FCC PART 15E
TEST REPORT
No.23T04Z80940-08

for

TCL Communication Ltd.

Tablet PC

9199S

FCC ID:2ACCJB217

with

Hardware Version: 05

Software Version: 4DS9

Issued Date: 2024-02-26

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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

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

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

REPORT HISTORY

Report Number	Revision	Description	Issue Date
23T04Z80940-08	Rev.0	1st edition	2024-02-26

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

CONTENTS

1. Test Laboratory

1.1. Introduction & Accreditation

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

1.2. Testing Location

Conducted testing Location: CTTL(Huayuan North Road)

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

Radiated testing Location: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing, 100176, P. R. China

1.3. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

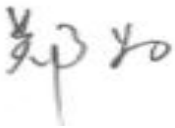
Testing Start Date: 2023-12-26

Testing End Date: 2024-02-26

1.5. Signature

Yao Xingyu

(Prepared this test report)



Zheng Wei

(Reviewed this test report)

Pang Shuai

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City:	Hong Kong
Postal Code:	/
Country:	China
Telephone:	+86 755 3661 1621
Fax:	+86 755 3661 2000-81722

2.2. 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
City:	Hong Kong
Postal Code:	/
Country:	China
Telephone:	+86 755 3661 1621
Fax:	+86 755 3661 2000-81722

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

3.1. About EUT

Description	Tablet PC
Model name	9199S
FCC ID	2ACCJB217
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Nominal Voltage	3.85V
Extreme High Voltage	4.4V
Extreme Low Voltage	3.6V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT33a	354709280001551	05	4DS9	2024-02-01
UT81a	354709280002070	05	4DS9	2024-01-08
UT85a	354709280002054	05	4DS9	2024-01-08

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

UT33a is used for Conduction test, UT81a and UT85a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Note	Manufacturer
AE1	Battery	TLp058DA	TMB
AE2	Charger	/	/
AE3	USB cable	/	/

*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 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

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

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

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

5. Laboratory Environment

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. Test Results

6.1. Summary of Test Results

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

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

Terms used in Verdict column

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

6.2. 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	3.85V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2024-07-04
2	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	1 year	2024-03-06
3	Test Receiver	ESCI	100766	R&S	1 year	2024-03-30
4	LISN	ENV216	101459	R&S	1 year	2024-03-29
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	103015	R&S	1 year	2025-01-18
2	EMI Antenna	VULB9163	9163-235	Schwarzbeck	1 year	2024-02-28
3	EMI Antenna	3117	00139065	ETS	1 year	2024-04-25
4	EMI Antenna	LB-180400 -25-C-KF	2110084000 006	A-INFO	1 year	2024-03-02

Test Item	Software	Manufacturer
Conducted emission	EMC32 V8.53.0	R&S
Radiated emission	EMC32 V10.60.20	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 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

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
30MHz ≤ f ≤ 1GHz	5.29
1GHz ≤ f ≤18GHz	5.62
18GHz ≤ f ≤40GHz	3.52

8.6 AC Power-line Conducted Emission

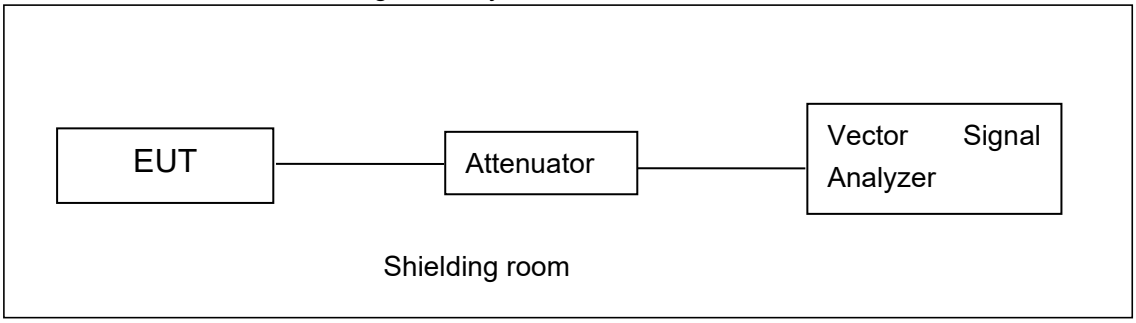
Measurement Uncertainty : 3.10dB,k=2

ANNEX A: Detailed Test Results

A.1. Measurement Method

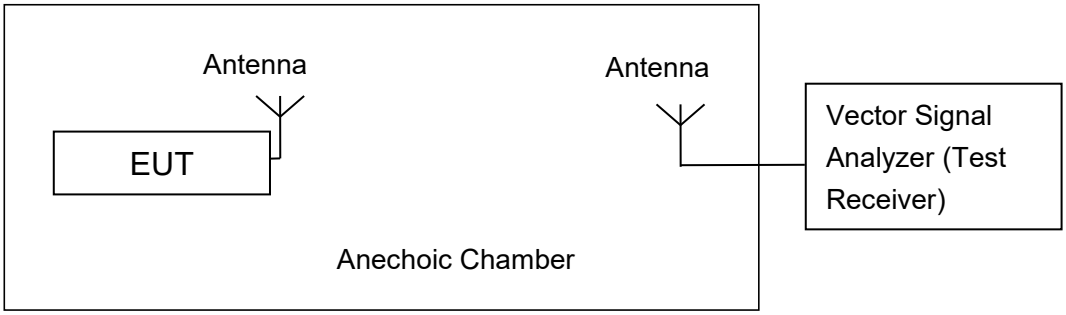
A.1.1. Conducted Measurements

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



A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,
Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;
Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 3MHz;



The measurement is made according to KDB 789033
The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

A.2. Maximum output Power

Measurement Limit and Method:

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

Limit use the less value, and B is the 26dB bandwidth.
The measurementmethod SA-2 is made according to KDB 789033

A.2.1 Antenna Gain

Antenna gain is -1.2dBi and the value is supplied by the applicant or manufacturer.

A.2.2 Maximum output Power-Conducted

EUT ID: UT33a

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	18.27	/	/	/	/	/	/	/
	5200MHz	18.33	/	/	/	/	/	/	/
	5240MHz	18.43	/	/	/	/	/	/	/
	5260MHz	18.39	/	/	/	/	/	/	/
	5280MHz	18.33	/	/	/	/	/	/	/
	5320MHz	18.19	/	/	/	/	/	/	/
	5500MHz	15.56	/	/	/	/	/	/	/
	5580MHz	18.31	/	/	/	/	/	/	/
	5700MHz	14.33	/	/	/	/	/	/	/
	5720MHz	18.12	/	/	/	/	/	/	/

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	17.29	/	/	/	/	/	/	/
	5200MHz	17.25	/	/	/	/	/	/	/
	5240MHz	17.30	/	/	/	/	/	/	/
	5260MHz	17.24	/	/	/	/	/	/	/
	5280MHz	17.16	/	/	/	/	/	/	/
	5320MHz	17.23	/	/	/	/	/	/	/

	5500MHz	15.49	/	/	/	/	/	/	/
	5580MHz	17.20	/	/	/	/	/	/	/
	5700MHz	14.32	/	/	/	/	/	/	/
	5720MHz	17.21	/	/	/	/	/	/	/

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	17.23	/	/	/	/	/	/	/	/
	5200MHz	17.31	/	/	/	/	/	/	/	/
	5240MHz	17.28	/	/	/	/	/	/	/	/
	5260MHz	17.32	/	/	/	/	/	/	/	/
	5280MHz	17.18	/	/	/	/	/	/	/	/
	5320MHz	17.29	/	/	/	/	/	/	/	/
	5500MHz	15.46	/	/	/	/	/	/	/	/
	5580MHz	17.09	/	/	/	/	/	/	/	/
	5700MHz	13.12	/	/	/	/	/	/	/	/
	5720MHz	17.28	/	/	/	/	/	/	/	/

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	17.15	/	/	/	/	/	/	/
	5230MHz	17.26	/	/	/	/	/	/	/
	5270MHz	17.16	/	/	/	/	/	/	/
	5310MHz	16.23	/	/	/	/	/	/	/
	5510MHz	14.29	/	/	/	/	/	/	/
	5550MHz	17.12	/	/	/	/	/	/	/
	5670MHz	17.15	/	/	/	/	/	/	/
	5710MHz	17.13	/	/	/	/	/	/	/

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	16.31	/	/	/	/	/	/	/	/	/
	5230MHz	16.39	/	/	/	/	/	/	/	/	/
	5270MHz	16.22	/	/	/	/	/	/	/	/	/
	5310MHz	16.08	/	/	/	/	/	/	/	/	/
	5510MHz	14.21	/	/	/	/	/	/	/	/	/
	5550MHz	16.14	/	/	/	/	/	/	/	/	/
	5670MHz	16.23	/	/	/	/	/	/	/	/	/
	5710MHz	16.15	/	/	/	/	/	/	/	/	/

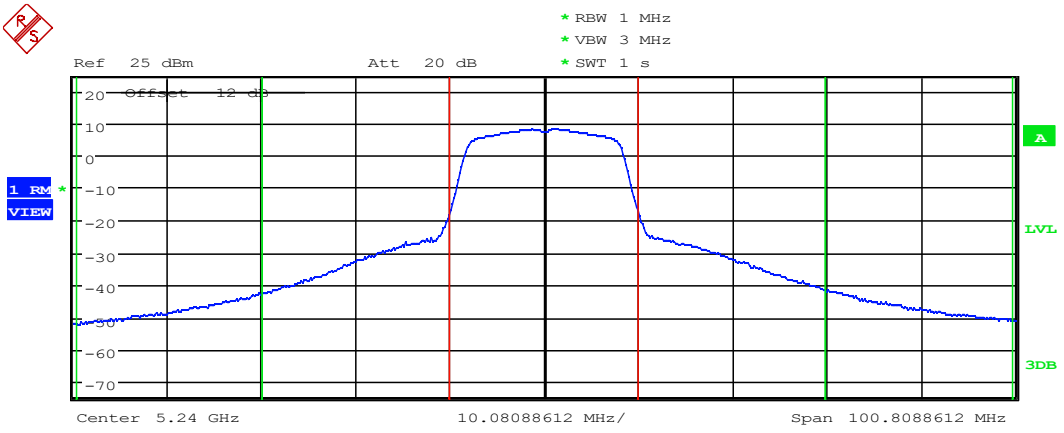
The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

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	16.03	/	/	/	/	/	/	/	/	/
	5290MHz	16.01	/	/	/	/	/	/	/	/	/
	5530MHz	13.01	/	/	/	/	/	/	/	/	/
	5610MHz	16.10	/	/	/	/	/	/	/	/	/
	5690MHz	16.04	/	/	/	/	/	/	/	/	/

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%



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Maximum output Power：11a CH48

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: UT33a

Measurement Results:

Mode	Frequency	Power Spectral Density (dBm/MHz)	Conclusion
802.11a	5180 MHz	7.78	P
	5200 MHz	7.87	P
	5240 MHz	8.15	P
	5260 MHz	8.18	P
	5280 MHz	8.36	P
	5320 MHz	7.84	P
	5500 MHz	5.37	P
	5580 MHz	7.99	P
	5700 MHz	4.54	P
	5720 MHz	8.35	P
802.11ac VHT20	5180 MHz	6.63	P
	5200 MHz	6.99	P
	5240 MHz	7.08	P
	5260 MHz	6.80	P
	5280 MHz	6.91	P
	5320 MHz	6.67	P
	5500 MHz	5.01	P
	5580 MHz	6.51	P
	5700 MHz	3.23	P
	5720 MHz	7.10	P
802.11n HT40	5190 MHz	3.79	P
	5230 MHz	3.79	P
	5270 MHz	3.77	P
	5310 MHz	2.73	P
	5510 MHz	0.87	P
	5550 MHz	3.73	P
	5670 MHz	3.63	P
	5710 MHz	4.64	P
802.11ac VHT80	5210 MHz	-0.77	P
	5290 MHz	-0.57	P

	5530 MHz	-3.51	P
	5610 MHz	-0.77	P
	5690 MHz	-0.11	P

Peak Power Spectral Density:11a CH56

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

EUT ID: UT33a

Measurement Result:

Mode	Frequency	26dB Emission Bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.1	20.76	P
	5200 MHz	Fig.2	20.92	P
	5240 MHz	Fig.3	20.36	P
	5260 MHz	Fig.4	20.64	P
	5280 MHz	Fig.5	20.64	P
	5320 MHz	Fig.6	21.04	P
	5500 MHz	Fig.7	19.96	P
	5580 MHz	Fig.8	20.84	P
	5700 MHz	Fig.9	20.08	P
	5720 MHz	Fig.10	20.96	P
802.11ac VHT20	5180 MHz	Fig.11	20.44	P
	5200 MHz	Fig.12	20.64	P
	5240 MHz	Fig.13	20.52	P
	5260 MHz	Fig.14	20.56	P
	5280 MHz	Fig.15	20.32	P
	5320 MHz	Fig.16	20.40	P
	5500 MHz	Fig.17	20.32	P
	5580 MHz	Fig.18	20.36	P
	5700 MHz	Fig.19	20.36	P
	5720 MHz	Fig.20	20.68	
802.11n HT40	5190 MHz	Fig.21	41.12	P
	5230 MHz	Fig.22	41.44	P
	5270 MHz	Fig.23	41.44	P
	5310 MHz	Fig.24	41.20	P
	5510 MHz	Fig.25	41.04	P
	5550 MHz	Fig.26	41.04	P
	5670 MHz	Fig.27	41.68	P
	5710 MHz	Fig.28	41.12	P
802.11ac	5210MHz	Fig.29	81.76	P

VHT80	5290MHz	Fig.30	81.60	P
	5530MHz	Fig.31	81.92	P
	5610 MHz	Fig.32	81.44	P
	5690MHz	Fig.33	81.60	P

Test graphs as below:

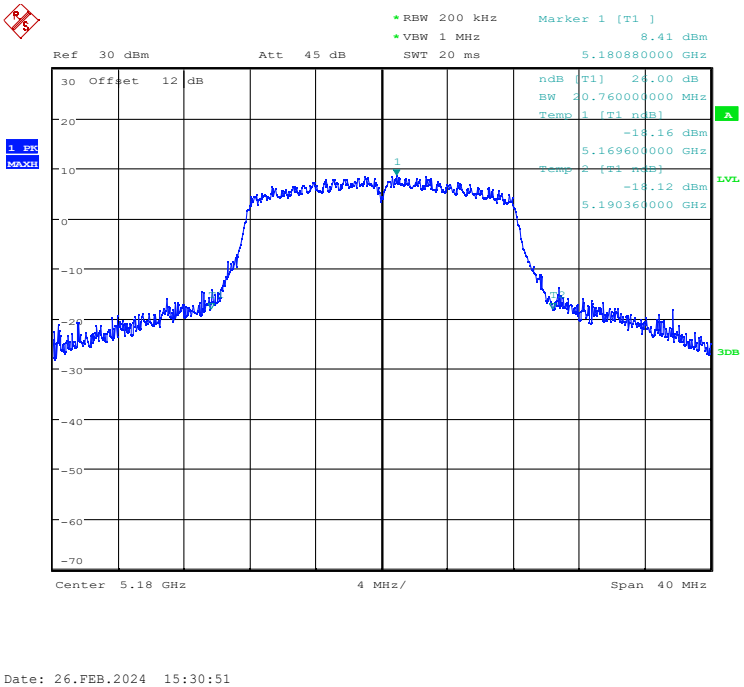


Fig.1 26dB Emission Bandwidth (802.11a, 5180MHz)

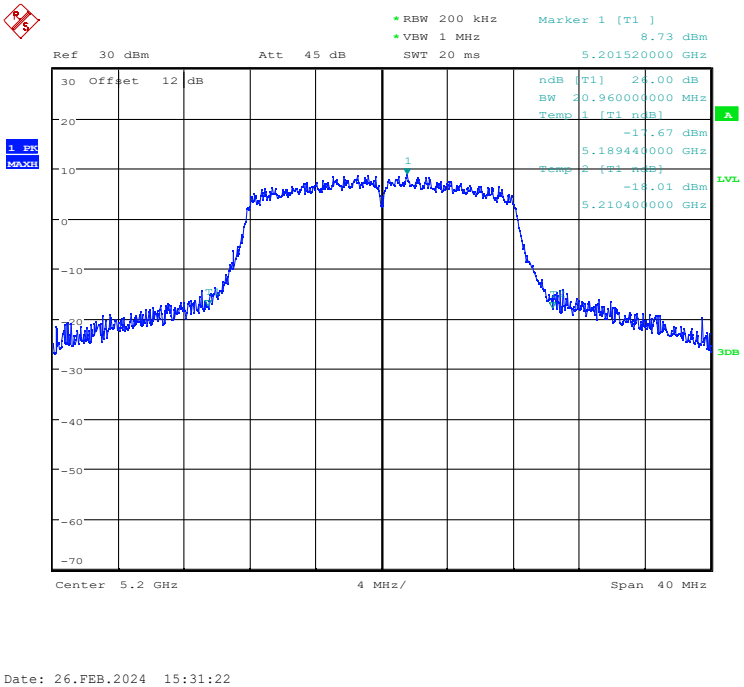


Fig.2 26dB Emission Bandwidth (802.11a, 5200MHz)

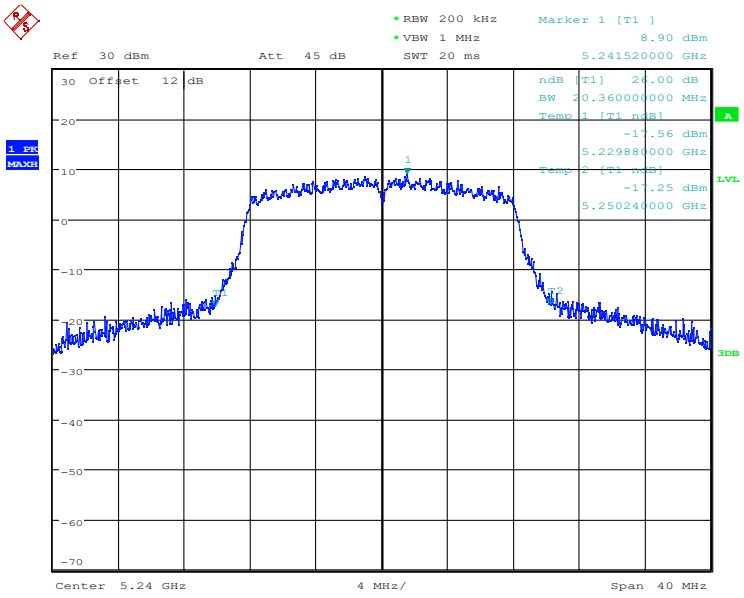


Fig.3 26dB Emission Bandwidth (802.11a, 5240MHz)

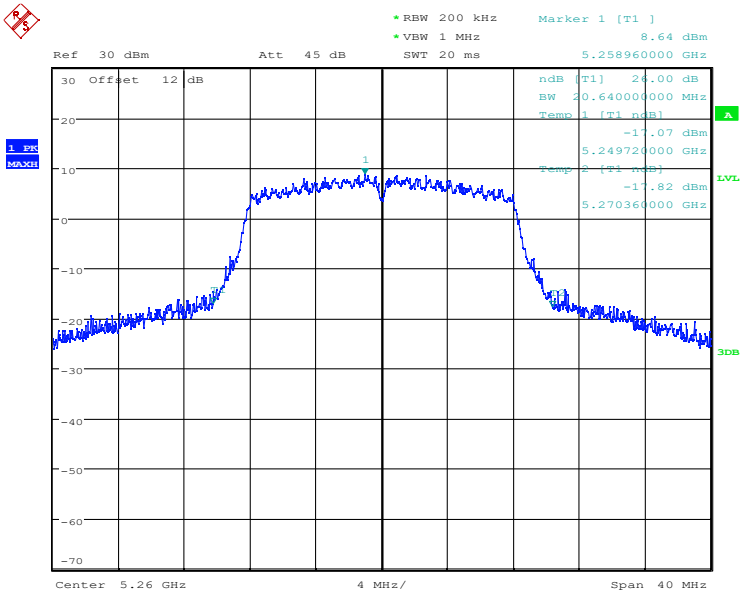


Fig.4 26dB Emission Bandwidth (802.11a, 5260MHz)

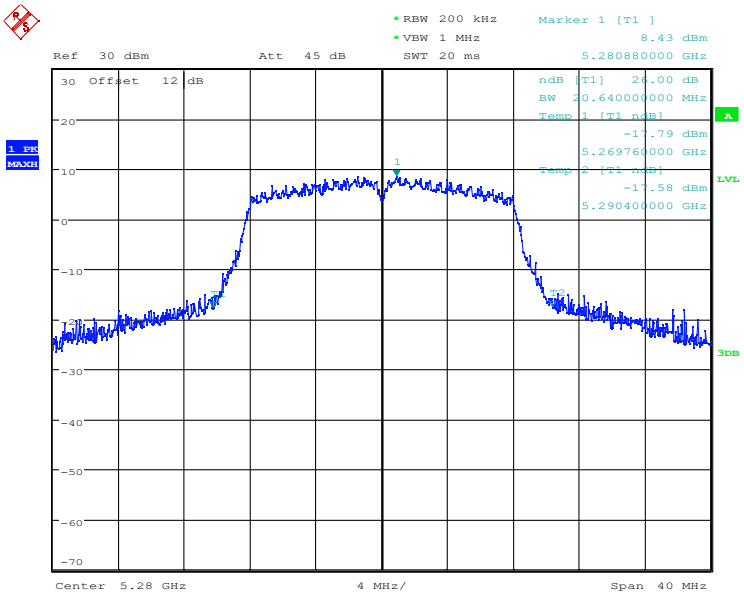


Fig.5 26dB Emission Bandwidth (802.11a, 5280MHz)

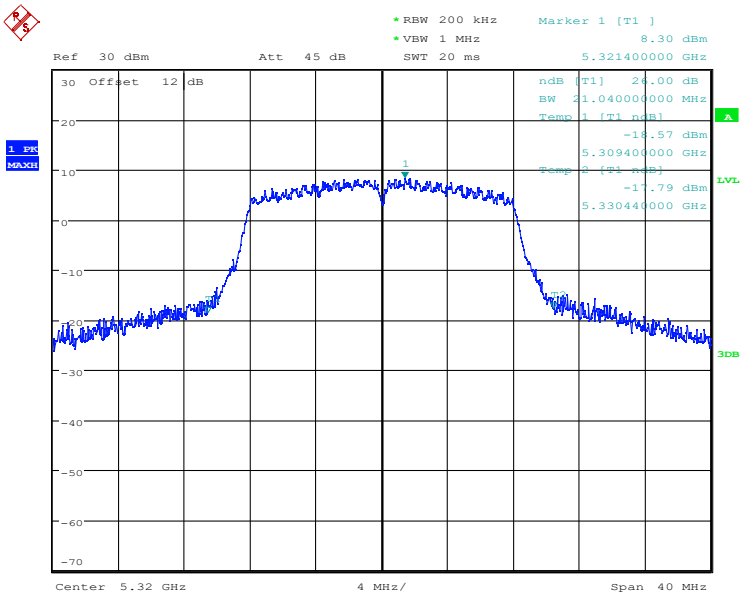


Fig.6 26dB Emission Bandwidth (802.11a, 5320MHz)

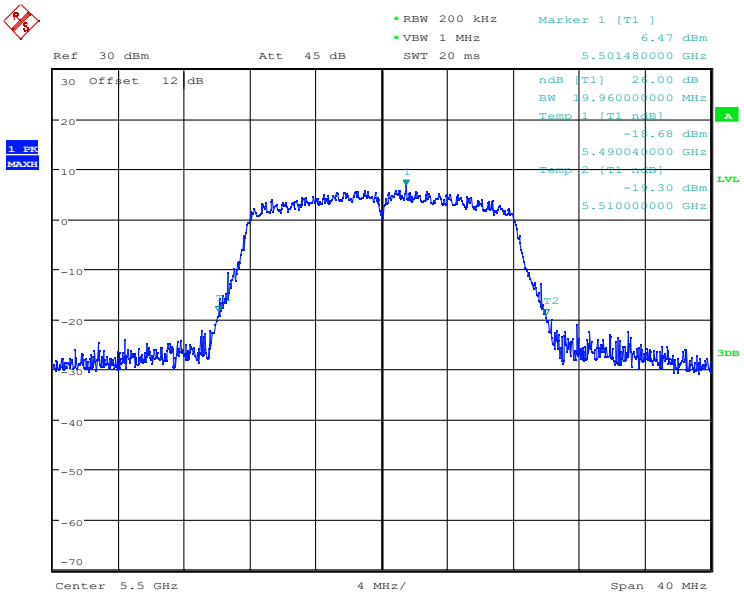


Fig.7 26dB Emission Bandwidth (802.11a, 5500MHz)

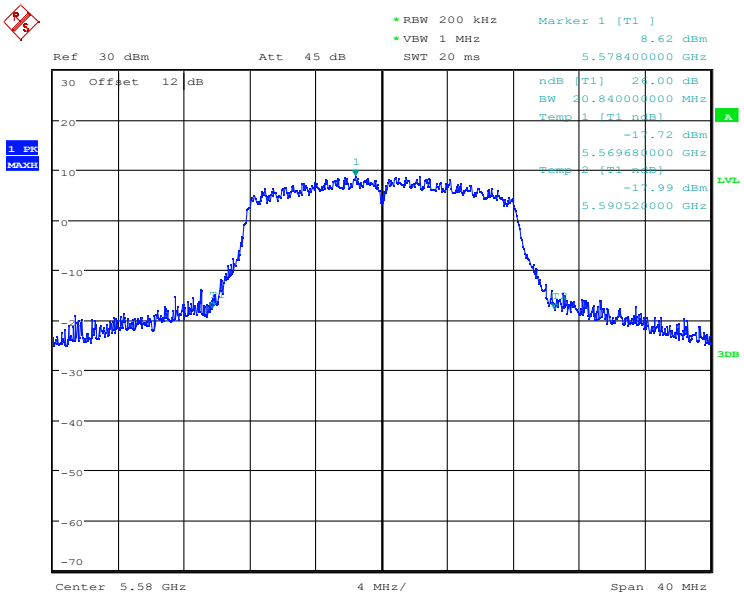


Fig.8 26dB Emission Bandwidth (802.11a, 5580MHz)

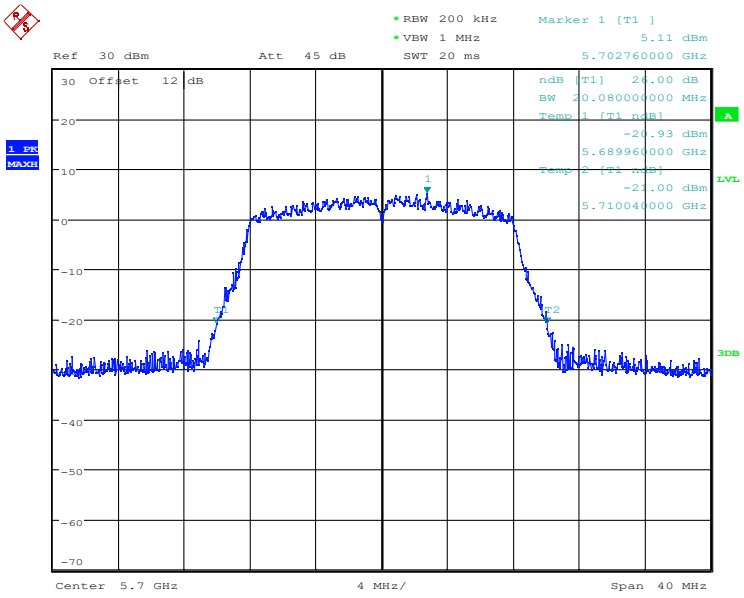


Fig.9 26dB Emission Bandwidth (802.11a, 5700MHz)

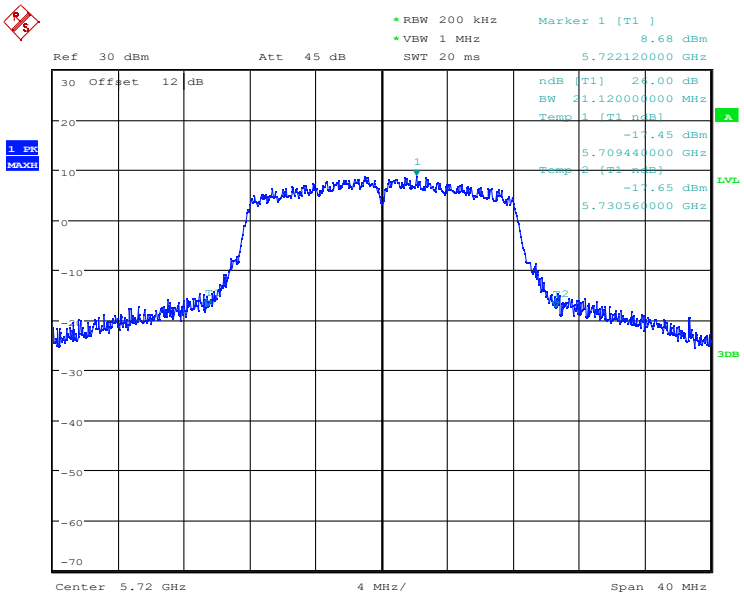


Fig.10 26dB Emission Bandwidth (802.11a, 5720MHz)

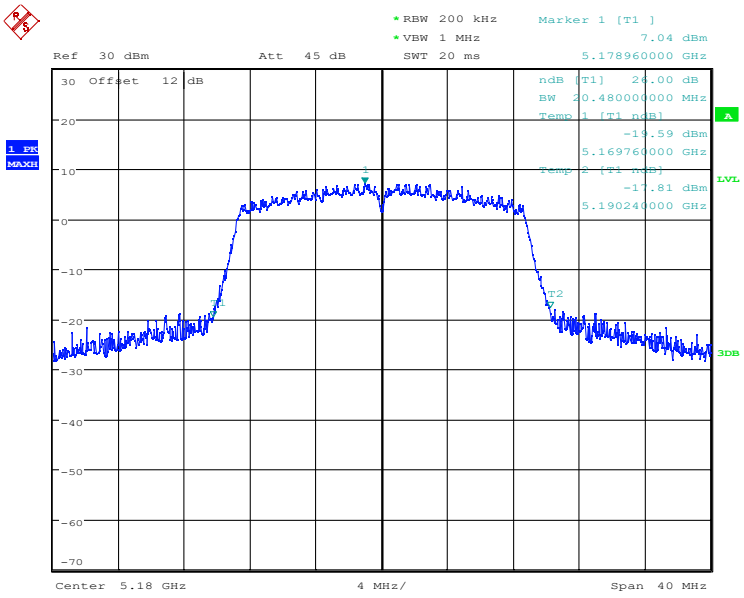


Fig.11 26dB Emission Bandwidth (802.11ac-VHT20, 5180MHz)

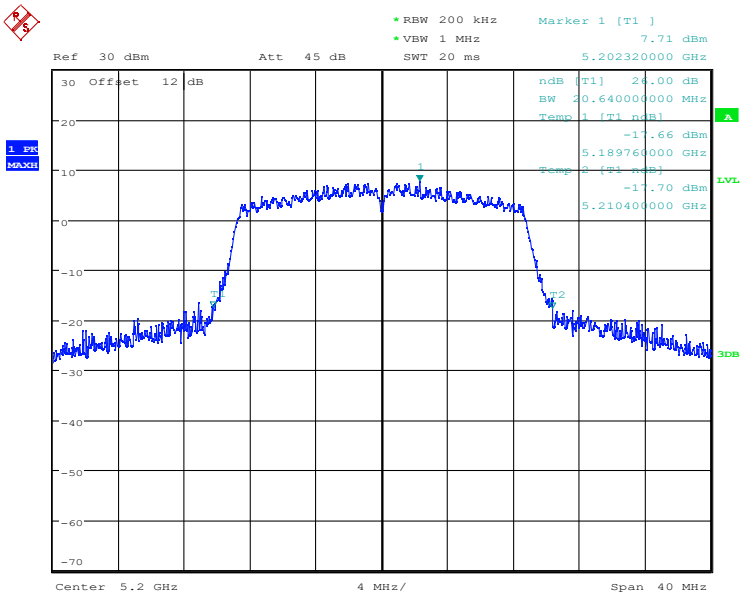


Fig.12 26dB Emission Bandwidth (802.11ac-VHT20, 5200MHz)

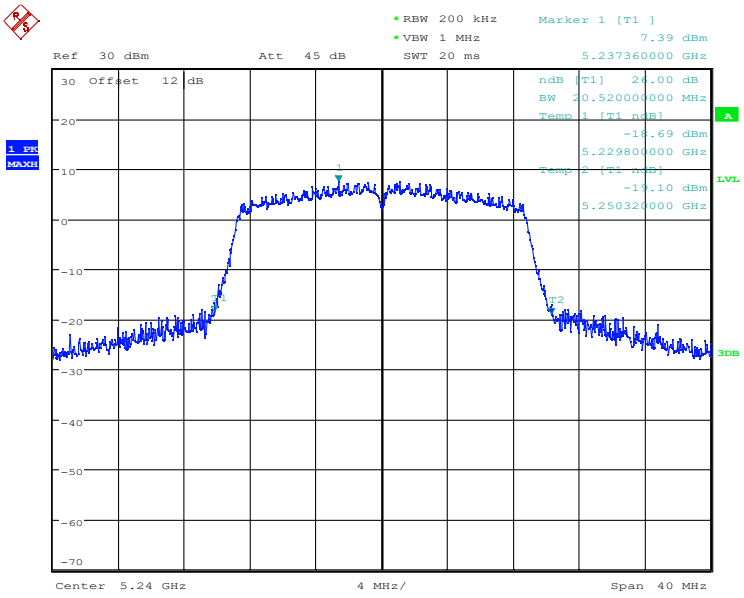


Fig.13 26dB Emission Bandwidth (802.11ac-VHT20, 5240MHz)

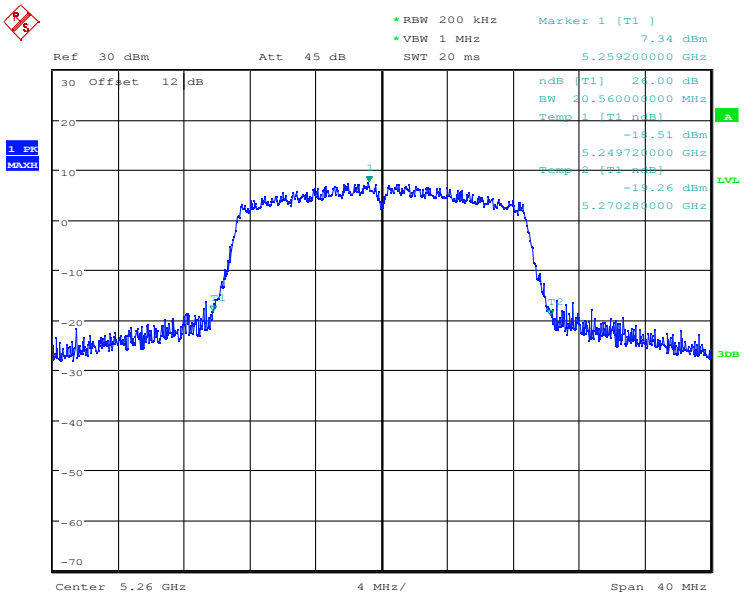


Fig.14 26dB Emission Bandwidth (802.11ac-VHT20, 5260MHz)

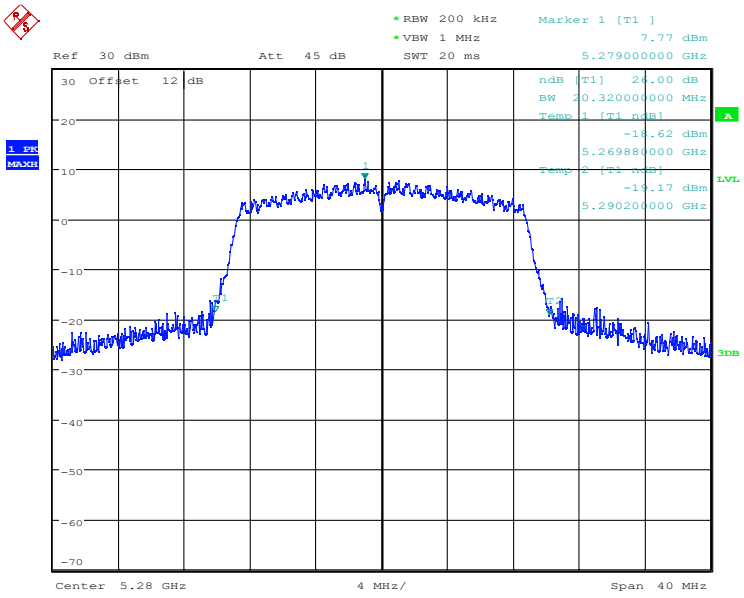


Fig.15 26dB Emission Bandwidth (802.11ac-VHT20, 5280MHz)

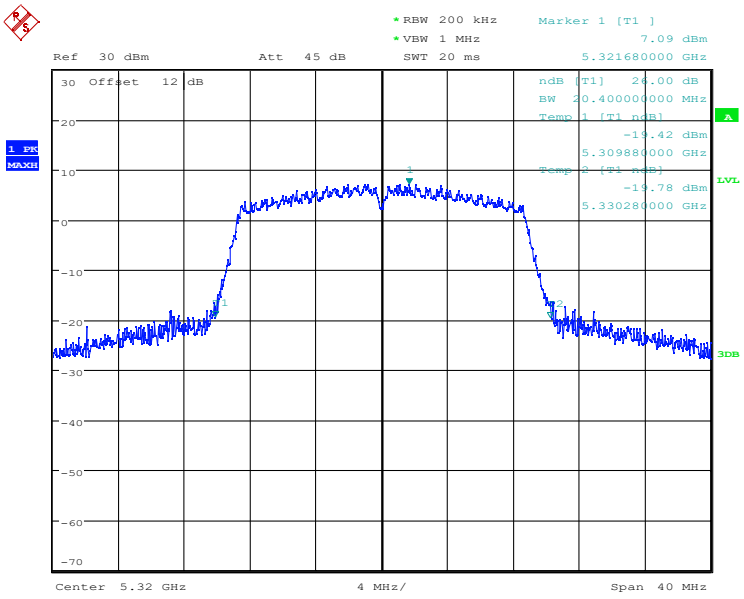
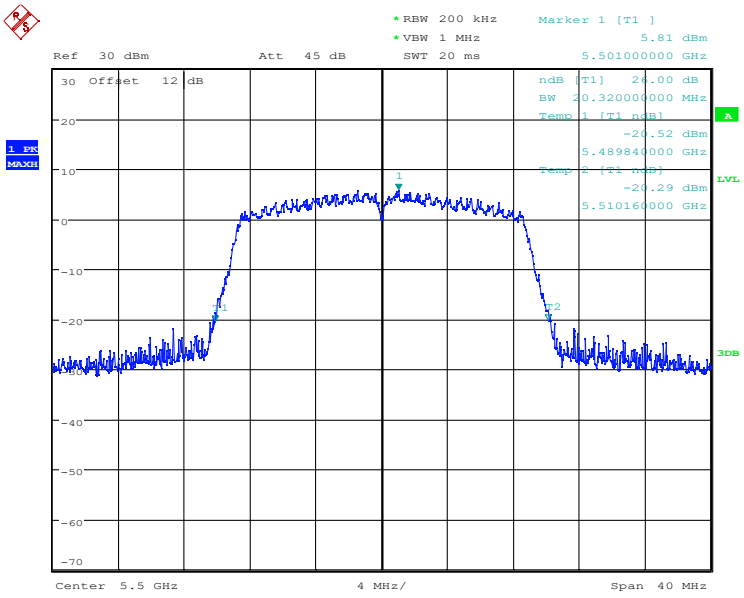


Fig.16 26dB Emission Bandwidth (802.11ac-VHT20, 5320MHz)



Date: 26.FEB.2024 15:38:43

Fig.17 26dB Emission Bandwidth (802. 11ac-VHT20, 5500MHz)

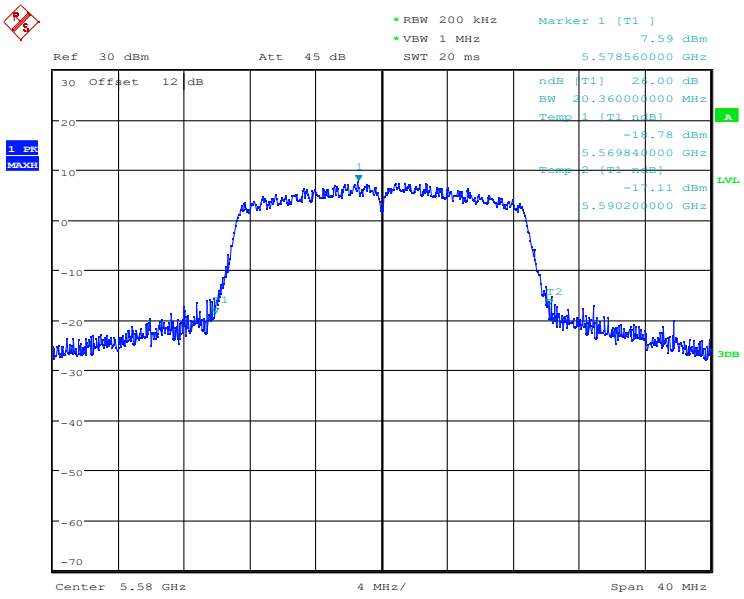


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Fig.18 26dB Emission Bandwidth (802. 11ac-VHT20, 5580MHz)

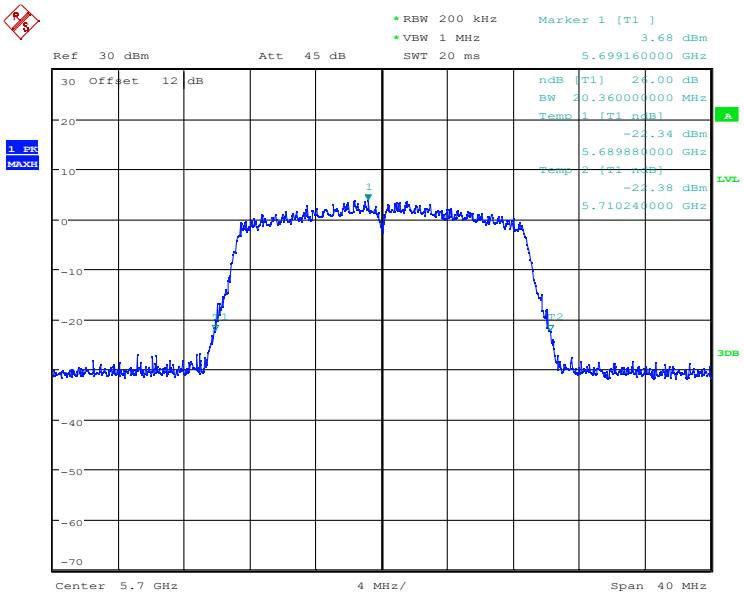

Fig.19 26dB Emission Bandwidth (802. 11ac-VHT20, 5700MHz)

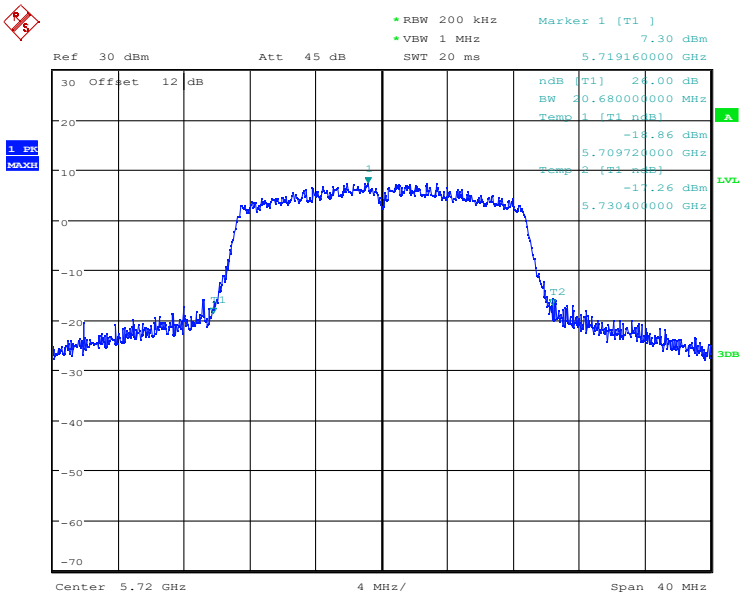

Fig.20 26dB Emission Bandwidth (802. 11ac-VHT20, 5720MHz)

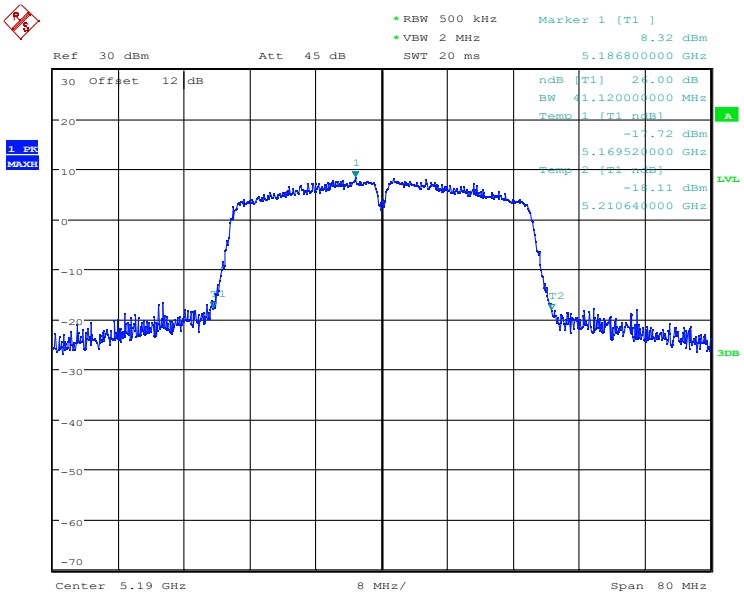

Fig.21 26dB Emission Bandwidth (802.11n-HT40, 5190MHz)

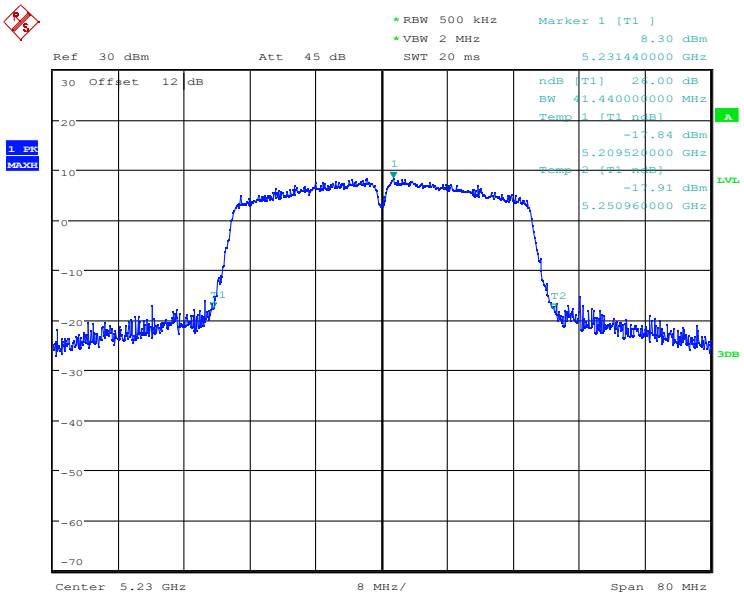

Fig.22 26dB Emission Bandwidth (802.11n-HT40, 5230MHz)

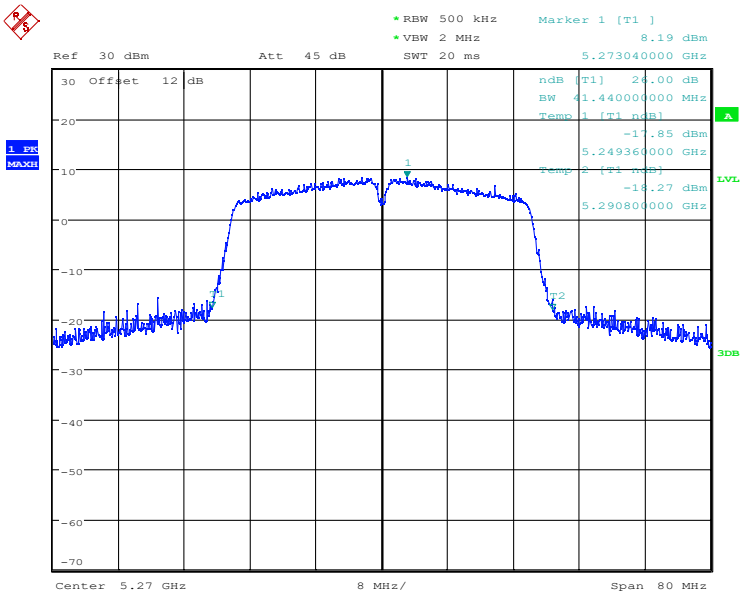

Fig.23 26dB Emission Bandwidth (802.11n-HT40, 5270MHz)

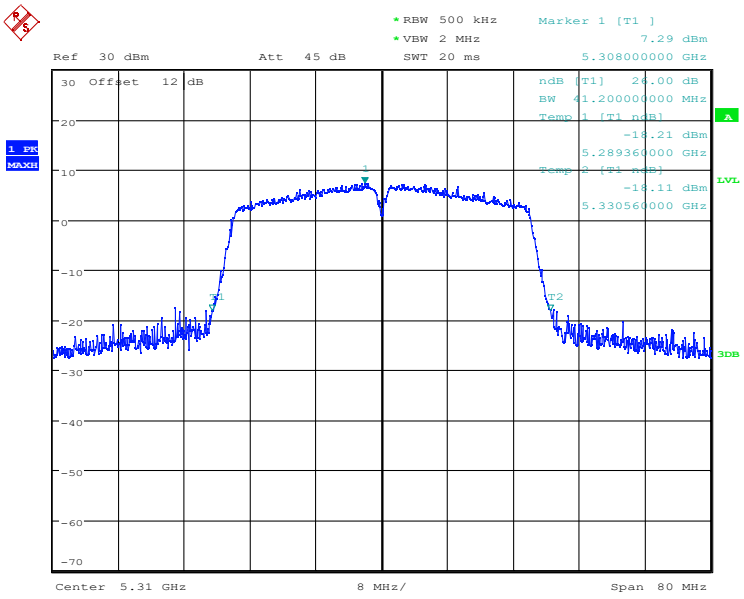

Fig.24 26dB Emission Bandwidth (802.11n-HT40, 5310MHz)

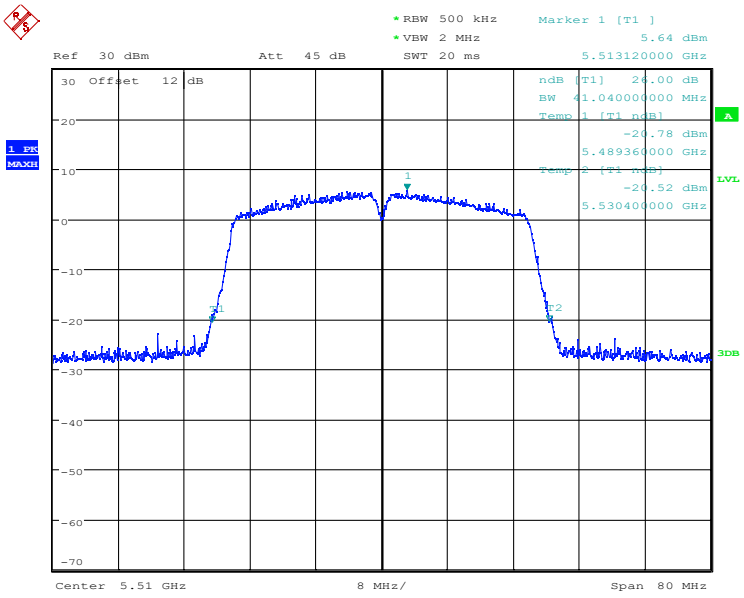

Fig.25 26dB Emission Bandwidth (802. 11n-HT40, 5510MHz)

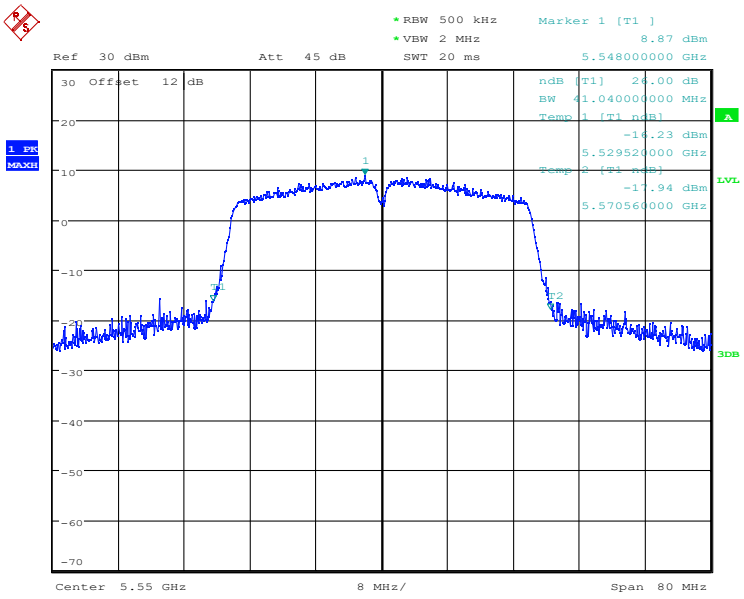

Fig.26 26dB Emission Bandwidth (802. 11n-HT40, 5550MHz)

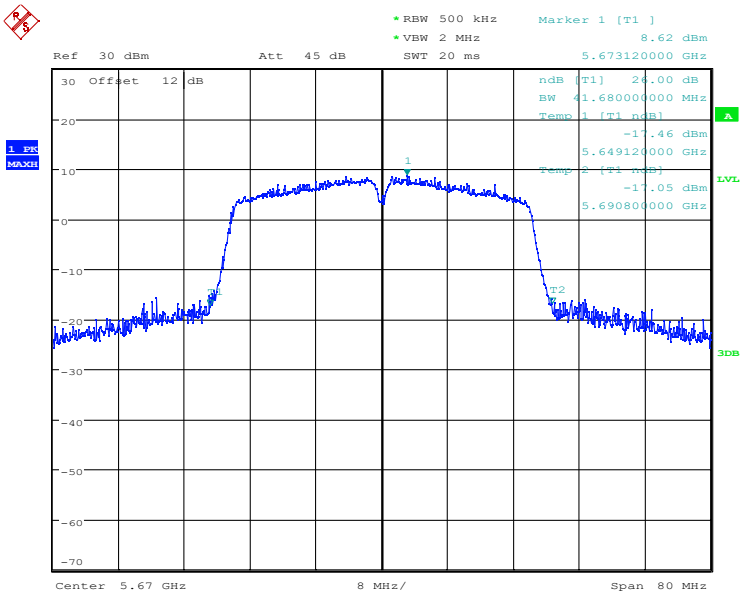

Fig.27 26dB Emission Bandwidth (802. 11n-HT40, 5670MHz)

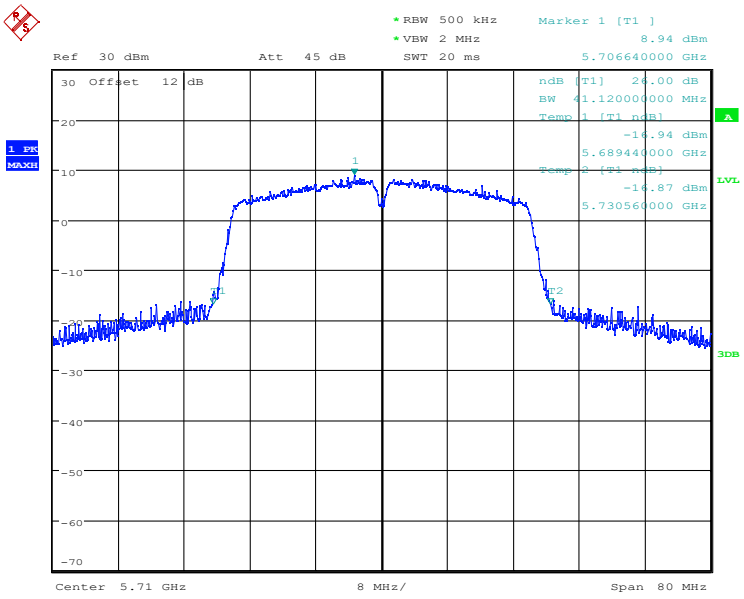

Fig.28 26dB Emission Bandwidth (802. 11n-HT40, 5710MHz)

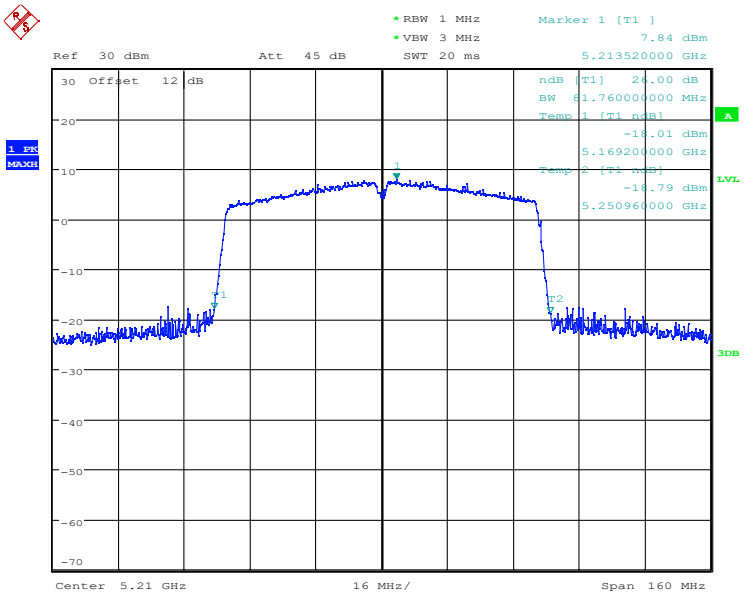

Fig.29 26dB Emission Bandwidth (802. 11ac-VHT80, 5210MHz)

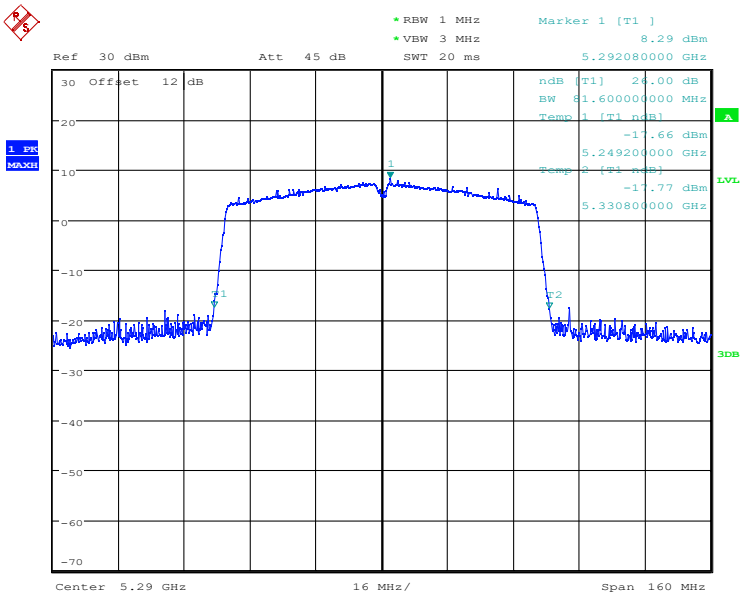

Fig.30 26dB Emission Bandwidth (802. 11ac-VHT80, 5290MHz)

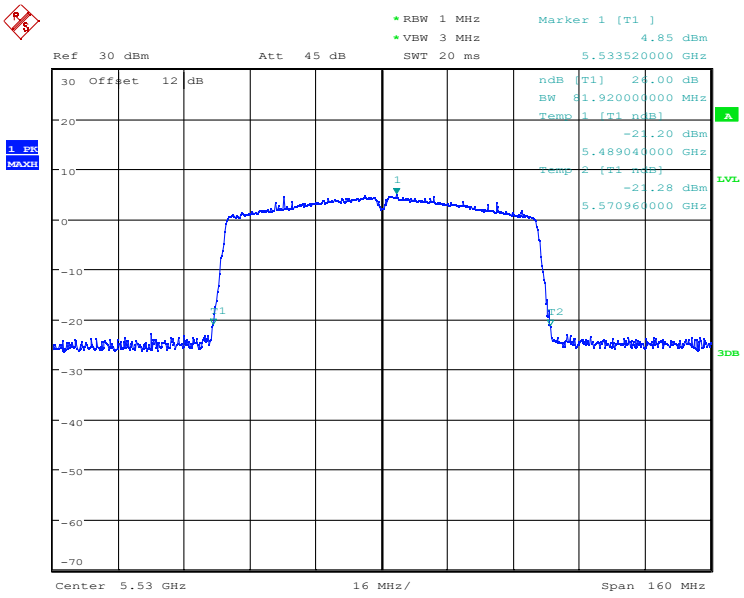

Fig.31 26dB Emission Bandwidth (802. 11ac-VHT80, 5530MHz)

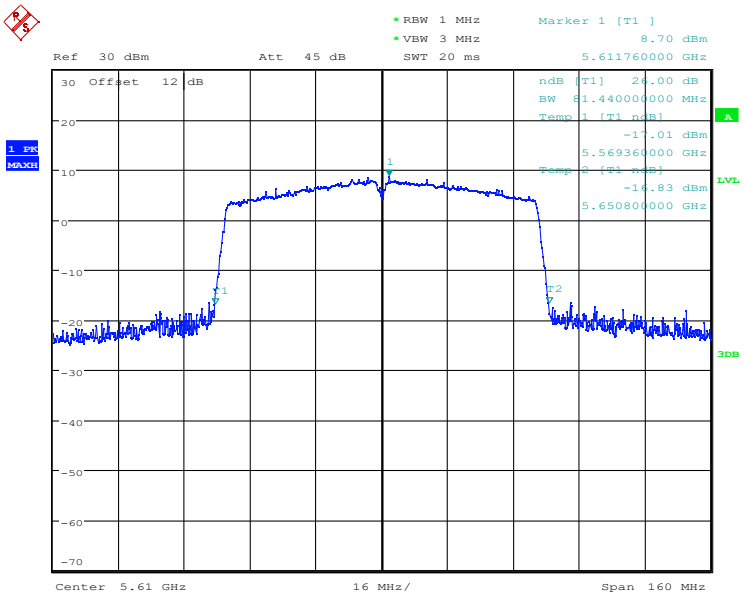

Fig.32 26dB Emission Bandwidth (802. 11ac-VHT80, 5610MHz)

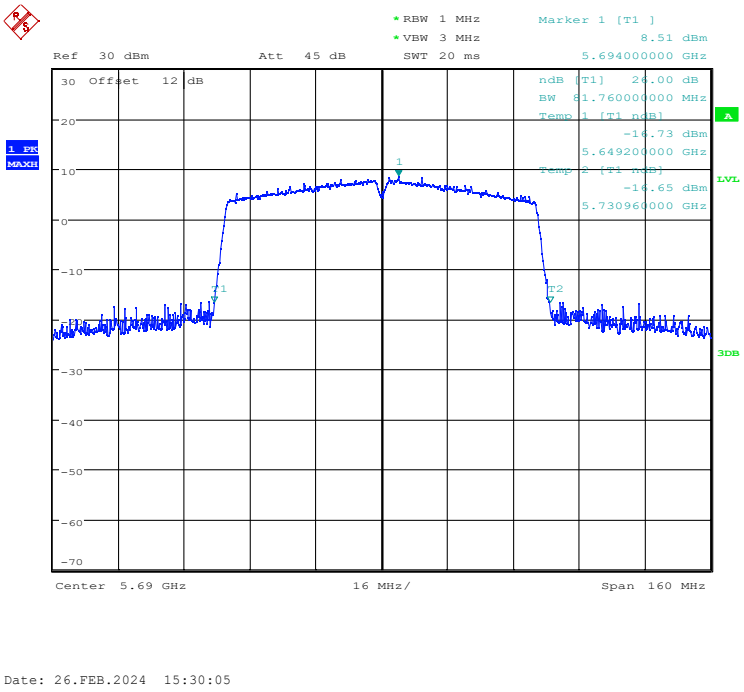

Fig.33 26dB Emission Bandwidth (802. 11ac-VHT80, 5690MHz)

Conclusion: PASS

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit (dB μ V/m)	
FCC 47 CFR Part 15.209	Peak	74
	Average	54

The measurement is made according to KDB 789033

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)).

Limit in restricted band:

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

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Measurement Result:

EUT ID: UT81a

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.34	P
	5320 MHz	Fig.35	P
	5500 MHz	Fig.36	P
	5700 MHz	Fig.37	P
802.11n HT20	5180 MHz	Fig.38	P
	5320 MHz	Fig.39	P
	5500 MHz	Fig.40	P
	5700 MHz	Fig.41	P
802.11n HT40	5190 MHz	Fig.42	P
	5310 MHz	Fig.43	P
	5510 MHz	Fig.44	P
	5670 MHz	Fig.45	P
802.11ac HT20	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P
802.11ac HT40	5190 MHz	Fig.50	P
	5310 MHz	Fig.51	P
	5510 MHz	Fig.52	P
	5670 MHz	Fig.53	P

802.11ac HT80	5210MHz	Fig.54	P
	5290MHz	Fig.55	P
	5530MHz	Fig.56	P
	5610MHz	Fig.57	P

Conclusion: PASS

Test graphs as below:

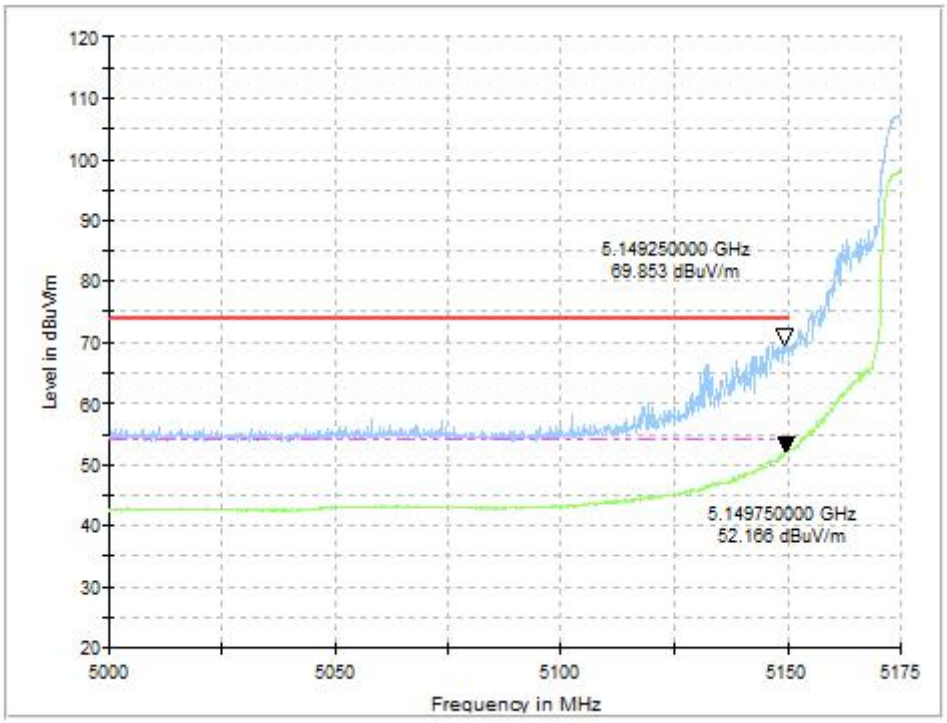

Fig. 34 Band Edges (802.11a Ch36, 5180MHz)

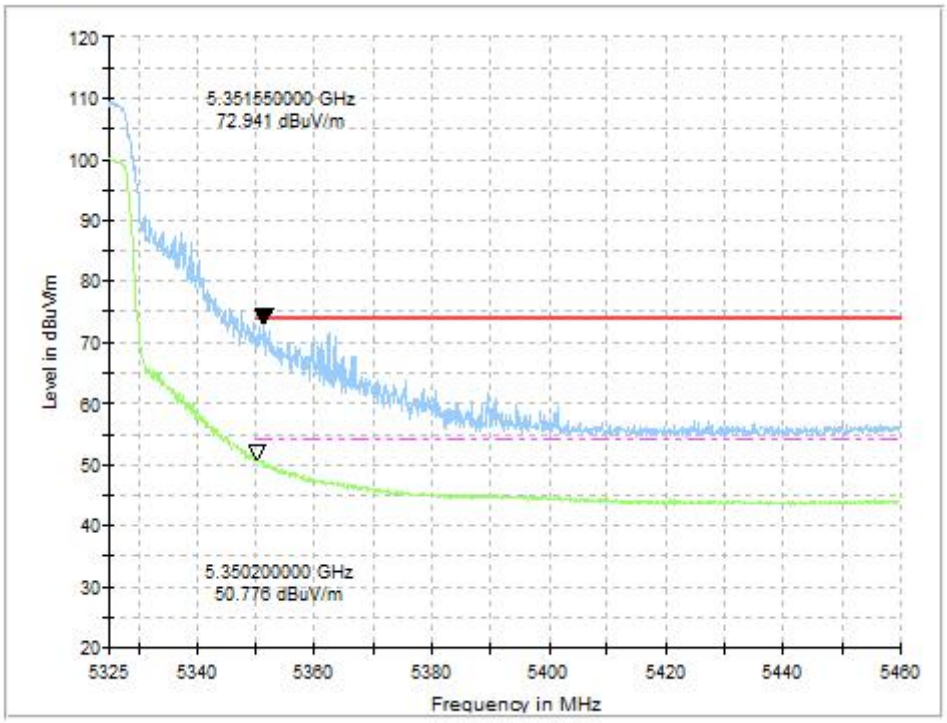

Fig. 35 Band Edges (802.11a Ch64, 5320MHz)

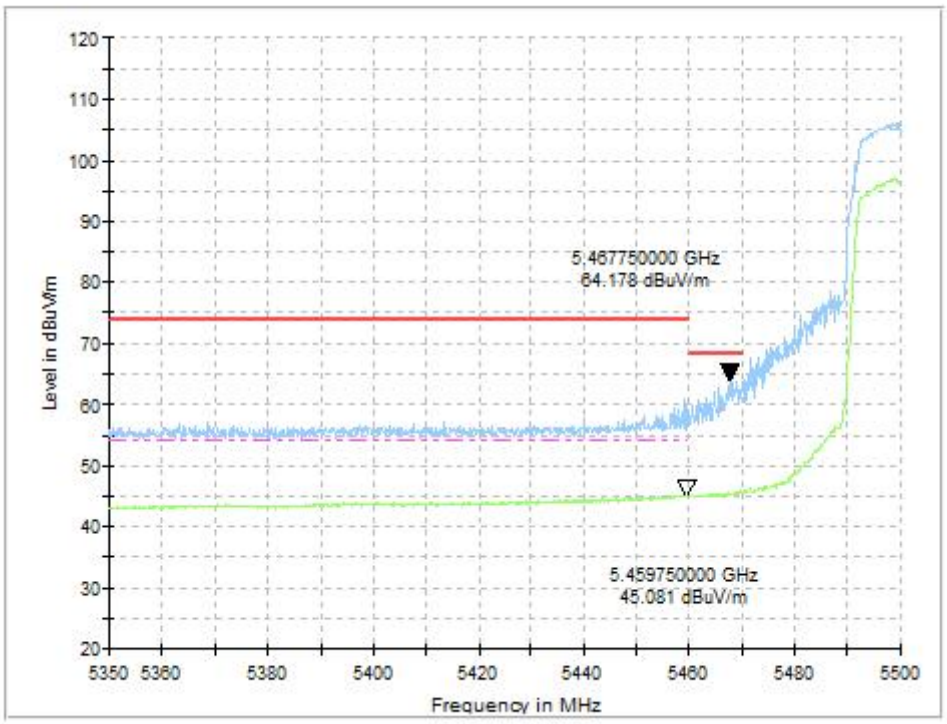

Fig. 36 Band Edges (802.11a Ch100, 5500MHz)

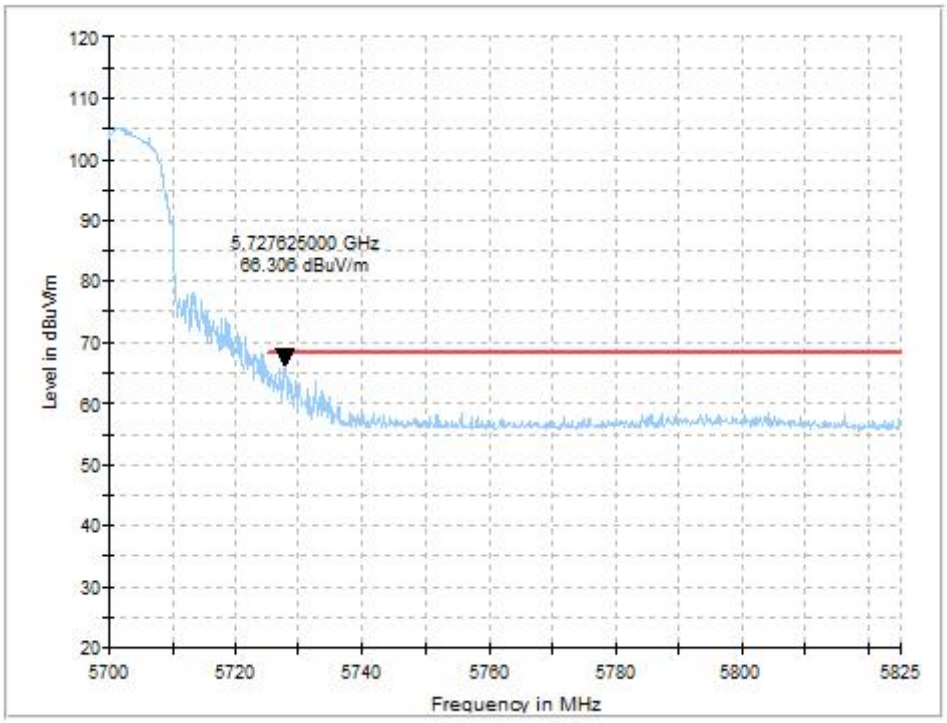

Fig. 37 Band Edges (802.11a Ch140, 5700MHz)

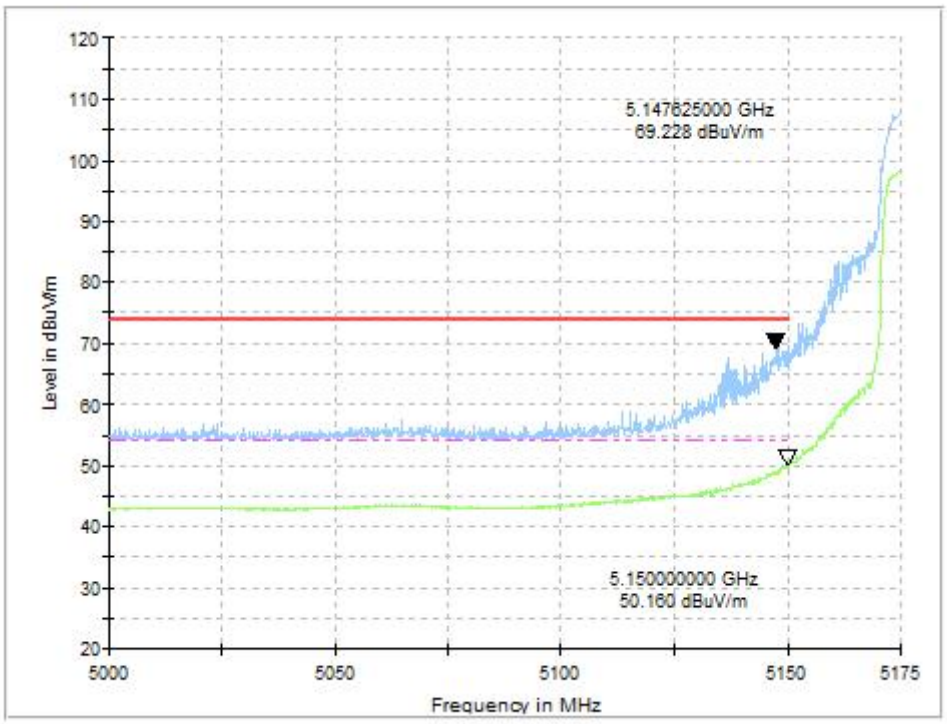

Fig. 38 Band Edges (802.11n-HT20 Ch36, 5180MHz)

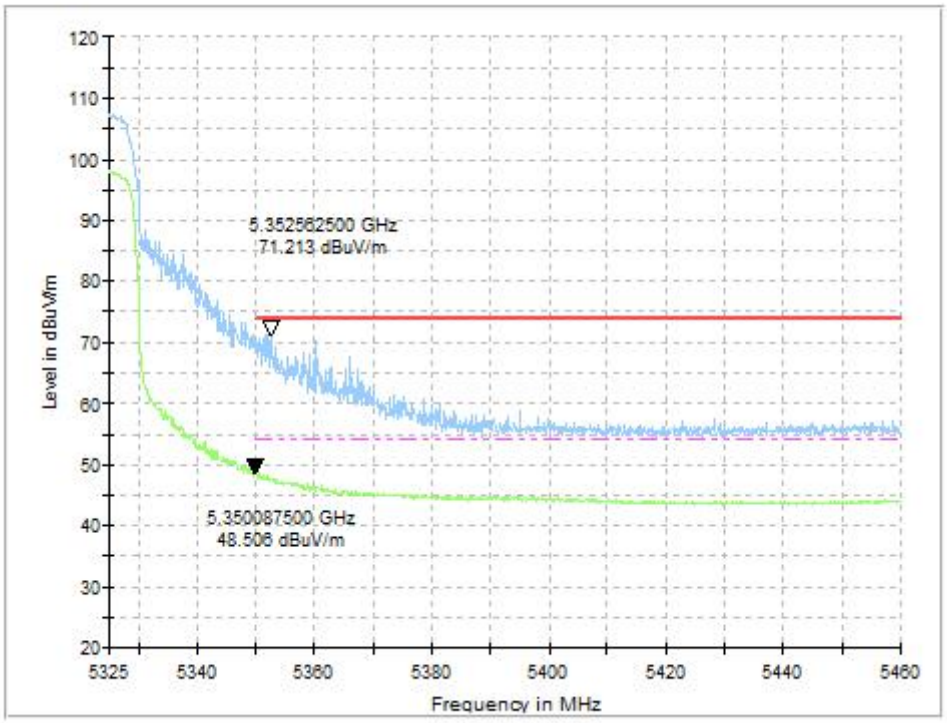

Fig. 39 Band Edges (802.11n-HT20 Ch64, 5320MHz)

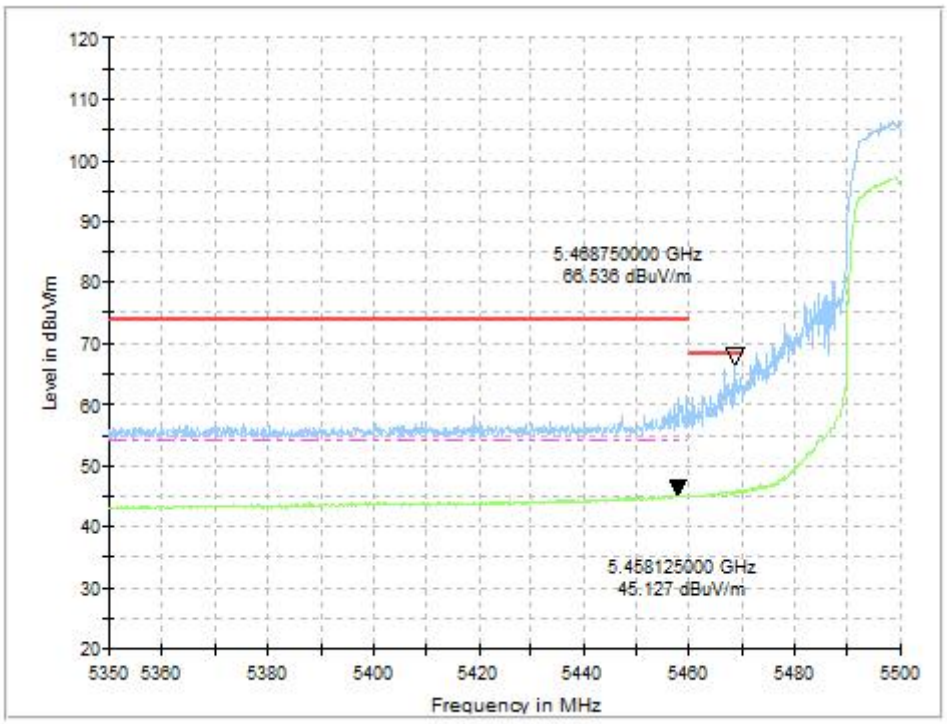

Fig. 40 Band Edges (802.11n-HT20 Ch100, 5500MHz)

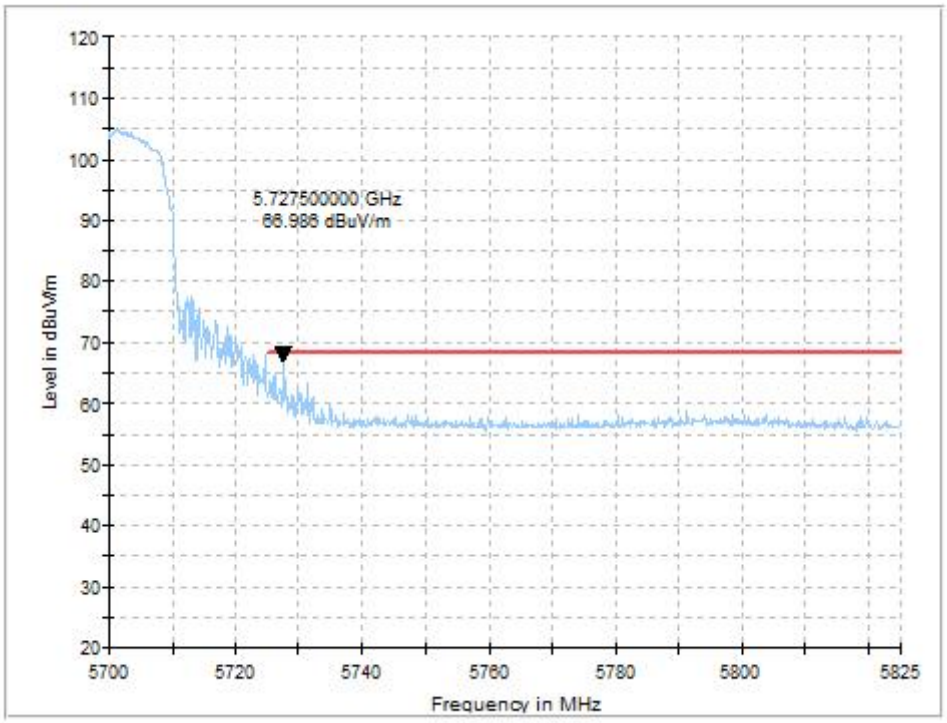

Fig. 41 Band Edges (802.11n-HT20 Ch140, 5700MHz)

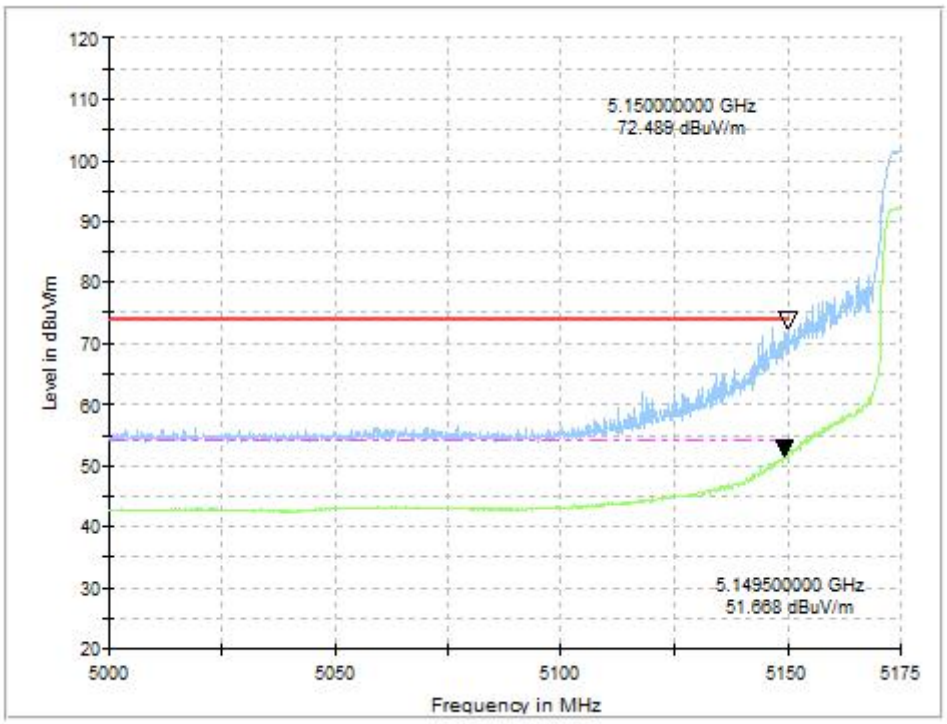

Fig. 42 Band Edges (802.11n-HT40 Ch38, 5190MHz)

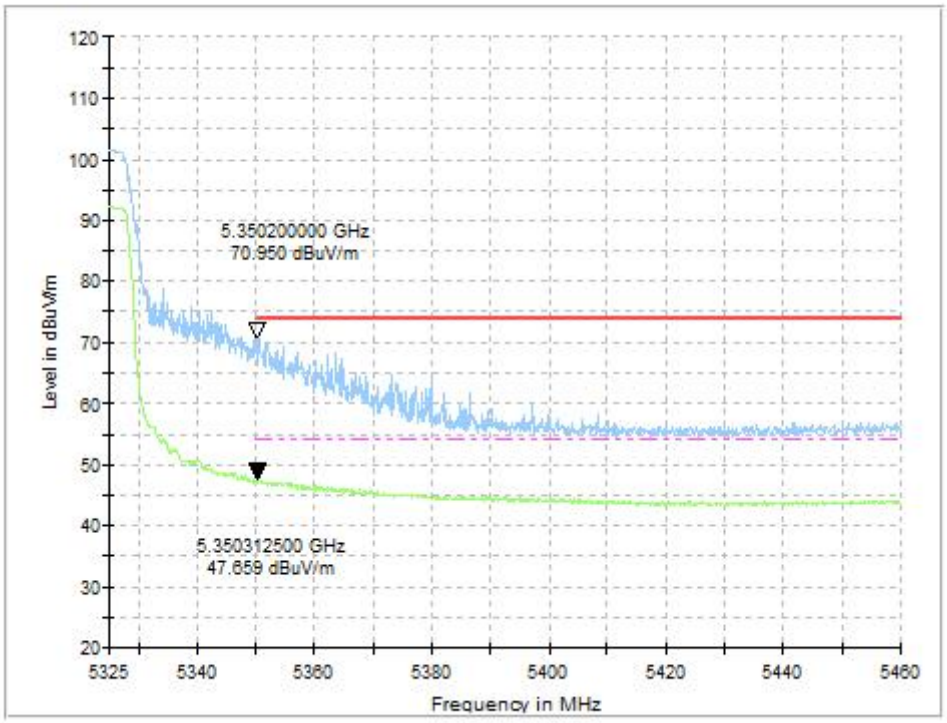

Fig. 43 Band Edges (802.11n-HT40 Ch62, 5310MHz)

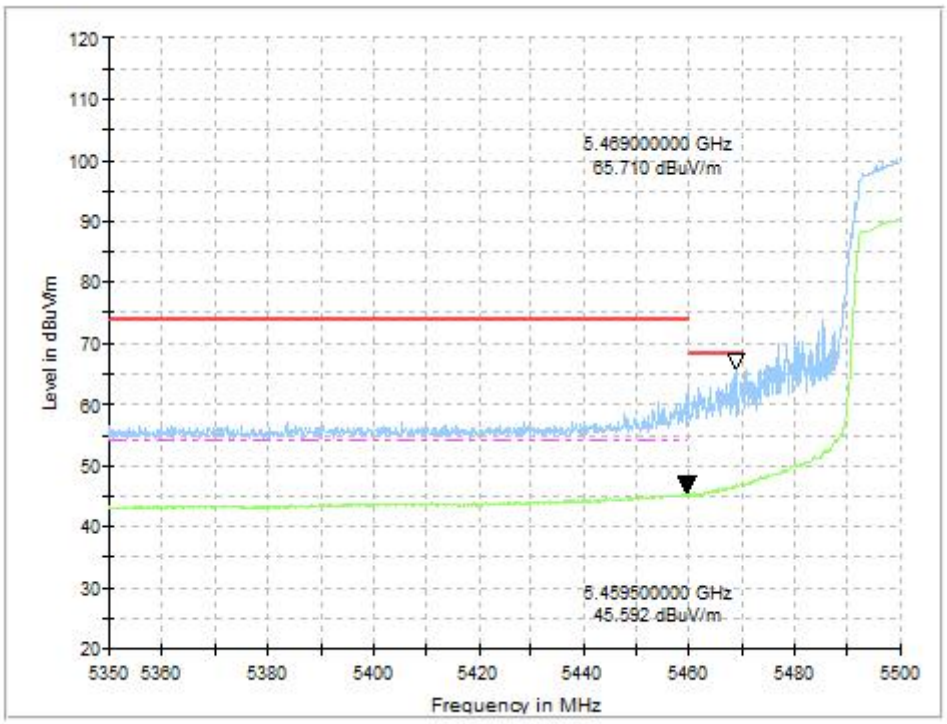

Fig. 44 Band Edges (802.11n-HT40 Ch102, 5510MHz)

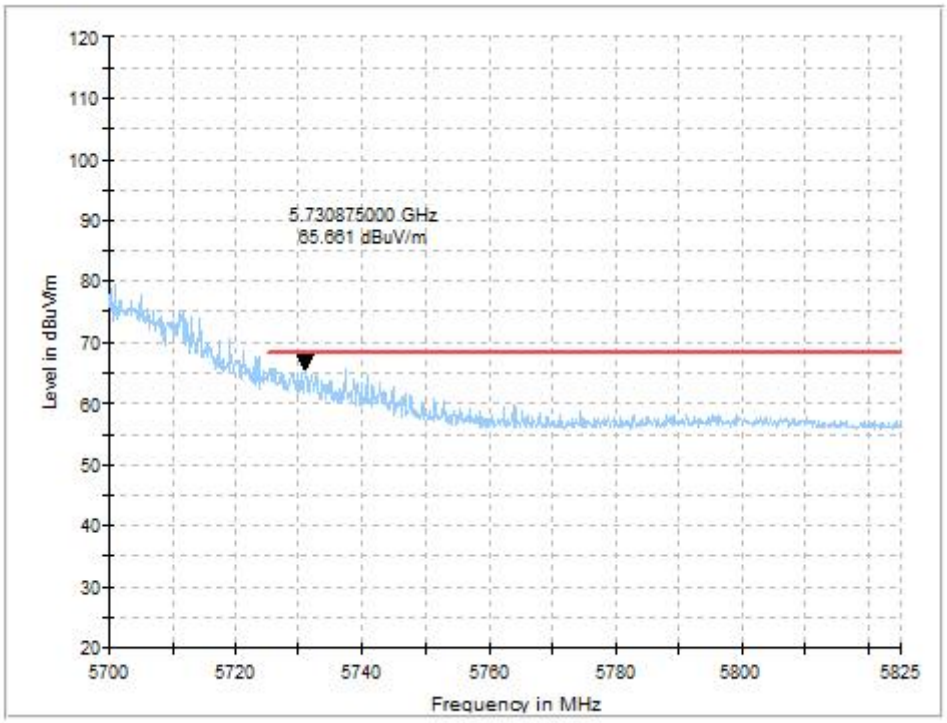

Fig. 45 Band Edges (802.11n-HT40 Ch134, 5670MHz)

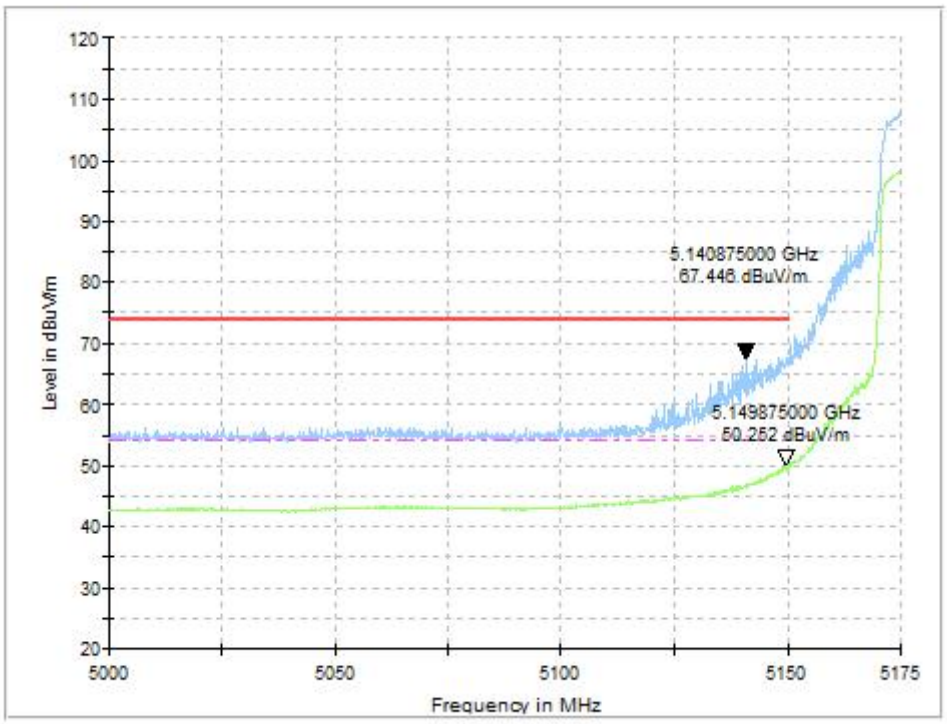

Fig. 46 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

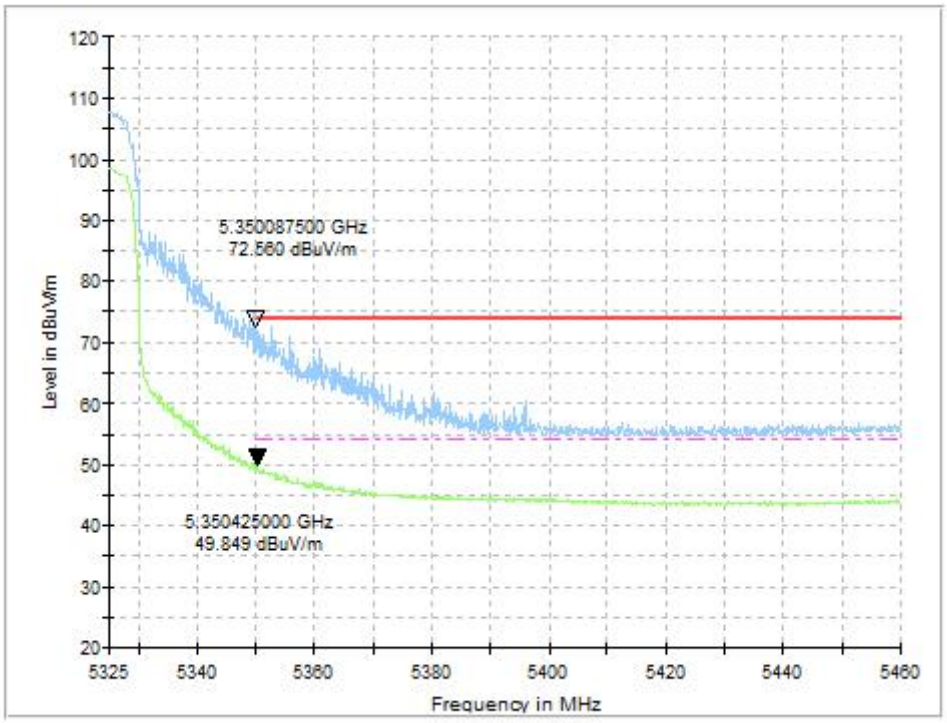

Fig. 47 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

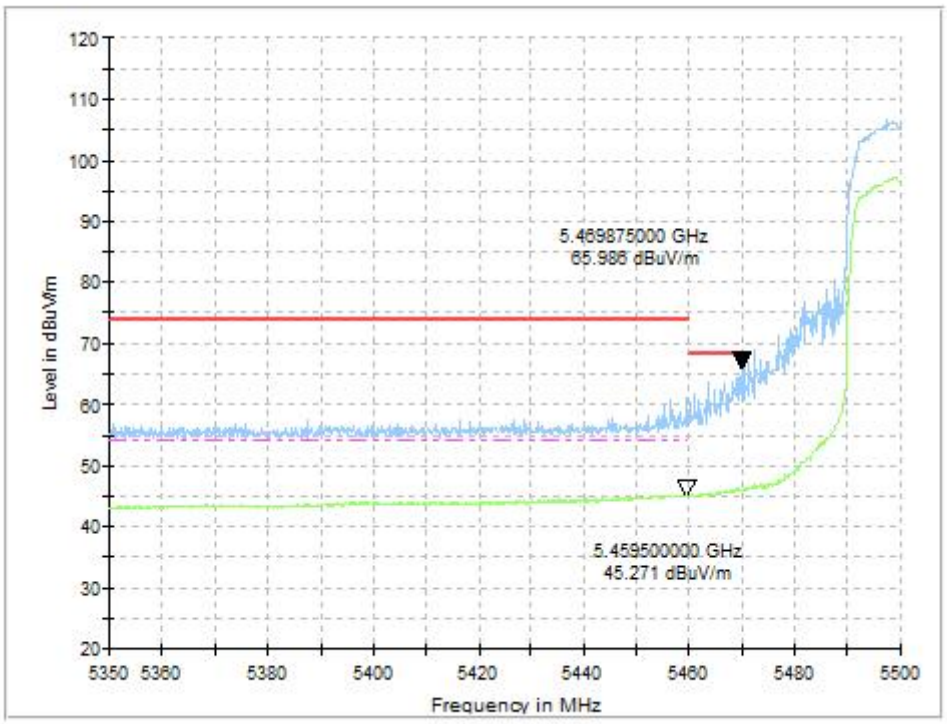

Fig. 48 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

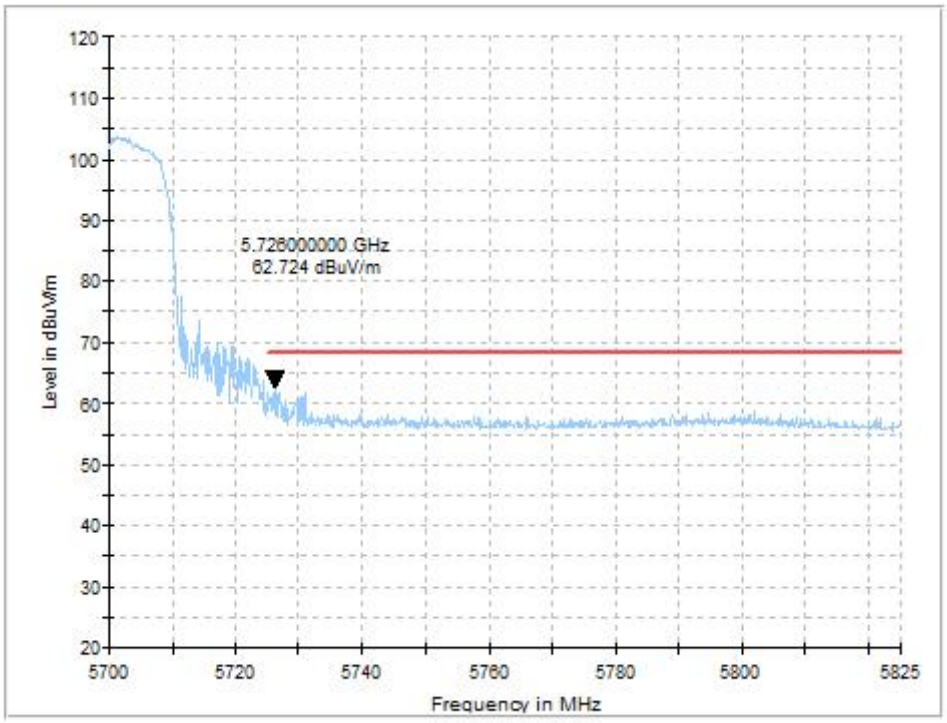

Fig. 49 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

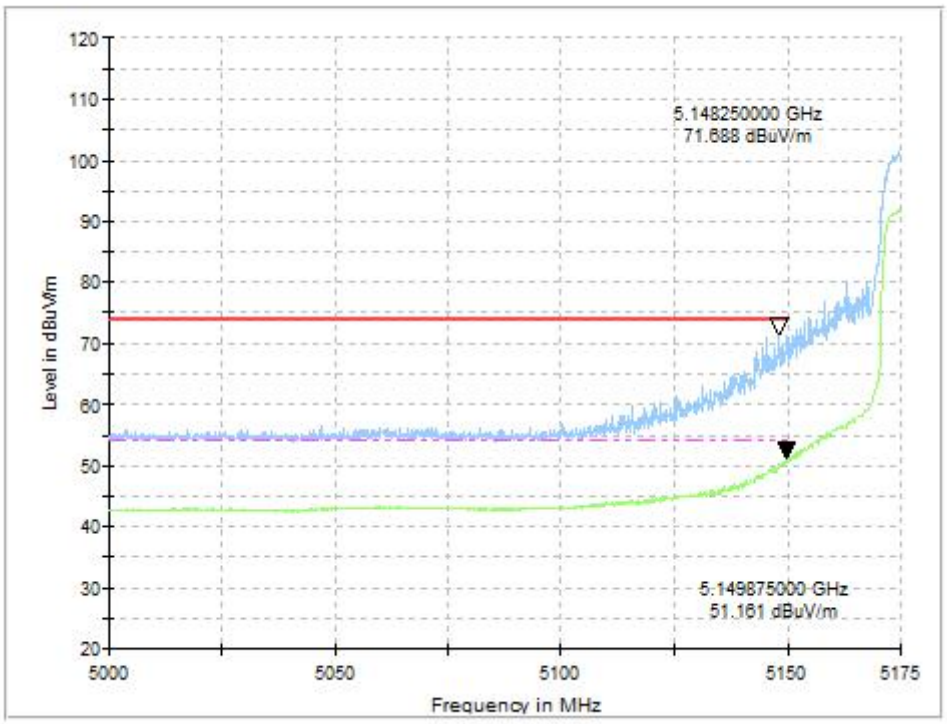

Fig. 50 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

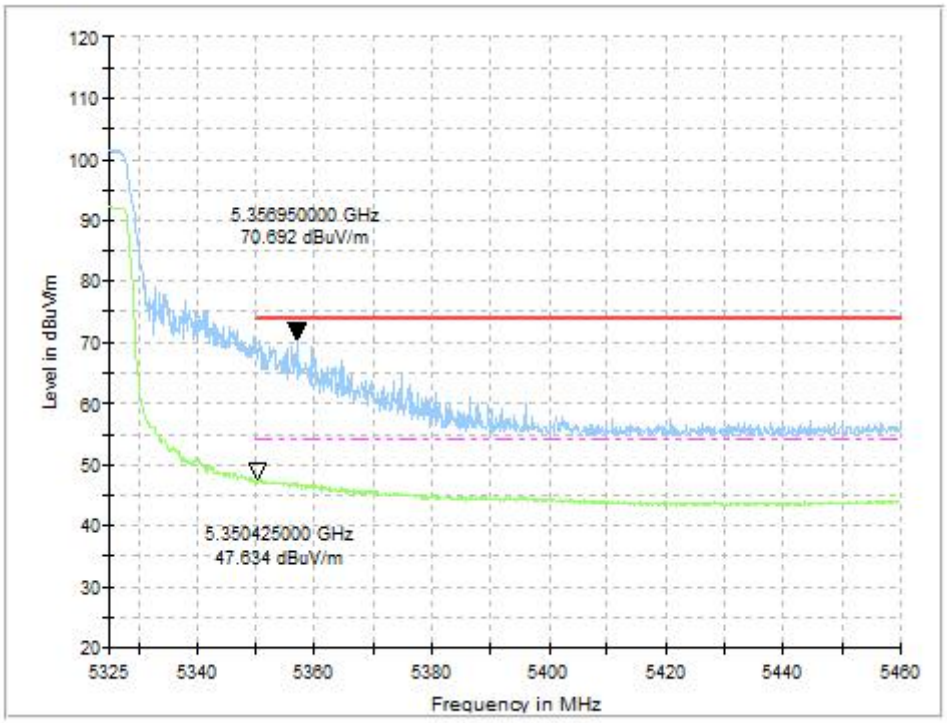

Fig. 51 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

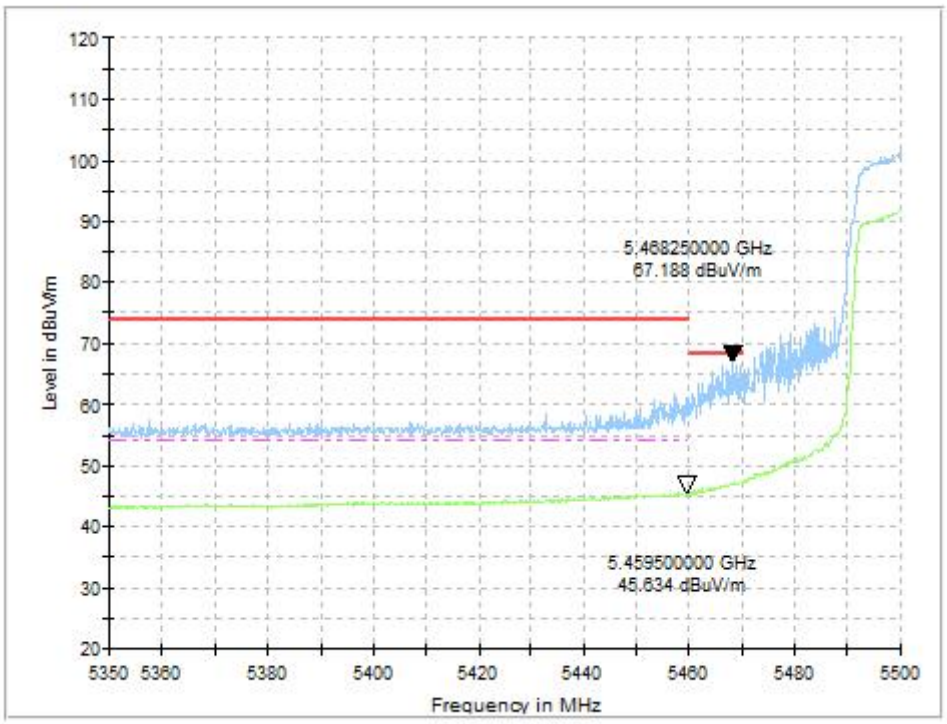

Fig. 52 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

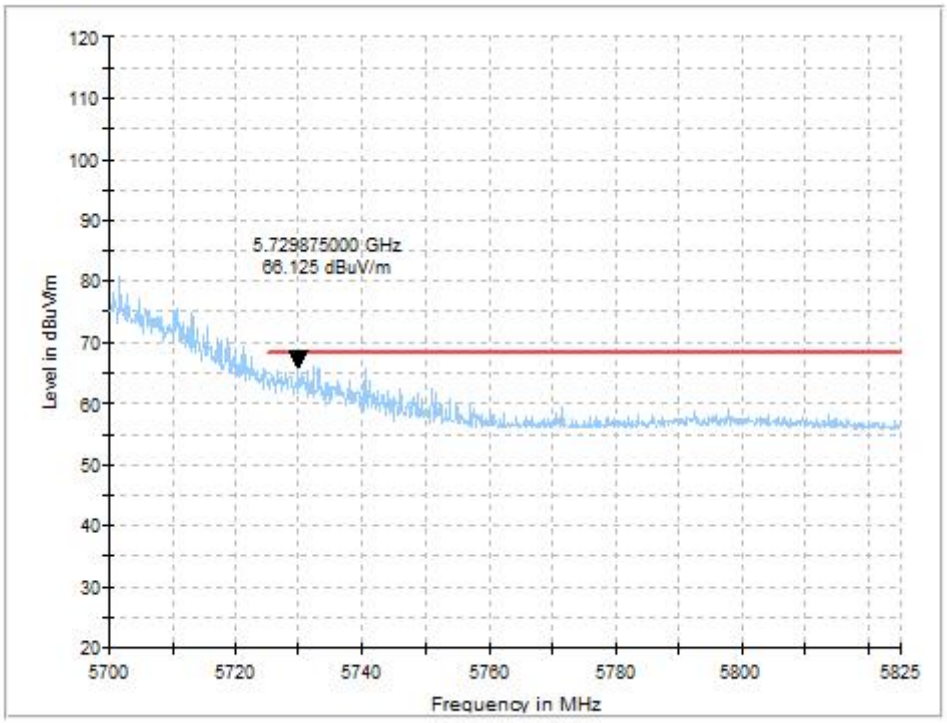

Fig. 53 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

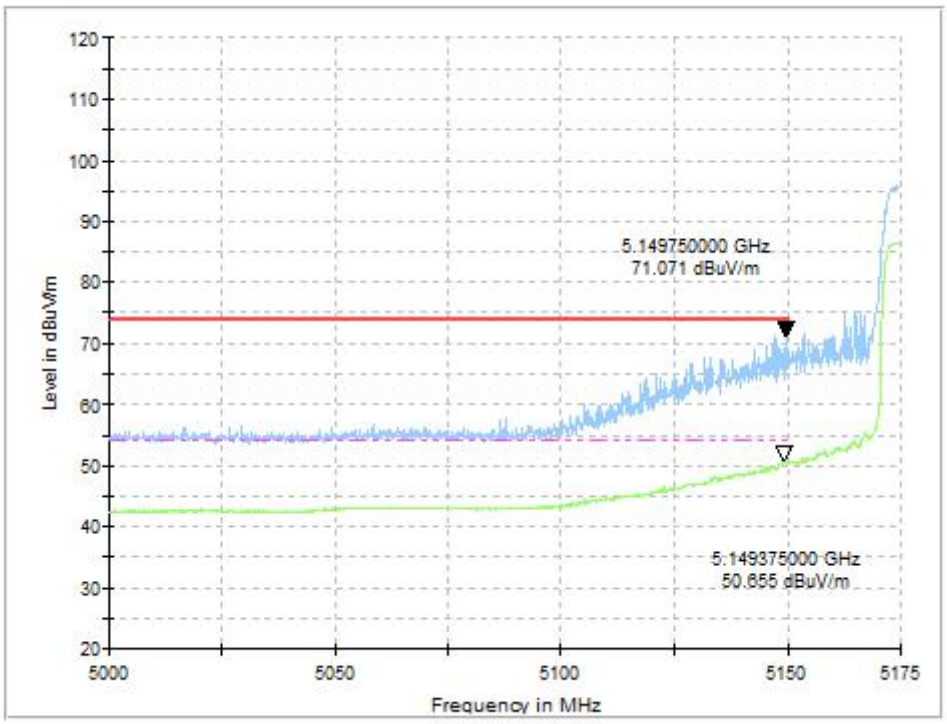

Fig. 54 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

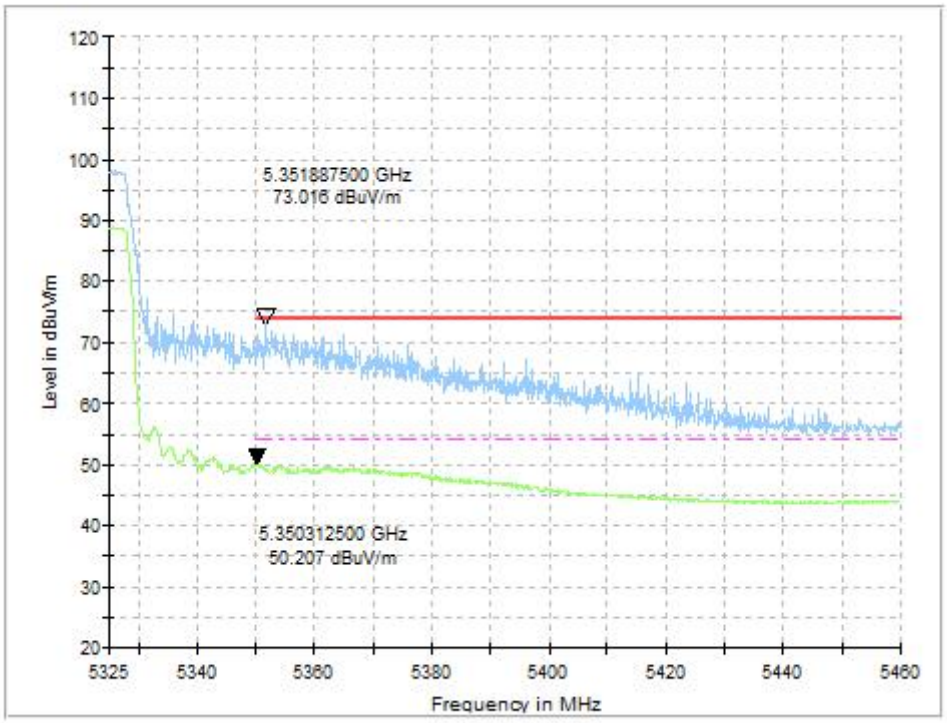

Fig. 55 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

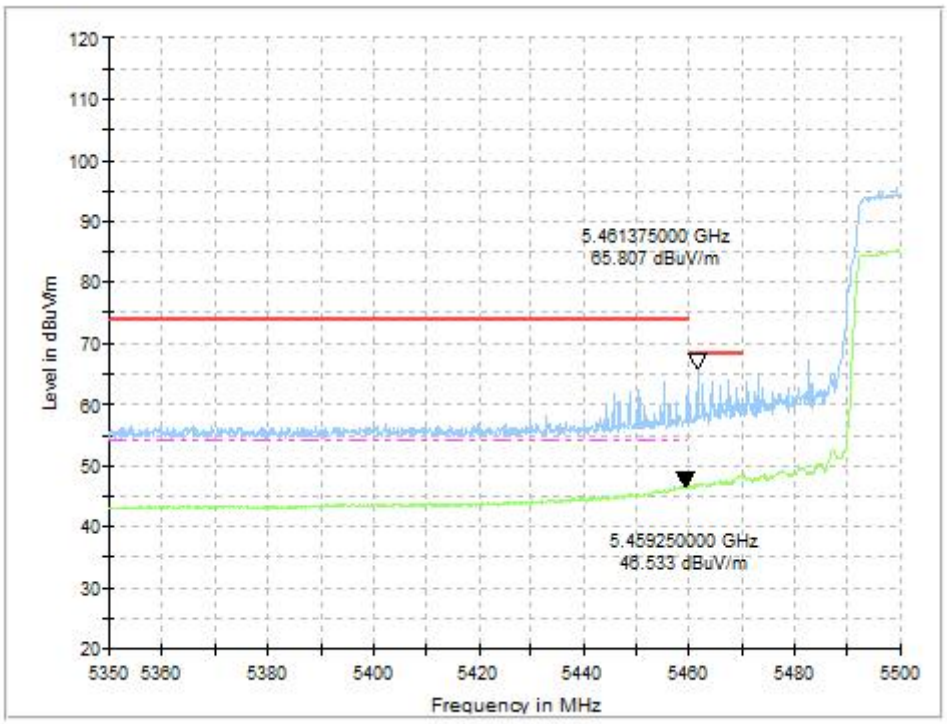

Fig. 56 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

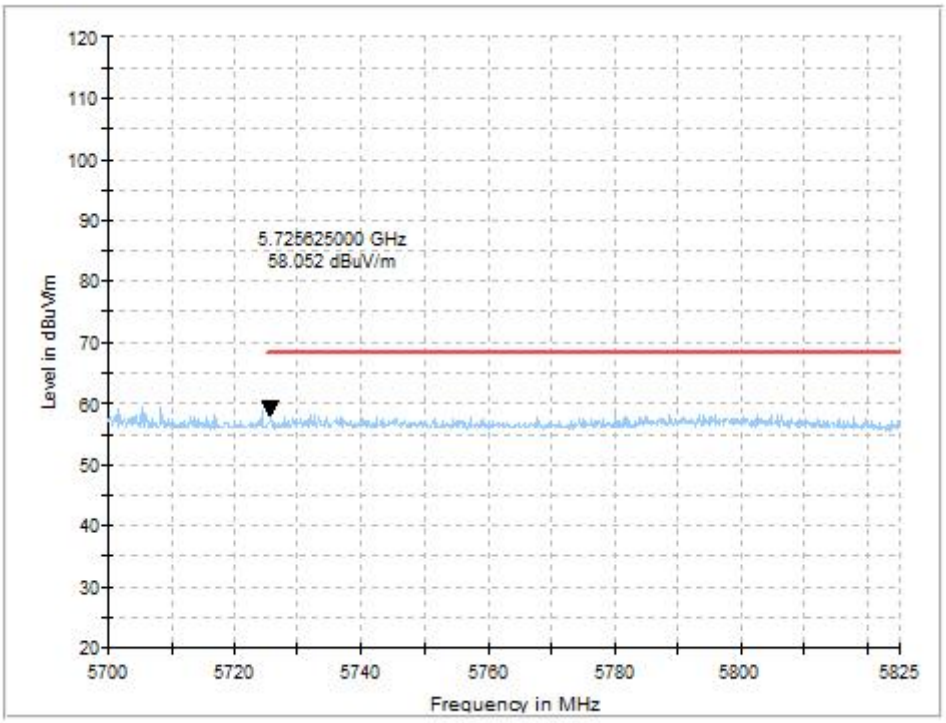

Fig. 57 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

The measurement is made according to KDB 789033
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)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(dBμV/m)	Measurement distance(m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

Note: for frequency range below 960MHz, the limit in 15.209 is defined in 10m test distance. The limit used above is calculated from 10m to 3m

Measurement Results:
EUT ID: UT81a

Note:
A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.
P_{Mea} is the field strength recorded from the instrument.
The measurement results are obtained as described below:
Result=P_{Mea}+$A_{Rpl=}$ P_{Mea}+Cable Loss+Antenna Factor

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)
5149.625	50.65	-23.27	32.90	41.02	54.00	3.35	V
5150.000	50.80	-23.27	32.90	41.17	54.00	3.20	V
11850.500	36.12	-29.90	38.80	27.22	54.00	17.88	H
15541.500	37.29	-25.97	38.50	24.76	54.00	16.71	H
17785.000	39.62	-25.05	41.71	22.96	54.00	14.38	V
17987.000	39.91	-24.58	41.87	22.62	54.00	14.09	H

Channel 40

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)
5149.875	43.36	-23.27	32.90	33.74	54.00	10.64	V
5459.125	42.82	-23.15	33.62	32.36	54.00	11.18	V
11845.500	36.17	-29.90	38.80	27.28	54.00	17.83	V
15598.500	38.11	-25.98	38.50	25.59	54.00	15.89	H
17789.000	39.63	-25.05	41.71	22.98	54.00	14.37	V
17988.000	40.01	-24.59	41.88	22.72	54.00	13.99	H

Channel 48

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)
5354.000	43.16	-23.55	33.12	33.60	54.00	10.84	V
5361.500	43.10	-23.46	33.15	33.42	54.00	10.90	V
11848.500	36.28	-29.90	38.80	27.38	54.00	17.72	H
15720.000	38.71	-25.79	38.60	25.90	54.00	15.29	V
17817.000	39.67	-25.03	41.70	23.00	54.00	14.33	V
17994.000	40.19	-24.68	41.89	22.97	54.00	13.81	H

Channel 52

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)
5118.500	42.63	-23.46	32.84	33.25	54.00	11.37	V
5123.250	42.62	-23.43	32.85	33.20	54.00	11.38	V
11848.500	36.60	-29.90	38.80	27.70	54.00	17.40	V
15780.500	39.93	-25.63	38.60	26.96	54.00	14.07	V
17955.500	40.20	-24.66	41.81	23.05	54.00	13.80	H
17988.500	40.19	-24.60	41.88	22.91	54.00	13.81	H

Channel 56

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)
5125.750	42.66	-23.41	32.85	33.22	54.00	11.34	V
5350.375	45.06	-23.60	33.10	35.55	54.00	8.94	V
11847.000	36.50	-29.90	38.80	27.60	54.00	17.50	H
15840.500	41.41	-25.53	38.64	28.30	54.00	12.59	V
17950.000	40.12	-24.68	41.80	23.00	54.00	13.88	V
17990.000	40.04	-24.62	41.88	22.77	54.00	13.96	V

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)
5350.125	48.89	-23.60	33.10	39.39	54.00	5.11	V
5350.750	48.72	-23.59	33.10	39.20	54.00	5.28	V
10640.000	34.72	-30.88	38.70	26.89	54.00	19.28	H
15960.500	42.80	-25.39	38.82	29.36	54.00	11.20	V
17950.500	39.97	-24.68	41.80	22.85	54.00	14.03	V
17992.000	40.04	-24.65	41.88	22.80	54.00	13.96	V

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)
5454.500	44.05	-23.16	33.61	33.59	54.00	9.95	V
5459.500	44.28	-23.15	33.62	33.81	54.00	9.72	V
11000.000	35.14	-31.02	38.60	27.56	54.00	18.86	H
15940.500	36.16	-25.41	38.78	22.79	54.00	17.84	H
17818.500	39.71	-25.02	41.70	23.03	54.00	14.29	H
17993.000	40.31	-24.66	41.89	23.09	54.00	13.69	H

Channel 140

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)
5451.750	42.85	-23.16	33.60	32.41	54.00	11.15	V
5459.250	42.86	-23.15	33.62	32.39	54.00	11.14	V
11400.000	35.80	-30.88	38.80	27.87	54.00	18.20	H
15845.000	35.84	-25.52	38.65	22.72	54.00	18.16	V
17801.500	39.59	-25.05	41.70	22.94	54.00	14.41	V
17957.500	39.83	-24.66	41.82	22.68	54.00	14.17	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)
5149.750	47.55	-23.27	32.90	37.93	54.00	6.45	V
5150.500	47.71	-23.27	32.90	38.08	54.00	6.29	V
11851.000	36.27	-29.90	38.80	27.37	54.00	17.73	H
15540.000	36.67	-25.97	38.50	24.14	54.00	17.33	H
17804.000	39.74	-25.05	41.70	23.09	54.00	14.26	V
17989.000	40.11	-24.60	41.88	22.83	54.00	13.89	V

Channel 40

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)
5149.500	43.18	-23.27	32.90	33.55	54.00	10.82	V
5369.125	42.93	-23.37	33.18	33.13	54.00	11.07	V
11848.500	36.16	-29.90	38.80	27.26	54.00	17.84	H
15600.000	37.07	-25.98	38.50	24.55	54.00	16.93	V
17820.000	39.67	-25.02	41.70	22.99	54.00	14.33	H
17986.000	40.01	-24.58	41.87	22.72	54.00	13.99	H

Channel 48

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)
5371.500	44.10	-23.34	33.19	34.25	54.00	9.90	V
5361.500	44.13	-23.46	33.15	34.44	54.00	9.87	V
11847.500	36.20	-29.90	38.80	27.30	54.00	17.80	V
15720.000	37.05	-25.79	38.60	24.24	54.00	16.95	H
17821.500	39.56	-25.02	41.70	22.88	54.00	14.44	V
17959.000	39.92	-24.65	41.82	22.76	54.00	14.08	H

Channel 52

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)
5350.250	43.37	-23.60	33.10	33.86	54.00	10.63	V
5354.125	43.11	-23.55	33.12	33.55	54.00	10.89	V
11850.500	36.32	-29.90	38.80	27.42	54.00	17.68	V
15780.000	38.40	-25.64	38.60	25.43	54.00	15.60	V
17956.500	39.98	-24.66	41.81	22.83	54.00	14.02	V
17989.000	39.94	-24.60	41.88	22.66	54.00	14.06	V

Channel 56

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)
5351.875	43.59	-23.58	33.11	34.06	54.00	10.41	V
5353.500	43.56	-23.56	33.11	34.00	54.00	10.44	V
11854.500	36.23	-29.90	38.80	27.32	54.00	17.77	V
15841.000	39.26	-25.53	38.64	26.15	54.00	14.74	V
17760.000	39.49	-25.06	41.74	22.81	54.00	14.51	H
17952.500	39.85	-24.67	41.81	22.72	54.00	14.15	V

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)
5350.250	47.20	-23.60	33.10	37.69	54.00	6.80	V
5351.250	46.78	-23.59	33.11	37.27	54.00	7.22	V
10640.000	34.57	-30.88	38.70	26.75	54.00	19.43	H
15960.500	40.46	-25.39	38.82	27.03	54.00	13.54	V
17955.000	39.97	-24.66	41.81	22.82	54.00	14.03	V
17990.000	39.90	-24.62	41.88	22.64	54.00	14.10	V

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)
5459.000	43.95	-23.15	33.62	33.49	54.00	10.05	V
5459.875	44.04	-23.15	33.62	33.57	54.00	9.96	V
11000.000	35.07	-31.02	38.60	27.48	54.00	18.93	V
15942.500	35.73	-25.41	38.79	22.35	54.00	18.27	H
17818.000	39.45	-25.02	41.70	22.78	54.00	14.55	V
17957.000	39.78	-24.66	41.81	22.63	54.00	14.22	V

Channel 140

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)
5455.875	42.83	-23.16	33.61	32.37	54.00	11.17	V
5457.000	42.94	-23.15	33.61	32.48	54.00	11.06	V
11400.000	35.45	-30.88	38.80	27.52	54.00	18.55	H
15848.000	35.78	-25.52	38.65	22.65	54.00	18.22	V
17818.500	39.54	-25.02	41.70	22.87	54.00	14.46	V
17956.000	39.85	-24.66	41.81	22.70	54.00	14.15	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)
5147.875	48.35	-23.28	32.90	38.74	54.00	5.65	V
5149.750	49.29	-23.27	32.90	39.66	54.00	4.71	V
11848.500	36.43	-29.90	38.80	27.53	54.00	17.57	V
15570.000	35.47	-25.98	38.50	22.95	54.00	18.53	V
17789.000	39.81	-25.05	41.71	23.15	54.00	14.19	V
17982.000	40.40	-24.59	41.86	23.13	54.00	13.60	V

Channel 46

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)
5350.875	43.81	-23.59	33.10	34.30	54.00	10.19	V
5353.375	43.81	-23.56	33.11	34.26	54.00	10.19	V
11849.500	36.46	-29.90	38.80	27.56	54.00	17.54	V
15690.000	34.87	-25.88	38.59	22.16	54.00	19.13	H
17818.000	39.87	-25.02	41.70	23.20	54.00	14.13	V
17993.500	40.46	-24.67	41.89	23.24	54.00	13.54	H

Channel 54

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)
5350.375	45.03	-23.60	33.10	35.53	54.00	8.97	V
5350.750	45.06	-23.59	33.10	35.55	54.00	8.94	V
11859.500	35.87	-29.89	38.80	26.96	54.00	18.13	V
15811.500	37.31	-25.56	38.61	24.26	54.00	16.69	H
17954.000	39.69	-24.67	41.81	22.55	54.00	14.31	V
17992.500	39.78	-24.65	41.89	22.55	54.00	14.22	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)
5350.875	46.12	-23.59	33.10	36.61	54.00	7.88	V
5351.375	46.06	-23.58	33.11	36.54	54.00	7.94	V
10620.000	35.04	-30.85	38.70	27.19	54.00	18.96	V
15931.500	38.55	-25.42	38.76	25.21	54.00	15.45	V
17960.000	39.79	-24.65	41.82	22.62	54.00	14.21	V
17980.500	39.54	-24.60	41.86	22.28	54.00	14.46	V

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)
5456.000	44.15	-23.16	33.61	33.69	54.00	9.85	V
5459.500	44.30	-23.15	33.62	33.83	54.00	9.70	V
11020.000	34.89	-30.96	38.58	27.27	54.00	19.11	H
15850.500	35.69	-25.52	38.65	22.55	54.00	18.31	H
17789.000	39.62	-25.05	41.71	22.96	54.00	14.38	H
17995.500	39.72	-24.70	41.89	22.53	54.00	14.28	V

Channel 118

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)
5455.500	43.21	-23.16	33.61	32.76	54.00	10.79	V
5457.125	43.38	-23.15	33.61	32.92	54.00	10.62	V
11180.000	34.76	-30.82	38.50	27.07	54.00	19.24	H
15942.500	36.27	-25.41	38.79	22.89	54.00	17.73	H
17954.500	40.15	-24.67	41.81	23.01	54.00	13.85	V
17986.500	40.29	-24.58	41.87	23.00	54.00	13.71	H

Channel 134

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)
5456.000	42.83	-23.16	33.61	32.38	54.00	11.17	V
5459.000	42.81	-23.15	33.62	32.34	54.00	11.19	V
11340.000	35.42	-30.71	38.74	27.38	54.00	18.58	H
15942.500	36.20	-25.41	38.79	22.82	54.00	17.80	V
17956.500	40.17	-24.66	41.81	23.02	54.00	13.83	H
17993.000	40.25	-24.66	41.89	23.02	54.00	13.75	V

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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)
5149.375	48.43	-23.27	32.90	38.81	54.00	5.57	V
5149.750	48.69	-23.27	32.90	39.06	54.00	5.31	V
11848.500	36.43	-29.90	38.80	27.53	54.00	17.57	V
15540.000	35.24	-25.97	38.50	22.71	54.00	18.76	H
17985.500	40.31	-24.58	41.87	23.02	54.00	13.69	V
17990.000	40.40	-24.62	41.88	23.14	54.00	13.60	H

Channel 40

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)
5122.750	42.99	-23.43	32.85	33.57	54.00	11.01	V
5455.000	43.01	-23.16	33.61	32.55	54.00	10.99	V
11849.000	36.25	-29.90	38.80	27.35	54.00	17.75	V
15600.000	36.90	-25.98	38.50	24.38	54.00	17.10	V
17797.500	39.61	-25.05	41.70	22.96	54.00	14.39	V
17987.000	40.08	-24.58	41.87	22.79	54.00	13.92	V

Channel 48

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)
5350.500	43.06	-23.60	33.10	33.56	54.00	10.94	V
5363.375	42.94	-23.44	33.15	33.22	54.00	11.06	V
11850.500	36.39	-29.90	38.80	27.49	54.00	17.61	H
15720.000	38.11	-25.79	38.60	25.30	54.00	15.89	V
17793.000	39.71	-25.05	41.71	23.06	54.00	14.29	V
17989.500	40.25	-24.61	41.88	22.98	54.00	13.75	H

Channel 52

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)
5354.875	43.08	-23.54	33.12	33.51	54.00	10.92	V
5365.000	42.99	-23.42	33.16	33.25	54.00	11.01	V
11850.500	36.12	-29.90	38.80	27.22	54.00	17.88	V
15779.500	38.48	-25.64	38.60	25.52	54.00	15.52	V
17953.500	39.87	-24.67	41.81	22.73	54.00	14.13	H
17985.000	39.95	-24.59	41.87	22.67	54.00	14.05	V

Channel 56

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)
5350.625	43.54	-23.59	33.10	34.03	54.00	10.46	V
5354.750	43.48	-23.54	33.12	33.91	54.00	10.52	V
11848.500	36.18	-29.90	38.80	27.28	54.00	17.82	H
15844.500	39.36	-25.52	38.64	26.24	54.00	14.64	H
17781.500	39.60	-25.05	41.72	22.94	54.00	14.40	H
17958.000	39.85	-24.66	41.82	22.69	54.00	14.15	V

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)
5350.375	47.87	-23.60	33.10	38.36	54.00	6.13	V
5351.875	47.31	-23.58	33.11	37.79	54.00	6.69	V
10640.000	34.58	-30.88	38.70	26.76	54.00	19.42	V
15961.000	40.32	-25.39	38.82	26.89	54.00	13.68	H
17951.500	39.77	-24.67	41.80	22.64	54.00	14.23	H
17990.000	39.88	-24.62	41.88	22.62	54.00	14.12	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)
5455.875	44.21	-23.16	33.61	33.75	54.00	9.79	V
5459.000	44.48	-23.15	33.62	34.01	54.00	9.52	V
11000.000	34.96	-31.02	38.60	27.38	54.00	19.04	V
15847.500	35.68	-25.52	38.65	22.55	54.00	18.32	V
17822.500	39.44	-25.01	41.70	22.75	54.00	14.56	H
17959.000	39.68	-24.65	41.82	22.51	54.00	14.32	H

Channel 140

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)
5450.750	42.76	-23.16	33.60	32.32	54.00	11.24	V
5457.750	42.93	-23.15	33.62	32.47	54.00	11.07	V
11400.000	35.20	-30.88	38.80	27.28	54.00	18.80	H
15845.000	35.67	-25.52	38.65	22.54	54.00	18.33	V
17787.000	39.55	-25.05	41.71	22.90	54.00	14.45	V
17954.500	39.68	-24.67	41.81	22.54	54.00	14.32	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)
5149.375	49.72	-23.27	32.90	40.10	54.00	4.28	V
5150.000	49.92	-23.27	32.90	40.29	54.00	4.08	V
11848.500	36.41	-29.90	38.80	27.51	54.00	17.59	H
15570.000	35.31	-25.98	38.50	22.79	54.00	18.69	V
17785.500	39.75	-25.05	41.71	23.09	54.00	14.25	V
17986.000	40.34	-24.58	41.87	23.05	54.00	13.66	V

Channel 46

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)
5350.625	43.30	-23.59	33.10	33.79	54.00	10.70	V
5365.500	43.27	-23.41	33.16	33.52	54.00	10.73	V
11848.000	36.34	-29.90	38.80	27.44	54.00	17.66	V
15690.000	34.96	-25.88	38.59	22.24	54.00	19.04	V
17818.000	39.72	-25.02	41.70	23.05	54.00	14.28	H
17986.000	40.42	-24.58	41.87	23.13	54.00	13.58	V

Channel 54

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)
5352.125	43.45	-23.58	33.11	33.92	54.00	10.55	V
5354.375	43.31	-23.55	33.12	33.74	54.00	10.69	V
11848.000	36.23	-29.90	38.80	27.33	54.00	17.77	V
15809.000	36.72	-25.56	38.61	23.67	54.00	17.28	H
17925.000	39.56	-24.74	41.75	22.55	54.00	14.44	V
17957.000	39.86	-24.66	41.81	22.70	54.00	14.14	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)
5350.125	46.30	-23.60	33.10	36.80	54.00	7.70	V
5350.750	46.30	-23.59	33.10	36.79	54.00	7.70	V
10620.000	35.00	-30.85	38.70	27.15	54.00	19.00	V
15933.000	37.69	-25.42	38.77	24.34	54.00	16.31	H
17955.000	39.95	-24.66	41.81	22.81	54.00	14.05	V
17989.500	39.78	-24.61	41.88	22.51	54.00	14.22	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)
5458.375	44.64	-23.15	33.62	34.18	54.00	9.36	V
5459.500	44.71	-23.15	33.62	34.25	54.00	9.29	V
11020.000	35.08	-30.96	38.58	27.46	54.00	18.92	H
15997.000	36.09	-25.43	38.89	22.63	54.00	17.91	H
17955.500	40.00	-24.66	41.81	22.85	54.00	14.00	V
17989.500	40.14	-24.61	41.88	22.87	54.00	13.86	V

Channel 118

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)
5458.750	43.31	-23.15	33.62	32.84	54.00	10.69	V
5459.625	43.39	-23.15	33.62	32.92	54.00	10.61	V
11180.000	34.76	-30.82	38.50	27.08	54.00	19.24	H
15849.000	36.06	-25.52	38.65	22.93	54.00	17.94	H
17955.000	40.02	-24.66	41.81	22.88	54.00	13.98	V
17993.500	40.15	-24.67	41.89	22.93	54.00	13.85	V

Channel 134

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)
5453.250	42.92	-23.16	33.61	32.48	54.00	11.08	V
5457.125	43.01	-23.15	33.61	32.55	54.00	10.99	V
11340.000	35.14	-30.71	38.74	27.11	54.00	18.86	V
15846.500	35.98	-25.52	38.65	22.86	54.00	18.02	H
17958.000	39.97	-24.66	41.82	22.81	54.00	14.03	H
17988.000	40.02	-24.59	41.88	22.74	54.00	13.98	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)
5149.625	49.4	-23.3	32.9	39.76	54.0	4.6	V
5150.000	49.4	-23.3	32.9	39.79	54.0	4.6	V
11871.000	35.9	-29.9	38.8	26.94	54.0	18.1	V
15630.000	35.2	-26.0	38.5	22.65	54.0	18.8	V
17958.500	39.6	-24.7	41.8	22.45	54.0	14.4	H
17991.500	39.5	-24.6	41.9	22.28	54.0	14.5	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)
5350.000	49.0	-23.6	33.1	39.51	54.0	5.0	V
5350.625	48.9	-23.6	33.1	39.36	54.0	5.1	V
11859.000	35.5	-29.9	38.8	26.59	54.0	18.5	V
15870.000	35.9	-25.5	38.7	22.70	54.0	18.1	V
17922.000	39.3	-24.8	41.7	22.34	54.0	14.7	V
17989.000	39.5	-24.6	41.9	22.25	54.0	14.5	V

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)
5457.625	45.2	-23.2	33.6	34.78	54.0	8.8	V
5459.250	45.1	-23.2	33.6	34.59	54.0	8.9	V
11060.000	34.3	-30.9	38.5	26.61	54.0	19.7	H
15850.500	36.0	-25.5	38.7	22.86	54.0	18.0	V
17960.500	40.1	-24.7	41.8	22.88	54.0	13.9	V
17987.500	40.1	-24.6	41.9	22.77	54.0	13.9	V

Channel 122

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)
5459.000	43.2	-23.2	33.6	32.75	54.0	10.8	V
5460.000	43.2	-23.2	33.6	32.69	54.0	10.8	V
11220.000	34.4	-30.7	38.5	26.48	54.0	19.6	V
15843.500	36.0	-25.5	38.6	22.92	54.0	18.0	H
17956.000	40.0	-24.7	41.8	22.88	54.0	14.0	H
17989.000	40.0	-24.6	41.9	22.74	54.0	14.0	V

PEAK Results:

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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)
5146.750	69.75	-23.29	32.89	60.14	74.00	4.25	H
5149.250	69.85	-23.28	32.90	60.23	74.00	4.15	V
10360.000	48.66	-30.47	38.56	40.56	68.30	19.64	H
15540.000	48.03	-25.97	38.50	35.50	74.00	25.97	H
17499.000	53.76	-24.98	42.00	36.73	68.30	14.54	H
17540.000	53.94	-25.01	41.96	36.99	68.30	14.36	V

Channel 40

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)
5149.500	60.97	-23.27	32.90	51.34	74.00	13.03	H
5259.500	61.05	-23.51	32.92	51.64	74.00	12.95	H
10400.000	48.55	-30.34	38.60	40.29	68.30	19.75	H
15600.000	49.28	-25.98	38.50	36.76	74.00	24.72	V
17235.000	53.65	-24.76	41.57	36.84	68.30	14.65	H
17407.500	53.62	-24.86	42.00	36.47	68.30	14.68	H

Channel 48

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)
5315.000	59.02	-23.66	33.03	49.65	74.00	14.98	V
5319.500	58.72	-23.66	33.04	49.34	74.00	15.28	H
10480.000	48.24	-30.60	38.68	40.17	68.30	20.06	H
15720.000	48.84	-25.79	38.60	36.03	74.00	25.16	H
17492.000	54.31	-24.97	42.00	37.28	68.30	13.99	H
17518.000	54.50	-24.99	41.98	37.51	68.30	13.80	V

Channel 52

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)
5162.400	54.28	-23.21	32.90	44.59	74.00	19.72	H
5167.600	54.25	-23.18	32.90	44.53	74.00	19.75	V
10526.000	50.27	-30.74	38.70	42.31	68.30	18.03	V
15781.000	52.88	-25.63	38.60	39.91	74.00	21.12	V
17302.000	54.47	-24.68	41.71	37.45	68.30	13.83	V
17543.000	54.71	-25.01	41.96	37.77	68.30	13.59	H

Channel 56

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)
5210.500	58.07	-23.26	32.90	48.42	74.00	15.93	V
5351.000	58.49	-23.59	33.10	48.98	74.00	15.51	H
10560.000	48.14	-30.78	38.70	40.22	68.30	20.16	V
15842.000	54.81	-25.53	38.64	41.70	74.00	19.19	H
17260.500	53.44	-24.71	41.62	36.53	68.30	14.86	H
17500.500	53.63	-24.98	42.00	36.60	68.30	14.67	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)
5350.538	72.53	-23.59	33.10	63.02	74.00	1.47	H
5351.550	72.94	-23.58	33.11	63.42	74.00	1.06	V
10640.000	47.99	-30.88	38.70	40.17	74.00	26.01	V
15964.000	54.54	-25.38	38.83	41.10	74.00	19.46	H
17231.500	53.24	-24.77	41.56	36.45	68.30	15.06	H
17673.000	53.45	-25.08	41.83	36.70	68.30	14.85	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)
5467.750	64.18	-23.14	33.64	53.68	68.30	4.12	H
5469.875	63.91	-23.14	33.64	53.41	68.30	4.39	H
11000.000	46.78	-31.02	38.60	39.20	74.00	27.22	H
16500.000	54.31	-25.42	40.10	39.63	68.30	13.99	V
17329.500	53.17	-24.73	41.79	36.11	68.30	15.13	H
17404.500	53.98	-24.85	42.00	36.84	68.30	14.32	V

Channel 140

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)
5725.125	65.16	-22.73	34.05	53.84	68.30	3.14	V
5727.625	66.31	-22.73	34.06	54.98	68.30	7.69	V
11400.000	46.72	-30.88	38.80	38.80	74.00	21.58	V
17100.000	52.49	-25.03	41.40	36.12	68.30	15.81	V
17474.500	53.38	-24.95	42.00	36.33	68.30	14.92	H
17653.500	54.01	-25.09	41.85	37.25	68.30	14.29	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)
5148.500	68.93	-23.28	32.90	59.31	74.00	5.07	V
5149.125	68.97	-23.28	32.90	59.34	74.00	5.03	V
10360.000	49.16	-30.47	38.56	41.06	68.30	19.14	V
15540.000	48.05	-25.97	38.50	35.52	74.00	25.95	H
17551.000	53.73	-25.02	41.95	36.80	68.30	14.57	H
17587.000	53.79	-25.05	41.91	36.93	68.30	14.51	H

Channel 40

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)
5128.500	55.71	-23.39	32.86	46.25	74.00	18.29	V
5287.000	56.16	-23.61	32.97	46.80	74.00	17.84	V
10400.000	48.91	-30.34	38.60	40.65	68.30	19.39	V
15600.000	48.40	-25.98	38.50	35.88	74.00	25.60	H
17242.000	54.48	-24.75	41.58	37.64	68.30	13.82	V
17308.500	54.10	-24.69	41.73	37.07	68.30	14.20	H

Channel 48

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)
5317.000	57.98	-23.66	33.03	48.60	74.00	16.02	V
5321.500	57.95	-23.66	33.04	48.57	74.00	16.05	H
10480.000	48.27	-30.60	38.68	40.19	68.30	20.03	V
15720.000	50.63	-25.79	38.60	37.82	74.00	23.37	V
17436.000	53.83	-24.90	42.00	36.73	68.30	14.47	H
17485.000	54.08	-24.96	42.00	37.04	68.30	14.22	V

Channel 52

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)
5202.400	61.80	-23.20	32.90	52.11	74.00	12.20	H
5322.400	62.78	-23.66	33.04	53.40	74.00	11.22	H
10520.000	46.75	-30.73	38.70	38.78	68.30	21.55	H
15780.000	48.31	-25.64	38.60	35.35	74.00	25.69	V
17311.000	53.08	-24.70	41.73	36.04	68.30	15.22	V
17635.000	53.39	-25.09	41.86	36.62	68.30	14.91	V

Channel 56

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)
5227.200	61.13	-23.37	32.90	51.60	74.00	12.87	H
5336.800	59.67	-23.68	33.07	50.28	74.00	14.33	V
10560.000	46.42	-30.78	38.70	38.50	68.30	21.88	H
15847.000	53.60	-25.52	38.65	40.47	74.00	20.40	V
17224.500	53.78	-24.79	41.55	37.02	68.30	14.52	V
17386.500	53.84	-24.82	41.96	36.71	68.30	14.46	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)
5352.533	71.21	-23.57	33.11	61.67	74.00	2.79	H
5360.100	70.19	-23.48	33.14	60.53	74.00	3.81	H
10640.000	46.15	-30.88	38.70	38.33	74.00	27.85	V
15959.500	52.53	-25.39	38.82	39.09	74.00	21.47	H
17190.500	52.83	-24.86	41.49	36.20	68.30	15.47	V
17328.500	53.25	-24.73	41.79	36.19	68.30	15.05	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)
5466.750	65.91	-23.14	33.63	55.42	68.30	2.39	V
5468.750	66.54	-23.14	33.64	56.04	68.30	1.76	V
11000.000	46.34	-31.02	38.60	38.75	74.00	27.66	V
16500.000	54.55	-25.42	40.10	39.87	68.30	13.75	H
17488.500	53.36	-24.97	42.00	36.32	68.30	14.94	H
17613.500	53.62	-25.08	41.89	36.81	68.30	14.68	V

Channel 140

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)
5726.000	64.99	-22.73	34.05	53.67	68.30	3.31	H
5727.500	66.99	-22.73	34.06	55.66	68.30	1.31	H
11400.000	46.73	-30.88	38.80	38.80	74.00	27.27	H
17100.000	50.98	-25.03	41.40	34.61	68.30	17.32	V
17268.500	53.49	-24.69	41.64	36.54	68.30	14.81	V
17600.000	53.32	-25.06	41.90	36.48	68.30	14.98	V

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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)
5146.875	72.42	-23.29	32.89	62.81	74.00	1.58	V
5150.000	72.49	-23.27	32.90	62.86	74.00	1.51	H
10380.000	46.95	-30.41	38.58	38.77	68.30	21.35	V
15570.000	47.34	-25.98	38.50	34.81	74.00	26.66	H
17399.500	53.05	-24.84	42.00	35.89	68.30	15.25	V
17475.000	54.11	-24.96	42.00	37.06	68.30	14.19	V

Channel 46

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)
5344.000	57.89	-23.68	33.09	48.48	74.00	16.11	V
5352.000	56.97	-23.58	33.11	47.44	74.00	17.03	V
10460.000	47.53	-30.53	38.66	39.40	68.30	20.77	V
15690.000	46.64	-25.88	38.59	33.92	74.00	27.36	H
17424.500	53.31	-24.88	42.00	36.20	68.30	14.99	H
17490.000	53.92	-24.97	42.00	36.89	68.30	14.38	V

Channel 54

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)
5189.600	60.10	-23.12	32.90	50.31	74.00	13.90	H
5348.000	62.93	-23.63	33.10	53.46	74.00	11.07	H
10540.000	47.00	-30.75	38.70	39.06	68.30	21.30	V
15810.000	47.84	-25.56	38.61	34.79	74.00	26.16	H
16828.500	51.66	-25.23	40.76	36.14	68.30	16.64	H
17326.500	53.93	-24.72	41.78	36.87	68.30	14.37	V

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)
5350.200	70.95	-23.60	33.10	61.45	74.00	3.05	H
5352.113	70.05	-23.58	33.11	60.51	74.00	3.95	V
10620.000	46.04	-30.85	38.70	38.19	74.00	27.96	H
15928.000	50.51	-25.42	38.76	37.18	74.00	23.49	H
17319.500	53.30	-24.71	41.76	36.25	68.30	15.00	H
17626.000	53.79	-25.09	41.87	37.01	68.30	14.51	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)
5467.000	63.38	-23.14	33.63	52.89	68.30	4.92	H
5469.000	65.71	-23.14	33.64	55.21	68.30	2.59	H
11020.000	46.01	-30.96	38.58	38.39	74.00	27.99	H
16530.000	50.03	-25.31	40.07	35.27	68.30	18.27	H
17488.000	53.06	-24.97	42.00	36.03	68.30	15.23	H
17694.000	53.45	-25.08	41.81	36.72	68.30	14.85	V

Channel 118

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)
5478.500	57.16	-23.13	33.66	46.63	68.30	11.14	H
5700.000	59.24	-22.75	34.00	47.99	68.30	9.06	H
11180.000	46.88	-30.82	38.50	39.19	74.00	27.12	V
16770.500	53.58	-25.30	40.61	38.26	68.30	14.72	V
17457.000	54.33	-24.94	42.00	37.27	68.30	13.97	H
17570.000	53.83	-25.04	41.93	36.94	68.30	14.47	H

Channel 134

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)
5725.625	65.59	-22.73	34.05	54.27	68.30	2.71	V
5730.875	65.66	-22.74	34.06	54.34	68.30	2.64	V
11340.000	46.82	-30.71	38.74	38.79	74.00	27.18	H
17010.000	50.64	-25.04	41.13	34.56	68.30	17.66	H
17342.500	53.30	-24.75	41.83	36.22	68.30	15.00	V
17504.500	52.91	-24.98	42.00	35.90	68.30	15.39	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)
5140.875	67.45	-23.32	32.88	57.88	74.00	6.55	H
5143.250	67.15	-23.31	32.89	57.57	74.00	6.85	V
10360.000	47.75	-30.47	38.56	39.66	68.30	20.55	H
15540.000	48.77	-25.97	38.50	36.24	74.00	25.23	V
17556.000	53.17	-25.03	41.94	36.25	68.30	15.13	V
17590.500	53.50	-25.06	41.91	36.65	68.30	14.80	V

Channel 40

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)
5142.500	56.58	-23.31	32.89	47.01	74.00	17.42	V
5278.500	56.42	-23.58	32.96	47.04	74.00	17.58	H
10400.000	48.21	-30.34	38.60	39.96	68.30	20.09	V
15600.000	46.57	-25.98	38.50	34.05	74.00	27.43	V
17147.000	52.84	-24.95	41.45	36.35	68.30	15.46	V
17192.500	53.81	-24.85	41.49	37.17	68.30	14.49	H

Channel 48

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)
5317.000	56.77	-23.66	33.03	47.40	74.00	17.23	V
5322.000	56.54	-23.66	33.04	47.16	74.00	17.46	V
10480.000	47.43	-30.60	38.68	39.35	68.30	20.87	H
15720.000	49.67	-25.79	38.60	36.86	74.00	24.33	V
17463.000	53.52	-24.94	42.00	36.46	68.30	14.78	H
17524.500	54.24	-25.00	41.98	37.27	68.30	14.06	H

Channel 52

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)
5205.200	58.93	-23.22	32.90	49.26	74.00	15.07	V
5337.600	60.51	-23.68	33.08	51.11	74.00	13.49	V
10520.000	47.82	-30.73	38.70	39.85	68.30	20.48	V
15780.000	48.71	-25.64	38.60	35.74	74.00	25.29	H
17301.500	53.00	-24.68	41.70	35.98	68.30	15.30	H
17578.500	52.83	-25.05	41.92	35.95	68.30	15.47	H

Channel 56

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)
5225.600	60.52	-23.36	32.90	50.97	74.00	13.48	H
5336.000	50.06	-23.68	33.07	40.67	74.00	23.94	V
10560.000	46.73	-30.78	38.70	38.81	68.30	21.57	V
15836.000	50.94	-25.53	38.64	37.83	74.00	23.06	V
17016.500	52.40	-25.04	41.15	36.29	68.30	15.90	H
17425.000	53.34	-24.89	42.00	36.22	68.30	14.96	V

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)
5350.087	72.56	-23.60	33.10	63.06	74.00	1.44	H
5352.675	72.40	-23.57	33.11	62.85	74.00	1.60	H
10640.000	46.11	-30.88	38.70	38.28	74.00	27.89	V
15965.500	53.14	-25.39	38.83	39.70	74.00	20.86	V
16923.000	52.33	-25.09	40.95	36.47	68.30	15.97	V
17502.500	53.51	-24.98	42.00	36.49	68.30	14.79	V

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)
5463.375	63.92	-23.15	33.63	53.44	68.30	4.38	H
5469.875	65.99	-23.14	33.64	55.49	68.30	2.31	V
11000.000	47.77	-31.02	38.60	40.19	74.00	26.23	V
16500.000	55.52	-25.42	40.10	40.84	68.30	12.78	V
17257.000	53.63	-24.72	41.61	36.73	68.30	14.67	H
17579.000	53.22	-25.05	41.92	36.35	68.30	15.08	H

Channel 140

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)
5726.000	62.72	-22.73	34.05	51.40	68.30	5.58	H
5276.875	61.80	-23.58	32.95	52.43	68.30	6.50	H
11400.000	46.65	-30.88	38.80	38.72	74.00	27.35	V
17100.000	50.95	-25.03	41.40	34.57	68.30	17.35	H
17313.500	52.97	-24.70	41.74	35.93	68.30	15.33	H
17529.000	52.68	-25.00	41.97	35.71	68.30	15.62	V

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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)
5148.250	71.69	-23.28	32.90	62.07	74.00	2.31	H
5149.875	71.04	-23.27	32.90	61.41	74.00	2.96	H
10380.000	49.06	-30.41	38.58	40.89	68.30	19.24	H
15570.000	46.98	-25.98	38.50	34.46	74.00	27.02	V
17440.000	53.66	-24.91	42.00	36.57	68.30	14.64	V
17521.000	54.17	-25.00	41.98	37.18	68.30	14.13	H

Channel 46

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)
5326.500	57.99	-23.67	33.05	48.61	74.00	16.01	V
5331.500	57.90	-23.68	33.06	48.52	74.00	16.10	V
10460.000	46.93	-30.53	38.66	38.80	68.30	21.37	H
15690.000	46.57	-25.88	38.59	33.85	74.00	27.43	H
17261.000	53.17	-24.71	41.62	36.26	68.30	15.13	V
17290.000	53.67	-24.66	41.68	36.65	68.30	14.63	H

Channel 54

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)
5204.400	61.87	-23.22	32.90	52.19	74.00	12.13	V
5337.200	63.06	-23.68	33.07	53.67	74.00	10.94	H
10540.000	46.77	-30.75	38.70	38.82	68.30	21.53	V
15810.000	49.04	-25.56	38.61	35.99	74.00	24.96	V
17141.000	52.85	-24.97	41.44	36.38	68.30	15.45	V
17556.500	53.36	-25.03	41.94	36.44	68.30	14.94	V

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)
5350.650	70.16	-23.59	33.10	60.65	74.00	3.84	H
5356.950	70.96	-23.52	33.13	61.35	74.00	3.04	V
10620.000	46.28	-30.85	38.70	38.43	74.00	27.72	H
15930.000	48.42	-25.42	38.76	35.09	74.00	25.58	H
17238.000	53.00	-24.76	41.58	36.18	68.30	15.30	H
17341.000	53.64	-24.75	41.82	36.56	68.30	14.66	V

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)
5464.375	65.12	-23.15	33.63	54.64	68.30	3.18	V
5468.250	67.19	-23.14	33.64	56.69	68.30	1.11	H
11020.000	47.49	-30.96	38.58	39.87	74.00	26.51	H
16515.500	52.09	-25.37	40.08	37.37	68.30	16.21	H
17128.000	51.73	-24.99	41.43	35.29	68.30	16.57	H
17603.000	53.68	-25.07	41.90	36.85	68.30	14.62	H

Channel 118

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)
5517.000	61.82	-23.13	33.77	51.18	68.30	6.48	H
5679.500	61.01	-22.76	33.96	49.82	68.30	7.29	H
11180.000	46.28	-30.82	38.50	38.60	74.00	27.72	H
16777.500	51.37	-25.31	40.63	36.04	68.30	16.93	H
17249.000	53.53	-24.73	41.60	36.67	68.30	14.77	V
17460.500	53.59	-24.94	42.00	36.54	68.30	14.71	H

Channel 134

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)
5729.875	66.12	-22.74	34.06	54.80	68.30	2.17	V
5732.250	66.01	-22.75	34.06	54.69	68.30	2.29	V
11340.000	47.27	-30.71	38.74	39.24	74.00	26.73	V
17010.000	50.76	-25.04	41.13	34.68	68.30	17.54	H
17286.500	53.62	-24.66	41.67	36.60	68.30	14.68	V
17531.500	53.59	-25.00	41.97	36.62	68.30	14.71	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)
5147.000	71.0	-23.3	32.9	61.40	74.0	3.0	V
5149.750	71.1	-23.3	32.9	61.44	74.0	2.9	H
10420.000	46.3	-30.4	38.6	38.07	68.3	22.0	V
15630.000	46.6	-26.0	38.5	34.09	74.0	27.4	H
17412.000	52.7	-24.9	42.0	35.56	68.3	15.6	V
17668.500	53.1	-25.1	41.8	36.38	68.3	15.2	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)
5351.888	73.0	-23.6	33.1	63.49	74.0	1.0	V
5352.675	71.9	-23.6	33.1	62.40	74.0	2.1	V
10580.000	46.9	-30.8	38.7	39.04	68.3	21.4	V
15870.000	48.4	-25.5	38.7	35.22	74.0	25.6	V
17191.500	53.4	-24.9	41.5	36.78	68.3	14.9	H
17319.500	53.5	-24.7	41.8	36.44	68.3	14.8	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)
5461.375	65.8	-23.1	33.6	55.33	68.3	2.5	V
5467.500	64.1	-23.1	33.6	53.65	68.3	4.2	H
11060.000	46.3	-30.9	38.5	38.67	74.0	27.7	H
16590.000	49.5	-25.1	40.0	34.63	68.3	18.8	H
17378.000	53.1	-24.8	41.9	35.97	68.3	15.2	H
17661.500	53.9	-25.1	41.8	37.10	68.3	14.4	H

Channel 122

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)
5725.625	58.1	-22.7	34.1	46.73	68.3	10.2	H
5727.625	57.6	-22.7	34.1	46.29	68.3	10.7	H
11220.000	47.2	-30.7	38.5	39.35	74.0	26.8	H
16830.000	49.7	-25.2	40.8	34.16	68.3	18.6	H
17330.000	53.5	-24.7	41.8	36.48	68.3	14.8	H
17636.500	53.4	-25.1	41.9	36.67	68.3	14.9	V

Conclusion: PASS

A.7. AC Powerline Conducted Emission (150kHz- 30MHz)

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

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.

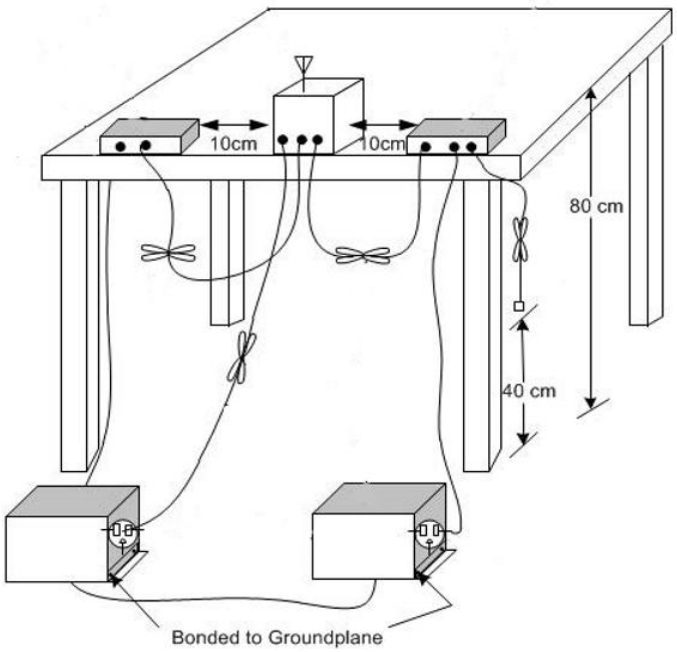
The measurement bandwidth is:

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

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Test setup



Measurement Result and limit:

EUT ID: UT85a

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.58	Fig.59	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.58	Fig.59	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: PASS

Test graphs as below:

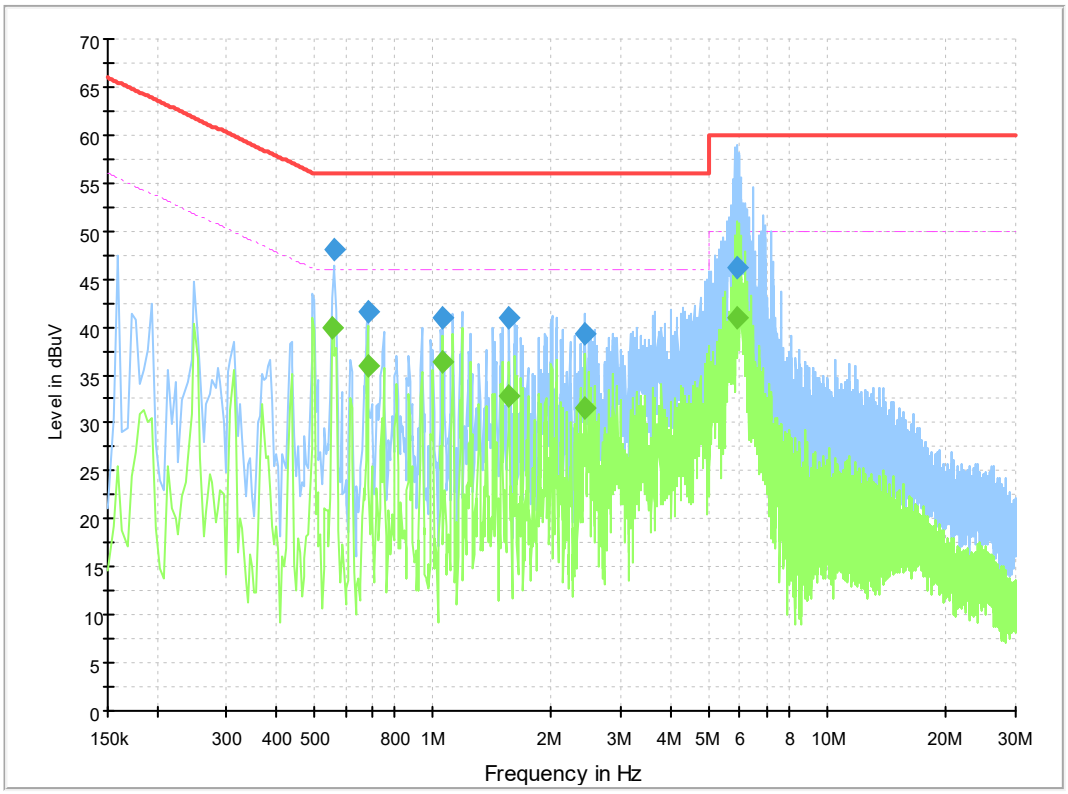


Fig.58 Conducted Emission(802.11a, Ch40, TX)

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.559500	48.1	2000.0	9.000	Off	L1	19.6	7.9	56.0
0.685500	41.6	2000.0	9.000	Off	L1	19.6	14.4	56.0
1.059000	41.0	2000.0	9.000	Off	L1	19.7	15.0	56.0
1.558500	41.0	2000.0	9.000	Off	L1	19.7	15.0	56.0
2.427000	39.3	2000.0	9.000	Off	L1	19.7	16.7	56.0
5.896500	46.2	2000.0	9.000	Off	N	19.8	13.8	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.555000	39.9	2000.0	9.000	Off	L1	19.6	6.1	46.0
0.685500	36.0	2000.0	9.000	Off	L1	19.6	10.0	46.0
1.059000	36.5	2000.0	9.000	Off	L1	19.7	9.5	46.0
1.563000	32.7	2000.0	9.000	Off	L1	19.7	13.3	46.0
2.427000	31.6	2000.0	9.000	Off	L1	19.7	14.4	46.0
5.896500	40.9	2000.0	9.000	Off	L1	19.8	9.1	50.0

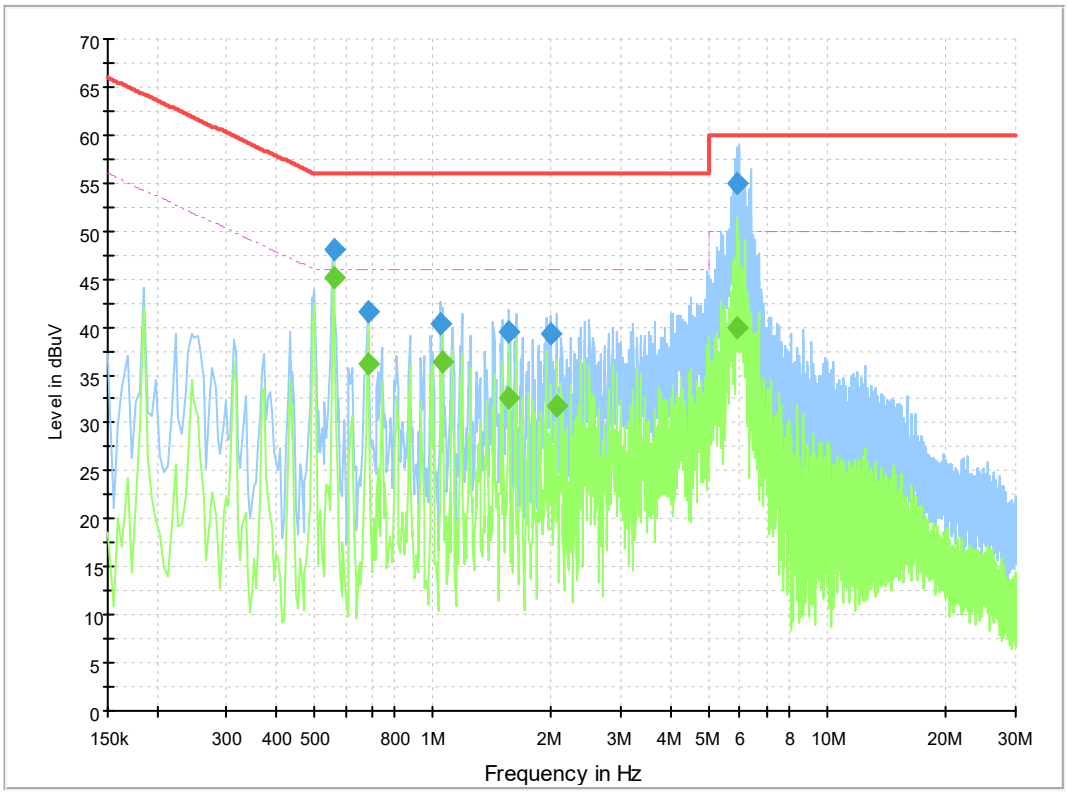


Fig.59 Conducted Emission(802.11a, IDLE)

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.559500	**48.2**	**2000.0**	**9.000**	**Off**	**L1**	**19.6**	**7.8**	**56.0**
0.685500	**41.6**	**2000.0**	**9.000**	**Off**	**L1**	**19.6**	**14.4**	**56.0**
1.050000	**40.2**	**2000.0**	**9.000**	**Off**	**L1**	**19.7**	**15.8**	**56.0**
1.563000	**39.5**	**2000.0**	**9.000**	**Off**	**L1**	**19.7**	**16.5**	**56.0**
1.990500	**39.3**	**2000.0**	**9.000**	**Off**	**L1**	**19.7**	**16.7**	**56.0**
5.937000	**55.0**	**2000.0**	**9.000**	**Off**	**L1**	**19.8**	**5.0**	**60.0**

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.559500	**45.1**	**2000.0**	**9.000**	**Off**	**L1**	**19.6**	**0.9**	**46.0**
0.685500	**36.1**	**2000.0**	**9.000**	**Off**	**L1**	**19.6**	**9.9**	**46.0**
1.059000	**36.4**	**2000.0**	**9.000**	**Off**	**L1**	**19.7**	**9.6**	**46.0**
1.563000	**32.7**	**2000.0**	**9.000**	**Off**	**L1**	**19.7**	**13.3**	**46.0**
2.058000	**31.8**	**2000.0**	**9.000**	**Off**	**L1**	**19.7**	**14.2**	**46.0**
5.937000	**39.9**	**2000.0**	**9.000**	**Off**	**N**	**19.8**	**10.1**	**50.0**

A.8. 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: UT33a

Measurement Result:

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.60	17.78	P
	5200 MHz	Fig.61	18.09	P
	5240 MHz	Fig.62	18.07	P
802.11ac (VHT20)	5180 MHz	Fig.63	18.42	P
	5200 MHz	Fig.64	18.40	P
	5240 MHz	Fig.65	18.45	P
802.11n HT40	5190 MHz	Fig.66	36.57	P
	5230 MHz	Fig.67	36.92	P
802.11ac (VHT80)	5210 MHz	Fig.68	75.43	P

Test graphs as below:

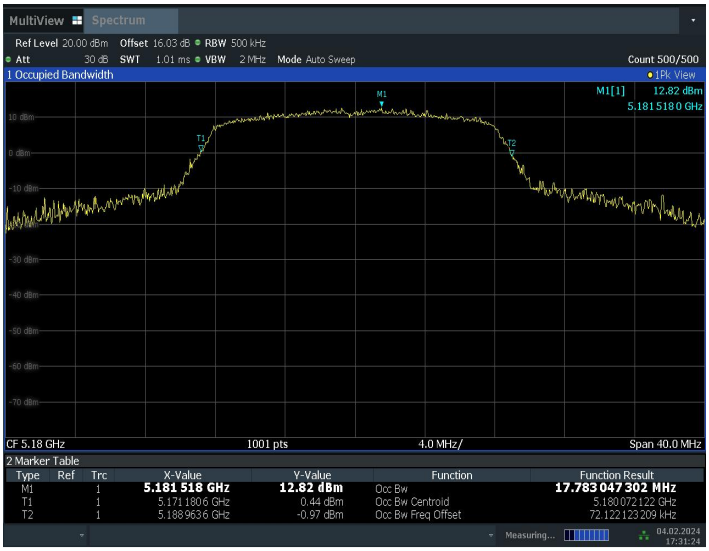


Fig.60 99% Occupied bandwidth (802.11a, 5180MHz)

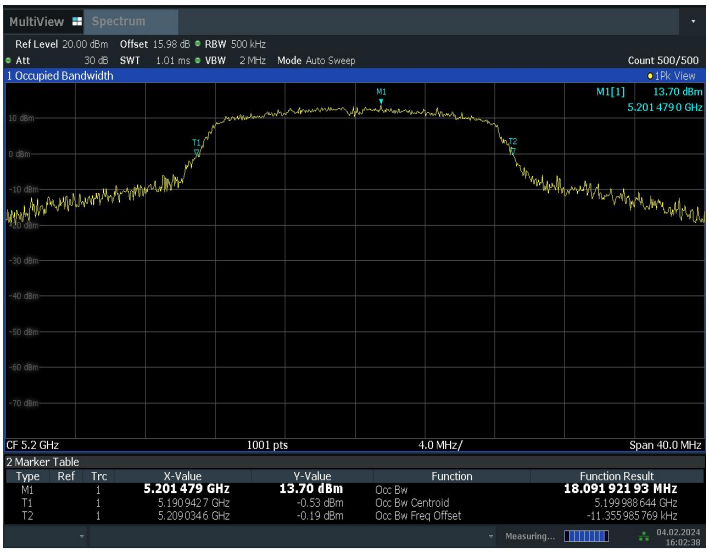


Fig.61 99% Occupied bandwidth (802.11a, 5200MHz)

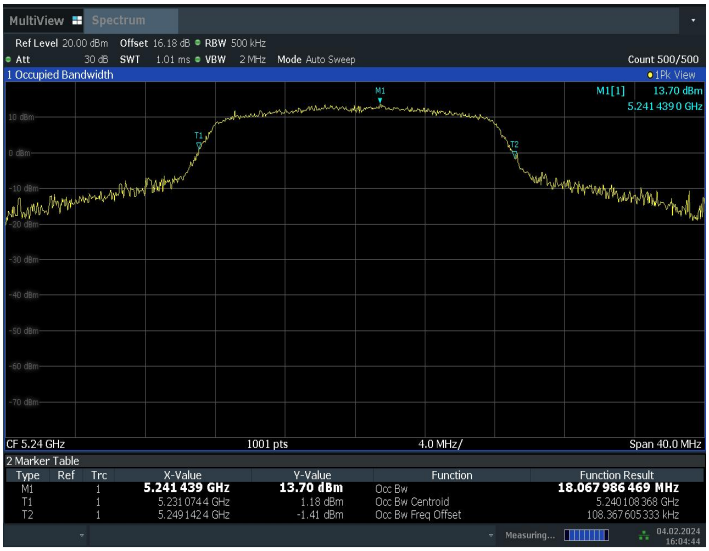


Fig.62 99% Occupied bandwidth (802.11a, 5240MHz)

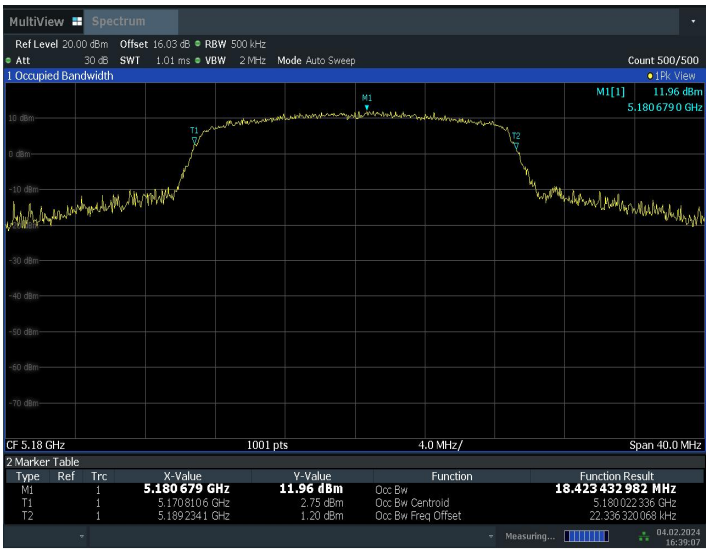
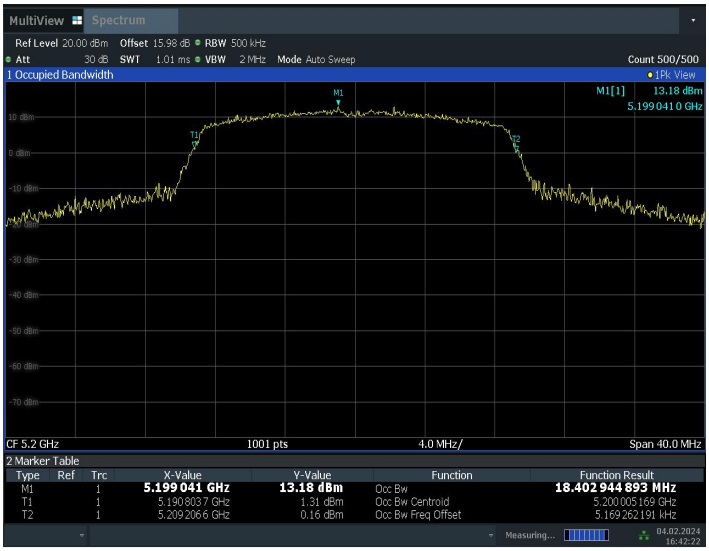
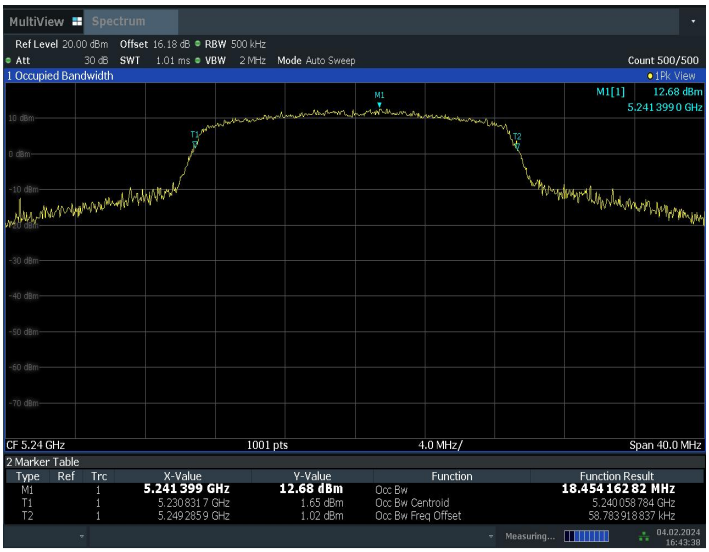


Fig.63 99% Occupied bandwidth (802.11ac-VHT20, 5180MHz)



16:42:23 04.02.2024

Fig.64 99% Occupied bandwidth (802.11ac-VHT20, 5200MHz)



16:43:38 04.02.2024

Fig.65 99% Occupied bandwidth (802.11ac-VHT20, 5240MHz)

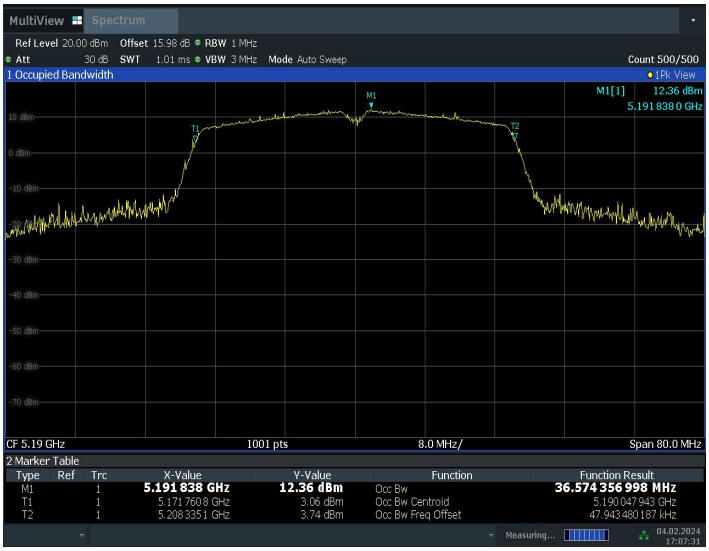


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Fig.66 99% Occupied bandwidth (802.11n-HT40, 5190MHz)

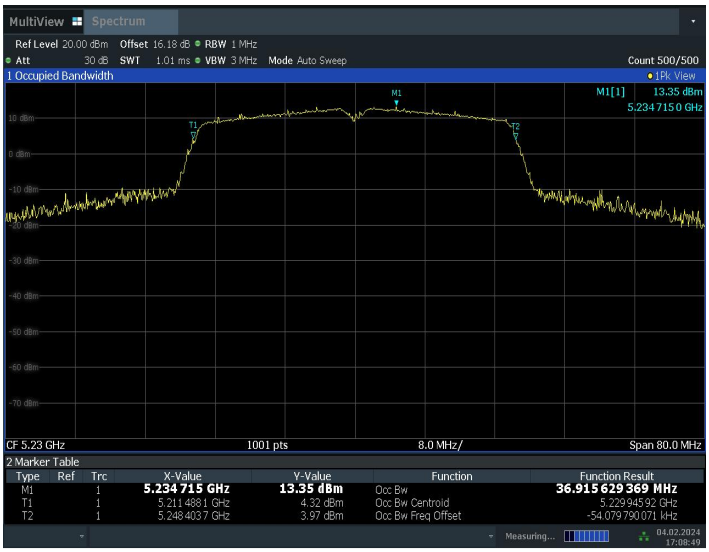

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Fig.67 99% Occupied bandwidth (802.11n-HT40, 5230MHz)

Fig.68 99% Occupied bandwidth (802.11ac-VHT80, 5210MHz)

Conclusion: PASS

A.9. Power control

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

ANNEX B: EUT parameters

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

ANNEX C: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

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

Presented this 26th day of June 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2024

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

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