FCC PART 15E
TEST REPORT
No.25T04Z100262-006

for

TCL Communication Ltd.

Tablet PC

8188S

FCC ID: 2ACCJB231

with

Hardware Version: 05

Software Version: 8P11

Issued Date: 2025-03-21

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
25T04Z100262-006	Rev.0	1st edition	2025-03-21

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: 2025-02-25

Testing End Date: 2025-03-21

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1.5. Signature

Dong Jiaxuan

(Prepared this test report)

Zheng Wei

(Reviewed this test report)

Pang Shuai

(Approved this test report)

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2. Client Information

2.1 Applicant Information

Company Name	TCL Communication Ltd.
Address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
Contact	Ting Wang
Email	ting.wang.hz@tcl.com
Tel.	+86 752 2639091

2.1. Manufacturer Information

Company Name	TCL Communication Ltd.
Address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
Contact	Ting Wang
Email	ting.wang.hz@tcl.com
Tel.	+86 752 2639091

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

3.1. About EUT

Description	Tablet PC
Model name	8188S
FCC ID	2ACCJB231
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Nominal Voltage	3.8V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT28a	354037970001958	05	8P11	2025-02-20
UT25a	354037970001974	05	8P11	2025-02-20

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

UT28a is used for Conduction test, UT25a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery1	TLp058C8	Huizhou GanFeng LiEnergy Battery Technology Co., Ltd.
AE2	Charger1	UC13US	HUIZHOU PUAN ELECTRONICS CO,. LTD.
AE3	USB Cable	CDA0000304C1	Huizhou Juwei Electronics CO.,LTD

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

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3.4. General Description

The Equipment under Test (EUT) is a model of Tablet PC 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

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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.

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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	3.8V
Humidity	44%

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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	2025-08-12
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2025-04-06
3	Attenuator	10dB/2W	/	Rosenberger	/	/
4	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	2025-06-06
2	EMI Antenna	VULB9163	01222	Schwarzbeck	1 year	2025-09-11
3	EMI Antenna	3115	00167250	ETS-Lindgren	1 year	2025-04-11

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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)
30MHz ≤ f ≤ 2GHz	1.22
2GHz ≤ f ≤3.6GHz	1.22
3.6GHz ≤ f ≤8GHz	1.22
8GHz ≤ f ≤12.75GHz	1.51
12.75GHz ≤ f ≤26GHz	1.51
26GHz ≤ f ≤40GHz	1.59

8.6 AC Power-line Conducted Emission

Measurement Uncertainty : 3.08dB,k=2

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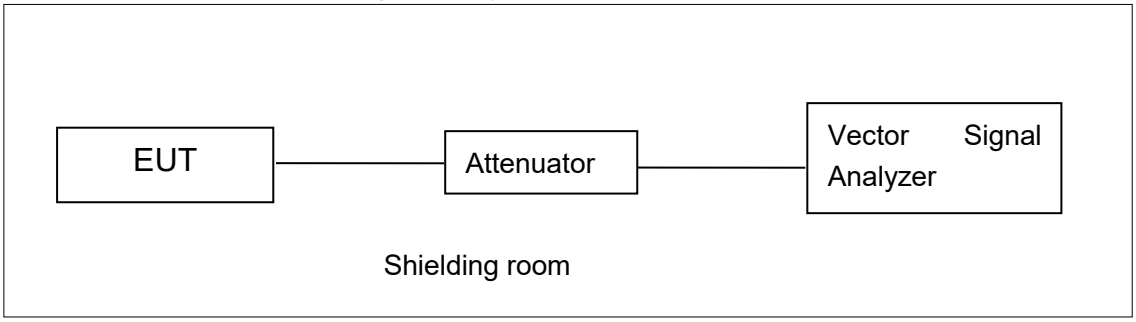
ANNEX A: Detailed Test Results

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.

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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 measurementmethod SA-2 is made according to KDB 789033

A.2.1 Antenna Gain

Antenna gain is 0.58dBi and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT28a

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	17.55	/	/	/	/	/	/	/
	5200MHz	17.59	/	/	/	/	/	/	/
	5240MHz	17.67	/	/	/	/	/	/	/
	5260MHz	17.79	/	/	/	/	/	/	/
	5280MHz	17.65	/	/	/	/	/	/	/
	5320MHz	17.86	/	/	/	/	/	/	/
	5500MHz	17.39	/	/	/	/	/	/	/
	5580MHz	17.22	/	/	/	/	/	/	/
	5700MHz	17.31	/	/	/	/	/	/	/
	5720MHz	17.13	/	/	/	/	/	/	/

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

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802.11n-HT20 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT20)	5180MHz	17.76	/	/	/	/	/	/	/
	5200MHz	17.74	/	/	/	/	/	/	/
	5240MHz	17.85	/	/	/	/	/	/	/
	5260MHz	17.83	/	/	/	/	/	/	/
	5280MHz	17.53	/	/	/	/	/	/	/
	5320MHz	17.80	/	/	/	/	/	/	/
	5500MHz	18.33	/	/	/	/	/	/	/
	5580MHz	18.28	/	/	/	/	/	/	/
	5700MHz	18.27	/	/	/	/	/	/	/
	5720MHz	18.04	/	/	/	/	/	/	/

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	15.90	/	/	/	/	/	/	/	/
	5200MHz	15.70	/	/	/	/	/	/	/	/
	5240MHz	15.94	/	/	/	/	/	/	/	/
	5260MHz	15.76	/	/	/	/	/	/	/	/
	5280MHz	15.52	/	/	/	/	/	/	/	/
	5320MHz	16.02	/	/	/	/	/	/	/	/
	5500MHz	15.60	/	/	/	/	/	/	/	/
	5580MHz	15.83	/	/	/	/	/	/	/	/
	5700MHz	15.54	/	/	/	/	/	/	/	/
	5720MHz	15.99	/	/	/	/	/	/	/	/

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

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802.11n-HT40 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT40)	5190MHz	15.81	/	/	/	/	/	/	/
	5230MHz	15.80	/	/	/	/	/	/	/
	5270MHz	15.62	/	/	/	/	/	/	/
	5310MHz	15.93	/	/	/	/	/	/	/
	5510MHz	16.18	/	/	/	/	/	/	/
	5550MHz	16.29	/	/	/	/	/	/	/
	5670MHz	16.18	/	/	/	/	/	/	/
	5710MHz	15.82	/	/	/	/	/	/	/

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	16.74	/	/	/	/	/	/	/	/	/
	5230MHz	16.50	/	/	/	/	/	/	/	/	/
	5270MHz	16.08	/	/	/	/	/	/	/	/	/
	5310MHz	16.94	/	/	/	/	/	/	/	/	/
	5510MHz	14.43	/	/	/	/	/	/	/	/	/
	5550MHz	17.28	/	/	/	/	/	/	/	/	/
	5670MHz	16.99	/	/	/	/	/	/	/	/	/
	5710MHz	16.88	/	/	/	/	/	/	/	/	/

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	15.82	/	/	/	/	/	/	/	/	/
	5290MHz	13.74	/	/	/	/	/	/	/	/	/
	5530MHz	14.21	/	/	/	/	/	/	/	/	/
	5610MHz	16.37	/	/	/	/	/	/	/	/	/
	5690MHz	16.23	/	/	/	/	/	/	/	/	/

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

The duty cycle of all mode >98%

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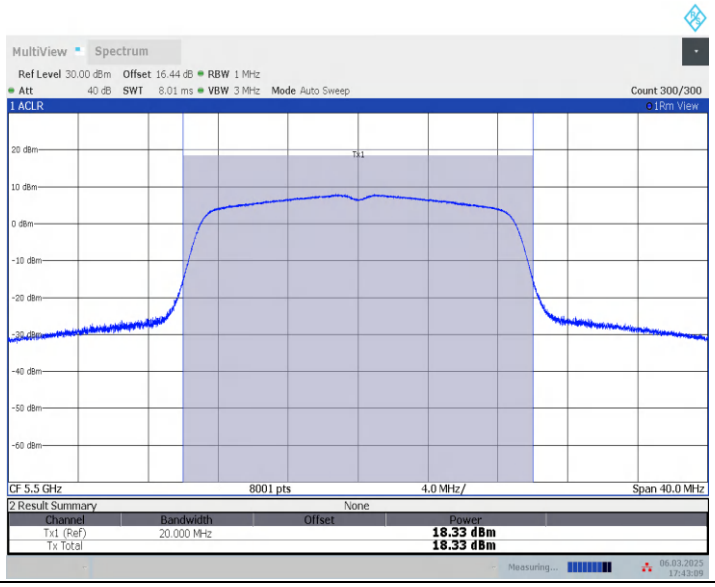
Maximum output Power:

11N20SISO_Ant1_5500


Conclusion: PASS

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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: UT28a

Measurement Results:

TestMode	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	5180	7.44	≤11.00	PASS
	5200	7.58	≤11.00	PASS
	5240	7.77	≤11.00	PASS
	5260	7.91	≤11.00	PASS
	5280	7.28	≤11.00	PASS
	5320	7.88	≤11.00	PASS
	5500	7.16	≤11.00	PASS
	5580	7.13	≤11.00	PASS
	5700	6.97	≤11.00	PASS
	5720	7.07	≤11.00	PASS
11N20SISO	5180	7.22	≤11.00	PASS
	5200	7.43	≤11.00	PASS
	5240	7.18	≤11.00	PASS
	5260	6.93	≤11.00	PASS
	5280	6.69	≤11.00	PASS
	5320	6.91	≤11.00	PASS
	5500	7.29	≤11.00	PASS
	5580	7.27	≤11.00	PASS
	5700	7.28	≤11.00	PASS
	5720	7.09	≤11.00	PASS
11AC40SISO	5190	3.34	≤11.00	PASS
	5230	3.42	≤11.00	PASS
	5270	3.27	≤11.00	PASS
	5310	3.61	≤11.00	PASS
	5510	1.57	≤11.00	PASS
	5550	3.82	≤11.00	PASS
	5670	3.93	≤11.00	PASS
	5710	3.68	≤11.00	PASS
11AC80SISO	5210	-0.79	≤11.00	PASS
	5290	-3.18	≤11.00	PASS
	5530	-2.43	≤11.00	PASS

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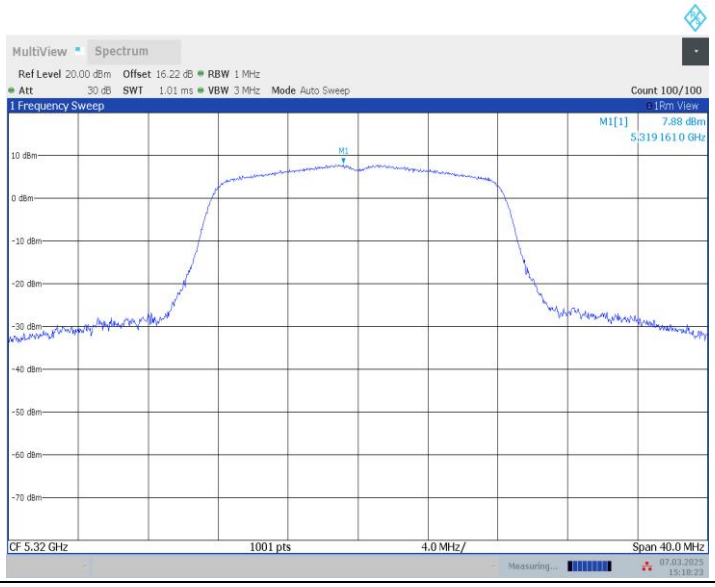
	5610	-0.14	≤11.00	PASS
	5690	-0.67	≤11.00	PASS

Peak Power Spectral Density:

11A_Ant1_5320


Conclusion: PASS

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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

EUT ID: UT28a

Measurement Result:

TestMode	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	5180	21.08	5169.88	5190.96	---	---
	5200	20.72	5189.76	5210.48	---	---
	5240	22.16	5230.04	5252.20	---	---
	5260	19.88	5250.16	5270.04	---	---
	5280	20.40	5270.04	5290.44	---	---
	5320	20.00	5310.04	5330.04	---	---
	5500	19.72	5490.12	5509.84	---	---
	5580	19.72	5570.12	5589.84	---	---
	5700	19.80	5690.08	5709.88	---	---
	5720	20.64	5709.88	5730.52	---	---
	5720	20.64	5709.88	5730.52	---	---
11N20SISO	5180	21.08	5169.32	5190.40	---	---
	5200	22.04	5188.32	5210.36	---	---
	5240	23.80	5228.28	5252.08	---	---
	5260	20.20	5250.00	5270.20	---	---
	5280	21.36	5269.80	5291.16	---	---
	5320	20.00	5310.04	5330.04	---	---
	5500	20.08	5489.96	5510.04	---	---
	5580	20.36	5569.96	5590.32	---	---
	5700	21.68	5688.44	5710.12	---	---
	5720	21.28	5709.40	5730.68	---	---
	5720	21.28	5709.40	5730.68	---	---
11AC40SISO	5190	42.24	5169.52	5211.76	---	---
	5230	40.88	5209.36	5250.24	---	---
	5270	40.72	5249.60	5290.32	---	---
	5310	40.88	5289.60	5330.48	---	---
	5510	41.20	5489.28	5530.48	---	---
	5550	40.56	5529.68	5570.24	---	---

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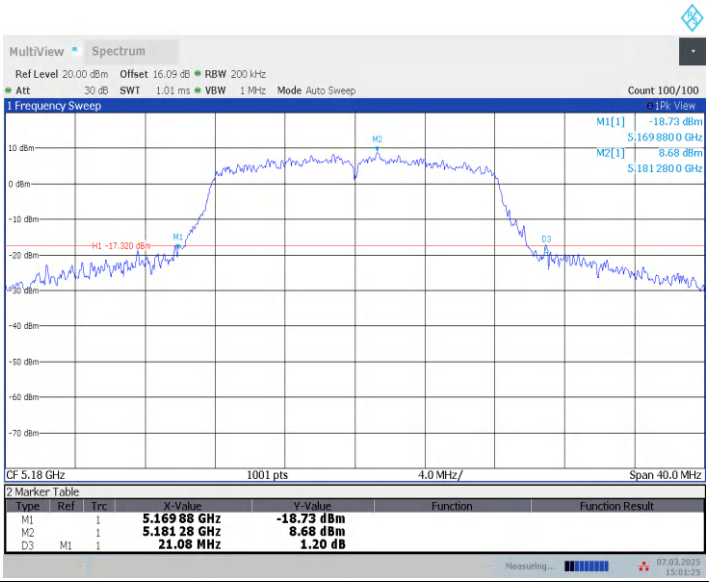
	5670	41.04	5649.28	5690.32	---	---
	5710	41.12	5689.52	5730.64	---	---
	5710	42.12	5689.52	5730.64	---	---
11AC80SISO	5210	93.44	5169.36	5262.80	---	---
	5290	81.60	5249.20	5330.80	---	---
	5530	81.76	5489.20	5570.96	---	---
	5610	81.44	5569.36	5650.80	---	---
	5690	83.36	5647.28	5730.64	---	---
	5690	83.36	5647.28	5730.64	---	---

Test graphs as below:

11A_Ant1_5180



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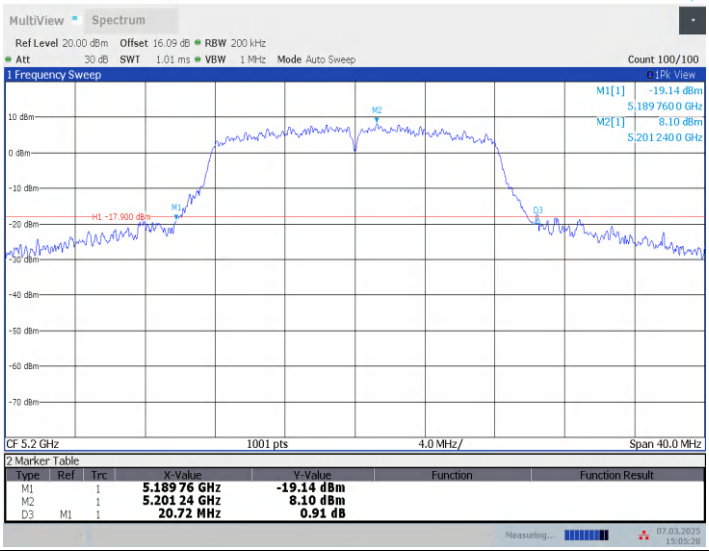

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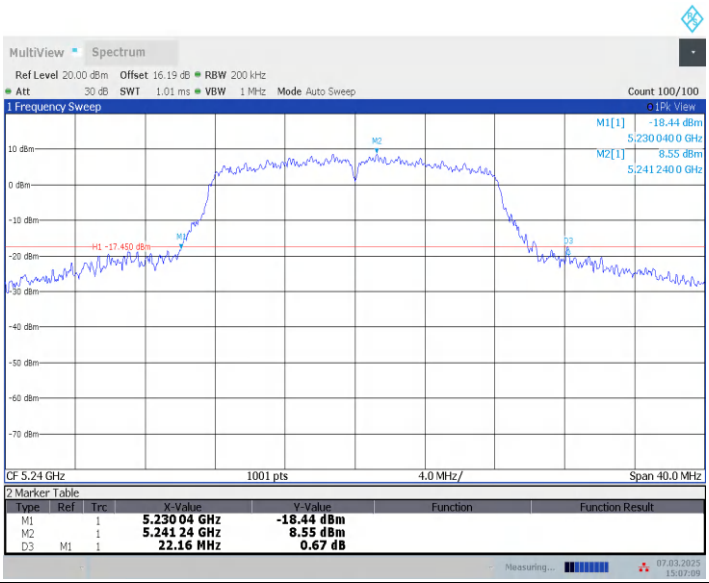

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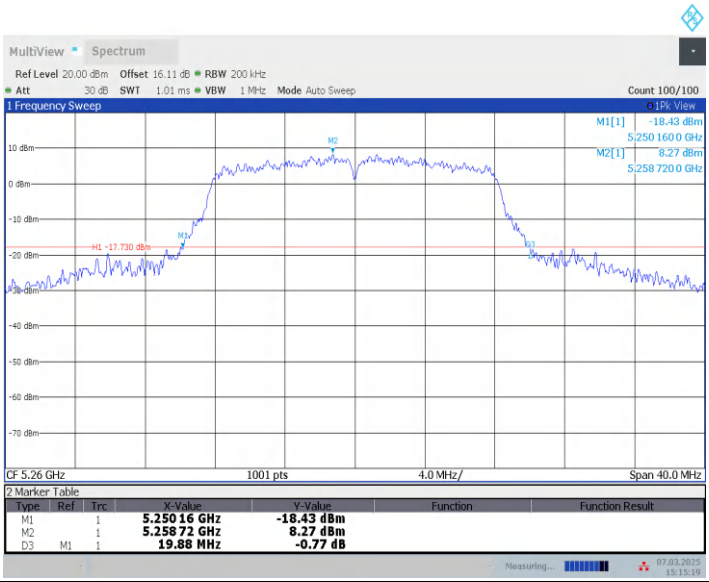

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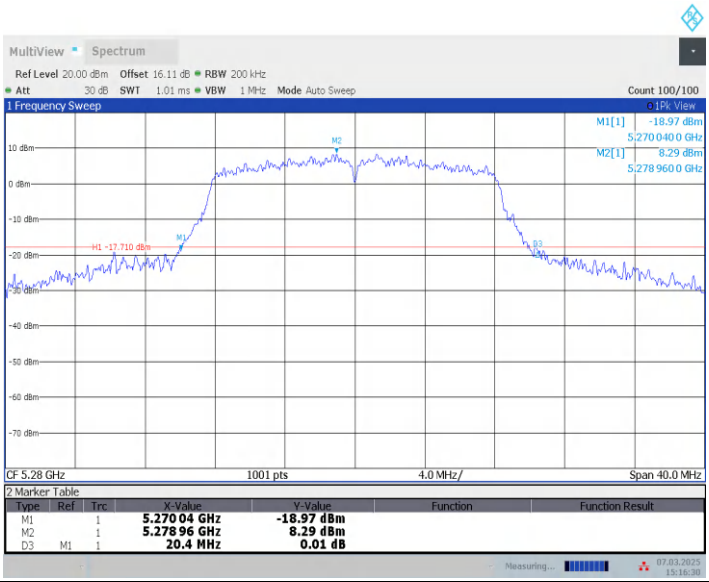

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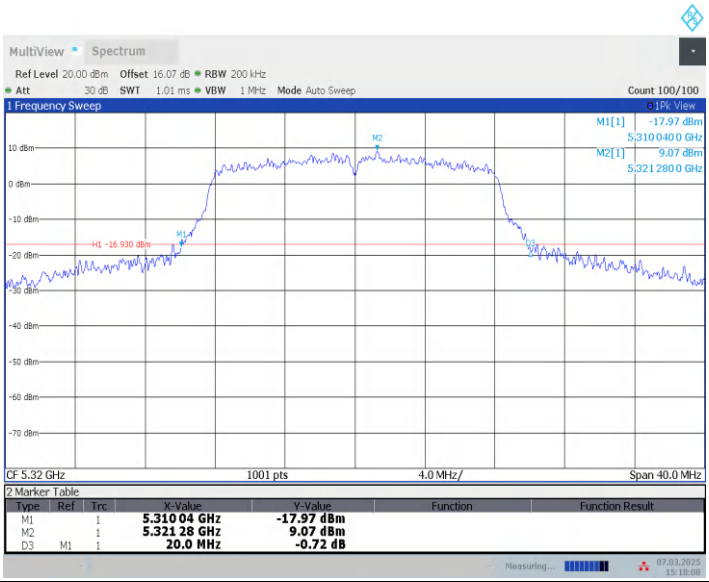

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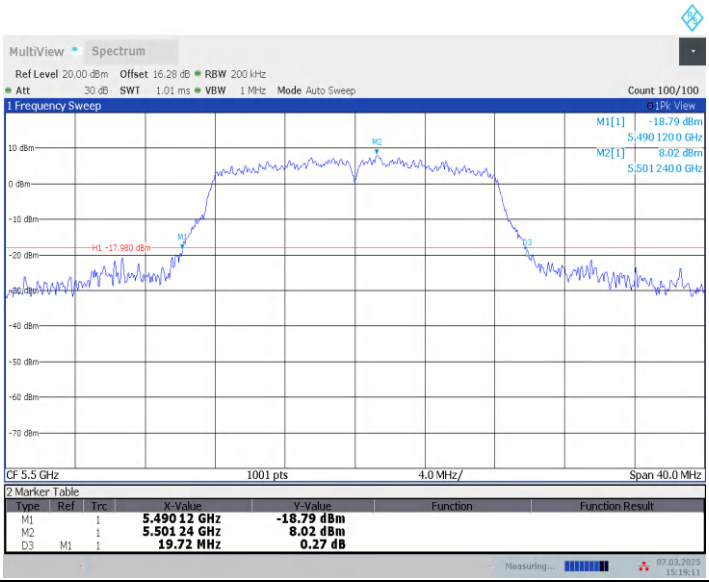

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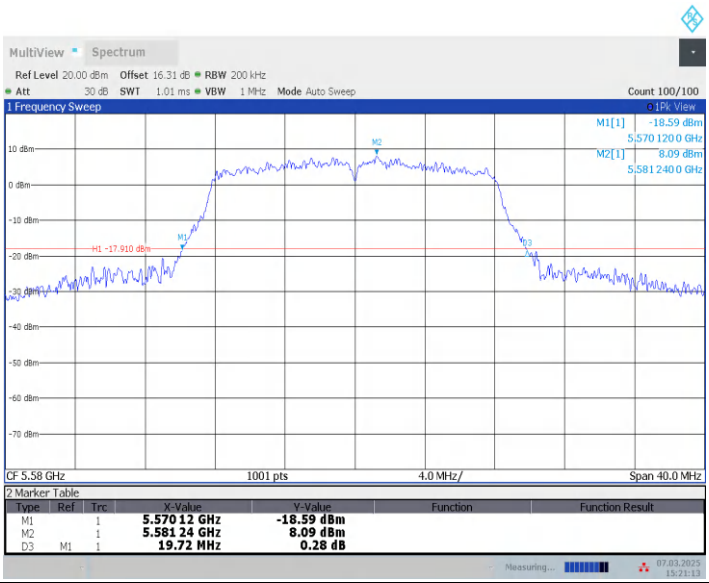

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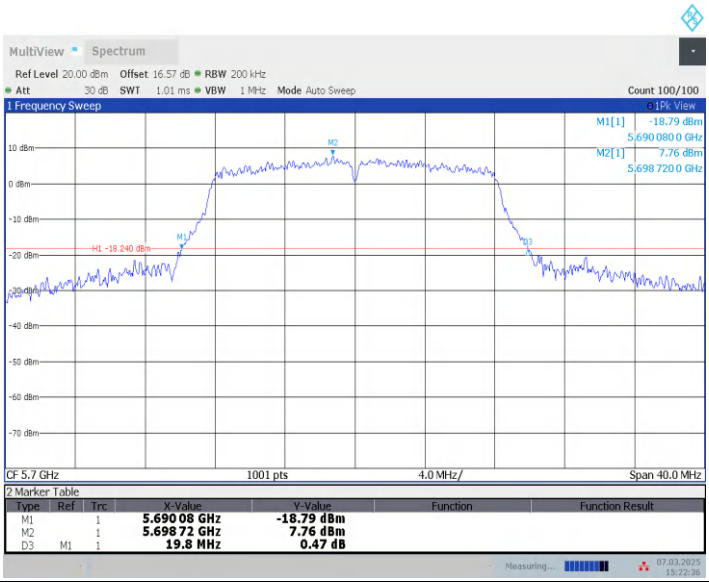

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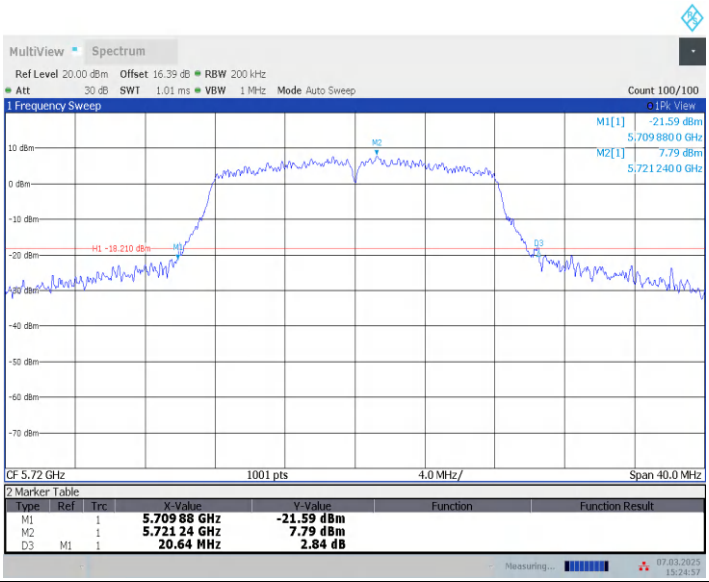

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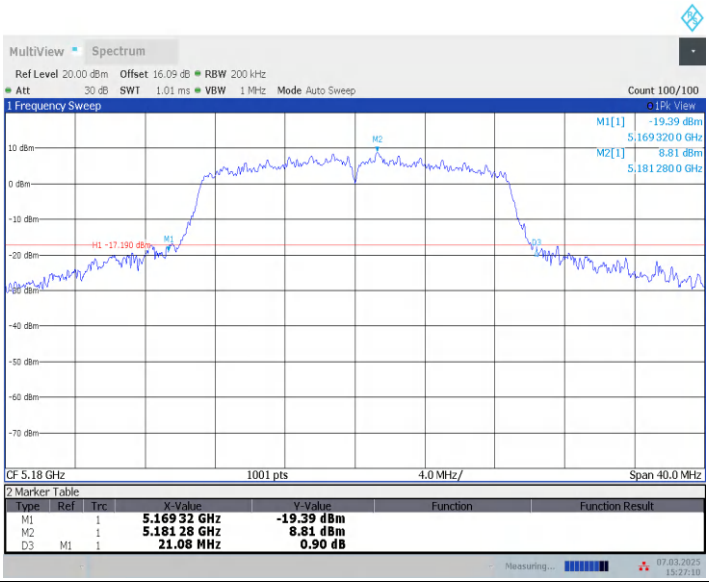

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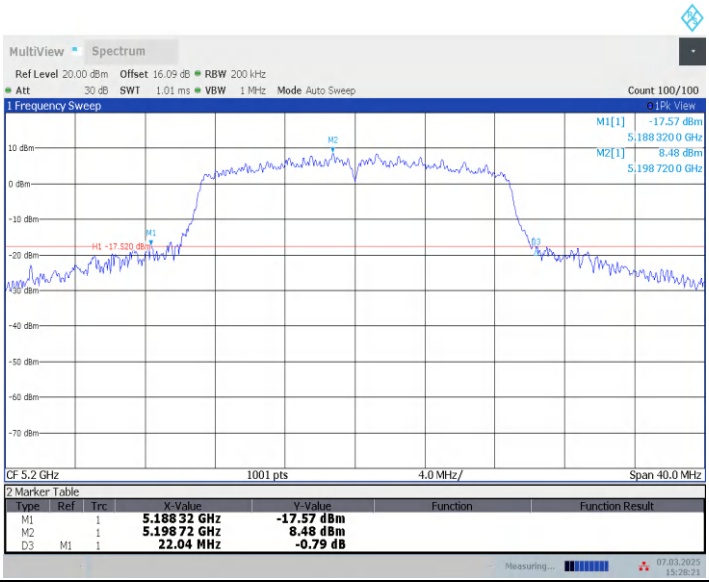

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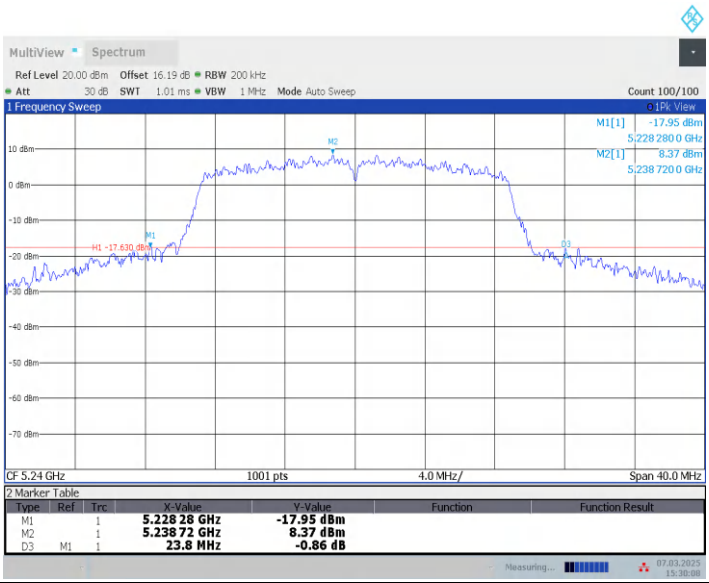

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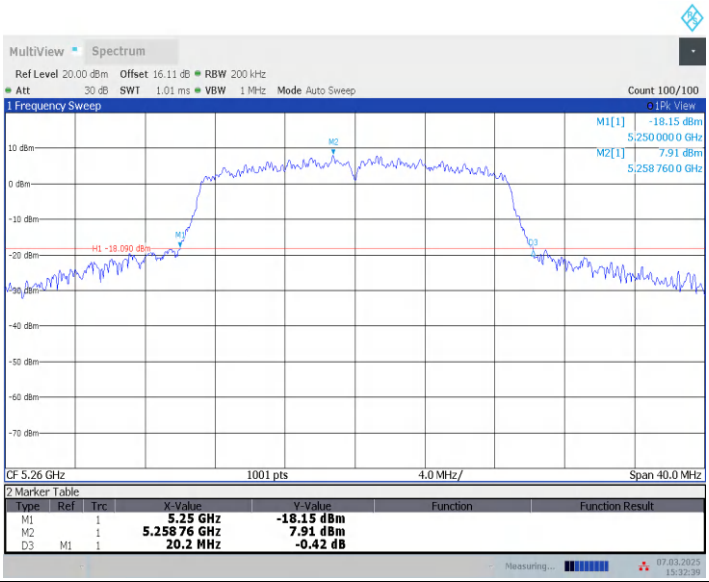

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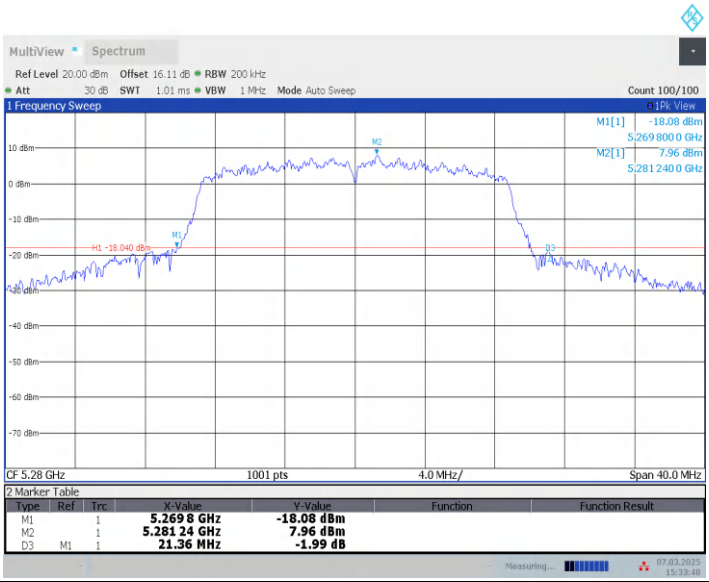

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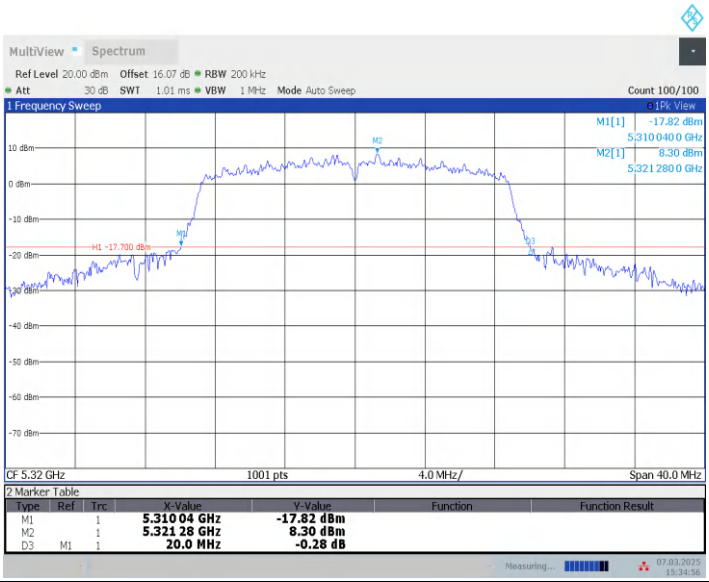

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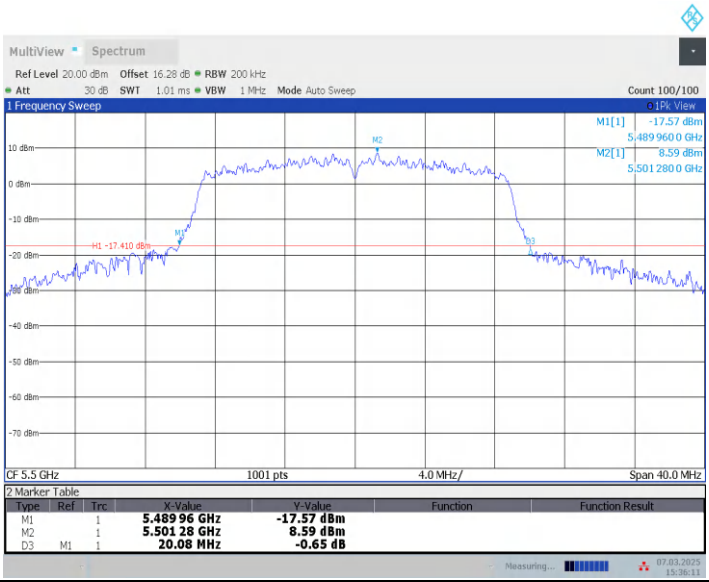

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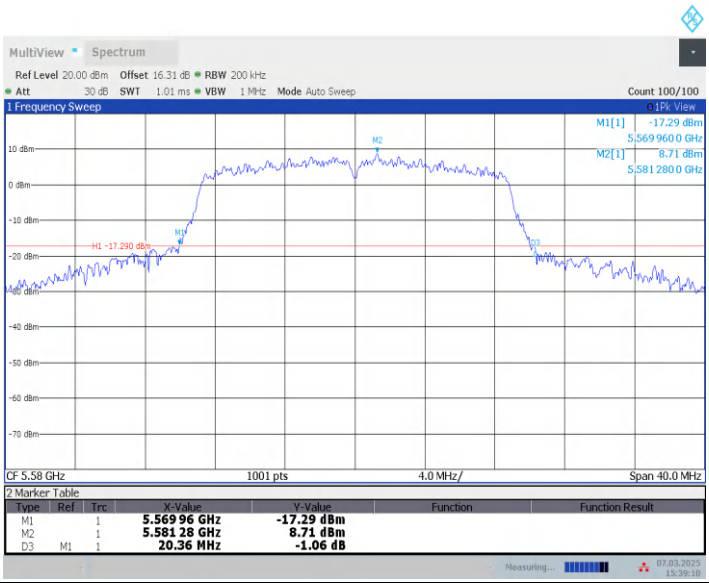

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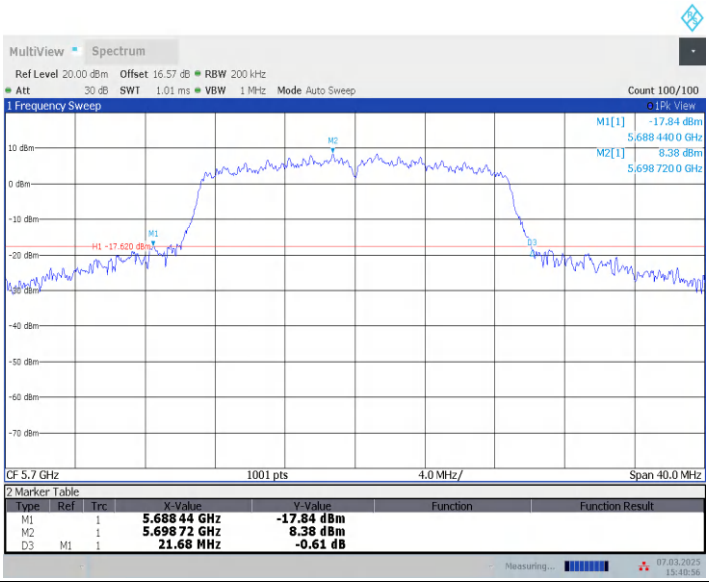

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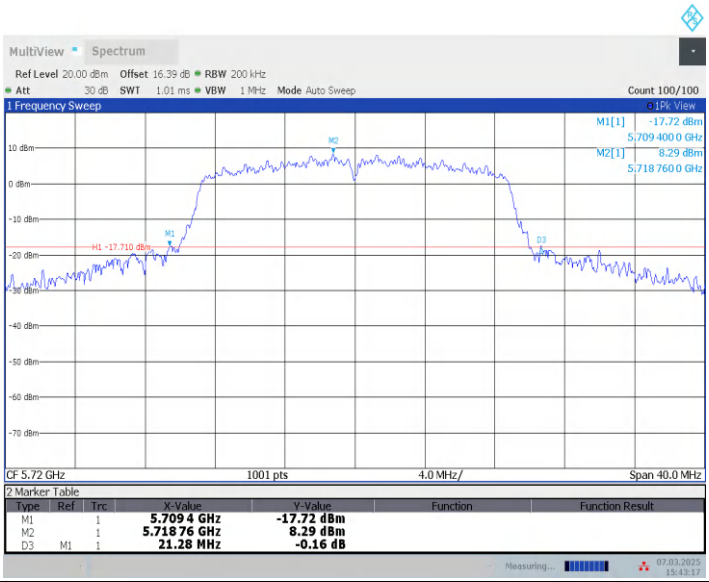

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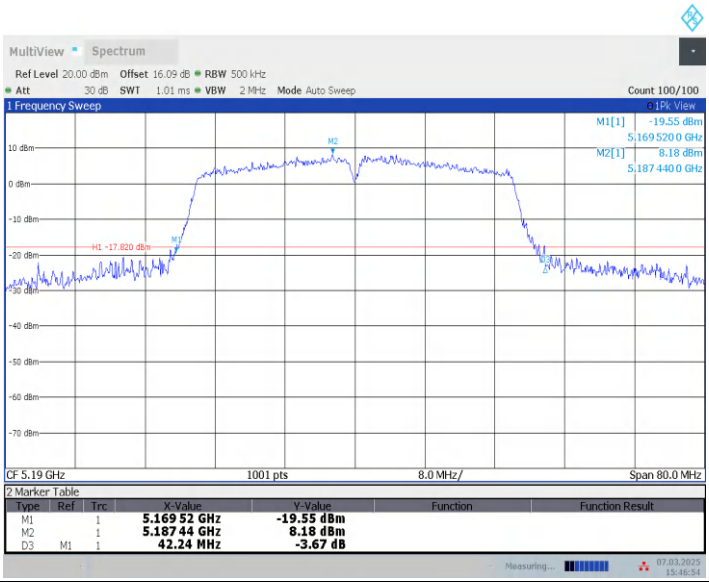

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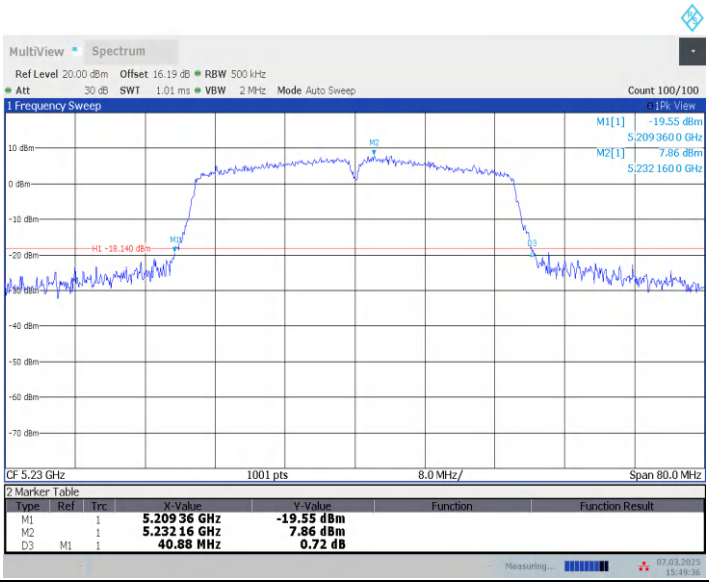

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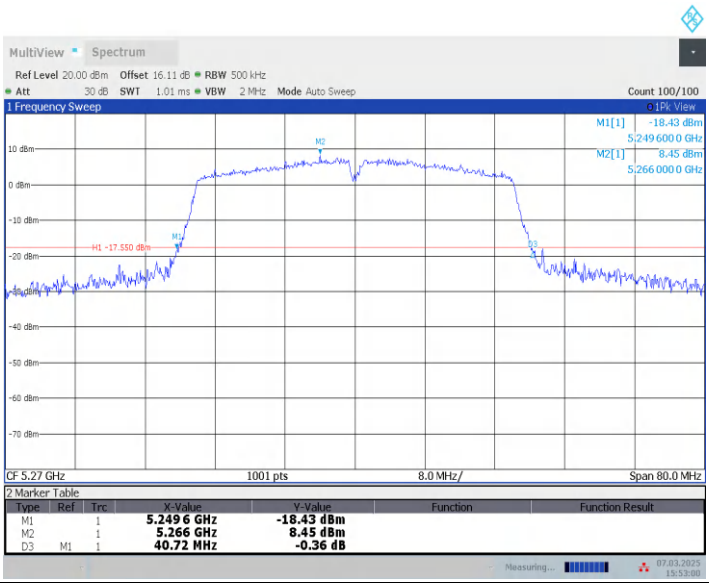

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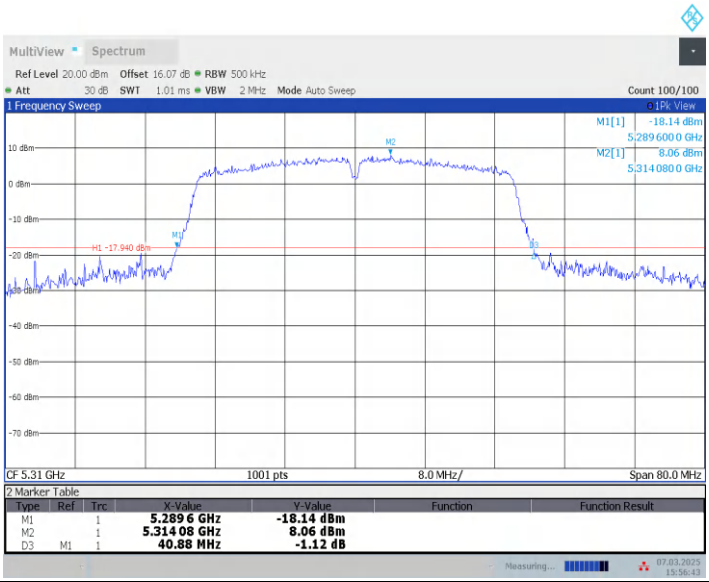

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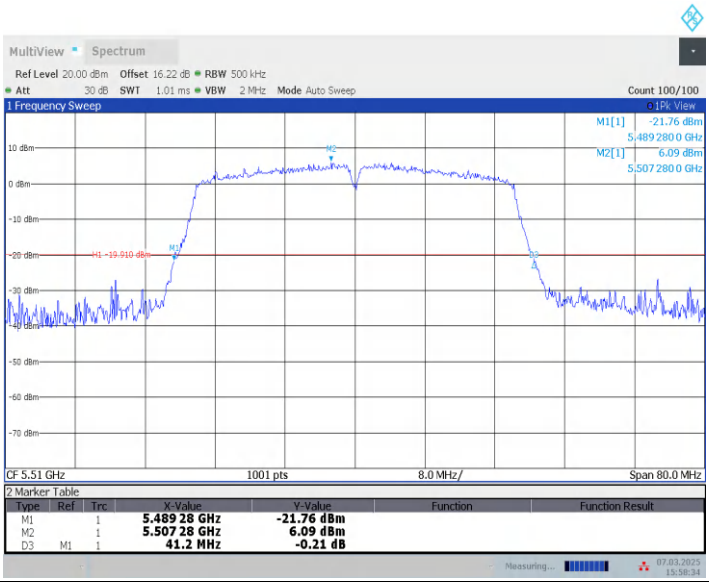

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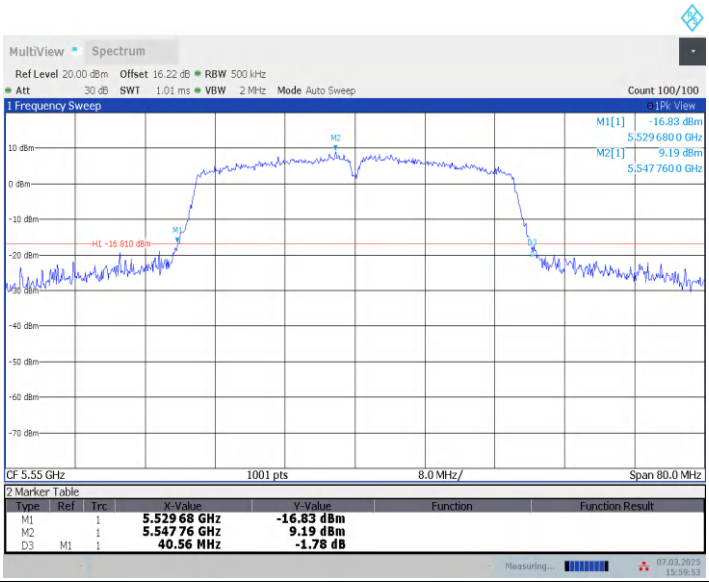

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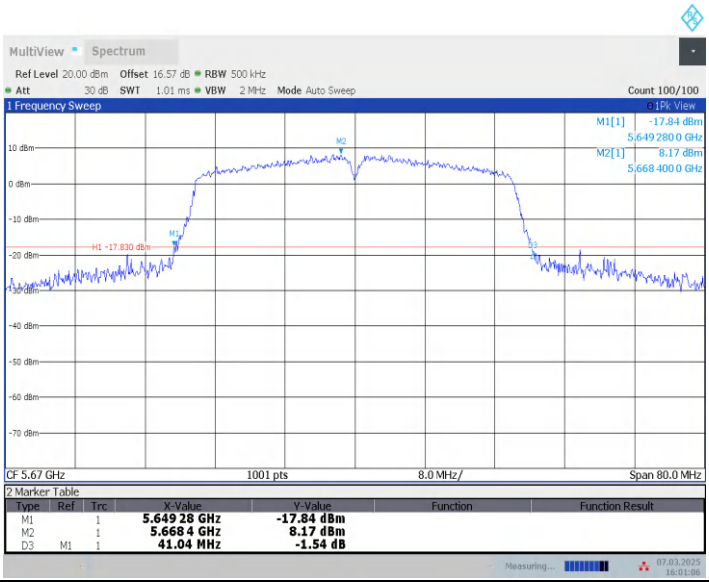

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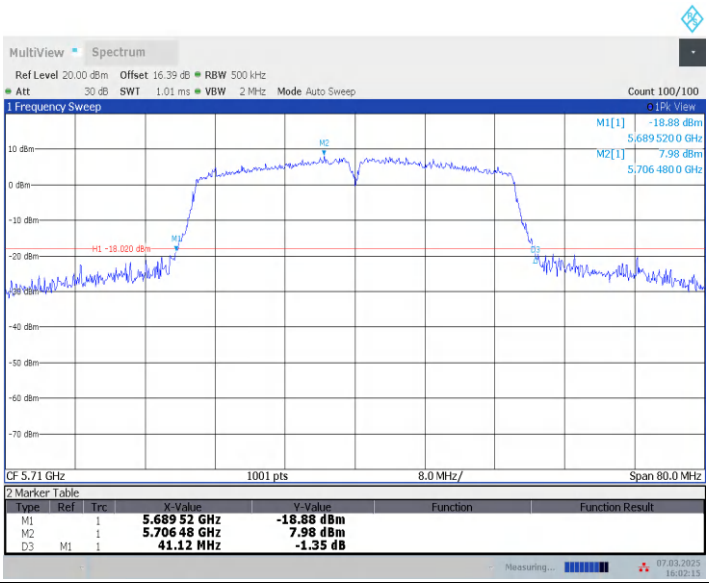

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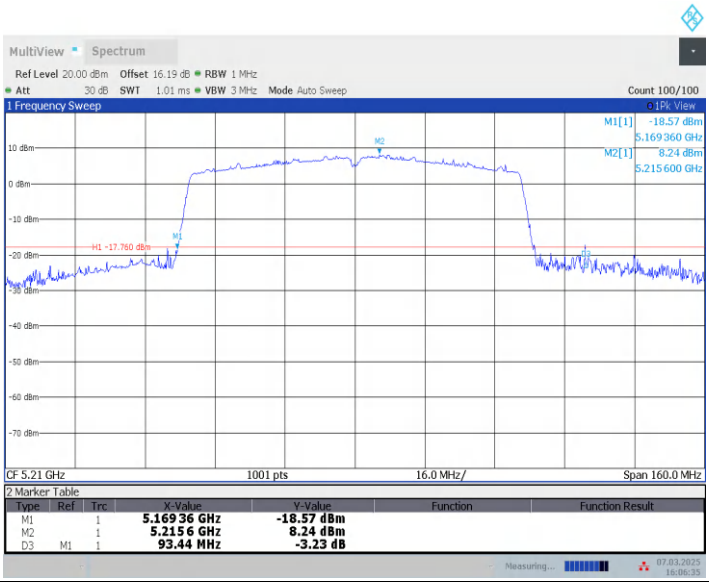

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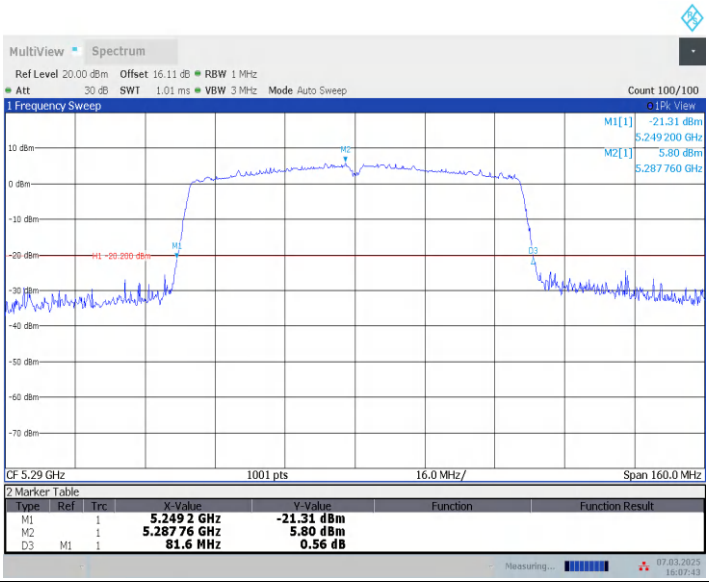

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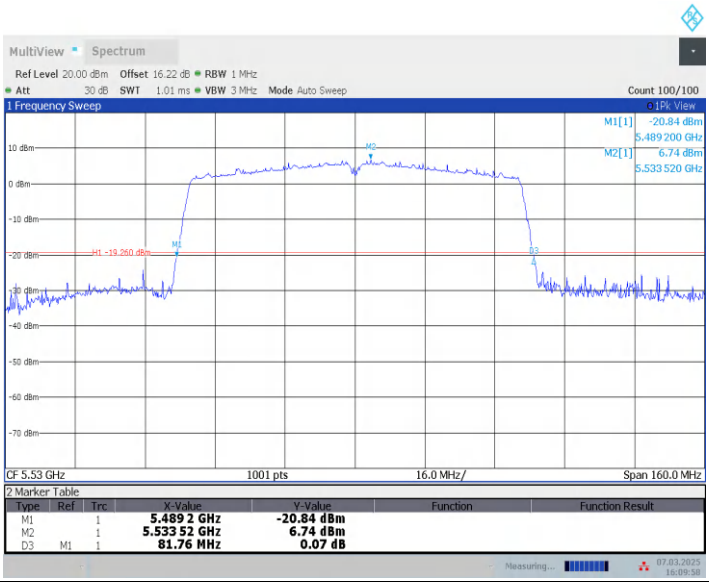

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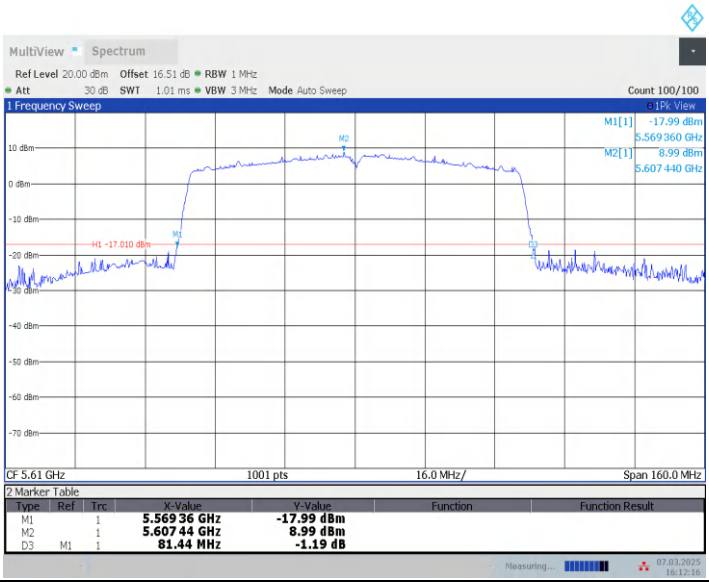

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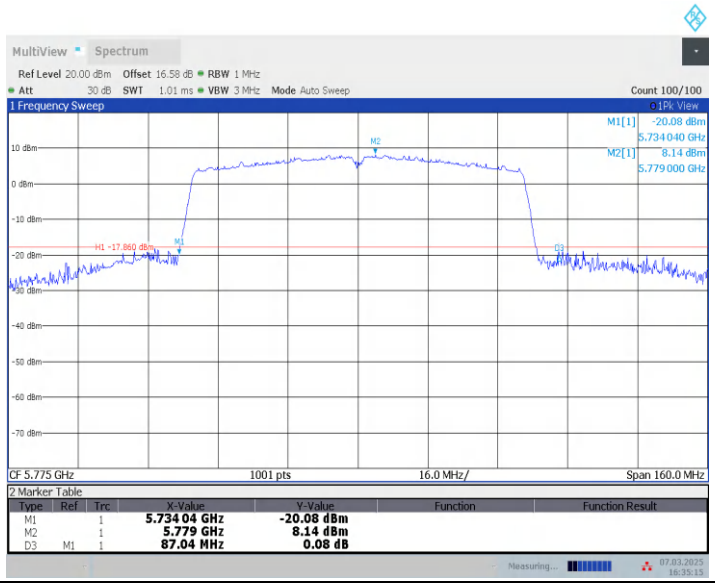

Conclusion: PASS

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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(μV/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 (uV/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).

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A.5.2 Test setup

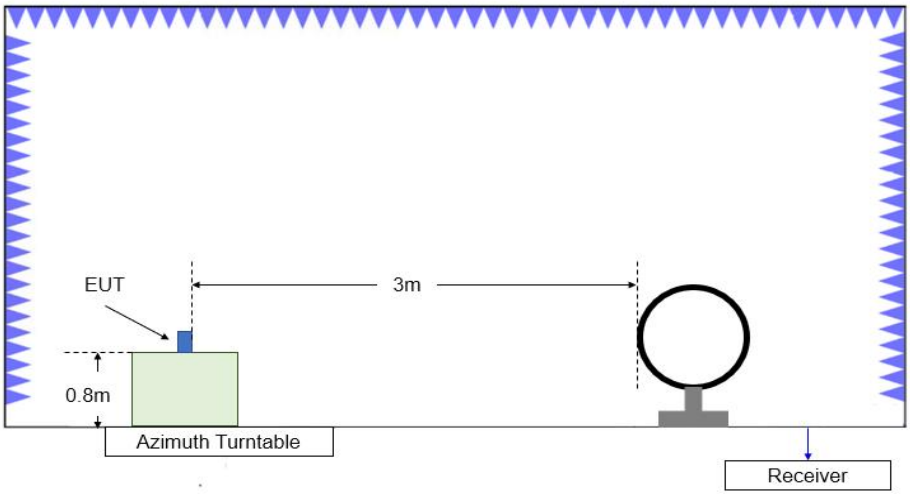

Figure A.5.1. Test Site Diagram (9kHz-30MHz)

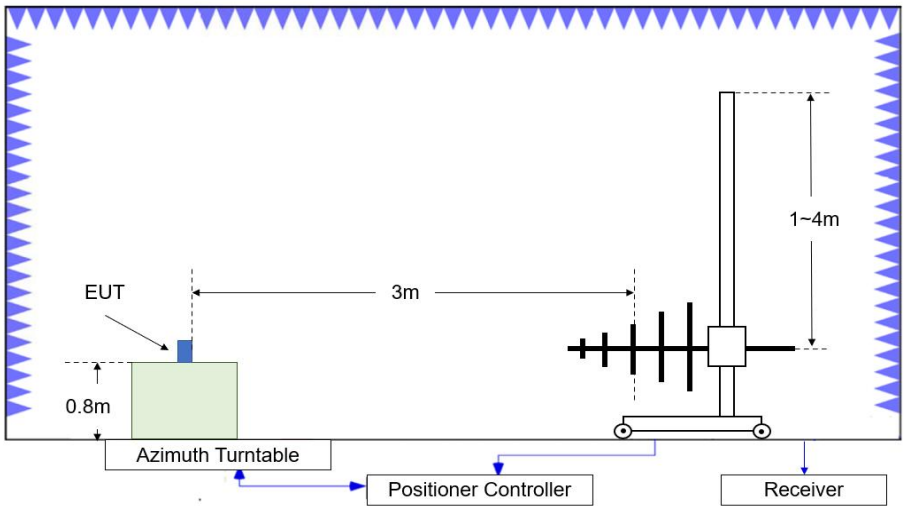

Figure A.5.2. Test Site Diagram (30MHz-1GHz)

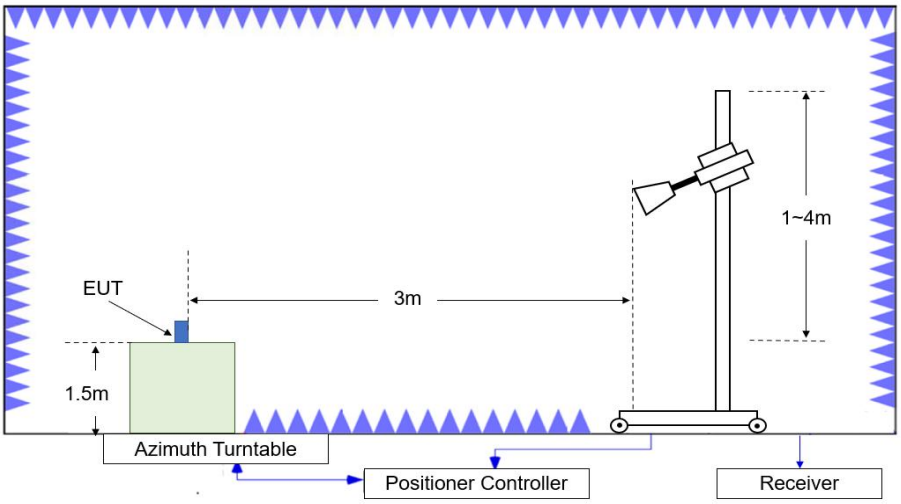

Figure A.5.3. Test Site Diagram (1GHz-40GHz)

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A.5.3 Test Procedures

Radiated unwanted emissions from the EUT were measured according to ANSI C63.10and 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 (dBμV/m) = $P_{measurement}$ (dBμV) + Cable Loss(dB) + Antenna Factor (dB/m)

Where: $P_{measurement}$ 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=EIRP- 20log (*D*) +104.77

Where:

E is the field strength in dBμV/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 20dBof the limit below 30MHz. OFS and semi-chamber comparison testing had been performed and the result came out very similar. (KDB 414788)

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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)
17882.850	45.90	-25.55	42.30	29.15	54.00	8.10	H
17920.250	45.90	-25.55	42.30	29.15	54.00	8.10	V
8288.100	39.92	-34.29	37.40	36.81	54.00	14.08	V
13274.950	39.88	-29.75	40.30	29.33	54.00	14.12	H
5149.180	51.55	-27.27	32.70	46.12	54.00	2.45	H
5149.300	51.35	-27.27	32.70	45.92	54.00	2.65	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)
17918.600	45.34	-25.55	42.30	28.59	54.00	8.66	H
17920.250	45.32	-25.55	42.30	28.57	54.00	8.68	V
14497.050	39.15	-28.78	40.00	27.93	54.00	14.85	H
13272.200	39.04	-29.75	40.30	28.49	54.00	14.96	H
5350.432	51.97	-27.08	33.50	45.55	54.00	2.03	H
5350.192	51.87	-27.08	33.50	45.45	54.00	2.13	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)
17935.100	45.63	-25.55	42.30	28.88	54.00	8.37	V
17919.150	45.48	-25.55	42.30	28.73	54.00	8.52	V
14491.550	39.28	-28.78	40.00	28.06	54.00	14.72	H
13288.150	39.23	-29.75	40.30	28.68	54.00	14.77	H
5458.720	46.78	-27.06	33.70	40.14	54.00	7.22	H
5458.675	46.76	-27.06	33.70	40.12	54.00	7.24	H

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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)
17909.250	45.32	-25.55	42.30	28.57	54.00	8.68	H
17945.000	45.26	-25.55	42.30	28.51	54.00	8.74	H
8287.550	39.69	-34.29	37.40	36.58	54.00	14.31	V
13284.300	39.10	-29.75	40.30	28.55	54.00	14.90	H
5149.900	53.46	-27.27	32.70	48.03	54.00	0.54	H
5149.760	52.85	-27.27	32.70	47.42	54.00	1.15	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)
17908.700	45.27	-25.55	42.30	28.52	54.00	8.73	H
17918.050	45.19	-25.55	42.30	28.44	54.00	8.81	H
14493.750	39.08	-28.78	40.00	27.86	54.00	14.92	H
14499.250	39.00	-28.78	40.00	27.78	54.00	15.00	H
5350.352	50.28	-27.08	33.50	43.86	54.00	3.72	H
5350.144	49.98	-27.08	33.50	43.56	54.00	4.02	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)
17905.950	45.16	-25.55	42.30	28.41	54.00	8.84	V
17914.750	45.13	-25.55	42.30	28.38	54.00	8.87	V
14497.600	39.45	-28.78	40.00	28.23	54.00	14.55	H
14499.250	39.02	-28.78	40.00	27.80	54.00	14.98	V
5457.265	45.76	-27.06	33.70	39.12	54.00	8.24	H
5459.245	45.54	-27.06	33.70	38.90	54.00	8.46	H

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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)
17935.650	45.38	-25.55	42.30	28.63	54.00	8.62	V
17909.800	45.27	-25.55	42.30	28.52	54.00	8.73	V
8304.050	39.62	-34.29	37.40	36.51	54.00	14.38	V
13286.500	39.15	-29.75	40.30	28.60	54.00	14.85	H
5149.020	51.75	-27.27	32.70	46.32	54.00	2.25	H
5148.580	51.66	-27.27	32.70	46.23	54.00	2.34	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)
17913.100	45.16	-25.55	42.30	28.41	54.00	8.84	V
17913.650	45.12	-25.55	42.30	28.37	54.00	8.88	H
14487.700	38.96	-28.78	40.00	27.74	54.00	15.04	H
14493.200	38.95	-28.78	40.00	27.73	54.00	15.05	V
5350.656	51.00	-27.08	33.50	44.58	54.00	3.00	H
5352.208	50.95	-27.08	33.50	44.53	54.00	3.05	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)
17923.550	45.25	-25.55	42.30	28.50	54.00	8.75	V
17904.300	45.20	-25.55	42.30	28.45	54.00	8.80	H
14496.500	39.31	-28.78	40.00	28.09	54.00	14.69	V
14492.650	38.94	-28.78	40.00	27.72	54.00	15.06	V
5459.395	44.61	-27.06	33.70	37.97	54.00	9.39	H
5455.240	44.37	-27.06	33.70	37.73	54.00	9.63	H

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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)
17938.950	45.18	-25.55	42.30	28.43	54.00	8.82	V
17934.000	45.08	-25.55	42.30	28.33	54.00	8.92	H
8287.550	40.35	-34.29	37.40	37.24	54.00	13.65	V
8288.100	39.33	-34.29	37.40	36.22	54.00	14.67	V
5149.540	48.15	-27.27	32.70	42.72	54.00	5.85	H
5149.340	48.10	-27.27	32.70	42.67	54.00	5.90	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	45.41	-25.55	42.30	28.66	54.00	8.59	H
17924.650	45.19	-25.55	42.30	28.44	54.00	8.81	V
13281.550	39.00	-29.75	40.30	28.45	54.00	15.00	V
13285.950	38.87	-29.75	40.30	28.32	54.00	15.13	H
5350.496	47.18	-27.08	33.50	40.76	54.00	6.82	H
5350.544	47.00	-27.08	33.50	40.58	54.00	7.00	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)
17916.950	45.48	-25.55	42.30	28.73	54.00	8.52	H
17915.850	45.24	-25.55	42.30	28.49	54.00	8.76	H
14489.900	39.01	-28.78	40.00	27.79	54.00	14.99	H
14485.500	38.89	-28.78	40.00	27.67	54.00	15.11	V
5457.700	45.50	-27.06	33.70	38.86	54.00	8.50	H
5459.845	45.19	-27.06	33.70	38.55	54.00	8.81	H

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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)
17923.550	45.16	-25.55	42.30	28.41	54.00	8.84	V
17926.300	45.14	-25.55	42.30	28.39	54.00	8.86	H
14492.650	39.26	-28.78	40.00	28.04	54.00	14.74	V
13273.850	38.99	-29.75	40.30	28.44	54.00	15.01	H
5149.780	53.10	-27.27	32.70	47.67	54.00	0.90	H
5149.920	53.02	-27.27	32.70	47.59	54.00	0.98	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)
17935.650	45.24	-25.55	42.30	28.49	54.00	8.76	V
17953.800	45.22	-25.55	42.30	28.47	54.00	8.78	V
14494.850	38.98	-28.78	40.00	27.76	54.00	15.02	H
14494.300	38.93	-28.78	40.00	27.71	54.00	15.07	V
5350.544	53.66	-27.08	33.50	47.24	54.00	0.34	H
5350.320	53.62	-27.08	33.50	47.20	54.00	0.38	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)
17925.200	45.23	-25.55	42.30	28.48	54.00	8.77	V
17915.300	45.06	-25.55	42.30	28.31	54.00	8.94	H
14487.700	38.99	-28.78	40.00	27.77	54.00	15.01	V
14494.300	38.95	-28.78	40.00	27.73	54.00	15.05	H
5459.860	45.08	-27.06	33.70	38.44	54.00	8.92	H
5459.800	44.98	-27.06	33.70	38.34	54.00	9.02	H

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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)
17926.300	45.34	-25.55	42.30	28.59	54.00	8.66	V
17905.400	45.11	-25.55	42.30	28.36	54.00	8.89	V
14489.900	39.18	-28.78	40.00	27.96	54.00	14.82	H
14495.950	39.03	-28.78	40.00	27.81	54.00	14.97	H
5149.420	50.90	-27.27	32.70	45.47	54.00	3.10	H
5149.940	50.87	-27.27	32.70	45.44	54.00	3.13	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)
17912.000	45.25	-25.55	42.30	28.50	54.00	8.75	V
17918.050	45.25	-25.55	42.30	28.50	54.00	8.75	H
14472.850	39.14	-28.78	40.00	27.92	54.00	14.86	H
8463.550	39.06	-34.00	37.40	35.66	54.00	14.94	V
5350.432	53.89	-27.08	33.50	47.47	54.00	0.11	H
5350.608	53.83	-27.08	33.50	47.41	54.00	0.17	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)
17924.100	45.23	-25.55	42.30	28.48	54.00	8.77	V
17923.550	45.19	-25.55	42.30	28.44	54.00	8.81	H
14487.150	38.88	-28.78	40.00	27.66	54.00	15.12	V
14497.050	38.87	-28.78	40.00	27.65	54.00	15.13	V
5457.160	45.37	-27.06	33.70	38.73	54.00	8.63	H
5459.395	45.11	-27.06	33.70	38.47	54.00	8.89	H

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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)
17908.700	56.54	-25.55	42.30	39.79	74.00	17.46	V
17888.900	56.49	-25.55	42.30	39.74	74.00	17.51	V
13810.650	51.95	-29.41	40.90	40.46	68.20	16.25	H
14159.900	51.95	-28.86	40.40	40.41	68.20	16.25	V
5147.560	71.30	-27.34	32.70	65.94	74.00	2.70	H
5148.580	70.76	-27.27	32.70	65.33	74.00	3.24	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)
17923.550	56.25	-25.55	42.30	39.50	74.00	17.75	V
17964.250	56.21	-25.55	42.30	39.46	74.00	17.79	H
13827.700	51.94	-29.41	40.90	40.45	68.20	16.26	H
14142.300	51.73	-28.86	40.50	40.09	68.20	16.47	H
5350.432	71.75	-27.08	33.50	65.33	74.00	2.25	H
5354.272	70.16	-27.08	33.50	63.74	74.00	3.84	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)
17925.750	56.05	-25.55	42.30	39.30	74.00	17.95	H
17876.800	55.95	-25.55	42.30	39.20	74.00	18.05	H
14118.100	51.67	-28.86	40.50	40.03	68.20	16.53	H
14150.000	51.61	-28.86	40.50	39.97	68.20	16.59	V
5458.720	63.45	-27.06	33.70	56.81	74.00	10.55	H
5468.470	66.51	-27.06	33.70	59.87	68.20	1.69	H

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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)
17923.000	56.36	-25.55	42.30	39.61	74.00	17.64	V
17922.450	56.33	-25.55	42.30	39.58	74.00	17.67	H
13705.600	51.95	-29.88	40.70	41.13	68.20	16.25	V
14129.100	51.94	-28.86	40.50	40.30	68.20	16.26	H
5149.420	72.86	-27.27	32.70	67.43	74.00	1.14	H
5149.100	72.76	-27.27	32.70	67.33	74.00	1.24	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)
17894.950	56.58	-25.55	42.30	39.83	74.00	17.42	H
17894.400	56.28	-25.55	42.30	39.53	74.00	17.72	H
13986.100	51.52	-29.33	40.70	40.15	68.20	16.68	H
14124.700	51.26	-28.86	40.50	39.62	68.20	16.94	V
5352.048	69.16	-27.08	33.50	62.74	74.00	4.84	H
5350.096	68.75	-27.08	33.50	62.33	74.00	5.25	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)
17923.000	56.71	-25.55	42.30	39.96	74.00	17.29	V
17920.250	56.38	-25.55	42.30	39.63	74.00	17.62	V
14146.150	51.41	-28.86	40.50	39.77	68.20	16.79	V
14189.600	51.28	-28.86	40.40	39.74	68.20	16.92	V
5459.650	60.74	-27.06	33.70	54.10	74.00	13.26	H
5469.730	66.97	-27.06	33.70	60.33	68.20	1.23	H

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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)
17833.900	56.17	-25.55	42.30	39.42	74.00	17.83	V
17860.300	56.02	-25.55	42.30	39.27	74.00	17.98	V
13709.450	52.48	-29.88	40.70	41.66	68.20	15.72	H
13731.450	52.37	-29.41	40.70	41.08	68.20	15.83	H
5149.840	72.82	-27.27	32.70	67.39	74.00	1.18	H
5149.560	72.49	-27.27	32.70	67.06	74.00	1.51	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)
17932.900	56.92	-25.55	42.30	40.17	74.00	17.08	V
17927.950	56.18	-25.55	42.30	39.43	74.00	17.82	H
13710.550	52.80	-29.88	40.70	41.98	68.20	15.40	H
14191.800	51.81	-28.86	40.40	40.27	68.20	16.39	H
5351.104	69.77	-27.08	33.50	63.35	74.00	4.23	H
5350.032	69.57	-27.08	33.50	63.15	74.00	4.43	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)
17846.550	56.03	-25.55	42.30	39.28	74.00	17.97	H
17912.550	55.97	-25.55	42.30	39.22	74.00	18.03	H
13724.850	51.82	-29.41	40.70	40.53	68.20	16.38	V
14223.700	51.71	-28.86	40.40	40.17	68.20	16.49	H
5459.920	60.58	-27.06	33.70	53.94	74.00	13.42	H
5469.775	67.76	-27.06	33.70	61.12	68.20	0.44	H

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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)
17918.050	56.52	-25.55	42.30	39.77	74.00	17.48	V
17937.850	56.10	-25.55	42.30	39.35	74.00	17.90	V
14178.600	51.73	-28.86	40.40	40.19	68.20	16.47	V
14143.950	51.36	-28.86	40.50	39.72	68.20	16.84	V
5147.040	68.08	-27.34	32.70	62.72	74.00	5.92	H
5148.620	67.40	-27.27	32.70	61.97	74.00	6.60	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)
17924.100	55.86	-25.55	42.30	39.11	74.00	18.14	H
17905.400	55.68	-25.55	42.30	38.93	74.00	18.32	H
13738.050	51.48	-29.41	40.70	40.19	68.20	16.72	V
14102.700	51.43	-28.98	40.50	39.91	68.20	16.77	V
5351.072	63.53	-27.08	33.50	57.11	74.00	10.47	H
5350.912	63.31	-27.08	33.50	56.89	74.00	10.69	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)
17900.450	55.94	-25.55	42.30	39.19	74.00	18.06	H
17947.750	55.93	-25.55	42.30	39.18	74.00	18.07	V
14106.000	51.78	-28.98	40.50	40.26	68.20	16.42	H
14107.100	51.51	-28.98	40.50	39.99	68.20	16.69	H
5458.390	61.67	-27.06	33.70	55.03	74.00	12.33	H
5469.490	66.69	-27.06	33.70	60.05	68.20	1.51	H

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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)
17925.750	55.89	-25.55	42.30	39.14	74.00	18.11	V
17917.500	55.83	-25.55	42.30	39.08	74.00	18.17	H
13629.150	51.71	-29.88	40.60	40.99	68.20	16.49	V
13697.900	51.63	-29.88	40.70	40.81	68.20	16.57	H
5148.660	73.23	-27.27	32.70	67.80	74.00	0.77	H
5149.900	71.13	-27.27	32.70	65.70	74.00	2.87	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)
17902.100	56.01	-25.55	42.30	39.26	74.00	17.99	V
17976.900	55.77	-25.55	42.30	39.02	74.00	18.23	H
14146.700	51.76	-28.86	40.50	40.12	68.20	16.44	V
13734.750	51.61	-29.41	40.70	40.32	68.20	16.59	V
5351.600	72.91	-27.08	33.50	66.49	74.00	1.09	H
5350.768	70.59	-27.08	33.50	64.17	74.00	3.41	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)
17945.550	56.29	-25.55	42.30	39.54	74.00	17.71	H
17940.600	56.16	-25.55	42.30	39.41	74.00	17.84	V
13712.200	52.10	-29.88	40.70	41.28	68.20	16.10	H
14200.050	51.82	-28.86	40.40	40.28	68.20	16.38	V
5451.010	59.47	-27.06	33.70	52.83	74.00	14.53	H
5469.985	64.93	-27.06	33.70	58.29	68.20	3.27	H

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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)
17941.150	55.87	-25.55	42.30	39.12	74.00	18.13	V
17860.850	55.72	-25.55	42.30	38.97	74.00	18.28	H
13691.300	51.79	-29.88	40.70	40.97	68.20	16.41	H
13885.450	51.66	-29.33	40.90	40.09	68.20	16.54	H
5144.340	68.93	-27.34	32.70	63.57	74.00	5.07	H
5149.340	68.89	-27.27	32.70	63.46	74.00	5.11	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)
17930.700	56.58	-25.55	42.30	39.83	74.00	17.42	V
17825.100	56.47	-25.55	42.30	39.72	74.00	17.53	H
14038.900	51.35	-28.98	40.70	39.63	68.20	16.85	V
14141.750	51.33	-28.86	40.50	39.69	68.20	16.87	V
5351.616	70.15	-27.08	33.50	63.73	74.00	3.85	H
5351.328	69.53	-27.08	33.50	63.11	74.00	4.47	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)
17734.900	55.87	-27.04	42.30	40.61	74.00	18.13	V
17922.450	55.78	-25.55	42.30	39.03	74.00	18.22	H
14191.250	51.58	-28.86	40.40	40.04	68.20	16.62	H
14147.800	51.37	-28.86	40.50	39.73	68.20	16.83	V
5458.465	63.44	-27.06	33.70	56.80	74.00	10.56	H
5466.700	63.86	-27.06	33.70	57.22	68.20	4.34	H

Conclusion: PASS

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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:

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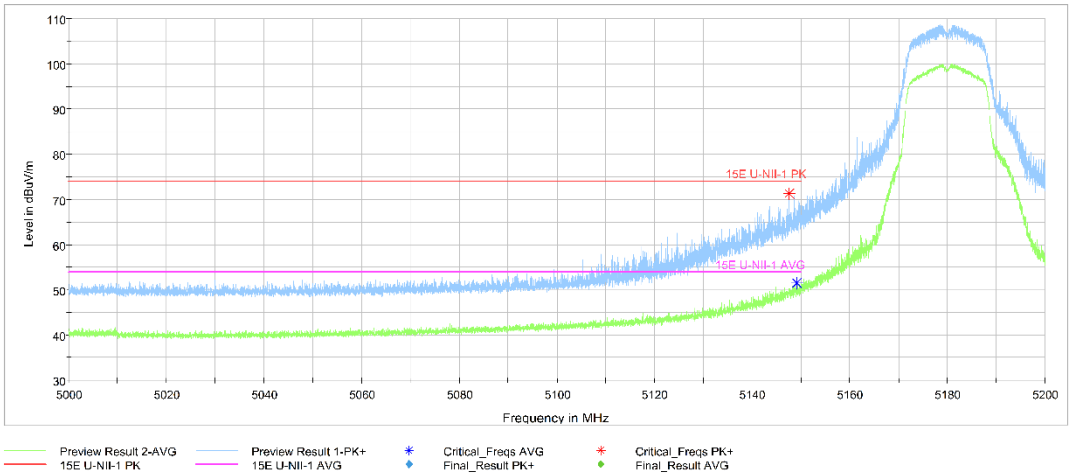

Fig. 1 Band Edges (802.11a Ch36, 5180MHz)

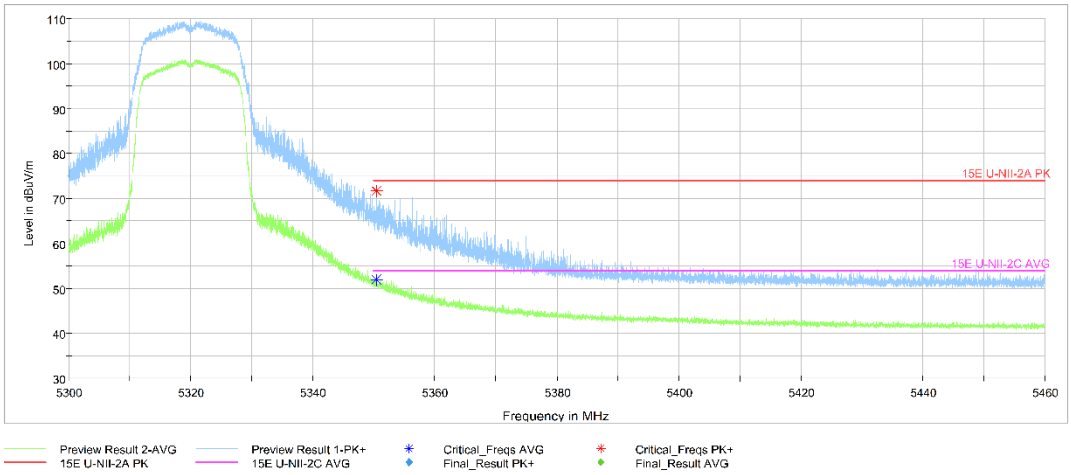

Fig. 2 Band Edges (802.11a Ch64, 5320MHz)

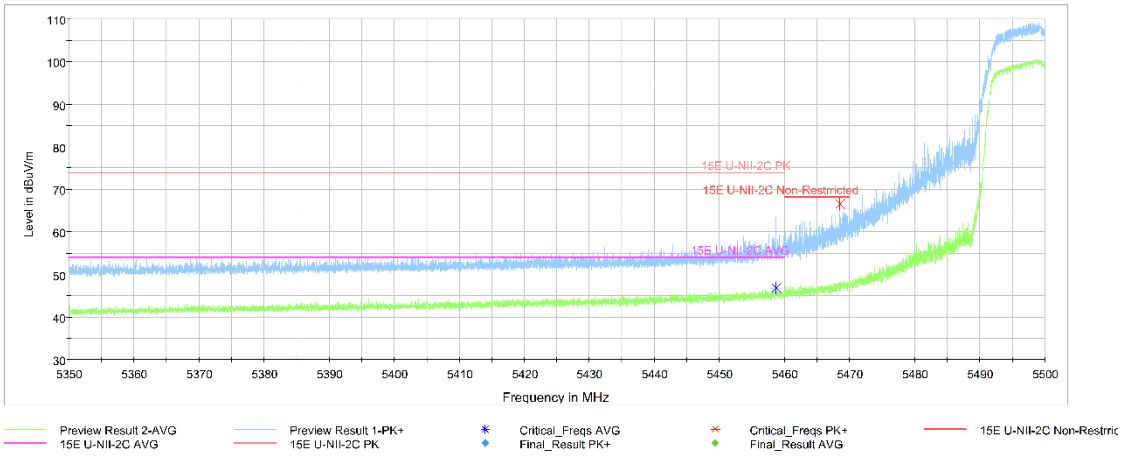

Fig. 3 Band Edges (802.11a Ch100, 5500MHz)

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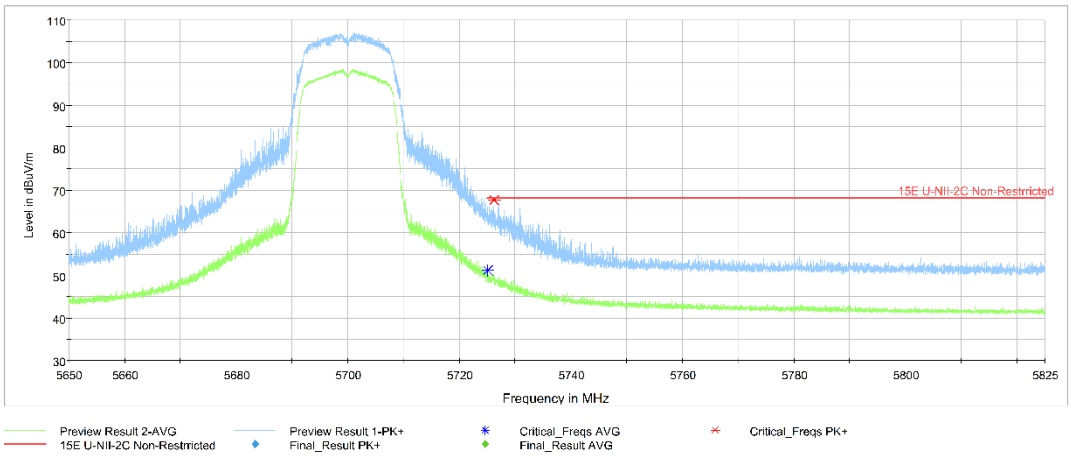

Fig. 4 Band Edges (802.11a Ch140, 5700MHz)

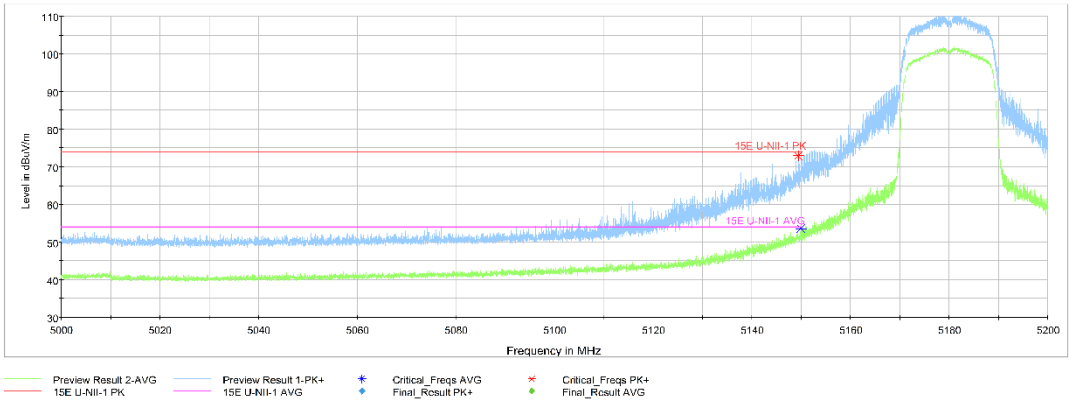

Fig. 5 Band Edges (802.11n-HT20 Ch36, 5180MHz)

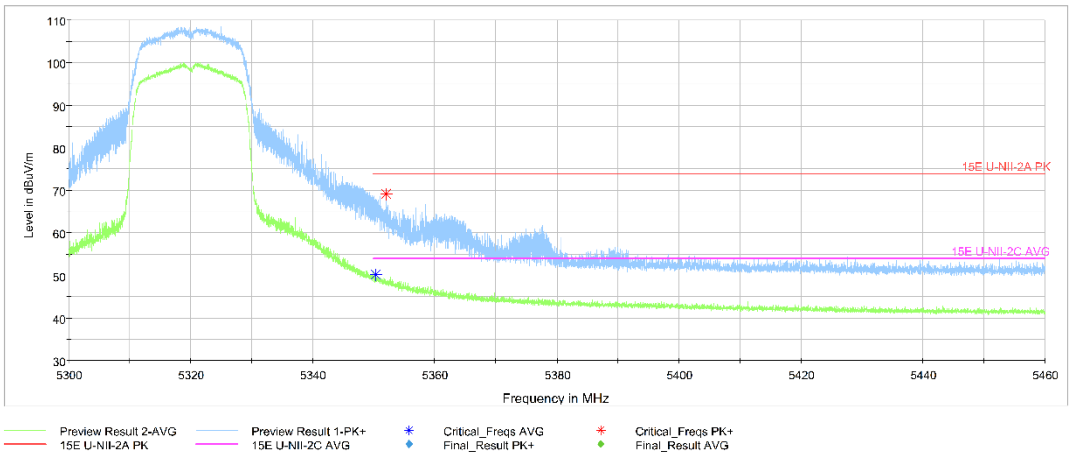

Fig. 6 Band Edges (802.11n-HT20 Ch64, 5320MHz)

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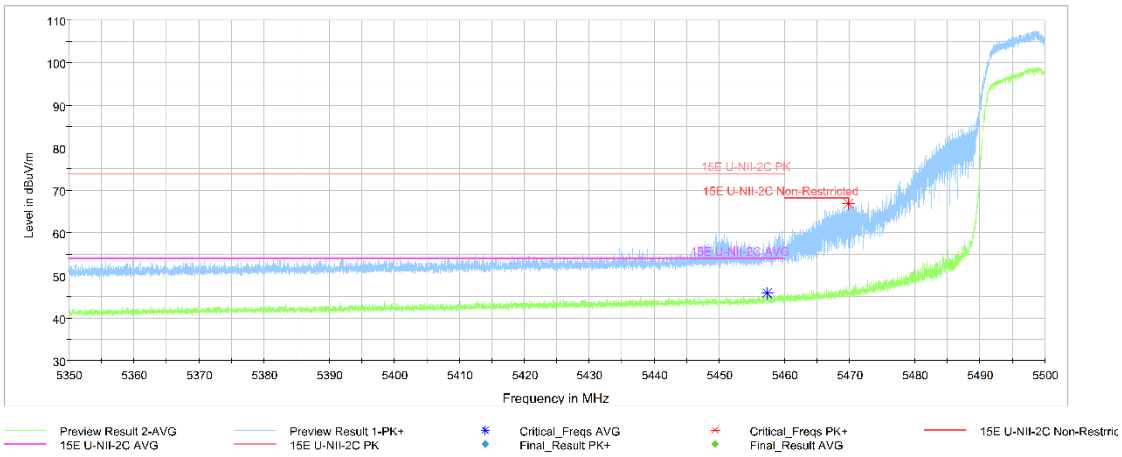

Fig. 7 Band Edges (802.11n-HT20 Ch100, 5500MHz)

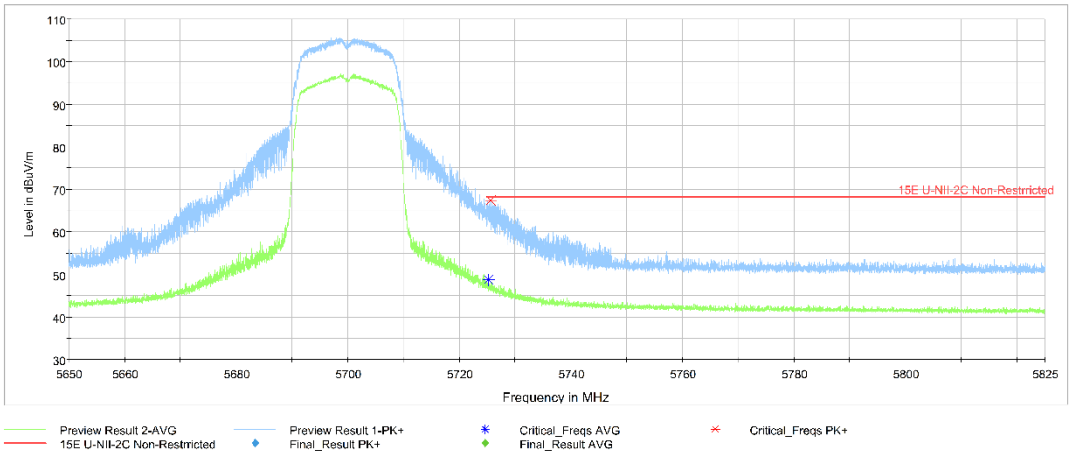

Fig. 8 Band Edges (802.11n-HT20 Ch140, 5700MHz)

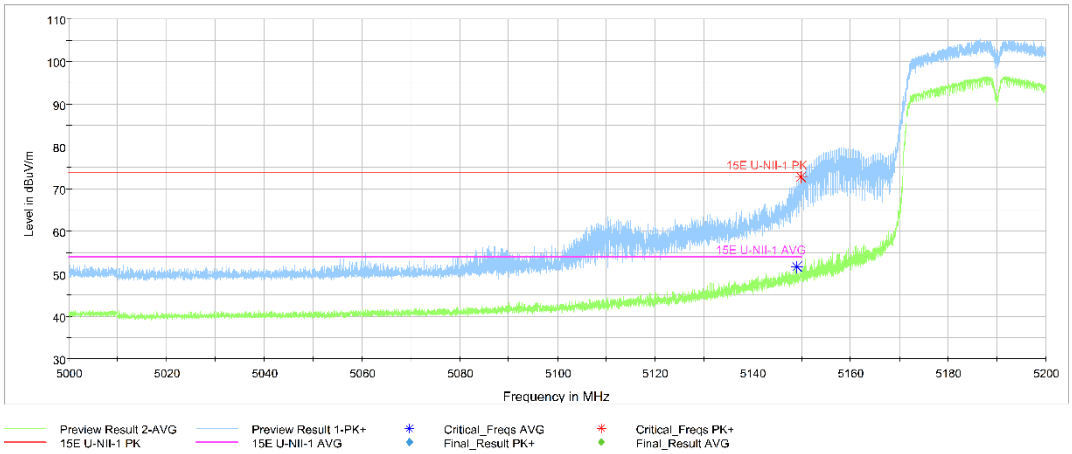

Fig. 9 Band Edges (802.11n-HT40 Ch38, 5190MHz)

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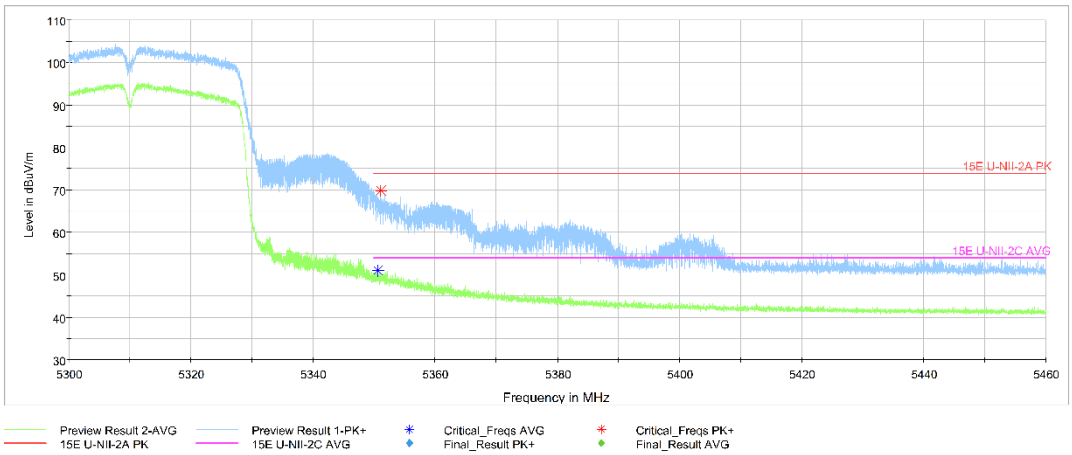

Fig. 10 Band Edges (802.11n-HT40 Ch62, 5310MHz)

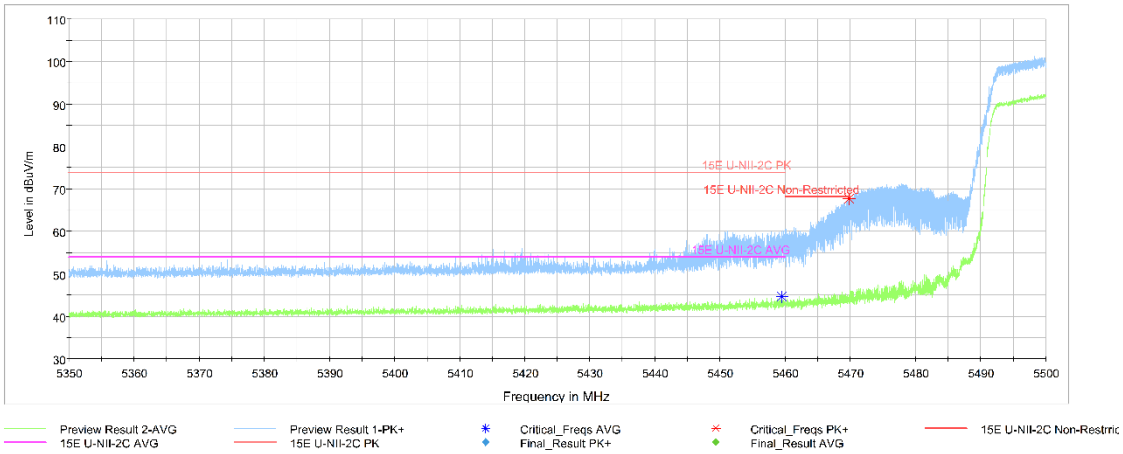

Fig. 11 Band Edges (802.11n-HT40 Ch102, 5510MHz)

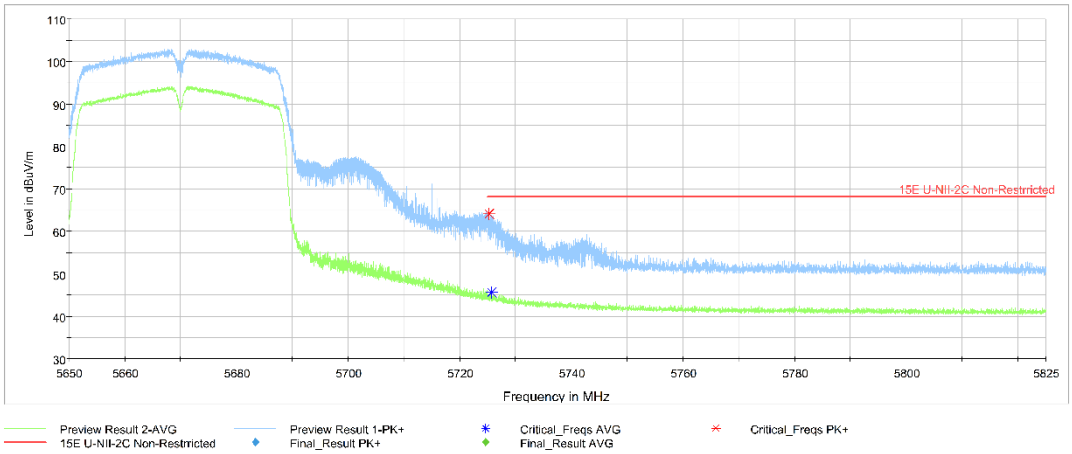

Fig. 12 Band Edges (802.11n-HT40 Ch134, 5670MHz)

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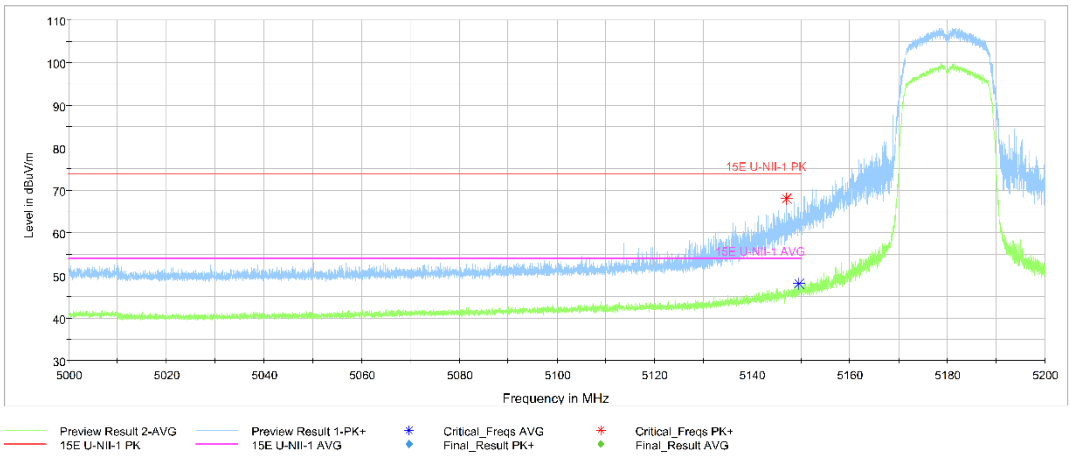

Fig. 13 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

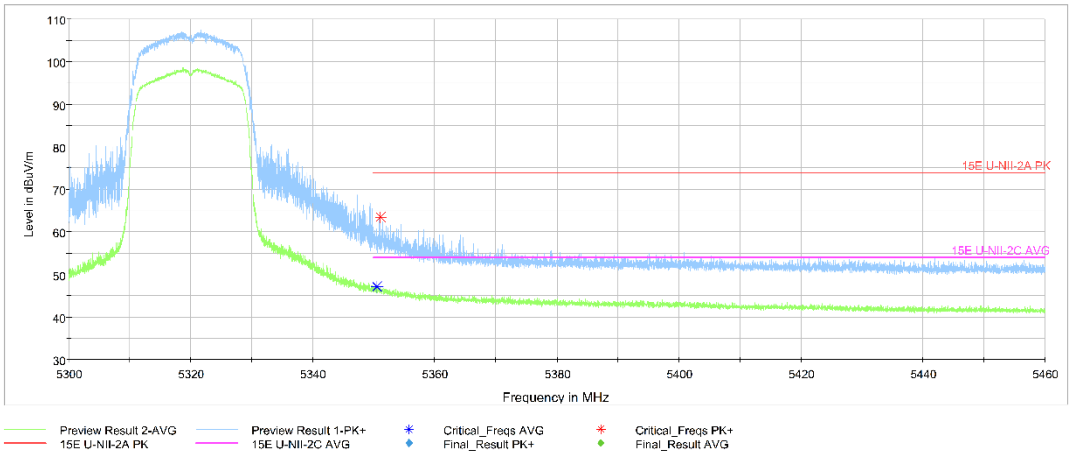

Fig. 14 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

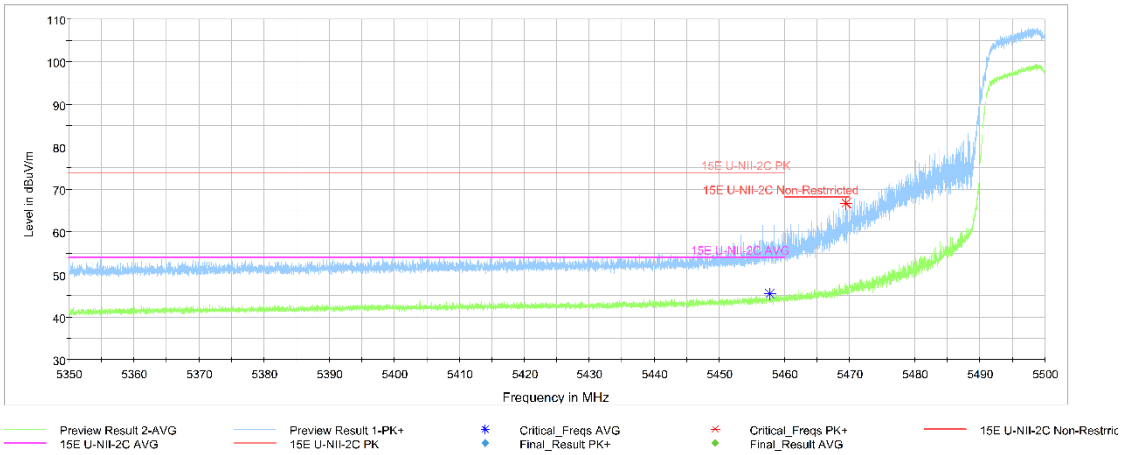

Fig. 15 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

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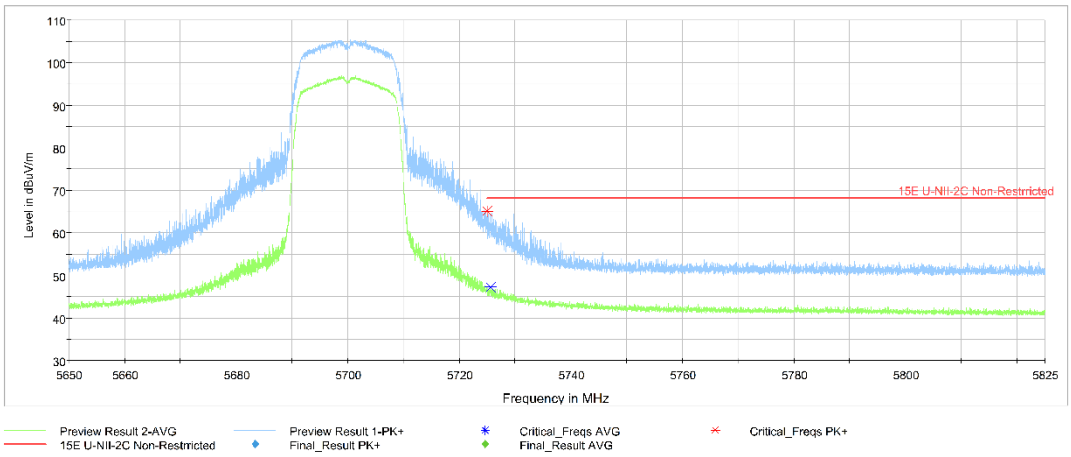

Fig. 16 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

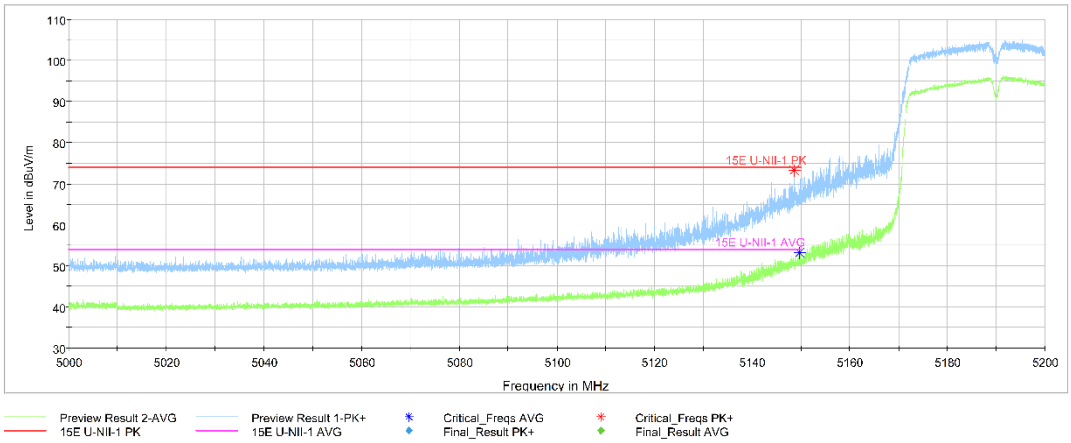

Fig. 17 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

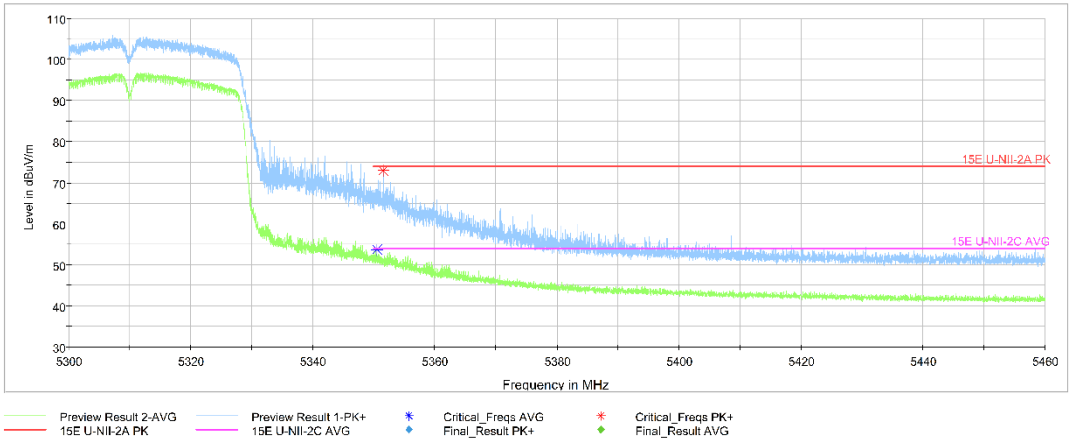

Fig. 18 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

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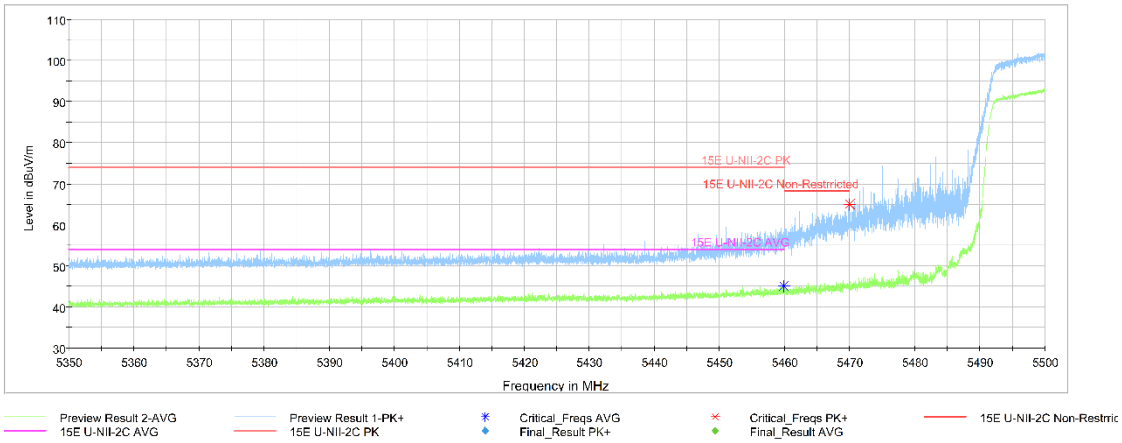

Fig. 19 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

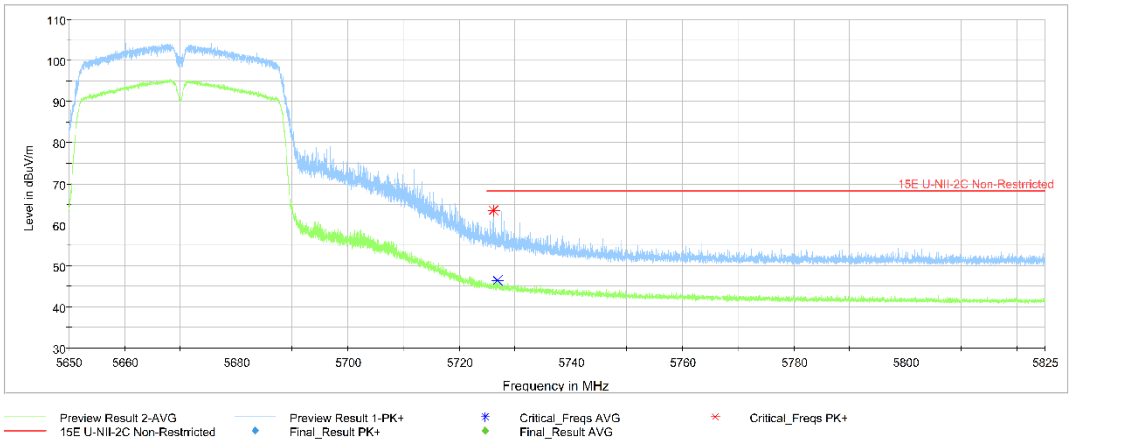

Fig. 20 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

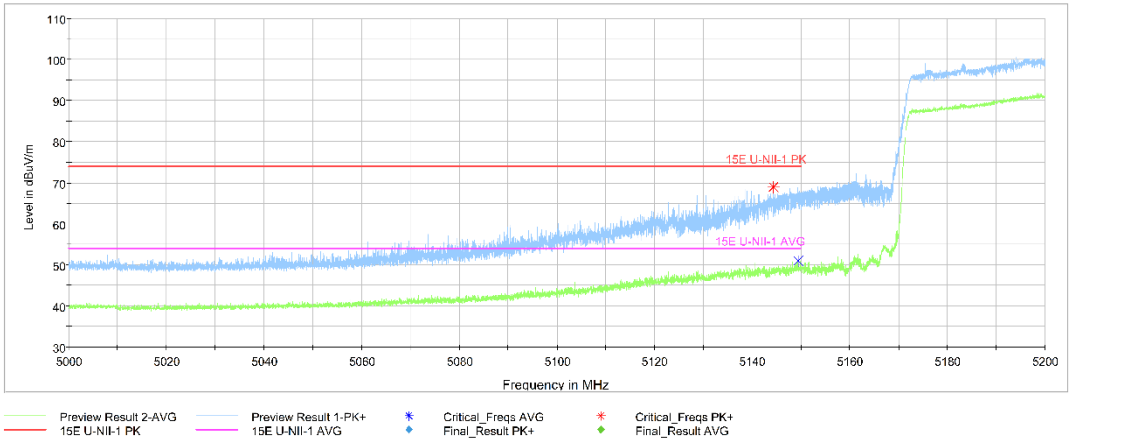

Fig. 21 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

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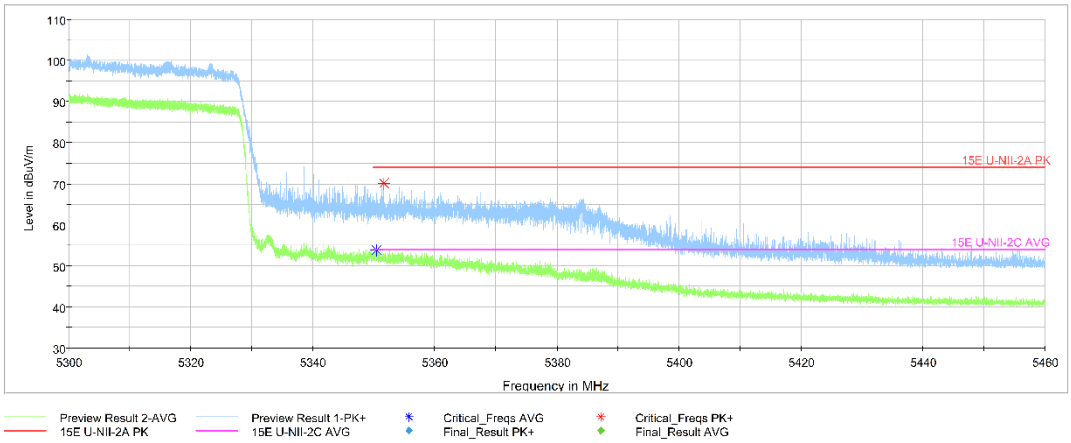

Fig. 22 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

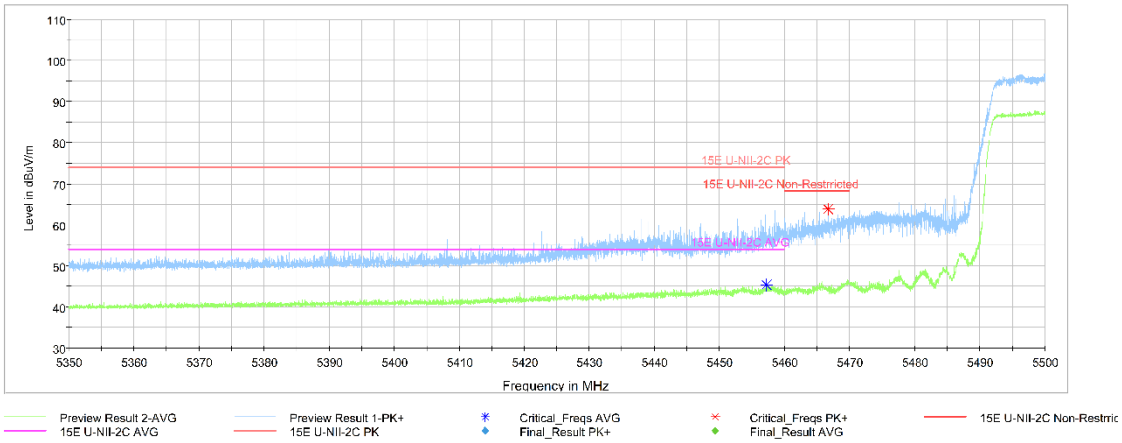

Fig. 23 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

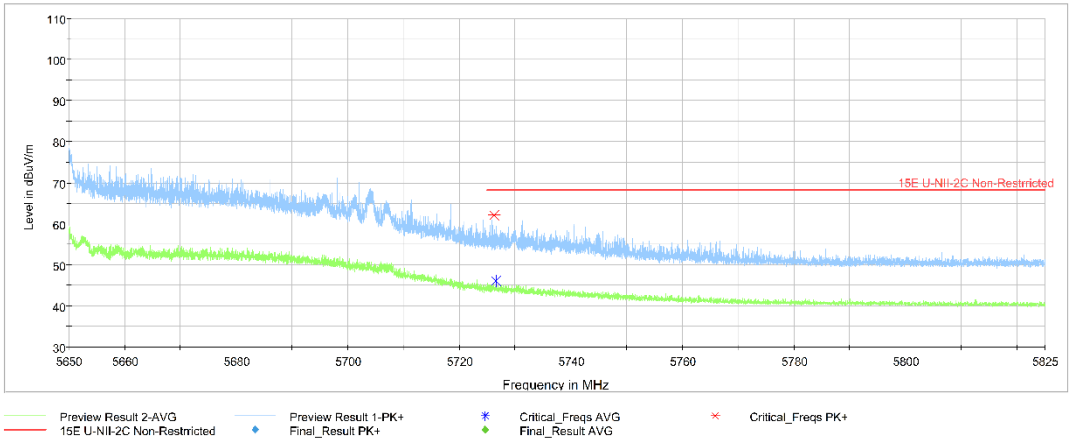

Fig. 24 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

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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.

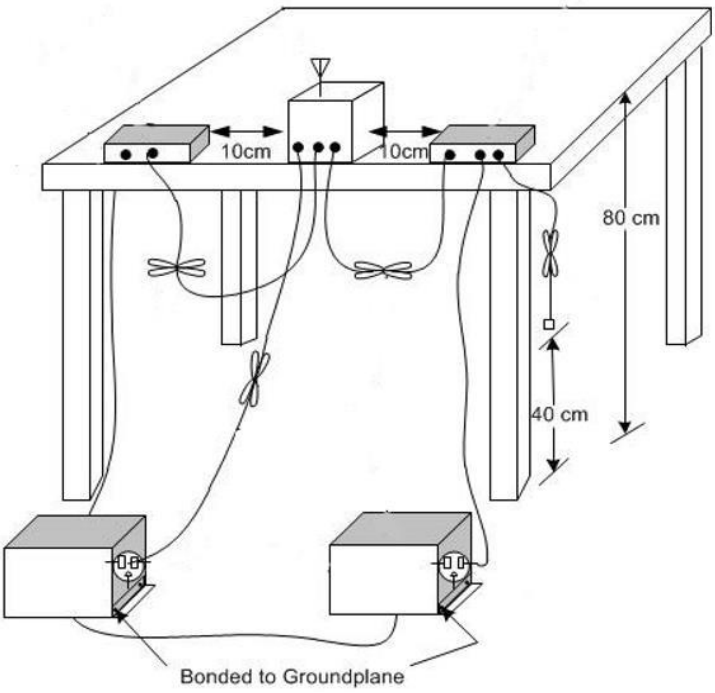
The measurement bandwidth is:

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



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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:

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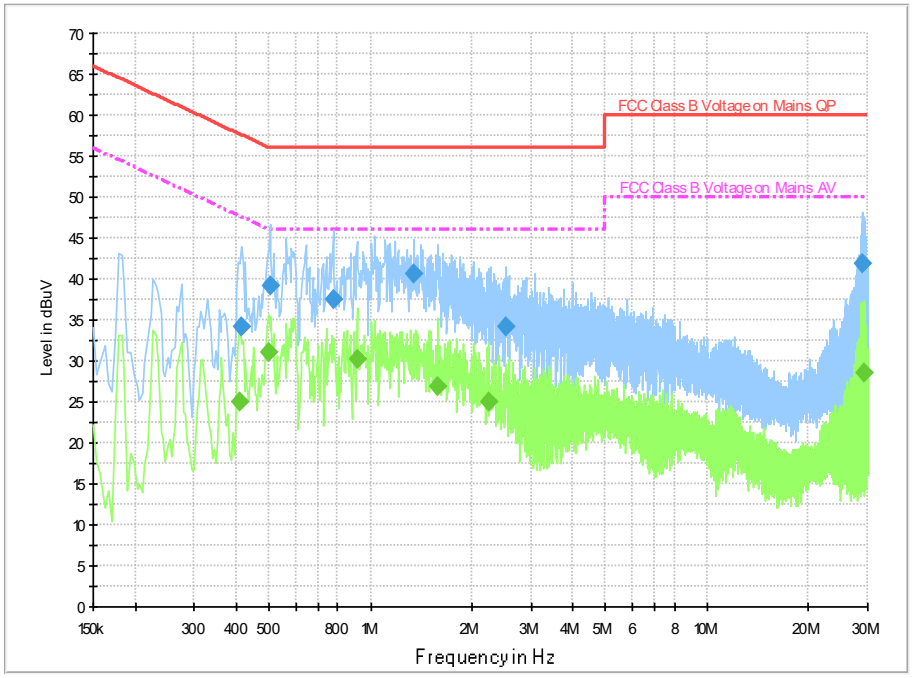

Fig.25 Conducted Emission(802.11a, Ch36, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.414000	34.3	2000.0	9.000	On	L1	20.0	23.3	57.6	
0.502000	39.1	2000.0	9.000	On	L1	20.0	16.9	56.0	
0.774000	37.4	2000.0	9.000	On	L1	19.9	18.6	56.0	
1.342000	40.6	2000.0	9.000	On	L1	19.9	15.4	56.0	
2.522000	34.1	2000.0	9.000	On	L1	19.8	21.9	56.0	
29.102000	42.0	2000.0	9.000	On	L1	20.1	18.0	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.410000	25.0	2000.0	9.000	On	N	19.9	22.6	47.6	
0.498000	30.9	2000.0	9.000	On	N	19.9	15.1	46.0	
0.914000	30.2	2000.0	9.000	On	L1	19.9	15.8	46.0	
1.586000	26.9	2000.0	9.000	On	L1	19.8	19.1	46.0	
2.254000	25.0	2000.0	9.000	On	L1	19.8	21.0	46.0	
29.226000	28.6	2000.0	9.000	On	L1	20.1	21.4	50.0	

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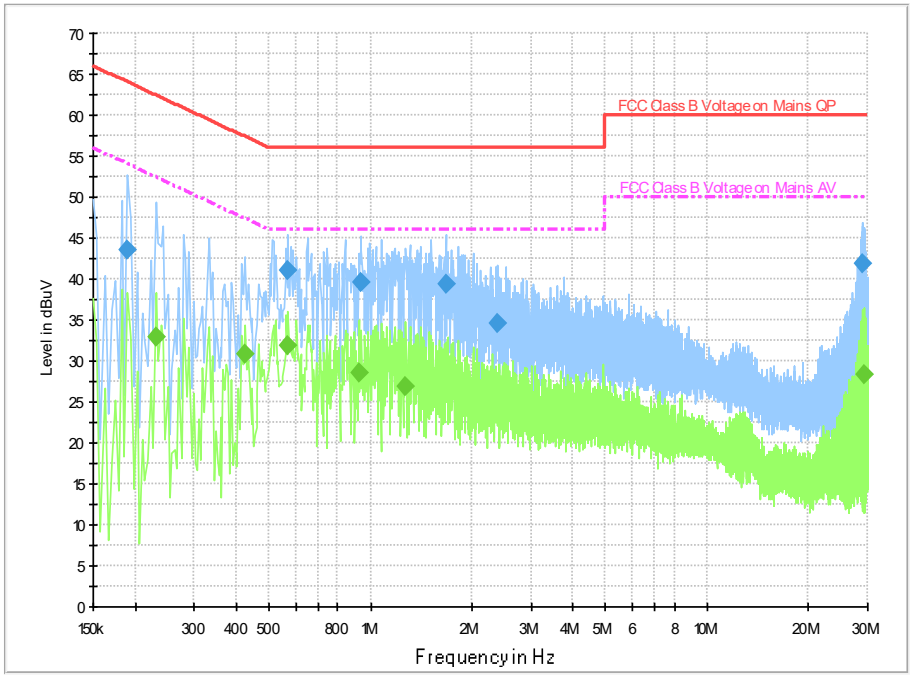

Fig.26 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.190000	43.6	2000.0	9.000	On	L1	19.9	20.5	64.0	
0.570000	41.1	2000.0	9.000	On	L1	20.0	14.9	56.0	
0.938000	39.5	2000.0	9.000	On	L1	19.9	16.5	56.0	
1.670000	39.5	2000.0	9.000	On	L1	19.8	16.5	56.0	
2.386000	34.6	2000.0	9.000	On	L1	19.8	21.4	56.0	
29.038000	41.8	2000.0	9.000	On	L1	20.1	18.2	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.230000	32.9	2000.0	9.000	On	L1	19.9	19.6	52.4	
0.426000	30.9	2000.0	9.000	On	N	19.9	16.4	47.3	
0.570000	32.0	2000.0	9.000	On	N	19.9	14.0	46.0	
0.922000	28.5	2000.0	9.000	On	L1	19.9	17.5	46.0	
1.274000	26.8	2000.0	9.000	On	L1	19.9	19.2	46.0	
29.210000	28.4	2000.0	9.000	On	L1	20.1	21.6	50.0	

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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% ofthe 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

EUT ID: UT28a

Measurement Result:

TestMode	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	5180	17.191	5171.4233	5188.6146	---	---
	5200	17.197	5191.4165	5208.6140	---	---
	5240	17.206	5231.3923	5248.5987	---	---
	5260	17.158	5251.4670	5268.6250	---	---
	5280	17.23	5271.4075	5288.6378	---	---
	5320	17.256	5311.4074	5328.6638	---	---
	5500	17.226	5491.4102	5508.6358	---	---
	5580	17.138	5571.4284	5588.5667	---	---
	5700	17.185	5691.4188	5708.6041	---	---
	5720	17.051	5711.4939	5728.5449	---	---

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	5720	17.051	5711.4939	5728.5449	---	---
11N20SISO	5180	18.172	5170.9009	5189.0733	---	---
	5200	18.124	5190.9256	5209.0494	---	---
	5240	18.186	5230.8821	5249.0677	---	---
	5260	18.118	5250.9208	5269.0383	---	---
	5280	18.089	5270.9436	5289.0324	---	---
	5320	18.143	5310.9405	5329.0837	---	---
	5500	18.087	5490.9551	5509.0424	---	---
	5580	18.173	5570.8945	5589.0672	---	---
	5700	18.181	5690.9143	5709.0950	---	---
	5720	18.138	5710.9453	5729.0838	---	---
	5720	18.139	5710.9453	5729.0838	---	---
11AC40SISO	5190	36.46	5171.8260	5208.2860	---	---
	5230	36.521	5211.7532	5248.2738	---	---
	5270	36.549	5251.8055	5288.3543	---	---
	5310	36.47	5291.8394	5328.3091	---	---
	5510	36.389	5491.8093	5528.1985	---	---
	5550	36.506	5531.8029	5568.3086	---	---
	5670	36.479	5651.7588	5688.2377	---	---
	5710	36.45	5691.8878	5728.3380	---	---
	5710	36.450	5691.8878	5728.3380	---	---
11AC80SISO	5210	75.478	5172.3217	5247.8002	---	---
	5290	75.299	5252.4969	5327.7964	---	---
	5530	75.336	5492.3914	5567.7278	---	---
	5610	75.418	5572.3182	5647.7361	---	---
	5690	75.595	5652.3120	5727.9074	---	---
	5690	75.595	5652.3120	5727.9074	---	---

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Test graphs as below:

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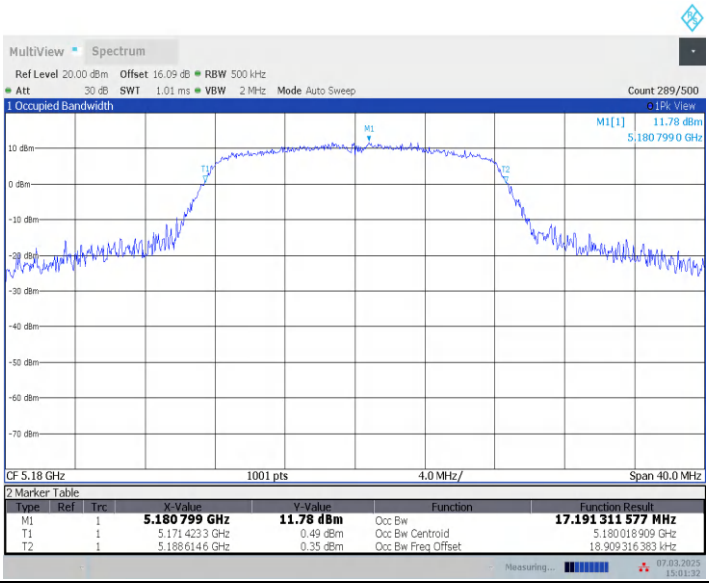

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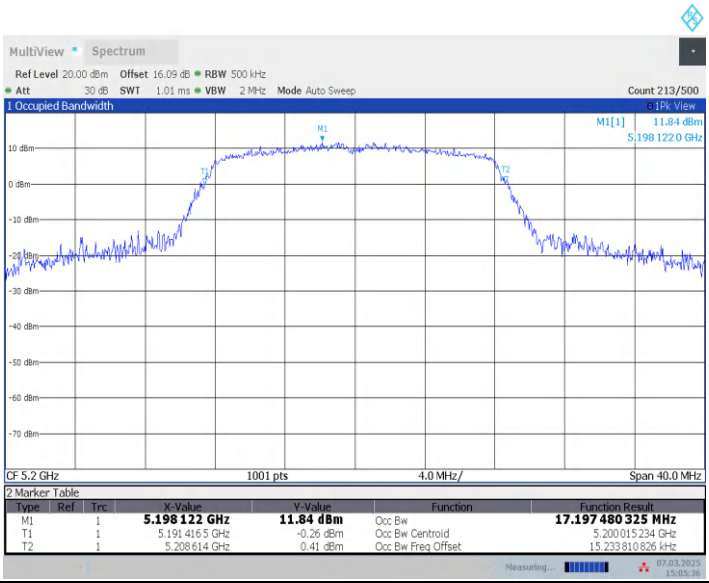

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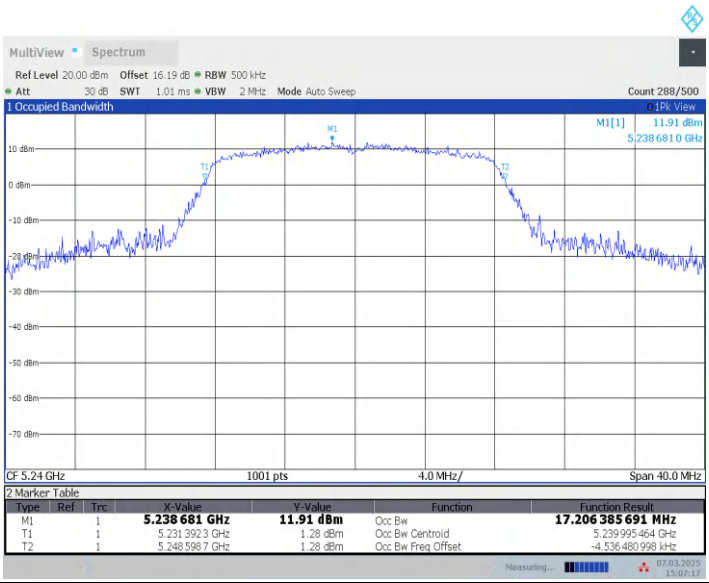

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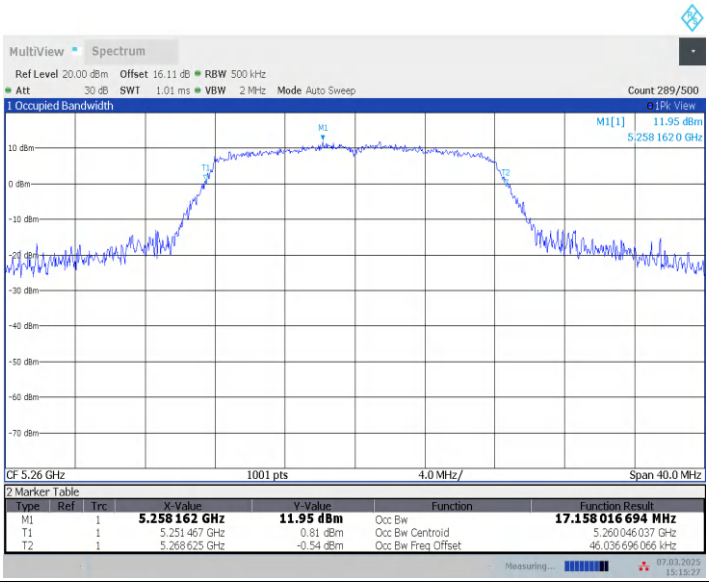

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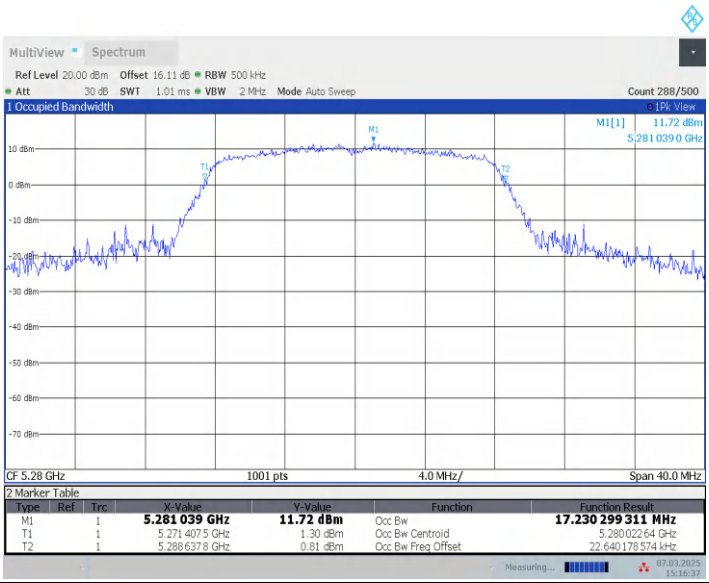

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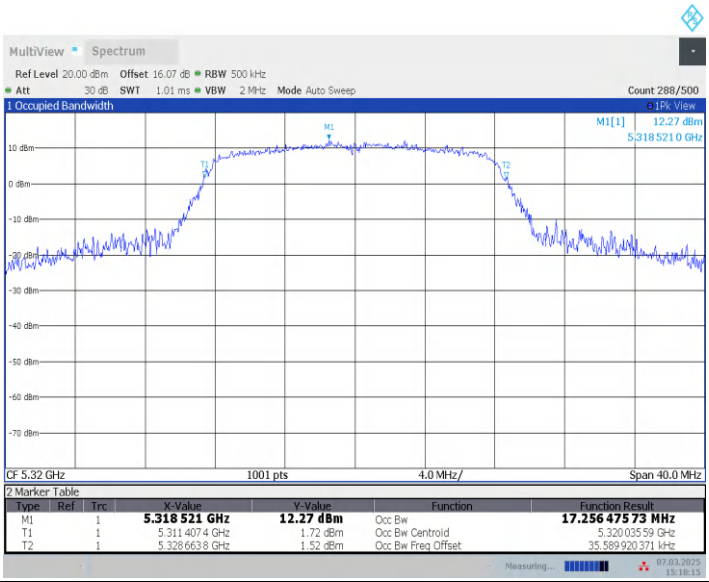

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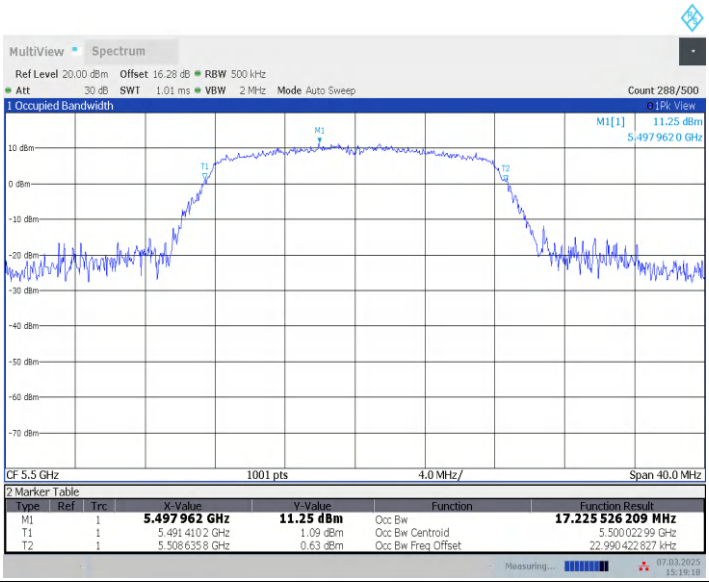

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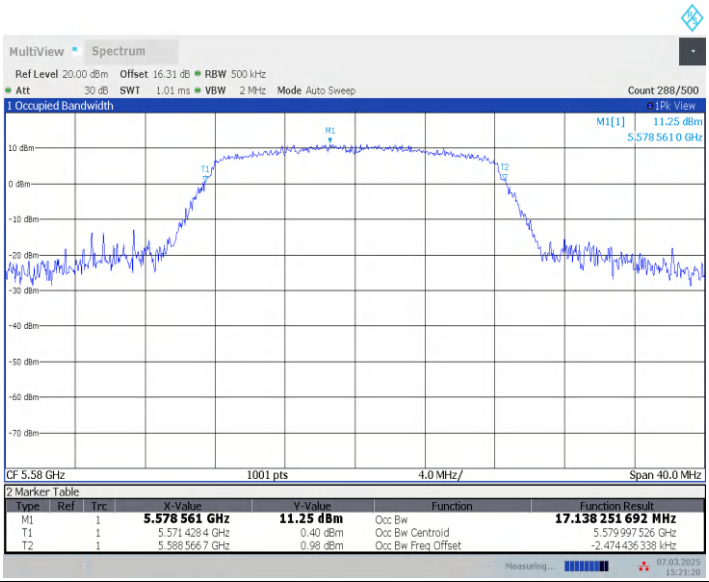

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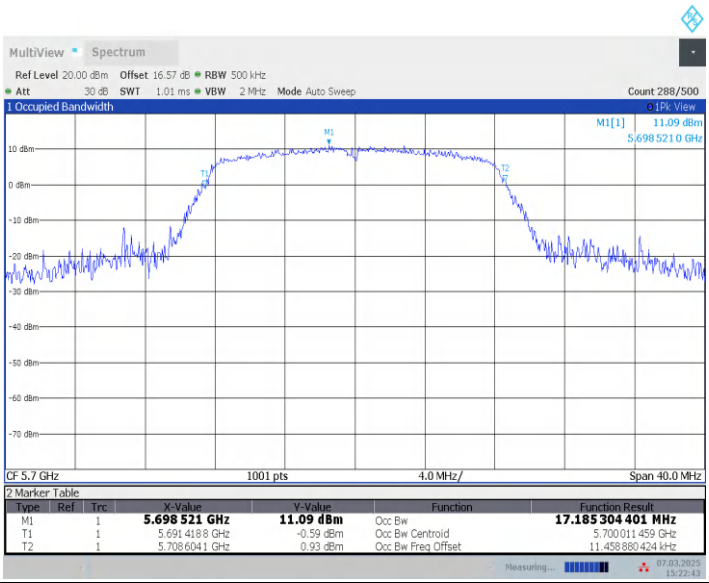

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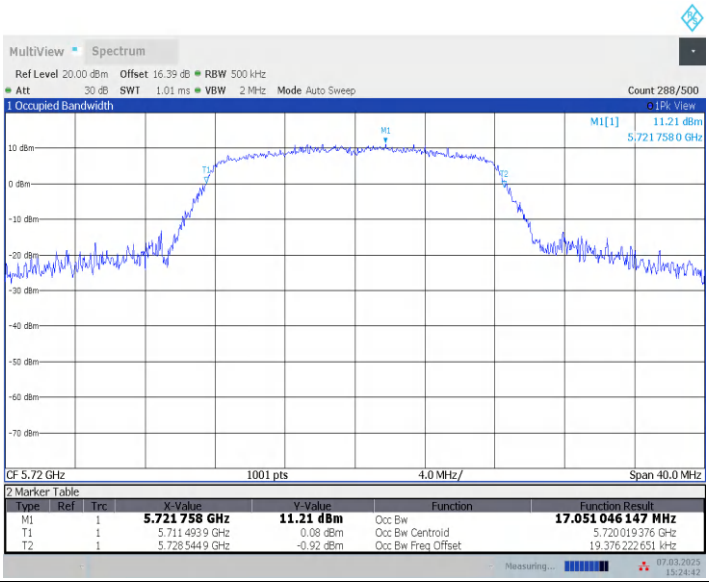

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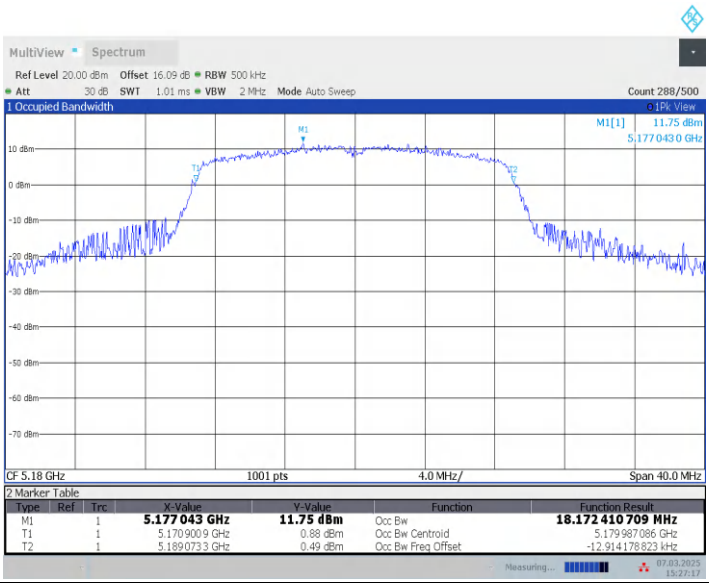

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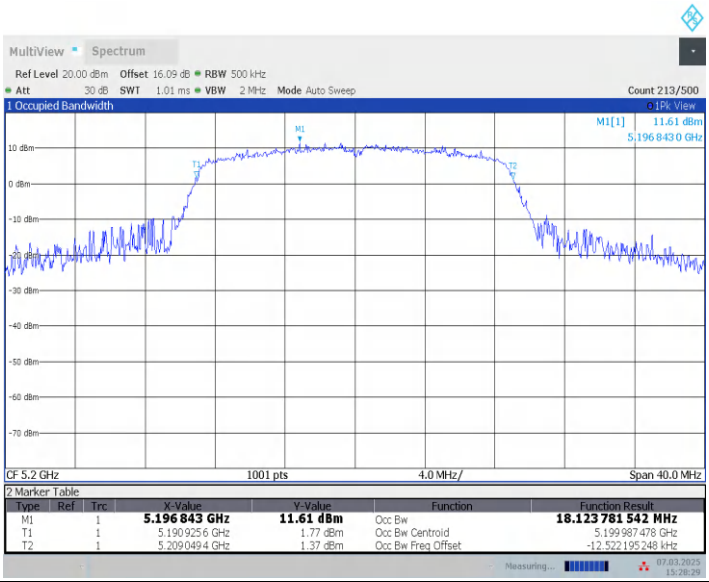

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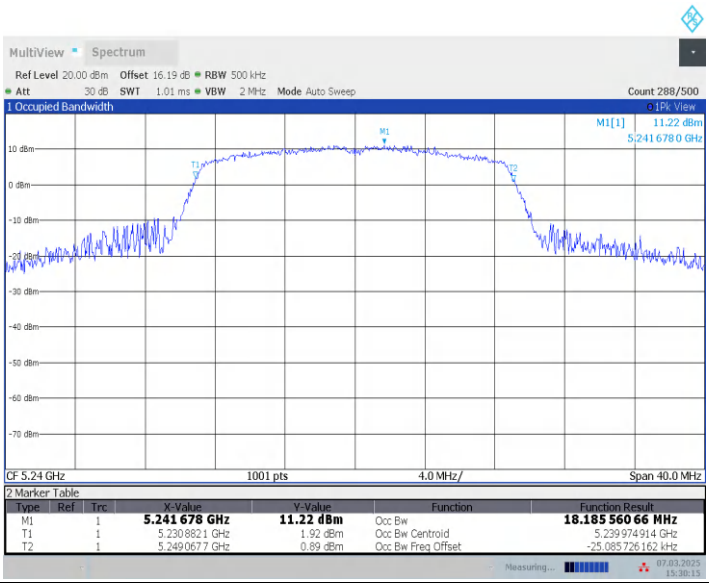

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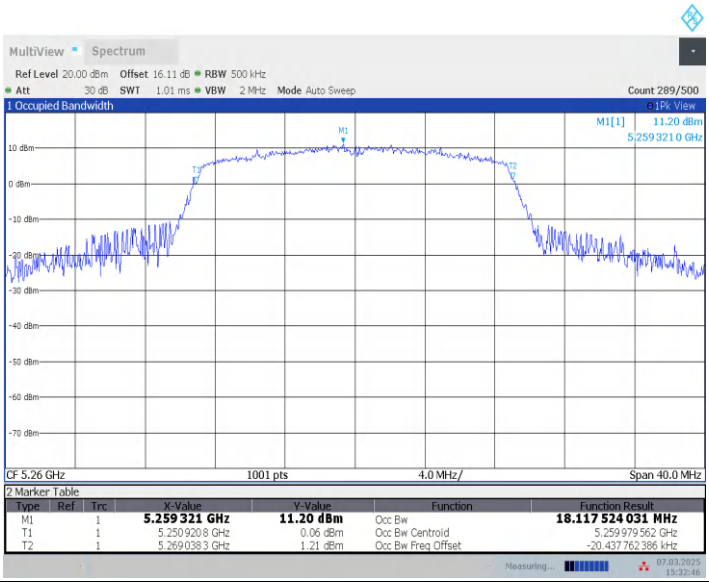

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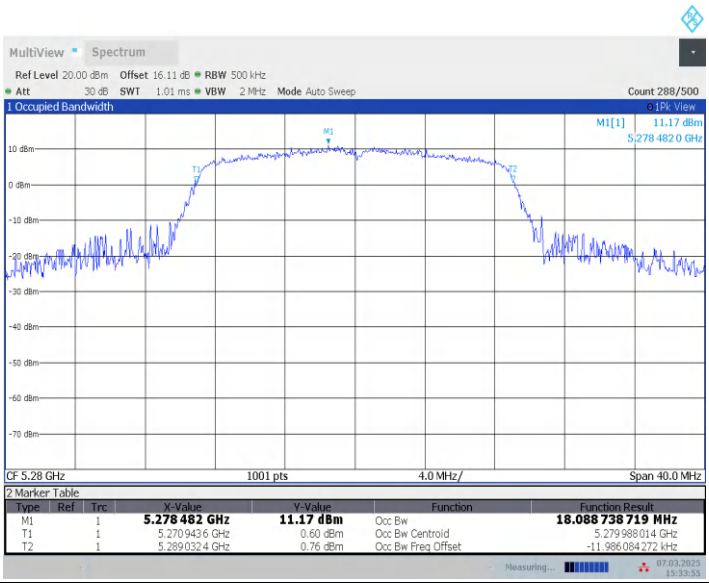

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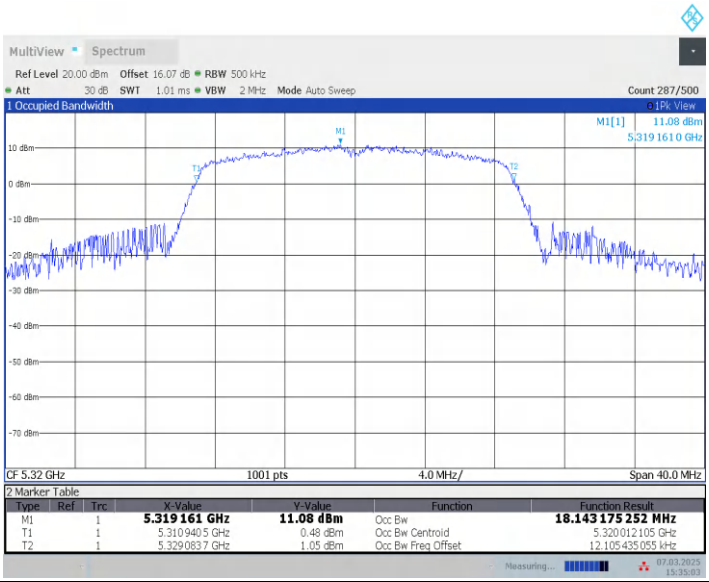

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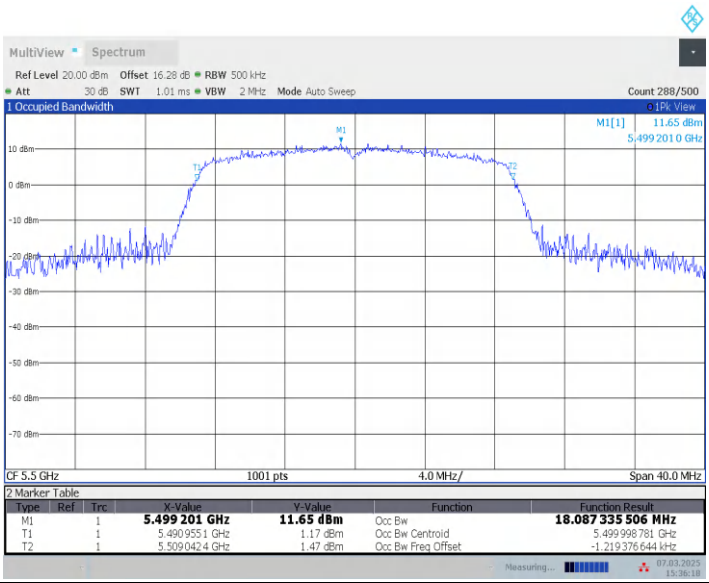

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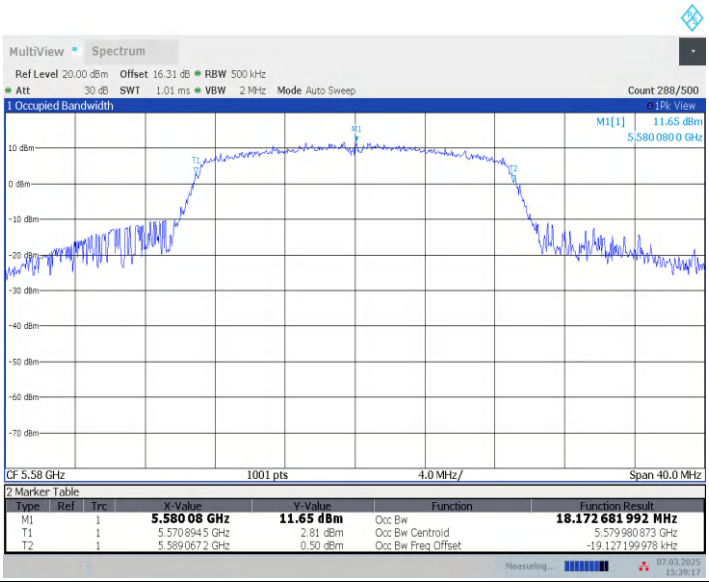

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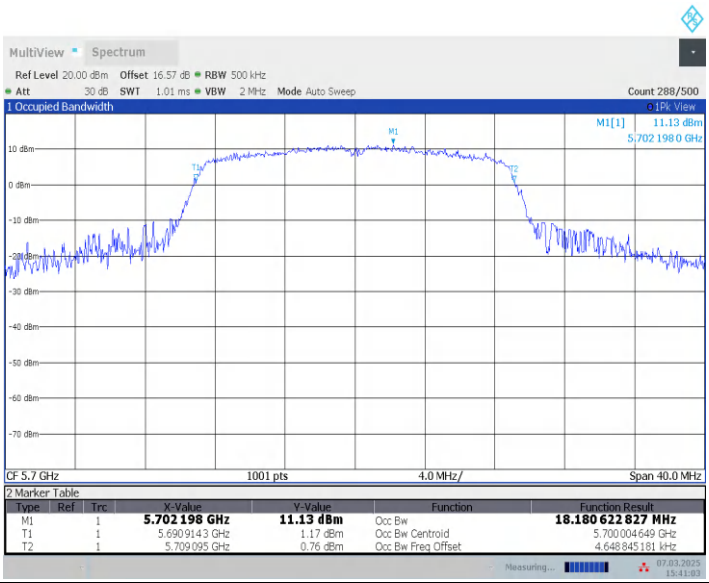

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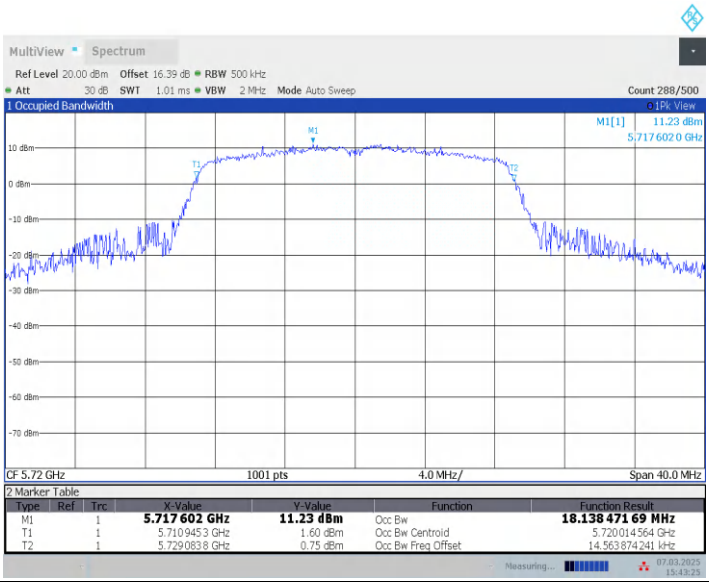

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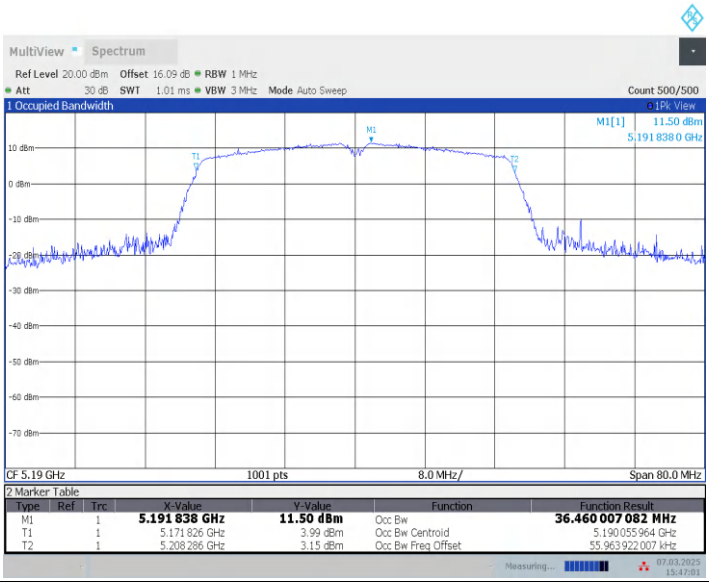

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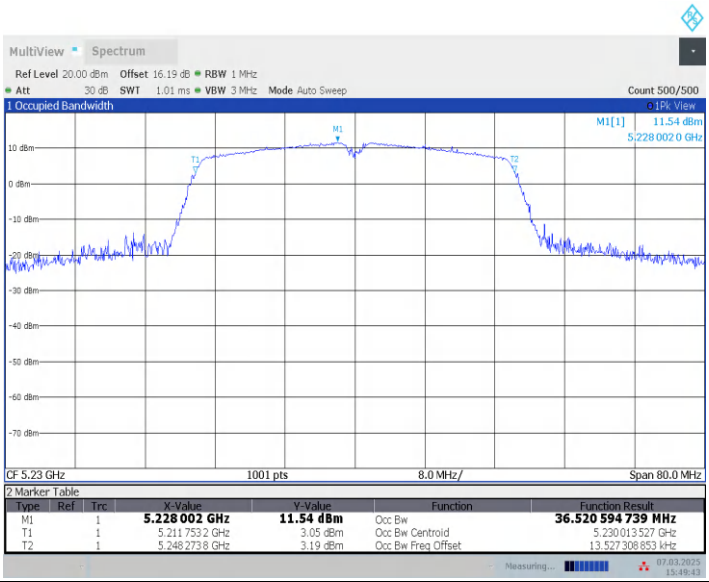

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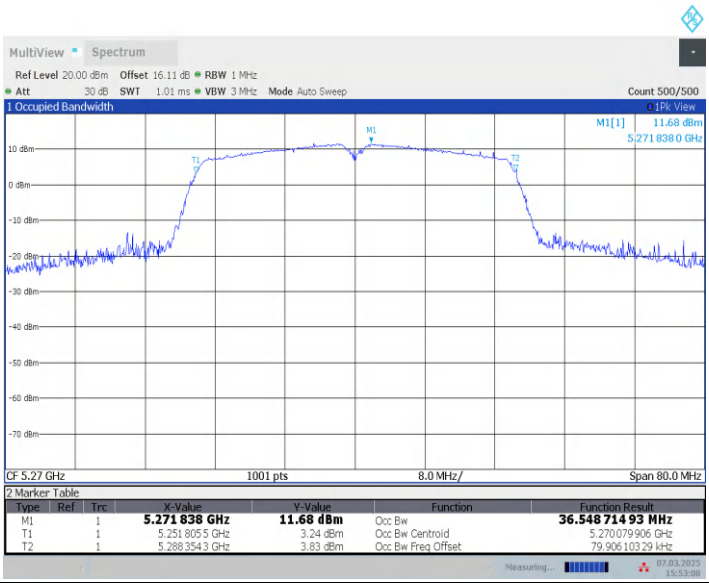

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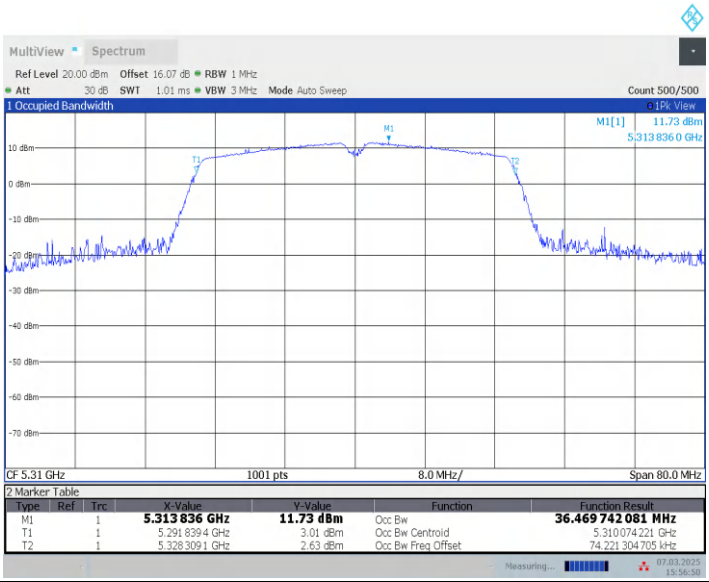

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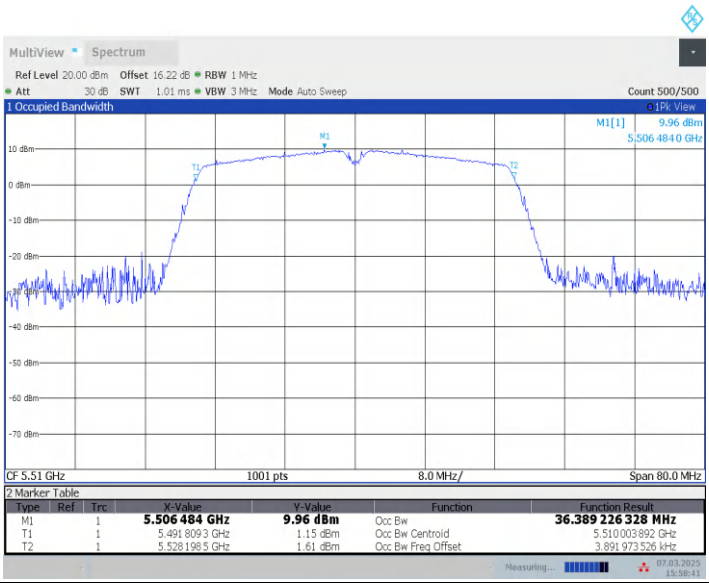

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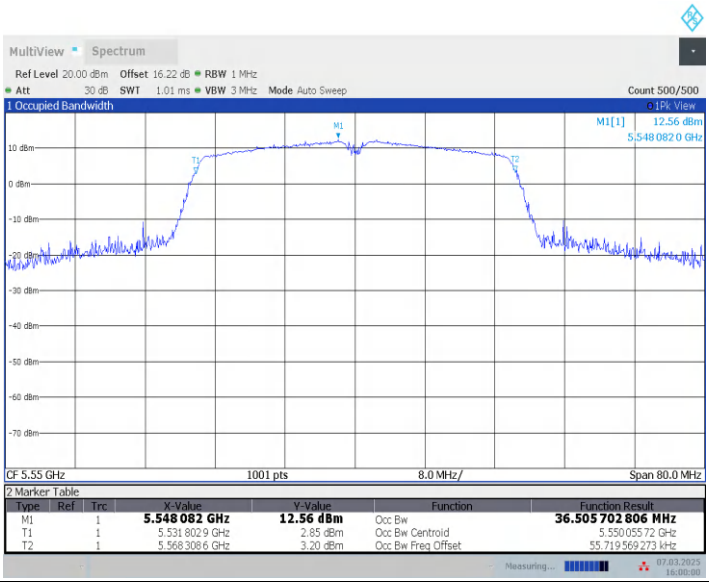

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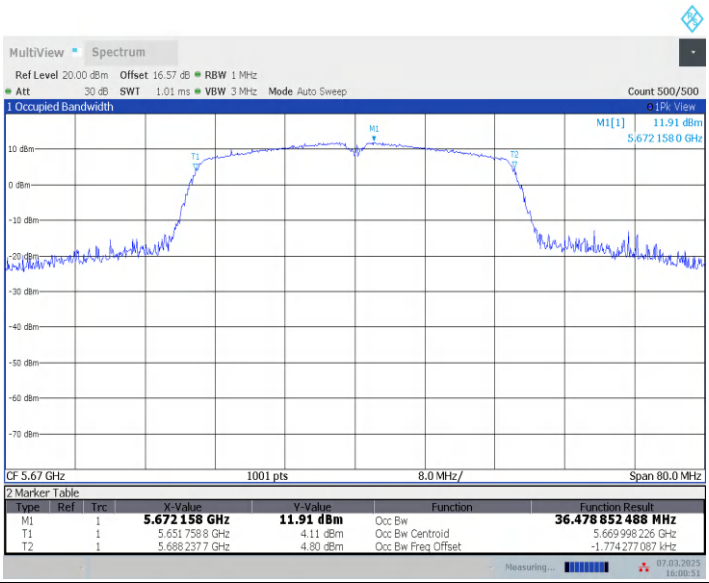

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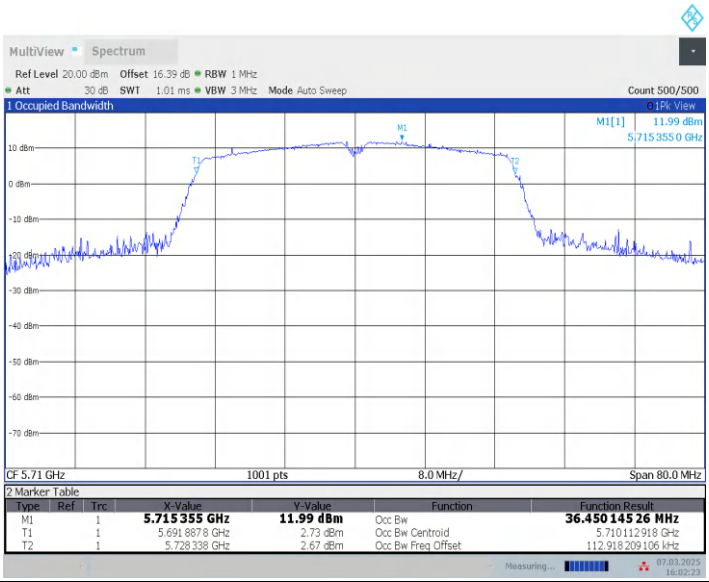

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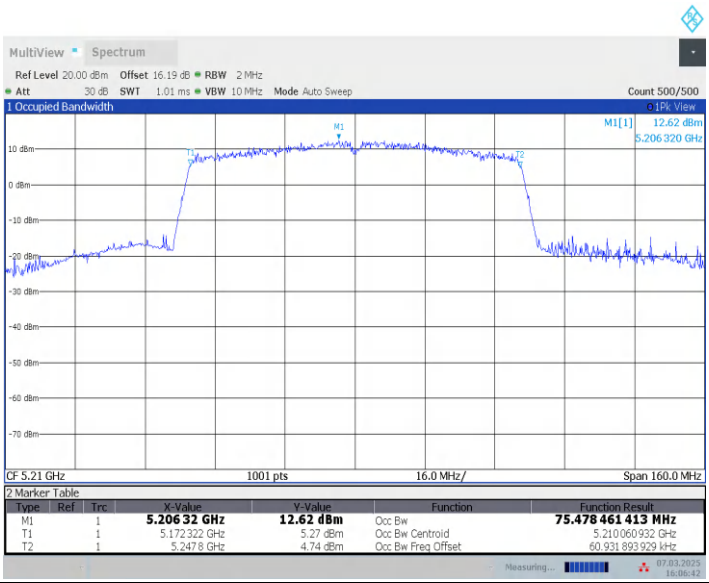

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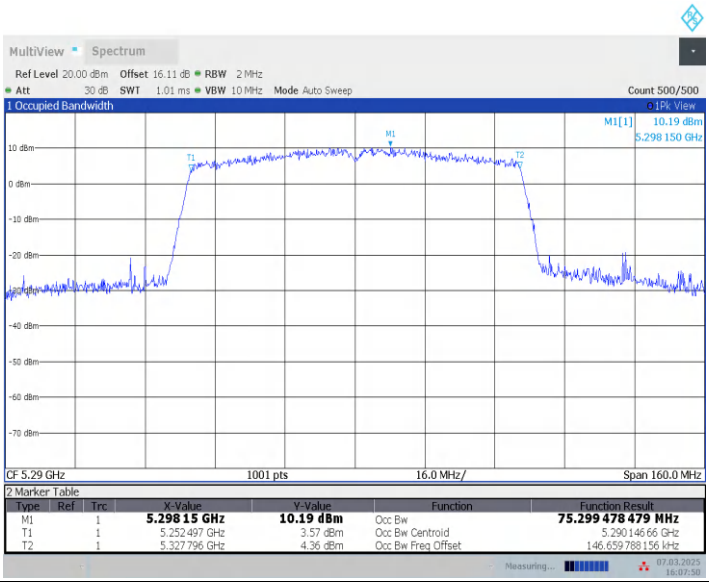

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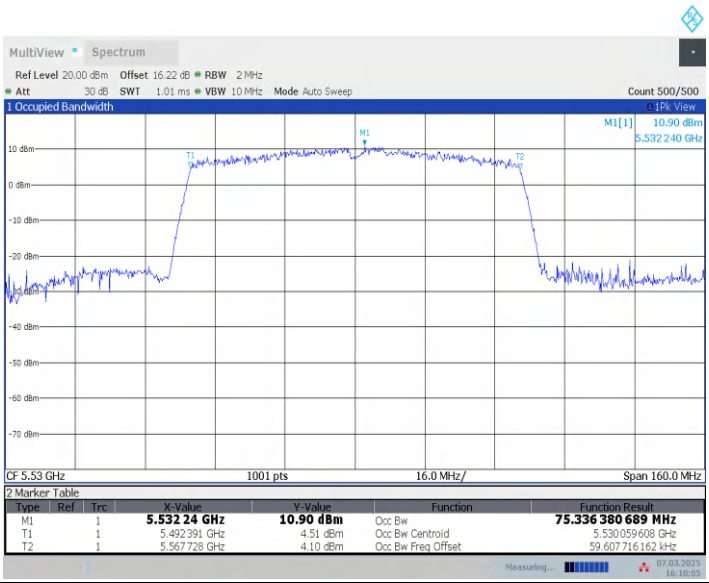

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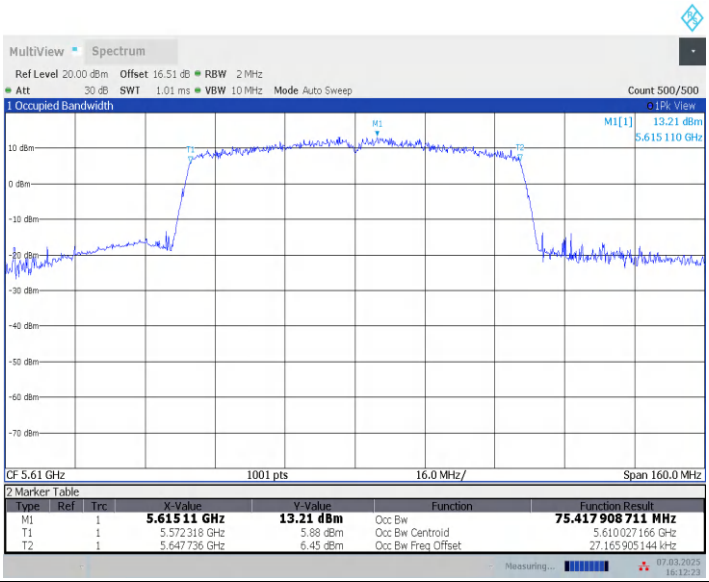

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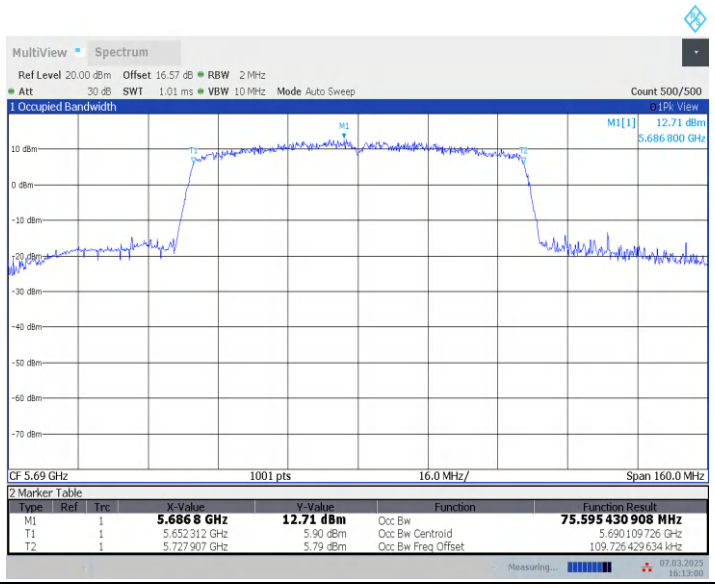

Conclusion: PASS

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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.

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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 *****

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