



FCC PART 15 TEST REPORT No.I23Z61283-IOT03

for

Client name: TCL Communication Ltd.

Product name: GSM/UMTS/LTE Mobile phone

Model name: T612B

With

FCC ID: 2ACCJH176

Hardware Version: 05

Software Version: 2BS7

Issued Date: 2023-07-28

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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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
I23Z61283-IOT03	Rev.0	1st edition	2023-07-28

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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 NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Conducted testing Location: CTTL(Huayuan North Road)

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

Radiated testing Location: CTTL(huayuan North Road)

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

1.3. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

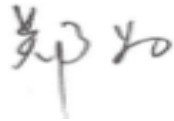
Testing Start Date: 2023-07-04

Testing End Date: 2023-07-27

1.5. Signature

姚兴宇

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	GSM/UMTS/LTE Mobile phone
Model name	T612B
FCC ID	2ACCJH176
WLAN Frequency Band	ISM Bands: -5150MHz~5250MHz -5250MHz~5350MHz -5470MHz~5725MHz
Type of modulation	OFDM
Antenna	Integral Antenna
Voltage	3.87V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
UT01a	352051810201118/ 352051810201126	05	2BS7
UT37a	352051810201555/ 352051810201563	05	2BS7

*EUT ID: is used to identify the test sample in the lab internally.
 UT01a is used for Conduction test, UT37a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	SN
AE1	Battery	/
AE2	Battery	/
AE3	Charger	/
AE4	USB Cable	/

AE1

Model	CAC4900009CA
Manufacturer	TIANMAO
Capacity	4900 mAh
Nominal Voltage	/

AE2

Model	CAC4900007C7
Manufacturer	VEKEN
Capacity	4900 mAh

Nominal Voltage	/
AE3	
Model	CBA0118BG0C7
Manufacturer	CHENYANG
Length of cable	/
AE4	
Model	CDA0000205C1
Manufacturer	JUWEI
Length of 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 GSM/UMTS/LTE Mobile phone with integrated antenna and inbuilt battery.

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

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

Samples undergoing test were selected by the client.

3.5. Interpretation of the Test Environment

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

Measurement Uncertainty

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

4. REFERENCE DOCUMENTS

4.1. Documents supplied by applicant

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

4.2. Reference Documents for testing

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

FCC Part15	Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices	2021
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12
KDB 558074 D01	Federal Communications Commission Office of Engineering and Technology Laboratory Division GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	2019

5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. SUMMARY OF 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
Frequency Stability	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 requested by the client/matrix manufacturer 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 4.1.

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

6.3. Test Conditions

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

Temperature	26°C
Voltage	3.87V
Humidity	44%

7. TEST EQUIPMENTS 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	LISN	ENV216	101200	Rohde & Schwarz	1 year	2024-07-04
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2024-02-21
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	103144	R&S	1 year	2023-10-25
2	EMI Antenna	VULB 9163	01223	SCHWARZBECK	1 year	2023-07-25
3	EMI Antenna	3115	6914	ETS-Lindgren	1 year	2024-04-25

※The EMI Antenna with series number of 01223 did not exceed the CAL.DUE.DATE when used.

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 Occupied Channel Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4 Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

8.5 Spurious Emissions

Conducted (k=1.96)

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

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	4.92
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.73
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.62
$18\text{GHz} \leq f \leq 40\text{GHz}$	3.52

8.6 AC Power-line Conducted Emission

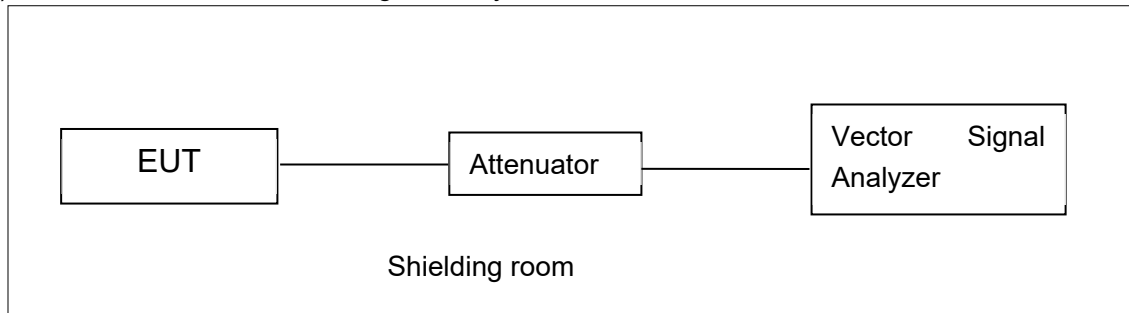
Measurement Uncertainty : 3.10,k=2

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

A.1.1. Conducted Measurements

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

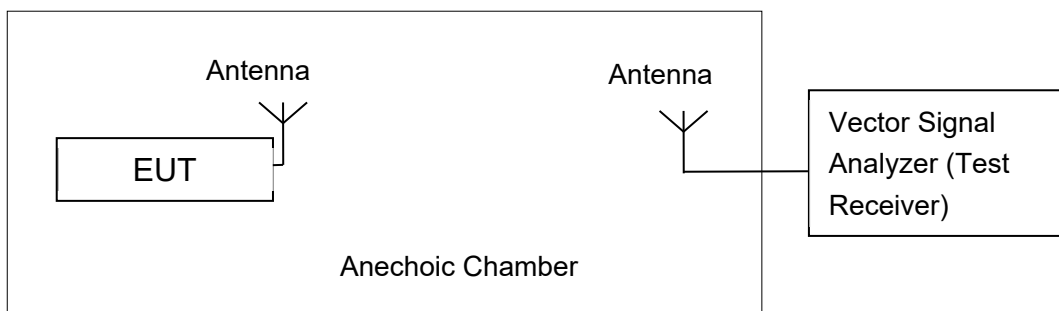


A.1.2. Radiated Emission Measurements

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

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

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



The measurement is made according to KDB 789033

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

A.2. Maximum output Power

Measurement Limit and Method:

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

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

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

Measurement Results:

802.11a mode

Mode	Frequency	Test Result (dBm)							
		Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
802.11a	5180MHz	17.46	/	/	/	/	/	/	/
	5200MHz	17.55	/	/	/	/	/	/	/
	5240MHz	17.54	/	/	/	/	/	/	/
	5260MHz	16.76	/	/	/	/	/	/	/
	5280MHz	16.58	/	/	/	/	/	/	/
	5320MHz	16.47	/	/	/	/	/	/	/
	5500MHz	17.10	/	/	/	/	/	/	/
	5580MHz	16.95	/	/	/	/	/	/	/
	5700MHz	16.88	/	/	/	/	/	/	/
	5720MHz	16.76	/	/	/	/	/	/	/

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	17.54	/	/	/	/	/	/	/
	5200MHz	17.42	/	/	/	/	/	/	/
	5240MHz	17.46	/	/	/	/	/	/	/
	5260MHz	16.50	/	/	/	/	/	/	/
	5280MHz	16.42	/	/	/	/	/	/	/
	5320MHz	16.30	/	/	/	/	/	/	/
	5500MHz	17.01	/	/	/	/	/	/	/
	5580MHz	16.96	/	/	/	/	/	/	/
	5700MHz	16.87	/	/	/	/	/	/	/
	5720MHz	16.74	/	/	/	/	/	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with

this condition.

802.11ac-HT20 mode

Mode	Frequency	Test Result (dBm)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
802.11ac (HT20)	5180MHz	16.30	/	/	/	/	/	/	/	/
	5200MHz	16.21	/	/	/	/	/	/	/	/
	5240MHz	16.43	/	/	/	/	/	/	/	/
	5260MHz	15.61	/	/	/	/	/	/	/	/
	5280MHz	15.32	/	/	/	/	/	/	/	/
	5320MHz	15.24	/	/	/	/	/	/	/	/
	5500MHz	15.81	/	/	/	/	/	/	/	/
	5580MHz	15.65	/	/	/	/	/	/	/	/
	5700MHz	15.54	/	/	/	/	/	/	/	/
	5720MHz	15.48	/	/	/	/	/	/	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

802.11n-HT40 mode

Mode	Frequency	Test Result (dBm)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n (HT40)	5190MHz	16.17	/	/	/	/	/	/	/
	5230MHz	16.21	/	/	/	/	/	/	/
	5270MHz	15.18	/	/	/	/	/	/	/
	5310MHz	15.07	/	/	/	/	/	/	/
	5510MHz	15.76	/	/	/	/	/	/	/
	5550MHz	15.68	/	/	/	/	/	/	/
	5670MHz	15.44	/	/	/	/	/	/	/
	5710MHz	15.36	/	/	/	/	/	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-HT40 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (HT40)	5190MHz	15.28	/	/	/	/	/	/	/	/	/
	5230MHz	15.04	/	/	/	/	/	/	/	/	/
	5270MHz	14.15	/	/	/	/	/	/	/	/	/

	5310MHz	14.07	/	/	/	/	/	/	/	/	/
	5510MHz	14.78	/	/	/	/	/	/	/	/	/
	5550MHz	14.46	/	/	/	/	/	/	/	/	/
	5670MHz	14.34	/	/	/	/	/	/	/	/	/
	5710MHz	14.27	/	/	/	/	/	/	/	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-HT80 mode

Mode	Frequency	Test Result (dBm)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
802.11ac (HT80)	5210MHz	13.96	/	/	/	/	/	/	/	/	/
	5290MHz	13.04	/	/	/	/	/	/	/	/	/
	5530MHz	13.58	/	/	/	/	/	/	/	/	/
	5610MHz	13.51	/	/	/	/	/	/	/	/	/
	5690MHz	13.46	/	/	/	/	/	/	/	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

The duty cycle of all mode are 100%.

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

Measurement Results:

Mode	Frequency	Power Spectral Density (dBm/MHz)	Conclusion
802.11a	5180 MHz	7.75	P
	5200 MHz	7.87	P
	5240 MHz	8.19	P
	5260 MHz	6.61	P
	5280 MHz	6.29	P
	5320 MHz	6.37	P
	5500 MHz	7.22	P
	5580 MHz	7.09	P
	5700 MHz	6.76	P
802.11n HT20	5180 MHz	7.09	P
	5200 MHz	7.13	P
	5240 MHz	7.26	P
	5260 MHz	6.16	P
	5280 MHz	6.29	P
	5320 MHz	6.24	P
	5500 MHz	7.05	P
	5580 MHz	6.88	P
	5700 MHz	6.39	P
802.11n HT40	5190 MHz	3.75	P
	5230 MHz	3.82	P
	5270 MHz	2.34	P
	5310 MHz	2.3	P
	5510 MHz	2.57	P
	5550 MHz	2.94	P
	5670 MHz	2.48	P
	5710 MHz	3.86	P
802.11ac VHT80	5210MHz	-1.89	P
	5290MHz	-2.46	P



	5530MHz	-2.05	P
	5610MHz	-2.53	P
	5690MHz	-2.5	P

Conclusion: PASS

A.4. Occupied 26dB 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
-------------------------	---------

Measurement Result:

Mode	Frequency	Occupied 26dB Bandwidth (MHz)		conclusion
		Fig.	Value	
802.11a	5180 MHz	Fig.1	7.75	P
	5200 MHz	Fig.2	7.87	P
	5240 MHz	Fig.3	8.19	P
	5260 MHz	Fig.4	6.61	P
	5280 MHz	Fig.5	6.29	P
	5320 MHz	Fig.6	6.37	P
	5500 MHz	Fig.7	7.22	P
	5580 MHz	Fig.8	7.09	P
	5700 MHz	Fig.9	6.76	P
	5720 MHz	Fig.10	8.38	P
802.11n HT20	5180 MHz	Fig.11	7.09	P
	5200 MHz	Fig.12	7.13	P
	5240 MHz	Fig.13	7.26	P
	5260 MHz	Fig.14	6.16	P
	5280 MHz	Fig.15	6.29	P
	5320 MHz	Fig.16	6.24	P
	5500 MHz	Fig.17	7.05	P
	5580 MHz	Fig.18	6.88	P
	5700 MHz	Fig.19	6.39	P
	5720 MHz	Fig.20	8.02	P
802.11n HT40	5190 MHz	Fig.21	3.75	P
	5230 MHz	Fig.22	3.82	P
	5270 MHz	Fig.23	2.34	P
	5310 MHz	Fig.24	2.30	P
	5510 MHz	Fig.25	2.57	P
	5550 MHz	Fig.26	2.94	P
	5670 MHz	Fig.27	2.48	P
	5710 MHz	Fig.28	3.86	P
802.11ac VHT80	5210MHz	Fig.29	-1.89	P
	5290MHz	Fig.30	-2.46	P

	5530MHz	Fig.31	-2.05	P
	5610MHz	Fig.32	-2.53	P
	5690 MHz	Fig.33	-2.50	P

Conclusion: PASS

Test graphs as below:

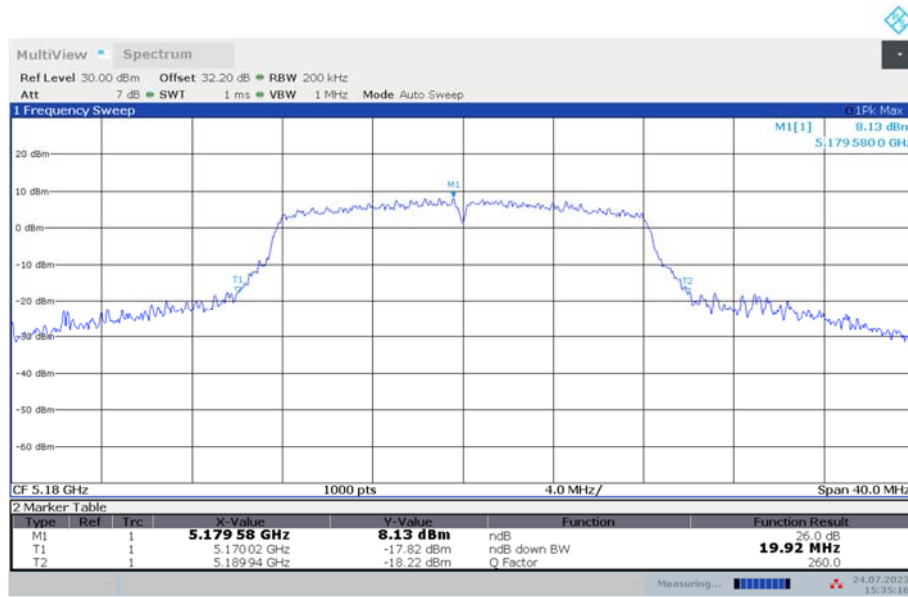


Fig.1 Occupied 26dB Bandwidth (802.11a, 5180MHz)

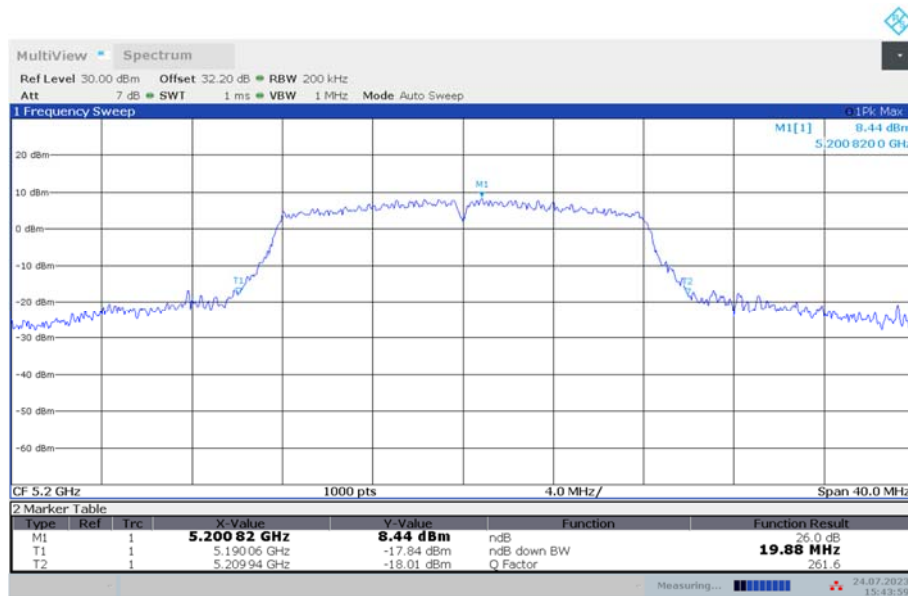


Fig.2 Occupied 26dB Bandwidth (802.11a, 5200MHz)

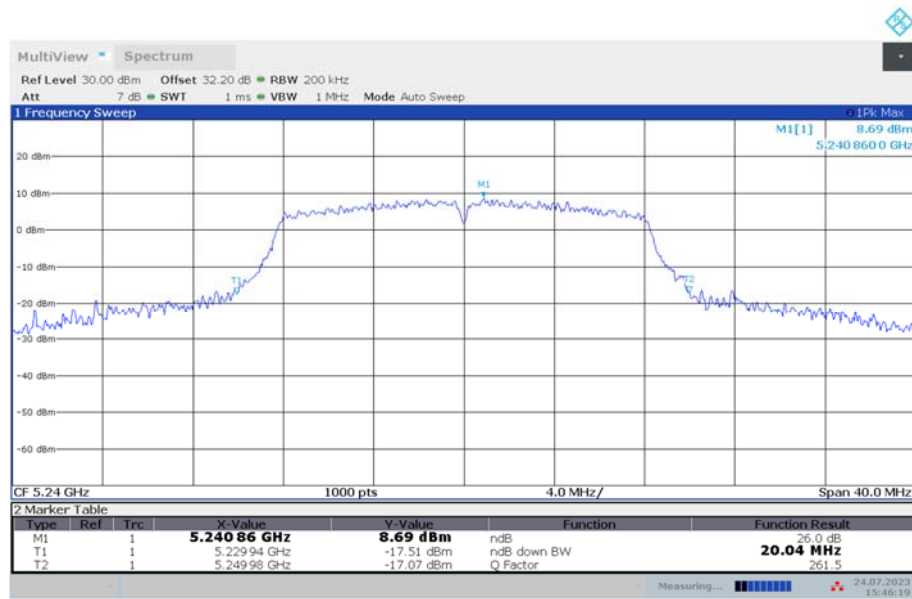


Fig.3 Occupied 26dB Bandwidth (802.11a, 5240MHz)

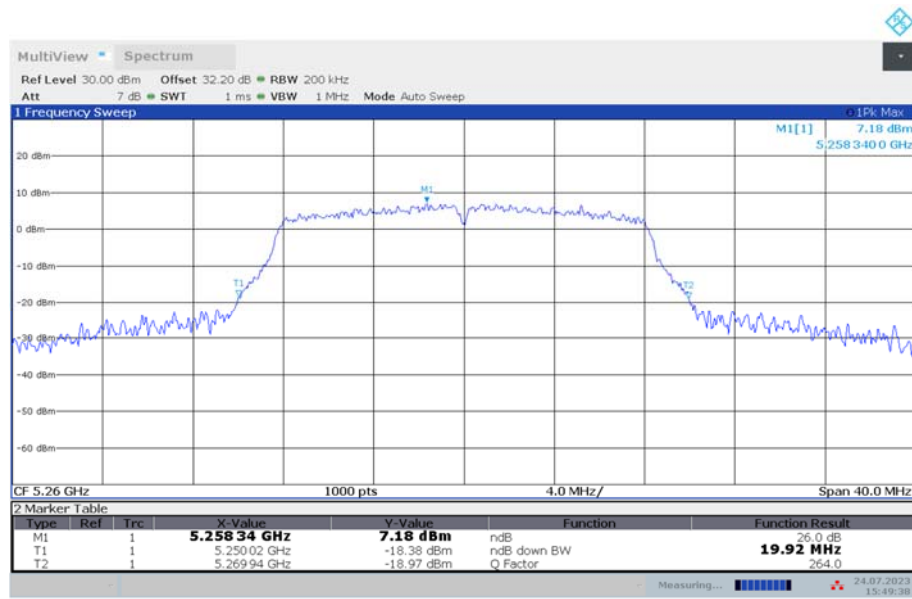


Fig.4 Occupied 26dB Bandwidth (802.11a, 5260MHz)

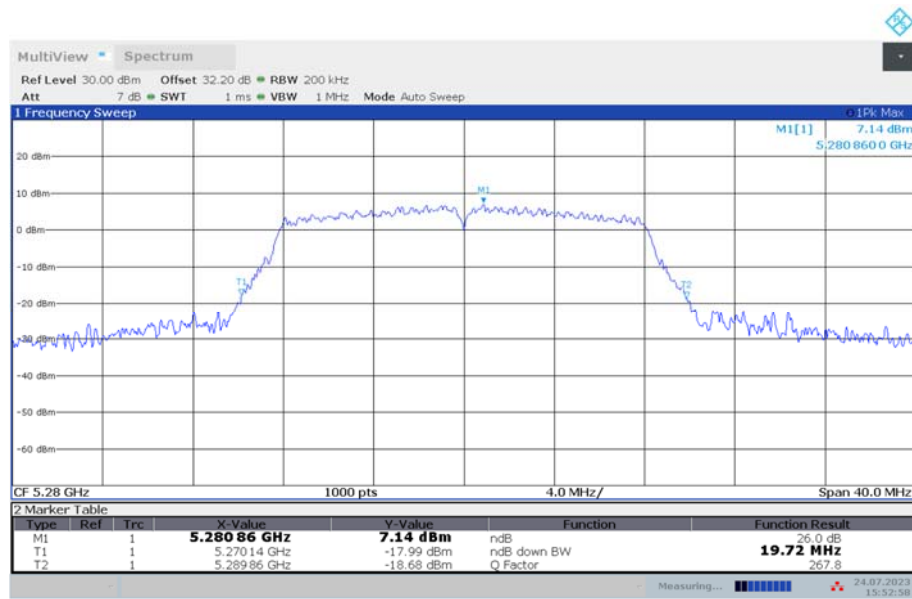


Fig.5 Occupied 26dB Bandwidth (802.11a, 5280MHz)

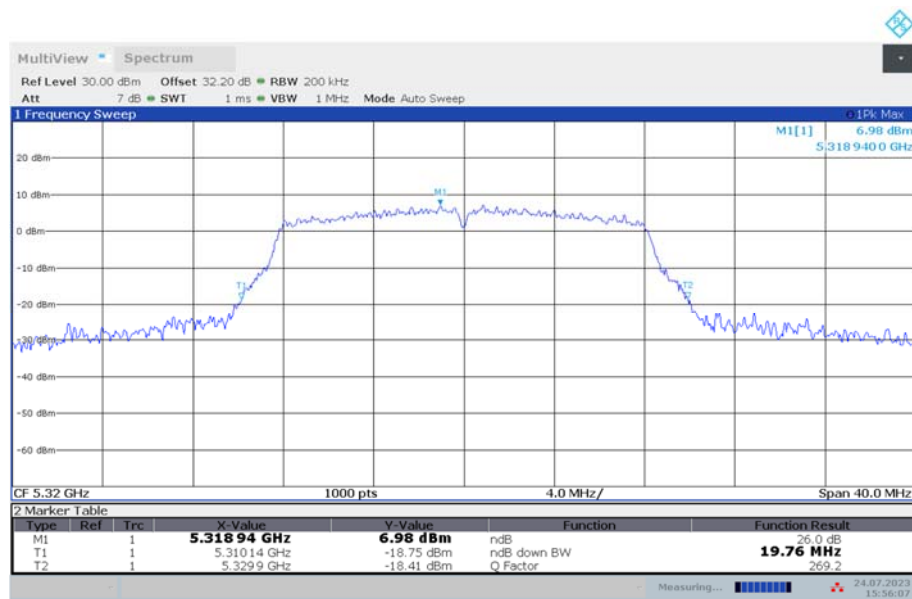


Fig.6 Occupied 26dB Bandwidth (802.11a, 5320MHz)

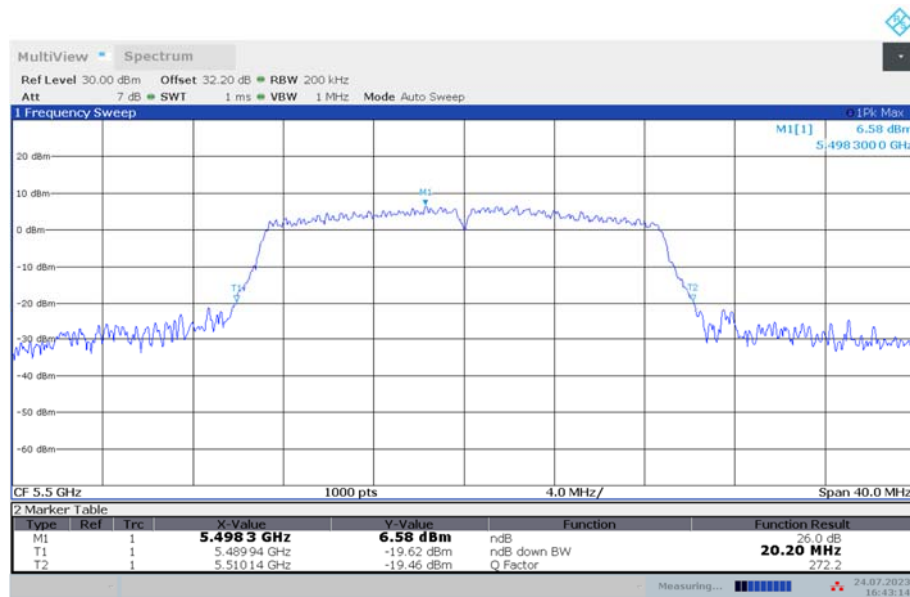


Fig.7 Occupied 26dB Bandwidth (802.11a, 5500MHz)

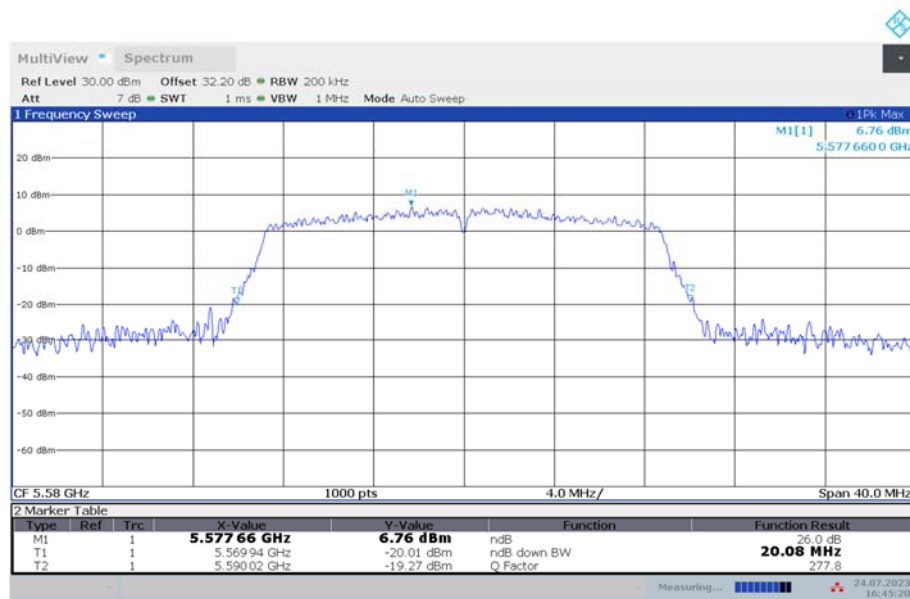


Fig.8 Occupied 26dB Bandwidth (802.11a, 5580MHz)

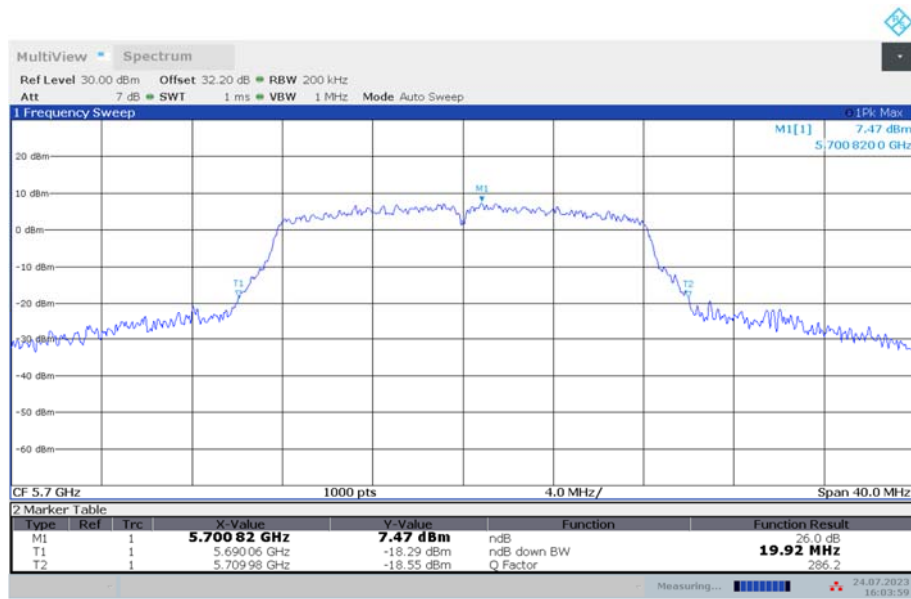
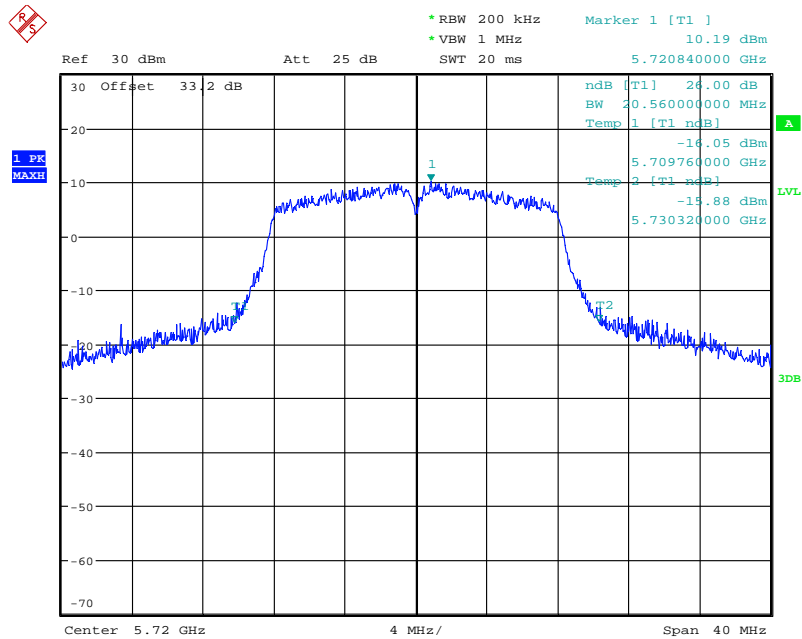


Fig.9 Occupied 26dB Bandwidth (802.11a, 5700MHz)



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

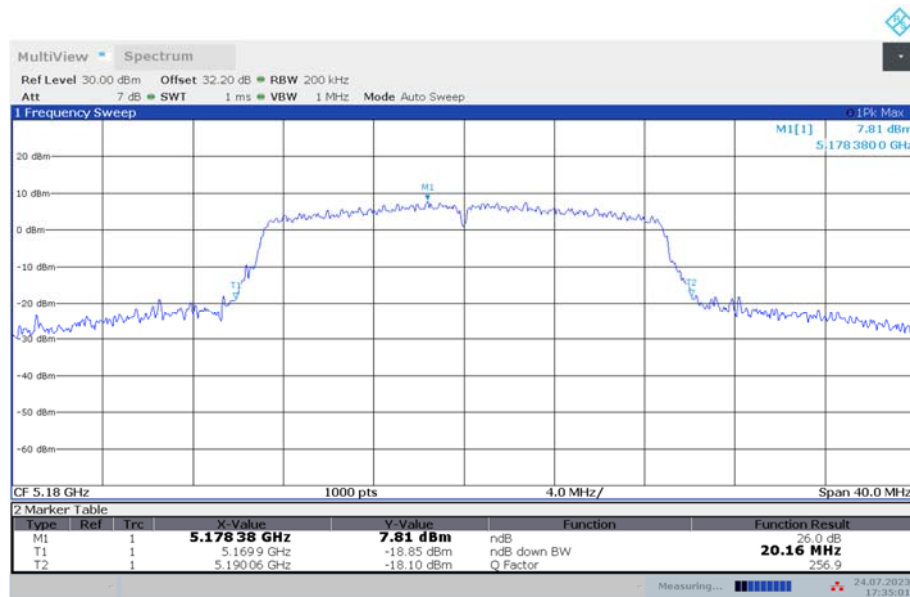


Fig.11 Occupied 26dB Bandwidth (802.11n-HT20, 5180MHz)

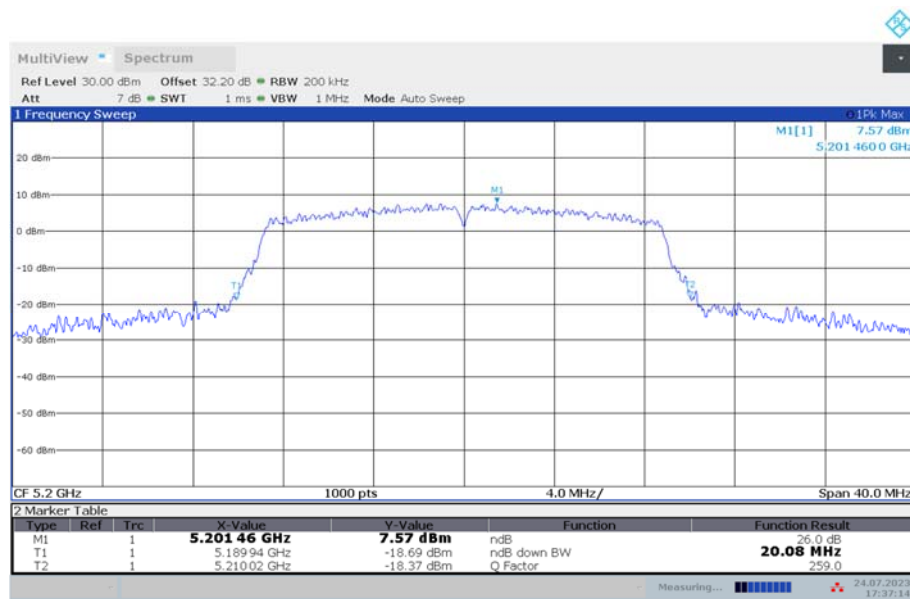


Fig.12 Occupied 26dB Bandwidth (802.11n-HT20, 5200MHz)

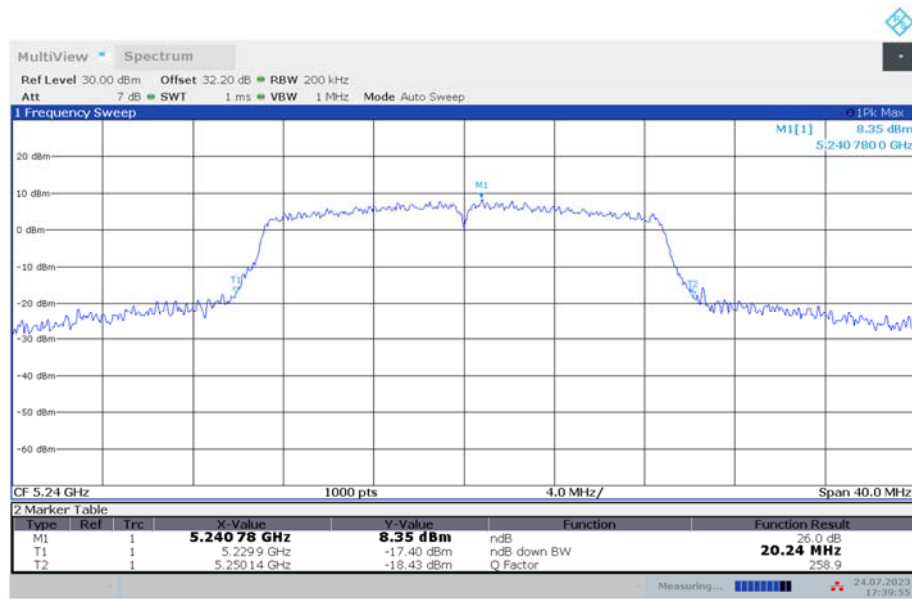


Fig.13 Occupied 26dB Bandwidth (802.11n-HT20, 5240MHz)

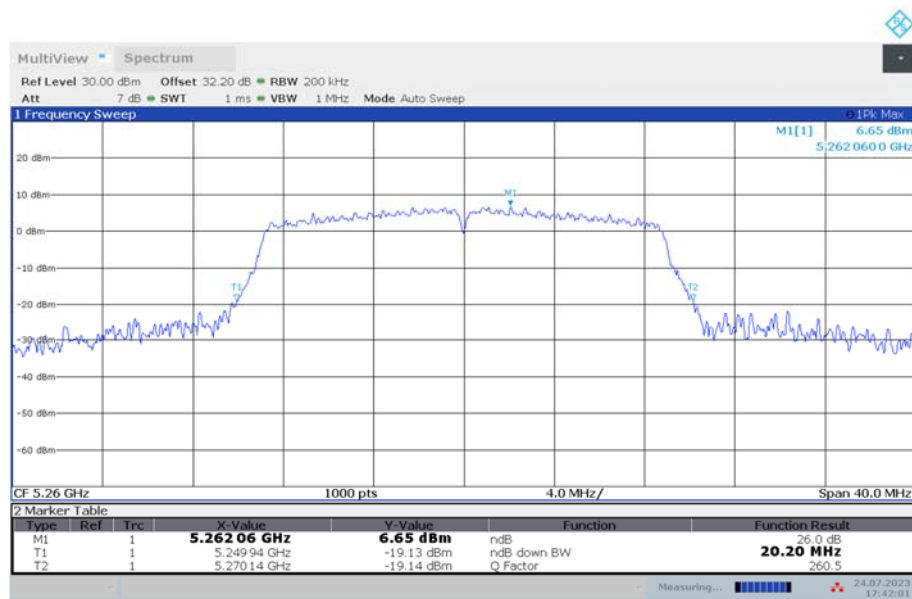


Fig.14 Occupied 26dB Bandwidth (802.11n-HT20, 5260MHz)

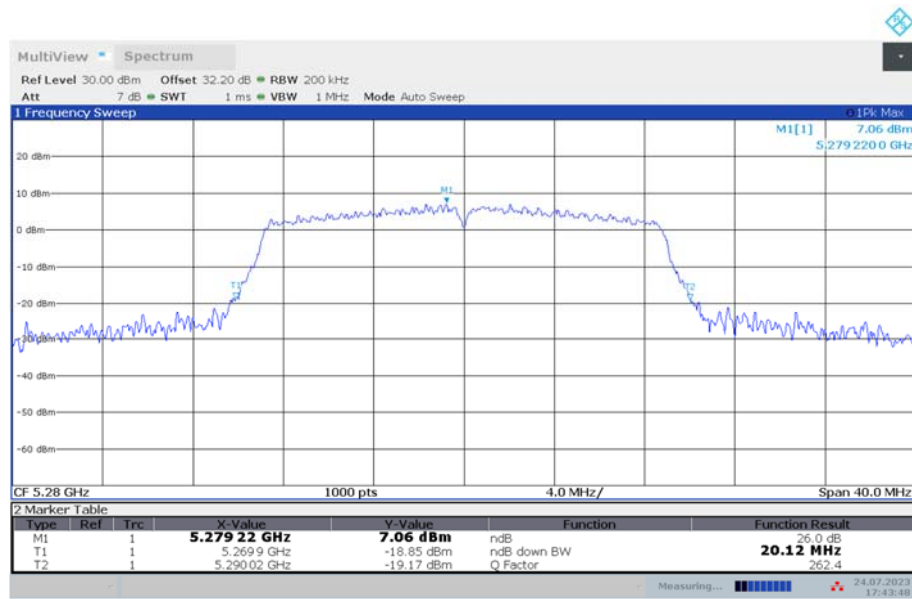


Fig.15 Occupied 26dB Bandwidth (802.11n-HT20, 5280MHz)

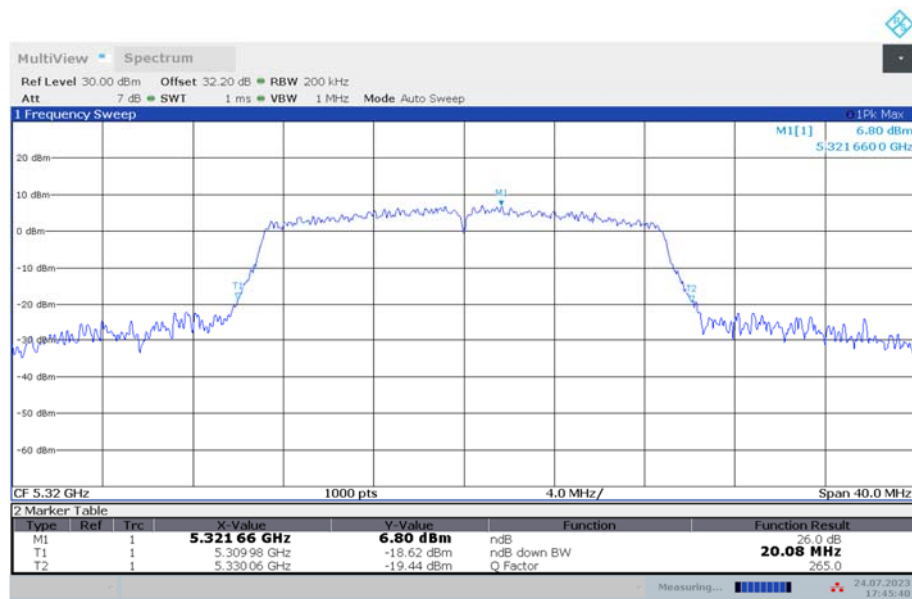


Fig.16 Occupied 26dB Bandwidth (802.11n-HT20, 5320MHz)

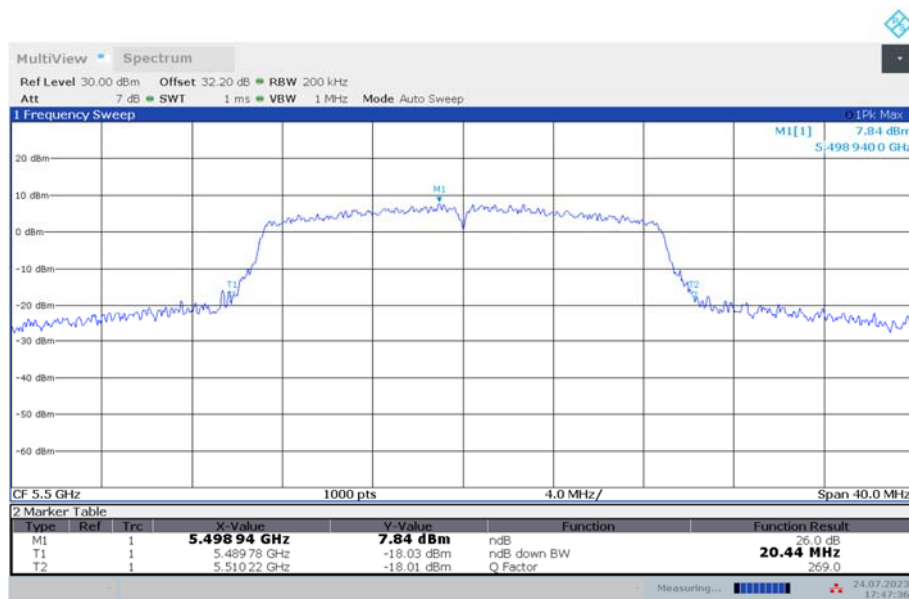


Fig.17 Occupied 26dB Bandwidth (802. 11n-HT20, 5500MHz)

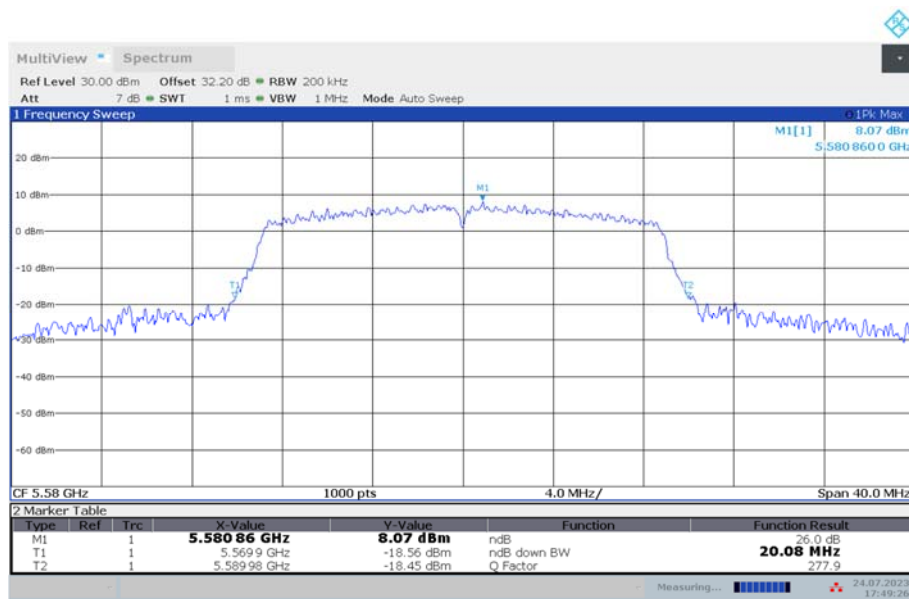


Fig.18 Occupied 26dB Bandwidth (802. 11n-HT20, 5580MHz)

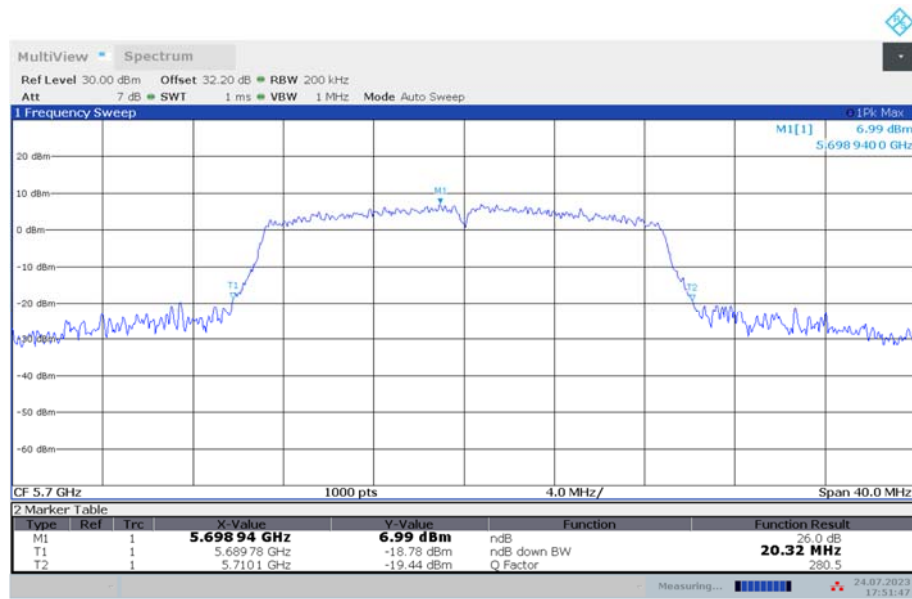
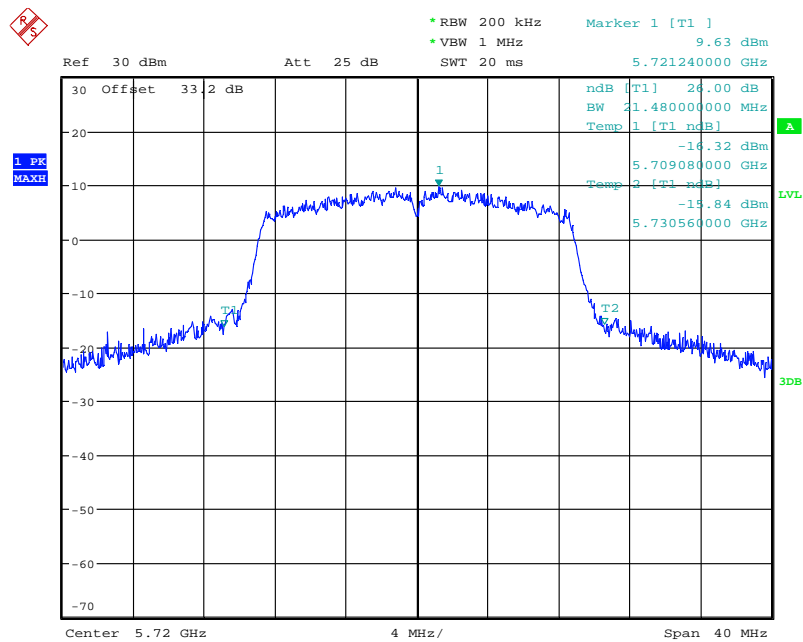


Fig.19 Occupied 26dB Bandwidth (802. 11n-HT20, 5700MHz)



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Fig.20 Occupied 26dB Bandwidth (802. 11n-HT20, 5720MHz)

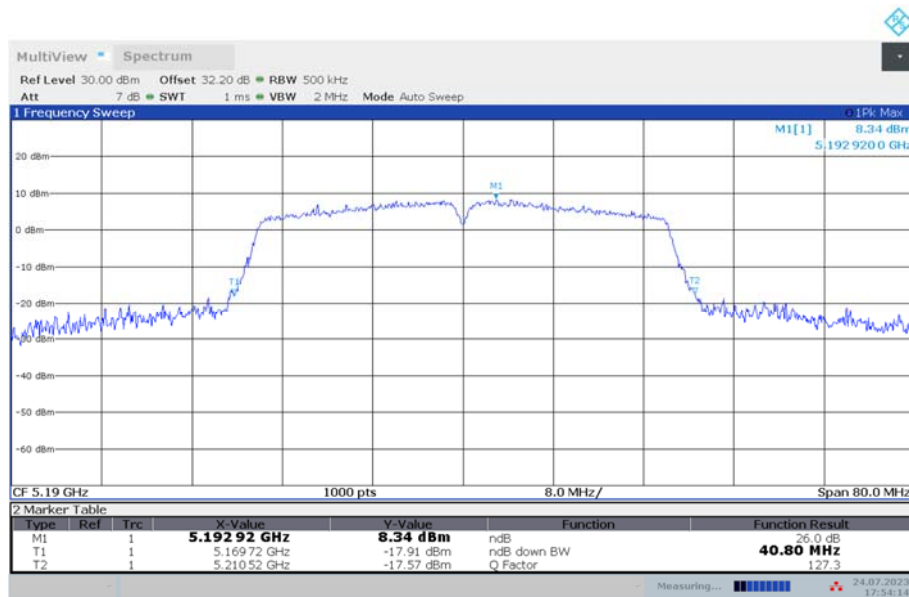


Fig.21 Occupied 26dB Bandwidth (802.11n-HT40, 5190MHz)

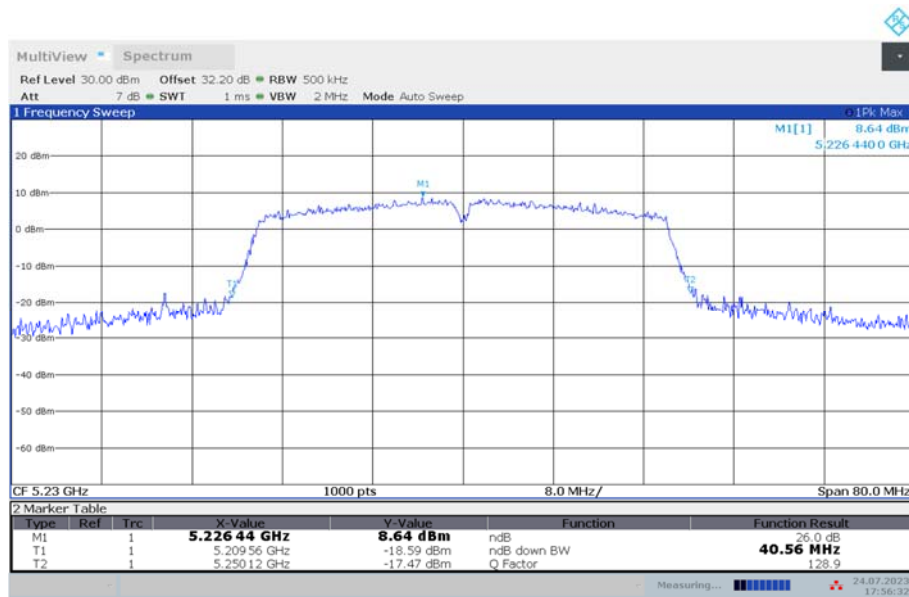


Fig.22 Occupied 26dB Bandwidth (802.11n-HT40, 5230MHz)

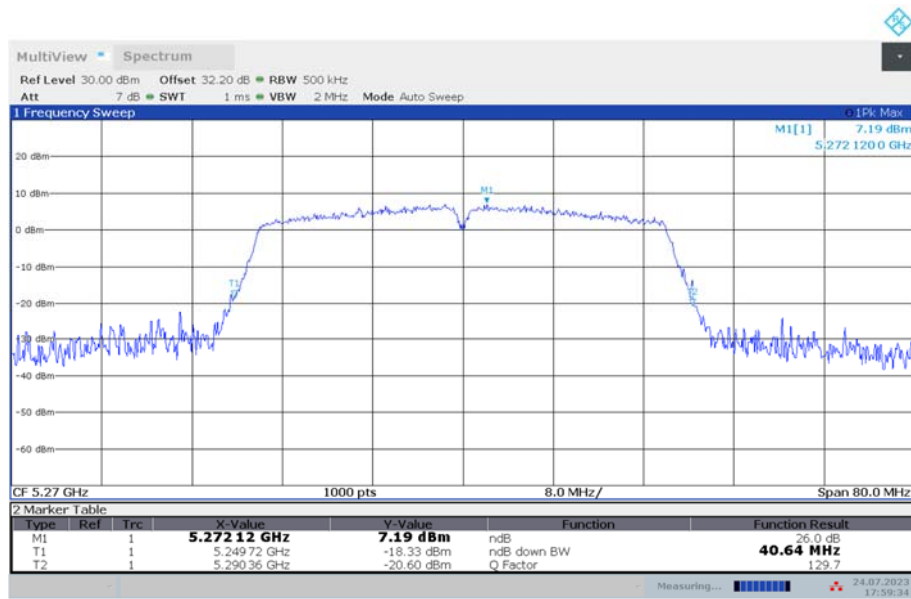


Fig.23 Occupied 26dB Bandwidth (802.11n-HT40, 5270MHz)

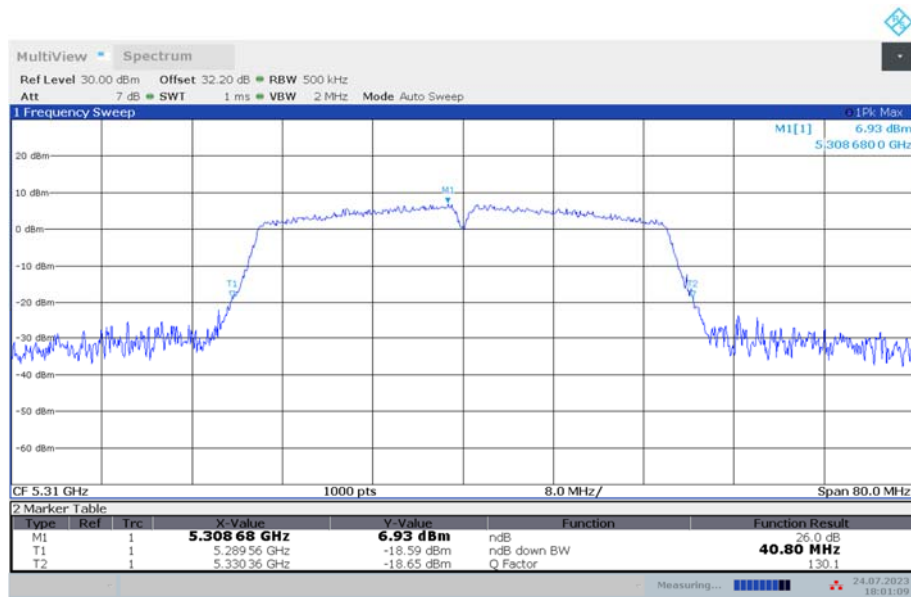


Fig.24 Occupied 26dB Bandwidth (802.11n-HT40, 5310MHz)

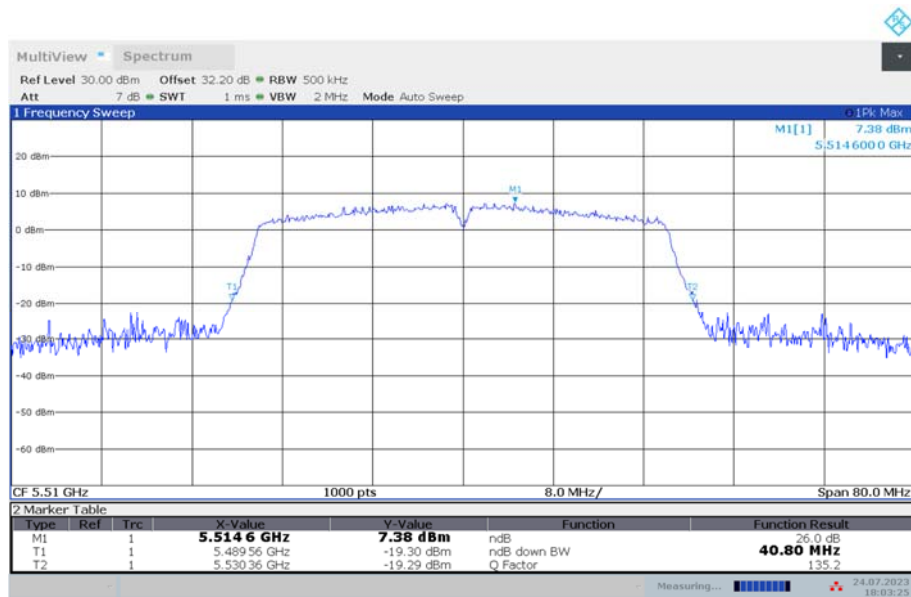


Fig.25 Occupied 26dB Bandwidth (802. 11n-HT40, 5510MHz)

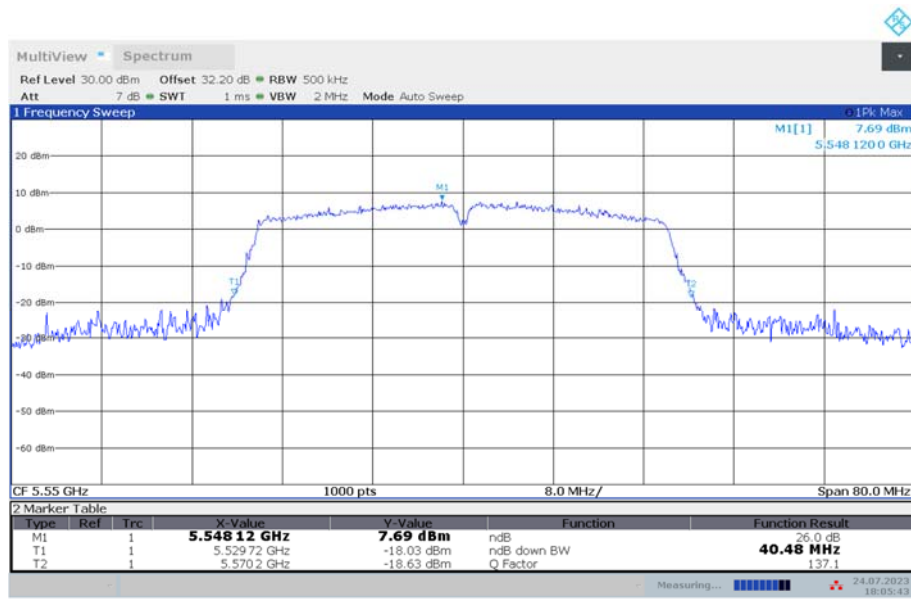


Fig.26 Occupied 26dB Bandwidth (802. 11n-HT40, 5550MHz)

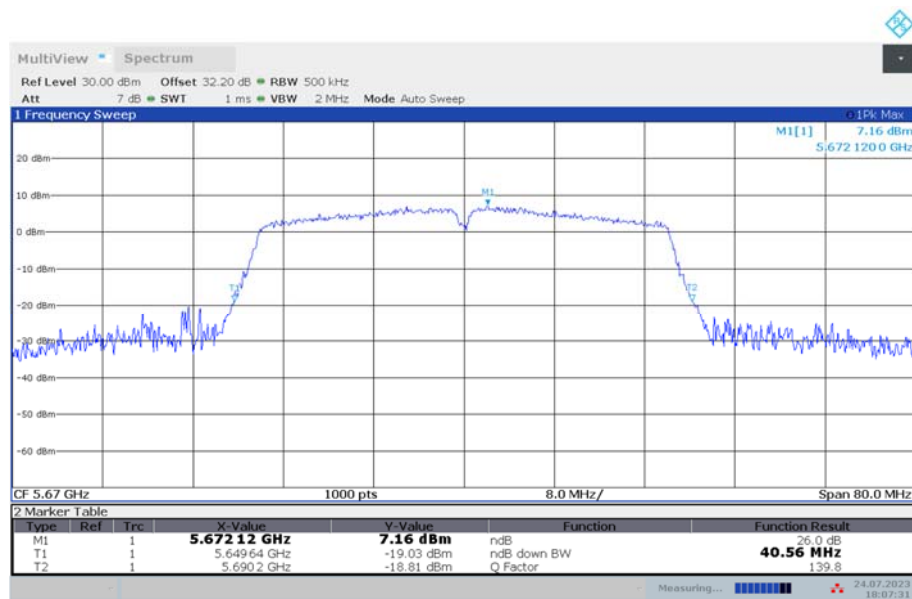


Fig.27 Occupied 26dB Bandwidth (802. 11n-HT40, 5670MHz)

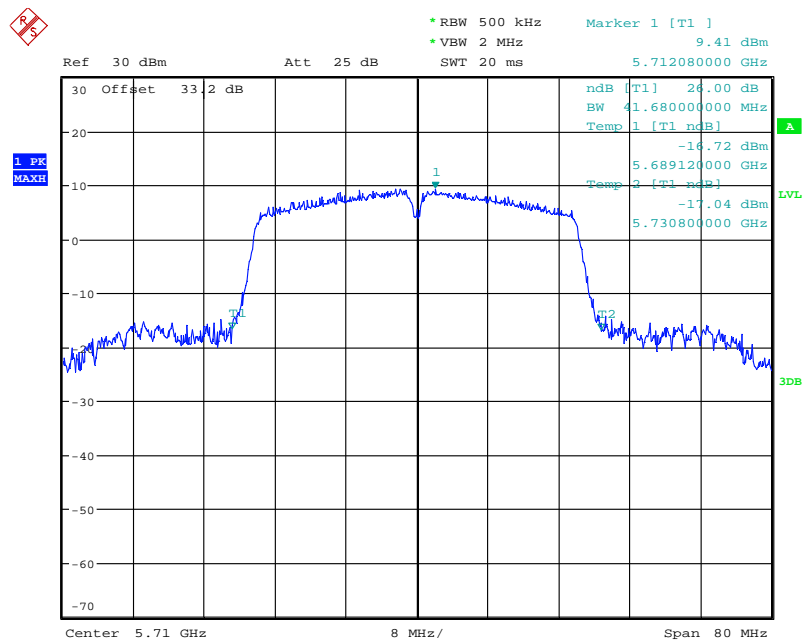


Fig.28 Occupied 26dB Bandwidth (802. 11n-HT40, 5710MHz)

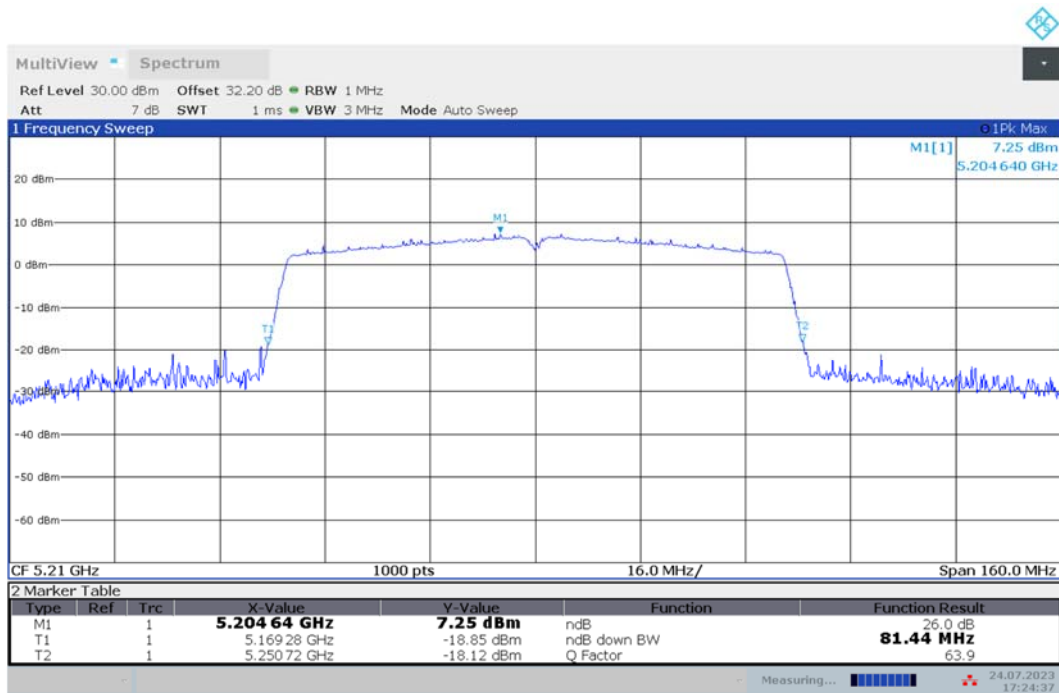


Fig.29 Occupied 26dB Bandwidth (802. 11ac-HT80, 5210MHz)

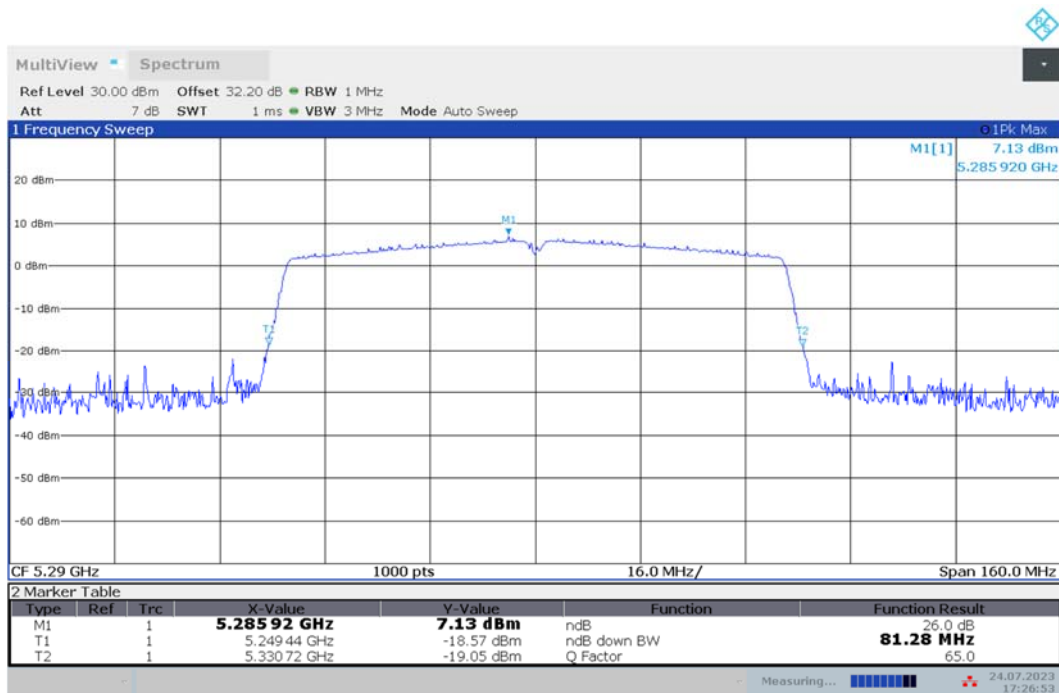


Fig.30 Occupied 26dB Bandwidth (802. 11ac-HT80, 5290MHz)

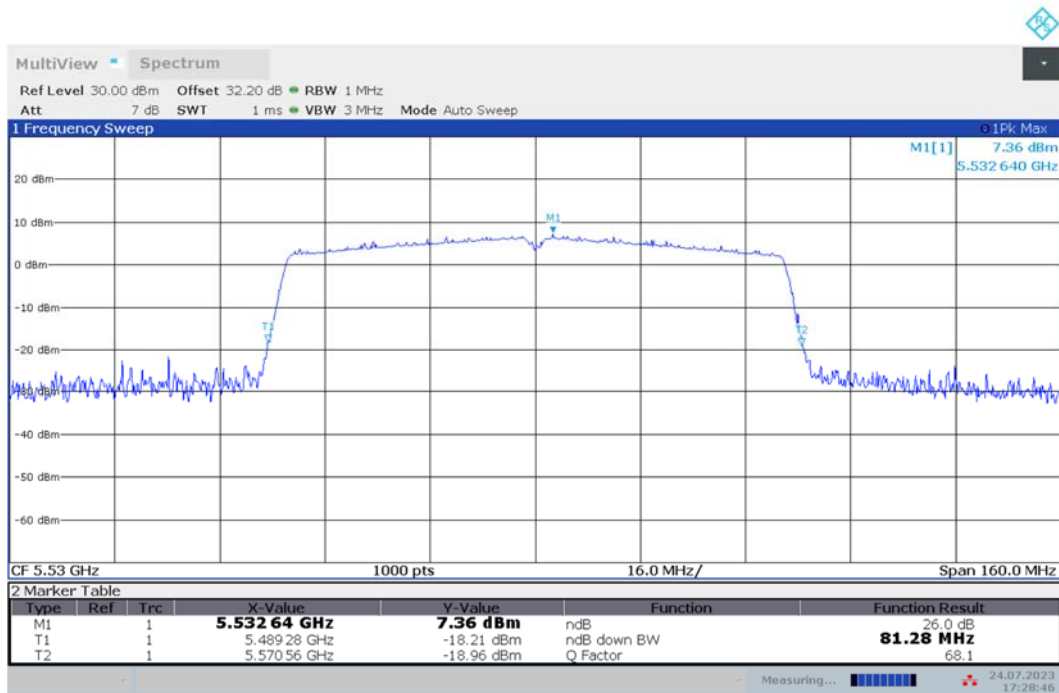


Fig.31 Occupied 26dB Bandwidth (802. 11ac-HT80, 5530MHz)

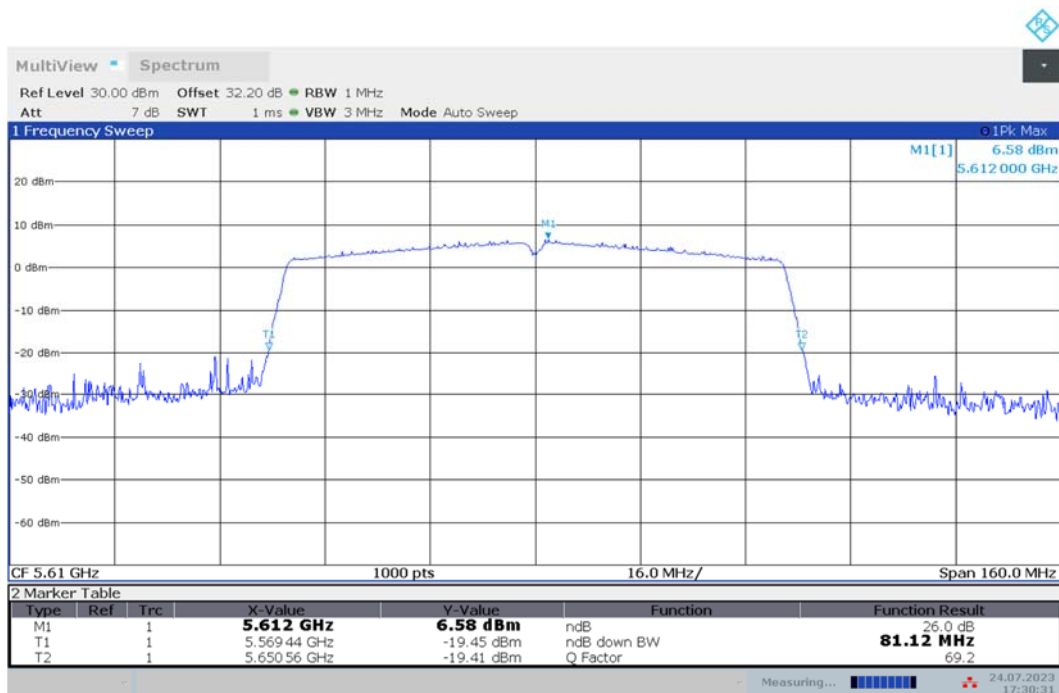
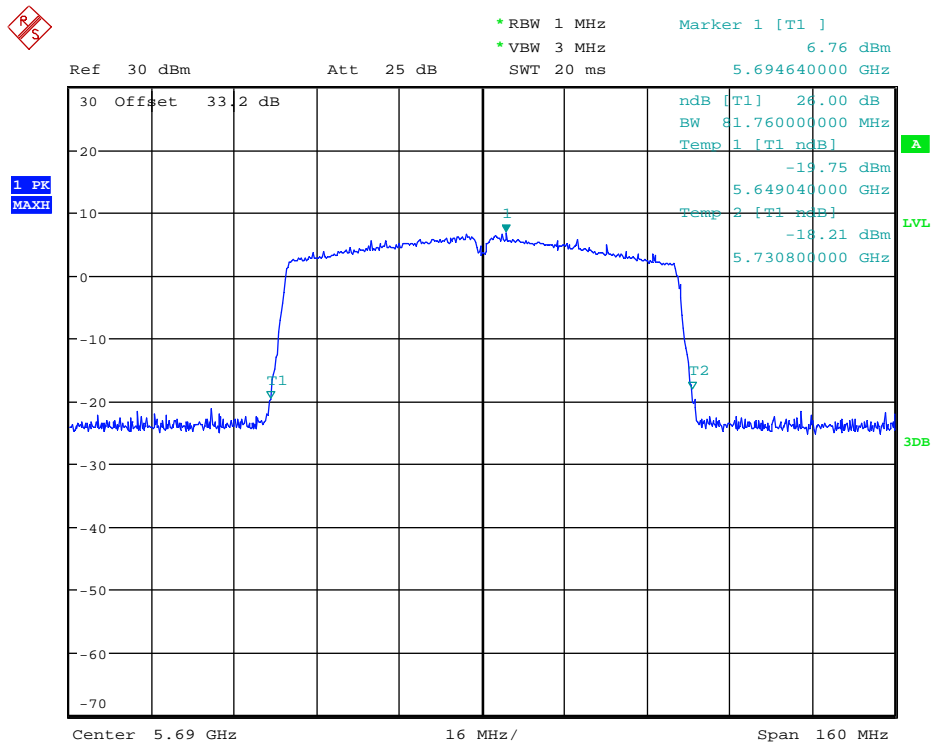


Fig.32 Occupied 26dB Bandwidth (802. 11ac-HT80, 5610MHz)



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Fig.33 Occupied 26dB Bandwidth (802.11ac-HT80, 5690MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-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)).

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:

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	
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Conclusion: PASS

Test graphs as below:

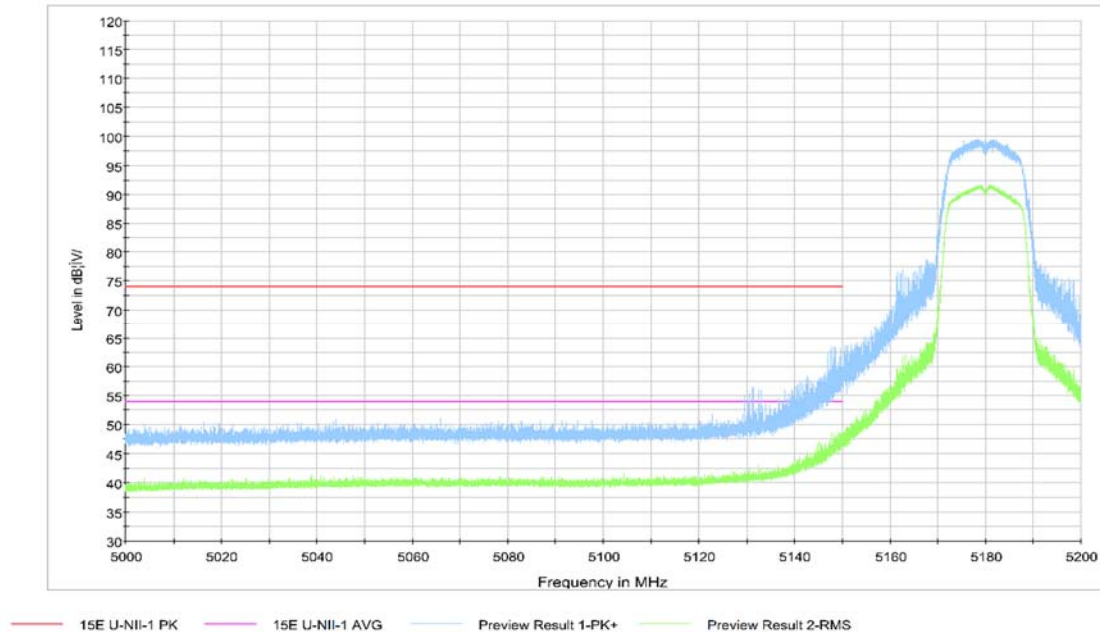


Fig.34 Band Edges (802.11a Ch36, 5180MHz)

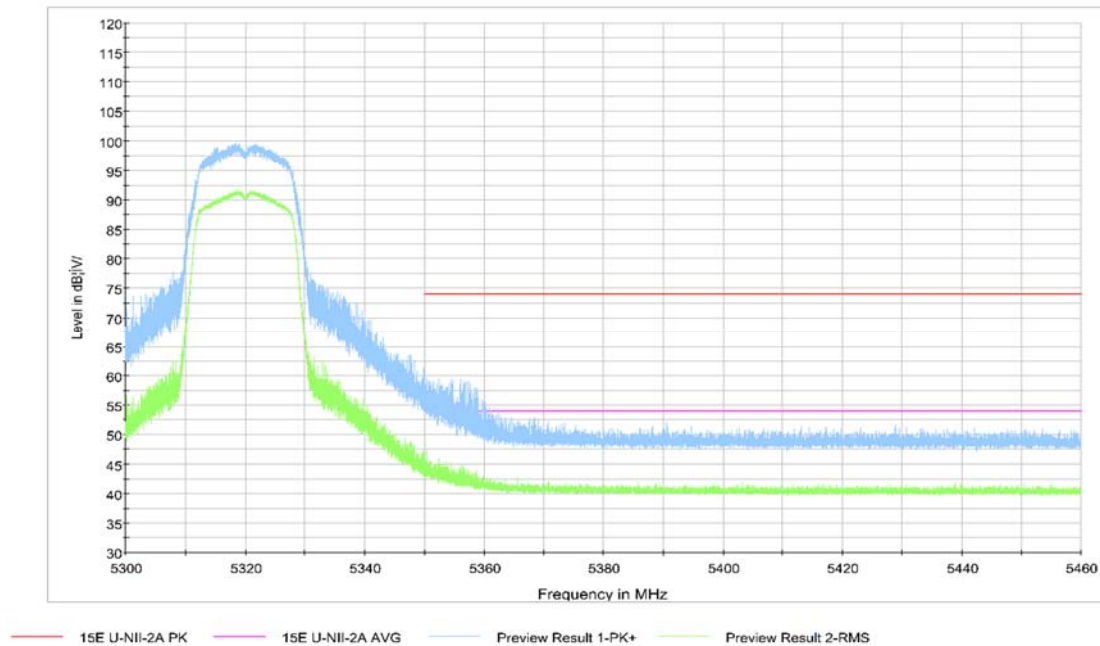


Fig.35 Band Edges (802.11a Ch64, 5320MHz)

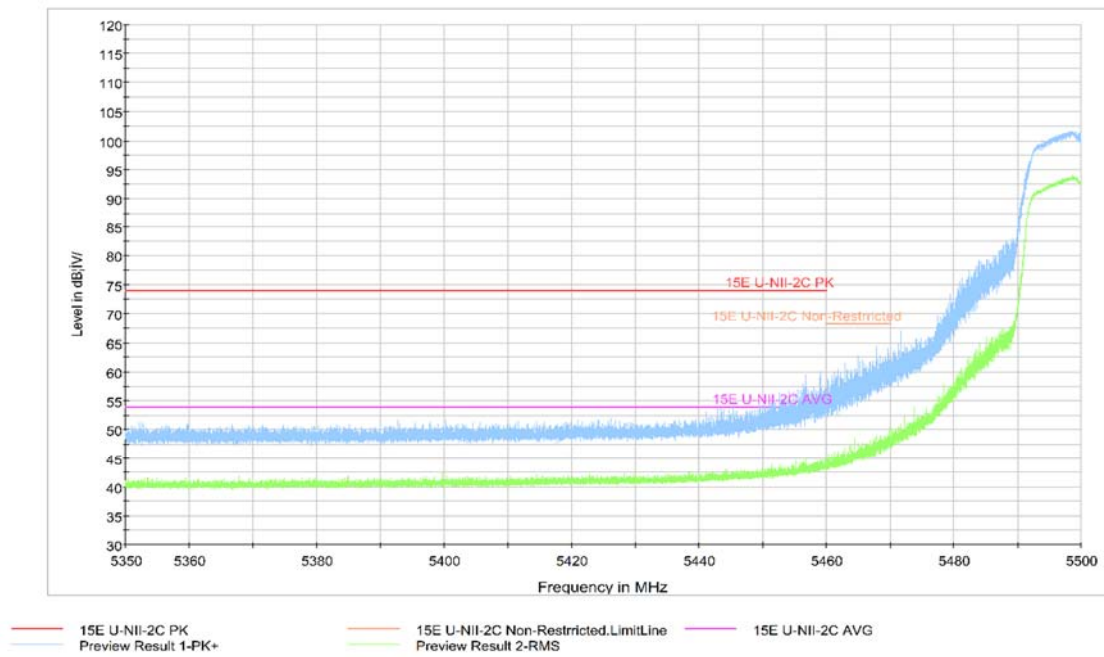


Fig.36 Band Edges (802.11a Ch100, 5500MHz)

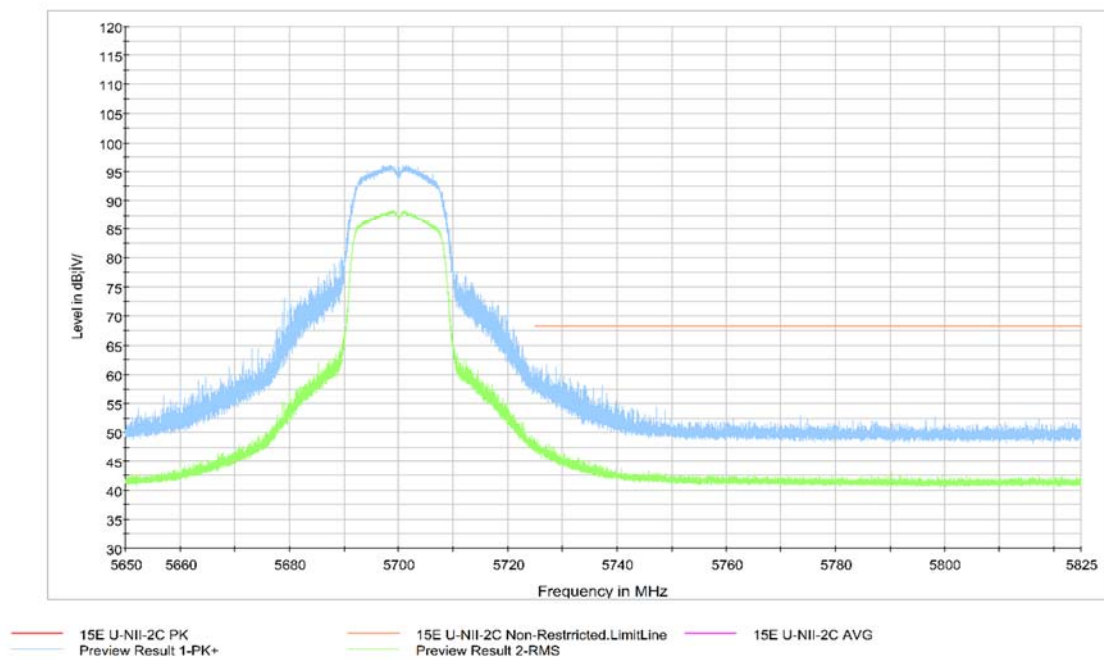


Fig.37 Band Edges (802.11a Ch140, 5700MHz)

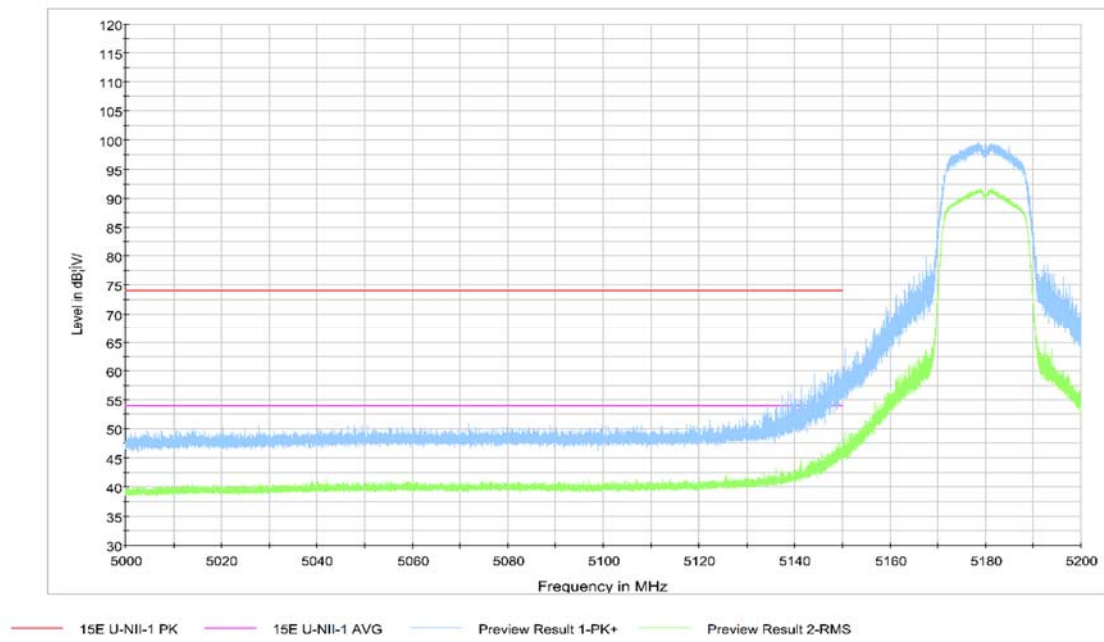


Fig.38 Band Edges (802.11n-HT20 Ch36, 5180MHz)

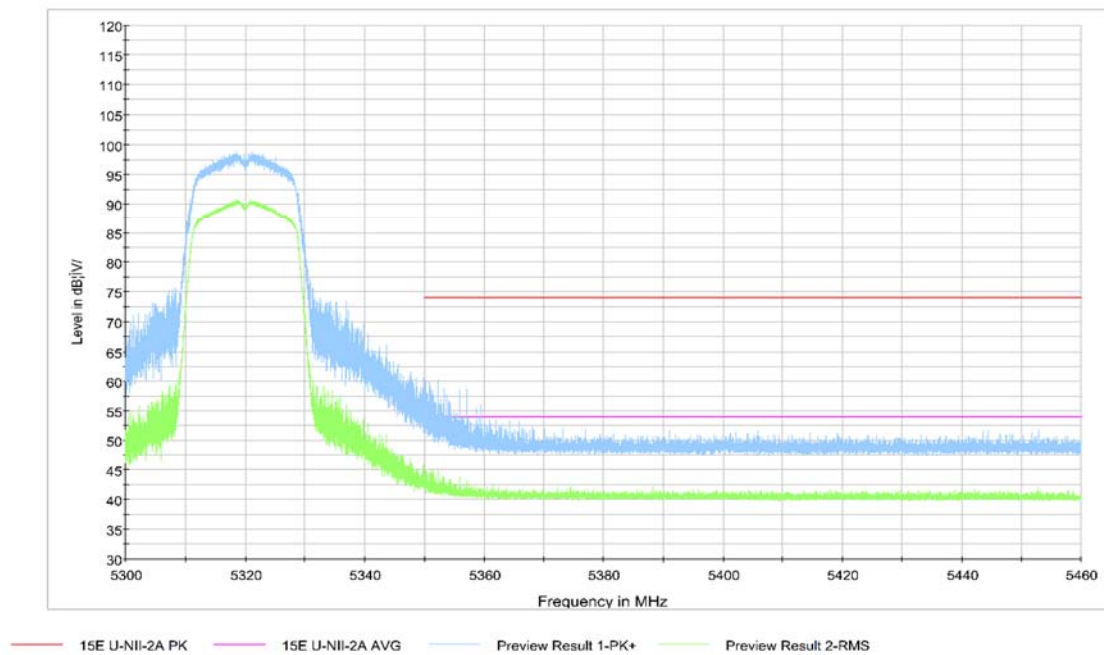


Fig.39 Band Edges (802.11n-HT20 Ch64, 5320MHz)

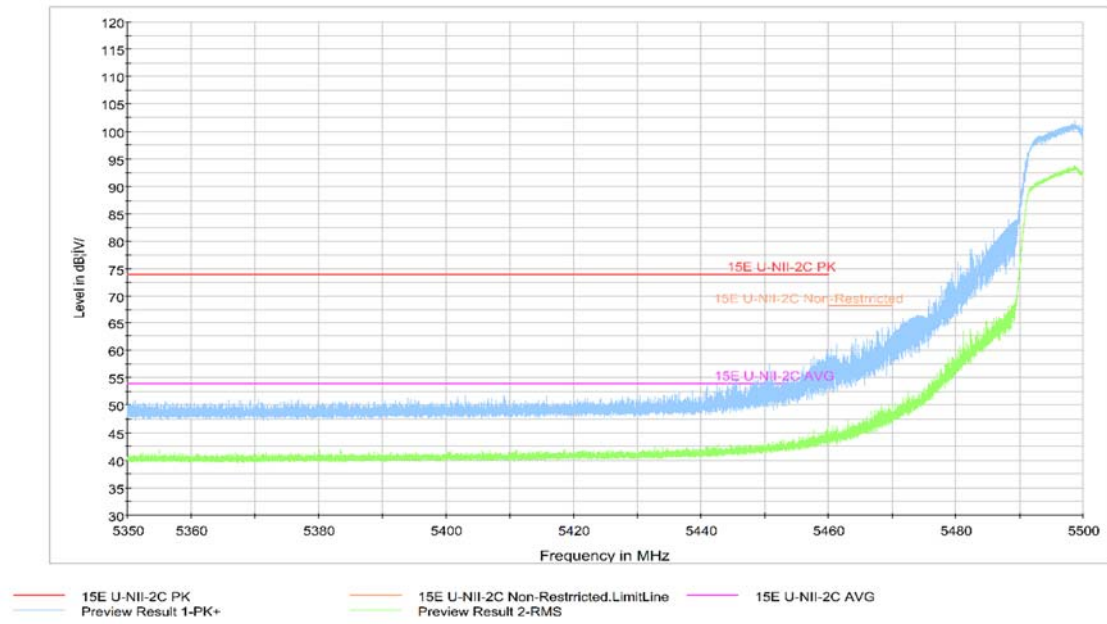


Fig.40 Band Edges (802.11n-HT20 Ch100, 5500MHz)

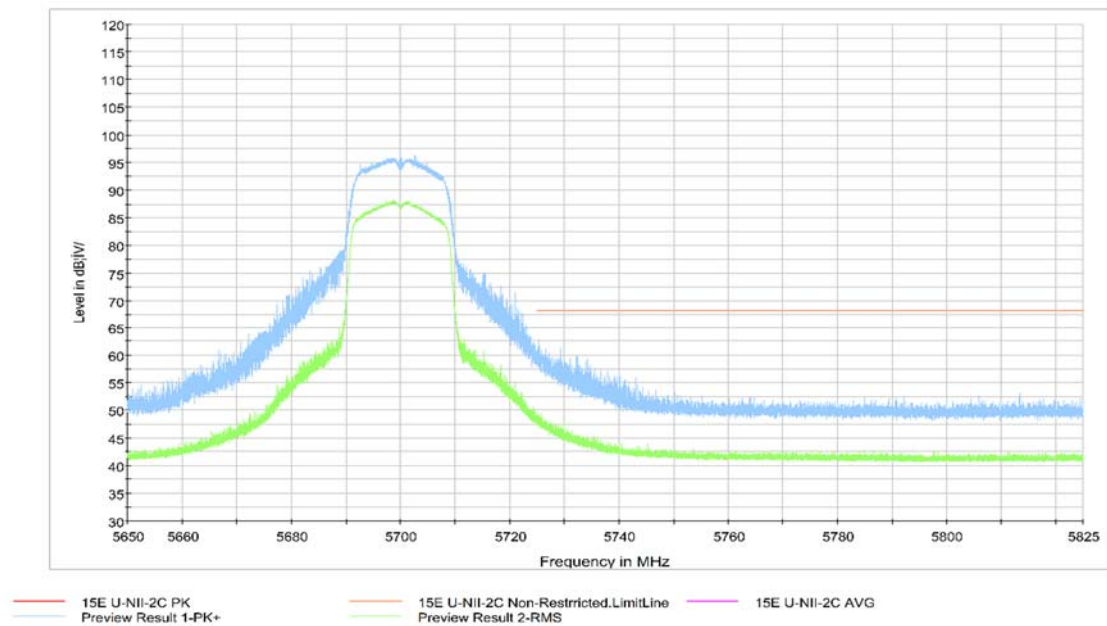


Fig.41 Band Edges (802.11n-HT20 Ch140, 5700MHz)

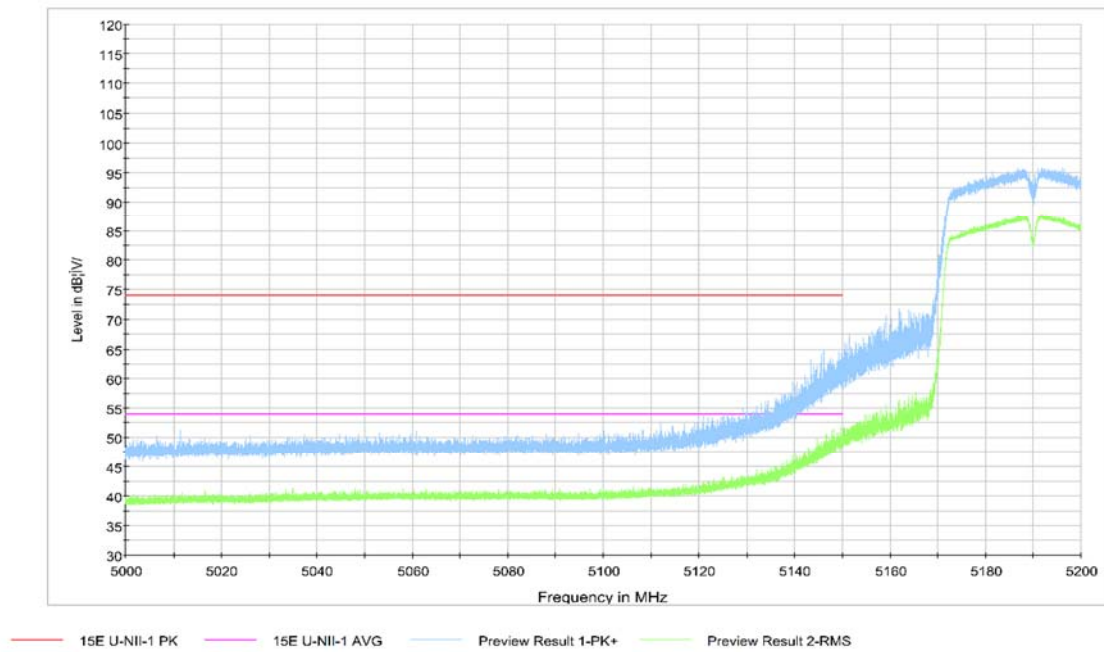


Fig.42 Band Edges (802.11n-HT40 Ch38, 5190MHz)

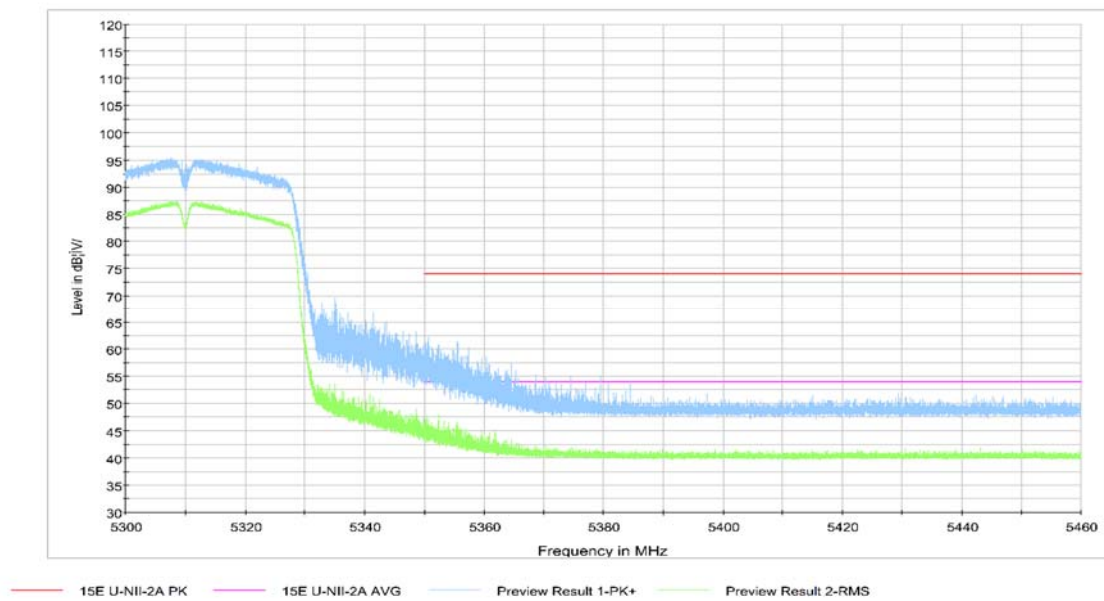


Fig.43 Band Edges (802.11n-HT40 Ch62, 5310MHz)

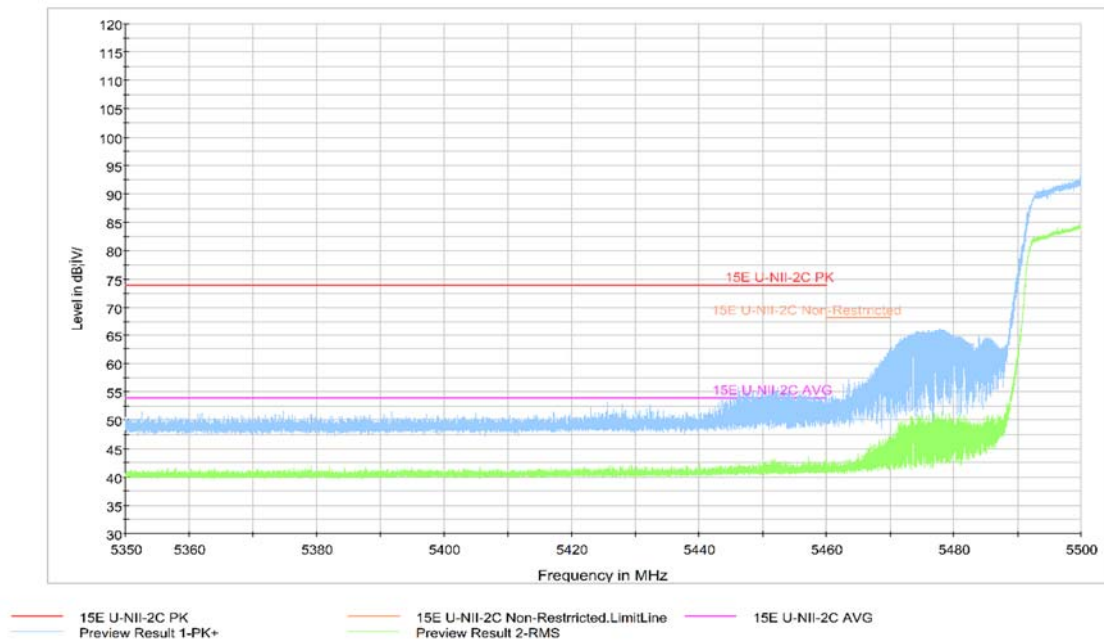


Fig.44 Band Edges (802.11n-HT40 Ch102, 5510MHz)

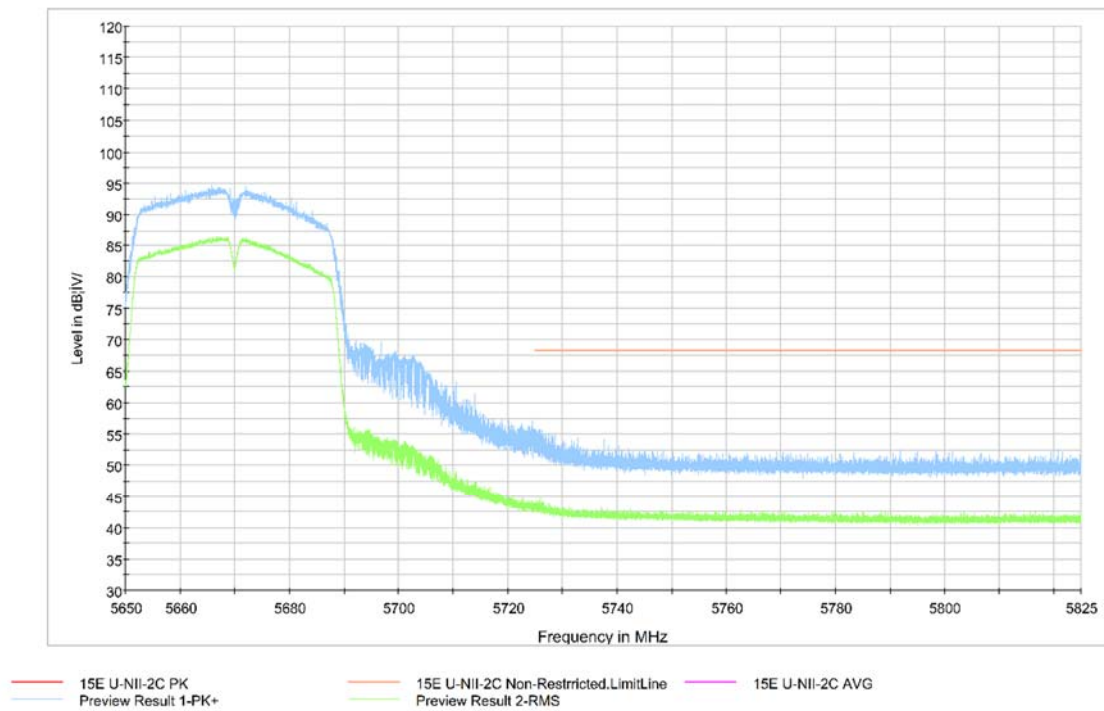


Fig.45 Band Edges (802.11n-HT40 Ch134, 5670MHz)

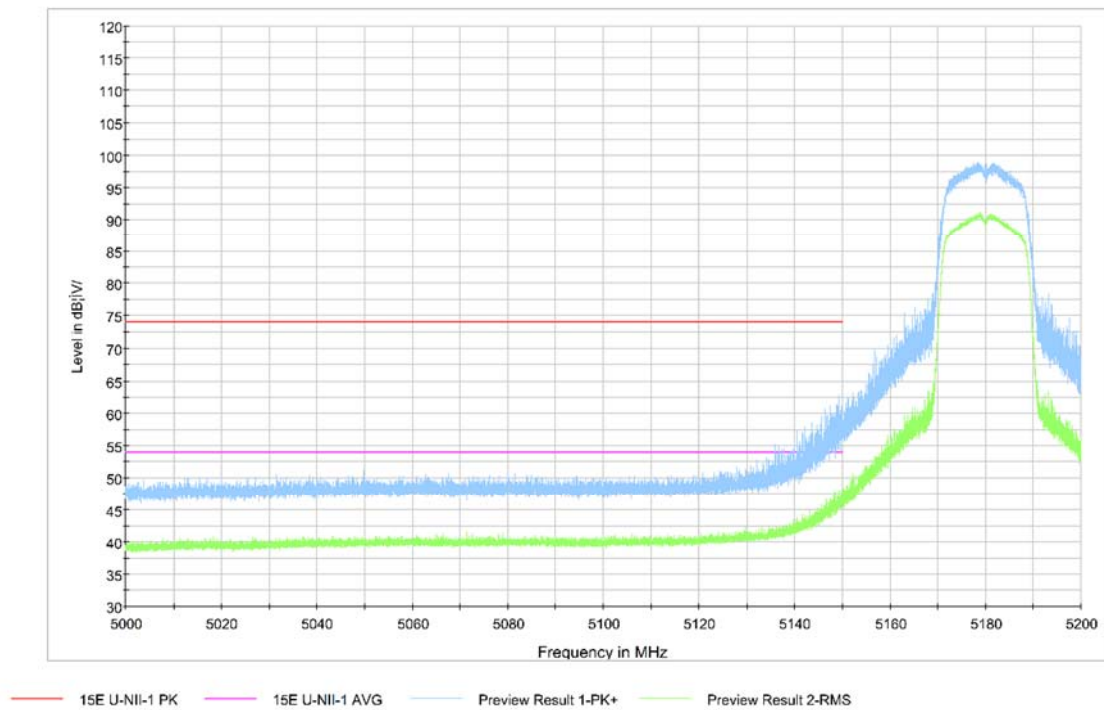


Fig.46 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

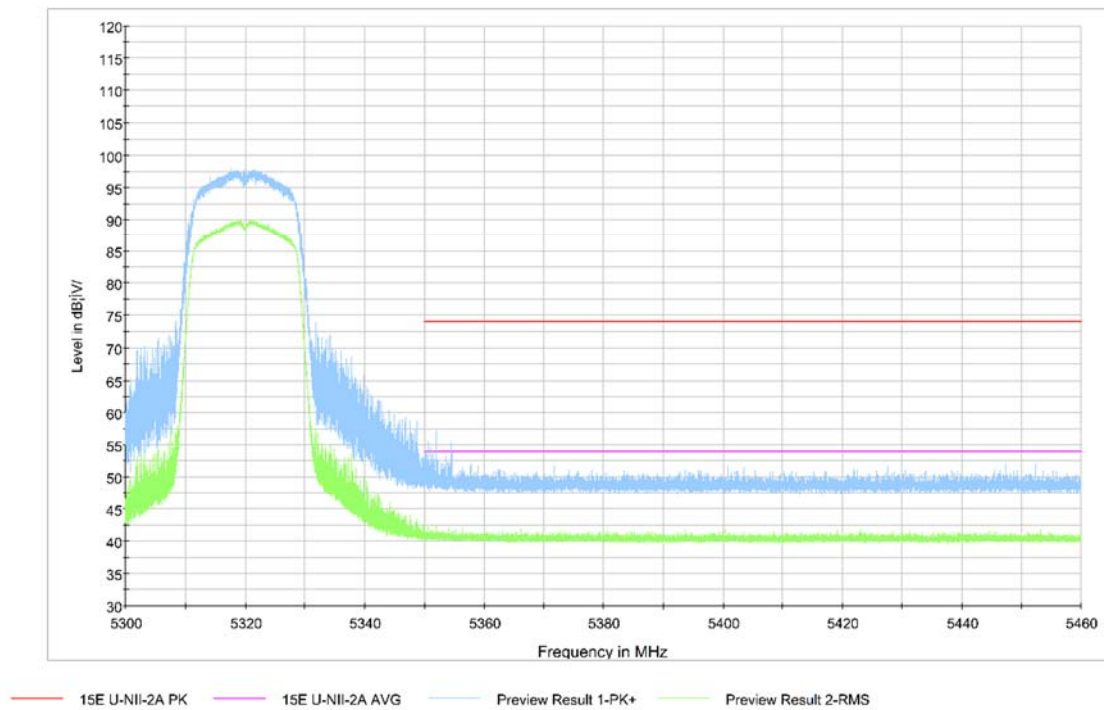


Fig.47 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

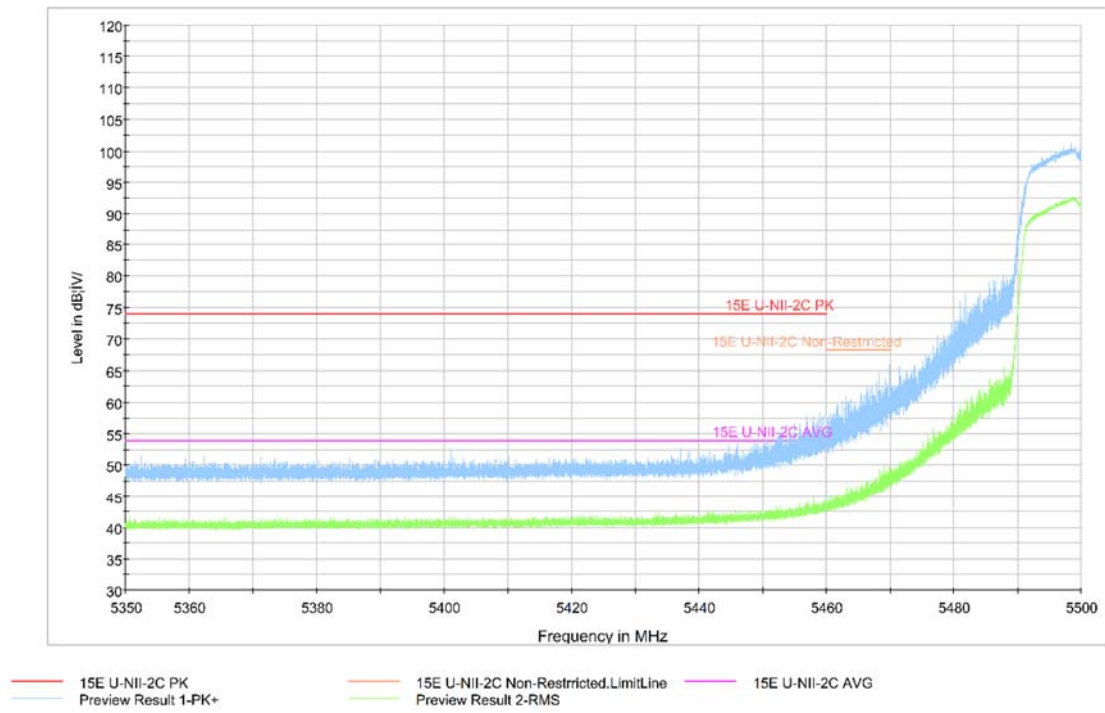


Fig.48 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

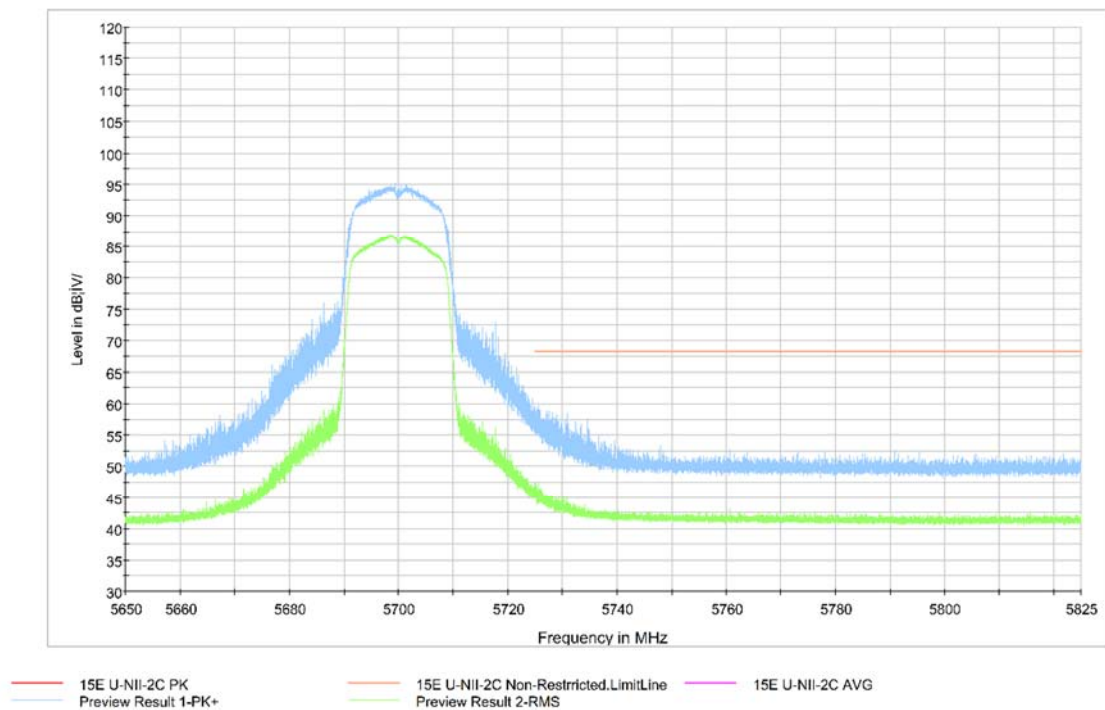


Fig.49 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

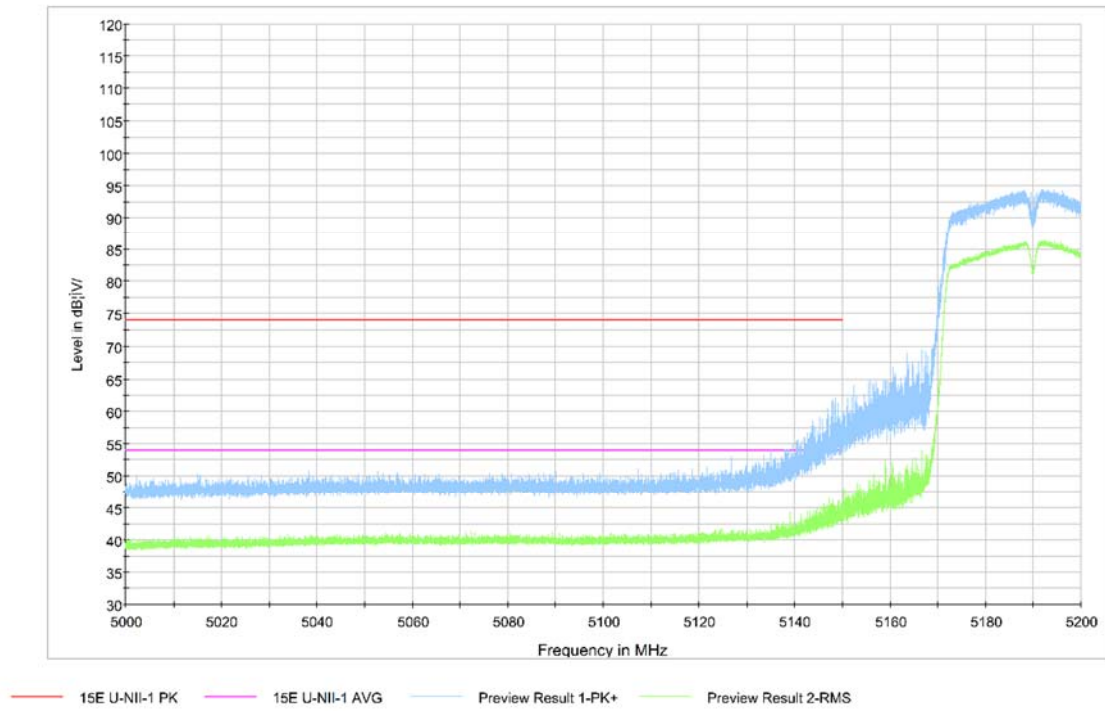


Fig.50 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

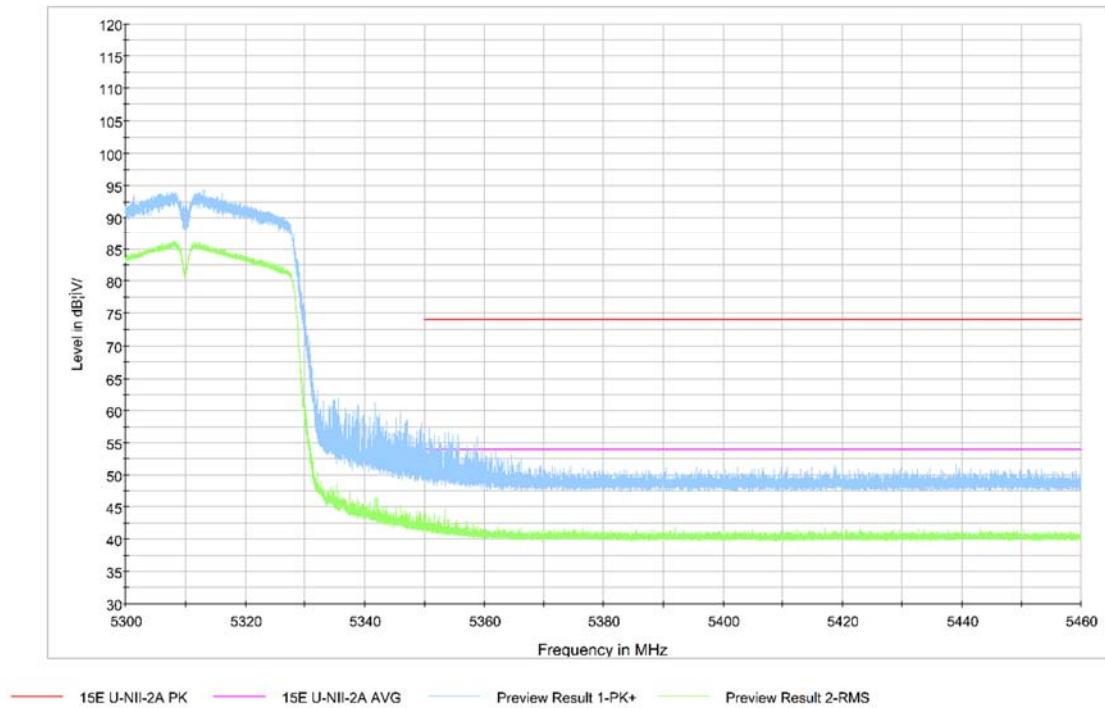


Fig.51 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

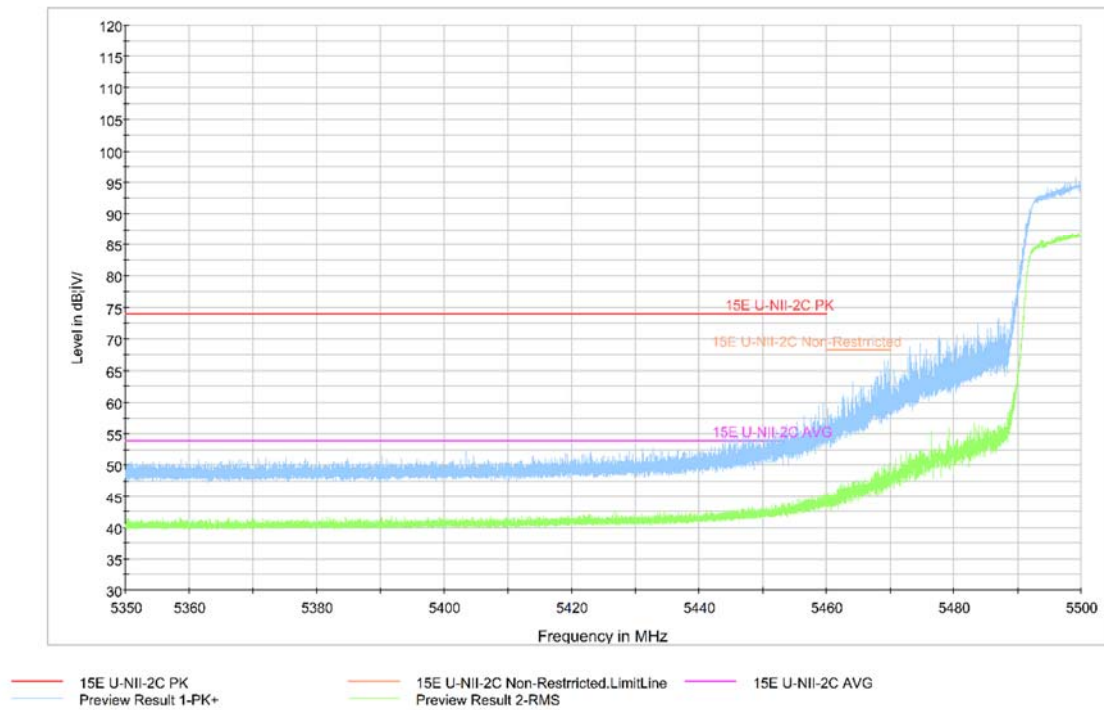


Fig.52 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

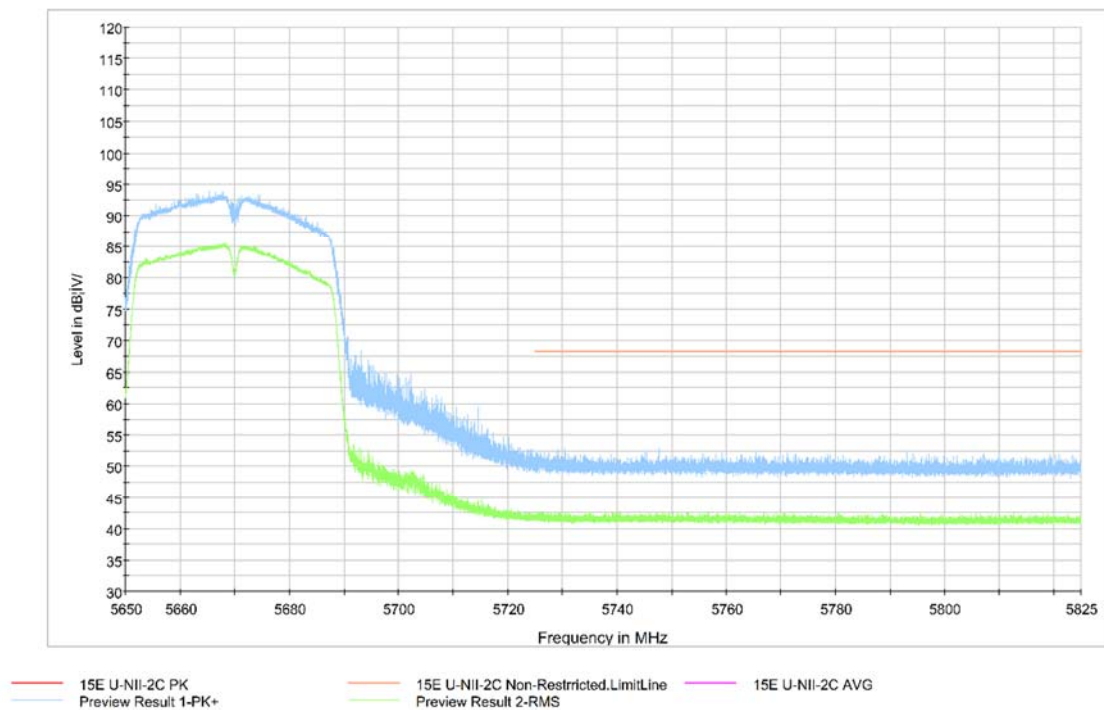


Fig.53 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

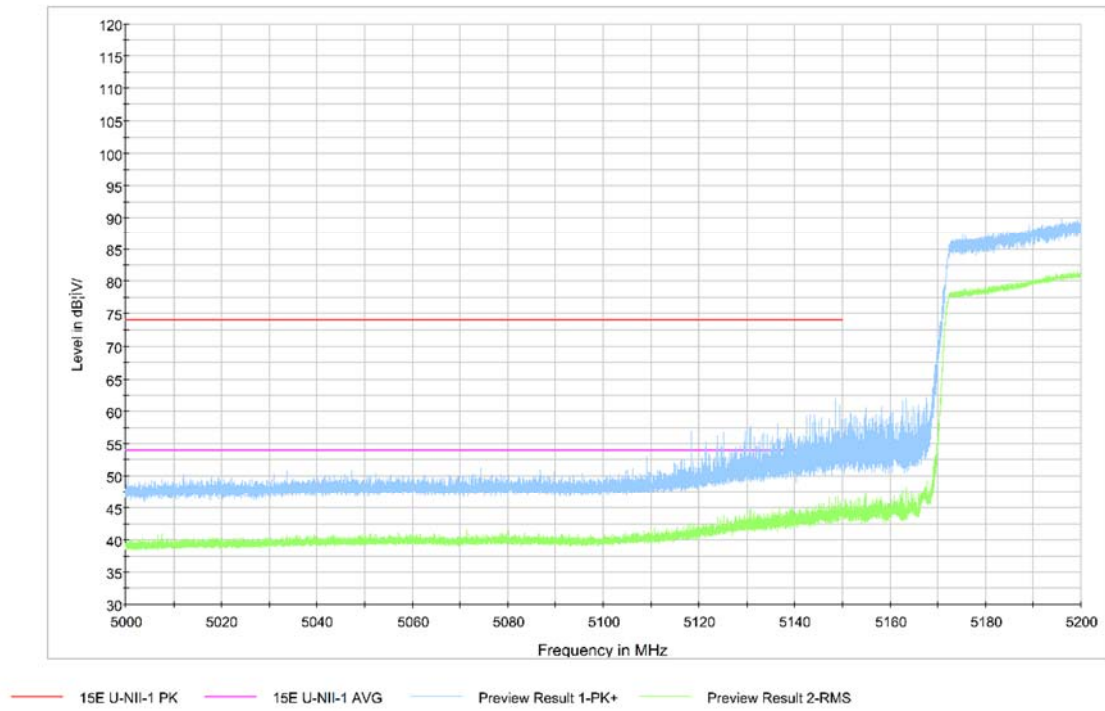


Fig.54 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

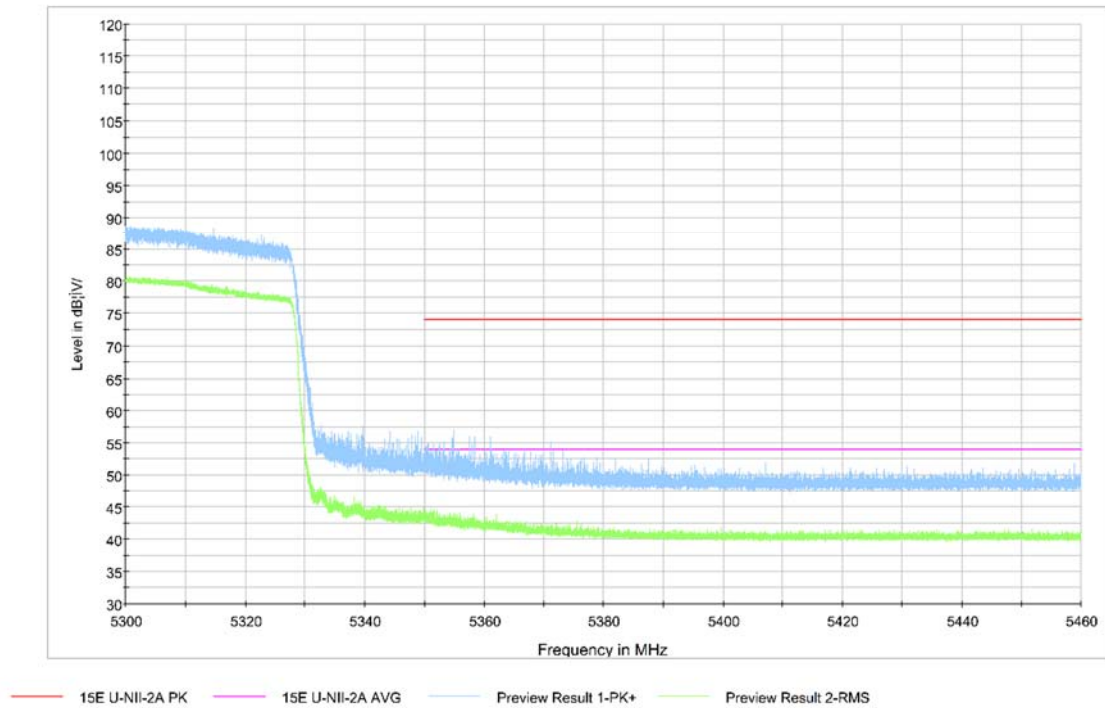


Fig.55 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

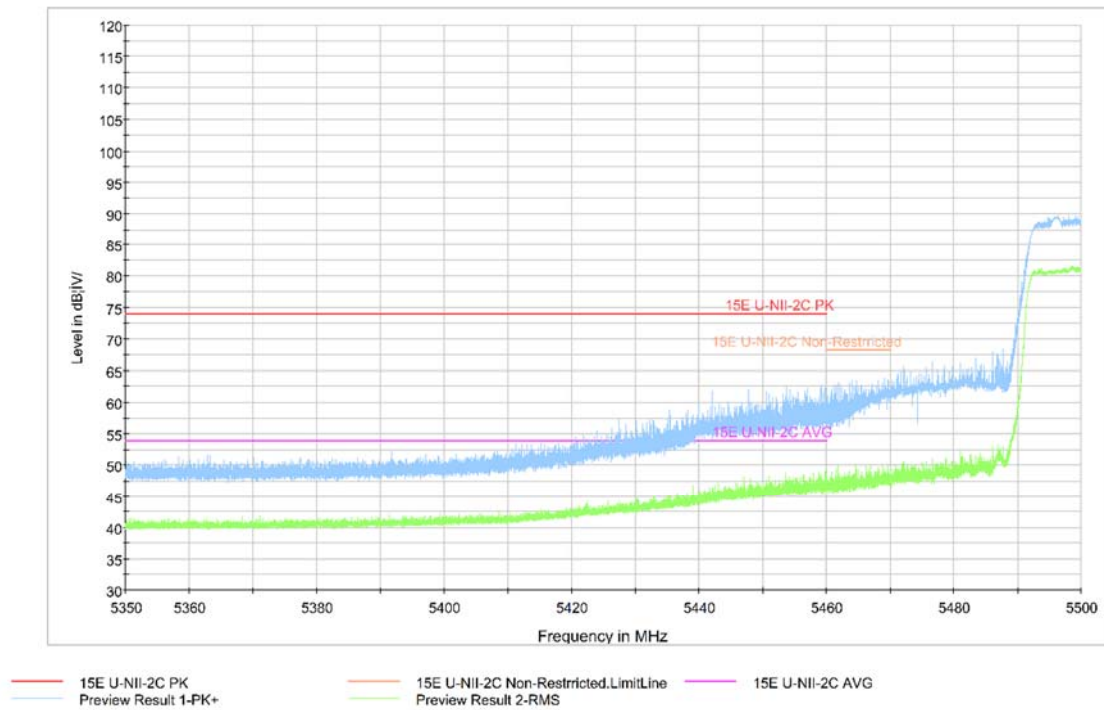


Fig.56 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

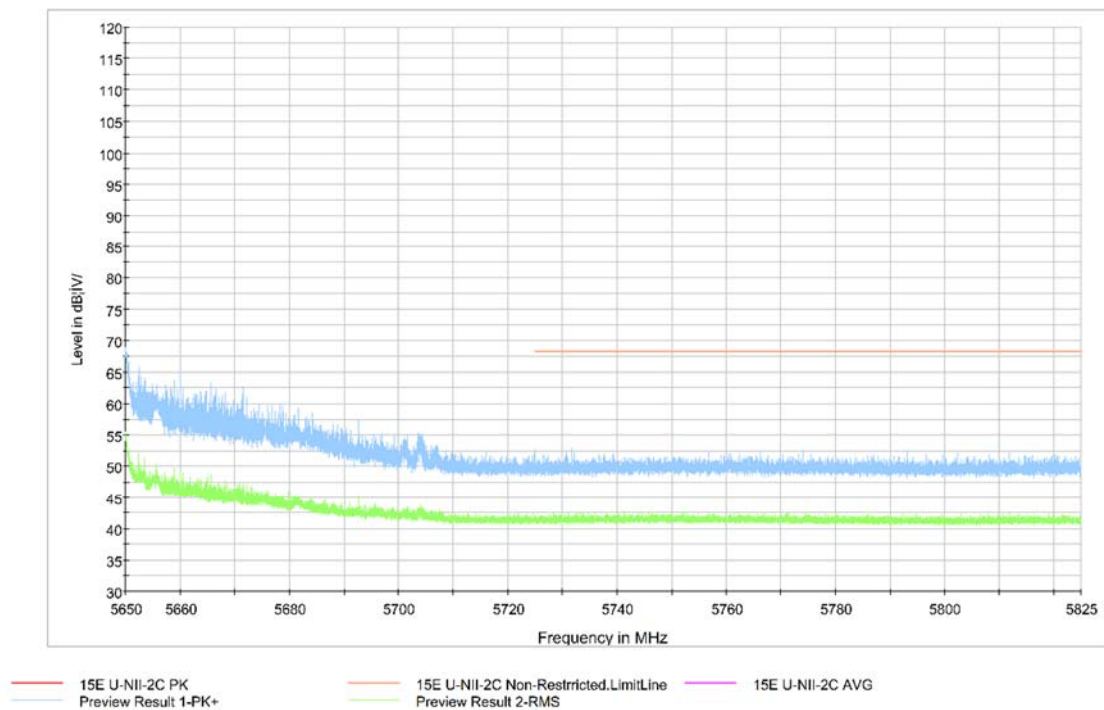


Fig.57 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

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

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

Conclusion: PASS

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:

$$\text{Result} = P_{Mea} + A_{Rpl} = P_{Mea} + \text{Cable Loss} + \text{Antenna Factor}$$

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)
17941.333	40.98	-29.59	45.95	24.62	54.00	13.02	V
17973.600	40.77	-29.59	45.95	24.41	54.00	13.23	V
12286.967	37.44	-32.12	39.00	30.56	54.00	16.56	V
12296.133	37.27	-32.12	39.00	30.39	54.00	16.73	H
5147.910	48.63	-27.79	34.00	42.42	54.00	5.37	H
5149.790	48.63	-28.00	34.00	42.63	54.00	5.37	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)
17886.333	40.46	-29.59	45.95	24.10	54.00	13.54	V
17938.033	40.43	-29.59	45.95	24.07	54.00	13.57	V
12300.167	37.23	-32.12	39.00	30.35	54.00	16.77	H
12329.500	37.14	-32.39	38.95	30.58	54.00	16.86	V
8320.000	36.00	-34.93	37.20	33.73	54.00	18.00	H
8319.633	35.56	-34.93	37.20	33.29	54.00	18.44	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)
17957.833	40.86	-29.59	45.95	24.50	54.00	13.14	H
17979.100	40.50	-29.59	45.95	24.14	54.00	13.50	H
12330.600	37.06	-32.39	38.95	30.50	54.00	16.94	V
12306.033	36.81	-32.12	39.00	29.93	54.00	17.19	H
8497.833	34.45	-34.28	37.30	31.43	54.00	19.55	V
8384.167	34.13	-34.42	37.30	31.25	54.00	19.87	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)
17947.933	40.56	-29.59	45.95	24.20	54.00	13.44	V
17972.500	40.50	-29.59	45.95	24.14	54.00	13.50	H
12331.700	37.34	-32.39	38.95	30.78	54.00	16.66	V
12263.133	37.16	-32.37	38.95	30.58	54.00	16.84	V
8497.100	34.02	-34.28	37.30	31.00	54.00	19.98	H
8187.267	33.72	-34.94	36.90	31.76	54.00	20.28	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)
17971.033	40.54	-29.59	45.95	24.18	54.00	13.46	H
17971.767	40.36	-29.59	45.95	24.00	54.00	13.64	V
12325.467	37.04	-32.12	39.00	30.16	54.00	16.96	V
12218.767	36.82	-32.12	38.90	30.04	54.00	17.18	V
8497.467	33.49	-34.28	37.30	30.47	54.00	20.51	V
8357.767	33.48	-34.93	37.20	31.21	54.00	20.52	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17959.667	40.65	-29.59	45.95	24.29	54.00	13.35	V
17932.900	40.63	-29.59	45.95	24.27	54.00	13.37	V
12330.233	36.90	-32.39	38.95	30.34	54.00	17.10	V
12329.500	36.78	-32.39	38.95	30.22	54.00	17.22	V
5350.424	47.27	-27.82	34.20	40.89	54.00	6.73	H
5350.056	46.26	-27.82	34.20	39.88	54.00	7.74	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)
17956.000	41.01	-29.59	45.95	24.65	54.00	12.99	V
17951.233	40.40	-29.59	45.95	24.04	54.00	13.60	H
12222.433	37.41	-32.12	38.90	30.63	54.00	16.59	V
12261.667	37.19	-32.37	38.95	30.61	54.00	16.81	V
5459.837	45.00	-27.49	34.20	38.29	54.00	9.00	V
5456.852	44.99	-27.49	34.20	38.28	54.00	9.01	V

Channel 120

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)
17971.767	41.26	-29.59	45.95	24.90	54.00	12.74	V
17976.533	40.70	-29.59	45.95	24.34	54.00	13.30	H
12332.800	37.37	-32.39	38.95	30.81	54.00	16.63	H
12295.767	36.97	-32.12	39.00	30.09	54.00	17.03	V
8290.300	34.08	-34.84	37.10	31.81	54.00	19.92	V
8287.733	33.80	-34.84	37.10	31.53	54.00	20.20	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)
17940.600	41.30	-29.59	45.95	24.94	54.00	12.70	H
17957.833	40.59	-29.59	45.95	24.23	54.00	13.41	H
12332.433	36.97	-32.39	38.95	30.41	54.00	17.03	H
12331.333	36.75	-32.39	38.95	30.19	54.00	17.25	V
9120.067	35.23	-34.20	37.70	31.73	54.00	18.77	V
9119.700	34.65	-34.20	37.70	31.15	54.00	19.35	V

Channel 144

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)
17954.533	40.57	-29.59	45.95	24.21	54.00	13.43	H
17957.833	40.33	-29.59	45.95	23.97	54.00	13.67	V
12291.367	37.25	-32.12	39.00	30.37	54.00	16.75	V
12330.967	36.63	-32.39	38.95	30.07	54.00	17.37	H
8313.400	33.69	-34.84	37.10	31.42	54.00	20.31	H

8306.433	33.67	-34.84	37.10	31.40	54.00	20.33	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)
17909.433	40.76	-29.59	45.95	24.40	54.00	13.24	V
17958.567	40.45	-29.59	45.95	24.09	54.00	13.55	H
12301.633	36.83	-32.12	39.00	29.95	54.00	17.17	H
12223.533	36.69	-32.12	38.90	29.91	54.00	17.31	V
5149.070	47.59	-28.00	34.00	41.59	54.00	6.41	H
5149.460	47.41	-28.00	34.00	41.41	54.00	6.59	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)
17909.433	40.32	-29.59	45.95	23.96	54.00	13.68	H
17935.833	40.29	-29.59	45.95	23.93	54.00	13.71	V
12219.867	36.98	-32.12	38.90	30.20	54.00	17.02	H
12332.800	36.50	-32.39	38.95	29.94	54.00	17.50	V
8319.633	35.44	-34.93	37.20	33.17	54.00	18.56	H
8320.000	35.41	-34.93	37.20	33.14	54.00	18.59	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)
17980.567	40.81	-29.59	45.95	24.45	54.00	13.19	V
17941.333	40.33	-29.59	45.95	23.97	54.00	13.67	V
12293.200	37.24	-32.12	39.00	30.36	54.00	16.76	H
12262.767	36.74	-32.37	38.95	30.16	54.00	17.26	V
8456.400	33.97	-34.69	37.40	31.26	54.00	20.03	H
8472.533	33.66	-34.28	37.30	30.64	54.00	20.34	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)
17979.100	41.06	-29.59	45.95	24.70	54.00	12.94	V
17976.533	41.05	-29.59	45.95	24.69	54.00	12.95	V
12329.867	37.24	-32.39	38.95	30.68	54.00	16.76	V
12332.800	37.06	-32.39	38.95	30.50	54.00	16.94	V
8495.633	33.87	-34.28	37.30	30.85	54.00	20.13	V
8273.800	33.68	-34.84	37.10	31.41	54.00	20.32	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)
17953.067	40.67	-29.59	45.95	24.31	54.00	13.33	H
17905.033	40.59	-29.59	45.95	24.23	54.00	13.41	H
12329.867	36.77	-32.39	38.95	30.21	54.00	17.23	V
12333.167	36.59	-32.39	38.95	30.03	54.00	17.41	V
8359.600	34.01	-34.93	37.20	31.74	54.00	19.99	V
8494.533	33.52	-34.28	37.30	30.50	54.00	20.48	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)
17942.067	40.90	-29.59	45.95	24.54	54.00	13.10	V
17944.633	40.55	-29.59	45.95	24.19	54.00	13.45	H
12009.033	36.77	-32.66	39.00	30.43	54.00	17.23	H
12289.533	36.73	-32.12	39.00	29.85	54.00	17.27	V
5351.256	45.08	-27.82	34.20	38.70	54.00	8.92	H
5350.352	44.82	-27.82	34.20	38.44	54.00	9.18	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)
17913.833	40.58	-29.59	45.95	24.22	54.00	13.42	V
17967.733	40.38	-29.59	45.95	24.02	54.00	13.62	H
12330.967	37.35	-32.39	38.95	30.79	54.00	16.65	V
12285.867	36.88	-32.12	39.00	30.00	54.00	17.12	V
5459.943	46.13	-27.49	34.20	39.42	54.00	7.87	V
5459.740	45.71	-27.49	34.20	39.00	54.00	8.29	V

Channel 120

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)
17953.800	40.64	-29.59	45.95	24.28	54.00	13.36	H
17932.900	40.55	-29.59	45.95	24.19	54.00	13.45	H
12290.633	36.88	-32.12	39.00	30.00	54.00	17.12	H
12216.567	36.77	-32.12	38.90	29.99	54.00	17.23	V
8211.833	33.98	-34.94	36.90	32.02	54.00	20.02	H
8490.500	33.63	-34.28	37.30	30.61	54.00	20.37	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)
17863.967	40.34	-29.59	45.95	23.98	54.00	13.66	H
17977.633	40.26	-29.59	45.95	23.90	54.00	13.74	H
12329.133	37.10	-32.39	38.95	30.54	54.00	16.90	H
12331.333	36.65	-32.39	38.95	30.09	54.00	17.35	V
9120.067	34.46	-34.20	37.70	30.96	54.00	19.54	V
8208.167	33.98	-34.94	36.90	32.02	54.00	20.02	V

Channel 144

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)
17912.367	41.04	-29.59	45.95	24.68	54.00	12.96	H
17959.667	40.43	-29.59	45.95	24.07	54.00	13.57	V
12308.600	38.08	-32.12	39.00	31.20	54.00	15.92	V
12289.167	36.79	-32.12	39.00	29.91	54.00	17.21	V
8309.000	34.11	-34.84	37.10	31.84	54.00	19.89	V

8499.667	33.58	-34.28	37.30	30.56	54.00	20.42	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)
17971.033	40.81	-29.59	45.95	24.45	54.00	13.19	V
17940.600	40.66	-29.59	45.95	24.30	54.00	13.34	H
12332.067	36.96	-32.39	38.95	30.40	54.00	17.04	H
12330.233	36.89	-32.39	38.95	30.33	54.00	17.11	V
5149.710	51.81	-28.00	34.00	45.81	54.00	2.19	H
5148.220	51.42	-27.79	34.00	45.21	54.00	2.58	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)
17932.900	40.69	-29.59	45.95	24.33	54.00	13.31	V
17960.400	40.54	-29.59	45.95	24.18	54.00	13.46	H
12330.233	37.40	-32.39	38.95	30.84	54.00	16.60	V
12306.033	37.22	-32.12	39.00	30.34	54.00	16.78	V
8270.133	34.09	-34.84	37.10	31.82	54.00	19.91	H
8330.267	33.71	-34.93	37.20	31.44	54.00	20.29	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)
17955.267	41.20	-29.59	45.95	24.84	54.00	12.80	H
17932.900	40.64	-29.59	45.95	24.28	54.00	13.36	H
12331.700	37.92	-32.39	38.95	31.36	54.00	16.08	V
12226.100	37.20	-32.12	38.90	30.42	54.00	16.80	V
8324.033	34.42	-34.93	37.20	32.15	54.00	19.58	V
8308.633	34.40	-34.84	37.10	32.13	54.00	19.60	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)
17951.967	40.99	-29.59	45.95	24.63	54.00	13.01	H
17956.367	40.78	-29.59	45.95	24.42	54.00	13.22	V
12332.433	37.17	-32.39	38.95	30.61	54.00	16.83	V
12266.433	37.05	-32.37	38.95	30.47	54.00	16.95	V
5352.464	47.92	-27.82	34.20	41.54	54.00	6.08	H
5350.416	47.78	-27.82	34.20	41.40	54.00	6.22	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)
17978.367	40.81	-29.59	45.95	24.45	54.00	13.19	H
17977.267	40.54	-29.59	45.95	24.18	54.00	13.46	H
12266.433	37.54	-32.37	38.95	30.96	54.00	16.46	H
12332.800	36.85	-32.39	38.95	30.29	54.00	17.15	V
5457.220	43.55	-27.49	34.20	36.84	54.00	10.45	V
5451.542	43.17	-27.49	34.20	36.46	54.00	10.83	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)
17975.800	40.99	-29.59	45.95	24.63	54.00	13.01	V
17957.100	40.79	-29.59	45.95	24.43	54.00	13.21	H
12331.333	37.06	-32.39	38.95	30.50	54.00	16.94	H
12290.633	36.81	-32.12	39.00	29.93	54.00	17.19	H
9406.067	33.71	-33.60	37.90	29.41	54.00	20.29	H
8287.367	33.63	-34.84	37.10	31.36	54.00	20.37	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)
17976.533	41.07	-29.59	45.95	24.71	54.00	12.93	V
17869.833	40.51	-29.59	45.95	24.15	54.00	13.49	V
12312.633	37.47	-32.12	39.00	30.59	54.00	16.53	H
12332.800	37.07	-32.39	38.95	30.51	54.00	16.93	V
9072.033	35.05	-34.52	37.70	31.87	54.00	18.95	H
9071.667	34.85	-34.52	37.70	31.67	54.00	19.15	V

Channel 142

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)
17960.400	40.47	-29.59	45.95	24.11	54.00	13.53	H
17951.967	40.37	-29.59	45.95	24.01	54.00	13.63	V
12333.167	36.45	-32.39	38.95	29.89	54.00	17.55	H
12332.433	36.41	-32.39	38.95	29.85	54.00	17.59	V
8497.100	34.48	-34.28	37.30	31.46	54.00	19.52	H
8479.867	33.79	-34.28	37.30	30.77	54.00	20.21	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)
17862.867	40.58	-29.59	45.95	24.22	54.00	13.42	H
17906.867	40.55	-29.59	45.95	24.19	54.00	13.45	V
12330.967	37.22	-32.39	38.95	30.66	54.00	16.78	V
8287.733	37.04	-34.84	37.10	34.77	54.00	16.96	H
5149.300	48.08	-28.00	34.00	42.08	54.00	5.92	H
5148.330	47.99	-27.79	34.00	41.78	54.00	6.01	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)
17977.633	41.35	-29.59	45.95	24.99	54.00	12.65	V
17957.100	40.75	-29.59	45.95	24.39	54.00	13.25	H
12308.600	36.90	-32.12	39.00	30.02	54.00	17.10	H
12332.800	36.78	-32.39	38.95	30.22	54.00	17.22	V
8319.633	35.47	-34.93	37.20	33.20	54.00	18.53	H
8320.000	35.44	-34.93	37.20	33.17	54.00	18.56	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)
17973.600	41.00	-29.59	45.95	24.64	54.00	13.00	V
17954.533	40.79	-29.59	45.95	24.43	54.00	13.21	V
12310.067	37.20	-32.12	39.00	30.32	54.00	16.80	V
12261.667	37.17	-32.37	38.95	30.59	54.00	16.83	H
8456.400	34.25	-34.69	37.40	31.54	54.00	19.75	V
8498.933	33.91	-34.28	37.30	30.89	54.00	20.09	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)
17979.100	40.93	-29.59	45.95	24.57	54.00	13.07	H
17962.967	40.42	-29.59	45.95	24.06	54.00	13.58	V
12330.600	36.70	-32.39	38.95	30.14	54.00	17.30	V
11764.100	36.64	-32.71	39.20	30.15	54.00	17.36	H
8280.400	34.36	-34.84	37.10	32.09	54.00	19.64	H
8318.167	33.87	-34.93	37.20	31.60	54.00	20.13	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)
17984.600	40.48	-29.59	45.95	24.12	54.00	13.52	H
17864.333	40.39	-29.59	45.95	24.03	54.00	13.61	V
12332.800	37.30	-32.39	38.95	30.74	54.00	16.70	H
12313.367	36.79	-32.12	39.00	29.91	54.00	17.21	V
8318.900	33.77	-34.93	37.20	31.50	54.00	20.23	V
8490.500	33.77	-34.28	37.30	30.75	54.00	20.23	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17940.600	40.63	-29.59	45.95	24.27	54.00	13.37	H
17973.600	40.43	-29.59	45.95	24.07	54.00	13.57	V
12332.067	37.43	-32.39	38.95	30.87	54.00	16.57	V
12332.433	37.00	-32.39	38.95	30.44	54.00	17.00	H
5352.040	42.42	-27.82	34.20	36.04	54.00	11.58	H

5350.088	42.34	-27.82	34.20	35.96	54.00	11.66	H
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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)
17977.633	40.78	-29.59	45.95	24.42	54.00	13.22	H
17979.100	40.70	-29.59	45.95	24.34	54.00	13.30	H
12262.767	37.16	-32.37	38.95	30.58	54.00	16.84	H
12330.967	37.07	-32.39	38.95	30.51	54.00	16.93	V
5458.007	44.83	-27.49	34.20	38.12	54.00	9.17	V
5459.583	44.35	-27.49	34.20	37.64	54.00	9.65	H

Channel 120

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17940.600	40.87	-29.59	45.95	24.51	54.00	13.13	H
17975.433	40.53	-29.59	45.95	24.17	54.00	13.47	H
12332.800	37.32	-32.39	38.95	30.76	54.00	16.68	V
12267.167	36.88	-32.37	38.95	30.30	54.00	17.12	H
8208.167	33.84	-34.94	36.90	31.88	54.00	20.16	V
8471.800	33.66	-34.28	37.30	30.64	54.00	20.34	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)
17936.200	40.92	-29.59	45.95	24.56	54.00	13.08	H
17906.133	40.83	-29.59	45.95	24.47	54.00	13.17	V
12332.800	37.96	-32.39	38.95	31.40	54.00	16.04	H
12329.500	37.24	-32.39	38.95	30.68	54.00	16.76	H
9120.067	35.07	-34.20	37.70	31.57	54.00	18.93	H
9119.700	34.89	-34.20	37.70	31.39	54.00	19.11	H

Channel 144

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)
17983.133	40.92	-29.59	45.95	24.56	54.00	13.08	H
17917.133	40.55	-29.59	45.95	24.19	54.00	13.45	V
12239.300	37.28	-32.37	38.95	30.70	54.00	16.72	V
12331.333	36.95	-32.39	38.95	30.39	54.00	17.05	H

8270.133	34.17	-34.84	37.10	31.90	54.00	19.83	V
8493.067	33.56	-34.28	37.30	30.54	54.00	20.44	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)
17972.500	40.36	-29.59	45.95	24.00	54.00	13.64	V
17944.633	40.32	-29.59	45.95	23.96	54.00	13.68	V
12332.800	36.99	-32.39	38.95	30.43	54.00	17.01	H
12331.700	36.94	-32.39	38.95	30.38	54.00	17.06	H
5147.350	46.46	-27.79	34.00	40.25	54.00	7.54	H
5147.970	46.20	-27.79	34.00	39.99	54.00	7.80	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)
17972.500	41.12	-29.59	45.95	24.76	54.00	12.88	V
17840.133	40.41	-29.59	45.95	24.05	54.00	13.59	V
12331.700	36.88	-32.39	38.95	30.32	54.00	17.12	H
12333.167	36.84	-32.39	38.95	30.28	54.00	17.16	H
8247.767	34.21	-34.48	37.00	31.69	54.00	19.79	V
8489.033	33.60	-34.28	37.30	30.58	54.00	20.40	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)
17976.533	40.92	-29.59	45.95	24.56	54.00	13.08	H
17941.700	40.74	-29.59	45.95	24.38	54.00	13.26	H
12331.700	37.38	-32.39	38.95	30.82	54.00	16.62	V
12332.800	37.05	-32.39	38.95	30.49	54.00	16.95	H
8486.100	34.09	-34.28	37.30	31.07	54.00	19.91	V
8443.200	34.05	-34.69	37.40	31.34	54.00	19.95	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)
17961.133	40.88	-29.59	45.95	24.52	54.00	13.12	H
17976.533	40.64	-29.59	45.95	24.28	54.00	13.36	V
12332.800	38.10	-32.39	38.95	31.54	54.00	15.90	H
12332.433	37.09	-32.39	38.95	30.53	54.00	16.91	H
5353.432	44.69	-27.82	34.20	38.31	54.00	9.31	H
5350.320	43.92	-27.82	34.20	37.54	54.00	10.08	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)
17975.800	40.83	-29.59	45.95	24.47	54.00	13.17	V
17869.833	40.62	-29.59	45.95	24.26	54.00	13.38	H
12264.600	37.14	-32.37	38.95	30.56	54.00	16.86	V
12283.300	37.05	-32.12	39.00	30.17	54.00	16.95	H
5457.752	45.25	-27.49	34.20	38.54	54.00	8.75	H
5459.012	45.24	-27.49	34.20	38.53	54.00	8.76	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)
17951.967	40.95	-29.59	45.95	24.59	54.00	13.05	V
17938.033	40.76	-29.59	45.95	24.40	54.00	13.24	V
12315.200	37.02	-32.12	39.00	30.14	54.00	16.98	H
12223.167	36.90	-32.12	38.90	30.12	54.00	17.10	H
8465.933	34.25	-34.28	37.30	31.23	54.00	19.75	V
8494.533	33.82	-34.28	37.30	30.80	54.00	20.18	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)
17943.167	40.74	-29.59	45.95	24.38	54.00	13.26	H
17983.500	40.68	-29.59	45.95	24.32	54.00	13.32	H
12304.200	36.96	-32.12	39.00	30.08	54.00	17.04	H
12259.833	36.73	-32.37	38.95	30.15	54.00	17.27	V
9072.033	35.28	-34.52	37.70	32.10	54.00	18.72	V

9071.667	34.69	-34.52	37.70	31.51	54.00	19.31	V
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Channel 142

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)
17975.067	40.53	-29.59	45.95	24.17	54.00	13.47	V
17932.900	40.30	-29.59	45.95	23.94	54.00	13.70	H
12267.167	37.09	-32.37	38.95	30.51	54.00	16.91	V
12332.800	36.79	-32.39	38.95	30.23	54.00	17.21	V
8195.700	33.99	-34.94	36.90	32.03	54.00	20.01	V
8359.600	33.89	-34.93	37.20	31.62	54.00	20.11	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)
17931.433	40.99	-29.59	45.95	24.63	54.00	13.01	H
17934.367	40.92	-29.59	45.95	24.56	54.00	13.08	V
12329.500	37.45	-32.39	38.95	30.89	54.00	16.55	H
12330.233	37.25	-32.39	38.95	30.69	54.00	16.75	V
8335.767	35.56	-34.93	37.20	33.29	54.00	18.44	V
8336.133	34.34	-34.93	37.20	32.07	54.00	19.66	V

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)
17972.500	40.40	-29.59	45.95	24.04	54.00	13.60	H
17870.933	40.35	-29.59	45.95	23.99	54.00	13.65	H
12290.633	37.46	-32.12	39.00	30.58	54.00	16.54	H
12330.967	37.31	-32.39	38.95	30.75	54.00	16.69	V
5351.160	44.51	-27.82	34.20	38.13	54.00	9.49	H
5352.160	44.45	-27.82	34.20	38.07	54.00	9.55	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)
17976.533	40.68	-29.59	45.95	24.32	54.00	13.32	H
17983.500	40.44	-29.59	45.95	24.08	54.00	13.56	V
12332.800	37.12	-32.39	38.95	30.56	54.00	16.88	V
12331.700	36.97	-32.39	38.95	30.41	54.00	17.03	V
5459.837	49.11	-27.49	34.20	42.40	54.00	4.89	H
5458.802	48.99	-27.49	34.20	42.28	54.00	5.01	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)
17941.333	41.04	-29.59	45.95	24.68	54.00	12.96	V
17971.033	40.74	-29.59	45.95	24.38	54.00	13.26	V
12332.800	37.03	-32.39	38.95	30.47	54.00	16.97	H
12262.767	36.91	-32.37	38.95	30.33	54.00	17.09	V
8359.600	34.01	-34.93	37.20	31.74	54.00	19.99	V
8186.533	33.99	-34.94	36.90	32.03	54.00	20.01	V

Channel 138

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)
17943.167	40.74	-29.59	45.95	24.38	54.00	13.26	H
17956.000	40.60	-29.59	45.95	24.24	54.00	13.40	H
12332.067	37.00	-32.39	38.95	30.44	54.00	17.00	H
12312.267	36.64	-32.12	39.00	29.76	54.00	17.36	V
8264.633	33.70	-34.48	37.00	31.18	54.00	20.30	H
8306.433	33.55	-34.84	37.10	31.28	54.00	20.45	H

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)
17943.533	49.29	-29.59	45.95	32.93	74.00	24.71	V
17867.633	49.16	-29.59	45.95	32.80	74.00	24.84	V
12292.467	46.33	-32.12	39.00	39.45	74.00	27.67	H
12293.567	45.33	-32.12	39.00	38.45	74.00	28.67	V
5147.910	63.44	-27.79	34.00	57.23	74.00	10.56	H
5148.400	63.38	-27.79	34.00	57.17	74.00	10.62	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)
17941.700	49.43	-29.59	45.95	33.07	74.00	24.57	H
17956.733	48.99	-29.59	45.95	32.63	74.00	25.01	H
12333.167	45.52	-32.39	38.95	38.96	74.00	28.48	V
12329.133	45.49	-32.39	38.95	38.93	74.00	28.51	H
10233.633	43.00	-34.09	38.00	39.09	68.20	25.20	H
9901.433	42.71	-33.69	37.90	38.50	68.20	25.49	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)
17480.067	49.69	-29.07	44.55	34.21	68.20	18.51	V
17944.633	48.77	-29.59	45.95	32.41	74.00	25.23	V
12332.067	45.41	-32.39	38.95	38.85	74.00	28.59	V
12329.867	45.33	-32.39	38.95	38.77	74.00	28.67	V
9637.433	43.64	-34.18	37.60	40.22	68.20	24.56	H
10219.700	43.34	-34.09	38.00	39.43	68.20	24.86	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)
17114.867	49.63	-29.25	41.40	37.48	68.20	18.57	V
17938.400	49.42	-29.59	45.95	33.06	74.00	24.58	H
12226.467	45.24	-32.12	38.90	38.46	74.00	28.76	H
12053.033	44.98	-32.19	38.95	38.22	74.00	29.02	V
8344.933	43.31	-34.93	37.20	41.04	74.00	30.69	H
10234.367	43.07	-34.09	38.00	39.16	68.20	25.13	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)
17357.233	49.24	-28.74	43.40	34.58	68.20	18.96	V
16836.933	49.20	-29.50	40.00	38.70	68.20	19.00	H
12265.700	45.23	-32.37	38.95	38.65	74.00	28.77	V
12291.367	45.09	-32.12	39.00	38.21	74.00	28.91	H
10287.167	43.24	-33.82	38.00	39.06	68.20	24.96	V
10236.567	42.73	-34.09	38.00	38.82	68.20	25.47	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)
17862.500	49.87	-29.59	45.95	33.51	74.00	24.13	H
17294.533	49.72	-29.54	42.90	36.36	68.20	18.48	V
12260.933	45.61	-32.37	38.95	39.03	74.00	28.39	V
12228.300	45.25	-32.37	38.95	38.67	74.00	28.75	V
5350.088	60.00	-27.82	34.20	53.62	74.00	14.00	H
5350.424	59.63	-27.82	34.20	53.25	74.00	14.37	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)
17980.200	49.69	-29.59	45.95	33.33	74.00	24.31	H
17902.467	49.25	-29.59	45.95	32.89	74.00	24.75	V
12263.867	45.31	-32.37	38.95	38.73	74.00	28.69	H
12269.367	45.05	-32.37	38.95	38.47	74.00	28.95	H
5458.990	60.12	-27.49	34.20	53.41	74.00	13.88	V
5467.990	64.51	-27.49	34.20	57.80	68.20	3.69	H

Channel 120

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)
17982.033	49.37	-29.59	45.95	33.01	74.00	24.63	V
17405.267	49.04	-29.44	43.80	34.68	68.20	19.16	H
12332.433	46.26	-32.39	38.95	39.70	74.00	27.74	V
12304.200	45.97	-32.12	39.00	39.09	74.00	28.03	H
10095.033	43.72	-33.75	38.05	39.42	68.20	24.48	V
8288.833	43.53	-34.84	37.10	41.26	74.00	30.47	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)
17364.933	49.81	-28.74	43.40	35.15	68.20	18.39	V
17936.933	49.48	-29.59	45.95	33.12	74.00	24.52	V
12310.433	45.30	-32.12	39.00	38.42	74.00	28.70	H
12240.033	45.07	-32.37	38.95	38.49	74.00	28.93	V
5726.948	61.75	-27.47	34.10	55.12	68.20	6.45	V
5728.881	61.28	-27.47	34.10	54.65	68.20	6.92	V

Channel 144

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)
17385.100	52.50	-29.44	43.80	38.14	68.20	15.70	H
17382.533	52.12	-29.44	43.80	37.76	68.20	16.08	V
12330.967	45.01	-32.39	38.95	38.45	74.00	28.99	H
12261.300	44.99	-32.37	38.95	38.41	74.00	29.01	H
10113.733	43.47	-34.28	38.10	39.65	68.20	24.73	V

10250.500	43.06	-33.82	38.00	38.88	68.20	25.14	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)
17377.033	49.77	-29.44	43.80	35.41	68.20	18.43	V
17915.667	48.58	-29.59	45.95	32.22	74.00	25.42	V
12223.900	45.40	-32.12	38.90	38.62	74.00	28.60	H
12330.233	45.40	-32.39	38.95	38.84	74.00	28.60	H
5147.850	60.21	-27.79	34.00	54.00	74.00	13.79	H
5149.010	60.20	-28.00	34.00	54.20	74.00	13.80	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)
16980.300	49.25	-29.38	40.85	37.78	68.20	18.95	V
16855.633	49.17	-29.50	40.00	38.67	68.20	19.03	V
12331.333	45.30	-32.39	38.95	38.74	74.00	28.70	V
12323.633	45.16	-32.12	39.00	38.28	74.00	28.84	V
10090.633	43.37	-33.75	38.05	39.07	68.20	24.83	V
8320.367	43.20	-34.93	37.20	40.93	74.00	30.80	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)
17955.267	48.67	-29.59	45.95	32.31	74.00	25.33	H
17979.833	48.58	-29.59	45.95	32.22	74.00	25.42	V
12196.033	45.89	-32.12	38.90	39.11	74.00	28.11	V
12332.067	45.41	-32.39	38.95	38.85	74.00	28.59	V
10102.733	43.61	-34.28	38.10	39.79	68.20	24.59	H
8482.433	42.70	-34.28	37.30	39.68	74.00	31.30	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)
17964.433	48.83	-29.59	45.95	32.47	74.00	25.17	H
17474.567	48.74	-28.70	44.20	33.24	68.20	19.46	V
12332.067	46.04	-32.39	38.95	39.48	74.00	27.96	H
12288.067	45.78	-32.12	39.00	38.90	74.00	28.22	V
9926.000	43.31	-33.69	37.90	39.10	68.20	24.89	V
10319.800	43.25	-33.88	38.00	39.13	68.20	24.95	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)
17371.900	49.03	-28.74	43.40	34.37	68.20	19.17	V
17977.633	48.99	-29.59	45.95	32.63	74.00	25.01	H
12329.867	45.37	-32.39	38.95	38.81	74.00	28.63	V
12310.067	45.18	-32.12	39.00	38.30	74.00	28.82	H
9960.833	43.43	-34.00	37.95	39.48	68.20	24.77	H
8476.933	42.89	-34.28	37.30	39.87	74.00	31.11	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)
17935.833	48.99	-29.59	45.95	32.63	74.00	25.01	H
17910.900	48.90	-29.59	45.95	32.54	74.00	25.10	V
12296.500	45.28	-32.12	39.00	38.40	74.00	28.72	H
12222.067	45.16	-32.12	38.90	38.38	74.00	28.84	H
5352.336	60.32	-27.82	34.20	53.94	74.00	13.68	H
5350.352	60.27	-27.82	34.20	53.89	74.00	13.73	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)
17963.700	49.33	-29.59	45.95	32.97	74.00	24.67	H
17960.767	48.98	-29.59	45.95	32.62	74.00	25.02	H
12228.667	45.85	-32.37	38.95	39.27	74.00	28.15	V
12330.233	45.40	-32.39	38.95	38.84	74.00	28.60	H
5459.710	60.11	-27.49	34.20	53.40	74.00	13.89	V

5470.000	65.12	-27.49	34.20	58.41	68.20	3.08	V
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Channel 120

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)
17979.833	49.82	-29.59	45.95	33.46	74.00	24.18	V
17341.100	49.37	-28.74	43.40	34.71	68.20	18.83	V
12266.800	45.54	-32.37	38.95	38.96	74.00	28.46	V
12331.333	45.42	-32.39	38.95	38.86	74.00	28.58	H
10264.800	42.89	-33.82	38.00	38.71	68.20	25.31	V
8430.367	42.77	-34.69	37.40	40.06	74.00	31.23	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)
17973.600	49.72	-29.59	45.95	33.36	74.00	24.28	H
17942.800	49.39	-29.59	45.95	33.03	74.00	24.61	H
12303.467	45.72	-32.12	39.00	38.84	74.00	28.28	H
12291.000	45.13	-32.12	39.00	38.25	74.00	28.87	V
5725.215	62.75	-27.47	34.10	56.12	68.20	5.45	H
5725.495	61.55	-27.47	34.10	54.92	68.20	6.65	V

Channel 144

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)
17387.667	52.67	-29.44	43.80	38.31	68.20	15.53	V
17384.000	51.52	-29.44	43.80	37.16	68.20	16.68	H
12311.533	45.25	-32.12	39.00	38.37	74.00	28.75	V
12223.533	45.20	-32.12	38.90	38.42	74.00	28.80	V
10115.200	43.05	-34.28	38.10	39.23	68.20	25.15	H
8224.667	43.03	-34.48	37.00	40.51	74.00	30.97	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)
16869.933	50.07	-29.50	40.00	39.57	68.20	18.13	V
17977.267	49.94	-29.59	45.95	33.58	74.00	24.06	H
12293.567	45.08	-32.12	39.00	38.20	74.00	28.92	V
12313.000	45.07	-32.12	39.00	38.19	74.00	28.93	V
5146.200	64.97	-27.79	34.00	58.76	74.00	9.03	H
5149.310	64.62	-28.00	34.00	58.62	74.00	9.38	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)
17951.600	49.25	-29.59	45.95	32.89	74.00	24.75	V
17451.467	49.11	-28.70	44.20	33.61	68.20	19.09	V
12332.067	45.50	-32.39	38.95	38.94	74.00	28.50	V
12283.667	45.39	-32.12	39.00	38.51	74.00	28.61	V
8487.567	43.38	-34.28	37.30	40.36	74.00	30.62	H
8487.933	43.33	-34.28	37.30	40.31	74.00	30.67	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)
17960.767	49.49	-29.59	45.95	33.13	74.00	24.51	H
17955.633	49.36	-29.59	45.95	33.00	74.00	24.64	V
12303.100	46.25	-32.12	39.00	39.37	74.00	27.75	H
12311.533	46.17	-32.12	39.00	39.29	74.00	27.83	V
9996.033	43.39	-34.00	37.95	39.44	68.20	24.81	H
10262.967	43.37	-33.82	38.00	39.19	68.20	24.83	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)
17964.433	49.18	-29.59	45.95	32.82	74.00	24.82	V
17876.800	49.15	-29.59	45.95	32.79	74.00	24.85	H
12331.700	46.00	-32.39	38.95	39.44	74.00	28.00	V
12332.067	45.78	-32.39	38.95	39.22	74.00	28.22	H
5350.720	62.26	-27.82	34.20	55.88	74.00	11.74	H
5355.480	61.38	-27.82	34.20	55.00	74.00	12.62	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)
17974.700	49.65	-29.59	45.95	33.29	74.00	24.35	V
17942.800	48.79	-29.59	45.95	32.43	74.00	25.21	H
12217.300	45.88	-32.12	38.90	39.10	74.00	28.12	V
12263.867	45.34	-32.37	38.95	38.76	74.00	28.66	V
5450.035	55.91	-27.49	34.20	49.20	74.00	18.09	V
5469.925	62.50	-27.49	34.20	55.79	68.20	5.70	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)
17306.267	49.14	-29.54	42.90	35.78	68.20	19.06	H
17344.033	49.13	-28.74	43.40	34.47	68.20	19.07	H
12293.200	45.86	-32.12	39.00	38.98	74.00	28.14	H
12331.333	45.51	-32.39	38.95	38.95	74.00	28.49	V
10024.633	43.60	-34.07	38.00	39.67	68.20	24.60	V
8874.400	43.12	-34.69	37.80	40.01	68.20	25.08	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)
17932.533	49.89	-29.59	45.95	33.53	74.00	24.11	V
17976.533	49.56	-29.59	45.95	33.20	74.00	24.44	V
12301.267	45.56	-32.12	39.00	38.68	74.00	28.44	H
12267.167	45.17	-32.37	38.95	38.59	74.00	28.83	V
5725.014	55.87	-27.47	34.10	49.24	68.20	12.33	V

5725.057	55.75	-27.47	34.10	49.12	68.20	12.45	V
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Channel 142

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)
17380.700	52.80	-29.44	43.80	38.44	68.20	15.40	V
17378.867	51.49	-29.44	43.80	37.13	68.20	16.71	V
12332.433	45.76	-32.39	38.95	39.20	74.00	28.24	V
12230.133	45.15	-32.37	38.95	38.57	74.00	28.85	H
10247.200	43.33	-34.09	38.00	39.42	68.20	24.87	H
10259.300	43.17	-33.82	38.00	38.99	68.20	25.03	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)
17945.733	49.07	-29.59	45.95	32.71	74.00	24.93	V
17964.067	49.05	-29.59	45.95	32.69	74.00	24.95	V
12288.800	45.60	-32.12	39.00	38.72	74.00	28.40	V
12292.833	45.54	-32.12	39.00	38.66	74.00	28.46	V
5149.300	62.76	-28.00	34.00	56.76	74.00	11.24	H
5148.990	61.38	-28.00	34.00	55.38	74.00	12.62	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)
17925.567	49.34	-29.59	45.95	32.98	74.00	24.66	H
17962.233	48.81	-29.59	45.95	32.45	74.00	25.19	V
12329.500	46.01	-32.39	38.95	39.45	74.00	27.99	V
12007.933	45.40	-32.66	39.00	39.06	74.00	28.60	H
8307.167	42.79	-34.84	37.10	40.52	74.00	31.21	H
10247.933	42.76	-33.82	38.00	38.58	68.20	25.44	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)
17916.033	49.13	-29.59	45.95	32.77	74.00	24.87	V
17972.133	49.11	-29.59	45.95	32.75	74.00	24.89	H
12259.467	45.54	-32.37	38.95	38.96	74.00	28.46	H
12034.333	45.43	-32.19	38.95	38.67	74.00	28.57	V
10245.733	43.51	-34.09	38.00	39.60	68.20	24.69	V
10138.667	43.10	-34.28	38.10	39.28	68.20	25.10	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)
17983.867	49.58	-29.59	45.95	33.22	74.00	24.42	V
16713.733	49.29	-29.14	39.65	38.78	68.20	18.91	V
12332.433	45.80	-32.39	38.95	39.24	74.00	28.20	H
11829.000	45.71	-32.09	39.20	38.60	74.00	28.29	H
8537.067	43.19	-33.81	37.40	39.60	68.20	25.01	V
10155.900	43.08	-33.67	38.05	38.70	68.20	25.12	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)
17365.300	50.01	-28.74	43.40	35.35	68.20	18.19	V
17957.467	49.58	-29.59	45.95	33.22	74.00	24.42	H
11730.000	45.12	-32.70	39.20	38.62	74.00	28.88	V
12329.133	45.12	-32.39	38.95	38.56	74.00	28.88	V
9998.233	42.82	-34.00	37.95	38.87	68.20	25.38	H
10099.433	42.79	-34.28	38.10	38.97	68.20	25.41	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)
17956.367	48.96	-29.59	45.95	32.60	74.00	25.04	V
17098.733	48.76	-29.25	41.40	36.61	68.20	19.44	H
12292.100	45.54	-32.12	39.00	38.66	74.00	28.46	V
12285.867	45.32	-32.12	39.00	38.44	74.00	28.68	H
5352.040	57.19	-27.82	34.20	50.81	74.00	16.81	H

5350.704	55.57	-27.82	34.20	49.19	74.00	18.43	H
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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)
17381.433	48.97	-29.44	43.80	34.61	68.20	19.23	H
17872.033	48.79	-29.59	45.95	32.43	74.00	25.21	H
12306.400	45.37	-32.12	39.00	38.49	74.00	28.63	H
12220.967	45.32	-32.12	38.90	38.54	74.00	28.68	V
5458.877	58.43	-27.49	34.20	51.72	74.00	15.57	H
5469.925	65.74	-27.49	34.20	59.03	68.20	2.46	H

Channel 120

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)
17349.533	49.14	-28.74	43.40	34.48	68.20	19.06	V
17439.000	49.02	-28.70	44.20	33.52	68.20	19.18	V
11983.733	46.40	-32.66	39.00	40.06	74.00	27.60	V
11806.267	45.68	-32.09	39.20	38.57	74.00	28.32	H
10161.033	43.26	-33.67	38.05	38.88	68.20	24.94	H
10047.000	42.48	-34.07	38.00	38.55	68.20	25.72	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)
17979.833	49.94	-29.59	45.95	33.58	74.00	24.06	H
17817.033	49.47	-29.59	45.95	33.11	74.00	24.53	H
11943.033	45.13	-32.42	39.05	38.50	74.00	28.87	H
12250.667	44.99	-32.37	38.95	38.41	74.00	29.01	V
5725.644	59.68	-27.47	34.10	53.05	68.20	8.52	V
5725.477	59.13	-27.47	34.10	52.50	68.20	9.07	H

Channel 144

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)
17380.333	51.38	-29.44	43.80	37.02	68.20	16.82	V
17395.733	50.87	-29.44	43.80	36.51	68.20	17.33	H
12225.367	45.46	-32.12	38.90	38.68	74.00	28.54	V
12310.067	44.95	-32.12	39.00	38.07	74.00	29.05	H

10134.267	42.81	-34.28	38.10	38.99	68.20	25.39	H
8219.167	42.57	-34.48	37.00	40.05	74.00	31.43	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)
17964.800	49.97	-29.59	45.95	33.61	74.00	24.03	V
17387.300	49.11	-29.44	43.80	34.75	68.20	19.09	H
12328.767	45.60	-32.39	38.95	39.04	74.00	28.40	V
12294.300	45.32	-32.12	39.00	38.44	74.00	28.68	H
5148.500	62.10	-27.79	34.00	55.89	74.00	11.90	H
5147.970	61.87	-27.79	34.00	55.66	74.00	12.13	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)
17385.100	49.41	-29.44	43.80	35.05	68.20	18.79	V
17607.667	48.75	-29.60	45.15	33.20	68.20	19.45	H
12287.333	45.06	-32.12	39.00	38.18	74.00	28.94	V
12295.400	44.96	-32.12	39.00	38.08	74.00	29.04	V
9939.200	42.74	-33.69	37.90	38.53	68.20	25.46	V
8489.033	42.68	-34.28	37.30	39.66	74.00	31.32	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)
17954.533	49.81	-29.59	45.95	33.45	74.00	24.19	V
17972.867	49.26	-29.59	45.95	32.90	74.00	24.74	V
12192.733	45.99	-32.12	38.90	39.21	74.00	28.01	V
11970.533	45.64	-32.42	39.05	39.01	74.00	28.36	V
8386.000	43.41	-34.42	37.30	40.53	74.00	30.59	V
10108.600	42.80	-34.28	38.10	38.98	68.20	25.40	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)
17986.067	49.33	-29.59	45.95	32.97	74.00	24.67	V
17961.133	49.10	-29.59	45.95	32.74	74.00	24.90	H
11838.533	45.96	-32.73	39.15	39.54	74.00	28.04	H
11983.367	45.57	-32.66	39.00	39.23	74.00	28.43	V
5350.840	57.36	-27.82	34.20	50.98	74.00	16.64	H
5350.944	57.25	-27.82	34.20	50.87	74.00	16.75	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)
17949.033	49.53	-29.59	45.95	33.17	74.00	24.47	V
17939.867	49.42	-29.59	45.95	33.06	74.00	24.58	V
12330.967	46.29	-32.39	38.95	39.73	74.00	27.71	H
12313.000	45.90	-32.12	39.00	39.02	74.00	28.10	V
5459.440	59.92	-27.49	34.20	53.21	74.00	14.08	V
5469.602	66.44	-27.49	34.20	59.73	68.20	1.76	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)
17972.500	49.24	-29.59	45.95	32.88	74.00	24.76	V
17969.200	49.07	-29.59	45.95	32.71	74.00	24.93	V
12261.667	45.82	-32.37	38.95	39.24	74.00	28.18	V
12311.533	45.71	-32.12	39.00	38.83	74.00	28.29	H
10245.000	42.87	-34.09	38.00	38.96	68.20	25.33	H
8490.867	42.81	-34.28	37.30	39.79	74.00	31.19	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)
16847.567	49.33	-29.50	40.00	38.83	68.20	18.87	V
17382.533	49.17	-29.44	43.80	34.81	68.20	19.03	H
12292.833	46.15	-32.12	39.00	39.27	74.00	27.85	H
11787.567	45.55	-32.09	39.20	38.44	74.00	28.45	V
5747.703	52.89	-27.21	34.00	46.10	68.20	15.31	H

5730.439	52.81	-27.47	34.10	46.18	68.20	15.39	H
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Channel 142

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)
17366.400	50.92	-28.74	43.40	36.26	68.20	17.28	H
17406.733	50.88	-29.44	43.80	36.52	68.20	17.32	H
12315.567	45.24	-32.12	39.00	38.36	74.00	28.76	H
12328.767	45.20	-32.39	38.95	38.64	74.00	28.80	V
10111.167	42.77	-34.28	38.10	38.95	68.20	25.43	H
10232.167	42.77	-34.09	38.00	38.86	68.20	25.43	H

802.11ac-HT80
Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17450.367	48.99	-28.70	44.20	33.49	68.20	19.21	H
17958.567	48.99	-29.59	45.95	32.63	74.00	25.01	H
11831.200	46.35	-32.09	39.20	39.24	74.00	27.65	V
12220.600	45.52	-32.12	38.90	38.74	74.00	28.48	V
8330.267	43.81	-34.93	37.20	41.54	74.00	30.19	H
10084.033	42.68	-33.75	38.05	38.38	68.20	25.52	V

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)
17976.533	49.01	-29.59	45.95	32.65	74.00	24.99	V
17140.167	49.00	-29.31	41.70	36.61	68.20	19.20	V
12292.833	46.18	-32.12	39.00	39.30	74.00	27.82	H
12332.067	46.08	-32.39	38.95	39.52	74.00	27.92	V
5354.984	57.12	-27.82	34.20	50.74	74.00	16.88	H
5358.416	56.06	-27.82	34.20	49.68	74.00	17.94	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)
17387.300	52.17	-29.44	43.80	37.81	68.20	16.03	H
17370.800	51.86	-28.74	43.40	37.20	68.20	16.34	V
12306.767	45.98	-32.12	39.00	39.10	74.00	28.02	H
12010.133	45.61	-32.66	39.00	39.27	74.00	28.39	V
5459.170	62.79	-27.49	34.20	56.08	74.00	11.21	H
5469.078	63.89	-27.49	34.20	57.18	68.20	4.31	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)
17368.600	51.21	-28.74	43.40	36.55	68.20	16.99	V
17370.433	51.15	-28.74	43.40	36.49	68.20	17.05	V
11798.200	45.38	-32.09	39.20	38.27	74.00	28.62	V
12312.633	45.31	-32.12	39.00	38.43	74.00	28.69	H
5731.576	52.80	-27.47	34.10	46.17	68.20	15.40	V
5774.198	52.61	-27.21	34.00	45.82	68.20	15.59	V

Channel 138

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)
17383.633	51.63	-29.44	43.80	37.27	68.20	16.57	H
17384.367	51.25	-29.44	43.80	36.89	68.20	16.95	V
12187.600	45.85	-32.12	38.90	39.07	74.00	28.15	H
12103.633	44.98	-32.38	38.90	38.46	74.00	29.02	V
9986.133	43.23	-34.00	37.95	39.28	68.20	24.97	V
10110.433	42.90	-34.28	38.10	39.08	68.20	25.30	H

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

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.10dB, k=2.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger AE5		
		802.11a	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 (dB μ V)	Result (dB μ V)		Conclusion
		With charger AE5		
		802.11a	Idle	
0.15 to 0.5	67 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:

Traffic:

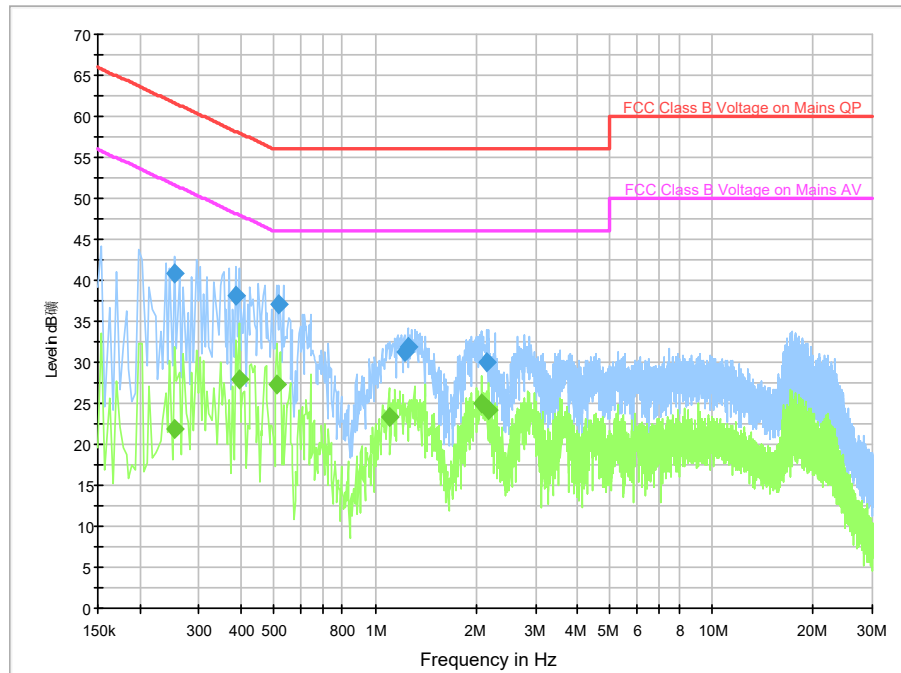


Fig.58 Conducted Emission (802.11a, Ch36, TX)

Note1: 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 (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.254000	40.7	2000.0	9.000	On	L1	19.7	20.9	61.6
0.386000	38.1	2000.0	9.000	On	L1	19.7	20.0	58.1
0.518000	37.0	2000.0	9.000	On	L1	19.7	19.0	56.0
1.222000	31.3	2000.0	9.000	On	N	19.6	24.7	56.0
1.250000	32.0	2000.0	9.000	On	N	19.6	24.0	56.0
2.146000	30.0	2000.0	9.000	On	N	19.6	26.0	56.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.254000	21.9	2000.0	9.000	On	L1	19.7	29.7	51.6
0.394000	27.9	2000.0	9.000	On	N	19.7	20.1	48.0
0.510000	27.3	2000.0	9.000	On	N	19.7	18.7	46.0
1.098000	23.3	2000.0	9.000	On	N	19.6	22.7	46.0
2.074000	25.0	2000.0	9.000	On	N	19.6	21.0	46.0
2.178000	24.2	2000.0	9.000	On	N	19.6	21.8	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:

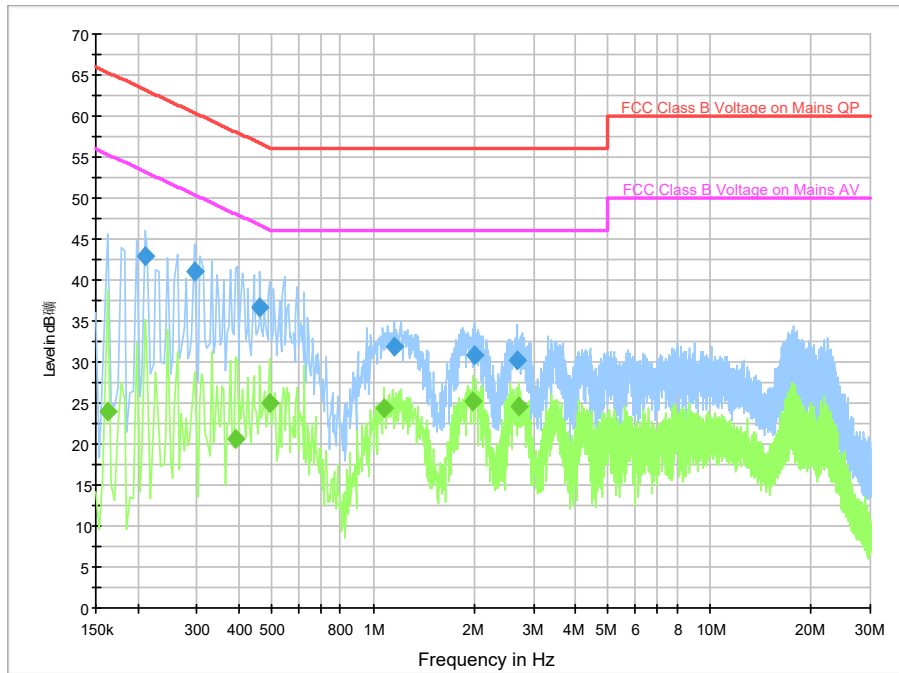


Fig.59 Conducted Emission(802.11a, IDLE)

Note1: 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 (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.210000	42.8	2000.0	9.000	On	L1	19.7	20.4	63.2
0.294000	41.0	2000.0	9.000	On	L1	19.7	19.5	60.4
0.462000	36.7	2000.0	9.000	On	N	19.7	19.9	56.7
1.154000	31.8	2000.0	9.000	On	N	19.6	24.2	56.0
2.002000	30.9	2000.0	9.000	On	N	19.6	25.1	56.0
2.690000	30.3	2000.0	9.000	On	N	19.6	25.7	56.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.162000	24.0	2000.0	9.000	On	N	19.7	31.4	55.4
0.390000	20.7	2000.0	9.000	On	L1	19.7	27.4	48.1
0.494000	25.1	2000.0	9.000	On	N	19.7	21.0	46.1
1.078000	24.3	2000.0	9.000	On	N	19.6	21.7	46.0
1.978000	25.3	2000.0	9.000	On	N	19.6	20.7	46.0
2.698000	24.6	2000.0	9.000	On	N	19.6	21.4	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

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% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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Measurement Result:

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
		Fig.	Value	
802.11a	5180 MHz	Fig.60	17.40	P
	5200 MHz	Fig.61	17.51	P
	5240 MHz	Fig.62	17.54	P
802.11n HT20	5180 MHz	Fig.63	18.26	P
	5200 MHz	Fig.64	18.20	P
	5240 MHz	Fig.65	18.33	P
802.11n HT40	5190 MHz	Fig.66	36.54	P
	5230 MHz	Fig.67	36.24	P
802.11ac HT80	5210 MHz	Fig.68	75.23	P

Conclusion: PASS
Test graphs as below:

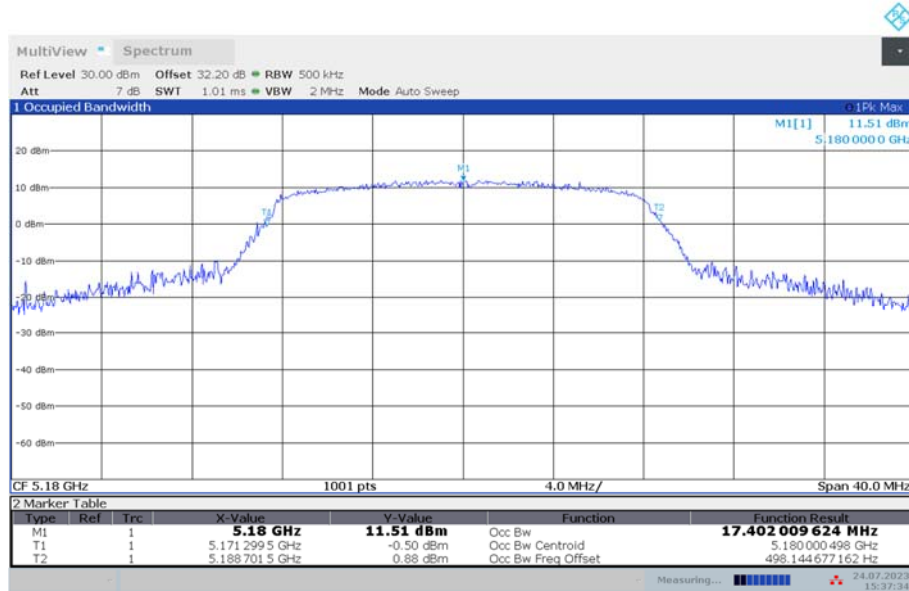


Fig.60 99% Occupied bandwidth (802.11a, 5180MHz)

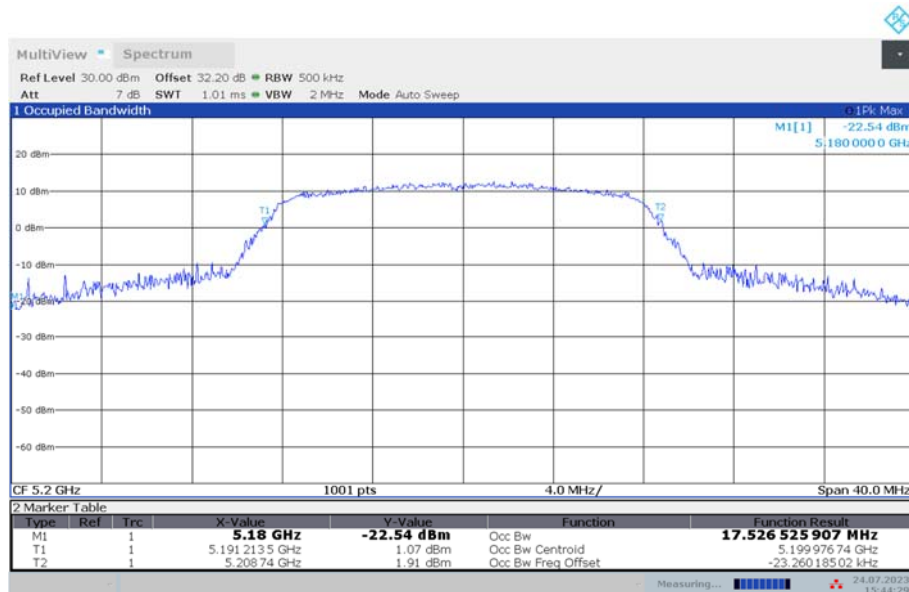


Fig.61 99% Occupied bandwidth (802.11a, 5200MHz)

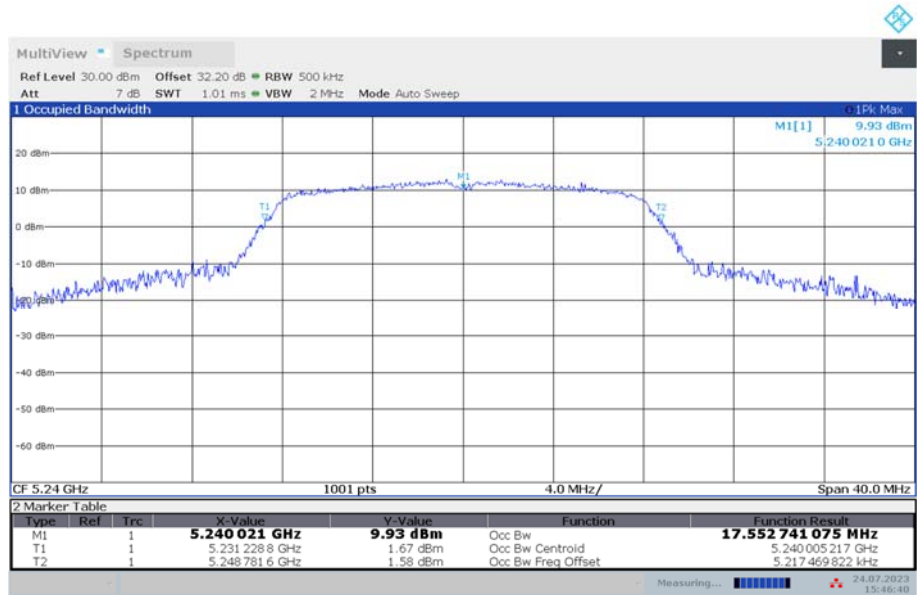


Fig.62 99% Occupied bandwidth (802.11a, 5240MHz)

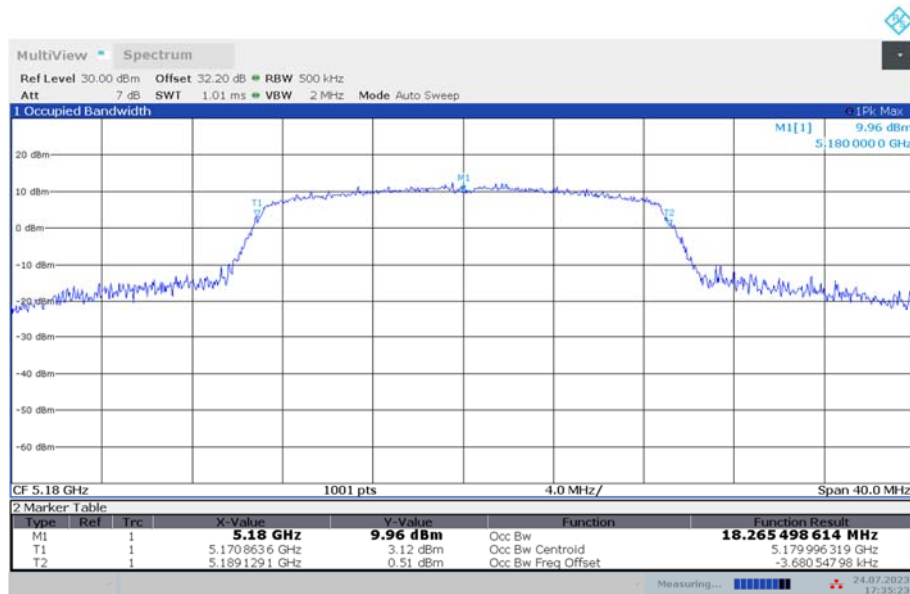


Fig.63 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

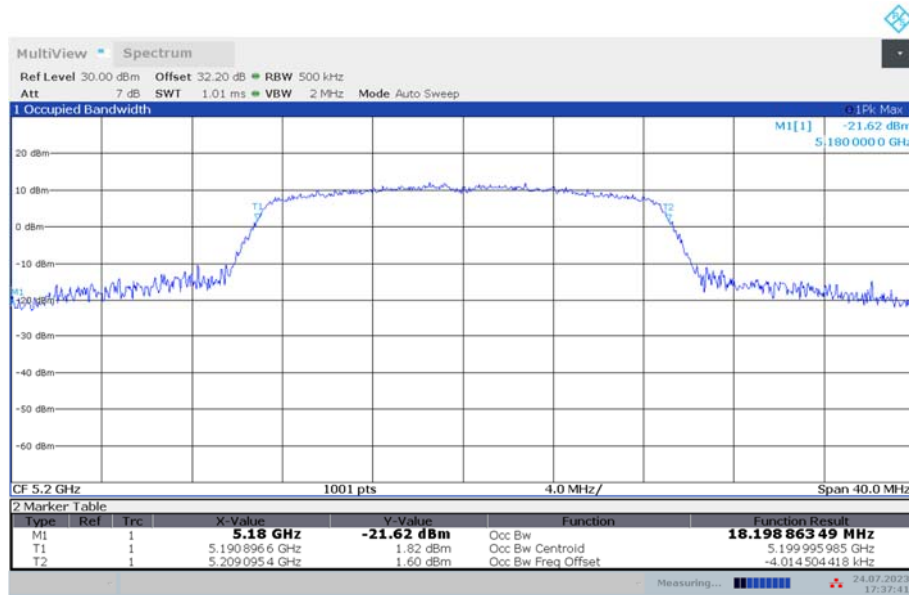


Fig.64 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

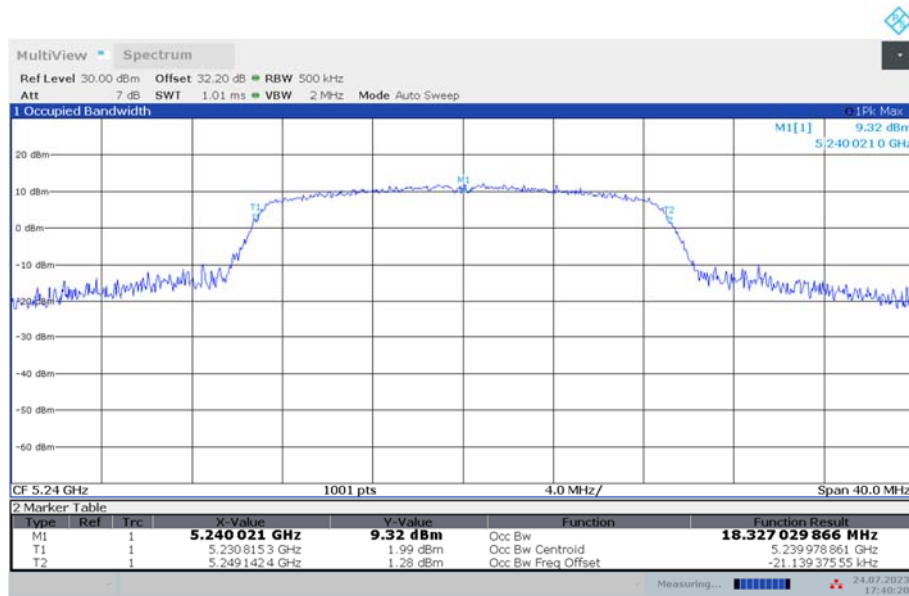
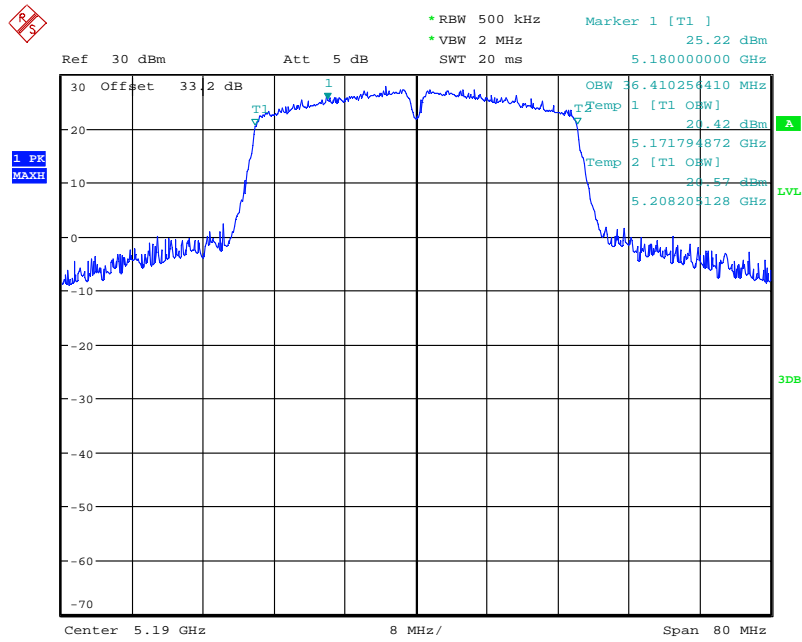


Fig.65 99% Occupied bandwidth (802.11n-HT20, 5240MHz)



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

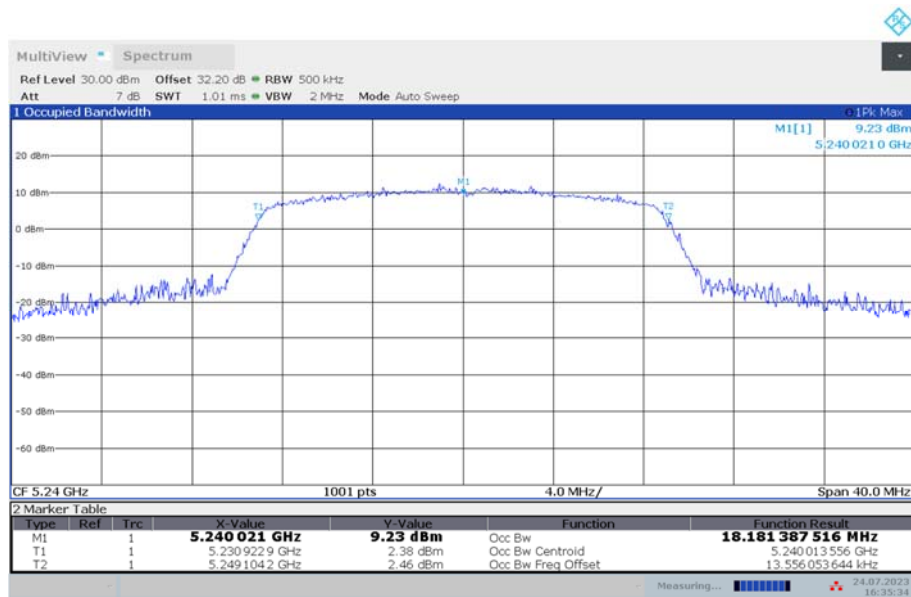


Fig.67 99% Occupied bandwidth (802.11n-HT40, 5230MHz)

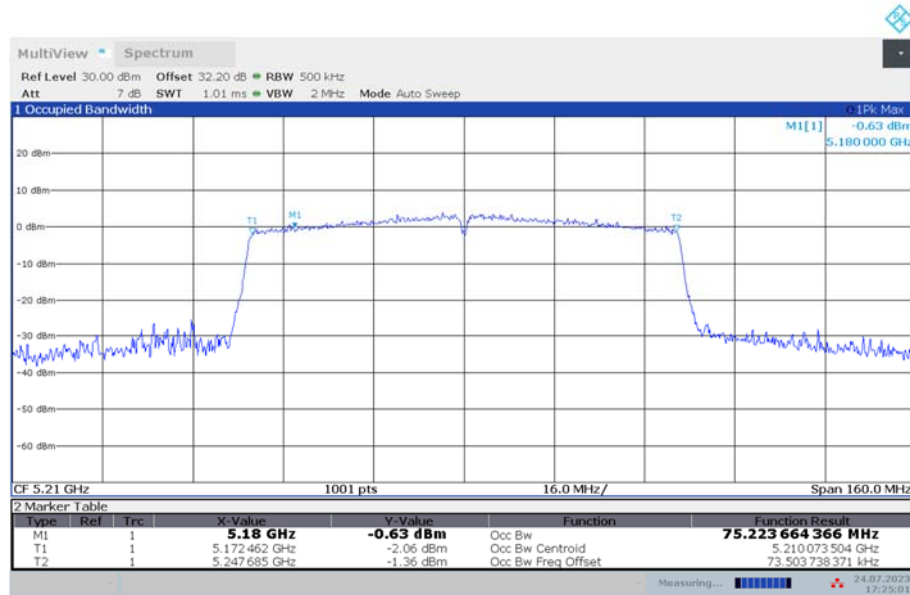


Fig.68 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

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

<p>United States Department of Commerce National Institute of Standards and Technology</p> <p>NVLAP[®] </p> <hr/> <p>Certificate of Accreditation to ISO/IEC 17025:2017</p> <hr/> <p>NVLAP LAB CODE: 600118-0</p> <p>Telecommunication Technology Labs, CAICT Beijing China</p> <p><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p> <p>Electromagnetic Compatibility & Telecommunications</p> <p><i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i></p> <hr/> <p>2022-10-01 through 2023-09-30 <i>Effective Dates</i></p> <p style="text-align: center;"></p> <p style="text-align: right;"> <i>For the National Voluntary Laboratory Accreditation Program</i></p>	
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