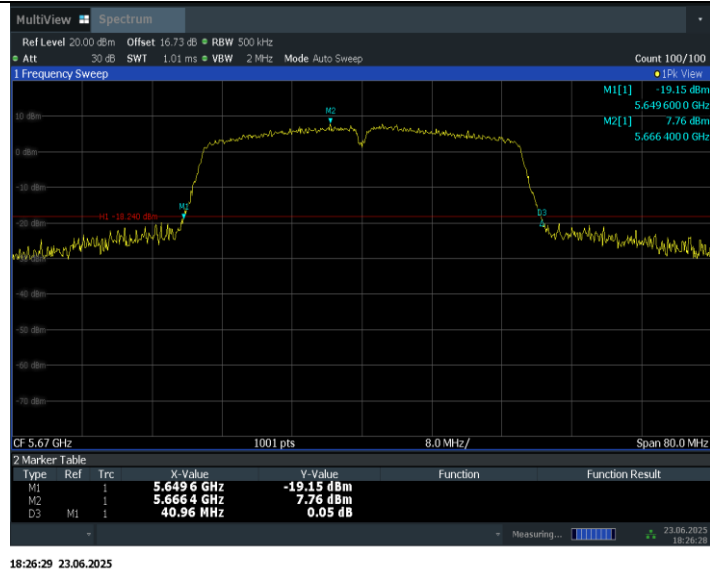
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11AC40SISO_Ant5_5550



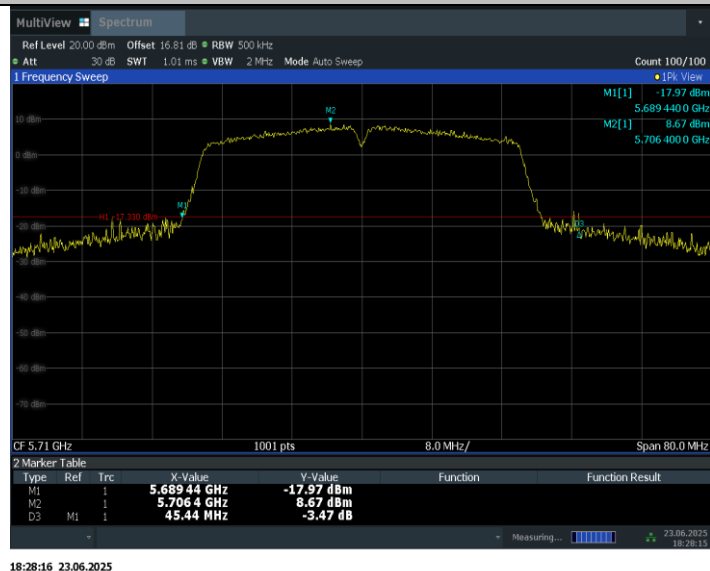
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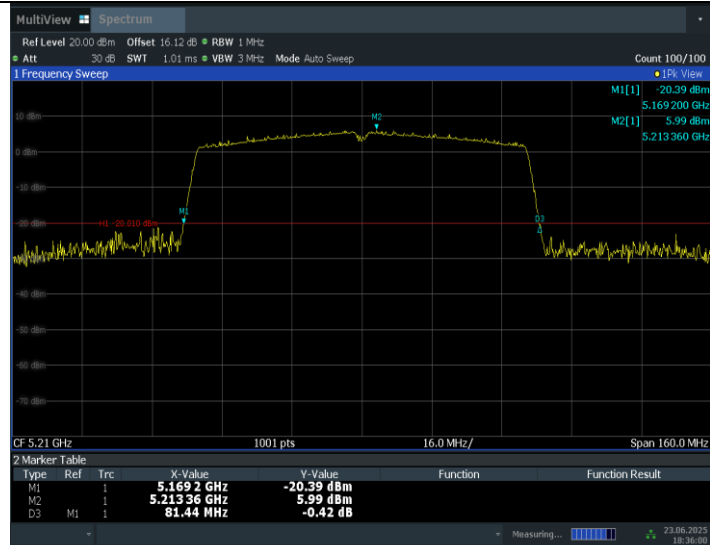
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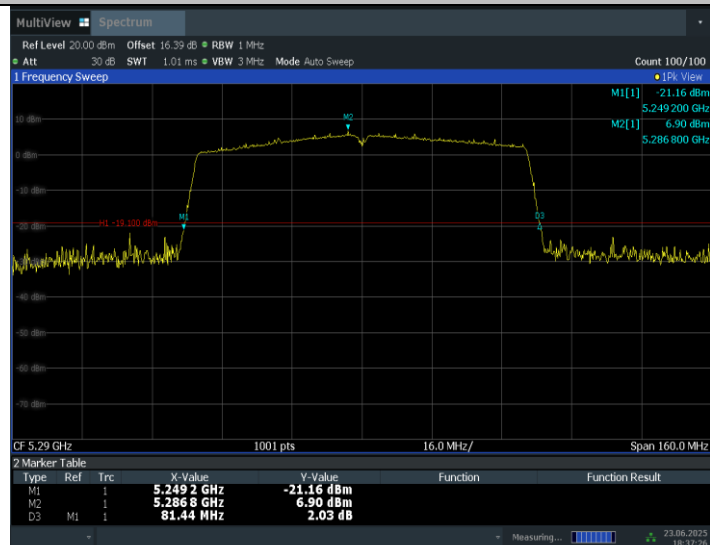
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11AC80SISO_Ant5_5210



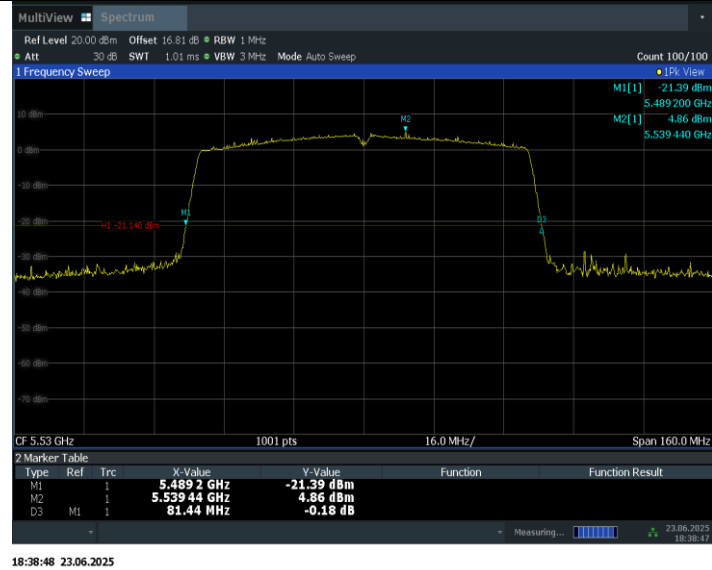
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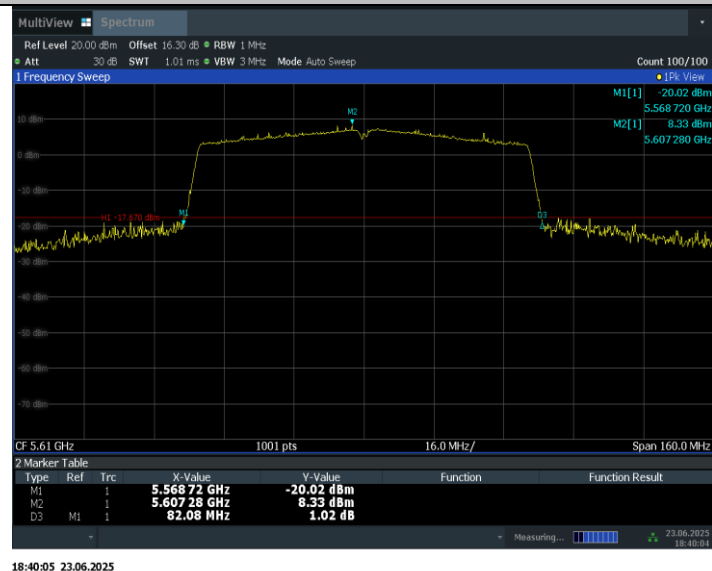
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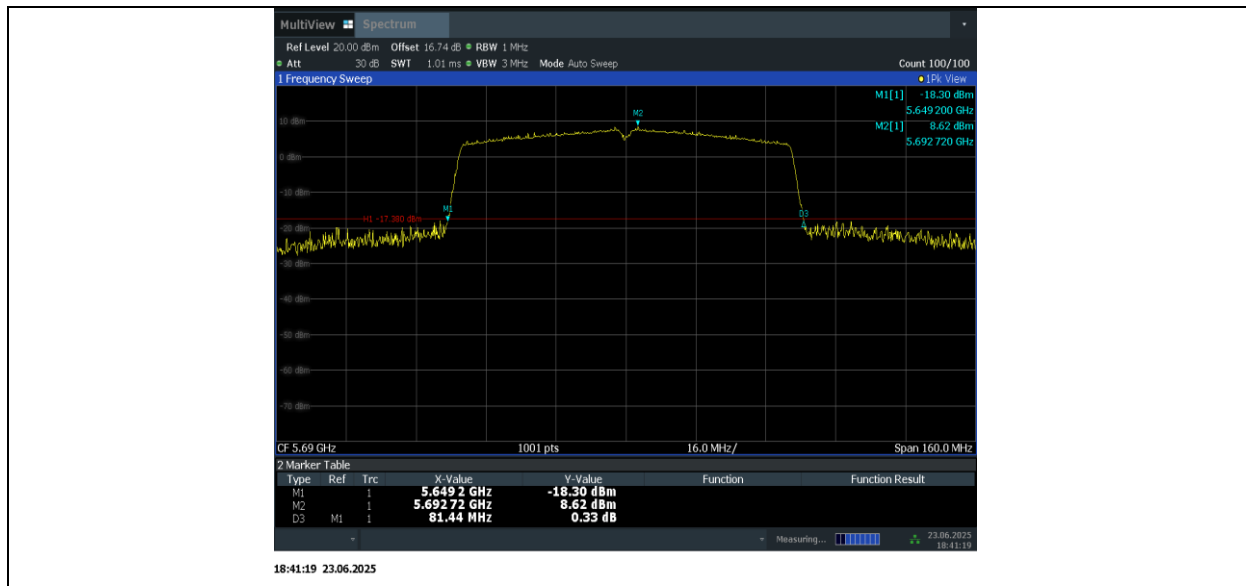
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11AC80SISO_Ant5_5610



18:40:05 23.06.2025

11AC80SISO_Ant5_5690



A.5. Radiated Unwanted Emission

A.5.1 Limits

Unwanted Emissions in the unrestricted bands shall not exceed the limits that shown in 15.407:

Standard	Limit
FCC 47 CFR Part 15.407	(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))

Frequency (MHz)	Field strength(μ V/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Frequency of emission (MHz)	Field strength (μ V/m)	Field strength (dBuV/m)	Measurement distance (m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3

Above 960	500	54	3
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Note: When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor (as defined in KDB 789033 II.G.2.d).

A.5.2 Test setup

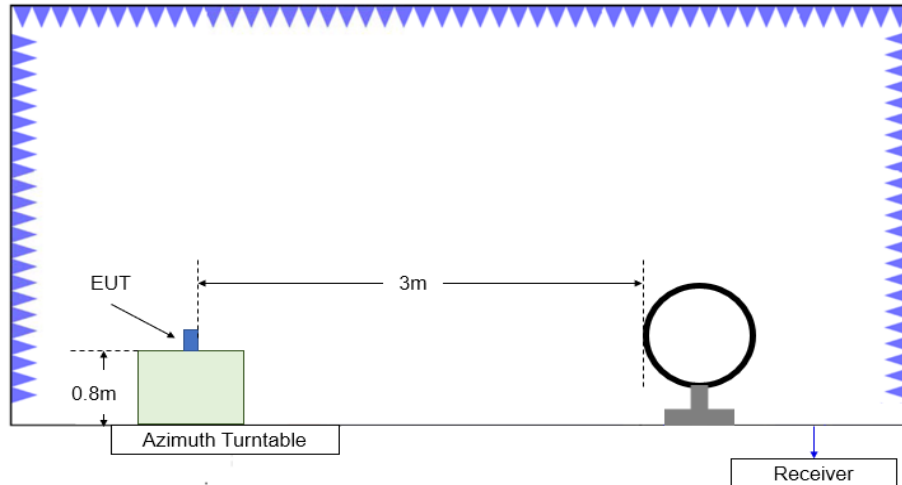


Figure A.5.1. Test Site Diagram (9kHz-30MHz)

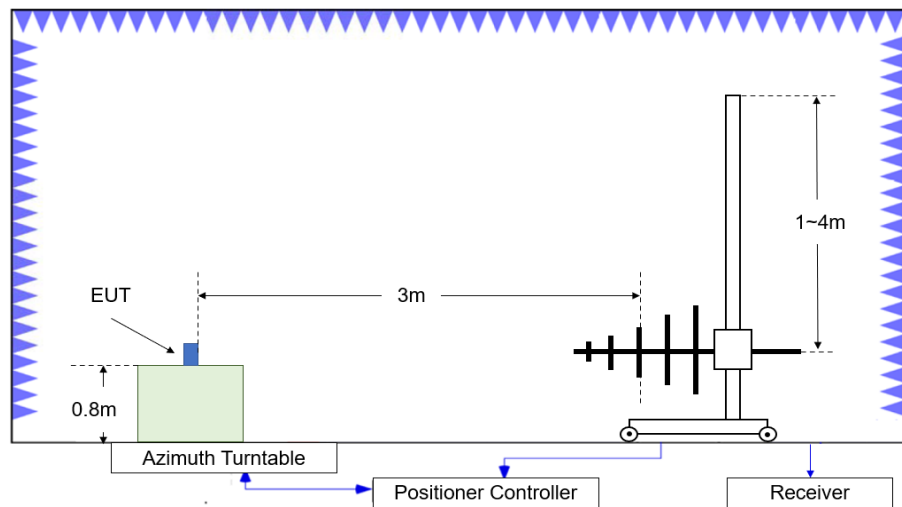


Figure A.5.2. Test Site Diagram (30MHz-1GHz)

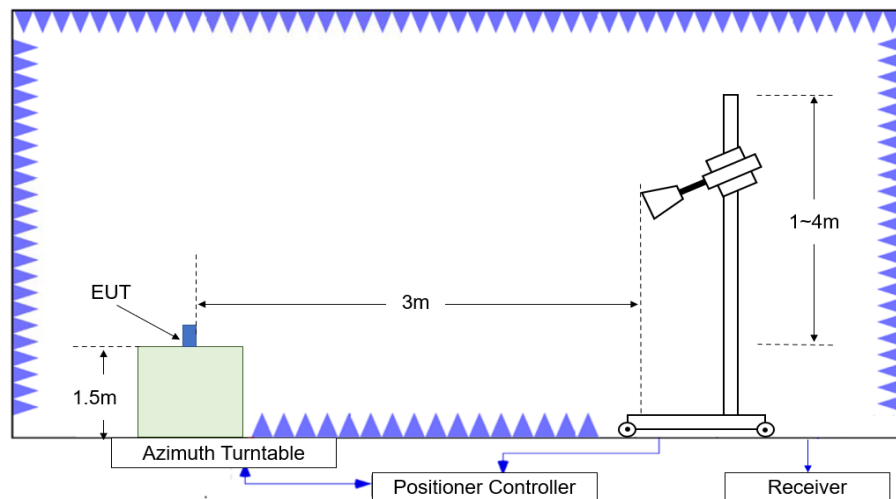


Figure A.5.3. Test Site Diagram (1GHz-40GHz)

A.5.3 Test Procedures

Radiated unwanted emissions from the EUT were measured according to ANSI C63.10 and KDB 789033 D02 v02r01.

Test setting

Frequency of emission (MHz)	RBW/VBW
30-1000	100kHz/300kHz
1000-4000	1MHz/3MHz
4000-18000	1MHz/3MHz
18000-26500	1MHz/3MHz
26500-40000	1MHz/3MHz

A.5.4 Calculation

1. The measurement results reported below is calculated by:

$$\text{Measurement Results (dB}\mu\text{V/m)} = P_{\text{measurement}} (\text{dB}\mu\text{V}) + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$$

Where: $P_{\text{measurement}}$ is the field strength recorded from the instrument

2. Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20 \log(D) + 104.77$$

Where:

E is the field strength in dB μ V/m

D is the measurement distance in meters

EIRP is the equivalent isotropically radiated power in dBm

Test note

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all modes and modulations/data rates. Only the radiated

emissions of the configuration that produced the worst case emissions are reported in this section.

3. Spurious emissions for all channels were investigated and almost the same below 1GHz. According to FCC 47 CFR §15.31, emission levels are not report much lower than the limit by over 20dB

4. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept.

5. EUT in each of three orthogonal axis emissions had been tested out only the worst case (axis data) recorded in the report.

6. Measurement frequencies were performed from 9 kHz to the 10th harmonic of highest fundamental frequency or 40GHz, whichever is lower.

7. No spurious emissions were detected within 20dB of the limit below 30MHz. OFS and semi-chamber comparison testing had been performed and the result came out very similar. (KDB 414788)

Measurement Results:

Average Results:

802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
8287.550	45.44	-34.29	37.10	42.63	54.00	8.56	H
17919.150	45.04	-25.55	45.40	25.19	54.00	8.96	H
17920.800	45.03	-25.55	45.40	25.18	54.00	8.97	V
8288.100	44.91	-34.29	37.10	42.10	54.00	9.09	H
5149.860	48.48	-27.27	34.00	41.75	54.00	5.52	H
5149.960	48.48	-27.27	34.00	41.75	54.00	5.52	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17937.300	45.21	-25.55	45.40	25.36	54.00	8.79	H
17918.600	45.16	-25.55	45.40	25.31	54.00	8.84	H
14485.500	38.98	-28.78	41.80	25.96	54.00	15.02	V
13284.850	38.84	-29.75	40.40	28.19	54.00	15.16	V
5350.080	49.35	-27.08	34.20	42.23	54.00	4.65	H
5350.720	48.79	-27.08	34.20	41.67	54.00	5.21	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17910.350	45.04	-25.55	45.40	25.19	54.00	8.96	H
17915.300	45.04	-25.55	45.40	25.19	54.00	8.96	V
14482.200	39.03	-28.78	41.80	26.01	54.00	14.97	V
14499.800	39.03	-28.78	41.80	26.01	54.00	14.97	H
5459.140	45.88	-27.06	34.30	38.64	54.00	8.12	H
5459.560	45.28	-27.06	34.30	38.04	54.00	8.72	H

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
8287.550	45.50	-34.29	37.10	42.69	54.00	8.50	H
17920.250	45.19	-25.55	45.40	25.34	54.00	8.81	H
17900.450	44.99	-25.55	45.40	25.14	54.00	9.01	V
8288.100	44.80	-34.29	37.10	41.99	54.00	9.20	H
5149.480	49.80	-27.27	34.00	43.07	54.00	4.20	H
5148.960	49.67	-27.27	34.00	42.94	54.00	4.33	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17932.350	45.30	-25.55	45.40	25.45	54.00	8.70	H
17921.350	45.28	-25.55	45.40	25.43	54.00	8.72	V
13306.300	39.21	-29.75	40.40	28.56	54.00	14.79	V
13274.400	38.71	-29.75	40.40	28.06	54.00	15.29	H
5350.640	49.76	-27.08	34.20	42.64	54.00	4.24	H
5350.240	48.90	-27.08	34.20	41.78	54.00	5.10	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17921.900	44.93	-25.55	45.40	25.08	54.00	9.07	V
17937.300	44.93	-25.55	45.40	25.08	54.00	9.07	V
14484.400	38.90	-28.78	41.80	25.88	54.00	15.10	H
14497.600	38.70	-28.78	41.80	25.68	54.00	15.30	V

5458.960	46.16	-27.06	34.30	38.92	54.00	7.84	H
5459.920	45.75	-27.06	34.30	38.51	54.00	8.25	H

802.11n-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17912.550	45.15	-25.55	45.40	25.30	54.00	8.85	H
17912.000	45.01	-25.55	45.40	25.16	54.00	8.99	V
8304.050	44.64	-34.29	37.10	41.83	54.00	9.36	H
8303.500	44.20	-34.29	37.10	41.39	54.00	9.80	H
5149.740	49.34	-27.27	34.00	42.61	54.00	4.66	H
5149.300	49.14	-27.27	34.00	42.41	54.00	4.86	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17916.400	45.31	-25.55	45.40	25.46	54.00	8.69	H
17918.600	45.25	-25.55	45.40	25.40	54.00	8.75	H
8496.000	43.06	-34.00	37.60	39.46	54.00	10.94	V
8495.450	42.23	-34.00	37.60	38.63	54.00	11.77	V
5352.448	48.83	-27.08	34.20	41.71	54.00	5.17	H
5350.704	48.48	-27.08	34.20	41.36	54.00	5.52	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17899.350	45.82	-25.55	45.40	25.97	54.00	8.18	V
17924.100	45.66	-25.55	45.40	25.81	54.00	8.34	V
13267.250	39.87	-29.75	40.20	29.42	54.00	14.13	H
13280.450	39.75	-29.75	40.40	29.10	54.00	14.25	V
5458.525	45.15	-27.06	34.30	37.91	54.00	8.85	H
5459.980	44.80	-27.06	34.30	37.56	54.00	9.20	H

802.11ac-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
8287.550	46.81	-34.29	37.10	44.00	54.00	7.19	H
8288.100	45.98	-34.29	37.10	43.17	54.00	8.02	H
17909.800	45.45	-25.55	45.40	25.60	54.00	8.55	V
17922.450	45.35	-25.55	45.40	25.50	54.00	8.65	H
5148.020	49.38	-27.34	33.90	42.82	54.00	4.62	H
5150.000	48.62	-27.27	34.00	41.89	54.00	5.38	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17913.100	45.09	-25.55	45.40	25.24	54.00	8.91	H
17906.500	45.04	-25.55	45.40	25.19	54.00	8.96	V
14498.150	39.11	-28.78	41.80	26.09	54.00	14.89	H
14499.250	38.99	-28.78	41.80	25.97	54.00	15.01	H
5351.104	50.30	-27.08	34.20	43.18	54.00	3.70	H
5350.144	50.18	-27.08	34.20	43.06	54.00	3.82	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17934.000	45.35	-25.55	45.40	25.50	54.00	8.65	H
17922.450	45.11	-25.55	45.40	25.26	54.00	8.89	H
14494.850	39.09	-28.78	41.80	26.07	54.00	14.91	H
14495.400	38.97	-28.78	41.80	25.95	54.00	15.03	V
5459.905	45.33	-27.06	34.30	38.09	54.00	8.67	H
5459.545	45.17	-27.06	34.30	37.93	54.00	8.83	H

802.11ac-HT40
Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
8304.050	46.39	-34.29	37.10	43.58	54.00	7.61	H
8303.500	46.25	-34.29	37.10	43.44	54.00	7.75	H
17914.750	45.07	-25.55	45.40	25.22	54.00	8.93	V
17916.950	45.03	-25.55	45.40	25.18	54.00	8.97	V
5148.500	49.32	-27.34	33.90	42.76	54.00	4.68	H
5149.660	49.15	-27.27	34.00	42.42	54.00	4.85	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17921.350	44.98	-25.55	45.40	25.13	54.00	9.02	H
17915.850	44.91	-25.55	45.40	25.06	54.00	9.09	V
8496.000	42.71	-34.00	37.60	39.11	54.00	11.29	V
8495.450	41.95	-34.00	37.60	38.35	54.00	12.05	V
5350.656	50.52	-27.08	34.20	43.40	54.00	3.48	H
5352.880	50.26	-27.08	34.20	43.14	54.00	3.74	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17932.900	44.90	-25.55	45.40	25.05	54.00	9.10	H
17938.400	44.86	-25.55	45.40	25.01	54.00	9.14	V
14496.500	39.01	-28.78	41.80	25.99	54.00	14.99	V
14484.950	38.91	-28.78	41.80	25.89	54.00	15.09	V
5459.320	44.78	-27.06	34.30	37.54	54.00	9.22	H
5458.540	44.77	-27.06	34.30	37.53	54.00	9.23	H

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17927.400	45.13	-25.55	45.40	25.28	54.00	8.87	H
8335.950	45.12	-34.29	37.30	42.11	54.00	8.88	H
17925.750	45.01	-25.55	45.40	25.16	54.00	8.99	V
8335.400	44.22	-34.29	37.30	41.21	54.00	9.78	H
5148.860	50.14	-27.27	34.00	43.41	54.00	3.86	H
5149.580	50.06	-27.27	34.00	43.33	54.00	3.94	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.300	45.33	-25.55	45.40	25.48	54.00	8.67	H
17909.800	45.03	-25.55	45.40	25.18	54.00	8.97	H
8463.550	43.74	-34.00	37.50	40.24	54.00	10.26	V
8464.100	42.54	-34.00	37.50	39.04	54.00	11.46	V
5350.224	50.51	-27.08	34.20	43.39	54.00	3.49	H
5354.896	50.40	-27.08	34.20	43.28	54.00	3.60	H

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17927.400	44.97	-25.55	45.40	25.12	54.00	9.03	H
17942.800	44.94	-25.55	45.40	25.09	54.00	9.06	H
14491.000	38.92	-28.78	41.80	25.90	54.00	15.08	V
13294.200	38.87	-29.75	40.40	28.22	54.00	15.13	V
5442.025	46.14	-27.18	34.30	39.02	54.00	7.86	H
5454.115	46.04	-27.06	34.30	38.80	54.00	7.96	H

PEAK Results:
802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17913.650	55.93	-25.55	45.40	36.08	74.00	18.07	H
17907.050	55.90	-25.55	45.40	36.05	74.00	18.10	H
13654.450	51.57	-29.88	40.70	40.75	68.20	16.63	V
13756.750	51.47	-29.41	40.80	40.08	68.20	16.73	H
5147.820	66.35	-27.34	33.90	59.79	74.00	7.65	H
5148.380	66.02	-27.34	33.90	59.46	74.00	7.98	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17920.800	56.16	-25.55	45.40	36.31	74.00	17.84	H
17894.400	55.99	-25.55	45.40	36.14	74.00	18.01	H
14144.500	51.34	-28.86	41.80	38.40	68.20	16.86	H
13677.000	51.21	-29.88	40.80	40.29	68.20	16.99	V
5350.672	70.30	-27.08	34.20	63.18	74.00	3.70	H
5350.656	70.25	-27.08	34.20	63.13	74.00	3.75	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17920.250	56.04	-25.55	45.40	36.19	74.00	17.96	V
17926.300	55.92	-25.55	45.40	36.07	74.00	18.08	H
14169.800	51.66	-28.86	41.70	38.82	68.20	16.54	H
14114.800	51.37	-28.86	41.80	38.43	68.20	16.83	H
5459.260	58.25	-27.06	34.30	51.01	74.00	15.75	H
5467.090	63.78	-27.06	34.30	56.54	68.20	4.42	H

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.500	56.97	-25.55	45.40	37.12	74.00	17.03	V
17914.200	56.53	-25.55	45.40	36.68	74.00	17.47	V
13729.250	51.95	-29.41	40.80	40.56	68.20	16.25	H
14203.900	51.86	-28.86	41.70	39.02	68.20	16.34	V
5149.220	70.36	-27.27	34.00	63.63	74.00	3.64	H
5148.760	69.77	-27.27	34.00	63.04	74.00	4.23	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17942.250	56.56	-25.55	45.40	36.71	74.00	17.44	H
17916.400	56.01	-25.55	45.40	36.16	74.00	17.99	V
13766.650	51.58	-29.41	41.10	39.89	68.20	16.62	H
13705.600	51.42	-29.88	40.80	40.50	68.20	16.78	H
5350.448	68.76	-27.08	34.20	61.64	74.00	5.24	H
5350.128	68.03	-27.08	34.20	60.91	74.00	5.97	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17930.700	55.76	-25.55	45.40	35.91	74.00	18.24	V
17920.250	55.69	-25.55	45.40	35.84	74.00	18.31	V
14121.400	51.78	-28.86	41.80	38.84	68.20	16.42	H
14038.900	51.46	-28.98	41.50	38.94	68.20	16.74	H
5459.155	59.64	-27.06	34.30	52.40	74.00	14.36	H
5469.940	64.76	-27.06	34.30	57.52	68.20	3.44	H

802.11n-HT40
Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17856.450	55.81	-25.55	45.40	35.96	74.00	18.19	V
17915.300	55.79	-25.55	45.40	35.94	74.00	18.21	H
13745.750	51.68	-29.41	40.80	40.29	68.20	16.52	V
14160.450	51.60	-28.86	41.70	38.76	68.20	16.60	V
5149.900	68.11	-27.27	34.00	61.38	74.00	5.89	H
5147.680	67.89	-27.34	33.90	61.33	74.00	6.11	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17926.300	56.17	-25.55	45.40	36.32	74.00	17.83	V
17901.550	55.72	-25.55	45.40	35.87	74.00	18.28	H
13685.800	51.93	-29.88	40.80	41.01	68.20	16.27	V
14171.450	51.56	-28.86	41.70	38.72	68.20	16.64	H
5350.048	70.33	-27.08	34.20	63.21	74.00	3.67	H
5350.256	69.75	-27.08	34.20	62.63	74.00	4.25	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17947.200	56.43	-25.55	45.40	36.58	74.00	17.57	H
17636.450	56.38	-27.04	45.20	38.22	68.20	11.82	V
13735.850	52.09	-29.41	40.80	40.70	68.20	16.11	H
14033.400	52.06	-28.98	41.50	39.54	68.20	16.14	V
5452.615	59.32	-27.06	34.30	52.08	74.00	14.68	H
5468.800	63.04	-27.06	34.30	55.80	68.20	5.16	H

802.11ac-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17912.550	56.34	-25.55	45.40	36.49	74.00	17.66	H
17907.600	56.30	-25.55	45.40	36.45	74.00	17.70	H
14066.400	51.69	-28.98	41.80	38.87	68.20	16.51	H
14122.500	51.63	-28.86	41.80	38.69	68.20	16.57	H
5150.000	67.07	-27.27	34.00	60.34	74.00	6.93	H
5146.780	66.84	-27.34	33.90	60.28	74.00	7.16	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.500	55.87	-25.55	45.40	36.02	74.00	18.13	H
17897.700	55.81	-25.55	45.40	35.96	74.00	18.19	H
13696.250	52.45	-29.88	40.80	41.53	68.20	15.75	H
14160.450	51.65	-28.86	41.70	38.81	68.20	16.55	V
5353.296	69.69	-27.08	34.20	62.57	74.00	4.31	H
5352.288	69.66	-27.08	34.20	62.54	74.00	4.34	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17934.550	57.01	-25.55	45.40	37.16	74.00	16.99	H
17824.000	55.83	-25.55	45.40	35.98	74.00	18.17	H
14185.750	51.84	-28.86	41.70	39.00	68.20	16.36	H
14169.800	51.68	-28.86	41.70	38.84	68.20	16.52	V
5455.900	59.04	-27.06	34.30	51.80	74.00	14.96	H
5469.565	64.75	-27.06	34.30	57.51	68.20	3.45	H

802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17913.100	56.77	-25.55	45.40	36.92	74.00	17.23	V
17945.550	56.22	-25.55	45.40	36.37	74.00	17.78	H
13719.900	51.77	-29.41	40.80	40.38	68.20	16.43	V
14038.350	51.71	-28.98	41.50	39.19	68.20	16.49	H
5146.640	70.53	-27.34	33.90	63.97	74.00	3.47	H
5148.940	70.03	-27.27	34.00	63.30	74.00	3.97	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17922.450	56.46	-25.55	45.40	36.61	74.00	17.54	V
17916.400	55.68	-25.55	45.40	35.83	74.00	18.32	H
14156.050	51.81	-28.86	41.80	38.87	68.20	16.39	H
14126.900	51.68	-28.86	41.80	38.74	68.20	16.52	H
5350.048	70.29	-27.08	34.20	63.17	74.00	3.71	H
5355.120	70.21	-27.08	34.20	63.09	74.00	3.79	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17947.750	56.14	-25.55	45.40	36.29	74.00	17.86	H
17908.700	55.77	-25.55	45.40	35.92	74.00	18.23	V
14081.800	52.56	-28.98	41.80	39.74	68.20	15.64	V
14143.950	51.85	-28.86	41.80	38.91	68.20	16.35	H
5445.655	58.84	-27.06	34.30	51.60	74.00	15.16	H
5467.690	61.97	-27.06	34.30	54.73	68.20	6.23	H

802.11ac-HT80
Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17914.200	56.58	-25.55	45.40	36.73	74.00	17.42	H
17881.750	55.99	-25.55	45.40	36.14	74.00	18.01	H
14114.800	51.70	-28.86	41.80	38.76	68.20	16.50	H
13597.800	51.51	-29.88	40.70	40.69	68.20	16.69	H
5137.420	67.54	-27.34	33.90	60.98	74.00	6.46	H
5138.120	66.28	-27.34	33.90	59.72	74.00	7.72	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17898.250	55.83	-25.55	45.40	35.98	74.00	18.17	V
17916.400	55.82	-25.55	45.40	35.97	74.00	18.18	H
14125.800	52.36	-28.86	41.80	39.42	68.20	15.84	H
13716.050	51.58	-29.41	40.80	40.19	68.20	16.62	V
5358.064	69.99	-27.08	34.20	62.87	74.00	4.01	H
5352.912	69.50	-27.08	34.20	62.38	74.00	4.50	H

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17882.300	55.73	-25.55	45.40	35.88	74.00	18.27	V
17916.400	55.61	-25.55	45.40	35.76	74.00	18.39	V
14142.300	52.24	-28.86	41.80	39.30	68.20	15.96	H
13754.000	52.02	-29.41	40.80	40.63	68.20	16.18	V
5455.075	62.94	-27.06	34.30	55.70	74.00	11.06	H
5466.205	64.58	-27.06	34.30	57.34	68.20	3.62	H

Conclusion: PASS

Band edge compliance

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.1	P
	5320 MHz	Fig.2	P
	5500 MHz	Fig.3	P
	5700 MHz	Fig.4	P
802.11n HT20	5180 MHz	Fig.5	P
	5320 MHz	Fig.6	P
	5500 MHz	Fig.7	P
	5700 MHz	Fig.8	P
802.11n HT40	5190 MHz	Fig.9	P
	5310 MHz	Fig.10	P
	5510 MHz	Fig.11	P
	5670 MHz	Fig.12	P
802.11ac HT20	5180 MHz	Fig.13	P
	5320 MHz	Fig.14	P
	5500 MHz	Fig.15	P
	5700 MHz	Fig.16	P
802.11ac HT40	5190 MHz	Fig.17	P
	5310 MHz	Fig.18	P
	5510 MHz	Fig.19	P
	5670 MHz	Fig.20	P
802.11ac HT80	5210MHz	Fig.21	P
	5290MHz	Fig.22	P
	5530MHz	Fig.23	P
	5610MHz	Fig.24	P

Conclusion: PASS

Test graphs as below:

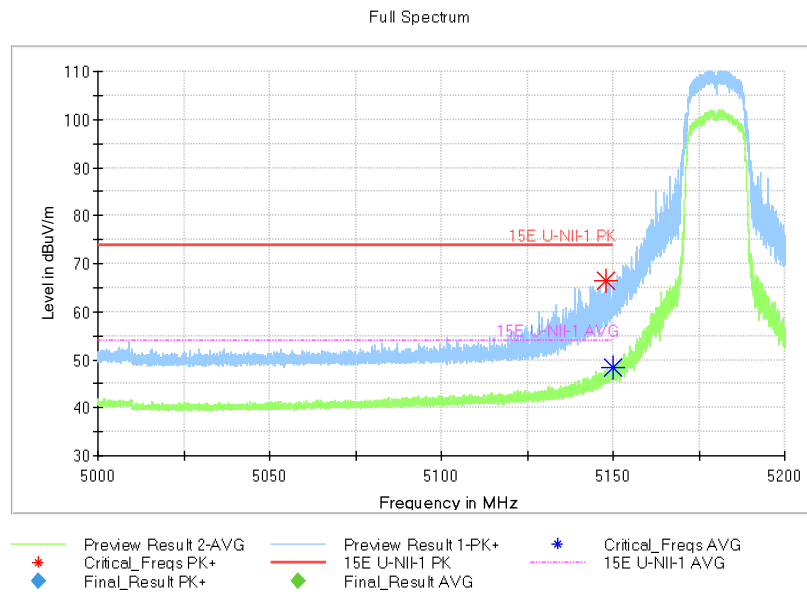


Fig.1 Band Edges (802.11a Ch36, 5180MHz)

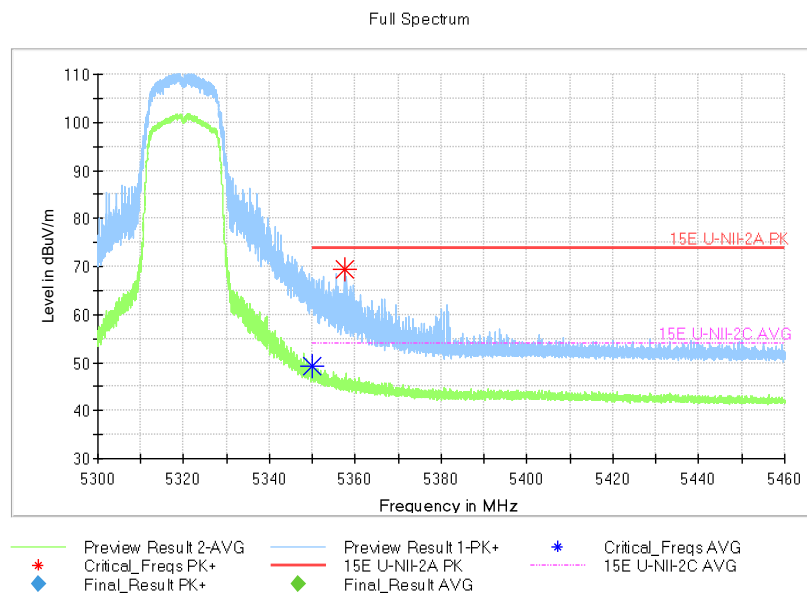


Fig.2 Band Edges (802.11a Ch64, 5320MHz)

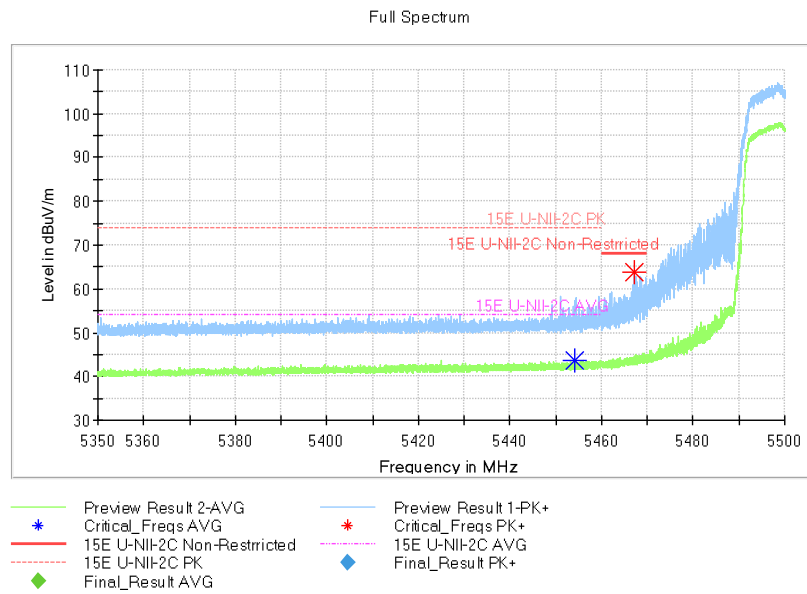


Fig.3 Band Edges (802.11a Ch100, 5500MHz)

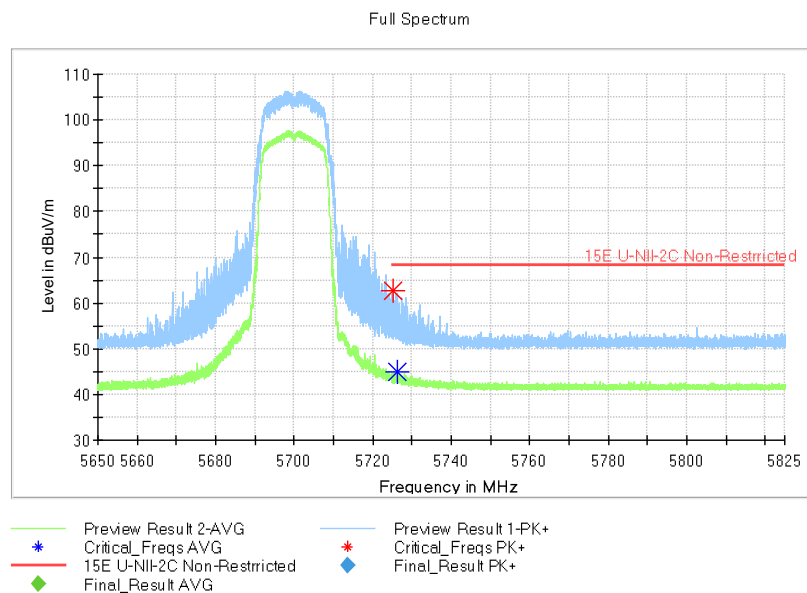


Fig.4 Band Edges (802.11a Ch140, 5700MHz)

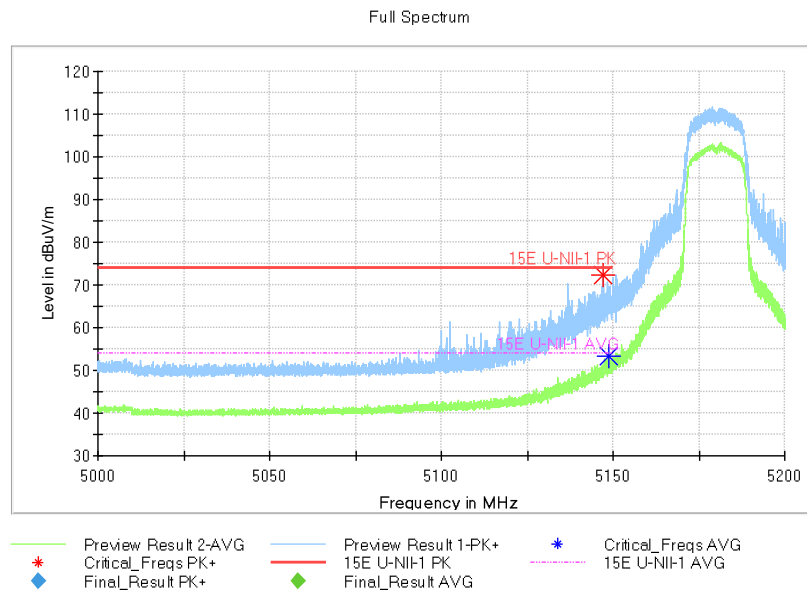


Fig.5 Band Edges (802.11n-HT20 Ch36, 5180MHz)

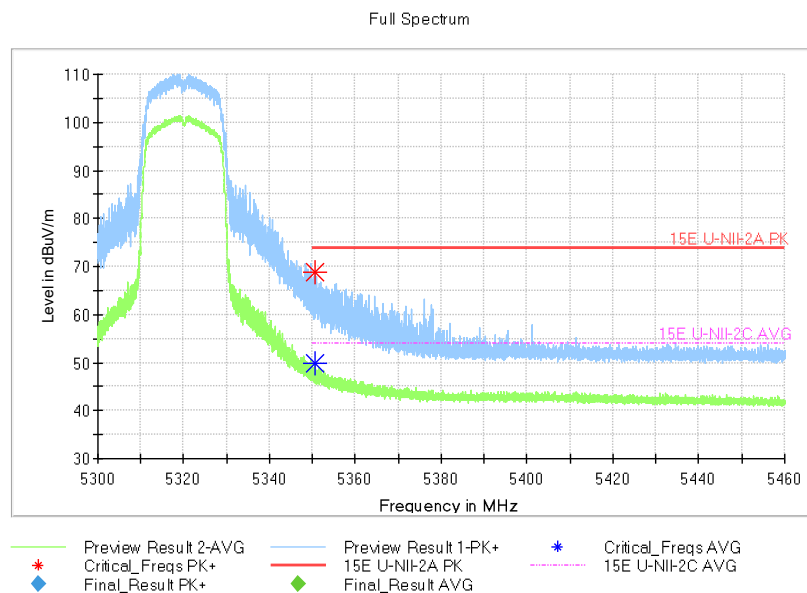


Fig.6 Band Edges (802.11n-HT20 Ch64, 5320MHz)

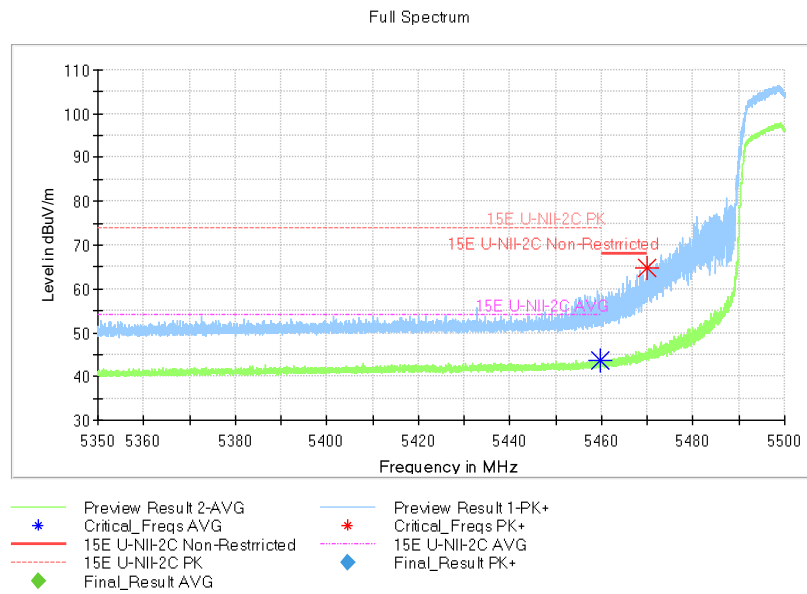


Fig.7 Band Edges (802.11n-HT20 Ch100, 5500MHz)

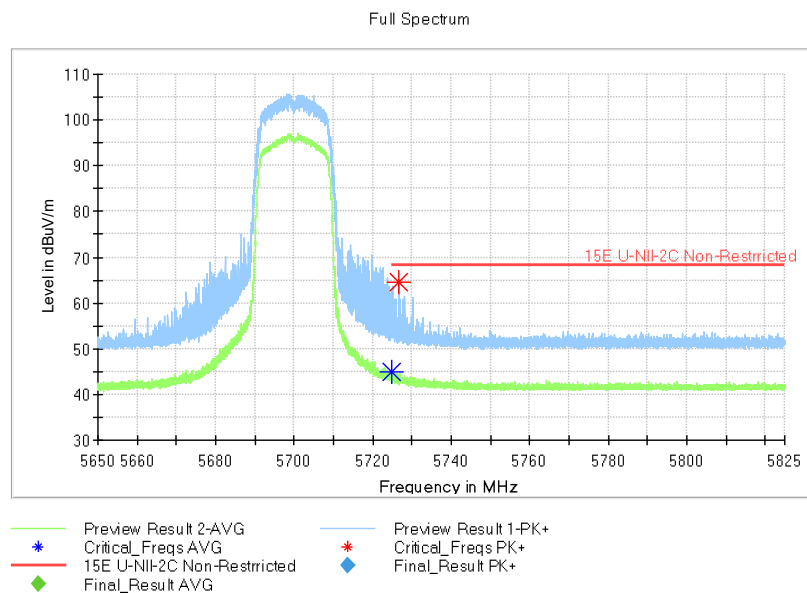


Fig.8 Band Edges (802.11n-HT20 Ch140, 5700MHz)

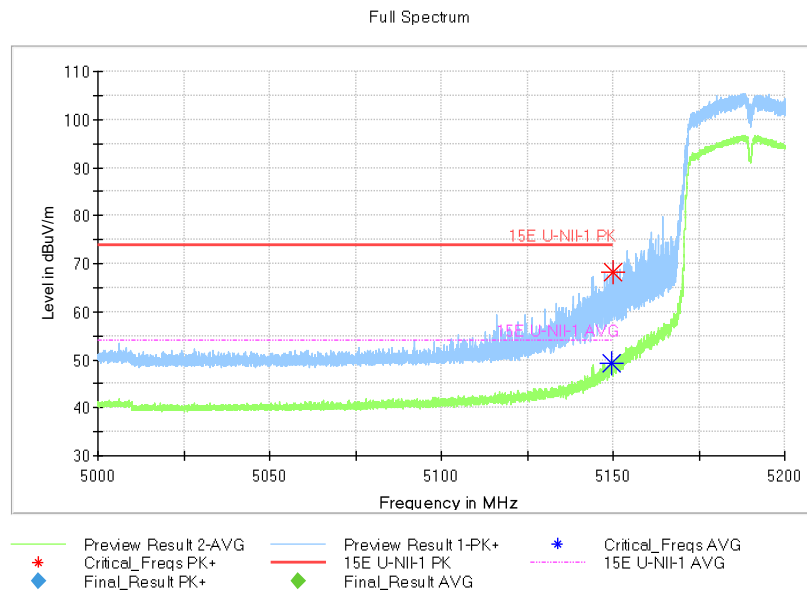


Fig.9 Band Edges (802.11n-HT40 Ch38, 5190MHz)

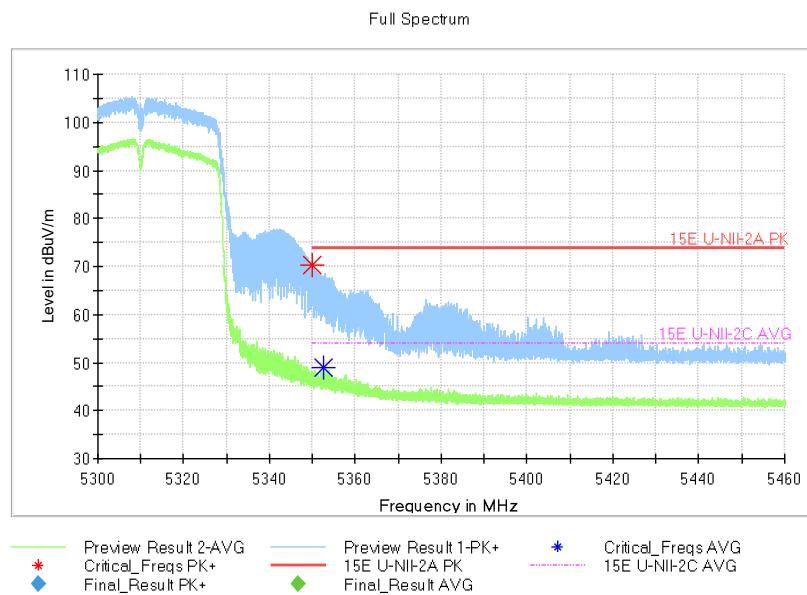


Fig.10 Band Edges (802.11n-HT40 Ch62, 5310MHz)

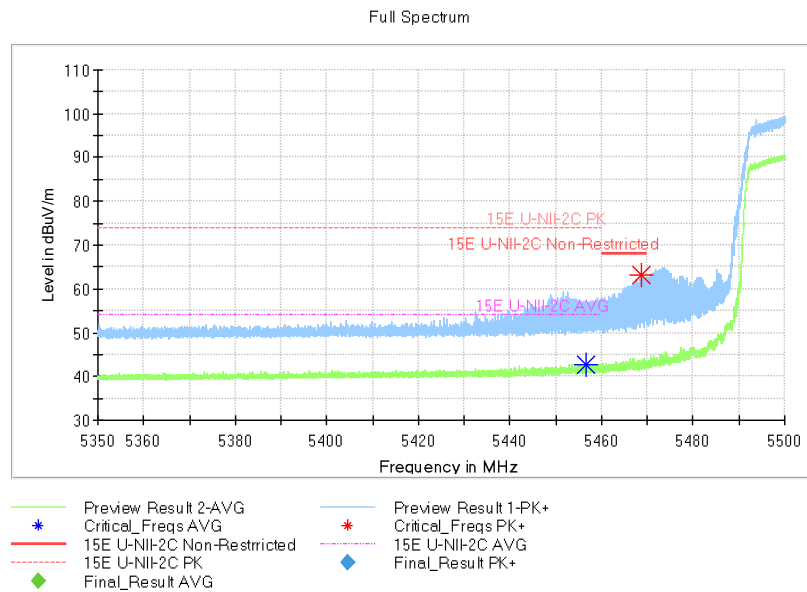


Fig.11 Band Edges (802.11n-HT40 Ch102, 5510MHz)

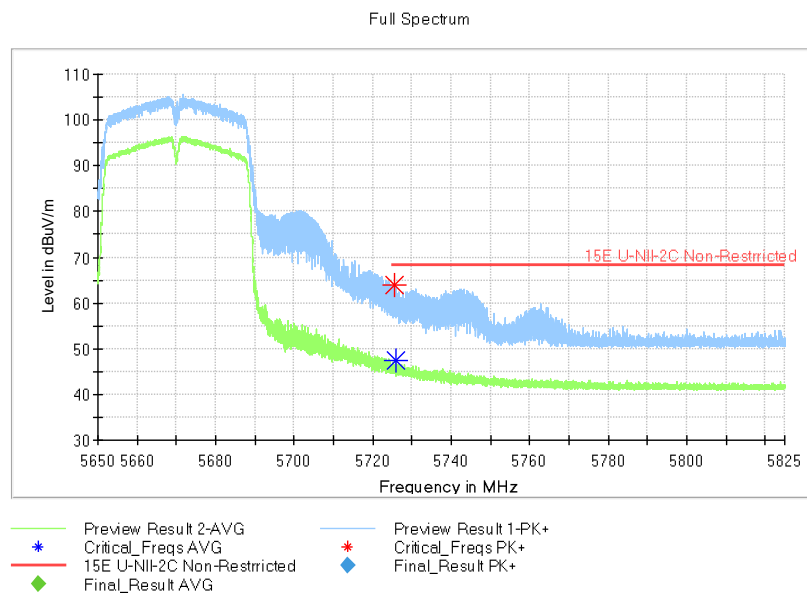


Fig.12 Band Edges (802.11n-HT40 Ch134, 5670MHz)

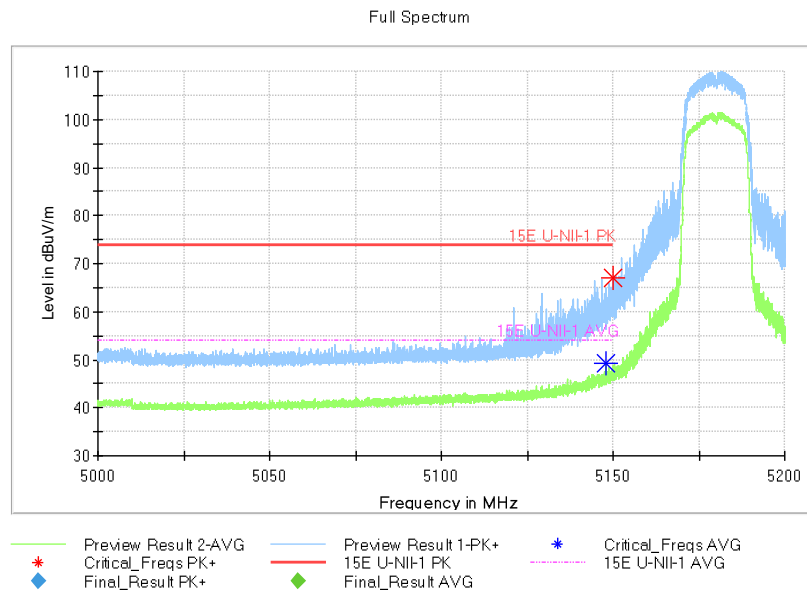


Fig.13 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

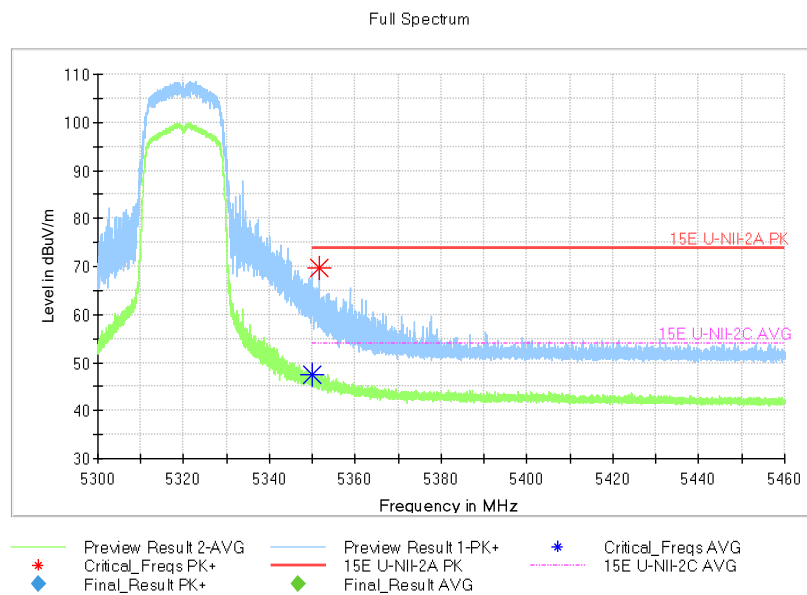


Fig.14 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

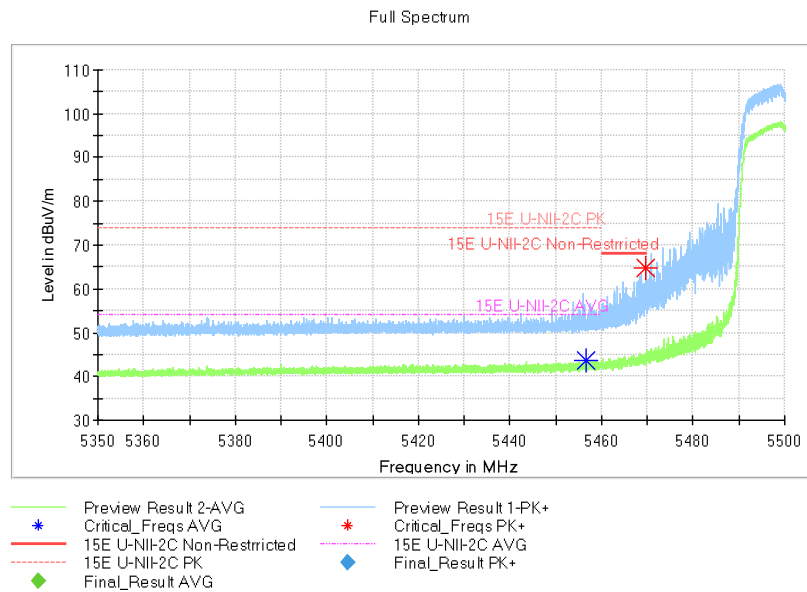


Fig.15 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

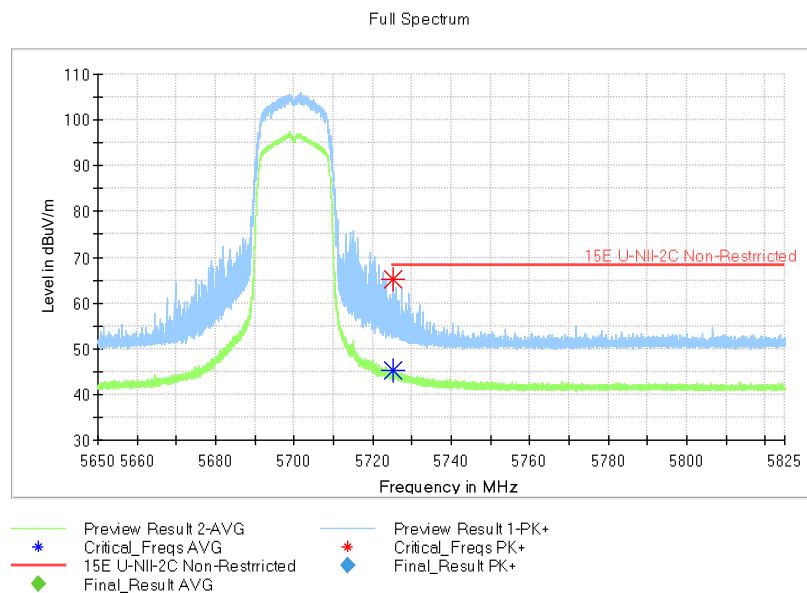


Fig.16 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

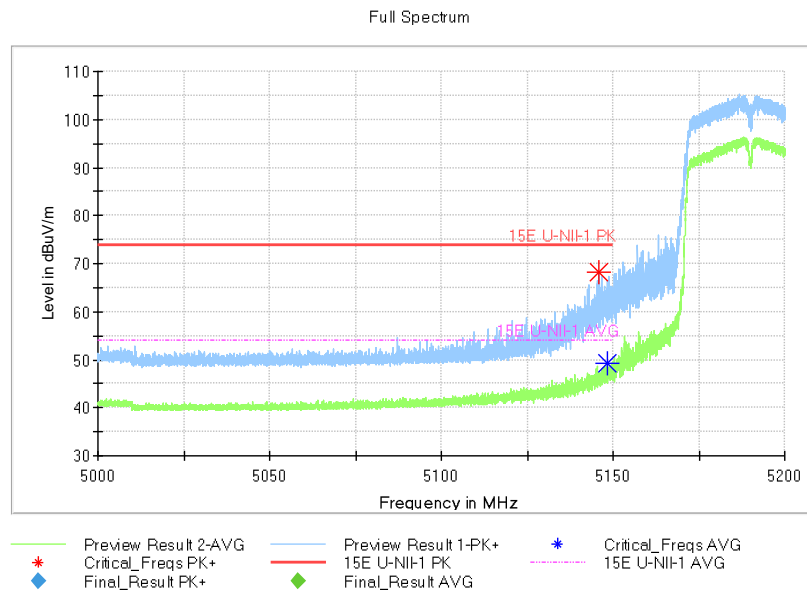


Fig.17 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

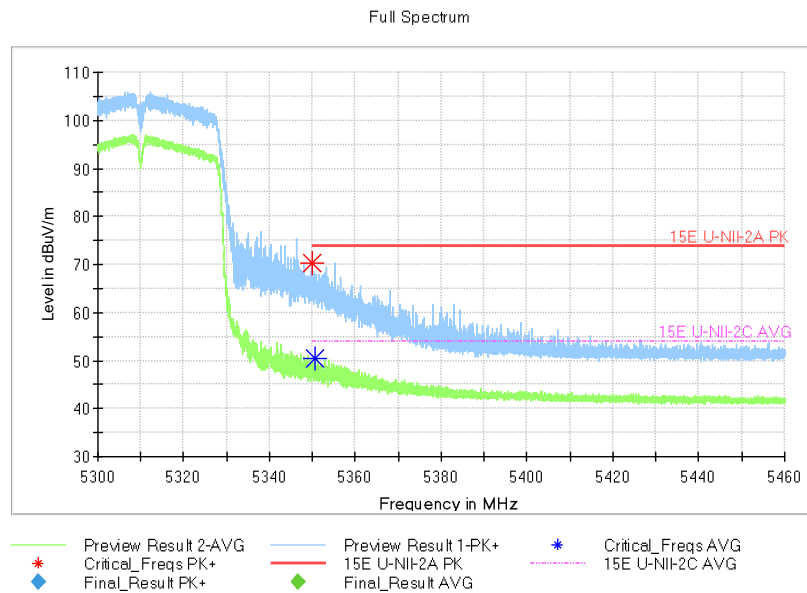


Fig.18 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

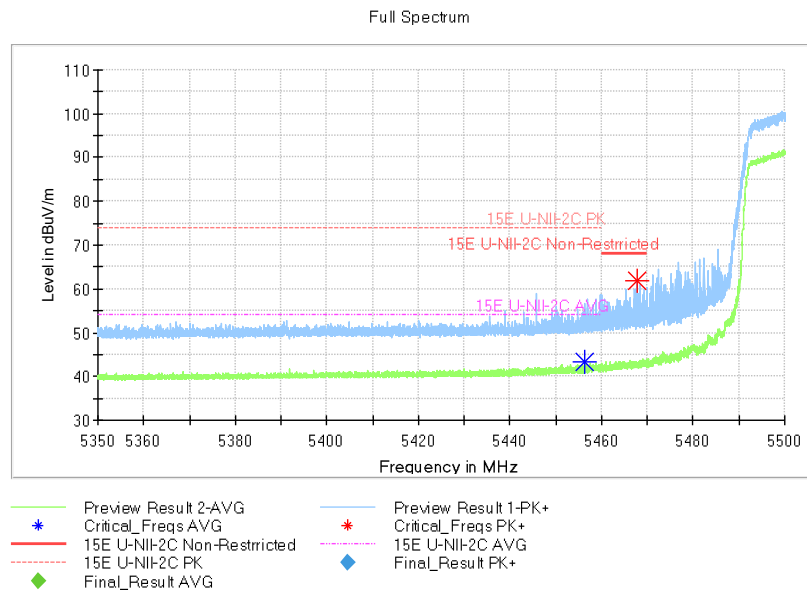


Fig.19 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

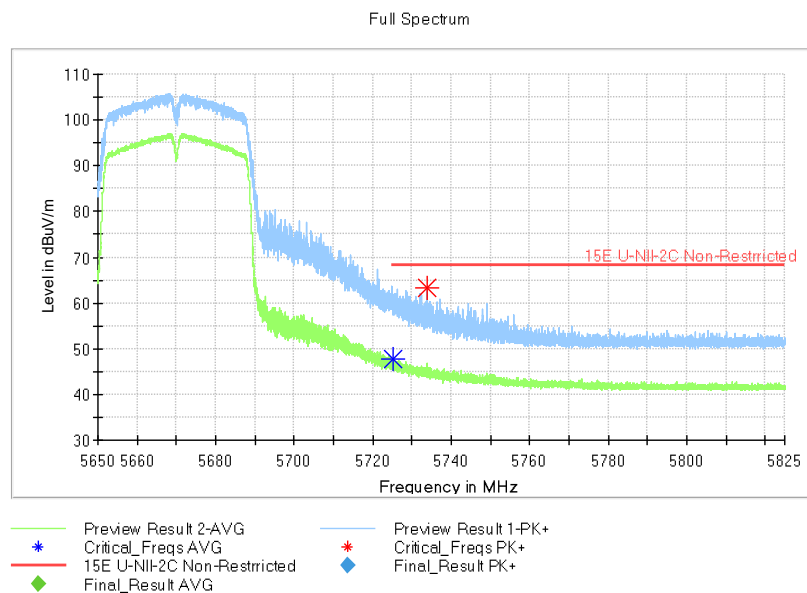


Fig.20 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

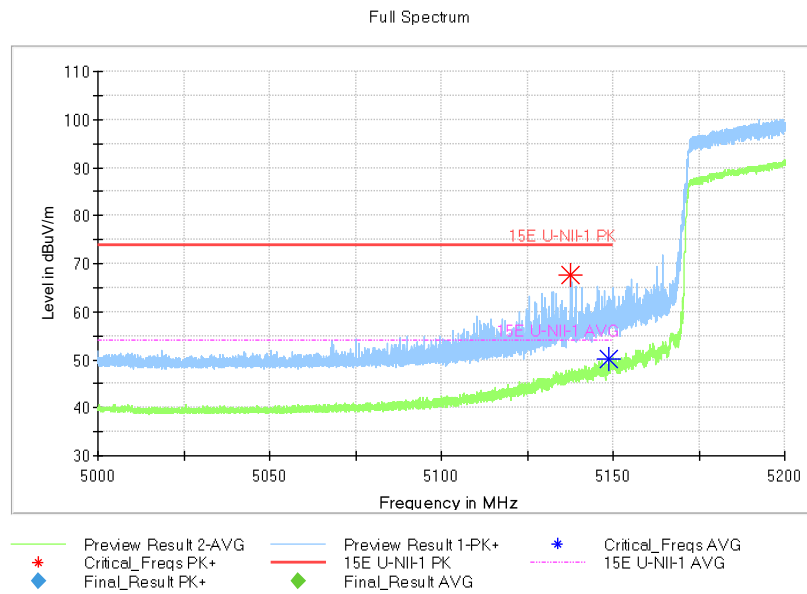


Fig.21 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

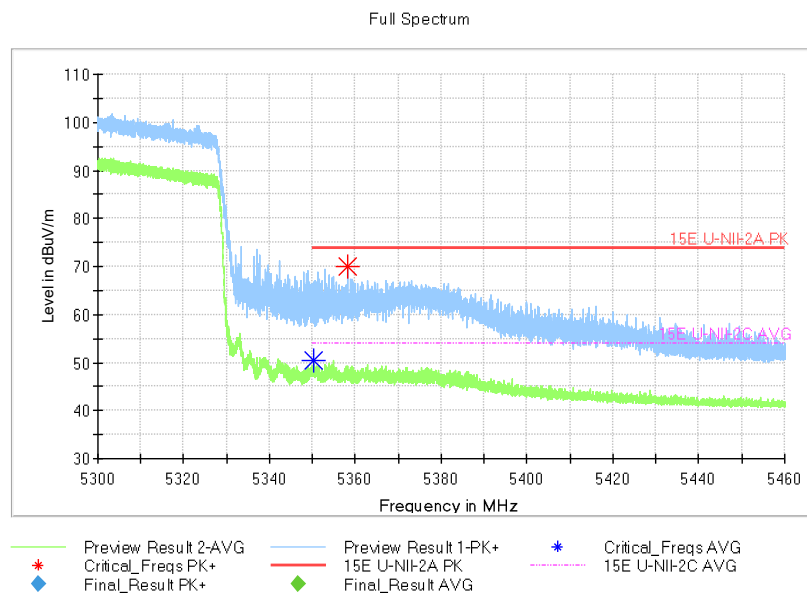


Fig.22 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

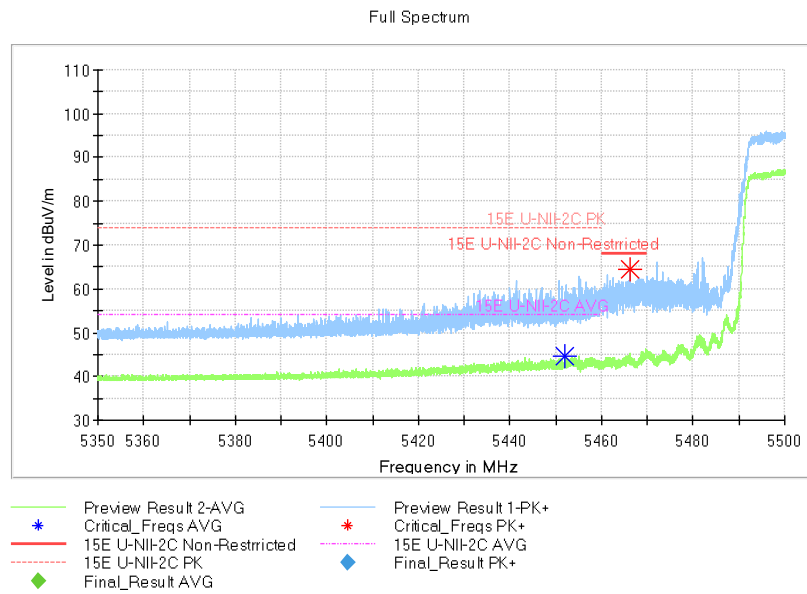


Fig.23 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

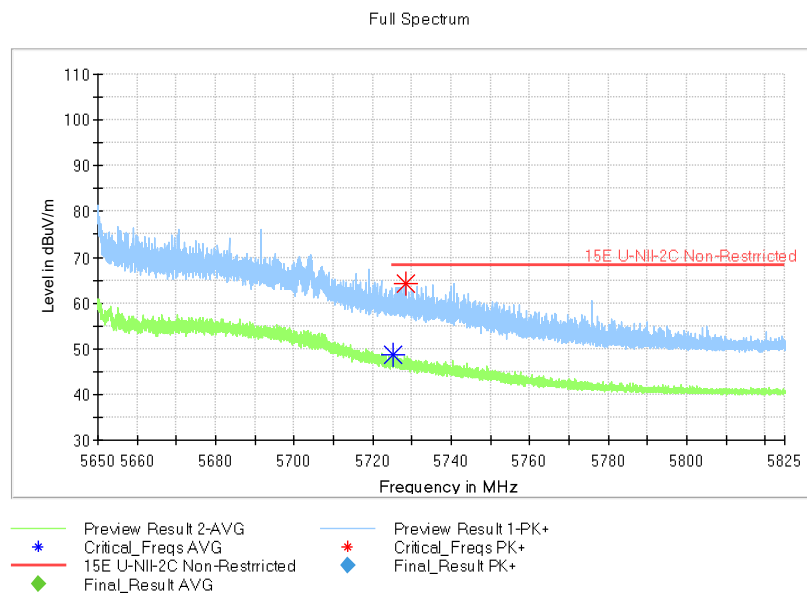


Fig.24 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. AC Powerline Conducted Emission (150kHz- 30MHz)

A.6.1 Summary

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section

A.6.2 Method of Measurement

See Clause 6.2 of ANSI C63.10 specifically.

See Clause 4 and Clause 5 of ANSI C63.10 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver:
Quasi-Peak / Average Detector.

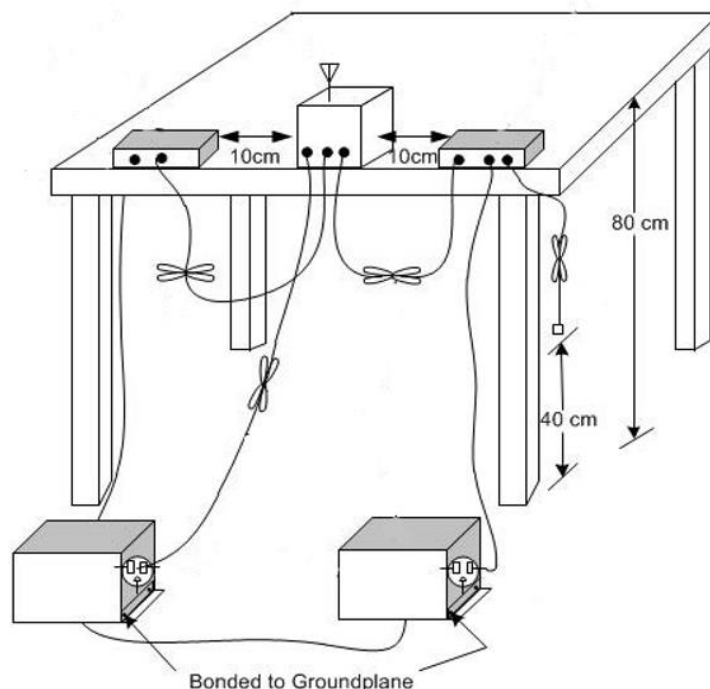
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

A.6.3 Test Condition

Voltage (V)	Frequency (Hz)
120	60

A.6.4 Test setup



Measurement Result and limit:
WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.25	Fig.26	P
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.25	Fig.26	P
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Conclusion: PASS

Test graphs as below:

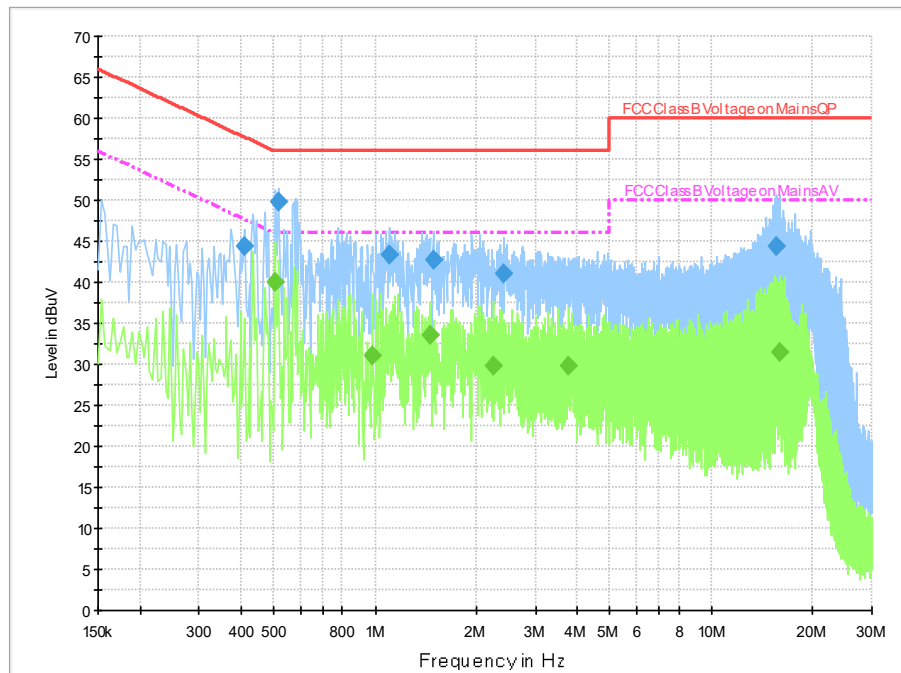


Fig.25 Conducted Emission(802.11a, Ch36, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.410000	44.4	2000.0	9.000	On	L1	20.0	13.3	57.6	
0.514000	49.7	2000.0	9.000	On	L1	20.0	6.3	56.0	
1.098000	43.3	2000.0	9.000	On	L1	19.9	12.7	56.0	
1.490000	42.8	2000.0	9.000	On	L1	19.9	13.2	56.0	
2.402000	41.1	2000.0	9.000	On	L1	19.8	14.9	56.0	
15.618000	44.5	2000.0	9.000	On	L1	20.0	15.5	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.502000	40.0	2000.0	9.000	On	L1	20.0	6.0	46.0	
0.982000	31.0	2000.0	9.000	On	L1	19.9	15.0	46.0	
1.454000	33.5	2000.0	9.000	On	L1	19.9	12.5	46.0	
2.250000	29.7	2000.0	9.000	On	L1	19.8	16.3	46.0	
3.762000	29.8	2000.0	9.000	On	L1	19.8	16.2	46.0	
15.986000	31.5	2000.0	9.000	On	L1	20.0	18.5	50.0	

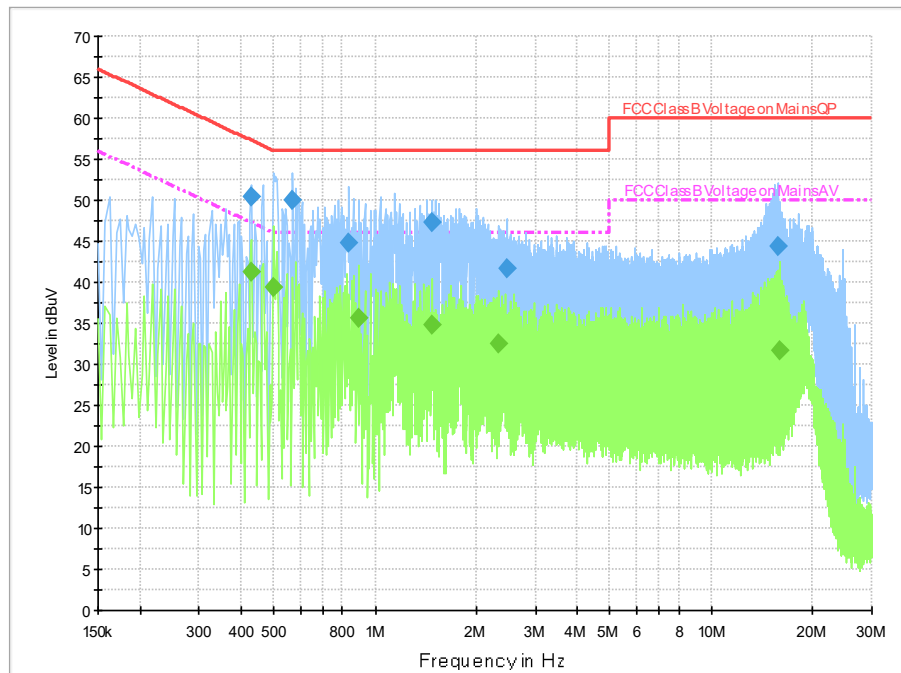


Fig.26 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.430000	50.4	2000.0	9.000	On	L1	20.0	6.9	57.3	
0.570000	50.0	2000.0	9.000	On	L1	20.0	6.0	56.0	
0.838000	44.8	2000.0	9.000	On	L1	19.9	11.2	56.0	
1.474000	47.3	2000.0	9.000	On	L1	19.9	8.7	56.0	
2.474000	41.6	2000.0	9.000	On	L1	19.8	14.4	56.0	
15.782000	44.4	2000.0	9.000	On	L1	20.0	15.6	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.430000	41.2	2000.0	9.000	On	L1	20.0	6.0	47.3	
0.498000	39.4	2000.0	9.000	On	L1	20.0	6.7	46.0	
0.898000	35.6	2000.0	9.000	On	L1	19.9	10.4	46.0	
1.474000	34.7	2000.0	9.000	On	L1	19.9	11.3	46.0	
2.322000	32.4	2000.0	9.000	On	L1	19.8	13.6	46.0	
15.942000	31.7	2000.0	9.000	On	L1	20.0	18.3	50.0	

A.7. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) 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.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. 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% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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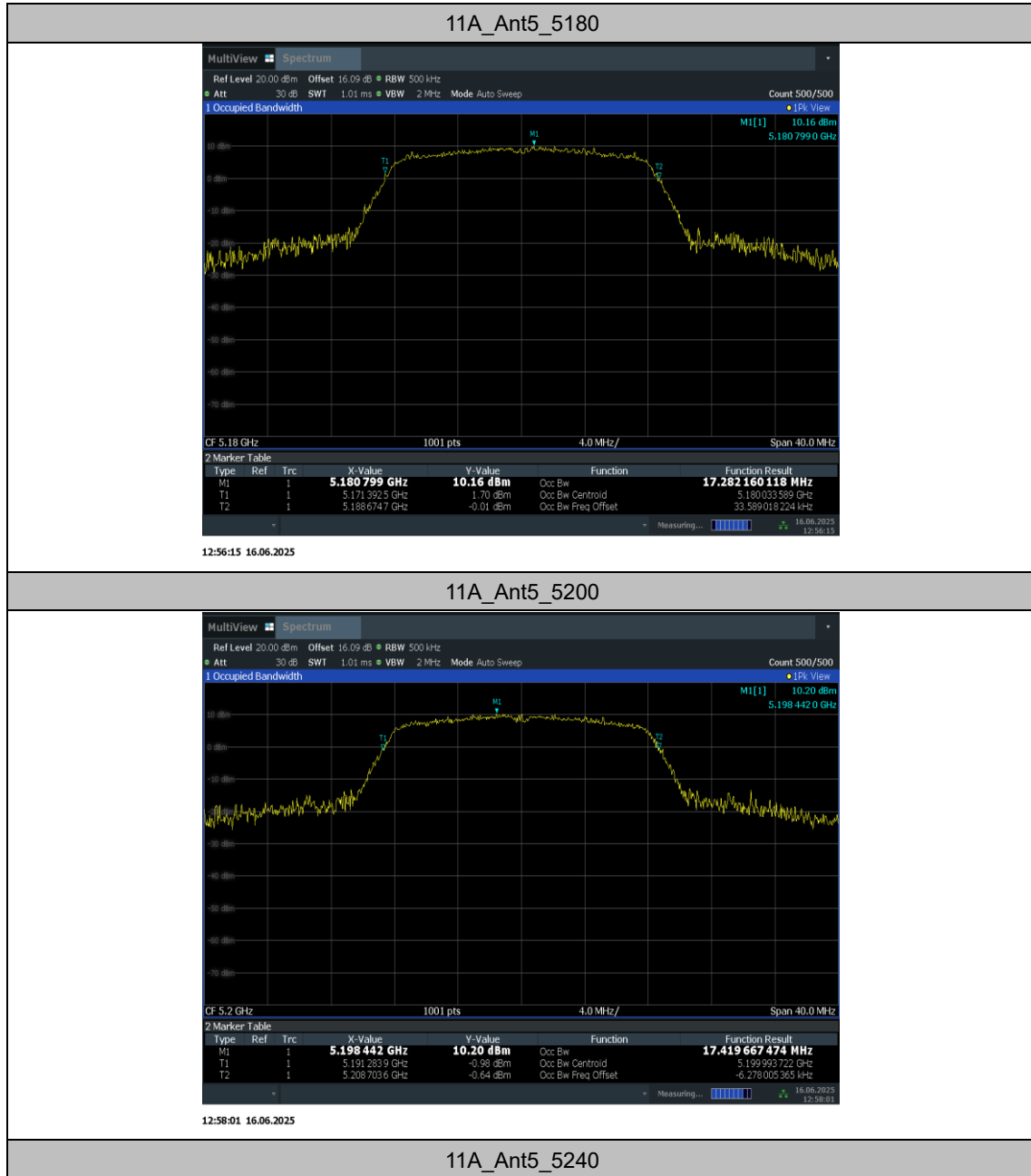
EUT ID: UT31A

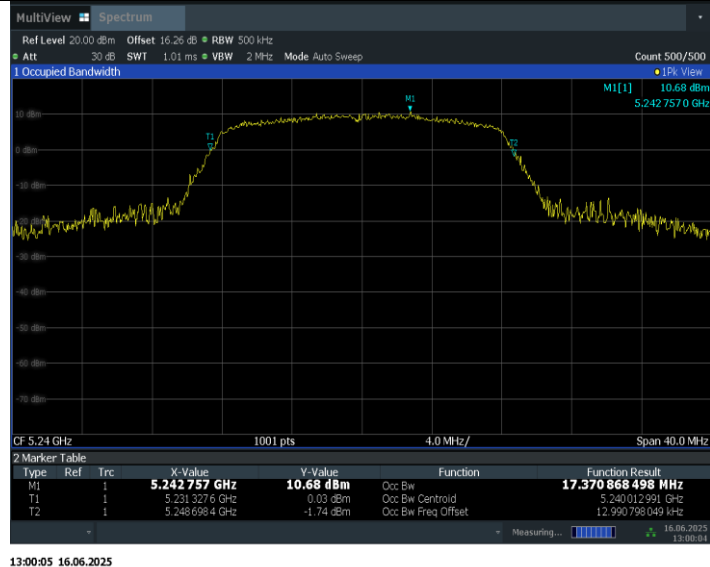
Measurement Result:

Test Mode	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11A	5180	17.282	5171.3925	5188.6747
	5200	17.420	5191.2839	5208.7036
	5240	17.371	5231.3276	5248.6984
11AC VHT20	5180	18.166	5170.9181	5189.0838
	5200	18.169	5190.9043	5209.0730
	5240	18.165	5230.9313	5249.0961
11AC VHT40	5190	36.380	5171.7730	5208.1526
	5230	36.419	5211.7425	5248.1615
11AC VHT80	5210	75.319	5172.2936	5247.6123

Conclusion: PASS

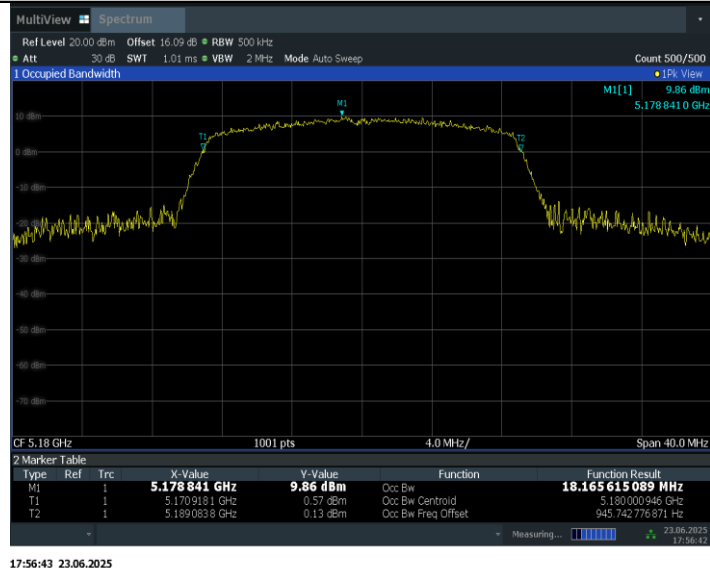
Test graphs as below:





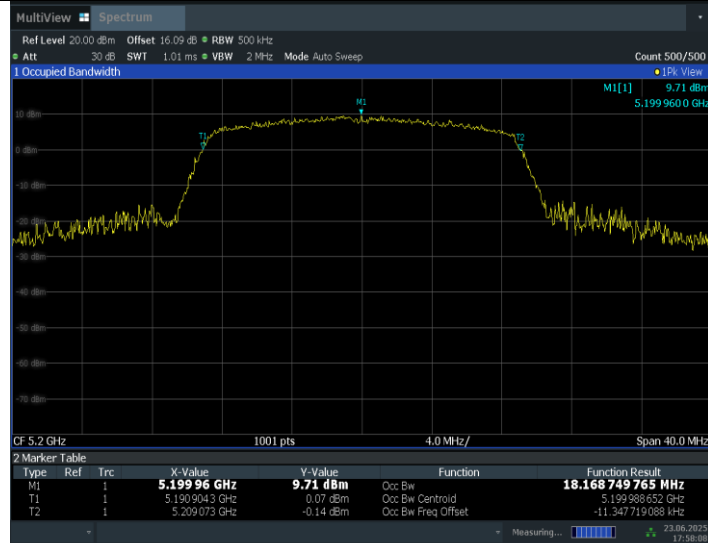
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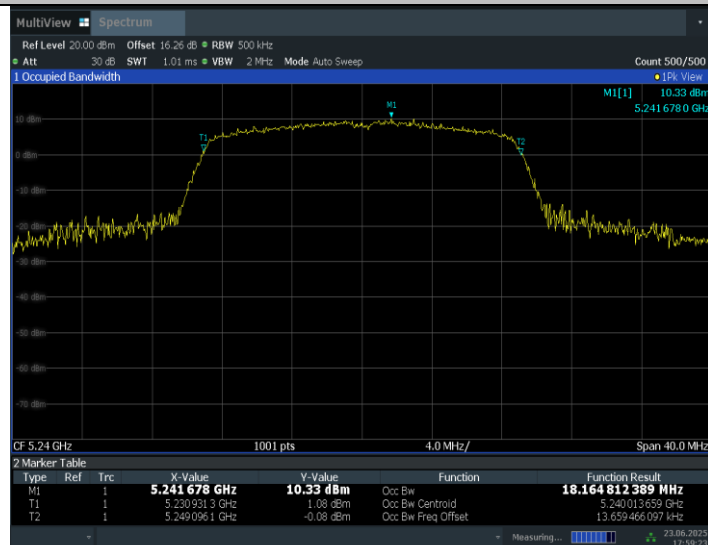
17:56:43 23.06.2025

11AC20SISO_Ant5_5200



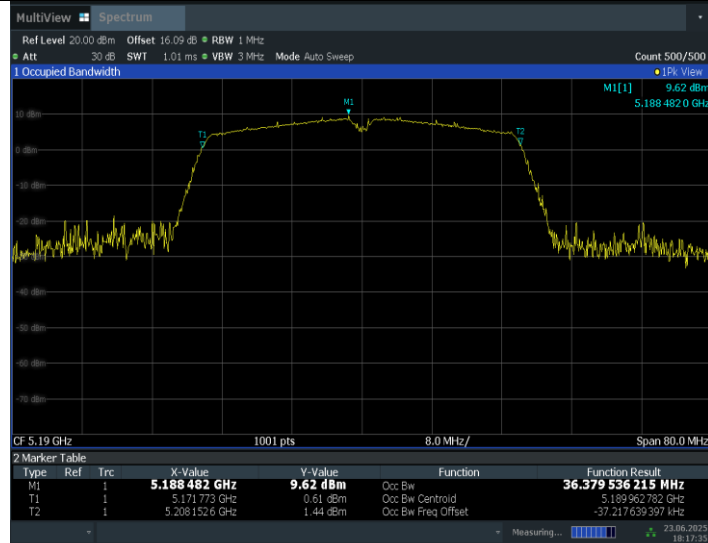
17:58:09 23.06.2025

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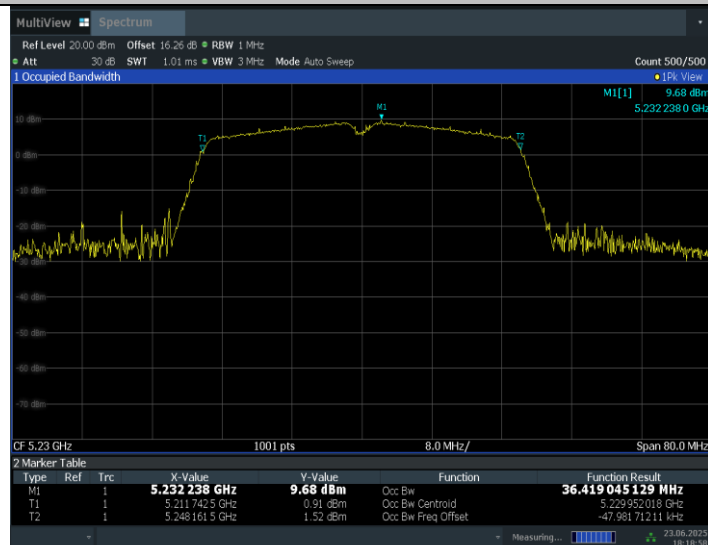
17:59:24 23.06.2025

11AC40SISO_Ant5_5190



18:17:36 23.06.2025

11AC40SISO_Ant5_5230



18:18:58 23.06.2025

11AC80SISO_Ant5_5210



A.8. Antenna Requirement

The antenna of the device is permanently attached. There are no provisions for connection to an external antenna.

The unit complies with the requirement of FCC Part 15.203.

A.9. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500 mW).

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate



Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 23rd day of July 2024.



Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

***** END OF REPORT BODY *****