



FCC PART 15E TEST REPORT No.24T04Z102392-009

for

BLU Products,Inc.

Smart phone

B1660V

FCC ID: YHLBLUB1660V

with

Hardware Version: V1.0

Software Version: BLU_B1660V_V15.0.01.05.01.05_FSec

Issued Date: 2025-02-20

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.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04Z102392-009	Rev.0	1st edition	2025-01-23
24T04Z102392-009	Rev.1	1. Added report numbers on pages 6-13. 2.Added antenna gain.	2025-02-20

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,
100191, P. R. China

1.3. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

Testing Start Date: 2024-10-09

Testing End Date: 2025-01-21

1.5. Signature



Dong Jiaxuan
(Prepared this test report)



Zheng Wei
(Reviewed this test report)



Pang Shuai
(Approved this test report)



No.24T04Z102392-009

2. Client Information

2.1 Applicant Information

Company Name: BLU Products, Inc.
Address: 8600 NW 36th Street, Suite #300 | Miami, FL 33166
Contact: Zeng wei
Email: zwei@ctasiasz.com
Telephone: 305.715.7171
Fax: 305.436.8819

2.2 Manufacturer Information

Company Name: BLU Products, Inc.
Address: 8600 NW 36th Street, Suite #300 | Miami, FL 33166
Contact: Zeng wei
Email: zwei@ctasiasz.com
Telephone: 305.715.7171
Fax: 305.436.8819

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

3.1. About EUT

Description	Smart phone
Model name	B1660V
FCC ID	YHLBLUB1660V
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Nominal Voltage	3.87V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
UT12a	354154670005203	V1.0	BLU_B1660V_V15.0.01.05.01.05_FSec
UT112a	354154670008728	V1.0	BLU_B1660V_V15.0.01.05.01.05_FSec

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

UT12a is used for Conduction test, UT112a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery1	C906548500PTF	Guangdong Highpower New Energy Technology Co., Ltd.
AE2	Charger1	US-BVS-2000	Guangdong Beicom Electronics Co.,Ltd.
AE3	USB Cable1	P103-BVJ132-000	Shenzhen Yihuaxing Electronic 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	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

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 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
Radiated Unwanted Emission	15.407, 15.205, 15.209	/	P
AC Powerline Conducted Emission	15.107, 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.

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	FSQ40	200089	Rohde & Schwarz	1 year	2025-08-11
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2025-04-30
3	Test Receiver	ESCI	100344	R&S	1 year	2025-04-01
4	LISN	ENV216	101200	R&S	1 year	2025-05-16
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	103023	R&S	1 year	2025-06-06
2	EMI Antenna	VULB 9163	01222	SCHWARZBECK	1 year	2025-09-11
3	EMI Antenna	3115	00167250	ETS-Lindgren	1 year	2025-04-11
4	EMI Antenna	3116	2663	ETS-Lindgren	1 year	2025-02-21

Test Software

Test Item	Test Software and Version	Software Vendor
Radiated Continuous Emission	EMC32 V10.60.20	R&S
Conducted Emission	EMC32 V8.53.0	R&S

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 Radiated Unwanted Emission

Frequency Range	Uncertainty(dB) (k=2)
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

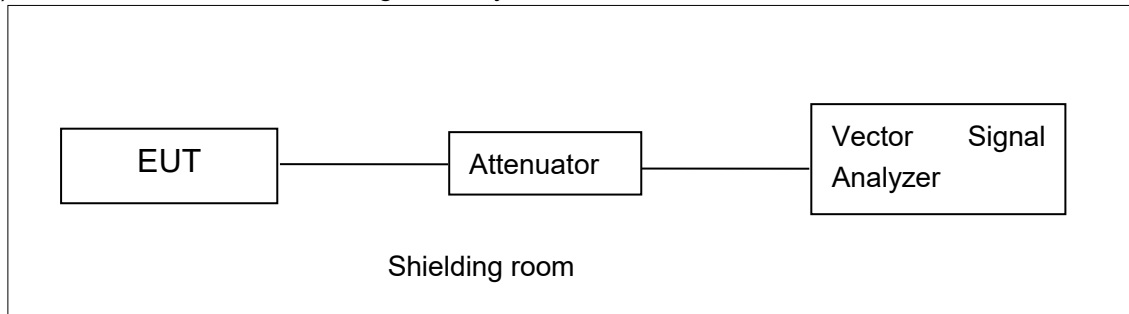
Measurement Uncertainty : 3.08dB,k=2

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

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

B.2.1 Antenna Gain

Peak antenna gain is 1.7dBi, and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT12a

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	16.58	/	/	/	/	/	/	/
	5200MHz	17.01	/	/	/	/	/	/	/
	5240MHz	17.25	/	/	/	/	/	/	/
	5260MHz	17.28	/	/	/	/	/	/	/
	5280MHz	17.38	/	/	/	/	/	/	/
	5320MHz	17.45	/	/	/	/	/	/	/
	5500MHz	16.36	/	/	/	/	/	/	/
	5580MHz	16.46	/	/	/	/	/	/	/
	5700MHz	16.48	/	/	/	/	/	/	/
	5720MHz	16.41	/	/	/	/	/	/	/

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	15.90	/	/	/	/	/	/	/
	5200MHz	16.39	/	/	/	/	/	/	/
	5240MHz	16.64	/	/	/	/	/	/	/
	5260MHz	16.65	/	/	/	/	/	/	/
	5280MHz	16.73	/	/	/	/	/	/	/
	5320MHz	16.85	/	/	/	/	/	/	/
	5500MHz	15.74	/	/	/	/	/	/	/

	5580MHz	15.78	/	/	/	/	/	/	/
	5700MHz	15.95	/	/	/	/	/	/	/
	5720MHz	15.43	/	/	/	/	/	/	/

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	15.88	/	/	/	/	/	/	/	/
	5200MHz	16.31	/	/	/	/	/	/	/	/
	5240MHz	16.61	/	/	/	/	/	/	/	/
	5260MHz	16.72	/	/	/	/	/	/	/	/
	5280MHz	16.65	/	/	/	/	/	/	/	/
	5320MHz	16.85	/	/	/	/	/	/	/	/
	5500MHz	15.75	/	/	/	/	/	/	/	/
	5580MHz	15.76	/	/	/	/	/	/	/	/
	5700MHz	15.99	/	/	/	/	/	/	/	/
	5720MHz	15.67	/	/	/	/	/	/	/	/

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	16.13	/	/	/	/	/	/	/
	5230MHz	16.43	/	/	/	/	/	/	/
	5270MHz	15.53	/	/	/	/	/	/	/
	5310MHz	15.59	/	/	/	/	/	/	/
	5510MHz	14.59	/	/	/	/	/	/	/
	5550MHz	14.30	/	/	/	/	/	/	/
	5670MHz	14.50	/	/	/	/	/	/	/
	5710MHz	14.71	/	/	/	/	/	/	/

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	16.03	/	/	/	/	/	/	/	/	/
	5230MHz	16.17	/	/	/	/	/	/	/	/	/
	5270MHz	15.95	/	/	/	/	/	/	/	/	/
	5310MHz	15.98	/	/	/	/	/	/	/	/	/
	5510MHz	15.88	/	/	/	/	/	/	/	/	/
	5550MHz	15.60	/	/	/	/	/	/	/	/	/
	5670MHz	15.82	/	/	/	/	/	/	/	/	/
	5710MHz	15.98	/	/	/	/	/	/	/	/	/

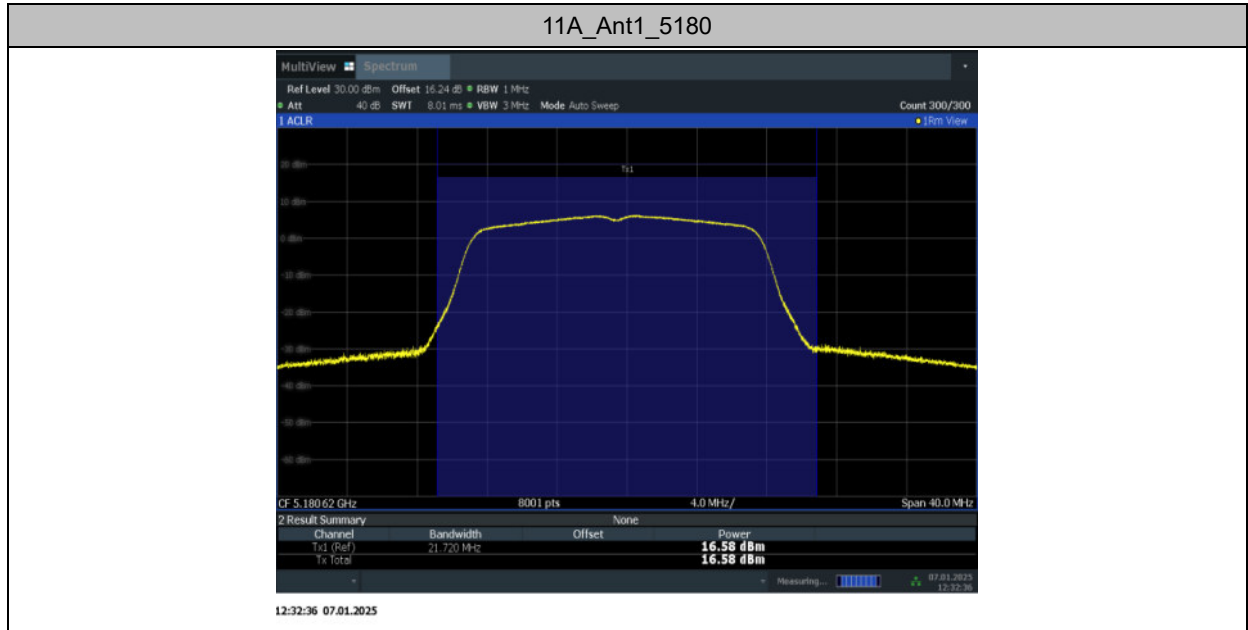
The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

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	15.41	/	/	/	/	/	/	/	/	/
	5290MHz	15.77	/	/	/	/	/	/	/	/	/
	5530MHz	15.00	/	/	/	/	/	/	/	/	/
	5610MHz	15.03	/	/	/	/	/	/	/	/	/
	5690MHz	15.01	/	/	/	/	/	/	/	/	/

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%.



Maximum output Power

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

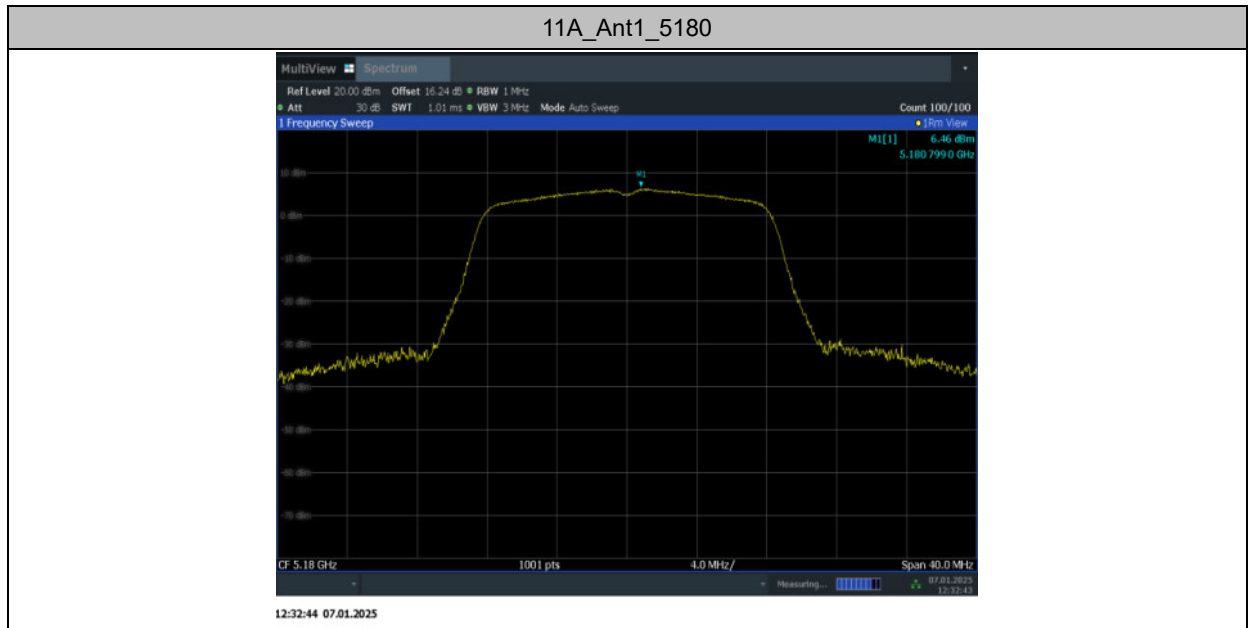
The output power measurement method Section F is made according to KDB 789033

EUT ID: UT12a

Measurement Results:

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.46	≤11.00	PASS
		5200	6.79	≤11.00	PASS
		5240	7.66	≤11.00	PASS
		5260	7.15	≤11.00	PASS
		5280	7.22	≤11.00	PASS
		5320	7.36	≤11.00	PASS
		5500	6.32	≤11.00	PASS
		5580	6.06	≤11.00	PASS
		5700	7.17	≤11.00	PASS
		5720	7.16	≤11.00	PASS
11N40SISO	Ant1	5190	3.25	≤11.00	PASS
		5230	3.57	≤11.00	PASS
		5270	3.57	≤11.00	PASS
		5310	3.64	≤11.00	PASS
		5510	3.79	≤11.00	PASS
		5550	3.54	≤11.00	PASS
		5670	3.39	≤11.00	PASS
		5710	3.96	≤11.00	PASS
11AC20SISO	Ant1	5180	5.68	≤11.00	PASS
		5200	6.17	≤11.00	PASS
		5240	6.54	≤11.00	PASS
		5260	6.50	≤11.00	PASS
		5280	6.38	≤11.00	PASS
		5320	6.53	≤11.00	PASS
		5500	5.96	≤11.00	PASS
		5580	5.38	≤11.00	PASS
		5700	6.16	≤11.00	PASS
		5720	5.87	≤11.00	PASS
11AC80SISO	Ant1	5210	-0.36	≤11.00	PASS
		5290	-0.82	≤11.00	PASS
		5530	-1.77	≤11.00	PASS

		5610	-0.41	≤ 11.00	PASS
		5690	-1.38	≤ 11.00	PASS



Peak Power Spectral Density

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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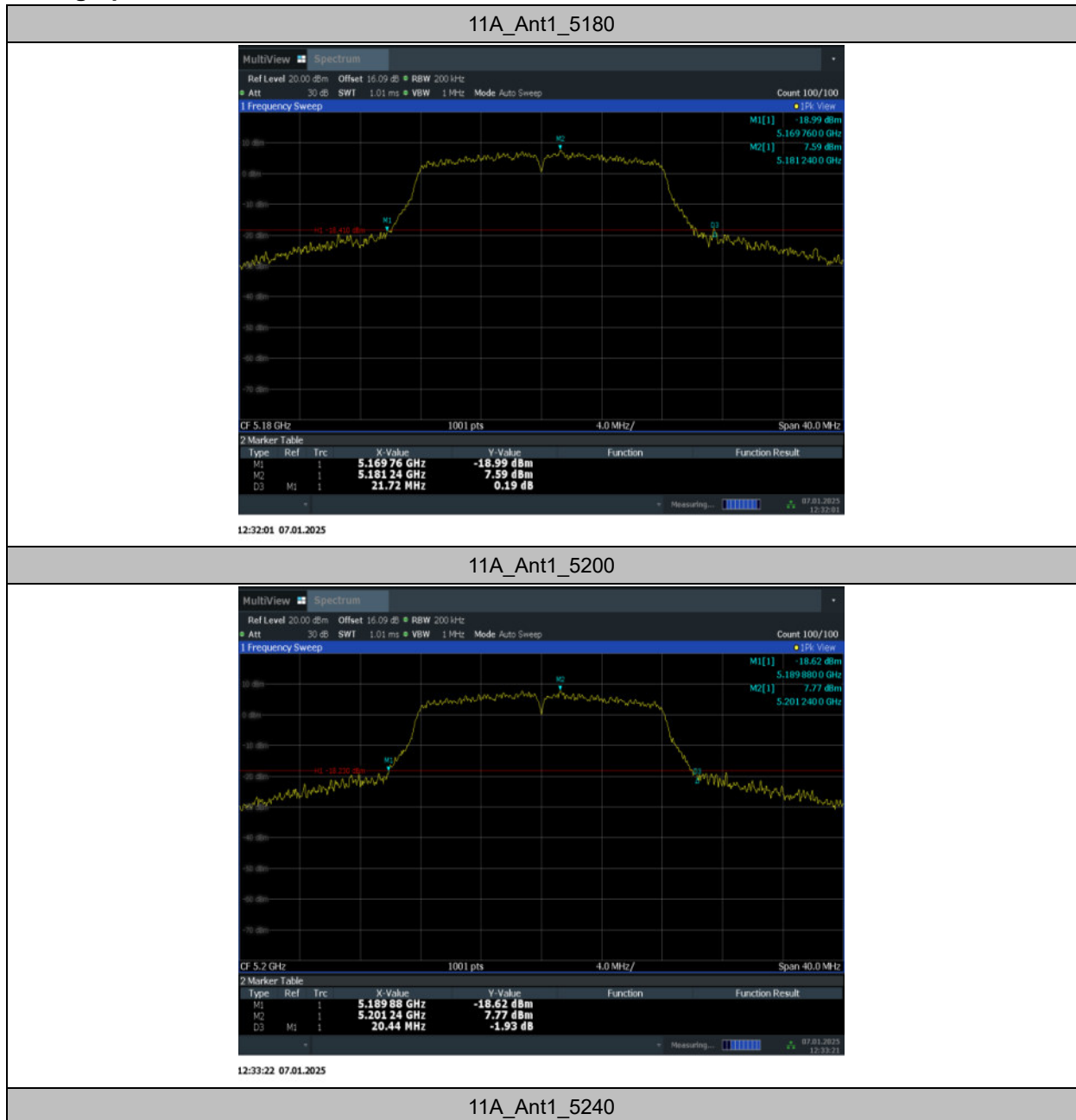
EUT ID: UT12a

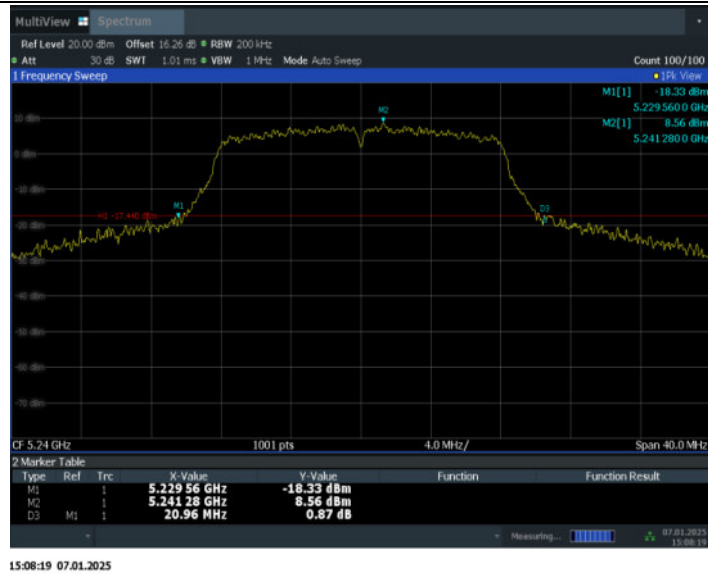
Measurement Result:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.72	5169.76	5191.48	---	---
		5200	20.44	5189.88	5210.32	---	---
		5240	20.96	5229.56	5250.52	---	---
		5260	21.24	5249.48	5270.72	---	---
		5280	20.60	5269.56	5290.16	---	---
		5320	20.60	5309.96	5330.56	---	---
		5500	21.16	5490.00	5511.16	---	---
		5580	20.04	5570.00	5590.04	---	---
		5700	22.12	5689.76	5711.88	---	---
		5720	20.08	5709.96	5730.04	---	---
11N40SISO	Ant1	5190	43.76	5166.88	5210.64	---	---
		5230	41.60	5209.52	5251.12	---	---
		5270	42.64	5249.04	5291.68	---	---
		5310	40.80	5289.68	5330.48	---	---
		5510	41.12	5489.52	5530.64	---	---
		5550	41.36	5529.20	5570.56	---	---
		5670	41.04	5649.44	5690.48	---	---
		5710	40.88	5689.52	5730.40	---	---
11AC20SISO	Ant1	5180	20.44	5169.84	5190.28	---	---
		5200	20.24	5189.84	5210.08	---	---
		5240	20.24	5229.88	5250.12	---	---
		5260	20.68	5249.44	5270.12	---	---
		5280	20.56	5269.84	5290.40	---	---
		5320	21.12	5309.84	5330.96	---	---
		5500	20.32	5489.88	5510.20	---	---
		5580	20.24	5569.88	5590.12	---	---
		5700	20.52	5689.84	5710.36	---	---
		5720	20.28	5709.84	5730.12	---	---
11AC80SISO	Ant1	5210	81.44	5169.36	5250.80	---	---
		5290	81.44	5249.20	5330.64	---	---

		5530	81.76	5489.04	5570.80	---	---
		5610	81.60	5569.20	5650.80	---	---
		5690	84.48	5646.16	5730.64	---	---

Test graphs as below:





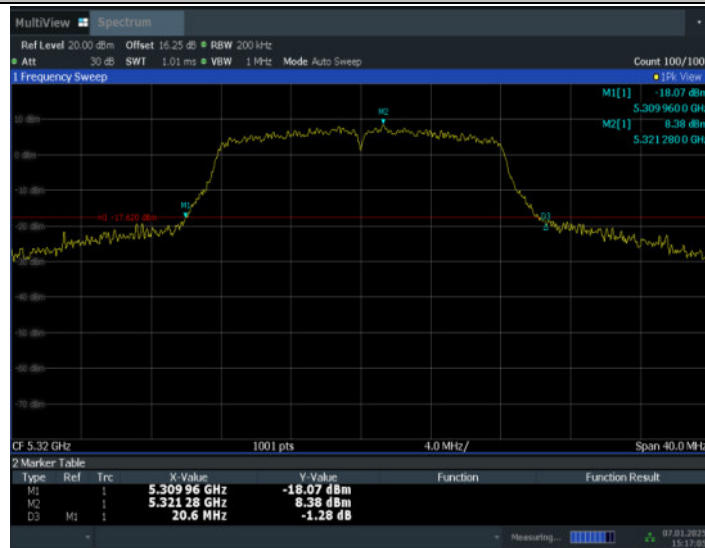
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11A_Ant1_5280

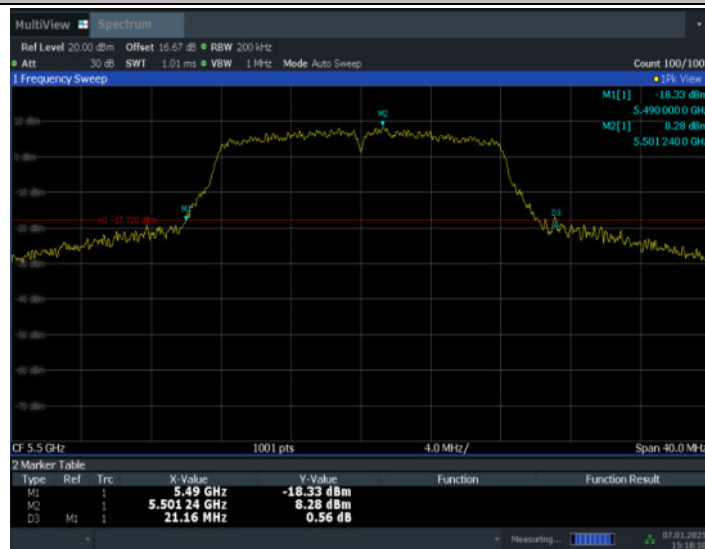


11A_Ant1_5320



15:17:06 07.01.2025

11A_Ant1_5500



15:18:11 07.01.2025

11A_Ant1_5580



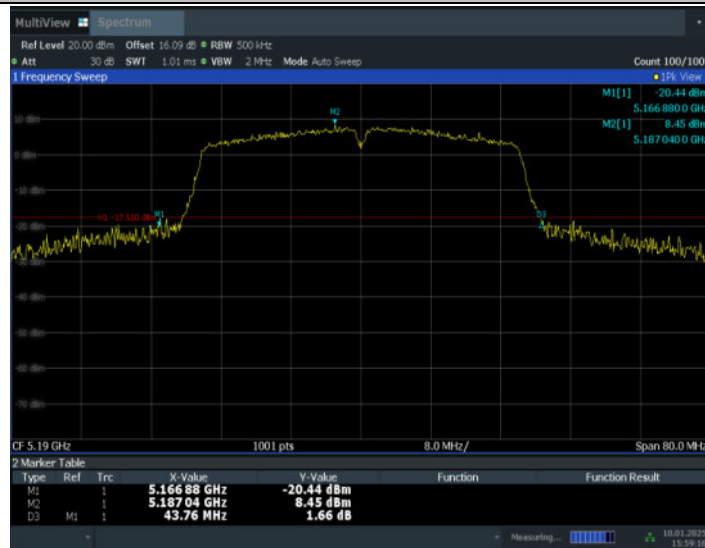
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11A_Ant1_5720

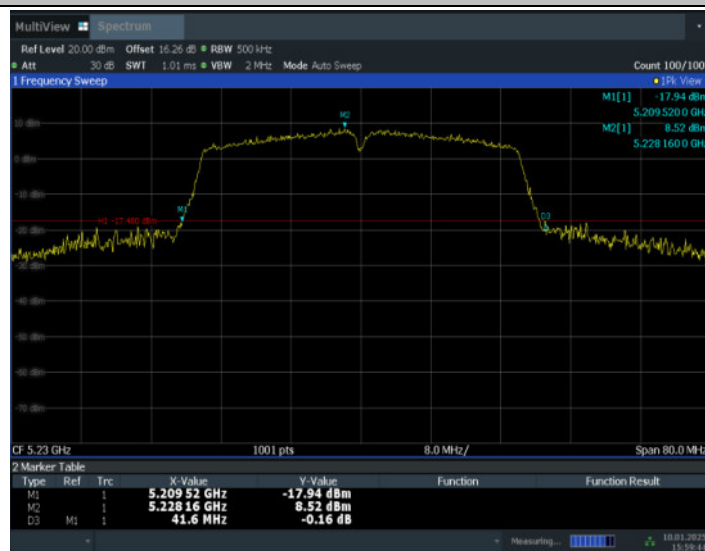


11N40SISO_Ant1_5190



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11N40SISO_Ant1_5230



15:59:45 10.01.2025

11N40SISO_Ant1_5270



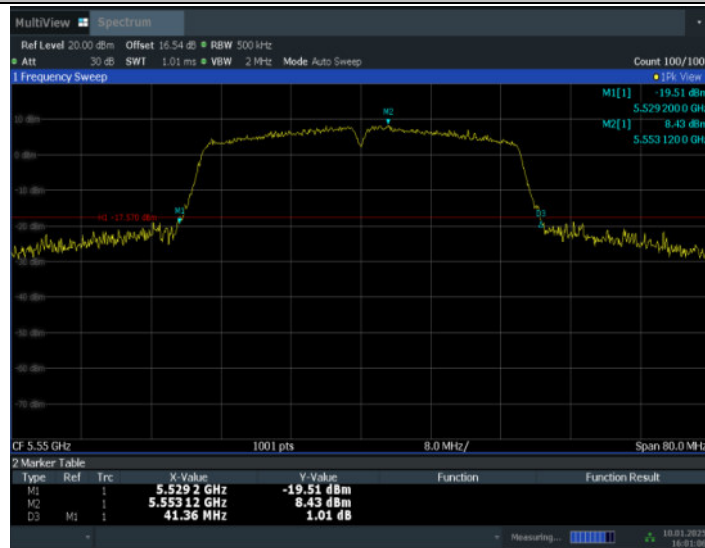
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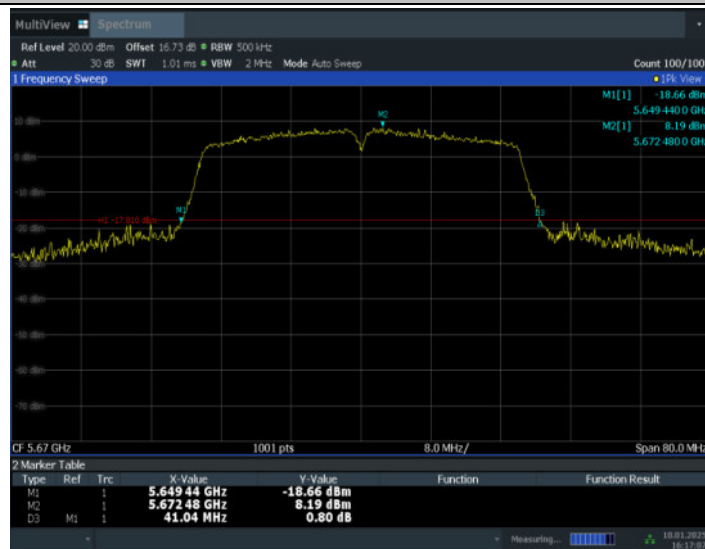


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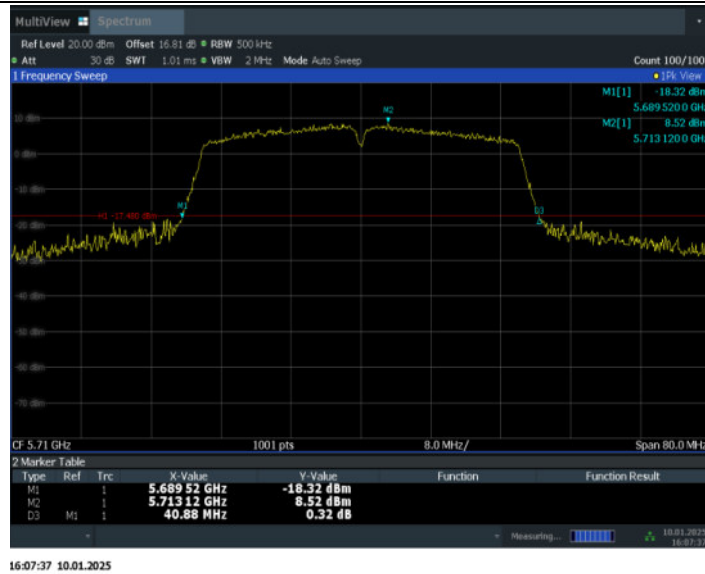
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16:17:08 10.01.2025

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11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200

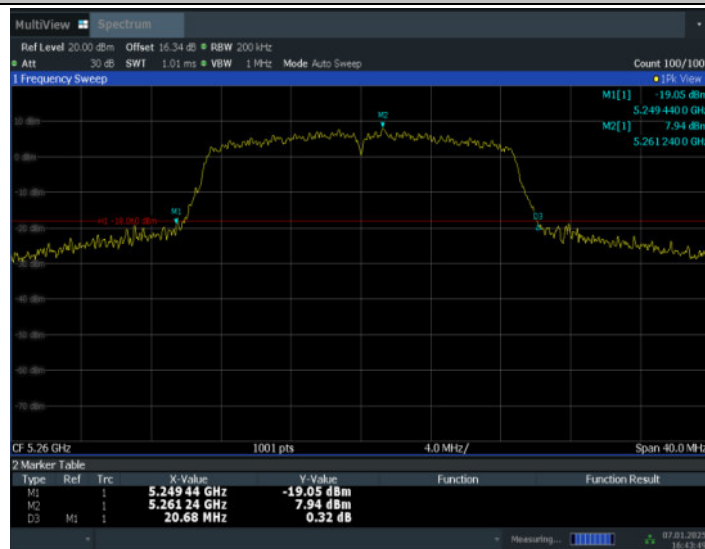


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11AC20SISO_Ant1_5260



16:43:50 07.01.2025

11AC20SISO_Ant1_5280



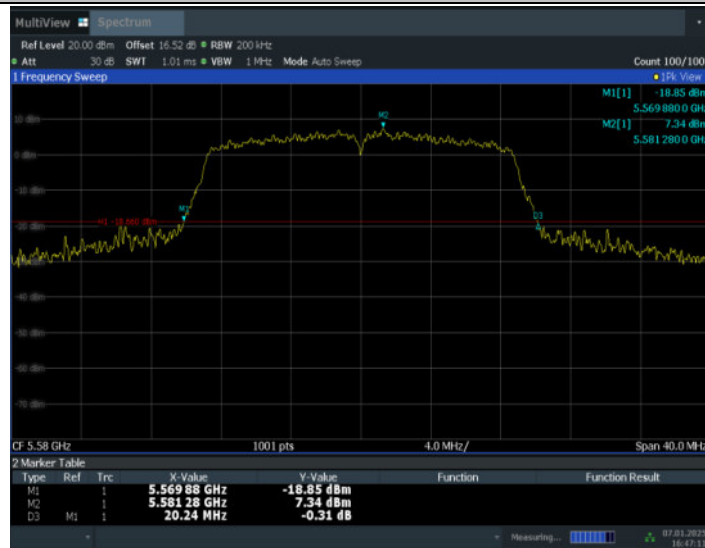
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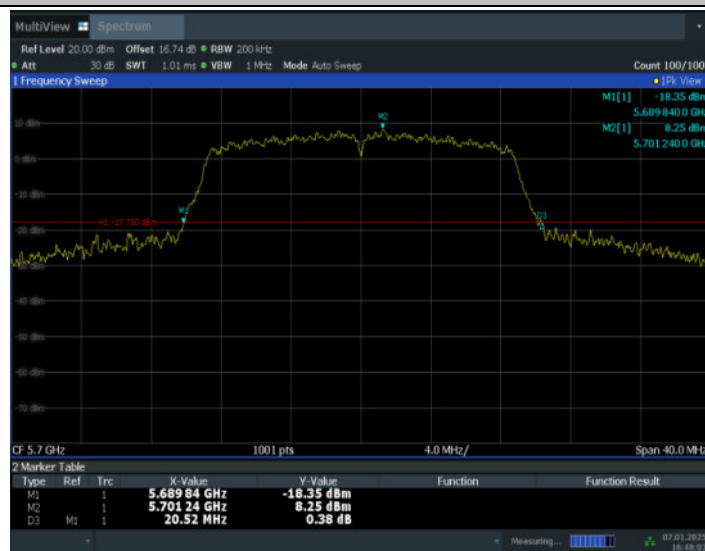


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16:47:11 07.01.2025

11AC20SISO_Ant1_5700



16:48:04 07.01.2025

11AC20SISO_Ant1_5720



11AC80SISO_Ant1_5210



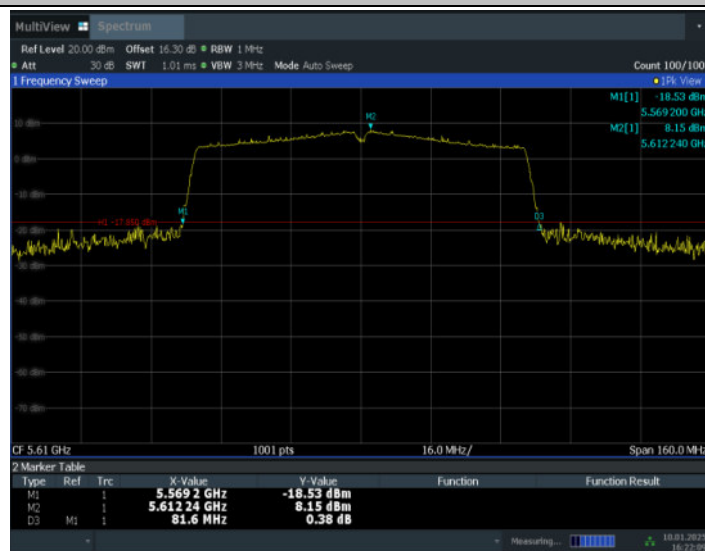
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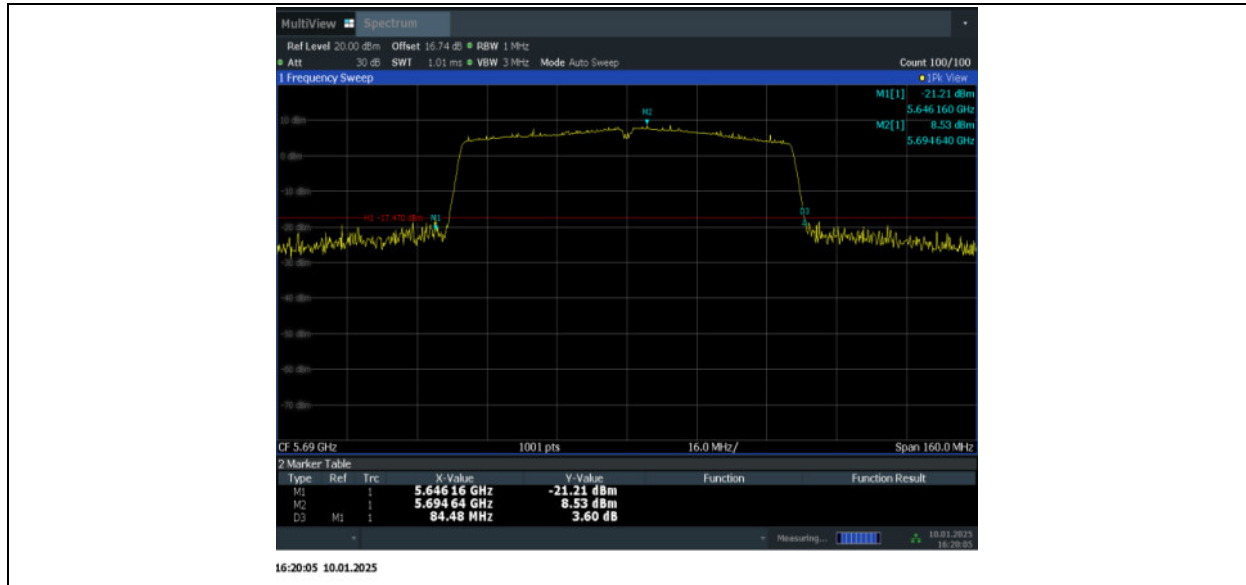
11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610



11AC80SISO_Ant1_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

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

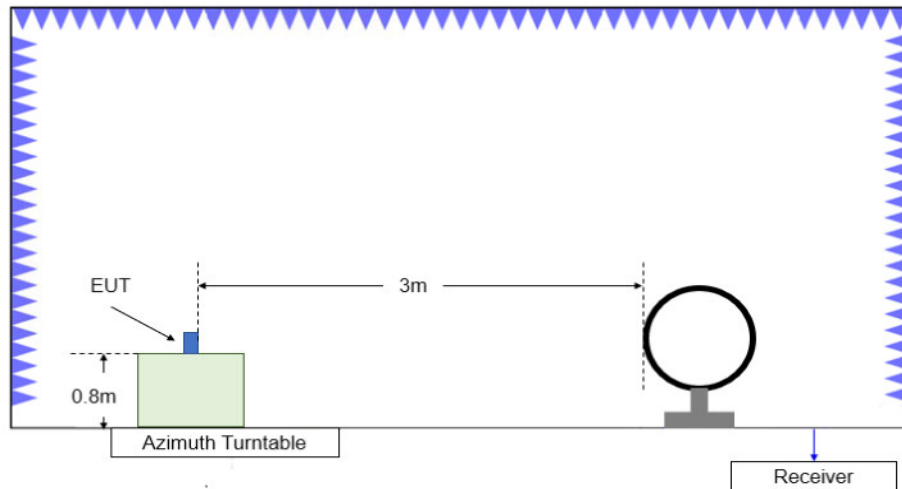


Figure A.5.1. Test Site Diagram (9kHz-30MHz)

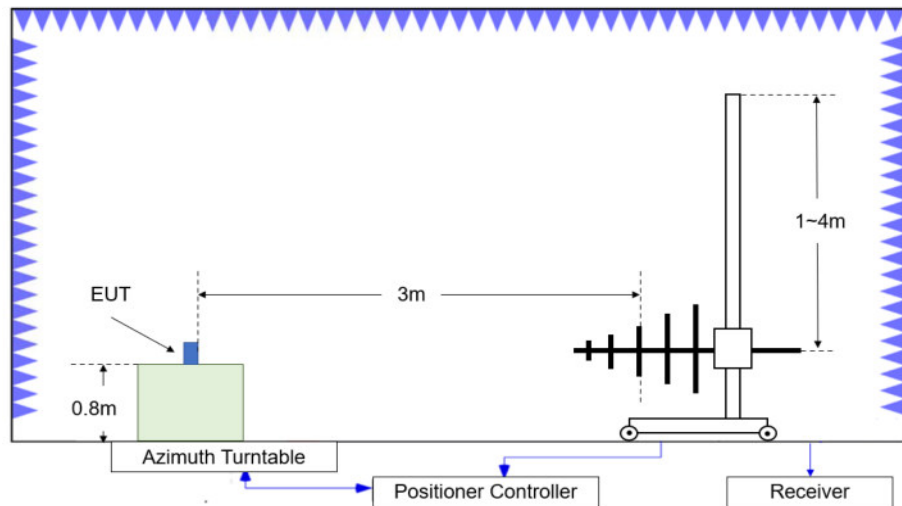


Figure A.5.2. Test Site Diagram (30MHz-1GHz)

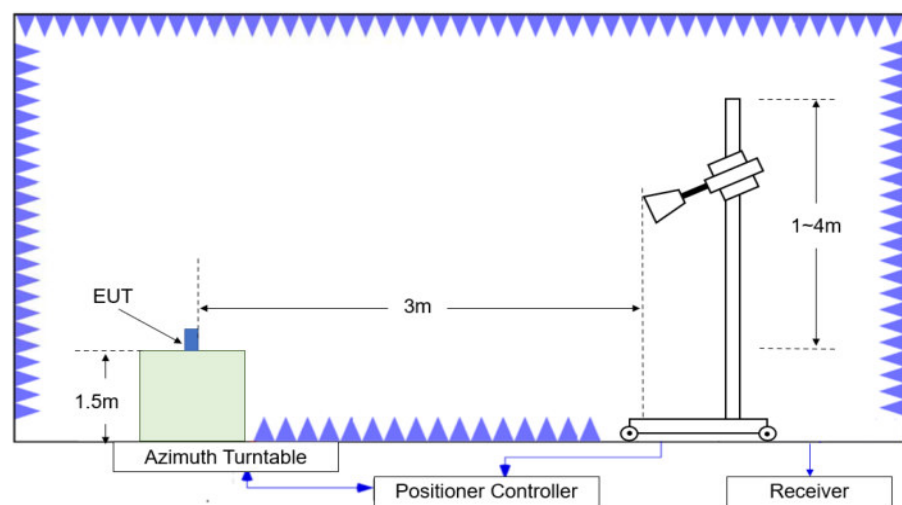


Figure A.5.3. Test Site Diagram (1GHz-40GHz)

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:

Measurement Results (dB μ V/m) = $P_{\text{measurement}}$ (dB μ V) + Cable Loss(dB) + 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)
17925.200	42.45	-25.55	42.30	25.70	54.00	11.55	V
17916.400	42.34	-25.55	42.30	25.59	54.00	11.66	V
13255.150	37.72	-29.75	40.20	27.27	54.00	16.28	V
13281.550	37.64	-29.75	40.30	27.09	54.00	16.36	V
5150.000	53.95	-27.27	32.70	48.52	54.00	0.05	H
5149.940	53.93	-27.27	32.70	48.50	54.00	0.07	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)
17917.500	42.67	-25.55	42.30	25.92	54.00	11.33	V
17918.600	42.67	-25.55	42.30	25.92	54.00	11.33	H
13277.700	37.81	-29.75	40.30	27.26	54.00	16.19	H
13268.900	37.75	-29.75	40.30	27.20	54.00	16.25	V
5350.320	52.51	-27.08	33.50	46.09	54.00	1.49	H
5351.184	52.31	-27.08	33.50	45.89	54.00	1.69	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)
17931.250	42.57	-25.55	42.30	25.82	54.00	11.43	V
17914.750	42.55	-25.55	42.30	25.80	54.00	11.45	V
13277.700	37.79	-29.75	40.30	27.24	54.00	16.21	V
13293.650	37.65	-29.75	40.30	27.10	54.00	16.35	V
5459.590	44.97	-27.06	33.70	38.33	54.00	9.03	H
5459.185	44.54	-27.06	33.70	37.90	54.00	9.46	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)
17915.850	42.87	-25.55	42.30	26.12	54.00	11.13	V
17937.850	42.87	-25.55	42.30	26.12	54.00	11.13	V
13263.950	38.02	-29.75	40.20	27.57	54.00	15.98	V
13272.750	37.44	-29.75	40.30	26.89	54.00	16.56	H
5149.960	53.06	-27.27	32.70	47.63	54.00	0.94	H
5149.860	52.25	-27.27	32.70	46.82	54.00	1.75	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)
17930.150	42.43	-25.55	42.30	25.68	54.00	11.57	V
17910.350	42.36	-25.55	42.30	25.61	54.00	11.64	H
13270.000	37.80	-29.75	40.30	27.25	54.00	16.20	H
13273.850	37.80	-29.75	40.30	27.25	54.00	16.20	V
5351.248	50.45	-27.08	33.50	44.03	54.00	3.55	H
5350.592	50.24	-27.08	33.50	43.82	54.00	3.76	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)
17921.350	42.66	-25.55	42.30	25.91	54.00	11.34	V
17916.950	42.57	-25.55	42.30	25.82	54.00	11.43	V
13282.100	37.91	-29.75	40.30	27.36	54.00	16.09	V
13292.000	37.69	-29.75	40.30	27.14	54.00	16.31	V
5458.990	43.16	-27.06	33.70	36.52	54.00	10.84	H
5459.035	42.99	-27.06	33.70	36.35	54.00	11.01	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)
17914.750	42.60	-25.55	42.30	25.85	54.00	11.40	H
17925.200	42.23	-25.55	42.30	25.48	54.00	11.77	V
13279.900	37.38	-29.75	40.30	26.83	54.00	16.62	V
13309.050	37.22	-29.75	40.30	26.67	54.00	16.78	V
5149.360	53.70	-27.27	32.70	48.27	54.00	0.30	H
5148.780	53.36	-27.27	32.70	47.93	54.00	0.64	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)
17920.800	43.07	-25.55	42.30	26.32	54.00	10.93	V
17914.200	42.39	-25.55	42.30	25.64	54.00	11.61	H
13253.500	37.32	-29.75	40.20	26.87	54.00	16.68	V
13268.900	37.29	-29.75	40.30	26.74	54.00	16.71	V
5351.360	50.10	-27.08	33.50	43.68	54.00	3.90	H
5351.616	49.50	-27.08	33.50	43.08	54.00	4.50	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)
17920.250	42.72	-25.55	42.30	25.97	54.00	11.28	H
17923.550	42.71	-25.55	42.30	25.96	54.00	11.29	V
13262.300	37.54	-29.75	40.20	27.09	54.00	16.46	H
13273.850	37.44	-29.75	40.30	26.89	54.00	16.56	V
5457.805	43.07	-27.06	33.70	36.43	54.00	10.93	H
5459.920	42.85	-27.06	33.70	36.21	54.00	11.15	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	42.59	-25.55	42.30	25.84	54.00	11.41	H
17915.300	42.50	-25.55	42.30	25.75	54.00	11.50	H
13281.550	37.90	-29.75	40.30	27.35	54.00	16.10	V
13272.200	37.64	-29.75	40.30	27.09	54.00	16.36	V
5149.840	51.45	-27.27	32.70	46.02	54.00	2.55	H
5149.980	50.83	-27.27	32.70	45.40	54.00	3.17	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)
17923.000	42.52	-25.55	42.30	25.77	54.00	11.48	H
17952.700	42.49	-25.55	42.30	25.74	54.00	11.51	H
13264.500	37.89	-29.75	40.20	27.44	54.00	16.11	V
13254.050	37.47	-29.75	40.20	27.02	54.00	16.53	V
5350.400	51.24	-27.08	33.50	44.82	54.00	2.76	H
5350.640	50.80	-27.08	33.50	44.38	54.00	3.20	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)
17940.050	42.52	-25.55	42.30	25.77	54.00	11.48	H
17902.100	42.50	-25.55	42.30	25.75	54.00	11.50	H
13275.500	37.51	-29.75	40.30	26.96	54.00	16.49	V
13274.400	37.42	-29.75	40.30	26.87	54.00	16.58	H
5459.500	48.16	-27.06	33.70	41.52	54.00	5.84	H
5459.995	47.09	-27.06	33.70	40.45	54.00	6.91	H